SEISMOLOGICAL INSTITUTE
BOX 517
751 20 UPPSALA 1
SWEDEN

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BOX 517
S-751 20 UPPSALA
SWEDEN

S E I S M O L O G I C A L B U L L E T I N

U P P S A L A, K I R U N A, S K A L S T U G A N, U M E Å,

U D D E H O L M and D E L A R Y

Uppsala	(Up):	59°51.5'N,	17°37.6'E; h = 14 m
Kiruna	(Ki):	67°50.4'N,	20°25.0'E; h = 390 m
Skalstugan	(Sk):	63°34.8'N,	12°16.8'E; h = 580 m
Umeå	(Um):	63°48.9'N,	20°14.2'E; h = 16 m
Uddeholm	(Ud):	60°05.4'N,	13°36.4'E; h = 240 m
Delary	(De):	56°28.2'N,	13°52.2'E; h = 150 m

J A N U A R Y 1 - 31, 1974

1974					
Jan.	1	Up	iP	08 09 14.1	
		Ki	iP	08 08 45.2	C
		Sk	iP	08 09 11.2	
		Um	iP	08 08 57.4	C
		Ud	iP	08 09 20.1	C
		De	iP	08 09 31.4	
		Mariana Islands (h = 330 km).			
"	1	Ki	iSKP1	09 50 42.8	
				micr sec	
			SKP1 Z'	0.1 1.2	
		Um	iSKP1	09 50 54.7	
		Ud	ePKP1	09 47 45	
		De	iPKP1	09 47 55.4	
		Fiji Islands (h = 190 km).			
"	1	Ki	iP	10 34 36.2	
		Ud	iP	10 34 49.6	
		Kashmir-Sinkiang (h = N).			
"	1	Up	iPKP1	13 01 44.8	C
				micr sec	
			PKP1 Z'	0.1 0.9	
		Ki	iPKP	13 01 35.1	
		Um	i(PKP)	13 01 32.6	
			iPKP	13 01 42.9	
			iSKP1	13 04 26.5	
		Ud	iPKP1	13 01 46.4	
			iSKP1	13 04 38.4	
		De	ePKP	13 01 56	
			iPKP1	13 01 57.5	
		Tonga-Kermadec Islands (h = 500 km).			
"	1	Up	iP	14 03 29.7	C
		Ki	iP	14 03 24.9	
		Um	iP	14 03 23.1	C
		Ud	iP	14 03 42.5	C
"	1	Up	iP	14 19 43.5	
		(cont.)			

1974					
Jan.	1	(cont.)			
		Up	iX	14 20 09.3	
				micr sec	
			X Z'	0.1 1.0	
		Ki	iP	14 19 45.5	
			iX	14 20 10.6	
				micr sec	
			P Z'	0.2 1.8	
		Sk	eX	14 20 25	
		Um	iP	14 19 41.1	
			iX	14 20 06.3	
		Ud	iP	14 19 54.8	
			iX	14 20 20.4	
		De	iP	14 19 52.8	
		Sumatra (h = 60 km). If the phase X is interpreted as pP, the focal depth is 100 km.			
"	1	Up	iP	14 25 37.7	
		Ki	eP	14 25 39	
		Um	iP	14 25 34.4	
		Ud	iP	14 25 48.2	
		Sumatra (h = N).			
"	1	Up	eP	15 13 28	
		Um	iP	15 13 05.4	
		Ud	eP	15 13 32	
		South of Japan (h = 10 km).			
"	1	Up	iP	18 16 40.1	
		Ki	iP	18 16 11.7	C
				micr sec	
			P Z'	0.1 0.9	
		Sk	iP	18 16 37.7	C
		Um	iP	18 16 23.8	C
		Ud	iP	18 16 46.6	C
		Mariana Islands (h = 320 km).			
"	2	Um	iP	00 17 43.0	
		Ud	iP	00 18 08.1	
		De	iP	00 18 31.5	

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974					
Jan.	2	Up	ePKP	00 20 43	
		Ki	iPKP	00 20 28.4	
		Sk	iPKP	00 20 40.0	
		Um	iPKP	00 20 34.5	
		Ud	iPKP	00 20 44.2	
			iSKP1	00 23 55.3	
		De	iPKP	00 20 51.4	
		New Hebrides Islands (h = 180 km).			
"	2	Ud	iPKP1	05 56 36.3	
		De	ePKP1	05 56 49	
"	2	Um	iP	05 59 19.4	
		Mariana Islands (h = 50 km).			
"	2	Um	i(Sgl)	10 52 16.3	
"	2	Up	iP	10 56 39.0	
			i(PP)	11 00 25.0	
			iPP	11 01 01.7	
			iSKS	11 07 04	
			iS	11 08 28	
			iPKKP2	11 12 18.0	
			iP'P'	11 20 27.7	
				micr sec	
			P Z'	0.2 1.5	
			PP Z'	6.4 2.4	
			Mx E	52 23	
			Mx N	21 20	
			Mx Z	97 24	
		Ki	e(PP)	11 00 36	
			iPP	11 01 26.1	
			iSKS	11 07 19	
			iS	11 08 56	
			iSP	11 10 39	
			iPKKP1	11 11 54.2	
			iPKKP2	11 12 03.7	
			iSS	11 16 41	
				micr sec	
			PP Z'	3.5 2.5	
			Mx E	53 21	
			Mx N	23 19	
			Mx Z	51 20	
		Sk	iP	10 56 32.6	
			i(PP)	10 59 40.5	
			iPP	11 00 53.6	
			iPKKP1	11 12 07.5	
			iPKKP2	11 12 24.4	
			iP'P'	11 20 31.4	
		Um	iP	10 56 47.4	
			iPP	11 01 17.4	
			iSKS	11 07 13	
			iPKKP1	11 11 56.0	
			iPKKP2	11 12 07.4	
			iP'P'	11 20 22.5	

(cont.)

1974					
Jan.	2	(cont.)			
		Ud	iP	10 56 28.2	
			iPP	11 00 49.0	
			iPKKP2	11 12 25.8	
		De	iP	10 56 25.9	
			iPP	11 00 39.8	
			iPKKP1	11 12 12.4	
			iPKKP2	11 12 31.3	
			iP'P'	11 20 30.8	
		Chile (h = 110 km).			
		n = 7.3, M = 7.2 (Up,Ki).			
		M uncorrected for focal depth.			
"	2	Up	iSgl	12 29 23.0	
		Ki	iSgl	12 31 20.3	
		Sk	iSgl	12 31 05.7	
		Um	iSgl	12 29 39.2	
		Ud	iSgl	12 30 22.6	
		De	iSgl	12 30 49.0	
		Western USSR.			
		Explosion.			
"	2	Up	iPP	13 52 20.9	
				micr sec	
			PP Z'	0.1 1.4	
		Ud	iPP	13 52 09.5	
		De	iPP	13 52 01.0	
		Chile (h = 100 km).			
"	2	Up	iP	14 53 11.4 D	
			ipP	14 54 01.5	
				micr sec	
			P Z'	0.6 0.8	
		Ki	iP	14 52 45.0 D	
			ipP	14 53 36.0	
				micr sec	
			P Z'	0.9 1.3	
		Sk	iP	14 53 13.3	
		Um	iP	14 52 54.7 D	
		Ud	iP	14 53 20.7 D	
			ipP	14 54 11.1	
		De	iP	14 53 30.4 D	
			ipP	14 54 21.3	
		Formosa.			
		h = 210 km (Up,Ki,Ud,De).			
		m = 6.4 (Up,Ki).			
"	2	Um	iP	22 14 26.9	
"	3	Ud	iPP	03 53 44.7	
		Chile (h = 100 km).			
"	3	Up	iP	04 05 29.7	
		Ki	iP	04 05 00.7	
		Sk	eP	04 05 26	

(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974					
Jan.	3	(cont.)			
		Um	iP	04 05 13.3	
		Ud	iP	04 05 36.4	
		De	iP	04 05 47.3	
		Mariana Islands (h = 140 km).			
"	3	Up	iP	07 44 29.3	
		Um	eP	07 45 01	
		Ud	iP	07 44 37.7	
		De	iP	07 44 02.0	
		Turkey (h = N).			
"	3	Up	iPKP	11 34 34.7	
		Ki	ePKP	11 34 24	
		Um	iPKP	11 34 26.9	
		Ud	iPKP	11 34 36.5	
		De	iPKP	11 34 45.4	
		New Hebrides Islands (h = 10 km).			
"	3	Ud	iPKPl	12 29 14.0	
"	3	Um	ePKP	15 00 28	
		Ud	iPKP	15 00 33.4	
		New Hebrides Islands (h = 25 km).			
"	3	Up	iSgl	15 54 36.2	
		Ki	i	15 52 05.9	
			iSgl	15 52 31.5	
				micr sec	
			Sgl Z'	0.1 0.5	
		Sk	iS*	15 52 34.7	
			iSgl	15 52 37.9	
		Um	iPgl	15 52 11.1	
			iSn	15 52 45.1	
			iSgl	15 52 58.3	
		Ud	iSgl	15 54 24.7	
		Nordland, Norway, 66.4°N, 14.6°E. Origin time = 15 51 09. Explosion.			
"	4	Ud	iSKPl	00 51 33.9	
		New Hebrides Islands (h = 15 km).			
"	4	Ud	iP	01 27 35.5	
		Greece.			
"	4	Up	iP	09 35 39.9	
			ipP	09 35 48.1	
				micr sec	
			pP Z'	0.1 0.9	
		Ki	iP	09 35 36.4 C	
				micr sec	
			P Z'	0.1 0.8	
		(cont.)			

1974					
Jan.	4	(cont.)			
		Sk	iP	09 36 00.7 C	
		Um	eP	09 35 32	
			ipP	09 35 40.3	
		Ud	iP	09 35 56.0 C	
			ipP	09 36 04.3	
			iPP	09 37 44.3	
		De	iP	09 35 57.4	
			iPP	09 37 44.0	
		Kirghiz-Sinkiang. h = 30 km (Up,Um,Ud). m = 5.6 (Up,Ki).			
"	4	Up	iSgl	11 46 51.5	
		Ki	iSn	11 43 43.8	
			iSgl	11 44 08.8	
		Sk	iSgl	11 46 32.0	
		Um	iSn	11 44 20.4	
			i	11 44 36.7	
			iSgl	11 44 55.7	
		Ud	iSgl	11 47 30.6	
		Northwest USSR. Explosion.			
"	4	Um	iSgl	12 14 57.0	
		Ud	eSgl	12 15 42	
		Western USSR. Explosion.			
"	4	Sk	iP	12 35 33.9	
		Turkey.			
"	4	Ki	iPgl	12 58 19.6	
			iSn	12 58 57.5	
			iSgl	12 59 11.7	
		Um	iSgl	13 00 46.7	
		Northwest USSR-Norway. Explosion.			
"	4	Ki	eP	18 07 31	
		Mexico (h = 50 km).			
"	4	Um	iPKP	19 00 57.7	
		Ud	iPKP	19 01 08.9	
		New Hebrides Islands (h = 20 km).			
"	4	Um	i(P)	21 30 47.0	
"	4	Ud	iPKPl	22 41 11.1	
		De	iPKPl	22 41 22.0	
"	5	Up	iP	04 31 34.2	
		Um	iP	04 32 15.6	
		Ud	eP	04 31 51	
		(cont.)			

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974						
Jan.	5	(cont.)				
		De	eP		04 31 10	
		Rumania (h = 90 km).				
"	5	Ud	iP		05 30 38.9	
"	5	Um	iP		07 38 16.3	
		Italy (h = N).				
"	5	Up	iP		08 47 37.3	
			ipP		08 48 02.5	
			i(PP)		08 51 28.6	
			iPP		08 51 46.7	
					micr	sec
			P	Z'	0.2	1.5
			pP	Z'	0.7	2.0
			Mx	E	6.3	42
			Mx	N	5.4	35
			Mx	Z	13	45
		Ki	iP		08 47 43.3	
			iPP		08 52 00.2	
					micr	sec
			PP	Z'	0.3	2.0
			Mx	E	3.8	24
			Mx	N	3.1	26
		Sk	iP		08 47 27.4	
			iPP		08 51 26.2	
		Um	iP		08 47 43.3	
			i(PP)		08 51 12.7	
			iPP		08 52 01.6	
		Ud	iP		08 47 28.5	
			ipP		08 47 55.1	
			iPP		08 51 33.8	
		De	iP		08 47 27.4	
			ipP		08 47 54.5	
			iPP		08 51 25.2	
		Peru.				
		h = 100 km (Up,Ud,De).				
		m = 6.7, M = 6.0 (Up,Ki).				
"	5	Ki	iSn		11 22 49.8	
			iSgl		11 23 10.3	
		Northwest USSR.				
		Explosion.				
"	5	Um	iSgl		12 13 55.2	
		Western USSR.				
		Explosion.				
"	5	Ki	iPn		12 21 11.2	
			iSn		12 22 00.0	
			iSgl		12 22 15.9	
		Um	eSgl		12 23 45	
		Northwest USSR-Norway.				
		Explosion.				

1974						
Jan.	5	Up	iP		14 11 53.0	
					micr	sec
			P	Z'	0.1	1.0
		Ki	iP		14 11 00.1	
					micr	sec
			P	Z'	0.1	0.8
		Sk	iP		14 11 30.2	
		Um	iP		14 11 26.5	
		Ud	iP		14 11 52.6	
		De	iP		14 12 15.2	
		Aleutian Islands				
		(h = 40 km).				
		m = 6.0 (Up,Ki).				
"	5	Ud	iP		15 35 32.1	
		Off coast of Oregon (h = N).				
"	5	Up	eP		15 49 04	
		Um	iP		15 48 46.4	
		Ud	iP		15 48 56.8	
		Off coast of Oregon (h = N).				
"	5	Up	iP		16 05 34.7	
					micr	sec
			P	Z'	0.2	1.5
		Ki	eP		16 04 55	
		Sk	iP		16 05 08.5	
		Um	iP		16 05 16.7	
		Ud	iP		16 05 26.1	
		De	eP		16 05 47	
		Off coast of Oregon (h = N).				
"	5	Up	iPKPl		16 40 17.1	
		Ud	iPKPl		16 40 19.5	C
		De	iPKPl		16 40 29.7	
"	5	Ki	iP		17 53 47.9	
		Ud	iP		17 54 26.7	
		Off coast of Oregon (h = N).				
"	5	Up	epPKP		22 02 33	
			iSKPl		22 06 00.7	
		Ki	iPKP		22 02 13.7	
			ipPKP		22 02 19.4	
		Sk	ePKP		22 02 25	
		Um	iPKP		22 02 20.4	
			ipPKP		22 02 25.8	
		Ud	iPKP		22 02 28.4	
			ipPKP		22 02 34.8	
			iSKPl		22 06 03.5	
		De	ipPKP		22 02 44.9	
		New Hebrides Islands.				
		h = 20 km (Ki,Um,Ud).				
"	5	Up	eP		23 35 29	
		(cont.)				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Jan.	5	(cont.)			
		Ud	iP	23 35 22.4	
		Off coast of Oregon (h = N).			
"	5	Up	iP	23 40 51.2	
		Sk	eP	23 40 25	
		Um	iP	23 40 33.8	
			ipP	23 40 39.3	
		Ud	iP	23 40 44.5	
			ipP	23 40 50.0	
		Off coast of Oregon.			
		h = 20 km (Um,Ud).			
"	6	Ud	iPKPl	04 39 15.5	
		De	iPKPl	04 39 25.9	
		Tonga Islands (h = N).			
"	6	Ud	iP	07 51 38.7	
		East of Crete (h = 30 km).			
"	6	Up	iSn	09 03 43.5	
			iSgl	09 04 39.8	
		Ki	iPn	09 00 29.5	
			iSn	09 01 27.4	
			iSgl	09 01 48.7	
		Sk	iSgl	09 04 11.5	
		Um	iSn	09 02 06.4	
			i	09 02 22.4	
			iSgl	09 02 39.7	
		Ud	iSn	09 04 06.9	
			eSgl	09 05 15	
			i	09 05 25.7	
		Northwest USSR.			
		Explosion.			
"	6	Up	iP	10 12 44.8	
		Ki	iP	10 12 45.7	
		Um	iP	10 12 47.9	
		Ud	iP	10 12 25.4	
			i	10 12 29.2	
		De	iP	10 12 38.2	
		North Atlantic Ocean			
		(h = N).			
"	6	Up	iP	10 38 38.3	
		Ki	iP	10 38 37.1	
		Sk	eP	10 38 09	
		Um	iP	10 38 41.0	
			i	10 38 45.6	
		Ud	iP	10 38 19.2	
		North Atlantic Ocean			
		(h = N).			
"	6	Up	iSKPl	12 38 35.6	
		Ki	ePKP	12 34 56	
		Um	iPKP	12 35 03.1	
		(cont.)			

1974 Jan.	6	(cont.)			
		Ud	iPKP	12 35 09.4	
		New Hebrides Islands			
		(h = N).			
"	6	Up	iP	14 43 30.0	C
				micr sec	
			P Z'	0.1 1.1	
		Ki	iP	14 44 14.3	
			i	14 44 17.7	
				micr sec	
			P Z'	0.2 1.5	
		Sk	iP	14 43 41.5	C
		Um	i(P)	14 43 51.8	
			iP	14 43 54.9	C
			i	14 44 00.1	
		Ud	i(P)	14 43 20.7	
			iP	14 43 23.9	C
			i	14 43 29.1	
		North of Ascension Island			
		(h = N).			
		m = 6.0 (Up,Ki).			
"	6	Up	iPKPl	15 33 15.9	
			iPKP2	15 33 20.4	
		Sk	iPKPl	15 33 09.7	
		Um	iPKPl	15 33 04.3	
		Ud	iPKPl	15 33 17.9	
		De	iPKPl	15 33 26.4	
		Kermadec Islands			
		(h = 20 km).			
"	6	Up	iPKP	17 58 40.9	
			iSKPl	18 01 52.6	
				micr sec	
			SKPl Z'	0.1 0.9	
		Ki	iPKP	17 58 26.5	
		Sk	iPKP	17 58 37.3	
		Um	iPKP	17 58 32.8	
		Ud	iPKP	17 58 43.0	
			iSKPl	18 01 56.4	
		De	i(PKP)	17 58 43.6	
			iPKP	17 58 50.4	
		New Hebrides Islands			
		(h = 120 km).			
"	6	Up	iRg	18 01 52.1	
		Ud	iRg	18 01 56.4	
		Central Sweden.			
"	6	Up	i(P)	18 02 48.2	
"	6	Ki	iP	21 43 51.9	
		Um	iP	21 43 24.2	
		De	iP	21 43 03.1	
		Turkey (h = N).			

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Jan.	6	Sk	iP		23 29 37.8	
		Ud	iP		23 29 01.3	
		Aegean Sea (h = N).				
"	6	Um	iP		23 55 06.1	
		Ud	iP		23 54 31.2	
		Aegean Sea (h = 45 km).				
"	7	Ud	iP		02 13 41.1	
"	7	Up	iP		04 07 46.7	
			ipP		04 07 57.1	
					micr	sec
			pP	Z'	0.1	0.9
		Ki	iP		04 07 25.5	
		Sk	epP		04 08 05	
		Um	iP		04 07 33.6	
			ipP		04 07 43.6	
		Ud	iP		04 07 55.6	
			ipP		04 08 04.9	
		Luzon.				
		h = 35 km (Up,Um,Ud).				
"	7	Up	iP		05 28 44.6	
			i		05 28 45.5	
			ipP		05 29 08.6	
		Ki	iP		05 28 38.5	
		Sk	iP		05 29 01.2	
		Um	iP		05 28 37.2	
			i		05 28 38.2	
		Ud	iP		05 28 57.7	
			i		05 28 58.6	
		De	eP		05 29 01	
		Burma-India.				
		h = 100 km (Up).				
"	7	Um	iP		08 36 34.1	C
		Ud	iP		08 36 59.9	C
		De	iP		08 37 21.6	C
		Alaska (h = 130 km).				
"	7	Ki	iP		08 59 16.2	
		Sumatra (h = 140 km).				
"	7	Um	iSgl		11 09 43.4	
		Western USSR.				
		Explosion.				
"	7	Ud	iP		11 33 08.4	
		Okhotsk Sea (h = 410 km).				
"	7	Um	iSgl		13 08 48.5	
		Western USSR.				
		Explosion.				
"	7	Up	iP		15 31 12.0	C
		(cont.)				

1974 Jan.	7	(cont.)				
		Up	i		15 31 15.8	
					micr	sec
			P	Z'	0.1	0.9
		Ki	iP		15 31 54.1	C
			i		15 31 57.8	
					micr	sec
			P	Z'	0.1	0.9
		Sk	iP		15 31 52.7	C
		Um	iP		15 31 30.1	C
		Ud	iP		15 31 27.9	C
			i		15 31 31.5	
		De	iP		15 31 09.2	C
			i		15 31 13.1	
		Iran (h = 30 km).				
		m = 5.6 (Up,Ki).				
		Double P, in average 3.8 sec apart.				
"	7	Up	iP		15 36 08.1	
					micr	sec
			P	Z'	0.1	1.1
		Ki	iP		15 36 51.5	
		Um	iP		15 36 26.3	
		Ud	iP		15 36 23.1	C
			i		15 36 27.0	
		De	iP		15 36 04.8	
		Iran (h = 35 km).				
"	7	Ud	iP		17 57 31.7	
		Iran (h = 40 km).				
"	7	Ki	iP		23 39 44.1	
		Um	iP		23 39 57.9	
		Bonin Islands (h = 520 km).				
"	8	Ud	iPKPl		04 45 32.0	
"	8	Um	iSgl		11 58 01.9	
		Western USSR.				
		Explosion.				
"	8	Up	iSgl		13 13 34.6	
		Ki	eSgl		13 15 31	
		Sk	eSgl		13 15 17	
		Um	iSgl		13 13 49.0	
		Ud	iSgl		13 14 35.7	
		Western USSR.				
		Explosion.				
"	8	Um	iSgl		13 24 06.0	
		Lake Ladoga region.				
		Explosion.				
"	8	Um	iP		19 56 30.0	
		Ud	iP		19 56 59.5	
		Japan (h = 10 km).				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Jan.	8	Ud	i(P)		21 14 40.7		
"	8	Up			micr	sec	
			Mx	E	2.6	17	
			Mx	N	3.2	18	
			Mx	Z	4.8	22	
		Ki	iPP		22 06 23.7		
			iSP		22 15 24		
					micr	sec	
			PP	Z'	0.1	1.5	
			Mx	E	5.9	22	
			Mx	N	4.3	20	
			Mx	Z	3.3	20	
		Um	iPP		22 05 45.0		
			iSKS		22 12 08		
			iS		22 13 13		
		Indian Ocean (h = N).					
		M = 6.1 (Up,Ki).					
"	8	Ki	iP		23 22 53.6	C	
		Um	iP		23 23 12.5	C	
		Ud	iP		23 23 43.3		
		Japan (h = 70 km).					
"	9	Up	iP		03 00 22.1	C	
					micr	sec	
			P	Z'	0.6	1.1	
			Mx	E	0.9	16	
			Mx	N	1.2	14	
			Mx	Z	2.1	16	
		Ki	iP		02 59 29.8	C	
					micr	sec	
			P	Z'	0.5	1.0	
			Mx	E	0.9	13	
			Mx	N	1.4	14	
			Mx	Z	1.4	15	
		Sk	iP		03 00 06.1	C	
		Um	iP		02 59 54.5	C	
		Ud	iP		03 00 25.7	C	
		De	iP		03 00 47.0	C	
		Kamchatka (h = N).					
		m = 6.6, M = 5.3 (Up,Ki).					
"	9	Ki	eP		03 28 49		
"	9	Ki	iSn		09 54 29.5		
		Northwest USSR-Norway.					
		Explosion.					
"	9	Um	iSgl		11 25 07.7		
		Western USSR.					
		Explosion.					
"	9	Up	iSgl		12 20 23.1		
		Ki	iSgl		12 22 28.3		
		Sk	iSgl		12 22 08.3		
		(cont.)					
1974 Jan.	9	(cont.)					
		Um	iSgl		12 20 39.9		
		Ud	iSgl		12 21 25.1		
		Western USSR.					
		Explosion.					
"	9	Um	iSgl		12 33 04.3		
		Esthonia.					
		Explosion.					
"	9	Um	iP		13 14 47.4		
		Adriatic Sea.					
"	9	Um	iP		21 18 17.2		
		Iran (h = N).					
"	10	Ud	iPKPl		00 58 16.9		
		De	iPKPl		00 58 28.8		
"	10	Up	iP		02 47 37.4	C	
			ipP		02 47 48.1		
					micr	sec	
			P	Z'	0.2	1.1	
		Ki	iP		02 46 44.9	C	
					micr	sec	
			P	Z'	0.1	1.1	
			Mx	E	0.7	15	
			Mx	N	0.9	15	
			Mx	Z	1.1	15	
		Um	iP		02 47 09.7	C	
			ipP		02 47 20.7		
		Ud	iP		02 47 42.0	C	
		Kamchatka.					
		h = 40 km (Up,Um).					
		m = 6.1 (Up,Ki).					
"	10	Up	iP		05 29 30.6	C	
			ipP		05 29 41.2		
					micr	sec	
			P	Z'	0.3	1.0	
			Mx	E	1.6	17	
			Mx	N	1.7	16	
			Mx	Z	2.3	17	
		Ki	iP		05 28 38.0	C	
			ipP		05 28 48.5		
					micr	sec	
			P	Z'	0.3	0.9	
			Mx	E	1.1	15	
			Mx	N	1.5	15	
			Mx	Z	2.1	16	
		Sk	iP		05 29 14.0		
		Um	iP		05 29 02.5	C	
			ipP		05 29 12.8		
		Ud	iP		05 29 34.6		
		De	iP		05 29 55.7		
		Kamchatka.					
		h = 40 km (Up,Ki,Um).					
		m = 6.4, M = 5.4 (Up,Ki).					

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974					
Jan.	10	Up	iP	09 07 06	
			i(PKP)	09 10 10.2	
			iPKP	09 10 18.5	C
			iPP	09 12 29	
			iSKP1	09 13 40.9	
				micr	sec
			PKP Z'	0.9	1.6
			Mx E	56	22
			Mx N	110	22
			Mx Z	180	22
		Ki	iP	09 06 35	
			iPKP	09 10 05.1	C
			iPP	09 11 39	
			iSKS	09 17 14.7	
			iPKKP1	09 20 01.1	
				micr	sec
			PKP Z'	0.5	1.2
			Mx E	70	22
			Mx N	66	22
			Mx Z	97	21
		Sk	iPKP	09 10 16.0	C
			eSKP1	09 13 42	
		Um	iP	09 06 51	
			i(PKP)	09 10 04.0	
			iPKP	09 10 11.3	C
			iPP	09 12 04	
		Ud	i(PKP)	09 10 11.2	
			iPKP	09 10 20.4	C
			iSKP1	09 13 43.4	
		De	i(PKP)	09 10 16.4	
			iPKP	09 10 26.6	C
			iSKP1	09 13 54.0	
		New Hebrides Islands			
		(h = 35 km).			
		M = 7.3 (Up,Ki).			
"	10	Ud	i(SKP1)	09 42 30.5	
"	10	Ud	iSKP1	10 15 07.3	
		New Hebrides Islands			
		(h = 55 km).			
"	10	Ki	iPKP	10 16 31.6	
		Um	iPKP	10 16 37.8	
		Ud	ePKP	10 16 47	
		New Hebrides Islands			
		(h = 45 km).			
"	10	Up	iSKP1	10 23 21.7	
				micr	sec
			SKP1 Z'	0.1	1.0
		Ki	i(PKP)	10 19 36.5	
			iPKP	10 19 42.1	
				micr	sec
			PKP Z'	0.1	1.5
		Sk	iPKP	10 19 52.8	
		(cont.)			

1974					
Jan.	10	(cont.)			
		Um	i(PKP)	10 19 46.3	
			iPKP	10 19 51.3	
			iSKP1	10 23 10.2	
		Ud	i(PKP)	10 19 56.3	
			iPKP	10 20 01.4	
			i(SKP1)	10 23 19.5	
			iSKP1	10 23 24.9	
		De	i(PKP)	10 19 57.2	
			iPKP	10 20 04.3	
			i(SKP1)	10 23 30.7	
			iSKP1	10 23 35.8	
		New Hebrides Islands			
		(h = 70 km).			
"	10	Um	iP	10 41 08.9	
		Russia-China (h = 540 km).			
"	10	Up	iSn	11 39 38.1	
			iSg1	11 39 51.4	
		Ki	iSg1	11 42 28.9	
		Um	iSg1	11 40 27.1	
		Ud	i(S*)	11 40 44.7	
		De	eSg1	11 41 24	
		Esthonia.			
		Explosion.			
"	10	Ud	iP	11 57 55.8	
		Tyrrhenian Sea (h = 340 km).			
"	10	Up	iP	12 56 14.8	C
			ipP	12 56 27.9	
				micr	sec
			P Z'	0.1	1.0
		Ki	iP	12 55 32.3	C
		Sk	iP	12 56 09.0	
		Um	iP	12 55 53.3	C
		Ud	iP	12 56 21.5	C
		De	iP	12 56 36.5	C
		Japan.			
		h = 50 km (Up).			
"	10	Ki	iP	16 24 30.9	
		Um	iP	16 24 48.9	
		Ud	iP	16 25 16.0	
		De	eP	16 25 29	
		Japan (h = 35 km).			
"	10	Um	iPKP1	16 28 50.1	
		Ud	iPKP1	16 29 03.3	
"	10	Ud	iP	16 43 09.9	
		Iran.			
"	10	Um	iPKP1	16 50 16.3	

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974						
Jan.	10	Up	eP		22 37 20	
					micr	sec
			P	Z'	0.1	0.9
		Ki	iP		22 37 17.8	
			i		22 37 22.5	
					micr	sec
			P	Z'	0.1	1.0
		Sk	iP		22 36 51.8	
		Um	iP		22 37 25.5	
		Ud	iP		22 37 02.7	
		De	eP		22 37 15	
		North Atlantic Ocean				
		(h = N).				
		m = 5.4 (Up,Ki).				
"	10	Ki	i(P)		23 12 53.7	
"	11	Ki	eP		02 04 48	
			i		02 04 55.3	
		Sk	eP		02 04 20	
		Um	iP		02 04 54.6	
		Ud	iP		02 04 33.6	
		North Atlantic Ocean				
		(h = N).				
"	11	Up	iP		02 11 19.4 C	
					micr	sec
			P	Z'	0.2	1.0
		Ki	iP		02 11 28.4 C	
					micr	sec
			P	Z'	0.1	1.1
		Sk	iP		02 11 44.8	
		Um	iP		02 11 17.6 C	
		Ud	iP		02 11 35.8 C	
		De	iP		02 11 32.3	
		Hindu Kush (h = 160 km).				
		m = 5.6 (Up,Ki).				
"	11	Um	iPKP		05 36 23.2	
		Argentina (h = 120 km).				
"	11	Up	iPKP		05 55 38.3	
			iSKP1		05 59 01.4	
					micr	sec
			Mx	E	3.8	20
			Mx	N	6.8	21
			Mx	Z	13	21
		Ki	iPKP		05 55 23.6	
					micr	sec
			PKP	Z'	0.1	1.0
			Mx	E	3.7	20
			Mx	N	5.6	22
			Mx	Z	6.8	21
		Sk	iPKP		05 55 36.0	
		Um	iPKP		05 55 30.2	
		Ud	iPKP		05 55 40.1	
		(cont.)				

1974				
Jan.	11	(cont.)		
		Ud	iSKP1	05 59 04.4
			iSKP	05 59 13.6
		De	iPKP	05 55 46.5
			iSKP1	05 59 15.4
		New Hebrides Islands		
		(h = 15 km).		
		M = 6.3 (Up,Ki).		
"	11	Ki	iPKP	06 06 21.9
"	11	Up	iP	09 33 01.3
				micr sec
			P Z'	0.1 1.1
		Ki	iP	09 32 08.8
				micr sec
			P Z'	0.1 1.1
		Um	iP	09 32 33.5
		Ud	iP	09 33 05.4
		Kamchatka (h = N).		
		m = 5.9 (Up,Ki).		
"	11	Ki	iPn	11 57 28.8
			iPgl	11 57 36.7
			iSn	11 58 16.0
			iSgl	11 58 30.5
		Um	iSgl	12 00 05.3
		Northwest USSR-Norway.		
		Explosion.		
"	11	Um	eSgl	12 23 07
		Western USSR.		
		Explosion.		
"	11	Up	iSgl	13 24 56.3
		Um	iSgl	13 25 12.9
		Western USSR.		
		Explosion.		
"	11	Ki	iP	15 01 32.8
		Um	iP	15 01 48.0
		Ud	iP	15 02 17.0
		South of Japan (h = 20 km).		
"	11	Sk	iP	15 13 10.2
		South Atlantic Ocean		
		(h = N).		
"	11	Um	iP	16 08 07.6
		Ud	iP	16 08 30.2
		Volcano Islands (h = N).		
"	11	Ud	iP	21 19 48.3
		Aegean Sea (h = 45 km).		
"	11	Ud	iP	22 52 26.9
		Kirghiz SSR (h = 40 km).		

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974				
Jan.	11	Ki	ePKP	23 44 23
		New Hebrides Islands (h = N).		
"	12	Up	iRg	11 08 18.7
		Ud	iRg	11 08 05.3
		Central Sweden.		
"	12	Ki	iPn	12 31 54.8
			iSn	12 32 43.4
			iS*	12 32 57.9
		Um	eSgl	12 34 27
		Northwest USSR-Norway. Explosion.		
"	12	Ki	i(S*)	12 45 56.7
		Northwest USSR. Explosion.		
"	12	Ud	iPKPl	12 54 21.9
"	12	Up	iSgl	13 45 44.5
		Ki	iSgl	13 46 25.8
		Sk	eSgl	13 46 56
		Um	iSgl	13 45 05.0
		Ud	iSgl	13 46 41.9
		De	iSgl	13 47 22.2
		Lake Ladoga region. Explosion.		
"	12	Um	iP	20 12 55.5
		Panama (h = 35 km).		
"	13	Up	eSgl	05 35 30
		Ki	iSn	05 32 11.8
			iSgl	05 32 32.2
		Um	iSgl	05 33 27.6
		Northwest USSR. Explosion.		
"	13	Ki	iSn	07 08 51.6
			iSgl	07 09 13.7
		Northwest USSR. Explosion.		
"	13	Up	iSgl	07 16 41.2
		Ki	ePn	07 12 34
			ePgl	07 12 46
			iSn	07 13 32.2
			iS*	07 13 50.8
		Sk	eSgl	07 16 22
		Um	iSn	07 14 13.7
			iSgl	07 14 47.7
		Ud	iSgl	07 17 19.5
		Northwest USSR. Explosion.		

1974				
Jan.	13	Ki	iPKP	18 11 46.2
		Um	iPKP	18 11 49.1
		New Hebrides Islands (h = N).		
"	13	Up	iSgl	18 28 59.5
		Ki	iSgl	18 29 22.9
		Sk	iPgl	18 27 46.3
			iSgl	18 28 12.6
		Um	iPgl	18 27 30.5
			iSgl	18 27 48.6
		Ud	iPgl	18 28 14.1
			iSgl	18 29 04.4
		Ångermanland, Sweden, 63.5°N, 17.1°E. Origin time = 18 27 08.		
"	13	Ud	iP	21 42 23.1
		Atlantic Ocean (h = N).		
"	14	Up	iSgl	11 39 01.6
		Um	iSgl	11 39 20.1
		Ud	eSgl	11 40 02
		De	eSgl	11 40 37
		Western USSR. Explosion.		
"	14	Up	iSgl	13 55 39.2
		Sk	iSgl	13 57 37.0
		Um	iSgl	13 56 22.3
		Ud	iSgl	13 56 45.4
		Esthonia. Explosion.		
"	14	Ki	ePKP	16 35 40
		Um	iPKP	16 35 47.9
		Ud	ePKP	16 35 59
			iSKPl	16 39 31.9
		New Hebrides Islands (h = 5 km).		
"	14	Up	iP	20 42 30.5
		Ki	iP	20 41 39.3
				micr sec
			P Z'	0.1 1.2
		Sk	iP	20 42 16.1
		Um	iP	20 42 03.1
		Ud	iP	20 42 34.7
		De	iP	20 42 54.7
		Kurile Islands (h = 15 km).		
"	14	Ki	iP	21 35 04.5
		Kamchatka.		
"	14	Ki	iPKP	23 50 47.8
		Ud	iPKP	23 51 03.9
		De	iPKP	23 51 08.8
		Solomon Islands (h = 55 km).		

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Jan.	15	Up	iPKP1		08 51 47.4	
			iPKP2		08 51 53.1	
					micr	sec
			PKP1	Z'	0.3	1.0
			PKP2	Z'	0.2	0.7
		Ki	i(PKP)		08 51 25.0	
			iPKP		08 51 34.1	
					micr	sec
			PKP	Z'	0.1	1.0
		Sk	iPKP1		08 51 40.4	
		Um	iPKP1		08 51 34.8	
		Ud	iPKP		08 51 46.1	
			iPKP1		08 51 49.5	
			iPKP2		08 51 56.5	
		De	iPKP1		08 51 57.2	
		Kermadec Islands (h = 110 km).				
"	15	Um	iSg1		13 03 03.7	
		Ud	iSg1		13 03 25.5	
		Esthonia. Explosion.				
"	15	Sk	iSg1		13 36 06.8	
		Um	iSg1		13 34 40.4	
		Western USSR. Explosion.				
"	15	Ud	iP		17 39 34.8	
		Greece (h = 40 km).				
"	15	Ki	iP		19 12 53.0	
		Um	iP		19 13 03.7	
		Mariana Islands (h = 220 km).				
"	15	Ki	iP		19 51 13.6	
		Sk	eP		19 50 48	
		Um	iP		19 51 24.7	
			i(pP)		19 51 30.7	
		Ud	iP		19 51 12.8	
			i(pP)		19 51 18.7	
		Iceland (h = N).				
"	15	Up	iP		23 00 38.7	
					micr	sec
			P	Z'	0.1	0.9
			Mx	N	5.1	19
		Ki	iP		23 00 16.3	
					micr	sec
			P	Z'	0.1	1.0
			Mx	E	2.0	11
			Mx	N	2.8	15
			Mx	Z	2.0	12
		Sk	eP		23 00 46	
		Um	iP		23 00 24.2	
		Ud	iP		23 00 51.1	
		Szechwan, China (h = N). m = 5.8, M = 5.7 (Up,Ki).				
1974 Jan.	16	Um	iPKP1		04 05 04.6	
"	16	Up	iP		05 04 15.7	
					micr	sec
			P	Z'	0.1	1.0
			Mx	N	1.1	15
		Ki	iP		05 03 52.5	
					micr	sec
			P	Z'	0.1	1.3
			Mx	E	1.1	13
			Mx	N	1.0	12
			Mx	Z	0.9	10
		Um	iP		05 04 00.4	
		Ud	iP		05 04 25.0	
		De	iP		05 04 33.7	
		Formosa (h = 60 km). m = 5.7, M = 5.4 (Up,Ki).				
"	16	Ud	iPKP1		07 31 02.3	
		De	iPKP1		07 31 12.4	
"	16	Ki	iP		09 56 51.2	
		Mariana Islands (h = 120 km).				
"	16	Ki	iPKP		11 04 07.3	
		New Hebrides Islands (h = 30 km).				
"	16	Up	iSg1		12 22 59.0	
		Um	iSg1		12 23 09.5	
		Ud	iSg1		12 24 00.8	
		Western USSR. Explosion.				
"	16	Um	eP		19 51 37	
		Ud	iP		19 52 09.3	
"	17	Up	iP		02 56 19.4 D	
			ipP		02 56 39.7	
					micr	sec
			P	Z'	0.1	0.9
		Ki	iP		02 56 00.9 D	
					micr	sec
			P	Z'	0.1	1.2
		Sk	eP		02 56 27	
		Um	iP		02 56 07.0 D	
		Ud	iP		02 56 29.2 D	
		De	iP		02 56 35.2 D	
		Luzon. h = 80 km (Up). m = 5.7 (Up,Ki).				
"	17	Up	iP		07 54 22.0 C	
		Um	iP		07 54 20.1	
		Ud	iP		07 54 38.3 C	
		De	iP		07 54 34.4	
		Pakistan (h = 100 km).				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Jan.	17	Up	iP		08 50 02.7	C
					micr	sec
			P	Z'	0.2	1.0
		Ki	iP		08 49 17.3	
					micr	sec
			P	Z'	0.1	1.0
		Sk	iP		08 49 54.1	
		Um	iP		08 49 37.6	
		Ud	iP		08 50 09.3	C
		De	iP		08 50 26.8	C
		Kurile Islands (h = 80 km).				
		m = 5.9 (Up,Ki).				
"	17	Ud	iP		11 02 48.8	
"	17	Um	iSgl		12 24 31.8	
		De	iSgl		12 25 28.8	
		Esthonia.				
		Explosion.				
"	17	Up	iSgl		12 30 29.5	
		Um	iSgl		12 30 53.6	
		Western USSR.				
		Explosion.				
"	17	Up	iSn		12 31 07.7	
			iSgl		12 31 21.2	
		Ki	eSgl		12 33 11	
		Sk	eSgl		12 33 03	
		Um	iSgl		12 31 35.5	
		Ud	iSgl		12 32 22.0	
		De	iSgl		12 32 42.2	
		Western USSR.				
		Explosion.				
"	17	Um	iSgl		13 02 44.9	
		Western USSR.				
		Explosion.				
"	17	Ud	iPKP1		13 05 37.4	
		De	iPKP1		13 05 48.5	
"	17	Up	iP		13 05 49.4	C
		Ki	iP		13 05 39.9	C
			ipP		13 06 45.5	
			i(PP)		13 09 41.9	
		Um	i(PP)		13 09 43.2	
			iPP		13 09 54.0	
		Ud	iP		13 05 57.7	C
			i(PP)		13 10 13.3	
			iPP		13 10 22.3	
		De	eP		13 05 59	
		Bali Sea.				
		h = 270 km (Ki).				
"	17	Um	i(P)		14 46 25.0	

1974 Jan.	18	Ki	eP		01 25 39	
		Um	iP		01 25 43.0	
		Ud	iP		01 26 03.3	
		Mindanao (h = N).				
"	18	Up	iPKP2		07 13 06.8	
					micr	sec
			Mx	N	1.1	16
			Mx	Z	1.1	17
		Ki	iPKP2		07 13 14.7	
					micr	sec
			Mx	E	1.4	17
			Mx	N	1.8	18
			Mx	Z	2.1	19
		Southwest of Macquarie Islands				
		(h = N).				
		M = 6.0 (Up,Ki).				
"	18	Um	iPKP1		10 39 24.3	
		New Zealand (h = N).				
"	18	Um	iP		11 02 25.6	
		Ud	iP		11 02 05.8	
		Turkey (h = 25 km).				
"	18	Ki	iPn		11 46 32.9	
			iSn		11 47 30.9	
			iSgl		11 47 55.1	
		Sk	i		11 50 04.7	
			iSgl		11 50 21.8	
		Um	iSn		11 48 10.0	
			i		11 48 25.8	
			iSgl		11 48 45.9	
		Northwest USSR.				
		Explosion.				
"	18	Ki	iSn		11 50 12.2	
		Sk	iSgl		11 53 06.5	
		Um	iSgl		11 51 28.3	
		Northwest USSR.				
		Explosion.				
"	18	Up	iSgl		13 47 12.4	
		Ki	iSgl		13 49 44.4	
		Sk	eSgl		13 49 04	
		Um	iSgl		13 47 45.3	
		Ud	iSgl		13 48 14.7	
		De	iSgl		13 48 40.8	
		Esthonia.				
		Explosion.				
"	18	Ud	iP		14 30 52.2	
		Greece.				
"	18	Up	iP		17 04 01.6	
		Ki	iP		17 04 03.8	C

(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Jan.	18	(cont.)			
		Sk	iP	17 03 45.8	
		Um	iP	17 04 06.6	C
			ipP	17 04 28.6	
		Ud	iP	17 03 49.2	
		De	iP	17 03 53.0	
		Haiti.			
		h = 80 km (Um).			
"	18	Up	iPgl	20 52 36.8	
			iSgl	20 52 50.2	
			iRg	20 52 52.5	
		Sk	iSn	20 54 06.2	
			iSgl	20 54 22.8	
		Um	iSgl	20 54 17.9	
		Ud	iPgl	20 52 48.1	
			i	20 53 06.5	
			iSgl	20 53 10.9	
			iRg	20 53 17.4	
		De	iSgl	20 54 34.4	
		Gästrikland, Sweden,			
		60.5°N, 16.5°E.			
		Origin time = 20 52 20.			
		Explosion?			
"	19	Up	iP	01 07 13.5	
		Ki	iP	01 07 13.6	C
		Um	iP	01 07 09.9	
		Ud	iP	01 07 24.6	
		Sumatra (h = 100 km).			
"	19	Um	iP	04 22 50.3	
		New Guinea (h = 80 km).			
"	19	Um	iP	09 04 02.8	
		Ud	iP	09 04 28.1	
		Aleutian Islands (h = 60 km).			
"	19	Ki	iP	10 40 17.2	
		Ryukyu Islands (h = 120 km).			
"	19	Up	iSgl	12 37 33.1	
		Um	iSgl	12 37 41.0	
		Ud	iS*	12 38 23.1	
			iSgl	12 38 31.8	
		Western USSR.			
		Explosion.			
"	19	Ki	iPn	12 46 50.5	
			iSn	12 47 38.0	
			iSgl	12 47 55.0	
		Northwest USSR-Norway.			
		Explosion.			
"	19	Um	iP	21 44 34.0	
		Ud	iP	21 45 05.9	

1974 Jan.	20	Up	iPKP	05 32 20.8	
		Ki	iPKP	05 32 06.5	
			ipPKP	05 32 20.0	
				micr	sec
			PKP Z'	0.1	1.0
		Sk	iPKP	05 32 17.2	
			ipPKP	05 32 31.1	
		Um	iPKP	05 32 12.3	
			ipPKP	05 32 25.9	
		Ud	iPKP	05 32 21.9	
			ipPKP	05 32 35.7	
			iSKP1	05 35 43.9	
		De	iPKP	05 32 29.4	
			ipPKP	05 32 42.3	
			iSKP1	05 35 53.6	
		New Hebrides Islands.			
		h = 45 km (Ki,Sk,Um,Ud,De).			
"	20	Ud	iPKP1	06 12 58.6	
		De	iPKP1	06 13 10.1	
"	20	Ki	iSn	06 51 36.9	
		Um	iSgl	06 52 51.1	
		Northwest USSR.			
		Explosion.			
"	20	Um	iP	15 59 29.3	
		Japan (h = N).			
"	20	Up	iP	20 15 44.3	C
		Ki	iP	20 15 40.2	
				micr	sec
			P Z'	0.1	1.0
		Sk	iP	20 16 01.0	
		Um	iP	20 15 37.8	C
		Ud	iP	20 15 57.6	C
		India-Bangla Desh (h = N).			
"	21	Ud	iP	00 18 31.5	
		Dodecanese Islands			
		(h = 70 km).			
"	21	Up	eP	00 55 00	
		Ki	eP	00 55 05	
		Um	ipP	00 55 07.9	
		Ud	iP	00 55 10.6	
			ipP	00 55 20.9	
		De	eP	00 55 08	
		Sumatra.			
		h = 40 km (Ud).			
"	21	Um	iSgl	12 43 16.7	
		Western USSR.			
		Explosion.			
"	21	Up	iP	14 20 54.5	
		(cont.)			

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Jan.	21	(cont.)					
		Ud	iP		14 20 58.1		
		Unimak Island (h = N).					
"	21	Ud	iP		20 16 39.2		
		Tyrrhenian Sea (h = 130 km).					
"	21	Um	iP		20 48 18.2		
		Ud	iP		20 47 46.5		
		North of Ascension Island					
		(h = N).					
"	21	Um	iPKP		21 25 19.9		
		South Sandwich Islands					
		(h = N).					
"	21	Ud	iP		23 01 28.9		
		Mexico (h = N).					
"	22	Ki	iP		06 15 37.0		
					micr	sec	
			P	Z'	0.2	1.4	
		Um	iP		06 15 26.2		
		Ud	iP		06 15 46.1		
		De	iP		06 15 44.5		
		Tadzhik SSR (h = 50 km).					
"	22	Ud	eP		10 13 24		
		Mindanao (h = N).					
"	22	Ud	iP		11 14 23.2		
"	22	Um	iSgl		12 21 07.7		
		Western USSR.					
		Explosion.					
"	22	Up	iSn		12 27 12.0		
			iSgl		12 27 23.1		
		Um	iSgl		12 27 56.6		
		Ud	iSgl		12 28 27.0		
		De	eSgl		12 28 48		
			iSg2		12 28 58.3		
		Esthonia.					
		Explosion.					
"	22	Um	iSgl		12 51 15.1		
		Ud	iSgl		12 51 57.2		
		De	eSgl		12 52 27		
		Western USSR.					
		Explosion.					
"	22	Up	iSgl		12 59 09.5		
		Um	iSgl		13 00 02.9		
		De	eSgl		13 00 37		
		Esthonia.					
		Explosion.					
1974 Jan.	22	De	i(P)		13 13 20.6		
"	22	Up	iP		13 38 36.6		C
					micr	sec	
			P	Z'	0.6	1.4	
			Mx	E	3.8	20	
			Mx	N	4.3	20	
			Mx	Z	7.2	21	
		Ki	iP		13 37 41.7		C
					micr	sec	
			P	Z'	0.3	1.0	
			Mx	E	5.5	23	
			Mx	N	3.9	20	
		Sk	iP		13 38 18.6		C
		Um	iP		13 38 07.4		C
			iPcP		13 38 58.7		
		Ud	iP		13 38 39.5		C
		De	iP		13 39 02.0		C
		Kamchatka (h = N).					
		m = 6.5, M = 5.8 (Up,Ki).					
"	22	Um	iSgl		14 44 34.2		
		Lake Ladoga region.					
		Explosion.					
"	22	Ud	iSgl		15 04 44.3		
		De	iSgl		15 03 39.1		
"	22	Ud	iP		15 46 51.2		
		Hindu Kush.					
		Intermediate depth.					
"	22	Ud	iP		19 40 33.7		
"	22	Up	iP		21 22 27.6		
		Greece.					
"	22	Up	iSgl		21 51 57.7		
		Um	iSgl		21 52 15.5		
		Ud	iSgl		21 53 06.0		
		De	eSgl		21 53 23		
			i		21 53 42.8		
		Western USSR.					
		Explosion?					
"	22	Um	iP		22 33 43.7		
		Lake Baikal.					
"	22	Up	iP		23 17 16.7		C
		Ki	eP		23 16 50		
		Sk	eP		23 17 18		
		Um	eP		23 17 00		
			i		23 17 12.7		
		Ud	iP		23 17 25.9		C
		De	iP		23 17 35.6		C
		Ryukyu Islands (h = 130 km).					

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974					
Jan.	23	Ki	iSn	08 08 16.8	
			iS*	08 08 30.0	
		Northwest USSR-Norway.			
		Explosion.			
"	23	Up	iSgl	10 25 52.5	
		Ki	iSgl	10 26 38.8	
		Sk	eSgl	10 27 06	
		Um	iSgl	10 25 13.8	
		Ud	iSgl	10 26 50.0	
		De	iSgl	10 27 34.9	
		Lake Ladoga region.			
		Explosion.			
"	23	Up	iSgl	14 00 50.9	
			iRg	14 00 54.5	
		Ud	iRg	14 01 07.9	
		Central Sweden.			
"	23	Up	iPKPl	14 09 42.3	
			i(SKPl)	14 12 28.5	
				micr	sec
			PKPl Z'	0.1	0.8
			(SKPl) Z'	0.1	0.9
		Ki	iPKP	14 09 33.7	
			iSKPl	14 12 22.2	
		Sk	e(PKP)	14 09 35	
			iPKP	14 09 39.0	
		Um	i(PKP)	14 09 30.9	
			iPKP	14 09 36.8	
			iSKPl	14 12 33.2	
		Ud	iPKPl	14 09 43.7	
			i	14 09 51.8	
		De	iPKP	14 09 54.4	
			iPKPl	14 09 55.4	
		Tonga-Kermadec Islands			
		(h = 450 km).			
"	23	Ki	iP	18 19 29.9	
		Um	iP	18 19 26.4	
		Ud	iP	18 19 41.4	
		Sumatra (h = 190 km).			
"	23	Um	iPKP	22 02 25.1	
			i(pPKP)	22 03 11.7	
		Argentina (h = 120 km).			
"	23	Ud	iP	22 13 03.6	
"	23	Ud	iP	22 21 57.3	
"	24	Up	iP	09 45 02.0	
			ipP	09 45 10.9	
		Sk	eP	09 45 50	
		Um	iP	09 45 42.0	
			ipP	09 45 49.1	
		(cont.)			

1974				
Jan.	24	(cont.)		
		Ud	iP	09 45 11.6
			ipP	09 45 19.1
		De	eP	09 44 37
		Greece.		
		h = 40 km (Um,Ud).		
"	24	Um	iSgl	10 41 44.5
		Esthonia.		
		Explosion.		
"	24	Ki	iP	11 11 58.3
		Um	iP	11 12 11.2
		Ud	iP	11 12 33.7
		Volcano Islands (h = N).		
"	24	Up	iSn	12 07 34.6
			iSgl	12 07 43.6
		Ki	iSgl	12 10 26.5
			i	12 10 36.0
		Um	iSgl	12 08 34.9
		Ud	iSgl	12 08 50.0
		De	iSgl	12 09 17.5
		Esthonia.		
		Explosion.		
"	24	Um	iSgl	12 17 53.5
		Ud	iSgl	12 18 42.2
		Western USSR.		
		Explosion.		
"	24	Up	iSgl	12 42 33.5
		Ki	iSgl	12 44 27.8
		Um	iSgl	12 42 47.6
		Ud	eSgl	12 43 35
		Western USSR.		
		Explosion.		
"	24	Up	iP	13 23 30.4
		Ki	iP	13 24 44.7
		Sk	iP	13 24 05.1
		Ud	iP	13 23 32.0
		De	iP	13 22 55.4
		Tyrrhenian Sea (h = 360 km).		
"	24	Up	iSgl	13 36 26.3
		Um	iSgl	13 36 46.2
		Western USSR.		
		Explosion.		
"	24	Um	iP	14 43 37.3
		Ud	iP	14 44 02.9
		Aleutian Islands (h = N).		
"	24	Up	iSgl	15 00 20.3
		Um	iSgl	15 02 17.9
		(cont.)		

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974						
Jan.	24	(cont.)				
		Ud	iPgl		14 59 37.1	
			iSgl		14 59 58.5	
			i		15 00 03.2	
			iRg		15 00 09.5	
		De	iSgl		15 00 09.8	
		Västergötland, Sweden,				
		58.5°N, 14.1°E.				
		Origin time = 14 59 10.				
		Explosion.				
"	24	Ki	i(Sgl)		15 00 45.6	
"	24	Up	ipP		18 53 33.0	
		Ki	eP		18 52 21	
		Sk	eP		18 52 48	
			ipP		18 53 04.7	
		Um	iP		18 52 51.3	
			i		18 53 02.8	
			ipP		18 53 05.8	
		Ud	ipP		18 53 20.6	
		De	ipP		18 53 46.7	
		Alaska. h = 60 km (Sk,Um).				
"	24	Up	iP		19 23 54.1	
			i		19 24 02.0	
			ipP		19 24 08.0	
			iPcP		19 24 22.8	
			iS		19 32 55	
					micr	sec
			P	Z'	0.5	1.0
			pP	Z'	1.3	1.1
			Mx	E	11	21
			Mx	N	17	22
			Mx	Z	30	20
		Ki	iP		19 23 10.3	
			i		19 23 11.7	
			ipP		19 23 24.7	
			iS		19 31 37	
					micr	sec
			P	Z'	0.4	1.1
			Mx	E	29	16
			Mx	N	15	17
			Mx	Z	27	17
		Sk	iP		19 23 46.1	C
			ipP		19 23 59.2	
		Um	iP		19 23 30.1	C
			ipP		19 23 43.0	
			iS		19 32 09	
		Ud	iP		19 24 00.7	C
			ipP		19 24 13.6	
		De	iP		19 24 17.7	C
			ipP		19 24 31.5	
		Japan.				
		h = 50 km (Up,Ki,Sk,Um,Ud,De).				
		m = 6.4, M = 6.5 (Up,Ki).				
"	24	Up	iP		21 45 21.7	
			i		21 45 29.7	

1974						
Jan.	24	Up	iP		23 49 12.7	
		Ki	iP		23 48 29.3	
		Um	iP		23 48 48.7	
			i(pP)		23 49 05.0	
		Ud	iP		23 49 20.8	
		Japan (h = 40 km).				
"	25	Up	i(P)		01 35 56.6	
"	25	Ki	iSn		08 16 40.3	
			iSgl		08 16 55.2	
		Um	iSgl		08 18 33.3	
		Northwest USSR-Norway.				
		Explosion.				
"	25	Ki	iSn		10 07 45.1	
		Um	iSgl		10 09 00.8	
		Northwest USSR.				
		Explosion.				
"	25	Up	iP		10 15 33.5	
					micr	sec
			Mx	E	1.0	18
			Mx	N	1.0	19
			Mx	Z	1.2	18
		Ki	iP		10 14 50.0	
					micr	sec
			Mx	E	1.5	18
			Mx	N	1.3	17
			Mx	Z	1.7	17
		Sk	iP		10 15 25.5	
		Um	iP		10 15 08.5	
			ipP		10 15 21.5	
		Ud	iP		10 15 40.7	
		Japan.				
		h = 50 km (Um).				
		M = 5.3 (Up,Ki).				
"	25	Um	iSgl		12 19 18.2	
		Western USSR.				
		Explosion.				
"	25	Um	iSgl		12 40 53.0	
		Western USSR.				
		Explosion.				
"	25	Ud	i(Sgl)		12 45 18.7	
"	25	Sk	i(P)		13 45 18.6	
		Um	i(P)		13 45 48.5	
"	25	De	iPKPl		14 30 00.6	
		Fiji Islands (h = 610 km).				
"	25	Um	iPKPl		15 08 47.6	
"	25	Up	iP		20 40 59.2	D
		(cont.)				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
Jan. 25 (cont.)

Up	ipP		20 41 33.5	
	iSKS		20 51 10	
			micr	sec
	P	Z'	0.2	0.9
	Mx	E	1.6	21
	Mx	N	2.1	17
	Mx	Z	2.0	21
Ki	iP		20 40 31.7	D
	iS		20 50 36	
	isP		20 51 27	
			micr	sec
	P	Z'	0.6	1.0
	Mx	E	1.7	19
	Mx	N	2.1	20
	Mx	Z	1.2	16
Sk	iP		20 40 56.9	D
	iPP		20 44 32.3	
Um	iP		20 40 43.4	D
	iSKS		20 50 53	
Ud	iP		20 41 05.7	D
De	iP		20 41 16.9	D
	ipP		20 41 51.8	
	iPP		20 45 09.6	

Mariana Islands.
h = 140 km (Up,De).
m = 6.3, M = 5.7 (Up,Ki).
M uncorrected for focal depth.

" 25 Ud iP 22 03 16.9

" 25

Um	iPKP		22 59 30.5
Ud	iPKP		22 59 39.7

Samoa Islands (h = 10 km).

" 25

Um	iP		23 07 37.5
Ud	iP		23 07 58.1

" 26

Up	iP		01 36 18.1	
			micr	sec
	P	Z'	0.1	1.1
Ki	iP		01 35 25.3	
Um	eP		01 35 51	
Ud	iP		01 36 22.1	
De	iP		01 36 43.1	

Kamchatka (h = N).

" 26

Up	iP		03 22 15.1
Ki	iP		03 21 21.6
Um	iP		03 21 47.8
	ipP		03 22 03.2
Ud	iP		03 22 14.1
De	iP		03 22 36.8

Aleutian Islands.
h = 55 km (Um).

1974
Jan. 26

Ud	iP		05 24 38.1

Turkey (h = 25 km).

" 26

Up	ePl		05 48 27	
	iS		05 58 54	
			micr	sec
	Mx	E	4.3	22
	Mx	N	3.8	18
	Mx	Z	8.5	18
Ki	iPl		05 48 09	
	eP2		05 48 18	
			micr	sec
	Mx	E	14	17
	Mx	N	9.0	21
	Mx	Z	14	17
Sk	iP2		05 48 19.7	
Um	iPl		05 48 20.3	
	iP2		05 48 30.4	
	iS		05 58 55	
De	iP2		05 48 40.2	

Mexico (h = N).
M = 6.2 (Up,Ki).
Pl and P2 probably derive from two consecutive shocks.

" 26

Ud	iPKPl		07 03 26.4
De	iPKPl		07 03 37.2

" 26 Ud i(pP) 10 31 41.1

Japan (h = 55 km).

" 26 Um iSgl 12 37 53.9

Northwest USSR.
Explosion.

" 26

Up	iSgl		13 14 08.0
Sk	eSgl		13 13 32
Um	iSgl		13 12 01.8

Northwest USSR-Finland.
Explosion.

" 26

Sk	eSgl		13 14 26
Um	iSgl		13 12 54.1

Northwest USSR-Finland.
Explosion.

" 26

Sk	eSgl		13 16 27
Um	iSgl		13 15 07.0

Northwest USSR-Norway.
Explosion.

" 26

Up	ipP		16 36 10.0
	iPcP		16 36 19.8
Ud	eP		16 36 02
	ipP		16 36 15.7

Japan.
h = 50 km (Ud).

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974				
Jan.	27	Up	iP	07 10 56.1
		Sk	ipP	07 11 04.3
		Um	iP	07 10 34.2
			ipP	07 10 47.5
		Ud	iP	07 11 03.6
			ipP	07 11 16.6
		De	iP	07 11 18.0
		Japan.		
		h = 50 km (Um,Ud).		
"	27	Up	iP	07 18 17.0
			ipP	07 19 05.8
		Ki	iP	07 17 48.2
			ipP	07 18 35.8
		Sk	iP	07 18 13.9
		Um	iP	07 18 00.5 D
			i	07 18 31.0
			ipP	07 18 48.8
		Ud	iP	07 18 23.5
			ipP	07 19 12.1
		De	iP	07 18 34.7 D
		Mariana Islands.		
		h = 200 km (Up,Ki,Um,Ud).		
"	27	Ud	iPKP	07 52 00.1
		Fiji Islands (h = 610 km).		
"	27	Up	iP	08 16 44.8
		Ud	iP	08 16 55.7
		Formosa (h = 40 km).		
"	27	Up	iP	08 28 36.0
		Um	iP	08 28 19.9
		Ud	iP	08 28 47.2
		Formosa (h = 30 km).		
"	27	Up	iP	08 57 52.6
			i	08 58 14.3
		Um	iP	08 58 12.8
		De	iP	08 57 37.6
		North Atlantic Ocean		
		(h = N).		
"	27	Up	iSn	09 29 08.9
			i	09 29 57.7
			iSgl	09 30 14.5
		Ki	iPn	09 25 58.5
			iSn	09 26 56.8
			iSgl	09 27 17.3
		Sk	iPn	09 27 02.8
			iSn	09 28 58.3
			iSgl	09 29 51.5
		Um	iPn	09 26 22.9
			iPgl	09 26 38.9
			iSn	09 27 36.9
			i	09 27 51.6
		(cont.)		

1974				
Jan.	27	(cont.)		
		Um	iSgl	09 28 10.3
		Ud	iPn	09 27 27.2
			iSn	09 29 34.5
			i	09 30 36.6
			iSgl	09 30 42.1
		De	iSgl	09 32 08.2
			i	09 32 20.8
		Northwest USSR.		
		Explosion.		
"	27	Ud	iP	10 54 10.9
		Formosa (h = 35 km).		
"	27	Ud	i(Sgl)	12 07 08.2
"	27	Up	iPKP	12 26 15.1
		Ki	iPKP	12 26 07.3
		Um	iPKP	12 26 12.6
			ipPKP	12 26 28.4
		Santa Cruz Islands.		
		h = 55 km (Um).		
"	27	Up	iP	21 11 40.0
		Ki	iP	21 12 47.9
		Sk	eP	21 12 19
		Um	iP	21 12 11.9
		Ud	iP	21 11 47.6
		De	iP	21 11 14.9
		Crete (h = 70 km).		
"	27	Ud	iPKPl	22 29 59.3
		De	iPKPl	22 30 09.9
		Fiji Islands (h = 600 km).		
"	27	Ud	iP	23 15 46.0
		Aegean Sea.		
"	28	Up	eSKPl	02 22 12
		Ki	iPKP	02 18 31.5
		Um	iPKP	02 18 38.0
		Ud	iSKPl	02 22 16.9
		New Hebrides Islands		
		(h = 25 km).		
"	28	Up	ePKP	02 20 43
			iSKPl	02 24 11.0
		Ki	iPKP	02 20 28.8
		Um	iPKP	02 20 35.9
		Ud	iPKP	02 20 44.5
			iSKPl	02 24 15.6
		De	iPKP	02 20 54.1
		New Hebrides Islands		
		(h = 25 km).		
"	28	Up	eP	02 26 26
		(cont.)		

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Jan.	28	(cont.)				
		Ki	iP		02 26 00.9	
					micr	sec
			P	Z'	0.1	1.0
		Um	iP		02 26 10.9	
		Ud	iP		02 26 32.0	
		Mariana Islands (h = 60 km).				
"	28	Up	iP		03 44 28.1	
					micr	sec
			P	Z'	0.1	0.9
		Ki	iP		03 45 38.4	
					micr	sec
			P	Z'	0.1	1.3
		Sk	iP		03 44 53.7	
		Um	iP		03 45 06.4	
		Ud	iP		03 44 23.9	D
		De	iP		03 43 51.5	D
		Algeria (h = N).				
		m = 5.6 (Up,Ki).				
"	28	Ud	iPKPl		04 16 03.4	
		De	iPKPl		04 16 15.1	
		Tonga-Kermadec Islands				
		(h = 570 km).				
"	28	Ud	iP		05 38 29.2	
		Greece.				
"	28	Up	iPKPl		06 22 41.2	
		Um	i(PKP)		06 22 29.6	
			iPKP		06 22 39.1	
			iSKPl		06 25 20.8	
		Ud	iPKPl		06 22 43.3	
		De	iPKPl		06 22 54.1	
		Tonga-Kermadec Islands				
		(h = 590 km).				
"	28	Ud	iP		06 47 28.6	
"	28	Up	iP		06 48 18.2	
"	28	Up	iPKPl		08 47 22.2	
		Ud	iPKPl		08 47 25.0	
		De	iPKPl		08 47 35.1	
"	28	Up	iP		12 25 04.1	
		Ki	iP		12 24 33.7	
		Um	iP		12 24 47.6	
		Ud	iP		12 25 10.1	
		De	iP		12 25 21.2	
		Mariana Islands (h = 140 km).				
"	28	Ki	iSgl		12 48 49.2	
		Sk	iSgl		12 48 56.2	
		Um	iSn		12 49 02.2	
		(cont.)				

1974 Jan.	28	(cont.)		
		Um	iSgl	12 49 16.8
		Ud	iSgl	12 50 43.8
		Nordland, Norway,		
		66.5°N, 14.2°E.		
		Origin time = 12 47 22.		
		Explosion.		
"	28	Um	i(Sgl)	13 36 19.2
"	28	Up	iSgl	13 36 45.4
		Sk	eSgl	13 38 41
		Um	iSgl	13 37 08.0
		De	eSgl	13 38 21
		Western USSR.		
		Explosion.		
"	28	Up	iSn	13 45 12.0
			iSgl	13 45 23.9
		Ki	iSgl	13 47 55.9
		Sk	iSgl	13 47 16.4
		Um	iSgl	13 45 59.3
		Ud	iSn	13 46 01.1
			iSgl	13 46 28.1
		De	iSgl	13 46 54.3
		Esthonia.		
		Explosion.		
"	28	Ud	iP	14 28 03.6
		India (h = 40 km).		
"	28	Up	iP	20 13 48.7
		Ki	iP	20 13 08.3
		Um	iP	20 13 26.1
		Ud	iP	20 13 56.6
		De	eP	20 14 12
		Japan (h = 55 km).		
"	29	Um	i(P)	11 13 53.3
"	29	Up	iSgl	12 13 23.3
		Sk	iSgl	12 15 16.5
		Um	iSgl	12 13 41.2
		Ud	iSgl	12 14 24.0
		Western USSR.		
		Explosion.		
"	29	Um	iSgl	12 22 03.4
		De	eSgl	12 22 57
		Esthonia.		
		Explosion.		
"	29	Sk	iSgl	12 39 26.7
		Um	iSgl	12 37 39.6
		De	iSgl	12 40 02.0
		Lake Ladoga region.		
		Explosion.		

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974							
Jan.	29	De	i(P)		12	51	22.2
"	29	Sk	iP		13	39	28.8
			i		13	39	33.8
		Ud	iP		13	38	59.8
		Sicily.					
"	29	Up	iP		15	17	31.9 C
		Ki	eP		15	18	47
		Sk	iP		15	18	15.3 C
		Um	iP		15	18	12.1
		Ud	iP		15	17	40.0
		De	iP		15	17	03.0
		Greece (h = 30 km).					
"	29	Ud	i(P)		16	32	34.6
"	29	Up	iPP		19	15	38.0
					micr		sec
			PP	Z'	0.1		1.3
		Ki	iP		19	10	56.4
			iPP		19	15	17.4
					micr		sec
			P	Z'	0.1		1.0
		Sk	iPKP		19	15	23.3
		Um	iP		19	11	00.8
			iPKP		19	15	17.4
			iPP		19	15	22.4
		Ud	iP		19	11	18.5
			iPKP		19	15	24.4
		Banda Sea (h = 150 km).					
		m = 6.4 (Up,Ki).					
"	29	Up	iP		21	08	36.1
"	29	Ki	iP		22	51	08.3
		Um	iP		22	51	12.1
			iPKP		22	55	28.8
			iPP		22	55	33.6
		Banda Sea (h = 150 km).					
"	30	Um	i(P)		00	01	13.0
"	30	Up	iP		05	03	52.0
		Ki	iP		05	03	36.8
		Sk	eP		05	04	08
		Um	iP		05	03	37.8
		Ud	iP		05	04	08.7
		Kazakh SSR.					
		Underground explosion.					
"	30	Up	iP		05	03	56.8 C
			iPn		05	05	02.8
			iPP		05	05	15.1
					micr		sec
			PP	Z'	0.1		1.0
		(cont.)					

1974							
Jan.	30	(cont.)					
		Ki	iP		05	03	41.5 C
					micr		sec
			P	Z'	0.2		0.6
		Sk	iP		05	04	12.5 C
			iPP		05	05	35.4
		Um	iP		05	03	42.1
		Ud	iP		05	04	13.4 C
			iPn		05	05	25.8
		De	iP		05	04	20.8
		Kazakh SSR.					
		m = 6.0 (Up,Ki).					
		Underground explosion.					
"	30	Up	iSgl		09	54	27.6
		Ki	eSgl		09	57	05
		Um	iSgl		09	55	02.7
		Ud	iSgl		09	55	34.2
		Esthonia.					
		Explosion.					
"	30	Ud	iP		10	04	35.4
"	30	Up	iP		10	07	28.3
			i(PP)		10	11	50.8
			iPP		10	11	57.1
					micr		sec
			P	Z'	0.1		0.9
			PP	Z'	0.6		2.0
			Mx	E	6.1		21
			Mx	N	5.7		19
			Mx	Z	12		19
		Ki	iP		10	07	10.3 C
			i		10	07	14.6
			i(PP)		10	11	17.3
			iPP		10	11	33.7
					micr		sec
			P	Z'	0.1		1.2
			i	Z'	0.3		1.4
			PP	Z'	0.6		2.0
			Mx	E	11		20
			Mx	N	12		19
			Mx	Z	8.4		18
		Sk	iP		10	07	31.6
			i(PP)		10	11	55.0
		Um	iP		10	07	15.7
			i		10	07	20.8
			i		10	07	35.0
			iPP		10	11	44.2
		Ud	iP		10	07	36.2 C
			i		10	07	40.2
			i		10	07	55.6
			i		10	12	22.7
		De	iPKP		10	11	43.2
		Aroe Islands (h = N).					
		m = 6.8, M = 6.5 (Up,Ki).					

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Jan.	30	Um	iSgl		12	15	16.8
		Western USSR.					
		Explosion.					
"	30	Up	iSgl		12	58	14.0
		Sk	iSgl		13	00	14.1
		Um	iSgl		12	58	35.4
		Ud	iSgl		12	59	19.9
		De	iSgl		12	59	44.9
		Western USSR.					
		Explosion.					
"	30	Up	iSgl		14	45	01.6
		Sk	eSgl		14	46	57
		Um	iPgl		14	44	39.6
			iSgl		14	45	41.5
		Ud	iPn		14	44	40.3
			i		14	45	06.5
			iSgl		14	46	03.5
		De	iPn		14	44	53.7
			iSn		14	46	04.8
			iSgl		14	46	37.3
		Esthonia.					
		Explosion.					
"	30	Up	iSgl		14	52	19.0
		Sk	iSgl		14	54	17.7
		Um	iSgl		14	52	57.3
		Ud	iPn		14	51	54.6
			iSgl		14	53	19.8
		De	iSgl		14	53	55.6
		Esthonia.					
		Explosion.					
"	30	Up	iS*		15	57	19.6
			iSgl		15	57	24.6
		Ki	iPn		15	54	40.5
			iPgl		15	54	42.9
			iSgl		15	55	19.6
			iRg		15	55	35.9
					micr		sec
			Sgl	Z'	0.1		0.5
		Sk	iPgl		15	54	45.5
			iSgl		15	55	26.3
		Um	iPn		15	54	51.2
			iPgl		15	54	58.6
			iSn		15	55	33.2
			iSgl		15	55	48.1
		Ud	iSn		15	56	46.7
			iSgl		15	57	14.3
		De	iSgl		15	59	05.5
		Nordland, Norway,					
		66.5°N, 14.3°E.					
		Origin time = 15 53 54.					
		Explosion.					
"	30	Ud	iP		18	17	57.2

1974 Jan.	31	Ud	iPKPl		05	40	26.5
		De	iPKPl		05	40	37.2
"	31	Up	iP		07	15	28.9
			ipP		07	15	39.2
					micr		sec
			P	Z'	0.1		1.3
			pP	Z'	0.2		1.0
			Mx	E	3.6		12
			Mx	N	4.2		16
			Mx	Z	7.0		15
		Ki	iP		07	14	56.8
			ipP		07	15	08.7
					micr		sec
			P	Z'	0.1		1.0
			pP	Z'	0.1		1.0
			Mx	E	9.6		15
			Mx	N	8.8		18
			Mx	Z	7.4		15
		Sk	eP		07	15	29
			ipP		07	15	39.5
		Um	iP		07	15	09.4
			i		07	15	15.3
			ipP		07	15	21.3
		Ud	iP		07	15	38.0
			ipP		07	15	49.1
		De	iP		07	15	51.7
			ipP		07	16	01.4
		Japan.					
		h = 40 km (Up,Ki,Sk,Um,Ud,De).					
		m = 5.9, M = 6.2 (Up,Ki).					
"	31	Ud	iPKPl		08	49	57.3 D
		De	iPKPl		08	50	08.0
"	31	Up	i(P)		12	12	14.8
"	31	Ki	iSKPl		15	30	59.7
		Sk	iPKP		15	28	40.4
			iSKPl		15	31	17.2
		Um	iPKP		15	28	36.4
			iSKPl		15	31	12.4
		Ud	iPKP		15	28	42.5
			iSKPl		15	31	26.8
		De	iPKP		15	28	48.6
		Fiji Islands (h = 580 km).					
"	31	De	i(P)		15	34	42.0
"	31	Up	iP		20	06	22.5 C
					micr		sec
			P	Z'	0.3		1.0
		Ki	iP		20	05	29.2 C
					micr		sec
			P	Z'	0.5		0.9
		Sk	iP		20	05	59.3 C
		(cont.)					

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
Jan. 31 (cont.)

	Um	iP	20 05 56.3	C
	Ud	iP	20 06 21.9	C
	De	iP	20 06 44.7	C

Aleutian Islands (h = 35 km).
m = 6.5 (Up,Ki).

" 31

Up	iP		20 26 50.3	
Ki	iP		20 25 57.2	C
			micr	sec
	P	Z'	0.1	0.9
Sk	iP		20 26 27.1	
Um	iP		20 26 23.8	C
Ud	iP		20 26 49.5	C
De	iP		20 27 11.9	C

Aleutian Islands (h = 45 km).

" 31

Up	iPKP		20 35 05.9	
			micr	sec
	Mx	E	1.4	18
	Mx	N	1.8	20
	Mx	Z	1.9	20
Ki			micr	sec
	Mx	E	1.8	20
	Mx	N	2.0	21
Um	iPKP		20 34 58.6	
Ud	iPKP		20 35 07.4	
De	iPKP		20 35 12.7	

Solomon Islands (h = 60 km).
M = 5.9 (Up,Ki).

" 31

Up	iPKP		23 48 52.1	
	i		23 48 58.4	
	iPP		23 50 13	
	iSP		00 00 06	
			micr	sec
	PKP	Z'	0.1	0.9
	Mx	E	30	21
	Mx	N	66	25
	Mx	Z	53	22
Ki	iPKP		23 48 40.8	
			micr	sec
	Mx	E	52	23
	Mx	N	51	23
	Mx	Z	21	21
Sk	iPKP		23 48 50.9	
	iPP		23 50 18.3	
Um	i(PKP)		23 48 39.0	
	iPKP		23 48 45.8	
	iPP		23 49 56.0	
Ud	i(PKP)		23 48 47.3	
	iPKP		23 48 54.2	
	iPP		23 50 25.0	
De	iPKP		23 48 59.8	
	iPP		23 50 49.1	

Solomon Islands (h = 35 km).
M = 7.2 (Up,Ki).

1974
Jan. 31

Ki	ePKP	23 56 39	
Um	iPKP	23 56 42.4	
Ud	iPKP	23 56 51.3	
	i	23 57 00.7	
De	iPKP	23 56 56.5	
	i	23 57 04.8	

Solomon Islands.
Origin time = 23 38 02.

Markus Båth
Klaus Meyer
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September 23, 1975

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S E I S M O L O G I C A L B U L L E T I N

U P P S A L A, K I R U N A, S K A L S T U G A N, U M E Å,

U D D E H O L M and D E L A R Y

Uppsala	(Up):	59°51.5'N,	17°37.6'E; h = 14 m
Kiruna	(Ki):	67°50.4'N,	20°25.0'E; h = 390 m
Skalstugan	(Sk):	63°34.8'N,	12°16.8'E; h = 580 m
Umeå	(Um):	63°48.9'N,	20°14.2'E; h = 16 m
Uddeholm	(Ud):	60°05.4'N,	13°36.4'E; h = 240 m
Delary	(De):	56°28.2'N,	13°52.2'E; h = 150 m

F E B R U A R Y 1 - 28, 1974

1974							
Feb.	1	Up	iP		00 05 55.1	D	
					micr	sec	
			P	Z'	0.4	1.4	
		Ki	iP		00 07 06.0		
					micr	sec	
			P	Z'	0.1	1.0	
		Sk	iP		00 06 39.3		
		Um	iP		00 06 30.5		
		Ud	iP		00 06 06.4		
		De	iP		00 05 32.0		
		Turkey (h = 30 km).					
		m = 5.7 (Up,Ki).					
"	1	Um	iPKP		01 22 51.1		
		Ud	iPKP		01 23 00.3		
		De	iPKP		01 23 06.1		
		Solomon Islands (h = 50 km).					
		In the present series of					
		Solomon Islands earthquakes,					
		De at a distance of about					
		122° appears as our most					
		sensitive station.					
"	1	Ki	iP		03 27 17.9		
		Sk	iP		03 28 07.0		
		Um	iP		03 28 01.9		
"	1	Up	iPKP		03 31 19.2		
			i		03 31 24.5		
			i		03 31 29.4		
			iPKKP		03 41 58.7		
					micr	sec	
			PKP	Z'	0.1	1.0	
			Mx	E	47	27	
			Mx	N	70	26	
			Mx	Z	60	21	
		(cont.)					

1974							
Feb.	1	(cont.)					
		Ki	iPKP		03 31 12.5		
			iPKKP		03 42 16.9		
					micr	sec	
			PKP	Z'	0.1	1.0	
			Mx	E	75	20	
			Mx	N	82	20	
			Mx	Z	45	19	
		Sk	iPKP		03 31 20.3		
			i		03 31 28.4		
		Um	i(PKP)		03 31 11.8		
			iPKP		03 31 15.6		
			iPKKP1		03 41 57.9		
		Ud	iPKP		03 31 23.8		
			iPKKP1		03 41 34.0		
		De	iPKP		03 31 28.3		
			iPKKP1		03 41 33.9		
		Solomon Islands (h = 40 km).					
		M = 7.4 (Up,Ki).					
"	1	Up	i(P)		03 45 39.4		
		Um	i(P)		03 45 21.7		
		Ud	i(P)		03 45 23.1		
"	1	Ud	iPKP		03 46 52.1		
		De	iPKP		03 46 57.8		
		Solomon Islands.					
"	1	Um	iPKP		03 50 27.5		
		De	iPKP		03 50 41.8		
		Solomon Islands.					
"	1	De	iPKP		03 51 53.0		
		Solomon Islands.					
"	1	De	iPKP		03 53 45.4		
		Solomon Islands.					

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
Feb. 1 De iPKP 03 54 53.4
Solomon Islands.

" 1 De iPKP 04 05 31.4
Solomon Islands.

" 1 De iPKP 04 30 26.7
Solomon Islands.

" 1 De iPKP 04 33 10.5
Solomon Islands.

" 1 De iPKP 04 33 42.1
Solomon Islands.

" 1 Ud iPKP 04 38 07.7
De iPKP 04 38 13.6
Solomon Islands (h = N).

" 1 De iPKP 04 50 21.7
Solomon Islands.

" 1 De iPKP 05 13 34.4
Solomon Islands (h = N).

" 1 De iPKP 06 09 29.5
Solomon Islands.

" 1 Um iPKP 07 21 01.7
Ud iPKP 07 20 59.3
De iPKP 07 21 09.0
Solomon Islands (h = N).

" 1 De iPKP 08 17 55.4
Solomon Islands (h = N).

" 1 Um iPKP 08 30 52.9
Ud iPKP 08 31 04.9
De iPKP 08 31 08.4
i 08 31 14.6
Solomon Islands (h = 60 km).

" 1 Um iPKP 08 34 44.4
De iPKP 08 34 59.8
i 08 35 09.3
Solomon Islands (h = N).

" 1 De iPKP 08 43 26.2
Solomon Islands.

" 1 Up iPKP 09 27 08.4
Um iPKP 09 27 01.2
Ud iPKP 09 27 10.6
De iPKP 09 27 16.0
Solomon Islands (h = 50 km).

1974
Feb. 1 De iPKP 10 31 10.6
Solomon Islands (h = N).

" 1 Ki iPKP 11 07 21.1
De iPKP 11 07 41.1
i 11 07 50.3
Solomon Islands (h = N).

" 1 Ki iPn 12 03 04.8
iSn 12 04 05.0
iSgl 12 04 28.4
Sk iSgl 12 06 47.3
Um iSn 12 04 43.3
iSgl 12 05 18.4
Ud iSgl 12 07 49.8
De i 12 09 20.1
iSgl 12 09 28.7
Northwest USSR.
Explosion.

" 1 Up iPKP 12 07 55.2
Tonga Islands (h = 110 km).

" 1 Up iP 12 13 50.8
micr sec
P Z' 0.1 0.9
Ki iP 12 13 49.8
micr sec
P Z' 0.2 1.0
Sk iP 12 14 03.4
Um iP 12 13 47.4
Ud iP 12 14 00.4
De iP 12 13 59.5
Sumatra (h = 140 km).
m = 6.2 (Up,Ki).

" 1 Up i(P) 12 48 37.3

" 1 Um iSgl 12 57 49.4
Ud iSgl 12 58 16.3
De eSgl 12 58 42
Esthonia.
Explosion.

" 1 De iPKP 13 39 41.0
i 13 39 50.0
Solomon Islands (h = 55 km).

" 1 Up iP 13 59 06.6
Ud eP 13 59 20

" 1 Um iSgl 14 09 11.8
Ud iSgl 14 09 46.6
De iSgl 14 10 10.9
Western USSR.
Explosion.

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974						
Feb.	1	Up	iP		15 15 10.2	C
					micr	sec
			P	Z'	0.2	1.0
		Ki	iP		15 14 15.7	C
			P	Z'	0.1	0.8
		Sk	iP		15 14 52.5	
		Um	iP		15 14 41.5	
		Ud	iP		15 15 13.4	C
			ipP		15 15 27.9	
		De	iP		15 15 35.1	C
			ipP		15 15 48.7	
		Kamchatka.				
		h = 50 km (Ud,De).				
		m = 6.0 (Up,Ki).				
"	1	De	iPKP		15 14 17.6	
		Solomon Islands (h = 40 km).				
"	1	De	iPKP		15 42 55.3	
		Solomon Islands (h = 50 km).				
"	1	Ud	iP		21 22 49.8	
"	1	Up	i(Sgl)		21 28 35.8	
"	1	Ud	iP		22 17 52.9	
"	1	De	iPKP		22 54 59.0	
		Solomon Islands.				
"	1	Um	iPKP		23 35 31.9	
		Ud	iPKP		23 35 42.4	
		De	iPKP		23 35 46.3	
		Solomon Islands (h = 45 km).				
"	2	De	iPKP		02 27 23.9	
		Solomon Islands (h = N).				
"	2	De	iPKP		02 38 04.6	
		Solomon Islands (h = 35 km).				
"	2	Up	iP		03 45 07.0	
		Ki	iP		03 45 34.0	
					micr	sec
			P	Z'	0.1	1.1
		Um	iP		03 45 24.4	
		De	iP		03 44 47.2	
		Azores Islands (h = N).				
"	2	Um	iP		05 17 45.8	
		Japan (h = 100 km).				
"	2	Um	iPKPl		06 20 06.3	
"	2	Sk	iP		07 20 03.8	
		Um	iP		07 20 18.5	
		Ud	eP		07 20 12	
		Mexico (h = 80 km).				

1974						
Feb.	2	De	iPKP		08 17 17.8	
		Solomon Islands.				
"	2	Up	iPKP		08 46 27.1	
			iSKPl		08 49 31.6	
		Ki	iPKP		08 46 13.1	
		Sk	iPKP		08 46 23.4	
		Um	iPKP		08 46 18.2	
			iSKPl		08 49 17.9	
		Ud	i(PKP)		08 46 19.6	
			iPKP		08 46 29.2	
			iSKPl		08 49 38.5	
		De	iPKP		08 46 27.1	
			iSKPl		08 49 38.2	
		New Hebrides Islands				
		(h = 270 km).				
"	2	Up	iPP		12 03 37.5	
			i		12 03 50.8	
					micr	sec
			Mx	E	1.3	17
			Mx	N	1.9	18
			Mx	Z	3.8	19
		Ki			micr	sec
			Mx	E	2.3	19
			Mx	N	3.2	19
			Mx	Z	2.3	18
		Um	iPP		12 03 13.7	
			iS		12 10 49	
		Ud	iPP		12 03 48.9	
			i		12 04 04.7	
		De	iPP		12 03 59.2	
			i		12 04 14.8	
		Aroe Islands (h = N).				
		M = 5.9 (Up,Ki).				
"	2	De	iPKP		15 54 14.3	
		Solomon Islands (h = N).				
"	2	Ud	iP		16 02 41.5	
"	2	Up	iP		16 05 19.1	
					micr	sec
			P	Z'	0.1	1.2
		Ki	iP		16 04 22.8	
					micr	sec
			P	Z'	0.1	1.1
		Sk	iP		16 04 49.6	
			ipP		16 05 00.7	
		Um	iP		16 04 51.9	
			ipP		16 05 03.1	
		Ud	iP		16 05 15.7	
			ipP		16 05 26.3	
		De	iP		16 05 39.9	
			ipP		16 05 51.2	
		Alaska.				
		h = 40 km (Sk,Um,Ud,De).				
		m = 5.7 (Up,Ki).				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974							
Feb.	2	Up	iPKPl		19	54	53.2
		Ud	iPKPl		19	54	55.7
		De	iPKPl		19	55	08.8
		Tonga-Kermadec Islands.					
"	2	Up	iP		20	09	27.7
			i		20	09	43.3
					micr		sec
			Mx	E	1.3		17
			Mx	N	2.0		22
			Mx	Z	2.4		20
		Ki	iP		20	09	26.2
			i		20	09	39.5
					micr		sec
			i	Z'	0.1		1.2
			Mx	E	2.0		16
			Mx	N	2.1		17
			Mx	Z	2.8		20
		Sk	iP		20	09	40.8
			iPP		20	13	34.2
		Um	iP		20	09	22.5
			iPP		20	13	03.6
		Ud	iP		20	09	34.9
			i		20	09	36.9
			iPP		20	13	21.2
		De	iP		20	09	35.7
		Sunda Strait (h = N).					
		M = 5.8 (Up,Ki).					
"	2	Um	iP		23	14	22.2
		Japan (h = 40 km).					
"	2	Um	iP		23	51	22.8
"	3	Up	iPKPl		03	36	22.5
		Sk	iPKPl		03	36	14.8
		Um	iPKPl		03	36	09.8
		Ud	iPKPl		03	36	23.9
		De	iPKPl		03	36	32.3
		Tonga-Kermadec Islands.					
"	3	Up	iPKPl		04	29	44.7
		Ud	iPKPl		04	29	47.2
		De	iPKPl		04	29	57.7
		Tonga-Kermadec Islands.					
"	3	Ki	iP		06	37	14.3
		Um	iP		06	36	53.3
		Arabian Sea (h = N).					
"	3	Ki	iP		09	03	58.5
		Um	iP		09	03	37.0
		Arabian Sea (h = N).					
"	3	Up	iP		10	20	54.5 D
			ipP		10	21	05.0
			iS		10	30	54
		(cont.)					

1974							
Feb.	3	(cont.)					
		Up			micr		sec
			P	Z'	0.2		0.9
			pP	Z'	0.4		1.1
			Mx	E	2.2		15
			Mx	N	3.1		16
			Mx	Z	7.4		14
		Ki	iP		10	20	35.2 D
			ipP		10	20	45.0
					micr		sec
			P	Z'	0.2		0.9
			pP	Z'	0.3		1.0
			Mx	E	8.1		14
			Mx	N	3.9		14
			Mx	Z	6.1		13
		Sk	iP		10	20	59.5
			ipP		10	21	09.9
		Um	iP		10	20	41.5 D
			ipP		10	20	51.1
			iS		10	30	29
		Ud	iP		10	21	04.7 D
			ipP		10	21	14.9
		De	iP		10	21	11.4 D
			ipP		10	21	21.5
		Luzon.					
		h = 35 km (Up,Ki,Sk,Um,Ud, De).					
		m = 6.1, M = 6.1 (Up,Ki).					
"	3	Sk	iPKPl		10	25	47.1
		Um	iPKPl		10	25	40.4
		Ud	iPKPl		10	25	53.9
		De	iPKPl		10	26	05.8
		Kermadec Islands.					
"	3	Ud	iP		15	06	01.9
		De	iP		15	05	42.2
		Iran (h = 40 km).					
"	3	Up			micr		sec
			Mx	E	1.2		20
			Mx	N	1.1		20
			Mx	Z	1.8		22
		Ki			micr		sec
			Mx	E	2.1		18
			Mx	N	1.6		17
		Um	iPKP		16	31	36.6
		Solomon Islands (h = 45 km).					
		M = 5.8 (Up,Ki).					
"	3	Um	i(P)		18	19	06.8
"	3	Um	iPP		19	04	06.6
		Aroe Islands (h = N).					
"	3	Up	iPKP		20	41	00.1
			ipPKP		20	41	12.7
		(cont.)					

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Feb.	3	(cont.)				
		Um	iPKP		20 40 53.1	
			ipPKP		20 41 04.6	
		Ud	iPKP		20 41 02.9	
			ipPKP		20 41 16.0	
		De	iPKP		20 41 08.1	
			ipPKP		20 41 21.0	
		Solomon Islands.				
		h = 45 km (Up,Um,Ud,De).				
"	4	Up	iP		03 34 24.0	
		Ki	iP		03 33 40.7	
		Sk	iP		03 34 16.7	
		Um	iP		03 34 00.0	C
		Ud	iP		03 34 30.8	
		De	iP		03 34 47.7	
		Japan (h = 220 km).				
"	4	Um	ePKP		09 29 13	
		Ud	ePKP		09 28 59	
		South Pacific Ocean (h = N).				
"	4	Um	i(Sgl)		10 45 23.2	
"	4	Up	iP		12 53 40.2	
"	4	Up	i(P)		14 50 09.0	
"	4	Up	iPKPl		17 13 06.9	
		Um	i(PKPl)		17 13 05.0	
		Ud	iPKPl		17 13 09.2	
"	4	Ud	iP		19 58 27.9	
"	4	Up	iPKP		20 29 24.9	
			i		20 29 34.5	
					micr	sec
			Mx	E	2.3	20
			Mx	N	3.6	20
			Mx	Z	5.1	22
		Ki	iPKP		20 29 16.5	
			i		20 29 22.7	
			iSP		20 39 30	
					micr	sec
			Mx	E	4.3	19
			Mx	N	2.8	20
			Mx	Z	3.8	20
		Sk	iPKP		20 29 28.5	
			i		20 29 36.2	
		Um	iPKP		20 29 17.0	
		Ud	iPKP		20 29 29.7	
			i		20 29 37.8	
		De	iPKP		20 29 32.8	
			i		20 29 41.9	
		Solomon Islands (h = 55 km).				
		M = 6.1 (Up,Ki).				
		(cont.)				

1974 Feb.	4	(cont.)				
		Double onsets, small and large, about 8 sec apart.				
"	4	Um	iPKP		21 17 40.1	
		Ud	iPKP		21 17 48.8	
		De	i(PKP)		21 17 45.1	
			iPKP		21 17 54.6	
		Solomon Islands (h = 55 km).				
"	4	Um	iPKP		21 43 36.6	
		De	iPKP		21 43 47.4	
		Solomon Islands (h = 55 km).				
"	4	Ud	iP		22 15 32.2	
		De	iP		22 15 20.1	
"	4	Ki	iP		23 21 24.0	
		Sk	eP		23 20 39	
		Ud	iP		23 20 05.3	
"	5	Um	i(PKP)		00 03 20.1	
			iPKP		00 03 30.5	
		Ud	iPKP		00 03 39.6	
		De	iPKP		00 03 45.2	
		Solomon Islands (h = 50 km).				
"	5	Um	iP		02 32 36.0	
		Ud	iP		02 32 10.6	
		De	iP		02 31 51.6	
		Turkey.				
"	5	Up	iP		02 35 02.7	
			ipP		02 35 19.6	
		Ki	iP		02 34 05.5	
			ipP		02 34 23.2	
		Sk	iP		02 34 33.5	
			ipP		02 34 51.3	
		Um	iP		02 34 34.1	
			ipP		02 34 52.4	
		Ud	iP		02 34 58.7	
		De	iP		02 35 24.0	
			ipP		02 35 41.4	
		Alaska.				
		h = 70 km (Up,Ki,Sk,Um,De).				
"	5	De	iP		06 46 47.9	
		Algeria (h = N).				
"	5	Sk	eSgl		12 16 33	
		Um	iSgl		12 15 09.3	
		Ud	iSgl		12 15 50.7	
		De	iSgl		12 16 15.5	
		Western USSR.				
		Explosion.				
"	5	Um	iP		12 19 35.8	

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Feb.	5	Um	iSgl	13 36 22.0		
			i	13 36 36.6		
		Esthonia.				
		Explosion.				
"	5	De	iPgl	14 38 03.7		
			iSgl	14 38 22.6		
			iRg	14 38 27.3		
"	5	Up	iP	15 10 24.2	C	
		Ki	iP	15 11 30.8		
			i	15 11 45.3		
		Sk	iP	15 11 03.7	C	
		Um	iP	15 10 56.6		
		Ud	iP	15 10 32.6	C	
		De	iP	15 10 01.3	C	
			iS	15 13 47.5		
		Dodecanese Islands				
		(h = 150 km).				
"	5	Up	iP	15 17 27.0		
		Sk	iP	15 17 39.0		
		Um	iP	15 17 36.0		
		De	iP	15 17 20.9		
"	5	Ki	iP	15 29 43.9		
		Sk	iP	15 29 47.7		
		Um	iP	15 29 05.5		
		Probably central Russia.				
"	5	Ud	iPKPl	17 15 04.0		
		Kermadec Islands (h = 310 km).				
"	5	Um	iP	18 29 08.6		
		Turkey (h = 40 km).				
"	5	Um	i(P)	21 32 01.4		
"	5	Up	iP	22 18 14.2		
		Ki	eP	22 17 58		
		Um	iP	22 18 04.3		
		Ud	iP	22 18 21.8		
		Molucca Passage (h = 110 km).				
"	5	Up	iSgl	22 35 17.8		
		Sk	eSgl	22 36 53		
		Um	iSgl	22 37 20.4		
		Ud	iSgl	22 35 02.1		
		De	iSgl	22 34 51.1		
		Västergötland, Sweden,				
		58.1°N, 14.0°E.				
		Origin time = 22 33 59.				
		Felt.				
"	6	Up	iP	03 01 52.4		
		Ki	iP	03 00 59.5		
		(cont.)				

1974 Feb.	6	(cont.)				
		Um	iP	03 01 24.4		
		Ud	iP	03 01 56.9		
		Kamchatka (h = N).				
"	6	Up	iP	04 15 00.7		
			i	04 15 10.0		
			iPP	04 17 40.6		
			iS	04 23 48		
			iP'P'	04 43 29.3		
				micr	sec	
			P	Z' 0.4	1.1	
			i	Z' 0.7	1.4	
			Mx	E 14	18	
			Mx	N 31	23	
			Mx	Z 26	19	
		Ki	iP	04 14 06.9		
			iS	04 22 10		
			iP'P'	04 43 47.9		
				micr	sec	
			P	Z' 0.6	1.0	
			Mx	E 26	18	
			Mx	N 18	18	
			Mx	Z 18	19	
		Sk	iP	04 14 36.8		
			i	04 14 44.0		
		Um	iP	04 14 34.1		
			iPP	04 17 07.4		
			iS	04 22 58		
			iP'P'	04 43 35.1		
		Ud	iP	04 14 59.2		
		De	iP	04 15 22.5		
		Unimak Island (h = 2 km).				
		m = 6.6, M = 6.5 (Up,Ki).				
"	6	Um	iP	07 03 17.4	C	
		Japan (h = 70 km).				
"	6	Up	iP	08 26 42.8		
		Ki	iP	08 26 46.1		
		Sk	iP	08 26 30.1		
		Ud	iP	08 26 32.6		
		De	iP	08 26 33.8		
		Colombia (h = 160 km).				
"	6	Ki	iP	08 59 46.7		
		Kamchatka (h = N).				
"	6	Ud	iP	10 29 57.7		
		Formosa (h = 60 km).				
"	6	Um	iSgl	12 23 36.7		
		Ud	iSgl	12 24 17.7		
		Western USSR.				
		Explosion.				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Feb.	6	Um	iSgl	12 54 13.9		
		Esthonia. Explosion.				
"	6	Ud	iP	16 17 54.4		
"	6	Up	iP	17 33 43.2	C	
				micr	sec	
			P	Z' 0.1	1.3	
		Ki	iP	17 33 51.2	C	
		Sk	iP	17 34 08.4	C	
		Um	iP	17 33 41.0	C	
		Ud	iP	17 33 59.8	C	
		De	iP	17 33 56.4		
		Afghanistan-USSR (h = 190 km).				
"	6	Sk	iP	17 48 08.6		
		Um	iP	17 48 18.1		
		Ud	iP	17 47 43.4		
		North of Ascension Island (h = N).				
"	6	Um	i(P)	18 38 28.5		
"	6	Ud	iP	19 44 30.3		
"	6	Um	iP	22 44 30.5		
		Pamir.				
"	7	Up	iPKPl	01 09 13.4		
		Sk	iPKPl	01 09 02.1		
			i	01 09 12.5		
		Um	iPKPl	01 08 55.3		
			i	01 09 03.8		
		Ud	iPKPl	01 09 13.6		
			i	01 09 19.7		
		Kermadec Islands.				
"	7	Up	iP	01 18 27.7		
		Ki	eP	01 18 34		
		Um	iP	01 18 25.1		
		Ud	iP	01 18 43.5		
		Afghanistan-USSR (h = 130 km).				
"	7	Um	eP	01 31 38		
		Ud	iP	01 31 15.5		
		South of Ascension Island (h = N).				
"	7	Ki	iP	02 12 39.9		
			i	02 12 53.6		
		Um	iP	02 13 00.9		
		Ud	iP	02 13 31.4		
		Kurile Islands.				
"	7	Um	iP	05 39 27.0		
		(cont.)				

1974 Feb.	7	(cont.)				
		Ud	iP	05 40 01.1		
		Japan (h = 50 km).				
"	7	Um	iP	08 52 08.5		
		Ud	iP	08 51 42.6		
		Turkey (h = 35 km).				
"	7	Up	iP	09 56 02.2	C	
				micr	sec	
			P	Z' 0.1	1.0	
		Ki	iP	09 55 43.9	C	
				micr	sec	
			P	Z' 0.1	1.2	
			Mx	E 1.1	20	
			Mx	N 1.2	21	
			Mx	Z 1.4	20	
		Sk	iP	09 56 07.6		
		Um	iP	09 55 48.9		
		Ud	iP	09 56 10.1	C	
		New Guinea (h = 30 km). m = 6.5 (Up,Ki).				
"	7	Um	i	12 21 07.5		
			iSgl	12 21 10.7		
		Ud	iSgl	12 21 51.9		
		De	iSgl	12 22 18.2		
		Western USSR. Explosion.				
"	7	Um	iP	12 44 33.8		
			i	12 45 03.7		
		Ud	iP	12 45 03.7		
		Japan (h = 90 km).				
"	7	Up	i	13 00 38.1		
			iSgl	13 00 45.2		
			i(Sg2)	13 00 50.4		
		Ki	iSgl	13 03 20.6		
		Sk	iSgl	13 02 38.9		
		Um	iSgl	13 01 19.3		
		Ud	iSgl	13 01 50.4		
		Esthonia. Explosion.				
"	7	Up	iP	16 00 02.5	D	
		Ki	iP	15 59 30.9	D	
		Sk	iP	15 59 59.5		
		Um	iP	15 59 44.2		
		Ud	iP	16 00 10.0		
		De	iP	16 00 21.7		
		Bonin Islands (h = 440 km).				
"	7	Ki	iP	16 35 37.3		
			ipP	16 35 55.1		
		Ud	iP	16 36 02.1		
		(cont.)				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974					
Feb.	7	(cont.)			
		Ud	ipP	16 36 19.8	
		Talaud Islands.			
		h = 60 km (Ki,Ud).			
"	7	Up	iP	18 22 11.0	
		Um	iP	18 21 57.0	
		Ud	iP	18 22 21.1	
"	7	Up	iP	19 14 46.6	
		Ki	iP	19 13 54.8	
		Um	iP	19 14 19.1	
		Ud	iP	19 14 51.2	
		Kurile Islands (h = 45 km).			
"	7	Um	iP	19 38 46.8	
		De	iP	19 38 21.0	
"	7	Ud	iPKPl	20 31 37.6	
		De	iPKPl	20 31 50.2	
"	8	Ki	iPn	10 08 28.2	
			iPgl	10 08 36.5	
			iSn	10 09 14.5	
			iSgl	10 09 27.4	
		Sk	iSgl	10 12 11.9	
		Um	iSn	10 10 24.2	
			iSgl	10 11 01.3	
		Northwest USSR-Norway.			
		Explosion.			
"	8	Um	iSgl	10 42 05.6	
		Lake Ladoga.			
		Explosion.			
"	8	Ud	iP	12 11 19.6	
		Kurile Islands (h = 60 km).			
"	8	Ki	iPn	12 57 04.2	
			i	12 57 46.6	
			eSn	12 58 03	
			iSgl	12 58 22.7	
		Sk	eSgl	13 00 50	
		Um	iSgl	12 59 14.5	
		Northwest USSR.			
		Explosion.			
"	8	De	iPKPl	13 44 27.2	
		Fiji Islands (h = 610 km).			
"	8	Up	iP	14 32 05.8 C	
				micr sec	
			P Z'	0.2 0.9	
		Ki	iP	14 31 11.5 C	
				micr sec	
			P Z'	0.3 0.9	
		Sk	iP	14 31 47.2 C	
		(cont.)			

1974					
Feb.	8	(cont.)			
		Um	iP	14 31 37.2 C	
		Ud	iP	14 32 08.4 C	
		De	iP	14 32 30.6	
		Komandorsky Islands (h = N).			
		m = 6.3 (Up,Ki).			
"	8	Ki	iPKP	18 43 46.0	
		Um	i(PKP)	18 43 46.1	
			iPKP	18 43 54.0	
		Ud	iPKP	18 44 02.9	
		Loyalty Islands (h = N).			
"	8	Um	iP	20 34 31.9	
			iPcP	20 34 54.4	
		Japan (h = 50 km).			
"	8	Um	iP	22 08 29.9	
"	8	Um	iPKP	22 28 10.2	
		New Hebrides Islands			
		(h = 35 km).			
"	9	Up	Mx	01 07	
				micr sec	
			Mx E	1.4 18	
			Mx Z	1.9 18	
		Ki	Mx	01 06	
				micr sec	
			Mx N	1.0 16	
		South Pacific Ocean (h = N).			
		M = 6.0 (Up,Ki).			
"	9	Ud	iP	03 43 18.3	
		Molucca Passage (h = N).			
"	9	Ki	iP	04 16 20.6	
		Um	iP	04 16 06.8	
		Ud	iP	04 16 21.1	
		De	iP	04 16 13.4	
		Pakistan (h = N).			
"	9	Ud	iP	04 36 12.7	
"	9	Um	iP	05 03 07.3	
"	9	Up	iPKPl	07 29 55.6	
		Sk	iPKPl	07 29 48.3	
		Um	iPKPl	07 29 43.4	
		Ud	iPKPl	07 29 59.2	
		De	iPKPl	07 30 07.9	
		Kermadec Islands (h = 100 km).			
"	9	Up	i	08 09 53.5	
			iSgl	08 09 57.1	
		Sk	iSgl	08 10 59.9	
		Um	iSgl	08 10 39.7	
		(cont.)			

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
Feb. 9 (cont.)
Ud iPgl 08 09 46.3
iSgl 08 10 13.1
Gästrikland-Hälsingland, Sweden, 61.2°N, 17.3°E.
Origin time = 08 09 12.

" 9 Up iP 08 40 30.7
Ki iP 08 40 12.8 D
micr sec
P Z' 0.2 1.0
Sk iP 08 40 36.9
Um iP 08 40 18.5 D
Ud iP 08 40 40.3 D
De iP 08 40 46.7
Luzon (h = 70 km).

" 9 Um iP 10 04 56.3

" 9 Ki iSn 12 49 30.9
i 12 49 42.7
Northwest USSR.
Explosion.

" 9 Um i(P) 15 19 27.1

" 9 Ud iP 17 16 29.9
Formosa (h = 60 km).

" 9 Up iP 18 32 51.5
Um iP 18 32 24.0
Ud iP 18 32 55.5
Kurile Islands (h = 55 km).

" 9 Um iP 18 48 36.9
Guatemala (h = 110 km).

" 10 De iPKP 02 34 09.3
Solomon Islands (h = 40 km).

" 10 Um iP 04 15 56.8
Ud iP 04 15 26.1
Northeast of Ascension Island (h = N).

" 10 Up iP 09 03 06.0
micr sec
P Z' 0.2 1.2
Ki iP 09 02 29.6
micr sec
P Z' 0.1 0.8
Sk iP 09 03 02.5
Um iP 09 02 45.1 D
Ud iP 09 03 13.9
De iP 09 03 28.1
Japan (h = 55 km).
m = 5.9 (Up,Ki).

1974
Feb. 10 Um iSgl 14 17 44.0
Ud iSgl 14 18 40.2

" 10 Ud iP 16 38 04.1
Pamir.

" 10 Up iP 16 39 47.7
Um iP 16 40 16.7
Ud iP 16 39 55.4
Zaire (h = N).

" 10 Ud iP 18 13 50.4

" 10 Ud iP 21 36 18.9
De iP 21 36 40.9
Aleutian Islands (h = N).

" 10 Um iP 21 42 52.1

" 10 Up iP 22 15 52.9
Ki iP 22 14 58.4
Sk iP 22 15 26.0
Um iP 22 15 27.4
Ud iP 22 15 50.7
De iP 22 16 17.4
Alaska (h = 60 km).

" 11 Up iP 00 24 13.6 C
Ki iP 00 23 55.1
Sk iP 00 24 17.6
Um iP 00 24 02.1
Ud iP 00 24 22.0 C
Mindanao (h = N).

" 11 Up iP 01 54 00.0
ipP 01 54 15.5
iPP 01 57 36.3
i 01 57 58.7
micr sec
P Z' 0.1 0.9
Ki iP 01 53 58.9 C
ipP 01 54 12.9
micr sec
P Z' 0.1 1.0
Sk iP 01 54 11.3
Um iP 01 53 56.7 C
ipP 01 54 11.0
Ud iP 01 54 09.3 C
ipP 01 54 24.6
i(PP) 01 57 41.0
Sunda Strait.
h = 55 km (Up,Ki,Um,Ud).
m = 6.2 (Up,Ki).

" 11 Um iP 03 55 33.0
Aleutian Islands (h = 80 km).

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974					
Feb.	11	Um	iP	05 23 46.4	
		Ud	iP	05 24 11.5	
"	11	Up	iP	05 48 53.7	
		Um	iP	05 48 30.3	C
		Ud	iP	05 49 01.5	
		Japan (h = 110 km).			
"	11	Um	i(P)	08 29 34.6	
"	11	Um	iPKPl	09 11 50.8	
		Ud	iPKPl	09 12 01.9	
"	11	Up	iP	14 22 01.1	
		Ki	iP	14 22 04.5	
			ipP	14 22 15.2	
		Um	iP	14 21 58.3	
			ipP	14 22 09.5	
		Ud	iP	14 22 12.7	C
			ipP	14 22 23.1	
		Nicobar Islands.			
		h = 40 km (Ki,Um,Ud).			
"	11	Up	iP	17 12 48.7	
		Ki	iP	17 12 01.1	
		Sk	eP	17 12 36	
		Um	iP	17 12 23.3	
		Ud	iP	17 12 54.1	
		Kurile Islands.			
"	11	Up	iP	17 15 35.4	
		Ki	iP	17 16 03.2	
		Arabian Sea (h = N).			
"	11	Up	iP	21 57 59.0	
			ipP	21 58 09.3	
		Um	iP	21 57 41.5	
			ipP	21 57 53.2	
		Mariana Islands.			
		h = 40 km (Up,Um).			
"	12	Ki	iP	01 38 32.0	
		Um	iP	01 38 50.8	
		Japan (h = 180 km).			
"	12	Ki	iP	01 53 51.3	
		Ud	iP	01 54 21.3	
"	12	Up	iP	02 47 34.4	
		Ki	iP	02 47 05.5	
		Um	iP	02 47 17.9	
		Ud	iP	02 47 40.8	
		Mariana Islands (h = 290 km).			
"	12	Up	iP	10 00 10.6	
			ipP	10 00 31.2	
		(cont.)			

1974					
Feb.	12	(cont.)			
		Up		micr	sec
			P Z'	0.3	0.7
		Ki	iP	09 59 54.1	C
			ipP	10 00 14.2	
				micr	sec
			P Z'	0.2	0.8
		Sk	iP	10 00 17.0	
		Um	iP	09 59 59.7	C
		Ud	iP	10 00 20.4	C
			ipP	10 00 41.1	
		De	iP	10 00 26.1	
		Mindoro.			
		h = 80 km (Up,Ki,Ud).			
		m = 6.3 (Up,Ki).			
"	12	Up	iSgl	14 30 04.4	
		De	iPgl	14 28 10.2	
			i	14 28 11.7	
			iSgl	14 28 26.1	
		Baltic Sea, south of Sweden,			
		55.7°N, 15.3°E.			
		Origin time = 14 27 50.			
		Explosion.			
"	13	Ud	iPKPl	00 32 58.2	
		De	iPKPl	00 33 10.4	
			i	00 33 21.8	
		Tonga Islands (h = N).			
"	13	Ud	iSgl	04 22 10.3	
"	13	Um	iSgl	12 13 30.3	
		Ud	iSgl	12 14 19.1	
		De	iSgl	12 14 41.2	
		Western USSR.			
		Explosion.			
"	13	Up	iSgl	12 45 01.2	
		Um	iSgl	12 45 35.3	
		Esthonia.			
		Explosion.			
"	13	Up	iSn	17 10 06.7	
			iSgl	17 10 20.0	
		Um	iSgl	17 10 52.8	
		Ud	iSgl	17 11 21.8	
		De	eSgl	17 11 46	
		Esthonia.			
		Explosion.			
"	13	Up	iP	21 33 56.5	
		Um	iP	21 33 32.4	
		Ud	iP	21 34 01.2	
		De	iP	21 34 19.8	
		Japan (h = 70 km).			

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974							
Feb.	13	Up	iP		23 51 27.3		
			i(PP)		23 55 15.2		
			iPP		23 55 23.5		
					micr sec		
			PP	Z'	0.1 1.0		
		Ki	iP		23 51 13.2	C	
					micr sec		
			P	Z'	0.1 1.0		
		Sk	iP		23 51 34.0		
		Um	iP		23 51 17.4	C	
			iPP		23 55 01.7		
		Ud	iP		23 51 34.9		
			i(PP)		23 55 29.4		
		De	iP		23 51 39.9	C	
			i		23 52 12.3		
			iPP		23 55 48.2		
		Celebes (h = 10 km).					
		m = 6.2 (Up,Ki).					
"	14	Up	iPKPl		02 26 33.5		
		Um	iPKPl		02 26 21.9		
		Ud	iPKPl		02 26 35.8		
		De	iPKPl		02 26 46.6		
		Tonga-Kermadec Islands.					
"	14	Up	iP		02 49 13.4		
		Ud	iP		02 49 13.0		
"	14	Um	iP		03 17 08.7		
		Ud	eP		03 17 31		
"	14	Up	iP		06 50 31.9	C	
					micr sec		
			P	Z'	0.1 1.0		
		Ki	iP		06 50 30.7		
		Sk	iP		06 50 46.0		
		Um	iP		06 50 27.7		
		Ud	iP		06 50 42.1	C	
		De	iP		06 50 40.9	C	
		Sumatra (h = 35 km).					
"	14	Up	iP		06 51 22.7		
					micr sec		
			P	Z'	0.1 1.1		
		Ki	iP		06 51 22.6		
					micr sec		
			P	Z'	0.1 1.2		
		Sk	iP		06 51 37.7		
		Um	iP		06 51 19.0		
		Ud	iP		06 51 33.6		
		De	iP		06 51 32.7		
		Sumatra.					
		Origin time = 06 38 58.					
		m = 6.0 (Up,Ki).					
"	14	Um	iP		07 45 30.8		

1974							
Feb.	14	Um	iP		08 01 10.5		
		Haiti (h = 7 km).					
"	14	Up	eP		08 31 26		
		Ki	iP		08 32 00.3		
		Um	iP		08 31 40.0		
		Indian Ocean (h = N).					
"	14	Um	iPKPl		10 13 36.4		
"	14	Up	i(P)		10 42 16.5		
			i		10 46 08.3		
			iLg2		10 47 26.2		
		Ki	iP		10 40 20.1		
			iPP		10 40 28.0		
			iS		10 41 59.5		
		Sk	e		10 41 39		
			i		10 45 46.5		
		Um	iP		10 41 18.4		
			iS		10 43 28.8		
		Ud	iP		10 42 09.7		
			i		10 46 34.8		
			iLg2		10 47 33.4		
		De	iP		10 42 51.6		
		Svalbard.					
"	14	Up	iP		12 10 51.9		
					micr sec		
			P	Z'	0.1 1.1		
		Ki	iP		12 11 14.3		
		Sk	iP		12 10 42.3		
		Um	iP		12 11 06.3		
		Ud	iP		12 10 38.6		
		De	iP		12 10 32.9		
		North Atlantic Ocean (h = N).					
"	14	Sk	iSgl		13 45 40.7		
		Um	iSgl		13 43 52.1		
		Lake Ladoga.					
		Explosion.					
"	14	Um	iSgl		14 05 30.1		
		Western USSR.					
		Explosion.					
"	14	Up	iP		14 56 25.3		
			iPP		14 56 36.0		
		Ki	iP		14 55 05.6		
			iSS		14 56 45.3		
		Sk	iP		14 55 27.2	C	
			iS		14 57 07.7		
		Um	iP		14 55 46.7		
		Ud	iP		14 56 15.3		
		Norwegian Sea (h = N).					
"	14	Up	iS*		19 25 27.6		
			iSgl		19 25 34.0		
		(cont.)					

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Feb.	14	(cont.)				
		Ki	ePgl		19 22 53	
			iSgl		19 23 29.5	
					micr sec	
			Sgl	Z'	0.1 0.5	
		Sk	iPgl		19 22 55.6	
			iSgl		19 23 35.9	
		Um	iPgl		19 23 08.2	
			iSn		19 23 42.7	
			iSgl		19 23 57.2	
		Ud	iSgl		19 25 23.4	
		De	iSgl		19 27 16.9	
		Nordland, Norway, 66.4°N, 14.3°E. Origin time = 19 22 04. Explosion.				
"	14	Um	iP		19 51 20.4	
"	15	Um	iP		03 01 41.7	
"	15	Up	ipP		04 03 54.9	
		Ki	eP		04 03 26	
			ipP		04 03 36.6	
		Sk	ipP		04 04 02.8	
		Um	iP		04 03 34.2	
			ipP		04 03 45.0	
		Ud	iP		04 03 57.4	
			ipP		04 04 08.1	
		Luzon-Formosa. h = 40 km (Ki,Um,Ud).				
"	15	Ki	iP		06 15 03.8	
		Um	iP		06 15 33.2	
		Alaska (h = 130 km).				
"	15	Up	iP		07 05 53.7	
		Sk	iP		07 06 06.1	
		De	iP		07 06 11.3	
"	15	Ud	iP		07 39 25.9	
		Iran.				
"	15	Up	iP		08 35 40.4	
		Um	iP		08 35 27.3	
		Ud	iP		08 35 54.6	
		Ryukyu Islands (h = 45 km).				
"	15	Up	iSgl		11 16 05.3	
		Ki	iPn		11 11 49.6	
			iSn		11 12 51.3	
			iSgl		11 13 14.2	
		Sk	iSgl		11 15 38.9	
		Um	iSgl		11 14 03.2	
		Ud	iSgl		11 16 35.2	
		De	iSgl		11 18 06.8	
		Northwest USSR. Explosion.				
1974 Feb.	15	Sk	eSgl		13 00 43	
		Um	i		12 58 32.7	
			iSgl		12 59 13.0	
		Ud	iSgl		12 59 56.5	
		De	eSgl		13 00 21	
		Western USSR. Explosion.				
"	15	Sk	iP		13 19 39.5	
		Greece.				
"	15	Um	iSgl		13 29 24.7	
		Ud	iSgl		13 30 05.8	
		De	iSgl		13 30 31.7	
		Western USSR. Explosion.				
"	15	Um	iSgl		14 53 05.7	
		Lake Ladoga. Explosion.				
"	15	Ud	iP		22 04 37.0	
"	15	Ud	iPKPl		23 33 30.5	
		De	iPKPl		23 33 42.7	
		Tonga-Kermadec Islands (h = 580 km).				
"	15	Ud	iP		23 49 24.9	
"	16	Up	iP		00 40 38.1	
		Ki	iP		00 40 22.8	
		Sk	iP		00 40 36.8	
		Um	iP		00 40 27.0	
		Ud	iP		00 40 46.1	
		Banda Sea (h = N).				
"	16	Um	iP		01 57 29.1	
"	16	Up	iP		02 02 35.6	C
			ipP		02 02 42.7	
			iS		02 11 56	
					micr sec	
			P	Z'	0.2 1.4	
		Ki	iP		02 02 37.1	C
					micr sec	
			P	Z'	0.2 1.2	
		Sk	iP		02 02 54.2	
		Um	iP		02 02 32.2	C
			ipP		02 02 39.6	
			iS		02 11 52	
		Ud	iP		02 02 47.7	C
			ipP		02 02 54.7	
		De	iP		02 02 45.4	C
		Andaman Islands. h = 25 km (Up,Um,Ud). m = 6.1 (Up,Ki).				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
Feb. 16 Up iP 02 05 10.9
ipP 02 05 16.2
iS 02 14 29
micr sec
P Z' 0.2 1.0
Mx E 2.8 15
Mx N 8.6 18
Mx Z 4.8 18
Ki iP 02 05 11.8
ipP 02 05 18.6
iS 02 14 36
micr sec
P Z' 0.2 1.0
pP Z' 0.2 1.1
Mx E 7.6 17
Mx N 19 19
Mx Z 6.1 18
Sk iP 02 05 27.9
ipP 02 05 35.1
Um iP 02 05 07.1 C
ipP 02 05 13.9
iS 02 14 23
Ud iP 02 05 22.4 C
ipP 02 05 28.9
De iP 02 05 20.2 C
ipP 02 05 26.8
Andaman Islands.
h = 25 km (Up,Ki,Sk,Um,Ud, De).
m = 6.2, M = 6.1 (Up,Ki).

" 16 Up iP 02 15 40.8
Ki iP 02 15 41.8
Um iP 02 15 37.3
Ud iP 02 15 49.6
Andaman Islands.
Origin time = 02 04 17.

" 16 Up iP 02 25 47.9 C
ipP 02 25 54.4
Ki iP 02 25 48.6
Um iP 02 25 44.4
ipP 02 25 51.1
Ud iP 02 25 59.6
De iP 02 25 58.6
Andaman Islands.
h = 25 km (Up,Um).

" 16 Up iP 04 22 16.4
Ud iP 04 22 43.5

" 16 Um iP 04 52 27.0
Ud iP 04 52 51.9

" 16 Up iPKP1 05 58 46.5
iPKP2 05 58 53.3
(cont.)

1974
Feb. 16 (cont.)
Up i 05 59 18.5
ipPKP1 06 00 47.5
iPP 06 02 21.0
micr sec
PKP1 Z' 0.2 0.9
PKP2 Z' 0.4 1.0
Ki iPKP1 05 58 25.5
Sk iPKP1 05 58 40.8
ipPKP1 06 00 42.7
Um iPKP1 05 58 34.9
ipPKP1 06 00 34.6
Ud iPKP1 05 58 48.4
iPKP2 05 58 57.1
ipPKP1 06 00 47.0
De iPKP1 05 58 56.3
iPKP2 05 59 09.8
i 05 59 31.7
ipPKP1 06 00 57.6
Kermadec Islands.
h = 530 km (Up,Sk,Um,Ud,De).

" 16 Um iP 06 15 02.0
Ud iP 06 15 12.7
Iran.

" 16 Up iPn 07 31 59.9
Ki i(Pn) 07 32 27.4
Ud iP 07 32 07.2
i(Pn) 07 32 14.7
Caspian Sea.

" 16 Um i(P) 07 37 45.5

" 16 Um iSgl 09 50 01.2
Lake Ladoga.
Explosion.

" 16 Ki iPn 15 15 17.1
iSn 15 16 06.5
iSgl 15 16 20.8
Um iSgl 15 17 51.2
Northwest USSR-Norway.
Explosion.

" 16 Up iP 16 21 26.3
micr sec
P Z' 0.1 1.0
Ki iP 16 21 04.6
Sk iP 16 21 34.1
Um iP 16 21 11.6
Ud iP 16 21 36.2
De iP 16 21 43.9
Formosa (h = 120 km).

" 16 Um iP 19 04 22.1
Japan.
Intermediate depth.

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Feb.	17	Um	i(P)		02 05 42.8	
"	17	Up	iP		04 46 13.1	
			isP		04 46 33.1	
					micr	sec
			P	Z'	0.1	0.9
			sP	Z'	0.1	1.2
		Ki	iP		04 45 45.2	
			isP		04 46 04.1	
					micr	sec
			P	Z'	0.1	1.0
			sP	Z'	0.2	0.9
		Sk	iP		04 46 10.4	
			isP		04 46 30.4	
		Um	iP		04 45 57.4	
			ipP		04 46 11.9	
		Ud	iP		04 46 19.3	
		De	iP		04 46 30.6	
			isP		04 46 51.7	
		Mariana Islands.				
		h = 55 km (Up,Ki,Sk,Um,De).				
		m = 6.0 (Up,Ki).				
		sP is here in general more pronounced than pP.				
"	17	Up	iP		05 07 59.9	
			i		05 08 07.0	
		Sk	iP		05 08 39.8	
		Um	iP		05 08 38.9	
		Ud	iP		05 08 06.8	
		De	iP		05 07 30.5	
		Greece (h = N).				
"	17	Up	iP		06 18 41.6	
		Ud	iP		06 18 55.3	
"	17	Up	i(P)		07 16 40.6	
"	17	Ud	iP		07 24 00.0	
"	17	Ki	iP		08 44 14.8	
		Kurile Islands (h = 60 km).				
"	17	Up	iP		11 43 16.0	
		Ud	iP		11 43 24.3	
		Ionian Sea (h = 8 km).				
"	17	Ud	iP		12 04 45.4	
		Ionian Sea.				
"	17	Up	iP		12 20 11.8	
		Um	iP		12 21 03.2	
		Ud	iP		12 20 18.1	
		De	iP		12 19 43.3	
		Ionian Sea.				
"	17	Um	i(P)		15 11 30.4	
		Ud	i(P)		15 11 09.7	
1974 Feb.	17	Ud	iP		15 40 19.2	
"	17	Um	iP		19 14 43.2	
		Ud	iP		19 15 09.1	
		Formosa (h = 80 km).				
"	17	Up	iP		21 30 42.6	
		Ki	iP		21 29 49.2	
		Sk	iP		21 30 18.7	
		Um	iP		21 30 16.3	
		Ud	iP		21 30 41.2	
		De	iP		21 31 04.2	
		Unimak Island (h = N).				
"	18	Ud	iP		02 03 25.3	
		Tien-Shan.				
"	18	Um	iPKPl		06 31 53.0	
"	18	Ud	iPKPl		09 10 58.0	
		De	iPKPl		09 11 08.8	
"	18	Um	iP		10 10 41.9	
		Lake Tanganyika (h = 5 km).				
"	18	Up	iSgl		11 26 11.4	
		Ud	iSgl		11 25 43.1	
		De	iSgl		11 26 02.5	
		Västergötland, Sweden, 58.6°N, 13.5°E.				
		Origin time = 11 24 56.				
"	18	Um	iSgl		11 35 26.4	
		De	iSgl		11 36 35.6	
		Probably western USSR. Explosion.				
"	18	Um	iSgl		12 59 22.8	
"	18	Ki	iSgl		13 14 26.9	
		Sk	iSgl		13 13 46.4	
		Um	iSgl		13 12 28.4	
		Ud	iSn		13 12 30.6	
			iSgl		13 13 00.0	
		De	iSgl		13 13 28.0	
		Western USSR. Explosion.				
"	18	Up	i		13 38 10.6	
			i		13 38 22.1	
			i(Sgl)		13 38 24.2	
"	18	Up	iP		13 44 49.0	
		Um	iP		13 44 14.6	
		Ud	iP		13 44 49.0	
		Aleutian Islands (h = 140 km).				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Feb.	18	Um	iP		18 29 44.4	
		Ud	iP		18 29 40.6	
		Turkey (h = 20 km).				
"	18	Up	eP		21 12 32	
		Ki	eP		21 11 57	
					micr	sec
			Mx	E	2.0	19
			Mx	N	1.4	20
		Um	iP		21 12 16.0	
		Ud	iP		21 12 46.1	C
		Japan (h = N).				
"	18	Um	iP		21 18 33.4	
		Ud	iP		21 19 00.8	
		Celebes Sea (h = 360 km).				
"	19	Up	iPP		01 42 31.0	
		Ki	ePP		01 42 02	
			i		01 42 08.3	
		Um	iPP		01 42 07.6	
		Ud	iP		01 38 09.0	
			iPP		01 42 37.1	
		De	i(PP)		01 42 30.0	
		Timor (h = N).				
"	19	Up	iP		02 14 16.3	
		Ki	iP		02 13 32.7	
		Sk	eP		02 14 15	
		Um	iP		02 13 51.7	
		Ud	iP		02 14 29.3	
		Lake Baikal region.				
"	19	Up	iP		03 42 58.1	
			ipP		03 43 04.1	
			i		03 45 31.6	
			iPP		03 46 14.5	
			iS		03 53 19	
					micr	sec
			P	Z'	1.2	2.1
			pP	Z'	1.1	1.6
			Mx	E	12	22
			Mx	N	38	21
			Mx	Z	17	19
		Ki	iP		03 42 38.9	
			ipP		03 42 45.8	
			iPP		03 45 56.3	
					micr	sec
			P	Z'	0.9	2.0
			pP	Z'	0.7	1.6
			Mx	E	25	23
			Mx	N	43	23
			Mx	Z	22	23
		Sk	iP		03 43 04.5	
			ipP		03 43 09.2	
			iPP		03 46 32.0	
		Um	iP		03 42 44.7	
		(cont.)				

1974 Feb.	19	(cont.)				
		Um	ipP		03 42 51.8	
			iS		03 53 01	
		Ud	iP		03 43 06.0	
			ipP		03 43 13.0	
		De	ipP		03 43 18.3	
		Luzon.				
		h = 25 km (Up,Ki,Sk,Um,Ud).				
		m = 6.7, M = 6.6 (Up,Ki).				
"	19	Up	iP		04 16 41.7	
			iPP		04 18 12.7	
		Ki	iP		04 16 51.1	
		Sk	iP		04 17 07.6	
		Um	iP		04 16 40.2	
			iPP		04 18 20.6	
		Ud	iP		04 16 58.5	
			iPP		04 18 35.8	
		De	iP		04 16 55.3	
		Hindu Kush (h = 90 km).				
"	19	Um	iP		07 58 36.8	
		Ud	iP		07 58 55.0	
		De	iP		07 58 53.5	
		Hindu Kush.				
		Intermediate depth.				
"	19	Sk	eSgl		09 53 23	
		Ud	iSgl		09 53 18.2	
		West coast of Norway,				
		60.6°N, 4.6°E.				
		Origin time = 09 50 54.				
		By combination with Bergen				
		and Kongsberg readings.				
"	19	Up	iSgl		10 56 24.4	
		Sk	iSgl		10 58 12.3	
		Um	i		10 56 28.0	
			iSgl		10 56 45.2	
		Ud	iSgl		10 57 26.5	
			i		10 57 34.8	
		Western USSR.				
		Explosion.				
"	19	Sk	iPgl		11 53 34.1	
			i		11 53 40.8	
			iSg2		11 53 45.2	
		Um	iSgl		11 55 26.2	
			iSg2		11 55 31.5	
		Ud	iSgl		11 54 45.2	
		Norway-Sweden border region,				
		near 67 3/4°N, 16 1/2°E.				
		Origin time = 11 53 20.				
"	19	Um	iSgl		12 12 46.4	
		Western USSR.				
		Explosion.				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Feb.	19	Um	i	12 42 00.3	
			iSgl	12 42 07.3	
		Western USSR.			
		Explosion.			
"	19	Up	iSgl	13 01 18.9	
		Ki	iSgl	13 04 10.9	
		Sk	iSgl	13 03 15.3	
		Um	iSgl	13 02 07.7	
		Ud	iSgl	13 02 24.4	
		De	iSgl	13 02 47.1	
		Esthonia.			
		Explosion.			
"	19	Um	i(P)	13 19 12.2	
"	19	Um	iSgl	14 02 49.8	
		Lake Ladoga.			
		Explosion.			
"	19	Ud	i(P)	14 06 30.7	
"	19	Up	i(P)	14 39 49.5	
"	19	Up	iP	19 47 53.6	
		Um	iP	19 47 39.4 C	
		Ud	iP	19 48 00.7 C	
		Luzon (h = 45 km).			
"	19	Up	iP	20 35 46.3	
"	19	Up	iP	21 37 33.2	
		Ki	iP	21 37 42.2	
		Um	iP	21 37 29.6	
		Ud	iP	21 37 49.9	
		De	eP	21 37 46	
		Afghanistan-USSR (h = N).			
"	19	Ki	iP	22 07 33.8	
		Um	iP	22 07 59.9	
"	19	Up	iP	23 01 08.3	
		Ud	iP	23 01 09.3	
		Greece.			
"	19	Up	iP	23 47 06.6	
			ipP	23 47 24.6	
		Ki	ipP	23 48 31.2	
		Um	ipP	23 48 02.7	
		Ud	iP	23 47 14.4	
			ipP	23 47 34.6	
		De	iP	23 46 40.0	
			ipP	23 47 00.3	
		Greece.			
		h = 100 km (Up,Ud,De).			
"	20	Long-period microseisms (periods around 16-18 sec), especially clear on Um LP N.			

1974 Feb.	20	Ud	iPKP1	00 55 54.1	
			iPKP2	00 56 01.7	
		De	iPKP1	00 56 04.6	
		Tonga Islands (h = 60 km).			
"	20	Um	i(P)	02 38 20.1	
"	20	Ki	iPKP	03 21 25.5	
			iPKKP1	03 31 50.2	
		Um	iPKP	03 21 23.1 C	
			iPKKP1	03 31 54.1	
		Ud	iPKP	03 21 14.5	
			iPKKP2	03 32 16.3	
		De	iPKKP2	03 32 12.5	
		Argentina (h = 120 km).			
"	20	Um	iSgl	05 53 09.0	
		Ud	eSgl	05 53 35	
"	20	Ki	ePgl	07 03 52	
			i	07 04 10.2	
			iSgl	07 04 11.7	
		Origin time = 07 03 27.			
"	20	Ud	iP	08 25 08.4	
"	20	Up	eP	11 50 29	
			iPP	11 52 02.9	
		Ki	iP	11 50 30.8	
			ipP	11 50 37.5	
		Sk	iP	11 50 52.7	
			ipP	11 50 59.9	
			i	11 53 12.4	
		Um	iP	11 50 23.6	
			ipP	11 50 30.2	
		Ud	iP	11 50 46.2	
			ipP	11 50 52.8	
		De	iP	11 50 45.8	
			ipP	11 50 53.6	
		Kirghiz SSR.			
		h = 35 km (Ki,Sk,Um,Ud,De).			
"	20	Up	iSgl	12 29 35.7	
		Um	iSgl	12 30 03.6	
		Ud	iSgl	12 30 40.6	
		De	iSgl	12 31 03.6	
		Western USSR.			
		Explosion.			
"	20	Um	iSgl	12 35 23.5	
		Ud	iSgl	12 36 08.1	
		De	eS*	12 36 24	
			iSg2	12 36 41.9	
		Western USSR.			
		Explosion.			
"	20	Ki	iPgl	13 39 07.7	
			iSn	13 39 44.5	
		(cont.)			

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Feb.	20	(cont.)			
		Ki	iSgl	13 39 58.3	
		Um	iSn	13 40 26.1	
			i	13 40 42.1	
			iSgl	13 40 54.0	
		Probably northwest USSR.			
		Explosion.			
"	20	Ki	iP	16 22 53.2	
		Sk	iP	16 22 35.5	
			ipP	16 22 42.8	
		Um	iP	16 22 55.3	
			ipP	16 23 00.6	
		Ud	iP	16 22 39.3	
			ipP	16 22 45.2	
		Haiti.			
		h = 20 km (Sk,Um,Ud).			
"	21	Ki	iP	00 25 09.9	
		Um	iP	00 24 52.3	
		Atlantic Ocean (h = N).			
"	21	Ud	iPKPl	01 05 39.3	
		De	iPKPl	01 05 50.9	
"	21	Ki	iPKP	05 49 03.4	
		South Sandwich Islands			
		(h = 90 km).			
"	21	Um	iP	08 21 12.8	
		Mariana Islands (h = 45 km).			
"	21	Ki	iP	10 47 56.7	
		Mariana Islands (h = 170 km).			
"	21	Um	iSgl	12 11 58.6	
		Ud	iSgl	12 12 37.7	
		Western USSR.			
		Explosion.			
"	21	Um	iSgl	12 29 51.1	
		Western USSR.			
		Explosion.			
"	21	Ud	iP	12 56 18.7	
		Colombia (h = 70 km).			
"	21	Ud	iP	13 26 30.1	
"	21	Up	i(P)	13 59 40.2	
"	21	Um	iPKPl	14 12 42.6	
		Ud	iPKPl	14 12 56.4	
"	21	Um	iPP	17 39 23.4	
		Banda Sea (h = 170 km).			
"	21	Ki	iP	19 00 40.6	
		(cont.)			

1974 Feb.	21	(cont.)			
		Ki	i	19 00 52.9	
		Um	iP	19 00 47.1	
		Ud	iP	19 01 07.3	
		Samar (h = N).			
"	22	Up	iP	00 35 49.8	
		Ud	iP	00 36 16.2	
		Turkmen SSR.			
"	22	Up	iP	00 47 52.2	
			i	00 47 54.3	
			ipP	00 49 20.5	
			iS	00 56 54	
			isS	00 59 27	
				micr	sec
			P Z'	0.9	0.9
			Mx E	4.2	20
			Mx N	6.3	17
			Mx Z	6.8	17
		Ki	iP	00 47 17.1	
			i	00 47 19.7	
			ipP	00 48 44.1	
			iS	00 55 50	
			iScS	00 56 35	
			iP'P'	01 15 25.2	
				micr	sec
			P Z'	1.2	1.5
			Mx E	3.9	16
			Mx N	3.5	15
			Mx Z	5.1	17
		Sk	iP	00 47 49.7	
			i	00 47 52.7	
			ipP	00 49 15.9	
		Um	iP	00 47 32.0	
			i	00 47 34.2	
			iS	00 56 15	
			isS	00 58 49	
			iP'P'	01 15 14.0	
		Ud	iP	00 47 59.8	
			i	00 48 02.0	
			i	00 48 56.4	
			ipP	00 49 29.2	
			iS	00 57 05.8	
		De	iP	00 48 12.7	
			i	00 48 14.8	
			ipP	00 49 41.6	
			iPP	00 51 17.7	
			i(S)	00 57 34.8	
		Japan.			
		h = 380 km (Up,Ki,Sk,Um,Ud, De).			
		m = 6.5, M = 5.9 (Up,Ki).			
		M uncorrected for focal depth.			
		Double P, small and large, separated by 2.4 sec in average.			

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Feb.	22	Up	iP		01 17 42.3	
			i		01 17 44.4	
					micr	sec
			P	Z'	0.1	1.0
		Um	iP		01 17 37.2	
		Ud	iP		01 17 43.3	
"	22	Up	iP		03 41 01.5	C
			iPn		03 41 58.1	
					micr	sec
			P	Z'	0.5	1.4
		Ki	iP		03 41 09.5	C
			ipP		03 41 34.9	
					micr	sec
			P	Z'	0.2	1.2
		Sk	iP		03 41 26.7	
		Um	iP		03 40 59.2	C
			ipP		03 41 23.0	
		Ud	iP		03 41 18.2	C
			ipP		03 41 40.9	
		De	iP		03 41 14.5	C
		Afghanistan-USSR.				
		h = 120 km (Ki,Um,Ud).				
		m = 5.9 (Up,Ki).				
"	22	Um	iSgl		05 56 08.0	
"	22	Up	iP		07 14 44.8	
		Ki	iP		07 15 02.4	
		Sk	iP		07 15 13.1	
		Um	iP		07 14 48.0	
		Ud	iP		07 15 00.3	
		De	iP		07 14 52.8	
		Pakistan (h = N).				
"	22	Um	iP		09 34 46.5	
		Ud	iP		09 35 05.3	
		De	iP		09 35 02.0	
		Hindu Kush.				
		Intermediate depth.				
"	22	Ud	iP		10 03 35.5	
"	22	Um	iSgl		12 21 35.2	
		Western USSR.				
		Explosion.				
"	22	Up	iP		13 44 16.0	
			i		13 44 30.2	
		Um	iP		13 44 56.0	
		Ud	iP		13 44 30.2	
		De	iP		13 43 56.1	
		Rumania (h = 150 km).				
"	22	Ud	iP		15 18 38.8	
"	22	Up	iP		15 31 32.2	
		Ionian Sea.				
1974 Feb.	22	Up	iP		20 57 50.2	
"	22	Ud	iP		22 35 25.6	
		Hindu Kush.				
		Intermediate depth.				
"	23	Up	iP		01 33 33.8	
					micr	sec
			P	Z'	0.1	0.9
		Sk	iP		01 34 22.2	
		Um	iP		01 34 15.1	
		Ud	iP		01 33 43.0	
		De	iP		01 33 05.5	
		Greece (h = 45 km).				
"	23	Up	iP		04 25 54.7	C
					micr	sec
			P	Z'	0.1	1.0
		Ki	iP		04 25 11.2	C
					micr	sec
			P	Z'	0.1	1.0
		Um	iP		04 25 30.3	C
		Ud	iP		04 26 01.4	C
		De	iP		04 26 18.2	C
		Japan (h = 60 km).				
		m = 5.8 (Up,Ki).				
"	23	Um	iPKPl		06 51 41.5	
"	23	Ud	iPKP		09 14 16.3	
		De	iPKP		09 14 27.5	
"	23	Ud	iPKPl		14 00 53.3	
"	23	Up	iP		21 00 07.1	
		Sk	iP		21 00 47.5	
		Um	iP		21 00 45.9	
		Ud	iP		21 00 13.6	
		Greece (h = N).				
"	23	Up	iP		21 02 52.7	
		Sk	iP		21 03 35.6	
		Um	iP		21 03 31.7	
		Ud	iP		21 03 00.2	
		Greece.				
"	24	Um	iP		04 36 11.6	
		Ud	eP		04 36 41	
		Japan (h = 20 km).				
"	24	Ki	iSn		06 27 36.9	
			iSgl		06 28 00.0	
		Um	iSn		06 28 16.8	
			iSgl		06 28 51.9	
		Ud	iSgl		06 31 21.4	
		Northwest USSR.				
		Explosion.				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Feb.	24	Um	iP	06 28 28.4	
		Ud	iP	06 28 56.1	
		Tien-Shan.			
"	24	Um	iPKPl	08 26 39.9	
"	24	Up	e	09 29 45	
			iSgl	09 29 53.9	
		Ki	iPn	09 25 39.5	
			iSn	09 26 38.7	
			iSgl	09 26 57.5	
		Sk	iSgl	09 29 26.0	
		Um	iSn	09 27 16.1	
			iSgl	09 27 45.1	
		Ud	i(Sgl)	09 30 22.4	
		Northwest USSR.			
		Explosion.			
"	24	Ud	iP	09 45 33.1	
"	24	Up	iP	12 16 41.7	
		Ud	iP	12 16 38.1	
"	24	Um	iP	15 07 10.6	
		Ud	iP	15 07 36.3	
		De	iP	15 07 58.8	
		Aleutian Islands (h = 100 km).			
"	24	Up	iP	16 34 56.4	
"	24	Up	iP	19 21 04.1	
		Ki	iP	19 21 02.3	
		Um	iP	19 20 59.3	
		Ud	iP	19 21 16.5	
		De	iP	19 21 16.8	
		Sunda Strait (h = 90 km).			
"	24	Ud	iP	20 26 55.6	
		De	iP	20 26 37.5	
"	24	Up	iP	21 40 52.9	
		Ki	iP	21 40 57.8	
		Sk	iP	21 41 15.6	
		Um	iP	21 40 49.9	
		Ud	iP	21 41 08.4	
		De	iP	21 41 08.6	
		Himalaya (h = 45 km).			
"	24	Ud	iP	22 53 33.0	
"	25	Um	iP	01 44 22.0	
		Ud	iP	01 43 54.4	
		De	iP	01 43 35.7	
		Ascension Island (h = N).			
"	25	Up	iP	05 57 28.2 D	
			iPcP	05 57 51.8	
		(cont.)			

1974 Feb.	25	(cont.)			
		Up		micr	sec
			P Z'	0.1	1.1
			Mx E	1.5	20
			Mx N	1.9	18
			Mx Z	2.4	18
		Ki	iP	05 56 42.2 D	
				micr	sec
			P Z'	0.2	1.2
			Mx E	3.7	19
			Mx N	3.6	20
			Mx Z	4.3	19
		Sk	iP	05 57 18.3	
		Um	iP	05 57 03.2 D	
			i	05 57 04.3	
		Ud	iP	05 57 34.6 D	
		De	iP	05 57 52.9 D	
		Kurile Islands (h = 10 km).			
		m = 6.1, M = 5.6 (Up,Ki).			
"	25	De	iP	11 07 38.3	
		Hindu Kush.			
		Intermediate depth.			
"	25	Up	iSgl	12 14 36.4	
		Um	iSgl	12 14 59.5	
		Ud	iSgl	12 15 43.1	
		De	iSgl	12 16 08.7	
		Western USSR.			
		Explosion.			
"	25	Ud	iP	12 18 09.2	
		Japan (h = 330 km).			
"	25	De	iP	16 19 03.4	
"	25	Up	iS	20 09 29.2	
			i	20 09 35.0	
		Ud	iS	20 08 54.3	
			i	20 09 08.1	
		De	iP	20 06 21.7	
			i	20 06 29.2	
			iS	20 08 16.9	
			i	20 08 23.2	
		United Kingdom (h = N).			
"	26	De	iPKPl	00 21 12.4	
"	26	Sk	i(Sgl)	04 14 15.1	
"	26	Um	iP	05 32 41.9	
		South of Japan (h = 220 km).			
"	26	Up	iP	06 34 09.0 C	
				micr	sec
			P Z'	0.2	0.7
		Ki	iP	06 33 15.0 C	
		(cont.)			

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Feb.	26	(cont.)				
		Ki	iPcP	06 34 14.9		
				micr	sec	
			P Z'	0.1	0.9	
		Sk	iP	06 33 51.9		
			iPcP	06 34 35.3		
		Um	iP	06 33 40.4	C	
			iPcP	06 34 28.8		
		Ud	iP	06 34 12.5		
			iPcP	06 34 48.1		
		De	iP	06 34 34.2	C	
			iPcP	06 35 01.7		
		Kamchatka (h = 50 km).				
		m = 6.0 (Up,Ki).				
"	26	Ki	iP	10 08 20.9		
		Um	iP	10 08 29.9		
		Mariana Islands (h = 25 km).				
"	26	Ki	iP	10 11 38.8		
		Um	iP	10 11 48.9		
		Ud	iP	10 12 12.7		
		Mariana Islands (h = 45 km).				
"	26	Ki	iSn	11 00 56.5		
		Um	iSgl	11 02 45.8		
		Northwest USSR-Norway.				
		Explosion.				
"	26	Up	iP	11 18 22.3		
		Sk	eP	11 19 05		
		Um	iP	11 19 07.3		
		Ud	iP	11 18 32.2		
		De	eP	11 17 52		
			i	11 18 00.9		
		Ionian Sea (h = N).				
"	26	Um	iSgl	12 08 56.8		
		Ud	iSgl	12 09 28.1		
		De	iSgl	12 09 53.0		
		Esthonia.				
		Explosion.				
"	26	Um	i	12 10 19.6		
			iSgl	12 10 23.2		
		Ud	iSgl	12 11 10.2		
		De	iSgl	12 11 35.1		
		Western USSR.				
		Explosion.				
"	26	Um	i(P)	12 25 30.7		
"	26	Up	eP	14 24 42		
		Sk	eP	14 25 16		
		Ud	iP	14 24 45.7		
		De	iP	14 24 10.8		
		West of Crete (h = N).				

1974 Feb.	26	Up	iSgl	14 55 37.2		
			iSg2	14 55 45.2		
		Sk	iSgl	14 54 57.7		
		Ud	iSgl	14 54 35.3		
		De	iSgl	14 55 17.9		
		West coast of Norway,				
		60.0°N, 4.8°E.				
		Origin time = 14 52 19.				
		By combination with Bergen				
		readings.				
"	26	Ud	iP	17 18 21.8		
"	26	Up	iP	23 27 45.3		
		Off coast of Oregon (h = N).				
"	27	Um	iP	03 53 17.7		
		Ud	iP	03 53 24.6		
		De	iP	03 53 48.1		
		Off coast of Oregon				
		(h = 15 km).				
"	27	Up	iP	03 54 46.3		
			i	03 54 52.4		
		Um	iP	03 54 26.9		
			i	03 54 33.9		
		Ud	iP	03 54 39.8		
			i	03 54 45.9		
		De	iP	03 55 00.1		
		Off coast of Oregon				
		(h = N).				
		Double P, possibly a double				
		shock.				
"	27	Up	iP	03 56 56.4		
		Um	iP	03 56 39.5		
		Ud	iP	03 56 50.5		
		De	iP	03 57 11.5		
		Off coast of Oregon (h = N).				
"	27	Ud	iP	04 06 24.2		
"	27	Up	iP	04 40 12.2		
			i	04 40 18.7		
		Um	iP	04 40 38.1		
		Ud	iP	04 40 08.2		
		De	iP	04 39 49.7		
		Ascension Island (h = N).				
"	27	Up	iP	08 32 45.0		
		Greece-Bulgaria (h = 20 km).				
"	27	Ud	i	10 47 45.4		
			iSgl	10 47 48.4		
"	27	Up	iSgl	11 49 33.2		
		(cont.)				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974						
Feb.	27	(cont.)				
		Up	i		11 49 50.0	
		Ud	iSgl		11 49 34.3	
			i		11 49 47.8	
		De	iPgl		11 47 35.3	
			i		11 47 36.8	
			iSgl		11 47 52.4	
			iRg		11 47 59.1	
		Baltic Sea, south of Sweden,				
		55.6°N, 15.3°E.				
		Origin time = 11 47 14.				
		Explosion.				
"	27	Up	iSgl		12 11 35.4	
		Um	iSgl		12 12 11.6	
		Ud	iSgl		12 12 38.3	
		De	iSgl		12 13 11.2	
		Esthonia.				
		Explosion.				
"	27	Up	iP		17 11 48.7	C
					micr	sec
			P	Z'	0.1	1.0
		Ki	iP		17 11 14.5	C
					micr	sec
			P	Z'	0.2	1.4
		Sk	iP		17 11 22.4	C
		Um	iP		17 11 34.1	C
		Ud	iP		17 11 40.7	C
		De	iP		17 11 57.4	
		Nevada.				
		m = 6.0 (Up,Ki).				
		Underground explosion.				
"	27	Up	iP		18 14 16.0	D
			ipP		18 14 24.8	
			i(PP)		18 17 07.2	
			iPP		18 17 28.8	
					micr	sec
			P	Z'	0.4	1.0
		Ki	iP		18 14 17.0	D
			ipP		18 14 26.1	
					micr	sec
			P	Z'	0.7	1.0
		Sk	iP		18 14 30.9	D
			iPP		18 17 47.7	
		Um	iP		18 14 13.5	D
			ipP		18 14 22.6	
			iPP		18 17 19.4	
		Ud	iP		18 14 26.4	D
			ipP		18 14 36.8	
			i(PP)		18 17 28.7	
			iPP		18 17 42.3	
		De	iP		18 14 24.5	D
			ipP		18 14 35.1	
			i(PP)		18 17 23.1	
			iPP		18 17 39.0	
		(cont.)				

1974						
Feb.	27	(cont.)				
		Sumatra.				
		h = 35 km (Up,Ki,Um,Ud,De).				
		m = 6.7 (Up,Ki).				
		Clear cases of early PP,				
		denoted (PP).				
"	27	Ki	iPKP		20 56 51.6	
		Um	iPKP		20 56 59.5	
		Tonga Islands (h = N).				
"	27	Um	i(P)		21 30 30.9	
		Ud	iP		21 29 55.4	
"	27	Up	i(P)		21 40 40.6	
"	27	Ud	iPKPl		21 43 15.2	
		De	iPKPl		21 43 26.0	
"	27	Up	iP		23 17 44.5	
		De	iP		23 17 17.3	
"	27	Up	iP		23 18 06.8	
		Sk	iP		23 18 47.4	
		Ud	iP		23 18 04.5	
		Sicily.				
"	28	Ki	iP		00 50 55.7	
		Ud	iP		00 51 11.2	
		Burma.				
"	28	Ud	iPKPl		05 06 14.6	
		De	iPKPl		05 06 25.7	
		Tonga-Kermadec Islands				
		(h = N).				
"	28	Um	iP		07 49 00.0	
		Ud	eP		07 48 57	
"	28	Up	iSgl		10 28 41.9	
		Um	iSgl		10 29 15.9	
		Ud	iSgl		10 29 45.4	
		Esthonia.				
		Explosion.				
"	28	Up	iSgl		12 19 09.6	
		Um	i		12 19 09.4	
			iSgl		12 19 22.7	
		Ud	iSgl		12 20 07.3	
		De	iSgl		12 20 27.5	
		Western USSR.				
		Explosion.				
"	28	Up	iP		13 44 49.7	
		Um	iP		13 45 31.2	
		Ud	iP		13 44 49.2	
		Sicily.				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
Feb. 28 Up iPKP1 14 19 12.3
i 14 19 15.4
iPKP2 14 19 24.1
micr sec
PKP2 Z' 2.9 2.8
Mx E 3.2 21
Mx N 3.6 20
Mx Z 10 20
Ki iPKP1 14 18 54.3
i 14 19 13.8
micr sec
PKP1 Z' 4.5 3.0
Mx E 7.2 22
Mx N 9.5 23
Mx Z 9.6 23
Sk iPKP1 14 19 09.1
Um iPKP1 14 19 02.9
i 14 19 13.4
Ud iPKP1 14 19 16.3
iPKP2 14 19 29.3
De iPKP2 14 19 43.2
New Zealand (h = 15 km).
M = 6.5 (Up,Ki).

" 28 Up iPKP1 14 25 12.8
iPKP2 14 25 26.4
micr sec
PKP2 Z' 0.1 1.0
Ki iPKP1 14 24 55.2
micr sec
PKP1 Z' 0.3 1.7
Sk iPKP1 14 25 09.7 C
Um iPKP1 14 25 04.4 C
Ud iPKP1 14 25 16.8
iPKP2 14 25 29.8
De iPKP2 14 25 46.4
New Zealand (h = 30 km).

" 28 Up iRg 14 29 18.9
Ud i 14 29 33.9
iRg 14 29 37.3
De iSg1 14 30 09.8
Central Sweden.

" 28 Um iPKP1 14 57 54.4
De iPKP2 14 58 34.3
New Zealand (h = N).

" 28 Up iP 15 10 42.9
micr sec
P Z' 0.1 1.0
Ki iP 15 09 49.6
Sk iP 15 10 20.3
Um iP 15 10 14.9
Ud iP 15 10 43.3
Aleutian Islands (h = 55 km).

1974
Feb. 28 Up iP 15 10 29.3
Ki iP 15 10 04.5
Sk iP 15 10 40.3
Um iP 15 10 07.4
Mixing with preceding event makes identification difficult.

" 28 Up iP 16 09 25.6
Um iP 16 09 00.4
Ud iP 16 09 32.6
De iP 16 09 48.1
Japan (h = 70 km).

" 28 Um iPKP 16 25 20.9
Ud iPKP 16 25 30.5
Tonga Islands (h = 100 km).

" 28 Ki iP 17 43 55.2
Ud iP 17 43 15.9
North Atlantic Ocean (h = N).

" 28 Up iP 19 30 14.9
Ki iP 19 29 21.4
Sk iP 19 29 51.3
Um iP 19 29 47.7
Ud iP 19 30 12.4
De iP 19 30 36.9
Aleutian Islands (h = N).

" 28 Up iP 20 28 21.0
Ki iP 20 28 17.1
Sk iP 20 28 14.0
Um iP 20 28 22.0
i 20 28 29.0
Ud iP 20 28 11.8
i 20 28 18.6
De iP 20 28 16.5
i 20 28 23.5
Costa Rica (h = 60 km).
Double P, 6.9 sec apart in average.

" 28 Up iP 20 32 55.4 C
iPP 20 36 27
iS 20 43 19
micr sec
P Z' 0.3 1.2
Mx E 3.6 19
Mx N 4.1 21
Mx Z 9.5 20
Ki iP 20 32 50.8 C
i 20 32 58.6
micr sec
P Z' 0.8 1.9
(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974

					micr	sec	
Feb.	28	(cont.)					
		Ki					
			Mx	E	12	16	
			Mx	N	9.2	17	
			Mx	Z	14	16	
		Sk	iP		20 32	40.1	C
			i		20 32	47.6	
		Um	iP		20 32	55.8	C
			iPP		20 36	26	
			iS		20 43	23	
		Ud	iP		20 32	45.8	C
		De	iP		20 32	50.3	C
		Costa Rica (h = 45 km).					
		m = 6.5, M = 6.2 (Up,Ki).					
		Double P, 7.6 sec apart					
		in average.					
"	28	Um	iP		20 51	31.6	
"	28	Um	iP		21 48	38.6	
			i		21 48	48.1	
		Ud	iP		21 48	28.2	
		Costa Rica (h = 55 km).					
"	28	Up	iP		22 23	46.6	
		Ki	iP		22 22	19.8	
		Um	iP		22 23	05.7	
			i		22 23	09.4	
		Ud	iP		22 23	41.3	
		Greenland Sea (h = N).					

Markus Båth

October 5, 1975

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BOX 517
S-751 20 UPPSALA
SWEDEN

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BOX 517
751 20 UPPSALA 1
SWEDEN

S E I S M O L O G I C A L B U L L E T I N

U P P S A L A, K I R U N A, S K A L S T U G A N, U M E Å,

U D D E H O L M and D E L A R Y

Uppsala	(Up):	59°51.5'N,	17°37.6'E;	h = 14 m
Kiruna	(Ki):	67°50.4'N,	20°25.0'E;	h = 390 m
Skalstugan	(Sk):	63°34.8'N,	12°16.8'E;	h = 580 m
Umeå	(Um):	63°48.9'N,	20°14.2'E;	h = 16 m
Uddeholm	(Ud):	60°05.4'N,	13°36.4'E;	h = 240 m
Delary	(De):	56°28.2'N,	13°52.2'E;	h = 150 m

M A R C H 1 - 31, 1974

1974 Mar.	1	Ud	iP	00 59 09.0	
"	1	Up	iSg1	01 57 36.6	
		Ki	iPg1	01 52 58.8	
			iSg1	01 53 32.8	
			iSg2	01 53 36.1	
				micr	sec
			Sg2 Z'	0.2	0.5
		Sk	iSn	01 55 20.5	
			iSg1	01 55 59.4	
		Um	i(Pg1)	01 54 00.0	
			iSn	01 55 01.5	
			iSg1	01 55 33.2	
			iSg2	01 55 42.0	
		Ud	eSg1	01 57 43	
		Coast of north Norway, 70.2°N, 19.7°E. Origin time = 01 52 15. Solution checked with Tromsoe readings.			
"	1	Up	eP	03 11 18	
		Um	iP	03 12 03.0	
		Ud	iP	03 11 24.4	
		Albania (h = N).			
"	1	Up	iPKP1	04 43 18.4	
		Ki	iPKP1	04 43 00.1	
		Um	iPKP1	04 43 11.9	
		New Zealand (h = N).			
"	1	Up	iPKP2	04 45 57.9	
		Ki	iPKP1	04 45 27.0	
		Um	iPKP1	04 45 35.0	
		New Zealand (h = 15 km).			
"	1	Ud	iP	06 22 10.3	
		Iran (h = N).			
1974 Mar.	1	Ki	iP	06 35 39.9	
		Um	iP	06 36 07.9	
		Ud	iP	06 36 33.4	
		Aleutian Islands (h = 20 km).			
"	1	Ud	iP	08 49 32.9	
		Ionian Sea.			
"	1	Ki	iPn	10 57 34.0	
			iSn	10 58 29.4	
			iSg1	10 58 52.5	
		Northwest USSR. Explosion.			
"	1	Ki	iSg1	11 08 37.5	
		Um	iSg1	11 10 06.3	
		Northwest USSR-Norway. Explosion.			
"	1	Ki	iSg1	11 09 10.6	
		Um	iSg1	11 10 39.5	
		Northwest USSR-Norway. Explosion.			
"	1	Ki	iSg1	11 25 25.8	
		Northwest USSR. Explosion.			
"	1	Up	iSg1	11 38 44.2	
		Ki	iSn	11 35 26.4	
			iSg1	11 35 48.2	
		Sk	iSg1	11 38 14.7	
		Um	iSn	11 36 05.3	
			i	11 36 21.4	
			iSg1	11 36 40.0	
		Ud	iSg1	11 39 15.6	
		De	eSg1	11 40 49	
		Northwest USSR. Explosion.			

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
Mar. 1 Um iSgl 12 13 32.0
Western USSR.
Explosion.

" 1 Um iSgl 14 04 35.8
Lake Ladoga region.
Explosion.

" 1 Ki iP 16 13 48.1
Komandorsky Islands
(h = 30 km).

" 1 Up iPKPl 21 35 42.5
Sk ePKPl 21 35 37
Um iPKPl 21 35 32.1
Ud iPKPl 21 35 43.6
New Zealand.
Origin time = 21 15 48.

" 1 Ud iP 22 12 14.1
Hindu Kush.
Intermediate depth.

" 2 Up iPKP2 05 06 05.5
micr sec
PKP2 Z' 0.2 1.2
Ki iPKPl 05 05 34.7
micr sec
PKPl Z' 0.1 1.5
Sk iPKPl 05 05 48.5
Um iPKPl 05 05 43.3
Ud iPKP2 05 06 10.0
New Zealand (h = 30 km).

" 2 Ki iPKPl 05 27 05.2
Sk ePKPl 05 27 11
Um iPKPl 05 27 04.1
New Zealand (h = 35 km).

" 2 Ud iP 09 09 19.8

" 2 Ki iSn 12 16 36.0
Northwest USSR.
Explosion.

" 2 Ki iPn 12 32 59.7
iPgl 12 33 09.7
iSn 12 33 48.7
iS* 12 34 02.0
Um i 12 35 12.5
iSgl 12 35 31.5
Northwest USSR-Norway.
Explosion.

" 2 Um iP 13 16 40.4
Ud iP 13 17 08.8
Japan (h = 380 km).

1974
Mar. 2 Um iPKPl 16 01 42.1
Ud iPKPl 16 01 54.4

" 2 Um iP 17 07 08.7
Guatemala (h = 45 km).

" 2 Up iPgl 17 16 38.5
iSgl 17 16 51.2
i 17 16 54.5
Sk iSgl 17 18 11.6
Um iSgl 17 18 01.0
Ud iPgl 17 16 55.4
iSn 17 17 18.5
iSgl 17 17 20.0
De iSgl 17 18 47.5
Gästrikland, Sweden,
60.8°N, 17.2°E.
Origin time = 17 16 23.

" 2 Um iPKPl 21 27 57.9

" 2 Ud iP 23 24 11.1

" 3 Ki iP 01 19 45.2
Sk iP 01 19 58.6
Um iP 01 20 27.4
i 01 20 57.3

" 3 Up iP 05 02 19.9 C
il 05 02 21.5
i2 05 02 29.0
ipP 05 02 33.8
iS 05 11 44
micr sec
il Z' 0.3 1.3
i2 Z' 0.2 1.0
pP Z' 0.5 1.2
Mx E 6.9 25
Mx N 6.6 24
Mx Z 8.7 25
Ki iP 05 01 41.7 C
il 05 01 43.5
iS 05 10 35
micr sec
P Z' 0.1 1.0
il Z' 0.2 1.2
Mx E 7.4 20
Mx N 4.8 17
Mx Z 5.7 18
Sk iP 05 02 14.4 C
il 05 02 16.1
ipP 05 02 28.2
Um iP 05 01 58.3 C
il 05 02 00.1
i2 05 02 06.8
iS 05 11 05
Ud iP 05 02 27.2 C
(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
Mar. 3 (cont.)

Ud	il	05 02 28.9		
	i2	05 02 36.6		
	ipP	05 02 39.7		
De	iP	05 02 41.6	C	
	il	05 02 43.4		
	ipP	05 02 52.7		

Japan.
h = 45 km (Up,Sk,Ud,De).
m = 6.0, M = 6.0 (Up,Ki).
Multiple P-phases il and i2, in average 1.7 and 9.0 sec after the first onset.

" 3

Ki	iP	05 02 31.5		
Sk	iP	05 02 57.2		
Um	iS	05 09 54		
Ud	iP	05 02 52.9		
De	iP	05 02 49.7		

Tibet (h = N).
Records disturbed by preceding event.

" 3 Ki iSgl 06 50 02.2
Northwest USSR.
Explosion.

" 3 Ud iP 07 23 33.8

" 3

Ki	iP	07 50 10.7		
Sk	iP	07 50 17.8		
	iS	07 52 13.6		
Um	iP	07 50 45.5		
Ud	iP	07 51 03.3		

Jan Mayen region,
near 71 1/2°N, 8°W.
Origin time = 07 47 42.

" 3 Ud iP 11 49 04.9
California (h = N).

" 3 Ud iP 12 03 16.5
Kurile Islands (h = N).

" 3

Up	iPKP1	13 11 43.7		
	iPKP2	13 11 55.3		
		micr	sec	
	PKP2	Z' 0.1	1.1	
	Mx	N 1.1	20	
	Mx	Z 1.5	19	
Ki	iPKP1	13 11 25.2		
		micr	sec	
	PKP1	Z' 0.2	1.5	
	Mx	E 1.1	22	
	Mx	N 1.3	22	
	Mx	Z 1.2	20	

(cont.)

1974
Mar. 3 (cont.)

Sk	iPKP1	13 11 39.3	C
	iPKP2	13 11 47.9	
Um	iPKP1	13 11 33.5	C
	iPKP2	13 11 40.8	
Ud	iPKP1	13 11 44.5	
	iPKP2	13 11 59.3	
De	iPKP1	13 11 51.6	

New Zealand (h = 6 km).
M = 5.9 (Up,Ki).

" 3

Ki	ePKP1	13 46 52	
Um	iPKP1	13 46 57.6	
	iPKP2	13 47 08.0	
Ud	iPKP1	13 47 09.1	

New Zealand (h = 10 km).

" 3

Up	iPKP2	14 00 11.3	
Ki	iPKP1	13 59 39.1	
Um	iPKP1	13 59 47.7	
Ud	iPKP2	14 00 15.8	

New Zealand (h = N).

" 3

Ki	ePKP1	14 09 49	
Sk	ePKP1	14 10 01	
Um	iPKP1	14 09 56.9	

Probably New Zealand.
Origin time = 13 50 11.

" 3

Up	iPKP	14 41 59.2		
		micr	sec	
	Mx	E 2.1	22	
	Mx	N 4.8	22	
	Mx	Z 7.8	22	
Ki	iPKP	14 41 42.7		
		micr	sec	
	PKP	Z' 0.1	1.0	
	Mx	E 4.1	21	
	Mx	N 5.6	22	
	Mx	Z 4.3	20	
Sk	iPKP	14 41 53.5		
Um	iPKP	14 41 49.2		
Ud	i(PKP)	14 41 54.8		
	iPKP	14 42 01.5		
De	iPKP	14 42 07.4		

New Hebrides Islands (h = 15 km).
M = 6.3 (Up,Ki).

" 3

Up	iP	16 26 41.4	
Ki	iP	16 24 56.0	
	eS	16 26 40	
Sk	iP	16 25 50.4	
Um	iP	16 25 51.1	
Ud	iP	16 26 37.6	
	i	16 26 42.0	
De	iP	16 27 18.2	

South of Svalbard (h = N).

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974					
Mar.	3	Um	iPKP1	17 14 03.8	
"	3	Sk	iP	19 04 23.8	
"	3	Ud	iP	21 42 05.0	
		De	iP	21 41 33.6	
		Crete (h = N).			
"	4	Ki	eP	01 12 08	
		Um	iP	01 11 53.0	
		Azores Islands (h = N).			
"	4	Ud	iP	02 36 40.0	
"	4	Ki	iP	06 22 17.7	C
				micr	sec
			P Z'	0.1	1.0
		Sk	eP	06 23 06	
		Um	iP	06 22 56.7	C
		Ud	eP	06 23 35	
		Arctic Ocean (h = N).			
"	4	Sk	iP	07 04 02.3	
		Ud	iP	07 04 28.3	
		Alaska (h = 35 km).			
"	4	Up	iS*	09 08 47.6	
			iSg1	09 08 53.9	
		Sk	eSg1	09 10 01	
		Um	iSg1	09 08 11.0	
		Ud	eSg1	09 09 46	
		De	iSg1	09 10 30.3	
		Lake Ladoga region.			
		Explosion.			
"	4	De	i(P)	11 45 39.9	
"	4	Up	iSg1	12 16 14.2	
		Ki	eSg1	12 18 06	
		Sk	iSg1	12 17 54.5	
		Um	iSg1	12 16 29.9	
			iRg	12 17 00.8	
		Ud	iSg1	12 17 11.9	
		De	iSn	12 16 54.6	
			iSg1	12 17 36.9	
		Western USSR.			
		Explosion.			
"	4	Um	iP	12 22 59.9	
"	4	Up	iPKP	12 57 06.1	
			iSKP1	13 00 08.1	
			iSKP2	13 00 19.5	
				micr	sec
			SKP2 Z'	0.1	1.4
		Ki	iPKP	12 56 58.2	
			iSKP1	12 59 43.9	
		(cont.)			

1974					
Mar.	4	(cont.)			
		Ki		micr	sec
			SKP1 Z'	1.2	2.2
		Sk	ePKP	12 57 07	
			iSKP1	13 00 04.4	
		Um	iPKP	12 57 02.0	
			i	12 57 07.3	
			ipPKP	12 58 41.8	
			iSKP1	12 58 57.2	
		Ud	iPKP	12 57 08.9	
			iSKP1	13 00 11.7	
			iSKP2	13 00 22.1	
		De	iPKP	12 57 14.6	
		Fiji Islands.			
		h = 420 km (Um).			
"	4	Ki	iSg1	13 45 37.6	
		Um	eSg1	13 45 37	
		East-central Finland,			
		65.5°N, 29.3°E.			
		Origin time = 13 43 29.			
		Solution from Finnish			
		station readings.			
"	4	Sk	i(Sg1)	13 46 21.3	
"	4	Up	i(P)	13 50 53.0	
"	4	Um	i(Sg1)	14 10 07.9	
"	4	Ki	iP	14 11 22.1	
		Sk	eP	14 11 48	
		Kirghiz-Sinkiang (h = N).			
"	4	Ki	iP	14 55 09.1	
		Ud	iP	14 55 16.9	
		Hindu Kush.			
		Intermediate depth.			
"	4	Sk	iP	15 09 13.3	
		Um	iP	15 09 30.8	
		Guatemala (h = 80 km).			
"	4	Up	iP	15 15 27.8	
		Ki	iP	15 14 59.5	
		Sk	iP	15 15 25.2	
		Um	iP	15 15 12.0	
		Ud	iP	15 15 34.7	
		Mariana Islands (h = 360 km).			
"	4	Ki	iP	18 28 15.3	
		Off coast of Oregon (h = N).			
"	4	Um	iPKP1	21 24 30.3	
"	4	Up	iSg1	23 04 10.2	
		Sk	iSg1	23 02 43.9	
		(cont.)			

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
Mar. 4 (cont.)
Ud iSgl 23 03 09.1
Western Norway,
near 61.8°N, 6.6°E.
Origin time = 23 01 06.
By combination with Bergen readings.

" 5 Ud iP 00 28 08.8
Hindu Kush.
Intermediate depth.

" 5 Up iP 03 22 53.1
Ud iP 03 23 06.1
i 03 23 32.1

" 5 Ki eSgl 09 45 05
Um iSgl 09 43 48.5
Lake Ladoga region.
Explosion.

" 5 Up iPKPl 11 11 51.7
micr sec
PKPl Z' 0.1 1.4
Sk iPKPl 11 11 46.2
Um iPKPl 11 11 39.9
Ud iPKPl 11 11 52.8

" 5 Up iSn 12 10 05.4
iSgl 12 10 17.2
Sk iSn 12 11 34.1
eSgl 12 12 08
Um iSgl 12 10 50.7
Ud iSgl 12 11 20.8
De iSgl 12 11 46.5
Esthonia.
Explosion.

" 5 Up iSn 12 27 14.2
iSgl 12 27 26.5
Ki iSgl 12 30 00.3
Sk iSgl 12 29 16.4
Um iSgl 12 28 01.9
Ud iSn 12 28 02.8
iSgl 12 28 33.0
Esthonia.
Explosion.

" 5 Sk iP 12 38 39.7
Hindu Kush.
Intermediate depth.

" 5 Up iSgl 12 52 51.3
Ki eSgl 12 55 02
Um iSgl 12 53 15.9
Western USSR.
Explosion.

1974
Mar. 5 Sk iSgl 13 36 03.9
Ud iPgl 13 34 07.6
iSgl 13 35 01.5
South coast of Norway,
58.3°N, 6.7°E.
Origin time = 13 32 57.
By combination with Bergen and Kongsberg readings.

" 5 Ki eSgl 13 36 34
Um iSgl 13 37 42.9
Northwest USSR.
Explosion.

" 5 Um iP 15 06 53.2
Off Pacific coast of Central America (h = 35 km).

" 5 Um iP 17 01 14.1
Kurile Islands.

" 6 Ki iP 00 12 18.1
Sk e(pP) 00 13 25
Um iP 00 13 09.6
Ud iP 00 13 56.5
Svalbard (h = N).

" 6 Up iP 01 52 58.6
ipP 01 53 29.2
iPP 01 56 17
iS 02 03 07
iPKKP 02 10 55.6
micr sec
P Z' 0.1 1.1
pP Z' 0.4 1.3
PP Z' 1.1 2.0
Mx E 3.8 20
Mx N 2.5 20
Mx Z 8.3 24
Ki iP 01 52 49.9
ipP 01 53 21.8
iPP 01 56 07
iS 02 02 56
iPKKP 02 10 56.9
micr sec
P Z' 0.3 1.7
pP Z' 1.7 2.4
PP Z' 0.7 2.0
Mx E 6.7 19
Mx N 5.2 22
Mx Z 7.7 19
Sk iP 01 52 41.7
ipP 01 53 12.2
iPP 01 55 56.9
iPKKP 02 11 02.6
Um iP 01 52 56.3
(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Mar.	6	(cont.)			
		Um	ipP	01 53 28.0	
			iPP	01 56 18	
			iPKKP	02 10 54.0	
			iS	02 03 06	
			iP'P'	02 19 02.1	
			i	02 19 29.1	
		Ud	iP	01 52 46.5	
			ipP	01 53 19.2	
			iPP	01 56 08.6	
			iPKKP	02 10 59.3	
		De	iP	01 52 52.6	
			ipP	01 53 24.7	
			iPP	01 56 15.7	
		Nicaragua.			
		h = 120 km (Up,Ki,Sk,Um,Ud, De).			
		m = 6.2, M = 6.1 (Up,Ki).			
		M uncorrected for focal depth.			
"	6	Up	iP	02 44 51.7	
		Ki	iP	02 45 36.3	
			ipP	02 45 42.4	
		Um	iP	02 45 15.5	
			ipP	02 45 22.4	
		Ud	iP	02 44 46.7	
			ipP	02 44 52.8	
		Ascension Island.			
		h = 25 km (Ki,Um,Ud).			
"	6	Um	iPKP	04 01 07.2	
		Ud	iPKPl	04 01 08.2	
		De	iPKPl	04 01 18.9	
"	6	Um	iPKP	04 38 17.8	
		New Hebrides Islands (h = 250 km).			
"	6	Ud	iP	05 05 26.2	
		Talaud Islands (h = 55 km).			
"	6	Ki	eP	05 19 22	
		Um	iP	05 19 09.1	
		North Atlantic Ocean (h = N).			
"	6	Um	iP	06 42 18.1	
		Ud	iP	06 42 50.8	
		Kurile Islands (h = N).			
"	6	Um	iPKPl	07 33 20.9	
"	6	Up	iSgl	10 41 15.2	
		Sk	iSgl	10 43 07.1	
		Um	iSgl	10 41 50.7	
		Ud	eSgl	10 42 22	
		De	iSgl	10 42 50.5	
		Esthonia.			
		Explosion.			

1974 Mar.	6	Um	i(Sgl)	10 43 12.5	
"	6	Up	iSgl	12 08 10.9	
		Um	iSgl	12 08 33.6	
		Western USSR.			
		Explosion.			
"	6	Up	iSn	12 37 52.2	
			iSgl	12 38 06.6	
		Um	iSgl	12 38 42.9	
		De	eSgl	12 39 40	
		Esthonia.			
		Explosion.			
"	6	Ki	iPn	12 40 43.7	
			iSn	12 41 39.0	
		Northwest USSR-Norway.			
		Explosion.			
"	6	Um	iSgl	12 43 40.1	
		Western USSR.			
		Explosion.			
"	6	Sk	e	12 53 33	
			eSgl	12 54 41	
		Um	iSgl	12 52 51.0	
		Lake Ladoga region.			
		Explosion.			
"	6	Ki	iPKPl	13 17 04.1	
		Um	iPKPl	13 17 12.2	
		New Zealand (h = N).			
"	6	Ud	iP	13 48 03.7	
"	6	Up	i(P)	15 02 18.3	
"	6	Um	iP	15 46 55.8	
"	6	Up	iSgl	17 47 03.0	
		Ki	i	17 44 47.8	
			iSgl	17 44 59.9	
				micr	sec
			Sgl Z'	0.1	0.8
		Sk	ePgl	17 44 26	
			iS*	17 45 04.2	
			iSgl	17 45 08.3	
		Um	iPgl	17 44 39.8	
			iSn	17 45 13.5	
			iSgl	17 45 28.1	
		Ud	iSgl	17 46 54.2	
		Nordland, Norway, 66.4°N, 14.5°E.			
		Origin time = 17 43 37.			
		Explosion.			
"	6	Um	iPKPl	18 30 48.9	

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
Mar. 6 Up iPP 19 47 50.0
iS 19 55 11
micr sec
PP Z' 0.3 1.9
Mx E 4.9 23
Mx N 7.8 25
Mx Z 16 23
Ki iP 19 43 07.2
iPP 19 47 23.0
micr sec
PP Z' 0.4 2.4
Mx E 7.7 19
Mx N 7.8 21
Mx Z 5.8 21
Sk e(PP) 19 47 35
Um iP 19 43 12.1
iPP 19 47 31.2
Ud iPP 19 48 08.8
De ePP 19 48 19
Banda Sea (h = 25 km).
m = 6.5, M = 6.4 (Up,Ki).

" 6 Ki iPgl 20 41 12.1
iSgl 20 41 42.4
Sk eSgl 20 43 17
Um iSgl 20 41 50.0
Swedish coast of northern Baltic Sea, 65.9°N, 23.1°E.
Origin time = 20 40 33.
Checked with Finnish station readings.

" 6 Up iP 20 52 03.2
Ki iP 20 51 21.5
Sk iP 20 51 55.5
Um iP 20 51 39.8
ipP 20 51 58.0
Ud iP 20 52 10.2
De iP 20 52 27.2
Japan.
h = 70 km (Um).

" 6 Up i(P) 21 16 27.0

" 6 Ki eP 21 42 58
Sk eP 21 43 28
Um iP 21 42 58.5
Kazakh-Sinkiang (h = N).

" 7 Ud iP 03 56 11.6
Crete (h = N).

" 7 Up iSgl 09 09 20.0
Ud iPgl 09 08 01.6
iSgl 09 08 35.9
De iSgl 09 08 41.6
Off coast of Bohuslän, Sweden, 58.2°N, 10.7°E.
Origin time = 09 07 19.
Explosion.

1974
Mar. 7 Um iSgl 10 38 23.1
Ud iSgl 10 38 54.2

" 7 Up iSgl 11 00 03.6
Sk iSgl 11 01 49.0
Um iSgl 11 00 27.1
Ud iSgl 11 01 08.1
De iSgl 11 01 35.0
Western USSR.
Explosion.

" 7 Up iSgl 11 10 09.0
Sk iSgl 11 12 11.7
Um iSgl 11 12 20.5
Ud iSgl 11 10 16.8
De iPgl 11 08 11.1
iSgl 11 08 28.9
Baltic Sea, off coast of south Sweden, 55.4°N, 15.2°E.
Origin time = 11 07 49.
Explosion.

" 7 Up iSgl 11 10 27.6
Ud iSgl 11 10 33.9
De iSgl 11 08 45.4
Same location as for the preceding event.
Origin time = 11 08 06.
Explosion.

" 7 Up iP 11 42 35.8
i 11 42 39.6
micr sec
P Z' 0.1 1.0
Mx E 1.6 11
Mx N 2.9 10
Mx Z 2.9 11
Ki iP 11 43 04.1
i 11 43 07.7
iPP 11 44 16.4
micr sec
P Z' 0.1 1.0
Mx E 4.5 12
Mx N 7.2 13
Mx Z 4.3 12
Sk iP 11 43 10.1
i 11 43 13.8
iPP 11 44 23.3
Um iP 11 42 43.1
i 11 42 47.4
iS 11 48 08
Ud iP 11 42 53.0
i 11 42 56.7
De iP 11 42 41.0
i 11 42 44.8
Iran-USSR (h = 20 km).
m = 5.7, M = 5.6 (Up,Ki).
Double P, in average 3.8 sec apart.

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
Mar. 7 Up iSgl 12 14 59.0
Ki iSgl 12 16 57.0
Sk eSgl 12 16 42
Um iSgl 12 15 15.1
Ud iSgl 12 16 00.0
De iSgl 12 16 25.4
Western USSR.
Explosion.

" 7 Between 13 16 and 14 23, Up, Ud,De recorded a series of explosions off coast of Bohuslän, Sweden, 58.2°N, 10.7°E (cf Mar. 7 at 09 07 19).

" 7 De iPKP 22 09 56.1
Solomon Islands (h = N).

" 8 Up iP 01 56 39.3
Ki iP 01 56 51.8
micr sec
P Z' 0.1 1.1
Sk iP 01 57 06.4
Um iP 01 56 39.4
Ud iP 01 56 53.7
De eP 01 56 49
Afghanistan (h = N).

" 8 Um iP 02 19 56.2

" 8 Up iP 02 39 19.8
Ki eP 02 40 34
Sk iP 02 39 55.1
Um eP 02 39 55
Ud iP 02 39 24.4
iPP 02 40 07.6
De iP 02 38 52.2
Crete (h = 50 km).

" 8 Um iPKP1 04 32 20.2

" 8 Um iPn 05 27 48.2
iPgl 05 27 51.5
iSgl 05 28 21.5
Origin time = 05 27 13.

" 8 Up iPKP2 05 33 29.5
Sk ePKP1 05 33 17
Um iPKP1 05 33 13.1 D
Ud iPKP2 05 33 31.7
De iPKP2 05 33 45.9

" 8 Ki iP 08 54 36.4
Turkey-Iran.

" 8 Up iP 09 36 41.7
(cont.)

1974
Mar. 8 (cont.)
Up ipP 09 36 53.2
micr sec
Mx E 1.0 18
Mx N 0.8 19
Mx Z 2.0 19
Ki iP 09 36 08.6
ipP 09 36 20.3
micr sec
Mx E 0.9 18
Mx N 1.1 17
Mx Z 1.5 18
Sk iP 09 36 40.3
ipP 09 36 51.8
Um iP 09 36 22.7
ipP 09 36 33.8
Ud iP 09 36 49.8
ipP 09 37 01.4
De ipP 09 37 14.4
Japan.
h = 45 km (Up,Ki,Sk,Um,Ud).
M = 5.2 (Up,Ki).

" 8 Ki iSn 10 18 15.9
iSgl 10 18 40.1
Um i 10 19 12.2
iSgl 10 19 32.9
Northwest USSR.
Explosion.

" 8 Ki iSn 11 01 53.0
iSgl 11 02 07.9
Um iSn 11 03 10.8
iSgl 11 03 49.2
Northwest USSR-Norway.
Explosion.

" 8 Sk iP 12 30 58.6

" 8 Ud iP 12 35 50.9
De iP 12 35 17.4
Crete (h = N).

" 8 Um iPKP1 13 59 36.2

" 8 Up iP 19 26 51.0
Um iP 19 26 36.3

" 8 Um iP 21 33 24.8
ipP 21 33 36.2
South of Japan.
h = 40 km (Um).

" 9 Um i(P) 02 44 30.4

" 9 Ud iP 03 57 39.8
il 03 57 47.6
De il 03 57 16.3
Crete (h = 55 km).

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
Mar. 9 Up eP 04 17 39
Ki eP 04 18 48
Sk iP 04 18 11.3
Um eP 04 18 11
Ud iP 04 17 39.9
i 04 18 01.7
De iP 04 17 08.4
Crete (h = 55 km).
Our western stations (Sk, Ud,De) show negative residuals, while our eastern stations (Ki,Um,Up) show zero-positive residuals, in relation to the NEIS solution (also for some preceding Crete earthquakes).

" 9 Ki ePKPl 05 29 29
Um iPKPl 05 29 31.3
i 05 29 40.7

" 9 Ud ePKPl 07 02 32

" 9 Ki iSn 13 12 40.1
Um i(Sn) 13 13 23.8
iSgl 13 14 03.4
Northwest USSR.
Explosion.

" 9 Ki iPKP 17 59 50.0
Um iPKP 17 59 56.6
New Hebrides Islands
(h = 290 km).

" 9 Um iSgl 19 08 42.7
Probably local explosion.

" 9 Um iSgl 19 31 47.4
Probably local explosion.

" 9 Up ePKP 20 33 15
Ki ePKP 20 33 03
Sk iPKP 20 33 10.8
Um iPKP 20 33 06.9
Ud iPKP 20 33 16.1
De iPKP 20 33 21.5
Solomon Islands (h = 50 km).

" 9 Up iPKP 20 36 53.7
iPP 20 38 10
micr sec
Mx E 5.8 20
Mx N 6.8 19
Mx Z 10 20
Ki iSP 20 47 07
micr sec
Mx E 12 20
Mx N 7.1 20
(cont.)

1974
Mar. 9 (cont.)
Ki micr sec
Mx Z 6.1 20
Sk ePKP 20 36 52
Um iPKP 20 36 45.2
Ud iPKP 20 36 55.9
De iPKP 20 37 00.7
Solomon Islands (h = N).
M = 6.5 (Up,Ki).
Surface waves (Mx) mixed with those of the preceding earthquake.

" 9 Um iP 21 00 09.6

" 9 Um iP 22 03 34.9

" 10 Ud iPKPl 00 16 28.4
De iPKPl 00 16 38.5
Fiji Islands (h = 590 km).

" 10 Up iP 00 23 47.7
Um iP 00 23 21.2
Ud iP 00 23 47.3 D
Aleutian Islands (h = 30 km).

" 10 Um iP 00 41 52.4

" 10 Ki iPKPl 06 44 14.9
Um iPKPl 06 44 24.0 D
New Zealand (h = N).

" 10 Um iPKP 08 06 08.2
Ud iPKP 08 06 18.2
Solomon Islands (h = 55 km).

" 10 Ki iP 10 08 49.1
Alaska (h = 120 km).

" 10 Up iP 12 42 31.2
Ki iP 12 43 47.0
Sk iP 12 43 14.2
Um iP 12 43 12.0
Ud iP 12 42 35.5
Greece.

" 10 Ud iP 16 16 23.4
Kurile Islands.

" 10 Ki iP 16 30 21.5
micr sec
Mx E 0.8 18
Mx N 0.5 17
Sk iP 16 30 09.1
Um iP 16 30 23.8
Ud iP 16 30 12.9
Ecuador (h = 45 km).

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974						
Mar.	10	Ud	eP		19 10 01	
		Greece.				
"	10	Up	il		21 55 34.6	
		Sk	il		21 56 11.9	
		Um	il		21 56 13.4	
		Ud	iP		21 55 35.3	
			il		21 55 40.6	
		Greece (h = 15 km).				
"	11	Ud	iP		01 31 33.7	
"	11	Um	iPKP		05 52 34.4	
		Ud	iPKP		05 52 25.6	
		Scotia Sea (h = N).				
"	11	Up	iP		11 48 03.0	
			ipP		11 48 43.4	
			i		11 50 53.8	
			iS		11 56 33	
			iScS		11 57 39	
			iP'P'		12 16 23.2	
					micr sec	
			P	Z'	0.8 1.5	
			pP	Z'	0.5 1.5	
			Mx	E	1.6 17	
			Mx	N	1.4 20	
			Mx	Z	2.7 18	
		Ki	iP		11 47 13.4 C	
			ipP		11 47 52.8	
					micr sec	
			P	Z'	0.3 1.4	
			pP	Z'	0.2 1.3	
			Mx	E	2.1 18	
			Mx	N	2.8 20	
			Mx	Z	2.6 21	
		Sk	iP		11 47 49.3	
		Um	iP		11 47 36.2 C	
			ipP		11 48 15.8	
			iS		11 55 43	
			iScS		11 57 06	
			iP'P'		12 16 35.7	
			i		12 16 47.2	
		Ud	iP		11 48 07.9 C	
			ipP		11 48 48.6	
		De	iP		11 48 27.2	
			i		11 51 37.2	
		Kurile Islands.				
		h = 160 km (Up,Ki,Um,Ud).				
		m = 6.2, M = 5.5 (Up,Ki).				
		M uncorrected for focal depth.				
"	11	Sk	eSgl		12 16 47	
		Um	iSgl		12 15 14.0	
		Western USSR.				
		Explosion.				
"	11	Up	iSgl		12 25 26.0	
		(cont.)				

1974						
Mar.	11	(cont.)				
		Ki	iSn		12 26 30.4	
			iSgl		12 27 19.4	
		Sk	iSgl		12 27 12.0	
		Um	iSgl		12 25 41.0	
			iRg		12 26 16.1	
		Ud	iSgl		12 26 25.9	
		De	iSgl		12 26 51.6	
		Western USSR.				
		Explosion.				
"	11	Um	iSgl		12 30 08.7	
		Western USSR.				
		Explosion.				
"	11	Up	eP		13 02 03	
		Ki	iP		13 02 12.2	
		Um	iP		13 02 01.5	
		Ud	iP		13 02 19.3	
		Hindu Kush.				
		Intermediate depth.				
"	11	Ud	iPKPl		14 45 58.4	
"	11	Um	iP		16 48 54.7	
		Ud	iP		16 48 56.5	
"	11	Ud	iP		16 54 10.5	
		Ryukyu Islands.				
"	11	Up	iP		20 29 00.9 C	
			i		20 29 04.7	
		Ki	iP		20 29 37.6 C	
		Sk	iP		20 29 35.9	
		Um	iP		20 29 14.6	
		Ud	iP		20 29 15.8 C	
		De	iP		20 28 59.3 C	
		Iran (h = 45 km).				
"	11	Ud	iP		20 53 24.6	
		Japan (h = 50 km).				
"	12	Up	eP		01 52 26	
		Ki	iP		01 53 05.0	
		Um	iP		01 52 40.1	
			i		01 52 47.9	
		Ud	iP		01 52 41.2	
		De	eP		01 52 24	
		Iran (h = 35 km).				
"	12	Ud	iP		06 35 22.9	
"	12	Up			micr sec	
			Mx	N	0.8 16	
		Ki	iP		07 00 14.8	
					micr sec	
			P	Z'	0.1 1.0	
		(cont.)				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Mar.	12	(cont.)				
		Ki			micr	sec
			Mx	E	1.1	13
			Mx	N	1.1	15
		Um	iP		06 59	51.3
		Ud	iP		06 59	48.8
		Turkey-Iran (h = 50 km).				
		M = 4.7 (Up,Ki).				
"	12	Ud	iPKP1		07 37	48.2
"	12	Up	eP		08 42	03
		Um	iP		08 41	34.5
		Ud	iP		08 42	06.4
		De	iP		08 42	23.9
		Kurile Islands (h = 55 km).				
"	12	Um	iP		10 25	56.9
		Alaska (h = 55 km).				
"	12	Up	iSn		11 48	43.4
			iSgl		11 48	54.7
		Ki	iSgl		11 51	25.1
		Sk	iSgl		11 50	45.0
		Um	iSgl		11 49	28.6
		Ud	iSn		11 49	31.2
			iSgl		11 49	57.5
		De	iSgl		11 50	24.4
		Esthonia.				
		Explosion.				
"	12	Up	iSgl		12 09	47.2
		Sk	iSgl		12 11	37.4
		Um	i		12 09	33.6
			iSgl		12 10	10.0
		Ud	iSgl		12 10	53.4
		Western USSR.				
		Explosion.				
"	12	Um	iSgl		13 03	07.3
		De	iSgl		13 03	49.6
		Esthonia.				
		Explosion.				
"	12	Up	iP		13 55	22.9
		Sk	iP		13 55	22.1
		Um	iP		13 55	04.4
		Ud	iP		13 55	31.7
		De	iP		13 55	44.1
		Japan (h = 80 km).				
"	12	Up	i		15 19	31.8
			i(Sgl)		15 20	12.6
		Ud	i		15 20	24.3
			i(Sgl)		15 20	43.9
		De	i		15 18	11.5
			i(Sgl)		15 19	04.5
"	12	Ud	iP		15 34	51.5
1974 Mar.	12	Up	i(P)		16 22	56.4
"	12	Sk	iP		18 10	09.9
"	12	Up	iP		18 19	50.1
			i		18 19	59.5
					micr	sec
			P	Z'	0.1	1.1
		Ki	iP		18 19	24.4
		Sk	iP		18 19	53.2
			i		18 20	02.7
		Um	iP		18 19	34.0
		Ud	iP		18 19	59.0
			i		18 20	08.8
		Ryukyu Islands (h = 70 km).				
		Interpreting the second phase at Up,Sk,Ud as pP gives h = 35 km.				
"	12	Up	iP		18 26	44.5
		Ki	iP		18 27	51.7 C
		Sk	iP		18 27	23.5
		Um	iP		18 27	16.9
		Ud	iP		18 26	52.5 C
		De	iP		18 26	19.2
		Dodecanese Islands (h = 40 km)				
"	12	Up	iP		23 29	56.4
		Ki	iP		23 29	05.4
		Um	iP		23 29	29.5
			i		23 29	42.2
		Ud	eP		23 30	01
		Kurile Islands.				
"	13	Up			micr	sec
			Mx	N	0.8	19
			Mx	Z	0.7	18
		Um	iP		00 28	52.8
		Ud	eP		00 29	10
		Talaud Islands (h = 10 km).				
"	13	Up	iP		03 03	10.0
		Ki	iP		03 02	50.8
		Sk	eP		03 03	13
		Ud	iP		03 03	18.0
		Leyte-Samar (h = 100 km).				
"	13	Up	iP		06 56	57.9
		Um	iP		06 56	53.6
		Ud	iP		06 57	12.8
		Nepal (h = 70 km).				
"	13	Up	ePKP		08 28	29
		Um	ePKP		08 28	25
		Ud	ePKP		08 28	31
		De	iPKP		08 28	37.1
			i		08 28	46.0
		Solomon Islands (h = 55 km).				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974				
Mar.	13	Um	iP	08 32 30.5
"	13	Up	iPKPl	08 49 58.0
		Sk	ePKP	08 49 57
		Um	iPKP	08 49 51.9
		Ud	iPKPl	08 49 59.8 C
		De	iPKPl	08 50 10.6 C
		Tonga-Kermadec Islands (h = 490 km).		
"	13	Ud	iSgl	11 22 56.0
		De	iSgl	11 23 15.5
"	13	Up	iSgl	11 27 50.7
		Sk	eSgl	11 29 41
		Um	iSgl	11 28 10.7
		Ud	iSgl	11 28 53.9
		De	iSgl	11 29 13.6
		Western USSR. Explosion.		
"	13	Um	iPKPl	11 31 40.7 D
"	13	Sk	iP	11 48 13.0
		Um	iP	11 48 28.1
		Ud	iP	11 48 20.4
		De	iP	11 48 27.1
		Guatemala (h = 90 km).		
"	13	Up	iSgl	12 14 36.0
		Ki	iSgl	12 16 41.3
		Sk	iSgl	12 16 17.0
		Um	iS*	12 14 44.5
			iSgl	12 14 52.0
		Ud	iSgl	12 15 34.3
		De	iSgl	12 15 59.9
		Western USSR. Explosion.		
"	13	Ud	iSgl	12 50 28.5
		De	iSgl	12 50 18.6
"	13	Ud	iSgl	13 35 33.0
		De	iSgl	13 34 42.1
"	13	Ud	i	15 15 39.2
			iSgl	15 16 01.3
		De	ePgl	15 13 16
			i	15 14 00.7
			iSgl	15 14 07.4
"	13	De	iPgl	15 46 25.2
			iSgl	15 47 08.7
"	13	Ki	iP	16 54 08.0
		Um	eP	16 54 13
		Ud	iP	16 54 34.8
		Halmahera (h = N).		

1974				
Mar.	13	Up	iSgl	17 14 35.0
		Sk	eSgl	17 14 58
		Ud	iPgl	17 13 13.1
			iSgl	17 13 35.6
			iRg	17 13 44.9
		De	iSgl	17 14 33.1
		Oslo Fjord, Norway, 59.5°N, 10.7°E. Origin time = 17 12 45. Checked with Kongsberg readings.		
"	13	Up	eP	17 26 11
			i	17 26 31.1
		Ki	iP	17 27 18.0
		Sk	iP	17 26 48.5
		Um	eP	17 26 44
		Ud	iP	17 26 15.9
			i	17 26 17.3
			i	17 26 43.3
		De	iP	17 25 44.5
		Crete (h = 50 km).		
"	13	Up	iP	18 22 20.4
		Ud	iP	18 22 27.7
		De	iP	18 21 52.4
		Greece.		
"	13	Up	iP	19 30 14.2
		Um	eP	19 30 54
		Ud	iP	19 30 22.6
		Greece.		
"	13	Ud	iP	23 45 29.5
"	13	Ud	iP	23 52 43.8
"	13	Um	i(Sgl)	23 59 46.0
"	14	Um	iP	00 43 38.1
"	14	De	iP	01 29 06.3
"	14	Um	i(Sgl)	02 15 11.5
"	14	Um	iP	08 40 11.2
		Ud	iP	08 40 38.6
		De	iP	08 40 56.1
		Aleutian Islands (h = N).		
"	14	De	iPKP	09 42 28.6
		New Hebrides Islands (h = 180 km).		
"	14	De	iPKP	10 31 48.5
		New Hebrides Islands (h = 1 km).		

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974					
Mar.	14	Ud	iP	11 04 04.3	
		Mindanao (h = 80 km).			
"	14	Um	i(P)	11 29 49.7	
"	14	Up	iSgl	12 17 21.8	
		Ki	iSgl	12 19 19.2	
		Sk	iSgl	12 19 09.5	
		Um	iSgl	12 17 36.0	
			iRg	12 18 04.8	
		Ud	iSgl	12 18 20.3	
		De	iSgl	12 18 43.7	
			iSg2	12 18 55.0	
		Western USSR.			
		Explosion.			
"	14	Up	iSgl	13 19 40.4	
		Um	iSgl	13 20 15.7	
		Ud	iSgl	13 20 44.5	
		De	iSgl	13 21 08.8	
		Esthonia.			
		Explosion.			
"	14	Ki	iSn	15 01 54.9	
			iSgl	15 02 12.5	
		Um	iSgl	15 03 38.6	
		Northwest USSR-Norway.			
		Explosion.			
		Checked with Tromsoe readings.			
"	14	De	i(P)	15 18 23.5	
"	14	Up	iPKP2	15 36 40.5	
		Um	iPKP1	15 36 23.8	
		Ud	iPKP1	15 36 35.4	
"	14	Ud	iPKP1	17 54 37.2	
		De	iPKP1	17 54 48.5	
"	14	Ud	iPKP1	19 55 00.5	
		De	iPKP1	19 55 11.4	
"	14	Up	iP	21 01 45.5	
		Sk	eP	21 02 28	
		Um	iP	21 02 27.7	
		Ud	iP	21 01 51.2	
			i	21 01 54.2	
		De	eP	21 01 14	
		Albania (h = N).			
"	14	Ud	iP	21 10 30.6	
		Japan (h = 270 km).			
"	14	Up	iPKP	21 18 01.3 D	
			iSKP1	21 21 23.6	
		(cont.)			

1974						
Mar.	14	(cont.)				
		Up	iSKP	21 21 35.8		
				micr	sec	
			PKP	Z' 0.1	1.4	
			Mx	E 2.1	22	
			Mx	N 2.8	22	
			Mx	Z 4.8	22	
		Ki	iPKP	21 17 47.5		
				micr	sec	
			PKP	Z' 0.1	1.0	
			Mx	E 2.0	21	
			Mx	N 1.8	20	
			Mx	Z 2.4	20	
		Sk	iPKP	21 17 58.1		
		Um	iPKP	21 17 53.8	D	
			iPP	21 19 41.5		
		Ud	iPKP	21 18 03.0	D	
			iSKP1	21 21 25.3		
		De	i(PKP)	21 17 55.9		
			iPKP	21 18 10.1	D	
			iSKP1	21 21 35.8		
			iSKP	21 21 41.1		
		New Hebrides Islands (h = 20 km).				
		M = 6.1 (Up,Ki).				
"	14	Ki	ePKP	21 54 24		
		Um	iPKP	21 54 31.0		
		New Hebrides Islands (h = N).				
"	14	Um	iP	22 22 06.6		
"	14	Ki	iPKP	23 12 17.6		
		Um	i(PKP)	23 12 21.4		
			iPKP	23 12 25.2		
		Ud	iPKP1	23 12 24.7		
		De	iPKP1	23 12 34.8		
		Fiji Islands (h = 540 km).				
"	15	Um	i(P)	02 29 26.0		
			i	02 30 09.0		
"	15	Sk	iSgl	09 05 38.1		
		Ud	iSgl	09 05 29.2		
		De	iSgl	09 06 30.5		
		West coast of Norway, 60.6°N, 5.2°E.				
		Origin time = 09 03 16.				
		By combination with Bergen and Kongsberg readings.				
"	15	Up	iSgl	09 23 51.7		
		Sk	iSgl	09 23 35.6		
		Um	iSgl	09 25 05.5		
		Ud	iSgl	09 22 51.5		
		(cont.)				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Mar.	15	(cont.)			
		De	iSgl	09 23 40.5	
		South Norway, 59.7°N, 7.6°E.			
		Origin time = 09 21 20.			
		By combination with Bergen and Kongsberg readings.			
"	15	Ki	i(P)	10 03 12.0	
		Um	i(P)	10 04 02.0	
"	15	Up	iP	10 11 49.0	
		Ud	iP	10 11 59.4	
		Luzon.			
"	15	Up	iSgl	10 44 34.9	
		Ki	iSgl	10 47 09.5	
		Sk	eSgl	10 46 27	
		Um	iSgl	10 45 10.4	
		Ud	iSgl	10 45 42.9	
		De	iSgl	10 46 09.8	
		Esthonia.			
		Explosion.			
"	15	Um	i(Sgl)	13 25 04.0	
"	15	Ud	iPKPl	16 46 06.6	
		De	iPKPl	16 46 18.5 D	
"	15	Up	iP	21 24 41.3	
		Ki	iP	21 24 05.9	
		Sk	eP	21 24 38	
		Um	iP	21 24 21.6	
			i	21 24 33.3	
		Ud	iP	21 24 48.2	
		South of Japan (h = 30 km).			
"	15	Ki	eP	21 56 58	
		Um	iP	21 57 00.6	
		Ud	iP	21 57 24.9	
		Panay (h = N).			
"	15	Up	iP	22 22 16.1	
			ipP	22 22 28.8	
				micr sec	
			P Z'	0.1 1.1	
		Ki	iP	22 21 25.9	
		Sk	iP	22 22 05.3	
		Um	iP	22 21 49.0	
			ipP	22 22 01.5	
		Ud	iP	22 22 20.3	
			ipP	22 22 32.9	
		De	iP	22 22 42.7	
		Kurile Islands.			
		h = 45 km (Up,Um,Ud).			
"	16	De	iPKPl	04 13 56.8	
1974 Mar.	16	Sk	eP	04 30 15	
		Um	iP	04 30 32.7	
"	16	Ki	iSn	07 35 02.8	
			iS*	07 35 15.0	
		Um	iSgl	07 36 50.5	
		Northwest USSR-Norway.			
		Explosion.			
"	16	Up	iP	09 31 55.6	
			i	09 32 04.9	
		Ki	eP	09 31 22	
		Um	iP	09 31 35.0	
		Ud	iP	09 32 02.6	
		Bonin Islands (h = 10 km).			
"	16	Ki	iSgl	10 13 20.8	
		Um	iSn	10 13 49.1	
			i	10 14 03.0	
			iSgl	10 14 16.6	
		Northwest USSR-Finland.			
		Explosion.			
"	16	Ki	iSgl	10 13 52.9	
		Um	i	10 14 32.9	
			iSgl	10 14 48.4	
		Northwest USSR-Finland.			
		Explosion.			
"	16	Ki	iSn	12 46 50.2	
			iSgl	12 47 12.6	
		Um	iSn	12 47 35.8	
			i	12 47 49.7	
			iSgl	12 48 06.5	
		Probably northwest USSR.			
		Explosion.			
"	16	Up	iP	13 21 51.8	
		Ki	iP	13 20 58.6	
		Um	iP	13 21 24.3	
		Ud	iP	13 21 53.0	
			ipP	13 22 35.2	
		Aleutian Islands.			
		h = 170 km (Ud).			
"	16	Ud	i(P)	14 30 17.1	
"	16	Ud	i(Sg2)	15 17 13.0	
			iRg	15 17 15.7	
"	16	Ud	iPKPl	15 20 21.4	
		De	iPKPl	15 20 33.2	
		Tonga-Kermadec Islands (h = 160 km).			
"	16	Up	iP	16 09 23.4	
		Ki	iP	16 08 44.8	
		(cont.)			

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Mar.	16	(cont.)				
		Um	iP		16 09 06.2	
		Ud	iP		16 09 16.6	
		California (h = N).				
"	16	Um	iP		19 53 42.7	
"	16	Up	iRg		22 03 20.3	
		Ud	iRg		22 03 01.7	
		Central Sweden.				
"	17	Up	iP		00 03 26.9	
		Ud	iP		00 03 36.7	
		Kurile Islands (h = 100 km).				
"	17	Up	iP		01 30 45.4	D
		Ki	iP		01 29 59.1	D
		Um	iP		01 30 20.2	D
		Ud	iP		01 30 51.5	D
		De	iP		01 31 09.0	
		Kurile Islands (h = 110 km).				
"	17	Up	iP		04 09 33.4	D
			ipP		04 09 50.0	
			iPP		04 12 47.4	
					micr sec	
			P	Z'	0.4 1.3	
		Ki	iP		04 09 33.7	D
			ipP		04 09 49.6	
					micr sec	
			P	Z'	0.4 1.4	
		Sk	iP		04 09 47.8	
			ipP		04 10 04.6	
		Um	iP		04 09 30.3	D
			ipP		04 09 46.9	
		Ud	iP		04 09 43.6	D
			i		04 09 56.3	
			ipP		04 09 59.6	
		De	iP		04 09 42.2	D
			ipP		04 09 58.7	
		Sumatra.				
		h = 60 km (Up,Ki,Sk,Um,Ud, De).				
		m = 6.3 (Up,Ki).				
"	17	Up	iS*		06 48 32.6	
			iSgl		06 48 40.6	
					micr sec	
			Sgl	Z'	0.1 1.0	
		Ki	iPn		06 44 23.8	
			iSn		06 45 23.0	
			iS*		06 45 43.2	
					micr sec	
			S*	Z'	0.1 0.6	
		Sk	iSgl		06 48 10.6	
		Um	iSn		06 46 00.5	
			i		06 46 15.8	
			iS*		06 46 32.2	
		(cont.)				

1974 Mar.	17	(cont.)				
		Um	iSgl		06 46 39.2	
		Ud	iSn		06 48 13.5	
			iSgl		06 49 12.8	
		De	iSgl		06 50 41.1	
		Northwest USSR.				
		Origin time = 06 43 12.				
		Explosion.				
"	17	Ud	iP		07 40 06.6	
		Sudan (h = N).				
"	17	Ud	iPKP		11 30 34.6	
		Loyalty Islands (h = 15 km).				
"	17	Ud	iP		13 05 18.6	
"	17	Um	iP		13 36 49.9	
		Gulf of Aden (h = N).				
"	17	Up	iP		16 24 05.8	
		Ki	iP		16 23 38.1	
		Sk	iP		16 24 06.4	
		Um	iP		16 23 48.1	
		Ud	iP		16 24 14.6	D
		Ryukyu Islands (h = 70 km).				
"	17	Up	iP		19 07 11.3	
		Ki	iP		19 06 47.4	
		Sk	eP		19 07 14	
		Um	iP		19 06 55.1	
		Ud	iP		19 07 20.2	
		Formosa (h = 80 km).				
"	17	Sk	ePKPl		19 31 31	
		Um	iPKPl		19 31 27.0	
		Ud	iPKPl		19 31 39.2	
"	17	Ud	iPKPl		19 53 19.3	
		De	iPKPl		19 53 30.4	
"	18	Um	iPKP		04 57 38.4	
		South Sandwich Islands (h = N).				
"	18	Ki	iPn		05 00 10.2	
			iPgl		05 00 15.9	
			iSn		05 00 35.5	
			iSgl		05 00 45.3	
		Sk	e(Sgl)		05 02 22	
		Um	iSgl		05 02 13.5	
		Coast of northern Norway, 68.3°N, 15.0°E.				
		Origin time = 04 59 38.				
"	18	Ki	iPgl		05 37 40.0	
			iSgl		05 38 14.7	
		Um	iSgl		05 40 17.4	
		(cont.)				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Mar.	18	(cont.) Off coast of north Norway, 70.1°N, 17.3°E. Origin time = 05 36 55. By combination with Tromsoe and Finnish station readings.				
"	18	Up	iP		10 48 42.9	
		Ki	iP		10 48 06.7	
		Um	iP		10 48 21.7	
		Ud	iP		10 48 50.5	
		De	iP		10 49 04.3	
		Japan (h = 300 km).				
"	18	Ud	iPKP1		10 58 54.9	
		De	iPKP1		10 59 05.8	
		Tonga-Kermadec Islands (h = 590 km).				
"	18	Up	iPKP		11 15 26.0	
			i		11 15 44.9	
					micr	sec
			i	Z'	0.1	1.5
			Mx	E	1.4	18
			Mx	N	1.7	19
			Mx	Z	1.8	17
		Ki	iPKP		11 15 10.4	
			i		11 15 29.1	
					micr	sec
			i	Z'	0.1	1.0
			Mx	E	2.4	21
			Mx	N	2.1	20
			Mx	Z	3.3	20
		Um	iPKP		11 15 20.4	
			i		11 15 37.2	
			iPP		11 17 38.7	
		Ud	iPKP		11 15 28.6	
			i		11 15 45.1	
		De	iPKP		11 15 32.5	
			ipPKP		11 15 41.1	
		Samoa Islands. h = 30 km (De). M = 5.9 (Up,Ki). PKP is followed after in average 17.7 sec by a larger onset - another event in the same area?				
"	18	Up	iSgl		12 36 30.8	
		Sk	eSgl		12 38 09	
		Um	iSgl		12 36 46.7	
			iRg		12 37 18.3	
		Ud	iSgl		12 37 32.0	
		De	iSgl		12 38 03.2	
		Western USSR. Explosion.				

1974 Mar.	18	Up	iP		23 50 47.3	C
			ipP		23 51 23.8	
					micr	sec
			P	Z'	0.1	0.9
			pP	Z'	0.4	1.7
		Ki	iP		23 50 19.5	
			ipP		23 50 55.5	
					micr	sec
			pP	Z'	0.3	1.9
		Sk	iP		23 50 48.3	C
		Um	iP		23 50 29.9	C
			ipP		23 51 05.9	
		Ud	iP		23 50 56.5	C
			ipP		23 51 32.8	
		East China Sea. h = 140 km (Up,Ki,Um,Ud) m = 5.7 (Up,Ki).				
"	19	Um	iPKP		08 03 08.1	
		Ud	iPKP		08 03 19.3	
		Fiji Islands (h = 570 km).				
"	19	Ud	iP		08 54 16.9	
"	19	Ki	iPn		09 28 47.7	
			iSn		09 29 43.0	
		Um	iSn		09 30 41.8	
			iSgl		09 31 20.6	
		Northwest USSR. Explosion.				
"	19	Um	iP		10 38 30.2	
"	19	Sk	eSgl		11 56 25	
		Ud	iSgl		11 56 12.6	
		Coast of southwest Norway, 60.6°N, 5.1°E. Origin time = 11 53 58. By combination with Bergen and Kongsberg readings.				
"	19	Up	iP		12 12 25.3	D
		Ki	iP		12 11 47.6	
		Sk	eP		12 12 20	
		Um	iP		12 12 03.8	D
		Ud	iP		12 12 32.7	
		Japan (h = 60 km).				
"	19	Um	iSgl		12 12 31.7	
		Western USSR. Explosion.				
"	19	Um	iSgl		12 22 13.6	
		Eastern Finland. Explosion?				
"	19	Up	iP		12 44 37.4	
		(cont.)				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
Mar. 19 (cont.)
Um iP 12 44 22.3
Ud iP 12 44 46.3
Formosa (h = 60 km).

" 19 Ud i(P) 14 00 19.9

" 19 Ki iP 17 14 03.7
Crete (h = N).

" 20 Up iP 04 02 33.1
Ki iP 04 01 59.4
Um iP 04 02 14.0
Ud iP 04 02 39.8
Japan (h = 110 km).

" 20 Ud iP 07 33 44.5

" 20 Up iP 07 58 25.1
Ud iP 07 58 37.3

" 20 Ki i(P) 08 23 25.5
Sk e(P) 08 23 43
Um i(P) 08 23 32.4

" 20 At 09 01 and 09 52 several explosions off coast of south Sweden are recorded at Up,Ud and De.

" 20 Ud iP 09 41 36.0

" 20 De i(Pgl) 10 23 28.3
i(Sgl) 10 23 43.3
Probably explosion off coast of south Sweden.

" 20 Up iSg2 11 18 19.9
Ki i(P*) 11 15 27.6
iPgl 11 15 29.5
i 11 15 52.8
iSgl 11 16 05.2
micr sec
Sgl Z' 0.1 0.5
Sk iPgl 11 15 31.0
iSgl 11 16 09.3
Um iPgl 11 15 45.2
iSn 11 16 19.1
iSgl 11 16 33.1
Ud iSn 11 17 27.1
iSgl 11 17 58.7
De eSg2 11 20 01
Nordland, Norway,
66.3°N, 14.5°E.
Origin time = 11 14 42.
Explosion.

1974
Mar. 20 Um iSgl 12 21 56.1
Western USSR.
Explosion.

" 20 Um iSgl 12 57 46.2
Lake Ladoga region.
Explosion.

" 20 Up iPn 15 19 11.3
iSn 15 19 59.8
i 15 20 08.0
iS* 15 20 12.1
iSgl 15 20 15.4
i 15 20 22.3
Sk iSg2 15 22 41.6
Um iSgl 15 22 03.3
iSg2 15 22 14.9
Ud iSgl 15 20 56.1
De iPn 15 19 07.8
iPgl 15 19 16.6
iSgl 15 20 08.3
i 15 20 16.0
Coast of Latvia,
56.2°N, 20.6°E.
Origin time = 15 18 09.
Explosion.

" 20 Up iSgl 15 31 52.1
Sk iSgl 15 33 22.3
Um iSgl 15 33 55.0
Ud iPgl 15 31 08.1
iSgl 15 31 30.6
iRg 15 31 42.7
De iSgl 15 31 41.4
Västergötland, Sweden,
58.4°N, 14.0°E.
Origin time = 15 30 41.
Explosion.

" 20 De iP 15 38 21.6
Hindu Kush.
Intermediate depth.

" 20 Um iP 15 46 27.4
Aleutian Islands (h = 90 km).

" 20 Um iP 17 04 16.0
Ud iP 17 04 45.2
Japan-Kurile Islands.

" 20 Um iP 17 07 36.1
Mariana Islands (h = N).

" 20 Um iPKPl 17 43 43.5

" 20 Um iP 20 47 41.9
Japan.

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
Mar. 20 Up iP 22 12 48.8
Um iP 22 12 27.6
Ud iP 22 12 55.2
Japan (h = 80 km).

" 20 Up iP 23 43 42.4
Ud iP 23 43 48.0
i 23 43 57.4
Greece (h = 110 km).

" 21 Ud iPKPl 00 30 02.6

" 21 Up iP 06 00 19.3 C
micr sec
P Z' 0.1 1.2
Mx N 0.7 15
Mx Z 1.1 16
Ki iP 05 59 40.1 C
micr sec
P Z' 0.1 1.0
Mx E 1.6 15
Mx N 1.3 17
Sk iP 06 00 13.2
Um iP 05 59 57.5 C
iS 06 08 59
Ud iP 06 00 26.5 C
De iP 06 00 41.8
Japan (h = 45 km).
m = 5.7, M = 5.3 (Up,Ki).

" 21 Ki iPgl 12 13 26.1
iSn 12 14 04.3
iS* 12 14 17.4
Sk iSgl 12 17 10.5
Um iSgl 12 15 53.8
Northwest USSR-Norway.
Explosion.

" 21 Up iSgl 12 16 22.3
Ki iSgl 12 18 26.6
Sk eSgl 12 18 12
Um iSgl 12 16 39.6
iRg 12 17 13.0
Ud iSgl 12 17 21.6
De iSgl 12 17 51.1
Western USSR.
Explosion.

" 21 Up iP 13 53 17.8
Ki iP 13 54 00.1
Sk eP 13 53 27
Um iP 13 53 41.3
Ud iP 13 53 11.0
Atlantic Ocean (h = N).

" 21 Ud iRg 14 03 40.9

" 21 Ki eSgl 14 41 24
(cont.)

1974
Mar. 21 (cont.)
Northwest USSR.
Explosion.

" 21 Ki iSgl 17 39 37.7
Sk iSgl 17 39 44.1
Um iSn 17 39 51.9
iSgl 17 40 05.6
Nordland, Norway,
66.5°N, 14.1°E.
Origin time = 17 38 10.
Explosion.

" 21 Up iS* 17 55 26.3
iSgl 17 55 31.1
Ki iSgl 17 56 10.5
Sk eSgl 17 56 38
Um iSgl 17 54 50.4
Ud iSgl 17 56 27.1
De eSgl 17 57 08
Lake Ladoga region.
Explosion.

" 22 Ki iP 01 34 05.1
Aleutian Islands (h = N).

" 22 Up iP 02 10 44.8
micr sec
P Z' 0.1 1.0
Ki iP 02 10 25.9
Um iP 02 10 31.9
ipP 02 10 43.0
Ud iP 02 10 54.3
ipP 02 11 06.3
De iP 02 11 00.3
ipP 02 11 11.7
Luzon.
h = 45 km (Um,Ud,De).

" 22 Up iPKPl 03 54 13.7
micr sec
PKPl Z' 0.1 1.0
Sk iPKPl 03 54 06.0
Um iPKPl 03 54 01.0
Ud iPKPl 03 54 15.1
De iPKPl 03 54 24.4
Kermadec Islands (h = 55 km).

" 22 Up iP 05 56 02.9
Ki iP 05 55 14.2 D
i 05 55 27.1
Um iP 05 55 41.8 D
Ud iP 05 56 06.2 D
De iP 05 56 29.7 D
Unimak Island (h = N).

" 22 Up iP 07 14 51.4
Ki eP 07 14 01
Sk iP 07 14 31.3
Um iP 07 14 28.8
Ud iP 07 14 53.3
i 07 15 04.4
Unimak Island (h = N).

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974					
Mar.	22	Ki	iSn	09 01 16.9	
			iSgl	09 01 35.2	
		Um	iSgl	09 03 05.0	
		Northwest USSR-Norway.			
		Explosion.			
"	22	Ki	iP	09 07 13.3	
		Um	eP	09 07 22	
		Ud	iP	09 07 46.7	
		Formosa (h = 60 km).			
"	22	Sk	eSgl	09 23 14	
"	22	De	iPgl	10 19 10.4	
			iSgl	10 19 26.7	
		Probably explosion off coast of south Sweden.			
"	22	Ki	iPn	10 27 45.3	
			iSn	10 28 44.4	
			iSgl	10 29 06.2	
		Sk	iSgl	10 31 32.0	
		Um	iSn	10 29 24.2	
			i	10 29 39.3	
			iSgl	10 29 57.8	
		Northwest USSR.			
		Explosion.			
"	22	De	e(Pgl)	10 29 31	
			iSgl	10 29 49.5	
		Explosion off coast of south Sweden?			
"	22	Ki	ePn	10 31 06	
			iSn	10 32 05.5	
			iSgl	10 32 28.3	
		Sk	eSgl	10 34 52	
		Um	iSn	10 32 44.7	
			i	10 32 58.6	
			iSgl	10 33 17.5	
		Northwest USSR.			
		Explosion.			
"	22	Um	iSgl	12 18 48.1	
		De	eSgl	12 20 00	
		Western USSR.			
		Explosion.			
"	22	Up	iSn	12 23 02.8	
			iSgl	12 23 14.9	
		Ki	i	12 25 23.6	
			iSgl	12 25 51.9	
		Sk	iSgl	12 25 09.8	
		Um	iSgl	12 23 49.6	
		Ud	iSgl	12 24 19.5	
		De	eSn	12 24 11	
			iSgl	12 24 45.1	
		Esthonia.			
		Explosion.			

1974					
Mar.	22	Up	iPKPl	14 32 11.9	
		Um	i(PKP)	14 32 00.4	
			iPKP	14 32 07.7	
		Ud	iPKPl	14 32 14.7	
		De	iPKPl	14 32 25.8	D
		Fiji Islands (h = 610 km).			
"	22	Up	iP	17 06 45.6	
		Ki	eP	17 08 02	
		Sk	iP	17 07 27.9	
		Um	iP	17 07 25.2	
			i	17 07 34.3	
		Ud	iP	17 06 52.1	
			i	17 06 57.9	
		De	iP	17 06 12.3	
		Greece-Albania (h = N).			
"	22	Up	iP	18 21 22.7	C
			i	18 21 28.0	
				micr sec	
			P Z'	0.1 0.7	
			Mx E	0.8 11	
			Mx N	1.7 12	
			Mx Z	1.3 10	
		Ki	iP	18 20 56.8	C
			i	18 21 01.8	
			iSS	18 29 15	
				micr sec	
			P Z'	0.1 0.8	
			Mx E	2.2 12	
			Mx N	3.6 16	
			Mx Z	1.8 11	
		Sk	iP	18 21 31.8	C
		Um	iP	18 21 03.4	C
			i	18 21 08.7	
			i	18 22 38.5	
			iPcP	18 23 13.2	
		Ud	iP	18 21 37.5	
			i	18 21 42.6	
		De	iP	18 21 47.9	C
		USSR-Mongolia (h = N).			
		m = 5.7, M = 5.4 (Up,Ki).			
		Double P, in average 5.2 sec apart. If the second phase is interpreted as pP, the focal depth is 25 km.			
"	22	Up	iP	19 14 22.2	
				micr sec	
			P Z'	0.1 1.1	
			Mx E	0.7 14	
			Mx N	1.5 17	
			Mx Z	1.7 16	
		Ki	iP	19 13 23.4	
			eS	19 15 36	
				micr sec	
			Mx E	1.1 15	
			Mx N	2.0 15	

(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Mar.	22	(cont.)					
		Ki			micr	sec	
			Mx	Z	0.6	10	
		Sk	iP		19 13	25.5	
			iS		19 15	38.2	
		Um	iP		19 13	56.1	
			i		19 14	03.6	
		Ud	iP		19 14	05.3	
		De	iP		19 14	45.1	
		Jan Mayen (h = 20 km).					
		(M = 4.3, Up,Ki).					
"	22	Um	iP		20 49	41.1	
"	22	Ud	iP		23 41	14.8	
		De	iP		23 41	14.6	
		Tien-Shan.					
"	23	Up	iPKP		01 46	53.7	
		Ki	iPKP		01 47	09.5	
		Sk	ePKP		01 47	01	
		Um	iPKP		01 47	01.9	
		Ud	iPKP		01 46	51.9	
		South Sandwich Islands					
		(h = 60 km).					
"	23	Um	i(P)		02 37	23.7	
"	23	Up	iP		07 02	15.5	
		Ki	iP		07 01	27.2	
		Sk	eP		07 02	02	
		Um	iP		07 01	49.5	
		Ud	iP		07 02	20.4	
		De	eP		07 02	40	
		Kurile Islands (h = N).					
"	23	Ud	iP		07 10	48.9	
		North Atlantic Ocean					
		(h = N).					
"	23	Up	iP		07 15	00.3	
		Ki	iP		07 15	02.1	
			ipP		07 15	08.3	
		Sk	iP		07 14	35.1	
			ipP		07 14	42.2	
		Um	iP		07 15	04.5	
		Ud	iP		07 14	40.1	
			ipP		07 14	46.2	
		North Atlantic Ocean.					
		h = 30 km (Ki,Sk,Ud).					
"	23	Up	iP		07 25	11.1	
					micr	sec	
			Mx	E	0.9	18	
			Mx	N	0.7	16	
			Mx	Z	1.8	19	
		Ki	iP		07 25	14.7	
		(cont.)					

1974 Mar.	23	(cont.)					
		Ki			micr	sec	
			P	Z'	0.1	1.5	
			Mx	E	0.7	15	
			Mx	N	0.4	14	
		Sk	iP		07 24	45.6	
			ipP		07 24	53.2	
		Um	iP		07 25	16.4	
		Ud	iP		07 24	53.2	
			ipP		07 25	01.4	
		De	iP		07 24	51.5	
		North Atlantic Ocean.					
		h = 40 km (Sk,Ud).					
		M = 4.6 (Up,Ki).					
"	23	Up	i		10 16	39.3	
			iLgl		10 30	12	
					micr	sec	
			Mx	E	0.9	12	
			Mx	N	1.2	14	
			Mx	Z	1.4	12	
		Ki	e		10 16	25	
					micr	sec	
			Mx	E	1.2	12	
			Mx	N	2.8	10	
		Sk	e		10 17	02	
		Ud	iP		10 16	12.7	
			i		10 17	03.6	
		De	iP		10 16	10.6	
		Sinkiang.					
"	23	Ud	iP		11 16	24.6	
"	23	Ud	iSKPl		12 02	18.6	
		New Hebrides Islands					
		(h = 40 km).					
"	23	Ud	iP		12 07	50.2	
			i		12 07	58.3	
"	23	Ki	iPgl		12 25	43.5	
			iSn		12 26	25.9	
			iSgl		12 26	47.0	
		Sk	eSgl		12 29	18	
		Um	iSn		12 27	13.2	
			iSgl		12 27	50.7	
		Northwest USSR.					
		Explosion.					
"	23	Ki	iPn		13 13	19.0	
			iPgl		13 13	27.9	
			iSn		13 14	07.7	
			iSgl		13 14	24.5	
		Um	iSgl		13 15	53.6	
		Northwest USSR-Norway.					
		Explosion.					

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
Mar. 23 Ki eSn 13 34 42
iSgl 13 35 02.5
Northwest USSR.
Explosion.

" 23 Up iSgl 13 45 52.1
Um iSgl 13 45 30.4
Ud e(Sgl) 13 47 01
Lake Ladoga region.
Explosion.

" 23 Up iPKPl 14 47 01.4
ipPKPl 14 49 09.0
iSKPl 14 49 52.6
iPKS 14 50 44
iSKKP 14 58 15.6

		micr	sec
PKPl	Z'	1.3	0.8
SKPl	Z'	5.4	2.0
Mx	E	5.6	22
Mx	N	8.3	22
Mx	Z	9.7	19

Ki i(PKP) 14 46 41.0
i(PKP) 14 46 43.6
iPKP 14 46 51.9
iSKPl 14 49 34.0
iSKS 14 53 14

		micr	sec
(PKP)	Z'	0.1	0.9
PKP	Z'	0.5	1.0
SKPl	Z'	4.1	1.8
Mx	E	8.4	19
Mx	N	16	21

Sk i(PKP) 14 46 54.1
iPKP 14 47 01.6
epPKP 14 49 06
iSKPl 14 49 49.3
Um i(PKP) 14 46 48.0
i(PKP) 14 46 51.0
iPKP 14 46 58.0
ipPKP 14 49 04.5
iSKPl 14 49 44.4
Ud iPKPl 14 47 03.7 C
ipPKPl 14 49 09.4
iSKPl 14 49 56.8
iPKKP 14 56 09.9
iSKKP 14 58 13.9
De iPKP 14 47 12.8
iPKPl 14 47 13.7
ipPKPl 14 49 15.4
iSKPl 14 50 05.2
Tonga-Kermadec Islands.
h = 550 km (Up,Sk,Um,Ud,De).
M = 6.7 (Up,Ki).
M uncorrected for focal depth.

1974
Mar. 23 Ud iPKPl 14 54 36.2
De iPKPl 14 54 46.7
Tonga-Kermadec Islands.
Origin time = 14 36 08.

" 23 Ud iPKPl 14 55 21.3
De iPKPl 14 55 31.8
Tonga-Kermadec Islands.
Origin time = 14 36 53.

" 23 Up iPKPl 15 00 05.5
i 15 00 18.3
Ud iPKPl 15 00 07.9
i 15 00 20.0
De ePKPl 15 00 18
Tonga-Kermadec Islands.
Origin time = 14 41 39.

" 23 Ud iPKPl 15 05 02.3

" 23 Ud iPKPl 15 12 06.4
De ePKPl 15 12 17
Tonga-Kermadec Islands.
Origin time = 14 53 38.

" 23 Up iPKPl 15 12 33.6

		micr	sec
PKPl	Z'	0.1	0.7

Ki i(PKP) 15 12 14.7
iPKP 15 12 23.3

		micr	sec
PKP	Z'	0.1	1.1

Sk i(PKP) 15 12 27.2
iPKP 15 12 36.8
iSKPl 15 15 19.3
Um i(PKP) 15 12 20.8
i(PKP) 15 12 22.1
iPKP 15 12 33.1
iSKPl 15 15 14.4
Ud iPKPl 15 12 35.5
De iPKPl 15 12 45.9
Tonga-Kermadec Islands
(h = 570 km).

" 23 Up iPKPl 15 19 26.8
Um iPKP 15 19 24.7
Ud iPKPl 15 19 29.0
De iPKPl 15 19 39.7
Tonga-Kermadec Islands.
Origin time = 15 01 01.

" 23 Um iP 15 22 38.5

" 23 Ud i(PKPl) 15 23 27.1

" 23 Ud i(P) 15 24 15.9

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974					
Mar.	23	Ud	i(P)	15 26 14.4	
"	23	Up	iPKPl	15 30 48.7	D
		Ki	ePKP	15 30 39	
		Um	i(PKP)	15 30 36.2	
			iPKP	15 30 46.5	
		Ud	iPKPl	15 30 50.7	D
		De	iPKPl	15 31 01.3	
		Tonga-Kermadec Islands.			
		Origin time = 15 12 22.			
"	23	Ud	iPKPl	15 37 41.6	
"	23	Ud	iPKPl	16 07 15.4	
		De	iPKPl	16 07 26.2	
		Tonga-Kermadec Islands.			
		Origin time = 15 48 47.			
"	23	Ud	iPKPl	16 23 22.1	
		De	ePKPl	16 23 32	
		Tonga-Kermadec Islands.			
		Origin time = 16 04 53.			
"	23	Up	iPKPl	18 32 02.1	
		Um	i(PKP)	18 31 56.2	
			iPKP	18 32 00.7	
		Ud	iPKPl	18 32 04.3	
		De	iPKPl	18 32 14.9	
		Tonga-Kermadec Islands			
		(h = 530 km).			
"	23	Up	iP	19 32 02.4	
		Um	iP	19 31 38.1	
		Ud	iP	19 32 09.1	
		Japan (h = 80 km).			
"	23	Up	iPKPl	20 30 02.9	D
		Um	iPKP	20 30 01.2	
		Ud	iPKPl	20 30 05.1	D
		De	iPKPl	20 30 15.9	D
		Tonga-Kermadec Islands			
		(h = 530 km).			
"	23	Up	iPKP	20 45 14.9	
				micr	sec
			Mx E	1.9	20
			Mx N	2.9	20
			Mx Z	4.3	20
		Ki	ePKP	20 45 01	
			i	20 45 07.8	
				micr	sec
			Mx E	3.3	21
			Mx N	2.5	20
		Sk	e(PKP)	20 45 09	
			iPKP	20 45 11.1	
		Um	e(PKP)	20 45 03	
			iPKP	20 45 08.1	
		(cont.)			

1974					
Mar.	23	(cont.)			
		Ud	iPKP	20 45 15.2	
		De	i(PKP)	20 45 19.3	
			iPKP	20 45 24.8	
		New Hebrides Islands			
		(h = N).			
		M = 6.2 (Up,Ki).			
"	23	Up	iPKPl	21 10 34.0	
		Ki	iPKP	21 10 23.7	
		Um	e(PKP)	21 10 23	
			iPKP	21 10 32.3	
			iSKPl	21 13 16.4	
		Ud	iPKPl	21 10 35.8	C
		De	iPKPl	21 10 46.8	C
		Tonga-Kermadec Islands			
		(h = 520 km).			
"	23	Um	iP	21 51 55.9	
		Ud	iP	21 51 24.4	
		Atlantic Ocean (h = N).			
"	23	Ud	iP	22 03 32.6	
"	23	Um	iP	22 22 36.8	
"	23	Up	iP	22 26 19.3	C
			i	22 26 23.9	
				micr	sec
			P Z'	0.1	0.6
		Ki	iP	22 26 02.4	
			i	22 26 06.4	
		Sk	iP	22 26 31.1	C
			i	22 26 36.2	
		Um	iP	22 26 05.1	C
			i	22 26 10.5	
		Ud	iP	22 26 32.8	C
			i	22 26 38.2	
		De	iP	22 26 39.0	
			i	22 26 44.4	
		Tsinghai, China (h = N).			
		Double P, in average 5.2			
		sec apart.			
"	24	Um	iP	00 18 50.9	
		Ud	iP	00 19 20.9	
		Japan (h = 90 km).			
"	24	Up	ePKP	00 30 55	
		Um	iPKP	00 30 55.8	
			iSKPl	00 33 30.8	
		De	iPKPl	00 31 07.6	
		South of Fiji Islands			
		(h = 600 km).			
"	24	Ud	iPKP	03 08 39.4	

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974						
Mar.	24	Up	iP		04 34 24.4	
			iPP		04 38 17.2	
			iSKS		04 44 50	
					micr	sec
			Mx	E	3.1	30
			Mx	N	1.6	18
			Mx	Z	5.6	30
		Ki	iP		04 33 58.5	
			iSKS		04 44 21	
			iS		04 44 43	
					micr	sec
			P	Z'	0.4	1.5
			Mx	E	2.0	19
			Mx	N	2.5	20
			Mx	Z	2.6	21
		Sk	iP		04 34 22.8	
		Um	iP		04 34 08.7	
			iSKS		04 44 34	
		Ud	iP		04 34 31.3	
			iPP		04 38 24.2	
			iSKS		04 45 02.1	
		De	eP		04 34 46	
			iSKS		04 45 14.4	
		Mariana Islands (h = 80 km).				
		M = 5.8 (Up,Ki).				
"	24	Up	ePKP		04 51 12	
		Um	ePKP		04 51 20	
		Ud	iPKP		04 51 08.2	
"	24	Up	iP		05 48 10.6	
			i		05 48 18.6	
"	24	Um	iP		06 45 07.8	
		Ud	iP		06 45 33.4	
"	24	Up	iPn		07 42 16.4	
			i		07 42 21.3	
		Um	iP		07 42 23.5	
		Ud	iP		07 42 28.7	
		Caucasus (h = N).				
"	24	Ki	iSn		08 19 39.8	
			iS*		08 19 57.7	
		Um	iSn		08 20 28.7	
			i		08 20 42.6	
			iSgl		08 21 03.8	
		Northwest USSR.				
		Explosion.				
"	24	Ki	iSn		08 30 29.9	
		Um	iSgl		08 31 54.5	
		Northwest USSR.				
		Explosion.				
"	24	Ki	iSn		08 30 43.1	
		(cont.)				

1974						
Mar.	24	(cont.)				
		Northwest USSR.				
		Explosion.				
"	24	Um	iPKP		10 27 19.3	
		Chile-Argentina (h = 100 km).				
"	24	Ud	iP		10 37 52.5	
"	24	Up	iP		14 25 36.8	
			i		14 25 38.4	
			iS		14 33 17	
					micr	sec
			P	Z'	0.2	0.9
			Mx	E	6.9	16
			Mx	N	6.4	18
			Mx	Z	16	16
		Ki	iP		14 25 35.7	
			i		14 25 37.5	
					micr	sec
			P	Z'	0.4	1.0
			Mx	E	10	14
			Mx	N	3.8	11
			Mx	Z	12	15
		Sk	iP		14 25 56.0	
			i		14 25 57.5	
		Um	iP		14 25 30.8	
			i		14 25 32.3	
			iS		14 33 06	
		Ud	iP		14 25 50.7	
			i		14 25 52.7	
		De	iP		14 25 51.0	
		Nepal (h = N).				
		m = 6.3, M = 6.1 (Up,Ki).				
		Double P, small and large,				
		in average 1.7 sec apart.				
"	24	Up	iP		16 27 14.6	
		Ki	iP		16 27 13.1	
		Sk	iP		16 27 33.6	
		Um	iP		16 27 08.6	
		Ud	iP		16 27 28.6	
		De	eP		16 27 29	
		Nepal (h = N).				
"	24	Ud	iP		19 13 44.2	
"	25	Um	iPKP		04 27 30.8	
		Ud	iPKP		04 27 38.0	
		Tonga-Fiji Islands (h = N).				
"	25	Up			micr	sec
			Mx	E	0.8	15
			Mx	N	1.8	15
			Mx	Z	1.7	16
		(cont.)				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Mar. 25 (cont.)

Ki			micr	sec
	Mx	E	2.7	15
	Mx	N	2.9	17
	Mx	Z	3.0	15
Um	iP		07 49	52.3

Mexico (h = 90 km).
M = 5.8 (Up,Ki).

" 25

Ki	iP	08 34	39.7

Hindu Kush.
Intermediate depth.

" 25

Ud	ePKP	12 03	35

Solomon Islands (h = 60 km).

" 25

Up	iSgl	12 56	51.5
Sk	iSgl	12 58	41.9
Um	iSgl	12 57	15.4
Ud	eSgl	12 57	56

Western USSR.
Explosion.

" 25

Sk	eP	13 52	37
Um	iP	13 52	09.6

Pakistan.

" 25

Ud	iPKPl	14 01	21.2

" 25

Up	iP	16 45	09.5
Um	iP	16 45	05.3
Ud	iP	16 45	18.9

Java (h = 90 km).

" 25

Um	iP	17 03	45.5
	il	17 03	53.3
Ud	il	17 04	21.0

Japan (h = 60 km).

" 25

De	iPKPl	17 41	04.7

" 25

Up	iSgl	17 44	15.5
Sk	eSgl	17 43	30
Ud	iSgl	17 43	17.2

West coast of Norway,
60.6°N, 5.2°E.
Origin time = 17 41 05.
By combination with
Kongsberg readings.

" 25

Up	iP	21 25	42.5
Ki	iP	21 25	40.3
Sk	iP	21 25	59.1
Um	iP	21 25	37.2
	i	21 25	54.7
Ud	iP	21 25	55.1
De	eP	21 25	56

Burma (h = N).

1974 Mar. 26

Ud	iPKPl	00 27	11.3 C
De	iPKPl	00 27	22.3 C

" 26

Ud	iP	04 54	12.3
De	iP	04 54	09.5

Pakistan (h = 45 km).

" 26

Ud	eP	07 01	21

Greece (h = 110 km).

" 26

Ki	iP	08 21	38.2
Um	iP	08 22	04.9
Ud	iP	08 22	30.6

Aleutian Islands (h = 40 km).

" 26

Um	iP	08 38	18.5
Ud	iP	08 38	49.6

Kurile Islands.

" 26

De	iPgl	08 51	19.8
	iSgl	08 51	35.2

Probably explosion off coast
of south Sweden.

" 26

Up	iSgl	10 40	03.2
Sk	iSgl	10 38	45.6
Um	iSgl	10 40	36.1
Ud	iS*	10 38	54.1
	iSgl	10 39	00.7
De	eSgl	10 40	05

Off west coast of Norway,
near 61°N, 4°E.
Origin time = 10 36 25.
By combination with Bergen
readings.

" 26

Up	iSg2	12 17	44.0
Sk	eSgl	12 19	27
Um	iSgl	12 17	53.2
Ud	iSgl	12 18	36.8

Western USSR.
Explosion.

" 26

Up	iPgl	12 19	55.7
	iSn	12 20	18.6
	iSgl	12 20	22.3
Sk	iSn	12 20	27.9
	iSgl	12 20	31.7
Um	iSgl	12 21	01.7
Ud	iPgl	12 19	41.7
	iSn	12 20	00.9
	iSgl	12 20	01.9

Dalarna, Sweden,
61.4°N, 14.7°E.
Origin time = 12 19 16.

" 26

Up	iSgl	12 30	47.8

(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Mar.	26	(cont.)			
		Sk	eSgl	12 32 44	
		Um	iSgl	12 31 36.6	
		De	eSgl	12 32 16	
		Esthonia.			
		Explosion.			
"	26	Up	iSgl	12 47 51.0	
		Sk	eSgl	12 50 10	
		Um	iSgl	12 49 56.4	
		Ud	iSgl	12 48 39.5	
		De	iSgl	12 48 27.1	
		Near Gotland, Sweden,			
		57.9°N, 19.1°E.			
		Origin time = 12 46 46.			
		Explosion?			
"	26	Up	iP	14 17 49.6	
		Ud	iP	14 17 58.9	
"	26	Ud	iP	21 49 27.8	
"	26	Um	i(Sgl)	23 56 40.7	
"	27	De	ePKPl	01 07 14	
"	27	Up	iPKPl	03 26 57.5	D
			ipPKPl	03 27 08.2	
				micr sec	
			PKPl Z'	0.2 1.0	
		Ki	iPKP	03 26 44.5	
		Sk	iPKPl	03 26 48.8	
		Um	iPKPl	03 26 44.5	
			iPKP	03 26 52.0	
		Ud	iPKPl	03 26 59.1	D
			ipPKPl	03 27 09.3	
		De	iPKP	03 27 03.7	
			iPKPl	03 27 08.8	D
			ipPKPl	03 27 19.4	
		Kermadec Islands.			
		h = 35 km (Up,Ud,De).			
"	27	Um	i(P)	03 32 21.9	
"	27	De	iPKPl	03 45 34.2	
"	27	Um	i(P)	03 47 04.7	
"	27	Up	eP	08 20 00	
		Um	iP	08 19 59.7	
		Ud	iP	08 20 10.7	
"	27	Up	eP	09 16 38	
		Um	iP	09 16 13.1	
		Ud	iP	09 16 43.9	
		Japan (h = 55 km).			

1974 Mar.	27	Ud	iP	10 12 13.7	
"	27	Up	iSgl	12 17 43.8	
		Um	iSgl	12 18 19.6	
		Esthonia.			
		Explosion.			
"	27	Ud	iP	12 21 01.1	
		De	eP	12 20 51	
"	27	Ud	iP	13 16 54.3	
"	27	Up	i	13 22 32.0	
			iSgl	13 22 48.9	
		Sk	iSgl	13 22 52.1	
		Ud	i	13 21 45.9	
			iSgl	13 21 52.7	
		De	eSn	13 21 44	
			iSgl	13 22 07.0	
		Near south coast of Norway,			
		58.4°N, 6.6°E.			
		Origin time = 13 19 47.			
		By combination with Bergen			
		and Kongsberg readings.			
"	27	Um	iPKPl	13 23 13.6	
		Ud	iPKPl	13 23 26.8	
"	27	Sk	i(Sg2)	14 47 12.1	
			iRg	14 47 14.5	
"	27	Ud	iP	14 48 33.1	
"	27	Um	iP	14 49 35.6	
			ipP	14 49 50.1	
		Ud	ipP	14 50 17.4	
		Japan.			
		h = 55 km (Um).			
"	27	Sk	eSgl	16 11 17	
		Um	iSgl	16 11 39.1	
"	27	Up	iP	16 12 18.6	
		Ki	eP	16 11 23	
		Ud	iP	16 12 19.8	
		Aleutian Islands (h = 45 km).			
"	27	Up	iP	16 39 52.9	D
			ipP	16 40 04.3	
			iPcP	16 40 12.6	
			iP'P'	17 07 54.6	
				micr sec	
			P Z'	0.8 1.1	
		Ki	iP	16 39 00.9	D
			ipP	16 39 11.8	
		(cont.)			

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
Mar. 27 (cont.)

			micr	sec	
Ki	P	Z'	0.6	0.8	
Sk	iP		16 39	33.0	D
	ipP		16 39	44.6	
Um	iP		16 39	26.5	D
	ipP		16 39	37.5	
	iP'P'		17 08	06.9	
Ud	iP		16 39	54.0	D
	iPcP		16 40	12.5	
De	iP		16 40	15.7	D
	iPcP		16 40	33.6	

Aleutian Islands.
h = 40 km (Up,Ki,Sk,Um).
m = 6.8 (Up,Ki).
The fact that the surface waves are very weak compared to the P waves could suggest greater depth, alternatively special source mechanism and/or special structure around the source.

" 27	Up	iSgl	17 40	33.4
	Ud	iSgl	17 40	36.4
	De	iPgl	17 38	36.9
		iSgl	17 38	52.0
		iTSgl	17 39	13.0

Baltic Sea, south of Sweden, 55.7°N, 15.0°E.
Origin time = 17 38 18.
Explosion.
Well developed T-phase.

" 27	Up	iSgl	17 40	42.9
	De	iPgl	17 38	47.5
		iSgl	17 39	01.9
		iTSgl	17 39	23.8

From the same area as the preceding event.
Origin time = 17 38 29.
Explosion.
Well developed T-phase.

" 27	Ud	iPKPl	17 58	26.1
	De	iPKPl	17 58	36.8

" 27	Up	iSgl	18 12	17.6
	Sk	eSgl	18 14	11
		iSg2	18 14	23.0
	Um	iSgl	18 14	27.3
	Ud	iPgl	18 11	25.3
		iSgl	18 12	22.7
	De	iPgl	18 10	19.8
		iSgl	18 10	36.5

(cont.)

1974
Mar. 27 (cont.)
Baltic Sea, south of Sweden, 55.5°N, 15.0°E.
Origin time = 18 09 59.
Explosion.

" 27	Up	iSgl	18 12	25.5
	Sk	eSgl	18 14	17
	Ud	iPgl	18 11	29.7
		iSgl	18 12	27.9
	De	iPgl	18 10	27.1
		iSgl	18 10	44.0

From the same area as the preceding event.
Origin time = 18 10 06.
Explosion.

" 27	Ud	iP	19 04	05.1
" 27	Ud	eP	19 50	18
" 27	Up	i(P)	21 00	33.3
" 28	Um	i(Sgl)	01 58	20.6
" 28	Up	ePKPl	02 18	28
	Um	i(PKP)	02 18	13.7
		iPKP	02 18	26.7
	Ud	iPKPl	02 18	28.7
	De	iPKPl	02 18	38.6

Tonga-Fiji Islands (h = 290 km).

" 28	Um	i(Sgl)	04 01	00.8
" 28	Up	iPKP	04 18	18.3
		i	04 18	27.3
	Ud	ePKP	04 18	16

Scotia Sea (h = N).

" 28	Ud	iP	04 26	28.3
" 28	Um	iSgl	04 57	26.7
		iRg	04 57	31.7
" 28	Ud	iPKPl	05 17	26.6
	De	iPKPl	05 17	33.7

Norfolk Island (h = N).

" 28	Up	iPKPl	09 54	54.2
	Ud	iPKPl	09 54	55.6
" 28	Ud	iPKPl	10 53	09.7
" 28	Up	iSgl	11 12	16.2
	Sk	eSgl	11 14	05

(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Mar.	28	(cont.)		
		Um	iSn	11 12 34.4
			iSgl	11 12 56.6
		Ud	eSgl	11 13 16
		De	eSn	11 13 17
			iSgl	11 13 53.3
		Esthonia.		
		Explosion.		
"	28	Ud	eP	11 19 30
"	28	Up	iSgl	12 16 09.3
			iSg2	12 16 17.4
		Sk	eSgl	12 17 58
		Um	iSgl	12 16 26.5
		Ud	iSgl	12 17 09.3
		De	iSgl	12 17 34.5
		Western USSR.		
		Explosion.		
"	28	Um	iSgl	12 23 33.2
		Western USSR.		
		Explosion.		
"	28	Ud	iSgl	14 29 38.2
		De	iSgl	14 29 35.3
		Skagerrak.		
		By combination with		
		Kongsberg readings.		
"	28	Up	iSgl	14 59 30.9
		Ki	eSgl	15 01 46
		Sk	iSgl	15 01 22.3
		Um	iSgl	14 59 56.8
		Ud	iSgl	15 00 34.3
		De	iSgl	15 01 04.0
		Esthonia.		
		Explosion.		
"	28	Up	eP	17 37 38
			i	17 37 46.6
		Queen Elizabeth Islands		
		(h = N).		
"	28	Up	iP	18 03 01.7
		Aleutian Islands (h = 200 km).		
"	28	Up	iP	21 37 38.0
			i	21 37 41.6
		Sk	eP	21 38 15
		Um	iP	21 38 16.2
			i	21 38 20.6
		Ud	iP	21 37 40.0
			i	21 37 44.0
		De	eP	21 37 06
		Sicily (h = N).		

1974 Mar.	29	Um	i(Sgl)	00 11 51.5
"	29	Um	i(Sgl)	00 23 50.5
"	29	Um	iP	00 31 26.5
		Japan (h = 40 km).		
"	29	Um	iPKPl	02 17 26.2
"	29	Up	eP	02 46 32
		Ud	eP	02 46 38
		Japan (h = N).		
"	29	Up	eP	03 58 07
		Ud	iP	03 58 08.8
"	29	Um	iP	06 24 57.2
		Ud	eP	06 25 23
		Bonin Islands.		
"	29	Um	i(P)	07 54 05.6
"	29	Ud	iRg	10 09 32.2
"	29	Ki	iSgl	11 34 41.6
		Sk	eSgl	11 37 14
		Um	iSgl	11 35 35.0
		Ud	iSgl	11 38 04.0
		Northwest USSR.		
		Explosion.		
"	29	Up	iPn	12 52 28.9
			iSn	12 53 13.0
			iSgl	12 53 25.9
		Ki	iS*	12 55 48.9
			iSgl	12 55 55.7
		Sk	iSgl	12 55 14.2
		Um	iSgl	12 54 00.8
		Ud	iSn	12 54 01.9
			iS*	12 54 24.3
			iSgl	12 54 28.2
		De	iSgl	12 54 51.0
		Esthonia.		
		Explosion.		
"	29	Up	ePKPl	13 15 49
		Sk	iPKPl	13 15 44.5
		Um	iPKPl	13 15 39.5
		Ud	iPKPl	13 15 50.6
"	29	Up	iSgl	13 26 35.1
		Sk	iSgl	13 27 59.2
		Um	iSgl	13 26 09.7
		Ud	iSgl	13 27 35.4
		De	iSgl	13 28 21.6
		Lake Ladoga region.		
		Explosion.		

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
Mar. 29 Up iSgl 13 29 14.7
iRg 13 29 23.7
Ud iRg 13 29 07.9
Central Sweden.

" 29 Up iPKPl 13 44 30.4
Ud iPKPl 13 44 33.3
Tonga-Kermadec Islands
(h = 540 km).

" 29 Sk eSgl 13 50 46
Um iSgl 13 48 51.6
Western USSR,
61.5°N, 34.2°E.
Origin time = 13 45 22.
Explosion?
Solution from Helsinki
regional bulletin.

" 29 Um iSgl 15 05 00.5

" 29 Sk iSgl 15 18 22.5
Ud iSgl 15 18 12.8
Southwest coast of Norway,
60.6°N, 5.4°E.
Origin time = 15 16 03.
By combination with Bergen
and Kongsberg readings.

" 29 De iPKPl 17 05 14.7
Tonga Islands (h = 70 km).

" 29 Up iP 20 53 34.3
Sk iP 20 54 04.6
Um iP 20 53 40.1
Ud iP 20 53 50.9
Pakistan (h = N).

" 29 Up iRg 21 07 33.9
Ud iRg 21 07 16.1
Central Sweden.

" 29 Up iP 22 00 56.5 D
ipP 22 01 11.6
iS 22 09 18
i(P'P') 22 29 47.4
iP'P' 22 30 00.4

		micr	sec
P	Z'	0.8	1.6
Mx	N	0.6	18
Mx	Z	1.1	20

Ki iP 22 00 01.6 D

		micr	sec
P	Z'	0.3	0.9
Mx	E	0.9	22
Mx	N	1.7	22
Mx	Z	1.2	20

(cont.)

1974
Mar. 29 (cont.)
Sk iP 22 00 29.3 D
iP'P' 22 30 10.5
Um iP 22 00 29.7 D
iS 22 08 26
iP'P' 22 30 07.8
Ud iP 22 00 53.4 D
iP'P' 22 29 55.5
De iP 22 01 17.4 D
ipP 22 01 33.6
Kodiak Island.
h = 55 km (Up,De).
m = 6.4, M = 5.1 (Up.Ki).

" 29 Up iRg 22 38 41.3
Ud iRg 22 38 22.9
Central Sweden.

" 30 Up iP 00 40 18.7
iPn 00 40 34.1
Ud iP 00 40 38.3
Caucasus.

" 30 Um iP 01 58 19.5

" 30 Up iPKPl 02 10 22.8
Um i(PKP) 02 10 16.6
iPKP 02 10 21.4
Ud iPKPl 02 10 25.0 C
De iPKPl 02 10 35.7
Tonga-Kermadec Islands
(h = 570 km).

" 30 Up iPKPl 02 16 10.4
Ki iPKP 02 15 55.2

" 30 Up eP 03 05 01
Greece.

" 30 Ud iP 04 14 05.8

" 30 Up iP 04 24 36.5
Um iP 04 24 34.6
Ud iP 04 24 52.7
Hindu Kush.
Intermediate depth.

" 30 Up iPKPl 05 42 05.7
Ud iPKPl 05 42 07.8
De iPKPl 05 42 18.8

" 30 Ud eP 06 53 14

" 30 Up iP 08 36 11.5
Ki iP 08 36 45.6
Um iP 08 36 31.7
Ud iP 08 36 01.1
Atlantic Ocean (h = N).

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974					
Mar.	30	Up	iP	08 45 13.6	
		Ud	iP	08 45 20.0	
		Kurile Islands (h = 55 km).			
"	30	Up	iSgl	09 56 25.8	
		Ki	iSgl	09 57 10.0	
		Sk	iSgl	09 57 41.7	
		Um	iSgl	09 55 51.1	
		Ud	iSn	09 56 38.1	
			iSgl	09 57 21.9	
		De	iSgl	09 58 04.0	
		Lake Ladoga region.			
		Explosion.			
"	30	Ud	i(Sgl)	10 58 09.1	
"	30	Ud	eP	11 31 16	
		Japan (h = 45 km).			
"	30	Up	iSgl	12 12 32.0	
		Um	iSgl	12 12 49.2	
		Ud	iSgl	12 13 31.0	
		Western USSR.			
		Explosion.			
"	30	Up	iSn	13 15 36.2	
			iSgl	13 16 43.7	
		Ki	i(Pn)	13 12 02.6	
			iPn	13 12 03.6	
			iPgl	13 12 13.2	
			iSn	13 12 52.9	
			iS*	13 13 05.0	
				micr sec	
			Pn Z'	0.1 1.1	
			Sn Z'	0.1 0.7	
			S* Z'	0.1 0.8	
		Sk	iSgl	13 15 54.4	
		Um	ePn	13 12 42	
			iSn	13 14 00.0	
			i	13 14 15.3	
			iSgl	13 14 35.5	
		Ud	iSn	13 15 53.0	
			iSgl	13 17 04.5	
		Northwest USSR-Norway.			
		Explosion?			
"	30	Ki	ePgl	13 43 05	
			iSn	13 43 46.3	
			iSgl	13 44 02.8	
		Um	i	13 44 38.9	
			iSgl	13 44 54.0	
		Northwest USSR-Finland.			
		Explosion.			
"	30	Up	iP	16 07 37.8	
		Um	iP	16 07 16.5	
		(cont.)			

1974					
Mar.	30	(cont.)			
		Ud	iP	16 07 46.2	
		Japan (h = N).			
"	30	Ki		micr sec	
			Mx E	0.5 14	
			Mx N	0.5 11	
		Sk	iP	18 45 09.6	
		Ud	iP	18 45 32.0	
		Iceland (h = N).			
"	30	Up	iP	19 14 28.9	
		Ki	iP	19 14 12.1	
		Sk	iP	19 13 43.5	
		Um	iP	19 14 22.7	
		Ud	iP	19 14 06.0	
		Iceland (h = N).			
"	30	Ki	iP	19 31 06.3	
		Ud	iP	19 31 15.1	
		Sumatra (h = N).			
"	30	Up	iP	19 37 08.4	
		Ki		micr sec	
			Mx E	0.8 17	
			Mx N	0.7 17	
			Mx Z	0.7 17	
		Um	eP	19 36 53	
			i	19 37 08.3	
		Ud	iP	19 37 15.3	
		Japan (h = 40 km).			
"	30	Up	eP	20 21 05	
		Ki		micr sec	
			Mx N	0.5 12	
		Sk	iP	20 20 19.0	
		Um	iP	20 20 58.3	
		Ud	iP	20 20 41.8	
		Iceland (h = N).			
"	30	Sk	iP	20 27 09.6	
		Ud	iP	20 27 28.2	
"	30	Ud	iPKP	21 43 39.0	
"	31	Ud	eP	02 00 06	
"	31	Between 02^h and 04^h, several local explosions are recorded at Um.			
"	31	Ud	iP	02 53 19.7	
"	31	Up	ePKP	05 08 07	
			iX	05 08 13.3	
		Ki	eX	05 08 14	
		(cont.)			

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
Mar. 31 (cont.)

Sk	eX	05 08 07	
Um	iPKP	05 08 08.5	
Ud	iPKP	05 08 02.7	

Pacific Ocean (h = N).

" 31

Up	iSg1	06 11 04.6	
Ki	iSn	06 07 54.4	
	iSg2	06 08 22.5	
Sk	iSg1	06 10 39.4	
Um	iSn	06 08 33.9	
	i	06 08 48.2	
	iSg1	06 09 07.0	
Ud	iSg1	06 11 38.8	

Northwest USSR.
Explosion.

" 31

Up	eP		07 01 59	
			micr	sec
	Mx	E	0.8	16
	Mx	N	0.8	17
	Mx	Z	1.6	17
Ki	iP		07 01 35.2	
			micr	sec
	Mx	E	2.7	19
	Mx	N	1.5	18
	Mx	Z	2.1	19
Um	iP		07 01 46.6	
	iSP		07 15 12	
Ud	iP		07 02 06.6	
	i		07 02 12.2	

New Guinea (h = N).
M = 5.7 (Up,Ki).

" 31

Up	iSn	09 07 26.9
	iSg1	09 08 22.4
Ki	iSn	09 05 05.9
	i	09 05 21.9
	iSg1	09 05 30.2
	iSg2	09 05 35.5
Sk	eSn	09 07 00
	iSg1	09 07 56.6
Um	iSn	09 05 46.9
	i	09 06 01.6
	iS*	09 06 14.7
Ud	iSn	09 07 43.9
	i	09 08 13.5
	i	09 08 46.4
	iSg1	09 08 55.2
De	iSg1	09 10 19.9

Northwest USSR.
Explosion.

" 31 Ud ePKP1 10 22 45

" 31 Ud iSKP1 14 58 42.9
New Hebrides Islands
(h = 25 km).

1974
Mar. 31

Um	iP	15 21 22.4	
	ipP	15 21 35.0	
Ud	iP	15 21 51.9	
	ipP	15 22 04.0	

Japan.
h = 45 km (Um,Ud).

" 31 Ud iP 16 06 32.4
Uzbekh SSR.

" 31 Ud eP 19 50 51

" 31 Ud iPKP1 21 05 09.2

" 31

Up	iP	21 22 14.1	
Um	iP	21 22 37.8	
Ud	iP	21 22 03.2	
	i	21 22 09.8	

North Atlantic Ocean
(h = N).

" 31

Up	iP	21 26 29.4
Ki	iP	21 26 22.8
Sk	iP	21 26 15.1
Um	iP	21 26 28.6
Ud	iP	21 26 20.1
De	iP	21 26 25.0

Nicaragua (h = 50 km).

Markus Båth
Klaus Meyer
Rutger Wahlström

October 18, 1975

SEISMOLOGISKA INSTITUTIONEN
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SEISMOLOGICAL INSTITUTE
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SWEDEN

S E I S M O L O G I C A L B U L L E T I N

U P P S A L A, K I R U N A, S K A L S T U G A N, U M E Å,

U D D E H O L M and D E L A R Y

Uppsala	(Up):	59°51.5'N,	17°37.6'E;	h = 14 m
Kiruna	(Ki):	67°50.4'N,	20°25.0'E;	h = 390 m
Skalstugan	(Sk):	63°34.8'N,	12°16.8'E;	h = 580 m
Umeå	(Um):	63°48.9'N,	20°14.2'E;	h = 16 m
Uddeholm	(Ud):	60°05.4'N,	13°36.4'E;	h = 240 m
Delary	(De):	56°28.2'N,	13°52.2'E;	h = 150 m

A P R I L 1 - 30, 1974

1974						
Apr.	1	Up	iP		00 27 53.9	
			ipP		00 28 06.4	
			i		00 28 21.3	
		Ki	iP		00 29 04.4	
					micr	sec
			P	Z'	0.1	1.0
		Sk	iP		00 28 31.8	
			ipP		00 28 45.7	
		Um	iP		00 28 28.3	
		Ud	iP		00 28 00.1	
			i		00 28 10.3	
		De	iP		00 27 25.8	
		Crete.				
		h = 70 km (Up,Sk).				
"	1	Ki	iPgl		08 51 58.5	
			iSn		08 52 37.2	
			iS*		08 52 50.5	
		Um	iSgl		08 54 25.8	
		Northwest USSR-Norway.				
		Explosion.				
"	1	Up	iSgl		11 18 07.2	
		Um	iSgl		11 18 45.5	
		Ud	iSg2		11 19 18.9	
		De	iSg2		11 19 44.2	
		Esthonia.				
		Explosion.				
"	1	Um	iP		11 47 24.5	
		Ud	iP		11 47 31.8	
"	1	Um	iSgl		12 25 00.0	
		Western USSR.				
		Explosion.				
"	1	Up	iP		13 40 11.7	
		Um	iP		13 39 46.9	
		Ud	iP		13 40 17.7	
		Japan (h = 70 km).				

1974						
Apr.	1	Ud	iP		15 36 11.1	
"	1	Up	iP		15 45 46.0	
		Ud	iP		15 45 51.4	
		Japan (h = 80 km).				
"	1	Up	iPKP		20 43 08.0	
			i		20 43 16.4	
		Ki	iPKP		20 43 23.9	
		Sk	iPKP		20 43 12.1	
		Um	iPKP		20 43 15.3	
		Ud	iPKP		20 43 05.9	
		South Sandwich Islands				
		(h = N).				
"	1	Up	iP		22 02 50.5	
			iPP		22 05 48.2	
					micr	sec
			P	Z'	0.1	1.1
			Mx	E	1.0	18
			Mx	N	1.1	16
			Mx	Z	1.1	16
		Ki	iP		22 02 17.2	
					micr	sec
			Mx	E	1.5	16
			Mx	N	1.5	15
			Mx	Z	1.4	15
		Sk	iP		22 02 47.7	
		Um	iP		22 03 31.2	
		Ud	iP		22 02 58.2	
		De	iP		22 03 13.4	
		South of Japan (h = 15 km).				
		M = 5.5 (Up,Ki).				
"	1	Ki	iP		23 29 48.6	
			i		23 29 52.7	
			iS		23 31 06.3	
			i		23 31 21.9	
		Sk	eP		23 30 10	
		(cont.)				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974					
Apr.	1	(cont.)			
		Sk	eS	23 31 49	
		Um	iS	23 32 24.2	
			i	23 32 45.5	
		Norwegian Sea, near 72°N, 5°E.			
		Origin time = 23 28 03.			
		Checked with Tromsoe and Finnish station readings.			
"	2	Ki	i(P)	00 05 51.2	
			iS	00 07 06.5	
			i	00 07 18.4	
		Sk	iP	00 06 08.2	
		Um	iP	00 06 26.9	
			iS	00 08 20.0	
			i	00 08 44.9	
		Norwegian Sea, near 72°N, 5°E.			
		Origin time = 00 04 01.			
		Checked with Tromsoe and Finnish station readings.			
"	2	Up	iP	03 35 30.5	
			i	03 36 06.3	
		Ki	iP	03 34 48.2	C
		Sk	iP	03 35 24.1	
		Um	iP	03 35 07.1	C
		Ud	iP	03 35 38.2	
		De	iP	03 35 54.1	
		Japan (h = 40 km).			
"	2	Up	iP	04 07 23.7	
			ipP	04 07 35.3	
		Ki	iP	04 06 56.8	
			ipP	04 07 10.5	
		Sk	epP	04 07 38	
		Um	iP	04 07 09.9	
			ipP	04 07 21.3	
		Ud	eP	04 07 29	
			ipP	04 07 42.4	
		Luzon.			
		h = 45 km (Up,Ki,Um,Ud).			
		The phase interpreted as pP has larger amplitudes than P.			
"	2	Up	iPKP	04 21 15.9	
		Ki	iPKP	04 21 06.3	
		Sk	iPKP	04 21 14.8	
		Um	iPKP	04 21 09.5	
		Ud	iPKP	04 21 19.3	
		De	iPKP	04 21 24.3	
		Solomon Islands (h = 45 km).			
"	2	Up	iPKPl	06 21 49.2	
		(cont.)			

1974					
Apr.	2	(cont.)			
		Ud	iPKPl	06 21 52.0	
		De	iPKPl	06 22 02.7	C
		Tonga-Kermadec Islands (h = 500 km).			
"	2	Up	iP	07 20 36.9	
		Ki	iP	07 19 54.0	
		Sk	eP	07 20 29	
		Um	iP	07 20 13.1	
		Ud	iP	07 20 44.0	
		Japan (h = 70 km).			
"	2	Ki	iP	07 22 27.6	
			ipP	07 22 40.6	
		Sk	epP	07 23 05	
		Um	iP	07 22 38.2	
			ipP	07 22 49.9	
		Ud	ipP	07 23 13.5	
		Mariana Islands.			
		h = 45 km (Ki,Um).			
"	2	Up	iP	08 10 05.3	
		Ki	iP	08 09 14.5	
		Um	iP	08 09 38.6	
		Ud	iP	08 10 10.8	
		Kurile Islands (h = N).			
"	2	Ud	i(Sgl)	08 48 34.1	
"	2	Ki	iSn	11 00 25.6	
		Northwest USSR-Norway.			
		Explosion.			
"	2	Ud	iPgl	13 20 55.4	
			iSgl	13 21 15.0	
		Origin time = 13 20 31.			
"	2	Um	iPKP	19 55 04.1	
		Ud	iPKP	19 54 55.0	
		Argentina (h = 170 km).			
"	2	Up	iP	21 24 16.8	
		Ki	iP	21 24 45.4	
			i	21 24 51.5	
"	3	Up	iPKPl	00 39 03.7	
		Ud	iPKPl	00 39 06.0	
"	3	Sk	eP	01 30 13	
		Um	iP	01 30 01.8	
		Ud	iP	01 30 28.7	
"	3	Um	iP	02 03 13.0	
		Ud	iP	02 03 42.7	
		Japan (h = 35 km).			

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Apr.	3	Um	i(P)	03	18	24.9
"	3	Up	iP	04	38	00.5
		Um	iP	04	37	36.6
		Ud	iP	04	38	07.7
		Japan (h = 120 km).				
"	3	Up	eSgl	08	04	14
		Ki	iPn	07	59	31.0
			iPgl	07	59	39.8
			iSn	08	00	17.1
			iS*	08	00	27.7
		Sk	eSgl	08	03	12
		Um	iSgl	08	02	04.5
		Ud	e	08	04	08
		Northwest USSR-Norway.				
		Explosion.				
"	3	Up	iSgl	10	50	58.3
		Ki	eSgl	10	53	34
		Sk	eSgl	10	52	48
		Um	iSgl	10	51	30.7
		Ud	iSn	10	51	33.5
			iSgl	10	51	59.9
		De	eSgl	10	52	31
		Esthonia.				
		Explosion.				
"	3	Up	iRg	11	51	06.6
		Um	iSgl	11	53	02.3
		Ud	iRg	11	51	21.7
		De	iSgl	11	51	54.2
		Västmanland, Sweden, near 59 1/2°N, 16° E.				
		Near-surface event.				
"	3	Um	iSgl	12	10	05.0
		De	iSgl	12	11	17.4
		Western USSR.				
		Explosion.				
"	3	Um	iSgl	12	20	38.4
		Western USSR.				
		Explosion.				
"	3	Ud	iSgl	12	51	07.6
			iRg	12	51	15.7
"	3	Ud	iRg	13	45	25.4
"	3	Ki	iSgl	14	12	43.5
		Um	iSgl	14	11	33.8
		Lake Ladoga region.				
		Explosion.				
"	3	Up	iSgl	15	52	17.7
		(cont.)				

1974 Apr.	3	(cont.)				
		Ki	i	15	52	42.8
			iSgl	15	53	05.9
		Sk	eSgl	15	53	32
		Um	iSgl	15	51	40.9
		Ud	iSgl	15	53	10.3
			iSg2	15	53	20.1
		De	iSgl	15	53	58.5
		Lake Ladoga region.				
		Explosion.				
"	3	Ud	iP	18	04	09.6
"	3	Up	i(P)	20	57	27.9
		Sk	i(P)	20	57	52.9
		Ud	i(P)	20	56	45.5
"	4	Up	eP	03	14	13
			ipP	03	14	23.9
		Um	iP	03	13	48.3
		Ud	iP	03	14	18.6
			ipP	03	14	29.0
		Kurile Islands.				
		h = 40 km (Up,Ud).				
"	4	Up	iP	03	17	50.9
"	4	Up	iP1	04	27	25.0
			iP2	04	27	31.9
			iPP	04	28	59.1
		Ki	iP1	04	27	36.7
			iP2	04	27	39.1
		Um	iP1	04	27	26.8
			iP2	04	27	31.1
		Ud	iP2	04	27	47.1
		De	iP1	04	27	44.6
			iP2	04	27	47.7
		Tadzhik SSR (h = 20 km).				
		Double onsets, P1 smaller and P2 larger.				
"	4	Up	iSgl	04	44	49.2
		Sk	iSgl	04	46	41.8
		Um	iSgl	04	45	31.3
		Ud	iSgl	04	45	52.2
		De	eSgl	04	46	26
		Esthonia.				
		Explosion.				
"	4	Up	iSgl	04	49	08.7
		Sk	eSgl	04	51	02
		Um	iSgl	04	49	52.0
		De	eSgl	04	50	49
		Esthonia.				
		Explosion.				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
Apr. 4 Up iSn 05 01 24.9
iSgl 05 01 32.3
Sk iSgl 05 03 24.9
Um iSgl 05 02 15.4
Ud i 05 02 25.7
iSgl 05 02 37.0
De iPn 05 01 23.0
iSn 05 02 35.1
iSgl 05 03 08.8
Esthonia.
Explosion.

" 4 Ud iP 05 11 31.2
Talaud Islands (h = N).

" 4 Sk ipPKP 07 24 00.2
Um iPKP 07 23 07.8
Ud ipPKP 07 24 02.7
New Hebrides Islands
(h = 200 km).

" 4 Up iP 07 48 17.0 C
iPcP 07 48 34.3
micr sec
P Z' 0.1 1.0
Ki iP 07 47 37.1 C
micr sec
P Z' 0.1 1.0
Sk iP 07 48 10.8 C
Um iP 07 47 54.6 C
iPcP 07 48 18.8
Ud iP 07 48 23.8 C
De iP 07 48 39.1 C
Japan (h = 100 km).
m = 5.6 (Up,Ki).

" 4 Ki iSn 07 58 46.1
iS* 07 58 58.9
Northwest USSR-Norway.
Explosion.

" 4 Up iP 10 29 48.7
eLgl 10 34 05
Um iLg2 10 35 51.8
Ud iP 10 30 02.0 C
iLg2 10 34 52.8
De iP 10 29 18.1
Rumania (h = N).

" 4 Up eSgl 11 29 25
Ud iPgl 11 28 32.6
iSgl 11 28 51.7
i 11 28 54.2
iRg 11 29 01.0
De iPgl 11 28 50.9
iSgl 11 29 23.9
(cont.)

1974
Apr. 4 (cont.)
Lake Vener region, Sweden.
Origin time = 11 28 08.

" 4 Up iSgl 12 18 29.2
Sk eSgl 12 20 12
Um iSgl 12 18 42.4
Ud iSgl 12 19 29.3
De iSgl 12 19 54.1
Western USSR.
Explosion.

" 4 Up iSgl 12 26 09.4
Ki iSn 12 26 29.2
Sk iSgl 12 27 26.8
Um iSgl 12 25 39.4
Ud iS* 12 26 56.6
iSgl 12 27 07.9
De iSgl 12 27 50.8
Lake Ladoga region.
Explosion.

" 4 Ud iP 12 52 15.0
De iP 12 51 58.5

" 4 Up iP 12 54 49.5
Ki iP 12 54 37.5
i 12 55 13.2
Um iP 12 54 40.4
Ud iP 12 54 58.2
De iP 12 55 03.1
Celebes Sea (h = 35 km).

" 4 Up iSgl 13 13 21.6
Sk iSgl 13 15 14.6
Um iSgl 13 14 03.7
Ud iSn 13 14 03.3
De iPn 13 13 12.6
eSn 13 14 26
Esthonia.
Explosion.

" 4 Up iSgl 13 13 43.1
Um iSgl 13 14 25.4
Esthonia.
Explosion.

" 4 Up iSgl 13 46 14.3
Sk iSgl 13 48 08.1
Um iPgl 13 45 55.2
iSgl 13 46 55.5
Ud iSn 13 46 56.8
iSgl 13 47 26.2
De iPn 13 46 05.5
eSgl 13 47 45
Esthonia.
Explosion.

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974					
Apr.	4	Up	iP	15 01 55.7	
			ipP	15 02 02.0	
		Ki	eP	15 02 35	
		Sk	eP	15 02 10	
		Um	iP	15 02 18.0	
			ipP	15 02 24.9	
		Ud	iP	15 01 50.8	
			ipP	15 01 58.3	
		De	iP	15 01 32.1	
			ipP	15 01 40.2	
		South of Ascension Island.			
		h = 25 km (Up,Um,Ud,De).			
"	4	Ud	iPKPl	18 38 02.7	
		De	iPKPl	18 38 13.9	
		Fiji Islands (h = 580 km).			
"	4	Um	iP	19 44 09.7	
			i	19 44 23.2	
		Japan (h = 80 km).			
"	4	Up	i(P)	20 53 24.8	
			i	20 53 28.1	
"	4	Up	iP	22 44 45.7	
		Ki	iP	22 44 19.7	
		Um	iP	22 44 29.8	
		Ud	iP	22 44 52.1	
		Mariana Islands (h = 200 km).			
"	4	De	iPKP	23 50 39.1	
		Solomon Islands (h = 55 km).			
"	5	Up	iP	01 43 45.8	
		Ud	iP	01 43 48.0	
		De	iP	01 43 57.9	
"	5	Up	iP	03 57 04.6	
				micr sec	
			P Z'	0.1 0.8	
		Ki	iP	03 57 00.3	
		Sk	iP	03 57 20.5	
		Um	iP	03 56 58.1 D	
			ipP	03 57 11.8	
		Ud	iP	03 57 17.7 D	
			ipP	03 57 31.3	
		De	iP	03 57 18.0	
		Burma.			
		h = 50 km (Um,Ud).			
"	5	Up	eP	05 05 07	
		Sk	eP	05 05 00	
		Ud	eP	05 04 58	
		De	eP	05 04 54	
		North Atlantic Ocean			
		(h = N).			

1974					
Apr.	5	Up	iP	08 03 24.9	
			i	08 03 34.4	
		Ki	iP	08 02 58.2	
		Um	iP	08 03 05.7	
		Ud	iP	08 03 34.3	
		Formosa (h = 60 km).			
"	5	Up	iP	09 04 36.8	
		Ki	iP	09 03 43.8	
		Um	iP	09 04 05.7	
		Ud	iP	09 04 38.1	
		De	iP	09 04 58.7	
		Aleutian Islands (h = 80 km).			
"	5	Um	iSgl	11 15 55.9	
		De	iSgl	11 16 34.1	
		Esthonia.			
		Explosion.			
"	5	Up	iSgl	11 18 21.1	
		Um	iSgl	11 18 52.3	
		Ud	iSgl	11 19 25.9	
		Esthonia.			
		Explosion.			
"	5	Um	iSgl	12 12 15.7	
		Ud	iSgl	12 12 58.9	
		De	iS*	12 13 18.3	
			iSgl	12 13 26.5	
		Western USSR.			
		Explosion.			
"	5	Ki	iSn	12 40 32.6	
		Northwest USSR-Norway.			
		Explosion.			
"	5	Ud	i(Sgl)	12 49 22.0	
		De	i(Sgl)	12 49 10.7	
"	5	Um	iSgl	13 27 02.7	
		Lake Ladoga region.			
		Explosion.			
"	5	Um	iSgl	13 40 13.0	
		Lake Ladoga region.			
		Explosion.			
"	5	Up	iSgl	17 28 33.2	
		Ki	iPgl	17 25 51.5	
			iSgl	17 26 30.4	
				micr sec	
			Sgl Z'	0.1 0.6	
		Sk	iPgl	17 25 55.0	
			iS*	17 26 34.9	
			iSgl	17 26 37.1	
		Um	iPn	17 26 00.8	
		(cont.)			

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974						
Apr.	5	(cont.)				
		Um	iPgl		17 26 08.1	
			iSn		17 26 43.1	
			iSgl		17 26 57.3	
		Ud	i		17 27 59.8	
			iSgl		17 28 23.8	
		De	iSgl		17 30 18.5	
		Nordland, Norway, 66.5°N, 14.1°E. Origin time = 17 25 01. Explosion. Unusually large for this explosion area.				
"	5	Up	iP		20 46 45.8	
			i		20 46 48.7	
"	5	Up	iP		21 54 48.8	
"	6	Up	iP		02 04 27.8	C
			iS		02 13 02	
			iP'P'		02 33 05.8	
			i		02 33 18.6	
					micr	sec
			P	Z'	0.3	0.6
			Mx	E	0.6	17
			Mx	N	1.8	24
			Mx	Z	2.7	27
		Ki	iP		02 03 33.5	C
			iP'P'		02 33 29.7	
			i		02 33 39.7	
					micr	sec
			P	Z'	1.0	0.8
			Mx	E	0.6	18
			Mx	N	1.3	19
		Sk	iP		02 04 02.6	C
		Um	iP		02 04 01.1	C
			iS		02 12 15	
			iP'P'		02 33 17.2	
			i		02 33 28.0	
		Ud	iP		02 04 25.6	C
		De	iP		02 04 48.9	C
			iP'P'		02 33 00.1	
		Alaska (h = 25 km). m = 6.8, M = 5.2 (Up,Ki). Double P onsets, a smaller phase with arrival times as given above, followed after 0.5 sec by a much larger onset. Remarkably large difference m - M.				
"	6	Up	i(PKP)		02 30 50.5	
			iPKP		02 30 55.0	
			i(SKPl)		02 34 14.5	
		(cont.)				

1974						
Apr.	6	(cont.)				
		Up	iSKPl		02 34 22.7	
		Ki	i(PKP)		02 30 36.6	
			iPKP		02 30 41.2	
					micr	sec
			PKP	Z'	0.1	1.0
		Sk	i(PKP)		02 30 48.3	
			iPKP		02 30 52.0	
		Um	i(PKP)		02 30 42.7	
			iPKP		02 30 47.2	
		Ud	i(PKP)		02 30 52.6	
			iPKP		02 30 57.3	
			i(SKPl)		02 34 17.8	
			iSKPl		02 34 24.8	
		De	i(PKP)		02 30 58.9	
			iPKP		02 31 03.5	
			i(SKPl)		02 34 27.6	
			iSKPl		02 34 34.8	
		New Hebrides Islands (h = 8 km). Clear precursors not only to PKP but also to SKPl.				
"	6	Up	iP		02 38 00.3	
		Ki	iP		02 37 06.3	
		Um	iP		02 37 34.0	
		Ud	iP		02 37 58.9	
		De	iP		02 38 21.6	
		Alaska (h = N).				
"	6	Ud	iP		02 47 03.6	
		North Atlantic Ocean (h = N).				
"	6	Up	i(PKP)		03 02 34.7	
			iPKP		03 02 38.2	
			i(SKPl)		03 05 56.6	
			iSKPl		03 06 04.8	
					micr	sec
			Mx	E	0.7	24
			Mx	N	1.1	21
			Mx	Z	1.4	20
		Ki	i(PKP)		03 02 20.5	
			iPKP		03 02 24.3	
					micr	sec
			PKP	Z'	0.1	1.3
			Mx	N	0.8	19
		Sk	i(PKP)		03 02 32.2	
			iPKP		03 02 35.5	
		Um	i(PKP)		03 02 26.7	
			iPKP		03 02 30.5	
		Ud	i(PKP)		03 02 36.3	
			iPKP		03 02 40.3	
			i(SKPl)		03 06 00.4	
			iSKPl		03 06 07.5	
		De	i(PKP)		03 02 42.9	
		(cont.)				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
Apr. 6 (cont.)

	De	iPKP	03 02 46.9	
		i(SKP1)	03 06 11.1	
		iSKP1	03 06 18.4	

New Hebrides Islands
(h = 15 km).
M = 5.6 (Up,Ki).
Cf note to Apr. 6, 02 30.

" 6	Up	iPKP	03 04 45.4	
		iSKP1	03 08 17.6	
	Um	i(PKP)	03 04 37.3	
		iPKP	03 04 42.2	
	Ud	e(PKP)	03 04 45	
		iPKP	03 04 50.4	
		iSKP1	03 08 23.2	
	De	e(PKP)	03 04 53	
		iPKP	03 04 58.3	
		i(SKP1)	03 08 22.1	
		iSKP1	03 08 29.5	

New Hebrides Islands.
Origin time = 02 45 35.

" 6	Up	iSKP1	03 27 01.6	
	Um	i(PKP)	03 23 21.1	
		iPKP	03 23 26.2	
	Ud	iPKP	03 23 31.1	
		iSKP1	03 27 05.6	
	De	i(PKP)	03 23 37.7	
		iPKP	03 23 40.4	

New Hebrides Islands
(h = 35 km).

" 6	Up	iPKP	04 02 55.5	
	Ki	iPKP	04 02 44.6	
	Sk	ePKP	04 02 52	
	Um	i(PKP)	04 02 46.2	
		iPKP	04 02 50.7	
	Ud	iPKP	04 02 56.4	
		iSKP1	04 06 29.0	
	De	i(PKP)	04 03 03.2	
		iPKP	04 03 07.1	
		i(SKP1)	04 06 31.2	
		iSKP1	04 06 38.7	

New Hebrides Islands
(h = 20 km).

" 6	Up	iP		04 06 40.7	C
		ipP		04 06 58.1	
		iS		04 15 07	
		iP'P'		04 35 18.1	
		i		04 35 21.7	
		i		04 35 33.9	
				micr	sec
		P	Z'	0.8	0.9
		Mx	E	0.8	20

(cont.)

1974
Apr. 6 (cont.)

Up				micr	sec
	Mx		N	2.6	24
	Mx		Z	3.0	24
Ki	iP			04 05 46.5	C
	ipP			04 06 03.7	
	iP'P'			04 35 40.9	
				micr	sec
	P		Z'	1.7	1.0
	Mx		E	0.9	18
	Mx		N	1.6	19
	Mx		Z	1.3	23
Sk	iP			04 06 15.2	C
	ipP			04 06 32.7	
	iPcP			04 06 56.2	
	iP'P'			04 35 32.8	
Um	iP			04 06 14.3	C
	ipP			04 06 31.3	
	iS			04 14 28	
	iP'P'			04 35 25.5	
	i			04 35 29.2	
	i			04 35 41.2	
Ud	iP			04 06 38.8	C
	ipP			04 06 56.1	
	iP'P'			04 35 19.9	
	i			04 35 36.5	
De	iP			04 07 02.1	C
	ipP			04 07 18.5	
	iP'P'			04 35 08.4	
	i			04 35 11.5	
	i			04 35 24.4	

Alaska.
h = 60 km (Up,Ki,Sk,Um,Ud, De).
m = 6.8, M = 5.4 (Up,Ki).
The P'P' group exhibits three clear onsets (Up,Um,De).
As for the Apr. 6, 02 04, Alaska earthquake, the m - M difference is remarkably large.

" 6	Up	iP		05 22 44.9	
	Ki	iP		05 21 49.9	
				micr	sec
		P	Z'	0.1	1.2
	Sk	iP		05 22 16.9	
	Um	iP		05 22 17.8	
	Ud	iP		05 22 41.2	
		i		05 23 01.2	
	De	iP		05 23 05.5	

Kodiak Island (h = 55 km).

" 6	Up	iSKP1	05 29 50.5
	Sk	iPKP	05 26 12.7
	Um	i(PKP)	05 26 09.1
		iPKP	05 26 13.7

(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
Apr. 6 (cont.)

Ud	iSKP1	05 29 53.7	
De	iPKP	05 26 24.9	
	iSKP1	05 30 07.0	

(New Hebrides Islands).

" 6

Up	iPKP1	06 19 26.5	
Um	iPKP	06 19 26.6	
	iSKP1	06 22 02.5	
Ud	iPKP1	06 19 26.9	
De	iPKP1	06 19 37.9	

Fiji Islands (h = 580 km).

" 6

Up	iPKP	08 01 11.2	
	iSKP1	08 04 43.5	
Ki	iPKP	08 00 58.2	
Sk	iPKP	08 01 10.5	
Um	iPKP	08 01 04.0	
Ud	iPKP	08 01 13.4	
	iSKP1	08 04 45.0	
De	iPKP	08 01 20.1	
	iSKP1	08 04 58.1	

New Hebrides Islands
(h = 20 km).

" 6

Up	i(PKP)	08 10 30.1		
	iPKP	08 10 34.2		
	iSKP1	08 14 01.2		
Ki	i(PKP)	08 10 16.3		
	iPKP	08 10 20.7		
		micr	sec	
	PKP	Z' 0.1	0.9	
Sk	i(PKP)	08 10 28.0		
	iPKP	08 10 31.7		
Um	i(PKP)	08 10 21.2		
	iPKP	08 10 25.7		
Ud	i(PKP)	08 10 32.8		
	iPKP	08 10 36.4		
	i(SKP1)	08 13 56.4		
	iSKP1	08 14 04.6		
De	i(PKP)	08 10 37.7		
	iPKP	08 10 41.3		
	i(SKP1)	08 14 07.3		
	iSKP1	08 14 14.7		

New Hebrides Islands
(h = 20 km).

" 6

Up	iSn	10 29 18.4	
	iSgl	10 29 25.9	
Um	iSgl	10 30 03.3	
Ud	iSgl	10 30 32.4	
De	iSgl	10 30 59.1	

Esthonia.
Explosion.

" 6

Um	i(Sgl)	11 05 42.1	

1974
Apr. 6

Um	i(P)	11 09 19.7	
Ud	i(P)	11 09 46.3	

" 6

Ki	iSn	12 07 13.6	
	iS*	12 07 31.1	
Sk	iSgl	12 10 15.4	
Um	iSn	12 07 58.7	
	i	12 08 15.4	
	iSgl	12 08 34.8	

Northwest USSR.
Explosion.

" 6

Up	iPKP2	12 36 49.7	
Ki	iPKP1	12 36 17.5	
	iPKP2	12 36 30.8	
Sk	iPKP2	12 36 51.9	
Um	iPKP2	12 36 38.3	
Ud	iPKP2	12 36 57.1	
De	iPKP2	12 37 01.7	

Auckland Islands (h = N).

" 6

Up	iP	12 44 43.7	
Ki	iP	12 44 29.2	
Ud	iP	12 44 56.6	
	iPcP	12 45 28.9	

Yunnan, China (h = N).

" 6

Up	iP	15 07 26.8	

Kurile Islands.

" 6

Ud	iP	20 18 41.9	

" 6

Up	iP	20 27 15.0		
		micr	sec	
	P	Z' 0.1	0.8	
	Mx	E 0.8	14	
	Mx	N 1.0	14	
	Mx	Z 1.5	14	
Ki	iP	20 27 21.5		
		micr	sec	
	P	Z' 0.1	1.0	
	Mx	E 0.8	12	
	Mx	N 0.8	12	
	Mx	Z 1.0	12	
Sk	iP	20 27 40.2		D
Um	iP	20 27 12.3		D
	iPP	20 28 44.3		
Ud	iP	20 27 31.5		D
	iPP	20 29 16.4		
De	iP	20 27 29.4		D
	ePP	20 29 12		

Tadzhik SSR (h = 80 km).
m = 5.7, M = 5.1 (Up,Ki).

" 6

Up	iSgl	20 40 58.8	
Sk	ePgl	20 38 44	

(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Apr.	6	(cont.)				
		Sk	iSgl	20 39 11.8		
		Um	iSgl	20 41 05.9		
		Ud	ePgl	20 39 18		
			iSn	20 39 53.5		
			iSgl	20 40 09.5		
		Near coast of Norway, 62.9°N, 8.2°E. Origin time = 20 38 10. Checked with Bergen reading.				
"	6	Sk	iP	20 46 10.3		
		Ud	iP	20 47 05.8		
"	6	Ud	iP	21 06 17.2		
"	6	Ud	iP	21 10 04.6		
"	6	Ud	iP	21 33 01.1		
"	6	Up	iP	22 18 13.2		
			ipP	22 18 29.2		
		Um	iP	22 17 47.6		
		Ud	iP	22 18 18.8		
		De	eP	22 18 36		
		Kurile Islands. h = 60 km (Up).				
"	7	Ud	iP	00 45 41.9		
		De	iP	00 46 05.9		
"	7	Up	iP	01 02 18.3		
		Ki	iP	01 03 29.9		
		Ud	iP	01 02 12.0		
		De	iP	01 01 40.3		
		Algeria (h = N).				
"	7	Ud	i(PKPl)	01 59 42.1		
		De	iPKPl	01 59 45.9		
"	7	Ud	iP	02 30 57.7		
"	7	Up	iPKPl	03 34 51.4		
			ipPKPl	03 35 36.0		
				micr	sec	
			pPKPl Z'	0.1	1.0	
		Um	iPKPl	03 34 39.4		
		Ud	iPKPl	03 34 52.9	C	
			ipPKPl	03 35 39.2		
		De	iPKPl	03 35 02.5		
			ipPKPl	03 35 47.4		
		Kermadec Islands. h = 180 km (Up,Ud,De).				
"	7	Ud	iP	04 25 15.0		
1974 Apr.	7	Up	iSgl	04 50 03.9		
		Ki	iSn	04 46 45.8		
			iSgl	04 47 08.7		
		Sk	iSgl	04 49 34.6		
		Um	iSn	04 47 26.5		
			i	04 47 43.4		
			iSgl	04 48 01.7		
		Ud	iSn	04 49 24.6		
			iSgl	04 50 34.8		
		De	iSgl	04 52 07.7		
		Northwest USSR. Explosion.				
"	7	Up	iP	06 12 53.4		
		Um	iP	06 12 26.5		
		Ud	iP	06 12 57.6		
		Kurile Islands (h = N).				
"	7	Up	iP	06 30 55.6		
		Ki	iP	06 30 50.0		
		Um	iP	06 30 43.4		
		Ud	iP	06 31 08.6		
		Burma.				
"	7	Up	iP	06 44 09.6		
			i	06 44 22.2		
				micr	sec	
			i Z'	0.1	1.3	
		Ki	iP	06 43 21.1		
		Um	iP	06 43 43.6		
		Ud	iP	06 44 14.7		
		Kurile Islands (h = 20 km).				
"	7	Up	iSn	09 03 40.8		
			eS*	09 04 28		
			iSgl	09 04 35.0		
		Ki	iPn	09 00 26.2		
			iSn	09 01 24.8		
			iSgl	09 01 45.8		
		Sk	iSgl	09 04 12.1		
		Um	iSn	09 02 03.0		
			i	09 02 15.5		
			iSgl	09 02 36.5		
		Ud	iSn	09 04 04.3		
			i	09 04 58.1		
			iSgl	09 05 12.3		
		De	iSgl	09 06 37.6		
			i	09 06 46.6		
		Northwest USSR. Explosion.				
"	7	Up	iP	11 30 16.1		
		Ud	iP	11 30 17.6		
			i	11 30 28.6		
		De	eP	11 29 48		

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Apr.	7	Ki	iSgl		13 33 34.5	
		Northwest USSR.				
		Explosion.				
"	7	Up	iP		14 28 13.6	
			iPn		14 28 36.4	
			iS		14 32 37	
					micr sec	
			Mx	E	2.8 15	
			Mx	N	2.5 13	
			Mx	Z	2.6 13	
		Ki	iP		14 29 21.4	
					micr sec	
			Mx	E	3.6 18	
			Mx	N	5.0 12	
			Mx	Z	5.3 12	
		Sk	iP		14 28 50.9	
			ipP		14 28 59.2	
		Um	iP		14 28 45.6	
			iS		14 33 34	
		Ud	iP		14 28 19.6	
			ipP		14 28 28.0	
			iPn		14 28 46.2	
		De	iP		14 27 46.7	
			ipP		14 27 55.4	
		Crete.				
		h = 40 km (Sk,Ud,De).				
		M = 5.3 (Up,Ki).				
		Pn (Up,Ud) is rather unusual for this epicenter location.				
"	7	Up	iP		16 15 49.5	
		Ki	iP		16 16 02.6	
		Sk	iP		16 16 15.6	
		Um	iP		16 15 50.7	
		Ud	iP		16 16 05.5	
			i		16 16 19.9	
		De	iP		16 15 58.9	
		Pakistan (h = 45 km).				
"	7	Up	iP		17 50 56.3	
		Um	iP		17 50 42.8	
		Ud	iP		17 51 09.0	
		De	iP		17 51 14.3	
		Yunnan, China (h = N).				
"	8	Um	iSgl		13 10 17.4	
		Ud	iSgl		13 11 08.5	
		De	eSgl		13 11 34	
		Western USSR.				
		Explosion.				
"	8	De	iP		17 40 18.3	
		Aegean Sea.				
		Intermediate depth.				
"	8	Ud	iP		17 54 59.9	C
1974 Apr.	8	Up	i		17 59 02.0	
		De	i(Pgl)		17 58 25.3	
			i(Sgl)		17 59 16.1	
"	8	Ud	iPKPl		18 23 06.5	
"	8	Up	epP		22 19 47	
		Ki	iP		22 19 33.1	
		Um	ipP		22 19 41.0	
		Ud	eP		22 19 42	
		De	epP		22 19 53	
		Sumatra (h = N).				
"	9	Ki	iP		01 19 09.3	
		Ud	iP		01 19 18.2	
		Sumatra (h = N).				
"	9	Ud	iP		04 45 26.3	
			i		04 45 32.4	
"	9	Um	iSgl		12 17 01.1	
		Western USSR.				
		Explosion.				
"	9	Up	iSgl		13 00 36.1	
		Sk	iSgl		13 02 34.8	
		Um	iSgl		13 01 25.1	
		De	iSgl		13 02 03.9	
		Esthonia.				
		Explosion.				
"	9	Up	iP		13 22 02.7	C
			i		13 22 13.1	
			iPcP		13 22 29.5	
					micr sec	
			P	Z'	0.1 0.7	
		Ki	iP		13 21 15.6	C
					micr sec	
			P	Z'	0.2 1.0	
		Sk	iP		13 21 51.5	C
		Um	iP		13 21 37.1	C
			ipP		13 22 13.2	
		Ud	iP		13 22 08.7	C
			iPcP		13 22 34.8	
		De	iP		13 22 26.8	C
		Kurile Islands.				
		h = 150 km (Um).				
		m = 5.9 (Up,Ki).				
"	9	Um	i(Sgl)		13 48 01.5	
"	9	Ud	iP		15 27 30.5	
			i		15 27 37.8	
"	9	Up	i(P)		15 35 09.9	
"	9	Um	iPKPl		15 56 28.0	

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974						
Apr.	9	Up	iP		17 43 40.1	
			iPcP		17 43 43.2	
			ipP		17 43 52.5	
					micr	sec
			pP	Z'	0.1	0.9
		Ki	iP		17 43 11.4	
			ipP		17 43 22.8	
		Sk	eP		17 43 43	
		Um	iP		17 43 23.8	
			iPcP		17 43 27.5	
			ipP		17 43 36.1	
		Ud	iP		17 43 47.3	
			ipP		17 43 59.0	
		De	iP		17 43 58.5	
			ipP		17 44 10.2	
		Mariana Islands.				
		h = 45 km (Up,Ki,Um,Ud,De).				
"	9	Up	iP		21 02 07.2	
		Ki	iP		21 01 13.8	
		Um	iP		21 01 41.0	
		Ud	iP		21 02 08.4	
		Aleutian Islands (h = 35 km).				
"	10	Ki	iP		01 38 20.6	
		Um	iP		01 38 47.6	
		Ud	iP		01 39 12.8	
		Aleutian Islands (h = 15 km).				
"	10	Um	iPKPl		05 27 43.1	
"	10	De	iPKPl		05 39 44.7	
"	10	Um	iSgl		06 01 40.2	
		Gulf of Bothnia,				
		64.9°N, 24.7°E.				
		Explosion.				
		Solution from Helsinki				
		regional bulletin.				
"	10	Um	iSgl		06 47 09.3	
		Same location and kind as				
		the preceding event.				
"	10	Um	iP		06 51 06.9	
		Andaman Islands (h = N).				
"	10	Um	iSgl		09 56 52.5	
		Same location and kind as				
		the event at 06 01.				
"	10	Um	iSgl		10 57 16.5	
		Western USSR.				
		Explosion.				
"	10	Ki	iSgl		14 02 03.5	
		Um	iSgl		14 00 28.1	
		Lake Ladoga.				
		Explosion.				
1974						
Apr.	10	Um	iSgl		14 05 47.3	
		Lake Ladoga region.				
		Explosion.				
"	10	Up	iPgl		14 08 47.5	
			iSgl		14 09 06.9	
			iRg		14 09 14.9	
		Ud	iPgl		14 08 55.4	
			iSgl		14 09 21.1	
		De	iSgl		14 09 34.4	
			iRg		14 09 48.4	
		Östergötland, Sweden,				
		58.7°N, 16.0°E.				
		Origin time = 14 08 23.				
		Explosion?				
"	10	Um	iP		22 03 10.7	C
		Ud	iP		22 03 29.9	C
"	10	Up	iP		22 55 35.5	
			ipP		22 56 05.9	
			iS		23 05 48	
					micr	sec
			pP	Z'	0.1	1.2
			Mx	E	1.3	22
			Mx	N	1.7	30
			Mx	Z	3.0	22
		Ki	iP		22 55 24.1	
			i		22 55 40.8	
					micr	sec
			P	Z'	0.1	1.5
			Mx	E	1.2	23
			Mx	N	1.9	23
			Mx	Z	3.6	30
		Sk	iP		22 55 15.5	
			i		22 55 36.1	
			ipP		22 55 47.9	
		Um	iP		22 55 32.7	
			i		22 55 39.2	
			isP		22 56 13.6	
			iS		23 05 49	
		Ud	iP		22 55 25.3	
			ipP		22 55 55.6	
		De	iP		22 55 32.2	
			i		22 55 57.9	
		Guatemala.				
		h = 120 km (Up,Sk,Ud).				
		m = 5.6, M = 5.4 (Up,Ki).				
		M uncorrected for focal				
		depth.				
"	10	Up	iP		23 11 39.7	
					micr	sec
			P	Z'	0.1	1.2
			Mx	E	0.9	16
			Mx	N	0.8	17
			Mx	Z	1.5	16
		Ki	iP		23 11 16.5	
		(cont.)				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Apr.	10	(cont.)					
		Ki			micr	sec	
			P	Z'	0.1	1.4	
			Mx	E	0.9	13	
			Mx	N	0.7	16	
			Mx	Z	0.7	13	
		Sk	eP		23 11 44		
		Um	iP		23 11 27.3		
			i		23 11 32.4		
		Ud	iP		23 11 49.1		
			i		23 11 57.1		
		De	iP		23 11 59.0		
		Formosa (h = 55 km).					
		m = 5.6, M = 5.4 (Up,Ki).					
"	11	Up	iPKPl		03 29 11.4		
		Sk	iPKPl		03 29 06.7		
		Ud	iPKPl		03 29 18.4		
		De	iPKPl		03 29 27.3		
"	11	Ki	iP		07 03 10.5		
		Um	iP		07 03 36.4		
		Ud	iP		07 04 01.7		
		Aleutian Islands (h = N).					
"	11	Up	iSn		11 40 36.7		
			iSgl		11 40 47.4		
		Ki	iSgl		11 43 16.7		
		Sk	iSgl		11 42 40.3		
		Um	iSgl		11 41 20.1		
		Ud	iSn		11 41 22.4		
			iSgl		11 41 47.5		
		De	iSgl		11 42 15.8		
		Esthonia.					
		Explosion.					
"	11	Um	iSgl		13 20 17.3		
		De	iSgl		13 21 25.4		
		Western USSR.					
		Explosion.					
"	11	Sk	iPKPl		19 58 41.3		
		Um	iPKPl		19 58 41.6		
"	11	Ud	iP		21 09 53.8		
		Iran (h = 25 km).					
"	11	Up	iP		21 48 51.1		C
			i		21 48 54.9		
			iPcP		21 49 14.4		
					micr	sec	
			P	Z'	0.2	0.9	
			i	Z'	0.1	0.7	
		Ki	iP		21 48 07.6		C
			i		21 48 10.1		
		(cont.)					

1974 Apr.	11	(cont.)					
		Ki			micr	sec	
			P	Z'	0.1	1.0	
			i	Z'	0.1	1.0	
		Sk	iP		21 48 42.8		C
			i		21 48 45.6		
		Um	iP		21 48 27.1		C
			i		21 48 30.6		
		Ud	iP		21 48 58.1		C
			i		21 49 02.1		
		De	iP		21 49 14.9		
			i		21 49 19.0		
		Japan (h = 80 km).					
		m = 5.9 (Up,Ki).					
		Double P phases suggest two events of the same magnitude, apparently with a slight shift in epicenter location.					
"	11	Um	iP		22 57 53.1		
		Ud	iP		22 58 19.1		
"	12	Ud	iP		01 18 21.4		
"	12	Ud	iP		06 49 04.4		
"	12	Ki	iPn		11 18 44.5		
			iSgl		11 19 48.9		
		Northwest USSR-Norway.					
		Explosion.					
"	12	Ki	iSn		11 31 50.7		
			iS*		11 32 10.0		
		Um	iSgl		11 33 06.9		
		Northwest USSR.					
		Explosion.					
"	12	Sk	iPKP		12 35 01.2		
		New Hebrides Islands (h = 240 km).					
"	12	Up	iP		17 58 16.4		
			i		17 58 17.2		
					micr	sec	
			P	Z'	0.1	1.0	
		Ki	iP		17 57 53.2		
			i		17 57 54.0		
					micr	sec	
			P	Z'	0.1	1.0	
		Sk	eP		17 58 17		
			i		17 58 17.8		
		Um	iP		17 58 02.6		
		Ud	iP		17 58 23.7		
			i		17 58 24.6		
		De	iP		17 58 33.2		
		(cont.)					

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Apr.	12	(cont.) Philippine Sea (h = N). m = 6.0 (Up,Ki). Double P, a small compression followed after 0.8 sec by a larger dilatation.			
"	12	Sk	iP	18 37 07.8	
		Ud	iP	18 37 10.4	
		Colombia (h = 150 km).			
"	12	Ud	iP	19 32 36.7	
"	12	Up	iPKPl	19 35 26.4	
		Um	iPKPl	19 35 15.6	
		Ud	iPKPl	19 35 28.1	
		De	iPKPl	19 35 37.4	
			i	19 35 43.3	
"	12	Up	iP	19 50 23.1	
		Ki	iP	19 49 38.7	
		Um	iP	19 49 58.5	
		Ud	iP	19 50 27.3	
			i	19 50 29.7	
		Japan (h = 80 km).			
"	12	Up	iX	20 26 30.0	
		Ud	eP	20 26 26	
			iX	20 26 38.3	
		De	iP	20 25 53.6	
		Crete (h = 100 km).			
"	12	Up	iP	21 45 32.0	
			i	21 45 46.2	
		Ud	iP	21 45 31.4	
"	12	Ki	i(P)	23 38 16.5	
"	12	Um	i(P)	23 39 58.5	
"	13	Up	iP	00 39 58.1	
		Sk	iP	00 40 22.4	
		Um	iP	00 39 56.7	
		Ud	iP	00 40 14.8	
		De	iP	00 40 11.0	
		Hindu Kush. Intermediate depth.			
"	13	Ud	iP	01 02 46.0	
		Japan (h = 60 km).			
"	13	Um	i(Sgl)	01 10 25.5	
"	13	Um	iPKPl	03 36 04.4	
		Ud	iPKPl	03 36 11.6	
		De	iPKPl	03 36 23.0	
1974 Apr.	13	Ud	iP	04 40 36.0	
"	13	Up	iP	05 09 57.3	
		Sk	iP	05 09 54.3	
		Um	iP	05 09 30.8	
		Ud	iP	05 10 08.2	
		De	iP	05 10 25.5	
		Lake Baikal (h = N).			
"	13	Ki	iPP	09 07 44.2	
		Sk	iPP	09 08 05.0	
		Um	iP	09 06 08.8	
		Ud	iP	09 06 30.8	
		De	iP	09 06 33.5	
		Kazakh SSR (h = 35 km).			
"	13	Ki	iSn	12 32 34.3	
			iSgl	12 32 55.1	
		Sk	iSgl	12 35 36.9	
		Um	iSgl	12 33 59.4	
		Northwest USSR. Explosion.			
"	13	Ki	iPn	13 04 34.8	
			iSn	13 05 24.4	
			iSgl	13 05 42.1	
		Um	eSgl	13 07 05	
		Northwest USSR-Norway. Explosion.			
"	13	Ki	iSgl	15 00 51.8	
		Um	iSgl	15 01 48.5	
		Northwest USSR-Finland. Explosion.			
"	13	Up	iP	15 42 38.0	
		Ki	iP	15 42 38.6	
		Sk	iP	15 42 59.8	
		Um	iP	15 42 31.9	
		Ud	iP	15 42 54.1	
		De	iP	15 42 53.1	
		Kashmir-Sinkiang (h = 110 km).			
"	13	Up	eSgl	18 12 13	
		Um	iSgl	18 11 48.3	
		Ud	iSgl	18 13 13.9	
		Lake Ladoga region. Explosion.			
"	13	Um	iPKPl	18 31 15.9	
"	13	Up	iP	20 19 27.3	
		Ki	iP	20 18 31.7	
		Sk	eP	20 19 09	
		Um	iP	20 18 58.0	
		Ud	iP	20 19 29.8	
		Kamchatka (h = N).			

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974								
Apr.	14	Ud	iP		01 41 27.9			
"	14	Ud	iP		01 48 53.7			
"	14	Up	eP		04 17 57			
		Ud	iP		04 17 54.2			
"	14	Up	iSgl		05 19 43.9			
		Ki	iSn		05 16 26.5			
			iSgl		05 16 51.0			
		Um	iS*		05 17 36.8			
			iSgl		05 17 44.9			
		Ud	iSgl		05 20 12.3			
		Northwest USSR.						
		Explosion.						
"	14	Um	iP		07 04 20.7			
		Ud	iP		07 04 52.5			
		Kurile Islands.						
"	14	Up	iP		07 07 30.0			
			ipP		07 08 00.5			
					micr	sec		
			pP	Z'	0.1	1.3		
		Ki	iP		07 07 21.3			
			ipP		07 07 50.1			
					micr	sec		
			pP	Z'	0.1	1.3		
		Sk	iP		07 07 12.8			
			ipP		07 07 41.6			
		Um	iP		07 07 27.6			
			ipP		07 07 58.1			
		Ud	iP		07 07 21.1			
			ipP		07 07 51.0			
		De	iP		07 07 27.6			
			epP		07 07 57			
		Guatemala.						
		h = 110 km (Up,Ki,Sk,Um,Ud,						
		De).						
		m = 5.6 (Up,Ki).						
"	14	Up	iP		07 20 50.1			
		Um	iP		07 20 42.3			
		Ud	iP		07 21 03.4			
		Burma.						
"	14	Um	iP		07 53 01.1			
		Ud	iP		07 53 18.6			
			i		07 53 25.5			
"	14	Um	iP		08 41 25.8			
		Ud	iP		08 41 41.9			
"	14	Ki	iP		09 34 44.2			
		Ud	iP		09 35 15.4			
"	14	Ud	eP		10 50 49			
			i		10 50 59.3			
1974								
Apr.	14	Up	iP		10 55 25.1			
					micr	sec		
			P	Z'	0.1	1.1		
			Mx	E	0.8	14		
			Mx	N	0.5	12		
			Mx	Z	1.7	13		
		Ki	iP		10 54 55.1			
					micr	sec		
			P	Z'	0.1	1.0		
			Mx	E	0.6	13		
			Mx	N	0.7	13		
			Mx	Z	0.7	13		
		Sk	ipP		10 55 34.6			
		Um	iP		10 55 07.6			
			ipP		10 55 18.0			
		Ud	iP		10 55 33.7			
		De	iP		10 55 44.2			
		Ryukyu Islands.						
		h = 40 km (Um).						
		m = 5.9, M = 5.3 (Up,Ki).						
"	14	Sk	iP		11 35 40.6			
		De	iP		11 34 47.6			
		Crete (h = 2 km).						
"	14	Up	iPKP		11 35 04.6			
		Sk	iPKP		11 35 08.9			
		Ud	iPKP		11 35 16.3			
		New Guinea (h = 100 km).						
		PKP at Ud is practically						
		simultaneous with P for the						
		preceding event, whence a						
		reliable separation is not						
		possible.						
"	14	Up	iP		11 50 15.3			
			ipP		11 50 25.2			
					micr	sec		
			P	Z'	0.1	1.1		
			Mx	E	0.8	14		
			Mx	N	0.6	13		
			Mx	Z	1.2	13		
		Ki	iP		11 49 46.6			
			ipP		11 49 54.7			
					micr	sec		
			P	Z'	0.1	1.0		
			Mx	Z	0.5	12		
		Sk	iP		11 50 15.6			
		Um	iP		11 49 57.8			
			ipP		11 50 05.7			
		Ud	iP		11 50 23.7	C		
			ipP		11 50 32.5			
		De	iP		11 50 34.3	C		
		Ryukyu Islands.						
		h = 30 km (Up,Ki,Um,Ud).						
		m = 5.9, M = 5.3 (Up,Ki).						

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Apr.	14	Ud	iP	12 07 48.6		
		Dodecanese Islands (h = 45 km).				
"	14	Up	iP	12 20 58.0		
			ipP	12 21 19.9		
		Ki	iP	12 20 22.4		
		Um	iP	12 20 35.2		
			ipP	12 20 58.8		
		Ud	iP	12 21 05.3		
			ipP	12 21 27.3		
		South of Japan.				
		h = 80 km (Up,Um,Ud).				
"	14	Up	iP	13 53 05.4		
		Ud	eP	13 53 14		
			i	13 53 31.0		
"	14	Ki	iP	15 51 45.2		
		Um	iP	15 52 14.6		
		Ud	iP	15 52 44.6		
		De	iP	15 53 10.6		
		Eastern Siberia (h = N).				
"	14	Up	iP	17 26 33.5		
			ipP	17 26 40.9		
		Ki	iP	17 26 04.4		
			ipP	17 26 12.6		
		Um	iP	17 26 08.7		
		Ud	iP	17 26 43.0		
			ipP	17 26 49.9		
		Ryukyu Islands.				
		h = 30 km (Up,Ki,Ud).				
"	14	Up	iP	23 33 39.9		
		Ki	iP	23 32 58.2		
		Um	iP	23 33 17.0		
		Ud	iP	23 33 47.5	C	
		De	iP	23 34 03.7		
		Japan (h = 40 km).				
"	15	Sk	iP	02 38 49.5		
		Ud	iP	02 39 10.5		
		Eastern Siberia (h = N).				
"	15	Up	iP	03 55 58.8		
			ipP	03 56 13.2		
				micr	sec	
			P	Z' 0.1	0.8	
			Mx	E 0.8	16	
			Mx	N 0.9	17	
			Mx	Z 1.4	20	
		Ki	iP	03 55 38.4		
				micr	sec	
			P	Z' 0.1	1.0	
		Sk	iP	03 56 06.7		
		(cont.)				

1974 Apr.	15	(cont.)				
		Um	iP	03 55 45.2		
			ipP	03 55 59.4		
		Ud	iP	03 56 08.6		
			ipP	03 56 21.5		
		De	eP	03 56 16		
		Luzon.				
		h = 50 km (Up,Um,Ud).				
		m = 5.8 (Up,Ki).				
"	15	Up	iP	05 49 54.2	C	
		Ki	iP	05 49 33.2		
		Um	iP	05 49 40.9		
		Ud	iP	05 50 03.8		
			ipP	05 50 19.0		
		Luzon.				
		h = 55 km (Ud).				
"	15	Up	iPKPl	11 32 31.7		
		Ud	iPKPl	11 32 33.6		
"	15	Ki	iP	12 13 46.5		
		Talaud Islands (h = 20 km).				
"	15	Up	i	12 17 31.8		
			iSgl	12 18 28.6		
			i	12 18 45.4		
		Sk	ePn	12 16 05		
			iSn	12 17 07.6		
		Um	iSn	12 18 24.6		
			i	12 18 41.6		
			i	12 18 57.0		
			iSgl	12 19 15.0		
			iSg2	12 19 27.2		
		Ud	iPn	12 16 00.5	C	
			iSn	12 16 59.7		
			i(TSn)	12 17 44.3		
		De	iSn	12 17 34.8		
		Off coast of southwest Norway, 60.2°N, 3.2°E.				
		Origin time = 12 14 42.				
		Solution checked with Bergen and Kongsberg readings.				
"	15	Um	eSgl	12 44 30		
		Ud	eSgl	12 45 20		
		Western USSR.				
		Explosion.				
"	15	Ud	iP	13 00 22.1		
"	15	Up	iP	15 46 51.2		
		Um	iP	15 47 06.5		
		Ud	iP	15 46 57.2		
		Malagasay (h = N).				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974					
Apr.	15	Ki	iP	16 36 47.6	
		Sk	iP	16 37 10.7	
		Um	iP	16 37 13.0	
		Ud	iP	16 37 35.4	
		De	iP	16 37 55.5	
		Alaska (h = 7 km).			
"	15	Up	iP	21 53 02.4	
		Um	iP	21 53 46.6	
		Italy (h = N).			
"	16	Ud	iSKP1	00 53 00.6	
"	16	Ud	iP	01 03 38.9	
"	16	Ud	iP	01 54 27.4	
"	16	Ud	eP	02 22 40	
"	16	Up	iP	05 21 44.9	
		Ki	iP	05 21 33.1	
		Um	iP	05 21 40.8	
		Mexico (h = 120 km).			
"	16	Up	iP	05 59 54.9	
		Ki	iP	05 59 38.1	
		Sk	iP	06 00 10.5	
		Um	iP	05 59 39.5	
		Ud	iP	06 00 11.4	
		De	iP	06 00 18.9	
		Kazakh SSR.			
		Origin time = 05 53 00.			
		Underground explosion?			
"	16	Ki	iPn	11 02 19.9	
			i	11 03 06.0	
			iSn	11 03 08.2	
		Sk	eSn	11 04 37	
		Um	iSn	11 04 34.4	
		Ud	i	11 05 34.9	
			eSn	11 06 01	
		Norwegian Sea,			
		71.4°N, 15.4°E.			
		Origin time = 11 01 17.			
		By combination with Tromsoe			
		and Finnish station readings.			
"	16	Up	iP	11 24 18.0	
"	16	Up	iP	11 35 12.2	C
			i	11 35 14.0	
			ipP	11 35 42.2	
			iX	11 35 52.9	
				micr sec	
			P Z'	0.1 0.9	
		Ki	iP	11 34 55.1	C
			iX	11 35 34.7	
		(cont.)			

1974					
Apr.	16	(cont.)			
		Ki		micr sec	
			P Z'	0.1 0.8	
		Sk	iP	11 35 17.7	
			i	11 35 19.4	
			ipP	11 35 48.9	
			iX	11 35 58.6	
		Um	iP	11 34 58.9	C
			i	11 35 00.7	
			iX	11 35 39.3	
		Ud	iP	11 35 21.5	C
			i	11 35 23.4	
			ipP	11 35 51.2	
			iX	11 36 01.7	
		De	iP	11 35 27.0	
			iX	11 36 07.1	
		Mindoro.			
		h = 120 km (Up,Sk,Ud).			
		m = 5.6 (Up,Ki).			
		Double P, 1.8 sec apart in			
		average.			
		X is probably P of another			
		event in the same location,			
		40.3 sec later.			
"	16	Up	eSgl	12 03 13	
		Um	iSgl	12 03 45.9	
		Ud	eSgl	12 04 11	
		Esthonia.			
		Explosion.			
"	16	Up	iSgl	13 00 40.2	
		Sk	iSgl	13 02 37.9	
		Um	iSgl	13 01 32.8	
		Ud	iSgl	13 01 44.6	
		Esthonia.			
		Explosion.			
"	16	Up	iP	13 11 28.0	
"	16	Up	i(P)	18 17 19.9	
		Ki	iP	18 16 35.8	
		Um	iP	18 17 01.9	
		Ud	iP	18 17 30.9	
		Aleutian Islands (h = 40 km).			
"	16	Ud	iP	18 34 49.7	
"	16	Up	iPKP2	18 38 00.4	
		Ki	iPKP	18 37 23.6	
		Um	iPKP	18 37 30.8	
			iPKP2	18 37 38.3	
		Ud	iPKP2	18 38 08.2	
		New Zealand (h = N).			
"	16	Ud	iP	22 28 36.0	
		Hindu Kush.			

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Apr.	16	Ud	iP		22 28 59.3	
		Could instead be pP to the preceding event.				
"	16	Um	eP		22 43 28	
		Ud	iP		22 42 55.2	
"	16	Sk	i(P)		23 51 39.6	
		Ud	iP		23 52 01.2	
		De	iP		23 52 28.7	
"	17	Up	iP		00 40 09.6	
			i		00 40 11.9	
			iS		00 46 27	
					micr	sec
			P	Z'	0.1	1.5
			Mx	E	1.0	20
			Mx	N	2.1	23
			Mx	Z	1.7	21
		Ki	iP		00 40 35.4	
			i		00 40 40.1	
					micr	sec
			P	Z'	0.1	1.1
			Mx	E	1.1	15
			Mx	N	2.2	22
			Mx	Z	1.1	19
		Sk	iP		00 39 59.6	
			i		00 40 02.9	
		Um	iP		00 40 26.8	
			i		00 40 31.3	
			iS		00 46 59	
		Ud	iP		00 39 55.9	
		De	iP		00 39 49.9	
			i		00 39 51.8	
			i		00 40 13.1	
		North Atlantic Ocean (h = N).				
		m = 5.6, M = 5.2 (Up,Ki).				
		Double P, characteristic for Atlantic earthquakes recorded at our stations.				
"	17	Sk	eP		00 50 16	
		Um	iP		00 50 10.6	
		Ud	iP		00 50 38.1	
		De	iP		00 51 00.2	
		Aleutian Islands (h = 45 km).				
"	17	Up	iP		01 34 57.8	
		Um	iP		01 35 42.5	
		Ud	iP		01 35 02.1	
		De	iP		01 34 16.4	
		Rumania (h = N).				
"	17	Um	iP		01 56 45.8	
			ipP		01 57 01.2	
		Ud	iP		01 57 14.4	
		(cont.)				

1974 Apr.	17	(cont.)				
		Japan.				
		h = 55 km (Um).				
"	17	Um	iP		03 49 19.5	
		Ud	iP		03 49 50.3	
		Kurile Islands (h = 45 km).				
"	17	Up	iP		04 26 50.3	
		Ud	iP		04 26 53.5	
"	17	Ud	iPKPl		04 28 40.2	
"	17	Sk	eP		05 56 03	
		Ud	iP		05 56 18.9	
		Kurile Islands (h = N).				
"	17	Ud	iP		06 26 09.9	
		Kurile Islands (h = N).				
"	17	Up	iP		06 28 18.0	
		Ud	iP		06 28 25.7	
		Kurile Islands (h = N).				
"	17	Up	iSn		11 43 49.7	
			iSgl		11 44 00.8	
		Ki	iSgl		11 46 35.0	
		Sk	iSg2		11 46 02.6	
		Um	iSgl		11 44 35.9	
		Ud	iSn		11 44 37.7	
			iSgl		11 45 06.0	
		De	eSn		11 44 59	
			iSgl		11 45 31.6	
		Esthonia.				
		Explosion.				
"	17	Um	iSgl		12 10 47.3	
		Ud	iSgl		12 11 30.3	
		Western USSR.				
		Explosion.				
"	17	Up	iSgl		12 52 33.0	
		Um	iSgl		12 54 32.3	
		Ud	iSgl		12 53 08.3	
		De	iSgl		12 53 08.9	
		Off coast of Östergötland, Sweden, 58.3°N, 17.5°E.				
		Origin time = 12 51 45.				
		Explosion.				
"	17	Up	iPgl		14 49 27.5	
			iSgl		14 49 42.7	
			iRg		14 49 48.1	
		Ud	iSg2		14 49 22.6	
			iRg		14 49 25.2	
		Central Sweden.				
		Origin time = 14 49 09.				
		Near-surface event.				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974						
Apr.	17	Up	iP		15 34 58.4	
		Ki	iP		15 34 41.6	
					micr	sec
			P	Z'	0.1	1.1
		Sk	iP		15 35 02.5	
			i		15 35 07.4	
		Um	iP		15 34 46.5	
			i		15 34 51.9	
		Ud	iP		15 35 05.1	
			i		15 35 10.6	
			i		15 38 10.7	
		De	eP		15 35 15	

Molucca Passage (h = N).
Double P, 5.3 sec apart, of which De has recorded only the second one.

"	17	Up	iP		18 35 51.8	
			iS		18 42 30	
					micr	sec
			P	Z'	0.1	1.5
			Mx	E	0.9	18
			Mx	N	0.8	18
			Mx	Z	1.1	16
		Ki	iP		18 36 42.0	
			i		18 36 46.6	
					micr	sec
			P	Z'	0.1	1.0
			Mx	E	1.1	20
			Mx	N	0.9	13
			Mx	Z	0.5	13
		Sk	iP		18 36 26.6	
		Um	iP		18 36 14.4	
			iPcP		18 37 40.7	
			iS		18 43 18	
		Ud	iP		18 36 01.9	
		De	iP		18 35 38.4	

Red Sea (h = N).
m = 5.7, M = 5.1 (Up,Ki).

"	17	Ud	iP		18 52 14.2
"	17	Ud	iPKP1		19 49 22.1
"	17	Up	iPKP1		19 50 14.6
		Ud	iPKP1		19 50 16.5
"	17	Up	iRg		19 57 02.5
		Ud	iSg2		19 56 34.8
			iRg		19 56 38.3

Central Sweden.
Near-surface event.

"	18	Up	iP		01 31 55.0
		Ki	iP		01 31 56.4

(cont.)

1974					
Apr.	18	(cont.)			
		Sk	iP		01 31 40.1
		Um	iP		01 31 58.9
		Ud	iP		01 31 49.6
		De	iP		01 31 44.3

Colombia (h = 25 km).

"	18	Ud	iPKP		07 54 46.4
		De	iPKP		07 54 52.3

Solomon Islands (h = 90 km).

"	18	De	iPKP1		08 24 04.4

Fiji Islands (h = 540 km).

"	18	Ud	iSg1		09 11 09.1

Near Bergen, Norway.
Origin time = 09 08 57.
By combination with Bergen readings.

"	18	Ki	iPKP		09 18 36.7

South Sandwich Islands (h = N).

"	18	Ud	i(Sg1)		09 23 19.1
"	18	Ud	iP		10 21 20.8
		De	iP		10 20 48.8

Crete (h = N).

"	18	Up	iP		10 41 33.1
		Ki	iP		10 40 35.7
			i		10 40 51.9
		Sk	eP		10 41 13
		Um	iP		10 41 01.7
		Ud	iP		10 41 35.3
		De	iP		10 41 59.3

Kamchatka (h = 45 km).

"	18	Um	iSg1		12 10 12.7

Western USSR.
Explosion.

"	18	Ud	iPg1		12 14 11.7
			iSg1		12 14 31.7
			i		12 14 34.7
			iRg		12 14 43.6
		De	iSg1		12 14 51.0

Västergötland, Sweden, 58.6°N, 13.5°E.
Origin time = 12 13 47.
Explosion.

"	18	Up	iSg1		15 01 13.2
		Sk	i		15 00 43.6

(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974					
Apr.	18	(cont.)			
		Sk	iSgl	15 00 49.8	
		Um	iSgl	15 02 02.5	
		Ud	iPgl	14 59 47.6	
			i	15 00 08.0	
			iSgl	15 00 10.8	
			iRg	15 00 21.1	
		De	iSgl	15 01 43.9	
		Southeastern Norway,			
		60.8°N, 10.6°E.			
		Origin time = 14 59 18.			
"	18	Sk	iP	19 24 33.4	
		Um	iP	19 24 17.8	
		Ud	iP	19 24 46.4	
		Japan (h = 60 km).			
"	18	Ki	ePKP	21 25 15	
		Um	iPKP	21 25 13.2	
		Ud	ePKP	21 25 06	
		Southeast Pacific Ocean			
		(h = N).			
"	18	Ki	iP	21 34 36.4	
			i	21 34 51.0	
		Kurile Islands.			
"	19	Ki	iP	03 41 03.2	
		Ud	iP	03 42 01.8	
"	19	Ki	iPKP	07 04 39.0	
		Ud	iPKPl	07 04 44.5	
		De	iPKPl	07 04 56.1	
"	19	Up	iPKPl	07 23 28.7	D
			i	07 24 10.1	
			iSKPl	07 26 14.6	
				micr sec	
			PKPl Z'	0.1 0.7	
			SKPl Z'	0.1 1.2	
		Ki	i(PKP)	07 23 06.1	
			iPKP	07 23 18.9	
			ipPKP	07 25 42.0	
			iSKPl	07 25 51.6	
				micr sec	
			PKP Z'	0.1 1.2	
			SKPl Z'	0.7 2.3	
		Sk	i(PKP)	07 23 21.1	
			iPKP	07 23 22.2	
			iSKPl	07 26 10.1	
		Um	i(PKP)	07 23 16.2	
			i	07 23 17.3	
			iPKP	07 23 23.0	
			ipPKP	07 25 48.7	
			iSKPl	07 26 04.9	
		Ud	iPKPl	07 23 31.4	D
			iSKPl	07 26 17.5	
		De	iPKP	07 23 40.6	
		(cont.)			

1974					
Apr.	19	(cont.)			
		De	iPKPl	07 23 41.7	D
			ipPKPl	07 26 01.9	
			iSKPl	07 26 25.3	
		Tonga-Kermadec Islands.			
		h = 650 km (Ki,Um,De).			
"	19	Up	iPKPl	08 21 33.6	
		Ki	iPKP	08 21 24.4	
			eSKPl	08 23 59	
		Sk	iPKP	08 21 26.6	
			iSKPl	08 24 14.2	
		Um	iPKP	08 21 21.5	
			iSKPl	08 24 09.7	
		Ud	iPKPl	08 21 35.9	D
		De	iPKPl	08 21 46.6	D
			iSKPl	08 24 30.2	
		Tonga-Kermadec Islands			
		(h = 600 km).			
"	19	Um	iP	11 06 26.8	
"	19	Ud	iP	11 19 30.2	
		Hindu Kush.			
		Intermediate depth.			
"	19	Um	iSgl	12 17 59.4	
		Western USSR.			
		Explosion.			
"	19	Ki	i	12 18 11.6	
			iSgl	12 18 20.3	
		Um	iSgl	12 19 13.1	
		Northwest USSR.			
		Explosion.			
"	19	Um	iSgl	12 34 57.7	
		Western USSR.			
		Explosion.			
"	19	Um	iSgl	14 27 14.5	
		Ud	iSgl	14 27 53.5	
		Western USSR.			
		Explosion.			
"	19	Up	iPn	15 29 53.9	
			iSgl	15 30 44.6	
		Ki	iSgl	15 33 21.7	
		Sk	iSn	15 32 04.1	
			iSgl	15 32 40.8	
		Um	iPgl	15 30 23.4	
			iSgl	15 31 24.0	
		Ud	iPn	15 30 21.9	
			iSn	15 31 24.8	
			iSgl	15 31 51.1	
		De	iPn	15 30 34.9	
			iPgl	15 30 55.2	
		(cont.)			

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
Apr. 19 (cont.)

	De	iSn	15 32 45.8	
		iS*	15 32 16.7	
		iSgl	15 32 20.5	

Gulf of Finland,
59.7°N, 23.9°E.
Origin time = 15 29 03.

" 19

Up	iP	18 30 12.7	
Ki	iP	18 29 35.8	
Sk	eP	18 30 09	
Um	iP	18 29 51.3	
Ud	iP	18 30 20.2	

Japan (h = 130 km).

" 19

Up	iP	22 36 29.0	
Um	iP	22 36 14.9	
Ud	iP	22 36 38.4	

" 20

Up			micr	sec
	Mx	E	0.6	20
	Mx	N	0.5	20
	Mx	Z	0.8	20
Ki			micr	sec
	Mx	E	0.9	22
	Mx	N	1.0	21
Um	i		03 29 44.5	
Ud	iPKP		03 29 36.6	
De	iPKP1		03 29 37.6	

Loyalty Islands (h = N).
M = 5.6 (Up,Ki).

" 20

Up	iP	04 39 33.3	
	i	04 39 42.0	
Ki	iP	04 39 13.6	
Um	iP	04 39 20.3	
Ud	iP	04 39 41.8	

Philippine Islands (h = N).

" 20

Up	iP	08 00 54.4	
	i	08 00 59.2	
Ki	iP	08 00 55.1	
Um	iP	08 00 51.5	
Ud	iP	08 01 06.0	
De	iP	08 01 03.2	

Nicobar Islands (h = N).

" 20

Ud	iP	08 33 12.8	
De	iP	08 33 37.7	

Aleutian Islands (h = 40 km).

" 20

Up			micr	sec
	Mx	E	0.8	20
	Mx	N	1.0	22
	Mx	Z	1.4	21

(cont.)

1974
Apr. 20 (cont.)

Ki			micr	sec
	Mx	E	0.9	20
	Mx	N	1.0	19
	Mx	Z	0.9	19
Ud	iPKP		08 46 40.5	

Loyalty Islands (h = N).
M = 5.7 (Up,Ki).

" 20

Up	iP	08 48 05.3	

" 20

Ki	i(P)	10 44 05.9	
	i	10 44 11.0	
	i	10 44 23.5	

" 20

Ki	iSn	12 20 50.9	
	iSgl	12 21 10.5	
Um	eSgl	12 22 12	

Northwest USSR.
Explosion.

" 20

Up	iSgl	14 51 39.5	
Ki	iSn	14 48 30.1	
	iSgl	14 48 45.8	
Sk	iSgl	14 51 11.0	
Um	iSgl	14 49 40.4	
Ud	e	14 51 25	
	iSgl	14 52 08.0	

Northwest USSR-Finland.
Explosion.

" 20

Ud	iPKP1	14 58 53.8	

" 20

Up	iP	15 02 17.5	

" 20

Ki	eP	16 09 30	
Ud	iP	16 09 53.6	

" 20

Up	iP		16 13 55.3	C
	iPcP		16 14 17.2	
			micr	sec
	P	Z'	0.1	1.0
Ki	iP		16 13 12.0	C
	ipP		16 13 25.7	
			micr	sec
	P	Z'	0.1	0.9
Sk	iP		16 13 47.0	
Um	iP		16 13 31.3	C
	ipP		16 13 47.1	
Ud	iP		16 14 02.1	C
	iPcP		16 14 24.3	
De	iP		16 14 18.8	C

Japan.
h = 55 km (Ki,Um).
m = 5.8 (Up,Ki).

" 20

Ud	iPKP1	16 19 14.0	

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974						
Apr.	20	Up	iP		17	49 28.5
		Ki	iP		17	48 34.5
		Ud	iP		17	49 27.7
		Aleutian Islands (h = 40 km).				
"	20	Ud	iP		19	59 52.8
"	20	Up	eP		23	25 15
		Ud	iP		23	25 24.1
"	21	Ud	eP		00	40 23
"	21	Um	iPKP		01	01 15.2
		Ud	iPKPl		01	01 23.2
		De	iPKPl		01	01 34.6
		Fiji Islands (h = 670 km).				
"	21	Up	iPKP		01	12 47.2
					micr	sec
			Mx	E	1.0	21
			Mx	N	1.2	22
			Mx	Z	2.3	21
		Ki			micr	sec
			Mx	E	1.1	22
			Mx	N	1.4	20
			Mx	Z	1.2	20
		Um	iPKP		01	12 46.9
			i		01	13 01.9
			iSKPl		01	16 13
		Ud	ePKP		01	12 52
		De	iPKPl		01	12 57.5
			i		01	13 05.7
		Loyalty Islands (h = N).				
		M = 5.8 (Up,Ki).				
"	21	Up	iP		01	35 44.1
			iPcP		01	36 06.4
		Ki	iP		01	34 58.8
		Um	iP		01	35 18.8
		Ud	iP		01	35 50.0
		De	iP		01	36 07.3
		Kurile Islands (h = 60 km).				
"	21	Up	iP		02	18 47.3
			ipP		02	18 55.3
					micr	sec
			pP	Z'	0.1	1.0
		Ki	iP		02	18 01.4
			ipP		02	18 10.0
					micr	sec
			P	Z'	0.1	1.5
			pP	Z'	0.1	1.0
		Sk	iP		02	18 36.4
			ipP		02	18 45.9
		Um	iP		02	18 22.0
			ipP		02	18 30.8
		(cont.)				

1974						
Apr.	21	(cont.)				
		Ud	iP		02	18 53.5
			ipP		02	19 02.4
		De	iP		02	19 11.8
			ipP		02	19 20.3
			iPcP		02	19 36.1
		Okhotsk Sea.				
		h = 30 km (Up,Ki,Sk,Um,Ud, De).				
		m = 5.9 (Up,Ki).				
"	21	Um	iP		04	05 26.0
		Ud	iP		04	04 54.2
		Italy.				
"	21	Up	iP		04	56 13.3
		Ki	iP		04	55 25.2
		Um	iP		04	55 56.0
		Ud	iP		04	56 14.1
		De	iP		04	56 32.7
		Queen Elisabeth Islands (h = 30 km).				
		All our stations exhibit large positive residuals (+5 to +15 sec) in relation to the NEIS solution.				
"	21	Up	i(P)		06	13 21.9
"	21	Up	iPKP2		07	15 22.0
		Ud	iPKP2		07	15 20.1
			i		07	15 29.7
		Macquarie Islands (h = N).				
"	21	Up	iSgl		09	27 51.9
		Ki	iPn		09	23 44.0
			iSn		09	24 40.8
			iSgl		09	25 01.7
		Sk	i		09	26 13.7
			iSgl		09	27 28.3
		Um	iSn		09	25 23.3
			i		09	25 38.1
			iS*		09	25 51.7
			iSgl		09	25 56.8
		Ud	iSn		09	27 20.8
			iSgl		09	28 21.5
			iSg2		09	28 36.6
		De	eSgl		09	29 50
		Northwest USSR.				
		Explosion.				
"	21	Ki	iSn		09	31 53.9
		Northwest USSR.				
		Explosion.				
"	21	Up	i		11	09 22.5
		(cont.)				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974							
Apr.	21	(cont.)					
		Up	iSn		11 09 46.0		
			i		11 10 07.7		
			iSgl		11 10 19.7		
					micr	sec	
			Sgl	Z'	0.1	0.7	
		Ki	eSn		11 10 35		
			iSgl		11 11 17.2		
		Sk	iPn		11 07 56.1		
			i		11 07 59.2		
			iPgl		11 08 03.6		
			iSn		11 08 35.0		
			i		11 08 42.2		
			iSgl		11 08 47.1		
		Um	i(Pn)		11 08 36.4		
			iPn		11 08 46.9		
			i		11 09 41.9		
			i		11 10 07.3		
			iSgl		11 10 30.5		
		Ud	i(Pn)		11 08 06.8		
			iPn		11 08 11.9		
			iPgl		11 08 23.4		
			i		11 08 45.3		
			iSn		11 09 06.4		
			i		11 09 17.5		
			iSgl		11 09 24.3		
		De	iSn		11 10 07.3		
			i		11 10 21.5		
			i		11 10 46.7		
			iSgl		11 10 50.6		
		Off coast of west Norway,					
		62.5°N, 5.7°E.					
		Origin time = 11 07 03.					
		The appearance of double Pn					
		(and Sn) is probably related					
		to the detailed structure of					
		the Moho discontinuity (for					
		a discussion, see R.					
		Wahlström, Seismolog. Inst.,					
		Uppsala, Rep. No. 3-75, 1975).					
"	21	Up	iP		15 18 41.4	D	
			ipP		15 19 32.4		
					micr	sec	
			P	Z'	0.1	1.2	
		Ki	iP		15 18 17.2	D	
			ipP		15 19 04.7		
					micr	sec	
			P	Z'	0.1	0.9	
		Sk	iP		15 18 45.0		
		Um	iP		15 18 25.7	D	
			ipP		15 19 13.5		
		Ud	iP		15 18 50.7	D	
			ipP		15 19 42.0		
		De	eP		15 19 00		
			i		15 19 07.3		
		(cont.)					

1974							
Apr.	21	(cont.)					
		Formosa.					
		h = 200 km (Up,Ki,Um,Ud).					
		m = 5.5 (Up,Ki).					
"	21	Up	i(P)		16 40 23.5		
"	21	Up	iPKPl		19 29 45.5		
		Um	iPKPl		19 29 34.2		
		Ud	iPKPl		19 29 47.8	C	
		De	iPKPl		19 29 58.0		
"	21	Up	ePKPl		23 08 26		
		Ki	iPKPl		23 07 56.6		
		Um	iPKPl		23 08 12.7		
		Ud	iPKPl		23 08 26.7		
"	21	Ud	iP		23 19 30.5		
		Kurile Islands.					
		Intermediate depth.					
"	22	Up	iP		00 40 20.4		
			i		00 40 24.5		
					micr	sec	
			Mx	E	0.9	18	
			Mx	N	3.4	19	
			Mx	Z	2.0	14	
		Ki	iP		00 39 53.3	C	
			i		00 39 57.3		
					micr	sec	
			P	Z'	0.1	0.8	
			Mx	E	0.9	15	
			Mx	N	0.9	15	
			Mx	Z	0.5	13	
		Sk	eP		00 40 27		
		Um	iP		00 40 03.0	C	
			i		00 40 07.4		
		Ud	iP		00 40 30.6	C	
			i		00 40 34.9		
		De	iP		00 40 41.3	C	
			i		00 40 45.8		
		Eastern China (h = N).					
		M = 5.3 (Up,Ki).					
		Double P, 4.3 sec apart.					
"	22	Up	iP		01 50 06.9	C	
		Ki	iP		01 50 05.9	C	
		Sk	iP		01 50 23.2		
			ipP		01 50 34.4		
		Um	iP		01 50 02.4	C	
			ipP		01 50 13.8		
		Ud	iP		01 50 19.3	C	
			isP		01 50 36.3		
		De	iP		01 50 18.0	C	
		Andaman Islands.					
		h = 40 km (Sk,Um,Ud).					

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Apr.	22	Ud	iP	01 57 50.5	
"	22	Up		micr sec	
			Mx Z	0.6 21	
		Um	iPKP	02 24 38.8	
		De	iPKPl	02 24 49.0	
		Loyalty Islands (h = 40 km).			
"	22	Up	iP	02 40 33.3	
			iPcP	02 40 52.7	
		Ki	iP	02 39 40.0	
			iPcP	02 40 08.8	
		Ud	iP	02 40 32.0	
			iPcP	02 40 52.2	
		De	eP	02 40 57	
			iPcP	02 41 11.5	
		Aleutian Islands (h = 70 km).			
"	22	Up	iP	03 25 40.9	
		Ki	iP	03 26 46.3	
		Sk	iP	03 26 19.2	
		Um	iP	03 26 11.4	
		Ud	iP	03 25 48.6 D	
		De	iP	03 25 17.9	
		Crete (h = 70 km).			
"	22	Um	eP	04 32 59	
		Ud	iP	04 33 24.0	
		Aleutian Islands (h = 45 km).			
"	22	Up	iP	04 41 56.3	
		Ki	iP	04 41 03.0	
		Sk	iP	04 41 34.3	
		Um	iP	04 41 29.8	
		Ud	iP	04 41 55.4	
		De	iP	04 42 18.4	
		Aleutian Islands (h = 30 km).			
"	22	Up	eSgl	08 24 06	
		Ki	iPgl	08 21 28.4	
			i	08 21 50.5	
			iSgl	08 22 05.5	
		Sk	iPgl	08 21 31.2	
			iSgl	08 22 12.0	
		Um	iPgl	08 21 44.4	
			iSn	08 22 19.5	
			iSgl	08 22 33.7	
		Ud	iSgl	08 23 59.9	
		Nordland, Norway, 66.5°N, 14.4°E. Origin time = 08 20 40. Explosion.			
"	22	Ki	ePn	09 44 40	
			iSn	09 45 26.5	
			iSgl	09 45 41.8	
		(cont.)			

1974 Apr.	22	(cont.)			
		Um	iSgl	09 47 13.3	
		Northwest USSR-Norway. Explosion.			
"	22	Up	eSgl	12 13 25	
		Sk	eSgl	12 15 06	
		Um	iSgl	12 13 41.8	
		De	eSgl	12 14 48	
		Western USSR. Explosion.			
"	22	Up	iP	12 34 26.5	
		Ud	iP	12 34 30.5	
"	22	Ki	iPn	12 54 09.3	
			iPgl	12 54 18.4	
			iSn	12 54 57.9	
			iSgl	12 55 13.9	
		Northwest USSR-Norway. Explosion.			
"	22	Ki	iSgl	14 12 58.7	
		Sk	iSgl	14 13 01.4	
		Um	iSn	14 13 11.7	
			iSgl	14 13 26.6	
		Ud	iSgl	14 14 56.8	
		Nordland, Norway, 66.5°N, 13.9°E. Origin time = 14 11 28. Explosion.			
"	22	Up	iSn	14 19 10.1	
			iSgl	14 19 23.6	
		Ki	eSgl	14 21 49	
		Sk	iSgl	14 21 13.5	
			i	14 21 19.5	
		Um	iSgl	14 19 57.6	
		Ud	iSn	14 19 58.8	
			iSgl	14 20 24.6	
		De	iSgl	14 20 52.1	
		Esthonia. Explosion.			
"	22	Ki	iP	15 37 40.8	
		Ud	iP	15 36 57.2	
			i	15 37 05.2	
		De	iP	15 36 56.1	
		North Atlantic Ocean (h = N).			
"	22	Ud	iSgl	15 39 41.7	
		De	iPgl	15 38 15.7	
			iSgl	15 38 40.2	
			iRg	15 38 50.9	
		Origin time = 15 37 44.			

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974				
Apr.	22	Ki	iP	16 09 54.0
		Kurile Islands.		
"	22	Up	iP	18 03 22.0
		Sk	iP	18 04 04.0
		Um	iP	18 04 01.5
		Ud	iP	18 03 28.9
		De	iP	18 02 53.0
		Greece (h = 70 km).		
"	22	Up	iP	19 15 29.1
		Ki	iP	19 14 48.0
		Um	iP	19 15 05.9
		Ud	iP	19 15 36.2
		Japan (h = 70 km).		
"	22	Up	iP	20 59 51.1
		Ki	iP	20 59 14.8
		Um	iP	20 59 29.5
		Ud	iP	20 59 58.4
		Japan (h = 60 km).		
"	23	Up	i	08 02 00.4
			i(Sgl)	08 02 31.4
		Sk	i	08 04 05.3
		De	e	08 03 02
"	23	Um	iPKPl	08 41 26.2
		Ud	iPKPl	08 41 39.5
		De	iPKPl	08 41 53.5
		Kermadec Islands (h = N).		
"	23	Sk	iP	11 53 47.2
		Guatemala-Mexico (h = 180 km).		
"	23	Um	iSgl	11 54 54.8
		Esthonia.		
		Explosion.		
"	23	Up	iP	12 03 23.6
		Sk	eP	12 03 18
		Um	iP	12 03 02.1
		Ud	iP	12 03 31.4
		De	iP	12 03 46.2
		Japan (h = 60 km).		
"	23	Sk	i(P)	12 04 41.5
"	23	Um	iSgl	12 49 16.2
			i	12 49 21.9
		Western USSR.		
		Explosion.		
"	23	Up	iP	17 49 23.9
		Ki	eP	17 49 55
		Um	eP	17 49 38
		(cont.)		

1974				
Apr.	23	(cont.)		
		Um	i	17 49 52.1
		Ud	iP	17 49 22.0
		Atlantic Ocean (h = N).		
"	23	Um	iP	18 55 42.4
		Ud	iP	18 55 10.6
			i	18 55 17.4
		De	i(P)	18 55 16.2
"	23	Ki	iP	19 35 54.3
		Um	iP	19 35 31.4
		Ud	iP	19 35 33.7
		De	iP	19 35 17.2
		Iran (h = N).		
"	23	Up	i(P)	19 57 12.3
"	24	Ud	iPKP	01 27 28.1
		De	iPKP	01 27 35.8
		Tonga Islands (h = 310 km).		
"	24	Up	iP	03 05 16.7
		Ki	iP	03 05 43.2
			i	03 05 49.4
		Sk	eP	03 05 48
		Um	iP	03 05 24.0
			i	03 05 34.7
		Ud	iP	03 05 25.3
			i	03 05 30.6
		De	iP	03 05 10.3
			i	03 05 15.9
		Iran (h = 60 km).		
"	24	Um	iP	07 00 40.1
"	24	Um	iP	07 01 19.4
		Poland.		
"	24	Up	iP	09 22 11.5 C
		Ki	iP	09 22 03.3
		Um	iP	09 21 58.8 C
		Ud	iP	09 22 20.5
		De	iP	09 22 22.1 C
		Sumbawa Island (h = 70 km).		
"	24	Um	iSgl	12 16 56.7
		Western USSR.		
		Explosion.		
"	25	Um	iP	00 07 07.7
		Ud	iP	00 07 34.9
		Kurile Islands (h = 60 km).		
"	25	Ki	iP	00 14 40.1
				micr sec
			P Z'	0.1 1.0
		(cont.)		

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974					
Apr.	25	(cont.)			
		Sk	iP	00 14 18.8	
		Um	iP	00 14 14.6	
		Ud	iP	00 13 55.5	
		Uganda (h = N).			
"	25	Up	iP	05 19 11.1	
		Ki	iP	05 19 47.6	
		Um	iP	05 19 27.3	
		Ud	iP	05 19 30.8	
		Iran.			
"	25	Ki	iS*	09 38 39.6	
			iSgl	09 38 45.1	
		Northwest USSR.			
		Explosion.			
"	25	Ki	iP	10 50 48.9	
		Ud	iP	10 51 13.3	
		Halmahera (h = 50 km).			
"	25	Um	iSgl	12 25 43.1	
		Ud	iSgl	12 26 28.8	
		Western USSR.			
		Explosion.			
"	25	Up	iSgl	13 56 30.6	
		Um	iSgl	13 56 52.8	
		Western USSR.			
		Explosion.			
"	25	Up	iP	16 00 20.3	
		Ki	iP	15 59 48.1	
			ipP	15 59 59.8	
		Um	iP	16 00 00.6	
		Ud	iP	16 00 28.4	
			ipP	16 00 38.8	
		De	iP	16 00 40.0	
		Ryukyu Islands.			
		h = 40 km (Ki,Ud).			
"	25	Ud	iP	16 58 30.0	
			i	16 58 38.1	
		De	iP	16 58 01.3	
"	26	Up	iP	00 03 48.1	
"	26	Up	ipP	02 29 14.7	
		Ki	iP	02 28 12.6	
			ipP	02 28 28.4	
		Sk	epP	02 29 05	
		Um	iP	02 28 36.0 C	
			ipP	02 28 49.7	
		Ud	iP	02 29 06.9 C	
			ipP	02 29 20.3	
		Kurile Islands.			
		h = 50 km (Ki,Um,Ud).			

1974					
Apr.	26	Um	i(P)	02 31 56.5	
"	26	Up	i	06 39 45.7	
			iSgl	06 39 56.2	
		Ki	iSgl	06 40 40.1	
		Sk	eSgl	06 41 05	
		Um	iSgl	06 39 14.8	
		De	iSgl	06 41 33.3	
		Lake Ladoga region.			
		Explosion.			
"	26	Um	i(P)	07 14 01.0	
"	26	Um	i(P)	08 21 59.3	
"	26	Up	eP	09 05 05	
"	26	Up	iSgl	10 02 44.4	
		Ki	i(Pn)	09 58 05.1	
			iPn	09 58 09.1	
			i	09 58 11.2	
			iPgl	09 58 12.6	
			iSn	09 58 42.7	
			iSgl	09 58 48.0	
				micr sec	
			Pgl Z'	0.1 0.5	
			Sn Z'	0.4 0.3	
			Sgl Z'	0.7 0.5	
		Sk	e(Pgl)	09 59 35	
			i	10 00 37.5	
			i(S*)	10 01 01.3	
			iSgl	10 01 06.5	
		Um	i	09 59 26.3	
			iSn	10 00 06.6	
			iS*	10 00 37.4	
			iSgl	10 00 44.9	
		Ud	i	10 02 14.1	
			iSgl	10 02 51.9	
		De	iSgl	10 04 39.0	
		Off coast of north Norway, 70.2°N, 18.1°E.			
		Origin time = 09 57 27.			
		By combination with Tromsoe and Finnish station readings.			
"	26	Ki	iSgl	10 24 44.2	
		Northwest USSR-Norway.			
		Explosion.			
"	26	Ki	iSn	10 33 35.6	
			iSgl	10 33 57.4	
		Um	i	10 34 32.7	
			iSgl	10 34 47.7	
		Northwest USSR.			
		Explosion.			
"	26	Ki	iSn	10 34 43.0	
		(cont.)			

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Apr.	26	(cont.)			
		Ki	iS*	10 35 02.4	
		Sk	e(S*)	10 37 22	
			iSg2	10 37 47.9	
		Um	iSn	10 35 22.7	
			iSgl	10 35 57.1	
		Ud	iSgl	10 38 31.4	
		Northwest USSR.			
		Explosion.			
"	26	Up	iP	12 07 12.8	
		Um	iP	12 07 04.8	
			i	12 07 10.4	
		De	iP	12 07 24.6	C
"	26	Sk	eSgl	13 56 19	
		Um	iSgl	13 54 34.4	
		Lake Ladoga region.			
		Explosion.			
"	26	Sk	iP	14 17 19.0	
		Ud	iP	14 16 46.0	
"	26	Up	iP	18 16 36.8	
		Ki	iP	18 17 26.0	
			i	18 17 39.0	
		Sk	iP	18 17 11.1	
		Um	iP	18 16 58.5	
		Ud	iP	18 16 48.2	
		Red Sea (h = N).			
"	26	Um	i(P)	19 13 40.8	
		Tanimbar Islands (h = N).			
"	26	Up	iP	22 36 13.3	
		Ud	iP	22 36 13.6	
		De	eP	22 35 43	
		Greece.			
"	26	Up	iP	23 07 44.4	C
			i	23 07 46.2	
		Ki	iP	23 07 54.7	C
			ipP	23 08 24.3	
			iPP	23 09 32.6	
		Sk	iP	23 08 11.1	C
			ipP	23 08 40.9	
			iPP	23 10 02.4	
		Um	iP	23 07 43.8	C
			i	23 08 04.9	
			ipP	23 08 13.3	
		Ud	iP	23 08 01.2	C
			ipP	23 08 30.9	
			iPP	23 09 42.5	
		De	iP	23 07 57.3	
		Hindu Kush.			
		h = 140 km (Ki,Sk,Um,Ud).			

1974 Apr.	27	Ud	iPKPl	02 27 59.5	C
"	27	Ki	iP	04 38 05.8	
		Um	i(P)	04 38 26.0	
		Ud	iP	04 39 08.9	
"	27	Up	iSgl	06 15 12.2	
		Ud	iPgl	06 14 11.1	
			iSgl	06 14 32.4	
		Origin time = 06 13 44.			
"	27	Up	iSKS	06 26 01	
			iS	06 27 05	
		Um	iSKS	06 26 05	
			iS	06 27 07	
		Peru (h = 110 km).			
"	27	Up	iPKPl	07 44 25.5	D
			ipPKPl	07 44 39.7	
			iPP	07 47 40	
			i	07 55 18.1	
				micr	sec
			PKPl Z'	1.5	1.2
			Mx E	0.9	18
			Mx N	1.7	19
			Mx Z	2.2	20
		Ki	i(PKP)	07 44 03.2	
			iPKP	07 44 12.9	
			ipPKP	07 44 26.3	
			iPP	07 46 56	
			iSKPl	07 47 44	
				micr	sec
			PKP Z'	0.2	1.4
			Mx E	2.0	19
			Mx N	1.6	17
			Mx Z	1.9	18
		Sk	iPKPl	07 44 17.3	
			iPKP	07 44 22.3	
			iPP	07 47 16.2	
		Um	iPKPl	07 44 14.7	
			iPKP	07 44 19.8	
			iPP	07 47 14.1	
			iSKPl	07 47 51	
			i	07 55 29.2	
		Ud	iPKPl	07 44 27.1	D
			ipPKPl	07 44 41.2	
			iPP	07 47 44.0	
		De	iPKP	07 44 33.9	
			iPKPl	07 44 38.1	D
			ipPKPl	07 44 51.3	
			i	07 55 38.8	
		Tonga-Kermadec Islands.			
		h = 45 km (Up,Ki,Ud,De).			
		M = 6.0 (Up,Ki).			
"	27	Up	iPKPl	08 03 30.6	
		(cont.)			

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
Apr. 27 (cont.)

Up	ipPKPl	08 03 42.0	
Ud	iPKPl	08 03 32.3	
	ipPKPl	08 03 43.4	
De	ipPKPl	08 03 54.1	

Tonga-Kermadec Islands.
h = 40 km (Up,Ud).
Origin time = 07 44 00.

" 27

Up	iPKPl	08 59 37.5	
	i	08 59 43.9	
Sk	iPKPl	08 59 32.1	
Um	iPKPl	08 59 27.1	D
Ud	iPKPl	08 59 39.6	D
	i	08 59 46.4	
De	ePKP	08 59 45	

Probably Tonga-Kermadec Islands.
Origin time = 08 40 07.

" 27

Up	iPKPl	09 05 59.3	
Ud	iPKPl	09 06 00.8	

" 27

Up	iP	09 27 44.4	
	ipP	09 28 22.2	
Ki	iP	09 27 47.5	
Sk	iP	09 28 07.4	
Um	iP	09 27 39.6	
	ipP	09 28 18.5	
Ud	iP	09 28 00.4	
	ipP	09 28 38.9	

Tadzhik-Sinkiang.
h = 190 km (Up,Um,Ud).

" 27

Up	iP	10 11 16.2		D
	ipP	10 11 23.8		
		micr	sec	
	P Z'	0.1	1.0	
Ki	iP	10 10 21.0		D
	ipP	10 10 27.8		
Sk	iP	10 10 57.9		
Um	iP	10 10 46.6		
Ud	iP	10 11 19.8		
De	iP	10 11 43.1		

Kamchatka.
h = 25 km (Up,Ki).

" 27

Ud	iPKPl	10 13 34.9	

" 27

Up	iPKPl	10 21 19.8	
Ki	iPKP	10 21 09.6	
	iSKPl	10 23 52.3	
Sk	iSKPl	10 24 07.6	
Um	iSKPl	10 24 03.0	
Ud	iPKPl	10 21 21.9	
	iSKPl	10 24 14.7	

(cont.)

1974
Apr. 27 (cont.)

De	iPKPl	10 21 32.1	

Tonga-Kermadec Islands (h = 520 km).

" 27

Up	iPKPl	10 30 46.0	
Ki	iPKP	10 30 38.9	
Ud	iPKPl	10 30 48.3	

" 27

Ki	iSn	12 05 53.0	
	i	12 06 06.7	
	iSgl	12 06 15.6	
Um	iSn	12 06 37.3	
	iSgl	12 07 15.6	

Northwest USSR.
Explosion.

" 27

Um	iSgl	12 20 04.8	

Western USSR.
Explosion.

" 27

Ud	iPKPl	14 39 07.3	

" 27

Up	iPKPl	15 19 32.6	
Ud	iPKPl	15 19 33.4	

" 27

Um	iP	17 31 19.2	
Ud	iP	17 31 50.2	

Kurile Islands (h = 80 km).

" 27

Ud	iP	18 04 45.1	

" 27

Up	iPKPl	19 30 10.2	
Ud	iPKPl	19 30 10.6	

" 27

Up	iPKPl	19 31 09.7	
	ipPKPl	19 31 20.3	
Um	iPKP	19 31 05.1	
Ud	iPKPl	19 31 11.1	
	ipPKPl	19 31 21.3	

" 27

Up	iPKPl	21 09 28.0	
Ud	iPKPl	21 09 30.0	

" 27

Up	ePKPl	21 26 29	
Um	iPKPl	21 26 13.2	
	i	21 26 17.3	
Ud	iPKPl	21 26 26.5	

" 28

Up	eP	01 00 59	
Ki	iP	01 01 59.6	
Um	iP	01 01 25.3	
Ud	iP	01 01 11.6	

Turkey (h = N).

" 28

Ud	iPKP	03 49 21.5	

Fiji Islands (h = 280 km).

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974						
Apr.	28	Up	e		07 53 10	
			iSgl		07 53 16.9	
		Ki	iPn		07 49 02.3	
			iSn		07 50 00.1	
			iS*		07 50 18.1	
		Sk	e		07 52 11	
			iSgl		07 52 48.2	
		Um	iSn		07 50 40.5	
			iSgl		07 51 13.4	
		Ud	iSn		07 52 38.4	
			iS*		07 53 35.9	
			iSgl		07 54 46.7	
		De	iSgl		07 55 28.4	
		Northwest USSR.				
		Explosion.				
"	28	Up	iPn		12 54 58.4	
			i		12 55 23.3	
			iSn		12 56 32.5	
			i		12 56 46.3	
			iSgl		12 57 28.3	
					micr sec	
			Sgl	Z'	0.3 0.7	
		Ki	iPn		12 53 21.7	D
			i		12 53 33.3	
					micr sec	
			Pn	Z'	1.7 0.5	
			i	Z'	4.2 0.5	
		Sk	iPn		12 54 13.5	
			iPgl		12 54 31.0	
			iSn		12 55 11.2	
			iSgl		12 55 44.3	
		Um	iPn		12 54 08.7	D
			i		12 54 21.7	
			iPgl		12 54 26.6	
			iSn		12 55 03.8	
			iSgl		12 55 36.4	
		Ud	iPn		12 54 56.8	
			i		12 54 58.3	
			i		12 55 04.7	
			i		12 55 17.3	
			iPgl		12 55 28.7	
			iSn		12 56 32.2	
			i		12 56 44.1	
			iSgl		12 57 28.6	
		De	iPn		12 55 45.3	
			iSn		12 57 52.8	
			i		12 58 37.9	
			iSgl		12 59 17.6	
		Near coast of north Norway, 68.9°N, 17.3°E.				
		Origin time = 12 52 54.				
		Checked with Norwegian and Finnish station readings.				

1974				
Apr.	28	Ud	iP	16 05 08.7
"	28	Um	iP	16 26 34.7
"	28	Sk	iP	16 35 39.3
		De	iP	16 34 36.2
		Crete (h = N).		
"	28	De	iPKPl	17 19 33.7
		Loyalty Islands (h = 30 km).		
"	28	Ud	iP	18 34 05.7
"	28	Up	iP	19 03 56.6
		Ki	iP	19 03 33.3
		Um	iP	19 03 41.6
		De	eP	19 04 14
		Formosa (h = N).		
"	28	Ud	iP	21 04 40.8
			i	21 05 01.5
"	28	Up	iPKPl	21 34 39.2
"	28	Um	iP	23 32 11.2
		Celebes (h = 80 km).		
"	29	Um	iP	00 05 20.4
		Ud	iP	00 05 20.0
"	29	Up	iP	02 03 45.4
		Hindu Kush (h = 130 km).		
"	29	Um	iP	08 39 10.4
		Bonin Islands (h = 500 km).		
"	29	Um	iSgl	12 24 56.1
		Western USSR.		
		Explosion.		
"	29	Ud	iP	13 31 30.2
		Tadzhik SSR.		
"	29	Um	i(Sgl)	15 36 24.7
"	29	Um	iP	16 26 10.8
		Ud	iP	16 26 21.5
		Off coast of Oregon (h = N).		
"	29	Up	iP	20 10 52.9
			ipP	20 11 01.4
			iPP	20 11 41.8
		Ki	iP	20 11 54.4 C
		(cont.)		

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Apr.	29	(cont.)				
		Ki			micr sec	
			P	Z'	0.1 1.0	
		Sk	iP		20 11 31.9	C
			ipP		20 11 40.9	
		Um	iP		20 11 21.3	
			ipP		20 11 29.2	
			iPP		20 12 36.1	
		Ud	iP		20 11 02.9	C
			ipP		20 11 11.0	
		De	iP		20 10 35.2	
			ipP		20 10 43.7	
		Egypt.				
		h = 40 km (Up,Sk,Um,Ud,De).				
"	29	Ki	i(P)		21 39 36.5	
		Um	iP		21 39 36.7	
		Ud	iP		21 40 02.3	
			i		21 40 10.0	
		Mindoro (h = 150 km).				
"	29	Up	iP		22 33 32.5	
		Ki	iP		22 33 34.9	
		Sk	iP		22 33 18.5	
			i(pP)		22 33 37.3	
		Um	iP		22 33 36.2	
		Ud	iP		22 33 23.0	C
		De	iP		22 33 25.1	
		Colombia (h = 90 km).				
"	29	Up	iP		22 47 45.6	
		Ki	iP		22 48 30.5	
		Ud	iP		22 48 01.4	
		De	iP		22 47 41.7	
		Iran-Iraq (h = N).				
"	30	Ki	iP		01 11 14.6	
			iPcP		01 12 03.2	
		Um	iP		01 11 27.9	
		Ud	iP		01 12 11.8	
		Kurile Islands (h = 50 km).				
"	30	Up	iP		02 38 05.4	
		Ki	iP		02 37 21.1	
		Sk	eP		02 37 56	
		Um	iP		02 37 40.8	
		Ud	iP		02 38 11.6	
		Japan (h = 50 km).				
"	30	Up	iP		03 06 06.5	
"	30	Up	eP		03 33 41	
		Ki	iP		03 33 12.5	C
		Sk	iP		03 33 39.2	
		Um	iP		03 33 23.8	
		(cont.)				

1974 Apr.	30	(cont.)				
		Ud	iP		03 33 48.1	
		Mariana Islands (h = N).				
"	30	Ki	iSn		07 29 16.2	
			iSgl		07 29 39.5	
		Sk	iSgl		07 32 10.9	
		Um	iSgl		07 30 34.6	
		Northwest USSR.				
		Explosion.				
"	30	Up	iP		07 34 49.4	
			ipP		07 35 01.3	
		Ki	iP		07 34 28.4	D
			ipP		07 34 40.1	
		Sk	ipP		07 35 06.6	
		Um	iP		07 34 35.2	D
			ipP		07 34 48.0	
		Ud	iP		07 34 59.0	
		Luzon.				
		h = 45 km (Up,Ki,Um).				
"	30	Um	iPKPl		08 23 24.2	
"	30	Um	iP		08 46 49.6	
"	30	Up	iSgl		11 56 41.1	
			i		11 56 43.8	
		Ud	iPgl		11 56 34.5	
			e		11 56 40	
			iSgl		11 56 55.0	
			iRg		11 57 01.7	
		De	eSgl		11 57 37	
		Södermanland-Närke, Sweden, 59.2°N, 16.0°E.				
		Origin time = 11 56 08.				
		Explosion?				
"	30	Ki	iPn		12 31 47.0	
			iPgl		12 31 56.1	
			iSn		12 32 35.3	
		Northwest USSR-Norway.				
		Explosion.				
"	30	Ki	iPn		12 38 28.6	
			iPgl		12 38 36.8	
			iSn		12 39 15.1	
			iS*		12 39 27.8	
		Sk	iSgl		12 42 12.7	
		Um	iSgl		12 41 02.5	
		Ud	iSgl		12 43 33.9	
		Northwest USSR-Norway.				
		Explosion.				
"	30	Up	iSgl		12 47 59.8	
		(cont.)				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974					
Apr.	30	(cont.)			
		Sk	eSgl	12 49 44	
		Um	i	12 48 02.8	
			iSgl	12 48 14.6	
		Ud	iSgl	12 48 56.4	
		De	iSgl	12 49 21.6	
		Western USSR.			
		Explosion.			
"	30	Up	iP	12 50 55.7	
"	30	Up	iP	14 21 53.0	
		Ki	iP	14 21 36.0	
		Sk	iP	14 22 12.7	
		Um	iP	14 21 34.6	
		De	iP	14 22 23.5	
"	30	Ud	iP	16 16 16.2	
"	30	Um	iP	19 21 18.0	
"	30	Up	iPKPl	19 49 23.9	
		Ud	iPKPl	19 49 24.2	
		De	iPKPl	19 49 35.6	C
		Fiji Islands (h = 550 km).			
"	30	Up	iP	19 58 46.8	
			ipP	19 59 01.4	
		Ki	iP	19 57 52.9	
			ipP	19 58 08.1	
		Um	iP	19 58 19.3	
			ipP	19 58 34.0	
		Ud	iP	19 58 45.5	
			ipP	19 59 00.2	
		De	iP	19 59 09.7	
			ipP	19 59 24.2	
		Aleutian Islands.			
		h = 55 km (Up,Ki,Um,Ud,De).			
"	30	Ki	iPKP	20 14 38.0	
		New Hebrides Islands			
		(h = 160 km).			
"	30	Up	iP	21 43 22.5	
		Afghanistan-USSR (h = 150 km).			

Markus Båth
Rutger Wahlström

November 10, 1975

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SWEDEN

S E I S M O L O G I C A L B U L L E T I N

U P P S A L A, K I R U N A, S K A L S T U G A N, U M E Å,

U D D E H O L M and D E L A R Y

Uppsala	(Up):	59°51.5'N,	17°37.6'E; h = 14 m
Kiruna	(Ki):	67°50.4'N,	20°25.0'E; h = 390 m
Skalstugan	(Sk):	63°34.8'N,	12°16.8'E; h = 580 m
Umeå	(Um):	63°48.9'N,	20°14.2'E; h = 16 m
Uddeholm	(Ud):	60°05.4'N,	13°36.4'E; h = 240 m
Delary	(De):	56°28.2'N,	13°52.2'E; h = 150 m

M A Y 1 - 31, 1974

1974					
May	1	Up	iP	00 42 26.5	
		Ki	iP	00 41 39.3	
		Sk	eP	00 42 15	
		Um	iP	00 42 00.4	
		Kurile Islands (h = 180 km).			
"	1	Up	iPKPl	05 17 29.2	
			ipPKPl	05 17 42.0	
				micr sec	
			PKPl Z'	0.2 1.0	
		De	iPKPl	05 17 41.1	
			ipPKPl	05 17 54.4	
		Tonga-Kermadec Islands.			
		h = 45 km (Up,De).			
"	1	Up	iPKPl	05 37 52.0	
			ipPKPl	05 38 03.9	
		Ud	iPKPl	05 37 53.5	
			ipPKPl	05 38 05.8	
		De	iPKPl	05 38 03.6	
			ipPKPl	05 38 13.9	
		Tonga-Kermadec Islands.			
		h = 40 km (Up,Ud,De).			
		Origin time = 05 18 21.			
"	1	Ud	iPKPl	05 39 53.8	
"	1	Up	iP	05 59 42.5	
		Um	iP	05 59 42.1	
"	1	Um	iPKP	11 49 46.5	
"	1	Ud	iPKPl	12 43 47.7	
		De	iPKPl	12 43 57.8	
"	1	Up	iPKP	13 02 37.8	
		Ki	ePKP	13 02 53	
		(cont.)			

1974					
May	1	(cont.)			
		Ki	i	13 02 59.7	
		Um	iPKP	13 02 46.0	
		Ud	iPKP	13 02 36.0	
		South Sandwich Islands			
		(h = 35 km).			
"	1	Up	iP	15 34 40.2	D
			iPP	15 38 22.9	
				micr sec	
			P Z'	0.2 0.9	
		Ki	iP	15 34 12.7	D
				micr sec	
			P Z'	0.5 1.0	
		Sk	iP	15 34 37.4	D
			iPP	15 38 16.9	
		Um	iP	15 34 24.0	D
			iPP	15 37 52.9	
		Ud	iP	15 34 46.2	D
			iPP	15 38 33.7	
		De	iP	15 34 57.0	D
		Mariana Islands (h = 460 km).			
		m = 6.1 (Up,Ki).			
"	1	Ud	iP	15 51 53.0	
		Greece.			
"	1	Up	iPKPl	18 54 18.3	
		Ud	iPKPl	18 54 20.3	C
		De	iPKPl	18 54 30.9	C
		Tonga-Kermadec Islands			
		(h = 520 km).			
"	1	Ki	iPKP	19 32 16.3	
		South Sandwich Islands			
		(h = N).			
"	1	Um	iPKPl	19 39 00.4	
		Ud	iPKPl	19 39 12.4	

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974						
May	1	Up	iP		22 06 43.8	
		Ki	iP		22 05 49.7	
		Um	iP		22 06 15.4	
		Ud	iP		22 06 47.3	
		De	iP		22 07 11.1	
		Kamchatka (h = N).				
"	2	Up	iP		04 16 32.6	
		Ki	eP		04 15 57	
					micr	sec
			Mx	E	0.7	17
			Mx	N	0.7	16
			Mx	Z	1.0	18
		Sk	iP		04 16 29.4	
		Um	iP		04 16 10.9	
		Ud	iP		04 16 39.4	
		Japan (h = 40 km).				
"	2	Um	eP		05 45 35	
		Ud	iP		05 46 03.9	
		Japan (h = N).				
"	2	Up	iP		05 47 10.2	
		Ki	iP		05 46 32.7	
					micr	sec
			Mx	E	1.2	18
			Mx	N	0.9	18
			Mx	Z	1.1	19
		Sk	iP		05 47 07.9	
		Um	iP		05 46 48.6	
		Ud	iP		05 47 16.8	
		Japan (h = 15 km).				
"	2	Um	iP		06 01 38.2	
"	2	Up	iPKPl		07 44 08.0	
		Ud	iPKPl		07 44 09.5	
		De	iPKPl		07 44 23.2	
"	2	Ki	iSgl		07 46 14.2	
		Sk	i		07 46 17.2	
			iSgl		07 46 19.9	
		Um	iSgl		07 46 41.4	
		Nordland, Norway,				
		66.5°N, 14.1°E.				
		Origin time = 07 44 45.				
		Explosion?				
"	2	Ki	iP		10 50 11.0	
		Um	iP		10 50 37.7	
		Ud	iP		10 51 03.4	
		Aleutian Islands (h = 130 km).				
"	2	Up	iP		13 21 44.4	
		Ki	iP		13 21 41.1	
		(cont.)				

1974						
May	2	(cont.)				
		Um	iP		13 21 40.0	
		Ud	iP		13 21 54.1	
		De	iP		13 21 51.8	
		Sunda Strait (h = 90 km).				
"	2	Ki	i(P)		14 17 33.3	
		Ud	iP		14 18 19.8	
		De	iP		14 18 41.6	
		Aleutian Islands (h = 55 km).				
"	2	Ud	i(P)		14 32 26.6	
"	2	Ud	iP		15 06 25.1	
		De	iP		15 06 23.7	
		Tadzhik SSR.				
"	2	Up	iSgl		15 20 51.2	
		Sk	iSgl		15 20 52.2	
		Ud	iSn		15 19 36.8	
			iSgl		15 19 54.3	
		Southern Norway.				
"	2	Up	iPKPl		17 18 10.0	
		Ud	iPKPl		17 18 10.3	
		De	iPKPl		17 18 22.2	
		Tonga-Kermadec Islands				
		(h = 170 km).				
"	2	Ud	iP		17 21 09.2	
		De	iP		17 21 27.2	
"	2	Up	iPKPl		18 01 07.9	
		Ud	iPKPl		18 01 09.3	
		De	iPKPl		18 01 19.6	
"	2	Ud	iPKPl		18 26 30.4	
			i		18 26 34.2	
"	2	Up	iP		21 44 17.9	
					micr	sec
			Mx	N	0.8	19
			Mx	Z	0.7	20
		Ki	iP		21 43 40.1	D
		Sk	iP		21 44 11.7	
		Um	iP		21 43 56.4	D
		Ud	iP		21 44 25.6	D
		De	iP		21 44 39.4	
		Japan (h = N).				
"	2	Ud	iP		21 56 33.6	
		Aleutian Islands (h = 45 km).				
"	2	Up	iP		22 46 48.7	C
					micr	sec
			P	Z'	0.1	0.9
		(cont.)				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974					
May	2	(cont.)			
		Ki	iP	22 45 56.0	C
				micr sec	
			P Z'	0.1 0.8	
		Um	iP	22 46 20.9	C
		Ud	iP	22 46 52.2	C
		De	iP	22 47 13.0	C
		Kamchatka (h = 60 km).			
		m = 5.9 (Up,Ki).			
"	2	Up	iPKPl	23 13 12.4	
			i	23 13 19.5	
		Ud	iPKPl	23 13 14.0	
			i	23 13 21.8	
		De	iPKPl	23 13 24.2	C
			i	23 13 28.3	
"	3	Um	iPKPl	00 18 48.4	
"	3	Um	iP	01 48 25.3	
"	3	Ud	iP	04 55 54.9	
"	3	Ki	iP	08 09 14.1	
		Guatemala (h = 55 km).			
"	3	Ud	iP	11 38 42.7	
		Luzon (h = 45 km).			
"	3	Um	iSgl	12 18 26.4	
		Western USSR-Finland.			
		Explosion.			
"	3	Up	iPKP	12 37 26.3	
			i	12 37 28.7	
		Ki	iPKP	12 37 12.8	
			i	12 37 14.6	
		Sk	ePKP	12 37 24	
			i	12 37 25.6	
		Um	iPKP	12 37 18.9	
			i	12 37 20.9	
		Ud	iPKP	12 37 28.7	
			i	12 37 30.7	
		De	iPKP	12 37 35.8	
			i	12 37 37.5	
		New Hebrides Islands			
		(h = 50 km).			
		Double PKP, smaller and			
		larger, in average 2.0 sec			
		apart.			
"	3	Up	iP	14 09 23.7	
			ipP	14 09 54.8	
		Ki	eP	14 09 35	
		(cont.)			

1974					
May	3	(cont.)			
		Ud	iP	14 09 39.2	
			ipP	14 10 12.4	
		De	iP	14 09 35.7	
			ipP	14 10 08.0	
		Hindu Kush.			
		h = 160 km (Up,Ud,De).			
"	3	Um	iP	22 46 19.8	
		Japan (h = N).			
"	3	Um	iP	22 51 44.0	
		Ud	iP	22 52 12.1	
		Japan (h = 15 km).			
"	4	Up	ePKPl	05 23 50	
			i	05 24 00.7	
		Ud	iPKPl	05 23 52.4	
			i	05 24 01.7	
"	4	Up	iPKPl	05 25 06.4	
		Ud	iPKPl	05 25 08.5	
"	4	Up	iP	08 12 34.2	
		Ki	iP	08 11 41.0	
			i	08 11 49.2	
		Sk	iP	08 12 08.2	
			i	08 12 16.5	
		Um	iP	08 12 08.7	
			i	08 12 16.6	
		Ud	iP	08 12 32.0	
			i	08 12 39.3	
		De	iP	08 12 54.2	
			i	08 13 03.4	
		Kodiak Island (h = 10 km).			
		Double onsets, in average			
		8.2 sec apart.			
"	4	Ki	iP	08 56 46.3	
			i	08 56 54.5	
		Sk	iP	08 57 13.2	
		Ud	iP	08 57 37.3	
		Kodiak Island (h = 2 km).			
"	4	Sk	iP	09 19 20.5	
		Kodiak Island (h = 70 km).			
"	4	Up	iPKPl	09 28 29.5	D
			iSKPl	09 31 22.3	
				micr sec	
			PKPl Z'	0.2 0.8	
			SKPl Z'	0.1 1.0	
		Ki	iPKP	09 28 10.5	
			iSKPl	09 31 00.6	
		(cont.)			

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
May 4 (cont.)

Ki			micr	sec
	SKP1	Z'	0.1	0.9
Sk	iPKP1		09 28	21.9
	iSKP1		09 31	17.0
Um	iPKP1		09 28	17.5
	iSKP1		09 31	10.9
Ud	iPKP1		09 28	31.7 D
	iSKP1		09 31	23.5
De	iPKP		09 28	39.9
	iPKP1		09 28	42.3 D

Tonga-Kermadec Islands
(h = 550 km).

" 4

Ud	eP	11 04	13

Japan (h = 60 km).

" 4

Ki	iSn	12 20	54.1
	iSgl	12 21	13.7
Um	iSn	12 21	45.8
	iSgl	12 22	19.2

Northwest USSR.
Explosion.

" 4

Um	iSgl	12 43	49.4

Western USSR.
Explosion.

" 4

Up	i(PKP)		13 05	21.8
	iPKP		13 05	31.5
	iSKP1		13 08	04.5
	iPKS1		13 08	58
			micr	sec
	PKP	Z'	0.1	0.9
	SKP1	Z'	0.1	1.1
Ki	iPKP		13 05	17.0
			micr	sec
	PKP	Z'	0.3	0.9
Sk	i(PKP)		13 05	19.6
	iPKP		13 05	28.3
	i(SKP1)		13 07	47.3
	iSKP1		13 07	52.7
Um	i(PKP)		13 05	09.6
	i(PKP)		13 05	17.6
	iPKP		13 05	23.8
	iPP		13 07	27
	iSKP1		13 07	41.8
	iPKS1		13 08	39
Ud	i(PKP)		13 05	21.0
	iPKP		13 05	33.2
	iSKP1		13 08	05.7
De	i(PKP)		13 05	27.2
	iPKP		13 05	40.4
	iSKP1		13 08	16.9

New Hebrides Islands
(h = 600 km).
Very clear examples of PKP precursors, denoted (PKP).

1974
May 4

De	iP	15 19	07.3

Algeria (h = N).

" 4

Ki	iP		18 06	54.5
	ipP		18 07	04.2
			micr	sec
	pP	Z'	0.2	1.7
Sk	iP		18 06	42.8
	ipP		18 06	52.7
Um	iP		18 06	59.0
	ipP		18 07	08.1
Ud	iP		18 06	47.9 C
	ipP		18 06	57.1

Panama.
h = 35 km (Ki,Sk,Um,Ud).

" 4

Ud	iP	19 15	07.3

Pamir.

" 4

Up	iP	20 02	02.3
	ipP	20 02	12.7
Ki	iP	20 01	45.3
Um	ipP	20 01	59.6
Ud	ipP	20 02	23.0

Mindoro.
h = 40 km (Up).

" 4

Up	iP		22 07	46.4
			micr	sec
	P	Z'	0.1	1.1
Ki	iP		22 06	53.5
	ipP		22 07	04.7
			micr	sec
	P	Z'	0.1	1.1
Um	iP		22 07	18.5
	ipP		22 07	29.3
Ud	iP		22 07	50.6
	ipP		22 08	02.2

Kamchatka.
h = 40 km (Ki,Um,Ud).
m = 5.9 (Up,Ki).

" 4

Up	iP	22 15	18.7
Ki	iP	22 15	56.7
Sk	iP	22 16	00.9
Um	iP	22 15	32.8
Ud	iP	22 15	33.6
De	iP	22 15	17.0

Iran (h = 45 km).

" 4

Ki	iP	23 57	13.4
	ipP	23 57	25.5
Um	eP	23 57	21
Ud	iP	23 57	39.0
	ipP	23 57	51.2

Mindanao.
h = 45 km (Ki,Ud).

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
May 5 Um iP 00 15 39.8
Ud iP 00 15 58.6
Afghanistan-USSR (h = 150 km).

" 5 Up iP 06 09 30.0
micr sec
P Z' 0.1 0.8
Mx E 1.0 17
Mx N 1.1 16
Mx Z 1.8 19
Ki iP 06 09 06.7
micr sec
P Z' 0.2 1.0
Mx E 0.9 15
Mx N 0.8 17
Mx Z 0.7 14
Sk iP 06 09 34.5
Um iP 06 09 15.0
Ud iP 06 09 40.1
De iP 06 09 47.9
Formosa (h = 25 km).
m = 6.1, M = 5.4 (Up,Ki).

" 5 De eP 06 14 14
Algeria (h = 30 km).

" 5 Up micr sec
Mx E 0.9 22
Mx N 1.2 22
Mx Z 1.4 20
Ki iPKP 08 36 52.2
micr sec
Mx E 0.8 19
Mx N 1.0 21
Mx Z 1.0 21
Sk iPKP 08 37 04.3
Um iPKP 08 36 57.6
Ud iPKP 08 37 08.3
New Hebrides Islands
(h = N).
M = 5.7 (Up,Ki).

" 5 Up iSn 10 24 20.6
iSgl 10 24 32.9
Sk eSgl 10 26 26
Um iSgl 10 25 06.6
Ud iSgl 10 25 37.0
Esthonia.
Explosion.

" 5 Up iPKP 11 46 33.1
Um iPKP 11 46 24.7
Ud iPKP 11 46 34.0
New Hebrides Islands
(h = 600 km).

1974
May 5 Up iSgl 12 28 12.0
Um iSgl 12 28 28.1
Western USSR.
Explosion.

" 5 Um iP 13 14 04.6
Mariana Islands (h = 200 km).

" 5 Up iSgl 13 58 09.3
Um iSgl 13 58 30.9
Ud iSgl 13 59 13.3
Western USSR.
Explosion.

" 5 Up iP 14 30 33.7 C
ipP 14 30 45.1
micr sec
P Z' 0.2 1.2
Mx E 0.7 18
Mx N 0.8 18
Mx Z 0.8 19
Ki micr sec
Mx E 1.2 16
Mx N 0.7 18
Mx Z 1.0 17
Sk iP 14 30 27.2 C
ipP 14 30 39.2
Um iP 14 30 11.6 C
Ud iP 14 30 41.0 C
ipP 14 30 52.4
De iP 14 30 56.1 C
Japan.
h = 45 km (Up,Sk,Ud).
M = 5.3 (Up,Ki).

" 5 Ud iP 16 38 30.5
Kurile Islands.

" 5 Up iP 19 21 19.6
iPcP 19 21 45.9
ipP 19 21 54.6
Sk iP 19 21 09.0
iPcP 19 21 39.5
Um iP 19 20 54.2
ipP 19 21 29.7
Ud iP 19 21 25.0
ipP 19 21 59.6
Kurile Islands.
h = 140 km (Up,Um,Ud).

" 5 Up ePgl 19 41 41
iSgl 19 42 34.0
i 19 42 41.7
Sk eSgl 19 43 09
i 19 43 19.6
Um iSgl 19 44 13.0
(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
May 5 (cont.)

Ud	iPgl	19	41 08.9
	iSgl	19	41 42.8
	i	19	41 50.6
De	iSn	19	41 46.5
	iSgl	19	41 54.3

Skagerrak, 58.4°N, 10.1°E.
Origin time = 19 40 25.

" 6 Ud iP 01 16 24.4
Nepal (h = N).

" 6 Ud iP 06 36 36.5
Mindanao (h = 90 km).

" 6

Ki	eP	10	38 35
Um	iP	10	38 42.8
Ud	iP	10	38 54.6

Talaud Islands (h = 40 km).

" 6

Up	iP		10 44 49.0	
			micr	sec
	Mx	E	0.8	17
	Mx	N	2.0	22
	Mx	Z	1.5	18
Ki	iP		10 44 50.1	C
			micr	sec
	Mx	E	1.8	18
	Mx	N	1.4	20
	Mx	Z	1.5	18
Sk	iP		10 45 04.5	C
Um	iP		10 44 46.1	
Ud	iP		10 44 59.7	
De	iP		10 44 57.4	C

Sumatra (h = N).
M = 5.6 (Up,Ki).
Surface waves (Mx) mixed with those of the preceding earthquake.

" 6

Up	iSn	11	23 59.2
	iSgl	11	24 11.0
Ki	iSgl	11	26 46.4
Sk	iSgl	11	26 03.0
Um	iSgl	11	24 46.0
Ud	iSgl	11	25 14.6
De	iSgl	11	25 39.1

Esthonia.
Explosion.

" 6

Ki	iPKP	11	57 23.5
Um	iPKP	11	57 28.6

Tonga Islands (h = 15 km).

1974
May 6

Sk	iSgl	12	14 42.9
Um	iSgl	12	13 12.8
	iRg	12	13 46.3
Ud	iSgl	12	13 56.4

Western USSR.
Explosion.

" 6

Ki	iP	13	53 44.5
Sk	iP	13	54 10.5
Ud	iP	13	54 07.5

Sinkiang, China.

" 6

Ki	iP	22	41 36.1
Sk	iP	22	42 10.6
Um	iP	22	41 49.6

Northeast China (h = N).

" 6

Ki	iP	22	45 33.2
Sk	iP	22	46 07.0
Um	iP	22	45 45.4

Northeast China (h = N).

" 7

Up	i(PKP1)	00	02 45.2
Um	iPKP1	00	02 26.6
Ud	iPKP1	00	02 39.4

" 7

Ki	iP	01	56 17.4
Sk	iP	01	56 45.5
Um	iP	01	56 26.4
Ud	iP	01	56 51.4

Formosa (h = 35 km).

" 7

Ki	iPKP	02	44 14.2
Um	iPKP	02	44 21.3
Ud	iPKP	02	44 29.6

Fiji Islands (h = N).

" 7

Up	iP		03 15 41.3	
			micr	sec
	Mx	E	1.9	20
	Mx	N	3.6	20
	Mx	Z	13	24
Ki	iP		03 16 02.5	
			micr	sec
	Mx	E	3.0	19
	Mx	N	5.9	21
	Mx	Z	4.7	20
Sk	eP		03 15 33	
Um	iP		03 15 56.8	
Ud	iP		03 15 24.5	
	i		03 15 28.2	

North Atlantic Ocean (h = N).
M = 5.8 (Up,Ki).
Surface waves (Mx) mixed with those of the preceding earthquake.

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974					
May	7	Um	iPKPl	03	49 22.0
"	7	Ki	iPgl	09	04 56.6
			iSn	09	05 34.3
			iS*	09	05 47.2
		Sk	eSgl	09	08 35
		Um	iSgl	09	07 19.1
		Northwest USSR-Norway.			
		Explosion.			
"	7	Um	iP	12	07 22.1
		Panama (h = N).			
"	7	Ud	iP	12	19 06.1
		Samar (h = 100 km).			
"	7	Sk	eSgl	12	24 43
		Um	iSgl	12	23 16.0
		Ud	iSgl	12	23 58.8
		Western USSR.			
		Explosion.			
"	7	Ki	iSgl	13	05 00.4
		Um	iSgl	13	02 55.9
		Esthonia.			
		Explosion.			
"	7	Um	i(Sgl)	13	14 18.9
"	7	Up	iSgl	14	38 35.8
		Um	iSgl	14	39 10.9
		Ud	eSgl	14	39 36
		Esthonia.			
		Explosion.			
"	7	Ud	iP	18	58 11.6
"	7	Ki	iP	21	13 47.7
		Ud	iP	21	14 39.2
		Kurile Islands (h = N).			
"	8	Ki	iP	04	35 58.8
		Sk	iP	04	36 31.9
		Alaska (h = 10 km).			
"	8	Up	iP	08	02 37.7
		Ki	iP	08	03 11.8
		Sk	iP	08	03 08.9
		Um	iP	08	02 51.1
		Arabian Sea (h = N).			
"	8	Ud	iP	09	04 21.9
		Japan (h = 80 km).			
"	8	Up	iP	11	09 48.4
		Ki	iP	11	09 02.4
		Ud	iP	11	09 54.7
		(cont.)			

1974					
May	8	(cont.)			
		Ud	iPP	11	12 44.4
		Okhotsk Sea (h = 450 km).			
"	8	Up	iSgl	11	27 10.5
		Ki	iPn	11	22 54.6
			iSn	11	23 53.4
			iSgl	11	24 17.7
		Sk	iSn	11	25 47.5
			iSgl	11	26 41.6
		Um	iSn	11	24 34.0
			i	11	24 47.9
			iSgl	11	25 06.9
		Ud	iSn	11	26 34.5
			iSgl	11	27 42.9
		De	iSgl	11	29 17.2
		Northwest USSR.			
		Explosion.			
"	8	Up	iPKP	11	39 02.8
			ipPKP	11	39 18.1
		Ki	iPKP	11	39 17.1
			ipPKP	11	39 33.4
		Sk	iPKP	11	39 10.1
			ipPKP	11	39 26.0
		Um	iPKP	11	39 10.3
			ipPKP	11	39 25.9
		Ud	iPKP	11	39 01.3
			ipPKP	11	39 17.4
		South Sandwich Islands.			
		h = 55 km (Up,Ki,Sk,Um,Ud).			
"	8	Ud	iPKP	12	10 39.4
		Fiji Islands (h = 630 km).			
"	8	Ki	iPn	12	32 20.0
			iSn	12	33 08.2
			iSgl	12	33 24.2
		Northwest USSR-Norway.			
		Explosion.			
"	8	Ki	iPn	12	32 45.6
			iPgl	12	32 55.3
			iSn	12	33 33.5
			iSgl	12	33 50.4
		Um	iSgl	12	35 19.9
		Northwest USSR-Norway.			
		Explosion.			
"	8	Up	iSgl	12	44 32.5
		Ki	iSgl	12	46 45.7
		Sk	eSgl	12	46 21
		Um	iSgl	12	44 57.3
		De	iSgl	12	46 05.0
		Western USSR.			
		Explosion.			

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974					
May	8	Ki	iP	15 24 47.4	
		Um	iP	15 25 11.9	
		Ud	iP	15 25 44.6	
"	8	Ki	i(P)	16 10 28.0	
		Sk	i(P)	16 10 29.8	
"	8	Ki	iP	16 44 46.1	
		Mindanao (h = 45 km).			
"	8	Ki	iSgl	20 38 36.4	
		Sk	iS*	20 38 39.6	
			iSgl	20 38 44.0	
		Um	iPgl	20 38 15.6	
			iSn	20 38 50.0	
			iSgl	20 39 03.3	
		Nordland, Norway, 66.4°N, 14.5°E. Origin time = 20 37 13. Explosion.			
"	8	Up	eP	22 17 31	
		Ud	iP	22 17 45.7	
		De	iP	22 17 44.7	
"	8	Up	iP	22 36 12.1	
		Ki	iP	22 35 56.2	
		Sk	iP	22 36 17.0	
		Um	iP	22 36 01.3	
		Ud	iP	22 36 20.2	
			ipP	22 36 41.4	
		De	iP	22 36 25.9	
		Molucca Passage. h = 80 km (Ud).			
"	8	Up	iP1	23 45 03.3	
			iP2	23 45 04.9	
			iP3	23 45 08.1	
			iP4	23 45 26.9	
			iPP	23 47 53.1	
			iS	23 54 35	
				micr sec	
			P2 Z'	0.1 0.8	
			P3 Z'	0.3 1.2	
			P4 Z'	1.2 1.7	
			PP Z'	0.8 2.2	
			Mx E	35 17	
			Mx N	71 15	
			Mx Z	47 16	
		Ki	iP1	23 44 27.6	
			iP2	23 44 28.8	
			iP3	23 44 31.4	
			iP4	23 44 49.7	
			iPP	23 46 53.4	
			iS	23 53 22	
		(cont.)			

1974					
May	8	(cont.)			
		Ki		micr	sec
			P3 Z'	0.2	0.9
			P4 Z'	0.4	1.7
			PP Z'	1.0	2.3
			Mx E	100	20
			Mx N	120	19
			Mx Z	36	17
		Sk	iP1	23 44 59.7	
			iP2	23 45 01.2	
			iP3	23 45 04.2	
			iP4	23 45 22.3	
			iPP	23 47 47.2	
		Um	iP1	23 44 42.4	
			iP2	23 44 43.9	
			iP3	23 44 47.1	
			iP4	23 45 05.5	
			iPP	23 47 14.6	
		Ud	iP1	23 45 11.1	
			iP2	23 45 12.6	
			iP3	23 45 15.8	
			iP4	23 45 34.6	
		De	iP1	23 45 25.4	
			iP2	23 45 26.5	
			iP3	23 45 29.2	
			iP4	23 45 48.0	
			iPP	23 48 15.6	
		Japan (h = 2 km). m = 6.3 (P3), 6.6 (P4), M = 7.2 (Up,Ki). Multiple onsets (in average P2-P1 = 1.4 sec, P3-P1 = 4.4 sec, P4-P1 = 22.9 sec): multiple event, alternatively some depth phase (pP).			
"	8	Ki	iP	23 50 04.5	
		Um	iP	23 50 16.3	
		Japan.			
"	9	Ud	iP	03 04 13.6 D	
			i	03 04 37.8	
		Pamir.			
"	9	Up	iPKP1	05 35 20.4	
		Sk	iPKP1	05 35 13.1	
		Um	iPKP1	05 35 07.2	
		Ud	iPKP1	05 35 21.7	
		De	iPKP1	05 35 29.8	
			i	05 35 43.9	
		Kermadec Islands.			
"	9	Ki	iP	05 35 19.9	
			ipP	05 35 30.4	
		Sk	eP	05 35 55	
		Um	iP	05 35 45.3	
		(cont.)			

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974						
May	9	(cont.)				
		Ud	iP		05 36 16.8	
			ipP		05 36 28.7	
		Kamchatka.				
		h = 40 km (Ki,Ud).				
"	9	Um	iP		06 07 00.5	
		South of Java (h = N).				
"	9	Up	iPgl		09 30 49.5	
			iSgl		09 31 08.9	
			iRg		09 31 14.8	
		Sk	e		09 33 01	
			iSgl		09 33 24.6	
		Um	iSgl		09 33 00.6	
		Ud	iPgl		09 31 19.1	
			iSn		09 31 54.9	
		De	iSgl		09 32 23.7	
		Baltic Sea, 58.8°N, 19.4°E.				
		Origin time = 09 30 25.				
		Explosion?				
"	9	Ki	iP		09 44 50.1	
		Sk	iP		09 44 31.2	
		Um	iP		09 44 52.2	
		Mona Passage (h = 30 km).				
"	9	Um	iSgl		12 19 41.2	
		Western USSR-Finland.				
		Explosion.				
"	9	Up	iPKPl		13 40 50.7	
		Ud	iPKPl		13 40 52.2	
			i		13 40 57.9	
			i		13 41 05.6	
		De	iPKPl		13 41 02.0	
			i		13 41 15.8	
"	9	Up			micr	sec
			Mx	E	1.2	20
			Mx	N	1.9	21
			Mx	Z	2.4	20
		Ki	iP		13 40 59.6	
			i		13 41 10.6	
					micr	sec
			P	Z'	0.1	1.0
			Mx	E	1.5	18
			Mx	N	0.8	19
			Mx	Z	1.2	16
		Sk	eP		13 41 19	
		Um	iP		13 41 04.5	
			i		13 41 12.3	
			iSKS		13 51 30	
			iS		13 52 14	
		(cont.)				

1974						
May	9	(cont.)				
		Ud	iP		13 41 23.3	
			i		13 41 32.9	
		Molucca Passage (h = 20 km).				
		M = 5.6 (Up,Ki).				
"	9	Ki	iP		13 44 17.2	
		Sk	iP		13 44 36.2	
		Ud	iP		13 44 35.9	
"	9	Ki	i(P)		16 20 09.6	
"	9	Up	iPKP		16 27 00.7	
		Ki	iPKP		16 26 46.9	
		Sk	iPKP		16 27 00.3	
		Um	iPKP		16 26 55.6	
		Ud	iPKP		16 27 02.2	
		De	iPKP		16 27 12.1	
		Loyalty Islands (h = 35 km).				
"	9	Up	iP		17 07 37.0	
		Ki	iP		17 08 44.9	
		Sk	iP		17 08 23.3	
		Ud	iP		17 07 47.3	
			i		17 07 51.4	
		De	iP		17 07 19.7	
		Dodecanese Islands (h = N).				
"	9	Ud	iP		18 33 50.1	
"	9	Sk	i(P)		19 15 42.3	
"	10	Up	iSKS		00 21 32	
			iSP		00 24 27	
					micr	sec
			Mx	E	3.8	18
			Mx	N	2.9	20
			Mx	Z	6.0	21
		Ki	iPKP		00 15 17.2	
			i		00 15 23.1	
					micr	sec
			Mx	E	3.3	19
			Mx	N	4.6	20
			Mx	Z	3.8	18
		Um	iPKP		00 15 06.2	
			iSKS		00 21 46	
			iSP		00 25 14	
		Ud	iPP		00 15 19.4	
		Prince Edward Island (h = N).				
		M = 6.2 (Up,Ki).				
"	10	Ud	iP		01 51 55.1	
"	10	Up	iPKP		02 23 00.5	C
			iPKPl		02 23 05.1	D
		(cont.)				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
May 10 (cont.)

Up	iPKP2		02 23 10.3	
			micr	sec
	PKP1	Z'	0.3	0.9
	PKP2	Z'	0.4	0.8
Ki	iPKP1		02 22 41.4	
	i		02 22 50.2	
			micr	sec
	PKP1	Z'	0.1	1.0
Sk	iPKP		02 22 57.2	C
	iPKP1		02 22 59.1	D
Um	iPKP1		02 22 53.3	D
Ud	iPKP		02 23 01.8	C
	iPKP1		02 23 07.0	D
	iPKP2		02 23 13.1	C
De	iPKP		02 23 06.2	C
	iPKP1		02 23 14.9	D
	iPKP2		02 23 26.6	C

Kermadec Islands (h = 230 km).
The clear distribution of C and D (PKP C, PKP1 D, PKP2 C) suggests an interesting effect of source mechanism.

" 10

Up	iP		05 37 27.0	
	ipP		05 37 36.2	
			micr	sec
	Mx	E	0.7	15
	Mx	N	0.4	12
	Mx	Z	1.0	15
Ki	iP		05 36 57.5	C
	ipP		05 37 06.6	
			micr	sec
	Mx	E	0.5	13
	Mx	N	0.7	17
	Mx	Z	0.5	13
Sk	iP		05 37 26.5	
	ipP		05 37 36.8	
Um	iP		05 37 09.2	C
	ipP		05 37 18.3	
Ud	iP		05 37 35.2	
	ipP		05 37 45.6	

Ryukyu Islands.
h = 35 km (Up,Ki,Sk,Um,Ud).
M = 5.3 (Up,Ki).

" 10

Um	iP		06 30 56.1	
	ipP		06 31 20.2	
Ud	iP		06 31 27.0	
De	iP		06 31 42.3	

Japan.
h = 100 km (Um).

" 10 Um iP 07 54 41.7
South of Japan (h = 380 km).

1974
May 10

Up	i(PP)		08 30 49.4	
	iPP		08 30 57.6	
	iSP		08 40 13	
			micr	sec
	PP	Z'	0.1	1.3
	Mx	E	0.8	17
	Mx	N	1.2	22
	Mx	Z	3.8	23
Ki	iP		08 26 14.0	
	i(PP)		08 30 26.7	
	iPP		08 30 37.7	
			micr	sec
	P	Z'	0.1	1.3
	PP	Z'	0.1	1.3
	Mx	E	3.7	21
	Mx	N	3.4	22
	Mx	Z	3.4	19
Sk	iP		08 26 09.1	
	i(PP)		08 30 23.1	
	iPP		08 30 27.2	
Um	iP		08 26 22.5	
	i(PP)		08 30 33.3	
	ePP		08 30 56	
Ud	i(PP)		08 30 32.8	
	iPP		08 30 42.3	

Eastern Pacific Ocean (h = N).
m = 6.4, M = 5.8 (Up,Ki).

" 10 Um iSg1 12 18 29.5
Western USSR-Finland.
Explosion.

" 10

Up	iP		13 53 52.1
	iPP		13 55 14.0
Ki	iP		13 54 26.4
	iPn		13 55 44.6
	iPP		13 55 56.7
Ud	iP		13 54 08.5
	i		13 54 13.7
De	eP		13 53 57

Iran (h = 70 km).

" 10

Um	iP		18 08 58.5
Ud	iP		18 09 23.2
De	iP		18 09 45.7

" 10

Up	iP1		19 35 49.7	
	iP2		19 35 51.0	
	iP3		19 35 53.1	
	iP4		19 36 00.8	
	iS		19 44 25	
			micr	sec
	P2	Z'	0.1	0.9
	P3	Z'	0.2	0.6
	P4	Z'	1.1	1.3

(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
May 10 (cont.)

Up			micr	sec
	Mx	E	15	18
	Mx	N	75	21
	Mx	Z	30	14
Ki	iP2		19 35 34.3	
	iP3		19 35 36.5	
	iP4		19 35 43.7	
	iS		19 43 57	
			micr	sec
	P3	Z'	0.4	0.9
	P4	Z'	0.5	1.0
	Mx	E	55	13
	Mx	N	180	21
	Mx	Z	40	12
Sk	iP2		19 36 00.8	
	iP3		19 36 03.4	
	iP4		19 36 10.5	
Um	iP2		19 35 38.2	
	iP3		19 35 40.5	
	iP4		19 35 47.7	
	iS		19 44 04	
Ud	iP1		19 36 02.1	
	iP2		19 36 03.1	
	iP3		19 36 05.4	
	iP4		19 36 14.0	
	iS		19 44 55.8	
De	iP2		19 36 10.4	
	iP3		19 36 13.4	
	iP4		19 36 20.4	

Szechwan, China (h = 10 km).
m = 6.6 (P3), 6.8 (P4),
M = 7.0 (Up,Ki).
Multiple onsets (in average P2-P1 = 1.2 sec, P3-P1 = 3.6 sec, P4-P1 = 11.1 sec); cf May 8 at 23 45.

" 10	Up	iP	19 44 48.2	
	Um	iP	19 44 36.2	

Szechwan, China.

" 10	Up	eP	19 48 16	
	Um	iP	19 48 06.6	
	Ud	iP	19 48 29.9	

" 11	Up	eP	00 57 15	
		i	00 57 18.1	
		i(PP)	01 00 35.1	
		iSKS	01 07 50	
		iS	01 08 33	
			micr	sec
		P Z'	0.1	1.1
		Mx E	4.7	22
		Mx N	3.8	23
		Mx Z	9.8	23

(cont.)

1974
May 11 (cont.)

Ki	iP		00 56 59.8	
	i		00 57 03.0	
	iSKS		01 07 34	
	iS		01 08 06	
			micr	sec
	P	Z'	0.1	1.2
	i	Z'	0.6	1.3
	Mx	E	10	25
	Mx	N	5.3	18
	Mx	Z	9.2	24
Sk	iP		00 57 20.4	
	i		00 57 23.5	
Um	iP		00 57 04.8	
	i		00 57 08.1	
	iSKS		01 07 40	
	iS		01 08 16	
Ud	iP		00 57 24.2	
	i		00 57 27.2	
	i(PP)		01 00 32.8	
De	eP		00 57 30	
	i(PP)		01 00 59.9	

Molucca Passage (h = N).
m = 6.6, M = 6.3 (Up,Ki).
Double P, in average 3.2 sec apart.
Clear cases of early PP, denoted (PP).

" 11	Up	iPP	01 14 24.9	
	Ki	iP	01 10 10.6	
		iPP	01 14 04.3	
			micr	sec
		P Z'	0.1	1.4
	Sk	iP	01 10 34.4	
		i(PP)	01 13 52.0	
		i	01 14 17.4	
	Um	iP	01 10 15.4	
		iPP	01 14 01.5	
	Ud	iP	01 10 34.6	
		i(PP)	01 13 48.3	
		i	01 14 16.4	

Molucca Passage (h = N).

" 11	Up	iP	02 37 50.7	
		i	02 38 04.1	
	Ki	iP	02 37 49.6	
	Um	iP	02 37 47.7	
		i	02 38 01.6	
	Ud	iP	02 37 59.9	

Sunda Strait (h = 90 km).
Interpreting the second, clear phase at Up,Um as pP yields h = 50 km only.

" 11	Up	iP	03 27 10.4	
	Ki	iP	03 26 53.4	

(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974						
May	11	(cont.)				
		Ud	iP		03 27 18.7	
		Talaud Islands (h = N).				
"	11	Up	eP		05 39 29	
		Um	iP		05 39 17.1	
		Ud	iP		05 39 40.9	
		Szechwan, China (h = N).				
"	11	Up	iP		06 27 12.0	
			i		06 27 29.7	
			iPP		06 30 48.2	
					micr	sec
			P	Z'	0.6	1.0
			PP	Z'	0.1	1.0
			Mx	E	2.3	20
			Mx	N	3.4	19
			Mx	Z	4.3	21
		Ki	iP		06 26 43.0	
			i		06 26 59.9	
					micr	sec
			P	Z'	0.8	1.1
			Mx	E	6.1	21
			Mx	N	5.2	19
			Mx	Z	7.1	20
		Sk	iP		06 27 09.1	
			iPP		06 30 40.3	
		Um	iP		06 26 55.4	
			i		06 27 13.0	
			iS		06 37 36	
		Ud	iP		06 27 17.8	
		De	iP		06 27 30.1	
			i		06 27 46.8	
			iPP		06 31 17.8	
		Mariana Islands (h = 6 km).				
		m = 6.8, M = 6.0 (Up,Ki).				
		After in average 17.2 sec,				
		P is followed by another				
		clear onset (Up,Ki,Um,De).				
"	11	Up	eP		09 22 04	
		Ki	iP		09 21 47.0	
		Sk	eP		09 21 12	
		Um	iP		09 21 58.0	
		Ud	iP		09 21 37.1	
		Iceland (h = 15 km).				
"	11	Up	iP		09 49 47.7	
		Ki	iP		09 49 34.9	
		Szechwan, China (h = N).				
"	11	Ki	iPn		10 18 55.3	
			iSn		10 19 49.8	
		Um	iSgl		10 21 39.0	
		Northwest USSR-Norway.				
		Explosion.				
1974						
May	11	Up	iP		10 42 53.8	
		Ud	iP		10 43 06.5	
"	11	Up	ePKP		13 19 50	
					micr	sec
			Mx	E	1.0	21
			Mx	N	1.3	23
			Mx	Z	2.0	19
		Ki	iPKP		13 20 07.4	
			i		13 20 11.8	
					micr	sec
			PKP	Z'	0.2	1.6
			Mx	E	1.5	18
			Mx	N	1.8	20
			Mx	Z	1.9	18
		Sk	ePKP		13 19 53	
		Um	ePKP		13 20 03	
		South Atlantic Ocean (h = N).				
		M = 5.8 (Up,Ki).				
"	11	Up	iP		14 41 48.6	
		Um	eP		14 41 28	
		South of Japan (h = 10 km).				
"	11	Ki	iP		15 52 49.1	
		Molucca Passage (h = N).				
"	11	Up	iP		18 16 44.8	
		Ki	iP		18 16 30.3	
		Um	iP		18 16 33.5	
		Ud	iP		18 16 58.4	
		Szechwan, China.				
"	11	Up			micr	sec
			Mx	N	0.7	20
			Mx	Z	0.9	22
		Ud	iPKP		18 24 49.8	
		New Hebrides Islands				
		(h = 5 km).				
"	11	Up	iP		19 21 18.2	
		Ki	iP		19 20 24.2	
		Sk	iP		19 20 51.6	
		Um	iP		19 20 52.3	C
		Ud	iP		19 21 15.6	C
		De	iP		19 21 38.7	
		Kodiak Island (h = 25 km).				
"	11	Up	iP		21 06 47.9	
					micr	sec
			Mx	E	1.0	21
			Mx	N	1.9	26
			Mx	Z	2.7	24
		Ki	iP		21 06 31.8	
			iSKS		21 17 03	
		(cont.)				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
May 11 (cont.)

Ki			micr	sec
	P	Z'	0.1	1.0
	Mx	E	2.0	21
	Mx	N	1.8	20
	Mx	Z	2.1	21
Sk	iP		21 06 52.5	
Um	iP		21 06 37.2	
	iSKS		21 17 08	
	iS		21 17 44	
Ud	iP		21 06 56.2	

Molucca Passage (h = N).
M = 5.6 (Up,Ki).

" 11

Up	iP	23 55 38.7	
Ki	eP	23 55 46	
Um	iP	23 55 36.4	
Ud	iP	23 55 53.9	

Pakistan (h = 40 km).

" 12

Up	iP	00 25 57.7	
	iS	00 30 02.6	
Ki	iP	00 27 04.5	
Sk	eP	00 26 37	
Um	iP	00 26 33.6	
Ud	iP	00 26 06.3	
	isS	00 31 16.8	
De	iP	00 25 35.2	
	iS	00 29 24.5	

Dodecanese Islands (h = 160 km).

" 12

Up	iP	02 18 48.3	
Sk	iP	02 19 11.4	
Um	iP	02 18 57.0	
Ud	iP	02 18 58.8	

Indian Ocean (h = N).

" 12

Up	iP	03 01 01.1	
Ki	iP	03 00 43.9	
Sk	iP	03 01 10.4	
Um	iP	03 00 49.1	
Ud	iP	03 01 11.9	

Szechwan, China (h = N).

" 12

Um	iP	04 23 40.1	

Japan (h = 45 km).

" 12

Up	i		10 24 08.1	
	iPP		10 24 11.1	
			micr	sec
	PP	Z'	0.1	1.5
Ki	ePP		10 24 46	
Sk	iP		10 19 51.5	
Um	iPP		10 24 26.6	
	iSKS		10 30 29	

(cont.)

1974
May 12 (cont.)

Ud	iP	10 19 45.8
	e	10 23 55
	iPP	10 23 58.5
De	iPP	10 23 49.5

Chile (h = 110 km).

" 12

Um	iSgl	11 33 22.6

Esthonia.
Explosion.

" 12

Up	iPKP	12 06 36.1
Ki	iPKP	12 06 51.7

		micr	sec
Mx	E	0.7	20
Mx	N	0.9	23
Mx	Z	1.4	24

South Sandwich Islands
(h = N).

" 12

Up	eP	12 10 29
Ki	eP	12 10 09
Sk	eP	12 10 36
Um	iP	12 10 14.6
Ud	iP	12 10 31.7

Molucca Passage (h = N).

" 12

Ki	eP	12 14 01
Um	eP	12 14 06
Ud	eP	12 14 25

Molucca Passage (h = N).

" 12

Up	iSgl	12 27 32.0
Ki	eSgl	12 29 35
Um	iSgl	12 27 49.6
Ud	iSgl	12 28 33.1
De	eSgl	12 28 56

Western USSR.
Explosion.

" 12

Ki	iP	12 45 31.0

Molucca Passage (h = N).

" 12

Ud	iP	12 46 48.2

Kurile Islands.

" 12

Up	iP	16 31 41.5
Ki	iP	16 31 24.7
Um	iP	16 31 28.6
Ud	iP	16 31 53.7

Szechwan, China (h = N).

" 12

Up	iP	19 22 19.0
Um	iP	19 21 55.0
Ud	iP	19 22 26.0

Japan (h = 140 km).

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
May 12 Ki iP 20 12 25.6
Ud iP 20 12 49.7
Molucca Passage (h = N).

" 12 Ki eP 20 17 01
Ud eP 20 17 20
Molucca Passage (h = N).

" 12 Up eP 20 30 54
Ki iP 20 30 36.6
Um iP 20 30 40.6
Ud iP 20 30 59.3
Molucca Passage (h = N).

" 12 Up iP 22 12 10.6
Ki iP 22 12 12.4
Um iP 22 12 05.1
Ud iP 22 12 27.4
De iP 22 12 26.9
Sinkiang, China (h = 180 km).

" 13 Ud iP 01 37 59.1

" 13 Ki iP 01 51 55.5
Kurile Islands (h = 180 km).

" 13 Up iP 02 23 24.1
ipP 02 25 34.0
micr sec
P Z' 0.1 1.0
Ki iP 02 23 07.2
ipP 02 25 16.6
micr sec
P Z' 0.2 1.1
Sk iP 02 23 28.9
Um iP 02 23 12.8
ipP 02 25 22.0
iS 02 33 02
Ud iP 02 23 32.6
ipP 02 25 42.7
De iP 02 23 39.8
Leyte.
h = 600 km (Up,Ki,Um,Ud).
m = 5.7 (Up,Ki).

" 13 Up iP 05 21 24.5
ipP 05 21 38.2
Ki iP 05 20 29.6
ipP 05 20 42.1
Sk iP 05 20 58.2
ipP 05 21 12.2
Um iP 05 20 57.2
ipP 05 21 10.5
Ud iP 05 21 21.9
Alaska.
h = 50 km (Up,Ki,Sk,Um).

1974
May 13 Ud iP 07 37 44.7
Hindu Kush.
Intermediate depth.

" 13 Um iPKP 12 11 36.8
Ud iPKP 12 11 48.3
De iPKP 12 11 55.5
Solomon Islands (h = N).

" 13 Up iSgl 12 13 07.4
Ki eSgl 12 15 02
Sk eSgl 12 14 51
Um iSgl 12 13 24.6
Ud iSgl 12 14 08.2
De iSgl 12 14 34.2
Western USSR.
Explosion.

" 13 Ud iPKPl 12 54 12.0
De iPKPl 12 54 21.2 C
Fiji Islands (h = 600 km).

" 13 Up iP 17 47 52.5 C
i 17 48 07.8
ipP 17 48 35.8
isP 17 48 56.6
micr sec
P Z' 0.7 1.1
Ki iP 17 48 01.2 C
ipP 17 48 45.5
micr sec
P Z' 0.6 1.2
Sk iP 17 48 17.8 C
Um iP 17 47 50.6 C
ipP 17 48 33.7
Ud iP 17 48 09.1 C
ipP 17 48 52.8
isP 17 49 13.0
De iP 17 48 05.1 C
ipP 17 48 48.9
isP 17 49 08.7
Hindu Kush.
h = 210 km (Up,Ki,Um,Ud,De).
m = 6.0 (Up,Ki).

" 13 Up iP 19 07 44.9
i(PP) 19 11 06.5
iPP 19 11 26.9
iSKS 19 18 14
micr sec
Mx E 0.9 19
Mx N 1.7 19
Mx Z 1.8 15
Ki iP 19 07 43.1
ipP 19 07 53.6
(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974						
May	13	(cont.)				
		Ki	iSKS		19 18 14	
			iS		19 18 50	
					micr	sec
			P	Z'	0.2	1.8
			Mx	E	2.9	15
			Mx	Z	2.0	13
		Sk	eP		19 07 58	
		Um	iP		19 07 41.6	
			ipP		19 07 51.0	
			iPP		19 11 24.8	
			iS		19 18 43	
		Ud	iP		19 07 54.1	
			ipP		19 08 03.3	
			iPP		19 11 49.9	
		De	iP		19 07 51.7	
			iPP		19 11 47.4	
		Sumatra.				
		h = 35 km (Ki,Um,Ud).				
		M = 5.8 (Up,Ki).				
"	13	Ki	iP		19 43 53.4	
			ipP		19 44 01.2	
					micr	sec
			pP	Z'	0.1	1.3
		Um	iP		19 43 50.5	
			ipP		19 43 58.9	
		Ud	eP		19 44 02	
			ipP		19 44 10.8	
		Sumatra.				
		h = 30 km (Ki,Um,Ud).				
"	13	Up	eP		20 16 01	
		Ki	iP		20 15 42.0	
		Um	iP		20 15 47.2	
		Ud	iP		20 16 06.3	
		Molucca Passage (h = N).				
"	13	Ki	eP		20 20 43	
		Um	iP		20 20 46.8	
		Molucca Passage (h = N).				
"	13	Up	iP		21 29 34.0	
		Ki	iP		21 29 43.6	
		Um	iP		21 29 32.5	
		Ud	iP		21 29 50.3	
		Hindu Kush (h = 230 km).				
"	14	Sk	iPKP		06 28 28.3	
		Um	iPKP		06 28 23.0	
		Solomon Islands (h = N).				
"	14	Up	iP		08 20 18.6 D	
		Ki	iP		08 19 29.1 D	
		Um	iP		08 19 52.3 D	
		Ud	iP		08 20 24.0 D	
		De	iP		08 20 43.4	
		Okhotsk Sea (h = 520 km).				

1974						
May	14	Up	iSgl		08 36 47.4	
		Ki	iSgl		08 40 50.8	
		Sk	e		08 37 28	
			iSgl		08 39 09.6	
		Um	iPgl		08 36 51.1	
			i		08 37 05.0	
			iSgl		08 38 35.2	
		Ud	ePgl		08 36 11	
			iS*		08 37 24.4	
			iSgl		08 37 31.4	
		De	eSgl		08 36 32	
		Near coast of Lithuania, near 56°N, 20°E.				
		Origin time = 08 34 33.				
		Explosion?				
"	14	Up	iP		08 50 01.5	
		Japan (h = 330 km).				
"	14	Up	iPKPl		11 40 54.6	
		Ud	iPKPl		11 40 56.0	
"	14	Um	iSgl		12 05 07.5	
		Esthonia.				
		Explosion.				
"	14	Um	iP		12 11 45.0	
		Japan (h = 60 km).				
"	14	Up	iSgl		12 12 40.1	
		Ki	iSgl		12 14 40.2	
		Um	iSgl		12 12 54.4	
		Ud	iSgl		12 13 37.4	
		De	iSgl		12 14 00.4	
		Western USSR.				
		Explosion.				
"	14	Ki	iP		13 20 26.8	
		Um	iP		13 20 32.5	
		Ud	iP		13 20 51.5	
		Molucca Passage (h = 40 km).				
"	14	Sk	iSgl		14 01 01.7	
		Um	iSgl		14 00 26.4	
"	14	Up	iP		14 18 21.3	
		Ki	iP		14 17 27.1	
		Sk	iP		14 17 57.8	
			iPcP		14 18 36.5	
		Um	iP		14 17 54.9 C	
			iPcP		14 18 34.9	
		Ud	iP		14 18 19.9 C	
		De	iP		14 18 43.2	
		Unimak Island (h = 25 km).				
"	14	Um	i(Sgl)		16 15 09.4	

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
May 14 Um iP 20 38 19.5
i 20 38 33.0
Japan (h = 30 km).

" 15 Up iP 00 20 48.2 C
Ki iP 00 20 50.3 C
micr sec
P Z' 0.1 0.6
Sk iP 00 21 11.4 C
Um iP 00 20 43.6 C
Ud iP 00 21 04.3 C
De eP 00 21 03
Kashmir-Sinkiang (h = 60 km).

" 15 Um iP 00 47 56.8
Japan (h = 330 km).

" 15 Up iP 04 01 28.4 D
Sk iP 04 01 45.5 D
i 04 01 52.6
Um iP 04 01 21.4 D
Ud iP 04 01 42.2 D
India (h = 30 km).

" 15 Um i 04 09 45.5
Ud i(SKP) 04 10 13.1

" 15 Ki iP 04 47 12.2
Sk iP 04 46 40.8
Ud iP 04 46 38.2
North Atlantic Ocean (h = N).

" 15 Ud iP 05 45 10.7
North Atlantic Ocean (h = N).

" 15 Ki iP 07 32 20.7
Ud iP 07 31 47.7
North Atlantic Ocean (h = N).

" 15 Ud iP 07 34 08.7
North Atlantic Ocean (h = N).

" 15 Ki iP 07 39 49.0
ipP 07 39 55.5
Ud iP 07 39 15.7
ipP 07 39 21.9
North Atlantic Ocean.
h = 25 km (Ki,Ud).

" 15 Ki iP 08 04 37.7
ipP 08 04 43.8
Ud iP 08 04 04.1
ipP 08 04 09.8
North Atlantic Ocean.
h = 20 km (Ki,Ud).

1974
May 15 Ki iP 09 04 27.0
Ud iP 09 03 52.5
North Atlantic Ocean (h = N).

" 15 Ki iSn 09 17 23.2
iSgl 09 17 37.8
Northwest USSR-Norway.
Explosion.

" 15 Ki iP 10 29 40.3
Ud iP 10 29 05.7
North Atlantic Ocean (h = N).

" 15 Ud iP 10 42 18.9
North Atlantic Ocean (h = N).

" 15 Ki iP 10 43 30.9
Sk eP 10 43 00
Um iP 10 43 20.1
Ud iP 10 42 57.1
De iP 10 42 51.7
North Atlantic Ocean (h = N).

" 15 Ud iP 10 56 45.0

" 15 Ki iP 11 17 40.8
Sk iP 11 17 09.2
Ud iP 11 17 06.8
North Atlantic Ocean (h = N).

" 15 Up iSgl 11 23 09.1
Ki eSgl 11 25 45
Sk eSgl 11 25 03
Um iSgl 11 23 44.9
Ud iSgl 11 24 13.4
De eSgl 11 24 45
Esthonia.
Explosion.

" 15 Up iPKPl 11 32 21.2
Ud iPKPl 11 32 23.5

" 15 Ud iP 12 43 18.7

" 15 Up iP 13 14 59.3 C
micr sec
P Z' 0.1 1.0
Ki iP 13 14 06.1 C
micr sec
P Z' 0.2 0.9
Sk iP 13 14 36.3 C
Um iP 13 14 32.9 C
Ud iP 13 14 58.5 C
De iP 13 15 21.0 C
ipP 13 15 32.9
(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
May 15 (cont.)
Aleutian Islands.
h = 45 km (De).
m = 6.1 (Up,Ki).

" 15 Ki iP 13 46 43.8
Sk eP 13 46 12
Ud iP 13 46 09.1
North Atlantic Ocean (h = N).

" 15 Ki iP 13 53 43.9
Sk iP 13 53 14.0
Ud iP 13 53 10.7
North Atlantic Ocean (h = N).

" 15 Ki iP 14 08 48.4
Sk eP 14 08 17
Ud iP 14 08 15.8
De eP 14 08 09
North Atlantic Ocean (h = N).
In general, P Z' exhibit relatively long periods in this sequence of North Atlantic earthquakes.

" 15 Ki iP 15 01 38.0
Ud iP 15 01 03.9
North Atlantic Ocean (h = N).

" 15 De i 15 52 10.5
i 15 52 15.7
iSgl 15 52 36.6

" 15 Ki iP 17 00 29.8
Ud eP 16 59 57.6

" 15 De i 17 13 04.0
i 17 13 08.7
iSgl 17 13 31.4

" 15 Ki iP 17 23 13.2
Sk iP 17 22 42.2
Ud iP 17 22 39.6
North Atlantic Ocean.

" 15 De i 17 56 34.0
iSgl 17 56 59.4

" 15 Up iPKP 18 58 55.2
ipPKP 18 59 27.7
Ki iPKP 18 59 10.5
ipPKP 18 59 42.6
iSKPl 19 02 35.3
micr sec
PKP Z' 0.1 1.0
(cont.)

1974
May 15 (cont.)
Sk ePKP 18 59 00
Um iPKP 18 59 04.0
ipPKP 18 59 35.6
Ud iPKP 18 58 53.6
ipPKP 18 59 25.8
South Sandwich Islands.
h = 120 km (Up,Ki,Um,Ud).

" 15 Up iP 19 10 32.5 C
iS 19 19 09
micr sec
P Z' 0.2 1.0
Mx E 21 20
Mx N 55 21
Mx Z 84 21
Ki iP 19 09 41.0 C
iS 19 17 35
micr sec
P Z' 0.6 1.0
Mx E 32 19
Mx N 36 23
Mx Z 22 22
Sk iP 19 10 18.1 C
Um iP 19 10 05.8 C
iS 19 18 21
i(P'P') 19 39 15.3
Ud iP 19 10 37.0 C
De iP 19 10 57.6 C
i(P'P') 19 38 58.9
Kurile Islands (h = 55 km).
m = 6.3, M = 6.7 (Up,Ki).

" 15 Up iP 19 38 46.5
Ki iP 19 39 07.0
Sk iP 19 38 35.8
Um iP 19 38 58.8
i 19 39 06.8
Ud iP 19 38 31.9
De iP 19 38 31.7
North Atlantic Ocean (h = N).

" 15 Ki iP 22 31 12.2
ipP 22 31 19.0
Sk iP 22 30 40.8
Ud iP 22 30 38.0
North Atlantic Ocean.
h = 25 km (Ki).

" 16 Up iPKPl 01 27 33.6
Sk ePKPl 01 27 28
Um iPKPl 01 27 23.3
i 01 27 43.5
Ud iPKPl 01 27 35.4

" 16 Up iP 03 09 53.0 C
(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974							
May	16	(cont.)					
		Up	iPn		03	11	00.5
			iPP		03	11	11.7
					micr		sec
			P	Z'	0.1		0.9
		Ki	iP		03	09	37.5 C
			iPn		03	10	36.9
					micr		sec
			P	Z'	0.2		0.5
		Sk	iP		03	10	09.1 C
			iPP		03	11	31.6
		Um	iP		03	09	37.9 C
			i		03	10	27.4
			iPn		03	10	39.3
		Ud	iP		03	10	09.3 C
			iPn		03	11	22.3
		De	iP		03	10	16.2 C
			iPP		03	11	41.6
		Kazakh SSR.					
		Underground explosion.					
		m = 6.0 (Up,Ki).					
"	16	Ki	iP		05	22	42.3
		Sk	eP		05	23	14
		Um	eP		05	23	05
		Ud	iP		05	23	35.3
		De	iP		05	23	58.3
		Aleutian Islands (h = N).					
"	16	Ki	iP		08	11	33.5
		Sk	iP		08	11	52.1
		Um	iP		08	11	24.3
		Ud	iP		08	11	44.0
		De	iP		08	11	41.0
		Pamir.					
		Intermediate depth.					
"	16	Um	iP		09	05	46.3
		Ud	i(P)		09	04	59.8
"	16	Um	i(Sgl)		09	52	20.2
"	16	Up	iPKPl		10	32	51.9
		Ud	iPKPl		10	32	53.6
"	16	Ud	iPgl		13	07	30.7
			iSgl		13	07	58.3
			iRg		13	08	10.6
		De	iSgl		13	08	03.0
		Bohuslän, Sweden,					
		58.3°N, 11.9°E.					
		Origin time = 13 06 55.					
"	16	Sk	iP		13	15	00.4
		Ud	iP		13	15	21.4
		State of Washington					
		(h = 55 km).					

1974							
May	16	Up	iSgl		13	20	48.5
		Sk	eSgl		13	22	44
		Um	iSgl		13	21	08.1
		Ud	eSgl		13	21	52
		Western USSR.					
		Explosion.					
"	16	Up	eP		15	12	47
					micr		sec
			Mx	E	0.5		13
			Mx	N	0.5		13
			Mx	Z	0.5		13
		Ki			micr		sec
			Mx	E	0.4		10
			Mx	N	0.2		8
		Sk	eP		15	13	24
		Ud	iP		15	12	52.0
		De	iP		15	12	20.0
		Dodecanese Islands (h = N).					
		M = 4.5 (Up,Ki).					
"	16	Up	iP		16	15	16.2
		Ki	iP		16	15	24.4
		Sk	iP		16	15	42.1
		Um	iP		16	15	14.6
		Ud	iP		16	15	32.8
		De	iP		16	15	29.8
		Afghanistan-USSR (h = 240 km).					
"	16	Ki	iP		17	25	25.7
		Ud	iP		17	24	52.0
		North Atlantic Ocean.					
		Origin time = 17 15 53.					
"	16	Ud	iP		17	30	44.3
"	16	Up	iPgl		18	19	42.3
			iSgl		18	19	59.7
			i		18	20	02.2
			iRg		18	20	06.9
		Um	iSgl		18	20	44.2
		Ud	iSgl		18	20	17.3
		Hälsingland, Sweden,					
		61.2°N, 17.0°E.					
		Origin time = 18 19 17.					
		Explosion?					
"	16	Up	eSgl		18	56	35
		Ki	eSgl		18	54	31
		Sk	eS*		18	54	34
			iSgl		18	54	39.2
		Um	iSn		18	54	44.3
			iSgl		18	54	58.0
		Ud	iSgl		18	56	24.1
		Nordland, Norway,					
		66.5°N, 14.3°E.					
		Origin time = 18 53 03.					
		Explosion.					

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974							
May	16	Up	iP		20 11 27.6	D	
			iPP		20 14 41.0		
			iS		20 20 55		
					micr	sec	
			P	Z'	0.4	0.9	
			PP	Z'	0.5	1.5	
			Mx	E	0.5	16	
			Mx	N	0.8	17	
			Mx	Z	0.7	20	
		Ki	iP		20 10 56.6	D	
			iS		20 19 57		
					micr	sec	
			P	Z'	0.4	1.0	
			Mx	E	0.7	16	
			Mx	N	0.7	16	
		Sk	iP		20 11 24.7	D	
			iPP		20 14 36.7		
		Um	iP		20 11 10.0	D	
			iPP		20 14 13.4		
			iS		20 20 21.2		
		Ud	iP		20 11 34.3	D	
			iPP		20 14 52.4		
		De	iP		20 11 46.2	D	
			ipP		20 13 42.6		
			iPP		20 15 13.1		
		Bonin Islands.					
		h = 530 km (De).					
		m = 5.9, M = 5.3 (Up,Ki).					
		M uncorrected for focal depth.					
"	16	Um	iP		20 25 07.9		
"	16	Sk	iP		20 30 00.1		
		Ud	iP		20 29 55.2		
"	16	Ki	iP		21 33 21.1		
		Ud	iP		21 32 47.1		
		North Atlantic Ocean (h = N).					
"	16	Ud	iP		22 17 34.4		
"	16	Up	iP		22 25 06.4		
		Um	iP		22 25 04.3		
		Ud	iP		22 25 22.6		
		Hindu Kush.					
		Intermediate depth.					
"	16	Up	eP		23 20 23		
			i		23 20 41.1		
					micr	sec	
			Mx	E	1.1	19	
			Mx	N	1.1	20	
			Mx	Z	2.7	20	
		Ki	eP		23 20 26		
		(cont.)					

1974							
May	16	(cont.)					
		Ki			micr	sec	
			Mx	E	3.3	18	
			Mx	N	2.4	17	
		Sk	eP		23 20 17		
		Um	iP		23 20 28.3		
			i		23 20 41.3		
			iS		23 30 56		
		Ud	eP		23 20 17		
			i		23 20 31.3		
		Nicaragua (h = 35 km).					
		M = 5.7 (Up,Ki).					
"	17	Up	iP		02 35 41.6		
		Ud	iP		02 35 48.6		
"	17	Um	iP		03 45 48.4		
		Ud	iP		03 46 14.0		
"	17	Up	epPKP		04 10 40		
		Ki	ipPKP		04 10 26.5		
		Sk	ipPKP		04 10 39.7		
		Um	ePKP		04 10 17		
			ipPKP		04 10 32.7		
		Solomon Islands.					
		h = 55 km (Um).					
"	17	Up	iP		10 29 41.5		
		Kurile Islands.					
"	17	Up	eSgl		12 23 01		
		Ki	ePgl		12 18 58		
			iSn		12 19 45.3		
			iS*		12 20 04.1		
		Sk	iSgl		12 22 33.7		
		Um	iSn		12 20 23.9		
			iSgl		12 21 00.8		
		Ud	iSgl		12 23 30.1		
		Northwest USSR.					
		Explosion.					
"	17	Ki	iSn		12 21 49.9		
		Sk	eSgl		12 24 40		
		Um	eSgl		12 23 05		
		Northwest USSR.					
		Explosion.					
"	17	Up	iP		13 52 37.7	C	
			ipP		13 53 23.8		
					micr	sec	
			P	Z'	0.4	0.9	
		Ki	iP		13 52 46.3	C	
			ipP		13 53 30.9		
					micr	sec	
			P	Z'	0.3	0.6	
		(cont.)					

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
May 17 (cont.)

Sk	iP		13 53 03.4	C
Um	iP		13 52 35.9	C
	ipP		13 53 20.1	
Ud	iP		13 52 53.9	C
	ipP		13 53 39.4	
De	iP		13 52 50.5	C
	ipP		13 53 34.8	

Hindu Kush.
h = 220 km (Up,Ki,Um,Ud,De).
m = 5.9 (Up,Ki).

" 17

Up	iP		14 31 45.5	
			micr	sec
	P	Z'	0.1	1.1
	Mx	E	0.6	12
	Mx	N	0.7	14
	Mx	Z	0.6	14
Ki	iP		14 31 26.1	
	iS		14 34 47	
			micr	sec
	P	Z'	0.2	1.5
	Mx	E	1.5	16
	Mx	N	1.3	13
	Mx	Z	1.0	17
Sk	iP		14 30 58.3	
	i		14 31 03.8	
Um	iP		14 31 37.4	
Ud	iP		14 31 24.1	
	i		14 31 27.2	
De	iP		14 31 49.5	

Iceland (h = N).
m = 5.0, M = 4.4 (Up,Ki).

" 17

Up	iP		15 35 46.4	
	ipP		15 36 14.5	
	isP		15 36 28.4	
	iSKS		15 46 12	
	iS		15 47 14	
			micr	sec
	pP	Z'	0.1	1.2
	Mx	E	0.9	22
	Mx	N	0.8	22
	Mx	Z	0.9	22
Ki	iP		15 35 51.3	
	ipP		15 36 20.9	
	iSKS		15 46 21	
			micr	sec
	pP	Z'	0.1	1.0
	Mx	E	2.5	23
	Mx	N	0.9	13
	Mx	Z	1.4	15
Sk	iP		15 35 36.8	
	ipP		15 36 05.3	
Um	iP		15 35 53.0	

(cont.)

1974
May 17 (cont.)

Um	ipP		15 36 20.7
	iSKS		15 46 20
	iS		15 47 26
Ud	iP		15 35 36.9
	ipP		15 36 06.1
	isP		15 36 19.5
De	iP		15 35 36.1
	ipP		15 36 04.3

Peru.
h = 110 km (Up,Ki,Sk,Um,Ud, De).
M = 5.6 (Up,Ki).
M uncorrected for focal depth.
pP and sP are considerably larger than P.

" 17

Up	iP		17 23 42.8	D
			micr	sec
	P	Z'	0.2	0.9
	Mx	E	4.8	17
	Mx	N	8.3	18
	Mx	Z	17	14
Ki	iP		17 23 16.1	D
			micr	sec
	P	Z'	0.1	0.9
	Mx	E	8.3	14
	Mx	N	7.2	13
	Mx	Z	6.6	14
Sk	iP		17 23 45.2	D
Um	iP		17 23 26.2	D
Ud	iP		17 23 52.0	D
De	iP		17 24 01.7	D

Ryukyu Islands (h = 20 km).
m = 6.1, M = 6.3 (Up,Ki).

" 17

Up	iP		19 53 19.3
	i		19 53 22.9
Ki	eP		19 54 00
	i		19 54 07.3
	iPP		19 55 44.0
Sk	eP		19 53 59
Um	iP		19 53 34.0
	i		19 53 39.4
Ud	iP		19 53 35.6
	i		19 53 39.0
De	iP		19 53 20.6
	i		19 53 24.7

Iran (h = N).
Double P phases, suggesting a double event with a slight shift in epicenter.

" 17

Up	iSgl		20 30 32.4
	iRg		20 30 36.0

(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
May 17 (cont.)

Um	iPgl		20 31 05.6	
	iSgl		20 31 59.5	
Ud	iRg		20 30 21.2	
De	eSgl		20 31 56	

Dalarna, Sweden,
60.4°N, 15.3°E.
Origin time = 20 29 55.
Near-surface event.

" 17

Up	iP		20 37 29.1	
Ki	iP		20 36 57.5	
Um	iP		20 37 11.3	
Ud	iP		20 37 36.0	

Bonin Islands (h = 510 km).

" 17

Up	iP		21 08 19.7	C
	ipP		21 08 54.9	
	iSKS		21 18 39	
	iS		21 19 19	
	iSP		21 20 37	
			micr sec	
	P	Z'	0.4 1.1	
	Mx	E	0.8 17	
	Mx	N	1.3 18	
	Mx	Z	1.7 21	
Ki	iP		21 08 16.9	C
	ipP		21 08 53.5	
	iSKS		21 18 31.1	
	i		21 18 50.6	
	iSP		21 20 42.7	
			micr sec	
	P	Z'	0.7 1.0	
	Mx	E	1.6 17	
	Mx	N	2.6 17	
	Mx	Z	1.4 15	
Sk	iP		21 08 32.8	C
	ipP		21 09 07.9	
	i		21 20 53.1	
	iSP		21 21 08.4	
Um	iP		21 08 16.1	C
	ipP		21 08 51.6	
	iSKS		21 18 34	
	iS		21 19 10	
Ud	iP		21 08 28.9	C
	ipP		21 09 04.1	
	i		21 18 27.8	
De	iP		21 08 28.3	C
	ipP		21 09 03.0	
	i		21 18 26.4	
	iSP		21 20 55.7	

Java.
h = 140 km (Up,Ki,Sk,Um,Ud, De).
m = 6.7, M = 5.7 (Up,Ki).
M uncorrected for focal depth.

1974
May 17

Um	iP		21 31 56.6	
	i		21 32 06.6	

South of Bali Island (h = N).

" 17

Sk	iP		21 38 15.5	
Um	iP		21 38 27.8	
De	iP		21 38 35.4	

" 17

Up	iP		21 38 29.8	
Ud	iP		21 38 46.0	
De	iP		21 38 28.3	

Separation between this event and the preceding one questionable, especially for Up and De.

" 17

Ud	iP		21 51 17.2	

" 17

Up	e(PKP)		23 25 07	
	iPKPl		23 25 21.1	
	ipPKPl		23 27 23.9	
			micr sec	
	PKPl	Z'	0.4 1.0	
Ki	ePKP		23 25 10	
	iSKPl		23 27 55.4	
			micr sec	
	SKPl	Z'	0.1 1.0	
Sk	iPKP		23 25 17.7	
Um	e(PKP)		23 25 08	
	iPKP		23 25 15.2	
	iSKPl		23 28 06.7	
Ud	iPKPl		23 25 21.3	C
De	iPKPl		23 25 32.9	C
	iPKP2		23 25 37.5	
	ipPKPl		23 27 35.0	

Tonga-Kermadec Islands.
h = 540 km (Up,De).

" 17

Up	iPKPl		23 37 27.3	
Ud	iPKPl		23 37 29.8	
De	iPKPl		23 37 39.7	

" 18

Up	iP		02 43 46.2	C
Ki	iP		02 44 00.6	
Sk	iP		02 44 12.9	
Um	iP		02 43 48.3	C
Ud	iP		02 44 01.6	C
De	iP		02 43 54.7	

India.
Underground explosion.

" 18

Ki	iPgl		10 51 05.3	
	iSn		10 51 39.2	
	iSgl		10 51 54.9	

Northwest USSR-Norway.
Explosion.

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 May	18	Ki	iSn	11 56 44.2	
			iSgl	11 57 01.6	
		Northwest USSR-Norway.			
		Explosion.			
"	18	Up	iPKPl	12 17 38.4	
		Ki	ePKP	12 17 21	
		Sk	iPKPl	12 17 32.3	C
		Um	iPKPl	12 17 28.2	C
		Ud	iPKP	12 17 34.3	
			iPKPl	12 17 40.3	C
		De	iPKP	12 17 41.1	
			iPKPl	12 17 48.4	C
		Kermadec Islands (h = 45 km).			
"	18	Ki	iSgl	12 23 11.3	
		Northwest USSR.			
		Explosion.			
"	18	Ud	iPKPl	14 17 17.7	
"	18	Up	eP	18 57 07	
			i	18 57 16.1	
		Ud	iP	18 57 17.7	
			i	18 57 25.2	
"	18	Um	iP	19 44 45.7	
		Ud	eP	19 45 14	
"	18	Ud	eP	20 05 33	
"	18	Up	i(P)	20 06 23.7	
		Ud	iP	20 06 38.5	
		Pamir.			
"	18	Up	iP	20 40 15.7	
		Um	iP	20 39 55.5	
		Ud	iP	20 40 23.0	
"	18	Ud	iP	23 00 11.8	
"	18	Up	eP	23 44 11	
			iS	23 47 41	
				micr	sec
			Mx E	0.5	14
			Mx N	0.7	15
		Ki	iP	23 43 50.8	
				micr	sec
			Mx E	0.5	12
			Mx N	0.7	13
			Mx Z	0.5	12
		Sk	iP	23 43 23.0	
			i	23 43 25.6	
		Um	iP	23 44 02.5	
			i	23 44 04.7	
		(cont.)			

1974 May	18	(cont.)			
		Ud	iP	23 43 50.4	
		De	iP	23 44 13.8	
		Iceland.			
		M = 4.3 (Up,Ki).			
"	19	Um	iPKPl	03 15 07.0	
"	19	Ud	iP	03 34 50.6	
"	19	Up	iS*	04 37 31.1	
			iSgl	04 37 38.9	
		Ki	iPn	04 33 22.0	
			iSn	04 34 20.1	
			iSgl	04 34 41.5	
		Sk	iSgl	04 37 07.6	
		Um	iSn	04 35 00.9	
			i	04 35 14.8	
			iSgl	04 35 34.1	
		Ud	iPn	04 34 50.3	
			eSn	04 36 56	
			iSgl	04 38 05.4	
		De	eSgl	04 39 45	
		Northwest USSR.			
		Explosion.			
"	19	Ki	iSn	06 32 24.1	
		Um	iSgl	06 33 40.7	
		Northwest USSR.			
		Explosion.			
"	19	Ud	iP	08 27 04.2	
"	19	Up	iPn	15 58 33.1	
			i	15 58 39.8	
			iSgl	16 00 27.1	
		Sk	eS*	16 00 44	
			iSgl	16 00 49.7	
		Um	iSgl	16 02 04.5	
		Ud	ePn	15 58 09	
			i	15 59 04.5	
			iSn	15 59 11.2	
			iSgl	15 59 34.1	
		North Sea, 56.6°N, 6.0°E.			
		Origin time = 15 56 51.			
		By combination with Bergen and Kongsberg readings.			
"	19	Ki	iP	19 01 41.7	
		Ud	iP	19 02 34.1	
		Alaska (h = N).			
"	19	Up	iP	22 06 25.2	
			ipP	22 06 42.3	
			iS	22 10 42.6	
		(cont.)			

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
May 19 (cont.)

Up	iScP		22	13	33.7
			micr		sec
	pP	Z'	0.1		1.0
	Mx	E	0.4		9
	Mx	N	0.4		10
	Mx	Z	0.5		9
Ki	iP		22	07	32.6
	iS		22	12	44.1
			micr		sec
	P	Z'	0.1		0.7
	Mx	E	0.6		14
	Mx	N	0.5		13
	Mx	Z	0.5		13
Sk	iP		22	07	04.5
	iScP		22	13	47.1
Um	iP		22	06	57.9
Ud	iP		22	06	33.2

Crete.
h = 90 km (Up).
m = 5.6, M = 4.5 (Up,Ki).
M uncorrected for focal depth.

" 20	Up	iP	00	24	57.7
		ipP	00	25	09.6
	Ki	iP	00	24	05.0 C
		ipP	00	24	16.0
	Um	iP	00	24	29.6
		ipP	00	24	40.7
	Ud	iP	00	25	01.5

Kamchatka.
h = 40 km (Up,Ki,Um).

" 20	Up	iSn	09	06	30.0
		iSgl	09	07	06.0
	Ki	iPn	09	04	12.3
		iPgl	09	04	15.8
		iSgl	09	04	54.1
	Sk	iPn	09	04	17.0
		iSgl	09	05	07.1
	Um	iPn	09	04	30.7
		iPgl	09	04	37.8
		iSn	09	05	16.8
		iSgl	09	05	32.8
	Ud	iSn	09	06	18.7
		i	09	06	36.3
		iSgl	09	06	52.3
	De	eSgl	09	08	52

Coast of Nordland, Norway,
66.8°N, 13.7°E.
Origin time = 09 03 26.

" 20	Up	iP	10	51	15.6	D
		ipP	10	51	21.3	

(cont.)

1974
May 20 (cont.)

Up			micr		sec	
	P	Z'	0.1		0.9	
Ki	iP		10	51	55.5	D
Sk	iP		10	51	47.8	D
Um	iP		10	51	32.1	
	ipP		10	51	38.5	
Ud	iP		10	51	27.3	D
	ipP		10	51	32.8	
De	iP		10	51	08.3	

Gulf of Aden.
h = 25 km (Up,Um,Ud).

" 20	Um	iSgl	13	25	56.9	

Western USSR.
Explosion.

" 20	Um	i(Sgl)	13	29	59.2	

" 20	Up	iP	17	47	24.3	
	Ki	iP	17	47	31.1	
	Sk	iP	17	47	48.7	
	Um	iP	17	47	21.8	
	Ud	iP	17	47	40.4	C
	De	iP	17	47	37.4	

Kashmir (h = N).

" 20	Up	iP	18	54	16.1
	Ki	iP	18	53	22.5
	Um	iP	18	53	48.4
	Ud	iP	18	54	18.2
	De	iP	18	54	39.9

Aleutian Islands (h = 40 km).

" 20	Up	iP	19	35	02.0

" 20	Ud	iP	20	12	33.4

Kurile Islands.

" 20	Up	iP	20	22	29.1
	Um	iP	20	22	27.2
	Ud	iP	20	22	45.0
	De	iP	20	22	43.4

Afghanistan-USSR (h = 240 km).

" 21	Up	iP	00	45	59.7
	Ki	iP	00	45	43.7
	Um	iP	00	45	49.2
	Ud	iP	00	46	08.4
	De	iP	00	46	13.8

Mindanao (h = 80 km).

" 21	Up	iPKP	02	21	46.7
		iSKP1	02	25	03.8
	Ki	iPKP	02	22	00.8
		iSKP1	02	25	06.6

(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974					
May	21	(cont.)			
		Ki		micr sec	
			SKPl Z'	0.1 1.4	
		Um	iPKP	02 21 54.0	
		Ud	iPKP	02 21 44.1	
		South Sandwich Islands			
		(h = 160 km).			
"	21	Up	iPKPl	05 05 56.7	
			iSKPl	05 08 47.4	
		Ki	iPKP	05 05 49.8	
			iSKPl	05 08 24.3	
				micr sec	
			SKPl Z'	0.1 1.4	
		Sk	iSKPl	05 08 40.7	
		Um	iPKP	05 05 55.2	
			iSKPl	05 08 35.8	
		Ud	iPKPl	05 05 57.7	
			iSKPl	05 08 49.0	
		De	iPKP	05 06 08.6	
			iPKPl	05 06 09.9	
			iSKPl	05 08 58.1	
		Tonga-Kermadec Islands			
		(h = 570 km).			
"	21	Up	iP	07 45 53.9	
		Germany.			
"	21	Up	iP	08 10 46.9	
		Sk	iP	08 10 59.3	
		Um	iP	08 10 39.2	
		Ud	iP	08 10 56.2	
		Java (h = 90 km).			
"	21	Up	iSgl	09 28 09.4	
		Ud	iSgl	09 28 13.8	
		De	iPgl	09 26 09.5	
			iSgl	09 26 25.2	
		Baltic Sea, south of Sweden,			
		55.5°N, 15.0°E.			
		Origin time = 09 25 50.			
		Explosion.			
"	21	Up	iSgl	09 37 10.0	
		Ud	iSgl	09 37 13.8	
		De	iPgl	09 35 10.7	
			iSgl	09 35 28.5	
		Baltic Sea, south of Sweden,			
		55.5°N, 15.0°E.			
		Origin time = 09 34 50.			
		Explosion.			
"	21	Up	iPgl	09 41 07.9	
			iSgl	09 41 35.6	
		Ud	eSgl	09 42 27	
		(cont.)			

1974				
May	21	(cont.)		
		De	iPgl	09 41 29.7
			eSgl	09 42 15
		Near Gotland, Sweden.		
		Origin time = 09 40 31.		
		Underwater explosion.		
"	21	Um	i(P)	10 44 01.2
"	21	Up	iSn	11 49 47.1
			iSgl	11 49 58.1
		Ki	iSgl	11 52 31.0
		Sk	iSgl	11 51 47.0
		Um	iSgl	11 50 34.1
		Ud	iSn	11 50 35.2
			iSgl	11 51 02.4
		De	iSgl	11 51 32.2
		Esthonia.		
		Explosion.		
"	21	Up	iSgl	12 09 02.1
		Sk	eSgl	12 10 50
		Um	iSgl	12 09 20.7
			iRg	12 09 54.6
		Ud	iSgl	12 10 04.3
		De	iSgl	12 10 32.7
			iSg2	12 10 43.4
		Western USSR.		
		Explosion.		
"	21	Sk	iP	12 14 05.0
		Um	iP	12 14 27.7
		Ud	iP	12 14 07.0
"	21	Up	iSgl	12 46 43.7
		Um	iSgl	12 46 54.5
			eRg	12 47 32
		Ud	iSgl	12 47 36.7
		De	eSgl	12 48 10
		Western USSR.		
		Explosion.		
"	21	Up	iSgl	13 02 15.4
		Sk	iSgl	13 04 16.0
		Um	iSgl	13 03 06.9
		De	iSgl	13 03 46.2
		Esthonia.		
		Explosion.		
"	21	Up	iSgl	14 51 04.5
		Um	iSgl	14 51 19.0
		Probably western USSR.		
		Explosion.		
"	21	Up	iSgl	14 55 33.4
		(cont.)		

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974					
May	21	(cont.)			
		Um	iSgl	14 57 33.4	
		Ud	iSgl	14 56 19.2	
		De	eSgl	14 56 41	
		Off coast of Södermanland, Sweden, 58.9°N, 17.7°E.			
		Origin time = 14 55 02.			
		Explosion.			
"	21	Up	iPgl	14 55 39.1	
			iSgl	14 55 53.1	
			iRg	14 55 59.7	
		Um	iSgl	14 57 54.0	
		Ud	iSgl	14 56 38.5	
		De	iPn	14 56 11.9	
			iSgl	14 56 58.2	
		Off coast of Södermanland, Sweden, 58.9°N, 17.7°E.			
		Origin time = 14 55 22.			
		Explosion.			
"	21	Up	iSgl	15 09 22.4	
		Ud	iSn	15 08 09.4	
			iS*	15 08 20.6	
			iSgl	15 08 27.0	
		Coast of south Norway, 58.2°N, 6.4°E.			
		Origin time = 15 06 17.			
		By combination with Bergen and Kongsberg readings.			
"	21	Ki	iPgl	15 34 33.5	
			i	15 34 49.6	
			iSgl	15 34 52.1	
		Um	iPgl	15 35 19.0	
			i	15 35 48.5	
			iSn	15 35 55.4	
		Swedish Lapland.			
		Origin time = 15 34 10.			
"	21	Up	eP	16 10 33	
		Ki	iP	16 10 33.8	
		Sk	iP	16 10 02.5	
		Um	iP	16 10 36.9	
		Ud	iP	16 10 16.4	
		De	iP	16 10 29.9	
		North Atlantic Ocean (h = N).			
"	21	Up	iPgl	16 49 28.5	
			iSgl	16 49 54.4	
		Um	iSgl	16 51 58.4	
		Ud	iPgl	16 49 55.2	
			iSgl	16 50 37.8	
			i	16 50 45.3	
		De	iPn	16 49 43.0	
		(cont.)			

1974					
May	21	(cont.)			
		De	iPgl	16 49 49.0	
			iSgl	16 50 28.2	
		Near Gotland, Sweden, 58.0°N, 18.4°E.			
		Origin time = 16 48 58.			
		Underwater explosion.			
"	21	Up	ePgl	16 52 12	
			iSn	16 52 38.6	
			iSgl	16 52 50.0	
			i	16 52 51.3	
		Ki	iSgl	16 56 36.4	
		Sk	ePgl	16 52 50	
			iSn	16 53 41.0	
			iSgl	16 54 04.8	
			i	16 54 20.1	
		Um	eSn	16 54 09	
			i	16 54 28.7	
			i	16 54 40.0	
			i	16 54 43.2	
			iSgl	16 54 44.4	
		Ud	iPgl	16 51 51.6	C
			i	16 51 54.0	D
			iSgl	16 52 15.8	
			i	16 52 17.4	
		De	iPgl	16 51 52.4	D
			iSgl	16 52 17.8	
		Västergötland, Sweden, 58.3°N, 12.8°E.			
		Origin time = 16 51 21.			
		Felt.			
		By combination with Bergen and Kongsberg readings.			
"	21	Up	iP	19 23 24.3	
		Um	iP	19 23 15.3	
		Ud	iP	19 23 33.7	
"	22	Um	iP	06 31 05.0	
"	22	Up	iP	07 45 03.6	
		Ud	iP	07 45 07.2	
		Greece (h = 130 km).			
"	22	Ud	iSgl	10 15 37.0	
		De	iPgl	10 13 18.0	
			eSgl	10 13 50	
"	22	Ki	iPgl	10 53 01.6	
			iSn	10 53 39.7	
			iSgl	10 53 55.0	
		Northwest USSR-Norway.			
		Explosion.			
"	22	Up	iSgl	12 09 15.0	
		(cont.)			

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974						
May	22	(cont.)				
		Ki	eSgl	12 11 13		
		Ud	iSgl	12 10 12.8		
		De	iSgl	12 10 44.1		
		Western USSR.				
		Explosion.				
"	22	Up	iSn	12 12 08.9		
			iSgl	12 12 16.5		
		Ki	eSgl	12 14 55		
		Sk	iSgl	12 14 14.0		
		Ud	iSgl	12 13 22.9		
		De	iSgl	12 13 49.4		
		Esthonia.				
		Explosion.				
"	22	Up	iPKPl	17 51 21.2		
		Ud	iPKPl	17 51 23.6	C	
"	22	Up	iPKPl	19 28 12.5		
		Ud	iPKPl	19 28 14.8	C	
		De	iPKPl	19 28 25.4	C	
"	22	Up	iRg	21 15 56.0		
		Ud	iRg	21 15 42.7		
		Central Sweden.				
"	22	Ki	eP	21 58 48		
"	23	Ki	iP	02 19 03.4		
			i	02 19 07.1		
		Ud	iP	02 19 18.4		
		De	eP	02 19 19		
		Sinkiang, China (h = N).				
"	23	Ud	eP	02 22 19		
"	23	Up	iP	05 28 00.3	C	
		Ki	iP	05 27 07.8		
		Um	iP	05 27 32.9		
		Ud	iP	05 28 00.8		
		Aleutian Islands (h = 35 km).				
"	23	Up	iPKPl	07 03 08.3		
			i	07 03 15.5		
			i	07 03 30.5		
				micr	sec	
			Mx N	0.8	19	
			Mx Z	1.1	20	
		Ki	iPKP	07 02 50.8		
				micr	sec	
			Mx E	0.9	20	
			Mx N	1.1	20	
			Mx Z	1.2	20	
		Sk	iPKPl	07 03 01.9		
		(cont.)				

1974						
May	23	(cont.)				
		Um	iPKPl	07 02 56.2		
		Ud	iPKPl	07 03 10.0		
		De	iPKPl	07 03 19.6		
			ipPKPl	07 03 36.2		
		Kermadec Islands.				
		h = 60 km (De).				
		M = 5.7 (Up,Ki).				
"	23	Ki	eP	09 25 53		
			i	09 26 01.9		
		Ud	eP	09 26 21		
		Mindanao (h = 70 km).				
"	23	Ki	iP	09 32 33.0		
		Ud	iP	09 31 59.9		
		North Atlantic Ocean (h = N).				
"	23	Up	iSgl	09 41 44.0		
		Ki	iSgl	09 43 52.9		
		Sk	iSgl	09 43 33.6		
		Um	iS*	09 41 57.7		
			iSgl	09 42 05.8		
		Ud	iSgl	09 42 44.9		
		De	iSgl	09 43 11.3		
		Western USSR.				
		Explosion.				
"	23	Um	i(P)	09 47 58.9		
"	23	Up	iP	11 17 38.2		
				micr	sec	
			P Z'	0.1	1.4	
		Ki	iP	11 17 58.0		
			ipP	11 18 04.9		
		Sk	iP	11 17 25.1		
		Um	eP	11 17 50		
		Ud	iP	11 17 23.7		
			ipP	11 17 30.5		
		De	iP	11 17 19.9		
		North Atlantic Ocean.				
		h = 25 km (Ki,Ud).				
"	23	Up	iSgl	12 21 15.1		
		Ki	eSgl	12 23 12		
		Um	iSgl	12 21 30.1		
		Ud	iSgl	12 22 14.0		
		De	iSg2	12 22 47.5		
		Western USSR.				
		Explosion.				
"	23	Um	i(P)	12 41 11.0		
"	23	Up	iSgl	13 47 11.3		
		Ki	iSgl	13 48 20.3		
		(cont.)				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974					
May	23	(cont.)			
		Sk	iSgl	13 48 28.6	
		Um	iSgl	13 46 42.2	
		Ud	e	13 47 17	
			eSgl	13 48 08	
		De	eSgl	13 48 57	
		Lake Ladoga region.			
		Explosion.			
"	23	Up	iP	13 50 19.6	
		Ki	eP	13 49 45	
		Um	iP	13 50 04.1	
		Ud	iP	13 50 11.2	
		De	iP	13 50 27.5	
		Nevada (h = 5 km).			
"	23	Up	iSgl	14 14 48.3	
		Ki	eSgl	14 15 05	
		Um	iSgl	14 14 14.3	
		East of Lake Ladoga.			
		Explosion?			
"	23	Up	iSgl	15 18 13.1	
		Ki	eSgl	15 18 56	
		Um	iSgl	15 17 32.6	
		Ud	eSgl	15 19 10	
		Lake Ladoga region.			
		Explosion.			
"	23	Ki	iP	15 55 49.1	
		(Greece).			
"	23	Up	iP	19 55 22.8	
		Ki	iP	19 56 48.0	
		Sk	iP	19 56 06.5	
		Um	iP	19 56 07.2	
		Ud	iP	19 55 26.6	
		Yugoslavia (h = N).			
"	23	Ki	iP	20 58 20.6	
		Um	iP	20 59 03.6	
		Ud	iP	20 59 39.8	
		Greenland Sea.			
"	24	Up	iP	01 35 11.2	
		Ud	iP	01 35 12.9	
		De	iP	01 34 36.4	
"	24	Up	iP	09 33 15.8	
		Um	iP	09 32 54.5	
			i	09 33 08.1	
		Ud	iP	09 33 22.3	
			i	09 33 35.8	
		Japan (h = 15 km).			
		The P arrivals are 8-9 sec late compared to the NEIS (cont.)			

1974					
May	24	(cont.)			
		solution. Moreover, interpreting the second phase at Um,Ud as pP gives h = 50 km.			
"	24	Ud	eP	09 43 40	
		Greece.			
"	24	Sk	i(Sgl)	10 05 38.7	
		Ud	iSgl	10 03 41.4	
		De	iPgl	10 01 24.1	
			iSgl	10 02 13.0	
"	24	Ki	iPn	10 53 00.8	
			iSn	10 54 00.8	
			iS*	10 54 19.4	
		Um	i	10 54 53.1	
			iSgl	10 55 13.0	
		Ud	iSgl	10 57 44.6	
		Northwest USSR.			
		Explosion.			
"	24	Ki	iPn	11 05 45.3	
			iSn	11 06 33.4	
			iS*	11 06 47.2	
		Um	iSgl	11 08 19.5	
		Northwest USSR-Norway.			
		Explosion.			
"	24	Ki	eSgl	12 36 14	
		Um	eSgl	12 34 26	
		Ud	iSgl	12 35 13.3	
		Western USSR.			
		Explosion.			
"	24	Ki	eSgl	13 02 56	
		Um	iSgl	13 01 29.0	
		Ud	iSgl	13 02 53.6	
		Lake Ladoga region.			
		Explosion.			
"	24	Ki	eSgl	13 29 39	
		Sk	iSgl	13 30 01.2	
		Um	iSgl	13 28 10.9	
		Ud	iSgl	13 29 35.9	
		Lake Ladoga region.			
		Explosion.			
"	24	Up	iP	20 37 02.2	
		Ki	iP	20 36 08.4	
		Sk	iP	20 36 45.1	
		Um	iP	20 36 33.4	
		Ud	iP	20 37 05.7	
		De	iP	20 37 27.2	
			i	20 37 37.9	
		Kamchatka (h = N).			

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 May	24	Ud	iP	21 32 33.5	
		Turkey.			
"	24	Ud	iPKPl	22 12 55.6	
"	24	Ki	iP	22 39 16.7	
		Ud	iP	22 40 08.8	
		Alaska (h = 130 km).			
"	24	Ud	iP	23 58 21.0	
"	25	Ki	ePgl	01 34 32	
			eSn	01 35 13	
			iSgl	01 35 29.7	
		Northwest USSR-Finland.			
		Explosion?			
"	25	Up	iPKP	04 37 25.8	
			i	04 37 38.6	
		Ki	ePKP	04 37 39	
		Um	iPKP	04 37 33.3	
		Ud	iPKP	04 37 23.4	
		South Sandwich Islands			
		(h = 100 km).			
"	25	Ud	iP	06 18 39.0	
"	25	Up	iP	09 42 59.7	
			ipP	09 43 10.0	
		Ki	iP	09 42 29.9	
		Sk	iP	09 42 59.7	
		Um	eP	09 42 42	
			ipP	09 42 51.7	
		Ud	iP	09 43 08.2	
			ipP	09 43 17.9	
		De	iP	09 43 19.4	
		Ryukyu Islands.			
		h = 35 km (Up,Um,Ud).			
"	25	Um	iSgl	11 52 50.1	
		Western USSR-Finland.			
		Explosion.			
"	25	Ud	iP	12 08 25.5	
		West of Gibraltar (h = N).			
"	25	Ki	iSn	12 56 28.4	
		Um	iSgl	12 57 49.5	
		Northwest USSR.			
		Explosion.			
"	25	Ki	iSn	14 30 58.1	
			iSgl	14 31 15.3	
		Um	iSn	14 31 43.0	
			iSgl	14 32 09.3	
		(cont.)			

1974 May	25	(cont.)			
		Northwest USSR-Finland.			
		Explosion.			
"	25	Ud	eP	15 38 16	
		Japan (h = 60 km).			
"	25	Um	i(P)	15 40 51.4	
"	25	Ki	iP	15 55 33.6	
		Ud	iP	15 55 02.3	
		North Atlantic Ocean (h = N).			
"	25	Up	iP	16 17 40.1	
		Ki	iP	16 17 33.9	
		Um	iP	16 17 33.5	
		Ud	iP	16 17 53.6	
			ipP	16 18 17.2	
		Burma.			
		h = 90 km (Ud).			
"	25	Ud	iPKPl	16 41 48.5	
		De	iPKPl	16 42 00.4	
		Tonga-Kermadec Islands			
		(h = 550 km).			
"	25	Up	iP	19 06 31.2	
		Ki	iP	19 06 12.9	
		Um	iP	19 06 18.9	
		Ud	iP	19 06 41.1	
			ipP	19 06 51.7	
		Luzon.			
		h = 40 km (Ud).			
"	25	Up	iP	20 17 48.6	
		Ki	iP	20 17 00.5	
		Sk	iP	20 16 56.3	
		Um	iP	20 17 25.8	
		Ud	iP	20 17 34.0	
		De	iP	20 18 08.1	
			i	20 18 19.7	
		Greenland (h = N).			
"	25	Up	iPKPl	21 11 40.1	
		Um	iPKP	21 11 28.8	
			iSKPl	21 14 12.4	
		Ud	iPKPl	21 11 42.6	
			iSKPl	21 14 24.2	
		De	iPKPl	21 11 52.6	
		Tonga-Kermadec Islands			
		(h = 680 km).			
"	25	Ud	iP	21 31 35.7	
		Aegean Sea.			
"	25	Ud	iP	22 35 02.7	
		Japan (h = 40 km).			

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
May 26 Up iPKP 01 51 27.3
iSKP1 01 54 53.2
micr sec
PKP Z' 0.2 1.8
SKP1 Z' 0.1 1.5
Mx E 1.5 20
Mx N 2.6 18
Mx Z 4.1 20
Ki iPKP 01 51 13.3
iPP 01 53 03
micr sec
PKP Z' 0.1 1.2
Mx E 2.6 20
Mx N 2.8 20
Mx Z 2.4 20
Sk iPKP 01 51 24.0
Um iPKP 01 51 19.3
iSKP1 01 54 41.4
Ud iPKP 01 51 29.4
iPP 01 54 00.4
iSKP1 01 54 58.3
De iPKP 01 51 33.5
iSKP1 01 55 05.4
New Hebrides Islands
(h = 15 km).
M = 6.1 (Up,Ki).

" 26 Up iPKP 01 56 01.7
ipPKP 01 56 09.1
iSKP1 01 59 35.7
Ki iPKP 01 55 46.6
ipPKP 01 55 54.6
Um iPKP 01 55 52.7
ipPKP 01 55 58.6
Ud ipPKP 01 56 11.4
De iPKP 01 56 08.7
ipPKP 01 56 14.9
New Hebrides Islands.
h = 25 km (Up,Ki,Um,De).
Origin time = 01 36 45.

" 26 Up ipPKP 02 34 48.3
Ki iPKP 02 34 24.5
ipPKP 02 34 32.6
Um iPKP 02 34 32.4
ipPKP 02 34 40.9
De iPKP 02 34 48.3
New Hebrides Islands.
h = 25 km (Ki,Um).

" 26 Up iP 03 51 27.4
Ud iP 03 51 40.8

" 26 Ki iPKP 05 56 41.8
New Hebrides Islands
(h = 15 km).

1974
May 26 Up iPKP 06 05 51.0
iPKP1 06 05 53.0
iSKP1 06 08 42.4
i 06 08 52.9
micr sec
SKP1 Z' 0.2 1.2
Ki i(PKP) 06 05 30.2
i 06 05 45.6
iSKP1 06 08 18.5
micr sec
SKP1 Z' 0.5 2.3
Sk i(PKP) 06 05 42.5
iSKP1 06 08 34.8
Um i(PKP) 06 05 39.7
iPKP 06 05 45.9
iSKP1 06 08 30.3
Ud iPKP 06 05 52.1
iPKP1 06 05 54.0
iSKP1 06 08 43.8
De iPKP1 06 06 04.7 D
iSKP1 06 08 52.4
Fiji Islands (h = 570 km).

" 26 Ki iPKP 06 07 27.6
micr sec
PKP Z' 0.1 1.6
Um iPKP 06 07 34.1
Ud iPKP 06 07 42.2
New Hebrides Islands.
Origin time = 05 48 26.

" 26 Ki iPKP 06 11 38.6
Sk iPKP 06 11 51.4
Ud iPKP 06 11 56.4
New Hebrides Islands
(h = 55 km).

" 26 Ki eSn 06 39 15
Um iSg1 06 40 38.7
Northwest USSR.
Explosion.

" 26 Up iSg1 07 00 28.8
Ki iSn 06 57 10.9
iSg1 06 57 34.2
Um i 06 58 03.4
iSg1 06 58 22.9
Ud iSg1 07 00 53.9
Northwest USSR.
Explosion.

" 26 Ki iPKP 07 34 44.2
Um iPKP 07 34 50.4
Ud iPKP 07 35 01.0
New Hebrides Islands
(h = 25 km).

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
May 26 Ki iPKP 08 33 50.9
Sk iPKP 08 34 04.9
New Hebrides Islands
(h = 10 km).

" 26 Up iPKP 08 55 46.4
Ki iPKP 08 55 30.1
Um iPKP 08 55 38.9
New Hebrides Islands
(h = 10 km).

" 26 Ki iPKP 09 11 57.9
Sk iPKP 09 12 08.9
New Hebrides Islands
(h = N).

" 26 Ki iPKP 10 21 42.2
Um iPKP 10 21 47.9
De iPKP 10 22 04.2
New Hebrides Islands
(h = 25 km).

" 26 Up iPKP 11 43 27.1
Ki iPKP 11 43 15.0
Ud iPKP 11 43 30.1
New Hebrides Islands
(h = 20 km).

" 26 Up iP 12 54 00.3
Ki iP 12 53 38.4
Formosa (h = 20 km).

" 26 Up iP 13 11 49.5
ipP 13 12 02.6
i 13 12 10.3
Ki eP 13 13 01
Sk ipP 13 12 43.4
Um iP 13 12 35.4
Ud iP 13 11 54.2
i 13 12 02.2
ipP 13 12 07.3
Greece.
h = 70 km (Up,Ud).

" 26 Up iP 13 19 49.7
Ud iP 13 19 55.2
Kurile Islands.

" 26 Up iP 20 52 14.4
Um iP 20 51 52.9
ipP 20 52 05.6
Ud iP 20 52 21.8
Japan.
h = 45 km (Um).

" 26 Ki i(P) 23 23 52.0

1974
May 27 Ud iP 03 34 33.9 C
Tadzhik SSR (h = 240 km).

" 27 Up iP 04 51 59.2 C
i 04 52 51.3
micr sec
i Z' 0.1 1.1
Mx E 3.2 21
Mx N 6.8 21
Mx Z 14 22
Ki iP 04 51 06.1
micr sec
Mx E 5.5 20
Mx N 6.5 22
Mx Z 5.8 22
Sk iP 04 51 44.1
iPcP 04 52 28.2
Um iP 04 51 31.7
i 04 51 58.8
iPcP 04 52 14.9
Ud iP 04 52 03.2
iPcP 04 52 33.9
De iP 04 52 24.8
Kurile Islands (h = 45 km).
M = 5.9 (Up,Ki).

" 27 Up iP 05 13 55.6
ipP 05 14 06.8
i 05 14 14.9
Ki iP 05 13 39.7
ipP 05 13 50.9
micr sec
pP Z' 0.1 1.2
Sk iP 05 13 35.2
i 05 14 13.7
Um iP 05 13 49.6
De iP 05 13 55.2
Mexico.
h = 40 km (Up,Ki).

" 27 Ud iP 07 45 06.5

" 27 Up iP 10 50 02.2
i 10 50 05.9
micr sec
Mx E 1.2 20
Mx N 1.6 22
Mx Z 2.2 20
Ki iP 10 49 47.2
i 10 49 51.7
micr sec
Mx E 3.0 18
Mx N 2.3 18
Mx Z 2.3 18
Sk iP 10 50 04.4
(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
May 27 (cont.)

Um	iP	10 49 57.8	
Ud	iP	10 50 13.7	

Mindanao (h = 35 km).
M = 5.7 (Up,Ki).

" 27

Up	iSn	12 17 25.7	
	iSgl	12 17 37.7	
Ki	iSgl	12 20 10.4	
Um	iSgl	12 18 10.9	
Ud	i(S*)	12 18 37.2	
	iSgl	12 18 40.8	
De	iSgl	12 19 06.9	

Esthonia.
Explosion.

" 27

Up	iP	12 28 54.6	
Ki	iP	12 29 16.2	
Ud	iP	12 28 42.0	
De	iP	12 28 36.2	

North Atlantic Ocean
(h = N).

" 27

Ud	iP	13 32 48.4	
	i	13 32 56.4	

" 27

Ud	iP	13 49 20.9	

" 27

Up	iSgl	13 58 40.2	
Ki	eSgl	14 00 51	
Sk	eSgl	14 00 37	
Um	iSgl	13 59 01.9	

Western USSR.
Explosion.

" 27

Up	iP	14 11 45.3	C
	ipP	14 11 49.8	
	iPcP	14 12 29.8	
		micr sec	
	P Z'	0.1 1.3	
	pP Z'	0.1 1.0	
Ki	iP	14 10 49.8	C
	ipP	14 10 55.0	
		micr sec	
	P Z'	0.2 1.0	
	pP Z'	0.2 1.0	
Sk	iP	14 11 15.7	C
	ipP	14 11 20.7	
Um	iP	14 11 18.4	C
	ipP	14 11 23.4	
Ud	iP	14 11 40.9	C
	ipP	14 11 46.4	
	iPcP	14 12 26.6	
De	iP	14 12 05.6	C
	ipP	14 12 10.7	

(cont.)

1974
May 27 (cont.)

Alaska.
h = 20 km (Up,Ki,Sk,Um,Ud, De).
m = 5.9 (Up,Ki).

" 28

Um	iP	00 16 30.9	

Japan (h = 310 km).

" 28

Up	iPKP1	03 14 47.0	
	iPKP2	03 14 53.7	
	epPKP1	03 16 44	
		micr sec	
	PKP1 Z'	0.1 0.9	
	PKP2 Z'	0.3 1.0	
Ki	iPKP1	03 14 25.8	C
Sk	iPKP1	03 14 41.6	C
	iPKP2	03 14 45.4	
	ipPKP1	03 16 34.9	
Um	iPKP1	03 14 35.7	
	ipPKP1	03 16 29.0	
Ud	iPKP1	03 14 48.8	C
	iPKP2	03 14 57.0	
	ipPKP1	03 16 42.4	
De	iPKP1	03 14 56.0	
	iPKP2	03 15 11.1	

Kermadec Islands.
h = 490 km (Sk,Um,Ud).

" 28

Up	iSgl	11 07 18.8	
Um	iSgl	11 08 10.9	

Esthonia.
Explosion.

" 28

Um	iSgl	12 13 20.2	

Western USSR.
Explosion.

" 28

Up	iPgl	14 04 48.0	
	iSgl	14 05 04.8	
	iRg	14 05 11.7	
Ki	iSgl	14 09 09.2	
Sk	iSgl	14 07 25.6	
Um	eSgl	14 07 03	
Ud	i(S*)	14 05 50.4	
	iSgl	14 05 52.3	
	i	14 05 54.0	
De	iPn	14 05 17.5	
	i	14 05 39.4	
	iSgl	14 06 06.6	
	i	14 06 12.4	

Off coast of Södermanland, Sweden, 58.7°N, 18.2°E.
Origin time = 14 04 27.
Explosion.

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 May	28	Ud	iPKPl	17 18 02.6	
		De	iPKPl	17 18 15.3	
"	28	Up	i(P)	21 53 43.1	
"	28	Up	iP	23 25 44.9	
			ipP	23 25 52.7	
		Um	iP	23 25 56.9	
			ipP	23 26 04.2	
		Ud	iP	23 25 57.9	
			ipP	23 26 05.5	
		Indian Ocean.			
		h = 30 km (Up,Um,Ud).			
		Origin time = 23 15 23.			
"	28	Up	iP	23 28 45.9	
			ipP	23 28 55.0	
		Ki	iP	23 29 16.7	
		Um	iP	23 28 58.2	
			ipP	23 29 06.4	
		Ud	iP	23 28 58.3	
			ipP	23 29 06.7	
		Indian Ocean.			
		h = 30 km (Up,Um,Ud).			
"	29	Ud	iP	01 54 51.1	
		Tien-Shan.			
"	29	Up	iP	04 27 31.0	
		Ki	iP	04 28 05.3	
		Um	iP	04 27 41.7	
		Ud	iP	04 27 43.0	
		Indian Ocean (h = N).			
"	29	Um	iP	07 19 38.2	
		Ud	iP	07 20 07.4	
		Japan (h = 30 km).			
"	29	Up	iP	08 23 46.7	
		Ki	iP	08 23 45.8 D	
		Sk	iP	08 23 59.9 D	
		Um	iP	08 23 43.5 D	
		Ud	iP	08 23 55.9 D	
		Sumatra (h = 130 km).			
"	29	Up	i(P)	11 30 44.3	
"	29	Ud	iP	12 08 35.7	
		Tien-Shan.			
"	29	Up	iSgl	12 42 22.3	
		Um	iSgl	12 42 41.6	
		Ud	iSgl	12 43 25.1	
		Western USSR.			
		Explosion.			

1974 May	29	Um	iSgl	13 10 38.1	
		Western USSR.			
		Explosion.			
"	29	Sk	i(P)	14 43 14.0	
"	29	Ki	eP	16 00 37	
		Celebes Sea (h = N).			
"	29	Ud	iPKPl	17 10 17.1	
"	30	Up	iP	01 10 53.1	
		Ki	eP	01 10 06	
		Ud	iP	01 10 45.9	
			ipP	01 10 56.1	
		Vancouver Island.			
		h = 40 km (Ud).			
"	30	Ud	iP	01 16 03.1	
		Kurile Islands (h = N).			
"	30	Ki	iPn	10 27 04.4	
			iPgl	10 27 12.6	
			iSn	10 27 50.9	
			iS*	10 28 02.4	
		Sk	iSgl	10 30 56.5	
		Um	iSn	10 29 01.6	
			iSgl	10 29 39.6	
		Northwest USSR-Norway.			
		Explosion.			
"	30	Up	iSgl	11 50 08.9	
		Ki	iSgl	11 52 26.3	
		Um	iSgl	11 50 34.1	
		Esthonia.			
		Explosion.			
"	30	Ud	iSgl	11 57 17.4	
			i	11 57 25.5	
		South Norway.			
		By combination with Bergen and Kongsberg readings.			
"	30	Up	iPKPl	13 19 22.6	
		Ud	iPKPl	13 19 26.6	
		De	iPKPl	13 19 36.0	
		Kermadec Islands (h = N).			
"	30	Ud	iP	13 21 46.8	
"	30	Up	iSgl	13 22 09.4	
		Ki	iSgl	13 24 43.5	
		Sk	iSgl	13 24 00.1	
		Um	iSgl	13 22 45.2	
		Ud	iSgl	13 23 10.3	
		(cont.)			

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974						
May	30	(cont.)				
		De	eSgl		13 23 41	
		Esthonia.				
		Explosion.				
"	30	Up	iP		15 44 21.7	
		Ki	iP		15 45 36.9	
		Um	iP		15 45 02.4	
		Ud	iP		15 44 31.4	
		Aegean Sea (h = 40 km).				
"	31	Ki	eP		02 06 22	
		Kamchatka (h = 110 km).				
"	31	Up	iP		03 24 00.8	
					micr	sec
			Mx	N	0.8	17
			Mx	Z	0.6	17
		Ki	iP		03 23 06.0	
			ipP		03 23 16.0	
					micr	sec
			Mx	E	0.7	17
			Mx	N	0.7	16
			Mx	Z	0.8	16
		Sk	epP		03 23 47	
		Um	iP		03 23 33.1	
			ipP		03 23 43.7	
		Ud	iP		03 23 58.8	
		De	iP		03 24 21.9	
		Unimak Island.				
		h = 40 km (Ki,Um).				
		M = 5.1 (Up,Ki).				
"	31	Up	iP		03 33 55.1	C
			iPn		03 35 01.3	
			iPP		03 35 13.5	
					micr	sec
			P	Z'	1.7	1.0
			Pn	Z'	0.1	0.7
			PP	Z'	0.2	0.8
		Ki	iP		03 33 38.7	C
			iPn		03 34 38.5	
					micr	sec
			P	Z'	1.8	1.1
			Pn	Z'	0.2	0.7
		Sk	iP		03 34 10.1	C
			iPn		03 35 27.9	
			iPP		03 35 33.6	
		Um	iP		03 33 39.7	C
			iPn		03 34 44.0	
			iPP		03 34 52.3	
		Ud	iP		03 34 11.5	C
		De	iP		03 34 18.8	C
			i		03 35 17.8	
		(cont.)				

1974						
May	31	(cont.)				
		De	iPn		03 35 42.0	
		Kazakh SSR.				
		m = 6.9 (P), 6.2 (PP) (Up,Ki).				
		Underground explosion.				
"	31	De	iPKPl		06 28 03.2	
		Fiji Islands (h = 570 km).				
"	31	Ud	iP		06 53 49.7	
"	31	Up	iSgl		07 27 10.6	
		Ki	iSgl		07 27 53.7	
		Sk	iSgl		07 28 20.2	
		Um	iSgl		07 26 29.4	
		Ud	iSgl		07 28 07.7	
		De	iSgl		07 28 50.3	
		Lake Ladoga region.				
		Explosion.				
"	31	De	i(P)		08 04 49.8	
"	31	Up	iP		09 21 06.5	
		Ki	iP		09 20 12.2	
		Sk	iP		09 20 50.7	
		Um	eP		09 20 38	
		Ud	iP		09 21 10.3	
		De	iP		09 21 31.3	
		Kamchatka (h = N).				
"	31	Sk	i(P)		12 34 02.5	
"	31	Up	iSgl		12 36 09.7	
		Sk	iSgl		12 37 58.3	
		Um	iSgl		12 36 25.8	
		Ud	iPn		12 35 06.5	
			iSgl		12 37 11.1	
		De	iPn		12 35 18.5	
			i		12 35 25.1	
			eSg2		12 37 42	
		Western USSR.				
		Explosion.				
"	31	Up	iP		14 13 47.0	
		Ki	iP		14 13 55.7	C
		Um	iP		14 13 45.5	C
		Ud	iP		14 14 03.8	C
		De	iP		14 14 00.5	
		Afghanistan-USSR (h = 240 km).				
"	31	Up	iP		14 17 27.9	
			i		14 17 37.0	
			iPP		14 20 47.7	
			iS		14 27 51	
		(cont.)				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974

May	31	(cont.)				
		Up			micr	sec
			P	Z'	0.1	1.5
			i	Z'	0.7	2.1
			PP	Z'	0.2	1.5
			Mx	E	9.6	20
			Mx	N	10	20
			Mx	Z	17	19
		Ki	iP		14 17 00.4	
			i		14 17 06.9	
					micr	sec
			P	Z'	0.1	1.5
			i	Z'	0.5	2.1
			Mx	E	32	19
			Mx	N	23	17
			Mx	Z	26	17
		Sk	iP		14 17 01.7	
			i		14 17 13.4	
		Um	iP		14 17 19.5	
			iS		14 27 30	
		Ud	iP		14 17 22.4	
		De	iP		14 17 32.1	
			i		14 17 39.3	
			iPP		14 20 54.2	
		Gulf of California (h = N).				
		m = 6.4, M = 6.6 (Up,Ki).				
		Generally small-amplitude				
		beginnings, followed by				
		larger onsets.				
"	31	Ud	iPKPl		20 07 14.0	

Markus Båth
Klaus Meyer
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November 30, 1975

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BOX 517
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BOX 517
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SWEDEN

S E I S M O L O G I C A L B U L L E T I N

U P P S A L A, K I R U N A, S K A L S T U G A N, U M E Å,

U D D E H O L M and D E L A R Y

Uppsala	(Up):	59°51.5'N,	17°37.6'E; h = 14 m
Kiruna	(Ki):	67°50.4'N,	20°25.0'E; h = 390 m
Skalstugan	(Sk):	63°34.8'N,	12°16.8'E; h = 580 m
Umeå	(Um):	63°48.9'N,	20°14.2'E; h = 16 m
Uddeholm	(Ud):	60°05.4'N,	13°36.4'E; h = 240 m
Delary	(De):	56°28.2'N,	13°52.2'E; h = 150 m

J U N E 1 - 30, 1974

1974 June	1	Um	iP	00 12 53.2	
		Japan.			
"	1	Up	iP	00 34 10.1	
		Um	iP	00 33 42.7	
		Ud	iP	00 34 08.7	
		De	iP	00 34 31.4	
		Aleutian Islands.			
"	1	Ud	iP	03 00 31.6	
"	1	Up	iP	03 36 01.2	
			i	03 36 24.4	
		Ki	iP	03 35 44.6	
		Sk	iP	03 36 08.8	
		Ud	iP	03 36 13.4	
		Szechwan, China (h = 15 km).			
"	1	Ud	iP	05 08 17.9	
"	1	Ud	iP	06 15 57.3	
"	1	Ud	iPKPl	09 01 23.2	
"	1	Up	iSgl	10 45 53.8	
		Ki	iPn	10 41 37.6	
			iPgl	10 41 52.6	
			iSn	10 42 37.1	
			iSgl	10 43 01.2	
		Sk	iSgl	10 45 24.7	
		Um	iSn	10 43 16.4	
			i	10 43 32.3	
			iS*	10 43 46.5	
			iSgl	10 43 52.0	
		Ud	iSgl	10 46 23.1	
		De	iSgl	10 47 59.5	
		Northwest USSR.			
		Explosion.			
1974 June	1	Ki	iSgl	10 44 18.3	
		Um	iSgl	10 45 15.2	
		Ud	iSgl	10 47 45.5	
		Northwest USSR.			
		Explosion.			
"	1	Up	iP	13 25 19.9	
		Um	i(P)	13 24 43.5	
		Ud	iP	13 25 26.1	
"	1	Ud	iP	13 26 52.7	C
"	1	Ki	iSn	15 27 01.7	
			iSgl	15 27 23.1	
		Northwest USSR.			
		Explosion.			
"	1	Up	iP	16 12 18.7	
		Ki	iP	16 13 29.8	
		Sk	iP	16 12 58.0	
		Um	iP	16 12 55.0	
		Ud	iP	16 12 25.5	D
		De	iP	16 11 51.1	
		Greece (h = 40 km).			
"	1	Up	iP	20 28 12.4	
		Ki	iP	20 28 14.4	
		Sk	iP	20 27 46.0	
		Um	iP	20 28 16.6	
		Ud	iP	20 27 55.0	
		De	iP	20 28 04.2	
		North Atlantic Ocean			
		(h = N).			
"	1	Up	iPKPl	23 12 43.1	
		Um	iPKPl	23 12 27.2	
		Ud	iPKPl	23 12 40.0	
		Kermadec Islands			
		(h = 450 km).			

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
June 2 Up iP 04 26 02.5
Sk iP 04 26 03.7
Um iP 04 25 45.3
Ud iP 04 26 13.4
Ryukyu Islands (h = N).

" 2 Sk iP 05 30 20.3
Um iP 05 30 23.1
i 05 30 33.2
Ud iP 05 29 57.2
Adriatic Sea.

" 2 Ki iSn 05 54 21.6
Northwest USSR.
Explosion.

" 2 Ud iPP 07 07 40.2
Indian Ocean (h = N).

" 2 Up iP 12 07 06.1
Ud iP 12 07 17.5
De iP 12 07 15.6
Nicobar Islands (h = N).

" 2 Ud iP 13 39 19.0
Talaud Islands (h = 70 km).

" 2

			micr	sec
Up				
	Mx	E	1.8	19
	Mx	N	2.5	20
	Mx	Z	2.7	20
Ki	eP		16 13 02	
			micr	sec
	Mx	E	2.0	21
	Mx	N	2.5	20
	Mx	Z	3.0	19

Ud iP 16 13 27.5
Talaud Islands (h = N).
M = 5.8 (Up,Ki).

" 2 Ki i(P) 18 14 53.6
Sk iP 18 15 23.4
Ud iP 18 15 45.7
Aleutian Islands
(h = 70 km).

" 2 Up iPKPl 22 46 31.8
Um iPKP 22 46 30.9
Ud iPKPl 22 46 34.0
De iPKPl 22 46 45.4
Tonga-Kermadec Islands
(h = 580 km).

" 2 Up iP 23 16 31.3
ipP 23 16 41.0
Ki iP 23 16 30.7
ipP 23 16 42.5
(cont.)

1974
June 2 (cont.)
Sk iP 23 16 17.1
ipP 23 16 28.1
Um ipP 23 16 43.9
Ud iP 23 16 19.9
ipP 23 16 29.9
De iP 23 16 22.2
ipP 23 16 33.6
Colombia.
h = 40 km (Up,Ki,Sk,Ud,De).

" 3 Um iP 03 09 16.1
Ud iP 03 09 09.7
De iP 03 08 46.8

" 3 Ud iPKPl 06 04 26.7

" 3

			micr	sec
Up	iP		11 53 09.8	
	ipP		11 53 33.9	
	iPP		11 54 43.8	
			micr	sec
	pP	Z'	0.2	1.3
	PP	Z'	0.3	1.5
	Mx	N	1.0	12
Ki	eP		11 53 17	
	iPP		11 54 54.1	
			micr	sec
	P	Z'	0.1	1.0
	PP	Z'	0.1	1.3
	Mx	E	0.5	8
	Mx	N	0.8	11
	Mx	Z	0.8	10
Sk	iP		11 53 35.4	
	ipP		11 54 00.0	
	iPP		11 55 20.4	
Um	iP		11 53 07.1	
	ipP		11 53 31.8	
	iPP		11 54 44.6	
Ud	iP		11 53 26.0	
	ipP		11 53 50.6	
	iPP		11 55 05.1	
De	iP		11 53 22.2	
	ipP		11 53 47.8	
	isP		11 54 00.5	
	iPP		11 54 59.9	

Afghanistan-USSR.
h = 120 km (Up,Sk,Um,Ud,De).
m = 5.6, M = 5.0 (Up,Ki).
M uncorrected for focal depth.

" 3 Um iSgl 12 16 48.3
Ud eSgl 12 17 33
Western USSR.
Explosion.

" 3 Up iP 15 14 32.0
Ud eP 15 14 50

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 June	3	Up	iPKPl	23 07 50.9	
		Ud	iPKPl	23 07 52.7	
		De	iPKPl	23 08 02.6	
"	3	Up	iP	23 42 52.3	C
		Ki	iP	23 42 56.1	
		Sk	iP	23 43 14.7	
			iPP	23 44 52.6	
		Um	iP	23 42 49.2	
		Ud	iP	23 43 08.2	C
			iPP	23 44 41.2	
		De	iP	23 43 06.7	
		Tadzhik SSR (h = 60 km).			
"	4	Ud	iP	02 25 17.7	
"	4	Ud	iPKPl	02 38 12.1	
		De	iPKPl	02 38 22.8	
"	4	Ud	iP	03 14 51.5	
		Kurile Islands.			
"	4	Up	i(PKP)	04 32 48.5	
			iPKP	04 33 02.1	
			iPP	04 35 37.2	
			iSKPl	04 36 08.0	
				micr	sec
			PKP Z'	0.2	1.2
			PP Z'	1.0	2.0
			SKPl Z'	1.2	2.0
			Mx E	5.2	26
			Mx N	3.7	25
			Mx Z	4.5	25
		Ki	i(PKP)	04 32 38.2	
			iPKP	04 32 49.2	
			iPP	04 34 47.5	
				micr	sec
			PKP Z'	0.5	1.3
			PP Z'	0.8	2.5
			Mx E	3.3	19
			Mx N	3.9	21
			Mx Z	2.4	20
		Sk	i(PKP)	04 32 45.6	
			iPKP	04 32 58.8	
			iPP	04 35 20.6	
			iSKPl	04 36 00.9	
		Um	i(PKP)	04 32 42.2	
			iPKP	04 32 56.0	
			ipPKP	04 34 13.8	
			iPP	04 35 11.1	
			iSKPl	04 35 53.2	
		Ud	i(PKP)	04 32 48.9	
			iPKP	04 33 05.6	
			iPP	04 35 41.1	
			iSKPl	04 36 11.5	
		De	i(PKP)	04 33 00.7	
			iPKP	04 33 13.3	
		(cont.)			
1974 June	4	(cont.)			
		De	ipPKP	04 34 31.0	
			iSKPl	04 36 21.6	
		Tonga Islands. h = 310 km (Um,De). m = 6.5, M = 6.2 (Up,Ki). M uncorrected for focal depth. Unusually large surface waves for this focal depth.			
"	4	Up	iP	04 45 11.5	
		Ki	iP	04 45 13.1	
			i	04 45 41.9	
		Um	iP	04 45 00.5	
			i(P)	04 45 38.2	
"	4	Ud	iPKPl	04 53 08.7	
"	4	Ki	iP	04 56 08.2	
		Um	iP	04 55 48.8	
"	4	Up	iP	05 08 59.1	
		Ki	iP	05 08 22.5	
		Um	iP	05 08 41.9	
		Ud	iP	05 08 59.5	
		Following NORSAR, these phases may be SKP.			
"	4	Um	iP	09 37 58.3	
"	4	Up	iSn	11 25 50.3	
			iSgl	11 26 01.5	
		Ki	iSgl	11 28 32.1	
		Sk	iSgl	11 27 48.5	
		Um	iSgl	11 26 33.3	
		Ud	iSgl	11 27 03.6	
		Esthonia. Explosion.			
"	4	Ud	iPKPl	11 48 06.9	
		De	iPKPl	11 48 17.9	
		Tonga-Kermadec Islands (h = 620 km).			
"	4	Ki	iSgl	13 05 53.5	
		Sk	iSgl	13 04 59.7	
		Um	iSgl	13 03 48.5	
		Esthonia. Explosion.			
"	4	Up	iP	13 05 10.5	
"	4	Ud	iP	14 24 00.5	
		Ionian Sea.			
"	4	Um	iSgl	14 45 00.7	
		Lake Ladoga region. Explosion.			

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 June	4	Ud	iP		15 16 25.2	
"	4	Up	eP		15 24 45	
		Ud	iP		15 24 35.7	
		North Atlantic Ocean (h = N).				
"	4	Up	i(P*)		23 14 32.0	
			iPgl		23 14 33.8	
			iSgl		23 15 05.3	
					micr sec	
			Sgl	Z'	0.2 0.6	
		Ki	iPgl		23 15 29.7	
			iSn		23 16 15.5	
			iS*		23 16 40.7	
			iSgl		23 16 44.5	
					micr sec	
			Sgl	Z'	0.1 0.6	
		Sk	i(P*)		23 14 31.4	
			iPgl		23 14 34.3	
			iS*		23 15 03.9	
			iSgl		23 15 06.5	
		Um	iPgl		23 14 23.1 C	
			iSgl		23 14 48.4	
		Ud	iP*		23 14 38.2	
			iPgl		23 14 41.1	
			iSn		23 15 03.4	
			iS*		23 15 17.8	
			iSgl		23 15 19.3	
		De	iSn		23 16 29.9	
			i		23 16 35.3	
			iS*		23 16 56.9	
			iSgl		23 17 00.5	
		Medelpad, Sweden, 62.3°N, 17.2°E.				
		Origin time = 23 13 51.				
		Felt.				
"	5	Up	iP		00 12 22.8	
			i		00 12 24.5	
					micr sec	
			P	Z'	0.1 1.0	
			Mx	E	0.6 13	
			Mx	N	1.5 17	
			Mx	Z	0.9 14	
		Ki	iP		00 12 08.8	
					micr sec	
			P	Z'	0.1 0.9	
			Mx	E	0.6 11	
			Mx	N	1.0 16	
		Sk	iP		00 12 36.2	
		Um	iP		00 12 12.0	
		Ud	iP		00 12 35.7	
		De	eP		00 12 42	
			i		00 12 47.6	
		Szechwan, China (h = N).				
		m = 5.9, M = 5.4 (Up,Ki).				
"	5	Up	iP		00 50 28.1	

1974 June	5	Um	iPKP		02 05 34.5	
		Ud	iPKP		02 05 44.0	
		New Britain (h = 50 km).				
"	5	Up	iPKP		05 39 07.2	
		Ki	iPKP		05 38 53.0 C	
		Sk	iPKP		05 39 05.2 C	
		Um	iPKP		05 38 59.9	
		Ud	iPKP		05 39 09.2 C	
		De	iPKP		05 39 16.4	
		New Hebrides Islands (h = 160 km).				
"	5	Ud	iPKP1		08 37 06.6	
		De	iPKP1		08 37 17.1	
		Fiji Islands (h = 350 km).				
"	5	Up	iSgl		11 17 17.0	
		Ki	iSgl		11 19 50.7	
		Um	iSgl		11 17 50.7	
		Ud	iSgl		11 18 23.4	
		De	iSgl		11 18 50.4	
		Esthonia.				
		Explosion.				
"	5	Ud	iPKP2		12 04 57.7	
		Macquarie Islands (h = N).				
"	5	Um	iP		12 36 56.1	
		Ud	iP		12 37 26.0	
		Japan (h = 40 km).				
"	5	Up	iP		12 40 53.0	
			i		12 40 56.1	
		Ki	iP		12 40 37.1	
					micr sec	
			P	Z'	0.1 0.9	
		Sk	iP		12 41 04.4	
		Um	iP		12 40 40.9	
			i		12 40 43.2	
		Ud	iP		12 41 06.0	
			i		12 41 08.6	
		Szechwan, China (h = N).				
		Double P, average separation 2.7 sec.				
"	5	Um	iSgl		14 23 12.1	
		Ud	iSgl		14 23 58.4	
		De	iSgl		14 24 19.3	
		Western USSR.				
		Explosion.				
"	5	Ud	iPKP		22 20 06.2	
		Tonga Islands (h = N).				
"	6	Ud	iP		07 08 44.8	
"	6	Ki	iPn		07 28 32.3	
		Northwest USSR.				
		Explosion.				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
June 6 Up i(P) 08 29 40.9
Sk iP 08 29 30.7

" 6 Up Mx 13 05
micr sec
Mx E 0.8 15
Mx N 2.3 16
Mx Z 1.8 15
Ki Mx 13 06
micr sec
Mx E 0.8 12
Mx N 0.7 13
Mx Z 0.8 12
Northeast China (h = N).
M = 5.2 (Up,Ki).

" 6 Um iSgl 15 19 54.8
Esthonia.
Explosion.

" 6 Up iP 17 12 42.7
Ki iP 17 11 55.9
Um iP 17 12 17.4
Ud iP 17 12 48.0
Kurile Islands (h = N).

" 6 De iPKPl 17 29 27.1
Fiji Islands (h = 570 km).

" 6 Um i(Sgl) 17 41 51.5

" 6 Up iSP 18 44 13
micr sec
Mx E 1.5 25
Mx N 3.2 25
Mx Z 4.2 25
Ki micr sec
Mx E 3.6 22
Mx N 3.9 21
Mx Z 4.9 24
New Ireland (h = 35 km).
M = 6.0 (Up,Ki).

" 6 Up iP 18 47 57.5
i 18 48 10.4
micr sec
P Z' 0.1 1.0
Ki iP 18 48 21.4
micr sec
P Z' 0.1 1.3
Sk iP 18 48 23.0
Um iP 18 48 05.9
Ud iP 18 48 08.9
Indian Ocean (h = N).
m = 5.9 (Up,Ki).

1974
June 6 Up iP 19 10 49.2 C
ipP 19 11 35.3
iPP 19 12 25.7
micr sec
P Z' 0.4 1.1
PP Z' 0.2 1.2
Ki iP 19 10 58.2 C
ipP 19 11 43.9
micr sec
P Z' 0.4 1.1
Sk iP 19 11 14.5 C
iPP 19 13 00.7
Um iP 19 10 47.9 C
iPP 19 12 21.6
Ud iP 19 11 05.6 C
ipP 19 11 52.3
iPP 19 12 47.3
De iP 19 11 01.7 C
iPP 19 12 41.3
Hindu Kush.
h = 230 km (Up,Ki,Ud).
m = 5.8 (Up,Ki).

" 6 Ki iP 21 37 57.6
Nicobar Islands.

" 7 Up iP 01 58 11.6

" 7 Ki iPn 03 10 12.0
Um iP 03 09 12.1
Ud iP 03 09 16.4
De iPP 03 09 41.9
Caucasus (h = N).

" 7 Ud iP 03 16 27.7
Caucasus.

" 7 Up iP 04 19 34.0
Ki iP 04 19 08.8
Ud iP 04 19 45.9
Luzon-Formosa (h = 40 km).

" 7 Up micr sec
Mx E 2.2 19
Mx N 3.8 21
Mx Z 5.7 21
Ki micr sec
Mx E 3.7 21
Mx N 3.1 21
Mx Z 3.3 20
Sk iPKP 07 06 43.6
Tonga Islands (h = N).
M = 6.2 (Up,Ki).

" 7 Ki iSgl 10 25 54.7
Northwest USSR.
Explosion.

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 June 7 Um iSgl 14 49 45.5
Esthonia.
Explosion.

" 7 Up eP 14 51 11
i 14 51 14.6
i 14 51 19.7
Sk iP 14 51 52.5
Um iP 14 51 46.5
Ud iP 14 51 18.0
Greece-Albania (h = 35 km).

" 7 Sk i(Sgl) 14 54 42.9
Ud i(Sgl) 14 53 45.2
De i(Sgl) 14 52 15.0

" 7 Um iSgl 16 25 04.2
Esthonia.
Explosion.

" 7 Ki iPgl 17 31 28.0
iSg2 17 31 32.7
iRg 17 31 35.2
Um iSgl 17 33 22.7
Swedish Lapland,
67.7°N, 21.2°E.
Origin time = 17 31 22.
Shallow event, possibly
explosion.
By combination with Tromsoe
reading.

" 7 Up iP 18 01 15.2 C
ipP 18 01 25.7
micr sec
P Z' 0.1 1.1
Ki iP 18 00 22.0
ipP 18 00 33.0
micr sec
P Z' 0.1 0.8
Sk iP 18 00 52.6
Um iP 18 00 48.3
ipP 18 00 59.2
Ud iP 18 01 14.3
ipP 18 01 25.0
De iP 18 01 35.9
ipP 18 01 47.2
Aleutian Islands.
h = 40 km (Up,Ki,Um,Ud,De).
m = 6.0 (Up,Ki).

" 7 Ki iPn 19 07 06.4
iSn 19 07 53.4
iSgl 19 08 08.3
Um iSgl 19 09 41.0
USSR-Norway.
Explosion.

1974 June 7 Up iPKPl 22 47 24.3
Um iPKPl 22 47 13.2
Ud iPKPl 22 47 25.6
De iPKPl 22 47 36.7 C
Tonga-Kermadec Islands
(h = 280 km).

" 7 Up iP 23 01 53.2
iSKS 23 12 17
micr sec
Mx E 2.7 23
Mx N 2.3 25
Mx Z 5.3 24
Ki iP 23 01 51.3
eSKS 23 12 13
micr sec
P Z' 0.1 2.0
Mx E 3.3 21
Mx N 3.7 23
Mx Z 2.9 22
Um iP 23 01 55.1
iSKS 23 12 21
Ud iP 23 01 44.2
South of Panama (h = N).
M = 5.8 (Up,Ki).

" 7 Up i(P) 23 29 24.7

" 8 Up iP 03 18 45.3
Ki iP 03 17 57.5
Um iP 03 18 19.2
Ud iP 03 18 51.1
Kurile Islands (h = 260 km).

" 8 Up iP 08 49 25.4
Ud iP 08 49 38.8

" 8 Up iP 10 49 10.5
Ki iP 10 49 08.8
Ud iP 10 49 19.6
Sunda Strait (h = 60 km).

" 8 Ki eSn 12 17 26
iSgl 12 17 54.1
Sk eSgl 12 20 24
Um iSgl 12 18 49.5
Northwest USSR.
Explosion.

" 8 Ki iP 12 30 11.7
Um iP 12 30 27.2
Ud iP 12 30 54.8
Japan (h = 35 km).

" 8 Up iPKPl 12 54 46.5
Um iPKP 12 54 42.0
(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
June 8 (cont.)

Ud	iPKPl	12 54 48.7	
De	iPKPl	12 54 58.9	

Tonga-Kermadec Islands
(h = 520 km).

" 8

Up	i	14 35 15.0	
	iSgl	14 35 17.4	
Sk	iSgl	14 36 10.8	
Um	iSgl	14 36 57.8	
Ud	iPgl	14 34 12.5	
	i	14 34 26.0	
	iSgl	14 34 26.9	
De	iSgl	14 35 19.7	

Värmland-Dalsland, Sweden,
59.1°N, 12.5°E.
Origin time = 14 33 55.

" 8

Ki	iPn	14 46 11.9	
	iSn	14 47 00.8	
	iSgl	14 47 17.3	
Sk	eSgl	14 50 01	
Um	iSgl	14 48 43.9	

USSR-Norway.
Explosion.

" 8

			micr	sec
Up				
	Mx	E	0.5	17
	Mx	N	0.5	17
	Mx	Z	1.3	19
Ki			micr	sec
	Mx	E	0.8	17
	Mx	N	0.6	16
	Mx	Z	0.8	18
De	iPKP		17 34 18.6	

Solomon Islands (h = N).
M = 5.5 (Up,Ki).

" 8

Up	iP	20 48 50.3	
	ipP	20 49 01.3	
Ki	iP	20 48 08.3	
Um	iP	20 48 25.9	
	ipP	20 48 37.7	
Ud	iP	20 48 57.1	
	ipP	20 49 09.3	

Japan.
h = 45 km (Up,Um,Ud).

" 8

Up	iPKP	21 45 14.2	
Um	iPKP	21 45 07.7	
Ud	iPKP	21 45 17.2	
De	iPKP	21 45 22.8	

Solomon Islands (h = 45 km).

" 8

Up	iPKP	22 14 57.7	
Ki	iPKP	22 14 44.8	

(cont.)

1974
June 8 (cont.)

Sk	iPKP	22 14 56.0	
Um	iPKP	22 14 49.7	
Ud	iPKP	22 14 59.7	
De	iPKP	22 15 05.5	

Solomon Islands (h = 35 km).

" 9

Ud	iPKPl	02 25 41.1	

" 9

Ud	iPKP	03 20 51.9	

Samoa Islands (h = N).

" 9

Ki	iP	04 10 08.0	
Um	iP	04 10 35.3	
Ud	iP	04 11 01.1	

Aleutian Islands (h = 50 km).

" 9

Um	iP	06 13 17.7	
	ipP	06 13 28.3	

Aleutian Islands.
h = 40 km (Um).

" 9

Ki	iSn	06 49 04.7	
Um	iSgl	06 50 14.6	

Northwest USSR.
Explosion.

" 9

Up	eSgl	07 42 39	
Ki	iPn	07 38 23.1	
	iSn	07 39 21.2	
	iSgl	07 39 44.9	
Sk	iSn	07 41 16.5	
	iSgl	07 42 06.5	
Um	iSn	07 40 00.1	
	i	07 40 15.4	
	i	07 40 32.6	
	iSgl	07 40 36.4	
Ud	iS*	07 42 57.5	
	iSgl	07 43 11.3	

Northwest USSR.
Explosion.

" 9

Ki	iP	11 52 43.0	
Sk	iP	11 52 36.7	
Um	iP	11 52 50.9	
Ud	iP	11 52 44.5	

" 9

Up	eP		14 29 40	
			micr	sec
	Mx	E	1.0	20
	Mx	N	0.7	20
	Mx	Z	0.9	21
Ki	eP		14 29 42	
			micr	sec
	Mx	E	1.4	22
Sk	iP		14 29 29.2	
Um	iP		14 29 44.8	

(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
June 9 (cont.)

Um	i	14 29 54.6	
Ud	iP	14 29 32.0	

Peru (h = 50 km).
M = 5.5 (Up,Ki).

" 9

Up	iPKPl	16 16 03.3
Ud	iPKPl	16 16 05.7

" 9

Up	iPKPl	21 20 45.3
Um	iPKP	21 20 42.8
Ud	iPKPl	21 20 46.7
De	iPKPl	21 20 57.6

" 10

Ki	iP	04 48 09.3
Um	iP	04 48 12.5

Celebes (h = 130 km).

" 10

Up	iP	05 14 26.2	
	i	05 14 29.2	
		micr	sec
	P Z'	0.1	1.1
Ki	iP	05 15 49.0	
	i	05 15 54.4	
Sk	eP	05 15 18	
	i	05 15 22.2	
Um	iP	05 15 06.5	
	i	05 15 11.5	
Ud	iP	05 14 43.0	
	i	05 14 46.6	
De	eP	05 14 06	
	i	05 14 09.3	

Rumania (h = 170 km).
Double P, suggesting a double event with a slight shift in hypocenter.

" 10

Ud	iP	07 46 36.3

California (h = 20 km).

" 10

Ki	iP	09 06 48.4
Sk	iP	09 07 25.2
Um	iP	09 07 10.6
Ud	iP	09 07 41.3
De	iP	09 08 00.3

Kurile Islands (h = N).

" 10

Up	iP	10 27 19.2

North Atlantic Ocean (h = N).

" 10

Sk	eSgl	12 19 28
Um	iSgl	12 18 00.0
Ud	iSgl	12 18 41.5

Western USSR.
Explosion.

" 10

Up	iP	14 45 08.0

(cont.)

1974
June 10 (cont.)

Ki	iP	14 44 13.9
Sk	iP	14 44 43.3
Um	iP	14 44 41.7
Ud	iP	14 45 05.6
De	iP	14 45 29.3

Alaska (h = 10 km).

" 10

Ki	eSn	17 12 51
	iS*	17 13 10.7
Sk	iSgl	17 15 40.6

Northwest USSR.
Explosion.

" 10

Up	iSgl	19 10 36.7	
Ki	iPgl	19 07 55.5	
	i	19 08 06.5	
	i	19 08 31.8	
	iSgl	19 08 32.4	
		micr	sec
	Sgl Z'	0.1	0.7
Sk	iPgl	19 06 58.8	
	iS*	19 08 35.9	
	iSgl	19 08 40.0	
Um	iSn	19 08 45.2	
	iSgl	19 09 00.0	
Ud	iSgl	19 10 25.3	
De	iSgl	19 12 20.4	

Nordland, Norway,
66.5°N, 14.3°E.
Origin time = 19 07 08.
Explosion.

" 10

Up	iSKPl	19 24 59.1	
	i	19 25 03.7	
		micr	sec
	SKPl Z'	0.1	1.0
Sk	iSKPl	19 24 52.0	
Um	iSKPl	19 24 45.1	
Ud	iSKPl	19 25 02.2	
De	iSKPl	19 25 11.6	

New Hebrides Islands
(h = 180 km).

" 11

Um	iP	00 10 08.6

" 11

Ki	iP	02 13 10.7
Sk	iP	02 12 44.8
Ud	iP	02 12 13.7
De	iP	02 11 43.2

East of Crete (h = 45 km).

" 11

Up	iP	06 27 00.1
Ud	iP	06 27 17.2

" 11

Ki	iP	11 45 41.4

Ceram (h = N).

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
June 11 Um iSgl 12 21 06.7
Western USSR.
Explosion.

" 11 Ud iP 12 52 15.1
Nevada (h = 20 km).

" 11 Up iSgl 13 07 05.9
Ki iSgl 13 09 22.6
Sk e 13 09 01
Um iSgl 13 07 24.6
Ud iSgl 13 08 07.0
De iSgl 13 08 31.5
iSg2 13 08 41.9
Western USSR.
Explosion.

" 11 Up iSn 13 29 25.5
iSgl 13 29 37.6
Ki iSgl 13 32 09.6
Sk iSgl 13 31 33.6
Um iSgl 13 30 12.9
Ud iSgl 13 30 45.9
De iSgl 13 31 03.2
iSg2 13 31 18.4
Esthonia.
Explosion.

" 11 Up iP 14 57 23.6
i 14 57 31.8
Ud iP 14 57 38.4
De iP 14 57 51.3

" 11 Up iP 20 31 40.4
Um iPcP 20 31 48.6
Ud iP 20 31 40.3
De iP 20 32 02.4
Aleutian Islands (h = 60 km).

" 11 Up iPKPl 22 34 56.4
i 22 35 03.6

		micr	sec
PKPl	Z'	0.1	1.0
Mx	N	1.0	23
Mx	Z	1.6	23

Ki

		micr	sec
Mx	E	0.9	20
Mx	N	1.0	21
Mx	Z	1.2	20

Sk iPKPl 22 34 50.2
i 22 34 57.2
Um iPKPl 22 34 47.8
Ud iPKPl 22 34 58.0
i 22 35 04.5
De iPKPl 22 35 07.0
i 22 35 14.0
Kermadec Islands (h = 15 km).
M = 5.7 (Up,Ki).
(cont.)

1974
June 11 (cont.)
Double onsets, smaller and larger, in average separated by 6.9 sec.

" 12 Up iP 00 46 16.5
i 00 46 56.2

" 12 Ud iP 03 24 56.0
Mindanao (h = 290 km).

" 12 Um iP 10 26 17.3
i 10 26 25.4
Ud iP 10 26 13.3
De iP 10 25 38.3
Jordan-Syria (h = N).

" 12 Ki iPn 12 03 41.6
iPgl 12 03 50.1
iSn 12 04 30.0
iSgl 12 04 45.5
USSR-Norway.
Explosion.

" 12 Um iP 13 44 05.0
Ud iP 13 44 37.2

" 12 Ki iX 13 59 48.9
Sk eP 13 59 15
iX 13 59 50.9
Um iP 13 59 23.9
iX 13 59 59.9
Mexico (h = 50 km).
X is probably P of another, somewhat larger event in the same region.

" 12 Um iP 15 24 17.0
Ud iP 15 24 19.0

" 12 Um iSgl 16 06 45.0
Esthonia.
Explosion.

" 12 Up iP 16 13 13.0

		micr	sec
Mx	E	0.6	13
Mx	N	0.7	15

Ki iP 16 12 59.5
iS 16 16 15

		micr	sec
Mx	E	0.8	11
Mx	N	1.1	15
Mx	Z	0.7	13

Sk iP 16 12 29.2
Um iP 16 13 07.8
Ud iP 16 12 55.0
(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
June 12 (cont.)
Iceland (h = 15 km).
M = 4.3 (Up,Ki).
Our readings exhibit rather large positive residuals compared to the NEIS solution.

"	12	Ki	iP	16 29 08.6	
		Sk	iP	16 29 26.1	
		Um	iP	16 29 02.7	
		Ud	iP	16 29 26.1	

Andaman Islands.

"	12	Up	iP	16 37 35.3	
			iS	16 47 12	
				micr	sec
			Mx E	2.7	20
			Mx N	2.2	18
			Mx Z	5.1	21
		Ki	iP	16 37 43.4	
			iS	16 47 30	
				micr	sec
			P Z'	0.1	0.8
			Mx E	3.6	22
			Mx N	4.7	22
			Mx Z	3.1	18
		Sk	iP	16 37 23.7	
		Um	iP	16 37 43.1	
			iS	16 47 31	
		Ud	iP	16 37 24.3	
		De	iP	16 37 23.6	

Venezuela (h = 35 km).
M = 5.8 (Up,Ki).

"	12	Ki	iP	16 56 35.6	C
		Sk	eP	16 57 07	
			iPcP	16 57 40.4	
		Um	iP	16 57 02.3	
			iPcP	16 57 37.9	
		Ud	iP	16 57 27.8	C
		De	iP	16 57 50.9	

Aleutian Islands (h = 45 km).

"	12	Ki	iP	17 19 01.7	
		Sk	iP	17 19 21.4	
			i	17 19 28.0	
		Um	iP	17 19 01.1	
		Ud	iP	17 19 18.6	

Burma.

"	12	Up	iP	17 59 24.2	
			i	18 00 27.1	
				micr	sec
			P Z'	0.7	2.0

(cont.)

1974
June 12 (cont.)
Δ = 18°
5.28
−0.53
4.75

		Up		micr	sec
			Mx E	3.4	15
			Mx N	7.1	15
			Mx Z	5.0	17
		Ki	iP	17 59 04.0	
				micr	sec
			P Z'	0.5	1.5
			Mx E	14	17
			Mx N	18	16
			Mx Z	8.9	17
		Sk	iP	17 58 36.9	
			i	17 58 41.2	
		Um	iP	17 59 16.2	
			i	17 59 20.6	
			iS	18 02 31	
		Ud	iP	17 59 02.4	
			i	17 59 05.8	
		De	iP	17 59 25.3	
			i	17 59 30.3	

Iceland (h = 15 km).
m = 5.4, M = 5.4 (Up,Ki).
Our readings exhibit rather large positive residuals compared to the NEIS solution, in addition to double onsets.

"	12	Ud	iP	18 48 39.1	

Afghanistan-USSR
(h = 110 km).

"	12	Um	iPKP	19 45 52.4	
			i	19 46 18.1	

South Sandwich Islands
(h = N).

"	12	Um	iPKP	21 46 06.9	

Solomon Islands (h = N).

"	12	Um	iP	22 59 54.2	
"	13	Um	iP	00 23 52.8	
		Ud	iP	00 24 10.6	

Hindu Kush (h = 220 km).

"	13	Um	iP	07 17 43.5	
"	13	Up	iPgl	08 10 04.9	
			i	08 10 33.0	
			iSgl	08 10 34.3	
		Sk	eSgl	08 12 34	
		Um	iSgl	08 11 38.9	
		Ud	iSgl	08 11 37.1	
		De	iSgl	08 12 11.6	

(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 June	13	(cont.)		
		Baltic Sea, 59.6°N, 21.8°E.		
		Origin time = 08 09 27.		
		Explosion.		
"	13	Up	iPgl	08 10 50.3
			i	08 11 19.1
			iSgl	08 11 19.6
		Um	iSgl	08 12 23.5
		Ud	iSgl	08 12 21.4
		De	iSgl	08 12 57.0
		Baltic Sea, 59.6°N, 21.8°E.		
		Origin time = 08 10 12.		
		Explosion.		
"	13	Up	iSgl	10 33 11.0
		Um	iSgl	10 33 43.9
		Ud	iSgl	10 34 15.6
		De	iSgl	10 34 43.6
		Esthonia.		
		Explosion.		
"	13	Ud	i(P)	12 07 26.1
"	13	Sk	iP	12 09 38.5
		Um	iP	12 09 51.2
		Mexico (h = 100 km).		
"	13	Up	i	12 16 33.8
		Sk	eSgl	12 18 08
		Um	iSgl	12 16 40.2
			eRg	12 17 07
		Ud	iSgl	12 17 24.7
		De	eSgl	12 17 51
		Western USSR.		
		Explosion.		
"	13	Sk	i	13 04 01.3
			iSgl	13 04 05.0
		Um	iSgl	13 02 17.4
			iRg	13 02 47.9
		Ud	eSgl	13 03 41
		Probably Lake Ladoga region explosion.		
"	13	Sk	i(P)	13 43 35.8
			i	13 43 49.4
		Um	i(P)	13 44 23.5
"	13	Ki	iP	13 56 33.7
		Um	iP	13 56 37.4
		Mindanao (h = 55 km).		
"	13	Up	iSn	17 43 39.6
			iSgl	17 43 49.7
		(cont.)		

1974 June	13	(cont.)		
		Sk	e(S*)	17 44 35
		Ud	iPgl	17 42 39.4
			iSgl	17 42 59.0
			iRg	17 43 06.5
		De	iSgl	17 43 29.7
		Dalsland, Sweden, 58.8°N, 12.1°E.		
		Origin time = 17 42 14.		
		Near-surface event.		
"	13	Ud	iP	18 39 50.1
		De	iP	18 39 13.1
"	13	Up	iP	21 54 39.2
		Sk	iP	21 54 29.9
		Um	iP	21 54 39.6
		Caribbean Sea (h = N).		
"	14	Up	eP	00 47 03
		Um	iP	00 47 13.4
"	14	Ud	iP	06 34 38.5
		Kurile Islands.		
"	14	Sk	ePKPl	06 54 48
		Um	iPKPl	06 54 42.7
			ipPKPl	06 56 24.5
		Ud	iPKPl	06 54 55.0
		De	iPKPl	06 55 04.1
		Kermadec Islands.		
		h = 430 km (Um).		
"	14	Up	iPKPl	08 44 47.7
		Sk	iPKPl	08 44 36.7
		Um	iPKPl	08 44 32.4
		Ud	iPKPl	08 44 44.6
		De	iPKPl	08 44 53.4
		Kermadec Islands.		
"	14	Up	iSgl	11 42 20.0
		Ki	iPn	11 38 06.7
			iSn	11 39 05.7
			iS*	11 39 24.8
		Sk	eSn	11 41 02
			iSgl	11 41 55.2
		Um	iSn	11 39 44.4
			i	11 39 59.6
			iS*	11 40 13.7
		Ud	iSgl	11 42 53.4
		De	iSgl	11 44 22.4
		Northwest USSR.		
		Explosion.		
"	14	Up	iSgl	12 27 41.7
		Ki	iSgl	12 29 46.5
		(cont.)		

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 June	14	(cont.)			
		Sk	iSgl	12 29 31.9	
		Um	iSgl	12 27 57.9	
		Ud	iSgl	12 28 39.2	
		De	e	12 28 43	
		Western USSR.			
		Explosion.			
"	14	Ki	iSn	12 46 36.0	
			iS*	12 46 48.7	
		Sk	eSgl	12 49 44	
		Um	iSgl	12 48 28.8	
		Ud	eSgl	12 50 56	
		USSR-Norway.			
		Explosion.			
"	14	Ki	iP	12 50 45.2	
		Java (h = 80 km).			
"	14	Up	iPKP	13 07 28.3	
		Ki	iPKP	13 07 12.2	
		Sk	iPKP	13 07 22.7	
		Um	iPKP	13 07 18.3	
		Ud	iPKP	13 07 28.3	
			iSKP1	13 10 39.3	
		De	iPKP	13 07 35.3	
			iSKP1	13 10 50.1	
		New Hebrides Islands			
		(h = 160 km).			
"	14	Um	iP	13 13 39.9	
"	14	Up	e(PKP)	13 43 41	
			iPKP	13 43 50.4	
				micr	sec
			PKP Z'	0.1	0.9
		Ki	iPKP	13 44 03.4	
				micr	sec
			Mx E	0.9	20
			Mx N	0.8	19
		Sk	iPKP	13 43 53.7	
		Um	i(PKP)	13 43 49.3	
			iPKP	13 43 56.5	
		Ud	iPKP	13 43 47.7	
		De	iPKP	13 43 43.2	
		Scotia Sea (h = N).			
"	14	Um	iP	14 00 00.3	
		Ud	iP	14 00 32.1	
		Japan (h = 130 km).			
"	14	Um	iP	15 48 54.3	
		Celebes (h = 190 km).			
"	14	Ki	iP	18 00 47.3	
		Um	iP	18 00 38.2	
			ipP	18 01 06.1	
		Ud	iP	18 00 57.0	
		(cont.)			

1974 June	14	(cont.)			
		Ud	ipP	18 01 25.7	
		Afghanistan-USSR.			
		h = 140 km (Um,Ud).			
"	14	Ud	iP	18 15 22.6	
"	14	Up	iPKP1	18 57 33.6	
		Um	iPKP	18 57 25.8	
			i	18 57 33.9	
		Ud	iPKP1	18 57 35.4	
		De	iPKP1	18 57 46.7	
		Tonga-Kermadec Islands			
		(h = 600 km).			
"	14	Up	iRg	21 16 17.8	
		Ud	iRg	21 16 06.4	
		Central Sweden.			
"	14	Up	iP	21 19 59.2	
		Um	iP	21 19 40.6	
		Ud	iP	21 20 06.2	
"	14	Um	iP	22 11 45.0	
		Ud	iP	22 12 04.5	
"	15	Up	iP	00 57 15.4	
			iLgl	01 04 38	
				micr	sec
			P Z'	0.1	1.5
			Mx E	0.7	13
			Mx N	0.7	13
			Mx Z	1.0	13
		Ki	iP	00 57 54.6	
			iPn	00 58 27.6	
				micr	sec
			Mx E	0.6	14
			Mx N	0.9	15
			Mx Z	0.7	15
		Sk	eP	00 58 00	
		Um	iP	00 57 27.8	
		Ud	iP	00 57 32.2	
		De	iP	00 57 18.7	
		Caucasus (h = 45 km).			
		M = 4.6 (Up,Ki).			
"	15	Um	iP	01 21 52.2	
		Ud	iP	01 22 12.2	
		Mindanao (h = 50 km).			
"	15	Up	iP	02 47 51.2	
			ipP	02 48 28.0	
			iX	02 48 33.7	
			eP'P'	03 16 05	
			i	03 16 09.3	
				micr	sec
			X Z'	0.3	1.0
		Ki	iP	02 46 57.9	
		(cont.)			

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
June 15 (cont.)

Ki	iX		02 47 39.2	
	iP'P'		03 16 28.0	
			micr	sec
	X	Z'	0.2	1.3
Sk	iP		02 47 30.9	
	iX		02 48 12.6	
	iP'P'		03 16 18.9	
Um	iP		02 47 23.8	
	ipP		02 48 00.5	
	iX		02 48 05.8	
	iP'P'		03 16 17.3	
Ud	iP		02 47 51.9	
	ipP		02 48 29.3	
	iX		02 48 34.2	
De	iP		02 48 14.8	
	iX		02 48 56.8	
	iP'P'		03 16 03.7	

Aleutian Islands.
h = 150 km (Up,Um,Ud).
X is probably P of another larger event in the same area, 42.0 sec later.

" 15

Ki	iP		03 42 34.0
Um	iP		03 42 11.3
Ud	iP		03 42 08.2

Gulf of Aden (h = N).

" 15

Um	iP		04 00 10.9
Ud	iP		04 00 38.8

Japan (h = 370 km).

" 15

Up	eP		04 03 06
Um	iP		04 03 17.6
Ud	iP		04 03 21.6

Caucasus.

" 15

Ki	iP		06 46 22.8

Mariana Islands (h = 430 km).

" 15

Up	iP		07 13 31.9	C
			micr	sec
	P	Z'	0.2	1.1
	Mx	E	0.7	15
	Mx	N	1.0	14
	Mx	Z	0.9	12
Ki	iP		07 13 15.5	C
			micr	sec
	P	Z'	0.3	0.9
	Mx	E	1.7	12
	Mx	N	2.4	16
	Mx	Z	1.4	12
Sk	iP		07 13 42.0	C
Um	iP		07 13 19.3	C

(cont.)

1974
June 15 (cont.)

Ud	iP		07 13 44.0	C
De	iP		07 13 49.8	

Szechwan, China (h = 40 km).
m = 6.3, M = 5.5 (Up,Ki).

" 15

Up	iP		07 26 27.3	C
	i		07 26 30.9	
Ki	iP		07 26 10.7	
	i		07 26 13.3	
			micr	sec
	P	Z'	0.1	0.9
Sk	eP		07 26 38	
Um	iP		07 26 14.8	
	i		07 26 17.8	
Ud	iP		07 26 39.8	
De	iP		07 26 48.5	

Szechwan, China (h = N).
Double P, average separation = 3.1 sec.

" 15

Um	iP		09 42 02.9

" 15

Up	iSgl		09 52 49.8
Um	iSgl		09 53 24.4
Ud	i		09 53 25.6
	iSgl		09 53 45.9
De	iSn		09 53 49.2
	iSgl		09 54 23.6

Gulf of Finland.
Explosion.

" 15

Ki	eSgl		09 56 36
Um	iSgl		09 54 34.9
De	iS*		09 55 32.3
	iSgl		09 55 37.2

Gulf of Finland.
Explosion.

" 15

Up	iP		10 29 29.9	
	i		10 29 33.8	
			micr	sec
	P	Z'	0.1	0.8
Ki	iP		10 29 14.0	
	i		10 29 18.2	
			micr	sec
	P	Z'	0.1	0.9
	Mx	E	0.7	15
	Mx	N	0.5	14
	Mx	Z	0.6	14
Sk	iP		10 29 41.9	
	i		10 29 45.2	
Um	iP		10 29 17.3	
	i		10 29 21.1	
Ud	iP		10 29 43.1	

(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 June	15	(cont.)					
		Ud	i		10 29 46.8		
		De	iP		10 29 48.7		
			i		10 29 52.5		
		Szechwan, China (h = N).					
		m = 6.0 (Up,Ki).					
		Double P, small and large,					
		average separation = 3.8					
		sec.					
"	15	Ki	iSn		11 35 11.0		
			iSg2		11 35 30.6		
		Sk	iSgl		11 37 53.1		
		Um	iSn		11 35 52.0		
			iSgl		11 36 19.0		
		USSR-Finland.					
		Explosion.					
"	15	Ki	iSgl		11 35 52.3		
		Um	iSgl		11 36 48.8		
		USSR-Finland.					
		Explosion.					
"	15	Ki	iPn		12 57 34.8		
			iSgl		12 58 40.1		
		Um	eSgl		13 00 07		
		USSR-Norway.					
		Explosion.					
"	15	Ki	iPn		12 58 02.6		
			iS*		12 59 04.5		
		Um	iS*		13 00 29.8		
			iSgl		13 00 35.2		
		USSR-Norway.					
		Explosion.					
"	15	Um	iSgl		13 12 50.8		
		Karelian SSR.					
		Explosion.					
		From Helsinki regional					
		bulletin.					
"	15	Up	i(P)		14 17 20.3		
"	15	Up	iP	/	14 38 05.0	C	
					micr	sec	
			P	Z'	0.1	0.9	
		Ki	iP		14 37 48.3		
					micr	sec	
			P	Z'	0.1	1.3	
			Mx	N	0.6	16	
		Sk	iP		14 38 14.6		
		Um	iP		14 37 52.2	C	
		Ud	iP		14 38 17.2	C	
		De	iP		14 38 23.0		
		(cont.)					

1974 June	15	(cont.)					
		Szechwan, China (h = 10 km).					
		m = 5.9 (Up,Ki).					
"	15	Ki	iSgl		17 14 21.4		
		Sk	iSgl		17 14 52.6		
		Um	iSgl		17 13 02.2		
		Ud	iSn		17 13 50.7		
			iSgl		17 14 39.9		
		Lake Ladoga region.					
		Explosion.					
"	16	Up	eP		01 32 12		
"	16	Ud	iP		02 42 15.7		
			i		02 42 22.1		
"	16	Ki	iSn		06 30 24.8		
		Um	iSgl		06 31 44.1		
		Northwest USSR.					
		Explosion.					
"	16	Sk	iP		09 09 45.7		
		Um	iP		09 09 39.2		
		Ud	iP		09 09 13.0		
		Aegean Sea (h = N).					
"	16	Ud	iP		11 14 50.1		
		Kurile Islands.					
"	16	Ud	i(P)		12 25 55.9		
"	16	Up	iP		12 28 23.2		
		Um	iP		12 28 28.4		
		Ud	iP		12 28 44.4		
		De	iP		12 28 40.4		
"	16	Up	iPKPl		13 36 52.5		
		Um	iPKP		13 36 44.7		
		Ud	iPKP		13 37 02.3		
		De	iPKPl		13 37 03.3		
		Fiji Islands (h = 650 km).					
"	16	Um	iP		22 08 22.0		
"	17	Um	iP		02 11 10.8		
		Ud	iP		02 11 41.5		
		Kurile Islands (h = N).					
"	17	Up	iP		02 29 17.1		
		Ki	iP		02 28 28.1		
		Sk	iP		02 29 01.9		
		Um	iP		02 28 51.4		
		Ud	iP		02 29 22.3		
		De	iP		02 29 41.9		
		Kurile Islands (h = N).					

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974							
June	17	Ki	e		03	36	18
			i		03	36	27.1
			i(Sgl)		03	36	36.3
"	17	Ki	ePn		05	13	06
			iSgl		05	13	46.8
			iSg2		05	13	52.8
		Sk	iSgl		05	14	01.7
		Um	iSgl		05	14	27.3
		Coast of Nordland, Norway, near 66 3/4°N, 13°E. Origin time = 05 12 17.					
"	17	Up	iP		06	08	22.3
					micr		sec
			Mx	Z	0.4		13
		Ki			micr		sec
			Mx	E	0.5		14
			Mx	N	0.3		10
			Mx	Z	0.5		11
		Sinkiang, China. Probably atmospheric explosion.					
"	17	Up	iP		07	29	53.2
			iPP		07	31	07.9
		Ki	iP		07	30	22.3
					micr		sec
			Mx	E	0.4		14
			Mx	N	0.6		16
			Mx	Z	0.5		14
		Sk	iP		07	30	24.8
		Ud	iP		07	30	09.9
			ipP		07	30	18.0
		Iran. h = 40 km (Ud).					
"	17	Up	i(Sgl)		12	17	33.1
		Ud	i(Sgl)		12	17	03.9
		De	i(Sgl)		12	17	24.1
"	17	Ud	iP		12	23	25.6
		Hindu Kush. Intermediate depth.					
"	17	Up	iSgl		14	15	40.9
		Sk	eSgl		14	17	28
		Um	iSgl		14	16	01.6
		Ud	iSgl		14	16	49.7
		Western USSR. Explosion.					
"	17	Ki	iSgl		15	31	28.8
		Sk	iSgl		15	29	26.9
			iRg		15	29	36.0
		Um	iSgl		15	31	03.0
		(cont.)					

1974							
June	17	(cont.) Off west coast of Norway, near 64 1/2°N, 10°E. Origin time = 15 28 38.					
"	17	Up	iP		16	47	40.1
		Ki	iP		16	46	57.7 C
		Sk	iP		16	47	32.7 C
		Um	iP		16	47	16.8 C
		Ud	iP		16	47	47.1 C
		De	iP		16	48	03.8
		Japan (h = 60 km).					
"	17	Ud	iPKPl		18	57	32.9
		De	iPKPl		18	57	45.1
"	17	Up	iP		19	30	33.0
		Ud	iP		19	30	41.6
		Ionian Sea (h = N).					
"	17	Up	iP		22	04	02.8
		Ki	iP		22	03	09.7
		Sk	iP		22	03	42.4
		Um	iP		22	03	35.8 C
		Ud	iP		22	04	03.5
		De	iP		22	04	25.6
		Aleutian Islands (h = 190 km).					
"	18	Ud	iP		00	13	50.6
		Iran (h = 50 km).					
"	18	Up	iP		00	30	30.2
"	18	Up	eSgl		00	33	16
		Um	iSgl		00	34	01.3
		De	eSgl		00	34	58
		Gulf of Finland. Explosion.					
"	18	Up	i(P)		02	24	11.4
			i		02	24	24.3
"	18	Up	eSgl		02	42	57
		Um	iSgl		02	43	41.2
		De	eSgl		02	44	36
		Gulf of Finland. Explosion.					
"	18	Um	iPKPl		07	55	44.9
		Ud	iPKPl		07	55	56.7
"	18	Up	iP		08	30	59.1 C
			iPP		08	31	27.6
					micr		sec
			P	Z'	0.1		0.8
		(cont.)					

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 June	18	(cont.)				
		Up			micr	sec
			Mx	E	0.4	9
			Mx	N	0.8	11
			Mx	Z	1.3	12
		Ki			micr	sec
			Mx	E	1.2	16
			Mx	N	0.9	13
			Mx	Z	0.8	12
		Sk	iP		08 31 39.9	C
		Um	iP		08 31 38.1	
			iS		08 36 02	
		Ud	iP		08 31 04.9	C
		De	iP		08 30 28.6	
			i		08 30 39.0	
		Greece (h = N).				
		M = 4.7 (Up,Ki).				
"	18	Up	iPKPl		08 50 10.4	
			iSKPl		08 53 03.7	
					micr	sec
			PKPl	Z'	0.1	0.7
		Ki	iSKPl		08 52 44.7	
		Sk	iPKPl		08 50 04.7	
		Um	iPKP		08 50 04.3	
			iSKPl		08 52 54.5	
		Ud	iPKPl		08 50 12.0	
			iSKPl		08 53 07.1	
		De	iPKPl		08 50 22.6	
			ipPKPl		08 52 23.5	
		Tonga-Kermadec Islands.				
		h = 530 km (De).				
"	18	Up	iPKPl		11 11 14.5	
		Sk	ePKPl		11 11 04	
			i		11 11 16.1	
		Ud	iPKPl		11 11 16.6	
"	18	Ki	eSgl		11 44 34	
		Um	iSgl		11 42 34.4	
		Ud	eSgl		11 43 05	
		Esthonia.				
		Explosion.				
"	18	Up	iSgl		12 13 16.0	
		Um	i		12 13 24.3	
			iSgl		12 13 38.3	
		De	i		12 14 25.7	
		Western USSR.				
		Explosion.				
"	18	Up	eSgl		12 14 20	
		Um	eSgl		12 14 39	
			eRg		12 15 05	
		Ud	iSgl		12 15 19.9	
		De	eSgl		12 15 46	
		Western USSR.				
		Explosion.				
1974 June	18	Up	iP		12 54 55.5	
		De	iP		12 55 31.3	
"	18	Up	iSgl		13 02 06.4	
		Ki	iSgl		13 04 58.4	
		Sk	iSgl		13 04 01.7	
		Um	iSgl		13 02 54.1	
		Ud	iSgl		13 03 06.8	
		De	iSgl		13 03 32.3	
		Esthonia.				
		Explosion.				
"	18	Um	iP		13 55 24.8	
		Ud	iP		13 55 55.7	
		Japan (h = 80 km).				
"	18	Up	iRg		14 54 10.8	
		Ud	iRg		14 54 22.5	
		Central Sweden.				
"	18	Up	iP		15 02 16.3	
"	18	Ki	iSgl		18 59 22.3	
		Sk	iSgl		19 00 37.2	
		Um	iSgl		19 00 02.0	
		Swedish Lapland,				
		66.5°N, 18.5°E.				
		Origin time = 18 58 34.				
"	18	Up	iP		20 34 55.6	
		Ki	iP		20 34 38.8	
		Um	iP		20 34 44.6	
		Ud	iP		20 35 04.3	
		Mindanao (h = N).				
"	18	Um	iP		21 08 55.7	
"	19	Up	i(pP)		02 19 49.9	
		Ki	iP		02 19 36.7	
		Um	iP		02 19 33.5	
			i(pP)		02 19 52.0	
		Ud	iP		02 19 46.1	
		De	iP		02 19 44.4	
		Nicobar Islands.				
"	19	Um	iP		03 09 13.3	
		Indian Ocean (h = N).				
"	19	Up	iP		03 18 46.6	C
					micr	sec
			Mx	E	1.0	18
			Mx	N	0.8	17
			Mx	Z	0.9	17
		Ki	iP		03 17 47.5	
			i		03 18 31.6	
		(cont.)				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 June	19	(cont.)				
		Ki			micr	sec
			Mx	E	1.8	20
			Mx	N	1.7	22
			Mx	Z	1.1	18
		Sk	iP		03 18 28.8	
		Um	iP		03 18 15.2	
			i		03 18 54.0	
		Ud	iP		03 18 50.1	
		De	iP		03 19 14.8	
		Eastern Siberia (h = N).				
		M = 5.1 (Up,Ki).				
"	19	Up	iP		07 08 39.2	
		Ud	iP		07 08 45.2	
		De	iP		07 08 13.0	
		Greece.				
"	19	Ud	iP		07 24 58.8	
"	19	Ud	iP		07 42 03.4	
		Hindu Kush.				
		Intermediate depth.				
"	19	Ki	iP		11 45 05.9	
		Sk	iP		11 45 35.9	
		Um	iP		11 45 33.0	
		Ud	iP		11 45 57.6	
		De	iP		11 46 20.6	
		Unimak Island (h = N).				
"	19	Ki	eSgl		12 14 29	
		Um	iSgl		12 12 36.4	
		Ud	iSgl		12 13 20.8	
		Western USSR.				
		Explosion.				
"	19	Ud	iP		12 28 05.9	
"	19	Up	iP		16 11 48.7	
		Ki	iP		16 11 14.1	
		Sk	iP		16 11 22.6	
		Um	iP		16 11 34.0	
		Ud	iP		16 11 40.5	
		Nevada.				
		Underground explosion?				
"	19	Sk	eSgl		16 37 39	
		Ud	i		16 37 16.1	
			iSgl		16 37 24.9	
		Off coast of southwest Norway, 60.2°N, 4.4°E.				
		Origin time = 16 34 59.				
		By combination with Kongsberg readings.				

1974 June	19	Ki	iP		17 38 10.2	
		Kamchatka (h = N).				
"	19	Ud	iPKP1		18 11 30.9	
"	19	Up	iP		19 03 41.2	
		Ki	iP		19 03 49.8	
		Sk	iP		19 04 06.9	
		Ud	iP		19 03 57.6	
		De	iP		19 03 54.6	
		Hindu Kush.				
		Intermediate depth.				
"	19	Up	iP		19 33 24.1	
			i		19 33 29.3	
		Sk	iP		19 32 57.6	
		Um	iP		19 33 05.6	
		Ud	iP		19 33 17.3	
		California (h = N).				
"	19	Ud	iP		20 14 10.3	
"	19	Up	iP		21 25 51.9	
			ipP		21 27 34.6	
		Ki	iP		21 25 18.6	
		Sk	iP		21 25 48.9	
		Um	iP		21 25 33.3	
		Ud	iP		21 25 59.2	
		De	iP		21 26 12.0	
		South of Japan.				
		h = 460 km (Up).				
"	19	Um	iP		22 08 05.1	
		Ud	iP		22 07 24.4	
		Ionian Sea.				
"	20	Up	ePKP2		01 49 09	
		Ki	iPKP1		01 48 38.8	
		Sk	iPKP1		01 48 53.0	
		Um	iPKP1		01 48 48.9	
		Ud	iPKP2		01 49 16.1	
		South of Kermadec Islands.				
"	20	Up	iP		05 36 35.3	
		Um	iP		05 36 10.8	
		Japan (h = 100 km).				
"	20	Up	iPKP1		06 54 25.5	C
			ipPKP1		06 56 34.4	
			iSKP1		06 57 18.3	
					micr	sec
			PKP1	Z'	0.1	0.8
		Ki	iPKP		06 54 12.3	
			iSKP1		06 56 58.8	
		(cont.)				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974							
June	20	(cont.)					
		Ki			micr	sec	
			SKPl	Z'	0.1	1.0	
		Sk	iPKPl		06 54	18.8	
		Um	iPKPl		06 54	14.0	
			iSKPl		06 57	08.7	
		Ud	iPKPl		06 54	27.9	C
			iSKPl		06 57	19.9	
		De	iPKPl		06 54	37.4	
			ipPKPl		06 56	40.4	
		Tonga-Kermadec Islands.					
		h = 560 km (Up,De).					
"	20	Ki	eSgl		08 53	42	
		Sk	eSgl		08 54	13	
		Um	i		08 53	14.7	
			iSgl		08 53	24.2	
		Ud	iSgl		08 54	01.7	
		Lake Ladoga region.					
		Explosion.					
"	20	Up	iP		09 32	10.9	
					micr	sec	
			Mx	E	1.0	14	
			Mx	N	0.9	10	
			Mx	Z	1.2	9	
		Ki	iP		09 33	43.2	
					micr	sec	
			Mx	E	1.6	15	
			Mx	N	1.2	12	
			Mx	Z	1.1	13	
		Sk	iP		09 32	59.2	
		Um	iP		09 33	02.2	
			iS		09 36	34	
		Ud	iP		09 32	16.8	C
		De	eP		09 31	28	
		Yugoslavia (h = N).					
		M = 4.6 (Up,Ki).					
"	20	Um	iSgl		13 28	34.0	
			eRg		13 29	02	
		Ud	iSgl		13 29	16.8	
		Western USSR.					
		Explosion.					
"	20	Um	iSgl		14 15	37.0	
		Western USSR.					
		Explosion.					
"	20	Um	iPKPl		15 05	27.3	
"	20	Up	eP		17 11	53	
			iS		17 14	40.5	
					micr	sec	
			S	Z'	0.4	2.0	
		Ki	iP		17 13	18.1	
		Um	iP		17 12	38.9	
		(cont.)					

1974							
June	20	(cont.)					
		Ud	iP		17 11	55.9	
		Yugoslavia (h = 45 km).					
"	20	Up	iP		17 12	12.8	
					micr	sec	
			P	Z'	0.1	1.2	
			Mx	E	0.7	8	
			Mx	N	1.1	9	
			Mx	Z	1.9	9	
		Ki	iP		17 13	42.6	
					micr	sec	
			P	Z'	0.2	1.1	
			Mx	E	1.4	11	
			Mx	N	0.9	13	
			Mx	Z	1.1	13	
		Sk	iP		17 12	51.2	
		Um	iP		17 12	57.5	
			i		17 13	00.4	
		Ud	iP		17 12	14.3	
		De	iP		17 11	15.1	
		Yugoslavia.					
		m = 5.2, M = 4.6 (Up,Ki).					
"	20	Up	iP		22 29	56.0	
			iSn		22 31	59.6	
			iLgl		22 33	51.9	
					micr	sec	
			Mx	N	0.5	9	
			Mx	Z	0.6	9	
		Ki	iP		22 31	26.4	
					micr	sec	
			Mx	E	0.4	8	
		Sk	eP		22 30	31	
		Um	iP		22 30	41.8	
		Ud	iP		22 30	00.1	
			iSn		22 32	02.2	
		De	iP		22 29	00.8	
			iLgl		22 32	07.0	
		Yugoslavia (h = N).					
		M = 4.4 (Up,Ki).					
"	20	Up	iP		22 52	18.6	
			ipP		22 52	31.4	
					micr	sec	
			P	Z'	0.1	1.4	
		Ki	iP		22 52	01.7	
		Um	iP		22 52	03.9	
		Ud	iP		22 52	27.4	C
			ipP		22 52	41.0	
		Luzon.					
		h = 50 km (Up,Ud).					
"	21	Sk	iP		01 15	05.2	
		Ud	iP		01 14	25.4	
			i		01 14	35.6	
		Greece-Bulgaria.					

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974						
June	21	Up	iSn		06 34 18.4	
			i		06 34 35.8	
			iSgl		06 34 58.1	
		Ki	iPgl		06 32 02.9	
			iSn		06 32 33.9	
			iS*		06 32 41.3	
			iSgl		06 32 44.5	
					micr	sec
			S*	Z'	0.1	0.5
			Sgl	Z'	0.2	0.7
		Sk	i		06 34 13.6	
			iSgl		06 34 36.5	
		Um	iPgl		06 32 14.4	
			i(Pg2)		06 32 16.9	
			iSn		06 32 46.4	
			i		06 32 50.2	
			iS*		06 32 57.4	
			iSgl		06 33 00.4	
		De	i		06 36 08.0	
			iSgl		06 37 00.9	
		Finland, 66.0°N, 26.8°E.				
		Origin time = 06 31 08.				
		Clear double Sn phases at Um.				
"	21	Ud	iPKP		07 44 15.7	
		Fiji Islands (h = 310 km).				
"	21	Up	iP		08 52 11.9	C
					micr	sec
			P	Z'	0.1	1.4
		Ki	iP		08 52 09.6	
					micr	sec
			P	Z'	0.1	1.8
		Sk	iP		08 51 41.0	C
		Um	iP		08 52 14.7	
		Ud	iP		08 51 54.7	
		De	iP		08 52 05.9	C
		North Atlantic Ocean (h = N).				
		m = 5.1 (Up,Ki).				
"	21	Up	iS*		11 34 06.9	
			iSgl		11 34 15.5	
		Ki	iPn		11 29 59.9	
			iSn		11 30 59.3	
			iSgl		11 31 20.9	
		Sk	eSgl		11 33 48	
		Um	iSn		11 31 37.3	
			i		11 31 52.1	
			iSgl		11 32 12.0	
			i		11 32 17.3	
		Ud	iSgl		11 34 47.8	
		De	eSgl		11 36 15	
		Northwest USSR.				
		Explosion.				
"	21	Sk	eSgl		12 15 25	
		(cont.)				
1974						
June	21	(cont.)				
		Um	iSgl		12 13 54.3	
		Ud	iSgl		12 14 40.5	
		Western USSR.				
		Explosion.				
"	21	Up	iSgl		13 00 31.9	
		Ki	iSgl		13 03 07.6	
		Sk	iSg2		13 02 29.7	
		Um	iSgl		13 01 04.9	
		Ud	iSgl		13 01 34.8	
		De	eSgl		13 02 01	
		Esthonia.				
		Explosion.				
"	21	Up	eP		16 13 02	
		Ki	iP		16 13 45.1	
		Sk	eP		16 13 31	
		Um	iP		16 13 21.1	
		Gulf of Aden (h = N).				
"	21	Um	iP		20 10 08.3	
		Ud	iP		20 10 40.1	
"	21	Up	iP		21 05 23.9	
			i		21 05 45.4	
					micr	sec
			Mx	E	0.7	15
			Mx	N	0.5	12
			Mx	Z	0.5	12
		Ki	iP		21 04 36.8	
					micr	sec
			Mx	E	1.2	14
			Mx	N	1.3	15
			Mx	Z	1.0	18
		Sk	iP		21 05 19.5	
		Um	iP		21 04 56.4	
			iS		21 11 28	
		Ud	iP		21 05 34.0	
		De	iP		21 05 52.8	C
		East of Lake Baikal (h = N).				
		M = 5.1 (Up,Ki).				
"	21	Up	iSgl		22 12 11.9	
		Ki	iPn		22 08 25.9	
			i		22 08 33.9	
			iPgl		22 08 41.4	
			iSn		22 09 24.8	
			iS*		22 09 45.5	
		Sk	iSgl		22 12 30.9	
		Um	iSn		22 10 24.4	
			iSgl		22 11 10.2	
		Ud	iSn		22 12 22.3	
			iSgl		22 13 44.1	
		Northwest USSR.				
		Explosion?				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
June 21 Up eP 22 23 23

" 22 Um iP 01 10 10.0 D
Banda Sea (h = 230 km).

" 22 Up iP 02 07 12.2
Ki iP 02 06 55.9
Sk iP 02 07 23.3
Um iP 02 06 59.3
Ud iP 02 07 24.0
Szechwan, China (h = 15 km).

" 22 Sk ePKPl 02 48 52
South of Australia (h = N).

" 22 Um iP 06 17 20.0
Ud iP 06 17 24.2
Caucasus.

" 22 Up iPKPl 07 30 17.4 D
i 07 31 10.3
micr sec
PKPl Z' 0.1 0.7
Ki iPKP 07 30 00.9
Sk iPKPl 07 30 09.8 C
Um iPKPl 07 30 06.2 C
Ud iPKPl 07 30 19.1 D
i 07 30 22.1
De iPKPl 07 30 28.8 D
i 07 30 35.1
Kermadec Islands (h = 160 km).
Our northern stations Sk,Um show clear C for PKPl, while the more southern stations Up,Ud,De show clear D.

" 22 Up ePKP 08 31 51
iPP 08 34 00.6
iSKPl 08 35 12.1
micr sec
PKP Z' 0.2 2.0
PP Z' 0.2 1.6
Mx E 1.1 22
Mx N 0.8 19
Mx Z 1.8 22
Ki iPKP 08 31 46.3
iPP 08 33 40.8
micr sec
PKP Z' 0.1 1.3
Mx E 3.3 21
Mx N 3.0 22
Mx Z 4.6 22
Sk iPKP 08 31 45.6
iPP 08 33 31.8
Um iPKP 08 31 51.0
(cont.)

1974
June 22 (cont.)
Ud iPKP 08 31 48.1
iPP 08 33 48.5
De iPKP 08 31 52.1
Easter Island (h = N).
M = 6.0 (Up,Ki).

" 22 Ud iPKPl 10 19 11.7
De iPKPl 10 19 23.6
Tonga Islands (h = N).

" 22 Ki iPn 10 28 53.3
iSn 10 29 41.6
iSgl 10 29 59.1
Sk eSgl 10 32 45
Um iSgl 10 31 27.2
USSR-Norway.
Explosion.

" 22 Up iP 10 41 03.7 C
micr sec
P Z' 0.1 1.0
Ki iP 10 40 22.1 C
micr sec
P Z' 0.1 0.8
Mx E 0.6 16
Mx N 0.7 17
Sk iP 10 40 56.2 C
Um iP 10 40 40.4 C
Ud iP 10 41 10.7 C
De iP 10 41 26.6 C
Japan (h = 40 km).
m = 6.0 (Up,Ki).

" 22 Up iP 13 15 38.5
Ki iP 13 15 04.4
Um iP 13 15 19.2
Ud iP 13 15 45.7
De eP 13 16 00
South of Japan (h = 70 km).

" 22 Up iSn 13 32 34.0
iSgl 13 32 57.5
Sk eSgl 13 35 11
Um i 13 33 31.0
i 13 33 46.8
iSgl 13 34 06.2
Ud i 13 33 19.5
iSgl 13 34 01.8
De iSgl 13 33 33.7
Approximate solution:
Latvia, 56 3/4°N, 25 1/2°E.
Origin time = 13 30 19.
Explosion?

" 22 Ki iSn 14 26 44.8
(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
June 22 (cont.)

Ki	iS*	14 27 03.3	

Northwest USSR.
Explosion.

" 22

Up	iP	16 17 36.2	
Ki	iP	16 16 52.4	
Sk	iP	16 17 28.8	
Ud	iP	16 17 43.1	
	ipP	16 18 03.8	

Japan.
h = 80 km (Ud).

" 22

Up	iP	18 21 03.6	
Ud	iP	18 21 17.0	

" 22

Up	iP	18 59 09.5	
Sk	iP	18 59 25.1	
Ud	iP	18 59 22.4	

Burma-India (h = 110 km).

" 22

Up	iP	19 34 14.9	D
	ipP	19 34 40.2	
	iPP	19 37 53.2	
		micr	sec
	P Z'	0.1	0.7
Ki	iP	19 33 46.3	D
	ipP	19 34 13.1	
		micr	sec
	P Z'	0.2	0.9
Sk	iP	19 34 12.2	
Um	iP	19 33 58.7	
	ipP	19 34 26.3	
Ud	iP	19 34 21.1	D
De	iP	19 34 32.6	

Mariana Islands.
h = 100 km (Up,Ki,Um).
m = 6.1 (Up,Ki).

" 22

Ud	iP	19 44 20.5	

" 22

Up	iP	20 46 35.4	

Aleutian Islands (h = 50 km).

" 22

Up	ePKP2	21 34 16	
Ki	iPKP1	21 34 04.5	
Ud	iPKP2	21 34 27.1	

West of Macquarie Islands
(h = N).

" 22

Ud	iP	21 44 33.5	
De	iP	21 43 59.1	

" 22

Up	iP	23 34 33.5	C
	i	23 34 40.3	
	iS	23 38 03	

(cont.)

1974
June 22 (cont.)

Up			micr	sec
	P	Z'	0.1	1.2
	Mx	E	1.0	14
	Mx	N	1.0	12
	Mx	Z	1.6	12
Ki	iP		23 35 51.7	
			micr	sec
	P	Z'	0.1	0.9
	Mx	E	0.8	11
	Mx	N	0.9	11
Sk	iP		23 35 19.3	
	i		23 35 24.6	
Um	iP		23 35 13.5	
Ud	iP		23 34 43.2	C
De	iP		23 34 04.9	

Greece-Bulgaria (h = N).
m = 5.2, M = 4.6 (Up,Ki).
Double P onsets.

" 23

Up	iP	05 25 48.9	
	iPcP	05 26 15.9	
Ki	iP	05 24 55.2	
Sk	iP	05 25 26.0	
Ud	iP	05 25 47.1	
De	iP	05 26 09.9	

Aleutian Islands (h = 40 km).

" 23

Ki	iSn	05 50 48.0	
	iS*	05 51 07.7	

Northwest USSR.
Explosion.

" 23

Up	iPKP1	06 31 17.3	
Ud	iPKP1	06 31 18.5	
De	iPKP1	06 31 29.4	

Fiji Islands (h = 490 km).

" 23

Up	iPKP	06 39 30.1	C
	iPKKP1	06 49 48.1	
Ki	iPKP	06 39 19.6	
Sk	iPKP	06 39 28.8	
Ud	iPKP	06 39 32.7	C
	iPKKP1	06 49 43.0	
De	iPKP	06 39 38.5	C

Solomon Islands (h = 70 km).

" 23

Up	iP	09 47 06.2	
Ud	iP	09 47 13.6	

Japan (h = 90 km).

" 23

Ud	iPKP	14 47 41.9	
De	iPKP	14 47 49.2	

New Guinea (h = 110 km).

" 23

Up	iPKP2	15 29 27.1	

(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 June	23	(cont.)				
		Ki	iPKP1	15 28 54.8	C	
		Sk	iPKP1	15 29 08.4		
		Ud	iPKP1	15 29 10.2		
		De	iPKP2	15 29 44.1		
		New Zealand (h = 80 km).				
"	23	Up	i(P)	17 34 27.5		
"	23	Up	iPKP1	19 18 59.1		
		Ud	iPKP1	19 19 01.2		
"	23	Up	iP	20 22 15.9		
		Ki	iP	20 21 59.9		
		Ud	iP	20 22 28.7		
		Szechwan, China (h = N).				
"	23	Ki	iP	21 12 26.0		
		Sk	iP	21 12 12.0		
		Turkey (h = N).				
"	24	De	iPKP	03 35 22.9		
		Solomon Islands (h = 90 km).				
"	24	Sk	i(P)	16 41 52.5		
		Um	i(P)	16 41 00.9		
			i	16 41 07.0		
		Ud	i(P)	16 41 51.9		
			i	16 41 55.6		
"	24	Sk	i(P)	17 00 47.8		
		Ud	i(P)	17 00 45.1		
"	24	Up	ePKP	17 22 34		
			iPKP1	17 22 41.9		
		Sk	iPKP1	17 22 31.8		
		Um	iPKP1	17 22 23.2		
		Ud	iPKP1	17 22 35.0		
		De	iPKP2	17 22 58.4		
		South of Kermadec Islands (h = 45 km).				
"	24	Up	iP	19 12 40.6	C	
			i	19 13 07.5		
			iS	19 21 42.6		
		Ki	iP	19 12 05.9	C	
				micr	sec	
			P Z'	0.1	0.8	
		Sk	iP	19 12 36.6		
		Um	iP	19 12 20.2	C	
		Ud	iP	19 12 47.9	C	
			iS	19 21 57.5		
		De	iP	19 12 59.2	C	
		Japan (h = 390 km).				
"	24	Ud	iPKP1	20 21 25.3		

1974 June	24	Up	ePKP	20 53 18		
			i	20 54 23.3		
			iSKP	20 56 45.6		
			iSP	21 04 45		
				micr	sec	
			SKP Z'	0.1	1.7	
			Mx E	1.8	23	
			Mx N	3.2	25	
			Mx Z	3.6	26	
		Ki	iPKP	20 53 33.2		
			iPP	20 55 38.2		
			iSKP1	20 56 44.1		
				micr	sec	
			PKP Z'	0.1	1.1	
			PP Z'	0.2	1.8	
			SKP1 Z'	0.4	2.0	
			Mx E	2.4	21	
			Mx N	1.8	18	
			Mx Z	2.1	19	
		Sk	iPKP	20 53 25.3		
			iSKP	20 56 49.5		
		Um	iPKP	20 53 26.1		
			iPP	20 55 12.7		
			iSKP	20 56 53.8		
		Ud	iPKP	20 53 15.8		
			iPP	20 54 41.3		
		De	iPKP	20 53 19.2		
			iPP	20 54 20.2		
		South Sandwich Islands (h = 80 km).				
		M = 6.0 (Up,Ki).				
"	24	Up			micr	sec
			Mx E		1.9	20
			Mx N		2.7	19
			Mx Z		3.5	25
		Ki	iP	21 49 07.3		
					micr	sec
			Mx E		3.3	19
			Mx N		3.8	23
			Mx Z		3.1	21
		Um	iP	21 49 14.7		
		De	iPKP	21 53 43.1		
		New Guinea (h = N).				
		M = 6.0 (Up,Ki).				
"	24	Up	iP	22 57 12.6		
		Ki	iP	22 57 19.8		
		Um	iP	22 57 09.8		
			isP	22 57 58.4		
		Ud	iP	22 57 29.4		
		De	iP	22 57 26.5		
		Afghanistan-USSR (h = 150 km).				
"	24	Ki	iPKP	23 51 41.6		
		South Sandwich Islands (h = 70 km).				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 June	25	Ki	iP		03 20 44.4	
		Ud	iP		03 21 14.2	
"	25	Up	iP		03 56 28.4	
		Ki	iP		03 55 43.2	
		Sk	iP		03 56 19.5	
		Um	iP		03 56 03.9	
		Ud	iP		03 56 35.5	
		De	iP		03 56 53.1	
		Japan (h = 190 km).				
"	25	Ki	iP		04 03 37.0	
		Sk	iP		04 04 08.1	
		Um	iP		04 03 38.1	C
		Ud	iP		04 04 09.0	
		Kazakh SSR.				
		Underground explosion.				
"	25	Up	iP		04 25 35.9	
		Ki	iP		04 25 07.0	D
			ipP		04 25 44.0	
					micr	sec
			pP	Z'	0.1	1.0
		Sk	iP		04 25 31.9	
		Um	iP		04 25 19.4	D
			ipP		04 25 59.1	
		Ud	iP		04 25 42.4	
		De	iP		04 25 53.8	
		Mariana Islands.				
		h = 150 km (Ki,Um).				
"	25	Ud	iP		04 56 13.6	
"	25	Up	iP		05 13 51.5	
		Ki	iP		05 13 38.9	
		Sk	iP		05 13 28.6	C
		Um	iP		05 13 42.4	
		Ud	iP		05 13 43.0	
		De	iP		05 13 48.7	
		Mexico (h = 25 km).				
"	25	Up			micr	sec
			Mx	E	1.2	20
			Mx	N	1.8	24
			Mx	Z	2.8	23
		Ki	iPKP2		05 26 01.3	
					micr	sec
			Mx	E	0.9	18
			Mx	N	2.6	24
			Mx	Z	1.7	22
		Ud	iPKP2		05 26 04.5	
		South Pacific Ocean (h = N).				
		M = 6.1 (Up,Ki).				
"	25	Up	iP		06 36 02.3	

1974 June	25	Up	i(pP)		08 57 41.3	
			iSKS		09 07 56	
					micr	sec
			Mx	E	0.9	19
			Mx	N	0.6	23
			Mx	Z	1.4	21
		Ki			micr	sec
			Mx	E	1.5	18
			Mx	N	0.9	18
			Mx	Z	1.0	17
		Sk	iP		08 57 15.5	
		Ud	iP		08 57 25.0	
		De	eP		08 57 32	
		Mexico (h = 30 km).				
		M = 5.3 (Up,Ki).				
"	25	Up	iSgl		11 45 35.4	
		Um	iSn		11 45 45.3	
			iSgl		11 46 10.2	
		Ud	iSgl		11 46 27.2	
			i		11 46 42.7	
		Probably Esthonian region.				
		Explosion.				
"	25	Ud	i		13 59 05.2	
			iSgl		13 59 29.4	
		De	iSgl		14 00 25.0	
"	25	Up	iP		14 12 53.4	
"	25	Up	eP		17 36 08	
			i(PP)		17 39 27.2	
			iPP		17 40 17.5	
			iSKS		17 46 41	
					micr	sec
			(PP)	Z'	0.4	2.1
			PP	Z'	0.5	1.9
			Mx	E	12	22
			Mx	N	18	24
			Mx	Z	27	18
		Ki	iP		17 36 23.2	
			i(PP)		17 39 26.2	
			iPP		17 40 47.9	
			iSKS		17 46 59	
					micr	sec
			P	Z'	0.1	1.5
			PP	Z'	0.2	1.9
			Mx	E	14	17
			Mx	N	16	17
			Mx	Z	12	17
		Sk	i(P)		17 36 37.6	
			iPP		17 40 50.9	
		Um	iP		17 36 15	
			i(PP)		17 39 36.7	
			iPP		17 40 35.6	

(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974						
June	25	(cont.)				
		Um	iSKS		17 46 50	
		Ud	i(P)		17 36 29.0	
			i(PP)		17 39 22.5	
			iPP		17 40 40.6	
		De	i(P)		17 36 22.8	
			i(PP)		17 39 35.1	
			iPP		17 40 17.7	
		South Indian Ocean (h = N).				
		m = 6.5, M = 6.7 (Up,Ki).				
"	25	Up	iP		17 51 34.9	
		Ki	iP		17 50 59.2	
		Um	iP		17 51 13.5	
		Ud	iP		17 51 41.9	
		De	iP		17 51 57.9	
		Japan (h = 9 km).				
"	25	Um	i(P)		19 27 38.3	
"	25	Up	iP		22 27 42.1	
			i(S)		22 31 00	
					micr	sec
			P	Z'	0.5	2.0
			Mx	E	1.2	20
			Mx	N	1.1	21
			Mx	Z	2.6	21
		Ki	iP		22 27 20.6	
					micr	sec
			P	Z'	0.9	2.4
			Mx	E	4.1	17
			Mx	N	2.2	14
			Mx	Z	3.4	16
		Sk	iP		22 26 51.3	
		Um	iP		22 27 33.1	
		Ud	iP		22 27 21.2	
			i		22 27 25.4	
		De	iP		22 27 45.8	
		Iceland (h = N).				
		m = 5.4, M = 4.6 (Up,Ki).				
"	26	Ki	iP		01 24 12.4	
		Um	iP		01 25 04.3	
		Ud	iP		01 25 54.9	
			i		01 25 57.6	
"	26	Ki	iPKP		04 18 48.4	
		South Atlantic Ocean (h = N).				
"	26	Um	iSgl		06 09 58.2	
		De	eSgl		06 10 57	
		Gulf of Finland.				
		Explosion.				

1974					
June	26	Up	iSgl	06 12 21.4	
		Ki	eSgl	06 15 00	
		Sk	eSgl	06 14 16	
		Um	iPn	06 11 46.4	
			iSn	06 12 42.3	
			iSgl	06 13 02.4	
		Ud	iSn	06 13 05.6	
			iSgl	06 13 28.8	
		De	eSn	06 13 24	
			iSgl	06 13 55.9	
		Gulf of Finland.			
		Explosion.			
"	26	Um	iP	06 33 37.5	
		Hindu Kush (h = 140 km).			
"	26	Up	iSgl	06 59 29.4	
		Sk	eSgl	07 01 19	
		Um	iSgl	07 00 09.8	
		Ud	iS*	07 00 29.3	
			iSgl	07 00 36.7	
		De	iPn	06 59 20.6	
			iSgl	07 01 03.5	
		Gulf of Finland.			
		Explosion.			
"	26	Um	iSgl	07 00 26.3	
		De	iPn	06 59 35.6	
			iSgl	07 01 18.7	
		Gulf of Finland.			
		Explosion.			
"	26	Up	iSgl	07 22 14.6	
		Sk	eSgl	07 24 08	
		Um	iSgl	07 22 54.3	
		Ud	eSgl	07 23 16	
		De	iSgl	07 23 50.7	
		Gulf of Finland.			
		Explosion.			
"	26	Up	iPgl	11 20 18.7	
			iSgl	11 20 39.5	
			i	11 20 43.0	
			iRg	11 20 50.8	
		Sk	iSgl	11 22 07.3	
		Um	iPgl	11 20 39.5	
			iSgl	11 21 16.1	
		Ud	iPgl	11 20 48.9	
			i	11 21 26.4	
			iSgl	11 21 32.8	
		De	iSgl	11 22 40.0	
		Gulf of Bothnia, 61.0°N, 19.8°E.			
		Origin time = 11 19 52.			
		Explosion?			

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974						
June	26	Up	iSgl		12 21 23.0	
		Ki	iSgl		12 24 17.0	
		Um	iSgl		12 22 12.4	
		Esthonia.				
		Explosion.				
"	26	Ki	iSgl		12 36 53.6	
		Um	iSgl		12 34 46.8	
		Ud	iSgl		12 35 12.1	
		De	eSgl		12 35 41	
		Esthonia.				
		Explosion.				
"	26	Um	iSgl		13 37 47.6	
		Western USSR.				
		Explosion.				
"	26	Ud	iP		13 46 23.8	
"	26	Um	iSgl		14 13 51.3	
		Western USSR.				
		Explosion.				
"	26	Um	iSgl		14 54 38.8	
		Lake Ladoga region.				
		Explosion.				
"	26	Up	iSgl		16 57 52.0	
		Ki	i		16 58 20.9	
			iSgl		16 58 46.5	
		Sk	iSgl		16 59 08.3	
		Um	eSgl		16 57 18	
		Ud	eSgl		16 58 49	
		De	iSgl		16 59 34.0	
		Lake Ladoga region.				
		Explosion.				
"	26	Sk	e(P)		18 54 05	
		Ud	iP		18 53 49.0	
		North Atlantic Ocean				
		(h = N).				
"	26	Ki	i(P)		19 05 32.1	
		Sk	iP		19 05 01.6	
		Ud	iP		19 04 52.3	
		North Atlantic Ocean				
		(h = N).				
"	26	Up	iPKPl		23 51 53.2	
			iSKPl		23 54 45.8	
					micr	sec
			PKPl	Z'	0.1	0.9
		Ki	i(PKP)		23 51 34.1	
			iPKP		23 51 43.1	
			iSKPl		23 54 24.4	
		(cont.)				

1974						
June	26	(cont.)				
		Ki			micr	sec
			SKPl	Z'	0.1	1.4
		Sk	i(PKP)		23 51 45.4	
			iPKP		23 51 53.0	
			iSKPl		23 54 39.8	
		Um	i(PKP)		23 51 41.1	
			iPKP		23 51 49.7	
			i		23 53 34.3	
			iSKPl		23 54 33.2	
		Ud	iPKPl		23 51 55.3	
			iSKPl		23 54 47.2	
		De	iPKPl		23 52 05.0	
			ipPKPl		23 54 12.7	
			iSKPl		23 54 56.2	
		Tonga-Kermadec Islands.				
		h = 570 km (De).				
"	27	Up	iP		02 00 49.6	
			iX		02 00 58.4	
			iPP		02 03 34.0	
			iS		02 10 25	
					micr	sec
			P	Z'	0.1	0.9
			X	Z'	1.2	1.4
			PP	Z'	0.1	1.2
			Mx	E	13	19
			Mx	N	13	17
			Mx	Z	17	20
		Ki	iP		02 00 13.0	
			iX		02 00 22.0	
			iPP		02 02 52.2	
					micr	sec
			P	Z'	0.2	1.4
			X	Z'	1.3	1.9
			PP	Z'	0.3	1.6
			Mx	E	37	19
			Mx	N	15	14
			Mx	Z	9.6	15
		Sk	iP		02 00 45.9	
			iX		02 00 53.6	
			iPP		02 03 31.4	
		Um	iP		02 00 27.8	
			iX		02 00 36.9	
			i		02 02 49.3	
			iS		02 09 46	
		Ud	iP		02 00 56.6	
			iX		02 01 04.1	
			i		02 03 10.7	
		De	iP		02 01 10.9	
			iX		02 01 19.4	
			iPP		02 04 16.3	
		Japan (h = 15 km).				
		m = 6.0 (P), 6.8 (X),				
		M = 6.6 (Up,Ki).				
		(cont.)				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
June 27 (cont.)
The phase X, in average 8.4 sec after P and considerably larger than P, may be P of another earthquake in the same area; alternatively, it may be pP with h = 30 km.

" 27 Um iP 02 15 41.3

" 27 Up i(P) 03 38 21.6
i 03 38 46.5
micr sec
i Z' 0.1 1.5

" 27 Up iPKP1 03 50 37.0 C
micr sec
PKP1 Z' 0.1 0.7
Ki iSKP1 03 53 11.7
Um iSKP1 03 53 21.7
Ud iPKP1 03 50 38.9 C
De iPKP1 03 50 49.0
Tonga-Kermadec Islands
(h = 500 km).

" 27 Um iP 04 29 33.8
Japan (h = N).

" 27 Up iP 05 00 44.4
micr sec
Mx E 1.3 14
Mx N 1.4 16
Mx Z 2.2 13
Ki i 05 00 23.7
micr sec
Mx E 1.2 16
Mx N 1.7 16
Mx Z 1.7 17
Sk iP 05 00 45.4
Um iP 05 00 25.2
i 05 00 40.7
Ud iP 05 00 55.4
i 05 01 05.4
Japan (h = 40 km).
M = 5.5 (Up,Ki).

" 27 Up iP 05 50 05.8

" 27 Up iPKP 08 04 45.7 C
i(PP) 08 05 19.5
iPKKP 08 15 43.9
micr sec
(PP) Z' 0.1 1.5
PKKP Z' 0.1 1.5
Mx E 1.3 23
Mx N 2.4 26
Mx Z 3.5 25
(cont.)

1974
June 27 (cont.)
Ki iPKP 08 04 34.3
micr sec
Mx E 2.5 23
Mx N 2.0 21
Mx Z 1.5 18
Sk iPKP 08 04 45.7
Um iPKP 08 04 39.3 C
Ud iPKP 08 04 48.3
iPP 08 06 12.1
De iPKP 08 04 53.8 C
ipPKP 08 05 10.6
iPKKP 08 15 28.1
New Britain.
h = 60 km (De).
M = 5.9 (Up,Ki).

" 27 Ud iP 08 22 00.8

" 27 Um iSg1 10 19 20.8
Ud eSg1 10 19 51
De e 10 20 07
iSg1 10 20 19.5
Esthonia.
Explosion.

" 27 Up iSg1 13 33 45.0
Sk iSg1 13 33 47.9
Ud i 13 32 43.5
iSg1 13 32 47.7
i 13 32 50.1
De eSn 13 32 42
Southwest Norway,
58.5°N, 6.9°E.
Origin time = 13 30 47.
By combination with Bergen and Kongsberg readings.

" 27 Sk iPKP2 13 52 50.6
Um iPKP2 13 52 47.9
Ud iPKP2 13 53 06.6
South of Kermadec Islands
(h = 25 km).

" 27 Up iSg1 14 01 55.3
Sk i 14 01 50.9
iSg1 14 01 54.4
Ud iSg1 14 00 53.7
Similar location as the 13 30-event.
Origin time = 13 58 53.

" 27 Sk i(PKP1) 15 51 12.0
Ud iPKP1 15 51 24.6
De iPKP1 15 51 36.1
South of Kermadec Islands
(h = N).

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 June	27	Up	iPKP2	17 07 50.0	
			i	17 08 01.4	
		Sk	iPKP1	17 07 38.0	
		Um	iPKP1	17 07 30.5	
		Ud	iPKP1	17 07 41.9	
		De	iPKP1	17 07 52.7	
			iPKP2	17 08 07.0	
		South of Kermadec Islands (h = N).			
"	27	Up	iPKP2	17 18 45.2	
"	27	Up	iP	18 57 28.7	
		Ki	iP	18 58 04.2	
		Ud	iP	18 57 20.7	
		Atlantic Ocean (h = N).			
"	27	Up	iP	19 04 06.6	C
				micr sec	
			P Z'	0.1 0.9	
		Ki	iP	19 04 07.8	C
		Sk	iP	19 04 23.3	C
		Um	iP	19 04 03.2	C
		Ud	iP	19 04 18.2	
		De	iP	19 04 16.3	C
		Andaman Islands (h = N).			
"	27	Up	iPKP2	22 58 51.4	
		Sk	iPKP1	22 58 35.4	
		Um	iPKP1	22 58 31.0	
		Ud	iPKP1	22 58 42.5	
		South of Kermadec Islands (h = N).			
"	27	Up	iP	23 02 11.8	
				micr sec	
			P Z'	0.1 1.2	
		Ki	iP	23 02 47.0	
				micr sec	
			P Z'	0.1 1.3	
		Sk	iP	23 02 15.7	
		Um	iP	23 02 32.7	
		Ud	iP	23 02 02.5	
		De	iP	23 01 56.4	
		Atlantic Ocean (h = N).			
		m = 5.8 (Up,Ki).			
"	27	Ud	iP	23 31 24.7	
"	28	Ud	iP	01 33 13.4	C
		De	iP	01 33 09.8	
		Hindu Kush.			
		Intermediate depth.			
"	28	Up	iPKP1	02 30 29.4	
		Sk	iPKP1	02 30 25.5	
		Um	iPKP1	02 30 20.2	
		(cont.)			

1974 June	28	(cont.)			
		Ud	iPKP1	02 30 32.7	
		De	iPKP2	02 30 57.7	
		South of Kermadec Islands (h = 60 km).			
"	28	Up	iPKP2	02 52 45.9	
			i	02 53 14.3	
		Ki	iPKP1	02 52 17.2	
		Sk	iPKP1	02 52 33.1	
		Um	iPKP1	02 52 28.5	
		Ud	iPKP1	02 52 40.6	
		De	iPKP2	02 53 01.7	
		South of Kermadec Islands (h = 40 km).			
"	28	Um	iPKP1	03 22 07.3	
		Ud	ePKP1	03 22 22	
"	28	Um	i(PKP1)	05 48 34.8	
"	28	Ki	eSn	10 00 17	
		Northwest USSR.			
		Explosion.			
"	28	Up	iP	11 14 58.1	
			i	11 15 16.4	
			iS	11 19 25	
				micr sec	
			P Z'	0.3 1.1	
			Mx E	0.5 11	
			Mx N	0.5 11	
			Mx Z	0.6 15	
		Ki	iP	11 16 08.3	
				micr sec	
			P Z'	0.1 1.3	
			Mx E	1.0 14	
			Mx N	0.6 14	
			Mx Z	0.5 12	
		Sk	iP	11 15 23.7	
		Um	iP	11 15 35.4	
		Ud	iP	11 14 52.5	
		De	iP	11 14 20.3	
		Algeria (h = N).			
		m = 5.7, M = 4.7 (Up,Ki).			
"	28	Up	iP	11 18 35.6	
		Um	iP	11 18 45.0	
		Ud	iP	11 18 34.1	
		De	iP	11 18 28.4	
"	28	Up	iSg1	11 35 49.0	
		Ki	iSg1	11 38 06.3	
		Sk	iSg1	11 37 39.2	
		Um	iSg1	11 36 13.5	
		Ud	eSg1	11 36 53	
		(cont.)			

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 June	28	(cont.)					
		De	iSgl		11 37 20.3		
			i		11 37 24.9		
		Western USSR. Explosion.					
"	28	Um	iSgl		13 06 43.4		
		Western USSR. Explosion.					
"	28	Up	eSgl		13 17 07		
		Um	iSgl		13 17 21.1		
		Ud	iSgl		13 18 06.3		
		De	iSgl		13 18 38.0		
			iSg2		13 18 49.4		
		Western USSR. Explosion.					
"	28	Um	iSgl		18 24 12.9		
		Ud	iSgl		18 25 39.0		
"	28	Sk	iSgl		18 33 45.1		
		Ud	iSgl		18 34 44.8		
		De	iSgl		18 35 58.3		
"	28	Up	iP		20 48 55.7	C	
"	29	Up	iP		01 12 17.5		
			iS		01 16 44		
					micr	sec	
			P	Z'	0.3	1.6	
			Mx	E	0.7	14	
			Mx	N	0.6	13	
			Mx	Z	0.5	15	
		Ki	iP		01 13 26.6		
					micr	sec	
			P	Z'	0.1	1.5	
			Mx	E	0.5	12	
			Mx	N	0.8	14	
			Mx	Z	0.7	13	
		Sk	iP		01 12 45.5		
		Um	iP		01 12 55.8		
			iS		01 17 43		
		Ud	iP		01 12 12.0		
		De	iP		01 11 38.8		
		Algeria (h = N). m = 5.6, M = 4.6 (Up,Ki).					
"	29	Up	iP		06 00 35.6		
		Ud	iP		06 00 36.2		
"	29	Ud	iP		07 28 24.7		
"	29	Ud	iP		09 41 01.0		
"	29	Ki	iSn		12 45 28.3		
		Northwest USSR. Explosion.					
1974 June	29	Um	iPKP2		13 07 58.8		
"	29	Ki	iSgl		13 21 28.3		
		Sk	iSgl		13 23 55.0		
		Um	iSgl		13 22 23.0		
		USSR-Finland. Explosion.					
"	29	Ki			micr	sec	
			Mx	E	0.5	16	
			Mx	N	0.7	17	
			Mx	Z	0.5	14	
		Ud	iP		14 18 56.1		
		Iran.					
"	29	Sk	iP		15 28 57.9		
		Ud	iP		15 28 45.8		
		De	eP		15 28 36		
		South Atlantic Ocean (h = N).					
"	29	Up	iP		21 34 10.1		
		Ud	iP		21 34 17.1		
		Ionian Sea.					
"	29	Up	iX		21 49 23.4		
		Ki	eP		21 48 17		
			iX		21 48 35.2		
		Ud	iX		21 49 27.2		
		De	iP		21 49 34.2		
			iX		21 49 49.3		
		Kamchatka (h = 30 km). X could be P of another earthquake in the same area, with a tentative origin time = 21 38 48.					
"	29	Ud	iP		22 21 34.7		
		Ionian Sea.					
"	29	Up	iP		22 36 35.9		
		Sk	eP		22 37 17		
		Um	iP		22 37 19.6		
		Ud	iP		22 36 40.7		
		Ionian Sea (h = N).					
"	29	Ud	iPKP1		22 42 10.0		
		De	iPKP1		22 42 20.7		
"	30	Ud	iP		04 01 05.9		
		(Crete).					
"	30	Up	iSgl		05 57 49.6		
		Ki	iPn		05 53 30.6		
			iSn		05 54 30.0		
			iSgl		05 54 53.2		
		(cont.)					

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 June	30	(cont.)				
		Sk	iSgl		05 57 18.7	
			i		05 57 25.2	
		Um	e		05 55 26	
			iSgl		05 55 44.7	
		Ud	i		05 57 26.8	
			iSgl		05 58 18.3	
		Northwest USSR.				
		Explosion.				
"	30	Ki	eSn		06 55 01	
		Sk	eSgl		06 57 55	
		Northwest USSR.				
		Explosion.				
"	30	Ki	iPKP		07 08 00.7	
		Ud	iPKP		07 07 48.4	
		Argentina (h = 190 km).				
"	30	Up	iPKP		08 52 56.7	
			i(PP)		08 55 17.8	
			iSKPl		08 56 25.2	
					micr	sec
			SKPl	Z'	0.1	1.4
			Mx	E	1.1	23
			Mx	N	1.0	23
			Mx	Z	1.6	23
		Ki	i(PKP)		08 52 40.3	
			iPKP		08 52 43.3	
					micr	sec
			PKP	Z'	0.1	1.0
			Mx	E	0.8	19
			Mx	N	1.4	23
			Mx	Z	1.0	21
		Sk	i(PKP)		08 52 42.6	
			iPKP		08 52 52.5	
			iSKPl		08 56 15.7	
		Um	i(PKP)		08 52 47.2	
			iPKP		08 52 49.7	
			iSKPl		08 56 06.8	
			iPKKP		09 03 06	
		Ud	i(PKP)		08 52 44.6	
			iPKP		08 52 58.9	
			iSKPl		08 56 26.7	
		De	e(PKP)		08 52 54	
			iPKP		08 53 06.1	C
			iSKPl		08 56 34.3	
		New Hebrides Islands (h = 60 km).				
		M = 5.7 (Up,Ki).				
"	30	Up	iP		09 05 02.0	
		Ud	iP		09 05 22.9	
"	30	Ud	iP		13 20 27.1	
"	30	Ud	iP		13 27 21.2	

1974 June	30	Ki	eP		13 35 43	
		Sk	iP		13 35 28.0	
		Ud	iP		13 35 06.4	
		Ethiopia (h = N).				
"	30	Up	iSgl		14 43 06.2	
		Ki	iPg2		14 38 56.6	
			iSg2		14 39 00.1	
					micr	sec
			Pg2	Z'	0.3	0.2
			Sg2	Z'	2.8	0.2
		Sk	iSgl		14 41 45.9	
		Um	iSgl		14 40 59.1	
		Near Kiruna, Sweden, 67.9°N, 19.8°E.				
		Origin time = 14 38 52.				
		By combination with Finnish station readings.				
"	30	Up	iPKP		18 14 26.4	
					micr	sec
			PKP	Z'	0.1	1.2
		Ki	iPKP		18 14 14.2	
		Sk	iPKP		18 14 25.6	
		Um	iPKP		18 14 19.1	
		Ud	iPKP		18 14 29.2	
		De	iPKP		18 14 34.5	
		Solomon Islands (h = 55 km).				
"	30	Ud	iPKPl		18 32 30.6	
		De	iPKPl		18 32 41.4	
"	30	Up	iP		18 35 27.0	
		Ki	iP		18 34 32.6	
		Sk	iP		18 35 10.0	
		Ud	iP		18 35 30.6	
		De	iP		18 35 52.4	
		Kamchatka (h = N).				
"	30	Ki	iP		19 10 35.2	
		Ud	iP		19 09 18.1	
		Italy (h = N).				

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December 18, 1975

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S E I S M O L O G I C A L B U L L E T I N

U P P S A L A, K I R U N A, S K A L S T U G A N, U M E Å,

U D D E H O L M and D E L A R Y

Uppsala	(Up):	59°51.5'N,	17°37.6'E; h = 14 m
Kiruna	(Ki):	67°50.4'N,	20°25.0'E; h = 390 m
Skalstugan	(Sk):	63°34.8'N,	12°16.8'E; h = 580 m
Umeå	(Um):	63°48.9'N,	20°14.2'E; h = 16 m
Uddeholm	(Ud):	60°05.4'N,	13°36.4'E; h = 240 m
Delary	(De):	56°28.2'N,	13°52.2'E; h = 150 m

J U L Y 1 - 31, 1974

1974 July	1	Up	iPKP	00 20 11.3	
		Ki	iPKP	00 20 00.2	
		Ud	iPKP	00 20 15.8	
		Alternatively, these readings could be SKP.			
"	1	Ud	iP	01 29 20.6	
			iS	01 31 30.2	
		De	iP	01 28 42.9	
			iS	01 30 20.8	
			i	01 31 26.6	
		France.			
		Rockburst.			
"	1	Ud	iP	03 20 23.1	
		Kurile Islands-Japan.			
"	1	Up	iP	05 16 44.0	
		Ki	eP	05 15 09	
		Sk	eP	05 16 05	
		Um	iP	05 16 04.2	
			i	05 16 10.7	
		Ud	iP	05 16 38.2	
			i	05 16 44.9	
		De	eP	05 17 16	
		Greenland Sea (h = N).			
"	1	Ud	iP	05 30 30.2	
		Lake Baikal (h = N).			
"	1	Up	iPKPl	06 42 02.0	
		Ud	iPKPl	06 42 09.8	
		De	iPKPl	06 42 19.1	
"	1	Ud	i	07 02 27.3	
			iSgl	07 02 39.6	
		De	i(Pgl)	07 00 25.1	
			i	07 00 59.1	
			iSgl	07 01 02.1	
1974 July	1	Ki	iP	07 09 51.0	
		Sk	iP	07 09 23.1	
		Um	iP	07 09 35.8	
		Ud	iP	07 09 08.4	
		Atlantic Ocean (h = N).			
"	1	Ki	iP	07 30 40.7	
				micr	sec
			P	Z' 0.1	0.8
			Mx	E 0.4	10
			Mx	N 0.9	18
			Mx	Z 0.8	16
		Sk	iP	07 31 27.8	
		Um	iP	07 31 32.0	
			i	07 31 56.4	
		Ud	iP	07 32 15.9	
			i	07 32 26.9	
			i	07 32 36.4	
		De	iP	07 32 57.8	
		Greenland Sea (h = N).			
"	1	Ud	iSgl	09 09 46.0	
		De	i	09 07 40.8	
			iSgl	09 07 53.5	
"	1	Ud	iPKPl	13 29 55.4	
		De	iPKPl	13 30 05.8	
			i	13 30 16.4	
"	1	Up	iSn	15 02 49.5	
			iSgl	15 03 02.0	
		Ki	iSgl	15 05 34.5	
		Sk	eSgl	15 04 52	
		Um	iSgl	15 03 38.1	
		Ud	iSn	15 03 37.1	
			eSgl	15 04 06	
		De	iSgl	15 04 31.0	
			iSg2	15 04 42.1	
		Esthonia.			
		Explosion.			

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 July	1	Sk	iPKP1		15 04 48.8	
		Um	iPKP1		15 04 38.7	
		Ud	iPKP1		15 04 51.0	
		South of Kermadec Islands (h = N).				
"	1	De	iP		15 56 39.7	
		Molucca Sea (h = 130 km).				
"	1	Up	iSKS		17 16 34	
			iSP		17 19 26	
					micr	sec
			Mx	E	3.4	18
			Mx	N	2.6	18
			Mx	Z	6.3	18
		Ki	iPP		17 10 50.2	
			iSKS		17 16 54	
			iSP		17 20 03	
					micr	sec
			Mx	E	5.9	22
			Mx	N	5.2	23
			Mx	Z	5.8	21
		Um	iSKS		17 16 45	
			iSP		17 19 49	
		Argentina (h = 15 km).				
		M = 6.2 (Up,Ki).				
"	1	Up	iP		21 18 03.8	
		Ud	iP		21 18 14.0	
"	1	Up	iP		23 23 49.5	C
			iSKS		23 34 14	
					micr	sec
			P	Z'	0.2	1.0
			Mx	E	1.0	20
			Mx	N	1.1	24
			Mx	Z	2.0	19
		Ki	iP		23 24 26.3	
					micr	sec
			P	Z'	0.1	1.7
			Mx	E	0.9	18
			Mx	N	1.3	17
			Mx	Z	1.0	17
		Sk	iP		23 24 01.7	
		Um	iP		23 24 09.7	
			iSKS		23 34 40	
		Ud	iP		23 23 46.6	C
		De	iP		23 23 29.2	C
		South Atlantic Ocean (h = N).				
		m = 6.1, M = 5.5 (Up,Ki).				
"	2	Up	i		05 23 02.7	
			iSgl		05 23 11.6	
		Sk	eSgl		05 24 55	
		Um	iSgl		05 25 19.1	
		(cont.)				

1974 July	2	(cont.)				
		Ud	i		05 22 57.3	
			iSgl		05 23 05.5	
		De	iPn		05 20 41.5	
			i		05 20 50.6	
			iSgl		05 21 17.9	
		Near Baltic coast of German Democratic Republic, near 54°N, 13 1/2°E.				
		Origin time = 05 20 03.				
"	2	De	iPKP1		06 50 16.9	
"	2	Up	iPKP2		07 35 37.3	
			i		07 35 42.4	
		Ki	iPKP1		07 35 33.0	
			iPKP2		07 35 41.9	
					micr	sec
			PKP1	Z'	0.1	1.0
		Sk	ePKP		07 35 37	
			iPKP1		07 35 44.8	
		Um	iPKP2		07 35 35.9	
		Ud	iPKP1		07 35 43.0	
			iPKP2		07 35 50.8	
		De	iPKP		07 35 35.7	
		West of Macquarie Islands (h = N).				
"	2	Ud	iSgl		08 03 31.2	
		De	i		08 02 33.8	
			iSgl		08 03 31.7	
"	2	Up	iSgl		08 07 02.2	
			iRg		08 07 19.9	
		Sk	iSgl		08 07 04.2	
		Um	iSgl		08 06 44.0	
			iRg		08 06 55.7	
		Medelpad, Sweden, 62.3°N, 17.3°E.				
		Origin time = 08 05 41.				
		Very shallow depth.				
"	2	De	iPP		09 36 21.0	
		Off coast of Chile (h = N).				
"	2	Up	iSgl		13 01 27.2	
		Sk	iSgl		13 03 26.4	
		Um	iSgl		13 02 18.1	
		Ud	iSn		13 02 09.1	
			iSgl		13 02 32.9	
		De	iSgl		13 03 00.7	
		Esthonia.				
		Explosion.				
"	2	Ki	iP		13 16 54.1	
		Um	iP		13 16 59.8	

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 July	2	Up	iP		15 23 26.7		
"	2	Up	iP		16 34 24.0		
			i		16 34 26.1		
		Ki	iP		16 34 22.4		
			i		16 34 24.4		
		Sk	iP		16 34 46.8		
		Um	iP		16 34 17.0		
			i		16 34 19.3		
		Ud	iP		16 34 39.8		
			i		16 34 41.8		
		De	iP		16 34 42.3		
		Kashmir-Tibet (h = N).					
		Double P, with Sk,De only showing the later P.					
"	2	Up	iP		16 48 30.6		
			iLgl		17 01 16		
					micr	sec	
			Mx	N	1.7	14	
			Mx	Z	0.5	8	
		Ki	iP		16 48 29.1		
			eLgl		17 01 22		
					micr	sec	
			Mx	E	0.5	9	
			Mx	N	1.5	11	
			Mx	Z	0.5	8	
		Sk	eP		16 48 50		
			i		16 48 58.0		
		Um	iP		16 48 23.0		
			i		16 48 31.7		
			i		17 00 49.5		
			iLgl		17 01 18.5		
		Ud	iP		16 48 47.3		
			i		16 48 51.4		
			i		16 48 56.0		
		De	iP		16 48 48.4		
			i		16 48 53.6		
		Alma-Ata (h = N).					
		M = 5.2 (Up,Ki).					
"	2	Up	i(pP)		17 37 13.8		
		Mindoro (h = 110 km).					
"	2	Ki	iSn		18 10 55.3		
			iSgl		18 11 08.9		
		Um	i		18 12 24.5		
			iSgl		18 12 44.0		
		USSR-Norway.					
		Explosion.					
"	2	Ud	iPKPl		18 40 10.4		
		De	iPKPl		18 40 19.9		
"	2	Up	iP		18 41 43.9		
		Um	iP		18 41 40.8		
"	2	Up	iP		19 31 02.5		
		(cont.)					

1974 July	2	(cont.)					
		Sk	iP		19 30 57.7		
		Um	iP		19 30 39.4		
		Ud	iP		19 31 09.6		
			ipP		19 31 31.1		
		Japan.					
		h = 80 km (Ud).					
"	2	Up	iP		20 36 16.2		
		Ki	iP		20 35 33.8		
		Um	iP		20 35 52.2		
		Ud	iP		20 36 23.1		
		De	iP		20 36 39.4		
		Japan (h = 30 km).					
"	2	Up	eP		23 44 00		C
			iPKP		23 46 05.0		
			iPKPl		23 46 08.5		C
			iPP		23 49 35.8		
					micr	sec	
			PKP	Z'	0.2	1.5	
			PKPl	Z'	2.1	1.0	
			Mx	E	25	24	
			Mx	N	60	25	
			Mx	Z	72	24	
		Ki	i(PKP)		23 45 47.1		
			iPKP		23 45 53.5		
			iSKP		23 49 29		
					micr	sec	
			(PKP)	Z'	0.1	1.0	
			PKP	Z'	1.0	1.6	
			Mx	E	33	21	
			Mx	N	73	23	
			Mx	Z	51	23	
		Sk	iPKPl		23 46 00.2		C
		Um	iPKPl		23 45 55.5		C
			iPP		23 49 25		
		Ud	iPKP		23 46 06.0		
			iPKPl		23 46 09.9		
		De	iPKP		23 46 11.7		C
			iPKPl		23 46 18.9		C
		Kermadec Islands (h = N).					
		M = 7.4 (Up,Ki).					
"	3	Up	iP		02 47 27.1		
		Ki	iP		02 47 19.4		
		Ud	iP		02 47 39.0		
		Burma.					
"	3	De	iPKPl		05 00 27.3		
"	3	Up	eX		05 12 58		
					micr	sec	
			Mx	E	0.8	20	
			Mx	N	1.4	16	
			Mx	Z	1.2	18	
		Ki	iP		05 12 03.7		
			iX		05 12 15.4		
		(cont.)					

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 July 3 (cont.)

Ki			micr	sec	
	Mx	E	1.0	16	
	Mx	N	0.9	15	
	Mx	Z	1.0	17	
Sk	eP		05 12 17		
	iX		05 12 28.4		
Um	iP		05 12 25.5		
	iX		05 12 37.0		
Ud	iP		05 12 35.7		
	iX		05 12 47.2		

California (h = 10 km).
M = 5.4 (Up,Ki).

" 3 Ud iPKP1 06 09 24.1

" 3 Ud iP 07 49 59.3
Aleutian Islands (h = 90 km).

" 3 Sk iPKP1 10 22 09.6
Ud ePKP1 10 22 19

" 3 De iP 11 24 31.7

" 3 Up iPKP1 14 24 54.8
Sk iPKP1 14 24 46.9
ipPKP1 14 24 57.7
Um iPKP1 14 24 42.0
Ud iPKP1 14 24 55.7
ipPKP1 14 25 06.4
De iPKP1 14 25 04.7
ipPKP1 14 25 15.4
Kermadec Islands.
h = 35 km (Sk,Ud,De).

" 3 Up iSg1 15 50 07.6
Ud iPg1 15 49 23.0
iSg1 15 49 46.5
iRg 15 49 56.7
De iSg1 15 49 56.8
Probably Västergötland, Sweden.
Origin time = 15 48 52.
Explosion?

" 3 Sk iPKP1 22 26 16.7
Ud i(PKP1) 22 26 31.2
De iPKP1 22 26 34.7

" 3 Up iPKP 23 44 47.5
iPKP1 23 44 51.0
iPP 23 48 14

			micr	sec
PKP	Z'	0.3	1.8	
PKP1	Z'	1.8	1.0	

(cont.)

1974 July 3 (cont.)

Up			micr	sec	
	Mx	E	4.1	21	
	Mx	N	4.3	20	
	Mx	Z	7.2	21	
Ki	i(PKP)		23 44 28.8		
	iPKP		23 44 34.6		
	iPP		23 47 28		
	iSKP		23 48 08		
			micr	sec	
	(PKP)	Z'	0.1	1.0	
	PKP	Z'	0.6	1.6	
	Mx	E	4.5	18	
	Mx	N	8.9	20	
	Mx	Z	7.6	20	
Sk	iPKP1		23 44 43.4		D
Um	iPKP1		23 44 38.0		D
Ud	iPKP		23 44 48.2		
	iPKP1		23 44 51.6		
De	iPKP		23 44 54.5		
	i		23 44 57.5		
	iPKP1		23 45 00.6		

Kermadec Islands (h = N).
M = 6.5 (Up,Ki).

" 4 Up iP 03 50 11.5
Ud iP 03 50 18.4

" 4 Ud iP 07 38 11.6
De iP 07 38 08.7

" 4 Up iPKP2 08 37 49.1
Sk iPKP1 08 37 37.6
Um iPKP1 08 37 32.7 D
Ud iPKP1 08 37 46.6
Kermadec Islands.

" 4 Sk iPKP 11 13 12.6
Um iPKP 11 13 08.2
Ud iPKP 11 13 21.9
De iPKP 11 13 28.2

" 4 Up iPKP1 11 17 11.2 C
Sk iPKP1 11 17 04.0 C
ipPKP1 11 17 15.0
Um iPKP1 11 16 59.0 C
Ud iPKP1 11 17 12.3 C
iPKP2 11 17 16.7
ipPKP1 11 17 23.9
De iPKP1 11 17 22.1 C
ipPKP1 11 17 33.3
Kermadec Islands.
h = 35 km (Sk,Ud,De).

" 4 Ud iP 11 46 08.2

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
July 4 Sk iPKP 12 21 27.3
Ud iPKP1 12 21 34.4
De iPKP1 12 21 46.5
Fiji Islands (h = 420 km).

" 4 Sk eSgl 13 10 09
Um iSgl 13 08 44.0
Ud iSgl 13 09 25.8
Western USSR.
Explosion.

" 4 Up iPKP1 13 53 59.7
iPKP2 13 54 02.9
micr sec
PKP1 Z' 0.1 0.9
Sk iPKP1 13 53 52.1
Um iPKP1 13 53 47.6
Ud iPKP1 13 54 01.0
iPKP2 13 54 04.9
De iPKP1 13 54 10.4
iPKP2 13 54 19.5
Kermadec Islands (h = N).

" 4 Um iSgl 14 34 36.5
Ud iSgl 14 36 04.7
Lake Ladoga region.
Explosion.

" 4 Ud iSgl 15 11 19.2
De eSgl 15 10 59

" 4 Ud iP 18 43 46.6

" 4 Up iP 19 39 03.7 C
ipP 19 39 10.6
iPP 19 40 52
iS 19 45 42
micr sec
P Z' 0.6 1.0
pP Z' 1.5 1.1
Mx E 140 12
Mx N 190 12
Mx Z 150 12
Ki iP 19 38 40.8 C
ipP 19 38 47.8
iS 19 45 08
micr sec
P Z' 0.1 1.0
pP Z' 0.6 1.3
Mx E 200 11
Mx N 310 17
Mx Z 210 12
Sk iP 19 39 13.8 C
ipP 19 39 21.0
Um iP 19 38 46.1 C
ipP 19 38 53.0
iPP 19 40 29
iS 19 45 14
(cont.)

1974
July 4 (cont.)
Ud iP 19 39 17.9 C
ipP 19 39 24.8
De iP 19 39 27.3 C
Mongolia.
h = 25 km (Up,Ki,Sk,Um,Ud).
m = 6.3, M = 7.5 (Up,Ki).
Alternatively, pP could instead be P of a second, larger shock.

" 4 Up iP 19 47 27.6
micr sec
P Z' 0.2 1.2
Ki iP 19 47 06.0
micr sec
P Z' 0.2 1.5
Sk iP 19 47 39.3
Um iP 19 47 11.0
Ud iP 19 47 42.6
De i(P) 19 47 48.2
iP 19 47 52.0
Mongolia (h = N).
m = 5.9 (Up,Ki).

" 4 Up iP 19 52 48.7 C
micr sec
P Z' 0.1 1.1
Sk iP 19 52 57.8
Um iP 19 52 31.0
Ud iP 19 53 02.9 C
De iP 19 53 12.2 C
Mongolia (h = N).

" 4 Up iP 20 10 10.7
Ki iP 20 09 48.0
Sk iP 20 10 21.7
Um iP 20 09 53.3
Ud iP 20 10 24.7
De iP 20 10 34.2 C
Mongolia.
Origin time = 20 01 49.
Origin times are based on our own records only, and therefore approximate in case of teleseisms.

" 4 Ud iP 20 48 58.0
De iP 20 49 04.3

" 4 Up iPKP1 20 57 05.6
iPKP2 20 57 08.7
Sk iPKP1 20 56 58.2
Um iPKP1 20 56 53.2
Ud iPKP1 20 57 07.0
iPKP2 20 57 10.7
De iPKP1 20 57 16.4
Tonga-Kermadec Islands.

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 July	4	Up	iP	21 34 57.9	C
			ipP	21 35 38.9	
		Ki	iP	21 35 06.3	
		Sk	iP	21 35 23.5	
		Um	iP	21 34 55.6	
		Ud	iP	21 35 14.3	
			ipP	21 35 55.1	
		De	iP	21 35 10.8	
		Hindu Kush.			
		h = 200 km (Up,Ud).			
"	4	Ki	iP	22 40 18.9	
		Sk	iP	22 40 15.9	
		Ud	iP	22 40 24.4	
		Mexico (h = 80 km).			
"	4	Up	Mx	23 36	
				micr sec	
			Mx E	1.2 21	
			Mx N	1.9 21	
			Mx Z	3.1 21	
		Ki	Mx	23 42	
				micr sec	
			Mx E	1.2 16	
			Mx N	1.8 18	
			Mx Z	1.7 17	
		South Pacific Ocean (h = N).			
		M = 6.0 (Up,Ki).			
"	5	Up	i(P)	03 56 29.7	
"	5	Up	eSgl	04 53 46	
		Ki	iSgl	04 51 49.0	
		Sk	iSgl	04 51 53.2	
		Um	iSn	04 52 03.5	
			iSgl	04 52 16.7	
		Ud	iSgl	04 53 40.4	
		Nordland, Norway,			
		66.5°N, 14.1°E.			
		Origin time = 04 50 20.			
		Explosion.			
"	5	Up	Mx	06 14	
				micr sec	
			Mx E	0.9 22	
			Mx Z	1.1 21	
		Chile (h = N).			
"	5	Ud	iP	06 38 51.2	
"	5	Up	iP	07 25 33.2	
		Ki	iP	07 25 38.8	
		Sk	iP	07 25 57.1	
		Um	iP	07 25 29.3	
		Ud	iP	07 25 49.1	
		De	iP	07 25 47.0	
		Tadzhik SSR (h = N).			

1974 July	5	Up	iSgl	07 41 02.6	
		Ki	iSgl	07 41 44.4	
		Sk	iSgl	07 42 10.7	
		Um	iSgl	07 40 22.7	
		Ud	iSgl	07 41 55.6	
		De	iSgl	07 42 43.9	
		Lake Ladoga region.			
		Explosion.			
"	5	Ud	iPKPl	09 09 26.0	
"	5	Ud	iP	09 27 19.7	
		De	iP	09 27 42.4	
"	5	Up	iSgl	11 08 07.1	
		Sk	eSgl	11 09 54	
		Um	i	11 08 31.8	
			iSgl	11 08 40.8	
		Ud	iSgl	11 09 08.6	
		De	iSgl	11 09 43.6	
		Esthonia.			
		Explosion.			
"	5	Up	iSgl	11 26 29.7	
		Ki	iPn	11 22 21.9	
			iSn	11 23 21.2	
			iS*	11 23 39.9	
			iSgl	11 23 44.8	
		Sk	iSgl	11 26 05.5	
		Um	iSn	11 23 59.8	
			i	11 24 17.4	
			iSgl	11 24 34.0	
		Ud	eSn	11 26 04	
			i	11 27 02.2	
			iSgl	11 27 09.1	
		De	iSgl	11 28 44.1	
		Northwest USSR.			
		Explosion.			
"	5	Up	iSgl	11 34 10.7	
		Ki	iSgl	11 36 48.2	
		Sk	eSgl	11 36 03	
		Um	iSgl	11 34 44.4	
		Ud	iSgl	11 35 14.6	
		De	iSgl	11 35 40.5	
		Esthonia.			
		Explosion.			
"	5	Up	iSgl	12 23 22.1	
		Ki	iSgl	12 25 20.0	
		Sk	iSgl	12 25 09.5	
		Um	iSgl	12 23 36.0	
			iRg	12 24 06.5	
		Ud	eSn	12 23 42	
			iSgl	12 24 19.5	
		Western USSR.			
		Explosion.			

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 July	5	Up	iSgl	15 37 02.0	
		Sk	iSgl	15 38 22.9	
		Um	iSgl	15 36 33.4	
		Ud	iSgl	15 37 57.7	
		De	eSgl	15 38 56	
		Lake Ladoga region.			
		Explosion.			
"	5	Up	iSn	16 21 27.1	
			iSgl	16 21 47.7	
		Sk	iSgl	16 23 02.0	
		Um	iSgl	16 23 42.7	
		Ud	iPn	16 20 37.9	
			iPgl	16 20 41.2	
			iSgl	16 21 18.5	
		De	iPn	16 20 11.9	
			iPgl	16 20 13.4	
			iSn	16 20 29.2	
			iSgl	16 20 32.2	
		Halland, Sweden,			
		57.3°N, 12.1°E.			
		Origin time = 16 19 50.			
"	5	Up	iPKPl	18 23 56.2	
			iX	18 24 19.7	
				micr sec	
			X Z'	0.1 1.0	
		Ki	iX	18 24 04.3	
		Sk	iPKPl	18 23 48.9	C
			i	18 23 57.2	
			iX	18 24 08.3	
		Um	iPKPl	18 23 43.6	C
		Ud	iPKPl	18 23 56.6	
			iPKP2	18 24 01.2	
			iX	18 24 19.9	
		De	iPKPl	18 24 06.7	C
			iPKP2	18 24 15.4	
			iX	18 24 25.6	
		Kermadec Islands (h = N).			
		X probably belongs to			
		another, larger shock in			
		the same area, 21 sec later.			
"	5	Ud	iP	18 52 51.5	
"	5	Up	iP	20 21 54.3	
			ipP	20 22 01.5	
		Ki	iP	20 21 49.2	
			ipP	20 21 56.6	
		Sk	iP	20 21 36.7	
			ipP	20 21 44.5	
		Um	iP	20 21 55.0	
			ipP	20 22 02.4	
		Ud	iP	20 21 43.8	
			ipP	20 21 51.4	
		Caribbean Sea.			
		h = 30 km (Up,Ki,Sk,Um,Ud).			
1974 July	5	Ud	iPKPl	23 38 46.0	
"	6	Up	iPKPl	04 50 25.7	
		Sk	iPKPl	04 50 17.6	
		Um	iPKPl	04 50 12.6	
		Ud	iPKPl	04 50 27.0	
		De	iPKPl	04 50 35.9	
		Tonga-Kermadec Islands.			
"	6	Up	iP	06 26 48.5	
		Ud	iP	06 27 04.2	
		De	iP	06 27 09.9	
		Mongolia.			
		Origin time = 06 18 27.			
"	6	Up	iP	09 19 47.8	
		Ki	iP	09 19 14.9	
		Sk	eP	09 19 45	
		Um	iP	09 19 29.0	
		Ud	iP	09 19 55.0	
		South of Japan (h = 450 km).			
"	6	Up	iP	09 47 44.2	
		Ud	iP	09 48 00.3	
"	6	Up	iP	11 06 50.8	
		Ki	iP	11 06 33.1	
		Sk	eP	11 06 56	
		Um	iP	11 06 38.6	
		Ud	eP	11 07 02	
		Luzon.			
"	6	Ki	iPn	11 09 22.4	
			iSn	11 10 11.3	
			iS*	11 10 25.6	
			iSgl	11 10 28.9	
		Um	iSgl	11 11 55.2	
			i	11 12 00.5	
		USSR-Norway.			
		Explosion.			
"	6	Um	iP	11 44 34.2	
		Ud	iP	11 45 04.4	
		Japan (h = 30 km).			
"	6	Ki	i(Pn)	12 31 09.3	
			iSn	12 31 58.9	
			iSgl	12 32 20.6	
		Sk	eSgl	12 34 56	
		Um	eSn	12 32 50	
			iSgl	12 33 26.4	
		Northwest USSR.			
		Explosion.			
"	6	Um	iPKP	12 40 19.3	
			i	12 40 34.4	
		Ud	ePKP	12 40 12	

(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 July	6	(cont.)				
		Ud	i	12 40 22.5		
		Easter Island region (h = N).				
"	6	De	iP	13 01 42.6		
"	6	Sk	iPKPl	13 12 16.6		
			ipPKPl	13 12 28.0		
		Ud	iPKPl	13 12 25.4		
			ipPKPl	13 12 36.9		
		Kermadec Islands.				
		h = 40 km (Sk,Ud).				
"	6	Sk	iPKPl	13 13 51.2		
"	6	Up	iPKP	15 10 25.6		
			ipPKP	15 10 33.9		
				micr	sec	
			Mx N	0.9	20	
			Mx Z	0.8	20	
		Ki	ipPKP	15 10 44.6		
		Sk	ipPKP	15 10 40.4		
		Um	ipPKP	15 10 41.7		
		Ud	iPKP	15 10 24.1		
			ipPKP	15 10 32.7		
		De	ipPKP	15 10 26.2		
		Scotia Sea.				
		h = 30 km (Up,Ud).				
"	6	Up	iP	15 53 57.4		
		Ki	iP	15 53 25.7		
		Um	iP	15 53 34.7		
			i	15 53 40.6		
		Ud	iP	15 54 01.2		
"	6	Up	iP	20 24 21.5		
				micr	sec	
			P Z'	0.1	1.0	
		Ki	iP	20 23 47.2	D	
		Sk	iP	20 24 19.5		
		Um	iP	20 24 01.1	D	
		Ud	iP	20 24 29.8	D	
			i	20 24 40.0		
		Japan (h = 70 km).				
"	6	Up	iP	20 29 27.9		
		Um	iP	20 29 09.6		
		De	iP	20 29 51.4		
		Mongolia (h = N).				
"	6	Ud	iP	21 31 38.2		
		De	iP	21 31 35.4		
"	6	Up	iP	21 38 53.1		
		Sk	iP	21 39 05.1		
		(cont.)				

1974 July	6	(cont.)				
		Um	iP	21 39 13.5		
			ipP	21 39 19.7		
		Ud	iP	21 38 49.6		
			ipP	21 38 56.1		
		South Atlantic Ocean.				
		h = 25 km (Um,Ud).				
"	6	Up	iPKPl	23 39 08.5		
				micr	sec	
			PKPl Z'	0.1	0.8	
		Ki	iPKP	23 38 51.5		
		Sk	iPKPl	23 39 01.4		
		Um	iPKPl	23 38 57.2		
		Ud	iPKPl	23 39 10.3		
			ipPKPl	23 40 30.6		
		De	iPKPl	23 39 19.9		
			iPKP2	23 39 25.4		
		Tonga-Kermadec Islands.				
		h = 330 km (Ud).				
"	7	Sk	iPKPl	00 14 26.7		
		Um	iPKPl	00 14 27.0		
		Ud	iPKPl	00 14 40.8		
"	7	Ki	iP	00 49 58.6		
		Ud	iP	00 50 25.0		
		Mindanao (h = N).				
"	7	Up	iPKPl	02 59 41.7		
		Sk	iPKPl	02 59 34.2		
			ipPKPl	02 59 44.2		
		Um	iPKPl	02 59 30.8		
		Ud	iPKPl	02 59 43.4		
			ipPKPl	02 59 53.6		
		De	iPKPl	02 59 52.3		
			ipPKPl	03 00 02.4		
		Kermadec Islands.				
		h = 35 km (Sk,Ud,De).				
"	7	Ki	iSn	06 33 50.0		
			iSgl	06 34 13.1		
		Um	i	06 34 39.7		
			iSgl	06 35 02.1		
		Northwest USSR.				
		Explosion.				
"	7	Up	iSgl	07 31 43.5		
		Ud	eSgl	07 31 29		
			e	07 31 46		
		De	iPgl	07 29 18.5		
			iSgl	07 29 45.3		
		Baltic Sea, south of Sweden.				
		Explosion.				
"	7	Ud	iP	07 53 30.2		
		North Atlantic Ocean (h = N).				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 July	7	Up	iP	08 31 36.5	
		Ki	iP	08 31 37.0	C
		Sk	iP	08 31 51.8	
		Um	iP	08 31 33.1	
		Ud	iP	08 31 47.2	C
		De	iP	08 31 45.5	
		Sumatra (h = 170 km).			
"	7	Up	iP	08 36 57.9	
		Um	iP	08 37 14.0	
		Ud	iP	08 37 08.1	
			i	08 37 13.1	
"	7	Sk	eP	10 29 22	
"	7	Up	iSgl	11 56 40.4	
		Ud	eSgl	11 56 20	
		De	ePgl	11 54 11	
			iSgl	11 54 37.6	
		Baltic Sea, south of Sweden. Explosion.			
"	7	Up	iP	13 04 11.9	
				micr	sec
			P Z'	0.1	1.0
		Ki	iP	13 03 24.0	
		Sk	iP	13 03 59.2	
		Um	iP	13 03 45.8	
		Ud	iP	13 04 17.1	
		De	iP	13 04 35.2	
		Kurile Islands (h = N).			
"	7	Sk	iP	14 49 26.0	
		Turkey.			
"	7	Up	iP	16 15 16.8	
		Ki	iP	16 13 51.5	
			iS	16 15 57.3	
		Sk	eP	16 15 05	
			eS	16 18 31	
		Um	iS	16 17 00.5	
		Ud	iP	16 15 28.6	
		De	iP	16 15 59.2	
			e	16 20 17	
		Novaya Zemlya. Origin time = 16 11 00. Possibly underground explosion, alternatively an aftereffect of a nuclear explosion in the southern test area on Novaya Zemlya on Oct. 27, 1973.			
"	7	Ud	eP	18 04 59	
"	7	Up	iP	21 05 39.5	
			i	21 05 44.5	
		Ki	iP	21 05 43.7	C
		(cont.)			

1974 July	7	(cont.)			
		Sk	iP	21 06 01.2	C
		Um	iP	21 05 35.8	C
		Ud	iP	21 05 54.7	C
		De	iP	21 05 52.1	
		India (h = N).			
"	8	De	iS	00 21 50.5	
		Yugoslavia.			
"	8	Up	iPKPl	04 09 53.9	
		Ki	iPKP	04 09 37.1	
		Sk	iPKPl	04 09 46.1	
		Um	iPKPl	04 09 41.3	
			i	04 09 48.5	
		Ud	iPKPl	04 09 55.1	
		De	iPKPl	04 10 03.8	
		Kermadec Islands.			
"	8	Up	iP	05 57 06.2	C
			ipP	05 57 18.1	
			iS	06 06 22	
				micr	sec
			P Z'	1.2	1.5
			Mx E	8.1	16
			Mx N	14	21
			Mx Z	19	18
		Ki	iP	05 56 27.5	C
			ipP	05 56 39.4	
			iS	06 05 18	
				micr	sec
			P Z'	0.4	1.0
			Mx E	30	18
			Mx N	19	19
			Mx Z	21	17
		Sk	iP	05 57 00.3	C
			ipP	05 57 13.4	
		Um	iP	05 56 43.7	C
			ipP	05 56 54.7	
			iS	06 05 49	
		Ud	iP	05 57 13.5	C
			ipP	05 57 25.8	
		De	iP	05 57 28.2	C
			ipP	05 57 40.1	
		Japan. h = 45 km (Up,Ki,Sk,Um,Ud, De). m = 6.7, M = 6.5 (Up,Ki).			
"	8	Up	iP	06 04 48.5	
				micr	sec
			P Z'	0.1	1.0
		Ki	iP	06 04 53.5	
			i	06 09 07.8	
		Sk	iP	06 05 17.5	
		Um	iP	06 04 40.7	
			i	06 04 43.3	
		Ud	iP	06 05 09.2	
		(cont.)			

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974						
July	8	(cont.)				
		De	iP	06 05 12.0		
			i	06 05 17.5		
		Sinkiang, China.				
"	8	Ud	eSgl	07 46 15		
			i	07 46 24.8		
		De	ePgl	07 44 02		
			iSgl	07 44 26.7		
		Baltic Sea, south of Sweden.				
		Explosion.				
"	8	Ud	i(Sgl)	08 31 22.2		
			i	08 31 27.4		
		De	iPgl	08 29 01.0		
			iSgl	08 29 28.8		
		Baltic Sea, south of Sweden.				
		Explosion.				
"	8	Ud	iPKPl	10 08 30.4		
"	8	Up	iP	12 20 19.3		
			i	12 20 51.8		
		Ki	iP	12 19 24.6		
		Sk	iP	12 20 01.4		
		Ud	iP	12 20 21.7		
		De	iP	12 20 43.4		
		Kamchatka (h = 60 km).				
"	8	Um	iSgl	12 20 18.9		
		Western USSR.				
		Explosion.				
"	8	Ud	e	13 00 29		
		De	ePgl	12 58 06		
			iSgl	12 58 32.0		
		Baltic Sea, south of Sweden.				
		Explosion.				
"	8	Up	iP	21 01 25.2		
"	8	De	iPKPl	22 36 28.3		
"	8	Ud	iP	23 39 58.4		
		De	iP	23 40 00.5		
		Mongolia.				
"	9	Ud	iPKPl	01 29 13.2		
		De	iPKPl	01 29 24.6		
"	9	Up	iP	02 37 28.2 C		
			ipP	02 37 41.4		
				micr	sec	
			Mx	E	1.4	15
			Mx	N	0.8	15
			Mx	Z	0.8	15
		(cont.)				

1974						
July	9	(cont.)				
		Ki	iP	02 38 34.7 C		
				micr	sec	
			Mx	E	0.5	9
			Mx	N	0.4	9
			Mx	Z	0.4	9
		Sk	iP	02 38 08.0		
		Um	iP	02 37 58.0		
			i	02 38 05.7		
		Ud	iP	02 37 38.0		
			ipP	02 37 52.5		
		De	iP	02 37 06.7		
			i	02 37 12.0		
		Dodecanese Islands.				
		h = 70 km (Up,Ud).				
		M = 4.7 (Up,Ki).				
"	9	Up	iP	07 13 11.8 C		
		Ki	iP	07 12 40.4 C		
		Sk	iP	07 13 08.5		
		Um	iP	07 12 53.9 C		
		Ud	iP	07 13 18.6		
		De	iP	07 13 30.4		
		Bonin Islands (h = 430 km).				
"	9	Sk	iP	07 27 26.5		
		Ud	iP	07 27 23.8		
		India-China (h = 55 km).				
"	9	Up		micr	sec	
			Mx	N	0.5	14
		Ki	iP	09 03 38.6		
		Sk	eP	09 04 12		
		Um	iP	09 03 54.7		
		Ud	iP	09 04 23.5		
		Japan (h = 15 km).				
"	9	Um	iSgl	12 08 35.3		
		Ud	iSgl	12 09 29.5		
		De	iSgl	12 09 50.5		
		Western USSR.				
		Explosion.				
"	9	Sk	ePKPl	12 09 49		
		Ud	iPKPl	12 09 57.6		
"	9	Ki	iPn	12 24 46.8		
			iPgl	12 24 54.8		
			iSn	12 25 33.2		
			iSgl	12 25 47.6		
		Sk	eSgl	12 28 36		
		Um	iSgl	12 27 28.0		
		USSR-Norway.				
		Explosion.				
"	9	Up	iSgl	13 41 31.7		
		(cont.)				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
July 9 (cont.)

Sk	eSgl	13 41 47	
Ud	iPgl	13 40 10.2	
	iSgl	13 40 32.1	
De	eSgl	13 41 41	

Southeast Norway,
59.7°N, 10.5°E.
Origin time = 13 39 42.

" 9

Ud	i(Sgl)	14 12 11.8	
De	iSgl	14 10 20.2	

Baltic Sea, south of Sweden.
Explosion.

" 9

Up	iP	16 31 02.1		C
		micr	sec	
	P	Z' 0.1	0.7	
Ki	iP	16 30 45.7		C
		micr	sec	
	Mx	E 0.5	12	
	Mx	N 0.6	16	
	Mx	Z 0.5	12	
Sk	iP	16 31 12.5		
Um	iP	16 30 49.4		C
Ud	iP	16 31 14.3		C

Szechwan, China (h = N).

" 9

Up	iPKPl	17 04 32.7	C
Sk	iPKPl	17 04 25.3	C
Um	iPKPl	17 04 20.0	
Ud	iPKPl	17 04 34.3	C
	iPKP2	17 04 37.6	
De	iPKPl	17 04 43.0	

Kermadec Islands (h = N).

" 9

Up	iSgl	17 27 46.7	
Um	iSgl	17 28 34.7	
Ud	iSgl	17 28 48.1	

Near coast of southwest
Finland.
Explosion?
Solution from Helsinki
regional bulletin.

" 9

Ki	iP	17 49 35.6	
Sk	eP	17 49 21	
	ipP	17 49 31.1	
Um	iP	17 49 40.7	
	ipP	17 49 48.9	
Ud	epP	17 49 38	

Caribbean Sea.
h = 30 km (Sk,Um).

" 9 Ud iP 17 58 16.3

" 9 Ud iP 18 12 59.1

" 9

Up	iSgl	20 52 38.0	

(cont.)

1974
July 9 (cont.)

Ki	iPgl	20 49 57.4	
	iSgl	20 50 32.6	
Sk	iPgl	20 49 59.3	
	iSgl	20 50 37.0	
	iSg2	20 50 41.0	
Um	iPgl	20 50 12.5	
	iSn	20 50 46.3	
	iSgl	20 51 00.5	
Ud	iSgl	20 52 27.6	

Nordland, Norway,
66.4°N, 14.4°E.
Origin time = 20 49 10.
Explosion.

" 9

Up	iP	23 43 33.5	
Ki	iP	23 43 04.6	
Um	iP	23 43 20.5	
De	iP	23 43 53.8	

Mariana Islands (h = 120 km).

" 10

Up	iP	03 03 52.9		C
	iPn	03 04 58.4		
Ki	iP	03 03 37.4		C
		micr	sec	
	P	Z' 0.1	0.5	
Sk	iP	03 04 08.3		
	iPP	03 05 30.1		
Um	iP	03 03 37.8		
	iPn	03 04 35.0		
Ud	iP	03 04 09.3		C
	iPP	03 05 32.4		
De	iP	03 04 17.1		
	iPP	03 05 44.1		

Kazakh SSR.
Underground explosion.

" 10

Um	iP	03 28 29.0	
Ud	iP	03 28 51.0	
De	iP	03 28 49.8	

Fergana.

" 10

Up	iP	04 19 28.3	
Ud	iP	04 19 29.8	

" 10

Up	iP	04 42 09.4	C
	ipP	04 42 20.2	
Ki	iP	04 42 11.2	
	ipP	04 42 21.9	
Sk	iP	04 42 24.8	
	ipP	04 42 35.7	
Um	iP	04 42 07.4	
	ipP	04 42 18.0	
Ud	iP	04 42 20.1	C
	ipP	04 42 31.0	
De	iP	04 42 17.7	C
	ipP	04 42 29.0	

(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 July 10 (cont.)

Sumatra.
h = 40 km (Up,Ki,Sk,Um,Ud, De).

"	10	Ki	iSgl	07 18 55.4
		Sk	eSgl	07 21 30
		Um	iSgl	07 20 07.0

North Finland,
68.0°N, 28.0°E.
Origin time = 07 17 24.
By combination with Finnish station readings.

"	10	Up	iP	09 11 39.4
		Ud	iP	09 11 47.0
"	10	Sk	iP	11 56 25.9
		Ud	iP	11 56 08.6
"	10	Um	iP	12 00 39.8
"	10	Ud	iP	12 20 38.0
		De	iP	12 20 05.1

Dodecanese Islands
(h = 45 km).

"	10	Um	iSgl	12 38 43.6
		Ud	iSgl	12 39 33.6
		De	iSgl	12 39 55.6

Western USSR.
Explosion.

"	10	Ki	i	12 47 22.0
			iSn	12 47 33.1
			iS*	12 47 45.3

USSR-Norway.
Explosion.

"	10	Up	iP	12 55 57.8
			i	12 56 11.2
		Ki	iP	12 55 40.7
		Sk	eP	12 56 09
		Ud	iP	12 56 10.6

Szechwan, China (h = N).

"	10	Ki	iSgl	14 01 32.2
		Sk	iSgl	14 01 48.8
		Um	iSgl	14 00 03.2
		Ud	iSgl	14 01 28.6

Lake Ladoga region.
Explosion.

"	10	Up	iP		16 11 48.9	C
					micr	sec
			P	Z'	0.2	1.1
		Ki	iP		16 11 14.7	C

(cont.)

1974 July 10 (cont.)

		Ki			micr	sec
			P	Z'	0.3	1.5
		Sk	iP		16 11 22.6	C
		Um	iP		16 11 34.0	C
		Ud	iP		16 11 41.0	C
		De	iP		16 11 57.6	

Nevada.
m = 6.2 (Up,Ki).
Underground explosion.

"	10	Up	iSn	16 15 54.4
			iSgl	16 16 03.4
			iRg	16 16 22.0
		Ud	iPgl	16 14 53.1
			iSgl	16 15 13.3
			iRg	16 15 22.3
		De	iSgl	16 15 44.9

Dalsland, Sweden,
58.8°N, 12.4°E.
Origin time = 16 14 28.
Near-surface event.

"	10	Up	i	17 48 31.5
			i(Sgl)	17 48 43.8
"	10	Up	iP	18 20 35.4 C
		Ki	iP	18 20 24.5
		Sk	iP	18 20 49.8
		Um	iP	18 20 25.1 C
		Ud	iP	18 20 48.9 C

India-China (h = N).

"	10	Up	iP	18 36 14.4
		Sk	iP	18 36 30.5
		De	iP	18 36 13.6
"	10	Ud	iP	18 42 52.9

Molucca Passage (h = N).

"	10	Sk	iP	19 40 33.0
		Ud	iP	19 40 00.8 C

Greece (h = 60 km).

"	11	Ki	iP	02 26 41.7

Alaska (h = 90 km).

"	11	Up	iP		05 47 43.9	
					micr	sec
			P	Z'	0.1	1.0
			Mx	E	0.7	18
			Mx	Z	1.1	17
		Ki	iP		05 47 17.6	C
					micr	sec
			P	Z'	0.1	1.0
		Sk	iP		05 47 41.7	
		Um	iP		05 47 28.6	C

(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 July 11 (cont.)

Um	i		05 47 35.1	
	ipP		05 47 41.6	
Ud	iP		05 47 50.6	

Mariana Islands.
h = 50 km (Um).
m = 6.1 (Up,Ki).

" 11

Up	iSgl		13 41 57.6	
Ki	iSgl		13 44 01.6	
Sk	eSgl		13 43 40	
Um	iSgl		13 42 19.4	
Ud	iSgl		13 43 00.8	

Western USSR.
Explosion.

" 11

Up	iSgl		14 32 48.6	
Sk	eSgl		14 32 48	
Um	iSgl		14 34 10.0	
Ud	iPgl		14 30 54.5	
	iSn		14 31 32.9	
	i		14 31 44.0	
	iSgl		14 31 50.6	
De	eSgl		14 32 11	

Southwest Norway,
58.5°N, 6.4°E.
Origin time = 14 29 45.
By combination with Bergen and Kongsberg readings.

" 11

Up	i(pP)		16 05 28.1	
Ki	eP		16 04 19	
Um	iP		16 04 40.4	
	ipP		16 04 58.4	
Ud	iP		16 05 11.1	

Japan.
h = 70 km (Um).

" 11

Up	iP		17 59 43.1	
	i		17 59 54.1	
			micr	sec
	i	Z'	0.1	1.0
	Mx	E	0.8	14
	Mx	N	1.2	14
	Mx	Z	2.0	17
Ki	iP		17 58 32.1	C
	iS		18 00 14.5	
			micr	sec
	P	Z'	0.2	1.0
	Mx	E	2.5	16
	Mx	N	3.3	15
	Mx	Z	1.4	15
Sk	iP		17 58 42.5	
	iS		18 00 32.5	
Um	iP		17 59 08.9	C
	i		17 59 19.0	

(cont.)

1974 July 11 (cont.)

Ud	iP		17 59 28.6	
	i		17 59 41.0	
De	iP		18 00 17.5	

Jan Mayen (h = N).
M = 4.3 (Up,Ki).

" 11

Ud	iPKPl		19 30 28.2	
De	iPKPl		19 30 38.4	

Tonga-Kermadec Islands
(h = 220 km).

" 12

Sk	iPKPl		03 04 27.1	

" 12

Up	iSgl		12 01 23.3	
Um	iSgl		12 01 56.0	
Ud	iSgl		12 02 25.1	

Esthonia.
Explosion.

" 12

Ki	iPn		12 20 41.5	
	iSgl		12 21 44.9	

USSR-Norway.
Explosion.

" 12

Up	iSgl		12 47 05.1	
Ki	iPn		12 42 56.3	
	iSn		12 43 55.6	
Sk	iSgl		12 46 44.1	
Um	iSn		12 44 36.9	
	i		12 44 52.0	
	iSgl		12 45 10.5	
Ud	iSgl		12 47 41.9	
De	iSgl		12 49 15.2	

Northwest USSR.
Explosion.

" 12

Um	eSgl		12 48 42	

Lake Ladoga region.
Explosion.

" 12

Sk	iPKPl		13 18 24.5	
Um	iPKPl		13 18 19.2	
Ud	iPKP2		13 18 42.7	

" 12

Up	iPKPl		16 02 04.4	
Sk	iPKPl		16 01 55.5	
Ud	iPKPl		16 02 08.5	

" 12

Up	iPKPl		16 51 39.0	
Sk	iPKPl		16 51 31.9	
	ipPKPl		16 51 44.6	
Um	iPKPl		16 51 27.2	
Ud	iPKPl		16 51 40.7	C
	iPKP2		16 51 44.9	
De	iPKPl		16 51 50.2	C

Kermadec Islands.
h = 45 km (Sk).

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
July 12 Sk iPKPl 18 25 33.4
ipPKPl 18 25 46.0
Ud iPKPl 18 25 42.7
De iPKPl 18 25 51.7
Kermadec Islands.
h = 45 km (Sk).
Origin time = 18 06 04.

" 12 Ki iP 18 39 58.9
Ud iP 18 40 22.3
Molucca Passage (h = 55 km).

" 12 Ud iP 19 28 08.8

" 13 Ki iPn 00 32 08.2
iSn 00 33 04.6
eS* 00 33 24
Northwest USSR.
Explosion.

" 13 Up iP 01 31 04.1 C
iX 01 31 25.3
i 01 31 33.1
iSKS 01 41 26
iS 01 41 38

		micr	sec
P	Z'	1.2	1.5
X	Z'	3.6	2.0
Mx	E	79	23
Mx	N	60	24
Mx	Z	160	23

Ki iP 01 31 04.2 C
iX 01 31 26.0
iSKS 01 41 31
iP'P' 01 57 07.2

		micr	sec
P	Z'	3.0	1.8
X	Z'	8.3	2.4
Mx	E	120	22
Mx	N	95	22
Mx	Z	110	22

Sk iP 01 30 49.5
iX 01 31 13.0
iP'P' 01 57 13.3
Um iP 01 31 06.5
iX 01 31 28.7
iS 01 41 45
iP'P' 01 57 10.8
Ud iP 01 30 53.9 C
iX 01 31 15.4
De iP 01 30 57.3
iX 01 31 18.5
Panama-Colombia (h = 10 km).
m = 7.0 (P), 7.4 (X),
M = 7.2 (Up,Ki).
Complex P-wave group.
X - P = 21.9 sec in average,
X probably being P of another
shock in the same area.

1974
July 13 Sk iP 01 37 36.6 C
Um iP 01 37 53.5
Panama-Colombia.
Origin time = 01 25 10.

" 13 Up i(P) 01 38 30.9
Sk iP 01 38 31.0
Um iP 01 38 41.3

" 13 Um iP 01 40 44.0

" 13 Up iP 01 43 35.9 C
iX 01 44 10.2
iY 01 44 32.9

		micr	sec
X	Z'	0.2	1.5

Ki iP 01 43 36.3 C
iX 01 44 10.3

		micr	sec
P	Z'	0.1	1.2
X	Z'	1.0	1.9

Sk iP 01 43 22.5 C
ipP 01 43 26.3
iX 01 43 56.6
Um iP 01 43 39.2 C
ipP 01 43 43.1
iX 01 44 11.9
Ud iP 01 43 25.9 C
iX 01 44 02.5
iY 01 44 21.0
De iP 01 43 28.7
ipP 01 43 32.4
iX 01 44 04.7
i 01 44 44.6
Panama-Colombia.
h = 15 km (Sk,Um,De).
m = 6.4 (X) (Up,Ki).
In average, X - P = 34.6 sec,
X probably being P of another
shock.

" 13 Up iP 01 52 43.1
Ki iP 01 52 44.3
Sk iP 01 52 28.7
i 01 52 31.2
Um iP 01 52 46.6
i 01 52 47.9
Ud iP 01 52 33.4
i 01 52 39.0
De iP 01 52 36.0
Colombia (h = 20 km).

" 13 Sk iP 02 04 58.5
Um iP 02 05 15.7
Ud iP 02 05 01.5
Panama-Colombia.
Origin time = 01 52 34.

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
July 13 Ki iP 02 09 19.1 C
Sk iP 02 09 04.6
Um iP 02 09 22.0 C
Ud iP 02 09 09.1
Panama-Colombia (h = N).

" 13 Up iP 02 14 58.4
Ki eP 02 15 00
Sk eP 02 14 46
Um iP 02 15 03.3
De iP 02 14 53.3
Panama-Colombia (h = N).

" 13 Up iP 02 15 44.6
i 02 15 48.5

" 13 Up iP 02 19 55.3
Ki iP 02 19 53.1 C
micr sec
P Z' 0.1 1.5
Sk iP 02 19 39.3 C
ipP 02 19 43.9
Um iP 02 19 56.6 C
ipP 02 20 00.8
Ud iP 02 19 46.0 C
De iP 02 19 50.3
Panama-Colombia.
h = 15 km (Sk,Um).

" 13 Up iP 02 25 17.7
Ki iP 02 25 18.2 C
Sk iP 02 25 04.0
Um iP 02 25 21.2 C
i 02 25 23.6
Ud iP 02 25 10.3
De iP 02 25 10.9
Panama-Colombia (h = N).

" 13 Ki iP 02 27 33.9
Sk iP 02 27 20.6
Um iP 02 27 37.6
Ud iP 02 27 23.7
De iP 02 27 26.9
Panama-Colombia (h = 25 km).

" 13 Up iP 02 33 00.8
ipP 02 33 16.8
micr sec
P Z' 0.2 1.6
Ki iP 02 33 01.3 C
ipP 02 33 14.8
micr sec
P Z' 0.2 1.5
Sk iP 02 32 47.5 C
ipP 02 33 03.5
Um iP 02 33 04.3 C
(cont.)

1974
July 13 (cont.)
Um ipP 02 33 19.6
Ud iP 02 32 50.9 C
De iP 02 32 53.8
ipP 02 33 09.8
Panama-Colombia.
h = 55 km (Up,Ki,Sk,Um,De).
m = 6.1 (Up,Ki).

" 13 Ki iP 02 43 26.6
Sk iP 02 43 12.6
Panama-Colombia.
Origin time = 02 30 48.

" 13 Up iP 02 51 33.1
Ki iP 02 51 32.2
Sk iP 02 51 18.0
i 02 51 24.9
Um iP 02 51 34.8
Ud iP 02 51 22.4
De iP 02 51 22.8
Panama-Colombia (h = N).

" 13 Ki iP 02 55 44.9
Sk iP 02 55 30.6
Um iP 02 55 46.3
Panama-Colombia (h = 50 km).

" 13 Ki iP 03 00 44.4
Sk eP 03 00 28
Um iP 03 00 48.1
Panama-Colombia (h = N).

" 13 Ki iP 03 11 25.0 C
Sk iP 03 11 11.4
Um iP 03 11 28.0 C
Panama-Colombia (h = N).

" 13 Up iP 03 24 35.6
Ki iP 03 24 19.1
Sk iP 03 24 46.7
Um iP 03 24 22.4
i 03 24 33.5
Ud iP 03 24 47.9
Szechwan, China (h = N).

" 13 Up iP 03 36 50.7

" 13 Sk iP 03 52 53.3

" 13 Ki iP 03 57 56.9
Sk iP 03 57 42.1
Um iP 03 57 59.1
Ud iP 03 57 46.2
Panama-Colombia (h = 40 km).

" 13 Up ipP 04 03 51.2
(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 July	13	(cont.)				
		Ki	iP		04 03 43.4	
			ipP		04 03 52.6	
					micr	sec
			pP	Z'	0.2	1.7
		Sk	iP		04 03 28.9	
			ipP		04 03 37.7	
		Um	iP		04 03 46.1	
			ipP		04 03 55.1	
		Ud	iP		04 03 33.4	
			ipP		04 03 43.0	
		De	iP		04 03 37.5	
			i(pP)		04 03 44.1	
		Panama-Colombia.				
		h = 35 km (Ki,Sk,Um,Ud).				
		Alternatively, pP, being larger than P, could be P of another shock in the same area. This interpretation is more likely, considering the general absence or weakness of pP in this series of shocks.				
"	13	Ki	iP		04 42 13.5	
		Sk	iP		04 42 00.2	
		Panama-Colombia (h = N).				
"	13	Ki	iP		05 07 35.1	
		Sk	iP		05 07 20.3	
		Um	iP		05 07 37.0	
		Panama (h = N).				
"	13	Ud	iP		05 46 54.8	
		Kurile Islands.				
"	13	Ki	iP		05 58 27.3	
		De	iP		05 58 20.2	
		Panama-Colombia (h = N).				
"	13	Ki	iP		06 10 11.2	
		Sk	iP		06 09 56.8	
		Panama-Colombia (h = 50 km).				
"	13	Um	iP		06 18 16.3	
"	13	Up	iPKPl		07 33 56.8	
		Ud	iPKPl		07 33 59.2	
"	13	Up	iP		08 46 11.7	C
		Ki	iP		08 46 11.8	
		Sk	iP		08 46 37.8	
		Ud	iP		08 46 28.0	
		Sinkiang, China (h = 55 km).				
"	13	Sk	iP		09 12 21.8	
		Ud	iP		09 12 26.0	
		Panama (h = N).				
1974 July	13	Sk	iP		09 44 49.2	
"	13	Ki	iP		09 53 28.0	
		Panama-Colombia (h = N).				
"	13	Up	iP		10 34 04.9	
			i		10 34 07.4	
		Ki	iP		10 34 05.7	
		Sk	iP		10 33 51.8	
			i		10 33 54.4	
		Um	iP		10 34 08.0	
			i		10 34 10.5	
		Ud	iP		10 33 55.4	
		De	iP		10 33 57.4	
			i		10 34 00.5	
		Panama-Colombia (h = 10 km).				
"	13	Up	iP		10 49 43.9	
					micr	sec
			P	Z'	0.1	1.0
		Ki	iP		10 49 15.9	
		Sk	iP		10 49 45.6	
		Um	iP		10 49 26.0	
		Ud	iP		10 49 52.8	
			i		10 50 29.8	
		De	iP		10 50 03.0	
		Formosa (h = 100 km).				
"	13	Ki	iP		11 56 45.0	C
		Sk	iP		11 56 30.8	
		Um	iP		11 56 48.0	
		Ud	iP		11 56 33.3	
		Panama-Colombia (h = 40 km).				
"	13	Up	eSgl		12 18 47	
		Ki	iPn		12 14 29.1	
			iPgl		12 14 41.0	
			iSn		12 15 25.3	
			iSgl		12 15 46.9	
		Sk	eSn		12 17 29	
			iSgl		12 18 17.7	
		Um	iSn		12 16 08.0	
			iSgl		12 16 45.0	
		Northwest USSR.				
		Explosion.				
"	13	Ki	iP		12 24 25.7	
		Panama (h = N).				
"	13	Ki	iP		12 53 57.2	
			i		12 54 02.8	
		Sk	iP		12 54 20.5	
		Alaska (h = 55 km).				
		Our readings are late compared to the NEIS solution.				
"	13	Ki	iP		13 00 18.7	
		(cont.)				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 July 13 (cont.)

	Ki	i	13 00 22.1	
	Sk	iP	13 00 07.3	
	Um	iP	13 00 21.6	
		i	13 00 25.2	

Panama-Colombia (h = 30 km).

" 13	Ki	iP	13 13 35.2	
		i	13 14 01.1	
	Sk	iP	13 13 19.2	
	Um	iP	13 13 37.4	
		i	13 13 50.8	
	Ud	iP	13 13 25.9	
	De	iP	13 13 30.4	

Panama-Colombia (h = N).

" 13	Ud	iSgl	13 17 36.6	

Southwest Norway.
Origin time = 13 15 45.
By combination with Bergen readings.

" 13	Ki	iP	14 15 05.7	
	Sk	iP	14 14 51.3	
	Um	iP	14 15 08.5	
		i	14 15 13.4	

Panama-Colombia (h = N).

" 13	Ki	eP	14 57 35	

Alaska (h = 90 km).

" 13	Sk	eP	15 57 20	
	Um	iP	15 57 36.5	

Panama-Colombia (h = 7 km).

" 13	Up	iP	16 02 50.2	C	
			micr	sec	
		P	Z' 0.1	1.0	
		Mx	E 0.4	12	
		Mx	N 0.6	16	
		Mx	Z 0.7	17	
	Ki	iP	16 03 59.0		
			micr	sec	
		Mx	E 1.0	14	
		Mx	N 0.5	15	
		Mx	Z 0.5	12	
	Sk	iP	16 03 14.3		
	Um	iP	16 03 26.0		
	Ud	iP	16 02 43.7		
		i	16 04 18.3		
	De	iP	16 02 12.3	C	
		i(pP)	16 02 21.7		

Algeria (h = 35 km).
M = 4.6 (Up,Ki).

" 13	Up	iP	16 28 33.5	
	Ki	iP	16 28 36.3	

(cont.)

1974 July 13 (cont.)

	Sk	iP	16 28 22.2	
		i	16 28 31.6	
	Um	iP	16 28 39.0	
	Ud	iP	16 28 25.7	
	De	iP	16 28 28.6	

Panama-Colombia (h = 20 km).

" 13	Up	iP	16 40 24.5	C
		i	16 40 31.0	
" 13	Ki	iP	16 47 59.6	
	Sk	iP	16 47 45.9	C
	Um	iP	16 48 03.0	
	Ud	iP	16 47 49.6	C
	De	iP	16 47 52.4	

Panama-Colombia (h = 35 km).

" 13	Ud	i(P)	17 07 38.9	

" 13	Up	iP	18 01 32.3	
	Ki	iP	18 01 32.5	
	Sk	iP	18 01 18.2	
	Um	iP	18 01 35.6	
	Ud	iP	18 01 22.3	
	De	iP	18 01 24.0	

Panama-Colombia (h = 20 km).

" 13	Um	iP	18 08 16.5	

" 13	Up	iP	18 11 24.6		
		iS	18 21 55		
			micr	sec	
		P	Z'	0.2	1.7
		Mx	E	0.9	18
		Mx	N	0.9	20
		Mx	Z	1.5	18
	Ki	iP	18 11 23.5		
			micr	sec	
		P	Z'	0.7	2.2
		Mx	E	1.4	17
		Mx	N	1.3	17
		Mx	Z	1.2	16
	Sk	iP	18 11 08.4		
	Um	eP	18 11 26		
		iS	18 22 05		
	Ud	iP	18 11 14.1		
	De	iP	18 11 16.1		
		i	18 11 19.1		

Panama-Colombia (h = 5 km).
m = 6.3, M = 5.4 (Up,Ki).
P Z' exhibits unusually long periods.

" 13	Up		micr	sec
		Mx	E 0.7	18
		Mx	N 0.8	18
		Mx	Z 1.2	18

(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 July	13	(cont.)					
		Ki	iPKP	18 17 25.7			
		Um	iPKP	18 17 33.1			
		New Hebrides Islands (h = 45 km).					
"	13	Ki	iP	19 28 25.6			
		Um	iP	19 28 28.6			
		Ud	iP	19 28 17.6			
		Panama-Colombia (h = 20 km).					
"	13	Ki	iP	19 54 40.2			
		Sk	iP	19 54 26.8			
		Um	iP	19 54 43.0			
			i	19 54 52.5			
		Ud	iP	19 54 30.3			
		Panama-Colombia (h = 20 km).					
"	13	Up	iP	21 11 55.0			
		Ki	eP	21 11 39			
		Ud	iP	21 12 08.1			
		Szechwan, China (h = N).					
"	13	Sk	iP	21 36 34.4			
		Um	iP	21 36 48.8			
		Ud	iP	21 36 16.9			
"	13	Ki	eP	23 17 51			
		Sk	iP	23 17 37.9			
		Um	iP	23 17 54.1			
		Ud	iP	23 17 44.1			
		Panama-Colombia (h = 15 km).					
"	13	Up	eP	23 21 25			
		Ki	iP	23 21 23.9			
				micr	sec		
			P	Z'	0.2	1.5	
		Sk	iP	23 21 09.4			
			i	23 21 12.7			
		Um	iP	23 21 27.3	C		
			i	23 21 29.9			
		Ud	iP	23 21 14.1			
			i	23 21 17.1			
		De	iP	23 21 16.9			
			i	23 21 19.3			
		Panama-Colombia (h = 25 km). Double P, the second one larger.					
"	13	Ki	eP	23 53 20			
		Sk	iP	23 53 02.7			
		Um	iP	23 53 19.0			
		Panama-Colombia (h = 60 km).					
"	14	Sk	iP	00 47 08.8			
		Um	iP	00 47 26.0			
		Panama-Colombia (h = 60 km).					
1974 July	14	Up	iP	02 01 21.8	C		
		Ki	iP	02 01 22.7	C		
				micr	sec		
			P	Z'	0.2	1.5	
		Sk	iP	02 01 08.2	C		
		Um	iP	02 01 25.4	C		
			i	02 01 37.0			
		Ud	iP	02 01 12.1	C		
		De	iP	02 01 15.3	C		
		Panama-Colombia (h = 25 km).					
"	14	Up	iP	02 26 30.7	C		
			ipP	02 26 36.0			
				micr	sec		
			P	Z'	0.1	1.0	
			Mx	E	0.7	19	
			Mx	N	0.6	18	
			Mx	Z	1.1	20	
		Ki	iP	02 26 31.0	C		
			ipP	02 26 35.6			
			iS	02 37 01			
				micr	sec		
			P	Z'	0.9	1.8	
			Mx	E	0.6	15	
			Mx	N	0.6	18	
			Mx	Z	0.6	16	
		Sk	iP	02 26 17.2	C		
			ipP	02 26 22.9			
		Um	iP	02 26 34.0	C		
			ipP	02 26 39.0			
		Ud	iP	02 26 21.0	C		
			ipP	02 26 26.1			
		De	iP	02 26 23.8	C		
			i	02 26 27.1			
		Panama-Colombia. h = 20 km (Up,Ki,Sk,Um,Ud). m = 6.3, M = 5.2 (Up,Ki).					
"	14	Up	iP	03 01 13.8			
		Ki	iP	03 02 19.1			
		Um	iP	03 01 49.3			
			i	03 02 13.3			
		Ud	iP	03 01 08.4			
		Alboran Sea (h = 30 km).					
"	14	Ki	iP	03 02 57.0			
			i	03 03 06.8			
		Sk	iP	03 02 41.6			
			i	03 02 50.4			
		Um	iP	03 02 58.6			
		Ud	iP	03 02 46.0			
		Panama-Colombia (h = 15 km).					
"	14	Um	iP	03 15 22.0			
"	14	Ki	iP	03 23 20.4			

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 July 14 Up iP 04 09 27.1
Ki iP 04 09 34.1
Sk eP 04 09 52
Um iP 04 09 24.0
Ud iP 04 09 42.3
De eP 04 09 42
Afghanistan-USSR (h = 120 km).

" 14 Ki iP 05 44 07.1
Sk iP 05 43 52.6
Um iP 05 44 08.3
Panama-Colombia.
Origin time = 05 31 28.

" 14 Up iP 06 16 52.2
Ki iP 06 15 31.1
Sk iP 06 16 13.1
Um iP 06 16 12.2
Ud iP 06 16 47.9
Greenland Sea (h = 15 km).

" 14 Up iSn 06 29 15.2
i 06 30 12.8
iSgl 06 30 17.6
Ki iPn 06 26 03.8
iSn 06 27 02.0
iSgl 06 27 23.4
Sk eSn 06 28 53
iSgl 06 29 49.9
Um iSn 06 27 43.1
iSgl 06 28 15.9
Ud iSn 06 29 41.9
iSgl 06 30 46.5
De iSgl 06 32 17.7
Northwest USSR.
Explosion.

" 14 Ki i(P) 07 02 04.6

" 14 Sk iPKPl 07 24 13.7
Um iPKPl 07 24 08.6
iX 07 24 23.3
Ud iPKPl 07 24 21.6
iX 07 24 38.2
Kermadec Islands (h = 15 km).

" 14 Ki eP 07 26 09
Sk iP 07 25 55.0
Um iP 07 26 12.0
Ud iP 07 25 58.0
Panama-Colombia (h = 35 km).
Arranging our stations in order of sensitivity (measured by number of recorded shocks) for the Panama-Colombia series on July 13-14, we find the following sequence and (cont.)

1974 July 14 (cont.)
relative numbers:
Sk:Ki:Um:Ud:De:Up = 2.6:2.6:2.4:1.8:1.3:1, which is not typical for our stations.

" 14 Up iP 09 51 31.2
Ki iP 09 51 19.7
iSKS 10 01 40
micr sec
Mx N 0.9 22
Ud iP 09 51 39.9
Flores Island (h = 120 km).

" 14 Up eP 11 26 11
Sk iP 11 26 48.1
Ud iP 11 26 16.0
Greece (h = 40 km).

" 14 Up iP 11 43 52.2
Sk iP 11 44 35.2
Ud iP 11 43 57.0
Ionian Sea.

" 14 Up iPKPl 13 17 04.0
Sk iPKPl 13 16 56.4
Um iPKPl 13 16 51.6
Ud iPKPl 13 17 05.4
De iPKPl 13 17 14.7
Kermadec Islands.
Origin time = 12 57 23.

" 14 Sk iPKPl 14 08 53.1
Um iPKPl 14 08 48.0
Ud iPKPl 14 09 01.4
Kermadec Islands (h = 35 km).

" 14 Up iP 15 36 24.7
Ki iP 15 35 48.0
Sk iP 15 36 20.4
Um iP 15 36 04.0 C
Ud iP 15 36 32.1 C
De iP 15 36 45.8
Japan (h = 130 km).

" 14 Up iP 16 35 13.8
Ki iP 16 34 23.5
Sk iP 16 34 59.6
Um iP 16 34 47.0
Ud iP 16 35 18.6
De iP 16 35 39.1
Okhotsk Sea (h = 380 km).

" 14 Up i 17 35 28.3
iSgl 17 35 31.8
iRg 17 35 38.1
(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
July 14 (cont.)

Ud	i	17 35 20.9	
	i(Sgl)	17 35 48.8	

Central Sweden.

" 14

Ki	iP	18 04 12.4	

Tanimbar Islands (h = 45 km).

" 14

Up	iPKPl	19 08 02.0	C
	i	19 08 08.2	
	ipPKPl	19 08 52.5	
		micr sec	
	PKPl Z'	0.2 0.9	
Ki	e(PKP)	19 07 38	
	iPKP	19 07 48.4	
Sk	iPKPl	19 07 54.5	C
Um	iPKPl	19 07 50.9	
	i	19 07 55.7	
	ipPKPl	19 08 37.5	
Ud	iPKPl	19 08 03.6	C
	i	19 08 10.2	
	ipPKPl	19 08 52.3	
De	iPKPl	19 08 12.9	C
	ipPKPl	19 08 59.4	

Kermadec Islands.
h = 190 km (Up,Um,Ud,De).

" 14

Up	iP	19 30 13.4	
Ki	iP	19 29 56.5	
Sk	iP	19 30 19.5	
Um	iP	19 30 02.0	
Ud	iP	19 30 22.6	
De	iP	19 30 25.9	

Luzon (h = 140 km).

" 14

Sk	iP	20 22 45.4	
Ud	iP	20 22 12.5	

Greece (h = 70 km).

" 14

Ki	iP	21 31 02.6	
	eTPg	21 35 59	
	iTSg	21 36 39.6	
Sk	iP	21 31 41.1	
	eS	21 33 25	
	eTSg	21 38 51	
Um	iP	21 31 52.8	
	iTSg	21 38 37.5	
Ud	iP	21 32 28.9	

Northeast of Jan Mayen
(h = N).

" 15

Ud	iP	01 31 55.3	

Afghanistan-USSR (h = 120 km).

" 15

Ki	iP	09 16 07.6	
Ud	iP	09 16 58.7	

(cont.)

1974
July 15 (cont.)

Ud	i(PcP)	09 17 37.2	

Kamchatka (h = 160 km).

" 15

Up	iSgl	10 37 59.4	
Sk	eSgl	10 39 47	
Um	iSgl	10 38 21.1	
Ud	eSgl	10 39 01	

Western USSR.
Explosion.

" 15

Sk	iP	11 01 21.4	

Panama-Colombia (h = N).

" 15

Up	iPKPl	11 27 34.7	
Sk	iPKPl	11 27 27.0	
	i	11 27 38.5	
Ud	iPKPl	11 27 35.7	
De	iPKPl	11 27 44.5	

Kermadec Islands (h = 80 km).

" 15

Ki	iP	16 51 55.8	

Kirghiz-Sinkiang (h = N).

" 15

Up	iP	17 15 25.5	
Ki	iP	17 14 58.8	C
Sk	iP	17 15 24.9	
Um	iP	17 15 11.5	
Ud	iP	17 15 34.3	C

Mariana Islands (h = 330 km).

" 15

Ki	iP	18 05 24.2	
Sk	iP	18 05 09.5	C
Ud	iP	18 05 14.1	

Panama-Colombia (h = N).

" 15

Ki	i(Sn)	18 37 48.7	
	iSgl	18 38 02.4	
Sk	i	18 38 06.4	
	iSgl	18 38 10.6	
Um	iSgl	18 38 30.6	
Ud	iSgl	18 39 57.4	

Nordland, Norway,
66.4°N, 14.3°E.
Origin time = 18 36 35.
Explosion.

" 15

Ki	iP	19 24 32.1	C
Sk	iP	19 24 17.9	
Um	iP	19 24 35.8	
Ud	iP	19 24 21.6	
De	iP	19 24 24.7	

Panama-Colombia (h = 7 km).

" 15

Ki	iP	19 35 48.8	

Mariana Islands (h = 60 km).

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 July	15	Ki	iP		19 42 50.4	
		Sk	iP		19 42 38.1	
		Um	iP		19 42 53.4	
		Ud	iP		19 42 43.7	
		Panama-Colombia (h = 40 km).				
"	15	Up	iP		23 24 07.7	C
					micr	sec
			P	Z'	0.1	1.3
		Ki	iP		23 24 08.1	
					micr	sec
			P	Z'	0.1	1.3
		Sk	iP		23 23 54.5	C
		Um	iP		23 24 11.2	C
		Ud	iP		23 23 58.0	C
		De	iP		23 24 00.9	
		Panama-Colombia (h = 30 km).				
		m = 5.9 (Up,Ki).				
"	16	Sk	iPKPl		02 32 26.1	
			i		02 32 39.7	
		Um	iPKPl		02 32 22.0	
		Ud	iPKPl		02 32 36.2	
		De	iPKPl		02 32 45.1	
		Kermadec Islands (h = 60 km).				
"	16	Up	iPKPl		02 39 48.0	
		Sk	iPKPl		02 39 39.8	
		Um	iPKPl		02 39 35.2	
		Ud	iPKPl		02 39 49.6	
		De	iPKPl		02 39 58.2	
		Kermadec Islands (h = 70 km).				
"	16	Ki	iP		04 19 12.9	
		Ud	iP		04 18 59.6	
"	16	Up	iPKPl		07 08 58.9	C
			ipPKPl		07 09 12.1	
		Sk	iPKPl		07 08 51.6	
			ipPKPl		07 09 04.5	
		Um	iPKPl		07 08 46.6	
			ipPKPl		07 08 59.9	
		Ud	iPKPl		07 09 00.5	C
			iPKP2		07 09 04.0	
			ipPKPl		07 09 13.4	
		De	iPKPl		07 09 09.0	
			ipPKPl		07 09 22.4	
		Kermadec Islands.				
		h = 45 km (Up,Sk,Um,Ud,De).				
"	16	Sk	iP		08 02 38.1	
		Ud	iP		08 02 38.8	
		Windward Islands (h = 60 km).				
"	16	Up	iP		12 48 19.4	
		Ki	iP		12 48 20.1	
		Sk	iP		12 48 05.7	
		(cont.)				

1974 July	16	(cont.)				
		Um	iP		12 48 23.5	
		Panama-Colombia (h = N).				
"	16	Up	iSgl		13 01 36.8	
		Ki	iSgl		13 04 31.5	
		Sk	iSgl		13 03 35.8	
		Um	iSgl		13 02 30.5	
		Ud	iSgl		13 02 36.7	
		De	eSgl		13 03 09	
		Esthonia.				
		Explosion.				
"	16	Up	iSgl		13 38 40.6	
		Ki	iSgl		13 40 48.8	
		Sk	eSgl		13 40 29	
		Um	iSgl		13 39 05.5	
		Ud	iSgl		13 39 42.6	
		De	iSgl		13 40 11.9	
		Western USSR.				
		Explosion.				
"	16	Um	iSgl		14 14 38.2	
		Western USSR.				
		Explosion.				
"	16	Ki	iP		16 09 07.6	
		Um	iP		16 08 57.5	
		Ud	e(P)		16 08 25	
		Azores Islands (h = N).				
"	16	De	iPKP		16 35 47.2	
		Solomon Islands (h = 150 km).				
"	17	Up	iP		00 05 37.2	
		Ki	iP		00 05 36.5	C
			ipP		00 05 52.2	
					micr	sec
			P	Z'	0.1	0.9
		Sk	iP		00 05 50.5	C
		Um	iP		00 05 34.3	
			ipP		00 05 50.1	
		Ud	iP		00 05 46.5	C
			i		00 05 52.3	
		De	iP		00 05 46.0	
		Sumatra.				
		h = 60 km (Ki,Um).				
"	17	Ki	iP		02 53 51.9	
		Ud	iP		02 54 49.7	
		Kamchatka (h = N).				
"	17	Up	iP		05 12 46.3	
			i		05 12 51.3	
			iPP		05 13 00.9	
			iS		05 15 23	
			iLg2		05 17 29	
		(cont.)				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 July 17 (cont.)

Up			micr	sec	
	P	Z'	0.2	0.8	
	i	Z'	0.4	1.1	
	Mx	E	0.6	3	
	Mx	N	0.8	3	
	Mx	Z	0.8	4	
Ki	iP		05 14 09.5		C
	i		05 14 15.8		
	iS		05 18 08		
			micr	sec	
	P	Z'	0.3	0.9	
	i	Z'	0.7	0.9	
	Mx	E	1.3	7	
	Mx	N	0.8	9	
	Mx	Z	0.8	5	
Sk	iP		05 13 39.3		C
	i		05 13 44.3		
Um	iP		05 13 27.9		C
	iS		05 16 42		
Ud	iP		05 13 01.8		
	i		05 13 08.5		
	i		05 13 20.5		
De	iP		05 12 22.6		
	i		05 12 30.7		

Rumania (h = 150 km).
m = 5.8 (Up,Ki).
Double P, smaller and larger, in average 6.2 sec apart.

" 17 Ud iP 05 36 40.7
Kurile Islands (h = 100 km).

" 17 Ud iPKPl 06 51 42.0
De iPKPl 06 51 50.9
Tonga Islands (h = N).

" 17 Ki iPKP 07 38 57.2

	micr	sec	
PKP	Z'	0.1	1.5

South Sandwich Islands
(h = N).

" 17 Up iP 10 53 41.3
ipP 10 53 53.2
Ki iP 10 52 48.2
Ud iP 10 53 40.4
De iP 10 54 02.8
Aleutian Islands.
h = 45 km (Up).

" 17 Um eSgl 12 21 22
Ud iSgl 12 22 10.6
De iSgl 12 22 37.2
Western USSR.
Explosion.

1974 July 17 Up iSgl 13 04 29.9
Ki eSgl 13 07 05
Sk eSgl 13 06 23
Um iSgl 13 05 04.7
Ud eSgl 13 05 30
De iSgl 13 06 01.7
Esthonia.
Explosion.

" 17 Um iSgl 15 00 15.5
Ud iSgl 15 01 39.0
Lake Ladoga region.
Explosion.

" 17 Up i 19 59 13.2
iSgl 19 59 25.8
Ki iSgl 20 01 21.8
Sk iSgl 20 01 02
Um iSgl 19 59 46.6
Ud iSgl 20 00 15.7
Western USSR.
Explosion.

" 17 Ud iP 23 32 14.9

" 18 Up iP 00 27 34.6

	micr	sec	
P	Z'	0.1	1.0

Ki iP 00 26 40.6

	micr	sec	
P	Z'	0.1	1.1

Sk eP 00 27 18
Um iP 00 27 05.7
Ud iP 00 27 37.8
De iP 00 27 59.8
Kamchatka (h = N).
m = 5.9 (Up,Ki).

" 18 Up iP 00 42 08.8
Ki iP 00 41 15.2
Sk eP 00 41 53
Um iP 00 41 40.6
Ud iP 00 42 12.5
De iP 00 42 33.7
Kamchatka (h = N).

" 18 Up ipPKPl 02 00 46.6
Sk iPKPl 02 00 27.5
ipPKPl 02 00 42.5
Um iPKPl 02 00 21.4
ipPKPl 02 00 34.6
Ud iPKPl 02 00 33.7
ipPKPl 02 00 47.8
De ipPKPl 02 00 56.0
Kermadec Islands.
h = 50 km (Sk,Um,Ud).

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 July	18	Up	iSn		02 29 08.1	
			iSgl		02 29 25.2	
		Ud	iSgl		02 29 31.1	
		De	iPgl		02 27 28.1	
			i		02 27 42.8	
			iSgl		02 27 44.8	
			iRg		02 27 52.4	
		Baltic Sea, south of Sweden, 55.5°N, 15.1°E.				
		Origin time = 02 27 07.				
		Explosion.				
"	18	Up	iPKP		11 24 01.0	
			iPP		11 26 24.8	
					micr	sec
			PP	Z'	0.2	2.0
			Mx	E	1.2	20
			Mx	N	2.6	21
			Mx	Z	3.4	21
		Ki	iPKP		11 23 46.1	
			iPP		11 25 39.1	
					micr	sec
			PP	Z'	0.2	1.8
			Mx	E	1.8	20
			Mx	N	2.3	21
			Mx	Z	1.9	20
		Sk	iPKP		11 23 55.7	
			iPP		11 26 11.5	
		Um	iPKP		11 23 53.8	
			iPP		11 26 05.8	
		Ud	iPKP		11 24 01.6	C
			ipPKP		11 24 12.4	
			iPP		11 26 25.5	
		De	iPKP		11 24 08.7	
		Tonga Islands.				
		h = 40 km (Ud).				
		m = 6.1, M = 6.0 (Up,Ki).				
		PP is consistently early.				
"	18	Ud	iP		11 40 04.3	
		Hindu Kush.				
		Intermediate depth.				
"	18	Up	iSgl		12 17 15.1	
		Sk	eSgl		12 19 10	
		Um	iSgl		12 17 31.0	
		Ud	iSgl		12 18 20.4	
		Western USSR.				
		Explosion.				
"	18	Ud	iP		17 29 25.1	
"	18	Ud	iP		17 53 34.8	
		De	iP		17 53 34.6	
"	18	Up			micr	sec
			Mx	E	0.9	19
			Mx	N	0.7	19
			Mx	Z	1.7	18
		(cont.)				

1974 July	18	(cont.)				
		Ki			micr	sec
			Mx	E	0.5	17
			Mx	Z	0.7	17
		Ud	ePKP		18 48 56	
		Chile (h = N).				
		M = 5.5 (Up,Ki).				
"	18	Up	iP		19 34 08.1	
			ipP		19 34 22.5	
					micr	sec
			P	Z'	0.1	1.5
		Ki	iP		19 33 53.0	
		Sk	iP		19 33 50.3	
			ipP		19 34 03.9	
		Um	iP		19 34 03.6	
			ipP		19 34 17.7	
		Ud	iP		19 33 59.6	
		De	iP		19 34 08.7	
		Mexico.				
		h = 50 km (Up,Sk,Um).				
"	18	De	iPKP1		22 17 04.0	
		Fiji Islands (h = 300 km).				
"	18	Up	iP		22 25 25.7	
			i		22 25 32.8	
		Um	iP		22 25 40.1	D
		Ud	iP		22 25 43.1	D
		De	iP		22 25 28.1	
		Caucasus (h = N).				
"	18	Up	iP		22 31 51.5	
			iS		22 34 31.8	
			i		22 34 49.0	
			iLg2		22 36 30.0	
		Ki	eLg1		22 39 41	
		Sk	iP		22 32 44.5	
			i		22 37 23.2	
			iLg2		22 38 52.1	
		Um	iP		22 32 34.4	
			i		22 32 46.0	
			iLg1		22 38 05.0	
		Ud	iP		22 32 08.9	
			i		22 32 14.3	
		De	iP		22 31 29.2	
			i		22 31 39.9	
		Probably Rumania.				
		Intermediate depth.				
		Origin time = 22 28 29.				
"	18	Up	iPKP1		23 18 47.3	
		Sk	iPKP1		23 18 40.2	
		Um	iPKP1		23 18 36.4	
		Ud	iPKP1		23 18 48.9	
		Kermadec Islands (h = N).				
"	18	Up	iPKP1		23 30 31.2	
		(cont.)				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
July 18 (cont.)
Ud iPKPl 23 30 31.3
De iPKPl 23 30 43.3
Fiji Islands (h = 600 km).

" 19 Ki iP 00 17 15.3
Sk eP 00 16 56
De iP 00 17 02.6
Colombia (h = 160 km).

" 19 Up ePKP 02 00 36
Ki iPKP 02 00 21.8
Sk iPKP 02 00 32.5
Um iPKP 02 00 28.0
Ud iPKP 02 00 38.0
De iPKP 02 00 44.5
Santa Cruz Islands
(h = 200 km).

" 19 Ud iPKP 02 21 28.3
Chile (h = 45 km).

" 19 Up iP 07 45 50.2
Ud iP 07 45 59.1
De iP 07 45 38.3
Cyprus (h = 70 km).

" 19 Events recorded at Up,Ud on
July 19: 10 22, 12 00, 14 02,
14 03, 15 49;
July 22: 10 39, 14 01;
July 23: 14 52;
July 24: 11 04, 12 12, 13 22,
16 22
are underwater explosions off
coast of Södermanland, Sweden,
58.9°N, 18.4°E.
The epicentral distances are:
Up 110 km and Ud 300 km.

" 19 Up eSgl 11 12 11
Um iSgl 11 12 46.4
Esthonia.
Explosion.

" 19 Ki iSn 11 32 28.2
iS* 11 32 47.2
Northwest USSR.
Explosion.

" 19 Up iPKPl 13 14 44.6
Um iPKPl 13 14 34.6
Ud iPKPl 13 14 46.0

" 19 Um eP 13 15 21
Panama-Colombia (h = N).

1974
July 19 Up iSgl 13 59 44.6
Sk eSgl 14 01 32
Um iSgl 13 59 58.8
Ud iSgl 14 00 42.3
De eSgl 14 01 18
Western USSR.
Explosion.

" 19 Up iSgl 14 08 38.6
Um iSgl 14 08 58.3
Ud eSgl 14 09 42
Western USSR.
Explosion.

" 19 Up i 14 38 30.4
Ki eSgl 14 40 39
Sk iSgl 14 40 19.7
Um iSgl 14 38 51.7
Ud iSgl 14 39 33.2
Western USSR.
Explosion.

" 19 Up iPgl 16 24 31.2
iSgl 16 24 36.1
iRg 16 24 37.3
Um eSgl 16 26 27
i 16 26 32.7
Ud iPgl 16 25 02.0
iSgl 16 25 29.9
Upland, Sweden,
60.1°N, 17.5°E.
Origin time = 16 24 25.
Ore mine explosion at
Dannemora.

" 19 Ud iP 17 42 13.9
Japan (h = 50 km).

" 19 Up iPgl 17 48 34.1
iSgl 17 48 58.7
Ki iSgl 17 51 31.7
Um i 17 49 04.5
i 17 49 34.6
iSgl 17 49 40.4
Ud iSgl 17 49 54.8
Off coast of southwest
Finland, 60.7°N, 21.0°E.
Origin time = 17 48 03.
By combination with Finnish
station readings.

" 19 Up iPKP 18 04 10.2
iPP 18 05 29.1
Ki iPKP 18 03 58.6
iPP 18 04 41.7
(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974					
July	19	(cont.)			
		Ki		micr	sec
			PP Z'	0.3	2.2
		Sk	iPKP	18 04	09.1
		Um	iPKP	18 04	03.5
			iPP	18 04	57.0
		Ud	iPKP	18 04	12.2
			iPP	18 05	32.7
		De	iPKP	18 04	18.7
		Solomon Islands (h = 160 km).			
"	19	Up	iP	18 48	16.8
		Ud	iP	18 48	36.0
"	19	Up	iP	18 55	54.8
		Ki	iP	18 55	10.7
		Sk	iP	18 55	46.4
		Um	iP	18 55	30.0
		Ud	iP	18 56	01.3
		De	iP	18 56	21.9
		Japan (h = 40 km).			
"	19	Up	eP	19 05	21
			ipP	19 05	28.7
		Ki	iP	19 05	21.6
			iX	19 05	38.8
		Um	epP	19 05	28
		Ud	iP	19 05	34.1
			ipP	19 05	41.7
		De	iX	19 05	50.1
		Sumatra.			
		h = 30 km (Up,Ud).			
"	19	Ki	iP	21 31	27.5
		Hindu Kush.			
		Intermediate depth.			
"	19	Ki	eP	23 40	01
		Um	iP	23 40	45.8
			i	23 40	50.5
		Ud	iP	23 41	34.7
			i	23 41	40.3
		De	iP	23 42	19.0
		Greenland Sea.			
"	20	Sk	iPKPl	00 04	12.1
		Ud	iPKPl	00 04	21.5
		Kermadec Islands (h = 45 km).			
"	20	Ud	iP	00 09	14.5
"	20	Up	eP	00 59	03
		Ki	iP	00 58	09.5
			iPcP	00 58	54.3
		Um	iP	00 58	37.9
		(cont.)			

1974				
July	20	(cont.)		
		Um	iPcP	00 59 10.5
		Ud	iP	00 59 02.4
		Aleutian Islands (h = 45 km).		
"	20	Ud	iP	01 15 31.9
		Aleutian Islands (h = N).		
"	20	Ki	iPn	02 22 35.7
			iPgl	02 22 45.5
			iSn	02 23 27.5
			iS*	02 23 43.7
		Um	iSn	02 24 12.3
			iS*	02 24 38.8
		Northwest USSR,		
		67.9°N, 32.2°E.		
		Origin time = 02 21 27.		
		By combination with Tromsoe readings.		
"	20	Um	i(P)	02 53 16.4
"	20	Ki	iSn	06 38 51.4
			iSgl	06 39 07.3
		Um	iSn	06 40 01.6
			i	06 40 20.3
			iSgl	06 40 39.2
		USSR-Norway.		
		Explosion.		
"	20	Ud	iPKPl	11 35 18.7
		De	iPKPl	11 35 29.3
"	20	Ki	iPn	11 51 43.2
			iPgl	11 51 52.9
			iSn	11 52 31.9
			iSgl	11 52 47.7
		Um	iSgl	11 54 20.0
		USSR-Norway.		
		Explosion.		
"	20	Ki	iPn	12 31 37.2
			iSn	12 32 33.6
			iS*	12 32 50.1
		Sk	iSgl	12 35 25.6
		Um	iSn	12 33 17.6
			i	12 33 30.3
			eSgl	12 33 54
		Northwest USSR.		
		Explosion.		
"	20	Ki	iP	13 09 39.0
		Sk	iP	13 09 25.8
		Um	iP	13 09 42.4
		Ud	iP	13 09 29.2
		Panama-Colombia (h = N).		

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 July	20	Ud	iP	14 55 04.9		
		Aegean Sea.				
"	20	Ud	iP	18 25 56.0		
		Greece (h = 45 km).				
"	20	Ki	iP	19 43 47.3		
			i	19 44 02.1		
		Halmahera (h = N).				
"	20	Ud	iP	20 14 02.4		
"	20	Up	iP	20 58 13.8		
		Ud	iP	20 58 30.2		
		De	iP	20 58 26.4		
		Hindu Kush.				
		Intermediate depth.				
"	20	Up	iPKP2	20 59 44.0		
		Um	iPKP1	20 59 26.5		
			i	20 59 38.5		
		Ud	ePKP1	20 59 38		
			iPKP2	20 59 48.3		
"	21	Ki	iP	00 02 50.3		
		Ud	iP	00 01 54.1		
		Turkey (h = N).				
"	21	Up	iPKP2	02 34 13.3		
		Um	iPKP1	02 33 55.4		
		Ud	iPKP1	02 34 06.9		
			iPKP2	02 34 15.3		
		De	ePKP2	02 34 32		
		South of Kermadec Islands (h = 30 km).				
"	21	Ki	eSn	05 08 55		
			eSgl	05 09 17		
		Northwest USSR.				
		Explosion.				
"	21	Ud	iP	05 28 57.2		
		Greece-Albania (h = N).				
"	21	Ki	iSn	06 25 16.7		
		Northwest USSR.				
		Explosion.				
"	21	Ki	iPgl	08 32 53.9		
			iSgl	08 33 03.7		
				micr	sec	
			Sgl Z'	0.1	0.4	
		Um	iSgl	08 34 42.0		
		Swedish Lapland,				
		67.5°N, 22.3°E.				
		Origin time = 08 32 42.				
		By combination with Finnish station readings.				

1974 July	21	Up	iP	08 41 15.7		
				micr	sec	
			Mx E	1.0	17	
			Mx N	1.0	18	
			Mx Z	2.7	22	
		Ki	iP	08 41 05.8		
				micr	sec	
			Mx E	2.1	18	
			Mx Z	1.8	16	
		Sk	iP	08 40 57.0		
		Ud	iP	08 41 05.9		
		Mexico (h = 70 km).				
		M = 5.5 (Up,Ki).				
"	21	Up	iP	09 40 27.3		
		Um	iP	09 40 10.0		
		Ud	iP	09 40 34.2		
"	21	Ud	iP	13 04 01.3		
		Aegean Sea.				
"	21	Ki	iPgl	15 28 26.7		
			iSn	15 29 03.9		
		Um	iSgl	15 29 56.6		
		USSR-Finland.				
		Explosion.				
"	21	Up	iSgl	15 32 19.0		
		Ki	i	15 28 42.6		
			iSn	15 29 23.3		
		Sk	iSgl	15 31 46.1		
		Um	iSn	15 29 45.1		
			iSgl	15 30 13.9		
		Ud	eSgl	15 32 40		
		USSR-Finland.				
		Explosion.				
"	21	Um	iP	21 54 41.2		
		Nicaragua (h = 80 km).				
"	21	Up		micr	sec	
			Mx Z	0.7	18	
		Um	iP	22 46 16.1		
		Nicaragua (h = 90 km).				
"	21	Ki	iP	23 55 50.7		
		Um	iP	23 56 35.1		
			i	23 56 42.6		
		Ud	iP	23 57 17.5		
		Arctic Ocean.				
"	22	Up	iP	01 36 36.7		
		Ki	iP	01 35 13.8		
			iS	01 37 21.1		
		Sk	iP	01 36 25.7		
		Um	iP	01 35 49.2		
			iS	01 38 21.7		

(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
July 22 (cont.)

	Ud	iP	01 36 50.4	
	De	iP	01 37 20.0	

Novaya Zemlya.
Possibly an aftereffect of a nuclear explosion in the southern test area on Novaya Zemlya on Oct. 27, 1973. Cf July 7, 1974, at 16 15.

" 22	Up	iP	03 54 01.5		
	Ki	iP	03 53 21.9	C	
	Um	iP	03 53 38.9		
	Ud	iP	03 54 09.7		

Sea of Japan (h = 300 km).

" 22	Up	iP	07 23 52.5		
		i	07 24 02.0		
		i	07 24 08.6		
			micr	sec	
		P Z'	0.1	0.7	
	Ki	iP	07 25 06.9		
	Sk	iP	07 24 27.9		
		i	07 24 30.5		
	Um	iP	07 24 31.2		
		i	07 24 34.6		
	Ud	iP	07 23 54.2		
		i	07 23 55.5		
	De	iP	07 23 17.0		

Tyrrhenian Sea (h = 270 km).

" 22	Ud	iP	11 36 19.5	

" 22	De	iPKPl	12 33 36.8	C

Fiji Islands (h = 680 km).

" 22	Um	iSgl	12 46 11.0	

Western USSR.
Explosion.

" 22	Ud	iP	13 28 56.1	

Kamchatka (h = 170 km).

" 22	Up	iP	16 46 38.5		
			micr	sec	
		P Z'	0.1	1.2	
	Ki	iP	16 45 30.2		

" 22	Ud	i(P)	18 12 11.1	

" 22	Up	iPKP	18 30 54.8	
	Ki	iPKP	18 31 02.7	
	Sk	iPKP	18 30 53.6	
	Um	iPKP	18 31 00.6	
	Ud	iPKP	18 30 51.8	
	De	iPKP	18 30 49.3	

Chile (h = 90 km).

1974
July 23

	De	iPKPl	00 47 44.4	

Tonga Islands (h = N).

" 23	Up	iP	03 17 00.5		
		ipP	03 17 11.6		
	Sk	iP	03 17 18.5		
		ipP	03 17 27.9		
	Um	iP	03 16 55.2		
	Ud	iP	03 17 15.0		

Burma-India.
h = 40 km (Up,Sk).

" 23	Up	iP	07 18 37.3		
			micr	sec	
		Mx N	0.9	20	
	Ki	iP	07 18 39.4		
			micr	sec	
		Mx N	1.4	16	
		Mx Z	1.5	16	
	Sk	eP	07 19 03		
		iPP	07 20 40.2		
	Um	iP	07 18 30.7		
	Ud	iP	07 18 51.2		
		iPP	07 20 27.2		
	De	iP	07 18 49.7		

Kirghiz SSR (h = N).
M = 4.8 (Up,Ki).

" 23	Up	eP	07 44 21	
	Ki	iP	07 44 24.7	
	Sk	eP	07 44 45	
		iPP	07 46 24.7	
	Um	iP	07 44 16.8	
	Ud	iP	07 44 37.8	
	De	iP	07 44 35.3	

Tadzhik-Sinkiang (h = 40 km).

" 23	Ki	eSgl	08 22 30	
	Sk	eSgl	08 22 55	
	Um	iSgl	08 21 04.4	
	Ud	iSgl	08 22 44.2	

Lake Ladoga region.
Explosion.

" 23	Ki	iPn	09 09 08.1	
		iSn	09 09 54.6	
		iS*	09 10 08.2	
	Um	iSgl	09 11 41.7	

USSR-Norway.
Explosion.

" 23	Ki	eSn	09 56 44	

Northwest USSR.
Explosion.

" 23	Ud	iP	10 29 36.2	

Pamir.

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 July	23	Up	iPKP	11 17 47.8		
			iSKPl	11 21 04.6		
		Ki	iPKP	11 17 32.9	C	
				micr	sec	
			PKP	Z' 0.1	1.0	
		Sk	iPKP	11 17 43.9		
			iSKPl	11 21 00.8		
		Um	iPKP	11 17 40.0		
			iSKPl	11 20 50.5		
		Ud	iPKP	11 17 48.9		
			iSKPl	11 21 07.2		
		De	iPKP	11 17 54.7		
			iSKPl	11 21 16.3		
		New Hebrides Islands (h = 160 km).				
"	23	Ud	iPKPl	11 42 35.6		
		De	iPKPl	11 42 46.7		
"	23	Up	eSgl	12 40 49		
		Um	iSgl	12 41 11.8		
		Ud	iSgl	12 41 47.1		
		De	eSg2	12 42 34		
		Western USSR. Explosion.				
"	23	Up	iP	15 06 03.3		
		Um	iP	15 05 41.4		
		Ud	iP	15 06 10.7		
			i	15 06 20.9		
		Japan (h = 15 km).				
"	23	Ki	iP	15 40 50.0		
		Mexico (h = 110 km).				
"	23	Ud	iP	17 46 01.8		
"	23	Up	iPKPl	19 23 44.1	C	
		Sk	iPKPl	19 23 36.2		
		Ud	iPKPl	19 23 45.3		
		De	iPKPl	19 23 54.8		
		Kermadec Islands (h = 420 km).				
"	23	Up	iP	20 40 09.1		
		Ki	iP	20 39 32.8		
		Um	iP	20 39 48.0		
		Ud	iP	20 40 16.9		
		De	iP	20 40 29.6		
		Japan (h = 310 km).				
"	24	Ud	iP	01 25 01.6		
"	24	Ki	iPKP	04 26 36.0		
		South Sandwich Islands (h = 35 km).				

1974 July	24	Up	iPKPl	08 47 20.6		
				micr	sec	
			PKPl	Z' 0.1	1.3	
			Mx	E 0.9	19	
			Mx	N 1.0	18	
			Mx	Z 1.5	18	
		Ki	ePKP	08 47 05		
				micr	sec	
			Mx	E 0.9	18	
			Mx	N 1.0	19	
			Mx	Z 1.9	20	
		Sk	iPKPl	08 47 15.0		
		Ud	iPKPl	08 47 22.7	C	
			ipPKPl	08 47 35.7		
		De	iPKPl	08 47 31.8	C	
			ipPKPl	08 47 44.1		
		Kermadec Islands. h = 45 km (Ud,De). M = 5.7 (Up,Ki).				
"	24	Um	iPKPl	11 00 53.4		
			i	11 01 11.3		
		Ud	iPKPl	11 01 07.0		
		De	iPKPl	11 01 16.1		
		Kermadec Islands (h = N).				
"	24	Up	iSn	11 39 32.6		
			iSgl	11 39 44.8		
		Um	iSgl	11 40 19.2		
		Ud	iSgl	11 40 49.3		
		Esthonia. Explosion.				
"	24	Up	iSgl	12 00 19.5		
			iRg	12 00 24.1		
		Sk	iSgl	12 02 12.0		
		Um	eSgl	12 02 24		
		Ud	iPgl	12 00 12.2		
			iSn	12 00 35.5		
			iRg	12 00 39.2		
		De	i	12 01 11.4		
		Västmanland-Södermanland, Sweden, 59.5°N, 16.1°E. Origin time = 11 59 55. Explosion?				
"	24	Ud	iP	12 28 21.8		
		Japan (h = 170 km).				
"	24	Ud	iP	17 01 47.1		
"	24	Sk	iPKPl	20 10 18.0		
		Um	iPKPl	20 10 10.7		
		Ud	ePKPl	20 10 25		
			i	20 10 29.9		
		Kermadec Islands.				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974					
July	24	Up	iP	20 36 19.5	
		Ki	iP	20 35 53.1	
			ipP	20 36 10.9	
				micr sec	
			P Z'	0.1 1.3	
		Sk	iP	20 36 17.8	
		Um	iP	20 36 04.1	D
		Ud	iP	20 36 25.9	
			ipP	20 36 43.1	
		De	eP	20 36 38	
		Mariana Islands.			
		h = 60 km (Ki,Ud).			
"	24	Um	iPKP	23 14 23.5	
			iX	23 14 38.9	
		Ud	iX	23 14 29.4	
		South Sandwich Islands			
		(h = 140 km).			
"	25	Up	iPKPl	03 01 56.3	
		Ud	iPKPl	03 01 58.0	
		De	iPKPl	03 02 09.4	C
		Tonga-Kermadec Islands			
		(h = 570 km).			
"	25	Up	iPKPl	04 07 19.4	C
		Ud	iPKPl	04 07 21.7	
"	25	Up	iX	05 45 08.7	
		Sk	iPKPl	05 44 46.0	
			ipPKPl	05 45 00.6	
		Um	iPKPl	05 44 41.1	
			ipPKPl	05 44 54.9	
		Ud	iPKPl	05 44 53.5	
			iX	05 45 10.4	
		Kermadec Islands.			
		h = 55 km (Sk,Um).			
"	25	Ki	iP	05 55 59.4	
		Sk	iP	05 56 23.3	
		Um	iP	05 55 53.9	
		Ud	iP	05 56 18.0	
		Sinkiang, China (h = 50 km).			
"	25	Ki	iPn	07 46 43.2	
			i	07 46 50.9	
			iSn	07 47 41.8	
			iSgl	07 48 05.4	
		Um	iSn	07 48 42.4	
			iSgl	07 49 24.8	
		Northwest USSR.			
		Explosion.			
"	25	Ud	iP	08 20 37.6	
"	25	Ki	iP	10 05 50.7	
		Um	iP	10 06 00.9	
		Mexico (h = 80 km).			

1974					
July	25	Ud	iP	10 32 49.2	
"	25	Ki	iP	10 33 54.4	
		Sk	iP	10 33 38.3	
		Um	iP	10 33 57.0	
		Panama-Colombia (h = N).			
"	25	Ki	i	10 57 45.8	
			iSgl	10 57 56.4	
		Sk	eSgl	10 58 24	
		Um	iSgl	10 56 37.1	
		Lake Ladoga region.			
		Explosion.			
"	25	Up	iSgl	11 18 30.5	
		Ud	iS*	11 19 28.9	
			iSgl	11 19 33.0	
		Off coast of southwest Finland.			
		Explosion.			
		By combination with Finnish station readings.			
"	25	Up	iSgl	11 18 41.8	
		Ud	iS*	11 19 41.7	
			iSgl	11 19 45.0	
		Same area and type as the preceding event.			
"	25	Up	iSgl	11 39 13.7	
		Ud	iSgl	11 40 16.7	
		Same area and type as the 11 18-events.			
"	25	Up	iSgl	11 45 02.5	
		Um	iSgl	11 46 01.5	
		Ud	eSgl	11 46 08	
		Same area and type as the 11 18-events.			
"	25	Ki	eSgl	12 17 07	
		Sk	eSgl	12 16 52	
		Um	iSgl	12 15 23.2	
			iRg	12 15 55.2	
		Ud	iSgl	12 16 05.1	
		Western USSR.			
		Explosion.			
"	25	Um	iSgl	12 59 56.1	
		Ud	eSgl	13 00 38	
		Western USSR.			
		Explosion.			
"	25	Up	iPgl	13 12 17.9	
			iSn	13 12 55.0	
			i	13 13 04.6	
			iSgl	13 13 09.8	
		Ki	i	13 15 19.8	

(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 July	25	(cont.)				
		Ki	iSgl		13 15 45.6	
			iSg2		13 15 57.8	
			i		13 16 05.8	
		Sk	e		13 14 33	
			iSgl		13 14 57.7	
		Um	iSgl		13 13 42.0	
		Ud	iPn		13 12 36.6	
			iSn		13 13 43.3	
			iSgl		13 14 10.9	
		De	iSgl		13 14 37.5	
		Esthonia.				
		Explosion.				
"	25	Up	iP		14 35 01.0	
		Ud	iP		14 35 13.1	
"	25	Ki	iPKP		14 48 20.2	
		Easter Island (h = N).				
"	25	Up	iPKP		17 36 21.0	
		Ki	ePKP		17 36 06	
					micr	sec
			Mx	E	0.8	19
			Mx	N	0.5	16
			Mx	Z	0.6	16
		Um	iPKP		17 36 14.8	
		Ud	iPKP		17 36 23.3	
		De	iPKP		17 36 29.1	
		New Britain (h = N).				
"	25	Um	iPKPl		17 40 09.9	
"	25	Um	iP		17 56 17.9	
		Ud	iP		17 56 06.4	
"	25	Ud	iSgl		19 11 43.4	
		Southwest Norway,				
		59.3°N, 7.0°E.				
		Origin time = 19 09 51.				
		By combination with Bergen				
		and Kongsberg readings.				
"	25	Sk	eSgl		19 16 19	
		Ud	iSgl		19 15 29.2	
		Southwest Norway,				
		59.3°N, 7.0°E.				
		Origin time = 19 13 38.				
		By combination with Bergen				
		and Kongsberg readings.				
"	25	Ud	iP		21 21 00.3	
		Greece.				
"	25	Ud	iP		21 37 40.1	
"	25	Ud	iP		23 23 54.2	

1974 July	26	Sk	ePKPl		02 47 46	
		Um	iPKPl		02 47 40.5	
		Ud	iPKPl		02 47 52.5	
"	26	Ud	iPKPl		04 45 59.6	
"	26	Ki	iP		06 14 12.0	
		Sk	eP		06 14 23	
"	26	Ki	i		10 23 37.2	
			iSn		10 24 01.4	
			iSgl		10 24 20.5	
		Um	iSgl		10 25 20.4	
		Northwest USSR.				
		Explosion.				
"	26	Sk	iP		11 33 55.4	
		Yugoslavia (h = N).				
"	26	Sk	iP		12 09 46.1	
"	26	Ki	eSn		12 16 31.2	
		Northwest USSR,				
		68.1°N, 39.1°E.				
		Origin time = 12 13 30.				
		Solution from Helsinki				
		regional bulletin.				
"	26	Um	iSgl		12 20 48.1	
		Western USSR.				
		Explosion.				
"	26	Up	iP		13 15 01.6	
			iSP		13 28 25	
					micr	sec
			Mx	E	0.9	18
			Mx	N	1.1	20
			Mx	Z	1.3	19
		Ki	iP		13 14 46.1	
			ipP		13 14 52.2	
			iPP		13 18 49	
					micr	sec
			P	Z'	0.1	1.0
			Mx	E	1.1	20
			Mx	N	0.9	20
			Mx	Z	1.6	21
		Sk	eP		13 15 08	
		Um	iP		13 14 51.1	
			ipP		13 14 56.8	
			i		13 15 15.7	
		Ud	iP		13 15 09.8	
		Ceram.				
		h = 20 km (Ki,Um).				
		M = 5.4 (Up,Ki).				
"	26	Ki	iP		13 23 35.9	
"	26	Up	i		14 09 54.2	
		(cont.)				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 July	26	(cont.)			
		Up	iSg1	14 10 04.1	
			iSg2	14 10 13.2	
		Ud	eSg1	14 10 09	
		De	i	14 08 06.2	
			iSg1	14 08 23.0	
			iRg	14 08 32.9	
		Southern Baltic Sea, near Bornholm. Probably explosion.			
"	26	Ud	iP	16 12 04.2	
			i	16 12 11.7	
		Japan (h = 35 km).			
"	26	Ki	iSg1	18 38 49.1	
		Um	iSg1	18 37 15.2	
"	26	Up	iP	20 48 22.8	
		Ki	iP	20 47 30.1	C
			ipP	20 47 44.0	
		Um	iP	20 47 56.2	
		Ud	iP	20 48 21.7	
			ipP	20 48 36.4	
		De	iP	20 48 44.4	
		Aleutian Islands. h = 55 km (Ki,Ud).			
"	26	Ki	iP	20 53 24.5	
		Sk	iP	20 53 38.7	
		Ud	iP	20 53 30.3	
		Hindu Kush (h = 80 km).			
"	26	Ud	iP	22 16 59.1	
"	27	Up	iP	01 07 07.5	
		Ki	iP	01 06 22.7	
		Sk	iP	01 06 58.5	
		Um	iP	01 06 43.0	
			ipP	01 06 53.6	
		Ud	iP	01 07 13.8	
			ipP	01 07 26.3	
		Kurile Islands. h = 45 km (Um,Ud).			
"	27	Up	iPKP1	01 22 34.5	
			iPKP2	01 22 39.6	
		Sk	iPKP1	01 22 29.6	
		Um	iPKP1	01 22 23.0	
		Ud	iPKP1	01 22 36.8	
			iPKP2	01 22 42.5	
		De	iPKP1	01 22 46.5	
		Kermadec Islands. Origin time = 01 02 55.			
"	27	Sk	iP	01 44 25.7	
		Colombia (h = 240 km).			

1974 July	27	Um	i(PKP1)	03 06 47.3	
			i	03 06 53.4	
"	27	Up	iP	04 37 05.2	
			iS	04 45 28	
				micr	sec
			P Z'	0.1	1.3
			Mx E	1.2	20
			Mx N	1.9	21
			Mx Z	2.7	22
		Ki	iP	04 36 12.9	
				micr	sec
			P Z'	0.1	1.3
			Mx E	2.0	19
			Mx N	2.8	20
			Mx Z	2.8	20
		Sk	iP	04 36 51.9	
		Um	iP	04 36 37.9	
			iS	04 44 35	
		Ud	iP	04 37 08.2	
		De	iP	04 37 31.0	
		Komandorsky Islands (h = N). m = 5.8, M = 5.4 (Up,Ki).			
"	27	Ud	iP	08 18 22.5	
"	27	Ki	iP	10 12 51.6	
			i	10 13 05.0	
		Tibet (h = N).			
"	27	Ud	iP	18 31 47.2	
		Aleutian Islands (h = 55 km).			
"	27	Ki	iP	21 32 32.9	C
		Um	iP	21 32 23.0	C
		Azores Islands (h = N).			
"	27	Ki	iP	23 43 59.9	
		Ud	iP	23 44 15.5	
"	28	Up	iP	04 17 48.1	
		Ki	iP	04 17 49.3	C
		Sk	iP	04 18 10.8	
			ipP	04 18 25.5	
		Um	iP	04 17 42.4	C
			ipP	04 17 57.4	
		Ud	iP	04 18 04.7	C
		De	iP	04 18 04.3	C
		Sinkiang, China. h = 70 km (Sk,Um).			
"	28	Up	iP	04 49 53.2	
		Sk	iP	04 50 29.8	
		Ud	iP	04 50 06.5	
"	28	Ud	iP	05 42 45.7	
		Greece.			

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
July 28 Up iPKPl 08 12 35.9
micr sec
PKPl Z' 0.1 0.9
Sk iPKPl 08 12 28.2 C
Um iPKPl 08 12 22.5
Ud iPKPl 08 12 36.8 C
iPKP2 08 12 40.4
De iPKPl 08 12 46.3 C
Kermadec Islands (h = 60 km).

" 28 Up iP 11 45 54.4 C
i 11 45 55.7
ipP 11 46 11.9
iPa 11 50 15.3
iS 11 54 49
iP'P' 12 14 14.2
micr sec
P Z' 7.2 2.0
Mx E 23 16
Mx N 27 17
Mx Z 38 18
Ki iP 11 45 06.3 C
i 11 45 07.7
iS 11 53 21
micr sec
P Z' 6.3 2.4
Mx E 58 16
Mx N 64 18
Mx Z 80 18
Sk iP 11 45 43.3
Um iP 11 45 28.7 C
iS 11 54 03
iP'P' 12 14 26.4
Ud iP 11 45 59.8 C
i 11 46 00.9
iS 11 55 05.0
iP'P' 12 14 13.6
De iP 11 46 19.1 C
i 11 46 20.0
iS 11 55 27.8
Kurile Islands.
h = 60 km (Up).
m = 7.5, M = 6.9 (Up,Ki).
The initial relatively weak compression is followed after 1.2 sec in average by a strong dilatation (i).

" 28 Up iP 11 51 43.9
micr sec
P Z' 0.1 1.1
Ki iP 11 50 55.8
ipP 11 51 07.6
Um iP 11 51 17.8 C
ipP 11 51 29.5
Ud iP 11 51 49.1
ipP 11 52 01.5
(cont.)

1974
July 28 (cont.)
Kurile Islands.
h = 45 km (Ki,Um,Ud).
Origin time = 11 40 49.

" 28 Um iP 11 56 46.3

" 28 Up iP 12 03 46.0
i 12 03 55.1
micr sec
P Z' 0.1 0.9
Ki iP 12 02 57.8 C
Um iP 12 03 20.0 C
Ud iP 12 03 51.2
De iP 12 04 12.2
Kurile Islands (h = 60 km).

" 28 Um iP 12 07 30.7
Ud eP 12 08 04
Kurile Islands.
Origin time = 11 57 03.

" 28 Up iP 12 10 40.1
micr sec
P Z' 0.1 1.1
Ki iP 12 09 51.6
ipP 12 10 04.4
Um iP 12 10 14.3
ipP 12 10 26.6
Ud iP 12 10 45.7
De eP 12 11 06
Kurile Islands.
h = 45 km (Ki,Um).

" 28 Up iP 12 18 46.2 C
micr sec
P Z' 0.2 1.2
Ki iP 12 17 58.4 C
ipP 12 18 12.1
micr sec
P Z' 0.1 1.1
Sk iP 12 18 35.1
ipP 12 18 47.0
Um iP 12 18 21.0
ipP 12 18 33.2
Ud iP 12 18 52.4
ipP 12 19 03.6
De iP 12 19 11.7
ipP 12 19 24.4
Kurile Islands.
h = 45 km (Ki,Sk,Um,Ud,De).
m = 6.1 (Up,Ki).

" 28 Up iP 12 30 37.0
micr sec
P Z' 0.1 1.2
Ki iP 12 29 48.9
(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 July 28 (cont.)

Sk	iP	12 30 24.7	
Um	iP	12 30 11.1	C
Ud	iP	12 30 42.2	C

Kurile Islands (h = N).

" 28

Um	iP	12 37 52.8	

" 28

Up	iP	12 54 25.7	
	ipP	12 54 38.5	
Ki	iP	12 53 38.3	
Um	iP	12 54 00.6	C
Ud	iP	12 54 31.2	
De	iP	12 54 48.8	

Kurile Islands.
h = 45 km (Up).
Origin time = 12 43 32.

" 28

Um	iP	13 08 14.2	

Kurile Islands.

" 28

Up	iP	13 15 13.2		
		micr	sec	
	P	Z' 0.1	1.1	
Ki	iP	13 14 23.7		
Sk	eP	13 15 01		
Um	iP	13 14 47.4		
Ud	iP	13 15 18.0		

Kurile Islands (h = 45 km).

" 28

Um	iP	13 17 40.9	
Ud	iP	13 18 11.7	

Kurile Islands.
Origin time = 13 07 12.

" 28

Um	iP	13 39 15.1	

Kurile Islands.

" 28

Up	ipP	13 42 00.8	
Ki	iP	13 41 02.4	
Um	iP	13 41 24.7	
Ud	iP	13 41 55.4	

Kurile Islands.
Origin time = 13 30 56.

" 28

Up	iP	13 42 33.0		
	ipP	13 42 48.0		
		micr	sec	
	P	Z' 0.9	2.0	
Ki	iP	13 41 45.0	C	
	ipP	13 41 59.6		
		micr	sec	
	P	Z' 0.9	2.0	
Sk	eP	13 42 20		
Um	iP	13 42 07.3	C	
	ipP	13 42 22.1		

(cont.)

1974 July 28 (cont.)

Ud	iP	13 42 38.2	C
	ipP	13 42 52.6	
De	iP	13 42 56.6	
	ipP	13 43 11.7	

Kurile Islands.
h = 55 km (Up,Ki,Um,Ud,De).
m = 6.7 (Up,Ki).

" 28

Um	iP	13 48 24.3	

" 28

Up	iP	13 52 34.5		C
		micr	sec	
	P	Z' 0.5	1.5	
	Mx	E 1.4	15	
	Mx	N 3.0	17	
	Mx	Z 5.1	18	
Ki	iP	13 51 46.7		C
		micr	sec	
	P	Z' 0.1	0.9	
	Mx	E 5.1	15	
	Mx	N 4.6	16	
	Mx	Z 4.9	16	
Sk	iP	13 52 22.6		
Um	iP	13 52 08.9		C
	ipP	13 52 19.1		
Ud	iP	13 52 39.9		C
	ipP	13 52 51.0		
De	iP	13 52 59.0		

Kurile Islands.
h = 40 km (Um,Ud).
m = 6.2, M = 5.9 (Up,Ki).
Surface waves (Mx) partially mixed with those of 13 42.

" 28

Um	iP	13 53 26.2	
Ud	i(pP)	13 54 08.6	

" 28

Um	iP	13 59 35.0	
Ud	eP	14 00 07	

Kurile Islands.
Origin time = 13 49 06.

" 28

Ki	iP	14 02 05.0	
Um	iP	14 02 27.4	
Ud	iP	14 02 59.1	

Kurile Islands.
Origin time = 13 51 59.

" 28

Ud	iP	14 05 30.0	

Kurile Islands.

" 28

Ki	iP	14 07 22.2	
Um	iP	14 07 43.8	
	ipP	14 07 56.7	
Ud	iP	14 08 15.3	

(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
July 28 (cont.)
Kurile Islands.
h = 50 km (Um).
Origin time = 13 57 15.

" 28
Up	iP		14 09 11.2	
Ki	iP		14 08 23.3	
	ipP		14 08 37.7	
Um	iP		14 08 45.7	C
Ud	iP		14 09 16.6	

Kurile Islands.
h = 55 km (Ki).
Origin time = 13 58 17.

" 28
Ki	iP		14 23 43.4	
Um	iP		14 24 05.5	
Ud	iP		14 24 36.8	

Kurile Islands.
Origin time = 14 13 37.

" 28
Sk	iP		14 49 29.0	
Um	iP		14 49 41.0	

" 28
Up	iP		15 21 30.5	
			micr	sec
	P	Z'	0.1	0.9
Ki	iP		15 20 42.6	
Um	iP		15 21 04.7	C
	ipP		15 21 16.6	
Ud	iP		15 21 35.6	C

Kurile Islands.
h = 45 km (Um).

" 28
Um	iP		16 07 38.7	
	ipP		16 07 52.7	
Ud	iP		16 08 09.6	
	ipP		16 08 22.8	

Kurile Islands.
h = 50 km (Um,Ud).

" 28
Up	iP		16 33 54.4	
Ki	iP		16 33 06.5	
Sk	ipP		16 33 54.2	
Um	iP		16 33 28.4	
	ipP		16 33 41.5	
Ud	iP		16 33 59.2	
	i		16 34 04.2	
	ipP		16 34 13.1	

Kurile Islands.
h = 50 km (Um,Ud).

" 28
Up	iP		16 38 29.1	
			micr	sec
	P	Z'	0.1	1.0
Ki	iP		16 37 40.8	
Um	iP		16 38 03.6	
Ud	iP		16 38 34.4	
De	iP		16 38 53.4	

Kurile Islands (h = 50 km).

1974
July 28
Up	iP		16 44 51.5	
	ipP		16 45 04.2	
			micr	sec
	pP	Z'	0.2	1.3
	Mx	E	0.8	16
	Mx	N	0.8	18
	Mx	Z	0.9	17
Ki	iP		16 44 03.4	C
	ipP		16 44 16.1	
			micr	sec
	pP	Z'	0.1	0.9
	Mx	E	1.9	17
	Mx	N	1.3	17
	Mx	Z	1.9	18
Sk	eP		16 44 40	
	ipP		16 44 53.1	
Um	iP		16 44 25.3	C
	ipP		16 44 38.4	
Ud	iP		16 44 56.3	
	i		16 45 02.4	
	ipP		16 45 09.6	

Kurile Islands.
h = 50 km (Up,Ki,Sk,Um,Ud).
M = 5.3 (Up,Ki).

" 28
Up	iP		16 45 13.2	
			micr	sec
	P	Z'	0.1	1.0
Ki	iP		16 44 26.9	
Sk	iP		16 45 02.4	
Um	iP		16 44 48.1	
Ud	iP		16 45 18.1	

Kurile Islands.
Origin time = 16 34 18.

" 28
Up	eP		17 07 31	
	i		17 07 35.2	
			micr	sec
	P	Z'	0.1	1.2
Ki	iP		17 06 41.8	
Um	iP		17 07 03.9	C
Ud	iP		17 07 34.6	

Kurile Islands (h = 45 km).

" 28
Up	iP		17 16 36.5	
Ki	iP		17 15 48.2	
Sk	iP		17 16 25.7	
Um	iP		17 16 10.7	
	ipP		17 16 21.8	
Ud	iP		17 16 41.9	
	ipP		17 16 53.1	
De	iP		17 17 00.3	

Kurile Islands.
h = 40 km (Um,Ud).

" 28
Up	iP		18 11 40.8	
Ki	iP		18 10 52.5	C

(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 July 28 (cont.)

Ki			micr	sec
	Mx	E	0.8	18
	Mx	N	1.0	16
	Mx	Z	1.4	17
Sk	eP		18 11 31	
Um	iP		18 11 15.0	C
Ud	iP		18 11 46.1	
	ipP		18 11 58.5	
De	iP		18 12 05.3	

Kurile Islands.
h = 45 km (Ud).

" 28 Up iP 18 23 24.7
Sk iP 18 23 51.1

" 28 Ki iP 18 29 30.1
Um iP 18 29 52.2
Ud eP 18 30 23
Kurile Islands (h = 40 km).

" 28 Ki iP 18 39 17.0
Um iP 18 39 39.2
Ud iP 18 40 10.4
Kurile Islands.
Origin time = 18 29 10.

" 28 Um iP 20 11 23.3
Ud iP 20 11 54.9
Kurile Islands.
Origin time = 20 00 54.

" 28 Up ePKPl 20 34 56
Sk ePKPl 20 34 51
Um iPKPl 20 34 45.0
Ud iPKPl 20 34 57.9
Kermadec Islands (h = 15 km).

" 28

Up	iP		22 02 40.6	D
Ki	iP		22 02 25.6	D
			micr	sec
	P	Z'	0.1	1.0
Um	iP		22 02 30.4	D
Ud	iP		22 02 49.1	D
De	iP		22 02 54.4	D

Talaud Islands (h = 100 km).

" 28 Um iP 23 32 52.1
Kurile Islands.

" 29 Um iP 00 31 21.9
Kurile Islands.

" 29 Um iP 01 17 46.8
Ud iP 01 18 17.7
Kurile Islands.
Origin time = 01 07 18.

1974 July 29 Ki iP 01 22 21.2
Um iP 01 21 51.1
Turkey.

" 29 Up iP 01 25 42.1 C
Ki iP 01 24 53.8
Um iP 01 25 16.1 C
Ud iP 01 25 47.4 C
Kurile Islands (h = 55 km).

" 29 Up iP 01 59 09.1
Ki eP 01 58 21
Um iP 01 58 42.9
Ud iP 01 59 14.1
Kurile Islands (h = N).

" 29

Up	iP		02 24 43.4	D
			micr	sec
	P	Z'	0.1	1.0
Ki	iP		02 23 55.6	D
Um	iP		02 24 17.8	D
Ud	iP		02 24 49.2	D
	ipP		02 25 02.3	

Kurile Islands.
h = 50 km (Ud).

" 29

Up	iP		03 26 13.4	C
	i		03 26 16.6	
	iS		03 35 06	
			micr	sec
	P	Z'	0.7	1.1
	Mx	E	14	27
	Mx	N	7.5	20
	Mx	Z	14	19
Ki	iP		03 25 25.5	C
	i		03 25 28.7	
	iS		03 33 44	
			micr	sec
	P	Z'	0.4	1.1
	Mx	E	19	17
	Mx	N	23	19
	Mx	Z	34	19
Sk	iP		03 26 01.0	C
	i		03 26 04.2	
Um	iP		03 25 47.4	C
	i		03 25 50.8	
	iS		03 34 20	
Ud	iP		03 26 18.8	C
De	iP		03 26 37.2	C
	i		03 26 40.7	

Kurile Islands (h = 40 km).
m = 6.7, M = 6.3 (Up,Ki).
Probably double event, the smaller first P followed after 3.2 sec by another larger onset.

" 29 Um iP 03 54 31.2
Kurile Islands.

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
July 29 Um iP 03 56 39.6
Kurile Islands.

" 29 Ki iP 04 09 38.5
Um iP 04 10 00.8
ipP 04 10 12.7
Ud iP 04 10 31.3
Kurile Islands.
h = 45 km (Um).

" 29 Um iP 04 35 56.5
Kurile Islands.

" 29 Um iP 05 26 21.7
Kurile Islands.

" 29 Um iP 05 31 35.4
Kurile Islands.

" 29 Up iP 07 27 23.9 C
ipP 07 27 36.3
iS 07 36 18

		micr	sec
P	Z'	1.4	1.3
Mx	E	8.9	18
Mx	N	16	18
Mx	Z	25	19

Ki iP 07 26 35.5 C
ipP 07 26 49.2
iS 07 34 47

		micr	sec
P	Z'	0.9	1.4
Mx	E	26	17
Mx	N	36	18
Mx	Z	38	18

Sk iP 07 27 11.6 C
Um iP 07 26 57.9 C
ipP 07 27 11.6
iS 07 35 37
Ud iP 07 27 29.0 C
ipP 07 27 42.6
De iP 07 27 47.8 C
ipP 07 28 01.5
Kurile Islands.
h = 50 km (Up,Ki,Um,Ud,De).
m = 6.9, M = 6.5 (Up,Ki).

" 29 Um iP 08 31 41.4
Kurile Islands.

" 29 Up iP 09 05 19.8
ipP 09 05 36.7
Um iP 09 04 53.8
ipP 09 05 10.8
Ud iP 09 05 24.9
ipP 09 05 41.2
Kurile Islands.
h = 60 km (Up,Um,Ud).
Origin time = 08 54 25.

1974
July 29 Up iP 09 08 27.7
Um iP 09 08 01.4 D
Ud iP 09 08 32.4
Kurile Islands.
Origin time = 08 57 33.

" 29 Up eP 09 39 46

		micr	sec
Mx	E	1.3	17
Mx	N	1.8	20
Mx	Z	2.9	18

Ki iP 09 38 57.5

		micr	sec
Mx	E	1.1	17
Mx	N	2.0	18
Mx	Z	1.5	18

Um iP 09 39 19.3 C
ipP 09 39 32.3
Ud iP 09 39 50.4 C
Kurile Islands.
h = 50 km (Um).
M = 5.4 (Up,Ki).

" 29 Um eP 10 37 48
Ud iP 10 38 17.3
Kurile Islands.
Origin time = 10 27 18.

" 29 Up iP 14 32 14.0 D

		micr	sec
P	Z'	0.1	1.0

Ki iP 14 31 26.5
Sk iP 14 32 00.8
Um iP 14 31 48.4 D
Ud iP 14 32 19.1
Kurile Islands (h = 35 km).

" 29 Up iP 15 06 52.6
Ki iP 15 06 35.4

" 29 Up iSn 15 32 00.5
iS* 15 32 04.9
Um iSgl 15 32 54.6
Ud iSn 15 32 49.0
iS* 15 33 08.6
De iPn 15 32 08.6
Off southwest coast of
Finland.
Explosion.

" 29 Up iSn 15 34 17.7
iS* 15 34 21.3
Um iSgl 15 35 10.3
Ud iS* 15 35 23.7
Off southwest coast of
Finland.
Explosion.

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
July 29 Up iPKPl 15 58 34.2
Ud iPKPl 15 58 37.0
De iPKPl 15 58 46.4

" 29 Um iP 15 59 10.3
Ud eP 15 59 42
Kurile Islands.
Origin time = 15 48 41.

" 29 Ki iP 17 36 42.1
Um iP 17 36 31.4
Ud iP 17 37 04.0
Sinkiang, China (h = 55 km).

" 29 Up iSgl 18 01 15.7
Ud iSgl 18 00 06.5
South Norway.
Origin time = 17 58 13.
By combination with
Kongsberg readings.

" 29 Up iP 19 20 55.2
Ki iP 19 20 07.2 C
Um iP 19 20 29.4
i 19 20 34.1
Ud iP 19 21 00.7
Kurile Islands (h = 40 km).

" 29 Um iP 20 00 13.6
Ud iP 20 00 44.8
Kurile Islands.
Origin time = 19 49 41.

" 29 Up iP 20 01 39.5 C
micr sec
P Z' 0.1 0.9
Ki iP 20 00 51.7
Um iP 20 01 13.3 C
Ud iP 20 01 44.9 C
Kurile Islands (h = N).
The order of sensitivity of
our stations for the Kurile
Islands shocks on July 28-29
(measured in the same way as
for the Panama-Colombia
series on July 13-14, cf
July 14 at 07 26) is as
follows:
Um:Ud:Ki:Up:Sk:De =
4.7:3.9:2.9:2.6:1.2:1, which
is more typical.

" 29 Um iP 21 22 54.5

" 29 Up i(PKP) 22 32 17.4
iPKP 22 32 21.6
Ki iPKP 22 32 13.4
(cont.)

1974
July 29 (cont.)
Ki iSKPl 22 34 41.9
micr sec
SKPl Z' 0.1 1.5
Sk i(PKP) 22 32 14.9
iSKPl 22 35 00.5
Um i(PKP) 22 32 16.3
iPKP 22 32 20.2
iSKPl 22 34 56.0
Ud i(PKP) 22 32 20.1
iPKP 22 32 24.0
i 22 32 31.2
iSKPl 22 35 09.4
De iPKP 22 32 29.4
Fiji Islands (h = 590 km).

" 29 Up iP 23 50 41.9 C

" 30 Ud iP 00 21 38.1
Kurile Islands.

" 30 Um iP 02 02 15.8
Molucca Passage (h = 90 km).

" 30 Up iP 05 20 04.0 C
ipP 05 20 54.7
iPP 05 21 41
iS 05 25 58
micr sec
P Z' 4.1 1.0
Mx E 48 13
Mx N 99 12
Mx Z 94 10
Ki iP 05 20 13.3 C
ipP 05 21 04.6
iS 05 26 17
micr sec
P Z' 5.2 1.0
Mx E 80 15
Mx N 100 12
Mx Z 190 18
Sk iP 05 20 30.0 C
ipP 05 21 23.1
Um iP 05 20 02.7 C
ipP 05 20 53.8
iS 05 25 57
Ud iP 05 20 20.5 C
ipP 05 21 12.2
De iP 05 20 16.9 C
Hindu Kush.
h = 250 km (Up,Ki,Sk,Um,Ud).
m = 6.9, M = 7.0 (Up,Ki).
M uncorrected for focal depth.

" 30 Ki iP 07 51 45.2
Um iP 07 51 34.8
Ud iP 07 51 52.3
Hindu Kush (h = 230 km).

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 July	30	Up	iP		09 33 12.9	
		Hindu Kush.				
		Intermediate depth.				
"	30	Up	iP		11 49 12.9	
			iPP		11 50 53.1	
					micr	sec
			P	Z'	0.2	1.0
		Ki	iP		11 49 22.3	
		Sk	iP		11 49 38.1	
		Um	iP		11 49 11.4	
		Ud	iP		11 49 29.1	
			iPP		11 51 15.6	
		De	iP		11 49 25.9	
			iPP		11 51 05.1	
		Hindu Kush (h = 70 km).				
"	30	Ud	iSgl		12 18 50.9	
		South Norway.				
		Origin time = 12 16 58.				
		By combination with				
		Kongsberg readings.				
"	30	Up	iSgl		12 36 42.1	
		Ud	iSgl		12 35 36.7	
		South Norway.				
		Origin time = 12 33 45.				
		By combination with				
		Kongsberg readings.				
"	30	Up	iSgl		12 43 00.6	
		Ki	iSgl		12 45 35.3	
		Um	iSgl		12 43 32.5	
		Ud	iSgl		12 44 06.0	
		Esthonia.				
		Explosion.				
"	30	Ud	iP		13 10 34.4	
"	30	Um	iSgl		14 04 57.3	
		Western USSR.				
		Explosion.				
"	30	Um	iSgl		14 06 08.2	
		Western USSR.				
		Explosion.				
"	30	Up	iP		17 43 51.5	
		Um	iP		17 44 12.7	
"	30	Up	iPKPl		18 24 35.3	
		Ud	iPKPl		18 24 37.6	
"	30	Um	i(Sgl)		18 35 27.8	
"	30	Ud	iP		21 11 48.3	
		Kurile Islands.				

1974 July	30	Um	iSKPl		22 03 56.5	
		Fiji Islands (h = 610 km).				
"	30	Up	iP		22 50 40.7	C
					micr	sec
			P	Z'	0.1	1.0
		Ki	iP		22 49 52.0	C
					micr	sec
			Mx	E	0.6	15
			Mx	N	0.9	20
			Mx	Z	1.1	19
		Sk	iP		22 50 28.3	
		Um	iP		22 50 14.9	C
		Ud	iP		22 50 46.0	C
		De	iP		22 51 06.1	
		Kurile Islands (h = 40 km).				
"	30	Ud	iP		23 30 15.5	
"	31	Ki	iP		00 43 02.4	
					micr	sec
			P	Z'	0.1	1.1
		Um	iP		00 43 04.3	
		Ceram (h = N).				
"	31	Up	i		01 44 50.4	
			i(Sgl)		01 45 44.8	
"	31	Ud	i(P)		08 30 05.8	
"	31	Ki	iP		09 30 01.9	
		Alaska (h = 45 km).				
"	31	Ud	iP		10 48 07.3	
"	31	Up	iSgl		13 08 39.0	
		Ki	iSgl		13 11 14.1	
		Sk	iSgl		13 10 46.5	
		Um	iSgl		13 09 18.5	
		Ud	i		13 09 35.7	
			iSgl		13 09 48.3	
		De	iSgl		13 10 14.5	
		Esthonia.				
		Explosion.				
"	31	Um	iP		15 56 25.4	
"	31	Ud	iP		16 03 28.8	
"	31	Um	iP		21 24 10.8	
		Kurile Islands.				
"	31	Up	iPKPl		22 50 53.6	
		Sk	iPKPl		22 50 45.8	
		Um	iPKPl		22 50 41.7	
		Ud	iPKPl		22 50 55.1	
		De	ePKPl		22 51 05	
		Kermadec Islands (h = 60 km).				

SEISMOLOGISKA INSTITUTIONEN
BOX 517
751 20 UPPSALA 1

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BOX 517
S-751 20 UPPSALA
SWEDEN

S E I S M O L O G I C A L B U L L E T I N

U P P S A L A, K I R U N A, S K A L S T U G A N, U M E Å,

U D D E H O L M and D E L A R Y

Uppsala	(Up):	59°51.5'N,	17°37.6'E; h = 14 m
Kiruna	(Ki):	67°50.4'N,	20°25.0'E; h = 390 m
Skalstugan	(Sk):	63°34.8'N,	12°16.8'E; h = 580 m
Umeå	(Um):	63°48.9'N,	20°14.2'E; h = 16 m
Uddeholm	(Ud):	60°05.4'N,	13°36.4'E; h = 240 m
Delary	(De):	56°28.2'N,	13°52.2'E; h = 150 m

NOTE. As a rule, regional events (within Fennoscandia and neighbouring areas) will henceforth be included only in case of earthquakes or possible earthquakes, whereas regional explosions (of conventional nature, performed for various purposes) will be excluded.

A U G U S T 1 - 31, 1974

1974 Aug. 1 Up eP 00 21 33
Ki iP 00 21 31.8
Sk iP 00 21 19.4
Um iP 00 21 35.0
De iP 00 21 27.1
Panama-Colombia (h = N).

" 1 Up iPKP 01 45 15.8
Solomon Islands (h = 30 km).

" 1 Sk iP 04 03 28.8
Hindu Kush.
Intermediate depth.

" 1 Up iP 05 16 49.0
Ki iP 05 15 54.6
Sk iP 05 16 21.9
Um iP 05 16 22.9 C
Ud iP 05 16 46.3
De iP 05 17 09.3
Kodiak Island (h = 25 km).

" 1 Up iP 05 18 31.4
i 05 18 34.4
iS 05 27 08

		micr	sec
P	Z'	0.1	1.0
i	Z'	0.1	0.8
Mx	E	2.2	17
Mx	N	3.2	18
Mx	Z	6.4	19

Ki iP 05 17 37.1
i 05 17 40.2
iS 05 25 26
(cont.)

1974 Aug. 1 (cont.)
Ki

		micr	sec
P	Z'	0.1	1.1
i	Z'	0.2	0.8
Mx	E	4.3	19
Mx	N	9.7	19
Mx	Z	7.6	20

Sk iP 05 18 04.0
i 05 18 07.0
Um iP 05 18 05.3
i 05 18 08.8
iS 05 26 19
Ud iP 05 18 28.1
i 05 18 30.7
De iP 05 18 52.2
i 05 18 54.9
Kodiak Island (h = 10 km).
m = 6.0, M = 5.8 (Up,Ki).
Double P, smaller and larger, 3.0 sec apart in average.

" 1 De iPKP 05 18 31.7
Loyalty Islands (h = 50 km).

" 1 Up iP 05 21 04.3
Ki iP 05 20 10.0 C

		micr	sec
P	Z'	0.1	1.0

Sk iP 05 20 36.7
Um iP 05 20 38.1 C
Ud iP 05 21 01.2
De iP 05 21 24.6 C
Kodiak Island.
Origin time = 05 10 35.
(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Aug. 1 (cont.)

Origin times for teleseisms are based on our own records only, and therefore accurate only to within a few seconds.

" 1 Up iP 06 06 06.8 C
iS 06 14 41
iP'P' 06 35 16.6
micr sec
P Z' 0.7 1.3
Mx E 3.4 18
Mx N 6.4 21
Mx Z 9.7 21
Ki iP 06 05 12.6 C
micr sec
P Z' 0.6 1.3
Mx E 8.1 22
Mx N 15 20
Mx Z 14 21
Sk iP 06 05 39.5 C
iP'P' 06 35 25.5
Um iP 06 05 40.8 C
iP'P' 06 35 17.5
Ud iP 06 06 03.4 C
De iP 06 06 27.3 C
Kodiak Island (h = N).
m = 6.6, M = 6.0 (Up,Ki).

" 1 Up iP 06 06 50.8
micr sec
P Z' 0.4 1.5
Sk iP 06 06 22.3
Um iP 06 06 26.3
Ud iP 06 06 48.3
De iP 06 07 09.7
Kodiak Island.
Origin time = 05 56 22.

" 1 Up iP 06 08 38.1
micr sec
P Z' 0.1 1.0
Ki iP 06 07 43.9 C
micr sec
P Z' 0.1 1.0
Sk iP 06 08 10.8
Um iP 06 08 12.8
Ud iP 06 08 34.3
De iP 06 08 58.6
Kodiak Island.
Origin time = 05 58 09.
m = 5.9 (Up,Ki).

" 1 Up iP 06 17 48.7
Ki iP 06 16 53.9 C
Sk iP 06 17 21.9
Um iP 06 17 22.4
Ud iP 06 17 44.3
Kodiak Island (h = 15 km).

1974 Aug. 1 Ki iP 06 26 38.6
Sk i(P) 06 27 11.4
Um iP 06 27 06.4
Kodiak Island (h = 20 km).

" 1 Ki iP 06 41 38.2
Um iP 06 42 05.5
Ud iP 06 42 28.7
Kodiak Island (h = 7 km).

" 1 Up iP 06 58 46.5
Ki iP 06 57 52.1
Sk iP 06 58 19.4
Um iP 06 58 20.1
Ud iP 06 58 43.0
Kodiak Island (h = 15 km).

" 1 Ki iP 07 20 24.0
Sk iP 07 20 51.6
Um iP 07 20 51.9
Ud iP 07 21 16.2
Kodiak Island (h = 15 km).

" 1 Ki iP 07 24 43.2
Kodiak Island (h = N).

" 1 Ki iP 07 27 49.2
Kodiak Island (h = 15 km).

" 1 Up iP 08 10 26.0
ipP 08 10 31.3
micr sec
P Z' 0.1 1.1
Mx E 0.9 18
Mx N 1.1 21
Mx Z 1.3 19
Ki iP 08 09 32.0
ipP 08 09 37.0
micr sec
P Z' 0.1 0.9
Mx E 0.8 14
Mx N 2.3 19
Mx Z 1.9 18
Sk iP 08 09 58.7 C
ipP 08 10 04.1
Um iP 08 09 59.9 C
ipP 08 10 05.6
i 08 10 29.4
Ud iP 08 10 22.8
ipP 08 10 27.7
De iP 08 10 46.3 C
ipP 08 10 52.0
Kodiak Island.
h = 20 km (Up,Ki,Sk,Um,Ud, De).
m = 5.9, M = 5.2 (Up,Ki).

" 1 Sk iP 08 27 28.6
Kodiak Island (h = N).

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
Aug. 1 Ki iP 08 36 16.3
Sk iP 08 36 43.1
Kodiak Island (h = N).

" 1 Up iP 09 48 20.0 C
Ki iP 09 49 01.1 C
Sk eP 09 48 43
Um iP 09 48 39.5 C
i 09 48 40.7
Ud iP 09 48 23.3 C
De iP 09 48 02.0
Zambia (h = 15 km).

" 1 Ki e(P) 12 27 41
Ud i(P) 12 26 53.8

" 1 Sk iP 15 01 41.0
Hindu Kush.
Intermediate depth.

" 1 Sk iP 15 39 32.1
Kodiak Island (h = N).

" 1 Up iP 18 36 23.7 C
Ki iP 18 35 55.0 C
Sk iP 18 36 21.0 C
Um iP 18 36 07.3 C
Ud iP 18 36 30.2 C
De iP 18 36 41.7
Mariana Islands (h = 320 km).

" 1 Um iP 20 02 31.4
Ud iP 20 02 50.7

" 1 Up Mx 21 01

		micr	sec
Mx	E	1.1	22
Mx	N	0.9	21
Mx	Z	1.3	19

Ki Mx 21 06

		micr	sec
Mx	E	0.9	18
Mx	N	1.2	18
Mx	Z	1.1	19

Indian Ocean (h = N).
M = 5.6 (Up,Ki).

" 1 Up eP 21 16 01
i 21 16 07.8
Ud iP 21 15 53.3

" 1 Up iP 22 50 01.8
i 22 50 04.1
i 22 50 14.4
iX 22 50 32.9
(cont.)

1974
Aug. 1 (cont.)
Up

		micr	sec
Mx	E	1.3	22
Mx	N	2.8	22
Mx	Z	4.5	22

Ki iP 22 49 10.5 C
iX 22 49 28.8

		micr	sec
Mx	E	1.8	20
Mx	N	2.4	23
Mx	Z	2.6	23

Sk eP 22 49 48
iX 22 50 16.2
Um eP 22 49 35
i 22 49 37.3
iX 22 49 58.7
Ud iP 22 50 07.4
i 22 50 08.8
iX 22 50 34.6
De iP 22 50 30.7
iX 22 51 05.0
Kurile Islands (h = 40 km).
M = 5.5 (Up,Ki).
Even though X fits PcP for Up,Ud, it is more likely that X stands for P of another earthquake with somewhat different epicenter.

" 2 Up iP 00 31 38.6
Ki iP 00 31 15.3
Sk iP 00 31 42.3
Ud iP 00 31 48.9
Ryukyu Islands.

" 2 Um iP 07 24 15.4
Ud iP 07 24 34.4 C
De iP 07 24 47.7

" 2 Up iP 08 30 47.7
Ki eP 08 31 28
i 08 31 33.2

		micr	sec
Mx	E	0.5	13
Mx	N	0.5	15
Mx	Z	0.4	11

Sk iP 08 31 24.2
Um iP 08 31 02.0
iPP 08 32 30.5
Ud iP 08 31 03.0
i 08 31 21.3
De iP 08 30 45.8
i 08 30 50.8
Iran (h = 45 km).

" 2 Up iP 09 32 51.6
Kodiak Island (h = 60 km).

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Aug.	2	Up	eP		10 02 18	
		Ki	eP		10 01 40	
		Sk	iP		10 02 14.9	
		Um	iP		10 01 54.6	
			i		10 01 58.6	
		Ud	iP		10 02 22.8	
		Japan (h = 40 km).				
"	2	Um	iPKPl		10 10 16.4	C
"	2	Up	iP		10 28 33.0	
		Ki	iP		10 28 16.4	
		Sk	iP		10 28 37.1	
		Um	iP		10 28 20.8	
		Ud	iP		10 28 41.4	
		Talaud Islands (h = 55 km).				
"	2	Up	iP		10 35 34.0	
		Ki	iP		10 36 41.0	
		Ud	iP		10 35 41.9	
		De	iP		10 35 10.0	
		Crete (h = 50 km).				
"	2	Up	iPKPl		10 41 15.7	
			iPKP2		10 41 21.2	
					micr sec	
			PKP2	Z'	0.1 1.2	
		Sk	iPKPl		10 41 09.4	
		Um	iPKPl		10 41 04.4	D
		Ud	iPKPl		10 41 17.6	
			i		10 41 32.7	
		De	ePKPl		10 41 27	
			iPKP2		10 41 37.6	
		Kermadec Islands (h = N).				
"	2	Up	iP		12 21 51.0	
		Ud	iP		12 21 58.4	
"	2	Up	i(P)		13 00 10.7	
		Ud	i(P)		12 59 08.3	
"	2	Up	iPl		14 45 09.9	
			iP2		14 45 14.3	
			iPcPl		14 45 26.8	
			iPcP2		14 45 31.6	
					micr sec	
			Pl	Z'	0.1 1.2	
		Ki	iPl		14 44 33.8	
			iP2		14 44 38.2	
					micr sec	
			Mx	E	0.6 15	
			Mx	N	0.8 17	
		Sk	iPl		14 45 05.0	
			iP2		14 45 10.1	
		Um	iPl		14 44 49.4	
			iP2		14 44 53.6	
		Ud	iPl		14 45 16.9	
		(cont.)				

1974 Aug.	2	(cont.)				
		Ud	iP2		14 45 21.9	
		De	iPl		14 45 32.1	
		Japan (h = 25 km).				
		Double P, 4.6 sec apart in average.				
"	2	Up	iPl		16 17 07.1	
			iP2		16 17 10.4	
		Ki	iPl		16 16 31.0	
					micr sec	
			Mx	E	0.6 15	
			Mx	N	0.7 17	
		Sk	iPl		16 17 01.8	
		Um	iPl		16 16 46.4	
			iP2		16 16 50.5	
		Ud	iPl		16 17 14.6	
			iP2		16 17 19.0	
		De	iP2		16 17 32.5	
		Japan (h = 35 km).				
		Double P.				
"	2	Ki	iPl		17 05 00.6	
			iP2		17 05 06.7	
		Um	iPl		17 05 16.3	
			iP2		17 05 22.1	
		Japan (h = 60 km).				
"	2	Um	iP		17 31 52.9	
		Hindu Kush.				
		Intermediate depth.				
"	2	Um	iP		21 11 44.8	
"	3	Up	iP		04 16 44.0	
			i		04 16 49.6	
					micr sec	
			P	Z'	0.1 1.0	
			Mx	N	0.8 15	
			Mx	Z	0.7 10	
		Ki	iP		04 16 40.3	
			i		04 16 45.5	
					micr sec	
			Mx	E	0.5 12	
			Mx	N	2.6 14	
			Mx	Z	0.5 13	
		Sk	iP		04 17 03.6	
			i		04 17 08.7	
		Um	iP		04 16 35.6	
			i		04 16 42.4	
		Ud	iP		04 16 59.3	
			i		04 17 04.8	
		De	iP		04 17 01.1	
			i		04 17 04.8	
		Kashmir-Tibet (h = 20 km).				
		M = 5.2 (Up,Ki).				
"	3	Um	eP		05 53 38	

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Aug.	3	Um	iP	05 57 14.1	
		Ud	iP	05 57 32.2	
"	3	Ki	iP	06 18 56.2	
		Um	iP	06 19 11.5	
		Japan (h = 60 km).			
"	3	Up	iPKPl	06 36 41.7	
			i	06 36 44.8	
		Um	iPKP	06 36 38.6	
		Ud	iPKPl	06 36 44.1	
			i	06 36 47.2	
		De	iPKPl	06 36 54.5	
			i	06 36 58.0	
		Tonga-Kermadec Islands (h = 330 km).			
"	3	Um	iP	07 10 41.6	
		Ud	iP	07 11 18.3	
		Kurile Islands (h = 60 km).			
"	3	Um	iP	07 20 34.8	
"	3	Up	iP	08 59 29.8	
		Ki	iP	08 58 41.8	
		Sk	eP	08 59 18	
		Um	iP	08 59 04.5	
		Ud	iP	08 59 35.1	
		Kurile Islands (h = 70 km).			
"	3	Ki	iP	10 51 16.9	
		Crete.			
"	3	Up	iP	11 21 29.3	
		Um	iP	11 21 09.5	
		Ud	iP	11 21 36.7	
		South of Japan.			
"	3	Sk	iPKP	11 54 23.7	
		Um	iPKP	11 54 20.8	
		New Hebrides Islands (h = 280 km).			
"	3	Up	iP	12 42 57.6	
		Ki	iP	12 42 09.3	
		Sk	iP	12 42 44.8	
		Um	iP	12 42 31.6	
			ipP	12 42 46.9	
		Ud	iP	12 43 02.8	
			ipP	12 43 19.8	
		De	iP	12 43 21.4	
		Kurile Islands. h = 60 km (Um,Ud).			
"	3	Up	iP	13 55 19.6	
		Hindu Kush. Intermediate depth.			

1974 Aug.	3	Up	iP	13 57 19.1	
		Ki	iP	13 57 20.0	
		Um	iP	13 57 16.7	
		Ud	iP	13 57 29.8	
		De	iP	13 57 27.6	
		Sumatra (h = N).			
"	3	Up	iP	14 05 07.4	
		Ki	iP	14 04 21.3	
		Ud	iP	14 05 13.5	
		Kurile Islands (h = 140 km).			
"	3	Up	iP	18 27 59.6	
			i	18 28 02.7	
			iPP	18 30 51.5	
			i(P'P')	18 55 31.9	
				micr	sec
			P Z'	0.8	1.3
			PP Z'	0.1	1.2
			Mx E	1.9	20
			Mx N	2.0	19
			Mx Z	2.7	22
		Ki	iP	18 27 21.2	C
			i	18 27 24.0	
			iPP	18 29 47.8	
			iS	18 36 13	
				micr	sec
			P Z'	0.4	1.2
			PP Z'	0.1	1.2
			Mx E	2.4	18
			Mx N	2.9	18
			Mx Z	3.4	18
		Sk	iP	18 27 54.8	C
			i	18 27 57.4	
			iPcP	18 28 13.9	
			iPP	18 30 37.5	
		Um	iP	18 27 37.9	C
			i	18 27 41.4	
			iS	18 36 42	
		Ud	iP	18 28 07.0	C
			i	18 28 09.9	
			iPP	18 30 54.2	
		De	iP	18 28 21.7	
			i	18 28 24.5	
			iPP	18 31 19.3	
		Japan (h = 60 km). m = 6.2, M = 5.6 (Up,Ki). Double P, small and large, 2.9 sec apart.			
"	3	Ki	iP	18 38 09.3	
		Ud	i(P)	18 39 00.1	
"	3	Sk	iP	20 13 34.2	
		Kodiak Island (h = N).			
"	4	Ki	iP	00 44 03.3	
		(cont.)			

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Aug.	4	(cont.)					
		Ki	ipP		00 44 15.1		
		Um	iP		00 44 25.7		
			ipP		00 44 36.3		
		Ud	iP		00 44 56.7		
		Kurile Islands.					
		h = 40 km (Ki,Um).					
"	4	Up	iP		02 05 12.5		
		Ki	iP		02 04 38.5	C	
		Um	iP		02 04 53.0	C	
			i		02 04 58.8		
		Ud	iP		02 05 19.5		
			i		02 05 26.1		
		De	iP		02 05 32.2		
		South of Japan (h = 90 km).					
"	4	Ud	iP		08 59 46.2		
"	4	Up	Mx		11 16		
					micr	sec	
			Mx	E	0.6	20	
			Mx	N	0.5	19	
			Mx	Z	0.6	19	
		South Pacific Ocean (h = N).					
"	4	Up	iP		13 21 48.3		
		Ki	iP		13 21 31.3		
		Sk	iP		13 21 50.2		
		Um	iP		13 21 35.5		
		Ud	iP		13 21 53.4		
		De	iP		13 21 58.3		
		Molucca Sea (h = 110 km).					
"	4	Up	iP		13 58 54.5		
		Sk	eP		13 59 22		
		Um	iP		13 58 53.7		
		Ud	iP		13 59 10.9		
		De	iP		13 59 06.7		
		Pakistan (h = 30 km).					
"	4	Up	iP		15 11 35.2		
			iPn		15 11 45.7		
			iPP		15 12 08.8		
			iS		15 15 57		
			iSn		15 16 07.2		
					micr	sec	
			P	Z'	0.3	1.1	
			Pn	Z'	0.3	1.1	
			PP	Z'	0.3	1.0	
			Mx	E	1.9	13	
			Mx	N	2.6	15	
			Mx	Z	4.0	15	
		Ki	iP		15 12 14.7	C	
			iPn		15 12 50.8		
		(cont.)					

1974 Aug.	4	(cont.)					
		Ki	iSn		15 17 55.0		
					micr	sec	
			P	Z'	0.2	1.1	
			Pn	Z'	0.4	1.1	
			Mx	E	2.3	11	
			Mx	N	2.0	12	
			Mx	Z	2.2	12	
		Sk	iP		15 12 12.5		
			i		15 12 19.2		
			iPn		15 12 57.0		
			iSn		15 17 50.2		
		Um	iP		15 11 48.3	C	
			iPP		15 12 24.3		
			iS		15 16 22		
			iSn		15 16 44.7		
		Ud	iP		15 11 52.6	C	
			iPn		15 12 07.9		
			iSn		15 16 56.6		
			iSS		15 17 42.2		
		De	iP		15 11 37.8	C	
			iPn		15 11 52.5		
			i		15 12 27.8		
			iSn		15 16 18.6		
		Caucasus (h = N).					
		m = 5.9, M = 5.1 (Up,Ki).					
		Clear cases of teleseismic Pn and Sn.					
"	4	Up	iP		17 33 22.1		
		Ki	iP		17 33 28.7		
		Sk	iP		17 33 46.6		
		Um	iP		17 33 19.3		
		Ud	iP		17 33 38.7	C	
			ipP		17 34 27.6		
		Afghanistan-USSR.					
		h = 240 km (Ud).					
"	4	Ud	iP		20 40 16.6		
"	4	Up	iP		21 46 44.1		
		Ki	iP		21 45 49.9		
		Sk	iP		21 46 16.9		
		Um	iP		21 46 18.2		
		Ud	iP		21 46 40.9		
		De	iP		21 47 04.6		
		Kodiak Island (h = 40 km).					
"	4	Ud	iP		22 35 00.3		
"	5	Ki	iP		00 28 04.1		
"	5	Ki	iP		00 59 29.8		
"	5	Ki	eP		01 04 07		
		(cont.)					

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Aug.	5	(cont.)				
		Ud	iP		01 04 59.3	
			ipP		01 05 18.4	
		De	iP		01 05 22.6	
			ipP		01 05 40.8	
		Aleutian Islands.				
		h = 70 km (Ud,De).				
"	5	Ud	iP		06 29 16.4	
"	5	Up	iP		13 27 16.0	
		Ki	iP		13 27 52.0	C
			iPP		13 29 39.8	
					micr	sec
			P	Z'	0.1	0.8
			Mx	E	0.5	12
			Mx	N	0.4	12
			Mx	Z	0.5	12
		Sk	iP		13 27 50.6	C
		Um	iP		13 27 29.2	C
			iPP		13 29 09.9	
		Ud	iP		13 27 31.1	C
		De	iP		13 27 15.4	
		Iran (h = 10 km).				
"	5	Ud	iPgl		15 06 20.5	
			iSgl		15 06 42.8	
			iRg		15 06 51.4	
		De	eSgl		15 07 38	
		Probably Oslo Fjord region.				
"	5	Up	iPKPl		17 58 40.7	
		Sk	iPKPl		17 58 33.5	
			i		17 58 40.9	
		Um	ePKPl		17 58 26	
			i		17 58 30.8	
		Ud	iPKPl		17 58 42.3	
			i		17 58 57.2	
		Kermadec Islands.				
"	5	Up	iPn		18 29 09.4	
		Ud	iP		18 29 25.0	
			iPn		18 29 38.8	
		Caucasus.				
"	6	Ki	iP		02 46 39.3	
			ipP		02 47 10.8	
		Ud	iP		02 47 31.7	
			ipP		02 48 03.8	
		De	iP		02 47 57.0	
		Alaska.				
		h = 140 km (Ki,Ud).				
"	6	Up	iSgl		08 12 52.5	
			e		08 13 34	
			i		08 14 11.0	
		Sk	iSgl		08 12 19.6	
		(cont.)				

1974 Aug.	6	(cont.)				
		Sk	i		08 12 59.2	
		Ud	iSgl		08 12 06.7	
		De	iSgl		08 12 01.3	
		North Sea, off east coast of Scotland.				
		By combination with Kongsberg and Bergen readings.				
"	6	Up	iP		11 15 34.4	
		Ki	iP		11 13 57.0	C
					micr	sec
			P	Z'	0.1	1.3
		Sk	iP		11 14 46.7	C
		Um	iP		11 14 51.0	
		Ud	iP		11 15 27.4	
		De	iP		11 16 10.8	C
		Greenland Sea (h = N).				
"	6	Ki	iP		13 09 33.9	
		Sk	iP		13 10 00.6	
		Kodiak Island (h = 15 km).				
"	6	Up	iSgl		15 38 51.1	
		Ud	iPgl		15 37 50.3	
			iSgl		15 38 11.6	
		De	iPgl		15 38 09.2	
			iSgl		15 38 41.8	
		Lake Vener region, Sweden.				
		Origin time = 15 37 25.				
"	6	Up	iP		16 59 57.1	C
			i		16 59 58.1	
					micr	sec
			P	Z'	0.1	0.9
		Ki	iP		16 59 09.9	C
			ipP		16 59 55.7	
					micr	sec
			P	Z'	0.4	0.7
		Sk	iP		16 59 45.6	
			i		16 59 47.6	
		Um	iP		16 59 31.4	C
			i		16 59 32.7	
			ipP		17 00 17.3	
		Ud	iP		17 00 02.6	C
			i		17 00 04.1	
			ipP		17 00 50.6	
		De	iP		17 00 22.4	
		Kurile Islands.				
		h = 200 km (Ki,Um,Ud).				
		m = 5.9 (Up,Ki).				
"	6	Ki	iP		18 14 59.6	
		Sk	iP		18 15 26.6	
		Ud	iP		18 15 51.8	
		Kodiak Island (h = N).				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Aug.	6	Up	iPKPl		18 57 32.9	
					micr	sec
			Mx	E	0.9	19
			Mx	N	1.9	21
			Mx	Z	2.3	21
		Ki	iX		18 57 36.6	
					micr	sec
			Mx	E	1.2	18
			Mx	N	1.5	18
			Mx	Z	1.9	18
		Sk	iPKP		18 57 34.3	
		Um	iPKP		18 57 31.5	
		Ud	iPKPl		18 57 32.9	
			iX		18 57 46.6	
		De	iPKPl		18 57 44.2	C
			iX		18 58 02.1	
		Tonga Islands (h = 50 km).				
		M = 5.9 (Up,Ki).				
"	6	Ki	iPKP		20 13 08.2	
		South Sandwich Islands				
		(h = N).				
"	6	Ud	iP		20 18 07.8	
"	7	Ki	iP		00 53 56.6	
			i(S)		00 55 27.0	
			iTPg		00 58 54.9	
			iTSg		00 59 33.1	
		Sk	iP		00 54 36.5	
			i		00 54 50.5	
			iS		00 56 18.8	
		Um	iP		00 54 45.4	
		Ud	iP		00 55 23.7	
			i(P)		00 55 36.0	
			i(S)		00 58 09.8	
		Norwegian Sea (h = N).				
"	7	Up	iP		01 03 46.2	
		Ki	iP		01 02 10.0	
			iS		01 03 21.6	
			eTPg		01 07 12	
			iTSg		01 07 50.8	
		Sk	iP		01 02 48.8	
			iS		01 04 32.9	
		Um	iP		01 03 00.5	
			iS		01 04 47.0	
		Norwegian Sea (h = N).				
"	7	Ki	iP		01 03 59.1	
			iTSg		01 09 32.3	
		Sk	iP		01 04 35.9	
			iS		01 06 17.3	
		Norwegian Sea.				
		Origin time = 01 02 14.				
"	7	Ki	iP		01 16 51.0	
		(cont.)				

1974 Aug.	7	(cont.)				
		Ki	iS		01 18 06.3	
			i(S)		01 18 21.5	
			e(T)		01 22 10	
			iTSg		01 22 29.7	
		Sk	iP		01 17 30.3	
			iS		01 19 12.7	
			i		01 19 17.9	
		Um	iP		01 17 41.5	
		Ud	i(P)		01 18 26.2	
		Norwegian Sea.				
		Origin time = 01 15 10.				
		(S) at Ki is a clear but unidentified phase appearing in average 15.9 sec after S in this series of Norwegian Sea earthquakes, corresponding to a velocity between those of Sn and S*. A similar doubling of P (and S) appears at Ud, where later, larger phases are also put in brackets.				
"	7	Ki	iP		01 49 29.4	
			iS		01 50 46.8	
			i(S)		01 51 03.7	
			iTPg		01 54 33.9	
			iTSg		01 55 13.3	
					micr	sec
			Mx	E	0.5	14
			Mx	N	0.4	15
			Mx	Z	0.7	15
		Sk	iP		01 50 08.9	
			iS		01 51 52.6	
		Um	iP		01 50 19.1	
		Ud	i(P)		01 51 09.0	
			i(S)		01 53 39.8	
		Norwegian Sea (h = N).				
"	7	Ki	iTSg		02 02 03.5	
		Sk	eP		01 57 11	
			iS		01 58 53.0	
		Ud	i(P)		01 58 10.3	
		Norwegian Sea.				
		Origin time = 01 54 49.				
"	7	Ki	iP		02 24 50.4	
			iS		02 26 04.7	
			i(S)		02 26 20.1	
			iTSg		02 30 26.4	
		Norwegian Sea.				
		Origin time = 02 23 08.				
"	7	Ki	eP		02 55 05	
			i		02 55 10.0	
		Sk	eP		02 55 23	
			i		02 55 28.9	
		(cont.)				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
Aug. 7 (cont.)

	Um	iP	02 55 50.0	
		i	02 55 52.2	
" 7	Ud	iP	03 00 25.8	
	De	iP	02 59 47.2	
	Greece.			
" 7	Ki	iP	03 54 49.7	
		iS	03 56 04.8	
		i(S)	03 56 20.2	
		iTPg	03 59 49.4	
		iTSg	04 00 28.7	
	Sk	iP	03 55 28.2	
		iS	03 57 14.8	
	Um	eP	03 55 39	
	Norwegian Sea.			
	Origin time = 03 53 08.			
" 7	Ki	iP	03 57 40.8	
		iS	03 58 54.6	
		i(S)	03 59 11.4	
		iTSg	04 03 17.6	
	Sk	iP	03 58 19.9	
		iS	04 00 03.3	
	Um	iP	03 58 29.4	
		i	03 58 32.1	
	Ud	iP	03 59 07.8	
		i(P)	03 59 19.8	
	Norwegian Sea.			
	Origin time = 03 55 59.			
" 7	Ki	iP	08 10 34.4	
	Ud	iP	08 10 49.3	
" 7	Ki	iP	08 30 36.3	
	Sk	iP	08 31 02.8	
	Ud	iP	08 31 26.8	
	De	iP	08 31 50.1	
	Kodiak Island (h = 30 km).			
" 7	Up	iP	08 34 05.8	
		ipP	08 34 15.4	
		iS	08 42 38	
			micr sec	
		P Z'	0.1 0.8	
	Ki		micr sec	
		Mx E	0.8 17	
		Mx N	0.8 17	
		Mx Z	0.9 16	
	Sk	iP	08 33 38.0	
	Um	iP	08 33 39.9	
		ipP	08 33 48.9	
		eS	08 41 47	
	Ud	iP	08 34 02.2	
	De	iP	08 34 26.1	
	(cont.)			

1974
Aug. 7 (cont.)

	De	ipP	08 34 36.5	
		iPP	08 36 58.7	
	Kodiak Island.			
	h = 40 km (Up,Um,De).			
" 7	Ki	iP	08 36 21.1	C
	Sk	iP	08 36 57.5	
	Ud	iP	08 37 17.0	
	Kodiak Island.			
" 7	Up	i(P)	09 04 07.9	
" 7	Up	iP	11 10 34.6	
	Sk	iP	11 10 51.6	
	Ud	iP	11 10 32.1	
" 7	Ki	iP	11 45 09.0	
		iS	11 46 21.0	
		i(T)	11 50 32.3	
		iTSg	11 50 47.1	
	Sk	iP	11 45 48.8	
		iS	11 47 31.8	
	Um	iP	11 45 59.8	
	Norwegian Sea.			
	Origin time = 11 43 28.			
" 7	Ki	iP	12 11 56.5	
	Ud	iP	12 12 06.2	
	De	iP	12 12 03.5	
	Sumatra (h = N).			
" 7	Ud	iP	13 12 11.8	
" 7	Ud	iP	15 34 14.8	
	Kurile Islands (h = 70 km).			
" 7	Up	iP	15 40 57.6	
		ipP	15 41 05.2	
	Ki	iP	15 40 03.7	
	Sk	iP	15 40 30.7	
	Kodiak Island.			
	h = 30 km (Up).			
" 7	Ki	iP	17 23 12.9	
		iS	17 24 25.5	
		i(S)	17 24 40.9	
		eTPg	17 28 03	
		iTSg	17 28 38.8	
	Sk	iP	17 23 51.4	
		iS	17 25 32.3	
	Um	iP	17 23 58.5	
	Norwegian Sea.			
	Origin time = 17 21 29.			
" 7	Up	iP	19 03 05.5	
	(cont.)			

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Aug.	7	(cont.)			
		Ki	iP	19 02 49.4	
		Sk	iP	19 03 10.2	
		Um	iP	19 02 54.3	
		Ud	iP	19 03 13.5	
		De	iP	19 03 20.1	
		Talaud Islands (h = 160 km).			
"	7	Ki	iP	21 16 24.0	
		Sk	iP	21 16 40.6	
		Um	iP	21 16 12.9	
		Ud	iP	21 16 31.2	
			ipP	21 16 59.2	
		De	iP	21 16 28.2	
		Afghanistan-USSR. h = 140 km (Ud).			
"	7	Ki	iP	23 30 27.4	
			iS	23 31 42.7	
			e(T)	23 35 36	
			iTSg	23 35 58.8	
		Sk	iP	23 31 06.0	
			iS	23 32 53.0	
		Norwegian Sea. Origin time = 23 28 46.			
"	8	Ki	iP	01 24 38.9	
			iS	01 25 52.8	
			i(S)	01 26 09.1	
			iTSg	01 30 15.0	
		Sk	iP	01 25 18.2	
			i	01 25 22.6	
			iS	01 26 59.6	
		Um	iP	01 25 29.2	
		Ud	i(P)	01 26 12.3	
		Norwegian Sea. Origin time = 01 22 56.			
"	8	Up	eP	01 28 32	
			iPP	01 28 51.1	
			iS	01 31 29	
			iTSg	01 36 31.8	
				micr sec	
			Mx E	2.0 18	
			Mx N	7.8 19	
			Mx Z	9.7 18	
		Ki	iP	01 26 55.7	
			iS	01 28 10.7	
			iTPg	01 31 51.3	
			iTSg	01 32 31.9	
				micr sec	
			P Z'	0.1 0.8	
			Mx E	9.7 18	
			Mx N	9.9 20	
			Mx Z	12 19	
		Sk	iP	01 27 34.4	
			iS	01 29 20.8	
		(cont.)			

1974 Aug.	8	(cont.)			
		Sk	iTSg	01 34 24.1	
		Um	iP	01 27 43.9	
			iS	01 29 52	
			iTSg	01 34 27.8	
		Ud	iP	01 28 21.9	
			i(S)	01 31 02.6	
			iTSg	01 36 25.9	
		De	iP	01 29 13.4	
			iPP	01 29 26.7	
		Norwegian Sea (h = N). Clear T phases; notation follows Båth and Shahidi (1971), Pure Appl. Geophys., 92: 74-114.			
"	8	Up	i(P)	03 18 46.7	
		Ki	i(P)	03 18 25.2	
		Sk	i(P)	03 17 59.1	
"	8	Ki	iP	06 02 31.1	
			iS	06 03 44.3	
			iTSg	06 08 01.1	
		Sk	iP	06 03 09.1	
			iS	06 04 55.6	
		Norwegian Sea. Origin time = 06 00 49.			
"	8	Ud	iPKP1	09 49 50.0	
		De	iPKP1	09 50 00.7	
"	8	Ki	iP	10 12 45.2	
			iS	10 13 59.1	
			i(S)	10 14 14.2	
			iTPg	10 17 46.1	
			iTSg	10 18 21.4	
		Sk	iP	10 13 24.4	
			iS	10 15 08.6	
		Um	iP	10 13 30.9	
		Ud	i(P)	10 14 24.1	
		Norwegian Sea. Origin time = 10 11 03.			
"	8	Ud	iPKP1	10 40 20.8	
		De	iPKP1	10 40 31.4	
		Fiji Islands (h = 570 km).			
"	8	Ud	i(P)	11 18 05.5	
"	8	Up	i	12 53 12.4	
		De	e	12 53 38	
			i(Sgl)	12 53 48.6	
"	8	Ki	iP	13 09 35.9	
		Ud	iP	13 09 46.1	
"	8	Ud	i	14 49 23.4	
		(cont.)			

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Aug.	8	(cont.)				
		Ud	i(Rg)		14 49 31.8	
		De	e		14 49 39	
			i(Rg)		14 49 56.1	
"	8	Up	iSgl		18 03 38.7	
		Ud	iPgl		18 02 36.5	
			iSgl		18 02 58.2	
		De	iPgl		18 02 42.0	
			iSgl		18 03 14.5	
		Dalsland, Sweden, 58.7°N, 12.2°E. Origin time = 18 02 05.				
"	8	Up	i(S)		19 11 30.4	
			iTSg		19 16 09.8	
					micr	sec
			Mx	E	0.6	17
			Mx	N	1.3	18
			Mx	Z	1.5	19
		Ki	iP		19 06 41.6	
			iS		19 07 54.3	
			i(S)		19 08 11.1	
			iTPg		19 11 37.3	
			iTSg		19 12 09.8	
					micr	sec
			P	Z'	0.1	0.9
			Mx	E	0.8	12
			Mx	N	1.0	14
			Mx	Z	1.9	18
		Sk	iP		19 07 20.2	
			iS		19 09 05.7	
			eTSg		19 13 56	
		Um	iP		19 07 29.2	
			iS		19 09 17.2	
			iTSg		19 14 07.1	
		Ud	iP		19 08 08.2	
			i(P)		19 08 19.6	
			i(S)		19 10 56.1	
			iTSg		19 16 04.2	
		De	iP		19 08 56.0	
		Norwegian Sea (h = N).				
"	8	Up	iP		19 28 34.3	
			i		19 28 41.2	
			iS		19 38 08	
					micr	sec
			P	Z'	0.2	1.3
			Mx	E	15	21
			Mx	N	38	21
			Mx	Z	17	15
		Ki	iP		19 28 10.2	
			i		19 28 15.9	
			iS		19 37 26	
					micr	sec
			P	Z'	0.5	1.9
		(cont.)				

1974 Aug.	8	(cont.)				
		Ki			micr	sec
			Mx	E	19	14
			Mx	N	23	16
			Mx	Z	11	12
		Sk	iP		19 28 32.8	
			i		19 28 42.1	
		Um	iP		19 28 22.2	
			iS		19 37 43	
		Ud	iP		19 28 45.4	
		De	iP		19 28 53.2	
			i		19 29 15.2	
		Formosa (h = 30 km). m = 6.2, M = 6.7 (Up,Ki).				
"	8	Up	i(P)		20 50 38.1	
		De	i(P)		20 50 30.8	
"	8	Um	iP		23 08 34.8	
		Ud	i(P)		23 08 03.0	
"	8	Up	i(S)		23 31 13.1	
			iTSg		23 35 54.5	
					micr	sec
			Mx	N	1.0	19
			Mx	Z	1.2	18
		Ki	iP		23 26 23.4	
			iS		23 27 36.6	
			i(S)		23 27 52.8	
			iTPg		23 31 21.3	
			iTSg		23 32 04.0	
					micr	sec
			Mx	E	0.9	13
			Mx	N	0.7	15
			Mx	Z	0.9	13
		Sk	iP		23 27 02.8	
			i(P)		23 27 11.6	
			iS		23 28 48.4	
			eTSg		23 33 49	
		Um	i		23 27 00.0	
			iP		23 27 13.3	
			iTSg		23 33 56.8	
		Ud	iP		23 27 50.3	
			i(P)		23 27 59.2	
			i		23 28 11.7	
			i		23 30 47.5	
			iTSg		23 35 42.6	
		De	iP		23 28 39.8	
		Norwegian Sea (h = N).				
"	9	Ki	iP		02 46 03.8	
		Um	i(P)		02 45 30.7	
		Ud	iP		02 45 10.7	
		Ascension Island (h = N).				
"	9	Up	iP		05 06 52.2	
		(cont.)				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Aug.	9	(cont.)				
		Up			micr	sec
			P	Z'	0.1	1.3
		Ki	iP		05	06 56.6
					micr	sec
			P	Z'	0.1	1.3
		Sk	iP		05	06 41.5
		Ud	iP		05	06 42.4
		De	iP		05	06 41.5
		Peru-Brazil (h = 160 km).				
		m = 6.2 (Up,Ki).				
"	9	Up	iP		06 49	48.0
		Ki	iP		06 49	33.4 C
					micr	sec
			P	Z'	0.1	1.0
		Um	iP		06 49	38.7 C
		Ud	iP		06 49	57.8
		De	iP		06 50	03.9
		Halmahera (h = 100 km).				
"	9	Ki	i(P)		10 31	43.4
		Mariana Islands (h = 35 km).				
"	9	Ki	iP		14 56	30.9
"	9	Um	iP		18 11	37.5
		Ud	iP		18 11	59.6
		Hindu Kush (h = 140 km).				
"	9	Um	iSKP1		18 36	05.8
		Ud	ePKP1		18 33	25
			i		18 33	26.2
		De	iPKP1		18 33	36.8
		Tonga-Kermadec Islands				
		(h = 520 km).				
"	9	Ki	i		19 19	23.2
		Um	iP		19 18	29.2
"	9	Um	iP		19 25	12.8
"	9	Up	iP		20 20	29.3
		Um	iP		20 21	16.0
		Ud	iP		20 20	34.4
		Greece.				
"	9	Up	iP		22 33	36.4
		Albania.				
"	9	Um	iPKP		22 36	14.1
		Ud	iPKP		22 36	05.3
		Chile (h = N).				
"	9	Ud	iP		22 54	06.6
		De	iP		22 54	06.8
		Sinkiang, China.				

1974 Aug.	10	Um	i(P)		05 37	39.4
		Ud	iP		05 37	48.8
		De	iP		05 38	02.3
"	10	Up	iPKP		10 05	44.8
			i		10 05	48.9
			iSKP1		10 08	27.3
		Ki	iPKP		10 05	39.2
			iSKP1		10 08	01.6
		Sk	ePKP		10 05	49
			i		10 05	50.8
			iSKP1		10 08	20.1
			i		10 08	26.7
		Um	iPKP		10 05	44.2
			i		10 05	47.2
			iSKP1		10 08	14.8
		Ud	iPKP		10 05	44.9
			iSKP1		10 08	28.9
		De	iPKP		10 05	55.6
			i		10 05	59.5
		Fiji Islands (h = 600 km).				
"	10	Ud	iPP		10 07	29.0
		De	iPP		10 07	17.6
		Chile-Bolivia (h = 120 km).				
"	10	Up	iPKP		11 40	38.9
					micr	sec
			PKP	Z'	0.1	0.9
		Ki	iPKP		11 40	31.0
			iSKP1		11 43	04.1
					micr	sec
			PKP	Z'	0.1	1.0
			SKP1	Z'	0.1	1.2
		Sk	i(PKP)		11 40	31.8
			iPKP		11 40	41.7
		Um	i(PKP)		11 40	26.6
			i(PKP)		11 40	33.8
			iPKP		11 40	37.7
			iSKP1		11 43	14.3
		Ud	iPKP		11 40	40.9
			iSKP1		11 43	29.5
		De	iPKP		11 40	51.7
			iSKP1		11 43	37.9
		Fiji Islands (h = 600 km).				
"	10	Up	eP		12 52	35
			i		12 53	14.2
			i		12 54	15.2
			iS		12 54	43.9
		Ki	iP		12 53	25.6
			eS		12 56	29
		Sk	eP		12 52	22
			iS		12 54	18.3
			i		12 54	48.8
		Um	i		12 53	22.9
		(cont.)				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974						
Aug.	10	(cont.)				
		Um	iS		12 55 32.5	
			i		12 55 57.6	
		Ud	eP		12 52 05	
			iS		12 53 54.5	
			i		12 54 15.7	
		De	iP		12 52 10.9	
			i		12 52 19.5	
			iS		12 53 59.7	
		United Kingdom (h = 10 km).				
"	10	Up	iP		15 13 45.1	
		Ki	iP		15 13 03.7	C
			ipP		15 13 16.5	
		Sk	iP		15 13 37.5	
			ipP		15 13 50.5	
		Um	iP		15 13 21.8	C
			ipP		15 13 34.8	
		Ud	iP		15 13 52.0	
			ipP		15 14 06.0	
		De	iP		15 14 08.3	
			ipP		15 14 23.3	
		Japan.				
		h = 50 km (Ki,Sk,Um,Ud,De).				
"	10	Sk	eP		17 58 18	
		Um	iP		17 58 29.5	
		Ud	iP		17 58 00.0	
		Ascension Island.				
"	10	Ki	iP		19 36 47.5	
		Um	iP		19 37 09.7	
		Ud	iP		19 37 40.4	C
		Kurile Islands (h = N).				
"	10	Ud	iP		20 42 12.7	
"	10	Ud	iP		22 05 34.4	
"	10	Ud	iPKPl		23 40 49.5	
		De	iPKPl		23 41 00.6	
"	11	Ud	iP		00 46 10.2	
"	11	Up	iP		01 21 33.0	
			iPP		01 23 05.8	
			iS		01 27 37	
					micr	sec
			P	Z'	1.3	1.1
			PP	Z'	7.5	2.0
			Mx	E	350	13
			Mx	N	650	17
			Mx	Z	430	17
		Ki	iP		01 21 35.6	C
			iPP		01 23 11	
			iS		01 27 47	
					micr	sec
			P	Z'	1.8	0.8
		(cont.)				

1974						
Aug.	11	(cont.)				
		Ki			micr	sec
			Mx	E	200	14
			Mx	N	220	14
			Mx	Z	310	14
		Sk	iP		01 21 56.4	C
			iPP		01 23 40.2	
			iS		01 28 29.6	
		Um	iP		01 21 27.7	C
			iPP		01 23 01.9	
			iS		01 27 28	
		Ud	iP		01 21 49.7	C
			iPP		01 23 32.4	
		De	iP		01 21 48.6	C
			iPP		01 23 29.3	
			iS		01 28 15.5	
		Tadzhik-Sinkiang (h = 9 km).				
		m = 6.7, M = 7.4 (Up,Ki).				
"	11	Ki	iP		01 26 38.7	
		Ud	iP		01 26 52.6	
		De	iP		01 26 51.1	
		Tadzhik-Sinkiang.				
		Origin time = 01 19 01.				
"	11	Ki	iP		01 54 18.5	
		Ud	iP		01 54 32.8	
		Tadzhik-Sinkiang.				
		Origin time = 01 46 41.				
"	11	Ki	iP		02 01 57.7	
		Tadzhik-Sinkiang.				
"	11	Ud	iP		02 09 06.1	
		De	iP		02 09 05.4	
		Tadzhik-Sinkiang.				
		Origin time = 02 01 14.				
"	11	Ki	iP		02 11 46.8	
		Ud	iP		02 12 00.6	
		De	iP		02 11 59.4	
		Tadzhik-Sinkiang.				
		Origin time = 02 04 09.				
"	11	Up	eP		02 14 41	
		Ki	iP		02 14 41.9	
		Um	iP		02 14 34.2	
		Ud	iP		02 14 56.0	
		De	iP		02 14 56.2	
		Tadzhik-Sinkiang.				
		Origin time = 02 07 05.				
"	11	Ki	iP		02 27 14.4	
		Ud	iP		02 27 28.8	
		De	iP		02 27 28.2	
		Tadzhik-Sinkiang.				
		Origin time = 02 19 37.				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Aug.	11	Ki	eP	02 32 11	
		Sk	iP	02 32 33.2	
		Um	iP	02 32 03.8	
		Ud	iP	02 32 25.8	
		De	iP	02 32 24.6	
		Tadzhik-Sinkiang.			
		Origin time = 02 24 34.			
"	11	Up	iP	02 37 22.7	
		Ki	iP	02 37 25.5	
		Sk	iP	02 37 46.6	
		Um	iP	02 37 17.9	
		Ud	iP	02 37 39.7	C
		De	iP	02 37 38.3	
		Tadzhik-Sinkiang (h = N).			
"	11	Up	iP	02 40 59.8	
		Ki	iP	02 41 02.6	
		Sk	iP	02 41 23.8	
		Um	iP	02 40 55.7	
		Ud	iP	02 41 16.7	
		De	iP	02 41 15.5	
		Tadzhik-Sinkiang.			
		Origin time = 02 33 25.			
"	11	Up	iP	02 44 45.0	
			iPP	02 46 14.1	
		Ki	iP	02 44 47.5	
		Sk	iP	02 45 08.6	
			iPP	02 46 53.1	
		Um	iP	02 44 39.8	
			i	02 44 45.2	
		Ud	iP	02 45 01.2	C
		De	iP	02 45 00.0	C
		Tadzhik-Sinkiang (h = N).			
"	11	Ud	iP	02 51 03.1	
"	11	Up	iP	02 51 21.7	
		Ki	eP	02 51 24	
		Tadzhik-Sinkiang.			
		Origin time = 02 43 46.			
"	11	Ki	iP	02 52 33.3	
		Um	iP	02 52 24.4	
		Ud	iP	02 52 47.5	
		De	iP	02 52 45.6	
		Tadzhik-Sinkiang.			
		Origin time = 02 44 55.			
"	11	Ki	iP	02 54 12.0	
		De	iP	02 54 25.2	
		Tadzhik-Sinkiang.			
		Origin time = 02 46 34.			
"	11	Ki	iP	02 59 30.9	
		(cont.)			

1974 Aug.	11	(cont.)			
		Ud	iP	02 59 45.9	
		De	eP	02 59 44	
		Tadzhik-Sinkiang.			
		Origin time = 02 51 53.			
"	11	Ud	iP	03 07 17.8	
"	11	Ud	iP	03 10 17.9	
"	11	Ud	iP	03 10 47.4	
"	11	Ud	iP	03 11 22.8	
"	11	Ud	iP	03 12 28.4	
"	11	Up	iP	03 12 47.6	
		Ki	iP	03 12 49.0	
			i	03 12 56.5	
		Um	iP	03 12 43.8	
		Ud	iP	03 13 03.1	
		De	iP	03 13 04.3	
		Tadzhik-Sinkiang (h = N).			
"	11	Ud	iP	03 15 58.6	
"	11	Ki	iP	03 23 32.5	
		Ud	iP	03 23 46.4	
		Tadzhik-Sinkiang.			
		Origin time = 03 15 54.			
"	11	Ki	iP	03 31 48.1	
		Um	iP	03 31 40.6	
		Ud	iP	03 32 03.3	
		De	iP	03 32 01.3	
		Tadzhik-Sinkiang (h = N).			
"	11	Up	iP	03 35 32.6	
		Ki	iP	03 35 36.8	
		Um	iP	03 35 30.8	
		Ud	iP	03 35 49.1	
		Tadzhik-Sinkiang.			
		Origin time = 03 27 59.			
"	11	Ud	iP	03 42 30.1	
"	11	Ki	iP	03 46 35.0	
		Ud	iP	03 46 48.7	
		Tadzhik-Sinkiang.			
		Origin time = 03 38 57.			
"	11	Ki	iP	03 55 35.0	
		Um	iP	03 55 30.7	
		Tadzhik-Sinkiang.			
		Origin time = 03 47 59.			
"	11	Up	eP	03 57 31	
		(cont.)			

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
Aug. 11 (cont.)

	Ki	eP	03 57 30
	Sk	iP	03 57 53.0
	Ud	iP	03 57 43.2
	De	iP	03 57 46.7

Tadzhik-Sinkiang.
Origin time = 03 49 54.

" 11

	Ki	eP	03 59 59
	Sk	iP	04 00 19.1
	Um	iP	03 59 52.4
	Ud	iP	04 00 13.3
	De	eP	04 00 13

Tadzhik-Sinkiang.
Origin time = 03 52 21.

" 11

	Sk	eP	04 06 53
	Ud	eP	04 06 43

Tadzhik-Sinkiang.
Origin time = 03 58 52.

" 11

	Ki	iP	04 22 31.3
	Sk	eP	04 22 56
	Um	eP	04 22 22
	Ud	iP	04 22 46.0

Tadzhik-Sinkiang.
Origin time = 04 14 54.

" 11

	Up	iP	04 36 22.1	
		i	04 36 29.2	
		iPP	04 37 57.4	
		i	04 38 16.4	
		i	04 38 38.6	
	Ki	iP	04 36 24.7	C
		i	04 36 30.7	
			micr sec	
		P Z'	0.1 0.8	
	Sk	iP	04 36 45.8	
		i	04 36 51.0	
		iPP	04 38 25.0	
	Um	iP	04 36 17.2	
		i	04 36 22.3	
		iPP	04 37 49.3	
	Ud	iP	04 36 38.9	C
		i	04 36 43.6	
		iPP	04 38 24.8	
	De	iP	04 36 37.9	C
		i	04 36 43.0	
		iPP	04 38 18.9	

Tadzhik-Sinkiang (h = N).
Double P, average separation 5.5 sec.

" 11

	Up	iP	04 43 17.6
	Ki	iP	04 43 19.1
	Um	iP	04 43 11.0

(cont.)

1974
Aug. 11 (cont.)

	Ud	iP	04 43 33.4

Tadzhik-Sinkiang.
Origin time = 04 35 41.

" 11

	Um	iP	04 44 44.2
	Ud	iP	04 45 06.9

Tadzhik-Sinkiang.
Origin time = 04 37 14.

" 11

	Ki	iP	04 48 13.5
	Um	iP	04 48 08.0
	Ud	iP	04 48 28.3
	De	eP	04 48 24

Tadzhik-Sinkiang.
Origin time = 04 40 36.

" 11

	Ud	iP	04 51 47.6

" 11

	Up	iP	05 20 06.8	
		i	05 20 11.2	
		iPP	05 21 26.5	
			micr	sec
		P Z'	0.2	1.0
		Mx E	1.3	14
		Mx N	4.2	14
		Mx Z	2.3	11
	Ki	iP	05 20 10.8	C
		i	05 20 14.0	
			micr	sec
		P Z'	0.2	0.8
		Mx E	1.9	11
		Mx N	3.6	13
		Mx Z	1.7	10
	Sk	iP	05 20 31.4	C
		i	05 20 34.6	
		iPP	05 22 13.6	
	Um	iP	05 20 03.2	C
		i	05 20 06.2	
		iPP	05 21 26.9	
	Ud	iP	05 20 24.8	C
		i	05 20 27.9	
	De	iP	05 20 23.7	C
		i	05 20 26.9	
		iPP	05 22 04.5	

Tadzhik-Sinkiang (h = N).
m = 5.8, M = 5.4 (Up,Ki).
Double P, average separation 3.5 sec.

" 11

	Ki	iP	05 24 43.5
	Ud	iP	05 24 57.4
	De	iP	05 24 55.7

Tadzhik-Sinkiang.
Origin time = 05 17 06.

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
Aug. 11 Up iP 05 27 08.7
Ki iP 05 27 10.0
i 05 27 17.7
micr sec
P Z' 0.1 0.9
Sk iP 05 27 31.4
Um iP 05 27 02.9
Ud iP 05 27 23.8
i 05 27 34.9
De iP 05 27 22.7
i 05 27 24.1
Tadzhik-Sinkiang (h = 30 km).

" 11 Up iP 05 31 27.6 C
iPP 05 32 57.5
iSS 05 40 18.0
micr sec
P Z' 0.2 0.9
PP Z' 0.1 1.0
Mx E 1.8 12
Mx N 6.0 17
Mx Z 4.0 12
Ki iP 05 31 30.3 C
micr sec
P Z' 0.5 0.8
Mx E 4.6 13
Mx N 9.9 13
Mx Z 4.4 13
Sk iP 05 31 51.3 C
iPP 05 33 31.0
Um iP 05 31 22.7 C
iPP 05 32 53.3
Ud iP 05 31 44.5 C
De iP 05 31 43.1 C
iPP 05 33 22.2
Tadzhik-Sinkiang (h = 25 km).
m = 6.0, M = 5.6 (Up,Ki).

" 11 Up iP 05 41 22.8
Ki iP 05 41 25.3
Sk iP 05 41 45.3
Um iP 05 41 17.6
Ud iP 05 41 39.1
De iP 05 41 38.4
Tadzhik-Sinkiang (h = N).

" 11 Ud iP 06 14 41.0

" 11 Ki eP 06 16 13
Ud iP 06 16 27.1
De iP 06 16 26.1
Tadzhik-Sinkiang.
Origin time = 06 08 35.

" 11 Ki iP 06 20 16.0
Ud iP 06 20 29.9
Tadzhik-Sinkiang.
Origin time = 06 12 38.

1974
Aug. 11 Ki iP 06 20 55.9
Ud iP 06 21 10.4
De eP 06 21 10
Tadzhik-Sinkiang.
Origin time = 06 13 18.

" 11 Ud iP 06 25 02.4

" 11 Ud iP 07 07 27.7

" 11 Up iP 07 09 44.6
i 07 10 24.3
iPP 07 11 10.1
i 07 11 24.1
micr sec
P Z' 0.1 1.0
Mx E 2.1 14
Mx N 4.8 18
Mx Z 2.9 13
Ki iP 07 09 46.1
i 07 09 50.4
micr sec
P Z' 0.2 0.8
Mx E 1.7 12
Mx N 6.5 13
Mx Z 1.8 11
Sk iP 07 10 06.1
i 07 10 11.0
iPP 07 11 50.9
Um iP 07 09 38.1
i 07 09 40.9
iPP 07 11 11.5
Ud iP 07 09 59.2
i 07 10 04.8
iPP 07 11 46.4
De iP 07 09 58.3
i 07 10 00.3
i(PP) 07 11 47.6
Tadzhik-Sinkiang (h = N).
m = 5.6, M = 5.4 (Up,Ki).
Multiple P.

" 11 Ki iP 07 22 08.0
Ud eP 07 22 20
i 07 22 28.0
De iP 07 22 18.3
Tadzhik-Sinkiang.
Origin time = 07 14 28.

" 11 Ud iP 07 26 34.1

" 11 Ud iP 08 02 43.7

" 11 Up iP 08 10 31.9
i 08 11 07.8
i(PP) 08 12 07.0
Ki iP 08 10 34.8 C
(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
Aug. 11 (cont.)

Ki	i		08 10 40.3	
	iPP		08 12 09.3	
			micr	sec
	P	Z'	0.1	1.0
Sk	iP		08 10 55.7	C
	iPP		08 12 35.8	
Um	iP		08 10 27.2	C
	i		08 10 33.6	
Ud	iP		08 10 49.0	C
	iPP		08 12 33.5	
De	iP		08 10 48.1	C

Tadzhik-Sinkiang (h = 10 km).

" 11

Ki	iP		09 09 37.5	
Um	iP		09 09 30.5	
Ud	iP		09 09 51.8	
De	iP		09 09 50.3	

Tadzhik-Sinkiang.
Origin time = 09 02 00.

" 11

Ud	iP		09 11 32.9	

" 11

Up	iP		09 16 34.8	
	iPn		09 17 52.9	
	iPP		09 18 09.5	
			micr	sec
	Mx	E	0.8	14
	Mx	N	1.3	18
	Mx	Z	1.1	14
Ki	iP		09 16 37.5	C
			micr	sec
	P	Z'	0.1	0.8
	Mx	E	0.7	9
	Mx	N	0.9	13
	Mx	Z	0.8	10
Sk	iP		09 16 58.3	
Um	iP		09 16 29.8	
	i		09 16 35.1	
Ud	iP		09 16 51.5	C
De	iP		09 16 50.1	C
	i		09 16 54.7	

Tadzhik-Sinkiang (h = 30 km).
M = 5.1 (Up,Ki).

" 11

Ki	iP		09 21 08.7	
Sk	iP		09 21 29.8	
Ud	iP		09 21 20.1	

Tadzhik-Sinkiang.
Origin time = 09 13 30.

" 11

Ud	iP		10 06 10.3	

" 11

Ud	iP		10 14 04.0	

" 11

Ud	iP		10 19 07.4	

1974
Aug. 11

Ki	iP		10 37 36.4	
Sk	iP		10 37 57.2	
Um	iP		10 37 28.0	
Ud	iP		10 37 50.1	
De	iP		10 37 48.8	

Tadzhik-Sinkiang.
Origin time = 10 29 58.

" 11

Ud	iP		10 53 22.6	

" 11

Ki	iP		11 09 00.6	
Um	i(P)		11 08 57.7	
Ud	iP		11 09 14.2	

Tadzhik-Sinkiang.
Origin time = 11 01 23.

" 11

Ud	iP		11 38 00.6	

" 11

Ki	iP		11 45 00.0	
Ud	iP		11 45 13.9	

Tadzhik-Sinkiang.
Origin time = 11 37 22.

" 11

Up	iP		12 13 58.7	
Ki	iP		12 14 00.1	
			micr	sec
	Mx	N	0.5	13
Sk	iP		12 14 21.6	
Um	iP		12 13 52.2	
Ud	iP		12 14 14.2	
De	iP		12 14 12.7	

Tadzhik-Sinkiang (h = N).

" 11

Up	iP		12 28 08.5	
Ki	iP		12 28 09.8	
			micr	sec
	Mx	E	0.3	12
	Mx	N	0.5	13
Sk	iP		12 28 31.2	
Um	iP		12 28 02.8	
Ud	iP		12 28 23.7	
De	eP		12 28 21	
	i		12 28 23.2	

Tadzhik-Sinkiang (h = N).

" 11

Up	iP		12 52 39.1	
Ki	iP		12 52 41.9	C
			micr	sec
	Mx	E	0.4	11
	Mx	Z	0.3	13
Sk	iP		12 53 02.4	
	iPP		12 54 43.7	
Um	iP		12 52 34.0	C
Ud	iP		12 52 55.8	C
De	iP		12 52 54.7	

Tadzhik-Sinkiang (h = N).

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
Aug. 11 Ud iP 13 08 17.4

" 11 Up iP 13 16 21.6
Ud eP 13 16 39
Tadzhik-Sinkiang.
Origin time = 13 08 47.

" 11 Ki iP 13 28 55.2
micr sec
Mx N 0.5 13
Um iP 13 28 48.4
Ud iP 13 29 10.0
De eP 13 29 08
i 13 29 09.0
Tadzhik-Sinkiang (h = N).

" 11 Ki iP 13 40 16.5
Um iP 13 40 10.7
Ud iP 13 40 29.8
De iP 13 40 28.9
Tadzhik-Sinkiang.
Origin time = 13 32 39.

" 11 Up iP 13 46 01.1
Ki iP 13 46 02.1
Sk iP 13 46 24.0
Um iP 13 45 54.7
i 13 45 58.9
Ud iP 13 46 16.4
i 13 46 20.0
De iP 13 46 15.2
Tadzhik-Sinkiang (h = N).

" 11 Up iP 14 07 00.2
Ki iP 14 07 00.8
i 14 07 03.2
micr sec
P Z' 0.1 0.8
Sk iP 14 07 21.6
i 14 07 23.6
Um iP 14 06 53.0
i 14 06 55.4
Ud iP 14 07 14.8
i 14 07 17.3
De iP 14 07 13.6
i 14 07 16.1
Tadzhik-Sinkiang (h = N).
Double P, average separation 2.4 sec.

" 11 Ud iP 14 23 40.4

" 11 Ud iP 14 40 58.6
Tadzhik-Sinkiang.

" 11 Ki eP 15 16 54
(cont.)

1974
Aug. 11 (cont.)
Ud iP 15 17 07.4
Tadzhik-Sinkiang.
Origin time = 15 09 15.

" 11 Ki iP 16 52 18.4
Ud iP 16 52 32.3
Tadzhik-Sinkiang.
Origin time = 16 44 40.

" 11 Ud iP 16 55 29.7

" 11 Up iP 17 29 04.2
Ki iP 17 29 06.1
Ud iP 17 29 20.1
De iP 17 29 19.3
Tadzhik-Sinkiang.
Origin time = 17 21 28.

" 11 Up iP 17 48 18.4
Ki iP 17 48 21.4
Sk iP 17 48 42.2
Um iP 17 48 13.7
Ud iP 17 48 35.4
De iP 17 48 34.4
Tadzhik-Sinkiang (h = N).

" 11 Ki iP 17 50 30.9
Ud iP 17 50 41.7
De iP 17 50 41.0
Tadzhik-Sinkiang.
Origin time = 17 42 51.

" 11 Ud e 18 15 15
iSgl 18 15 55.3

" 11 Ki iP 18 19 35.3
Ud iP 18 19 48.1
Tadzhik-Sinkiang.
Origin time = 18 11 56.

" 11 Ud iP 19 01 42.5

" 11 Ud iP 19 04 29.4
Kurile Islands.

" 11 Ki iP 19 34 57.5
Ud iP 19 35 12.2
Tadzhik-Sinkiang.
Origin time = 19 27 20.

" 11 Up iP 19 38 15.4
i 19 38 19.0
Ki iP 19 38 14.9
i 19 38 22.0
(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Aug.	11	(cont.)					
		Sk	iP		19	38	38.6
			iPP		19	40	18.4
		Um	iP		19	38	10.4
			iPP		19	39	34.1
		Ud	iP		19	38	28.5
			i		19	38	32.2
		De	eP		19	38	27
			i		19	38	30.3
		Tadzhik-Sinkiang (h = N).					
"	11	Up	iP		19	42	16.6
"	11	Up	iP		20	13	03.7 C
			i		20	13	06.8
			iPP		20	14	34.0
			iS		20	19	08
					micr		sec
			P	Z'	0.7		1.5
			PP	Z'	1.1		2.0
			Mx	E	7.0		15
			Mx	N	14		18
			Mx	Z	9.5		12
		Ki	iP		20	13	06.7 C
			i		20	13	09.3
			iS		20	19	13
					micr		sec
			P	Z'	0.7		1.2
			Mx	E	8.4		12
			Mx	N	24		12
			Mx	Z	6.6		10
		Sk	iP		20	13	27.7 C
			i		20	13	30.7
			iPP		20	15	10.6
		Um	iP		20	12	58.9 C
			i		20	13	02.1
			iPP		20	14	31.0
			iS		20	18	55
		Ud	iP		20	13	20.1
			i		20	13	23.8
			iPP		20	14	56.6
		De	iP		20	13	19.1
			i		20	13	22.6
			iPP		20	14	58.8
		Tadzhik-Sinkiang (h = N). m = 6.1, M = 5.9 (Up,Ki). Double P, average separation 3.2 sec. In this series of aftershocks, Ki is one of our most sensitive stations (for P), while PP Z' almost never shows up clearly at Ki, as distinct from our other stations.					
"	11	Ud	iP		20	33	14.2
			i		20	33	17.2
1974 Aug.	11	Ud	iP		20	55	23.4
"	11	Ud	iPKPl		21	28	16.5
		De	iPKPl		21	28	28.0 D
"	11	Up	iP		21	29	10.4 D
			i		21	29	13.0
			iPP		21	30	45.2
			iS		21	35	10
					micr		sec
			P	Z'	0.4		1.2
			PP	Z'	1.6		2.0
			Mx	E	14		10
			Mx	N	18		18
			Mx	Z	28		10
		Ki	iP		21	29	13.7 D
			i		21	29	16.5
			iPP		21	30	45
			iS		21	35	23
					micr		sec
			P	Z'	1.0		1.5
			Mx	E	49		12
			Mx	N	50		12
			Mx	Z	47		12
		Sk	iP		21	29	33.9 D
			i		21	29	36.7
			iPP		21	31	13.2
		Um	iP		21	29	05.4 D
			i		21	29	08.6
			iPP		21	30	34.2
		Ud	iP		21	29	27.3 D
			i		21	29	30.3
			iPP		21	31	06.0
		De	iP		21	29	26.2 D
			i		21	29	29.0
			iPP		21	31	09.4
		Tadzhik-Sinkiang (h = 9 km). m = 6.1, M = 6.5 (Up,Ki). As distinct from most other aftershocks in this series, this shock shows a very clear P dilatation and not compression.					
"	11	Ud	iP		21	49	42.6
"	11	Up	iP		21	57	43.1
		Ki	iP		21	57	44.0
		Sk	iP		21	58	04.6
		Um	iP		21	57	36.4
		Ud	iP		21	57	58.0
		De	iP		21	57	57.0
		Tadzhik-Sinkiang (h = N).					
"	11	Up	iP		22	04	04.7
		Ki	iP		22	04	05.3
		(cont.)					

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Aug.	11	(cont.)					
		Sk	iP	22 04 26.3			
		Um	iP	22 03 57.7			
		Ud	iP	22 04 19.1			
		De	iP	22 04 17.4			
		Tadzhik-Sinkiang (h = N).					
"	11	Ki	iP	22 04 34.8			
		Sk	eP	22 04 59			
		Um	iP	22 04 25.7			
		Ud	iP	22 04 49.0			
		De	iP	22 04 48.7			
		Tadzhik-Sinkiang.					
		Origin time = 21 56 58.					
"	11	De	iPKP	22 11 45.8			
"	11	Up	iP	22 18 02.1			
			i	22 18 04.9			
		Ki	iP	22 18 04.7			
		Sk	iP	22 18 25.7			
		Um	iP	22 17 57.3			
			i	22 18 00.2			
		Ud	iP	22 18 18.8			
			i	22 18 21.7			
		De	iP	22 18 17.6			
			i	22 18 20.6			
		Tadzhik-Sinkiang (h = N).					
		Double P, average separation 2.9 sec.					
"	11	Ki	iP	22 24 28.4			
		Ud	iP	22 24 42.5			
		Tadzhik-Sinkiang.					
		Origin time = 22 16 50.					
"	11	Ki	iP	22 31 03.3			
			i	22 31 07.2			
		Sk	eP	22 31 28			
		Um	iP	22 30 58.9			
		Ud	eP	22 31 16			
			i	22 31 23.6			
		De	eP	22 31 21			
		Tadzhik-Sinkiang.					
"	11	Ki	eP	22 33 13			
		Ud	iP	22 33 22.5			
		Tadzhik-Sinkiang.					
		Origin time = 22 25 33.					
"	11	Ki	iP	22 43 36.3			
"	11	Ki	eP	22 48 58			
"	11	Up	iP	22 51 37.4			
		Ki	i(P)	22 51 09.3			

1974 Aug.	11	Ud	iP	22 56 26.4			
"	11	Up	iP	23 26 31.0			
			iPP	23 28 01.7			
				micr	sec		
			Mx	E	0.5	11	
			Mx	N	0.7	15	
			Mx	Z	0.7	11	
		Ki	iP	23 26 34.2			D
			iPP	23 28 06.7			
				micr	sec		
			P	Z'	0.1	0.7	
			Mx	E	0.8	12	
			Mx	N	0.5	12	
			Mx	Z	0.8	12	
		Sk	iP	23 26 54.8			D
		Um	iP	23 26 26.7			
		Ud	iP	23 26 48.4			D
		De	iP	23 26 47.1			D
			iPP	23 28 26.8			
		Tadzhik-Sinkiang (h = N).					
		M = 4.9 (Up,Ki).					
"	11	Ud	iP	23 34 32.3			
"	12	Ud	iP	00 18 20.3			
"	12	Ki	iP	00 20 24.3			
		Ud	iP	00 20 37.3			
		Tadzhik-Sinkiang.					
		Origin time = 00 12 45.					
"	12	Ki	eP	00 44 45			
		Ud	iP	00 44 59.5			
		Tadzhik-Sinkiang.					
		Origin time = 00 37 08.					
"	12	Ki	iP	00 51 44.5			
		Um	iP	00 51 36.5			
		Ud	iP	00 51 58.5			
		Tadzhik-Sinkiang.					
		Origin time = 00 44 07.					
"	12	Ki	iP	00 58 38.7			
		Ud	iP	00 58 47.6			
		Tadzhik-Sinkiang.					
"	12	Ki	iP	01 24 41.7			
		Um	iP	01 24 34.6			
		Ud	iP	01 24 55.7			
		Tadzhik-Sinkiang.					
		Origin time = 01 17 04.					
"	12	Ud	iP	01 26 44.4			
"	12	Ki	iP	01 44 09.2			
		Um	iP	01 44 43.9			

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
Aug. 12 Ki iP 01 52 48.1
Um iP 01 52 40.7
Ud iP 01 53 02.0
Tadzhik-Sinkiang.
Origin time = 01 45 10.

" 12 Up iP 01 56 35.6
Ki iP 01 56 36.3
Um iP 01 56 30.7
Ud eP 01 56 50
De eP 01 56 50
Tadzhik-Sinkiang.
Origin time = 01 49 00.

" 12 Ud iP 02 29 42.9

" 12 Up eP 02 43 41
Ki iP 02 43 43.8
Um iP 02 43 38.2
Ud iP 02 44 00.0 C
De iP 02 43 58.8
Tadzhik-Sinkiang.
Origin time = 02 36 07.

" 12 Up ePKP 03 11 52
iPP 03 14 24.8
micr sec
PP Z' 0.1 1.8
Mx E 0.7 18
Mx N 1.1 20
Mx Z 2.3 21
Ki ePKP 03 11 38
i 03 11 41.5
micr sec
Mx E 1.8 20
Mx N 1.5 18
Mx Z 1.9 20
Sk iPKP 03 11 51.6
Um iPKP 03 11 48.7
Ud e(PKP) 03 11 46.5
iPKP 03 11 57.0
De iPKP 03 12 03.3
Fiji Islands (h = 70 km).
M = 5.8 (Up,Ki).

" 12 Up eP 03 24 03

" 12 Ud iP 03 29 20.7

" 12 Up iP 05 03 28.0
Ki iP 05 03 30.6
Ud iP 05 03 43.0
Tadzhik-Sinkiang.
Origin time = 04 55 52.

" 12 Ud iP 07 09 12.9
Tadzhik-Sinkiang.

1974
Aug. 12 Ud iP 10 59 10.6
Kurile Islands.

" 12 Ud iP 11 03 18.2

" 12 Up iP 11 34 12.2
Ki iP 11 33 34.8
Sk eP 11 34 04
Um iP 11 33 48.6 C
Ud iP 11 34 19.1
De iP 11 34 45.4
Japan (h = 70 km).

" 12 Ki iP 13 47 45.3
micr sec
Mx E 0.3 10
Mx N 0.6 11
Mx Z 0.5 13
Sk eP 13 48 10
Ud iP 13 47 58.6
De eP 13 47 58
Tadzhik-Sinkiang (h = N).

" 12 Up micr sec
Mx E 0.4 12
Mx N 0.7 15
Mx Z 0.5 12
Ki iP 13 56 32.6
micr sec
Mx E 0.5 12
Mx N 1.0 12
Mx Z 0.5 12
Sk iP 13 56 53.6
Um iP 13 56 25.1
i 13 56 31.4
Ud iP 13 56 47.0
De iP 13 56 44.5
Tadzhik-Sinkiang.
Origin time = 13 48 55.
M = 4.7 (Up,Ki).

" 12 Ud iP 14 09 18.0

" 12 Up micr sec
Mx E 0.7 12
Mx N 1.5 14
Mx Z 1.0 13
Ki eP 14 22 29
i 14 22 32.8
micr sec
Mx E 1.3 12
Mx N 2.5 12
Mx Z 1.4 12
Sk eP 14 22 52
Um iP 14 22 20.7
Ud eP 14 22 44
De iP 14 22 44.5
(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
Aug. 12 (cont.)
Tadzhik-Sinkiang (h = N).
M = 5.1 (Up,Ki).

" 12

Up	iP	14 22 42.3
Ki	iP	14 22 45.3
Sk	iP	14 23 08.6
Um	iP	14 22 37.4
Ud	iP	14 22 59.1
De	iP	14 22 56.7

Tadzhik-Sinkiang.
Origin time = 14 15 07.

" 12

Ki	eP	14 28 30
Sk	eP	14 27 55
Um	iP	14 28 10.1
Ud	iP	14 27 39.9

North of Ascension Island
(h = N).

" 12

Sk	eP	15 02 09
Ud	e(P)	15 01 26
	i	15 01 40.7

Greece.

" 12

Ud	iP	16 35 46.4

" 12

Up	iP	17 36 29.4
	i	17 36 35.0
Um	iP	17 36 51.3
Ud	iP	17 36 56.2

" 12

Up	iP	19 06 35.3
Ki	iP	19 06 41.8
Sk	iP	19 07 00.3
Um	iP	19 06 32.3
Ud	iP	19 06 51.9
De	iP	19 06 49.7

Afghanistan-USSR.
Intermediate depth.

" 12

Ki	eP	20 26 04
Sk	iP	20 26 30.3
Ud	iP	20 26 22.9

Tadzhik-Sinkiang.
Origin time = 20 18 30.

" 12

Um	iP	21 01 42.2
	i	21 01 56.2
Ud	iP	21 02 14.3

Kurile Islands.

" 12

Up	iP	21 25 25.2
	i	21 25 37.1
	i	21 26 11.5
	iPP	21 26 55.8

(cont.)

1974
Aug. 12 (cont.)

Up			micr	sec
	Mx	E	0.6	12
	Mx	N	1.2	17
	Mx	Z	0.8	12
Ki	iP		21 25 27.5	
			micr	sec
	P	Z'	0.1	1.0
	Mx	E	1.3	15
	Mx	N	1.4	13
	Mx	Z	1.1	13
Sk	iP		21 25 48.5	
Um	iP		21 25 19.7	
	i		21 25 23.1	
	iPP		21 26 52.7	
Ud	iP		21 25 41.5	
	iPP		21 27 26.7	
De	iP		21 25 40.5	
	i		21 25 45.0	
	i		21 27 37.9	

Tadzhik-Sinkiang (h = 25 km).
M = 5.0 (Up,Ki).

" 12

Up	eP	21 40 06
	ipP	21 40 19.2
Ki	eP	21 39 49
	ipP	21 40 04.8
Sk	eP	21 39 44
	ipP	21 39 58.7
Um	iP	21 39 56.8
	ipP	21 40 09.1
Ud	iP	21 40 06.0
	ipP	21 40 18.0
De	ipP	21 40 19.1

Mexico.
h = 50 km (Up,Ki,Sk,Um,Ud).

" 12

Up	iP		22 04 52.4	
			micr	sec
	Mx	E	0.6	12
	Mx	N	0.8	16
	Mx	Z	0.8	12
Ki	iP		22 04 55.5	
			micr	sec
	Mx	E	0.6	15
	Mx	N	0.7	13
	Mx	Z	0.5	12
Sk	iP		22 05 15.8	
	i		22 05 25.8	
Um	iP		22 04 47.3	
Ud	iP		22 05 09.6	
	i		22 05 18.1	
De	iP		22 05 08.3	

Tadzhik-Sinkiang (h = N).
M = 4.9 (Up,Ki).

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
Aug. 12 Ki iP 22 10 12.3
i 22 10 14.6
Sk eP 22 10 32
Um iP 22 10 06.6
Ud iP 22 10 26.1
Tadzhik-Sinkiang.
Origin time = 22 02 34.

" 12 Up iP 22 52 09.5
Ki iP 22 52 12.8
Sk iP 22 52 33.4
i 22 52 36.1
Um iP 22 52 05.6
Ud iP 22 52 26.8
De iP 22 52 23.0
i 22 52 28.3
Tadzhik-Sinkiang (h = N).

" 12 Up iP 23 58 02.8
Ki iP 23 57 38.2
Sk iP 23 58 06.0
Um iP 23 57 47.1
Ud iP 23 58 12.4
De iP 23 58 24.1
Formosa (h = 25 km).

" 13 Ki iP 00 26 08.7
Ud iP 00 26 30.9

" 13 Ud iP 00 53 48.9

" 13 Ud iP 03 22 22.5

" 13 Ki iPKP 03 30 17.7
South Sandwich Islands
(h = N).

" 13 Up iP 03 57 15.5 C
iS 04 06 07
iP'P' 04 25 27.8

		micr	sec
P	Z'	0.2	0.9
Mx	E	5.8	19
Mx	N	5.7	20
Mx	Z	9.8	20

Ki iP 03 56 22.7 C
iPP 03 58 41
iScP 04 01 06.9
iP'P' 04 25 42.7

		micr	sec
P	Z'	0.2	1.4
Mx	E	8.5	20
Mx	N	5.8	19
Mx	Z	6.1	20

Sk iP 03 56 57.3
iPcP 03 57 29.0
(cont.)

1974
Aug. 13 (cont.)
Sk iScP 04 01 31.5
iP'P' 04 25 35.6
Um iP 03 56 48.7
iScP 04 01 28.1
iS 04 05 21
iP'P' 04 25 35.5
Ud iP 03 57 16.3
iP'P' 04 25 32.7
De iP 03 57 38.0 C
i 03 57 53.3
Aleutian Islands (h = 50 km).
m = 6.1, M = 6.0 (Up,Ki).

" 13 Ud iP 04 10 49.5

" 13 Up iP 04 34 37.4
iPP 04 36 15.2
Ki iP 04 34 48.1
Sk iP 04 35 03.8
ipP 04 35 37.1
Um iP 04 34 36.7
Ud iP 04 34 54.0
ipP 04 35 30.4
De iP 04 34 52.9
Hindu Kush.
h = 170 km (Sk,Ud).

" 13 Up

		micr	sec
Mx	N	1.0	22
Mx	Z	1.4	21

Ki iPKP 06 12 14.3

		micr	sec
Mx	E	0.7	20
Mx	N	0.8	19
Mx	Z	1.2	20

Fiji Islands (h = 30 km).
M = 5.6 (Up,Ki).

" 13 Ki iP 07 31 16.9
Molucca Passage (h = N).

" 13 Up Mx 08 36

		micr	sec
Mx	N	0.8	21
Mx	Z	1.5	22

Fiji Islands (h = N).

" 13 Ud iP 10 30 25.2

" 13 Up iP 11 22 12.9
Ki iP 11 22 16.6
Sk iP 11 22 38.1
Ud iP 11 22 30.2
De iP 11 22 29.9
Tadzhik-Sinkiang (h = 20 km).

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974						
Aug.	13	Up			micr	sec
			Mx	E	1.0	20
			Mx	N	1.9	21
			Mx	Z	2.7	22
		Ki	iPKP		13 11	47.4
					micr	sec
			Mx	E	1.5	20
			Mx	N	1.6	19
			Mx	Z	2.4	20
		Fiji Islands (h = 55 km).				
		M = 5.9 (Up,Ki).				
"	13	Ki	iPKP		14 00	34.2
		Fiji Islands (h = N).				
"	13	Ki	iP		14 00	49.4
		Ud	iP		14 01	04.0
		Tadzhik-Sinkiang.				
		Origin time = 13 53 11.				
"	13	Ki	iP		14 23	42.9
		Sk	iP		14 24	03.4
		Ud	iP		14 23	56.9
		De	iP		14 23	56.4
		Tadzhik-Sinkiang (h = N).				
"	13	Um	iP		14 41	53.7
		Ud	iP		14 42	29.7
		Kurile Islands (h = N).				
"	13	Ki	iP		14 55	49.1
			i		14 55	53.4
		Ud	iP		14 56	03.3
		Tadzhik-Sinkiang (h = N).				
"	13	Up	iPKP1		15 05	35.9
					micr	sec
			PKP1	Z'	0.1	1.4
		Ki	ePKP		15 05	30
			iPKP1		15 05	34.7
					micr	sec
			PKP1	Z'	0.2	1.2
			Mx	E	0.8	18
			Mx	N	0.6	19
			Mx	Z	0.6	19
		Sk	iPKP1		15 05	44.0
		Um	iPKP1		15 05	34.1
		Ud	iPKP2		15 05	56.9
		De	iPKP1		15 05	38.6
		West of Macquarie Islands (h = N).				
"	13	Up	iPKP		15 21	43.2
		Ki	iPKP		15 21	33.5
		Sk	iPKP		15 21	44.6
		Um	iPKP		15 21	36.8
		(cont.)				

1974				
Aug.	13	(cont.)		
		Ud	iPKP	15 21 47.6
		De	iPKP	15 21 51.2
		New Britain (h = 100 km).		
"	13	Ki	iP	16 46 03.1
		Tadzhik-Sinkiang.		
"	13	Sk	iSg1	19 55 28.0
		Ud	iSg1	19 54 48.2
		De	iSg1	19 54 53.3
		Southwest Norway.		
"	13	Ki	iP	21 26 55.5
			i	21 26 57.1
		Sk	iP	21 27 18.1
		Um	iP	21 26 48.6
		Ud	iP	21 27 11.6
		De	iP	21 27 09.1
		Tadzhik-Sinkiang (h = N).		
"	14	Ki	iP	01 23 42.1
		Um	iP	01 23 36.2
		Ud	iP	01 23 58.1
		Tadzhik-Sinkiang.		
		Origin time = 01 16 05.		
"	14	Ki	iP	01 38 40.2
		Sk	eP	01 39 01
		Um	iP	01 38 32.2
		Ud	iP	01 38 54.0
		De	iP	01 38 53.5
		Tadzhik-Sinkiang (h = N).		
"	14	Ki	iP	02 26 28.6
		Sk	iP	02 26 50.0
		Um	iP	02 26 21.3
		Ud	iP	02 26 42.8
			i	02 26 47.7
		De	iP	02 26 42.1
		Tadzhik-Sinkiang.		
		Origin time = 02 18 51.		
"	14	Ud	e	02 42 30
			i	02 42 32.3
			iRg	02 42 38.2
"	14	Ud	iP	03 28 32.1
"	14	Up	iPKP1	03 32 27.6
		Sk	iPKP1	03 32 15.5
			i	03 32 22.7
		Um	iPKP1	03 32 10.7
		Ud	iPKP1	03 32 24.8
			i	03 32 34.9
		De	i	03 32 46.7
		Kermadec Islands.		

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
Aug. 14 Up iP 03 56 15.9
Ki iP 03 55 42.6
Um iP 03 55 57.1
Ud iP 03 56 22.8
De iP 03 56 35.1
Bonin Islands (h = 60 km).

" 14 Ki iPKP 04 05 32.1
Sk iPKP 04 05 43.5
Um iPKP 04 05 38.7

" 14 Ki iP 05 10 08.2
Ud iP 05 10 22.2
Tadzhik-Sinkiang.
Origin time = 05 02 30.

" 14 Up iP 05 43 44.6
Ki iP 05 42 56.5
Sk eP 05 43 30
Um iP 05 43 18.6 C
ipP 05 43 31.2
Ud iP 05 43 49.9
Kurile Islands.
h = 45 km (Um).

" 14 Up iP 05 45 49.8 C
ipP 05 46 02.6
iP'P' 06 13 58.6
micr sec
P Z' 0.2 0.8
Mx E 0.8 17
Mx N 1.3 18
Mx Z 1.9 20
Ki iP 05 44 56.5 C
ipP 05 45 12.2
iPcP 05 45 42.4
iScP 05 49 39.1
micr sec
P Z' 0.1 1.2
Mx E 1.5 18
Mx N 1.2 18
Mx Z 1.4 17
Sk iP 05 45 28.5 C
iPcP 05 46 01.5
iP'P' 06 14 08.9
Um iP 05 45 22.6 C
ipP 05 45 35.6
iPcP 05 45 58.2
iP'P' 06 14 10.6
Ud iP 05 45 49.8 C
iPcP 05 46 16.5
De iP 05 46 12.3 C
ipP 05 46 27.4
Aleutian Islands.
h = 50 km (Up,Ki,Um,De).
m = 6.0, M = 5.3 (Up,Ki).

1974
Aug. 14 Ki iP 06 25 53.4
i 06 25 58.5
Sk iP 06 26 15.4
i 06 26 20.3
Ud iP 06 26 07.5
i 06 26 13.2
De iP 06 26 04.7
i 06 26 10.9
Tadzhik-Sinkiang (h = N).
Double P, average separation 5.5 sec.

" 14 Up iP 07 00 27.8 C
micr sec
P Z' 0.1 1.0
Ki iP 06 59 45.3 C
micr sec
P Z' 0.1 1.0
Sk iP 07 00 20.1 C
Um iP 07 00 03.9 C
Ud iP 07 00 34.5 C
De iP 07 00 51.1 C
Japan (h = 40 km).
m = 6.0 (Up,Ki).

" 14 Ki iP 07 15 13.7
Sk eP 07 15 35
Ud iP 07 15 27.2
De iP 07 15 26.2
Tadzhik-Sinkiang.
Origin time = 07 07 36.

" 14 Up iP 07 58 31.4
Ki iP 07 58 33.9
Sk iP 07 58 55.0
Um iP 07 58 26.0
Ud iP 07 58 47.9
De iP 07 58 46.8
Tadzhik-Sinkiang (h = N).

" 14 Sk iP 10 51 57.7
Ud iP 10 51 23.8
Greece.

" 14 Ud iPKP1 11 27 29.6

" 14 Ki iP 11 46 17.5
Ud iP 11 46 31.4
Tadzhik-Sinkiang.
Origin time = 11 38 39.

" 14 Up iP 13 06 04.1
Ki i(P) 13 07 05.5 C
i 13 07 12.8
Sk e(P) 13 06 54
(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
Aug. 14 (cont.)

Um	iP		13 06 32.0	
Ud	iP		13 06 23.6	
De	iP		13 05 58.3	
	i		13 06 03.0	

" 14

Ud	iP		14 26 19.3	
De	iP		14 26 17.1	

Tadzhik-Sinkiang.
Origin time = 14 18 27.

" 14

Up	iP		15 05 30.6	C
	iPn		15 05 41.6	
			micr sec	
	P	Z'	0.3 1.0	
Ki	iP		15 04 30.9	
	i		15 04 41.8	
			micr sec	
	P	Z'	0.3 1.1	
	i	Z'	0.4 1.0	
Sk	iP		15 05 25.1	C
	iPn		15 05 34.2	
	i		15 05 45.7	
Um	iP		15 04 55.7	C
	i(Pn)		15 05 09.1	
	i		15 06 29.8	
Ud	iP		15 05 42.7	C
	i		15 05 46.6	
	iPn		15 05 57.9	
	i		15 06 08.6	
De	iP		15 06 05.0	
	iPn		15 06 28.9	

Western Siberia.
m = 5.8 (Up,Ki).
Probably explosion.
Long-lasting reverberation wave trains on SP records.

" 14

Ki	iP		15 55 15.9	
Ud	iP		15 55 29.8	

Tadzhik-Sinkiang.
Origin time = 15 47 38.

" 14

Up	iP		16 10 36.2	
	iPP		16 11 09.4	
Ki	iP		16 11 44.8	
Sk	iP		16 11 13.6	C
Ud	iP		16 10 42.0	C
De	iP		16 10 07.9	
	i		16 10 11.9	

Crete (h = 60 km).

" 14

Up	i		16 48 55.2	
	iSgl		16 49 10.1	
Sk	e		16 47 41	
	iSgl		16 47 48.0	
	iSg2		16 47 51.6	

(cont.)

1974
Aug. 14 (cont.)

Um	iSgl		16 49 34.2	
Ud	iSgl		16 48 13.9	
De	iSgl		16 49 26.2	

West coast of Norway, 61.8°N, 4.8°E.
Origin time = 16 45 46.
By combination with Bergen and Kongsberg readings.

" 14

Ud	iP		17 21 08.0	

" 14

Ud	i(Sgl)		18 08 09.8	
De	iSgl		18 08 21.7	

" 14

Ki	iPKP		18 15 21.2	
Um	iPKP		18 15 18.7	
Ud	iPKP		18 15 10.4	

Argentina (h = 130 km).

" 14

Sk	iPKPl		18 52 40.9	
Um	iPKPl		18 52 35.9	
	i		18 52 38.1	
Ud	iPKPl		18 52 51.4	

Kermadec Islands.

" 14

Ki	iP		20 04 12.4	

Canada (h = N).

" 14

Up	i(P)		21 09 01.7	
Um	i(P)		21 10 44.7	
Ud	e(P)		21 09 02	

" 14

Up	iP		21 45 13.0	

" 14

Ki	iP		22 05 59.7	
Um	iP		22 06 26.4	
Ud	iP		22 06 51.1	
De	iP		22 07 14.1	C

South of Alaska.

" 14

Up	iP		22 14 28.8	
			micr sec	
	Mx	E	0.6 12	
	Mx	N	1.2 17	
	Mx	Z	0.8 12	
Ki	iP		22 14 31.5	
	i		22 14 39.5	
			micr sec	
	Mx	E	0.5 12	
	Mx	N	1.1 13	
	Mx	Z	0.4 10	
Sk	iP		22 14 52.5	
	i		22 15 01.0	
Um	iP		22 14 23.7	
	i		22 14 32.7	
Ud	iP		22 14 45.4	

(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
Aug. 14 (cont.)

	Ud	i	22 14 54.2
	De	iP	22 14 44.5
		i	22 14 52.7

Tadzhik-Sinkiang (h = N).
M = 4.9 (Up,Ki).
Probably two shocks, 8.5 sec apart.

" 14

Ki	iP		23 57 42.3
Um	iP		23 57 34.7
Ud	iP		23 57 56.6

Sinkiang, China.
Origin time = 23 50 05.

" 15

Ki	iP		00 39 37.2

Mariana Islands (h = 50 km).

" 15

Ki	iP		00 40 12.2
Um	iP		00 40 34.1

" 15

Ud	iPKP1		01 38 31.2
De	iPKP1		01 38 42.8 C

Tonga Islands (h = 170 km).

" 15

Ki	iP		02 14 03.9	
			micr	sec
	P	Z'	0.1	1.1
Sk	iP		02 14 27.0	
Um	iP		02 14 13.6	
Ud	iP		02 14 28.7	

North of Halmahera (h = 60 km).
Our readings are consistently late compared to the NEIS solution.

" 15

Up	iP		02 24 52.9
Um	iP		02 25 12.1

" 15

Up	iP		03 53 49.1	
Sk	iP		03 53 44.9	
Um	iP		03 53 29.0	
Ud	iP		03 53 56.8	

Japan (h = 45 km).

" 15

Up	iPKP		03 54 45.4	
			micr	sec
	Mx	E	0.7	19
	Mx	N	0.7	20
	Mx	Z	0.8	20
Ki	iPKP		03 54 33.0	
			micr	sec
	Mx	E	0.9	20
	Mx	N	0.5	19
	Mx	Z	0.9	20

(cont.)

1974
Aug. 15 (cont.)

Sk	iPKP		03 54 43.9
Um	iPKP		03 54 38.7
Ud	iPKP		03 54 45.9
De	iPKP		03 54 53.2

Solomon Islands (h = 60 km).
M = 5.5 (Up,Ki).

" 15

Up	iP		04 46 14.3
Ki	iP		04 46 17.4 C
Sk	iP		04 46 37.7
Um	iP		04 46 09.6
Ud	iP		04 46 31.2 C
De	iP		04 46 30.3 C

Tadzhik-Sinkiang (h = N).

" 15

Ki	iP		08 34 10.8
Ud	iP		08 34 24.7

Tadzhik-Sinkiang.
Origin time = 08 26 33.

" 15

Ud	iP		08 36 29.2 C
De	iP		08 36 28.0

" 15

Up	iPKP1		08 46 46.4
Ud	iPKP1		08 46 47.1

" 15

Up	iP		10 57 33.3
Ki	iP		10 57 01.1
Sk	iP		10 57 30.4
Um	iP		10 57 15.0
Ud	iP		10 57 40.2
De	iP		10 57 52.4

Bonin Islands (h = 420 km).

" 15

Ki	eP		11 30 29
Ud	iP		11 30 45.1
De	iP		11 30 44.1

Tadzhik-Sinkiang (h = N).

" 15

Ki	iP		13 14 14.4 C
Ud	iP		13 14 29.1
De	eP		13 14 31

Kashmir-Sinkiang (h = 110 km).

" 15

Sk	iPKP1		14 45 19.0
	i		14 45 48.0
Um	iPKP1		14 45 18.1

" 15

Ki	e(P)		15 06 56
Um	e(P)		15 05 52
De	eP		15 05 01
	i		15 05 06.6

" 15

Up	iP		15 41 19.3
	i		15 41 25.3

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Aug.	15	Um	iPKP	18 46 11.1	
		Ud	iPKP	18 46 02.9	
		Chile (h = 100 km).			
"	15	Up	iP	18 56 23.8	
		Um	iP	18 57 12.5	
			i	18 57 22.0	
		Ud	iP	18 56 31.1	
"	15	Ki	i(P)	20 12 15.3	
		Ud	i(P)	20 12 26.8	
"	15	Up	iP	23 17 01.1	
		Ki	iP	23 16 42.0	
		Sk	iP	23 17 08.9	
		Um	iP	23 16 51.2	
		Ud	iP	23 17 10.0	
		Luzon (h = N).			
"	15	Up	i(P)	23 36 22.5	
			i	23 36 46.8	
		Um	i(P)	23 34 03.2	
		Ud	i(P)	23 35 15.5	
"	15	Up	iP	23 51 25.6	
		Ki	iP	23 51 23.0	C
		Sk	eP	23 51 46	
		Ud	iP	23 51 36.4	
		Tadzhik-Sinkiang.			
		Origin time = 23 43 47.			
"	16	Up	eP	00 03 05	
			i	00 03 11.5	
"	16	Up	iP	00 18 42.9	
		Ki	iP	00 18 44.3	C
				micr	sec
			P Z'	0.1	0.8
			Mx E	0.4	11
			Mx N	0.5	12
			Mx Z	0.4	12
		Sk	iP	00 19 04.7	
			iPP	00 20 46.8	
		Um	iP	00 18 36.6	C
			iPP	00 20 09.9	
		Ud	iP	00 18 58.4	C
			iPP	00 20 36.5	
		De	iP	00 18 57.3	C
		Tadzhik-Sinkiang (h = 50 km).			
"	16	Up	iP	01 58 29.5	
			ipP	01 58 41.1	
		Ki	iP	01 57 41.9	
		Um	iP	01 58 04.1	
			ipP	01 58 18.3	
		Ud	iP	01 58 34.9	
		(cont.)			

1974 Aug.	16	(cont.)			
		Ud	ipP	01 58 47.0	
		Kurile Islands.			
		h = 45 km (Up,Um,Ud).			
"	16	Um	iP	06 10 26.5	
		Atlantic Ocean (h = N).			
"	16	Ki	iP	06 26 29.9	
		Um	iP	06 26 40.1	
		Mariana Islands (h = 50 km).			
"	16	Ki	iP	06 33 54.4	
		Um	iP	06 34 05.2	
		Mariana Islands (h = 20 km).			
"	16	Ud	iPKP1	07 22 31.5	
		De	iPKP1	07 22 42.2	
		Fiji Islands (h = 500 km).			
"	16	Up	iP	08 49 30.1	
"	16	Um	iP	09 38 46.4	
		Ud	iP	09 38 35.5	
"	16	Up	iP	09 52 28.4	C
			ipP	09 52 42.7	
			iS	10 01 19	
			iP'P'	10 20 44.8	
				micr	sec
			P Z'	0.1	0.7
			pP Z'	0.2	1.0
			Mx E	3.6	19
			Mx N	4.3	20
			Mx Z	6.8	20
		Ki	iP	09 51 35.2	C
			ipP	09 51 50.9	
			iPcP	09 52 20.8	
			iPP	09 53 49	
			iScP	09 56 18.4	
			eS	09 59 44	
				micr	sec
			P Z'	0.1	0.9
			Mx E	3.7	19
			Mx N	4.0	17
			Mx Z	4.2	18
		Sk	iP	09 52 09.3	C
			ipP	09 52 23.7	
			iPcP	09 52 40.7	
		Um	iP	09 52 01.6	
			ipP	09 52 15.5	
			iPcP	09 52 37.1	
			iS	10 00 35	
			i(P'P')	10 20 38.8	
			iP'P'	10 20 55.0	
		Ud	iP	09 52 28.6	C
		(cont.)			

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
Aug. 16 (cont.)

Ud	ipP	09 52 43.2	
	iPcP	09 52 54.8	
De	iP	09 52 50.8	C
	ipP	09 53 05.1	

Aleutian Islands.
h = 55 km (Up,Ki,Sk,Um,Ud, De).
m = 5.9, M = 5.8 (Up,Ki).
The appearance of clear ScP, especially on Ki Z', from earthquakes in this epicentral region is noteworthy; cf Aug. 13 at 03 57 and Aug. 14 at 05 45.

" 16

Up	i(P)	11 51 14.9	
	i	11 51 35.0	
Ud	iP	11 51 06.3	

" 16

Ud	iP	12 21 47.4	

Panama (h = 35 km).

" 16

Ki	iP	13 23 29.3	
Sk	iP	13 24 02.6	
Um	iP	13 23 44.7	
	ipP	13 24 01.6	
Ud	iP	13 24 13.0	
	ipP	13 24 27.9	
De	iP	13 24 25.9	

Japan.
h = 60 km (Um,Ud).

" 16

Ki	iP	16 31 40.9	
Sk	iP	16 31 57.1	
Ud	iP	16 32 27.7	C

" 16

Ki	iSKPl	17 18 40.5	
De	iPKPl	17 16 14.7	

Fiji Islands (h = 440 km).

" 16

Ud	iP	18 06 50.1	

" 16

Up	iP	19 56 57.2	
	ipP	19 57 23.9	
Ki	iP	19 56 36.7	C
		micr	sec
	P Z'	0.1	1.0
Sk	iP	19 57 02.1	
Um	iP	19 56 43.9	
	ipP	19 57 12.0	
Ud	iP	19 57 02.0	C
De	iP	19 57 09.9	

Mindanao.
h = 110 km (Up,Um).

" 16

Ki	iP	22 26 42.9	

1974
Aug. 17

Ki	iP	03 30 45.9	
Um	iP	03 30 38.1	
Ud	iP	03 31 00.0	

Tadzhik-Sinkiang (h = N).

" 17

Up	iP	04 00 11.7	
Ki	iP	03 59 19.7	
Sk	iP	03 59 59.1	
Um	iP	03 59 43.6	

Okhotsk Sea (h = 3 km).

" 17

Ud	iP	05 19 47.7	

" 17

Up	iP	05 23 02.3	C
	i	05 23 07.2	
	iPcP	05 23 53.6	
		micr	sec
	P Z'	0.1	1.0
	Mx E	0.4	11
	Mx N	0.6	14
	Mx Z	0.5	15
Ki	iP	05 22 09.8	C
	i	05 22 14.4	
		micr	sec
	P Z'	0.1	1.2
	Mx E	0.7	16
	Mx N	0.9	15
	Mx Z	1.1	15
Sk	iP	05 22 49.7	
	i	05 22 54.9	
Um	iP	05 22 33.8	C
	i	05 22 38.7	
	iPcP	05 23 38.2	
Ud	iP	05 23 08.4	C
	i	05 23 40.7	
De	iP	05 23 28.9	
	i	05 23 33.5	

Okhotsk Sea (h = 1 km).
m = 5.7, M = 5.0 (Up,Ki).
Double P, average separation 4.8 sec.

" 17

Ud	iP	15 19 02.9	

" 17

Ki	iP	16 31 38.4	
Um	iP	16 31 44.4	
Ud	iP	16 32 01.4	

Molucca Passage (h = N).

" 17

Um	iP	19 14 43.9	

Japan.

" 17

Ud	iP	21 05 56.1	

Aleutian Islands (h = 55 km).

" 17

Ki	iP	22 32 17.4	
Ud	iP	22 32 39.9	

Molucca Passage (h = 120 km).

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974							
Aug.	17	Up	iP		23 16 39.1		
		Ki	iP		23 17 15.4		
		Ud	iP		23 16 53.9		
		De	iP		23 16 39.6		
		Iran.					
"	17	Up	i(P)		23 58 41.4		
					micr	sec	
			Mx	E	0.7	13	
			Mx	N	1.5	17	
			Mx	Z	1.5	16	
		Ki	iP		23 58 38.2		
					micr	sec	
			P	Z'	0.1	0.9	
			Mx	E	0.9	15	
			Mx	N	1.4	14	
			Mx	Z	1.2	14	
		Sk	eP		23 58 58		
			i		23 59 04.1		
		Um	iP		23 58 29.4		
			i		23 58 36.5		
		Ud	iP		23 58 51.7		
			i		23 58 59.9		
		De	eP		23 58 50		
		Tadzhik-Sinkiang (h = 30 km).					
		M = 4.9 (Up,Ki).					
		Double P, of which Up (P) corresponds to the latter onset.					
"	18	Ki	iP		03 06 37.3		
		Ud	iP		03 06 52.2		
		Tadzhik-Sinkiang.					
		Origin time = 02 58 59.					
"	18	Ud	iP		08 37 56.7		
"	18	Um	iP		10 52 18.9	C	
		Japan (h = 130 km).					
"	18	Up	eP		10 59 37		
			iPKP		11 03 07.8		
			iPP		11 04 42.6		
					micr	sec	
			PKP	Z'	0.2	1.4	
			Mx	E	50	20	
			Mx	N	35	20	
			Mx	Z	110	19	
		Ki	e(PKP)		11 03 10		
			iPKP		11 03 15.3		
			iPP		11 05 03		
					micr	sec	
			PKP	Z'	0.9	2.5	
			Mx	E	63	21	
			Mx	N	43	19	
			Mx	Z	50	22	
		(cont.)					

1974							
Aug.	18	(cont.)					
		Sk	i(PKP)		11 03 04.3		
			iPKP		11 03 12.2		
			i(PP)		11 04 29.2		
		Um	iP		10 59 49	C	
			iPKP		11 03 08.9		
			iPP		11 04 57		
		Ud	iPKP		11 02 59.8		
			i		11 03 37.7		
			iPP		11 04 31.0		
			iPKKP1		11 13 05.8		
		De	iPKP		11 03 02.4		
			iPP		11 04 30.9		
		Chile (h = 35 km).					
		M = 7.4 (Up,Ki).					
		PP exhibits unusually long periods on the SP records, around 4-5 sec.					
"	18	Up	iP		11 26 34.3		
"	18	Up	iP		12 02 42.8		
		Um	iP		12 02 49.9		
"	18	Ud	iPKP1		12 08 35.2	C	
"	18	Ki	iP		12 12 06.2		
		Mexico (h = 50 km).					
"	18	Up	iP		12 14 13.1		
"	18	Up	iP		12 21 07.7		
"	18	Up	iP		12 34 27.9		
			i		12 34 43.8		
"	18	Um	iP		13 36 39.6		
"	18	Um	iP		14 03 46.6		
"	18	Up	iP		14 19 24.0	C	
			i		14 19 40.4		
					micr	sec	
			P	Z'	0.1	1.5	
		Um	iP		14 19 21.6		
"	18	Ki	iP		16 10 55.1		
					micr	sec	
			Mx	N	0.5	13	
		Um	iP		16 10 46.8		
		Ud	iP		16 11 09.8		
		De	iP		16 11 08.0		
		Tadzhik-Sinkiang (h = 20 km).					
"	18	Up	iP		17 27 31.6		
		Ki	iP		17 26 40.3		
		(cont.)					

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Aug.					
18	(cont.)				
	Um	iP		17 27 07.0	
		i		17 27 25.0	
	Ud	iP		17 27 34.1	
	Aleutian Islands (h = N).				
" 18	Up	iPKP		18 13 02.5	
	Ki	iPKP		18 12 48.7	
	Sk	iPKP		18 13 00.3	
	Um	iPKP		18 12 55.0	
	Ud	iPKP		18 13 04.5	
	De	iPKP		18 13 11.3	
	New Hebrides Islands (h = 180 km).				
" 18	Up	iP		18 17 28.7	
	Ud	iP		18 17 41.2	
	Iran (h = N).				
" 18	Up	Mx		21 10	
				micr	sec
		Mx	E	0.8	20
		Mx	Z	0.8	19
	Chile (h = 30 km).				
" 18	Ud	iP		21 19 08.1	
" 18	Ud	iP		22 36 26.5	
" 18	Ki	iPKP		23 26 55.7	
	Ud	iPKP		23 26 42.5	
	Chile (h = 20 km).				
" 19	Up	iPKPl		00 25 35.5	
	Ud	iPKPl		00 25 39.3	
" 19	Ud	iP		01 22 54.2	
" 19	Ki	iP		01 31 33.2	
	Ud	iP		01 31 47.2	
	Tadzhik-Sinkiang.				
	Origin time = 01 23 55.				
" 19	Up	iP		12 29 15.6	
		i		12 29 32.9	
				micr	sec
		P	Z'	0.2	1.2
		Mx	E	0.8	20
		Mx	N	0.5	15
		Mx	Z	0.6	16
	Ki	iP		12 28 39.2	
				micr	sec
		P	Z'	0.1	1.0
		Mx	E	1.2	18
		Mx	N	1.0	16
		Mx	Z	0.9	17
	(cont.)				

1974 Aug.				
19	(cont.)			
	Sk	eP		12 29 11
		i		12 29 12.6
	Um	iP		12 28 54.9
	Ud	iP		12 29 23.0
		i		12 29 28.5
	De	iP		12 29 37.1
	Japan (h = 25 km).			
	m = 6.0, M = 5.3 (Up,Ki).			
" 19	Ki	iP		16 14 48.2
	Sk	iP		16 15 18.3
	Um	iP		16 15 03.7
		i		16 15 14.0
	Ud	iP		16 15 32.6
	Japan (h = 25 km).			
" 19	Up	iPl		17 51 14.1
		iP2		17 51 21.3
	Ki	ePl		17 50 38
		iP2		17 50 43.3
	Sk	iPl		17 51 10.7
	Um	iPl		17 50 53.5
		iP2		17 50 58.1
	Ud	iPl		17 51 20.8
		iP2		17 51 27.9
	De	iP2		17 51 40.8
	Japan (h = 40 km).			
	Double P, denoted Pl and P2.			
" 19	Up	iPgl		19 52 57.8
		iS*		19 54 14.7
		iSgl		19 54 21.4
	Sk	i		19 52 56.8
		iSgl		19 53 36.4
	Um	iSn		19 54 27.6
		i		19 54 51.2
		iS*		19 55 10.2
		iSgl		19 55 14.5
	Ud	iPn		19 52 04.8
		iPgl		19 52 17.4
		iSn		19 52 54.4
		iSgl		19 53 13.9
	De	iSn		19 53 26.2
		iSgl		19 53 56.4
	West coast of Norway, 60.0°N, 5.0°E.			
	Origin time = 19 51 00.			
	By combination with Bergen and Kongsberg readings.			
" 19	Up	iS*		19 57 11.7
		i(Sgl)		19 57 25.4
	Sk	iSgl		19 56 31.1
	Um	iSgl		19 58 10.5
	Ud	iSgl		19 56 08.5
	(cont.)			

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
Aug. 19 (cont.)

	De	iSgl	19 56 48.4	
	West coast of Norway,			
	60.0°N, 5.0°E.			
	Origin time = 19 53 56.			
	By combination with			
	Bergen readings.			
" 19	Up	iP	20 07 26.3	
		iPP	20 10 53.6	
	Ki	iP	20 07 18.3	
		ipP	20 07 29.2	
			micr	sec
		Mx E	0.4	14
		Mx N	0.5	17
	Sk	iP	20 07 10.6	
		iPP	20 10 24.3	
	Um	iP	20 07 25.6	
		ipP	20 07 37.5	
		iPP	20 10 48.9	
		iS	20 17 52	
	Ud	iP	20 07 17.0	
	De	iP	20 07 22.9	
		ipP	20 07 34.1	
	Off Pacific coast of			
	Central America.			
	h = 40 km (Ki,Um,De).			
" 19	Up	iP	22 03 00.8	
	Ki	iP	22 02 14.7	
	Sk	iP	22 02 51.3	
	Um	iP	22 02 36.1	
	Ud	iP	22 03 07.3	
	Kurile Islands (h = N).			
" 19	Up	iP	23 44 33.2	
	Ki	iP	23 44 35.7	
	Sk	iP	23 44 56.9	
	Um	iP	23 44 28.2	
	Ud	iP	23 44 49.3	
	De	iP	23 44 45.8	
	Tadzhik-Sinkiang (h = N).			
" 20	Up	iP	00 17 30.0	
	Ki	iP	00 17 32.4	
		i	00 17 38.3	
" 20	Ki	iP	03 08 55.5	
	Um	iP	03 09 33.1	
	Ud	eP	03 09 49	
		i	03 10 06.3	
" 20	Up	iP	04 51 34.7	
	Ki	iP	04 50 58.5	
			micr	sec
		Mx E	0.8	18
		Mx N	0.5	14

(cont.)

1974
Aug. 20 (cont.)

	Sk	iP	04 51 30.9	
	Um	iP	04 51 14.0	
	Ud	iP	04 51 41.0	
	De	iP	04 51 55.8	
	Japan (h = 30 km).			
" 20	Sk	iP	05 03 30.3	
	Um	iP	05 03 42.1	
" 20	Ki	iP	06 43 05.2	
	Ud	iP	06 43 40.4	
		i	06 43 48.1	
	Formosa (h = 70 km).			
" 20	Ud	i(Sgl)	07 48 00.8	
" 20	Up	iP	08 07 10.5	
	Ki	eP	08 06 31	
	Um	iP	08 06 49.8	
	Ud	iP	08 07 14.2	
	Japan (h = 10 km).			
" 20	Um	iP	08 34 46.6	
	Ud	iP	08 35 19.4	
	Japan (h = 140 km).			
" 20	Ki	iP	10 26 19.4	
	Sk	iP	10 26 42.6	
	Ud	iP	10 26 32.5	
	De	iP	10 26 31.6	
	Tadzhik-Sinkiang (h = N).			
" 20	Up	iP	14 25 49.5	
	Ud	iP	14 25 49.4	
	Greece.			
" 20	Ud	iP	15 01 55.5	
" 20	Ki	iP	15 22 13.0	
			micr	sec
		Mx N	0.5	13
	Um	iP	15 22 08.3	
	Ud	iP	15 22 27.4	
	De	iP	15 22 25.9	
	Tadzhik-Sinkiang (h = 50 km).			
" 20	Ud	iP	15 41 41.2	
" 20	Ki	iP	16 50 03.4	
	Sk	iP	16 50 24.2	
	Ud	iP	16 50 14.3	
	De	iP	16 50 13.7	
	Tadzhik-Sinkiang (h = N).			
" 20	Ki	iP	17 40 37.3	
	Um	iP	17 40 30.3	

(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
Aug. 20 (cont.)
Ud iP 17 40 50.6
De iP 17 40 49.7
Tadzhik-Sinkiang (h = N).

" 20 Ki iP 18 44 17.9
Um iP 18 44 27.6
Ud iP 18 44 48.2
Caroline Islands (h = 6 km).

" 20 Ki iP 20 14 24.0
Um iP 20 14 37.6

" 20 Up iP 20 55 47.4 C
ipP 20 55 59.5
micr sec
P Z' 0.9 0.9
Mx E 0.8 20
Mx N 2.1 23
Mx Z 2.7 22
Ki iP 20 54 53.6
ipP 20 55 08.7
micr sec
P Z' 0.5 0.9
Mx E 1.8 20
Mx N 1.5 18
Mx Z 1.9 20
Sk iP 20 55 27.6 C
Um iP 20 55 19.3
iS 21 03 43
Ud iP 20 55 48.5
De iP 20 56 10.7 C
Aleutian Islands.
h = 50 km (Up,Ki).
m = 6.7, M = 5.4 (Up,Ki).

" 20 Ud iPP 21 56 33.0
Chile-Argentina (h = 90 km).

" 20 Up iP 23 57 27.7
Ki iP 23 58 46.1
Sk iP 23 58 07.8
Um iP 23 58 08.5
i 23 58 30.7
Ud iP 23 57 34.5
i 23 57 41.5
De iP 23 57 02.0
Greece (h = 50 km).

" 20 Ki iP 23 59 17.4
Um iP 23 59 10.5
Ud iP 23 59 31.5
De iP 23 59 30.7
Tadzhik-Sinkiang.
Origin time = 23 51 40.

1974
Aug. 21 Um iP 01 08 23.0
Ud iP 01 08 52.5

" 21 Um iP 03 53 58.7 C
Ud iP 03 54 27.9
De iP 03 54 43.4
Japan (h = 390 km).

" 21 Ki i(P) 07 59 56.8
Ud i(P) 08 00 17.7

" 21 Up iP 08 44 41.8
Ud iP 08 44 46.8
Greece.

" 21 Ud iP 08 58 46.0
Greece.

" 21 Up iP 09 58 44.5
Ud iP 09 58 48.0
Greece.

" 21 Sk iP 12 45 31.4
Ud iP 12 44 55.0
Greece.

" 21 Up iP 13 07 43.1
Sk iP 13 08 23.7
i 13 08 27.1
Ud iP 13 07 51.2
i 13 07 55.4
De i(P) 13 07 22.2
Ionian Sea (h = N).

" 21 Ud iP 14 31 20.3

" 21 Ud iP 15 11 38.9 C
De iP 15 11 08.1

" 21 Ud i(P) 16 17 03.0

" 21 Up iP 18 16 05.4
Ki iP 18 16 06.7 C
Sk iP 18 16 27.9
Um iP 18 15 59.6
Ud iP 18 16 21.3
i 18 16 23.4
De iP 18 16 20.3
i 18 16 22.7
Tadzhik-Sinkiang (h = N).

" 21 Up iP 18 52 51.8
i 18 52 54.1
Ki iP 18 52 54.8
i 18 52 57.1
(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Aug.	21	(cont.)				
		Ki			micr	sec
			P	Z'	0.1	0.6
		Sk	eP		18 53	15
			i		18 53	18.4
		Um	iP		18 52	45.5
			i		18 52	49.0
			iPP		18 54	20.0
		Ud	iP		18 53	08.7
			i		18 53	10.8
		De	iP		18 53	07.9
			i		18 53	09.7
			iPP		18 54	49.4
		Tadzhik-Sinkiang (h = N).				
		Double P.				
"	21	Up	iP		21 26	01.4
		Ud	iP		21 26	12.5
		De	iP		21 26	17.9
		Molucca Passage (h = 45 km).				
"	21	Um	iP		21 45	17.5
"	22	Ud	iP		01 30	33.6
		Greece.				
"	22	Ud	iP		06 18	28.6
		De	iP		06 18	25.9
		Sumatra (h = N).				
"	22	Ki	iP		07 13	21.3
		Ud	iP		07 13	30.3
		Tadzhik-Sinkiang.				
"	22	Ki	iP		09 24	25.4 C
		Ud	iP		09 24	39.6
		De	iP		09 24	38.6
		Tadzhik-Sinkiang (h = N).				
"	22	Ki	iPKP		12 07	10.2
		Sk	iPKP		12 07	30.6
		Ud	iPKPl		12 07	29.7
			i		12 07	39.4
		De	iPKPl		12 07	41.1 D
		Fiji Islands (h = 580 km).				
"	22	Ud	iP		15 31	01.5
		De	i(P)		15 31	51.8
"	22	Up	iP		15 34	13.1
		Ki	iP		15 34	20.9
		Sk	iP		15 34	39.0
		Um	iP		15 34	11.0
		Ud	iP		15 34	29.8
		De	iP		15 34	25.0
		Afghanistan-USSR (h = 110 km).				

1974 Aug.	22	Sk	iSgl		15 48	21.1
		Ud	iSgl		15 48	02.1
		West coast of Norway, near Bergen.				
"	22	De	iP		18 04	48.2
"	22	Up	iP		21 16	32.6
		Ud	iP		21 16	17.8
"	22	De	iP		21 35	06.1
"	22	De	iP		21 50	33.1
"	23	Up	iP		04 10	39.8
					micr	sec
			Mx	E	0.7	14
			Mx	N	0.7	19
			Mx	Z	1.1	17
		Ki	iP		04 10	13.3
					micr	sec
			Mx	E	0.6	11
			Mx	N	0.5	13
			Mx	Z	0.8	12
		Ud	iP		04 10	49.0
		De	eP		04 11	00
		Formosa (h = N).				
		M = 5.3 (Up,Ki).				
"	23	Up	i(PP)		05 08	02.2
			iPKP		05 08	45.3
			iPP		05 09	03.8
					micr	sec
			PP	Z'	0.1	1.1
			Mx	E	1.0	17
			Mx	N	0.9	17
			Mx	Z	1.7	18
		Ki	iP		05 04	18.5
			i(PP)		05 07	41.2
			iPP		05 08	37.4
			iSKS		05 14	41
					micr	sec
			P	Z'	0.1	1.2
			Mx	E	1.8	18
			Mx	N	2.5	20
			Mx	Z	1.4	17
		Sk	iP		05 04	38.7
			i(PP)		05 08	22.5
			iPKP		05 08	48.5
			iPP		05 09	15.5
		Um	iP		05 04	24.8
			i(PP)		05 07	41.1
			iPP		05 08	41.8
		Ud	iP		05 04	40.8
			e(PP)		05 07	58
			iPKP		05 08	47.9

(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Aug.	23	(cont.)				
		Ud	iPP	05 09 18.9		
		De	iP	05 04 47.0		
			iPKP	05 08 50.8		
			iPP	05 09 23.0		
		Banda Sea (h = 140 km).				
		m = 6.3, M = 5.8 (Up,Ki).				
		M uncorrected for focal depth.				
"	23	Ki	iP	06 00 00.6		
		Ud	iP	06 00 14.8		
		De	iP	06 00 13.2		
		Tadzhik-Sinkiang.				
		Origin time = 05 52 23.				
"	23	Sk	iSgl	06 04 49.1		
		Ud	iSgl	06 04 29.8		
		De	iSgl	06 05 06.6		
		West coast of Norway,				
		near 60.0°N, 5.0°E.				
		Origin time = 06 02 14.				
		By combination with Bergen readings.				
"	23	Up	iP	06 47 12.5		
		Um	iP	06 46 52.4		
		Ud	iP	06 47 19.7		
		Japan (h = 320 km).				
"	23	Ki	iP	08 25 54.5		
		Sk	iP	08 26 29.8		
		Um	iP	08 26 13.0		
		Ud	iP	08 26 44.0	C	
		De	iP	08 27 00.0		
		Japan (h = 170 km).				
"	23	Ud	iP	08 46 48.2		
		Japan.				
"	23	Up	iP	09 00 38.4		
		Ki	iP	09 00 40.0		
		Sk	iP	09 00 28.7		
		Ud	iP	09 00 27.8		
		De	iP	09 00 29.1		
		Colombia (h = 160 km).				
"	23	Up	iP	09 06 50.9		
		Sk	iP	09 06 26.7		
		Um	iP	09 06 43.6		
		Ud	iP	09 06 47.0		
"	23	Ud	iP	12 30 15.2		
"	23	Up	iP	13 09 43.9		
		Ki	iP	13 08 54.1		
		Ud	iP	13 09 48.9		
		Kurile Islands.				

1974 Aug.	23	Up	iSgl	13 52 21.3		
		Sk	eSgl	13 52 15		
		Ud	iPgl	13 50 54.9		
			i	13 51 15.4		
			iSgl	13 51 18.7		
		De	i(Sn)	13 52 15.4		
			iSgl	13 52 42.4		
		South Norway,				
		near 60.2°N, 10.2°E.				
		Origin time = 13 50 24.				
"	23	De	e	15 46 56		
			i(Rg)	15 47 01.0		
"	23	Up	iP	16 34 07.4		
			i(PP)	16 35 45.7		
		Ki	iP	16 34 07.8		
		Sk	eP	16 34 28		
		Um	iP	16 34 00.8		
		Ud	iP	16 34 21.7	C	
			iPP	16 36 01.5		
		De	iP	16 34 20.8		
		Tadzhik-Sinkiang (h = N).				
"	23	Up	ePKPl	17 54 24		
		Sk	ePKPl	17 54 16		
		Um	iPKPl	17 54 08.0	C	
		Ud	iPKPl	17 54 26.4		
		De	iPKPl	17 54 38.6		
"	23	Up	i(P)	18 55 55.1		
		Um	i(P)	18 56 43.0		
"	24	Um	iP	00 07 01.6		
		Ud	iP	00 06 46.7		
		Haiti-Puerto Rico (h = N).				
"	24	Up	iP	03 00 14.2	C	
				micr	sec	
			P Z'	0.1	1.0	
		Ki	iP	03 00 15.5	C	
			ipP	03 00 37.5		
				micr	sec	
			P Z'	0.2	1.3	
		Sk	iP	03 00 01.6	C	
			ipP	03 00 26.0		
		Um	iP	03 00 17.7	C	
			ipP	03 00 41.2		
		Ud	iP	03 00 04.6	C	
			ipP	03 00 28.7		
		De	iP	03 00 06.7	C	
			ipP	03 00 31.1		
		Colombia.				
		h = 90 km (Ki,Sk,Um,Ud,De).				
		m = 6.0 (Up,Ki).				
"	24	Up	iP	03 22 05.2		

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974					
Aug.	24	Up	iP	03 34 24.9	
"	24	De	iPKP1	03 41 15.9	
		Tonga Islands (h = N).			
"	24	Ki	iP	06 08 19.1	
		Um	iP	06 08 11.3	
			i	06 08 21.5	
		Ud	iP	06 08 33.1	
		De	iP	06 08 31.6	
			i	06 08 40.3	
		Tadzhik-Sinkiang.			
		Origin time = 06 00 41.			
"	24	Ud	iP	07 04 00.9	
		De	iP	07 03 59.8	
		Tadzhik-Sinkiang.			
		Origin time = 06 56 09.			
"	24	Ud	iPKP1	09 19 51.6 C	
		De	iPKP1	09 20 02.1	
"	24	Up	iPKP1	09 26 30.7	
		Ud	ePKP1	09 26 27	
"	24	Up	eP	10 25 15	
			i	10 25 16.0	
			i	10 25 32.6	
		Sk	eP	10 25 55	
		Um	iP	10 25 54.4	
		Ud	iP	10 25 21.4	
			i	10 25 25.7	
		De	iP	10 24 45.2	
		Greece (h = N).			
"	24	Up	iP	10 52 06.4 C	
			ipP	10 52 18.7	
			eP'P'	11 20 23	
			i	11 20 29.6	
				micr sec	
			P Z'	0.2 1.0	
			Mx E	1.4 19	
			Mx N	2.9 20	
			Mx Z	3.5 20	
		Ki	iP	10 51 12.8 C	
			ipP	10 51 25.5	
				micr sec	
			P Z'	0.3 0.9	
			Mx E	2.7 19	
			Mx N	2.6 19	
			Mx Z	3.1 21	
		Sk	iP	10 51 43.2 C	
			ipP	10 51 55.5	
		Um	iP	10 51 40.0 C	
			ipP	10 51 52.0	
			iPcP	10 52 16.5	
		(cont.)			

1974				
Aug.	24	(cont.)		
		Um	iP'P'	11 20 33.5
		Ud	iP	10 52 05.6 C
			ipP	10 52 17.5
			iP'P'	11 20 23.0
		De	iP	10 52 28.3 C
			ipP	10 52 40.4
		Aleutian Islands.		
		h = 45 km (Up,Ki,Sk,Um,Ud,De).		
		m = 6.2, M = 5.6 (Up,Ki).		
"	24	Up	i(P)	10 58 26.5
		Ud	iP	10 58 14.3
"	24	Up	iP	11 29 20.3
		Ki	iP	11 29 23.9
		Sk	iP	11 29 44.8 C
		Um	iP	11 29 16.1 C
		Ud	iP	11 29 37.7 C
			i	11 29 41.9
		De	iP	11 29 36.6 C
			i	11 29 40.8
		Tadzhik-Sinkiang (h = N).		
"	24	Um	iP	11 34 34.8
		Ud	iP	11 35 08.1
"	24	Up	iP	12 22 12.1
			iX	12 22 38.8
			iPP	12 23 47.0
		Ki	iP	12 22 14.4
			i	12 22 16.7
			iX	12 22 29.5
				micr sec
			Mx N	0.8 14
		Sk	iP	12 22 36.6
			iX	12 22 56.1
		Um	iP	12 22 07.1
			iPP	12 23 37.8
		Ud	iP	12 22 28.8
		De	iP	12 22 27.8
			iX	12 22 43.2
		Tadzhik-Sinkiang (h = N).		
		X is probably P of another earthquake.		
"	24	Ki	eP	12 44 12
		Ud	iP	12 44 25.2
		Tadzhik-Sinkiang.		
		Origin time = 12 36 33.		
"	24	Up	iPKP	14 19 53.7
			iSKP1	14 22 21.4
		Ki	iPKP	14 19 38.8
		Sk	iPKP	14 19 50.4
		(cont.)		

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Aug.	24	(cont.)				
		Um	iPKP	14 19 45.9		
			iSKP1	14 22 07.9		
		Ud	iPKP	14 19 56.1		
			iSKP1	14 22 24.3		
		De	iPKP	14 20 02.3		
			iSKP1	14 22 34.2		
		New Hebrides Islands (h = 630 km).				
"	24	Ki	iP	14 34 28.5		
		Um	iP	14 34 53.9		
		Ud	iP	14 35 21.1		
		Aleutian Islands (h = 40 km).				
"	24	Ud	iP	16 00 39.9		
"	24	Up	iP	16 52 10.7		
		Um	iP	16 52 24.8		
		Ud	iP	16 51 53.6		
		De	iP	16 51 53.9		
		North Atlantic Ocean (h = N).				
"	24	Ud	iP	17 51 29.3		
		De	eP	17 51 28		
		Tadzhik-Sinkiang.				
		Origin time = 17 43 37.				
"	24	Ud	iP	18 27 48.4		
		Aleutian Islands (h = 70 km).				
"	24	Up	iP	18 29 07.5		
		Ki	iP	18 28 58.5		
			i	18 29 03.7		
		Sk	iP	18 29 21.8		
			i	18 29 27.1		
		Um	iP	18 28 58.3 C		
			i	18 29 03.7		
		Ud	iP	18 29 20.1 C		
			i	18 29 30.9		
		De	iP	18 29 26.0		
		Burma (h = N).				
"	24	De	ePKP1	18 51 52		
			i	18 52 03.6		
		Tonga Islands (h = N).				
"	24	Um	iPKP	19 07 17.5		
		Chile-Argentina (h = 110 km).				
"	24	Up	iPKKP1	19 27 44		
		Um	iPKP	19 17 03.9		
			ePKKP1	19 27 33		
		Ud	iPKP	19 16 55.5		
			iPKKP1	19 27 45.3		
		De	i(PP)	19 16 44.4		
		Argentina (h = 30 km).				

1974 Aug.	24	Up	iP	22 13 37.3		
		Ki		micr	sec	
			Mx	E	0.9	15
			Mx	N	0.6	14
			Mx	Z	0.7	15
		Sk	eP	22 14 13		
		Um	iP	22 14 16.1		
		Ud	iP	22 13 39.9		
			iPP	22 14 05.4		
		Ionian Sea (h = 10 km).				
"	24	Ki	iP	22 15 39.2		
		Um	iP	22 15 44.5		
"	24	Up	iP	22 29 51.6 C		
			iPcP	22 30 18.1		
				micr	sec	
			P	Z'	0.1	1.0
		Ki	iP	22 28 58.2 C		
				micr	sec	
			P	Z'	0.2	0.9
		Sk	iP	22 29 28.3 C		
		Um	iP	22 29 25.2 C		
			iPcP	22 29 57.0		
		Ud	iP	22 29 50.7 C		
			ipP	22 30 02.0		
		De	iP	22 30 13.3 C		
			i	22 30 37.8		
		Aleutian Islands. h = 40 km (Ud). m = 6.0 (Up,Ki).				
"	24	Up	iP	22 32 15.9		
		Sk	iP	22 32 53.0		
		Ud	iP	22 32 19.7		
		Greece.				
"	25	Up	iSgl	00 14 42.5		
		Sk	iSgl	00 13 27.9		
		Um	iSgl	00 15 16.5		
		Ud	iSgl	00 13 40.0		
		De	iSgl	00 14 47.7		
		Off west coast of Norway, 61.3°N, 4.4°E. Origin time = 00 11 14. By combination with Bergen readings.				
"	25	Ud	iPKP1	00 36 57.7		
"	25	Ki	iP	01 23 10.6		
		Um	iP	01 23 37.2		
		Ud	iP	01 24 02.0		
		Aleutian Islands (h = 60 km).				
"	25	Up	iP	01 30 34.6 D		
		(cont.)				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
Aug. 25 (cont.)

Up	iPP		01 33 27.8	
	iS		01 40 23	
			micr	sec
	P	Z'	0.5	0.9
	PP	Z'	0.1	1.3
	Mx	E	1.8	19
	Mx	N	3.4	16
	Mx	Z	4.6	18
Ki	iP		01 29 58.7	D
	iPP		01 32 35.2	
	iS		01 39 16	
			micr	sec
	P	Z'	0.3	1.0
	PP	Z'	0.2	1.5
	Mx	E	6.2	16
	Mx	N	4.3	15
	Mx	Z	6.1	16
Sk	iP		01 30 29.6	D
	iPP		01 33 19.0	
Um	iP		01 30 14.4	D
	ipP		01 30 27.6	
	iS		01 39 43	
Ud	iP		01 30 41.7	D
	ipP		01 30 55.0	
De	iP		01 30 54.3	D
	i		01 31 13.2	
	iPP		01 34 08.8	

South of Japan.
h = 50 km (Um,Ud).
m = 6.3, M = 5.9 (Up,Ki).

" 25

Um	iP	02 00 18.6	
Ud	eP	02 00 47	

South of Japan.
Origin time = 01 48 45.

" 25

Up	eP	02 23 46	
	ipP	02 23 57.8	
Ki	iP	02 23 10.3	
	ipP	02 23 21.6	
Um	iP	02 23 25.9	
	ipP	02 23 37.4	
Ud	iP	02 23 53.1	

South of Japan.
h = 40 km (Up,Ki,Um).

" 25

Um	iP	02 37 48.1	C
Ud	iP	02 38 14.9	

South of Japan (h = N).

" 25

Ki	iP	03 05 03.4	
Um	iP	03 05 18.9	C
Ud	iP	03 05 46.5	

South of Japan (h = N).

1974
Aug. 25

Ud	iPKP	03 47 03.3	

Fiji Islands (h = N).

" 25

Up	iP	04 26 34.4	
Ki	iP	04 25 41.2	
Sk	iP	04 26 13.6	
Um	iP	04 26 06.9	
Ud	iP	04 26 36.0	

Aleutian Islands (h = 25 km).

" 25

Up	iP	04 32 10.8	
	ipP	04 32 23.1	
		micr	sec
	P	Z' 0.1	1.0
	pP	Z' 0.1	0.8
	Mx	Z 0.7	18
Ki	iP	04 31 34.8	
	ipP	04 31 46.8	
	iPP	04 34 12.1	
		micr	sec
	P	Z' 0.1	1.0
	Mx	E 0.5	16
	Mx	N 0.5	15
	Mx	Z 0.6	16
Sk	iP	04 32 07.8	
	ePP	04 34 57	
Um	iP	04 31 50.8	
	ipP	04 32 02.8	
Ud	iP	04 32 17.9	
	ipP	04 32 30.1	
De	iP	04 32 31.2	
	ipP	04 32 43.3	

South of Japan.
h = 45 km (Up,Ki,Um,Ud,De).
m = 5.7 (Up,Ki).

" 25

Up	iPKP1	05 10 19.9	
Um	iSKP1	05 13 04.9	
Ud	iPKP1	05 10 24.3	
De	iPKP1	05 10 35.1	

Tonga-Kermadec Islands
(h = 580 km).

" 25

Ud	iP	05 33 43.7	

Greece.

" 25

Up	iP	06 01 31.7	
Sk	eP	06 02 13	
Um	iP	06 02 10.5	
Ud	iP	06 01 38.8	

Ionian Sea (h = 9 km).

" 25

Um	iP	07 54 48.9	

" 25

Sk	iP	08 20 08.5	

(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974						
Aug.	25	(cont.)				
		Ud	iP		08 19 36.0	
		De	eP		08 19 01	
"	25	Ud	iP		08 24 36.9	
		De	eP		08 24 07	
"	25	Up	iP		09 33 29.1	
		Um	iP		09 33 01.8	
		Ud	iP		09 33 26.8	
		De	iP		09 33 49.4	
		Aleutian Islands (h = N).				
"	25	Up	iP		10 07 01.2	
			ipP		10 07 12.6	
					micr sec	
			P	Z'	0.1 1.1	
		Ki	iP		10 06 25.6	
			ipP		10 06 37.3	
					micr sec	
			Mx	E	0.5 16	
			Mx	N	0.4 15	
			Mx	Z	0.5 15	
		Um	iP		10 06 41.0	
			ipP		10 06 53.3	
		Ud	iP		10 07 08.3	
			ipP		10 07 20.8	
		De	epP		10 07 34	
		South of Japan.				
		h = 45 km (Up,Ki,Um,Ud).				
"	25	Up	eP		10 25 13	
		Ki	iP		10 24 36.8	
		Sk	epP		10 25 21	
		Um	iP		10 24 51.6	
			ipP		10 25 02.9	
		Ud	iP		10 25 18.8	
			ipP		10 25 30.0	
		South of Japan.				
		h = 40 km (Um,Ud).				
"	25	Up	ipP		10 39 48.2	
		Ki	ipP		10 39 13.0	
		Um	iP		10 39 17.7	
			ipP		10 39 28.7	
			i		10 39 40.4	
		Ud	iP		10 39 45.0	
		South of Japan.				
		h = 40 km (Um).				
"	25	Um	iP		10 52 49.2	
		Ud	iP		10 53 16.9	
		South of Japan.				
		Origin time = 10 41 15.				
"	25	Up	iP		11 26 06.9	
		(cont.)				

1974						
Aug.	25	(cont.)				
		Up	ipP		11 26 17.0	
		Um	iP		11 25 45.7	
			ipP		11 25 57.6	
		Ud	iP		11 26 11.8	
		Japan.				
		h = 40 km (Up,Um).				
"	25	Up	iPKP		12 10 23.4	
		Ud	ePKP		12 10 24	
		De	iPKP		12 10 32.9	
		Fiji Islands (h = 400 km).				
"	25	Um	iP		13 27 16.3	
		Panama-Colombia (h = N).				
"	25	Up	iP		13 36 12.8	
		Sk	iP		13 36 52.2	
		Um	iP		13 36 52.5	
			i		13 37 03.6	
		Ud	iP		13 36 19.1	C
		Greece (h = N).				
"	25	Up	iPKP1		14 53 11.7	
			ipPKP1		14 55 18.7	
			iSKP1		14 56 03.7	
		Ki	iPKP		14 53 01.1	
			ipPKP		14 55 07.3	
			iSKP1		14 55 41.8	
					micr sec	
			SKP1	Z'	0.3 1.6	
		Sk	iPKP		14 53 09.6	
			epPKP		14 55 13	
			iSKP1		14 55 57.6	
		Um	i(PKP)		14 53 02.3	
			iPKP		14 53 09.4	
			ipPKP		14 55 11.9	
			iSKP1		14 55 52.8	
		Ud	iPKP1		14 53 13.4	
			ipPKP1		14 55 19.3	
			iSKP1		14 56 05.2	
		De	iPKP1		14 53 23.7	
			i		14 53 41.4	
			i		14 55 26.7	
			ipPKP1		14 55 30.9	
			iSKP1		14 56 13.7	
		Tonga-Kermadec Islands.				
		h = 550 km (Up,Ki,Sk,Um,Ud, De).				
"	25	Up	iPKP1		16 47 39.3	
		Ud	iPKP1		16 47 40.9	
		De	iPKP1		16 47 49.9	
"	25	Ud	iPKP1		16 57 27.8	
"	25	Ki	iP		17 09 36.7	
		(cont.)				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Aug.	25	(cont.)			
		Um	iP	17 10 03.4	
		Ud	iP	17 10 28.8	
		De	iP	17 10 51.4	
		Aleutian Islands (h = 50 km).			
"	25	Um	i(P)	17 22 38.4	
		Ud	i(P)	17 22 23.0	
			i	17 22 28.8	
"	25	Ki	iP	17 48 55.7	
		Sk	eP	17 49 17	
		Um	i(P)	17 48 41.8	
		Ud	e(P)	17 49 04	
			iP	17 49 10.2	
		De	iP	17 49 08.6	
		Tadzhik-Sinkiang (h = N).			
"	25	Up	iP	19 47 58.8	
		Ki	eP	19 49 18	
		Sk	iP	19 48 37.7	
		Um	iP	19 48 38.2	
		Ud	iP	19 48 05.3 C	
		De	iP	19 47 33.8 C	
		Ionian Sea (h = N).			
"	25	Ud	iP	20 52 32.0	
		De	iP	20 52 31.1	
		Tadzhik-Sinkiang.			
		Origin time = 20 44 40.			
"	25	Ud	iP	23 37 25.6 C	
		Hindu Kush (h = 330 km).			
"	26	Ki	iP	00 13 13.4	
		Um	iP	00 13 15.0	
"	26	Up	iP	00 30 22.6	
		Ki	iP	00 30 13.0	
		Ud	iP	00 30 38.0	
		Sinkiang, China (h = N).			
"	26	Ud	iP	01 58 49.6	
"	26	Up	iP	06 40 16.2 C	
		Ki	iP	06 40 05.7 C	
		Sk	iP	06 39 58.0	
		Um	iP	06 40 13.1 C	
		Ud	iP	06 40 06.6	
		De	iP	06 40 13.8 C	
		Mexico-Guatemala (h = N).			
"	26	Sk	iP	07 21 32.8	
		Ud	iP	07 21 04.0	
		Aegean Sea (h = 40 km).			
"	26	Ud	i(P)	10 36 35.3	

1974 Aug.	26	Up	iP	14 44 20.0	
			i	14 44 56.3	
		Ki	iP	14 43 46.6	
			i	14 44 17.0	
		Sk	iP	14 44 12.6	
		Um	iP	14 44 00.0 C	
			ipP	14 44 11.9	
		Ud	iP	14 44 26.7	
		De	eP	14 44 39	
		South of Japan.			
		h = 45 km (Um).			
"	26	De	iP	15 15 34.2	
"	26	Up	iP	15 27 08.0	
		Ki	iP	15 26 51.3 C	
		Ud	iP	15 27 15.5	
		Mindanao (h = 90 km).			
"	26	Ud	iPKPl	16 25 47.4	
		De	iPKPl	16 25 58.4	
"	26	Ud	iP	18 03 46.9	
		De	iP	18 04 02.0	
		Japan (h = 45 km).			
"	26	Up	eP	18 15 16	
			i	18 15 34.0	
		Ki	iP	18 16 26.2	
		Sk	eP	18 16 01	
			i	18 16 11.9	
		Um	i	18 16 14.9	
		Ud	iP	18 15 21.1	
			i	18 15 28.6	
		De	iP	18 14 47.2	
			i	18 15 00.6	
		Crete (h = N).			
		Probably multiple event.			
"	27	Up	iP	05 51 09.6	
		Ki	iP	05 51 12.2	
			i	05 51 14.3	
		Sk	iP	05 51 32.3	
			i	05 51 35.0	
		Um	iP	05 51 04.4	
			i	05 51 06.8	
		Ud	iP	05 51 26.2	
			i	05 51 28.5	
		De	iP	05 51 25.0	
		Tadzhik-Sinkiang (h = N).			
		Double P, average separation 2.4 sec.			
"	27	Up	iPKP	06 43 00.3	
		Ki	iPKP	06 43 08.0 C	
		Um	iPKP	06 43 05.4	
			i	06 43 12.2	

(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Aug.	27	(cont.)				
		Ud	iPKP	06 42 56.9		
		De	ePKP	06 42 51		
		Chile (h = 25 km).				
"	27	Up	iP	08 21 03.6		
		Ki	iP	08 21 02.3		
		Sk	iP	08 21 16.6		
		Um	iP	08 21 00.2		
			ipP	08 21 28.9		
		Ud	eP	08 21 13		
		Sumatra.				
		h = 110 km (Um).				
"	27	Ud	i(SKP1)	11 23 23.7		
"	27	Ud	iP	11 54 18.0		
"	27	Up	iP	12 46 42.6		
		Ud	iP	12 46 59.3		
"	27	Ud	i(P)	12 52 23.6		
"	27	Up	iP	13 03 34.7	D	
			iPP	13 05 06.5		
				micr	sec	
			P	Z' 0.7	1.3	
			PP	Z' 0.2	1.0	
			Mx	E 8.9	12	
			Mx	N 12	17	
			Mx	Z 25	13	
		Ki	iP	13 03 38.3	D	
			iPP	13 05 13		
				micr	sec	
			P	Z' 0.7	0.9	
			Mx	E 29	15	
			Mx	N 18	11	
			Mx	Z 25	14	
		Sk	iP	13 03 58.9	D	
			i(PP)	13 05 34.5		
			iPP	13 05 40.5		
		Um	iP	13 03 30.8	D	
			iPP	13 05 03.3		
			iS	13 09 27		
		Ud	iP	13 03 52.9	D	
			iPP	13 05 34.1		
		De	iP	13 03 51.5	D	
			iPP	13 05 33.1		
		Tadzhik-Sinkiang (h = N).				
		m = 6.2, M = 6.2 (Up,Ki).				
"	27	Ki	iP	13 23 25.4		
		Ud	iP	13 23 41.5		
		Tadzhik-Sinkiang.				
		Origin time = 13 15 48.				
"	27	De	iP	13 42 06.7		
1974 Aug.	27	Ki	iP	13 44 45.8		
		Sk	iP	13 45 07.5		
		Um	iP	13 44 39.9		
		Ud	iP	13 45 00.4		
			i	13 45 07.6		
		De	eP	13 44 59		
		Tadzhik-Sinkiang (h = N).				
"	27	Up	iP	14 32 20.8		
		Ki	iP	14 32 21.6		
		Sk	eP	14 32 42		
		Um	iP	14 32 13.5		
		Ud	iP	14 32 36.3		
		De	iP	14 32 34.7		
		Tadzhik-Sinkiang (h = N).				
"	27	Up	iP	14 58 42.0	C	
		Ki	eP	14 57 49		
		Ud	iP	14 58 42.8		
			i	14 58 58.2		
		Aleutian Islands.				
"	27	Ki	iPKP	15 14 51.1		
		Ud	iPKP1	15 15 13.8		
"	27	Ki	iPKP	15 39 12.1		
			iPP	15 40 11.7		
		Um	iPKP	15 39 10.1		
		Ud	iPKP	15 39 01.9		
		Argentina (h = 150 km).				
"	27	Up	iPKP1	15 48 13.6		
			ipPKP1	15 50 13.9		
		Ki	ePKP1	15 47 49		
			ipPKP1	15 49 58.7		
		Sk	iPKP1	15 48 00.9		
		Um	iPKP1	15 47 56.4		
			i	15 47 57.9		
			ipPKP1	15 50 03.5		
		Ud	iPKP1	15 48 09.5		
			i	15 48 16.3		
			ipPKP1	15 50 21.6		
		De	iPKP1	15 48 18.2		
			i	15 48 29.5		
		Kermadec Islands region.				
		h = 570 km (Up,Ki,Um,Ud).				
		Alternatively, pPKP1 could instead be PKP1 of another shock.				
"	27	Sk	iP	16 20 20.8		
		Ud	iP	16 20 15.0		
		De	iP	16 20 14.3		
		Tadzhik-Sinkiang.				
		Origin time = 16 12 23.				
"	27	Up	iP	17 41 32.7		
		(cont.)				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Aug.	27	(cont.)					
		Up	iPP		17 43 07.0		
					micr	sec	
			P	Z'	0.2	1.5	
			Mx	E	0.7	12	
			Mx	N	1.3	15	
			Mx	Z	1.2	15	
		Ki	iP		17 41 35.1		C
			i		17 41 38.7		
					micr	sec	
			P	Z'	0.1	1.0	
			i	Z'	0.2	0.8	
			Mx	E	2.4	18	
			Mx	N	2.5	12	
			Mx	Z	1.2	14	
		Sk	iP		17 41 56.1		
			i		17 41 59.4		
			iPP		17 43 29.6		
		Um	iP		17 41 27.4		
			i		17 41 30.8		
			iPP		17 42 59.1		
		Ud	iP		17 41 49.3		
		De	iP		17 41 48.1		
			i		17 41 51.5		
			iPP		17 43 28.3		
		Tadzhik-Sinkiang (h = N).					
		m = 5.7, M = 5.1 (Up,Ki).					
		Double P, average separation 3.4 sec.					
"	27	Ki	iP		18 12 34.1		
			i		18 12 37.1		
		Ud	iP		18 12 48.3		
		De	eP		18 12 48		
		Tadzhik-Sinkiang.					
		Origin time = 18 04 56.					
"	27	Ud	iP		18 48 05.5		
"	27	Ki	iP		23 08 27.9		
		Ud	iP		23 08 41.8		
		Tadzhik-Sinkiang.					
		Origin time = 23 00 50.					
"	28	Up	iP		01 01 31.6		C
		Ki	iP		01 00 52.5		C
		Sk	iP		01 01 25.6		C
		Um	iP		01 01 09.8		
		Ud	iP		01 01 38.3		C
		De	iP		01 01 53.6		
		Japan (h = 50 km).					
"	28	Ud	iP		02 26 59.0		
"	28	Up	iPKP1		05 43 05.3		
			iPKP2		05 43 11.1		
		Ki	iPKP1		05 42 43.8		
		(cont.)					

1974 Aug.	28	(cont.)					
		Sk	iPKP1		05 42 57.0		
		Um	iPKP1		05 42 52.4		
			i		05 43 03.2		
			i		05 43 24.9		
		Ud	iPKP1		05 43 05.0		C
			iPKP2		05 43 12.9		
		De	iPKP1		05 43 14.7		
		South of Kermadec Islands (h = 100 km).					
"	28	Ud	iP		07 54 51.5		
		Vancouver Island (h = N).					
"	28	Ki	iP		09 29 42.9		
		Sk	iP		09 30 03.5		
		Um	iP		09 29 35.3		
		Ud	iP		09 29 56.9		
		De	iP		09 29 55.6		
		Tadzhik-Sinkiang (h = 55 km).					
"	28	Ud	iPKP		10 37 29.6		
		De	iPKP		10 37 36.1		
		Fiji Islands (h = 610 km).					
"	28	Ki	iP		14 51 51.1		
		De	i(P)		14 52 04.3		
			i		14 52 07.5		
"	28	Ud	iP		15 08 48.9		
"	28	Up	iSKP1		15 36 23.7		
		Ud	iSKP1		15 36 27.1		
		New Hebrides Islands (h = 160 km).					
"	28	Ki	iP		17 12 36.4		
		Ud	iP		17 12 51.5		
		Tadzhik-Sinkiang (h = 50 km).					
"	28	Up	iP		18 53 34.3		
		Ki	iP		18 52 41.3		
					micr	sec	
			Mx	E	0.6	16	
			Mx	N	1.0	19	
			Mx	Z	1.1	19	
		Sk	iP		18 53 08.6		
		Um	iP		18 53 08.3		
			i		18 53 11.7		
		Ud	iP		18 53 31.2		
		De	iP		18 53 54.4		
		Gulf of Alaska (h = 4 km).					
"	28	Ud	iP		20 46 35.0		
"	28	Ud	iP		21 11 29.2		

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Aug.	28	Up	iP		22 40 34.5		
		Ki	iP		22 40 02.3		
		Sk	iP		22 40 30.6		
		Um	iP		22 40 16.0		
		Ud	iP		22 40 41.1		
		De	iP		22 40 53.0		
		South of Japan.					
		Origin time = 22 28 41.					
"	28	Up	eP		22 44 04		
		Ki	iP		22 43 17.4		
		Um	iP		22 43 50.8		
"	29	Ki	iP		01 07 47.3		
"	29	Up	iP		01 09 51.4	C	
					micr	sec	
			P	Z'	0.1	0.8	
		Ki	iP		01 10 00.0	C	
					micr	sec	
			P	Z'	0.1	1.0	
		Sk	iP		01 10 16.9	C	
		Um	iP		01 09 49.6	C	
		Ud	iP		01 10 07.9	C	
		De	iP		01 10 04.2	C	
			iPP		01 11 50.5		
		Afghanistan-USSR					
		(h = 230 km).					
		m = 5.3 (Up,Ki).					
"	29	Ki	iP		01 53 47.9		
		Ud	iP		01 54 02.3		
		Tadzhik-Sinkiang.					
		Origin time = 01 46 10.					
"	29	Up	iPKPl		03 09 50.8	C	
			ipPKPl		03 10 07.1		
					micr	sec	
			PKPl	Z'	0.2	1.0	
			Mx	N	0.9	24	
			Mx	Z	0.8	24	
		Ki	iPKPl		03 09 26.1		
		Sk	iPKPl		03 09 43.0	C	
		Um	iPKPl		03 09 41.4	C	
		Ud	iPKPl		03 09 52.2	C	
		De	iPKPl		03 10 01.5	C	
			ipPKPl		03 10 18.5		
		Kermadec Islands.					
		h = 60 km (Up,De).					
"	29	Up	iPKPl		03 16 04.4	C	
		Sk	ePKPl		03 15 57		
		Um	iPKPl		03 15 53.2		
		Ud	iPKPl		03 16 06.1		
		Kermadec Islands.					
		Origin time = 02 56 28.					
1974 Aug.	29	Ki	iP		03 34 31.2		
		Sk	eP		03 35 02		
		Um	iP		03 34 58.4	D	
		Ud	iP		03 35 23.6	D	
		De	iP		03 35 46.4	D	
		Aleutian Islands.					
		Origin time = 03 24 26.					
"	29	Sk	iPKP		04 51 52.6		
		Tonga Islands (h = N).					
"	29	Up	iP		06 28 26.6		
		Ud	iP		06 28 24.3		
"	29	Up	iP		06 51 07.4		
		Ki	iP		06 50 15.1		
		Sk	iP		06 50 48.0		
		Um	iP		06 50 40.5		
		Ud	iP		06 51 08.4		
		De	iP		06 51 30.0		
		Aleutian Islands (h = N).					
"	29	Up	eP		07 53 17		
		Ud	iP		07 53 45.1		
		Tadzhik-Sinkiang.					
"	29	Ki	iP		08 32 57.6		
		Sk	iP		08 33 19.0		
		Ud	iP		08 33 11.3		
		De	iP		08 33 10.4		
		Tadzhik-Sinkiang (h = N).					
"	29	Ki	iP		08 43 38.7		
		Ud	iP		08 44 43.1		
		De	iP		08 45 10.3		
		Northern Siberia, near the estuary of the River Lena.					
"	29	Up	iP		10 04 23.9	C	
			iS		10 08 00		
			i		10 10 41		
					micr	sec	
			P	Z'	2.2	0.7	
			Mx	E	18	4	
			Mx	N	18	8	
			Mx	Z	25	8	
		Ki	iP		10 02 53.3	C	
			iS		10 05 07		
			i(P'P')		10 39 32.9		
					micr	sec	
			P	Z'	2.7	0.7	
			Mx	E	18	6	
			Mx	N	18	6	
			Mx	Z	17	6	
		Sk	iP		10 04 02.2	C	
			iS		10 07 16.4		

(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Aug.	29	(cont.)				
		Sk	e(P'P')	10 39 13		
		Um	iP	10 03 31.0	C	
			iS	10 06 16		
			e(P'P')	10 39 11		
		Ud	iP	10 04 34.0	C	
		De	iP	10 05 06.4	C	
			iS	10 09 22.5		
		Novaya Zemlya.				
		m = 6.5 (Up,Ki).				
		Underground explosion.				
		The (P'P') phases are all early compared to JB tables.				
"	29	Ud	iP	14 02 48.8		
		De	i	14 03 38.3		
"	29	Up	iP	15 04 42.4	C	
			iS	15 08 22.0		
				micr	sec	
			P Z'	0.1	0.7	
		Ki	iP	15 03 38.7	C	
			i	15 03 47.9		
			iS	15 06 28.1		
				micr	sec	
			P Z'	0.3	1.0	
		Sk	iP	15 04 40.4	C	
		Um	iP	15 04 01.3		
			i	15 04 07.3		
		Ud	iP	15 04 57.3		
		De	iP	15 05 21.1	C	
			i	15 05 28.4		
		Ural Mountains.				
		m = 5.4 (Up,Ki).				
		Underground explosion.				
"	29	Ud	iP	22 39 58.5		
		Japan.				
"	30	Sk	iP	00 19 14.3		
		Ud	iP	00 18 36.0		
		Aegean Sea (h = 15 km).				
"	30	Up	iPKPl	01 44 14.5		
			ipPKPl	01 44 30.6		
		Ki	i(PKP)	01 44 04.2		
		Sk	ePKPl	01 44 12		
		Ud	iPKPl	01 44 16.5		
		De	iPKPl	01 44 24.9		
		Kermadec Islands.				
		Origin time = 01 24 40.				
"	30	Ki	i(P)	05 13 43.8		
		Um	i(P)	05 14 33.2		
"	30	Um	iP	05 48 42.6		

1974 Aug.	30	Up	iX	07 58 19.0		
		Ki	iP	07 57 49.1		
			iX	07 58 11.4		
		Sk	iX	07 58 02.1		
		Um	iP	07 57 50.8		
			iX	07 58 18.3		
		Ud	iP	07 57 47.1		
			i	07 58 04.6		
			iX	07 58 09.2		
		De	iX	07 58 14.6		
		Nicaragua (h = 60 km).				
		X, of larger amplitude than P, may be P of another earthquake; alternatively, interpreting X as pP gives h = 90 km.				
"	30	Up	iP	09 34 05.9		
		Ud	iP	09 34 14.3		
		De	eP	09 34 24		
"	30	Up	iPgl	10 44 01.3		
			iSgl	10 44 18.2		
			i	10 44 22.5		
			iRg	10 44 27.2		
		Ki	iSgl	10 47 49.1		
		Sk	ePgl	10 44 44		
			iSgl	10 45 33.0		
		Um	iSgl	10 45 54.0		
		Ud	iPgl	10 43 49.8		
			iSgl	10 43 58.8		
			iRg	10 44 03.0		
		De	iPgl	10 44 43.1		
			iSgl	10 45 33.8		
		Grängesberg, Dalarna-Västmanland, Sweden, 60.1°N, 15.0°E.				
		Origin time = 10 43 39.				
		Rockburst.				
		Felt.				
		Ref.: M. Båth, Phys. Earth Planet. Inter., 1975, 10: 369-376.				
"	30	Ud	iRg	11 30 56.8		
"	30	Up	iP	13 55 19.9		
		Ud	iP	13 55 25.1		
"	30	Ud	i(P)	13 58 28.9		
"	30	Up	iP	14 34 20.2	C	
"	30	Up	iP	15 11 48.5	C	
				micr	sec	
			P Z'	0.3	1.3	
		(cont.)				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974							
Aug.	30	(cont.)					
		Ki	iP		15 11 14.2	C	
					micr	sec	
			P	Z'	0.2	1.4	
		Sk	iP		15 11 22.6	C	
		Um	iP		15 11 34.0	C	
		Ud	iP		15 11 40.8	C	
		De	iP		15 11 57.0	C	
		Nevada.					
		m = 6.2 (Up,Ki).					
		Underground explosion.					
"	30	Sk	iP		17 47 22.3		
		Ud	iP		17 46 55.3		
		De	iP		17 46 18.4		
		Yugoslavia (h = N).					
"	30	Up	iP		18 26 09.8		
			ipP		18 26 23.0		
		Ki	iP		18 25 33.3		
			ipP		18 25 46.1		
		Sk	iP		18 26 04.9		
		Um	iP		18 25 49.8	C	
			ipP		18 26 02.8		
		Ud	iP		18 26 16.8	C	
			ipP		18 26 30.1		
		South of Japan.					
		h = 50 km (Up,Ki,Um,Ud).					
"	30	De	iPKPl		19 27 03.7		
		Fiji Islands (h = 590 km).					
"	30	Up	iRg		19 39 49.8		
		Ud	iRg		19 39 33.8		
		Central Sweden.					
"	30	Ud	i(P)		19 45 00.4		
"	30	Up	iP		20 13 08.3		
			ipP		20 13 35.8		
		Ki	iP		20 13 03.8	C	
		Sk	iP		20 13 24.3		
			ipP		20 13 53.2		
		Um	iP		20 13 01.4		
			ipP		20 13 28.3		
		Ud	iP		20 13 21.8		
			ipP		20 13 48.6		
		De	iP		20 13 23.3	C	
		Burma.					
		h = 110 km (Up,Sk,Um,Ud).					
"	30	Up	iP		20 13 30.9		
		Um	iP		20 13 18.3		
		De	iP		20 13 41.9		
		Celebes (h = 50 km).					
"	30	Up	iRg		20 55 21.9		
		(cont.)					

1974							
Aug.	30	(cont.)					
		Ud	iRg		20 54 50.5		
		Central Sweden.					
"	30	Up	iRg		21 16 09.6		
		Ud	eRg		21 15 46		
		Central Sweden, possibly Grängesberg aftershock.					
"	30	Up	iP		23 41 26.6	C	
			ipP		23 41 38.4		
			iS		23 51 21		
					micr	sec	
			P	Z'	0.1	1.0	
			pP	Z'	0.2	1.0	
			Mx	E	2.0	18	
			Mx	N	2.6	18	
			Mx	Z	3.4	15	
		Ki	iP		23 40 52.5	C	
			ipP		23 41 04.1		
			iS		23 50 18		
					micr	sec	
			P	Z'	0.1	1.0	
			pP	Z'	0.1	1.4	
			Mx	E	5.4	17	
			Mx	N	4.3	16	
			Mx	Z	5.5	16	
		Sk	iP		23 41 21.7		
			ipP		23 41 32.1		
		Um	iP		23 41 06.3	C	
			iS		23 50 45		
		Ud	iP		23 41 33.1	C	
			ipP		23 41 45.1		
		De	iP		23 41 46.2	C	
		South of Japan.					
		h = 40 km (Up,Ki,Sk,Ud).					
		m = 5.9, M = 5.9 (Up,Ki).					
"	31	Um	iP		00 16 50.4		
			i		00 17 08.2		
		Ud	iP		00 17 17.2		
		South of Japan (h = N).					
"	31	Um	iP		00 34 38.9		
		Ud	iP		00 35 05.6		
		South of Japan.					
"	31	Ki	e(PKP)		01 33 09		
		Sk	iPKP		01 33 24.0		
		Um	iPKP		01 33 18.8	C	
		Ud	iPKP		01 33 24.4		
		De	iPKP		01 33 28.8		
			i		01 33 34.2		
		Loyalty Islands (h = 15 km).					
"	31	Ud	iP		02 04 46.9		
		De	iP		02 04 46.0		

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Aug.	31	Ud	iP	02 38 58.9	
		Greece.			
"	31	Up	iRg	04 04 55.6	
		Ud	i	04 05 49.8	
"	31	Ud	iP	04 19 25.3	
"	31	Ki	i(P)	05 24 18.7	
		Um	i(P)	05 23 33.6	
"	31	Ud	iP	05 26 32.1	
			i	05 26 46.8	
"	31	Um	iP	05 37 58.3	
		Ud	iP	05 38 25.4	
		South of Japan.			
"	31	Up	iP	07 06 30.4	
		Ki	iP	07 05 11.0	
		Ud	iP	07 06 16.8	
"	31	Um	i(P)	07 17 11.9	
"	31	Up	iP	09 49 05.2	
		Ud	iP	09 49 10.6	
		De	iP	09 49 28.5	
		Kurile Islands (h = 55 km).			
"	31	Um	i(P)	10 34 28.9	
		Ud	iP	10 33 11.0	
"	31	Up	iP	11 39 15.0	
		Ki	iP	11 38 39.6	
		Sk	iP	11 39 10.9	
		Um	iP	11 38 54.6	
			ipP	11 39 22.1	
		Ud	iP	11 39 22.7	
		De	iP	11 39 36.7	
		South of Japan.			
		h = 110 km (Um).			
"	31	Ki	iP	11 42 17.1	
		Ud	eP	11 42 31	
		Tadzhik-Sinkiang.			
		Origin time = 11 34 39.			
"	31	Ud	iP	12 59 18.7	
"	31	Um	i(P)	13 19 57.3	
"	31	Up	eP	16 17 03	
"	31	Up	iP	17 21 30.2	
			iPP	17 22 58.7	
		Ki	iP	17 21 32.9	
		(cont.)			

1974 Aug.	31	(cont.)			
		Sk	iP	17 21 53.9	
			iPP	17 23 34.2	
		Um	iP	17 21 25.3	
		Ud	iP	17 21 46.9	
		De	iP	17 21 45.9	
		Tadzhik-Sinkiang (h = N).			
"	31	Up	iP	18 17 34.8	C
			ipP	18 17 49.1	
		Ki	iP	18 17 36.3	C
			ipP	18 17 50.5	
		Sk	eP	18 17 50	
		Um	iP	18 17 32.8	
			ipP	18 17 46.8	
		Ud	iP	18 17 45.6	C
			ipP	18 18 03.1	
		De	iP	18 17 43.5	
			ipP	18 17 58.5	
		Sumatra.			
		h = 55 km (Up,Ki,Um,Ud,De).			
"	31	De	iP	18 22 36.6	
"	31	Ud	iP	18 43 23.6	
"	31	Ud	iP	19 00 21.4	
"	31	Ud	eP	19 04 39	
"	31	Up	eP	19 58 16	
		Sk	eP	19 58 26	
		Ud	eP	19 58 29	
		De	iP	19 58 31.7	C
"	31	Up	iP	23 16 00.0	
		Ki	iP	23 16 09.1	
		Sk	iP	23 16 25.0	
		Um	iP	23 15 58.4	
		Ud	iP	23 16 16.2	
			ipP	23 17 00.9	
		Hindu Kush.			
		h = 220 km (Ud).			
		Origin time = 23 08 31.			
"	31	Up	eP	23 53 55	
		Ki	iP	23 52 43.4	
		Sk	iP	23 53 25.4	
			i	23 53 33.4	
		Um	iP	23 53 25.8	
			i	23 53 34.3	

Markus Båth

February 4, 1976

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S E I S M O L O G I C A L B U L L E T I N

U P P S A L A, K I R U N A, S K A L S T U G A N, U M E Å,

U D D E H O L M and D E L A R Y

Uppsala	(Up):	59°51.5'N,	17°37.6'E;	h = 14 m
Kiruna	(Ki):	67°50.4'N,	20°25.0'E;	h = 390 m
Skalstugan	(Sk):	63°34.8'N,	12°16.8'E;	h = 580 m
Umeå	(Um):	63°48.9'N,	20°14.2'E;	h = 16 m
Uddeholm	(Ud):	60°05.4'N,	13°36.4'E;	h = 240 m
Delary	(De):	56°28.2'N,	13°52.2'E;	h = 150 m

S E P T E M B E R 1 - 30, 1974

1974 Sep.	1	Up	iP	00 30 16.2 D
		Ki	iP	00 29 44.7 D
		Sk	iP	00 30 13.4
		Um	iP	00 29 58.4 D
		Ud	iP	00 30 23.0 D
		De	iP	00 30 35.4
		Bonin Islands (h = 390 km).		
"	1	Ud	iP	02 14 45.6
"	1	Up	iPKPl	02 56 34.9
		Ud	iPKPl	02 56 36.9
"	1	Up	iP	03 40 24.7
		Ud	iP	03 40 45.9
		De	eP	03 40 45
"	1	Ud	iP	05 09 17.5
"	1	Up	iPKPl	06 29 58.3
		Sk	iPKPl	06 29 49.2
		Um	iPKPl	06 29 43.2
		Ud	iPKPl	06 29 57.5
		Kermadec Islands.		
"	1	Sk	iPKP	09 52 50.6
		Ud	iPKP	09 52 49.0
		Off coast of Chile (h = N).		
"	1	Ki	iP	10 07 20.5
		Ud	iP	10 07 35.0
		Tadzhik-Sinkiang.		
		Origin time = 09 59 43.		
"	1	Up	iP	11 04 20.4
		Ki	iP	11 03 05.9
			i	11 03 08.8
		Sk	iP	11 03 18.1
		(cont.)		
1974 Sep.	1	(cont.)		
		Sk	i	11 03 21.9
			iS	11 05 02.6
		Um	iP	11 03 44.1
			i	11 03 47.1
		Ud	iP	11 04 04.6
			i	11 04 16.2
		De	iP	11 04 54.3
		Jan Mayen (h = N).		
		Double P.		
"	1	Ki	eP	11 20 43
		Sk	iP	11 20 53.4
			iS	11 22 32.0
		Probably Jan Mayen.		
		Origin time = 11 18 34.		
"	1	Ki	iP	13 17 18.7
		Sk	iP	13 17 31.2
			i	13 17 35.0
			iS	13 19 21.4
		Um	iP	13 17 56.4
			i	13 18 00.8
		Ud	iP	13 18 17.7
		Jan Mayen (h = N).		
		Double P.		
"	1	Ki	iP	14 02 03.0
		Sk	iP	14 01 54.4
			ipP	14 02 17.0
		Um	iP	14 02 10.3
			ipP	14 02 34.4
		Ud	iP	14 02 00.3
			ipP	14 02 23.4
		El Salvador.		
		h = 90 km (Sk,Um,Ud).		
"	1	Up	iP	16 02 46.8
		Ud	eP	16 02 59

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974						
Sep.	2	Up	iPKPl		00 13 03.5	
			i		00 13 10.0	
		Um	iPKPl		00 12 52.7	
		Ud	iPKPl		00 13 05.5	
"	2	Ki	iP		01 10 47.0	
		Ud	iP		01 11 01.1	
		Tadzhik-Sinkiang.				
		Origin time = 01 03 09.				
"	2	Up	iP		01 46 16.2	
		Ud	iP		01 46 29.6	
		Iran.				
"	2	Up	iP		04 46 07.7	D
			isP		04 46 24.4	
			iS		04 56 51	
					micr	sec
			P	Z'	0.2	1.3
		Ki	iP		04 46 07.6	D
			iS		04 56 51	
					micr	sec
			P	Z'	0.3	1.0
			Mx	E	0.6	18
			Mx	N	0.6	18
			Mx	Z	0.8	18
		Sk	iP		04 46 21.3	D
			iPP		04 50 01.3	
		Um	iP		04 46 04.8	D
			ipP		04 46 17.6	
			i		04 46 34.1	
			iPP		04 49 35.3	
			iS		04 56 47	
		Ud	iP		04 46 17.4	D
			ipP		04 46 29.4	
			iPP		04 49 57.8	
		De	iP		04 46 15.7	D
			isP		04 46 32.2	
		Sumatra.				
		h = 45 km (Um,Ud).				
		m = 6.5 (Up,Ki).				
		The phases interpreted as PP are consistently late.				
"	2	Up	ipP		05 28 46.4	
		Ki	iP		05 28 00.8	
		Sk	iP		05 28 32.3	
		Um	iP		05 28 15.8	
			ipP		05 28 26.6	
		Ud	iP		05 28 43.3	
			ipP		05 28 54.1	
		Japan.				
		h = 40 km (Um,Ud).				
"	2	Up	iP		08 54 45.4	
			i(sP)		08 55 02.2	
		(cont.)				

1974						
Sep.	2	(cont.)				
		Up	iSKS		09 05 09	
			iS		09 05 29	
		Ki	iP		08 54 45.5	
			ipP		08 54 59.2	
					micr	sec
			P	Z'	0.1	0.9
		Sk	iP		08 54 59.5	
		Um	iP		08 54 42.1	
			iS		09 05 24	
		Ud	iP		08 54 54.5	
			i(sP)		08 55 11.4	
		De	iP		08 54 54.2	
			ipP		08 55 06.7	
		Sumatra.				
		h = 50 km (Ki,De).				
"	2	Ki	iP		09 14 36.0	
		Um	iP		09 14 40.4	
		Ud	iP		09 14 58.2	
"	2	Ud	iPKPl		12 26 04.6	
		De	iPKPl		12 26 14.2	
		Fiji Islands (h = 440 km).				
"	2	Ki	iPKP		13 09 26.5	
		South Sandwich Islands (h = N).				
"	2	Um	iP		14 06 15.2	
"	2	Ud	iP		16 52 40.3	
"	2	Um	iP		18 05 36.0	
		Ud	iP		18 05 55.0	
"	2	Ki	ePKP		18 36 11	
		Sk	iPKP		18 36 23.3	
		Um	iPKP		18 36 18.1	D
		De	iPKP		18 36 35.0	
		Santa Cruz Islands (h = 120 km).				
"	2	Ki	eP		19 01 59	
		Sk	iP		19 02 25.5	
		Ud	iP		19 02 15.3	
		Sinkiang, China (h = N).				
"	2	Um	iP		23 31 46.1	
		Ud	iP		23 32 17.7	
		Kurile Islands.				
"	3	Up	iP		01 51 41.2	
					micr	sec
			P	Z'	0.1	0.9
		Ki	iP		01 51 04.9	
		(cont.)				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
Sep. 3 (cont.)

Sk	iP		01 51 35.8
Um	iP		01 51 19.9
Ud	iP		01 51 47.3
De	iP		01 52 01.5

South of Japan (h = 20 km).

" 3

Up	iP			01 52 11.2
	iS			02 01 59
			micr	sec
	P	Z'	0.1	1.1
	Mx	E	0.8	16
	Mx	N	1.3	18
	Mx	Z	1.2	18
Ki	iP			01 51 35.9
	iS			02 00 56
			micr	sec
	P	Z'	0.1	1.0
	Mx	E	1.2	16
	Mx	N	1.1	15
	Mx	Z	1.5	16
Sk	iP			01 52 06.2
Um	iP			01 51 50.4
	iS			02 01 23
Ud	iP			01 52 17.7

South of Japan.
Origin time = 01 40 15.
m = 5.9, M = 5.4 (Up,Ki).

" 3

Up	iP			01 52 23.5
			micr	sec
	P	Z'	0.1	1.1
Ki	iP			01 51 47.0
			micr	sec
	P	Z'	0.1	1.1
Um	iP			01 52 02.9
Ud	iP			01 52 30.9
De	iP			01 52 44.7

South of Japan.
Origin time = 01 40 28.
m = 5.9 (Up,Ki).

" 3

Up	iP			01 52 46.9
			micr	sec
	P	Z'	0.2	1.2
Ki	iP			01 52 09.7
			micr	sec
	P	Z'	0.1	1.3
Sk	iP			01 52 41.1
Um	iP			01 52 25.2
Ud	iP			01 52 53.4

South of Japan.
Origin time = 01 40 50.
m = 6.0 (Up,Ki).

" 3 Up iP 01 56 41.9
(cont.)

1974
Sep. 3 (cont.)

Ki	iP		01 55 48.5
Ud	iP		01 56 47.2

Kurile Islands (h = 20 km).

" 3

Up	iP			01 57 47.3
Ki	iP			01 57 11.0
Um	iP			01 57 26.7 D
Ud	iP			01 57 54.4

South of Japan.
Origin time = 01 45 51.

" 3

Um	iP			02 06 03.1
	i			02 06 14.6

South of Japan (h = 15 km).

" 3

Up	iP			06 07 15.7
	i			06 07 30.4
			micr	sec
	P	Z'	0.5	0.8
	Mx	E	3.1	15
	Mx	N	6.0	15
	Mx	Z	7.8	15
Ki	iP			06 06 56.7
	i			06 07 10.3
			micr	sec
	P	Z'	0.5	0.9
	Mx	E	5.4	16
	Mx	N	7.8	21
	Mx	Z	3.8	18
Sk	iP			06 07 21.7
Um	iP			06 07 02.5
	i			06 07 18.2
	iS			06 16 55
Ud	iP			06 07 24.9
	i			06 07 39.6
De	iP			06 07 32.5
	i			06 07 46.0

Luzon (h = 10 km).
m = 6.6, M = 6.2 (Up,Ki).
A clear second phase, 14.4 sec after P; interpreted as pP, it would give h = 55 km.

" 3

Up	iP			06 11 46.8
	i			06 11 48.5
			micr	sec
	P	Z'	0.1	0.7
Ki	iP			06 11 29.5
	i			06 11 40.8
			micr	sec
	P	Z'	0.1	0.9
Sk	iP			06 11 54.9
Um	iP			06 11 34.8
	i			06 11 36.6
Ud	iP			06 11 57.8
	i			06 11 59.6

(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
Sep. 3 (cont.)

	De	iP	06 12 05.2

Luzon (h = N).
m = 5.9 (Up,Ki).
Double P, small and large, 1.8 sec apart.

" 3	Ki	iP	09 07 26.2
	Um	iP	09 07 20.4
	Ud	iP	09 07 36.7

Tadzhik-Sinkiang (h = N).

" 3	Up	iP	14 00 33.4
	Ud	iP	14 00 51.6
	De	iP	14 00 41.2

Iran-USSR.

" 3	Up	iP	19 27 26.7
	Ki	iP	19 26 50.8 C
	Sk	iP	19 27 22.8
	Um	iP	19 27 07.0
		i	19 27 18.7
	Ud	iP	19 27 33.8

South of Japan (h = 15 km).

" 3	Um	iP	19 27 29.3
	Ud	iP	19 27 45.9

New Guinea (h = 40 km).

" 3	Um	iP	19 38 43.2
	Ud	iP	19 39 10.6

South of Japan (h = N).

" 3	Up	iP	19 48 53.4	
		iPP	19 50 24.9	
			micr	sec
		P Z'	0.1	1.0
		Mx E	1.0	11
		Mx N	1.1	13
		Mx Z	2.2	10
	Ki	iP	19 48 56.0	
			micr	sec
		P Z'	0.2	0.8
		Mx E	2.4	13
		Mx N	2.8	12
		Mx Z	1.6	10
	Sk	iP	19 49 17.3	
		iPP	19 50 56.3	
	Um	iP	19 48 48.2	
		iPP	19 50 20.7	
	Ud	iP	19 49 10.6	
	De	iP	19 49 09.3	
		iPP	19 50 47.6	

Tadzhik-Sinkiang (h = N).
m = 5.7, M = 5.3 (Up,Ki).

" 3	Sk	iP	20 01 24.7

(cont.)

1974
Sep. 3 (cont.)
Hindu Kush.
Intermediate depth.

" 3	Up	iP	20 07 13.7
	Um	iP	20 06 54.4
	Ud	iP	20 07 20.7

South of Japan (h = 450 km).

" 4	Um	iP	00 32 27.8

Japan (h = 70 km).

" 4	Ki	iP	01 48 40.5
	Ud	iP	01 48 54.4
	De	iP	01 48 53.2

Tadzhik-Sinkiang.
Origin time = 01 41 03.

" 4	Um	iP	02 35 51.6

" 4	Um	iP	04 17 21.3

" 4	Up	iP	06 18 19.2	
	Ki	iP	06 18 17.3	
			micr	sec
		P Z'	0.1	0.9
	Sk	iP	06 18 31.5	
	Um	iP	06 18 13.2	
	Ud	iP	06 18 28.7	
	De	iP	06 18 27.8	

South of Java (h = 70 km).

" 4	Up	iP	06 35 02.4	
		iS	06 39 44	
			micr	sec
		P Z'	0.4	1.8
		Mx E	6.5	20
		Mx N	3.9	16
		Mx Z	4.7	16
	Ki	iP	06 36 08.1	
		iS	06 41 45	
			micr	sec
		P Z'	0.2	1.7
		Mx E	8.5	20
		Mx N	3.9	19
		Mx Z	4.9	12
	Sk	iP	06 35 34.1	
		i	06 35 44.4	
	Um	iP	06 35 33.5	
		iS	06 40 42	
	Ud	iP	06 35 03.5	
	De	iP	06 34 25.5	

Libya (h = 15 km).
m = 5.8, M = 5.2 (Up,Ki).

" 4	Ki	iP	06 52 09.0
	Um	iP	06 51 51.6

(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
Sep. 4 (cont.)
Ud iP 06 51 59.3
Pakistan.

" 4 Ud iP 07 12 26.9
Kurile Islands.

" 4 Ud iPKP1 08 17 44.7
De iPKP1 08 17 54.9
Tonga Islands (h = 60 km).

" 4 Ud iP 08 40 28.7

" 4 Up iP 09 31 10.8
ipP 09 31 24.9
micr sec
pP Z' 0.1 1.2
Ki iP 09 30 29.3
ipP 09 30 45.0
micr sec
Mx E 1.3 19
Mx N 1.1 22
Mx Z 1.2 20
Sk eP 09 31 06
Um iP 09 30 48.0
ipP 09 31 03.6
Ud iP 09 31 17.6
ipP 09 31 32.0
De iP 09 31 33.1
Japan.
h = 55 km (Up,Ki,Um,Ud).

" 4 Ki iP 15 38 13.5
Ud iP 15 38 23.8
De iP 15 38 21.6
Tadzhik-Sinkiang (h = N).

" 4 Ud iP 18 54 55.8

" 5 Up iP 00 37 51.9
Ki iP 00 38 58.3
Sk iP 00 38 30.1
Ud iP 00 37 59.9
De iP 00 37 27.9
Crete.

" 5 Up iP 01 07 06.1
Ki iP 01 06 23.8
Um iP 01 06 41.4
Ud iP 01 07 12.1 C
Japan (h = 90 km).

" 5 Up iP 04 04 48.4
Ki eP 04 04 21
micr sec
Mx N 0.5 12
(cont.)

1974
Sep. 5 (cont.)
Um iP 04 04 25.1
Ud iP 04 05 03.2
De iP 04 05 14.9
USSR-Mongolia (h = N).

" 5 Up iP 06 34 47.1
Ki iP 06 34 11.0
ipP 06 34 25.3
Um iP 06 34 26.6
ipP 06 34 39.3
Ud iP 06 34 53.9
South of Japan.
h = 50 km (Ki,Um).

" 5 Ki iP 07 29 20.7
Japan (h = N).

" 5 Up iP 07 59 57.8
Ki iP 08 00 00.5
micr sec
P Z' 0.1 1.0
Sk iP 07 59 43.8
Um iP 08 00 02.8
ipP 08 00 41.9
Ud iP 07 59 47.2
ipP 08 00 25.8
De iP 07 59 47.4
Colombia.
h = 160 km (Um,Ud).

" 5 Ki iP 09 16 02.7
Kurile Islands.

" 5 Up iP 10 08 07.2
Ki iP 10 07 57.4
Um iP 10 08 02.9
Mexico-Guatemala (h = N).

" 5 Up iP 11 39 51.4
Ki iP 11 41 00.2
micr sec
Mx E 0.4 14
Mx Z 1.2 22
Sk eP 11 40 31
Ud iP 11 40 01.2
De iP 11 39 28.2
i 11 39 47.5
Crete (h = 55 km).

" 5 Ki iP 12 21 53.1
Sk iP 12 22 13.9
Um iP 12 21 45.6
Ud iP 12 22 07.1
De iP 12 22 05.5
Tadzhik-Sinkiang (h = N).

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Sep.	5	Ki	iP	14 09 42.2	
		Banda Sea (h = 90 km).			
"	5	Up	iP	14 40 28.8	
		Ki	iP	14 40 35.4	
			ipP	14 41 25.1	
		Um	iP	14 40 25.9	
			ipP	14 41 18.6	
		Ud	iP	14 40 44.5	
			ipP	14 41 31.6	
		De	iP	14 40 42.0	
		Afghanistan-USSR.			
		h = 240 km (Ki,Um,Ud).			
"	5	Ud	iPKPl	15 55 02.4	
"	5	Up	iP	17 52 48.9	
		Ki	iP	17 52 13.9	
		Sk	iP	17 52 44.2	
		Um	iP	17 52 29.3	
		Ud	iP	17 52 55.6	
		South of Japan (h = N).			
"	5	Ki	iP	18 32 52.4 C	
		Sk	iP	18 33 24.3	
		Ud	iP	18 33 34.8	
		De	iP	18 33 44.5	
		Ryukyu Islands (h = N).			
"	5	Ud	iP	18 41 09.6	
		Hindu Kush (h = 170 km).			
"	5	Ki	Mx	21 56	
				micr	sec
			Mx E	0.8	21
			Mx N	0.5	15
		Ryukyu Islands (h = N).			
"	6	Up	iP	15 31 32.8	
		Ki	iP	15 31 35.8	
		Sk	iP	15 31 56.5	
			iPP	15 33 39.1	
		Um	iP	15 31 27.7	
		Ud	iP	15 31 49.5 C	
			iPP	15 33 29.9	
		De	iP	15 31 48.5 C	
		Tadzhik-Sinkiang (h = N).			
"	6	Sk	iPKP	20 54 59.5	
		Um	iPKP	20 54 54.2	
		Tonga Islands (h = 120 km).			
"	6	Up	iPKP	23 45 27.0	
		Sk	iPKP	23 45 26.9	
		Um	iPKP	23 45 21.1	
			i	23 45 26.2	
		Ud	iPKP	23 45 29.6	
		(cont.)			
1974 Sep.	6	(cont.)			
		De	i(PKP)	23 45 21.3	
			iPKP	23 45 34.8	
		Solomon Islands (h = 60 km).			
"	7	Um	iP	03 39 59.6	
		Ud	iP	03 40 00.8	
		Iran.			
"	7	Ki	iP	04 19 41.1	
		Um	iP	04 20 00.0	
		Ud	iP	04 20 31.7	
		De	iP	04 20 49.2	
		Japan (h = 240 km).			
"	7	Ki	eP	07 35 27	
		Sk	iP	07 35 15.2	
		Um	i(P)	07 35 24.7	
		Ud	iP	07 35 18.7	
		Colombia (h = 20 km).			
"	7	Um	iP	08 38 42.4	
		Turkey (h = 15 km).			
"	7	Ud	iP	10 17 57.9	
"	7	Up	iP	11 50 50.2 C	
		Ki	iP	11 50 39.6	
		Sk	eP	11 51 04	
		Ud	iP	11 51 03.3	
		Burma (h = N).			
"	7	Ud	iP	13 44 21.3	
"	7	Up	iSgl	15 50 36.6	
		Ud	iPgl	15 49 16.2	
			iSgl	15 49 36.5	
		De	iSgl	15 50 29.6	
		Southeast Norway,			
		59.3°N, 11.1°E.			
		Origin time = 15 48 51.			
"	7	Up	iP	15 54 05.3	
				micr	sec
			Mx E	0.5	14
			Mx N	0.9	17
			Mx Z	0.5	13
		Ki	iP	15 54 09.0	
				micr	sec
			Mx E	0.8	11
			Mx N	0.6	11
			Mx Z	0.9	11
		Sk	iP	15 54 29.9	
		Um	iP	15 54 00.1	
		Ud	iP	15 54 22.9	
			i	15 54 34.2	
		De	iP	15 54 20.9	
		(cont.)			

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974						
Sep.	7	(cont.)				
		Tadzhik-Sinkiang (h = N).				
		M = 4.9 (Up,Ki).				
"	7	Up	iP		16 04 45.8	
		Ud	iP		16 05 03.4	
"	7	Ki	iP		19 09 11.3	
		Sk	iP		19 09 26.6	
		Java (h = 110 km).				
"	7	Up	iP		19 52 05.8	
			ipP		19 52 22.2	
					micr	sec
			P	Z'	0.1	1.1
			pP	Z'	0.1	1.0
		Ki	iP		19 52 16.1	C
			ipP		19 52 33.2	
					micr	sec
			P	Z'	0.1	1.0
			pP	Z'	0.2	1.0
		Sk	iP		19 51 53.8	C
			ipP		19 52 10.2	
		Um	iP		19 52 14.1	
			ipP		19 52 31.3	
		Ud	iP		19 51 53.8	
			ipP		19 52 11.5	
		De	iP		19 51 53.0	
			ipP		19 52 10.0	
		Leeward Islands.				
		h = 60 km (Up,Ki,Sk,Um,Ud, De).				
		m = 5.7 (Up,Ki).				
"	7	Um	iPKP		20 12 31.1	
		Ud	iPKP		20 12 26.6	
		Chile (h = 15 km).				
"	7	Um	iPKP		20 37 35.2	
		Chile-Argentina (h = 80 km).				
"	7	Up	iP		20 56 49.6	
			i		20 56 53.3	
			i(PP)		21 00 05.4	
			iPP		21 00 49.1	
			iS		21 08 19	
					micr	sec
			P	Z'	0.2	1.5
			PP	Z'	0.9	2.0
			Mx	E	13	21
			Mx	N	23	23
			Mx	Z	23	23
		Ki	iP		20 56 45.8	
			i		20 56 49.9	
			i(PP)		20 59 51.1	
			iPP		21 00 45.5	
		(cont.)				

1974						
Sep.	7	(cont.)				
		Ki	iSKS		21 07 21	
					micr	sec
			P	Z'	0.7	1.4
			PP	Z'	0.2	1.4
			Mx	E	28	21
			Mx	N	49	23
			Mx	Z	32	22
		Sk	iP		20 57 00.9	
			i		20 57 04.5	
			iPP		21 01 15.6	
		Um	iP		20 56 45.0	
			i		20 56 48.4	
			iPP		21 00 42.7	
			iS		21 08 10	
		Ud	iP		20 56 58.4	
			i		20 57 01.7	
			i		20 57 14.7	
			i(PP)		21 00 14.5	
			iPP		21 01 10.5	
		De	eP		20 56 58	
			i		20 57 01.6	
			iPP		21 01 02.8	
		South of Java (h = N).				
		m = 6.8, M = 6.7 (Up,Ki).				
		Double P, in average 3.7 sec apart.				
"	7	Up	iP		21 52 11.8	
		Ud	iP		21 52 21.9	
		Formosa (h = 60 km).				
"	8	Ud	iP		05 29 56.9	
"	8	Ki	iPKP		05 32 07.7	
		Sk	iSKP1		05 35 49.0	
		New Hebrides Islands (h = 15 km).				
"	8	Up	iPKP		05 35 15.9	
		Ki	iPKP		05 35 05.1	
			iPP		05 35 39.8	
			iPKKP1		05 46 14.4	
					micr	sec
			PP	Z'	0.3	1.7
		Sk	iPKP		05 35 15.4	
			iPKKP1		05 45 56.8	
		Um	iPKP		05 35 09.6	
			iPP		05 35 56.2	
		Ud	iPKP		05 35 18.6	
			iPP		05 36 32.4	
			iPKKP1		05 45 56.8	
		De	iPKP		05 35 24.4	
		New Ireland (h = 450 km).				
"	8	Ud	eP		08 09 12	
		Greece (h = 45 km).				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
Sep. 8 Ud iPKPl 08 19 43.4

" 8 Ud iP 09 36 09.8

" 8 Ki iP 11 18 24.0
Samar (h = N).

" 8 Up iP 12 49 53.3
Ki iP 12 49 23.5
Um iP 12 49 36.8
Ud iP 12 49 59.8
Volcano Islands (h = 140 km).

" 8 Ki iPKP 15 13 34.7
i 15 13 58.1
South Sandwich Islands
(h = N).

" 8 Ki iP 16 40 54.0
Ud iP 16 41 47.6
Aleutian Islands (h = 90 km).

" 8 Up iP 19 14 41.8
Ki micr sec
Mx E 0.6 11
Mx N 0.5 13
Mx Z 0.4 11
Sk iP 19 15 21.8
Ud iP 19 14 49.4
Aegean Sea (h = N).

" 9 De iPKPl 04 05 05.3

" 9 Ki iP 18 06 28.9
Sk iP 18 05 51.6
North Atlantic Ocean (h = N).

" 9 Ki iPKP 18 19 13.3
Solomon Islands (h = 55 km).

" 9 Sk iP 23 01 03.0
Yugoslavia (h = 25 km).

" 9 Ki iPKPl 23 54 37.2
Um iPKPl 23 54 47.1

" 10 Up iP 00 30 27.7
Sk eP 00 31 05
Ud iP 00 30 32.4
Ionian Sea (h = N).

" 10 Ud iP 04 08 31.9

" 10 Ud iP 05 40 15.2
Leyte (h = 60 km).

" 10 Up iP 13 57 56.8
(cont.)

1974
Sep. 10 (cont.)
Ki iP 13 57 31.0
Sk iP 13 57 59.0
Ud iP 13 58 06.1
Ryukyu Islands (h = 30 km).

" 10 Sk iPKP 18 24 57.2
Um iPKP 18 24 51.5
Santa Cruz Islands
(h = 240 km).

" 10 Up iPKPl 21 25 52.2 C
iPKP2 21 25 55.9
i 21 27 31.5
micr sec
PKPl Z' 0.2 1.0
Ki iPKPl 21 25 33.5 C
Sk iPKPl 21 25 45.3 C
Um iPKPl 21 25 40.3 C
Ud iPKPl 21 25 53.7 C
De iPKPl 21 26 02.2 C
i 21 27 50.3
Kermadec Islands (h = 25 km).

" 10 Up iPKPl 21 41 07.7
Sk iPKPl 21 40 58.0
Um iPKPl 21 40 52.7
Ud iPKPl 21 41 06.1
De iPKPl 21 41 15.0
Kermadec Islands.
Origin time = 21 21 21.

" 11 Up iPKPl 01 36 43.0
iPKP2 01 36 48.2
micr sec
PKPl Z' 0.1 1.2
PKP2 Z' 0.3 1.5
Ki iPKPl 01 36 24.1
Sk iPKPl 01 36 37.4 C
Um iPKPl 01 36 32.5 C
i 01 36 41.2
Ud iPKPl 01 36 45.0
De iPKPl 01 36 54.0 C
Kermadec Islands (h = 45 km).

" 11 Ud iP 03 39 27.9
De iP 03 39 38.4

" 11 Ud iP 04 14 38.4

" 11 Up iP 05 17 26.3
Sk iP 05 18 08.1
Um iP 05 18 06.9
Ud iP 05 17 31.3
i 05 17 35.5
Albania (h = 50 km).

" 11 Ud iP 07 20 05.6

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974					
Sep.	11	Up	iPKPl	07 45 56.6	
		Sk	iPKPl	07 45 49.3	
		Ud	iPKPl	07 45 57.0	
		De	iPKPl	07 46 06.8	
		Kermadec Islands.			
		Origin time = 07 26 15.			
"	11	Um	iPKPl	08 11 43.3	
"	11	Ki	iPKP	09 46 48.9	
		Sk	iPKP	09 46 59.0	
		Um	iPKP	09 46 54.5	
		Ud	iPKP	09 47 05.0	
		De	iPKP	09 47 13.5	
		New Hebrides Islands (h = N).			
"	11	Ud	i(P)	11 48 39.7	
"	11	De	iPKP2	12 27 05.9	
		Kermadec Islands (h = 40 km).			
"	11	Up	iPgl	13 02 01.1	
			iSgl	13 02 48.6	
		Ud	iPgl	13 01 25.1	
			iSgl	13 01 44.8	
		De	iPgl	13 02 03.2	
			iSgl	13 02 51.9	
		Southeast Norway,			
		59.7°N, 10.8°E.			
		Origin time = 13 01 00.			
"	11	Ud	i(P)	13 18 25.9	
		De	i(P)	13 18 33.3	
			i	13 18 47.8	
"	12	Up	iSgl	00 34 42.5	
		Ki	iPn	00 31 47.0	
			iS*	00 32 10.5	
			iSgl	00 32 11.2	
				micr	sec
			Sgl Z'	0.1	0.5
		Sk	iSgl	00 33 45.2	
		Um	ePn	00 31 58	
			iPgl	00 32 01.5	
			iS*	00 32 29.1	
			iSgl	00 32 32.8	
		Ud	iSgl	00 34 56.6	
		Norrbotten, Sweden,			
		66.1°N, 21.7°E.			
		Origin time = 00 31 21.			
		By combination with Finnish station readings.			
		Felt.			
"	12	Up	iSgl	00 35 27.7	
		Ki	iPn	00 32 32.3	
			iS*	00 32 55.5	
		(cont.)			

1974					
Sep.	12	(cont.)			
		Ki	iSgl	00 32 56.5	
				micr	sec
			Sgl Z'	0.1	0.5
		Sk	eSgl	00 34 31	
		Um	iS*	00 33 14.4	
			iSgl	00 33 18.3	
		Norrbotten, Sweden,			
		66.1°N, 21.7°E.			
		Origin time = 00 32 06.			
		By combination with Finnish station readings.			
		Felt.			
"	12	Ki	iP	02 45 32.3	
		Ud	iP	02 45 46.3	
		Tadzhik-Sinkiang (h = N).			
"	12	Up	i	03 38 02.1	
			iPgl	03 38 04.0	
			i	03 38 39.9	
			iSgl	03 38 46.6	
		Ki	iSgl	03 41 28.1	
		Sk	iSgl	03 40 37.4	
		Um	iPgl	03 38 27.2	
			iSn	03 39 08.0	
			iSgl	03 39 26.5	
		Ud	eSn	03 39 29	
			iSgl	03 39 53.4	
		De	iSn	03 39 52.1	
			iSgl	03 40 24.0	
		Gulf of Finland,			
		59.7°N, 23.8°E.			
		Origin time = 03 37 09.			
		Explosion?			
"	12	Up	iP	05 31 11.3	
		Ki	iP	05 30 31.1	
		Um	iP	05 30 52.8	
		Ud	iP	05 31 04.5	C
		California (h = N).			
"	12	Up	iP	06 10 36.7	
		Ki	iP	06 10 39.4	
				micr	sec
			Mx E	1.6	17
			Mx N	1.0	14
			Mx Z	1.7	14
		Sk	iP	06 11 00.6	
		Ud	iP	06 10 54.2	
		De	iP	06 10 53.8	
		Sinkiang, China (h = N).			
"	12	Ki	iP	06 35 28.3	
		Sk	iP	06 35 49.5	
		Ud	iP	06 35 42.0	
		De	eP	06 35 41	
		Tadzhik-Sinkiang (h = N).			

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974					
Sep.	12	Ud	iP	06 37 21.8	
		Unimak Island (h = 40 km).			
"	12	De	iP	09 26 48.9	
"	12	Up	iSgl	11 36 24.9	
		Ud	iPgl	11 35 09.5	
			iSgl	11 35 38.0	
		De	iPgl	11 35 14.9	
			iSgl	11 35 45.8	
			iRg	11 36 00.1	
		West coast of Sweden,			
		58.4°N, 11.3°E.			
		Origin time = 11 34 34.			
		Probably explosion.			
"	12	Up	iS*	12 44 38.8	
			iSgl	12 44 44.6	
		Sk	eSgl	12 47 12	
		Um	iSgl	12 46 41.6	
		Ud	iSgl	12 45 26.8	
		De	iPgl	12 43 58.3	
			iSgl	12 44 47.7	
		Off coast of Latvia,			
		56.5°N, 20.2°E.			
		Origin time = 12 42 53.			
		Explosion?			
"	12	De	iP	13 13 25.8	
"	12	Ud	i(Sgl)	13 24 10.6	
"	12	Up	iSgl	13 37 31.2	
		Sk	iSgl	13 37 34.9	
		Ud	iS*	13 36 28.2	
			iSgl	13 36 32.8	
		De	iSgl	13 36 45.9	
			iSg2	13 36 50.7	
		Southwest Norway,			
		58.3°N, 6.6°E.			
		Origin time = 13 34 28.			
		By combination with Bergen and Kongsberg readings.			
"	12	Up	eSgl	14 02 03	
		Ud	ePgl	14 00 47	
			iSgl	14 01 16.2	
			i	14 01 26.6	
		De	iPgl	14 00 52.7	
			iSgl	14 01 23.5	
			iRg	14 01 37.1	
		Same location as the 11 34-event.			
		Origin time = 14 00 12.			
		Probably explosion.			

1974					
Sep.	12	Ud	iPKP1	16 13 14.4	
		De	iPKP1	16 13 25.0	
"	12	Ud	iP	18 31 49.9	
		De	iP	18 31 47.7	
"	12	Um	iPKP	20 05 52.5	
		Ud	iPKP1	20 06 05.5	
		De	iPKP1	20 06 17.5 D	
		Fiji Islands (h = 610 km).			
"	12	Sk	iP	20 26 56.2	
		Um	iP	20 27 11.5	
		Ud	iP	20 27 03.4	
		De	iP	20 27 10.0	
		El Salvador (h = 90 km).			
"	12	Ud	iP	20 31 17.7	
		De	iP	20 31 17.0	
"	12	Sk	iP	20 55 16.5	
		Ud	iP	20 55 12.1	
"	12	Up	iP	23 11 37.3	
		Ki	i(P)	23 11 46.9	
		Sk	iP	23 11 54.2	
		Um	iP	23 11 35.3	
		Ud	iP	23 11 48.6	
		De	iP	23 11 48.6	
		(Andaman Islands).			
"	12	Up	iPKP	23 15 14.5	
		Ki	iPKP	23 15 30.1	
				micr sec	
			PKP Z'	0.1 1.5	
		Um	iPKP	23 15 21.3	
		Ud	iPKP	23 15 12.8	
			iPKKP1	23 25 09.9	
		De	iPKP	23 15 07.2	
		South Sandwich Islands			
		(h = N).			
"	12	Up	iPKP2	23 52 07.6	
"	13	Up	iP	02 15 33.8	
		Ki	iP	02 15 42.7	
		Sk	iP	02 15 59.3	
		Um	iP	02 15 32.1	
		Ud	iP	02 15 50.3	
			ipP	02 16 31.3	
		De	iP	02 15 46.9	
		Hindu Kush.			
		h = 200 km (Ud).			
"	13	Up	iP	03 09 52.8 C	
			iPn	03 10 58.5	
			iPP	03 11 11.5	

(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974						
Sep.	13	(cont.)				
		Up			micr	sec
			P	Z'	0.1	0.9
		Ki	iP		03 09 37.5	C
					micr	sec
			P	Z'	0.1	0.5
		Sk	iP		03 10 08.4	C
			iPP		03 11 31.0	
		Um	iP		03 09 37.5	C
			i		03 10 52.7	
		Ud	iP		03 10 09.1	C
			iPn		03 11 21.7	
			iPP		03 11 34.5	
		De	iP		03 10 16.0	C
			iPn		03 11 31.3	
			iPP		03 11 43.6	
		Kazakh SSR.				
		m = 5.9 (Up,Ki).				
		Underground explosion.				
"	13	Up	iP		05 00 29.3	
		Ud	eP		05 00 42	
		De	iP		05 00 18.4	
		Turkey (h = N).				
"	13	Ud	iP		05 36 43.8	
		Baja California (h = N).				
"	13	Up	iP		08 03 16.4	C
			iPcP		08 03 56.5	
			iP'P'		08 32 16.9	
					micr	sec
			P	Z'	0.8	1.3
			Mx	E	1.5	20
			Mx	N	2.5	20
			Mx	Z	3.6	22
		Ki	iP		08 02 21.5	C
					micr	sec
			P	Z'	0.6	1.4
			Mx	E	2.3	19
			Mx	N	1.3	17
			Mx	Z	1.7	14
		Sk	iP		08 02 58.6	C
			iPcP		08 03 46.7	
		Um	iP		08 02 47.6	C
			iPcP		08 03 40.2	
			iS		08 10 40	
		Ud	iP		08 03 19.6	C
			iPcP		08 03 58.6	
		De	iP		08 03 41.6	C
			iPcP		08 04 12.5	
			iPP		08 06 05.2	
		Kamchatka (h = 55 km).				
		m = 6.6, M = 5.5 (Up,Ki).				
"	13	De	iP		10 51 47.9	C

1974						
Sep.	13	Up	iSgl		11 33 31.9	
		Ki	iPgl		11 28 56.9	C
			i		11 29 02.2	
			iSgl		11 29 17.2	
					micr	sec
			Pgl	Z'	0.1	0.4
			Sgl	Z'	0.3	0.3
		Sk	iSgl		11 31 53.4	
			i		11 31 56.2	
		Um	iSgl		11 31 21.4	
		Ud	eSgl		11 33 40	
		North Norway,				
		69.3°N, 19.8°E.				
		Origin time = 11 28 31.				
		By combination with Tromsoe				
		readings.				
"	13	Up	eP		18 29 31	
					micr	sec
			Mx	E	0.3	9
			Mx	N	0.4	12
			Mx	Z	0.7	10
		Ki	iP		18 30 46.3	
					micr	sec
			Mx	E	0.3	9
			Mx	N	0.4	9
			Mx	Z	0.3	8
		Sk	iP		18 30 12.3	
		Um	iP		18 30 12.0	
		Ud	i(P)		18 29 36.6	
			iP		18 29 40.8	
		Greece (h = 25 km).				
		M = 4.4 (Up,Ki).				
"	13	Ud	iP		18 47 28.8	
		De	iP		18 47 27.5	
"	13	Up	iPgl		20 49 48.1	
			iSgl		20 49 59.5	
			iRg		20 50 01.7	
		Sk	i		20 51 15.6	
		Um	i		20 51 02.3	
			iSgl		20 51 32.0	
		Ud	iPgl		20 49 58.5	
			iSgl		20 50 16.9	
			i		20 50 20.8	
			iRg		20 50 26.1	
		De	iSgl		20 51 44.3	
		Gästrikland-Dalarna, Sweden,				
		60.4°N, 16.3°E.				
		Origin time = 20 49 35.				
		Near-surface event.				
"	14	Up	iP		02 49 46.3	
		Ki	iP		02 48 56.3	
		Sk	iP		02 49 34.4	
		Um	iP		02 49 19.5	
		(cont.)				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Sep.	14	(cont.)			
		Ud	iP	02 49 50.6	
		De	iP	02 50 10.8	
		Kurile Islands (h = 180 km).			
"	14	Ki	iP	04 44 59.3	
		Sk	iP	04 45 19.2	
		Um	iP	04 44 51.6	
		Ud	iP	04 45 13.4	C
		De	iP	04 45 12.3	C
		Tadzhik-Sinkiang (h = N).			
"	14	Ki	iPKP	08 54 31.5	
		New Hebrides Islands (h = N).			
"	14	De	iPKPl	08 56 15.2	
		Fiji Islands (h = 600 km).			
"	14	Ud	iP	11 25 22.7	C
		De	iP	11 24 49.9	
		Crete.			
"	14	Ud	iP	18 56 43.8	
"	14	Um	iPKPl	19 47 28.6	
			i	19 47 50.5	
		Ud	iPKPl	19 47 45.0	
"	14	Ud	iPKPl	21 37 13.7	
"	14	Ud	iPKPl	21 41 01.2	
"	14	Up	iPKPl	22 37 16.8	
		Ud	iPKPl	22 37 18.4	
"	15	Ud	eP	00 42 37	
		De	eP	00 42 05	
		Greece (h = 110 km).			
"	15	Ki	iPKP	02 20 58.4	
		Um	iPKP	02 21 07.9	
"	15	Up	iPKPl	08 36 11.3	
			iPKP2	08 36 25.0	
		Ki	iPKPl	08 35 53.7	
		Sk	iPKPl	08 36 07.0	
		Um	iPKPl	08 36 02.2	
		Ud	iPKPl	08 36 12.6	
		New Zealand (h = 60 km).			
"	15	Ud	iP	11 25 19.2	
"	15	Up	iP	14 55 14.4	
		Um	iP	14 54 50.2	
		Ud	iP	14 55 19.1	
		Japan (h = 30 km).			
1974 Sep.	15	Up	iP	15 00 16.1	
		Ki	iP	15 00 24.7	
		Ud	iP	15 00 32.3	
		Hindu Kush (h = 230 km).			
"	15	Ki	iPKP	15 01 34.4	
		New Hebrides Islands (h = 35 km).			
"	15	Ud	iP	17 57 26.6	
		Hindu Kush. Intermediate depth.			
"	15	Ud	iP	19 47 57.7	
"	15	Up	iSKPl	20 56 16.8	
		Um	iSKPl	20 56 00.2	
		Ud	eSKPl	20 56 21	
			i	20 56 27.2	
		New Hebrides Islands (h = 240 km).			
"	15	Ud	iP	22 01 22.6	
"	16	Sk	eP	00 52 00	
		Ud	eP	00 51 55	
		De	iP	00 51 48.0	
		Argentina (h = 280 km).			
"	16	Ki	iP	00 55 57.3	
		Um	iP	00 56 12.2	
		Ud	iP	00 56 04.4	
"	16	Ki	iP	01 07 14.6	
		Ud	iP	01 07 47.8	
		De	iP	01 07 34.8	
"	16	Ud	iP	03 53 25.4	
		Kurile Islands.			
"	16	Ud	iPKPl	10 49 12.1	
		De	iPKPl	10 49 19.5	
			i	10 49 36.8	
		Tonga-Kermadec Islands (h = N).			
"	16	Um	iPKPl	11 59 19.7	
"	16	Up	i(P)	12 55 20.6	
		De	i(P)	12 55 54.6	
"	16	Up	i(P)	14 36 45.5	
"	16	Up	i(P)	14 46 50.1	
"	16	Up	i(P)	15 16 27.5	

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
Sep. 16 Ki iP 16 34 08.2
Ud iP 16 34 34.7

" 16 Up iP 16 53 26.1
micr sec
P Z' 0.1 1.1
Mx E 0.5 11
Mx N 0.4 10
Mx Z 0.9 11
Ki iP 16 53 29.1 C
micr sec
P Z' 0.1 1.0
Mx E 1.6 14
Mx N 0.4 9
Mx Z 1.3 13
Sk iP 16 53 50.0 C
Um iP 16 53 21.6
Ud iP 16 53 42.9 C
iPP 16 55 23.2
De iP 16 53 41.9 C
Tadzhik-Sinkiang (h = 60 km).
m = 5.6, M = 5.1 (Up,Ki).

" 16 Up iP 21 08 01.1
micr sec
Mx E 0.8 20
Mx N 1.1 20
Mx Z 1.1 20
Ki iP 21 07 15.2
micr sec
Mx E 0.8 17
Mx N 0.7 18
Mx Z 1.0 17
Um iP 21 07 36.4
Ud iP 21 08 06.6 C
De iP 21 08 24.9 C
Kurile Islands (h = 55 km).
M = 5.1 (Up,Ki).

" 16 Up iP 22 06 29.5
micr sec
Mx E 0.9 24
Mx N 1.2 22
Mx Z 2.2 23
Ki iP 22 05 38.5
micr sec
Mx E 0.8 19
Mx N 0.5 17
Mx Z 0.9 17
Sk iP 22 06 16.3
iPcP 22 06 52.8
Um iP 22 06 02.2
Ud iP 22 06 35.1
i 22 06 37.5
De iP 22 06 55.4
Kurile Islands (h = 50 km).
M = 5.1 (Up,Ki).

1974
Sep. 17 Ud iPKPl 00 17 20.8

" 17 Up iP 02 11 52.7
iS 02 20 25
micr sec
P Z' 0.2 1.6
Mx N 0.8 19
Mx Z 1.1 20
Ki iP 02 10 57.6
micr sec
P Z' 0.2 1.5
Mx E 0.6 18
Mx N 0.8 19
Mx Z 1.0 18
Sk iP 02 11 25.6
Um iP 02 11 26.4
Ud iP 02 11 48.8
De iP 02 12 12.4
Kodiak Island (h = 15 km).
m = 6.0, M = 5.0 (Up,Ki).

" 17 Up iP 04 22 38.7
Sk iP 04 23 22.0
Ud iP 04 22 40.5
Greece-Albania (h = 45 km).

" 17 Up iP 05 14 59.7
iPP 05 15 26.7
iS 05 18 31
micr sec
P Z' 0.2 0.8
Mx E 1.6 11
Mx N 3.8 11
Mx Z 5.1 11
Ki iP 05 16 18.7 C
micr sec
P Z' 0.1 1.1
Mx E 3.3 11
Mx N 3.2 10
Mx Z 3.0 10
Sk iP 05 15 43.6 C
Um iP 05 15 41.9 C
iS 05 19 58
Ud iP 05 15 06.6
i 05 15 09.5
De iP 05 14 27.5
Greece-Albania (h = 15 km).
m = 5.5, M = 5.3 (Up,Ki).

" 17 Up iP 05 21 49.9
Ud iP 05 21 57.1
Greece-Albania.

" 17 Up iP 09 03 06.8 C
micr sec
P Z' 0.1 0.9
(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
Sep. 17 (cont.)

Ki	iP	09 02 13.3	
Sk	eP	09 02 50	
Um	iP	09 02 39.3	
Ud	iP	09 03 10.8	
De	iP	09 03 31.5	

Kamchatka (h = 10 km).

" 17

Up	ipP	17 41 38.2	
		micr	sec
	pP Z'	0.1	1.0
Ki	iP	17 40 30.3	
	ipP	17 40 44.6	
Sk	iP	17 41 06.3	
	ipP	17 41 22.2	
Ud	iP	17 41 27.6	
De	iP	17 41 47.7	
	ipP	17 42 02.7	

Kamchatka.
h = 55 km (Ki,Sk,De).

" 17

De	iP	19 33 33.7	

" 18

Up	iP	00 31 13.0	C
Ud	iP	00 31 21.3	
De	iP	00 31 25.3	

Celebes (h = 230 km).

" 18

Up	iP	01 49 48.1	
Ki	iP	01 48 55.4	
Sk	iP	01 49 32.6	
De	iP	01 50 13.6	

Kamchatka (h = N).

" 18

Ki	iP	04 59 19.3	
Ud	iP	04 59 48.2	

Luzon (h = 45 km).

" 18

Up	iP	05 26 09.1	
Ki	iP	05 27 18.1	
Ud	iP	05 26 17.4	
De	iP	05 25 43.3	

Crete (h = 20 km).

" 18

Up	iP	09 11 32.5	
Sk	iP	09 12 16.4	
	i	09 12 23.8	
Um	iP	09 12 14.1	
	i	09 12 19.4	
Ud	iP	09 11 39.1	C
De	iP	09 11 00.7	

Greece-Albania (h = 10 km).

" 18

Up	iP	18 40 40.1	
Ki	iP	18 40 37.7	C
		micr	sec
	P Z'	0.2	0.8

(cont.)

1974
Sep. 18 (cont.)

Sk	iP	18 40 52.3	
Um	iP	18 40 36.1	
Ud	iP	18 40 49.7	
De	iP	18 40 48.1	

Java (h = 90 km).

" 18

Ki	iP	22 31 20.7	
Um	iP	22 31 25.4	
Ud	iP	22 31 43.2	

Mindanao (h = N).

" 19

Up	iP	02 00 19.1	
Ki	iP	01 59 34.1	
Um	iP	01 59 54.3	C
Ud	iP	02 00 25.0	C
	i	02 00 37.1	
De	iP	02 00 42.4	

Kurile Islands (h = N).

" 19

Ud	iP	03 37 00.8	

" 19

Up	iPKP1	10 32 28.1	
		micr	sec
	PKP1 Z'	0.1	0.9
Ki	iPKP	10 32 10.2	
Ud	iPKP1	10 32 29.5	
De	iPKP1	10 32 38.8	
	iPKP2	10 32 45.9	

Kermadec Islands (h = 170 km).

" 19

Up	iPKP1	17 25 43.9	
Sk	iPKP1	17 25 37.5	
Um	iPKP1	17 25 32.1	
Ud	iPKP1	17 25 45.2	
De	iPKP1	17 25 53.7	

Kermadec Islands.
Origin time = 17 06 03.

" 19

Up	iP	20 27 26.5	
Ki	iP	20 28 08.3	
Sk	iP	20 27 40.3	
Um	iP	20 27 50.4	D
Ud	iP	20 27 23.2	

Ascension Island (h = N).

" 20

Up	iP	00 02 46.5	
Ki	iP	00 02 22.1	C
		micr	sec
	P Z'	0.1	0.9
Sk	iP	00 02 45.9	C
Um	iP	00 02 31.7	C
Ud	iP	00 02 53.5	

Mariana Islands (h = 110 km).

" 20

Up	iP	01 04 00.8	C

(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974						
Sep.	20	(cont.)				
		Up			micr	sec
			P	Z'	0.2	1.0
			Mx	E	0.9	22
			Mx	N	1.6	22
			Mx	Z	1.6	20
		Ki	iP		01 03 16.7	
					micr	sec
			P	Z'	0.2	1.3
			Mx	E	1.8	20
			Mx	N	2.5	20
		Sk	iP		01 03 53.1	
		Um	iP		01 03 36.3	
		Ud	iP		01 04 07.2	C
		De	iP		01 04 24.5	
		Japan (h = 50 km).				
		m = 6.1, M = 5.5 (Up,Ki).				
"	20	Ki	i		01 16 59.5	
			i		01 17 08.3	
			i(Sgl)		01 17 13.8	
		Sk	i(Sgl)		01 19 00.5	
		Swedish Lapland.				
"	20	Ud	iPKP		11 17 48.1	
		Chile-Bolivia (h = 110 km).				
"	20	Ud	iP		12 02 56.2	
"	20	Up	ipPKP1		19 43 59.1	
		Ud	ipPKP1		19 44 02.2	
		De	iPKP1		19 44 02.9	C
			ipPKP1		19 44 13.4	
		Tonga Islands.				
		h = 35 km (De).				
"	20	Up	iPKP2		20 08 59.6	
					micr	sec
			PKP2	Z'	0.1	1.0
		Ki	iPKP1		20 08 28.9	
					micr	sec
			PKP1	Z'	0.2	1.1
		Sk	iPKP2		20 08 59.5	
			i		20 09 04.3	
		Um	iPKP1		20 08 33.1	
			iPKP2		20 08 46.4	
			i		20 08 50.3	
		Ud	iPKP2		20 09 06.2	
		New Zealand (h = 50 km).				
		PKP2 followed after 4.4 sec				
		by another clear phase				
		(Sk,Um).				
"	20	Ud	iP		21 17 34.1	
		Mindanao (h = 100 km).				

1974						
Sep.	20	Up	iPKP		21 38 34.3	
			i		21 39 52.0	
					micr	sec
			Mx	E	1.9	20
			Mx	N	3.6	20
		Ki	iP		21 34 23.0	
			ipP		21 34 54.3	
			iPKP		21 38 28.6	
					micr	sec
			Mx	E	3.3	24
			Mx	N	3.1	24
		Sk	ePKP		21 38 39	
		Um	iPKP		21 38 32.8	
			i		21 39 28.9	
		Ud	iPKP		21 38 42.4	
			i		21 40 26.5	
		De	iPKP		21 38 45.8	C
		New Guinea.				
		h = 120 km (Ki).				
		M = 6.0 (Up,Ki).				
		M uncorrected for focal				
		depth.				
"	21	Up	iP		01 14 39.7	
			iPP		01 16 13.1	
		Ki	iP		01 14 46.5	
		Sk	iP		01 15 04.8	
		Um	iP		01 14 36.8	
		Ud	iP		01 14 56.7	
			iPP		01 16 35.0	
		De	iP		01 14 53.9	
		Afghanistan-USSR (h = 90 km).				
"	21	Ud	iPKP1		02 12 25.4	
"	21	Up	iPKP2		06 16 14.9	
			i		06 16 19.7	
					micr	sec
			PKP2	Z'	0.2	1.0
		Ki	iPKP1		06 15 44.5	
			iPKP2		06 15 52.8	
					micr	sec
			PKP1	Z'	0.2	1.0
			PKP2	Z'	0.4	1.5
		Sk	iPKP2		06 16 14.5	
		Um	iPKP1		06 15 50.0	
			i		06 15 58.2	
			iPKP2		06 16 02.3	
			i		06 16 06.6	
		Ud	iPKP2		06 16 21.8	
			i		06 16 26.9	
		New Zealand (h = 50 km).				
		PKP2 followed after 4.7 sec				
		by another clear phase				
		(Up,Um,Ud).				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Sep.	21	Up	iP		06 37 46.5	C
			ipP		06 37 56.3	
			i		06 38 00.3	
		Ki	iP		06 37 42.0	
		Sk	iP		06 38 03.7	
		Um	iP		06 37 39.4	C
		Ud	iP		06 38 00.2	C
			ipP		06 38 10.3	
		De	iP		06 38 01.6	
		India-Bangla Desh.				
		h = 35 km (Up,Ud).				
		Readings are consistently late by about 10 sec compared to the NEIS solution.				
"	21	Ki	eP		09 27 30	
		North Atlantic Ocean				
		(h = N).				
"	21	Ud	iPKPl		11 41 41.6	
		De	iPKPl		11 41 52.5	
		Tonga-Kermadec Islands				
		(h = 240 km).				
"	21	Up	iPKPl		12 59 47.7	
					micr	sec
			Mx	E	2.1	22
			Mx	N	3.6	20
			Mx	Z	5.4	20
		Ki			micr	sec
			Mx	E	3.7	20
			Mx	N	3.2	19
			Mx	Z	3.8	18
		Um	iPKP		12 59 40.0	
			i		12 59 46.0	
		Ud	iPKPl		12 59 49.6	
		De	iPKPl		12 59 59.7	
		Tonga-Kermadec Islands				
		(h = N).				
		M = 6.2 (Up,Ki).				
"	21	Ud	iP		15 51 39.5	
		Japan (h = 35 km).				
"	21	Up	iP		16 05 18.7	C
			i		16 05 31.8	
			iPcP		16 05 50.0	
			iS		16 13 41	
					micr	sec
			P	Z'	0.3	1.5
			PcP	Z'	1.3	2.2
		Ki	iP		16 04 26.7	C
					micr	sec
			P	Z'	0.5	2.0
		(cont.)				

1974 Sep.	21	(cont.)				
		Sk	iP		16 05 02.6	
		Um	iP		16 04 51.1	C
			i		16 05 04.1	
			iPcP		16 05 37.2	
			iS		16 12 49	
		Ud	iP		16 05 23.0	
			iPcP		16 05 56.7	
		De	iP		16 05 43.9	
		Kamchatka (h = 120 km).				
		m = 6.1 (Up,Ki).				
"	21	Up	iP		16 14 37	
		Ki	iP		16 12 52.5	
			iTPg		16 20 37.5	
			iTSg		16 21 11.4	
					micr	sec
			P	Z'	0.1	0.8
			Mx	E	2.0	14
			Mx	N	3.2	17
			Mx	Z	4.3	19
		Sk	iP		16 13 34.1	
		Um	iP		16 13 45.6	
		Ud	iP		16 14 30.3	
			i		16 14 37.5	
		De	iP		16 15 10.1	
		Svalbard (h = N).				
"	21	Up	iP		18 03 53.2	
		Ki	iP		18 03 46.8	
		Um	iP		18 03 45.5	C
		Ud	iP		18 04 06.3	C
			ipP		18 04 28.1	
		Burma-India.				
		h = 90 km (Ud).				
"	21	Up	iPKPl		19 45 02.9	
		Ud	iPKPl		19 45 05.3	
		De	iPKPl		19 45 16.4	
		Tonga-Kermadec Islands				
		(h = 580 km).				
"	21	Ud	iPKPl		22 50 49.6	
		De	iPKPl		22 51 00.2	
"	22	De	iPKPl		04 30 36.7	
		Tonga-Kermadec Islands				
		(h = N).				
"	22	Up	iP		05 51 35.9	
		Ki	iP		05 51 33.9	
		Ud	iP		05 51 47.6	
		Sinkiang, China.				
"	22	Ud	iSKPl		08 37 46.2	
		New Hebrides Islands				
		(h = 90 km).				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
Sep. 22 Up iP 09 01 02.9
Tsinghai, China (h = N).

" 22 Ud iP 09 07 14.2
Kurile Islands.

" 22 Up iPKPl 11 51 04.3
Sk iPKPl 11 50 57.6
Um iPKPl 11 50 52.2
Ud iPKPl 11 51 06.1
De iPKPl 11 51 14.7
Kermadec Islands (h = 40 km).

" 22 Ud iP 12 44 07.8

" 22 Ki iP 19 17 44.4
Ud iP 19 18 09.7
Mindanao (h = 50 km).

" 23 Up iP 15 01 09.0

		micr	sec
P	Z'	0.1	1.1
Mx	E	0.9	12
Mx	N	1.4	16

Ki i(P) 15 00 46.8

		micr	sec
Mx	E	2.7	15
Mx	N	5.3	17
Mx	Z	1.5	13

Sk iP 15 01 19.5
Um iP 15 00 55.0
Ud iP 15 01 22.2
Szechwan, China (h = N).
M = 5.4 (Up,Ki).

" 23 Up iP 16 02 23.0
Sk i 16 03 19.0
Ud iP 16 02 29.2
i 16 02 37.8
i 16 03 04.0
De iP 16 01 53.5
Greece (h = 50 km).

" 23 Up iP 19 38 21.5
iPcP 19 39 09.6
iS 19 46 33

		micr	sec
P	Z'	0.3	1.2
Mx	E	2.7	18
Mx	N	5.7	13
Mx	Z	8.4	15

Ki iP 19 39 14.4
iS 19 48 16
iP'P' 20 07 34.6

		micr	sec
P	Z'	0.5	1.3
Mx	E	6.1	14

(cont.)

1974
Sep. 23 (cont.)

		micr	sec
Ki Mx	N	5.8	17
Mx	Z	4.6	16

Sk iP 19 38 46.4
Um iP 19 38 48.2
iS 19 47 23
Ud iP 19 38 21.1
i 19 38 23.2
De iP 19 37 57.4
Gabon (h = N).
m = 6.4, M = 6.0 (Up,Ki).
Multiple P.

" 24 Ki iP 02 08 45.2
ipP 02 08 51.7

		micr	sec
pP	Z'	0.1	1.4

Sk iP 02 08 07.4
Ud iP 02 08 09.2
ipP 02 08 15.9
North Atlantic Ocean.
h = 25 km (Ki,Ud).

" 24 Up iP 03 02 10.7

" 24 Ki iP 07 41 40.4
Kamchatka.
Intermediate depth.

" 24 Up iS* 10 18 32.9
iSg2 10 18 48.1
Ud iSgl 10 17 33.6
West coast of Norway,
60.6°N, 5.2°E.
Origin time = 10 15 24.
By combination with Bergen and Kongsberg readings.

" 24 Up iSgl 11 23 30.7
Ud iPgl 11 22 36.9
iSgl 11 22 56.5
De iSgl 11 23 16.3
Västergötland, Sweden,
near 58.6°N, 13.2°E.
Origin time = 11 22 12.

" 24 Ki iP 17 50 11.8
Sk iP 17 49 51.1
Ud iP 17 49 19.9
De eP 17 48 47
Crete.

" 24 Up iSgl 18 29 03.5
Ki iSgl 18 26 59.0
Sk iPgl 18 26 25.9
iSgl 18 27 07.3
(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Sep.	24	(cont.)			
		Um	iSn	18 27 13.9	
			iSgl	18 27 26.5	
		Ud	iSgl	18 28 53.9	
		Nordland, Norway, 66.5°N, 14.4°E. Origin time = 18 25 32. Explosion?			
"	25	Um	iPKPl	02 11 42.4	
		Ud	iPKPl	02 11 54.9	
"	25	Up	iP	11 38 00.1	
		Ki	iP	11 37 07.1	
		Um	iP	11 37 32.7	
		Ud	iP	11 38 01.8	C
		De	iP	11 38 23.7	
		Aleutian Islands (h = 110 km).			
"	25	Um	i(Sgl)	11 48 17.1	
"	25	Up	iRg	13 19 50.4	
		Sk	iSgl	13 21 18.3	
		Ud	iSgl	13 20 23.9	
		East-central Sweden. Near-surface event.			
"	25	Up	iRg	14 48 50.0	
		Ud	iSgl	14 49 20.2	
		East-central Sweden. Near-surface event.			
"	25	De	iP	16 42 17.9	
"	26	Ud	iP	02 27 08.6	
"	26	Um	i(PcP)	07 41 43.8	
		Ud	iP	07 41 57.8	
		Japan (h = 40 km).			
"	26	Up	iSg2	09 44 08.5	
		Sk	eSgl	09 43 20	
		Ud	iSgl	09 42 57.9	
			iSg2	09 43 04.4	
		De	iSgl	09 43 47.7	
		West coast of Norway, 60.1°N, 5.1°E. Origin time = 09 40 44. By combination with Bergen readings.			
"	26	Up	iP	10 34 46.0	
		Ud	iP	10 34 56.2	
		Japan (h = 60 km).			
"	26	Ki	iP	11 39 15.1	
		(cont.)			

1974 Sep.	26	(cont.)			
		Um	iP	11 39 39.7	
		Ud	iP	11 40 07.0	
			i	11 40 14.2	
		De	iP	11 40 31.2	
			i	11 40 36.7	
		Unimak Island (h = 30 km).			
"	26	Ud	iPKPl	12 19 21.0	
		De	iPKPl	12 19 31.4	
"	26	Ki	iP	13 07 31.6	
		Ud	iP	13 08 10.8	
		Volcano Islands (h = 120 km).			
"	26	Up	iSgl	13 27 13.7	
		Sk	eSgl	13 27 14	
			iSg2	13 27 26.6	
		Ud	iSgl	13 26 16.2	
		De	eSgl	13 26 05	
		North Sea, near 57 1/2°N, 4 1/2°E. Origin time = 13 23 26. By combination with Bergen and Kongsberg readings.			
"	26	Ud	iP	14 57 54.0	
"	26	Up	iP	15 16 48.3	C
				micr sec	
			P Z'	0.2 1.4	
		Ki	iP	15 16 14.3	C
				micr sec	
			P Z'	0.1 1.3	
		Sk	iP	15 16 22.6	C
		Um	iP	15 16 34.0	C
		Ud	iP	15 16 40.7	
		De	iP	15 16 57.5	
		Nevada. m = 6.0 (Up,Ki). Underground explosion.			
"	26	Up	iPKPl	15 20 25.3	
		Ud	iPKPl	15 20 24.3	
		De	iPKPl	15 20 37.4	C
			ipPKPl	15 20 48.4	
		Tonga Islands. h = 45 km (De).			
"	26	Up	iRg	16 03 14.0	
		Ud	iRg	16 03 26.9	
		East-central Sweden. Near-surface event.			
"	26	De	iP	16 11 13.4	
"	26	Ud	iP	16 50 47.5	
		Kurile Islands.			

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974							
Sep.	26	Ud	iPKPl		21	22	20.1
"	26	Up	iP		21	29	24.4
		Ud	iP		21	29	30.4
		Kurile Islands.					
"	26	Up	iP		23	02	36.9
		Ud	iP		23	02	44.6
		Kurile Islands.					
"	26	Up	iPKP		23	14	10.1
		Ki	iPKP		23	14	26.7
		Um	iPKP		23	14	18.4
		Ud	iPKP		23	14	07.8
		South Sandwich Islands					
		(h = 70 km).					
"	26	Up	iP		23	27	35.6
		Ki	iP		23	27	03.6
		Sk	iP		23	27	32.3
		Um	iP		23	27	17.2
		Ud	iP		23	27	42.2
		De	iP		23	27	53.5
		Bonin Islands (h = 80 km).					
"	27	Up	iP		00	19	20.3
		Ki	iP		00	19	29.6
		Um	iP		00	19	27.5
		Argentina (h = 220 km).					
"	27	Um	i		00	29	30.7
			i(Sgl)		00	29	40.9
"	27	Ud	iP		01	15	36.2
"	27	Up	iP		03	21	49.8 D
			il		03	21	57.7
			i2		03	22	09.4
			iS		03	31	27
					micr		sec
			P	Z'	0.2		0.8
			il	Z'	0.5		1.0
			i2	Z'	0.7		0.9
			Mx	E	7.7		20
			Mx	N	9.0		20
			Mx	Z	17		23
		Ki	iP		03	21	12.9 D
			il		03	21	20.9
			i2		03	21	32.0
			iS		03	30	20
					micr		sec
			P	Z'	0.1		1.0
			il	Z'	0.2		1.0
			i2	Z'	0.4		1.1
			Mx	E	21		18
			Mx	N	13		16
			Mx	Z	16		19
		(cont.)					

1974							
Sep.	27	(cont.)					
		Sk	iP		03	21	44.7 D
			il		03	21	53.0
			i2		03	22	03.9
		Um	iP		03	21	29.2 D
			il		03	21	36.8
			i2		03	21	47.0
			iS		03	30	47
		Ud	iP		03	21	57.4 D
			il		03	22	05.0
			i2		03	22	13.9
		De	iP		03	22	11.0
			il		03	22	18.8
			i2		03	22	27.3
		Japan (h = 45 km).					
		m = 5.9(P), 6.2(il), 6.4(i2),					
		M = 6.4 (Up,Ki).					
		Multiple P-phases, in average					
		7.9 and 18.1 sec after the					
		first onset.					
"	27	Um	iP		03	45	53.3
		Alaska (h = 70 km).					
"	27	Up	iP		04	21	43.9 C
			iPP		04	25	16.7
					micr		sec
			P	Z'	0.3		1.5
			Mx	E	2.2		23
			Mx	N	1.9		21
			Mx	Z	6.0		22
		Ki	iP		04	21	49.3 C
			iSKS		04	32	14
					micr		sec
			P	Z'	0.3		1.5
			Mx	E	4.9		21
			Mx	N	2.3		21
			Mx	Z	5.2		21
		Sk	iP		04	21	33.1 C
		Um	iP		04	21	49.8 C
			iPP		04	25	19.7
		De	iP		04	21	34.4 C
		Colombia (h = 45 km).					
		m = 6.3, M = 5.8 (Up,Ki).					
"	27	Up	iP		05	36	02.3
			i		05	36	30.0
					micr		sec
			P	Z'	0.5		0.8
		Ki	iP		05	36	01.2
					micr		sec
			P	Z'	0.2		0.8
		Sk	iP		05	36	21.9
		Um	iP		05	35	56.7
		De	iP		05	36	16.3
		Nepal (h = 70 km).					
		m = 6.4 (Up,Ki).					

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974							
Sep.	27	Up	iP		05 58 31.0	C	
			iS		06 07 31		
			iP'P'		06 26 52.2		
					micr	sec	
			P	Z'	0.8	0.9	
			Mx	E	38	15	
			Mx	N	83	18	
			Mx	Z	130	17	
		Ki	iP		05 57 46.7		
			i		05 57 47.7		
			eS		06 06 06		
					micr	sec	
			P	Z'	0.6	1.0	
			Mx	E	79	16	
			Mx	N	100	17	
			Mx	Z	150	17	
		Sk	iP		05 58 21.6	C	
			ipP		05 58 34.5		
		Um	iP		05 58 06.8	C	
			iS		06 06 45		
		De	iP		05 58 54.7	C	
			ipP		05 59 06.0		
		Kurile Islands.					
		h = 45 km (Sk,De).					
		m = 6.7, M = 7.2 (Up,Ki).					
"	27	Um	iPKP		07 03 58.2		
		De	iPKP		07 04 12.2		
		Solomon Islands (h = 400 km).					
"	27	Up	iP		08 24 01.2		
		Ki	iP		08 23 16.4		
		Sk	eP		08 23 52		
		Um	iP		08 23 36.3		
		Ud	iP		08 24 07.7		
		De	iP		08 24 26.2		
		Kurile Islands (h = 70 km).					
"	27	Up	iP		09 19 44.3		
		Sk	iP		09 19 39.2		
		Um	iP		09 19 22.9		
		Ud	iP		09 19 51.0		
		De	iP		09 20 04.6		
		Japan (h = 60 km).					
"	27	Up	iP		12 19 35.0		
			i		12 19 40.0		
		Ki	iP		12 19 40.7		
			i		12 19 47.0		
		Sk	iP		12 19 24.7		
			i		12 19 29.3		
		Ud	iP		12 19 25.7		
			i		12 19 30.6		
		De	iP		12 19 25.7		
			i		12 19 30.6		
		(cont.)					

1974							
Sep.	27	(cont.)					
		Colombia (h = 70 km).					
		The second, stronger phase					
		follows the first after					
		5.1 sec in average.					
"	27	Up	iP		12 21 00.2		
		Ki	iP		12 20 11.8		
		Um	iP		12 20 35.6		
			ipP		12 20 46.2		
		Ud	iP		12 21 06.6		
		De	iP		12 21 24.9		
		Kurile Islands.					
		h = 40 km (Um).					
"	27	Up	iPKP		12 36 21.7		
			i		12 36 44.8		
		Ki	iPKP		12 36 37.7		
		Um	iPKP		12 36 28.3		
		Ud	iPKP		12 36 19.7		
		South Sandwich Islands					
		(h = 60 km).					
"	27	Um	i		13 53 28.6		
			iRg		13 53 36.0		
"	27	Up	iP		15 38 42.9		
		Ki	iP		15 37 56.9		
		Ud	iP		15 38 49.2		
		Japan (h = 90 km).					
"	27	De	iP		16 10 55.4		
"	27	Up	iS*		17 38 57.5		
			iSgl		17 39 02.1		
		Ki	ePgl		17 37 37		
			iSn		17 38 14.2		
			iSgl		17 38 25.6		
		Sk	iSgl		17 38 33.7		
		Um	iPgl		17 36 48.1	C	
			iPn		17 36 50.7		
			iSgl		17 36 55.4		
		Ud	iSgl		17 39 22.9		
		De	eSgl		17 41 02		
		Västerbotten, Sweden,					
		64.3°N, 20.6°E.					
		Origin time = 17 36 36.					
"	27	Up	iP		20 33 31.0		
		Ud	iP		20 33 38.2		
		Greece.					
"	28	Up	iPKPl		00 02 24.4	D	
			i		00 02 33.6		
			iSKPl		00 05 11.8		
		(cont.)					

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Sep. 28 (cont.)

Up			micr	sec
	PKPl	Z'	0.5	1.0
Ki	iPKP		00 02	14.1
	iSKPl		00 04	51.3
			micr	sec
	SKPl	Z'	0.5	1.8
Sk	iPKP		00 02	19.2
	iSKPl		00 05	06.6
Um	i(PKP)		00 02	10.6
	iPKP		00 02	13.2
	i		00 02	21.7
	iSKPl		00 05	01.6
Ud	iPKPl		00 02	27.1 D
	i		00 02	35.7
	ipPKPl		00 04	47.2
	iSKPl		00 05	13.9
De	iPKPl		00 02	36.7 D
	i		00 02	46.3
	ipPKPl		00 04	53.0

Tonga-Kermadec Islands.
h = 620 km (Ud,De).

" 28	Up	eP	01 40	22
	Sk	eP	01 41	00
	Ud	iP	01 40	28.3
	De	iP	01 39	57.9
		i	01 40	06.1

Crete (h = 50 km).

" 28	Sk	iP	06 08	03.9

Aegean Sea.

" 28	Um	iP	08 20	09.4
	Ud	iP	08 20	35.6

Japan (h = 70 km).

" 28	Ud	iP	08 45	55.6

Mariana Islands (h = 320 km).

" 28	Ud	iP	10 26	30.6
" 28	Sk	iP	11 47	28.1

South of Panama (h = N).

" 28	Um	iPKPl	14 10	56.1
	Ud	iPKPl	14 11	08.1
" 28	Sk	iP	16 12	28.2
	Um	iP	16 12	10.2
	Ud	iP	16 12	39.7

Japan (h = 70 km).

" 28	Um	iP	21 04	58.9
	Ud	iP	21 05	27.1

Japan (h = 60 km).

1974 Sep. 28	Ud	iP	21 35	39.9
" 28	Ud	iP	23 20	24.1 C

Afghanistan-USSR.
Intermediate depth.

" 29	Up	iP	06 40	58.8
	Ki	iP	06 42	00.5
	Sk	iP	06 41	36.8
	Ud	iP	06 41	03.7
	De	iP	06 40	33.0

Crete-Rhodes (h = 55 km).

" 29	Up	iP	14 00	53.4
	Um	iP	14 00	32.7
	Ud	iP	14 01	01.0

Japan (h = 55 km).

" 29	Up	iP	15 59	37.6	C
		i	15 59	42.8	
		iPP	16 01	15.3	
			micr	sec	
	P	Z'	0.1	1.1	
	i	Z'	0.5	1.3	
	Mx	E	2.0	9	
	Mx	N	6.6	15	
	Mx	Z	3.7	8	
Ki	iP		15 59	34.9	C
	i		15 59	40.1	
			micr	sec	
	P	Z'	0.1	0.6	
	i	Z'	0.5	0.9	
	Mx	E	7.6	16	
	Mx	N	17	16	
	Mx	Z	8.3	16	
Sk	iP		15 59	59.1	
	i		16 00	04.3	
Um	iP		15 59	30.1	
	i		15 59	35.5	
Ud	iP		15 59	54.3	C
	i		15 59	59.6	
	iPP		16 01	37.1	
De	iP		15 59	55.4	C
	iPP		16 01	41.7	

Sinkiang, China (h = N).
m = 6.2, M = 5.7 (Up,Ki).
Double P, average separation 5.3 sec.

" 29	Up	iP	17 54	53.2
	Ud	iP	17 55	02.8

Greece-Albania (h = N).

" 29	Ud	iP	21 51	51.7
" 29	Ki	iP	23 41	32.7 D

(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Sep.	29	(cont.)			
		Sk	eP	23 40 50	
		Um	iP	23 40 59.3	
		Ud	iP	23 40 19.5	D
		Tunisia (h = N).			
"	29	Up	iP	23 59 35.0	
		Ki	iP	23 58 43.8	C
		Sk	iP	23 59 20.3	
		Um	iP	23 59 07.6	
		Ud	iP	23 59 39.6	
		Okhotsk Sea (h = 470 km).			
"	30	Up	iP	00 25 24.3	
		Ki	iP	00 24 43.2	
		Sk	iP	00 25 16.6	
		Um	iP	00 25 01.4	
		Ud	iP	00 25 31.1	
		Japan (h = 50 km).			
"	30	Ki	iP	06 08 27.8	
		Ud	iP	06 08 13.8	
		Colombia (h = 20 km).			
"	30	Up	iP	07 50 16.4	
			ipP	07 50 28.5	
		Ki	iP	07 50 00.9	
			ipP	07 50 11.7	
		Sk	iP	07 50 30.5	
			ipP	07 50 41.5	
		Um	iP	07 50 02.2	
			ipP	07 50 13.8	
		Ud	iP	07 50 31.4	
		Sinkiang, China.			
		h = 50 km (Up,Ki,Sk,Um).			
"	30	Up	iP	08 27 51.5	
		Sk	eP	08 28 32	
		Ud	iP	08 28 00.5	
		Greece.			
"	30	Ki	iP	08 28 45.4	
		Sumatra.			
"	30	Ki	iPn	09 12 57.5	
			iSn	09 13 54.8	
			iSgl	09 14 15.6	
		Sk	ePn	09 14 01	
			iSn	09 15 45.0	
			iSgl	09 16 43.1	
		Um	iPn	09 13 22.3	
			iPgl	09 13 38.3	
			iSn	09 14 34.1	
			iSgl	09 15 09.6	
		Ud	iPn	09 14 24.1	
			iSn	09 16 29.6	
			iSgl	09 17 36.5	
		(cont.)			

1974 Sep.	30	(cont.)			
		De	iSn	09 17 35.0	
			iSgl	09 19 06.5	
		Northwest USSR.			
		Explosion.			
		Included in this bulletin, as being of unusual size with exceptionally clear phases.			
"	30	Sk	iP	10 03 35.5	
		Ud	iP	10 03 28.0	
		De	iP	10 03 25.9	
		Tadzhik SSR (h = 170 km).			
"	30	Ud	iP	13 56 29.9	
			i	13 57 43.5	
"	30	Up	iP	21 16 17.9	
		Ud	iP	21 16 25.1	
		Japan (h = 140 km).			
"	30	Up	iSgl	23 57 35.4	
		Ki	iSgl	23 55 22.2	
		Sk	iSgl	23 55 37.8	
		Um	iSn	23 55 41.7	
			iSgl	23 55 58.4	
		Nordland, Norway, 66.8°N, 14.0°E.			
		Origin time = 23 53 55.			

Markus Båth
Klaus Meyer
Rutger Wahlström

April 17, 1976

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BOX 517
751 20 UPPSALA 1
SWEDEN

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BOX 517
S-751 20 UPPSALA
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S E I S M O L O G I C A L B U L L E T I N

U P P S A L A, K I R U N A, S K A L S T U G A N, U M E Å,

U D D E H O L M and D E L A R Y

Uppsala	(Up):	59°51.5'N,	17°37.6'E;	h = 14 m
Kiruna	(Ki):	67°50.4'N,	20°25.0'E;	h = 390 m
Skalstugan	(Sk):	63°34.8'N,	12°16.8'E;	h = 580 m
Umeå	(Um):	63°48.9'N,	20°14.2'E;	h = 16 m
Uddeholm	(Ud):	60°05.4'N,	13°36.4'E;	h = 240 m
Delary	(De):	56°28.2'N,	13°52.2'E;	h = 150 m

O C T O B E R 1 - 31, 1974

1974 Oct.	1	Up	iP		00 39 17.2		
					micr	sec	
			Mx	E	0.7	12	
		Ki			micr	sec	
			Mx	E	1.0	12	
		Ud	iP		00 39 20.2		
		Ionian Sea (h = 20 km).					
		M = 4.6 (Up,Ki).					
"	1	Up	ipP		04 21 03.2		
					micr	sec	
			pP	Z'	0.1	1.2	
			Mx	E	2.4	18	
			Mx	N	4.2	23	
			Mx	Z	6.1	18	
		Ki	ipP		04 20 37.9		
					micr	sec	
			Mx	E	5.0	19	
			Mx	N	4.8	19	
			Mx	Z	3.4	17	
		Sk	ipP		04 21 02.2		
		Um	iP		04 20 32.6		
			iSKS		04 31 01		
		Ud	iP		04 20 57.2		
			ipP		04 21 10.3		
		Mariana Islands.					
		h = 50 km (Ud).					
		M = 6.0 (Up,Ki).					
"	1	Up	iP		08 43 19.5		
					micr	sec	
			P	Z'	0.1	1.3	
			Mx	E	0.7	19	
			Mx	N	0.7	19	
			Mx	Z	1.1	20	
		Ki	iP		08 42 52.7	D	
					micr	sec	
			P	Z'	0.1	1.1	
			Mx	E	0.7	17	
			Mx	N	0.5	15	
		(cont.)					

1974 Oct.	1	(cont.)					
		Sk	iP		08 43 17.2		
		Um	iP		08 43 02.9		
		Ud	iP		08 43 25.4	D	
		Mariana Islands (h = 50 km).					
		m = 6.1, M = 5.3 (Up,Ki).					
"	1	De	iP		11 03 26.0		
"	1	Up	iP		13 18 28.7		
		Ki	iP		13 18 30.7	C	
		Sk	iP		13 18 56.0		
		Um	iP		13 18 24.1		
		Ud	iP		13 18 45.3	C	
		De	iP		13 18 44.1	C	
		Tadzhik-Sinkiang (h = N).					
"	1	Up	iSgl		13 55 27.8		
		Ud	iPgl		13 54 27.0		
			iSgl		13 54 46.1		
			iRg		13 54 56.0		
		De	iSgl		13 55 19.3		
		Lake Vänern-Dalsland, Sweden,					
		58.8°N, 12.7°E.					
		Origin time = 13 54 03.					
		Near-surface event.					
"	1	Ud	iP		14 41 04.7		
"	1	Up	i(P)		21 06 51.8		
"	1	Up	iSgl		23 52 39.4		
		Sk	iSgl		23 50 59.7		
		Um	iSgl		23 52 50.5		
		Ud	iSgl		23 51 40.2		
		De	iSgl		23 53 04.3		
		West coast of Norway,					
		62.5°N, 5.1°E.					
		Origin time = 23 49 13.					
		By combination with Bergen and Kongsberg readings.					

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974						
Oct.	2	Up	iSgl		00 29 48.8	
		Ki	ePgl		00 26 57	
			iSn		00 27 20.0	
			iSgl		00 27 35.8	
					micr	sec
			Sgl	Z'	0.1	0.5
		Sk	ePgl		00 27 05	
			iSgl		00 27 51.1	
		Um	iPn		00 27 08.9	
			iPgl		00 27 19.8	
			iSn		00 27 54.6	
			iSgl		00 28 12.4	
		Ud	iSgl		00 29 37.0	
		Nordland, Norway,				
		66.7°N, 14.0°E.				
		Origin time = 00 26 09.				
		Cf Sep. 30, 1974, at 23 57.				
"	2	Up	iP		01 07 30.7	
		Sk	iP		01 07 20.3	
		Ud	iP		01 07 39.4	
		De	iP		01 08 02.2	
		Eastern Siberia.				
"	2	Up			micr	sec
			Mx	E	0.9	19
			Mx	N	0.7	19
			Mx	Z	1.1	20
		Ki	iP		03 08 45.4	
					micr	sec
			Mx	E	0.8	19
			Mx	N	0.7	18
		Sk	iP		03 08 32.8	
		Ud	iP		03 08 34.9	
		Peru (h = 5 km).				
		M = 5.4 (Up,Ki).				
"	2	Up	iP		03 13 48.3	
"	2	Sk	iPKPl		03 38 20.6	
		Um	iPKPl		03 38 13.1	
		Ud	iPKPl		03 38 26.1	
			i		03 38 32.3	
		Kermadec Islands.				
		Origin time = 03 18 45.				
"	2	Ki	i		04 16 23.8	
			iSgl		04 16 28.7	
		Um	i(Sn)		04 17 16.2	
			iSgl		04 17 43.8	
"	2	Ki	iP		11 06 30.7	
"	2	Up	iP		15 07 01.5	
		Ki	iP		15 06 09.1	
		(cont.)				

1974						
Oct.	2	(cont.)				
		Sk	iP		15 06 45.1	
		Ud	iP		15 07 05.2	C
		De	iP		15 07 26.2	
		Kamchatka (h = 50 km).				
"	2	Ki	iP		18 09 51.7	
		Ud	iP		18 10 01.4	
		Sumatra (h = 90 km).				
"	3	Sk	iP		04 49 43.4	
		Panama-Colombia (h = N).				
"	3	Ud	iP		06 38 33.1	
"	3	Up	iP		11 19 22.1	
					micr	sec
			P	Z'	0.1	0.7
		Ki	iP		11 19 30.7	C
					micr	sec
			P	Z'	0.1	0.6
		Sk	iP		11 19 47.7	
		Um	iP		11 19 20.4	C
		Ud	iP		11 19 38.5	C
			ipP		11 20 24.9	
		De	iP		11 19 35.1	
		Hindu Kush.				
		h = 230 km (Ud).				
		m = 5.4 (Up,Ki).				
"	3	Up	iP		14 22 20.8	
					micr	sec
			P	Z'	0.1	1.0
"	3	Up	iP		14 35 28	
			i		14 35 42.2	
			iPP		14 39 52	
			iSKS		14 46 07	
			iS		14 47 16	
					micr	sec
			P	Z'	0.2	1.5
			i	Z'	1.1	2.0
			Mx	E	200	23
			Mx	N	130	23
			Mx	Z	510	23
		Ki	iP		14 35 37.0	
			i(PP)		14 39 35.9	
			iPP		14 40 11.2	
			iPKKP		14 51 34.7	
					micr	sec
			P	Z'	0.4	2.0
			(PP)	Z'	2.3	3.0
			PP	Z'	2.5	2.3
			Mx	E	240	20
			Mx	N	110	19
			Mx	Z	190	18
		(cont.)				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974						
Oct.	3	(cont.)				
		Sk	iP	14	35	22.1
			i(PP)	14	39	10.1
			iPP	14	39	31.8
			iPKKP	14	51	34.4
		Um	iP	14	35	33.7
			i(PP)	14	39	19.5
			iPP	14	40	01
			iPKKP	14	51	36.4
			iP'P'	14	59	47.5
		Ud	iP	14	35	20.2
			i	14	35	34.3
			iPKKP	14	51	42.3
		De	iP	14	35	16.0
		Peru (h = 15 km).				
		m = 7.2, M = 7.8 (Up,Ki).				
		Very well developed mantle surface waves; cf M. Båth and A. López Arroyo, J. Geophys. Res., 1962, 67: 1933-1942.				
"	3	Up	iPP	14	53	51.2
				micr		sec
			PP Z'	0.1		1.3
		Peru (h = N).				
"	3	Ki	eP	15	51	36
		Um	iP	15	51	40.4
		Mariana Islands (h = 70 km).				
"	3	Ki	iP	21	34	28.2
			i	21	34	51.4
		Ud	iP	21	34	00.1
"	3	Up	iP	21	37	55.3
		Dodecanese Islands.				
"	4	Up	iP	00	30	45.4 C
		Ki	iP	00	30	13.5
		Sk	iP	00	30	41.9 C
		Um	iP	00	30	27.0 C
		Ud	iP	00	30	52.2 C
			ipP	00	32	39.5
		De	iP	00	31	03.9
		South of Japan.				
		h = 490 km (Ud).				
"	4	Ki	iPKP	04	06	50.6
		South Sandwich Islands (h = N).				
"	4	Ki	iP	05	42	37.6
		Ud	iP	05	42	56.9
"	4	Ki	iP	06	53	48.8
		(cont.)				

1974						
Oct.	4	(cont.)				
		Ud	iP	06	54	46.6
		De	iP	06	55	07.5
		Kamchatka (h = N).				
"	4	Ud	iP	07	01	03.6
		Hindu Kush.				
		Intermediate depth.				
"	4	Ud	iP	15	47	08.4
"	4	Up	iP	17	46	43.2
			ipP	17	46	53.7
				micr		sec
			pP Z'	0.1		1.0
		Ki	iP	17	45	49.2
			ipP	17	46	01.9
				micr		sec
			P Z'	0.1		1.2
		Sk	iP	17	46	26.7
		Um	iP	17	46	14.5
		Ud	iP	17	46	45.7
			ipP	17	46	57.6
		De	iP	17	47	06.3
			ipP	17	47	18.5
		Kamchatka.				
		h = 45 km (Up,Ki,Ud,De).				
		m = 5.8 (Up,Ki).				
"	4	Up	iP	18	06	12.3
		Ki	iP	18	05	18.0
			ipP	18	05	28.5
		Sk	iP	18	05	55.2
		Ud	iP	18	06	15.7
			ipP	18	06	26.9
		De	iP	18	06	36.7
		Kamchatka.				
		h = 40 km (Ki,Ud).				
"	4	Up	iP	18	08	43.6
		Ki	iP	18	07	49.6
			ipP	18	08	02.2
				micr		sec
			P Z'	0.1		1.4
		Sk	iP	18	08	26.9
		Ud	iP	18	08	47.6
		De	iP	18	09	07.1
		Kamchatka.				
		h = 45 km (Ki).				
"	4	Up	iP	22	33	03.8
			i	22	33	24.0
			iX	22	34	13.0
			iPP	22	34	51.5
			iS	22	39	54
				micr		sec
			P Z'	0.9		1.2
		(cont.)				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
Oct. 4 (cont.)

Up			micr	sec	
	PP	Z'	0.3	1.3	
	Mx	E	5.4	19	
	Mx	N	11	21	
	Mx	Z	13	13	
Ki	iP		22 33 23.7		
	iX		22 34 22.2		
	iPP		22 35 20.2		
			micr	sec	
	P	Z'	0.4	1.1	
	PP	Z'	0.2	1.3	
	Mx	E	9.8	16	
	Mx	N	14	18	
	Mx	Z	11	15	
Sk	iP		22 33 32.2		
Um	iP		22 33 08.3		
	iPcP		22 34 40.1		
	iPP		22 34 58.7		
	iS		22 40 04		
Ud	iP		22 33 19.1		
	iPP		22 35 18.3		
De	iP		22 33 09.9		
	iX		22 34 13.5		

Pakistan (h = N).
m = 6.3, M = 6.0 (Up,Ki).
X could be P of another earthquake with different location.

" 4 Ud iP 22 39 37.2

" 4 Up iP 22 46 02.3

			micr	sec
P		Z'	0.4	1.5
Ki	iP		22 45 08.3	
			micr	sec
P		Z'	0.2	1.2
Sk	iP		22 45 45.3	
Um	iP		22 45 34.6	
Ud	iP		22 46 05.5	
De	iP		22 46 26.1	

Kamchatka (h = 15 km).
m = 6.2 (Up,Ki).

" 4 Up iP 23 24 22.3
Ki iP 23 24 41.9 C
Sk iP 23 24 50.4 C
Um iP 23 24 26.2 C
Ud iP 23 24 37.3 C
Pakistan (h = N).

" 5 Ud iPKPl 03 38 34.9

" 5 Up iP 04 44 34.7
Ki iP 04 43 40.9
Kamchatka (h = N).

1974
Oct. 5 Ud iP 16 13 59.3
De iP 16 13 54.7

" 5 Up iP 17 52 10.5
Sk iP 17 52 06.8
Um iP 17 51 51.3
Ud iP 17 52 19.2 C
Japan (h = 60 km).

" 5 Ki iP 21 56 54.6
Ud iP 21 57 44.5

" 5 Ud iP 22 44 53.9
Kodiak Island (h = 70 km).

" 6 Ud iP 00 49 02.3

" 6 Up iP 01 30 34.7
Ki iP 01 31 04.6
Sk iP 01 31 12.3
Um iP 01 30 49.8
Ud iP 01 30 54.1
De iP 01 30 39.8
Iran.

" 6 Up iP 03 07 58.7
Ud iP 03 07 59.0
Crete.

" 6 Ud iPKPl 05 08 57.0
De iPKPl 05 09 07.5

" 6 Ud iP 17 49 57.7
Celebes (h = 220 km).

" 6 Ki iP 20 04 08.4
Um iP 20 04 23.8
Ud iP 20 04 51.4
Japan (h = 70 km).

" 7 Up iP 10 03 19.6 C
iPcP 10 03 48.1
Ki iP 10 02 34.4 C
Sk iP 10 03 10.2
Um iP 10 02 54.7 C
Ud iP 10 03 26.2
De iP 10 03 44.0
Japan (h = 330 km).

" 7 Up eP 11 48 12
iPP 11 48 33.0

			micr	sec
Mx		E	1.0	11
Mx		Z	0.4	6
Ki			micr	sec
Mx		E	2.2	13
Mx		N	0.6	8
Mx		Z	0.7	8

(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974							
Oct.	7	(cont.)					
		Sk	iP		11 48 53.7		
			i		11 49 02.8		
		Um	i(P)		11 49 01.2		
		Ud	iP		11 48 19.2		
		De	e(P)		11 47 39		
		Ionian Sea (h = 20 km).					
		M = 4.7 (Up,Ki).					
"	7	Up	iP		17 22 54.1		
			iPP		17 26 17.2		
		Ki	iP		17 22 48.5		
		Sk	iP		17 22 37.9		
		Um	iP		17 22 54.6		
			iPP		17 26 18.3		
		Ud	iP		17 22 44.9		
		De	iP		17 22 50.1		
		Nicaragua (h = 230 km).					
"	7	Up	iPKP		22 11 28.4		
			i		22 11 31.8		
			i(PP)		22 12 41.7		
			iX		22 14 14.0		
			iY		22 14 40.3		
			iPKKP1		22 21 21.5		
			i		22 21 24.4		
					micr	sec	
			PKP	Z'	0.1	0.7	
			Y	Z'	0.4	1.2	
		Ki	iPKP		22 11 44.6		
			i(PP)		22 12 54.0		
			i(X)		22 14 38.6		
			iX		22 14 46.3		
					micr	sec	
			PKP	Z'	0.1	0.9	
			(PP)	Z'	0.2	1.3	
			X	Z'	2.9	2.1	
			Mx	N	0.7	18	
		Sk	iPKP		22 11 34.9		
			i		22 11 38.9		
			iY		22 14 46.2		
			iPKKP		22 22 01.4		
		Um	iPKP		22 11 37.7		
			iX		22 14 32.5		
			iY		22 14 47.5		
			iPKKP		22 21 54.9		
		Ud	iPKP		22 11 28.1		
			i		22 11 32.7		
			i(PP)		22 12 36.1		
			i		22 14 37.8		
			iY		22 14 41.3		
			iPKKP1		22 21 24.8		
		De	iPKP		22 11 23.1		
			i		22 11 27.3		
			iY		22 14 35.3		
			iPKKP1		22 21 42.5		
		(cont.)					

1974							
Oct.	7	(cont.)					
		South Sandwich Islands					
		(h = N).					
		X and Y are well marked phases, though unidentified, arriving 30-40 sec ahead of calculated times for SKP1 and SKP, respectively. Greater depth may be suggested. In fact, with h about 290 km and origin time about 21 53 10, with unchanged epicenter, all our readings can be brought into agreement internally, also including the observation that the surface waves are remarkably small.					
"	7	Up	i(P)		23 49 18.2		
"	8	De	iP		00 29 10.3		
"	8	Up	i(P)		01 58 00.9		
"	8	Up	iP		02 22 18.8		
		Ki	iP		02 21 55.6		
"	8	Up	iP		02 49 58.4		
		Um	iP		02 49 33.0		
		Okhotsk Sea (h = 300 km).					
"	8	Up	eP		03 15 29		
		Ki	iP		03 14 37.6		
			iPP		03 15 55.3		
					micr	sec	
			Mx	N	0.7	10	
		Sk	iP		03 15 21.3	C	
		Um	iP		03 15 01.5		
		Ud	iP		03 15 38.6		
		De	iP		03 15 59.4		
		Central Siberia (h = N).					
"	8	Up	i(Sgl)		07 28 10.3		
"	8	Up	iP		10 02 05.5	D	
			iS		10 11 08		
			iP'P'		10 30 07.6		
					micr	sec	
			P	Z'	1.3	1.3	
			P'P'	Z'	1.2	2.2	
			Mx	E	62	25	
			Mx	N	33	21	
			Mx	Z	110	22	
		Ki	iP		10 02 13.9	D	
			iS		10 11 24		
			iP'P'		10 30 02.3		
		(cont.)					

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974						
Oct.	8	(cont.)				
		Ki			micr	sec
			P	Z'	3.0	1.7
			P'P'	Z'	0.2	1.4
			Mx	E	54	20
			Mx	N	42	19
			Mx	Z	55	20
		Sk	iP		10 01 52.3	D
			iP'P'		10 30 14.4	
		Um	iP		10 02 13.2	D
			iS		10 11 24	
			iP'P'		10 30 02.6	
		Ud	iP		10 01 53.8	D
			iS		10 10 53.8	
			iP'P'		10 30 08.6	
		De	iP		10 01 53.6	D
		Leeward Islands (h = 45 km).				
		m = 6.9, M = 6.9 (Up,Ki).				
"	8	Up	iP		11 08 26.7	
		Ud	iP		11 08 30.9	
"	8	Ud	iP		11 36 20.6	
"	8	Up	iP		13 00 29.7	
		Ki	iP		13 00 37.9	
		Sk	iP		13 00 16.2	
		Um	iP		13 00 37.6	
		Ud	iP		13 00 17.0	
		Leeward Islands (h = 55 km).				
"	8	Up	iP		17 12 22.9	
		Ud	iP		17 12 37.9	C
"	8	Ud	iP		17 24 10.5	
"	8	Up	iP		18 06 16.1	
		Um	iP		18 05 39.0	
"	8	Up	iP		18 17 31.7	
		Ki	iP		18 17 39.4	
		Sk	iP		18 17 17.6	
		Ud	iP		18 17 20.1	
		De	iP		18 17 19.5	
		Leeward Islands (h = 45 km).				
"	8	Up	iP		19 20 42.1	
		Ki	iP		19 20 06.6	
		Sk	iP		19 20 38.3	
		Um	iP		19 20 24.0	
		Ud	iP		19 20 50.9	
		Japan (h = 55 km).				
"	8	Up	iP		19 53 34.5	C
		Ki	iP		19 52 55.9	
		Sk	iP		19 53 30.1	C
		(cont.)				

1974						
Oct.	8	(cont.)				
		Um	iP		19 53 12.5	C
		Ud	iP		19 53 41.2	
		Japan (h = 55 km).				
"	8	Ki	iP		22 31 21.3	
		Sk	iP		22 31 46.1	
		Ud	iP		22 31 36.3	
		Tadzhik-Sinkiang (h = N).				
"	8	Ud	iP		22 34 04.0	
"	9	Ud	iP		07 20 46.2	
"	9	Up	iSgl		07 27 00.9	
		Sk	iSgl		07 27 40.2	
		Ud	iPgl		07 25 20.7	
			iSn		07 25 52.9	
			iSgl		07 26 07.8	
		Skagerrak, 57.4°N, 9.2°E.				
		Origin time = 07 24 20.				
"	9	Up	iP		07 43 01.2	C
			iX		07 43 52.1	
			iS		07 51 56.8	
			iP'P'		08 11 11.5	
					micr	sec
			P	Z'	0.9	0.8
			P'P'	Z'	1.1	2.5
			Mx	E	29	24
			Mx	N	57	25
			Mx	Z	70	19
		Ki	iP		07 42 14.2	C
			iPcP		07 42 56.8	
			iS		07 50 26.8	
			iP'P'		08 11 33.8	
					micr	sec
			P	Z'	0.6	1.1
			P'P'	Z'	2.5	3.0
			Mx	E	46	18
			Mx	N	69	20
			Mx	Z	50	18
		Sk	iP		07 42 50.1	C
			iX		07 43 41.2	
			eP'P'		08 11 20	
		Um	iP		07 42 35.9	C
			iPcP		07 43 11.2	
			iS		07 51 09.9	
			iP'P'		08 11 23.9	
		Ud	iP		07 43 07.0	C
			iPcP		07 43 32.2	
			iS		07 52 08.4	
			eP'P'		08 11 06	
		De	iP		07 43 24.5	C
			iPcP		07 43 45.9	
		Kurile Islands (h = 50 km).				
		m = 6.8, M = 6.8 (Up,Ki).				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
Oct. 9 Sk iPKP 11 05 58.9
Solomon Islands (h = 35 km).

" 9 Ud iP 18 25 44.9
Ionian Sea (h = 40 km).

" 10 Up iPKPl 02 05 28.7
Ki iPKP 02 05 20.1
iSKPl 02 07 53.8
Ud iPKPl 02 05 30.0
De iPKPl 02 05 41.6
Tonga-Kermadec Islands
(h = 590 km).

" 10 Up iPKPl 02 52 37.9 C
micr sec
PKPl Z' 0.1 0.8
Ud iPKPl 02 52 39.4
De iPKPl 02 52 49.9
Tonga-Kermadec Islands
(h = 100 km).

" 10 Ud iP 06 25 42.3

" 10 Up iPl 06 59 22.5
iP2 06 59 24.5
ipP2 06 59 39.5
micr sec
P2 Z' 0.8 1.6
Ki iPl 06 58 40.5
iP2 06 58 42.3
iPP 07 00 56.5
iS 07 07 08
micr sec
P2 Z' 0.4 1.3
PP Z' 0.2 1.7
Sk iP2 06 59 16.3
ipP2 06 59 30.6
iPP 07 01 42.9
Um iPl 06 58 59.0
iP2 06 59 00.8
Ud iPl 06 59 29.3
iP2 06 59 31.5
ipP2 06 59 46.7
De iP2 06 59 47.6
Japan.
h = 55 km (Up,Sk,Ud).
m = 6.4 (Up,Ki).
Double P; P2 - Pl = 1.9 sec.

" 10 Up iPl 07 07 56.7
iP2 07 08 01.2
iS 07 17 00
micr sec
Pl Z' 0.2 1.2
P2 Z' 1.1 1.6
(cont.)

1974
Oct. 10 (cont.)
Up micr sec
Mx E 24 19
Mx N 35 18
Mx Z 40 19
Ki iPl 07 07 14.0
iP2 07 07 18.9
iPP 07 09 34.0
iS 07 15 50
micr sec
Pl Z' 0.1 1.2
P2 Z' 1.0 1.9
PP Z' 1.1 2.5
Mx E 72 17
Mx N 65 17
Mx Z 35 17
Sk iPl 07 07 48.4
iP2 07 07 54.0
iPP 07 10 22.0
Um iPl 07 07 32.5
iP2 07 07 38.1
Ud iPl 07 08 03.3
iP2 07 08 08.8
De iPl 07 08 20.5
iP2 07 08 24.4
iPP 07 11 05.8
Japan (h = 45 km).
m = 5.9(Pl), 6.6(P2),
M = 7.0 (Up,Ki).
Double P; P2 - Pl = 5.0 sec.

" 10 Sk iP 14 51 04.8
Ud iP 14 50 55.7

" 10 De iP 15 35 15.4
Kamchatka (h = 50 km).

" 10 Up iSgl 15 41 15.7
Um iSgl 15 43 18.2
Ud iPgl 15 40 30.7
iSgl 15 40 54.1
De iPgl 15 40 35.8
iSgl 15 41 02.4
Västergötland, Sweden,
58.4°N, 14.0°E.
Origin time = 15 40 01.

" 10 Up iP 16 17 05.4 C
Ki iP 16 17 12.0 C
Sk iP 16 17 30.3 C
Um iP 16 17 02.5 C
Ud iP 16 17 22.0 C
De iP 16 17 19.5
Afghanistan-USSR (h = 120 km).

" 10 Ki iP 21 21 51.5 C
ipP 21 22 28.7
(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974							
Oct.	10	(cont.)					
		Um	iP		21 21 52.2		
		Ud	iP		21 22 04.4		
			ipP		21 22 42.9		
		Tadzhik-Sinkiang.					
		h = 180 km (Ki,Ud).					
"	10	Up	iP		21 45 15.0	C	
					micr	sec	
			P	Z'	0.2	0.9	
		Ki	iP		21 45 14.2	C	
			iPP		21 48 50.6		
			iS		21 56 03		
					micr	sec	
			P	Z'	0.3	0.9	
			PP	Z'	0.1	1.2	
			Mx	E	0.8	19	
			Mx	N	1.3	22	
			Mx	Z	1.0	18	
		Sk	iP		21 45 28.3	C	
			iPP		21 49 19.0		
		Um	iP		21 45 11.4	C	
			iPP		21 48 52.4		
		Ud	iP		21 45 24.7	C	
			iPP		21 49 04.1		
		De	iP		21 45 22.9	C	
			iPP		21 49 06.3		
		Sumatra (h = 20 km).					
		m = 6.4 (Up,Ki).					
"	11	Ki	iPKP2		06 20 46.1		
					micr	sec	
			Mx	E	0.8	19	
			Mx	N	0.7	18	
			Mx	Z	0.9	20	
		Southwest of Macquarie					
		Islands (h = N).					
"	11	Up	Mx		08 50		
					micr	sec	
			Mx	E	0.9	23	
			Mx	N	0.7	19	
			Mx	Z	1.1	20	
		Ki	Mx		08 48		
					micr	sec	
			Mx	E	1.6	21	
			Mx	N	1.4	23	
			Mx	Z	1.5	22	
		Southeastern Pacific Ocean					
		(h = N).					
		M = 5.7 (Up,Ki).					
"	11	Up			micr	sec	
			Mx	E	1.8	23	
			Mx	N	2.6	21	
			Mx	Z	4.2	25	
		(cont.)					

1974							
Oct.	11	(cont.)					
		Ki	iPKP2		08 54 23.8		
					micr	sec	
			PKP2	Z'	0.1	1.3	
			Mx	E	2.9	21	
			Mx	N	2.7	21	
			Mx	Z	2.4	20	
		Southwest of Macquarie					
		Islands (h = N).					
		M = 6.3 (Up,Ki).					
"	11	Up	iP		09 16 25.0		
			i		09 16 30.9		
		Ki	iP		09 15 54.0		
			i		09 15 58.3		
					micr	sec	
			P	Z'	0.2	0.9	
		Sk	iP		09 15 37.7		
		Um	iP		09 16 11.1		
		North of Iceland (h = N).					
"	11	Ki	iP		13 46 42.0		
		Arctic Ocean (h = N).					
"	11	Up	iP		14 23 44.3	C	
			i		14 24 08.6		
					micr	sec	
			P	Z'	0.1	0.8	
			Mx	E	1.4	18	
			Mx	N	2.6	24	
			Mx	Z	2.4	14	
		Ki	iP		14 23 20.7	C	
					micr	sec	
			P	Z'	0.1	1.0	
			Mx	E	2.9	13	
			Mx	N	1.7	15	
			Mx	Z	2.5	12	
		Sk	iP		14 23 48.0		
		Um	iP		14 23 28.4		
		Ud	iP		14 23 53.6	C	
		De	iP		14 24 01.5		
		Formosa (h = 45 km).					
		m = 5.8, M = 5.8 (Up,Ki).					
"	11	Ud	iP		17 53 34.3		
"	11	Sk	iP		18 08 03.6		
		Um	iP		18 08 13.8		
		De	iP		18 07 55.7		
		Peru (h = 70 km).					
"	11	Up	iP		18 21 57.3		
		Ki	iP		18 21 06.5		
		Sk	iP		18 21 42.5		
		Ud	iP		18 22 02.0		
		De	iP		18 22 21.7		
		Okhotsk Sea (h = 420 km).					

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974						
Oct.	11	Um	iPKPl		22 19 33.6	C
		Ud	iPKPl		22 19 47.0	
		Kermadec Islands.				
"	12	Ki	iP		01 02 27.7	
		Ud	iP		01 03 07.4	
		Bonin Islands (h = N).				
"	12	Up	iP		04 58 44.6	C
			i		04 59 32.7	
			iPP		05 01 23.1	
			iS		05 07 56	
					micr	sec
			P	Z'	0.1	1.0
			Mx	E	1.2	20
			Mx	N	2.0	22
			Mx	Z	1.7	16
		Ki	iP		04 58 02.3	C
					micr	sec
			P	Z'	0.1	1.4
			Mx	E	4.2	18
			Mx	N	3.5	18
			Mx	Z	1.9	18
		Sk	iP		04 58 36.4	C
		Um	iP		04 58 21.5	C
			iS		05 07 12	
		Ud	iP		04 58 51.7	C
		De	iP		04 59 08.1	C
		Japan (h = 25 km).				
		m = 5.9, M = 5.7 (Up,Ki).				
"	12	Ud	iPKPl		05 16 19.8	
"	12	Up	iP		06 26 04.9	
			ipP		06 26 14.1	
			iPP		06 28 41.9	
			iS		06 35 16	
					micr	sec
			P	Z'	0.1	1.2
			PP	Z'	0.3	1.6
			Mx	E	5.8	20
			Mx	N	8.7	22
			Mx	Z	5.6	19
		Ki	iP		06 25 22.5	C
			ipP		06 25 32.6	
			iPP		06 27 41.3	
			iS		06 33 57	
					micr	sec
			P	Z'	0.1	0.9
			PP	Z'	1.1	3.0
			Mx	E	18	17
			Mx	N	12	19
			Mx	Z	10	17
		Sk	iP		06 25 57.4	C
			ipP		06 26 07.3	
		(cont.)				

1974						
Oct.	12	(cont.)				
		Sk	iPP		06 28 26.8	
		Um	iP		06 25 41.6	C
			iS		06 34 32	
		Ud	iP		06 26 12.0	C
			ipP		06 26 21.0	
			i(PP)		06 28 39.2	
		De	iP		06 26 29.0	
			ipP		06 26 38.3	
		Japan.				
		h = 35 km (Up,Ki,Sk,Ud,De).				
		m = 5.9(P), 6.6(PP),				
		M = 6.2 (Up,Ki).				
"	12	Ud	iP		07 45 54.9	
"	12	Ud	iP		10 52 25.8	
"	12	Um	iP		11 45 56.5	
		Ud	iP		11 46 36.3	
		Japan (h = 50 km).				
"	12	Um	i(P)		11 46 32.8	
		Ud	iP		11 47 03.1	
"	12	Up	iP		12 44 00.0	
			iX		12 44 14.5	
					micr	sec
			P	Z'	0.1	1.4
		Ki	iP		12 43 05.9	
			iX		12 43 18.1	
					micr	sec
			P	Z'	0.1	1.6
		Sk	iP		12 43 33.8	
		Um	iP		12 43 33.8	
			iX		12 43 43.8	
		Ud	iX		12 44 03.0	
		De	iP		12 44 21.1	
		Kodiak Island (h = 10 km).				
		m = 5.8 (Up,Ki).				
"	12	Ki	iP		12 56 00.6	
					micr	sec
			Mx	E	1.2	18
			Mx	N	0.9	18
			Mx	Z	0.8	16
		Um	iP		12 56 18.8	
		Ud	iP		12 56 49.8	
		Japan (h = 10 km).				
"	12	Up	iP		16 28 39.6	
		Ki	iP		16 27 58.2	
			ipP		16 28 07.8	
					micr	sec
			Mx	E	1.2	18
			Mx	N	0.9	18
			Mx	Z	1.0	18
		(cont.)				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Oct.	12	(cont.)				
		Um	iP	16	28	16.0
			ipP	16	28	25.2
		Ud	iP	16	28	46.8
			ipP	16	28	55.5
			i	16	29	20.9
		Japan.				
		h = 35 km (Ki,Um,Ud).				
"	12	Ki	iP	16	48	07.3
			ipP	16	48	15.5
		Um	iP	16	48	25.8
		Ud	iP	16	48	56.3
		Japan.				
		h = 30 km (Ki).				
"	12	Up	iP	17	53	24.6
		Ki	iP	17	52	31.3
		Um	iP	17	52	56.5
		Ud	iP	17	53	29.7
		De	iP	17	53	49.3
		Kamchatka.				
"	12	Ud	iPKP	19	17	58.9
		De	iPKPl	19	17	58.1
		Fiji Islands (h = 620 km).				
"	12	Up	iPKP	23	37	30.6
			i	23	37	54.8
		Ki	iPKP	23	37	45.4
		Sk	iPKP	23	37	35.3
		Um	iPKP	23	37	38.7 C
		Ud	iPKP	23	37	29.2
		De	iPKP	23	37	24.0
		South Sandwich Islands (h = N).				
"	13	Up	iP	00	25	57.4
		Ki	iP	00	27	02.4
		Ud	iP	00	26	03.4
		De	iP	00	25	31.3
		Crete (h = N).				
"	13	Up	iP	02	48	30.1
				micr		sec
			Mx E	0.9		23
			Mx N	0.8		22
			Mx Z	0.9		23
		Ki	iP	02	48	13.4
				micr		sec
			P Z'	0.1		1.1
			Mx E	0.9		20
			Mx N	1.1		20
			Mx Z	1.2		20
		Sk	iP	02	48	33.9
		(cont.)				

1974 Oct.	13	(cont.)				
		Um	iP	02	48	18.7
			iSKS	02	58	50
		Ud	iP	02	48	36.8
		Molucca Passage (h = 40 km).				
		M = 5.4 (Up,Ki).				
"	13	Um	iP	02	51	33.8
		Ud	iP	02	51	48.4
"	13	Ud	iP	02	53	54.4
"	13	Up	iP	10	01	20.0
		Sk	eP	10	01	58
		Ud	iP	10	01	43.3
		De	iP	10	01	35.0
		Ural Mountains region.				
"	13	Um	iP	10	57	11.1
"	13	Ki	iP	11	36	52.3
		Um	iP	11	36	48.7
			ipP	11	37	03.4
		Ud	iP	11	37	02.6
			ipP	11	37	17.5
		Nicobar Islands.				
		h = 55 km (Um,Ud).				
"	13	Ki	iSgl	19	29	44.0
		Sk	iSgl	19	32	00.8
		Um	iPn	19	30	24.2
			iPgl	19	30	38.7
			iSgl	19	32	08.0
		North Norway.				
		By combination with Tromsoe reading.				
		Poor internal agreement.				
"	13	Up	iP	21	38	49.2
				micr		sec
			Mx N	2.9		20
			Mx Z	0.7		18
		Ki		micr		sec
			Mx E	1.5		16
			Mx N	1.8		13
			Mx Z	1.2		14
		Sk	iP	21	39	08.4
		Um	iP	21	38	39.1
		Ud	iP	21	39	03.4
		De	iP	21	39	07.6
		Tibet (h = N).				
		M = 5.3 (Up,Ki).				
"	14	Ki	iP	04	16	27.9
		Leeward Islands (h = N).				
		(cont.)				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974						
Oct.	14	(cont.)				
		An earthquake in Yugoslavia (origin time 04 11 16) gives the same arrival time at Ki, whence a fully reliable separation is not possible.				
"	14	Sk	iP		07 58 08.8	
		Um	iP		07 58 23.4	
		Ud	iP		07 58 10.6	
		De	iP		07 58 12.0	
		Peru-Ecuador (h = 160 km).				
"	14	Ud	iP		11 37 32.1	
		Tadzhik-Sinkiang.				
"	14	Up	iP		14 22 55.7	
			iS		14 32 07	
					micr	sec
			P	Z'	0.2	1.5
			Mx	E	3.1	20
			Mx	N	4.5	21
			Mx	Z	4.1	20
		Ki	iP		14 22 14.9	
			iS		14 30 45	
					micr	sec
			Mx	E	11	21
			Mx	N	7.3	22
			Mx	Z	6.4	19
		Sk	iP		14 22 50.1	
		Um	iP		14 22 32.3	
			iS		14 31 23	
		Ud	iP		14 23 02.4	
		De	iP		14 23 19.0	
		Japan (h = 15 km).				
		M = 6.0 (Up,Ki).				
"	14	De	iPKPl		14 55 03.7 C	
		Fiji Islands (h = 550 km).				
"	14	Up	iP		21 13 17.7	
		Um	iP		21 12 54.7	
		Ud	iP		21 13 24.5	
		Japan (h = 20 km).				
"	14	Up	iPKPl		21 19 55.7	
					micr	sec
			PKPl	Z'	0.1	0.7
		Um	iPKPl		21 19 44.6	
			iSKPl		21 22 42.2	
		Ud	iPKPl		21 19 58.0	
		De	iPKPl		21 20 07.9	
		Tonga-Kermadec Islands (h = 460 km).				
"	15	Up	iP		01 28 00.5	
		(cont.)				

1974						
Oct.	15	(cont.)				
		Up	ipP		01 28 10.5	
			iS		01 37 11	
					micr	sec
			P	Z'	0.3	1.5
			Mx	E	1.9	20
			Mx	N	2.4	19
			Mx	Z	2.6	19
		Ki	iP		01 27 18.7	
			ipP		01 27 28.6	
					micr	sec
			P	Z'	0.1	1.3
			Mx	E	6.9	21
			Mx	N	4.0	17
			Mx	Z	2.7	18
		Sk	iP		01 27 53.2	
			ipP		01 28 02.2	
		Um	iP		01 27 36.8 C	
			ipP		01 27 46.3	
			iS		01 36 25	
		Ud	iP		01 28 07.3 C	
			ipP		01 28 16.7	
		De	iP		01 28 24.1	
			ipP		01 28 33.2	
		Japan.				
		h = 35 km (Up,Ki,Sk,Um,Ud, De).				
		m = 6.0, M = 5.8 (Up,Ki).				
"	15	Ki	iP		03 10 46.8	
		Ud	iP		03 12 07.9	
		Greenland Sea (h = N).				
"	15	Ki	iP		03 24 42.3	
		Um	iP		03 24 40.6	
"	15	Up	iP		06 15 05.7	
		Ki	iP		06 14 20.2	
		Sk	eP		06 14 55	
		Um	iP		06 14 40.7 C	
		Ud	iP		06 15 11.8 C	
		De	iP		06 15 29.5 C	
		Kurile Islands (h = 80 km).				
"	15	Ki	iP		08 19 01.7	
		Ud	iP		08 19 29.0	
		De	iP		08 19 37.7	
		Mindanao (h = N).				
"	15	Up	iP		09 15 37.3	
		Sk	iP		09 15 59.7	
		Um	iP		09 15 46.6	
		Ud	iP		09 15 42.8 C	
			i		09 15 49.1	
		Iran.				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Oct.	15	Sk	eP	10 02 01	
		Um	iP	10 01 47.8	
		Ud	iP	10 01 27.5	
		Greece (h = N).			
"	15	Sk	i(Sgl)	12 28 09.4	
"	15	Ud	iPgl	13 12 30.6	
			iSgl	13 12 52.7	
"	15	Up	iP	15 26 58.6	
		Ki	iP	15 26 05.7	
		Sk	iP	15 26 42.2	
		Ud	iP	15 27 02.2	
		De	iP	15 27 23.5	
		Kamchatka.			
"	15	Up	iP	16 12 42.1	
			ipP	16 12 51.7	
				micr sec	
			P Z'	0.1 1.0	
		Ki	iP	16 11 49.6	
		Ud	iP	16 12 45.2	
		De	iP	16 13 07.4	
		Kamchatka.			
		h = 35 km (Up).			
"	15	Up	iPKPl	21 47 22.7	
			i	21 47 26.8	
			i	21 47 30.7	
				micr sec	
			PKPl Z'	0.2 1.1	
		Ki	iPKP	21 47 08.2	
			i(pPKP)	21 47 24.8	
		Sk	iPKPl	21 47 15.7	
			ipPKPl	21 47 29.1	
		Um	i(PKPl)	21 47 10.1 C	
			iPKPl	21 47 11.0	
			i	21 47 14.7	
			ipPKPl	21 47 25.0	
		Ud	i(PKPl)	21 47 22.8	
			iPKPl	21 47 24.6	
			i	21 47 28.6	
			i	21 47 33.6	
		De	iPKPl	21 47 32.9 C	
			ipPKPl	21 47 45.8	
		Kermadec Islands.			
		h = 45 km (Sk,Um,De).			
		Complex beginning (Up,Um,Ud).			
"	15	Sk	iPKPl	22 26 03.1	
		Um	iPKPl	22 25 56.9	
		Ud	iPKPl	22 26 06.0	
		Kermadec Islands.			
"	15	Up	iP	22 36 32.6	
		Ud	iP	22 36 39.7	

1974 Oct.	15	Ud	iP	23 42 53.3	
"	16	Up	iP	05 08 49.1	
			iPP	05 10 28.7	
		Ki	iP	05 08 51.8	
		Sk	iP	05 09 13.4	
			iPP	05 10 59.4	
		Um	iP	05 08 44.3	
			iPP	05 10 20.2	
		Ud	iP	05 09 05.7	
			iPP	05 10 49.0	
		De	iP	05 09 05.4	
			iPP	05 10 51.2	
		Sinkiang, China (h = N).			
"	16	Up	iP	05 42 16.1	
			i	05 42 20.2	
		Ki	iP	05 42 24.2	
		Sk	iP	05 41 53.0	
			i	05 42 00.9	
		Um	iP	05 42 29.7	
		Ud	iP	05 41 57.9	
		De	iP	05 42 04.2	
		North Atlantic Ocean (h = N).			
"	16	Up	iPl	05 50 57.6 C	
			iP2	05 51 02.1	
			iP3	05 51 09.3	
			iP4	05 51 14.9	
			iS	05 55 52	
				micr sec	
			Pl Z'	0.1 1.0	
			P2 Z'	0.4 1.2	
			P3 Z'	0.4 1.0	
			P4 Z'	3.5 1.6	
			Mx E	83 17	
			Mx N	120 17	
			Mx Z	220 18	
		Ki	iPl	05 51 08.0 C	
			iP3	05 51 20.6	
			iP4	05 51 24.5	
				micr sec	
			Pl Z'	0.1 1.0	
			P3 Z'	0.5 1.1	
			P4 Z'	2.5 1.8	
			Mx E	210 22	
			Mx N	120 16	
			Mx Z	150 21	
		Sk	iPl	05 50 34.9 C	
			iP3	05 50 46.8	
		Um	iPl	05 51 06.5 C	
			iP2	05 51 12.6	
		Ud	iPl	05 50 39.2 C	
			iP3	05 50 51.8	
			iP4	05 50 57.9	
		De	iPl	05 50 45.7 C	
		(cont.)			

Δ = 27.5°
5.58
0.69
6.27

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Oct.	16	(cont.)				
		De	iP3		05 50 57.9	
			iP4		05 51 02.4	
		North Atlantic Ocean (h = N).				
		m = 5.6(P1), 6.0(P2), 6.2(P3),				
		6.8(P4), M = 6.8 (Up,Ki).				
		Multiple rupture: P2 - P1				
		= 5.3 sec, P3 - P1 = 12.2 sec,				
		P4 - P1 = 17.3 sec.				
"	16	Up	i(P)		05 59 21.7	
		Um	e(P)		05 59 24	
"	16	Up	iP		06 39 55.3	C
			iPn		06 40 58.4	
			iPP		06 41 13.5	
					micr sec	
			P	Z'	0.3 0.5	
		Ki	iP		06 39 38.4	C
					micr sec	
			P	Z'	0.4 1.0	
		Sk	iP		06 40 10.2	C
			iPP		06 40 33.0	
		Um	iP		06 39 39.9	C
		Ud	iP		06 40 11.3	C
		De	iP		06 40 18.8	C
			iPn		06 41 42.7	
		Kazakh SSR.				
		m = 6.4 (Up,Ki).				
		Underground explosion.				
"	16	Um	iP		06 45 20.0	
"	16	Up	iPn		08 14 49.4	
			i		08 15 13.5	
			i		08 15 16.4	
			iSgl		08 16 24.8	
		Sk	iSgl		08 16 52.9	
		Um	iSgl		08 18 06.0	
		Ud	iPn		08 14 40.1	
			iSgl		08 15 42.7	
		De	iPn		08 14 21.2	
			iPgl		08 14 27.1	
			iSgl		08 15 15.6	
		Skagerrak,				
		near 57 1/2°N, 7 1/2°E.				
		Origin time = 08 13 28.				
		By combination with Bergen				
		and Kongsberg readings.				
"	16	Up	iP		09 41 03.8	C
			ipP		09 41 13.2	
			iPP		09 43 39.8	
					micr sec	
			P	Z'	0.2 0.9	
			Mx	E	1.3 22	
		(cont.)				

1974 Oct.	16	(cont.)				
		Up			micr sec	
			Mx	N	1.1 15	
			Mx	Z	1.7 21	
		Ki	iP		09 40 21.6	C
					micr sec	
			P	Z'	0.2 1.1	
			Mx	E	3.6 22	
			Mx	N	2.6 19	
			Mx	Z	2.3 18	
		Sk	iP		09 40 56.0	C
			iPP		09 43 27.3	
		Um	iP		09 40 40.1	C
		Ud	iP		09 41 10.4	C
		De	iP		09 41 26.6	C
		Japan.				
		h = 35 km (Up).				
		m = 6.2, M = 5.5 (Up,Ki).				
"	16	Up	iP		11 10 29.7	D
					micr sec	
			P	Z'	0.1 0.7	
		Ki	iP		11 09 58.2	D
			iPP		11 12 50.3	
					micr sec	
			P	Z'	0.1 0.8	
		Sk	iP		11 10 27.0	D
			iPP		11 13 34.8	
		Um	iP		11 10 11.9	D
		Ud	iP		11 10 36.8	D
			iPP		11 13 49.2	
		De	iP		11 10 48.5	D
		Bonin Islands (h = 440 km).				
		m = 5.6 (Up,Ki).				
"	16	Up	i(P)		12 53 45.4	
		De	iP		12 54 19.6	
"	16	Up	i(P)		13 39 04.1	
		Um	i(P)		13 38 39.9	
"	16	Ud	iPgl		13 51 45.6	
			iSgl		13 52 10.1	
			iRg		13 52 24.2	
		De	iPgl		13 51 49.0	
			iSgl		13 52 16.1	
			iRg		13 52 29.0	
		Västergötland, Sweden.				
		Origin time = 13 51 15.				
		Near-surface event.				
"	16	Ki	iPKP		15 08 02.8	
		Um	iPKP1		15 08 14.0	
		Ud	iPKP1		15 08 25.5	
		Kermadec Islands.				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974					
Oct.	16	Sk	iPKP	17 49 07.6	
		Um	i(PP)	17 49 28.1	
		De	iPKP	17 49 15.0	
		New Britain (h = 70 km).			
"	16	Ud	iPKP1	18 25 31.0	
		Tonga-Kermadec Islands			
		(h = 600 km).			
"	17	Up	iP	04 17 14.7	
		Ki	eP	04 17 55	
		Ud	iP	04 17 28.6	C
		De	iP	04 17 12.4	
		Iran (h = 35 km).			
"	17	Ud	iP	06 09 25.4	
"	17	Ki	iP	06 10 36.0	
		Sk	eP	06 10 21	
"	17	Ki	iP	09 04 20.7	
		Sk	iP	09 03 55.9	
		Ud	iP	09 03 57.0	
		Leeward Islands (h = 60 km).			
"	17	Up	iSgl	13 33 36.7	
		Sk	eSgl	13 33 37	
		Ud	iSgl	13 32 39.1	
		De	i	13 32 32.3	
			iSgl	13 32 59.9	
		Southwest Norway,			
		near 58.7°N, 7.1°E.			
		Origin time = 13 30 45.			
"	17	Ki	iP	14 07 23.9	
			ipP	14 08 06.4	
		Sk	iP	14 07 46.8	
		Um	iP	14 07 31.5	
		Ud	iP	14 07 50.1	
			ipP	14 08 35.0	
		Mindoro.			
		h = 170 km (Ki,Ud).			
"	17	Ki	iP	15 42 43.1	
		Sk	iP	15 42 10.4	
		Ud	iP	15 42 07.8	
		North Atlantic Ocean (h = N).			
"	17	Ud	iP	19 04 27.4	
"	17	Sk	iP	20 06 59.8	
		Guatemala (h = 160 km).			
"	17	Ki	iP	22 16 42.6	
		Sk	iP	22 16 59.9	
		Um	iP	22 16 32.6	
		Ud	iP	22 16 50.7	
		(cont.)			

1974					
Oct.	17	(cont.)			
		Afghanistan-USSR			
		(h = 210 km).			
"	18	Ki	eP	00 37 59	
			ipP	00 38 11.4	
		Um	iP	00 37 57.8	
			ipP	00 38 11.0	
		Ud	iP	00 37 35.0	
			ipP	00 37 51.2	
		De	iP	00 37 30.5	
		Leeward Islands.			
		h = 50 km (Ki,Um,Ud).			
"	18	Up		micr	sec
			Mx E	0.8	21
			Mx N	0.9	21
			Mx Z	1.4	21
		Ki	iP	09 18 06.8	
				micr	sec
			Mx E	1.4	22
			Mx N	1.0	21
			Mx Z	1.9	23
		New Guinea (h = 35 km).			
		M = 5.6 (Up,Ki).			
"	18	Ud	iSKP	11 47 51.9	
		New Hebrides Islands			
		(h = 50 km).			
"	18	Ki	iPKP	12 10 52.6	
		Samoa Islands (h = N).			
"	18	Up	iP	14 13 22.6	
		Ki	iP	14 12 28.8	
		Um	iP	14 12 56.1	
		Ud	iP	14 13 20.8	
		De	iP	14 13 43.8	
		Unimak Island (h = 40 km).			
"	18	Um	iPKP2	17 38 29.5	
		South Pacific Ocean (h = N).			
"	18	Up	iSgl	17 50 45.0	
		Sk	eSgl	17 50 34	
		Ud	iSgl	17 49 47.1	
		Southwest Norway,			
		59.2°N, 7.0°E.			
		Origin time = 17 47 56.			
		By combination with Bergen			
		and Kongsberg readings.			
"	18	Up	iP	22 00 30.5	
			i	22 00 36.2	
		Ki	iP	21 59 55.6	
		Sk	iP	22 00 27.2	
		Um	iP	22 00 10.6	
		(cont.)			

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
Oct. 18 (cont.)
Ud iP 22 00 37.8
South of Japan (h = 15 km).

" 19 Um iP 00 17 21.0
South of Japan (h = 130 km).

" 19 Ud iP 04 01 52.5

" 19 Up iPKP 04 05 25.3
Ki iPKP 04 05 11.1 C
Sk iPKP 04 05 22.4
Um iPKP 04 05 17.4
iSKP1 04 08 20.5
Ud iPKP 04 05 27.4 C
iSKP1 04 08 33.0
De iPKP 04 05 33.1
iSKP1 04 08 49.4
New Hebrides Islands
(h = 170 km).

" 19 Up iP 04 08 20.2
micr sec
P Z' 0.1 1.0
Ki iP 04 07 45.0 C
micr sec
Mx E 1.0 16
Mx N 1.0 16
Mx Z 0.8 16
Sk iP 04 08 15.5
Um iP 04 08 00.2 C
Ud iP 04 08 27.0
De iP 04 08 40.1
South of Japan (h = 25 km).

" 19 Up iP 06 58 46.5
i 06 58 50.8
micr sec
Mx N 1.2 22
Mx Z 1.7 21
Ki iP 06 58 35.9
micr sec
P Z' 0.1 1.1
Mx E 1.1 17
Mx N 1.2 18
Sk iP 06 58 57.6
Um iP 06 58 39.1
Ud iP 06 58 57.9
De iP 06 59 02.2
Celebes (h = 70 km).
M = 5.6 (Up,Ki).

" 19 Up iP 09 51 05.7
Ki iP 09 50 17.6
Um iP 09 50 39.8 C
Ud iP 09 51 10.9
Kurile Islands (h = 170 km).

1974
Oct. 19 Ki iP 15 10 00.6
North Atlantic Ocean (h = N).

" 19 Ud iP 23 15 59.5
Iran (h = 60 km).

" 20 Ki iP 01 20 07.6
Ud iP 01 20 33.9

" 20 Sk iP 05 03 04.9
Colombia (h = 50 km).

" 20 Ud iPKP1 05 27 49.7
De iPKP1 05 28 01.3 C
Tonga-Kermadec Islands
(h = 570 km).

" 20 Up iP 11 30 28.7
micr sec
P Z' 0.1 1.0
Mx E 3.4 18
Mx N 1.2 14
Mx Z 2.7 18
Ki iP 11 31 47.9
micr sec
Mx E 5.2 12
Mx N 1.7 9
Mx Z 1.7 9
Sk iP 11 31 08.8
i 11 31 19.4
Um iP 11 31 11.2
i 11 31 15.9
Ud iP 11 30 33.3
De iP 11 30 02.1
Ionian Sea (h = N).
M = 5.1 (Up,Ki).

" 20 Up iP 11 54 07.4
micr sec
P Z' 0.1 1.1
Ki iP 11 53 23.4
Sk iP 11 54 00.0
Um iP 11 53 43.3
Ud iP 11 54 14.2
ipP 11 54 24.8
De iP 11 54 33.7
Japan.
h = 40 km (Ud).

" 20 Um iPKP 15 46 14.4
De iPKP 15 46 29.9
Solomon Islands (h = 45 km).

" 20 Ki iP 15 47 45.6

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
Oct. 20 Up micr sec
Mx N 0.9 20
Mx Z 1.4 21
Ki micr sec
Mx E 1.1 20
Mx N 0.8 19
Ud iPKP 19 58 16.2
De iPKP 19 58 20.8
Solomon Islands (h = 45 km).
M = 5.5 (Up,Ki).

" 21 Up Mx 03 42
micr sec
Mx E 1.1 19
Mx N 1.0 22
Mx Z 1.4 20
Ki Mx 03 43
micr sec
Mx E 0.8 18
Mx N 1.3 19
Mx Z 1.0 18
South Pacific Ocean
(h = N).
M = 5.9 (Up,Ki).

" 21 Up iSgl 04 23 24.4
i 04 23 31.7
Sk iSgl 04 23 56.1
Um iPn 04 22 58.0
iSgl 04 23 32.6
Ud iSgl 04 23 46.5
Off coast of Hälsingland,
Sweden, 61.8°N, 17.6°E.
Origin time = 04 22 20.

" 21 Up iPKP 04 30 37.1
iSKPl 04 33 23.3
micr sec
PKP Z' 0.1 1.2
SKPl Z' 0.1 1.1
Ki i(PKP) 04 30 19.4
iPKP 04 30 29.0
iSKPl 04 32 57.0
micr sec
SKPl Z' 0.8 1.7
Sk i(PKP) 04 30 30.9
iPKP 04 30 40.9
iSKPl 04 33 15.5
Um i(PKP) 04 30 32.3
iPKP 04 30 36.7
iSKPl 04 33 10.5
Ud i(PKP) 04 30 36.3
iPKP 04 30 40.0
iSKPl 04 33 24.6
De iPKP 04 30 45.1
iSKPl 04 33 34.8
Fiji Islands (h = 600 km).

1974
Oct. 21 Up i(P) 06 10 25.4

" 21 Up iSgl 10 09 33.7
Sk eSgl 10 10 07
Ud i 10 08 20.5
iSgl 10 08 24.2
De iSgl 10 08 55.0
Probably Skagerrak.

" 21 Up iP 12 58 36.5
micr sec
P Z' 0.2 1.0
Ki iP 12 57 42.3
micr sec
P Z' 0.2 0.9
Sk iP 12 58 19.4 C
Um iP 12 58 07.5 C
Ud iP 12 58 39.5
De iP 12 59 01.5 C
Kamchatka (h = N).
m = 6.2 (Up,Ki).

" 21 Up iP 14 53 41.9
Sk iP 14 54 15.9
Um iP 14 54 20.1
Ud iP 14 53 41.9
De iP 14 53 06.3
Tyrrhenian Sea (h = 320 km).

" 21 Ki micr sec
Mx E 0.9 18
Mx N 0.8 17
Ud iP 15 19 10.4
Japan (h = N).

" 21 Ki i(Pgl) 16 39 09.9
i(Sn) 16 39 40.1
Off coast of north Norway.
By combination with Tromsoe
reading.

" 21 Ki i(Pgl) 16 59 10.9
i(Sn) 16 59 40.9
Off coast of north Norway.
By combination with Tromsoe
readings.

" 21 Um iPKPl 17 30 41.6
Ud iPKPl 17 30 53.4

" 21 Um iPKPl 18 48 08.4
Ud iPKPl 18 48 20.4

" 21 Um iPKPl 19 57 18.2

" 22 Ki eP 00 35 26
Timor (h = 90 km).

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974						
Oct.	22	Ud	iPKPl		04 08 33.3	
		De	iPKPl		04 08 43.6	
"	22	Up	iP		05 10 54.9	
			i		05 10 59.4	
					micr	sec
			P	Z'	0.2	1.5
			Mx	E	1.1	19
			Mx	N	1.1	15
			Mx	Z	2.6	19
		Ki	iP		05 10 51.3	
					micr	sec
			P	Z'	0.2	1.7
			Mx	E	2.9	13
			Mx	N	2.0	11
			Mx	Z	1.8	12
		Sk	iP		05 10 21.8	
		Um	iP		05 10 57.5 C	
			iS		05 14 51	
		Ud	iP		05 10 38.3	
		De	iP		05 10 57.0	
		Southwest of Iceland				
		(h = N).				
		m = 5.1, M = 4.7 (Up,Ki).				
"	22	Ud	iP		06 18 17.9	
			i		06 18 24.6	
		North Atlantic Ocean (h = N).				
"	22	Um	i(P)		07 34 26.8	
		Ud	iP		07 33 43.8	
		Ionian Sea (h = N).				
"	22	Um	iP		08 50 55.8	
		Ud	iP		08 51 22.2	
		South of Japan (h = N).				
"	22	Ud	iP		09 17 33.4	
		Sumatra (h = N).				
"	22	Ki	iP		09 29 24.9	
					micr	sec
			P	Z'	0.2	1.9
			Mx	E	0.6	14
			Mx	N	0.7	15
		Um	iP		09 29 23.5	
		Ud	iP		09 29 32.0	
		Sumatra (h = 80 km).				
"	22	Ud	iP		10 18 52.9	
"	22	Ud	iPKPl		11 11 28.6	
"	22	Up	iP		12 10 53.8	
			iS		12 14 48	
		(cont.)				

1974						
Oct.	22	(cont.)				
		Up			micr	sec
			P	Z'	0.1	1.2
			Mx	E	1.7	18
			Mx	N	1.2	14
			Mx	Z	3.9	22
		Ki	eP		12 10 46	
			i		12 10 58.9	
					micr	sec
			P	Z'	0.5	2.5
			i	Z'	0.6	2.4
			Mx	E	5.2	13
			Mx	N	3.8	16
			Mx	Z	4.4	14
		Sk	iP		12 10 16.3	
		Um	iP		12 10 53.3	
			iS		12 14 48	
		Ud	iP		12 10 34.9	
		Southwest of Iceland				
		(h = N).				
		m = 5.1, M = 4.9 (Up,Ki).				
"	22	Up	iP		17 56 48.4	
					micr	sec
			P	Z'	0.1	1.0
		Ki	iP		17 56 53.7	
		Sk	iP		17 57 12.5 C	
		Um	iP		17 56 42.5	
		Ud	iP		17 57 04.6 C	
			ipP		17 57 33.4	
		Tadzhik SSR.				
		h = 140 km (Ud).				
"	22	Ki	iP		22 26 30.2	
		Ud	iP		22 26 44.3	
		Tadzhik-Sinkiang (h = 260 km).				
"	22	Up	iP		22 58 13.3 D	
			iS		23 08 30	
					micr	sec
			P	Z'	0.1	1.0
			Mx	E	3.2	17
			Mx	N	5.0	23
			Mx	Z	7.0	16
		Ki	iP		22 57 55.1	
					micr	sec
			Mx	E	6.9	18
			Mx	N	5.5	19
			Mx	Z	6.9	18
		Sk	iP		22 58 19.9	
		Um	iP		22 58 02.4 D	
			iS		23 08 13	
		Ud	iP		22 58 22.0 D	
		Mindoro (h = 40 km).				
		M = 6.1 (Up,Ki).				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Oct.	23	Ud	iP		02 10 08.2	
		Crete.				
"	23	Up	i(PKP)		06 33 40.7	
			iPKP		06 33 47.6	
			iPP		06 35 08.2	
					micr	sec
			PP	Z'	2.1	2.5
			Mx	E	41	22
			Mx	N	110	23
			Mx	Z	79	20
		Ki	i(PKP)		06 33 33.5	
			iPKP		06 33 43.4	
			iPP		06 34 23.0	
					micr	sec
			PKP	Z'	0.1	1.0
			PP	Z'	0.7	2.2
			Mx	E	89	23
			Mx	N	90	22
			Mx	Z	53	19
		Sk	i(PKP)		06 33 38.4	
			iPKP		06 33 49.3	
			iPP		06 35 04.6	
		Um	iPKP		06 33 42.5	
			iPP		06 34 35.4	
		Ud	iPKP		06 33 50.6	
			iPP		06 35 18.8	
		De	i(PKP)		06 33 48.1	
			iPKP		06 33 56.4	
			iPP		06 35 34.9	
		D'Entrecasteaux Islands (h = 50 km). m = 7.2, M = 7.4 (Up,Ki).				
"	23	Ki	iPKPl		11 46 24.0	
		West of Macquarie Islands (h = N).				
"	23	Ud	iP		11 57 34.7	
		North of Ascension Island (h = N).				
"	23	Ud	iP		12 11 49.5	
"	23	De	iP		13 45 47.1	
"	23	Ud	ipPKP		15 14 42.5	
		De	iPKP		15 14 24.5	
			ipPKP		15 14 52.0	
		New Hebrides Islands. h = 100 km (De).				
"	24	Up	iP		05 38 28.4	C
			i		05 38 40.6	
		(cont.)				

1974 Oct.	24	(cont.)				
		Up			micr	sec
			P	Z'	0.1	0.8
		Ki	iP		05 37 51.6	C
					micr	sec
			P	Z'	0.1	0.6
		Sk	iP		05 38 23.5	C
		Um	iP		05 38 07.6	C
		Ud	iP		05 38 35.7	C
		De	iP		05 38 49.1	
		Japan (h = 60 km). m = 5.9 (Up,Ki).				
"	24	Up	iP		07 42 47.6	
			ipP		07 42 53.4	
					micr	sec
			pP	Z'	0.1	0.8
			Mx	E	0.8	16
			Mx	N	0.8	17
			Mx	Z	1.1	16
		Ki	iP		07 42 11.9	C
			ipP		07 42 18.0	
					micr	sec
			P	Z'	0.1	1.2
			Mx	E	1.1	15
			Mx	N	1.2	16
			Mx	Z	0.9	16
		Sk	iP		07 42 42.7	
		Um	iP		07 42 27.7	C
			ipP		07 42 33.3	
			iS		07 52 03	
		Ud	iP		07 42 54.7	C
			ipP		07 43 00.4	
		De	iP		07 43 08.6	
			ipP		07 43 13.4	
		South of Japan. h = 20 km (Up,Ki,Um,Ud,De). m = 5.9, M = 5.4 (Up,Ki).				
"	24	Up	i(Sgl)		11 08 08.2	
"	24	Up			micr	sec
			Mx	N	1.4	19
		Ki	iP		14 33 24.6	
		Ud	iP		14 33 57.1	
		Formosa (h = 55 km).				
"	24	Ki	iP		16 16 58.9	
		Um	iP		16 16 53.7	
		Ud	iP		16 17 12.5	
		De	iP		16 17 12.0	
		Kirghiz SSR (h = N).				
"	25	Up	iP		00 18 05.0	
			i		00 18 45.6	
		(cont.)				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Oct.	25	(cont.)				
		Up		micr	sec	
			P	Z' 0.1	1.3	
		Ki	iP	00 17	52.9	
			i	00 18	44.1	
				micr	sec	
			P	Z' 0.5	1.7	
		Sk	iP	00 17	47.1	
			i	00 18	32.3	
		Um	iP	00 18	01.8	
			i	00 18	55.1	
		Ud	iP	00 17	55.6	
		De	iP	00 18	04.5	
		Mexico (h = 120 km).				
		m = 5.9 (Up,Ki).				
"	25	Ud	iP	03 52	54.5	
"	25	Ki	iP	07 30	30.8	
		Um	iP	07 30	46.6 C	
		Ud	iP	07 31	14.6	
		Japan (h = 60 km).				
"	25	Up	iP	11 49	00.4	
			iS	11 53	20.9	
		Ki	iP	11 50	09.1	
		Sk	iP	11 49	39.9	
		Ud	iP	11 49	06.7	
			iS	11 53	38.2	
		De	iP	11 48	33.6	
			iS	11 52	39.1	
		Crete (h = 45 km).				
"	25	Up	iP	15 51	22.8 C	
				micr	sec	
			P	Z' 0.1	0.8	
		Ki	iP	15 50	38.4 C	
				micr	sec	
			P	Z' 0.1	0.9	
		Sk	iP	15 51	12.9	
		Um	iP	15 50	58.4 C	
		Ud	iP	15 51	29.3	
		Japan (h = 45 km).				
		m = 5.9 (Up,Ki).				
"	26	Up	iP	14 20	08.9	
		De	eP	14 20	18	
"	27	Up	iPKPl	00 01	40.5 C	
		Sk	iPKPl	00 01	34.4 C	
		Um	iPKPl	00 01	28.3 C	
			ipPKPl	00 01	42.9	
		Ud	iPKPl	00 01	41.4	
		Kermadec Islands.				
		h = 50 km (Um).				

1974 Oct.	27	Um	i(pPKPl)	00 23	10.4	
		Ud	iPKPl	00 23	14.0	
			i(pPKPl)	00 23	26.1	
			i	00 23	42.6	
		De	iPKPl	00 23	21.5	
"	27	Um	iPKPl	00 49	12.5	
			ipPKPl	00 49	28.5	
		Ud	ipPKPl	00 49	40.7	
"	27	Up	iP	02 39	59.7	
		Ki	iP	02 39	12.9	
		Um	iP	02 39	37.3	
			ipP	02 40	21.4	
		Ud	iP	02 39	59.8	
		Japan.				
		h = 190 km (Um).				
"	27	Ki	iP	03 30	46.6	
		Ud	iP	03 30	57.8	
		Pamir.				
"	27	Up	iP	03 51	51.6	
		Ud	iP	03 52	08.1	
		Tadzhik SSR (h = 35 km).				
"	27	De	iPKPl	05 10	33.0	
		Loyalty Islands (h = 100 km).				
"	27	Up	iP	07 43	35.3	
		Ud	iP	07 43	51.9	
"	27	Up	iP	08 57	48.6	
		Ki	iP	08 59	00.9	
		Sk	iP	08 58	28.2	
		Um	iP	08 58	21.5	
		Ud	iP	08 57	56.3	
		De	iP	08 57	27.4	
		Crete (h = 70 km).				
"	27	Up	iPKPl	13 06	42.8	
				micr	sec	
			PKPl Z'	0.1	0.9	
		Um	i(PKPl)	13 06	37.2	
		Ud	iPKPl	13 06	45.0	
"	27	Ud	iP	22 53	29.7	
		Hindu Kush.				
		Intermediate depth.				
"	28	Ud	iSgl	15 08	42.9	
		De	iSgl	15 06	52.8	
"	28	Up	iSgl	21 58	25.7	
		Sk	iSgl	21 59	40.8	
		(cont.)				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
Oct. 28 (cont.)

	Um	iSg1	22 00 24.6	
	Ud	iSg1	21 57 53.8	
	De	iPg1	21 56 51.3	
		iSg1	21 57 08.0	
		iSn	21 57 10.6	

Halland, Sweden,
57.4°N, 12.1°E.
Origin time = 21 56 29.
Felt.

" 29	Up	iP	01 08 48.1	
		i	01 14 12.6	
			micr	sec
		P Z'	0.1	1.0
		Mx N	4.8	11
		Mx Z	7.3	12
	Ki	iP	01 10 24.2	
			micr	sec
		P Z'	0.1	1.5
		Mx E	2.1	8
		Mx N	3.8	11
		Mx Z	3.2	11
	Sk	iP	01 09 41.6	
	Um	iP	01 09 32.6	
	Ud	iP	01 08 54.7	
		i	01 14 18.0	
	De	iP	01 08 09.0	
		i	01 12 22.0	

Yugoslavia (h = N).
m = 5.0, M = 5.2 (Up,Ki).

" 29	Up	iP	03 22 03.5	
	Ki	iP	03 22 12.6	
	Sk	iP	03 21 52.1	
	Um	iP	03 22 17.3	
	Ud	iP	03 21 53.1	

Venezuela (h = N).

" 29	Up	iP	03 28 17.1	
		i(PP)	03 32 29.2	
		iPP	03 32 49.5	
		iSKS	03 38 39.8	
		i	03 39 27.3	
		iSP	03 41 42	
		iPKKP1	03 43 47.8	
		iPKKP2	03 44 02.7	
			micr	sec
		P Z'	0.1	0.9
		PP Z'	0.4	1.4
		Mx E	8.4	20
		Mx N	19	21
		Mx Z	11	22
	Ki	iP	03 28 01.5	
		i(PP)	03 32 12.8	
		iPP	03 32 24.0	

(cont.)

1974
Oct. 29 (cont.)

	Ki	iSKS	03 38 25	
		iS	03 39 32	
		iPKKP1	03 43 57.4	
		iPKKP2	03 44 18.5	
			micr	sec
		P Z'	0.5	1.3
		PP Z'	2.8	2.3
		PKKP1 Z'	0.8	2.3
		Mx E	11	20
		Mx N	29	22
		Mx Z	9.9	18
	Sk	iP	03 28 22.5	
		i(PP)	03 32 32.3	
		iPP	03 32 57.8	
		iPKKP1	03 43 43.1	
		iPKKP2	03 43 59.1	
	Um	iP	03 28 06.4	
		i(PP)	03 31 30.1	
		iPP	03 32 33.1	
		iSKS	03 38 29.6	
		iS	03 39 41	
		iPKKP1	03 43 51.5	
	Ud	iP	03 28 25.1	
		i	03 28 30.5	
		i(PP)	03 31 58.0	
		iPP	03 33 02.6	
		iPKKP1	03 43 40.4	
		iPKKP2	03 43 58.1	
	De	iP	03 28 30.5	
		i(PP)	03 32 03.1	
		i	03 32 32.4	

Banda Sea (h = 120 km).
m = 7.1, M = 6.4 (Up,Ki).
M uncorrected for focal depth.
Clear cases of (PP), i.e.
early PP, as well as of PKKP1
and PKKP2.

" 29	Um	iP	04 44 31.6	

Japan (h = 9 km).

" 29	Ud	iP	05 57 31.6	
" 29	Um	iP	06 42 23.0	
	Ud	iP	06 42 54.6	
" 29	Up	iPKP1	10 10 59.4	
			micr	sec
		PKP1 Z'	0.1	1.2
	Ki	iPKP1	10 10 57.7	
			micr	sec
		PKP1 Z'	0.1	1.0
	Sk	iPKP2	10 11 11.5	
	Um	iPKP1	10 10 57.3	
	Ud	iPKP2	10 11 09.5 C	

(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974						
Oct.	29	(cont.)				
		De	iPKPl	10 11 01.1		
			i	10 11 08.2		
		South of Australia (h = N).				
"	29	Ki	iPgl	10 36 12.8		
			iSgl	10 36 50.1		
		Sk	iSgl	10 36 54.5		
		Um	iPgl	10 36 28.8		
			iSn	10 37 03.6		
			iSgl	10 37 18.1		
		Ud	iSgl	10 38 45.3		
		Nordland, Norway,				
		66.4°N, 14.2°E.				
		Origin time = 10 35 22.				
		Explosion?				
"	29	Ki	iP	11 10 54.1		
		Um	i(pP)	11 11 20.4		
		Ud	i(pP)	11 11 46.6		
		Japan (h = 45 km).				
"	30	Ki	iP	00 15 32.1		
		Mexico (h = 80 km).				
"	30	Sk	iSgl	00 17 46.2		
		Ud	iSgl	00 16 23.1		
		De	iSgl	00 16 14.6		
"	30	Ki	iP	02 41 45.4		
		Ud	iP	02 42 00.0		
		De	iP	02 41 59.0		
		Kashmir (h = 100 km).				
"	30	Ki	iP	04 43 30.6		
		Ud	iP	04 43 50.4		
		Celebes (h = 110 km).				
"	30	Ki		micr	sec	
			Mx	E	0.8	18
			Mx	N	0.3	12
		Ud	iP	10 44 49.8		
		Japan (h = 20 km).				
"	30	Up	iP	16 19 11.4		
			i	16 19 14.8		
			ipP	16 19 23.5		
				micr	sec	
			P	Z'	0.1	1.3
			Mx	E	6.9	16
			Mx	N	4.8	16
			Mx	Z	14	16
		Ki	iP	16 18 40.1		
				micr	sec	
			P	Z'	0.1	1.0
			Mx	E	13	19
		(cont.)				

1974						
Oct.	30	(cont.)				
		Ki		micr	sec	
			Mx	N	9.9	18
			Mx	Z	10	20
		Sk	iP	16 19 11.5		
		Um	iP	16 18 53.2		
		Ud	iP	16 19 20.1		
			i	16 19 23.7		
			ipP	16 19 32.6		
		De	iP	16 19 32.7		
			ipP	16 19 44.1		
		Ryukyu Islands.				
		h = 45 km (Up,Ud,De).				
		m = 5.7, M = 6.3 (Up,Ki).				
"	30	Up	iP	18 03 23.2 D		
		Ki	iP	18 02 52.0		
				micr	sec	
			P	Z'	0.1	1.0
		Sk	iP	18 03 20.3		
		Um	iP	18 03 05.8 D		
		Ud	iP	18 03 30.2 D		
		De	iP	18 03 41.1		
		Bonin Islands (h = 420 km).				
"	30	Up	iP	21 57 29.0		
		Ki	iP	21 57 15.6		
		Sk	iP	21 57 36.0		
		Um	iP	21 57 20.0 D		
			ipP	21 59 35.0		
		Ud	iP	21 57 38.3 D		
		De	iP	21 57 43.4		
		Celebes Sea.				
		h = 630 km (Um).				
"	31	Ki	iP	00 43 30.6		
		Um	iP	00 43 47.7 C		
		Japan (h = 60 km).				
"	31	Up	iP	05 15 09.5		
				micr	sec	
			P	Z'	0.1	0.9
		Ki	iP	05 14 16.2		
		Sk	iP	05 14 50.3		
		Um	iP	05 14 47.3		
		Ud	iP	05 15 09.9		
		Aleutian Islands (h = 70 km).				
"	31	Up	iP	06 47 57.2		
		Um	iP	06 47 31.6		
		Okhotsk Sea (h = 430 km).				
"	31	Ki		micr	sec	
			Mx	E	0.7	19
			Mx	N	0.8	19
			Mx	Z	0.9	19
		(cont.)				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974						
Oct.	31	(cont.)				
		Ud	iPKPl		07 05 58.4	
		De	iPKPl		07 06 10.2	
		Tonga Islands (h = N).				
"	31	Ki	iP		09 14 22.7	
		Um	iP		09 14 22.4	
			i		09 14 30.9	
		Ud	iP		09 14 33.1	
		Sumatra.				
"	31	Up	iP		09 55 46.2	
		Ki	iP		09 55 14.1	
		Sk	iP		09 55 44.3	
		Um	iP		09 55 29.7	
		Ud	iP		09 55 53.6	
		Bonin Islands (h = 70 km).				
"	31	Ki	iP		18 09 48.9	
					micr	sec
			P	Z'	0.1	1.3
		Um	iP		18 10 16.0	
		Ud	iP		18 10 41.6	
		De	iP		18 11 04.3	
		Aleutian Islands (h = 35 km).				
"	31	Ud	iP		18 10 10.6	
			i		18 10 21.4	

Markus Båth
Rutger Wahlström

May 1, 1976

BOX
S-751 [illegible] ALA 1
SWEDEN

SEISMOLOGICAL INSTITUTE
BOX 517
S-751 20 UPPSALA
SWEDEN

S E I S M O L O G I C A L B U L L E T I N

U P P S A L A, K I R U N A, S K A L S T U G A N, U M E Å,

U D D E H O L M and D E L A R Y

Uppsala	(Up):	59°51.5'N,	17°37.6'E;	h = 14 m
Kiruna	(Ki):	67°50.4'N,	20°25.0'E;	h = 390 m
Skalstugan	(Sk):	63°34.8'N,	12°16.8'E;	h = 580 m
Umeå	(Um):	63°48.9'N,	20°14.2'E;	h = 16 m
Uddeholm	(Ud):	60°05.4'N,	13°36.4'E;	h = 240 m
Delary	(De):	56°28.2'N,	13°52.2'E;	h = 150 m

N O V E M B E R 1 - 30, 1974

1974
Nov. 1 Ud iPKPl 03 55 46.8
Tonga Islands (h = N).

" 1 Up iP 12 55 43.3
Ud iP 12 55 55.5
Gulf of Aden (h = N).

" 1 Up iP 16 43 55.1
Ud iP 16 44 02.5
Greece.

" 1 Up iP 19 02 24.1
Ki iP 19 01 48.9
Um iP 19 02 04.0
Ud iP 19 02 30.8
South of Japan (h = 100 km).

" 1 Ki iPKPl 21 04 16.5
Um iPKPl 21 04 24.0
New Zealand (h = 25 km).

" 1 Up iPKP 23 39 10.4
Ki iPKP 23 39 25.2
Um iPKP 23 39 18.4
Ud iPKP 23 39 07.8
South Sandwich Islands
(h = N).

" 2 Ki eP 01 14 49
Ud iP 01 14 07.4 C
De iP 01 14 00.9
North Atlantic Ocean
(h = N).

" 2 Ud iPKPl 02 11 28.2

" 2 Ki iP 03 09 17.9
Ud iP 03 10 15.3
Kamchatka (h = 50 km).

1974
Nov. 2 Up iP 05 04 08.9
i(S) 05 07 38

		micr	sec
P	Z'	4.4	0.8
Mx	E	22	6
Mx	N	16	5
Mx	Z	25	5

Ki iP 05 02 47.4 C
iS 05 04 57
i(P'P') 05 39 13.6

		micr	sec
P	Z'	32	1.0
Mx	E	67	6
Mx	N	58	6
Mx	Z	51	6

Sk iP 05 03 54.1
i(P'P') 05 39 00.3
Um iP 05 03 18.9 C
iS 05 05 55
i(P'P') 05 39 32.5
Ud iP 05 04 22.4 C
i(P'P') 05 38 51.2
De iP 05 04 54.3 C
Novaya Zemlya.
m = 7.0, M = 6.2 (Up,Ki).
Underground explosion.
(P'P'), interpreted as early P'P', has a different travel-time slope from the JB tables.

" 2 Ki iS 05 41 46.9
Novaya Zemlya aftershock.

" 2 Ki eP 05 53 26
eS 05 55 32
Novaya Zemlya aftershock.

" 2 Ud iP 07 21 45.1

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
Nov. 2 Up iP 08 38 29.8
micr sec
P Z' 0.1 1.0
Ki iP 08 37 46.8
Sk iP 08 38 20.7
Um iP 08 38 05.7
Ud iP 08 38 36.1
De iP 08 38 53.2
Japan (h = 70 km).

" 2 Ud iP 10 05 38.5
Aleutian Islands (h = N).

" 2 Ud iP 11 29 38.0

" 2 Up iP 12 50 24.8
Ki iP 12 49 43.4
Sk iP 12 50 17.9
Um iP 12 50 02.0
Ud iP 12 50 31.9
Japan (h = 30 km).

" 2 Ud iPKPl 14 37 49.1
De iPKPl 14 38 01.9

" 2 Up iP 19 54 32.2
micr sec
P Z' 0.1 0.9
Ki iP 19 53 48.2
Sk iP 19 54 25.0
Um iP 19 54 07.9
Ud iP 19 54 38.5
De iP 19 54 55.8
Japan (h = 120 km).

" 2 Up iP 22 06 50.7
micr sec
P Z' 0.1 1.1
Ki iP 22 06 11.5 C
Sk iP 22 06 44.6 C
Um iP 22 06 28.3 C
Ud iP 22 06 57.7 C
De iP 22 07 16.1
Japan (h = 45 km).

" 2 Ki iP 22 22 49.0
Um iP 22 23 06.4
Japan (h = 35 km).

" 2 Up eP 22 37 36
micr sec
Mx E 0.8 17
Mx N 0.8 16
Mx Z 1.0 15
Ki iP 22 35 49.2
(cont.)

1974
Nov. 2 (cont.)
Ki i 22 35 54.0
iS 22 36 53.6
micr sec
Mx E 1.2 16
Mx N 0.7 16
Mx Z 0.7 13
Sk eP 22 36 40
iS 22 38 24.3
Um iP 22 36 42.5
i 22 36 48.5
iS 22 38 22.5
Ud iP 22 37 27.4
i 22 37 34.0
De iP 22 38 12.1
i 22 38 16.2
Norwegian Sea (h = N).

" 2 Um i(PKP) 22 37 57.5
iPKP 22 38 05.6
Ud iPKP 22 38 14.8 C
De iPKP 22 38 21.7
Tonga Islands (h = 100 km).

" 2 Ki iP 22 56 02.3
Um iP 22 56 19.9
Ud iP 22 56 48.3
Japan (h = 15 km).

" 3 Ud iP 03 51 37.4

" 3 Up iP 10 35 13.1 C
ipP 10 35 23.3
micr sec
P Z' 0.1 0.9
Ki iP 10 35 01.9 C
ipP 10 35 11.2
micr sec
P Z' 0.1 0.9
Sk iP 10 35 29.7 C
ipP 10 35 39.3
Um iP 10 35 01.2 C
Ud iP 10 35 29.2 C
ipP 10 35 38.9
De iP 10 35 33.4
Sinkiang, China.
h = 45 km (Up,Ki,Sk,Ud).
m = 5.5 (Up,Ki).

" 3 Ki iP 11 33 29.2
Sea of Japan (h = 380 km).

" 3 Ki iP 12 10 18.0
Um iP 12 10 37.3
Ud iP 12 11 08.2
De iP 12 11 26.9
Japan (h = 130 km).

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Nov.	3	Um	iPKPl	14 16 23.0	
"	3	Up	iP	16 41 38.4	
		Ki	iP	16 41 19.9	C
		Um	iP	16 41 25.9	
			ipP	16 41 35.5	
		Ud	iP	16 41 48.0	C
			ipP	16 41 59.1	
		Luzon.			
		h = 40 km (Um,Ud).			
"	3	Ud	iPKP	18 55 14.7	
		Easter Island (h = N).			
"	3	De	iPKPl	23 26 40.9	D
"	4	Ki	iP	03 03 37.7	
		Ud	iP	03 02 38.9	
		Aegean Sea (h = N).			
"	4	Ki	iP	04 50 23.0	
		Sea of Japan (h = 290 km).			
"	4	Ud	iPKPl	09 04 40.6	
		De	iPKPl	09 04 49.5	
"	4	Ud	iP	10 32 37.1	
"	4	Ud	i(Sgl)	13 55 34.7	
"	4	Ud	iPKPl	15 06 23.2	
		De	iPKPl	15 06 35.0	
		Tonga Islands (h = N).			
"	4	Ki	iP	17 06 30.8	
"	4	Ud	iPKPl	17 48 49.0	
		De	iPKPl	17 49 00.7	
		Tonga Islands (h = N).			
"	4	Ud	iPKPl	17 48 58.6	
		De	iPKPl	17 49 10.8	C
			i	17 49 22.2	
		Tonga Islands.			
		Origin time = 17 29 34.			
"	4	Ud	iP	18 10 17.6	
"	4	Ki	iSgl	20 03 09.2	
		Sk	iSgl	20 03 15.7	
		Um	iSgl	20 03 37.9	
		Nordland, Norway.			
		Origin time = 20 01 42.			
		Explosion?			

1974 Nov.	4	Sk	iP	21 35 54.5	
		Ud	iP	21 36 02.4	
		Central America (h = N).			
"	5	Ki	iP	10 34 02.3	
		Sk	iP	10 34 26.5	
		Ud	iP	10 34 51.7	
		Alaska (h = 15 km).			
"	5	Up	iPKP2	10 58 53.1	
			i	10 59 01.5	
				micr sec	
			Mx Z	0.9 22	
		Ki	iPKPl	10 58 21.8	C
				micr sec	
			PKPl Z'	0.2 0.8	
		Sk	iPKPl	10 58 42.9	
			iPKP2	10 58 48.3	
		Ud	iPKP2	10 58 59.0	C
		De	ePKP2	10 59 08	
		New Zealand (h = N).			
"	5	Ki	iPKPl	11 13 05.4	
		New Zealand (h = 45 km).			
"	5	Ki	iP	13 52 46.9	
		Ud	iP	13 52 56.0	
			iPP	13 56 54.5	
		Sunda Strait (h = 100 km).			
		Readings are late compared to the NEIS solution.			
"	5	Up	iPKPl	19 29 24.3	
		Ud	iPKPl	19 29 26.5	
"	5	Ki	iPKPl	19 41 39.8	
		Sk	iPKPl	19 41 52.3	
		Ud	iPKPl	19 41 50.6	
		De	iPKPl	19 41 47.8	
		West of Macquarie Islands (h = N).			
"	5	Ki	iPKPl	20 01 21.3	
		New Zealand (h = N).			
"	5	Up	iP	20 08 56.6	
		Ki	iP	20 09 26.4	
			iPP	20 10 42.9	
		Sk	eP	20 09 34	
		Ud	iP	20 09 06.4	
		De	iP	20 08 58.8	
		Iran (h = 70 km).			

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Nov.	6	Up	iP	04 46 08.3	
		Ki	iP	04 46 45.8	
		Um	iP	04 46 28.8	
			i	04 47 25.3	
		Ud	iP	04 46 24.7	
			i	04 46 55.6	
		Caucasus.			
"	6	Up	iSgl	05 26 49.8	
		Ki	iSgl	05 24 40.5	
		Um	iSgl	05 24 55.5	
		De	iSgl	05 28 54.2	
		Central Finland.			
"	6	Ki	iP	09 17 48.1	
"	6	Ud	iP	11 24 55.9	
"	6	Up	iSgl	13 31 06.9	
		Sk	iSgl	13 31 08.4	
		Ud	iPgl	13 29 13.6	
			i	13 29 39.6	
			iSgl	13 30 08.6	
		De	iPgl	13 29 22.9	
			iSgl	13 30 17.9	
		Southwest coast of Norway, 58.4°N, 6.6°E.			
		Origin time = 13 28 04.			
"	6	Up	iSgl	14 47 06.9	
		Ud	iSgl	14 46 12.1	
		Southwest Norway.			
		By combination with Bergen readings.			
"	6	Up	iPKP2	14 55 26.1	
		Ki	iPKP1	14 54 53.3	
				micr sec	
			PKP1 Z'	0.1 1.0	
		Sk	iPKP2	14 55 26.9	
		Um	iPKP1	14 55 01.4 C	
			i	14 55 07.1	
		Ud	iPKP2	14 55 31.0 C	
		New Zealand (h = 40 km).			
"	6	Ud	iPKP1	16 51 36.3	
		De	iPKP1	16 51 49.8	
"	6	Ud	iP	17 04 46.7	
		De	iP	17 04 44.1	

1974 Nov.	6	Ud	iP	19 21 09.6	
"	6	Ud	iP	19 27 44.8	
"	7	Up	iP	00 13 15.1	
		Um	iP	00 12 50.4	
		Ud	iP	00 13 21.6	
		De	iP	00 13 39.1	
		Kurile Islands (h = 30 km).			
"	7	Up	e	02 39 03	
			i(S)	02 40 10.0	
		Um	iP	02 37 47.5	
			i	02 41 46.6	
		Ud	e	02 39 08	
			iS	02 40 08.1	
		De	iP	02 36 15.5	
"	7	Up	iP	04 26 35.9	
			i	04 26 47.2	
		Ki	iP	04 26 38.0	
			i	04 26 48.2	
		Um	iP	04 26 33.4	
		Ud	iP	04 26 46.0	
			i	04 26 56.5	
		Sumatra (h = 10 km). Interpreting the second phase as pP would give h = 40 km (Up,Ki,Ud).			
"	7	Up	iP	05 10 10.2	
		Ki	iP	05 09 23.1	
		Ud	iP	05 10 13.6	
		Kurile Islands (h = 55 km).			
"	7	Ud	iP	11 59 38.3	
		Japan (h = 150 km).			
"	7	Ud	iP	13 31 10.1	
		De	iP	13 31 04.5	
		Peru (h = 150 km).			
"	7	Ki	iP	15 11 05.9	
		Ud	iP	15 11 59.1	
		Kurile Islands (h = N).			
"	7	Ud	iPKP1	16 18 48.6	
"	7	Ud	iP	18 51 50.6	
		Greece.			

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Nov.	7	Ki	iP	18 55 42.0	
		Ud	iP	18 56 32.6	
		Aleutian Islands (h = 20 km).			
"	7	Ki	iP	20 12 16.4	
		Ud	iP	20 13 15.0	
		Komandorsky Islands (h = 40 km).			
"	7	Ki	iP	20 29 03.3	
		Ud	iP	20 29 59.0	
"	8	Up	iP	02 40 00.4	
		Ki	iP	02 39 55.7	C
		Um	iP	02 39 55.7	C
		Ud	iP	02 40 09.6	C
		De	iP	02 40 09.5	
		Java (h = 110 km).			
"	8	Up	iP	03 01 57.3	
"	8	Ud	i	11 35 54.0	
			i	11 36 13.5	
			iSgl	11 36 15.5	
		De	iSgl	11 36 46.1	
"	8	Up	iPKP	13 57 44.3	
		Ki	iPKP	13 57 28.3	
		Ud	iPKP	13 57 45.4	
		Tonga Islands (h = N). Late arrivals compared to the NEIS solution.			
"	8	Ki	ePn	18 19 23	
			iSgl	18 20 05.0	
		Sk	iSgl	18 22 55.3	
		Um	iSgl	18 21 56.3	
		North Norway.			
"	8	Sk	iP	20 55 27.6	C
		Um	iP	20 55 44.7	C
		Panama-Colombia (h = 10 km).			
"	8	Up	iP	21 34 07.1	
			i	21 34 10.7	
			iS	21 42 48.8	
				micr	sec
			P	Z' 0.2	1.1
			i	Z' 2.1	1.0
			Mx	E 3.7	15
			Mx	N 12	22
			Mx	Z 6.0	22
		(cont.)			

1974 Nov.	8	(cont.)			
		Ki	iP	21 33 24.7	
			i	21 33 27.8	
			iPP	21 35 42.3	
			iS	21 41 33	
				micr	sec
			P	Z' 0.2	1.0
			i	Z' 3.3	1.0
			PP	Z' 0.8	1.1
			Mx	E 14	18
			Mx	N 9.1	18
			Mx	Z 3.8	18
		Sk	iP	21 34 00.2	
			i	21 34 02.9	
			iPP	21 36 25.3	
		Um	iP	21 33 43.6	C
			i	21 33 47.3	
			iS	21 42 07	
		Ud	iP	21 34 14.6	
			i	21 34 17.9	
			iS	21 42 52.9	
		De	iP	21 34 31.7	
			i	21 34 34.6	
			i(PP)	21 36 54.3	
			iPP	21 37 14.4	
		Japan (h = 130 km). m = 7.0, M = 6.2 (Up,Ki). M uncorrected for focal depth. Multiple P.			
"	9	Ki	iP	04 30 47.2	
		Mindanao (h = 15 km).			
"	9	Sk	iP	05 56 52.0	
		Um	iP	05 56 29.4	
		Ud	iP	05 57 02.0	
		Kurile Islands (h = 150 km).			
"	9	Up	iP	05 57 25.6	
		Ki	iP	05 56 43.7	
"	9	Up	iP	06 05 27.7	C
				micr	sec
			P	Z' 0.1	0.6
		Ki	iP	06 06 42.0	
		Sk	iP	06 06 09.0	
		Um	iP	06 06 06.8	
		Ud	iP	06 05 35.3	
		De	iP	06 04 58.2	
		Greece-Albania (h = 25 km).			
"	9	Up	iPgl	07 17 26.3	
			iSn	07 18 41.1	
		(cont.)			

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Nov.	9	(cont.)					
		Up	iS*		07 19 30.1		
		Ki	iPn		07 15 29.7	C	
			iPgl		07 15 36.7		
			iSn		07 16 18.5		
					micr	sec	
			Pn	Z'	0.2	0.5	
			Pgl	Z'	0.2	0.5	
			Sn	Z'	0.2	0.7	
		Sk	iPn		07 15 55.2	C	
			iSn		07 17 03.8		
		Um	iPn		07 16 09.3	C	
			iSn		07 17 26.8		
		Ud	iPn		07 16 44.1	C	
			iSn		07 18 25.9		
		De	iPn		07 17 33.3		
		Norwegian Sea (h = N).					
"	9	Up	iP		10 46 30.1		
					micr	sec	
			Mx	E	4.6	20	
			Mx	N	3.9	20	
			Mx	Z	10	19	
		Ki	iP		10 45 36.2		
					micr	sec	
			Mx	E	6.1	21	
			Mx	N	4.7	23	
			Mx	Z	5.2	21	
		Um	iP		10 46 01.7		
		Ud	iP		10 46 33.6		
		De	iP		10 46 55.2		
		Kamchatka (h = N).					
		M = 5.8 (Up,Ki).					
"	9	Sk	iPKP		10 59 33.3		
		South Sandwich Islands					
		(h = N).					
"	9	Up	iP		12 20 26.4		
		Um	iP		12 21 05.0		
		Ud	iP		12 20 20.1		
		De	iP		12 19 47.8		
		Algeria (h = N).					
"	9	Ki	iP		12 37 17.3		
		Sk	iP		12 37 23.0		
		Um	iP		12 37 31.2		
			i		12 37 44.3		
		Ud	i		12 39 12.7		
"	9	Ud	iP		13 11 17.6		
"	9	Up	iP		13 13 52.4		
		(cont.)					

1974 Nov.	9	(cont.)					
		Up	i(PP)		13 17 40.5		
			iPP		13 18 04.9		
			iS		13 25 29		
					micr	sec	
			P	Z'	0.4	1.9	
			PP	Z'	0.3	1.6	
			Mx	E	56	23	
			Mx	N	40	18	
			Mx	Z	120	24	
		Ki	eP		13 13 49		
			i(PP)		13 17 41.4		
			iPP		13 18 12.0		
					micr	sec	
			PP	Z'	0.6	2.1	
			Mx	E	49	21	
			Mx	N	31	18	
			Mx	Z	34	18	
		Sk	iPP		13 17 49.5		
		Um	i(PP)		13 17 43.0		
			iPP		13 18 11.9		
			iS		13 25 46		
			iSP		13 27 34		
		Ud	iP		13 13 44.0		
			i(PP)		13 17 14.6		
		De	iP		13 13 43.8		
			i(PP)		13 17 38.1		
		Peru (h = 6 km).					
		m = 6.8, M = 7.2 (Up,Ki).					
"	9	Up	iP		14 27 52.1		
			i		14 28 41.7		
					micr	sec	
			P	Z'	0.3	1.4	
		Ki	iP		14 27 10.3		
					micr	sec	
			P	Z'	0.1	1.3	
		Sk	iP		14 27 45.6		
		Um	iP		14 27 28.9	C	
		Ud	iP		14 27 59.2		
		De	iP		14 28 15.2		
			i		14 28 28.7		
		Japan (h = 25 km).					
		m = 6.1 (Up,Ki).					
"	9	Up	iP		19 24 10.3		
			ipP		19 24 23.8		
					micr	sec	
			P	Z'	0.1	1.0	
			Mx	E	3.8	22	
			Mx	N	5.7	19	
			Mx	Z	9.5	23	
		Ki	iP		19 24 08.8	C	
		(cont.)					

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
Nov. 9 (cont.)

Ki	ipP		19 24 22.9		
	i		19 24 33.2		
			micr	sec	
	P	Z'	0.4	1.0	
	pP	Z'	0.8	1.6	
	Mx	E	11	22	
	Mx	N	9.0	21	
	Mx	Z	11	23	
Sk	iP		19 24 24.4		
	ipP		19 24 41.2		
	iPP		19 28 20.5		
Um	iP		19 24 07.2		C
	iSKS		19 34 46		
Ud	iP		19 24 19.7		
	i		19 24 21.9		
	ipP		19 24 34.2		
	i(PP)		19 27 19.3		
	i		19 28 02.6		
De	iP		19 24 21.4		C
	i(PP)		19 27 34.0		
	iPP		19 28 11.6		

Sunda Strait.
h = 55 km (Up,Ki,Sk,Ud).
m = 6.5, M = 6.3 (Up,Ki).

" 10 Up iPKPl 03 26 12.1 C

		micr	sec
PKPl	Z'	0.1	0.8

Ud iPKPl 03 26 14.9 C
Tonga-Kermadec Islands
(h = 620 km).

" 10 Ki iP 04 39 22.3
Ud iP 04 39 37.3
Tadzhik-Sinkiang (h = N).

" 10 Up

		micr	sec
Mx	E	1.4	18
Mx	N	1.9	18
Mx	Z	2.8	19

Ki iPKP 04 44 35.8

		micr	sec
Mx	E	1.8	20
Mx	N	2.8	20
Mx	Z	2.8	20

Ud iPKP 04 44 53.8
Fiji Islands (h = N).
M = 6.0 (Up,Ki).

" 10 Up iP 07 05 05.4
Ud iP 07 05 19.5
Tibet (h = N).

1974
Nov. 11 Up iP 05 28 43.6 C
ipP 05 28 59.0

		micr	sec
P	Z'	0.2	0.9
Mx	N	1.4	20

Ki iP 05 27 50.8
ipP 05 28 06.6

		micr	sec
pP	Z'	0.2	1.1
Mx	E	2.0	19
Mx	N	1.6	19

Sk iP 05 28 23.0
ipP 05 28 37.5
Um iP 05 28 19.6
iPcP 05 28 52.0
Ud iP 05 28 44.7 C
ipP 05 29 00.6
De iP 05 29 07.0
Aleutian Islands.
h = 55 km (Up,Ki,Sk,Ud).
m = 6.2, M = 5.4 (Up,Ki).

" 11 Up iPKPl 06 48 26.2

		micr	sec
PKPl	Z'	0.1	0.8

Ki iPKP 06 48 16.1 C

		micr	sec
PKP	Z'	0.1	1.0

Sk iPKPl 06 48 20.0
Um iPKPl 06 48 16.2
i 06 48 25.7
Ud iPKPl 06 48 28.3 C
De iPKPl 06 48 38.0
i 06 48 45.6
Tonga-Kermadec Islands
(h = 200 km).

" 11 Um iPKPl 06 51 57.1
Ud iPKPl 06 52 09.2

" 11 Up iP 09 07 19.3
Sk iP 09 07 19.9
Ud iP 09 07 28.8 C
De iP 09 07 40.7
Ryukyu Islands (h = 45 km).

" 11 Ud iPKP 09 33 59.6
Solomon Islands
(h = 110 km).

" 11 Ud iP 10 04 35.4

" 11 Ud iP 11 57 25.1
Peru (h = 70 km).

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974						
Nov.	11	Ud	iP		13 21 33.3	
"	12	Ki	iP		03 26 45.2	
		Ud	iP		03 27 37.2	
		Kurile Islands (h = N).				
"	12	Ki	iPKP		06 18 33.7	
		Chile-Argentina (h = 90 km).				
"	12	Ud	iP		18 02 11.5	
		Tadzhik-Sinkiang.				
"	12	Um	iP		20 19 36.0	
		Ud	iP		20 20 06.3	
		Japan (h = 70 km).				
"	12	Up			micr	sec
			Mx	N	1.2	22
		Ki	iP		22 26 28.6	
			ipP		22 26 46.3	
					micr	sec
			P	Z'	0.2	1.4
			Mx	E	1.2	18
			Mx	N	1.8	20
		Sk	ipP		22 27 05.5	
		Um	iP		22 26 32.8	
			ipP		22 26 50.5	
		Ud	iP		22 26 50.1	
			ipP		22 27 06.8	
		De	iP		22 26 56.1	
			ipP		22 27 12.8	
		Celebes Sea.				
		h = 60 km (Ki,Um,Ud,De).				
		M = 5.6 (Up,Ki).				
"	13	Up	iP		02 41 41.0	
			i		02 41 48.4	
			iPn		02 42 03.2	
			iSn		02 46 36.9	
					micr	sec
			P	Z'	0.4	1.4
			Mx	E	1.0	13
			Mx	N	2.2	14
			Mx	Z	1.9	14
		Ki	iP		02 42 19.6	
			iPn		02 42 55.9	
			iSn		02 47 49.6	
					micr	sec
			Pn	Z'	0.3	1.2
			Mx	N	1.9	19
		Sk	iP		02 42 19.8	
			iPn		02 42 38.7	
		Um	iP		02 41 53.8	
			iSn		02 47 27.4	
		(cont.)				

1974						
Nov.	13	(cont.)				
		Ud	iP		02 41 58.5	
			iSn		02 47 34.6	
		De	iP		02 41 45.3	
			iPn		02 41 59.6	
		Caucasus (h = 40 km).				
		m = 6.0, M = 4.8 (Up,Ki).				
		Clear Pn and Sn phases.				
"	13	Ud	iPKP1		05 42 48.6	
		Tonga-Kermadec Islands				
		(h = N).				
"	13	Ud	iP		10 30 53.3	
		Afghanistan-USSR.				
		Intermediate depth.				
"	13	Up	iSg1		10 40 34.9	
		Ud	iSg1		10 39 32.1	
		Near Bergen, Norway.				
		By combination with Bergen				
		readings.				
"	13	Up	iP		14 02 52.2	
"	13	Ud	i(Sg1)		15 07 45.7	
		De	i(Sg1)		15 05 54.1	
"	13	Ud	iPKP1		17 00 33.1	
"	13	Ki	iPKP1		17 19 20.1	
			iPKP2		17 19 34.8	
		Ud	iPKP2		17 19 48.4	
		Southwest of Macquarie				
		Islands (h = N).				
"	13	Ud	iP		22 44 02.8	
"	14	Ud	iP		02 18 43.6	
		Greece-Albania (h = 45 km).				
"	14	Up	ipP		04 59 12.3	
			i		04 59 28.4	
					micr	sec
			Mx	N	1.0	18
			Mx	Z	1.5	19
		Ki	iP		04 58 12.2	
			ipP		04 58 21.4	
					micr	sec
			pP	Z'	0.1	1.0
			Mx	E	1.5	18
			Mx	N	1.8	18
			Mx	Z	1.9	18
		Sk	iP		04 58 33.6	
			ipP		04 58 42.2	
		Um	iPcP		04 59 22.8	
		(cont.)				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
Nov. 14 (cont.)

Ud	ipP		04 59 07.8	
Alaska.				
h = 35 km (Ki,Sk).				
M = 5.2 (Up,Ki).				
pP is bigger than P, which explains the absence of P on some records.				
" 14 Ud	iP		06 19 07.8	
Ryukyu Islands (h = N).				
" 14 Ud	iP		12 46 28.5	
Greece (h = 10 km).				
" 14 Up	iP		13 27 22.8	
	i		13 27 27.5	
			micr	sec
	P	Z'	0.1	0.9
	Mx	E	7.5	16
	Mx	N	3.1	9
	Mx	Z	4.1	9
Ki	iP		13 28 36.0	
	iPP		13 29 22.7	
			micr	sec
	Mx	E	7.5	14
	Mx	N	3.5	14
	Mx	Z	2.6	11
Sk	iP		13 28 05.1	
	i		13 28 09.9	
Um	iP		13 28 01.9	
	i		13 28 06.6	
	iS		13 32 31	
Ud	iP		13 27 31.1	
De	iP		13 26 55.3	
Greece (h = 20 km).				
M = 5.4 (Up,Ki).				
Double P.				
" 14 Up	iP		14 31 38.4	
	i		14 31 41.8	
	iS		14 35 34	
			micr	sec
	P	Z'	0.1	1.0
	i	Z'	0.3	1.0
	Mx	E	4.5	16
	Mx	N	2.3	10
	Mx	Z	4.0	10
Ki	iP		14 32 51.4	
			micr	sec
	Mx	E	5.1	15
	Mx	N	2.3	11
	Mx	Z	1.6	9

(cont.)

1974
Nov. 14 (cont.)

Sk	iP		14 32 20.0	
	i		14 32 22.0	
Um	iP		14 32 14.5	
	i		14 32 21.7	
Ud	iP		14 31 45.6	
	i		14 31 47.7	
	i		14 31 54.6	
De	iP		14 31 10.6	
Greece (h = 3 km).				
M = 5.3 (Up,Ki).				
Multiple P.				
" 14 Ud	iPKPl		15 25 18.8	
" 14 Up	iP		15 34 36.0	
	i		15 34 38.4	
	iS		15 38 35	
			micr	sec
	P	Z'	0.1	0.8
	Mx	E	4.5	16
	Mx	N	2.8	9
	Mx	Z	4.0	10
Ki	iP		15 35 47.2	
			micr	sec
	Mx	E	3.2	14
	Mx	N	2.1	12
	Mx	Z	2.1	8
Sk	iP		15 35 16.6	
	i		15 35 18.9	
Um	iP		15 35 11.1	
	iS		15 39 47	
Ud	iP		15 34 43.0	
	i		15 34 44.6	
De	iP		15 34 03.1	
Greece (h = 25 km).				
M = 5.2 (Up,Ki).				
Double P.				
" 14 Ki	iPKP		17 30 41.3	
South Sandwich Islands (h = N).				
" 14 Ud	iP		18 26 55.1	
" 15 Ki	iP		00 28 01.5	
Gulf of Aden (h = N).				
" 15 Ud	i		15 01 57.3	
	iRg		15 02 00.3	
" 15 Up	iP		17 45 49.1	
Ki	iP		17 46 13.9	

(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
Nov. 15 (cont.)

Sk	iP		17 46 19.8	
Ud	iP		17 46 04.8	
De	iP		17 45 53.7	

Iran (h = 80 km).

" 15

Up	iP		19 13 27.6	

Aleutian Islands (h = 45 km).

" 15

Up	iP		22 39 27.8	
Sk	iP		22 39 51.1	
Um	iP		22 39 23.5	
Ud	iP		22 39 45.2	
	iPP		22 41 29.9	
De	iP		22 39 44.9	

Sinkiang, China (h = 35 km).

" 15

Ud	iP		23 30 49.4	

" 15

Up	iP		23 44 14.3	C
	ipP		23 44 26.7	
	iPP		23 46 49.4	
			micr sec	
	P	Z'	0.5 1.0	
	PP	Z'	0.1 1.2	
	Mx	E	3.0 22	
	Mx	N	3.3 23	
	Mx	Z	4.1 20	
Ki	iP		23 43 36.1	C
	iPP		23 46 01.2	
			micr sec	
	P	Z'	0.4 1.1	
	PP	Z'	0.2 1.2	
	Mx	E	9.0 17	
	Mx	N	6.3 21	
	Mx	Z	6.8 17	
Sk	iP		23 44 09.1	C
	ipP		23 44 21.7	
	iPP		23 46 49.6	
Um	iP		23 43 53.1	C
	iS		23 52 59	
Ud	iP		23 44 21.6	C
	ipP		23 44 33.9	
De	iP		23 44 36.1	C
	ipP		23 44 48.0	
	iPP		23 47 29.6	

Japan.
m = 6.3, M = 5.9 (Up,Ki).
h = 45 km (Up,Sk,Ud,De).

" 16

Ud	iP		00 24 22.5	

Japan (h = 35 km).

1974
Nov. 16

Up	iP		05 04 10.4	
Ki	iP		05 04 16.2	
Ud	iP		05 04 23.1	

Burma.

" 16

Up	eP		10 50 39	
	i		10 50 47.1	
	iPP		10 54 35.0	
			micr sec	
	Mx	N	2.2 29	
Ki	iP		10 50 22.0	
	i		10 50 31.4	
	iPP		10 54 16.3	
			micr sec	
	P	Z'	0.1 1.1	
	PP	Z'	0.1 1.5	
	Mx	E	1.1 20	
	Mx	N	1.4 20	
Sk	eP		10 50 47	
Um	i(P)		10 50 36.5	
	iPP		10 54 20.0	
Ud	iP		10 50 47.4	
De	iPP		10 55 05.9	

Molucca Passage
(h = 35 km).
M = 5.5 (Up,Ki).

" 16

Up	iP		16 26 58.3	
Ki	iP		16 27 03.9	
Sk	iP		16 27 22.2	C
Um	iP		16 26 55.9	
Ud	iP		16 27 13.8	
De	iP		16 27 12.4	

Kashmir-India (h = 60 km).

" 16

Up	iP		16 35 59.5	
	i		16 36 03.7	
			micr sec	
	P	Z'	0.1 1.0	
	Mx	N	3.9 20	
	Mx	Z	1.3 14	
Ki	iP		16 35 40.4	
			micr sec	
	P	Z'	0.1 1.0	
	Mx	E	1.7 11	
	Mx	N	3.2 14	
	Mx	Z	1.6 11	
Sk	iP		16 36 09.6	
Um	iP		16 35 45.7	
Ud	iP		16 36 11.9	
	i		16 36 16.1	
De	iP		16 36 20.0	

Kansu, China (h = N).
m = 5.8, M = 5.4 (Up,Ki).

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Nov.	16	Up	iP		19 30 02.7		
					micr	sec	
			P	Z'	0.1	1.0	
			Mx	E	1.8	19	
			Mx	N	1.5	17	
			Mx	Z	3.0	22	
		Ki	iP		19 30 12.7		
					micr	sec	
			P	Z'	0.1	1.3	
			Mx	E	1.3	12	
			Mx	N	1.4	13	
			Mx	Z	1.5	14	
		Sk	iP		19 29 40.1		
		Um	iP		19 30 14.2		
		Ud	iP		19 29 45.5		
		De	iP		19 29 51.0		
		North Atlantic Ocean					
		(h = N).					
		m = 5.6, M = 4.9 (Up,Ki).					
"	16	Ud	iP		21 13 48.7		
		Himalaya.					
"	16	Sk	i(Sgl)		22 15 43.6		
"	16	Up	iP		22 17 34.6	C	
					micr	sec	
			P	Z'	0.1	0.8	
		Ki	iP		22 17 26.4	C	
		Sk	iP		22 17 49.4		
		Um	iP		22 17 26.4	C	
		Ud	iP		22 17 47.9	C	
		De	iP		22 17 49.0		
		Burma (h = 160 km).					
"	16	Ki	iP		23 04 05.7		
		Sk	iP		23 04 41.6		
		Ud	iP		23 04 55.4		
		Japan (h = 70 km).					
"	17	Um	iP		00 07 29.5		
		Greece.					
"	17	Up	iP		00 17 39.4		
		Ki	iP		00 17 41.8		
		Sk	iP		00 17 27.8		
		Um	iP		00 17 45.7		
		Ud	iP		00 17 35.2		
		De	iP		00 17 36.2		
		Panama-Colombia					
		(h = 20 km).					
"	17	Ud	iP		03 32 04.9		
		Iraq (h = 20 km).					
1974 Nov.	17	Ud	iP		07 12 44.1		
"	17	Sk	iP		07 45 17.1		
		Ud	iP		07 45 21.8		
		North Atlantic Ocean					
		(h = N).					
"	17	Ud	iPKP		12 33 03.3		
		Solomon Islands					
		(h = 90 km).					
"	17	Ki	iP		13 30 04.3		
		Ud	iP		13 30 58.9		
			ipP		13 31 11.8		
		Japan.					
		h = 50 km (Ud).					
"	17	Ki	iP		15 13 22.3		
			iPP		15 14 58.5		
					micr	sec	
			PP	Z'	0.2	1.5	
			Mx	E	0.6	11	
			Mx	N	0.4	10	
			Mx	Z	0.5	11	
		Sk	iP		15 13 29.2		
		Ud	iP		15 13 06.0		
		De	iP		15 12 57.2		
		Iran (h = 45 km).					
"	17	Up	iP		15 39 32.6		
		Ki	iP		15 38 55.4		
		Ud	iP		15 39 26.0		
			i		15 39 29.8		
		Oregon (h = 10 km).					
"	17	Up	iP		17 34 36.5	C	
			ipP		17 34 43.2		
					micr	sec	
			P	Z'	0.1	1.0	
		Ki	iP		17 33 42.3	C	
					micr	sec	
			P	Z'	0.1	0.7	
		Sk	iP		17 34 19.0		
		Um	iP		17 34 07.5	C	
		Ud	iP		17 34 40.0	C	
			ipP		17 34 47.6		
			iPcP		17 35 18.4		
		De	iP		17 35 01.7	C	
			iPcP		17 35 29.4		
		Kamchatka.					
		h = 25 km (Up,Ud).					
		m = 6.0 (Up,Ki).					
"	17	Up	iP		18 09 48.4		
		Ud	iP		18 09 51.8		
		De	iP		18 10 13.2		
		Kamchatka.					

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Nov.	17	Up	iP		22 40 15.7	
		Hindu Kush.				
		Intermediate depth.				
"	17	Um	iP		23 10 26.1	
		Mexico (h = N).				
"	18	Ud	iP		06 27 59.8	
"	18	Ki	iP		07 25 29.8	
		Kamchatka (h = N).				
"	18	Ki	iP		13 08 01.3	
		Um	iP		13 08 17.1	
		Ud	iP		13 08 44.6	
		De	iP		13 08 57.2	
		South of Japan (h = N).				
"	18	Up	iP		18 15 04.1	C
			il		18 15 11.5	
			i2		18 15 21.4	
					micr	sec
			il	Z'	0.1	1.0
			i2	Z'	0.2	1.0
			Mx	E	1.1	15
			Mx	N	2.1	23
			Mx	Z	2.2	14
		Ki	iP		18 14 46.2	
			il		18 14 56.5	
			i2		18 15 06.6	
					micr	sec
			il	Z'	0.2	1.3
			i2	Z'	0.1	1.0
			Mx	E	1.2	18
			Mx	N	1.1	15
			Mx	Z	0.7	13
		Sk	iP		18 15 10.7	
			il		18 15 15.8	
		Um	iP		18 14 50.0	C
			il		18 14 58.8	
			i2		18 15 07.6	
		Ud	iP		18 15 13.4	
			il		18 15 20.6	
			i2		18 15 29.7	
		De	iP		18 15 25.5	
		Luzon-Formosa (h = 35 km).				
		m = 6.0, M = 5.5 (Up,Ki).				
		P is followed by two, generally larger phases, denoted il and i2.				
"	18	Ki	iP		19 46 21.1	C
		(cont.)				
1974 Nov.	18	(cont.)				
		Ki	ipP		19 46 36.6	
		Um	iP		19 46 34.3	C
			ipP		19 46 50.3	
		Ud	iP		19 47 00.5	C
		South of Japan.				
		h = 60 km (Ki,Um).				
"	18	Um	iP		22 59 08.1	
		Japan (h = 110 km).				
"	19	Ud	iPKPl		02 39 37.6	
		De	iPKPl		02 39 47.5	
"	19	Up	iP		04 07 26.6	C
			ipP		04 07 37.2	
			iPP		04 10 38.8	
			iS		04 17 14	
			iSKS		04 17 26	
					micr	sec
			P	Z'	0.1	0.9
			pP	Z'	0.2	0.8
			Mx	E	1.6	17
			Mx	N	2.6	18
			Mx	Z	4.4	18
		Ki	iP		04 07 06.2	C
			ipP		04 07 17.0	
			iS		04 16 46	
					micr	sec
			P	Z'	0.3	1.0
			pP	Z'	0.4	0.9
			Mx	E	2.7	19
			Mx	N	2.9	16
			Mx	Z	1.4	12
		Sk	iP		04 07 31.6	C
			ipP		04 07 42.2	
		Um	iP		04 07 13.0	C
			ipP		04 07 22.7	
			iS		04 16 59	
		Ud	iP		04 07 36.1	C
			ipP		04 07 46.4	
		De	iP		04 07 43.3	C
			ipP		04 07 53.9	
		Luzon.				
		h = 40 km (Up,Ki,Sk,Um, Ud,De).				
		m = 6.1, M = 5.7 (Up,Ki).				
"	19	Ki	iSKPl		06 00 54.6	
		Um	iSKPl		06 01 07.4	
		Ud	iSKPl		06 01 22.0	
		De	iPKPl		05 58 42.1	
		Fiji Islands (h = 640 km).				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Nov.	19	Up	Mx		06 04		
					micr	sec	
			Mx	E	2.6	22	
			Mx	N	5.3	24	
			Mx	Z	8.3	18	
		Ki	Mx		06 02		
					micr	sec	
			Mx	E	3.0	18	
			Mx	N	3.5	18	
			Mx	Z	1.9	18	
		New Ireland (h = 20 km).					
		M = 6.1 (Up,Ki).					
"	19	Up	ipPKP		07 09 45.7		
			iSKPl		07 13 00.1		
		Ki	iPKP		07 09 21.8		
			ipPKP		07 09 33.7		
		Sk	iPKP		07 09 33.9		
			ipPKP		07 09 45.5		
		Um	iPKP		07 09 27.7		
			ipPKP		07 09 39.8		
		Ud	iPKP		07 09 38.6		
			ipPKP		07 09 49.7		
		De	ipPKP		07 09 55.6		
		New Hebrides Islands.					
		h = 40 km (Ki,Sk,Um,Ud).					
"	19	Um	iPKP		07 40 05.4		
		Ud	iPKP		07 40 14.3		
"	19	Up	iPKPl		08 25 05.3	C	
		Ki	iPKP		08 24 43.0		
		Sk	iPKPl		08 24 57.7		
		Um	iPKPl		08 24 52.7		
		Ud	iPKPl		08 25 07.0		
		De	iPKPl		08 25 16.1		
		Tonga-Kermadec Islands.					
"	19	Um	iP		10 30 11.1		
"	19	Um	iP		14 25 36.8		
"	19	Up	i(P)		16 48 23.3		
"	19	Ud	iP		21 15 52.5		
"	20	Ki	iP		00 19 08.0		
					micr	sec	
			P	Z'	0.1	0.9	
		Sk	iP		00 19 38.6		
		Um	iP		00 19 35.3	C	
			ipP		00 19 47.7		
		Ud	iP		00 20 00.0		
			ipP		00 20 13.3		
		(cont.)					

1974 Nov.	20	(cont.)					
		De	iP		00 20 23.3		
			ipP		00 20 36.1		
		Aleutian Islands.					
		h = 45 km (Um,Ud,De).					
"	20	Up	iP		00 51 02.8		
		Ki	iP		00 50 37.5		
		Sk	iP		00 51 05.8		
		Um	iP		00 50 46.9		
		Ud	iP		00 51 11.8		
		Formosa (h = 170 km).					
"	20	Um	iPKP		02 29 28.2		
			i		02 29 38.2		
"	20	Ud	iP		03 40 52.4		
"	20	Up	eP		04 30 40		
			iPKP		04 33 53.5		
			ipPKP		04 34 09.9		
			iPP		04 36 05		
			iSKPl		04 37 12.3		
			iX		04 46 14.5		
					micr	sec	
			PKP	Z'	0.2	1.3	
			pPKP	Z'	1.3	1.8	
			SKPl	Z'	0.2	0.9	
			Mx	E	30	22	
			Mx	N	49	22	
			Mx	Z	81	23	
		Ki	iPKP		04 33 38.2		
			i		04 33 47.7		
			ipPKP		04 33 57.8		
			iPP		04 35 17		
			iX		04 46 36.9		
					micr	sec	
			PKP	Z'	0.4	1.6	
			i	Z'	0.3	1.1	
			pPKP	Z'	0.5	1.2	
			Mx	E	39	23	
			Mx	N	46	22	
			Mx	Z	44	22	
		Sk	iPKP		04 33 50.4		
			ipPKP		04 34 08.8		
		Um	eP		04 30 23		
			i(PKP)		04 33 37.6		
			iPKP		04 33 46.1		
			ipPKP		04 34 03.5		
			iPP		04 35 42		
			iX		04 46 11.7		
		Ud	i(PKP)		04 33 49.0		
			iPKP		04 33 55.6		
			ipPKP		04 34 12.8		
		(cont.)					

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Nov.	20	(cont.)			
		Ud	iSKP1	04 37 18.3	
			iX	04 46 14.8	
		De	i(PKP)	04 33 55.9	
			iPKP	04 34 03.1	
			ipPKP	04 34 19.9	
		New Hebrides Islands.			
		h = 60 km (Up,Ki,Sk,Um,Ud,De).			
		M = 7.3 (Up,Ki).			
		X parallels SKKP but is about 1 min too early.			
"	20	Ki	iP	08 44 39.1	
		Sk	iP	08 44 15.9	
		Ud	iP	08 44 16.2	
		Windward Islands (h = N).			
"	20	Ud	iP	10 46 14.6	
"	20	Up	iSgl	12 31 29.7	
		Sk	ePgl	12 30 36	
			iSgl	12 31 25.1	
		Ud	iPgl	12 30 03.2	
			iSgl	12 30 26.9	
		De	iSn	12 31 23.6	
		Southeast Norway, 60.1°N, 10.1°E.			
		Origin time = 12 29 32.			
"	20	Ki	iPKP	13 40 39.6	
				micr sec	
			Mx E	1.0 21	
			Mx N	1.0 19	
			Mx Z	1.1 18	
		Um	iPKP	13 40 31.7	
		Ud	iPKP	13 40 25.1	
		South Atlantic Ocean (h = N).			
"	20	Ki	iP	14 29 57.4	
"	21	Ki	iP	00 45 33.4	
		Sk	iP	00 45 26.5	
		Um	iP	00 45 10.6	
		Ud	iP	00 45 06.2	
		Gulf of Aden.			
"	21	Ud	i(Sgl)	11 57 06.2	
		De	i(Sgl)	11 57 34.0	
"	21	Sk	iP	12 11 00.2	
		Um	iP	12 10 41.5	
		Ud	iP	12 11 09.3	
		Japan (h = 80 km).			

1974 Nov.	21	Ud	i(Rg)	13 39 21.9	
"	21	Ud	iP	15 14 02.8	
		De	iP	15 14 01.5	
		Kirghiz SSR.			
"	21	Um	iPKP1	17 40 35.8	
"	21	Up	iRg	17 59 51.8	
		Ud	iRg	17 59 34.5	
		Central Sweden.			
		Near-surface event.			
"	21	Up	iRg	18 00 28.0	
		Ud	iRg	18 00 11.4	
		Central Sweden.			
		Near-surface event.			
"	21	Up	iRg	18 23 54.8	
		Ud	iRg	18 23 37.5	
		Central Sweden.			
		Near-surface event.			
"	21	Up	iP	19 55 53.7	D
				micr sec	
			P Z'	0.1 0.6	
		Ki	iP	19 55 49.9	
		Sk	iP	19 56 10.1	D
		Um	iP	19 55 47.6	
		Ud	iP	19 56 06.7	D
		De	iP	19 56 07.8	
		Burma (h = N).			
"	21	Up	iRg	21 35 30.2	
		Ud	iRg	21 35 14.4	
		Central Sweden.			
		Near-surface event.			
"	21	Sk	e(P)	21 48 45	
		Ud	iP	21 48 49.4	
		North Atlantic Ocean (h = N).			
		Late arrivals.			
"	22	Ud	iPKP1	00 29 02.2	
"	22	Sk	i	02 25 27.2	
			i(Sgl)	02 25 32.1	
"	22	Up	iP	02 53 54.3	
		Ki	iP	02 53 19.0	
		Sk	iP	02 53 50.6	
		Um	iP	02 53 34.2	
		Ud	iP	02 54 02.3	
		De	iP	02 54 16.7	
		Japan (h = 350 km).			

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Nov.	22	Up	iPKPl	05 05 57.9	
		Ud	iPKPl	05 05 59.9	C
		De	iPKPl	05 06 09.8	
"	22	Sk	eP	07 00 29	
		Ud	iP	07 00 16.9	
		Himalaya.			
"	22	Ud	iP	09 11 43.7	
		Iran (h = 60 km).			
"	22	Sk	iP	09 40 12.7	
		Alaska (h = N).			
"	22	Up	iP	09 51 01.3	
			ipP	09 51 15.4	
		Ki	iP	09 51 39.4	
		Um	iP	09 51 20.9	
		Ud	iP	09 51 16.4	
			ipP	09 51 29.1	
		Iran.			
		h = 60 km (Up,Ud).			
"	22	De	i(Sgl)	10 20 59.9	
"	22	Up	iRg	11 14 33.5	
		Ud	iRg	11 14 17.7	
		Central Sweden.			
		Near-surface event.			
"	22	Up	iRg	11 15 53.5	
		Ud	iRg	11 15 36.0	
		Central Sweden.			
		Near-surface event.			
"	22	Up	iRg	11 33 12.5	
		Ud	iRg	11 32 55.3	
		Central Sweden.			
		Near-surface event.			
"	22	Up	iRg	11 33 19.8	
		Ud	iRg	11 33 03.2	
		Central Sweden.			
		Near-surface event.			
"	22	Up	iRg	11 33 45.8	
		Ud	iRg	11 33 29.3	
		Central Sweden.			
		Near-surface event.			
"	22	Up	iRg	11 34 58.1	
		Ud	iRg	11 34 41.1	
		Central Sweden.			
		Near-surface event.			

1974 Nov.	22	Ud	iP	14 39 08.8	
"	22	Ki	iP	16 37 34.0	
		Ud	iP	16 38 02.1	
		Baja California (h = N).			
"	23	Sk	iPKPl	00 03 41.9	
		Um	iPKPl	00 03 35.1	
		Ud	iPKPl	00 03 48.6	
"	23	Up	iPKPl	00 55 08.9	
			i	00 55 21.4	
		Ki	ePKP	00 54 57	
			iSKPl	00 58 11.1	
				micr sec	
			SKPl Z'	0.1 1.0	
		Sk	iPKPl	00 55 01.1	
			iSKPl	00 58 27.3	
		Um	iPKP	00 54 57.4	
			iSKPl	00 58 22.0	
		Ud	iPKPl	00 55 09.7	
			iSKPl	00 58 35.5	
		De	iPKPl	00 55 21.8	D
			i	00 55 25.5	
			ipPKPl	00 56 18.8	
		Tonga-Kermadec Islands.			
		h = 220 km (De).			
"	23	Um	iP	02 12 27.5	
		Banda Sea (h = 170 km).			
"	23	Ud	iP	03 38 46.4	
"	23	Up	iP	04 34 25.8	
		Ki	iP	04 33 58.1	
		Um	iP	04 34 08.8	
		Ud	iP	04 34 34.9	
		Ryukyu Islands (h = 7 km).			
"	23	Sk	iP	07 57 41.8	
		Ud	iP	07 57 07.2	
		Italy (h = N).			
"	23	Ki	i(pP)	08 56 29.2	
		Um	iP	08 56 33.6	
			i(pP)	08 56 42.5	
		Ud	iP	08 56 58.9	
		Volcano Islands (h = N).			
"	23	Up	iP	09 55 57.2	
			i	09 56 09.2	
				micr sec	
			P Z'	0.2 1.4	
		(cont.)			

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
Nov. 23 (cont.)

Up			micr	sec	
	Mx	N	1.4	26	
	Mx	Z	0.9	22	
Ki	iP		09 55 32.9		C
Sk	iP		09 56 00.6		
Um	iP		09 55 42.1		
Ud	iP		09 56 06.2		
De	iP		09 56 17.6		

Ryukyu Islands (h = N).

" 23

Up	iPKPl		15 44 19.2	
Sk	iPKPl		15 44 14.4	
Um	iPKPl		15 44 06.5	
Ud	iPKPl		15 44 21.5	
De	iPKPl		15 44 30.6	

Kermadec Islands.

" 23

Um	iP		16 07 36.8	C
Ud	iP		16 08 01.0	C

Bonin Islands (h = 500 km).

" 23

Up	iP		18 51 06.8	
	i		18 51 15.6	
			micr	sec
	Mx	E	1.1	12
Ki			micr	sec
	Mx	E	1.2	12
Sk	iP		18 51 50.8	
Um	iP		18 51 47.6	
	i		18 51 56.3	
Ud	iP		18 51 13.8	
	i		18 51 21.4	

Greece-Albania (h = N).
M = 4.6 (Up,Ki).
Double onsets.

" 24

Up	iPKPl		02 57 36.5	
Um	iPKPl		02 57 20.7	
Ud	iPKPl		02 57 36.9	

Kermadec Islands.

" 24

Sk	iP		05 06 07.4	

Panama-Colombia (h = N).

" 24

Up	i(P)		07 18 28.9	
Sk	i(P)		07 18 23.4	

South of Panama (h = 35 km).

" 24

Ud	iP		07 19 57.7	

Talaud Islands (h = 140 km).

" 24

Up	iPKPl		08 10 06.8	
Ud	iPKPl		08 10 07.7	
De	iPKPl		08 10 18.2	

Kermadec Islands (h = 70 km).

1974
Nov. 24

Ud	iP		10 56 23.4	

" 24

Ud	iP		16 27 06.7	

Kurile Islands.

" 24

Sk	i(Sgl)		17 00 19.8	

" 24

Ud	iP		21 37 04.2	

Molucca Passage
(h = 55 km).

" 25

Up	iP		13 39 46.3	

Japan.

" 25

Up	iP		16 44 56.6	
	i		16 45 01.6	
			micr	sec
	P	Z'	0.1	1.0
Ki	iP		16 45 34.1	
	i		16 45 39.6	
			micr	sec
	P	Z'	0.1	0.9
Sk	iP		16 45 29.3	
	i		16 45 33.4	
Um	iP		16 45 11.6	
	i		16 45 17.4	
Ud	iP		16 45 07.1	
	i		16 45 12.8	

Gulf of Aden (h = N).
m = 5.8 (Up,Ki).
Double P, smaller and larger, average separation 5.2 sec.

" 25

Ki	iP		20 44 18.9	

" 25

Ki	iP		22 11 10.3	
Ud	iP		22 11 27.0	C

Sinkiang, China (h = N).

" 25

Up	iPKPl		22 43 29.3	
Ud	iPKPl		22 43 31.3	
De	iPKPl		22 43 42.0	

" 25

Ki	iP		23 50 54.7	

" 26

Sk	iP		01 06 36.4	
Ud	iP		01 06 18.8	

" 26

Ud	iPKPl		09 26 10.0	
De	iPKPl		09 26 21.1	

Tonga-Kermadec Islands
(h = 600 km).

" 26

Ud	iP		12 15 34.5	

Kurile Islands.

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Nov.	26	Ud	iP	12 59 01.9		
		Sinkiang, China.				
"	26	Ki	iP	13 30 30.9		
		Ud	iP	13 31 25.7 C		
		Aleutian Islands (h = 30 km).				
"	26	Sk	i(Sgl)	14 25 44.0		
"	26	Ud	iP	14 39 35.0		
"	26	Ki	iSgl	15 42 38.7		
		Sk	iSgl	15 42 46.9		
		Um	iSgl	15 43 07.3		
		Ud	iSgl	15 44 31.8		
		Nordland, Norway.				
		Explosion?				
"	26	Sk	iPKPl	20 53 38.6		
		Um	iPKPl	20 53 31.1		
		Ud	iPKPl	20 53 41.4		
			i(pPKPl)	20 53 56.5		
		Kermadec Islands.				
"	26	Up	i(pPKPl)	21 14 32.7		
		Um	iPKPl	21 14 05.8		
		Ud	i(pPKPl)	21 14 38.7		
"	26	Up	iPKPl	23 20 35.4		
		Um	iPKP	23 20 32.8		
			iSKPl	23 23 17.2		
		Ud	iPKPl	23 20 38.1 C		
			iSKPl	23 23 29.7		
		De	iPKPl	23 20 48.6 C		
		Tonga-Kermadec Islands				
		(h = 520 km).				
"	27	Up	iP	07 45 47.8		
		Ki	iP	07 46 31.4		
				micr	sec	
			P Z'	0.1	1.0	
		Sk	iP	07 46 25.1		
		Um	iP	07 46 04.2 C		
		Ud	iP	07 46 02.9 C		
		De	iP	07 45 44.3 C		
		Iran-Iraq (h = 30 km).				
"	27	Sk	i(Sgl)	09 43 55.7		
"	27	Um	iPKPl	11 39 41.3		
"	27	Ud	iPgl	14 39 52.6 C		
			iSgl	14 40 13.7		
		(cont.)				

1974 Nov.	27	(cont.)				
		De	iSgl	14 40 45.0		
		Probably Dalsland, Sweden.				
		Origin time = 14 39 25.				
"	27	Um	iP	15 43 00.1		
"	27	Up	iP	16 58 58.6 C		
				micr	sec	
			Mx E	0.8	14	
			Mx N	1.2	14	
			Mx Z	2.1	16	
		Ki	iP	16 59 43.5 C		
				micr	sec	
			P Z'	0.2	1.2	
			Mx E	0.8	11	
			Mx N	1.2	14	
			Mx Z	0.8	12	
		Sk	iP	16 59 38.4		
		Um	iP	16 59 16.3		
			i	16 59 19.6		
		Ud	iP	16 59 14.7 C		
		De	iP	16 58 56.2 C		
		Iran-Iraq (h = 50 km).				
		M = 4.8 (Up,Ki).				
"	27	Ki	i(P)	20 43 53.8		
		Ud	iP	20 45 01.5		
		De	iP	20 45 24.4		
		Arctic Ocean (h = N).				
"	27	Up	iP	21 50 32.4		
		Ki	iP	21 50 19.6		
		Sk	iP	21 50 13.3		
		De	iP	21 50 30.7		
		Mexico (h = 50 km).				
"	28	Sk	iP	01 22 41.2		
		Ud	iP	01 22 09.2		
		De	iP	01 21 36.8		
			i	01 21 48.2		
		Crete.				
"	28	Up	iP	05 39 43.2 C		
				micr	sec	
			Mx N	1.4	20	
			Mx Z	2.5	23	
		Ki	iP	05 38 49.6		
				micr	sec	
			Mx E	0.7	16	
		Sk	eP	05 39 26		
		Ud	iP	05 39 42.4 C		
		De	iP	05 40 05.8		
		Aleutian Islands (h = 60 km).				
		M = 5.2 (Up,Ki).				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Nov.	28	Ki	eP		13 41 18	
		Sk	iP		13 42 09.0	
		Ud	iP		13 42 17.9	C
"	28	De	iP		14 01 38.4	
"	28	Up	iP		15 05 23.4	
		Ki	iP		15 05 24.1	
		Sk	iP		15 05 45.3	
		Ud	iP		15 05 40.3	C
		De	iP		15 05 39.4	
		Sinkiang, China (h = 35 km).				
"	28	Ki	iSKPl		15 35 48.8	
		Sk	iSKPl		15 36 13.1	
		Ud	iPKPl		15 33 27.5	D
		De	iPKPl		15 33 38.8	D
		Fiji Islands (h = 630 km).				
"	28	Up	iP		16 42 48.3	
					micr	sec
			P	Z'	0.1	1.2
		Ki	iP		16 41 54.4	
			ipP		16 42 03.9	
					micr	sec
			P	Z'	0.1	1.0
		Sk	iP		16 42 24.6	
			ipP		16 42 34.6	
		Um	iP		16 42 21.6	
			ipP		16 42 30.8	
		Ud	iP		16 42 46.1	
			ipP		16 42 56.1	
		De	iP		16 43 09.4	
			ipP		16 43 19.2	
		Unimak Island.				
		h = 35 km (Ki,Sk,Um,Ud,De).				
		m = 5.9 (Up,Ki).				
"	28	Um	iP		20 31 16.7	
		Ud	iP		20 31 38.6	
"	28	Um	i		23 30 23.8	
		Ud	i		23 29 20.2	
"	29	Ki	iP		00 55 50.0	
		Atlantic Ocean (h = N).				
"	29	Um	iPKPl		03 25 19.7	
"	29	Up			micr	sec
			Mx	N	1.0	18
		Ki			micr	sec
			Mx	N	1.3	17
		Sk	iP		06 54 37.9	
		(cont.)				

1974 Nov.	29	(cont.)				
		Um	iP		06 54 18.9	
		Sinkiang, China.				
		M = 4.9 (Up,Ki).				
"	29	Um	iP		10 04 39.0	
		Ud	iP		10 04 12.3	
		De	iP		10 03 34.9	
"	29	Up	iPKP		10 08 17.7	
		Ki	iPKP		10 08 03.4	
		Sk	iPKP		10 08 13.4	
		Um	iPKP		10 08 10.6	
		Ud	iPKP		10 08 19.7	
		De	iPKP		10 08 25.1	
		New Hebrides Islands				
		(h = 140 km).				
"	29	Up	iP		12 57 26.4	C
"	29	Sk	iSgl		13 47 59.0	
		Ud	i		13 46 51.4	
			iSgl		13 46 59.1	
		Southwest Norway,				
		58.5°N, 6.4°E.				
		Origin time = 13 44 56.				
		By combination with Bergen				
		and Kongsberg readings.				
"	29	Ud	iPKPl		16 30 48.0	
		De	iPKPl		16 30 59.1	
		Tonga-Kermadec Islands				
		(h = 590 km).				
"	29	Up	iP		21 13 34.6	
					micr	sec
			P	Z'	0.2	1.5
		Ki	iP		21 12 58.7	
			i		21 13 01.0	
					micr	sec
			P	Z'	0.1	1.2
		Sk	iP		21 13 39.0	
		Ud	iP		21 13 45.4	
		De	iP		21 14 01.2	
		USSR-Mongolia (h = N).				
		m = 5.5 (Up,Ki).				
"	29	Up	iP		22 16 33.6	
			i		22 17 58.7	
			ipP		22 18 13.8	
			iS		22 25 46.6	
					micr	sec
			P	Z'	3.1	1.0
		(cont.)				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
Nov. 29 (cont.)

	Up			micr	sec	
		Mx	E	22	20	
		Mx	N	37	20	
		Mx	Z	40	21	
	Ki	iP		22 16	00.2	
		i		22 16	00.9	
		ipP		22 17	37.6	
		iS		22 24	45.4	
		iP'P'		22 43	46	
				micr	sec	
		P	Z'	2.7	0.9	
		Mx	E	45	16	
		Mx	N	39	15	
		Mx	Z	40	16	
	Sk	iP		22 16	30.7	
		ipP		22 18	08.6	
		iS		22 25	37.3	
	Um	iP		22 16	14.3	
		ipP		22 17	53.5	
		iS		22 25	11.6	
		isS		22 27	50	
	Ud	iP		22 16	40.3	
		ipP		22 18	17.9	
		iS		22 25	55.9	
	De	iP		22 16	53.6	
		ipP		22 18	31.0	
		iS		22 26	20.2	

South of Japan.
h = 450 km (Up,Ki,Sk,Um,Ud,De).
m = 6.9, M = 6.9 (Up,Ki).
M uncorrected for focal depth! P exhibits a small compression followed by a large dilatation.

"	29	De	iP	22 56	53.1
"	29	Ud	iP	22 57	00.0
"	30	Ud	iPKP1	00 46	53.2
"	30	Ud	iP	03 31	07.3
"	30	Up	iPKP1	05 19	01.3
			iPKP2	05 19	11.5
		Ki	iPKP1	05 18	42.0 D
				micr	sec
			PKP1 Z'	0.2	1.0
		Sk	iPKP1	05 18	55.9
		Um	iPKP1	05 18	51.6
		Ud	iPKP1	05 19	03.0

New Zealand (h = 55 km).

1974
Nov. 30

	Up	iP		13 08	03.3 C
				micr	sec
		P	Z'	0.1	0.9
	Ki	iP		13 07	09.1 C
				micr	sec
		P	Z'	0.1	1.0
	Sk	iP		13 07	43.5
		iPcP		13 08	23.2
	Um	iP		13 07	35.1 C
	Ud	iP		13 08	05.0 C
	De	iP		13 08	26.4

Aleutian Islands
(h = 15 km).
m = 5.9 (Up,Ki).

"	30	Up	iPKP1	14 14	57.8
			iPKP2	14 15	05.5
				micr	sec
			PKP2 Z'	0.1	1.0
		Ki	iPKP1	14 14	36.2
				micr	sec
			PKP1 Z'	0.2	1.1
		Sk	iPKP1	14 14	50.8
		Um	iPKP1	14 14	46.0
		Ud	iPKP1	14 14	57.5

New Zealand (h = 30 km).

"	30	Up	iPKP1	15 54	02.0
			iPKP2	15 54	12.1
				micr	sec
			PKP2 Z'	0.1	1.3
		Ki	iPKP1	15 53	42.3
			ipPKP1	15 53	53.9
		Sk	iPKP1	15 53	59.1
		Um	iPKP1	15 53	52.2 C
			ipPKP1	15 54	03.2

New Zealand.
h = 40 km (Ki,Um).

"	30	Up	iPKP1	17 23	31.3
			iPKP2	17 23	41.5
		Ki	iPKP1	17 23	11.8 C
				micr	sec
			PKP1 Z'	0.1	1.0
		Sk	iPKP1	17 23	26.4
		Um	iPKP1	17 23	21.9
		Ud	iPKP1	17 23	32.6

New Zealand (h = 40 km).

"	30	Up	iP	17 42	59.7 C
		Ud	iP	17 43	16.2 C
		De	iP	17 43	12.5

Hindu Kush (h = 200 km).

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974					
Nov.	30	Ki	iPKPl	17 52	16.2
"	30	Ud	iRg	21 07	22.1
		Central Sweden.			
		Near-surface event.			
"	30	Up	iRg	21 08	38.7
		Ud	iRg	21 08	22.7
		Central Sweden.			
		Near-surface event.			
"	30	Ud	i(Rg)	21 21	07.3

Markus Båth

July 26, 1976

SEISMOLOGICAL INSTITUTE
BOX 517
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SWEDEN

S E I S M O L O G I C A L B U L L E T I N

U P P S A L A, K I R U N A, S K A L S T U G A N, U M E Å,

U D D E H O L M and D E L A R Y

Uppsala	(Up):	59°51.5'N,	17°37.6'E; h = 14 m
Kiruna	(Ki):	67°50.4'N,	20°25.0'E; h = 390 m
Skalstugan	(Sk):	63°34.8'N,	12°16.8'E; h = 580 m
Umeå	(Um):	63°48.9'N,	20°14.2'E; h = 16 m
Uddeholm	(Ud):	60°05.4'N,	13°36.4'E; h = 240 m
Delary	(De):	56°28.2'N,	13°52.2'E; h = 150 m

D E C E M B E R 1 - 31, 1974

1974 Dec.						
	1	Up	iP		00 17 16.0	
		Ki	iP		00 17 24.9	
		Sk	iP		00 17 41.4	
		Um	iP		00 17 14.1	
		Ud	iP		00 17 32.2	
		Hindu Kush (h = 210 km).				
"	1	Ud	iPKPl		02 11 29.4	
"	1	Ud	iP		03 02 55.2	
		Aleutian Islands (h = 55 km).				
"	1	Up	iP		06 26 07.5	
		Sk	eP		06 26 48	
		Ud	iP		06 26 15.3	
		Greece (h = N).				
"	1	Ud	iP		07 03 39.0	
		Formosa (h = 60 km).				
"	1	Ud	iP		11 25 13.7	
		Turkey.				
"	1	Up	iP		12 14 09.4	
			i		12 14 25.9	
					micr	sec
			Mx	N	1.4	13
			Mx	Z	1.7	13
		Ki	iP		12 15 22.9	
					micr	sec
			Mx	E	0.6	11
			Mx	N	0.7	12
		Sk	iP		12 14 58.0	
		Um	iP		12 14 49.3	
			i		12 15 06.7	
		Ud	iP		12 14 21.3	
		(cont.)				

1974 Dec.						
	1	(cont.)				
		De	iP		12 13 47.2	
		Turkey (h = 35 km).				
		M = 4.6 (Up,Ki).				
"	1	Up	iP		13 21 55.8	
		Ki	iP		13 21 41.1	
					micr	sec
			P	Z'	0.1	0.9
		Sk	iP		13 22 02.2	
		Um	iP		13 21 46.1	D
		Ud	iP		13 22 05.0	D
		De	iP		13 22 09.9	
		Mindanao (h = 520 km).				
"	1	Up	iP		14 35 29.4	
		Ki	iP		14 35 30.2	
		Sk	iP		14 35 44.6	
		Um	iP		14 35 26.6	
		Ud	iP		14 35 39.1	
		Nicobar Islands.				
"	1	Ud	iP		15 05 56.4	
"	1	Up	iSn		19 39 19.2	
			i		19 39 37.0	
			iSgl		19 40 06.9	
			i		19 40 39.4	
		Ki	iPgl		19 36 01.7	C
			iSgl		19 36 05.5	
					micr	sec
			Pgl	Z'	0.4	0.4
		Sk	eSn		19 38 16	
			iSgl		19 38 44.7	
		Um	iPgl		19 37 09.5	
			iSn		19 37 44.7	
		(cont.)				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
Dec. 1 (cont.)

Um	iSg1	19 38 03.7	
Ud	iSg1	19 40 15.5	
De	iSg2	19 42 15.1	

Kiruna, Sweden, 67.8°N, 20.1°E.
Origin time = 19 35 58.
Felt.

" 1	Ud	iPKP1	21 57 57.5
	De	iPKP1	21 58 09.3
" 1	Up	iP	23 15 38.8
	Ud	iP	23 15 41.8

Greece.

" 2	Up	iPKP1	00 32 17.2
	Ki	iPKP	00 31 47.4
	Um	iPKP	00 32 00.5
		iPKP1	00 32 10.8
	Ud	iPKP1	00 32 12.8

New Zealand.

" 2	Up	ePKP1	00 37 46	
		iPKP2	00 37 56.2	
		iX	00 38 07.4	
			micr	sec
		PKP2 Z'	0.1	1.1
		X Z'	0.1	0.8
	Ki	iPKP1	00 37 27.1	C
		iX	00 37 33.3	
		i	00 37 49.6	
			micr	sec
		PKP1 Z'	0.1	0.8
		X Z'	0.4	1.8
	Sk	iPKP1	00 37 41.3	
		iX	00 37 53.3	
	Um	iPKP1	00 37 36.5	
		iX	00 37 50.6	
	Ud	iPKP1	00 37 49.9	C
		iPKP2	00 38 00.1	
		iX	00 38 09.8	
	De	iPKP1	00 37 58.6	
		iPKP2	00 38 11.2	
		iX	00 38 24.8	

New Zealand (h = 120 km).
The unidentified phase X, arriving later than PKP2, has a greater slope of its travel-time graph than PKP1 and PKP2.

" 2	Ki	iP	00 59 40.5

(cont.)

1974
Dec. 2 (cont.)

Um	iP	00 59 42.8	

Banda Sea (h = N).

" 2	Up	iP	01 19 02.3 C
		i	01 19 07.4
		ipP	01 19 31.5
	Ki	iP	01 18 55.4
		ipP	01 19 28.7
	Sk	iP	01 19 17.7
		ipP	01 19 49.7
	Um	iP	01 18 54.1
		i	01 19 00.0
		ipP	01 19 26.0
	Ud	iP	01 19 15.6
		i	01 19 21.3
	De	iP	01 19 17.4

Burma.
h = 130 km (Up,Ki,Sk,Um).
Double P, average separation 5.6 sec.

" 2	Up	iP	01 29 24.0
	Ki	iP	01 28 53.1
	Um	iP	01 29 13.7
" 2	Up	iPKP1	01 31 13.4
	Um	iPKP1	01 30 56.2
	Ud	iPKP1	01 31 09.5
		i	01 31 16.3
" 2	Up	iP	01 59 25.0
			micr sec
		P Z'	0.1 1.3
	Sk	iP	02 00 01.4
	Um	iP	02 00 05.1
	Ud	iP	01 59 21.0

(Italy).

" 2	Up	iPKP	02 10 20.2
	Ki	iPKP	02 10 06.7
	Sk	iPKP	02 10 17.5
	Um	iPKP	02 10 13.1
	Ud	iPKP	02 10 23.3
	De	iPKP	02 10 29.5

Santa Cruz Islands
(h = 150 km).

" 2	Ki	iP	04 43 19.5
	Um	iP	04 44 10.6
	Ud	iP	04 44 41.7

Greenland (h = N).

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
Dec. 2 Up iP 06 46 13.1
iX 06 46 20.7
micr sec
P Z' 0.2 1.2
Mx E 2.4 16
Mx N 2.1 17
Mx Z 4.3 16
Ki iP 06 45 53.2
iX 06 46 00.8
micr sec
P Z' 0.2 1.0
Mx E 2.2 15
Mx N 2.4 17
Mx Z 2.0 13
Sk iP 06 46 18.3
Um iP 06 45 59.9
iX 06 46 07.6
iS 06 55 45
De iP 06 46 25.1
i 06 46 40.6
Luzon (h = 55 km).
m = 6.0, M = 5.7 (Up,Ki).
Interpreting the clear phase X as pP gives h = 25 km (Up, Ki,Um).

" 2 Up iPKP 07 02 12.7
iPKKP 07 12 40.1
Ki iPKP 07 02 04.0
Um iPKP 07 02 06.3
Ud iPKP 07 02 17.0
iPKKP 07 12 32.5
De iPKP 07 02 20.2
iPKKP 07 12 27.9
New Britain (h = 30 km).

" 2 Up iP 09 13 25.2 C
i 09 13 30.4
micr sec
P Z' 0.1 0.9
Ki iP 09 13 58.5 C
i 09 14 03.6
micr sec
P Z' 0.4 0.8
Mx E 1.5 12
Mx N 0.8 11
Mx Z 1.1 13
Sk iP 09 13 58.9 C
i 09 14 04.2
Um iP 09 13 36.8 C
i 09 13 41.9
iPP 09 15 20.0
(cont.)

1974
Dec. 2 (cont.)
Ud iP 09 13 40.6 C
i 09 13 45.9
iPP 09 15 24.1
De iP 09 13 25.7 C
i 09 13 31.1
Iran (h = 35 km).
m = 6.0 (Up,Ki).
Double P, average separation 5.2 sec.

" 2 De iPKPl 12 40 41.1
Fiji Islands (h = 590 km).

" 2 Up micr sec
Mx E 1.8 30
Mx Z 5.1 35
Ki iP 12 49 08.2
ipP 12 49 34.5
micr sec
Mx E 4.7 30
Mx N 4.0 25
Mx Z 6.1 30
Sk ipP 12 49 28.2
Ud iP 12 49 07.3
ipP 12 49 34.5
De iP 12 49 14.1
ipP 12 49 42.4
Guatemala.
h = 100 km (Ki,Ud,De).
M = 5.7 (Up,Ki).

" 2 Ud iP 14 20 14.1
Greece-Bulgaria (h = 45 km).

" 2 Up iP 18 54 17.4
Ki iP 18 53 30.5
Um iP 18 53 51.8
Ud iP 18 54 23.3
Okhotsk Sea (h = 420 km).

" 2 Um iP 20 27 54.3
Ud iP 20 28 21.6 C
South of Japan (h = 35 km).

" 2 Up iP 23 07 06.2
micr sec
P Z' 0.1 0.8
Sk iP 23 07 47.3
i 23 07 52.3
Um iP 23 07 47.1
Ud iP 23 07 15.3
i 23 07 18.9
De iP 23 06 39.4
Greece (h = 15 km).

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
Dec. 2 Up iP 23 14 23.1
Ud iP 23 14 29.2
Greece (h = N).

" 3 Up iX 03 20 49.7
micr sec
Mx E 7.3 21
Mx N 9.3 20
Mx Z 14 22
Ki iP 03 20 25.6
iX 03 20 34.7
i(PP) 03 24 26.9
i 03 24 47.3
micr sec
X Z' 0.4 1.4
i Z' 0.6 1.9
Mx E 14 18
Mx N 25 23
Mx Z 12 20
Um iX 03 20 39.7
Ud iP 03 20 51.8
iX 03 20 58.3
De iX 03 21 03.5
Banda Sea (h = N).
M = 6.5 (Up,Ki).
X is larger, sharper and more pronounced than P.

" 3 Up iSgl 10 28 22.3
Ki iPn 10 25 15.8
iPgl 10 25 21.1
iS* 10 25 55.7
iSgl 10 25 58.4
micr sec
Sgl Z' 0.2 0.5
Sk iPgl 10 25 35.4
i 10 25 54.4
iSn 10 26 10.3
iSgl 10 26 24.7
Um iPn 10 25 36.4 C
iSn 10 26 23.9
iSgl 10 26 44.3
Ud iSn 10 27 31.2
iSgl 10 28 13.0
Coast of Nordland, Norway, 67.1°N, 13.6°E.
Origin time = 10 24 31.

" 3 Ud iP 19 29 43.9
Kurile Islands (h = 35 km).

" 4 Up iP 02 47 16.0
i 02 47 20.1
(cont.)

1974
Dec. 4 (cont.)
Up micr sec
P Z' 0.2 1.5
Ki eP 02 48 02
Sk iP 02 47 36.2
Um iP 02 47 43.4
i 02 47 48.9
Ud iP 02 47 14.0
i 02 47 19.3
Ascension Island (h = N).
Double P.

" 4 Up iP 03 20 19.7
il 03 20 22.8
i2 03 20 32.9
iS 03 30 43
micr sec
P Z' 1.0 2.0
i2 Z' 0.5 1.4
Mx E 15 19
Mx N 24 22
Mx Z 27 20
Ki iP 03 20 21.4 C
il 03 20 24.9
iS 03 30 46
micr sec
P Z' 0.2 1.4
il Z' 1.2 1.7
Mx E 41 18
Mx N 27 17
Mx Z 34 18
Sk iP 03 20 34.7
il 03 20 38.4
Um iP 03 20 17.3 C
il 03 20 20.3
i2 03 20 32.7
iS 03 30 40
Ud iP 03 20 30.7 C
il 03 20 33.8
i2 03 20 44.0
De iP 03 20 28.4 C
il 03 20 31.7
i2 03 20 42.0
Sumatra (h = 20 km).
m = 6.6, M = 6.9 (Up,Ki).
Complicated series of onsets following P.

" 4 Um iP 10 10 47.4
Ud iP 10 11 19.3 C
Kurile Islands (h = N).

" 4 Ud iP 17 41 33.9
Molucca Passage (h = 60 km).

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Dec.	4	Ki	iPKP		20 02 32.5	C	
		South Sandwich Islands (h = N).					
"	4	Ki	iP		20 24 25.1		
		Ud	iP		20 25 16.5		
		Aleutian Islands (h = 40 km).					
"	4	Ud	iP		23 26 38.3		
		Greece.					
"	5	Up	iP		03 28 49.4		
					micr	sec	
			P	Z'	0.1	0.8	
		Ki	iP		03 28 20.4		
		Um	iP		03 28 30.9		
		Ud	iP		03 28 55.3		
		Mariana Islands (h = 190 km).					
"	5	Ud	iP		06 55 39.2		
"	5	Up	iP		12 10 48.0		
			i		12 10 51.0		
			iSKS		12 21 07		
			iS		12 22 00		
			iPKKP		12 27 26.9		
					micr	sec	
			P	Z'	0.2	1.5	
			i	Z'	0.9	1.6	
		Ki	iP		12 10 53.9	D	
			iSKS		12 21 17		
			iS		12 22 14		
			iPKKP		12 27 18.3		
			i		12 27 22.6		
					micr	sec	
			P	Z'	0.3	1.2	
		Sk	iP		12 10 40.1	D	
			iPKKP		12 27 32.2		
		Um	iP		12 10 56.0	D	
			iSKS		12 21 17		
			iS		12 22 11		
			iPKKP		12 27 20.7		
		Ud	iP		12 10 39.8		
			i		12 10 42.1		
			iPKKP		12 27 32.7		
		De	iP		12 10 38.4		
			iPKKP		12 27 34.4		
		Peru-Brazil (h = 160 km). m = 6.8 (Up,Ki).					
"	5	Up	e(P)		12 34 59		
		Um	iP		12 35 32.7		
			i		12 35 40.4		
1974 Dec.	5	Um	iP		12 50 16.0		
"	5	Ud	i		14 21 13.1		
			i(Sgl)		14 21 53.1		
"	5	Up	i(P)		18 10 15.8		
		Um	iP		18 09 59.6		
		South of Japan (h = N).					
"	5	Um	iP		20 36 15.2		
		South of Japan (h = N).					
"	5	Up	iP		23 09 30.5		
		Ki	iP		23 08 45.2		
		Um	iP		23 09 05.9		
		Ud	iP		23 09 37.2		
		Kurile Islands (h = 180 km).					
"	6	Ud	iP		06 42 01.5		
"	6	Up	iP		14 11 31.3		
					micr	sec	
			Mx	E	1.9	20	
			Mx	Z	2.7	22	
		Ki	iP		14 11 25.9		
					micr	sec	
			P	Z'	0.1	1.5	
			Mx	E	1.6	17	
			Mx	N	1.3	17	
			Mx	Z	1.5	16	
		Sk	iP		14 11 15.5		
		Um	iP		14 11 27.9		
		Ud	iP		14 11 18.7		
			i		14 11 22.3		
		Panama-Costa Rica (h = 45 km). M = 5.6 (Up,Ki).					
"	6	Um	iP		14 16 31.8		
		Ud	iP		14 16 40.2		
			i		14 16 46.6		
"	6	Up	iP		14 29 35.5		
		Ki	iP		14 29 00.9		
"	6	Ki	eP		17 18 02		
		Sk	iP		17 18 31.0		
		Um	iP		17 18 16.7		
		Ud	eP		17 18 40		
		Mariana Islands (h = N).					
"	6	Up	iP		17 21 42.3		
		Ki	iP		17 21 12.6		
		(cont.)					

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974							
Dec.	6	(cont.)					
		Ki			micr	sec	
			P	Z'	0.1	0.9	
		Sk	iP		17 21 39.2		
		Um	iP		17 21 25.6		
			i		17 21 42.6		
		Ud	iP		17 21 48.7		
		Mariana Islands (h = N).					
"	6	Um	iP		18 36 15.1		
"	6	Up	e(P)		20 17 10		
			i		20 17 33.8		
		Um	i(P)		20 17 35.4		
"	6	De	iPKP		21 54 20.6		
		New Hebrides Islands (h = 20 km).					
"	7	Um	i(P)		00 54 52.8		
"	7	Up	iP		00 58 06.4		
		Um	iP		00 57 38.2		
		Ud	iP		00 58 06.9		
		Aleutian Islands (h = 25 km).					
"	7	Ud	i(Sgl)		01 05 11.8		
"	7	Ud	i(Sgl)		03 48 24.4		
"	7	Ud	iP		03 48 37.8		
		Kurile Islands (h = N).					
"	7	Up	iP		06 06 49.4		
		Ki	iP		06 06 34.6		
		Sk	iP		06 07 05.7	C	
		Um	iP		06 06 35.4	C	
		Ud	iP		06 07 06.0		
		Kazakh SSR.					
		Underground explosion.					
"	7	Up	iP		07 45 09.7	C	
			i		07 45 11.9		
			ipP		07 45 21.8		
			iS		07 54 10		
			iP'P'		08 13 39.7		
					micr	sec	
			P	Z'	0.2	1.0	
			Mx	E	2.0	18	
			Mx	N	3.5	18	
			Mx	Z	4.8	18	
		Ki	iP		07 44 16.7	C	
			i		07 44 18.4		
		(cont.)					

1974							
Dec.	7	(cont.)					
		Ki	i(pP)		07 44 25.4		
					micr	sec	
			P	Z'	0.3	0.9	
			(pP)	Z'	0.5	1.6	
			Mx	E	4.6	17	
			Mx	N	4.8	17	
			Mx	Z	4.4	17	
		Sk	iP		07 44 47.1		
			i		07 44 49.1		
		Um	iP		07 44 43.0	C	
			i		07 44 45.2		
			iS		07 53 24		
			iP'P'		08 13 31.4		
		Ud	iP		07 45 09.4	C	
			i		07 45 11.1		
			ipP		07 45 20.6		
		De	iP		07 45 31.8		
			i		07 45 34.2		
		Aleutian Islands. h = 45 km (Up,Ud). m = 6.3, M = 5.7 (Up,Ki). Double P, 2.0 sec apart.					
"	7	Up	iPKPl		09 43 35.6		
		Ki	iPKPl		09 43 18.3		
			ipPKPl		09 43 35.6		
		Sk	iPKPl		09 43 31.6		
			ipPKPl		09 43 49.2		
		Um	iPKPl		09 43 26.6	C	
			ipPKPl		09 43 44.5		
		Ud	iPKPl		09 43 38.0		
			ipPKPl		09 43 55.6		
		De	iPKPl		09 43 50.3		
		New Zealand. h = 60 km (Ki,Sk,Um,Ud).					
"	7	Um	iP		11 15 01.8		
		Ud	iP		11 15 29.1		
		South of Japan (h = N).					
"	7	Up	iRg		11 20 12.1		
		Ud	iRg		11 19 58.3		
		Central Sweden. Near-surface event.					
"	7	Up	iPKPl		12 27 42.3	C	
			ipPKPl		12 27 48.3		
		Sk	iPKPl		12 27 38.8		
		Um	iPKPl		12 27 31.1		
		Ud	iPKPl		12 27 44.1	C	
			ipPKPl		12 27 51.3		
		De	iPKPl		12 27 53.3		
		(cont.)					

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
Dec. 7 (cont.)
New Zealand region.
h = 20 km (Up,Ud).
Origin time = 12 07 49.

" 7 Up iP 14 05 21.2
ipP 14 05 37.0
Ki iP 14 05 10.9
Sk iP 14 05 37.1
ipP 14 05 54.4
Um iP 14 05 13.2
ipP 14 05 30.1
Ud iP 14 05 34.3
ipP 14 05 50.6
De iP 14 05 34.7
Burma-India.
h = 60 km (Up,Sk,Um,Ud).

" 7 Up eP 14 38 31
Um iP 14 38 35.6 C
Ud iP 14 38 25.8 C
De iP 14 38 29.7
Costa Rica (h = 45 km).

" 7 Up iPKP 14 45 27.9
De iPKP 14 45 36.4
Solomon Islands (h = 90 km).

" 7 De ePKPl 15 15 24

" 7 Up iP 18 10 36.5
Ud iP 18 10 42.6
Bonin Islands (h = N).

" 7 Up iP 18 33 59.3
Ud iP 18 34 04.3
Greece.

" 7 Sk iP 20 18 36.5
Ud iP 20 18 47.9

" 7 Up iP 22 13 32.4 C
ipP 22 13 40.3
micr sec
P Z' 0.1 0.9
Ki iP 22 12 39.0 C
micr sec
P Z' 0.1 1.0
Sk iP 22 13 12.8
Um iP 22 13 05.1
ipP 22 13 15.0
Ud iP 22 13 34.3
ipP 22 13 44.0
(cont.)

1974
Dec. 7 (cont.)
De iP 22 13 55.9
ipP 22 14 05.6
Aleutian Islands.
h = 35 km (Up,Um,Ud,De).
m = 5.9 (Up,Ki).

" 8 Ki iP 01 30 45.2
Iceland (h = 30 km).

" 8 Sk iP 03 53 59.5
Iceland (h = 15 km).

" 8 Up iP 04 03 32.6
Ud iP 04 03 49.1
De iP 04 03 46.9
Afghanistan-USSR
(h = 230 km).

" 8 Ud iP 05 46 32.7
De iP 05 45 57.9
Aegean Sea (h = 40 km).

" 8 Sk iP 06 59 36.7
Um ipP 06 59 24.7
Ud iP 06 59 30.9
ipP 06 59 51.8
Afghanistan-USSR.
h = 100 km (Ud).

" 8 Um iP 07 28 43.6

" 8 Up iP 08 47 16.8
Um iP 08 47 04.8
Ud iP 08 47 26.0
Caroline Islands (h = 60 km).

" 8 Ud i(P) 10 43 16.7

" 8 Ud iPKPl 12 49 47.6

" 8 Ud iP 17 34 02.6
Unimak Island (h = N).

" 8 Ud iPKPl 19 45 05.9 C
De iPKPl 19 45 17.3

" 8 Ki iP 22 37 41.5
Leyte (h = 60 km).

" 9 Up iP 15 23 23.8
Um iP 15 23 30.2

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974						
Dec.	9	Ud	iPgl	15 42 21.8		
			iSgl	15 42 25.8		
			iRg	15 42 28.2		
"	9	Ki	iPgl	19 09 03.5		C
			iSgl	19 09 27.9		
		Um	iSgl	19 09 47.0		
		Tornedalen, Sweden, 66.1°N, 23.4°E. Origin time = 19 08 24. Solution from Helsinki regional bulletin.				
"	9	Ud	iP	23 16 39.3		
		Greece.				
"	10	Ud	iPKPl	01 22 48.4		
		De	iPKPl	01 22 58.4		
		Fiji Islands (h = 630 km).				
"	10	Up	iP	01 48 28.9		C
			ipP	01 49 14.6		
			isP	01 49 39.0		
				micr	sec	
			P	Z' 1.3	1.3	
			pP	Z' 0.6	1.2	
			sP	Z' 0.9	1.3	
		Ki	iP	01 48 37.4		
			i	01 48 47.0		
			ipP	01 49 21.9		
				micr	sec	
			P	Z' 0.8	0.9	
			pP	Z' 0.3	1.1	
		Sk	iP	01 48 54.6		C
			ipP	01 49 39.4		
			isP	01 50 03.2		
		Um	iP	01 48 26.5		C
			ipP	01 49 11.1		
			isP	01 49 36.8		
		Ud	iP	01 48 44.5		C
			ipP	01 49 29.3		
			isP	01 49 55.8		
		De	iP	01 48 41.1		
			ipP	01 49 26.2		
			isP	01 49 51.7		
		Hindu Kush. h = 220 km (Up,Ki,Sk,Um,Ud, De). m = 6.2 (Up,Ki). sP has larger amplitudes than pP.				

1974						
Dec.	10	Ki	iP	02 40 46.0		
			i	02 40 53.0		
				micr	sec	
			P	Z' 0.1	1.0	
		Sk	eP	02 40 12		
		Um	iP	02 40 39.2		
			i	02 40 46.1		
		Ud	iP	02 40 09.8		
		North Atlantic Ocean (h = N). Double P (Ki,Um).				
"	10	Um	iP	03 56 17.5		
		Ud	iP	03 56 48.9		
		Japan (h = N).				
"	10	Ud	iP	08 31 28.0		
		Aegean Sea (h = N).				
"	10	Ud	iP	13 10 13.3		
		Japan (h = N).				
"	10	Up	iP	13 13 43.4		
			ipP	13 13 55.4		
		Ki	iP	13 12 59.6		
			ipP	13 13 10.9		
				micr	sec	
			pP	Z' 0.1	1.0	
		Sk	iP	13 13 33.9		
			ipP	13 13 45.1		
		Um	iP	13 13 19.6		
			ipP	13 13 30.2		
		Ud	iP	13 13 50.1		D
			ipP	13 14 01.2		
		De	iP	13 14 05.2		
		Japan. h = 40 km (Up,Ki,Sk,Um,Ud).				
"	10	Ud	iP	15 31 56.9		
			ipP	15 32 07.2		
		Japan. h = 40 km (Ud).				
"	10	Ud	iP	19 37 34.2		
"	10	Up	iP	19 58 29.4		
		Sk	iP	19 58 59.3		
		Um	iP	19 58 33.3		
		Ud	iP	19 58 45.1		
		Pakistan (h = 45 km).				
"	11	Ud	iP	01 13 12.7		
		(cont.)				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974							
Dec.	11	(cont.)					
		Ud	i		01	13	16.8
		Japan (h = 70 km).					
"	11	Ud	i(P)		12	12	15.8
"	11	Up	iPKPl		15	23	53.9
		Ud	iPKPl		15	23	56.1
"	11	Ud	iP		20	29	07.2
		Venezuela (h = 110 km).					
"	12	Up	iP		13	02	44.8
		Ki	iP		13	02	36.9
			i		13	02	47.5
					micr		sec
			P	Z'	0.1		1.0
		Um	iP		13	02	41.3
		Ud	iP		13	02	59.8
		Banda Sea (h = 20 km).					
"	12	Ud	i(P)		13	34	09.6
"	12	Up	iP		21	23	26.8
		Ki	iP		21	22	26.5
			iS		21	24	34.2
					micr		sec
			S	Z'	0.1		0.9
		Sk	iP		21	23	37.3 D
		Um	iS		21	24	52.3
		Ud	iP		21	24	02.0
			i		21	24	50.3
		De	iP		21	24	36.6
"	13	Up	iP		07	43	17.1
			ipP		07	43	39.4
		Ki	iP		07	43	00.2
			ipP		07	43	23.3
		Um	iP		07	43	04.6
		Ud	iP		07	43	25.5
			ipP		07	43	48.6
		Talaud Islands.					
		h = 90 km (Up,Ki,Ud).					
"	13	Ki	iP		07	56	47.9
		Ud	iP		07	57	10.8
		Talaud Islands (h = 90 km).					
"	13	Ud	iP		08	13	56.4
"	13	Up	i(Rg)		15	54	52.6
"	13	Ud	iP		18	19	11.2
		Hindu Kush.					
		Intermediate depth.					

1974							
Dec.	14	Up	iP		02	41	27.2 C
					micr		sec
			P	Z'	0.2		0.9
			Mx	E	1.7		15
			Mx	N	3.7		14
			Mx	Z	4.3		13
		Ki			micr		sec
			Mx	E	4.5		18
			Mx	N	2.4		16
			Mx	Z	2.0		14
		Sk	iP		02	42	07.1 C
			i		02	42	08.8
		Um	iP		02	42	04.8 C
			i		02	42	07.4
		Ud	iP		02	41	33.4 C
			i		02	41	37.2
		De	iP		02	40	56.8
		Greece (h = N).					
		M = 5.1 (Up,Ki).					
"	14	Up	iP		10	33	22.7
		Ud	iP		10	33	27.2
		Kurile Islands (h = N).					
"	14	Up	iP		12	42	25.4 C
					micr		sec
			P	Z'	0.1		0.9
		Ki	iP		12	41	36.1
		Sk	iP		12	42	12.0 C
		Um	iP		12	42	00.7
		Ud	iP		12	42	30.6 C
		Kurile Islands (h = N).					
"	14	Up	iP		14	07	13.6
			i		14	07	28.0
		Ki	iP		14	07	14.8
					micr		sec
			P	Z'	0.2		1.8
		Sk	iP		14	07	31.5
		Um	iP		14	07	14.6
		Ud	iP		14	07	24.9
		Sumatra (h = 60 km).					
"	14	Up	iP		20	20	21.0
					micr		sec
			P	Z'	0.1		1.0
		Ki	iP		20	20	04.0
					micr		sec
			P	Z'	0.1		0.8
		Sk	iP		20	20	25.5
		Um	iP		20	20	09.5
		Ud	iP		20	20	29.0
		Halmahera (h = 220 km).					
		m = 6.1 (Up,Ki).					

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
Dec. 14 Up iP 21 34 08.4 D
micr sec
P Z' 0.1 0.8
Sk iP 21 34 49.6 D
Um iP 21 34 49.0
Ud iP 21 34 15.2 D
i 21 34 16.7
De iP 21 33 40.2
Greece (h = 10 km).

" 15 Up i(Rg) 14 01 08.9

" 15 Ki iP 18 25 55.6
Um iP 18 26 45.7
Ud iP 18 27 36.7
Norwegian Sea (h = N).

" 15 Ud iP 18 44 35.2
i 18 44 40.0
Volcano Islands (h = N).

" 15 Up iPKPl 22 24 12.0
i 22 24 29.6
Sk iPKPl 22 24 08.6
Um iPKPl 22 24 00.7 C
Ud iPKPl 22 24 13.4
Kermadec Islands (h = N).

" 16 Ud iP 04 24 08.2

" 16 Up iPKPl 05 22 51.5 C
Sk iPKPl 05 22 42.6 C
Um iPKPl 05 22 35.4
Ud iPKPl 05 22 48.8
De iPKPl 05 23 01.8 C
Kermadec Islands (h = 60 km).

" 16 De iPKP 05 30 30.3
Solomon Islands (h = 150 km).

" 16 Up iP 06 29 53.7 C
iPn 06 30 54.2
Ki iP 06 29 37.5
micr sec
P Z' 0.1 0.6
Sk iP 06 30 08.3
Um iP 06 29 38.0 C
Ud iP 06 30 09.2 C
iPP 06 31 33.3
De iP 06 30 17.3
iPP 06 31 43.6
Kazakh SSR.
Underground explosion.

1974
Dec. 16 Up iP 06 47 53.0
Ki iP 06 47 37.1
Sk iP 06 48 07.8
Um iP 06 47 37.6
Ud iP 06 48 08.9 C
De iPP 06 49 43.0
Kazakh SSR.
Underground explosion.

" 16 Up Mx 09 00
micr sec
Mx E 1.3 22
Mx Z 2.4 22
Ki Mx 09 02
micr sec
Mx E 1.5 16
Mx N 2.3 21
Mx Z 2.1 17
Easter Island (h = N).
M = 5.9 (Up,Ki).

" 16 Up i(P) 14 11 27.5

" 16 Up i 21 12 12.0
iSgl 21 12 15.0
iRg 21 12 17.3
Um i(Sg2) 21 14 06.4
Ud iPgl 21 12 40.1
iSgl 21 13 08.5
Dannemora, Sweden,
60.1°N, 17.5°E.
Origin time = 21 12 02.
Rockburst at the iron ore mines.
Probably a double rupture, 2.0 sec apart, as evidenced by Up records.
Felt.

" 16 Up i(P) 21 38 38.4
Ud i(P) 21 38 43.9

" 17 Ud iP 04 37 41.9 C
Sumatra (h = N).

" 17 Um iP 10 37 07.8
South of Japan (h = 35 km).

" 17 Up iPKPl 15 55 09.6
micr sec
PKPl Z' 0.1 1.0
Ki iPKPl 15 55 10.1 C
(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Dec.	17	(cont.)				
		Ki			micr	sec
			PKPl	Z'	0.2	1.3
		Sk	iPKPl		15 55	24.4
		Um	iPKPl		15 55	12.4 C
		Ud	iPKPl		15 55	25.3 C
		De	iPKPl		15 55	16.6
		West of Macquarie Islands (h = N).				
"	17	Ud	iPKP		23 21	24.5
"	18	Up	i(P)		02 03	40.3
"	18	Up	iP		02 39	22.9
		Ki	iP		02 39	28.4
		Um	iP		02 39	19.6
		Ud	iP		02 39	42.4 C
		Tadzhik-Sinkiang (h = 40 km).				
"	18	Ki	iP		03 34	01.4
		Ud	iP		03 34	13.2
		Tadzhik SSR (h = 50 km).				
"	18	Ki	iP		05 42	14.5
		Ud	iP		05 43	06.8
		Aleutian Islands (h = 40 km).				
"	18	Up	iP		08 03	20.5
					micr	sec
			Mx	E	2.6	14
			Mx	N	1.8	13
			Mx	Z	3.2	12
		Ki	e(P)		08 02	50
					micr	sec
			Mx	N	1.7	9
		Sk	iP		08 03	22.5 C
		Ud	iP		08 03	29.7
		Mongolia (h = N).				
		M = 5.4 (Up,Ki).				
"	18	Up	iP		11 44	01.6
		Ki	iP		11 43	26.5
		Um	iP		11 43	40.6
		Ud	iP		11 44	09.3
		South of Japan.				
"	18	Sk	i(P)		11 45	47.2
		Mexico (h = N).				
"	18	Ki	iP		12 33	35.4
			i		12 33	44.7
		Banda Sea (h = N).				

1974 Dec.	18	Up	i(P)		14 10	53.5
"	18	Ud	iPgl		14 24	51.0 C
			iSgl		14 25	08.1
"	18	Um	iP		18 11	15.8
			i		18 11	22.6
			i		18 11	31.6
		Japan (h = 30 km).				
"	18	Up	iPKPl		20 11	13.4
		Sk	iPKPl		20 11	05.3
		Um	iPKPl		20 11	02.2
"	18	Up	iPn		20 14	22.6
			i		20 14	36.7
			iSn		20 16	03.2
			i		20 16	24.8
			iSgl		20 16	49.5
					micr	sec
			Sgl	Z'	0.2	0.8
		Ki	iPn		20 13	13.5
			i		20 13	14.7
			iPgl		20 13	21.7
			i		20 13	26.4
			iSn		20 13	56.2
			iSgl		20 14	13.0
					micr	sec
			Pn	Z'	0.2	0.4
			Sn	Z'	0.3	0.5
			Sgl	Z'	0.5	0.5
		Sk	iPn		20 13	19.9
			iPgl		20 13	27.5
			iSn		20 14	11.4
			iS*		20 14	22.9
			iSgl		20 14	26.9
			iRg		20 14	50.5
		Um	iPn		20 13	39.6
			i		20 13	41.1
			iPgl		20 13	49.7
			iSn		20 14	44.5
			iSgl		20 15	08.6
		Ud	iPn		20 14	09.5
			i		20 14	16.6
			iSn		20 15	30.3
			i		20 15	44.9
		De	iPn		20 15	04.8
			i		20 17	43.9
			iSgl		20 18	16.3
		Norwegian Sea (h = N). The doubling of Pn and possibly Sn (Ki,Um,Ud, and possibly Up) is quite pronounced, suggesting a (cont.)				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
Dec. 18 (cont.)
more complicated structure
at the Moho discontinuity.
Rg at Sk suggests very shallow
focal depth, also supported by
the clear appearance of Pgl
and Sgl at nearly all stations.

" 18 Ud iP 20 42 13.1
Hindu Kush.
Intermediate depth.

" 18 Sk iP 21 36 12.0
Um iP 21 36 06.1
Ud iP 21 35 39.8
De eP 21 35 03
Aegean Sea (h = 40 km).

" 18 Ki iP 23 13 08.5
Ud iP 23 13 57.5

" 18 Up i(P) 23 49 30.4

" 19 Up iPKPl 01 38 28.9
Sk iPKPl 01 38 23.3
Um iPKPl 01 38 18.1
i 01 38 28.8
i 01 38 40.3
Ud iPKPl 01 38 29.5
South of Kermadec Islands.

" 19 Ud iPKPl 10 09 08.5
De iPKPl 10 09 20.3

" 19 De iP 15 23 48.6
South of Greece.

" 19 Up iPKP 15 52 03.6
Ki iPKP 15 51 49.8
Sk iPKP 15 52 00.8
Um iPKP 15 51 55.8
Ud iPKP 15 52 06.3
De iPKP 15 52 12.2
Santa Cruz Islands
(h = 130 km).

" 19 Up iP 16 13 33.9
iS 16 24 10

		micr	sec
P	Z'	0.2	1.5
Mx	E	1.4	19
Mx	N	1.4	20
Mx	Z	3.7	21

(cont.)

1974
Dec. 19 (cont.)
Ki iP 16 13 34.4
iS 16 24 11

		micr	sec
P	Z'	0.6	2.1
Mx	E	4.5	22
Mx	N	3.0	22
Mx	Z	4.9	24

Sk iP 16 13 19.8
i 16 13 21.0
Um iP 16 13 36.1
i 16 13 37.8
iS 16 24 13
Ud iP 16 13 24.7
i 16 13 25.9
De eP 16 13 26
i 16 13 27.9
Panama (h = 15 km).
m = 6.2, M = 5.7 (Up,Ki).

" 19 Up iP 21 13 49.6
Ud iP 21 13 36.3

" 19 Ud iP 21 50 48.4

" 19 Up iPKPl 23 48 31.7
Um iPKPl 23 48 20.7
Ud iPKPl 23 48 33.6
De iPKPl 23 48 43.4
Tonga-Kermadec Islands
(h = 200 km).

" 20 Up i(PKP) 02 59 02.7
iPKP 02 59 06.1
Ki iPKP 02 58 49.5
Sk iSKPl 03 01 51.7
Um i(PKP) 02 58 48.4
iPKP 02 58 57.4
Ud i(PKP) 02 58 56.3
iPKP 02 59 05.8
De i(PKP) 02 59 09.2
iPKP 02 59 14.9
Fiji Islands (h = 370 km).

" 20 Up iP 03 12 51.4
Ud iP 03 13 00.4

" 20 Up iP 03 37 02.1
iX 03 37 13.2
Ki iP 03 37 27.6
iX 03 37 41.6

		micr	sec
P	Z'	0.1	0.7

Sk iP 03 37 32.1
(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
Dec. 20 (cont.)

Um	iP	03 37 09.1	
	iX	03 37 21.5	
Ud	iP	03 37 16.4	
	iX	03 37 29.2	
De	iP	03 37 04.5	
	iX	03 37 17.5	

Iran (h = 7 km).
X is probably P of another smaller earthquake in nearly the same area.

" 20 Ki iP 05 58 23.0
Turkey.

" 20 Up eP 06 08 05

" 20 Ud i(Sgl) 08 32 12.5

" 20 Ki iP 12 26 32.5
Ud iP 12 27 29.6
Kurile Islands (h = N).

" 20 Ki iP 13 37 40.9
Ud iP 13 38 24.9
Japan (h = 70 km).

" 20

Up	iP	15 14 04.1	C
	i	15 14 05.5	
	i	15 14 19.7	
		micr sec	
	P Z'	0.1 0.8	
Ki	iP	15 15 21.8	C
	i	15 15 40.0	
Sk	iP	15 14 47.8	
Um	i	15 14 54.7	
Ud	iP	15 14 11.2	C
	i	15 14 25.3	

Greece-Albania (h = 10 km).

" 20

Up	eP	16 06 38
Sk	eP	16 07 20
Um	e(P)	16 07 19
Ud	iP	16 06 42.8

Greece-Albania (h = N).

" 20

Up	iP	16 48 47.4	
	iPcP	16 49 17.6	
	ipP	16 50 19.8	
		micr sec	
	P Z'	0.1 1.0	
Ki	iP	16 47 58.4	

(cont.)

1974
Dec. 20 (cont.)

Ki	iPcP	16 48 47.9	
	ipP	16 49 31.0	
		micr sec	
	P Z'	0.1 1.0	
Sk	iP	16 48 35.3	
	iPcP	16 49 09.0	
Um	iP	16 48 21.1	
	iPcP	16 49 01.2	
	ipP	16 49 51.9	
Ud	iP	16 48 52.6	
	iPcP	16 49 21.1	
	ipP	16 50 21.9	
De	iP	16 49 12.3	
	ipP	16 50 45.4	

Okhotsk Sea.
h = 450 km (Up,Ki,Um,Ud,De).
m = 5.2 (Up,Ki).
Exceptionally pronounced PcP at Up,Ud.

" 20

Up	iP	16 51 01.5
Ki	iP	16 50 29.9
Um	iP	16 50 49.3
Ud	iP	16 51 07.6

Kurile Islands.

" 20

Up	iP	19 50 48.0
Sk	iP	19 50 47.5
Ud	iP	19 50 57.1

Japan (h = 60 km).

" 21

Up	iP	00 39 33.9
Ki	iP	00 39 38.5
Sk	eP	00 39 23
Ud	iP	00 39 26.0

Panama (h = N).

" 21 Ud iP 02 46 02.1

" 21 Up i(Sgl) 03 09 10.7

" 21

Up	iPKP	08 48 16.3
Um	iPKP	08 48 02.3

Samoa Islands (h = N).

" 21

Up	iP	18 50 48.0
Ud	iP	18 50 58.0

Japan (h = 45 km).

" 21

Up	iP	20 50 31.1
Ki	iP	20 50 17.3
Um	iP	20 50 18.6
Ud	iP	20 50 44.5

Burma-China (h = N).

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974						
Dec.	22	Up	iPKPl		02 38 11.8	
					micr	sec
			PKPl	Z'	0.1	0.9
		Ud	iPKPl		02 38 13.2	
		De	iPKPl		02 38 23.4	
		Tonga-Kermadec Islands				
		(h = N).				
"	22	Up	iP		04 56 42.5	
					micr	sec
			P	Z'	0.2	1.5
		Um	iP		04 56 20.9	C
		Ud	iP		04 56 51.5	
"	22	Up	iP		05 43 07.9	
		Ud	iP		05 43 09.0	
		Aleutian Islands (h = 55 km).				
"	22	Up	iP		08 30 54.2	
		Ki	iP		08 30 27.7	
		Um	iP		08 30 37.6	
		Ud	iP		08 31 01.4	
		Ryukyu Islands (h = 70 km).				
"	22	Up	iPKPl		13 34 49.7	C
		Ud	iPKPl		13 34 52.1	C
"	22	Up	iPKP		17 02 12.8	
		Ki	iX		17 02 09.5	
		Um	iX		17 02 16.8	
			iSKPl		17 04 54.6	
		Ud	iPKP		17 02 14.0	
			iX		17 02 26.1	
		Fiji Islands (h = 560 km).				
"	22	Up	iPKPl		18 26 10.5	C
					micr	sec
			PKPl	Z'	0.1	1.3
		Ud	iPKPl		18 26 13.0	
		Kermadec Islands (h = N).				
"	23	Up	iP		05 27 26.9	
			i		05 27 36.0	
					micr	sec
			P	Z'	0.1	1.3
		Ki	iP		05 28 02.9	
					micr	sec
			P	Z'	0.1	1.1
		Sk	iP		05 28 08.5	
			iPn		05 28 28.2	
		Um	iP		05 27 36.5	
		Ud	iP		05 27 43.0	
		Caucasus (h = N).				
		m = 5.5 (Up,Ki).				

1974						
Dec.	23	Up	iP		06 31 15.3	
"	23	Up	iP		09 54 48.7	C
					micr	sec
			P	Z'	0.1	0.8
		Ki	iP		09 54 50.6	C
					micr	sec
			P	Z'	0.1	0.9
		Sk	iP		09 55 09.8	
		Um	iP		09 54 44.7	C
		Ud	iP		09 55 03.1	C
		De	iP		09 55 03.5	C
		Nepal (h = 45 km).				
		m = 5.8 (Up,Ki).				
"	23	Up	iPKPl		11 50 12.2	
		Ud	iPKPl		11 50 15.7	
			i		11 50 38.8	
		De	iPKPl		11 50 25.8	
		Tonga-Kermadec Islands				
		(h = 200 km).				
"	23	Up	iP		16 36 45.2	
		Ud	iP		16 36 53.3	
		De	iP		16 36 20.9	
		Crete (h = N).				
"	23	Sk	iP		23 55 01.7	
		Um	iP		23 55 17.6	
		South of Panama (h = N).				
"	23	Up	iP		23 57 15.2	
		Hindu Kush.				
		Intermediate depth.				
"	24	Sk	iPKPl		00 17 41.4	
		Ud	iPKPl		00 17 53.1	
"	24	Up	iP		00 49 59.4	
		Sk	iP		00 50 17.8	
		Um	i(P)		00 49 45.3	
		Ud	iP		00 50 11.5	
		Tibet.				
"	24	Um	iPKP		02 04 16.7	
		Ud	ePKP		02 04 31	
		New Britain (h = 55 km).				
"	24	Up	iP		02 22 52.0	
			ipP		02 23 28.1	
					micr	sec
			pP	Z'	0.3	1.1
		Ki	iP		02 22 41.6	
			ipP		02 23 18.0	

(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Dec.	24	(cont.)					
		Ki			micr	sec	
			pP	Z'	0.4	1.7	
		Sk	iP		02	22	33.8
			ipP		02	23	09.6
		Um	iP		02	22	49.2
			ipP		02	23	25.8
		Ud	iP		02	22	41.0
			ipP		02	23	19.4
		De	iP		02	22	47.5
			ipP		02	23	25.6
		Guatemala.					
		h = 150 km (Up,Ki,Sk,Um,Ud, De).					
		The pP amplitudes are considerably larger than those of P at all our stations.					
"	24	Up	iP		07	08	33.7
			iPP		07	12	04.8
			iS		07	19	10
					micr	sec	
			P	Z'	1.5	2.0	
			PP	Z'	0.3	1.5	
			Mx	E	9.6	20	
			Mx	N	20	20	
			Mx	Z	23	20	
		Ki	iP		07	08	34.3
			i(S)		07	19	18
					micr	sec	
			P	Z'	2.4	2.7	
			Mx	E	23	15	
			Mx	N	27	15	
			Mx	Z	22	14	
		Um	iP		07	08	30.7
		Ud	iP		07	08	44.5
			iPP		07	12	12.7
		De	iP		07	08	42.6
		Sumatra (h = N).					
		m = 7.0, M = 6.7 (Up,Ki).					
"	24	Up	iP		09	50	40.4
		Um	iP		09	50	46.9
		Ud	iP		09	50	55.2
		Pakistan (h = N).					
"	24	Up	iP		10	32	53.8
		Ki	iP		10	34	02.0
		Ud	iP		10	33	03.3
		Turkey (h = 25 km).					
"	24	Ud	iP		11	30	33.0
1974 Dec.	24	Up	iP		14	30	41.9
		Ud	iP		14	30	47.0
		Italy.					
"	24	Up	iP		19	48	38.9
		Ki	iP		19	48	51.0
		Sk	iP		19	48	30.4
		Ud	iP		19	48	31.3
		De	iP		19	48	32.6
		Windward Islands (h = 100 km).					
"	24	Um	iP		20	02	10.3
		Ud	iP		20	03	10.1
			ipP		20	03	55.8
			isP		20	04	20.1
		Hindu Kush.					
		h = 220 km (Ud).					
"	25	Ki	iPKP		02	35	48.4
					micr	sec	
			PKP	Z'	0.1	1.0	
		Sk	iPKP		02	35	59.8
		Um	iPKP		02	35	55.0
		Ud	iPKP		02	36	04.7
			iSKP1		02	39	12.2
		De	iPKP		02	36	11.5
			iSKP1		02	39	24.4
		New Hebrides Islands (h = 180 km).					
"	25	Up	iP		03	00	04.4 C
			ipP		03	00	15.4
					micr	sec	
			P	Z'	0.7	1.0	
			Mx	E	3.5	17	
			Mx	N	3.9	17	
			Mx	Z	4.9	20	
		Ki	iP		02	59	10.9 C
					micr	sec	
			P	Z'	0.5	1.2	
			Mx	E	4.1	17	
			Mx	N	4.5	17	
			Mx	Z	2.7	15	
		Sk	iP		02	59	44.9 C
			ipP		02	59	56.5
		Um	iP		02	59	36.7 C
			ipP		02	59	48.6
		Ud	iP		03	00	05.8 C
			ipP		03	00	17.0
		De	iP		03	00	28.0 C
		Aleutian Islands.					
		h = 40 km (Up,Sk,Um,Ud).					
		m = 6.6, M = 5.8 (Up,Ki).					

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
Dec. 25 Up iP 03 04 06.6
Ki iP 03 03 12.8
Ud iP 03 04 05.0
Aleutian Islands.
Origin time = 02 53 14.

" 25 Um i(P) 03 29 28.5
Ud iP 03 29 53.6
Aleutian Islands.
Origin time = 03 19 03.

" 25 Um i(P) 03 31 04.9
Ud iP 03 31 33.9
Aleutian Islands.
Origin time = 03 20 41.

" 25 Up iP 06 53 43.1
Ki iP 06 52 51.6
Ud iP 06 53 45.3
Aleutian Islands (h = N).

" 25 Ud iPKPl 07 38 53.9
i 07 39 09.0

" 25 Ud iP 07 58 32.5

" 25 Up iP 08 05 36.8
micr sec
P Z' 0.1 1.0
Ki iP 08 04 44.0 C
micr sec
P Z' 0.1 1.1
Sk iP 08 05 16.4
Um iP 08 05 09.3
Ud iP 08 05 38.4
ipP 08 05 48.6
De iP 08 06 00.2
Aleutian Islands.
h = 40 km (Ud).
m = 5.9 (Up,Ki).

" 25 Ud iP 09 28 34.6

" 25 Ud iP 09 30 59.1

" 25 Ki iP 11 24 33.6
Um iP 11 25 01.8
Ud iP 11 25 25.8
Unimak Island (h = 30 km).

" 25 Sk i(P) 11 43 29.6
(cont.)

1974
Dec. 25 (cont.)
Um i(P) 11 40 41.0
i 11 41 07.5
Ud i(P) 11 41 10.2

" 25 Up iPKPl 12 52 18.9
iPKP2 12 52 25.5
ipPKPl 12 53 51.7
micr sec
PKPl Z' 0.2 1.1
Ki iPKPl 12 52 01.1
Sk iPKPl 12 52 13.5
Um iPKPl 12 52 08.4
ipPKPl 12 53 35.6
Ud iPKP 12 52 16.4
iPKPl 12 52 20.2
De iPKPl 12 52 28.5
iPKP2 12 52 43.1
Kermadec Islands.
h = 380 km (Up,Um).

" 25 Up iP 15 12 47.1 C
Ki iP 15 11 56.5
micr sec
P Z' 0.1 0.5
Sk iP 15 12 32.3
Um iP 15 12 19.9 C
Ud iP 15 12 51.9
De iP 15 13 11.9
Okhotsk Sea (h = 520 km).

" 25 Ud iP 15 14 36.5

" 25 Um iP 17 23 27.3

" 25 Ki iP 17 26 31.5
micr sec
P Z' 0.1 1.1
Um iP 17 26 39.5
Ud iP 17 26 59.7
Caroline Islands (h = 25 km).

" 25 Up iP 23 13 03.4
Ud iP 23 13 21.6
De iP 23 13 06.0
Iran.

" 26 Ud iP 00 10 10.6
Celebes Sea (h = 360 km).

" 26 Ud iP 02 01 49.6

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974 Dec.	26	Ud	iPKPl		09 47 41.2	
"	26	Up	iP		14 07 11.3	
		Ki	iP		14 08 21.3	
		Sk	iP		14 07 49.0	
		Um	iP		14 07 42.3	
		Ud	iP		14 07 17.2	
		De	iP		14 06 45.6	
		Crete (h = N).				
"	26	Um	iP		14 25 09.9	
		Ud	iP		14 24 58.0	
"	26	Up	iP		18 43 40.7	
		Ki	iP		18 44 18.1	
		Sk	iP		18 44 16.6	
		Um	iP		18 44 00.2	
		Ud	iP		18 43 56.7 C	
		De	iP		18 43 40.7	
		Iran (h = N).				
"	26	Up	iP		21 49 12.6	
		Ki	iP		21 48 53.7	
					micr sec	
			P	Z'	0.1 1.3	
		Um	iP		21 48 59.6	
			i		21 49 14.6	
		Ud	iP		21 49 20.2	
		Samar (h = N).				
"	26	Up	iX		22 30 20.0	
		Um	iPKPl		22 30 02.4	
		Ud	iPKPl		22 30 15.9	
			iX		22 30 22.5	
		Kermadec Islands (h = 60 km).				
"	27	Ud	iPKPl		04 16 04.4	
		De	iPKPl		04 16 15.6	
"	27	Up	iP		05 53 55.3 C	
			iPn		05 54 49.6	
					micr sec	
			P	Z'	0.5 0.9	
		Ki	iP		05 53 38.7 C	
					micr sec	
			P	Z'	0.4 1.0	
		Sk	iP		05 54 09.4 C	
		Um	iP		05 53 39.8 C	
		Ud	iP		05 54 11.4 C	
		De	iP		05 54 18.5 C	
		Kazakh SSR.				
		m = 6.4 (Up,Ki).				
		Underground explosion.				

1974 Dec.	27	Up	iPKPl		11 48 35.0	
			i		11 48 39.8	
					micr sec	
			PKPl	Z'	0.1 1.0	
		Ki	iPKP		11 48 16.9	
		Sk	iPKPl		11 48 27.0	
			i		11 48 40.2	
		Um	iPKPl		11 48 13.5	
		Ud	iPKPl		11 48 36.1 C	
		De	iPKPl		11 48 45.1	
			i		11 49 02.4	
		Kermadec Islands (h = 60 km).				
"	27	Up	iPKPl		12 16 00.2 D	
					micr sec	
			PKPl	Z'	0.1 1.0	
		Ki	iPKP		12 15 45.6	
		Sk	iPKPl		12 15 53.0 D	
		Um	iPKPl		12 15 45.6	
		Ud	iPKPl		12 16 01.2	
		De	iPKPl		12 16 10.7 D	
		Kermadec Islands (h = 20 km).				
"	27	Ki	iP		23 00 17.9	
		Queen Elizabeth Islands (h = N).				
"	27	Up	iP		23 09 58.9	
		Ki	iP		23 10 42.3	
		Ud	iP		23 10 14.0 C	
			i		23 10 26.2	
		De	iP		23 09 55.5	
		Iran-Iraq.				
"	27	Ki	iP		23 28 12.5	
		Ud	iP		23 29 02.3	
		Queen Elizabeth Islands (h = N).				
		These readings exhibit distinct positive residuals vs the NEIS solution.				
"	28	Ud	i		00 02 57.7	
			i(Sgl)		00 03 52.8	
"	28	Up	iP		00 22 38.1 C	
		Ki	iP		00 21 43.4 C	
		Um	iP		00 22 12.0	
		Ud	iP		00 22 36.9 C	
		Alaska (h = 45 km).				
"	28	Um	iP		00 27 49.5	
		Ud	iP		00 28 19.4	

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974					
Dec.	28	Ud	iP	01 42 08.4	
		Caucasus (h = N).			
"	28	Um	iPKPl	02 14 05.5	
		Ud	iPKPl	02 14 18.1	
			i	02 14 34.8	
"	28	Up	iP	05 31 31.5	
		Ki	iP	05 31 06.5	
		Um	iP	05 31 16.3	
		Ud	iP	05 31 41.1	
		Formosa (h = 120 km).			
"	28	Up	iP	06 56 50.3	
		Ki	iP	06 56 28.1	
		Um	iP	06 56 36.2	
		Ud	iP	06 56 59.9	
		Formosa (h = 45 km).			
"	28	Ud	i(Sgl)	09 16 40.4	
"	28	Up	iP	12 19 42.9	C
			i	12 19 44.4	
			iPP	12 21 25.5	
			iS	12 26 04	
			i	12 29 15	
				micr	sec
			P Z'	0.1	0.8
			i Z'	1.1	1.0
			PP Z'	0.9	1.3
			Mx E	14	14
			Mx N	29	16
			Mx Z	25	14
		Ki	iP	12 19 51.0	C
			i	12 19 52.2	
			iPP	12 21 33.7	
			iS	12 26 17	
				micr	sec
			P Z'	0.2	1.0
			i Z'	1.6	1.0
			PP Z'	1.3	1.8
			Mx E	22	10
			Mx N	23	10
			Mx Z	16	9
		Sk	iP	12 20 07.8	C
			i	12 20 09.0	
			iPP	12 21 56.1	
		Um	iP	12 19 41.4	C
			i	12 19 42.6	
			iPP	12 21 24.4	
			iS	12 26 01	
		Ud	iP	12 19 59.5	C
			i	12 20 00.8	
		(cont.)			

1974					
Dec.	28	(cont.)			
		Ud	iPP	12 21 44.4	
		De	iP	12 19 56.1	C
			iPP	12 21 40.2	
		Pakistan (h = 20 km).			
		m = 6.5, M = 6.4 (Up,Ki).			
		Double P, smaller and			
		larger, average separation			
		1.3 sec.			
"	28	Up	iP	12 54 06.5	
			i	12 54 19.2	
		Ki	iP	12 54 14.8	
			i	12 54 27.2	
		Sk	iP	12 54 31.1	
			i	12 54 43.0	
		Um	iP	12 54 04.6	
			i	12 54 16.8	
		Ud	iP	12 54 22.8	
			i	12 54 35.5	
		De	iP	12 54 18.5	
			i	12 54 32.1	
		Pakistan (h = N).			
		The second onset is probably			
		P of another earthquake in			
		the same area, 12.6 sec			
		later.			
"	28	Up	i(Sgl)	17 13 20.0	
			iRg	17 13 24.7	
			i	17 13 46.5	
"	28	Ki	iP	17 22 52.8	
		Kurile Islands.			
"	28	Um	iP	19 10 28.7	
		Ud	iP	19 10 46.4	
		Pakistan.			
		Origin time = 19 02 30.			
"	28	Up	iP	22 36 16.3	
		Ki	iP	22 36 23.8	
		Sk	iP	22 36 40.7	
		Um	iP	22 36 13.9	C
			i	22 37 03.5	
		Ud	iP	22 36 32.5	C
		De	iP	22 36 29.8	
		Pakistan (h = N).			
"	28	Up	iP	22 46 48.0	
		Ki	iP	22 46 56.8	
		Sk	iP	22 47 14.1	
		Um	iP	22 46 47.1	
		(cont.)			

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
Dec. 28 (cont.)

Ud	iP		22 47 04.7

Pakistan (h = N).

" 28

Ki	iP		23 38 43.3

Volcano Islands (h = N).

" 29 Long-period microseisms (period around 16-18 sec), especially well developed on Um LP N.

" 29

Ki	iP		00 02 01.8
	ipP		00 02 49.6
Sk	iP		00 01 55.0
Um	iP		00 02 09.3
	ipP		00 02 56.2

Mexico-Guatemala.
h = 190 km (Ki,Um).

" 29

Ki	iP		02 00 06.3
	ipP		02 00 23.5
Um	iP		02 00 24.1
	ipP		02 00 41.6
Ud	iP		02 00 54.8
	ipP		02 01 11.9

Japan.
h = 70 km (Ki,Um,Ud).

" 29

Up	iP		03 54 04.0	
	iS		03 57 23	
			micr	sec
	P	Z'	0.4	1.5
	Mx	E	1.3	10
	Mx	N	2.7	12
	Mx	Z	1.4	13
Ki	iP		03 53 42.7	
	i		03 53 49.4	
			micr	sec
	P	Z'	0.4	1.9
	i	Z'	2.8	3.0
	Mx	E	4.8	18
	Mx	N	3.3	15
	Mx	Z	4.7	15
Sk	iP		03 53 13.2	
Um	iP		03 53 52.7	
	i		03 53 56.7	
Ud	iP		03 53 38.0	
	i		03 53 44.4	
De	iP		03 54 06.9	

Iceland (h = N).
m = 5.6, M = 4.8 (Up,Ki).
Double P onsets with remarkably long period on Z'.

1974
Dec. 29

Ki	iP		04 23 50.0

Banda Sea (h = 40 km).

" 29

Up	iP		05 06 32.7
	iPP		05 08 02.1
Ki	iP		05 06 37.6
Sk	iPP		05 08 34.4
Um	iP		05 06 28.3
Ud	iP		05 06 48.1
	iPP		05 08 21.4

Tadzhik SSR (h = 70 km).

" 29

Ud	iP		06 51 50.5

" 29

Up	iP		10 07 20.9
Um	iP		10 06 51.5

Sea of Japan (h = 240 km).

" 29

Up	iPKPl		10 33 09.5
Ud	iPKPl		10 33 11.0

" 29

Ki	iP		13 41 35.9

Aleutian Islands (h = 55 km).

" 29

Ud	iP		17 49 58.8

" 29

Up	iP		18 34 50.2	
	iY		18 35 28.2	
			micr	sec
	P	Z'	0.2	1.1
Ki	iP		18 33 54.2	D
	iX		18 34 16.3	
	iY		18 34 31.7	
			micr	sec
	P	Z'	0.2	0.9
	X	Z'	0.2	1.0
	Y	Z'	0.1	1.0
Sk	iP		18 34 20.2	D
	iX		18 34 42.6	
	iY		18 34 57.4	
Um	iP		18 34 22.9	D
	i(X)		18 34 42.4	
Ud	iP		18 34 46.9	D
	iX		18 35 09.4	
De	iP		18 35 10.7	D
	iY		18 35 49.0	

Alaska (h = 70 km).
m = 6.1 (Up,Ki).
The phases X and Y follow P after 22.3 sec and 37.8 sec in average, respectively. Interpreted as pP and sP, respectively, they give h = 100 km.

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974						
Dec.	29	Um	iP		23 22 43.7	
"	30	Up	iP		03 43 03.6	
		Ki	iP		03 42 06.8	
			i		03 42 20.3	
					micr sec	
			i	Z'	0.1 1.0	
		Sk	iP		03 42 34.4	
		Um	iP		03 42 36.4	C
			i		03 43 07.6	
		Ud	iP		03 42 59.4	C
			i		03 43 18.9	
		De	iP		03 43 25.2	C
			i		03 43 41.3	
		Alaska (h = 60 km).				
"	30	Up	iP		04 55 15.1	C
			i		04 55 19.8	
			iPP		04 56 41.8	
					micr sec	
			P	Z'	0.2 0.8	
			PP	Z'	0.2 1.1	
		Ki	iP		04 55 25.7	C
					micr sec	
			P	Z'	0.1 0.8	
		Sk	iP		04 55 41.2	
			iPP		04 57 24.7	
		Um	iP		04 55 14.6	C
			iPP		04 56 45.1	
		Ud	iP		04 55 32.0	C
			iPP		04 57 10.5	
		De	iP		04 55 24.8	
			i		04 55 29.0	
			iPP		04 57 02.0	
		Hindu Kush (h = 120 km).				
		m = 5.8 (Up,Ki).				
"	30	Ki	iP		07 50 17.5	
		Ud	iP		07 50 48.7	
"	30	Up	iP		15 27 59.3	C
					micr sec	
			P	Z'	0.1 0.9	
		Um	iP		15 27 46.1	
		Ud	iP		15 28 11.1	C
		Szechwan, China (h = N).				
"	30	Up	iP		16 32 27.5	
		Ki	iP		16 32 36.0	
		Ud	iP		16 32 44.1	
		Afghanistan-USSR (h = 40 km).				

1974						
Dec.	30	Ki	iP		20 44 40.9	
		Um	iP		20 44 40.3	
		Ud	iP		20 44 21.0	
		Leeward Islands (h = N).				
"	30	Ki	iPKP		21 25 16.8	
		South Sandwich Islands				
		(h = N).				
"	31	Um	iP		00 07 55.1	C
		Ud	iP		00 08 25.1	
		Japan (h = 50 km).				
"	31	Up	iP		04 48 00.5	
					micr sec	
			P	Z'	0.1 1.1	
		Ki	iP		04 47 07.9	
					micr sec	
			P	Z'	0.1 1.0	
		Um	iP		04 47 33.8	
		Ud	iP		04 48 01.8	
			ipP		04 48 46.4	
		Aleutian Islands.				
		h = 180 km (Ud).				
		m = 5.5 (Up,Ki).				
"	31	Up	iPKPl		09 11 24.8	
		Um	iPKPl		09 11 08.0	
		Ud	iPKPl		09 11 22.1	C
"	31	Um	iP		15 58 10.8	
		Ud	iP		15 58 12.7	
		Caucasus.				
"	31	Sk	iP		20 27 55.2	
		Um	iP		20 28 10.6	
		Ud	iP		20 28 03.8	
		Guatemala (h = 80 km).				
"	31	Up	iP		20 33 55.7	
					micr sec	
			Mx	E	2.6 17	
			Mx	N	3.3 17	
			Mx	Z	5.4 20	
		Ki	iP		20 33 45.8	
					micr sec	
			Mx	E	5.6 15	
			Mx	N	5.2 19	
			Mx	Z	6.0 15	
		Sk	iP		20 33 34.8	
		(cont.)				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974
Dec. 31 (cont.)

Um	iP	20 33 51.2	
Ud	iP	20 33 43.0	
De	iP	20 33 51.7	

Guatemala (h = 40 km).
M = 6.1 (Up,Ki).

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