SEISMOLOGISKA INSTITUTIONEN
BOX 517
751 20 UPPSALA 1

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

J A N U A R Y 1 - 31, 1972

1972					
Jan.	1	Ud	ePKP		10 33 37
		De	iPKP		10 33 39.1
		Solomon Islands (h = 510 km).			
"	1	Um	iP		13 05 42.4
		Iceland (h = N).			
"	1	Um	iP		20 32 01.7
		Ud	iP		20 32 25.5
		Molucca Passage (h = 45 km).			
"	1	Up	iPKP		21 42 02.7
			iPKP2		21 42 25.9
					micr sec
			PKP	Z'	0.1 0.7
		Ki	iSKP		21 44 37.1
		Um	iSKP		21 44 48.0
		Ud	iPKP		21 42 04.8 C
			ipPKP		21 44 09.5
		De	iPKP		21 42 14.8 C
		Tonga-Kermadec Islands (h = 480 km).			
"	1	Up	ePKP		22 25 01
			iSS		22 45 36
					micr sec
			Mx	E	13 23
			Mx	N	26 24
			Mx	Z	30 25
		Ki	eX		22 25 00
					micr sec
			Mx	E	23 23
			Mx	N	26 22
			Mx	Z	20 22
		Um	iX		22 25 02.4
			iSS		22 44 46
		Ud	iPKP		22 25 06.6
			iX		22 25 16.7
		(cont.)			

1972					
Jan.	1	(cont.)			
		De	ePKP		22 25 13
			iX		22 25 21.9
		Fiji Islands (h = 55 km). M = 6.9 (Up,Ki).			
"	2	Um	iP		02 25 53.4
"	2	Ud	iP		04 08 24.3
"	2	Up	iPKP		04 27 37.5
					micr sec
			PKP	Z'	0.1 0.6
		Um	ePKP		04 27 26
			iSKP		04 30 22.7
		Ud	iPKP		04 27 39.7
		De	iPKP		04 27 49.7
		Tonga-Kermadec Islands (h = 500 km).			
"	2	Ud	iP		05 23 21.0
"	2	Um	eP		06 25 08
		Ud	eP		06 25 19
"	2	Ud	iP		06 32 23.4
"	2	Ud	iP		06 49 17.8
"	2	Ud	iP		08 45 52.5
"	2	Up	iP		09 22 44.3
		Sk	eP		09 23 24
		Um	eP		09 23 26
		Ud	iP		09 22 49.8
		Ionian Sea (h = 45 km).			
"	2	Up	iP		10 35 38.8 C
			i		10 35 59.2
		(cont.)			

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

1972
Jan. 2 (cont.)

Up			micr	sec
	P	Z'	0.1	1.0
	Mx	E	0.9	10
	Mx	Z	1.7	12
Ki	iP		10 35 27.0	C
			micr	sec
	P	Z'	0.1	1.0
Sk	iP		10 35 55.3	
Um	iP		10 35 26.8	
Ud	iP		10 35 54.4	C
	i		10 36 00.9	
	i		10 36 14.9	
De	iP		10 35 58.9	
	i		10 36 20.3	

Sinkiang (h = N).
m = 5.5 (Up,Ki).
Double P-phases at Up,Ud and De, in average 21 sec apart.

" 2	Up	iP	17 00 36.3	
" 2	Ud	iP	17 43 48.7	
" 2	Ud	iP	18 13 49.5	
" 2	Ud	iP	18 15 26.6	
" 2	Um	iP	18 26 05.6	C

Alaska (h = 100 km).

" 2	Ud	iP	18 32 18.1	
" 2	Ud	iP	18 37 09.4	
	De	iP	18 37 20.2	
" 2	Up	iPKP	18 56 42.9	
	Sk	iPKP	18 56 37.5	
		i	18 56 45.4	
	Um	i(PKP)	18 56 26.2	
		iPKP	18 56 31.3	
		i	18 56 39.1	
	Ud	i(PKP)	18 56 39.9	
		iPKP	18 56 45.6	
		i	18 56 49.9	
	De	iPKP	18 56 55.7	

Kermadec Islands (h = 35 km).

" 2	Up	iP	19 47 35.6	
	Sk	eP	19 47 33	
	Um	iP	19 47 16.5	
	Ud	eP	19 47 43	

Japan (h = 60 km).

1972

Jan. 2	Ud	iP	20 16 54.3	
" 2	Ud	iP	20 48 26.5	
" 2	Ud	iP	21 27 55.7	
" 2	Up	eP	22 09 54	
			micr	sec
	Mx	E	1.1	19
	Mx	N	1.1	21
	Mx	Z	3.2	23
	Ki	iS	22 20 02	
			micr	sec
	Mx	E	1.4	20
	Mx	N	1.7	20
	Mx	Z	1.4	17
	Sk	iP	22 09 33.7	
	Um	iP	22 09 53.7	
		i	22 10 01.9	

Mexico (h = 55 km).
M = 5.5 (Up,Ki).

" 2	Up	iP	22 21 50.7	C
		i	22 22 13.9	
			micr	sec
	P	Z'	0.1	0.9
	Ki	iP	22 21 18.7	
			micr	sec
	P	Z'	0.1	1.0
	Sk	iP	22 21 47.9	
	Um	iP	22 21 32.5	C
		i	22 22 03.6	
	Ud	iP	22 21 57.9	C
	De	iP	22 22 10.0	
		i	22 22 17.1	

Bonin Islands (h = 55 km).
m = 5.9 (Up,Ki).

" 3	Ud	iP	02 51 12.2	
" 3	Up	iP	06 47 13.7	
			micr	sec
	P	Z'	0.1	1.0
	Ki	iP	06 46 21.4	
		ipP	06 46 32.1	
			micr	sec
	P	Z'	0.1	0.9
	Sk	eP	06 46 58	
	Um	iP	06 46 45.9	C
		ipP	06 46 57.1	
	Ud	iP	06 47 19.3	
	De	iP	06 47 38.3	

Kamchatka.
h = 40 km (Ki,Um).
m = 6.0 (Up,Ki).

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

1972 Jan.	3	Ud	iP		07 36 53.1	
		Venezuela (h = 70 km).				
"	3	Um	iP		07 51 19.8	
		Mexico (h = 25 km).				
"	3	Ud	iP		09 55 08.4	
"	3	Um	iP		10 07 59.6	
		Ud	iP		10 08 17.3	
		De	iP		10 08 14.3	
		Hindu Kush.				
		Intermediate depth.				
"	3	Ki	iP		14 57 03.6	
"	3	Up	iP		17 17 19.1	
			ipP		17 17 35.0	
					micr	sec
			P	Z'	0.1	1.1
			Mx	E	1.4	18
			Mx	N	1.7	19
			Mx	Z	2.3	17
		Ki	iP		17 16 28.9	
			iPcP		17 17 13.1	
					micr	sec
			Mx	E	2.0	15
			Mx	N	2.5	15
			Mx	Z	3.4	17
		Sk	iP		17 17 02.4	
		Um	iP		17 16 54.7	
			ipP		17 17 09.0	
			iPcP		17 17 28.1	
		Ud	iP		17 17 20.2	
			iPcP		17 17 43.7	
		De	eP		17 17 44	
			ipP		17 17 59.9	
		Aleutian Islands.				
		h = 60 km (Up,Um,De).				
		M = 5.5 (Up,Ki).				
"	3	Up	iP		17 42 27.5	
			ipP		17 42 38.7	
		Ud	iP		17 42 27.6	
			i		17 43 03.0	
		Aleutian Islands.				
		h = 40 km (Up).				
"	3	Up	iP		19 37 13.3	
		Ki	iP		19 36 21.1	
					micr	sec
			P	Z'	0.1	0.9
		Um	iP		19 36 45.7	
		Ud	iP		19 37 17.2	
		Aleutian Islands.				
		Origin time = 19 26 16.				
1972 Jan.	3	Up	iP		20 16 59.2	
		Ud	iP		20 17 00.2	
		Aleutian Islands (h = 50 km).				
"	4	Up	iP		00 31 29.6	
					micr	sec
			P	Z'	0.1	0.9
		Ki	iP		00 30 52.0	
		Sk	iP		00 31 24.4	
		Um	iP		00 31 08.1	
			ipP		00 31 20.0	
		Ud	iP		00 31 37.0	
		De	iP		00 31 51.6	
		Japan.				
		h = 45 km (Um).				
"	4	Um	eP		00 57 07	
		Japan (h = 30 km).				
"	4	Ud	eP		02 39 34	
		Bonin Islands (h = N).				
"	4	Up	iP		03 28 49.1	C
			ipP		03 29 04.8	
			iS		03 38 37	
					micr	sec
			P	Z'	0.7	1.1
			pP	Z'	1.3	1.1
			Mx	E	210	22
			Mx	N	370	21
			Mx	Z	110	16
		Ki	iP		03 28 25.7	C
			ipP		03 28 40.6	
			iS		03 37 52	
					micr	sec
			P	Z'	1.1	1.4
			pP	Z'	1.5	1.4
			Mx	E	110	15
			Mx	N	170	15
			Mx	Z	72	14
		Sk	iP		03 28 52.9	C
			ipP		03 29 08.5	
		Um	iP		03 28 34.1	C
			ipP		03 28 49.5	
			iS		03 38 01	
		Ud	iP		03 28 58.5	C
			ipP		03 28 14.5	
		De	iP		03 29 06.2	C
			ipP		03 29 22.7	
		Formosa.				
		h = 60 km (Up,Ki,Sk,Um,Ud, De).				
		m = 6.7, M = 7.6 (Up,Ki).				
"	4	Up	iP		05 20 44.6	
			ipP		05 20 53.3	
		(cont.)				

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

1972
Jan. 4 (cont.)

Ki	eP	05 20 22
Um	i(pP)	05 20 38.0
Ud	i(pP)	05 21 02.8

Formosa.
h = 30 km (Up).

" 4

Up	iP	12 27 12.1
	ipP	12 27 21.4
Ki	eP	12 26 51
Um	i(pP)	12 27 06.5
	i	12 27 20.4
Ud	e(pP)	12 27 29

Formosa.
h = 35 km (Up).

" 4

Up	e	12 53 42
	i(Sgl)	12 53 48.6
Ki	i	12 51 41.6
	i(Sgl)	12 52 04.8
Um	e	12 52 30
	e(Sgl)	12 53 04

Norwegian Sea.

" 4

Ud	iP	13 21 14.0

Lake Baikal.

" 4

Sk	iP	13 22 16.2

" 4

Ud	i(Pgl)	14 10 18.8
	i(Sgl)	14 10 38.5

" 4

Ud	iPP	15 54 54.2

Hindu Kush.
Intermediate depth.

" 4

Up	iP	17 17 38.9
Sk	iP	17 16 34.6
	i	17 16 46.5
Um	iP	17 17 19.0
	i	17 17 22.7
Ud	iP	17 17 04.9

Iceland.

" 4

Up	iP	18 13 25.5
Ki	iP	18 13 12.3
Sk	eP	18 13 32
Um	iP	18 13 16.1
Ud	iP	18 13 34.3
De	iP	18 13 39.8

Molucca Sea (h = 70 km).

" 4

Up	iP	18 23 22.4
Ki	iP	18 23 07.9
	ipP	18 23 24.2
Sk	iP	18 23 28.5

(cont.)

1972
Jan. 4 (cont.)

Um	iP	18 23 12.8
	ipP	18 23 28.8
Ud	iP	18 23 31.0
	ipP	18 23 46.7
De	iP	18 23 36.3

Molucca Sea.
h = 60 km (Ki,Um,Ud).

" 4

Um	ePKP	19 52 06

Easter Island region
(h = N).

" 4

Up	iPKP	20 26 00.8
	i(SKP)	20 29 13.3
Um	iPKP	20 25 49.9
	iSKP	20 28 46.8
Ud	iPKP	20 26 03.1 C
De	iPKP	20 26 14.0 C
	i	20 26 15.9

Tonga-Kermadec Islands
(h = 560 km).

" 4

Up	iPKP	21 44 30.5
Sk	ePKP	21 44 20
Um	iPKP	21 44 13.4
Ud	iPKP	21 44 31.7
De	ePKP	21 44 36

" 4

Up	iSgl	22 57 22.6
	iRg	22 57 31.3
Ud	iSgl	22 57 01.9
	iRg	22 57 05.0

Central Sweden.
Explosion.

" 5

Up	iP	01 09 52.2
Ki	iP	01 09 00.2
Um	iP	01 09 24.5
Ud	iP	01 09 52.8

Aleutian Islands (h = 50 km).

" 5

Ki	iP	01 12 29.4
Sk	eP	01 12 25
Um	iP	01 12 03.2
Ud	iP	01 12 04.5
De	iP	01 11 47.2

Iran (h = 45 km).

" 5

Up	iS	05 02 43.6
	iLgl	05 04 17.7
Sk	eP	05 01 28
	iLgl	05 06 17.9
Um	eP	05 01 35
	iLgl	05 06 22.1
Ud	eP	05 00 46

(cont.)

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

1972
Jan. 5 (cont.)
Ud iLgl 05 04 26.7
De iP 04 59 48.9
Austria (h = 10 km).

" 5 Sk eP 05 58 35
Um iP 05 58 12.1
Ud iP 05 58 32.2

" 5 Um eP 06 08 42
Ud iP 06 08 12.7
iPcP 06 08 51.2
Atlantic Ocean (h = N).

" 5 Ud iP 08 20 43.5
Afghanistan.

" 6 Ud iP 00 31 18.3
Hindu Kush.
Intermediate depth.

" 6 Up eP 00 44 53
iPKP 00 48 37.5
ipPKP 00 49 20.8
Ki iP 00 44 23.7
iPKP 00 48 27.1
ipPKP 00 49 16.2
micr sec
PKP Z' 0.1 1.3
Sk iPKP 00 48 38.1
ipPKP 00 49 16.8
Um iP 00 44 34.9
iPKP 00 48 32.9
ipPKP 00 49 16.5
Ud eP 00 44 59
iPKP 00 48 41.6
iPP 00 49 44.8
De iPKP 00 48 46.7
ipPKP 00 49 27.9
New Britain.
h = 160 km (Up,Ki,Sk,Um, De).

" 6 Sk ePKP 01 42 44
Um iPKP 01 42 38.9
i 01 42 50.3
Ud iPKP 01 42 51.2
i 01 43 00.2

" 6 Um iP 03 13 38.6
Ud iP 03 14 09.1 C
Japan (h = 55 km).

" 6 Ki micr sec
Mx E 0.9 14
Mx N 0.8 15
Mx Z 0.8 15
(cont.)

1972
Jan. 6 (cont.)
Ud iP 04 26 36.1
North Atlantic Ocean
(h = N).

" 6 Sk eP 05 47 16
North Atlantic Ocean
(h = N).

" 6 Sk eP 05 48 03.2
Ud iP 05 48 13.5
i 05 48 22.4
i 05 48 34.5
North Atlantic Ocean
(h = N).

" 6 Ud iP 06 38 13.7
Kirghiz SSR (h = N).

" 6 Sk iP 06 45 35.2 C
Um iP 06 45 14.6
Ud iP 06 45 39.9 C
Ryukyu Islands (h = 15 km).

" 6 Up iPKP 07 03 28.2
Sk iPKP 07 03 17.7
Um iPKP 07 03 12.3
Ud iPKP 07 03 25.6
De ePKP 07 03 33
Kermadec Islands (h = 40 km).

" 6 Up i 07 04 53.5
Um iP 07 04 21.3
i 07 04 36.1
Ud iP 07 04 33.4
i 07 04 48.6

" 6 Ud iP 07 11 47.5

" 6 Up iP 09 48 37.7 C
Ki iP 09 49 17.8 C
Sk iP 09 49 14.1 C
Um iP 09 48 52.7 C
Ud iP 09 48 53.6 C
De iP 09 48 36.9
Iran (h = 40 km).

" 6 Up iSgl 12 22 14.4
Ki eSgl 12 24 07
Sk eSgl 12 23 57
Um iSgl 12 22 26.9
Ud iSgl 12 23 11.6
De eSgl 12 23 43
Western USSR.
Explosion.

" 6 Um iPKP 12 32 50.3
Fiji Islands (h = N).

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

1972 Jan.	6	Ud	iP	13 17 09.7	
		Hindu Kush.			
		Intermediate depth.			
"	6	Ud	iP	15 57 37.9	
		De	eP	15 57 52	
"	6	Ki	iSgl	16 23 39.4	
		Sk	iSgl	16 23 44.0	
		Um	iSgl	16 24 06.5	
		Ud	eSgl	16 25 33	
		Nordland, Norway,			
		66.5°N, 14.0°E.			
		Origin time = 16 22 09.			
		Explosion?			
"	6	Ud	ePKP	17 15 43	
		Chile (h = 30 km).			
"	7	Ki	iP	02 47 12.6	
"	7	Um	iP	03 40 15.5	
		Japan (h = 60 km).			
"	7	Up	iP	06 40 02.3	
			i(PP)	06 43 49.0	
				micr	sec
			Mx	E 2.8	21
			Mx	N 6.7	22
			Mx	Z 4.3	21
		Ki	iP	06 39 41.5	
			i(PP)	06 43 26.4	
				micr	sec
			Mx	E 3.4	20
			Mx	N 5.2	22
			Mx	Z 4.1	22
		Sk	iPKP	06 44 10.9	
		Um	iP	06 39 49.7	
			iPKP	06 44 03.3	
		Ud	iP	06 40 09.7	
			i(PP)	06 43 49.5	
		De	iP	06 40 18.0	
			iPKP	06 44 19.6	
		New Guinea (h = N).			
		M = 6.2 (Up,Ki).			
		(PP) are probably early			
		arrivals of PP.			
"	7	Ud	iSgl	08 53 55.9	
		De	i(Sn)	08 53 35.0	
		Esthonia.			
		Explosion.			
"	7	Ki	ePn	10 45 42	
			iSn	10 46 40.7	
		Sk	eSgl	10 49 28	
		(cont.)			

1972 Jan.	7	(cont.)			
		Um	e(Sgl)	10 48 03	
		Northwest Russia.			
		Origin time = 10 44 24.			
		Explosion.			
"	7	Ud	i(Sn)	12 58 51.6	
			i(Sgl)	12 59 11.3	
"	7	Um	i(P)	13 23 34.7	
"	7	Ud	iP	16 20 44.3	
			i	16 20 51.2	
"	7	Ud	iP	20 33 26.6	
		Aleutian Islands (h = 35 km).			
"	7	Um	iP	20 42 45.9	
		Ud	iP	20 42 49.8	
		Caucasus.			
"	7	Ki	iP	21 39 24.2	
			i	21 39 38.7	
"	7	Ud	iPKP	23 51 59.3	
		De	iPKP	23 52 10.5	
		Fiji Islands (h = 600 km).			
"	8	Up	ePKP	03 27 18	
		Um	ePKP	03 27 12	
		Ud	i(PKP)	03 27 09.2	
			iPKP	03 27 15.8	
		De	iPKP	03 27 21.7	
		Tonga Islands (h = N).			
"	8	Ud	iP	03 46 22.8	
"	8	Up	iP	05 39 50.2 C	
			iS	05 49 44	
				micr	sec
			P	Z' 1.6	1.3
			Mx	E 120	15
			Mx	N 42	15
			Mx	Z 170	15
		Ki	iP	05 39 29.0 C	
			iS	05 49 03	
				micr	sec
			P	Z' 1.6	1.3
			Mx	E 43	11
			Mx	N 43	13
			Mx	Z 36	11
		Sk	iP	05 39 54.9	
		Um	iP	05 39 34.8	
			iS	05 49 18	
		Ud	iP	05 39 58.9	
		De	iP	05 40 07.0 C	
		(cont.)			

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

1972
Jan. 8 (cont.)
Formosa-Luzon (h = N).
m = 7.0, M = 7.2 (Up,Ki).

" 8	Up	iP		05 47 30.2
		ipP		05 47 41.9
				micr sec
		P	Z'	0.1 1.2
	Ki	iP		05 47 08.7
				micr sec
		P	Z'	0.1 1.2
	Sk	iP		05 47 34.9
	Um	iP		05 47 15.8
		ipP		05 47 27.8
	Ud	iP		05 47 39.5
		ipP		05 47 51.3
	De	iP		05 47 47.2

Formosa-Luzon.
h = 45 km (Up,Um,Ud).
m = 5.8 (Up,Ki).

" 8	Ud	iP		05 58 45.3
" 8	Up	eP		06 05 31
		ipP		06 05 41.1
	Um	iP		06 05 17.2
		ipP		06 05 27.6
	Ud	iP		06 05 41.2
		ipP		06 05 50.6

Formosa-Luzon.
h = 35 km (Up,Um,Ud).

" 8	Up	iP		06 21 46.6
		ipP		06 21 57.9
				micr sec
		P	Z'	0.1 1.4
	Ki	eP		06 21 24
	Um	iP		06 21 32.7
		ipP		06 21 42.4
	Ud	iP		06 21 55.8

Formosa-Luzon.
h = 40 km (Up,Um).

" 8	Up	iP		06 36 43.3
		ipP		06 36 55.4
	Ki	iP		06 36 22.0
	Um	iP		06 36 29.3
		ipP		06 36 39.9
	Um	iP		06 36 52.9
		ipP		06 37 03.8

Formosa-Luzon.
h = 40 km (Up,Um,Ud).

" 8	Up	iP		08 26 18.1
		ipP		08 26 26.2

(cont.)

1972
Jan. 8 (cont.)

	Up			micr sec
		pP	Z'	0.2 1.2
		Mx	E	2.6 14
		Mx	N	2.0 14
		Mx	Z	4.6 14
	Ki	iP		08 25 55.7
		ipP		08 26 04.6
				micr sec
		pP	Z'	0.1 1.3
		Mx	E	2.2 17
		Mx	N	2.6 20
		Mx	Z	1.4 11
	Sk	iP		08 26 25.7
		ipP		08 26 33.1
	Um	iP		08 26 02.8
		ipP		08 26 11.8
	Ud	iP		08 26 27.5
		ipP		08 26 35.5
	De	eP		08 26 35
		ipP		08 26 42.8

Formosa-Luzon.
h = 30 km (Up,Ki,Sk,Um,Ud, De).
m = 5.9, M = 5.8 (Up,Ki).

" 8	Up	iP		08 56 12.0
	Ki	iP		08 55 18.9
	Sk	iP		08 55 46.8
	Um	iP		08 55 46.1
	Ud	iP		08 56 09.5
	De	eP		08 56 34

Alaska.

" 8	Ki	iPn		10 40 37.8
		iSn		10 41 25.5
		iS*		10 41 43.3
	Um	iSgl		10 43 09.9

Northwest Russia-Norway border region,
69.5°N, 30.7°E.
Origin time = 10 39 35.
Explosion.

" 8	Ud	iP		11 13 47.0
	De	iP		11 13 56.7
" 8	Up	iPKP		11 53 34.1
		ipPKP		11 53 51.7
				micr sec
		Mx	E	1.2 21
		Mx	N	1.9 21
		Mx	Z	2.7 20
	Ki	iPKP		11 53 49.2
		ipPKP		11 54 07.2

(cont.)

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

1972
Jan. 8 (cont.)

Ki			micr	sec
	PKP	Z'	0.1	0.7
	pPKP	Z'	0.2	1.0
	Mx	E	1.4	18
	Mx	N	2.8	21
	Mx	Z	1.4	20
Sk	ePKP		11 53 39	
	iPP		11 55 18.1	
Um	iPKP		11 53 41.3	
	ipPKP		11 53 59.8	
	iPP		11 55 29.6	
Ud	iPKP		11 53 31.7	
	ipPKP		11 53 49.8	
	iPP		11 54 56.8	
	ipPP		11 55 19.7	
De	ipPKP		11 53 42.7	

South Sandwich Islands.
h = 60 km (Up,Ki,Um,Ud).
M = 6.0 (Up,Ki).

"	8	Up	iSgl	12 03 00.6
		Ki	e(S*)	12 05 11
			eSgl	12 05 24
		Um	iS*	12 03 31.2
			iSgl	12 03 35.3
		Ud	iSgl	12 04 03.3

Esthonia.
Explosion.

"	8	Ki	e(Sgl)	12 50 30
		Um	i(Sgl)	12 51 40.1

"	8	Um	iSgl	13 07 39.1

Western USSR.
Explosion.

"	8	Up	iP	14 44 12.4
				micr sec
			P Z'	0.1 1.2
		Ki	iP	14 43 51.1
		Sk	eP	14 44 19
		Um	iP	14 43 58.1
		Ud	iP	14 44 21.9
		De	eP	14 44 31

Formosa-Luzon (h = N).

"	8	Ki	eP	17 24 06
		Um	eP	17 24 19

Mariana Islands (h = 25 km).

"	8	Ki	iP	17 38 45.4 C
		Sk	eP	17 38 23
		Um	iP	17 38 19.5

Congo (h = N).

1972
Jan. 8

Up	ePKP		21 53 02
Ki	iPKP		21 52 41.0
			micr sec
	PKP	Z'	0.1 0.8
Sk	iPKP		21 52 55.2
Um	iPKP		21 52 49.2

New Zealand (h = 35 km).

"	8	Ki	iPKP	21 55 59.9
		Um	iPKP	21 56 10.1

New Zealand.

"	8	Sk	iP	22 48 29.5
"	9	Um	eP	11 55 21
		Ud	iP	11 55 41.3

Philippine Islands.

"	9	Up	iSgl	12 27 00.4
		Ki	i(Sgl)	12 27 49.2
		Sk	eSgl	12 28 11
		Um	iSgl	12 26 25.5
		Ud	eSgl	12 28 02
		De	eSgl	12 28 44

Lake Ladoga,
61.2°N, 31.0°E.
Origin time = 12 23 30.
Explosion.

"	9	Sk	iP	13 10 26.2
"	9	Sk	iP	14 11 02.5
		Ud	eP	14 11 34

Kamchatka (h = N).

"	9	Up	iP	17 01 18.2

Afghanistan-USSR.

"	10	Ki	iP	02 10 04.7
		Sk	iP	02 10 20.0
		Um	iP	02 10 01.8
		Ud	iP	02 10 15.2

Sumatra (h = 80 km).

"	10	Ki	eP	02 22 51
		Sk	eP	02 23 26
"	10	Up	iP	05 35 50.4
			ipP	05 35 58.5
		Ki	iP	05 35 29.0
			ipP	05 35 37.7
		Sk	iP	05 35 55.4
		Um	iP	05 35 36.1
			ipP	05 35 44.9
		Ud	iP	05 36 00.1
			ipP	05 36 08.1

(cont.)

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

1972
Jan. 10 (cont.)
Formosa-Luzon.
h = 30 km (Up,Ki,Um,Ud).

" 10 Ki iP 09 18 11.2
Ud iP 09 18 22.0

" 10 Up iP 10 10 05.7
Ki iP 10 09 38.2
micr sec
P Z' 0.1 0.9
Sk iP 10 10 03.4
Um iP 10 09 50.3 C
Ud iP 10 10 12.4
De iP 10 10 23.6
Mariana Islands (h = 350 km).

" 10 Um iSgl 11 38 54.6
Ud iSgl 11 39 24.4
Esthonia.
Explosion.

" 10 Ud iP 12 52 28.0

" 10 Ud iP 15 17 48.1
De eP 15 17 18
Dodecanese Islands
(h = 40 km).

" 10 Up iP 19 32 21.1 C
micr sec
P Z' 0.1 0.7
Ki iP 19 31 47.8 C
micr sec
P Z' 0.1 0.8
Sk iP 19 32 18.3 C
Um iP 19 32 02.0 C
ipP 19 33 47.3
Ud iP 19 32 28.5 C
iPP 19 35 33.3
De iP 19 32 40.8 C
South of Japan.
h = 490 km (Um).
m = 5.4 (Up,Ki).

" 10 Ud iP 19 41 04.1

" 10 Ki e(Sgl) 19 52 16
Sk i(Sgl) 19 51 47.6
Um e(Sgl) 19 52 33
Probably Nordland, Norway.

" 10 Um eP 20 38 16
Ud eP 20 38 27
Java (h = 25 km).

1972
Jan. 11 Um iP 01 04 47.2
Japan (h = 370 km).

" 11 Um iP 01 12 27.8

" 11 Um iP 02 10 37.5
Ud iP 02 11 04.0

" 11 Um iP 03 15 01.7
Ud iP 03 14 35.9
North Atlantic Ocean
(h = N).

" 11 Ud eP 05 38 34

" 11 Up i(Sn) 12 09 19.4
iSgl 12 09 32.9
Sk eSgl 12 11 23
Um iSgl 12 10 06.6
Ud iSgl 12 10 34.7
De eSgl 12 11 02
Esthonia, 59.5°N, 25.1°E.
Origin time = 12 07 32.
Explosion.

" 11 Up eSgl 13 02 55
Ki e(Sgl) 13 05 50
Sk eSgl 13 04 54
Um iSgl 13 03 44.6
De eSgl 13 04 22
Esthonia, 59.3°N, 23.8°E.
Origin time = 13 01 15.
Explosion.

" 11 Sk iSgl 13 31 17.2
Ud iSgl 13 30 43.4
i 13 30 53.9
De eSgl 13 31 34
iSg2 13 31 44.1
Southwest Norway.
By combination with
Kongsberg readings.

" 11 Up iSgl 14 17 23.5
Ki i(Sgl) 14 19 57.5
Sk iSgl 14 19 14.4
Um iSgl 14 17 59.4
Ud eSgl 14 18 29
De eSgl 14 18 51
Esthonia, 59.4°N, 25.1°E.
Origin time = 14 15 23.
Explosion.

" 11 Up iP 15 57 38.3
Um iP 15 57 19.0
Ud iP 15 57 48.7

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

1972
Jan. 11 Ki iPn 19 44 03.9
iP* 19 44 11.8
iSn 19 44 50.2
iS* 19 45 02.8
Sk eSgl 19 47 56
Um iSgl 19 46 38.9
Northwest Russia-Norway
border region,
69.7°N, 30.1°E.
Origin time = 19 43 03.
Explosion.

" 12 Up eSgl 05 12 45
Sk iSgl 05 12 31.8
Ud iSgl 05 11 45.2
Southeast Norway.
Solution checked with
NORSAR readings.

" 12 Up iP 08 22 26.7
Ki iP 08 23 25.2
micr sec
P Z' 0.1 0.8
Sk iP 08 23 04.8
Um iP 08 22 53.1
Ud iP 08 22 36.9
Egypt (h = 55 km).

" 12 Up iP 10 11 34.8 D
ipP 10 13 39.9
micr sec
P Z' 0.2 1.1
Ki iP 10 11 42.2 D
ipP 10 13 46.8
iPKKP 10 28 18.6
micr sec
P Z' 0.2 1.1
Sk iP 10 11 26.1 D
ipP 10 13 28.3
iPKKP 10 28 29.2
Um iP 10 11 41.0 D
ipP 10 13 46.4
iS 10 22 14
iPKKP 10 28 18.8
Ud iP 10 11 25.9 D
i 10 11 35.4
ipP 10 13 30.9
De iP 10 11 25.0 D
Brazil.
h = 580 km (Up,Ki,Sk,Um,Ud).
m = 6.3 (Up,Ki).

" 12 Up iP 13 56 40.8
micr sec
Mx N 2.0 16
Mx Z 1.9 18
(cont.)

1972
Jan. 12 (cont.)
Ki iP 13 57 49.6
micr sec
Mx N 1.7 18
Sk iP 13 57 19.9 D
Um iP 13 57 14.3 D
Ud iP 13 56 48.2 D
De iP 13 56 14.3 D
i 13 56 18.1
Crete (h = 50 km).
M = 4.8 (Up,Ki).

" 12 Um iP 14 14 09.7
Tanimbar Islands (h = 5 km).

" 12 Up iP1 18 45 06.0 C
iP3 18 45 40.7
iPP 18 46 48.4
micr sec
P1 Z' 0.1 0.7
P3 Z' 0.6 1.5
Ki iP1 18 45 08.7 C
iP2 18 45 33.9
iP3 18 45 44.4
micr sec
P1 Z' 0.1 0.5
P2 Z' 0.6 0.8
Mx N 1.7 8
Sk iP1 18 45 29.2 C
iP2 18 45 55.2
iP3 18 46 04.9
Um iP1 18 45 01.4 C
iP2 18 45 27.4
iP3 18 45 36.7
iS 18 51 08
Ud iP1 18 45 22.9 C
iP2 18 45 47.9
iP3 18 45 58.5
De iP1 18 45 21.2 C
iP2 18 45 46.4
iP3 18 45 56.9
iPP 18 47 05.8
Tadzhik-Sinkiang (h = 80 km).
m = 6.4 (Up,Ki).
P1, P2 and P3 denote multiple
P-phases: P2 - P1 = 25.4 sec,
P3 - P1 = 35.4 sec.

" 12 Up eP 20 30 34
Ki iP 20 29 36.9
i(pP) 20 29 50.3
Um i(pP) 20 30 16.0
Ud iP 20 30 39.7
Kamchatka (h = N).

" 13 Um iPKP 04 28 00.0
(cont.)

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

1972
Jan. 13 (cont.)
Um ipPKP 04 28 20.3
Chile-Argentina.
h = 80 km (Um).

" 13 Ki iP 09 36 45.8
Ud iP 09 36 49.6
Afghanistan-USSR.

" 13 Sk eSgl 11 45 38
Ud iSgl 11 45 21.3
Southwest Norway.
By combination with
Kongsberg readings.

" 13 Um iSgl 13 32 15.5
Ud i(Sgl) 13 33 00.0
Western USSR.
Explosion.

" 13 Up iP 14 05 06.9 C
iPcP 14 05 33.5
Ki iP 14 04 19.0 C
Sk iP 14 04 54.5
Um iP 14 04 40.3
Ud iP 14 05 12.3 C
Kurile Islands (h = 60 km).

" 13 Up iP 17 33 26.9

		micr	sec
P	Z'	0.1	1.0
Mx	E	1.0	13
Mx	N	1.7	16
Mx	Z	3.3	19

Ki iP 17 32 34.9
iPP 17 34 16.6

		micr	sec
P	Z'	0.1	1.0
Mx	E	3.0	18
Mx	N	3.1	16
Mx	Z	1.8	16

Sk iP 17 33 16.8
Um iP 17 33 02.2
i 17 33 40.3
Ud iP 17 33 38.2
i 17 34 18.7
De iP 17 34 01.7
Siberia (h = N).
m = 5.7, M = 5.4 (Up,Ki).

" 13 Ki iP 17 50 26.4
Formosa.

" 13 Sk i(Sgl) 21 22 27.4

" 13 Um iP 22 11 31.5
Mexico (h = N).

1972
Jan. 14 Ki eP 00 13 36
Um iP 00 13 41.7
Ud iP 00 14 02.6
Mindoro (h = 130 km).

" 14 Ud iP 02 10 53.4
Afghanistan-USSR
(h = 110 km).

" 14 Ki iP 03 28 28.5
Um iP 03 29 00.0
Bering Strait (h = N).

" 14 Ki iP 04 17 25.1
Um iP 04 17 30.0
Ud iP 04 17 47.8
Celebes Sea (h = 570 km).

" 14 Sk i(Sgl) 04 57 50.1

" 14 Sk i(Sgl) 07 18 36.5

" 14 Um iSgl 14 56 26.4
Western USSR.
Explosion.

" 14 Ud iP 19 45 19.9
Ionian Sea.

" 14 Ki eP 20 03 34
iS 20 04 42.5
iT 20 08 54.9
Sk iP 20 04 13.3
Um iP 20 04 18.9
iS 20 06 09.4
Norwegian Sea.
Origin time = 20 01 53.

" 14 Up iP 22 16 38.2 C
Ki iP 22 17 21.9 C

		micr	sec
P	Z'	0.2	0.9

Sk iP 22 17 15.9 C
Um iP 22 16 55.3 C
Ud iP 22 16 53.6 C
De iP 22 16 35.0 C
Iran-Iraq (h = N).

" 14 Ki iP 22 33 45.7
Ud iP 22 34 36.3
Vancouver Island (h = N).

" 14 Um iP 22 47 31.1

" 15 Up e(PKP) 03 58 16
iSKP 04 01 49.1
(cont.)

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

1972
Jan. 15 (cont.)

Up	iPKS	04 01 57.3
Ki	iPKP	03 58 12.0
	iSKP	04 01 24.4
Sk	ePKP	03 58 21
	iSKP	04 01 41.6
Um	iPKP	03 58 18.0
	iSKP	04 01 37.5
Ud	i(PKP)	03 58 17.5
	i(PKP)	03 58 20.6
	iPKP	03 58 27.2
	iSKP	04 01 51.5
	iPKS	04 01 59.1
De	i(PKP)	03 58 27.2
	iPKP	03 58 29.3

Tonga Islands (h = 130 km).

" 15

Ki	iPn	10 03 04.4
	iSn	10 03 52.8
	iSgl	10 04 09.7
Um	iSgl	10 05 38.9

Northwest Russia-Norway border region, 69.5°N, 31.0°E.
Origin time = 10 02 00.
Explosion.

" 15

Up	iP	10 55 45.6
Ki	eP	10 56 33
Ud	iP	10 56 07.5
De	eP	10 55 48

Turkey.

" 15

Up	iSn	12 19 23.0
	iSgl	12 19 36.1
Ki	e(Sg2)	12 22 18
Sk	eSgl	12 21 29
Um	iSgl	12 20 11.4
Ud	eSn	12 20 12
	eSgl	12 20 38
De	iSgl	12 21 06.2

Esthonia, 59.5°N, 24.8°E.
Origin time = 12 17 40.
Explosion.

" 15

Ki	iSgl	12 34 36.0
Sk	iSgl	12 34 39.5
Um	iSgl	12 35 03.6
Ud	e(Sgl)	12 36 29

Nordland, Norway, 66.5°N, 14.0°E.
Origin time = 12 33 05.
Explosion.

" 15

Ud	eP	14 49 02

1972
Jan. 15

Ki	ePn	15 56 18
	iSn	15 57 05.0
	iS*	15 57 17.3

Probably northwest Russia-Norway border region.
Origin time = 15 55 17.
Explosion.

" 15

Up	iP	18 16 40.5
	ipP	18 16 44.5
Ki	iP	18 15 51.3
	ipP	18 15 54.8
Sk	iP	18 16 33.4
	ipP	18 16 37.1
Um	iP	18 16 12.9
Ud	iP	18 16 49.8 C
	ipP	18 16 53.3
De	iP	18 17 14.1

Eastern Russia.
h = 15 km (Up,Ki,Sk,Ud).

" 15

Ki	i(Sn)	18 37 14.0
	i(Sgl)	18 37 36.3

" 15

Up	iP	19 33 55.8
Ki	iP	19 33 44.6
Sk	iP	19 33 37.4
Um	iP	19 33 53.4

Mexico-Guatemala (h = N).

" 15

Up	iP		20 29 40.8	
	iPP		20 31 19.8	
	iS		20 35 56	
			micr	sec
	P	Z'	0.5	1.4
	Mx	E	33	16
	Mx	N	39	15
	Mx	Z	48	15
Ki	iP		20 29 35.2	
	i		20 29 40.4	
	iPP		20 31 16.6	
			micr	sec
	P	Z'	0.6	1.5
	Mx	E	120	15
	Mx	N	32	13
	Mx	Z	100	15
Sk	iP		20 29 59.7	
	i		20 30 05.0	
	iPP		20 31 50.0	
Um	iP		20 29 32.3	
	i		20 29 37.5	
	iPP		20 31 02.4	
	iS		20 35 42	
Ud	iP		20 29 55.2	
	i		20 30 01.4	
	iPP		20 31 39.8	

(cont.)

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

1972
Jan. 15 (cont.)

De	eP		20 29 58
	i		20 30 03.3
	iPP		20 31 44.8

Sinkiang (h = N).
m = 6.1, M = 6.8 (Up,Ki).
Double P, in average 5.5 sec apart, or alternatively, P and pP with a focal depth of 20 km.

" 15

Ud	iPKP		21 05 31.9
De	ePKP		21 05 45

Fiji Islands (h = 250 km).

" 15

Ki	iP		23 53 44.6	
			micr	sec
	Mx	E	0.8	13
	Mx	Z	0.9	16
Sk	eP		23 54 08	
Um	iP		23 53 38.3	
Ud	eP		23 54 06	

Sinkiang (h = N).

" 16

Up	iSgl		03 24 42.1
Ki	iPn		03 20 28.6
	iSn		03 21 25.6
	iSgl		03 21 45.8
Sk	eSgl		03 24 14
Um	i(Sn)		03 22 05.8
	iSgl		03 22 40.3
Ud	iSgl		03 25 11.3

Northwest Russia, 67.8°N, 33.6°E.
Origin time = 03 19 13.
Explosion.

" 16

Ud	iP		05 16 32.8

(Formosa).

" 16

Ud	iP		05 48 53.1

Greece.

" 16

Ki	iP		06 33 27.2
	i		06 33 40.5
	iS		06 35 14.4
Sk	eP		06 34 30
Um	iP		06 34 20.7
	i		06 34 35.3
	iS		06 36 45.9
Ud	iP		06 35 12.9
De	eP		06 36 00

Svalbard.
Origin time = 06 31 12.

" 16 Ki eP 07 56 02
(cont.)

1972
Jan. 16 (cont.)

Ki	iS		07 57 45.3
Um	eP		07 56 57
	iS		07 59 17.8

Svalbard.
Probably from the same area as the preceding event.
Origin time = 07 53 46.

" 17

Ki	iP		04 28 54.1
	iPcP		04 29 39.2
Ud	iP		04 29 47.7

Kurile Islands (h = 130 km).

" 17 Ki eP 06 00 54
Dodecanese Islands.

" 17

Up	iP		21 55 18.1	C
	ipP		21 55 30.5	
			micr	sec
	P	Z'	0.1	1.3
Ki	iP		21 55 18.8	C
	ipP		21 55 28.4	
			micr	sec
	P	Z'	0.1	1.3
	Mx	N	1.7	18
Sk	ipP		21 55 41.5	
Um	ipP		21 55 21.6	
Ud	iP		21 55 24.4	

Sumatra.
h = 40 km (Up,Ki).
m = 6.0 (Up,Ki).

" 18

Up	iP		00 28 14.2	C
	ipP		00 28 22.2	
			micr	sec
	P	Z'	0.1	0.9
Ki	iP		00 27 19.9	C
	ipP		00 27 27.6	
			micr	sec
	P	Z'	0.1	1.0
Sk	iP		00 27 47.3	C
	ipP		00 27 55.0	
Um	iP		00 27 48.5	C
	ipP		00 27 56.0	
Ud	iP		00 28 11.2	C
	ipP		00 28 18.7	
De	iP		00 28 34.8	C
	ipP		00 28 42.9	

Kodiak Island.
h = 30 km (Up,Ki,Sk,Um,Ud, De).
m = 5.9 (Up,Ki).

" 18 Ki iP 02 27 02.5
Mariana Islands (h = 150 km).

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

1972 Jan.	18	Um	iP		05 55 18.8	
		Japan.				
"	18	Ki	iP		07 44 22.1	
			i		07 44 35.3	
		Sunda Strait (h = 80 km).				
"	18	Up	iP		12 53 47.9	C
					micr	sec
			P	Z'	0.6	1.4
			Mx	N	1.9	21
		Ki	iP		12 52 53.3	C
					micr	sec
			P	Z'	0.2	1.2
		Sk	iP		12 53 29.4	
		Um	iP		12 53 19.3	C
		Ud	iP		12 53 50.7	C
			iPcP		12 54 28.1	
		De	eP		12 54 14	
		Kamchatka (h = 35 km).				
		m = 6.4 (Up,Ki).				
"	18	Ki	eP		14 12 07	
		Ud	iP		14 13 07.1	
		Kurile Islands (h = 50 km).				
"	18	Up	eP		21 18 06	
		Ki	iP		21 18 49.0	
					micr	sec
			P	Z'	0.1	1.0
		Sk	eP		21 18 42	
		Um	iP		21 18 19.4	
		Ud	iP		21 18 22.0	C
			i		21 18 28.7	
		De	eP		21 18 06	
		Iran (h = N).				
"	18	Up			micr	sec
			Mx	E	17	24
			Mx	N	32	23
			Mx	Z	17	25
		Ki	iP		22 09 31.7	
			iPP		22 14 03.9	
					micr	sec
			PP	Z'	0.2	2.0
			Mx	E	20	23
			Mx	N	23	23
			Mx	Z	16	24
		Sk	e(PP)		22 14 33	
			iPKKP		22 24 42.5	
		Um	i(PP)		22 14 01.5	
			iPP		22 14 26.3	
		Ud	iPKKP		22 24 38.6	
		De	i(PP)		22 14 25.4	
		New Guinea (h = N).				
		M = 6.9 (Up,Ki).				

1972 Jan.	18	Ki	iP		22 22 28.2	
			i		22 22 35.8	
		Um	i(PP)		22 27 03.3	
			iPP		22 27 28.6	
		Ud	iPKKP		22 37 39.4	
		New Guinea (h = N).				
"	18	Ki	eP		23 31 35	
		Um	iP		23 30 56.8	
		Ud	eP		23 30 05	
		Italy (h = 25 km).				
"	19	Ki	eP		00 44 58	
		Um	iP		00 44 31.5	C
		Ud	iP		00 43 49.6	C
		De	eP		00 43 31	
		Madeira (h = N).				
"	19	Sk	i(P)		00 59 43.7	
"	19	Ki	iPn		11 51 53.8	
			iSn		11 52 52.3	
		Um	eSgl		11 54 07	
		Northwest Russia.				
		Origin time = 11 50 36.				
		Explosion.				
"	19	Up	iSgl		13 33 11.4	
		Ki	iSgl		13 35 41.5	
		Sk	eSgl		13 35 01	
		Um	iSgl		13 33 54.4	
		Esthonia, 59.5°N, 25.1°E.				
		Origin time = 13 31 11.				
		Explosion.				
"	19	Up			micr	sec
			Mx	E	8.5	24
			Mx	N	18	24
			Mx	Z	16	25
		Ki	iP		15 15 05.4	
			iPP		15 19 39.6	
					micr	sec
			Mx	E	11	21
			Mx	N	12	18
			Mx	Z	8.5	20
		Um	iPP		15 20 00.2	
		De	iPKP		15 19 36.1	
		New Guinea (h = N).				
		M = 6.7 (Up,Ki).				
"	19	Um	iP		17 51 05.0	
		Ud	iP		17 51 41.5	
		Japan (h = 30 km).				
"	19	Ki	i(Sn)		20 15 49.3	
			iSgl		20 16 02.0	
		(cont.)				

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

1972
Jan. 19 (cont.)
Sk iSgl 20 16 09.4
Um iSn 20 16 15.1
iSgl 20 16 29.0
Nordland, Norway,
66.5°N, 14.2°E.
Origin time = 20 14 35.
Explosion?

" 19 Ki iPKP2 20 42 25.3
Um iPKP2 20 42 13.3
Macquarie Islands (h = N).

" 20 Ki iP 00 58 40.7
Ud iP 00 57 43.4
De eP 00 57 18
Dodecanese Islands (h = N).

" 20 Ki iP 02 21 27.8 C
Sk iP 02 21 01.2 C
Ud iP 02 20 30.4 C
De iP 02 20 00.5 C
Dodecanese Islands (h = N).

" 20 Um iPKP 06 58 28.1
Ud iPKP2 06 58 55.3
Kermadec Islands (h = N).

" 20 Sk iP 09 33 44.6
Alaska (h = 140 km).

" 20 Up iP 11 43 52.1 C
iPP 11 45 27.2
micr sec
P Z' 3.4 1.2
Ki iP 11 44 00.9 C
iPP 11 45 40.9
micr sec
P Z' 3.7 1.3
Sk iP 11 44 17.6 C
iPP 11 45 57.8
Um iP 11 43 51.1 C
iPP 11 45 22.8
Ud iP 11 44 08.6 C
iPP 11 45 46.9
iS 11 50 16.7
De iP 11 44 04.6 C
iPP 11 45 43.8
iS 11 50 07.8
Hindu Kush (h = 210 km).
m = 6.8 (Up,Ki).

" 20 Um iP 12 18 12.0
Greece.

" 20 Um i(Sgl) 12 30 05.3

1972
Jan. 20 Um iP 18 24 56.6
Japan (h = 60 km).

" 20 Ki iP 21 36 36.8

" 21 Ki iP 01 15 10.7
Sk e(P) 01 15 36
Um iP 01 15 10.0
Ud iP 01 15 22.4
Sumatra.

" 21 Ud iP 04 19 02.0

" 21 Ki ePKP 04 59 28
Um iPKP 04 59 41.8 C
i 04 59 45.5
Ud iPKP 04 59 54.4 C
South of Kermadec Islands.

" 21 Up iSgl 10 53 48.5
Ki iPn 10 49 34.7
iSn 10 50 33.1
iS* 10 50 53.5
Sk iSgl 10 53 22.1
Um iSn 10 51 12.6
iSgl 10 51 47.4
Ud iSgl 10 54 21.7
De eSgl 10 55 46
Northwest Russia,
67.7°N, 33.9°E.
Origin time = 10 48 17.
Explosion.

" 21 Up iP 11 12 36.7
i 11 12 38.8
Sk iP 11 12 39.8
Um iP 11 12 20.0
Ud iP 11 12 45.9
i 11 12 48.3
De eP 11 12 56
Ryukyu Islands (h = 60 km).

" 21 Um iP 12 37 11.7

" 21 Up iP 12 38 05.1
Ud iP 12 38 19.6

" 21 Up eP 15 42 21
Ki iP 15 42 00.0
Um iP 15 42 07.2
Ud iP 15 42 25.7
Mindanao (h = 180 km).

" 21 Um iP 15 54 21.1
Off coast of Oregon
(h = N).

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

1972 Jan.	21	Up	iP		19 31 22.9		
			ipP		19 33 26.7		
					micr	sec	
			P	Z'	0.1	1.0	
		Ki	iP		19 31 29.5		
			ipP		19 33 33.4		
		Sk	iP		19 31 13.7		
			ipP		19 33 19.6		
		Um	iP		19 31 29.0		D
			ipP		19 33 31.8		
		Ud	iP		19 31 13.9		D
			ipP		19 33 18.6		
		De	iP		19 31 12.3		D
			ipP		19 33 13.5		
		Brazil.					
		h = 570 km (Up,Ki,Sk,Um,Ud,					
		De).					
"	21	Um	iP		22 44 46.0		
		Ud	eP		22 45 04		C
"	22	Up	iPKP		01 01 17.6		
		Um	ePKP		01 01 11		
			iSKP		01 04 01.8		
		Ud	iPKP		01 01 20.5		
		De	iPKP		01 01 29.9		
"	22	Um	iP		01 51 28.3		
"	22	Up	iSgl		05 24 52.8		
		Sk	eSgl		05 25 17		
		Ud	eSn		05 23 23		
			iSgl		05 23 59.3		
		De	iSgl		05 23 24.5		
		North Sea.					
"	22	Ud	iP		06 24 47.7		
"	22	Ki	eP		07 25 36		
		Sk	iP		07 26 16.9		
		Um	iP		07 26 00.0		
		Ud	iP		07 26 31.7		C
		Sakhalin (h = 55 km).					
"	22	Ki	iPn		09 15 56.8		
			iSn		09 16 45.8		
			iSgl		09 17 02.0		
		Northwest Russia-Norway					
		border region.					
		Explosion.					
"	22	Up	iP		11 01 30.5		
		Ud	iP		11 01 16.0		C
"	22	Um	iSgl		12 03 12.4		
		Ud	iSgl		12 03 57.1		
		(cont.)					

1972 Jan.	22	(cont.)					
		Western USSR.					
		Explosion.					
"	22	Up	iP		12 09 39.1		
		Ki	iP		12 09 03.9		C
		Sk	eP		12 09 32		
		Um	iP		12 09 19.0		C
		Ud	iP		12 09 47.0		C
		South of Japan (h = 160 km).					
"	22	Up	iP		13 21 25.0		
			ipP		13 21 43.3		
			isP		13 21 56.0		
			iS		13 31 44		
					micr	sec	
			P	Z'	0.1	1.2	
			sP	Z'	0.2	1.3	
			Mx	E	4.9	23	
			Mx	N	2.9	23	
			Mx	Z	11	23	
		Ki	iP		13 21 14.1		
			ipP		13 21 33.7		
			isP		13 21 45.4		
			iPP		13 24 31.4		
					micr	sec	
			P	Z'	0.4	1.6	
			sP	Z'	0.4	1.3	
			Mx	E	6.1	20	
			Mx	N	6.1	21	
			Mx	Z	9.3	22	
		Sk	iP		13 21 07.7		
			ipP		13 21 26.6		
		Um	iP		13 21 23.1		
			ipP		13 21 40.0		
			isP		13 21 53.8		
			iPP		13 24 46.0		
			iS		13 31 45		
		Ud	iP		13 21 16.0		C
			ipP		13 21 33.9		
			isP		13 21 44.6		
			iPP		13 24 32.8		
		De	iP		13 21 23.4		
			ipP		13 21 40.6		
			isP		13 21 51.7		
		Guatemala.					
		h = 70 km (Up,Ki,Sk,Um,Ud,					
		De).					
		m = 6.0, M = 6.0 (Up,Ki).					
"	22	Up	ePKP		22 10 12		
					micr	sec	
			Mx	E	3.4	22	
			Mx	N	5.0	23	
			Mx	Z	7.9	23	
		(cont.)					

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

1972
Jan. 22 (cont.)

Ki			micr	sec
	Mx	E	3.4	20
	Mx	N	3.9	19
	Mx	Z	4.7	19
Um	iPKP		22 09 56.0	
Ud	ePKP		22 10 13	
De	ePKP		22 10 23	

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

" 22

Um	iPKP	22 12 00.0
Ud	iPKP	22 12 10.7

South of Kermadec Islands.

" 22

Ud	iPKP	22 56 49.5
De	ePKP	22 56 56

Tonga Islands (h = 140 km).

" 23

Up	iP2		02 16 56.4	C
			micr	sec
	P2	Z'	0.1	1.0
	Mx	N	1.3	18
	Mx	Z	1.5	19
Ki	iP1		02 16 41.0	
	iP2		02 16 43.5	
			micr	sec
	P2	Z'	0.1	1.1
	Mx	E	1.2	19
	Mx	N	1.3	17
Sk	eP1		02 17 06	
	iP2		02 17 08.0	
Um	iP1		02 16 43.0	
	iP2		02 16 45.7	C
Ud	iP1		02 17 06.0	
	iP2		02 17 08.8	C
De	iP2		02 17 13.6	C

China (h = N).
m = 6.0, M = 5.2 (Up,Ki).
P1 and P2 denote double P-phases, in average 2.7 sec apart.

" 23

Ud	iP	05 39 30.0

" 23

Ud	iP	08 41 26.5

Kamchatka.

" 23

Up	iP	11 46 45.8	
Ki	iP	11 45 53.1	D
Sk	eP	11 46 25	
Um	iP	11 46 19.2	
Ud	iP	11 46 46.6	D
De	iP	11 47 08.6	

Aleutian Islands (h = 100 km).

1972
Jan. 23

Um	iPKP	13 12 22.1
Ud	iPKP	13 12 30.2
De	iPKP	13 12 40.8

Fiji Islands (h = 600 km).

" 23

Ki	iP	15 18 34.4	C

Japan (h = 40 km).

" 23

Um	iP	17 27 07.0	C

" 23

Ki	ePKP	17 37 31	
Um	iPKP	17 37 35.0	C
Ud	iSKP	17 41 12.8	
De	eSKP	17 41 19	

New Hebrides Islands (h = N).

" 23

Ki	iPKP	18 22 52.1
Um	iPKP	18 22 56.2
Ud	iSKP	18 26 34.2

New Hebrides Islands (h = 35 km).

" 23

Up	iPKP		21 36 58.5
	iX		21 37 25.7
	iY		21 37 48.4
	iZ		21 38 16.3
	i		21 49 48.3
	iPKKS		21 49 56.2
			micr sec
	Mx	E	35 22
	Mx	N	60 22
	Mx	Z	96 22
Ki	iPKP		21 36 41.3
	iX		21 37 08.7
	i		21 37 50.4
	iZ		21 37 55.6
	i		21 46 47.1
	iPKKP		21 47 06.4
	iPKKS		21 50 07.3
			micr sec
	Mx	E	50 24
	Mx	N	40 23
	Mx	Z	32 21
Sk	iPKP		21 36 53.2
	iX		21 37 20.0
	iY		21 37 40.8
Um	iPKP		21 36 46.9
	i		21 37 07.6
	iPKKP		21 46 50.5
	iPKKS		21 49 58.4
Ud	iPKP		21 37 01.0
	iY		21 37 50.4
	iPKKS		21 49 51.3
De	i(PKP)		21 36 57.5
	iPKP		21 37 07.5

(cont.)

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

1972
Jan. 23 (cont.)

De	i		21 37 23.6
	iSKP		21 40 36.8

New Hebrides Islands
(h = N).
M = 7.3 (Up,Ki).
X(Up,Ki,Sk), Y(Up,Sk,Ud),
Z(Up,Ki) mark three
unidentified phases.

" 23

Up	iPKP		21 53 45.9	
			micr	sec
	PKP	Z'	0.1	1.4
Ki	ePKP		21 53 30	
			micr	sec
	PKP	Z'	0.1	1.0
Sk	iPKP		21 53 41.2	
Um	iPKP		21 53 35.7	
	iSKP		21 56 32.7	
Ud	iPKP		21 53 48.5	
De	iPKP		21 53 55.1	

New Hebrides Islands
(h = N).

" 24

Um	iPKP		03 54 57.8	

New Hebrides Islands
(h = 60 km).

" 24

Up			micr	sec
	Mx	E	2.3	20
	Mx	N	5.1	19
	Mx	Z	6.4	19
Ki			micr	sec
	Mx	E	2.0	16
	Mx	N	3.1	19
Um	iPKP		04 14 39.8	

New Hebrides Islands
(h = 30 km).
M = 6.3 (Up,Ki).

" 24

Up	iP		04 42 39.2	D
Ki	iP		04 42 24.2	D
Sk	iP		04 42 44.7	D
Um	iP		04 42 28.9	D
Ud	iP		04 42 47.0	D
De	iP		04 42 53.1	

Celebes Sea (h = 420 km).

" 24

Up	iP		06 02 05.1
Ki	iP		06 01 49.4
Um	iP		06 01 56.9
Ud	iP		06 02 16.9

Luzon (h = 80 km).

" 24

Um	iPKP		06 24 27.0

New Hebrides Islands.

1972
Jan. 24

Sk	eP		09 50 11

" 24

Ki	iP		09 52 25.2
Um	iP		09 52 18.2
Ud	iP		09 51 47.7

North Atlantic Ocean
(h = N).

" 24

Ki	iP		12 31 44.6

Mindoro (h = 50 km).

" 24

Ud	iSn		15 16 53.5
	iSgl		15 17 10.7

Southwest Norway.
By combination with
Bergen readings.

" 24

Ki	iP		17 35 04.3
Sk	iP		17 35 33.1
Um	iP		17 35 35.5
Ud	i(P)		17 35 50.2

Alaska (h = 30 km).

" 24

Up	iPKP		19 57 31.9	C
	ipPKP		19 57 58.4	
			micr	sec
	PKP	Z'	0.3	1.0
Sk	ePKP		19 57 22	
Um	iPKP		19 57 21.0	
Ud	iPKP		19 57 33.9	C
	ipPKP		19 58 01.4	
De	iPKP		19 57 43.5	C

Tonga-Kermadec Islands.
h = 100 km (Up,Ud).

" 24

Up	iP		23 04 20.2	C
			micr	sec
	P	Z'	0.1	0.8
Ki	iP		23 03 35.8	C
			micr	sec
	P	Z'	0.1	0.8
Sk	eP		23 04 12	
Um	iP		23 03 55.9	
Ud	iP		23 04 27.0	C
De	iP		23 04 45.1	

Japan (h = 140 km).
m = 5.8 (Up,Ki).

" 25

Ki	iP		01 14 44.0

Chagos Islands (h = N).

" 25

Up	iP		02 18 17.6	
	i		02 18 19.6	
	iS		02 28 03	
			micr	sec
	P	Z'	2.9	1.3

(cont.)

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

1972
Jan. 25 (cont.)

Up			micr	sec
	Mx	E	1360	22
	Mx	N	2420	21
Ki	iP		02 17 54.3	
	i		02 17 56.4	
	iS		02 27 22	
			micr	sec
	P	Z'	1.5	1.0
Sk	iP		02 18 22.4	
	i		02 18 29.5	
Um	iP		02 18 02.3	
	i		02 18 04.8	
	iS		02 27 33	
Ud	iP		02 18 27.0	
	i		02 18 29.3	
De	iP		02 18 35.9	
	i		02 18 43.9	

Formosa (h = N).
m = 7.2 (Up,Ki), M = 8.5 (Up).
Mx (Up) were measured on Wiechert records in this and the following case.

" 25

Up	iP		03 53 14.1	
	i		03 53 16.7	
	iS		04 03 04	
			micr	sec
	P	Z'	0.7	0.9
	Mx	E	300	23
	Mx	N	470	23
Ki	iP		03 52 51.8	
	i		03 52 54.0	
	iS		04 02 20	
			micr	sec
	P	Z'	1.4	1.2
	Mx	E	260	19
	Mx	N	360	19
	Mx	Z	210	14
Sk	iP		03 53 20.1	
Um	iP		03 53 00.0	
	i		03 53 01.9	
Ud	iP		03 53 24.6	
	i		03 53 26.7	
De	iP		03 53 34.2	

Formosa (h = N).
m = 6.8, M = 7.7 (Up,Ki).
Double P, in average 2.5 sec apart; cf preceding event.

" 25

Up	iP		05 49 18.0	
	iPP		05 50 52.8	
			micr	sec
	P	Z'	0.1	1.1

(cont.)

1972
Jan. 25 (cont.)

Ki	iP		05 49 28.2	
	iPP		05 51 06.3	
Sk	iP		05 49 44.7	
	iPP		05 51 28.6	
Um	iP		05 49 17.3	
	iPP		05 50 55.0	
Ud	iP		05 49 34.9	
	iPP		05 51 20.4	
De	iP		05 49 30.6	

Hindu Kush (h = 70 km).

" 25

Ki	eP		08 14 51	

Sumatra (h = 60 km).

" 25

Ud	iP		10 13 12.2	

Kamchatka (h = N).

" 25

Um	iP		11 31 09.2	
Ud	iP		11 31 41.1	

Japan (h = 110 km).

" 25

Up	iP		15 16 44.2	
			micr	sec
	P	Z'	0.1	0.8
Ki	iP		15 16 15.1	
			micr	sec
	P	Z'	0.2	1.0
Sk	iP		15 16 41.0	
Um	iP		15 16 27.8	
Ud	iP		15 16 51.2	
De	iP		15 17 02.3	

Volcano Islands (h = 220 km).
m = 5.8 (Up,Ki).

" 25

Ud	iP		20 28 46.6	

Italy (h = N).

" 25

Ki	iP		21 14 31.9	
Ud	eP		21 15 04	

Formosa (h = 35 km).

" 25

Ki	eP		22 55 09	
Um	iP		22 55 08.3	
Ud	iP		22 55 45.9	

" 25

Up	iP		23 21 53.2	
Ki	iP		23 21 24.8	
Um	iP		23 21 35.7	
Ud	iP		23 22 01.7	

Ryukyu Islands (h = 20 km).

" 26

Um	iP		03 31 38.2	

" 26

Up	iP		03 54 35.5	C
	ipP		03 55 17.9	

(cont.)

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

1972 Jan.	26	(cont.)				
		Ki	iP		03 54 34.0	C
			ipP		03 55 18.3	
					micr sec	
			P	Z'	0.1 0.9	
		Sk	iP		03 54 49.4	C
		Um	iP		03 54 32.2	
			ipP		03 55 13.1	
		Ud	iP		03 54 45.0	
			ipP		03 55 27.7	
		De	iP		03 54 43.5	
		Sumatra.				
		h = 170 km (Up,Ki,Um,Ud).				
"	26	Um	iP		03 58 15.7	
		Ud	iP		03 58 17.6	
"	26	Up	iP		04 42 32.2	
			i		04 42 39.2	
		Ki	iP		04 41 42.9	
			i		04 41 49.8	
		Sk	iP		04 42 19.3	
		Um	iP		04 42 05.5	D
			i		04 42 12.4	
		Ud	iP		04 42 37.9	
			i		04 42 44.6	
		De	iP		04 42 57.0	
		Okhotsk Sea.				
		Deep.				
"	26	Up	iP		13 23 15.4	
		Um	iP		13 23 04.0	
"	26	Um	iP		14 39 09.1	
		Ud	iP		14 39 35.0	
"	26	Ki	iSgl		15 53 32.0	
		Sk	iSgl		15 53 35.4	
		Um	iSn		15 53 45.6	
			iSgl		15 53 59.0	
		Nordland, Norway,				
		66.5°N, 14.0°E.				
		Origin time = 15 52 02.				
		Explosion.				
"	26	Up	iP		19 03 24.8	
		Um	iP		19 03 00.5	
		Ud	iP		19 03 31.7	
			ipP		19 03 47.5	
		Japan.				
		h = 60 km (Ud).				
"	26	Ud	iP		21 31 36.5	D
"	26	Ki	i(Sgl)		21 40 43.9	

1972 Jan.	26	Up	iPKP		23 18 29.2	C
			iSKP		23 21 14.1	
					micr sec	
			PKP	Z'	0.5 0.9	
			SKP	Z'	1.2 0.9	
		Ki	i(PKP)		23 18 10.0	
			iPKP		23 18 22.4	
			iSKP		23 20 49.1	
			iPKS		23 21 47	
					micr sec	
			PKP	Z'	0.3 0.7	
		Sk	iPKP		23 18 22.1	
			i		23 18 33.3	
			iSKP		23 21 06.6	
		Um	i(PKP)		23 18 16.6	C
			iPKP		23 18 24.2	
			i		23 18 30.5	
			iSKP		23 21 01.8	
			i		23 21 05.9	
			iSKKP		23 30 16.8	
		Ud	iPKP		23 18 30.5	
			i		23 18 32.0	
			iSKP		23 21 15.4	
			iSKKP		23 29 51.1	
		De	iPKP		23 18 40.4	
			iSKP		23 21 21.1	
			iSKKP		23 29 39.1	
		Fiji Islands (h = 670 km).				
"	26	Up	iSKP		23 29 49.5	
		Ud	iPKP		23 27 08.6	
			iSKP		23 29 51.1	
		De	iPKP		23 27 18.3	C
			iSKP		23 30 00.2	
		Fiji Islands (h = 690 km).				
"	26	Up	iPKP		23 50 39.8	
			iSKP		23 53 23.1	
					micr sec	
			SKP	Z'	0.1 0.9	
		Ki	iPKP		23 50 32.4	
			iSKP		23 52 58.6	
		Sk	iPKP		23 50 33.0	
			iSKP		23 53 15.7	
		Um	i(PKP)		23 50 27.3	
			iPKP		23 50 39.0	
			iSKP		23 53 10.4	
			i		23 54 26.6	
		Ud	i(PKP)		23 50 40.0	
			iPKP		23 50 42.0	
			iSKP		23 53 24.3	
		De	iPKP		23 50 50.9	
			iSKP		23 53 33.7	
		Fiji Islands (h = 690 km).				
"	27	Ud	ePKP		04 31 59	
		(cont.)				

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

1972 Jan.	27	(cont.)			
		Ud	iSKP	04 34 42.9	
		De	iPKP	04 32 09.5	C
"	27	Ki	eP	06 43 09	
			i	06 43 19.3	
"	27	Up	iSgl	14 09 43.3	
		Sk	eSgl	14 11 26	
		Um	iSgl	14 09 59.0	
		Ud	eSgl	14 10 43	
		Western USSR.			
		Explosion.			
"	27	Um	iP	14 52 01.7	
		Japan (h = 60 km).			
"	27	Um	iP	18 08 54.7	D
		Ud	eP	18 09 08	
"	27	Um	iP	18 58 33.2	
		Ecuador (h = 100 km).			
"	27	Ki	iP	21 39 35.0	
"	27	Ki	eP	21 46 48	
"	28	Up	i(PKP)	01 35 19.0	
			iPKP	01 35 27.1	
			iSKP	01 38 46.0	
				micr sec	
			PKP Z'	0.1 0.8	
			Mx N	5.1 30	
			Mx Z	4.3 30	
		Ki	iPKP	01 35 12.2	C
			iSKP	01 38 26.8	
				micr sec	
			PKP Z'	0.3 1.0	
			Mx E	1.5 19	
			Mx N	4.7 21	
		Sk	e(PKP)	01 35 18	
			iPKP	01 35 24.3	
			iSKP	01 38 41.5	
		Um	i(PKP)	01 35 12.1	
			iPKP	01 35 18.4	
			iSKP	01 38 32.2	
		Ud	i(PKP)	01 35 19.0	
			iPKP	01 35 27.7	
			iSKP	01 38 48.4	
		De	i(PKP)	01 35 23.9	
			i	01 35 25.9	
			iSKP	01 38 56.6	
		New Hebrides Islands			
		(h = 120 km).			
		M = 6.3 (Up,Ki).			
		M uncorrected for focal depth.			

1972 Jan.	28	Um	iP	02 45 03.6	
			iPP	02 47 53.3	
		Ud	eP	02 45 25	
		Formosa.			
"	28	Up	ePP	10 37 11	
		Ki	eP	10 35 45	
		Sk	iP	10 35 51.7	
			ePP	10 37 38	
		Um	iP	10 35 27.6	
			iPP	10 37 14.8	
		Ud	iP	10 35 39.4	
			iPP	10 37 25.3	
		Pakistan (h = N).			
"	28	Ki	iPn	12 59 19.7	
			iPgl	12 59 27.9	
			iSn	13 00 06.0	
			iS*	13 00 20.8	
		Um	eSn	13 01 16	
			iSgl	13 01 56.5	
		Ud	eSgl	13 04 19	
		Northwest Russia-Norway			
		border region,			
		69.8°N, 30.0°E.			
		Origin time = 12 58 19.			
		Explosion.			
"	28	Up	iP	13 01 38.0	
		Ud	eP	13 01 32	
"	28	Um	eSgl	14 35 42	
		Western USSR.			
		Explosion.			
"	28	Up	iP	16 30 23.3	D
				micr sec	
			P Z'	0.1 1.3	
			Mx E	1.2 13	
			Mx Z	1.7 13	
		Ki	iP	16 30 02.3	
				micr sec	
			P Z'	0.1 1.4	
			Mx E	0.6 15	
			Mx N	1.3 15	
		Um	iP	16 30 09.3	D
		Ud	iP	16 30 33.1	D
		Formosa-Luzon (h = N).			
		m = 5.8, M = 5.4 (Up,Ki).			
"	28	Um	iP	18 29 35.6	
		Ud	iP	18 29 29.9	
"	28	Ki	iSgl	19 21 16.6	
		Sk	iSgl	19 21 21.6	
		Um	iSn	19 21 29.6	
		(cont.)			

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

1972				
Jan.	28	(cont.)		
		Um	iSgl	19 21 44.1
		Ud	e(Sg2)	19 23 10
		Nordland, Norway, 66.5°N, 14.0°E. Origin time = 19 19 46. Explosion.		
"	28	Up	iP	20 36 55.6
		Ki	eP	20 36 49
		Sk	eP	20 37 14
		Um	iP	20 36 50.5
		Ud	iP	20 37 11.5
			i	20 37 16.6
		Tien-Shan.		
"	28	Ud	iP	22 56 53.8
"	29	Um	ePKP	00 51 17
		Ud	ePKP	00 51 19
		New Zealand.		
"	29	Um	iP	00 58 56.2
		Ud	eP	00 59 28
"	29	Up	ePKP	02 06 09
		Um	iPKP	02 06 02.0
		Ud	iPKP	02 06 10.5 C
		De	iPKP	02 06 21.4
"	29	Um	i(Sgl)	06 01 04.1
"	29	Um	iP	06 30 11.6
"	29	Um	iPKP2	06 37 48.7
		South Pacific Ocean (h = N).		
"	29	Ki	iP	06 57 39.3
		Sk	iP	06 57 58.1
		Um	iP	06 57 31.4
		Ud	iP	06 57 49.7
		Kashmir-India (h = 60 km).		
"	29	Ki	iP	07 34 03.0
			i	07 34 18.6
		Um	i(P)	07 35 11.7
"	29	Um	iP	09 41 31.7
"	29	Ki	eP	09 59 29
		Ud	iP	09 59 14.1
"	29	Um	iP	11 23 32.2
		Ud	iP	11 24 01.9
		Japan (h = 20 km).		

1972				
Jan.	29	Up	iSgl	12 43 21.3
		Ki	e(Sg2)	12 45 41
		Sk	e(Sgl)	12 45 11
		Um	iSn	12 43 17.1
			iSgl	12 43 40.7
		Ud	iSgl	12 44 23.5
		Esthonia, 59.6°N, 26.5°E. Origin time = 12 41 00. Explosion.		
"	29	Um	eSgl	12 58 59
		Ud	eSgl	12 59 42
		Western USSR. Explosion.		
"	29	Ki	iP	17 44 37.1
"	29	Ki	iP	21 21 02.6
		Um	iP	21 21 13.6
		Mariana Islands (h = 80 km).		
"	29	Up	iPKP	23 02 39.1
		Um	iPKP	23 02 25.7
		Ud	iPKP	23 02 41.4
		De	iPKP	23 02 52.2
"	30	Ki	iP	02 51 40.7
		Um	iP	02 51 37.2
		Sumatra.		
"	30	Um	iP	03 00 30.4
		South of Japan (h = 25 km).		
"	30	Um	iP	12 16 09.3
"	30	Ki	iP	17 44 36.2
		Um	eP	17 44 55
			i	17 45 04.3
		Ud	eP	17 45 17
		Mariana Islands (h = N).		
"	30	Ki	iP	20 31 24.1
				micr sec
			P Z'	0.1 1.0
		Sk	iP	20 32 13.1
		Um	iP	20 32 10.0
		Ud	eP	20 32 52
			i(Pn)	20 33 13.7
		Arctic Ocean (h = N).		
"	30	Um	iP	22 23 38.9
		Celebes (h = 130 km).		
"	31	Um	iPKP	01 00 21.4
		Fiji Islands (h = 480 km).		

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

1972				
Jan.	31	Up	eP	06 01 48
		Ki	iP	06 00 54.5
		Sk	iP	06 01 25.4
		Um	iP	06 01 21.2
			iPcP	06 01 56.8
		Ud	iP	06 01 47.1
		De	eP	06 02 10
		Aleutian Islands (h = 50 km).		
"	31	Um	iP	10 23 21.9
		Japan (h = 70 km).		
"	31	Um	iSgl	12 26 03.9
		Esthonia.		
		Explosion.		
"	31	Ki	e(Sgl)	12 54 56
		Um	iSgl	12 53 12.9
		Ud	iSgl	12 53 56.8
		Western USSR.		
		Explosion.		
"	31	Sk	eSgl	14 16 42
		Um	iSgl	14 15 08.6
		Ud	eSgl	14 15 53
		Esthonia.		
		Explosion.		
"	31	Um	iSKP	19 27 31.6
		Ud	iPKP	19 24 52.7
		De	ePKP	19 25 04
		Tonga-Kermadec Islands (h = 550 km).		

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April 1, 1974

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BOX 517
751 20 UPPSALA 1
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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

F E B R U A R Y 1 - 29, 1972

1972 Feb.	1	Up	iP		00 35 21.5 D	
					micr	sec
			P	Z'	0.3	0.9
		Ki	iP		00 34 28.3 D	
					micr	sec
			P	Z'	0.1	0.7
		Sk	iP		00 35 01.1 D	
		Um	iP		00 34 58.9 D	
		Ud	iP		00 35 22.6 D	
		De	iP		00 35 44.7 D	
		Aleutian Islands (h = 55 km). m = 6.3 (Up,Ki).				
"	1	Up	eP		02 25 40	
		Ki	iP		02 25 20.1	
		Sk	eP		02 25 45	
		Um	iP		02 25 27.4	
		Ud	iP		02 25 50.2	
		Luzon (h = 20 km).				
"	1	Ki	ePKP		02 56 13	
					micr	sec
			Mx	E	1.1	18
			Mx	N	1.7	20
		Um	ePKP		02 56 11	
		Ud	ePKP		02 56 19	
		Solomon Islands (h = 40 km).				
"	1	Um	iP		03 44 20.1	
		South of Japan (h = N).				
"	1	Up	i(P)		10 58 24.8	
"	1	Up	iSg1		13 04 27.3	
		De	iPg1		13 02 30.8	
		(cont.)				

1972 Feb.	1	(cont.)		
		De	iSg1	13 02 45.5
		Baltic Sea, south of Sweden. Origin time = 13 02 13. Explosion.		
"	1	Up	iSg1	13 05 31.8
		De	iPg1	13 03 34.4
			iSg1	13 03 49.5
		Baltic Sea, south of Sweden. Origin time = 13 03 16. Explosion.		
"	1	Up	iSg1	13 11 23.6
		De	iPg1	13 09 26.5
			iSg1	13 09 42.9
		Baltic Sea, south of Sweden. Origin time = 13 09 06. Explosion.		
"	1	Up	iSg1	13 27 55.0
		Ud	iSg1	13 28 04.4
		De	iPg1	13 25 57.2
			iSg1	13 26 16.3
		Baltic Sea, south of Sweden. Origin time = 13 25 33. Explosion.		
"	1	Um	eSg1	13 32 28
		Esthonia. Explosion.		
"	1	Um	iP	15 27 43.5
		Volcano Islands (h = 120 km).		
"	1	Ki	iP	19 41 09.7
		(cont.)		

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

1972
Feb. 1 (cont.)
Um iP 19 41 25.5 C
Ud iP 19 41 52.4 C
South of Japan (h = N).

" 1 Sk i(P) 20 19 53.9

" 1 Um iP 23 26 00.8
Ud iP 23 26 31.4
Japan (h = 130 km).

" 1 Um iP 23 41 40.3

" 2 Um iP 01 13 22.8 C
Japan (h = 60 km).

" 2 Um iP 01 32 59.3
Ud iP 01 33 26.2
South of Japan (h = N).

" 2 Sk e(P) 02 25 02

" 2 Ki iP 08 44 19.8
Um iP 08 44 26.4
i 08 44 33.1
Ud iP 08 44 49.0
i 08 44 56.0
Luzon (h = 90 km).

" 2 Um iP 11 10 28.9
iPcP 11 10 46.2
Ud iP 11 10 54.9
South of Japan (h = 30 km).

" 2 Um iSg1 12 48 58.2
Western USSR.
Explosion.

" 2 Ud iPn 13 04 00.8
iPg1 13 04 04.4
iSg1 13 04 36.5
De iPg1 13 03 51.8
iSg1 13 04 15.7
Southern Sweden.
Origin time = 13 03 21.

" 2 Um iP 16 52 34.6
Ud iP 16 53 01.3
South of Japan (h = N).

" 2 Ki iP 19 24 54.0
Um iP 19 24 49.1
Ud eP 19 25 09
Andaman Islands
(h = 45 km).

1972
Feb. 2 Um iP 21 03 50.7

" 2 Up iP 21 24 30.7
ipP 21 24 42.8
Ki iP 21 25 46.9
Sk iP 21 25 13.0
Um iP 21 25 09.9
ipP 21 25 20.7
Ud iP 21 24 37.8
ipP 21 24 49.1
De eP 21 24 00
Greece.
h = 45 km (Up,Um,Ud).

" 2 Up iPKP 23 03 44.1
ipPKP 23 03 52.2
Sk iPKP 23 03 37.4
Um iPKP 23 03 32.4
ipPKP 23 03 40.1
Ud iPKP 23 03 45.7
ipPKP 23 03 53.6
De ipPKP 23 04 02.8
Kermadec Islands.
h = 30 km (Up,Um,Ud).

" 3 Um iP 00 18 01.2
Ud iP 00 18 14.7

" 3 Ki iP 00 21 58.5
Um iP 00 22 08.7 C
Ryukyu Islands (h = N).

" 3 Up iP 02 35 01.7
iPn 02 35 16.6

		micr	sec
P	Z'	0.1	1.2
Mx	E	2.5	15
Mx	N	1.8	15
Mx	Z	5.3	16

Ki iP 02 35 37.7
iPn 02 36 06.7

		micr	sec
P	Z'	0.1	1.0
Mx	E	3.2	17
Mx	N	3.4	17
Mx	Z	2.4	17

Sk iP 02 35 37.1
Um iP 02 35 12.7 C
Ud iP 02 35 17.9
i(Pn) 02 35 55.0
Caucasus (h = 40 km).
m = 5.6, M = 5.2 (Up,Ki).

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

1972
Feb. 3 Um iP 05 42 06.8
Hindu Kush.
Intermediate depth.

" 3 Sk iP 05 42 43.3
Um iP 05 43 15.4
Ud iP 05 42 52.3
North Atlantic Ocean
(h = N).

" 3 Up iP 07 20 46.1
micr sec
P Z' 0.2 1.5
Ki eP 07 20 40
micr sec
P Z' 0.1 1.5
Sk iP 07 20 12.1
Um iP 07 20 44.5
Ud iP 07 20 23.2
North Atlantic Ocean
(h = N).
m = 5.5 (Up,Ki).

" 3 Ki iP 07 33 30.7
Um iP 07 33 31.9
Ud iP 07 33 57.0
China (h = N).

" 3 Um iPKP 08 54 31.2
iPP 08 55 08.7
Ud iPKP 08 54 39.6
New Britain (h = 170 km).

" 3 Up i(P) 09 22 40.6

" 3 Up iSg1 12 35 37.7
Ki iSg1 12 38 06.4
Sk iSg1 12 37 29.6
Um iSg1 12 36 14.2
Ud iSg1 12 36 40.2
De eSg1 12 37 08
Esthonia, 59.5°N, 25.0°E.
Origin time = 12 33 42.
Explosion.

" 3 Ki iPg1 13 29 57.1
iSg1 13 30 19.4
Sk iSg1 13 32 05.0
Um iSg1 13 31 53.1
North Norway,
68.0°N, 16.7°E.
Origin time = 13 29 29.

" 3 Ud iP 14 02 09.6

1972
Feb. 4 Ki iP 00 10 52.4
Um iP 00 11 08.7
Ud iP 00 11 36.3
South of Japan (h = N).

" 4 Um iP 00 28 03.2
North Pacific Ocean.

" 4 Um iP 01 20 24.4
Nicaragua (h = 50 km).

" 4 Um iPKP 01 41 59.3
New Zealand.

" 4 Up iP 02 46 11.2
micr sec
P Z' 0.1 1.2
Mx E 2.4 14
Ki iP 02 47 37.8
micr sec
Mx E 2.5 13
Mx N 0.8 13
Sk iP 02 46 50.9
Um iP 02 46 55.8
Ud iP 02 46 10.6
Italy (h = 25 km).
M = 4.8 (Up,Ki).

" 4 Um iPKP 06 06 36.6
Chile (h = 25 km).

" 4 Ki ePKP 07 20 56
Um iPKP 07 21 01.1
Ud ePKP 07 21 05
De iPKP 07 21 12.0
Fiji Islands (h = 610 km).

" 4 Ud iP 08 02 05.9
Kurile Islands (h = 60 km).

" 4 Up iP 09 22 22.8
Ki iP 09 23 49.1
Sk iP 09 23 03.9
Um iP 09 23 07.3
Ud iP 09 22 23.1
Italy (h = 25 km).

" 4 Ki iPn 10 17 57.9
iP* 10 18 06.2
iSn 10 18 44.6
iS* 10 18 57.3
Um iSg1 10 20 32.1
Northwest Russia-Norway
border region,
69.4°N, 29.8°E.
Origin time = 10 16 56.
Explosion.

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

1972
Feb. 4 Up iP 10 43 29.8
Ki iP 10 42 53.7
micr sec
Mx E 1.1 16
Mx N 1.0 15
Mx Z 1.0 14
Um iP 10 43 06.2
iS 10 53 17
Ud iP 10 43 30.4
Volcano Islands (h = N).

" 4 Um i(Sg1) 11 32 13.3

" 4 Up iSg1 11 55 05.0
Um iSg1 11 55 36.8
Ud eSg1 11 56 10
De eSg1 11 56 33
Esthonia.
Explosion.

" 4 Um i(Sg1) 13 15 11.2

" 4 Up iP 14 17 36.7
ipP 14 17 42.9
micr sec
P Z' 0.1 1.0
Ki iP 14 17 35.2
micr sec
P Z' 0.1 1.1
Sk iP 14 17 56.4
Um iP 14 17 31.2
Ud iP 14 17 51.8
De iP 14 17 51.3
Tibet.
h = 20 km (Up).
m = 5.7 (Up,Ki).

" 4 Up iP 15 31 48.0 D
micr sec
P Z' 0.1 0.8
Ki iP 15 31 49.7 D
micr sec
P Z' 0.1 0.9
Sk iP 15 32 04.5 D
Um iP 15 31 45.3 D
Ud iP 15 31 59.9 D
De iP 15 31 57.6 D
Nicobar Islands (h = 55 km).
m = 6.0 (Up,Ki).

" 4 Um iP 16 03 56.7
Ud iP 16 04 23.6
South of Japan (h = N).

" 4 Ki iP 16 43 06.8
(cont.)

1972
Feb. 4 (cont.)
Um iP 16 42 43.4
Ud iP 16 42 39.1
Gulf of Aden (h = N).

" 4 Up eP 17 23 44
Ki iP 17 25 09.5
Sk iP 17 24 24.0
Um iP 17 24 29.9
Ud iP 17 23 45.4
Italy (h = 25 km).

" 4 Ki ePg1 17 35 23
iSg1 17 36 00.1
Sk iSg1 17 36 04.3
Um iSg1 17 36 27.7
Nordland, Norway,
66.5°N, 14.1°E.
Origin time = 17 34 32.
Explosion.

" 4 Um iP 18 22 05.5
i 18 22 11.8
Italy (h = N).

" 4 Ud iP 19 02 27.9
Dodecanese Islands.

" 4 Um iP 19 07 32.1
Italy (h = N).

" 4 Ki iPg1 20 23 02.2
iSg1 20 23 40.4
Sk iSg1 20 23 47.3
Um iSn 20 23 54.8
iSg1 20 24 08.6
Nordland, Norway,
66.5°N, 14.1°E.
Origin time = 20 22 12.
Explosion.

" 5 Up iP 00 15 24.2
Turkey.

" 5 Up i(P) 00 26 40.0
i 00 26 45.8
micr sec
(P) Z' 0.1 0.9

" 5 Up micr sec
Mx E 1.2 20
Mx N 1.4 20
Mx Z 2.9 18
Ki micr sec
Mx E 1.4 18
Mx N 1.4 18
Mx Z 1.1 18
(cont.)

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

1972
Feb. 5 (cont.)
Um iPKP2 00 36 35.8
South Pacific Ocean
(h = N).
M = 6.0 (Up,Ki).

" 5 Ki eP 01 31 48
Sk eP 01 31 03
Um iP 01 31 08.1
Ud iP 01 30 22.7
Italy (h = N).

" 5 Um eP 03 54 29
Italy (h = N).

" 5 Ki iP 04 29 36.9
i 04 29 43.7
Sk iP 04 28 56.7
Um iP 04 29 30.6
Ud iP 04 29 01.5
i 04 29 07.9
De eP 04 29 07
North Atlantic Ocean
(h = N).

" 5 Um eP 05 10 28
Italy (h = N).

" 5 Up eP 07 12 00
Ki iP 07 13 30.9
micr sec
Mx E 0.3 11
Um iP 07 12 48.5
Ud iP 07 12 03.8
Italy (h = N).

" 5 Ud iP 09 47 45.5

" 5 Um iSg1 12 33 28.0
Western USSR.
Explosion.

" 5 Um iP 12 38 23.7
Italy (h = N).

" 5 Ki iP 14 09 03.9
Um iP 14 09 03.6
Sunda Strait (h = 60 km).

" 5 Up iP 15 18 40.8
micr sec
Mx E 1.2 13
Ki micr sec
Mx E 1.2 14
Mx N 0.6 9
Mx Z 0.4 9
(cont.)

1972
Feb. 5 (cont.)
Sk eP 15 19 21
Um iP 15 19 25.4
Ud eP 15 18 39
Italy (h = 35 km).
M = 4.5 (Up,Ki).

" 5 Um iSg1 15 29 32.2
Lake Ladoga.
Explosion.

" 5 Up iPg1 18 32 04.4
iRg 18 32 25.0
Sk eSg1 18 33 50
Um iSg1 18 34 06.6
Ud iPg1 18 31 58.0
iSg1 18 32 09.2
iRg 18 32 14.3
Västmanland, Sweden,
60.0°N, 15.2°E.
Origin time = 18 31 45.
Explosion.

" 5 Up iP 18 58 55.8
Ki iP 18 58 59.8
Sk iP 18 59 20.3
Um iP 18 58 51.6
Ud iP 18 59 12.6
Tadzhik-Sinkiang
(h = 110 km).

" 5 Ki iP 21 59 51.5
Ud iP 21 59 24.0
De eP 21 59 06
Iran (h = 50 km).

" 6 Up iP 00 33 32.5
micr sec
P Z' 0.1 1.0
Ki iP 00 32 39.8
Um iP 00 33 05.7
Ud iP 00 33 32.5
Aleutian Islands
(h = 45 km).

" 6 Up iP 00 41 42.9
micr sec
P Z' 0.2 1.0
Ki iP 00 40 48.9
Um eP 00 41 17
Ud eP 00 41 41
Aleutian Islands
(h = 45 km).

" 6 Up iP 01 38 10.9
Ki eP 01 39 37
(cont.)

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

1972
Feb. 6 (cont.)

Ki			micr	sec
	Mx	E	0.6	13
Sk	iP		01 38 50.0	
Um	iP		01 38 55.7	
Ud	eP		01 38 07	

Adriatic Sea (h = N).

" 6	Up	iP	02 23 52.8
	Um	iP	02 23 25.6
	Ud	iP	02 23 53.5

Aleutian Islands
(h = 45 km).

" 6	Um	eP	03 04 32
	Ud	iP	03 04 17.7
" 6	Ki	iPn	06 40 32.1
		iSn	06 41 30.7
		iSg1	06 41 52.7
	Sk	iSg1	06 44 18.6
	Um	iSn	06 42 08.0
		iSg1	06 42 42.1

Northwest Russia,
67.5°N, 33.3°E.
Origin time = 06 39 14.
Explosion.

" 6	Um	iP	06 46 26.1
	Ud	iP	06 46 53.3

South of Japan (h = N).

" 6	Um	i(Sg1)	07 25 25.6
" 6	Ud	iP	07 38 22.2

Sinkiang (h = N).

" 6	Ki	iPKP	12 13 54.7	
			micr	sec
		PKP Z'	0.1	0.8
	Um	iPKP	12 14 00.4	
	Ud	iPKP	12 14 11.0	

New Hebrides Islands
(h = 140 km).

" 6	Up	iP	17 52 44.9
	Ki	iP	17 51 50.8
	Sk	eP	17 52 25
	Um	iP	17 52 16.9
	Ud	iP	17 52 45.5

Aleutian Islands (h = N).

" 6	Up	eP	21 19 40
	Ki	epP	21 19 15
	Um	iP	21 19 21.5
		ipP	21 19 30.7

(cont.)

1972
Feb. 6 (cont.)

Ud	iP	21 19 47.7
	ipP	21 19 58.2

South of Japan.
h = 35 km (Um,Ud).

" 6	Um	eP	21 49 06

Italy (h = N).

" 6	Up	iP	22 16 49.2	
	Ki	iP	22 16 23.5	
			micr	sec
		P Z'	0.1	1.0
	Sk	iP	22 16 47.4 D	
	Um	iP	22 16 33.4 D	
	Ud	iP	22 16 54.4	

Mariana Islands (h = 50 km).

" 6	Ki	iS	23 39 10.3
	Sk	eS	23 40 28

Norwegian Sea.

" 7	Sk	iPKP	00 39 48.5
	Um	iPKP	00 39 42.1
	Ud	iPKP	00 39 55.2
	De	ePKP	00 40 09

Kermadec Islands
(h = 80 km).

" 7	Sk	i(P)	03 50 59.4
" 7	Up	iPKP	04 36 56.7
	Um	iPKP	04 36 51.2
	Ud	iPKP	04 36 58.9
	De	iPKP	04 37 09.2

Tonga-Kermadec Islands
(h = 550 km).

" 7	Up	iP	05 19 10.4	
			micr	sec
		Mx E	1.2	20
		Mx N	1.4	19
		Mx Z	1.6	20
	Ki	eP	05 18 28	
			micr	sec
		Mx E	3.0	18
		Mx N	2.8	18
		Mx Z	1.9	15
	Um	iP	05 18 46.5	
		iS	05 27 41	
	Ud	iP	05 19 17.4	
	De	eP	05 19 34	

Japan (h = 40 km).
M = 5.6 (Up,Ki).

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

1972 Feb.	7	Um	ePKP		05 53 34	
		South Sandwich Islands (h = N).				
"	7	Up	iP		08 00 19.5	
		Ki	iP		07 59 25.7	
		Sk	eP		08 00 03	
		Um	iP		07 59 50.9	
		Ud	iP		08 00 24.5	
		De	eP		08 00 44	
		Kamchatka (h = 60 km).				
"	7	De	i(P)		13 38 01.6	
"	7	Um	e(Sg1)		13 57 00	
"	7	Up	iSg1		14 20 17.1	
		Ki	e(Sg2)		14 22 48	
		Sk	eSg1		14 22 02	
		Um	iSg1		14 20 50.6	
		Ud	eSg1		14 21 21	
		De	eSg1		14 21 41	
		Esthonia.				
		Explosion.				
"	7	Um	iP		14 32 19.3	
		Ud	iP		14 32 51.2	
		Kurile Islands (h = 130 km).				
"	7	Um	iP		16 19 29.8	
		South of Japan (h = N).				
"	7	Up	iP		19 27 38.4	
			ipP		19 27 44.8	
			iS		19 38 22	
					micr	sec
			pP	Z'	0.1	1.2
			Mx	E	1.2	20
			Mx	N	1.0	19
			Mx	Z	1.9	20
		Ki	eP		19 27 35	
			ipP		19 27 41.9	
					micr	sec
			Mx	E	2.2	18
			Mx	N	1.1	16
			Mx	Z	1.4	17
		Sk	iP		19 27 23.6	
			ipP		19 27 30.4	
		Um	iP		19 27 40.3	
			ipP		19 27 46.6	
		Ud	iP		19 27 30.1	
			ipP		19 27 35.6	
		De	iP		19 27 34.8	
			ipP		19 27 41.1	
		Costa Rica.				
		h = 20 km (Up,Ki,Sk,Um,Ud,De).				
		M = 5.6 (Up,Ki).				

1972 Feb.	7	Um	iP		20 16 26.3	
		Costa Rica (h = N).				
"	8	Up	iP		03 49 59.4	C
			i		03 50 06.0	
					micr	sec
			P	Z'	0.4	0.9
			Mx	E	2.9	14
			Mx	N	2.1	15
			Mx	Z	4.4	14
		Ki	iP		03 49 38.4	C
			i		03 49 44.9	
					micr	sec
			P	Z'	0.3	0.6
			Mx	E	2.4	12
			Mx	N	2.8	15
			Mx	Z	2.5	14
		Sk	iP		03 50 03.3	C
		Um	iP		03 49 45.4	C
		Ud	iP		03 50 08.8	C
			i		03 50 15.5	
		De	eP		03 50 16	
		Luzon (h = 50 km).				
		m = 6.6, M = 5.9 (Up,Ki).				
"	8	Ud	iP		06 08 09.5	
		De	iP		06 07 51.9	
"	8	Sk	eP		07 02 27	
"	8	Ud	i(Pg1)		12 17 36.4	
			i(Sg1)		12 17 55.3	
"	8	Sk	eP		12 23 45	
		Ud	eP		12 23 07	
		Italy (h = N).				
"	8	Up	i(P)		12 55 03.5	
			i		12 55 09.1	
"	8	De	iP		13 11 20.9	
"	8	Up	iP		15 54 49.9	
			i		15 55 02.3	
		Um	iP		15 54 35.3	
			i		15 54 49.9	
		Ud	eP		15 54 58	
			i		15 55 07.2	
		Formosa (h = N).				
"	8	Up	iP		19 07 58.3	
			ipP		19 08 11.2	
		Ki	iP		19 07 16.7	C
			ipP		19 07 29.3	
					micr	sec
			P	Z'	0.1	0.7
		Sk	iP		19 07 51.4	
		(cont.)				

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

1972
Feb. 8 (cont.)

Um	iP	19 07 35.0	C
	ipP	19 07 47.9	
Ud	iP	19 08 05.6	C
	ipP	19 08 18.4	
De	iP	19 08 21.3	

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

" 8

Up	iP	20 02 06.4
Ki	iP	20 02 45.8
Sk	iP	20 02 42.5
Um	iP	20 02 20.1
Ud	iP	20 02 22.0
De	iP	20 02 04.5

Iran (h = 50 km).

" 8

Ki	iP	20 09 25.1
Um	iP	20 09 37.7

Volcano Islands (h = N).

" 8

Ud	iP	23 07 41.0

" 9

Ki	iP	01 45 42.6
Sk	eP	01 46 13
Um	iP	01 45 52.0
Ud	iP	01 46 16.9

Formosa (h = 50 km).

" 9

Ki	iP	03 28 52.0
	i	03 28 57.1
Sk	iP	03 28 27.1

" 9

Ud	i(Sg1)	09 39 39.4

" 9

Ki	iPn	10 10 04.5
	iSn	10 10 54.3
Um	iSg1	10 12 36.0

Northwest Russia.
Origin time = 10 08 58.
Explosion.

" 9

Ki	eP	11 28 43
Sk	ePn	11 29 15
Um	iP	11 28 15.3
Ud	iP	11 28 19.2
De	eP	11 28 09

Caucasus (h = 35 km).

" 9

Ud	iPg1	12 06 16.8
	iSg1	12 06 43.5
De	iPg1	12 06 21.5
	iSg1	12 06 48.8

Southern Sweden.
Origin time = 12 05 43.

1972
Feb. 9

Ud	i(Sg1)	12 09 38.5
De	i(Sg1)	12 09 44.2

Probably same origin as for the preceding event.

" 9

De	i(Sg1)	12 57 38.8

" 9

Up	iPg1	13 03 39.1
	iSg1	13 04 33.2
Ud	iSg1	13 04 39.8
De	iPg1	13 02 32.3
	iSg1	13 02 50.0

Baltic Sea, south of Sweden, 55.4°N, 15.0°E.
Origin time = 13 02 11.
Explosion.

" 9

Ud	i(Sg1)	13 09 01.7

" 9

Um	iPKP	14 08 47.9

New Hebrides Islands (h = 80 km).

" 9

Up	iP	14 29 04.1
Ud	iP	14 29 18.2
De	iP	14 29 01.9

Iran (h = 45 km).

" 9

Ud	iPKP	14 52 44.2
De	iPKP	14 52 55.0

Tonga-Kermadec Islands (h = 550 km).

" 9

Ud	iSg1	15 33 56.5
De	ePg1	15 33 15
	iSg1	15 33 38.5

Southern Sweden.

" 9

Sk	eP	16 00 36
Um	iP	16 00 47.9

South of Panama (h = N).

" 9

Up	iP	18 05 26.8

" 9

			micr	sec
Up	iPKP		21 03 48.3	
	Mx	E	3.4	22
	Mx	N	1.9	21
	Mx	Z	7.8	22
Ki	i(PKP)		21 03 49.5	
	iPKP		21 03 58.4	
	Mx	E	1.4	20
	Mx	N	1.4	18
	Mx	Z	1.7	19

(cont.)

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

1972
Feb. 9 (cont.)

Sk	iPKP	21 03 48.8	
Um	i(PKP)	21 03 44.6	
	iPKP	21 03 54.9	
Ud	i(PKP)	21 03 34.5	
	iPKP	21 03 44.8	
De	iPKP	21 03 42.2	

Chile (h = N).
M = 6.0 (Up,Ki).

" 10	Up	iPKP	00 56 11.5
	Ud	iPKP	00 56 13.4
	De	iPKP	00 56 22.7

Kermadec Islands
(h = 40 km).

" 10	Ud	eP	01 22 05
" 10	Up	ePKP	03 23 24
	Um	ePKP	03 23 16
		iSKP	03 26 03.8
	Ud	iPKP	03 23 24.8
	De	iPKP	03 23 35.6

Fiji Islands (h = 580 km).

" 10	Up	iP	05 09 55.0	C
		iPP	05 11 12.9	
			micr sec	
		P Z'	0.3 0.8	
	Ki	iP	05 09 38.3	C
			micr sec	
		P Z'	0.2 0.8	
	Sk	iP	05 10 09.6	C
	Um	iP	05 09 39.4	C
	Ud	iP	05 10 11.3	C
	De	iP	05 10 18.6	C

Kazakh SSR.
m = 6.2 (Up,Ki).
Underground explosion.

" 10	Up	iPKP	06 11 35.1
	Ud	iPKP	06 11 36.5

Kermadec Islands (h = N).

" 10	Up	iP	06 56 29.5
		i	06 56 32.6
	Ki	iP	06 57 09.1
	Sk	iP	06 57 05.3
		i	06 57 08.4
	Um	iP	06 56 44.9
		i	06 56 47.9
	Ud	iP	06 56 44.5
		i	06 56 47.6
	De	iP	06 56 27.7
		i	06 56 30.6

Iran (h = 20 km).
Double P, in average 3.0 sec apart.

1972
Feb. 10

Up	iP	09 11 22.3	
Um	eP	09 11 37	
Ud	iP	09 11 36.8	
De	iP	09 11 20.3	

Iran (h = N).

" 10	Um	eP	09 16 04
	Ud	eP	09 16 23

Mindanao (h = 100 km).

" 10	Up	iSg1	09 34 40.1
	Ud	eSg1	09 34 46
	De	iPg1	09 32 52.6
		iSg1	09 33 09.8

Baltic Sea, south of Sweden, 55.8°N, 20.6°E.
Origin time = 09 32 31.
Explosion.

" 10	Up	iSg1	09 58 04.9
	De	iPg1	09 56 16.9
		iSg1	09 56 34.0

Baltic Sea, south of Sweden, 55.8°N, 20.6°E.
Origin time = 09 55 56.
Explosion.

" 10	Up	iSg1	12 16 51.6
	Ki	eSg1	12 18 50
	Sk	eSg1	12 18 34
	Um	iSg1	12 17 07.3
	Ud	eSg1	12 17 51

Western USSR.
Explosion.

" 10	Ud	iP	13 32 23.3
" 10	Ud	i(P)	14 05 17.6
" 10	Sk	eSg1	14 14 56
	Um	iSg1	14 13 10.8
	Ud	eSg1	14 14 29

Near Lake Ladoga.
Explosion.

" 10	Ki	eP2	16 48 36
	Sk	eP2	16 48 31
	Ud	iP1	16 47 42.3
		iP2	16 48 10.5
	De	iP2	16 47 53.3

Iran (h = 50 km).
Two events are suggested.

" 11	Ki	e(P)	03 14 03
" 11	Um	iP	04 40 17.8

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

1972 Feb.	11	Um	iP	05 43 00.3
"	11	Up	iP	06 03 36.2
		Ki	iP	06 03 32.6
		Sk	eP	06 03 56
		Um	iP	06 03 28.2
		Ud	iP	06 03 51.1
		De	iP	06 03 51.1
		Sinkiang (h = 25 km).		
"	11	Ki	iSg1	12 08 21.9
		Um	iSg1	12 06 39.4
		Western USSR.		
		Explosion.		
"	11	Up	iP	12 30 17.0
		Ud	iP	12 30 31.8
"	11	Um	iSg1	13 32 53.3
		Western USSR.		
		Explosion.		
"	11	Up	iP	17 25 00.3
		Sk	eP	17 25 05
		Um	iP	17 25 23.8
		Ud	iP	17 24 53.4
		Atlantic Ocean (h = N).		
"	11	Ki	i(P)	18 35 13.3
		Um	e(P)	18 35 47
"	11	Ki	e(P)	18 37 42
		Sk	i(P)	18 37 22.6
"	11	Ki	iSg1	19 42 55.6
		Sk	iSg1	19 43 01.3
		Um	iSg1	19 43 22.1
		Nordland, Norway,		
		66.5°N, 13.8°E.		
		Origin time = 19 41 21.		
		Explosion.		
"	11	Up	ePKP	21 26 25
		Sk	ePKP	21 26 17
		Um	iPKP	21 26 09.3
		Ud	iPKP	21 26 23.8
"	11	Up	iP	21 46 32.9
		Ki	iP	21 45 42.1
		Um	eP	21 46 06
		Ud	iP	21 46 38.8
		Kamchatka (h = 45 km).		
"	12	Ki	iP	01 18 11.0
		Um	iP	01 18 18.4
		Formosa.		
1972 Feb.	12	Up	iP	07 55 14.1
		Ki	iP	07 54 27.8
			ipP	07 54 40.0
		Um	iP	07 54 49.3
			ipP	07 55 01.2
		Ud	iP	07 55 20.2
			ipP	07 55 31.8
		Kurile Islands.		
		h = 45 km (Ki,Um,Ud).		
"	12	Ki	eSg1	08 58 53
		Sk	ePg1	08 57 06
			eSg1	08 57 39
		Um	iSg1	08 58 43.8
		Ud	eSg1	08 59 01
		Norwegian Sea.		
"	12	Ki	iPn	09 55 58.8
			iSn	09 56 48.0
		Um	iSg1	09 58 31.7
		Northwest Russia-Norway		
		border region,		
		69.5°N, 31.2°E.		
		Origin time = 09 54 54.		
		Explosion.		
"	12	Ki	iSn	09 57 45.9
			i(S*)	09 58 00.4
		Um	iSg1	09 59 29.8
		Probably northwest Russia.		
		Explosion.		
"	12	Ki	ePn	10 58 35
			iSn	10 59 20.3
			iS*	10 59 33.8
		Sk	eSg1	11 02 01
		Um	iSn	11 00 01.2
			iSg1	11 00 32.6
		Northwest Russia-Finland		
		border region,		
		67.7°N, 30.2°E.		
		Origin time = 10 57 35.		
		Explosion.		
"	12	Sk	iPKP	11 26 18.8
		Um	iPKP	11 26 07.7
		South of Australia (h = N).		
"	12	Up	iP	12 02 43.3
			ipP	12 02 56.2
		Ki	eP	12 02 05
		Um	iP	12 02 21.7
			ipP	12 02 34.4
		Ud	iP	12 02 50.7
			ipP	12 03 03.6
		Japan.		
		h = 50 km (Up,Um,Ud).		

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

1972 Feb.	12	Ki	ePKP	12 13 59
		Sk	ePKP	12 14 10
		Um	iPKP	12 14 04.7
		Ud	ePKP	12 14 15
		New Hebrides Islands (h = 55 km).		
"	12	Ki	iSn	13 13 29.9
			iSg1	13 13 53.0
		Um	eSn	13 14 18
			iSg1	13 14 52.2
		Northwest Russia. Explosion.		
"	12	Ki	e(Sn)	13 31 41
		Um	iSg1	13 33 09.2
		Northwest Russia. Explosion.		
"	12	Up	iP	18 02 01.5
		Ki	iP	18 01 08.9
		Sk	eP	18 01 32
		Um	iP	18 01 39.7
		Ud	iP	18 01 57.2
		Canada (h = N).		
"	12	Up	i(PKP)	19 11 10.3
			iPKP	19 11 18.6
		Ki	iPKP	19 11 02.0
		Sk	ePKP	19 11 12
		Um	i(PKP)	19 11 05.7
			iPKP	19 11 10.2
		Ud	i(PKP)	19 11 09.9
			iPKP	19 11 18.5
		De	i(PKP)	19 11 18.9
			iPKP	19 11 27.0
		Tonga Islands (h = 5 km).		
"	12	Up	eP	19 23 37
		Um	eP	19 23 37
"	13	Ki	iP	04 37 52.7
		Ud	iP	04 38 40.4
"	13	Sk	i(P)	04 40 07.1
"	13	Up	iP	06 10 34.6
"	13	Up	i(P)	08 14 14.7
"	13	Ud	ePKP	09 06 06
		De	ePKP	09 06 12
		New Hebrides Islands.		
"	13	Up	iP	10 13 25.0
			iPcP	10 13 58.8
		(cont.)		

1972 Feb.	13	(cont.)		
		Ki	iP	10 14 11.3
		Sk	iP	10 13 53.1
		Um	iP	10 13 46.9
			iPcP	10 14 14.3
		Ud	iP	10 13 29.2
		De	iP	10 13 08.8
		Tanzania (h = N).		
"	13	Up	iP	11 32 58.5
		Sk	eP	11 33 37
		Um	e(pP)	11 33 46
		Ud	iP	11 32 54.9
			ipP	11 33 12.0
		De	eP	11 32 21
		Greece. h = 80 km (Ud).		
"	13	Up	iP	13 12 16.8
		Ki	eP	13 13 24
		Sk	iP	13 12 55.8
		Um	iP	13 12 54.7
		Ud	iP	13 12 23.1
		De	iP	13 11 49.8
		Greece (h = 25 km).		
"	13	Um	iPKP	13 21 06.4
		Ud	ePKP	13 21 11
		De	iPKP	13 21 26.4
		Tonga-Kermadec Islands (h = 70 km).		
"	13	Up	iP	13 32 15.7
		Um	iP	13 31 55.3
		Ud	iP	13 32 22.2
		South of Japan (h = N).		
"	13	Um	iPKP	15 23 48.9
			i	15 24 33.8
		South Sandwich Islands (h = N).		
"	13	Up	iP	18 06 35.6
			ipP	18 06 45.7
		Ki	iP	18 05 43.0
			ipP	18 05 52.6
		Sk	eP	18 06 11
		Um	iP	18 06 10.3
			ipP	18 06 19.5
		Ud	iP	18 06 34.5
		De	iP	18 06 57.0
			ipP	18 07 06.5
		South of Alaska. h = 35 km (Up,Ki,Um,De).		
"	13	Um	iP	20 20 27.4
		Mexico (h = 25 km).		

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

1972						
Feb. 13	Up	iPKP		21 24 44.7		
	Ki	iPKP		21 24 59.4		
				micr	sec	
		PKP	Z'	0.1	1.1	
	Sk	iPKP		21 24 50.1		
	Um	iPKP		21 24 53.0		
	Ud	iPKP		21 24 42.5		
	De	iPKP		21 24 38.4		
	South Sandwich Islands (h = N).					
" 13	Up	iP		21 34 23.4		
		iS		21 43 20		
				micr	sec	
		P	Z'	0.1	1.0	
		Mx	E	2.3	20	
		Mx	N	2.5	20	
		Mx	Z	4.9	20	
	Ki	eP		21 35 00		
				micr	sec	
		Mx	E	1.5	17	
		Mx	Z	2.1	19	
	Sk	iP		21 34 28.4		
	Um	iP		21 34 45.5		
		iS		21 44 10		
	Ud	iP		21 34 15.3		
	De	iP		21 34 00.6		
	Atlantic Ocean (h = N). M = 5.6 (Up,Ki).					
" 13	Up	iP		22 50 09.1		
	Ki	iP		22 49 13.5		
	Sk	eP		22 49 46		
	Um	iP		22 49 42.2		
	Ud	iP		22 50 06.2		
	De	iP		22 50 30.5		
	Alaska (h = 150 km).					
" 14	Up	iP		00 51 37.0		
		i		00 51 43.5		
	Ki	iP		00 51 16.2		
		i		00 51 23.6		
				micr	sec	
		P	Z'	0.1	1.2	
	Sk	eP		00 51 42		
	Um	iP		00 51 21.6		
	Ud	iP		00 51 45.1		
	De	iP		00 51 53.0		
	Luzon (h = 55 km).					
" 14	Um	iPKP		05 14 05.6		
	South of Kermadec Islands.					
" 14	Sk	e(P)		07 21 05.6		
" 14	Ki	i(Sg1)		07 29 42.6		

1972						
Feb. 14	Ud	iP		07 42 42.0		
" 14	Up	eSg1		12 36 59		
	Um	iSg1		12 37 27.5		
	De	eSg1		12 38 21		
	Esthonia. Explosion.					
" 14	Um	i(Sg1)		13 19 21.9		
" 14	Um	iSg1		14 55 37.2		
	Esthonia. Explosion.					
" 14	Ud	i(P)		14 59 34.8		
" 14	De	iP		15 53 43.6		
" 14	Ki	i(P)		17 10 03.8		
" 14	Ud	iP		21 14 33.3		
" 14	Up	iP		23 45 22.4		C
		ipP		23 45 48.6		
		iPKP		23 48 42.5		C
		i		23 48 50.1		
		iPP		23 50 35		
		iSP		00 00 25.7		
				micr	sec	
		PKP	Z'	0.3	1.0	
		Mx	E	39	20	
		Mx	N	120	27	
		Mx	Z	160	24	
	Ki	iP		23 44 52		C
		i		23 45 38.5		
		iPKP		23 48 28.4		
		i		23 48 36.5		
		iPP		23 49 36		
				micr	sec	
		PKP	Z'	0.5	1.1	
		Mx	E	38	22	
		Mx	Z	50	25	
	Sk	eP		23 45 13		
		iPKP		23 48 39.1		
		i		23 48 47.5		
	Um	iP		23 45 06		C
		iPKP		23 48 34.7		
		iPP		23 50 10		
	Ud	iPKP		23 48 44.9		
		i		23 48 52.2		
	De	eP		23 45 30		
		i(PKP)		23 48 36.1		
		iPKP		23 48 42.7		
		i		23 48 51.6		
		i		23 48 59.0		

(cont.)

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

1972
Feb. 14 (cont.)
Santa Cruz Islands
(h = 100 km).
M = 7.1 (Up,Ki).
PKP is followed after in average 8.0 sec by another onset.

" 15	Up	iP	03 08 51.8
	Ki	iP	03 07 57.3
	Um	iP	03 08 24.3
	Ud	iP	03 08 53.3

Aleutian Islands
(h = 40 km).

" 15	Ki	iPKP	04 27 58.3
	Sk	iPKP	04 28 10.8
	Um	iPKP	04 28 05.0
	Ud	iPKP	04 28 13.8
	De	i(PKP)	04 28 11.8
		iPKP	04 28 20.5

Tonga Islands (h = 90 km).

" 15	Um	iPKP	04 29 35.6
	De	ePKP	04 29 51

Santa Cruz Islands
(h = 110 km).

" 15	Up	iP	05 16 16.6
	Ud	iP	05 16 25.1

Japan.

" 15	Ud	iP	08 41 17.1
" 15	Sk	eP	08 47 29
	Ud	iP	08 46 49.4
" 15	Up	iP	09 09 14.2
	Ki	iP	09 09 17.9
	Sk	eP	09 09 01
	Ud	iP	09 09 04.5
	De	iP	09 09 05.1

Colombia (h = 170 km).

" 15	Sk	ePg1	10 11 40
		iRg	10 11 47.0
" 15	Ud	i(Sg1)	10 14 04.3
" 15	Ki	iP	10 19 13.8
" 15	Up	eP	11 32 47
	Ki	iP	11 31 54.4
	Ud	iP	11 32 47.7

Aleutian Islands
(h = 50 km).

1972
Feb. 15

Up	eP	12 36 21
Ud	iP	12 36 15.5
De	eP	12 36 35
" 15 Sk	iP	12 39 37.6
Ud	iP	12 39 05.3
De	iP	12 38 29.8

Greece (h = 10 km).

" 15	Up	iSg1	13 02 34.3
	Um	iSg1	13 03 14.5
	Ud	eSg1	13 03 29
	De	eSg1	13 03 51

Esthonia.
Explosion.

" 15	Ud	i(P)	13 13 05.8
" 15	Um	iP	14 34 18.0
" 15	Ki	iSg1	17 36 51.0
	Sk	iSg1	17 36 55.5
	Um	iSg1	17 37 17.5
	Ud	i(Sg1)	17 38 45.7

Nordland, Norway,
66.5°N, 14.1°E.
Origin time = 17 35 22.
Explosion.

" 15	Um	iP	18 40 16.5
" 15	Up	eP	21 04 48
	Um	iP	21 04 36.9
	Ud	iP	21 04 56.1

Halmahera.

" 15	Up	iP	21 32 20.2
	Ud	iP	21 32 10.7
	De	iP	21 32 07.4

Peru (h = 70 km).

" 15	Up	ePKP	21 49 02
	Um	iPKP	21 48 53.0

Santa Cruz Islands
(h = 100 km).

" 16	Up	iP	00 47 30.1
	Ki	eP	00 48 41
	Sk	iP	00 48 08.3
	Um	iP	00 48 03.0
	Ud	iP	00 47 36.9
		i	00 47 39.8
	De	iP	00 47 01.5
		i	00 47 04.6

Greece (h = N).

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

1972 Feb.	16	Up	iP	03 01 27.0
		Sk	eP	03 02 09
		Ud	iP	03 01 34.0
			i	03 01 37.9
		De	iP	03 01 02.3
		Greece (h = N).		
"	16	Up	iPKP	04 08 41.9
		Ki	e(PKP)	04 08 23
			iPKP	04 08 28.1
		Sk	iPKP	04 08 38.6
		Um	iPKP	04 08 34.4
		Ud	iPKP	04 08 43.9
		De	iPKP	04 08 49.8
		Santa Cruz Islands (h = 100 km).		
"	16	Up	i(P)	04 55 58.3
"	16	Ud	iP	06 36 16.4
		Yugoslavia.		
"	16	Um	i(PKP)	07 27 15.6
		Ud	e(PKP)	07 27 28
		South of Kermadec Islands.		
"	16	Ki	iP	09 12 29.6
				micr sec
			P Z'	0.1 1.0
		Um	iP	09 12 32.5
		Ud	iP	09 12 50.2
		De	iP	09 12 54.7
			i	09 13 14.4
		Celebes (h = 120 km).		
"	16	Up	iSg1	11 20 47.6
		Um	iSg1	11 21 20.5
		Ud	iSg1	11 21 48.3
		De	iSg1	11 22 14.8
		Esthonia, 59.5°N, 25.0°E.		
		Origin time = 11 18 50.		
		Explosion.		
"	16	Sk	iP	12 53 47.2
		Ud	iP	12 53 14.7
		Aegean Sea.		
"	16	Up	i(P)	14 47 48.4
"	16	De	eP	14 58 07
"	16	Up	eP	21 14 58
		Ki	eP	21 14 10
		Um	iP	21 14 36.0
		Ud	iP	21 15 01.6
		Aleutian Islands (h = 50 km).		

1972 Feb.	16	Up	iP	23 27 09.6
			ipP	23 27 17.7
		Ki	iP	23 27 01.7
		Sk	eP	23 27 30
		Um	iP	23 26 56.6
		Ud	iP	23 27 26.2
		De	eP	23 27 29
		Sinkiang. h = 30 km (Up).		
"	17	Up	i	00 25 00.0
		Um	iP	00 24 54.5
			i	00 26 01.0
		Ud	eP	00 24 43
		Jamaica (h = 20 km).		
"	17	Um	iP	00 50 32.2
"	17	Um	iSg1	01 57 00.4
		Esthonia. Explosion.		
"	17	Ki	eP	02 12 56
		Um	iP	02 13 23.0
		Ud	eP	02 13 53
		Aleutian Islands (h = 45 km).		
"	17	Up	iSg1	11 30 58.4
		Ud	iSg1	11 31 01.2
		De	iPg1	11 28 58.5
			iSg1	11 29 15.1
		Baltic Sea, south of Sweden, 55.5°N, 15.1°E.		
		Origin time = 11 28 38.		
		Explosion.		
"	17	Up	iSg1	11 31 19.0
		Ud	iSg1	11 31 22.8
		De	iPg1	11 29 19.0
			iSg1	11 29 36.0
		Baltic Sea, south of Sweden, 55.5°N, 15.1°E.		
		Origin time = 11 28 58.		
		Explosion.		
"	17	Ud	i(Sg1)	13 20 45.2
"	17	Up	eP	14 06 48
		Formosa.		
"	17	Um	iSg1	14 17 20.9
		Esthonia. Explosion.		
"	17	De	i(P)	14 19 53.1

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

1972
Feb. 17 Um iSg1 14 53 48.0
Lake Ladoga.
Explosion.

" 17 De i(P) 15 26 19.8

" 17 Up iSg1 15 39 25.9
Um iSg1 15 41 32.5
Ud iSg1 15 39 16.7
De iSg1 15 37 26.3
Småland-Skåne, Sweden,
56.4°N, 13.9°E.
Origin time = 15 37 20.

" 17 Up iP 16 09 01.9 D
micr sec
P Z' 0.2 0.8
Ki iP 16 08 28.9 D
micr sec
P Z' 0.1 0.9
Sk iP 16 08 58.3 D
Um iP 16 08 43.0 D
Ud iP 16 09 08.7 D
De iP 16 09 21.0 D
South of Japan (h = 380 km).
m = 5.7 (Up,Ki).

" 17 Ud eP 22 12 34
Japan (h = 50 km).

" 18 Up iSg1 11 01 28.4
Sk iSg1 11 03 21.3
Um iSg1 11 02 01.2
Ud eSg1 11 02 29
De iSg1 11 02 54.6
Esthonia, 59.5°N, 25.0°E.
Origin time = 10 59 30.
Explosion.

" 18 Um i(P) 12 17 44.4

" 18 Um iSg1 12 21 26.9
Near Lake Ladoga.
Explosion.

" 18 Up ePKP 13 23 06
Ud iPKP 13 23 08.3
De iPKP 13 23 19.2
Tonga-Kermadec Islands
(h = 490 km).

" 18 Up iP 15 44 30.8
Ud iP 15 44 33.8

" 18 Up iP 18 13 37.8
Um iP 18 13 12.9
(cont.)

1972
Feb. 18 (cont.)
Ud iP 18 13 44.1
ipP 18 13 55.0
Kurile Islands.
h = 40 km (Ud).

" 18 Ud iP 18 56 00.3

" 18 Up eP 21 14 36
Ud iP 21 14 25.8

" 18 Ki eP 22 15 32
Um iP 22 15 45.5
ipP 22 15 57.3
Volcano Islands.
h = 45 km (Um).

" 19 Up iSg1 04 40 24.3
Um iSg1 04 40 45.4
Ud iSg1 04 41 24.3
Esthonia.
Explosion.

" 19 Sk ePKP 08 18 16
Um iPKP 08 18 08.8 C
Ud iPKP 08 18 18.2
Solomon Islands (h = 60 km).

" 19 Up eP 08 19 47
Um iP 08 19 32.2
Ud iP 08 19 51.2
Mindoro (h = 15 km).

" 19 Ud eP 08 59 04

" 19 Um iSg1 12 39 12.3
Ud iSg1 12 39 55.3
Western USSR.
Explosion.

" 19 Up iP 13 30 25.4
Sk eP 13 30 16
Um iP 13 30 00.5
Ud iP 13 30 31.6
De iP 13 30 49.8
Kurile Islands (h = N).

" 19 Um i(Sg1) 13 47 38.6

" 19 Up iP 14 05 43.4
Sk iP 14 05 33.5
Um iP 14 05 17.8
Ud iP 14 05 49.2
De iP 14 06 07.5
Kurile Islands (h = 50 km).

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

1972 Feb. 19	Up	iPKP		14 57 39.4	
		i		14 57 51.6	
				micr	sec
		PKP	Z'	0.1	0.7
	Um	iPKP		14 57 27.6	
		iSKP		15 00 25.2	
	Ud	iPKP		14 57 41.6	
		i		14 57 54.2	
	De	iPKP		14 57 52.1	
	Tonga-Kermadec Islands (h = 490 km).				
" 19	Ud	iP		18 08 20.8	
" 19	Ud	iP		19 54 12.2	
	Costa Rica (h = N).				
" 19	Up	iP		22 51 17.1	
	Um	eP		22 50 52	
	Ud	iP		22 51 22.9	
	De	iP		22 51 41.1	
	Kurile Islands (h = 50 km).				
" 20	Ud	iP		01 29 01.2	
" 20	Up	iP		03 10 45.4	
	Ki	iP		03 10 44.5	
	Sk	iP		03 11 05.7	
	Um	iP		03 10 39.1	
	Ud	iP		03 11 00.5	
	De	iP		03 11 00.5	
	Tibet (h = N).				
" 20	Um	iP		04 42 29.7	
	Ud	iP		04 42 52.9	
	Formosa-Luzon (h = 25 km).				
" 20	Up	iPKP		04 57 22.9	
				micr	sec
		PKP	Z'	0.5	1.0
	Ki	ePKP		04 57 06	
	Sk	iPKP		04 57 17.1	
	Um	iPKP		04 57 11.7	
	Ud	iPKP		04 57 24.5	
	De	iPKP		04 57 35.0	
		i		04 57 40.0	
	Tonga-Kermadec Islands (h = 280 km).				
" 20	Ud	eP		05 17 59	
	Afghanistan-USSR.				
" 20	Up	iP		06 20 37.0	
				micr	sec
		P	Z'	0.1	1.1
	(cont.)				

1972 Feb. 20	(cont.)				
	Up			micr	sec
		Mx	E	1.3	17
		Mx	N	1.1	15
		Mx	Z	2.3	17
	Ki	iP		06 20 08.8	
				micr	sec
		Mx	E	1.8	13
		Mx	N	2.2	16
		Mx	Z	2.7	15
	Sk	iP		06 20 12.9	
	Um	iP		06 20 25.1	
	Ud	iP		06 20 28.8	
	De	iP		06 20 43.5	
	Gulf of California (h = N). M = 5.7 (Up,Ki).				
" 20	Sk	eP		07 48 21	
	Ud	iP		07 48 21.3	
	Trinidad (h = 70 km).				
" 20	Um	iSg1		08 41 55.4	
	Northwest Russia. Explosion.				
" 20	Sk	i(Sg1)		12 41 08.2	
" 20	Up	iSKP		13 50 41.3	
	Ki	iPKP		13 47 15.0	
	Sk	iPKP		13 47 27.0	
	Um	iPKP		13 47 20.8	
	Ud	iPKP		13 47 31.2	
		iSKP		13 50 45.7	
	New Hebrides Islands (h = 140 km).				
" 20	Um	iP		15 30 26.2	
	Okhotsk Sea.				
" 20	Up	iP		21 43 39.3	
	Sk	iP		21 44 18.8	
	Um	iP		21 44 16.3	
	Ud	iP		21 43 46.1	C
	De	eP		21 43 11	
	Greece (h = 55 km).				
" 21	Up	iPKP		02 01 52.8	C
	Ud	iPKP		02 01 55.3	
	De	iPKP		02 02 05.4	
" 21	Up	iPKP		04 13 37.5	
		i		04 13 45.7	
		ipPKP		04 14 02.4	
	Um	iPKP		04 13 33.3	
	Ud	iPKP		04 13 38.8	
		ipPKP		04 14 04.9	
	(cont.)				

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

1972
Feb. 21 (cont.)

De	ePKP	04 13 49	
	ipPKP	04 14 15.5	

Tonga-Kermadec Islands.
h = 90 km (Up,Ud,De).

" 21	Ki	iPKP	06 21 39.3
	Um	iPKP	06 21 46.1

New Hebrides Islands
(h = 25 km).

" 21	Ki	ePKP	06 50 35

Solomon Islands
(h = 90 km).

" 21	Ud	iP	07 12 37.7

Gulf of California (h = N).

" 21	Ud	eP	08 00 02
" 21	Up	iP	09 54 19.9
		ipP	09 54 38.4
	Ki	eP	09 53 55
	Um	iP	09 54 03.6
	Ud	iP	09 54 29.5
		ipP	09 54 48.8
	De	iP	09 54 37.7

Formosa.
h = 70 km (Up,Ud).

" 21	Up	iP	10 15 05.6
	Um	iP	10 14 41.8
	Ud	iP	10 15 12.5

Japan (h = 60 km).

" 21	Up	iP	15 07 05.8
	Ud	iP	15 07 14.8

Japan (h = 40 km).

" 21	Um	eP	15 58 09
	Ud	eP	15 57 44
	De	iP	15 57 00.0
" 21	Up	iP1	19 45 21.4
		iP2	19 45 22.4
		iS	19 53 56
		iP'P'	20 14 11.1
			micr sec
		P2 Z'	0.5 0.9
		Mx E	1.3 17
		Mx N	1.6 18
		Mx Z	2.6 19
	Ki	iP1	19 44 26.2
		iP2	19 44 27.5
		iP3	19 44 40.6
		iP'P'	20 14 34.9

(cont.)

1972
Feb. 21 (cont.)

Ki			micr sec
	P2	Z'	0.8 0.9
	Mx	E	2.2 20
	Mx	N	3.9 20
	Mx	Z	4.7 21
Sk	eP1		19 44 56
	iP2		19 44 57.0
	iP3		19 45 09.6
Um	iP1		19 44 54.4
	iP2		19 44 55.8
	iS		19 53 07
	iP'P'		20 14 22.5
Ud	iP1		19 45 18.8
	iP2		19 45 20.1
	iP3		19 45 33.7
	iP'P'		20 14 11.9
De	iP1		19 45 42.4
	iP2		19 45 43.8
	iP3		19 45 57.0
	i(P'P')		20 14 22.5

Alaska (h = 60 km).
m = 6.7, M = 5.5 (Up,Ki).
Multiple P: P2 - P1 = 1.2 sec, P3 - P1 = 14.4 sec.
P3 could be interpreted as pP for a focal depth of 55 km.

" 21	Um	iP	22 10 50.2
	Ud	iP	22 11 22.0

Kamchatka (h = N).

" 22	Sk	ePKP	00 01 00
	Um	iPKP	00 00 56.4
	Ud	iPKP	00 01 05.1
	De	ePKP	00 01 13

Santa Cruz Islands
(h = 110 km).

" 22	Up	iP	01 22 09.7	C
		isP	01 23 17.7	
		iPP	01 23 40.4	
			micr sec	
		P Z'	0.6 1.1	
	Ki	iP	01 22 18.7	C
		isP	01 23 26.3	
			micr sec	
		P Z'	0.6 1.1	
	Sk	iP	01 22 35.2	C
		isP	01 23 43.4	
	Um	iP	01 22 08.2	C
		isP	01 23 15.9	
	Ud	iP	01 22 27.0	C
		ipP	01 23 13.5	
		isP	01 23 36.3	
		iPP	01 24 07.3	

(cont.)

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

1972
Feb. 22 (cont.)

	De	iP	01 22 22.4	C
		ipP	01 23 10.5	
		isP	01 23 31.5	
		iPP	01 23 59.1	

Hindu Kush.
h = 220 km (Up,Ki,Sk,Um,Ud, De).
m = 6.0 (Up,Ki).

" 22	Um	iP	12 58 51.6	

Banda Sea (h = 320 km).

" 22	Up	iSg1	13 02 34.5	
	Um	iSg1	13 03 08.3	
	Ud	eSg1	13 03 35	
	De	eSg1	13 04 01	

Esthonia, 59.4°N, 25.3°E.
Origin time = 13 00 30.
Explosion.

" 22	Up	iSg1	13 16 24.9	
	Ud	iSg1	13 16 28.4	
	De	iPg1	13 14 24.8	
		iSg1	13 14 40.8	

Baltic Sea, south of Sweden, 55.5°N, 15.0°E.
Origin time = 13 14 05.
Explosion.

" 22	De	i(Sg1)	15 17 33.4	

" 22	Ki	eSn	15 32 46	
		iSg1	15 33 02.3	
	Um	iSn	15 33 15.9	
		iSg1	15 33 30.5	

Nordland, Norway.
Explosion.

" 22	Ud	iP	16 20 34.2	
	De	eP	16 19 56	

Greece (h = 70 km).

" 22	Up	iP	18 55 12.3	D
		i	18 55 20.7	
		ipP	18 55 25.8	
			micr sec	
		P Z'	0.1 1.0	
	Ki	iP	18 55 13.9	D
		ipP	18 55 27.5	
	Um	iP	18 55 09.2	D
		ipP	18 55 23.1	
	Ud	iP	18 55 24.3	D
		ipP	18 55 37.7	
	De	iP	18 55 22.1	D
		ipP	18 55 35.5	

(cont.)

1972
Feb. 22 (cont.)

	De	isP	18 55 40.3	

Andaman Islands.
h = 50 km (Up,Ki,Um,Ud,De).

" 22	Up	iP	20 10 57.8	C
		ipP	20 11 10.6	
			micr sec	
		P Z'	0.1 1.0	
	Ki	iP	20 10 14.7	C
			micr sec	
		P Z'	0.1 0.9	
	Um	iP	20 10 34.0	C
	Ud	iP	20 11 04.8	C
	De	iP	20 11 21.3	

Japan.
h = 50 km (Up).
m = 6.0 (Up,Ki).

" 22	Ud	i(P)	21 37 56.6	

" 22	Ki	iPKP2	22 11 59.8	
	Ud	iPKP2	22 12 07.1	
	De	iPKP2	22 11 58.4	

Balleny Islands (h = N).

" 23	Up	iP	03 18 06.6	
	Um	iP	03 17 41.7	
	Ud	iP	03 18 12.9	C
	De	iP	03 18 30.6	C

Kurile Islands (h = 40 km).

" 23	Up	iP	03 32 32.4	
	Ud	iP	03 32 36.8	
	De	iP	03 32 55.6	

Kurile Islands (h = 40 km).

" 23	Up	iP	03 53 43.2	
	Um	iP	03 53 18.5	
	Ud	iP	03 53 49.3	
	De	iP	03 54 07.2	

Kurile Islands (h = 40 km).

" 23	De	i(P)	07 41 06.6	

" 23	Um	iP	07 42 15.0	
	Ud	iP	07 41 59.8	

Mona Passage (h = 70 km).

" 23	Ud	eP	09 53 08	

Molucca Passage
(h = 90 km).

" 23	Up	iP	10 16 23.5	
	Ki	iP	10 17 29.6	
	Ud	iP	10 16 30.3	
	De	iP	10 16 00.4	

Crete.

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

1972 Feb. 23	Up	eSg1	10 52 03	
	Ki	iSn	10 48 35.9	
	Um	eSn	10 49 21	
		iSg1	10 49 57.8	
	Ud	eSg1	10 52 34	
	De	eSg1	10 54 04	
	Northwest Russia.			
	Explosion.			
" 23	De	eP	13 03 14	
	Afghanistan-USSR			
	(h = 180 km).			
" 23	Ud	iP	14 08 40.9	
	De	iP	14 08 38.0	
	Pamir.			
" 23	Up	e	18 38 34	
	Ki	ePKP	18 38 05	
	Um	iPKP	18 38 12.6	
	Ud	iPKP	18 38 20.4	
	De	i(PKP)	18 38 17.5	
		iPKP	18 38 28.9	
		i	18 38 51.5	
	Tonga Islands (h = 50 km).			
" 24	Up	iP	01 53 35.1	
		iP'P'	02 22 41.2	
			micr sec	
		P Z'	0.2 1.0	
	Ki	iP	01 52 41.1	C
			micr sec	
		P Z'	0.2 1.0	
	Um	iP	01 53 08.5	
	Ud	iP	01 53 32.5	
	De	iP	01 53 56.4	
		ipP	01 54 13.4	
	Alaska.			
	h = 60 km (De).			
	m = 6.2 (Up,Ki).			
" 24	Up	iP	10 24 58.0	
	Um	iP	10 24 32.1	
	Ud	iP	10 25 03.9	
" 24	Up	iP	10 30 22.2	
		ipP	10 30 33.2	
	Ki	iP	10 29 32.4	
	Um	iP	10 29 55.0	
	Ud	iP	10 30 26.7	
	De	iP	10 30 46.9	
	Kurile Islands.			
	h = 40 km (Up).			
" 24	Ud	eP	11 39 15	
	Mindoro (h = 60 km).			
1972 Feb. 24	Ud	eP	11 44 14	
		i	11 44 25.9	
	Luzon (h = 35 km).			
" 24	Up	i(P)	12 45 42.8	
" 24	Up	eP	16 04 35	
	Um	iP	16 04 13.5	
	Ud	iP	16 04 43.0	
	Japan (h = 60 km).			
" 24	Ud	eP	16 09 17	
" 24	Up	iSn	18 44 34.2	
		iSg1	18 45 13.9	
	Ki	iSn	18 43 45.2	
	Um	iPn	18 42 46.6	
		iSn	18 43 56.5	
		i	18 44 14.3	
	Ud	iPn	18 42 52.1	
		iSn	18 44 08.0	
	De	eSg1	18 46 15	
	Norwegian Sea,			
	66.2°N, 6.4°E.			
	Origin time = 18 41 11.			
" 25	Up	iPKP	01 36 10.1	
		i	01 36 26.4	
		iPP	01 38 01.1	
			micr sec	
		PKP Z'	0.1 0.8	
		PP Z'	0.3 1.7	
		Mx E	2.5 19	
		Mx N	3.4 19	
		Mx Z	4.9 21	
	Ki	iPKP	01 36 25.4	C
			micr sec	
		PKP Z'	0.1 1.1	
		Mx E	3.3 18	
		Mx N	4.7 18	
	Um	iPKP	01 36 16.0	
		i	01 36 19.7	
	Ud	iPKP	01 36 08.3	
		i	01 36 09.8	
		iPP	01 37 50.0	
	De	iPKP	01 36 03.8	
		i	01 36 04.9	
		iPP	01 37 32.8	
	South Sandwich Islands			
	(h = N).			
	M = 6.2 (Up,Ki).			
" 25	Up	iPKP	03 11 47.3	
	Um	iPKP	03 11 52.9	
	Ud	iPKP	03 11 46.4	
	South Sandwich Islands			
	(h = N).			

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

1972					
Feb. 25	Up	iRg		08 22 42.1	
	Ud	iSg1		08 22 51.1	
		iRg		08 22 56.9	
" 25	Up	iPKP		09 02 50.7	
		iSKP		09 05 51.0	
				micr	sec
		PKP	Z'	0.1	0.7
	Ki	iSKP		09 05 34.7	
	Um	iPKP		09 02 38.4	
		iSKP		09 05 40.3	
	Ud	iPKP		09 02 52.6	
		iSKP		09 05 52.5	
	De	iPKP		09 03 03.7	
	Tonga-Kermadec Islands (h = 450 km).				
" 25	Up	i(Sn)		10 59 15.0	
		iSg1		10 59 28.0	
	Um	iSg1		11 00 01.3	
	Ud	eSg1		11 00 29	
	De	eSg1		11 00 55	
	Esthonia, 59.5°N, 25.0°E. Origin time = 10 57 30. Explosion.				
" 25	Ud	i(Sg1)		13 15 22.3	
" 25	Um	iSg1		13 49 48.6	
	Esthonia. Explosion.				
" 25	Ud	iP		20 29 19.1	
	De	iP		20 29 17.6	
	Windward Islands (h = 140 km).				
" 26	Um	iP		02 19 54.9	
	Ud	eP		02 20 16	
	Pamir.				
" 26	Up	iP		02 23 42.3	
				micr	sec
		Mx	N	1.4	19
		Mx	Z	1.5	19
	Ki	eP		02 22 44	
	Um	iP		02 23 12.9	
	Ud	iP		02 23 46.5	
	Kurile Islands (h = N).				
" 26	Up	iP		04 51 15.1	
	Um	iP		04 50 50.0	
	Ud	iP		04 51 21.5	
	Kurile Islands.				
" 26	Up	iP		06 09 15.7	
	(cont.)				

1972					
Feb. 26	(cont.)				
	Ki	iP		06 08 27.9	
	Um	iP		06 08 50.1	
	Ud	iP		06 09 21.3	
	De	iP		06 09 39.7	
	Kurile Islands (h = N).				
" 26	Up	i(Rg)		12 16 52.2	
	Ud	i(Rg)		12 16 38.7	
" 26	Up	iPKP		14 13 17.9	
	Ud	iPKP		14 13 20.0	
	De	iPKP		14 13 29.8	
" 26	Um	eP		15 12 44	
" 26	Ki	iP		15 31 15.1	
	Um	iP		15 31 18.9	
	Ud	iP		15 31 41.2	
	Molucca Passage (h = 70 km).				
" 26	Up	iP		15 38 07.7	
	Um	iP		15 38 05.4	
	Mexico-Guatemala (h = N).				
" 26	Ki	iSg1		16 05 51.3	
	Um	iSg1		16 06 19.0	
	Ud	iSg1		16 07 43.4	
	Nordland, Norway. Explosion.				
" 26	Up	iP		19 06 42.9	
	Ki	iP		19 06 30.1	
	Um	iP		19 06 32.1	
	Ud	iP		19 06 55.2	
	China (h = N).				
" 26	Up	iP		23 39 11.3	
		i		23 39 14.1	
		iPP		23 40 58.8	
				micr	sec
		P	Z'	0.3	1.0
		Mx	E	2.1	14
		Mx	N	2.3	13
		Mx	Z	5.7	14
	Ki	iP		23 38 41.2	
		i		23 38 43.7	
				micr	sec
		P	Z'	0.4	1.0
		Mx	E	3.0	16
		Mx	N	3.8	12
		Mx	Z	2.0	12
	Um	iP		23 38 49.4	
		i		23 38 53.0	
	Ud	iP		23 39 25.0 D	
		i		23 39 27.4	
	(cont.)				

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

1972
Feb. 26 (cont.)

De	iP		23 39 37.7
	i		23 39 40.2

USSR-Mongolia (h = N).
m = 6.0, M = 5.5 (Up,Ki).
Double P, in average 2.8 sec apart.

" 27

Ki	iSn		03 25 16.3
	iSg1		03 25 38.5
Um	iSn		03 25 54.8
	iSg1		03 26 28.3
Ud	eSg1		03 29 05

Northwest Russia.
Explosion.

" 27

Um	iP		04 57 37.1
Ud	iP		04 57 59.9

" 27

Um	iP		07 21 12.3

Haiti (h = 15 km).

" 27

Up	iP1		10 08 57.3	
			micr	sec
	P1	Z'	0.1	1.4
Ki	iP1		10 07 30.8	
	iP2		10 07 38.1	
			micr	sec
	P2	Z'	0.1	1.4
	Mx	E	0.9	13
	Mx	N	0.7	10
	Mx	Z	0.6	9
Um	iP1		10 08 12.8	
	iP2		10 08 18.9	
Ud	iP1		10 08 56.3	
	iP2		10 09 05.2	
De	iP1		10 09 26.8	

Arctic Ocean (h = N).
m = 5.2 (Up,Ki).
Double P, in average 7.5 sec apart.

" 27

Up	iP		11 19 37.3
Um	eP		11 19 47
Ud	iP		11 19 48.2

Indian Ocean (h = N).

" 27

Up	eP3		12 20 27
	iP4		12 20 31.8
Ki	eP3		12 21 26
	iP4		12 21 29.9
Um	iP1		12 20 47.3
	iP3		12 20 59.5
	iP4		12 21 04.6
Ud	iP1		12 20 04.7
	iP2		12 20 12.4

(cont.)

1972
Feb. 27 (cont.)

Ud	iP3		12 20 16.5
	iP4		12 20 21.5
De	eP3		12 19 54
	iP4		12 19 58.9

West of Gibraltar (h = N).
P1, P2, P3 and P4 denote multiple P-phases.

" 27

Um	iP		13 44 45.3
Ud	iP		13 44 28.6

" 27

Ki	iP		13 58 26.5
Um	iP		13 58 57.3
Ud	iP		13 59 22.0

Alaska (h = 50 km).

" 27

Um	eP		15 51 27

" 27

Up	iP		22 22 26.9
Um	iP		22 22 04.1
Ud	iP		22 22 41.0

Siberia.

" 27

Ud	eP		23 44 08

" 28

Up	iP		02 09 17.5
Um	iP		02 09 50.1
Ud	iP		02 09 31.0

Turkey (h = 5 km).

" 28

Um	iPKP		02 54 07.8
Ud	iPKP		02 54 28.3

South of Kermadec Islands.
Deep.

" 28

Ud	iP		05 26 55.5

Hindu Kush.

" 28

Ud	iP		06 17 55.7

Ionian Islands.

" 28

Up	i(PKP2)		06 35 28.2
Ki	iPKP		06 34 57.8
Um	iPKP		06 35 06.9
Ud	i(PKP2)		06 35 35.3

New Zealand (h = 210 km).

" 28

Ud	iP		10 19 37.6
De	iP		10 19 05.9

Greece.

" 28

Up	iP		10 57 49.6	
	ipP		10 57 53.1	
			micr	sec
	pP	Z'	0.1	1.0

(cont.)

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

1972
Feb. 28 (cont.)

Up			micr	sec
	Mx	E	0.9	16
	Mx	N	1.0	12
	Mx	Z	1.3	11
Ki	eP		10 58 54	
	i		10 59 01.6	
			micr	sec
	Mx	E	1.7	13
	Mx	N	0.5	13
Um	eP		10 58 23	
	ipP		10 58 27.4	
	i		10 58 42.3	
Ud	iP		10 57 58.0	
	ipP		10 58 01.7	
De	iP		10 57 23.6	
	ipP		10 57 25.8	
	i		10 57 38.5	

Greece.
h = 15 km (Up,Um,Ud,De).
M = 4.8 (Up,Ki).

" 28	Ki	ePKP	12 26 33	
		i	12 26 37.2	
	Um	ePKP	12 26 40	
		i	12 26 43.6	

New Zealand.

" 28	Um	iSg1	12 56 35.3	

Western USSR.
Explosion.

" 28	Ki	iP	15 45 37.3	
	Ud	iP	15 43 59.6	
	De	iP	15 43 08.1	
		iS	15 44 27.1	

Germany (h = 10 km).

" 28	Ud	iP	16 31 16.8	
" 28	Up	eP	16 52 08	
	Ud	iP	16 52 22.9	

Iran (h = 55 km).

" 28	Up	iP	17 23 46.8	
	Ki	iP	17 22 47.2	
" 28	Ud	iP	17 30 07.2	
" 28	Up	iP	17 42 16.8	
	Ki	iP	17 41 37.2	
	Um	iP	17 41 54.1	D
	Ud	iP	17 42 25.2	
	De	eP	17 42 41	

Sikhota Alin (h = 460 km).

" 28	Ud	iP	18 15 58.8	

1972
Feb. 28

Up	eP		18 20 07	
Um	eP		18 20 10	
Ud	iP		18 20 23.6	

Afghanistan.

" 28	Up	iP	18 52 06.4	
	Ki	eP	18 52 46	
	Um	eP	18 52 21	
	Ud	iP	18 52 22.0	
		i	18 52 30.8	
	De	eP	18 52 05	

Iran (h = 25 km).

" 28	Ud	iP	19 07 16.2	
" 28	Ud	iP	19 09 30.8	
" 28	Up	iP	19 14 18.4	
	Ki	iP	19 14 58.2	
	Um	eP	19 14 32	
	Ud	iP	19 14 33.4	D
	De	iP	19 14 16.3	

Iran.

" 28	Up	iP	19 39 14.4	
	Ud	iP	19 39 29.3	
" 28	Up	eSg1	20 28 25	
	Ki	ePg1	20 25 40	
		iSg1	20 26 17.8	
	Um	iSn	20 26 32.1	
		iSg1	20 26 46.0	
	Ud	iSg1	20 28 11.2	

Nordland, Norway,
66.5°N, 14.0°E.
Origin time = 20 24 48.
Explosion?

" 28	De	i(P)	22 41 06.1	
" 28	Up	iP	23 08 37.0	
	Ud	iP	23 08 52.3	
" 28	Ud	iP	23 13 54.3	
" 28	Up	iP	23 37 39.3	
	Ud	iP	23 37 54.4	
" 28	Ud	iP	23 46 37.5	
" 29	Um	iP	00 51 59.2	
" 29	Up	ePKP	01 10 59	
	Ud	iPKP	01 11 01.6	
	De	iPKP	01 11 12.4	

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

1972
Feb. 29 Up iP1 09 34 41.5 C
iP2 09 34 43.5
iP3 09 34 52.2
iPP 09 37 41.7
iS 09 44 18
micr sec
P1 Z' 0.2 1.0
P2 Z' 1.2 0.7
P3 Z' 2.1 0.7
Mx E 250 25
Mx N 190 21
Mx Z 240 21
Ki iP1 09 34 04.7 C
iP2 09 34 06.7
iP3 09 34 14.7
iS 09 43 03
iP'P' 10 02 05.0
micr sec
P1 Z' 0.1 1.0
P2 Z' 0.9 1.1
P3 Z' 2.0 0.7
Mx E 380 20
Mx N 310 20
Mx Z 160 17
Um iP1 09 34 20.6 C
iS 09 43 35
Ud iP1 09 34 48.5 C
iP2 09 34 50.6
iP3 09 34 59.5
iS 09 44 35.8
De iP1 09 35 03.6 C
iP2 09 35 05.6
iP3 09 35 14.3
iPP 09 38 15.8
iS 09 45 03.0
Japan (h = 55 km).
m = 6.1 (P1), 7.0 (P2),
7.4 (P3), M = 7.7 (Up,Ki).
Multiple P-phases:
P2 - P1 = 2.0 sec,
P3 - P1 = 10.6 sec.

" 29 Up iP 09 54 22.5 C
iPP 09 57 11.9
micr sec
P Z' 0.4 1.0
Ki iP 09 53 45.7
iPP 09 56 22.3
micr sec
P Z' 0.3 1.0
Sk eP 09 54 20
ePP 09 57 06
Um iP 09 54 02.0 C
Ud iP 09 54 30.0 C
De iP 09 54 45.2 C
iPP 09 57 46.1
Japan (h = 60 km).
m = 6.5 (Up,Ki).

1972
Feb. 29 Up iP 10 01 47.0
Ki eP 10 01 10
Um eP 10 01 23
Ud iP 10 01 53.1
Japan.
Origin time = 09 50 04.

" 29 Up iP 10 01 30.9

" 29 Up iP 11 19 39.4
Ki iP 11 19 02.7
Sk eP 11 19 36
Um iP 11 19 18.7
i 11 19 22.1
Ud iP 11 19 46.9
De iP 11 20 01.0
Japan (h = 50 km).

" 29 Ud iP 11 30 17.6

" 29 Ki iS 11 34 44.3
Norwegian Sea.

" 29 Um iP 11 38 51.4
Ud iP 11 39 22.7
Japan (h = 50 km).

" 29 Um iSg1 12 03 35.5
Ud eSg1 12 04 17
Western USSR.
Explosion.

" 29 Up iP 12 13 06.9
Ki eP 12 12 31
Sk eP 12 13 05
Um iP 12 12 46.1
Ud iP 12 13 14.2
De eP 12 13 30
Japan (h = 55 km).

" 29 Ki iP 12 32 21.0
Um iP 12 32 33.8
Japan (h = 70 km).

" 29 Up iP 13 00 04.3
Ki iP 12 59 27.5
Sk eP 13 00 01
Um iP 12 59 43.4
Ud iP 13 00 11.7
Japan (h = 70 km).

" 29 Up iP 13 04 13.1
Um iP 13 03 51.8
ipP 13 04 04.7
Japan.
h = 50 km (Um).

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

1972 Feb.	29	Um	iP	13 07 56.9 C
		Ud	eP	13 08 27
		Japan (h = 60 km).		
"	29	Up	iP	13 12 55.5
		Ki	iP	13 12 35.4
		Um	iP	13 12 41.9
		Ud	iP	13 13 04.7
		De	iP	13 13 11.5
		Luzon (h = 35 km).		
"	29	Um	iP	13 43 00.6
		Ud	eP	13 43 33
		Japan (h = 60 km).		
"	29	Ud	i(P)	15 42 14.8
"	29	Um	iP	16 33 02.8
		Japan (h = 50 km).		
"	29	Up	eP	16 59 26
		Um	iP	16 59 07.0
		Ud	eP	16 59 34
		Japan (h = 50 km).		
"	29	Up	eSg1	19 25 11
		Ki	iPn	19 20 18.8
			i(Pg1)	19 20 27.1
			iSn	19 21 04.8
			iS*	19 21 17.8
		Sk	eSg1	19 24 10
		Um	iSn	19 22 15.4
			iSg1	19 22 53.4
		Ud	eSg1	19 25 21
		Northwest Russia-Norway border region, 69.5°N, 29.7°E. Origin time = 19 19 18. Explosion.		
"	29	Ki	eP	19 55 44
		Um	iP	19 55 34.2
		Hindu Kush. Intermediate depth.		
"	29	Ki	i(P)	20 14 15.6
"	29	Up	eP	20 58 31
			i	20 58 44.5
		Sk	eP	20 59 14
		Um	iP	20 59 16.1
		Ud	iP	20 58 35.3
		De	e(P)	20 57 58
		Adriatic Sea (h = N).		

1972 Feb.	29	Um	iP	21 08 03.1
		Ud	eP	21 08 34
		Japan (h = 55 km).		
"	29	Um	iP	21 11 34.6
		Japan (h = 70 km).		
"	29	Up	eP	21 16 29
		Ud	iP	21 16 19.4
"	29	Up	eP	21 36 29
		Sk	iP	21 37 09
		Um	iP	21 37 10.5
		Italy.		
"	29	Up	iP	23 54 02.6

Markus Båth
Ota Kulhánek
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May 4, 1974

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BOX 517
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BOX 517
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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

M A R C H 1 - 31, 1972

1972					
Mar.	1	Um	iP		03 36 38.9
		Japan (h = 50 km).			
"	1	Up	iP		04 03 27.9
		Ki	iP		04 03 37.8
		Sk	iP		04 03 16.9
		Ud	iP		04 03 17.7
		Windward Islands			
		(h = 100 km).			
"	1	Um	i(Sgl)		06 04 32.3
"	1	Up	i(PKP)		09 23 54.7
		Ki	i(PKP)		09 23 41.1
			iPKP		09 23 49.8
		Sk	e(PKP)		09 23 50
		Um	iPKP		09 23 54.0
		Ud	i(PKP)		09 23 54.9
		De	iPKP		09 24 06.3
		Tonga Islands (h = N).			
"	1	Up	iP		09 37 18.8
		Ki	iP		09 36 42.1
			ipP		09 36 55.2
		Sk	iP		09 37 14.4
		Um	iP		09 36 58.2
		Ud	iP		09 37 26.0
		De	eP		09 37 44
		Japan.			
		h = 50 km (Ki).			
"	1	Up	iP		09 40 38.8
				micr	sec
			P	Z' 0.2	1.2
			Mx	E 3.1	18
			Mx	N 4.8	16
			Mx	Z 5.3	18
		Ki	iP		09 39 59.5
		(cont.)			

1972					
Mar.	1	(cont.)			
		Ki			micr sec
			P	Z'	0.1 1.0
			Mx	E	3.2 16
			Mx	N	4.2 19
			Mx	Z	3.8 18
		Sk	eP		09 40 12
		Um	iP		09 40 21.6
		Ud	iP		09 40 31.9
			ipP		09 40 38.7
		De	iP		09 40 50.7
			ipP		09 40 57.1
		California.			
		h = 25 km (Ud,De).			
		m = 6.0, M = 5.9 (Up,Ki).			
"	1	Ud	iP		10 04 54.9
		Caucasus.			
"	1	Um	eP		10 17 12
		Japan (h = 45 km).			
"	1	Up	i(Sn)		12 47 56.6
		Sk	iSgl		12 50 10.5
		Um	eS*		12 48 41
			iSgl		12 48 46.2
		Ud	iSgl		12 49 25.6
		De	iSgl		12 49 50.2
		Western USSR.			
		Explosion.			
"	1	Up	iP		13 20 56.9
		Ki	iP		13 20 23.3
		Sk	eP		13 20 53
		Um	iP		13 20 36.1
		Ud	iP		13 21 06.6
		Japan (h = 60 km).			
"	1	De	iP		13 51 46.0

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

1972 Mar.	1	Ud	i(P)	14 09 54.5
"	1	De	iP	14 21 33.4
"	1	Um	i(P)	15 13 11.8
"	1	Um	iP	19 38 26.6
		Ud	eP	19 38 32
		Caucasus.		
"	1	Ud	iPKP	20 53 17.3
		De	iPKP	20 53 29.4
"	1	Ki	i(P)	21 39 17.2
"	1	Ki	i(Sgl)	23 19 29.6
		Um	i(Sgl)	23 19 14.0
"	2	Sk	iSgl	01 30 07.8
		Um	e	01 29 46
			iSgl	01 30 08.6
"	2	Um	eP	02 12 14
		Japan (h = 45 km).		
"	2	Up	iP	03 28 45.0
		Ki	iP	03 28 46.0
		Um	iP	03 28 42.6
		Sumatra (h = N).		
"	2	Um	iP	04 17 49.0
		Japan (h = 40 km).		
"	2	Um	eP	05 16 33
"	2	Up	iP	07 04 27.7
		Um	iP	07 04 11.0
		Ud	iP	07 04 35.8
		Bonin Islands (h = 490 km).		
"	2	Up	iP	09 25 44.8
		Ki	eP	09 24 08
		Sk	eP	09 24 40
		Um	iP	09 24 24.1
		Ud	iP	09 24 52.0
		De	e(pP)	09 25 20
		Japan (h = 45 km).		
"	2	Ki	ePKP	09 49 07
		Um	iPKP	09 49 14.2
		Ud	ePKP	09 49 24
		New Hebrides Islands (h = 35 km).		
"	2	Up	iP	10 06 29.6
		Um	iP	10 06 16.4
		(cont.)		

1972 Mar.	2	(cont.)		
		Ud	iP	10 06 39.7
		Formosa-Luzon (h = N).		
"	2	Up	iP	10 11 01.2
		Um	iP	10 10 39.6
		Ud	iP	10 11 06.8
			ipP	10 11 20.5
		Japan.		
		h = 50 km (Ud).		
"	2	Ki	iPKP	10 27 38.7
		Fiji Islands (h = 60 km).		
"	2	Up	iP	10 57 01.4
		Ki	iP	10 57 02.0
				micr sec
			P Z'	0.1 1.2
		Sk	iP	10 56 48.3 D
			i	10 56 51.7
		Um	iP	10 57 04.0
			i	10 57 07.7
		Ud	iP	10 56 51.8
			i	10 56 54.6
			i	10 57 00.1
		De	iP	10 56 54.8
			i	10 56 57.8
			i	10 57 03.0
		Colombia (h = N).		
		Multiple P, in average 3.2 and 8.3 sec after the first onset.		
"	2	Up	eP	11 21 17
		Um	iP	11 20 58.1
		Ud	eP	11 21 26
		Japan (h = 60 km).		
"	2	Um	iP	12 22 37.2
		Ud	iP	12 22 59.4
		Formosa-Luzon (h = 35 km).		
"	2	Up	iS	12 54 34.5
		Ki	iP	12 50 36.8
		Sk	iP	12 51 05.3
			iS	12 52 47.9
		Um	iP	12 51 22.3
			eS	12 53 15
		Ud	iP	12 51 56.5
			i	12 54 37.8
		De	e(P)	12 52 57
		Norwegian Sea (h = N).		
"	2	Up	eP	14 16 58
		Um	e(PP)	14 17 38
		Ud	iP	14 17 03.2
		Caucasus.		

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

1972 Mar.	2	Ud	iP	14 18 12.2
"	2	Um	iP	14 58 09.2
		Ud	eP	14 58 38
		Japan (h = 70 km).		
"	2	Ud	iP	15 27 40.6
"	2	Ki	iSgl	16 19 03.6
		Sk	eSgl	16 19 10
		Um	iSn	16 19 18.1
			iSgl	16 19 31.3
		Nordland, Norway, 66.5°N, 14.1°E. Origin time = 16 17 35. Explosion.		
"	2	Up	iPKP	17 15 45.4
		Ud	iPKP	17 15 46.1
		De	iPKP	17 15 57.6
"	2	Um	i(P)	19 17 20.1
		Aleutian Islands (h = 55 km).		
"	2	Um	iP	20 07 24.6
"	2	Up	iP	20 21 49.8 C
			ipP	20 22 05.6
			iPP	20 24 36.7
				micr sec
			P Z'	0.2 0.9
		Ki	iP	20 21 12.9 C
			ipP	20 21 28.8
			iPP	20 23 49.2
				micr sec
			P Z'	0.2 1.0
		Sk	iP	20 21 44.9 C
			ipP	20 22 00.4
			iPP	20 24 28.8
		Um	iP	20 21 29.2 C
			ipP	20 21 44.6
		Ud	iP	20 21 56.8 C
			ipP	20 22 12.8
		De	iP	20 22 10.6 C
		Japan. h = 60 km (Up,Ki,Sk,Um,Ud). m = 6.2 (Up,Ki).		
"	2	Um	iP	21 24 06.6
		Japan (h = 70 km).		
"	2	Ki	iP	21 40 13.8
"	3	Um	iP	00 53 14.5
"	3	Up	iP	02 23 51.1
		(cont.)		

1972 Mar.	3	(cont.)		
		Ki	iP	02 23 03.8
		Sk	eP	02 23 41
		Um	iP	02 23 25.5
		Ud	iP	02 23 56.8
		De	eP	02 24 17
		Kurile Islands (h = 140 km).		
"	3	Um	iP	07 40 27.2
		Gulf of Aden.		
"	3	Up	iP	11 53 56.9
		Um	iP	11 53 35.6
		Ud	iP	11 54 03.2
		Japan (h = 60 km).		
"	3	Um	e(S*)	12 35 20
			iSgl	12 35 31.0
		Western USSR. Explosion.		
"	3	Um	iP	14 31 03.6
		Japan (h = 60 km).		
"	3	De	i(P)	14 43 33.1
"	3	De	iP	15 10 52.8
"	3	De	eP	15 17 48
"	3	Um	iP	15 17 52.1
		Ud	eP	15 18 20
		Japan (h = 60 km).		
"	3	Ud	iPgl	15 20 52.8
			iRg	15 21 06.0
"	3	Um	iP	16 22 09.5
"	3	Um	iP	16 23 58.6
		Ud	iP	16 24 26.6
		Japan (h = 55 km).		
"	3	Um	eP	20 10 55
"	3	Ud	iP	20 56 27.7
"	3	Um	iP	21 20 11.7
"	3	Up	ePP	21 30 48
		Ki	iPP	21 32 33.5
		Sk	eP	21 31 18
		Um	iP	21 31 17.6
		Ud	eP	21 30 41
			iPP	21 31 00.7
		De	eP	21 29 48
		Yugoslavia (h = 30 km).		

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

1972					
Mar.	3	Up	eP		21 36 34
"	3	Um	eP		22 56 21
		Ud	iP		22 56 52.5
"	4	Sk	eP		01 15 22
		Ud	eP		01 14 50
		De	eP		01 14 17
		Greece (h = 60 km).			
"	4	Ud	iP		03 09 34.4
"	4	Up	iPKP		03 16 44.4
			i		03 16 52.5
			iPP		03 19 53.9
					micr sec
			PP	Z'	0.3 1.5
		Ki	i(PKP)		03 16 24.5
			iPKP		03 16 37.1
			iSKP		03 19 09.2
		Sk	iPKP		03 16 37.6
			i		03 16 48.1
			iSKP		03 19 26.9
		Um	i(PKP)		03 16 31.3
			iPKP		03 16 38.7
			i		03 16 44.6
			iSKP		03 19 20.6
		Ud	iPKP		03 16 45.9
			iSKP		03 19 33.5
			iPP		03 19 54.0
			iSKKP		03 28 04.1
		De	iPKP		03 16 58.0
			iSKP		03 19 42.0
		Fiji Islands (h = 570 km).			
"	4	Ki	iP		04 07 57.5
		China.			
"	4	Ki	iPKP		04 37 36.8
			i		04 37 40.8
					micr sec
			PKP	Z'	0.1 1.1
		Sk	ePKP		04 37 52
		Um	iPKP		04 37 43.4
			i		04 37 47.0
		Ud	iPKP		04 37 53.3
			iSKP		04 41 13.7
		De	iPKP		04 38 00.2
		New Hebrides Islands (h = 30 km).			
"	4	Um	iP		04 53 16.7
"	4	Ki	eP		06 07 53
		Sk	eP		06 07 52
		Um	iP		06 08 02.7
		(cont.)			

1972					
Mar.	4	(cont.)			
		Um	i		06 08 09.9
		Mexico (h = 60 km).			
"	4	Up	iP		08 30 19.7
		Ud	iP		08 30 31.0
		Sinkiang (h = N).			
"	4	Ki	iPn		10 32 42.3
			iSn		10 33 31.5
			iSgl		10 33 47.1
		Um	iSgl		10 35 11.9
		Northwest Russia-Norway border region.			
		Origin time = 10 31 37.			
		Explosion.			
"	4	Sk	e(Pgl)		12 01 20
		Um	iSgl		12 01 37.4
		Western USSR.			
		Explosion.			
"	4	Sk	iP		12 24 17.8
"	4	Up	iP		13 48 39.4
		Ki	iP		13 48 42.3
					micr sec
			P	Z'	0.2 1.5
		Sk	iP		13 48 27.1
		Um	iP		13 48 43.3
		Ud	iP		13 48 29.4
		De	iP		13 48 30.4
		Colombia (h = 150 km).			
"	4	Um	iP		14 47 03.0
		Ud	eP		14 46 24
		Greece.			
"	4	Up	iP		18 31 43.5 D
		Ki	iP		18 31 47.1 D
					micr sec
			P	Z'	0.1 0.6
		Sk	iP		18 32 07.2 D
		Um	iP		18 31 39.3 D
		Ud	iP		18 32 00.3 D
		De	iP		18 31 59.4 D
		Tadzhik-Sinkiang (h = 130 km).			
"	4	Up	iP		19 15 48.7
			i		19 15 56.7
			iS		19 18 50.2
					micr sec
			P	Z'	0.1 1.0
			i	Z'	0.2 1.1
			Mx	E	2.7 18
			Mx	N	3.4 14
			Mx	Z	5.6 19
		(cont.)			

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

1972
Mar. 4 (cont.)

Ki	iP		19 14 37.3	C	
			micr	sec	
	P	Z'	0.4	1.0	
	Mx	E	5.1	14	
	Mx	N	5.9	14	
	Mx	Z	7.0	16	
Sk	iP		19 14 48.0	D	
	iS		19 16 38.1		
Um	iP		19 15 13.6	C	
Ud	iP		19 15 33.8	D	
	i		19 15 45.9		
De	iP		19 16 20.1		

Jan Mayen (h = N).
m = 5.4, M = 4.8 (Up,Ki).

" 4	Um	iP	19 35 15.1
	Ud	iP	19 35 35.8

Hindu Kush (h = 230 km).

" 4	Um	iP	22 17 01.6

Central America (h = 60 km).

" 4	Ki	i(PcP)	23 46 16.4

Aleutian Islands (h = 55 km).

" 5	Um	iP	01 49 43.5

Japan (h = 60 km).

" 5	Up	iP	03 14 40.9
	Ki	iP	03 13 47.3
		iPcP	03 14 29.8
	Sk	eP	03 14 19
	Um	iP	03 14 14.1
	Ud	iP	03 14 39.5
	De	iP	03 15 03.2

Aleutian Islands (h = N).

" 5	Ki	eP	06 15 22
	Um	iP	06 15 01.3

Arabian Sea (h = N).

" 5	Um	eP	07 17 33
" 5	Um	iP	09 46 27.0

Caucasus.

" 5	Up	eSgl	09 58 11
	Ki	iPn	09 54 00.5
		iSn	09 54 59.5
		iSgl	09 55 22.2
	Sk	iSgl	09 57 48.5
	Um	iSn	09 55 41.0
		iSgl	09 56 13.5
	Ud	eSgl	09 58 50

Northwest Russia,
(cont.)

1972
Mar. 5 (cont.)
67.7°N, 34.1°E.
Origin time = 09 52 42.
Explosion.

" 5	Up	eP	10 18 33
	Um	iP	10 18 12.5
	Ud	eP	10 18 40

Japan (h = 40 km).

" 5	Ud	iP	10 21 28.3
" 5	Um	iP	10 32 47.4
	Ud	eP	10 33 16

Japan (h = 45 km).

" 5	Um	eP	11 50 11
		ePKP	11 54 24

Banda Sea (h = 100 km).

" 5	Um	i(P)	13 06 00.0

Aleutian Islands (h = 50 km).

" 5	Ud	iP	13 08 20.6
" 5	Sk	iP	15 32 57.5

Zambia (h = N).

" 5	Ki	eP	18 04 32
		ipP	18 04 42.2
	Um	iP	18 04 59.0
		ipP	18 05 09.5
	Ud	iP	18 05 23.5
		ipP	18 05 34.3

Unimak Island.
h = 40 km (Ki,Um,Ud).

" 5	Ki	iP	19 17 25.6

Hindu Kush.
Intermediate depth.

" 5	Um	iP	23 50 28.1
" 6	Ud	iPKP	00 44 50.8
	De	iPKP	00 45 01.0
" 6	Um	iP	09 08 00.4
" 6	Um	iP	09 19 06.1
" 6	Up	i(Sn)	12 59 15.2
		iSgl	12 59 28.5
	Ki	e(Sgl)	13 02 04
	Sk	eSgl	13 01 17
	Um	iSgl	13 00 01.3
	Ud	iSgl	13 00 31.7

(cont.)

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

1972
Mar. 6 (cont.)
De eSgl 13 00 55
Esthonia, 59.5°N, 25.0°E.
Origin time = 12 57 30.
Explosion.

" 6 Um i(Sgl) 13 56 13.8

" 6 Um iP 14 18 30.5
Botswana (h = N).

" 6 Um i(P) 15 06 06.2

" 6 Ki iSgl 16 04 34.3
Sk iSgl 16 05 02.6
Um iPgl 16 03 22.3
iSgl 16 03 37.2
Västerbotten, Sweden,
64.8°N, 20.4°E.
Origin time = 16 03 04.

" 6 Um iP 17 03 45.0
South of Japan (h = 360 km).

" 6 Ki iP 17 06 51.9
Hindu Kush.

" 6 Um i(P) 18 04 53.1

" 6 Ki iPn 18 38 20.6
iSn 18 39 06.6
iS* 18 39 19.3
Sk eSgl 18 42 06
Um eSn 18 40 21
iSgl 18 40 53.7
Ud iSgl 18 43 26.0
Northwest Russia-Norway
border region,
69.5°N, 30.2°E.
Origin time = 18 37 20.
Explosion.

" 6 Up iP 18 59 51.0 D
iPcP 19 00 21.2
ipP 19 01 48.9
micr sec
P Z' 0.6 1.0
Ki iP 18 59 03.7 D
ipP 19 00 58.3
micr sec
P Z' 0.8 1.0
Sk iP 18 59 39.1 D
ipP 19 01 36.1
Um iP 18 59 25.6 D
iPcP 19 00 05.3
ipP 19 01 18.9
Ud iP 18 59 56.9 D
(cont.)

1972
Mar. 6 (cont.)
Ud iPcP 19 00 24.7
ipP 19 01 49.5
Okhotsk Sea.
h = 580 km (Up,Ki,Sk,Um,Ud).
m = 6.0 (Up,Ki).

" 6 Up iP 19 15 25.9
Ki iP 19 15 26.8
ipP 19 15 36.3
i 19 15 47.0
micr sec
P Z' 0.1 1.0
Um iP 19 15 23.4
ipP 19 15 31.9
Ud iP 19 15 35.9
Sumatra.
h = 35 km (Ki,Um).

" 7 Um iP 00 45 08.8
Ud iP 00 45 30.8

" 7 Um iP 03 21 53.1
Ud eP 03 22 21
Japan (h = 60 km).

" 7 Up iPKP 04 58 16.1
Ud iPKP 04 58 18.2

" 7 Um iP 05 25 27.1
Ud iP 05 25 02.0
(Albania).

" 7 Up iX2 06 31 55.7
micr sec
X2 Z' 0.1 1.0
Mx E 2.0 21
Mx N 4.5 21
Ki iP 06 31 21.5
iX1 06 31 27.2
iX2 06 31 33.0
micr sec
X2 Z' 0.1 1.0
Mx E 1.5 20
Mx N 2.0 18
Sk eP 06 31 55
iX2 06 32 06.5
Um eX1 06 31 35
iX2 06 31 41.4
Ud eP 06 31 56
iX2 06 32 07.9
De eX1 06 32 09
Formosa (h = N).
m = 5.9, M = 5.7 (Up,Ki).

" 7 Up iPKP 08 04 37.1
ipPKP 08 05 30.6
(cont.)

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

1972
Mar. 7 (cont.)

Up	iSKP		08 08 03.7	
	iX		08 14 59.3	
			micr	sec
	PKP	Z'	0.7	0.5
	pPKP	Z'	0.7	1.1
	Mx	E	4.3	30
	Mx	N	3.4	26
	Mx	Z	3.5	23
Ki	i(PKP)		08 04 16.1	
	iPKP		08 04 23.0	
	iPP		08 07 17.7	
			micr	sec
	PKP	Z'	0.5	1.1
	PP	Z'	0.9	2.3
Sk	iPKP		08 04 32.1 D	
	ipPKP		08 05 24.8	
	iSKP		08 07 54.6	
	eX		08 15 13	
Um	iPKP		08 04 27.0	
	iSKP		08 07 52.8	
	iX		08 15 22.3	
Ud	iPKP		08 04 38.7	
	ipPKP		08 05 30.5	
De	iPKP		08 04 44.8	
	i		08 04 51.1	
	ipPKP		08 05 40.9	

Kermadec Islands.
h = 200 km (Up,Sk,Ud,De).
The phase X travels over the greater arc, but its identification did not prove possible with standard tables.

" 7	Ud	eP	08 47 29	
" 7	Up	iPKP	10 23 57.8	
	Sk	iPKP	10 23 50.1	
	Um	iPKP	10 23 44.8	
	Ud	iPKP	10 23 59.4	
	De	iPKP	10 24 08.8	
" 7	Um	iP	10 57 45.9	
	Ud	iP	10 57 14.5	
" 7	Ki	iP2	11 13 27.0	
	Um	iP1	11 13 38.6	
		iP2	11 13 43.0	
	Ud	iP2	11 14 11.1	

Japan (h = 40 km).

" 7	Um	iP	13 02 41.4	
" 7	Um	iP	14 08 02.3	
" 7	Up	iP2	14 10 07.5	

(cont.)

1972
Mar. 7 (cont.)

Ki	iP2		14 09 55.9	
			micr	sec
	P2	Z'	0.2	1.4
Sk	iP1		14 09 40.2	
	iP2		14 09 48.2	
Um	eP1		14 09 56	
	iP2		14 10 04.5	
Ud	eP1		14 09 51	
	iP2		14 09 57.0	

Mexico (h = N).

" 7	Sk	eP2	14 18 57	
	Um	iP2	14 19 12.8	
	Ud	eP1	14 19 02	

Mexico (h = 35 km).
The notation P1 and P2 used here and in some following Mexican events, follows the notation in the preceding event.

" 7	Up	iP	14 36 14.8	
	Ud	iP	14 36 02.9	
" 7	Up	iP	16 56 43.8	
	Ki	iP	16 56 37.7	
	Um	iP	16 56 36.3	
	Ud	iP	16 56 56.7	

Burma-India (h = 140 km).

" 7	Ki	iSgl	17 36 58.7	
	Sk	iSgl	17 37 02.7	
	Um	iSgl	17 37 26.2	

Nordland, Norway,
66.5°N, 13.9°E.
Origin time = 17 35 28.
Explosion.

" 7	Ud	iP	21 16 03.4	
" 7	Um	eP	22 32 19	
		i	22 32 27.6	
" 8	Um	iP	00 30 18.1	
	Ud	iP	00 30 46.1	

Japan (h = 70 km).

" 8	Up	eP	01 02 32	
" 8	Up	iPKP	01 44 18.2	
		i	01 44 25.5	
	Sk	iPKP	01 44 15.1	
		ipPKP	01 44 28.0	
	Um	iPKP	01 44 07.5	
		ipPKP	01 44 19.8	
	Ud	iPKP	01 44 19.6	

(cont.)

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

1972
Mar. 8 (cont.)
Ud ipPKP 01 44 32.9
South of Kermadec Islands.
h = 50 km (Sk,Um,Ud).

" 8 Um i(Sgl) 02 39 53.3

" 8 Um iP 03 45 03.3
Banda Sea (h = 120 km).

" 8 Up iP 03 59 30.5
ePKP 04 03 54
micr sec
Mx E 2.5 25
Mx N 2.6 24
Mx Z 3.3 26
Ki iP 03 59 13.0
micr sec
P Z' 0.1 1.1
Mx E 3.7 20
Mx N 2.6 19
Mx Z 3.0 19
Sk iP 03 59 34.4
ePKP 04 03 54
iPP 04 04 21.7
Um iP 03 59 18.9
ipP 03 59 26.8
iPKP 04 03 33.6
iPKKP 04 15 22.2
Ud iP 03 59 38.2
ipP 03 59 47.4
iPP 04 04 35.5
De ePKP 04 03 59
New Guinea.
h = 30 km (Um,Ud).
M = 6.0 (Up,Ki).

" 8 Sk eP2 05 33 12
Um iP2 05 33 28.3
Ud ePl 05 33 18
Mexico (h = N).

" 8 Up iP 06 26 31.6
Ki iP 06 25 38.9 C
Um iP 06 26 06.1 C
i 06 26 22.5
Ud iP 06 26 31.0 C
Aleutian Islands (h = 45 km).

" 8 Up eP 08 26 27
Sk eP 08 27 16
Ud iP 08 26 36.2
De ipP 08 26 30.1
Greece (h = 120 km).

" 8 Ki eP2 10 18 14
(cont.)

1972
Mar. 8 (cont.)
Sk iPl 10 17 58.1
Um iPl 10 18 17.3
Ud iPl 10 18 07.3
Mexico (h = N).

" 8 Sk eP 10 30 30
Ud eP 10 30 00
Greece.

" 8 Ki eP 11 23 17
Sk eP 11 23 49
Um iP 11 23 30.8
ipP 11 23 43.2
Ud iP 11 23 58.6
Japan.
h = 45 km (Um).

" 8 Ud iSgl 11 35 27.0
De ePgl 11 33 33
iSgl 11 33 44.3
South Sweden.
Origin time = 11 33 19.

" 8 Up i(Rg) 13 01 00.3
Ud i(Rg) 13 00 56.7

" 8 Sk i(P) 14 58 55.2

" 8 Up iP 15 33 44.2
Ki iP 15 32 50.5
Sk eP 15 33 21
Um iP 15 33 18.3
Ud iP 15 33 43.0
De eP 15 34 15
Alaska (h = 20 km).

" 8 Up iPKP 16 28 41.4
Sk iPKP 16 28 34.1
Um iPKP 16 28 29.2
Ud iPKP 16 28 43.3
De iPKP 16 28 51.8

" 8 Um iP 18 21 01.8

" 8 Up iP 19 55 53.4
Ki iP 19 55 17.2
Sk iP 19 55 48.5
Um iP 19 55 32.8
ipP 19 55 48.3
Ud iP 19 56 00.3
De eP 19 56 14
Japan.
h = 60 km (Um).

" 8 Up iP 21 56 56.8
(cont.)

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

1972 Mar.	8	(cont.)				
		Ki	iP		21 57 28.7	
		Sk	iP		21 57 29.8	
		Um	iP		21 57 08.0	
		Ud	iP		21 57 11.7	
		De	iP		21 56 57.3	
		Iran (h = 45 km).				
"	9	Up	Mx		06 02	
					micr	sec
			Mx	E	0.9	22
			Mx	N	0.9	21
			Mx	Z	1.4	21
		Ki	Mx		06 00	
					micr	sec
			Mx	E	1.7	19
			Mx	N	1.0	19
			Mx	Z	0.9	20
		Fiji Islands (h = 140 km).				
		M = 5.8 (Up,Ki).				
"	9	Um	iP		09 31 49.1	
		Banda Sea (h = 150 km).				
"	9	Sk	eP		11 41 00	
"	9	Um	iP		11 59 03.3	
		Aleutian Islands				
		(h = 40 km).				
"	9	Ki	eP		13 40 21	
		Um	iP		13 40 33.9	
"	9	Sk	eSgl		15 19 16	
		Ud	iSgl		15 18 14.8	
		Southwest Norway.				
		By combination with				
		Kongsberg readings.				
"	9	Ki	eP		15 39 32	
		Sk	e(pP)		15 40 15	
		Um	iP		15 39 58.2	
			ipP		15 40 11.3	
		Ud	iP		15 40 23.4	
		De	iP		15 40 46.5	
		Aleutian Islands.				
		h = 50 km (Um).				
"	9	Ud	eP		15 46 54	
"	9	Ki	iSgl		16 24 07.4	
		Sk	iSgl		16 24 12.1	
		Um	iSgl		16 24 35.8	
		Nordland, Norway,				
		66.5°N, 14.0°E.				
		Origin time = 16 22 38.				
		Explosion.				

1972 Mar.	9	Ki	iPKP		18 23 39.3	
			i		18 24 09.3	
		Um	iPKP		18 23 32.1	
		Ud	iPKP		18 23 22.7	
		South Sandwich Islands				
		(h = N).				
"	9	Up	iP		21 34 37.5	
"	10	Ki	eP		01 19 51	
		Um	iP		01 20 29.7	
"	10	Um	iP		01 30 01.2	
"	10	Up	eP		02 34 21	
		Ki	iP		02 33 47.1	
		Sk	iP		02 34 17.2	
		Um	iP		02 34 00.0	
		Ud	iP		02 34 28.2	
		Japan (h = 70 km).				
"	10	Up	iP		05 03 52.9	C
			iPn		05 04 58.4	
			iPP		05 05 11.9	
					micr	sec
			P	Z'	0.2	1.0
		Ki	iP		05 03 37.4	C
			i		05 03 44.2	
					micr	sec
			P	Z'	0.3	0.7
		Sk	iP		05 04 08.4	C
			iPP		05 05 30.6	
		Um	iP		05 03 38.2	C
			iPn		05 04 28.1	
		Ud	iP		05 04 09.5	C
			iPn		05 05 22.1	
			iPP		05 05 33.6	
		De	iP		05 04 16.6	C
			iPP		05 05 42.3	
		Kazakh SSR.				
		m = 6.2 (Up,Ki).				
		Underground explosion.				
"	10	Ki	eP		06 57 43	
		Um	iP		06 57 37.1	
"	10	Ud	iP		07 01 23.3	
"	10	Sk	eP		08 06 04	
			i		08 06 09.1	
"	10	Um	iPKP		09 28 49.5	
			i		09 29 00.2	
		Ud	iPKP		09 29 02.3	
		Kermadec Islands (h = 60 km).				

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

1972
Mar. 10 Ud iP 10 18 15.0
i 10 18 35.8

" 10 Ki iP 10 36 46.3
micr sec
P Z' 0.1 1.0
Sk iP 10 36 25.4
Um iP 10 36 46.2
Ud iP 10 36 26.0
ipP 10 36 56.5
De iP 10 36 25.2
Venezuela.
h = 120 km (Ud).

" 10 Ki iPn 10 52 54.9
iSn 10 53 53.8
iS* 10 54 12.5
Sk iSgl 10 56 41.7
Um iSn 10 54 33.0
iS* 10 55 02.4
iSgl 10 55 08.2
Northwest Russia,
67.7°N, 34.1°E.
Origin time = 10 51 36.
Explosion.

" 10 Up iP 14 44 20.5 C
micr sec
P Z' 0.1 0.8
Ki iP 14 44 29.0
Um iP 14 44 19.1
Ud iP 14 44 36.8 C
De iP 14 44 32.9
Pakistan (h = 45 km).

" 10 Ud iPgl 15 04 03.0
iSgl 15 04 36.7
De iSgl 15 04 45.2
Skagerrak, 58.2°N, 9.8°E.
Origin time = 15 03 15.
Explosion?
By combination with
Kongsberg readings.

" 10 Ud iSgl 15 10 36.8
De iSgl 15 10 50.8
Skagerrak.
Explosion?
By combination with
Kongsberg readings.

" 10 Ud i(P) 15 11 30.6

" 10 Ud iPgl 15 13 24.2
iSgl 15 13 58.5
De ePgl 15 13 30
iSgl 15 14 06.6
(cont.)

1972
Mar. 10 (cont.)
Skagerrak, 58.5°N, 10.6°E.
Origin time = 15 12 46.
Explosion?
By combination with
Kongsberg readings.

" 10 Ud iP 16 11 43.8

" 10 Um i(Sgl) 17 12 14.1

" 10 Um i(Sgl) 17 24 05.5

" 11 Ud eP 00 52 05
Peru (h = 35 km).

" 11 Um iP 02 28 20.6

" 11 Ki iP 03 32 19.5
micr sec
Mx E 1.7 19
Mx N 1.0 16
Um iP 03 32 18.1
e(PP) 03 35 59
Ud eP 03 32 36
Java (h = 60 km).

" 11 Up iP 04 03 24.5
i 04 03 36.9
micr sec
Mx E 1.5 20
Mx N 1.3 18
Mx Z 3.3 19
Ki iP 04 03 19.1
micr sec
Mx E 1.3 19
Mx N 2.0 21
Mx Z 1.7 17
Um iP 04 03 22.9
i 04 03 33.8
Ud iP 04 03 13.9
i 04 03 24.5
Guatemala (h = 90 km).
M = 5.6 (Up,Ki).

" 11 Up iP 04 44 27.0 C
ipP 04 44 36.8
micr sec
P Z' 0.1 0.8
Ki iP 04 44 02.9 C
Um iP 04 44 11.7 C
Ud iP 04 44 36.0 C
ipP 04 44 46.0
De iP 04 44 46.9
ipP 04 44 56.0
Formosa.
h = 35 km (Up,Ud,De).

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

1972 Mar.	11	Up	iP	04 58 36.9
		Um	iP	04 58 17.2 D
		Ud	iP	04 58 28.8
"	11	Um	iP	04 59 41.2 D
		Japan (h = 45 km).		
"	11	Um	iP	07 55 10.3 C
"	11	Um	iP	08 06 20.2
"	11	Um	iP	09 27 09.7 D
		Ud	eP	09 27 38
		Japan (h = 70 km).		
"	11	Up	iRg	11 22 04.4
		Ud	iRg	11 21 50.8
"	11	Um	eSgl	12 15 26
		Western USSR. Explosion.		
"	11	Ud	iP	13 28 01.5
"	11	Um	iP	17 47 14.0 C
		Mariana Islands (h = 40 km).		
"	11	Um	iP	18 38 58.3
"	11	Up	iP	18 55 51.8
		Um	iP	18 55 35.5
		Mariana Islands (h = 50 km).		
"	11	Um	e(Sgl)	19 37 05
"	11	Um	i(Sgl)	20 04 03.6
"	11	Um	i(Sgl)	20 05 24.6
"	12	Um	i(Sgl)	01 12 42.8
"	12	Um	eP	07 23 17
"	12	Um	iP	13 10 15.8
		Alaska (h = 120 km).		
"	12	Um	iP	14 38 33.1
		Japan (h = 55 km).		
"	12	Ud	eP	17 39 03
		Iran.		
"	13	Ki	iP	03 30 12.1
		Um	iP	03 30 30.3 D
		Ud	iP	03 31 00.8
		Japan (h = 170 km).		
1972 Mar.	13	Ki	ePgl	04 27 43
			iSgl	04 28 15.8
		Sk	iSgl	04 28 50.9
		Um	iSgl	04 29 07.9
		Off coast of Nordland, Norway, 67.2°N, 14.1°E. Origin time = 04 26 56.		
"	13	Ud	eP	05 57 01
"	13	Um	ePKP	05 59 17
			iSKP	06 02 00.2
		Ud	iPKP	05 59 19.8 D
		De	iPKP	05 59 30.4
			ipPKP	06 01 35.2
		Tonga-Kermadec Islands. h = 530 km (De).		
"	13	Ud	iP	09 28 21.6
		Aegean Sea.		
"	13	Up	iSgl	13 06 49.5
		Um	i(S*)	13 07 29.3
		Ud	eSgl	13 05 49
		South Norway, 60.8°N, 7.9°E. Origin time = 13 04 16. By combination with Bergen and Kongsberg readings.		
"	13	Up	ePn	14 06 56
			i	14 07 32.1
			iSn	14 07 41.1
		Ud	iPgl	14 06 35.4
			iSgl	14 07 06.1
		Skagerrak, 58.5°N, 10.4°E. Origin time = 14 05 54. Explosion? By combination with Kongsberg readings.		
"	13	Up	ePn	14 23 18
			iSn	14 29 02.6
		Ud	iPgl	14 27 57.2
			iSgl	14 28 31.2
		Skagerrak, 58.5°N, 10.6°E. Origin time = 14 27 18. Explosion? By combination with Kongsberg readings.		
"	13	Um	eP	18 57 33
		Ud	iP	18 57 59.5
"	13	Ud	iP	21 51 10.8
		Hindu Kush. Intermediate depth.		

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

1972					
Mar.	14	Up	iP	00 58 59.6	C
		Ki	i(pP)	00 58 29.9	
		Sk	iP	00 58 54.4	
		Um	iP	00 58 36.9	
			i	00 58 38.9	
			i(pP)	00 58 45.4	
		Ud	iP	00 59 06.8	C
		De	iP	00 59 20.4	C
		Japan (h = 40 km).			
"	14	Ud	iP	04 07 21.3	
		Hindu Kush.			
		Intermediate depth.			
"	14	Um	eP	07 26 52	
		Japan (h = 80 km).			
"	14	Ud	iPKP	07 35 27.3	
		De	iPKP	07 35 38.9	
		Tonga Islands (h = 140 km).			
"	14	Um	iPKP2	07 46 08.9	
		Ud	iPKP2	07 46 38.6	
		New Zealand (h = 70 km).			
"	14	Ud	iP	11 00 12.4	
"	14	Up	iP	11 18 47.0	
		Um	iP	11 18 24.2	
		Ud	iP	11 18 54.0	D
		De	iP	11 19 10.0	
		Japan (h = 60 km).			
"	14	Um	iPKP	12 39 06.0	D
		Santa Cruz Islands (h = 230 km).			
"	14	Um	iSgl	13 01 13.8	
		Ud	iSgl	13 01 22.0	
		De	iSgl	13 01 47.9	
		Esthonia.			
		Explosion.			
"	14	Up	iP	14 10 36.9	C
			i	14 10 41.6	
			iS	14 14 36	
				micr sec	
			P Z'	0.1 1.0	
			i Z'	0.5 1.2	
			Mx E	8.2 11	
			Mx N	5.9 11	
			Mx Z	6.1 11	
		Ki	iP	14 11 44.1	C
				micr sec	
			P Z'	0.1 1.0	
			Mx E	6.7 12	
		(cont.)			

1972					
Mar.	14	(cont.)			
		Ki		micr sec	
			Mx N	5.3 12	
			Mx Z	5.3 12	
		Sk	iP	14 11 21.6	
			i	14 11 25.7	
		Um	iP	14 11 08.6	
			iS	14 15 38	
		Ud	iP	14 10 48.0	C
		De	iP	14 10 16.5	
			i	14 10 20.8	
		Turkey (h = 35 km).			
		m = 5.8, M = 5.6 (Up,Ki).			
"	14	Ud	i(P)	14 49 51.8	
"	14	Ki	iSgl	14 55 27.6	
		Sk	iSgl	14 55 33.7	
		Um	iSn	14 55 41.3	
			iSgl	14 55 55.1	
		Nordland, Norway, 66.5°N, 14.1°E.			
		Origin time = 14 54 00.			
		Explosion.			
"	14	Up	iSgl	15 06 58.5	
		Sk	eSgl	15 08 51	
		Um	iSgl	15 07 33.9	
		Ud	eSn	15 07 35	
			iSgl	15 08 04.2	
		De	eSgl	15 08 28	
		Esthonia, 59.5°N, 25.0°E.			
		Origin time = 15 05 00.			
		Explosion.			
"	14	Sk	e(Sgl)	15 15 04	
"	14	De	i(P)	15 24 48.8	
"	14	Um	i(Sgl)	17 02 37.7	
"	14	Um	i(Sgl)	20 54 20.8	
"	14	Ki	i(P)	21 35 21.8	
		Um	e(P)	21 35 16	
"	15	Um	i(Sgl)	00 04 54.0	
"	15	Um	eP	00 28 49	
		Ud	iP	00 29 09.9	
		De	eP	00 29 09	
		Tadzhik SSR (h = 140 km).			
"	15	Um	iP	00 46 24.2	
"	15	Um	iP	01 54 19.6	
		Zambia (h = N).			

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

1972
Mar. 15 Ud i(PP) 05 18 45.9
Banda Sea (h = 230 km).

" 15 Up iP 06 09 45.1 D
micr sec
P Z' 0.1 0.6
Ki iP 06 09 43.7
Sk iP 06 10 04.7 D
Um iP 06 09 38.8 D
Ud iP 06 10 00.0 D
De iP 06 10 00.1
Tibet (h = N).

" 15 Ki iP 06 18 22.7

" 15 Ki eSgl 08 19 34
Sk eSgl 08 19 38
Um iSgl 08 20 01.6
Nordland, Norway.
Explosion.

" 15 Ki iPn 10 03 58.2
iSn 10 04 46.6
iS* 10 04 59.7
Sk eSgl 10 07 54
Um iSgl 10 06 30.8
Northwest Russia-Norway
border region,
69.4°N, 30.9°E.
Origin time = 10 02 54.
Explosion.

" 15 Up iP 11 34 01.9 C
micr sec
P Z' 0.4 1.1
Mx N 1.0 18
Mx Z 1.9 20
Ki iP 11 33 08.5 C
micr sec
P Z' 0.2 1.0
Mx E 1.5 18
Mx N 1.1 15
Mx Z 1.1 15
Sk iP 11 33 41.5 C
Um iP 11 33 34.7 C
Ud iP 11 34 03.0 C
i 11 34 11.2
i 11 34 16.0
De iP 11 34 25.1 C
Aleutian Islands (h = 40 km).
m = 6.4, M = 5.2 (Up,Ki).

" 15 Up iSgl 12 11 16.9
Ud iPgl 12 09 52.4
iSgl 12 10 23.5
De ePgl 12 10 05
iSgl 12 10 36.9
(cont.)

1972
Mar. 15 (cont.)
De i 12 10 44.6
Skagerrak, 58.6°N, 10.5°E.
Origin time = 12 09 15.
Explosion?
By combination with
Kongsberg readings.

" 15 Up i(Rg) 12 42 15.8
Ud i(Rg) 12 42 29.3

" 15 Up iSgl 12 47 49.0
Ud iPgl 12 47 33.5
iSgl 12 48 01.0
iRg 12 48 12.7
De iSgl 12 48 12.4
Östergötland, Sweden,
58.5°N, 15.9°E.
Origin time = 12 47 00.
Probably explosion.

" 15 Up iSgl 12 52 58.0
Um iSgl 12 53 15.9
Ud iSgl 12 53 58.2
De eSgl 12 54 33
Western USSR.
Explosion.

" 15 Ud iP 12 57 28.8

" 15 Ud iPgl 12 58 45.8
iSgl 12 59 20.2
De ePgl 12 58 52
iSgl 12 59 28.1
Skagerrak, 58.5°N, 10.6°E.
Origin time = 12 58 07.
Explosion?
By combination with
Kongsberg readings.

" 15 Ud iPgl 12 59 53.4
iSgl 13 00 26.7
Probably Skagerrak.
Explosion?

" 15 Ud iP 15 13 22.2
i 15 13 31.7

" 15 Up iPKP 15 17 49.2
Sk iPKP 15 17 43.4
Um iPKP 15 17 38.7
ipPKP 15 17 49.0
Ud iPKP 15 17 50.3 C
ipPKP 15 18 00.5
De iPKP 15 17 58.6
South of Kermadec Islands.
h = 35 km (Um,Ud).

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

1972							
Mar.	15	Ud	iP		16 00 58.2		
"	15	Ud	eP		19 36 54		
"	15	Up	eP		19 54 25		
		Ki	iP		19 54 08.6		
					micr	sec	
			P	Z'	0.1	1.0	
		Um	iP		19 54 14.7		
		Ud	iP		19 54 29.1		
		Mindanao (h = 40 km).					
"	15	Ud	eP		20 05 43		
"	15	Ud	i(Sgl)		21 19 54.8		
"	16	Up	i(P)		00 42 42.4		
"	16	Ud	iPKP		00 47 50.1		
		De	iPKP		00 48 01.6		
"	16	Um	i(Sgl)		00 53 04.6		
"	16	Up	eP		00 55 59		
		Ud	eP		00 56 26		
"	16	Up	iP		03 40 21.5		
		Ki	iP		03 41 32.5		
		Sk	iP		03 41 01.8		
		Um	iP		03 40 56.6	C	
		Ud	iP		03 40 28.7	C	
		De	iP		03 39 54.1	C	
		Greece (h = 150 km).					
"	16	Up	iP		05 21 28.8		
					micr	sec	
			Mx	E	1.0	17	
			Mx	N	1.7	23	
			Mx	Z	0.8	20	
		Ki	iP		05 21 09.9		
					micr	sec	
			Mx	N	1.3	17	
		Sk	eP		05 21 36		
		Um	iP		05 21 16.2		
			i		05 21 25.6		
		Ud	iP		05 21 37.8	C	
			i		05 21 47.2		
		De	eP		05 21 44		
		Luzon (h = 55 km).					
		M = 5.5 (Up,Ki).					
"	16	Ki	iP		05 31 48.9		
		Ud	iP		05 32 43.2	C	
		Okhotsk Sea (h = 440 km).					
"	16	Ud	eP		06 43 48		
		De	eP		06 43 35		

1972							
Mar.	16	Ud	i(Sgl)		10 19 59.3		
"	16	Ud	i(Sgl)		12 06 25.2		
		De	e(Sgl)		12 07 43		
"	16	Up	iSgl		12 15 30.8		
		Um	iSgl		12 15 48.8		
		Ud	iSgl		12 16 31.7		
		De	eSgl		12 16 58		
		Western USSR.					
		Explosion.					
"	16	Up	iSgl		12 36 36.9		
		Sk	eSgl		12 38 26		
		Um	iSgl		12 37 00.4		
		Ud	iSgl		12 37 41.1		
		De	eSgl		12 38 03		
		Esthonia, 59.4°N, 26.6°E.					
		Origin time = 12 34 13.					
		Explosion.					
"	16	Ud	i(P)		13 51 14.0		
"	16	Up	eSgl		16 11 58		
		Sk	eSgl		16 13 10		
		Um	iSgl		16 11 22.1		
		Ud	iSgl		16 12 59.8		
		Lake Ladoga.					
		Explosion.					
"	16	De	i(Pgl)		16 38 58.3		
			i(Sgl)		16 39 25.4		
"	16	Up	iP		17 28 44.1		
		Ud	iP		17 28 53.2		
"	16	Ud	iP		21 36 57.3		
		Spain (h = N).					
"	16	Ud	iP		22 01 06.9		
		Mindanao (h = 70 km).					
"	17	Up	iPKP		00 40 07.7	C	
			iSKP		00 43 08.7		
					micr	sec	
			PKP	Z'	0.8	0.7	
		Ki	i(PKP)		00 39 48.1		
			iPKP		00 39 56.3	C	
			iSKP		00 42 47.6		
					micr	sec	
			PKP	Z'	0.1	1.2	
		Sk	i(PKP)		00 40 00.7		
			iPKP		00 40 03.2		
			iSKP		00 43 02.8		
		Um	i(PKP)		00 39 54.1		
			i(PKP)		00 39 56.3		
		(cont.)					

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

1972
Mar. 17 (cont.)

Um	iPKP	00 40 02.2	
	iSKP	00 42 58.4	
Ud	iPKP	00 40 10.0	C
	iSKP	00 43 10.2	
De	i(PKP)	00 40 18.0	C
	iPKP	00 40 20.6	C
	iSKP	00 43 18.4	

Tonga-Kermadec Islands
(h = 410 km).

"	17	Ud	iP	01 16 30.0	D
"	17	Ud	eP	02 01 29	
"	17	Um	iP	03 21 22.0	
"	17	Um	iP	06 26 40.1	
"	17	Up	iP	07 31 52.9	
		Ud	iP	07 32 01.8	

Ryukyu Islands (h = 40 km).

"	17	Ud	eP	07 48 20	
		De	eP	07 47 48	
"	17	Up	iP	07 59 47.3	
		Ki	iP	07 58 57.0	
		Um	iP	07 59 19.7	
		Ud	iP	07 59 52.4	
		De	iP	08 00 10.0	

Kurile Islands (h = N).

"	17	Ki	eP	08 00 49	
		Sk	eP	08 00 44	
		Ud	iP	08 00 23.9	
"	17	Up	eP	08 12 33	
"	17	Up	iP	09 24 24.5	
			i	09 24 35.8	
		Ki	iP	09 24 31.9	
			i	09 24 42.2	
				micr sec	
			P	Z' 0.1 0.9	
		Sk	eP	09 24 53	
			ipP	09 24 58.3	
			iPP	09 26 22.4	
		Um	iP	09 24 21.7	
			ipP	09 24 28.8	
			iPP	09 25 53.7	
		Ud	iP	09 24 41.5	
			ipP	09 24 48.8	
			iPP	09 26 20.7	
		De	iP	09 24 39.0	
			ipP	09 24 45.6	
			i	09 25 26.7	

(cont.)

1972
Mar. 17 (cont.)

Tadzhik SSR.
h = 25 km (Um,Ud,De).

"	17	Sk	i(Sgl)	11 18 17.0	
		Ud	i(Sgl)	11 17 59.6	
"	17	Sk	iSgl	12 21 04.5	
		Ud	iPgl	12 19 24.7	
			iSgl	12 19 46.9	
		De	iSgl	12 20 44.7	

South Norway,
59.5°N, 10.4°E.
Origin time = 12 18 52.
By combination with
Kongsberg readings.

"	17	Up	iP	12 39 35.4	
		Ki	iP	12 38 42.1	D
		Um	iP	12 39 09.4	D
		Ud	iP	12 39 33.9	
		De	iP	12 39 57.5	D

Aleutian Islands (h = 25 km).

"	17	Um	i(Sgl)	13 04 35.6	
"	17	Um	i(Sgl)	14 02 29.4	
"	17	Up	i(P)	16 08 49.9	
		Ud	i(P)	16 08 06.7	
"	17	Um	i(Sgl)	17 12 02.6	
"	17	Ud	eP	17 19 17	
"	17	Ud	iP	18 28 15.3	
"	17	Up	i(Sgl)	19 38 47.4	
"	18	Up	iP	00 51 44.8	
			ipP	00 53 12.4	
				micr sec	
			P	Z' 0.1 1.0	
		Ki	iP	00 51 00.7	
			ipP	00 52 26.1	
				micr sec	
			P	Z' 0.2 1.0	
		Sk	iP	00 51 36.0	
			iPP	00 53 59.3	
		Um	iP	00 51 20.2	
			ipP	00 52 50.0	
			iPP	00 53 36.0	
		Ud	iP	00 51 51.3	D
			ipP	00 53 19.6	
		De	iP	00 52 10.0	
			ipP	00 53 44.8	
			iPP	00 54 41.6	

(cont.)

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

1972					
Mar.	18	(cont.)			
		Sakhalin.			
		h = 420 km (Up,Um,Ud,De).			
		m = 5.5 (Up,Ki).			
"	18	Up	iP		05 00 52.2
		Aleutian Islands (h = 45 km).			
"	18	Ud	iP		06 51 59.6
"	18	Ud	iP		07 22 19.2
"	18	Up	iP		07 24 42.5
		Ki	eP		07 23 58
		Sk	eP		07 24 30
		Um	iP		07 24 13.1
		Ud	iP		07 24 46.9
		De	iP		07 25 00.8
		Japan (h = 70 km).			
"	18	Up	iP		09 07 33.2
		Um	iP		09 07 46.9
		Ud	eP		09 07 45
"	18	Ki	e(Sgl)		09 27 12
		Um	i(Sgl)		09 28 05.6
"	18	Ud	e(PKP)		11 27 28
		De	e(PKP)		11 27 39
"	18	Up	iP		13 50 15.4
		Um	iP		13 49 56.8
		Ud	iP		13 50 22.0
		De	eP		13 50 35
		Bonin Islands (h = 30 km).			
"	18	Up	iP		15 04 59.1
				micr	sec
			P	Z' 0.1	1.0
			Mx	E 2.2	15
			Mx	N 1.0	14
			Mx	Z 2.0	21
		Ki	eP		15 04 10
			iPP		15 04 21.5
				micr	sec
			PP	Z' 0.1	1.2
			Mx	E 3.0	16
			Mx	N 3.8	16
			Mx	Z 2.2	15
		Sk	iP		15 04 02.9
		Um	iP		15 04 41.7
		Ud	iP		15 04 36.0
			i		15 04 43.2
		De	iP		15 05 14.4
		North of Iceland (h = N).			
		M = 4.6 (Up,Ki).			

1972					
Mar.	18	Ud	eP		18 39 34
		Kamchatka.			
"	18	Up	iP		23 20 11.3
		Ki	iP		23 19 33.9
		Sk	iP		23 20 06.6
		Um	iP		23 19 50.7
		Ud	iP		23 20 18.3
		De	iP		23 20 32.4
		Japan (h = 60 km).			
"	18	Up	iP		23 29 24.0 D
			iPP		23 32 19.4
				micr	sec
			P	Z' 0.9	0.9
			Mx	E 2.0	21
			Mx	N 1.9	18
			Mx	Z 3.2	16
		Ki	iP		23 28 46.9 D
			iPP		23 31 19.6
				micr	sec
			P	Z' 0.7	1.0
			Mx	E 5.4	17
			Mx	N 3.5	18
			Mx	Z 5.1	17
		Sk	iP		23 29 18.5
			iPP		23 32 11.3
		Um	iP		23 29 03.2 D
		Ud	iP		23 29 30.7 D
		De	iP		23 29 44.8 D
		Japan (h = 45 km).			
		m = 6.8, M = 5.8 (Up,Ki).			
"	18	Up	iP		23 55 10.8
		Ki	eP		23 54 33
		Um	iP		23 54 50.0
		Ud	iP		23 55 17.6
		De	iP		23 55 31.7
		Japan (h = 60 km).			
"	19	Ud	ePKP		01 07 54
			i		01 08 03.8
		New Britain (h = 40 km).			
"	19	Um	i(Sgl)		02 39 17.1
"	19	Up	e(P)		03 39 41
		Um	i(P)		03 39 44.1
		Ud	i(P)		03 39 32.7
"	19	Ud	ePKP		05 14 06
		De	iPKP		05 14 16.4
		Tonga-Kermadec Islands (h = 140 km).			
"	19	Ud	eP		06 30 29

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

1972 Mar.	19	Up	iPKP	06 50 38.4
		Sk	iPKP	06 50 29.5
		Um	iPKP	06 50 24.1
		Ud	iPKP	06 50 41.4
		De	ePKP	06 50 51
"	19	Ki	eSn	07 54 59
			iS*	07 55 17.2
			iSgl	07 55 24.2
		Um	eSn	07 55 34
			iSgl	07 56 12.9
		Probably northwest Russia. Explosion.		
"	19	Up	iP	13 45 05.1
		Um	iP	13 44 42.7
		Formosa (h = 40 km).		
"	19	Up	iP	16 08 52.7 D
			isP	16 09 18.4
			iPP	16 11 21.4
			iS	16 17 52
				micr sec
			P Z'	0.7 1.1
			Mx E	4.0 25
			Mx N	4.2 23
			Mx Z	4.8 22
		Ki	iP	16 08 10.9 D
			ipP	16 08 29.0
			iPP	16 10 29.6
			iS	16 16 36
			iPS	16 16 55.6
				micr sec
			P Z'	1.4 1.4
			Mx N	2.8 15
			Mx Z	3.4 17
		Sk	iP	16 08 45.1 D
			isP	16 09 12.7
			iPP	16 11 11.7
		Um	iP	16 08 29.3 D
			iS	16 17 10
		Ud	iP	16 08 59.5 D
			isP	16 09 25.8
			iS	16 18 09.7
		De	iP	16 09 15.8 D
			isP	16 09 44.4
			iPP	16 12 00.4
			iS	16 18 23.6
		Japan. h = 70 km (Up,Ki,Sk,Ud,De). m = 6.9, M = 5.8 (Up,Ki).		
"	19	Um	iP	18 04 56.3
"	19	Um	iPKP	22 27 33.7
		Ud	iPKP	22 27 25.1
		Chile (h = 40 km).		

1972 Mar.	20	Ud	iP	01 40 14.0
"	20	Um	iP	02 26 48.5
		Ud	iP	02 27 19.0
		Japan (h = 80 km).		
"	20	Sk	eP	06 02 16
		Um	eP	06 02 15
		Ud	iP	06 01 40.5
		Albania.		
"	20	Up	iP	07 47 19.6
			i	07 47 24.1
			iPP	07 51 25.2
			iSKS	07 58 12
			iS	07 58 45
			ePKPPKS	08 15 47
				micr sec
			P Z'	0.2 1.2
			Mx E	5.0 20
			Mx N	5.0 20
			Mx Z	6.8 20
		Ki	iP	07 47 24.8
			i	07 47 28.4
			ipP	07 47 41.3
			iPP	07 51 29
				micr sec
			P Z'	0.1 1.2
			Mx E	5.0 19
			Mx N	3.2 19
			Mx Z	5.1 19
		Sk	iP	07 47 10.0
			i	07 47 13.0
			ipP	07 47 27.5
		Um	iP	07 47 26.5
			i	07 47 29.5
			iPP	07 51 28
			iSKS	07 58 22
		Ud	iP	07 47 10.7
			i	07 47 14.9
			ipP	07 47 26.3
			iPKPPKS	08 15 52.7
		De	iP	07 47 11.1
			i	07 47 15.5
			ipP	07 47 26.9
			iPP	07 51 05.5
		Peru. h = 60 km (Ki,Sk,Ud,De). m = 6.6, M = 6.1 (Up,Ki). Double P, in average 3.8 sec apart.		
"	20	De	iP	08 03 59.4
"	20	Ud	iP	08 04 27.1
		De	iP	08 04 27.4
		Peru (h = 50 km).		

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

1972 Mar.	20	Um	iP	10 29 39.0
		Ud	eP	10 30 09
		Japan (h = 45 km).		
"	20	Ud	iP	11 02 31.8
		Hindu Kush.		
"	20	Um	iP	11 30 28.4
			ipP	11 31 09.5
		Hindu Kush.		
		h = 210 km (Um).		
"	20	Up	iSgl	13 06 05.2
		Um	iSgl	13 06 53.5
		Ud	iSgl	13 07 03.6
		De	eSgl	13 07 34
		Esthonia, 59.5°N, 23.4°E.		
		Origin time = 13 04 30.		
		Explosion.		
"	20	Up	iP	13 24 06.2
			ipP	13 24 18.4
		Ki	iP	13 24 05.8
			ipP	13 24 18.7
		Sk	epP	13 24 35
		Um	iP	13 24 03.9
			ipP	13 24 15.8
		Ud	eP	13 24 13
		De	iP	13 24 14.6
			ipP	13 24 26.6
		Sumatra.		
		h = 45 km (Up,Ki,Um,De).		
"	20	Ud	iP	14 19 13.1
"	20	De	eP	14 49 58
"	20	Up	iSgl	15 48 25.7
		Um	iSgl	15 47 56.8
		Ud	eSgl	15 49 21
		Lake Ladoga.		
		Explosion.		
"	20	Up	iP	17 04 01.7
		Ud	iP	17 03 52.4
		De	iP	17 03 53.3
			ipP	17 04 06.1
		Peru.		
		h = 50 km (De).		
"	20	Um	iPKP	17 21 53.2
		Easter Island region		
		(h = N).		
"	20	De	e(P)	18 32 45
"	20	De	e(P)	18 37 37

1972 Mar.	20	Ud	iP	20 16 34.4
		De	iP	20 16 19.7
"	20	Ud	iPKP	20 31 10.3
		Chile (h = N).		
"	20	Ud	i(PKP)	21 24 00.0
		De	i(PKP)	21 24 10.6
"	20	Ki	eP	23 09 22
		Java (h = 70 km).		
"	20	Up	iP	23 42 46.1 C
			iP'P'	00 10 53.9
				micr sec
			P Z'	1.1 0.9
			Mx E	1.7 18
			Mx N	3.8 21
			Mx Z	2.3 19
		Ki	iP	23 41 53.0 C
			iPcS	23 46 36.9
				micr sec
			P Z'	0.6 0.8
			Mx E	2.7 18
			Mx N	2.5 20
			Mx Z	2.4 17
		Sk	iP	23 42 25.0 C
			iPcP	23 42 57.5
		Um	iP	23 42 19.1 C
			iPcS	23 46 50.8
			iP'P'	00 11 03.3
		Ud	iP	23 42 46.5 C
		De	iP	23 43 08.5 C
			iPP	23 45 50.6
		Aleutian Islands (h = 45 km).		
		m = 7.0, M = 5.7 (Up,Ki).		
"	21	Up	iPKP	00 01 28.4 C
			ipPKP	00 03 37.9
				micr sec
			PKP Z'	0.1 0.8
		Ki	ePKP	00 01 19
			iSKP	00 04 02.2
		Sk	ePKP	00 01 27
			iSKP	00 04 17.8
		Um	i(PKP)	00 01 17.0
			iPKP	00 01 27.8
			iSKP	00 04 12.6
		Ud	iPKP	00 01 30.1
			ipPKP	00 03 37.7
			iSKP	00 04 25.8
		De	iPKP	00 01 40.6
			i(pPKP)	00 03 38.8
			iSKP	00 04 32.7
		Tonga-Kermadec Islands.		
		h = 540 km (Up,Ud).		

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

1972 Mar.	21	Up	iP		01 08 09.7
		Ki	iP		01 07 14.4
		Sk	eP		01 07 52
		Um	iP		01 07 39.7
		Ud	iP		01 08 11.4
		De	iP		01 08 33.2
		Kamchatka (h = 45 km).			
"	21	Up	iPKP		01 23 10.4
		Um	iPKP		01 22 55.9
		Ud	ePKP		01 23 16
		De	ePKP		01 23 22
"	21	Ud	iP		01 36 47.9
		De	iP		01 36 17.5
		Rhodes Island.			
"	21	Up	iP		01 46 28.8
		Ki	iP		01 45 45.1
		Um	iP		01 46 05.1
		Ud	iP		01 46 35.6
		Japan (h = 40 km).			
"	21	Ud	iP		05 41 46.2
"	21	Up	iP		09 58 47.7
			i		09 58 50.7
					micr sec
			P	Z'	0.1 0.9
		Ki	iP		09 57 54.7
			i		09 57 58.5
			ipP		09 58 05.3
					micr sec
			P	Z'	0.1 0.9
		Sk	eP		09 58 31
		Um	iP		09 58 21.5
			i		09 58 24.4
			ipP		09 58 32.0
		Ud	iP		09 58 47.5
			i		09 58 50.6
		De	iP		09 59 09.4
			i		09 59 12.7
		Aleutian Islands.			
		h = 40 km (Ki,Um).			
		m = 6.0 (Up,Ki).			
		Double P, in average 3.2 sec apart.			
"	21	Um	i(Sgl)		13 42 13.4
"	21	Ud	iP		15 18 25.1
"	21	Up	iSgl		15 21 06.3
		Ud	ePgl		15 19 42
			iSgl		15 20 10.3
			i		15 20 18.3
		(cont.)			

1972 Mar.	21	(cont.)			
		De	eSgl		15 20 33
			i		15 20 40.5
		Skagerrak, 58.7°N, 10.4°E.			
		Origin time = 15 19 03.			
		Explosion?			
		By combination with Kongsberg readings.			
"	21	Up	ePgl		15 27 35
			iSgl		15 28 26.6
			i		15 28 38.5
		Ud	iPgl		15 27 01.4
			iSgl		15 27 33.2
			i		15 27 40.0
		De	iPgl		15 27 14.1
			iSgl		15 27 53.9
			i		15 28 01.4
		Skagerrak, 58.7°N, 10.4°E.			
		Origin time = 15 26 25.			
		Explosion?			
		By combination with Kongsberg readings.			
		The third phase arrives between Sg2 and Rg with a velocity of about 3.19 km/sec.			
"	21	Up	iPKP2		16 53 47.3
		Um	iPKP		16 53 25.7
		Ud	iPKP		16 53 39.1
		De	ePKP2		16 54 04
		Kermadec Islands (h = 60 km).			
"	21	Up	iPKP		17 22 22.9
		Sk	iPKP		17 22 15.9
		Um	iPKP		17 22 10.5
		Ud	iPKP		17 22 24.4
		De	iPKP		17 22 33.7
		Kermadec Islands (h = 150 km).			
"	21	Up	iPn		18 22 22.9
		Um	iPn		18 22 48.5
		Ud	iP		18 22 33.2
			iPn		18 22 55.3
		De	iP		18 22 13.3
		Turkey.			
"	21	Up	iP		23 12 12.6
					micr sec
			Mx	E	1.5 16
		Ki	iP		23 13 24.2
		Sk	iP		23 12 41.5
		Um	iP		23 12 44.4
			i		23 13 09.8
		Ud	iP		23 12 03.7
		(cont.)			

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

1972
Mar. 21 (cont.)

Ud	i		23 12 20.6
De	iP		23 11 30.7
	i		23 11 44.9

Mediterranean Sea (h = N).

" 22	Ki	iSgl	00 16 54.1
	Sk	iSgl	00 16 56.5
	Um	iSn	00 17 07.8
		iSgl	00 17 21.7

Nordland, Norway,
66.5°N, 13.9°E.
Origin time = 00 15 23.
Explosion.

" 22	Up	iP		00 57 19.0
		i		00 57 23.5
				micr sec
		P	Z'	0.1 1.0
	Ki	iP		00 57 57.6
	Um	iP		00 57 31.0
		i		00 57 45.9
	Ud	iP		00 57 29.2
		i		00 57 54.7
	De	iP		00 57 10.7

Turkey (h = 35 km).

" 22	Up	iP	03 09 35.4
	Ki	eP	03 08 41
	Sk	eP	03 09 19
	Um	iP	03 09 07.7
	Ud	iP	03 09 38.9
	De	iP	03 10 00.8

Kamchatka (h = 40 km).

" 22	Ud	iPKP	08 48 38.1

Tonga Islands (h = 130 km).

" 22	Up	iP		10 38 11.2
		ipP		10 38 43.0
		iPcP		10 38 51.0
		i		10 40 03
				micr sec
		P	Z'	2.6 1.2
		Mx	E	35 30
		Mx	N	25 19
		Mx	Z	34 20
	Ki	iP		10 37 22.0
		iX		10 37 39.2
		iY		10 38 00.5
		i		10 38 11
				micr sec
		P	Z'	4.0 1.5
		Mx	E	20 18
		Mx	N	20 18
		Mx	Z	17 16
	Sk	iP		10 37 59.2

(cont.)

1972
Mar. 22 (cont.)

Sk	iX		10 38 18.8
	ipP		10 38 30.2
Um	iP		10 37 45.4
	iY		10 38 22.9
	iP'P'		11 06 54.2
Ud	iP		10 38 16.6
	iX		10 38 37.5
De	iP		10 38 36.5
	iPP		10 41 09.4

Kurile Islands.
h = 130 km (Up,Sk).
m = 7.0, M = 6.5 (Up,Ki).
X and Y mark unidentified phases.

" 22	Ki	iPn		14 52 17.4 C
		iSn		14 53 15.4
		iSgl		14 53 40.3
	Sk	eSgl		14 56 01
	Um	iSn		14 53 53.6
		iSgl		14 54 30.3

Northwest Russia,
67.7°N, 33.9°E.
Origin time = 14 51 00.
Explosion.

" 22	Up	iPKP	16 12 51.4
	Um	i(pPKP)	16 12 56.8
	Ud	iPKP	16 12 53.7
	De	iPKP	16 13 02.8
		i(pPKP)	16 13 17.8

Tonga Islands (h = N).

" 22	Up	iP		16 36 58.5
		iS		16 39 35.2
				micr sec
		Mx	E	13 22
		Mx	N	10 20
		Mx	Z	12 19
	Ki	iP		16 35 51.5 D
		iPP		16 36 00.7
				micr sec
		P	Z'	0.4 0.6
		PP	Z'	0.6 0.8
		Mx	E	15 16
		Mx	N	21 16
		Mx	Z	8.8 13
	Sk	iP		16 35 57.4 C
		iS		16 37 49.7
	Um	iP		16 36 25.9
		i		16 36 45.4
		iS		16 38 40.5
	Ud	iP		16 36 43.2
	De	iP		16 37 31.9

Jan Mayen (h = N).
M = 5.3 (Up,Ki).

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

1972 Mar.	22	Um	i(Sgl)	16 46 14.2	
"	22	Ud	iP	18 46 36.3	
"	22	Ud	iP	18 57 29.0	
"	23	Um	iPKP	09 43 00.3	
		South Sandwich Islands (h = N).			
"	23	Um	eSgl	12 49 55	
		Western USSR. Explosion.			
"	23	Um	iP	20 24 11.7	
"	23	Um	iP	21 36 58.6	
		Oregon (h = N).			
"	23	Um	iP	21 44 35.4	
		Caroline Islands (h = 70 km).			
"	23	Um	iP	22 01 41.5	
		Molucca Passage (h = N).			
"	23	Up	i(PKP2)	23 30 19.1	
		Ki	iPKP	23 29 48.8	D
		Um	iPKP	23 29 53.3	
		Ud	i(PKP2)	23 30 25.9	
			iPKP2	23 30 36.1	
		New Zealand (h = N).			
"	24	Up	iP	03 48 56.1	C
			iP'P'	04 17 47.0	
				micr sec	
			P Z'	0.7 1.0	
		Ki	iP	03 48 01.5	C
			ipP	03 48 20.7	
				micr sec	
			P Z'	1.4 1.1	
		Sk	iP	03 48 30.0	C
		Um	iP	03 48 29.6	C
			i	03 48 44.6	
			iP'P'	04 17 54.6	
			i	04 18 14.5	
		Ud	iP	03 48 53.5	C
			ipP	03 49 13.1	
			i(P'P')	04 18 02.5	
		De	iP	03 49 17.1	C
			iPcP	03 49 42.2	
		Alaska. h = 70 km (Ki,Ud). m = 6.9 (Up,Ki).			
"	24	Ud	iP	05 02 51.0	
			i	05 02 53.8	
		(cont.)			

1972 Mar.	24	(cont.)			
		De	iP	05 02 50.9	
		Hindu Kush. Intermediate depth.			
"	24	Ud	iPKP	06 25 49.4	
		De	iPKP	06 26 01.1	
		Fiji Islands (h = 570 km).			
"	24	Up	iP	08 20 02.6	
				micr sec	
			P Z'	0.1 1.0	
		Ki	iP	08 19 53.9	
		Sk	eP	08 20 24	
		Um	iP	08 19 55.5	
		Ud	iP	08 20 17.7	
		De	iP	08 20 24.3	
		Sinkiang (h = N).			
"	24	Ki	e(Pn)	12 07 01	
			i(Sn)	12 07 47.9	
"	24	Um	iSgl	12 46 55.6	
		Western USSR. Explosion.			
"	24	Up	iPKP	17 03 09.7	C
				micr sec	
			PKP Z'	0.1 0.9	
		Sk	iPKP	17 03 04.4	
		Um	iPKP	17 02 59.4	C
			ipPKP	17 03 19.4	
		Ud	iPKP	17 03 11.4	C
			ipPKP	17 03 30.6	
		South of Kermadec Islands. h = 70 km (Um,Ud).			
"	24	Ki	iP	17 30 29.4	
		Um	iP	17 30 35.4	
		Ud	iP	17 30 53.9	
			i	17 31 07.5	
		De	iP	17 31 03.2	
		Mindanao (h = N).			
"	24	Ki	eP	19 44 22	
		Um	iP	19 44 28.4	
		Ud	e	19 44 58	
		Mindanao (h = N).			
"	24	Ud	i(P)	21 16 29.8	
"	24	Ud	i(P)	21 32 56.1	
"	24	Ud	iP	22 04 02.7	
"	24	Up	iP	23 06 50.5	
		Ki	iP	23 05 55.9	
		(cont.)			

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

1972 Mar.	24	(cont.)				
		Sk	iP		23 06 34.6	
			ipP		23 06 45.3	
		Um	iP		23 06 22.1	
		Ud	iP		23 06 54.5	
		De	iP		23 07 15.6	
			ipP		23 07 26.0	
		Kamchatka.				
		h = 40 km (Sk,De).				
"	25	Up	iP		01 06 40.6	C
			iPcP		01 07 09.0	
			ipP		01 07 18.6	
					micr	sec
			P	Z'	0.5	1.5
			Mx	E	1.5	25
			Mx	N	1.4	20
			Mx	Z	1.4	20
		Ki	iP		01 05 50.9	C
			ipP		01 06 28.5	
					micr	sec
			P	Z'	0.1	1.0
			Mx	E	2.3	19
			Mx	N	2.0	18
		Sk	iP		01 06 28.5	
			ipP		01 07 06.3	
		Um	iP		01 06 13.9	C
			ipP		01 06 52.3	
		Ud	iP		01 06 45.1	C
			ipP		01 07 22.4	
		De	iP		01 07 04.7	C
			iPcP		01 07 21.6	
		Kurile Islands.				
		h = 150 km (Up,Ki,Sk,Um,Ud).				
		m = 6.2, M = 5.4 (Up,Ki).				
"	25	Um	iP		04 49 15.8	
		Japan (h = 60 km).				
"	25	Um	iPKP		05 45 51.7	
		Ud	iPKP		05 46 03.7	
		De	iPKP		05 46 13.7	
			i		05 46 40.9	
		Tonga Islands (h = N).				
"	25	Ud	iP		06 01 27.6	
		Aegean Sea.				
"	25	Up	eP		06 06 53	
		Um	iP		06 06 34.7	
		Ud	iP		06 07 06.8	
		De	iP		06 07 17.6	
		Mongolia (h = N).				
"	25	Um	i(Sgl)		06 14 18.3	
"	25	Ud	iP		06 21 30.9	
		(cont.)				

1972 Mar.	25	(cont.)				
		De	iP		06 20 57.5	
		Dodecanese Islands (h = N).				
"	25	Ud	iP		08 05 54.0	
"	25	Um	i(Sgl)		09 49 52.3	
"	25	Sk	iP		11 53 02.4	
"	25	Up	ePP		12 34 51	
			iPS		12 44 20	
					micr	sec
			Mx	E	6.9	20
			Mx	N	6.4	20
			Mx	Z	9.0	19
		Ki	iPP		12 34 18.4	
					micr	sec
			Mx	E	13	24
			Mx	N	6.6	21
			Mx	Z	11	24
		Sk	iPP		12 34 53.0	
		Um	iPKP		12 34 10.6	
			iPP		12 34 28.3	
			iPS		12 43 49	
		Ud	ePP		12 35 07	
		New Ireland (h = 40 km).				
		M = 6.5 (Up,Ki).				
"	25	Ud	iP		12 41 30.4	
"	25	Ud	iPKP		13 55 11.5	
		De	iPKP		13 55 22.5	
"	25	Um	i(Sgl)		15 28 54.0	
"	25	Up	iP		23 10 40.1	C
			ipP		23 10 51.2	
			i		23 11 22.0	
			iPP		23 13 13.9	
			iS		23 19 35	
					micr	sec
			P	Z'	0.5	1.0
			Mx	E	6.5	19
			Mx	N	9.9	18
			Mx	Z	13	18
		Ki	iP		23 09 55.7	
			ipP		23 10 07.2	
			iS		23 18 12	
					micr	sec
			P	Z'	0.2	1.0
			Mx	E	15	20
			Mx	N	21	20
			Mx	Z	25	20
		Sk	iP		23 10 30.5	C
		Um	iP		23 10 15.5	C
			ipP		23 10 26.3	
		(cont.)				

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

1972
Mar. 25 (cont.)

Um	iS	23 18 53
Ud	iP	23 10 46.5
De	iP	23 11 04.1
	ipP	23 11 15.6

Kurile Islands.
h = 40 km (Up,Ki,Um,De).
m = 6.5, M = 6.3 (Up,Ki).

" 25 Um iP 23 25 28.3
Japan (h = 70 km).

" 26

Up	iPKP	01 22 32.9
Sk	iPKP	01 22 26.3
Um	iPKP	01 22 21.1
	i	01 22 26.0
Ud	iPKP	01 22 34.7
De	iPKP	01 22 43.0

" 26 Ud eP 04 03 48
North Atlantic Ocean
(h = N).

" 26

Up	iP	06 20 46.4
Ki	iP	06 20 39.4
Sk	iP	06 21 01.7 C
Um	iP	06 20 38.2 C
Ud	iP	06 20 59.6 C
De	eP	06 21 01

India (h = N).

" 26

Up	iS*	08 27 15.4
	iSgl	08 27 25.4
Sk	eSgl	08 27 01
Um	i	08 25 04.6
	iSgl	08 25 24.0
Ud	iSgl	08 27 59.0

Northwest Russia.
Explosion.

" 26

Up	iSgl	08 56 27.2
Ki	iPn	08 52 16.4
	iSn	08 53 12.3
	iS*	08 53 31.9
Sk	eSgl	08 56 00
Um	iSn	08 53 55.1
	iSgl	08 54 28.7
Ud	iSgl	08 57 02.3
De	eSgl	08 58 40

Northwest Russia,
67.8°N, 33.4°E,
Origin time = 08 51 02.
Explosion.

" 26

Up	iP	09 52 56.4
Ki	iP	09 52 54.9
Sk	iP	09 53 08.6

(cont.)

1972
Mar. 26 (cont.)

Um	iP	09 52 52.7 C
Ud	iP	09 53 05.3

Sumatra (h = 80 km).

" 26

Um	iP	09 54 04.6
Ud	iP	09 54 28.8

" 26

Um	iP	14 36 49.1
	ipP	14 37 02.7
Ud	ipP	14 37 35.3

Japan.
h = 50 km (Um).

" 26

Um	iP	14 59 08.8
Ud	eP	14 59 28

" 27 Um iP 04 59 00.1
Bonin Islands.

" 27 Ki eP 05 02 01

		micr	sec
P	Z'	0.1	1.4

Um	eP	05 02 03
Ud	iP	05 02 11.0

" 27 Um i(P) 07 25 17.3

" 27

Ud	iP	08 26 59.3
	i	08 27 07.3

South Atlantic Ocean
(h = N).

" 27 Ud iP 09 29 05.4
Alaska (h = 150 km).

" 27

Um	iSKP	11 33 13.7
De	iPKP	11 30 46.4

Fiji Islands (h = 570 km).

" 27

Ki	eSgl	12 24 12
Um	iSgl	12 22 04.6
De	eSgl	12 23 02

Esthonia.
Explosion.

" 27 Um i(PP) 12 27 39.3
Peru (h = 60 km).

" 27

Ki	iP	13 40 32.2
Um	eP	13 40 05
Ud	iP	13 39 26.6
	i	13 39 33.9

Libya (h = N).

" 27

Up	i(Rg)	19 04 26.7
Ud	i(Rg)	19 04 14.5

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

1972 Mar.	27	Up	iP	22 15 18.0	
		Ki	eP	22 14 44	
		Um	iP	22 14 57.2	
		Ud	iP	22 15 30.9	
		De	iP	22 15 43.0	
		Mongolia-USSR.			
"	27	Up	iP	23 27 44.4	
		Ki	iP	23 27 34.7	
		Sk	eP	23 27 55	
		Um	iP	23 27 39.3	
		Ud	iP	23 27 56.9	C
		Celebes (h = 240 km).			
"	28	Up	i(Sgl)	00 13 20.6	
		Um	i(Sgl)	00 11 52.7	
"	28	Ud	iP	01 20 00.8	
"	28	Up	iP	04 28 53.2	C
			iPn	04 29 59.1	
				micr sec	
			P Z'	0.1 1.0	
		Ki	iP	04 28 37.9	C
				micr sec	
			P Z'	0.1 0.6	
		Sk	iP	04 29 08.6	C
			iPn	04 30 22.4	
		Um	iP	04 28 38.2	
		Ud	iP	04 29 09.6	C
			iPn	04 30 22.4	
		De	iP	04 29 17.4	
			iPn	04 30 31.6	
		Kazakh SSR.			
		m = 5.8 (Up,Ki).			
		Underground explosion.			
"	28	Um	i(Sgl)	06 08 13.9	
"	28	Ki	i(Sgl)	07 17 08.2	
"	28	Ki	iP	08 41 19.9	
			epP	08 42 15	
		Um	iP	08 41 25.8	
			ipP	08 42 18.4	
		Ud	iP	08 41 46.1	
			ipP	08 42 35.6	
		Mindoro.			
		h = 210 km (Ki,Um,Ud).			
		If the phases here identified			
		as pP instead were sP, the			
		focal depth would be 150 km.			
"	28	Up	iSgl	12 09 05.0	
		Ki	iSgl	12 10 57.0	
		Sk	eSgl	12 10 46	
		(cont.)			

1972 Mar.	28	(cont.)			
		Um	iS*	12 09 11.0	
			iSgl	12 09 17.3	
		Ud	iSgl	12 10 05.9	
		Western USSR.			
		Explosion.			
"	28	De	i(P)	14 16 44.7	
"	28	Up	i(PKP)	14 17 23.8	
			iPKP	14 17 27.7	
			i	14 17 33.4	
				micr sec	
			(PKP) Z'	0.3 1.5	
			PKP Z'	0.8 0.9	
		Ki	i(PKP)	14 17 04.8	
			iPKP	14 17 10.3	
				micr sec	
			PKP Z'	0.1 1.0	
		Sk	i(PKP)	14 17 20.0	
			iPKP	14 17 22.8	
		Um	iPKP	14 17 16.6	
		Ud	i(PKP)	14 17 24.6	
			iPKP	14 17 30.0	
			i	14 17 37.1	
		De	i(PKP)	14 17 29.6	
			iPKP	14 17 37.7	
			i	14 17 50.5	
		Kermadec Islands (h = 340 km).			
"	28	Ud	iP	15 08 35.4	
"	28	Ki	iSgl	18 33 06.6	
		Sk	iSgl	18 33 11.7	
		Um	iSn	18 33 20.4	
			iSgl	18 33 35.3	
		Nordland, Norway,			
		66.6°N, 13.9°E.			
		Origin time = 18 31 36.			
		Explosion.			
"	28	De	iPKP	18 38 19.3	C
			i	18 38 26.7	
		Tonga Islands (h = 45 km).			
"	28	Up	iP	21 03 55.4	
		Ki	iP	21 03 00.7	
		Sk	iP	21 03 30.9	
		Um	iP	21 03 28.1	
			iPcP	21 04 08.0	
		Ud	iP	21 03 53.1	
		De	iP	21 04 15.6	
		Unimak Island (h = 25 km).			
"	28	Um	i(P)	23 55 10.2	
"	29	Ki	iP	06 34 34.4	
		Kurile Islands (h = 80 km).			

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

1972 Mar.	29	Ki	iP	11 41 11.7	
		Um	iP	11 41 26.0	
		Ud	iP	11 41 51.6	
"	29	Um	i(P)	11 56 29.5	
"	29	Um	iP	15 20 53.1	
		Guatemala (h = 80 km).			
"	29	Um	iP	23 16 40.6	
		Venezuela (h = 50 km).			
"	30	Um	iP	02 19 27.0	
"	30	Up	iPKP	02 51 00.3	
		Ki	ePKP	02 50 50	
		Um	iPKP	02 50 57.2	
		Ud	iPKP	02 51 02.3	
		De	iPKP	02 51 12.4	
		Tonga-Kermadec Islands (h = 130 km).			
"	30	Um	iP	03 25 48.1	
		Japan (h = 360 km).			
"	30	Up	iPKP	05 53 27.6	C
			i	05 53 51.4	
			ipPKP	05 55 37	
			ipSKP	05 59 09.8	
			i	06 02 47	
				micr sec	
			PKP Z'	5.6 0.9	
			Mx E	4.7 22	
			Mx N	6.4 21	
			Mx Z	5.1 19	
		Ki	e(PKP)	05 53 02	
			i(PKP)	05 53 05.7	
			i(PKP)	05 53 08.1	
			iPKP	05 53 13.5	C
			iSKP	05 56 02.0	
			i	06 03 44	
				micr sec	
			(PKP) Z'	0.1 0.7	
			PKP Z'	0.2 0.7	
			Mx E	6.1 21	
			Mx N	6.0 20	
			Mx Z	6.0 19	
		Sk	i(PKP)	05 53 19.3	
			iPKP	05 53 24.3	
		Um	i(PKP)	05 53 13.6	
			iPKP	05 53 19.8	
			iSKP	05 56 12.3	
		Ud	iPKP	05 53 29.4	C
			ipSKP	05 59 12.0	
			iSKKP	06 04 28.7	
		De	i(PKP)	05 53 36.2	C
		(cont.)			
1972 Mar.	30	(cont.)			
		De	iPKP	05 53 39.9	C
		Tonga-Kermadec Islands. h = 580 km (Up). M = 6.5 (Up,Ki). M uncorrected for focal depth.			
"	30	Ki	iP	06 29 14.3	
		Sk	eP	06 29 37	
"	30	Um	iP	07 04 51.8	
		Ud	iP	07 05 19.7	
"	30	Up	iPKP	07 05 59.4	
			i	07 06 07.0	
		Ud	iPKP	07 06 01.0	
			i	07 06 09.0	
		Tonga-Kermadec Islands (h = 500 km).			
"	30	Up	iPKP	07 22 43.6	C
				micr sec	
			PKP Z'	0.1 0.7	
		Ki	ePKP	07 22 28	
			iSKP	07 25 17.3	
		Sk	e(PKP)	07 22 36	
			iPKP	07 22 38.0	
		Um	i(PKP)	07 22 30.9	
			iPKP	07 22 36.9	
			iSKP	07 25 28.3	
		Ud	iPKP	07 22 45.4	C
		Tonga-Kermadec Islands (h = 490 km).			
"	30	Up	iPKP	07 42 32.5	
		Ud	iPKP	07 42 34.5	
		Tonga-Kermadec Islands (h = 480 km).			
"	30	Ud	iP	10 08 32.2	
"	30	Up	iPKP	11 18 50.8	
				micr sec	
			Mx E	1.0 18	
			Mx N	1.1 20	
			Mx Z	2.2 20	
		Ki	ePP	11 20 18	
				micr sec	
			Mx E	0.8 19	
			Mx N	1.3 22	
			Mx Z	1.2 20	
		Um	ePKP	11 19 06	
		Ud	iPP	11 19 37.6	
			iPKKP	11 29 59.6	
		Chile (h = 70 km). M = 5.7 (Up,Ki).			

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

1972					
Mar.	30	Up	iSgl	12 08 34.9	
		Ki	eSgl	12 10 33	
		Sk	eSgl	12 10 12	
		Um	iSgl	12 08 50.9	
		Ud	iSgl	12 09 35.0	
		De	eSgl	12 10 03	
		Western USSR.			
		Explosion.			
"	30	Up	iPKP	15 12 44.9	
				micr	sec
			PKP	Z' 0.1	0.7
		Um	ePKP	15 12 39	
		Ud	iPKP	15 12 46.8	
		De	iPKP	15 12 56.8	
		Tonga-Kermadec Islands			
		(h = 500 km).			
"	30	Up	iPKP	16 16 38.0 C	
				micr	sec
			PKP	Z' 0.2	0.8
		Ki	iSKP	16 19 12.3	
		Sk	ePKP	16 16 31	
		Um	i(PKP)	16 16 25.5	
			iPKP	16 16 31.5	
			iSKP	16 19 22.5	
		Ud	iPKP	16 16 40.0 C	
		De	iPKP	16 16 49.8 C	
		Tonga-Kermadec Islands			
		(h = 500 km).			
"	30	Up	eP	19 54 11	
		Sk	eP	19 54 06	
		Um	iP	19 53 50.6	
		Ud	iP	19 54 18.6	
		Japan (h = 140 km).			
"	30	Up	iPKP	20 09 24.3	
		Um	ePKP	20 09 12	
		Ud	iPKP	20 09 25.7	
"	30	Up	iP	20 29 52.4	
		Ki	iP	20 28 52.4	
		Sk	eP	20 29 35	
		Ud	iP	20 29 59.5	
		De	iP	20 30 20.9	
"	30	Ud	eP	20 40 23	
"	30	Up	iPKP	22 14 59.4	
		Ud	iPKP	22 15 01.5	
"	30	Ud	eP	23 58 27	
"	31	Up	iP	03 03 09.1	
			i	03 03 16.7	
		(cont.)			

1972					
Mar.	31	(cont.)			
		Up			
				micr	sec
			Mx	E 1.2	13
			Mx	N 0.7	16
			Mx	Z 1.5	14
		Ki	i	03 04 37.6	
				micr	sec
			Mx	E 1.6	15
			Mx	N 0.7	12
		Sk	iP	03 03 47.9	
		Um	iP	03 03 45.7	
		Ud	iP	03 03 15.7	
		De	iP	03 02 40.9	
			iPP	03 03 01.9	
		Greece (h = N).			
		M = 4.7 (Up,Ki).			
"	31	Um	iP	04 55 03.5	
		Ud	eP	04 55 38	
		Japan (h = 40 km).			
"	31	Ud	iP	05 30 57.6	
"	31	Up	iPn	11 21 21.7	
			iPgl	11 21 31.3	
			iSn	11 22 10.6	
			iSgl	11 22 22.4	
		Sk	iSgl	11 24 45.5	
		Um	ePn	11 22 12	
			i(P*)	11 22 22.3	
			i	11 23 51.9	
			iSgl	11 24 14.2	
		Ud	iPn	11 21 40.1	
			iPgl	11 21 51.4	
			iSn	11 22 43.4	
			iSgl	11 23 07.6	
		De	iPn	11 21 17.4	
			iPgl	11 21 26.3	
			eSgl	11 22 17	
		Baltic Sea, 56.3°N, 20.8°E.			
		Origin time = 11 20 20.			
		Explosion?			
"	31	Up	iPn	12 15 17.1	
			iSn	12 16 02.5	
			iSgl	12 16 15.9	
		Ki	i(Sg2)	12 18 49.6	
		Sk	iSgl	12 18 06.1	
		Um	iPgl	12 15 44.9	
			iSgl	12 16 49.5	
		Ud	iPn	12 15 44.6	
			iSn	12 16 50.5	
			iSgl	12 17 17.6	
		De	ePn	12 15 56	
			iSgl	12 17 45.2	
		Esthonia, 59.6°N, 25.2°E.			
		(cont.)			

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

1972
Mar. 31 (cont.)
Origin time = 12 14 16.
Explosion.

"	31	Um	iSgl		12 26 54.6
		Ud	eSgl		12 27 32

Western USSR.
Explosion.

"	31	Ud	eP		13 37 01
		De	eP		13 37 25
"	31	Ki	iP		13 57 13.2
		Um	iP		13 57 52.7
		Ud	eP		13 58 25
"	31	Um	i(Sgl)		14 11 57.7
		Ud	i(Sgl)		14 12 41.8
"	31	Up	iP		14 17 52.0
			iPP		14 20 50.4
					micr sec
			P	Z'	0.1 0.9
			PP	Z'	0.1 1.2
		Ki	iP		14 17 18.6
					micr sec
			P	Z'	0.1 0.9
		Sk	iP		14 17 48.3
		Um	iP		14 17 33.0 D
			ipP		14 18 05.1
			iPP		14 20 20.3
		Ud	iP		14 17 59.5
			iPP		14 21 01.0
		De	iP		14 18 12.1
			iPP		14 21 23.1

South of Japan.
h = 130 km (Um).
m = 5.6 (Up,Ki).

"	31	De	eP		15 26 05
"	31	Up	iPKP		15 55 45.5
					micr sec
			Mx	E	1.5 16
			Mx	N	3.0 19
			Mx	Z	3.8 20
		Ki	iPKP		15 55 58.2
					micr sec
			PKP	Z'	0.1 1.1
			Mx	E	2.6 20
			Mx	N	3.0 22
			Mx	Z	2.6 21
		Sk	ePKP		15 55 52
		Um	iPKP		15 55 52.0
			i(PP)		15 57 34.7
		Ud	iPKP		15 55 42.7
			i(PP)		15 57 00.2

(cont.)

1972
Mar. 31 (cont.)
South Sandwich Islands
(h = N).
M = 6.2 (Up,Ki).

"	31	Um	iP		19 51 35.4
		Ud	iP		19 51 56.4

Tadzhik SSR.

"	31	Ud	iP		20 09 55.8
		De	iP		20 09 22.9

Dodecanese Islands (h = N).

"	31	Up	eP		20 37 15
			iS		20 41 35
		Ki	iP		20 38 21.5
					micr sec
			Mx	E	0.7 12
		Sk	iP		20 37 53.2
		Um	eP		20 37 53
		Ud	iP		20 37 24.0
			i		20 37 34.7
		De	iP		20 36 51.4

Dodecanese Islands (h = 20 km).

"	31	Up	iPKP		21 15 33.3 D
					micr sec
			PKP	Z'	0.1 1.0
		Ki	iSKP		21 18 08.8
		Um	i(PKP)		21 15 21.9
			iPKP		21 15 27.3
			iSKP		21 18 19.4
		Ud	iPKP		21 15 35.5 D
		De	iPKP		21 15 45.6

Tonga-Kermadec Islands
(h = 480 km).

"	31	Sk	eP		22 17 02
		Um	i		22 17 18.5
		Ud	iP		22 16 30.6
		De	eP		22 15 57

Greece.

Markus Båth
Ota Kulhánek
Klaus Meyer
Rutger Wahlström

May 8, 1974

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BOX 517
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SWEDEN

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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

A P R I L 1 - 30, 1972

1972				
Apr.	1	Ki	iX	02 46 23.0
			iPKP2	02 46 36.3
		Um	iPKP	02 46 21.4
			iPKP2	02 46 42.0
		Ud	iPKP2	02 47 00.9
		De	ePKP2	02 47 05
		Auckland Islands (h = N).		
"	1	Up	iP	05 55 39.7
		Sk	eP	05 56 25
		Um	iP	05 56 25.0
		Ud	iP	05 55 42.3
		De	eP	05 55 05
		Yugoslavia (h = N).		
"	1	Up	iSg1	09 41 56.6
		Ki	iPn	09 37 45.1
			iSn	09 38 44.5
			iS*	09 39 03.2
			iSg1	09 39 07.2
		Sk	e	09 41 12
			iSg1	09 41 39.4
		Um	iSn	09 39 24.6
			iSg1	09 39 59.0
		Ud	iS*	09 42 06.2
			iSg1	09 42 28.3
		De	iSg1	09 44 01.0
		Northwest Russia, 67.6°N, 34.3°E. Origin time = 09 36 26. Explosion.		
"	1	Ki	iSn	09 48 37.7
			iS*	09 48 55.8
			iSg1	09 49 01.0
		Sk	eSg1	09 51 25
		Um	eSn	09 49 15
			iSg1	09 49 51.5
		(cont.)		

1972				
Apr.	1	(cont.)		
		Ud	eSg1	09 52 27
		Northwest Russia. Explosion.		
"	1	Up	iP	10 26 10.8 D
		Ki	iP	10 25 19.1
		Sk	iP	10 25 54.9
		Um	iP	10 25 43.5
		Ud	iP	10 26 14.9
		De	iP	10 26 35.4
		Kurile Islands (h = N).		
"	1	Ud	iP	10 58 52.7
"	1	Up	iPKP	11 19 46.9
			iPKS	11 23 30.2
		Ki	ePKP	11 19 38
		Sk	ePKP	11 19 41
		Um	iPKP	11 19 37.8
			i	11 19 46.6
			iSKP	11 23 01.4
		Ud	iPKP	11 19 49.6
			iPKS	11 23 33.8
		De	iPKP	11 20 00.8
		Fiji Islands (h = 220 km).		
"	1	Um	iP	15 02 36.0
		Ud	iP	15 03 06.7
"	1	Sk	eP	18 24 05
		Um	eP	18 23 33
			i	18 23 39.2
		Ud	eP	18 23 18
		De	eP	18 22 57
"	1	Um	iP	19 04 19.6
			ipP	19 04 41.6
		(cont.)		

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

1972 Apr.	1	(cont.)			
		Ud	iP		19 04 50.8
		Japan.			
		h = 90 km (Um).			
"	1	Ki	eP		20 37 39
		Um	iP		20 38 06.4
		Ud	iP		20 38 31.2
		De	eP		20 38 54
"	1	Up	iX		21 45 36.7
		Ki	eX		21 45 31
		Sk	eP		21 45 20
		Um	iP		21 44 57.6
			iX		21 45 30.5
		Ud	iP		21 45 18.3
			iX		21 45 50.8
"	1	Um	i(P)		22 25 29.5
"	1	Um	i(P)		22 57 52.1
"	1	Up	iPKP		23 55 20.5
		Ud	iPKP		23 55 22.5
		De	ePKP		23 55 32
"	2	Up	eX		00 11 31
			iPKP2		00 11 49.9
					micr sec
			PKP2	Z'	0.2 1.5
			Mx	E	3.5 20
			Mx	N	3.2 20
			Mx	Z	4.5 22
		Ki	iPKP		00 11 11.0
			iX		00 11 23.2
					micr sec
			X	Z'	0.1 1.2
			Mx	E	4.2 18
			Mx	N	4.8 19
			Mx	Z	3.8 19
		Sk	ePKP2		00 11 57
		Um	iPKP		00 11 13.8
			iPKP2		00 11 41.8
		Ud	iPKP2		00 11 57.8
		De	iPKP		00 11 19.6
			iPKP2		00 12 04.3
		Auckland Islands (h = N).			
		M = 6.4 (Up,Ki).			
		The phase marked X in this and adjacent Auckland Islands events parallels the PKP travel time with a lag of about 12-13 sec. It could be pPKP, implying a focal depth of h = 45 km.			

1972 Apr.	2	Up	Mx		00 35
					micr sec
			Mx	E	2.4 21
			Mx	N	2.6 21
			Mx	Z	1.5 18
		Ki	Mx		00 34
					micr sec
			Mx	E	1.2 16
			Mx	N	2.5 12
		Solomon Islands			
		(h = 30 km).			
		M = 6.1 (Up,Ki).			
"	2	Ki	iX		00 37 41.1
		Um	iPKP		00 37 32.9
			iX		00 37 44.3
			iPKP2		00 38 01.7
		Ud	iPKP2		00 38 20.3
		De	iPKP2		00 38 24.9
		Auckland Islands (h = N).			
"	2	Up	ePKP2		00 59 29
					micr sec
			PKP2	Z'	0.1 1.1
		Ki	iPKP		00 58 57.8
			iPKP2		00 59 11.6
					micr sec
			PKP2	Z'	0.1 1.1
		Um	iPKP		00 58 51.8
			iX		00 59 01.2
			iPKP2		00 59 18.4
		Ud	iPKP2		00 59 36.2
		De	iPKP2		00 59 41.0
		Auckland Islands (h = N).			
"	2	Ud	iP		02 45 17.2
"	2	Um	iPKP		02 59 39.3
		Solomon Islands			
		(h = 200 km).			
"	2	Um	iPKP2		03 30 21.4
		Ud	iPKP2		03 30 38.8
		Auckland Islands (h = N).			
"	2	Up	iP		03 42 21.2
			i		03 42 37.2
					micr sec
			P	Z'	0.1 0.9
			Mx	N	1.7 16
		Ki	iP		03 42 26.6
		Sk	iP		03 42 45.4
		Um	iP		03 42 17.4
		Ud	iP		03 42 36.5
		De	iP		03 42 35.0
		Kashmir (h = 45 km).			

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

1972 Apr.	2	Um	iP		04 30 18.5
		Ud	iP		04 30 44.3
"	2	Up	eP		07 58 53
		Ki	iP		07 58 57.6
		Sk	eP		07 59 18
		Um	eP		07 58 47
		Ud	iP		07 59 05.7
			i		07 59 14.4
		Kashmir (h = 60 km).			
"	2	Up	iPKP		09 20 42.8
			iPP		09 23 18.4
		Ki	iPKP		09 20 27.1
					micr sec
			PKP	Z'	0.1 1.1
			Mx	E	1.5 20
			Mx	N	1.6 21
			Mx	Z	1.4 20
		Sk	ePKP		09 20 41
		Um	i(PKP)		09 20 25.0
			iPKP		09 20 34.0
		Ud	i(PKP)		09 20 31.0
			iPKP		09 20 43.9
		De	i(PKP)		09 20 38.8
			iPKP		09 20 52.0
		Tonga Islands (h = N).			
"	2	Ki	iP		13 17 20.5
		Um	iP		13 17 46.8
			i		13 17 50.3
		Alaska (h = 120 km).			
"	2	Ud	iPKP		14 51 49.3
		Samoa Islands (h = N).			
"	2	Um	iP		16 30 26.9
"	2	Up			micr sec
			Mx	E	9.1 19
			Mx	N	16 19
			Mx	Z	23 19
		Ki	ePKP		21 48 57
					micr sec
			Mx	E	7.0 19
			Mx	N	9.7 19
			Mx	Z	8.1 19
		Sk	ePKP		21 49 09
		Um	iPKP		21 49 02.1
		Ud	ePKP		21 49 18
		New Hebrides Islands (h = N).			
		M = 6.7 (Up,Ki).			
"	3	Ki	iP		01 37 07.1
		Um	eP		01 37 05
		Ud	iP		01 37 29.6
		Kirghiz-Sinkiang (h = N).			
1972 Apr.	3	Up	eP		08 13 32
		Ki	eP		08 14 10
		Sk	eP		08 14 09
		Um	iP		08 13 45.6
		Ud	iP		08 13 46.9
		De	eP		08 13 39
		Iran (h = 45 km).			
"	3	Um	iP		09 11 31.1
		Ud	eP		09 11 01
		Greece (h = N).			
"	3	Up	eP		09 15 02
		Ki	iP		09 15 31.3
					micr sec
			Mx	E	1.2 16
			Mx	N	1.1 15
			Mx	Z	1.2 16
		Sk	iP		09 15 33.0
		Um	iP		09 15 10.3
			i		09 15 17.3
		Ud	iP		09 15 15.0
		De	iP		09 14 59.9
		Iran (h = 50 km).			
"	3	Up	iP		09 48 23.6
					micr sec
			P	Z'	0.1 1.0
		Ki	iP		09 47 45.1
		Sk	eP		09 48 17
		Um	iP		09 48 01.5
			ipP		09 48 16.4
		Ud	iP		09 48 29.7
		Japan. h = 55 km (Um).			
"	3	Up	iSn		13 52 48.1
			iSg1		13 53 01.4
		Ki	eSg1		13 55 32
		Sk	eSg1		13 54 49
		Um	iSg1		13 53 35.3
		Ud	iSn		13 53 36.4
			iSg1		13 54 04.5
		Esthonia, 59.5°N, 25.1°E. Origin time = 13 51 00. Explosion.			
"	3	Sk	eP		15 52 05
		Um	iP		15 51 50.2
		Volcano Islands (h = 140 km).			
"	3	Um	iPKP		17 07 19.0
		Ud	iPKP		17 07 30.4
"	3	Um	iP		17 37 32.7

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

1972 Apr.	3	Up	iP		18 58 54.2	
			iS		19 03 46	
					micr	sec
			P	Z'	0.3	1.3
			Mx	E	5.3	21
			Mx	N	5.1	19
			Mx	Z	8.0	21
		Ki	iP		18 58 57.1	
					micr	sec
			P	Z'	0.1	1.1
			Mx	E	4.1	17
			Mx	N	2.0	14
			Mx	Z	4.4	17
		Sk	iP		18 58 26.1	
		Um	iP		18 58 58.7	
			iS		19 03 53	
		Ud	iP		18 58 36.2	
		De	iP		18 58 41.7	
		North Atlantic Ocean (h = N).				
		m = 5.8, M = 5.3 (Up,Ki).				
"	3	Um	iP		19 03 40.5	
		Ud	eP		19 04 07	
		Japan (h = 40 km).				
"	3	Up	iP		20 42 17.0	
			iS		20 47 06	
					micr	sec
			P	Z'	0.2	1.3
			Mx	E	6.9	20
			Mx	N	5.7	19
			Mx	Z	11	21
		Ki	iP		20 42 18.7	
					micr	sec
			P	Z'	0.6	2.3
			Mx	E	6.3	17
			Mx	N	3.4	17
			Mx	Z	5.5	17
		Sk	iP		20 41 48.9	
		Um	iP		20 42 22.6	
			iS		20 47 16	
		Ud	iP		20 41 57.2	
			i		20 42 01.4	
		De	iP		20 42 06.4	
		North Atlantic Ocean (h = N).				
		m = 5.9, M = 5.4 (Up,Ki).				
"	3	Up	iP		22 19 59.0	
		Ki	iP		22 19 23.4	
		Sk	iP		22 19 54.9	
		Um	iP		22 19 38.8 D	
		Ud	iP		22 20 06.6	
		Japan (h = 310 km).				
1972 Apr.	3	Ki	iP		22 59 42.6	
		Um	iP		23 00 06.8	
		Kurile Islands (h = 60 km).				
"	4	Ki	iP		09 03 43.8	
		Um	iP		09 04 02.0	
		Ud	iP		09 04 31.6	
		Japan (h = 35 km).				
"	4	Up	iSg1		13 21 58.8	
		Ki	eSg1		13 24 49	
		Sk	iSg1		13 23 56.1	
		Um	iSg1		13 22 48.2	
		Ud	eSg1		13 21 59	
		Esthonia, 59.0°N, 24.4°E.				
		Origin time = 13 20 06.				
		Explosion.				
"	4	Um	iP		15 32 52.2	
		Japan (h = N).				
"	4	Up	iP		22 56 33.3 D	
			i		22 59 22.5	
			iPKP		23 00 46.1	
			iSKS		23 06 30.0	
			iSP		23 09 31.3	
			iPKKP		23 12 11.7	
					micr	sec
			P	Z'	0.1	0.9
			Mx	E	2.4	21
			Mx	N	5.0	23
			Mx	Z	4.0	21
		Ki	iP		22 56 20.9 D	
			iPKP		23 00 40.4	
			iSKS		23 06 16	
			iPKKP		23 12 20.4	
					micr	sec
			P	Z'	1.0	1.0
			Mx	E	3.7	19
			Mx	N	4.3	21
			Mx	Z	3.3	20
		Sk	iP		22 56 40.6 D	
			iPKKP		23 12 07.8	
		Um	iP		22 56 24.6 D	
			iPKP		23 00 42.5	
			iSKS		23 06 21	
			iPKKP		23 12 18.1	
		Ud	iP		22 56 42.1 D	
			iPKKP		23 12 06.2	
		De	iP		22 56 46.7 D	
			iPKP		23 00 51.2	
			iPKKP		23 12 03.3	
		Banda Sea (h = 380 km).				
		m = 7.0, M = 6.1 (Up,Ki).				
		M uncorrected for focal depth.				

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

1972
Apr. 4 Um i(PP) 23 52 28.8
Peru (h = 50 km).

" 5 Up iP 00 04 56.6 C
i 00 05 07.0
Um iP 00 04 42.2
Ud iP 00 05 05.3
i 00 05 15.4

" 5 Up iP 00 38 03.2
Um iP 00 38 13.9
Ud iP 00 38 11.9
Indian Ocean (h = N).

" 5 Um iP 01 12 26.3
Indian Ocean (h = N).

" 5 Up iP 05 48 01.1 C
micr sec
P Z' 0.1 1.0
Ki iP 05 47 17.9 C
micr sec
P Z' 0.1 0.8
Sk iP 05 47 52.7 C
Um iP 05 47 37.0 C
Ud iP 05 48 07.9 C
De iP 05 48 24.5
Japan (h = 70 km).
m = 5.8 (Up,Ki).

" 5 Ud iP 06 57 10.4
Kurile Islands (h = 110 km).

" 5 Um iP 07 56 54.2
Indian Ocean (h = N).

" 5 Um i(P) 07 57 34.5
Ud e(P) 07 57 34.6
De e(P) 07 57 35.9

" 5 Um eP 10 12 15
Indian Ocean (h = N).

" 5 Up iP 13 27 50.9
Ki iP 13 27 38.5
Sk eP 13 28 07
Um iP 13 27 38.6
Ud iP 13 28 06.4
China (h = N).

" 5 Up iP 15 01 53.3
Ki iP 15 01 35.0
Um eP 15 01 35

" 5 Um eP 15 28 38

1972
Apr. 5 Ki iP 15 29 46.4
Ud iP 15 30 12.0
Mindanao (h = 90 km).

" 5 Um i(P) 18 50 55.2
i 18 51 14.7

" 5 Um iP 18 59 20.6
Indian Ocean (h = N).

" 5 Ki iSg1 20 10 47.8
Sk iSg1 20 10 53.6
Um iSn 20 11 01.6
iSg1 20 11 15.5
Nordland, Norway,
66.5°N, 14.0°E.
Origin time = 20 09 18.
Explosion.

" 5 Up ePP 22 47 43
Ki iP 22 46 11.2
micr sec
P Z' 0.1 0.9
Sk iP 22 46 31.1 D
Um iP 22 46 03.3 D
iPP 22 47 41.0
Ud iP 22 46 24.1 D
De iP 22 46 23.0
Tadzhik-Sinkiang
(h = 120 km).

" 6 Sk eP 00 09 42
Ud iP 00 09 10.0
De eP 00 08 40
Crete.

" 6 Up iP 00 14 55.3
Ki iP 00 14 20.4
Sk iP 00 14 49.8
Um iP 00 14 34.6
ipP 00 15 59.6
Ud iP 00 15 01.5
De iP 00 15 14.3
Japan.
h = 390 km (Um).

" 6 Up iP 00 48 52.2
Ki eP 00 48 07
Sk iP 00 48 39.2
Um iP 00 48 25.5
Ud iP 00 48 56.6
De iP 00 49 15.9
Kurile Islands (h = 70 km).

" 6 Um iP 02 43 35.2
Indian Ocean (h = N).

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

1972
Apr. 6 Up iPKP 03 39 53.4
iSKP 03 43 16.0
Ki iPKP 03 40 07.9
i(SKP) 03 43 17.8
micr sec
PKP Z' 0.3 1.3
(SKP) Z' 0.6 1.9
Sk iPKP 03 39 59.1
iSKP 03 43 20.0
Um iPKP 03 40 01.8
Ud iPKP 03 39 52.0
iSKP 03 43 14.4
De ePKP 03 39 44
South Sandwich Islands
(h = 140 km).
(SKP) denotes early SKP
arrival.

" 6 Ki iP 03 46 34.2
Um iP 03 46 50.6
Ud iP 03 47 19.0
Japan (h = N).

" 6 Up iPKP 03 49 49.1
Ud iPKP 03 49 51.6

" 6 De iPKP 05 27 41.0
Tonga-Kermadec Islands
(h = 510 km).

" 6 Sk iP 07 07 16.3
Hindu Kush.
Intermediate depth.

" 6 Up e(P) 08 43 42
Ki iP 08 44 38.0
Ud iP 08 43 41.9
De e(P) 08 43 47
Caucasus.

" 6 Up iP 11 20 54.4
Ki iP 11 19 59.0
Sk eP 11 20 32
Um iP 11 20 24.2
Ud iP 11 20 53.8
Aleutian Islands
(h = 55 km).

" 6 Up iPKP 14 53 59.0
Sk ePKP 14 53 58
Um iPKP 14 53 52.3
Ud iPKP 14 54 01.2
De iPKP 14 54 06.9
Solomon Islands
(h = 410 km).

1972
Apr. 6 Ud eP 17 21 41
North Atlantic Ocean
(h = N).

" 6 Um iP 21 34 23.8
Ud iP 21 34 41.4
Hindu Kush (h = 220 km).

" 6 Ki eP 21 50 51
Ud iP 21 51 20.4
Kirghiz-Sinkiang (h = N).

" 6 Ki eP 22 50 32
Um iP 22 50 58.5
Ud iP 22 51 23.4
De eP 22 51 46
Alaska (h = N).

" 7 Up ePKP2 00 23 34
micr sec
Mx E 1.2 20
Mx N 1.8 20
Mx Z 3.3 20
Ki ePKP 00 23 11
micr sec
Mx E 2.4 18
Mx N 3.5 21
Mx Z 2.6 19
Sk iPKP2 00 23 48.1
Um iPKP 00 23 12.2
iPKP2 00 23 32.4
Ud iPKP2 00 23 40.6
i 00 23 48.5
De iPKP2 00 23 38.0
Macquarie Islands (h = N).
M = 6.2 (Up,Ki).

" 7 Up iP 00 41 27.0
Ki eP 00 41 57
Sk eP 00 41 55
Um iP 00 41 38.2
i 00 41 57.3
Ud iP 00 41 38.2
i 00 42 02.6
Indian Ocean (h = N).

" 7 Ki iP 01 29 53.3
Um iP 01 29 58.5
Ud eP 01 30 17
Molucca Passage (h = 45 km).

" 7 Um i(P) 01 32 41.7

" 7 Up iP 03 26 20.4
Ki iP 03 25 24.4
ipP 03 25 52.8
(cont.)

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

1972
Apr. 7 (cont.)

Sk	eP	03 25 52	
Um	iP	03 25 53.0	
	ipP	03 26 22.3	
Ud	eP	03 26 17	
De	iP	03 26 41.7	
	ipP	03 27 09.4	

Alaska.
h = 100 km (Ki,Um,De).

" 7 Up i(P) 05 58 43.3

" 7 Up iPg1 08 09 18.9
iSg1 08 09 26.2
iRg 08 09 31.1

" 7 Up iPKP 10 40 26.3
Tonga Islands (h = N).

" 7 Um iP 14 24 06.4

" 7 Ud i 15 19 32.1
iSg1 15 19 59.0
De iSg1 15 20 36.2

" 7 Up iSg1 16 25 54.1
Ki eSg1 16 26 34
Sk eSg1 16 27 05
Um iSg1 16 25 14.9
Ud eSg1 16 26 45
Lake Ladoga.
Explosion.

" 7 Ud iP 17 10 27.3
Ionian Islands.

" 7 Up iP 19 22 19.3
Ki eP 19 21 52
Um iP 19 22 02.9
Mariana Islands (h = 40 km).

" 7 Up iSn 20 23 43.7
iSg1 20 24 17.7
Ki iPn 20 23 05.3
eSn 20 24 35
iSg1 20 25 23.8
Sk iPn 20 21 52.7
iSn 20 22 25.7
i 20 22 40.3
iSg1 20 22 45.2
Um iPn 20 22 41.5
iSn 20 23 56.4
iSg1 20 24 33.6
Ud iPn 20 22 08.3
iPg1 20 22 23.6
iSn 20 22 59.4
(cont.)

1972
Apr. 7 (cont.)

Ud	iSg1	20 23 20.5
De	iPn	20 22 47.6
	iSn	20 23 58.7
	iSg1	20 24 43.9

Near west coast of Norway, 62.4°N, 6.2°E.
Origin time = 20 21 09.

" 8 Sk eP 00 15 29
Um iP 00 15 32.3
Ud iP 00 14 52.0
Greece-Albania.

" 8 Ki iP 01 17 13.5
Ud iP 01 18 03.9
Kurile Islands (h = 60 km).

" 8 Ud iP 01 38 53.4
Greece-Albania.

" 8 Up iP 05 05 53.0
iPcP 05 06 21.6
iS 05 14 42

		micr	sec
P	Z'	0.2	1.5
Mx	E	1.3	22
Mx	N	1.2	22
Mx	Z	2.4	20

Ki iP 05 06 24.8

		micr	sec
P	Z'	0.1	1.4
Mx	E	1.8	20
Mx	N	1.2	18
Mx	Z	1.5	22

Sk iP 05 05 53.2
Um iP 05 06 14.5
iS 05 15 14
Ud iP 05 05 42.1
De iP 05 05 34.9
Atlantic Ocean (h = N).
m = 6.0, M = 5.4 (Up,Ki).

" 8 Um iP 05 34 32.4
Indian Ocean (h = N).

" 8 Up iP 06 35 47.5

		micr	sec
P	Z'	0.1	1.1

Ki iP 06 35 08.8

		micr	sec
P	Z'	0.1	1.4

Sk iP 06 35 20.5
Um iP 06 35 29.5
Ud iP 06 35 40.7
i 06 35 42.8
(cont.)

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

1972
Apr. 8 (cont.)

De	iP	06 36 01.8	

Off coast of Oregon
(h = 10 km).
m = 5.9 (Up,Ki).

" 8	Up	iP	06 51 48.8
	Ki	eP	06 51 47
	Um	iP	06 51 41.0
	Ud	iP	06 52 02.7

Tibet (h = N).

" 8	Um	eSg1	08 12 23

Lake Ladoga region.
Explosion.

" 8	Up	i	09 35 01.4
		iSg1	09 35 15.4
	Um	eSg1	09 37 15
	Ud	iSg1	09 35 58.0
" 8	Up	i(Sg1)	09 35 44.3
	Um	eSg1	09 37 41
	Ud	iSg1	09 36 29.1
" 8	Up	iP	09 43 58.0 D
			micr sec
		P Z'	0.2 1.1
	Ki	iP	09 43 42.7 D
			micr sec
		P Z'	0.2 1.1
		Mx E	0.8 12
		Mx N	1.2 18
		Mx Z	0.6 12
	Sk	iP	09 44 09.3
	Um	iP	09 43 45.8 D
	Ud	iP	09 44 10.8 D

China (h = 55 km).
m = 6.2 (Up,Ki).

" 8	Um	iPKP	10 19 29.7

New Britain (h = 160 km).

" 8	Ud	iPKP	10 36 16.6
	De	ePKP	10 36 27

Tonga-Kermadec Islands
(h = 510 km).

" 8	Ki	iPn	10 55 59.7
		iSn	10 56 50.1
	Sk	ePn	10 57 12
		eSg1	10 59 43
	Um	iPn	10 56 38.3
		iSn	10 57 54.6
		iSg1	10 58 32.6
	Ud	eSg1	11 01 04

(cont.)

1972
Apr. 8 (cont.)

Northwest Russia,
69.2°N, 31.8°E.
Origin time = 10 54 54.
Explosion.

" 8	Ki	iPn	11 15 46.6
		iSn	11 16 37.1
	Sk	eSg1	11 19 04
	Um	iSn	11 17 06.0
		iSg1	11 17 30.3

Northwest Russia,
66.8°N, 31.2°E.
Origin time = 11 14 40.
Explosion.

" 8	Ki	iPn	12 58 15.9
		iP*	12 58 23.9
		iSn	12 59 02.2
		iS*	12 59 14.9
	Sk	eSg1	13 02 00
	Um	iSn	13 00 12.5
		iSg1	13 00 50.3
	Ud	eSg1	13 03 18

Northwest Russia-Norway
border region,
69.5°N, 30.3°E.
Origin time = 12 57 15.
Explosion.

" 8	Um	iP	21 51 09.2
	Ud	eP	21 51 38

Japan (h = 60 km).

" 9	Ud	eP	00 42 28
" 9	Um	eP	01 21 23
	Ud	eP	01 21 35

Off coast of Oregon
(h = N).

" 9	Up	iP	04 18 53.3 C
		iPP	04 20 29.0
			micr sec
		P Z'	0.7 0.9
		Mx E	6.5 10
		Mx N	5.6 9
		Mx Z	14 10
	Ki	iP	04 18 41.0 C
			micr sec
		P Z'	0.5 0.9
		Mx E	7.9 10
		Mx N	3.7 10
		Mx Z	7.4 10
	Sk	iP	04 19 09.4 C
		iPP	04 20 54.3
	Um	iP	04 18 40.6 C

(cont.)

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

1972
Apr. 9 (cont.)

Um	iS	04 24 57	
Ud	iP	04 19 08.7	C
De	iP	04 19 13.1	C
	i(PP)	04 20 49.8	

Sinkiang (h = N).
m = 6.3, M = 6.0 (Up,Ki).

"	9	Ud	eP	06 08 37
"	9	Up	iP	08 33 21.9 C
		Ki	eP	08 32 33
		Sk	iP	08 33 09.6
		Um	iP	08 32 54.7
		Ud	iP	08 33 26.5
		De	iP	08 33 45.9

Kurile Islands (h = 45 km).

"	9	Ud	eP	08 52 00
			i	08 52 11.7

Sinkiang (h = 15 km).

"	9	Um	iPKP	09 28 53.4
		Ud	iPKP	09 29 06.7
		De	iPKP	09 29 15.4
"	9	Up	eSg1	10 43 06
		Ki	iSn	10 40 51.4
		Sk	eSg1	10 43 28
		Um	eSn	10 41 29
			iSg1	10 42 05.2

Northwest Russia.
Explosion.

"	9	Up	iP	10 52 00.0	C
		Ki	iP	10 51 47.5	
		Sk	iP	10 52 15.7	
		Um	iP	10 51 47.4	
		Ud	iP	10 52 15.4	C
		De	eP	10 52 20	

Sinkiang (h = N).

"	9	Um	iP	13 46 01.1
		Ud	iP	13 46 28.2
"	9	Up	eP	15 39 44
		Sk	eP	15 39 19
		Um	eP	15 39 38
		Ud	iP	15 39 29.1

Guatemala (h = 90 km).

"	9	Ud	iP	16 57 04.7

Hindu Kush.
Intermediate depth.

"	9	Ki	ePKP	20 58 47

(cont.)

1972
Apr. 9 (cont.)

Um	ePKP	20 58 52	
Ud	ePKP	20 58 52	
De	iPKP	20 59 04.3	

Tonga Islands (h = N).

"	9	Ud	iP	22 52 03.1
"	9	Ki	iP	22 55 47.3
		Sk	eP	22 56 06
		Um	iP	22 55 39.5
		Ud	iP	22 55 58.4

Kashmir (h = 50 km).

"	10	Um	iP	00 11 49.6
		Ud	iP	00 12 08.3

Afghanistan-USSR.

"	10	Up	iP	00 57 11.1
		Ki	iP	00 56 48.7
		Um	iP	00 56 56.3
		Ud	iP	00 57 20.2
"	10	Up	eP	00 58 12
		Um	iP	00 57 54.3
		Ud	eP	00 58 21

Japan (h = 40 km).

"	10	Um	iP	01 05 02.0

Japan (h = 40 km).

"	10	Um	eP	01 35 11

Japan (h = N).

"	10	Up	eP	01 56 24	
		Um	iP	01 56 40.3	
		Ud	iP	01 56 38.5	

Iran.
Origin time = 01 48 57.

"	10	Um	iP	02 10 36.4
"	10	Up	iP	02 14 21.1 C
			i	02 14 22.6
			iPP	02 15 52
			iS	02 20 15

		micr	sec
P	Z'	0.1	0.9
i	Z'	0.9	0.8
Mx	E	97	18
Mx	N	140	22
Mx	Z	260	21

		Ki	iP	02 14 58.0 C
			i	02 14 59.4
			iPP	02 16 43.3
			iS	02 21 18

(cont.)

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

1972
Apr. 10 (cont.)

			micr	sec	
Ki					
	P	Z'	0.1	0.9	
	i	Z'	0.9	0.7	
	Mx	E	150	17	
	Mx	N	180	18	
	Mx	Z	100	13	
Sk	iP		02 14 56.1		C
	i		02 14 57.5		
Um	iP		02 14 34.8		C
	i		02 14 36.2		
Ud	iP		02 14 36.2		C
	i		02 14 37.7		
De	iP		02 14 19.7		C
	i		02 14 21.3		

Iran (h = N).
m = 6.7, M = 7.1 (Up,Ki).
Double P, in average 1.5 sec apart. The second onset is considerably bigger than the first one.

" 10	Ud	iP	02 27 46.4	
" 10	Ud	iP	02 31 08.1	
" 10	Up	iP	02 32 53.9	
	Ki	iP	02 33 30.3	
	Um	iP	02 33 08.3	
	Ud	iP	02 33 08.6	
	De	eP	02 32 54	

Iran.
Origin time = 02 25 26.
Approximate origin times for Iranian aftershocks are based on our own records only.

" 10	Ud	iP	02 37 45.7	
" 10	Up	iP	02 38 09.8	
	Ki	eP	02 38 46	
	Um	iP	02 38 23.5	
	Ud	iP	02 38 25.1	
	De	eP	02 38 07	

Iran.
Origin time = 02 30 42.

" 10	Up	iP	02 38 57.8	
	Um	iP	02 39 12.1	
	Ud	iP	02 39 13.8	
	De	iP	02 38 57.1	

Iran.
Origin time = 02 31 30.

" 10	Up	eP	02 42 00	

(cont.)

1972
Apr. 10 (cont.)

	Ki	iP	02 42 36.3	
	Sk	iP	02 42 34.7	
	Um	iP	02 42 13.1	C
	Ud	iP	02 42 14.7	C
	De	iP	02 41 58.4	

Iran (h = N).

" 10	Ud	iP	02 45 22.7	

(Iran).

" 10	Um	eP	02 48 33	
	Ud	iP	02 48 33.5	

Iran.
Origin time = 02 40 51.

" 10	Ud	eP	03 00 37	
" 10	Um	iP	03 06 30.9	
	Ud	eP	03 06 32	

Iran.
Origin time = 02 58 49.

" 10	Ud	eP	03 22 33	
" 10	Up	iP	03 45 24.1	
	Ki	iP	03 46 01.6	
	Sk	eP	03 46 03	
	Um	iP	03 45 38.4	
	Ud	iP	03 45 39.3	
	De	eP	03 45 23	

Iran (h = N).

" 10	Um	iP	03 51 28.6	

Japan (h = N).

" 10	Up	iP	04 02 13.4	C
	Ki	iP	04 02 50.4	C
	Sk	iP	04 02 48.1	
	Um	iP	04 02 27.1	C
	Ud	iP	04 02 28.5	C
	De	iP	04 02 12.0	

Iran.
Origin time = 03 54 46.

" 10	Ud	iP	04 05 03.7	
" 10	Sk	eP	04 13 10	
	Um	iP	04 13 07.3	
" 10	Up	eP	04 14 29	
	Ki	iP	04 15 07.6	
	Sk	iP	04 15 05.3	
	Um	eP	04 14 41	
	Ud	iP	04 14 44.1	

Iran.
Origin time = 04 07 01.

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

1972				
Apr.	10	Up	iP	04 15 16.2
		Ki	iP	04 15 52.8
		Sk	eP	04 15 50
		Um	iP	04 15 32.1
		Ud	iP	04 15 31.3
		De	eP	04 15 19
		Iran.		
		Origin time = 04 07 48.		
"	10	Ud	iP	04 20 13.3
"	10	Ud	eP	04 26 52
"	10	Up	iP	04 43 45.5
		Ki	iP	04 44 21.5
		Sk	iP	04 44 20.2
		Um	iP	04 43 59.0
		Ud	iP	04 43 59.6
			i	04 44 00.7
		Iran (h = N).		
"	10	Um	eP	05 00 25
		Ud	iP	05 00 26.9
		Iran.		
		Origin time = 04 52 44.		
"	10	Ud	eP	05 25 22
"	10	Um	iP	05 40 34.8
		Ud	iP	05 40 36.7
		Iran.		
		Origin time = 05 32 54.		
"	10	Ud	eP	05 45 21
"	10	Ud	eP	05 56 57
		De	iP	05 56 45.7
		Iran.		
"	10	Up	iP	05 57 36.0
		Ki	eP	05 57 01
		Sk	iP	05 57 33.0
		Um	iP	05 57 19.2
		Mariana Islands (h = N).		
"	10	Um	eP	06 03 08
		Ud	iP	06 03 11.1
		Iran.		
		Origin time = 05 55 27.		
"	10	Ud	eP	06 04 17
"	10	Ki	iP	06 15 08.1
		Sk	eP	06 15 06
		Um	eP	06 14 44
		Ud	iP	06 14 45.4
		Iran.		
		Origin time = 06 07 02.		

1972				
Apr.	10	Up	iP	06 28 23.0
		Ki	eP	06 28 33
		Ud	iP	06 28 30.9
"	10	Up	iP	08 41 21.6
		Ki	iP	08 41 58.2
		Sk	iP	08 41 55.6
		Um	iP	08 41 34.7
		Ud	iP	08 41 36.5
		De	iP	08 41 20.2
		Iran (h = N).		
"	10	Up	iP	09 11 25.7
		Ki	eP	09 12 02
		Um	iP	09 11 40.8
		Ud	iP	09 11 40.6
		De	iP	09 11 24.5
		Iran (h = N).		
"	10	Ud	eP	09 18 41
		Iran.		
"	10	Up	iP	09 54 12.3
		Ki	iP	09 54 49.5
		Sk	iP	09 54 46.8
		Um	iP	09 54 26.4
		Ud	iP	09 54 27.3
		De	eP	09 54 11
		Iran (h = N).		
"	10	Up	iP	10 54 28.8
		Ki	eP	10 55 07
		Sk	eP	10 55 05
		Um	iP	10 54 43.5
		Ud	iP	10 54 45.5 C
		De	iP	10 54 30.2
		Iran (h = N).		
"	10	Ud	iP	12 06 20.9
"	10	Up	iSg1	12 46 49.7
		Ki	eSg1	12 48 37
		Sk	eSg1	12 48 23
		Um	iSg1	12 46 55.3
		Ud	iSn	12 47 19.4
			iSg1	12 47 53.2
		Western USSR.		
		Explosion.		
"	10	Up	eP	13 05 53
		Ki	eP	13 06 31
		Um	e(P)	13 06 02
		Ud	iP	13 06 07.5
		De	iP	13 05 55.3
		Iran.		
		Origin time = 12 58 24.		
"	10	Ki	eP	13 59 34
		(cont.)		

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

1972
Apr. 10 (cont.)

Um	iP	13 59 10.7	
Ud	iP	13 59 08.1	

Iran.
Origin time = 13 51 28.

" 10	Up	iP	14 43 03.8
	Ki	iP	14 43 40.8
	Sk	eP	14 43 38
	Um	iP	14 43 19.0
	Ud	iP	14 43 19.1
	De	iP	14 43 02.4

Iran (h = N).

" 10	Up	iP	16 32 47.4
	Ki	iP	16 32 35.8
	Sk	eP	16 33 04
	Um	iP	16 32 35.9
	Ud	iP	16 33 03.2

Sinkiang.

" 10	Um	iP	16 55 58.4
	Ud	iP	16 55 58.8

Iran.
Origin time = 16 48 16.

" 10	Ud	iP	16 59 35.0
" 10	Up	eP	17 00 37
	Ki	eP	17 01 11
	Um	iP	17 00 51.4
	Ud	iP	17 00 49.0

Iran.
Origin time = 16 53 06.

" 10	Up	iP	17 21 02.9
	Ki	eP	17 21 39
	Um	iP	17 21 16.1
	Ud	iP	17 21 17.6

Iran.
Origin time = 17 13 33.

" 10	Ud	iP	19 25 38.9
" 10	Up	iPKP	19 59 29.1
	Ud	ePKP	19 59 31
	De	ePKP	19 59 41
" 10	Up	iP	20 34 36.3 C
		i	20 34 38.4
	Ki	iP	20 35 12.5
		i	20 35 15.2
	Sk	iP	20 35 10.9
		i	20 35 14.6
	Um	iP	20 34 49.7
		i	20 34 53.3

(cont.)

1972
Apr. 10 (cont.)

Ud	iP	20 34 51.1	
	i	20 34 53.5	
De	iP	20 34 34.9	

Iran (h = N).
Double P, in average 2.9 sec apart.

" 10	Up	i(P)	21 28 10.3
		i	21 28 29.9
" 10	Up	iP	22 15 54.4
		iX	22 16 21.6
	Ki	eX	22 15 47
	Sk	eP	22 15 50
	Um	iP	22 15 32.8
		iX	22 16 00.7
	Ud	eP	22 16 00

Japan (h = 30 km).
The phase marked X could be P of another shock in the same area, 27.5 sec later.

" 11	Um	iP	00 46 14.7
	Ud	iP	00 46 18.1

Iran.
Origin time = 00 38 34.

" 11	Um	eP	01 46 17
	Ud	iP	01 46 17.9

Iran.
Origin time = 01 38 35.

" 11	Up	iP	02 32 17.0	C
		ipP	02 32 25.6	
		iS	02 41 20	
			micr	sec
		P Z'	0.7	1.6
		Mx E	31	22
		Mx N	28	20
		Mx Z	38	18
	Ki	iP	02 32 53.7	C
		ipP	02 33 02.5	
		iS	02 42 30	
			micr	sec
		P Z'	0.8	1.9
		Mx E	23	19
		Mx N	26	19
		Mx Z	22	19
	Sk	iP	02 32 21.5	C
	Um	iP	02 32 38.5	C
		ipP	02 32 47.3	
		iS	02 42 05	
	Ud	iP	02 32 08.3	C
		ipP	02 32 17.6	

(cont.)

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

1972
Apr. 11 (cont.)
De iP 02 31 53.4 C
Atlantic Ocean.
h = 35 km (Up,Ki,Um,Ud).
m = 6.5, M = 6.7 (Up,Ki).

" 11 Ki eP 03 03 41

" 11 Ki iP 06 07 22.3
Sk iP 06 07 33.6
Um iP 06 07 06.5
Ud iP 06 07 20.5
Turkmen SSR (h = N).

" 11 Up iP 06 29 13.6
Ud iP 06 29 28.8
Sinkiang (h = N).

" 11 Um iP 11 11 21.7

" 11 Up iP 11 16 51.5
i 11 16 55.2
Sk iP 11 17 31.9
Um iP 11 17 30.7
Ud iP 11 16 57.9
i 11 17 01.2
De iP 11 16 21.5
Greece (h = 55 km).

" 11 Ud eP 12 03 12

" 11 Um eP 12 04 56

" 11 Ki iP 12 08 46.0
Sk eP 12 08 33
Um iP 12 08 52.0
Cuba (h = N).

" 11 Up iSg1 12 29 18.2
Sk eSg1 12 31 10
Um iSg1 12 29 51.2
Ud iSg1 12 30 21.5
De eSg1 12 30 47
Esthonia, 59.5°N, 25.0°E.
Origin time = 12 27 20.
Explosion.

" 11 Ud iP 13 13 16.2

" 11 Up iP 14 25 13.8 C
micr sec
P Z' 0.1 1.0
Ki iP 14 24 30.3 C
micr sec
P Z' 0.1 1.0
Sk iP 14 25 05.3 C
(cont.)

1972
Apr. 11 (cont.)
Um iP 14 24 49.7 C
Ud iP 14 25 20.6 C
De iP 14 25 37.3 C
Japan (h = 60 km).
m = 5.8 (Up,Ki).

" 11 Sk eSg1 14 36 28
Ud iPg1 14 35 31.2
iSg1 14 35 51.4

" 11 Ki iP 15 36 30.5
Um iP 15 36 58.0
South of Alaska (h = 15 km).

" 11 Um iP 16 38 43.3
(Iran).

" 11 Ki iP 18 30 29.1
Alaska (h = 20 km).

" 11 Um iP 19 25 37.2

" 11 Um iP 19 53 32.9
Ud iP 19 53 34.4
Iran.
Origin time = 19 45 51.

" 12 Up eP 05 59 09
Ki eP 05 59 46
Sk eP 05 59 45
Um iP 05 59 22.1
Ud iP 05 59 23.8
De iP 05 59 07.6
Iran (h = N).

" 12 Ki ePKP 10 18 53
Um iPKP 10 19 01.3
Ud iPKP 10 19 05.3
De iPKP 10 19 15.8
Tonga Islands (h = 200 km).

" 12 Ud iP 10 54 17.4

" 12 De i(P) 14 05 44.5

" 12 De i(P) 14 35 02.5

" 12 Ud iP 18 40 21.1

" 12 Up iP 18 45 10.2 C
i 18 45 14.3
Ki iP 18 45 46.9 C
Sk iP 18 45 45.1
Um iP 18 45 23.8 C
Ud iP 18 45 25.5 C
i 18 45 28.8
(cont.)

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

1972
Apr. 12 (cont.)
De iP 18 45 09.0
Iran (h = N).

" 12 Ud eP 18 55 18

" 12 Up iPg1 20 49 04.0
iSg1 20 49 10.7
Ud iSg1 20 50 03.6
Uppland, Sweden.
Origin time = 20 48 57.
Probably ore mine explosion at Dannemora

" 12 Up eP 21 45 34
i 21 45 40.9
Ki eP 21 45 49
Sk eP 21 46 03
i 21 46 08.4
Um iP 21 45 33.5
i 21 45 40.4
Ud iP 21 45 51.0
i 21 45 58.0
Uzbek SSR (h = 60 km).
Double P, in average 6.9 sec apart.

" 12 Up eP 22 39 16
Sk eP 22 39 55
Um iP 22 39 30.0
Ud iP 22 39 31.6
De eP 22 39 16
Iran (h = N).

" 12 Um iP 23 14 58.4
Ud iP 23 14 59.4
Iran.
Origin time = 23 07 16.

" 12 Up iP 23 15 18.7
i 23 15 20.9
iS 23 21 22.7
micr sec
Mx E 0.6 16
Mx N 0.9 20
Mx Z 0.9 17
Ki iP 23 15 55.2
i 23 15 57.1
micr sec
Mx E 0.8 11
Mx N 1.1 17
Mx Z 0.6 16
Sk iP 23 15 53.3
Um iP 23 15 32.8
i 23 15 35.0
Ud iP 23 15 33.8
(cont.)

1972
Apr. 12 (cont.)
Ud i 23 15 35.7
De iP 23 15 16.8
Iran (h = N).
M = 4.9 (Up,Ki).
Double P, in average 2.0 sec apart.

" 13 Um iP 01 23 01.2
Ud eP 01 23 33
De iP 01 23 41.6

" 13 Um iP 01 24 38.2
Ud iP 01 25 10.6

" 13 Um iP 01 42 16.6
Ud iP 01 42 41.6

" 13 Ki iPKP 04 59 12.9
Um iPKP 04 59 19.1
New Hebrides Islands (h = 20 km).

" 13 Ud iP 06 54 53.5
Greece.

" 13 Up iSg1 09 50 29.2
Um eSg1 09 52 28
Ud iSg1 09 51 02.1
De iPg1 09 48 40.2
eSg1 09 49 40
Northern Poland.

" 13 Up iPKP 10 38 15.8
Sk ePKP 10 38 15
Um iPKP 10 38 05.4
Ud iPKP 10 38 17.4

" 13 Um iP 11 21 57.9

" 13 Sk i(P) 14 22 30.0

" 13 Ki eP 15 15 33
Ud iP 15 16 03.0
Luzon (h = 70 km).

" 13 Ki iSg1 16 37 34.2
Sk iSg1 16 37 40.6
Um i 16 37 53.6
iSg1 16 38 02.3
Nordland, Norway, 66.5°N, 14.1°E.
Origin time = 16 36 05.
Explosion.

" 13 Up iP 18 44 40.0
Ki eP 18 45 17
(cont.)

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

1972 Apr. 13	(cont.)			
	Sk	eP	18 45 14	
	Um	iP	18 44 53.4	
	Ud	iP	18 44 55.2	
	De	iP	18 44 39.0	
	Iran (h = N).			
" 13	Um	eP	19 13 49	
	Ud	iP	19 13 51.5	
	De	eP	19 13 37	
	Iran.			
	Origin time = 19 06 09.			
" 13	Um	eP	19 34 09	
	Ud	eP	19 34 13	
	Iran.			
" 13	Um	eP	19 40 08	
	Japan (h = 15 km).			
" 13	Up	eP	20 03 33	
	Um	iP	20 03 46.3	
	Ud	iP	20 03 48.0	
	Iran.			
	Origin time = 19 56 05.			
" 14	Ki	iSg1	00 14 22.6	
	Sk	iSg1	00 14 28.8	
	Um	iSn	00 14 35.7	
		iSg1	00 14 52.9	
	Nordland, Norway, 66.6°N, 13.8°E.			
	Origin time = 00 12 53.			
	Explosion.			
" 14	Up	iP	05 54 20.4	C
	Ki	iP	05 53 43.6	
	Sk	iP	05 54 15.6	
	Um	iP	05 53 59.6	C
	Ud	iP	05 54 27.7	
	De	iP	05 54 41.3	
	Japan (h = 80 km).			
" 14	Ud	iP	06 17 16.9	
" 14	Up	i(P)	08 23 27.7	
" 14	Up	iP	11 05 43.5	
	Ki	iP	11 04 56.1	
	Um	iP	11 05 18.1	
	Ud	iP	11 05 48.7	
	De	iP	11 06 07.8	
	Kurile Islands (h = 40 km).			
" 14	Um	iP	11 16 00.7	

1972 Apr. 14	Um	iP	11 23 30.3	
	Sinkiang.			
" 14	Um	iP	11 36 29.4	
	Turkey.			
" 14	Ki	eP	12 56 18	
	Ud	iP	12 56 44.1	
	Luzon (h = 45 km).			
" 14	De	i(P)	14 41 35.0	
" 14	De	ePg1	15 17 28	
		iRg	15 17 39.7	
" 14	Up	iP	18 28 30.3	
	Ki	iP	18 28 28.3	
	Sk	iP	18 28 42.4	
	Um	eP	18 28 27	
	Ud	iP	18 28 41.0	
	Sunda Strait (h = 80 km).			
" 14	Up	iP	20 33 07.2	
	Ki	eP	20 33 44	
	Um	iP	20 33 21.0	
	Ud	iP	20 33 22.4	
	De	eP	20 33 08	
	Iran.			
	Origin time = 20 25 39.			
" 14	Up	eP	20 58 47	
	Ud	iP	20 58 29.1	
" 14	Ud	iP	23 09 46.3	
	De	eP	23 09 29	
	Iran.			
	Origin time = 23 02 03.			
" 15	Um	iP	02 27 54.1	
	Ud	iP	02 27 55.3	
	De	iP	02 27 39.3	
	Iran.			
	Origin time = 02 20 12.			
" 15	Up	eP	05 54 00	
	Ki	iP	05 53 17.8	
	Sk	eP	05 53 54	
	Um	iP	05 53 36.4	C
	Ud	iP	05 54 08.1	
	De	iP	05 54 24.1	
	Sea of Japan (h = 250 km).			
" 15	Up	iSKP	07 50 50.9	
	Ki	iSKP	07 50 28.2	
	Sk	eSKP	07 50 47	
	Um	iPKP	07 47 26.0	
	(cont.)			

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

1972
Apr. 15 (cont.)

Um	iSKP	07 50 39.4	
Ud	iSKP	07 50 54.5	
De	iPKP	07 47 38.1	

Loyalty Islands
(h = 160 km).

" 15	Ud	iP	09 59 22.1	
" 15	Ki	e(P)	11 45 20	
	Um	i(P)	11 46 01.6	
		i	11 46 30.5	
	Ud	iP	11 45 34.3	

Probably more than one event.

" 15	Ud	iP	13 20 43.7	
" 15	Up	iP	15 36 04.1	
	Um	eP	15 36 17	
	Ud	iP	15 36 19.1	

Iran.
Origin time = 15 28 36.

" 15	Up	eP	15 46 15	
	Um	e(P)	15 46 59	
	Ud	eP	15 46 12	

Aegean Sea.

" 15	Um	iP	17 37 53.1	C

Banda Sea (h = 130 km).

" 15	Up	eP	17 38 50	
" 15	Ki	iP	17 50 06.3	
	Sk	iP	17 49 51.6	
	Um	iP	17 50 08.2	
	Ud	eP	17 49 52	

Colombia (h = 40 km).

" 15	Ud	eP	18 26 42	
" 15	Um	iP	20 38 36.4	
" 15	Um	iPg1	20 57 10.2	
		iSg1	20 57 19.0	
" 15	Ud	eP	23 05 32	

Kamchatka (h = 80 km).

" 15	Up	ePKP	23 30 24	
	Um	iPKP	23 30 13.0	
	Ud	iPKP	23 30 25.8	
" 15	Um	iPKP	23 57 22.6	
		i	23 57 31.4	

New Hebrides Islands
(h = 40 km).

1972
Apr. 16

Up	iP	00 06 58.9		
	iS	00 09 44.4		
Ki	iP	00 08 22.7		
Sk	iP	00 07 54.0		
Um	iP	00 07 41.2		
Ud	iP	00 07 14.8		
De	iP	00 06 35.8		

Rumania (h = 140 km).

" 16	Up	iP	00 26 38.6	
	Um	iP	00 26 12.6	
	Ud	iP	00 26 43.4	

Kurile Islands (h = 55 km).

" 16	Up	iP	01 40 42.3	
		ipP	01 40 52.3	
			micr sec	
		P Z'	0.1 1.0	
	Ki	iP	01 40 42.9	C
		ipP	01 40 52.1	
			micr sec	
		P Z'	0.1 1.0	
	Sk	iP	01 41 05.4	
	Um	iP	01 40 39.1	
		ipP	01 40 49.4	
	Ud	iP	01 40 51.6	
	De	iP	01 40 50.3	

Sumatra.
h = 35 km (Up,Ki,Um).
m = 6.1 (Up,Ki).

" 16	Up	eP	02 57 12	
		ipP	02 57 27.2	
	Ki	eP	02 56 27	
	Um	iP	02 56 47.1	
	Ud	iP	02 57 17.9	
	De	eP	02 57 38	

Kurile Islands.
h = 55 km (Up).

" 16	Ud	iP	03 26 36.4	

Crete.

" 16	Ud	i(PKP)	04 38 21.1	
	De	e(PKP)	04 38 33	
" 16	Ud	iP	05 16 20.0	
" 16	Um	i(P)	06 40 14.9	
" 16	Um	eP	07 10 59	
" 16	Up	iP	09 48 36.0	
	Um	iP	09 48 49.0	
	Ud	iP	09 48 50.3	

Iran.
Origin time = 09 41 07.

" 16	Up	iP	10 12 56.6	

(cont.)

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

1972
Apr. 16 (cont.)

Up	iS		10 15 18.4
	iLg2		10 16 44
			micr sec
	P	Z'	0.1 0.9
	Mx	E	2.7 6
	Mx	N	2.4 7
	Mx	Z	3.4 7
Ki	iP		10 14 39.1
	iLg2		10 20 53
			micr sec
	P	Z'	0.1 0.9
	Mx	E	4.9 9
	Mx	N	2.4 8
	Mx	Z	1.8 7
Sk	iP		10 13 46.6
Um	iP		10 13 49.7
Ud	iP		10 13 01.8
	iS		10 15 31.3

Austria (h = 20 km).
m = 5.0, M = 5.1 (Up,Ki).

" 16

Up	iP		11 07 38.3
			micr sec
	Mx	N	0.8 8
	Mx	Z	0.9 7
Ki	iP		11 09 21.1
			micr sec
	Mx	E	0.8 8
	Mx	N	0.4 8
Sk	iP		11 08 27.4
Um	iP		11 08 31.1
Ud	iP		11 07 42.6
De	iP		11 06 53.6

Austria (h = 20 km).
M = 4.4 (Up,Ki).

" 16

Up	iP	12 27 24.3
Um	iP	12 27 05.7
Ud	eP	12 27 31

Bonin Islands (h = N).

" 16

Up	eP	13 57 42
Ki	iP	13 56 05.7
Sk	iP	13 56 58.4
Um	iP	13 56 57.0
Ud	iP	13 57 36.8

Greenland Sea (h = N).

" 16

Ud	e(Pg1)	14 07 37
	iSg1	14 07 50.1

" 16

Ud	eP	15 45 12

" 16

Ud	eP	17 13 48

1972
Apr. 16

Up	iP	20 57 09.2
Ki	iP	20 56 53.2
Um	iP	20 56 57.9
Ud	iP	20 57 17.5

Talaud Islands (h = 250 km).

" 16

Ud	iP	21 36 26.4

Dodecanese Islands.

" 16

Um	eP	22 49 11
Ud	ePP	22 53 41

Celebes (h = N).

" 16

Up	iP	23 51 59.1
Ki	iP	23 52 37.4
Sk	eP	23 52 35
Um	iP	23 52 13.9
Ud	iP	23 52 15.0

Iran (h = N).

" 17

Um	iP	00 48 40.7
	ipP	00 48 56.4
Ud	iP	00 49 10.7
	ipP	00 49 26.2

Japan.
h = 60 km (Um,Ud).

" 17

Up	iP	01 12 58.2
Ki	iP	01 12 05.7
Um	eP	01 12 31
Ud	eP	01 12 58

Aleutian Islands
(h = 55 km).

" 17

Up	iP	01 38 09.7
Ud	iP	01 38 09.6

Aleutian Islands
(h = 45 km).

" 17

Up	iP	01 43 53.0	
Ki	iP	01 45 17.2	
Sk	iP	01 44 35.1	
Um	iP	01 44 37.4	C
	i	01 44 42.3	
Ud	iP	01 43 56.8	

Adriatic Sea (h = N).

" 17

Ki	iP	02 21 42.6
Ud	iP	02 21 20.3

Iran.
Origin time = 02 13 37.

" 17

Ud	eP	02 25 52

" 17

Up	iP	02 32 52.9

(cont.)

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

1972
Apr. 17 (cont.)

Ki	iP		02 33 01.2	
Sk	eP		02 33 18	
Um	iP		02 32 51.1	
Ud	iP		02 33 09.2	C

Pakistan (h = 45 km).

" 17	Um	i(P)		03 42 20.0	
		i		03 42 32.4	
	Ud	i(P)		03 42 04.0	
		i		03 42 18.7	
" 17	Up	eP		04 15 05	
	Ki	iP		04 14 15.0	
	Sk	eP		04 14 52	
	Um	iP		04 14 38.8	
	Ud	iP		04 15 10.2	

Kurile Islands (h = N).

" 17	Up	iP		05 15 48.9	
	Ki	iP		05 14 55.6	
	Um	iP		05 15 24.0	
	Ud	iP		05 15 48.7	

Aleutian Islands
(h = 45 km).

" 17	Ki	iP		09 04 53.6	
	Um	iP		09 04 58.7	
	Ud	iP		09 05 16.3	

Celebes Sea (h = 270 km).

" 17	Up	iP		10 45 56.9	
		ipP		10 46 22.6	
				micr	sec
		pP	Z'	0.1	1.0
	Ki	iP		10 45 48.1	
		ipP		10 46 15.6	
				micr	sec
		pP	Z'	0.1	1.2
	Sk	iP		10 46 11.8	
		ipP		10 46 38.2	
	Um	iP		10 45 48.2	
		ipP		10 46 14.4	
	Ud	iP		10 46 09.6	
		ipP		10 46 36.3	
	De	ipP		10 46 38.6	

Burma-India.
h = 110 km (Up,Ki,Sk,Um, Ud).

" 17	Up	iP		11 01 29.8	C
		i		11 01 35.8	
		iS		11 11 09	
				micr	sec
		P	Z'	0.4	1.4
		Mx	E	19	18

(cont.)

1972
Apr. 17 (cont.)

Up			micr	sec
	Mx	N	18	17
	Mx	Z	42	18
Ki			micr	sec
	Mx	E	11	16
	Mx	N	15	17
	Mx	Z	12	17
Sk	iP		11 01 33.0	
Um	iP		11 01 14.1	
	iS		11 10 41	
Ud	iP		11 01 39.1	
	i		11 01 44.9	
De	iP		11 01 48.0	

Formosa (h = 35 km).
M = 6.5 (Up,Ki).

" 17	Up	iP		11 13 27.3	
				micr	sec
		P	Z'	0.1	1.0
	Ki	iP		11 13 02.1	
	Sk	iP		11 13 30.4	
	Um	iP		11 13 11.0	
	Ud	iP		11 13 36.5	
	De	iP		11 13 45.1	

Formosa (h = N).

" 17	Up	iP		14 14 55.6	
				micr	sec
		P	Z'	0.1	1.5
	Ki	iP		14 14 22.2	
				micr	sec
		P	Z'	0.1	1.5
		Mx	E	0.7	15
		Mx	N	0.8	19
	Sk	eP		14 14 51	
	Um	iP		14 14 36.4	
	Ud	iP		14 15 01.9	
	De	iP		14 15 14.2	

Bonin Islands (h = N).
m = 5.7 (Up,Ki).

" 17	Up	iP		14 50 22.4
	Sk	iP		14 49 53.9
	Um	iP		14 50 01.5
	Ud	iP		14 50 14.0

Off coast of Oregon
(h = N).

" 17	Ki		micr	sec
		Mx	E	0.5	13
		Mx	N	0.5	13
	Um	iP		15 20 15.6
	Ud	iP		15 20 23.4
	De	eP		15 20 16

Iran (h = 45 km).

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

1972				
Apr. 17	Up	iP	19 03 25.6	
	Um	iP	19 03 39.6	
	Ud	iP	19 03 40.1	
	Iran.			
	Origin time = 18 55 58.			
" 17	Up	iP	20 33 49.7	
	Ki	iP	20 33 19.1	
	Sk	eP	20 33 46	
	Um	iP	20 33 31.7	
	Ud	iP	20 33 54.7	
	Volcano Islands (h = N).			
" 17	Ud	eP	21 03 58	
	Iran.			
" 17	Up	iP	21 18 49.1	
	Ki	iP	21 19 26.3	
	Sk	eP	21 19 24	
	Um	iP	21 19 02.7	
	Ud	iP	21 19 03.6	
	De	iP	21 18 48.3	
	Iran (h = 55 km).			
" 17	Ud	eP	21 24 24	
" 17	Ud	i(PKP)	23 11 03.0	
	De	e(PKP)	23 11 12	
" 17	Ud	iP	23 40 53.6	
	Off coast of Oregon (h = N).			
" 18	Ki	iPKP	02 07 53.0	
		iSKP	02 11 03.6	
			micr	sec
		SKP Z'	0.1	1.6
	Sk	iPKP	02 08 04.3	
	Um	iPKP	02 07 58.2	
		iSKP	02 11 15.2	
	Ud	ePKP	02 08 08	
		iSKP	02 11 29.9	
	De	iPKP	02 08 09.7	
		iSKP	02 11 38.6	
	Loyalty Islands (h = 120 km).			
" 18	Up	ePKP	03 45 18	
	Ki	iPKP	03 45 06.5	
	Sk	iPKP	03 45 17.8	
	Um	iPKP	03 45 12.1	
	Ud	iPKP	03 45 21.3	
	De	iPKP	03 45 27.2	
	Solomon Islands (h = 80 km).			

1972				
Apr. 18	Ki	iP	04 37 35.9	
	Um	eP	04 37 13	
	Ud	iP	04 37 13.0	
	Iran.			
	Origin time = 04 29 31.			
" 18	Up	iPKP	04 44 04.4	
	Sk	iPKP	04 43 56.0	
		i	04 44 10.0	
	Um	iPKP	04 43 52.2	
		i	04 44 02.0	
	Ud	iPKP	04 44 07.3	
		i	04 44 20.3	
	De	iPKP	04 44 16.3	
" 18	Sk	e(Sg1)	05 12 52	
	Ud	eSg1	05 11 05	
	De	ePg1	05 10 18	
		eSg1	05 10 47	
	Near northern Denmark.			
" 18	Up	i(Sg1)	05 10 37.0	
" 18	Ki	iP	05 14 35.0	
	Ud	iP	05 15 33.4	
	Kamchatka (h = N).			
" 18	Up	iP	05 57 59.1	
	Ki	iP	05 58 54.4	
	Sk	iP	05 58 07.8	
	Um	iP	05 58 30.8	
	Ud	iP	05 57 47.7	
	De	iP	05 57 28.2	
	North Atlantic Ocean (h = N).			
" 18	Ud	iP	07 29 08.2	
" 18	Ud	iP	07 33 06.0	
" 18	Ki	iP	13 00 42.2	
	Sk	eP	13 01 11	
	Ud	iP	13 01 08.8	
" 18	Ki	iP	14 23 48.1	
	Um	iP	14 24 14.0	
	Aleutian Islands (h = 140 km).			
" 18	Ud	i(P)	15 13 57.7	
" 18	Ki	iP	15 19 10.6	
			micr	sec
		P Z'	0.1	0.7
	(cont.)			

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

1972 Apr. 18	(cont.)			
	Sk	iP	15 18 49.6	
	Um	iP	15 18 45.4	
	Ud	iP	15 18 25.8	
	Lake Tanganyika (h = 5 km).			
" 18	Up		micr	sec
		Mx N	0.8	22
		Mx Z	1.1	20
	Um	iPKP	18 46 06.0	
	South of Africa (h = N).			
" 18	Up	iP	23 28 33.7	
	Ki	iP	23 29 06.1	
		i(pP)	23 29 18.8	
	Sk	eP	23 29 08	
	Um	iP	23 28 43.1	
		i(pP)	23 28 56.5	
	Ud	iP	23 28 50.4	
	Caspian Sea (h = N).			
" 19	Up	iSg1	00 19 56.4	
	Sk	eSg1	00 19 47	
	Um	i	00 19 09.0	
		iSg1	00 19 28.9	
	Ud	iSg1	00 20 05.8	
	Medelpad-Ångermanland, Sweden, 62.6°N, 17.2°E. Origin time = 00 18 30.			
" 19	Ud	iP	03 44 12.6	
	Greece (h = 5 km).			
" 19	Up	iPKP	10 36 34.2	
	Ud	iPKP	10 36 36.1	
	De	iPKP	10 36 46.3	
" 19	Up	iP	14 51 06.0	
		ipP	14 51 19.3	
	Ki	iP	14 50 20.1	
		ipP	14 50 32.7	
	Sk	iP	14 50 54.9	
	Um	iP	14 50 40.8	
		ipP	14 50 53.4	
	Ud	iP	14 51 11.6	
		ipP	14 51 24.6	
	De	eP	14 51 28	
	Kurile Islands. h = 50 km (Up,Ki,Um,Ud).			
" 19	Ud	iP	17 48 23.7	
" 19	Um	eP	17 49 24	
	Ud	iP	17 49 24.9	
	Iran. Origin time = 17 41 42.			

1972 Apr. 19	Up	iP	19 43 21.8
	Ki	eP	19 42 42
	Sk	iP	19 43 16.7
	Um	iP	19 43 01.2
	Ud	iP	19 43 29.2
	Japan (h = 60 km).		
" 19	Ud	iP	21 16 36.3
" 20	Up	iP	00 43 59.9
	Ki	iP	00 43 47.7
	Sk	iP	00 44 16.3
	Um	iP	00 43 47.8
	Ud	iP	00 44 15.6
	De	iP	00 44 20.1
	Sinkiang (h = N).		
" 20	Sk	iP	03 54 18.1
	Um	iP	03 54 02.3
	Ud	iP	03 54 21.5
	Talaud Islands.		
" 20	Up	iSg1	11 44 28.8
	Ki	eSg1	11 47 06
	Sk	eSg1	11 46 19
	Um	iSg1	11 45 04.4
	Ud	iSg1	11 45 31.6
	De	eSg1	11 46 00
	Esthonia, 59.6°N, 24.4°E. Origin time = 11 42 40. Explosion.		
" 20	De	i(P)	14 59 56.0
" 20	Ud	iP	15 18 54.4
	De	iP	15 18 35.7
" 20	Ki	i(sP)	15 24 36.6
	Um	i(pP)	15 24 50.1
	Ud	i(sP)	15 25 25.9
	De	i(pP)	15 25 40.0
	Alaska (h = 90 km).		
" 20	De	i(P)	15 34 05.2
" 20	Up	iP	15 48 25.0
	Ki	iP	15 49 01.6
	Um	iP	15 48 39.2
	Ud	iP	15 48 40.0
	De	eP	15 48 24
	Iran. Origin time = 15 40 57.		
" 20	Up	iSg1	16 06 00.5
	Ki	ePg1	16 03 17
	(cont.)		

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

1972
Apr. 20 (cont.)

Ki	iSg1		16 03 56.6
Sk	iSg1		16 03 59.9
Um	ePg1		16 03 35
	iSn		16 04 09.9
	iSg1		16 04 25.3
De	eSg1		16 07 46

Nordland, Norway,
66.5°N, 13.8°E.
Origin time = 16 02 25.
Explosion.

" 20	Um	iPKP	17 20 55.9
	Ud	iPKP	17 21 01.8
	De	iPKP	17 21 11.7

Tonga Islands (h = 35 km).

" 20	Um	iP	19 04 48.1
	Ud	iP	19 04 53.7

Caucasus.

" 20	Up	i(P)	19 13 36.2
" 20	Ud	iP	19 30 05.2

Iran.

" 21	Up	iP1		01 38 47.5
		iP2		01 38 49.2
		ipP		01 39 16.8
		iP'P'		02 07 18.5
		i		02 07 46.0
				micr sec
		P2	Z'	0.7 1.8
		Mx	E	0.8 20
		Mx	N	1.6 22
		Mx	Z	1.8 22
	Ki	iP1		01 37 53.4
		iP2		01 37 55.2
		ipP		01 38 22.7
				micr sec
		P2	Z'	0.2 1.1
		pP	Z'	0.7 1.5
		Mx	E	1.1 15
		Mx	N	2.0 21
		Mx	Z	2.4 20
	Sk	iP2		01 38 24.9
		ipP		01 38 53.7
	Um	iP1		01 38 21.2
		iP2		01 38 23.2
		ipP		01 38 50.6
		iP'P'		02 07 26.6
	Ud	iP1		01 38 46.5
		iP2		01 38 47.4
		ipP		01 39 15.6
	De	iP1		01 39 09.5

(cont.)

1972
Apr. 21 (cont.)

De	iP2		01 39 11.1
	i		01 39 24.2

Aleutian Islands.
h = 120 km (Up,Ki,Sk,Um,Ud).
m = 6.1, M = 5.3 (Up,Ki).
Double P, in average 1.8 sec apart.

" 21	Up			micr sec
		Mx	E	1.0 21
		Mx	N	1.3 23
		Mx	Z	1.7 21
	Ki	iP		01 45 55.6
		ipP		01 46 08.6
	Um	iP		01 45 56.7
		ipP		01 46 08.9
	Ud	iP		01 46 11.6
		ipP		01 46 23.9

Java.
h = 45 km (Ki,Um,Ud).

" 21	Um	iP	03 47 51.1
" 21	Um	iP	08 18 11.3

Japan (h = 45 km).

" 21	Up	eP	10 50 48

Eastern Siberia (h = N).

" 21	De	i(P)	10 50 58.9
" 21	Up	iP	13 32 29.0
			micr sec
		Mx E	1.0 17
		Mx N	0.8 18
		Mx Z	2.2 18
	Ki	iP	13 32 04.2
	Um	iP	13 32 12.5
	Ud	iP	13 32 37.8
		ipP	13 32 48.4
	De	iP	13 32 49.8

Formosa.
h = 40 km (Ud).

" 21	Up	iPn	13 35 22.0
		iSn	13 36 48.9
		i	13 37 17.1
		iSg1	13 37 29.6
			micr sec
		Sg1 Z'	0.2 0.7
	Ki	iPn	13 35 37.7
		iSn	13 37 17.1
			micr sec
		Sn Z'	0.1 0.5

(cont.)

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

1972
Apr. 21 (cont.)

Um	iPn		13 35 24.3
	iSn		13 36 53.5
	i		13 37 11.4
	iS*		13 37 25.0
Ud	iPn		13 34 56.0
	iSn		13 36 04.3
	iS*		13 36 29.7
De	iPn		13 35 28.5
	iSn		13 37 02.4
	iSg1		13 37 50.7

Norwegian Sea,
62.9°N, 2.2°E.
Origin time = 13 33 24.

" 21

Up	ePKP		13 44 28	
			micr	sec
	Mx	E	0.8	21
	Mx	N	1.6	22
	Mx	Z	2.1	22
Ki	iPKP		13 44 11.2	
			micr	sec
	PKP	Z'	0.1	1.0
	Mx	E	1.5	20
	Mx	N	1.4	20
	Mx	Z	1.4	20
Um	iPKP		13 44 19.6	
Ud	iPKP		13 44 28.1	
De	iPKP		13 44 34.8	

Tonga Islands (h = 130 km).
M = 5.8 (Up,Ki).

" 21 De i(P) 13 58 27.5

" 21

Up	iP	14 40 35.2
Ki	iP	14 41 12.6
Um	iP	14 40 48.9
Ud	iP	14 40 50.4

Iran (h = N).

" 21 Ud iP 15 18 47.4

" 21 Ud i(P) 15 32 17.1

" 21

Ud	iSg1	17 08 24.6
De	ePg1	17 07 03
	eSg1	17 07 30

Kattegat, off west coast
of Sweden.

" 21 Um iSg1 17 11 16.8

" 21

Um	iP	19 06 42.2
Ud	iP	19 06 43.7

Iran.
Origin time = 18 59 00.

1972
Apr. 21

Up	iP	21 28 01.6
Ki	iP	21 28 03.0
		micr sec
	Mx N	1.0 16
Sk	eP	21 28 24
Ud	iP	21 28 17.0
De	iP	21 28 17.2

Sinkiang (h = N).

" 21 Um iP 22 51 00.4
Hindu Kush.
Intermediate depth.

" 22

Up	iP	02 23 46.8
Ud	iP	02 23 48.9

" 22

De	ePg1	09 25 37
	eSg1	09 26 05

" 22

Up	iX	09 29 38.3
Um	iPKP	09 29 15.5
	iX	09 29 27.9
Ud	ePKP	09 29 28
	iX	09 29 40.0

" 22

Ki	iPn	10 10 59.2
	iSn	10 11 47.6
	iS*	10 12 01.9
Um	iSn	10 12 59.3
	iSg1	10 13 33.5

Northwest Russia-Norway
border region,
69.5°N, 31.0°E.
Origin time = 10 09 55.
Explosion.

" 22

Up	iSg1	12 47 59.2
Ki	iPg1	12 45 19.1
	iSg1	12 45 56.2
Sk	iSg1	12 46 01.8
Um	ePg1	12 45 35
	iSn	12 46 10.1
	iSg1	12 46 24.6
Ud	iSg1	12 47 49.9
De	eSg1	12 49 44

Nordland, Norway,
66.5°N, 14.1°E.
Origin time = 12 44 28.

" 22

Up	iP	13 28 57.9	
Ki	iP	13 28 55.5	C
Sk	iP	13 29 14.6	
Um	iP	13 28 52.8	C
Ud	iP	13 29 10.8	C
De	iP	13 29 10.5	

Burma (h = N).

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

1972				
Apr. 22	Ki	iPKP	13 36 01.5	
	Um	iPKP	13 36 08.1	
	Ud	iPKP	13 36 17.3	
	De	iPKP	13 36 24.6	
	Santa Cruz Islands (h = 650 km).			
" 22	Up	iP	21 22 43.8	
	Ki	iP	21 22 25.5	
	Sk	iP	21 22 47.6	
	Um	iP	21 22 32.1	
	Ud	iP	21 22 52.1	
	Mindanao (h = 60 km).			
" 23	Up	iPKP	00 26 32.8	
	Um	iPKP	00 26 40.9	
	Ud	iPKP	00 26 31.3	
" 23	Up	eP	02 07 31	
	Ki	eP	02 08 09	
	Um	iP	02 07 46.3	
	Ud	iP	02 07 48.1	
	De	iP	02 07 31.7	
	Iran (h = 70 km).			
" 23	Up	iP	05 18 22.3	
	Ki	iP	05 19 35.7	
	Sk	iP	05 19 02.4	
	Um	eP	05 18 57	
		i	05 19 01.8	
	Ud	iP	05 18 28.5	
		i	05 18 33.0	
	De	iP	05 17 52.1	
	Greece (h = 40 km).			
" 23	Ud	iP	07 25 00.4	
	Iran.			
" 23	Up	iSg1	08 43 57.4	
	Ki	iPn	08 39 45.2	
		iSn	08 40 44.6	
	Sk	iSg1	08 43 31.9	
	Um	iSn	08 41 23.6	
		iSg1	08 41 57.5	
	Ud	iSg1	08 44 29.4	
	De	iSg1	08 46 04.1	
	Northwest Russia, 67.7°N, 34.3°E. Origin time = 08 38 26. Explosion.			
" 23	Um	iP	17 27 00.6	
	Ud	eP	17 27 17	
" 23	Up	iP	20 53 14.1	
	(cont.)			

1972					
Apr. 23	(cont.)				
	Up			micr	sec
		P	Z'	0.1	1.0
	Ki	iP		20 53 12.7	
				micr	sec
		P	Z'	0.1	1.0
	Sk	iP		20 53 26.7	
	Um	iP		20 53 11.0	
	Ud	iP		20 53 23.4	
	Sumatra (h = 100 km). m = 6.2 (Up,Ki).				
" 23	Ki	eP		22 36 24	
	Sk	eP		22 36 20	
	Um	eP		22 36 00	
	Ud	iP		22 35 59.5	
	Iran (h = 45 km).				
" 23	Ki	ePKP		23 55 33	
	Um	i(PKP)		23 55 43.8	
	New Hebrides Islands (h = 15 km).				
" 24	Up			micr	sec
		Mx	E	2.0	21
		Mx	N	2.3	21
		Mx	Z	4.1	20
	Ki	iPKP		01 40 05.4	
				micr	sec
		Mx	E	3.7	20
		Mx	N	5.0	20
		Mx	Z	5.2	20
	Um	i(PKP)		01 40 00.8	
		iPKP		01 40 08.7	
	Easter Island (h = N). M = 6.2 (Up,Ki).				
" 24	Ki	eP		01 48 40	
	Ud	iP		01 49 04.2	
	Mindoro (h = 30 km).				
" 24	Up	iPKP		02 22 35.9	
		iSKP		02 25 23.1	
		iPP		02 25 45.7	
				micr	sec
		SKP	Z'	0.2	1.1
	Ki	e(PKP)		02 22 16	
		iSKP		02 25 00.3	
		i		02 35 13.1	
				micr	sec
		SKP	Z'	0.4	1.1
		Mx	E	1.5	18
		Mx	N	1.4	20
	Sk	i(PKP)		02 22 28.9	
		iSKP		02 25 16.7	
	(cont.)				

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

1972
Apr. 24 (cont.)

Um	i(PKP)		02 22 22.8	
	i(PKP)		02 22 24.7	
	iPKP		02 22 30.6	
	i		02 24 29.6	
	iSKP		02 25 11.8	
	i		02 34 41.9	
Ud	iPKP		02 22 37.9	
	iSKP		02 25 25.1	
	i		02 25 38.2	
De	iPKP		02 22 49.9	D
	iSKP		02 25 34.0	

Fiji Islands (h = 620 km).

" 24

Up	iPKP		03 09 34.7	
			micr	sec
	PKP	Z'	0.1	1.3
Ki	iPKP		03 09 13.1	
Sk	iPKP		03 09 29.0	
Um	iPKP		03 09 23.1	
Ud	iPKP		03 09 36.3	
De	ePKP		03 09 45	

South of Kermadec Islands (h = N).

" 24

Ki	iP		04 30 22.8

Mariana Islands (h = 35 km).

" 24

Up	iP		10 09 10.0	
	ipP		10 09 16.4	
	iPP		10 12 02	
	iPa		10 13 49	
	iS		10 18 54	
			micr	sec
	P	Z'	1.7	1.9
	Mx	E	140	17
	Mx	N	220	18
	Mx	Z	220	18
Ki	iP		10 08 45.2	
	ipP		10 08 52.6	
	iS		10 18 10	
			micr	sec
	P	Z'	2.5	2.5
	Mx	E	270	15
	Mx	N	220	15
	Mx	Z	160	12
Sk	iP		10 09 12.7	
Um	iP		10 08 54.6	
	ipP		10 09 00.9	
	iPP		10 11 38	
Ud	iP		10 09 19.8	
	ipP		10 09 26.5	
De	iP		10 09 28.0	

Formosa.
h = 25 km (Up,Ki,Um,Ud).
m = 6.9, M = 7.7 (Up,Ki).

1972
Apr. 24

Up	iP1		11 44 01.7	
			micr	sec
	P1	Z'	0.1	1.0
Ki	eP1		11 43 36	
	iP2		11 43 41.2	
			micr	sec
	P2	Z'	0.1	1.1
Sk	eP2		11 44 09	
Um	iP1		11 43 46.6	
Ud	eP1		11 44 09	
De	iP1		11 44 19.4	

Formosa (h = N).
m = 5.9 (Up,Ki).

" 24

Up	iP		12 12 20.1
Ki	iP		12 11 55.8
Sk	eP		12 12 22
Um	iP		12 12 04.7
Ud	iP		12 12 28.3
De	eP		12 12 37

Formosa (h = 20 km).

" 24

Um	iP		12 34 09.1

" 24

Ud	iP		13 37 19.9

" 24

Ki	eP		14 49 13
Sk	eP		14 49 13
Um	iP		14 48 50.4
Ud	iP		14 48 51.5

Iran (h = N).

" 24

Up	eP		18 01 36
Ud	iP		18 01 37.7

" 24

Up	eP		18 10 22	
			micr	sec
	P	Z'	0.1	1.0
	Mx	E	1.7	18
	Mx	N	2.4	22
	Mx	Z	2.6	19
Ki	eP		18 09 55	
			micr	sec
	Mx	E	2.6	13
	Mx	N	1.1	15
	Mx	Z	2.2	12
Sk	eP		18 10 23	
Um	iP		18 09 59.9	
Ud	iP		18 10 27.8	

Formosa (h = N).
M = 5.7 (Up,Ki).

" 24

Ki	iP		18 43 13.4
Sk	eP		18 43 49
Um	iP		18 43 31.2

(cont.)

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

1972
Apr. 24 (cont.)

	Ud	iP		18 44 03.8
	Japan (h = 25 km).			
" 24	Up	iPKP		21 47 26.2
	Ud	iPKP		21 47 28.0
	De	ePKP		21 47 38
" 25	Um	iP		00 47 01.2
	Ud	iP		00 47 05.1
	Caucasus.			
" 25	Ud	iP		07 11 11.7
	Iran.			
" 25	Ud	iP		07 40 42.3
" 25	Ud	iP		08 38 28.5
	Iran.			
" 25	Up	i(P)		12 34 42.4
" 25	Up	i(Rg)		13 08 30.6
	Ud	i(Rg)		13 09 15.2
" 25	Up	iP		13 28 43.2
	Ki	iP		13 29 19.7
			micr	sec
		P	Z' 0.1	1.0
	Sk	iP		13 29 17.5
	Um	iP		13 28 56.2
	Ud	iP		13 28 58.0 C
	De	iP		13 28 41.2
	Iran (h = 45 km).			
" 25	Ki	eP		13 44 47
	Sk	iP		13 45 24.9
	Um	iP		13 45 21.0
	Ud	eP		13 45 39
	De	eP		13 46 09
	Alaska (h = 60 km).			
" 25	Up	iP		15 15 09.6
	Ud	iP		15 15 06.6
" 25	Up	iP		19 42 39.0
		iPP		19 45 55.4
		iS		19 52 58
			micr	sec
		P	Z' 8.0	1.4
		Mx	E 230	18
		Mx	N 590	25
		Mx	Z 270	16
	Ki	iP		19 42 21.7
		i		19 42 22.3
		iS		19 52 23

(cont.)

1972
Apr. 25 (cont.)

	Ki			micr sec
		P	Z'	13 2.2
		Mx	E	290 16
		Mx	N	470 20
		Mx	Z	400 16
	Sk	iP		19 42 44.7
	Um	iP		19 42 27.1
		iS		19 52 40
	Ud	iP		19 42 47.8
	De	iP		19 42 53.3
	Mindoro (h = 50 km).			
	m = 7.7, M = 8.0 (Up,Ki).			
" 25	Up	iP		19 51 14.2
				micr sec
		P	Z'	0.1 1.0
	Ki	iP		19 50 57.1
	Um	iP		19 51 03.0
	Ud	iP		19 51 23.4
	Mindoro.			
	Origin time = 19 38 44.			
	Approximate origin times for Mindoro aftershocks are based on our own records only.			
" 25	Up	iP		19 53 25.6
	Ud	iP		19 53 38.5
" 25	Ki	iP		19 54 57.9
	Um	iP		19 55 02.5
	Ud	iP		19 55 24.3
	De	eP		19 55 30
	Mindoro.			
	Origin time = 19 42 45.			
" 25	Up	iP		19 57 19.3
	Um	iP		19 57 02.5
" 25	Up	iP1		20 02 27.3
		iP2		20 02 39.2
	Ud	iP2		20 02 47.2
" 25	Up	iP		20 03 04.6
	Ki	iP		20 02 47.8
	Ud	iP		20 03 13.7
	Mindoro.			
	Origin time = 19 50 35.			
" 25	Up	iP		20 09 05.5
	Ki	iP		20 08 48.6
	Sk	iP		20 09 11.5
	Um	iP		20 08 54.7
	Ud	iP		20 09 15.3

(cont.)

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

1972
Apr. 25 (cont.)

De	iP		20 09 20.1

Mindoro.
Origin time = 19 56 36.

" 25	Up	iP	20 42 21.4
		i	20 42 27.9
	Ki	eP	20 42 01
	Um	eP	20 42 07
	Ud	iP	20 42 30.9

Mindoro.
Origin time = 20 29 50.

" 25	Up	iP		20 50 14.5
				micr sec
		P	Z'	0.1 0.7
	Ki	eP		20 49 57
	Sk	eP		20 50 21
	Um	iP		20 50 03.1
	Ud	iP		20 50 24.1
	De	iP		20 50 30.7

Mindoro.
Origin time = 20 37 45.

" 25	Up	iP		20 59 07.3
				micr sec
		P	Z'	0.1 0.8
	Ki	iP		20 58 50.1
	Sk	eP		20 59 09
	Um	iP		20 58 55.7
	Ud	iP		20 59 16.5
	De	iP		20 59 21.0

Mindoro (h = N).

" 25	Up	iP	21 37 51.3
	Ki	iP	21 37 34.0
			micr sec
		P Z'	0.1 1.0
	Sk	eP	21 38 00
	Um	iP	21 37 39.4
	Ud	iP	21 38 00.2

Mindoro.
Origin time = 21 25 22.

" 25	Um	iP	22 12 32.6
" 25	Ki	eP	23 01 51
	Ud	iP	23 02 14.6

(Mindoro).

" 25	Up	ePKP	23 35 34
	Um	ePKP	23 35 29
	Ud	iPKP	23 35 35.8
	De	ePKP	23 35 45
" 26	Up	iP	00 48 40.2

(cont.)

1972
Apr. 26 (cont.)

Ki	iP		00 48 24.7
Um	iP		00 48 29.4
Ud	iP		00 48 49.5

Mindoro.
Origin time = 00 36 11.

" 26	Up	i(PKP)		01 51 26.3
		iPKP		01 51 30.4
		ipPKP		01 53 37.0
		iSKP1		01 54 04.4
		iSKP2		01 54 09.3
				micr sec
		SKP1	Z'	0.1 1.0
	Ki	iPKP		01 51 15.1
		iSKP		01 53 38.2
	Sk	iPKP		01 51 25.3
		iSKP		01 53 58.3
	Um	i(PKP)		01 51 05.8
		iPKP		01 51 21.6
		iSKP		01 53 51.4
	Ud	i(PKP)		01 51 21.7
		iPKP		01 51 30.9
		iSKP1		01 54 06.8
		iSKP2		01 54 12.4
	De	i(PKP)		01 51 31.5
		iPKP		01 51 38.6
		ipPKP		01 53 48.8
		iSKP		01 54 16.2

Fiji Islands.
h = 570 km (Up,De).

" 26	Up	iP	03 09 43.4
	Ki	eP	03 09 26
	Um	iP	03 09 31.5
	Ud	iP	03 09 52.5

Mindoro.
Origin time = 02 57 13.

" 26	Up	iP	03 27 34.1
	Ki	iP	03 27 15.1

Mindoro.
Origin time = 03 15 03.

" 26	Up	iP	03 50 01.7
	Ud	iP	03 50 10.3

Mindoro.
Origin time = 03 37 31.

" 26	Up	iP	04 29 07.2
	Ki	eP	04 28 49
	Sk	eP	04 29 14
	Um	iP	04 28 55.3
	Ud	iP	04 29 16.1

Mindoro (h = 70 km).

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

1972 Apr. 26	Up	iP		04 42 46.3 C		
				micr	sec	
		P	Z'	0.1	0.7	
	Ki	iP		04 42 29.0 C		
				micr	sec	
		Mx	E	1.8	20	
		Mx	N	0.7	18	
		Mx	Z	1.6	21	
	Sk	iP		04 42 50.8		
	Um	iP		04 42 34.6		
	Ud	iP		04 42 55.3 C		
	Mindoro (h = 70 km).					
" 26	Up	iP		06 31 16.5		
				micr	sec	
		P	Z'	0.1	0.8	
		Mx	E	2.7	18	
		Mx	N	1.7	16	
		Mx	Z	4.5	17	
	Ki	iP		06 30 59.2		
				micr	sec	
		P	Z'	0.1	0.8	
		Mx	E	6.7	19	
		Mx	N	3.5	18	
		Mx	Z	6.9	18	
	Sk	iP		06 31 22.3		
	Um	iP		06 31 04.6		
	Ud	iP		06 31 25.4		
	De	iP		06 31 31.8		
	Mindoro (h = N).					
	m = 6.1, M = 5.9 (Up,Ki).					
" 26	Up	iP		06 35 06.4		
		ipP		06 35 11.4		
				micr	sec	
		pP	Z'	0.1	1.0	
		Mx	E	3.0	16	
		Mx	N	3.9	13	
		Mx	Z	5.3	13	
	Ki	iP		06 36 18.6		
				micr	sec	
		Mx	E	2.9	13	
		Mx	N	1.7	12	
		Mx	Z	1.2	11	
	Sk	iP		06 35 51.5		
		ipP		06 35 56.0		
	Um	iP		06 35 42.8		
		ipP		06 35 47.1		
	Ud	iP		06 35 17.4		
		ipP		06 35 23.5		
	De	iP		06 34 41.7		
		ipP		06 34 48.8		
	Turkey.					
	h = 20 km (Up,Sk,Um,Ud,De).					
	M = 5.1 (Up,Ki).					

1972 Apr. 26	Up	iP		06 56 11.0		
				micr	sec	
		P	Z'	0.1	0.8	
	Ki	iP		06 55 53.7		
	Um	iP		06 55 59.1		
	Ud	iP		06 56 19.0		
		ipP		06 56 37.6		
	Mindoro.					
	h = 70 km (Ud).					
" 26	Ud	iPKP		08 36 55.5		
	De	ePKP		08 37 07		
" 26	Up	iP		08 51 01.4		
	Um	eP		08 50 52		
		ipP		08 51 11.8		
	Ud	iP		08 51 10.3		
	Mindoro.					
	h = 70 km (Um).					
" 26	Up	iP		09 56 54.9		
	Ki	eP		09 56 38		
	Um	iP		09 56 43.0		
	Ud	iP		09 57 03.7		
	Mindoro (h = 50 km).					
" 26	Ki	i(P)		10 17 52.6		
	Um	i(P)		10 18 05.4		
" 26	Up	iP		10 22 16.4		
	Ki	eP		10 22 53		
	Um	iP		10 22 30.2		
	Ud	iP		10 22 31.0		
	Iran.					
	Origin time = 10 14 48.					
" 26	Up	iPKP		11 11 33.8		
	Ud	iPKP		11 11 36.4		
	De	iPKP		11 11 46.4		
" 26	Up	eP		11 36 04		
	Ki	eP		11 35 48		
	Um	iP		11 35 53.2		
	Mindoro.					
	Origin time = 11 23 35.					
" 26	Up	iPKP		12 40 16.2		
	Ki	iPKP		12 40 05.9		
	Sk	i(PKP)		12 40 09.8		
	Um	i(PKP)		12 40 03.8		
		iPKP		12 40 10.1		
		iSKP		12 42 54.1		
	Ud	iPKP		12 40 17.9		
		iSKP		12 43 07.0		
	De	iPKP		12 40 28.6		
	Tonga-Kermadec Islands					
	(h = 570 km).					

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

1972
Apr. 26 Up iP 14 30 12.7
Ki iP 14 29 55.6
Um eP 14 29 59
Ud iP 14 30 21.8
Mindoro (h = 70 km).

" 26 Ki eP 14 37 44
Um iP 14 38 03.1
Ud iP 14 38 33.1
Japan (h = 55 km).

" 26 Up eP 15 08 16
Ki eP 15 07 56
Ud iP 15 08 21.9
Mindoro.
Origin time = 14 55 44.

" 26 Ud iP 15 08 46.9
Iran.

" 26 Up iP 15 57 39.7

" 26 Up iP 16 04 29.1
micr sec
Mx E 2.9 14
Mx N 1.9 10
Mx Z 2.2 12
Ki eP 16 05 40
micr sec
Mx E 3.4 12
Mx N 1.3 10
Mx Z 1.1 11
Sk eP 16 05 13
Um iP 16 05 04.5
iS 16 09 34
Ud iP 16 04 38.2
i 16 04 42.1
De eP 16 04 05
Turkey (h = 30 km).
M = 5.1 (Up,Ki).

" 26 Up iP 16 08 31.6
iX 16 08 46.1
micr sec
P Z' 0.1 0.9
Ki iP 16 08 14.7
iX 16 08 31.1
micr sec
P Z' 0.1 0.8
Sk eP 16 08 38.6
Um iP 16 08 19.6
iX 16 08 33.8
Ud iP 16 08 40.5
iX 16 08 55.2
De iP 16 08 47.2
Mindoro (h = 35 km).
(cont.)

1972
Apr. 26 (cont.)
m = 6.0 (Up,Ki).
Phases marked X are probably P of another Mindoro earthquake, with origin time = 15 56 14.

" 26 Up iP 16 13 43.4
i 16 13 53.9
micr sec
P Z' 0.1 0.9
Ki iP 16 13 26.1 C
micr sec
P Z' 0.1 0.9
Sk iP 16 13 49.0 C
Um iP 16 13 31.6 C
Ud iP 16 13 52.1 C
De iP 16 13 48.5
Mindoro (h = 55 km).
m = 5.9 (Up,Ki).

" 26 Up iP1 17 47 38.4
iP2 17 47 43.0
i(PP) 17 50 42.4
micr sec
P2 Z' 0.1 0.9
Ki iP1 17 47 20.7
iP2 17 47 26.5
micr sec
Mx E 1.8 18
Mx N 0.9 18
Mx Z 1.5 18
Sk iP2 17 47 49.6
Um iP1 17 47 27.3
iP2 17 47 32.1
Ud iP1 17 47 46.6
iP2 17 47 51.8
Mindoro (h = 55 km).
Double P, in average 5.1 sec apart.

" 26 Up iP 17 51 20.4
i 17 51 24.6
Um iP 17 51 10.5
Ud iP 17 51 32.1
Mindoro.
Origin time = 17 38 52.

" 26 Up iP1 17 58 34.7
iP2 17 58 42.9
Ki iP2 17 58 26.0
Um iP1 17 58 22.7
iP2 17 58 32.7
Ud iP1 17 58 43.3
Mindoro (h = 70 km).

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

1972
Apr. 26 Ki eP 18 24 29
Um iP 18 24 59.3
Ud iP 18 25 24.1
Unimak Island (h = 20 km).

" 26 Up iP 18 51 23.0
Um iP 18 51 11.1
Mindoro (h = 45 km).

" 26 Um i(P) 20 32 29.2

" 26 Up iP 21 03 44.7
Ki iP 21 03 26.9
Sk eP 21 03 49
Um iP 21 03 31.9
Ud iP 21 03 52.7
Mindanao (h = 130 km).

" 26 Up iP 21 18 56.1
micr sec
P Z' 0.1 0.8
Sk iP 21 19 36.6
Um iP 21 19 34.4
Ud iP 21 19 03.8
De iP 21 18 25.8
Greece (h = N).

" 26 Up iP 21 47 26.4
Ki eP 21 47 09
Ud eP 21 47 34
Mindoro (h = 45 km).

" 26 Up iP1 22 17 14.2
iP2 22 17 27.3
Um i(P2) 22 17 14.1
(Mindoro).

" 26 Ki eP 23 59 54
Um iP 23 59 58.9
Ud iP 00 00 24.7
Formosa (h = N).

" 27 Up iP 00 47 47.6
Ki iP 00 48 24.3
Um iP 00 48 00.6
Ud iP 00 48 02.1
Iran.
Origin time = 00 40 19.

" 27 Up iP 01 42 05.2 C
micr sec
P Z' 0.2 1.0
Mx E 2.8 21
Mx N 1.8 15
Mx Z 5.1 20
Ki eP 01 41 48
(cont.)

1972
Apr. 27 (cont.)
Ki micr sec
Mx E 7.7 19
Mx N 3.2 18
Mx Z 8.8 18
Sk iP 01 42 12.2
Um iP 01 41 53.0 C
iS 01 52 07
Ud iP 01 42 14.1 C
De eP 01 42 22
Mindoro (h = 70 km).
M = 5.9 (Up,Ki).

" 27 Up iP 02 39 15.1
Ki eP 02 39 00
Um iP 02 39 03.5
Mindoro.
Origin time = 02 26 46.

" 27 Up iP 03 51 41.7
Um iP 03 51 29.8
Ud iP 03 51 50.0
Mindoro.
Origin time = 03 39 12.

" 27 Up i(P) 05 17 45.2

" 27 Up iP2 06 03 44.9
Ki iP2 06 03 44.6
Sk eP2 06 04 11
Um eP1 06 03 42
iP2 06 03 43.4
Ud eP1 06 03 51
iP2 06 03 54.6
De iP2 06 03 53.1
Sumatra (h = 55 km).

" 27 Up iP 06 56 58.3
micr sec
P Z' 0.1 0.8
Mx E 1.6 17
Mx N 1.4 16
Mx Z 2.6 16
Ki iP 06 56 42.3
micr sec
Mx E 4.1 17
Mx N 2.0 18
Mx Z 4.6 18
Sk iP 06 57 05.8
Um iP 06 56 47.0
Ud iP 06 57 07.9
De eP 06 57 14
Mindoro (h = 55 km).
M = 5.7 (Up,Ki).

" 27 Up iP 08 07 33.6
Um iP 08 07 12.8

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

1972
Apr. 27 Ki iPn 11 47 44.1
iSn 11 48 33.4
iS* 11 48 48.4
Um eSg1 11 50 24
Northwest Russia.
Origin time = 11 46 39.
Explosion.

" 27 Um i(P) 12 43 03.3

" 27 Sk iSg1 13 14 25.9
Ud iSg1 13 13 29.7
Southwest Norway.
Approximate origin time
= 13 11 24.
By combination with
Kongsberg readings.

" 27 Up iP 14 49 48.1
Ki iP 14 49 30.8
Sk eP 14 49 55
Um iP 14 49 36.4
Ud iP 14 49 56.0 D
Mindoro.
Origin time = 14 37 18.

" 27 Up iP 15 48 09.6
Ki iP 15 47 51.2
micr sec
Mx E 0.9 18
Mx N 0.7 18
Mx Z 1.0 18
Um iP 15 47 56.7
Ud iP 15 48 16.4
Mindoro.
Origin time = 15 35 38.

" 27 Up iP 15 54 47.5
Ki iP 15 54 30.4
Um iP 15 54 35.3
Ud iP 15 54 56.5
Mindoro.
Origin time = 15 42 17.

" 27 Up iP 16 09 58.1
Mindoro (h = 50 km).

" 27 Ki iSg1 16 22 01.7
Sk iSg1 16 22 06.1
Um iSg1 16 22 29.1
Nordland, Norway,
66.5°N, 13.9°E.
Origin time = 16 20 32.
Explosion.

" 27 Up iP 19 32 42.3 C
(cont.)

1972
Apr. 27 (cont.)
Up micr sec
P Z' 0.1 0.9
Mx E 1.9 17
Mx N 1.9 18
Mx Z 3.0 17
Ki iP 19 32 17.6
micr sec
P Z' 0.1 0.9
Mx E 1.1 15
Mx N 0.9 15
Mx Z 0.7 13
Sk iP 19 32 45.9
Um iP 19 32 26.2
iPcP 19 32 40.9
Ud iP 19 32 52.1
iPcP 19 33 01.0
De iP 19 33 00.4
Formosa (h = 15 km).
m = 5.9, M = 5.5 (Up,Ki).

" 27 Up iPKP 20 00 35.4
iSKP 20 03 23.4
Ki iPKP 20 00 24.7
iSKP 20 03 01.5
Sk ePKP 20 00 27
iSKP 20 03 17.6
Um i(PKP) 20 00 19.6
iPKP 20 00 28.4
iSKP 20 03 12.6
Ud iPKP 20 00 36.8
iSKP 20 03 25.4
De iPKP 20 00 47.7
iSKP 20 03 33.5
Tonga-Kermadec Islands
(h = 570 km).

" 27 Ki iPg1 22 04 29.2
iSg1 22 04 57.3
Um iSg1 22 06 40.3

" 27 Um i(P) 22 23 13.5
Ud iP 22 23 21.3
Formosa.

" 27 Up iP 22 58 02.9
Ki iP 22 57 45.9
Sk iP 22 58 08.3
Um iP 22 57 51.3
Ud iP 22 58 11.7
Midoro (h = 50 km).

" 28 Up iP 01 02 06.2
micr sec
P Z' 0.1 1.0
Ki iP 01 02 03.2
(cont.)

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

1972
Apr. 28 (cont.)

Sk	iP		01 02 25.9	
Um	iP		01 02 00.3	
Ud	iP		01 02 20.5	
De	iP		01 02 20.5	

Tibet (h = N).

" 28

Ki	iP		02 13 02.8	
Um	iP		02 12 35.4	
Ud	iP		02 12 40.9	

Iran.
Origin time = 02 04 56.

" 28

Up	iP		05 12 18.1	

" 28

Um	iP		06 07 03.8	

" 28

Up	iP		11 41 21.4	C
	ipP		11 41 28.6	
			micr sec	
	pP	Z'	0.1 0.9	
	Mx	E	0.8 20	
	Mx	N	0.9 21	
	Mx	Z	1.3 19	
Ki	iP		11 41 18.7	
	ipP		11 41 26.1	
			micr sec	
	pP	Z'	0.2 1.1	
	Mx	E	0.8 18	
	Mx	N	1.4 23	
	Mx	Z	0.8 18	
Sk	iP		11 41 37.7	
	ipP		11 41 45.8	
Um	iP		11 41 15.9	C
	ipP		11 41 23.0	
Ud	iP		11 41 33.9	C
	ipP		11 41 41.7	
De	iP		11 41 33.6	
	ipP		11 41 41.6	

Burma.
h = 30 km (Up,Ki,Sk,Um,Ud, De).
M = 5.2 (Up,Ki).

" 28

Um	i(P)		12 06 37.8	

" 28

Sk	eSg1		15 33 13	
Ud	iSn		15 31 54.9	
	iSg1		15 32 12.8	

Southwest Norway,
58.4°N, 6.4°E.
Origin time = 15 30 04.
By combination with Kongsberg and Bergen readings.

1972
Apr. 28

Up	iP		19 14 43.7	
Ki	iP		19 13 46.5	
Sk	eP		19 14 14	
Um	iP		19 14 16.3	
De	iP		19 15 04.9	

Alaska (h = 130 km).

" 28

Um	iP		21 18 50.7	

" 28

Up	iP		23 46 19	
	iPKP		23 50 06.1	
	iPP		23 51 18	
	iSKS		23 56 18.0	
	iPKKP		00 00 37.9	
	i		00 00 45.0	
			micr sec	
	PKP	Z'	0.1 0.9	
	PP	Z'	0.1 1.0	
	PKKP	Z'	0.4 1.3	
	Mx	E	6.8 22	
	Mx	N	9.9 22	
	Mx	Z	16 21	
Ki	iP		23 45 56.8	
	iPKP		23 49 53.2	
	iPP		23 50 37.2	
	iSKS		23 55 56	
	iPKKP		00 00 59.5	
	i		00 01 11.5	
			micr sec	
	PKP	Z'	0.1 0.9	
	PP	Z'	0.1 1.1	
	PKKP	Z'	0.2 1.4	
	Mx	E	8.5 20	
	Mx	N	8.7 19	
	Mx	Z	9.0 20	
Sk	iP		23 46 22.9	
	iPKP		23 50 05.4	
	iPKKP		00 00 42.1	
	i		00 00 48.2	
Um	iP		23 46 06	
	iPKP		23 49 59.2	
	iPP		23 50 54.2	
	iSKS		23 56 07	
	iPKKP		00 00 50.7	
	i		00 01 00.4	
Ud	iP		23 46 28.9	
	i		23 46 38.5	
	iPKP		23 50 09.0	
	iPP		23 51 31.0	
	iPKKP		00 00 34.3	
	i		00 00 38.9	
De	iP		23 46 40.0	
	iPKP		23 50 13.3	
	iPP		23 51 47.0	
	iPKKP		00 00 26.5	
	i		00 00 40.4	

(cont.)

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

1972
Apr. 28 (cont.)
Solomon Islands
(h = 410 km).
m = 6.0, M = 6.6 (Up,Ki).
M uncorrected for focal depth.
Double PKKP-phases are recorded at Up,Ki,Sk,Um, Ud,De.

" 29 Up iP 04 27 41.2
Ki eP 04 27 27
Um iP 04 27 29.4
Ud iP 04 27 49.7
Mindoro.
Origin time = 04 15 11.

" 29 Up iP 05 07 10.6 C
ipP 05 07 19.8
micr sec
P Z' 0.1 0.9
Ki iP 05 06 53.4
Sk iP 05 07 16.4
Um iP 05 06 58.7 C
ipP 05 07 09.2
Ud iP 05 07 19.4 C
ipP 05 07 29.1
Mindoro.
h = 35 km (Up,Um,Ud).
Origin time = 04 54 41.

" 29 Um iSg1 05 40 15.6
Lake Ladoga.
Explosion.

" 29 Ki iP 06 06 14.8

" 29 Um iP 06 58 26.7

" 29 Up iP 08 28 26.7
ipP 08 28 40.7
Sk iP 08 28 28.7
Ud iP 08 28 35.0
ipP 08 28 47.6
De eP 08 28 48
ipP 08 29 01.3
Japan.
h = 50 km (Up,Ud,De).

" 29 Ki iPn 10 03 13.0
iSn 10 04 01.7
iSg1 10 04 17.8
Um iSg1 10 05 44.3
Northwest Russia-Norway border region,
69.4°N, 31.2°E.
Origin time = 10 02 09.
Explosion.

1972
Apr. 29 Ki iPn 11 08 36.0
iSn 11 09 35.2
iSg1 11 09 59.0
Sk eSg1 11 12 20
Um iSn 11 10 15.0
iSg1 11 10 48.8
Ud iSg1 11 13 20.3
Northwest Russia,
67.7°N, 34.1°E.
Origin time = 11 07 17.
Explosion.

" 29 Ki iPn 11 12 01.8
iPg1 11 12 10.4
iSn 11 12 48.5
iSg1 11 13 03.5
Um iSg1 11 14 36.6
Northwest Russia-Norway border region,
69.6°N, 30.2°E.
Origin time = 11 11 00.
Explosion.

" 29 Ki i(Sn) 12 26 59.1
i(Sg1) 12 27 22.1
Um i(Sg1) 12 28 23.7
Probably northwest Russia.
Explosion.

" 29 Up eSg1 13 00 53
Um eSg1 13 01 14
Ud eSg1 13 01 57
De eSg1 13 02 24
Probably Esthonia.
Explosion.

" 29 Up iSg1 13 20 11.6
Ki eSg1 13 22 12
Sk eSg1 13 22 01
Um iSg1 13 20 30.8
Ud iSg1 13 21 15.9
De iSg1 13 21 41.8
Probably Esthonia.
Explosion.

" 29 Ud iP 14 37 22.0

" 29 Um i(P) 15 58 28.9
Ud iP 15 58 20.4
Iran.

" 29 Up iP 16 11 50.3 C
i 16 11 52.1
Ki iP 16 12 27.0
i 16 12 28.9
Sk eP 16 12 25
(cont.)

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

1972
Apr. 29 (cont.)

Um	iP		16 12 03.9		
	i		16 12 05.8		
Ud	iP		16 12 05.3	C	
	i		16 12 07.6		
De	iP		16 11 49.8		

Iran (h = N).
Double P, in average 2.0 sec apart.

" 29	Um	iP		16 37 00.0	
" 29	Up	iP		18 35 01.9	
				micr	sec
		P	Z'	0.1	0.8
	Ki	iP		18 36 10.1	C
				micr	sec
		P	Z'	0.1	0.5
		Mx	E	0.4	12
		Mx	N	1.1	13
		Mx	Z	0.9	13
	Sk	iP		18 35 40.9	C
	Um	iP		18 35 34.9	C
	Ud	iP		18 35 09.3	C
	De	iP		18 34 36.3	C

Crete (h = 45 km).
m = 5.8 (Up,Ki).

" 29	Up	iPKP		23 25 18.7	
	Ki	ePKP		23 25 08	
	Um	iPKP		23 25 12.2	
	Ud	ePKP		23 25 23	
		iPKKP		23 35 36.5	
	De	iPKP		23 25 26.6	

Solomon Islands (h = 55 km).

" 30	Up	iP		00 25 58.6	C
		iY		00 26 14.7	
				micr	sec
		P	Z'	0.2	1.3
	Ki	iP		00 25 41.5	C
		iY		00 25 56.0	
				micr	sec
		P	Z'	0.2	1.0
	Sk	iP		00 26 04.4	C
		iY		00 26 18.6	
	Um	iP		00 25 46.9	C
		iX		00 25 53.9	
		iY		00 26 01.4	
	Ud	iP		00 26 07.3	C
		iX		00 26 14.7	
		iY		00 26 22.4	
	De	eP		00 26 16	

Mindoro (h = N).
m = 6.2 (Up,Ki).
(cont.)

1972
Apr. 30 (cont.)
X and Y mark corresponding phases at the different stations: X-P = 7.2 sec, Y-P = 14.9 sec.

" 30	Ud	iP		07 23 29.5	

Tadzhik SSR.

" 30	Ud	iP		10 39 09.9	
	De	eP		10 38 37	

Crete (h = 80 km).

" 30	Up	iP		12 30 44.5	
	De	iP		12 31 01.6	
" 30	Up	iP		15 28 02.3	
		i		15 28 03.7	
				micr	sec
		P	Z'	0.2	0.7
		Mx	E	3.8	20
		Mx	N	4.4	22
		Mx	Z	7.7	19
	Ki	iP		15 27 45.4	
		i		15 27 46.6	
				micr	sec
		P	Z'	0.1	1.0
		Mx	E	11	19
		Mx	N	4.8	17
		Mx	Z	11	19
	Sk	iP		15 28 08.5	
		i		15 28 09.1	
	Um	iP		15 27 50.1	D
		i		15 27 51.4	
		i		15 28 21.1	
		iS		15 38 00	
	Ud	iP		15 28 11.1	
		i		15 28 12.3	
	De	iP		15 28 16.5	
		i		15 28 17.9	

Mindoro (h = 55 km).
m = 6.1, M = 6.2 (Up,Ki).
Double P, about 1.2 sec apart.

" 30	Up	iP		16 19 35.9	
				micr	sec
		P	Z'	0.1	0.9
	Ki	iP		16 19 18.3	
				micr	sec
		P	Z'	0.1	1.1
	Sk	iP		16 19 41.4	
	Um	iP		16 19 24.4	
	Ud	iP		16 19 45.0	

Mindoro (h = 70 km).
m = 5.8 (Up,Ki).

Markus Båth, Ota Kulhánek, Klaus Meyer, Rutger Wahlström
June 5, 1974

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BOX 517
751 20 UPPSALA 1
SWEDEN

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BOX 517
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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

M A Y 1 - 31, 1972

1972 May	1	Ki	iP	01 14 03.6
			i	01 14 24.3
		Um	iP	01 14 17.0
		Ud	iP	01 14 42.1
			i	01 15 00.4
"	1	Up	i(P)	02 40 28.6
		Um	i(P)	02 39 54.0
			i	02 40 05.2
		Ud	i(P)	02 40 05.7
"	1	Up	iSgl	03 37 31.5
		Ki	iPn	03 33 17.5
			iSn	03 34 14.3
			iSgl	03 34 37.2
		Sk	eSgl	03 37 01
		Um	iSgl	03 35 31.2
		Ud	iSgl	03 38 03.4
		Northwest USSR, 67.9°N, 33.6°E. Origin time = 03 32 02. Explosion.		
"	1	Up	iPKP	03 53 28.4
		Ki	iPKP	03 53 14.4
		Sk	iPKP	03 53 25.3
		Um	iPKP	03 53 20.6
		Ud	iPKP	03 53 31.0
		De	iPKP	03 53 37.4
		New Hebrides Islands (h = 130 km).		
"	1	Up	iPKP	10 54 13.2
			i(pPKP)	10 54 23.0
				micr sec
			(pPKP) Z'	0.1 1.0
		Ki	ePKP	10 53 54
		Sk	iPKP	10 54 07.8 D
		Um	i(PKP)	10 54 02.4
			iPKP	10 54 03.3
		(cont.)		

1972 May	1	(cont.)		
		Ud	iPKP	10 54 14.5
		De	iPKP	10 54 22.8
		South of Kermadec Islands (h = N).		
"	1	Um	iP	11 04 15.0
		Ud	iP	11 04 11.3
"	1	Up	iP	14 41 43.2
		Ud	eP	14 41 51
"	1	Up	iP	17 35 27.8
			ipP	17 35 38.4
				micr sec
			pP Z'	0.1 1.0
		Ki	iP	17 34 54.5
			ipP	17 35 04.0
		Sk	eP	17 35 23
			ipP	17 35 33.5
		Um	iP	17 35 09.1
			ipP	17 35 19.8
		Ud	iP	17 35 34.5
			ipP	17 35 44.7
		De	iP	17 35 46.9
			ipP	17 35 58.3
		Bonin Islands. h = 40 km (Up,Ki,Sk,Um,Ud, De).		
"	1	Up	iP	18 35 51.2
		Ki	eP	18 35 41
		Um	iP	18 35 40.0
		Ud	iP	18 35 59.5
		Mindoro (h = 60 km).		
"	1	Up	iP	19 16 23.2
		Ki	iP	19 16 23.6
		Um	iP	19 16 20.8
		Ud	iP	19 16 33.8
		(cont.)		

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

1972 May 1 (cont.)

De	iP	19 16 31.6	

Sumatra.

" 1	Up	iP	19 20 22.9
	Ki	iP	19 20 07.3
	Sk	eP	19 20 28
	Um	iP	19 20 12.6
	Ud	iP	19 20 31.4

Talaud Islands (h = 140 km).

" 1	Up	iP	19 58 54.7 C
		iPP	20 02 26.6
	Ki	iP	19 58 53.5 C
		ePP	20 02 28
	Sk	iP	19 59 08.3
	Um	iP	19 58 51.4 C
		iPP	20 02 31.0
	Ud	iP	19 59 03.7 C
		iPP	20 02 50.4
	De	iP	19 59 03.6

Sumatra (h = 90 km).

" 1	Up	eP	20 13 09
	Ki	eP	20 12 47
	Um	eP	20 13 00
		i	20 13 13.5
	Ud	eP	20 13 17
	De	iP	20 13 24.7

Formosa (h = 20 km).

" 2	Up	eP	00 25 42
	Ki	iP	00 24 45.1
	Um	iP	00 25 07.0
" 2	Up	iP	01 01 38.3
		iS	01 04 21.2
	Ki	iP	01 00 04.9
		iTSg	01 05 20.0
	Sk	iP	01 00 41.5
		iS	01 02 24.5
	Um	iP	01 00 52.0
		iS	01 02 42.3
		iTSg	01 07 23.0
	Ud	iP	01 01 28.8
	De	iP	01 02 21.2

Norwegian Sea (h = N).

" 2	Up	iP	03 22 56.3	
		iPP	03 26 47.1	
	Ki	iP	03 22 41.2	
			micr	sec
		P Z'	0.1	0.9
	Sk	eP	03 23 02	
	Um	iP	03 22 46.3	
	Ud	iP	03 23 05.3	

(cont.)

1972 May 2 (cont.)

De	iP	03 23 10.0	

Mindanao (h = 390 km).

" 2	Up	iP	03 33 04.0
	Ki	eP	03 33 13
	Um	iP	03 33 01.8
	Ud	eP	03 33 21

Hindu Kush.
Intermediate depth.

" 2	Ud	iP	05 01 36.7
" 2	Um	i(P)	06 14 51.4
" 2	Up	iP	07 10 01.2
			micr sec
		P Z'	0.2 1.4
		Mx E	2.6 22
		Mx N	2.0 22
		Mx Z	4.5 22
	Ki	iP	07 09 48.5
		iPP	07 13 39.1
		iPS	07 22 33
			micr sec
		P Z'	0.2 1.5
		Mx E	4.9 24
		Mx N	4.2 24
		Mx Z	5.7 24
	Sk	iP	07 09 44.5
		iPP	07 13 34.8
	Um	iP	07 09 57.3
		iPP	07 13 59.6
	Ud	iP	07 09 52.3
		iPP	07 13 48.8
	De	iP	07 10 00.5

Pacific Ocean (h = N).
m = 6.6, M = 5.9 (Up,Ki).

" 2	Um	iSgl	12 27 08.0
	De	iSgl	12 28 25.1

Western USSR.
Explosion.

" 2	Sk	eSgl	12 48 05
	Um	iSgl	12 49 20.2
	De	iSgl	12 47 42.5

South Norway.
By combination with
Kongsberg readings.

" 2	Ud	i(P)	14 29 22.1
	De	i(P)	14 28 32.5
" 2	Up	iP	15 51 37.0
	Ki	eP	15 51 20

(cont.)

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

1972 May	2	(cont.)		
		Um	iP	15 51 26.4
		Ud	iP	15 51 44.7
		Talaud Islands (h = 10 km).		
"	2	Up	iP	17 05 43.1
		Ki	iP	17 06 20.6
		Sk	iP	17 06 18.1
		Um	iP	17 05 56.9
		Ud	iP	17 05 58.1
		Iran.		
		Origin time = 16 58 15.		
"	2	Um	iP	17 26 14.1
		Ud	iP	17 26 32.6
		Hindu Kush.		
		Intermediate depth.		
"	2	Up	iPn	18 44 15.7
			i(P*)	18 44 23.0
			iSn	18 45 23.6
			i	18 45 37.8
			iSgl	18 45 58.8
		Sk	iSgl	18 46 32.9
		Um	iSn	18 46 37.8
			iSgl	18 47 36.1
		Ud	iPn	18 43 53.1
			iSn	18 44 44.1
		De	ePgl	18 43 51
			iSn	18 44 24.7
			iSgl	18 44 39.5
		Off coast of south Norway, 56.9°N, 7.4°E.		
		Origin time = 18 42 47.		
"	2	Up	iP	19 26 48.7
		Ki	iP	19 26 14.1
		Sk	iP	19 26 22.2
		Um	iP	19 26 33.7
		Ud	iP	19 26 40.4
		De	eP	19 26 59
		Nevada (h = 20 km).		
"	2	Um	iP	19 56 21.0
		Ud	iP	19 56 52.3
"	2	Ki	i(P)	20 16 12.0
"	2	Ki	e(P)	21 45 02
"	3	Up	iP	00 41 30.6
		Sk	eP	00 41 02
		Um	iP	00 41 12.4
		Ud	iP	00 41 21.4
		California (h = N).		
"	3	Ki	iPKP	02 26 25.1
		(cont.)		

1972 May	3	(cont.)		
		Um	ePKP	02 26 32
		New Hebrides Islands (h = 25 km).		
"	3	Up	iP	04 12 01.1
		Ki	eP	04 12 09
		Um	iP	04 11 58.2
		Ud	iP	04 12 16.7
		Hindu Kush.		
		Intermediate depth.		
"	3	Up	iP	05 00 02.0 C
				micr sec
			P Z'	0.1 0.8
		Ki	iP	04 59 09.0
				micr sec
			P Z'	0.1 0.7
		Sk	eP	04 59 37
			i	04 59 41.2
		Um	iP	04 59 34.7
		Ud	iP	05 00 02.7
		De	iP	05 00 24.8
		Aleutian Islands (h = 55 km).		
		m = 6.0 (Up,Ki).		
"	3	Ki	iP	07 42 44.9
		Sk	eP	07 42 49
		Um	eP	07 42 39
"	3	Sk	eSgl	08 03 54
		Um	iSgl	08 02 00.5
		Eastern Finland.		
		Explosion?		
"	3	Sk	iP	09 50 41.9
		Ud	iP	09 50 11.3
		Dodecanese Islands.		
"	3	Um	e(P)	11 55 08
"	3	Ud	i(P)	12 05 19.9
"	3	Up	iP	12 05 59.5
		Ki	iP	12 06 34.8
		Sk	eP	12 06 31
		Um	iP	12 06 05.7
			i(PP)	12 07 48.3
		Ud	iP	12 06 21.1
"	3	Ud	iPgl	12 17 45.5
			iSgl	12 18 18.8
		De	iPgl	12 17 34.1
			eSgl	12 17 57
		Southern Sweden.		
		Origin time = 12 17 02.		

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

1972 May	3	Up	iP		12 33 24.9	
		Ud	iP		12 33 35.5	
"	3	Ki	iP		13 20 46.5	
		Ud	iP		13 21 11.5	
		Talaud Islands (h = 90 km).				
"	3	De	i(P)		13 31 27.7	
"	3	De	i(P)		13 32 57.2	
			i		13 33 44.7	
"	3	Ki	iP		15 12 36.6	
"	3	Ud	i(P)		18 03 56.1	
"	3	Up	iPKP		19 07 40.5	
		Santa Cruz Islands (h = 30 km).				
"	3	Ud	iP		21 05 42.5	
"	3	Um	iP		22 00 45.2	
		Ud	eP		22 00 49	
		Iran.				
"	4	Up	iP		03 35 36.2	
		Ud	iP		03 35 45.6	
"	4	Up	iP		04 02 12.1	
			ipP		04 02 27.7	
					micr	sec
			P	Z'	0.1	1.0
			pP	Z'	0.2	1.0
			Mx	E	1.2	25
			Mx	N	1.0	22
			Mx	Z	1.4	25
		Ki	iP		04 01 35.2	
			ipP		04 01 51.1	
					micr	sec
			pP	Z'	0.2	1.1
			Mx	E	1.4	17
			Mx	N	1.1	17
			Mx	Z	1.2	16
		Sk	iP		04 02 07.2	
		Um	iP		04 01 50.8	
			ipP		04 02 05.6	
			iS		04 11 13	
		Ud	iP		04 02 19.2	
		De	iP		04 02 32.9	
			ipP		04 02 48.3	
		Japan.				
		h = 60 km (Up,Ki,Um,De).				
		m = 6.0, M = 5.3 (Up,Ki).				
"	4	Up	iP		04 25 29.1	
			ipP		04 25 41.9	
		Ki	iP		04 25 23.0	
		(cont.)				

1972 May	4	(cont.)				
		Ki	ipP		04 25 35.8	
					micr	sec
			Mx	E	0.8	18
			Mx	N	0.6	18
			Mx	Z	0.8	18
		Sk	iP		04 25 39.5	
			ipP		04 25 52.3	
			ePP		04 30 06	
		Um	iP		04 25 23.7	
			ipP		04 25 36.1	
		Ud	iP		04 25 37.9	
			ipP		04 25 50.4	
			iPP		04 29 56.9	
		De	iP		04 25 38.4	
		South of Java.				
		h = 45 km (Up,Ki,Sk,Um,Ud).				
"	4	Up	iP		05 06 50.4	
			ipP		05 07 04.9	
		Ki	iP		05 07 27.9	
		Sk	eP		05 07 24	
		Um	iP		05 07 03.9	
		Ud	iP		05 07 05.4	
		Iran.				
		h = 55 km (Up).				
"	4	Up	iP		06 39 13.0	
			i		06 39 53.8	
		Ki	iP		06 38 59.4	
					micr	sec
			P	Z'	0.1	1.5
		Sk	iP		06 38 52.3	
		Um	iP		06 39 08.2	
			i		06 39 50.3	
		Ud	iP		06 39 01.3	
		Mexico (h = 120 km).				
		The second arrival at Up,				
		Um interpreted as pP gives				
		a focal depth of 160 km.				
"	4	Up	iP		08 04 10	
			i(PKP)		08 07 10.3	
			iPKP		08 07 23.4	
			ipPKP		08 07 37.8	
			iPP		08 09 39.6	
			iSKP		08 10 47.0	
					micr	sec
			PKP	Z'	0.4	1.1
			SKP	Z'	1.5	1.3
			Mx	E	12	25
			Mx	N	28	25
			Mx	Z	50	26
		Ki	eP		08 03 39	
			iPKP		08 07 10.5	
			ipPKP		08 07 24.2	
		(cont.)				

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

1972
May 4 (cont.)

			micr	sec
Ki	PKP	Z'	0.8	1.1
	Mx	E	30	24
	Mx	N	23	22
	Mx	Z	31	23
Sk	i(PKP)		08 07 04.4	
	iPKP		08 07 21.5	
	ipPKP		08 07 35.1	
	iSKP		08 10 41.5	
Um	iP		08 03 58	
	i(PKP)		08 07 09.9	
	iPKP		08 07 16.9	
	ipPKP		08 07 30.5	
	iPP		08 09 16	
	iSKP		08 10 33	
Ud	i(PKP)		08 07 09.1	
	i(PKP)		08 07 14.6	
	iPKP		08 07 25.9	
	ipPKP		08 07 39.3	
	iPP		08 09 51.1	
	iSKP		08 10 53.1	
De	i(PKP)		08 07 20.9	
	iPKP		08 07 32.3	
	ipPKP		08 07 47.9	
	iSKP		08 11 01.3	

New Hebrides Islands.
h = 50 km (Up,Ki,Sk,Um,Ud, De).
M = 7.0 (Up,Ki).

" 4	Um	iPKP	09 28 56.6
	De	iPKP	09 29 08.5

Tonga Islands (h = 20 km).

" 4	Up	iP	10 30 44.9
" 4	Up	iPgl	13 16 02.7
		iSgl	13 16 17.9
		iRg	13 16 25.8
	Sk	eSgl	13 18 34
	Um	iS*	13 18 19.3
	Ud	iSgl	13 17 02.3
	De	iPn	13 16 32.9
		eSgl	13 17 20

Off coast of Södermanland, Sweden, 58.8°N, 17.7°E.
Origin time = 13 15 44.
Explosion.

" 4	Up	iSgl	13 16 42.9
		iRg	13 16 50.6
	Sk	ePn	13 17 30
		eSgl	13 19 00
	Um	iS*	13 18 44.6
		iSgl	13 18 49.6
	Ud	iSgl	13 17 27.1

(cont.)

1972
May 4 (cont.)

	De	iPn	13 16 57.7
		iSgl	13 17 44.6

Off coast of Södermanland, Sweden, 58.8°N, 17.7°E.
Origin time = 13 16 09.
Explosion.

" 4	Up	iPgl	13 30 24.3
		iSgl	13 30 39.6
		iRg	13 30 46.6
	Sk	eSgl	13 32 56
	Um	iS*	13 32 40.9
		iSgl	13 32 45.0
	Ud	iSgl	13 31 24.2
	De	ePn	13 30 54
		iSgl	13 31 42.0

Off coast of Södermanland, Sweden, 58.8°N, 17.7°E.
Origin time = 13 30 05.
Explosion.

" 4	Up	iSgl	13 31 01.8
		iRg	13 31 09.3
	Sk	eSgl	13 33 19
	Um	iS*	13 33 04.4
		iSgl	13 33 08.5
	Ud	iSgl	13 31 46.8
	De	iPn	13 31 16.6
		iSgl	13 32 03.8

Off coast of Södermanland, Sweden, 58.8°N, 17.7°E.
Origin time = 13 30 28.
Explosion.

" 4	De	i(Pgl)	14 01 56.8
		i(Sgl)	14 02 47.8
" 4	Um	iP	15 20 09.0
	Ud	iP	15 20 10.0

Iran.
Origin time = 15 12 27.

" 4	Ud	iP	15 40 03.3
" 4	Up	ipP	17 51 09.5
	Ki	eP	17 50 13
	Sk	iP	17 50 47.3
		ipP	17 51 05.4
	Um	iP	17 50 31.8
	Ud	iP	17 51 03.5

Japan.
h = 70 km (Sk).

" 4	Sk	iP	18 49 18.1
	Um	iP	18 49 07.8
		i	18 49 16.4
	Ud	iP	18 49 20.4

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

1972 May	4	Up	iSgl		19 03 54.5	
		De	ePgl		19 01 40	
			iSgl		19 02 18.0	
"	4	Up	iP		21 45 20.8	C
			ipP		21 45 35.0	
			iPP		21 45 46.4	
			iS		21 49 38	
					micr	sec
			P	Z'	14	2.4
			Mx	E	71	22
			Mx	N	86	22
			Mx	Z	100	20
		Ki	iP		21 46 30.1	C
			iS		21 51 38	
					micr	sec
			P	Z'	2.5	1.9
			Mx	E	90	19
			Mx	N	65	16
			Mx	Z	70	17
		Sk	iP		21 45 59.5	C
			iS		21 50 46.6	
		Um	iP		21 45 54.1	C
			iS		21 50 37	
		Ud	iP		21 45 27.7	C
			iS		21 49 51.0	
		De	iP		21 44 54.2	C
			iS		21 48 54.1	
		Crete.				
		h = 50 km (Up).				
		m = 6.9, M = 6.5 (Up,Ki).				
"	4	Um	i(P)		22 18 07.7	
"	5	Ud	iP		08 45 48.9	
		De	iP		08 45 17.7	
		Crete.				
"	5	De	i(P)		10 14 20.5	
"	5	Up	iP		10 27 58.6	C
					micr	sec
			P	Z'	0.2	0.9
			Mx	E	1.6	17
			Mx	N	2.3	21
			Mx	Z	2.0	14
		Ki	iP		10 27 35.7	C
					micr	sec
			P	Z'	0.1	1.0
			Mx	E	3.1	13
			Mx	N	1.9	16
			Mx	Z	2.0	14
		Sk	iP		10 28 02.9	C
		Um	iP		10 27 44.0	C
			i		10 28 14.3	
		Ud	iP		10 28 08.5	C
		(cont.)				

1972 May	5	(cont.)				
		Ud	i		10 28 15.4	
		De	iP		10 28 16.5	C
		Formosa (h = 55 km).				
		m = 5.9, M = 5.7 (Up,Ki).				
"	5	De	i(P)		10 52 23.7	
"	5	Ki	iPKP		19 57 36.4	
		South Sandwich Islands				
		(h = N).				
"	5	Ki	i(P)		22 15 37.3	
"	5	Up	iPP		23 36 09.5	
			iPKKP		23 45 45.3	
					micr	sec
			PP	Z'	1.1	2.1
			Mx	E	6.7	23
			Mx	N	15	24
			Mx	Z	16	20
		Ki	iP		23 30 58	
			iPKP		23 34 55.4	
			iPP		23 35 29	
			ePKKP		23 46 04	
					micr	sec
			Mx	E	9.7	19
			Mx	N	26	27
			Mx	Z	11	23
		Um	iPKP		23 35 00.8	
			iPKKP		23 46 08.4	
		Ud	ePKP		23 35 09	
			iPP		23 36 18.4	
			iPKKP		23 45 46.8	
		De	iPKP		23 35 13.9	
			iPKKP		23 45 34.4	
		New Britain (h = 30 km).				
		M = 6.7 (Up,Ki).				
"	6	Ki	iSKP		03 46 00.7	
		Um	iSKP		03 46 10.9	
		Ud	iSKP		03 46 24.3	
		De	iPKP		03 43 48.7	
		Fiji Islands (h = 620 km).				
"	6	Um	iP		04 49 28.1	
		Japan (h = 80 km).				
"	6	Up	iSgl		09 38 07.8	
		Um	iSgl		09 38 31.4	
		Ud	iSgl		09 39 11.6	
		De	iSgl		09 39 34.3	
		Esthonia.				
		Explosion.				
"	6	Um	iSgl		10 35 27.8	
		Northwest USSR.				
		Explosion.				

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

1972 May	6	Ki	iPgl	11 25 02.2
			iSgl	11 25 38.2
		Um	iPn	11 25 08.8
			iPgl	11 25 18.2
			iSn	11 25 52.2
			iSgl	11 26 06.1
		Ud	iSn	11 27 00.6
			iS*	11 27 31.7
			iSgl	11 27 37.5

Nordland, Norway, 66.5°N, 14.7°E.
Origin time = 11 24 16.
Explosion.

"	6	Um	iP	16 25 09.0
		Ud	iP	16 25 21.2

Hindu Kush.
Intermediate depth.

"	6	Um	iP	17 43 54.5
		Ud	eP	17 44 22
"	6	Up	iP	18 01 28.6
		Sk	eP	18 01 18
		Um	iP	18 01 07.3
		Ud	iP	18 01 35.0

Japan (h = 35 km).

"	6	Ki	iPn	20 22 45.4
			iPgl	20 22 53.6
			iSn	20 23 31.8
			iSgl	20 23 44.2
		Um	iSgl	20 25 21.8

Northwest USSR-Norway border region, 69.7°N, 30.0°E.
Origin time = 20 21 45.
Explosion.

"	6	Ud	eP	21 53 32
"	6	Up	iP	22 15 49.6
		Ki	iP	22 15 36.2
		Sk	eP	22 16 02
		Um	eP	22 15 38
		Ud	iP	22 16 01.7

China (h = 15 km).

"	7	Up	e(P)	03 50 26
"	7	Ki	iP	06 39 32.4
		Um	iP	06 39 56.2
"	7	Up	iP	06 43 54.5
		Ki	iP	06 43 51.0

		micr	sec
Mx	E	0.6	14
Mx	Z	0.6	14

(cont.)

1972 May 7 (cont.)

Sk	iP	06 44 15.0
Um	iP	06 43 46.0
Ud	iP	06 44 10.8

Sinkiang (h = 30 km).

"	7	Up	iP	08 59 26.6
		Um	iP	08 59 12.3
		Ud	iP	08 59 34.2
"	7	Ki	iPn	09 16 24.5
			iSn	09 17 12.4
			iSgl	09 17 28.2
		Um	iSgl	09 18 56.8

Northwest USSR-Norway border region, 69.5°N, 30.6°E.
Origin time = 09 15 21.
Explosion.

"	7	Ud	iPKP	13 07 33.2
		De	iPKP	13 07 43.5
"	7	Ki	iP	14 49 11.9
		Sk	iP	14 48 24.5
		Um	iP	14 48 24.7
			i	14 48 32.9
		Ud	iP	14 47 44.3
		De	eP	14 47 05

Yugoslavia (h = 55 km).

"	7	Um	iP	15 05 56.9
		Ud	iP	15 06 34.0
			i	15 06 41.8

Japan (h = 70 km).

"	7	Ud	iP	16 26 23.6
"	7	Ud	iP	17 03 03.8
			ipP	17 03 10.5

North Atlantic Ocean.
h = 25 km (Ud).

"	7	Ki	Mx	17 37

		micr	sec
Mx	E	0.7	17
Mx	N	0.6	16
Mx	Z	1.3	23

New Ireland (h = 100 km).

"	7	Um	iPKP	17 39 33.0

New Hebrides Islands (h = 30 km).

"	7	Up	ePKP2	22 27 27

		micr	sec
Mx	E	4.0	19
Mx	N	3.4	19
Mx	Z	7.7	21

(cont.)

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

1972
May 7 (cont.)

Ki	iPKP2		22 27 27.2	
			micr	sec
	PKP2	Z'	0.1	1.5
	Mx	E	3.0	20
	Mx	N	2.8	20
	Mx	Z	2.3	18
Sk	ePKP		22 26 29	
Um	iPKP2		22 27 31.5	
Ud	ePKP		22 26 28	
	iPKP2		22 27 21.4	
De	ePKP		22 26 31	

South Pacific Ocean
(h = N).
M = 6.5 (Up,Ki).

" 8

Up	iS		00 13 17.8	
	i		00 13 52.2	
Ki	iP		00 09 03.9	
	iTSg		00 14 17.0	
Sk	iP		00 09 40.6	
	iS		00 11 22.7	
Um	iP		00 09 52.8	
	iS		00 11 40.3	
	iTSg		00 16 21.4	
Ud	iP		00 10 27.6	
	iS		00 12 45.2	
De	iP		00 11 19.7	

Norwegian Sea (h = N).

" 8

Ki	iP		00 50 50.6	
Ud	eP		00 51 14	

Banda Sea (h = N).

" 8

Ud	iP		03 13 40.8	

" 8

Ud	eP		03 49 18	

" 8

Up	eP1		04 33 38	
	iP2		04 33 43.9	
Ki	iP2		04 33 27.0	
Um	iP2		04 33 32.3	
Ud	eP1		04 33 47	
	iP2		04 33 53.0	

Mindoro (h = 55 km).

" 8

Up			micr	sec
	Mx	E	0.8	20
	Mx	N	1.5	21
	Mx	Z	1.3	19
Ki			micr	sec
	Mx	E	1.0	19
	Mx	N	0.9	18
	Mx	Z	1.1	19
Um	i(P)		06 33 11.8	
Ud	i(P)		06 33 25.0	

New Guinea (h = N).
M = 5.6 (Up,Ki).

1972
May 8

De	iP		09 02 01.8	

Greece (h = N).

" 8

Sk	iP		09 17 13.7	

" 8

Sk	iP		09 18 56.7	
De	iP		09 18 53.1	

" 8

Up	iP		09 25 12.6	
			micr	sec
	Mx	E	1.1	12
	Mx	N	1.4	10
	Mx	Z	2.1	10
Ki	iP		09 26 30.7	
			micr	sec
	P	Z'	0.1	1.0
	Mx	E	1.2	11
	Mx	N	2.6	12
	Mx	Z	2.7	12
Sk	iP		09 25 59.7	
Um	iP		09 25 51.5	
Ud	iP		09 25 23.1	
De	iP		09 24 45.6	

Greece-Bulgaria (h = 10 km).
M = 4.9 (Up,Ki).

" 8

Ud	iPKP		14 33 59.2	
	i		14 34 13.0	
De	ePKP		14 34 10	

" 8

Ki	iPKP		16 34 29.8	
Um	ePKP		16 34 33	
Ud	ePKP		16 34 40	
De	iPKP		16 34 43.4	

Fiji Islands (h = 70 km).

" 8

Up	Mx		17 31	
			micr	sec
	Mx	E	1.1	22
	Mx	N	2.3	21
	Mx	Z	3.4	21
Ki	Mx		17 27	
			micr	sec
	Mx	E	1.1	20
	Mx	N	2.0	21
	Mx	Z	1.9	20

New Ireland (h = 40 km).
M = 5.8 (Up,Ki).

" 8

Up	iP		17 56 45.6	
Ki	iP		17 56 45.1	
Um	iP		17 56 42.8	
Ud	iP		17 56 55.0	

Sumatra (h = N).

" 8

Up	iPKP		17 59 55.6	
	i		18 00 01.6	

(cont.)

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

1972
May 8 (cont.)

Ud	iPKP		17 59 58.3
	i		18 00 02.9
De	iPKP		18 00 07.4

Tonga-Kermadec Islands
(h = 190 km).

" 8	Ud	iP	18 45 48.1
" 8	Ud	iP	19 19 24.0
" 8	Ud	iP	19 41 37.8
	De	eP	19 41 59

Kamchatka (h = 30 km).

" 8	Ud	iP	20 25 59.4

Lake Baikal.

" 9	Um	iP	04 04 05.3

Bonin Islands (h = N).

" 9	Up	iPKP		05 22 44.6	
		i		05 22 50.4	
	Ki	ePKP		05 22 22	
	Sk	iPKP		05 22 38.8	
	Um	iPKP		05 22 33.3	
	Ud	iPKP		05 22 46.3	
		i		05 22 52.9	
	De	iPKP		05 22 54.7	

Kermadec Islands (h = 370 km).

" 9	Ki	ipP	08 38 48.4

Sea of Japan (h = 270 km).

" 9	Up	i(PKP)		12 38 29.1
		iPKP		12 38 39.4
		iSKP		12 41 21.3
				micr sec
		PKP	Z'	0.1 1.2
		SKP	Z'	0.2 1.2
	Ki	e(PKP)		12 38 13
		iPKP		12 38 25.0
		iSKP		12 40 56.2
				micr sec
		PKP	Z'	0.2 1.3
		SKP	Z'	0.3 1.5
	Sk	e(PKP)		12 38 24
		iPKP		12 38 35.2
		iSKP		12 41 13.7
	Um	e(PKP)		12 38 20
		iPKP		12 38 32.2
		i		12 41 01.4
		iSKP		12 41 09.0
	Ud	e(PKP)		12 38 27
		i(PKP)		12 38 30.6
		iPKP		12 38 41.0
		iSKP		12 41 22.8

(cont.)

1972
May 9 (cont.)

De	i(PKP)		12 38 40.7
	iSKP		12 41 33.6

Fiji Islands (h = 570 km).

" 9	Um	eP	12 43 58
" 9	Up	ePKP	13 28 47
	Ki	iPKP	13 28 31.3
	Sk	iPKP	13 28 41.2
	Um	iPKP	13 28 39.0
	Ud	i(PKP)	13 28 36.5
		iPKP	13 28 47.2
	De	i(PKP)	13 28 44.9
		iPKP	13 28 53.6

Tonga Islands (h = 270 km).

" 9	Ud	iP	14 17 26.2
" 9	Up	iP	17 45 06.6
			micr sec
		Mx E	1.2 11
		Mx N	2.5 12
		Mx Z	3.2 11
	Ki	eP	17 46 20
			micr sec
		Mx E	1.2 10
		Mx N	0.9 11
		Mx Z	0.8 10
	Sk	eP	17 45 50
	Um	iP	17 45 43.6
		iS	17 50 04
	Ud	iP	17 45 17.0
	De	iP	17 44 47.3

Turkey (h = 35 km).
M = 4.8 (Up,Ki).

" 9	Um	iP	18 56 57.5
" 9	Ud	iP	21 54 15.0
" 9	Up	iP	23 26 34.7
	Ki	eP	23 26 10
	Sk	eP	23 26 38
	Ud	iP	23 26 44.3
" 10	Up		micr sec
		Mx E	1.1 23
		Mx N	0.9 20
		Mx Z	1.2 18
	Ki		micr sec
		Mx E	1.5 23
		Mx N	0.9 20
		Mx Z	1.2 20
	Um	iPP	06 07 30.4
	Ud	ePKP	06 07 08

New Britain (h = N).
M = 5.6 (Up,Ki).

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

1972					
May	10	Up	iP	12 59 16.3	
		Ki	iP	12 59 12.0	
		Sk	iP	12 59 32.7	
		Um	iP	12 59 09.9	
		Ud	iP	12 59 29.8	
		De	iP	12 59 31.3	
		Burma (h = 90 km).			
"	10	Ki	iP	14 03 05.2	
		Um	iP	14 02 42.2	
		Ud	iP	14 02 38.5	
			i	14 02 43.4	
		Iran.			
		Origin time = 14 55 00.			
"	10	Ki	eP	17 22 25	
		Um	iP	17 22 43.0	
		Sea of Japan (h = 250 km).			
"	10	Ud	iP	17 43 42.3	
		Ecuador (h = 90 km).			
"	10	Um	iP	18 30 11.8	
		Ud	iP	18 30 31.4	
		Hindu Kush.			
		Intermediate depth.			
"	10	Up	iPP	22 20 41.3	
		Ki	iP	22 16 25.3	
		Um	iP	22 16 29.1	
			iPP	22 20 25.3	
		Ud	iP	22 16 47.8	
		Celebes (h = 60 km).			
"	10	Up	i(P)	23 33 34.7	
"	10	Up	eP	23 33 55	
		Kurile Islands (h = 100 km).			
"	11	Up	iP	00 55 56.3	C
			ipP	00 56 14.7	
			iS	01 04 52	
				micr sec	
			P Z'	0.3 0.9	
			Mx E	1.8 23	
			Mx N	2.1 20	
			Mx Z	3.1 19	
		Ki	iP	00 55 12.0	C
			ipP	00 55 29.8	
			iS	01 03 30	
				micr sec	
			P Z'	0.1 1.0	
			Mx E	4.0 23	
			Mx N	2.3 18	
			Mx Z	4.2 21	
		Sk	iP	00 55 46.9	C
			ipP	00 56 06.4	
		(cont.)			

1972					
May	11	(cont.)			
		Um	iP	00 55 31.8	C
			ipP	00 55 50.8	
			iS	01 04 08	
		Ud	iP	00 56 02.7	C
			ipP	00 56 20.1	
		De	iP	00 56 19.6	C
			ipP	00 56 38.2	
		Japan.			
		h = 70 km (Up,Ki,Sk,Um,Ud, De).			
		m = 6.0, M = 5.7 (Up,Ki).			
"	11	Up	iP	03 11 57.7	C
		Sk	eP	03 12 38	
		Um	eP	03 12 40	
		Ud	iP	03 12 04.8	
		De	eP	03 11 37	
		Greece (h = 130 km).			
"	11	Up	ePKP	04 07 57	
			iSKP	04 11 18.3	
			i	04 11 43.7	
		Ki	iPKP	04 07 42.1	
			ipPKP	04 07 58.8	
		Sk	epPKP	04 08 11	
		Um	iPKP	04 07 48.7	
			ipPKP	04 08 05.4	
		Ud	iPKP	04 07 59.4	
			ipPKP	04 08 15.2	
		New Hebrides Islands.			
		h = 60 km (Ki,Um,Ud).			
"	11	Up	iP1	04 42 06.2	
			iP2	04 42 09.7	
		Sk	iP1	04 42 47.3	
			iP2	04 42 50.4	
		Um	i(P2)	04 42 48.0	
		Ud	iP1	04 42 14.0	
			iP2	04 42 17.1	
		De	eP1	04 41 40	
			iP2	04 41 42.6	
		Aegean Sea.			
		Double P, in average 3.2 sec apart.			
"	11	Up	iP	05 36 16.6	
		Um	iP	05 36 05.2	
		Ud	eP	05 36 26	
"	11	Up	iSn	12 18 36.8	
			iSgl	12 18 48.6	
		Ki	eSgl	12 21 18	
		Sk	eSgl	12 20 35	
		Um	iSgl	12 19 23.9	
		Ud	iSn	12 19 26.6	
			iSgl	12 19 51.8	
		(cont.)			

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

1972
May 11 (cont.)

	De	iSgl		12 20 19.9

Esthonia, 59.6°N, 24.4°E.
Origin time = 12 17 00.
Explosion.

" 11	Um	iPKP		15 27 14.5
	Ud	iPKP		15 27 26.7
" 11	Up	e(pP)		19 21 06
				micr sec
		Mx	E	0.5 14
		Mx	Z	0.6 14
	Ki	ipP		19 20 40.3
				micr sec
		Mx	E	0.4 11
	Um	iP		19 20 33.8
		ipP		19 20 47.1
	Ud	iP		19 20 59.8
		ipP		19 21 13.2

Luzon-Formosa.
h = 50 km (Um,Ud).
M = 5.2 (Up,Ki).

" 11	Up	iPKP		21 37 22.4
		i		21 37 24.2
		ipPKP		21 38 52.2
		iSKKP		21 48 12.7
				micr sec
		PKP	Z'	0.8 1.0
	Ki	i(PKP)		21 37 00.1
		iPKP		21 37 08.8
		iSKP		21 40 09.7
				micr sec
		PKP	Z'	0.1 1.0
		SKP	Z'	0.4 2.0
	Sk	iPKP		21 37 15.9
	Um	iPKP		21 37 10.9
		i		21 37 18.9
		iSKP		21 40 19.9
		iSKKP		21 48 40.1
	Ud	iPKP		21 37 23.2
		i		21 37 26.0
		i		21 37 28.5
	De	iPKP		21 37 29.2
		i		21 37 35.0

Kermadec Islands.
h = 380 km (Up).

" 12	Up	iP1		01 33 09.2
		iP2		01 33 17.2
		iP3		01 33 24.6
		iP4		01 33 31.0
		iS		01 42 38
				micr sec
		P2	Z'	0.1 0.9
		P4	Z'	0.2 1.0

(cont.)

1972
May 12 (cont.)

	Up			micr sec
		Mx	E	2.7 20
		Mx	N	3.2 20
		Mx	Z	6.2 20
	Ki	iP1		01 32 44.6
		iP4		01 33 05.0
		iS		01 42 02
				micr sec
		P4	Z'	0.2 1.2
		Mx	E	1.6 17
		Mx	N	1.5 18
		Mx	Z	2.1 17
	Sk	iP1		01 33 13.5
		iP4		01 33 35.0
	Um	iP1		01 32 53.8
		iP2		01 33 01.1
		iP3		01 33 08.8
		iP4		01 33 15.7
		iS		01 42 15
	Ud	iP1		01 33 17.9
		iP2		01 33 27.1
		iP3		01 33 34.6
		iP4		01 33 40.4
	De	eP1		01 33 31

Formosa (h = 60 km).
m = 6.0, M = 5.7 (Up,Ki).
P1, P2, P3 and P4 denote multiple P; in average: P2-P1 = 8.2 sec, P3-P1 = 15.8 sec and P4-P1 = 21.7 sec. P3 could be interpreted as pP for a focal depth of 60 km.

" 12	Ud	iP		02 30 32.5
" 12	Ki	iP		03 09 23.3
" 12	Up	iP		03 14 19.9
	Um	iP		03 14 12.2
	Ud	iP		03 14 33.3
" 12	Ki	iP		04 51 28.6

Hindu Kush.
Intermediate depth.

" 12	Ki	iP		07 01 28.9
	Ud	eP		07 02 27

Alaska (h = N).

" 12	Ud	iP		07 46 56.9
" 12	Ud	iP		08 04 37.2
" 12	De	e(P)		10 59 37

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

1972 May	12	Sk	eSgl	12 03 34
		Um	iSgl	12 02 02.6
		Ud	iSgl	12 02 45.6
		Western USSR.		
		Explosion.		
"	12	Ki	iPn	12 02 03.4
			iSn	12 03 02.3
			iS*	12 03 21.6
		Sk	iSgl	12 05 50.4
		Um	i	12 03 57.2
			iS*	12 04 11.6
			iSgl	12 04 16.9
		Ud	eSgl	12 06 48
		Northwest USSR,		
		67.8°N, 34.1°E.		
		Origin time = 12 00 45.		
		Explosion.		
"	12	Ud	iP	12 57 14.4
"	12	Up	iPKP	14 41 12.5
			i	14 41 34.2
		Sk	iPKP	14 41 07.6
		Um	iPKP	14 41 02.7
		Ud	iPKP	14 41 14.2
"	12	Ki	iP	16 48 47.8
		Um	iP	16 48 47.9
		Banda Sea (h = 110 km).		
"	12	Sk	iP	17 53 40.7
"	12	Up	iP	18 07 21.9
"	12	De	e(P)	19 07 56
"	12	Um	iP	20 21 13.4
		Ud	eP	20 20 19
"	12	Ud	iP	23 07 56.2
		Mindoro.		
"	13	Ki	iP	04 00 06.5
		Um	iP	04 00 19.0
		Volcano Islands (h = 120 km).		
"	13	Up	iP	06 12 44.0
		Um	iP	06 12 38.8
		Ud	iP	06 12 53.0
"	13	Um	iPKP	06 15 35.3
		Ud	iPKP	06 15 44.7
		De	ePKP	06 15 45
		New Britain (h = 70 km).		
"	13	Um	iP	08 39 19.3

1972 May	13	Um	iP		09 10 04.6	
"	13	Up	iPKP		09 43 19.2	
			i		09 43 25.5	
					micr	sec
			PKP	Z'	0.1	0.8
		Ki	iPKP		09 42 59.0	
			i		09 43 04.5	
		Sk	iPKP		09 43 13.5	
		Um	iPKP		09 43 08.5	
			i		09 43 15.6	
		Ud	iPKP		09 43 21.3	
			i		09 43 29.0	
		De	iPKP		09 43 29.2	
		South of Kermadec Islands				
		(h = 40 km).				
"	13	Ud	iP		10 33 35.7	
"	13	Ki	eSgl		12 24 28	
		Um	iSgl		12 22 45.5	
		Ud	eSgl		12 23 30	
		Western USSR.				
		Explosion.				
"	13	Ki	iP		13 40 26.1	
		Ud	iP		13 41 22.1	
		De	eP		13 41 44	
		Kamchatka.				
"	13	Um	iP		13 48 26.7	
"	13	Ki	iP		14 05 01.5	
		North Atlantic Ocean (h = N).				
"	13	Up			micr	sec
			Mx	E	0.9	18
			Mx	N	0.8	17
			Mx	Z	1.3	19
		Ki			micr	sec
			Mx	E	0.6	16
			Mx	N	0.5	14
			Mx	Z	0.5	13
		Ud	iP		14 07 50.5	
		North Atlantic Ocean (h = N).				
		M = 4.6 (Up,Ki).				
"	13	Ki	iP		15 13 18.4	
		Um	iP		15 13 09.0	
		North Atlantic Ocean (h = N).				
"	13	Ki	ePKP		15 38 24	
		Um	iPKP		15 38 21.9	
		Ud	iPKP		15 38 13.9	
		Chile (h = 40 km).				
"	13	Ki	iP		16 43 54.4	
		North Atlantic Ocean (h = N).				

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

1972
May 13 Up eP 16 46 37
micr sec
P Z' 0.1 1.2
Mx E 1.6 21
Mx N 1.0 14
Mx Z 2.6 19
Ki iP 16 47 02.0
micr sec
P Z' 0.1 1.2
Mx E 3.6 22
Mx N 2.0 21
Mx Z 2.9 22
Sk iP 16 46 25.3
Um iP 16 46 52.0
Ud iP 16 46 17.3
North Atlantic Ocean (h = N).
m = 5.6, M = 4.9 (Up,Ki).

" 13 Ki iP 21 41 23.0
Kamchatka.

" 13 Ud iPKP 22 03 33.5
Chile (h = 40 km).

" 13 Ud iP 22 48 51.8

" 14 Up iP 05 16 31.5
Ki iP 05 16 19.6
Um iP 05 16 22.6
Ud iP 05 16 40.8
Celebes (h = 190 km).

" 14 Ki iPn 10 36 04.4
iSn 10 36 52.4
iS* 10 37 05.3
Sk eSgl 10 39 59
Um iSgl 10 38 36.7
Northwest USSR-Norway border region, 69.5°N, 30.9°E.
Origin time = 10 35 01.
Explosion.

" 14 Ud iP 10 36 17.7
Mindanao (h = 110 km).

" 14 Up iP 12 12 33.0 C
iS 12 21 44
micr sec
P Z' 0.1 1.0
Mx E 3.1 20
Mx N 2.9 18
Mx Z 4.5 22
Ki iP 12 11 50.8 C
i 12 12 05.0
iPP 12 14 06.0
iS 12 20 26
(cont.)

1972
May 14 (cont.)
Ki
micr sec
P Z' 0.1 1.0
Mx E 5.5 20
Mx N 4.2 19
Mx Z 3.3 20
Sk iP 12 12 24.9 C
Um iP 12 12 09.5 C
i 12 12 22.1
iS 12 21 01
Ud iP 12 12 39.4 C
i 12 12 54.1
De iP 12 12 55.7
i 12 13 11.4
Japan (h = 10 km).
m = 6.0, M = 5.8 (Up,Ki).
Interpreting the second phase at Ki,Um,Ud,De as pP gives a focal depth of 55 km.

" 14 Ki iPn 13 09 10.0
iSgl 13 10 12.4
Sk iPn 13 09 17.3
i 13 09 25.4
iSn 13 10 07.7
i 13 10 18.1
Um iPn 13 09 36.2
iSn 13 10 40.0
iSgl 13 11 09.7
Norwegian Sea, 67.8°N, 10.4°E.
Origin time = 13 08 13.

" 14 Up iP 19 45 22.6
ipP 19 45 36.8
micr sec
P Z' 0.2 0.9
Ki iP 19 44 29.9
micr sec
P Z' 0.1 0.9
Mx E 0.6 16
Mx N 0.7 17
Mx Z 0.6 16
Sk eP 19 45 03
Um iP 19 44 55.9
Ud iP 19 45 22.8
De iP 19 45 45.6
Aleutian Islands.
h = 50 km (Up).
m = 5.9 (Up,Ki).

" 14 Ud iP 21 11 47.9
Aleutian Islands (h = 45 km).

" 15 Um iP 01 03 20.6
Banda Sea (h = 170 km).

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

1972				
May	15	Ki	iPn	09 39 05.5
			iSn	09 39 52.9
			iS*	09 40 06.8
		Um	iSgl	09 41 39.1
		Northwest USSR-Norway border region, 69.5°N, 30.6°E. Origin time = 09 38 03. Explosion.		
"	15	Up	iPKP	09 51 17.9
			iSKP	09 54 10.1
				micr sec
			PKP Z'	0.2 0.8
		Ki	i(PKP)	09 50 59.8
			iPKP	09 51 08.6
			iSKP	09 53 48.4
				micr sec
			PKP Z'	0.1 0.9
			SKP Z'	0.1 1.1
		Sk	i(PKP)	09 51 10.4
			iPKP	09 51 18.1
			iSKP	09 54 04.0
		Um	i(PKP)	09 51 05.1
			iPKP	09 51 13.1
			iSKP	09 53 58.5
		Ud	iPKP	09 51 20.3
			iSKP	09 54 11.4
			iSKKP	10 02 29.6
		De	iPKP	09 51 30.2
			i	09 51 31.7
			ipPKP	09 53 41.1
			iSKP	09 54 20.3
		Tonga-Kermadec Islands. h = 550 km (De).		
"	15	Ki	iP	10 10 06.9
		Um	iP	10 10 34.6
		Ud	iP	10 10 59.4
"	15	Um	iPKP2	11 42 13.6
		Ud	iPKP2	11 42 01.4
		South Pacific Ocean (h = N).		
"	15	Ki	eP	12 24 13
		Ud	eP	12 23 31
		Atlantic Ocean (h = N).		
"	15	Up	iP	13 15 16.2
		Ki	iP	13 14 28.1
		Um	iP	13 14 50.3
		Ud	iP	13 15 21.1
		De	eP	13 15 42
		Kurile Islands (h = N).		
"	15	Up	iP	13 48 33.7
				micr sec
			P Z'	0.1 1.0
		(cont.)		

1972				
May	15	(cont.)		
		Ki	iP	13 47 40.5
		Ud	iP	13 48 34.3
		Aleutian Islands (h = 50 km).		
"	15	Um	iPKP	14 21 33.8
		Ud	iPKP	14 21 45.8
"	15	Up	iP	14 31 49.7
			ipP	14 32 00.7
		Ki	eP	14 31 33
		Sk	epP	14 32 08
		Um	ipP	14 31 52.7
		Ud	ipP	14 32 08.5
		Mindoro. h = 40 km (Up).		
"	15	Ki	iPKP	22 26 47.1
		South Georgia Island (h = N).		
"	16	Up	i(X)	01 47 28.4
		Ki	eP	01 48 21
		Sk	eP	01 47 52
		Um	eP	01 47 48
		Ud	iP	01 47 19.8
			iX	01 47 29.8
		De	iP	01 46 52.9
		Crete (h = N).		
"	16	Ki	iP	04 51 52.3
"	16	Ud	iPP	11 04 51.3
		Chile-Argentina (h = 120 km).		
"	16	Up	iP	11 07 19.7 C
		Ki	iP	11 07 56.9 C
		Sk	iP	11 07 54.6
		Um	iP	11 07 33.0 C
		Ud	iP	11 07 34.8 C
			i	11 07 40.3
		De	iP	11 07 18.3
		Iran (h = 35 km).		
"	16	Up	iSgl	13 01 44.3
		Ki	eSgl	13 04 35
		Sk	iSgl	13 03 42.5
		Um	iSgl	13 02 34.9
		Ud	eSgl	13 02 44
		De	eSgl	13 03 11
		Esthonia, 59.2°N, 24.0°E. Origin time = 13 00 00. Explosion.		
"	16	Up	iSgl	13 38 00.8
		Um	iSgl	13 38 31.5
		Ud	eSgl	13 39 02
		De	eSgl	13 39 30
		(cont.)		

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

1972
May 16 (cont.)
Esthonia, 59.6°N, 25.2°E.
Origin time = 13 36 00.
Explosion.

" 16	Ud	i(P)		15 20 10.5
" 16	Up	iP		16 18 11.6
	Ki	iP		16 17 28.1
	Sk	eP		16 18 04
	Um	iP		16 17 47.8
	Ud	iP		16 18 18.6
		i		16 18 21.6
	De	iP		16 18 35.6

Japan (h = 120 km).

" 16	Um	i(P)		17 12 43.4
" 16	Um	i(Sgl)		23 25 43.5
	Ud	e(Sgl)		23 26 34
" 16	Ki	i(Sgl)		23 30 33.3
" 16	Um	e(Sgl)		23 32 39
" 17	Up	iP1		05 40 21.4
		iP2		05 40 23.6
		ipP		05 40 34.2
		iS		05 50 43
				micr sec
		P2	Z'	0.1 0.9
		Mx	E	4.8 15
		Mx	N	11 26
		Mx	Z	8.4 17
	Ki	iP2		05 40 07.0
		ipP		05 40 17.7
		iS		05 50 13
				micr sec
		P2	Z'	0.1 0.9
		pP	Z'	0.2 1.4
		Mx	E	9.1 16
		Mx	N	12 16
		Mx	Z	9.2 16
	Sk	iP2		05 40 29.6
		ipP		05 40 40.9
	Um	iP1		05 40 11.2
		iP2		05 40 13.5
		ipP		05 40 23.3
		iS		05 50 23
	Ud	iP1		05 40 32.4
		iP2		05 40 34.2
		ipP		05 40 43.8
	De	eP2		05 40 41

Luzon.
h = 40 km (Up,Ki,Sk,Um,Ud).
m = 6.0, M = 6.4 (Up,Ki).
Double P, in average 2.1 sec apart.

1972
May 17

Up	iP			06 03 10.7
	i			06 03 22.1
Ki	eP			06 02 55
Um	iP			06 03 01.0
	i			06 03 12.1
Ud	iP			06 03 21.0

Luzon (h = 90 km).

" 17	Up	iP		09 45 39.2
	Sk	iP		09 46 06.7
	Um	iP		09 45 40.3
	Ud	iP		09 45 55.6

Pakistan.
Origin time = 09 37 38.

" 17	Up	iP		09 47 40.3
	Ki	iP		09 47 53.2
	Sk	iP		09 48 07.4
	Um	iP		09 47 40.9
	Ud	iP		09 47 56.5

Pakistan.
Origin time = 09 39 39.

" 17	Up	iP		10 14 07.7
		iX		10 14 09.5
		iY		10 14 13.4
				micr sec
		X	Z'	0.1 0.9
		Mx	E	1.3 14
		Mx	N	1.6 10
		Mx	Z	2.1 13
	Ki	iP		10 14 18.7
				micr sec
		P	Z'	0.1 1.0
		Mx	E	4.0 12
		Mx	N	1.3 12
		Mx	Z	3.3 11
	Sk	iP		10 14 33.7
	Um	iP		10 14 07.0
		iX		10 14 09.1
		iY		10 14 13.4
	Ud	iP		10 14 24.3
		iX		10 14 26.1
		iY		10 14 30.4
	De	iP		10 14 20.9

Pakistan (h = N).
m = 5.6, M = 5.5 (Up,Ki).
Y identified as pP gives h = 25 km (Up,Um,Ud).

" 17	Um	iP		10 41 19.9
" 17	Up	iSn		11 56 47.6
		iSgl		11 57 01.3
	Um	iSgl		11 57 34.4

Esthonia.
Explosion.

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

1972 May	17	Up	iSgl		12 05 02.4	
		Ki	iSgl		12 06 56.6	
		Um	iSgl		12 05 15.1	
		Ud	eSgl		12 06 09	
		Western USSR.				
		Explosion.				
"	17	Um	iP		12 36 31.5	
		Ud	iP		12 36 16.9	
"	17	Ki	iSgl		12 39 26.5	
		Sk	eSgl		12 39 06	
		Um	iSgl		12 37 47.0	
		Ud	iSgl		12 38 21.3	
		Western USSR.				
		Explosion.				
"	17	Ki	iP		14 20 32.5	
		Um	iP		14 20 59.1	
		Ud	iP		14 21 30.4	
		Kurile Islands (h = 100 km).				
"	17	Um	iP		17 45 30.7	
		Ud	iP		17 45 35.2	
"	17	Ud	iP		18 39 36.0	
"	17	Ki	eP		18 55 44	
		Sk	eP		18 56 17	
		Um	iP		18 56 01.0	
			ipP		18 56 27.7	
		Ud	iP		18 56 30.6	
		Japan.				
		h = 100 km (Um).				
"	17	Up	i(P)		19 18 27.5	
					micr	sec
			(P)	Z'	0.1	1.0
"	17	Ki	iP		21 21 21.9	
		Sk	iP		21 21 06.3	
		Um	iP		21 21 23.0	
		Ud	iP		21 21 08.3	
		Colombia (h = 190 km).				
"	18	Up	iP		02 50 38.0	
		Ki	iP		02 51 10.3	
		Sk	eP		02 51 11	
		Um	iP		02 50 50.0	
		Ud	iP		02 50 52.6	
			iPP		02 52 35.8	
		De	iP		02 50 38.0	
		Iran (h = 35 km).				
"	18	Up	iP		02 53 37.9	
			ipP		02 53 48.7	
					micr	sec
			P	Z'	0.1	1.3
		(cont.)				

1972 May	18	(cont.)				
		Up			micr	sec
			Mx	E	0.8	17
			Mx	N	1.6	18
			Mx	Z	1.8	19
		Ki	iP		02 52 57.1	
					micr	sec
			P	Z'	0.1	1.0
			Mx	E	0.6	14
			Mx	N	0.9	15
			Mx	Z	0.7	15
		Sk	iP		02 53 31.5	
		Um	iP		02 53 15.4	
			ipP		02 53 25.4	
		Ud	iP		02 53 45.2	
			ipP		02 53 55.5	
		De	eP		02 54 01	
		Japan.				
		h = 40 km (Up,Um,Ud).				
		m = 5.9, M = 5.4 (Up,Ki).				
"	18	Um	iP		05 30 39.4	
		Ud	eP		05 30 37	
"	18	Um	iP		06 14 24.9	
"	18	Ud	iP		09 16 20.4	
"	18	Um	iSgl		12 10 07.4	
		Ud	iSgl		12 10 45.7	
		De	eSgl		12 11 17	
		Western USSR.				
		Explosion.				
"	18	Up	iSgl		14 29 27.1	
		Sk	eSgl		14 31 16	
		Um	iSgl		14 29 49.5	
		Ud	iSgl		14 30 33.5	
		De	iSgl		14 30 58.9	
		Western USSR.				
		Explosion.				
"	18	Um	i(P)		14 44 10.0	
		Ud	i(P)		14 44 32.7	
"	18	Up	i(P)		15 43 03.0	
		Ud	i(P)		15 43 16.7	
"	18	Um	iP		16 07 59.1	
"	18	Um	i(P)		17 20 13.7	
"	18	Um	iP		21 35 46.5	
"	19	Ud	iP		00 40 19.3	
			i		00 40 31.7	
		Greece.				

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

1972 May	19	Up	iP		01 18 55.8	
					micr	sec
			Mx	E	1.1	15
			Mx	N	0.8	16
			Mx	Z	1.1	16
		Ki	iP		01 20 20.7	
					micr	sec
			Mx	E	1.1	20
			Mx	N	0.5	13
			Mx	Z	0.5	13
		Sk	iP		01 19 35.8	
		Um	iP		01 19 42.6	
		Ud	iP		01 19 05.8	
		De	iP		01 18 31.2	
		Tunisia (h = 50 km).				
		M = 4.6 (Up,Ki).				
"	19	Ki	eP		06 09 42	
			i		06 09 54.3	
		Sk	eP		06 10 05	
		Um	iP		06 09 49.8	
			ipP		06 10 07.8	
		Ud	ipP		06 10 33.0	
		Mindoro.				
		h = 70 km (Um).				
"	19	Ki	eP		07 14 27	
			iS		07 15 43.3	
			eTPg		07 19 23	
			iTSg		07 19 55.8	
		Sk	iP		07 15 08.7	
			iS		07 16 55.3	
		Um	iP		07 15 17.2	
		Ud	iP		07 16 07.8	
			i		07 16 13.4	
		De	iP		07 16 48.7	
		Norwegian Sea (h = N).				
"	19	Up	iP		10 08 03.2	
		Ki	iP		10 07 33.9 C	
					micr	sec
			P	Z'	0.1	1.0
		Sk	iP		10 08 00.7	
		Um	iP		10 07 46.5 C	
		Ud	iP		10 08 09.5 C	
		De	iP		10 08 21.4	
		Volcano Islands (h = 70 km).				
"	19	Ki	eP		11 03 36	
		Sk	iP		11 02 51.6	
			i		11 02 55.7	
		Um	iP		11 02 52.7 C	
			i		11 02 57.2	
		Yugoslavia.				
"	19	Ki	iPn		11 39 32.7	
			iSn		11 40 30.8	
		(cont.)				

1972 May	19	(cont.)				
		Ki	iS*		11 40 51.0	
		Sk	eSgl		11 43 18	
		Um	iSgl		11 41 46.1	
		Northwest USSR,				
		67.8°N, 33.8°E.				
		Origin time = 11 38 15.				
		Explosion.				
"	19	Sk	eSgl		12 38 19	
		Um	iSgl		12 37 01.1	
		Ud	eSgl		12 37 33	
		De	eSgl		12 37 56	
		Esthonia.				
		Explosion.				
"	19	De	iP		12 58 45.8	
"	19	Um	iP		14 31 19.9	
		Ud	iP		14 31 22.9	
"	19	Up	eP		17 11 49	
		Um	iP		17 11 34.9	
		Ud	iP		17 11 41.0	
		Nevada.				
		Underground explosion.				
"	19	Ki	i(P)		20 11 29.3	
		Sk	i(P)		20 11 33.4	
"	19	Ud	iP		21 08 43.7	
"	19	Um	iP		22 45 24.9	
			ipP		22 45 36.5	
		Ud	iP		22 45 52.9	
		De	iP		22 46 17.7	
		Japan.				
		h = 45 km (Um).				
"	20	Up	ipPKP		02 54 06.6	
			iSKP		02 57 24.1	
					micr	sec
			SKP	Z'	0.1	1.3
			Mx	E	1.0	21
			Mx	N	1.2	22
			Mx	Z	2.2	23
		Ki	iPKP		02 53 40.1	
			ipPKP		02 53 52.4	
					micr	sec
			Mx	E	1.0	21
			Mx	N	0.9	20
			Mx	Z	0.8	18
		Sk	iPKP		02 53 54.8	
			eSKP		02 57 17	
		Um	iPKP		02 53 47.7	
			ipPKP		02 53 59.3	
		Ud	iPKP		02 53 58.0	
		(cont.)				

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

1972
May 20 (cont.)

Ud	ipPKP	02 54 08.9	
	iSKP	02 57 26.0	
De	iPKP	02 54 07.9	

New Hebrides Islands.
h = 40 km (Ki,Um,Ud).
M = 5.7 (Up,Ki).

" 20	Um	iP	03 06 38.5	
		ipP	03 06 49.4	
	Ud	iP	03 07 06.4	
		ipP	03 07 17.8	

Japan.
h = 40 km (Um,Ud).

" 20	Sk	e(P)	04 29 57	
	Ud	i(P)	04 29 07.4	
" 20	Ud	iPKP	05 00 02.2	
	De	iPKP	05 00 11.4	
" 20	Up	iP	06 51 54.4	
	Ki	iP	06 52 31.6	
	Sk	eP	06 52 29	
	Um	iP	06 52 08.1	C
	Ud	iP	06 52 09.4	
		ipP	06 52 17.0	
	De	iP	06 51 52.8	

Iran.
h = 30 km (Ud).

" 20	Ki	iP	06 53 04.9	
	Sk	iP	06 53 33.5	
	Um	iP	06 53 34.0	C
	Ud	iP	06 53 57.6	

Kodiak Island (h = 60 km).

" 20	Um	i(P)	09 41 35.1
" 20	Up	iSgl	15 59 19.6
	Ki	eSgl	16 01 30
	Um	iSgl	15 59 43.3
	Ud	iSgl	16 00 20.0

Western USSR.
Explosion.

" 20	Um	iP	16 04 22.6
	Ud	eP	16 03 54
" 20	Ud	iP	18 59 29.7
" 20	Up	iP	21 27 41.9
	Ki	eP	21 27 05
	Um	iP	21 27 20.9
	Ud	iP	21 27 49.4

Japan (h = 15 km).

1972
May 20

Up	iP		21 36 58.7
	ipP		21 37 08.8
	iS		21 45 52
Ki	iP		21 36 04.7
			micr sec
	P	Z'	0.1 1.0
	Mx	E	0.5 18
	Mx	N	0.5 17
Sk	iP		21 36 33.6
Um	iP		21 36 31.9
	ipP		21 36 42.3
Ud	iP		21 36 56.7
	ipP		21 37 07.6
De	iP		21 37 19.6
	ipP		21 37 30.7

South of Alaska.
h = 40 km (Up,Um,Ud,De).

" 21	Up	ePP	00 19 02
	Ki	eP	00 17 15
		iS	00 18 39.2
		iTPg	00 22 12.7
		iTSg	00 22 50.3
	Sk	eP	00 17 55
		iS	00 19 40.6
	Um	iP	00 18 02.7
	Ud	iP	00 18 44.7

Norwegian Sea,
73.6°N, 7.6°E.
Origin time = 00 15 33.

" 21	Up	iX	01 01 18.1
	Sk	iPKP	01 01 08.7
	Um	iPKP	01 01 02.3
	Ud	iPKP	01 01 16.2
		iX	01 01 21.0
" 21	Um	iP	03 32 04.9

Kurile Islands.

" 21	Ki	eSn	05 30 10
		iSgl	05 30 31.5
	Um	iSgl	05 31 25.1

Probably northwest USSR.
Explosion.

" 21	Up	iPKP	06 21 22.8
		ipPKP	06 21 27.4
	Ki	iPKP	06 21 15.1
	Sk	ePKP	06 21 22
	Um	iPKP	06 21 20.3
		ipPKP	06 21 24.7
	Ud	iPKP	06 21 25.2
		ipPKP	06 21 29.6
	De	iPKP	06 21 34.8
		ipPKP	06 21 39.0

North of New Zealand.
h = 15 km (Up,Um,Ud,De).

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

1972 May	21	Ki	eP		06 59 06
			eS		07 00 21
			eTPg		07 04 04
			eTSg		07 04 29
		Sk	eS		07 01 31
		Um	iP		06 59 55.5
		Ud	eP		07 00 39
		Norwegian Sea.			
		Origin time = 06 57 26.			
"	21	Up	iP		08 00 22.1
		Ki	iP		07 58 45.5
			iS		08 00 03.6
			iTPg		08 03 28.3
		Sk	iP		07 59 26.3
			iS		08 01 13.6
			eTSg		08 06 19
		Um	iP		07 59 34.1
			iS		08 01 28.4
			iTPg		08 04 50.2
			iTSg		08 06 09.4
		Ud	iP		08 00 14.7
			eTSg		08 07 21
		Norwegian Sea (h = N).			
		Exceptionally pronounced			
		T-phases, especially at			
		Ki and Um.			
"	21	Up	iP		11 50 10.2 C
		Ki	iP		11 49 19.3
		Um	iP		11 49 42.9 C
		Ud	iP		11 50 15.0
		Okhotsk Sea (h = 440 km).			
"	21	Um	iP		11 52 17.7
"	21	Ud	iP		19 24 30.7
"	21	Ki	eP		22 24 51
		Um	iP		22 25 18.2
		Ud	iP		22 25 43.0
"	22	Up	iP2		06 16 23.2
			iS		06 26 36
					micr sec
			P2	Z'	0.4 0.9
			Mx	E	68 18
			Mx	N	130 25
			Mx	Z	120 18
		Ki	iP1		06 16 01.7
			iP2		06 16 03.2
			iS		06 26 03
			iP'P'		06 43 03.3
					micr sec
			P2	Z'	1.8 1.1
			Mx	E	50 15
			Mx	N	84 16
			Mx	Z	36 15
		(cont.)			

1972 May	22	(cont.)			
		Sk	iP1		06 16 26.2
			iP2		06 16 28.1
		Um	iP1		06 16 08.4
			iP2		06 16 09.7
			iS		06 26 06
		Ud	iP1		06 16 30.7
			iP2		06 16 32.7
		Luzon (h = 35 km).			
		m = 6.8, M = 7.4 (Up,Ki).			
		Double P, in average 1.7			
		sec apart.			
"	22	Up	iP		06 23 35.2
					micr sec
			P	Z'	0.2 1.0
		Ki	iP		06 23 15.6
					micr sec
			P	Z'	0.3 1.1
		Sk	iP		06 23 39.8
		Um	iP		06 23 22.2
		Ud	iP		06 23 44.5
		Luzon (h = N).			
		m = 6.2 (Up,Ki).			
"	22	Up	iP		06 25 56.2
		Ki	iP		06 25 35.9
		Um	eP		06 25 42
		Ud	iP		06 26 04.9
		Luzon.			
		Origin time = 06 13 34.			
		Approximate origin times			
		for Luzon aftershocks are			
		based on our own records			
		only.			
"	22	Up	iP		06 30 58.8
		Ki	iP		06 30 38.1
		Um	iP		06 30 44.8
		Ud	iP		06 31 07.3
		Luzon.			
		Origin time = 06 18 36.			
"	22	Up	iP		06 33 03.5
		Ki	iP		06 32 37.5
		Um	iP		06 32 48.2
		Luzon.			
		Origin time = 06 20 39.			
"	22	Ki	iPKP		06 34 55.4
		Sk	iPKP		06 34 43.7
		Um	iPKP		06 34 52.6
"	22	Up	iP		06 49 15.2
		Ki	iP		06 48 54.7
		Ud	iP		06 49 24.5
		Luzon.			
		Origin time = 06 36 53.			

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

1972 May	22	Up	iP2	06 59 02.0
		Ki	iP1	06 58 39.0
			iP2	06 58 42.3
		Sk	iP1	06 59 03.9
			iP2	06 59 08.2
		Um	iP1	06 58 46.0
		Ud	iP1	06 59 08.4
			iP2	06 59 11.1
		Luzon (h = N).		
"	22	Ud	eP	07 07 11
"	22	Um	iP	07 20 28.0
"	22	Um	eP	07 29 26
"	22	Ki	iP	07 30 38.6
		Um	iP	07 30 45.6
		Ud	iP	07 31 07.9
		Luzon.		
		Origin time = 07 18 37.		
"	22	Up	iP	07 38 16.3
		Ki	iP	07 37 56.2
		Um	iP	07 38 02.4
		Ud	iP	07 38 25.5
		Luzon.		
		Origin time = 07 25 54.		
"	22	Ud	iP	07 41 33.6
"	22	Up	iP	07 41 43.1
		Ki	iP	07 41 23.4
		Um	iP	07 41 29.9
		Ud	iP	07 41 52.3
		Luzon (h = 55 km).		
"	22	Up	iP2	07 44 42.4
		Ki	iP2	07 44 21.8
		Ud	iP1	07 44 46.1
			iP2	07 44 50.7
		Luzon.		
		Origin time = 07 32 15.		
"	22	Ki	iP	07 59 39.9
"	22	Ki	eP	08 26 20
		Ud	eP	08 26 48
		Probably Luzon.		
		Origin time = 08 14 17.		
"	22	Ki	iP1	09 30 57.6
		Um	iP2	09 31 09.1
		Ud	iP1	09 31 28.5
			iP2	09 31 34.7
		Luzon.		
		Origin time = 09 18 57.		

1972 May	22	Ki	eP	09 52 28
		Um	iP	09 52 33.8
		Ud	iP	09 52 55.3
		Luzon.		
		Origin time = 09 40 25.		
"	22	Up	iP	10 18 44.4
		Ki	iP	10 18 24.7
		Um	iP	10 18 31.6
		Ud	iP	10 18 53.8
		Luzon (h = N).		
"	22	Ud	iP	10 29 05.1
"	22	Ki	iP	11 12 01.8
		Ud	iP	11 12 30.3
		Luzon.		
		Origin time = 11 00 00.		
"	22	Ki	iP	11 30 39.6
		Ud	iP	11 31 04.9
		Probably Luzon.		
"	22	Ki	eP	11 34 03
		Um	eP	11 34 06
		Ud	eP	11 34 28
		Celebes (h = N).		
"	22	Ki	eP	12 53 49
		Um	eP	12 53 53
		Ud	iP	12 54 18.1
		Luzon.		
		Origin time = 12 41 46.		
"	22	Up	iP	13 26 52.6
		Ki	eP	13 26 32
		Um	iP	13 26 38.7
		Ud	iP	13 27 01.7
		Luzon.		
		Origin time = 13 14 31.		
"	22	Ud	iP	13 32 38.6
"	22	Ki	iP	13 50 31.4
		Um	eP	13 50 35
		Ud	iP	13 51 00.0
		Luzon.		
		Origin time = 13 38 28.		
"	22	Up	iP	14 01 40.4
		Um	eP	14 01 23
		Ud	iP	14 01 47.0
		Luzon.		
		Origin time = 13 49 16.		
"	22	Ki	eP	14 08 06
		Um	eP	14 08 11
		(cont.)		

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

1972 May	22	(cont.)				
		Ud	iP		14 08 34.2	
		Luzon.				
		Origin time = 13 56 03.				
"	22	Ud	iP		15 13 29.9	
"	22	Up	iP		15 59 00.7	
		Ki	iP		15 58 38.6	
		Um	iP		15 58 44.1	
		Ud	iP		15 59 04.7	
		Luzon.				
		Origin time = 15 46 36.				
"	22	Ud	iP		16 45 19.9	
"	22	Ud	i(Sgl)		17 19 27.7	
"	22	Ud	iP		17 27 22.3	
"	22	Ud	i(Sgl)		18 08 23.5	
"	22	Ud	iP		19 10 36.9	
"	22	Ud	eP		19 24 38	
"	22	Up	iP		20 37 04.9	
		Ki	iP		20 36 44.9	
		Sk	eP		20 37 10	
		Um	iP		20 36 51.4	
		Ud	iP		20 37 13.8	
		Luzon (h = 80 km).				
"	22	Up	iP		21 02 02	
			i(PKP)		21 04 41.0	
			i(PKP)		21 04 43.7	
			iPKP		21 04 54.8	
			ipPKP		21 05 53.3	
			iPP		21 07 37.1	
			iSKP		21 08 09.1	
			i		21 08 17.3	
			iPKS		21 08 26	
			ipPKS		21 09 22	
					micr	sec
			(PKP)	Z'	0.1	0.9
			PKP	Z'	0.4	1.0
			pPKP	Z'	2.1	2.4
			PP	Z'	2.0	2.3
			Mx	E	5.8	23
			Mx	N	15	22
			Mx	Z	15	23
		Ki	e(PKP)		21 04 22	
			i(PKP)		21 04 28.0	
			iPKP		21 04 37.7	
			ipPKP		21 05 37.7	
			iPP		21 06 44.3	
			iSKP		21 07 41.9	
		(cont.)				

1972 May	22	(cont.)				
		Ki	iPKS		21 07 58	
			ipPKS		21 08 55	
					micr	sec
			PKP	Z'	1.0	1.2
			pPKP	Z'	3.3	2.8
			PP	Z'	1.9	2.1
			Mx	E	15	23
			Mx	N	18	22
			Mx	Z	8.3	23
		Sk	i(PKP)		21 04 34.8	
			i(PKP)		21 04 39.7	
			iPKP		21 04 47.5	
			ipPKP		21 05 48.2	
			iPP		21 07 16.8	
			iSKP		21 08 00.8	
		Um	iP		21 01 43	
			i(PKP)		21 04 30.0	
			i(PKP)		21 04 34.8	
			iPKP		21 04 45.6	
			ipPKP		21 05 43.6	
			iPP		21 07 08.8	
			iSKP		21 07 55.5	
			iPKS		21 08 14	
			ipPKS		21 09 08	
			iSKKP		21 17 24.8	
		Ud	i(PKP)		21 04 41.2	
			i(PKP)		21 04 43.6	
			iPKP		21 04 54.9	
			ipPKP		21 05 52.2	
			iPP		21 07 37.2	
			iSKP		21 08 10.1	
			iSKKP		21 17 03.8	
		Tonga Islands.				
		h = 230 km (Up,Ki,Sk,Um,Ud).				
		m = 6.7, M = 6.8 (Up,Ki).				
		M uncorrected for focal depth.				
"	22	Up	iP		21 40 54.3	
		Ki	eP		21 40 17	
		Sk	eP		21 40 42	
		Um	iP		21 40 36.6	
		Ud	iP		21 40 55.8	
"	22	Ud	iP		21 52 44.8	
"	22	Up	eP		23 50 34	
		Ki	iP		23 50 14.3	
		Um	iP		23 50 21.3	
		Ud	iP		23 50 43.2	
		Luzon.				
		Origin time = 23 38 12.				
"	23	Up	iP		00 31 49.1	
			i		00 31 56.3	
		(cont.)				

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

1972
May 23 (cont.)

Up			micr	sec
	P	Z'	0.1	1.0
Ki	iP		00 31 29.2	
			micr	sec
	P	Z'	0.1	1.0
Sk	iP		00 31 53.4	
Um	iP		00 31 35.7	
Ud	iP		00 31 57.9 C	

Luzon (h = 45 km).
m = 5.8 (Up,Ki).

" 23	Um	iP	00 50 23.8

Mexico (h = 100 km).

" 23	Ud	iP	02 15 43.2
" 23	Ki	eP	02 46 40
	Um	iP	02 46 42.2
	Ud	eP	02 46 26

Mona Passage (h = 40 km).

" 23	Ud	eP	03 00 21
" 23	Up	eP	03 19 07
	Sk	eP	03 19 35
	Um	iP	03 19 26.3
	Ud	iP	03 18 58.1

Greece-Bulgaria (h = 5 km).

" 23	Ki	eSgl	04 52 23
	Sk	iSgl	04 52 55.9
	Um	eSgl	04 51 02

Lake Ladoga.
Explosion.

" 23	Ud	eP	05 52 07
" 23	Ud	iP	06 54 00.9
" 23	Um	iP	07 42 41.5
" 23	Ki	iP	07 43 37.1
		ipP	07 43 46.1
	Um	iP	07 43 33.8
		ipP	07 43 42.0
	Ud	eP	07 43 46

Sumatra.
h = 30 km (Ki,Um).

" 23	Ud	eP	08 55 18
" 23	Ki	iP	10 12 31.8
			micr sec
		P Z'	0.1 1.5
	Um	iP	10 12 21.8

Azores Islands (h = N).

1972
May 23

Ud	iSgl		11 02 29.6

West coast of Norway.
By combination with Bergen readings.

" 23	Up	iP	11 09 03.0
	Sk	iP	11 09 51.9
	Um	iP	11 09 43.2
		i	11 09 45.9
	Ud	iP	11 09 10.0

Italy.

" 23	Up	iP	12 03 30.7
	Ki	iP	12 02 54.7
	Um	iP	12 03 10.0
		i	12 03 17.1
	Ud	iP	12 03 38.8
		i	12 03 45.4

Japan (h = 60 km).

" 23	Up	iSgl	12 13 43.4
	Ki	eSgl	12 15 38
	Sk	eSgl	12 15 27
	Um	iSgl	12 13 57.9
	Ud	iSgl	12 14 43.6

Western USSR.
Explosion.

" 23	Ud	iP	12 19 13.1
" 23	Ud	iP	12 39 45.9
" 23	Um	iP	13 33 56.2
" 23	Sk	e(Sgl)	16 01 53
" 23	Um	iP	17 33 09.0
		i	17 33 21.3
" 23	Up	iP	18 03 45.6 C
		i	18 03 50.7
			micr sec
		P Z'	0.1 0.9
	Ki	iP	18 03 25.5 C
		i	18 03 30.6
	Sk	iP	18 03 49.9
	Um	iP	18 03 32.2 C
		i	18 03 37.2

Luzon (h = 70 km).

" 23	Up	iP	18 15 11.0 D
		ipP	18 15 22.4
			micr sec
		P Z'	0.1 1.0
	Ki	iP	18 14 33.7
	Sk	iP	18 15 05.7
	Um	iP	18 14 50.2 D

(cont.)

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

1972
May 23 (cont.)

Um	ipP	18 15 01.5

Japan.
h = 40 km (Up,Um).

" 23	Up	iP	18 24 38.7
		ipP	18 24 49.8
	Ki	eP	18 24 47
	Sk	eP	18 25 05
	Um	iP	18 24 36.8
		ipP	18 24 47.2

Afghanistan-USSR.
h = 40 km (Up,Um).

" 23	Um	iP	18 38 53.6
" 23	Um	iP	19 27 44.4
" 23	Up	iP	20 30 49.3
		i	20 30 55.3
	Ki	eP	20 30 28
	Um	iP	20 30 35.5

Luzon.
Origin time = 20 18 27.

" 24	Up	eP	01 13 56
	Ki	iP	01 13 38.9
		i	01 13 44.0
	Um	iP	01 13 44.4

Halmahera (h = 140 km).

" 24	Up	ePKP	01 14 21
	Ki	iPKP	01 14 26.6
	Sk	ePKP	01 14 27
	Um	iPKP	01 14 24.1

South of Australia (h = N).

" 24	Ki	eP	01 34 46
	Um	iP	01 34 52.8

Luzon.
Origin time = 01 22 45.

" 24	Up	iP	02 25 58.1
	Ki	iP	02 25 39.5

Luzon.
Origin time = 02 13 37.

" 24	Ki	eP	04 52 47
	Um	iP	04 52 50.6
" 24	Up	iP	08 23 46.8
		i	08 23 54.2
	Ki	eP	08 23 29
	Um	iP	08 23 33.4

Luzon (h = 60 km).

" 24	Ki	iPn	10 09 25.8

(cont.)

1972
May 24 (cont.)

Ki	iSn	10 10 11.8
	iS*	10 10 24.8
Sk	eSgl	10 13 22
Um	i(Sn)	10 11 22.1
	eSgl	10 12 05
Ud	eSgl	10 14 24

Northwest USSR-Norway border region, 69.8°N, 30.0°E.
Origin time = 10 08 25.
Explosion.

" 24	Ki	e(Sn)	10 20 01
		i(Sgl)	10 20 19.5
	Um	i(Sgl)	10 21 12.1
" 24	Up	iP	10 22 20.5
	Ki	eP	10 22 53
	Sk	iP	10 22 50.5
	Um	iP	10 22 32.9
	Ud	iP	10 22 31.6

Arabian Sea (h = N).

" 24	Up	ePKP		11 45 19	
				micr	sec
		Mx	E	1.5	20
		Mx	N	2.4	22
		Mx	Z	3.0	22
	Ki			micr	sec
		Mx	E	2.9	21
		Mx	N	2.8	23
		Mx	Z	1.3	21
	Um	ePKP		11 45 12	
	Ud	ePKP		11 45 25	

Loyalty Islands (h = 40 km).
M = 6.1 (Up,Ki).

" 24	Ki	iP	12 34 18.4
	Um	iP	12 34 10.1
	Ud	iP	12 34 29.6

Pamir.
Intermediate depth.

" 24	Ki	iP	13 30 25.4
	Sk	iP	13 30 45.7
	Um	eP	13 30 26
	Ud	iP	13 30 46.3
" 24	Ki	iSgl	16 19 54.8
	Sk	eSgl	16 19 59
	Um	eSgl	16 20 22

Nordland, Norway.
Explosion.

" 24	Um	iP	16 40 33.4
" 24	Up	iP	16 43 56.6

(cont.)

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

1972
May 24 (cont.)
Ki eP 16 43 33
Um iP 16 43 40.6
Ud iP 16 44 03.9
Luzon.
Origin time = 16 31 33.

" 24 Um iP 20 52 26.8

" 24 Up iP 23 00 37.1
Um iP 23 00 09.1

" 24 Um iP 23 05 13.6

" 24 Ki iP 23 05 46.8
Ud iP 23 06 14.2
Luzon.
Origin time = 22 53 44.

" 24 Ki iP 23 39 41.3
Mindanao.

" 24 Up iP 23 46 33.1
Ki iP 23 46 13.3
Um iP 23 46 20.1
Ud iP 23 46 41.8
Luzon.
Origin time = 23 34 11.

" 25 Um iP 01 58 17.5
Ionian Islands.

" 25 Um iP 02 29 17.5

" 25 Up iP 02 31 41.8
Ki eP 02 31 34
Um iP 02 31 32.3
Ud iP 02 31 54.9

" 25 Up iPKP 02 36 50.5
Ki iPKP 02 36 23.3
Sk iPKP 02 36 42.9
Um iPKP 02 36 37.7
Ud iPKP 02 36 50.3

" 25 Up eP 04 24 03
i 04 24 22.5
Ki e 04 23 54
Ud eP 04 24 11
i 04 24 24.7
Formosa (h = 50 km).

" 25 Um iP 04 31 04.7

" 25 Up iP 04 59 49.6
Ki eP 04 59 27
Ud eP 05 00 00
Luzon (h = 70 km).

1972
May 25 Up iP 05 33 09.7
Um iP 05 33 03.2
Ud iP 05 33 22.6

" 25 Up eP 05 44 14
Ki iP 05 43 53.1
Ud eP 05 44 22
Luzon (h = 35 km).

" 25 Up eP 06 48 40
Ki eP 06 48 14

" 25 Um i(Sgl) 07 06 26.7

" 25 Ki iP 09 12 31.3
Um iP 09 12 11.5
Ud iP 09 12 08.9
Iran (h = 45 km).

" 25 Up iSn 11 06 16.9
iSgl 11 06 29.8
Ki eSgl 11 08 59
Sk iSgl 11 08 19.8
Um iSgl 11 07 02.4
Ud iSgl 11 07 36.2
Esthonia, 59.5°N, 25.1°E.
Origin time = 11 04 30.
Explosion.

" 25 Ud eP 12 31 42
Molucca Sea (h = 130 km).

" 25 Ud i(P) 17 00 14.2

" 25 Up iPKP 17 35 45.7
Sk ePKP 17 35 39
Um iPKP 17 35 33.7
Ud iPKP 17 35 47.2

" 25 Up iPKP 20 24 04.4
Um iPKP 20 23 54.7
i 20 24 31.1
Ud iPKP 20 24 05.2

" 25 Um iP 21 30 13.8
Ud iP 21 30 31.8
Afghanistan-USSR (h = 60 km).

" 26 Long-period microseisms, periods around 17 sec, recorded at Umeå, especially on the Press-Ewing N-component.

" 26 Ki eP 02 27 53

" 26 Up iP 08 50 50.5 C
(cont.)

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

1972
May 26 (cont.)

Up	i	08 51 17.4	
		micr	sec
	P	Z' 0.2	0.7
Ki	iP	08 50 33.2	C
		micr	sec
	P	Z' 0.1	0.8
Sk	iP	08 50 56.3	C
Um	iP	08 50 38.7	C
Ud	iP	08 50 59.4	C
	i	08 51 19.4	
De	iP	08 51 06.2	C

Mindoro (h = 40 km).
m = 6.3 (Up,Ki).

" 26 Ud eP 10 54 43

" 26 Um iSgl 12 31 29.0
Ud iSgl 12 32 22.3
De iSgl 12 32 43.7
Western USSR.
Explosion.

" 27

Up	iP	04 16 22.2	D
	iPcP	04 16 59.7	
	ipP	04 17 49.6	
	iPP	04 18 39.3	
	iS	04 24 06.6	
	i(P'P')	04 45 18.7	
		micr	sec
	P	Z' 2.5	1.0
Ki	iP	04 15 29.0	D
	iPcP	04 16 29.6	
	ipP	04 16 54.5	
	iPP	04 17 33.0	
		micr	sec
	P	Z' 1.6	1.0
Sk	iP	04 16 06.1	D
	iPP	04 18 19.6	
Um	iP	04 15 54.2	D
	iPcP	04 16 44.2	
	iS	04 23 13	
	i(P'P')	04 45 28.5	
Ud	iP	04 16 26.2	D
	iPcP	04 17 02.6	
	iPP	04 18 47.7	
	i(P'P')	04 45 16.6	
De	iP	04 16 47.4	D
	iPcP	04 17 16.7	
	ipP	04 18 17.4	
	iPP	04 19 15.4	

Kamchatka.
h = 420 km (Up,Ki,De).
m = 6.5 (Up,Ki).
(P'P') denotes P'P' early by about 16 sec.

1972
May 27

Up	i(PKP)	07 38 48.9	
Ud	i(PKP)	07 38 51.4	
De	e(PKP)	07 38 36	

" 27

Ki	iP	08 46 09.4	C
Um	iP	08 45 47.8	C
Ud	iP	08 45 51.4	C
De	iP	08 45 36.7	C

Iran.

" 27

Up	i(PKP)	09 08 26.5
Ud	i(PKP)	09 08 28.5

" 27 Ud iP 11 30 25.7

" 27

Ki	iPn	11 42 36.5
	iSn	11 43 21.8
	iSgl	11 43 35.3
Um	iSn	11 44 37.8

Northwest USSR-Norway border region.
Origin time = 11 41 37.
Explosion.

" 27

Up	iSgl	13 46 45.6
Um	iSgl	13 47 07.7
Ud	iSgl	13 47 46.6

Western USSR.
Explosion.

" 27 Ki ipP 14 01 45.1
Hindu Kush.
Intermediate depth.

" 27 Ki iP 14 05 25.6
Yellow Sea.

" 27 Ud iP 21 50 53.9

" 28

Up	ePKP	01 13 06
Sk	iPKP	01 13 06.3
Um	iPKP	01 13 06.1
Ud	iPKP	01 13 07.7
De	iPKP	01 13 19.3

Tonga-Kermadec Islands
(h = 610 km).

" 28

Ki	ePKP	01 59 07
Um	iPKP	01 59 10.4
De	iPKP	01 59 25.0

New Britain (h = 70 km).

" 28

Up	iP	02 09 25.7
	ipP	02 09 39.0
	i(PP)	02 12 43.3
	iPP	02 13 44
	iPS	02 22 48

(cont.)

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

1972
May 28 (cont.)

Up			micr	sec
	PP	Z'	1.4	2.0
	Mx	E	5.8	20
	Mx	N	10	23
	Mx	Z	8.4	22
Ki	iP		02 09 15.3	
	ipP		02 09 30.0	
			micr	sec
	pP	Z'	0.1	0.9
	Mx	E	13	20
	Mx	N	11	21
	Mx	Z	9.5	20
Sk	iP		02 09 34.5	
Um	iP		02 09 17.4	
	ipP		02 09 32.1	
	e(PP)		02 12 48	
	iPP		02 13 41.5	
	iSKS		02 19 54	
	iPS		02 22 36	
Ud	iP		02 09 32.9	
	ipP		02 09 47.5	
	i(PP)		02 13 03.0	
	iPP		02 13 52.8	
De	iP		02 09 35.2	
	ipP		02 09 49.7	

Sumbawa Island.
h = 55 km (Up,Ki,Um,Ud,De).
M = 6.5 (Up,Ki).
(PP) denotes early PP.

" 28	Up	iP	03 19 32.0	
			micr	sec
		P	Z' 0.1	1.0
	Ki	iP	03 20 41.1	
	Sk	eP	03 20 17	
	Um	iP	03 20 04.9	
		i	03 20 16.6	
	Ud	iP	03 19 45.0	
	De	iP	03 19 11.9	

Turkey (h = N).

" 28	Up	iP	03 35 16.4
	Ud	iP	03 35 25.8
" 28	Ki	iP	04 13 50.2
	Um	iP	04 14 09.1
		ipP	04 14 29.0
	Ud	iP	04 14 40.2 D
	De	iP	04 14 56.3

Japan.
h = 70 km (Um).

" 28	Up	iP	06 13 31.2
	Ki	iP	06 14 07.6
	Sk	iP	06 14 05.1
	Um	iP	06 13 44.5

(cont.)

1972
May 28 (cont.)

	Ud	iP	06 13 45.8
	De	iP	06 13 30.1

Iran.
Origin time = 06 06 03.

" 28	Ud	iP	06 27 14.8
" 28	Um	i(P)	07 21 38.2
" 28	Ud	iP	09 55 06.3
" 28	Up	iP	10 51 40.7
	Ki	iP	10 50 54.9
	Um	iP	10 51 16.5
	Ud	iP	10 51 45.9
	De	iP	10 52 05.7

Kurile Islands (h = 35 km).

" 28	Up	iSgl	11 43 03.5
	Ki	iPn	11 38 55.4
		iSn	11 39 55.5
		iS*	11 40 14.5
	Sk	iSgl	11 42 38.0
	Um	iSn	11 40 33.4
		iSgl	11 41 09.9
	Ud	iS*	11 43 34.1
		iSgl	11 43 42.2
	De	iSgl	11 45 11.7

Northwest USSR,
67.7°N, 34.2°E.
Origin time = 11 37 35.
Explosion.

" 28	Ud	iP	12 35 29.7
" 28	Up	iP	14 21 17.5
	Um	iP	14 20 53.7
	Ud	iP	14 21 23.7

Kurile Islands (h = N).

" 28	Ud	eP	14 45 13
" 28	Up	iP	15 33 20.6
	Ki	eP	15 33 03
	Ud	iP	15 33 29.4

Mindoro (h = 45 km).

" 28	Up	iP	16 20 47.3
	Ud	iP	16 20 55.6
" 28	Ki	iP	17 00 15.2
	Sk	iP	17 00 34.2
	Um	iP	17 00 03.4
	Ud	iP	17 00 21.7

Hindu Kush (h = 90 km).

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

1972 May	28	Up	i(PKP)	18 30 40.9
		Ki	iPKP	18 30 33.5
		Um	i(PKP)	18 30 36.9
			iPKP	18 30 40.7
			iSKP	18 33 11.6
		Ud	i(PKP)	18 30 38.3
			i(PKP)	18 30 41.2
			iPKP	18 30 51.5
			iSKP	18 33 26.6
		De	i(PKP)	18 30 49.3
		Fiji Islands (h = 620 km).		
"	28	Ud	iP	19 51 08.8
"	28	Up	iPKP	19 55 55.4
		Ud	iPKP	19 55 56.8
		De	iPKP	19 56 06.1
"	28	Up	iP	21 55 52.0
		Ud	iP	21 55 55.0
"	29	Up	ePKP	01 06 18
		Um	iPKP	01 06 00.2
		Ud	ePKP	01 06 13
"	29	Up	iP	02 59 56.4
		Ud	iP	03 00 05.5
"	29	Um	i(P)	05 13 43.1
"	29	Ud	iP	07 41 56.4
		Hindu Kush.		
		Intermediate depth.		
"	29	Up	iP	08 00 27.1
		Ud	iP	08 00 32.8
		Kurile Islands (h = 30 km).		
"	29	Um	i(P)	10 04 39.9
"	29	Ud	iP	10 21 48.1
"	29	Up	iP	12 36 06.6
		Ud	iP	12 36 12.7
		De	iP	12 36 30.0
"	29	Up	iSgl	13 27 04.0
		Um	iSgl	13 27 09.8
		De	e(Sgl)	13 28 36
		Western USSR.		
		Explosion.		
"	29	Um	iP	18 43 03.0
		Ud	iP	18 43 31.5
"	29	Up	iP	19 15 17.1
		(cont.)		

1972 May	29	(cont.)		
		Ki	iP	19 15 25.9
		Sk	eP	19 15 44
		Um	iP	19 15 15.6
		Ud	iP	19 15 33.3
		De	iP	19 15 30.2
		Hindu Kush (h = 240 km).		
"	29	Up	iPKP	19 23 55.3
			ipPKP	19 24 00.4
		Ud	iPKP	19 23 56.4
			ipPKP	19 24 01.7
		De	epPKP	19 24 09
		Tonga-Kermadec Islands.		
		h = 20 km (Up,Ud).		
"	29	Ud	iP	20 48 16.2
"	30	Up	eP	06 45 40
			iPP	06 47 09.5
		Ki	iP	06 45 49.0
				micr sec
			P Z'	0.1 1.3
		Sk	iP	06 46 06.6
		Um	iP	06 45 38.5
		Tadzhik SSR (h = N).		
"	30	Up	iP	08 02 11.8
		Ud	iP	08 02 25.6
"	30	Up	eSgl	09 26 30
		Ud	iPgl	09 25 08.0
			iSgl	09 25 38.1
		De	iPn	09 25 16.2
			iSgl	09 26 00.2
		Skagerrak, 58.7°N, 10.5°E.		
		Origin time = 09 24 29.		
		Explosion.		
"	30	Up	iSgl	09 26 49.2
		Ud	iPgl	09 25 27.9
			iSgl	09 25 58.0
		De	iPn	09 25 36.2
			iSgl	09 26 20.4
		Skagerrak, 58.7°N, 10.5°E.		
		Origin time = 09 24 49.		
		Explosion.		
"	30	Up	iSgl	09 27 11.2
		Ud	iSgl	09 26 19.4
		De	iSgl	09 26 42.1
		Skagerrak, 58.7°N, 10.5°E.		
		Origin time = 09 25 11.		
		Explosion.		
"	30	Up	iPKP	10 02 17.0
		(cont.)		

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

1972				
May	30	(cont.)		
		Um	iPKP	10 02 07.9
		Ud	iPKP	10 02 19.6
"	30	Up	iSgl	10 06 31.2
		Ud	iPgl	10 05 12.8
			iSn	10 05 40.1
			iSgl	10 05 44.4
		De	iPgl	10 05 15.0
			iSgl	10 05 45.8
			iRg	10 05 58.2
		Skagerrak, 58.2°N, 10.9°E.		
		Origin time = 10 04 32.		
		Explosion.		
"	30	Up	iP	10 25 42.2
"	30	Up	iP	10 42 47.1
		Ki	iP	10 42 18.0
		Um	iP	10 42 25.2
		Ud	iP	10 42 53.4
		De	iP	10 43 04.7
		Mariana Islands.		
"	30	Up	iSgl	13 02 35.4
		De	iSgl	13 00 53.8
		Baltic Sea, south of Sweden.		
		Explosion.		
"	30	Up	iSgl	13 02 54.9
		Ud	iS*	13 02 53.1
			iSgl	13 02 57.7
		De	iSgl	13 01 11.6
		Baltic Sea, south of Sweden,		
		55.5°N, 15.0°E.		
		Origin time = 13 00 35.		
		Explosion.		
"	30	Um	iP	13 08 34.3
		Ud	iP	13 08 45.2
"	30	Up	iP	18 59 54.2
		Ki	iP	18 59 25.9
		Sk	eP	18 59 30
		Um	iP	18 59 54.3
"	30	Um	i(P)	19 27 50.4
"	30	Up	iP	20 00 03.3
		Ki	eP	20 00 02
		Um	iP	20 00 10.4
		Ud	iP	19 59 46.2
		North Atlantic Ocean (h = N).		
"	30	Up	iP	20 22 49.3 C
				micr sec
			P Z'	0.1 1.3
		Ud	eP	20 23 03

1972				
May	30	Up	eP	23 11 16
"	31	Ki	iPP	02 56 27.7
		Sk	iP	02 54 49.1
		Tadzhik SSR.		
"	31	Up	iSn	11 09 47.2
			iSgl	11 09 59.1
		Ki	eSgl	11 12 29
		Sk	eSgl	11 11 48
		Um	iSgl	11 10 32.3
		Ud	iSgl	11 11 02.7
		De	iSgl	11 11 27.7
		Esthonia, 59.5°N, 25.0°E.		
		Origin time = 11 08 00.		
		Explosion.		
"	31	Ki	i(Sgl)	11 37 47.7
		Um	i(Sgl)	11 39 03.5
"	31	Up	iSgl	12 37 38.0
		Um	iSgl	12 37 49.9
		Ud	iSgl	12 38 34.2
		Western USSR.		
		Explosion.		
"	31	Ki	iP	13 08 24.9
		Ud	iP	13 08 57.6
"	31	Ud	i(PKP)	13 22 20.6
		De	i(PKP)	13 22 33.5
"	31	Um	iSgl	15 38 10.1
		Ud	iSgl	15 39 37.2
		Lake Ladoga region.		
		Explosion.		
"	31	Sk	iP	18 05 31.1
		Um	iP	18 05 38.9
		Turkey.		

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June 8, 1974

SEISMOLOGICAL INSTITUTE
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

J U N E 1 - 30, 1972

1972					
June	1	Um	iP		00 28 39.1
		Ud	iP		00 29 11.2
"	1	Up	iP		03 19 31.1
			ipP		03 19 40.3
					micr sec
			P	Z'	0.1 1.0
		Ki	iP		03 18 39.0
			ipP		03 18 48.5
					micr sec
			P	Z'	0.1 1.3
		Sk	eP		03 19 09
		Um	iP		03 19 04.9
			ipP		03 19 15.0
		Ud	iP		03 19 30.4
			ipP		03 19 39.6
		De	iP		03 19 52.9
			ipP		03 20 02.0
		Aleutian Islands.			
		h = 35 km (Up,Ki,Um,Ud,De).			
		m = 5.9 (Up,Ki).			
"	1	Ud	iP		06 29 30.3
"	1	Ud	iPKP		06 43 04.1
		De	iPKP		06 43 15.4
		Tonga Islands (h = N).			
"	1	Up	iP		06 43 36.9
		Ki	iP		06 43 17.2
					micr sec
			P	Z'	0.1 1.0
		Sk	iP		06 43 41.2
		Um	iP		06 43 23.4
			iS		06 53 26
		Ud	iP		06 43 45.9
		Luzon (h = 45 km).			
"	1	Up	iP		06 44 20.6
		(cont.)			

1972				
June	1	(cont.)		
		Ki	iP	06 43 59.7
		Um	iP	06 44 06.6
		Ud	iP	06 44 29.5
		Luzon.		
		Origin time = 06 32 00.		
"	1	Up	iP	07 01 09.3
		Ki	iP	07 00 49.5
		Ud	iP	07 01 18.4
		Luzon.		
		Origin time = 06 48 48.		
"	1	Ki	iP	08 19 43.8
		Um	iP	08 19 56.2
		Ud	iP	08 20 19.4
		Volcano Islands (h = 210 km).		
"	1	Ud	iP	09 44 20.3
		Kurile Islands (h = 90 km).		
"	1	Sk	e(Sgl)	12 02 32
		Um	i(Sgl)	12 02 11.2
"	1	Ud	iP	12 10 57.2
"	1	Up	iP	12 56 40.4
		Ki	iP	12 55 57.7
		Um	iP	12 56 16.3
		Ud	iP	12 56 47.1
		De	iP	12 57 04.3
		Sea of Japan (h = 160 km).		
"	1	Up	iP	13 48 57.7
		Aegean Sea.		
"	1	Sk	i(Pgl)	14 49 39.7
			i(Sgl)	14 49 42.1
"	1	Ud	iP	15 08 35.6

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

1972 June	1	Um	iP	15 29 13.5
"	1	Ki	ePgl	15 50 44
			iSgl	15 50 56.3
			iRg	15 50 59.7
		Swedish Lapland.		
		Explosion.		
"	1	Ud	iP	17 38 42.5
"	2	Up	iP	00 19 30.5
		Um	iP	00 19 44.3
		Ud	eP	00 19 46
		De	iP	00 19 29.5
		Iran.		
		Origin time = 00 12 03.		
"	2	Ud	iP	02 02 36.0
"	2	Ud	iP	02 36 57.8
"	2	Ud	iP	04 30 02.3
"	2	Um	iP	04 30 09.1
		Ud	iP	04 30 29.3
"	2	Ud	iP	05 19 12.9
"	2	Ud	iP	06 38 59.8
		Sinkiang.		
"	2	Up	iSgl	12 05 37.6
		Ki	e(Sgl)	12 08 12
		Sk	eSgl	12 07 25
		Um	iSgl	12 06 09.9
		Ud	eSgl	12 06 40
		De	iSgl	12 07 05.7
		Esthonia, 59.5°N, 25.0°E.		
		Origin time = 12 03 39.		
		Explosion.		
"	2	De	i(Pn)	12 09 47.9
			i(Sgl)	12 10 38.0
		Probably an event from the same area and of the same type as the one on June 2, 13 24.		
"	2	De	e(Pn)	12 12 04
			i(Sgl)	12 12 54.4
		Probably an event from the same area and of the same type as the one on June 2, 13 24.		
"	2	Ki	eSgl	13 00 26
		Sk	eSgl	13 00 30
		(cont.)		

1972 June	2	(cont.)		
		Um	iSgl	13 00 55.3
		Nordland, Norway, 66.5°N, 13.8°E.		
		Origin time = 12 58 55.		
		Explosion.		
"	2	Up	iSgl	13 26 10.5
		Ud	iSgl	13 26 53.8
		De	iPn	13 25 26.1
			iSgl	13 26 17.6
		Baltic Sea, 57.0°N, 19.8°E.		
		Origin time = 13 24 34.		
		Explosion.		
"	2	Up	iP	14 28 01.5
		Ki	iP	14 27 20.3
		Um	iP	14 27 40.7
		Ud	iP	14 28 08.7
		De	eP	14 28 26
		Japan (h = 70 km).		
"	2	Up	iP1	15 14 31.2
		Ki	eP2	15 13 55
		Sk	eP1	15 14 23
		Um	iP1	15 14 10.3
			iP2	15 14 17.7
		Ud	iP1	15 14 39.5
			iP2	15 14 44.2
		De	eP2	15 15 02
		Japan (h = 60 km).		
"	2	Up	eP	16 58 29
		Sk	e(P)	16 58 35
		Ud	iP	16 58 44.6
		Tibet.		
"	2	Ki	eSgl	17 37 42
		Sk	eSgl	17 37 45
		Um	iSgl	17 38 08.9
		Nordland, Norway.		
		Explosion.		
"	2	Um	iP	19 21 50.3
"	2	Ki	iP	20 42 50.3
		Ud	iP	20 43 14.1
		India-China (h = N).		
"	2	Up	iP	21 57 42.4
		Ki	eP	21 56 51
		Um	iP	21 57 16.7
		Ud	iP	21 57 43.6
		Aleutian Islands (h = 50 km).		
"	2	Up	iP	23 03 02.0 C
			i	23 03 04.6
		(cont.)		

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

1972 June 2 (cont.)

Up			micr sec
	P	Z'	0.1 0.8
Ki	iP		23 03 03.1 C
	i		23 03 05.0
			micr sec
	P	Z'	0.2 0.8
Sk	iP		23 03 17.6
	i		23 03 19.9
Um	iP		23 02 59.4 C
	i		23 03 01.6
Ud	iP		23 03 13.3 C
	i		23 03 15.7
	ipP		23 03 27.2
De	iP		23 03 11.2 C
	i		23 03 13.7
	ipP		23 03 27.3

Sumatra.
h = 55 km (Ud,De).
m = 6.1 (Up,Ki).
Double P, in average 2.4 sec apart.

" 3

Up	iP		02 28 53.5 C
			micr sec
	Mx	N	0.8 18
	Mx	Z	0.5 15
Ki	iP		02 28 27.9
Sk	eP		02 28 55
Um	eP		02 28 38
Ud	iP		02 29 02.0

Ryukyu Islands (h = N).

" 3

Up	iPn	03 33 38.0
	iPgl	03 33 44.8
	i	03 34 13.1
	iSn	03 34 19.9
	iS*	03 34 27.9
	iSgl	03 34 31.0
Ki	iSgl	03 37 10.2
Sk	eSn	03 35 45
	iSgl	03 36 22.0
Um	iPn	03 33 56.2
	iPgl	03 34 07.2
	iSn	03 34 51.3
	iSgl	03 35 10.2
Ud	iPn	03 34 04.2
	iSn	03 35 07.9
	iSgl	03 35 30.6
De	iPn	03 34 18.3
	iSn	03 35 29.0

Off coast of Esthonia, 59.5°N, 24.3°E.
Origin time = 03 32 44.
The records of our stations do not exhibit the characteristics otherwise typical for explosions in this area.

1972 June 3

Um	eP	06 05 37

" 3

Ud	eP	07 23 43

Formosa (h = 60 km).

" 3

Up	iP1	08 28 49.0
Ki	iP1	08 29 26.2
Um	iP1	08 29 02.7
Ud	iP1	08 29 04.1
	iP2	08 29 08.2
De	iP2	08 28 51.4

Iran.
Origin time = 08 21 21.

" 3

Ud	iP	11 03 28.9

North Atlantic Ocean (h = N).

" 3

Up	eSgl	11 59 43
Um	iSgl	12 00 02.9
Ud	iSgl	12 00 46.1
De	eSgl	12 01 13

Western USSR.
Explosion.

" 3

Up	i(Pgl)	14 08 54.3
	i(Sgl)	14 08 55.8
	iRg	14 08 57.0

Sonic boom.

" 3

Up	iP	14 26 15.9
Um	iP	14 25 55.9
Ud	eP	14 26 24

South of Japan (h = 70 km).

" 3

Um	i(P)	15 18 32.2

" 3

Ud	eP	15 47 53

Aleutian Islands (h = 50 km).

" 3

Ki	iP	18 50 10.6
Sk	iP	18 49 39.4
Ud	eP	18 49 28
De	iP	18 49 26.9

North Atlantic Ocean (h = N).

" 3

Up	iPKP	18 50 20.5
Ki	iPKP	18 50 03.3
Sk	iPKP	18 50 18.9
Um	iPKP	18 50 13.3
Ud	ePKP	18 50 22
De	iPKP	18 50 29.0

Santa Cruz Islands (h = 45 km).

" 3

Um	iPKP	19 05 24.2

Santa Cruz Islands (h = 55 km).

" 4

Ud	eP	03 45 26

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

1972 June	4	Up	eP	05 17 12
		Ud	iP	05 16 54.6
		North Atlantic Ocean (h = N).		
"	4	Um	i(P)	07 20 05.7
"	4	Sk	eP	07 38 43
"	4	Ud	iP	08 03 10.4
		De	iP	08 03 32.0
"	4	Um	iP	10 23 15.6
		Ud	eP	10 23 17
		Indian Ocean (h = N).		
"	4	Ki	iP	10 36 38.6
				micr sec
			Mx E	0.8 18
			Mx N	0.7 18
			Mx Z	0.9 20
		Um	iP	10 36 24.0
		Ud	eP	10 36 25
		Indian Ocean (h = N).		
"	4	Up	ePKP	12 45 13
		Sk	iPKP	12 45 08.1
		Um	i(PKP)	12 45 00.3
			iPKP	12 45 05.6
		Ud	ePKP	12 45 15
		South of Kermadec Islands (h = 25 km).		
"	4	Ud	iP	16 34 30.5
		Turkey (h = 15 km).		
"	4	Up	iP3	16 59 35.4
		Ki	eP1	16 59 25
		Sk	eP3	16 59 19
		Um	iP1	16 59 27.1
			iP2	16 59 34.6
			iP3	16 59 42.1
		Ud	iP3	16 59 25.8
		De	iP1	16 59 08.9
			iP3	16 59 25.3
		North Atlantic Ocean (h = N).		
"	4	Um	iP	18 50 37.3
"	4	Up	iPKP	21 27 18.9
			i	21 27 23.0
		Sk	iPKP	21 27 12.8
		Um	iPKP	21 27 06.9
		Ud	iPKP	21 27 20.5
		De	iPKP	21 27 29.0
"	4	Up	ePKP	21 54 01
		Ki	ePKP	21 53 41
		(cont.)		

1972 June	4	(cont.)		
		Um	iPKP	21 53 51.1
		Ud	iPKP	21 53 58.8
			i	21 54 03.9
		De	iPKP	21 54 04.1
		South of Kermadec Islands (h = 35 km).		
"	4	Um	eP	22 32 09
		Ud	iP	22 32 12.9
"	5	Ki	iP	00 47 56.9
		Um	i(P)	00 47 43.6
		Ud	iP	00 47 46.0
		Iran.		
"	5	Up	iPKP	00 50 01.6
		Ki	ePKP	00 49 47
		Sk	ePKP	00 49 57
		Um	iPKP	00 49 51.9
		Ud	iPKP	00 50 04.4
"	5	Up	iP	10 49 47.6
			i	10 49 51.7
				micr sec
			P Z'	0.1 0.9
		Ki	eP	10 51 03.6
		Sk	iP	10 50 35.2
		Um	iP	10 50 29.1
		Ud	iP	10 49 55.5
			i	10 49 59.2
			iS	10 54 00.5
		De	eP	10 49 20
		Greece (h = 70 km).		
"	5	Up	iSgl	18 27 50.8
		Sk	e(Sgl)	18 28 32
		Um	iSgl	18 29 27.6
		Ud	iPgl	18 26 25.4
			iSgl	18 26 58.5
			i(Sg2)	18 27 02.5
		De	ePgl	18 26 32
			iSn	18 27 03.2
			iSgl	18 27 11.6
		Skagerrak, 58.5°N, 10.2°E. Origin time = 18 25 40. Explosion.		
"	5	Up	iSgl	18 33 14.3
		Sk	e(Sgl)	18 34 00
		Um	iSgl	18 34 56.5
		Ud	iPgl	18 31 49.4
			iSgl	18 32 23.7
			i(TPgl)	18 32 36.1
		De	ePgl	18 31 56
			iSgl	18 32 31.0
		Skagerrak, 58.4°N, 10.2°E. Origin time = 18 31 05. Explosion.		

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

1972 June	5	Up	iSgl	18 35 34.8
		Ud	iSgl	18 34 46.4
		Skagerrak, probably from the same area as the preceding events.		
		Explosion.		
"	5	Up	iSgl	18 36 19.4
		Ud	iSgl	18 35 28.2
		De	ePgl	18 34 54
			eSgl	18 35 31
		Skagerrak.		
		Origin time = 18 34 10.		
		Explosion.		
"	5	Up	iSn	18 49 25.3
			iSgl	18 49 42.4
			iSg2	18 49 48.9
		Sk	e(Sgl)	18 50 29
		Um	iSgl	18 51 20.6
		Ud	iPgl	18 48 15.9
			iSgl	18 48 50.4
		De	iSgl	18 48 57.9
		Skagerrak, 58.3°N, 10.0°E.		
		Origin time = 18 47 32.		
		Explosion.		
"	5	Up	iSgl	18 53 09.0
		Ud	iPgl	18 51 42.8
			iSgl	18 52 17.6
		De	iSgl	18 52 25.2
		Skagerrak, 58.4°N, 10.1°E.		
		Origin time = 11 50 59.		
		Explosion.		
"	5	Up	iSgl	18 53 46.6
		Ud	iSgl	18 52 55.4
		De	iSgl	18 53 02.5
		Skagerrak, 58.4°N, 10.2°E.		
		Origin time = 18 51 37.		
		Explosion.		
"	5	Ud	iPKP	22 57 12.6
		De	iPKP	22 57 22.8
"	5	Up	eP	23 29 53
		Ki	iP	23 29 53.2
		Um	iP	23 29 49.7
		Ud	eP	23 30 04
		Sumatra (h = N).		
"	6	De	iPKP	00 18 00.4
		Fiji Islands (h = 550 km).		
"	6	Up	iP	02 30 37.4 C
			ipP	02 30 52.3
		(cont.)		

1972 June	6	(cont.)			
		Up		micr	sec
			P	Z' 0.1	0.9
		Ki	iP	02 29 44.5 C	
			iPcP	02 30 29.8	
				micr	sec
			P	Z' 0.1	1.1
		Um	iP	02 30 10.5	
			ipP	02 30 25.2	
			iPcP	02 30 45.7	
		Ud	iP	02 30 38.2	
			iPcP	02 31 03.4	
		De	iP	02 30 59.9	
			ipP	02 31 14.7	
		Aleutian Islands.			
		h = 55 km (Up,Um,De).			
		m = 6.0 (Up,Ki).			
"	6	Up	iP	04 51 21.5	
		Ki	iP	04 51 20.9	
			ipP	04 51 34.1	
		Um	iP	04 51 17.8	
		Ud	eP	04 51 31	
			ipP	04 51 44.9	
		De	eP	04 51 30	
		Sumatra.			
		h = 50 km (Ki,Ud).			
"	6	Up	iP	05 34 10.5 C	
			ipP	05 34 21.7	
			iS	05 40 52	
				micr	sec
			pP	Z' 0.2	1.5
			Mx	E 1.5	16
			Mx	N 1.0	14
			Mx	Z 2.7	17
		Ki	iP	05 34 33.9 C	
			ipP	05 34 44.6	
			iS	05 41 40	
				micr	sec
			P	Z' 0.1	1.3
			pP	Z' 0.3	1.5
			Mx	E 0.7	16
			Mx	N 0.8	14
			Mx	Z 0.6	14
		Um	iP	05 34 26.3 C	
			iS	05 41 17	
		Ud	iP	05 33 56.4 C	
		De	iP	05 33 50.7 C	
		North Atlantic Ocean.			
		h = 40 km (Up,Ki).			
		m = 6.1, M = 5.1 (Up,Ki).			
"	6	Up	eP	10 53 51	
		Ki	eP	10 52 50	
		Kamchatka (h = N).			

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

1972 June	6	Ki	eP		14 31 08	
		North Atlantic Ocean (h = N).				
"	6	Up	iP		18 02 22.5	C
			iPP		18 04 00.3	
		Ki	iP		18 02 59.2	C
					micr	sec
			Mx	E	0.5	13
			Mx	N	0.5	11
			Mx	Z	0.5	12
		Sk	iP		18 02 57.0	C
		Um	iP		18 02 36.2	C
			iPP		18 04 14.5	
		Ud	iP		18 02 37.2	C
		De	iP		18 02 21.2	
			i		18 02 48.5	
		Iran (h = 55 km).				
"	6	Ud	iP		18 47 02.4	
"	6	Up	eP		19 15 38	
		Ki	iP		19 15 17.1	
		Sk	eP		19 15 41	
		Um	iP		19 15 21.4	
		Ud	iP		19 15 47.2	
		Luzon (h = 45 km).				
"	7	Up	iP		01 34 52.7	C
			iPn		01 35 58.1	
			iPP		01 36 10.8	
					micr	sec
			P	Z'	0.1	0.9
		Ki	iP		01 34 36.8	C
			iPn		01 35 36.9	
					micr	sec
			P	Z'	0.2	0.6
		Sk	iP		01 35 08.1	C
			iPP		01 36 29.0	
		Um	iP		01 34 37.5	C
			iPn		01 35 38.5	
		Ud	iP		01 35 09.7	C
		De	iP		01 35 16.2	C
			iPP		01 36 43.3	
		Kazakh SSR.				
		m = 6.0 (Up,Ki).				
		Underground explosion.				
"	7	Up	iP		05 37 11.2	
					micr	sec
			Mx	E	1.0	17
			Mx	N	1.4	20
			Mx	Z	1.3	16
		Ki	eP		05 36 50	
					micr	sec
			Mx	E	0.7	15
			Mx	N	1.6	17
			Mx	Z	1.0	17
		(cont.)				

1972 June	7	(cont.)				
		Um	eP		05 36 56	
			iS		05 47 16	
		Ud	eP		05 37 22	
		Luzon (h = 15 km).				
		M = 5.5 (Up,Ki).				
"	7	Um	iP		11 19 47.8	
"	7	Up	iPKP		11 59 13.4	
		Sk	iPKP		11 59 07.1	
		Um	iPKP		11 59 01.6	
		Ud	iPKP		11 59 14.2	
		De	iPKP		11 59 24.4	
		Kermadec Islands (h = N).				
"	7	Up	iP		12 14 36.1	C
			iPP		12 18 39.7	
					micr	sec
			P	Z'	0.1	1.0
		Ki	iP		12 14 19.9	C
			iPP		12 18 12.2	
					micr	sec
			P	Z'	0.3	1.0
		Sk	iP		12 14 40.7	C
			iPP		12 18 47.3	
		Um	iP		12 14 25.4	C
			iPP		12 18 21.0	
		Ud	iP		12 14 44.3	C
		De	iP		12 14 49.7	
		Halmahera (h = 150 km).				
		m = 6.4 (Up,Ki).				
"	7	Up	iP		16 50 40.8	
			iPcP		16 51 18.9	
					micr	sec
			P	Z'	0.1	1.0
		Ki	iP		16 49 46.8	
		Sk	iP		16 50 24.7	
		Um	iP		16 50 12.4	
		Ud	iP		16 50 43.2	
			iPcP		16 51 20.8	
		De	iP		16 51 06.0	
		Kamchatka (h = 280 km).				
"	7	Up	iSKP		17 48 56.6	
		Ki	iPKP		17 45 33.1	
		Um	iPKP		17 45 39.6	
			iSKP		17 48 44.1	
		Ud	iSKP		17 49 01.4	
		De	iSKP		17 49 10.4	
		New Hebrides Islands (h = 180 km).				
"	7	Um	iSKS		23 32 11	
		Mexico (h = 55 km).				
"	8	De	eP		00 34 45	
		Dodecanese Islands (h = N).				

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

1972 June	8	Um	iP		04 42 51.0
"	8	Up	iP		05 06 23.3
		Um	iP		05 06 21.5
		Ud	iP		05 06 40.7
		De	eP		05 06 36
		Hindu Kush (h = 120 km).			
"	8	Up	i(P)		05 56 20.9
"	8	Up	iP		06 24 26.9
		Ki	iP		06 23 34.4
					micr sec
			P	Z'	0.1 1.0
		Um	iP		06 24 00.7
			ipP		06 24 11.9
		Ud	iP		06 24 26.9
		De	iP		06 24 47.8
		Aleutian Islands.			
		h = 40 km (Um).			
"	8	Up	iP		07 07 45.5
		Ki	eP		07 06 53
		Aleutian Islands (h = 45 km).			
"	8	Ki	iP		08 08 40.2
		Um	iP		08 08 44.0
		Banda Sea (h = 310 km).			
"	8	Up	iP		09 26 04.0
			ipP		09 26 16.4
			iS		09 35 54
					micr sec
			P	Z'	0.4 1.4
			pP	Z'	0.4 1.3
			Mx	E	5.8 14
			Mx	N	2.7 19
			Mx	Z	11 14
		Ki	iP		09 25 43.8
			ipP		09 25 54.8
			iS		09 35 18
					micr sec
			P	Z'	0.2 1.3
			pP	Z'	0.3 1.3
			Mx	E	3.3 17
			Mx	N	5.9 21
			Mx	Z	1.5 18
		Sk	iP		09 26 09.2
		Um	iP		09 25 50.8
			ipP		09 26 02.1
			iS		09 35 24
		Ud	iP		09 26 14.0
			ipP		09 26 25.5
		De	iP		09 26 22.0
			ipP		09 26 33.4
		Formosa.			
		h = 40 km (Up,Ki,Um,Ud,De).			
		m = 6.3, M = 6.0 (Up,Ki).			

1972 June	8	Up	eP		09 45 46
			iPP		09 46 54.5
		Ki	iP		09 46 32.8
					micr sec
			P	Z'	0.1 1.0
		Sk	eP		09 46 25
		Um	iP		09 46 03.1
			iPP		09 47 24.1
		Ud	iP		09 46 02.2
			i		09 46 06.3
		De	eP		09 45 43
		Iran (h = 20 km).			
"	8	Ki	iPn		10 20 15.2
			iPgl		10 20 23.2
			iSn		10 21 01.7
			iS*		10 21 14.2
		Um	iSgl		10 22 51.9
		Northwest USSR-Norway border region, 69.8°N, 30.1°E.			
		Origin time = 10 19 14.			
		Explosion.			
"	8	Up	iP		10 29 40.0
		Ki	iP		10 29 19.3
		Um	iP		10 29 26.7
		Ud	iP		10 29 50.1
		Formosa (h = N).			
"	8	Ki	iP		12 52 53.8
		Ud	iP		12 52 24.8
		Iraq.			
"	8	Up	iP		16 18 55.5
		Ki	iP		16 18 52.9
		Sk	iP		16 19 11.7
		Um	iP		16 18 50.1
		Ud	iP		16 19 09.2
"	8	Ud	iPKP		16 34 40.7
		De	iPKP		16 34 49.6
		Fiji Islands (h = 290 km).			
"	8	Up	eP		16 56 21
		Ki	eP		16 56 04
		Um	iP		16 56 06.8
		Ud	iP		16 56 30.7
		Formosa (h = N).			
"	8	Up	iP		17 31 06.5
			iPn		17 31 14.3
			iSn		17 35 32.7
			iLg2		17 39 05
					micr sec
			Mx	E	0.8 14
			Mx	Z	0.8 15
		Ki	iP		17 31 43.6
		(cont.)			

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

1972
June 8 (cont.)

Ki	iPn		17 32 10.1	
	i(Sn)		17 37 38.7	
			micr	sec
	Mx	E	0.5	12
	Mx	N	0.8	17
	Mx	Z	0.5	12
Sk	iPn		17 32 11.7	
	iSn		17 37 11.4	
	iLg2		17 41 08.6	
Um	iP		17 31 18.8	
	i		17 31 21.6	
	iSn		17 36 09.7	
Ud	iP		17 31 24.2	
	i		17 31 26.8	
	iSn		17 36 26.6	
De	iP		17 31 11.2	

Caucasus (h = 50 km).
M = 4.5 (Up,Ki).
Double P, in average 2.8 sec apart.

" 8

Up	eP		18 11 31	
	iPP		18 15 43.1	
Ki	iPP		18 16 11.3	
	iPKKP		18 26 57.5	
Um	ePP		18 16 02	
	iPKKP		18 27 01.4	
Ud	iPP		18 15 40.8	

Argentina (h = 260 km).

" 8

Up	iP		18 21 21.5	

" 8

Up	eP		19 08 32	
	iPKP		19 12 20.9	
	i		19 13 15	
	iPP		19 13 20.0	
	iPKKP		19 22 59.9	
	iPKKP		19 23 17.4	
			micr	sec
	PKP	Z'	0.2	1.5
	PP	Z'	0.7	1.8
	Mx	E	17	20
	Mx	N	17	20
	Mx	Z	37	20
Ki	ePKP		19 12 25	
	iPP		19 13 47.4	
	iPKKP		19 22 44.0	
	iPKKP		19 23 11.7	
			micr	sec
	PKP	Z'	0.4	1.5
	PP	Z'	0.4	1.5
	Mx	E	18	22
	Mx	N	18	24
	Mx	Z	15	21
Sk	iPKP		19 12 20.0	
Um	iP		19 08 41	

(cont.)

1972
June 8 (cont.)

Um	iPKP		19 12 23.9	
	i		19 13 32	
	iPP		19 13 41.9	
	iPKKP		19 22 50.7	
	iPKKP		19 23 16.7	
De	iPKP		19 12 16.1	

Chile (h = 40 km).
m = 7.0, M = 6.9 (Up,Ki).

" 8

Up	iPP		19 41 47.6	
			micr	sec
	PP	Z'	0.1	1.5
Ki	iPKP		19 40 51.6	
			micr	sec
	PKP	Z'	0.1	1.5
Sk	iPKP		19 40 47.4	
Um	iPKP		19 40 48.8	

Chile (h = 55 km).

" 8

Um	iP		19 45 15.1	

" 8

Up	iP		23 19 55.3	
	i		23 19 59.6	
Ki	iP		23 19 47.7	
	i		23 19 51.9	
Sk	iP		23 20 11.9	
	i		23 20 15.6	
Um	iP		23 19 47.2	
	i		23 19 51.0	

Tibet (h = 60 km).
Double P, in average 4.0 sec apart.

" 9

Up	iPKP		00 39 14.8	
	iX		00 39 36.6	
			micr	sec
	Mx	N	0.5	18
	Mx	Z	0.6	18
Ki	iX		00 39 24.1	
			micr	sec
	Mx	E	0.5	19
	Mx	N	0.5	20
	Mx	Z	0.9	22
Sk	iX		00 39 33.6	
Um	ePKP		00 39 06	
	iX		00 39 29.7	
De	iPKP		00 39 27.8	

Tonga Islands (h = N).
M = 5.4 (Up,Ki).

" 9

Up	iP		04 10 47.4	
Um	iP		04 10 43.0	

Mexico (h = 140 km).

" 9

Ki	iPKP		07 03 38.7	
Um	iPKP		07 03 31.5	

South Sandwich Islands (h = N).

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

1972 June	9	Up	iP		07 47 47.1
			ipP		07 47 56.4
			iS		07 52 22
					micr sec
			Mx	E	1.6 11
			Mx	N	2.1 11
			Mx	Z	3.2 12
		Ki	iP		07 48 54.2
					micr sec
			P	Z'	0.1 0.9
			Mx	E	1.2 12
			Mx	N	2.0 14
			Mx	Z	1.3 13
		Sk	iP		07 48 26.2
		Um	iP		07 48 18.9
		De	iP		07 47 24.4
			iPP		07 47 47.7
		Crete.			
		h = 40 km (Up).			
		M = 5.1 (Up,Ki).			
"	9	Ud	i(P)		10 30 14.5
"	9	Ki	Mx		10 49
					micr sec
			Mx	E	0.7 19
			Mx	N	0.4 18
		Easter Island region			
		(h = N).			
"	9	Um	iSgl		12 46 00.5
			iRg		12 46 36.3
		Western USSR.			
		Explosion.			
"	9	Up	iPKP		18 47 38.1
		Ud	iPKP		18 47 40.8
		De	ePKP		18 47 50
"	9	Ud	iP		19 48 32.7
		De	iP		19 48 13.8
		Iraq.			
"	9	Ud	iP		20 39 50.7
"	9	Ud	iP		22 27 12.9
		Ionian Islands.			
"	10	Um	eP		02 54 10
"	10	Up	iP		03 41 13.3
			i		03 41 15.3
					micr sec
			P	Z'	0.3 1.5
		Ki	iP		03 40 17.7
			i		03 40 20.6
		(cont.)			

1972 June	10	(cont.)			
		Ki			micr sec
			P	Z'	0.4 1.1
			Mx	E	0.4 13
			Mx	N	0.5 15
			Mx	Z	0.6 14
		Um	iP		03 40 46.4 C
			i		03 40 48.9
			iS		03 48 26
		Ud	iP		03 41 08.0
			i		03 41 11.3
		De	eP		03 41 33
			i		03 41 35.4
		Canada (h = N).			
		m = 6.2 (Up,Ki).			
		Double P, in average 2.6			
		sec apart.			
"	10	Up	eP		03 46 46
		Ud	iP		03 46 54.3
"	10	Ud	iP		06 55 37.7
"	10	Up	iP		08 14 34.0
		Ki	iP		08 13 46.7
		Um	iP		08 14 07.9
		Ud	iP		08 14 40.1
		De	iP		08 14 57.9
		Kurile Islands (h = 140 km).			
"	10	Ki	iPn		10 29 54.3
			iPgl		10 30 02.5
			iSn		10 30 40.5
			iS*		10 30 52.9
		Um	iSgl		10 32 28.7
		Northwest USSR-Norway border			
		region, 69.7°N, 30.2°E.			
		Origin time = 10 28 53.			
		Explosion.			
"	10	Up	iP		10 45 20.8
		Ud	iP		10 45 29.5
"	10	Up	eP		11 37 32
		Ki	eP		11 37 51
		Um	iP		11 37 35.7
		Ud	iP		11 37 47.3
		De	eP		11 37 40
		Pakistan (h = 15 km).			
"	10	Ki	iPKP		12 40 54.4
		Um	iPKP		12 41 11.5
		Ud	ePKP		12 41 25
		De	iPKP		12 41 35.0
		Tonga Islands (h = 60 km).			
"	10	Ki	iP		14 59 39.6
		(cont.)			

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

1972
June 10 (cont.)

Um	iP	14 59 48.8	
Ud	eP	14 59 40	
" 10 Ki	iP	19 38 57.6	C
Um	eP	19 38 32	
Ud	iP	19 38 28.2	C
De	iP	19 38 09.5	

Iran-Iraq (h = N).

" 10 Um	iP	22 45 38.0	
Ud	iP	22 46 04.1	

Gulf of Alaska (h = N).

" 11 Ud	ePKP	04 50 36
De	iPKP	04 50 46.0

Tonga Islands (h = N).

" 11 Ki	iP	12 23 02.7
Ud	iP	12 22 36.2
" 11 Ki	e(Sn)	13 05 33
	iSgl	13 05 48.8
Um	i(Sn)	13 06 14.8
	iSgl	13 06 39.4
" 11 Up	ePKP	14 49 10
	eSKP	14 52 48
Ki	iSKP	14 52 23.9
Um	ePKP	14 49 04
	iSKP	14 52 36.4
Ud	iPKP	14 49 10.4
	iSKP	14 52 49.6
De	iPKP	14 49 21.6
	iSKP	14 52 58.8

Tonga Islands (h = 80 km).

" 11 Up	iP	16 10 59.2
Um	eP	16 11 24
Ud	iP	16 10 28.4
De	iP	16 10 32.7
	iS	16 12 33.6

United Kingdom.
Underwater explosion.

" 11 Up	iP		16 53 46.1	
	ipP		16 55 03	
	iPP		16 57 47.1	
	iPPP		16 59 54.6	
	iSKS		17 03 53	
	iS		17 04 28	
	iSP		17 05 56.2	
			micr	sec
	P	Z'	1.4	0.9
	PP	Z'	4.4	1.5
	Mx	E	120	19
	Mx	N	110	21
	Mx	Z	180	21

(cont.)

1972
June 11 (cont.)

Ki	iP		16 53 31.9	
	ipP		16 54 47	
	iPP		16 57 19.2	
	iS		17 04 02.4	
			micr	sec
	P	Z'	3.5	1.0
	PP	Z'	15	2.0
	Mx	E	180	21
	Mx	N	230	23
	Mx	Z	140	21
Sk	iP		16 53 52.3	
	iPP		16 57 56.8	
	iPPP		17 00 08.8	
	iSP		17 06 04.5	
Um	iP		16 53 36.2	
	iSKS		17 03 57	
Ud	iP		16 53 54.6	
	iPPP		17 00 11.4	
De	iP		16 54 00.0	
	iSP		17 06 20.5	

Celebes Sea.
h = 320 km (Up,Ki).
m = 7.4, M = 7.7 (Up,Ki).
M uncorrected for focal depth.
Clear G-wave pulse recorded on long-period instruments.

" 11 Um	iP	17 31 06.0
" 11 Up	iP	17 36 18.9
Um	iP	17 36 08.3
Ud	iP	17 36 27.0
De	iP	17 36 32.9

Celebes Sea.
Origin time = 17 23 34.

" 11 Ud	iP	17 53 40.3
" 11 Up	ePKP	18 17 46
Ud	iPKP	18 17 46.4
" 11 Sk	eP	18 33 44
Um	eP	18 34 01
Ud	iP	18 33 51.5

Guatemala (h = 50 km).

" 11 Ki	iP	18 50 52.6
Um	iPKP	18 55 02.8
Ud	ePKP	18 55 12
De	iPKP	18 55 16.4

New Guinea (h = 150 km).

" 11 Up	iSgl	20 32 35.3
Sk	iSgl	20 32 08.9
Um	iSgl	20 33 36.1

(cont.)

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

1972
June 11 (cont.)

Ud	iSgl	20 31 30.1	
De	iSgl	20 32 17.7	

Southern Norway,
59.9°N, 7.3°E.
Origin time = 20 29 51.
By combination with
Kongsberg and Bergen
readings.

" 11	Up	iP	21 23 54.4
	Ki	iP	21 23 13.7
	Um	iP	21 23 31.4
	Ud	iP	21 24 02.2
	De	iP	21 24 17.6

Japan (h = 100 km).

" 11	Um	iP	21 43 10.8
" 11	Ki	iSgl	21 55 22.7
	Um	iSgl	21 56 51.0

Northwest USSR.
Explosion.

" 11	Ki	iSgl	21 58 19.6
	Um	eSgl	21 59 54

Northwest USSR.
Explosion.

" 11	Um	iP	23 33 31.3
	Ud	iP	23 34 02.9
" 11	Ud	iP	23 38 26.0
" 11	Ud	iP	23 42 23.8
" 11	Ud	iP	23 44 37.8
" 12	Up	iPKP	01 04 22.2
	Ki	iPKP	01 04 08.5 C
		iPKKP	01 14 15.1
			micr sec
		PKP Z'	0.2 0.5
	Sk	iPKP	01 04 19.5 C
		ipPKP	01 05 18.2
	Um	iPKP	01 04 14.3 C
		ipPKP	01 05 12.3
		iPKKP	01 14 03.0
		iPKKP	01 14 39.6
		i(SKKP)	01 17 22.4
	Ud	i(PKP)	01 04 07.1
		iPKP	01 04 23.7
		ipPKP	01 05 21.7
		iPKKP	01 13 43.1
		iPKKP	01 14 30.6
		e(SKKP)	01 17 25
	De	i(PKP)	01 04 14.3

(cont.)

1972
June 12 (cont.)

De	iPKP	01 04 30.2 C	
	iSKP	01 07 36.6	

Santa Cruz Islands.
h = 230 km (Sk,Um,Ud).

" 12	Up	iPgl	04 31 59.9
		i	04 32 02.6
		iS*	04 32 19.9
		iSgl	04 32 21.8
	Ki	eSgl	04 35 45
	Sk	iSgl	04 33 25.3
	Um	iSgl	04 33 52.2
		i	04 33 54.8
	Ud	iPgl	04 31 39.1
		i	04 31 41.5
		iSgl	04 31 44.4
		i	04 31 46.9
		iSn	04 31 51.8
	De	iSgl	04 33 23.6

Central Sweden,
60.1°N, 14.5°E.
Origin time = 04 31 33.
Felt.
Double Pgl- and Sgl-phases
(Up,Um,Ud) could suggest two
events, about 2.6 sec apart.

" 12	De	iPKP	09 50 04.6

Tonga-Kermadec Islands
(h = N).

" 12	Um	i(PKP)	10 03 24.2
	Ud	i(PKP)	10 03 35.2
" 12	Up	iP	10 09 13.3
			micr sec
		P Z'	0.1 1.0
	Ki	iP	10 09 13.9 D
		iSKS	10 19 43
			micr sec
		P Z'	0.1 1.0
		Mx E	0.9 25
		Mx N	0.4 20
		Mx Z	0.9 22
	Sk	iP	10 08 59.9 D
	Um	iP	10 09 16.6 D
		iSKS	10 19 44
	Ud	iP	10 09 03.8 D
	De	iP	10 09 06.1 D

South of Panama (h = 25 km).
m = 6.0 (Up,Ki).

" 12	Up	iP	11 30 23.4
	Ki	iP	11 30 04.0
	Ud	iP	11 30 32.8

Luzon.
Origin time = 11 18 00.

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

1972 June	12	Up	iP		11 32 07.1	
			iS		11 42 21	
					micr	sec
			P	Z'	0.1	0.9
			Mx	E	0.6	17
			Mx	N	0.9	17
			Mx	Z	0.9	17
		Ki	iP		11 31 47.5	C
			iS		11 41 45	
					micr	sec
			P	Z'	0.1	1.0
			Mx	E	0.5	12
			Mx	N	1.3	22
			Mx	Z	0.5	12
		Sk	iP		11 32 11.5	
		Um	iP		11 31 54.1	C
			iS		11 41 58	
		Ud	iP		11 32 16.6	C
		De	iP		11 32 23.1	
		Luzon (h = N).				
		m = 6.0, M = 5.3 (Up,Ki).				
"	12	Up	iP		12 50 01.0	
		Um	iP		12 50 14.1	
"	12	Up	iP		13 40 30.7	
			iS		13 45 43	
					micr	sec
			P	Z'	0.1	0.9
			Mx	E	3.6	21
			Mx	N	6.1	20
			Mx	Z	3.4	17
		Ki	iP		13 41 15.3	C
			iS		13 47 05	
			iSS		13 49 30	
					micr	sec
			P	Z'	0.3	0.9
			Mx	E	2.4	13
			Mx	N	3.0	14
			Mx	Z	2.7	17
		Sk	iP		13 41 09.3	
		Um	iP		13 40 48.4	
			iS		13 46 14	
		Ud	iP		13 40 46.0	C
		De	iP		13 40 26.7	C
		Iran-Iraq (h = N).				
		m = 5.9, M = 5.4 (Up,Ki).				
"	12	Up	iP		13 46 29.2	
		Ki	iP		13 47 13.6	C
					micr	sec
			P	Z'	0.1	0.8
		Sk	iP		13 47 06.7	
		Um	iP		13 46 46.5	
		Ud	iP		13 46 44.6	
		De	iP		13 46 25.6	C
		Iran-Iraq (h = N).				

1972 June	12	Um	iSgl		15 34 16.9	
		Ud	eSgl		15 34 46	
		Esthonia.				
		Explosion.				
"	12	Ud	iP		17 05 29.6	
"	12	Ud	iP		17 11 54.0	
"	12	Up	iP		19 58 26.6	
			iPcP		19 58 55.5	
			eP'P'		20 26 46	
					micr	sec
			P	Z'	0.2	1.2
			Mx	E	2.7	20
			Mx	N	7.2	20
			Mx	Z	9.0	19
		Ki	iP		19 57 34.0	
			iPa		20 01 12	
			iS		20 05 34	
			eP'P'		20 27 10	
					micr	sec
			P	Z'	0.1	1.0
			Mx	E	6.1	21
			Mx	N	5.3	18
			Mx	Z	6.1	18
		Sk	iP		19 58 03.6	
			iPcP		19 58 40.4	
		Um	iP		19 58 00.3	
			iPcP		19 58 37.9	
			iScP		20 02 38.8	
			iS		20 06 25	
			iP'P'		20 26 59.8	
		Ud	iP		19 58 25.5	
			eP'P'		20 26 50	
		De	iP		19 58 48.0	
			iPcP		19 59 12.0	
		Aleutian Islands (h = 45 km).				
		m = 6.0, M = 5.9 (Up,Ki).				
"	12	Um	iP		20 57 10.3	
"	13	Up	iP		01 02 08.6	
					micr	sec
			Mx	E	0.7	15
			Mx	N	1.1	20
			Mx	Z	0.9	16
		Ki	iP		01 02 53.0	
			i		01 02 53.8	
			iS		01 08 42	
					micr	sec
			P	Z'	0.2	0.7
			Mx	E	0.6	13
			Mx	N	0.8	14
			Mx	Z	0.7	15
		Sk	iP		01 02 46.9	
		Um	iP		01 02 25.7	
		(cont.)				

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

1972
June 13 (cont.)

Um	i		01 02 26.8
Ud	iP		01 02 23.6
	i		01 02 24.7
De	iP		01 02 04.3
	i		01 02 05.3

Iran-Iraq (h = 25 km).
M = 4.7 (Up,Ki).
Double P, in average 1.0 sec apart.

" 13 Ud iP 02 05 29.2

" 13

Ki	eP		06 54 02
Ud	iP		06 55 04.0

" 13

Up	eP		08 00 26
De	eP		08 00 19

Colombia (h = 160 km).

" 13

Ki	ePn		08 01 43
	iSn		08 02 28.9
	iSgl		08 02 42.8

Northwest USSR-Norway border region.
Explosion.

" 13

Um	iSgl		10 02 41.9
Ud	eSgl		10 03 10

Esthonia.
Explosion.

" 13

Up	iP		10 54 14.9	
			micr	sec
	Mx	E	1.3	17
	Mx	N	1.6	15
	Mx	Z	1.4	17
Ki	iP		10 53 27.2	
			micr	sec
	Mx	E	1.4	14
	Mx	N	2.6	12
	Mx	Z	1.5	16
Sk	iP		10 54 07.8	
Um	iP		10 53 47.7	
Ud	iP		10 54 24.5	
De	iP		10 54 42.7	

Eastern Siberia (h = N).
M = 5.4 (Up,Ki).

" 13

Um	iSgl		11 31 49.2

Esthonia.
Explosion.

" 13

Um	iP		11 59 21.2

Hindu Kush (h = 210 km).

" 13

Up	i(Sn)		12 40 25.6

(cont.)

1972
June 13 (cont.)

Up	iSgl		12 40 36.9
Ki	eSgl		12 43 15
Sk	eSgl		12 42 29
Um	iSgl		12 41 13.3
Ud	eSn		12 41 14
	eSgl		12 41 39
De	iSgl		12 42 04.9

Esthonia, 59.5°N, 24.6°E.
Origin time = 12 38 45.
Explosion.

" 13 Um iP 13 27 30.7

" 13 Um iP 17 11 20.2

" 13

Up	iPKP		17 18 16.4 C	
			micr	sec
	PKP	Z'	0.4	1.4
	Mx	E	0.6	20
	Mx	N	0.7	19
	Mx	Z	0.8	19
Ki	iPKP		17 18 02.8 C	
			micr	sec
	PKP	Z'	0.1	1.3
	Mx	E	0.5	19
	Mx	N	1.1	20
	Mx	Z	1.2	20
Sk	iPKP		17 18 09.3 C	
Um	iPKP		17 18 04.2 C	
Ud	iPKP		17 18 18.7 C	
De	iPKP		17 18 27.2 C	

Kermadec Islands (h = 45 km).
M = 5.7 (Up,Ki).

" 13

Um	iP		18 35 06.7
Ud	eP		18 35 35

" 13 Um iP 19 57 10.1

Mexico (h = 130 km).

" 13 Ud iP 20 41 21.7

" 13 Ud iP 22 24 41.5

" 13

Up	eP		22 30 40
Ki	eP		22 30 20
Um	iP		22 30 26.9
Ud	iP		22 30 49.0

" 13

Up	iPKP		22 51 07.2
Sk	iPKP		22 50 59.7
Um	ePKP		22 51 04
Ud	iPKP		22 51 08.1
De	iPKP		22 51 16.6
	i		22 51 29.0

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

1972 June	14	Ki	iP		00 56 22.9	
			iPn		00 57 23.4	
		Sk	eP		00 56 21	
		Um	iP		00 56 01.2	
			ipP		00 56 14.2	
		Ud	iP		00 56 08.6	
			ipP		00 56 20.4	
		De	i(pP)		00 56 07.8	
		Caspian Sea.				
		h = 45 km (Um,Ud).				
"	14	Up	iP		01 02 25.6	
					micr	sec
			P	Z'	0.1	0.9
		Ki	iP		01 01 29.2	
			ipP		01 02 04.8	
					micr	sec
			P	Z'	0.1	0.8
		Sk	eP		01 01 58	
		Um	iP		01 01 57.3	
			iP'P'		01 32 02.7	
		Ud	iP		01 02 22.3	
		De	iP		01 02 46.6	
		Alaska.				
		h = 150 km (Ki).				
		m = 5.7 (Up,Ki).				
"	14	Ki	ePKP		04 13 02	
		New Hebrides Islands				
		(h = 25 km).				
"	14	Um	iP		04 29 18.0	
"	14	Up	iP		04 40 58.7	C
					micr	sec
			Mx	E	0.4	14
			Mx	N	0.5	20
			Mx	Z	0.6	16
		Ki	iP		04 41 43.2	C
			ipP		04 41 49.0	
			iS		04 47 33.0	
					micr	sec
			P	Z'	0.2	0.9
			Mx	E	0.6	16
			Mx	N	0.7	18
			Mx	Z	0.4	13
		Sk	iP		04 41 36.3	C
		Um	iP		04 41 15.7	C
			ipP		04 41 21.6	
		Ud	iP		04 41 14.1	C
			ipP		04 41 19.7	
			iS		04 46 39.8	
		De	iP		04 40 55.1	C
			ipP		04 41 00.5	
		Iran-Iraq.				
		h = 20 km (Ki,Um,Ud,De).				
		M = 4.5 (Up,Ki).				

1972 June	14	Up	i	06 10 39.5
		Ki	i	06 10 43.6
		Sk	iPKP	06 10 24.3
		Ud	iPKP	06 10 32.6
		De	iPKP	06 10 41.7
"	14	Ud	iPKP	06 22 19.0
		De	iPKP	06 22 30.6
"	14	Ki	iPKP2	07 10 40.8
		Um	iPKP2	07 10 39.6
		Ud	ePKP2	07 10 44
		West of Macquarie Islands		
		(h = N).		
"	14	Um	iP	07 44 52.1
"	14	Ud	iP	08 11 53.2
"	14	Up	eSgl	10 06 53
		Ud	iPn	10 05 33.6
			iPgl	10 05 35.8
			iSgl	10 06 06.6
			iRg	10 06 14.0
		De	iPgl	10 05 35.9
			iSgl	10 06 05.8
		Off coast of Bohuslän,		
		Sweden.		
		Origin time = 10 04 57.		
		Explosion?		
"	14	Up	ePKP	13 43 16
		Sk	iPKP	13 43 05.7
			i	13 43 15.6
		Um	iPKP	13 43 10.5
		Ud	iPKP	13 43 15.1
		De	iPKP	13 43 23.6
"	14	Um	iP	15 36 31.0
"	14	Up	iP	17 16 03.1
			i	17 16 17.7
		Um	iP	17 15 46.3
		Ud	iP	17 16 12.1
		De	eP	17 16 25
		Japan (h = 70 km).		
"	14	Up	iP	18 38 51.9
			ipP	18 39 04.0
		Ki	iP	18 38 13.3
			ipP	18 38 25.6
		Um	iP	18 38 30.4
			ipP	18 38 41.6
		Ud	iP	18 38 59.1
			ipP	18 39 11.0
		Japan.		
		h = 45 km (Up,Ki,Um,Ud).		

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

1972 June	14	Up	iP		18 59 47.8		
					micr	sec	
			P	Z'	0.1	1.2	
			Mx	E	1.9	13	
			Mx	N	1.5	12	
			Mx	Z	2.4	13	
		Ki	iP		19 01 15.5		
					micr	sec	
			P	Z'	0.1	1.3	
			Mx	E	2.5	16	
			Mx	N	1.1	13	
			Mx	Z	0.9	11	
		Sk	iP		19 00 28.5		
		Um	iP		19 00 35.2		
			iS		19 04 15		
		Ud	iP		18 59 48.4		
		De	iP		18 58 57.2		
			iS		19 01 32.2		
			iLg2		19 03 13.9		
		Italy (h = 15 km).					
		m = 5.0, M = 4.8 (Up,Ki).					
"	14	Up	iP		21 04 54.9		
		Ki	iP		21 06 22.3		
		Um	iP		21 05 40.0		
		Ud	iP		21 04 55.5		
		De	iP		21 04 03.2		
		Italy (h = 5 km).					
"	14	Ud	iP		22 04 05.6		
		Atlantic Ocean.					
"	15	Up	iP		00 38 12.4		
			ipP		00 38 19.0		
			iS		00 42 07		
					micr	sec	
			pP	Z'	0.2	1.2	
			Mx	E	1.1	12	
			Mx	N	2.1	15	
			Mx	Z	1.9	13	
		Ki	eP		00 39 28		
					micr	sec	
			Mx	E	2.5	16	
			Mx	N	1.8	13	
			Mx	Z	1.5	14	
		Sk	iP		00 38 54.0		
		Um	iP		00 38 51.9		
			iS		00 43 17		
		Ud	iP		00 38 20.0		
			ipP		00 38 26.5		
			iS		00 42 28.5		
		De	iP		00 37 44.2		
		Greece.					
		h = 25 km (Up,Ud).					
		M = 5.0 (Up,Ki).					
"	15	Ki	iP		00 42 31.8		
		Um	iP		00 42 25.0		

1972 June	15	Ki	iP	00 49 30.5
		Ud	iP	00 49 55.5
"	15	Ki	iPKP	01 32 42.5
		Tonga Islands (h = N).		
"	15	Up	iPKP	03 16 10.4
		Ud	iPKP	03 16 12.4
		De	ePKP	03 16 23
"	15	Up	iP	03 55 50.8
		Um	iP	03 55 34.3
"	15	Up	ePKP	04 09 34
		Um	iPKP	04 09 19.1
		Ud	ePKP	04 09 36
		De	iPKP	04 09 44.1
		Kermadec Islands.		
		Origin time = 03 49 51.		
"	15	Up	iPKP	04 10 04.2
				micr sec
			PKP Z'	0.1 0.9
		Ki	ePKP	04 09 47
		Sk	iPKP	04 09 57.6
		Um	iPKP	04 09 52.5
		Ud	iPKP	04 10 06.6 C
		De	iPKP	04 10 15.3 C
			i	04 10 28.7
		Kermadec Islands (h = N).		
"	15	Up	iPKP	04 21 43.0
		Sk	ePKP	04 21 36
		Um	ePKP	04 21 32
		Ud	iPKP	04 21 44.6
		De	ePKP	04 21 56
		Kermadec Islands.		
		Origin time = 04 02 02.		
"	15	Up	iPgl	08 40 09.8
			iSgl	08 40 32.3
		Sk	iSgl	08 42 03.8
		Um	iPgl	08 40 29.8
			iSgl	08 41 08.1
		Ud	iPgl	08 40 42.6
			iSgl	08 41 30.1
		De	eSgl	08 42 29
		Baltic Sea, 60.8°N, 20.3°E.		
		Origin time = 08 39 41.		
		Explosion.		
"	15	Up	iPgl	09 26 15.9
			iSgl	09 26 37.0
		Ki	iSgl	09 29 27.8
		Sk	eSgl	09 28 10
		Um	iPgl	09 26 36.1
			iSgl	09 27 14.5
		(cont.)		

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

1972 June 15 (cont.)

Ud	iPn	09 26 41.9
	ePgl	09 26 47
	iSgl	09 27 35.8
De	eSgl	09 28 35

Baltic Sea, 60.8°N, 20.3°E.
Origin time = 09 25 47.
Explosion.

" 15

Up	iSgl	09 26 58.3
Um	iPgl	09 26 57.0
	iSgl	09 27 35.9
Ud	iSgl	09 27 57.0

Baltic Sea, 60.8°N, 20.3°E.
Origin time = 09 26 07.
Explosion.

" 15

Ud	iP	09 29 40.3

" 15

Sk	eP	09 30 58
Um	iP	09 30 55.8
Ud	iP	09 30 22.4

Greece (h = 80 km).

" 15

De	e(Pgl)	10 13 31
	i(Sgl)	10 13 39.8

" 15

Ud	iP	10 28 04.1

" 15

Ud	iP	11 00 16.8
De	iP	11 00 36.5

" 15

Ki	iP	12 01 47.5

" 15

Um	iSgl	12 03 55.8
Ud	eSgl	12 04 20
De	eSgl	12 04 56

Esthonia.
Explosion.

" 15

Up	iP	12 05 17.0
Ki	iP	12 05 13.5
Sk	eP	12 05 27
Ud	iP	12 05 26.0
	i	12 05 41.8
De	iP	12 05 25.2

Sunda Strait (h = 90 km).

" 15

Up	ePKP	12 59 27
Ud	iPKP	12 59 31.1
De	iPKP	12 59 39.4

" 15

Up	eSgl	13 11 40
Um	iSgl	13 11 48.2
De	eSgl	13 13 01

Western USSR.
Explosion.

1972 June 15

Up	i(Sgl)	13 29 49.6
Ud	i(Sgl)	13 28 51.2
	i	13 28 55.5
De	i(Sgl)	13 30 23.5

South Norway.

" 15

Up	iP	13 37 41.2
De	iP	13 37 05.7

" 15

Up	iPKP	13 46 42.9
Ud	iPKP	13 46 44.9
De	iPKP	13 46 54.5

" 15

Ud	iP	14 24 10.6
De	iP	14 23 43.9

Crete.

" 15

Ud	iP	15 14 13.1

" 15

Ud	iP	15 29 53.4
De	eP	15 29 43

" 15

Up	iP		15 32 16.5		C
	ipP		15 32 38.1		
			micr	sec	
	P	Z'	0.2	1.0	
Ki	iP		15 31 33.2		C
			micr	sec	
	P	Z'	0.1	1.0	
Sk	iP		15 32 08.0		C
	ipP		15 32 30.6		
Um	iP		15 31 52.4		C
Ud	iP		15 32 24.0		C
	ipP		15 32 46.0		
De	iP		15 32 40.2		C
	ipP		15 33 02.1		

Japan.
h = 80 km (Up,Sk,Ud,De).
m = 5.9 (Up,Ki).

" 15

Up	eP	17 37 27
Um	eP	17 37 37
Ud	eP	17 37 39

Indian Ocean (h = N).

" 15

Up	iP	17 37 50.2
Sk	iP	17 38 22.7
Ud	iP	17 38 02.2

Greece.

" 15

Up	iP		23 05 46.1		
Ki	eP		23 05 29		
			micr	sec	
	P	Z'	0.1	1.0	
Um	eP		23 05 37		
Ud	iP		23 05 53.9		

Mindanao (h = 100 km).

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

1972 June	16	Sk	eP	03 07 10
			i	03 07 26.2
		Ud	eP	03 07 19
			i	03 07 34.0
"	16	Up	iP	08 46 42.9
		Ki	iP	08 46 43.6
		Sk	iP	08 46 29.9
		Um	iP	08 46 45.6
		Ud	iP	08 46 33.4
			ipP	08 46 44.4
		De	iP	08 46 36.0
		South of Panama.		
		h = 40 km (Ud).		
"	16	Um	iP	09 40 37.2
"	16	Up	iSgl	12 25 49.0
		Sk	eSgl	12 27 30
		Um	iSgl	12 26 08.6
		Ud	iSgl	12 26 52.9
		De	eSgl	12 27 17
		Western USSR.		
		Explosion.		
"	16	Ud	i(P)	12 36 48.8
"	16	Ki	eP	12 48 21
		Um	iP	12 48 42.5
		Ud	eP	12 49 16
		Japan (h = 45 km).		
"	16	Ud	iP	14 06 15.8
"	16	Ud	iP	14 09 05.4
			i	14 09 26.2
"	16	Up	ePKP	16 33 44
		Ud	iPKP	16 33 44.5
"	16	Up	iP	18 53 23.1
		Um	iP	18 53 45.5
		Ud	iP	18 53 18.9
"	16	Up	eP	19 05 30
		Um	iP	19 05 30.7
		Ud	iP	19 05 48.1
		Hindu Kush (h = 40 km).		
"	16	Up	eSgl	19 44 42
		Ki	iSgl	19 42 36.3
		Sk	iSgl	19 42 41.5
		Um	ePgl	19 42 15
			iSn	19 42 49.2
			iSgl	19 43 03.6
		Ud	iSgl	19 44 28.2
		(cont.)		

1972 June	16	(cont.)		
		Nordland, Norway,		
		66.5°N, 14.0°E.		
		Origin time = 19 41 07.		
		Explosion.		
"	16	Up	iPKP	20 43 13.4
		Ud	iPKP	20 43 15.0
		De	iPKP	20 43 24.5
"	17	Ud	iP	02 43 46.0
"	17	Ud	iP	03 28 32.8
"	17	Up	ePKP	03 55 37
			i	03 55 41.1
		Um	iPKP	03 55 24.8
		Ud	iPKP	03 55 38.6
			i	03 55 44.0
"	17	Um	iP	05 26 38.6
		Ud	iP	05 27 03.5
		De	eP	05 27 25
		Alaska (h = 40 km).		
"	17	Ki	iPKP	06 16 40.7
		Tonga Islands (h = 40 km).		
"	17	Up	iP	09 05 33.2
			i	09 05 42.6
			iS	09 07 36.7
			i	09 08 33.4
			iLgl	09 08 57.5
		Ki	iP	09 07 16.3
		Sk	eP	09 06 24
		Um	iS	09 09 38.3
			iLgl	09 11 22.0
		Ud	eP	09 05 36
			i	09 05 45.0
			iS	09 07 41.9
		De	iP	09 04 43.6
			i(S)	09 06 13.6
			iS	09 06 22.5
		Austria (h = N).		
		The second phase at Up and		
		Ud could be interpreted as		
		pP for a focal depth of 55		
		km.		
"	17	Um	i	11 28 09.2
			i(Sgl)	11 28 25.2
"	17	Um	iPKP	13 03 06.5
		De	iPKP	13 03 23.3
		Santa Cruz Islands		
		(h = 130 km).		

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

1972 June	17	Um	iP	17 17 35.9
"	17	Up	iS*	19 01 41.6
			iSgl	19 01 48.0
		Ki	e(Sg2)	19 02 37
		Um	iS*	19 01 12.1
			iSgl	19 01 14.4
		Ud	iSn	19 02 00.7
			eS*	19 02 42
			iSgl	19 02 49.8
		De	eSgl	19 03 31

Lake Ladoga, 61.3°N, 31.1°E.
Origin time = 18 58 14.
Explosion.

"	17	Up	eP	19 29 19
		Ud	iP	19 29 26.6

Kurile Islands (h = 60 km).

"	17	Up	iPKP	22 53 48.5
			i	22 53 54.8
		Sk	ePKP	22 53 39
		Um	iPKP	22 53 37.1
		Ud	iPKP	22 53 50.5
			i	22 53 58.6
		De	iPKP	22 54 01.3
			i	22 54 11.7

Kermadec Islands (h = 70 km).

				micr	sec
"	18	Up			
			Mx	E	0.9	18
			Mx	Z	1.0	19
		Um	iPKP		01 19 57.7	

South Pacific Ocean (h = N).

"	18	Up	iP	04 39 39.4 D
		Ki	eP	04 39 41
		Ud	iP	04 39 54.9 D
"	18	Up	iSgl	06 25 39.4
		Ki	iPn	06 21 25.1
			iSn	06 22 22.3
			iS*	06 22 42.6
			iSgl	06 22 46.7
		Sk	eSgl	06 25 10
		Um	iSn	06 23 03.4
			iS*	06 23 32.8
			iSgl	06 23 39.2
		Ud	iSgl	06 26 15.2
		De	eSgl	06 27 36

Northwest USSR,
67.9°N, 33.7°E.
Origin time = 06 20 09.
Explosion.

"	18	Ki	iP	07 13 03.1 C

Mariana Islands (h = 110 km).

1972 June	18	Up	iSgl	09 21 59.0
		Ki	iPn	09 17 44.1
			iSn	09 18 41.5
			iSg2	09 19 11.0
		Sk	eSgl	09 21 30
		Um	iSn	09 19 23.6
			iSgl	09 19 58.0
		Ud	iSgl	09 22 32.2
		De	eSgl	09 23 57

Northwest USSR,
67.9°N, 33.7°E.
Origin time = 09 16 28.
Explosion.

"	18	Up	iP	13 14 04.1
		Ki	iP	13 13 46.6
"	18	Ki	iP	16 52 27.8

Iraq.

"	18	Um	iP	19 56 38.9
"	19	Up	iP	01 13 41.0 C
			ipP	01 13 56.8

			micr	sec
		P	Z'	0.2	1.0
		Mx	N	1.3	23
		Mx	Z	1.7	21
	Ki	iP		01 12 47.5 C	

			micr	sec
		P	Z'	0.1	0.9
		Mx	E	1.5	20
		Mx	N	1.0	19
		Mx	Z	0.9	16

		Sk	iP	01 13 21.5
		Um	iP	01 13 13.4 C
			ipP	01 13 29.0
		De	iP	01 14 04.3

Aleutian Islands.
h = 55 km (Up,Um).
m = 6.0, M = 5.3 (Up,Ki).

"	19	Up	ipP	01 20 14.5
		Ki	eP	01 19 11
			ipP	01 19 21.7
		Um	eP	01 19 35

Aleutian Islands.
h = 40 km (Ki).

				micr	sec
"	19	Up	iP	01 44 49.3	
			P	Z'	0.1	0.9
		Ki	eP	01 44 32	
			i	01 44 40.3	
		Sk	eP	01 44 56	
		Um	iP	01 44 38.1	

Mindoro (h = 50 km).

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

1972 June	19	Up	iP		01 45 43.1	
"	19	Up	iP		01 54 17.0	
					micr	sec
			P	Z'	0.1	1.0
			Mx	E	1.0	18
			Mx	N	1.5	21
			Mx	Z	1.4	17
		Ki	iP		01 53 22.3	
			i		01 53 28.2	
					micr	sec
			P	Z'	0.1	1.0
			Mx	E	3.0	17
			Mx	N	1.3	17
			Mx	Z	3.1	18
		Sk	eP		01 53 59	
		Um	iP		01 53 48.4	
		Komandorsky Islands (h = N).				
		m = 5.9, M = 5.4 (Up,Ki).				
"	19	Up	eP1		06 06 21	
			iP2		06 06 24.0	
			iP3		06 06 28.4	
			iS		06 10 52	
					micr	sec
			P2	Z'	0.1	1.0
			P3	Z'	0.1	0.9
			Mx	E	1.2	20
			Mx	N	1.8	20
			Mx	Z	2.3	21
		Ki	iP1		06 06 21.1	
			iP2		06 06 23.2	
			iP3		06 06 28.0	
					micr	sec
			P2	Z'	0.1	0.9
			P3	Z'	0.1	0.9
			Mx	E	1.8	15
			Mx	N	1.2	18
			Mx	Z	1.6	15
		Sk	iP2		06 05 52.1	
		Um	iP1		06 06 24.5	
			iP2		06 06 27.2	
		North Atlantic Ocean (h = N).				
		m = 5.5, M = 4.7 (Up,Ki).				
		Multiple P. In average:				
		P2 - P1 = 2.6 sec, P3 - P1 =				
		= 7.3 sec.				
		If P3 is interpreted as pP,				
		the focal depth is 25 km.				
"	19	Ki	iPKP		12 08 38.8	
		Sk	iPKP		12 08 50.0	
		Um	iPKP		12 08 44.9	
		New Hebrides Islands				
		(h = 35 km).				
"	19	Up	eP		12 20 00	
		(cont.)				
1972 June	19	(cont.)				
		Ki	iP		12 19 56.5	
		Sk	iP		12 19 29.2	
		Um	iP		12 20 02.9	
		North Atlantic Ocean (h = N).				
"	19	Up	iP		15 24 01.6	C
			ipP		15 24 11.8	
					micr	sec
			P	Z'	0.2	0.9
		Ki	iP		15 23 09.5	C
			ipP		15 23 21.2	
					micr	sec
			P	Z'	0.1	1.0
		Sk	eP		15 23 40	
			ipP		15 23 49.5	
		Um	iP		15 23 35.1	C
			i		15 23 48.5	
		De	iP		15 24 23.7	
		Aleutian Islands.				
		h = 40 km (Up,Ki,Sk).				
		m = 6.1 (Up,Ki).				
"	19	Up	iSgl		15 45 53.6	
		Ki	eSgl		15 48 05	
		Sk	eSgl		15 47 41	
		Um	iSgl		15 46 17.5	
		De	i(Sgl)		15 47 26.0	
		Western USSR.				
		Explosion.				
"	19	Ki	iP		15 58 35.0	
"	19	Ki	eP		18 18 16	
		Kurile Islands (h = N).				
"	19	Up	iP		21 58 47.9	
		De	iP		21 59 00.4	
"	20	Up			micr	sec
			Mx	E	0.5	19
			Mx	N	0.8	19
			Mx	Z	1.1	20
		Ki	i(PKP2)		02 02 20.3	
			iPKP2		02 02 34.8	
					micr	sec
			PKP2	Z'	0.1	1.2
			Mx	E	0.6	18
			Mx	N	1.4	20
			Mx	Z	1.4	20
		Sk	ePKP2		02 02 42	
		Um	iPKP2		02 02 27.6	
		De	iPKP2		02 02 26.2	
		Southwest of Macquarie Islands				
		(h = N).				
		M = 5.8 (Up,Ki).				

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

1972 June	20	Sk	eP		02 46 38
		De	eP		02 45 36
		Crete.			
"	20	Up	iP		04 25 54.4
		Ki	iP		04 24 59.3
			ipP		04 25 24.9
		Sk	eP		04 25 29
		Um	iP		04 25 29.2
		De	iP		04 26 16.7
			ipP		04 26 42.5
		Alaska.			
		h = 100 km (Ki,De).			
"	20	Up	iP		05 33 43.1 C
			iPP		05 35 27.3
					micr sec
			P	Z'	0.1 0.8
		Ki	iP		05 33 51.1 C
		Sk	iP		05 34 08.2 C
		Um	iP		05 33 40.9 C
			iPP		05 35 23.3
		De	iP		05 33 56.5 C
		Afghanistan-USSR (h = 110 km).			
"	20	Up	ePKP		10 37 44
		Sk	ePKP		10 37 41
		Um	ePKP		10 37 37
		Santa Cruz Islands			
		(h = 140 km).			
"	20	Up	iP		10 43 39.0
		Ki	eP		10 42 59
		Um	iP		10 43 15.9
		De	iP		10 44 02.6
		Sea of Japan (h = 420 km).			
"	20	Ud	iP		13 39 00.9
"	20	Ki	iP		14 12 33.0
		Ud	iP		14 12 42.5
		Afghanistan-USSR (h = 130 km).			
"	20	Ki	iP		15 30 45.4
		Java (h = 90 km).			
"	20	Um	iP		17 19 41.9
"	20	Up	eP		18 39 08
		Ki	iP		18 38 49.5
		Um	iP		18 38 50.8
			i		18 39 28.6
		Ud	iP		18 39 13.4
		Talaud Islands (h = 80 km).			
"	21	Ud	e(P)		02 51 21

1972 June	21	Up	eP		03 49 04
		Ki	eP		03 47 27
		Sk	eP		03 48 16
		Um	iP		03 48 16.6
		Ud	iP		03 48 53.6
		Greenland Sea (h = N).			
"	21	Ki	iP		05 12 07.9
		Um	iP		05 11 32.1
		De	iP		05 10 36.8
		Turkey (h = N).			
"	21	Um	i(P)		09 01 42.1
"	21	Ud	iP		09 21 36.5
"	21	Ki	iPn		11 36 54.3
			iSn		11 37 53.7
			iS*		11 38 12.5
		Sk	eSgl		11 40 41
		Um	i(S*)		11 39 01.4
			iSgl		11 39 06.0
		Northwest USSR,			
		67.6°N, 34.1°E.			
		Origin time = 11 35 35.			
		Explosion.			
"	21	Ud	iPgl		11 37 38.0
			iSgl		11 37 55.8
		De	iSgl		11 38 28.8
		Väner region, Sweden.			
		Origin time = 11 37 15.			
"	21	Ud	i(Sgl)		15 13 00.9
		De	i(Sgl)		15 11 10.3
"	21	Up	eP		15 41 21
			ipP		15 41 31.3
					micr sec
			P	Z'	0.1 1.3
			pP	Z'	0.1 1.1
			Mx	E	3.0 16
			Mx	N	3.1 16
			Mx	Z	5.0 17
		Ki	iP		15 40 47.7
			ipP		15 40 57.2
					micr sec
			pP	Z'	0.1 1.1
			Mx	E	7.3 19
			Mx	N	5.5 19
			Mx	Z	7.6 18
		Sk	ipP		15 41 29.8
		Um	iP		15 41 01.0
			ipP		15 41 12.0
		Ud	iP		15 41 30.0
			ipP		15 41 40.1

(cont.)

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

1972
June 21 (cont.)
De ipP 15 41 53.0
Japan.
h = 40 km (Up,Ki,Um,Ud).
m = 5.9, M = 5.9 (Up,Ki).

" 21 Up iP 19 20 51.3
Um iP 19 20 51.1
Ud iP 19 20 41.5

" 22 Um eP 02 46 10
Ud iP 02 46 41.8
Kurile Islands.

" 22 Up iP 06 07 26.8
Ki iP 06 06 30.7
Sk iP 06 06 58.0
Um iP 06 06 59.3
Alaska (h = 50 km).

" 22 Ki eP 06 19 51
micr sec
Mx E 0.5 14
Mx N 0.4 12
Mx Z 0.5 12
Ud eP 06 20 32
Japan (h = 50 km).

" 22 Ki iPn 10 30 45.1
iSn 10 31 33.6
iSgl 10 31 47.9
Um iSgl 10 33 19.6
Northwest USSR-Norway border region, 69.6°N, 30.7°E.
Origin time = 10 29 41.
Explosion.

" 22 Up iPKP 11 03 49.5
Sk ePKP 11 03 42
Um iPKP 11 03 37.1
Ud iPKP 11 03 50.6
De iPKP 11 03 59.2
Kermadec Islands (h = 60 km).

" 22 Um i(P) 11 33 03.3

" 22 Up iP 14 52 31.9
Ki iP 14 50 52.2
i 14 51 01.5
Sk eP 14 51 49
Um iP 14 51 45.0
Ud iP 14 52 21.9
i 14 52 31.0
Greenland Sea.

" 22 Ud iP 19 49 52.2

1972
June 23 Um iP 02 00 26.7
Ud eP 02 00 52

" 23 Ud eP 02 42 33

" 23 Ki eP 04 21 05
Sk eP 04 20 33
Ud eP 04 21 10
Iceland.

" 23 Up eP 06 55 37
Ki iP 06 56 38.9
Um iP 06 56 08.2
Ud iP 06 55 47.6
De iP 06 55 22.0
Turkey (h = N).

" 23 Up iP 08 46 07.1
Ki iP 08 46 51.9 C
Um iP 08 46 25.2
Ud iP 08 46 22.5 C
De iP 08 46 03.3 C
Iran-Iraq (h = 40 km).

" 23 Up iP 09 00 04.0
Ki iP 08 59 28.3
Sk eP 09 00 02
Um iP 08 59 43.1
i 09 00 12.7
Ud iP 09 00 11.4
De eP 09 00 27
Japan (h = 70 km).

" 23 Um iP 09 05 34.1
Ud iP 09 05 42.6

" 23 Up iSgl 11 27 09.0
Ud ePn 11 25 30
eSn 11 26 16
iSgl 11 26 28.2
De ePn 11 25 18
eSn 11 25 50
Northern Denmark, 57.2°N, 9.4°E.
Origin time = 11 24 35.

" 23 Up i 12 23 29.2
iSgl 12 23 51.2
Um iSgl 12 24 01.5
Ud iS* 12 24 41.4
iSgl 12 24 48.8
De eSgl 12 25 12
Western USSR, 59.2°N, 29.6°E.
Origin time = 12 20 39.
Explosion.

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

1972					
June	23	Um	eP		13 06 38
"	23	Up	iSgl		13 33 35.8
		Um	eSgl		13 33 53
		Ud	iSgl		13 34 34.6
		Western USSR.			
		Explosion.			
"	23	Up	iP		14 23 12.9
		Ki	iP		14 22 19.2 C
					micr sec
			P	Z'	0.1 1.0
		Sk	eP		14 22 49
		Um	iP		14 22 46.5
		Ud	iP		14 23 11.5 C
		De	iP		14 23 34.0
		Aleutian Islands (h = 25 km).			
"	23	Ki	iSKP		16 26 45.1
		Ud	iPKP		16 24 18.0
		De	iPKP		16 24 27.8
		Fiji Islands (h = 600 km).			
"	23	Up	iP		16 41 23.5 C
					micr sec
			P	Z'	0.1 0.9
		Ki	iP		16 40 51.3 C
					micr sec
			P	Z'	0.1 0.9
		Sk	iP		16 41 22.0 C
		Um	iP		16 41 04.9 C
			iPcP		16 41 18.1
		Ud	iP		16 41 31.4 C
		De	eP		16 41 43
		South of Japan (h = 510 km).			
		m = 5.3 (Up,Ki).			
"	23	Ud	iP		17 21 08.4
		Turkey.			
"	23	Ud	iP		19 40 02.3
"	23	Ki	iPKP		19 51 10.5
		Um	iPKP		19 51 16.6
		New Hebrides Islands			
		(h = 200 km).			
"	24	Ud	iP		02 42 32.1
"	24	Ud	iP		06 15 56.6
"	24	Ud	iP		07 04 49.2
"	24	Up	iP		07 21 44.6
		Ki	eP		07 23 17
		Sk	eP		07 22 28
		Um	iP		07 22 29.1
		(cont.)			

1972					
June	24	(cont.)			
		Um	iPP		07 22 51.9
		Ud	iP		07 21 46.0
		De	eP		07 21 11
		Yugoslavia (h = N).			
"	24	Up	iP		07 34 09.5
		Um	iP		07 34 05.4
		Ud	iP		07 34 26.5
		Tadzhik SSR (h = 190 km).			
"	24	Up	i(P)		09 35 11.2
		Ud	iP		09 34 28.1
			i		09 34 45.2
"	24	Ki	ePn		09 59 44
			iSn		10 00 30.1
			iSgl		10 00 46.9
		Northwest USSR-Norway border			
		region.			
		Explosion.			
"	24	Up	iSgl		11 09 39.8
		Um	iSgl		11 09 56.3
		Ud	i		11 10 31.2
			iSgl		11 10 39.9
		Western USSR.			
		Explosion.			
"	24	Ki	i(Sn)		12 16 44.9
			i(Sgl)		12 17 06.7
		Um	e(Sgl)		12 18 04
		Northwest USSR.			
		Explosion.			
"	24	Ud	iP		12 34 20.4
"	24	Ud	eP		13 18 03
"	24	Up	iPKP		15 24 02.3
		Tonga Islands (h = N).			
"	24	Up	iP		15 36 57.9 D
			iPP		15 38 27
			iS		15 43 04
			iSa		15 45 18
					micr sec
			P	Z'	0.6 0.9
			PP	Z'	0.9 1.1
			Mx	E	47 14
			Mx	N	38 14
			Mx	Z	83 14
		Ki	iP		15 37 08.4 D
			ipP		15 37 22.6
			iPP		15 38 47
			iS		15 43 24
		(cont.)			

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

1972
June 24 (cont.)

Ki			micr	sec
	P	Z'	1.2	1.8
	Mx	E	44	11
	Mx	N	29	8
	Mx	Z	35	11
Sk	iP		15 37 24.9 D	
Um	iP		15 36 57.3 D	
	iPP		15 38 21	
	i		15 38 37	
	iS		15 43 03	
Ud	iP		15 37 15.0 D	
	iPP		15 38 55.4	
De	iP		15 37 10.5 D	
	iPP		15 38 54.1	

Hindu Kush.
h = 50 km (Ki).
m = 6.4, M = 6.7 (Up,Ki).

" 24 Up iP 18 04 00.8
Off coast of Oregon (h = N).

" 24 Up iP 18 42 37.9
Sk eP 18 43 02
Um eP 18 42 38
Ud eP 18 42 52
Hindu Kush (h = 100 km).

" 24 Ud eP 19 01 01

" 24 Up eP 21 25 38
Um eP 21 25 38
Ud iP 21 25 51.2
Hindu Kush (h = N).

" 24 Up iP 23 07 57.8
Ud iP 23 08 14.7
Hindu Kush (h = N).

" 24 Up iP 23 33 18.6 C
ipP 23 34 16.4
iPP 23 37 25.0

			micr	sec
	PP	Z'	0.1	1.3
Ki	iP		23 33 03.3 C	
	ipP		23 33 59.8	
			micr	sec
	P	Z'	0.3	1.1
	Mx	N	0.4	18
Sk	iP		23 33 24.2	
Um	iP		23 33 08.4 C	
	ipP		23 34 04.4	
Ud	iP		23 33 27.1 C	
	ipP		23 34 21.1	
	isP		23 34 47.7	
De	iP		23 33 33.1	

(cont.)

1972
June 24 (cont.)
De ipP 23 34 27.6
iPP 23 37 48.0
Halmahera.
h = 230 km (Up,Ki,Um,Ud,De).
m = 6.0 (Up,Ki).

" 25 Long-period microseisms (periods around 14-15 sec) recorded, especially clear on Umeå LP N-component.

" 25 Up iP 05 03 02.3
Sk iP 05 03 44.8
Um iP 05 03 47.3
Ud iP 05 03 04.3
Yugoslavia (h = N).

" 25 Up i(P) 05 52 34.7

" 25 Um iPKP 06 39 09.5 C
New Hebrides Islands (h = N).

" 25 Up iP 08 03 20.9
i 08 03 27.7
iPP 08 04 52.5

			micr	sec
	P	Z'	0.1	0.8
Ki	eP		08 03 33	
			micr	sec
	Mx	N	0.4	12
	Mx	Z	0.4	11
Sk	iP		08 03 47.4	
	iPP		08 05 27.4	
Um	iP		08 03 20.3 C	
	iPP		08 04 48.8	
Ud	iP		08 03 37.7 C	
	i		08 03 44.8	
	ipP		08 03 51.6	
	iPP		08 05 16.2	
De	iP		08 03 33.5	
	ipP		08 03 47.0	
	iPP		08 05 11.8	

Hindu Kush.
h = 55 km (Ud,De).

" 25 Um iP 14 24 04.6
Japan (h = 50 km).

" 25 Up iPKP 15 52 32.6
Um iSKP 15 55 15.7
Ud iPKP 15 52 34.9
De iPKP 15 52 45.6
Tonga-Kermadec Islands (h = 520 km).

" 25 Um iP 17 15 19.9
Italy (h = 15 km).

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

1972					
June	25	Um	iP		17 38 28.2
"	25	Um	eP		21 33 53
		Japan (h = N).			
"	26	Up	iPKP		00 16 29.4
		Um	iPKP		00 16 27.3
			iSKP		00 19 14.7
		Ud	iPKP		00 16 31.7
		De	iPKP		00 16 42.2
		Tonga-Kermadec Islands (h = 460 km).			
"	26	Um	iP		00 55 09.3
		Ud	iP		00 55 28.3
		Hindu Kush (h = 55 km).			
"	26	Up	iP		05 02 38.6
		Ki	eP		05 02 08
		Um	iP		05 02 21.1
		Ud	iP		05 02 46.2
"	26	Up	eP		06 37 05
		Ki	eP		06 36 29
		Um	iP		06 36 44.8
		Japan (h = 60 km).			
"	26	Up	iP		08 20 21.6
					micr sec
			Mx	E	1.0 13
			Mx	N	0.7 15
			Mx	Z	1.1 14
		Ki	iP		08 20 02.3
					micr sec
			P	Z'	0.1 1.3
			Mx	E	1.0 16
			Mx	N	0.7 15
		Um	iP		08 20 09.8
		Ud	iP		08 20 31.2
		Formosa (h = N).			
		M = 5.4 (Up,Ki).			
"	26	Up	iP		10 16 10.2
			iPcP		10 16 45.0
			ipP		10 16 56.7
					micr sec
			P	Z'	0.5 1.1
		Ki	iP		10 15 18.5
			ipP		10 16 04.3
			iPcP		10 16 15.3
					micr sec
			P	Z'	0.3 1.0
		Sk	iP		10 15 56.1
			iPcP		10 16 36.3
		Um	iP		10 15 43.4
			iPcP		10 16 28.3
		(cont.)			

1972					
June	26	(cont.)			
		Ud	iP		10 16 15.1
			iPcP		10 16 48.5
			ipP		10 17 01.0
		De	iP		10 16 35.8
			iPcP		10 17 00.9
		Kamchatka.			
		h = 200 km (Up,Ki,Ud).			
		m = 6.1 (Up,Ki).			
"	26	Up	iSgl		12 24 15.6
		Um	iSgl		12 24 31.3
		Ud	iSgl		12 25 16.1
		De	eSgl		12 25 42
		Western USSR.			
		Explosion.			
"	26	Sk	eP		12 37 56
		Ud	iP		12 37 24.6
		De	eP		12 36 53
		Dodecanese Islands (h = 80 km).			
"	26	Ud	iP		16 07 47.0
		De	iP		16 07 24.7
"	26	Up	iP		16 14 58.3
					micr sec
			P	Z'	0.3 2.2
		Ki	iP		16 15 31.2
					micr sec
			P	Z'	0.3 2.5
		Sk	eP		16 15 05
		Um	eP		16 15 20
		Ud	iP		16 14 48.1
		De	iP		16 14 36.9
		Atlantic Ocean (h = N).			
		m = 6.1 (Up,Ki).			
"	26	Up	iP		16 41 59.7
					micr sec
			P	Z'	0.2 2.0
		Ki	iP		16 42 34.0
					micr sec
			P	Z'	0.1 1.7
		Um	iP		16 42 20.2
		Ud	iP		16 41 50.4
		De	iP		16 41 37.6
		Atlantic Ocean (h = N).			
		m = 5.8 (Up,Ki).			
"	26	Up	iPKP		18 00 11.6
		Ki	iSKP		18 02 46.6
		Um	ipPKP		18 02 05.8
		Ud	iPKP		18 00 14.1
		Tonga-Kermadec Islands (h = 490 km).			
"	26	Um	iP		21 06 36.8
		(cont.)			

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

1972
June 26 (cont.)

Ud	iP		21 06 55.5

Hindu Kush.

" 26	Um	iP	21 36 45.1
" 26	Up	ePl	23 40 05
	Ki	iPl	23 39 45.5 C
		iP2	23 39 49.1
	Sk	eP2	23 40 14
	Um	iPl	23 39 52.3
		iP2	23 39 55.6
	Ud	iPl	23 40 14.6
		iP2	23 40 17.8
	De	iP2	23 40 21.7

Luzon (h = 50 km).

" 27	Ud	iP		02 04 46.0	
" 27	Ud	iPKP		05 18 38.9	
	De	iPKP		05 18 49.6	
" 27	Up	iP		06 48 09.7	
				micr	sec
		P	Z'	0.1	1.2
	Ki	iP		06 48 24.4	
				micr	sec
		P	Z'	0.1	1.2
	Sk	iP		06 48 36.9	
	Um	iP		06 48 11.8	
	Ud	iP		06 48 25.8	
	De	iP		06 48 19.1	

Pakistan (h = 10 km).
m = 5.8 (Up,Ki).

" 27	De	iPKP		08 36 11.0

New Britain (h = 60 km).

" 27	Up	iP		09 16 14.3
	Ki	iP		09 16 05.4
	Sk	eP		09 16 29
	Um	iP		09 16 05.4
		ipP		09 16 13.7
	Ud	iP		09 16 27.9
		ipP		09 16 36.0
	De	iP		09 16 31.3

Burma.
h = 30 km (Um,Ud).

" 27	Up	iP		10 57 21.3	
	Ki	iP		10 57 35.9 C	
				micr	sec
		P	Z'	0.1	1.0
	Sk	iP		10 57 48.8	
	Um	iP		10 57 23.3	
		i		10 58 05.8	

(cont.)

1972
June 27 (cont.)

Ud	iP		10 57 37.4
De	iP		10 57 30.9

Pakistan (h = 10 km).

" 27	Ud	iP		12 25 14.0
		i		12 25 51.4
" 27	Ki	eSgl		13 05 12
	Sk	iSgl		13 04 21.8
	Um	iSgl		13 03 14.3
	Ud	iSgl		13 03 37.4

Esthonia.
Explosion.

" 27	Ud	iP		14 56 36.3
" 27	Up	iPl		16 07 10.2
		iP2		16 07 15.8
				micr sec
		P2	Z'	0.1 1.2
		Mx	E	0.8 15
		Mx	N	0.3 10
		Mx	Z	1.2 13
	Ki	iP2		16 07 26.3
				micr sec
		Mx	E	0.8 11
		Mx	N	0.4 12
		Mx	Z	0.9 11
	Sk	ePl		16 07 37
		iP2		16 07 43.4
	Um	iPl		16 07 09.7
		iP2		16 07 14.9
		iPP		16 08 38.2
	Ud	iPl		16 07 26.9
		iP2		16 07 33.3
	De	ePl		16 07 23
		iP2		16 07 29.7

Hindu Kush (h = 55 km).
M = 4.9 (Up,Ki).
Double P, in average 6.0 sec apart.

" 27	Up	iP		19 52 16.3
	Ki	eP		19 52 06
	Sk	iP		19 51 59.2
	Um	iP		19 52 14.1
	Ud	iP		19 52 08.4
	De	iP		19 52 14.1

Guatemala (h = 70 km).

" 27	Ki	eP		23 18 30
	Um	iP		23 18 46.2
	Ud	eP		23 19 14
		ipP		23 19 28.4

Japan.
h = 55 km (Ud).

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

1972 June	28	Up	eP		00 06 33	
		Ki	eP		00 05 58	
		Um	iP		00 06 11.5	
		Ud	iP		00 06 39.4	
		Japan (h = 45 km).				
"	28	Ki			micr	sec
			Mx	E	0.6	15
		Sk	iP		01 48 43.0	
		Um	iP		01 48 37.8	
		Ud	eP		01 48 05	
		Yugoslavia (h = N).				
"	28	Up	iP		02 02 04.1	C
			ipP		02 02 19.9	
					micr	sec
			P	Z'	0.1	0.9
		Ki	iP		02 01 24.6	C
					micr	sec
			P	Z'	0.1	0.8
		Sk	iP		02 01 58.4	C
			ipP		02 02 15.0	
		Um	iP		02 01 42.2	C
			i		02 01 45.8	
			ipP		02 01 57.7	
		Ud	iP		02 02 11.5	C
			ipP		02 02 27.4	
		De	iP		02 02 26.4	C
		Japan.				
		h = 60 km (Up,Sk,Um,Ud).				
		m = 5.8 (Up,Ki).				
"	28	Ud	iP		03 10 33.9	
"	28	Ud	iP		03 19 32.7	
"	28	Ki	iPKP		06 34 09.4	
		Ud	ePKP		06 34 26	
		De	ePKP		06 34 35	
"	28	Up	iP		08 22 34.8	
		Ki	iP		08 23 33.8	
		Ud	iP		08 22 45.1	
"	28	Up	iP		09 39 30.2	C
			ipP		09 39 45.8	
					micr	sec
			pP	Z'	0.1	1.1
		Ki	iP		09 38 53.5	C
		Sk	iP		09 39 25.4	
			ipP		09 39 41.9	
		Um	iP		09 39 09.6	C
			ipP		09 39 25.9	
		Ud	iP		09 39 37.4	C
			ipP		09 39 52.5	
		De	iP		09 39 51.1	
		Japan.				
		h = 60 km (Up,Sk,Um,Ud).				

1972 June	28	Up	iSgl		09 56 58.0	
		Ud	iSgl		09 57 00.9	
		De	iPgl		09 54 57.9	
			iSgl		09 55 12.4	
		Baltic Sea, south of Sweden, 55.7°N, 15.0°E.				
		Origin time = 09 54 40.				
		Explosion.				
"	28	Up	iP2		09 56 19.3	D
			ipP		09 56 24.6	
			iS		10 01 48	
					micr	sec
			P2	Z'	0.4	1.4
			Mx	E	1.2	20
			Mx	N	1.4	16
			Mx	Z	1.5	16
		Ki	iP1		09 57 17.2	
			iP2		09 57 17.9	D
			ipP		09 57 23.3	
			iPP		09 58 51	
					micr	sec
			P2	Z'	0.4	1.4
			Mx	E	1.4	17
			Mx	N	2.6	17
			Mx	Z	1.5	16
		Sk	eP1		09 56 56	
			iP2		09 56 57.3	D
		Um	iP1		09 56 45.0	
			iP2		09 56 46.2	D
			ipP		09 56 51.2	
			i		09 59 04.9	
			eS		10 02 25	
		Ud	iP2		09 56 29.5	D
			ipP		09 56 34.7	
		De	iP2		09 56 03.1	D
		United Arab Republic.				
		h = 15 km (Up,Ki,Um,Ud).				
		m = 6.1, M = 5.1 (Up,Ki).				
		The small phase P1 precedes P2 by about 1.1 sec.				
"	28	Up	iRg		13 43 00.4	
		Ud	iSgl		13 43 31.9	
			iRg		13 43 45.0	
		De	iSgl		13 44 15.3	
		Off coast of Södermanland, Sweden.				
		Explosion.				
"	28	Up	i(Pgl)		13 46 26.7	
			i(Rg)		13 46 53.7	
		Ud	i(Sgl)		13 46 59.9	
		De	i(Rg)		13 47 32.0	
		Central Sweden.				
		Explosion.				

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

1972 June	28	Ki	iP	14 01 38.6
		Um	iP	14 02 18.0
		Ud	iP	14 02 47.2
"	28	Up	iP	15 59 03.8
		Ki	iP	15 58 24.7 C
		Sk	iP	15 58 58.6
		Um	iP	15 58 42.2 C
			i	15 58 52.2
		Ud	iP	15 59 10.8 C
		De	iP	15 59 25.4
		Japan (h = 55 km).		
"	28	Ud	eP	18 21 09
"	28	Ki	iSgl	20 37 07.0
		Sk	eSgl	20 37 11
		Um	iSn	20 37 21.3
			iSgl	20 37 35.3
		Ud	iSg2	20 39 02.7
		Nordland, Norway, 66.5°N, 14.0°E.		
		Origin time = 20 35 37.		
		Explosion.		
"	28	Ud	iP	21 05 15.6
"	28	Up	eP	21 14 23
		Ud	iP	21 14 10.1
"	28	Ud	iP	21 30 55.1
"	29	Ud	i(P)	02 39 11.6
"	29	Up	eP	03 39 36
			iPP	03 41 04.3
		Ki	eP	03 39 40
		Sk	iPP	03 41 37.8
		Um	iP	03 39 32.2
		Ud	iP	03 39 53.0
			i	03 39 57.2
		De	iP	03 39 50.9
		Afghanistan-USSR (h = 55 km).		
"	29	Up	iP	03 56 59.7
		Ki	iP	03 56 39.7
				micr sec
			Mx E	0.5 18
			Mx N	0.4 18
		Um	iP	03 56 44.3
		Ud	iP	03 57 06.8 C
			i	03 57 14.3
		Samar (h = 70 km).		
"	29	Ud	iP	04 26 01.0
"	29	Ud	iPKP	05 19 57.2
		De	ePKP	05 20 08

1972 June	29	Um	i(P)	07 03 28.8
"	29	Um	i(P)	08 05 36.3
"	29	Up	iPKP	08 45 53.0
		Um	iPKP	08 45 43.4 C
		Ud	iPKP	08 45 55.1
"	29	Um	iP	08 48 59.0
		Alternatively, this could be SKP to the preceding event.		
"	29	Um	i(Sgl)	12 55 33.3
"	29	Um	i(P)	13 44 13.5
"	29	De	iP	14 01 47.7
"	29	De	i(P)	14 04 06.7
"	29	Ud	iP	15 39 50.1
"	29	Up	iP	15 42 43.9
		Ud	eP	15 42 55
"	29	Up	ePKP	16 40 59
		Ud	ePKP	16 41 01
		Solomon Islands (h = 40 km).		
"	29	Up	iP	17 27 00.9
			iPcP	17 27 33.4
		Ki	iP	17 26 10.3
			iPcP	17 27 03.7
				micr sec
			P Z'	0.1 0.9
		Sk	iP	17 26 47.0
			iPcP	17 27 24.9
		Um	iP	17 26 34.4
			iPcP	17 27 17.2
		Ud	iP	17 27 05.6
			iPcP	17 27 35.8
		De	iP	17 27 25.8
			iPcP	17 27 49.7
		Kurile Islands (h = 210 km).		
"	29	Um	iP	19 44 27.8
"	29	Ud	iP	20 04 43.8
"	29	Ud	i(P)	21 44 06.4
"	30	Long-period microseisms (periods around 15-16 sec) recorded, especially clear on Umeå LP N-component.		

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

1972 June	30	Ud	iP	00 04 18.1
"	30	Up	eP	04 09 18
		Ki	iP	04 09 06.9
		Sk	iP	04 09 00.4
			ipP	04 09 12.1
		Um	iP	04 09 15.3
			ipP	04 09 27.2
		Ud	iP	04 09 08.8 C
			ipP	04 09 21.3
		De	eP	04 09 16
		Mexico.		
		h = 45 km (Sk,Um,Ud).		
"	30	Ud	iP	08 42 36.0
		De	iP	08 42 28.7
"	30	Ki	iPn	09 56 59.6
			iSn	09 57 45.8
			iS*	09 57 58.8
		Sk	eSgl	10 00 52
		Um	iSgl	09 59 34.7
		Northwest USSR-Norway border region, 69.5°N, 30.3°E.		
		Origin time = 09 55 59.		
		Explosion.		
"	30	Um	iSgl	12 08 08.5
		Western USSR.		
		Explosion.		
"	30	Up	iSn	12 27 48.2
			iSgl	12 28 01.8
		Ki	e(Sg2)	12 30 38
		Sk	eSgl	12 29 51
		Um	iSgl	12 28 35.0
		Ud	iSgl	12 29 04.2
		De	iSgl	12 29 31.2
		Esthonia, 59.5°N, 25.1°E.		
		Origin time = 12 26 00.		
		Explosion.		
"	30	Ki	iP	12 57 46.4
				micr sec
			Mx E	0.7 19
			Mx N	0.7 23
			Mx Z	1.0 21
		Sk	eP	12 57 45
		Mexico (h = N).		
"	30	Up	iPKP	12 58 03.9
		Ki	iPKP	12 58 00.3
		Sk	ePKP	12 58 03
			i	12 58 10.2
		Um	ePKP	12 58 02
			i	12 58 07.5
			iSKP	13 00 42.4
		(cont.)		

1972 June	30	(cont.)		
		Ud	iPKP	12 58 04.7
		De	iPKP	12 58 15.6
		Fiji Islands (h = 600 km).		
"	30	Up	iP	13 47 54.3
		Ki	eP	13 47 29
		Um	iP	13 47 38.3
		Ud	iP	13 48 03.5
		De	eP	13 48 16
		Ryukyu Islands (h = 80 km).		
"	30	Ud	iP	14 45 47.7
"	30	Up	iP	17 57 24.0
			i	17 57 33.0
		Ki	iP	17 57 55.8
			i	17 58 06.1
		Sk	iP	17 57 57.3
			i	17 58 06.3
		Um	iP	17 57 35.1
			i	17 57 44.1
		Ud	iP	17 57 39.0
			i	17 57 48.0
		De	iP	17 57 24.2
			i	17 57 34.2
		Iran (h = N).		
		The second phase can be interpreted either as another event from the same focal area, or as pP for a focal depth of 35 km.		
"	30	Ud	iPKP	19 07 30.4
		De	ePKP	19 07 41
"	30	Up	iP	19 09 27.6
			i	19 09 43.8
				micr sec
			Mx E	0.7 18
			Mx N	0.8 17
			Mx Z	0.5 17
		Ki	iP	19 09 03,3
				micr sec
			Mx E	0.6 16
			Mx N	0.6 16
			Mx Z	0.6 16
		Sk	eP	19 09 28
		Um	iP	19 09 11.2
		Ud	iP	19 09 36.6
		De	eP	19 09 46
		Formosa (h = N).		
		M = 5.2 (Up,Ki).		
"	30	Up	eP	20 38 53
		Ki	eP	20 39 29
		Sk	eP	20 39 28
		(cont.)		

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

1972				
June	30	(cont.)		
		Um	eP	20 39 09
		Ud	iP	20 39 07.8
		Iran.		
		Origin time = 20 31 25.		
"	30	Ki	iSgl	20 45 44.7
		Sk	iSgl	20 45 52.4
		Um	iSn	20 45 57.5
			iSgl	20 46 12.2
		Ud	iSgl	20 47 38.5
		Nordland, Norway,		
		66.5°N, 14.1°E.		
		Origin time = 20 44 16.		
		Explosion.		
"	30	Ki	iP	20 58 59.2
		Ud	iP	20 58 34.2
"	30	Ud	eP	22 07 26.4

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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 L Y 1 - 31, 1972

1972 July	1	Up	iS*	04 34 02.6
			iSg2	04 34 17.0
		Ud	iSg2	04 34 09.1
		De	iPgl	04 31 50.1
			iSgl	04 32 12.6

Baltic Sea, south of Sweden, 54.9°N, 13.4°E.
Origin time = 04 31 22.
Explosion.

"	1	Up	iS*	04 35 24.9
			iSg2	04 35 38.3
		Ud	iSg2	04 35 29.5
		De	iPgl	04 33 13.0
			iSgl	04 33 35.4

Baltic Sea, south of Sweden, 54.9°N, 13.4°E.
Origin time = 04 32 45.
Explosion.

"	1	Ud	iPKP	06 04 11.2
		De	iPKP	06 04 19.8

Tonga Islands (h = 40 km).

"	1	Um	iP	07 23 04.9
		Ud	eP	07 23 20
"	1	Up	iP	08 29 04.6
		Ki	eP	08 28 49
		Ud	eP	08 29 13
"	1	Up	iPKP	10 41 58.8
		Ki	iPKP	10 41 42.4
		Sk	iPKP	10 41 53.6
			iPKP2	10 42 06.1
		Um	iPKP	10 41 48.6 C
			iPKP2	10 42 01.9
		Ud	iPKP	10 42 00.5
		De	iPKP2	10 42 32.8

South of Kermadec Islands (h = 60 km).

1972 July	1	Ki	iP	12 22 51.9
		Um	iP	12 23 03.6
"	1	De	iP	12 39 18.9
"	1	Up	iSn	12 41 14.8
			iSgl	12 41 26.1
		Ki	iSgl	12 44 03.9
		Sk	iSgl	12 43 16.8
		Um	iSgl	12 42 02.8
		Ud	eSgl	12 42 29
		De	iSgl	12 42 53.7

Esthonia, 59.5°N, 24.8°E.
Origin time = 12 39 30.
Explosion.

"	1	Up	iP	13 59 24.1
		Ki	iP	13 59 34.2
		Sk	iP	13 59 50.2
		Um	iP	13 59 22.9 C
		Ud	iP	13 59 41.0

Hindu Kush (h = 130 km).

"	1	Up	iSgl	17 28 11.4
		Ki	eSgl	17 29 11
		Sk	ePgl	17 25 55
			iSgl	17 26 27.0
		Um	iSgl	17 28 18.5
		Ud	iSgl	17 27 16.4
			iSg2	17 27 23.1
		De	iSgl	17 28 47.7

West coast of Norway, 62.8°N, 7.5°E.
Origin time = 17 25 14.

"	1	Up	eP	23 08 25
		Ki	eP	23 08 15
		Ud	iP	23 08 15.4

Mexico (h = N).

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

1972 July	2	Up	iP		00 18 56.7
		Ki	iP		00 19 05.1 C
		Sk	iP		00 19 22.1
		Um	iP		00 18 54.7 C
		Ud	iP		00 19 13.4
		Hindu Kush (h = 250 km).			
"	2	Up	iX		00 47 38.3
		Ki	eP		00 47 16
		Sk	eX		00 47 18
		Um	iP		00 47 25.6
			iX		00 47 31.7
			ipP		00 47 40.7
		Ud	iP		00 47 22.7
		Mexico.			
		h = 55 km (Um).			
"	2	Up	iSgl		08 08 47.7
		Ki	iPn		08 04 31.5
			iSn		08 05 30.5
			iS*		08 05 49.6
			iSgl		08 05 54.0
			iSg2		08 05 59.3
		Sk	iSgl		08 08 18.8
			i		08 08 26.5
		Um	iSn		08 06 08.0
			iSgl		08 06 43.3
		Ud	i		08 08 46.2
			iSgl		08 09 14.6
		Northwest USSR,			
		67.7°N, 34.0°E.			
		Origin time = 08 03 13.			
		Explosion.			
"	2	Up	iP		13 03 14.8
			i		13 03 18.4
			iPP		13 04 39
			iS		13 08 58
					micr sec
			P	Z'	0.1 1.0
			Mx	E	2.0 21
			Mx	N	3.4 21
			Mx	Z	1.8 17
		Ki	iP		13 03 54.3
			i		13 03 58.2
			iPP		13 05 32
			iSS		13 12 58
					micr sec
			P	Z'	0.1 0.9
			Mx	E	4.0 19
			Mx	N	4.3 20
			Mx	Z	1.6 15
		Sk	iP		13 03 51.4
			i		13 03 55.3
			iPP		13 05 32.3
		Um	iP		13 03 29.8
		(cont.)			

1972 July	2	(cont.)		
		Um	i	13 03 33.7
			iPP	13 04 58
			iS	13 09 22
		Ud	iP	13 03 30.3
			i	13 03 33.7
			iS	13 09 32.7
		De	iP	13 03 13.7
			i	13 03 16.6
		Iran (h = 30 km).		
		m = 5.5, M = 5.4 (Up,Ki).		
		Double P, in average 3.6		
		sec apart.		
"	2	Up	iP	14 12 14.8
		Ki	eP	14 12 54
		Ud	iP	14 12 30.2
		De	eP	14 12 14
		Iran (h = 30 km).		
"	2	Up	iP	16 09 53.8
"	2	Ud	iPKP	20 32 51.6
		De	iPKP	20 33 03.0
"	2	Ud	iP	20 37 11.0
"	2	Ud	eP	23 47 35
		Japan (h = 230 km).		
"	3	Up	iP	01 31 25.1 D
			iPP	01 35 08.9
				micr sec
			P Z'	0.2 0.7
		Ki	iP	01 30 57.5 D
			iPP	01 34 27.0
				micr sec
			P Z'	0.6 1.0
		Sk	iP	01 31 22.5 D
			iPP	01 35 04.9
		Um	iP	01 31 08.9 D
			i	01 31 18.7
			i	01 31 32.2
			iPP	01 34 44.5
		Ud	iP	01 31 31.4 D
			iPP	01 35 21.6
		De	iP	01 31 42.5 D
			iPP	01 35 41.4
		Mariana Islands (h = 620 km).		
		m = 6.3 (Up,Ki).		
"	3	Up	iP	02 17 08.5
		Ki	iP	02 17 47.0
			iPP	02 19 26.7
		Sk	iP	02 17 44.7
		Um	iP	02 17 22.3
		(cont.)		

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

1972
July 3 (cont.)

Um	iPP		02 18 50.5
Ud	iP		02 17 23.1
De	iP		02 17 06.6

Iran (h = 40 km).

" 3 Ki	eP		02 30 45
Sk	epP		02 31 07
Um	eP		02 30 51

Mexico (h = 90 km).

" 3 Ud	iPKP		03 23 08.3
De	iPKP		03 23 19.1

Fiji Islands (h = 580 km).

" 3 Ud	eP		03 40 42

Afghanistan-USSR (h = 130 km).

" 3 Up	iP		05 27 23.5
Ki	eP		05 28 00
" 3 Up	iP		05 33 28.7
	i		05 33 34.6
			micr sec
	P	Z'	0.1 1.1
Ki	eP		05 34 05
	i		05 34 10.7
Um	iP		05 33 43.3
Ud	eP		05 33 43

Socotra (h = N).

" 3 Up	iPKP		05 43 06.0
Sk	ePKP		05 42 56
Um	iPKP		05 42 49.6
Ud	iPKP		05 43 02.6
	i		05 43 09.0
" 3 Up	iP		05 44 34.5
Ki	iP		05 44 17.8
	i		05 44 33.2
			micr sec
	P	Z'	0.1 1.2
Sk	eP		05 44 39
Um	iP		05 44 23.5
Ud	iP		05 44 42.9

Mindanao (h = 100 km).

" 3 Up	iP		06 03 42.6
Ki	eP		06 04 19
" 3 Um	i(P)		08 05 14.3

South Africa (h = N).

" 3 Um	iP		09 25 32.7
Ud	iP		09 24 54.6
" 3 Um	iP		12 38 39.7
Ud	iP		12 38 39.5

1972
July 3

Up	iSgl		15 05 17.9
Ud	iPgl		15 04 39.3
	i		15 04 40.9
	iSgl		15 04 57.3
	iSg2		15 05 00.6
	iRg		15 05 07.8
De	iSgl		15 05 31.9

Västergötland, Sweden, 58.9°N, 14.3°E.
Origin time = 15 04 16.
Explosion?

" 3 Ki	iP		15 16 40.5
Um	iP		15 16 57.8
Ud	iP		15 17 27.1
De	eP		15 17 42

Japan (h = 60 km).

" 3 Ki	eP		17 11 29
Um	iP		17 11 19.7
Ud	iP		17 11 38.0

Hindu Kush (h = 200 km).

" 3 Um	iP		19 28 14.2

Mariana Islands (h = 100 km).

" 3 Ki	iP		19 33 50.9
Ud	iP		19 33 22.1
De	iP		19 33 02.9
" 3 Up	iP		21 45 29.3
Ki	iP		21 46 08.0
Sk	iP		21 46 05.3
Um	iP		21 45 44.1
	iPP		21 47 21.2
Ud	iP		21 45 44.4
De	iP		21 45 27.9

Iran (h = 45 km).

" 3 Up	Mx		23 07
			micr sec
	Mx	E	0.9 23
	Mx	Z	1.3 23

Chile (h = N).

" 4 Up	iP		01 15 52.8
			micr sec
	P	Z'	0.3 1.2
	Mx	E	1.4 18
	Mx	N	1.3 18
	Mx	Z	3.3 22
Ki	iP		01 15 12.8 C
	ipP		01 15 25.4
	iS		01 23 53
			micr sec
	P	Z'	0.1 1.0

(cont.)

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

1972 July 4 (cont.)

Ki			micr	sec
	Mx	E	2.4	21
	Mx	N	2.3	21
	Mx	Z	2.4	17
Sk	iP		01 15 46.5	
Um	iP		01 15 30.4	C
	ipP		01 15 43.3	
	iS		01 24 27	
Ud	iP		01 16 00.4	C
	ipP		01 16 14.0	
De	iP		01 16 15.4	

Japan.
h = 50 km (Ki,Um,Ud).
m = 6.2, M = 5.5 (Up,Ki).

" 4

Up	eP	01 52 36	
Ki	iP	01 51 58.5	
Sk	eP	01 52 33	
Um	iP	01 52 13.6	
	i	01 52 35.2	
Ud	iP	01 52 41.9	
De	eP	01 53 02	

Japan (h = 40 km).

" 4 Ud iP 03 03 20.1

" 4

Ki	iP1	04 16 37.2
	iP2	04 16 43.8
Um	iP2	04 16 42.8
Ud	iP1	04 16 50.7

Java (h = 90 km).

" 4

Ki	iP	06 23 05.9
Ud	iP	06 22 13.0

" 4

Up	iP		10 29 02.3	C
	iSKS		10 39 23	
			micr	sec
	P	Z'	0.1	1.0
	Mx	E	4.5	21
	Mx	N	3.5	18
	Mx	Z	7.8	22
Ki	iP		10 28 46.1	C
	iPP		10 32 10	
			micr	sec
	P	Z'	0.3	1.0
	Mx	E	4.0	19
	Mx	N	4.7	18
	Mx	Z	3.8	20
Sk	iP		10 29 07.4	C
Um	iP		10 28 51.7	C
	ipP		10 29 07.5	
Ud	iP		10 29 10.9	C
	ipP		10 29 27.2	
	iPP		10 32 46.6	

(cont.)

1972 July 4 (cont.)

De	iP		10 29 16.3 C
	ipP		10 29 32.1
	iPP		10 33 02.9

Negros.
h = 60 km (Um,Ud,De).
m = 6.2, M = 6.0 (Up,Ki).

" 4 Um iP 11 13 10.1

" 4

Ki	iSgl	12 08 37.5
Um	iSgl	12 06 41.1
Ud	iSgl	12 07 27.0
De	iSgl	12 08 02.8

Western USSR.
Explosion.

" 4 Um i(P) 20 58 04.9

" 5

Up	iPKP		00 04 03.4	
	i		00 04 08.9	
			micr	sec
	PKP	Z'	0.1	0.7
Ki	ePKP		00 03 47	
Sk	iPKP		00 03 57.2	
	i		00 03 59.2	
Um	iPKP		00 03 52.3	D
Ud	iPKP		00 04 05.2	D
	i		00 04 11.0	
De	iPKP		00 04 13.1	
	i		00 04 25.3	

Kermadec Islands (h = 230 km).
The second phase at Up,Sk,Ud, De belongs probably to the PKP1 branch.

" 5

Up	iP2		01 17 36.7	
	iLgl		01 30 49	
			micr	sec
	Mx	E	0.4	10
	Mx	N	0.4	8
	Mx	Z	0.5	9
Ki	eP1		01 17 14	
	i		01 17 17.1	
	iP2		01 17 24.0	
	eLgl		01 30 22	
			micr	sec
	Mx	E	0.4	10
	Mx	N	0.7	15
	Mx	Z	0.4	9
Sk	eP2		01 17 45	
	iLgl		01 31 52.9	
Um	eP2		01 17 19	
	i		01 29 23.6	
	iLgl		01 29 48.2	
Ud	iP2		01 17 52.4	

(cont.)

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

1972
July 5 (cont.)

Ud	iPP	01 19 25.3
	iLgl	01 31 51.7
De	eP2	01 17 56
	iLgl	01 32 04.3

Sinkiang (h = N).
M = 4.8 (Up,Ki).
PP at Ud corresponds to P2, the larger of the two P-onsets.

" 5

Up	iSKP	02 08 23.8
Um	iSKP	02 08 07.1

New Hebrides Islands (h = 240 km).

" 5

Um	iP	02 49 39.8
Ud	iP	02 50 08.4
De	eP	02 50 20

" 5

Up	iP	04 14 05.5
Ki	eP	04 14 31
Um	iP	04 14 22.0
	ipP	04 14 32.1
Ud	eP	04 13 52
De	eP	04 13 43

North Atlantic Ocean.
h = 35 km (Um).

" 5

Up	iP	04 17 55.4
Ki	iP	04 17 40.9
Sk	eP	04 18 11
Um	iP	04 17 42.5
	i	04 17 47.1
Ud	iP	04 18 10.7
De	iP	04 18 17.8

Sinkiang (h = N).

" 5

Up	iP1		10 27 32.4	
	iP2		10 27 33.3	
	ipP		10 27 40.8	
	iS		10 36 27	
	iP'P'		10 55 50.7	
			micr	sec
	P2	Z'	0.2	1.1
	pP	Z'	0.6	1.5
	Mx	E	1.9	20
	Mx	N	2.4	19
	Mx	Z	2.9	18
Ki	iP2		10 26 47.6	
	ipP		10 26 55.3	
	iS		10 35 07	
	iP'P'		10 56 09.5	
			micr	sec
	pP	Z'	0.3	1.5
	Mx	E	4.1	17
	Mx	N	3.9	19
	Mx	Z	4.7	20

(cont.)

1972
July 5 (cont.)

Sk	iP1	10 27 02.4
	ipP	10 27 12.0
	iP'P'	10 56 05.8
Um	iP2	10 27 12.1
	ipP	10 27 19.9
	iS	10 35 50
Ud	iP1	10 27 24.8
	iP2	10 27 26.7
	ipP	10 27 33.9
De	iP2	10 27 46.3
	ipP	10 27 54.6

Vancouver Island.
h = 30 km (Up,Ki,Sk,Um,Ud, De).
m = 6.3, M = 5.7 (Up,Ki).

" 5

Up	iSgl	12 03 50.6
Sk	eSgl	12 05 33
Um	iSgl	12 04 06.0
Ud	iS*	12 04 47.1
	iSgl	12 04 52.1
De	iSgl	12 05 13.0

Western USSR, 59.3°N, 28.2°E.
Origin time = 12 01 00.
Explosion.

" 5

Um	iP	13 12 54.1
	ipP	13 13 20.6
Ud	ipP	13 13 16.7

Guatemala.
h = 110 km (Um).

" 5

Up	iSn	14 00 33.9
	iSgl	14 00 47.2
Ki	iSgl	14 03 23.8
	iSg2	14 03 36.5
Sk	e	14 02 14
	iSgl	14 02 35.5
Um	iPgl	14 00 16.3
	i	14 00 47.3
	iSgl	14 01 20.1
Ud	iPn	14 00 15.3
	eSn	14 01 21
	iSgl	14 01 48.6
De	iPn	14 00 26.3
	eSn	14 01 40
	iSgl	14 02 16.0

Esthonia, 59.5°N, 25.1°E.
Origin time = 13 58 47.
Explosion.

" 5

Ud	iP	15 51 26.0

Aleutian Islands (h = 50 km).

" 5

Ki	iSgl	16 22 15.1
Sk	iSgl	16 22 19.7

(cont.)

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

1972 July 5 (cont.)

Um	iSgl	16 22 42.0

Nordland, Norway, 66.5°N, 14.0°E.
Origin time = 16 20 46.
Explosion.

"	5	Um	iP	16 36 47.5
		Ud	iP	16 36 49.3

Iran.

"	5	Up	iP	18 09 59.3
		Sk	iP	18 10 36.8
		Um	iP	18 10 37.6
		Ud	iP	18 10 04.3
			i	18 10 12.1
		De	iP	18 09 29.2

Greece (h = 15 km).

"	5	Up	iP	19 13 40.2
		Sk	eP	19 14 19
		Ud	iP	19 13 46.4
		De	eP	19 13 10

Ionian Sea (h = N).

"	6	Up	eP	01 09 54
		Ki	iP	01 09 37.7
		Um	iP	01 09 38.9
		Ud	iP	01 10 09.7
		De	eP	01 10 18

Kazakh SSR.
Underground explosion.

"	6	Ud	iP	05 29 57.8

Crete.

"	6	Ud	i(Sgl)	13 20 01.8
"	6	Ud	iP	13 44 59.1
"	6	Up	iSgl	14 28 39.4
		Ud	iPgl	14 27 50.9
			i	14 27 52.4
			iSgl	14 28 12.1
			iSg2	14 28 14.6
			iRg	14 28 24.8
		De	ePgl	14 28 01
			iSgl	14 28 28.9

Västergötland, Sweden, 58.6°N, 13.8°E.
Origin time = 14 27 25.
Explosion?

"	6	Ud	i	15 03 21.6
			i	15 03 25.5
			i(Sgl)	15 03 34.9

(cont.)

1972 July 6 (cont.)

De	eSgl	15 03 04
	iRg	15 03 10.9

South Sweden.
Explosion?

"	6	Up	iSgl	15 30 49.7
		Ud	e	15 30 32
			i(Sgl)	15 30 47.3
			i	15 30 58.2
"	6	Ud	iSgl	15 36 20.8
		De	iSgl	15 34 30.5
			iRg	15 34 38.3
"	6	Ud	iP	16 14 05.9

Pakistan (h = 55 km).

"	6	Ud	iP	19 13 24.9
"	6	Up	iPKP	20 25 20.7
		Ud	iPKP	20 25 22.0
		De	iPKP	20 25 32.5
"	7	Um	iP	00 15 13.1
		Ud	eP	00 15 39
"	7	De	e(Sgl)	03 03 47
"	7	Ud	e(Sgl)	03 05 47
		De	i(Sgl)	03 04 23.7
"	7	Ki	iP	07 08 17.2
		Sk	eP	07 08 45

Kodiak Island (h = 70 km).

"	7	Up	iPKP	07 35 06.1
		Sk	iPKP	07 35 00.5
		Um	iPKP	07 34 55.2
		Ud	iPKP	07 35 07.6

South of Kermadec Islands (h = N).

"	7	Ud	iP	12 03 32.8
"	7	Up	iP	12 15 07.8
			i(pP)	12 15 18.8
				micr sec
			(pP) Z'	0.1 1.0
			Mx E	0.9 19
			Mx N	3.0 21
			Mx Z	1.7 16
		Ki	iP	12 15 00.8
				micr sec
			P Z'	0.1 1.0
			Mx E	0.6 15
			Mx N	2.1 20

(cont.)

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

1972 July 7 (cont.)

Ki			micr	sec
	Mx	Z	0.8	16
Um	iP		12 15 00.2	
	ipP		12 15 07.0	
	iPcP		12 15 27.5	
	iS		12 23 49	
Ud	iP		12 15 20.4	
	ipP		12 15 29.5	
De	eP		12 15 24	

Burma.
h = 30 km (Um,Ud).
m = 6.0, M = 5.4 (Up,Ki).

" 7	Up	iP	12 49 06.4	
	Ki	iP	12 48 46.6	
		iS	12 59 14	
			micr	sec
		P Z'	0.1	1.0
		Mx E	0.6	16
		Mx N	0.6	16
		Mx Z	0.5	16
	Um	iP	12 48 53.0	
		i	12 49 10.2	
	Ud	iP	12 49 14.3	
	De	eP	12 49 24	

Samar (h = N).

" 7	Ud	iP	13 00 46.8

Greece.

" 7	Ud	eP	20 21 44
" 8	Ud	iP	00 40 38.6 C
" 8	Up	iP	01 00 05.1
	Ki	iP	00 59 47.6
	Um	iP	00 59 53.3
	Ud	iP	01 00 13.5
	De	iP	01 00 20.5

Mindanao (h = 110 km).

" 8	Up	iP	03 11 56.5
	Um	iP	03 11 37.0
	Ud	iP	03 11 50.7
" 8	Ki	iP	03 59 17.6

Molucca Passage (h = N).

" 8	Up	iP	05 50 30.5
	Sk	iP	05 51 15.3
	Um	iP	05 51 09.5
	Ud	eP	05 50 39
	De	iP	05 50 03.0

Greece-Bulgaria (h = 30 km).

" 8	Up	iP	06 56 58.0

(cont.)

1972 July 8 (cont.)

Up	iPP		06 58 32.5
	iS		07 03 03
			micr sec
	P	Z'	0.3 0.7
	Mx	N	0.8 9
	Mx	Z	0.4 8
Ki	iP		06 57 05.9
	iPP		06 58 46.0
	iS		07 03 18
			micr sec
	P	Z'	0.3 0.8
	Mx	E	0.4 9
	Mx	N	0.7 9
	Mx	Z	0.4 9
Sk	iP		06 57 23.0
	iPP		06 59 09.5
Um	iP		06 56 55.6 C
	iPP		06 58 30.3
	iS		07 02 59
Ud	iP		06 57 14.4 C
	i		06 57 29.9
	iPP		06 58 59.4
De	iP		06 57 11.1
	iPP		06 58 53.7

Afghanistan-USSR (h = 120 km).
m = 6.2, M = 5.0 (Up,Ki).
M uncorrected for focal depth.

" 8	Up	iP	08 40 27.5
	Ki	iP	08 39 39.1
	Um	iP	08 40 02.2
	Ud	iP	08 40 33.1
		i	08 40 37.6

Kurile Islands (h = N).

" 8	Up	eSgl	12 02 32
	Ki	eSgl	12 04 30
	Um	i(S*)	12 02 49.6
		iSgl	12 02 53.3
	Ud	iSgl	12 03 32.5

Western USSR.
Explosion.

" 8	Up	iP1	12 23 38.0
		iP2	12 23 46.6
	Ki	iP1	12 23 24.2
		iP2	12 23 33.2
			micr sec
		Mx E	1.5 23
		Mx N	1.3 24
		Mx Z	1.5 22
	Sk	iP1	12 23 19.9
		iP2	12 23 28.7
		ipP	12 23 38.3
	Um	iP1	12 23 33.8
		iP2	12 23 41.9

(cont.)

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

1972 July 8 (cont.)

Ud	iP2	12 23 39.1	
De	iP1	12 23 37.3	
	iP2	12 23 46.9	

Mexico.
h = 70 km (Sk).
Double P, in average 8.8 sec apart.

" 8	Ki	ePn	12 45 14
		iSn	12 46 02.1
		iSg1	12 46 17.9

Northwest USSR-Norway border region.
Explosion.

" 8	Up	iP	13 37 46.9
	Sk	eP	13 38 31
	Um	iP	13 38 23.6
	Ud	iP	13 37 55.3
	De	iP	13 37 17.9

Greece.

" 8	Up	iP	15 04 28.7
	Um	iP	15 04 39.0
	Ud	iP	15 04 50.1
	De	eP	15 04 44

" 8	Ki	eP	15 52 01
	Um	iP	15 52 05.5
	Ud	eP	15 52 24
		i	15 52 30.7
	De	eP	15 52 32

Molucca Passage (h = N).

" 8	Up	iP	19 48 08.3

" 9	Up	eP	05 07 14
	Um	iP	05 07 12.9
	Ud	iP	05 07 25.1
	De	iP	05 07 24.3

" 9	Up	iP		07 03 22.0
		i		07 03 22.9
		iPP		07 03 33.1
		iLg2		07 07 40.2
				micr sec
		P	Z'	0.1 0.5
	Ki	iP		07 04 29.4
		i		07 08 34.4
		iLg2		07 10 37.6
	Sk	eP		07 04 17
		iLg2		07 09 56.8
	Um	iP		07 03 46.4
		i		07 03 54.0
		iS		07 06 33.1
	Ud	iP		07 03 44.6

(cont.)

1972 July 9 (cont.)

Ud	i	07 03 52.1	
	iPP	07 03 58.7	
	iLg2	07 08 35.3	
De	iP	07 03 21.4	
	i	07 06 28.8	
	iLg2	07 07 49.6	

Central Russia, near 50°N, 36°E.
Origin time = 07 00 00.
Probably underground explosion.

" 9	Ud	iPKP	11 27 10.7

Fiji Islands (h = 280 km).

" 9	Up	iP	13 13 14.6
	Ud	iP	13 13 27.8

Burma-India (h = 150 km).

" 9	Ud	iP	13 26 34.7
	De	iP	13 26 01.1

Greece.

" 9	Up	iP		14 04 17.4
				micr sec
		P	Z'	0.3 1.0
	Ki	iP		14 03 25.9
		i		14 03 28.1
				micr sec
		P	Z'	0.4 0.9
	Sk	iP		14 04 02.2
	Um	iP		14 03 49.7
	Ud	iP		14 04 22.0
		ipP		14 05 49.2
	De	iP		14 04 42.1

Okhotsk Sea.
h = 410 km (Ud).
m = 5.8 (Up,Ki).

" 9	Ud	iP	23 57 09.6

North Atlantic Ocean (h = N).

" 10	Ud	iPKP	06 49 26.2
	De	iPKP	06 49 37.6
		i	06 49 55.6

Tonga-Kermadec Islands (h = N).

" 10	Up	iP	08 30 50.7
	Ki	iP	08 30 17.7
	Sk	iP	08 30 47.8
	Um	iP	08 30 31.8 D
	De	iP	08 31 11.0

South of Japan (h = 460 km).

" 10	Ki	iP	12 36 02.9

Kamchatka (h = N).

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

1972				
July	10	Ud	iP	12 36 21.8
"	10	Ki	iP	13 22 14.7
			i	13 22 18.8
"	10	Ki	iP	14 29 58.9
		Mindanao (h = 50 km).		
"	10	Ud	iPKP	18 54 59.6
		De	iPKP	18 55 10.5
"	10	Up	iP	19 11 44.2
		Ki	iP	19 11 27.3
			ipP	19 11 39.5
		Sk	iP	19 11 57.6
		Um	iP	19 11 29.1
			ipP	19 11 40.1
		Ud	iP	19 11 59.0
		Sinkiang.		
		h = 40 km (Ki,Um).		
"	10	Um	iP	22 58 37.0
"	11	Up	i(P)	01 12 40.5
"	11	Ud	eP	04 28 37
		Hindu Kush.		
		Intermediate depth.		
"	11	Ki	iP	05 18 02.8
		Um	ipP	05 18 21.3
		Ud	iP	05 18 36.1
			ipP	05 18 45.1
			iPP	05 22 32.2
		Caroline Islands.		
		h = 30 km (Ud).		
"	11	Up	iP	06 02 08.0 C
				micr sec
			P Z'	0.3 0.7
		Ki	iP	06 02 16.9 C
				micr sec
			P Z'	0.4 0.7
		Sk	iP	06 02 33.7 C
		Um	iP	06 02 06.4 C
		Ud	iP	06 02 24.5 C
			ipP	06 03 08.1
			iPP	06 04 09.2
		De	iP	06 02 20.5 C
			ipP	06 03 08.8
			iPP	06 03 59.7
		Hindu Kush.		
		h = 220 km (Ud,De).		
		m = 6.0 (Up,Ki).		
"	11	Up	iP	07 09 05.4
		Ki	eP	07 08 23
		(cont.)		

1972				
July	11	(cont.)		
		Ud	iP	07 09 10.2
		De	eP	07 09 29
		Kurile Islands (h = 60 km).		
"	11	Up	iP	07 24 25.3
		Ki	iP	07 24 57.0
		Um	eP	07 24 32
		Ud	iP	07 24 47.3
		De	eP	07 24 40
"	11	Up	iX	08 52 21.3
		Sk	iPKP	08 52 10.8
		Um	iPKP	08 52 04.2
		Ud	iPKP	08 52 16.5
			iX	08 52 23.8
		South of Kermadec Islands		
		(h = N).		
"	11	Up	iSgl	10 33 26.0
		Ud	iPgl	10 32 35.4
			i	10 32 36.9
			iSgl	10 32 55.9
		De	iPgl	10 32 47.0
			iSgl	10 33 15.4
		Västergötland, Sweden,		
		58.6°N, 13.8°E.		
		Origin time = 10 32 10.		
"	11	Up	iSgl	12 32 50.1
		Ki	eSgl	12 34 46
		Sk	eSgl	12 34 34
		Um	iS*	12 33 00.4
			iSgl	12 33 05.8
		Ud	iSgl	12 33 50.4
		De	iSgl	12 34 13.8
			iSg2	12 34 25.4
		Western USSR,		
		59.3°N, 28.2°E.		
		Origin time = 12 30 00.		
		Explosion.		
"	11	Ud	iP	14 14 46.7
"	11	Up	iP	15 19 07.4
		Ki	iP	15 18 44.8
		Um	iP	15 18 52.9
		Ud	iP	15 19 16.4
"	11	Ud	iP	15 22 09.7
"	11	Ki	ePKP	16 04 44
		New Britain (h = 50 km).		
"	11	Up	eP	20 56 35
			ipP	20 56 52.9
		Ki	eP	20 56 28
		(cont.)		

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

1972				
July	11	(cont.)		
		Ki	ipP	20 56 47.5
		Sk	eP	20 56 52
			ipP	20 57 08.7
		Um	iP	20 56 28.9
			ipP	20 56 45.1
		Ud	iP	20 56 48.5
			ipP	20 57 07.7
		India-Burma.		
		h = 60 km (Up,Ki,Sk,Um,Ud).		
"	11	Ki	eP	21 59 29
			i	21 59 40.4
"	11	Ki	iP	22 55 51.7
		Sk	eP	22 55 49
		Um	iP	22 55 23.5
			i	22 55 28.6
		Ud	iP	22 55 23.3
			i	22 55 27.1
		De	iP	22 55 05.0
			i	22 55 08.8
		Iran-Iraq (h = N).		
"	12	Up	iP	00 25 09.4
		Ki	iP	00 24 18.4
		Um	iP	00 24 41.5
		Ud	iP	00 25 15.4
		Kurile Islands (h = N).		
"	12	Up	iP	00 43 46.0
		Um	iP	00 44 27.8
		Ud	iP	00 43 53.1
		Greece.		
"	12	Um	i(Sgl)	12 39 18.1
		Ud	e(Sgl)	12 40 07
"	12	Ki	iPn	14 03 39.5
			iPgl	14 03 47.8
			iSn	14 04 25.8
			iSgl	14 04 42.9
		Um	eSgl	14 06 14
		Northwest USSR-Norway border region.		
		Origin time = 14 02 40.		
		Explosion.		
"	12	Up	iP	14 28 24.4
		Ki	iP	14 26 37.9
		Um	iP	14 27 33.1
			i	14 27 41.8
		Ud	iP	14 28 19.9
		Svalbard region.		
"	12	Up	iP	18 24 27.4
		Ki	iP	18 23 52.5
		(cont.)		

1972				
July	12	(cont.)		
		Um	iP	18 24 07.3
		Ud	iP	18 24 34.0
		De	eP	18 24 47
"	12	Um	iP	18 31 28.2
"	12	Up	iP	18 48 53.9
		Ki	iP	18 48 19.2
		Um	iP	18 48 34.0
			i	18 48 41.1
		Ud	iP	18 49 01.0
			i	18 49 07.5
		De	iP	18 49 13.8
		South of Japan (h = 110 km).		
"	12	Up	iP	19 46 44.1
			i	19 46 50.3
		Ki	eP	19 47 53
		Sk	iP	19 47 21.4
			ipP	19 47 43.0
		Um	iP	19 47 20.3
			ipP	19 47 38.0
		Ud	iP	19 46 48.5
		De	iP	19 46 13.3
		Greece.		
		h = 90 km (Sk,Um).		
"	13	Up	iSn	01 17 16.3
			iSgl	01 17 51.2
		Sk	iSgl	01 16 41.7
		Um	iSgl	01 18 28.8
		Ud	e	01 16 20
			iSg2	01 16 52.5
		De	eSg2	01 18 02
		Near west coast of Norway, 60.9°N, 4.4°E.		
		Origin time = 01 14 21.		
		Bergen and Kongsberg readings included in the solution.		
"	13	Ki	iP	02 13 16.7
		Um	iP	02 13 03.4
		Indian Ocean (h = N).		
"	13	Up	iP	05 37 09.1
		Sk	iP	05 37 28.2
		Um	iP	05 37 02.5
		Ud	iP	05 37 25.9
		Tibet.		
"	13	Ud	iP	10 23 36.2
"	13	Up	iS*	13 15 34.5
			iSgl	13 15 38.6
		Ki	eSgl	13 18 38
		(cont.)		

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

1972 July	13	(cont.)		
		Sk	iSgl	13 17 34.4
		Um	iS*	13 16 29.5
			iSgl	13 16 34.0
		Ud	iSgl	13 16 42.7
		De	iSgl	13 17 01.6
		Esthonia, 59.1°N, 23.5°E.		
		Origin time = 13 14 00.		
		Explosion.		
"	13	Up	iS*	13 15 49.0
			iSgl	13 15 55.1
		Sk	iSgl	13 17 52.3
		Um	iSgl	13 16 44.8
		Ud	iSgl	13 16 55.5
		De	iSn	13 16 48.3
			iS*	13 17 15.2
			iSgl	13 17 20.3
		Esthonia, 59.3°N, 23.7°E.		
		Origin time = 13 14 15.		
		Explosion.		
"	13	Ud	iP	13 23 06.4
"	13	Ud	iP	14 44 29.8
"	13	Ki	iP	15 16 09.0
		Um	i(P)	15 16 45.0
		Ud	eP	15 16 54
"	13	Up	iP	15 22 13.3
		Ki	eP	15 22 01
		Ud	iP	15 22 22.0 C
		Celebes Sea (h = 350 km).		
"	13	Ki	iP	15 51 57.6
		Um	iP	15 52 49.9
		Ud	iP	15 53 40.4
		Svalbard region.		
"	13	Ki	iSgl	16 20 26.6
		Sk	iSgl	16 20 34.7
		Um	iSgl	16 20 53.6
		Nordland, Norway, 66.5°N, 14.2°E.		
		Origin time = 16 18 59.		
		Explosion.		
"	13	Ud	iP	17 36 06.7
"	13	Ud	iP	18 59 15.9
"	13	Ud	iP	20 48 50.9
"	13	Ud	eP	22 25 12
		Italy (h = N).		

1972 July	13	Ki	iP	22 38 33.2
		Aleutian Islands (h = 35 km).		
"	13	Ud	eP	23 14 30
"	13	Up	eP	23 54 46
		Ki	iP	23 53 48.5
		Ud	iP	23 54 42.4
			i	23 54 55.0
		Aleutian Islands (h = 25 km).		
"	14	Ud	eP	00 53 04
"	14	Ki	eP	02 16 06
			i	02 20 36.6
				micr sec
			Mx E	0.5 16
			Mx N	0.5 15
			Mx Z	0.5 16
		Sk	eP	02 16 23
		Um	iSKS	02 26 42
		Ud	iP	02 16 22.6
			i(PP)	02 20 39.2
			iPP	02 20 55.5
		South of Java (h = N).		
"	14	Up	iPKP	03 12 28.2
			ipPKP	03 12 36.3
		Ki	iPKP	03 12 41.9
			ipPKP	03 12 50.5
		Sk	iPKP	03 12 31.4
			ipPKP	03 12 40.9
		Um	iPKP	03 12 35.9
			ipPKP	03 12 45.1
		Ud	iPKP	03 12 25.3
			ipPKP	03 12 35.0
		Scotia Sea.		
		h = 35 km (Up,Ki,Sk,Um,Ud).		
"	14	Ud	iP	04 39 19.3
"	14	Ki	iP	09 21 42.3
		Ud	iP	09 22 32.9
		Kamchatka.		
		Deep.		
"	14	Ud	iP	13 11 35.4
		Iran (h = 35 km).		
"	14	Ud	iP	13 25 32.5
		De	eP	13 25 15
"	14	Up	iP	15 04 14.8
		Ki	eP	15 04 46
		Um	iP	15 04 23.4
		Ud	iP	15 04 36.5
		De	iP	15 04 27.3

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

1972				
July	14	Ud	iP	17 56 35.2
"	14	Ud	eP	18 20 14
"	14	Ud	iPKP	22 19 23.8
		Tonga Islands (h = 80 km).		
"	14	Ud	iP	23 04 56.3
"	15	Ki	iP	00 43 23.0
		Ud	iP	00 43 45.2
"	15	Ud	iP	01 54 37.6
		Aleutian Islands (h = 45 km).		
"	15	Up	iP	02 27 36.0
			ipP	02 27 43.9
				micr sec
			P Z'	0.1 0.9
		Ki	iP	02 27 10.2
			isP	02 27 20.5
		Um	iP	02 27 20.3
			ipP	02 27 26.5
			isP	02 27 30.7
		Ud	iP	02 27 45.1
			ipP	02 27 52.3
			isP	02 27 55.6
		De	iP	02 27 57.4
		Ryukyu Islands.		
		h = 25 km (Up,Ki,Um,Ud).		
"	15	Ud	eP	02 43 53
"	15	Ki	ePKP	05 13 46
		Um	ePKP	05 13 49
		De	ePKP	05 14 09
		New Hebrides Islands		
		(h = 230 km).		
"	15	Ud	iP	06 50 41.9
		North Atlantic Ocean		
		(h = N).		
"	15	Ud	iP	07 03 05.6
		North Atlantic Ocean		
		(h = N).		
"	15	Ud	iP	08 18 10.9
"	15	Ki	iPn	09 50 26.2
			iPgl	09 50 34.8
			iSn	09 51 12.0
			iSgl	09 51 24.2
		Ud	eSgl	09 55 23
		Northwest USSR-Norway		
		border region.		
		Origin time = 09 49 30.		
		Explosion.		

1972				
July	15	Ud	iP	10 02 46.1
"	15	Ki	iPn	10 21 28.1
			iSn	10 22 16.2
			iSgl	10 22 32.7
		Ud	eSgl	10 26 29
		Northwest USSR-Norway		
		border region.		
		Explosion.		
"	15	Up	iP	16 28 45.8
			ipP	16 29 15.4
		Ki	iP	16 27 56.6
		Um	iP	16 28 19.0
		Ud	iP	16 28 50.8
		De	eP	16 29 11
		Kurile Islands.		
		h = 120 km (Up).		
"	15	Up	iP	17 09 57.5
		Ki	iP	17 09 50.5
		Ud	iP	17 10 10.8
			i	17 10 42.8
"	16	Up	iPKP	00 47 28.1
			iSKP	00 50 15.6
			eSKKP	00 58 53
				micr sec
			SKP Z'	0.1 1.0
		Ki	iPKP	00 47 21.4
			iSKP	00 49 53.0
				micr sec
			SKP Z'	0.4 1.7
		Um	i(PKP)	00 47 16.5
			iPKP	00 47 23.0
			iSKP	00 50 03.8
		Ud	iPKP	00 47 29.2
			iSKP	00 50 16.9
			eSKKP	00 58 48
			i	00 58 52.0
		De	iPKP	00 47 40.7
			i(pPKP)	00 50 07.2
			iSKP	00 50 27.0
		Fiji Islands (h = 600 km).		
"	16	Up	iP	02 30 06.0 D
				micr sec
			P Z'	0.1 1.0
		Ki	iP	02 29 51.6
			iPcP	02 30 53.6
				micr sec
			P Z'	0.1 1.0
		Um	iP	02 29 53.8
			iPcP	02 30 55.0
		Ud	iP	02 30 19.7
			iPcP	02 31 09.1
		De	iP	02 30 23.6
		(cont.)		

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

1972
July 16 (cont.)

De	iPcP		02 31 12.9	

Tibet (h = N).
m = 5.8 (Up,Ki).

" 16	Up	iP		02 52 32.3
				micr sec
		Mx	E	0.8 17
		Mx	N	1.6 18
		Mx	Z	0.9 11
	Ki	iP		02 53 18.3
		i		02 53 24.2
				micr sec
		P	Z'	0.1 1.0
		Mx	E	1.3 15
		Mx	N	1.8 17
		Mx	Z	1.4 15
	Um	iP		02 52 50.0
	Ud	iP		02 52 48.0
	De	iP		02 52 28.4

Turkey (h = 40 km).
M = 4.8 (Up,Ki).

" 16	Up	iP		03 05 58.7
	Ud	iP		03 06 06.9

Celebes Sea (h = 350 km).

" 16	Up	iP		03 49 41.1
	Ki	eP		03 49 27
	Um	iP		03 49 29.5
	Ud	iP		03 49 54.6
	De	iP		03 49 59.4

Tibet (h = N).

" 16	Up	iP		03 59 49.4
" 16	Up	iPKP		04 41 21.8
		iPKP1		04 41 29.3
		iPKP2		04 41 40.6
				micr sec
		PKP	Z'	0.1 1.3
		PKP1	Z'	0.3 1.0
		PKP2	Z'	0.2 1.0
	Ki	iPKP		04 41 09.7 C
		ipPKP		04 41 25.4
		iSKP		04 44 52.9
				micr sec
		PKP	Z'	0.6 1.3
		Mx	N	0.7 23
	Um	iPKP		04 41 15.9
		iPKP1		04 41 19.7
		iPKP2		04 41 34.1
	Ud	iPKP		04 41 23.1 C
		iPKP1		04 41 31.3
		iPKP2		04 41 42.2
	De	iPKP		04 41 27.9 C
		iPKP1		04 41 38.5

(cont.)

1972
July 16 (cont.)

De	iPKP2		04 41 56.5

South of Kermadec Islands.
h = 55 km (Ki).

" 16	Up	eP		05 47 54
	Ud	iP		05 48 03.1

Indian Ocean (h = N).

" 16	Up	iSgl		10 12 09.8
	Ki	ePn		10 07 54
		iSn		10 08 52.3
		iSgl		10 09 14.7
	Um	iSn		10 09 33.1
		iS*		10 10 03.0
		iSgl		10 10 09.0
		iSg2		10 10 18.5
	Ud	iSgl		10 12 40.8

Northwest USSR,
67.8°N, 33.8°E.
Origin time = 10 06 37.
Explosion.

" 16	Ki	ePn		10 20 42
		iPgl		10 20 50.8
		iSn		10 21 27.8
		iSgl		10 21 41.3
	Um	iSgl		10 22 41.0

Northwest USSR,
67.8°N, 30.5°E.
Origin time = 10 19 43.
Explosion.

" 16	Up	eP		12 58 03
	Ud	iP		12 58 16.9
" 16	Up	iP		13 59 52.1
	Ki	eP		13 59 28
	Um	iP		13 59 35.7
	Ud	iP		14 00 00.6

Formosa (h = N).

" 16	Up	iP		15 51 35.6
" 16	Up	iP		17 22 00.6 C
		iPP		17 25 36.7
		iSKS		17 32 27
		iS		17 32 44
				micr sec
		P	Z'	0.1 1.3
		Mx	E	1.0 18
		Mx	N	1.5 21
		Mx	Z	1.9 20
	Ki	iP		17 22 00.9 C
		ipP		17 22 10.6
		iSKS		17 32 46

(cont.)

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

1972
July 16 (cont.)

Ki			micr	sec
	P	Z'	0.4	1.0
	Mx	E	3.7	20
	Mx	N	2.0	18
	Mx	Z	3.7	21
Um	iP		17 21 57.8	C
	ipP		17 22 07.5	
	iPP		17 25 28.2	
	iSKS		17 32 21	
	iS		17 32 41	
Ud	iP		17 22 10.1	C
	ipP		17 22 20.3	
	iPP		17 25 50.4	
De	iP		17 22 08.7	C
	ipP		17 22 19.4	

Sumatra.
h = 35 km (Ki,Um,Ud,De).
m = 6.3, M = 5.7 (Up,Ki).

" 16	Up	ePKP	18 28 22
	Ud	ePKP	18 28 23
	De	iPKP	18 28 31.9

Tonga Islands (h = N).

" 16	Up	eP	20 14 26
	Ki	iP	20 13 30.0
	Ud	eP	20 14 27

Kamchatka (h = N).

" 16	Up	iP	22 52 27.3
	Ki	iP	22 52 14.2
	Ud	eP	22 52 39
		i	22 52 44.4

China.

" 17	Up	epP	01 14 10
	Ki	ipP	01 13 37.2
	Ud	iP	01 14 00.5
		ipP	01 14 17.0

Japan.
h = 60 km (Ud).

" 17	Up	iPKP	01 24 57.8
	Ud	iPKP	01 24 59.8
	De	ePKP	01 25 10

" 17	Ud	iP	03 19 38.9

Dodecanese Islands.

" 17	Up	iPKP	05 42 18.7
	Ud	iPKP	05 42 20.0
	De	iPKP	05 42 31.8

" 17	Ud	iP	05 51 53.5

Greece.

1972
July 17

Up	iP		08 39 07.5	
			micr	sec
	P	Z'	0.2	1.3
Ki	iP		08 38 12.6	
			micr	sec
	Mx	E	0.4	16
	Mx	N	0.4	14
	Mx	Z	0.4	15
Um	iP		08 38 33.8	
Ud	iP		08 39 10.8	
De	iP		08 39 33.0	

Kamchatka (h = N).

" 17	Up	eSgl	09 50 07
	Ki	i	09 46 22.8
		iSgl	09 46 30.7
		i	09 46 40.0
	Sk	iSgl	09 49 18.5
		i	09 49 46.0
	Um	iSgl	09 47 58.1
	Ud	e	09 50 33
		eSgl	09 50 44

Off coast of northwest USSR.
Explosion.

" 17	Up	eSgl	09 54 07
	Ki	i	09 50 14.4
		iSgl	09 50 36.0
	Sk	i	09 53 49.9
	Um	iSgl	09 52 03.3
	Ud	e	09 54 37
		iSgl	09 54 53.8
	De	eSgl	09 56 19

Off coast of northwest USSR.
Explosion.

" 17	Up	eSgl	09 58 07
	Ki	i	09 54 29.0
		eSgl	09 54 38
	Sk	i	09 57 49.0
	Um	iSgl	09 56 04.2
	Ud	i	09 58 38.0
		iSgl	09 58 55.7

Off coast of northwest USSR.
Explosion.

" 17	Ud	iP	10 43 08.4

Greece.

" 17	Up	iSn	14 07 35.3
		iSgl	14 07 47.6
	Ki	e(Sgl)	14 10 22
	Um	iSgl	14 08 20.4
	Ud	iSn	14 08 23.3
		iS*	14 08 48.2
		iSgl	14 08 52.5

(cont.)

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

1972
July 17 (cont.)
De iSgl 14 09 16.1
Esthonia, 59.5°N, 25.0°E.
Origin time = 14 05 49.
Explosion.

" 17 Up eP 16 20 51
Ud iP 16 20 54.3
Greece.

" 17 Up iSgl 16 32 19.6
Ud iSgl 16 32 11.7
De e 16 30 12
iSgl 16 30 19.8
Baltic Sea, south of Sweden.
Explosion.

" 17 Up iSgl 16 38 18.0
Ud iSgl 16 38 10.4
De i 16 36 11.4
iSgl 16 36 17.7
Baltic Sea, south of Sweden.
Explosion.

" 17 Ud eP 17 14 05
i 17 14 12.0

" 17 Up iP 17 26 42.4
Um iP 17 26 24.7
Ud iP 17 26 50.1
South of Japan (h = 40 km).

" 17 Up i(P) 18 08 56.7

" 18 Up Mx 00 57
micr sec
Mx E 0.8 20
Mx N 0.6 22
Mx Z 1.4 21
Ki Mx 00 55
micr sec
Mx E 0.9 22
Mx N 0.9 22
Mx Z 1.3 23
Off Pacific coast of Mexico
(h = N).
M = 5.4 (Up,Ki).

" 18 Up iP 02 26 56.3
ipP 02 29 00.9
Ki iP 02 26 26.1 C
Um iP 02 26 40.1
ipP 02 28 44.6
Ud iP 02 27 02.7 C
ipP 02 29 08.8
De iP 02 27 14.4
ipP 02 29 21.8
(cont.)

1972
July 18 (cont.)
Volcano Islands.
h = 590 km (Up,Um,Ud,De).

" 18 Up iP 02 30 24.1
Ki iP 02 30 31.4
Ud iP 02 30 34.2

" 18 Up eP 02 36 31
Ud iP 02 36 30.5

" 18 Ud iP 02 44 57.0

" 18 Ud iP 03 35 14.4

" 18 Um iP 09 59 38.7
Ud iP 10 00 03.2
De eP 10 00 16

" 18 Ud iP 11 29 04.1

" 18 Ud iP 13 45 55.8 C
De eP 13 46 02
Celebes Sea (h = 350 km).

" 18 Ki micr sec
Mx E 0.4 10
Mx N 0.3 12
Mx Z 0.3 13
Ud iP 13 50 22.0
De iP 13 49 38.9
Greece-Bulgaria (h = N).

" 18 Up iP 14 05 36.2 C
ipP 14 06 00.2
micr sec
P Z' 0.1 0.8
Ki iP 14 04 51.8 C
micr sec
P Z' 0.1 0.9
Sk iP 14 05 26.7
Um iP 14 05 11.6 C
Ud iP 14 05 42.4 C
ipP 14 06 07.7
De iP 14 05 59.6 C
Japan.
h = 100 km (Up,Ud).
m = 5.7 (Up,Ki).

" 18 Ud iP 18 35 55.6
Hindu Kush.
Intermediate depth.

" 18 Ud eP 19 02 56
Leeward Islands (h = 45 km).

" 18 Up iP 22 17 33.1 C
(cont.)

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

1972					
July	18	(cont.)			
		Up	ipP	22 17 48.0	
				micr	sec
			P	Z' 0.1	0.8
		Ki	iP	22 16 48.6	C
		Sk	iP	22 17 23.7	C
		Um	iP	22 17 08.6	C
			ipP	22 17 23.8	
		Ud	iP	22 17 39.4	C
			ipP	22 17 53.7	
		De	iP	22 17 56.5	C
			ipP	22 18 11.4	
		Japan.			
		h = 55 km (Up,Um,Ud,De).			
"	18	Ud	eP	22 28 35	
		Vancouver Island (h = N).			
"	19	Up	iP	01 26 03.1	
		Ud	iP	01 26 09.0	
"	19	Up	iPKP	02 31 58.8	
		Ud	iPKP	02 32 00.6	
		De	iPKP	02 32 10.4	
"	19	Up	iPKP	07 24 18.7	
		Ud	iPKP	07 24 20.7	
"	19	Um	iSgl	11 28 09.4	
		Ud	iSgl	11 28 53.1	
		Western USSR.			
		Explosion.			
"	19	Ud	i(PKP)	13 39 28.1	
			ePKP	13 39 42	
		South Sandwich Islands			
		(h = 60 km).			
"	19	Up	i(P)	16 10 23.7	
"	19	Up	iPKP	20 20 42.5	
		Ud	iPKP	20 20 45.0	
		De	iPKP	20 20 55.8	
"	20	Up	iP	01 02 16.1	
		Ki	iP	01 02 24.7	
		Sk	eP	01 02 42	
		Um	iP	01 02 14.0	
		Ud	iP	01 02 32.6	
		De	iP	01 02 29.5	
		Hindu Kush.			
		Intermediate depth.			
"	20	Ud	iP	09 19 38.2	
"	20	Up	iP	10 14 06.1	
		Ud	iP	10 14 20.4	

1972				
July	20	De	iP	11 21 47.3
"	20	Up	i(Sn)	12 29 57.0
			iSgl	12 30 12.6
		Ki	iSgl	12 32 10.0
		Sk	iSgl	12 31 56.0
		Um	iS*	12 30 28.0
			iSgl	12 30 31.1
		Ud	iSgl	12 31 10.9
		De	i	12 31 07.8
			iSgl	12 31 35.4
		Western USSR,		
		59.3°N, 27.7°E.		
		Origin time = 12 27 30.		
		Explosion.		
"	20	Ki	iPn	13 06 44.5
		Um	iPn	13 05 50.6
		Iran-USSR.		
"	20	Up	iP	13 59 13.2
		Ki	iP	13 57 51.2
		Um	iP	13 58 37.8
			i	13 58 44.9
		Ud	iP	13 59 13.8
			i	13 59 20.9
		De	eP	13 59 53
		Arctic Ocean.		
"	20	Up	iP	14 05 21.5
		Ud	iP	14 05 37.1
			i	14 05 40.2
"	20	Up	i(P)	16 12 19.2
"	20	Up	iP	17 27 48.6
		Ki	iP	17 27 14.8
		Um	iP	17 27 33.8
		Ud	iP	17 27 40.5
		De	eP	17 27 57
		Nevada.		
		Underground explosion.		
"	21	Ki	iP	01 01 42.1
"	21	Up	iP	01 14 37.8
		Um	iP	01 14 16.7
		Ud	iP	01 14 45.0
		Japan (h = 80 km).		
"	21	Um	iP	07 24 25.8
		Japan (h = 120 km).		
"	21	Up	ePKP	08 56 20
			iSKP	08 59 55.3
		(cont.)		

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

1972 July 21 (cont.)

Up			micr	sec
	SKP	Z'	0.1	1.1
Ki	ePKP		08 56 14	
	iSKP		08 59 31.5	
			micr	sec
	SKP	Z'	0.3	1.7
Sk	ePKP		08 56 19	
	iSKP		08 59 47.4	
Um	iPKP		08 56 17.1	
	iSKP		08 59 42.8	
Ud	iPKP		08 56 22.1	
	i		08 56 30.6	
	iSKP		08 59 56.4	
De	iPKP		08 56 33.0	
	ipPKP		08 57 06.6	
	iSKP		09 00 04.7	

Tonga Islands.
h = 120 km (De).

" 21	Ki	iP	11 39 51.8
" 21	Ki	eP2	14 14 40
	Ud	iP1	14 14 50.3
		iP2	14 14 52.4
	De	iP2	14 14 54.7

Tadzhik SSR (h = 200 km).

" 21	Up	iP	14 51 55.2
	Ki	iP	14 51 38.4
	Um	iP	14 51 44.6
	Ud	iP	14 52 04.4
		ipP	14 52 31.5
	De	iP	14 52 11.0

Mindanao.
h = 100 km (Ud).

" 21	Ud	iP	15 47 20.0
	De	iP	15 47 11.6
" 21	Up	iP	16 20 06.7
	Ki	iP	16 19 43.8
	Um	iP	16 19 51.9
	Ud	iP	16 20 16.0
	De	iP	16 20 24.0

Formosa (h = 20 km).

" 21	Up	iP	16 21 57.0
	Ki	iP	16 21 40.0
	Ud	iP	16 22 09.5

China (h = N).

" 21	Ud	iP	17 05 49.3
" 21	Sk	e(P2)	17 28 39
	Um	iP1	17 28 32.4
		iP2	17 28 39.9

(cont.)

1972 July 21 (cont.)

Ud	i(P2)		17 29 17.0

Probably Arctic Ocean.

" 21	Up	iP	21 44 48.2
	Um	iP	21 44 30.7
	Ud	iP	21 44 50.9
" 22	Up	eP	00 26 03
	Ud	iP	00 26 10.6

Ionian Sea.

" 22	Up	i(PKP)		03 35 48.5
		iPKP		03 36 00.9
	Ki	e(PKP)		03 36 02
				micr sec
		Mx	E	0.9 18
		Mx	N	0.6 18
	Sk	ePKP		03 36 08
	Um	iPKP		03 36 08.3
	Ud	i(PKP)		03 35 47.8

South Atlantic Ocean
(h = N).

" 22	Up	iP		05 14 55.8
		iPP		05 15 14.4
		iS		05 18 12.2
	Ki	iP		05 15 56.9
		i		05 16 05.2
				micr sec
		P	Z'	0.1 0.5
		Mx	E	0.6 10
		Mx	N	0.4 10
	Sk	iP		05 15 45.1
		i		05 15 49.2
	Um	iP		05 15 21.8
		i		05 15 25.6
		iS		05 19 05.4
	Ud	iP		05 15 16.1
		i		05 15 19.3
		iS		05 18 53.4
		iLgl		05 21 35.1
	De	iP		05 14 48.9
		i		05 14 53.4
		iLgl		05 20 21.6

Crimea (h = N).

" 22	Up	iPKP	06 21 39.3
	Ki	ePKP	06 21 27

New Britain (h = 50 km).

" 22	Up	iPKP	06 22 13.6
	Sk	iPKP	06 22 10.7
	Um	iPKP	06 22 04.4

Santa Cruz Islands
(h = 45 km).

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

1972 July	22	Ud	iP	07 31 39.7
		Bonin Islands (h = 420 km).		
"	22	Up	iPgl	07 55 04.1
			i	07 56 04.6
			iS*	07 56 15.0
			iSgl	07 56 18.7
		Ki	iSgl	07 58 46.7
		Sk	iSgl	07 55 58.6
		Um	iSn	07 56 48.1
			iSgl	07 57 26.4
		Ud	iPn	07 54 24.1
			iPgl	07 54 33.9
			iSn	07 55 02.9
			iSgl	07 55 16.3
		De	iPn	07 54 44.4
			i(S*)	07 55 50.2
			iSgl	07 55 59.4
		South Norway, 59.7°N, 7.4°E.		
		Origin time = 07 53 34.		
"	22	Ud	eP	09 19 02
		Kurile Islands (h = 40 km).		
"	22	Up	iPKP	15 43 24.6
		Um	iPKP	15 43 08.3
		Ud	iPKP	15 43 22.1
			i	15 43 27.1
"	22	Up	iP	16 50 37.1
			i	16 50 39.8
			iS	16 58 18
				micr sec
			P Z'	0.1 1.0
			Mx E	2.6 17
			Mx N	23 22
			Mx Z	3.8 19
		Ki	iP	16 50 30.3
			eS	16 58 11
				micr sec
			Mx E	6.0 17
			Mx N	10 16
		Sk	iP	16 50 52.0
			i	16 50 55.1
		Um	iP	16 50 26.8
			i	16 50 30.0
			iS	16 58 05
		Ud	iP	16 50 51.2
			i	16 50 53.7
		De	iP	16 50 53.4
		Tibet (h = N).		
		M = 5.6 (Up,Ki).		
		Double P, in average 2.9 sec apart.		
"	22	Up	eP	17 16 35
		(cont.)		

1972 July	22	(cont.)		
		Um	eP	17 16 23
		Ud	iP	17 16 47.8
		Tibet.		
		Origin time = 17 07 01.		
"	22	Up	iP	18 12 26.5
		Ud	iP	18 12 31.7
		Greece (h = 130 km).		
"	22	Up	iP	21 09 43.8
		Ud	iP	21 09 56.4
		Tibet (h = N).		
"	22	Ki	iP	21 35 08.1 C
		Sk	iP	21 35 13.6
			iS	21 37 05.8
		Um	iS	21 37 53.6
			i	21 38 12.8
			i	21 38 22.3
		Ud	eP	21 36 03
		Jan Mayen region, 70.7°N, 6.6°W.		
		Origin time = 21 32 49.		
"	23	Up	iP	04 00 53.6
		Ud	iP	04 01 09.3
		Afghanistan.		
"	23	Up	i(S*)	06 08 55.0
			iSgl	06 09 01.4
		Ki	ePn	06 04 48
			eSn	06 05 45
			iSgl	06 06 06.5
		Sk	eSgl	06 08 32
		Um	iSn	06 06 23.5
			iSgl	06 06 59.9
		Ud	iSgl	06 09 33.2
		Northwest USSR, 67.8°N, 33.7°E.		
		Origin time = 06 03 32.		
		Explosion.		
"	23	Up	iPKP	07 17 12.5
		Ud	iPKP	07 17 15.0
"	23	Ki	iPKP	10 09 26.8
		Sk	iSKP	10 12 22.0
		Um	iSKP	10 12 17.1
		Fiji Islands (h = 480 km).		
"	23	Up	iP	10 36 29.9
		Ki	iP	10 35 57.0
		Sk	iP	10 36 23.3
		Um	iP	10 36 10.1
			i	10 36 17.8
			ipP	10 36 26.9
		(cont.)		

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

1972 July 23 (cont.)

Ud	iP		10 36 33.0	

Mariana Islands.
h = 60 km (Um).

" 23	Ud	iP		10 54 35.4
" 23	Up	eP		11 03 24
			micr	sec
		Mx	N	0.6 17
		Mx	Z	0.6 19
	Ki	eP		11 02 34
			micr	sec
		Mx	E	0.6 15
		Mx	N	0.7 17
		Mx	Z	0.8 16
	Sk	iP		11 02 51.8
	Ud	iP		11 03 17.4

Vancouver Island (h = N).
M = 5.0 (Up,Ki).

" 23	Up	iPKP		16 29 11.3
	Ud	iPKP		16 29 13.9
	De	iPKP		16 29 23.5
" 23	Ud	ePKP		16 44 34

South Sandwich Islands
(h = 110 km).

" 23	Um	iP		16 54 29.8
	Ud	iP		16 54 41.1
		i		16 54 43.6

Alternatively, these phases could be PKKP to the preceding event.

" 23	Sk	eP		18 23 34
	Ud	iP		18 23 03.9
	De	iP		18 22 30.1

Crete.

" 23	Up	iP		19 23 59.9 D
		iS		19 32 53
		iP'P'		19 52 25.6
			micr	sec
		P	Z'	0.3 1.3
		Mx	E	6.7 23
		Mx	N	20 23
		Mx	Z	32 23
	Ki	iP		19 23 13.8 D
		iS		19 31 32
		iP'P'		19 52 46.1
			micr	sec
		P	Z'	0.4 1.6
		Mx	E	25 18
		Mx	N	47 22
	Sk	iP		19 23 31.4 D

(cont.)

1972 July 23 (cont.)

	Sk	iP'P'		19 52 38.3
	Um	iP		19 23 38.6 D
		iS		19 32 17
	Ud	iP		19 23 53.3 D
		iP'P'		19 52 27.6
	De	iP		19 24 14.6 D
		iP'P'		19 52 20.3

Vancouver Island (h = N).
m = 6.3, M = 6.5 (Up,Ki).

" 23	Up	iP		20 10 29.1
	Um	iP		20 10 18.9
" 23	Up	iP		20 28 23.9
	Ki	iP		20 27 38.5
	Sk	eP		20 27 54
	Ud	iP		20 28 17.6

Vancouver Island (h = N).

" 23	Ud	eP		21 29 22
" 23	Up			micr sec
		Mx	E	0.5 17
		Mx	N	0.8 21
		Mx	Z	1.4 20
	Sk	iP2		21 53 32.0
	Ud	eP1		21 53 47
		iP2		21 53 53.7

Vancouver Island (h = N).

" 24	Ud	iP		04 13 18.1
" 24	De	iPKP		06 22 43.3

Fiji Islands (h = 640 km).

" 24	Up	eP		07 03 55
	Ud	iP		07 03 30.5
" 24	Ud	iP		07 09 05.5
" 24	Ud	eP		08 26 13
" 24	Up	iP		10 27 46.6
	Ud	eP		10 28 02
		i		10 28 24.6
	De	eP		10 27 39

Turkey (h = N).

" 24	Ud	iP		10 45 37.8
		i		10 45 47.9
" 24	Up	iSgl		11 01 02.2
	Ud	i(S*)		11 01 04.7
		iSgl		11 01 10.1
	De	iPgl		10 59 09.7
		iSgl		10 59 26.3

(cont.)

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

1972
July 24 (cont.)

De	i	10 59 29.6	

Baltic Sea, south of Sweden, 55.7°N, 15.4°E.
Origin time = 10 58 49.
Explosion.

" 24	Up	iSgl	11 01 12.1
	Ud	i(S*)	11 01 13.6
		iSgl	11 01 19.0
	De	iPgl	10 59 18.0
		iSgl	10 59 35.1
		i	10 59 38.4

Baltic Sea, south of Sweden, 55.7°N, 15.4°E.
Origin time = 10 58 58.
Explosion.

" 24	Up	iP	11 03 44.0
	Ki	eP	11 03 51
		i	11 04 04.5
	Sk	eP	11 03 25
	Ud	iP	11 03 26.0
	De	eP	11 03 28
		i	11 03 36.3

Venezuela (h = N).

" 24	Up	iP	15 06 38.8
	Ki	iP	15 06 37.0
	Um	iP	15 06 32.0
	Ud	iP	15 06 54.5
		i	15 06 56.8
	De	iP	15 06 54.5
		i	15 06 56.9

Kashmir-Tibet (h = N).

" 24	Ud	iP	16 36 30.8
" 24	Ud	eP	19 13 34

Aleutian Islands (h = 45 km).

" 24	Ud	eP	23 18 17
" 25	Up	iP	02 00 49.7 C
		i	02 01 03.5
			micr sec
		Mx N	0.4 11
		Mx Z	0.5 10
	Ki	iP	02 02 04.9
			micr sec
		Mx E	0.2 10
		Mx N	0.3 14
	Sk	iP	02 01 31.3
	Um	iP	02 01 28.7
		i	02 01 29.9
	Ud	iP	02 00 56.3
		i	02 00 58.9

(cont.)

1972
July 25 (cont.)

De	iP	02 00 14.4	

Greece (h = 45 km).
M = 4.4 (Up,Ki).

" 25	Up	eP	02 54 02
	Ud	eP	02 54 09
" 25	Um	iP	03 32 40.4
	Ud	eP	03 32 57
" 25	Up	iPKP	04 27 03.6
	Ud	iPKP	04 27 05.7
		i	04 27 10.6

Fiji Islands (h = 510 km).

" 25	Ud	iP	07 02 31.8

Ionian Islands.

" 25	Up	iPKP	08 49 11.1
	Sk	ePKP	08 49 08
	Um	iPKP	08 49 04.6
	Ud	iPKP	08 49 12.6
		ipPKP	08 49 23.3
	De	iPKP	08 49 22.5
		ipPKP	08 49 34.0

Kermadec Islands.
h = 35 km (Ud,De).

" 25	Up	iPKP	09 00 40.3
		ipPKP	09 00 51.5
	Ud	iPKP	09 00 41.8
		ipPKP	09 00 54.4
	De	iPKP	09 00 51.6

Kermadec Islands.
h = 40 km (Up,Ud).

" 25	Up	iPKP	09 39 28.0
		i	09 39 35.2
		iSKP	09 42 56.8
		i	09 43 08.7
			micr sec
		PKP Z'	0.1 1.0
		SKP Z'	0.1 1.0
	Ki	iPKP	09 39 11.2
		iSKP	09 42 33.5
			micr sec
		SKP Z'	0.5 1.6
		Mx N	0.6 21
		Mx Z	0.8 21
	Sk	iPKP	09 39 20.4
		i	09 39 25.8
		iSKP	09 42 49.6
	Um	iPKP	09 39 18.1
		iSKP	09 42 44.8
	Ud	iPKP	09 39 28.6
		iSKP	09 42 59.0

(cont.)

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

1972 July	25	(cont.)		
		Ud	i	09 43 11.0
		De	iPKP	09 39 40.7
			ipPKP	09 40 32.4
			iSKP	09 43 07.8
		Tonga Islands.		
		h = 200 km (De).		
		Double SKP at Up,Ud,		
		probably corresponding to		
		SKP1 and SKP2.		
"	25	Up	eP	15 03 39
		Ud	iP	15 03 58.3
		De	eP	15 03 50
"	25	Um	iP	16 52 20.1
"	25	Ud	iP	18 17 22.0
		Aleutian Islands (h = 50 km).		
"	25	Um	iP	19 06 38.3
		Ud	eP	19 07 11
"	25	Um	eP	20 02 22
		Ud	eP	20 02 33
"	25	Ud	eP	23 09 46
"	26	Up	iP	01 45 27.5
		Ki	eP	01 45 05
		Um	eP	01 45 23
		Ud	eP	01 45 42
"	26	Up	iP	02 37 02.2
		Ud	iP	02 37 07.6
		Kurile Islands (h = 90 km).		
"	26	Ud	iP	03 12 05.0
"	26	Up	iP	08 32 43.8
		Ud	iP	08 32 57.7
"	26	Ud	iP	09 43 07.9 C
"	26	Ki	iPn	11 07 44.6
			iSn	11 08 30.8
			iS*	11 08 43.6
		Sk	eSgl	11 11 35
		Um	iSgl	11 10 19.3
		Ud	iSgl	11 12 50.5
		Northwest USSR-Norway		
		border region,		
		69.6°N, 30.1°E.		
		Origin time = 11 06 44.		
		Explosion.		
"	26	Up	iPKP	12 18 20.3
		(cont.)		

1972 July	26	(cont.)		
		Ud	iPKP	12 18 22.6
		De	iPKP	12 18 25.4
"	26	Ud	iPKP	13 55 39.2
		De	iPKP	13 55 49.9
		Tonga-Kermadec Islands		
		(h = 550 km).		
"	26	Um	eP	14 19 39
		Ud	eP	14 20 02
"	26	Up	iP	15 06 02.6
		Ki	iP	15 05 27.3
		Sk	iP	15 05 57.9
		Um	iP	15 05 42.5
			i(PcP)	15 06 00.0
		Ud	iP	15 06 10.1
		South of Japan (h = 80 km).		
"	26	Um	i(P)	16 44 16.6
"	26	Ki	iP	17 12 26.5
			i	17 12 38.0
"	26	Ki	iP	17 30 54.9
		Ud	iP	17 31 43.8
"	26	Um	iP	18 46 19.6 C
"	26	Up	iP	18 55 29.8
		Ki	iP	18 54 31.9
			ipP	18 54 44.1
		Sk	iP	18 54 58.2
		Um	iP	18 55 02.8
			ipP	18 55 15.1
		Ud	iP	18 55 24.5
		De	iP	18 55 51.1
		Canada.		
		h = 45 km (Ki,Um).		
"	26	Um	iP	19 03 13.2
		Ud	iP	19 03 17.6
"	26	Up	iP	22 04 20.6
		Ud	iP	22 04 30.8
		Ionian Islands.		
"	27	Up	iP	00 31 39.4
			ipP	00 31 46.1
			i	00 31 54.0
			iS	00 40 20
				micr sec
			P Z'	0.1 1.0
			pP Z'	0.2 1.1
			Mx N	0.6 21
			Mx Z	0.8 20
		(cont.)		

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

1972
July 27 (cont.)

Ki	iP		00 30	47.9
	ipP		00 30	54.3
	i		00 31	02.8
			micr	sec
	pP	Z'	0.2	1.0
Sk	eP		00 31	22
	i		00 31	41.9
Um	iP		00 31	11.2
	ipP		00 31	18.4
	i		00 31	27.3
	iS		00 39	32
Ud	iP		00 31	42.7
	ipP		00 31	50.3
	i		00 32	01.0
De	iP		00 32	03.6
	ipP		00 32	11.1
	i		00 32	21.0

Kurile Islands.
h = 25 km (Up,Ki,Um,Ud,De).
m = 6.1 (Up,Ki).
The third phase (Up,Ki,Um, Ud,De) could be P of another shock in nearly the same area.

" 27

Ki	iP	10 22	38.4
Ud	iP	10 23	31.5

Aleutian Islands (h = 45 km).

" 27

Ki	iP	13 15	35.6

Celebes Sea.

" 27

Ud	iP	15 35	21.8
De	iP	15 35	13.8
	i	15 35	18.5

" 27

Ki	iSgl	16 21	10.0
Sk	iSgl	16 21	14.7
Um	iSgl	16 21	36.7
Ud	e(Sg2)	16 23	05

Nordland, Norway,
66.5°N, 14.1°E.
Origin time = 16 19 40.
Explosion.

" 27

Up	eP1		16 53	31
	iP2		16 53	33.4
	ipP		16 53	39.4
			micr	sec
	P2	Z'	0.2	1.3
Ki	iP1		16 53	01.0
	iP2		16 53	05.0
	ipP		16 53	10.6
			micr	sec
	P2	Z'	0.1	1.0
	Mx	E	0.7	17
	Mx	N	0.9	20
	Mx	Z	0.9	20

(cont.)

1972
July 27 (cont.)

Sk	iP2	16 53	33.7
Um	iP1	16 53	13.6
	iP2	16 53	16.4
	ipP	16 53	21.8
Ud	iP1	16 53	39.3
	iP2	16 53	41.9
	ipP	16 53	47.3
De	iP2	16 53	52.8

Ryukyu Islands.
h = 20 km (Up,Ki,Um,Ud).
m = 5.9 (Up,Ki).
Double P, about 2.9 sec apart. It is likely that the depth phase pP refers to the second, bigger onset.

" 27

Ud	iPKP	18 46	15.1
De	iPKP	18 46	25.3

Fiji Islands (h = 500 km).

" 27

Ki	iSgl	19 54	53.7
Sk	iSgl	19 54	57.4
Um	iSn	19 55	07.6
	iSgl	19 55	21.5
Ud	iSg2	19 56	48.5

Nordland, Norway,
66.5°N, 13.8°E.
Origin time = 19 53 22.
Explosion.

" 27

Sk	iP	20 16	23.1
Ud	eP	20 16	32

Guatemala (h = 80 km).

" 27

Um	iP	20 56	58.5
Ud	iP	20 56	50.9

Guatemala (h = 80 km).

" 27

Ud	eP	21 29	17

Guatemala (h = 90 km).

" 27

Um	iP	23 26	43.2

" 28

Ud	iPKP	03 53	41.3
De	iPKP	03 53	51.1

" 28

Ud	iP	03 56	46.4

Alternatively, this could be SKP to the preceding event.

" 28

Ki	eP		07 14	29
	ipP		07 14	43.6
			micr	sec
	Mx	E	0.4	15
	Mx	N	0.4	15
	Mx	Z	0.4	15
Um	eP		07 14	41
	i(sP)		07 15	04.5

(cont.)

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

1972 July	28	(cont.)			
		Ud	iP		07 15 11.6
			ipP		07 15 26.0
		Formosa.			
		h = 55 km (Ki,Ud).			
"	28	Um	iPKP		08 45 16.2
		South Pacific Ocean (h = N).			
"	28	Up	iP		08 59 47.0 D
			ipP		08 59 59.0
					micr sec
			P	Z'	0.2 1.0
		Ki	iP		08 58 52.9
			ipP		08 59 05.7
					micr sec
			P	Z'	0.1 1.1
			Mx	E	0.6 18
			Mx	N	0.9 20
			Mx	Z	0.9 20
		Sk	iP		08 59 26.8
		Um	iP		08 59 19.0
			iPcP		08 59 59.6
		Ud	iP		08 59 48.2
			ipP		09 00 00.1
		De	iP		09 00 10.4 D
		Aleutian Islands.			
		h = 45 km (Up,Ki,Ud).			
		m = 6.1 (Up,Ki).			
"	28	Ud	iP		11 18 13.9
"	28	Um	i(P)		11 21 01.6
"	28	Ki	iPn		11 28 44.8
			iSn		11 29 31.0
			iS*		11 29 45.2
		Um	i(Sn)		11 30 23.7
			iSgl		11 31 01.3
		Northwest USSR,			
		68.2°N, 30.8°E.			
		Origin time = 11 27 44.			
		Explosion.			
"	28	Um	iP		12 34 44.9
"	28	Ud	iP		14 29 36.8
"	28	Um	iP		15 41 09.4
		Ud	iP		15 41 31.2
		Tibet (h = N).			
"	28	Up	iSgl		16 30 43.4
		Um	iS*		16 31 00.7
			iSgl		16 31 04.4
		Ud	iSgl		16 31 45.1
		De	eSgl		16 32 15
		Western USSR.			
		Explosion.			

1972 July	28	Up	eP		16 36 45
		Um	iP		16 36 18.5
		Ud	iP		16 36 47.9
		Aleutian Islands (h = 5 km).			
"	28	Ud	iPKP		23 55 56.5
		De	iPKP		23 56 07.6
"	29	Um	iP		01 03 00.7
		Ud	iP		01 03 34.6
"	29	Ud	iP		02 33 42.1
"	29	Ud	iPKP		05 15 55.8
		De	iPKP		05 16 08.1
"	29	Up	iP		05 17 39.3 C
			iPP		05 21 39
			ipPP		05 22 22.3
					micr sec
			P	Z'	0.1 0.9
			Mx	E	1.0 20
			Mx	N	1.6 18
			Mx	Z	0.9 16
		Ki	iP		05 17 25.8 C
					micr sec
			P	Z'	0.3 1.0
			Mx	E	1.7 19
			Mx	N	2.3 21
			Mx	Z	1.4 17
		Sk	iP		05 17 46.3 C
		Um	iP		05 17 30.1 C
			iSKS		05 27 49
			iS		05 28 27
		Ud	iP		05 17 47.7 C
			iPP		05 21 57.5
		De	iP		05 17 52.4 C
			ipP		05 18 33.0
			iPP		05 22 09.0
			ipPP		05 22 42.0
		Celebes.			
		h = 160 km (De).			
		m = 6.4, M = 5.7 (Up,Ki).			
		M uncorrected for focal depth.			
"	29	Ki	iP		05 50 04.6
		Um	iP		05 50 21.6
		Ud	iP		05 50 51.4
		Japan (h = 60 km).			
"	29	Um	iP		06 22 22.7
"	29	Um	iP		07 55 04.2
"	29	Ud	iP		08 27 43.0
"	29	Up	eP		09 33 59
		(cont.)			

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

1972 July	29	(cont.)				
		Ki	iP		09 34 08.0	
		Um	iP		09 34 03.7	
			i		09 34 10.2	
		Ud	iP		09 34 12.4	
		De	iP		09 34 10.5	
"	29	Up	i(P)		09 49 47.5	
"	29	Up	ePP		11 19 20	
		Ki	iP		11 14 58.2	
					micr	sec
			Mx	E	0.7	17
			Mx	N	0.4	14
			Mx	Z	0.5	17
		Um	iP		11 14 59.7	
			i		11 15 14.0	
		Ud	eP		11 15 19	
			ePP		11 19 32	
		South of Bali Island (h = 300 km).				
"	29	Up	iP		13 07 01.4	
		Ud	iP		13 07 03.0	
"	29	Ud	iP		14 40 07.5	
"	29	Ud	eP		14 46 23	
"	29	Um	eP		16 15 52	
		Ud	iP		16 15 38.8	
		Ecuador (h = 170 km).				
"	29	Ud	eP		16 59 54	
		De	iP		17 00 16.9	
"	29	Up	eP		17 18 34	
		Um	eP		17 18 31	
		Ud	iP		17 18 49.2	
"	29	Up	iP		17 27 59.2	
		Ki	iP		17 27 57.1	
		Um	iP		17 27 55.2	
		Ud	iP		17 28 07.6	
		Sumatra (h = 90 km).				
"	29	Up	eP		19 05 43	
		Ki	iP		19 04 49.6	
		Um	iP		19 05 16.2	
			i		19 05 23.2	
		Ud	iP		19 05 41.9	
		De	iP		19 06 04.5	
		Aleutian Islands (h = 40 km).				
"	29	Ud	iP		19 15 26.7	
		Greece.				
1972 July	29	Up	iP		21 18 02.1	
		Ki	iP		21 17 11.1	
		Um	iP		21 17 35.0	
		Ud	iP		21 18 06.5	
		Kurile Islands (h = N).				
"	29	Um	iP		21 53 42.4	
"	29	Up	Mx		23 38	
					micr	sec
			Mx	E	0.9	19
			Mx	N	0.7	20
			Mx	Z	1.8	19
		Ki	Mx		23 36	
					micr	sec
			Mx	E	0.8	18
			Mx	N	1.1	20
			Mx	Z	0.5	16
		Bismarck Sea (h = N).				
		M = 5.5 (Up,Ki).				
"	30	Up	iP		00 05 54.5	
		Nevada (h = 5 km).				
"	30	Up	eP		01 34 49	
		Sk	eP		01 35 29	
		Um	eP		01 35 24	
			i		01 35 28.0	
		Ud	iP		01 34 57.5	
		Aegean Sea (h = N).				
"	30	Up	iP		02 31 30.3	
		Ki	iP		02 30 45.7	
		Um	iP		02 31 04.8	
		Ud	iP		02 31 36.5	
		Japan (h = 160 km).				
"	30	Up	iP		03 11 49.5	
					micr	sec
			P	Z'	0.1	1.0
			Mx	E	0.8	16
			Mx	N	1.0	18
			Mx	Z	1.9	18
		Ki	iP		03 10 58.8	
					micr	sec
			Mx	E	1.0	16
			Mx	N	1.1	17
			Mx	Z	0.9	16
		Sk	iP		03 11 35.5	
		Um	iP		03 11 22.7	
		Ud	iP		03 11 54.5	
		De	eP		03 12 07	
		Kurile Islands (h = 45 km).				
		M = 5.1 (Up,Ki).				
"	30	Um	iP		03 31 31.3	

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

1972 July	30	Um	iP		03 49 53.9	
		Ud	iP		03 50 06.4	
"	30	Um	eP		04 33 20	
		Ud	eP		04 33 45	
"	30	Up	iP		05 00 18.8	C
			ipP		05 00 32.9	
					micr	sec
			P	Z'	0.2	1.0
		Ki	iP		04 59 25.5	C
					micr	sec
			P	Z'	0.1	0.9
		Sk	iP		04 59 58.5	
		Um	iP		04 59 51.3	C
			ipP		05 00 04.9	
		Ud	iP		05 00 20.0	C
			ipP		05 00 33.2	
		De	iP		05 00 42.0	
			ipP		05 00 55.3	
		Aleutian Islands.				
		h = 50 km (Up,Um,Ud,De).				
		m = 6.0 (Up,Ki).				
"	30	Up	iP		05 11 42.9	
		Ki	iP		05 11 42.3	
		Sk	iP		05 11 56.0	
		Um	iP		05 11 39.9	C
		Ud	iP		05 11 51.8	C
		Sumatra (h = 45 km).				
"	30	Um	eP		05 28 43	
"	30	Um	iP		06 37 09.7	
		Ud	eP		06 37 21	
"	30	Ud	iP		09 48 25.1	
"	30	Um	eP		10 53 45	
"	30	Ud	iP		11 05 46.2	
		Crete.				
"	30	Up	eP		11 48 12	
		Um	iP		11 48 08.5	
		Ud	iP		11 48 26.2	
		Afghanistan-USSR.				
"	30	Um	iP		12 29 20.4	
"	30	Up	iP		16 12 02.4	
		Ki	iP		16 11 39.9	
			ipP		16 11 49.7	
					micr	sec
			P	Z'	0.1	1.0
		Um	iP		16 11 48.8	
		Ud	iP		16 12 11.1	
			ipP		16 12 21.8	
		De	eP		16 12 23	
		Formosa.				
		h = 35 km (Ki,Ud).				

1972 July	30	Um	iP		17 19 05.9	
"	30	Um	iP		17 51 34.3	
		Ud	iP		17 52 00.5	
"	30	Up	iPKP		17 59 05.9	
			iPKKP		18 09 41.7	
					micr	sec
			Mx	E	1.2	21
			Mx	N	1.9	21
			Mx	Z	2.4	22
		Ki	ePKP		17 58 59	
			i		17 59 12.3	
					micr	sec
			Mx	E	2.9	21
			Mx	N	3.6	24
			Mx	Z	3.2	23
		Um	ePKP		17 58 53	
			ePKKP		18 09 53	
		Ud	ePKP		17 59 05	
			i		17 59 31.1	
			ePKKP		18 09 41	
		De	ePKP		17 59 11	
			iPKKP		18 09 29.1	
		New Britain (h = 45 km).				
		M = 5.9 (Up,Ki).				
"	30	Ki	eP		18 17 55	
		Um	iP		18 18 34.3	
"	30	Up	eP		18 46 46	
		Ki	iP		18 46 25.3	
		Um	iP		18 46 31.7	
		Ud	iP		18 46 53.4	
"	30	Ud	eP		19 11 21	
"	30	Ki	iP		19 52 24.3	
		Ud	iP		19 51 29.1	
		De	iP		19 50 57.3	
"	30	Ki	iP		20 14 46.1	
		Ud	eP		20 13 50	
		De	iP		20 13 20.4	
"	30	Up	iPKP		20 32 37.5	
					micr	sec
			Mx	E	1.2	21
			Mx	N	2.6	21
			Mx	Z	2.7	22
		Ki	ePKP		20 32 26	
					micr	sec
			Mx	E	3.2	22
			Mx	N	4.0	25
			Mx	Z	2.8	20
		Sk	ePKP		20 32 37	
		Um	iPKP		20 32 31.0	
		Ud	iPKP		20 32 40.3	
		(cont.)				

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

1972 July	30	(cont.)				
		De	iPKP		20 32 45.4	
		New Britain (h = 15 km).				
		M = 6.0 (Up,Ki).				
"	30	Up	iP		21 55 32.0	
			i		21 55 35.2	
			iS		22 03 59	
			iP'P'		22 25 03.9	
					micr	sec
			P	Z'	2.3	1.5
			Mx	E	400	20
			Mx	N	590	24
		Ki	iP		21 54 40.6	
			i		21 54 43.1	
			iS		22 02 26	
					micr	sec
			P	Z'	3.3	2.1
			Mx	E	900	27
			Mx	N	620	23
			Mx	Z	810	25
		Sk	iP		21 55 02.7	
			i		21 55 05.7	
		Um	iP		21 55 08.2	
			i		21 55 10.9	
			iS		22 03 13	
		Ud	iP		21 55 26.7	
			i		21 55 29.3	
		De	iP		21 55 49.5	
			i		21 55 52.5	
		Alaska (h = 25 km).				
		m = 7.1, M = 7.9 (Up,Ki).				
		Double P, 2.8 sec apart.				
"	30	Up	iP		22 18 56.5	
		Um	iP		22 19 09.0	
		Ud	iP		22 19 11.6	
		De	iP		22 18 54.2	
		Iran.				
"	30	Up	eP		23 10 49	
		Um	iP		23 10 25.0	
		Ud	eP		23 10 43	
		Alaska.				
		Origin time = 23 00 31.				
"	30	Up	iP		23 31 26.4	C
			ipP		23 31 47.2	
			i(PP)		23 34 37.1	
			i		23 35 22.5	
			iPKP		23 35 36.9	
			iPP		23 35 53.4	
					micr	sec
			P	Z'	0.1	0.9
			PP	Z'	0.1	1.2
		Ki	iP		23 31 10.6	C
			i		23 31 44.6	
		(cont.)				

1972 July	30	(cont.)				
		Ki	e(PP)		23 34 34	
			iPP		23 35 28.1	
			ePKKP		23 47 10	
					micr	sec
			P	Z'	0.2	1.0
		Sk	eP		23 31 34.0	
			i(PKP)		23 35 49.0	
		Um	iP		23 31 15.2	C
			i(PP)		23 34 33.0	
			iPKP		23 35 31.3	
			iPP		23 35 37.3	
			iPKKP		23 47 06.2	
		Ud	iP		23 31 34.3	C
			ipP		23 31 55.5	
			i(PP)		23 34 48.3	
			iPP		23 36 05.6	
			iPKKP		23 46 52.9	
		De	iP		23 31 40.0	C
			iPKP		23 35 44.1	
			iPP		23 36 13.6	
		Banda Sea.				
		h = 80 km (Up,Ud).				
		m = 6.7 (Up,Ki).				
		(PP) denotes early PP arrivals.				
"	30	Up	ePKP2		23 59 27	
		Ki	iPKP		23 58 51.9	
		Sk	iPKP		23 59 04.9	
			iPKP2		23 59 21.3	
		Um	iPKP		23 58 59.6	C
			iPKP2		23 59 10.7	
		Ud	iPKP2		23 59 30.8	C
		New Zealand (h = 35 km).				
		PKP is probably identical with PKP1.				
"	31	Ud	eP		03 07 12	
"	31	Up	iP		03 40 30.3	C
			ipP		03 40 41.9	
			iPP		03 43 27.3	
			iS		03 50 25	
					micr	sec
			P	Z'	0.5	1.2
			pP	Z'	0.4	1.1
			PP	Z'	0.1	1.1
			Mx	E	1.5	16
			Mx	N	2.1	15
			Mx	Z	3.0	17
		Ki	iP		03 39 54.9	C
			ipP		03 40 06.3	
			iPP		03 42 28.8	
			iS		03 49 19	
					micr	sec
			P	Z'	0.3	1.1
		(cont.)				

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

1972
July 31 (cont.)

				micr	sec	
	Ki					
		pP	Z'	0.4	1.1	
		PP	Z'	0.1	1.0	
		Mx	E	3.5	17	
		Mx	N	3.5	19	
		Mx	Z	2.4	17	
	Sk	iP		03 40 25.1		C
		ipP		03 40 36.8		
		iPP		03 43 21.2		
	Um	iP		03 40 10.2		C
		i		03 40 19.8		
		ipP		03 40 21.9		
		iPP		03 42 57.3		
		iS		03 49 47		
	Ud	iP		03 40 36.9		C
		ipP		03 40 48.3		
		i		03 40 55.9		
	De	iP		03 40 50.5		C

South of Japan.
h = 40 km (Up,Ki,Sk,Um,Ud).
m = 6.5, M = 5.8 (Up,Ki).

"	31	Ki	eP	05 16 50
		Um	iP	05 17 19.3
		Ud	iP	05 17 47.1
"	31	Ki	eP	06 36 18
		Um	iP	06 36 14.5
		Ud	iP	06 36 28.1
		De	iP	06 36 25.4
"	31	Ki	iP	06 49 43.7
		Um	iP	06 50 09.7
			iPcP	06 51 05.3
		Ud	iP	06 50 41.8

Kamchatka (h = N).

"	31	Um	iP	07 34 12.5
		Ud	eP	07 34 26
"	31	Ki	ePKP	07 45 57
		Um	e(PKP)	07 46 04
			iPKP	07 46 05.4
		Ud	iPKP	07 46 15.1
		De	ePKP	07 46 20

New Hebrides Islands
(h = 15 km).

"	31	Ud	iSKP	08 15 46.6
		De	iPKP	08 13 10.7
			eSKP	08 15 55

Fiji Islands (h = 630 km).

"	31	Um	iSKP	11 18 00.9
			ipSKP	11 19 03.7

New Hebrides Islands.
h = 180 km (Um).

1972
July 31

Up	iPgl	14 20 29.8
	iSgl	14 21 46.4
De	iPgl	14 19 55.8
	iSgl	14 20 42.2

Probably near coast of
Poland.
Origin time = 14 18 50.
Explosion.

"	31	Up	iPgl	14 20 40.2
			iSgl	14 21 56.5
			i	14 21 59.9
		De	iPgl	14 20 06.3

Probably near coast of
Poland.
Origin time = 14 19 00.
Explosion.

"	31	Um	iP	14 26 25.5
		Ud	eP	14 26 33
		De	iP	14 26 24.4
"	31	Up	iP	14 47 18.2 C
		Ki	iP	14 46 48.6
			ipP	14 47 16.0
		Um	iP	14 46 59.3
			ipP	14 47 27.7
			iSKS	14 57 17
		Ud	eP	14 47 23
			iPP	14 51 16.6
			i(sPP)	14 51 50.8

Mariana Islands.
h = 110 km (Ki,Um).

"	31	Up	iP	16 08 08.7		
			i	16 08 32.6		
			iS	16 18 01		
					micr	sec
			P	Z'	0.1	0.9
			Mx	E	1.5	16
			Mx	N	2.0	16
			Mx	Z	2.8	16
		Ki	iP	16 07 32.9		
			i	16 07 40.8		
			iS	16 16 58		
					micr	sec
			P	Z'	0.1	1.1
			Mx	E	3.0	18
			Mx	N	3.5	18
			Mx	Z	1.6	15
		Um	iP	16 07 48.2		
			iS	16 17 25		
		Ud	iP	16 08 15.2		
		De	iP	16 08 28.5		

South of Japan (h = N).
m = 5.9, M = 5.8 (Up,Ki).

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

1972				
July	31	Up	eP	17 16 38
		Ki	eP	17 16 17
		Um	iP	17 16 25.6
			ipP	17 16 33.2
		Ud	eP	17 16 51
		Formosa.		
		h = 25 km (Um).		
"	31	Up	iP	17 30 00.9
		Um	iP	17 29 35.2
		Ud	iP	17 30 06.5
		Okhotsk Sea (h = 440 km).		
"	31	Up	eSKP	20 13 37
		Ud	iSKP	20 13 40.3
		New Hebrides Islands		
		(h = 100 km).		
"	31	Um	iP	21 08 49.8
		Ud	eP	21 08 51

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July 31, 1974

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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

A U G U S T 1 - 31, 1972

1972				
Aug.	1	Up	iP	00 00 40.0
		Ki	iP	00 01 40.8
		Um	iP	00 01 06.6
		Ud	iP	00 00 48.6
		De	eP	00 00 20
		Turkey (h = N).		
"	1	Events at 01 00, 02 00, 02 20, 02 40, 03 00, 04 00, 04 30, 05 45, 07 30 and 08 45 all belong to the so-called Blue Road project, a test profile of underwater explosions from Umeå in Sweden to Mo i Rana in Norway. Readings and interpretations will be presented in a special publication.		
"	1	Up	eP	03 33 35
		Ki	iP	03 33 20.0
		Ud	eP	03 33 42
		Molucca Passage (h = 50 km).		
"	1	Ud	eP	09 52 50
"	1	Up	iP	10 49 54.6
		Ki	iP	10 49 53.1 C
			i	10 50 17.1
		Um	iP	10 49 50.9
		Ud	iP	10 50 02.1
		De	eP	10 50 02
		Sumatra (h = 120 km).		
"	1	Ud	iP	13 19 01.8
		De	iP	13 18 46.5
"	1	Ud	i(P)	15 19 05.3

1972				
Aug.	1	Ud	iP	15 23 08.6
		De	iP	15 23 01.0
"	1	Um	iP	15 30 31.2
		Ud	iP	15 30 26.8
"	1	Ki	iP	15 53 11.8
		Um	iP	15 53 26.1
"	1	Up	iPKP	17 48 42.6
		Ud	iPKP	17 48 44.6
		De	iPKP	17 48 55.3
"	1	Um	iPgl	17 52 56.1
			iSgl	17 53 20.1
		Gulf of Bothnia.		
"	1	Um	iSgl	18 59 20.5
		Western USSR. Explosion.		
"	1	Up	iP	19 19 58.4
			i(PP)	19 23 14.7
			iPP	19 24 03.7
			iSKS	19 30 27.3
			iS	19 31 14.4
				micr sec
			PP Z'	0.2 1.2
			Mx E	5.0 20
			Mx N	4.4 19
			Mx Z	4.2 22
		Ki	iP	19 19 39
			ipP	19 20 06.4
			iPP	19 23 34
			ipPP	19 23 58.8
			iSKS	19 30 08
			iPS	19 32 04
		(cont.)		

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

1972
Aug. 1 (cont.)

Ki			micr	sec
	P	Z'	0.2	1.1
	pP	Z'	0.3	1.2
	Mx	E	5.3	21
	Mx	N	2.4	17
	Mx	Z	3.8	20
Sk	iP		19 20 06.1	
	ipP		19 20 29.4	
	iPP		19 24 10.4	
	ipPP		19 24 35.4	
Um	iP		19 19 47.4	
	ipP		19 20 11.9	
	i(PP)		19 23 18.6	
	iPP		19 23 38.6	
	ipPP		19 24 05.5	
	iSKS		19 30 15	
Ud	iP		19 20 06.0	
	ipP		19 20 30.7	
	i(PP)		19 23 58.0	
De	iP		19 20 11.8	
	ipP		19 20 36.2	
	i(PP)		19 23 43.8	
	iPP		19 24 25.2	
	ipPP		19 24 48.5	

Molucca Passage.
h = 90 km (Ki,Sk,Um,Ud,De).
m = 6.5, M = 6.1 (Up,Ki).

" 1 Up iPP 21 26 20.1

		micr	sec
Mx	E	0.7	24
Mx	N	1.2	22
Mx	Z	0.8	20
Ki		micr	sec
Mx	E	0.9	20
Mx	N	0.7	18
Mx	Z	1.0	18

Bismarck Sea (h = N).
M = 5.5 (Up,Ki).

" 1 Ki iP 22 15 42.4

eTPg	22 20 52	
iTSg	22 21 14.7	
Sk	eP	22 16 17
iS	22 17 57.7	
Um	iP	22 16 44.2
Ud	eP	22 17 07

Northeast of Jan Mayen.

" 2 Ud iP 07 44 40.2

" 2 Ki

		micr	sec
Mx	E	0.6	18
Mx	N	0.6	19
Mx	Z	0.9	20
Um	iPKP	10 01 46.6	

Solomon Islands (h = 60 km).

1972
Aug. 2

Ud	iSgl	10 43 53.6
De	ePgl	10 42 45
	iSgl	10 43 41.2

Off coast of south Norway.
Origin time = 10 41 32.

" 2 Ud iP 11 00 15.8

" 2 Up iP 11 23 28.6 C

	iPcP	11 23 57.2
Ki	iP	11 22 42.0 C

		micr	sec
P	Z'	0.1	1.0
Sk	iP	11 23 18.0	
Um	iP	11 23 03.3 C	
	iPcP	11 23 40.9	
Ud	iP	11 23 34.2 C	
De	eP	11 23 54	

Okhotsk Sea (h = 350 km).

" 2 Up iSgl 12 32 53.5

Sk	eSgl	12 34 35
Um	iSgl	12 33 10.2
Ud	iSgl	12 33 52.5
De	eSgl	12 34 08

Western USSR,
59.2°N, 28.3°E.
Origin time = 12 30 00.
Explosion.

" 2 Um iP 13 00 41.3

" 2 Ki iP 14 16 10.7

Um	iP	14 16 26.1
Ud	iP	14 16 53.4

Japan (h = 210 km).

" 2 Up iPKP 14 38 01.6

Ud	iPKP	14 38 02.9
De	ePKP	14 38 14

" 2 Ud eP 15 16 38

De	eP	15 16 10

Turkey.

" 2 Ud iP 18 53 26.4

Kurile Islands (h = 55 km).

" 2 Up iPKP 20 08 05.9 C

	ipPKP	20 08 53.9	
		micr	sec
	PKP	Z' 0.4	0.8
Ki	e(PKP)	20 07 47	
	iPKP	20 07 53.0	
		micr	sec
	PKP	Z' 0.1	1.3
Sk	e(PKP)	20 07 57	

(cont.)

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

1972
Aug. 2 (cont.)

Sk	iPKP	20 08 03.0	
Um	i(PKP)	20 07 54.0	
	iPKP	20 08 02.2	
	ipPKP	20 08 49.5	
Ud	iPKP	20 08 08.0	C
	i	20 08 11.0	
	ipPKP	20 08 52.7	
De	iPKP	20 08 14.1	C
	i	20 08 18.5	
	ipPKP	20 09 04.6	

Tonga-Kermadec Islands.
h = 190 km (Up,Um,Ud,De).

" 2

Ki	iP	21 41 21.4	
Sk	eP	21 41 23	
Um	iP	21 41 00.8	
	ipP	21 41 08.5	
Ud	iP	21 41 04.6	
	ipP	21 41 12.0	
De	iP	21 40 51.0	

Iran.
h = 30 km (Um,Ud).

" 2

Up	iP		21 49 03.8	C
	iX		21 49 28.0	
	iS		21 57 19	
			micr	sec
	P	Z'	0.2	1.0
	Mx	E	1.5	16
	Mx	N	2.4	17
	Mx	Z	2.3	17
Ki	iP		21 48 08.4	C
	iX		21 48 31.8	
	iS		21 55 46	
			micr	sec
	P	Z'	0.2	1.1
	Mx	E	5.0	19
	Mx	N	4.8	19
	Mx	Z	3.1	18
Sk	iP		21 48 45.2	C
Um	iP		21 48 34.7	C
	iPcP		21 49 29.6	
	iS		21 56 35	
Ud	iP		21 49 06.4	C
	iPcP		21 49 47.7	
De	iP		21 49 29.1	C
	iPcP		21 50 03.1	

Kamchatka (h = N).
m = 6.2, M = 5.7 (Up,Ki).

" 2

Sk	iP	22 13 05.1	
Um	iP	22 13 22.3	
Ud	iP	22 13 13.7	

Mexico (h = 50 km).

" 2

Up	iP	23 11 13.0	

(cont.)

1972
Aug. 2 (cont.)

Ki	iP	23 11 44.6	
Sk	iP	23 11 44.9	
	ipP	23 11 51.0	
Um	iP	23 11 23.9	C
	ipP	23 11 30.2	
Ud	iP	23 11 27.9	
	ipP	23 11 34.3	
De	iP	23 11 14.3	C
	ipP	23 11 19.9	

Iran.
h = 25 km (Sk,Um,Ud,De).

" 2

Up	iP	23 19 58.4	
Ki	iP	23 20 30.3	
Sk	eP	23 20 33	
Um	iP	23 20 09.5	
Ud	iP	23 20 13.5	
De	iP	23 20 00.1	

Iran (h = N).

" 2 Um i(P) 23 51 33.0

" 3 Events at 01 00, 02 00, 02 40, 03 00, 03 20, 03 40 and 04 30 all belong to the so-called Blue Road project, a test profile of underwater explosions from Umeå in Sweden to Mo i Rana in Norway. Readings and interpretations will be presented in a special publication.

" 3

Up	iP	02 09 39.8	
Ki	iP	02 10 40.7	
Sk	eP	02 10 22	
Um	iP	02 10 08.1	
Ud	iP	02 09 54.4	
De	eP	02 09 26	

Turkey (h = 30 km).

" 3

Up	iP	02 36 16.5	
Ki	iP	02 35 28.8	
Sk	eP	02 36 04	
Um	iP	02 35 50.7	
Ud	iP	02 36 21.1	C
De	iP	02 36 40.4	

Kurile Islands (h = N).

" 3

Up	iP1		04 51 53.5	
	iP2		04 51 54.2	
	i		04 52 13.3	
	iS		05 00 53	
	iP'P'		05 20 17.6	
			micr	sec
	P2	Z'	0.5	0.9

(cont.)

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

1972 Aug. 3 (cont.)

Up			micr	sec	
	Mx	E	6.1	21	
	Mx	N	8.5	19	
	Mx	Z	13	19	
Ki	iP1		04 51 00.3		
	iP2		04 51 00.9		
	iPcS		04 55 46.5		
	iS		04 59 13.1		
			micr	sec	
	P2	Z'	0.2	0.9	
	Mx	E	13	18	
	Mx	N	12	17	
	Mx	Z	12	17	
Sk	iP2		04 51 32.6		
	iPcP		04 52 05.5		
	iP'P'		05 20 13.8		
Um	iP2		04 51 27.0	C	
	iS		05 00 01		
	iP'P'		05 20 15.1		
Ud	iP1		04 51 53.3		
	iP2		04 51 54.0	C	
	i		04 52 13.0		
	iPcS		04 56 26.5		
	iP'P'		05 20 14.9		
De	iP2		04 52 15.9	C	
	iPcP		04 52 33.1		

Aleutian Islands (h = 50 km).
m = 6.4, M = 6.2 (Up,Ki).
The phase P1 at Up, Ki and Ud denotes a small-amplitude precursor, preceding the main onset P2 by about 0.7 sec.

" 3 Ud eP 05 17 54
Aleutian Islands (h = N).

" 3 Up iP 05 24 11.4
Um eP 05 23 46
Ud iP 05 24 11.3
Aleutian Islands (h = 40 km).

" 3 Up iP 05 46 15.0 C

			micr	sec
	P	Z'	0.1	0.9
Ki	iP		05 45 21.8	C
Um	iP		05 45 47.9	C
Ud	iP		05 46 14.6	C

Aleutian Islands (h = 50 km).

" 3 Up iP 07 10 44.7 C

			micr	sec
	P	Z'	0.4	1.2
	Mx	E	1.1	19
	Mx	N	1.3	18
	Mx	Z	2.0	19
Ki	iP		07 09 51.7	C

(cont.)

1972 Aug. 3 (cont.)

Ki			micr	sec	
	P	Z'	0.1	1.2	
	Mx	E	2.1	18	
	Mx	N	1.4	16	
	Mx	Z	1.5	18	
Sk	iP		07 10 23.9		
	iPcP		07 10 56.2		
Um	iP		07 10 17.9	C	
	iPcP		07 10 51.8		
Ud	iP		07 10 44.6	C	
	iPcP		07 11 10.9		
De	iP		07 11 06.9	C	
	ipP		07 11 18.7		

Aleutian Islands.
h = 45 km (De).
m = 6.1, M = 5.4 (Up,Ki).

" 3 Up iP 07 14 13.0

			micr	sec
	P	Z'	0.2	1.0
Ki	iP		07 13 19.9	
	iPcP		07 14 03.4	
			micr	sec
	P	Z'	0.1	0.9
Sk	iP		07 13 51.5	
	iPcP		07 14 24.1	
Um	iP		07 13 45.8	
	iPcP		07 14 20.2	
Ud	iP		07 14 13.0	
De	iP		07 14 35.5	

Aleutian Islands (h = 50 km).
m = 6.0 (Up,Ki).

" 3 Um iP 07 34 21.5

" 3 Up iP 09 54 45.6
Ki iP 09 54 15.0
Ud iP 09 54 54.6
De eP 09 55 04
Formosa (h = 90 km).

" 3 Up iP 12 46 37.6

			micr	sec
	P	Z'	0.2	1.5
Ki	iP		12 45 39.4	
			micr	sec
	P	Z'	0.1	1.1
	Mx	E	0.8	19
	Mx	N	0.7	20
	Mx	Z	0.9	19
Sk	iP		12 46 17.4	
Um	iP		12 46 07.1	
Ud	iP		12 46 38.7	
De	iP		12 47 03.1	

Kamchatka (h = N).
m = 5.9 (Up,Ki).

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

1972						
Aug.	3	Um	iP		15 09 08.6	
		Mexico (h = N).				
"	3	Up	iP		15 22 54.7	
					micr	sec
			P	Z'	0.1	0.6
		Ki	iP		15 22 37.5	
					micr	sec
			Mx	E	0.7	17
			Mx	Z	0.5	17
		Sk	iP		15 23 00.9	
		Um	iP		15 22 43.2	
		Ud	iP		15 23 03.4	
		De	eP		15 23 11	
		Mindoro (h = N).				
"	3	Up	i(P)		19 07 19.7	
"	3	Up	iP		21 44 38.5	
		Ki	iP		21 45 39.0	
					micr	sec
			Mx	E	0.5	11
			Mx	N	0.4	11
			Mx	Z	0.4	11
		Sk	eP		21 45 19	
		Um	iP		21 45 04.6	
		Ud	iP		21 44 50.0	
		De	iP		21 44 24.2	
		Turkey (h = 40 km).				
"	3	Up	eP		22 35 40	
			i		22 35 41.9	
		Ki	i(P)		22 35 40.1	
		Sk	eP		22 36 04	
		Um	iP		22 35 38.7	
		Ud	eP		22 35 56	
			i		22 35 57.8	
			ipP		22 36 34.5	
		De	iP		22 35 53.0	
		Hindu Kush.				
		h = 180 km (Ud).				
"	3	Up	iP		22 55 27.2	
		Ki	iP		22 55 58.0	
		Sk	eP		22 56 01	
			i		22 56 08.1	
		Um	iP		22 55 37.0	
			i		22 55 45.2	
		Ud	iP		22 55 41.3	
			i		22 55 50.3	
		De	iP		22 55 27.5	
		Iran (h = 60 km).				
"	4	Up	iP		01 39 27.7	
		Aleutian Islands (h = 60 km).				
"	4	Up	iP		05 35 15.0	
		Ki	iP		05 36 14.6	
		(cont.)				

1972						
Aug.	4	(cont.)				
		Sk	iP		05 35 54.9	
		Um	iP		05 35 39.3	
		Ud	iP		05 35 26.3	
		De	iP		05 34 59.8	
		Turkey (h = N).				
"	4	Ki	iPKP		07 36 07.2	
		Sk	iPKP		07 36 19.2	
		Um	iPKP		07 36 13.1	
		Solomon Islands (h = N).				
"	4	Ki	eP		08 11 39	
		Ud	iP		08 11 01.4	
			i		08 11 07.2	
		Atlantic Ocean (h = N).				
"	4	Up	iP		09 58 33.3	
			i		09 58 45.5	
		Ki	iP		09 57 42.1	
					micr	sec
			P	Z'	0.1	1.1
		Sk	iP		09 58 04.2	
		Um	iP		09 58 08.8	
		Ud	iP		09 58 27.3	
		De	iP		09 58 50.3	
			i		09 58 58.3	
		Alaska (h = 20 km).				
"	4	Sk	iP		11 01 56.9	
		Ud	iP		11 01 23.7	
		Greece.				
"	4	Up	iP		11 21 43.8	
		Ki	eP		11 21 38	
		Um	eP		11 21 41	
		Ud	iP		11 21 24.2	
		Iceland (h = N).				
"	4	Up	iP		11 48 29.8	D
			ipP		11 48 36.1	
			iS		11 56 53	
					micr	sec
			P	Z'	0.2	0.9
			pP	Z'	0.5	1.5
			Mx	E	3.1	20
			Mx	N	3.2	20
			Mx	Z	6.3	21
		Ki	iP		11 47 38.2	
			ipP		11 47 45.0	
			iS		11 55 18	
					micr	sec
			P	Z'	0.2	1.0
			pP	Z'	0.5	1.4
			Mx	E	4.8	18
			Mx	N	7.8	21
			Mx	Z	7.3	21
		Sk	iP		11 48 00.2	D
		(cont.)				

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

1972
Aug. 4 (cont.)

Sk	ipP		11 48 06.4
Um	iP		11 48 05.6
	ipP		11 48 12.4
	iS		11 56 11
Ud	iP		11 48 23.7 D
	ipP		11 48 30.5
De	iP		11 48 47.5 D
	ipP		11 48 53.7

Alaska.
h = 25 km (Up,Ki,Sk,Um,Ud, De).
m = 6.3, M = 5.8 (Up,Ki).

" 4

Up	iP		17 03 37.5
Ki	iP		17 02 44.1
Um	iP		17 03 12.3
Ud	iP		17 03 37.8
	i		17 03 53.5

Aleutian Islands (h = 45 km).

" 4

Um	iP		17 29 31.7

" 4

Up	iP1		18 01 55.0
	iP2		18 01 56.1
	iP3		18 01 58.4
			micr sec
	P2	Z'	0.1 1.0
	P3	Z'	0.2 1.0
	Mx	E	29 25
	Mx	N	35 17
	Mx	Z	51 17
Ki	iP1		18 01 04.0
	iP2		18 01 04.7
	iP3		18 01 07.5
			micr sec
	P3	Z'	0.1 1.0
	Mx	E	31 15
	Mx	N	23 16
	Mx	Z	25 15
Sk	iP2		18 01 40.9
Um	iP1		18 01 27.8
	iP2		18 01 28.8
	iP3		18 01 31.4
	iS		18 09 49
	i(P'P')		18 30 24.1
	iP'P'		18 30 41.7
Ud	iP1		18 01 59.5
	iP2		18 02 00.4
De	iP2		18 02 19.6

Kurile Islands (h = 55 km).
m = 6.0 (P3), M = 6.6 (Up, Ki).
Multiple P, in average
P2 - P1 = 0.9 sec,
P3 - P1 = 3.5 sec.

1972
Aug. 4

Ki	iP		18 36 08.5

Kurile Islands (h = N).

" 4

Um	i(P)		19 41 41.0

" 4

Up	iPKP		20 20 34.6
			micr sec
	Mx	E	1.9 20
	Mx	N	1.9 18
	Mx	Z	3.8 20
Ki	iPKP		20 20 21.0
			micr sec
	Mx	E	2.1 18
	Mx	N	2.9 18
	Mx	Z	2.6 19
Sk	iPKP		20 20 32.0
Um	iPKP		20 20 26.1
	i		20 20 40.3
Ud	iPKP		20 20 36.7

Solomon Islands (h = 35 km).
M = 6.0 (Up,Ki).

" 4

Sk	ePKP		21 18 24

Solomon Islands (h = 40 km).

" 4

Up	iPKP		21 24 34.2
Ki	ePKP		21 24 25
Sk	iPKP		21 24 32.7
Um	iPKP		21 24 25.9
Ud	ePKP		21 24 37
De	iPKP		21 24 45.3

Solomon Islands (h = 25 km).

" 4

Up	iPKP		22 03 20.6
Ki	ePKP		22 03 06

Solomon Islands (h = 40 km).

" 4

Up	ePKP		22 49 34
			micr sec
	Mx	E	1.5 20
	Mx	N	1.7 19
	Mx	Z	2.7 20
Ki	iPKP		22 49 21.6
			micr sec
	Mx	E	2.3 19
	Mx	N	2.8 20
	Mx	Z	2.7 18
Sk	iPKP		22 49 32.5
Um	i(PKP)		22 49 23.6
	iPKP		22 49 26.7
Ud	i(PKP)		22 49 33.6
	iPKP		22 49 37.2

Solomon Islands (h = 35 km).
M = 6.0 (Up,Ki).

" 4

Um	iP		23 44 22.1
	i		23 44 32.2
Ud	iP		23 45 03.5

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

1972					
Aug.	5	Ud	iP	00 16 13.9	
			i	00 16 33.6	
"	5	Ud	iP	00 45 42.9	
"	5	Sk	ePKP	01 05 43	
		Solomon Islands (h = 60 km).			
"	5	Um	ePKP	02 25 02	
		Solomon Islands (h = 45 km).			
"	5	Up	iPKP	02 53 46.0	
		Um	iPKP	02 53 39.3	
		Ud	ePKP	02 53 48	
		Solomon Islands (h = 30 km).			
"	5	Um	iP	03 12 06.6	
		Ud	eP	03 11 53	
"	5	De	iPKP	04 02 15.8	
		Fiji Islands (h = 620 km).			
"	5	Up	iP	04 15 43.3	
		Ki	eP	04 16 20	
		Um	iP	04 15 57.7	
		Ud	iP	04 15 58.4	
		De	iP	04 15 42.0	
		Iran (h = N).			
"	5	Ki	iP	05 01 56.9	
		Kurile Islands (h = N).			
"	5	Up		micr	sec
			Mx N	0.8	18
			Mx Z	1.2	18
		Ki	ePKP	05 50 15	
				micr	sec
			Mx E	0.5	14
			Mx N	0.7	18
			Mx Z	0.8	16
		Sk	iPKP	05 50 27.1	
		Um	iPKP	05 50 21.6	
		Ud	iPKP	05 50 30.9	
		De	iPKP	05 50 37.2	
		Solomon Islands (h = N).			
		M = 5.6 (Up,Ki).			
"	5	Up	iP	05 57 14.9	
		Ki	iP	05 56 22.1	
		Um	iP	05 56 48.0	
		Ud	iP	05 57 21.9	
		Kurile Islands (h = 45 km).			
"	5	Up	iPKP	06 49 59.0	
				micr	sec
			Mx E	1.4	19
			Mx N	1.6	18
			Mx Z	2.7	20
		(cont.)			

1972					
Aug.	5	(cont.)			
		Ki	ePKP	06 49 44	
				micr	sec
			Mx E	1.8	20
			Mx N	1.6	19
			Mx Z	1.0	18
		Sk	iPKP	06 49 52.9	
		Um	iPKP	06 49 46.5	
			i	06 49 51.5	
		Ud	iPKP	06 49 55.4	
		De	i(PKP)	06 50 10.7	
		Solomon Islands (h = N).			
		M = 5.9 (Up,Ki).			
"	5	Um	iP	06 55 46.6	
"	5	Up	iP	08 38 04.8	
		Ki	iP	08 37 11.0	
		Ud	iP	08 38 04.5	
			ipP	08 38 20.0	
		De	eP	08 38 27	
		Aleutian Islands.			
		h = 55 km (Ud).			
"	5	Ki	iPn	11 45 33.0	
			iSn	11 46 20.2	
			iSgl	11 46 35.0	
		Um	iSgl	11 48 05.2	
		Northwest USSR-Norway border region, 69.5°N, 30.5°E.			
		Origin time = 11 44 31.			
		Explosion.			
"	5	Up	iPKP	14 10 02.4	
			i	14 10 08.9	
				micr	sec
			PKP Z'	0.1	0.8
		Sk	iPKP	14 09 55.7	C
			ipPKP	14 10 08.4	
		Um	iPKP	14 09 50.3	C
		Ud	iPKP	14 10 04.0	C
			ipPKP	14 10 16.3	
		De	iPKP	14 10 13.1	C
			ipPKP	14 10 26.2	
		Kermadec Islands.			
		h = 45 km (Sk,Ud,De).			
"	5	Ud	iP	22 16 55.4	
"	6	Up	iP	00 57 18.3	
			i	00 57 26.3	
			iSn	01 00 01.2	
			iS	01 00 20.9	
				micr	sec
			P Z'	0.1	1.0
		Ki	ePn	00 58 28	
			iP	00 58 37.3	
		(cont.)			

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

1972
Aug. 6 (cont.)

Ki	i		00 58 42.1	
	iS		01 02 46.0	
			micr	sec
	P	Z'	0.1	0.8
Sk	eP		00 58 09	
Um	iPn		00 57 49.7	
	iP		00 57 58.5	
	iSn		01 01 18.0	
	iLgl		01 04 15.8	
Ud	iPn		00 57 31.2	
	i		00 57 35.2	
	iP		00 57 44.2	
	iSn		01 00 57.1	
De	ePn		00 57 00	
	iSn		00 59 57.8	
	iLgl		01 02 16.7	

Black Sea (h = N).
m = 5.2 (Up,Ki).

" 6

Up	iP		01 21 11.5	C
	iPP		01 22 59.7	
			micr	sec
	P	Z'	0.1	0.8
	Mx	E	0.6	13
	Mx	N	0.9	13
	Mx	Z	1.1	14
Ki	iP		01 21 38.0	C
			micr	sec
	P	Z'	0.2	0.8
	Mx	E	2.5	16
	Mx	N	1.8	18
	Mx	Z	3.1	16
Sk	iP		01 21 43.0	C
	ipP		01 21 51.1	
Um	iP		01 21 20.0	C
	iPP		01 23 10.3	
Ud	iP		01 21 25.8	C
	ipP		01 21 34.0	
	iPP		01 23 19.6	
De	iP		01 21 14.1	C
	ipP		01 21 21.7	

Iran.
h = 30 km (Sk,Ud,De).
m = 6.0, M = 5.2 (Up,Ki).

" 6

Up	iP	01 40 31.0
Ki	iP	01 40 59.4
Sk	iP	01 41 03.1
Um	iP	01 40 40.4
Ud	iP	01 40 47.4
De	iP	01 40 35.1

Iran (h = N).

" 6

Up	iP	07 07 50.2
	i	07 07 53.5

(cont.)

1972
Aug. 6 (cont.)

Ki	iP		07 08 29.7	C
	i		07 08 33.5	
			micr	sec
	P	Z'	0.1	0.8
Sk	iP		07 08 25.9	
	i		07 08 29.2	
Um	iP		07 08 05.6	
	i		07 08 09.5	
Ud	iP		07 08 05.5	C
	i		07 08 09.1	
De	iP		07 07 47.5	
	i		07 07 51.6	

Iran (h = 35 km).
Double P, in average
3.7 sec apart.

" 6

Up	iPKP		07 33 40.6	
			micr	sec
	PKP	Z'	0.1	1.2
	Mx	E	3.1	20
	Mx	N	4.1	18
	Mx	Z	5.4	20
Ki	iPKP		07 33 27.6	
			micr	sec
	PKP	Z'	0.1	1.1
	Mx	E	4.1	17
	Mx	N	2.9	17
	Mx	Z	2.7	17
Sk	iPKP		07 33 38.4	
Um	iPKP		07 33 32.2	
	i		07 33 42.9	
	iPP		07 35 02	
Ud	iPKP		07 33 43.0	
De	iPKP		07 33 49.2	

Solomon Islands (h = 55 km).
M = 6.2 (Up,Ki).

" 6

Up	iPKP	07 36 09.5
Ki	ePKP	07 35 58
Um	iPKP	07 36 07.0
Ud	iPKP	07 36 13.4
De	iPKP	07 36 19.2

Solomon Islands.
Origin time = 07 17 18.

" 6

Ki	ePKP	07 42 09
Sk	ePKP	07 42 26
Um	ePKP	07 42 15
Ud	iPKP	07 42 31.2
De	iPKP	07 42 36.8

Solomon Islands.
Origin time = 07 23 33.

" 6

Up	iPKP	07 43 19.3
Ki	iPKP	07 43 06.2
Sk	iPKP	07 43 17.0

(cont.)

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

1972 Aug. 6 (cont.)

Um	iPKP	07 43 11.9
Ud	iPKP	07 43 20.9
De	ePKP	07 43 26

Solomon Islands.
Origin time = 07 24 25.

" 6

De	iPKP	08 12 38.9

Loyalty Islands (h = 60 km).

" 6

Up	eSgl	08 35 26
Ki	iSn	08 32 11.5
	iS*	08 32 29.4
Sk	iSgl	08 35 03.1
Um	eSgl	08 33 30
Ud	eSgl	08 36 01

Northwest USSR.
Explosion.

" 6

Ud	iP	10 12 33.2

Dodecanese Islands.

" 6

Up	iPKP	10 34 33.9
Ki	iPKP	10 34 21.0
Sk	iPKP	10 34 31.9
Um	iPKP	10 34 27.0 C
Ud	iPKP	10 34 35.5
De	iPKP	10 34 40.9

Solomon Islands (h = 70 km).

" 6

Ud	iP	11 10 10.5

Kurile Islands.

" 6

Ud	iP	11 18 21.4

Kurile Islands (h = N).

" 6

Ki	iP	11 25 36.5
Sk	eP	11 25 49
Ud	iP	11 25 47.7

Sunda Strait (h = 70 km).

" 6

Up	iPKP		15 36 27.9	
Ki	iPKP		15 36 14.5	
			micr	sec
	Mx	E	0.6	20
	Mx	N	0.4	18
	Mx	Z	0.7	20
Sk	iPKP		15 36 25.5	
Um	iPKP		15 36 21.2	
Ud	iPKP		15 36 29.0	
De	iPKP		15 36 36.0	

Solomon Islands (h = 50 km).

" 6

Up	iPKP	15 44 13.5

Solomon Islands (h = N).

" 6

Up	iP	15 46 15.3
Ki	eP	15 46 45

(cont.)

1972 Aug. 6 (cont.)

Um	iP	15 46 29.4
Ud	iP	15 46 24.9
De	eP	15 46 11

Arabian Sea (h = N).

" 6

Up	eP	16 03 21
Ki	eP	16 03 49
Sk	eP	16 03 46
Ud	iP	16 03 28.3
De	eP	16 03 16

Arabian Sea (h = N).

" 6

Ki	iP	17 12 28.5

" 6

Ud	eP	18 32 50

Komandorsky Islands
(h = N).

" 7

Ud	iP	01 40 51.5
De	iP	01 40 13.1

Italy.

" 7

Up	iP	01 49 08.7
Ki	eP	01 48 48
Ud	iP	01 49 18.1

Luzon (h = N).

" 7

Up	i(PKP)		09 43 21.7	
	iPKP		09 43 33.2	
	ipPKP		09 43 45.2	
	iPP		09 46 13.4	
	iSKP		09 47 05	
			micr	sec
	Mx	E	1.0	20
	Mx	N	1.5	21
	Mx	Z	2.2	20
Ki	iPKP		09 43 17.0	
	ipPKP		09 43 29.4	
			micr	sec
	PKP	Z'	0.1	1.0
	pPKP	Z'	0.1	1.0
	Mx	E	2.4	21
	Mx	N	3.0	22
	Mx	Z	3.5	22
Sk	iPKP		09 43 26.9	
	ipPKP		09 43 39.4	
Um	iPKP		09 43 24.1	
	ipPKP		09 43 36.1	
Ud	i(PKP)		09 43 23.6	
	iPKP		09 43 35.7	
	ipPKP		09 43 46.9	
De	i(PKP)		09 43 32.7	
	iPKP		09 43 42.9	
	ipPKP		09 43 51.5	
	iPP		09 46 41.6	

Samoa Islands.
(cont.)

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

1972
Aug. 7 (cont.)
h = 40 km (Up,Ki,Sk,Um,Ud, De).
M = 6.0 (Up,Ki).

" 7 Up i(P) 15 17 38.1

" 7 Ud iPgl 19 46 21.9
iSgl 19 46 42.9
iRg 19 46 52.8
De iSgl 19 47 35.8
South Norway, 59.3°N, 11.3°E.
Origin time = 19 45 56.
By combination with Kongsberg readings.
Possibly explosion.

" 7 Ki iPKP 23 35 20.8
ipPKP 23 36 08.5
micr sec
PKP Z' 0.1 1.1
Sk iPKP 23 35 33.0
ipPKP 23 36 20.0
Ud iPKP 23 35 36.4
De ePKP 23 35 44
ipPKP 23 36 33.8
New Hebrides Islands.
h = 190 km (Ki,Sk,De).

" 8 Up iP 00 51 23.4 C
iPn 00 52 15.0
Ki iP 00 51 56.4 C
iPn 00 53 06.4
micr sec
Pn Z' 0.1 1.2
Sk eP 00 51 58
ipP 00 52 10.2
Um iP 00 51 33.9
Ud iP 00 51 40.0 C
ipP 00 51 52.4
iPn 00 52 43.3
De iP 00 51 26.4 C
Iran.
h = 45 km (Sk,Ud).

" 8 Ki iP 04 36 08.8
Congo (h = 25 km).

" 8 Up iP 09 56 43.0 D
micr sec
P Z' 0.1 1.0
Ki iP 09 55 53.2 D
micr sec
P Z' 0.1 0.8
Sk iP 09 56 28.6
(cont.)

1972
Aug. 8 (cont.)
Um iP 09 56 16.5
Ud iP 09 56 47.6 D
De iP 09 57 06.9
Kurile Islands (h = N).
m = 6.0 (Up,Ki).

" 8 Up iP 10 05 22.4
Um iP 10 05 02.3
Ud iP 10 05 28.5
South of Japan (h = 45 km).

" 8 Ud i(P) 11 14 44.8
i 11 14 47.5
De i(P) 11 15 04.0

" 8 Up iSgl 13 02 16.4
Ki eSgl 13 05 08
Sk iSgl 13 04 13.6
Um iSgl 13 03 05.7
Ud eSgl 13 03 21
De eSgl 13 03 42
Esthonia, 59.2°N, 24.1°E.
Origin time = 13 00 30.
Explosion.

" 8 Ud iP 14 32 53.6
De iP 14 32 42.0

" 8 Ud ePKP 16 18 15
New Britain (h = 70 km).

" 8 Up iPKP 18 02 27.3 D
i 18 02 40.7
micr sec
PKP Z' 0.1 0.6
Sk iPKP 18 02 21.0
Um iPKP 18 02 10.8
Ud iPKP 18 02 29.3 D
De iPKP 18 02 39.1 D
i 18 02 43.9
Tonga-Kermadec Islands (h = 530 km).

" 8 Up i(P) 18 42 48.1
Ki i(P) 18 43 13.0
Ud i(P) 18 42 24.3

" 8 Um iPKP 19 04 57.3
Solomon Islands (h = 15 km).

" 8 Up iP 19 17 53.4 C
iPP 19 19 41.3
micr sec
P Z' 0.2 0.8
Mx E 0.6 13
(cont.)

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

1972
Aug. 8 (cont.)

Up			micr	sec
	Mx	N	0.7	13
	Mx	Z	0.9	14
Ki	iP		19 18 20.4	C
	ipP		19 18 32.2	
	iPP		19 20 16.8	
			micr	sec
	P	Z'	0.2	0.8
	Mx	E	2.2	17
	Mx	N	1.7	15
	Mx	Z	2.1	16
Sk	iP		19 18 24.7	C
	ipP		19 18 37.0	
Um	iP		19 18 02.0	C
	iPP		19 19 51.9	
Ud	iP		19 18 08.7	C
	ipP		19 18 20.6	
	iPP		19 20 08.8	
De	iP		19 17 56.2	C

Iran.
h = 45 km (Ki,Sk,Ud).
m = 6.2, M = 5.2 (Up,Ki).

" 8

Up	iP		19 18 18.0	
			micr	sec
	P	Z'	0.1	1.0
Ki	iP		19 18 45.3	
			micr	sec
	P	Z'	0.1	0.8
Sk	iP		19 18 49.9	
Um	iP		19 18 26.2	
Ud	iP		19 18 33.6	
De	iP		19 18 21.3	

Iran.
Origin time = 19 09 58.
m = 5.9 (Up,Ki).

" 8

Up	iPKP		21 01 11.9
	i		21 01 32.9
Sk	iPKP		21 01 05.0
Um	i		21 01 44.4
Ud	iPKP		21 01 14.3
De	iPKP		21 01 23.3

Solomon Islands.

" 9

Up	iP		00 08 23.8	C
			micr	sec
	P	Z'	0.1	1.2
Ki	iP		00 07 30.7	
Um	eP		00 07 58	
Ud	iP		00 08 24.1	
	ipP		00 08 41.8	
De	iP		00 08 46.4	

Aleutian Islands.
h = 65 km (Ud).

1972
Aug. 9

Um	iP		00 31 42.7
Ud	iP		00 32 07.6

" 9

Up	iPKP		00 56 45.4	
Ki	ePKP		00 56 37	
	iSKP		00 59 34.8	
			micr	sec
	SKP	Z'	0.1	1.5
Um	ePKP		00 56 37	
	iSKP		00 59 46.1	
Ud	iPKP		00 56 47.5	
	i		00 57 20.1	
	iSKP		00 59 58.4	
De	iPKP		00 56 58.1	
	i		00 57 02.0	
	i		00 57 19.9	

Tonga-Kermadec Islands
(h = 320 km).

" 9

Up	iP		04 06 40.2 C
	i		04 06 42.7
Ki	eP		04 07 59
Sk	eP		04 07 22
Um	iP		04 07 21.6
	i		04 07 35.7
Ud	iP		04 06 47.5
	i		04 06 50.4

Greece-Albania (h = 40 km).

" 9

Up	iP		04 24 08.5

" 9

Up	iP1		04 29 24.1	C
	iP2		04 29 25.0	
	iP3		04 29 27.9	
	i		04 29 42.9	
	iS		04 39 05	
			micr	sec
	P3	Z'	0.3	1.0
	Mx	E	0.7	15
	Mx	N	1.6	22
	Mx	Z	3.3	20
Ki	iP1		04 29 25.0	
	iP2		04 29 26.7	
	iP3		04 29 30.9	
			micr	sec
	P3	Z'	0.1	1.1
	Mx	E	3.0	20
	Mx	N	2.1	17
	Mx	Z	2.3	18
Sk	iP2		04 29 41.3	
	iP3		04 29 45.1	
Um	iP1		04 29 20.3	
	iP2		04 29 22.1	
	iP3		04 29 25.6	
	iS		04 39 00	
Ud	iP1		04 29 35.4	C
	iP2		04 29 36.5	

(cont.)

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

1972
Aug. 9 (cont.)

Ud	iP3		04 29 39.9
De	iP1		04 29 32.4
	iP2		04 29 34.2
	iP3		04 29 37.6

Nicobar Islands (h = N).
m = 6.2 (P3), M = 5.6 (Up, Ki).
Multiple P, in average
P2 - P1 = 1.2 sec,
P3 - P1 = 4.9 sec.

" 9	Up	iP		04 43 58.6
	Ki	eP		04 44 05
	Um	iP		04 44 00.4
	Ud	iP		04 44 12.4
	De	iP		04 44 07.2
" 9	Um	iP		07 40 06.9
	Ud	iP		07 40 18.7
" 9	Up	iP		08 27 34.4
	Ki	eP		08 27 21
	Sk	iP		08 27 16.1
	Um	iP		08 27 30.0
		ipP		08 28 02.3
	Ud	iP		08 27 25.5

Mexico.
h = 130 km (Um).

" 9	Up	eP	09 00 34
	Um	eP	09 00 30
	Ud	iP	09 00 44.1
	De	eP	09 00 42

Nicobar Islands.
Origin time = 08 48 47.

" 9	Ki	iPn	11 40 38.1
		iPgl	11 40 44.1
		iSn	11 41 24.4
		iSgl	11 41 39.8
	Um	iSgl	11 43 14.0

Northwest USSR-Norway border region, 69.7°N, 30.1°E.
Origin time = 11 39 37.
Explosion.

" 9	Sk	iPKP	12 54 00.1
	Um	iPKP	12 53 55.3
	Ud	iPKP	12 54 07.2
	De	iPKP	12 54 17.0

Solomon Islands.

" 9	Up	iP		13 00 27.9	C
				micr	sec
		P	Z'	0.1	0.9
	Ki	iP		13 00 29.5	

(cont.)

1972
Aug. 9 (cont.)

	Ki	i		13 00 39.5	
				micr	sec
		P	Z'	0.1	1.0
	Sk	iP		13 00 45.8	
	Um	iP		13 00 24.9	
	Ud	iP		13 00 39.7	C
	De	iP		13 00 37.7	

Nicobar Islands (h = N).
m = 5.9 (Up,Ki).

" 9	Up	iP		15 46 19.9
		i		15 46 20.9
		i		15 46 33.7
		iX		15 48 24.2
		iS		15 55 52.8
				micr sec
		P	Z'	0.2 0.9
	Ki	iP		15 45 48.6
		i		15 45 50.2
		i		15 46 03.0
		iS		15 54 55
				micr sec
		P	Z'	0.1 0.6
	Sk	iP		15 46 17.3
		i		15 46 18.3
		i		15 46 30.6
		iPP		15 49 32.2
	Um	iP		15 46 01.2
		i		15 46 02.9
		i		15 46 16.3
		iX		15 48 05.9
		iS		15 55 19
	Ud	iP		15 46 26.7
		i		15 46 40.5
		iX		15 48 31.6
	De	iP		15 46 38.3
		i		15 46 39.5
		i		15 46 52.3

Bonin Islands (h = 470 km).
m = 5.6 (Up,Ki).
Multiple P, in average 1.3 and 14.1 sec after the first onset.
If the phase X is interpreted as pP, the focal depth will be 600 km.

" 9	Ki	eP	16 35 42
	Ud	iP	16 35 57.3

Turkestan.

" 9	Up	iP		19 50 43.3
		i		19 51 01.2
				micr sec
		P	Z'	0.1 0.9
		Mx	E	1.9 20

(cont.)

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

1972
Aug. 9 (cont.)

Up			micr	sec
	Mx	N	1.4	20
	Mx	Z	3.1	18
Ki	iP		19 50 02.2	
	iPP		19 51 41.0	
			micr	sec
	Mx	E	1.0	14
	Mx	N	0.8	12
	Mx	Z	1.2	12
Sk	eP		19 50 43	
Um	iP		19 50 17.4	
	i		19 50 33.4	
	i(PP)		19 52 08.9	
Ud	iP		19 50 53.5	
	i		19 51 13.0	
De	eP		19 51 09	
	i		19 51 26.3	

Lake Baikal (h = N).
M = 5.1 (Up,Ki).

" 9	Up	iP	21 00 50.0	
	Ki	iP	21 00 01.0	
			micr	sec
		Mx E	0.8	12
		Mx N	0.6	14
		Mx Z	0.5	12
	Sk	eP	21 00 42	
	Um	iP	21 00 24.0	
	Ud	iP	21 00 59.6	
	De	iP	21 01 18.8	

Eastern Siberia (h = 35 km).

" 9	Ud	iP	21 20 09.5

Kurile Islands.

" 9	Up	eP	23 54 26
" 10	Ud	iP	01 13 35.9
" 10	Ud	iP	02 37 05.8
		i	02 37 12.9
" 10	Ud	ePKP	03 28 35

Solomon Islands (h = 50 km).

" 10	Um	iP	15 02 19.6

Japan (h = 45 km).

" 10	Up	ePKP	15 50 46
	Ki	e(pPKP)	15 50 45
	Ud	iPKP	15 50 47.7
	De	iPKP	15 50 56.6 C
		ipPKP	15 51 09.1

Tonga Islands.
h = 45 km (De).

1972
Aug. 10

Up	iP		21 16 14.5	
			micr	sec
	P	Z'	0.1	0.9
Ki	iP		21 16 03.1	
			micr	sec
	P	Z'	0.1	1.1
	Mx	E	0.5	18
	Mx	N	0.5	15
Sk	iP		21 16 28.9	
Um	iP		21 16 03.1	
Ud	iP		21 16 27.6	
De	iP		21 16 31.8	

Tibet (h = N).
m = 5.8 (Up,Ki).

" 10	Up	iP	22 15 09.3
	Um	iP	22 14 47.4
	Ud	iP	22 15 16.6

Japan (h = 70 km).

" 11	Up	iP	02 31 13.1	C
			micr	sec
	P	Z'	0.1	1.0
	Mx	E	0.5	19
	Mx	N	0.6	13
	Mx	Z	0.9	14
	Ki	iP	02 30 44.6	
			micr	sec
	P	Z'	0.1	1.0
	Mx	E	0.8	11
	Mx	N	1.5	15
	Mx	Z	0.7	11
	Sk	iP	02 31 19.8	C
	Um	iP	02 30 52.9	
	Ud	iP	02 31 25.5	
		iPP	02 33 23.5	
	De	iP	02 31 36.5	C
		ipP	02 31 45.7	

Mongolia.
h = 35 km (De).
m = 5.8, M = 5.0 (Up,Ki).

" 11	Up	eP	02 44 30
	Ki	eP	02 43 49
	Um	iP	02 44 03.5
	Ud	eP	02 44 38

Japan (h = 20 km).

" 11	Um	iP	05 23 17.6
	Ud	eP	05 23 46

Japan (h = 60 km).

" 11	Ud	iP	06 53 32.9

Italy.

" 11	Up	iPKP	07 50 16.6	D
		i	07 50 45.1	

(cont.)

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

1972
Aug. 11 (cont.)

Up	ipPKP		07 52 01.2	
			micr	sec
	PKP	Z'	0.1	0.6
Ki	e(PKP)		07 50 05	
	iPKP		07 50 07.1	
	iSKP		07 53 00.9	
			micr	sec
	PKP	Z'	0.1	1.0
Sk	e(PKP)		07 50 11	
Um	i(PKP)		07 50 05.4	
	iPKP		07 50 14.7	
	iSKP		07 53 11.5	
Ud	iPKP		07 50 18.6	D
	ipPKP		07 52 02.9	
De	iPKP		07 50 28.8	D
	ipPKP		07 52 11.3	

Tonga-Kermadec Islands.
h = 440 km (Up,Ud,De).

" 11

Up	iP	09 17 13.2
Ki	eP	09 17 21
Sk	eP	09 17 39
Um	iP	09 17 10.5
Ud	iP	09 17 28.6
De	iP	09 17 25.9

Hindu Kush (h = 270 km).

" 11

Um	iSgl	13 03 19.7
Ud	iSgl	13 03 51.1

Esthonia.
Explosion.

" 11

De	i(P)	13 23 09.8

" 11

Up	iP		13 35 03.7	C
	iPcP		13 35 41.7	
	iP'P'		14 04 12.2	
			micr	sec
	P	Z'	0.1	1.0
	Mx	E	0.7	18
	Mx	N	0.9	20
	Mx	Z	1.1	20
Ki	iP		13 34 09.2	C
	iPcP		13 35 13.3	
			micr	sec
	P	Z'	0.1	0.8
	Mx	E	1.2	18
	Mx	N	0.8	17
	Mx	Z	0.7	13
Sk	iP		13 34 46.1	C
	iPcP		13 35 32.5	
Um	iP		13 34 34.9	C
Ud	iP		13 35 07.0	C
	iPcP		13 35 44.8	
	iP'P'		14 04 19.0	
De	iP		13 35 29.0	

Kamchatka (h = N).
m = 6.0, M = 5.1 (Up,Ki).

1972
Aug. 11

Ki	iSgl	13 56 03.7
Sk	iSgl	13 56 09.2
Um	iSn	13 56 17.3
	iSgl	13 56 31.1

Nordland, Norway,
66.5°N, 14.1°E.
Origin time = 13 54 35.
Explosion.

" 11

Up	iSgl	15 19 02.8
Sk	iSgl	15 18 50.8
	iRg	15 19 21.3
Ud	iSgl	15 18 00.2

Southwest Norway,
58.9°N, 6.3°E.
Origin time = 15 16 00.
By combination with
Kongsberg readings.

" 11

Ud	i(P)	15 38 30.1

" 11

Um	iSgl	16 59 53.3

Lake Ladoga region.
Explosion.

" 11

Up	iSgl	17 37 41.0
Sk	iSgl	17 35 43.4
	i	17 35 50.8
Um	iSn	17 35 51.2
	iSgl	17 36 04.2
Ud	iSgl	17 37 28.5

Nordland, Norway,
66.5°N, 14.2°E.
Origin time = 17 34 07.
Explosion.

" 11

Um	iPKP	21 21 16.0
	iPKKP	21 31 23.1
Ud	ePKP	21 21 10
	iPKKP	21 31 48.3

Chile-Argentina (h = 110 km).

" 11

Ud	ePKP	21 57 17
De	iPKP	21 57 28.0

" 12

Ud	iP	01 53 10.9
	i	01 53 22.4

" 12

Ud	iP	02 29 32.0

" 12

Up	iPgl	05 36 38.9
	iSgl	05 36 56.8
	iSn	05 37 00.9
	iRg	05 37 04.5
Sk	eSgl	05 38 18
Um	iSgl	05 38 39.7
Ud	iPgl	05 36 26.3
	iSgl	05 36 36.0

(cont.)

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

1972
Aug. 12 (cont.)
Ud iRg 05 36 38.8
Central Sweden,
59.8°N, 14.9°E.
Origin time = 05 36 16.

" 12 Um i(P) 06 09 13.1

" 12 Up iP 09 53 04.3 C
ipP 09 53 13.5
iS 10 02 00
micr sec
P Z' 0.6 1.0
Mx E 2.7 20
Mx N 3.8 21
Mx Z 3.8 19
Ki iP 09 52 11.2 C
ipP 09 52 22.2
iS 10 00 20
micr sec
P Z' 0.2 1.0
Mx E 3.0 17
Mx N 3.9 20
Mx Z 3.8 18
Sk iP 09 52 43.6
ipP 09 52 53.1
Um iP 09 52 36.2
ipP 09 52 47.0
iS 10 01 07.3
iP'P' 10 21 21.3
Ud iP 09 53 05.0 C
ipP 09 53 13.0
De iP 09 53 26.7
ipP 09 53 35.9
Aleutian Islands.
h = 35 km (Up,Ki,Sk,Um,Ud,
De).
m = 6.5, M = 5.7 (Up,Ki).

" 12 Up iP 11 31 26.6
Um eP 11 31 02
iPcP 11 31 39.2
Ud iP 11 31 27.2
Aleutian Islands (h = 45 km).

" 12 Up iP 12 45 09.9
Ki iP 12 44 15.4
micr sec
P Z' 0.1 0.7
Mx E 0.5 17
Mx N 0.7 17
Mx Z 0.5 17
Sk eP 12 44 47
Um iP 12 44 42.4
Ud iP 12 45 08.6
De iP 12 45 31.7
Unimak Island (h = N).

1972
Aug. 12 Ki iPn 13 01 04.3
iSn 13 01 53.4
Um iSgl 13 03 40.0
Northwest USSR-Norway border
region, 69.5°N, 31.1°E.
Origin time = 13 00 00.
Explosion.

" 12 Ud i(P) 13 18 04.1

" 12 Up micr sec
Mx E 1.1 23
Mx N 0.7 20
Mx Z 3.0 24
Ki eP 13 28 48
iSKS 13 39 24
micr sec
Mx E 1.2 18
Mx N 1.7 22
Mx Z 1.3 23
Sk eP 13 28 37
ipP 13 28 42.1
Um iP 13 28 50.8
ipP 13 28 59.1
iSKS 13 39 25
Ud ipP 13 28 47.2
South of Panama.
h = 30 km (Um).
M = 5.4 (Up,Ki).

" 12 Up eP 14 25 43
Ki iP 14 25 28.5
i 14 25 31.3
Sk eP 14 25 49
Um iP 14 25 33.1 D
Ud iP 14 25 51.0 D
De iP 14 25 56.5
Celebes (h = 130 km).

" 12 Ki iPn 16 45 18.8
iSn 16 46 04.1
iSgl 16 46 20.6
Um iSgl 16 47 47.1
Northwest USSR-Norway border
region, 69.3°N, 30.1°E.
Origin time = 16 44 19.
Explosion.

" 12 Ud iPKP 16 50 25.2
De iPKP 16 50 33.3
Tonga-Kermadec Islands
(h = 130 km).

" 12 Up iP 17 20 05.7
Sk iP 17 19 46.5
Ud eP 17 19 55
Mexico (h = 80 km).

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

1972 Aug.	12	Up	iP		21 46 19.5
		Ki	eP		21 45 25
		Um	iP		21 45 52.4
		Ud	iP		21 46 18.0
"	12	Um	iP		23 14 06.8
		Ud	iP		23 14 32.3
"	12	Up	iP		23 52 25.8
					micr sec
			P	Z'	0.1 1.0
			Mx	E	0.8 14
			Mx	N	0.7 8
			Mx	Z	1.2 9
		Ki	eP		23 53 38
					micr sec
			Mx	E	1.0 14
			Mx	N	0.7 9
			Mx	Z	0.5 8
		Sk	iP		23 53 04.8
		Um	iP		23 53 00.5
			ipP		23 53 04.3
			iPP		23 53 28.4
			iS		23 57 09
		Ud	iP		23 52 28.1
		De	iP		23 51 51.4
			ipP		23 51 54.6
			iPP		23 52 15.6
			i		23 52 35.5
		Yugoslavia.			
		h = 15 km (Um,De).			
		M = 4.6 (Up,Ki).			
"	13	Ud	eP		02 08 06
		Japan (h = 20 km).			
"	13	Ud	iP		02 09 23.6
"	13	Up	iP		02 25 53.6
		Ki	iP		02 25 42.2
		Ud	iP		02 26 07.5
"	13	Ki	eP		02 39 47
		Sk	eP		02 40 16
		Um	iP		02 40 15.6
		Ud	iP		02 40 39.4
		De	iP		02 41 02.6
		Gulf of Alaska (h = N).			
"	13	Up	iPgl		06 30 14.0
			iSgl		06 30 31.4
			iSn		06 30 35.4
			iRg		06 30 38.9
		Um	iSgl		06 32 10.8
		Ud	iPgl		06 30 01.6
			iSgl		06 30 10.5
			iRg		06 30 13.4
		(cont.)			

1972 Aug.	13	(cont.)		
		Central Sweden,		
		59.8°N, 14.9°E.		
		Origin time = 06 29 52.		
"	13	Ki	iP	06 40 07.5
		Ud	iP	06 40 15.5
		Hindu Kush.		
		Intermediate depth.		
"	13	Up	iP	08 17 19.7
		Ki	iP	08 16 33.6
		Sk	eP	08 17 10
		Um	iP	08 16 54.5 D
		Ud	iP	08 17 25.9 D
		De	iP	08 17 43.5
		Okhotsk Sea (h = 420 km).		
"	13	Up	iP	08 23 25.6
		Sk	iP	08 23 06.6
		Um	iP	08 23 21.9
"	13	Up	iP	09 12 28.4
		Ki	iP	09 12 36.7
		Um	iP	09 12 22.4
		Ud	iP	09 12 44.9 C
		De	iP	09 12 41.9
		Afghanistan-USSR (h = N).		
"	13	Sk	iP	09 52 53.8
		Okhotsk Sea.		
"	13	Up	iPKP	10 13 54.0 C
		Ki	ePKP	10 13 37
		Sk	iPKP	10 13 46.8
		Um	iPKP	10 13 41.9
		Ud	iPKP	10 13 55.7
		De	iPKP	10 14 03.5
			i	10 14 14.8
		Kermadec Islands (h = 40 km).		
"	13	Up	ePKP	10 17 47
		Sk	iPKP	10 17 38.6
		Ud	iPKP	10 17 47.2
			i	10 18 03.5
		De	ePKP	10 18 01
			i	10 18 12.6
		Kermadec Islands.		
		Origin time = 09 58 06.		
"	13	Ud	iP	10 40 34.8
"	13	Ud	ePKP	10 48 53
		De	ePKP	10 49 05
"	13	Ud	iP	11 24 53.6
		Kurile Islands.		

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

1972					
Aug.	13	Ki	iSn		12 05 18.3
			iS*		12 05 37.2
		Um	iSgl		12 06 32.7
		Northwest USSR.			
		Explosion.			
"	13	Up	iPKP		12 06 59.8
					micr sec
			PKP	Z'	0.1 1.0
			Mx	E	0.6 21
			Mx	Z	1.1 21
		Ki	iPKP		12 07 10.2
					micr sec
			PKP	Z'	0.1 1.2
		Sk	iPKP		12 06 59.5
		Um	iPKP		12 07 06.2
		Ud	iPKP		12 06 56.7
		De	iPKP		12 06 54.2
		Chile (h = N).			
"	13	Up	ePKP		15 32 45
		Sk	iPKP		15 32 37.5
		Ud	iPKP		15 32 46.9
"	13	Up	iPKP		15 33 30.5
		Sk	iPKP		15 33 24.4
		Um	iPKP		15 33 18.6
			i		15 33 39.1
		Ud	iPKP		15 33 33.7
			ipPKP		15 33 50.7
		De	iPKP		15 33 41.8
			ipPKP		15 33 59.4
"	13	Up	ePKP		16 17 45
		Sk	ePKP		16 17 36
		Ud	ePKP		16 17 48
"	13	Ud	iP		17 46 30.0
"	13	Um	iP		17 58 36.3
"	13	Up	i(P)		19 27 34.0 C
"	14	Um	iP		02 12 40.9
		Okhotsk Sea.			
		Deep.			
"	14	Um	iP		02 26 15.9
"	14	Um	iPKP		04 16 22.9
		Ud	ePKP		04 16 33
		Santa Cruz Islands (h = N).			
"	14	Up	ePKP		04 48 56
		Ki	ePKP		04 49 10
		Um	iPKP		04 49 04.2
		Ud	iPKP		04 48 54.1
		South Sandwich Islands			
		(h = 50 km).			

1972					
Aug.	14	Ud	iP		05 43 11.7
"	14	Um	i(P)		06 11 12.1
"	14	Ki	iPKP		06 58 43.4
					micr sec
			PKP	Z'	0.1 1.0
		Um	iPKP		06 58 36.5
		Ud	iPP		06 59 52.3
		South Sandwich Islands			
		(h = 110 km).			
"	14	Up	iP		07 23 55.6
					micr sec
			P	Z'	0.1 1.1
		Ki	iP		07 24 03.1
		Sk	iP		07 24 21.2
		Um	iP		07 23 53.1
		Ud	iP		07 24 12.1 C
		De	iP		07 24 09.2
		Afghanistan-USSR (h = 130 km).			
"	14	Ki	eP		10 57 54
		Sk	iP		10 57 26.8
		Ud	iP		10 57 35.9
		Caribbean Sea (h = 20 km).			
"	14	Ki	ePKP		12 04 49
		Sk	ePKP		12 04 59
		Um	iPKP		12 04 53.5
		Ud	iPKP		12 04 56.1
		De	iPKP		12 05 04.3
		Fiji Islands (h = 620 km).			
"	14	Up	iP		14 46 21.2
		Ki	iP		14 46 22.7
		Sk	iP		14 46 37.1
		Um	iP		14 46 18.1
		Ud	iP		14 46 32.3
		De	iP		14 46 30.9
		Sumatra.			
"	14	Up	iP		14 46 51.9
		Ki	iP		14 46 52.8
		Sk	eP		14 47 07
		Um	iP		14 46 46.3
		Ud	iP		14 47 00.6
		De	eP		14 47 00
		Sumatra.			
		Origin time = 14 34 51.			
"	14	Up	iP		15 46 47.4
		Ki	iP		15 46 32.0
					micr sec
			P	Z'	0.1 1.1
		Sk	iP		15 46 52.9
		Um	iP		15 46 36.9
			ipP		15 46 44.5
		(cont.)			

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

1972
Aug. 14 (cont.)

Ud	iP		15 46 55.9
De	iP		15 47 02.9

Molucca Passage.
h = 30 km (Um).

" 14	Up	iP	16 03 15.7
	Um	iP	16 03 40.4
" 14	De	i(P)	17 30 36.1
" 14	Up	iP	18 40 28.8
	Ki	iP	18 39 57.9 D
	Sk	iP	18 40 26.1 D
	Um	iP	18 40 11.0 D
	Ud	iP	18 40 35.7 D
	De	iP	18 40 47.5

South of Japan (h = 560 km).

" 14	Up	e(P)	19 27 20
	Sk	eP	19 27 47
	Um	iP	19 27 46.3
	Ud	iP	19 27 14.8
		i	19 27 18.6

Ionian Sea.

" 14	Up	iP	21 37 49.8
	Ud	eP	21 37 51
" 14	Um	iP	21 56 38.9
" 14	Up	iPP	22 49 02.1
			micr sec
		PP Z'	0.1 1.5
		Mx E	1.0 20
		Mx N	1.0 22
		Mx Z	2.3 21
	Ki	iP	22 43 44.7
			micr sec
		Mx E	1.7 19
		Mx N	1.2 21
		Mx Z	1.3 19
	Sk	e(PP)	22 48 06
	Um	i(PP)	22 47 46.5
	Ud	iPP	22 49 17.4

New Guinea (h = 45 km).
M = 5.6 (Up,Ki).
The phases (PP) at Sk and Um denote early PP arrivals.

" 15	De	iPKP	04 08 56.7

Fiji Islands (h = 570 km).

" 15	Up	iP	11 06 34.4 D
			micr sec
		P Z'	0.2 0.8
	Ki	iP	11 05 42.7 D

(cont.)

1972
Aug. 15 (cont.)

Ki			micr sec
	P	Z'	0.2 1.0
Sk	iP		11 06 04.3 D
Um	iP		11 06 10.2 D
	ipP		11 06 15.3
Ud	iP		11 06 28.5 D
	ipP		11 06 33.2
De	iP		11 06 51.7 D
	ipP		11 06 57.7

Alaska.
h = 20 km (Um,Ud,De).
m = 6.3 (Up,Ki).

" 15	Um	iP	16 16 32.7
" 15	Ki	eP	17 49 59
		i	17 50 07.9
		i	17 50 13.0
	Sk	iP	17 50 19.8
		iS	17 52 02.4
	Um	iP	17 50 40.9
	Ud	iP	17 51 07.7

ESE of Jan Mayen, near 71°1/2N, 1°E.
Origin time = 17 48 09.
By combination with Finnish and Norwegian readings.

" 15	Up	iP	18 26 22.7
	Um	iP	18 25 51.2
		i	18 26 03.6
	Ud	iP	18 26 29.4

South of Japan (h = N).

" 15	Up	e(pP)	21 48 49
	Ki	iP	21 47 40.0
	Sk	iP	21 48 08.7
	Um	iP	21 48 10.3
	Ud	iP	21 48 34.9

Alaska (h = 20 km).

" 15	Um	iP	23 02 08.6
	Ud	iP	23 02 39.6

(Kurile Islands).

" 16	Up	iP	03 23 52.9 C
		iPn	03 24 58.4
		iPP	03 25 11.7
	Ki	iP	03 23 37.2 C
		iPn	03 24 37.9
			micr sec
		P Z'	0.1 0.5
	Sk	iP	03 24 08.4 C
		iPP	03 25 30.9
	Um	iP	03 23 37.8 C
		i	03 24 18.5

(cont.)

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

1972
Aug. 16 (cont.)

Ud	iP	03 24 09.1 C
	iPn	03 25 21.7
De	iP	03 24 16.1 C
	iPP	03 25 44.1

Kazakh SSR.
Underground explosion.

" 16 Ud iP 05 48 56.4

" 16 Ud iP 10 23 21.2

" 16

Um	eP	10 36 50
Ud	iP	10 37 21.7

Komandorsky Islands (h = N).

" 16

Up	iSgl	11 22 06.9
Ki	iPn	11 17 50.3
	iPgl	11 18 04.2
	i(S)	11 18 43.4
	iSn	11 18 49.3
	iS*	11 19 08.7
	iSgl	11 19 13.1
Sk	iSgl	11 21 36.9
Um	iSn	11 19 28.2
	iSgl	11 20 04.4
Ud	iSgl	11 22 39.1
De	iSgl	11 24 06.4

Northwest USSR,
67.8°N, 34.1°E.
Origin time = 11 16 32.
Explosion.

" 16

			micr	sec
Up	iPKP		11 45 34.8	
	PKP	Z'	0.1	1.0
Ki	iPKP		11 45 33.7	
	ipPKP		11 45 40.6	
	pPKP	Z'	0.2	1.4
	Mx	E	0.8	19
	Mx	N	0.9	20
	Mx	Z	0.9	20
Sk	iPKP		11 45 43.5	
	ipPKP		11 45 49.6	
Um	iPKP		11 45 33.6	
	ipPKP		11 45 39.4	
Ud	ePKP		11 45 42	
	ipPKP		11 45 46.2	
	i		11 45 51.9	
De	ePKP		11 45 39	

South of Australia.
h = 25 km (Ki,Sk,Um).

" 16

Up	iSgl	12 08 10.1
Ki	eSgl	12 10 30
Um	iSgl	12 08 37.9

(cont.)

1972
Aug. 16 (cont.)

Ud	eSgl	12 09 09
De	eSgl	12 09 37

Esthonia, 59.5°N, 25.7°E.
Origin time = 12 06 00.
Explosion.

" 16

Ki	iP	12 43 03.6
	iS	12 44 13.4
Sk	iP	12 43 43.1
	iS	12 45 29.0

Probably northeast of Jan Mayen.

" 16

Up	iSgl	12 57 13.0
Ki	e(Sgl)	12 59 15
Um	iSgl	12 57 33.0
Ud	iSgl	12 58 17.1
	iSg2	12 58 27.2
De	eSgl	12 58 43

Western USSR.
Explosion.

" 16

Um	iP	14 05 29.5
Ud	iP	14 06 10.0

" 16 Ud iP 19 38 16.6
Kurile Islands.

" 16 Ud iP 20 04 08.9

" 16 Up i(P) 20 54 20.2

" 16 Um iP 22 29 10.5

" 17 Um iP 02 33 11.7

" 17

			micr	sec
Ki	iP		03 28 48.3	
	P	Z'	0.1	0.8
Ud	iP		03 29 03.9	

Java (h = 100 km).

" 17

Up	iP	06 32 09.9
Ki	eP	06 32 03
	i	06 32 05.6
Um	iP	06 32 03.4
Ud	iP	06 32 24.3
	i	06 32 26.5
De	iP	06 32 25.9
	i	06 32 28.6

Sinkiang (h = N).

" 17

Up	iP	09 35 56.3
Ki	iP	09 35 23.4
Um	iP	09 35 36.5
Ud	iP	09 36 04.1

South of Japan (h = 470 km).

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

1972 Aug.					
	17	Ud	iP	10 21 09.9	
"	17	Up	iPKP	12 08 53.3	
		Sk	ePKP	12 08 48	
		Um	iPKP	12 08 43.6	
		Ud	iPKP	12 08 54.7	
"	17	Up	iSgl	12 20 40.8	
		Sk	eSgl	12 19 53	
		Ud	i(Pgl)	12 18 43.6	
			iSgl	12 19 36.0	
		Southwest coast of Norway.			
"	17	Up	i(P)	15 29 43.1	
"	17	Ki	iP	17 14 10.7	
		Ud	iP	17 13 13.7	
		De	eP	17 12 43	
		Aegean Sea.			
"	17	Up	iP	18 23 13.0	
		Ki	iP	18 23 17.7	
		Sk	iP	18 23 35.8	
		Um	iP	18 23 12.6	
		Ud	iP	18 23 28.3	C
		De	eP	18 23 24	
		Himalaya.			
"	17	Ud	iP	23 54 54.5	
"	17	Up	iP	23 59 05	
			iPKP	00 02 51.3	
			iPP	00 03 55	
			iPKKP	00 13 19.8	
				micr sec	
			P Z'	0.1 1.0	
			PKP Z'	0.1 0.9	
			PP Z'	1.2 2.0	
			Mx E	20 18	
			Mx N	29 19	
			Mx Z	50 19	
		Ki	iP	23 58 38	
			i	23 58 45.2	
			i(PKP)	00 02 27.4	
			iPKP	00 02 40.3	
			iPP	00 03 16	
			iPKKP	00 13 28.4	
				micr sec	
			P Z'	0.1 1.2	
			PKP Z'	0.2 1.0	
			Mx E	23 18	
			Mx N	54 22	
			Mx Z	17 18	
		Sk	e(P)	23 59 13	
			i(PKP)	00 02 33.9	
			iPKP	00 02 51.2	
			iPKKP	00 13 20.6	
		(cont.)			

1972 Aug.				
	17	(cont.)		
		Um	iP	23 58 50
			iPKP	00 02 45.1
			iPP	00 03 31
			iPKKP	00 13 30.7
		Ud	e(P)	23 59 20
			i	23 59 22.8
			iPKP	00 02 54.2
			iPP	00 04 07.1
			iPKKP	00 13 15.9
		De	iPKP	00 02 58.1
			iPKKP	00 13 05.5
		New Britain (h = 10 km).		
		m = 7.3, M = 7.0 (Up,Ki).		
"	18	De	iPKP	01 30 50.1
		New Britain (h = 35 km).		
"	18	Up	iPKP	01 53 24.4
		Ki	ePKP	01 53 40
		Um	iPKP	01 53 30.8
		Ud	iPKP	01 53 22.6
		South Sandwich Islands		
		(h = 60 km).		
"	18	Ud	iP	04 27 16.2
"	18	Um	i(P)	06 29 45.1
"	18	Ki	iP	08 13 48.3
			iS	08 15 36.0
		Sk	iP	08 13 54.7
			eS	08 15 41
		Um	iP	08 14 16.1
		East of Jan Mayen, near		
		70°1/2N, 4°W.		
		Origin time = 08 11 37.		
"	18	Up	iP	08 15 03.1
		Ud	iP	08 15 11.6
		Ionian Sea.		
		Complications with		
		preceding record.		
"	18	Um	i(P)	09 30 55.9
"	18	Sk	e(P)	10 12 22
		Um	i(P)	10 11 54.9
		Ud	iP	10 11 50.9 C
		Pakistan.		
"	18	Ki	iP	10 30 04.2
		Um	iP	10 30 23.3
"	18	Ki	iPKP	10 37 56.5
		New Britain (h = 10 km).		

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

1972				
Aug.	18	Up	iP	11 26 55.7
			iPP	11 27 20.7
		Sk	eP	11 27 32
		Um	iP	11 27 26.1
		Ud	iP	11 27 08.8
		Ionian Sea.		
"	18	Ud	iSgl	13 26 47.0
		De	ePgl	13 26 04
			iSgl	13 26 28.0
			i(Rg)	13 26 36.3
		Off coast of Bohuslän, Sweden.		
		Origin time = 13 26 25.		
		Explosion.		
"	18	Ki	iP	13 58 09.8
			i	13 58 13.8
		Um	iP	13 58 41.6
"	18	Up	iP	15 18 29.0
		Um	iP	15 18 14.2
		Ud	iP	15 18 38.0
"	18	Up	iP	15 47 22.6
		Ki	iP	15 46 42.4
		Um	i(P)	15 46 57.2
		Ud	iP	15 47 28.4
		De	eP	15 47 58
		Kurile Islands.		
"	18	Um	iP	18 26 49.2
"	18	Um	iPKP	18 37 58.7
		New Britain (h = 45 km).		
"	18	Up	iP	18 54 18.8
		Ki	iP	18 53 55.8
		Ud	iP	18 54 30.1
		Ryukyu Islands (h = N).		
"	18	Up	iP	19 12 28.7
				micr sec
			P Z'	0.1 1.0
		Ki	iP	19 11 34.8
				micr sec
			P Z'	0.1 1.0
		Sk	iP	19 12 11.2
		Um	iP	19 12 00.1
		Ud	iP	19 12 32.1 C
		De	iP	19 12 54.0
		Kamchatka (h = N).		
		m = 5.9 (Up,Ki).		
"	18	Up	iSgl	20 56 54.7
		Sk	iSgl	20 56 44.3
		(cont.)		

1972				
Aug.	18	(cont.)		
		Um	iSgl	20 57 59.4
		Ud	iPgl	20 55 31.4
			iSgl	20 55 52.1
		De	iSgl	20 57 21.6
		Southern Norway, 60.5°N, 10.7°E.		
		Origin time = 20 55 05.		
		Solution checked with Bergen and Kongsberg readings.		
"	18	Up	iP	21 10 33.7
		Ki	iP	21 10 37.3
		Sk	eP	21 10 23
		Um	iP	21 10 39.2
		Ud	iP	21 10 24.6
		De	eP	21 10 27
		Colombia (h = 160 km).		
"	18	Up	i(P)	21 53 19.4
"	19	Ud	eP	00 24 21
"	19	Ud	iP	01 26 45.7
"	19	Ud	iP	05 18 19.9
"	19	Ud	iP	06 51 55.4
		Greece.		
"	19	Ud	iP	07 12 37.6
"	19	Ud	iPP	13 04 48.4
		De	iPKP	13 01 29.0
			iPP	13 05 06.7
		Tonga Islands (h = 320 km).		
"	19	Ud	iPgl	13 51 58.9
			iSgl	13 52 22.3
		De	e(Sgl)	13 52 54
"	19	Up	iP	16 00 53.2
"	19	Ud	iPgl	16 42 17
			iSgl	16 42 41.3
		De	e(Sgl)	16 43 20
"	19	Um	iP	18 01 01.3
			i	18 01 10.5
		Kurile Islands.		
"	19	Ud	iP	18 05 34.9
		Kurile Islands (h = N).		
"	19	Um	iP	22 26 33.0

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

1972					
Aug.	19	Up	iP	23 31 52.1	C
		Um	iP	23 31 27.3	C
			ipP	23 31 38.8	
		Ud	iP	23 31 58.1	C
			ipP	23 32 09.5	
		De	iP	23 32 16.9	C

Kurile Islands.
h = 40 km (Um,Ud).

"	19	Up	iP	23 47 18.2	
		Sk	eP	23 47 13	
		Um	iP	23 46 58.7	
		Ud	iP	23 47 25.2	

South of Japan (h = 25 km).

"	20	Up	iPn	02 53 11.5		
			i	02 53 17.5		
			iSn	02 53 37.7		
			iSgl	02 53 44.0		
				micr	sec	
			Sn	Z' 0.1	0.5	
		Ki	eS*	02 55 45		
			iSgl	02 55 52.9		
		Sk	iPgl	02 53 24.2		
			i	02 53 29.5		
			iS*	02 53 58.7		
			iSgl	02 54 01.8		
		Um	iPgl	02 53 16.6		
			i	02 53 19.6		
			i	02 53 23.1		
			iSn	02 53 44.8		
			iS*	02 53 47.7		
			iSgl	02 53 51.6		
		Ud	iPn	02 53 15.8		
			i	02 53 23.3		
			iSn	02 53 46.5		
			iSgl	02 53 52.7		
		De	iSgl	02 55 31.0		

Hälsingland, Sweden,
61.9°N, 16.8°E.
Origin time = 02 52 35.
Felt.

"	20	Up	i(P)	03 04 33.0		
			iP	03 04 35.1	C	
			iPP	03 04 49.4		
			i	03 05 28.7		
			iSn	03 08 15.9		
			iLg2	03 10 51.1		
				micr	sec	
			P	Z' 1.0	1.1	
			PP	Z' 1.4	1.0	
		Ki	iP	03 05 04.6		
			iPP	03 05 25.1		
			iSn	03 09 20.3		
				micr	sec	
			P	Z' 1.2	1.1	

(cont.)

1972						
Aug.	20	(cont.)				
		Ki			micr	sec
			PP	Z'	1.5	1.3
			Mx	N	1.9	6
		Sk	iP		03 05 13.4	C
			iSn		03 09 46.5	
			iLg2		03 12 49.4	
		Um	iP		03 04 40.4	C
			iSn		03 08 38.2	
			iLg2		03 11 12.5	
		Ud	iP		03 04 57.7	C
			iLg2		03 12 01.4	
		De	e(P)		03 04 49	
			iP		03 04 50.2	C
			iSn		03 08 45.2	
			iLg2		03 11 33.3	

North of the Caspian Sea.
m = 6.2 (Up,Ki).
Underground explosion.
(P) at Up and De denote a small-amplitude precursor, preceding the main onset by about 2 sec.

"	20	Um	iP	04 01 17.2	

"	20	Up	iP	05 23 55.1		
		Ki	iP	05 23 39.4		
				micr	sec	
			P	Z' 0.1	1.2	
		Um	iP	05 23 44.5		
		Ud	iP	05 24 03.5		

Halmahera (h = 55 km).

"	20	Ki	i(P)	06 10 03.0	
		Um	i(P)	06 10 29.5	

"	20	Up	iP	08 20 48.2	C	
				micr	sec	
			P	Z' 0.2	1.2	
		Ki	iP	08 19 55.0	C	
				micr	sec	
			P	Z' 0.1	1.2	
		Sk	eP	08 20 31	C	
		Um	iP	08 20 20.1	C	
		Ud	iP	08 20 51.4	C	
		De	iP	08 21 12.6	C	

Kamchatka (h = N).
m = 6.0 (Up,Ki).

"	20	Up	iSgl	09 03 17.3	
		Ki	eSgl	09 05 36	
		Um	iSgl	09 03 37.5	
		Ud	iSgl	09 04 18.5	

Esthonia, 59.6°N, 26.2°E.
Origin time = 09 01 00.
Explosion.

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

1972					
Aug.	20	Um	iP		09 33 05.1
"	20	Up	iP		10 20 26.6 C
			i		10 20 30.0
					micr sec
			P	Z'	0.3 1.4
		Ki	iP		10 19 46.4 C
			i		10 19 50.1
					micr sec
			P	Z'	0.1 1.0
		Sk	iP		10 20 20.2 C
		Um	iP		10 20 03.9 C
			i		10 20 07.4
		Ud	iP		10 20 33.8 C
			i		10 20 37.6
		De	iP		10 20 49.1
		Japan (h = 25 km).			
		m = 6.2 (Up,Ki).			
		Double P, in average 3.6 sec apart.			
"	20	Um	iP		14 49 29.2
		Ud	iP		14 49 18.3
		De	iP		14 49 22.9
"	20	Up	iP		17 49 43.8
		Ud	iP		17 49 52.3
"	21	Up	iP		06 33 23.7 D
			iPcP		06 33 53.1
			ipP		06 35 23.1
			iPP		06 35 49.0
			iS		06 42 11
			iScS		06 42 15.8
			i(P'P')		07 01 43.6
					micr sec
			P	Z'	3.3 1.1
			pP	Z'	1.5 1.5
			Mx	E	2.1 16
			Mx	N	2.6 18
			Mx	Z	3.6 18
		Ki	iP		06 32 36.6 D
			ipP		06 34 31.0
			iPP		06 34 51.9
			iScP		06 36 27.3
			iS		06 39 44.2
			iP'P'		07 02 10.8
					micr sec
			P	Z'	3.2 1.0
			pP	Z'	2.1 1.9
			PP	Z'	1.4 1.6
			Mx	E	3.7 12
			Mx	N	4.7 13
			Mx	Z	1.8 12
		Sk	iP		06 33 12.0 D
			ipP		06 35 10.1
			iScP		06 36 51.9
		(cont.)			

1972				
Aug.	21	(cont.)		
		Um	iP	06 32 58.0 D
			ipP	06 34 55.3
			iScP	06 36 41.9
			iS	06 40 24.2
			iScS	06 41 46.3
			i(P'P')	07 01 43.0
		Ud	iP	06 33 29.3 D
			ipP	06 35 29.4
			iS	06 41 22.7
			eP'P'	07 01 55
		De	iP	06 33 47.7 D
			iPcP	06 34 09.2
			ipP	06 35 49.2
			iPP	06 36 20.6
			iS	06 41 58.2
			iP'P'	07 01 57.5
		Okhotsk Sea.		
		h = 610 km (Up,Ki,Sk,Um,Ud, De).		
		m = 6.6, M = 5.8 (Up,Ki).		
		M uncorrected for focal depth.		
		(P'P') denotes early arrivals of P'P'.		
"	21	Ud	eP	06 59 43
"	21	Up	iP	07 49 55.1
"	21	Up	ePKP	09 05 57
		New Ireland (h = 35 km).		
"	21	Up	eP	10 25 56
		Ki	iP	10 25 01.0
		Sk	eP	10 25 39
		Um	i(pP)	10 25 34.3
		Kamchatka (h = N).		
"	21	Up	iP	11 00 08.0
		Ki	eP	10 59 33
		Um	iP	10 59 49.2
		Ud	iP	11 00 15.0
		South of Japan (h = N).		
"	21	Ud	iP	14 08 56.3
		De	eP	14 09 10
		Ryukyu Islands (h = N).		
"	21	Up	iP	14 14 18.1
		Ki	iP	14 14 15.0
		Sk	eP	14 14 36
		Um	iP	14 14 11.1
		Ud	iP	14 14 32.2
		De	iP	14 14 32.0
		Sikkim (h = N).		
"	21	Up	iP	14 34 38.1
		(cont.)		

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

1972				
Aug.	21	(cont.)		
		Um	iP	14 34 27.7
		Ud	iP	14 34 50.8
		Burma-India (h = N).		
"	21	Ki	eP	19 04 48
		Um	iP	19 04 45.0
		Ud	iP	19 05 05.1
		Sikkim (h = N).		
"	21	Ki	eP	22 07 54
		Ud	iP	22 07 58.3
"	21	Ki	iP	22 10 38.9
		South of Java (h = 60 km).		
"	21	Up	iP	23 06 39.2
		Ud	iP	23 06 52.5
		Crete.		
"	22	Ud	iP	04 16 33.1
		Aleutian Islands (h = 50 km).		
"	22	Up	iP	05 42 17.9
			ipP	05 42 28.6
				micr sec
			pP Z'	0.1 1.1
		Ki	iP	05 41 46.4
		Sk	eP	05 42 15
		Um	iP	05 41 59.4
		Ud	iP	05 42 24.0
		De	iP	05 42 35.2
		Volcano Islands.		
		h = 40 km (Up).		
"	22	Ki	i(P)	13 05 44.9
"	22	Up	iP	14 30 57.6
		Ki	e(pP)	14 30 17
		Um	iP	14 30 29.4
		Ud	iP	14 30 59.5
		Kurile Islands (h = 60 km).		
"	22	Um	iP	14 47 11.5
"	22	Ud	iP	14 56 30.2
"	22	Ki	eP	15 20 03
"	22	Ki	iP	16 42 47.6
			i	16 43 10.2
		Tien-Shan.		
"	22	Um	iP	18 19 48.2
		Ud	eP	18 20 18
		Japan (h = 140 km).		

1972				
Aug.	22	Um	iP	21 52 13.1
		Ud	iP	21 52 29.7
"	22	Um	iP	22 06 32.8
"	22	Ki	iP	22 59 08.9
			i	22 59 11.7
		Ud	iP	23 00 00.9
		South of Japan (h = 30 km).		
"	22	Um	iP	23 00 10.2
"	23	Um	iP	00 17 28.7
"	23	Up	iP	08 57 31.0 C
				micr sec
			P Z'	0.2 0.8
		Ki	iP	08 56 35.1 C
				micr sec
			P Z'	0.5 1.0
		Sk	iP	08 57 03.4 C
			iPcP	08 57 53.7
		Um	iP	08 57 04.2 C
			ipP	08 57 22.3
			iPcP	08 57 54.8
		Ud	iP	08 57 27.8 C
		De	iP	08 57 51.9 C
			iPcP	08 58 23.7
		Kodiak Island.		
		h = 70 km (Um).		
		m = 6.4 (Up,Ki).		
"	23	Sk	i(P)	10 49 01.4
		Kurile Islands.		
"	23	Up	iP	11 33 47.7
		Ki	iP	11 33 15.6
		Sk	iP	11 33 44.7
		Um	iP	11 33 29.1 D
		Ud	iP	11 33 55.3
		De	iP	11 34 06.7 D
		Bonin Islands (h = 390 km).		
"	23	Up	iSgl	12 07 38.3
		Ki	i(S*)	12 09 39.6
		Sk	eSgl	12 09 27
		Um	iS*	12 07 57.6
			iSgl	12 08 01.3
		Ud	iSgl	12 08 42.1
			iSg2	12 08 52.0
		De	eSgl	12 09 08
		Western USSR.		
		Explosion.		
"	23	Up	iP	12 13 16.5
		Ki	iP	12 13 00.5 D
				micr sec
			P Z'	0.1 1.0
		(cont.)		

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

1972
Aug. 23 (cont.)

Sk	eP	12 13 24	
Um	iP	12 13 05.7	D
Ud	iP	12 13 24.8	D
De	iP	12 13 31.0	

Halmahera (h = 110 km).

" 23

Up	iPgl	15 16 22.2	
	iSgl	15 16 42.4	
Ud	iPgl	15 16 31.1	
	iS*	15 16 57.7	
	iSgl	15 16 58.8	
	i	15 17 18.3	
De	iSgl	15 17 06.0	

Östergötland, Sweden,
58.4°N, 16.3°E.
Origin time = 15 15 56.

" 23

Up	iP		18 03 59.1	C
	i		18 04 09.0	
	iPP		18 04 20.0	
	iS		18 06 34.5	
	i		18 06 55.7	
			micr sec	
	P	Z'	0.1 0.6	
	PP	Z'	0.1 0.6	
Ki	iP		18 05 23.5	C
	i		18 05 25.5	
	iS		18 09 29.0	
			micr sec	
	P	Z'	0.2 0.6	
Sk	iP		18 04 53.8	C
	iS		18 08 37.1	
Um	iP		18 04 41.0	C
	i		18 04 45.9	
	iSn		18 07 55.2	
Ud	iP		18 04 13.7	
	i		18 04 17.8	
	iSn		18 07 08.2	
	iS		18 07 22.7	
De	iP		18 03 34.3	
	i		18 03 44.5	

Rumania (h = 80 km).
m = 5.5 (Up,Ki).

" 23

Ki	iP	19 20 08.7	
Sk	eP	19 20 36	
Um	iP	19 20 22.0	
Ud	iP	19 20 47.9	

Bonin Islands (h = N).

" 23 Ud iP 20 31 28.8
Ionian Sea.

" 24 Sk eP 12 57 52

" 24 Up i(P) 13 56 35.2

1972
Aug. 24

Ki	iP	14 32 39.7	
Sk	i(P)	14 33 07.3	
Um	i(P)	14 32 51.0	

Sumatra (h = 70 km).

" 25

Ki	iP	08 57 34.4	
Sk	eP	08 57 41	
	iS	08 59 46.3	
Um	iS	09 00 38.7	
	i	09 01 09.2	
Ud	iP	08 58 36.6	

Jan Mayen (h = N).

" 25

Up	iPKP	14 27 37.2	
	i	14 27 47.2	
Ki	iPKP	14 27 18.7	
Sk	iPKP	14 27 34.4	
Um	iPKP	14 27 28.1	
	i	14 27 29.4	
Ud	iPKP	14 27 40.5	
	i	14 27 50.2	
De	iPKP	14 27 50.2	
	i	14 28 04.7	

South of Kermadec Islands
(h = 110 km).
The second phase at Up, Um, Ud and De belongs to the PKPl branch.

" 25

Ki	eP	18 14 06	
Sk	eP	18 14 36	
Um	iP	18 14 20.5	
Ud	iP	18 14 46.5	

South of Japan (h = 430 km).

" 25 Ud eP 18 51 04
Hindu Kush (h = 130 km).

" 25 Ki iP 20 26 28.3

" 26 Um iPKP 00 26 19.5
Kermadec Islands (h = 120 km).

" 26

Ki	iPKP	02 58 11.1	
Um	iPKP	02 58 03.8	

South Sandwich Islands
(h = N).

" 26 Ud iP 03 28 00.6
Aleutian Islands (h = 30 km).

" 26

Up	iP		03 53 49.8	C
	iPn		03 54 49.9	
Ki	iP		03 53 34.2	C
	iPP		03 54 48.3	
			micr sec	
	P	Z'	0.2 0.5	

(cont.)

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

1972
Aug. 26 (cont.)

Sk	iP	03 54 05.3	C
	iPn	03 55 20.3	
Um	iP	03 53 34.9	C
	iPn	03 54 31.7	
	iPP	03 54 49.1	
Ud	iP	03 54 06.4	C
De	iP	03 54 13.2	
	ePn	03 55 21	

Kazakh SSR.
Underground explosion.

" 26

Ud	iPKP	04 30 19.7
De	iPKP	04 30 32.3

" 26

Ki	iP	04 53 07.3

New Guinea (h = N).

" 26

Ki	ePKP	06 39 57

New Hebrides Islands
(h = 120 km).

" 26

Up	iP	11 49 03.6	
Ki	iP	11 48 09.3	C
Sk	iP	11 48 39.6	
Um	iP	11 48 36.1	
	iPcP	11 49 15.5	
Ud	iP	11 49 02.2	C
	iPcP	11 49 31.1	
De	iP	11 49 24.4	C

Aleutian Islands (h = 50 km).

" 26

Ki	ePn	12 45 20
	iSn	12 46 05.4
	iSgl	12 46 21.4
Sk	eSgl	12 48 46
Um	iSgl	12 47 15.8

Northwest USSR,
67.6°N, 30.5°E.
Origin time = 12 44 20.
Explosion.

" 26

			micr	sec
Up	e(P)		18 16 38	
	(P)	Z'	0.1	1.2
Ki	e(P)		18 16 03	
Sk	eP		18 16 03	
Um	i(P)		18 16 21.0	
Ud	eP		18 16 25	
	i		18 16 33.3	

Off coast of Oregon (h = N).

" 26

Up	i	19 00 54.7
	iSgl	19 01 22.0
Sk	i(Sgl)	18 59 17.2
Ud	i	18 59 37.5
	e(Sgl)	19 00 45.2

(cont.)

1972
Aug. 26 (cont.)
Off coast of southwest Norway.
Poor agreement between data.

" 26

			micr	sec
Up	iPKP		22 02 42.0	
	PKP	Z'	0.1	0.9
Um	ePKP		22 02 26	
Ud	iPKP		22 02 43.3	
De	ePKP		22 02 53	

Tonga-Kermadec Islands
(h = 50 km).

" 27

De	iP	01 06 54.0

" 27

De	eP	01 20 08

" 27

Up	eP	03 01 21
Sk	eP	03 02 02
Ud	iP	03 01 28.8

Greece.

" 27

Up	iP	04 04 38.5
Ki	eP	04 04 04
Um	iP	04 04 18.5
Ud	iP	04 04 45.6

" 27

Up	iSgl	08 50 26.2
	i(Sg2)	08 50 35.6
Ki	ePn	08 46 14
	iSn	08 47 13.4
	iSgl	08 47 35.4
Sk	iSgl	08 50 04.3
Um	i	08 48 08.9
	iSgl	08 48 29.0
Ud	eSgl	08 51 00

Northwest USSR,
67.8°N, 34.1°E.
Origin time = 08 44 55.
Explosion.

" 27

			micr	sec
Up				
	Mx	E	0.5	11
	Mx	N	1.4	20
	Mx	Z	0.6	12
Ki	eP		15 00 13	
			micr	sec
	Mx	E	1.1	15
	Mx	N	0.9	18
	Mx	Z	0.6	12
Um	iX		15 00 30	
Ud	iP		15 00 36.3	
	iX		15 00 52.8	

Burma-China (h = N).
M = 5.2 (Up,Ki).
Interpreting X as pP gives h = 60 km.

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

1972 Aug.	27	Ud	iPKP		15 12 22.5
		De	ePKP		15 12 37
"	27	Um	iP		19 48 14.0
			i		19 48 25.6
		De	iP		19 48 09.6
"	27	Um	i(P)		19 49 18.7
		Ud	iP		19 48 37.9
			i		19 48 42.8
			i		19 49 25.7
		De	i(P)		19 48 39.0
		North Atlantic Ocean (h = N).			
"	27	Ki	eP		21 27 21
		Um	eP		21 27 28
		Ud	iP		21 27 45.7
		Mindanao (h = 150 km).			
"	28	Up	iPKP		02 37 55.8
		Ki	iPKP		02 37 49.9 C
		Sk	iPKP		02 37 58.7 C
		Um	iPKP		02 37 51.3
			i		02 37 55.9
			iPP		02 39 34.0
		Ud	iPKP		02 37 59.0
		De	iPKP		02 38 02.1
		Australia (h = 60 km).			
"	28	Up	iP		06 04 24.2 C
			iS		06 07 59
					micr sec
			P	Z'	3.8 0.7
			Mx	E	6.9 7
			Mx	N	14 8
			Mx	Z	15 8
		Ki	iP		06 02 53.7 C
			iS		06 05 08
					micr sec
			P	Z'	4.6 0.9
			Mx	E	13 6
			Mx	N	14 6
			Mx	Z	13 6
		Sk	iP		06 04 03.0 C
			iS		06 07 14.5
		Um	iP		06 03 31.4 C
			iS		06 06 14
		Ud	iP		06 04 34.3 C
		De	iP		06 05 07.2 C
			iS		06 09 21.0
		Novaya Zemlya.			
		m = 6.7, M = 5.7 (Up,Ki).			
		Underground explosion.			
"	28	Ki	i(P)		12 32 25.9
			i		12 32 30.5
		(cont.)			

1972 Aug.	28	(cont.)			
		Ki			micr sec
			(P)	Z'	0.1 0.6
		Um	i(P)		12 32 30.8
"	28	Sk	eP		13 02 20
"	28	Up	iSgl		14 20 31.5
		Ki	iPn		14 17 00.5
			iPgl		14 17 10.6
			iSgl		14 17 51.8
			iTPg		14 18 05.0
			iTSg		14 18 16.8
					micr sec
			Sgl	Z'	0.1 0.7
		Sk	iPn		14 17 15.9
			iPgl		14 17 33.1
			iSn		14 18 04.8
		Um	iPn		14 17 34.1
			iSn		14 18 32.8
			i		14 18 41.2
			iSgl		14 19 01.9
			iTPg		14 19 13.0
		Ud	iPn		14 18 08.9
			iSn		14 19 38.4
			iSgl		14 20 28.3
		De	iSgl		14 22 19.0
		Lofoten, 68.0°N, 12.7°E.			
		Origin time = 14 16 20.			
"	28	Up	iP		14 37 14.7 C
			ipP		14 37 29.3
					micr sec
			P	Z'	0.1 0.6
		Ki	iP		14 36 58.0
			ipP		14 37 14.6
		Sk	iP		14 37 20.1
			ipP		14 37 34.9
		Um	iP		14 37 03.3
			ipP		14 37 17.2
		Ud	iP		14 37 23.8 C
			ipP		14 37 38.2
		Mindoro.			
		h = 55 km (Up,Ki,Sk,Um,Ud).			
"	28	Up	iSgl		14 52 32.0
		Ki	iPgl		14 49 13.7
			iSgl		14 49 52.6
			iTPg		14 50 06.5
			iTSg		14 50 17.9
		Sk	ePn		14 49 22
			iSn		14 50 07.1
			iTPg		14 50 41.5
		Um	iPn		14 49 38.1
			iSn		14 50 35.5
			iSgl		14 51 03.9
			iTPg		14 51 10.3
		(cont.)			

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

1972
Aug. 28 (cont.)

Ud	e		14 52 19
	eSgl		14 52 34

Lofoten, 68.0°N, 12.7°E.
Origin time = 14 48 23.

" 28	Up	iP		15 31 57.4 C
		i		15 32 00.1
		iPcP		15 32 27.2
			micr	sec
		P	Z' 0.2	0.8
	Ki	iP		15 31 05.5 C
			micr	sec
		P	Z' 0.1	0.8
	Sk	iP		15 31 37.5 C
	Um	iP		15 31 31.6
	Ud	iP		15 31 59.5 C
		iPcP		15 32 27.3
	De	iP		15 32 21.5 C
		i		15 32 31.7
		iPcP		15 32 38.9

Aleutian Islands (h = 45 km).
m = 6.1 (Up,Ki).

" 28	Ud	iP	15 34 00.4
	De	iP	15 33 47.3
" 28	Um	eP	16 56 05
	Ud	iP	16 56 19.2
		i	16 56 23.6
" 28	Up	ePKP	19 17 25
			micr sec
		Mx E	1.2 20
		Mx N	1.4 19
		Mx Z	1.7 21
	Ki		micr sec
		Mx E	1.6 21
		Mx N	2.1 20
		Mx Z	2.4 20
	Um	iPKP	19 17 22.5
	Ud	i(PKP)	19 17 24.1
		iPKP	19 17 29.2
	De	iPKP	19 17 34.8

Tonga Islands (h = N).
M = 5.9 (Up,Ki).

" 28	Up	iPKP	19 23 13.3
	Ki	iPKP	19 22 58.7
	Um	iPKP	19 23 08.0

New Britain (h = 35 km).

" 28	Um	iP	19 46 04.9
" 28	Ud	i	20 55 00.1
		iSgl	20 55 08.9
	De	iPgl	20 54 11.1

(cont.)

1972
Aug. 28 (cont.)

De	iSgl	20 55 07.9

Probably off coast of south Norway.
Origin time = 20 52 57.

" 28	Ki	i(Pn)	23 19 40.4
		iPgl	23 19 49.3
		iSgl	23 20 14.1
		i	23 20 19.7
	Sk	eSgl	23 22 34
	Um	iSgl	23 22 13.9
	Ud	eSgl	23 24 20

Coast of north Norway.

" 29	Um	iP	00 49 45.8
" 29	Ki		micr sec
		Mx E	0.6 15
		Mx Z	0.6 16
	Sk	eP	01 47 42
	Um	iP	01 47 53.4
	Ud	iP	01 47 54.2

Gulf of California (h = N).

" 29	Sk	eP	02 54 35
	Ud	iP	02 54 04.9

Turkey.

" 29	Up	iP	03 41 02.2
		i	03 41 05.1
		i	03 41 25.6
	Ki	iP	03 41 11.9 C
		i	03 41 26.2
			micr sec
		P	Z' 0.2 0.8
	Sk	iP	03 40 50.5
	Um	iP	03 41 10.3 C
	Ud	iP	03 40 51.2 C
	De	iP	03 40 49.7 C
		i	03 40 53.1

Windward Islands (h = 70 km).

" 29	Ki	iPKP	06 17 55.8
	Sk	iPKP	06 18 04.6
	Um	iPKP	06 18 03.6
	Ud	iPKP	06 18 06.1
		i	06 18 13.2
	De	iPKP	06 18 13.5 C

Tonga Islands (h = 150 km).

" 29	Up	iP	07 11 01.9
	Ki	eP	07 10 44
	Sk	eP	07 11 08
	Ud	iP	07 11 10.7
" 29	Ud	eP	19 25 58
		i	19 26 16.8

Atlantic Ocean (h = N).

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

1972						
Aug.	29	Ki	iP		22 06 05.3	
		Sk	iP		22 05 37.3	
		Ud	iP		22 05 05.8	
		De	iP		22 04 33.6	
		Crete.				
"	29	Ud	iP		22 16 11.1	
		Atlantic Ocean (h = N).				
"	29	Ud	iP		22 23 19.3	
			i		22 23 21.4	
		De	iP		22 22 47.9	
		Crete.				
"	30	Ki	iPP		00 58 07.0	
		Solomon Islands (h = 45 km).				
"	30	Ud	iPKP		05 39 30.7	
			iSKP		05 42 22.0	
		De	ePKP		05 39 38	
			iSKP		05 42 30.3	
		Fiji Islands (h = 560 km).				
"	30	Ki	i(P)		09 17 09.6	
"	30	Up	iPP		10 49 12.0	
					micr	sec
			PP	Z'	0.1	1.5
			Mx	E	8.1	21
			Mx	N	11	23
			Mx	Z	20	21
		Ki			micr	sec
			Mx	E	14	22
			Mx	N	15	21
			Mx	Z	13	23
		Ud	iPP		10 49 35.9	
		New Guinea (h = 15 km).				
		M = 6.6 (Up,Ki).				
"	30	Up	iSgl		10 58 06.6	
		Sk	iSgl		10 58 28.2	
		Ud	i(Pn)		10 56 40.7	
			iPgl		10 56 47.9	
			iSgl		10 57 11.2	
		De	iSgl		10 58 08.2	
		South Norway,				
		59.5°N, 10.4°E.				
		Origin time = 10 56 17.				
		By combination with				
		Kongsberg readings.				
"	30	Um	i(P)		14 50 13.1	
"	30	Up	iP		15 23 29.2	C
			i		15 23 31.6	
			ipP		15 23 36.2	
		(cont.)				

1972						
Aug.	30	(cont.)				
		Up			micr	sec
			P	Z'	0.1	0.7
			i	Z'	0.4	0.8
			Mx	E	1.4	18
			Mx	N	1.3	18
			Mx	Z	2.4	18
		Ki	iP		15 23 12.2	C
			i		15 23 14.6	
			ipP		15 23 19.5	
			iPP		15 25 11.3	
					micr	sec
			P	Z'	0.1	0.7
			i	Z'	0.3	1.0
			Mx	E	1.7	12
			Mx	N	1.4	14
			Mx	Z	1.6	12
		Sk	iP		15 23 40.9	C
			i		15 23 43.4	
			ipP		15 23 48.0	
		Um	iP		15 23 15.6	C
			i		15 23 17.8	
			ipP		15 23 22.9	
			iPcP		15 24 29.4	
			iPP		15 25 15.6	
		Ud	iP		15 23 42.9	C
			i		15 23 45.2	
			ipP		15 23 50.3	
		De	iP		15 23 49.3	
			i		15 23 51.1	
			ipP		15 23 56.5	
			iPcP		15 24 48.1	
		China.				
		h = 25 km (Up,Ki,Sk,Um,Ud,				
		De).				
		m = 6.3, M = 5.3 (Up,Ki).				
		Double P, in average 2.3				
		sec apart.				
"	30	Up	iP		15 51 21.8	
		Um	iP		15 51 07.3	
"	30	Up	iP		18 01 14.9	
		Sk	eP		18 01 27	
		De	eP		18 01 15	
"	30	Up	iP		18 57 03.3	C
			ipP		18 57 09.7	
					micr	sec
			P	Z'	0.2	0.8
			pP	Z'	0.2	0.8
			Mx	E	0.9	16
			Mx	N	1.1	16
			Mx	Z	1.6	17
		Ki	iP		18 56 46.4	C
			ipP		18 56 53.1	
			iPP		18 58 43.8	
		(cont.)				

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

1972
Aug. 30 (cont.)

Ki			micr	sec
	P	Z'	0.2	1.0
	pP	Z'	0.2	1.0
	Mx	E	1.4	11
	Mx	N	1.7	12
	Mx	Z	1.2	12
Sk	iP		18 57 14.9 C	
	ipP		18 57 22.0	
Um	iP		18 56 49.2 C	
	ipP		18 56 56.0	
	iPcP		18 58 01.1	
Ud	iP		18 57 16.9 C	
	ipP		18 57 23.4	
	iPcP		18 58 14.9	
	iPP		18 59 17.7	
De	iP		18 57 22.7 C	
	ipP		18 57 29.6	
	iPcP		18 58 19.5	

China.
h = 25 km (Up,Ki,Sk,Um,Ud, De).
m = 6.1, M = 5.2 (Up,Ki).

" 30

Up	iP		19 00 54.2 C	
	ipP		19 01 00.8	
			micr	sec
	P	Z'	0.3	0.8
	Mx	E	1.0	18
	Mx	N	0.8	12
	Mx	Z	1.7	16
Ki	iP		19 00 37.4 C	
	ipP		19 00 43.2	
	iPP		19 02 35.2	
			micr	sec
	P	Z'	0.2	1.0
	Mx	E	1.1	13
	Mx	N	0.8	12
	Mx	Z	1.3	13
Sk	iP		19 01 06.8 C	
Um	iP		19 00 40.9 C	
	ipP		19 00 47.4	
Ud	iP		19 01 08.6 C	
	ipP		19 01 14.6	
De	iP		19 01 14.5 C	
	ipP		19 01 20.7	

China.
h = 25 km (Up,Ki,Um,Ud,De).
m = 6.2, M = 5.1 (Up,Ki).

" 30 De iPKP 19 33 35.1
Solomon Islands (h = 70 km).

" 30 Ud eP 20 12 36

" 30 Up eP 20 17 11
(cont.)

1972
Aug. 30 (cont.)

Ki	eP	20 16 22
Ud	iP	20 17 19.2

" 30 Ud iPKP 20 19 00.1
De ePKP 20 19 13

" 30

Up	iP	20 51 51.8 C
Ki	iP	20 51 35.1
Sk	iP	20 52 04.1
Um	iP	20 51 38.0
Ud	iP	20 52 05.6

China.
Origin time = 20 42 33.

" 30

Um	iP	21 26 06.1
	ipP	21 26 13.9
Ud	iP	21 26 38.3

Japan.
h = 30 km (Um).

" 30 Ud eP 22 23 28

" 30 Um i(P) 23 54 31.2

" 31

Ki	iP	01 24 30.6
Um	iP	01 24 38.4
Ud	eP	01 25 06
De	eP	01 25 13

Formosa (h = 60 km).

" 31

Up	iX		02 37 06.6	
			micr	sec
	Mx	E	0.9	23
	Mx	Z	1.2	22
Ki	iP		02 36 38.7	
			micr	sec
	P	Z'	0.1	1.5
	Mx	E	0.9	22
	Mx	N	0.9	22
	Mx	Z	1.2	22
Sk	eP		02 36 34	
	ipP		02 36 49.4	
	iX		02 36 54.8	
Um	iP		02 36 46.5	
	iX		02 37 05.2	
	i		02 38 29.7	
Ud	iP		02 36 40.2	
	iX		02 36 57.3	
De	iX		02 37 01.9	

El Salvador.
h = 55 km (Sk).
M = 5.3 (Up,Ki).
X could be P of an after-shock, about 19 sec later.

" 31 Ud iP 03 34 10.6

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

1972					
Aug.	31	Um	ePKP	05 52 53	
		Ud	iPKP	05 53 00.2	
		De	iPKP	05 53 10.6	C
		Fiji Islands (h = 630 km).			
"	31	Ud	iP	07 08 22.8	
"	31	Ki	iP	07 32 29.7	
		Ud	iP	07 32 37.7	
"	31	Um	iP	08 05 28.5	
		Japan (h = 20 km).			
"	31	Up	iP	08 18 46.7	
				micr sec	
			Mx E	2.1 16	
			Mx N	2.8 16	
			Mx Z	1.5 13	
		Ki	iP	08 18 08.8	
				micr sec	
			Mx E	4.0 14	
			Mx N	4.1 13	
			Mx Z	2.4 16	
		Sk	iP	08 18 41.5	
		Um	iP	08 18 24.5	
			iS	08 27 26	
		Ud	iP	08 18 53.8	
		De	eP	08 19 12	
		Japan (h = 25 km).			
		M = 5.9 (Up,Ki).			
"	31	Up	iP	14 11 01.5	C
			iX	14 11 05.4	
			iPcP	14 12 57.3	
			iY	14 13 01.4	
				micr sec	
			P Z'	0.2 1.0	
			X Z'	0.2 0.9	
			Mx E	1.0 13	
			Mx N	1.8 13	
			Mx Z	1.9 14	
		Ki	iP	14 10 29.6	C
			iX	14 10 33.7	
			iPcP	14 12 45.7	
			iY	14 12 49.7	
				micr sec	
			P Z'	0.1 1.1	
			X Z'	0.1 0.8	
			Mx E	1.2 9	
			Mx N	1.5 12	
			Mx Z	1.3 10	
		Sk	iP	14 11 07.6	
			iX	14 11 12.2	
			iPcP	14 13 00.7	
			iY	14 13 05.4	
		Um	iP	14 10 39.6	C
			iX	14 10 43.1	
		(cont.)			

1972					
Aug.	31	(cont.)			
		Um	iPcP	14 12 49.4	
			iY	14 12 53.1	
		Ud	iP	14 11 15.6	C
			iX	14 11 19.2	
			iPcP	14 13 03.7	
			iY	14 13 07.5	
		De	iP	14 11 28.7	C
			iX	14 11 32.7	
			iPcP	14 13 09.4	
			iY	14 13 13.8	
		Central Siberia (h = N).			
		m = 5.7, M = 5.2 (Up,Ki).			
		The phase X can either be interpreted as P of a second event from the same area or as pP for a focal depth of 15 km. The phase Y is the corresponding PcP or pPcP, respectively.			
"	31	Up	iSgl	16 54 44.4	
		Ki	iPn	16 51 16.4	
			iPgl	16 51 27.9	
			i	16 51 36.3	
			iSgl	16 52 06.8	
			iTPg	16 52 19.8	
			iTSg	16 52 31.4	
		Sk	iPn	16 51 31.3	
			iSn	16 52 20.1	
			iTPg	16 52 55.1	
		Um	i(Pn)	16 51 45.7	
			iPn	16 51 50.4	
			iSn	16 52 48.2	
			iSgl	16 53 17.2	
			iTPg	16 53 23.7	
			i	16 53 29.2	
		Ud	iPn	16 52 25.0	
			i	16 53 44.1	
			iSgl	16 54 44.3	
		Lofoten, 68.0°N, 12.7°E.			
		Origin time = 16 50 36.			

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August 30, 1974

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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

S E P T E M B E R 1 - 30, 1972

1972				
Sep.	1	Ud	iP	01 55 34.1
"	1	Um	iP	03 58 05.5
"	1	Ud	iP	04 14 20.8
		Japan (h = 60 km).		
"	1	Sk	iSg1	05 12 21.7
		Ud	iSg1	05 12 27.5
		De	eSg1	05 13 21
		Off west coast of Norway, 60.9°N, 3.8°E.		
		Origin time = 05 09 52.		
		By combination with Bergen and Kongsberg readings.		
"	1	Up	iP	07 28 46.9
		Ud	iP	07 28 46.6
			i	07 29 01.2
"	1	Up	iP	08 21 43.0
		Ud	iP	08 21 45.6
"	1	Up	iSg1	12 12 51.1
		Ki	eSg1	12 14 47
		Um	iSg1	12 13 07.0
		Ud	iSg1	12 13 52.2
		De	eSg1	12 14 22
		Western USSR, 59.3°N, 28.3°E.		
		Origin time = 12 10 00.		
		Explosion.		
"	1	Up	iPKP	13 06 09.2
			iSKP	13 09 21.3
				micr sec
			PKP Z'	0.1 1.2
		Ki	iPKP	13 05 55.4 D
		(cont.)		

1972				
Sep.	1	(cont.)		
		Sk	iPKP	13 06 06.3 D
		Um	iPKP	13 06 01.4 D
		Ud	iPKP	13 06 11.7 D
			iSKP	13 09 25.8
		De	iPKP	13 06 18.1 D
		New Hebrides Islands (h = 130 km).		
"	1	Ud	i(P)	13 59 10.0
"	1	Up	iP	14 41 45.6
		Ki	iP	14 40 52.5
		Ud	iP	14 41 47.5
		Aleutian Islands (h = 60 km).		
"	1	Sk	e(Sg1)	15 14 01
		Ud	iSg1	15 12 56.7
		Southwest Norway.		
		By combination with Kongsberg readings.		
"	1	Ki	iSg1	17 53 20.3
		Sk	iSg1	17 53 24.7
		Um	iSn	17 53 33.8
			iSg1	17 53 47.5
		Ud	iSg1	17 55 12.7
			iSg2	17 55 19.1
		Nordland, Norway, 66.5°N, 14.0°E.		
		Origin time = 17 51 51.		
		Explosion.		
"	1	Ki	i(Sg1)	20 47 37.6
"	2	Up	iP1	02 01 16.7
			iP2	02 01 18.4 C
		(cont.)		

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

1972
Sep. 2 (cont.)

Up	iS		02 10 49	
			micr	sec
	P2	Z'	0.6	1.2
	Mx	E	8.2	18
	Mx	N	7.2	21
	Mx	Z	17	22
Ki	eP1		02 00 46	
	iP2		02 00 46.9	C
	ipP		02 00 58.6	
	i		02 01 35.2	
	iS		02 09 53	
			micr	sec
	P2	Z'	0.4	1.3
	Mx	E	23	21
	Mx	N	16	20
	Mx	Z	27	21
Sk	iP2		02 01 17.0	C
Um	iP2		02 00 59.6	C
	iS		02 10 13	
Ud	eP1		02 01 26	
	iP2		02 01 26.7	C
	eS		02 11 11	
De	iP2		02 01 38.4	C
	i		02 01 53.7	

Ryukyu Islands.
h = 40 km (Ki).
m = 6.5, M = 6.4 (Up,Ki).
P1 denotes a small-amplitude phase, preceding the main onset by about 1.7 sec.

" 2

Up	eP		02 19 29	
	ipP		02 19 50.3	
			micr	sec
	pP	Z'	0.1	1.0
Ud	iP		02 19 39.5	
	ipP		02 19 59.3	

Formosa.
h = 80 km (Up,Ud).

" 2

Up	eP	02 53 09	
Ki	eP	02 52 19	
Ud	iP	02 53 15.4	

Kurile Islands (h = N).

" 2

Ud	iP	03 53 53.0	

Kurile Islands (h = N).

" 2

Up	iP	03 59 51.3	
Ki	iP	03 59 00.6	
Ud	iP	03 59 57.6	

Kurile Islands (h = 45 km).

1972
Sep. 2

Up	iPKP	04 34 02.3	
Ki	ePKP	04 33 53	
Um	iPKP	04 34 01.4	
Ud	iPKP	04 34 04.7	
	iSKP	04 36 54.5	
De	iPKP	04 34 16.9	D

Tonga-Kermadec Islands
(h = 590 km).

" 2

Ki	iP	06 14 47.6	
Um	iP	06 15 05.7	C
Ud	eP	06 15 33	

Japan (h = 80 km).

" 2

Up	iP	06 34 05.2	
Ud	iP	06 34 14.8	

Sumatra (h = 70 km).

" 2

Up	iP	09 03 49.8	
Ki	iP	09 03 34.4	
		micr	sec
	P	Z' 0.1	0.5
Sk	iP	09 04 05.3	
Ud	iP	09 04 06.1	
De	eP	09 04 14	

Kazakh SSR.
Underground explosion.

" 2

Up	eP1	10 43 46
	iP2	10 43 48.8
	iPn	10 44 23.2
	iSn	10 49 45.3
Ki	eP2	10 44 16
	iSn	10 51 11.9
Sk	eP2	10 44 18
	iPn	10 45 17.4
	iPP	10 45 24.5
Um	iPP	10 44 58.6
	i	10 45 19.1
Ud	iP1	10 44 03.8
	iP2	10 44 06.0
	iPn	10 44 57.1
De	eP1	10 43 54
	iP2	10 43 55.7
	ePP	10 44 51

Turkmen SSR (h = N).

" 2

Ki	iPn	10 43 58.9
	iSn	10 44 47.3
	iSg1	10 45 03.0

Northwest USSR.
Origin time = 10 42 55.
Explosion.

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

1972					
Sep.	2	Up	eP		14 59 44
			i		14 59 53.4
			iPP		15 00 49.1
			iS		15 04 29
					micr sec
			PP	Z'	0.1 1.2
			Mx	E	9.0 16
			Mx	N	6.8 15
			Mx	Z	9.0 15
		Ki	iP		15 00 55.3
			i		15 01 22.9
			iS		15 06 35
					micr sec
			Mx	E	8.7 15
			Mx	N	3.2 17
			Mx	Z	3.9 14
		Sk	iP		15 00 17.6
		Um	iP		15 00 20.2
		Ud	iP		14 59 46.0
			i		14 59 54.2
		De	iP		14 59 14.2
			i(Pn)		14 59 30.4
		Libya (h = N).			
		M = 5.7 (Up,Ki).			
"	2	Up	iP		18 40 31.5
		Ki	iP		18 39 40.8
		Ud	iP		18 40 36.9
		Kurile Islands (h = N).			
"	2	Up	eP		18 43 20
		Ki	eP		18 42 29
		Ud	iP		18 43 24.9
		Kurile Islands (h = N).			
"	2	Ud	iP		19 01 37.0
		Kurile Islands (h = N).			
"	2	Up	iP		19 23 58.4 D
		Ki	iP		19 23 20.6
		Sk	i		19 24 03.9
		Um	iP		19 23 36.6 D
		Ud	iP		19 24 04.9
		De	eP		19 24 25
		Japan (h = 55 km).			
"	3	Ud	iPKP		00 36 35.5
		New Britain (h = N).			
"	3	Ki	ePKP		01 02 29
		South Sandwich Islands (h = N).			
"	3	De	iPKP		02 13 02.7
		New Britain (h = N).			

1972					
Sep.	3	Up			micr sec
			Mx	E	2.4 18
			Mx	N	3.4 19
			Mx	Z	6.1 19
		Ki	i(PKP)		06 49 43.5
			iPKP		06 49 54.0
					micr sec
			Mx	E	3.7 20
			Mx	N	5.5 21
			Mx	Z	5.8 21
		Um	iPKP		06 49 58.0
		Ud	iPKP		06 50 07.3
		De	e(PKP)		06 50 06
			iPKP		06 50 14.1
		New Britain (h = 45 km).			
		M = 6.1 (Up,Ki).			
"	3	Ki	eP		07 05 54
			iS		07 07 39.8
		Sk	e(Lg1)		07 11 00
		Um	i		07 09 28.7
		Svalbard.			
"	3	Up			micr sec
			Mx	E	1.1 19
			Mx	N	1.4 20
			Mx	Z	3.1 19
		Ki			micr sec
			Mx	E	1.8 20
			Mx	N	1.1 17
			Mx	Z	1.7 17
		De	iPKP		08 14 45.0
		New Britain (h = 50 km).			
		M = 5.7 (Up,Ki).			
"	3	Up	eP		08 43 41
		Ki	eP		08 44 57
			i		08 45 19.8
		Sk	iP		08 44 19.3
		Um	iP		08 44 08.9
		Ud	iP		08 43 48.6
		De	iP		08 43 13.9 C
		Turkey (h = 15 km).			
"	3	Up	iP		09 18 33.5
		Um	iP		09 18 34.1
		Ud	iP		09 18 47.8
		Afghanistan-USSR.			
"	3	Up	iSKP		12 02 34.3
		Ud	iSKP		12 02 38.5
			i(sSKP)		12 03 23.7
		De	iSKP		12 02 49.5
		New Hebrides Islands (h = 100 km).			

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

1972
Sep. 3 Ud i(P) 13 25 25.6
i 13 26 26.2

" 3 Ud iPKP 16 23 21.3
De iPKP 16 23 27.7
New Britain (h = 50 km).

" 3 Up iP 16 56 22.5 C
iPP 16 58 00.5
iS 17 02 37
micr sec
P Z' 2.6 1.4
PP Z' 3.0 1.9
Mx E 17 10
Mx N 43 14
Mx Z 29 9
Ki iP 16 56 28.9 C
iX 16 57 02.4
iS 17 02 57
micr sec
P Z' 1.9 1.2
Mx E 26 11
Mx N 48 11
Mx Z 22 10
Sk iP 16 56 47.3 C
iX 16 57 06.0
Um iP 16 56 19.7 C
iPP 16 57 57
iS 17 02 34
Ud iP 16 56 38.5 C
iPP 16 58 26.1
De iP 16 56 36.0 C
iPP 16 58 23.7
Kashmir (h = 35 km).
m = 6.7, M = 6.5 (Up,Ki).
Phases, denoted X and found especially at Ki,Sk in this and several following Kashmir earthquakes, could be due to reflections from underneath at mantle discontinuities in the depth range of 500 to 650 km.

" 3 Up iP 17 17 13.6
micr sec
P Z' 0.1 1.0
Ki eP 17 17 24
Sk iP 17 17 37.9
Um iP 17 17 10.3 C
Ud iP 17 17 29.9
De eP 17 17 27
Kashmir (h = N).

" 3 Up eP 17 54 12
(cont.)

1972
Sep. 3 (cont.)
Um iP 17 54 08.2 C
Ud iP 17 54 27.6
Kashmir (h = N).

" 3 Ki eP 18 08 09
Ud iP 18 08 21.8
(Kashmir).

" 3 Um iP 18 56 01.9
Ud iP 18 56 21.8
Kashmir.
Origin time = 18 48 11.
Approximate origin times are given for some Kashmir aftershocks not reported by NEIS, as based on our own readings and essentially for the purpose of easier event identification.

" 3 Up iP 19 32 50.4
Um iP 19 32 46.9
Ud iP 19 33 06.0
Kashmir.
Origin time = 19 24 56.

" 3 Up iP 20 40 12.9
Ki eP 20 40 20
Um iP 20 40 10.1
Ud iP 20 40 29.3 C
Kashmir (h = N).

" 3 Ud eP 21 37 16

" 3 Ud iP 21 56 29.2

" 3 Ud iP 22 41 23.0
Kashmir.

" 3 Ki eP 22 47 43
Ud iP 22 47 58.8
Kashmir.

" 3 Up iP 23 11 46.6 C
iPP 23 13 27.3
micr sec
P Z' 0.2 0.8
PP Z' 0.1 1.1
Mx E 0.6 10
Mx N 0.8 11
Mx Z 0.9 11
Ki iP 23 11 52.6 C
iX 23 12 26.2
(cont.)

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

1972
Sep. 3 (cont.)

Ki			micr	sec
	P	Z'	0.2	1.0
	Mx	E	0.9	11
	Mx	N	1.3	10
	Mx	Z	1.1	10
Sk	iP		23 12 11.1 C	
Um	iP		23 11 43.8 C	
Ud	iP		23 12 02.7 C	
De	iP		23 11 59.9 C	
	iPP		23 13 42.0	

Kashmir (h = N).
m = 5.8, M = 5.0 (Up,Ki).

" 3	Up	eP	23 22 42
	Sk	iP	23 23 05.9
	Um	iP	23 22 37.2
	Ud	iP	23 22 58.3

Kashmir.
Origin time = 23 14 48.

" 3	Sk	eP	23 50 24
	Ud	eP	23 50 16

Kashmir.

" 4	Up	iP	00 16 49.7
	Ki	iP	00 16 08.1
	Sk	eP	00 16 45
	Um	iP	00 16 25.1
	Ud	iP	00 16 56.7
	De	iP	00 17 13.2

Japan (h = 80 km).

" 4	Up	iP	00 22 02.1
	Ki	iP	00 22 10.6
	Sk	eP	00 22 27
	Um	iP	00 21 59.4
	Ud	iP	00 22 18.7
	De	iP	00 22 16.2

Kashmir (h = 55 km).

" 4	Up	iSg1	00 27 53.7
	Ud	iPn	00 27 32.0
		iPg1	00 27 39.6
		iSg1	00 28 34.0
	De	iPg1	00 27 18.4
		iSg1	00 27 53.5

Baltic Sea, near Gotland,
Sweden, 57.1°N, 18.4°E.
Origin time = 00 26 33.
Explosion?

" 4	Up	iP	00 58 16.7 C	
			micr	sec
	P	Z'	0.1	0.8

(cont.)

1972
Sep. 4 (cont.)

Ki	iP		00 58 23.0 C	
			micr	sec
	P	Z'	0.1	1.0
Sk	iP		00 58 41.2	
Um	iP		00 58 13.7 C	
Ud	iP		00 58 33.0 C	
	iPP		01 00 18.2	
De	iP		00 58 30.0 C	

Kashmir (h = 70 km).
m = 5.6 (Up,Ki).

" 4	Ud	iP	01 10 36.4

" 4	Up	iP	01 31 44.9
			micr sec
	P	Z'	0.2 1.2
Ki	iP		01 31 50.5
			micr sec
	P	Z'	0.1 1.2
Sk	iP		01 32 09.9
Um	iP		01 31 42.2 C
Ud	iP		01 32 01.7 C
	iPP		01 33 49.5
De	iP		01 31 59.0

Kashmir (h = N).
m = 5.5 (Up,Ki).

" 4	Ud	iP	02 31 15.3

" 4	Up	iP	02 44 12.0 C
		iPP	02 45 50.3
			micr sec
	P	Z'	0.1 0.8
Ki	iP		02 44 18.4
	e		02 45 26
			micr sec
	P	Z'	0.1 1.0
Sk	iP		02 44 36.4 C
Um	iP		02 44 09.1 C
Ud	iP		02 44 28.5 C
De	iP		02 44 25.4 C
	iPP		02 46 10.1

Kashmir (h = 30 km).
m = 5.6 (Up,Ki).

" 4	Up	iP	03 59 15.3
			micr sec
	P	Z'	0.1 1.0
Ki	iP		03 59 22.1
			micr sec
	P	Z'	0.1 1.0
Sk	iP		03 59 39.9
	iX		03 59 56.8
Um	iP		03 59 12.4 C

(cont.)

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

1972
Sep. 4 (cont.)

Ud	iP		03 59 31.9	C
De	iP		03 59 29.0	

Kashmir (h = 35 km).
m = 5.5 (Up,Ki).

" 4

Ki	iP		04 14 40.2	
Um	iP		04 14 29.7	
Ud	iP		04 14 49.0	

Kashmir.
Origin time = 04 06 39.

" 4

Up	eP		04 17 59	
Ud	iP		04 18 14.7	

Kashmir.
Origin time = 04 10 05.

" 4

Um	iPKP		04 45 12.7	
De	iPKP		04 45 28.9	

Santa Cruz Islands
(h = 290 km).

" 4

Up	iP		06 34 41.1	
Um	iP		06 34 36.6	
Ud	iP		06 34 55.9	

Kashmir (h = N).

" 4

Up	iPn		07 02 35.4	C
	iSn		07 04 29.3	
	iSg1		07 05 36.6	
			micr sec	
	Mx	N	0.8 4	
	Mx	Z	1.1 4	
Ki	iPn		07 01 18.9	C
	iSn		07 02 16.0	
			micr sec	
	Mx	E	1.8 3	
	Mx	N	1.8 3	
	Mx	Z	1.3 4	
Sk	iPn		07 02 21.7	
	i		07 02 24.3	
	iSn		07 04 07.1	
	iSg1		07 05 07.0	
Um	iPn		07 01 43.5	
	iSn		07 02 58.1	
	iSg1		07 03 33.0	
Ud	iPn		07 02 49.1	
	iSn		07 04 53.6	
	iSg1		07 06 00.0	
De	iPn		07 03 26.2	
	iSn		07 06 03.9	
	i		07 06 22.8	
	iSg1		07 07 30.8	

Kola Peninsula.
Origin time = 07 00 00.
Probably underground explosion.

1972
Sep. 4

Sk	eP		09 04 06	
Um	iP		09 04 11.9	
Ud	iP		09 04 56.7	

" 4

Ud	iP		10 29 07.1	

" 4

Up	eP		10 43 39	
			micr sec	
	P	Z'	0.1 1.0	
Ki	eP		10 43 43	
Sk	iP		10 44 03.4	
Um	iP		10 43 36.2	C
Ud	iP		10 43 54.3	
De	iP		10 43 51.9	

Kashmir (h = 60 km).

" 4

Ki	iP		13 43 11.9	

Kashmir.

" 4

Up	iP		13 45 46.0	
			micr sec	
	P	Z'	0.1 0.9	
Ki	iP		13 45 52.3	
			micr sec	
	P	Z'	0.1 1.1	
Sk	iP		13 46 10.5	
Um	iP		13 45 43.2	
	i		13 45 48.0	
Ud	iP		13 46 02.5	
De	iP		13 46 01.9	

Kashmir (h = N).
m = 5.5 (Up,Ki).

" 4

Up	iP		13 50 13.1	C
	ipP		13 50 25.5	
	iPP		13 51 51.4	
			micr sec	
	P	Z'	0.4 0.9	
	PP	Z'	0.3 1.2	
	Mx	E	1.2 13	
	Mx	N	1.6 13	
	Mx	Z	1.9 14	
Ki	iP		13 50 19.1	C
			micr sec	
	P	Z'	0.3 1.0	
	Mx	E	1.3 10	
	Mx	N	1.7 11	
	Mx	Z	1.1 13	
Sk	iP		13 50 37.6	C
	iX		13 50 55.7	
Um	iP		13 50 10.1	C
	iPP		13 51 43.9	
Ud	iP		13 50 29.4	C
	ipP		13 50 40.0	
	iPP		13 52 14.9	

(cont.)

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

1972
Sep. 4 (cont.)

De	iP	13 50 26.4	C
	iPP	13 52 10.2	

Kashmir.
h = 40 km (Up,Ud).
m = 6.0, M = 5.3 (Up,Ki).

" 4 Ki	eP	14 01 17	
Ud	iP	14 01 53.3	

" 4 Ud	eP	15 02 03	

Kashmir.

" 4 Up	iP	15 18 38.8	
Ki	iP	15 18 07.8	
Sk	eP	15 18 36	
Um	iP	15 18 21.9	C
Ud	iP	15 18 44.6	C

Bonin Islands (h = 40 km).

" 4 De	e(Pg1)	15 33 38	
	i(Sg1)	15 33 59.6	

" 4 Up	iP	16 06 25.1	
Um	iP	16 06 21.6	C
Ud	iP	16 06 40.9	
De	eP	16 06 39	

Kashmir.
Origin time = 15 58 31.

" 4 Up	eP		18 26 49	
	iPKP		18 30 10.8	
	ipPKP		18 30 25.4	
	iPP		18 32 08.6	
			micr	sec
	pPKP	Z'	0.1	1.0
	Mx	E	22	22
	Mx	N	40	22
	Mx	Z	65	22
Ki	eP		18 26 20	
	e(PKP)		18 29 54	
	iPKP		18 29 58.2	
	iPP		18 31 20	
			micr	sec
	Mx	E	32	23
	Mx	N	34	26
	Mx	Z	34	23
Sk	i(PKP)		18 30 06.0	
	iPKP		18 30 09.5	
Um	iP		18 26 33	
	iPKP		18 30 00.9	
	ipPKP		18 30 14.0	
	iPP		18 31 37	
Ud	i(PKP)		18 30 10.1	
	iPKP		18 30 14.4	

(cont.)

1972
Sep. 4 (cont.)

Ud	ipPKP	18 30 27.1	
	iPP	18 32 19.9	
De	i(PKP)	18 30 17.4	
	iPKP	18 30 20.6	

Santa Cruz Islands.
h = 50 km (Up,Um,Ud).
M = 7.1 (Up,Ki).

" 4 Um	iP	20 14 16.8	
Ud	eP	20 14 35	
De	iP	20 14 34.4	

Kashmir (h = N).

" 4 Up	iP	21 08 43.2	
Ki	iP	21 08 50.7	
Sk	eP	21 09 08	
Um	iP	21 08 43.7	
Ud	iP	21 09 02.6	
De	iP	21 09 00.1	

Kashmir.
Origin time = 21 00 52.

" 4 Up	iPKP	21 42 35.0	
Ki	iPKP	21 42 30.1	
Um	iPKP	21 42 35.5	
Ud	iPKP	21 42 36.0	C
	i	21 42 47.1	
	iSKP	21 45 25.5	
De	iPKP	21 42 46.1	C
	eSKP	21 45 35	

Fiji Islands (h = 610 km).

" 4 Up	iP	22 52 02.4	
Ki	iP	22 52 07.9	
Sk	iP	22 52 27.0	
Um	iP	22 51 59.3	C
Ud	iP	22 52 18.7	
	i	22 52 26.6	

Kashmir (h = 55 km).

" 4 Up	eP	23 33 23	
Sk	eP	23 33 47	
Um	iP	23 33 19.6	
Ud	iP	23 33 38.5	
	i	23 33 43.1	

Kashmir (h = N).

" 4 Ud	eP	23 45 42	

Peru-Ecuador (h = 60 km).

" 5 Up	iPKP	02 59 08.8	
Ki	iPKP	02 58 54.2	
Sk	iPKP	02 59 05.9	
Um	iPKP	02 59 01.2	

(cont.)

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

1972
Sep. 5 (cont.)
Ud e(PKP) 02 59 03
De i(PKP) 02 59 05.7
iPKP 02 59 12.7
Loyalty Islands (h = 55 km).

" 5 Ud eP 03 16 02

" 5 Up iP 03 15 53.9
Sk iP 03 16 19.7
Um iP 03 15 51.5
Ud iP 03 16 11.9
De eP 03 16 10
Kashmir (h = 45 km).

" 5 Up iP 03 16 15.3
Sk eP 03 16 39
Um iP 03 16 11.8
Ud iP 03 16 31.5
Kashmir.
Origin time = 03 08 21.

" 5 Up iP 04 15 22.0
Ki iP 04 15 28.4
Sk iP 04 15 46.5 C
Um iP 04 15 18.9 C
Ud iP 04 15 38.6 C
De iP 04 15 35.7
Kashmir (h = N).

" 5 Ki eP 04 39 49
Ud eP 04 40 02
Kashmir.

" 5 Up i(PP) 05 41 11.1
i 05 41 44.5
micr sec
Mx N 0.6 18
Mx Z 0.7 20
Ki iP 05 36 53.8
i 05 36 59.9
ePP 05 41 12
micr sec
P Z' 0.1 1.2
Mx E 1.1 20
Mx N 0.9 18
Mx Z 1.0 21
Sk i(PP) 05 41 21.8
Um iP 05 36 57.9
iPP 05 41 11.6
Ud iP 05 37 17.3
i(PP) 05 41 14.9
iPP 05 41 50.8
De i(PP) 05 41 25.0
Banda Sea (h = 90 km).
M = 5.5 (Up,Ki).

1972
Sep. 5 Um iX 08 05 02.0
(Kashmir).
For suggested interpretation of X, see Sep. 3 at 16 56.

" 5 Ki e 09 08 16
iSg1 09 08 37.7
Sk iSg1 09 09 09.4
Um iSg1 09 07 11.6
De iSg1 09 09 38.3
Lake Ladoga.
Explosion?

" 5 Up iP 09 21 52.7
iPP 09 23 35.0
micr sec
P Z' 0.2 1.0
Ki iP 09 21 58.3
micr sec
P Z' 0.1 1.0
Sk iP 09 22 16.9
Um iP 09 21 49.6
iPP 09 23 28.4
Ud iP 09 22 08.9 C
iPP 09 23 56.3
De eP 09 22 06
i 09 22 07.9
Kashmir (h = N).
m = 5.5 (Up,Ki).

" 5 Ud iP 09 49 39.3
Kashmir.

" 5 Ud iPKP 10 34 03.9
Santa Cruz Islands
(h = 35 km).

" 5 Ki iP 11 10 08.0

" 5 Ki iPg1 11 29 59.7
iSg1 11 30 22.5
Sk eSg1 11 33 02
Um i 11 32 25.0
iSg1 11 32 30.1
North Norway.
Origin time = 11 29 30.
Explosion.

" 5 Ud iP 13 16 10.9

" 5 Up iP 14 23 08.2
Ki eP 14 23 16
Um iP 14 23 05.8
Ud iP 14 23 24.8
Kashmir.
Origin time = 14 15 15.

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

1972 Sep.	5	Ki	eP	14 43 19	
		Ud	iP	14 43 51.7	
		Luzon (h = N).			
"	5	Up	iSn	15 41 25.2	
			iSg1	15 41 36.4	
		Sk	iSg1	15 43 26.9	
		Um	iSg1	15 42 14.1	
			iRg	15 42 42.6	
		Ud	eSn	15 42 14	
			iSg1	15 42 38.6	
			iSg2	15 42 46.7	
		De	e	15 42 51	
			iSg1	15 43 04.6	
		Esthonia, 59.5°N, 24.5°E.			
		Origin time = 15 39 44.			
		Explosion.			
"	5	Um	iP	15 43 10.8	
		Kurile Islands.			
"	5	Up	iP	17 31 50.7	C
			iPP	17 35 54.7	
			iSKS	17 42 11.0	
				micr sec	
			P Z'	0.3 1.0	
		Ki	iP	17 31 33.8	C
			i	17 31 39.7	
			iPP	17 35 27.2	
				micr sec	
			P Z'	1.2 1.1	
		Sk	iP	17 31 55.7	C
			iPP	17 36 02.4	
		Um	iP	17 31 39.3	C
			ipP	17 32 10	
			iPP	17 35 36	
		Ud	iP	17 31 58.3	C
			iPP	17 36 06.1	
		De	iP	17 32 03.9	C
			i(PP)	17 35 29.1	
			iPP	17 36 16.4	
		Halmahera.			
		h = 120 km (Um).			
		m = 7.0 (Up,Ki).			
"	5	Up	i(PKP)	17 49 40.2	
			iPKP	17 49 50.7	
			ipPKP	17 50 03.5	
			iSKP	17 53 18.0	
				micr sec	
			PKP Z'	0.1 1.0	
			pPKP Z'	0.2 1.0	
			Mx E	3.8 20	
			Mx N	4.7 20	
			Mx Z	11 22	
		(cont.)			

1972 Sep.	5	(cont.)			
		Ki	iPKP	17 49 35.5	C
			ipPKP	17 49 48.7	
				micr sec	
			PKP Z'	0.6 1.1	
			pPKP Z'	0.8 1.2	
			Mx E	7.0 23	
			Mx N	6.5 22	
			Mx Z	7.9 21	
		Sk	iPKP	17 49 47.0	
			ipPKP	17 49 59.3	
		Um	i(PKP)	17 49 36.1	
			iPKP	17 49 41.8	
			ipPKP	17 49 54.5	
			iSKP	17 53 02.7	
		Ud	i(PKP)	17 49 42.4	
			iPKP	17 49 52.8	
			ipPKP	17 50 05.5	
			iSKP	17 53 20.2	
		De	i(PKP)	17 49 48.1	
			i(PKP)	17 49 51.4	
			iPKP	17 49 59.8	
			iSKP	17 53 29.4	
		New Hebrides Islands.			
		h = 50 km (Up,Ki,Sk,Um,Ud).			
		M = 6.4 (Up,Ki).			
"	5	Up	iPKP	18 22 48.1	
		Ki	iPKP	18 22 32.8	
			ipPKP	18 22 45.9	
				micr sec	
			pPKP Z'	0.1 1.1	
		Sk	iPKP	18 22 44.6	
			ipPKP	18 22 57.5	
		Um	iPKP	18 22 39.1	
			ipPKP	18 22 51.8	
		Ud	ePKP	18 22 49	
			ipPKP	18 23 02.5	
		De	e(PKP)	18 22 48	
			iPKP	18 22 55.1	
			ipPKP	18 23 07.3	
		New Hebrides Islands.			
		h = 50 km (Ki,Sk,Um,Ud,De).			
"	5	Um	iP	18 43 37.8	
"	5	Ki	eSn	19 28 31	
			iSg1	19 28 39.9	
		Sk	iSg1	19 28 54.8	
		Um	iSg1	19 29 12.6	
		Nordland, Norway,			
		66.6°N, 14.4°E.			
		Origin time = 19 27 16.			
		Explosion?			

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

1972				
Sep.	5	Sk	e	19 30 33
		Um	i(PP)	19 30 27.1
		Ud	i(PP)	19 29 42.0
		Peru (h = 150 km).		
"	5	Up	eP	19 54 13
		Ki	iP	19 53 17.8
		Um	iP	19 53 44.6
		Ud	iP	19 54 10.2
		Aleutian Islands (h = 35 km).		
"	5	Ki	iP	20 16 14.3
		Sk	eP	20 16 32
		Um	iP	20 16 03.8
		Ud	iP	20 16 21.6
		De	iP	20 16 19.1
		Hindu Kush (h = 150 km).		
"	5	Um	iP	20 23 26.0
"	5	Um	iP	20 29 24.6
"	6	Up	iP	03 00 07.4
		Ki	iP	03 00 10.7
				micr sec
			P Z'	0.1 0.9
		Sk	iP	03 00 30.0
		Um	iP	03 00 03.4
		Ud	iP	03 00 22.8
		De	iP	03 00 21.4
		Kashmir-Tibet (h = 45 km).		
"	6	Up	eP	04 26 36
		Ki	eP	04 26 12
		Ud	iP	04 26 47.9
		Ryukyu Islands (h = 45 km).		
"	6	Um	i(Sg1)	04 46 45.7
"	6	Ud	iP	07 30 17.0
		De	iP	07 29 53.8
		Crete.		
"	6	Um	iP	08 55 14.2
		Western Mediterranean Sea (h = N).		
"	6	Up	i	11 00 44.7
			iSg1	11 01 03.6
		Sk	iSg1	11 00 14.0
		Um	iSg1	11 01 52.8
		Ud	iSg1	10 59 58.5
		De	eSg1	11 00 51
		(cont.)		

1972				
Sep.	6	(cont.)		
		Near coast of Hordaland, Norway, 60.3°N, 5.2°E. Origin time = 10 57 47. Explosion according to Bergen.		
"	6	Ki	iPg1	11 29 59.7
			iSg1	11 30 23.0
		Um	iSg1	11 32 30.1
		North Norway. Origin time = 11 29 30. Explosion.		
"	6	Um	iP	11 37 15.5
		Ud	iP	11 36 51.7
		De	iP	11 36 18.3
		Aegean Sea.		
"	6	Up	eP	11 53 50
		Ki	eP	11 53 17
				micr sec
			Mx E	0.9 18
			Mx N	0.7 16
			Mx Z	1.0 17
		Um	iP	11 53 30.8
		Ud	iP	11 53 55.9
		Japan (h = 15 km).		
"	6	De	iP	12 27 21.2
"	6	Up	eP	12 41 22
		Ki	eP	12 41 27
		Ud	iP	12 41 38.7
		Kashmir. Origin time = 12 33 28.		
"	6	Ki	eP	13 19 45
		Ud	iP	13 19 58.9
		Tashkent region.		
"	6	Ud	i(Sg1)	15 05 04.8
		De	i(Sg1)	15 03 14.0
			i(Rg)	15 03 24.6
		Probably Baltic Sea, south of Sweden. Explosion?		
"	6	De	i(Sg1)	15 16 55.0
"	6	Um	i(P)	16 29 12.6
"	6	Um	i(P)	17 38 30.9

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

1972
Sep. 6 Up eP 18 17 44
Ki iP 18 18 50.8
Sk iP 18 18 21.6
Ud iP 18 17 50.0
De iP 18 17 17.5 C
Crete (h = 70 km).

" 6 Up ePKP2 18 30 11
Ki ePKP2 18 30 07
Um iPKP2 18 30 07.3
Ud ePKP2 18 30 24
North of Macquarie Islands
(h = N).

" 6 Sk iP 21 21 48.3
Kashmir.

" 6 Um iP 22 33 47.1
Ud iP 22 34 06.2
Kashmir.

" 7 Ud iPKP 00 56 07.4
De iPKP 00 56 18.9 C
Tonga-Kermadec Islands
(h = 520 km).

" 7 Up eP 02 30 22
Ki eP 02 30 29
Um iP 02 30 18.7
Ud iP 02 30 38.8 C
Kashmir.
Origin time = 02 22 29.

" 7 Up iP 03 06 26.5
ipP 03 06 32.1
micr sec
P Z' 0.3 1.6
pP Z' 0.2 1.3
Mx E 1.1 22
Mx N 1.0 22
Mx Z 1.6 20
Ki iP 03 06 49.3
ipP 03 06 55.3
micr sec
P Z' 0.8 2.2
Mx E 1.7 19
Mx N 1.7 22
Mx Z 1.4 20
Sk iP 03 06 51.2
ipP 03 06 56.1
Um iP 03 06 35.2
ipP 03 06 40.8
iS 03 16 10
Ud iP 03 06 37.0
(cont.)

1972
Sep. 7 (cont.)
Ud ipP 03 06 42.8
iPP 03 09 19.5
De iP 03 06 25.5
ipP 03 06 31.1
iPP 03 09 07.2
Indian Ocean.
h = 20 km (Up,Ki,Sk,Um,Ud,De).
m = 6.3, M = 5.4 (Up,Ki).

" 7 Up iP 04 32 09.7
Ki eP 04 32 16
Sk iP 04 32 34.2
Um iP 04 32 06.4
Ud iP 04 32 25.8
De eP 04 32 24
Kashmir (h = N).

" 7 Ki eP 05 28 03
Um iP 05 28 21.1
Ud iP 05 28 53.5
Japan (h = 70 km).

" 7 Up iP 05 53 02.2
Ud eP 05 53 07
De iP 05 52 27.6

" 7 Up eP 09 16 15
Ki iP 09 15 20.7
Ud iP 09 16 12.9
De iP 09 16 36.6
Alaska (h = 70 km).

" 7 Ud iP 09 18 33.7
Kurile Islands.

" 7 Up iSn 10 15 28.6
iSg1 10 15 40.8
Ki iSg1 10 18 16.0
Sk eSg1 10 17 34
Um iSg1 10 16 14.1
Ud iSg1 10 16 42.0
iSg2 10 16 48.8
De iSg1 10 17 07.8
Esthonia, 59.5°N, 25.1°E.
Origin time = 10 13 40.
Explosion.

" 7 Up iP 10 46 34.2
Ki eP 10 46 22
Ud iP 10 46 46.9

" 7 Ki iPg1 11 30 01.9
iSg1 11 30 24.8
North Norway.
(cont.)

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

1972
Sep. 7 (cont.)
Origin time = 11 29 32.
Explosion.

" 7	Ki	iP	11 49 43.0	
	Ud	iP	11 51 04.5	
" 7	Up	Mx	21 11	
			micr	sec
		Mx Z	1.4	20
	Ki	Mx	21 03	
			micr	sec
		Mx E	0.9	20
		Mx N	1.1	22

New Britain (h = 50 km).

" 7	Up	iP	22 31 05.0	
		ipP	22 31 07.8	
		iS	22 34 26	
			micr	sec
		P Z'	0.1	0.9
		pP Z'	0.1	0.9
		Mx E	3.6	12
		Mx N	6.1	14
		Mx Z	4.0	10
	Ki	iP	22 32 17.7	
		ipP	22 32 19.9	
		iS	22 36 43	
			micr	sec
		pP Z'	0.1	0.8
		Mx E	7.8	15
		Mx N	5.4	15
		Mx Z	5.5	13
	Sk	iP	22 31 21.9	
	Um	iP	22 31 45.6	
		ipP	22 31 48.8	
		iS	22 35 38	
	Ud	iP	22 30 49.7	
		ipP	22 30 53.3	
		iS	22 33 47.2	
	De	iP	22 30 14.6	
		iS	22 32 46.5	

France.
h = 10 km (Up,Ki,Um,Ud).
m = 5.2, M = 5.3 (Up,Ki).

" 8	Ki	iP	03 26 47.7	
	Um	iP	03 26 51.7	
	Ud	iP	03 27 11.6	

Banda Sea (h = 70 km).

" 8	Um	i(P)	06 12 00.3	
" 8	Up	iP	06 41 31.2	C
			micr	sec
		P Z'	0.1	0.9

(cont.)

1972
Sep. 8 (cont.)

Ki	iP	06 40 46.4	
Sk	iP	06 41 21.5	
Um	iP	06 41 06.5	C
Ud	iP	06 41 37.3	C
De	iP	06 41 54.6	C

Japan (h = 70 km).

" 8	Ki	iPn	10 27 31.8
		iSn	10 28 22.4
		iS*	10 28 37.4
	Um	iPn	10 28 11.2
		iSn	10 29 30.3
		iSg1	10 30 05.9
	Ud	iSg1	10 32 38.4

Northwest USSR-Norway border region, 69.5°N, 31.5°E.
Origin time = 10 26 25.
Explosion.

" 8	Up	iP2	11 38 28.6	
		iS	11 41 11	
			micr	sec
		P2 Z'	2.9	1.6
		Mx E	130	17
		Mx N	85	18
		Mx Z	89	17
	Ki	iP1	11 37 22.0	
		iP2	11 37 24.0	D
		iS	11 39 23.1	
			micr	sec
		P2 Z'	1.9	0.8
		Mx E	170	17
		Mx N	140	15
		Mx Z	86	15
	Sk	iP1	11 37 28.3	
		iP2	11 37 30.4	D
		iS	11 39 28.6	
	Um	iP2	11 37 58.7	D
		iS	11 40 20.3	
	Ud	iP1	11 38 11.8	
		iP2	11 38 14.2	D
		iS	11 40 53.7	
	De	iP1	11 38 54.8	
		iP2	11 38 57.1	D
		i(S)	11 42 22.0	

Δ = 16°
5.20
0.70
5.90

Jan Mayen (h = N).
m = 6.3, M = 6.2 (Up,Ki).
P1 denotes a small-amplitude phase, preceding the main onset P2 by about 2.2 sec. Checked with JB-tables for depth 0.00, the S-readings (Up,Ki,Sk,Um) are somewhat early compared to P, which may depend on the particular structure of the region.

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

1972
Sep. 8 Ud iP 11 50 24.4

" 8 Ki iP 11 54 03.5
Bismarck Sea (h = 40 km).

" 8 Up eP 12 41 33
Ki iP 12 40 45.2
Ud iP 12 41 38.3
Kurile Islands (h = 45 km).

" 8 Ki iP 13 56 57.1
Kurile Islands.

" 8 Ki iP 18 00 04.3
Ud iP 18 00 28.9

" 8 Up iPn 18 04 58.9
iPg1 18 05 08.1
iSn 18 05 41.9
i 18 05 49.7
iSg1 18 05 55.7
Ki i 18 08 21.2
iSg1 18 08 35.1
Sk iSn 18 07 04.5
iSg1 18 07 44.1
Um iSn 18 06 13.2
iSg1 18 06 30.8
Ud iSn 18 06 29.1
iSg1 18 06 59.3
De iPn 18 05 37.2
iSg1 18 07 22.8
Esthonia, 59.5°N, 24.8°E.
Origin time = 18 04 00.
Explosion.

" 8 Ud iP 20 11 32.7

" 9 Ud eP 00 33 25

" 9 Up iP 01 49 54.2 C
Ki iP 01 50 31.4 C
Sk iP 01 50 29.1
Um iP 01 50 07.9
Ud iP 01 50 09.5
De iP 01 49 52.8
Iran (h = 50 km).

" 9 Up i(PKP) 03 03 14.2
iPKP 03 03 20.3
micr sec
PKP Z' 0.1 1.4
Mx E 2.7 20
Mx N 4.5 21
Mx Z 7.6 20
(cont.)

1972
Sep. 9 (cont.)
Ki iPKP 03 03 06.2
micr sec
PKP Z' 0.2 1.7
Mx E 7.0 20
Mx N 6.0 20
Mx Z 12 22
Um iPKP 03 03 13.5
Ud i(PKP) 03 03 15.6
iPKP 03 03 24.1
De i(PKP) 03 03 28.9
iPKP 03 03 32.5
Tonga Islands (h = 35 km).
M = 6.4 (Up,Ki).

" 9 Up iP 03 07 24.7
Ki eP 03 08 05
Sk iP 03 08 01.1
Um iP 03 07 40.2
Ud iP 03 07 39.2
Iran.
Origin time = 03 00 01.

" 9 Up eP 03 31 27
Ud iP 03 31 43.3
De eP 03 31 42
Kashmir.
Origin time = 03 23 34.

" 9 Ki iP 06 02 20.3
Bismarck Sea (h = 5 km).

" 9 Um iP 07 33 19.5

" 9 Ki iPg1 11 29 59.3
iSg1 11 30 22.0
Um iSg1 11 32 30.0
North Norway.
Origin time = 11 29 30.
Explosion.

" 9 Um iP 20 29 56.1
Banda Sea (h = 340 km).

" 9 Ud iP 21 48 28.9
De iP 21 47 59.1
Dodecanese Islands.

" 10 Ud iP 02 01 32.9

" 10 Ud iP 02 05 33.1
Kurile Islands.

" 10 Up eP 02 53 42
Ud iP 02 53 57.7
Kashmir.

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

1972					
Sep.	10	Up	iP		02 57 29.5
		Ki	iP		02 56 36.0 C
					micr sec
			P	Z'	0.1 1.0
		Sk	iP		02 57 02.9 C
		Um	iP		02 57 03.7 C
		Ud	iP		02 57 26.3
		De	eP		02 57 56
		Kodiak Island (h = N).			
"	10	Sk	iP		03 03 57.4
		Kodiak Island (h = N).			
"	10	Ki	iP		03 09 02.1
		Kodiak Island (h = N).			
"	10	Up	iP		05 08 36.4 D
		Ud	iP		05 08 52.8
		De	iP		05 08 49.4
		Hindu Kush (h = 210 km).			
"	10	Up	iSKP		06 26 20.3
					micr sec
			SKP	Z'	0.1 1.3
			Mx	E	3.2 21
			Mx	N	4.3 20
			Mx	Z	5.4 20
		Ki	iPKP		06 22 37.6
					micr sec
			Mx	E	3.0 18
			Mx	N	3.9 19
			Mx	Z	4.7 20
		Loyalty Islands (h = 40 km).			
		M = 6.3 (Up,Ki).			
"	10	Ud	ePKP		08 59 43
		De	iPKP		08 59 51.1
		Fiji Islands (h = 540 km).			
"	10	Up	iPKP		11 26 44.7
		Ki	iPKP		11 26 31.2
		Sk	ePKP		11 26 39
		Ud	e(PKP)		11 26 25
			i(PKP)		11 26 33.9
			iPKP		11 26 45.9
		De	i(PKP)		11 26 44.7
			iPKP		11 26 54.2
		Loyalty Islands (h = 60 km).			
"	10	Ki	iPg1		11 29 59.3
			iSg1		11 30 22.1
		Sk	eSg1		11 33 08
		Um	i		11 32 25.4
			iSg1		11 32 29.8
		(cont.)			

1972					
Sep.	10	(cont.)			
		North Norway.			
		Origin time = 11 29 30.			
		Explosion.			
"	10	Up	iP		12 27 32.1
		Um	iP		12 27 14.9
		Ud	iP		12 27 26.5
"	10	Um	iP		13 51 24.8
		Panama (h = 35 km).			
"	10	Ud	iP		15 24 56.8
"	10	Sk	eP		15 42 17
		Ud	iP		15 42 12.0 C
			i		15 42 25.7
"	10	Ud	iP		15 58 58.9
"	10	Up	iP		18 38 27.5
"	10	Sk	iP		18 51 03.7
"	10	Ud	ePKP		19 57 42
		Fiji Islands (h = 550 km).			
"	10	Up	iP		20 23 53.2
		Ki	iP		20 23 21.8 C
		Sk	iP		20 23 50.5
		Ud	iP		20 24 00.1 C
		Bonin Islands (h = 520 km).			
"	10	Up	iP		21 06 04.0 C
			ipP		21 06 14.7
					micr sec
			P	Z'	0.1 0.7
			pP	Z'	0.1 0.7
		Ki	iP		21 05 58.2 C
			ipP		21 06 08.5
					micr sec
			P	Z'	0.1 0.6
		Sk	iP		21 06 22.9
			i		21 06 36.4
		Um	iP		21 05 54.9
		Ud	iP		21 06 19.8 C
			i		21 06 23.2
			ipP		21 06 30.0
			i		21 06 32.4
		De	iP		21 06 21.8 C
			ipP		21 06 32.1
			i		21 06 35.0
		Sinkiang.			
		h = 40 km (Up,Ki,Ud,De).			
		m = 5.7 (Up,Ki).			

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

1972					
Sep. 10	Up	e(P)		21 30 21	
	Ud	iP		21 30 14.1	
	De	eP		21 29 48.5	
	Crete.				
" 10	Ud	iP		22 04 13.0	
" 11	Up	iP		03 13 57.3	D
		ipP		03 14 03.8	
	Ki	iP		03 13 01.9	D
		ipP		03 13 08.4	
				micr	sec
		P	Z'	0.1	1.0
		pP	Z'	0.1	1.0
	Sk	iP		03 13 28.9	
	Um	iP		03 13 30.6	D
	Ud	iP		03 13 53.6	
	De	iP		03 14 17.4	
		ipP		03 14 24.5	
	Alaska.				
	h = 25 km (Up,Ki,De).				
" 11	De	iP		07 51 59.9	
	France (h = N).				
" 11	Ki	eP		08 04 15	
" 11	Ki	iPg1		11 30 00.9	
		iSg1		11 30 23.8	
	Sk	eSg1		11 33 03	
	Um	i		11 33 27.8	
		iSg1		11 33 31.0	
	North Norway.				
	Origin time = 11 29 32.				
	Explosion.				
" 11	Up	Mx		11 40	
				micr	sec
		Mx	E	1.0	21
		Mx	N	0.9	20
		MX	Z	0.8	19
	Bismarck Sea (h = N).				
" 11	Ki	iP		11 40 59.9	
	Off Pacific coast of Mexico				
	(h = N).				
" 11	Up	Mx		12 21	
				micr	sec
		Mx	E	1.3	22
		Mx	N	1.3	23
		Mx	Z	3.0	22
	Ki	Mx		12 21	
				micr	sec
		Mx	E	1.3	19
		(cont.)			

1972					
Sep. 11	(cont.)				
	Ki			micr	sec
		Mx	N	0.8	19
		Mx	Z	1.0	17
	Bismarck Sea (h = 15 km).				
	M = 5.7 (Up,Ki).				
" 11	Up	iX		13 50 10.4	
		iPP		13 54 11.7	
				micr	sec
		Mx	E	2.4	18
		Mx	N	5.3	24
		Mx	Z	6.7	24
	Ki	iP		13 49 34.6	
				micr	sec
		Mx	E	5.2	20
		Mx	N	7.8	24
		Mx	Z	2.9	22
	Sk	eX		13 50 13	
		iPP		13 54 33.0	
	Um	iX		13 49 55.9	
		i		13 50 13.1	
	Ud	iP		13 50 02.1	
		iX		13 50 19.6	
	Ceram (h = N).				
	M = 6.3 (Up,Ki).				
" 11	Ki	eP		16 57 05	
	Hindu Kush.				
	Intermediate depth.				
" 11	Um	iP		18 38 37.2	
	Ud	eP		18 39 16	
" 11	Ki	iP		20 49 30.1	
" 12	Um	iP		00 14 40.8	
" 12	Ud	iP		01 43 28.5	
	Aleutian Islands				
	(h = 210 km).				
" 12	Ud	iP		01 57 47.5	
	Caucasus.				
" 12	Um	iP		02 28 14.9	
" 12	Up	Mx		04 54	
				micr	sec
		Mx	E	1.2	21
		Mx	N	1.0	23
		Mx	Z	1.9	20
	Ki	Mx		04 57	
				micr	sec
		Mx	E	1.0	19
		(cont.)			

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

1972
Sep. 12 (cont.)

Ki			micr	sec	
	Mx	N	0.9	20	
	Mx	Z	1.1	18	

Off Pacific coast of
Mexico (h = N).
M = 5.5 (Up,Ki).

"	12	Ud	i(Sg1)	11	07	15.4
		De	i(Sg1)	11	05	24.8
"	12	Um	iSg1	14	15	55.5
		Ud	iSg1	14	16	39.0
		De	iSg1	14	17	03.3

Western USSR.
Explosion.

"	12	Ki	iP	14	29	05.2
"	12	Sk	i(P)	15	37	47.1
"	12	Up	iSg1	16	31	08.9
		Ki	eSg1	16	34	09
		Sk	eSg1	16	31	21
		Um	iSg1	16	32	44.1
		Ud	iSg1	16	30	15.9
		De	iSg1	16	29	53.6

North Sea, 56.7°N, 5.0°E.
Origin time = 16 27 20.

"	12	Ki	iPg1	17	29	58.9
			iSg1	17	30	21.8
		Sk	eSg1	17	33	01
		Um	iSg1	17	32	26.8

North Norway.
Origin time = 17 29 30.
Explosion.

"	12	Ki	iSg1	18	22	01.7
		Sk	iSg1	18	22	06
		Um	iSn	18	22	15.2
			iSg1	18	22	29.5
		Ud	iSg1	18	23	56.9

Nordland, Norway,
66.5°N, 13.9°E.
Origin time = 18 20 32.
Explosion.

"	12	Um	iP	23	10	51.1

Kurile Islands.

"	12	Up	iPKP	23	15	54.5	
		Sk	iPKP	23	15	48.8	
		Um	iPKP	23	15	43.3	C
		Ud	iPKP	23	15	56.1	C

1972
Sep. 13

		Ud	iPKP	01	26	00.4
		De	iPKP	01	26	11.9
"	13	Up	iP	01	59	14.4
		Ud	iP	01	59	22.8

Japan (h = 30 km).

"	13	Up	iP	04	18	09.1	D
			iS	04	22	04	
			iScP	04	25	32.6	
			iScS	04	29	15.8	
				micr		sec	
			P Z'	2.4		1.1	
			Mx E	7.8		10	
			Mx N	7.2		8	
			Mx Z	13		8	
		Ki	iP	04	19	21.8	D
			iPP	04	20	09.4	
			iS	04	24	13	
				micr		sec	
			P Z'	1.5		1.4	
			Mx E	6.6		8	
			Mx N	7.0		8	
			Mx Z	5.3		9	
		Sk	iP	04	18	49.9	D
		Um	iP	04	18	45.4	D
			iS	04	23	03	
		Ud	iP	04	18	16.3	D
			iS	04	22	22.0	
		De	iP	04	17	40.9	D
			iS	04	21	15.1	

Greece (h = 80 km).
m = 6.6, M = 5.8 (Up,Ki).

"	13	Up	ePKP	06	41	41
		Ki	iPKP	06	41	30.7
		Sk	iPKP	06	41	41.0
		Um	i(PKP)	06	41	31.6
			iPKP	06	41	37.3

Loyalty Islands
(h = 50 km).

"	13	Up	iPKP	07	33	33.2	
		Um	iPKP	07	33	27.1	C
		Ud	iPKP	07	33	35.0	C
		De	iPKP	07	33	46.3	C

Tonga-Kermadec Islands
(h = 510 km).

"	13	De	i(P)	10	57	26.1
"	13	Sk	eP	11	15	34
			i	11	15	42.8
"	13	Ud	iP	11	53	23.5

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

1972 Sep. 13	Up	ePKP		13 11 33	
		iPP		13 14 10.1	
		iSKP		13 15 10.6	
				micr	sec
		Mx	E	1.0	20
		Mx	N	1.4	19
		Mx	Z	2.2	20
	Ki	ePKP		13 11 18	
				micr	sec
		Mx	E	1.5	20
		Mx	N	2.1	20
		Mx	Z	1.6	21
	Sk	ePKP		13 11 32	
		eSKP		13 15 03	
	Um	ePKP		13 11 27	
	Ud	ePKP		13 11 36	
		iSKP		13 15 16.5	
	De	e(PKP)		13 11 36	
		iPKP		13 11 44.2	
	Loyalty Islands (h = 30 km). M = 5.9 (Up,Ki).				
" 13	Ud	iPKP		13 18 10.0	
	Loyalty Islands (h = 90 km).				
" 13	Up	iSKP		13 29 40.7	
	Ki	ePKP		13 26 03	
	Sk	ePKP		13 26 13	
	Um	iSKP		13 29 33.5	
	Ud	iPKP		13 26 15.5	
		iSKP		13 29 49.7	
	De	iPKP		13 26 20.7	
	Loyalty Islands (h = 80 km).				
" 13	Ud	iPKP		13 51 57.0	
	Loyalty Islands (h = 35 km).				
" 13	Sk	iP		13 52 33.9	
" 13	Ud	i(Sg1)		14 05 55.2	
	De	e(Sg1)		14 04 09	
		iRg		14 04 16.4	
" 13	Up	iSKP		14 14 50.2	
	Ki	ePKP		14 11 03	
	Sk	ePKP		14 11 11	
	Ud	ePKP		14 11 20	
	De	e(PKP)		14 11 20	
		iPKP		14 11 23.7	
	Loyalty Islands (h = 60 km).				

1972 Sep. 13	Up	i(PKP)		14 52 41.2	
		iPKP		14 52 53.7	
		iPP		14 55 29.9	
		iSKP1		14 56 26.3	
		iSKP2		14 56 32.1	
				micr	sec
		SKP1	Z'	0.3	1.8
		SKP2	Z'	0.2	1.2
		Mx	E	5.4	23
		Mx	N	11	23
		Mx	Z	16	20
	Ki	iPKP		14 52 41.9	
		iPP		14 54 42	
		iSKP		14 56 06.1	
				micr	sec
		Mx	E	9.4	21
		Mx	N	16	21
		Mx	Z	13	22
	Um	i(PKP)		14 52 41.3	
		iPKP		14 52 48.0	
		iPP		14 55 04	
		iSKP		14 56 12.3	
	Ud	i(PKP)		14 52 44.2	
		iPKP		14 52 56.2	
		iPP		14 55 40.2	
		iSKP		14 56 29.1	
	De	i(PKP)		14 52 55.1	
		iPKP		14 53 03.1	
		iPP		14 55 58.4	
		iSKP		14 56 38.6	
	Loyalty Islands (h = 35 km). M = 6.6 (Up,Ki).				
" 13	Up	iSKP1		15 00 25.7	
		iSKP2		15 00 33.9	
	Ki	iPKP		14 56 43.2	
	Um	iSKP		15 00 09.2	
		i		15 00 15.8	
	Ud	eSKP		15 00 29	
	De	iSKP		15 00 37.6	
	Loyalty Islands. Origin time = 14 37 38.				
" 13	Up	i		15 15 15.3	
		iSKP		15 18 30.9	
	Ki	iPKP		15 14 47.1	
	Um	ePKP		15 14 54	
		i		15 15 00.2	
		iSKP		15 18 21.3	
		i		15 18 29.1	
	Ud	ePKP		15 14 55	
		iSKP		15 18 37.6	
		i		15 18 44.0	
	De	iPKP		15 15 01.1	
		i		15 15 08.4	
	Loyalty Islands (h = 55 km).				

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

1972				
Sep. 13	Up	i(P)	15 21 25.7	
	Ud	i(P)	15 21 29.0	
		i	15 21 36.4	
" 13	Up	iP	18 48 30.4	
	Ki	iP	18 47 37.8	
	Um	iP	18 48 02.5	
	Ud	iP	18 48 34.3	
	De	iP	18 48 55.0	
	Kamchatka (h = N).			
" 13	Ud	e(P)	21 04 49	
	Greece.			
" 13	Up	iP	21 20 31.6	
	Ud	iP	21 20 30.4	
	De	iP	21 20 52.3	
	Aleutian Islands (h = 50 km).			
" 14	Up	ePKP	09 43 29	
		iPP	09 46 12.5	
			micr	sec
		Mx	N 0.6	21
		Mx	Z 0.6	21
	Ki	ePKP	09 43 10	
		i	09 43 27.0	
	Um	i(PKP)	09 43 08.8	
		iPKP	09 43 20.3	
	De	ePKP	09 43 32	
	Loyalty Islands (h = N).			
" 14	Up	iSKP	13 00 17.4	
	Sk	iSKP	13 00 10.0	
	Um	iSKP	12 59 59.8	
	Ud	iSKP	13 00 20.8	
	De	iSKP	13 00 26.4	
	New Hebrides Islands (h = 210 km).			
" 14	Sk	iSg1	15 10 56.5	
	Ud	eSn	15 09 37	
		iS*	15 09 49.2	
		iSg1	15 09 55.5	
	Southwest Norway, 58.4°N, 6.5°E. Origin time = 15 07 48. By combination with Bergen and Kongsberg readings.			
" 14	Up	iP	15 16 02.2	
	Ud	iP	15 16 03.3	
	De	iP	15 16 34.4	
" 14	Up	i(P)	15 24 01.9	

1972				
Sep. 14	Ud	iP	15 28 17.2	
" 14	Ud	iP	21 13 31.3	
" 14	Sk	eP	22 21 51	
	Um	eP	22 21 50	
	Yugoslavia.			
" 15	Up	eSKP	03 34 01	
			micr	sec
		SKP	Z' 0.1	1.5
	Ud	eSKP	03 34 07	
	Fiji Islands (h = 600 km).			
" 15	Ud	iP	05 58 38.8	
" 15	Ud	iP	07 18 00.8	C
	Kashmir.			
" 15	Up	ePKP	07 57 32	
			micr	sec
		PKP	Z' 0.1	1.1
	D'Entrecasteaux Islands (h = 15 km).			
" 15	Ki	iSn	12 10 58.5	
		iS*	12 11 17.2	
	Sk	iSg1	12 13 44.7	
	Um	iSg1	12 12 16.4	
	Northwest USSR. Explosion.			
" 15	Ud	iP	12 26 17.9	
" 15	Up		micr	sec
		Mx	N 0.7	20
		Mx	Z 1.1	20
	Ki	iPKP	13 37 49.6	
			micr	sec
		PKP	Z' 0.1	1.0
		Mx	E 0.8	21
		Mx	N 1.0	21
		Mx	Z 1.0	21
	Sk	iPKP	13 38 01.0	
	De	iPKP	13 38 14.3	
	Loyalty Islands (h = 20 km). M = 5.6 (Up,Ki).			
" 15	Ki	iSg1	16 16 08.8	
	Sk	iSg1	16 16 13.5	
	Um	iSg1	16 16 35.3	
	Nordland, Norway, 66.5°N, 14.1°E. Origin time = 16 14 39. Explosion.			

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

1972					
Sep. 15	Up			micr	sec
		Mx	E	0.7	19
		Mx	N	0.8	19
		Mx	Z	1.3	19
	Ki	eX		18 06 11	
				micr	sec
		Mx	E	0.8	19
		Mx	N	0.6	19
		Mx	Z	0.9	17
	Sk	eX		18 06 21	
	Ud	iPKP		18 06 14.1	
	De	iX		18 06 37.6	
	Loyalty Islands (h = 25 km).				
	M = 5.6 (Up,Ki).				
" 15	Up	iP		18 23 11.2	
	Ki	iP		18 23 41.3	
	Um	iP		18 23 26.4	
	Ud	eP		18 23 26	
	De	iP		18 23 14.5	
" 15	Ud	iP		21 19 39.7	
" 15	Ud	eP		21 21 59	
" 15	Up	iP		21 37 26.7	
		ipP		21 37 53.7	
	Ki	iP		21 37 01.9	
		ipP		21 37 28.2	
	Sk	iP		21 37 30.0	
		ipP		21 37 57.6	
	Um	iP		21 37 10.3	
		ipP		21 37 37.9	
	Ud	iP		21 37 37.1	
		ipP		21 38 03.2	
	De	eP		21 37 46	
	Ryukyu Islands.				
	h = 110 km (Up,Ki,Sk,Um,Ud).				
" 15	Up	iSKP2		22 04 42.5	
	Ki	iPKP		22 01 38.7	
	Sk	ePKP		22 01 49	
		iSKP		22 04 29.0	
	Um	iPP		22 04 07.8	
		iSKP		22 04 24.6	
	Ud	i(PKP)		22 01 43.3	
		iPKP		22 01 56.1	
		iSKP1		22 04 38.8	
		iSKP2		22 04 45.8	
	De	i(PKP)		22 01 53.9	
	Fiji Islands (h = 540 km).				
" 15	Um	iP		22 21 27.5	
	Ud	iP		22 21 46.6	
	(Pakistan).				

1972				
Sep. 15	Ki	iPKP		23 07 16.3
	Sk	ePKP		23 07 25
	Um	i(PKP)		23 07 18.6
		iPKP		23 07 23.3
	Ud	iPKP		23 07 32.1
" 15	De	iPKP		23 46 04.1
	Fiji Islands (h = 610 km).			
" 16	Um	i(P)		02 23 04.7
" 16	Sk	ePKP		03 39 50
	Ud	iPKP		03 39 59.5
" 16	Up	iP		03 57 56.0
		iPP		03 58 19.8
		iS		04 01 37
				micr sec
		P	Z'	0.1 1.0
		Mx	E	3.8 12
		Mx	N	3.1 16
		Mx	Z	7.4 14
	Ki	iP		03 59 15.0
		i(Pn)		03 59 53.2
				micr sec
		P	Z'	0.1 1.0
		Mx	E	8.9 15
		Mx	N	2.5 12
		Mx	Z	2.7 12
	Sk	iP		03 58 38.4
	Um	iP		03 58 36.9
		i(Pn)		03 58 57.3
		iS		04 02 48
	Ud	iP		03 58 02.2
		i		03 58 04.6
	De	iP		03 57 21.2
		i		03 57 23.7
	Albania (h = 15 km).			
	m = 5.3, M = 5.3 (Up,Ki).			
" 16	Sk	ePKP		04 34 00
	New Guinea (h = 5 km).			
" 16	Ki	iP		05 31 36.7
" 16	Ki	eP		08 41 35
	Sk	iP		08 41 52.1
	Ud	iP		08 41 44.0
" 16	Ud	iP		09 19 19.1
" 16	Up	iP		09 27 23.8
		ipP		09 27 33.6
		iPP		09 30 50.4
		iSKS		09 37 50

(cont.)

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

1972
Sep. 16 (cont.)

Up			micr	sec
	P	Z'	0.1	1.1
	pP	Z'	0.1	0.9
	Mx	E	2.4	21
	Mx	N	3.5	24
	Mx	Z	7.7	24
Ki	iP		09 27 10.5	
	ipP		09 27 20.2	
	iPP		09 30 27.6	
	iSKS		09 37 36	
			micr	sec
	P	Z'	0.1	1.0
	pP	Z'	0.1	0.9
	PP	Z'	0.2	1.4
	Mx	E	4.4	24
	Mx	N	3.0	22
	Mx	Z	5.8	23
Sk	iP		09 27 05.6	
	iPP		09 30 20.0	
Um	iP		09 27 19.3	
	ipP		09 27 28.6	
	iSKS		09 37 45	
Ud	iP		09 27 14.6	
	ipP		09 27 24.7	
De	iP		09 27 22.6	
	ipP		09 27 32.2	
	iPP		09 30 49.9	

Mexico.
h = 35 km (Up,Ki,Um,Ud,De).
m = 6.2, M = 5.8 (Up,Ki).

" 16

Up	iP		11 04 58.3 C	
			micr	sec
	P	Z'	0.1	1.0
Ki	iP		11 04 41.9 C	
			micr	sec
	P	Z'	0.1	0.9
Sk	iP		11 05 03.0 C	
Um	iP		11 04 47.7 C	
Ud	iP		11 05 06.7 C	
	ipP		11 05 45.8	
De	iP		11 05 12.7 C	

Halmahera.
h = 160 km (Ud).
m = 6.2 (Up,Ki).

" 16

Up			micr	sec
	Mx	E	0.9	22
	Mx	N	0.7	20
	Mx	Z	1.4	20
Ki			micr	sec
	Mx	E	0.9	20
	Mx	N	1.1	20
	Mx	Z	1.4	20

(cont.)

1972
Sep. 16 (cont.)

Um	iPKP	12 30 10.0
Ud	iPKP	12 30 20.3

Solomon Islands (h = 55 km).
M = 5.6 (Up,Ki).

" 16

Up			micr	sec
	Mx	Z	0.7	18
Ki	iP		14 04 56.4	
			micr	sec
	Mx	E	0.6	18
	Mx	N	0.7	17
	Mx	Z	0.6	18
Sk	iP		14 04 23.0	
	ipP		14 04 33.1	
Um	iP		14 04 36.2	
	ipP		14 04 45.9	
	i(PcP)		14 05 04.5	
Ud	iP		14 04 04.5	
	ipP		14 04 15.1	

North of Ascension Island.
h = 35 km (Sk,Um,Ud).

" 16

Up	iP	14 10 49.0
Ki	eP	14 12 08
Sk	iP	14 11 29.7
Um	iP	14 11 28.1
Ud	iP	14 10 53.1
	i	14 10 54.9
De	iP	14 10 13.7
	i	14 10 16.2

Albania-Yugoslavia
(h = 5 km).

" 16

Ki	iP	14 17 56.4
Ud	iP	14 18 24.6

Molucca Passage
(h = 70 km).

" 16 Um iP 14 24 39.9

" 16

Ud	iP	14 40 51.8
De	iP	14 40 15.1

Albania-Yugoslavia.

" 16

Up	Mx		17 11	
			micr	sec
	Mx	Z	0.6	18

Solomon Islands (h = 50 km).

" 16

Ud	iP	18 35 57.8
De	eP	18 35 36

" 17 Ud eP 01 10 33

Molucca Passage (h = 70 km).

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

1972 Sep. 17	Ud	iP	02 39 12.9	
	Aleutian Islands (h = 35 km).			
" 17	Up	iSg1	04 26 07.9	
	Ki	iPn	04 21 52.9	
		iSn	04 22 52.6	
		iS*	04 23 10.8	
	Sk	eSg1	04 25 38	
	Um	iSn	04 23 32.7	
		i	04 23 44.2	
		iSg1	04 24 07.0	
	Ud	iSg1	04 26 37.4	
	Northwest USSR, 67.8°N, 34.2°E. Origin time = 04 20 33. Explosion.			
" 17	Ud	iPKP	09 37 00.4	
	De	iPKP	09 37 11.7	
	Fiji Islands (h = 630 km).			
" 17	Up	iSg1	10 16 48.9	
	Ki	iPn	10 12 37.4	
		iSn	10 13 34.8	
		iS*	10 13 51.6	
	Sk	iSg1	10 16 22.3	
	Um	iSn	10 14 15.7	
		i	10 14 31.0	
		iSg1	10 14 51.0	
	Ud	iSg1	10 17 23.1	
	De	iSg1	10 18 49.5	
	Northwest USSR, 67.8°N, 33.7°E. Origin time = 10 11 21. Explosion.			
" 17	Up	iSg1	12 51 02.6	
	Ki	iPn	12 47 05.8	
		iPg1	12 47 13.9	
		iSn	12 47 51.2	
		iSg1	12 48 04.9	
		iSg2	12 48 10.2	
	Sk	eSn	12 49 43	
		iSg1	12 50 31.4	
	Um	iPn	12 47 30.1	
		iSn	12 48 31.3	
		i	12 48 46.9	
		iSg1	12 49 01.0	
		iRg	12 49 35.4	
	Ud	iSn	12 50 30.6	
		iSg1	12 51 27.3	
	Northwest USSR-Finland border region, 67.5°N, 30.5°E. Origin time = 12 46 06. Explosion.			

1972 Sep. 17	Ud	iP		13 53 35.7	
" 17	Up	iP		14 12 03.1	C
		iS		14 15 50	
				micr	sec
		P	Z'	2.9	1.2
		Mx	E	77	11
		Mx	N	48	11
		Mx	Z	70	12
	Ki	iP		14 13 18.6	C
		iS		14 18 09	
				micr	sec
		P	Z'	0.5	1.1
		Mx	E	200	18
		Mx	N	65	13
		Mx	Z	67	13
	Sk	iP		14 12 43.1	C
		iS		14 17 20.1	
	Um	iP		14 12 41.1	C
		iS		14 17 02	
	Ud	iP		14 12 08.7	C
		iS		14 16 11.3	
	De	iP		14 11 31.1	
		iS		14 15 05.5	
	Greece (h = N). m = 6.5, M = 6.4 (Up,Ki). Comparing LP Z-records at Up with the Greek earthquake on Sep. 13, 04 18, we find opposite phases for P, S and Rayleigh waves, otherwise good similarity.				
" 17	Ud	iP		14 21 58.1	C
	Greece.				
" 17	Up	iP		14 31 22.4	
	Sk	eP		14 32 02	
	Um	eP		14 32 02	
	Ud	iP		14 31 29.5	
	Greece. Origin time = 14 26 36. Approximate origin times, based on our own records, are given for some Greek aftershocks not reported by NEIS. Their purpose is essentially to facilitate identification of events.				
" 17	Ud	iP		14 39 40.2	
	Greece.				
" 17	Ud	iP		14 43 09.6	
	Greece.				

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

1972 Sep.	17	Up	iP		14 48 58.0		
					micr	sec	
			P	Z'	0.1	1.1	
		Ki	eP		14 50 12		
		Sk	iP		14 49 37.6		
		Um	iP		14 49 35.8		
			i		14 49 37.7		
		Ud	iP		14 49 03.5		
			i		14 49 05.2		
		De	iP		14 48 27.3		
		Greece (h = N).					
"	17	Up	iP		15 08 10.8		
		Ud	iP		15 08 22.1		
		Greece.					
"	17	Ud	eP		15 33 51		
"	17	Up	iP		15 42 32.7		
		Sk	iP		15 43 13.7		
		Ud	iP		15 42 39.5		
			i		15 42 42.3		
		Greece.					
		Origin time = 15 37 47.					
"	17	Ud	iP		15 48 02.5		
"	17	Ud	eP		15 58 23		
"	17	Up	iP		16 31 00.1		
					micr	sec	
			Mx	Z	0.6	18	
		Sk	eP		16 31 12		
		Um	eP		16 31 21		
			i		16 31 25.5		
		Ud	iP		16 30 57.5		
		De	iP		16 30 46.5		
		South Atlantic Ocean (h = N).					
"	17	Ud	eP		16 32 51		
		Greece.					
"	17	Sk	eP		16 52 11		
		Um	iP		16 52 09.2		
		Ud	iP		16 51 38.9		
		Greece.					
		Origin time = 16 46 45.					
"	17	Sk	eP		17 04 33		
		Um	eP		17 04 28		
		Ud	iP		17 03 59.5		
		Greece.					
		Origin time = 16 59 05.					
1972 Sep.	17	Up	eP		17 06 41		
		Sk	iP		17 07 17.2		
		Ud	iP		17 06 44.6		
		Greece.					
		Origin time = 17 01 52.					
"	17	Ud	eP		17 08 02		
"	17	Up	eP		17 12 29		
		Sk	eP		17 13 10		
		Um	iP		17 13 08.7		
		Ud	iP		17 12 36.5		
			i		17 12 39.9		
		Greece.					
		Origin time = 17 07 43.					
"	17	Ud	eP		17 29 59		
		Greece.					
"	17	Up	iP		17 45 42.6	C	
			iX		17 46 27.0		
					micr	sec	
			P	Z'	0.2	1.0	
			Mx	E	0.4	9	
			Mx	N	0.4	10	
			Mx	Z	0.8	9	
		Ki	iP		17 45 48.8	C	
			iX		17 46 20.1		
					micr	sec	
			P	Z'	0.2	1.2	
			Mx	E	1.0	10	
			Mx	N	1.1	9	
			Mx	Z	0.7	9	
		Sk	iP		17 46 06.9	C	
		Um	iP		17 45 39.8	C	
			iPP		17 47 15.2		
		Ud	iP		17 45 59.4	C	
			iPP		17 47 44.2		
		De	iP		17 45 55.3	C	
			i(PP)		17 47 49.5		
		Kashmir (h = N).					
		m = 5.8, M = 5.0 (Up,Ki).					
"	17	Ud	iP		19 40 22.7		
"	17	Up	iP		19 55 24.4		
		Sk	eP		19 56 03		
		Um	iP		19 56 04.4		
		Ud	iP		19 55 30.9		
			i		19 55 34.8		
		Greece.					
		Origin time = 19 50 37.					
"	17	Ud	eP		20 23 14		
		Greece.					

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

1972 Sep.	17	Ud	iP		20 41 06.1
		Greece.			
"	17	Up	iP		20 41 57.2
			i		20 42 00.5
		Sk	eP		20 42 34
		Ud	iP		20 42 02.6
			i		20 42 05.8
		Greece.			
		Origin time = 20 37 10.			
"	17	Up	iP		21 09 40.2
		Ki	iP		21 09 41.0 C
					micr sec
			P	Z'	0.1 1.1
		Sk	iP		21 09 27.0 C
		Um	iP		21 09 44.0
		Ud	iP		21 09 30.8
		De	iP		21 09 33.1 C
		Colombia (h = 20 km).			
"	17	Up	eP		21 14 51
		Sk	eP		21 15 31
		Ud	iP		21 14 59.1
			i		21 15 02.6
		Greece.			
		Origin time = 21 10 05.			
"	17	Up	eP		21 23 16
		Sk	eP		21 23 01
		Ud	eP		21 23 05
		De	eP		21 23 07
		Colombia (h = 50 km).			
"	17	Up	iP		21 30 27.1
					micr sec
			P	Z'	0.1 1.0
			Mx	Z	0.7 20
		Ki	iP		21 30 28.1 C
			iS		21 41 09
					micr sec
			P	Z'	0.3 1.8
			Mx	E	0.7 23
			Mx	Z	1.0 23
		Sk	iP		21 30 13.7 C
		Um	iP		21 30 30.3 C
		Ud	iP		21 30 16.9 C
		De	iP		21 30 19.9 C
		Colombia (h = 20 km).			
		m = 6.1, M = 5.2 (Up,Ki).			
"	17	Up	iP		21 31 58.6
		Ki	iP		21 33 15.9
		Sk	eP		21 32 40
		Um	iP		21 32 38.8
		Ud	iP		21 32 05.9
		(cont.)			

1972 Sep.	17	(cont.)			
		Greece.			
		Origin time = 21 27 13.			
"	17	Up	eP		21 56 20
		Ud	iP		21 56 30.8 C
		Greece.			
"	17	Sk	eP		22 06 49
		Um	eP		22 06 49
		Ud	iP		22 06 14.7 C
		Greece.			
		Origin time = 22 01 22.			
"	17	Up	iP		22 31 11.2
		Ud	iP		22 31 19.2
		Greece.			
		Origin time = 22 26 25.			
"	17	Ud	iP		23 03 35.0 C
		Greece.			
"	17	Up	iP		23 37 23.2
					micr sec
			P	Z'	0.1 1.2
		Ki	eP		23 36 50
			i		23 36 56.3
		Sk	eP		23 37 22
		Um	iP		23 37 02.5
		Ud	iP		23 37 29.8
		South of Japan (h = 15 km).			
"	17	Ud	eP		23 54 01
"	18	Ud	iP		00 13 21.0
"	18	Ud	iP		00 23 16.9
"	18	Up	iP		01 02 26.7
		Sk	iP		01 03 07.1
		Um	eP		01 03 06
		Ud	iP		01 02 33.3
			iPP		01 02 56.0
		De	eP		01 01 57
		Greece.			
		Origin time = 00 57 40.			
"	18	Up	iPKP		01 09 06.5 D
					micr sec
			PKP	Z'	0.1 0.7
		Ki	ePKP		01 08 56
		Sk	ePKP		01 09 01
		Um	iPKP		01 09 00.3
			iSKP		01 11 50.9
		Ud	iPKP		01 09 09.1 D
		(cont.)			

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

1972
Sep. 18 (cont.)
Ud i 01 09 23.4
De iPKP 01 09 19.4 D
Tonga-Kermadec Islands
(h = 500 km).

" 18 Up i(P) 01 19 50.9
Ud iP 01 19 51.0
Greece.

" 18 Ud iP 01 50 21.8
Crete (h = 90 km).

" 18 Sk eP 01 58 29
Ud iP 01 57 56.7
Greece.
Origin time = 01 53 04.

" 18 Ud iP 02 22 45.7
South Atlantic Ocean
(h = N).

" 18 Ud iP 02 43 39.4
Greece.

" 18 Up eP 03 06 58
Sk eP 03 07 40
Ud iP 03 07 05.1
i 03 07 12.3
Greece.
Origin time = 03 02 12.

" 18 Ud eP 04 52 01
Greece.

" 18 Up eP 05 21 46
Sk eP 05 22 26
Ud iP 05 21 53.5
i 05 21 56.5
Greece.
Origin time = 05 17 00.

" 18 Up iP 05 48 21.8
Ki iP 05 48 20.3
Sk iP 05 48 00.8
Um iP 05 48 23.9 C
Ud eP 05 48 05
Haiti (h = 15 km).

" 18 Ud eP 06 23 27

" 18 Ud iP 07 23 53.8

" 18 Ud iP 08 25 18.2

1972
Sep. 18 Up iP 08 25 16.0
ipP 08 25 20.2

		micr	sec
pP	Z'	0.1	0.9
Mx	E	0.8	11
Mx	N	0.5	10
Mx	Z	1.1	17

Ki eP 08 26 31

		micr	sec
Mx	E	2.7	15
Mx	N	1.1	15
Mx	Z	0.9	13

Sk iP 08 25 56.2
Um iP 08 25 56.1
Ud iP 08 25 22.8
ipP 08 25 26.3
Greece.
h = 15 km (Up,Ud).
M = 4.6 (Up,Ki).

" 18 Ki iPKP 08 30 51.4
South of Africa (h = N).

" 18 Ud iP 11 01 26.4
Greece.

" 18 Ud ePKP 11 02 09
Loyalty Islands (h = 20 km).

" 18 Up i(pP) 11 08 39.4
Sk eP 11 09 13
Ud iP 11 08 40.7
i(pP) 11 08 44.0
Greece.
Origin time = 11 03 48.

" 18 Ki ePg1 11 13 45
iSn 11 14 22.4
iS* 11 14 34.9
Sk eSg1 11 17 23
Um iSg1 11 16 15.2
Northwest USSR-Norway border region.
Explosion.

" 18 Ki iP 12 24 35.0
Sk iP 12 25 10.9
Um iP 12 24 53.4
Ud iP 12 25 24.3
De iP 12 25 40.2
Japan (h = 110 km).

" 18 Up iSg1 13 46 38.1
Ki eSn 13 47 49.3
(cont.)

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

1972
Sep. 18 (cont.)

	Ki	iSg1	13 48 35.1
	Sk	eSg2	13 48 37
	Um	iSg1	13 46 54.4
	Ud	iSg1	13 47 37.7
	De	iSg1	13 48 04.3

Western USSR.
Explosion.

" 18	Ud	iP	13 52 04.0

Halmahera (h = 90 km).

" 18	Sk	eP	14 08 45
	Ud	iP	14 08 11.0

Greece.
Origin time = 14 03 18.

" 18	Up	iP	14 42 05.4
	Sk	iP	14 42 47.9
	Um	iP	14 42 45.7
	Ud	iP	14 42 11.8
		i	14 42 13.3
		i(pP)	14 42 16.2
	De	iP	14 41 35.1

Greece.
Origin time = 14 37 19.

" 18	Ud	eP	15 25 11

Greece.

" 18	Up	iP	15 45 10.2
	Sk	eP	15 45 46
	Um	iP	15 45 41.2
	Ud	iP	15 45 12.2
		i	15 45 15.2
		i	15 45 31.1
	De	eP	15 44 35

Greece.
Origin time = 15 40 19.

" 18	Ud	iP	15 45 57.8
" 18	Ud	iP	17 07 38.9

Greece.

" 18	Ud	iP	17 37 12.0

Greece.

" 18	Ud	iP	17 38 49.9

Greece.

" 18	Ud	iPKP	18 27 51.5
	De	iPKP	18 28 02.2

1972
Sep. 18

Up	iP		20 49 40.2	D
	iPP		20 54 01.9	
			micr sec	
	PP	Z'	0.1 1.3	
Ki	iP		20 49 30.4	D
	iPP		20 53 45.1	
			micr sec	
	P	Z'	0.1 1.4	
Um	iP		20 49 32.5	D
	i(PP)		20 53 30.1	
	iPP		20 53 48.9	
Ud	iP		20 49 48.9	D
	i(PP)		20 53 59.8	
	iPP		20 54 19.1	
De	iP		20 49 51.2	D
	i(PP)		20 54 00.5	
	ePP		20 54 19	

Sumba Island (h = 45 km).
m = 6.3 (Up,Ki).
(PP) are early PP arrivals.

" 18	Sk	eP	20 52 15
	Um	eP	20 52 12
	Ud	eP	20 51 36

Greece.
Origin time = 20 46 46.

" 18	Up	iP	21 49 55.3	C
	Ki	iP	21 50 02.4	
	Sk	eP	21 50 20	
	Um	iP	21 49 52.6	
	Ud	iP	21 50 11.8	C
	De	iP	21 50 08.9	

Kashmir (h = 35 km).

" 18	Ud	iP	22 11 12.6

Greece.

" 18	Up	iP	22 19 54.2
	Sk	eP	22 20 35
	Um	iP	22 20 34.4
	Ud	iP	22 20 02.9 C
		i	22 20 05.3
	De	iP	22 19 24.3

Greece.
Origin time = 22 15 08.

" 18	Up	iP	23 09 46.1
	Ud	iP	23 09 48.9

Greece.

" 18	Ud	iP	23 41 02.6

Greece.

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

1972 Sep.	19	Ud	iP		00 46 49.7
			i		00 46 51.6
		Greece.			
"	19	Up	iP		01 10 35.6
		Ud	iP		01 10 42.4
			i		01 10 44.5
			i(pP)		01 10 46.5
		Greece.			
		Origin time = 01 05 49.			
"	19	Up	iP		01 48 15.7
			i		01 48 18.8
			iS		01 57 36
			iScS		01 58 19
					micr sec
			P	Z'	0.4 1.5
			Mx	E	3.4 22
			Mx	N	3.0 21
			Mx	Z	7.3 24
		Ki	iP		01 48 15.6
			i		01 48 20.0
			iS		01 57 39
			iScS		01 58 24
					micr sec
			P	Z'	0.4 1.5
			Mx	E	7.2 22
			Mx	N	5.7 23
			Mx	Z	9.0 23
		Sk	iP		01 47 59.5
			i		01 48 02.7
			iP'P'		02 16 03.2
		Um	iP		01 48 19.2
			i		01 48 23.2
			iS		01 57 42
		Ud	iP		01 48 04.0
			i		01 48 06.8
			iPcP		01 48 29.0
			iP'P'		02 16 01.9
		De	iP		01 48 07.6
			i		01 48 10.1
			iP'P'		02 16 02.0
		Haiti (h = N).			
		m = 6.3, M = 6.0 (Up,Ki).			
"	19	Ud	eP		03 20 07
		Greece.			
"	19	Up	iP		04 07 28.0
		Ki	iP		04 07 01.7
		Sk	iP		04 07 30.0
		Um	iP		04 07 11.2
		Ud	iP		04 07 37.4
		De	iP		04 07 47.4
		Ryukyu Islands.			

1972 Sep.	19	Ud	eP		04 59 35
		Greece.			
"	19	Ud	iP		05 49 08.5
			i		05 49 14.8
		Greece.			
"	19	Um	iP		06 04 10.7 C
		Ud	iP		06 04 30.1
			i		06 04 42.4
"	19	Ud	iP		08 32 01.2
		Greece.			
"	19	Ki	ePn		10 10 48
			iPg1		10 10 56.8
			iSn		10 11 34.9
			iS*		10 11 49.0
		Um	iSg1		10 13 23.4
		Northwest USSR-Norway border region, 69.6°N, 30.4°E.			
		Origin time = 10 09 46.			
		Explosion.			
"	19	Ud	iP		10 18 43.4
		Greece.			
"	19	Up	iSn		12 26 31.7
			iSg1		12 26 44.7
		Ki	e		12 29 09
			iSg1		12 29 22.2
		Sk	iSg1		12 28 34.2
		Um	iSg1		12 27 18.5
		Ud	iSn		12 27 20.3
			iSg1		12 27 50.0
		De	iPn		12 26 24.7
			iSg1		12 28 12.3
		Esthonia, 59.5°N, 25.0°E.			
		Origin time = 12 24 45.			
		Explosion.			
"	19	Ud	iP		15 08 21.5
		Hindu Kush.			
		Intermediate depth.			
"	19	Up	ipPKP		15 27 34.1
					micr sec
			Mx	E	1.0 20
			Mx	N	1.4 20
			Mx	Z	0.7 17
		Ki			micr sec
			Mx	E	0.5 16
			Mx	N	0.9 20
		Sk	iPKP		15 26 37.0
			ipPKP		15 27 32.6
		(cont.)			

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

1972
Sep. 19 (cont.)

Um	iPKP	15 26 31.2
Ud	iPKP	15 26 41.8
	ipPKP	15 27 37.5
De	e(PKP)	15 26 40
	iPKP	15 26 44.9

New Britain.
h = 220 km (Sk,Ud).
M = 5.6 (Up,Ki).
M uncorrected for focal depth.

" 19 Ud iP 17 14 24.9
Greece.

" 19 Ud iP 17 49 12.0
Greece.

" 19

Up	ePKP	17 59 34
Ki	iPKP	17 59 20.0
Um	iPKP	17 59 26.1
Ud	ePKP	17 59 33

Tonga Islands (h = 55 km).

" 19

Up	iP	19 54 49.3
Sk	iP	19 55 31.1
Um	iP	19 55 31.0
Ud	iP	19 54 53.6

Albania.

" 19 Up iP 20 49 53.3
Ud eP 20 49 57

" 19 Ud iP 20 52 52.8

" 19 Um iP 21 03 54.0

" 20

Up	iP	00 21 32.4
Ki	iP	00 21 33.6 D
Sk	iP	00 21 49.2 D
Um	iP	00 21 28.5 D
	ipP	00 21 38.3
Ud	iP	00 21 43.5 D

Andaman Islands.
h = 35 km (Um).

" 20

Up	iP	00 37 42.8
Sk	eP	00 38 26
Ud	iP	00 37 49.5
	i	00 37 51.4
	i(pP)	00 37 53.9

Greece.
Origin time = 00 32 57.

" 20 Um iP 01 41 46.9

1972
Sep. 20 Ud iP 02 59 37.3

" 20 Ud iP 05 35 38.5
Greece.

" 20 Ud iP 06 52 08.5
Kashmir.

" 20

Sk	eP	06 53 41
Ud	iP	06 53 08.2

Greece.
Origin time = 06 48 15.

" 20

Up	ePKP		08 04 37	
	i		08 04 57.5	
	iPP		08 07 29.5	
			micr	sec
	PP	Z'	0.1	1.5
	Mx	E	0.8	20
	Mx	N	0.9	20
	Mx	Z	1.4	21
Ki			micr	sec
	Mx	E	0.8	19
	Mx	N	0.7	18
	Mx	Z	1.3	21
Um	ePKP		08 04 32	
Ud	e(PKP)		08 04 31	
	iPKP		08 04 40.8	

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

" 20 Sk iP 08 15 01.4
Greece.

" 20 Ud iP 08 41 26.6

" 20

Um	iP	10 52 19.3
Ud	iP	10 51 48.3

Greece.
Origin time = 10 46 55.

" 20

Up	iPg1	12 02 31.7
	iSg1	12 03 49.2
De	iPg1	12 01 20.4
	iSg1	12 01 47.8

Baltic Sea, south of Sweden.
Origin time = 12 00 47.
Explosion?

" 20

Up	iP	12 51 07.3
Ki	eP	12 50 35
Um	iP	12 50 49.2 D
Ud	iP	12 51 13.6

" 20 Up iP 17 15 43.4
(cont.)

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

1972
Sep. 20 (cont.)

Ki	iP		17 15 43.9	C
			micr	sec
	P	Z'	0.1	1.1
	Mx	E	0.7	17
	Mx	N	0.9	20
	Mx	Z	1.0	18
Sk	eP		17 15 56	
Um	iP		17 15 41.3	
Ud	iP		17 15 52.9	C

Sumatra (h = 70 km).

" 20 Ud iP 18 28 53.9
Greece.

" 20 Um iP 18 41 43.5

" 20 Up

		micr	sec
Mx	N	0.6	22
Mx	Z	1.2	22
Ki	ePKP	19 00 27	
Um	ePKP	19 00 37	
Ud	ePKP	19 00 42	

Santa Cruz Islands
(h = 45 km).

" 20 Up eP 19 12 19
Sk eP 19 13 02
Ud iP 19 12 24.3
Greece.
Origin time = 19 07 32.

" 20 Um iP 19 25 40.1
Haiti (h = N).

" 20 Ud iP 20 42 56.3
Kurile Islands.

" 20 Up

iP		20 54 11.4	
ipP		20 54 18.0	
		micr	sec
P	Z'	0.2	1.6
pP	Z'	0.3	1.8
Mx	E	0.8	21
Mx	N	0.8	18
Mx	Z	1.9	20
Ki	iP	20 54 44.9	
ipP		20 54 51.3	
iS		21 02 52	
		micr	sec
P	Z'	0.3	1.5
pP	Z'	0.4	1.4
Mx	E	1.4	17
Mx	N	2.5	26

(cont.)

1972
Sep. 20 (cont.)

Ki		micr	sec
Mx	Z	1.7	17
Sk	iP	20 54 43.2	
ipP		20 54 48.9	
Um	iP	20 54 25.1	
ipP		20 54 31.6	
Ud	iP	20 54 24.3	
ipP		20 54 30.2	

Arabian Sea.
h = 25 km (Up,Ki,Sk,Um,Ud).
m = 6.1, M = 5.2 (Up,Ki).

" 20 Up

iP		21 01 53.2	
iS		21 09 30	
Ki	iP	21 02 30.4	
ipP		21 02 36.4	
		micr	sec
pP	Z'	0.1	1.3
Sk	iP	21 02 27.2	
Um	iP	21 02 09.3	
ipP		21 02 16.2	
Ud	iP	21 02 08.2	

Arabian Sea.
h = 25 km (Ki,Um).

" 20 Ud iP 21 15 34.8

" 20 Up

iP		22 21 06.6	
i(sP)		22 21 18.0	
		micr	sec
P	Z'	0.1	0.9
Mx	E	0.8	16
Mx	N	0.7	15
Mx	Z	0.8	15
Ki	iP	22 20 13.5	
		micr	sec
P	Z'	0.1	1.0
Mx	E	1.0	16
Mx	N	1.0	16
Mx	Z	1.4	15
Sk	iP	22 20 47.8	
Um	iP	22 20 40.2	
ipP		22 20 46.7	
Ud	iP	22 21 08.0	
ipP		22 21 16.0	
i		22 21 29.9	

Aleutian Islands.
h = 25 km (Um,Ud).
m = 5.9, M = 5.2 (Up,Ki).

" 21 Up

iP		00 22 28.8	C
ipP		00 22 37.4	
iS		00 32 34	

(cont.)

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

1972
Sep. 21 (cont.)

Up			micr	sec
	P	Z'	0.1	1.0
	Mx	E	0.6	20
	Mx	N	1.1	25
	Mx	Z	0.8	19
Ki	iP		00 22 31.2	
	i		00 22 41.6	
			micr	sec
	P	Z'	0.2	1.1
	Mx	E	0.6	14
	Mx	N	1.0	16
	Mx	Z	1.0	17
Sk	iP		00 22 45.0	
	i		00 23 03.2	
Um	iP		00 22 26.7	
	ipP		00 22 35.0	
Ud	iP		00 22 39.7	
	ipP		00 22 48.2	

Sumatra.
h = 30 km (Up,Um,Ud).
m = 6.0, M = 5.4 (Up,Ki).

" 21	Up	iP	00 58 56.3	C
	Ki	iP	00 58 58.2	C
		i	00 59 13.1	
	Sk	iP	00 59 11.6	C
		i	00 59 28.9	
	Um	iP	00 58 54.2	C
		i	00 59 11.1	
	Ud	iP	00 59 07.1	C
		i	00 59 21.4	

Sumatra (h = N).
Interpreting the second phase at Ki,Sk,Um,Ud as pP would give a focal depth of 60 km.

" 21	Up	iP	01 35 32.7	
	Ki	iP	01 35 34.3	
	Um	iP	01 35 29.7	
	Ud	iP	01 35 43.5	C

Sumatra.
Origin time = 01 23 17.

" 21	Ud	iP	02 02 43.3

Greece.

" 21	Up	iP	02 26 41.2
	Sk	iP	02 27 22.5
	Um	iP	02 27 19.2
	Ud	iP	02 26 46.7

Greece (h = N).

" 21	Ud	eP	07 54 42

Crete.

1972
Sep. 21

Up	iP		09 04 36.6	
	iPP		09 04 56.3	
	iS		09 08 23.3	
			micr	sec
	P	Z'	0.1	0.5
	PP	Z'	0.1	0.8
Ki	iP		09 04 51.9	
	i		09 05 28.4	
	iLg1		09 11 22.6	
			micr	sec
	P	Z'	0.1	0.8
Sk	iP		09 05 10.3	
	iPn		09 05 15.3	
	i		09 10 21.6	
	iLg1		09 12 30.2	
Um	iP		09 04 34.1	
	i		09 04 37.2	
	iLg1		09 10 36.2	
Ud	iP		09 04 58.5	C
	i		09 05 43.6	
	iS		09 09 09.0	

North of the Caspian Sea.
Origin time = 09 00 00.
m = 5.3 (Up,Ki).
Probably underground explosion.

" 21	Ud	iP	09 36 36.1

" 21	Ki	iPn	10 24 45.1
		iPg1	10 24 54.3
		iSn	10 25 32.9
		iS*	10 25 46.3
	Sk	eSg2	10 28 52
	Um	iSg1	10 27 17.7

Northwest USSR-Norway border region, 69.4°N, 30.9°E.
Origin time = 10 23 42.
Explosion.

" 21	Ki	ePg1		11 51 24
		iSg1		11 52 03.2
				micr sec
		Sg1	Z'	0.1 0.5
	Sk	iPg1		11 51 29.9
		iSg1		11 52 09.0
	Um	iPg1		11 51 43.1
		iSn		11 52 16.7
		iSg1		11 52 30.6
	Ud	iSg1		11 53 57.7

Nordland, Norway, 66.3°N, 14.2°E.
Origin time = 11 50 39.
Explosion?

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

1972					
Sep. 21	Ki	iP		14 20 31.9	
	Sk	iP		14 20 44.5	
	Um	iP		14 21 10.0	
	Ud	iP		14 21 32.0	
		i		14 21 43.3	
" 21	Ud	i(P)		14 39 38.7	
" 21	Up	iP		15 41 49.0	C
				micr	sec
		P	Z'	0.3	1.3
	Ki	iP		15 41 14.9	C
		iPcP		15 41 38.2	
				micr	sec
		P	Z'	0.2	1.3
	Sk	iP		15 41 23.0	C
	Um	iP		15 41 34.4	C
		iPcP		15 41 51.2	
	Ud	iP		15 41 41.0	C
		iPcP		15 41 58.4	
	De	iP		15 41 57.8	C
	Nevada.				
	m = 6.2 (Up,Ki).				
	Underground explosion.				
" 21	Up	i(P)		16 01 19.3	
" 21	Up	iP		20 16 42.3	
	Ud	iP		20 16 54.3	
" 21	Ud	iP		22 37 05.3	
	Greece.				
" 22	Up	iP		01 20 57.6	
	Ud	iP		01 21 09.9	
	Greece.				
" 22	Ud	eP		02 46 06	
" 22	Um	iP		03 51 39.2	
		iPcP		03 52 23.7	
	Kurile Islands (h = 80 km).				
" 22	Ki	iP		06 44 29.4	
	(Greece).				
" 22	Ki	iP		07 36 50.6	D
				micr	sec
		P	Z'	0.1	1.0
	Um	iP		07 37 18.0	
	Ud	eP		07 37 40	
	Alaska (h = N).				
" 22	Up	eP		08 09 15	
	Sk	eP		08 09 57	
	(cont.)				

1972					
Sep. 22	(cont.)				
	Ud	iP		08 09 21.9	
		i		08 09 24.6	
	Greece.				
	Origin time = 08 04 29.				
" 22	Ud	i(PKP)		08 20 55.8	
		iPKP		08 21 11.2	
	Fiji Islands (h = 610 km).				
" 22	Up	ePKP		12 04 11	
	Ki	i(PKP)		12 03 49.1	
		iPKP		12 03 55.7	
				micr	sec
		PKP	Z'	0.1	1.2
	Sk	ePKP		12 04 08	
	Um	iPKP		12 04 03.6	
	Ud	e(PKP)		12 03 59.6	
		iPKP		12 04 12.6	
	De	i(PKP)		12 04 08.8	
		iPKP		12 04 20.0	
	Tonga Islands (h = 220 km).				
" 22	Up	iSg1		12 06 03.7	
	Ki	eSg1		12 07 59	
	Um	iSg1		12 06 15.5	
	Ud	iSg1		12 07 01.4	
	Western USSR.				
	Explosion.				
" 22	Ki	iPKP		12 29 28.2	
	South Sandwich Islands (h = 160 km).				
" 22	Ud	iP		12 31 22.5	
	Greece.				
" 22	Ki	iP		12 56 17.5	
" 22	Up	iP		14 20 48.1	
	Ki	eP		14 20 10	
		ipP		14 20 27.3	
	Sk	ipP		14 20 59.2	
	Um	iP		14 20 27.3	
		ipP		14 20 43.6	
	Ud	iP		14 20 55.7	
		ipP		14 21 13.8	
	Japan.				
	h = 60 km (Ki,Um,Ud).				
" 22	Um	iSg1		14 20 13.1	
	Western USSR.				
	Explosion.				
" 22	Um	iP		14 30 49.5	
	Ud	iP		14 31 02.9	

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

1972 Sep.	22	Ki	iP		17 03 38.1
"	22	Ki	iP		17 49 07.7
		Sk	iP		17 49 27.6
		Um	iP		17 49 11.2
		Ud	iP		17 49 29.3
		Celebes (h = 150 km).			
"	22	Ki	eP		18 06 14
		Um	iP		18 06 15.9
		Celebes Sea (h = 570 km).			
"	22	Ki	iP		19 14 33.3
		Um	iP		19 14 29.4
"	22	Up	iP		20 09 20.8
			ipP		20 09 30.2
			iS		20 19 04
					micr sec
			P	Z'	0.4 1.5
			pP	Z'	0.3 1.1
			Mx	E	18 15
			Mx	N	21 18
			Mx	Z	40 16
		Ki	iP		20 08 56.3
			ipP		20 09 05.5
			iX		20 10 22.4
					micr sec
			P	Z'	0.2 1.5
			pP	Z'	0.2 1.0
			Mx	E	26 12
			Mx	N	19 13
			Mx	Z	22 13
		Sk	iP		20 09 24.3
			ipP		20 09 34.1
		Um	iP		20 09 04.8
			ipP		20 09 14.4
			iX		20 10 03.4
			iS		20 18 36
		Ud	iP		20 09 28.4
			ipP		20 09 37.9
			iX		20 09 59.7
		De	iP		20 09 38.4
			ipP		20 09 47.5
		Formosa.			
		h = 35 km (Up,Ki,Sk,Um,Ud,De).			
		m = 6.2, M = 6.7 (Up,Ki).			
"	22	Ki	iP		21 45 36.3
		Um	iP		21 45 45.8
		Ud	iP		21 46 10.7
		Formosa (h = N).			
"	22	Up	iP		22 53 30.4
		Ud	iP		22 53 34.3
		Greece.			

1972 Sep.	23	Up	iP		01 57 31.1
		Ki	iP		01 58 46.2
			iPP		01 59 21.2
		Sk	iP		01 58 18.7
		Um	iP		01 58 06.3
		Ud	iP		01 57 41.8
		De	iP		01 57 03.4
		Bulgaria (h = N).			
"	23	Ki	iP		02 07 12.9
		Turkey.			
"	23	Um	eP		02 25 26
		Bulgaria (h = 10 km).			
"	23	Up	iP		02 26 20.4 C
			iS		02 36 08
					micr sec
			P	Z'	0.1 1.0
			Mx	E	13 20
			Mx	N	16 17
			Mx	Z	24 16
		Ki	iP		02 25 57.6 C
			iS		02 35 24
					micr sec
			P	Z'	0.1 1.2
			Mx	E	20 12
			Mx	N	11 13
			Mx	Z	18 12
		Sk	eP		02 26 25
		Um	iP		02 26 05.2
		Ud	iP		02 26 29.6 C
			iX		02 26 53.7
		De	eP		02 26 41
		Formosa (h = N).			
		m = 5.8, M = 6.6 (Up,Ki).			
"	23	Up	iP		02 55 43.1
		Ud	iP		02 55 35.6
		California (h = 20 km).			
"	23	Up	eP		03 39 57
		Um	iP		03 40 36.5
		Ud	iP		03 40 05.6
		Greece.			
		Origin time = 03 35 12.			
"	23	De	iP		05 08 24.2
"	23	Up	iP		07 32 43.4
		Um	iP		07 32 45.5
		Ud	iP		07 32 57.5
		Pakistan (h = 10 km).			
"	23	Ud	eP		08 33 02

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

1972				
Sep. 23	Up	iP	08 38 38.8	
	Ud	iP	08 38 44.0	
	Greece.			
" 23	Up	iP	08 51 59.0	
	Ud	iP	08 51 58.1	
	Aleutian Islands (h = 40 km).			
" 23	Up	eP	10 51 13	
	Ki	eP	10 50 19	
	Ud	iP	10 51 12.6	
	Aleutian Islands (h = 40 km).			
" 23	Ki	iP	11 15 17.7	
" 23	Um	iP	11 16 12.9	
" 23	Ud	iPKP	11 38 33.2	
	De	iPKP	11 38 43.8	
	Tonga-Kermadec Islands (h = 640 km).			
" 23	Ud	iPKP	12 10 26.9	
	De	ePKP	12 10 39	
	New Britain (h = 90 km).			
" 23	Ud	iP	23 36 16.7	
	Pakistan.			
" 24	Long-period microseisms (periods around 18 sec), especially well developed on Um LP N-component.			
" 24	Up	eP	04 41 20	
	Ud	iP	04 41 28.8	
	Greece.			
" 24	Ud	eP	06 12 28	
	Greece.			
" 24	Ki	eP	06 55 47	
	Formosa (h = 60 km).			
" 24	Sk	eP	08 46 37	
	Ud	iP	08 46 29.1	
" 24	Up	iP	13 21 27.9	
	Ki	iP	13 21 05.2	
	Ud	iP	13 21 38.4	
		i(PcP)	13 21 47.2	
	Formosa (h = 55 km).			
" 24	Up	iP	14 36 23.3	
	(cont.)			

1972				
Sep. 24	(cont.)			
	Ud	iP	14 36 24.8	
		i	14 36 31.3	
	Greece.			
" 24	Up	iP2	20 23 50.8	C
		i(PP)	20 27 19.2	
		i(PP)	20 28 03.0	
		iPP	20 28 18.1	
		ePKKP	20 39 15	
			micr	sec
		P2 Z'	0.1	0.9
		PP Z'	0.4	1.5
		Mx E	18	26
		Mx N	19	23
		Mx Z	44	26
	Ki	iP1	20 23 32.9	
		iP2	20 23 35.6	
		i(PP)	20 26 53.8	
		i(PP)	20 27 35.5	
		iPP	20 27 52.3	
		iPKKP	20 39 30.8	
			micr	sec
		P2 Z'	0.4	1.5
		Mx E	39	25
		Mx N	44	27
	Sk	iP2	20 24 02.0	
		i(PP)	20 27 20.8	
		iPP	20 28 22.0	
		iPKKP	20 39 25.7	
	Um	iP1	20 23 38.3	
		iP2	20 23 41.0	
		i(PP)	20 27 38.6	
		iPP	20 28 00.6	
		iPKKP	20 39 28.2	
	Ud	iP1	20 23 56.9	
		iP2	20 23 59.9	
		i(PP)	20 27 33.3	
		iPP	20 28 32.7	
		iPKKP	20 39 13.5	
		i	20 39 27.7	
	De	iP2	20 24 04.7	
		i(PP)	20 27 31.5	
		i(PP)	20 28 23.9	
		iPP	20 28 44.6	
	Tanimbar Islands (h = N). m = 6.9, M = 6.9 (Up,Ki). The main onset P2 follows P1 after about 2.8 sec. (PP) denote early arrivals of PP, preceding PP by about 60 and 19 sec, respectively.			
" 24	Ud	iP	22 48 22.1	

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

1972
Sep. 24 Ki iP 22 53 13.6
Um iP 22 53 20.1
Ud iP 22 53 36.3
Tanimbar Islands (h = N).

" 24 Um iP 23 34 19.3
Ud iP 23 34 38.9
Tanimbar Islands (h = N).

" 25 Up iP 00 13 19.1
micr sec
P Z' 0.1 0.9
Ki iP 00 13 03.4
Um iP 00 13 09.0 C
Ud iP 00 13 27.5 C
Tanimbar Islands (h = N).

" 25 Ki iP 01 24 48.7
Tanimbar Islands (h = N).

" 25 Up iPg1 02 56 14.0
iSg1 02 56 41.2
Sk eSg1 02 57 02
Ud iPg1 02 55 54.1
i 02 56 00.6
iSg1 02 56 10.1
iSn 02 56 13.3
De iSn 02 56 43.4
iSg1 02 56 49.4
Lake Vener region, Sweden,
58.9°N, 13.7°E.
Origin time = 02 55 34.

" 25 Up iP 03 34 52.8
Ud iP 03 34 53.7

" 25 Um iP 04 08 35.8
Tanimbar Islands (h = N).

" 25 Up eP 06 59 32
Ki iP 06 59 04.1
Sk iP 06 59 00.7
Ud eP 06 59 24

" 25 Up iP 09 38 50.4
Ki iP 09 38 09.8
Sk eP 09 38 44
Um iP 09 38 27.7 C
Ud iP 09 38 57.6 C
De iP 09 39 12.8
Japan (h = 60 km).

" 25 Up iP 09 39 19.1
(cont.)

1972
Sep. 25 (cont.)
Up micr sec
P Z' 0.1 1.2
Ki iP 09 38 38.5
micr sec
P Z' 0.1 1.3
Um iP 09 38 56.9
Ud iP 09 39 25.6
De iP 09 39 41.7
Japan.
Origin time = 09 28 02.
m = 5.9 (Up,Ki).

" 25 Up iP 11 41 54.2 D
micr sec
P Z' 0.1 1.0
Ki iP 11 41 55.5 D
micr sec
P Z' 0.1 0.9
Sk iP 11 42 10.9 D
Um iP 11 41 51.1 D
Ud iP 11 42 06.2 D
De iP 11 42 04.2 D
Nicobar Islands (h = N).
m = 5.8 (Up,Ki).

" 25 Um iSg1 12 28 06.1
Western USSR.
Explosion.

" 25 Ki iP 14 32 17.5
Um iP 14 32 30.2
Ud iP 14 33 00.6
Mariana Islands (h = 60 km).

" 25 Up iP 16 11 39.8
Ki iP 16 11 02.2
Sk iP 16 11 35.0
Um iP 16 11 18.4 C
Ud iP 16 11 47.3 C
De iP 16 12 01.7
Japan (h = 190 km).

" 25 Up iP 18 10 31.1 C
ipP 18 10 59.4
Ki eP 18 11 38
Sk eP 18 11 10
Um iP 18 11 07.4
Ud iP 18 10 40.4 C
De iP 18 10 08.5
Dodecanese Islands.
h = 150 km (Up).

" 25 Ud iP 22 01 14.3

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

1972 Sep.	25	Um	iP	22 40 03.5	
		Turkey.			
"	25	Um	iP	23 50 02.1	
		Ud	iP	23 50 17.8	
"	26	Ki	iPP	00 18 49.4	
		New Britain (h = 120 km).			
"	26	Um	iP	01 07 44.1	
"	26	Ud	iPKP	06 05 40.2	
		De	iPKP	06 05 50.5	
"	26	Up	iSg1	11 46 38.2	
		Um	iSg1	11 47 11.4	
		Ud	iS*	11 47 37.0	
			iSg1	11 47 41.9	
		Esthonia.			
		Explosion.			
"	26	Ud	i(Pg1)	12 02 49.5	
			i(Sg1)	12 03 06.7	
		De	i(Sg1)	12 04 26.3	
"	26	Um	iSg1	12 12 20.8	
		Ud	eSg1	12 13 04	
		De	eSg1	12 13 38	
		Western USSR.			
		Explosion.			
"	26	Ud	iP	12 14 36.9	
			i	12 14 40.4	
		Greece.			
"	26	Up	iP	12 22 32.2	C
			i	12 22 47.4	
				micr sec	
			P Z'	0.1 0.9	
		Ki	iP	12 23 39.4	C
				micr sec	
			P Z'	0.1 0.7	
		Sk	iP	12 23 10.7	C
			i	12 23 22.4	
		Um	iP	12 23 04.0	C
		Ud	iP	12 22 39.8	C
		De	iP	12 22 08.2	C
		Crete (h = N).			
		m = 5.7 (Up,Ki).			
"	26	Up	iSg1	13 01 32.8	
		Ki	iSg1	13 04 25.2	
		Sk	iSg1	13 03 31.4	
		Um	iSg1	13 02 22.9	
		Ud	iSg1	13 02 31.4	
		(cont.)			

1972 Sep.	26	(cont.)			
		De	iSg1	13 03 00.8	
		Esthonia, 59.5°N, 23.3°E.			
		Origin time = 13 00 00.			
		Explosion.			
"	26	Ud	iP	13 30 59.6	
			i	13 31 13.2	
"	26	Ud	iP	14 27 30.6	
		Albania.			
"	26	Sk	iPP	14 44 40.2	
		Um	eP	14 44 18	
			iPP	14 44 38.5	
		Ud	iP	14 43 48.2	
		Albania.			
"	26	Up	iP	19 18 24.3	
			i	19 18 34.4	
		Um	iP	19 18 27.3	
		Ud	iP	19 18 41.7	
		Kashmir (h = N).			
"	26	Up	ePKP	21 24 20	
			iPP	21 25 23.0	
				micr sec	
			PP Z'	0.2 1.5	
			Mx E	1.9 17	
			Mx N	1.0 18	
			Mx Z	3.0 22	
		Ki	iPP	21 25 48.8	
				micr sec	
			Mx E	1.7 19	
			Mx N	1.6 21	
		Um	iPKP	21 24 28.6	
		Ud	iPKP	21 24 18.8	
			iPP	21 25 10.7	
		De	iPKP	21 24 19.0	
		Argentina (h = 15 km).			
		M = 5.8 (Up,Ki).			
"	26	Ud	iP	21 35 17.1	
"	27	Up	iP	00 18 43.4	
			i	00 18 48.8	
				micr sec	
			P Z'	0.1 0.9	
			Mx N	1.5 17	
			Mx Z	2.4 15	
		Ki	iP	00 18 27.8	
				micr sec	
			P Z'	0.1 1.0	
			Mx E	2.2 13	
			Mx N	7.1 20	
		(cont.)			

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

1972
Sep. 27 (cont.)

Ki			micr	sec
	Mx	Z	1.8	12
Sk	iP		00 18 51.0	
	i		00 19 08.7	
Um	i		00 18 45.6	
Ud	iP		00 18 56.7	
De	eP		00 19 02	

Szechwan, China (h = N).
m = 5.9, M = 5.4 (Up,Ki).

" 27	Up	iP	02 11 42.2 C	
			micr	sec
		P Z'	0.1	1.0
	Ki	iP	02 11 50.5 C	
	Sk	eP	02 12 07	
	Um	iP	02 11 40.4 C	
	Ud	iP	02 11 58.7 C	
	De	iP	02 11 54.9	

Pakistan (h = 45 km).

" 27	Ud	iSg1	07 58 53.0
		i(Sg2)	07 59 00
	De	iPn	07 56 26.5
		iPg1	07 56 31.8
		iSn	07 56 56.3
		iSg1	07 57 03.7
		i	07 57 35.9

Baltic Sea, off coast of Poland.
Origin time = 07 55 50.
Explosion?

" 27	Up		micr	sec
		Mx E	0.9	18
		Mx N	1.8	20
		Mx Z	1.9	20
	Ki	iPKP	09 20 47.8	
			micr	sec
		PKP Z'	0.1	1.0
		Mx E	1.7	19
		Mx N	3.9	21
		Mx Z	2.8	20
	Sk	ePKP	09 20 58	
	Um	iPKP	09 20 55.1	
	Ud	i(PKP)	09 20 52.5 C	
		iPKP	09 21 03.4	
	De	i(PKP)	09 21 02.4 C	
		iPKP	09 21 12.5	

Samoa Islands (h = N).
M = 6.0 (Up,Ki).

" 27	Ki	i(P)	09 22 07.6	
			micr	sec
		(P) Z'	0.1	0.7

1972
Sep. 27

Ki	eP	09 26 09	
Sk	eP	09 26 27	
Um	iP	09 26 01.9	C
Ud	iP	09 26 19.1	
De	iP	09 26 21.6	

Kashmir (h = N).

" 27	Ud	ePKP	09 49 27

Samoa Islands (h = N).

" 27	Um	iP	11 50 04.7
	Ud	iP	11 50 36.1

Sea of Japan (h = 350 km).

" 27	Up	iP	18 06 38.8	
		i	18 06 58.6	
			micr	sec
		P Z'	0.1	1.3
		Mx E	1.4	18
		Mx N	2.0	19
		Mx Z	2.4	15
	Ki	iP	18 06 19.2	
			micr	sec
		Mx E	2.4	13
		Mx N	2.6	16
		Mx Z	1.6	11
	Sk	e(P)	18 06 51	
	Um	iP	18 06 27.0	
	Ud	iP	18 06 54.6	
		i	18 07 04.0	
	De	iP	18 07 02.4	

Formosa (h = 55 km).
M = 5.7 (Up,Ki).

" 27	Up	iP	18 39 51.2
		i	18 40 07.5
	Ki	iP	18 39 23.7
	Um	iP	18 39 31.3
	Ud	iP	18 39 56.2

Formosa (h = 20 km).

" 27	Ki	iP	20 33 00.3	
			micr	sec
		P Z'	0.1	1.0
	Sk	iP	20 33 17.7	
	Um	iP	20 32 50.8	
	Ud	iP	20 33 09.3	
		i	20 33 13.8	
	De	eP	20 33 07	

Kashmir (h = 40 km).

" 27	Ud	iP	20 45 59.1

Greece.

" 27	Ki	ePn	21 02 44

(cont.)

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

1972
Sep. 27 (cont.)
Ki iPg1 21 02 53.6
iSn 21 03 26.4
iSg1 21 03 37.2
Um iSg1 21 04 31.1

" 27 Ud iPKP 21 53 27.2
De iPKP 21 53 38.8
Tonga Islands (h = N).

" 27 Ki iP 23 25 39.1
Ud iP 23 26 26.0

" 28 Ud iP 03 50 05.9

" 28 Ki eP 06 04 34
Ud iP 06 05 32.6
Kamchatka (h = 70 km).

" 28 Ki ePKP 07 17 23
Sk e(PKP) 07 17 30
Ud iPKP 07 17 22.6
De ePKP 07 17 23
South Pacific Ocean
(h = N).

" 28 Ki eP 09 13 53
Ud iP 09 14 05.0
Sunda Strait (h = N).

" 28 Ki eP 16 08 36
Ud iP 16 09 32.0

" 28 Ud iP 20 43 31.6
Caucasus.

" 28 Ud iP 22 24 25.7
Greece.

" 28 Ud iP 22 53 20.8

" 29 Um iP 00 06 14.9
Ud iP 00 06 41.3 C
South of Japan (h = 500 km).

" 29 Up iP 01 21 46.0
Sk eP 01 22 28
Ud iP 01 21 54.4
Greece.
Origin time = 01 17 00.

" 29 Up iP 02 38 36.6
Sk eP 02 39 14
Ud iP 02 38 39.6
Greece.
Origin time = 02 33 49.

1972
Sep. 29 Ki eP 04 39 41
Ud iP 04 40 14.6
De eP 04 40 22
Formosa (h = 60 km).

" 29 Ki eP 06 28 32
Siberia (h = N).

" 29 Up ePKP 06 57 04
micr sec
Mx E 1.0 20
Mx N 0.8 19
Mx Z 1.4 20
Ki iPKS 07 00 13
micr sec
Mx E 1.5 20
Mx N 1.8 20
Sk ePKP 06 57 03
Um iPKP 06 56 59.8
Ud i(PKP) 06 56 57.1
iPKP 06 57 05.8
De i(PKP) 06 57 06.6
Tonga Islands (h = N).
M = 5.8 (Up,Ki).

" 29 Up iP 09 10 36.6
Ki iP 09 09 42.4
Sk iP 09 10 06.7
Um iP 09 10 10.8
Ud iP 09 10 32.1
De iP 09 10 56.8
Alaska (h = 15 km).

" 29 Ud iPg1 10 50 46.6
iSg1 10 51 19.7
De iPg1 10 50 47.2
iSg1 10 51 17.2
Off coast of Bohuslän,
Sweden, 58.1°N, 11.3°E.
Origin time = 10 50 08.
Explosion.

" 29 Up iPKP 10 52 27.3
Ud iPKP 10 52 24.2
De iPKP 10 52 36.0
Tonga-Kermadec Islands
(h = 140 km).

" 29 Ud iPg1 10 52 38.5
iSg1 10 53 11.3
De iPg1 10 52 38.8
iSg1 10 53 08.5
Off coast of Bohuslän,
Sweden, 58.1°N, 11.3°E.
Origin time = 10 52 00.
Explosion.

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

1972
Sep. 29 Ud i(Pg1) 11 14 19.1
iSg1 11 14 55.4
De e(Pg1) 11 13 57
iSg1 11 14 33.0
Northern Denmark.
By combination with
Kongsberg readings.

" 29 Ud iSg1 11 36 48.6
i 11 36 57.0
De iPg1 11 36 04.3
iSg1 11 36 29.5
Off coast of Bohuslän,
Sweden.
Origin time = 11 35 32.
The phase i at Ud could
be interpreted as TSg1.
Explosion.

" 29 Ud iSg1 11 37 02.1
De iPg1 11 36 16.7
iSg1 11 36 41.8
Off coast of Bohuslän,
Sweden.
Origin time = 11 35 44.
Explosion.

" 29 Ki iP 13 02 27.7
Sk eP 13 03 03
Um iP 13 02 48.0
Ud iP 13 03 19.3
Kurile Islands (h = N).

" 29 Up iSg1 13 18 02.1
Ki eSg1 13 20 06
Sk eSg1 13 19 46
Um iSg1 13 18 19.2
i 13 18 23.2
Ud iSg1 13 19 01.7
De iSg1 13 19 33.3
Western USSR.
Explosion.

" 29 Up iSn 13 43 51.5
iSg1 13 44 03.5
Ki iSg1 13 46 34.9
Sk i(Sg1) 13 46 00.3
Um iSg1 13 44 38.4
Ud iSn 13 44 40.6
i(S*) 13 45 01.7
iSg1 13 45 05.8
De iSg1 13 45 32.5
Esthonia, 59.5°N, 24.8°E.
Origin time = 13 42 08.
Explosion.

1972
Sep. 29 Ki iP 14 04 45.2
Sk eP 14 05 08
Ud iP 14 05 06.3
Sinkiang (h = N).

" 29 Up iP 16 31 51.2
i 16 31 53.4
ipP 16 32 00.7
micr sec
Mx E 1.2 13
Mx N 2.6 18
Mx Z 2.8 14
Ki iP 16 31 34.8
micr sec
P Z' 0.1 0.9
Mx E 2.0 14
Mx N 7.4 19
Mx Z 2.0 14
Sk iP 16 32 02.4
Um iP 16 31 37.7
Ud iP 16 32 04.5
ipP 16 32 13.6
De eP 16 32 14
Szechwan, China.
h = 35 km (Up,Ud).
M = 5.6 (Up,Ki).

" 29 Ki eP 17 16 10
Ud iP 17 16 30.6
i 17 16 42.6
Talaud Islands (h = 30 km).

" 29 Um iPKP 17 25 07.0
Ud iPKP 17 25 16.9

" 29 Ud iP 17 30 51.9

" 29 Up iP 20 34 55.0
i 20 34 57.1
micr sec
Mx E 1.2 13
Mx N 1.8 17
Mx Z 2.2 13
Ki iP 20 34 38.7
i 20 34 40.9
micr sec
P Z' 0.1 0.8
Mx E 1.0 14
Mx N 6.1 19
Mx Z 1.2 14
Sk iP 20 35 07.0
Um iP 20 34 42.9
Ud iP 20 35 08.3
(cont.)

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

1972
Sep. 29 (cont.)

Ud	i	20 35 24.1	
De	eP	20 35 14	

Szechwan, China (h = N).
M = 5.4 (Up,Ki).

" 29	Ud	iP	22 47 46.2
" 30	Ki	iPKP	01 39 57.6
		ipPKP	01 40 27.0

South Sandwich Islands.
h = 110 km (Ki).

" 30	Ud	iP	02 41 27.0

Mexico (h = 50 km).

" 30	Ud	iPKP	03 28 55.1

Tonga Islands (h = N).

" 30	Up	iP	07 07 23.0	
		ipP	07 08 07.9	
		isP	07 08 28.9	
			micr	sec
		sP Z'	0.1	1.0
	Ki	iP	07 07 31.8	C
		ipP	07 08 16.3	
	Sk	eP	07 07 49	
		epP	07 08 31	
	Um	iP	07 07 21.3	C
		ipP	07 08 05.3	
	Ud	iP	07 07 39.0	
		ipP	07 08 23.9	
		isP	07 08 45.6	
	De	eP	07 07 36	
		ipP	07 08 18.4	

Hindu Kush.
h = 210 km (Up,Ki,Sk,Um,Ud, De).

" 30	Up	iP	10 36 35.6	C
	Ki	iP	10 36 43.6	
	Sk	iP	10 37 00.9	
	Um	iP	10 36 33.3	C
	Ud	iP	10 36 52.3	C
	De	iP	10 36 48.5	

Afghanistan-USSR
(h = 180 km).

" 30	Ki	iPn	10 42 44.4
		iSn	10 43 33.9
		iS*	10 43 48.7
	Sk	ePg1	10 44 25
		eSg2	10 46 46
	Um	i	10 44 11.0

(cont.)

1972
Sep. 30 (cont.)

Um	iSg1	10 45 16.2
Ud	iPg1	10 45 03.9

Northwest USSR-Norway border region, 69.3°N, 31.1°E.
Origin time = 10 41 40.
Explosion.

" 30	Up	iSg1	12 03 02.7
	Ki	eSg1	12 05 06
	Sk	eSg2	12 05 03
	Um	iSg1	12 03 19.6
	Ud	iSg1	12 04 01.7
	De	eSg1	12 04 29

Western USSR.
Explosion.

" 30	Up	eSg1	15 11 44
	Ki	eSg1	15 12 24
		eSg2	15 12 38
	Sk	iSg1	15 12 57.7
	Um	iSg1	15 11 06.7
	Ud	iSg1	15 12 44.2
	De	eSg1	15 13 25

Lake Ladoga.
Explosion.

" 30	Ud	iP	16 53 30.7
" 30	Ud	iP	16 55 15.3
" 30	Ud	iP	17 02 36.9
" 30	Ud	iP	18 25 00.4
" 30	Ud	iP	18 26 12.2
" 30	Up	iP	22 58 37.5
	Ki	iP	22 57 31.4
	Um	iP	22 58 07.3
	Ud	iP	22 58 31.7

Arctic Ocean (h = N).

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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

O C T O B E R 1 - 31, 1972

1972 Oct.	1	Up	iP		00 59 50.1		
			iPP		01 00 04.3		
			iS		01 02 43.4		
					micr	sec	
			P	Z'	0.1	1.0	
			PP	Z'	0.1	0.8	
		Ki	iP		01 01 14.0		
			i		01 01 19.5		
			iPP		01 01 39.8		
			iS		01 05 33.8		
					micr	sec	
			P	Z'	0.1	0.7	
			PP	Z'	0.1	0.7	
			S	Z'	0.1	1.0	
		Sk	iP		01 00 42.5		
			i		01 00 47.3		
		Um	iP		01 00 31.1	C	
			iPP		01 00 46.8		
			i		01 05 25.2		
		Ud	iP		01 00 05.2		
			iPP		01 00 20.7		
			i		01 00 46.5		
		De	iP		00 59 27.0		
			i(PP)		00 59 45.2		
			i		01 00 18.0		
		Rumania (h = 160 km).					
		m = 5.2 (Up,Ki).					
"	1	Up	eP		03 05 13		
		Ud	iP		03 05 20.5		
		Greece.					
"	1	Up	iP		04 35 55.3		
			i		04 35 59.7		
					micr	sec	
			P	Z'	0.1	1.1	
			Mx	E	0.7	8	
			Mx	N	1.0	8	
			Mx	Z	1.7	8	
		(cont.)					

1972 Oct.	1	(cont.)					
		Ki	iP		04 37 23.2		
			i		04 37 31.2		
					micr	sec	
			P	Z'	0.2	1.2	
			Mx	E	2.0	13	
			Mx	N	1.1	9	
			Mx	Z	1.4	9	
		Sk	iP		04 36 43.9		
			i		04 36 49.8		
		Um	iP		04 36 39.4		
			iPP		04 36 55.5		
			iLg2		04 43 23.0		
		Ud	iP		04 36 04.5	C	
			iPP		04 36 26.0		
		De	iP		04 35 18.8		
			iPP		04 35 29.2		
		Yugoslavia (h = 5 km).					
		m = 5.3, M = 4.7 (Up,Ki).					
		If the second arrival at					
		Up,Ki,Sk is interpreted as					
		pP, it gives h = 25 km.					
"	1	Ud	iP		05 21 15.6		
"	1	Up	iP		06 40 46.9		
		Um	iP		06 40 47.5		
		Ud	iP		06 40 37.2		
"	1	Up	iP		10 18 36.3		
		Ki	iP		10 17 33.0		
			ipP		10 17 50.9		
		Sk	ipP		10 18 18.8		
		Um	ipP		10 18 20.2		
		Ud	eP		10 18 27		
			ipP		10 18 43.9		
			iPcP		10 19 20.7		
		De	iP		10 18 57.0		
		Alaska.					
		h = 70 km (Ki,Ud).					

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

1972				
Oct.	1	Up	ePKP	12 28 24
		Um	iPKP	12 28 11.5
		Ud	iPKP	12 28 25.7
		De	iPKP	12 28 35.2
"	1	Um	iP	13 22 51.4
"	1	Ud	eP	13 24 28
"	1	Up	ePP	17 18 28
		Ud	iP	17 17 06.9
		Pakistan (h = 70 km).		
"	1	Up	iP	18 25 05.4
		Ki	eP	18 25 15
		Sk	iP	18 25 31.8
		Um	iP	18 25 03.9
		Ud	iP	18 25 22.2
			i(pP)	18 25 52.0
		De	eP	18 25 19
		Hindu Kush (h = 100 km).		
"	1	Ud	iP	20 47 59.9
		Kurile Islands.		
"	1	Up	iP	21 54 40.6
			ipP	21 54 56.5
		Ud	iP	21 54 39.6
		Aleutian Islands.		
		h = 60 km (Up).		
"	1	Up	eP	23 50 02
			iLg2	23 55 12.5
		Ki	iP	23 48 17.5
			iS	23 49 57.7
		Sk	eP	23 49 20
		Um	iP	23 49 17.4
			iS	23 51 23.2
			iLi	23 52 25.8
		Ud	eP	23 50 05
		Arctic Ocean, south of Svalbard.		
"	2	Up	iP	00 01 38.1 D
			i	00 02 14.9
			iS	00 11 42.5
			iSP	00 13 00.7
				micr sec
			P Z'	0.5 0.8
		Ki	iP	00 01 22.4 D
			iPP	00 05 04.0
				micr sec
			P Z'	1.4 0.9
		Sk	iP	00 01 43.7 D
			iPP	00 05 42.0
		Um	iP	00 01 27.9 D
		(cont.)		

1972				
Oct.	2	(cont.)		
		Um	iS	00 11 23
			iSP	00 12 37
		Ud	iP	00 01 46.9 D
			i	00 02 24.7
		De	iP	00 01 52.7 D
			iPP	00 05 54.4
		Mindanao (h = 610 km).		
		m = 6.6 (Up,Ki).		
"	2	Up	iP	02 33 27.4 C
		Ki	iP	02 32 38.2
		Um	eP	02 33 01
		Ud	iP	02 33 32.6 C
		De	iP	02 33 51.7
		Kurile Islands (h = N).		
"	2	Up	eP	03 54 52
		Kurile Islands (h = 140 km).		
"	2	Ud	ePKP	06 06 16
		De	iPKP	06 06 27.4
"	2	Ki	ePgl	09 28 43
			iSgl	09 29 20.8
		Sk	iSgl	09 29 27.1
		Um	ePgl	09 29 01
			iSn	09 29 34.8
			iSgl	09 29 47.6
		Ud	iSgl	09 31 14.7
		Nordland, Norway,		
		66.5°N, 14.1°E.		
		Origin time = 09 27 52.		
		Explosion.		
"	2	Ud	iPKP	10 11 57.3
		South Sandwich Islands (h = N).		
"	2	Up	iSgl	10 43 42.8
		Ud	iPgl	10 43 52.0
			iSgl	10 44 25.8
		De	iSgl	10 44 46.1
		Probably off coast of Södermanland, Sweden.		
		Explosion?		
"	2	Up	iP	11 07 53.0
		Um	iP	11 07 47.4 C
		Ud	iP	11 08 06.2 C
"	2	Up	i	15 48 54.7
		Um	iPKP	15 48 38.1
		Ud	iPKP	15 48 48.3
			i	15 49 00.5
		De	iPKP	15 48 58.8
		Fiji Islands (h = 610 km).		

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

1972 Oct.	2	De	e(P)	16 14 26
"	2	Ud	iSgl	18 07 11.2
		Southwest Norway. By combination with Bergen and Kongsberg readings.		
"	2	Up	iP	19 19 00.7
		Ud	iP	19 19 04.5
		De	iP	19 19 25.7
		Kurile Islands-Kamchatka.		
"	2	Ki	iSgl	19 46 49.0
		Northern Finland (Helsinki).		
"	2	Ud	iP	20 05 12.2
		De	iP	20 04 41.6
		Crete.		
"	2	Ud	iPP	20 55 26.7
		Chile-Argentina (h = 80 km).		
"	2	Ud	iP	21 04 54.1
"	2	Up	iPKP	21 22 26.6
		Um	i(PKP)	21 22 09.5
		Ud	i(PKP)	21 22 21.6
			iPKP	21 22 29.6
		De	iPKP	21 22 43.1
"	2	Up	eP	22 02 49
		Um	eP	22 02 27
		Ud	iP	22 02 55.2
		Kurile Islands (h = N).		
"	2	Up	iP	23 29 50.7
			ipP	23 30 02.2
		Ki	eP	23 29 13
		Um	iP	23 29 30.2
			ipP	23 29 42.2
		Ud	iP	23 29 57.6
			ipP	23 30 09.2
		Japan. h = 40 km (Up,Um,Ud).		
"	3	Ud	iPP	00 07 09.4
		De	iPKP	00 06 01.5
		New Britain (h = 45 km).		
"	3	Up	iP	02 01 50.5
		Ud	iP	02 02 02.3
"	3	Um	iPgl	06 41 45.9
			iSgl	06 42 03.7
			iRg	06 42 08.4
		Probably Ångermanland, Sweden, 62.9°N, 18.2°E. Origin time = 06 41 22.		
1972 Oct.	3	Up	iPgl	06 44 26.8
		Sk	iSgl	06 45 00.4
		Um	iPgl	06 43 56.2
			iSgl	06 44 14.1
			iRg	06 44 18.6
		Ud	iPgl	06 44 36.0
			iSgl	06 45 25.9
		De	iSgl	06 46 59.8
		Ångermanland, Sweden, 62.9°N, 18.2°E. Origin time = 06 43 32.		
"	3	Sk	eSgl	06 46 58
		Um	iPgl	06 45 53.6
			iSgl	06 46 11.2
			iRg	06 46 15.9
		Ud	iPgl	06 46 33.4
			iSgl	06 47 22.8
		De	iSgl	06 48 56.9
		Ångermanland, Sweden, 62.9°N, 18.2°E. Origin time = 06 45 29.		
"	3	Up	iPgl	07 30 21.2
		Sk	ePgl	07 30 14
			iSgl	07 30 55.7
		Um	iPgl	07 29 50.1
			iSgl	07 30 07.7
			iRg	07 30 12.6
		Ud	iPgl	07 30 30.9
			iSgl	07 31 21.9
		De	iSgl	07 32 54.8
		Ångermanland, Sweden, 62.9°N, 18.2°E. Origin time = 07 29 27.		
"	3	Up	iPgl	07 31 33.9
		Sk	iSgl	07 32 08.4
		Um	iPgl	07 31 02.4
			iSgl	07 31 19.6
			iRg	07 31 24.6
		Ud	iPgl	07 31 43.0
			iSgl	07 32 29.7
		De	iSgl	07 34 07.0
		Ångermanland, Sweden, 62.9°N, 18.2°E. Origin time = 07 30 38.		
"	3	Sk	iSgl	08 49 17.1
		Um	iPgl	08 48 12.0
			iSgl	08 48 29.6
			iRg	08 48 34.4
		Ud	iPgl	08 48 46.7
			iSgl	08 49 36.3
		De	eSgl	08 51 19
		Ångermanland, Sweden, 62.9°N, 18.2°E. Origin time = 08 47 47.		

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

1972 Oct.					
	3	Up	iP	09 04 38.4	
			i	09 04 39.4	
			iS	09 08 23.0	
			iLgl	09 10 37	
				micr	sec
			P	Z' 1.3	0.9
		Ki	iP	09 05 19.9	C
			i	09 05 27.2	
			iSn	09 10 02.4	
			i	09 10 49.5	
				micr	sec
			P	Z' 1.1	0.8
		Sk	iP	09 05 20.5	
			i	09 05 27.7	
			i(SS)	09 10 27.4	
			iLgl	09 12 56.8	
		Um	iP	09 04 51.5	C
			iLgl	09 11 12.8	
		Ud	iP	09 05 00.6	C
			iLgl	09 11 40.1	
			iLg2	09 12 10.5	
		De	iP	09 04 46.8	C

Northwest of the Caspian Sea.
Origin time = 09 00 00.
m = 6.4 (Up,Ki).
Underground explosion.

"	3	Sk	iSgl	09 15 37.0	
		Um	iPgl	09 14 31.1	
			iSgl	09 14 48.6	
		Ud	iPgl	09 15 12.0	
			iSgl	09 15 58.3	
		De	eSgl	09 17 37	

Ångermanland, Sweden,
62.9°N, 18.2°E.
Origin time = 09 14 07.

"	3	Up	iPgl	09 39 35.1	
			iSgl	09 40 11.2	
		Sk	ePgl	09 39 27	
			iSgl	09 40 11.4	
		Um	iPgl	09 39 02.6	
			iSgl	09 39 19.6	
			iRg	09 39 24.6	
		Ud	iPgl	09 39 44.9	
			iSgl	09 40 31.6	
		De	iSgl	09 42 08.5	

Ångermanland, Sweden,
62.9°N, 18.2°E.
Origin time = 09 38 39.

"	3	Up	iP	10 25 13.6	C
				micr	sec
			P	Z' 0.2	0.9
		Ki	eP	10 24 25	
				micr	sec
			P	Z' 0.1	0.8

(cont.)

1972 Oct.					
	3	(cont.)			
		Sk	iP	10 25 00.1	
		Um	iP	10 24 47.4	
		Ud	iP	10 25 18.8	C
		De	iP	10 25 37.5	

Kurile Islands (h = N).
m = 6.2 (Up,Ki).

"	3	Ud	iPgl	13 01 03.2
			iSgl	13 01 35.8
		De	iPgl	13 01 03.9
			iSgl	13 01 34.3

Off coast of Bohuslän,
Sweden, 58.2°N, 11.1°E.
Origin time = 13 00 23.
By combination with
Kongsberg readings.
This event is probably
followed closely by two
more events.
Explosions?

"	3	Ud	iPgl	13 34 21.8
			iSgl	13 34 54.6
		De	iPgl	13 34 22.3
			iSgl	13 34 51.8

Off coast of Bohuslän,
Sweden, 58.2°N, 11.1°E.
Origin time = 13 33 42.
Explosion?

"	3	Ud	eP	14 40 24
"	3	Ud	ePKP	16 35 00

Santa Cruz Islands
(h = 180 km).

"	3	De	ePKP	18 24 11
			i	18 24 22.5

Tonga Islands (h = 60 km).

"	3	Ki	iP	18 37 31.0
		Ud	eP	18 38 24

Aleutian Islands (h = 40 km).

"	4	Sk	eP	05 05 02
		Ud	eP	05 05 15

Off Pacific coast of
Central America (h = N).

"	4	Um	iP	05 33 36.3
			ipP	05 33 48.6
		Ud	iP	05 34 07.8
			ipP	05 34 20.7
			iPcP	05 34 32.9

Kurile Islands.
h = 45 km (Um,Ud).

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

1972 Oct.	4	Ud	iP		06 13 50.3
"	4	Up	iP		06 19 16.0
			e		06 19 38
		Um	iP		06 19 49.6
		Ud	iP		06 19 27.1
		De	eP		06 18 55
		Turkey (h = N).			
"	4	Up	iP		08 53 40.0
					micr sec
			P	Z'	0.1 1.2
			Mx	E	0.8 9
			Mx	N	1.3 12
			Mx	Z	1.6 12
		Ki			micr sec
			Mx	E	3.5 17
			Mx	N	2.6 17
			Mx	Z	1.9 18
		Sk	eP		08 54 17
		Um	eP		08 54 12
		Ud	iP		08 53 39.2
			i		08 53 47.5
			iPP		08 53 59.1
		De	eP		08 53 06
		Greece (h = N).			
		M = 4.8 (Up,Ki).			
"	4	Ud	e(Sgl)		12 23 21
		De	iPn		12 21 17.8
			iPgl		12 21 21.7
			iSgl		12 21 44.1
			iRg		12 21 53.3
"	4	Ud	iSgl		15 09 31.1
		Southwest Norway.			
		By combination with Bergen and Kongsberg readings.			
"	5	Ud	iP		04 18 06.5
		Japan (h = 25 km).			
"	5	Sk	eP		05 20 24
		Ud	iP		05 20 19.0 D
		North Atlantic Ocean (h = N).			
"	5	Sk	eP		08 57 18
		Ud	iP		08 56 43.4
			i		08 56 48.8
		Greece.			
"	5	Sk	iP		11 00 40.6
		Um	eP		11 00 57
		Ud	iP		11 00 46.5
		Guatemala (h = 90 km).			
1972 Oct.	5	Sk	eP		13 45 27
		Ud	iP		13 44 54.8
		Greece.			
"	5	Ud	iP		21 52 42.0
			i		21 52 58.0
		North Atlantic Ocean (h = N).			
"	6	Ud	iP		05 51 35.3
		De	iP		05 51 58.8
		Kodiak Island (h = 35 km).			
"	6	Ud	i(Sgl)		09 38 28.0
"	6	Up	i(P)		10 56 04.2
"	6	Up	iP		11 42 36.8
			ipP		11 42 46.1
					micr sec
			pP	Z'	0.1 0.8
			Mx	E	2.0 21
			Mx	N	1.6 18
		Ki	iP		11 42 00.2
			ipP		11 42 09.3
					micr sec
			Mx	E	1.5 18
			Mx	N	2.0 18
		Sk	iP		11 42 33.8
			ipP		11 42 43.0
		Um	iP		11 42 16.1 C
			ipP		11 42 25.2
		Ud	iP		11 42 44.4 C
			ipP		11 42 53.6
		De	eP		11 42 58
			ipP		11 43 07.4
		Japan.			
		h = 35 km (Up,Ki,Sk,Um,Ud, De).			
		M = 5.6 (Up,Ki).			
"	6	Up	iP		15 18 46.3
"	6	Up	eP		16 04 08
		Ki	eP		16 03 48
		Um	eP		16 03 55
		Ud	eP		16 04 17
		Formosa (h = N).			
"	6	De	iPKP		16 53 54.4
		New Britain (h = 60 km).			
"	6	Up	ePKP		17 01 44
			i(PP)		17 02 55.6
					micr sec
			Mx	E	4.6 20
			Mx	N	6.8 20

(cont.)

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

1972
Oct. 6 (cont.)

Up			micr sec
	Mx	Z	11 20
Ki	iPKP		17 01 30.0
	ePP		17 02 10
			micr sec
	Mx	E	12 25
	Mx	N	7.8 21
	Mx	Z	5.5 19
Sk	ePKP		17 01 37
	iPP		17 02 43.1
Um	iPKP		17 01 23.9
	iPP		17 02 11
Ud	ePKP		17 01 35
	i		17 01 46.9
De	iPKP		17 01 38.4
	i		17 02 23.8

New Britain (h = 60 km).
M = 6.4 (Up,Ki).

"	6	Up	iP	20 13 03.1
		Ki	iP	20 12 47.8
		Sk	iP	20 13 07.7
		Um	iP	20 12 52.6
		Ud	iP	20 13 10.3
			i	20 13 11.9
		De	iP	20 13 16.9

Mindanao (h = 540 km).

"	6	Up	iP	20 34 13.0	C
			ipP	20 34 49.3	
				micr sec	
			P Z'	0.1 0.9	
		Ki	iP	20 34 12.7	
				micr sec	
			P Z'	0.2 1.0	
		Sk	iP	20 34 27.6	C
		Um	iP	20 34 09.6	C
		Ud	iP	20 34 23.3	C
			i	20 34 24.7	
		De	iP	20 34 22.1	C
			ipP	20 34 57.4	

Sumatra.
h = 140 km (Up,De).
m = 5.8 (Up,Ki).

"	7	Up	i(P)	00 52 23.6
"	7	De	iP	01 41 46.7

Laptev Sea (h = N).

"	7	Um	iP	02 14 33.7
			i	02 14 45.6
"	7	Um	iP	03 13 38.6
		Ud	iP	03 14 19.6

1972
Oct. 7

Ud	iP		03 37 03.4
De	eP		03 36 28

Greece.

"	7	Up	iPKP	05 51 48.4
		Ud	iPKP	05 51 49.6
		De	iPKP	05 51 58.3
			ipPKP	05 53 36.1

Fiji Islands.
h = 410 km (De).

"	7	Ud	iPKP	12 53 31.1
		De	iPKP	12 53 36.7
			ipPKP	12 53 56.6

New Ireland.
h = 70 km (De).

"	7	Up	i(PKP)	13 58 57.5
		Ud	i(PKP)	13 59 00.6
"	8	Ud	iPKP	03 04 48.3 C
			i	03 04 54.9
		De	iPKP	03 04 50.2 C
			i	03 04 56.1

West Chile Rise (h = N).

"	8	Ud	iP	04 19 05.5

Greece.

"	8	Um	iP	06 18 41.2
		Ud	iP	06 18 59.6

Hindu Kush.
Intermediate depth.

"	8	Ki	ePn	09 24 46
			ePgl	09 24 53
			iSgl	09 26 00.4
		Um	iSgl	09 27 33.5

Northwest USSR.
Explosion.

"	8	Ud	iPKP	10 09 32.2
		De	iPKP	10 09 43.6 C
"	8	Ki	e(pP)	11 16 02
		Um	iP	11 15 58.5
			ipP	11 16 24.3
		Ud	iP	11 16 29.5

Japan.
h = 100 km (Um).
The focal depth differs quite a lot from that determined by the NEIS, but makes a better fit to the clear P-onset at Um and Ud according to the Jeffreys-Bullen tables.

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

1972				
Oct.	8	Ud	iP	12 38 57.6
		Kurile Islands.		
"	8	Um	iP	13 06 33.4
			ipP	13 07 01.2
		Ud	iP	13 06 51.8
			ipP	13 07 19.3
		De	iP	13 06 55.7
			ipP	13 07 24.7
		Celebes.		
		h = 110 km (Um,Ud,De).		
"	8	Um	iP	16 04 07.2
"	8	Ud	iP	16 06 56.9
"	8	Up	iP	17 08 39.5
"	8	Up	eP	17 14 11
		Um	iP	17 13 48.6
		Ud	iP	17 14 17.3
		De	eP	17 14 38
		Japan (h = 60 km).		
"	8	Um	iP	18 16 12.2
"	8	Um	iSKP	19 48 23.5
		Ud	iPKP	19 45 46.6
			iSKP	19 48 36.8
		De	iPKP	19 45 58.7
			iSKP	19 48 45.1
		Fiji Islands (h = 610 km).		
"	8	Ki	eP	21 12 04
		Ud	iP	21 12 13.1
		De	iP	21 12 10.5
		Pakistan (h = 45 km).		
"	8	Up	iP	23 02 05.2
			i	23 02 20.9
		Ud	iP	23 02 18.7
			i	23 02 37.7
		De	eP	23 02 18
			i	23 02 35.6
		Afghanistan-USSR (h = 110 km).		
"	8	Ud	iPKP	23 20 38.7
			i	23 20 40.7
			i	23 20 50.2
		De	iPKP	23 20 51.4
"	9	Up	iPKP	00 23 44.3
			i	00 23 52.0
		Sk	iPKP	00 23 43.1
		Um	iPKP	00 23 34.2
		Ud	iPKP	00 23 46.8
			i	00 23 55.5
		(cont.)		

1972				
Oct.	9	(cont.)		
		De	iPKP	00 23 54.4
			i	00 24 09.0
"	9	Ki	iP	02 06 10.8
		Um	iP	02 05 50.5
		Ud	iP	02 05 57.4
			i	02 06 22.8
		De	iP	02 05 43.7
		Iran (h = 50 km).		
"	9	Up	eP	05 59 39
		Ki	iP	05 59 21.4
		Ud	iP	05 59 43.0
		Molucca Passage (h = 35 km).		
"	9	Ud	iP	06 02 56.6
		Alaska (h = N).		
"	9	Up	iP	07 26 04.6 C
				micr sec
			P Z'	0.2 1.0
			Mx N	0.5 15
			Mx Z	0.5 15
		Ki	iP	07 26 37.8 C
			iPP	07 28 26.2
				micr sec
			P Z'	0.1 0.8
			Mx E	0.6 13
			Mx N	1.4 16
		Sk	iP	07 26 38.3 C
			i	07 27 12.8
			iPP	07 28 27.2
		Um	iP	07 26 16.1 C
		Ud	iP	07 26 20.1 C
		De	iP	07 26 05.5 C
		Iran (h = N).		
		m = 5.9, M = 5.0 (Up,Ki).		
"	9	Ud	iP	08 37 15.7
		De	iP	08 36 59.0
		Iran (h = 10 km).		
"	9	Up	iP	09 44 23.0
			iPcP	09 44 46.8
		Ki	iP	09 43 38.6
		Sk	iP	09 44 13.1
		Um	iP	09 43 58.4
			iPcP	09 44 31.0
		Ud	iP	09 44 29.4
			ipP	09 44 45.1
		De	iP	09 44 46.6
		Kurile Islands.		
		h = 60 km (Ud).		
"	9	Up	iP	09 50 59.3
		Ki	iP	09 50 15.5
		(cont.)		

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

1972 Oct. 9 (cont.)

	Um	iP	09 50 35.4
	Ud	iP	09 51 06.9
	De	iP	09 51 23.8

Kurile Islands (h = 45 km).

"	9	Up	iP	11 08 16.4
"	9	Um	iP	11 59 25.5

Aleutian Islands (h = 40 km).

"	9	Um	eSgl	13 23 37
		Ud	iSgl	13 24 09.2
		De	eSgl	13 24 34

Western USSR.
Explosion.

"	9	Up	iP	15 17 23.8
		Ud	iP	15 17 40.4

Hindu Kush (h = 100 km).

"	9	Up	iP	23 57 13.2
		Ki	iP	23 57 51.1
		Um	iP	23 57 28.1
		Ud	iP	23 57 29.0
		De	iP	23 57 12.0

Iran (h = 20 km).

"	10	Ud	iP	02 28 37.8
		De	iP	02 28 10.3

Dodecanese Islands (h = 50 km).

"	10	Up	iP	04 37 02.0
		Ki	iP	04 38 09.0
		Sk	iP	04 37 39.9
		Um	iP	04 37 33.6
		Ud	iP	04 37 09.0
		De	iP	04 36 36.4 C

Crete (h = N).

"	10	Up	iP	07 37 44.5
"	10	Sk	eP	12 31 01
		Ud	eP	12 31 03

Panama (h = N).

"	10	Ud	iP	19 29 08.9
		De	iP	19 28 36.4

Crete (h = 40 km).

"	10	Ki	iP	21 05 22.0
		Ud	iP	21 05 57.1

Ryukyu Islands (h = 50 km).

"	10	Up	iP	22 56 25.4
			iPP	23 00 34.5

(cont.)

1972 Oct. 10 (cont.)

	Up	iSKS		23 06 43	
				micr	sec
		PP	Z'	0.4	2.0
	Sk	eP		22 56 27	
		i(PKKP)		23 11 57.7	
	Um	iPP		23 00 49.1	
		iSKS		23 06 52	
	Ud	iP		22 56 17.8	
		iPP		23 00 18.5	
		i		23 00 21.1	
		iPKKP		23 12 20.0	
	De	iP		22 56 15.1	
		iPP		23 00 14.7	
		ePKKP		23 12 22	

Chile-Bolivia (h = 130 km).

"	11	Up	iP	00 40 18.0 C
			ipP	00 40 46.8
		Ki	iP	00 39 24.1
			ipP	00 39 52.2
		Sk	iP	00 40 01.2
		Um	iP	00 39 46.3
		Ud	iP	00 40 21.5 C
		De	iP	00 40 43.3 C
			ipP	00 41 10.7

Kamchatka.
h = 120 km (Up,Ki,De).

"	11	Up	iP	00 44 35.4
		Ki	iP	00 44 06.6
		Um	iP	00 44 18.6 C
		Ud	iP	00 44 41.3
		De	iP	00 44 53.0

Mariana Islands (h = 320 km).

"	11	Ud	iP	07 05 55.6

Greece.

"	11	Ki	iP	07 26 13.1
		Ud	eP	07 26 49
"	11	Sk	eSgl	10 21 06

Southwest Norway.
By combination with
Bergen readings.

"	11	Up	iPKP	11 06 21.8
		Ud	iPKP	11 06 23.4
		De	iPKP	11 06 35.0
			i	11 06 47.5
			ipPKP	11 08 57.8

Fiji Islands.
h = 650 km (De).

"	11	Ud	iP	13 29 49.1
		De	iP	13 29 39.3

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

1972						
Oct.	12	Up	iP		00 29 06.3	C
			iPP		00 30 47.8	
					micr sec	
			PP	Z'	0.1 1.0	
		Ki	iP		00 29 13.0	
					micr sec	
			P	Z'	0.1 0.8	
		Sk	iP		00 29 31.0	
			iX		00 29 49.9	
		Um	iP		00 29 03.9	C
		Ud	iP		00 29 23.3	C
		De	iP		00 29 20.0	

Kashmir (h = 50 km).
m = 5.6 (Up,Ki).
For suggested interpretation of X (Sk), see Sep. 3, 1972, at 16.56.

"	12	Ud	iP		10 33 36.4	
"	12	Ud	iPgl		12 10 04.1	
			iSgl		12 10 28.5	
		De	iSgl		12 11 24.7	

South Norway,
59.5°N, 10.3°E.
Origin time = 12 09 32.
By combination with Kongsberg readings.

"	12	Up	iP		18 03 16.4	C
			iSKS		18 13 42	
		Ki	iP		18 03 00.0	
			iPP		18 06 53.9	
					micr sec	
			P	Z'	0.1 1.1	
		Sk	eP		18 03 23	
			iPP		18 07 27.6	
		Um	iP		18 03 05.6	
			iSKS		18 13 31	
		Ud	iP		18 03 24.3	
			i		18 04 02.8	
			i(PP)		18 06 49.7	
			i(PP)		18 07 22.5	

Halmahera (h = 110 km).

"	12	Ud	iP		23 10 01.6	
"	13	Up	iSgl		01 32 22.2	
		Ki	iPgl		01 28 44.7	
			iSgl		01 28 53.9	
			iRg		01 28 57.0	
					micr sec	
			Rg	Z'	0.3 1.0	
		Sk	eSgl		01 31 12	
		Um	iSgl		01 30 18.8	
		Ud	eSgl		01 32 37	

(cont.)

1972 Oct. 13 (cont.)

Malmberget, Sweden,
67.2°N, 20.5°E.
Origin time = 01 28 34.
Rockburst at the iron ore mines.
Felt.

"	13	Up	iSgl		01 32 43.6	
		Ki	iPgl		01 29 05.9	
			iSgl		01 29 14.9	
			iRg		01 29 17.9	
					micr sec	
			Rg	Z'	1.6 1.0	
		Sk	iSgl		01 31 33.5	
		Um	iPgl		01 29 55.3	
			iSn		01 30 28.2	
			iSgl		01 30 39.9	
			iRg		01 31 02.2	
		Ud	iSn		01 32 15.5	
			iSgl		01 32 59.0	

Malmberget, Sweden,
67.2°N, 20.5°E.
Origin time = 01 28 56.
Rockburst at the iron ore mines.
Felt.

"	13	Up	iP		04 57 04.4	D
			ipP		04 57 14.5	
			iS		05 05 50	
			iP'P'		05 25 23.9	
					micr sec	
			P	Z'	0.3 1.0	
			pP	Z'	0.3 1.0	
			Mx	E	1.3 23	
			Mx	N	2.5 23	
			Mx	Z	3.5 23	
		Ki	iP		04 56 11.7	D
			ipP		04 56 22.6	
			iS		05 04 17	
			iP'P'		05 25 43.4	
					micr sec	
			P	Z'	0.5 1.0	
			pP	Z'	0.9 1.3	
			Mx	E	2.0 16	
			Mx	N	1.9 16	
			Mx	Z	1.4 15	
		Sk	iP		04 56 40.0	D
			ipP		04 56 50.6	
			i		05 25 26.9	
			iP'P'		05 25 33.3	
		Um	iP		04 56 38.6	D
			ipP		04 56 49.0	
			iS		05 05 11	
			i		05 25 23.2	
			iP'P'		05 25 30.4	

(cont.)

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

1972
Oct. 13 (cont.)

Ud	iP	04 57 03.5	D
	ipP	04 57 14.1	
	iP'P'	05 25 24.3	
De	iP	04 57 25.8	D
	ipP	04 57 36.9	

Alaska.
h = 40 km (Up,Ki,Sk,Um,Ud, De).
m = 6.5, M = 5.5 (Up,Ki).
Double P'P' at Sk and Um.

" 13	Up	iP	05 12 31.3		C
		iPP	05 14 14.1		
			micr	sec	
		P	Z' 0.1	0.7	
	Ki	iP	05 12 37.9		C
	Sk	iP	05 12 56.3		C
	Um	iP	05 12 28.5		C
		iPP	05 14 09.6		
	Ud	iP	05 12 47.9		C
		iPP	05 14 34.1		
	De	iP	05 12 46.1		C
		iPP	05 14 32.3		

Kashmir (h = N).

" 13	Up	iP	09 36 42.5	
	Um	iP	09 36 14.0	
	Ud	iP	09 36 46.9	

Aleutian Islands (h = N).

" 13	Ud	iP	12 02 43.5	
" 13	Ud	iP	16 17 06.6	

Colombia (h = 170 km).

" 13	Up	iPKP	17 49 00.2	
	Um	iPKP	17 48 50.8	C
	Ud	ePKP	17 49 00	
" 14	Up	iP	00 10 24.3	C
		ipP	00 11 46.6	
		iS	00 18 32.7	
		iScS	00 19 35.5	
			micr sec	
		P	Z' 0.1 0.8	
	Ki	iP	00 09 36.8	C
		epP	00 11 03	
			micr sec	
		P	Z' 0.2 0.9	
	Um	iP	00 09 58.7	C
		ipP	00 11 22.3	
		iS	00 17 45.2	
		iScS	00 19 06.4	
	Ud	iP	00 10 29.8	C
		ipP	00 11 52.9	

(cont.)

1972
Oct. 14 (cont.)

	De	iP	00 10 48.4	C

Okhotsk Sea.
h = 400 km (Up,Um,Ud).
m = 5.6 (Up,Ki).

" 14	Um	iP	02 25 01.1	

Tanimbar Islands (h = N).

" 14	Up	iP	03 40 27.5	C
		i	03 40 44.1	
			micr sec	
		P	Z' 0.1 0.9	
	Ki	iP	03 39 35.3	
	Um	iP	03 40 01.6	C
		i	03 40 21.3	
		iPcP	03 40 36.6	
	Ud	iP	03 40 28.0	
	De	iP	03 40 50.2	

Aleutian Islands (h = 60 km).

" 14	Um	eP	06 09 45	

Celebes (h = 170 km).

" 14	Ud	iPKP	08 03 46.6	
	De	iPKP	08 03 56.8	
" 14	Up	ePKP	12 26 24	
		i	12 26 30.9	
	Um	iPKP	12 26 12.8	
		i	12 26 26.6	
	Ud	iPKP	12 26 24.2	
		i	12 26 31.8	
	De	iPKP2	12 26 47.4	

South of Kermadec Islands (h = N).

" 14	Um	iPKP	12 57 41.3	
	Ud	iPKP	12 57 53.2	
		i	12 58 01.4	
" 14	Up	iP	13 01 30.0	
	Um	iP	13 01 35.8	
	Ud	iP	13 01 54.1	C
	De	eP	13 01 52	

Hindu Kush.
Intermediate depth.

" 14	Ud	iP	14 45 43.7	

Kamchatka.

" 14	Um	iPKP	15 10 19.1	C
	Ud	iPKP	15 10 28.6	

New Hebrides Islands (h = 60 km).

" 14	Um	iP	15 46 27.7	

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

1972 Oct.	14	Um	iP		16 33 27.1
		Ud	iP		16 32 57.2
"	14	Ud	iPKP		18 36 33.9
			i		18 36 40.0
		De	iPKP		18 36 45.8
"	15	Up	iPKP		00 11 54.3 D
			i		00 12 01.9
					micr sec
			PKP	Z'	0.1 1.0
		Ki	iPKP		00 11 31.8
					micr sec
			Mx	N	1.0 19
		Sk	iPKP		00 11 49.2
		Um	iPKP		00 11 43.6
		Ud	iPKP		00 11 55.9
			i		00 12 06.0
		De	ePKP		00 12 05
			i		00 12 18.7
		South of Kermadec Islands (h = N).			
"	15	Ud	iP		01 13 03.6
"	15	Um	iPKP		01 17 38.3
			i		01 17 51.6
		Ud	iPKP		01 17 51.3 C
			i		01 18 03.9
"	15	Up	iPKP		01 19 49.2
			i		01 19 57.1
					micr sec
			PKP	Z'	0.1 1.1
		Ki	iPKP		01 19 27.9
					micr sec
			PKP	Z'	0.5 2.0
		Sk	iPKP		01 19 43.3
		Um	iPKP		01 19 38.6
			i		01 19 51.3
		Ud	iPKP		01 19 51.2
			i		01 20 00.4
		De	iPKP2		01 20 12.0
		South of Kermadec Islands (h = N).			
"	15	Um	iP		03 39 46.9
		Ud	iP		03 40 06.2
		Kashmir.			
"	15	Up	ePKP		03 44 27
			i		03 44 35.4
		Sk	i(PKP2)		03 44 40.9
		Um	iPKP		03 44 14.6
			i		03 44 26.1
		Ud	iPKP		03 44 26.7
			i		03 44 35.4

1972 Oct.	15	Um	iPKP		04 30 02.6
			i		04 30 14.0
		Ud	iPKP		04 30 14.6
			i		04 30 21.5
"	15	Up	iPcP		04 44 17.0
					micr sec
			PcP	Z'	0.1 0.9
		Ki	iP		04 42 53.1
		Sk	iPcP		04 44 08.3
		Um	iPcP		04 44 01.2
		Ud	iP		04 43 53.7
			iPcP		04 44 19.5
		De	iPcP		04 44 33.5
		Kurile Islands (h = 120 km).			
"	15	Up	iPKP		05 41 08.6
			i		05 41 26.9
					micr sec
			PKP	Z'	0.1 1.3
			i	Z'	0.2 1.2
		Sk	iPKP		05 41 02.3
			i		05 41 14.6
		Um	iPKP		05 40 57.0 C
			i		05 41 09.2
			iPKKP		05 49 44.9
			i		05 50 00.3
		Ud	iPKP		05 41 09.3
			i		05 41 18.6
			i		05 41 48.1
		South of Kermadec Islands (h = N).			
"	15	Um	iP		07 16 12.9
"	15	Up	iP		07 56 50.2
		Ki	iP		07 55 55.9
		Um	iP		07 56 21.5
			ipP		07 56 31.9
		Ud	iP		07 56 46.3
			ipP		07 56 57.2
		De	eP		07 57 09
		South of Alaska. h = 40 km (Um,Ud).			
"	15	Ud	eP		08 53 11
"	15	Up	i(PKP)		10 47 12.8
		Ki	iPKP		10 47 08.2
		Um	i(PKP)		10 47 07.1
			iPKP		10 47 13.2
		Ud	i(PKP)		10 47 15.6
			iPKP		10 47 19.3
		De	iPKP		10 47 23.6
		Loyalty Islands (h = 100 km).			
"	15	Sk	iP		11 18 03.5
		(cont.)			

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

1972					
Oct.	15	(cont.)			
		Ud	iP	11 17 56.1	
		Hindu Kush.			
		Intermediate depth.			
"	15	Um	iPKP	12 19 46.5	
		Ud	iPKP	12 19 59.7	
			i	12 20 08.1	
		South of Kermadec Islands			
		(h = N).			
"	15	Ud	iP	14 42 06.0	
"	15	Ud	iP	14 46 29.8	
"	15	Up	iP	14 55 45.5	C
			iPP	14 57 28.3	
				micr sec	
			P Z'	0.1 1.1	
		Ki	iP	14 55 51.5	C
		Sk	iP	14 56 09.3	C
		Um	iP	14 55 42.6	C
		Ud	iP	14 56 02.0	C
			i	14 56 20.8	
			iPP	14 57 48.2	
		De	iP	14 55 59.1	
		Kashmir (h = 60 km).			
"	15	Um	iP	15 12 07.5	
"	15	Ud	iP	16 13 52.3	
"	15	Up	ePKP	16 48 18	
			iPKP2	16 48 37.7	
		Sk	ePKP	16 48 13	
		Um	iPKP	16 48 06.8	C
			i	16 48 20.3	
		Ud	iPKP	16 48 18.3	C
			iPKP2	16 48 33.3	
			i	16 48 41.6	
		South of Kermadec Islands.			
		Origin time = 16 28 29.			
"	15	Ki	eP	17 03 31	
		Ud	iP	17 03 16.0	
"	15	Up	iPKP	17 10 36.7	C
			iPKP2	17 10 53.7	
		Sk	iPKP2	17 10 38.9	
		Um	iPKP	17 10 27.9	C
			i	17 10 43.3	
		Ud	iPKP	17 10 39.8	
			i	17 10 47.7	
			iPKP2	17 10 56.1	
		De	iPKP	17 10 50.4	C
		South of Kermadec Islands.			
		Origin time = 16 50 49.			

1972					
Oct.	15	Ud	eP	17 42 59	
"	15	Ki	eP	17 58 39	
		Ud	iP	17 58 22.0	
"	15	Up	iP	19 45 37.5	
				micr sec	
			P Z'	0.1 1.0	
		Ki	eP	19 44 45	
		Ud	iP	19 45 36.8	
		De	eP	19 45 59	
		Aleutian Islands (h = 60 km).			
"	15	Up	iPKP2	20 25 49.1	
		Sk	ePKP	20 25 22	
		Um	iPKP	20 25 18.1	
		Ud	iPKP	20 25 30.9	
			i	20 25 39.8	
		South of Kermadec Islands.			
		Origin time = 20 05 39.			
"	15	Up	iP	22 07 42.0	
			i	22 07 47.0	
			ipP	22 07 58.6	
				micr sec	
			P Z'	0.1 1.0	
		Sk	iP	22 08 22.9	
			ipP	22 08 39.3	
		Um	iP	22 08 25.0	
		Ud	iP	22 07 48.6	
			i	22 07 53.7	
			ipP	22 08 04.0	
		De	ipP	22 07 30.0	
		Greece.			
		h = 80 km (Up,Sk,Ud).			
"	16	Ud	eP	00 55 33	
"	16	Up	iP	03 32 29.3	
		Ki	iP	03 31 43.5	
		Um	iP	03 32 03.9	
		Ud	iP	03 32 35.4	
		De	iP	03 32 53.2	
		Kurile Islands (h = 45 km).			
"	16	Up	iPKP	04 42 52.9	
		Sk	ePKP	04 42 47	
		Um	iPKP	04 42 41.2	
		Ud	iPKP	04 42 55.2	
			i	04 42 59.5	
		De	i	04 43 12.3	
		Kermadec Islands (h = 55 km).			
"	16	Um	iP	05 20 20.0	
		Ud	iP	05 20 45.9	
		De	iP	05 21 08.5	

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

1972 Oct.	16	Up	iP		06 33 18.2
		Ud	iP		06 33 35.9
		Kashmir.			
"	16	Up	i(P)		07 58 38.6
					micr sec
			(P)	Z'	0.1 1.0
"	16	De	iP		09 03 19.7
"	16	Um	iP		09 45 23.4
		Ud	iP		09 45 37.0
		De	iP		09 45 31.2
		Pakistan.			
"	16	Ki	eP		11 02 47
"	16	Up	iPKP		14 30 50.6
			i		14 30 56.9
					micr sec
			PKP	Z'	0.1 1.0
		Um	iPKP		14 30 40.2
			i		14 30 53.8
		Ud	iPKP		14 30 52.1
			i		14 30 59.0
		De	iPKP2		14 31 15.0
"	16	Up	iPKP		16 30 42.4
			i		16 30 49.1
		Um	iPKP		16 30 31.2
		Ud	iPKP		16 30 43.4 C
			i		16 30 49.5
		De	ePKP2		16 31 06
"	16	Ud	iP		16 57 35.8
		Kashmir.			
"	16	Ud	iP		19 51 16.4 C
		Japan.			
"	16	Ud	iP		23 44 30.5
			i		23 44 44.5
		Greece.			
"	17	Up	iP		01 30 55.1
"	17	Ud	iP		02 04 22.2
"	17	Um	iP		06 17 44.9
"	17	Up	iPKP		06 34 27.1 C
			i		06 34 37.6
					micr sec
			PKP	Z'	0.1 1.0
		Sk	iPKP		06 34 24.6
		Um	iPKP		06 34 18.5 C
		(cont.)			

1972 Oct.	17	(cont.)		
		Um	i	06 34 30.9
		Ud	iPKP	06 34 30.2 C
			i	06 34 37.4
		South of Kermadec Islands (h = N).		
"	17	Up	i(PKP)	07 33 00.0
		Um	iPKP	07 32 45.7
			i	07 32 58.5
		Ud	iPKP	07 32 57.5
		De	iPKP	07 33 08.4
"	17	Up	i	07 54 16.9
		Um	iPKP	07 53 57.9 C
			i	07 54 10.7
		Ud	iPKP	07 54 09.6
"	17	Ud	iPn	08 44 00.5
			iPgl	08 44 10.1
			iSgl	08 45 02.6
		De	e(Pn)	08 43 49
			iPgl	08 44 02.2
			iSn	08 44 34.5
			iSgl	08 44 51.6
		Off south coast of Norway. By combination with Kongsberg and Bergen readings.		
"	17	Ki	iPn	10 28 31.9
			iPgl	10 28 40.1
			iSn	10 29 18.5
			iSgl	10 29 33.0
		Sk	iSgl	10 32 21.5
		Um	iSgl	10 31 07.0
		Northwest USSR-Norway border region, 69.6°N, 30.5°E. Origin time = 10 27 29. Explosion.		
"	17	Ki	iP	12 06 53.9
		Um	iP	12 06 42.5
		Ud	iP	12 07 01.9
		De	iP	12 06 59.0
		Hindu Kush. Intermediate depth.		
"	17	Up	ePKP	15 49 18
		Um	iPKP	15 49 08.7
		Ud	iPKP	15 49 20.1
"	17	Um	iP	18 07 06.1
"	17	Ki	iP	18 41 03.4
		Um	iP	18 41 04.3
		(cont.)		

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

1972 Oct.	17	(cont.)			
		Um	i		18 41 21.3
		Ud	iP		18 41 34.2
"	17	Um	iPKP		20 14 48.5
		Ud	iPKP		20 14 48.4
"	17	Up			micr sec
			Mx	E	2.2 23
			Mx	N	2.1 23
			Mx	Z	3.2 23
		Ki	iP		21 37 13.8
					micr sec
			Mx	E	3.0 17
			Mx	N	3.2 18
			Mx	Z	3.4 17
		Um	iP		21 37 16.2
		Ud	iP		21 37 32.7
			i(PP)		21 40 47.8
		Sumba Island (h = N).			
		M = 5.9 (Up,Ki).			
"	18	Up	iPKP		01 18 10.0
		Um	iPKP		01 18 00.5
			i		01 18 13.0
		Ud	iPKP		01 18 12.1
			i		01 18 25.5
"	18	Up	iP		01 59 44.1 C
					micr sec
			P	Z'	0.2 1.2
		Ki	iP		01 59 06.3 C
		Um	iP		01 59 22.9 C
		Ud	iP		01 59 51.6 C
		Japan (h = 80 km).			
"	18	Up	i		02 49 45.2
		Um	iPKP		02 49 28.6
			i		02 49 41.2
		Ud	iPKP		02 49 40.4
			iPKP2		02 50 00.3
"	18	Up	iSgl		13 11 14.0
		Ki	eSgl		13 13 45
		Sk	eSgl		13 13 02
		Um	iSgl		13 11 47.4
		Ud	eSgl		13 12 18
		De	iSgl		13 12 44.2
		Esthonia, 59.6°N, 24.8°E.			
		Origin time = 13 09 18.			
		Explosion.			
"	18	Ud	iPKP		13 30 42.1
		Kermadec Islands (h = N).			
"	18	Up	eP		14 23 25
		Ud	eP		14 23 27
		Greece.			
1972 Oct.	18	Up	iP		14 40 34.4 C
"	18	Ud	iP		17 24 05.9
		Greece.			
"	18	Up			micr sec
			Mx	E	2.0 21
			Mx	N	3.6 22
			Mx	Z	3.3 20
		Ki	iP		18 32 22.5
			ipP		18 32 28.3
					micr sec
			P	Z'	0.1 0.8
			Mx	E	4.0 19
			Mx	N	3.5 21
			Mx	Z	3.8 20
		Um	iP		18 32 26.1
			ipP		18 32 32.1
		Ud	iP		18 32 45.2
			ipP		18 32 51.0
			i(PP)		18 35 48.5
		Timor.			
		h = 20 km (Ki,Um,Ud).			
		M = 6.1 (Up,Ki).			
"	18	Ki	iP		18 41 57.7
		Kurile Islands.			
"	18	Ud	iP		20 16 13.1
		Timor (h = N).			
"	18	Up	iP		23 05 34.7
		Sk	iP		23 06 16.3
		Um	iP		23 06 15.9
		Ud	iP		23 05 42.5
			iPP		23 06 04.2
		Greece (h = 80 km).			
"	18	Um	iPKP		23 26 08.7
			i		23 26 21.6
		Ud	iPKP2		23 26 32.9
"	19	Um	eP		09 03 20
"	19	Ud	iP		15 02 28.1
		Eastern Mediterranean Sea.			
"	19	Up	i(P)		15 03 43.6
					micr sec
			(P)	Z'	0.1 0.9
"	19	Ud	iP		15 13 58.9
"	19	Ki	iP		21 31 49.3 C
		Um	iP		21 32 02.4 C
		Ud	iP		21 32 24.8 C
		Mariana Islands.			

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

1972 Oct.	19	Up	iPKP		22 36 16.8	
					micr	sec
			PKP	Z'	0.4	1.6
		Ki	iPKP		22 36 15.5	
			iPKP2		22 36 25.9	
					micr	sec
			PKP	Z'	0.1	0.9
		Sk	ePKP		22 36 25	
		Um	iPKP		22 36 14.3	
		Ud	iPKP		22 36 24.6	
			iPKP2		22 36 35.8	
		De	iPKP		22 36 20.6	
		South of Australia (h = N).				
"	20	Um	iP		02 32 58.9	
"	20	Up	iP		04 42 52.5	
			i		04 42 56.7	
			iS		04 50 06	
					micr	sec
			P	Z'	0.3	1.1
			i	Z'	0.4	1.1
			Mx	E	8.2	18
			Mx	N	6.7	18
			Mx	Z	15	18
		Ki	iP		04 43 29.5	
			i		04 43 34.6	
					micr	sec
			P	Z'	0.2	0.8
			i	Z'	0.6	1.3
			Mx	E	7.4	16
			Mx	N	5.4	15
			Mx	Z	3.8	15
		Sk	iP		04 42 55.5	
		Um	iP		04 43 15.3	
		Ud	iP		04 42 40.7	
			i		04 42 44.2	
			i		04 43 07.7	
		De	iP		04 42 27.9	
			i		04 42 56.3	
			iPP		04 44 21.8	
		North Atlantic Ocean (h = N).				
		m = 6.4, M = 6.0 (Up,Ki).				
"	20	Ki	iP		06 18 57.4	
"	20	Ki	iP		06 20 03.0	
		Um	iP		06 20 30.9	
		Ud	iP		06 20 55.8	
		Unimak Island (h = 40 km).				
"	20	Ud	iP		06 24 24.2	
"	20	Um	iP		06 41 19.7	
"	20	Up	iPKP		06 58 56.4	
		(cont.)				

1972 Oct.	20	(cont.)				
		Up	iPKP2		06 59 02.4	
					micr	sec
			PKP2	Z'	0.1	1.2
		Ki	iPKP2		06 59 01.5	
					micr	sec
			PKP2	Z'	0.2	1.5
		Sk	iPKP2		06 59 13.3	
		Um	iPKP2		06 59 01.9	
		Ud	iPKP2		06 59 12.4	
		De	iPKP2		06 59 10.5	
		South of Australia (h = N).				
"	20	Up	iP		08 30 37.7	
			i		08 34 18.6	
					micr	sec
			P	Z'	0.1	1.2
			i	Z'	0.5	1.9
			Mx	E	12	18
			Mx	N	13	17
			Mx	Z	22	18
		Ki	eP		08 30 27	
			iS		08 40 59	
					micr	sec
			P	Z'	0.7	2.5
			Mx	E	25	19
			Mx	N	23	21
			Mx	Z	23	16
		Sk	iP		08 30 24.8	
			iPP		08 33 38.5	
		Um	iP		08 30 39.9	
		Ud	iP		08 30 36.3	
			iPP		08 33 58.8	
		De	iP		08 30 46.8	
		Mexico (h = 40 km).				
		m = 6.2, M = 6.7 (Up,Ki).				
"	20	Ki	iP		11 54 22.3	
		Banda Sea (h = 130 km).				
"	20	Up	iP		12 40 47.7	
		Ki	iP		12 40 51.3	
"	20	Ki	iPn		13 02 45.7	
			iPgl		13 02 54.0	
			iSn		13 03 31.9	
			iS*		13 03 44.7	
		Um	iSgl		13 05 21.4	
		Northwest USSR-Norway border region, 69.7°N, 30.0°E.				
		Origin time = 13 01 45.				
		Explosion.				
"	20	Um	i		13 49 33.6	
			iSgl		13 49 39.7	
		Ud	eSgl		13 51 33	
		Lake Ladoga region.				
		Explosion?				

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

1972					
Oct.	20	Ki	iPKP		17 32 21.8
		Sk	iPKP		17 32 37.5
		Um	iPKP		17 32 33.0
			i		17 32 45.5
		Ud	iPKP		17 32 45.9
		De	iPKP		17 32 57.2
"	20	Up	iP		22 52 02.2
		Ki	iP		22 51 52.6
		Ud	iP		22 52 15.1
		De	eP		22 52 18
"	21	Ki	iP		01 41 58.4
		Sk	eP		01 42 13
		Sumatra (h = 210 km).			
"	21	Up	iP		04 27 57.8 C
					micr sec
			Mx	E	0.9 19
			Mx	N	0.7 15
			Mx	Z	1.1 16
		Ki	iP		04 27 35.1 C
			i		04 27 39.7
					micr sec
			Mx	E	1.0 12
			Mx	N	0.8 11
			Mx	Z	1.2 12
		Sk	iP		04 28 01.7 C
		Um	iP		04 27 43.0 C
		Ud	iP		04 28 07.5 C
			i		04 28 19.4
		Formosa (h = 35 km).			
		M = 5.3 (Up,Ki).			
"	21	Up	iPKP		06 34 25.2
		Ud	iPKP		06 34 27.9
			i		06 34 36.4
		De	iPKP		06 34 38.7
		Tonga-Kermadec Islands (h = 140 km).			
"	21	De	iPKP		09 26 57.6
		Tonga Islands (h = 40 km).			
"	21	Ud	iPKP		11 36 26.7
			i		11 36 31.8
		De	iPKP		11 36 35.6
"	21	Ud	eP		18 44 30
"	21	Up	iP		20 01 36.8
					micr sec
			P	Z'	0.1 1.0
		Ki	iP		20 00 40.0
			i		20 00 51.3
			ipP		20 01 10.9
		(cont.)			

1972					
Oct.	21	(cont.)			
		Ki			micr sec
			P	Z'	0.1 0.7
		Sk	iP		20 01 08.4
			epP		20 01 42
		Um	iP		20 01 09.7
			ipP		20 01 40.7
		Ud	iP		20 01 33.4
			i		20 03 02.4
		De	iP		20 01 59.4
			ipP		20 02 32.4
		Alaska.			
		h = 140 km (Ki,Sk,Um,De).			
		m = 5.7 (Up,Ki).			
"	21	Up	iP		23 30 03.9
		Ki	iP		23 29 44.5
		Sk	eP		23 30 08
		Um	iP		23 29 50.4
		Ud	iP		23 30 12.5
"	21	Ud	iP		23 58 37.7
"	22	Ki	eP		02 38 41
"	22	Um	iPKP		06 27 08.8
		Ud	iPKP		06 27 16.2
		Tonga Islands (h = 100 km).			
"	22	Ud	iP		08 35 44.4
		Peru (h = 60 km).			
"	22	De	iPKP		11 50 58.2
		Tonga Islands (h = 250 km).			
"	22	Um	iP		11 56 14.8
"	22	De	iP		12 45 26.5
		Greece.			
"	22	Ki	iP		14 16 32.4
		Aegean Sea.			
"	22	Up	iP		22 25 33.2
		Ud	iP		22 25 26.0
"	22	Up	iPKP		22 58 22.3
			i		22 58 27.3
			i		22 58 30.6
		Sk	iPKP		22 58 16.0
		Um	iPKP		22 58 10.7
		Ud	iPKP		22 58 24.2
			i		22 58 28.8
			i		22 58 32.8
		De	iPKP		22 58 32.6
			i		22 58 37.7
		(cont.)			

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

1972 Oct.	22	(cont.)				
		De	i		22 58 45.7	
		Kermadec Islands (h = 110 km).				
"	22	Ki	ipP		23 13 26.9	
		Um	eP		23 13 33	
		Ud	iP		23 14 03.5	
			ipP		23 14 16.7	
		Japan.				
		h = 45 km (Ud).				
"	22	Ud	iP		23 25 33.8	
			i		23 25 50.3	
"	23	Up	i(pP)		02 41 51.6	
		Ud	iP		02 41 50.6	
		Japan (h = 40 km).				
"	23	Ud	iP		06 04 25.4	
"	23	Ud	iP		06 31 15.7	
		Japan (h = 130 km).				
"	23	Ud	iP		08 32 24.8	
"	23	Ud	iP		10 01 34.4	
		De	iPP		10 01 15.2	
		Aegean Sea (h = 20 km).				
"	24	Up	iP		02 43 06.4	
					micr	sec
			P	Z'	0.1	0.9
		Ki	iP		02 42 44.2	
		Ud	iP		02 43 15.4	
		Luzon (h = 150 km).				
"	24	Up	Mx		03 52	
					micr	sec
			Mx	N	1.6	18
			Mx	Z	3.8	20
		Ki	Mx		03 43	
					micr	sec
			Mx	E	1.6	17
			Mx	N	2.3	19
		Caroline Islands (h = 35 km).				
		M = 5.7 (Up,Ki).				
"	24	Up	iPKP		04 49 42.1	
		Sk	ePKP		04 49 39	
		Um	iPKP		04 49 32.1	
		Ud	iPKP		04 49 44.2	
"	24	Up	iP		06 57 42.6	
					micr	sec
			P	Z'	0.1	1.3
		(cont.)				

1972 Oct.	24	(cont.)				
		Sk	eP		06 58 17	
		Ud	iP		06 57 48.7	
		Greece.				
"	24	Ki	iP		07 44 49.8	
		Mariana Islands (h = 15 km).				
"	24	Ki	eP		18 22 29	
		Ud	iP		18 22 09.8	
		Iran.				
"	24	Um	iP		19 51 12.8	
"	25	Ki	iP		00 34 42.2 C	
		Ud	iP		00 35 34.8	
		Aleutian Islands (h = 5 km).				
"	25	Up	iP		01 13 12.6	
					micr	sec
			P	Z'	0.1	1.0
		Ki	iP		01 12 28.7	
		Sk	iP		01 12 43.5	
		Um	iP		01 12 50.0	
			i		01 12 58.5	
			iS		01 22 02	
		Ud	iP		01 13 05.1	
		Off coast of Oregon (h = N).				
"	25	Ud	iP		05 13 56.7	
"	25	Sk	iP		09 48 38.3	
		Um	iP		09 48 22.1	
		De	iP		09 48 25.6	
		Hindu Kush.				
		Intermediate depth.				
"	25	Ud	iP		10 51 30.9	
		Mexico (h = N).				
"	25	Ud	iPgl		13 18 03.1	
			iSgl		13 18 29.4	
		De	iSgl		13 18 46.2	
		Coast of Bohuslän, Sweden,				
		58.5°N, 11.2°E.				
		Origin time = 13 17 28.				
		By combination with				
		Kongsberg readings.				
"	25	Up	iP		18 29 21.3	
			iS		18 31 57.6	
			iSS		18 32 31.2	
					micr	sec
			P	Z'	0.2	1.0
			Mx	E	11	18
		(cont.)				

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

1972
Oct. 25 (cont.)

Up			micr	sec
	Mx	N	8.5	19
	Mx	Z	12	19
Ki	iP		18 28 15.0	D
	iS		18 30 02.0	
	iSS		18 30 16.5	
			micr	sec
	P	Z'	1.4	1.1
	Mx	E	13	15
	Mx	N	20	15
	Mx	Z	7.9	13
Sk	iP		18 28 20.5	
	iS		18 30 12.8	
Um	iP		18 28 48.6	
	iS		18 30 58	
	iSS		18 31 19.1	
Ud	iP		18 29 05.2	
	iS		18 31 34.5	
De	iP		18 29 49.0	

Jan Mayen (h = N).
m = 5.6, M = 5.2 (Up,Ki).

" 25	Up	iP	21 59 55.0	
		iPP	22 00 14.5	
		iS	22 02 47.9	
			micr	sec
		P	Z' 0.1	1.0
		PP	Z' 0.5	1.5
		Mx	E 0.9	5
		Mx	N 1.2	10
		Mx	Z 2.1	13
	Ki	iP	22 01 21.1	
			micr	sec
		Mx	N 0.9	13
	Sk	iP	22 00 31.9	
	Um	iP	22 00 43.2	
	Ud	iP	21 59 51.2	
	De	iP	21 59 05.5	

Italy (h = N).
M = 4.5 (Up,Ki).

" 25	Ud	iP	23 34 30.5	

Japan (h = 60 km).

" 26	Ki	iSgl	00 15 46.6	
	Sk	iSgl	00 15 54.4	
	Um	eSgl	00 16 22	

Nordland, Norway,
66.7°N, 13.5°E.
Origin time = 00 14 15.

" 26	Up	iP	03 34 40.4	
		ipP	03 34 47.9	
			micr	sec
		pP	Z' 0.1	0.9
	Ki	i(pP)	03 36 07.5	

(cont.)

1972
Oct. 26 (cont.)

Um	eP		03 35 17
	i		03 35 27.5
Ud	iP		03 34 47.2
De	eP		03 34 10

Ionian Sea.
h = 30 km (Up).

" 26	Ki	iP	13 14 52.6	
			micr	sec
		P	Z' 0.1	1.0

Sumatra (h = 50 km).

" 26	Ki	iP	14 14 27.8	
	Ud	iP	14 14 38.4	

India.

" 26	Ki	iP	15 52 14.6	
	Sk	iP	15 52 20.4	
		iS	15 54 10.5	
	Um	e(P)	15 52 59	
	Ud	eP	15 53 08	

Jan Mayen.

" 26	Up	iP	17 16 48.4	
		i	17 17 05.4	
			micr	sec
		P	Z' 0.9	1.0
		Mx	E 2.7	18
		Mx	N 2.0	22
		Mx	Z 6.5	20
	Ki	iP	17 16 17.4	
		i	17 16 19.2	
		ipP	17 16 29.1	
			micr	sec
		P	Z' 0.5	1.0
		Mx	E 1.8	18
		Mx	N 1.6	17
		Mx	Z 1.8	16
	Sk	iP	17 16 48.4	
		ipP	17 16 57.8	
	Um	iP	17 16 30.5	D
	Ud	iP	17 16 57.3	D
		ipP	17 17 06.9	
	De	iP	17 17 08.4	
		ipP	17 17 21.2	

Ryukyu Islands.
h = 40 km (Ki,Sk,Ud,De).
m = 6.7, M = 5.6 (Up,Ki).

" 26	Up	iP	17 26 33.0	
	Ki	iP	17 25 39.5	
	Um	iP	17 26 03.5	
	Ud	iP	17 26 34.6	

Kamchatka (h = 140 km).

" 26	Ud	iP	19 59 50.1	

(cont.)

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

1972
Oct. 26 (cont.)
Hindu Kush.
Intermediate depth.

"	26	Up	ePKP		23 07 25
			iSKP		23 10 35.9
					micr sec
			PKP	Z'	0.1 1.1
		Ki	iPKP		23 07 10.5
					micr sec
			PKP	Z'	0.2 1.0
		Sk	iPKP		23 07 22.1 D
		Um	iPKP		23 07 17.1 D
		Ud	iPKP		23 07 27.1 D
			iSKP		23 10 37.8
		De	iPKP		23 07 32.7 D
			iSKP		23 10 48.3

New Hebrides Islands
(h = 160 km).

"	27	Ki	e(Sgl)		00 06 54
		Sk	e(Sgl)		00 07 01
"	27	Ud	iP		00 12 59.4

Tien-Shan.

"	27	Up	iPKP		09 42 26.0
			iSKP		09 45 59.6
					micr sec
			SKP	Z'	0.1 0.9
			Mx	E	3.6 21
			Mx	N	4.3 20
			Mx	Z	8.0 21
		Ki	iPKP		09 42 11.6
					micr sec
			PKP	Z'	0.1 0.9
			Mx	E	6.1 21
			Mx	N	7.0 21
			Mx	Z	7.0 22
		Sk	i(PKP)		09 42 17.7
			iPKP		09 42 23.0
			iSKP		09 45 49.6
		Um	i(PKP)		09 42 16.6
			iPKP		09 42 18.5
			iSKP		09 45 42.0
		Ud	i(PKP)		09 42 21.3
			iPKP		09 42 28.5
		De	i(PKP)		09 42 25.2
			i(PKP)		09 42 30.8
			iPKP		09 42 34.9
			iSKP		09 46 06.8

New Hebrides Islands
(h = 40 km).
M = 6.4 (Up,Ki).
(PKP) denotes small-amplitude precursors.

1972
Oct. 27

	27	Ki	iP		12 08 00.0
		Ud	iP		12 08 26.4

Alma-Ata (h = N).

"	27	Up	iP		12 55 25.3
			i		12 55 39.7
		Um	iP		12 56 06.5

Rumania.

"	27	Up	iSgl		14 17 29.4
		Ud	iSgl		14 16 51.5
		De	iSgl		14 18 16.0
"	27	Ki	i(Sgl)		16 05 22.4
		Sk	i(Sgl)		16 05 26.6
"	27	Ki	i(Sgl)		18 07 07.7
		Sk	i(Sgl)		18 07 10.3
"	27	Up	iP		18 22 37.7
		Um	iP		18 22 13.3
		Ud	iP		18 22 42.9

Japan (h = 55 km).

"	27	Up	iP		20 53 53.5
		Ud	iP		20 54 09.5

USSR-China.

"	28	Up	iP		01 14 53.0
					micr sec
			P	Z'	0.1 1.5
			Mx	E	0.8 17
			Mx	N	1.7 23
			Mx	Z	1.5 19
		Ki	iP		01 14 35.9 C
					micr sec
			P	Z'	0.1 1.1
			Mx	E	1.2 18
			Mx	N	1.3 19
			Mx	Z	2.1 19
		Sk	eP		01 14 57
		Um	iP		01 14 41.7
		Ud	iP		01 15 01.4 C

Halmahera (h = 50 km).
m = 6.2, M = 5.6 (Up,Ki).

"	28	Ki	iP		01 23 48.9
		Um	eP		01 23 57
		Ud	iP		01 24 14.9

Halmahera (h = N).

"	28	Up	iPKP		02 45 55.0
					micr sec
			Mx	E	2.7 20
			Mx	N	3.6 20
			Mx	Z	4.6 20

(cont.)

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

1972
Oct. 28 (cont.)

Ki	iP		02 41 41.7	
	iPKP		02 45 43.6	
	iPP		02 46 22.1	
			micr	sec
	P	Z'	0.1	1.2
	Mx	E	5.5	20
	Mx	N	4.8	19
	Mx	Z	4.7	19
Sk	iPKP		02 45 54.9	
Um	iPKP		02 45 48.8	
Ud	iPKP		02 45 57.9	
De	iPKP		02 46 02.6	

New Guinea (h = 2 km).
M = 6.2 (Up,Ki).

" 28

Up	iPKP		03 35 47.0	
	iSKP		03 38 59.3	
			micr	sec
	PKP	Z'	0.2	1.3
	SKP	Z'	0.5	1.2
	Mx	E	1.4	18
	Mx	N	1.9	18
	Mx	Z	2.7	20
Ki	iPKP		03 35 34.1	
	i(SKP)		03 39 00.7	
			micr	sec
	PKP	Z'	0.2	1.0
	Mx	E	1.5	18
	Mx	N	2.3	18
	Mx	Z	3.5	22
Sk	i(PKP)		03 35 35.8	
	iPKP		03 35 44.8	
	iSKP		03 38 56.0	
Um	i(PKP)		03 35 30.8	
	iPKP		03 35 40.0	
	iSKP		03 38 52.2	
	i		03 39 08.0	
Ud	i(PKP)		03 35 41.0	
	iPKP		03 35 50.6	
	iSKP		03 39 06.0	
De	i(PKP)		03 35 44.2	
	iPKP		03 35 55.1	
	iSKP		03 39 13.7	

New Hebrides Islands
(h = 130 km).
M = 6.0 (Up,Ki).
M uncorrected for focal depth.
(PKP) denotes small-amplitude precursors.

" 28

Up	eP		03 48 14	
	i		03 48 32.5	
			micr	sec
	P	Z'	0.1	1.2

(cont.)

1972
Oct. 28 (cont.)

Um	iP	03 48 18.6

These phases may belong to the preceding event.

" 28

Ud	iPKP	07 50 42.3
De	ePKP	07 50 54

" 28

Um	i(P)	11 11 09.0

" 28

Ud	iP	12 08 14.5

" 28

Ud	iP	12 11 05.4

Mindanao (h = 130 km).

" 28

Ud	iP	14 33 47.7

" 28

Ki	eP	17 32 57
Ud	iP	17 33 19.6

Halmahera (h = 70 km).

" 28

Up	iP		18 05 52.5	
	ipP		18 06 14.9	
			micr	sec
	P	Z'	0.1	0.9
Ki	iP		18 05 16.1	
	ipP		18 05 37.3	
Sk	eP		18 05 48	
Um	iP		18 05 32.0	
	i		18 05 34.5	
	ipP		18 05 53.0	
	i		18 06 12.5	
Ud	iP		18 05 59.9	
	ipP		18 06 22.6	
De	iP		18 06 13.8	

Japan.
h = 80 km (Up,Ki,Um,Ud).

" 28

Ki	eP	18 44 34
Ud	iP	18 44 57.9

Halmahera (h = 80 km).

" 28

Um	iP	23 18 48.2
Ud	iP	23 19 15.5

Japan (h = 380 km).

" 29

Ud	iP	03 12 14.5

" 29

Up	iP	03 20 09.2
Ki	iP	03 20 43.6
Ud	iP	03 20 00.0

Atlantic Ocean (h = N).

" 29

Ki	iP	04 37 24.8
Ud	eP	04 37 49

Halmahera (h = 100 km).

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

1972 Oct.	29	Ud	iPKP		05 08 12.8	
		De	iPKP		05 08 23.9	
"	29	Up	iP		07 31 45.4	D
			ipP		07 33 02.2	
			iPP		07 34 40.3	
					micr	sec
			P	Z'	0.3	1.1
			PP	Z'	0.1	1.0
		Ki	iP		07 31 10.9	D
			ipP		07 32 26.7	
			iPP		07 33 47.1	
					micr	sec
			P	Z'	0.2	1.0
			PP	Z'	0.1	1.2
		Sk	iP		07 31 41.8	D
			ipP		07 32 59.1	
			iPP		07 34 31.2	
		Um	iP		07 31 25.5	D
			ipP		07 32 42.2	
		Ud	iP		07 31 52.9	D
			ipP		07 33 10.0	
		De	iP		07 32 05.9	D
			ipP		07 33 25.5	
		Japan.				
		h = 340 km (Up,Ki,Sk,Um,Ud, De).				
		m = 5.8 (Up,Ki).				
"	29	Up	iSgl		08 05 52.9	
		Ki	iPn		08 01 43.4	
			iSn		08 02 40.5	
			iSgl		08 03 01.6	
		Sk	eSgl		08 05 27	
		Um	iS*		08 03 50.3	
			iSgl		08 03 56.4	
		Ud	iSgl		08 06 27.8	
		Northwest USSR,				
		67.8°N, 33.6°E.				
		Origin time = 08 00 27.				
		Explosion.				
"	29	Up	iSgl		12 26 03.6	
		Ki	ePn		12 21 56	
			iSn		12 22 53.1	
			eSgl		12 23 12	
			iSg2		12 23 21.9	
		Sk	eSgl		12 25 43	
		Um	iSgl		12 24 08.5	
		Ud	iSgl		12 26 39.3	
		Northwest USSR,				
		67.8°N, 33.6°E.				
		Origin time = 12 20 39.				
		Explosion.				
"	29	Ki	iP		13 38 31.4	C

1972 Oct.	29	Up	iPKP		18 00 59.4	C
					micr	sec
			PKP	Z'	0.1	1.0
		Ki	iPKP		18 00 38.6	
		Sk	iPKP		18 00 53.0	C
		Um	iPKP		18 00 48.2	C
			iSKP		18 04 04.5	
		Ud	iPKP		18 01 00.9	C
		De	iPKP		18 01 09.3	C
			i		18 01 19.1	
		Kermadec Islands (h = 60 km).				
"	29	Ud	iPKP		18 05 24.4	
		De	iPKP		18 05 35.3	
"	29	Ki	iPKP		19 27 24.2	
		South Sandwich Islands (h = 110 km).				
"	30	Up	iP		01 56 59.5	
		Ud	iP		01 57 15.7	
		De	iP		01 57 11.9	
		Hindu Kush.				
		Intermediate depth.				
"	30	Ud	iP		02 01 10.8	
		De	iP		02 01 11.7	C
		North Atlantic Ocean (h = N).				
"	30	Ki	iPKP		10 48 40.9	
		Sk	iPKP		10 48 52.3	
		Um	iPKP		10 48 48.0	
		Ud	iPKP		10 48 57.5	
		De	i(PKP)		10 48 57.1	
			iPKP		10 49 02.4	
		Loyalty Islands (h = 150 km).				
"	30	Um	iPP		11 23 25.5	
		Afghanistan.				
		Intermediate depth.				
"	30	Up	iP		14 37 02.0	D
			iS		14 40 58	
					micr	sec
			P	Z'	0.4	1.0
			Mx	E	1.3	12
			Mx	N	3.4	13
			Mx	Z	6.0	13
		Ki	iP		14 38 16.6	
					micr	sec
			P	Z'	0.1	1.4
			Mx	E	1.4	14
			Mx	N	2.3	13
			Mx	Z	2.8	13
		Sk	iP		14 37 42.3	D
		Um	iP		14 37 42.1	D
		(cont.)				

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

1972 Oct.	30	(cont.)			
		Um	iS	14 42 06	
		Ud	iP	14 37 07.7	D
			iS	14 41 10.3	
		De	iP	14 36 29.8	
		Greece (h = N).			
		m = 5.7, M = 5.1 (Up,Ki).			
"	30	Ki	iP	14 44 22.8	
			i	14 44 31.7	
			i	14 46 24.6	
		Sk	iP	14 44 29.0	
			iS	14 46 19.0	
		Um	iP	14 44 58.0	
			iS	14 47 07.0	
		Ud	iP	14 45 13.4	
		Jan Mayen, 71°N, 4°W.			
		Origin time = 14 42 07.			
"	30	Up	iPKP	17 06 50.8	
			iPKKP	17 17 17.1	
			iPKKP	17 17 26.0	
				micr sec	
			Mx E	1.1 19	
			Mx N	2.1 20	
			Mx Z	3.0 20	
		Ki	iPKP	17 06 38.7	
			iPKKP	17 17 33.9	
				micr sec	
			Mx E	5.0 22	
			Mx N	3.2 20	
			Mx Z	2.9 22	
		Sk	ePKP	17 06 50	
		Um	iPKP	17 06 43.8	
			ipPKP	17 06 57.9	
		Ud	iPKP	17 06 53.5	
			iPKKP	17 17 11.3	
			iPKKP	17 17 21.2	
		De	iPKP	17 06 58.8	
			ipPKP	17 07 12.5	
		Solomon Islands.			
		h = 50 km (Um,De).			
		M = 6.0 (Up,Ki).			
"	31	Ud	iP	06 27 00.5	
		De	eP	06 26 36	
"	31	Up	iP	11 06 25.9	
		Sk	iP	11 07 06.9	
		Ud	iP	11 06 29.4	
			iPP	11 06 55.1	
		Greece.			
"	31	Up	eP	11 35 41	
		Sk	eP	11 36 21	
		Ud	iP	11 35 50.1	
		Greece.			
1972 Oct.	31	Ud	iPKP	13 26 09.7	
		De	iPKP	13 26 20.3	
"	31	Ud	iPKP	17 59 40.0	C
		De	iPKP	17 59 51.4	
"	31	Up	eP	18 15 51	
		Ud	iP	18 15 58.0	
		Greece.			
"	31	De	eP	19 02 43	
"	31	Up	eP	21 39 14	
		Ki	eP	21 39 17	
		Ud	iP	21 39 26.9	
		Kashmir (h = 70 km).			
"	31	Up	iP	23 37 23.7	
		Ki	iP	23 37 22.1	C
				micr sec	
			P Z'	0.1 0.8	
		Sk	eP	23 37 37	
		Um	iP	23 37 20.1	C
			ipP	23 37 35.9	
		Ud	iP	23 37 32.6	C
			iPP	23 41 26.9	
		De	iP	23 37 31.0	C
		Sunda Strait.			
		h = 60 km (Um).			

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September 22, 1974

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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

N O V E M B E R 1 - 30, 1972

1972				
Nov.	1	Ud	iPKP	00 42 07.3
		Solomon Islands (h = 40 km).		
"	1	Up	eP	04 13 51
		Ud	iP	04 14 08.5
		De	eP	04 14 02
		Uzbek SSR (h = 15 km).		
"	1	Um	iP	04 28 27.1
		Japan (h = 70 km).		
"	1	Ud	iP	04 48 05.7
"	1	Ki	iP	04 59 28.5
			i	04 59 36.1
		Sk	iP	04 59 47.6
		Um	iP	05 00 10.1
		Ud	iP	05 00 33.5
		Jan Mayen (h = N).		
"	1	Up	iP	06 24 08.3
		Ud	iP	06 24 19.1
		Greece.		
"	1	Um	iP	06 33 39.7
		Japan (h = 50 km).		
"	1	Um	ePKP	06 49 00
		Ud	iPKP	06 49 03.8
		De	iPKP	06 49 11.3
		Tonga Islands (h = N).		
"	1	Ki	i	09 18 30.3
			iSg1	09 18 39.7
"	1	Ud	i(P)	10 31 26.5

1972				
Nov.	1	Ki	iPn	11 04 01.6
			iPg1	11 04 13.2
			iSn	11 04 49.2
			iS*	11 05 02.4
		Um	iSg1	11 06 33.4
			iSg2	11 06 45.3
		Northwest Russia-Norway border region, 69.4°N, 30.8°E. Origin time = 11 02 59. Explosion.		
"	1	Up	iSg1	12 17 04.6
			iSg2	12 17 11.4
		Ki	eSg1	12 18 58
		Sk	eSg1	12 18 44
		Um	iSg1	12 17 20.7
		Ud	iSg1	12 18 04.8
		De	eSg1	12 18 27
		Western USSR, 59.3°N, 28.2°E. Origin time = 12 14 15. Explosion.		
"	1	Ki	iPg1	12 42 41.7
			iSn	12 43 22.1
			iSg1	12 43 44.2
		Um	iSg1	12 44 36.9
		Northwest USSR. Explosion.		
"	1	Up	iP	14 34 08.2 C
		Ki	iP	14 33 28.1
				micr sec
			P Z'	0.1 1.0
		Sk	eP	14 34 01
		Um	iP	14 33 45.9 C
			ipP	14 34 02.7

(cont.)

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

1972
Nov. 1 (cont.)

Ud	iP		14 34 15.2	C
	ipP		14 34 32.7	
De	iP		14 34 30.7	
	ipP		14 34 46.4	

Japan.
h = 60 km (Um,Ud,De).

" 1	Um	iP		15 13 08.7	
	Ud	iP		15 13 44.4	
	De	eP		15 14 08	

Aleutian Islands
(h = 50 km).

" 1	Up	i(P)		15 14 38.1	
" 1	Up	iP		15 35 31.4	
				micr sec	
		P	Z'	0.2 1.5	
	Ki	iP		15 34 48.5	
				micr sec	
		P	Z'	0.1 0.9	
	Sk	eP		15 35 25	
	Um	iP		15 35 07.4	C
		i		15 35 18.5	
	Ud	iP		15 35 38.2	
	De	iP		15 35 55.0	
		i		15 36 01.5	

Japan (h = 80 km).
m = 5.8 (Up,Ki).

" 1	Up	iP		16 50 51.2	
	Ki	iP		16 50 06.1	
	Um	iP		16 50 26.7	
	Ud	iP		16 50 57.9	
	De	eP		16 51 14	

Kurile Islands
(h = 50 km).

" 1	Up	iP		17 09 59.7	
	Ki	iP		17 08 33.5	
		iS		17 09 54.4	
		iTSg		17 14 37.8	
	Sk	iP		17 09 01.9	
		iS		17 10 43.0	
	Um	iP		17 09 20.8	
	Ud	iP		17 09 49.4	

Norwegian Sea (h = N).

" 1	Ud	iP		21 15 51.2	
" 1	Ki	eP		21 36 37	
	Ud	e(PP)		21 41 44	

New Guinea (h = 40 km).

1972
Nov. 1

Up	iP			22 03 56.6	D
	ipP			22 04 22.7	
				micr sec	
	P		Z'	0.1 0.6	
	pP		Z'	0.2 1.0	
Ki	iP			22 03 47.9	
	ipP			22 04 13.4	
				micr sec	
	pP		Z'	0.2 1.0	
Sk	iP			22 04 11.4	
	ipP			22 04 37.8	
Um	iP			22 03 47.5	D
	ipP			22 04 13.9	
Ud	iP			22 04 09.8	D
	ipP			22 04 36.1	
De	iP			22 04 13.0	
	ipP			22 04 38.7	

Burma.
h = 110 km (Up,Ki,Sk,Um, Ud,De).
m = 6.1 (Up,Ki).

" 2	Ud	iP		00 41 13.2	
" 2	Up	iP		01 33 55.2	C
		iPn		01 35 01.1	
		iLg1		01 45 25	
				micr sec	
		P	Z'	1.3 0.6	
	Ki	iP		01 33 38.7	C
				micr sec	
		P	Z'	1.0 0.8	
	Sk	iP		01 34 10.6	C
	Um	iP		01 33 39.9	C
	Ud	iP		01 34 11.6	C
	De	iP		01 34 18.7	C
		iPn		01 35 37.9	

Kazakh SSR.
m = 6.9 (Up,Ki).
Underground explosion.

" 2	Ki	iP		10 05 47.1	
	Um	iP		10 05 51.8	

Tanimbar Islands (h = N).

" 2	Ud	iP		12 35 25.8	C

Hindu Kush.
Intermediate depth.

" 2	Ud	iP		13 00 16.0	

Tadzhik-Sinkiang (h = N).

" 2	Up	i(Sg1)		13 12 16.0	
	Um	iSg1		13 12 13.5	

Western USSR.
Explosion.

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

1972 Nov.	2	Up	iP		17 18 43.7
		Ki	iP		17 18 22.5
		Um	iP		17 18 29.9
		Ud	iP		17 18 51.6
		Luzon (h = 70 km).			
"	2	Up	iP		20 11 47
			i(PKP)		20 14 30.0
			iPKP		20 14 41.9
			iPP		20 17 13
			iSKP		20 18 07.8
					micr sec
			(PKP)	Z'	0.1 1.1
			PKP	Z'	0.2 1.0
			SKP	Z'	0.3 1.0
			Mx	E	41 21
			Mx	N	64 21
			Mx	Z	110 21
		Ki	iP		20 11 13
			i(PKP)		20 14 22.6
			iPKP		20 14 27.0
			i(PP)		20 16 19
			iSKP		20 17 42.9
					micr sec
			PKP	Z'	0.5 1.0
			SKP	Z'	0.2 1.4
			Mx	E	70 21
			Mx	N	75 21
			Mx	Z	87 22
		Sk	e(PKP)		20 14 29
			iPKP		20 14 37.7
			iSKP		20 18 02.9
		Um	iP		20 11 29
			i(PKP)		20 14 24.9
			iPKP		20 14 33.0
			iPP		20 16 48
			iSKP		20 17 55.0
		Ud	i(PKP)		20 14 32.5
			iPKP		20 14 44.9
			iSKP		20 18 10.4
		De	i(PKP)		20 14 40.0
			iPKP		20 14 48.2
			iSKP		20 18 18.9
		Loyalty Islands			
		(h = 30 km).			
		M = 7.5 (Up,Ki).			
"	3	Up	iSg1		13 40 29.2
		Um	iSg1		13 41 03.6
		Ud	eSg1		13 41 34
		De	eSg1		13 41 54
		Esthonia, 59.5°N, 25.0°E.			
		Origin time = 13 38 30.			
		Explosion.			

1972 Nov.	3	Ki	ePKP		16 34 07
		Ud	i(PKP)		16 34 06.8
		Loyalty Islands			
		(h = 25 km).			
"	3	Ki	iP		16 59 56.9
"	4	Up	iP		00 05 51.6 D
			i		00 06 26.9
			iPP		00 07 29.6
			i		00 07 36.5
					micr sec
			P	Z'	0.1 1.1
			PP	Z'	0.3 1.5
			Mx	E	6.0 14
			Mx	N	4.8 12
			Mx	Z	9.1 17
		Ki	iP		00 06 04.6
					micr sec
			P	Z'	0.1 1.0
			Mx	E	8.5 11
			Mx	N	7.1 10
			Mx	Z	7.9 10
		Sk	iP		00 06 19.0
			iPP		00 08 04.6
		Um	iP		00 05 51.5
			iPP		00 07 30.1
			i		00 08 00.1
		Ud	iP		00 06 08.0 D
			ipP		00 06 14.6
			iPP		00 07 58.9
		De	iP		00 06 05.0
		Afghanistan.			
		h = 30 km (Ud).			
		m = 5.7, M = 6.0 (Up,Ki).			
"	4	Ki	e(P)		00 12 16
		Sk	e(P)		00 12 04
		Ud	iPP		00 15 50.7
		Chile (h = 130 km).			
"	4	Ki	eP		01 44 53
		Sk	i(pP)		01 44 44.0
		Ud	iP		01 44 31.7
			ipP		01 44 43.6
		Leeward Islands.			
		h = 45 km (Ud).			
"	4	Ki	iP		01 49 52.5
		Ud	iP		01 49 30.2
			ipP		01 49 44.3
		Leeward Islands.			
		h = 50 km (Ud).			

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

1972						
Nov.	4	Up	ipPKP		04 09 19.7	
			iSKP		04 12 41.7	
					micr	sec
			pPKP	Z'	0.1	1.1
			Mx	E	4.1	21
			Mx	N	6.4	21
			Mx	Z	11	22
		Ki	iPKP		04 08 57.0	
			ipPKP		04 09 08.4	
					micr	sec
			PKP	Z'	0.2	1.2
			pPKP	Z'	0.2	1.0
			Mx	E	6.3	20
			Mx	N	6.3	21
			Mx	Z	7.1	20
		Sk	iPKP		04 09 08.0	
			ipPKP		04 09 19.0	
		Um	i(PKP)		04 09 01.5	
			iPKP		04 09 04.5	
			ipPKP		04 09 15.7	
			iSKP		04 12 25.7	
		Ud	i(PKP)		04 09 08.6	
			iPKP		04 09 13.6	
			ipPKP		04 09 23.7	
		De	i(PKP)		04 09 10.7	
			iPKP		04 09 18.5	
			ipPKP		04 09 29.4	
		New Hebrides Islands.				
		h = 40 km (Ki,Sk,Um,Ud,De).				
		M = 6.4 (Up,Ki).				
"	4	Up	iSg1		04 53 37.4	
		Ki	iSg1		04 51 31.1	
		Sk	iSg1		04 51 37.1	
		Um	iSn		04 51 45.1	
			iSg1		04 51 58.7	
		Ud	iSg1		04 53 25.2	
		Nordland, Norway,				
		66.5°N, 14.0°E.				
		Origin time = 04 50 02.				
		Explosion?				
"	4	Ud	iP		05 45 10.7	
"	4	Up	iP		09 40 03.5	
		Ki	eP		09 40 35	
		Sk	eP		09 40 39	
			ipP		09 40 46.9	
		Um	iP		09 40 15.0	
			ipP		09 40 24.5	
		Ud	iP		09 40 19.4	
			ipP		09 40 29.6	
		De	iP		09 40 05.3	
			ipP		09 40 15.3	
		Iran.				
		h = 45 km (Um,Ud,De).				

1972						
Nov.	4	Up	iPKP		10 05 46.5	
			iPKKP		10 16 49.0	
					micr	sec
			PKP	Z'	0.1	1.4
		Ki	eP		10 01 42	
			ePKP		10 05 37	
		Um	i(PKP)		10 05 34.5	
			iPKP		10 05 40.9	
		Ud	i(PKP)		10 05 34.7	
			iPKP		10 05 50.5	
			iPKKP		10 16 33.3	
		De	iPKP		10 05 53.7	
		New Guinea (h = 90 km).				
"	4	Up	iP		10 49 21.1	
			i		10 49 27.5	
			i		10 49 30.6	
					micr	sec
			P	Z'	0.1	0.8
		Ki	iP		10 49 14.8	
		Um	iP		10 49 18.5	
		Ud	iP		10 49 29.6	
			i		10 49 39.1	
"	4	Up	iPKP		11 26 06.3	
		Ud	iPKP		11 26 07.1	
		De	iPKP		11 26 17.9	
		Fiji Islands (h = 550 km).				
"	4	Ki	eP		11 55 17	
"	4	Um	iP		11 56 16.5	
"	4	Up	iSg1		12 30 00.7	
		Um	iSg1		12 30 17.0	
		Ud	iSg1		12 30 54.1	
		Western USSR.				
		Explosion.				
"	4	Um	i(Sg1)		15 06 29.6	
"	4	Um	iP		16 52 17.1	
"	4	Up	iP		21 49 30.9	C
			i(PP)		21 52 53.2	
			i		21 53 19.3	
			iPP		21 53 30.5	
					micr	sec
			P	Z'	0.1	0.8
			PP	Z'	0.3	1.3
		Ki	iP		21 49 24.7	C
			i(PP)		21 52 34.9	
			iPP		21 53 20.4	
			iSKS		21 59 47.5	
		(cont.)				

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

1972
Nov. 4 (cont.)

Ki			micr	sec
	P	Z'	0.1	1.2
	PP	Z'	1.3	2.5
Sk	iP		21 49 41.3	C
	iPKP		21 53 42.9	
	iPP		21 53 50.2	
Um	iP		21 49 25.5	C
	i(PP)		21 52 15.8	
	iPP		21 53 17.3	
	iSKS		21 59 49.2	
Ud	iP		21 49 40.4	
	i		21 49 46.7	
	i(PP)		21 52 59.8	
	iPKP		21 53 38.2	
	iPP		21 53 47.1	
De	iP		21 49 41.0	
	iPKP		21 53 33.7	
	iPP		21 53 51.3	

Java (h = 130 km).
m = 6.5 (Up,Ki).

" 4 Ud iP 22 09 52.3
Greece.

" 5

Up	ePKP	00 07 43
Ki	ePKP	00 07 30
Sk	iPKP	00 07 32.3
Um	iPKP	00 07 33.9
Ud	iPKP	00 07 36.7
	i	00 07 47.0
De	iPKP	00 07 40.6

Loyalty Islands
(h = 20 km).

" 5

Up	iP		00 19 57.2	
	i(PP)		00 23 22.9	
	iPP		00 24 09.3	
			micr	sec
	PP	Z'	0.1	1.5
Ki	iP		00 19 50.0	
	i		00 20 02.3	
	ePP		00 24 00	
			micr	sec
	P	Z'	0.1	1.3
Sk	ePP		00 24 39	
Um	i(P)		00 20 03.5	
	i(PP)		00 23 25.2	
	iPP		00 24 12.1	
Ud	iP		00 20 05.3	
	i		00 24 47.0	
De	iPP		00 24 43.8	

Sawu Sea (h = N).
m = 6.3 (Up,Ki).

1972
Nov. 5

Um	iP	00 48 20.9
Ud	iP	00 48 39.1

Hindu Kush (h = 210 km).

" 5

Ki	iPKP	01 18 38.6
Um	iPKP	01 18 45.5
	i	01 19 03.0

Loyalty Islands
(h = 20 km).

" 5

Ud	iP	02 02 25.4
De	eP	02 02 20

Afghanistan-Pakistan.

" 5 Up iP 04 22 41.0
Ryukyu Islands (h = N).

" 5 Ud iP 11 12 33.9
Java (h = 550 km).

" 5

Um	iP	12 40 49.6
Ud	iP	12 41 20.9

Japan (h = 70 km).

" 5

Ki	ePP	13 14 03
Um	iP	13 12 35.0
Ud	iP	13 12 37.3

Caucasus (h = 60 km).

" 5

Ud	iPKP	13 50 32.3
De	iPKP	13 50 43.8

Tonga-Kermadec Islands
(h = 640 km).

" 5 Ud iP 14 15 01.1
Hindu Kush.
Intermediate depth.

" 5

Up	iP		19 31 05.4	
			micr	sec
	P	Z'	0.3	1.5
Ki	iP		19 32 13.6	
			micr	sec
	P	Z'	0.1	1.0
Sk	iP		19 31 43.6	
Um	iP		19 31 38.0	
Ud	iP		19 31 12.3	
	i		19 31 15.4	
De	iP		19 30 38.4	
	i		19 30 42.0	

Crete (h = N).
m = 5.8 (Up,Ki).

" 5

Ki	iP	20 21 58.1
	iPKP	20 26 04.2

(cont.)

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

1972
Nov. 5 (cont.)

Ki	iPKKP	20 37 16.7	
Sk	ePP	20 27 09	
Um	iPKP	20 26 08.4	
Ud	iPP	20 27 08.7	
	iPKKP	20 36 55.1	
De	iPKP	20 26 22.3	

New Guinea (h = 230 km).

" 5

Ki	iPKP	22 26 07.0	
Sk	iPKP	22 26 19.6	
Um	e(PKP)	22 26 07	

Loyalty Islands
(h = 25 km).

" 6

Ki	eP	00 13 34	

" 6

Ki	iSn	09 19 30.8	
	iSg1	09 20 52.8	
Um	iSg1	09 20 43.6	

Northwest USSR.
Explosion.

" 6

Up	iP	11 05 57.6	C
Ki	iP	11 05 53.8	
Sk	iP	11 06 15.2	C
	i	11 06 29.5	
Um	iP	11 05 51.1	C
	ipP	11 06 00.7	
Ud	iP	11 06 12.0	C
	ipP	11 06 21.4	
De	iP	11 06 12.4	

Sikkim.
h = 35 km (Um,Ud).

" 6

Up	iP	11 51 14.4		C
		micr	sec	
	P	Z' 0.1	0.8	
Ki	iP	11 50 36.5		C
		micr	sec	
	P	Z' 0.1	1.0	
Sk	iP	11 51 09.2		C
Um	iP	11 50 53.5		C
	ipP	11 51 12.6		
Ud	iP	11 51 21.5		C
De	iP	11 51 36.3		C

Japan.
h = 70 km (Um).
m = 5.8 (Up,Ki).

" 6

Ki	iPn	12 22 19.0	
	iPg1	12 22 28.3	
	iSn	12 23 05.1	

(cont.)

1972
Nov. 6 (cont.)

Um	iSg1	12 24 52.7	

Northwest Russia-Norway
border region,
69.6°N, 30.1°E.
Origin time = 12 21 18.
Explosion.

" 6

Up	iP	16 33 16.2	
Ud	iP	16 33 22.0	

Kurile Islands
(h = 50 km).

" 6

Up	iP	20 33 35.0	
Ud	iP	20 33 41.6	
	i	20 33 45.6	

Greece.

" 7

Um	i(P)	02 37 31.1	

" 7

Um	i(P)	05 52 32.5	
	i	05 53 13.1	

" 7

Ud	iP	06 05 28.1	

" 7

Up	iP	06 52 27.3	
	i	06 52 44.2	
		micr	sec
	P	Z' 0.1	0.9
Ki	eP	06 52 04	
	ipP	06 52 08.6	
Um	iP	06 52 12.7	
	i	06 52 36.8	
Ud	iP	06 52 37.3	
	i	06 52 53.5	

Formosa (h = 20 km).

" 7

Um	i(P)	07 57 21.6	

" 7

Ud	iP	09 34 28.4	

Celebes Sea (h = 310 km).

" 7

Ud	iP	11 11 02.8	

" 7

Up	iP	12 11 53.4	
Ki	iP	12 12 01.6	
		micr	sec
	P	Z' 0.1	1.2
Sk	iP	12 11 31.9	
Um	iP	12 12 01.0	
Ud	iP	12 11 36.5	
De	iP	12 11 44.5	

North Atlantic Ocean
(h = N).

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

1972

Nov.	7	Ki	iPn		12 20 00.4
			iPg1		12 20 08.9
			iSn		12 20 46.8
			iSg1		12 21 04.4
		Um	iSn		12 21 58.7
			iSg1		12 22 33.9
		Northwest USSR-Norway border region, 69.6°N, 30.2°E. Origin time = 12 18 59. Explosion.			
"	7	Up	iP		13 49 14.2
					micr sec
			P	Z'	0.1 0.9
		Ki	iP		13 48 40.8
			iPP		13 51 28.2
					micr sec
			P	Z'	0.1 1.0
			PP	Z'	0.1 1.4
		Sk	iP		13 49 10.2
			iPP		13 52 11.5
		Um	iP		13 48 54.5
			ipP		13 49 42.0
		Ud	iP		13 49 20.4
			ipP		13 50 09.8
		De	iP		13 49 33.1
		Bonin Islands. h = 200 km (Um,Ud). m = 5.6 (Up,Ki).			
"	7	Um	iP		15 20 14.6
		Ud	iP		15 20 34.4
		De	eP		15 20 32
		Kashmir.			
"	7	Up	iP		18 34 21.1
		Ki	iP		18 34 19.7
		Um	iP		18 34 17.4
		Ud	iP		18 34 30.4
		Sunda Strait (h = 90 km).			
"	7	Ud	iP		22 47 06.8
		De	iP		22 46 29.0
		Crete (h = 15 km).			
"	8	Ud	iP		00 58 13.6
		Aleutian Islands (h = 40 km).			
"	8	Um	iP		01 17 25.5
		Ud	iP		01 17 51.9
"	8	Up	iSg1		09 18 35.9
		(cont.)			

1972

Nov.	8	(cont.)			
		Ud	iPn		09 17 12.4
			iPg1		09 17 14.8
			iSn		09 17 40.9
			iSg1		09 17 44.6
		De	iPg1		09 17 21.7
			iSg1		09 17 57.5
			i		09 18 05.8
		Off coast of Bohuslän, Sweden, 58.5°N, 10.8°E. Origin time = 09 16 36. Explosion.			
"	8	Ud	iPg1		09 38 49.9
			iSg1		09 39 22.6
		Off coast of Bohuslän, Sweden. Explosion.			
"	8	Up	iSn		09 40 12.8
			iSg1		09 40 26.2
		Ud	iPg1		09 39 07.4
			iSn		09 39 33.7
			iSg1		09 39 37.5
		De	iPg1		09 39 10.3
			iSg1		09 39 42.2
			i		09 39 46.6
		Off coast of Bohuslän, Sweden, 58.3°N, 11.1°E. Origin time = 09 38 28. Explosion.			
"	8	Ud	iP		11 22 48.4
"	8	Up	iP		14 37 31.7
					micr sec
			P	Z'	0.1 1.0
			Mx	E	2.7 16
			Mx	N	2.5 20
		Ki	iP		14 37 07.1
			i		14 37 21.9
					micr sec
			P	Z'	0.1 1.4
		Sk	i(pP)		14 37 41.8
		Um	iP		14 37 15.6
		Ud	iP		14 37 41.7
		Formosa (h = 25 km). m = 5.8 (Up,Ki).			
"	8	Ud	iP		20 04 25.4
"	8	Ud	iP		21 06 45.2
"	9	Um	iP		02 06 06.8

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

1972
Nov. 9 Ud iPKP 03 07 22.9
De iPKP 03 07 33.9
Fiji Islands (h = 540 km).

" 9 Ud iP 07 24 46.3

" 9 Ki iSKP 08 29 40.2
micr sec
SKP Z' 0.1 1.2
De iPKP 08 27 28.6 D
Fiji Islands (h = 620 km).

" 9 Up iPKP 08 27 55.0
iSKP 08 30 42.0
micr sec
PKP Z' 0.1 0.9
SKP Z' 0.5 1.1
Ki i(PKP) 08 27 37.6
iPKP 08 27 47.5
iSKP 08 30 19.2
micr sec
PKP Z' 0.1 0.6
SKP Z' 1.7 1.5
Sk i(PKP) 08 27 47.6
iSKP 08 30 36.1
Um i(PKP) 08 27 43.4
iPKP 08 27 49.6
iSKP 08 30 31.1
Ud iPKP 08 27 56.7 D
iSKP 08 30 44.2
De iPKP 08 28 08.0 D
iSKP 08 30 52.8
Fiji Islands (h = 610 km).

" 9 Sk iP 11 51 39.7
Ud iP 11 51 14.9
Tyrrhenian Sea.
Deep.

" 9 Ki ePKP 15 58 36
New Hebrides Islands
(h = 60 km).

" 9 Up iSg1 16 40 28.6
Ki iPg1 16 37 46.5
iSg1 16 38 23.0
Sk iSg1 16 38 26.5
i 16 38 29.8
Um iPg1 16 38 01.0
iSn 16 38 35.0
iSg1 16 38 48.9
Ud iSg1 16 40 16.2
Nordland, Norway,
66.4°N, 14.6°E.
Origin time = 16 36 58.
Explosion.

1972
Nov. 9 Up iP 16 49 58.8
Um iP 16 50 39.9
Ud iP 16 50 06.1
i 16 50 10.5
Greece.

" 9 Up iP 18 53 02.4
micr sec
P Z' 0.2 1.0
Mx E 17 17
Mx N 20 20
Mx Z 27 17
Ki iP 18 52 38.8
micr sec
P Z' 0.2 1.3
Mx E 23 12
Mx N 18 13
Mx Z 21 12
Sk e(pP) 18 53 12
Um iP 18 52 41.5
Ud iP 18 53 10.0
De iP 18 53 21.0
Formosa (h = N).
m = 6.1, M = 6.7 (Up,Ki).

" 9 Ud iP 21 16 25.1 C

" 9 Um iP 23 52 14.8
Kurile Islands.

" 10 Um iPKP 00 41 58.8
De iPKP 00 42 15.6
Fiji Islands (h = 520 km).

" 10 Up i(P) 01 15 18.2

" 10 Um iP 04 52 56.3
Ud eP 04 52 59
Iran (h = N).

" 10 Up iP 04 55 18.6
Sk eP 04 55 43
Um iP 04 55 20.7
Ud iP 04 55 37.4
Afghanistan.

" 10 Up iP 07 51 43.6 C
iPcP 07 52 08.8
micr sec
P Z' 0.3 1.0
Ki iP 07 50 57.7 C
micr sec
P Z' 0.5 1.0
Sk iP 07 51 33.7
iPP 07 53 54.0
(cont.)

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

1972
Nov. 10 (cont.)

Um	iP		07 51 18.5	C
Ud	iP		07 51 49.8	C
De	iP		07 52 07.8	C

Kurile Islands
(h = 120 km).
m = 6.3 (Up,Ki).

" 10

Up	iP		08 39 23.1	
	iPcP		08 40 01.9	
			micr sec	
	P	Z'	0.1 1.0	
Ki	iP		08 38 30.4	
Sk	iP		08 39 06.8	
Um	iP		08 38 56.3	
	iPcP		08 39 45.9	
Ud	iP		08 39 27.7	
	iPcP		08 40 04.9	
De	iP		08 39 48.1	
	iPcP		08 40 18.0	

Kamchatka (h = 110 km).

" 10

Um	i(PKP)		21 12 30.9	
Ud	i(PKP)		21 12 43.1	

" 11

Up	iP		01 16 38.5	

" 11

Up	iP		01 57 24.9	C
			micr sec	
	P	Z'	0.1 0.8	
Ki	iP		01 57 17.2	
			micr sec	
	P	Z'	0.1 0.8	
Sk	iP		01 57 40.0	C
Um	iP		01 57 16.6	C
Ud	iP		01 57 37.7	C

Burma (h = 140 km).
m = 5.8 (Up,Ki).

" 11

Ud	iP		15 53 11.1	

Alaska (h = 140 km).

" 11

Up	iP		22 52 16.5	
Sk	iP		22 51 57.5	
Ud	iP		22 52 18.5	D

" 11

Ud	iP		23 24 40.6	

" 12

Ud	iP		01 51 15.7	

Hindu Kush.
Intermediate depth.

" 12

Ki	iP		02 38 55.5	
Ud	iP		02 39 30.7	

Mariana Islands
(h = 35 km).

1972
Nov. 12

Ki	iP		02 56 00.4	
Ud	iP		02 56 50.8	

Kamchatka (h = 40 km).

" 12

Ud	iP		04 19 39.4	
	ipP		04 19 53.1	

Japan.
h = 50 km (Ud).

" 12

Ki	iP		09 50 25.3	
Ud	iP		09 51 17.6	C
De	iP		09 51 41.0	

Aleutian Islands
(h = 45 km).

" 12

Up	iP		18 04 23.1	D
	ipP		18 04 54.4	
	iPP		18 05 59.2	
	iS		18 10 23	
	iSn		18 12 50.8	
			micr sec	
	P	Z'	0.6 1.0	
	PP	Z'	3.2 1.7	
	Mx	E	4.8 15	
	Mx	N	8.1 9	
	Mx	Z	9.5 12	
Ki	iP		18 04 27.5	D
	ipP		18 04 57.2	
	iPP		18 06 07	
			micr sec	
	P	Z'	1.5 0.9	
	Mx	E	12 10	
	Mx	N	13 10	
	Mx	Z	11 9	
Sk	iP		18 04 47.4	D
	ipP		18 05 19.1	
	iPP		18 06 28.6	
	iSn		18 14 05.8	
Um	iP		18 04 19.3	D
	ipP		18 04 49.3	
	iPP		18 05 50	
Ud	iP		18 04 39.9	D
	ipP		18 05 09.1	
De	iP		18 04 38.4	D

Tadzhik-Sinkiang.
h = 150 km (Up,Ki,Sk,Um,Ud).
m = 6.5, M = 6.1 (Up,Ki).
Well developed higher-mode surface waves.

" 12

Ki	iP		18 59 22.9	
Ud	iP		18 59 34.7	

Tadzhik-Sinkiang.

" 12

Ud	iP		20 33 06.7	

Crete.

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

1972 Nov.	13	Up	iP		04 56 32.2	
			ipP		04 56 47.1	
			iS		05 07 08	
					micr	sec
			P	Z'	0.1	1.1
			pP	Z'	0.1	1.0
			Mx	E	33	25
			Mx	N	23	25
			Mx	Z	69	23
		Ki	iP		04 56 22.0	
			iS		05 06 47	
					micr	sec
			P	Z'	0.9	2.3
			Mx	E	75	25
			Mx	N	49	24
			Mx	Z	66	25
		Sk	iP		04 56 12.1	
			ipP		04 56 29.7	
		Um	iP		04 56 32.3	
		Ud	iP		04 56 28.9	
			i		04 56 35.0	
			ipP		04 56 43.1	
		De	iP		04 56 31.8	
			ipP		04 56 49.2	
		Mexico.				
		h = 60 km (Up,Sk,Ud,De).				
		m = 6.2, M = 6.9 (Up,Ki).				
"	13	Ud	iP		06 27 16.9	
"	13	Up	iPKP		06 54 48.4	
		Ud	iPKP		06 54 50.5	
		De	iPKP		06 55 02.1	
		Fiji Islands (h = 600 km).				
"	13	Up	iP		08 23 21.3 D	
			iPP		08 26 31.4	
					micr	sec
			P	Z'	1.2	0.7
			PP	Z'	0.4	1.3
		Ki	iP		08 22 49.3 D	
			iPP		08 25 39.7	
					micr	sec
			P	Z'	1.0	0.8
			PP	Z'	0.2	1.2
		Sk	iP		08 23 18.2 D	
			iPP		08 26 23.7	
		Um	iP		08 23 03.2 D	
		Ud	iP		08 23 28.4 D	
			iPP		08 26 41.3	
			iS		08 33 08.1	
		De	iP		08 23 40.3 D	
			i		08 26 26.2	
			iPP		08 27 01.3	
		(cont.)				

1972 Nov.	13	(cont.)				
		Bonin Islands (h = 370 km).				
		m = 6.5 (Up,Ki).				
"	13	Ud	iP		09 28 55.8	
"	13	Up	eP		09 36 29	
		Ki	iP		09 35 35.2	
			ipP		09 36 10.0	
		Um	iP		09 36 02.2	
			ipP		09 36 38.4	
		Ud	iP		09 36 27.8	
			ipP		09 37 02.2	
		De	iP		09 36 50.5	
		Aleutian Islands.				
		h = 140 km (Ki,Um,Ud).				
"	13	Ud	iP		14 06 39.7	
"	13	Ud	iP		19 20 58.2	
"	13	Ki	iP		20 32 07.7	
		Ud	iP		20 32 35.7	
		Mindanao.				
"	13	Um	iP		23 26 46.1	
		Ud	eP		23 27 07	
		(Andaman Islands).				
"	13	Ki	eP		23 37 44	
"	13	Up	eP		23 45 46	
			i		23 45 52.2	
					micr	sec
			P	Z'	0.1	0.9
			Mx	E	1.4	15
			Mx	N	1.8	15
			Mx	Z	2.4	15
		Ki	iP		23 45 39.9	
			i		23 45 48.5	
			iS		23 55 04	
					micr	sec
			Mx	E	4.1	21
			Mx	N	5.9	21
			Mx	Z	3.1	21
		Sk	eP		23 45 59	
			i		23 46 04.5	
		Um	iP		23 45 35.3	
			e		23 45 44	
			iS		23 54 59	
		Ud	iP		23 45 53.3	
			i		23 46 00.9	
		De	iP		23 45 55.9	
		Andaman Islands (h = N).				
		M = 5.8 (Up,Ki).				

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

1972						
Nov.	14	Ki	iP		01 22 46.8	
"	14	Up	iP		04 35 13.3	
			iS		04 37 48.5	
					micr	sec
			P	Z'	0.1	0.9
			Mx	E	6.1	17
			Mx	N	6.4	18
			Mx	Z	6.9	19
		Ki	iP		04 34 06.7	
			iS		04 36 00.4	
					micr	sec
			P	Z'	0.3	0.8
			Mx	E	8.9	16
			Mx	N	10	15
			Mx	Z	7.1	15
		Sk	iP		04 34 12.6	
			iS		04 36 04.8	
		Um	iP		04 34 40.9	
			iS		04 36 57.5	
		Ud	iP		04 34 56.1	
			iS		04 37 26.2	
		De	iP		04 35 48.4	
		Jan Mayen (h = N).				
		m = 5.2, M = 5.0 (Up,Ki).				
"	14	Ud	iP		05 37 31.8	
"	14	Ki	iP		11 38 14.6	
		Ud	iP		11 39 05.9	
		Unimak Island (h = 50 km).				
"	14	Ud	iP		11 48 49.9	C
"	14	Um	i(P)		15 06 56.4	
"	14	Ki	iPKP		16 43 56.8	
		Sk	ePKP		16 44 08	
		Um	iPKP		16 44 03.6	
		Ud	e(pPKP)		16 44 53	
		De	ePKP		16 44 20	
		New Hebrides Islands (h = 120 km).				
"	14	Ud	iP		17 10 59.6	
		Aleutian Islands (h = 40 km).				
"	15	Up	iP		00 51 02.3	
		Tadzhik SSR.				
"	15	Ud	i(P)		05 57 03.4	
"	15	Ud	iP		06 02 33.7	

1972						
Nov.	15	Ud	iP		08 22 46.8	
"	15	De	i(P)		11 06 00.8	
"	15	Ud	iP		13 01 53.3	
"	15	Ud	iSg1		13 29 44.2	
		South Norway.				
		By combination with Kongsberg readings.				
"	15	Ki	i(P)		15 50 13.4	
"	15	Up			micr	sec
			Mx	E	1.3	23
			Mx	N	1.3	23
			Mx	Z	2.8	23
		Ki	iPKP		16 38 53.7	
					micr	sec
			Mx	E	2.9	21
			Mx	N	1.8	20
			Mx	Z	2.4	20
		Sk	iPKP		16 39 02.3	
		South of Australia (h = N).				
		M = 6.1 (Up,Ki).				
"	15	Ud	iP		19 34 16.7	
"	15	Up	iPKP		23 55 16.5	
		Ud	iPKP		23 55 18.9	
"	16	Ki	eP		11 34 33	
		Ud	iP		11 34 55.4	
		Burma.				
"	16	Ud	iP		12 06 07.2	
		Hindu Kush.				
		Intermediate depth.				
"	16	Up	iP		12 50 38.1	C
			ipP		12 51 04.4	
			isP		12 51 17.9	
			iPP		12 52 15.0	
			iPcP		12 52 29.7	
					micr	sec
			P	Z'	0.4	0.8
		Ki	iP		12 50 48.5	C
			ipP		12 51 15.8	
			iPP		12 52 31.5	
					micr	sec
			P	Z'	0.4	1.4
		Sk	iP		12 51 04.7	C
			ipP		12 51 31.7	

(cont.)

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

1972
Nov. 16 (cont.)

Sk	iPP	12 52 49.1	
Um	iP	12 50 37.3	C
	ipP	12 51 04.6	
	isP	12 51 17.2	
Ud	iP	12 50 54.9	C
	ipP	12 51 20.6	
	isP	12 51 32.8	
	iPP	12 52 39.6	
De	iP	12 50 50.2	C
	ipP	12 51 16.2	

Hindu Kush.
h = 130 km (Up,Ki,Sk,Um,Ud, De).
m = 6.1 (Up,Ki).

" 16

Up	iSg1	13 55 49.7
Sk	eSg1	13 56 45
Ud	iPg1	13 54 31.3
	iSg1	13 55 04.2
De	iPg1	13 54 20.6
	iSg1	13 54 47.7

Off coast of Bohuslän, Sweden, 57.9°N, 11.4°E.
Origin time = 13 53 48.
Explosion.

" 16

Up	iSg1	13 57 36.8
Sk	eSg1	13 58 36
Um	iSg1	13 59 24.4
Ud	iPg1	13 56 20.2
	i	13 56 40.5
	iSg1	13 56 54.1
De	iPg1	13 56 08.6
	iSg1	13 56 36.3

Off coast of Bohuslän, Sweden, 57.9°N, 11.4°E.
Origin time = 13 55 35.
Explosion.

" 16 Ki iP 14 15 53.6
Kurile Islands.

" 16 Ud eP 23 49 35

" 17 Up iPKP 00 38 25.1
Loyalty Islands
(h = 35 km).

" 17 Ud iP 02 18 57.6
Ionian Sea.

" 17

Up	iP	02 47 31.9
	i	02 47 34.8

(cont.)

1972
Nov. 17 (cont.)

Ki	eP	02 48 50
Sk	iP	02 48 11.9
Um	iP	02 48 13.6
	i	02 48 20.6
Ud	iP	02 47 38.4
De	iP	02 47 01.5

Ionian Sea (h = 40 km).

" 17

Ki	iSg1	09 16 16.0
Sk	eSg1	09 16 32
Um	iSg1	09 16 57.3

Off coast of Nordland, Norway.

" 17

Ki	iSg1	09 16 42.1
Sk	eSg1	09 17 01
Um	iSg1	09 17 24.4

Off coast of Nordland, Norway.

" 17

Up	iP		09 16 54.5	
	ipP		09 17 10.9	
			micr sec	
	pP	Z'	0.1 1.1	
Ki	iP		09 17 22.6	C
	ipP		09 17 39.6	
			micr sec	
	P	Z'	0.1 0.8	
Sk	iP		09 17 26.1	C
Um	iP		09 17 03.3	C
	ipP		09 17 21.6	
	iPP		09 18 51.3	
Ud	iP		09 17 09.1	C
	ipP		09 17 27.3	
	iPP		09 18 59.0	
De	iP		09 16 56.0	C
	ipP		09 17 13.6	
	i		09 17 31.9	

Iran.
h = 70 km (Up,Ki,Um,Ud,De).
m = 5.7 (Up,Ki).

" 17

Up	iSn	12 11 54.0
	iSg1	12 12 06.3
Um	iSg1	12 12 40.1
Ud	iSg1	12 13 13.2
De	i	12 13 08.3
	iSg1	12 13 37.6

Esthonia, 59.5°N, 25.0°E.
Origin time = 12 10 08.
Explosion.

" 17 Um iP 12 42 36.9

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

1972 Nov.	17	Up	iP		15 08 01.4
			ipP		15 08 55.5
					micr sec
			P	Z'	0.1 1.3
			pP	Z'	0.2 1.6
		Ki	ipP		15 08 46.3
					micr sec
			pP	Z'	0.1 1.0
		Sk	eP		15 07 45
			ipP		15 08 40.2
		Um	iP		15 08 06.1
			ipP		15 08 55.8
		Ud	ipP		15 08 48.7
		De	ipP		15 08 56.9
		Mexico-Guatemala.			
		h = 220 km (Up,Sk,Um).			
		m = 5.6 (Up,Ki).			
"	17	Up	eP		16 51 56
		Ki	eP		16 51 03
		Ud	eP		16 51 52
		Alaska (h = N).			
"	17	Up	iP		17 31 09.6
			ipP		17 31 18.4
		Ki	iP		17 30 19.6
			ipP		17 30 26.7
		Ud	iP		17 31 10.5
			ipP		17 31 19.6
		De	iP		17 31 31.4
		Aleutian Islands.			
		h = 30 km (Up,Ki,Ud).			
"	17	Up	iPKP		19 03 56.7
		Sk	i(PKP)		19 04 01.1
		Um	iPKP		19 03 41.0
			i		19 03 45.4
			iSKP		19 06 25.4
		Ud	iPKP		19 03 57.9
"	17	Up	iPKP2		19 11 24.0
		Um	iPKP1		19 11 03.7
			iPKP2		19 11 08.0
		Ud	iPKP1		19 11 16.0
			iPKP2		19 11 26.8
"	18	Um	iP		00 36 50.2
"	18	Ud	iP		03 20 13.9
"	18	Ud	iP		08 39 39.0
"	18	Up	iP		08 41 46.8
					micr sec
			P	Z'	0.1 1.1
		(cont.)			

1972 Nov.	18	(cont.)			
		Ki	iP		08 40 53.1
					micr sec
			P	Z'	0.1 0.9
		Sk	iP		08 41 30.6
		Um	iP		08 41 17.6
		Ud	eP		08 41 54
		De	iP		08 42 19.8
		Kamchatka (h = N).			
		m = 5.9 (Up,Ki).			
"	18	Up	iSg1		08 55 36.4
		Ki	iPg1		08 52 50.3
			iSn		08 53 21.0
					micr sec
			Sn	Z'	0.1 0.5
		Sk	iS*		08 53 36.3
			iSg1		08 53 39.5
		Um	iPn		08 53 03.7
			iPg1		08 53 09.1
			iSg1		08 54 01.5
		Ud	eSg1		08 55 22
		Nordland, Norway,			
		66.6°N, 13.8°E.			
		Origin time = 08 52 00.			
"	18	Ki	iPn		12 20 56.6
			iSn		12 21 45.0
			iSg1		12 22 01.7
		Northwest USSR-Norway			
		border region.			
		Origin time = 12 19 53.			
		Explosion.			
"	18	Ud	eP		18 04 59
"	18	Um	iP		23 05 55.7
		Ud	iP		23 06 25.6
		Japan (h = 140 km).			
"	19	Ud	i(P)		00 10 01.5
"	19	Ud	iP		02 10 04.2
"	19	Ud	iSg1		02 50 36.6
"	19	Ki	eP		04 47 52
			ipP		04 48 17.6
		Um	iP		04 47 58.9
			ipP		04 48 24.7
		Ud	iP		04 47 50.8
			ipP		04 48 16.1
		De	iP		04 47 58.0
		El Salvador.			
		h = 100 km (Ki,Um,Ud).			

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

1972 Nov.	19	Ud	i(P)		05 49 28.4
"	19	Um	iP		07 51 54.5
		Indian Ocean (h = N).			
"	19	Ki	iP		08 31 05.7
		Ud	iP		08 31 30.5
		Mindanao (h = 140 km).			
"	19	Ud	iP		09 28 07.6
		De	eP		09 27 31
"	19	Up	iPKP		10 57 08.6
			i		10 57 12.3
		Ki	iPKP		10 56 51.8
		Sk	ePKP		10 57 02
		Um	iPKP		10 56 56.5
			i		10 57 01.3
		Ud	iPKP		10 57 10.4
		De	iPKP		10 57 18.7
		Kermadec Islands (h = 80 km).			
"	19	Up	iP		17 41 14.3
				micr	sec
			P	Z' 0.2	1.4
			Mx	E 2.6	22
			Mx	N 4.2	16
			Mx	Z 5.3	16
		Ki	iP		17 40 13.1
				micr	sec
			P	Z' 0.2	1.5
			Mx	E 2.2	15
			Mx	N 1.7	15
			Mx	Z 3.3	15
		Um	iP		17 40 44.7
		Ud	iP		17 41 06.0
		Queen Elizabeth Islands (h = N).			
		m = 5.7, M = 5.2 (Up,Ki).			
"	19	Up	iP		20 15 37.3 D
			i		20 15 43.5
				micr	sec
			P	Z' 1.6	1.9
			Mx	E 2.7	18
			Mx	N 5.0	20
			Mx	Z 6.1	18
		Ki	iP		20 14 06.8 D
			iS		20 16 46
				micr	sec
			P	Z' 3.5	1.6
			Mx	E 3.3	15
			Mx	N 6.0	20
			Mx	Z 6.4	19
		(cont.)			

1972 Nov.	19	(cont.)		
		Sk	iP	20 14 51.2
			i	20 14 59.3
		Um	iP	20 14 56.7 D
		Ud	iP	20 15 31.6 D
			i	20 15 38.6
		De	iP	20 16 10.0 D
			i	20 16 15.3
		Greenland Sea (h = N).		
		m = 6.1, M = 4.9 (Up,Ki).		
"	19	Ki	eP	20 48 24
		Um	iP	20 48 21.4
		Ud	iP	20 48 32.5
		Sumatra (h = N).		
"	20	Ud	eP	01 10 05
"	20	Up	eP	03 35 07
			i	03 35 09.1
		Ki	eP	03 36 23
		Sk	iP	03 35 52.2
		Um	iP	03 35 46.0
		Ud	iP	03 35 14.2
		De	iP	03 34 39.1
		Greece (h = N).		
"	20	Up	iP	03 41 33.2
		Ki	eP	03 42 10
		Ud	iP	03 41 49.1
"	20	Up	iP	09 24 39.5
		Ki	iP	09 24 11.8
				micr sec
			P	Z' 0.1 1.0
		Um	iP	09 24 23.7
		Ud	iP	09 24 46.7
		Mariana Islands (h = 130 km).		
"	20	Ud	i(P)	09 56 47.7
"	20	Sk	iSg1	10 30 15.7
		Ud	iPg1	10 29 27.5
			iSg1	10 30 13.0
		De	iSg1	10 31 23.0
		Southern Norway, 61.1°N, 7.4°E.		
		Origin time = 10 28 28.		
		By combination with Kongsberg readings.		
"	20	Up	iPKP	13 26 01.1
			i	13 26 07.1
		(cont.)		

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

1972
Nov. 20 (cont.)

Up			micr	sec	
	PKP	Z'	0.1	1.0	
Ki	iPKP		13 25 49.4		
Um	iPKP		13 25 56.7		
Ud	iPKP		13 26 02.3		C
	ipPKP		13 26 44.3		
De	iPKP		13 26 12.9		C
	ipPKP		13 26 54.9		

Tonga-Kermadec Islands.
h = 160 km (Ud,De).

" 20 Ud i(P) 14 29 54.4

" 20

Up	iPKP	14 40 11.0
Sk	iPKP	14 40 12.9
Um	iPKP	14 40 19.0
Ud	iPKP	14 40 09.4

South Sandwich Islands
(h = N).

" 21 Ud iPKP 01 42 01.1
Fiji Islands (h = 560 km).

" 21 Ud iP 02 45 21.7
Albania.

" 21

Up	eP		02 59 04		
			micr	sec	
	P	Z'	0.4	1.5	
	Mx	E	6.1	21	
	Mx	N	9.7	20	
	Mx	Z	6.4	16	
Ki	iP		02 58 40.6		
			micr	sec	
	P	Z'	0.1	1.0	
	Mx	E	8.1	11	
	Mx	N	6.0	16	
	Mx	Z	10	11	
Sk	eP		02 59 08		
Um	iP		02 58 47.4		
Ud	iP		02 59 12.3		
	ipP		02 59 17.2		

Formosa.
h = 15 km (Ud).
m = 6.1, M = 6.2 (Up,Ki).

" 21

Up	Mx		05 13		
			micr	sec	
	Mx	E	5.1	18	
	Mx	N	5.4	18	
	Mx	Z	8.5	18	
Ki	Mx		05 12		
			micr	sec	
	Mx	E	8.4	19	

(cont.)

1972
Nov. 21 (cont.)

Ki			micr	sec	
	Mx	N	6.7	18	
	Mx	Z	10	18	

Solomon Islands
(h = 35 km).
M = 6.4 (Up,Ki).

" 21

Um	iP	05 47 04.8
Ud	iP	05 47 30.0

Volcano Islands
(h = 150 km).

" 21

Up			micr	sec	
	Mx	E	2.7	18	
	Mx	N	5.7	17	
	Mx	Z	9.1	17	
Ki	iP		10 12 55.8		
			micr	sec	
	Mx	E	3.3	15	
	Mx	N	2.6	14	
	Mx	Z	3.3	13	
Ud	iP		10 13 51.9		

Queen Elizabeth Islands
(h = N).
M = 5.4 (Up,Ki).

" 21 Um iSg1 14 40 33.3
Esthonia.
Explosion.

" 21

Up	iP		17 12 39.3		C
	ipP		17 12 50.0		
			micr	sec	
	P	Z'	0.4	1.0	
Ki	iP		17 11 45.5		C
	ipP		17 11 55.7		
			micr	sec	
	P	Z'	0.2	0.9	
	Mx	N	1.5	18	
Sk	iP		17 12 19.5		C
	ipP		17 12 30.0		
	i		17 13 10.0		
Um	iP		17 12 11.7		C
	ipP		17 12 22.2		
Ud	iP		17 12 41.1		C
	ipP		17 12 51.8		
De	iP		17 13 03.0		C

Aleutian Islands.
h = 40 km (Up,Ki,Sk,Um,Ud).
m = 6.4 (Up,Ki).

" 21

Ki	iSg1	17 37 31.8
Sk	iS*	17 37 35.4
	iSg1	17 37 39.0

(cont.)

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

1972
Nov. 21 (cont.)

Um	iSn	17 37 46.4	
	iSg1	17 37 59.3	

Nordland, Norway,
66.5°N, 14.1°E.
Origin time = 17 36 04.
Explosion.

" 21	Sk	iPKP	19 16 57.5
	Ud	iPKP	19 17 06.8

" 21	Sk	iPg1	21 12 11.1
		eS*	21 12 54
		iSg1	21 12 58.1
	Ud	iPg1	21 12 11.1
		iSg1	21 12 56.2

Southern Norway,
61.2°N, 7.3°E.
Origin time = 21 11 11.
By combination with Kongsberg readings.

" 22	Ud	ePKP	02 31 38

Solomon Islands
(h = 180 km).

" 22	Ki	iP	03 09 53.2
" 22	Ki	iP	07 10 52.9

Afghanistan.

" 22	Ud	iP	07 19 14.9
" 22	Sk	iP	08 47 35.8
" 22	Um	iPKP1	09 19 18.1
	Ud	iPKP1	09 19 30.5
		iPKP2	09 19 43.5

South of Kermadec Islands
(h = 20 km).

" 22	De	i(Sg1)	10 27 40.3
		iRg	10 27 44.2
		i	10 27 53.1
" 22	Ki	e(P)	10 49 08
		i	10 49 32.2
" 22	Ki	iP	10 58 08.0
	Sk	iP	10 57 53.2
	Um	eP	10 58 09
	Ud	iP	10 57 52.6

Colombia (h = 40 km).

" 22	Ki	iP	11 34 33.0

(cont.)

1972
Nov. 22 (cont.)

Ki	i		11 34 37.1
	iS		11 36 00.7
	iRg		11 37 16.2
	i		11 37 40.4
	iTPg		11 39 31.5
	iTSg		11 40 05.5
			micr sec
	Mx	E	0.7 10
	Mx	N	0.4 10
Sk	iP		11 35 10.5
	iS		11 36 55.5
Um	iP		11 35 29.6
	iS		11 37 32.0
	iRg		11 39 39.1
	iTPg		11 40 10.2
	iTSg		11 42 10.0
Ud	iP		11 36 05.8

Norwegian Sea.
Origin time = 11 32 52.

" 22	Um	iP	12 37 16.3
" 22	Ki	i(P)	12 42 05.6
" 22	Up	ePKP	14 10 20
			micr sec
	Mx	E	1.0 21
	Mx	N	0.9 21
	Mx	Z	2.4 22
Ki	iPKP		14 10 03.9
			micr sec
	PKP	Z'	0.1 1.0
Sk	iPKP		14 10 14.9
Um	iPKP		14 10 10.1
Ud	iPKP		14 10 20.7
	iSKP		14 13 48.6
De	iPKP		14 10 27.9
	iSKP		14 13 57.4

New Hebrides Islands
(h = 45 km).

" 22	Ki	i(P)	14 30 47.4
" 22	Ki	e(P)	15 39 46
		i	15 40 16.7
" 22	Up	iSg1	15 54 00.6
	Sk	eSg1	15 55 48
	Um	iSg1	15 54 22.9
	Ud	iSg1	15 55 02.5
		i	15 55 09.9

Western USSR.
Explosion.

" 22	Ki	i(P)	16 09 13.3

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

1972				
Nov. 22	Ki	iPKP	18 12 49.2	
	Ud	iPKP	18 13 05.6	
	Tonga Islands (h = 55 km).			
" 22	Up	iP	18 14 06.6	D
	Ki	iP	18 14 04.9	D
	Sk	iP	18 14 28.5	
	Um	iP	18 13 58.9	D
	Ud	iP	18 14 19.8	
	Kashmir (h = N).			
" 22	Up	iP	21 15 51.4	
	Sk	iP	21 16 06.6	
	Um	iP	21 15 43.0	
	Ud	iP	21 16 04.5	
" 22	Um	iP	22 28 13.8	
	Ud	iP	22 28 34.4	
	Afghanistan-USSR.			
" 23	Up	iP	01 17 52.3	
	Ki	iP	01 18 30.3	
	Sk	iP	01 17 56.9	
	Um	iP	01 18 10.8	
	Ud	iP	01 17 39.4	
	North of Ascension Island (h = N).			
" 23	Ud	eP	03 15 55	
" 23	Sk	iP	07 24 36.8	
" 23	Ki	ePKP	08 26 28	
	Sk	ePKP	08 26 42	
	Loyalty Islands (h = N).			
" 23	Ki	iPg1	08 46 21.3	
		iSg1	08 46 58.0	
	Off north coast of Norway.			
" 23	Ki	iP	13 44 54.8	
	Ud	iP	13 45 03.9	
	Tadzhik SSR (h = 170 km).			
" 23	Up	iPKP2	15 12 22.7	
	Ki	ePKP1	15 11 51	
	Sk	ePKP1	15 11 55	
		iPKP2	15 12 11.1	
	Um	iPKP1	15 11 52.7	
	Ud	ePKP1	15 12 05	
		iPKP2	15 12 25.8	
	South of Kermadec Islands (h = N).			
" 23	Up	iPKP2	15 22 09.7	
	(cont.)			

1972				
Nov. 23	(cont.)			
	Sk	ePKP2	15 22 04	
	Um	iPKP2	15 21 58.5	
	Ud	iPKP2	15 22 11.5	
	South of Kermadec Islands (h = 5 km).			
" 24	Ki	iPKP	00 21 23.3	
	Um	iPKP	00 21 29.9	C
	Ud	iPKP	00 21 38.0	
	New Hebrides Islands (h = 200 km).			
" 24	Sk	i(P)	01 30 49.9	
	Um	iP	01 30 38.5	
	Ud	iP	01 30 11.8	
	Greece.			
" 24	Up	iP	01 40 16.8	
	Sk	iP	01 40 52.1	
	Um	eP	01 40 49	
	Ud	iP	01 40 21.4	
		i	01 40 32.7	
	De	eP	01 39 50	
	Greece (h = N).			
" 24	Up	ePKP	02 08 33	
	Um	iPKP	02 08 17.1	C
	Ud	iPKP	02 08 30.8	
" 24	Up	iP	03 53 13.5	C
		ipP	03 53 17.7	
			micr	sec
		P Z'	0.5	0.8
		pP Z'	0.3	0.8
		Mx E	1.7	15
		Mx N	1.4	13
		Mx Z	2.4	12
	Ki	iP	03 54 29.5	C
		ipP	03 54 33.9	
			micr	sec
		P Z'	0.1	1.0
		Mx E	2.0	13
		Mx N	1.2	12
		Mx Z	1.1	10
	Sk	i(P)	03 53 54.9	C
		iP	03 53 56.1	C
		ipP	03 54 00.5	
	Um	i(P)	03 53 52.7	
		iP	03 53 53.8	
		ipP	03 53 58.6	
		i	03 54 02.4	
		iS	03 58 12	
	Ud	iP	03 53 19.8	C
		ipP	03 53 25.8	
	(cont.)			

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

1972
Nov. 24 (cont.)

De	iP		03 52 41.8	
	i		03 52 50.8	

Greece-Albania.
h = 20 km (Up,Ki,Sk,Um,Ud).
m = 5.7, M = 4.9 (Up,Ki).
(P) denotes a small-amplitude precursor.

" 24	Ud	iP		05 44 51.2	
" 24	Up	iP		09 04 36.4	
		i		09 04 39.7	
				micr	sec
		P	Z'	0.1	0.7
	Ki	iP		09 04 53.4	
	Sk	iP		09 05 11.3	
	Um	iP		09 04 34.0	
		i		09 04 38.0	
		i(S)		09 08 14.5	
	Ud	iP		09 04 58.4	C
	De	iP		09 04 56.5	

North of the Caspian Sea.
Underground explosion?

" 24	Ud	iP		09 48 22.9	
" 24	Up	iP		10 05 40.9	C
		iPn		10 05 53.1	
				micr	sec
		P	Z'	0.1	0.7
		Pn	Z'	0.1	0.7
	Ki	iP		10 05 37.0	C
				micr	sec
		P	Z'	0.1	1.0
	Sk	iPn		10 06 25.7	C
	Um	iP		10 05 30.9	
		iPn		10 05 52.4	
	Ud	iP		10 05 58.0	C
	De	iP		10 06 02.4	C
		iPn		10 06 24.4	

Northeast of the Caspian Sea.
m = 5.6 (Up,Ki).
Underground explosion.

" 24	Up	iSg1	11 17 35.9	
	Um	iSg1	11 18 09.0	
	Ud	iSg1	11 18 38.2	
	De	eSg1	11 19 03	
		i	11 19 09.1	

Esthonia, 59.5°N, 25.0°E.
Origin time = 11 15 33.
Explosion.

" 24	Sk	iP	12 51 07.6	
	Ud	iP	12 51 09.5	

1972
Nov. 24

De	i(P)		12 52 16.9	
" 24 Up	iP		13 30 14.8	
	i		13 30 22.8	
	ipP		13 30 28.0	
	iS		13 39 15	
			micr	sec
	P	Z'	0.1	0.8
	pP	Z'	0.1	0.7
	Mx	E	1.0	18
	Mx	N	2.9	23
	Mx	Z	2.4	18
Ki	iP		13 30 21.6	C
	ipP		13 30 35.1	
	iS		13 39 29	
			micr	sec
	pP	Z'	0.1	0.9
	Mx	E	2.2	17
	Mx	N	2.6	18
	Mx	Z	1.9	18
Sk	iP		13 30 35.0	C
	ipP		13 30 48.8	
Um	iP		13 30 14.4	C
	i		13 30 20.9	
	ipP		13 30 28.4	
	iS		13 39 16	
Ud	iP		13 30 27.3	C
	ipP		13 30 41.4	
De	iP		13 30 22.7	
	ipP		13 30 36.7	

Bay of Bengal.
h = 50 km (Up,Ki,Sk,Um,Ud, De).
m = 5.8, M = 5.7 (Up,Ki).

" 24	Ud	i(P)	13 56 42.0	
" 24	Sk	iPP	15 14 38.7	
	Ud	i	15 13 38.1	

Banda Sea (h = 510 km).

" 24	Ud	iP	19 25 31.1	
		i	19 25 32.9	
" 24	Ud	iP	19 56 21.4	
		i	19 56 23.4	
" 24	Ud	iP	21 12 05.9	
" 24	Ki	eP	23 08 40	
	Ud	iP	23 09 07.8	

Luzon (h = 60 km).

" 24	Ud	iP	23 49 07.0	

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

1972 Nov. 25	Up	ePKP1		01 51 02	
	Um	iPKP1		01 50 49.1	
	Ud	iPKP1		01 51 02.5	
		iPKP2		01 51 10.0	
	South of Kermadec Islands (h = N).				
" 25	Up	eP		03 15 06	
				micr	sec
		P	Z'	0.1	1.2
		Mx	E	0.9	19
		Mx	Z	2.6	21
	Ki	iP		03 14 53.9	
				micr	sec
		Mx	E	1.5	20
		Mx	N	1.0	16
		Mx	Z	1.4	17
	Sk	iP		03 14 48.3	
		i		03 15 00.8	
	Um	iP		03 15 02.9	
		iS		03 25 29	
	Ud	i		03 15 06.9	
	Mexico (h = N).				
	M = 5.4 (Up,Ki).				
" 25	Ud	iP		08 51 47.1	
" 25	Ki	iPg1		09 39 10.5	
		iSg1		09 39 20.3	
		iRg		09 39 26.3	
	Um	iSg1		09 40 38.9	
	Lapland, Sweden.				
	Origin time = 09 38 59.				
	Ore mine explosion at Malmberget?				
" 25	Ki	iPn		11 15 05.9	
		iSn		11 15 53.9	
	Um	iSg1		11 17 34.9	
	Northwest USSR-Norway border region, 69.1°N, 31.3°E.				
	Origin time = 11 14 02.				
	Explosion.				
" 25	Ki	iPn		11 15 23.2	
		iSn		11 16 12.3	
		iSg1		11 16 28.3	
	Um	iSg1		11 17 50.1	
	Northwest USSR-Norway border region, 69.1°N, 31.3°E.				
	Origin time = 11 14 18.				
	Explosion.				

1972 Nov. 25	Up	iP		13 21 01.5	
	Ud	iP		13 21 08.7	
	Greece.				
" 25	Up	iP		13 51 28.3	
	Ki	iP		13 50 39.6	
				micr	sec
		P	Z'	0.1	1.0
		Mx	E	0.9	13
		Mx	N	0.9	13
	Sk	iP		13 51 21.0	
	Um	iP		13 50 59.7	
	Ud	iP		13 51 37.2	
	De	iP		13 51 56.2	
	Eastern Siberia (h = N).				
" 25	Up	iP		15 25 38.7	
	Sk	eP		15 26 22	
	Um	iP		15 26 22.4	
	Ud	iP		15 25 44.6	C
	De	iP		15 25 14.6	
	Greece (h = N).				
" 25	Up	ePKP1		16 13 46	
		iPKP2		16 13 55.5	
	Sk	ePKP1		16 13 41	
	Um	iPKP1		16 13 35.4	
		iPKP2		16 13 46.9	
	Ud	iPKP1		16 13 49.6	
		iPKP2		16 13 57.7	
	South of Kermadec Islands (h = 30 km).				
" 25	Um	iPKP		19 04 06.4	
	Ud	iPKP		19 04 16.6	
	De	ePKP		19 04 23	
	New Hebrides Islands (h = 140 km).				
" 25	Up	iPKP1		20 00 40.1	
	Ki	ePKP1		20 00 24	
	Sk	iPKP1		20 00 34.5	
	Um	iPKP1		20 00 30.3	
		i(PKP2)		20 00 40.0	
	Ud	iPKP1		20 00 41.1	
	South of Kermadec Islands (h = N).				
" 25	Up	iP		20 08 12.7	C
		i		20 08 16.1	
		iS		20 12 13	
				micr	sec
		P	Z'	0.1	1.0
		i	Z'	0.6	1.5
	(cont.)				

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

1972
Nov. 25 (cont.)

Up			micr	sec
	Mx	E	0.7	10
	Mx	N	2.2	18
	Mx	Z	2.7	20
Ki	iP		20 06 43.2 C	
	iS		20 09 22	
			micr	sec
	P	Z'	1.5	1.5
	Mx	E	1.7	13
	Mx	N	1.2	12
	Mx	Z	1.2	12
Sk	iP		20 07 28.8	
Um	iP		20 07 33.2 C	
Ud	iP		20 08 08.4 C	
De	iP		20 08 44.8 C	

Greenland Sea (h = N).
m = 5.6, M = 4.6 (Up,Ki).

" 25	Up	eP	22 51 00
	Ki	eP	22 51 39
	Sk	iP	22 51 39.3
	Um	iP	22 51 14.0
	Ud	iP	22 51 14.8
	De	iP	22 50 58.5

Iran (h = 40 km).

" 26	Ki	iP	01 02 35.0

Sunda Strait (h = 20 km).

" 26	Ki	i	01 49 03.3
	Ud	eP	01 49 02

Molucca Passage
(h = 55 km).

" 26	Ud	i(P)	01 50 26.2
" 26	Up	iPKP	04 41 07.9
		iSKP	04 43 55.3
			micr sec
		SKP Z'	0.1 1.0
	Ki	ePKP	04 40 49
		iSKP	04 43 32.5
			micr sec
		SKP Z'	0.2 1.3
	Sk	ePKP	04 41 09
		iSKP	04 43 48.4
	Um	iPKP	04 41 02.6
		iSKP	04 43 44.1
	Ud	iPKP	04 41 09.3
		iSKP	04 43 57.1
	De	iPKP	04 41 20.4 C
		i	04 41 33.9
		ipPKP	04 43 38.3

(cont.)

1972
Nov. 26 (cont.)

De	iSKP	04 44 05.6

Tonga-Kermadec Islands.
h = 630 km (De).

" 26	Up	iSg1	05 21 15.5
	Ki	eSn	05 17 58
		iSg1	05 18 19.8
	Sk	eSg1	05 20 52
	Um	iSg1	05 19 08.1
	Ud	iSg1	05 21 47.1

Northwest USSR.
Explosion.

" 26	Ud	iP	06 09 08.4

Ryukyu Islands (h = 45 km).

" 26	Ki	iSn	06 43 26.4
		iSg1	06 43 51.8
	Um	i	06 44 26.5
		iSg1	06 44 43.3

Northwest USSR.
Explosion.

" 26	Ki	i	07 59 03.4
		i(Sg1)	07 59 31.5
	Um	i(Sg1)	07 58 49.6
		i	07 58 57.5
" 26	Up	iP	08 03 20.3 C
			micr sec
		P Z'	0.1 1.5
	Ki	iP	08 03 09.2 C
	Sk	eP	08 03 27 C
	Um	iP	08 03 10.8 C
	Ud	iP	08 03 28.5 C
		i	08 03 29.5
	De	iP	08 03 34.8 C

Celebes Sea (h = 330 km).

" 26	Up	iP	08 08 34.3
		ipP	08 08 41.9
	Ki	eP	08 09 01
	Sk	epP	08 08 32
	Um	iP	08 08 52.4
	Ud	eP	08 08 18
		ipP	08 08 25.3
	De	eP	08 08 20

North Atlantic Ocean.
h = 25 km (Up,Ud).

" 26	Up	iSg1	08 13 04.7
	Ki	iSn	08 09 45.6
		iSg1	08 10 08.7

(cont.)

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

1972
Nov. 26 (cont.)

	Sk	iSg1	08 12 41.2	
	Um	iSg1	08 11 01.3	
	Ud	eSg1	08 13 38	

Northwest USSR.
Explosion.

" 26	Up	eP	08 26 38		
	Ud	iP	08 26 46.1		

Greece.

" 26	Ud	iP	10 41 30.4		

Aleutian Islands
(h = 60 km).

" 26	Up	iPKP1	13 01 44.2		C
		iPKP2	13 01 51.1		
			micr	sec	
		PKP1	Z' 0.1	1.2	
		PKP2	Z' 0.2	1.1	
	Ki	ePKP1	13 01 27		
	Sk	iPKP1	13 01 40.9		C
		i	13 01 56.3		
	Um	iPKP1	13 01 34.1		C
	Ud	iPKP1	13 01 45.9		C
		ipPKP1	13 01 48.3		
		iPKP2	13 01 54.1		
	De	iPKP1	13 01 56.1		C
		ipPKP1	13 01 59.6		
		iPKP2	13 02 08.2		

South of Kermadec Islands.
h = 10 km (Ud,De).

" 26	Um	iP	13 18 14.0		
	Ud	eP	13 18 42		
" 26	Up	iP	15 03 00.8		C
	Ki	iP	15 02 08.5		
	Sk	iP	15 02 44.9		
	Um	iP	15 02 33.2		C
	Ud	iP	15 03 05.1		C
	De	iP	15 03 25.9		

Kamchatka (h = 45 km).

" 26	Up	iPKP	15 51 07.0		
	Ki	e(PKP)	15 50 43		
		iPKP	15 50 52.3		
	Um	iPKP	15 50 58.7		
	Ud	iPKP	15 51 07.7		
	De	iPKP	15 51 18.1		
		i	15 51 30.3		

Tonga-Kermadec Islands
(h = N).

" 26	Ud	i(P)	15 57 55.8		

1972
Nov. 26

Up	iP1		16 07 09.4		
	iP2		16 07 12.1		D
	ipP2		16 07 19.7		
			micr	sec	
	P2	Z'	0.2	1.2	
	pP2	Z'	0.2	1.3	
	Mx	E	1.9	10	
	Mx	N	1.1	13	
Ki	eP1		16 08 36		
	iP2		16 08 38.2		D
	ipP2		16 08 46.5		
			micr	sec	
	P2	Z'	0.1	1.0	
	Mx	E	3.8	15	
	Mx	N	1.0	14	
Sk	iP2		16 07 50.8		D
	i		16 08 05.4		
Um	iP2		16 07 57.5		D
	ipP2		16 08 05.0		
Ud	iP2		16 07 10.0		D
	ipP2		16 07 17.2		
	iLg2		16 12 30.6		
De	iP1		16 06 29.7		
	iP2		16 06 32.7		D

Italy.
h = 30 km (Up,Ki,Um,Ud).
m = 5.3, M = 4.8 (Up,Ki).

" 26	Up	i	16 25 51.1		
	Um	i(PKP)	16 25 23.9		
		iPKP	16 25 35.9		
	Ud	iPKP	16 25 43.2		
	De	ePKP	16 25 51		
" 26	Ki	iP	16 34 08.0		
	Um	iP	16 34 34.7		
	Ud	iP	16 35 00.2		
" 26	Up	iPKP	18 58 14.6		
	Sk	iPKP	18 58 12.3		
	Um	iPKP	18 58 07.4		
	Ud	iPKP	18 58 17.1		

New Hebrides Islands
(h = 150 km).

" 26	Ud	iP	19 22 35.6		
" 26	Ud	iP	22 47 15.6		
		i	22 47 26.7		
" 26	Ki	iP	23 49 31.9		

Colombia (h = 50 km).

" 27	Up	ePKP	02 43 37		

(cont.)

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

1972
Nov. 27 (cont.)

Um	iPKP		02 43 25.8		
Ud	iPKP		02 43 36.1		

" 27

Up	iP		02 57 46.0		C
	ipP		02 58 01.2		
			micr	sec	
	P	Z'	0.1	1.0	
	pP	Z'	0.3	1.3	
	Mx	E	2.2	15	
	Mx	N	2.0	16	
	Mx	Z	4.0	15	
Ki	iP		02 57 24.3		C
	iPcP		02 57 37.6		
			micr	sec	
	P	Z'	0.1	1.2	
	Mx	N	1.2	14	
Sk	iP		02 57 54.0		C
Um	iP		02 57 32.0		C
	iPcP		02 57 43.3		
Ud	iP		02 57 55.5		C
	ipP		02 58 11.3		
De	iP		02 58 05.9		C

Luzon.
h = 55 km (Up,Ud).
m = 5.8, M = 5.7 (Up,Ki).

" 27

Ki	iP		03 02 46.7		

Celebes Sea (h = 50 km).

" 27

Ki	iPKP		03 44 03.0		
Um	iPKP		03 44 09.9		
Ud	iPKP		03 44 20.1		
De	iPKP		03 44 26.4		

New Hebrides Islands
(h = 210 km).

" 27

Up	ePKP1		04 47 08		
Sk	ePKP1		04 47 02		
Um	iPKP1		04 46 56.8		
Ud	iPKP1		04 47 09.3		

South of Kermadec Islands
(h = 50 km).

" 27

Ki	iP		06 55 42.5		
			micr	sec	
	P	Z'	0.1	1.2	
Um	iP		06 55 47.0		
Ud	iP		06 56 05.0		

Molucca Passage (h = 25 km).

" 27

Up	iP		07 29 39.4		

" 27

Ud	i(pP)		09 09 23.1		

Talaud Islands (h = 110 km).

1972
Nov. 27

Ud	iPg1		10 03 11.5		
	iSg1		10 03 35.1		

South Norway.
By combination with
Kongsberg readings.

" 27

Up	iSg1		12 54 36.1		
Ki	iSg1		12 57 14.6		
Um	i		12 55 05.6		
	iSg1		12 55 11.3		
Ud	iSg1		12 55 43.0		
De	eSg1		12 56 09		

Esthonia, 59.7°N, 24.5°E.
Origin time = 12 52 48.
Explosion.

" 27

Up			micr	sec	
	Mx	E	1.5	20	
	Mx	N	1.6	18	
Um	iP		15 26 06.6		
Ud	iP		15 26 28.0		

Afghanistan-USSR
(h = 150 km).

" 27

Up	eP		15 30 56		
	iPP		15 35 26.1		
			micr	sec	
	Mx	E	1.0	18	
	Mx	N	1.8	20	
	Mx	Z	1.9	20	
Ki	iP		15 30 42.9		D
	i(PP)		15 33 35.8		
	iPP		15 35 13.5		
			micr	sec	
	P	Z'	0.2	1.0	
	Mx	E	2.2	20	
	Mx	N	1.5	18	
	Mx	Z	2.1	19	
Sk	iP		15 31 02.8		
	iPP		15 35 32.5		
Um	iP		15 30 47.3		D
	iPP		15 35 08.4		
	iS		15 41 44		
Ud	iP		15 31 05.2		D
	i(PP)		15 34 32.8		
De	iP		15 31 09.8		
	iPP		15 35 18.2		

Banda Sea (h = 430 km).
M = 5.7 (Up,Ki).
M uncorrected for focal
depth.

" 27

Up	iP		21 48 12.8		D
Ki	iP		21 47 18.1		
	ipP		21 47 30.1		

(cont.)

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

1972
Nov. 27 (cont.)

Sk	iP	21 47 55.9
Um	iP	21 47 43.5 D
Ud	iP	21 48 13.9 D
De	iP	21 48 38.3 D
	ipP	21 48 50.7

Kamchatka.
h = 45 km (Ki,De).

" 28

Up	iPKP1	10 13 32.4
Sk	iPKP1	10 13 27.3
Um	iPKP1	10 13 21.8 C
Ud	iPKP1	10 13 34.2 C

South of Kermadec Islands
(h = 310 km).

" 28

Up	iP	10 28 37.1
Sk	eP	10 29 08
Um	iP	10 28 51.5
Ud	iP	10 28 49.6
De	iP	10 28 32.0

Arabian Sea (h = N).

" 28

Ki	iPn	11 54 31.3
	iPg1	11 54 41.2
	iSn	11 55 18.3
	iSg1	11 55 35.5
Um	iP	11 57 06.7

Northwest USSR-Norway
border region,
69.6°N, 30.4°E.
Origin time = 11 53 29.
Explosion.

" 28

Ki	iSg1	12 05 17.9
Sk	iSg1	12 05 22.8
Um	iSn	12 05 31.8
	iSg1	12 05 45.2
Ud	iSg1	12 07 12.1

Nordland, Norway,
66.5°N, 14.0°E.
Origin time = 12 03 49.
Explosion.

" 28

Up	iP	13 31 56.2	
		micr	sec
	P	Z' 0.1	1.0
Ki	iP	13 33 02.5	
Sk	iP	13 32 33.8	
Um	iP	13 32 27.4	
Ud	iP	13 32 03.6	
	ipP	13 32 15.6	
De	iP	13 31 34.4	
	ipP	13 31 45.8	

Eastern Mediterranean Sea.
h = 45 km (Ud,De).

1972
Nov. 28

Sk	iP	13 44 36.0

Alaska (h = 35 km).

" 28

Um	iSg1	13 45 21.8

Western USSR.
Explosion.

" 28

Up	iPKP	16 24 31.7
Ud	iPKP	16 24 34.2
De	iPKP	16 24 43.8

" 28

Um	eP	18 32 30

" 28

Ud	iP	19 16 18.6

" 28

Ud	ipP	20 57 35.4

Afghanistan-USSR
(h = 100 km).

" 28

Ki	iP	21 51 11.5

" 29

Ud	iP	01 31 04.5

Greece.

" 29

Um	iP	02 04 08.4
Ud	iP	02 03 44.9

" 29

Ki	eP	03 12 02
Ud	iP	03 12 32.4

Halmahera (h = 60 km).

" 29

Ki	ePg1	04 34 16
	iSg1	04 34 51.9
Sk	iSn	04 34 57.9
Um	iPg1	04 34 31.8
	iSn	04 35 05.4
	iSg1	04 35 19.1

Nordland, Norway,
66.5°N, 14.8°E.
Origin time = 04 33 30.
Explosion?

" 29

Ki	iPn	10 51 16.7
	ePg1	10 51 31
	iSn	10 52 15.7
	iS*	10 52 34.5
Sk	eSg1	10 55 04
Um	iSn	10 52 54.5
	i	10 53 10.0
	iSg1	10 53 30.8

Northwest USSR,
67.8°N, 34.1°E.
Origin time = 10 49 58.
Explosion.

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

1972 Nov.	29	Ud	iP	13 34 16.1	
		De	iP	13 33 38.6	
"	29	Ki	iP	13 59 01.3	
"	30	Ud	iPKP	03 04 52.0	
		Tonga Islands.			
"	30	Um	iP	03 34 19.6	
		Ud	iP	03 34 15.8	
"	30	Um	iP	06 24 57.7	
"	30	Up	i(Pn)	10 35 00.3	D
			iSn	10 36 08.1	
			iS*	10 36 40.8	
			iSg1	10 36 44.4	
		Sk	eSn	10 36 29	
			iSg1	10 37 08.7	
			i	10 37 16.9	
		Um	iSn	10 37 29.2	
			iSg1	10 38 26.1	
		Ud	e	10 34 38	
			iSn	10 35 28.8	
			i	10 35 42.6	
			iSg1	10 35 58.9	
		De	iPg1	10 34 29.9	
			iSn	10 35 08.0	
			iSg1	10 35 29.4	
		North Sea, 56.8°N, 5.9°E.			
		Origin time = 10 33 12.			
"	30	Up	iP	11-29 17.5	
				micr sec	
			P Z'	0.1 1.4	
		Ki	iP	11 30 53.7	
		Sk	iP	11 29 59.5	
		Um	iP	11 30 05.1	C
		Ud	iP	11 29 16.8	
		Adriatic Sea (h = N).			
"	30	Up	iP	12 06 58.4	
		Greece.			
"	30	Ud	iP	12 54 45.3	
"	30	Um	iSg1	13 38 05.6	
		Western USSR.			
		Explosion.			
"	30	Ud	iP	14 51 55.3	
"	30	Um	iP	17 25 40.4	
"	30	Sk	i(P)	17 41 06.5	

1972 Nov.	30	Up	ePKP	18 36 30	
		Um	iPKP	18 36 17.6	C
"	30	Ki	iP	18 40 54.8	
		Kamchatka.			
"	30	Ki	iP	22 03 40.5	
		Ud	iP	22 03 58.2	
		Tadzhik-Sinkiang (h = 60 km).			

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October 6, 1974

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, 1972

1972 Dec.	1	Um	iP		03 13 17.7	C
		Ud	iP		03 13 47.2	C
		Japan (h = 60 km).				
"	1	Sk	iP		07 29 38.6	
		Italy (h = N).				
"	1	Up	iP		07 39 19.0	D
		Ki	iP		07 39 55.5	
		Sk	iP		07 40 53.5	
		Ud	iP		07 39 34.1	D
		De	iP		07 39 17.1	
		Iran.				
		Origin time = 07 31 51.				
"	1	Ki	eP		10 38 50	
		Kodiak Island (h = 25 km).				
"	1	Ki	iPn		11 31 50.8	
			iSn		11 32 40.0	
			iS*		11 32 51.6	
		Um	iSgl		11 34 25.2	
		Northwest USSR-Norway border region, 69.5°N, 31.2°E.				
		Origin time = 11 30 46.				
		Explosion.				
"	1	Up	iP		11 45 58.5	
			ipP		11 46 07.0	
			iPP		11 47 21.2	
					micr	sec
			P	Z'	0.1	1.3
			pP	Z'	0.2	1.1
			Mx	E	3.0	22
			Mx	N	3.9	16
			Mx	Z	2.8	12
		Ki	i(PP)		11 47 44.0	
					micr	sec
			(PP)	Z'	0.2	1.5
			Mx	E	8.6	13
		(cont.)				

1972 Dec.	1	(cont.)				
		Ki			micr	sec
			Mx	N	11	15
			Mx	Z	7.3	12
		Sk	iP		11 46 33.3	
			i		11 47 01.2	
		Um	iP		11 46 07.1	
			iPP		11 47 30.9	
		Ud	iP		11 46 15.5	
			i		11 46 17.6	
			ipP		11 46 23.3	
		De	iP		11 46 06.0	
			ipP		11 46 12.7	
		Iran.				
		h = 35 km (Up,Ud,De).				
		m = 5.7, M = 5.6 (Up,Ki).				
"	1	Up	iP		12 16 07.1	
		Ud	iP		12 16 17.4	
		Greece.				
"	1	Ki	iP		15 07 08.8	
					micr	sec
			P	Z'	0.1	1.4
		Um	iX		15 07 25.7	
		Ud	iP		15 07 34.8	
			iX		15 07 41.4	
		Molucca Passage (h = N).				
"	1	Ki	eP		21 25 16	
		Um	iP		21 25 41.6	
		Ud	iP		21 26 13.9	
		Kamchatka (h = N).				
"	2	Up	iP1		00 33 01.0	
			iP2		00 33 03.8	
			iP3		00 33 06.8	
			iP4		00 33 14.8	
			i		00 33 37.6	
			iSKS		00 43 33	
		(cont.)				

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

1972
Dec. 2 (cont.)

			micr	sec
Up				
	P2	Z'	0.1	0.8
	P3	Z'	0.4	1.0
	P4	Z'	1.1	1.1
	Mx	E	340	27
	Mx	N	440	23
	Mx	Z	580	30
Ki	iP1		00 32 43.1	
	iP2		00 32 46.5	
	i		00 32 53.1	
	iSKS		00 43 09	
			micr	sec
	P1	Z'	0.1	0.8
	P2	Z'	0.8	1.0
	i	Z'	1.3	0.9
	Mx	E	290	18
	Mx	N	320	19
	Mx	Z	360	18
Sk	iP1		00 33 07.0	
Um	iP1		00 32 48.7	
	iP2		00 32 51.3	
Ud	iP1		00 33 09.2	
	iP2		00 33 12.1	
	iP3		00 33 15.1	
	iP4		00 33 23.3	
De	iP1		00 33 18.4	

Mindanao (h = N).
m = 7.2, M = 8.0 (Up,Ki).
Multiple P-phases with successively increasing amplitudes; in average
P2 - P1 = 2.9 sec,
P3 - P1 = 5.9 sec,
P4 - P1 = 14.0 sec.

" 2 Ki iP 00 46 05.8
Ud iP 00 46 31.4
Mindanao.
Origin time = 00 33 09.
Approximate origin times, based on our own records, are given for aftershocks not reported by NEIS.

" 2 Up iP 00 47 51.3
ipP 00 47 59.7
Ki iP 00 47 34.1
ipP 00 47 41.8

			micr	sec
	P	Z'	0.1	1.3

Sk ipP 00 48 06.3
Um iP 00 47 39.3
Ud iP 00 47 59.5
ipP 00 48 07.3
Mindanao.
h = 30 km (Up,Ki,Ud).

1972
Dec. 2 Ud iP 00 50 29.1

" 2 Um iP 00 57 10.5

" 2 Up iP 01 10 12.0

" 2 Ki eP 01 13 16
Um iP 01 13 21.1
Ud iP 01 13 42.8
Mindanao.
Origin time = 01 00 20.

" 2 Up iP 01 16 47.0
i 01 17 11.7

" 2 Ki iP 01 49 04.1

" 2 Ki iP 01 50 39.6
Mindanao (h = 90 km).

" 2 Up iP 01 53 59.2
i 01 54 02.2

			micr	sec
	P	Z'	0.1	1.0

Ki iP 01 53 42.2 C
i 01 53 45.5

			micr	sec
	P	Z'	0.1	1.0
	i	Z'	0.5	1.0

Sk iP 01 54 03.8
i 01 54 06.8
Um iP 01 53 47.8 C
i 01 53 50.8
Ud iP 01 54 08.0 C
i 01 54 11.1
De iP 01 54 16.5 C
i 01 54 20.2
Mindanao (h = 55 km).
m = 6.5 (Up,Ki).
Double P, in average 3.2 sec apart.

" 2 Sk iP 01 57 32.4
Um iP 01 57 16.5
Mindanao.
Origin time = 01 44 14.

" 2 Ki iP 02 01 17.9

" 2 Ki iP 02 04 08.4
Ud iP 02 04 33.6
Mindanao.
Origin time = 01 51 12.

" 2 Up iP 02 10 31.6
Ki iP 02 10 14.7
(cont.)

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

1972
Dec. 2 (cont.)

Ki	i		02 10 18.2
Ud	iP		02 10 39.8

Mindanao.
Origin time = 01 57 18.

" 2	Ki	iP	02 14 06.5
" 2	Up	iP	02 26 15.1
	Ki	eP	02 26 00
		i	02 26 09.8
	Um	iP	02 26 04.4
	Ud	iP	02 26 24.6

Mindanao (h = N).

" 2	Up	eP	02 35 33
	Ki	iP	02 35 13.4
		ipP	02 35 25.5
	Ud	iP	02 35 38.8

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

" 2	Ki	eP	02 43 04
	Ud	iP	02 43 25.6
		ipP	02 43 37.2

Mindanao.
h = 45 km (Ud).

" 2	Ki	iP	02 48 01.4
	Ud	iP	02 48 27.6

Mindanao.
Origin time = 02 35 06.

" 2	Up	iP	03 09 48.4
	Ki	iP	03 09 31.0
		ipP	03 09 49.3
	Um	iP	03 09 37.1
	Ud	iP	03 09 56.9

Mindanao.
h = 70 km (Ki).

" 2	Ud	eP	03 34 21
" 2	Ki	iP	03 42 15.8

Mindanao (h = N).

" 2	Ki	iP	03 46 06.1

Mindanao (h = N).

				micr	sec
" 2	Up	iP		04 10 10.0 D	
		P	Z'	0.1	1.0
		Mx	E	2.2	23
		Mx	N	2.2	18
		Mx	Z	4.1	17
	Ki	iP		04 09 52.6 D	
		ipP		04 10 12.6	

(cont.)

1972
Dec. 2 (cont.)

				micr	sec
Ki					
		P	Z'	0.2	1.0
		Mx	E	3.9	16
		Mx	N	2.4	17
		Mx	Z	3.4	16
Sk	iP			04 10 15.7	
	i			04 10 22.5	
Um	iP			04 09 58.9	
	i(PP)			04 13 16.5	
Ud	iP			04 10 18.5 D	
De	i(P)			04 10 27.5	

Mindanao.
h = 80 km (Ki).
m = 6.3, M = 5.9 (Up,Ki).

" 2	Up	iP	04 44 59.4
	Ki	iP	04 44 42.6

			micr	sec
		P	Z' 0.1	1.1
	Um	iP	04 44 49.4	
	Ud	iP	04 45 07.6	
		i	04 45 17.7	

Mindanao (h = 70 km).

" 2	Ki	eP	06 01 16

				micr	sec
" 2	Up				
		Mx	E	2.5	19
		Mx	N	3.0	19
		Mx	Z	4.9	20
	Ki	iP		06 01 21.8	
		ipP		06 01 42.0	
		pP	Z'	0.1	1.0
		Mx	E	3.9	18
		Mx	N	4.0	17
		Mx	Z	4.7	20
	Sk	ipP		06 02 02.3	
	Ud	iP		06 01 47.3	

Mindanao.
h = 80 km (Ki,Sk).
M = 6.0 (Up,Ki).

" 2	Ki	eP	06 29 24
" 2	Ki	iP	06 59 03.9
" 2	Ki	eP	07 07 38

Mindanao (h = 60 km).

" 2	Ki	iP	07 10 37.7
	Ud	iP	07 11 03.3

Mindanao.
Origin time = 06 57 41.

" 2	Ki	iP	08 31 00.4 C

(cont.)

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

1972
Dec. 2 (cont.)
Ud iP 08 31 26.4 C
Mindanao (h = N).

" 2 Ki eP 10 07 20
ipP 10 07 43.2
Sk ipP 10 08 06.1
Ud iP 10 07 44.8
Mindanao.
h = 90 km (Ki).

" 2 Ki eP 10 29 25
Ud iP 10 29 51.5
Mindanao (h = 90 km).

" 2 Up ipP 10 49 27.2
micr sec
pP Z' 0.1 1.0
Ki iP 10 49 04.3
ipP 10 49 10.2
micr sec
pP Z' 0.1 1.3
Ud iP 10 49 29.8
ipP 10 49 35.7
Mindanao.
h = 20 km (Ki,Ud).
m = 6.1 (Up,Ki).

" 2 Ki iPn 11 12 28.0
iSn 11 13 16.8
iSgl 11 13 32.5
Northwest USSR-Norway border region.
Origin time = 11 11 24.
Explosion.

" 2 Ki eP 11 39 54
Ud iP 11 40 18.1
Mindanao (h = 70 km).

" 2 Ki i 12 25 06.8
i(Sn) 12 25 12.7
iSgl 12 25 34.1
Um iSgl 12 25 56.2
Northwest USSR.
Explosion.

" 2 Ki eP 12 37 08
Ud iP 12 37 31.2
ipP 12 37 50.6
Mindanao.
h = 70 km (Ud).

" 2 Up iSgl 13 06 11.7
Ki iSgl 13 08 21.3
Sk iSgl 13 08 01.3
Um iSgl 13 06 35.9
(cont.)

1972
Dec. 2 (cont.)
Ud iSgl 13 07 15.3
De iSgl 13 07 33.7
Western USSR,
59.1°N, 27.2°E.
Origin time = 13 03 36.
Explosion.

" 2 Up iSgl 13 12 40.0
Sk eSgl 13 14 26
Um iSgl 13 12 57.9
Ud iSgl 13 13 40.2
Western USSR,
59.3°N, 27.5°E.
Origin time = 13 10 00.
Explosion.

" 2 Up eP 13 33 45
ipP 13 33 52.0
micr sec
Mx E 2.9 19
Mx N 2.1 12
Mx Z 2.3 17
Ki iP 13 34 52.4
micr sec
Mx E 3.4 14
Mx N 1.8 18
Sk iP 13 34 27.3
Um ipP 13 34 28.2
Ud iP 13 33 54.0
ipP 13 34 02.4
De iP 13 33 23.9
Crete.
h = 40 km (Up,Um,Ud).
M = 5.1 (Up,Ki).

" 2 Ki iP 15 00 18.9
Ud iP 15 00 45.4
Mindanao (h = 80 km).

" 2 Ki iP 16 11 17.7
Sk iP 16 11 23.0
Ud iP 16 11 29.1

" 2 Ki eP 18 28 54
Mindanao (h = 80 km).

" 2 Ki iP 21 13 31.9
Ud iP 21 13 56.3
Mindanao (h = 60 km).

" 2 Ki eP 22 00 53
Ud iP 22 01 18.5
Mindanao (h = 70 km).

" 2 Ki iP 23 49 45.7
Mindanao (h = 80 km).

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

1972 Dec.	2	Ud	iP		23 52 17.3	
		North of Halmahera (h = 100 km).				
"	2	Ki	iP		23 59 25.4	
		Ud	iP		23 59 50.7	
		Mindanao (h = 90 km).				
"	3	Sk	iP		00 11 29.4	
"	3	Ki	eP		01 14 48	
			ipP		01 14 57.5	
					micr	sec
			pP	Z'	0.1	1.0
		Ud	iP		01 15 10.1	
			ipP		01 15 19.1	
		Mindanao. h = 35 km (Ki,Ud).				
"	3	Ki	eP2		01 40 04	
		Um	iP2		01 40 08.4	
		Ud	iP1		01 40 22.7	
			iP2		01 40 28.9	
		Mindanao (h = 60 km).				
"	3	Ki	eP		02 09 21	
			ipP		02 09 33.1	
		Ud	iP		02 09 47.3	
		Mindanao. h = 45 km (Ki).				
"	3	Ud	iP		02 32 57.8	
"	3	Ki	iP2		03 17 32.9	
		Ud	eP1		03 17 53	
			iP2		03 17 56.0	
		Mindanao (h = 70 km).				
"	3	Um	iP		07 57 39.4	
"	3	Up	eP		07 58 12	
					micr	sec
			P	Z'	0.1	1.3
		Ki	iP		07 57 54.1	
			i		07 57 57.5	
					micr	sec
			P	Z'	0.1	0.9
		Um	iP		07 58 00.4	
		Ud	iP		07 58 18.8	
		Mindanao (h = 80 km). m = 6.0 (Up,Ki).				
"	3	Up	iP		09 02 27.8 C	
					micr	sec
			P	Z'	0.2	1.3
		Ki	iP		09 02 30.0 C	
					micr	sec
			P	Z'	0.1	1.2
		(cont.)				

1972 Dec.	3	(cont.)				
		Sk	iP		09 02 49.6	
		Um	iP		09 02 21.4	
		Ud	iP		09 02 42.4	
			i		09 02 44.4 C	
		De	iP		09 02 43.5	
		Sinkiang (h = N). m = 5.6 (Up,Ki).				
"	3	Ud	iPKP		09 12 41.9	
		De	iPKP		09 12 51.3	
		Fiji Islands (h = 600 km).				
"	3	Ki	ipP		09 38 31.3	
		Ud	iP		09 38 37.5	
			ipP		09 38 55.5	
		Mindanao. h = 70 km (Ud).				
"	3	Ud	iPKP		10 52 19.1	
		De	iPKP		10 52 30.1	
		Tonga-Kermadec Islands (h = N).				
"	3	Ki	iP2		11 29 18.3	
		Ud	iP1		11 29 32.8	
			iP2		11 29 42.9	
		Mindanao (h = 80 km).				
"	3	Ud	iP		13 23 39.1	
		Kamchatka (h = N).				
"	3	Up	eSgl		13 51 59	
		Um	iSgl		13 52 07.8	
		Ud	eSgl		13 52 59	
		Western USSR. Explosion.				
"	3	Sk	iPKP		15 15 09.9	
		Prince Edward Island (h = N).				
"	3	Sk	iP		16 42 38.3	
"	3	Up	iP		18 11 51.2	
		Ki	iP		18 12 01.9	
		Ud	iP		18 12 01.0	
		Indian Ocean (h = N).				
"	3	Ki	i(pP)		19 12 10.2	
		Mindanao (h = 60 km).				
"	3	Up	iP		19 38 51.9	
					micr	sec
			P	Z'	0.1	1.1
			Mx	E	2.0	18
			Mx	N	2.5	20
			Mx	Z	2.7	20
		(cont.)				

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

1972
Dec. 3 (cont.)

Ki	iP		19 38 35.9		
	ipP		19 38 51.2		
			micr	sec	
	pP	Z'	0.1	1.2	
	Mx	E	5.7	21	
	Mx	N	2.6	17	
	Mx	Z	4.7	20	
Ud	iP		19 38 57.7		
De	ipP		19 39 22.6		

Mindanao.
h = 55 km (Ki).
m = 6.1, M = 5.9 (Up,Ki).

" 3	Up	eP2		20 49 10	
	Ki	eP2		20 48 53	
	Ud	iP1		20 49 08.6	
		iP2		20 49 18.0	

Mindanao (h = 70 km).

" 3	Ud	eP		20 51 08	
" 3	Ki	eP		20 54 05	
	Ud	iP		20 54 23.3	

Mindanao (h = 70 km).

" 3	Ki	eP		20 55 07	
	Ud	iP		20 55 29.2	

Mindanao.

" 3	Up	i(P)		22 20 16.5	
	Ud	i(P)		22 20 28.4	

Japan (h = 15 km).

" 3	Ud	eP		23 09 24	
" 4	Up	i(P)		03 30 33.7	
	Ud	iP		03 30 28.9	
	De	iP		03 29 57.8	

Crete (h = 40 km).

" 4	Ki	eP		07 11 21	
	Um	iP		07 11 29.4	
	Ud	iP		07 11 48.7	
	De	iP		07 11 57.1	

Mindanao (h = 100 km).

" 4	Ki	iP		07 29 27.3	
	Ud	iP		07 29 52.5	

Mindanao (h = 70 km).

" 4	Ud	iP		07 44 31.5	

Afghanistan.

" 4	Up	iP		10 27 52.6	C
		iPP		10 30 49.4	
		iS		10 37 28	

(cont.)

1972
Dec. 4 (cont.)

Up	i(P'P')		10 54 41.8		
			micr	sec	
	P	Z'	4.1	1.0	
	Mx	E	170	21	
	Mx	N	210	23	
	Mx	Z	330	23	
Ki	iP		10 27 15.8		C
	iPP		10 29 51.3		
	iS		10 36 16		
	i(P'P')		10 55 09.7		
	iP'P'		10 55 21.8		
			micr	sec	
	P	Z'	5.2	1.3	
	Mx	E	240	19	
	Mx	N	300	17	
	Mx	Z	310	18	
Sk	iP		10 27 47.5		C
	iPP		10 30 40.1		
	iS		10 37 24.7		
Um	iP		10 27 32.3		C
	iPP		10 30 09.5		
	iS		10 36 55.2		
	i(P'P')		10 54 42.7		
Ud	iP		10 27 59.9		C
	iS		10 37 45.0		
De	iP		10 28 13.5		C
	iS		10 38 12.4		
	eP'P'		10 55 09		

Japan (h = 70 km).
m = 7.3, M = 7.7 (Up,Ki).

" 4	Up	iP		10 43 11.1	C
				micr	sec
	P	Z'		0.1	1.2
	Ki	iP		10 42 33.0	C
	Sk	iP		10 43 08.1	C
	Um	iP		10 42 50.9	C
		ipP		10 43 04.4	
	Ud	iP		10 43 18.4	C
		ipP		10 43 32.1	

Japan.
h = 50 km (Um,Ud).
Origin time = 10 31 30.

" 4	Ki	eP		10 52 54	
	Um	iP		10 53 08.0	
	Ud	eP		10 53 36	

Japan.
Origin time = 10 41 49.

" 4	Up	iP		10 56 38.8	C
				micr	sec
	P	Z'		0.1	1.1
	Um	eP		10 56 21	

Japan.
Origin time = 10 45 00.

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

1972 Dec.	4	Up	iP	11 17 10.3
		Um	iP	11 16 49.6
			ipP	11 17 02.8
		Ud	iP	11 17 17.8
			ipP	11 17 31.1
		Japan.		
		h = 50 km (Um,Ud).		
"	4	Um	iP	11 20 42.1
		Japan (h = N).		
"	4	Up	iP	11 33 38.2
		Ki	iP	11 33 01.9
		Sk	iP	11 33 34.6
		Um	iP	11 33 17.1
		Ud	iP	11 33 45.5
		Japan (h = 80 km).		
"	4	Up	iP	12 02 20.6
			i	12 02 28.4
			ipP	12 02 35.9
				micr sec
			P Z'	0.1 1.3
		Ki	iP	12 01 43.5
			ipP	12 01 58.7
		Sk	iP	12 02 15.4
		Um	iP	12 01 59.9
		Ud	iP	12 02 27.0
			i	12 02 35.8
			ipP	12 02 43.2
		De	iP	12 02 41.4
		Japan.		
		h = 55 km (Up,Ki,Ud).		
"	4	Ki	ePgl	12 05 57
			iSn	12 06 35.3
			iS*	12 06 47.9
		Um	iSgl	12 08 25.4
		Northwest USSR-Norway border region.		
		Explosion.		
"	4	Ud	eP	12 10 52
"	4	Ud	eP	12 19 12
"	4	Um	iP	12 29 07.0
		Ud	eP	12 29 35
		Japan.		
		Origin time = 12 17 47.		
"	4	Um	iP	12 57 59.6
		Ud	iP	12 58 28.0
		Japan (h = 40 km).		
"	4	Up	eP	13 00 13
		Ki	eP	12 59 36
		(cont.)		

1972 Dec.	4	(cont.)		
		Sk	iP	13 00 07.5
		Um	iP	12 59 51.8
		Ud	iP	13 00 19.8
			i	13 00 26.5
		De	e(P)	13 00 40
		Japan (h = 80 km).		
"	4	Ki	eP	13 09 10
		Um	iP	13 09 26.6
		Ud	eP	13 09 53
		Japan (h = 80 km).		
"	4	Ki	ipP	13 20 40.3
		Sk	ipP	13 21 12.6
		Um	iP	13 20 43.4
		Ud	iP	13 21 11.1
			i	13 21 18.0
		Japan (h = 60 km).		
"	4	Um	iP	13 33 23.7
		Japan (h = N).		
"	4	Up	eP	13 42 33
		Ki	eP	13 41 56
		Sk	ipP	13 42 42.7
		Um	iP	13 42 12.0
		Ud	iP	13 42 38.9
			ipP	13 42 55.5
		De	eP	13 42 53
		Japan.		
		h = 60 km (Ud).		
"	4	Ki	eP	14 01 03
		Um	iP	14 01 17.6
		Japan (h = 55 km).		
"	4	Ki	iP	14 48 32.9
		Ud	iP	14 49 25.1
		De	iP	14 49 48.0
		Aleutian Islands (h = 50 km).		
"	4	Up	iP	15 02 38.7 D
			i	15 02 45.8
				micr sec
			P Z'	0.2 1.1
		Ki	iP	15 02 02.6 D
				micr sec
			P Z'	0.1 1.0
		Sk	iP	15 02 34.5 D
		Um	iP	15 02 18.3 D
		Ud	iP	15 02 46.4 D
		De	iP	15 02 59.7 D
		Japan (h = 60 km).		
		m = 5.9 (Up,Ki).		
"	4	Up	iP	15 12 04.8
		(cont.)		

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

1972
Dec. 4 (cont.)

Ki	iP		15 11 28.4		
			micr	sec	
	P	Z'	0.1	1.0	
Sk	iP		15 12 00.2		
Um	iP		15 11 44.1	D	
	ipP		15 11 59.8		
Ud	iP		15 12 12.6	D	
	ipP		15 12 28.3		
De	iP		15 12 25.6		

Japan.
h = 60 km (Um,Ud).

" 4

Ki	iP		15 17 29.4		
Ud	iP		15 17 55.2		

Mindanao (h = 70 km).

" 4

Up	iP		15 30 27.3		
Ki	iP		15 29 53.4		
Um	iP		15 30 08.9		
	ipP		15 30 24.5		
Ud	eP		15 30 35		

Japan.
h = 60 km (Um).

" 4

Ud	iPKP		16 01 42.7		
De	iPKP		16 01 49.8		

Tonga-Kermadec Islands
(h = 130 km).

" 4

Up	ePKP		16 41 10		
Sk	ePKP		16 41 03		
Um	iPKP		16 40 57.8		
Ud	iPKP		16 41 12.1		
	i		16 41 27.5		

Kermadec Islands (h = 40 km).

" 4

Up	iP		18 05 30.7		
			micr	sec	
	Mx	E	2.7	23	
	Mx	N	4.8	22	
	Mx	Z	2.7	20	
Ki	iP		18 05 10.8		
			micr	sec	
	P	Z'	0.1	1.1	
	Mx	E	2.1	18	
	Mx	N	2.6	22	
	Mx	Z	3.0	19	
Sk	iP		18 05 34.1		
Um	iP		18 05 18.3		
Ud	iP		18 05 37.1		

New Guinea (h = N).
M = 6.0 (Up,Ki).

" 4

Um	iP		18 24 03.6	D	

" 4

Up	iP		18 24 56.4		

(cont.)

1972
Dec. 4 (cont.)

Ki	eP		18 24 20		
Um	iP		18 24 33.0		
Ud	iP		18 25 00.6		
	i		18 25 02.6		

Japan (h = 90 km).

" 4

Um	iP		18 40 07.9		
Ud	eP		18 40 37		
	i(pP)		18 40 53.0		

Japan.
Origin time = 18 28 48.

" 4

Up	iP		20 35 16.1		
Um	iP		20 34 55.3		

Japan (h = 80 km).

" 4

Um	iP		20 41 11.2		

Japan (h = 70 km).

" 4

Up	iPKP		21 57 00.3		
Ud	iPKP		21 57 02.3		
De	iPKP		21 57 13.6		

Tonga-Kermadec Islands
(h = 610 km).

" 4

Um	iP		22 57 39.4		

Japan (h = 60 km).

" 4

Um	iP		23 37 04.8		

Japan (h = 70 km).

" 5

Up	eP		00 19 09		
Sk	eP		00 19 04		
Um	iP		00 18 47.3		
Ud	iP		00 19 14.9		

Japan.
Origin time = 00 07 27.

" 5

Ki	iP		02 10 12.5		
Ud	iP		02 10 40.4		

Mindanao (h = 80 km).

" 5

Up			micr	sec	
	Mx	E	1.4	18	
	Mx	N	2.3	21	
	Mx	Z	2.4	18	
Ki	iP		03 00 14.1		

New Guinea (h = N).

" 5

Um	iP		03 13 37.8		
Ud	iP		03 14 03.6		

Japan (h = N).

" 5

Up	eP		04 22 51		
Ki	iP		04 22 17.4		
Sk	iP		04 22 47.7		

(cont.)

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

1972
Dec. 5 (cont.)
Um iP 04 22 29.1
i 04 22 31.3
ipP 04 22 42.8
Ud iP 04 22 55.9
Japan.
h = 50 km (Um).

" 5 Ki iP 06 16 03.4
Ud iP 06 16 30.4
Mindanao (h = 80 km).

" 5 Ki i(Sgl) 06 35 30.0

" 5 Ud iP 06 36 12.2
Japan (h = N).

" 5 Up iP 09 14 25.3
micr sec
P Z' 0.1 1.1
Ki eP 09 14 40
Ud iP 09 14 27.5
Chagos Islands (h = N).

" 5 Up iP 10 14 34.4
ipP 10 14 48.2
Ki iP 10 13 57.4
Sk iP 10 14 29.9
Um iP 10 14 13.7
i 10 14 25.1
ipP 10 14 28.6
Ud iP 10 14 41.7
Japan.
h = 55 km (Up,Um).

" 5 Um iP 11 21 18.9
Japan (h = 60 km).

" 5 Ki iSgl 12 02 41.3
Sk eSgl 12 02 47

" 5 Up iP 12 03 31.4
Um iP 12 03 09.1
ipP 12 03 15.8
Ud iP 12 03 38.8
ipP 12 03 45.3
Japan.
h = 25 km (Um,Ud).

" 5 Sk iP 12 05 39.1
Um iP 12 05 33.2
Ud iP 12 05 04.5
i 12 05 11.9
Aegean Sea (h = 60 km).

" 5 Ki iP 12 59 59.3
Um iP 13 00 17.6
Japan (h = 45 km).

1972
Dec. 5 Um iP 13 55 58.8
Japan (h = N).

" 5 Up iP 14 15 21.7
micr sec
P Z' 0.1 1.2
Mx E 1.7 18
Mx N 3.6 17
Mx Z 3.4 17
Ki iP 14 14 45.1
micr sec
Mx E 3.5 17
Mx N 3.7 17
Mx Z 3.0 15
Sk iP 14 15 16.1 C
Um iP 14 15 00.8 C
ipP 14 15 16.0
Ud iP 14 15 28.3 C
ipP 14 15 43.7
De eP 14 15 44
Japan.
h = 55 km (Um,Ud).
M = 5.8 (Up,Ki).

" 5 Up iPKP1 15 17 00.4 D
iPKP2 15 17 10.9
Ki ePKP1 15 16 43
Sk iPKP1 15 16 56.0
Um iPKP1 15 16 50.8 D
Ud iPKP1 15 17 03.0 D
De ePKP1 15 17 09
South of Kermadec Islands
(h = 60 km).

" 5 Ki iP 15 30 46.0
Ud iP 15 31 10.2
Mindanao (h = 45 km).

" 5 Ki eP 15 38 13
Um iP 15 38 31.0
Ud eP 15 39 01
Japan.
Origin time = 15 27 11.

" 5 Ki iP 15 39 44.7
Mindanao (h = 90 km).

" 5 Up iPKP 15 51 37.0
Ud iPKP 15 51 38.8

" 5 Ki eP 16 07 19
Ud iP 16 07 45.0
Mindanao.
Origin time = 15 54 23.

" 5 Ki iP 16 11 38.0
Ud iP 16 12 04.1
(cont.)

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

1972
Dec. 5 (cont.)
Mindanao.
Origin time = 15 58 42.

" 5 Ki iP 16 20 14.9
Ud eP 16 20 42
Mindanao.
Origin time = 16 07 20.

" 5 Ki eP 17 01 36
micr sec
P Z' 0.1 1.2
Ud eP 17 02 03
Mindanao (h = 70 km).

" 5 Ki iP 19 49 17.3
Sk eP 19 49 52
Um iP 19 49 34.0
iPcP 19 50 04.0
Sea of Japan (h = 450 km).

" 5 Ud iPKP 19 51 03.2
i 19 51 11.0
De iPKP 19 51 06.9
Tonga Islands (h = N).

" 5 Up micr sec
Mx E 4.3 22
Mx N 2.0 22
Ki e(P) 22 13 52
micr sec
Mx N 4.8 19
New Guinea (h = N).
M = 6.0 (Up,Ki).

" 6 Up micr sec
Mx E 3.8 20
Mx N 7.1 22
Mx Z 9.0 22
Ki iP 01 57 16.1 C
micr sec
Mx E 6.3 19
Mx N 5.3 20
Mx Z 6.4 19
New Guinea (h = N).
M = 6.3 (Up,Ki).

" 6 Up eP 02 53 50
Ud iP 02 53 57.5
Greece (h = 160 km).

" 6 Ki ipP 04 14 56.3
Um iP 04 14 56.1
ipP 04 15 11.3
Ud iP 04 15 22.9
Japan.
h = 55 km (Um).

1972
Dec. 6 Up iP 05 43 48.1 C
micr sec
P Z' 0.3 1.1
Ki iP 05 44 11.6 C
micr sec
P Z' 0.4 1.1
Sk iP 05 44 10.7 C
Um iP 05 43 57.2 C
Ud iP 05 43 57.7 C
i 05 44 09.8
De iP 05 43 45.5 C
Indian Ocean (h = N).
m = 6.5 (Up,Ki).

" 6 Ud iPKP 09 37 56.8 D
De iPKP 09 38 09.1 D
Tonga-Kermadec Islands
(h = 550 km).

" 6 Ki iP 10 36 53.1
ipP 10 37 14.6
micr sec
pP Z' 0.1 1.0
Ud iP 10 37 16.8
Mindanao.
h = 80 km (Ki).

" 6 Ud iP 10 45 27.9
Japan (h = 70 km).

" 6 Ki iP 14 19 28.3
Mindanao (h = 70 km).

" 6 Ki eP 16 17 45
Sk eP 16 18 14
Um iP 16 17 59.2
ipP 16 18 10.2
Ud iP 16 18 27.3 C
Japan.
h = 40 km (Um).

" 6 Ki iP 16 21 47.6

" 6 Ud iP 17 36 44.6
Japan (h = 90 km).

" 6 Up iP 20 23 50.6 C
micr sec
P Z' 0.1 1.0
Ki iP 20 23 13.7
micr sec
P Z' 0.1 1.0
Sk iP 20 23 44.5
Um iP 20 23 29.5
Ud iP 20 23 56.7
Japan (h = 60 km).
m = 5.7 (Up,Ki).

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

1972 Dec.	6	Ud	iP		22 30 16.3	
		Mindanao (h = 70 km).				
"	6	Up	iP		23 52 46.4	D
					micr	sec
			P	Z'	0.1	1.0
		Ki	iP		23 52 03.4	
			i		23 52 13.8	
					micr	sec
			P	Z'	0.1	1.0
			Mx	E	2.0	19
			Mx	N	2.3	21
		Um	iP		23 52 22.7	D
		Ud	iP		23 52 53.1	D
		Japan (h = 15 km).				
		m = 5.9 (Up,Ki).				
"	7	Up	iP		00 26 33.6	
		Sk	eP		00 26 29	
		Um	iP		00 26 12.6	C
		Ud	iP		00 26 40.0	C
		Japan (h = 70 km).				
"	7	Ki	eP		01 05 26	
		Um	iP		01 05 45.6	
		Ud	iP		01 06 14.3	
		Japan (h = 60 km).				
"	7	Ki	iP		02 13 01.5	
		Um	iP		02 13 17.8	
		Ud	i(pP)		02 13 55.7	
		Japan (h = 60 km).				
"	7	Ki	e(P)		05 33 53	
		Japan (h = 35 km).				
"	7	Sk	ePKP		06 17 27	
		Um	iPKP		06 17 22.1	
			i		06 17 29.6	
		Ud	iPKP		06 17 34.3	
		Kermadec Islands (h = 170 km).				
"	7	Ki	eP		09 37 24	
		Um	iP		09 37 27.3	
		Mindanao (h = 70 km).				
"	7	Up			micr	sec
			Mx	E	2.6	22
			Mx	N	2.4	22
			Mx	Z	4.7	23
		Ki	iP		11 55 24.3	
					micr	sec
			Mx	E	2.2	20
		New Guinea (h = 20 km).				
		M = 5.9 (Up,Ki).				
"	7	Up	iP		11 57 18.8	C
		(cont.)				

1972 Dec.	7	(cont.)				
		Ki	iP		11 57 18.1	C
					micr	sec
			P	Z'	0.1	0.8
		Sk	iP		11 57 32.3	C
		Um	iP		11 57 15.6	C
		Ud	iP		11 57 27.4	C
		(Sumatra).				
"	7	Sk	iSgl		13 14 09.6	
"	7	Ki	iP		14 13 46.6	
		Um	iP		14 13 50.1	
		Ud	iP		14 14 12.8	
		Mindanao (h = 55 km).				
"	7	Ki	iP		15 03 27.0	
					micr	sec
			P	Z'	0.2	1.7
		Ud	iP		15 03 51.6	C
		North of Halmahera (h = 55 km).				
"	7	Um	iP		15 57 33.0	
		Japan (h = 15 km).				
"	7	Ki	iP		17 34 17.6	
					micr	sec
			P	Z'	0.1	1.4
		Um	iP		17 35 01.1	
			i		17 35 09.6	
		Ud	iP		17 35 35.5	
		Greenland Sea (h = N).				
"	7	Up	iP		19 29 33.3	C
					micr	sec
			P	Z'	0.2	0.8
		Ki	iP		19 28 39.1	C
					micr	sec
			P	Z'	0.3	0.9
		Sk	iP		19 29 12.7	C
		Um	iP		19 29 05.0	C
		Ud	iP		19 29 34.8	C
		De	iP		19 29 57.4	C
		Aleutian Islands (h = N).				
		m = 6.4 (Up,Ki).				
"	7	Ki	iP		19 37 19.5	
		Japan (h = 70 km).				
"	7	Up	iP		23 49 22.2	
		Ki	eP		23 48 45	
		Sk	iP		23 49 17.0	
		Um	iP		23 49 00.9	C
			i		23 49 11.1	
		Ud	iP		23 49 29.4	
		Japan (h = 80 km).				

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

1972						
Dec.	8	Ud	eP		00 31 21	
		Japan (h = 60 km).				
"	8	Ki	eP		02 52 40	
		Ud	iP		02 52 51.8	
		Andaman Islands (h = N).				
"	8	Um	iP		04 15 32.2	
			ipP		04 15 43.7	
		Ud	iP		04 15 59.4	
		Japan.				
		h = 45 km (Um).				
"	8	Up	iP		04 23 33.1	
			ipP		04 23 45.4	
					micr sec	
			P	Z'	0.1 1.2	
			pP	Z'	0.1 1.3	
		Ki	iP		04 22 56.6	
			ipP		04 23 09.5	
					micr sec	
			pP	Z'	0.1 1.2	
		Um	iP		04 23 13.5	
			ipP		04 23 26.0	
		Ud	iP		04 23 40.8	
			ipP		04 23 52.5	
		Japan.				
		h = 45 km (Up,Ki,Um,Ud).				
		m = 5.7 (Up,Ki).				
"	8	Ki	iP		04 44 27.3	
		Arctic Ocean (h = 30 km).				
"	8	De	iPKP		05 10 19.5	
		Tonga-Kermadec Islands				
		(h = N).				
"	8	Ud	iP		05 44 31.6	
"	8	De	iPKP		06 37 05.4	
		Tonga-Kermadec Islands				
		(h = N).				
"	8	Ud	iPKP		07 01 00.1	
		De	iPKP		07 01 10.7	
		Tonga-Kermadec Islands				
		(h = N).				
"	8	Up	iP		08 01 27.8	C
			i(pP)		08 01 39.7	
					micr sec	
			P	Z'	0.1 1.0	
			Mx	E	2.2 19	
			Mx	N	2.1 20	
			Mx	Z	3.0 22	
		Ki	iP		08 01 28.6	C
		(cont.)				

1972						
Dec.	8	(cont.)				
		Ki	ipP		08 01 38.5	
			isP		08 01 45.6	
					micr sec	
			P	Z'	0.3 1.0	
			sP	Z'	0.2 1.1	
		Sk	iP		08 01 42.2	
			ipP		08 01 52.9	
		Um	iP		08 01 25.5	
			isP		08 01 42.4	
			iS		08 12 01	
		Ud	iP		08 01 37.7	C
			ipP		08 01 48.3	
			isP		08 01 55.0	
		De	iP		08 01 35.8	C
			ipP		08 01 45.6	
			isP		08 01 53.6	
		Sumatra.				
		h = 40 km (Ki,Sk,Ud,De).				
		m = 6.4 (Up,Ki).				
"	8	Ki	iP		08 25 49.1	
			i		08 25 53.2	
		Ud	iP		08 26 15.4	
			i		08 26 18.8	
		Mindanao (h = 70 km).				
"	8	Up	iP		09 01 01.0	
			isP		09 01 19.6	
		Ki	iP		09 01 01.4	
			isP		09 01 18.1	
					micr sec	
			P	Z'	0.1 1.0	
		Sk	epP		09 01 26	
		Ud	iP		09 01 09.8	
		De	ipP		09 01 20.7	
		Sumatra (h = N).				
"	8	Ki	iP		09 28 38.0	
			i		09 28 50.2	
		Ud	iP		09 29 02.8	
			i		09 29 14.9	
		Mindanao (h = 90 km).				
"	8	Ud	iP		09 44 22.5	
		Mindanao (h = 80 km).				
"	8	Um	eP		09 47 02	
			ipP		09 47 08.0	
		Japan (h = 20 km).				
"	8	Ki	iP		10 31 14.5	
			i		10 31 18.1	
		Ud	iP		10 31 41.4	
			i		10 31 48.7	
		Mindanao (h = 60 km).				

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

1972
Dec. 8 Ki iP 10 41 31.3
Mindanao (h = 60 km).

" 8 Ki eP 10 46 12
Mindanao (h = 60 km).

" 8 Ki iP 10 52 06.8
Ud eP 10 52 31
Mindanao (h = 70 km).

" 8 Ki iP 13 25 51.5
Ud i 13 26 24.3
ipP 13 26 32.6
Mindanao (h = 70 km).

" 8 Up iP 17 08 50.6 C
micr sec
P Z' 0.1 1.3
Ki iP 17 08 32.9 C
micr sec
P Z' 0.1 1.0
Um iP 17 08 39.0 C
Ud iP 17 08 59.0 C
Mindanao (h = 55 km).
m = 6.1 (Up,Ki).

" 8 Ud iP 17 41 27.0
Mindanao (h = 90 km).

" 8 Up iPKP 18 20 37.5
Ki e(PKP) 18 20 17
iPKP 18 20 28.6
iSKP 18 23 03.4
micr sec
SKP Z' 0.2 1.5
Sk i(PKP) 18 20 28.0
iPKP 18 20 32.1
Um i(PKP) 18 20 25.4
iPKP 18 20 29.7
i 18 20 37.8
iSKP 18 23 15.6
Ud iPKP 18 20 38.6
iSKP 18 23 28.2
De iPKP 18 20 50.0 D
Fiji Islands (h = 610 km).

" 8 Up iP 18 25 50.9 C
ipP 18 26 01.1
iS 18 36 29
micr sec
P Z' 0.1 1.0
pP Z' 0.1 1.0
Mx E 3.2 17
Mx N 2.8 22
Mx Z 4.5 22
Ki iP 18 25 51.7 C
(cont.)

1972
Dec. 8 (cont.)
Ki ipP 18 26 02.4
isP 18 26 08.0
micr sec
P Z' 0.2 1.1
sP Z' 0.4 1.5
Mx E 3.3 17
Mx N 3.2 18
Mx Z 4.3 19
Sk iP 18 26 05.2 C
isP 18 26 22.4
Um iP 18 25 48.4 C
ipP 18 25 58.0
iS 18 36 26
Ud iP 18 26 01.8 C
ipP 18 26 11.4
isP 18 26 19.4
De iP 18 25 58.9 C
ipP 18 26 08.6
Sumatra.
h = 35 km (Up,Ki,Sk,Um,Ud, De).
m = 6.3, M = 5.9 (Up,Ki).

" 8 Ki iP 19 51 50.3
Ud iP 19 52 16.4
ipP 19 52 34.8
Mindanao.
h = 70 km (Ud).

" 8 Up iP2 20 30 33.4
Ki iP1 20 30 10.6
iP2 20 30 16.7
ipP 20 30 31.1
micr sec
P2 Z' 0.1 0.8
Sk iP1 20 30 31.7
iP2 20 30 38.1
Um iP1 20 30 16.2
i 20 30 27.3
Ud iP1 20 30 35.1
iP2 20 30 41.1
Mindanao (h = 60 km).
In average: P2 - P1 = 6.2 sec.

" 8 Ki iP 20 40 08.6
Ud iP 20 40 35.6
Mindanao.
Origin time = 20 27 13.

" 8 Ki iP 20 48 26.4

" 8 Up iP 20 56 34.2
micr sec
Mx E 1.4 18
(cont.)

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

1972
Dec. 8 (cont.)

Up			micr	sec
	Mx	N	2.5	20
	Mx	Z	2.6	21
Ki	iP		20 56 18.6	
			micr	sec
	P	Z'	0.1	1.0
	Mx	E	4.1	21
Um	eP		20 56 25	
Ud	iP		20 56 43.2	
	i		20 56 52.2	

Mindanao (h = 70 km).
M = 5.9 (Up,Ki).

" 9

Up	iP		00 21 07.3	
	i		00 21 21.6	
Ki	iP		00 20 50.1	
	ipP		00 21 07.5	
			micr	sec
	pP	Z'	0.1	1.0
Um	eP		00 20 56	
	i		00 21 09.8	
Ud	iP		00 21 14.4	

Mindanao.
h = 60 km (Ki).

" 9 De iP 01 50 54.9

" 9

Up	iPKP		03 06 29.3	
Ud	iPKP		03 06 29.5	
	i		03 06 31.6	

" 9

Ki	iP		05 09 34.5	
			micr	sec
	P	Z'	0.1	1.0
Ud	iP		05 09 58.8	D

Mindanao (h = 70 km).

" 9

Ki	iP		06 16 28.1	
Um	iP		06 16 35.2	
Ud	iP		06 16 53.2	

Mindanao (h = 90 km).

" 9

Up	iP		06 17 51.0	
			micr	sec
	P	Z'	0.2	1.3
Ki	iP		06 17 15.1	
			micr	sec
	P	Z'	0.2	1.5
Sk	iP		06 17 47.2	
Um	iP		06 17 30.6	
Ud	iP		06 17 58.1	
De	iP		06 18 12.0	

Japan (h = 50 km).
m = 5.9 (Up,Ki).

" 9 Ki eP 06 28 04
(cont.)

1972
Dec. 9 (cont.)

Um	iP		06 28 18.5	

Japan.
Origin time = 06 16 59.

" 9

Ki	iP		06 40 34.9	
Ud	iP		06 40 59.8	C

Mindanao (h = 90 km).

" 9

Up	iP		06 55 07.8	
	iS		07 03 41	
			micr	sec
	P	Z'	0.2	1.5
	Mx	E	2.0	21
	Mx	N	1.8	17
	Mx	Z	4.7	23
Ki	iP		06 55 30.1	
	ipP		06 55 39.4	
			micr	sec
	P	Z'	0.2	1.7
	pP	Z'	0.2	1.5
	Mx	E	5.3	21
	Mx	N	2.9	18
	Mx	Z	7.1	20
Sk	iP		06 55 00.6	
	ipP		06 55 09.6	
Um	iP		06 55 22.4	
	ipP		06 55 31.5	
	iS		07 04 07	
Ud	iP		06 54 54.7	
	ipP		06 55 04.3	
De	iP		06 54 50.5	
	ipP		06 54 59.7	

North Atlantic Ocean.
h = 35 km (Ki,Sk,Um,Ud,De)
m = 6.1, M = 5.7 (Up,Ki).

" 9

Up	iP		07 40 54.0	
Ki	iP		07 40 37.1	
			micr	sec
	P	Z'	0.1	1.1
Um	iP		07 40 42.5	
Ud	iP		07 41 03.2	C

Mindanao (h = 90 km).

" 9

Up	iP		08 57 13.1	C
	ipP		08 57 19.1	
			micr	sec
	pP	Z'	0.1	0.9
Sk	iP		08 57 52.9	
	ipP		08 57 59.6	
Um	iP		08 57 52.8	
	ipP		08 57 59.3	
Ud	iP		08 57 21.2	C
	i		08 57 23.8	
De	iP		08 56 41.8	

Greece.
h = 25 km (Up,Sk,Um).

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

1972					
Dec.	9	Ud	iP		10 19 35.6
"	9	Up	iP		13 08 55.5
					micr sec
			Mx	E	1.1 19
			Mx	Z	1.2 18
		Ki	iP		13 08 36.6
					micr sec
			P	Z'	0.1 1.0
		Um	iP		13 08 43.3
		Ud	iP		13 09 03.6
		Mindanao (h = 70 km).			
"	9	Up	eP		13 38 50
		Ki	iP		13 38 32.0
					micr sec
			P	Z'	0.1 0.8
		Um	iP		13 38 36.6
		Ud	iP		13 38 55.8
		Mindanao (h = 45 km).			
"	9	Ud	ipP		16 28 00.1
		Mindanao (h = 70 km).			
"	9	Um	iP		20 48 08.6
"	9	Up	iP		22 38 53.3
		Ud	iP		22 38 47.1
"	9	Up	iP		23 19 59.4
		Ki	iP		23 19 22.7
		Um	iP		23 19 38.6
		Ud	iP		23 20 04.9
		Japan (h = 60 km).			
"	9	Ud	iP		23 36 13.7
"	10	Ud	iP		00 41 06.0
		Mindanao (h = N).			
"	10	Ud	iP		00 42 39.9
"	10	Up	iP		00 42 59.1
		Um	iP		00 42 38.4 C
		Ud	iP		00 43 06.1 C
		Japan (h = 55 km).			
"	10	Ki	ePKP		00 57 02
		Um	iPKP		00 57 10.5
		Ud	iPKP2		00 57 40.2
		New Zealand (h = 210 km).			
"	10	Um	iP		01 08 48.1
		Ud	iP		01 09 15.4
		Japan (h = 40 km).			
"	10	Up	iP		03 46 26.8 C
		(cont.)			

1972					
Dec.	10	(cont.)			
		Up			micr sec
			P	Z'	0.1 0.9
		Ki	iP		03 45 43.5 C
					micr sec
			P	Z'	0.1 1.0
		Sk	iP		03 46 18.6 C
		Um	iP		03 46 02.5 C
		Ud	iP		03 46 33.7 C
		De	iP		03 46 50.6 C
		Japan (h = 170 km).			
		m = 5.6 (Up,Ki).			
"	10	Up	iP		04 33 52.7 C
					micr sec
			P	Z'	0.1 0.8
		Ki	iP		04 33 37.4 C
					micr sec
			P	Z'	0.3 0.6
		Sk	iP		04 34 08.3 C
		Um	iP		04 33 37.2 C
		Ud	iP		04 34 08.8 C
		De	iP		04 34 16.0 C
		Kazakh SSR.			
		m = 6.1 (Up,Ki).			
		Underground explosion.			
"	10	Up	iP		04 34 05.2 C
			iPn		04 35 10.9
			iPP		04 35 22.8
					micr sec
			P	Z'	2.1 1.0
		Ki	iP		04 33 48.9 C
		Sk	iP		04 34 20.2 C
			iPP		04 35 42.4
		Um	iP		04 33 49.8 C
			iPn		04 34 52.5
			iPP		04 35 03.3
		Ud	iP		04 34 21.3 C
		De	iP		04 34 28.8 C
			iPP		04 35 51.4
		Kazakh SSR.			
		m = 7.0 (Up).			
		Underground explosion.			
"	10	Up	iP		04 45 50.9
		Ki	iP		04 45 37.9
		Sk	iP		04 45 32.1
		Um	iP		04 45 49.4
		Ud	iP		04 45 40.7
		De	iP		04 45 49.6
		Mexico (h = 210 km).			
"	10	Up	i(S*)		05 05 54.1
			iSgl		05 06 06.4
		Ki	eSn		05 02 49
			iSgl		05 03 11.9
		(cont.)			

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

1972
Dec. 10 (cont.)

Sk	eSgl		05 05 41	
Um	iSn		05 03 30.3	
	i		05 03 44.0	
	iSgl		05 04 06.0	
Ud	iSgl		05 06 35.4	

Northwest USSR,
67.9°N, 34.1°E.
Origin time = 05 00 31.
Explosion.

" 10	Ud	iPKP	08 18 03.5	C
	De	iPKP	08 18 14.6	C

Tonga Islands (h = N).

" 10	Up	iSgl	09 51 37.5	
	Ki	i	09 48 17.8	
		i(S*)	09 48 37.6	
	Sk	eSgl	09 51 05.9	
	Um	iSn	09 49 00.0	
		iSgl	09 49 31.7	

Northwest USSR.
Explosion.

" 10	Um	iSgl	11 25 26.4	
" 10	Up	iP	12 18 23.6	
		iPn	12 18 28.1	
			micr sec	
		Pn Z'	0.1 1.0	
	Ki	iPn	12 20 10.7	
	Sk	iP	12 19 06.9	
		iPn	12 19 17.5	
	Um	iP	12 19 08.9	
		iPn	12 19 20.8	
	Ud	iP	12 18 30.2	
		iPn	12 18 34.6	
	De	iPn	12 18 03.0	

Greece (h = 70 km).
The Pn-phases have bigger amplitudes than the P-phases.

" 10	Ud	eP	13 19 50	
" 10	Um	i(P)	14 35 59.5	
" 10	Up	iP	18 37 08.9	C
		i	18 37 10.8	
		i	18 37 22.6	
		iPcP	18 37 35.3	
			micr sec	
		P Z'	0.3 0.9	
		Mx E	3.3 19	
		Mx N	8.0 18	
		Mx Z	10 18	
	Ki	iP	18 36 23.1	C
		i	18 36 25.0	

(cont.)

1972
Dec. 10 (cont.)

Ki			micr sec	
	P	Z'	0.1 0.7	
	i	Z'	0.1 0.9	
	Mx	E	9.1 18	
	Mx	N	8.9 20	
	Mx	Z	5.8 17	
Sk	iP		18 36 58.7	C
	i		18 37 01.0	
	iPcP		18 37 28.4	
Um	iP		18 36 44.5	C
	i		18 36 46.2	
	i		18 37 07.0	
	iPcP		18 37 19.0	
Ud	iP		18 37 15.7	C
	i		18 37 17.2	
	iPcP		18 37 38.3	
De	iP		18 37 33.1	C
	i		18 37 34.9	

Kurile Islands (h = 15 km).
m = 6.4, M = 6.1 (Up,Ki).
Double P-onsets, 1.9 sec apart.

" 10	Um	iP	18 50 08.5	

Kurile Islands.

" 10	Um	iP	23 48 19.5	
" 11	Up	iP	00 33 19.8	
	Um	iP	00 32 53.5	
	Ud	iP	00 33 26.0	
		ipP	00 33 33.1	

Kurile Islands.
h = 25 km (Ud).

" 11	Sk	iP	01 23 20.6	
" 11	Sk	iP	01 35 39.1	
	Ud	iP	01 35 02.4	

Greece.

" 11	Up	iP	01 47 35.2	
		ipP	01 47 45.0	
	Ki	iP	01 47 36.6	
		ipP	01 47 45.5	
			micr sec	
		P Z'	0.1 1.0	
	Um	iP	01 47 32.5	
		ipP	01 47 42.0	
	Ud	iP	01 47 43.7	
	De	iP	01 47 43.7	

Sumatra.
h = 35 km (Up,Ki,Um).

" 11	Ki	iP	01 49 11.0	C

(cont.)

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

1972
Dec. 11 (cont.)

Ki			micr sec
	P	Z'	0.1 1.0
Um	iP		01 49 06.1 C
Ud	iP		01 49 16.4
De	iP		01 49 18.2 C

Sumatra.

" 11	Ki	iP	02 12 28.4
	Ud	iP	02 12 36.1
" 11	Ud	iP	02 16 26.1

Kurile Islands (h = N).

" 11	Ud	iP	02 36 29.7
" 11	Sk	iP	02 39 26.9
" 11	Up	iP	02 41 15.4
	Ki	iP	02 40 56.9
	Um	iP	02 41 02.5
	Ud	iP	02 41 21.5

Mindanao (h = 100 km).

" 11	Ud	iP	02 50 34.3

Talaud Islands (h = N).

" 11	Ud	eP	04 26 17

Greece.

" 11	Up	iP	05 12 46.0
			micr sec
	P	Z'	0.1 1.3
	Ki	iP	05 12 29.3
			micr sec
	P	Z'	0.1 1.0
	Um	iP	05 12 34.9
	Ud	iP	05 12 53.4

Mindanao (h = 70 km).
m = 6.1 (Up,Ki).

" 11	Ki	eP	05 14 27
	Ud	iP	05 14 49.6

(Mindanao).

" 11	De	iP	05 48 40.9
" 11	Up	iP	06 11 37.4
	Sk	iP	06 11 33.9
	Um	iP	06 11 18.0
	Ud	iP	06 11 45.2

Japan (h = 55 km).

" 11	Ki	iP	08 09 19.8
	Ud	iP	08 10 11.6
" 11	Um	eP	09 21 57

Japan (h = N).

1972
Dec. 11

Ki	iP		11 30 48.7 C
Ud	iP		11 31 14.4

Mindanao (h = 60 km).

" 11	Um	i	12 14 17.2
		iSgl	12 14 20.9

Western USSR.
Explosion.

" 11	Up	iSn	12 52 38.5
		iSgl	12 52 52.1
	Um	iSgl	12 53 25.4

Esthonia.
Explosion.

" 11	Ki	i(Sgl)	13 40 36.4
	Ud	iPgl	13 36 25.5
		iSgl	13 37 11.5

Southwest Norway,
59.8°N, 6.8°E.
Origin time = 13 35 23.
By combination with Bergen and Kongsberg readings.

" 11	Up	eP	13 52 48
	Ud	iP	13 53 00.8

Greece.

" 11	Um	iP	14 17 00.7 C
" 11	Ki	iPn	15 09 23.3
		iSn	15 10 10.0
		iS*	15 10 23.8
	Sk	iSgl	15 13 13.4
	Um	i	15 11 36.3
		iSgl	15 11 59.4
		iSg2	15 12 07.7

Northwest USSR-Norway border region, 69.7°N, 30.2°E.
Origin time = 15 08 22.
Explosion.

" 11	Ki	iP	15 35 11.7
	Ud	iP	15 35 34.7

Luzon (h = N).

" 11	Ki	eSgl	16 56 09
	Um	iSgl	16 56 04.8
" 11	Up	eP	17 41 04
	Ki	eP	17 40 29
	Um	iP	17 40 41.0
		i	17 40 44.4
	Ud	iP	17 41 08.0

Japan (h = 70 km).

" 11	Um	iP	18 02 28.8

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

1972					
Dec.	11	Um	iP		19 43 57.2
"	11	Ud	iP		19 43 57.3
		Kurile Islands (h = 45 km).			
"	11	Um	iSgl		20 05 56.6
"	11	Ud	eP		21 16 50
		Japan (h = 50 km).			
"	11	Ud	iP		23 34 52.0 C
		Celebes (h = 170 km).			
"	12	Up	iP		00 46 29.7
		Ki	iP		00 45 37.2 C
		Ud	iP		00 46 33.0 C
		De	iP		00 46 54.6
		Kamchatka (h = 40 km).			
"	12	Up	iPKP		01 28 16.7 C
		Ud	iPKP		01 28 18.0 C
"	12	Ud	iP		02 37 44.8 C
		Greece (h = 10 km).			
"	12	Sk	iP		03 31 02.0
		Um	iP		03 30 59.6 C
			i		03 31 09.3
		Ud	iP		03 30 45.4
		Zambia (h = 10 km).			
"	12	Ki	iP		05 07 32.7
			ipP		05 07 47.1
					micr sec
			pP	Z'	0.1 1.0
			Mx	N	2.6 24
		Um	iP		05 07 38.2
		Ud	iP		05 07 56.5
			ipP		05 08 10.5
			i(sP)		05 08 22.4
		Mindanao.			
		h = 50 km (Ki,Ud).			
"	12	Up	iPKP		05 58 38.6
		Ud	iPKP		05 58 39.0
		De	iPKP		05 58 51.3
			i		05 58 57.0
		Tonga-Kermadec Islands			
		(h = 70 km).			
"	12	Up	iP		06 05 51.5
					micr sec
			P	Z'	0.1 1.1
		Ki	iP		06 05 25.8 C
					micr sec
			P	Z'	0.1 1.0
		Um	iP		06 05 36.9 C
		(cont.)			

1972					
Dec.	12	(cont.)			
		Ud	iP		06 05 57.5 C
		Mariana Islands (h = 5 km).			
		m = 6.1 (Up,Ki).			
"	12	Ki	eP		07 02 24
		Ud	iP		07 02 49.1
"	12	Up	iPn		07 45 15.0
			iSn		07 47 22.8
			iSgl		07 48 14.9
		Ki	iPn		07 43 39.7
			iPgl		07 43 51.5
			iSn		07 44 32.9
			i		07 44 36.2
			iSg2		07 44 58.0
					micr sec
			Pn	Z'	0.3 0.5
			Sn	Z'	0.1 0.7
		Sk	iPn		07 44 22.7
			i		07 44 26.6
			iSn		07 45 50.9
		Um	iPn		07 44 27.9
			i		07 44 36.7
			iSn		07 45 55.9
			iSgl		07 46 31.8
		Ud	iPn		07 45 10.0 C
			iSn		07 47 17.0
			i(S*)		07 47 47.3
		Norwegian Sea,			
		71.0°N, 11.8°E.			
		Origin time = 07 42 30.			
"	12	Up	iP		09 15 01.5 D
					micr sec
			P	Z'	0.1 0.8
		Ki	iP		09 14 16.8 D
			ipP		09 14 28.3
					micr sec
			P	Z'	0.4 1.0
		Sk	iP		09 14 51.2 D
			ipP		09 15 03.2
		Um	iP		09 14 38.1 D
			ipP		09 14 50.1
		Ud	iP		09 15 08.3 D
		De	iP		09 15 26.5 D
			ipP		09 15 38.3
		Kurile Islands.			
		h = 45 km (Ki,Sk,Um,De).			
		m = 6.4 (Up,Ki).			
"	12	Up	iP		11 02 05.6 C
					micr sec
			P	Z'	0.1 1.1
		Ki	iP		11 01 28.9 C
		Sk	iP		11 02 00.6 C
		Um	iP		11 01 44.7 C
		(cont.)			

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

1972
Dec. 12 (cont.)
Um i 11 01 48.1
Ud iP 11 02 12.3 C
Japan (h = 80 km).

" 12 Up iSgl 13 01 39.0
Um iSgl 13 02 30.6
Esthonia.
Explosion.

" 12 Sk iP 14 05 55.5

" 12 Sk iP 14 57 01.8

" 12 Ud i(P) 16 26 43.9 D

" 12 Up ipP 16 58 47.4
Ki iP 16 58 31.2
ipP 16 58 47.8
micr sec
pP Z' 0.1 0.9
Um ipP 16 58 42.5
Sumatra.
h = 60 km (Ki).

" 12 Up iP 18 00 09.2 C
micr sec
P Z' 0.1 1.3
Ki iP 17 59 51.3 C
micr sec
P Z' 0.1 1.0
Mx N 3.0 22
Sk iP 18 00 12.7 C
Um iP 17 59 55.6 C
Ud iP 18 00 16.9 C
Mindanao (h = 5 km).
m = 6.1 (Up,Ki).

" 12 Sk i(P) 18 01 59.4

" 12 Ki iP 18 13 42.8
Ud iP 18 14 07.4
i 18 14 11.0
Mindanao (h = 40 km).

" 12 Ud iPKP 20 06 59.0 C
De iPKP 20 07 10.2 C
Tonga-Kermadec Islands
(h = 490 km).

" 12 Ki iPgl 20 41 12.5
iSgl 20 41 32.5

" 13 Ki iP 02 51 00.7 C
Ud iP 02 51 29.0 C
Mindanao (h = 50 km).

1972
Dec. 13 Sk iP 03 03 55.1
Ud iP 03 03 24.3 C
De iP 03 02 39.1 C
Greece-Bulgaria (h = 30 km).

" 13 Ki iSKP 05 01 50.4
Fiji Islands (h = 610 km).

" 13 Up iSn 13 36 21.2
iSgl 13 36 34.1
Ki iSgl 13 39 06.1
Sk iSgl 13 38 27.3
Um iSgl 13 37 08.1
Ud iSgl 13 37 38.9
De iSgl 13 38 03.2
Esthonia, 59.5°N, 24.9°E.
Origin time = 13 34 37.
Explosion.

" 13 Ki iP 14 37 53.7

" 13 Ki iP 15 35 22.7
Mariana Islands (h = 200 km).

" 13 Up iP 16 13 01.8
micr sec
P Z' 0.1 1.0
Ki iP 16 12 08.3
Sk eP 16 12 42
Um iP 16 12 33.5
Ud iP 16 13 03.0
De iP 16 13 24.1
Aleutian Islands (h = N).

" 13 Ki eP 23 04 10
Negros (h = 140 km).

" 14 Ki iP 05 13 09.3
North Atlantic Ocean
(h = N).

" 14 Up iP 05 52 00.3 D

" 14 Ud iP 07 09 30.0

" 14 Up iP 08 53 39.4 C
Ki eP 08 52 58
Um iP 08 53 13.1 C
Ud iP 08 53 45.2 C
Japan (h = 70 km).

" 14 De iPKP 08 56 46.8
Fiji Islands (h = 450 km).

" 14 Ki iPn 10 58 20.1
iSn 10 59 08.1
iSgl 10 59 24.2
(cont.)

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

1972
Dec. 14 (cont.)
Northwest USSR-Norway border region.
Origin time = 10 57 17.
Explosion.

" 14 Ki iP 11 33 42.6
Mindanao (h = 70 km).

" 14 Up iPKP 13 42 32.1
Um iPKP 13 42 23.6
Ud iPKP 13 42 33.6
i 13 42 36.7
South of Kermadec Islands (h = N).

" 14 Ki ePKP 13 50 43
Um iPKP 13 50 47.9
Ud iPKP 13 50 59.0
South of Kermadec Islands (h = 30 km).

" 14 Ki i(P) 17 42 12.3

" 14 Up iP 17 55 14.5 C
i 17 55 25.8
micr sec
P Z' 0.1 1.0
Sk iP 17 55 55.4
Um i 17 56 01.1
i 17 56 31.6
Ud iP 17 55 21.5 C
i 17 55 23.1
i 17 55 30.6
De iP 17 54 45.0
i 17 54 50.3
Greece (h = 10 km).

" 14 Ud iP 20 26 01.5

" 14 Up iP 21 01 52.3
ipP 21 02 02.2
micr sec
pP Z' 0.2 1.1
Ki iP 21 01 59.6
ipP 21 02 10.0
iPP 21 05 18.4
micr sec
pP Z' 0.1 1.1
Sk iP 21 02 10.0
ipP 21 02 20.5
Um ipP 21 02 03.3
i 21 02 36.7
i 21 03 10.5
Ud iP 21 02 02.5
ipP 21 02 13.1
i 21 03 15.2
(cont.)

1972
Dec. 14 (cont.)
Ud iPP 21 05 21.8
De iP 21 01 58.5
ipP 21 02 08.6
Indian Ocean.
h = 40 km (Up,Ki,Sk,Ud,De).

" 15 Up iP 02 03 41.4
i 02 03 44.7
ipP 02 03 58.3
Ki iP 02 03 04.9
Sk eP 02 03 40
i 02 03 43.3
Um iP 02 03 20.8
i 02 03 24.8
ipP 02 03 40.4
Ud iP 02 03 49.5
i 02 03 52.6
ipP 02 04 06.7
De iP 02 04 06.2
Japan.
h = 55 km (Up,Um,Ud).
Double P at Up,Sk,Um, Ud, in average 3.5 sec apart.
The focal depth is calculated from the later, bigger onsets.

" 15 Up iP 06 27 05.8
micr sec
P Z' 0.1 1.1
Ki iP 06 26 28.5
Sk iP 06 27 02.3
Um iP 06 26 45.9 D
Ud iP 06 27 13.7 D
De iP 06 27 27.1
Japan (h = 35 km).

" 15 Ki iP 08 30 19.9
Um iP 08 30 23.8
Ud iP 08 30 39.2
i 08 30 45.6
Mindanao (h = 60 km).

" 15 Ud iPKP 10 09 40.2
De iPKP 10 09 49.7

" 15 Ud eP 11 01 37
Mindanao (h = 70 km).

" 15 De i(P) 11 09 13.6

" 15 Ki iSgl 11 46 05.1
Um eSgl 11 46 49
Northwest USSR.
Explosion.

" 15 Up iSgl 13 17 53.4
(cont.)

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

1972
Dec. 15 (cont.)

Sk	iSgl	13 17 53.7	
Ud	e	13 16 36	
	iS*	13 16 52.0	
	iSgl	13 16 56.9	
De	iSn	13 16 10.5	
	iSgl	13 16 44.4	

North Sea, 57.0°N, 3.5°E.
Origin time = 13 13 45.

" 15	Up	iP	14 52 31.7
		ipP	14 52 47.7
	Um	iP	14 52 05.4
		ipP	14 52 22.6
	Ud	iP	14 52 38.5
	De	iP	14 52 56.9

Kurile Islands.
h = 60 km (Up,Um).

" 15	Ud	iP	15 59 05.9

Mindanao.

" 15	De	iP	16 32 18.8
" 15	Ud	eP	18 01 28
		i	18 01 42.3
	De	iP	18 00 50.1
		i	18 01 02.0

Crete (h = N).

" 15	Up	iP	18 06 51.0

Aleutian Islands (h = N).

" 15	Up	e	20 00 07
	Ki	iP	19 58 31.9 C
	Sk	iP	19 59 14.4
	Um	iP	19 59 16.7 C
		i	19 59 23.3
	Ud	iP	19 59 51.8 C
		iPP	20 00 21.9
	De	iP	20 00 25.2 C

Greenland Sea (h = N).

" 16	Up	iPKP	02 20 51.4 C
	Ud	iPKP	02 20 53.6 C
	De	iPKP	02 21 03.7 C
" 16	Up	iP	02 34 20.1
	Ki	iP	02 33 44.4
		i	02 33 53.5
	Um	iP	02 33 59.6
		i	02 34 06.3
	Ud	iP	02 34 27.1
	De	iP	02 34 40.8

Japan (h = N).

" 16	De	iPKP	04 24 10.6

Fiji Islands (h = 560 km).

1972
Dec. 16

Up	iP	04 59 56.3	
Ki	eP	04 59 02	
Um	iP	04 59 31.5	
Ud	iP	04 59 58.7	
De	iP	05 00 21.7	

Aleutian Islands (h = 40 km).

" 16	Up	iSgl	10 11 24.8
	Sk	iS*	10 11 07.9
		iSgl	10 11 10.8
	Um	iPgl	10 09 31.6 D
		iSg2	10 09 33.6
		iRg	10 09 35.6
	Ud	iSgl	10 11 44.9
	De	iSgl	10 13 24.8

Västerbotten, Sweden,
63.6°N, 19.9°E.
Origin time = 10 09 29.
Felt.

" 16	Up	iPKP	11 48 57.0	C
		iPKKP	11 59 15.5	
			micr	sec
		PKP Z'	0.1	0.8
	Ki	iPKP	11 48 45.5	C
			micr	sec
		PKP Z'	0.1	0.9
	Sk	iPKP	11 48 56.3	C
	Um	iPKP	11 48 50.8	C
		iPKKP	11 59 33.9	
	Ud	iPKP	11 49 00.0	C
		iPKKP	11 59 10.5	
	De	iPKP	11 49 05.5	C
		iPKKP	11 59 02.8	

Solomon Islands (h = 80 km).

" 16	De	iPKP	13 55 04.3

Santa Cruz Islands
(h = 170 km).

" 16	Ud	eP	14 55 41
" 16	Up	iPKP	20 48 03.4
	Ud	iPKP	20 48 04.3
	De	iPKP	20 48 15.5 C

Tonga Islands (h = 60 km).

" 16	Um	i(P)	21 18 05.6
	Ud	iP	21 17 15.1

Greece.

" 16	Ud	eP	21 58 36
" 16	Ud	iP	22 55 01.1
" 16	Up	iP	23 03 46.1

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

1972 Dec.	16	Up	iP		23 05 58.1	
			i(Pn)		23 06 20.4	
		Ki	iP		23 04 37.4	
			iPn		23 04 51.6	
					micr	sec
			Pn	Z'	0.1	1.0
		Sk	eP		23 05 25	
		Um	iP		23 05 25.2	
		De	iP		23 06 27.4	
		Arctic Ocean (h = N).				
"	17	Up	iP		00 01 39.8	C
		Ki	iP		00 01 23.0	C
			ipP		00 01 32.8	
					micr	sec
			pP	Z'	0.1	1.2
		Um	iP		00 01 28.5	C
		Ud	iP		00 01 48.4	
			ipP		00 01 58.1	
		Mindanao.				
		h = 40 km (Ki,Ud).				
"	17	Um	i(P)		00 10 30.7	
"	17	Up	iP		00 25 25.1	C
			ipP		00 25 37.5	
		Ki	iP		00 25 07.5	C
			ipP		00 25 19.1	
					micr	sec
			P	Z'	0.1	0.8
		Sk	iP		00 25 29.9	C
		Um	iP		00 25 13.2	C
			ipP		00 25 26.6	
		Ud	iP		00 25 33.1	C
			ipP		00 25 45.7	
		De	iP		00 25 39.9	C
			i(pP)		00 25 49.8	
		Mindanao.				
		h = 45 km (Up,Ki,Um,Ud).				
"	17	Up	iP		00 29 31.5	
			iPcP		00 29 56.7	
					micr	sec
			P	Z'	0.1	1.1
			Mx	E	6.9	20
			Mx	N	14	18
			Mx	Z	13	18
		Ki	iP		00 28 44.2	
					micr	sec
			P	Z'	0.1	1.1
			Mx	E	12	18
			Mx	N	11	19
			Mx	Z	9.6	18
		Sk	iP		00 29 21.3	C
		Um	iP		00 29 06.3	C
		Ud	iP		00 29 37.3	C
			ipP		00 29 49.2	
		(cont.)				
1972 Dec.	17	(cont.)				
		De	iP		00 29 56.4	C
			iPcP		00 30 11.9	
		Kurile Islands.				
		h = 45 km (Ud).				
		m = 6.0, M = 6.3 (Up,Ki).				
"	17	Up	iP		00 43 22.1	
		Um	iP		00 42 57.4	
		Ud	iP		00 43 28.0	
		Kurile Islands (h = N).				
"	17	Up	eP		00 52 25	
		Um	iP		00 52 00.7	
		Ud	iP		00 52 31.6	
		Kurile Islands.				
		Origin time = 00 41 28.				
"	17	Up	iP		01 18 25.2	
		Ki	iP		01 18 07.9	
		Um	iP		01 18 13.8	
		Ud	iP		01 18 33.5	C
		Mindanao.				
		Origin time = 01 05 12.				
"	17	Up	iP		01 29 16.2	
		Um	iP		01 28 50.9	
		Ud	iP		01 29 22.2	
		De	eP		01 29 43	
		Kurile Islands (h = N).				
"	17	Up	iP		01 33 41.2	
		Um	iP		01 33 16.2	
		Ud	eP		01 33 47	
		Kurile Islands.				
		Origin time = 01 22 44.				
"	17	Um	iP		01 36 38.8	
		Ud	iP		01 37 10.0	
		Kurile Islands (h = N).				
"	17	Um	iP		02 25 04.1	
		Kurile Islands.				
"	17	Up	iP		03 28 42.2	
		Ki	iP		03 28 25.1	D
		Um	iP		03 28 30.7	
		Ud	iP		03 28 50.1	D
		Mindanao (h = N).				
"	17	Up	iP		03 57 25.3	
		Ki	iP		03 56 48.8	
		Sk	eP		03 57 21	
		Um	iP		03 57 04.8	
		Ud	iP		03 57 32.5	
		Japan (h = 150 km).				

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

1972 Dec.	17	Um	iP	03 57 19.5 C
		Ud	iP	03 57 48.0 C
"	17	Ud	iP	04 44 05.7
"	17	Up	iSgl	05 04 10.2
		Ki	iPn	04 59 54.5
			iSn	05 00 53.3
			iSgl	05 01 18.0
		Sk	iSgl	05 03 41.0
		Um	i	05 01 56.9
			iSgl	05 02 09.3
		Ud	iSgl	05 04 41.6
		De	iSgl	05 06 14.8
		Northwest USSR, 67.8°N, 34.0°E. Origin time = 04 58 36. Explosion.		
"	17	Up	iP	05 56 58.1
		Um	iP	05 56 33.5
		Ud	iP	05 57 04.6
		Kurile Islands (h = N).		
"	17	Um	iP	06 19 46.9
"	17	Up	iP	06 35 51.6
		Ki	eP	06 35 09
		Um	iP	06 35 28.3
		Ud	iP	06 35 58.6
		Kurile Islands (h = N).		
"	17	Ki	iP	07 40 00.0
"	17	Um	iP	08 20 39.8
		Ud	eP	08 21 00
"	17	Up	ePKPl	08 52 25
			iPKP2	08 52 34.7
		Sk	iPKPl	08 52 21.3
		Um	iPKPl	08 52 15.6
		Ud	iPKPl	08 52 28.0
		South of Kermadec Islands. Origin time = 08 32 39.		
"	17	Up	ePKPl	08 57 13
			iPKP2	08 57 21.1
		Sk	ePKPl	08 57 04
		Um	iPKPl	08 57 02.5
		Ud	iPKPl	08 57 14.5
		South of Kermadec Islands. Origin time = 08 37 25.		
"	17	Up	ePKPl	08 58 15
			iPKP2	08 58 24.3
		Sk	iPKPl	08 58 05.6
		Um	iPKPl	08 58 01.9
		(cont.)		

1972 Dec.	17	(cont.)		
		Ud	iPKPl	08 58 14.6
		South of Kermadec Islands (h = 45 km).		
"	17	Up	ePKPl	09 39 51
		Um	iPKPl	09 39 39.1
		Ud	ePKPl	09 39 51
		South of Kermadec Islands. Origin time = 09 20 03.		
"	17	Um	iP	09 49 45.5
		Ud	iP	09 50 16.8
"	17	Up	iPKPl	10 12 34.0
			iPKP2	10 12 42.5
			i	10 12 57.6
		Ki	ePKPl	10 12 13
		Sk	iPKPl	10 12 29.1
		Um	iPKPl	10 12 21.7
			i	10 12 23.3
			i	10 12 37.8
		Ud	iPKPl	10 12 34.1
			i	10 12 36.5
		De	iPKPl	10 12 44.0
		South of Kermadec Islands (h = 50 km).		
"	17	Up	iP	12 50 04.2
			i	12 50 10.9
		Ki	iP	12 51 09.1
				micr sec
			Mx N	1.0 14
			Mx Z	1.1 15
		Sk	iP	12 50 41.3
		Um	iP	12 50 33.7
		Ud	iP	12 50 10.6
			i	12 50 19.8
			i	12 50 26.6
			iPP	12 50 58.6
		De	iP	12 49 37.5
		Crete (h = 35 km).		
"	17	Ud	iP	12 56 42.9
"	17	Ud	iP	12 59 50.9
"	17	Up	iP	16 35 54.8
		Um	iP	16 35 33.2 C
			ipP	16 35 42.1
		Ud	iP	16 36 02.2 C
			ipP	16 36 11.2
		Japan. h = 35 km (Um,Ud).		
"	17	Um	iP	16 47 03.6
		Ud	iP	16 47 26.0

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

1972 Dec.	17	Up	ePKP	18 19 29	
		Sk	ePKP	18 19 28	
		Um	iPKP	18 19 23.6	C
		Ud	iPKP	18 19 32.0	C
		De	iPKP	18 19 37.8	C
		New Ireland (h = 45 km).			
"	17	Um	eP	18 49 14	
		Ud	eP	18 48 46	
"	17	Sk	eP	18 57 08	
		Um	iP	18 57 21.3	
			i	18 57 34.5	
		Ud	eP	18 56 50	
		North of Ascension Island (h = N).			
"	17	Up	ePKP	19 32 21	
		Um	iPKP	19 32 06.4	C
		Ud	iPKP	19 32 19.9	
"	17	Up	iP	21 03 51.5	
				micr sec	
			P Z'	0.1 1.5	
		Ki	iP	21 04 35.5	
			iX	21 04 55.1	
				micr sec	
			P Z'	0.1 1.5	
			X Z'	0.1 1.4	
		Sk	iP	21 04 02.5	
			iX	21 04 21.1	
		Um	iP	21 04 16.3	
			iX	21 04 34.6	
		Ud	iP	21 03 44.6	
			i	21 03 47.8	
			iX	21 04 03.0	
		North of Ascension Island (h = N).			
		m = 5.7 (Up,Ki).			
		Interpreting X at Ki,Sk, Um,Ud as pP would imply a focal depth of 70 km.			
"	17	Um	eP	21 17 30	
		Ud	iP	21 16 58.7	
		North of Ascension Island. Origin time = 21 06 17.			
"	17	Ud	iP	21 43 34.5	
"	17	Um	iPKP	21 43 56.6	
		Ud	iPKP	21 44 06.1	
"	17	Ud	iP	22 45 14.0	
"	18	Up	iP	00 04 45.3	
		Um	iP	00 04 21.6	
		(cont.)			

1972 Dec.	18	(cont.)			
		Ud	iP	00 04 52.4	
		Japan (h = 40 km).			
"	18	Um	iP	00 08 55.4	
		Ud	e(P)	00 09 28	
		Japan (h = 30 km).			
"	18	Um	iP	01 24 11.5	
			i	01 24 16.9	
"	18	Up	iP	01 30 48.8	C
				micr sec	
			P Z'	0.1 1.0	
		Ki	iP	01 31 31.0	C
				micr sec	
			P Z'	0.1 1.3	
		Sk	iP	01 31 12.6	C
		Um	iP	01 31 09.2	C
		Ud	iP	01 30 52.2	C
		De	iP	01 30 32.1	C
		Zambia (h = 2 km).			
		m = 5.9 (Up,Ki).			
"	18	Up	eP	01 54 46	
		Ud	iP	01 54 50.9	
		Kurile Islands.			
"	18	Um	iP	02 48 28.1	
		Zambia (h = N).			
"	18	Ki	eP	03 02 29	
		Ud	iP	03 03 25.7	
		Alaska (h = 170 km).			
"	18	Ud	iP	04 31 47.6	
		De	iP	04 31 16.7	
		Crete.			
"	18	Ki	eP	05 57 30	
"	18	Ki	iP	06 45 52.6	
			ipP	06 46 10.0	
		Mindanao.			
		h = 70 km (Ki).			
"	18	Up	iPKP	07 11 56.6	
			iSKP	07 14 45.6	
			iPP	07 15 06.7	
				micr sec	
			PP Z'	0.1 1.2	
		Ki	iPKP	07 11 39.0	
			i	07 11 47.6	
			iSKP	07 14 24.2	
				micr sec	
			SKP Z'	0.5 1.9	
		Sk	iPKP	07 11 48.5	
		(cont.)			

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

1972
Dec. 18 (cont.)

Sk	i	07 11 58.5	
	iSKP	07 14 40.1	
	iPP	07 14 49.0	
Um	iPKP	07 11 44.2	
	i	07 11 56.0	
	iSKP	07 14 35.4	
Ud	iPKP	07 11 57.8	
	iSKP	07 14 48.2	
De	iPKP	07 12 09.2	
	i	07 12 09.8	
	ipPKP	07 14 26.0	
	iSKP	07 14 56.8	

Tonga-Kermadec Islands.
h = 620 km (De).

" 18	Um	i(P)	07 17 27.7	
" 18	Um	iP	07 56 17.5	
" 18	Ki	iP	10 16 00.8	
	Um	iP	10 16 07.5	
	Ud	iP	10 16 25.0	

Mindanao (h = N).

" 18	Up	iP	11 31 05.8	C
		ipP	11 31 25.8	
	Ki	iP	11 31 01.0	C
		iPcP	11 31 32.0	
	Sk	iP	11 31 21.7	C
		i	11 31 31.8	
		ipP	11 31 40.7	
	Um	iP	11 30 59.3	C
		ipP	11 31 19.2	
	Ud	iP	11 31 18.4	
		ipP	11 31 38.9	
	De	iP	11 31 19.3	

Burma.
h = 80 km (Up,Sk,Um,Ud).

" 18	Ud	iP	11 58 51.0	
" 18	De	i(Sgl)	13 30 29.1	
		iRg	13 30 34.4	
" 18	Up	iSn	13 34 06.8	
		iSgl	13 34 21.6	
	Sk	iSgl	13 36 11.8	
	Um	iSgl	13 34 54.0	
	Ud	eSgl	13 35 26	
	De	iSgl	13 35 51.9	

Esthonia, 59.5°N, 25.0°E.
Origin time = 13 32 24.
Explosion.

" 18	Up	iP	14 09 49.8	C
		i	14 09 52.3	

(cont.)

1972
Dec. 18 (cont.)

Up	ipP		14 10 02.3		
	iX		14 10 15.2		
	iPP		14 13 14.0		
	iS		14 20 29		
			micr	sec	
	P	Z'	0.2	1.2	
	Mx	E	1.7	22	
	Mx	N	2.5	20	
	Mx	Z	3.3	22	
Ki	iP		14 09 50.3		C
	i		14 09 52.9		
	ipP		14 10 02.2		
	iX		14 10 13.6		
	iPP		14 13 12.9		
	i		14 13 51.0		
	iS		14 20 30		
			micr	sec	
	P	Z'	0.3	1.2	
	Mx	E	2.5	16	
	Mx	N	2.9	18	
	Mx	Z	3.0	19	
Sk	iP		14 10 03.6		C
	i		14 10 06.2		
	i		14 10 13.7		
	iX		14 10 30.2		
Um	iP		14 09 46.9		C
	i		14 09 49.4		
	ipP		14 09 58.9		
	iS		14 20 25		
Ud	iP		14 09 59.3		C
	i		14 10 01.8		
	ipP		14 10 12.4		
	iX		14 10 24.7		
	iPP		14 13 33.1		
De	iP		14 09 57.7		C
	i		14 10 00.3		
	ipP		14 10 09.5		
	iX		14 10 24.4		
	iPP		14 13 35.1		

Sumatra.
h = 45 km (Up,Ki,Um,Ud,De).
m = 6.4, M = 5.8 (Up,Ki).
Double P-onsets, 2.6 sec apart.
The phase X could possibly be interpreted as sP.

" 18	Up	iP	16 35 36.0	
	Um	iP	16 35 15.7	
		i	16 35 33.9	
	Ud	iP	16 35 43.8	

Japan (h = 45 km).

" 18	Up	iP	23 38 51.9	C
	Um	iP	23 38 31.1	C
	Ud	iP	23 38 59.1	C

Japan (h = 10 km).

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

1972
Dec. 19 Um iPKP 00 30 37.4
New Britain (h = 60 km).

" 19 Um i 06 12 03.7
i 06 12 10.4
Ud iP 06 12 22.5
Japan (h = 35 km).

" 19 Ki iP 06 39 41.9

" 19 Up iP 07 16 35.4
Ki iP 07 16 07.8
Mariana Islands (h = 310 km).

" 19 Up iP 10 44 46.1 C
Ki iP 10 43 52.8 C
ipP 10 44 03.9
micr sec
P Z' 0.1 1.0
Sk iP 10 44 22.0
Um iP 10 44 19.6
ipP 10 44 31.5
Ud iP 10 44 45.4 C
ipP 10 44 55.9
De iP 10 45 08.2 C
Aleutian Islands.
h = 40 km (Ki,Um,Ud).

" 19 De i(Rg) 14 05 05.9

" 19 Up iSgl 14 30 23.2
Ud eSgl 14 30 13
De iPgl 14 27 50.1
iSgl 14 28 17.8
Baltic Sea, south of Sweden.
Origin time = 14 27 15.
Explosion.

" 19 Up iSgl 14 37 00.2
Ud iSgl 14 36 50.2
De iPgl 14 34 29.8
iSgl 14 34 56.6
Baltic Sea, south of Sweden.
Origin time = 14 33 56.
Explosion.

" 19 Up iSgl 14 37 12.3
Ud iSgl 14 37 03.0
De iPgl 14 34 43.2
iSgl 14 35 09.2
Baltic Sea, south of Sweden.
Origin time = 14 34 09.
Explosion.

" 19 Up iPKP 14 58 12.9 C
i 14 58 22.9
Sk iPKP 14 58 08.8 C
(cont.)

1972
Dec. 19 (cont.)
Um iPKP 14 58 03.9 C
Ud iPKP 14 58 15.6 C

" 19 Ud iPKP 15 03 59.4
i 15 04 05.6
De iPKP 15 04 10.1

" 19 Ud iP 15 34 35.1
Mindanao (h = 55 km).

" 19 Up iP 15 35 41.6
micr sec
Mx E 1.2 20
Mx N 2.1 20
Mx Z 1.4 20
Ki iP 15 35 22.6
ipP 15 35 27.7
micr sec
pP Z' 0.1 1.0
Mx E 1.4 17
Mx N 1.6 19
Mx Z 2.1 19
Ud iP 15 35 48.8
Mindanao.
h = 20 km (Ki).
M = 5.6 (Up,Ki).

" 19 Ud iPKP 16 06 55.3
De iPKP 16 07 06.4
Tonga-Kermadec Islands
(h = 570 km).

" 19 De iP 17 25 06.0

" 19 Ud iP 17 28 41.2
i 17 28 47.3
Mindanao (h = 60 km).

" 19 Ki i(Sgl) 19 01 15.5
Um i(Sgl) 19 01 30.7

" 19 Up iP 19 39 57.1
micr sec
Mx E 1.6 14
Mx N 1.5 14
Mx Z 2.0 15
Ki iP 19 41 01.1
micr sec
Mx E 1.2 12
Sk iP 19 40 32.9
Um iP 19 40 31.1
Ud iP 19 40 01.7 D
De iP 19 39 31.4
i 19 39 35.8
ipP 19 39 42.7
Crete.
h = 50 km (De).
M = 4.9 (Up,Ki).

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

1972				
Dec.	19	Ki	eP	19 53 11
			ipP	19 53 28.7
		Ud	iP	19 53 38.4
		Mindanao.		
		h = 70 km (Ki).		
"	19	Up	iPgl	21 13 20.0
			iSgl	21 13 38.3
			iRg	21 13 42.6
		Um	iSgl	21 15 22.8
		Ud	iRg	21 13 30.9
		De	eSgl	21 14 43
		Central Sweden,		
		59.8°N, 15.1°E.		
		Origin time = 21 12 57.		
		Probably rockburst in the		
		Bergslagen mining area.		
"	19	Ki	iP	23 14 45.1
		Um	iP	23 15 12.1
		Ud	iP	23 15 37.9
		Aleutian Islands (h = 15 km).		
"	19	Ud	iP	23 24 13.1
		Japan (h = 40 km).		
"	19	Um	iP	23 26 01.4
		Ud	iP	23 26 29.9
		Japan (h = 60 km).		
"	20	Um	iP	00 08 12.2
		Japan (h = N).		
"	20	Up	iP	03 12 43.0
		Ud	iP	03 12 56.3 C
"	20	Ud	iP	04 23 09.9
"	20	Um	iP	04 23 33.0
		Ud	iP	04 23 46.0
"	20	Up	iP	07 46 45.8
		Ki	iP	07 46 16.4
		Um	iP	07 46 28.7
		Ud	iP	07 46 53.6
		De	iP	07 47 04.1
		Mariana Islands (h = 45 km).		
"	20	Up	iPgl	09 16 01.1
			iSn	09 16 44.2
			iSgl	09 17 11.5
		Ud	iSgl	09 17 36.6
		De	iPn	09 15 17.4
			iPgl	09 15 25.7
			iSgl	09 16 13.0
		Baltic Sea, Gulf of Gdansk.		
		Origin time = 09 14 27.		
		Explosion.		

1972				
Dec.	20	Up	iPgl	09 37 27.7
			iSn	09 38 10.9
			iSgl	09 38 38.1
		Um	e(Sgl)	09 40 35
		Ud	iSn	09 38 33.7
		De	iPn	09 36 43.8
			iPgl	09 36 52.2
			iSgl	09 37 40.0
		Baltic Sea, Gulf of Gdansk.		
		Origin time = 09 35 57.		
		Explosion.		
"	20	Um	iPKP	09 50 54.9
		Ud	iPKP	09 51 09.2
		South of Kermadec Islands		
		(h = 10 km).		
"	20	Up	iPgl	10 08 25.2
		Um	eSgl	10 11 40
		Ud	iSn	10 09 32.6
			iSgl	10 10 02.8
		De	iPn	10 07 42.2
			iPgl	10 07 50.3
			iSgl	10 08 39.0
		Baltic Sea, Gulf of Gdansk.		
		Origin time = 10 06 49.		
		Explosion.		
"	20	Up	iPgl	10 20 39.4
			iSgl	10 21 50.4
		Um	e(Sgl)	10 23 50
		Ud	iSn	10 21 47.5
			iSgl	10 22 18.5
		De	iPn	10 19 56.3
			iPgl	10 20 04.0
			i(Sn)	10 20 38.0
			iSgl	10 20 53.5
		Baltic Sea, Gulf of Gdansk.		
		Origin time = 10 19 06.		
		Explosion.		
"	20	Up	iPgl	10 32 44.2
			iSn	10 33 27.6
			iSgl	10 33 55.6
		Um	iSgl	10 36 07.8
		Ud	iSn	10 33 52.7
			iSgl	10 34 22.8
		De	iPn	10 32 01.9
			iPgl	10 32 09.6
			iSgl	10 32 57.9
		Baltic Sea, Gulf of Gdansk.		
		Origin time = 10 31 11.		
		Explosion.		
"	20	De	i(Sgl)	11 07 10.6
"	20	Ud	i(pPKP)	11 20 42.7
		South Sandwich Islands		
		(h = 140 km).		

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

1972					
Dec.	20	Up	iSn	12 26 11.5	
			iSgl	12 26 23.1	
		Ki	iSgl	12 29 01.9	
		Um	iSgl	12 26 58.9	
		Ud	eSgl	12 27 27	
		De	iSgl	12 27 54.4	
		Esthonia, 59.6°N, 24.5°E.			
		Origin time = 12 24 34.			
		Explosion.			
"	20	Ki	eP	15 38 54	
		Ud	eP	15 39 20	
			i	15 39 25.6	
		Mindanao (h = 80 km).			
"	20	Up	iPKP	18 11 32.4	
		Ki	i(PKP)	18 11 13.5	
			iPKP	18 11 25.6	D
				micr sec	
			PKP Z'	0.1 1.0	
		Sk	i(PKP)	18 11 26.7	
		Um	i(PKP)	18 11 21.5	
			iPKP	18 11 33.0	
			iSKP	18 14 09.9	
		Ud	iPKP	18 11 34.4	D
			iSKP	18 14 22.9	
		De	iPKP	18 11 45.6	D
			i	18 11 46.3	
		Tonga-Kermadec Islands			
		(h = 610 km).			
"	20	Up	iP	18 59 54.1	
		Sk	iP	18 59 34.8	
		Um	iP	18 59 51.3	
		Mexico (h = 150 km).			
"	20	Ud	iPKP	19 15 45.2	
		De	iPKP	19 15 56.3	
		Tonga-Kermadec Islands			
		(h = 650 km).			
"	20	Ud	iP	21 16 58.5	
"	20	Up	iPKP	21 30 39.2	
		Um	iSKP	21 33 18.9	
		Ud	iPKP	21 30 41.4	
		De	iPKP	21 30 52.8	
		Tonga-Kermadec Islands			
		(h = 570 km).			
"	20	Ki	iP	22 55 35.2	
		Sk	iP	22 56 02.4	
		Um	iP	22 55 42.0	
		Ud	iP	22 56 01.2	
		Mindanao (h = 45 km).			
"	20	Ud	iP	23 00 25.9	
		(cont.)			

1972					
Dec.	20	(cont.)			
		Ud	i	23 00 35.6	
		Japan (h = N).			
"	21	Ud	i(PKP)	01 24 35.4	
			iPKP	01 24 40.1	
		De	iPKP	01 24 51.2	C
		Tonga-Kermadec Islands			
		(h = 590 km).			
"	21	Ki	iPKP1	04 01 26.6	
		Um	iPKP1	04 01 34.1	
			ipPKP1	04 01 41.1	
		Ud	iPKP2	04 02 07.5	
		New Zealand.			
		h = 20 km (Um).			
"	21	Up	iP	10 04 37.0	D
				micr sec	
			P Z'	0.1 1.0	
		Ki	iP	10 04 20.1	D
				micr sec	
			P Z'	0.1 1.0	
		Sk	iP	10 04 41.4	D
		Um	iP	10 04 25.8	D
		Ud	iP	10 04 45.4	D
		Negros (h = 570 km).			
		m = 5.6 (Up,Ki).			
"	21	Up	iSn	12 29 40.9	
			iSgl	12 29 53.4	
		Ki	iSgl	12 32 30.5	
		Um	iSgl	12 30 27.1	
		Ud	iSgl	12 30 58.3	
		De	iSgl	12 31 23.0	
		Esthonia, 59.6°N, 24.7°E.			
		Origin time = 12 28 00.			
		Explosion.			
"	21	Up	iP	20 26 48.9	
		Um	iP	20 26 33.9	
			i	20 26 59.4	
		Ud	iP	20 26 45.9	
			i	20 27 06.3	
		Nevada.			
		Underground explosion.			
"	22	Up	iP	01 16 45.6	
				micr sec	
			P Z'	0.1 1.0	
		Um	iP	01 16 30.9	
		Ud	iP	01 16 54.5	
		Formosa (h = N).			
"	22	Um	iP	05 28 01.5	
		De	iP	05 27 49.3	
		Colombia (h = 170 km).			

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

1972					
Dec.	22	Up	iP	08 50 03.7	
		Ki	iP	08 49 26.7	C
		Sk	eP	08 50 00	
		Um	iP	08 49 43.3	C
		Ud	iP	08 50 11.0	C
		De	iP	08 50 24.7	C
		Japan (h = 60 km).			
"	22	Sk	iP	10 09 49.7	
"	22	Ki	iP	10 52 57.7	
		Mariana Islands (h = 30 km).			
"	22	Ud	iP	10 58 29.7	
		De	iP	10 58 52.7	
		Alaska (h = N).			
"	22	Up	iP	12 07 25.0	
		Ud	iP	12 07 25.1	
		Aleutian Islands (h = 45 km).			
"	22	Up	iPKP	12 37 47.7	
			i	12 37 49.8	
			iPP	12 39 13.5	
			iSKS	12 44 36	
				micr	sec
			PKP	Z' 0.1	1.0
			PP	Z' 0.1	1.2
			Mx	E 5.8	20
			Mx	N 11	20
			Mx	Z 13	21
		Ki	ePKP	12 38 02	
			i	12 38 03.8	
				micr	sec
			PKP	Z' 0.3	1.1
			Mx	E 8.2	18
			Mx	N 8.8	18
			Mx	Z 7.7	19
		Sk	iPKP	12 37 54.3	
		Um	iPKP	12 37 56.1	
			i	12 37 58.3	
			iPP	12 39 35.4	
		Ud	iPKP	12 37 46.4	
			i	12 37 48.5	
			iPP	12 39 11.8	
		De	iPKP	12 37 42.1	
			iPP	12 38 48.8	
		South Sandwich Islands (h = N).			
		M = 6.6 (Up,Ki).			
		Double PKP-phases, in average 2.1 sec apart.			
"	22	Up	iSgl	12 47 35.2	
			i	12 47 54.5	
		Ki	iSn	12 44 23.2	
			iS*	12 44 45.3	
		(cont.)			

1972					
Dec.	22	(cont.)			
		Sk	iSgl	12 47 15.5	
		Um	iSn	12 45 03.2	
			i	12 45 18.1	
			iSgl	12 45 38.4	
		Ud	i	12 47 54.2	
			iS*	12 48 00.7	
		De	iSn	12 48 10.6	
			eSgl	12 49 45	
		Northwest USSR, 67.8°N, 34.1°E.			
		Origin time = 12 42 16.			
		Explosion.			
"	22	Ki	ePKP	13 02 11	
		Um	iPKP	13 02 05.8	
		South Sandwich Islands (h = N).			
"	22	Ki	iPKP	13 24 37.3	
				micr	sec
			PKP	Z' 0.2	1.5
		Um	iPKP	13 24 30.9	
		South Sandwich Islands (h = N).			
"	22	Up	iSgl	13 43 56.0	
		Um	iSgl	13 44 16.8	
		Ud	eSgl	13 44 58	
		De	eSgl	13 45 25	
		Western USSR.			
		Explosion.			
"	22	Ud	iP	16 08 36.2	
"	22	Ud	iPKP	16 41 27.3	
		De	iPKP	16 41 40.0	
		Samoa Islands (h = N).			
"	22	Up	iP	16 50 36.1	C
		Okhotsk Sea (h = 450 km).			
"	22	Um	iP	17 46 41.4	
		Ud	iP	17 47 09.0	
		Japan (h = 150 km).			
"	22	Ud	iP	18 53 11.6	
			i	18 53 32.2	
"	22	Up	iPKP	19 10 13.4	
		South Sandwich Islands (h = N).			
"	23	Up	iP	02 28 37.1	
				micr	sec
			P	Z' 0.1	1.1
		Ki	eP	02 27 47	
		(cont.)			

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

1972
Dec. 23 (cont.)
Ud iP 02 28 38.1 D
De iP 02 29 00.0
Aleutian Islands (h = 45 km).

" 23 Ki iPKP1 05 20 35.6
micr sec
PKP1 Z' 1.3 2.5
Um iPKP1 05 20 42.5
Ud iPKP2 05 21 14.6
New Zealand (h = N).

" 23 Up iP 06 42 27.6
micr sec
P Z' 0.1 1.3
Mx E 3.6 16
Mx N 3.6 20
Mx Z 6.8 20
Ki iP 06 42 21.3 C
micr sec
P Z' 0.4 1.7
Mx N 4.5 17
Sk iP 06 42 08.2
Um iP 06 42 27.8
Ud iP 06 42 18.1
De iP 06 42 23.6 C
Nicaragua (h = 5 km).
m = 6.1, M = 6.0 (Up,Ki).

" 23 Ud iP 07 32 25.1
De eP 07 32 34
Nicaragua (h = 5 km).

" 23 Um iSgl 10 44 49.1
Ud eSgl 10 45 40
Lake Ladoga.
Explosion?

" 23 Up eSgl 11 41 09
i 11 41 19.7
Ud eSgl 11 41 14
De iPgl 11 39 12.6
iSgl 11 39 27.0
Baltic Sea, south of Sweden,
55.7°N, 15.1°E.
Origin time = 11 38 55.

" 23 Ud i(PKP) 12 17 17.7
iPKP 12 17 26.9
Solomon Islands (h = 50 km).

" 23 Up iP 13 00 37.1
Ud iP 13 00 42.2
Greece (h = 30 km).

" 23 Up iPKP 17 30 57.6
Um i(PKP) 17 30 37.8
(cont.)

1972
Dec. 23 (cont.)
Ud iPKP 17 30 59.9 D
De iPKP 17 31 10.2 D
Tonga-Kermadec Islands
(h = 510 km).

" 24 Ud iP 03 45 06.3
De iP 03 44 33.9
Rhodus Island.

" 24 Ud iP 04 52 15.5

" 24 Ud iP 05 49 11.1
Aegean Sea.

" 24 Ud eP 05 52 16

" 24 Ki iPKP 08 05 50.4
Ud iPKP 08 05 32.7
South Sandwich Islands
(h = N).

" 24 Up iSgl 10 04 04.4
Ki iSn 10 00 58.7
Sk iSgl 10 03 47.6
Um iSn 10 01 34.2
iSgl 10 02 10.8
Ud iSgl 10 04 34.8
Northwest USSR,
67.8°N, 34.1°E.
Origin time = 09 58 40.
Explosion.

" 24 Ud iP 10 40 42.5
Hindu Kush.
Intermediate depth.

" 24 Ki iP 11 31 42.0
Alma-Ata (h = N).

" 24 Up iPKP2 20 51 30.2
Um iPKP2 20 51 22.3
Ud i 20 51 34.3
iPKP2 20 51 39.9
Macquarie Islands (h = N).

" 24 Ud iP 23 32 33.2

" 25 Sk iPKP 01 54 05.3
Um iPKP 01 53 59.5
Santa Cruz Islands (h = 180 km).

" 25 Um iPKP 03 51 44.1
New Hebrides Islands (h = 25 km).

" 25 Ud iPKP 04 35 18.8
De iPKP 04 35 28.6
i 04 35 30.4

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

1972 Dec.	25	Up	iPKP		05 37 19.2
		Ud	iPKP		05 37 20.1
		South Sandwich Islands (h = N).			
"	25	Um	iPKP		05 39 06.0
		Ud	iPKP		05 39 19.5
"	25	Up	iP		07 03 56.5
		Um	iP		07 03 35.8
		Ud	iP		07 04 04.6
		Japan (h = 30 km).			
"	25	Ud	iP		07 25 26.3
		Japan (h = 35 km).			
"	25	Up	iP		09 18 43.1
		Um	iP		09 19 17.6
		Ud	iP		09 18 48.7
		Turkey (h = N).			
"	25	Up	iP2		12 41 29.9
		Ki	eP1		12 40 30
		Ud	eP1		12 41 22
			iP2		12 41 31.3
		Kamchatka (h = 40 km).			
		Double P-onsets. P2 may be interpreted as pP.			
"	25	Up	iP		12 56 42.8
			iS		12 59 33.5
			i		13 01 56.4
		Ki	iP		12 58 06.5
		Sk	iP		12 57 39.0
		Um	iP		12 57 23.9
		Ud	iP		12 57 00.1
			iS		13 00 15.4
		De	iP		12 56 24.1
		Rumania (h = 130 km).			
"	25	Um	eP		13 03 01
"	25	Up	iP		13 06 47.5
		Sk	iP		13 06 31.0
		Um	iP		13 06 22.9
		Ud	iP		13 06 52.0
		Kurile Islands (h = 50 km).			
"	25	Up	iPKP		14 09 59.2 D
			i		14 10 04.8
					micr sec
			PKP	Z'	0.1 0.9
		Ki	ePKP		14 09 45
		Sk	iPKP		14 09 53.8
		Um	iPKP		14 09 48.4 D
		Ud	iPKP		14 10 01.3 D
			i		14 10 08.1
		(cont.)			

1972 Dec.	25	(cont.)			
		De	iPKP		14 10 09.0 D
			i		14 10 21.6
		Kermadec Islands (h = 400 km).			
"	25	Ud	iP		14 58 31.7
"	25	Um	iSgl		15 10 14.3
		Ud	iSgl		15 11 31.8
"	25	Ud	iP		18 59 31.8 C
"	25	Up	iP		19 06 22.8 C
			ipP		19 06 42.1
					micr sec
			P	Z'	0.4 1.4
			Mx	E	3.3 24
			Mx	N	3.8 26
			Mx	Z	5.1 26
		Ki	iP		19 05 29.0 C
			ipP		19 05 50.4
			iPP		19 07 37.9
					micr sec
			P	Z'	0.2 1.2
			Mx	E	5.5 24
			Mx	N	5.6 26
		Sk	iP		19 06 05.9 C
			ipP		19 06 25.2
			isP		19 06 37.4
		Um	iP		19 05 54.6 C
			ipP		19 06 14.7
			isP		19 06 25.4
		Ud	iP		19 06 26.7 C
		De	iP		19 06 48.1 C
			ipP		19 07 09.3
			isP		19 07 21.0
		Kamchatka.			
		h = 80 km (Up,Ki,Sk,Um,De).			
		m = 6.2, M = 5.7 (Up,Ki).			
"	25	Um	iP		19 31 25.3
"	25	Sk	iP		21 32 26.8
"	25	Ud	iP		22 34 44.4
"	25	Up	eP		22 35 39
		Um	iP		22 35 18.3
		Ud	iP		22 35 46.9
		Japan (h = 50 km).			
"	25	Ud	iP		22 38 44.6
"	25	Um	iP		23 13 09.0
		Ud	iP		23 13 02.0
"	26	Um	iP		02 15 38.2
		(cont.)			

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

1972					
Dec.	26	(cont.)			
		Ud	iP	02 16 10.1	
		Aleutian Islands (h = 80 km).			
"	26	Um	iP	04 24 29.4	
		Hindu Kush (h = 160 km).			
"	26	Ud	iP	04 47 07.1	
"	26	Um	iP	05 05 08.1	
		Gulf of California (h = N).			
"	26	Ud	iP	05 23 16.4	
"	26	Ud	e(P)	06 23 05	
"	26	Um	i(P)	07 08 20.4	
"	26	Sk	iP	07 35 50.0	
"	26	Um	i(P)	08 44 51.1	
"	26	Ud	iP	11 36 54.9	
"	26	Up	iSn	12 25 55.7	
			iSgl	12 26 09.1	
		Ki	eSgl	12 28 51	
		Um	iSgl	12 26 43.4	
		Ud	iSgl	12 27 14.8	
		De	eSgl	12 27 39	
		Esthonia, 59.5°N, 25.0°E.			
		Origin time = 12 24 10.			
		Explosion.			
"	26	Sk	eP	15 35 42	
			i	15 37 33.0	
"	26	Ud	i(P)	17 20 09.7	
"	26	Up	iP	18 42 50.7	
		Ki	iP	18 43 27.9	
		Sk	eP	18 43 23	
		Um	iP	18 43 04.3	
		Ud	iP	18 43 06.2	
		Iran (h = N).			
"	26	Ki	eP	21 03 31	
		Colombia (h = 160 km).			
"	26	Ki	iP	21 17 28.6	
		Ud	iP	21 17 54.9	
		Mindanao (h = 170 km).			
"	26	Up	iP	22 14 38.6	C
			i	22 14 43.1	
			iPcP	22 15 03.3	
				micr sec	
			P Z'	0.1 0.7	
		(cont.)			

1972					
Dec.	26	(cont.)			
		Ki	iP	22 13 44.3	
			i	22 14 02.8	
			iPcP	22 14 29.0	
		Sk	iP	22 14 16.4	
			i	22 15 04.3	
		Um	iP	22 14 11.8	
			iPcP	22 14 46.8	
		Ud	iP	22 14 37.6	C
			i	22 14 39.7	
			ipP	22 14 51.5	
		De	iP	22 15 00.7	C
		Aleutian Islands.			
		h = 50 km (Ud).			
"	27	Ki	i(P)	06 28 39.1	
"	27	Ud	iP	08 20 10.3	
		Sicily.			
"	27	Ud	i(P)	08 49 29.2	
"	27	Ki	ePn	12 18 35	
			iSn	12 19 24.0	
			iSgl	12 19 41.9	
		Northwest USSR-Norway border region.			
		Origin time = 12 17 31.			
		Explosion.			
"	27	Ki	iSn	12 29 33.4	
		Sk	iSgl	12 32 21.3	
		Um	iSn	12 30 11.7	
			iS*	12 30 41.3	
			iSgl	12 30 46.5	
		Northwest USSR.			
		Explosion.			
"	27	Up	iP	14 16 16.6	
			i1	14 16 27.6	
			ipP	14 17 33.5	
			i3	14 18 38.8	
			iS	14 24 28	
				micr sec	
			pP Z'	0.1 1.2	
			i3 Z'	0.1 0.8	
		Ki	iP	14 15 31.4	
			ipP	14 16 45.9	
			isP	14 17 40.4	
			i3	14 17 54.1	
				micr sec	
			P Z'	0.1 1.1	
			pP Z'	0.1 1.1	
		Sk	iP	14 16 08.4	
			i(sP)	14 18 24.8	
		Um	iP	14 15 51.3	
			ipP	14 17 07.4	
		(cont.)			

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

1972
Dec. 27 (cont.)

Um	isP		14 17 59.8	
Ud	iP		14 16 23.2	C
	i1		14 16 32.5	
	i2		14 16 47.9	
	ipP		14 17 39.5	
	i		14 18 02.6	
	isP		14 18 32.0	
	i3		14 18 45.2	
De	iP		14 16 43.6	
	i2		14 17 07.9	
	isP		14 18 55.0	

Okhotsk Sea.
h = 360 km (Up,Ki,Um,Ud).
m = 5.4 (Up,Ki).
Corresponding, but unidentified phases at the different stations have been denoted by the same numbers (i1, i2, i3).

" 27	Ud	iP		15 47 03.6	
" 27	Sk	i(P)		21 59 13.4	
" 27	Sk	iP		22 11 20.2	
" 27	Up	iP		23 06 55.7	
		iS		23 12 50	
				micr	sec
		P	Z'	0.1	1.3
		Mx	E	8.7	17
		Mx	N	19	17
		Mx	Z	27	16
	Ki	iP		23 05 54.1	
				micr	sec
		P	Z'	0.1	1.3
		Mx	E	12	15
		Mx	N	9.0	13
		Mx	Z	12	13
	Sk	eP		23 06 18	
	Um	iP		23 06 26.4	
		iS		23 11 58	
	Ud	iP		23 06 48.5	

Queen Elizabeth Islands (h = N).
m = 5.5, M = 5.9 (Up,Ki).

" 28	Up			micr	sec
		Mx	N	3.0	21
		Mx	Z	1.9	20
	Ki	iPKP		03 00 00.3	
		i		03 00 20.6	
				micr	sec
		PKP	Z'	0.2	1.5
		Mx	E	1.7	16
		Mx	N	2.2	22

(cont.)

1972
Dec. 28 (cont.)

Ki			micr	sec
	Mx	Z	1.5	16
Um	iPKP		03 00 06.7	
Ud	iPKP		03 00 13.0	

Loyalty Islands (h = 30 km).
M = 6.1 (Up,Ki).

" 28	Ud	iP	03 50 16.3	C
" 28	Ki	iP	04 33 37.6	
" 28	Sk	i(P)	05 15 01.6	
" 28	Up	iP2	06 07 28.1	C
			micr	sec
		Mx E	1.7	15
		Mx N	1.7	16
		Mx Z	2.0	14
	Ki	iP1	06 07 06.9	
		iP2	06 07 09.0	C
		i	06 07 33.2	
			micr	sec
		P2 Z'	0.1	1.1
		i Z'	0.2	1.5
		Mx E	5.7	21
		Mx N	4.2	19
		Mx Z	6.0	19
	Sk	iP1	06 07 29.3	
	Um	iP2	06 07 20.6	C
	Ud	iP1	06 07 32.4	
		iP2	06 07 36.0	C

Mindanao (h = 70 km).
M = 5.9 (Up,Ki).
Double P-onsets at Ki and Ud. The second, P2, has the biggest amplitudes.

" 28	Um	iP	07 11 32.1	

Japan (h = 15 km).

" 28	Up	iPKP	09 19 12.1	C
			micr	sec
		PKP Z'	0.1	1.0
	Ki	iPKP	09 18 57.1	C
			micr	sec
		PKP Z'	0.1	0.9
	Sk	i(PKP)	09 19 06.1	
		iPKP	09 19 09.1	
		i	09 19 19.5	
	Um	iPKP	09 19 04.1	C
	Ud	i(PKP)	09 19 10.2	
		iPKP	09 19 15.6	
	De	iPKP	09 19 20.4	

New Hebrides Islands (h = 45 km).

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

1972					
Dec.	28	Ki	iP	09 38 56.2	
"	28	Ud	iPKP	10 55 52.2	D
		De	iPKP	10 56 03.5	D
"	28	Ud	iP	10 58 31.9	
"	28	Ki	e	12 26 37	
			i	12 26 48.9	
		Ud	iP	12 26 56.1	
		Mindanao (h = 80 km).			
"	28	Um	iSgl	12 50 09.3	
			i	12 50 16.0	
		Western USSR.			
		Explosion.			
"	28	Up		micr	sec
			Mx	E 2.9	17
			Mx	N 5.6	16
			Mx	Z 6.4	16
		Ki	eP	14 42 34	
			i	14 43 10.5	
				micr	sec
			i	Z' 0.2	1.8
			Mx	E 3.2	14
			Mx	N 2.6	14
			Mx	Z 3.3	13
		Queen Elizabeth Islands			
		(h = N).			
		M = 5.4 (Up,Ki).			
"	28	Ki	iP	15 40 36.1	
"	28	Ki	e(P)	15 55 40	
"	28	Sk	iP	17 02 27.0	
"	28	Up	iP	17 05 32.2	C
			ipP	17 05 51.5	
			iPP	17 07 12.8	
				micr	sec
			P	Z' 0.1	0.7
			pP	Z' 0.1	0.8
			Mx	E 3.0	16
			Mx	N 2.4	8
			Mx	Z 7.6	20
		Ki	iP	17 05 46.9	C
			ipP	17 06 06.9	
				micr	sec
			pP	Z' 0.1	0.8
			Mx	E 2.2	12
			Mx	N 1.5	8
			Mx	Z 1.8	13
		Sk	iP	17 05 58.7	C
			ipP	17 06 18.2	
		Um	iP	17 05 31.6	C
		(cont.)			

1972					
Dec.	28	(cont.)			
		Um	i	17 05 36.3	
			ipP	17 05 51.2	
			iS	17 11 42	
		Ud	iP	17 05 48.8	C
			ipP	17 06 08.1	
		De	iP	17 05 44.3	C
			ipP	17 06 03.2	
			iPP	17 07 24.6	
		Afghanistan.			
		h = 90 km (Up,Ki,Sk,Um,Ud, De).			
		m = 5.8, M = 5.5 (Up,Ki).			
"	28	Ki	iPKP	18 42 59.8	
				micr	sec
			PKP	Z' 0.1	1.1
		Sk	iPKP	18 42 49.4	
		Ud	iPKP	18 42 42.2	
			i	18 42 46.5	
		South Sandwich Islands			
		(h = N).			
"	28	Ud	iP	23 39 06.2	
"	29	Ki	iP	03 51 14.7	
		Sk	iP	03 50 43.8	
		Ud	iP	03 50 12.0	
			i	03 50 13.7	
		De	iP	03 49 42.7	
		Crete (h = 35 km).			
"	29	Ud	iPKP	05 09 31.2	
		Chile (h = 60 km).			
"	29	Ki	iSgl	12 06 10.8	
		Northwest USSR.			
		Explosion.			
"	29	Ki	eP	12 42 24	
			i	12 42 30.2	
		Mindanao (h = 60 km).			
"	29	Up	iSn	12 46 37.9	
			iSgl	12 46 50.2	
		Ki	iSgl	12 49 22.0	
		Um	iSgl	12 47 25.6	
			i	12 47 39.3	
		Ud	iSn	12 47 26.2	
			iSgl	12 47 52.7	
		De	iSgl	12 48 20.6	
		Esthonia, 59.5°N, 24.5°E.			
		Origin time = 12 45 00.			
		Explosion.			
"	29	Up	iSgl	17 39 12.2	
		Ki	iPgl	17 36 31.4	
		(cont.)			

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

1972 Dec.	29	(cont.)		
		Ki	iSgl	17 37 08.7
		Sk	ePgl	17 36 34
			iS*	17 37 12.3
			iSgl	17 37 15.4
		Um	iPn	17 36 39.0
			iPgl	17 36 47.1
			iSn	17 37 21.2
			iSgl	17 37 34.7
		Ud	iSgl	17 39 01.2
		De	eSgl	17 40 56
		Nordland, Norway, 66.4°N, 14.5°E. Origin time = 17 35 43. Explosion.		
"	29	Ki	ePKP	19 24 29
		Sk	iPKP	19 24 42.1
		Um	iPKP	19 24 35.8
			i	19 24 43.7
		De	iPKP	19 24 53.5
		Loyalty Islands (h = N).		
"	29	Ud	iP	21 53 00.8
"	29	Ki	iP	22 19 06.8
		Japan (h = 170 km).		
"	29	Ki	iP	23 40 28.7
				micr sec
			P Z'	0.2 1.5
		Sk	iP	23 41 20.4
		Um	iP	23 41 19.2
		Ud	eP	23 41 50
		Arctic Ocean (h = N).		
"	30	De	iP	05 51 12.4
"	30	Ud	iP	06 19 31.0
"	30	Ud	iP	06 27 46.0
		North Atlantic Ocean (h = N).		
"	30	Ki	eP	07 24 18
			i	07 24 24.2
		Ud	i	07 24 47.8
		Mindanao (h = 80 km).		
"	30	Ki	iP	08 56 29.6
"	30	Ud	iP	09 15 08.7
"	30	Ud	iP	15 23 19.6
		Bonin Islands (h = 50 km).		
"	30	Ud	eP	15 25 59
		Aegean Sea (h = N).		

1972 Dec.	30	Ud	i(P)	15 36 03.0
"	30	Ki	iP	17 42 10.7
		Ud	iP	17 42 36.1
		Mindanao (h = 35 km).		
"	31	Up	iP	00 03 12.8
		Ud	iP	00 03 28.3
		Tibet (h = N).		
"	31	Ki	i(Pgl)	00 20 08.5
			iSgl	00 20 38.7
		Off northwest coast of Norway.		
"	31	Ud	iP	08 36 26.1
"	31	Um	iP	10 17 11.9
		Ud	iP	10 17 36.8
		Kodiak Island (h = 20 km).		
"	31	Ud	iP	15 44 47.7
"	31	Ki	eP	15 55 26
		Ud	eP	15 55 54
"	31	Up	eP	20 07 40
		Ud	eP	20 07 46
		Greece (h = 50 km).		

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