

PRELIMINARY

SEISMOLOGICAL BULLETIN

U P P S A L A, K I R U N A, S K A L S T U G A N, and G Ö T E B O R G

Uppsala (Up): $59^{\circ}51.5'N$, $17^{\circ}37.6'E$; h = 14 m.
Kiruna (Ki): $67^{\circ}50.4'N$, $20^{\circ}25.0'E$; h = 390 m.
Skalstugan (Sk): $63^{\circ}34.8'N$, $12^{\circ}16.8'E$; h = 580 m.
Göteborg (Gb): $57^{\circ}41.9'N$, $11^{\circ}58.7'E$; h = 66 m.

J a n u a r y 1-31, 1960
.....

1960

1960

Jan 1	Up	iP	04 22 23	Jan 2	M	N	2.4	23
		i	04 22 34	cont.	M	Z	2.2	22
	Ki	iP	04 21 33		Ki	eL	13 13	
	Sk	iP	04 22 12					microns sec
	Kurile Islands.				M	E	2.6	19
" 1	Up	iP	04 29 56		South Atlantic Ocean, west of Bouvet Island.			
	Bonin Islands.				Magn. = 6.1 (Up, Ki).			
" 1	Ki	iP	06 10 08	" 2	Up	iP	23 05 40	
	Mariana Islands.			" 2	Up	iP	23 20 43	
" 1	Ki	iP	23 21 54		Ki	iP	23 20 44	
	Near east coast of Kamchatka.				Sk	iP	23 20 59	
" 2	Up	iP	05 19 17	" 3	Up	iP	09 35 03	
			microns sec	" 3	Up	iP	11 28 24	
	P	Z'	0.1 0.6	" 3	Up	iP	11 31 58	
	Ki	iP	05 19 19		i		11 32 04	
			microns sec		i(Lgl)		11 45 41	
	P	Z'	0.9 2.2		iLgl		11 46 12	
	Sk	iP	05 19 33				microns sec	
	i		05 19 46		P	Z'	0.5 0.6	
	Gb	iP	05 19 30		M	E	1.4 11	
	Off coast of Sumatra.				M	N	2.6 10	
" 2	Up	iP	07 09 59		M	Z	2.0 11	
			microns sec	Ki	iP		11 31 45	
	P	Z'	0.1 1.1		i		11 31 51	
	Ki	eP	07 08 58				microns sec	
	Gb	iP	07 10 13		P	Z'	0.3 0.7	
	Near east coast of Kamchatka.				M	E	2.0 13	
" 2	Up	iP	10 27 49		M	N	3.2 14	
" 2	Up	eL	13 10		M	Z	2.1 12	
			microns sec	Sk	iP		11 32 14	
	M	E	1.8 19		i		11 32 20	
cont.					iPP		11 33 58	
					i		11 34 04	
					iLgl		11 47 29	
					D = 4950 km = $44\frac{1}{2}^{\circ}$.			
				cont.				

Up = Uppsala, Ki = Kiruna, Sk = Skalistugan, Gb = Göteborg

1960

Jan 3
cont.

Gb	iP	11 32 30
	iPP	11 34 15
	i	11 34 24
	eLi	11 46 23
	oLgl	11 48 00
	i	11 48 23

D = 5150 km = 46 $\frac{1}{2}$ ⁰.

Sinkiang Province, China.

Magn. = 6.7 (Up, Ki).

The phase 6 sec after P has much larger amplitudes than P proper (only these larger amplitudes are given here). Clear Lgl phases.

"	3	Up	iP	11 48 32
			i	11 48 38
		Ki	iP	11 47 35
			i	11 47 42
		Sk	iP	11 47 29
		Gb	eP	11 48 00
			i	11 48 23

South Central Alaska.

"	3	Up	iP	14 57 37
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"	3	Up	iP	20 23 52 D
			iS	20 27 24
				microns sec
		P	Z'	0.4 0.6
		S	E	2.2 3
		S	N	3.3 3
		S	Z'	1.2 1.5
		Ki	iP	20 25 06 D
			i	20 31 13
			i	20 31 27
				microns sec
		P	Z'	0.5 1.2
		M	E	0.9 12
		Sk	iP	20 24 27 D
			iS	20 28 38
		Gb	iP	20 23 27 D
			iS	20 26 44
			i	20 26 51

Tyrrhenian Sea (h = 250 km).
Magn. = 6.2 (Up, Ki).

"	3	Up	iP	21 31 00
			i	21 31 09
				microns sec
		P	Z'	0.1 0.7
		Ki	iP	21 30 13
		Sk	eP	21 31 00

Kurile Islands (h = 150 km).

1960

Jan 4

Up	iP	04 07 06 C
	i	04 07 15
		microns sec
	P	Z' 0.1 0.5
Ki	iP	04 07 02
Sk	iP	04 07 23
Gb	iP	04 07 24

India - E. Pakistan border.

"	4	Up	iP	06 25 43
			eS	06 33 13
				microns sec
		S	N	2.4 20
		M	E	3.4 16
		M	N	2.4 15
		M	Z	2.3 20
				(D = 5900 km = 53 ⁰).
		Ki	eP	06 26 37
				microns sec
		M	E	3.4 18
		M	N	2.8 16
		M	Z	1.6 16
		Sk	iP	06 26 16 D

"	4	Up	iP	09 20 19
"	4	Sk	i(P)	10 04 28
"	4	Sk	iP	10 54 51
			i	10 54 55
"	4	Sk	iP	11 13 48
"	4	Sk	iP	11 19 50
			i	11 19 53

Seismic?

"	4	Up	iP	12 55 36 D
			i	12 55 38
			iS	12 58 24
			iLg2	13 00 27
				microns sec
		P	Z'	0.4 0.5
		S	Z'	0.4 0.5
		M	E	4.9 4
		M	N	6.0 6
		M	Z	1.9 10
				D = 1700 km = 15 $\frac{1}{2}$ ⁰ .
		Ki	iP	12 57 02
			i	12 57 16
			iS	13 01 14
			iLgl	13 03 57
			i(Lgl)	13 04 05

cont.

Up = Uppsala, K1 = Kiruna, Sk = Skanstugan, Gb = Göteborg

1960

Jan 4
cont.

1 13 04 19
microns sec
P Z' 0.2 0.8
M E 4.0 8
M N 0.8 12
M Z 1.3 12
D = 2600 km = 23 $\frac{1}{2}$ ⁰.
Sk 1P 12 56 34 D
1 12 56 37
1S 13 00 14
1Lgl 13 02 48
D = 2300 km = 20 $\frac{1}{2}$ ⁰.
Gb 1P 12 55 34
1S 12 58 20
1PoP 13 00 37
1 13 00 54
D = 1700 km = 15 $\frac{1}{2}$ ⁰.
Rumania. Magn. = 5.9(Up,K1).
Clear channel waves.
" 4 K1 1P 13 46 16
1 13 46 28
Luzon Island, Philippine
Islands.
" 4 Up 1P 15 10 03
K1 1P 15 10 10
" 4 Up 1(P) 20 32 22
" 5 Up 1P 06 10 56
1PP 06 11 09
D = 1900 km = 17⁰.
K1 1P 06 12 19
1 06 12 42
eS 06 16 44
D = 2800 km = 25⁰.
Sk eP 06 11 49
1 06 11 53
1PP 06 12 07
D = 2400 km = 21 $\frac{1}{2}$ ⁰.
Gb 1P 06 10 57
Rumania.
" 6 Up 1P 00 33 15
" 6 K1 1P 15 22 29
The Alps, Northern Italy.
" 6 Up 1P 18 55 41 D
microns sec
P Z' 0.1 0.5
K1 1P 18 55 34 D
Sk 1P 18 55 56 C
Burma.

1960

Jan 6 Up 1P 23 04 39
K1 1P 23 05 14
Sk 1P 23 05 14 D
" 7 K1 1P 08 01 10
" 7 Up 1P 08 27 23
microns sec
P Z' 0.1 1.0
M E 1.0 17
M N 1.5 19
M Z 1.4 18
K1 1P 08 27 24
microns sec
P Z' 0.1 1.0
M E 1.4 17
M N 1.1 20
M Z 1.2 17
Sk 1P 08 27 38
Gb 1P 08 27 41
Nicobar Islands.
Magn. = 5.6 (Up, K1).
" 7 Up eSKS 13 54 39
microns sec
SKS E 0.7 7
SKS Z 1.2 8
M E 2.3 19
M N 4.1 20
M Z 5.5 20
K1 1PKP 13 47 20
1 13 47 36
e 14 06 35
microns sec
PKP Z' 0.2 1.5
M E 2.6 21
M N 2.5 18
M Z 3.3 18
Sandwich Islands.
Magn. = 6.2 (Up, K1).
" 7 K1 1P 14 55 09
" 7 K1 1(P) 16 55 12
Sk 1P 16 56 09
" 7 Up 1(P) 18 24 11
" 7 Up 1P 22 45 07
" 7 Up 1P 23 29 27
1 23 29 31
1Pa 23 35 55
microns sec
P Z' 0.1 0.6
cont.

Up = Uppsala, K1 = Kiruna, Sk = Skanstugan, Gb = Göteborg

1960
Jan 7
cont.

M	E	1.6	21
M	N	2.0	20
M	Z	1.9	20
K1	1P	23 29 22	
i		23 29 28	
microns sec			
P	Z'	0.2	0.9
M	E	1.9	17
M	N	2.0	20
M	Z	1.6	16
Sk	1P	23 29 43	
Gb	1P	23 29 38	
i		23 29 42	

Nicobar Islands.

Magn. = 5.8 (Up, K1).

"	8	Up	1PKP	02 53 58
		K1	1PKP	02 54 14
Sandwich Islands.				

"	8	K1	1PKP	11 48 25 D
microns sec				
		PKP	Z'	0.2 1.5
Sandwich Islands.				

"	8	Up	-	
microns sec				
		M	E	1.5 16
		M	N	1.0 17
		M	Z	2.1 19
K1		1PKP		15 05 02
microns sec				
		PKP	Z'	0.1 1.0
		M	E	1.2 19
		M	N	0.9 18
		M	Z	1.4 20
Sk		1PKP		15 05 00
Sandwich Islands.				

"	8	Gb	e(P)	16 03 00
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"	8	Gb	1P	22 05 40 C
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"	9	Up	1P	03 36 12
		i		03 36 58

"	9	K1	1P	04 01 27
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"	9	Up	1P	04 04 02
		eS		04 08 24
microns sec				
		S	E	1.0 8
		S	N	2.4 8
		M	E	3.7 18
		M	N	5.1 17
		M	Z	4.7 15
D = 2650 km = 24°.				

cont.

1960

Jan 9	K1	1P	04 05 08
cont.		eS	04 10 15
		e(Lgl)	04 14 25

microns sec			
P	Z'	0.2	0.9
S	N	0.7	15
M	E	2.6	12
M	N	1.9	17
M	Z	1.8	17
D = 3450 km = 31°.			
Sk	1P	04 04 42	
Gb	1P	04 03 57	
Southwestern Turkey.			

"	9	Up	1P	04 40 42 C
		i		04 40 49
microns sec				

		P	Z'	0.1 0.6
Sk		1P		04 40 37 C

"	9	K1	1P	06 35 06 D
		Sk	1(P)	06 37 00

"	9	Up	1P	07 31 23 C
		1PP		07 32 56
		1PoP		07 33 14
		1S		07 37 08
		1!		07 39 50

microns sec				
P	Z'	0.9	0.5	
PP	E	1.1	1	
PP	Z'	0.7	0.8	
S	E	0.5	3	
S	N	1.1	5	
M	E	1.4	13	
M	N	1.9	9	
M	Z	2.0	13	
(D = 4450 km = 40°).				

K1		1P		07 31 32 C
		i		07 32 48
		1PP		07 33 11
		i		07 33 54
		1S		07 37 32
		i		07 40 26
		1SS		07 40 54

microns sec				
P	Z	1.9	4	
P	Z'	3.1	1.2	
PP	Z'	1.6	1.7	
S	E	1.2	5	
S	N	0.8	8	
M	E	1.7	10	
M	N	2.9	9	
M	Z	1.5	8	
(D = 4650 km = 42°).				

cont.

Up = Uppsala, Ki = Kiruna, Sk = Skälstugan, Gb = Göteborg

1960				1960			
Jan 9 cont.	Sk	1P	07 31 48 C	Jan 11	Ki	1P	12 16 36
		1PP	07 33 29				microns sec
	Gb	1P	07 31 39			P	Z' 0.1 1.0
		i	07 33 13				
		1PP	07 33 22	" 11	Sk	1PKP	18 09 37
	Hindu Kush (h = 150 km).				Kermadec Islands.		
	Magn. = 6.9 (Up, Ki).						
" 9	Up	1P	15 41 57	" 12	Up	1P	02 04 34
	Sk	eP	15 41 53				microns sec
" 9	Ki	1P	17 58 54			M	E 2.6 22
	Unimak Island region.					M	N 5.1 21
" 9	Up	eP	22 52 10			M	Z 1.5 19
" 10	Sk	1P	00 36 10		Ki	1P	02 04 09
" 10	Ki	1P	23 41 32			i	02 04 23
" 11	Up	eP	02 39 31				microns sec
			microns sec			P	Z' 0.1 1.0
	M	E	0.8 15			M	E 1.5 17
	M	N	0.8 13			M	N 1.3 19
	M	Z	1.2 15			M	Z 0.8 13
	Ki	1P	02 39 01 D		Sk	1P	02 04 38
			microns sec		Gb	1P	02 05 02
	M	E	0.7 14		Near east coast of Formosa.		
	M	N	0.6 18		Magn. = 5.8 (Up, Ki).		
	M	Z	0.9 15	" 12	Up	i	03 28 41
	Sk	eP	02 39 31				microns sec
	Ryukyu Islands.					M	E 1.9 20
" 11	Up	eP	03 03 40			M	N 2.4 20
	Ki	1P	03 03 26			M	Z 2.6 20
	Off coast of Luzon,				Ki	1PKP	03 28 18
	Philippine Islands.						microns sec
" 11	Up	-	-			M	E 2.4 18
			microns sec			M	N 1.7 18
	M	E	1.4 15			M	Z 3.3 18
	M	N	3.3 18	" 12	Up	1P	08 13 55
	M	Z	1.8 14		Sk	1P	08 13 48 D
	Ki	1P	03 21 31	" 12	Up	1P	10 18 37
	eSoS		03 31 28	" 12	Up	1P	10 33 41
			microns sec	" 12	Up	i(P)	10 48 31
	P	Z'	0.1 1.5	" 12	Ki	1P	21 55 25
	M	E	1.7 16	" 13	Up	1P	01 34 24
	M	N	2.0 17			i	01 34 35
	M	Z	1.4 17		Ki	1P	01 34 05 D
	D = 7800 km = 70°.			" 13	Ki	1P	05 18 30
	Sk	1P	03 21 48	" 13	Up	1P	12 57 54
	Near south coast of Burma.						
	Magn. = 5.7 (Up, Ki).						

Up = Uppsala, Ki = Kiruna, Sk = Skalistugan, Gb = Göteborg

1960

Jan 13

Up 1P 15 54 26
 e 15 57 56
 1PKP 15 58 19
 1PP 15 58 41
 1SKS 16 04 53
 1S 16 06 04
 e(PS) 16 07 38
 1SS 16 13 14
 microns sec
 P Z 2.4 11
 P Z' 0.1 1.0
 PP E 2.6 10
 PP Z 4.0 10
 PP Z' 0.2 1.3
 SKS E 18 17
 SKS N 2.1 7
 S N 52 18
 M E 100 25
 M N 110 29
 M Z 130 24
 (D = 11550 km = 104°).
 Ki 1P 15 54 36
 i 15 54 47
 i 15 57 21
 1PKP 15 58 33
 1PP 15 58 53
 1SKS 16 05 06
 1S 16 06 27
 1pS 16 07 16
 1PKKP 16 10 09
 i 16 10 26
 microns sec
 P E 0.8 11
 P Z 1.9 11
 P Z' 0.7 2.0
 PKP E 0.8 7
 PP E 3.2 8
 PP Z 4.9 9
 PP Z' 2.7 3.0
 SKS E 21 15
 S N 42 12
 PKKP Z' 0.1 1.0
 M E 66 21
 M N 53 22
 M Z 72 20
 (D = 11800 km = 106°).
 Sk 1P 15 54 17
 i 15 54 19
 i 15 57 43
 ePKKP 16 10 18
 1P'P' 16 18 38
 Gb 1P 15 54 10
 1pP 15 54 40
 1PKP 15 58 00
 oont.

1960

Jan 13

Southern Peru. h = 130 km
 oont. (Up, Ki, Gb). Magn. = 7.5
 (Up, Ki).
 Well developed G-waves,
 which have passed around
 the earth several times,
 were recorded, especially
 well at Uppsala.
 " 13 Up 1P 16 40 44 C
 i 16 40 53
 microns sec
 P Z' 0.4 0.7
 Ki 1P 16 39 51 C
 i 16 40 11
 microns sec
 P Z' 0.3 1.0
 Sk 1P 16 40 23 C
 i 16 40 30
 Gb 1P 16 41 00
 i 16 41 11
 Aleutian Islands.
 " 13 Sk eP 18 45 46
 " 13 Ki 1P 18 50 29
 " 13 Ki c(P) 21 52 15
 e 21 52 35
 Local?
 " 14 Up 1P 02 53 35
 i 02 53 48
 Ki 1P 02 53 37 C
 i 02 53 52
 Sk 1P 02 53 51
 i 02 54 06
 Near coast of northern
 Sumatra.
 " 14 Up 1P 04 47 15
 Sk 1(P) 04 49 12
 " 14 Ki e(P) 09 08 43
 1(Sg) 09 09 02
 " 14 Up 1P 10 37 21 C
 i 10 37 31
 microns sec
 P Z' 0.1 0.6
 Ki 1P 10 36 43 C
 1PoP 10 37 08
 1PP 10 39 10
 microns sec
 P Z' 0.3 1.2
 oont.

Up = Uppsala, K1 = Kiruna, Sk = Skälstugan, Gb = Göteborg

1960					1960				
Jan 14					Jan 15				
cont.					Near coast of southern Peru				
					(h = 150 km).				
					Magn. = 6.7 (Up).				
Sk					" 15				
1P					K1 1P				
10 37 16 C					Gb 1P				
1PP					" 15				
10 39 50					Up i(P)				
D = 7900 km = 71°.					" 16				
Gb 1P					Sk 1P				
10 37 42					" 16				
Honshu, Japan.					Up 1PKP				
					12 49 11 D				
" 14					1SKP				
K1 1P					12 52 03				
Near east coast of					Gb 1PKP				
Kamohatka.					12 49 22				
					Fiji Islands region (h=600				
" 14					km).				
Up i(P)									
20 48 50					" 16				
K1 e(P)					K1 1PKP				
20 45 48					15 52 13				
Possibly two different					Loyalty Islands region.				
shocks.									
					" 16				
Up 1P					K1 1PKP				
21 06 16					18 57 14				
K1 1P					Sk 1PKP				
21 05 31					18 57 25				
microns sec					New Hebrides Islands region				
P Z' 0.1 1.0					(h = 200 km).				
Kurile Islands.									
					" 16				
" 14					Up iP				
Up					20 59 03 D				
-					microns sec				
microns sec					P Z' 0.4 1.0				
M E 1.3 19					K1 iP				
M N 2.4 23					20 58 06 D				
M Z 0.9 19					microns sec				
K1 iP					P Z' 0.6 0.8				
21 36 31					Sk iP				
Sk iP					20 58 34				
21 36 04					Gb iP				
Atlantic Ocean.					20 59 08 D				
					i 20 59 36				
					Alaska (h = 150 km).				
" 15									
Up 1PP					" 16				
09 48 32					Up iP				
i 09 48 45					21 03 44				
i(SKKS) 09 55 13					microns sec				
i(S) 09 56 08					P Z' 0.1 1.2				
iPS 09 57 43					K1 iP				
microns sec					21 03 10				
PP Z 0.8 4					microns sec				
(S) N 2.1 7					P Z' 0.1 1.0				
M E 13 22					Sk iP				
M N 7.3 19					21 03 28				
M Z 19 22									
(D = 11550 km = 104°).					" 17				
K1 iP					Up iP				
09 44 26					04 30 22				
i(S) 09 56 27					K1 iP				
iPS 09 58 08					04 29 40 C				
microns sec					microns sec				
M E 12 19					P Z' 0.1 1.0				
M N 4.0 17					Sk iP				
M Z 8.6 20					04 30 30				
(D = 11800 km = 106°).					Gb iP				
Gb i(P)					04 30 43				
09 44 19					Off coast of northern				
i(PKP) 09 47 54					Honshu, Japan.				
iPP 09 48 24									
cont.					" 17				
					Up iP				
					15 13 24 C				

cont.

Up = Uppsala, Ki = Kiruna, Sk = Skalistugan, Gb = Göteborg

1960
Jan 23
cont.

microns sec
M E 5.5 22
M N 7.5 21
M Z 6.5 20
(D = 11550 km = 104°).
Ki iPP 04 58 55
iSKS 05 05 28
ePS 05 07 49
microns sec
PP Z 1.1 7
SKS E 1.9 8
M E 16 21
M N 4.8 20
M Z 10 21
D = 11150 km = 100½°.
Sk iP 04 55 00
i 04 55 07
e(PKP) 04 59 22
Ceram Island region.
Magn. = 6.6 (Up, Ki).

" 23 Sk iSKP 06 45 33
Fiji Islands region
(h = 400 km).

" 23 Up iPP 07 49 33
iSKS 07 55 53
microns sec
M E 4.5 23
M N 6.4 21
M Z 4.5 23
(D = 11450 km = 103°).
Ki ePP 07 49 08
ePKS 07 53 05
eSKS 07 55 38
microns sec
PP E 1.0 6
PP Z 0.7 8
SKS E 2.6 11
M E 15 21
M N 4.2 22
M Z 8.1 20
(D = 11100 km = 100°).
Sk iP 07 45 25
iPKP 07 49 43
Ceram Island region.
Magn. = 6.5 (Up, Ki).

" 23 Up i(P) 12 10 03
i 12 10 08

1960

Jan 23 Up iPP 18 14 45
i! 18 15 29
eSKS 18 21 21
ePS 18 23 57
microns sec
M E 1.9 20
M N 5.9 23
M Z 3.4 21
(D = 11550 km = 104°).
Ki eSKS 18 21 05
eSS 18 28 59
microns sec
SKS E 1.1 10
M E 7.1 20
M N 2.8 22
M Z 5.2 20
(D = 11200 km = 101°).
Sk iP 18 10 42
iPP 18 15 21
Ceram Island region.
Magn. = 6.3 (Up, Ki).

" 24 Up eP 00 51 08
Sk iP 00 50 50
Off coast of Oregon.

" 24 Up ePP 04 43 35
iPKS 04 44 46
eSS 05 01 22
microns sec
PKS E 0.6 6
PKS N 1.2 6
M E 2.9 20
M N 4.7 23
M Z 5.8 22
Ki i 04 52 13
ePS 04 52 47
microns sec
M E 5.1 21
M N 3.7 20
M Z 3.6 20
Fiji Islands.
Magn. = 6.4 (Up, Ki).

" 24 Up iP 21 25 23

" 25 Up iP 08 57 02 0
i 08 57 09
i 08 57 14

microns sec
M E 1.0 18
M N 1.1 19

cont.

Up = Uppsala, Ki = Kiruna, Sk = Skalistugan, Gb = Göteborg

1960					1960				
Jan 25	Sk	iP	08 56 45	C	Jan 26	M	N	1.3	21
cont.		i	08 56 58		cont.	M	Z	1.3	20
	Gb	iP	08 57 21			D = 2800 km = 25°.			
		i	08 57 32		Ki	iP		09 58 16	
	Near east coast of Kamchatka.					i		09 58 21	
" 25	Up	iP	11 37 08			i		09 58 45	
	Sk	eP	11 36 51			i		10 04 06	
	Near east coast of Kamchatka.					microns sec			
" 25	Up	iP	17 41 12	D	P	Z'	0.3	1.0	
		i	17 41 27		M	E	2.0	19	
		microns sec			M	N	1.4	18	
	M	E	1.0	18	Sk	iP		09 58 09	
	M	N	1.1	18		i		09 59 32	
	M	Z	1.5	19		i		10 04 19	
	Ki	-				i		10 06 46	
		microns sec			Gb	eP		09 57 30	
	M	E	1.8	20		i		09 57 37	
	M	N	0.7	18		eS		10 02 04	
	M	Z	1.3	19		i		10 02 16	
" 25	Up	iP	20 38 34			D = 2850 km = 25½°.			
		microns sec				Turkey. Magn. = 6.1 (Up, Ki).			
	P	Z'	0.1	0.7	" 26	Up	iP	13 10 51	
" 26	Up	iP	03 29 17	D		i		13 11 11	
		i	03 29 26			microns sec			
	Sk	i(P)	03 29 28		P	Z'	0.1	0.7	
		i	03 29 36		M	E	2.4	17	
	Gb	e(P)	03 28 56		M	N	1.7	17	
" 26	Up	iP	09 48 09			M	Z	1.2	15
		i	09 48 22		Ki	iP		13 11 56	C
	microns sec					microns sec			
	P	Z'	0.1	0.5		P	Z'	0.1	1.0
	Ki	iP	09 47 22		Gb	iP		13 10 45	
	Sk	iP	09 47 59		Turkey.				
	Gb	iP	09 48 28	D	" 26	Ki	i(P)	13 19 39	
		i	09 48 41		" 26	Up	iP	20 30 28	C
	Kurile Islands.					i		20 30 42	
" 26	Up	iP	09 57 24	C		is		20 33 06	
		i	09 57 30			i		20 33 45	
	is		10 01 47			microns sec			
	microns sec				P	Z'	0.2	0.6	
	P	E	1.2	3	S	E	0.8	4	
	P	N	0.7	2	S	N	0.5	3	
	P	Z	1.0	2		(D = 1650 km = 15°).			
	P	Z'	0.7	1.2	Ki	iP		20 31 51	
	S	N	1.0	5		i		20 31 57	
	M	E	1.8	19		ipP		20 32 17	
cont.						i		20 33 41	
						i		20 36 12	
						microns sec			
					P	Z'	0.4	1.0	
						(D = 2350 km = 21°).			
					Gb	iP		20 30 20	
					cont.				

Up = Uppsala, Ki = Kiruna, Sk = Skalistugan, Gb = Göteborg

1960					1960				
Jan 26		1		20 30 26	Jan 30	Ki	1P		02 57 16
cont.		i		20 30 37		Mariana Islands region.			
		Rumania. h = 140 km (Ki).			" 30	Up	iPKP		04 30 21
		Magn. = 5.6 (Up, Ki).					i		04 30 27
" 26	Ki	i(P)		21 01 38		Sk	iPKP		04 30 16
	Kermadec Islands.					Kermadec Islands.			
" 26	Up	iPKP		22 41 07	" 30	Sk	eP		05 51 19
		i		22 41 11	" 30	Ki	iP		10 03 44
		microns sec			" 30	Ki	eP		18 08 30
		PKP	Z'	0.2 0.7		Sk	eP		18 08 56
	Ki	ePKP		22 40 45		Mariana Islands region.			
		i		22 40 50	" 30	Ki	eP		18 50 31
	Gb	iPKP		22 41 05		microns sec			
		i		22 41 10		M	E	1.1	20
	Kermadec Islands.					M	N	1.0	20
" 28	Up	iP		02 03 02		M	Z	1.0	20
" 28	Up	iP		09 00 06		Sk	iP		18 50 57
		microns sec				Mariana Islands region.			
		P	Z'	0.1 0.7	" 30	Up	i(P)		18 58 01
	Ki	iP		08 59 22	" 31	Ki	iPKP		04 21 44 D
" 28	Up	i(P)		14 50 47		Sk	iPKP		04 21 54
		i		14 50 57		Santa Cruz Islands (h = 200 km).			
	Sk	iP		14 50 48	" 31	Up	iP		05 19 54
" 29	Up	iP		07 40 54			i		05 20 03
		i		07 41 08			iS		05 29 26
		microns sec				microns sec			
		M	E	1.1 20		P	Z'	0.1	1.2
		M	N	1.0 20		S	E	2.2	13
		M	Z	1.4 22		M	E	7.8	18
	Ki	iP		07 41 17 C		M	N	10	15
		i		07 42 09		M	Z	8.5	15
		microns sec				D = 8150 km = 731°.			
		P	Z'	0.1 1.0	Ki	iP			05 19 18
		M	E	0.9 17		i			05 19 32
		M	N	0.8 18		iS			05 28 20
		M	Z	0.4 17		microns sec			
	Sk	iP		07 41 34 C		P	Z	1.1	7
	P and M possibly belong to two different earthquakes.					P	Z'	0.2	1.2
" 29	Up	iP		11 10 39		S	E	2.3	9
		i(Sg)		11 11 04		S	N	1.1	8
	Sk	e(Sg)		11 13 01		M	E	13	18
" 29	Up	iP		14 25 18		M	N	8.6	14
		microns sec				M	Z	7.2	13
		P	Z'	0.1 0.8		D = 7550 km = 68°.			
" 29	Ki	iP		16 50 07	Sk	iP			05 19 50 C
						i			05 20 20
					cont.				

Up = Uppsala, Ki = Kiruna, Sk = Skalistugan, Gb = Göteborg

1960

Jan 31 Gb 1P 05 20 14

cont. Near east coast of
Shikoku, Japan.
Magn. = 6.3 (Up, Ki).

" 31 Up 1P 14 01 20
Sk 1P 14 01 37
Chinghai Province, China.

Markus Båth
24.8.1960.

PRELIMINARY
SEISMOLOGICAL BULLETIN

U P P S A L A , K I R U N A , S K A L S T U G A N , and G Ö T E B O R G

Uppsala (Up): $59^{\circ}51.5'N$, $17^{\circ}37.6'E$; h = 14 m.
Kiruna (K1): $67^{\circ}50.4'N$, $20^{\circ}25.9'E$; h = 390 m.
Skalstugan (Sk): $63^{\circ}34.8'N$, $12^{\circ}16.8'E$; h = 580 m.
Göteborg (Gb): $57^{\circ}41.9'N$, $11^{\circ}58.7'E$; h = 66 m.

F e b r u a r y 1-29, 1960
.....

1960				1960			
Feb 1	Up	1P	02 20 18	Feb 2	Sk	1PKP	06 49 43
	K1	1P	02 19 36			1	06 49 56
	Sk	1P	02 19 52		Gb	1PKP2	06 50 15
		1	02 19 56		Kermadec Islands region.		
	Gb	1P	02 20 21		"	2	K1 1P 08 21 29
	Pacific Ocean.				Near west coast of Honshu, Japan.		
" 1	Up	1P	02 53 13	" 2	Up	1P	12 34 37
	K1	1P	02 52 40			1	12 34 54
	Near east coast of Honshu, Japan.				K1	1P	12 33 32
" 1	Up	1P	12 05 03			1	12 33 42
		1	12 05 12		Sk	1P	12 34 32
	K1	1P	12 06 13		Gb	1P	12 35 34
		1	12 06 17			1	12 37 53
	Sk	1P	12 05 42		Northern Finland.		
		1	12 05 47	" 3	Up	1P	00 02 03
	Gb	1P	12 04 52			1	00 02 06
		1	12 05 09		K1	1P	00 01 42
	Near west coast of Crete.				Kansu Province, China.		
" 1	Up	1P	14 06 55	" 3	Up	1PKP	02 40 56
		1	14 07 12			1	02 41 11
	K1	1P	14 06 04			1	02 41 14
		1	14 06 29			1	02 41 31
	Gb	1P	14 07 15		K1	1PKP	02 40 39
		1	14 07 32			1	02 40 43
	Off east coast of Kamchatka.				Sk	1PKP	02 40 48
" 1	K1	1P	23 07 44			1	02 40 58
		1	23 08 10			1	02 41 18
" 2	Up	1PKP	06 49 47		Gb	1PKP2	02 41 32
		1	06 50 01		Off coast of North Island, New Zealand.		
	K1	1PKP	06 49 27	" 3	K1	1P	10 18 46
		1	06 50 31	" 3	Up	1P	12 59 49
	cont.				K1	1P	12 59 07
					cont.		

Up = Uppsala, Ki = Kiruna, Sk = Skanstugan, Gb = Göteborg

1960					1960				
Feb 3	Off west coast of				Feb 4	Sk	eP	21 09 10	
cont.	Hokkaido, Japan.				cont.	Near	coast of Honshu, Japan.		
" 3	Sk	1(P)	18 13 31		" 5	Ki	1P	14 33 02	
		1	18 15 52		" 6	Up	1P	10 36 22	
" 3	Sk	1(P)	22 19 56		" 6	Up	1P	17 10 53	
" 3	Sk	1(P)	22 30 09				1	17 10 56	
" 3	Sk	1(P)	22 51 05			Sk	1P	17 11 09	
							1	17 11 12	
" 4	Up	1PKP	04 06 06			Gb	1P	17 11 03	
		1	04 06 48			Tibet.			
	Ki	1(P)	04 01 36		" 6	Up	1P	17 24 04	
		1PKP	04 05 15				1	17 24 05	
		1	04 06 09			Ki	1P	17 24 00	
	Sk	1PKP	04 05 55			Sk	1P	17 24 13	
		1	04 06 14			Near coast of Sumatra.			
		1	04 06 49		" 7	Up	1S	01 35 58	
	New Ireland region.					Ki	1P	01 33 13	
" 4	Ki	1P	04 16 50				1S	01 33 50	
" 4	Up	1P	07 14 52			Sk	1P	01 33 14	
		1	07 14 56				1	01 33 54	
	Ki	1P	07 15 30				1S	01 34 00	
		1	07 15 33			Gb	1(S)	01 37 02	
	Sk	1P	07 15 28		" 7	Up	1P	04 37 27	
	Southern Iran.					Ki	1P	04 37 31	
" 4	Up	1P	10 28 51			Venezuela.			
		1	10 29 00		" 7	Up	1P	10 20 07	
	Ki	1P	10 28 52			Ki	1P	10 19 53	
		1	10 29 16			Sk	1P	10 20 15	
	Sk	1P	10 29 14			Gb	1P	10 20 23	
		1	10 29 27			Celebes Sea. (h = 600 km).			
		1	10 29 49		" 7	Up	1P	10 24 06	
	Northern India.					Sk	e(P)	10 25 26	
	(h = 100 km).				" 8	Up	1PKP	13 04 55	
" 4	Up	1P	17 01 53				1	13 05 00	
		1	17 02 02			Ki	1PKP	13 05 04	
	Ki	1P	17 01 12			Gb	1PKP	13 04 49	
		1	17 01 25			Drake Passage.			
		1	17 03 31		" 8	Up	1P	13 15 19	
	Sk	1P	17 01 53		" 8	Up	1P	19 01 56	
		1	17 04 21				1	19 01 59	
	Off east coast of						1	19 03 32	
	Honshu, Japan.					Ki	1P	19 02 06	
" 4	Up	1P	21 09 14				1	19 03 08	
	Ki	1P	21 08 38		cont.				
		1	21 08 50						
	cont.								

Up = Uppsala, Ki = Kiruna, Sk = Skalistugan, Gb = Göteborg

1960				1960			
Feb 8	Sk	1P	19 02 24	Feb 12	Gb	1(P)	12 50 14
cont.		1	19 02 28				
		i	19 03 52	" 12	Gb	1P	17 42 21
	Gb	1P	19 02 15	" 13	Up	1P	00 40 58
		i	19 03 59		Ki	1P	00 40 43
		1	19 04 09		Sk	1P	00 40 40
	Afghanistan. (h = 150 km).						
" 8	Up	1(P)	20 47 07	" 13	Up	1(P)	11 19 28
					Sk	1P	11 18 54
" 8	Up	1P	23 38 50	" 13	Up	1(P)	11 34 59
	Sk	1P	23 39 32	" 13	Up	1P	11 58 41
	Gb	1P	23 38 35	" 13	Up	i	15 55 24
" 9	Ki	1P	03 46 52			i	15 55 31
" 9	Ki	1P	12 20 12		Ki	1P	15 54 31
" 10	Up	1P	00 09 51			i	15 55 03
		1	00 09 59		Halmahera.		
		i	00 10 07	" 14	Up	1P	13 02 39
		1PP	00 13 45		Andaman Islands.		
	Ki	1P	00 09 37	" 14	Up	1PKP	15 59 30
	Ceram.				Sk	1PKP	15 59 23
" 10	Up	1P	00 56 50		Gb	1PKP	15 59 38
		i	00 57 02		Kermadec Islands.		
" 10	Gb	1P	15 16 03	" 14	Up	1P	17 02 42
" 10	Up	1PKP	23 39 13		Sk	1P	17 02 34
	Samoa Islands region.			" 14	Up	1P	17 43 21
" 11	Up	1(P)	02 27 34		Gb	1P	17 42 58
		i	02 28 04			i	17 43 00
	Ki	1P	02 28 40	" 15	Up	1PKP	22 38 15
		i	02 28 46			i	22 38 26
	Gb	1P	02 27 29		Sk	1PKP	22 38 07
" 11	Up	1PKP	04 18 04		Kermadec Islands.		
		i	04 18 27	" 16	Up	1PKP	01 29 16
	Gb	1PKP	04 18 13			i	01 29 19
	Pacific Ocean.					i	01 29 51
" 11	Up	1PP	04 48 09		Sk	1PKP	01 29 09
	Ki	1PKP	04 45 27			i	01 29 57
	Gb	1(P)	04 48 19		Gb	1PKP	01 29 31
	New Hebrides region.					i	01 29 39
			(h = 450 km.)		Kermadec Islands.		
" 12	Up	1P	08 08 38 C	" 16	Up	1P	05 13 23
	Ki	1(P)	08 08 37		Ki	1P	05 12 55
	Sk	1P	08 09 03			i	05 13 11
	Gb	1P	08 08 50		cont.		

Up = Uppsala, Ki = Kiruna, Sk = Skalistugan, Gb = Göteborg

1960				1960			
Feb 16	Sk	1P	05 13 25	Feb 18	Up	1P	12 25 37
oont.		i	05 16 55		Gb	1P	12 24 36
		Mariana Islands.					
" 16	Up	1PKP	05 41 39	" 18	Up	1P	17 56 30
		i	05 41 46		Sk	1P	17 55 21
		i	05 42 44			i	17 55 26
	Ki	1PKP	05 41 18	" 18	Up	1P	19 32 24
		i	05 41 24			Ki	19 31 36
	Sk	1PKP	05 41 34		Near east coast of		
		i	05 41 35		Kamohatka.		
	Kermadec Islands region.			" 18	Gb	1P	19 37 25
" 16	Ki	1P	12 56 49	" 18	Up	1P	20 42 48
		i	12 57 07			i	20 42 53
" 16	Up	1P	15 17 52			i	20 42 57
	Ki	1P	15 17 13		Ki	1P	20 42 34
	Off east coast of				Sk	1(P)	20 42 59
	Honshu, Japan.				China-Burma-India borders.		
" 16	Ki	1P	15 57 10	" 18	Up	1P	21 45 46
" 17	Up	1P	08 12 52			i	21 45 53
	Ki	1P	08 12 00			i	21 46 00
" 17	Up	1P	10 20 10		Ki	1P	21 44 53
" 17	Ki	1P	10 36 50			i	21 45 04
" 17	Ki	1P	10 41 51		Sk	1P	21 45 30 D
" 17	Ki	1P	11 58 33			i	21 45 42
" 17	Ki	1P	12 03 35		Near east coast of		
" 17	Up	1P	16 38 45		Kamohatka.		
		i	16 38 50	" 18	Up	1P	22 37 13
	Ki	1P	16 38 00		Ki	1P	22 36 19
		i	16 38 12			i	22 36 31
	Sk	1P	16 38 38		Sk	1P	22 36 49
	Near east coast of					i	22 37 37
	Hokkaido, Japan.				Fox Islands, Aleutian		
" 18	Ki	1P	02 07 18		Islands.		
" 18	Gb	1P	12 00 27	" 19	Sk	1P	01 16 02
" 18	Up	1P	12 04 20			i	01 16 04
		i	12 04 25	" 19	Sk	1P	01 24 34
	Sk	1P	12 04 48	" 19	Ki	1P	02 05 01
	Gb	1P	12 03 05		Sk	1P	02 05 13
		i	12 03 06	" 19	Sk	1P	03 07 47
				" 19	Sk	1P	03 23 59
				" 19	Up	1P	05 19 26
						i	05 19 43
					Ki	1P	05 18 30
						i	05 18 42
					oont.		

Up = Uppsala, Ki = Kiruna, Sk = Skelstugan, Gb = Göteborg

1960				1960			
Feb 19	Sk	1P	05 19 03	Feb 20	Gb	1P	14 38 12
cont.		1	05 19 15	cont.		1	14 38 23
	Kenai Peninsula.				Near coast of Kamohatka.		
" 19	Ki	1(P)	05 27 29	" 20	Ki	1P	14 46 50
" 19	Sk	1P	05 49 50	" 20	Ki	1P	15 35 41
" 19	Gb	1P	07 18 18	" 20		1	15 35 47
		1	07 19 17	" 20	Ki	1P	18 02 17
" 19	Gb	1P	10 09 59	" 20	Up	1P	20 12 49
" 19	Up	1P	10 44 16 C			1	20 12 56
	Ki	1P	10 44 25		Ki	1P	20 11 56
		1	10 45 10			1	20 12 07
	Sk	1P	10 44 41		Sk	1P	20 12 33
	Hindu Kush. (h = 200 km).				Gb	1P	20 13 13
" 19	Ki	1P	11 15 15			1	20 13 24
" 19	Gb	1P	11 21 52	" 20	Up	1P	23 38 04
" 19	Up	1P	21 41 03			1	23 38 09
	Sk	1P	21 41 45		Ki	1P	23 38 13
" 20	Up	1P	00 25 03		Sk	1P	23 38 29
		1	00 25 09	" 21	Up	1PKP2	01 07 14
" 20	Up	1P	00 33 58			1	01 07 22
		1	00 34 04			1	01 07 28
" 20	Up	1P	00 55 16		Ki	1PKP	01 06 46
		1	00 56 40		Sk	1PKP2	01 07 13
		1	00 57 04		South Island, New Zealand.		
		1	00 57 08	" 21	Up	1P	08 19 03
		1	00 57 14			1	08 19 11
	Ki	1P	00 53 45			1	08 19 17
		1	00 53 52		Ki	1P	08 20 13
		1	00 54 17		Sk	1P	08 19 27
		1	00 54 35			1	08 19 35
		1(Sg)	00 54 42		Gb	1P	08 18 33
	Sk	1(P)	00 55 58			1	08 18 43
		1	00 56 11	" 21	Up	1P	08 31 56
		1	00 56 42		Ki	1P	08 31 29
		1(Sg)	00 56 45		Sk	1P	08 32 04
" 20	Up	1P	02 46 39	" 21	Up	1P	09 34 55
		1	02 47 04			1	09 35 04
" 20	Up	1P	14 37 49		Ki	1P	09 35 43
		1	14 38 00			1	09 36 37
	Ki	1P	14 36 57		Turkey.		
	Sk	1P	14 37 33	" 21	Up	1PKP	09 57 40
cont.					Fiji Islands (h = 600 km).		

Up = Uppsala, K1 = Kiruna, Sk = Skanstugan, Gb = Göteborg

1960				1960					
Feb	21	Sk	1P	16 08 01	Feb	22	Up	1P	21 09 00
"	21	Up	1P	17 33 03				1	21 09 03
		K1	1P	17 32 10				1	21 09 09
		Sk	1P	17 32 42		K1	1P		21 10 16
		Gb	1P	17 33 17				1	21 10 27
		Aleutian Islands.				Sk	1P		21 09 43
								1	21 09 51
"	21	K1	1P	22 56 32		Gb	1P		21 08 32
		Halmahera.						1	21 08 58
						Greece.			
"	21	Up	1P	23 33 10	"	23	Up	1P	00 35 42
			1	23 33 17				1	00 35 46
		K1	1P	23 33 14				1	00 35 56
		Sk	e	23 35 35		K1	1P		00 36 59
		Kirghiz, S.S.R.				Sk	1P		00 36 24
								1	00 36 26
"	22	Up	1PKP	01 12 42		Gb	1P		00 35 33
			1	01 12 44		Greece.			
		K1	1PKP	01 12 37					
		Sk	ePKP	01 12 34	"	23	Up	1P	02 17 14
		Gb	1PKP	01 12 51				1	02 17 58
		Fiji Islands. (h = 600 km).						1	02 18 21
						K1	1P		02 17 23
"	22	Up	1P	01 15 32		Sk	1P		02 17 38
		K1	1P	01 15 07				1	02 17 41
		Sk	1P	01 15 24				1	02 18 24
"	22	K1	1P	05 19 27		Gb	1P		02 17 37
			1	05 19 37				1	02 17 38
			1	05 20 58				1	02 18 21
		Sk	1P	05 19 45		Afghanistan.			
			1	05 19 56	"	23	Up	1P	07 22 47
			1	05 21 27		Sk	1P		07 23 31
		Jan Mayen Island region.							
"	22	Up	1P	05 39 29	"	23	Up	1P	07 39 13
			1	05 39 34				1	07 39 17
			1	05 39 37				1	07 39 23
		Sk	1P	05 39 26		K1	1P		07 40 29
			1	05 39 31				1	07 40 33
"	22	Gb	1P	08 21 12		Sk	1P		07 39 55
			1	08 21 33				1	07 39 58
"	22	K1	1P	13 08 59		Gb	1P		07 39 05
		Sk	1P	13 09 20				1	07 39 29
			1	13 11 00		Greece.			
"	22	Up	1P	15 15 07	"	23	Up	1P	07 52 34
"	22	Up	1P	20 41 58				1	07 52 41
			1	20 41 59		K1	1P		07 53 54
						Sk	1P		07 53 16
								1	07 53 21
								1	07 53 30
						Gb	1P		07 52 29
						Greece.			

Up = Uppsala, Ki = Kiruna, Sk = Skälstugan, Gb = Göteborg

1960				1960						
Feb	23	Up	1P	08 22 21	Feb	24	Up	1P	19 01 06	
		i		08 22 32			K1	1P	19 01 48	
		K1	1P	08 22 04			Turkey.			
		Sk	1P	08 22 47						
		Gb	1P	08 22 43	"	24	Up	1PKP	21 55 54	
		Formosa.					i		21 57 18	
"	23	Up	1P	09 35 12			K1	1PKP	21 55 43	
		K1	1P	09 34 34			i		21 55 50	
		Sk	1P	09 35 07			Gb	1PKP	21 56 05	
		Gb	1P	09 35 34			i		21 56 11	
		Near south coast of					Solomon Islands.			
		Honshu, Japan.				"	24	Up	1P	22 06 07
		(h = 100 km).				"	25	Up	1P	14 35 38
"	23	Up	1P	09 49 24			K1	1P	14 35 12	
		Sk	1P	09 49 17						
"	23	Up	1PKP	11 49 28			K1	1P	21 40 31	
		K1	1PKP	11 49 20						
		Gb	1(PKP)	11 49 45	"	26	Up	1P	01 20 38	
		Fiji Islands. (h = 500 km).					i		01 20 54	
							K1	eP	01 20 12	
"	23	Up	1P	15 08 28			i		01 20 32	
		Sk	1P	15 08 56			Ceram Sea.			
"	24	Up	1P	00 15 18	"	26	Up	1P	05 37 15	
		K1	1P	00 14 49			K1	1P	05 37 28	
		Sk	1P	00 15 16	"	26	Up	1P	08 07 26	
		Mariana Islands region.				"	26	Up	1P	08 17 28
		(h = 300 km).					K1	1P	08 17 09	
"	24	Up	1P	03 54 04	"	26	Up	1P	12 31 49	
"	24	Up	1P	05 19 25			Gb	1P	12 30 34	
"	24	Up	1P	06 20 43	"	26	Up	1P	13 37 10	
"	24	Up	1P	16 03 28			K1	1P	13 38 33	
		i		16 03 32			Sk	1P	13 38 03	
		i(Sg)		16 03 52	"	26	Up	1P	15 01 26	
		Gb	e(Sg)	16 05 02	"	26	Up	1P	20 34 52	
"	24	Up	1P	16 29 03	"	26	Up	1P	21 41 46	
		i		16 29 28			K1	1P	21 41 34	
		Gb	i(P)	16 29 28			Sk	1P	21 41 28	
"	24	K1	eP	17 20 31			Chiapas, Mexico.			
"	24	Up	1P	17 35 18	"	26	Up	1P	23 40 29	
		i		17 35 22			i		23 40 45	
		i		17 35 46			i		23 43 48	
		K1	1P	17 35 13			K1	1P	23 39 36	
							oont.			

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Gb = Göteborg

1960

Feb 26
cont.

	i	23 39 41
	i	23 44 22
Sk	iP	23 40 08
	i	23 40 19
	i	23 40 41
Gb	iP	23 40 47
	i	23 40 51

Aleutian Islands.

"	27	Up	iP	00 18 14
		Ki	iP	00 17 22
		Sk	iP	00 17 59
		Gb	iP	00 18 (31)

Aleutian Islands.

"	27	Up	iP	08 21 06
		i		08 21 08
		i		08 21 13
		i		08 21 24
		Ki	iP	08 20 16
		Sk	iP	08 20 48
		i		08 21 09

Aleutian Islands.

"	27	Up	iPKP	09 15 41
		i		09 15 42
		i		09 15 49
		Sk	iPKP	09 15 37

Kermadec Islands.

"	27	Ki	iP	09 18 42
		Off south coast of Sumatra.		

"	27	Ki	iP	23 19 19
		Celebes Sea.		

"	28	Up	iP	07 29 09
		i		07 30 58
		i		07 31 14
		Ki	iP	07 27 45
		i		07 27 52
		i		07 28 33
		Sk	iP	07 28 13
		i		07 29 00
		i		07 29 22

Off north coast of Norway.

"	28	Up	iP	09 45 17
		Ki	iP	09 44 31
		Kurile Islands.		

1960

Feb	29	Up	iP	00 19 23 C
		Ki	iP	00 18 55

"	29	Up	iP	00 32 06
		i		00 32 38
		Ki	iP	00 32 54
		Gb	i(P)	00 32 (22)

"	29	Up	iP	05 35 13
		i		05 35 18
		i		05 35 42
		Ki	iP	05 34 56
		i		05 35 31
		Sk	iP	05 35 20

Near southwest coast of Luzon, P.I. (h = 150 km).

"	29	Up	iP	08 45 17
		Ki	iP	08 44 55
		Western Burma.		

"	29	Up	iP	23 47 07
		i		23 47 18
		i		23 48 15
		Ki	iP	23 48 04
		i		23 48 05
		Sk	iP	23 47 19
		i		23 47 36
		Gb	iP	23 46 35
		i		23 46 52

Morocco.

Ingrid Pettersson
Oct. 4, 1960.

Markus Båth.

PRELIMINARY

SEISMOLOGICAL BULLETIN

U P P S A L A , K I R U N A , S K A L S T U G A N , and G Ö T E B O R G

Uppsala (Up): $59^{\circ}51.5'N$, $17^{\circ}37.6'E$; h = 14 m.
Kiruna (Ki): $67^{\circ}50.4'N$, $20^{\circ}25.0'E$; h = 390 m.
Skalstugan (Sk): $63^{\circ}34.8'N$, $12^{\circ}16.8'E$; h = 580 m.
Göteborg (Gb): $57^{\circ}41.9'N$, $11^{\circ}58.7'E$; h = 66 m.

March 1-31, 1960
.....

1960				1960				
Mar	1	Sk	1P	09 33 23	Mar	3	Ki 1P	05 08 00
							1	05 08 20
"	1	Sk	1P	09 54 19			Central Alaska.	
"	1	Ki	1P	11 36 58	"	3	Up 1P	14 22 52
							1	14 22 53
"	2	Ki	1P	00 22 56			Ki 1P	14 22 48
		Michoacan, Mexico.					1	14 22 50
							Sk 1P	14 23 12
"	2	Ki	1P	09 44 04			1	14 23 14
			1	09 44 41			1	14 23 23
"	2	Ki	1P	21 36 08			Gb 1P	14 23 17
							1	14 23 26
							1	14 25 05
"	2	Up	1P	22 02 19			Sinkiang Province, China.	
		Sk	1P	22 01 59				
			1	22 02 21	"	3	Gb 1P	19 37 16
		Gb	1P	22 01 53				
			1	22 02 03	"	3	Ki 1P	20 53 56
			1	22 05 15			1	20 54 15
		North Atlantic Ocean.			"	3	Ki 1P	23 03 15
"	3	Up	1P	01 54 26			1	23 03 25
		Ki	1P	01 54 34	"	4	Up 1P	01 24 27
		Sk	1P	01 54 13				
		Gb	1P	01 54 09	"	4	Up 1P	02 27 08
		(Near coast of Venezuela. (h = 100 km).					1	02 27 12
"	3	Ki	1P	04 09 21			1	02 27 21
			1	04 09 29			1	02 27 34
		Sk	1P	04 09 40			Ki 1P	02 26 15
			1	04 09 47			1	02 26 27
"	3	Ki	1(P)	08 57 51			Sk 1P	02 26 47
			1	08 58 09			1	02 27 08
			1	08 58 35			Gb 1P	02 27 25
							1	02 27 37
							Andreanof Islands, Aleutian Islands.	

Nicobar Islands.

Up = Uppsala, Ki = Kiruna, Sk = Skanstugan, Gb = Göteborg

1960				1960					
Mar	6	Up	eP	04 24 30	Mar	7	Ki	1P	09 21 19
			i	04 24 40					
		Gb	eP	04 24 32	"	7	Up	1P	15 59 44
		Gulf of California.					Ki	1P	15 59 18
							Sk	1P	15 59 48
"	6	Up	1P	06 48 03			Ryukyu Islands.		
"	6	Up	1P	08 07 36	"	7	Ki	1(P)	19 00 33
		Kurile Islands.							
"	6	Up	1(P)	09 16 08	"	7	Ki	1P	21 25 00
							Sk	1P	21 24 27
"	6	Up	1P	09 36 09	"	8	Up	1P	14 19 14
			i	09 36 14	"	8	Up	1P	15 01 07
"	6	Up	1P	11 49 30	"	8	Ki	1P	16 49 00
"	6	Up	1P	17 30 52	"	8	Up	1PKP	16 52 12
			i	17 30 58				i	16 52 25
		Sk	1P	17 31 34				1SKP	16 55 29
			i	17 31 49				1SKSP	17 04 30
"	6	Ki	1(P)	23 57 58				i	17 04 37
"	7	Up	eP	00 58 50			Ki	1PKP	16 51 56
			i	00 59 41				i	16 52 12
			i	01 00 25				i	16 52 34
		Ki	1P	00 59 10				1PKKP	17 01 51
		Sk	eP	00 59 29				i	17 05 11
			i	00 59 48			Sk	1PKP	16 52 08
			i	01 00 34				i	16 52 14
		Iran.						i	16 52 46
								1SKP	16 55 24
"	7	Ki	1P	02 21 17				1PSKS	17 04 50
		Off coast of Sumatra.					New Hebrides Islands.		
							(h = 250 km).		
"	7	Up	1P	05 26 44 C	"	8	Up	1P	17 28 13
			i	05 26 53	"	8	Ki	1P	19 22 10
			i	05 27 24	"	8	Up	1P	20 37 51
		Ki	1P	05 26 29	"	9	Ki	1P	03 41 46
			i	05 26 34	"	9	Ki	1P	13 48 25
			i	05 26 56	"	9	Ki	1(P)	16 27 08
		Sk	1P	05 26 50	"	10	Up	1PKP	00 12 30
			i	05 26 54			Ki	1PKP	00 12 49
		Celebes.					Southern Peru (h = 150 km).		
"	7	Up	1P	06 21 56	"	10	Ki	1P	00 33 06
			i	06 21 59			Central Alaska.		
		Ki	1P	06 21 06					
		Sk	1P	06 21 42					
			i	06 21 46					
		Off southwest coast of							
		Kamchatka. (h = 100 km).							

Up = Uppsala, Ki = Kiruna, Sk = Skälstugan, Gb = Göteborg

1960

Mar	10	Ki	1P	05 15 35
"	10	Up	1PKP	05 19 17
			i	05 19 24
		Ki	1PKP	05 18 55
		Sk	1PKP	05 19 11
			i	05 19 15
			Kermadec Islands region. (h = 500 km).	
"	10	Ki	1(P)	07 25 51
"	10	Ki	1(P)	08 47 11
"	10	Ki	1P	09 23 42
			Mindanao, Philippine Islands.	
"	10	Ki	1P	11 53 51
"	10	Ki	1PKP	14 03 29
			Samoa Islands region.	
"	10	Up	1P	14 43 26
			i	14 43 53
		Ki	1P	14 42 38
			i	14 42 48
		Sk	1P	14 43 15
			i	14 43 18
		Gb	1P	14 43 51
			Kurile Islands. (h = 100 km).	
"	10	Ki	1P	15 42 15
"	10	Up	1P	15 47 47
		Sk	1P	15 46 51
"	10	Sk	1P	16 33 48
"	10	Ki	1P	20 59 47
"	10	Gb	1P	21 27 58
"	10	Gb	1P	23 28 06
"	11	Up	1P	03 31 31
"	11	Ki	1P	07 17 29
"	11	Up	1P	07 41 09
"	11	Up	e(Sg)	11 07 29
			i	11 07 39
			cont.	

1960

Mar	11	Gb	1P	11 05 59
cont.			i(Sg)	11 06 29
"	11	Up	e(Sg)	11 13 18
		Gb	1P	11 11 30
			e(Sg)	11 12 06
"	11	Up	1P	12 49 56
		Sk	1P	12 50 35
"	11	Sk	eP	13 13 26
"	11	Ki	1P	13 23 27
			Mariana Islands (h = 200 km).	
"	11	Gb	1P	14 26 59
"	11	Up	1P	14 30 16
"	11	Gb	1(P)	14 35 21
"	11	Up	1P	14 39 44
"	11	Gb	1(P)	14 50 36
"	11	Ki	1(P)	20 21 44
"	11	Ki	1(P)	21 02 18
"	12	Up	1PKP	01 50 06
		Sk	1PKP	01 49 56
			i	01 50 04
			Kermadec Islands.	
"	12	Up	1P	02 58 42
		Ki	1P	02 59 15
		Sk	1P	02 59 17
"	12	Up	1P	07 21 01
"	12	Up	1P	07 27 22
"	12	Up	1P	07 40 08
"	12	Gb	1P	08 16 47
"	12	Gb	1P	08 29 47
"	12	Gb	1P	09 09 23
"	12	Ki	1P	09 35 49
			i	09 35 51
"	12	Ki	1P	11 41 42

Up = Uppsala, Ki = Kiruna, Sk = Skalistugan, Gb = Göteborg

1960				1960					
Mar	12	Up	1P	11 58 14	Mar	14	Up	1P	11 05 12
			i	11 58 23					Andreanof Islands,
			i	12 04 18					Aleutian Islands.
		Ki	1P	11 59 36					
			i	11 59 47	"	14	Ki	1P	13 19 49
		Sk	1P	11 58 59					
			i	11 59 04	"	14	Up	1P	14 53 46
		Gb	1P	11 58 05			Gb	1P	14 54 19
			i	11 58 18					
		Southern Yugoslavia.			"	14	Up	1P	14 57 15
							Ki	i(P)	14 57 35
"	12	Gb	1P	12 03 36					
"	12	Up	1P	19 57 08	"	14	Up	1P	19 28 57
								i	19 29 02
									Off coast of Oregon.
"	12	Gb	1P	20 41 (06)					
			i	20 42 (10)	"	14	Up	1P	20 21 57
							Ki	1P	20 22 36
"	12	Ki	1P	20 45 18				i	20 24 14
							Sk	eP	20 22 22
"	12	Up	1PKP	20 49 27					Persian Gulf.
		Sk	1PKP	20 49 27					
		New Britain.			"	15	Ki	1P	02 24 49
"	12	Ki	1P	21 00 18	"	15	Up	1P	04 10 00
			i	21 00 21			Sk	1P	04 09 52
"	12	Up	1P	22 02 22	"	15	Sk	1P	08 22 51
		Sk	1P	22 02 35					
"	13	Up	eP	09 26 03	"	15	Up	1P	09 32 06
								i	09 32 19
"	13	Up	1P	09 29 41				i	09 32 29
							Ki	1P	09 31 13
"	13	Up	1P	12 01 18				i	09 31 16
		Ki	1P	12 01 21				i	09 31 37
"	14	Up	1P	00 06 11			Sk	1P	09 31 45
		Ki	1P	00 06 12				i	09 31 48
		Sk	1P	00 05 58			Gb	1P	09 32 18
			i	00 06 01				i	09 32 31
		Gb	eP	00 06 20					Andreanof Islands,
			i	00 06 54					Aleutian Islands.
		Panama-Colombia border.			"	15	Up	1P	10 00 09
		(h = 60 km).					Ki	eP	10 00 12
"	14	Up	1P	01 04 01			Gb	i(P)	10 00 49
			i	01 04 25				i	10 00 51
		Ki	1P	01 03 13	"	15	Ki	1P	12 00 46
		Sk	1P	01 03 54	"	15	Gb	1P	12 18 56
		Gb	1P	01 04 43				i	12 18 58
		Hokkaido, Japan.							
"	14	Sk	1P	04 49 18	"	15	Up	eP	15 35 00
							Ki	1P	15 35 19

Up = Uppsala, K1 = Kiruna, Sk = Skalistugan, Gb = Göteborg

1960				1960					
Mar	15	K1	1P	17 38 33	Mar	18	Up	1P	15 12 57
"	16	Up	1PKP	00 52 01	"	18	Up	1P	18 36 41
		Sandwich Islands.				K1	1P	18 37 34	
"	16	K1	1(P)	04 19 57			Sk	1P	18 37 06
"	16	K1	1(P)	04 36 39	"	18	K1	1P	21 17 26
"	16	Up	1(P)	07 32 47	"	19	Up	1(P)	06 28 51
"	16	Gb	e(P)	07 42 47	"	19	K1	1P	09 06 30
		1		07 44 51			1		09 06 35
"	16	Up	e(P)	09 55 47	"	19	Gb	1P	11 49 10
							1		11 49 12
"	16	Up	1P	19 36 19	"	19	Up	1P	12 06 53
		1		19 36 23	"	19	K1	1P	12 54 00
		K1	1P	19 35 52			1		12 54 54
		1		19 35 53	"	20	Up	eP	00 59 06
		Sk	1P	19 36 08			Sk	e(P)	00 59 50
		1		19 36 13	"	20	Up	1P	01 35 32
"	17	Up	1P	20 25 03	"	20	Up	1P	07 38 39
		K1	1P	20 24 10			K1	1P	07 38 40
		Andreanof Islands,				Near coast of Sumatra.			
		Aleutian Islands.			"	20	Up	1P	11 10 10
"	18	Up	1P	01 27 18	"	20	Up	1P	13 48 09
		e(pP)		01 27 59			1		13 48 44
		K1	1(pP)	01 27 53			K1	1P	13 47 28
		Sk	1P	01 27 01			Sk	1P	13 48 02
		Guatemala. (h = 150 km).					1		13 50 36
"	18	K1	e(PKP)	12 35 12			Gb	1P	13 48 31
		New Britain (h = 150 km).				Off northeast coast of			
"	18	Sk	1P	13 45 52			Honshu, Japan. (h = 60 km).		
"	18	Up	1P	13 55 57	"	20	Up	1P	13 55 54
"	18	K1	1P	14 12 30			Near east coast of Honshu,		
"	18	Up	1P	14 40 11			Japan.		
"	18	Up	1P	14 53 53	"	20	K1	1P	15 18 52
		K1	1P	14 53 57	"	20	Up	1P	17 18 47
		Sk	1P	14 54 17			1		17 18 51
		Afghanistan-Tadzhik border.					1		17 21 29
"	18	Sk	1P	14 56 02			1P'P'		17 47 02
				cont.					

Up = Uppsala, Ki = Kiruna, Sk = Skanstugan, Gb = Göteborg

1960				1960			
Mar 20	Ki	iP	17 18 05	Mar 21	Up	iP	04 54 41
cont.		i	17 27 26		Ki	iP	04 54 07
	Sk	iP	17 18 40			i	04 54 25
		i	17 18 43		Near east coast of Honshu, Japan.		
	Gb	iP	17 19 09				
		i	17 19 11				
	Off northeast coast of Honshu, Japan. (h = 60 km).			" 21	Ki	iP	05 00 53
" 20	Ki	iP	18 19 16	" 21	Up	iP	06 05 36
" 20	Ki	iP	20 25 34		Gb	iP	06 06 03
					Near east coast of Honshu, Japan.		
" 20	Up	iP	20 29 24	" 21	Up	eP	07 02 49
	Ki	iP	20 28 20		Ki	iP	07 02 06
" 20	Up	iP	21 47 57		Near east coast of Honshu, Japan.		
	Near east coast of Honshu, Japan.			" 21	Ki	iP	07 07 36
" 20	Up	iP	22 38 24	" 21	Up	iP	07 25 20
	Ki	iP	22 39 09		Ki	iP	07 26 18
" 20	Up	iP	23 38 56		Gb	iP	07 24 54
	North Atlantic Ocean.			" 21	Up	iP	09 24 13
" 21	Up	iP	00 08 05		Ki	iP	09 23 32
	Ki	i(P)	00 09 06	" 21	Up	iP	09 29 43
	Sk	i(P)	00 09 35			i	09 29 50
	Gb	e(P)	00 08 32			i	09 32 22
		i	00 09 45		Ki	iP	09 29 01
" 21	Up	i(P)	00 12 59			i	09 29 08
	Ki	i(P)	00 12 16			i	09 29 15
	Sk	iP	00 14 23		Sk	iP	09 29 35
	Gb	iP	00 13 49			i	09 30 02
" 21	Up	iP	00 46 11			i	09 32 05
		i	00 46 21		Gb	iP	09 30 01
		i	00 48 49			i	09 30 04
	Ki	iP	00 45 29			i	09 32 51
		i	00 45 37		Near east coast of Honshu, Japan.		
		i	00 47 56	" 21	Up	iP	10 18 24
	Sk	iP	00 46 03		Sk	iP	10 19 02
		i	00 46 09	" 21	Ki	iP	14 36 40
	Gb	iP	00 46 27			i	14 37 21
		i	00 46 37		Sk	iP	14 36 24
		i	00 48 26			i	14 36 56
	Near east coast of Honshu, Japan.					i	14 37 01
" 21	Up	iP	03 56 27	" 21	Ki	i(P)	14 58 26
	Ki	iP	03 56 18	" 21	Up	iP	15 20 56
	Sk	eP	03 56 47				
	Burma.						

Up = Uppsala, Ki = Kiruna, Sk = Skanstugan, Gb = Göteborg

1960				1960					
Mar	21	K1	1P	21 11 15	Mar	23	Sk	1P	00 34 37
"	21	Up	1P	23 08 20	cont.		i		00 34 40
		Near east coast of					i		00 34 49
		Honshu, Japan.				Gb	1P		00 35 07
							i		00 35 11
"	21	Up	1P	23 33 04			i		00 37 54
		K1	1P	23 32 22			Near east coast of		
		Near east coast of					Honshu, Japan.		
		Honshu, Japan.			"	23	K1	1(P)	00 45 34
"	22	Up	1P	00 40 34	"	23	Up	1P	01 18 37
"	22	Up	1P	02 01 22			i		01 18 54
		K1	1P	02 01 08			i		01 22 47
		Near east coast of				K1	1P		01 17 56
		Oaxaca, Mexico.					i		01 18 10
"	22	Up	1PKP	02 51 56		Sk	1P		01 18 30
		K1	1PKP	02 51 57			i		01 18 36
		Gb	1PKP	02 52 03		Gb	1P		01 19 01
		Northwest of Balleny					i		01 19 09
		Islands.					Near east coast of		
"	22	Up	1(P)	07 30 46			Honshu, Japan.		
"	22	Up	1P	07 37 57	"	23	Up	1P	01 51 30
		K1	1(P)	07 36 45			K1	1P	01 50 56
"	22	Up	1P	09 19 14			Sk	1P	01 51 10
		i		09 19 19			Gb	1P	01 51 49
		K1	1P	09 18 46	"	23	Up	1P	01 56 06
		i		09 18 58			i		01 57 03
		Sk	1P	09 19 28			i		01 57 12
		i		09 19 33			K1	1P	01 55 33
"	22	Up	1P	10 34 22			Gb	1P	01 56 25
		K1	1P	10 33 41	"	23	Up	1P	02 03 00
		Gb	1P	10 34 41			i		02 03 10
"	22	K1	1P	12 56 59			K1	1P	02 02 19
"	22	K1	1P	20 06 25			i		02 02 27
"	22	Up	1P	20 14 33			Gb	1P	02 03 25
"	22	K1	1P	20 35 51			i		02 03 34
		Gb	1P	20 35 04			Near east coast of		
"	23	Up	1P	00 34 43			Honshu, Japan.		
		i		00 34 48	"	23	Up	1P	02 20 30
		i		00 37 18			K1	1P	02 19 49
		K1	1P	00 34 01			i		02 20 20
cont.						Sk	1P		02 20 30
							i		02 22 51
						Gb	1P		02 20 54
							Near east coast of		
							Honshu, Japan.		
					"	23	Up	1P	04 37 26

Mar	23	Up	1P	08 58 03
			1	08 58 10
		K1	1P	08 57 21
			1	08 57 35
			1	08 57 50
		Sk	1P	08 57 55
		Gb	1P	08 58 18
			1	08 58 25
		Near east coast of Honshu, Japan.		
"	23	Sk	1P	09 00 28
"	23	Up	1P	10 40 14
		K1	1P	10 39 33
			1	10 39 47
		Sk	1P	10 40 07
		Gb	1P	10 40 36
		Near east coast of Honshu, Japan. (h = 100 km).		
"	23	Up	1P	12 02 23
			1	12 02 32
		K1	1P	12 01 42
			1	12 01 51
		Gb	1P	12 02 43
			1	12 02 51
		Near east coast of Honshu, Japan.		
"	23	Up	1P	16 12 29
			1	16 12 44
		K1	1P	16 11 48
		Sk	1P	16 12 21
		Gb	1P	16 12 51
		Near east coast of Honshu, Japan. (h = 100 km).		
"	23	Up	1P	20 13 57
			1	20 14 00
		K1	1P	20 13 38
		Sk	1P	20 14 07
		Gb	1P	20 14 17
		Szechwan Province, China.		
"	23	Up	1P	21 33 59
"	23	Up	1P	21 45 43
			1	21 45 51
		K1	1P	21 45 00
			1	21 45 08
		Sk	1P	21 45 34
			1	21 47 59
		dout.		

Mar 23	Gb	1P	21 46 04
cont.		1	21 46 13
	Near east coast of Honshu, Japan.		
" 23	Up	1P	22 33 59
		1	22 34 08
		1	22 36 47
	K1	1P	22 33 20
		1	22 33 32
		1	22 35 27
	Sk	1P	22 33 53
		1	22 34 04
		1	22 36 30
	Gb	1P	22 34 23
		1	22 34 32
		1	22 36 43
		1	22 36 52
	Near east coast of Honshu, Japan.		
" 23	Up	1P	23 03 01
	K1	1P	23 02 20
	Sk	1P	23 02 59
	Near east coast of Honshu, Japan.		
" 23	Up	1P	23 12 18
		1	23 12 25
	K1	1P	23 13 50
		1	23 13 53
	Sk	1P	23 12 57
		1	23 13 00
		1	23 17 51
	Gb	1P	23 11 41
		1	23 12 40
		1	23 15 25
	Switzerland.		
" 23	K1	1(P)	23 19 52
" 23	Up	1P	23 37 40
	K1	1P	23 36 52
	Sk	1P	23 37 49
	Near east coast of Honshu, Japan.		
" 24	Up	1P	03 08 14
		1	03 08 18
		1	03 08 26
	K1	1P	03 07 22
		1	03 07 24
	Sk	eP	03 07 58
	Gb	1P	03 08 31
	cont.		

Up = Uppsala, Ki = Kiruna, Sk = Skanstugan, Gb = Göteborg

1960				1960			
Mar 24	1	03 08 37		Mar 24	Up	1P	20 38 08
cont.	Andreanof Islands, Aleutian Islands.				Gb	1P	20 38 38
" 24	Up	1P	06 05 24	" 24	Up	1P	23 28 27
		1	06 05 35		Gb	e(P)	23 29 34
		1	06 05 47	" 25	Up	1PKP	02 47 31
	Ki	1P	06 04 36		Ki	1PKP	02 47 21
		1	06 04 38		Sk	1PKP	02 47 23
	Sk	1P	06 05 02			1	02 47 25
		1	06 05 18		Gb	1PKP	02 47 39
	Gb	1P	06 05 48			1	02 47 45
		1	06 05 52		Fiji Islands. (h = 400 km).		
	Kurile Islands.			" 25	Ki	1P	02 50 09
" 24	Ki	1P	08 07 55	" 25	Gb	1P	05 45 18
" 24	Up	1(Sg)	08 13 48			1	05 45 19
		1	08 13 53	" 25	Gb	1P	08 19 48
		1	08 13 56	" 25	Up	1P	10 41 55
	Sk	1(P)	08 13 04	" 25	Up	1P	11 15 12
		1(Sg)	08 13 32	" 25	Up	1P	11 56 28
		1	08 13 39	" 26	Up	1P	07 28 43
	Gb	1	08 12 10	" 26	Up	1(P)	11 28 19
		1(Sg)	08 12 27		Ki	1(P)	11 28 07
	Explosion at Stavanger, Norway.			" 27	Up	1(P)	01 20 17
" 24	Up	1P	10 07 14			1	01 21 29
		1	10 07 24	" 27	Up	1PKP	04 07 35
	Ki	1P	10 06 21			1	04 07 39
	Sk	1P	10 06 54		Ki	1PKP	04 07 22
		1	10 07 02			1	04 07 30
	Gb	1P	10 07 29			1(PKKP)	04 17 25
		1	10 07 39		Sk	1PKP	04 07 33
	Andreanof Islands, Aleutian Islands.					1	04 07 36
" 24	Up	1P	10 10 13		Gb	1PKP	04 07 44
		1	10 10 22			1	04 07 52
	Ki	1P	10 09 30		New Hebrides Islands.		
	Sk	1P	10 10 04	" 27	Ki	1P	07 39 29
	Gb	1P	10 10 34		Off coast of Mexico.		
	Near east coast of Honshu, Japan.			" 27	Up	1PKP	09 17 07
" 24	Ki	1P	15 42 07			1	09 17 16
" 24	Up	1P	20 14 04		Ki	ePKP	09 16 56
	Ki	1P	20 13 22		Sk	1PKP	09 17 05
	Sk	1P	20 14 02			1	09 18 05
	Gb	1P	20 14 34		cont.		
		1	20 14 38				
	Near east coast of Honshu, Japan.						

Up = Uppsala, Ki = Kiruna, Sk = Skalistugan, Gb = Göteborg

1960					1960				
Mar	27	Gb	1PP	09 19 36	Mar	28	Up	1P	00 26 30
cont.			1	09 19 49				1	00 26 36
		New Hebrides Islands.					K1	1P	00 26 29
"	27	Up	eP	09 42 59				1	00 26 35
"	27	Up	1P	10 12 40			Sk	1P	00 26 17
								1	00 26 24
"	27	Up	1PKP	17 44 29 C				1	00 26 34
			1	17 44 33			Gb	1P	00 26 20
		K1	1PKP	17 44 13				1	00 26 41
		Sk	1PKP	17 44 22			Off south coast of Panama.		
			1	17 44 34	"	28	Up	1P	05 11 25
		Gb	1PKP	17 44 38	"	28	Gb	1PKP	06 55 04
			1	17 44 53			New Hebrides Islands.		
		Kermadec Islands.					(h = 300 km).		
"	27	Up	1(P)	20 05 02	"	28	Sk	1PKP	07 01 49
		K1	1P	20 05 35				1	07 02 00
"	27	Up	eP	20 28 34			New Hebrides Islands.		
		K1	1P	20 28 20	"	28	Up	1PKP	12 57 19
			1	20 28 24				1	12 57 26
		Sk	eP	20 28 03			Sk	1PKP	12 57 14
			1	20 28 15				1	12 57 31
		Gb	eP	20 28 29			Gb	1PKP	12 57 29
		Jalisco, Mexico.						1	12 57 32
"	27	Up	1P	20 32 03				1	12 58 17
"	27	Up	1PKP	23 47 50			Tonga Islands region.		
			1	23 47 58	"	28	Gb	1P	15 01 35
			1PKP2	23 48 16	"	28	K1	1P	15 03 01
			1	23 49 35	"	28	K1	1(P)	16 28 12
			1	23 51 50	"	28	Gb	1P	19 00 17
			1	23 56 56	"	28	Up	1P	20 54 14
		K1	1PKP	23 47 43			Sk	1P	20 53 42
			1	23 47 48				1	20 53 44
			1	23 47 55			Gb	1P	20 53 54
		Sk	1PKP	23 47 49			North Atlantic Ocean.		
			1	23 47 56	"	29	Up	1PKP	00 30 40
			1PKP2	23 48 10				1	00 30 49
		Gb	1PKP2	23 48 32			K1	1PKP	00 30 20
			1	23 48 36				1	00 30 24
			1	23 49 30			Sk	1PKP	00 30 35
			1	23 49 52				1	00 30 48
			1	23 54 55			Kermadec Islands region.		
		Off coast of North Island,							
		New Zealand.							
"	28	Up	1P	00 19 20					
		Gb	1P	00 19 42					

Up = Uppsala, Ki = Kiruna, Sk = Skälstugan, Gb = Göteborg

1960					1960				
Mar	29	Up	1PKP	06 50 12	Mar	30	K1	1(P)	14 14 07
			i	06 50 17					
			1PKS	06 53 42	"	30	K1	1P	14 24 43
		Sk	1PKP	06 50 06					Near coast of Sumatra.
			i	06 50 10					
			i	06 50 14	"	30	Gb	1P	15 08 00
			1PKS	06 53 36					
		Gb	1PKP	06 50 11	"	30	Gb	1P	15 13 35
			i	06 50 22					
			i	06 50 33	"	30	K1	1PKP	15 38 45
			1PKS	06 53 48			Sk	1PKP	15 38 52
							Gb	1PKP	15 39 01
				New Hebrides Islands.					Loyalty Islands region.
"	29	Up	1P	07 02 38					
		Sk	1P	07 02 33	"	30	Up	1P	20 35 52
			i	07 03 04					
		Gb	1(P)	07 02 10	"	31	Up	1P	00 52 38
"	29	K1	1P	07 43 12			K1	1P	00 52 09
			i	07 43 19				i	00 52 10
		Sk	1P	07 43 26			Sk	1P	00 52 35
			i	07 43 33					Mariana Islands. (h = 250 km).
				Off coast of Sumatra.	"	31	Up	1P	03 13 26
"	29	K1	1(P)	17 57 58			K1	1P	03 12 44
								i	03 12 57
"	30	Up	1P	04 47 05			Sk	1P	03 13 18
							Gb	1P	03 13 47
"	30	Sk	1P	05 49 25				i	03 13 49
			i	05 49 31					Off northeast coast of
									Honshu, Japan.
"	30	Up	1P	07 09 40	"	31	K1	1P	17 40 20
		K1	1P	07 08 48					Off northeast coast of
			1PoP	07 09 33					Honshu, Japan.
				Andreanof Islands,					
				Aleutian Islands.	"	31	Up	1P	20 08 53
"	30	Up	1PKP	11 09 00			K1	1P	20 08 29
		K1	1PKP	11 08 43			Sk	1P	20 08 28
			i	11 08 48				i	20 08 30
		Sk	1PKP	11 08 57					Gulf of California.
			i	11 09 02	"	31	K1	1(P)	20 14 12
		Gb	1PKP	11 09 05			Sk	1(P)	20 14 12
			i	11 09 11	"	31	K1	1(P)	21 14 20
				New Hebrides Islands.				i	21 14 24
"	30	Sk	1P	12 53 25					Explosion.
"	30	K1	1P	13 02 14	"	31	Up	eP	21 44 07
			i	13 02 23			K1	1P	21 43 22
		Sk	1P	13 02 03					Near north coast of
		Gb	1P	13 02 57					Honshu, Japan.
			i	13 03 02					Ingrid Pettersson
				Off east coast of Greenland.					Oct 28, 1960.

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PRELIMINARY
SEISMOLOGICAL BULLETIN

U P P S A L A , K I R U N A , S K A L S T U G A N , and G Ö T E B O R G

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.
Göteborg (Gb): 57°41.9'N, 11°58.7'E; h = 66 m.

A p r i l 1-30, 1960
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1960				1960			
Apr 1	Up	iPKP	03 13 21	Apr 2	Sk	iP	20 09 52
	Ki	iPKP	03 13 13				
		iSKP	03 15 50	" 2	Up	iP	22 42 28
	Sk	iPKP	03 13 17			i	22 42 38
		iSKP	03 16 03			i	22 43 25
	Fiji Islands.	(h = 650 km).			Ki	iP	22 43 10
						i	22 43 25
" 1	Up	iP	14 23 15		Sk	iP	22 43 06
		i	14 23 24		Western Iran.		
	Ki	iP	14 22 30				
	Sk	iP	14 22 46	" 2	Up	iP	23 39 40
	Off coast of Vancouver					i	23 39 43
	Island.					i	23 40 40
" 1	Up	iP	14 59 50		Ki	iP	23 40 25
					Sk	iP	23 40 18
" 1	Ki	i(P)	17 43 17		Iran.		
		i	17 43 19	" 3	Up	iP	05 21 49 0
" 1	Sk	iP	18 54 03		Ki	iP	05 21 19
" 1	Up	iP	20 39 10		Sk	iP	05 21 47
" 1	Ki	iP	21 12 13		Bonin Islands region.		
" 2	Ki	iP	03 21 52		(h = 550 km).		
		i	03 21 55	" 3	Up	iP	07 31 17 0
" 2	Ki	iP	08 58 07		Ki	iP	07 30 36
		i	08 58 08		Off northeast coast of		
" 2	Ki	iP	10 00 02		Honshu, Japan.		
		i	10 00 13	" 4	Up	iP	13 22 53
" 2	Up	iP	12 05 17		China.		
		i	12 06 18	" 4	Ki	iP	19 04 26
" 2	Ki	iP	13 31 17		Near west coast of Luzon		
					Island, Philippine Islands.		

Up = Uppsala, Ki = Kiruna, Sk = Skälstugan, Gb = Göteborg

1960					1960				
Apr	4	Up	iP	21 04 43	Apr	7	Up	iP	08 33 11
		Ki	iP	21 04 26				i	08 33 20
			i	21 04 33			Ki	i(P)	08 34 15
		Near west coast of Luzon							
		Island, Philippine Islands.			"	7	Up	iP	08 39 23
								i	08 39 32
"	4	Ki	iP	23 02 27					
"	4	Ki	iP	23 30 41	"	7	Up	iP	08 48 11
"	4	Up	iP	23 34 00			Ki	iP	08 47 30
			i	23 34 01			Off east coast of Honshu,		
			i	23 34 11			Japan.		
		Ki	iP	23 33 06	"	7	Ki	iP	10 40 47
			i	23 33 18	"	7	Up	iP	10 52 02
		Sk	iP	23 33 15	"	7	Ki	iP	11 48 15
		Aleutian Islands.							
"	4	Sk	iP	23 39 53	"	7	Up	iPKP	14 06 02
"	4	Sk	iP	23 47 19				i	14 06 19
			i	23 48 38				iSKP	14 08 58
"	5	Up	iPKP	07 36 42			Ki	i(PKP)	14 05 44
			i	07 36 49				iPKP	14 05 52
		Ki	iPKP	07 36 54				iSKP	14 08 37
			i	07 36 58			Sk	iPKP	14 05 57
		Sk	iPKP	07 36 48				i	14 08 31
		Sandwich Islands.					Fiji Islands region.		
"	5	Sk	i(P)	11 46 31			(h = 500 km).		
"	5	Up	iPKP	12 55 15	"	7	Up	iP	19 49 30
		Sk	iPKP	12 55 17	"	7	Ki	iP	19 51 43
		Sandwich Islands.			"	8	Up	iPKP	00 14 55
"	5	Up	iP	17 27 55				i	00 14 58
			i	17 28 05				iSKP	00 18 24
			i	17 29 45			Ki	i(PKP)	00 14 36
		Ki	iP	17 27 36				iPKP	00 14 49
			i	17 27 39				iSKP	00 17 59
			i	17 27 45			Sk	iPKP	00 14 49
			i	17 29 10				iSKP	00 18 17
		Sk	iP	17 26 58			Tonga Islands. (h = 200 km).		
			i	17 28 04	"	8	Ki	i(P)	14 44 29
		North Atlantic Ocean.						i	14 46 57
"	5	Ki	iP	19 25 06	"	8	Up	iP	15 58 32
"	5	Up	iP	20 38 16	"	8	Up	iP	20 32 17
"	7	Up	iP	03 23 20				i	20 34 54
					"	9	Up	iP	00 25 41
							Ki	iP	00 24 48

Up = Uppsala, Ki = Kiruna, Sk = Skanstugan, Gb = Göteborg

1960				1960			
Apr 9	Up	iP	02 55 10	Apr 13	Ki	iP	05 00 38
	Ki	iP	02 54 29	cont.	Andreanof Islands, Aleutian Islands.		
	Near east coast of Honshu, Japan.						
" 9	Ki	iP	17 15 05	" 13	Ki	iP	08 07 20
					Sk	iP	08 07 55
" 10	Up	i(P)	00 58 48		Manchuria.		
		i	00 58 54	" 13	Up	iP	11 34 33
		i	00 59 08				
" 10	Ki	iP	07 02 35	" 13	Up	iP	12 48 05
" 10	Up	iP	13 19 49	" 13	Up	iP	12 50 27
		i	13 19 53			i	12 50 31
	Ki	iP	13 19 16			i	12 50 42
		i	13 19 32			i	12 51 05
	Bonin Islands.				Ki	iP	12 50 12
" 10	Up	iP	20 37 10			i	12 50 19
		i	20 37 13			i	12 50 36
	Ki	iP	20 36 17		Sk	iP	12 50 07
		i	20 36 22			i	12 50 13
	Sk	iP	20 36 47			i	12 50 20
	Fox Islands, Aleutian Islands.				Guatemala-Mexico border.		
" 10	Up	iP	22 10 34	" 13	Up	iP	13 25 29
		i	22 10 38		Ki	iP	13 24 35
	Ki	iP	22 11 40		Fox Islands, Aleutian Islands.		
		i	22 11 45	" 13	Up	iP	13 43 46
	Sk	iP	22 11 16	" 13	Up	iP	14 14 12
		i	22 11 18				
	Western Turkey.			" 13	Up	iP	15 11 23
" 12	Up	iP	04 27 46	" 13	Ki	i(P)	17 19 58
		i	04 27 52				
		i	04 28 49	" 13	Ki	i(P)	17 41 48
	Ki	iP	04 28 53				
	Sk	iP	04 28 27	" 13	Up	iP	20 26 08
	Western Turkey.			" 14	Ki	iP	00 04 57
" 12	Up	iP	07 25 04	" 14	Ki	iP	19 37 41
" 12	Up	iP	20 47 24	" 15	Ki	iP	08 06 05
" 12	Up	iP	20 49 40	" 15	Up	iPKP	08 52 49
	Ki	iP	20 49 15			i	08 52 51
	Sk	iP	20 49 46		Sk	iPKP	08 52 44
	Outer Mongolia.				Kermadec Islands.		
" 13	Up	iP	05 01 31	" 15	Up	iP	10 17 27
		i	05 01 45			i	10 17 29
	cont.						

Up = Uppsala, Ki = Kiruna, Sk = Skalistugan, Gb = Göteborg

1960					1960				
Apr 15	Ki	iP	10 16 47		Apr 18	Up	iP	08 18 33	
cont.							i	08 18 47	
			Near south coast of Hokkaido, Japan.				i	08 18 44	
" 15	Up	iP	11 14 56			Ki	iP	08 18 01	
		i	11 14 59				i	08 18 05	
	Ki	iP	11 14 13			Sk	iP	08 18 39	
			Near south coast of Hokkaido, Japan.				i	08 18 32	
						Gb	iP	08 18 52	
" 15	Up	iP	11 49 58					Bonin Islands region. (h = 450 km).	
		i	11 52 31		" 18	Sk	iP	08 21 35	
	Ki	iP	11 49 17		" 18	Up	iP	08 27 59	
		i	11 49 31		" 18	Up	iP	11 26 56	
	Sk	iP	11 49 51			Ki	iP	11 25 55	
		i	11 49 56		" 18	Up	iP	11 26 56	
		i	11 52 16			Ki	iP	11 25 55	
	Gb	iP	11 50 20		" 18	Ki	iP	11 46 58	
		i	11 50 28				i	11 48 29	
			Near north coast of Honshu, Japan. (h = 150 km).				i	11 49 12	
" 15	Up	i(P)	13 16 08		" 19	Up	iP	01 24 29	
" 15	Up	iP	19 00 58			Ki	iP	01 23 41	
		i	19 01 12					Kurile Islands.	
" 15	Up	iPKP	22 24 17		" 19	Up	iP	07 43 36	
	Ki	iPKP	22 23 53				i	07 44 29	
		i	22 24 04				i	07 44 32	
	Sk	iPKP	22 24 14				i	07 45 51	
		i	22 24 21			Ki	i(P)	07 43 36	
			New Hebrides Islands.		" 19	Ki	iP	18 33 35	
" 16	Ki	i(P)	08 34 57		" 19	Up	iP	19 37 06	
" 16	Up	iP	08 38 39				i	19 37 20	
		i	08 38 41			Ki	iP	19 36 14	
	Ki	iP	08 38 36			Sk	iP	19 36 48	
" 16	Up	iP	20 49 29			Gb	iP	19 37 22	
	Ki	iP	20 48 42				i	19 37 34	
			Kurile Islands.					Andreanof Islands, Aleutian Islands.	
" 17	Up	iP	01 23 35		" 19	Up	iP	20 33 21	
	Ki	iP	01 22 41			Ki	iP	20 32 33	
			Unimak Island... region.		" 19	Up	iP	20 43 59	
" 17	Up	iPKP	22 07 51				i	20 44 03	
		i	22 07 53			Ki	iP	20 43 07	
	Ki	iPKP	22 07 45			Gb	iP	20 44 13	
	Sk	ePKP	22 07 57					Fox Islands, Aleutian Islands.	
	Gb	iPKP	22 08 01		" 19	Ki	iP	23 42 49	
			Fiji Islands. (h = 500 km).						

Up = Uppsala, Ki = Kiruna, Sk = Skälstugan, Gb = Göteborg

1960					1960				
Apr	20	Ki	iP	10 40 32	Apr	22	Gb	iP	10 05 47
"	20	Up	i	12 43 57	"	22	Ki	iP	14 40 32
			i(Sg)	12 44 10	"	22	Up	iPKP	15 18 08
		Sk	e	12 44 19				i	15 18 12
			i(Sg)	12 44 44			Sk	ePKP	15 17 57
		Gb	iP	12 42 37			Kermadec Islands.		
			i	12 42 58	"	22	Up	iP	16 27 20
			i(Sg)	12 43 02				i	16 27 24
"	20	Up	iP	15 23 19			Ki	iP	16 27 07
"	20	Up	iP	15 26 41	"	22	Up	iP	19 00 07
"	20	Up	iP	17 02 17			Ki	iP	18 59 51
			i	17 02 30			Masbate, Philippine Islands.		
		Ki	iP	17 01 52	"	22	Up	i	20 46 11
		Gb	iP	17 02 23				i(pPKP)	20 46 29
"	20	Up	iP	19 30 31			Ki	iPKP	20 45 14
			i	19 30 34				ipPKP	20 46 11
			i	19 30 37			Tonga Islands. (h = 200 km).		
			ipP	19 31 16	"	23	Up	iP	06 33 14
		Ki	iP	19 30 43			Ki	iP	06 33 54
			i	19 30 46			Iran.		
		Sk	iP	19 30 59	"	23	Up	iP	13 17 18
			i	19 31 03				i	13 17 20
			i	19 32 25				i	13 17 25
		Gb	iP	19 30 54			Ki	iP	13 16 54
			ipP	19 31 37			Outer Mongolia.		
			i	19 32 52	"	23	Ki	iP	18 43 23
		Hindu Kush. (h = 200 km).			"	23	Up	eP	20 04 41
"	20	Ki	i(P)	20 25 43	"	23	Ki	iP	20 10 05
"	20	Up	iP	20 35 04	"	24	Up	iP	00 09 10
			i	20 35 05			Ki	iP	00 08 16
"	20	Up	iP	20 48 50				i	00 08 25
			i	20 49 00			Near Islands,		
"	20	Ki	iP	21 07 23			Aleutian Islands.		
		Hindu Kush.			"	24	Ki	iP	00 38 27
"	20	Ki	iP	21 34 08	"	24	Ki	iP	02 15 16
			i	21 34 28	"	24	Up	iP	03 35 01
"	21	Gb	iP	07 31 45				i	03 35 13
"	21	Up	iP	09 40 17				i	03 35 23
"	21	Gb	iP	14 13 10			cont.		

Up = Uppsala, Ki = Kiruna, Sk = Skalistugan, Gb = Göteborg

1960				1960			
Apr 24		ipP	03 37 13	Apr 25	Up	i(P)	12 22 48
cont.		i	03 37 23				
		iPP	03 39 12	" 25	Up	i(P)	12 52 18
		i	03 39 16			i	12 52 21
		i(SP)	03 46 36				
		iPKKP	03 51 31	" 25	Up	iP	12 56 53
Ki		iP	03 34 54		Ki	iP	12 56 02
		i	03 35 01		Sk	iP	12 56 38
		iSKS	03 44 35		Off south coast of Kamchatka.		
		iPKKP	03 51 37				
Sk		iP	03 35 12	" 25	Up	iP	15 04 34
		i	03 35 22			i	15 04 41
		i	03 37 48		Ki	iP	15 03 40
		iPP	03 39 31			i	15 03 46
Gb		iP	03 35 18			i	15 03 50
		iSP	03 38 20		Sk	iP	15 04 08
		i	03 38 32			i	15 04 15
		iPP	03 39 38		Gb	iP	15 04 47
		iSP	03 47 38			i	15 04 54
	Java Sea. (h = 600 km).				Kodiak Island region.		
" 24	Up	iP	06 05 35	" 25	Up	iP	16 33 30
		i	06 05 38			i	16 33 36
	Ki	iP	06 06 25		Ki	iP	16 34 42
	Sk	iP	06 05 44			i	16 34 48
	Gb	iP	06 05 45		Sk	iP	16 34 13
	Eastern Turkey.					i	16 34 19
" 24	Ki	i(P)	12 11 39		Gb	iP	16 33 24
						i	16 33 30
					Aegean Sea.		
" 24	Up	iP	12 22 10	" 25	Ki	iP	19 01 43
		i	12 22 11				
	Ki	iP	12 22 47	" 25	Up	i(P)	22 44 15
		i	12 22 57				
		i	12 24 26	" 26	Up	i(P)	00 41 18
Sk		iP	12 22 45				
		i	12 22 54	" 26	Ki	iP	03 44 44
		i	12 23 00				
Gb		iP	12 22 23	" 26	Sk	iP	05 12 48
		i	12 22 35				
	Southern Iran.			" 26	Sk	iP	07 00 00
" 24	Up	i(P)	14 57 38	" 26	Up	iP	12 51 24
" 24	Up	iPKP	18 23 50			i	12 51 34
	Kermadec Islands.			" 26	Ki	iP	14 23 42
" 25	Up	iP	00 25 22	" 26	Gb	iP	16 56 13
	Ki	iP	00 24 40				
	Near south coast of Hokkaido, Japan.			" 26	Ki	iP	20 30 37
					Sk	iP	20 31 05
" 25	Sk	iP	08 50 08		Off coast of Formosa.		

Up = Uppsala, Ki = Kiruna, Sk = Skälstugan, Gb = Göteborg

1960				1960					
Apr	26	Up	iP	21 36 43	Apr	28	Ki	iPKP	02 29 26
		Ki	iP	21 36 19	cont.			Sandwich Islands.	
			i	21 36 24					
		Sk	iP	21 36 52	"	28	Up	eP	03 49 27
		Kansu Province, China.							
"	27	Ki	iP	04 50 13	"	28	Up	iP	16 31 59
							Gb	iP	16 31 08
"	27	Up	iP	05 46 24				i	16 31 26
			i	05 46 40				i	16 31 29
"	27	Up	iP	12 38 37	"	28	Up	iP	16 32 47
								i	16 32 51
"	27	Ki	e(P)	12 44 37			Sk	iP	16 33 16
"	27	Up	iP	13 40 36	"	28	Up	iP	16 38 55
			i	13 40 42				i	16 39 03
								i	16 39 24
"	27	Up	iP	13 46 31			Ki	iP	16 40 01
			i	13 46 43				i	16 40 07
								i	16 42 43
"	27	Up	iP	14 30 34			Sk	iP	16 39 33
			i	14 30 46				i	16 39 47
			i	14 30 51			Dodecanese Islands.		
"	27	Ki	iP	17 47 48	"	28	Up	i(P)	19 26 03
		Southern Iran.						i	19 26 46
								i	19 26 53
"	27	Up	iP	22 56 06				i(Sg)	19 26 56
			i	22 56 09			Ki	e(Sg)	19 30 22
			i	22 56 18			Sk	i(Sg)	19 27 12
		Ki	iP	22 55 47			Gb	iP	19 25 18
			i	22 55 58				i(Sg)	19 25 32
		Sk	iP	22 56 15	"	28	Ki	iP	19 59 20
		Gb	iP	22 56 30			Sk	iP	19 58 04
			i	22 56 46	"	28	Sk	iP	23 44 57
		Off coast of Luzon, Philippine Islands.			"	29	Ki	iP	00 50 21
"	28	Up	eP	00 42 42				i	00 50 52
			i	00 42 51			Sk	iP	00 51 45
								i	00 51 54
"	28	Ki	iP	00 59 18	"	29	Up	iPKP	02 34 29
			i	00 59 37			Ki	iPKP	02 34 45
		Fox Islands, Aleutian Islands.					Sk	iPKP	02 34 35
							Sandwich Islands.		
"	28	Sk	iP	01 00 21	"	29	Ki	i(P)	02 37 51
		Fox Islands, Aleutian Islands.					Sk	i(P)	02 37 55
"	28	Up	iPKP	02 29 10	"	29	Ki	iPKP	04 02 07
			i	02 29 16			Sandwich Islands.		
		cont.							

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Gb = Göteborg

1960				1960			
Apr	29	Ki	iP	Apr	29	Gb	iP
			i	cont.			i
							iPP
						Celebes.	
"	29	Up	iP				
"	29	Up	eP	"	29	Ki	iP
			i				i
"	29	Ki	iP	"	29	Up	iP
		Sk	ePP				e
		Celebes.					i
"	29	Up	iPKP				iPP
			i			Ki	iP
			i				i
			i				i
			i			Sk	iP
		Ki	iPKP				iPP
		Sk	iPKP			Gb	iP
			i				ePP
			i			Celebes.	
		Gb	iPKP	"	30	Up	eP
			i				
			i	"	30	Up	iP
		Kermadec Islands.					i
"	29	Up	iPKP				i
		Sk	iPKP				iPP
			i			Ki	iP
		Gb	iPKP				i
			i				iPP
		Kermadec Islands region.				Sk	iP
"	29	Gb	iP				i
"	29	Ki	iP				i
			i			Gb	iP
			i				i
		Sk	iP				iPP
						Celebes.	
"	29	Sk	i(P)	"	30	Up	iP
			i				
"	29	Up	iP	"	30	Up	iP
			e			Ki	iP
			iPP				
		Ki	iP	"	30	Up	iP
			i				
			i	"	30	Ki	iP
			i(PF)				i
		Sk	eP				
			i	"	30	Ki	iP
			i				
			iPP				
cont.						Banda Sea. (h = 600 km).	

Up = Uppsala, Ki = Kiruna, Sk = Skalistugan, Gb = Göteborg

1960

Apr	30	Up	iP	22	27	27
			i	22	27	29
			i	22	27	39

Ingrid Pettersson
Nov. 2, 1960.

Markus Båth.

PRELIMINARY
SEISMOLOGICAL BULLETIN

U P P S A L A, K I R U N A, S K A L S T U G A N, and G Ö T E B O R G

Uppsala (Up): $59^{\circ}51.5'N$, $17^{\circ}37.6'E$; h = 14 m.
Kiruna (K1): $67^{\circ}50.4'N$, $20^{\circ}25.0'E$; h = 390 m.
Skalstugan (Sk): $63^{\circ}34.8'N$, $12^{\circ}16.8'E$; h = 580 m.
Göteborg (Gb): $57^{\circ}41.9'N$, $11^{\circ}58.7'E$; h = 66 m.

May 1 - 31, 1960
.....

1960

1960

May 1	Up	1P	03 06 12	May 2	Up	1P	12 23 45 C
		i	03 06 23			i	12 23 49
	K1	1P	03 05 21			i	12 24 00
	Fox Islands, Aleutian Islands.					i	12 26 12
						i	12 27 02
						1PP	12 27 43
" 2	Up	1P	01 07 58		K1	1P	12 23 34
		i	01 08 06			i	12 23 58
		i	01 08 13			i	12 27 20
	K1	1P	01 07 44			1PP	12 27 26
		i	01 07 50			1PKKP	12 40 35
		1PP	01 09 20		Sk	1P	12 23 53
	Sk	1P	01 08 14			i	12 23 58
		i	01 08 19			1(PF)	12 27 44
		1PP	01 09 54			i	12 27 58
	Gb	i	01 08 48		Gb	1P	12 24 00
		i	01 09 00			1PP	12 28 12
	Sinkiang Province, China.				Celebes.		
" 2	Up	1P	02 51 18	" 2	Up	1P	12 50 28
		i	02 51 21			i	12 50 29
	K1	eP	02 52 38	" 2	K1	1P	14 53 21
	Sk	1P	02 52 48			i	14 53 30
" 2	Up	1PKP	04 36 10	" 2	Up	1P	15 41 30
		i	04 36 12		Sk	eP	15 40 10
	Sk	1PKP	04 36 06				
	Kermadec Islands region.			" 2	Up	1P	18 21 58
" 2	Up	1P	08 53 29		K1	1P	18 21 27
		i	08 53 36		Near east coast of Honshu, Japan.		
	K1	1P	08 54 20				
		i	08 54 22	" 2	Up	1PKP	20 51 08
" 2	K1	1P	10 52 29			i	20 51 11
	Samar Island, Philippine Islands.				Sk	1PKP	20 51 01
					Gb	1PKP	20 51 10
" 2						i	20 51 19
					Kermadec Islands region.		
" 2	K1	1P	12 04 27				
	Celebes.						

Up = Uppsala, K1 = Kiruna, Sk = Skalistugan, Gb = Göteborg

1960				1960			
May	2	K1	1P	22 56 54	May	3	K1 1P 22 33 45
"	3	Up	1P	07 06 39	cont.	Sk	1P 22 34 16
		i		07 06 45		Gb	1P 22 34 41
		K1	1P	07 07 14		South of Honshu, Japan.	
		Sk	1P	07 07 13		(h = 150 km).	
		i		07 07 18			
		Iran.			"	4	Up 1PKP 00 15 52
							K1 1PKP 00 15 41
							1SKP 00 18 13
							Fiji Islands. (h = 600 km).
"	3	Up	1P	07 24 16			
"	3	Up	1P	08 05 25	"	4	Up 1P 11 18 02
		i		08 05 29			i 11 19 03
		i		08 05 34		Sk	1(P) 11 18 21
		K1	1P	08 05 11			i 11 19 35
		i		08 05 20		Gb	1P 11 17 27
		Sk	1P	08 05 37			i 11 17 45
		i		08 05 45			i 11 17 47
		Gb	1P	08 05 51			
		China.			"	4	Up 1P 12 50 22
							i 12 50 36
"	3	Up	1PKP	08 15 14			
		K1	1PKP	08 15 05	"	5	Up 1P 06 16 50
		Gb	1PKP	08 15 26			
		Tonga Islands region.			"	5	Up 1P 08 22 20
							i 08 22 27
"	3	K1	e(P)	08 16 18		Sk	1P 08 23 01
			1(Sg)	08 16 53			i 08 23 05
		Sk	e	08 19 34			
"	3	K1	e(P)	08 25 57	"	5	Up 1P 11 36 34
			1(Sg)	08 26 43			i 11 36 36
							i 11 36 42
"	3	K1	1P	12 45 54		K1	1P 11 35 42
							i 11 36 28
"	3	K1	1P	13 00 14		Sk	1P 11 36 19
						Gb	1P 11 36 56
"	3	Up	1PP	13 39 39			1PoP 11 37 21
		K1	1P	13 35 29		Near east coast of	
		i		13 38 26		Kamohatka.	
		Sk	1PP	13 39 53	"	5	K1 1(P) 16 19 49
		Celebes.					
"	3	K1	1P	14 43 12	"	5	Up 1P 17 24 39
		Near east coast of Honshu,					i 17 24 42
		Japan.				K1	1P 17 24 18
						Gb	eP 17 25 01
							i 17 25 20
"	3	Up	1P	15 13 49		Near east coast of	
						Hokkaido, Japan.	
"	3	Up	1P	21 40 36			
"	3	Up	1P	22 34 20	"	5	Up 1P 17 46 43
		i		22 34 30			i 17 47 59
		i		22 34 36			i 17 48 02
		cont.			"	5	K1 1P 19 31 31

Up = Uppsala, Ki = Kiruna, Sk = Skanstugan, Gb = Göteborg

1960				1960			
May	5	Gb	1P	20 26 31	May	7	Ki 1P 19 46 46
			1	20 26 37	cont.	Sk	1P 19 46 12
			1	20 26 40		Gb	1P 19 45 28
			1	20 26 46			
			1	20 27 29	"	8	Up 1PKP 05 49 20
"	5	Up	1P	20 50 46			1 05 49 24
			1	20 50 47		Ki	1PKP 05 49 06
"	6	Gb	1P	11 59 06		Sk	1PKP 05 49 14
"	6	Up	1(PKP)	12 02 08		Gb	1PKP 05 49 27
"	6	Up	1P	14 09 33		Kermadec Islands.	
		Ki	1P	14 09 28	"	8	Up 1P 12 31 21
		Sk	1P	14 09 48		Ki	1P 12 31 28
		1		14 10 07		Sk	1P 12 31 47
"	6	Gb	1P	18 07 44		Hindu Kush (h = 200 km).	
"	6	Up	1P	18 57 53	"	8	Up 1P 13 52 34
		1		18 58 04		Sk	1P 13 53 01
		Ki	1P	18 57 08		Hindu Kush.	
		Sk	1P	18 57 36	"	8	Up 1P 14 40 15
		Gb	1P	18 58 13			iPoP 14 40 41
		Near east coast of				Ki	1P 14 39 28
		Kamchatka.				Sk	1P 14 40 03
"	6	Ki	1P	21 06 46		Gb	1P 14 40 34
"	6	Up	1P	23 17 46		Kurile Islands.	
		Ki	1P	23 18 59	"	9	Up 1P 00 22 49
		Sk	1P	23 18 26			1 00 22 51
"	7	Up	1(P)	03 10 48			1 00 23 03
"	7	Up	1(P)	07 14 42		Ki	1P 00 22 18
"	7	Up	1P	07 30 37		Sk	1P 00 22 48
"	7	Up	1P	11 38 12		Gb	1P 00 23 06
		Ki	1P	11 38 59		Ryukyu Islands.	
"	7	Up	1P	14 22 26	"	9	Up 1P 02 59 22
		1		14 22 29			i 02 59 31
		1		14 22 47		Ki	1P 02 59 08
		Ki	1P	14 21 42			1 02 59 17
		Sk	1P	14 22 13		Sk	eP 02 59 27
		Gb	eP	14 22 46		Celebes Sea.	
		Hokkaido, Japan.			"	9	Gb 1P 07 21 00
"	7	Up	1P	19 45 31	"	9	Ki 1(P) 08 13 51
		1		19 45 33	"	9	Up 1P 14 46 33
		1		19 45 41			1 14 46 42
		cont.				Ki	1P 14 46 29
						1	14 46 38
						Sk	1P 14 46 50
						Gb	1P 14 46 54
						East Pakistan-India border.	

Up = Uppsala, Ki = Kiruna, Sk = Skalistugan, Gb = Göteborg

1960				1960					
May	9	Gb	1P	16 09 08	May	10	Sk	1P	23 28 45
					cont.			i	23 29 12
"	9	Up	1P	16 38 12			Gb	1P	23 29 34
		i		16 38 15			Near coast of western		
		Ki	1P	16 38 46			Honshu, Japan. (h = 100 km).		
		i		16 38 51					
		Sk	1P	16 38 14	"	11	Ki	1P	05 24 05
		Gb	1P	16 37 50				i	05 24 06
		Atlantic Ocean.							
"	9	Up	1P	17 07 24	"	11	Up	1P	07 38 00
								i	07 38 04
"	9	Up	1P	17 55 40	"	11	Up	1P	12 01 45
"	9	Gb	1P	18 34 57	"	11	Up	1P	13 28 55
"	9	Sk	1P	19 08 51			Sk	1P	13 29 24
							Italy.		
"	9	Gb	1P	19 17 34	"	11	Up	1P	14 10 51
		i		19 17 41			Ki	1P	14 11 55
"	10	Ki	1PKP	11 15 09	"	11	Up	1P	18 50 11
		i		11 15 22				1PP	18 54 22
		Sandwich Islands.					Ki	1P	18 49 51
"	10	Ki	1(P)	12 13 59			Sk	eP	18 50 12
								1PP	18 54 23
"	10	Up	1P	15 18 19			Ceram Sea.		
"	10	Up	1P	15 38 07	"	11	Up	1P	19 50 42
"	10	Up	1P	16 27 53	"	11	Up	1(P)	20 23 10
"	10	Ki	1P	17 10 12			Ki	1P	20 22 06
								i	20 22 16
"	10	Up	1P	17 46 43			Sk	1P	20 22 39
		i		17 46 47				i	20 22 44
		Ki	1P	17 45 51	"	11	Up	1(P)	20 48 13
		Sk	1P	17 46 27				i	20 48 21
		Gb	1P	17 47 05	"	12	Up	1P	07 27 13
		Off southeast coast of						i	07 27 16
		Kamchatka.							
"	10	Up	1P	21 59 26	"	12	Up	1P	08 53 43
		i		21 59 29	"	12	Ki	1P	13 29 19
		Ki	1P	22 00 03				i	13 29 32
		i		22 00 13	"	12	Sk	1P	13 32 10
		1PP		22 01 49	"	12	Sk	1P	14 22 00
		Sk	1P	22 00 00	"	12	Sk	1P	14 57 33
		Gb	1P	21 59 39	"	12	Sk	1P	16 19 29
		Northeastern Saudi Arabia.							
"	10	Up	1P	23 29 13					
		Ki	1P	23 28 39					
		cont.							

Up = Uppsala, Ki = Kiruna, Sk = Skalistugan, Gb = Göteborg

1960					1960				
May	12	Sk	1P	16 24 17	May	13	Ki	1P	16 17 04
"	12	Up	1P	19 18 31	cont.			i	16 17 15
		Ki	1(P)	19 19 37				i	16 17 19
"	12	Up	1P	20 43 58			Sk	1P	16 25 13
"	12	Up	1P	22 45 23				i	16 17 32
			i	22 45 26				i	16 17 47
			i	22 45 28			Gb	1P	16 18 17
		Ki	1P	22 45 21				i	16 18 32
			i	22 45 32			Alaska Peninsula.		
		Sk	1P	22 45 08	"	13	Up	1P	16 46 36
			i	22 45 24				i	16 46 40
		Panama.					Ki	1P	16 46 48
"	12	Sk	1P	23 00 16				i	16 47 07
"	12	Up	1P	23 13 27			Sk	1P	16 46 52
		Ki	1P	23 13 25	"	13	Up	1PKP	21 06 27
		Sk	1P	23 13 11			Ki	1PKP	21 06 11
		Near south coast of					Sk	1PKP	21 06 19
		Panama.					Kermadec Islands region.		
"	13	Sk	1P	00 43 13	"	13	Up	1P	21 11 18
"	13	Sk	1(P)	01 23 06				i	21 11 55
"	13	Ki	1P	01 55 39			Sk	1P	21 11 12
"	13	Up	i	08 39 31	"	14	Up	1P	11 28 09
			i	08 39 39				i	11 28 12
			1(Sg)	08 39 44				i	11 28 16
		Ki	e	08 41 43	"	14	Ki	1P	11 51 54
			1(Sg)	08 42 15				i	11 52 07
		Sk	i	08 38 14	"	14	Up	1P	16 28 17
			i	08 38 22				i	16 28 20
			1(Sg)	08 39 24	"	14	Up	1P	16 34 59
		Gb	1P	08 38 07				i	16 35 01
			1(Sg)	08 38 46	"	14	Up	1P	17 54 14
			i	08 38 55				i	17 54 19
"	13	Ki	1P	10 13 14			Ki	1P	17 53 32
		Revilla Gigedo Islands					Sk	1P	17 54 05
		region.					Gb	1P	17 54 36
"	13	Gb	1P	14 32 22			Near south coast of		
"	13	Up	1P	16 11 05			Hokkaido, Japan.		
"	13	Up	1P	16 17 58	"	14	Up	1P	22 30 24
			i	16 18 10				i	22 30 31
		cont.					Ki	1P	22 29 30
							Sk	1P	22 30 08
							Gb	1P	22 30 45
							Kamohatka.		

Up = Uppsala, Ki = Kiruna, Sk = Skälstugan, Gb = Göteborg

1960					1960				
May	14	Sk	eP	23 09 22	May	17	Up	1P	09 23 51
"	15	Up	1P	05 29 28			i		09 23 59
"	15	Sk	1P	06 35 41			Ki	1P	09 22 13
"	15						i		09 22 17
"	15	Up	1P	13 42 11			Sk	1P	09 23 04
			i	13 42 24			i		09 23 10
		Ki	1P	13 41 47			Svalbard region.		
		Sk	1P	13 42 17	"	17	Gb	1P	15 47 32
		Gb	1P	13 42 32			i		15 47 49
		i		13 42 45	"	17	Up	1P	18 02 39
		Near east coast of Formosa.			"	17	Up	1P	23 37 17
"	15	Up	1P	21 47 58			i		23 37 24
		i		21 48 10			Sk	1P	23 37 14
		Ki	1P	21 47 05	"	18	Up	1P	06 46 47
		iPoP		21 47 56			i		06 46 59
		Sk	1P	21 47 34			i		06 47 03
		Gb	1P	21 48 12			Ki	1P	06 46 16
		i		21 48 15			i		06 46 28
		Alaska Peninsula.					i		06 49 31
"	16	Up	1P	00 24 20			Sk	1P	06 46 46
"	16	Ki	1P	04 34 26			i		06 46 59
		i		04 34 36			Gb	1P	06 47 04
		Sk	1P	04 34 30			i		06 47 15
"	16	Up	1P	04 37 24			Ryukyu Islands. (h = 100 km).		
"	16	Gb	1P	07 32 13	"	18	Up	1P	06 56 19
"	16	Up	1P	10 00 06	"	18	Up	1P	08 48 43
		i		10 00 24			i		08 48 47
		i		10 00 28			i		08 48 53
		i		10 00 33			1PP		08 50 17
		Sk	e	10 01 59			Ki	1P	08 49 20
		i		10 02 18			i		08 49 22
		i		10 02 26			i		08 49 32
		Gb	1(P)	10 00 22			1PP		08 50 58
		i		10 00 41			i		08 51 13
		i		10 00 59			Sk	1P	08 49 18
		i(L)		10 01 07			Gb	1P	08 48 51
		Explosion at Norrköping, Sweden.					i		08 49 05
"	16	Up	1P	14 03 33			Persian Gulf.		
"	16	Up	1P	20 38 53	"	18	Up	1P	09 06 56
"	17	Up	1P	07 30 49			i		09 06 58
		i		07 30 52	"	18	Ki	1P	09 13 40
							i		09 13 52
					"	18	Up	1P	14 03 19
					"	18	Ki	1P	16 26 35

Up = Uppsala, Ki = Kiruna, Sk = Skalistugan, Gb = Göteborg

1960				1960			
May	19	Up	1P	May	19	Up	1P
						Sk	1P
			02 14 32				23 43 32
		i	02 14 42				23 44 11
		1PP	02 16 05				
		i	02 16 20	"	20	Up	1P
		Ki	1P				04 22 04
			02 14 41			i	04 22 10
		i	02 14 48			Ki	1P
		i	02 15 17			Sk	1P
		1PP	02 16 12			Gb	1P
		Sk	1P				04 22 13
			02 14 48			Persian Gulf.	
		1PP	02 16 41				
		Gb	1P	"	20	Up	i(Sg)
			02 14 57				06 03 58
		i	02 15 04			i	06 04 05
		1PP	02 16 43			Sk	e(Sg)
		i	02 16 45				06 05 47
		Hindu Kush. (h = 200 km).		"	20	Gb	1P
							07 11 02
"	19	Up	1P	"	20	Up	1PKP
		Gb	1P				11 32 03
			02 20 29			i	11 32 09
						Ki	1PKP
"	19	Up	1P				11 31 55
			10 24 52			i	11 31 59
		i	10 25 03			i	11 32 15
		Ki	1P			Sk	1PKP
			10 25 15				11 32 00
		i	10 25 25			i	11 32 08
		Sk	1P			Gb	1PKP
			10 25 23				11 32 13
		Gb	1P			i	11 32 35
			10 24 46			Norfolk Island.	
		i	10 24 56				
		i	10 25 10	"	20	Gb	1P
		Mascarene Islands region.					15 55 51
"	19	Up	1P	"	20	Gb	1(P)
			15 17 48				16 09 58
"	19	Ki	1(P)	"	20	Sk	1P
			15 21 54				21 09 04
"	19	Up	1P	"	21	Up	1P
		Ki	1P				04 34 23
			16 57 06				
		i	16 56 12	"	21	Gb	1P
			16 56 23				05 59 01
		Fox Islands, Aleutian Islands.		"	21	Up	1P
"	19	Up	1P				06 46 11
			17 52 20			Ki	1P
		Ki	1P				06 47 26
		Gb	1P			Sk	1P
			17 53 16				06 46 50
			17 52 31			Gb	1P
							06 45 56
"	19	Up	i			i	06 46 13
			18 57 00			Near west coast of Greece.	
		i(Sg)	18 57 42	"	21	Up	1P
		i	18 57 48				08 29 30
		Ki	1P			Ki	1P
			18 54 14				08 29 12
		i(Sg)	18 54 41			i	08 29 21
		Sk	e			Sk	1P
			18 55 00				08 29 35
		i	18 55 33			Gb	1P
		i(Sg)	18 55 47				08 30 04
"	19	Ki	1P			Luzon Island, Philippine Islands.	
			23 11 57	"	21	Up	1PKP
							10 21 51
						i	10 21 56
						cont.	

Up = Uppsala, Ki = Kiruna, Sk = Skalistugan, Gb = Göteborg

1960				1960			
May 21 cont.		1PP	10 23 22	May 22	Up	1P	11 08 33
		1(PKKP)	10 32 00			1	11 08 40
		1	10 32 05			1	11 08 49
	Ki	1PKP	10 21 56		Ki	1P	11 08 12
		1	10 22 04			1	11 08 19
		1PP	10 23 48		Sk	1P	11 08 50
	Sk	1PKP	10 21 49	Babuyan Islands.(h = 200 km).			
		1	10 22 03				
		1PP	10 23 14	" 22	Ki	1PKP	12 35 46
	Gb	1PKP	10 21 43			1	12 36 24
		1	10 21 50	Chile.			
		1	10 22 08				
		1PP	10 22 59	" 22	Up	1P	12 57 05
		1	10 23 32				
Near coast of Chile.				" 22	Up	1P	13 11 06
" 21	Up	1PP	13 20 25	" 22	Gb	1P	15 42 13
	Ki	1PKP	13 19 04	" 22	Up	1P	19 01 35
		1	13 19 10	" 22	Up	1P	19 14 46
	Sk	1PKP	13 18 53			1	19 14 55
	Gb	1PKP	13 19 01			1PP	19 16 21
Chile.						1	19 16 29
" 22	Gb	1P	01 18 57			1(PKKP)	19 24 57
" 22						1	19 25 14
	Up	1PKP	08 29 55	Ki	1PKP	19 15 03	
	Ki	1PKP	08 30 05		1PP	19 16 55	
	Sk	1PKP	08 29 52	Sk	1PKP	19 14 54	
		1	08 29 56		1	19 15 03	
Chile.					1PP	19 16 24	
" 22	Up	1P	09 34 53	Gb	1PKP	19 14 47	
" 22					1	19 14 58	
	Ki	1P	09 51 18		1PP	19 16 05	
		1	09 51 21	Near coast of Chile.			
" 22	Up	1PKP	10 49 33	" 22	Ki	1PKP	19 29 42
		1	10 49 41		Sk	1PKP	19 29 36
	Ki	1PKP	10 49 41	Near coast of Chile.			
		1PP	10 51 39	" 22	Up	1PKP	19 30 01
	Sk	1PKP	10 49 31		Ki	1PKP	19 30 08
	Gb	1PKP	10 49 24		Sk	1PKP	19 29 59
	Near coast of Chile.				Gb	1PKP	19 29 54
					1	19 30 01	
" 22	Up	1PKP	10 51 45	Near coast of Chile.			
		1PP	10 53 12	" 22	Up	1PKP	19 30 15
		1PKKP	11 01 37		Gb	1PKP	19 30 14
	Ki	1PKP	10 51 46		1PP	19 31 32	
		1	10 51 52	Near coast of Chile.			
		1PP	10 53 42	" 22	Up	1P	21 21 40
	Sk	1PKP	10 51 36		Gb	1P	21 21 48
		1	10 51 52				
	Gb	1PKP	10 51 27				
		1	10 51 45				
	Near coast of Chile.						

Up = Uppsala, K1 = Kiruna, Sk = Skalistugan, Gb = Göteborg

1960				1960			
May	22	Up	1P	22 26 51	May	23	K1 1PKP 01 00 46
			1	22 30 23	cont.	Sk 1PKP	01 00 37
		K1	1P	22 26 42		Chile.	
		Sk	1P	22 26 42			
		Gb	1P	22 26 38	"	23	Up 1PKP 01 10 08
"	22	Up	1PKP	22 33 03		K1 1PKP	01 10 15
			1(PKP)	22 34 22		1	01 10 28
		K1	1PKP	22 33 11		Chile.	
		Sk	1PKP	22 33 01	"	23	K1 1PKP 01 53 58
			1(PKP)	22 34 18		Near coast of Chile.	
		Gb	1PKP	22 32 57	"	23	Up 1PKP 03 05 33
			1(PKP)	22 34 16		K1 1PKP	03 05 39
		Chile. Probably two shocks.				Sk 1PKP	03 05 29
"	22	K1	1P	23 23 43		Southern Chile.	
"	22	Up	1PKP	23 25 57	"	23	Up 1PKP 03 15 22
		K1	1PKP	23 26 05		K1 1PKP	03 15 30
		Sk	1PKP	23 25 56		1	03 15 35
		Gb	1PKP	23 25 52		Sk 1PKP	03 15 23
		Chile.				Gb 1PKP	03 15 17
"	22	K1	1PKP	23 48 34		Near coast of Chile.	
		Sk	1PKP	23 48 24	"	23	Up 1PKP 05 32 32
		Chile.				1	05 32 42
"	22	K1	1P	23 51 40		K1 1PKP	05 32 39
			1	23 51 43		1	05 32 44
		Gb	1P	23 51 31		Sk 1PKP	05 32 30
"	23	Up	1PKP	00 15 06		1	05 32 42
		K1	1PKP	00 15 13		Gb 1PKP	05 32 28
			1	00 15 23		1	05 32 37
		Sk	1PKP	00 15 05	"	23	Up 1PKP 07 28 38
		Gb	1PKP	00 15 01		K1 1PKP	07 28 39
			1	00 15 08		1	07 28 46
		Chile.				Sk 1PKP	07 28 30
"	23	Up	1PKP	00 44 42		Gb 1PKP	07 28 19
			1PP	00 46 21		1	07 28 30
			1	00 47 24		Off coast of Chile.	
			1	00 47 33	"	23	K1 1PKP 08 32 22
		K1	1PKP	00 44 50		Near coast of Chile.	
			1PP	00 46 44	"	23	Up 1(P) 09 01 11
		Sk	1PKP	00 44 41	"	23	K1 1PKP 10 11 26
		Gb	1PKP	00 44 37		1	10 11 31
			1	00 47 33		Chile.	
			1	00 47 38	"	23	Up 1PKP 10 57 06
			1	00 47 56		K1 1PKP	10 57 13
		Near coast of Chile.			cont.		
"	23	Up	1PKP	01 00 39			

Up = Uppsala, K1 = Kiruna, Sk = Skalistugan, Gb = Göteborg

1960					1960				
May	23	Sk	1PKP	10 57 05	May	25	Up	1P	05 51 09
cont.		Chile.						1	05 51 17
								1	05 51 19
"	23	K1	1(P)	11 14 41	"	25	K1	1(P)	08 49 53
"	23	K1	1P	14 19 41				1	08 50 22
								1	08 50 52
"	23	Up	1PKP	16 33 31	"	25	Up	1PKP	08 53 49
		K1	1PKP	16 33 35				1	08 54 02
		Sk	1PKP	16 33 26				1	08 55 59
		(Chile).					K1	1PKP	08 53 48
"	23	Up	1P	17 16 34				1	08 53 57
								1	08 56 15
"	24	K1	1P	02 00 05				1PP	08 56 28
			1	02 00 13			Sk	1PKP	08 53 48
								1	08 54 01
"	24	Up	1P	07 54 24					Off coast of Chile.
			1	07 54 27					
"	24	K1	1P	07 58 33	"	25	K1	1P	08 58 05
								1	08 58 19
"	24	Up	1P	08 38 05	"	25	Up	1P	10 33 21
		K1	1P	08 36 40				1	10 33 26
			1	08 37 32			K1	1P	10 33 01
		Sk	1P	08 38 19				1	10 33 14
"	24	K1	1P	08 56 32			Sk	1P	10 33 18
								1	10 33 24
"	24	Up	1P	10 13 03	"	25	Up	1P	10 59 31
		K1	1P	10 12 38	"	25	K1	1(P)	12 03 47
"	24	Up	1PKP	15 06 45				1	12 04 54
			1	15 06 47	"	25	Up	1P	12 57 45
			1	15 06 57				1	12 57 50
			1	15 07 05			K1	1P	12 58 20
			1	15 07 12				1	12 58 42
		K1	1PKP	15 06 25			Sk	1P	12 58 19
			1	15 06 30	"	25	K1	1P	13 04 40
			1	15 06 33	"	25	K1	1P	13 51 54
			1	15 06 37					Halmahera.
		Sk	1PKP2	15 06 56	"	25	Up	1PKP	15 17 35
			1	15 07 06			K1	1SKP	15 20 01
		South Island, New Zealand.							Fiji Islands. (h = 600 km).
"	24	K1	1(PKP)	20 52 02	"	25	Up	1P	17 58 13 C
			1PKP	20 52 10	"	25	Up	e(P)	19 14 36
		Sk	1PKP	20 52 06	"	25	K1	1PKP	19 40 55
		Southern Chile.							Chile.
"	25	K1	1P	04 57 34					
			1	04 57 36					
"	25	K1	1P	05 19 50					

Up = Uppsala, K1 = Kiruna, Sk = Skalistugan, Gb = Göteborg

1960					1960				
May	25	K1	1P	22 28 20	May	27	Sk	1P	01 33 53
"	26	Up	1P	00 52 27	cont.			i	01 33 57
"	26	Sk	1P	00 53 11	"	27	K1	1P	02 24 01
"	26	Sk	1P	00 59 56	"	27	Up	1PKP	03 36 32
"	26	K1	1P	01 48 17			K1	1PKP	03 36 31
"	26	Sk	1P	01 48 08			Sk	1PKP	03 36 23
"	26	Up	1P	05 14 40			Off coast of Chile.		
		K1	1P	05 15 58	"	27	Up	1P	05 51 33
		i		05 16 05				i	05 51 47
		i		05 16 19	"	27	Up	1P	18 02 52
		Sk	1P	05 15 23	"	27	Up	ePKP	23 26 07
		Albania-Greece border.					K1	1PKP	23 26 11
"	26	Up	1P	05 42 26				i	23 26 17
"	26	Sk	1P	05 43 10			Sk	ePKP	23 26 05
"	26	K1	1P	15 27 45			Gb	1PKP	23 25 57
"	26	Up	1P	18 17 03				i	23 26 06
"	26	K1	1P	18 17 04			Off coast of Chile.		
"	26	Sk	1P	18 17 18	"	27	K1	1P	23 39 48
"	26	Sk	1(P)	18 37 26				i	23 39 50
"	26	Sk	1P	19 12 14			Sk	1P	23 40 37
"	26	Sk	1P	19 52 52	"	28	K1	1P	01 41 44
"	26	Up	1P	20 15 15	"	28	K1	1PKP	03 25 05
		i		20 15 30			Chile.		
		K1	1P	20 15 09	"	28	Sk	1P	06 25 11
		i		20 15 28	"	28	Sk	1P	09 46 36
		Sk	1P	20 15 31	"	28	K1	1P	11 03 16
		i		20 15 46			Sk	1P	11 03 07
		i		20 15 51	"	28	K1	1PKP	11 24 43
		Eastern India.						i	11 24 53
"	26	Up	1P	20 38 45			Sk	1PKP	11 24 44
		i		20 38 51			Chile.		
		Sk	1P	20 39 24	"	28	Up	1P	19 27 45 C
"	27	K1	1P	00 42 23			K1	1(P)	19 28 55
"	27	i		00 42 32			Sk	1P	19 28 24
"	27	Up	1P	01 33 43			Gb	1P	19 27 26
		i		01 33 48	"	29	Sk	1P	04 55 25
		K1	1P	01 33 26	"	29	Up	ePKP	07 58 35
		i		01 34 47				1PT	07 59 58
		i		01 35 18			oont.		
		oont.					oont.		

Up = Uppsala, Ki = Kiruna, Sk = Skalistugan, Gb = Göteborg

1960				1960			
May 29	Ki	1PKP	07 58 32	May 30	Ki	1P	16 18 12
cont.		1	07 58 42	cont.	Sk	eP	16 18 46
		1PP	08 00 24		Near southwest coast of Luzon, Philippine Islands.		
	Sk	1PKP	07 58 23				
	Gb	ePKP	07 58 12				
		1	07 58 46	" 30	Up	1P	19 32 18
	Chile.					1	19 32 19
" 29	Up	1P	08 31 52 C	" 31	Up	1P	00 33 04
	Ki	1P	08 31 26			1	00 33 09
	Sk	1P	08 31 54		Ki	1P	00 33 40
	Gb	1P	08 32 06		Sk	1P	00 34 34
	Ryukyu Islands.						
" 29	Up	1PKP	08 53 28	" 31	Up	1PKP	02 59 01
	Ki	1PKP	08 53 24		Ki	1PKP	02 59 09
		1	08 53 34		Sk	1PKP	02 59 00
	Sk	1PKP	08 53 14		Gb	1PKP	02 59 00
	Gb	1PKP	08 53 04		Chile.		
	Southern Chile.			" 31	Up	1P	03 58 04
" 29	Ki	eP 1P	14 24 24		Ki	1P	03 56 21
		1	14 24 38			1S	03 57 39
	Near coast of Chile.				Sk	1P	03 57 05
" 29	Up	1PKP	21 43 02			1S	03 58 59
	Ki	1PKP	21 43 09		Gb	1P	03 58 38
		1	21 43 18		Arctic Ocean.		
	Sk	1PKP	21 43 00	" 31	Gb	1P	05 34 27
	Gb	1PKP	21 42 54	" 31	Up	1P	11 13 27
	Near coast of southern Chile.					1	11 13 36
" 30	Up	1P	07 38 31			1P'P'	11 41 31
		1	07 38 33			1	11 41 33
		1	07 39 36		Ki	1P	11 13 36
		1	07 39 38			1	11 13 43
" 30	Sk	1P	08 13 50			1P'P'	11 41 28
" 30	Sk	1P	08 15 53		Sk	1P	11 13 13
" 30	Up	1PKP	08 49 19			1P'P'	11 41 49
		1	08 49 24		Gb	1P	11 13 09
		1	08 49 28			1	11 13 17
	Ki	ePKP	08 49 04			1P'P'	11 41 38
		1	08 49 19		Leeward Islands.		
	Sk	1PKP	08 49 11	" 31	Ki	1P	11 53 31
		1	08 49 23		Sk	1P	11 53 09
	Gb	1PKP	08 49 24		Leeward Islands region.		
		1	08 49 36	" 31	Ki	1P	14 35 11
	Kermadec Islands region.					1	14 35 37
" 30	Up	1P	16 18 30	" 31	Up	1P	14 40 50
cont.				" 31	Up	1P	16 12 58

Up = Uppsala, K1 = Kiruna, Sk = Skelstugan, Gb = Göteborg

1960

May 31 K1 1P 16 38 58

" 31 Up 1(P) 17 33 36

" 31 Up 1P 19 05 53

" 31 Up 1P 21 13 09

K1 1P 21 13 04

1PP 21 17 05

Sk 1P 21 13 20

Java Sea.

(h = 600 km).

Ingrid Pettersson

Dec. 6, 1960.

Markus Båth.

1960					1960				
June	1	Up	iP	00 36 19	June	2	Up	iPKP	06 17 12
"	1	Up	iPKP	05 21 51			i		06 17 18
		Ki	e(PKP)	05 21 47		Ki	iPKP		06 17 19
			iPKP	05 22 02			i		06 17 26
			i	05 39 51			iPP		06 19 43
		Chile.				Sk	iPKP		06 17 11
"	1	Up	iP	08 08 07			i		06 17 16
"	1	Up	iP	14 59 42		Gb	iPKP		06 17 12
"	1	Up	iP	15 14 49		Southern Chile.			
"	1	Ki	iP	15 49 33	"	2	Ki	iP	07 20 17
"	1	Up	iP	18 40 19			Sk	iP	07 22 57
			i	18 40 26	"	2	Up	i	07 31 21
"	1	Up	iP	19 13 30			i		07 31 40
"	1	Sk	iP	22 45 26			Ki	iP	07 30 17
"	1	Ki	iPKP	21 32 10			Sk	iP	07 30 23
		Near coast of Chile.						i	07 32 02
"	2	Up	iP	02 05 16		Iran.			
		Ki	iP	02 05 01	"	2	Up	iPKP	08 05 56
			i	02 06 51			Ki	iPKP	08 05 46
		Sk	iP	02 05 22			Sk	iPKP	08 05 55
		Near south coast of Mindanao, Philippine Islands.					Gb	iPKP	08 05 54
"	2	Ki	i(PKP)	04 14 34		New Britain.			
			i	04 14 43	"	2	Ki	iPKP	08 55 16
"	2	Up	iP	04 30 17			Sk	iPKP	08 55 07
		Sk	iP	04 30 35		Near coast of Chile.			
					"	2	Up	iP	12 49 22 G
							i		12 49 26
							Ki	iP	12 50 02
							Sk	iP	12 49 58
							Gb	iP	12 49 35
						Iran.			
"	2	Up	iP	04 30 17	"	2	Up	iP	18 19 00
		Sk	iP	04 30 35			Ki	iP	18 19 09
						cont.			

Up = Uppsala, Ki = Kiruna, Sk = Skalistugan, Gb = Göteborg

1960				1960			
June 2				June 3			
cont.				cont.			
	Sk	iP	18 18 46			iSKP	13 44 24
	Leeward Islands region.				Gb	iPKP	13 41 52
					Fiji Islands (h = 600 km).		
" 2	Up	iP	19 02 51				
" 2	Up	iPKP	19 17 24	" 3	Gb	iP	14 04 36
		iSKP	19 20 17	" 3	Ki	iP	15 53 51
	Ki	iPKP	19 17 18	" 3	Up	iP	16 29 03
		iSKP	19 19 53			i	16 29 13
	Sk	iSKP	19 20 07			i	16 29 28
	Gb	iPKP	19 17 39		Ki	iP	16 28 21
		iSKP	19 20 27		Sk	iP	16 28 58
	Fiji Islands (h = 550 km).				Gb	iP	16 29 24
" 2	Up	iPKP	20 06 48			i	16 29 26
	Ki	iPKP	20 06 47		Near south coast of Hokkaido, Japan.		
	Gb	iPKP	20 07 02		(h = 100 km).		
	Fiji Islands (h = 550 km).						
" 3	Up	iP	03 42 09	" 3	Up	iP	17 36 50
		i	03 42 18			i	17 36 55
	Sk	iP	03 42 02	" 3	Ki	iPKP	18 36 52
	Gb	iP	03 42 30		Sk	iPKP	18 36 35
" 3	Ki	iP	04 27 43		Off coast of southern Chile.		
" 3	Gb	iP	05 26 41	" 3	Up	eP	20 07 29
" 3	Up	iP	07 25 52	" 3	Up	iP	20 34 12
		i	07 26 00		Sk	eP	20 33 53
		i	07 30 39	" 3	Up	iP	21 50 18
" 3	Sk	iP	09 58 43		Ki	iP	21 49 49
" 3	Sk	iP	10 19 30		Gulf of California.		
" 3	Up	i(P)	12 41 54	" 3	Ki	iP	22 08 07
		i	12 42 37	" 4	Up	iP	02 39 53
		i	12 42 48		Ki	iP	02 39 34
" 3	Up	iSKP	13 35 33		Sk	iP	02 39 35
	Ki	iSKP	13 35 07		Gb	iP	02 39 49
	Sk	iSKP	13 35 25		Near coast of Jalisco, Mexico.		
	Gb	iSKP	13 35 12	" 4	Up	iP	02 43 20
	Fiji Islands (h = 600 km).			" 4	Up	iP	03 02 14
" 3	Up	iPKP	13 41 44	" 4	Up	iP	03 31 01
		i	13 41 49			i	03 31 05
		i	13 44 20		Ki	iP	03 31 25
		iSKP	13 44 32			i	03 31 30
	Ki	iPKP	13 41 41		Sk	iP	03 31 25
		iSKP	13 44 06		Gb	eP	03 31 12
	Sk	iPKP	13 41 40				
		i	13 41 50				
	cont.						

Up = Uppsala, Ki = Kiruna, Sk = Skalistugan, Gb = Göteborg

1960				1960			
June 4	Up	iP	08 21 00	June 6	Up	iP	09 06 44
	Ki	iP	08 21 27				
" 4	Up	iP	08 56 47	" 6	Up	iP	09 51 59
	Ki	iP	08 57 54	" 6	Up	iP	11 56 04
	Sk	iP	08 57 25	" 6	Up	iPKP	23 48 37
" 4	Up	iP	10 26 50		Ki	iPKP	23 48 27
	Ki	iP	10 26 19		Gb	iPKP	23 48 47
	Sk	iP	10 26 46		South of Fiji Islands.		
	Volcano Islands region.				(h = 600 km).		
" 4	Up	iP	11 12 08	" 7	Ki	iPKP	05 41 42
	Ki	iP	11 12 45		Sk	iPKP	05 41 36
	Sk	iP	11 12 04		Southern Chile.		
	Gb	iP	11 11 42	" 7	Up	iP	13 07 45
	Azores Islands region.					i	13 07 50
" 5	Up	iP	19 13 55			i	13 08 48
" 5	Up	iPKP	19 50 29		Ki	iP	13 06 51
		i	19 50 32		Sk	iP	13 07 28
		i	19 50 48		Gb	iP	13 08 06
	Sk	iPKP	19 50 22		Near east coast of		
		i	19 50 27		Kamohatka.		
	Gb	iPKP2	19 50 49	" 7	Sk	iP	13 14 55
	Kermadec Islands.				Off coast of southern Chile.		
" 6	Up	iP	01 29 30	" 7	Sk	iP	14 21 26
		i	01 29 33	" 7	Up	iP	15 44 06
		i	01 29 38			i	15 44 14
	Ki	iP	01 28 51			i	15 44 19
		i	01 28 54		Sk	iP	15 44 48
		i	01 29 03		Gb	eP	15 44 26
		iPP	01 31 25		Arabian Sea.		
	Sk	iP	01 29 04	" 8	Up	iP	06 40 23
		i	01 29 07			i	06 40 27
	Gb	iP	01 29 33		Sk	iP	06 39 16
		i	01 29 37	" 8	Up	iP	08 35 41
		i	01 29 44			i	08 35 49
	Off coast of northern			" 8	Sk	iP	08 39 53
	California.			" 8	Up	iP	09 34 41
" 6	Up	iPKP	06 14 51			i	09 34 44
		i	06 14 55			i	09 34 57
		i	06 15 27			i	09 35 06
		i	06 15 53		Probably explosion.		
	Ki	iPKP	06 15 03	" 8	Up	iP	09 36 35
		i	06 15 31			i	09 36 51
	Sk	iPKP	06 14 50		Probably explosion.		
		i	06 14 55				
		i	06 15 26				
	Gb	iPKP	06 14 42				
		i	06 14 47				
	Near coast of Chile.						

1960				1960			
June 8	Up	iP	16 27 39	June 10	Ki	iPKP	09 27 03
	Ki	iP	16 28 05		Sk	iPKP	09 27 37
		i	16 28 13		Samoa Islands region.		
	Sk	iP	16 27 28				
		i	16 27 36	" 10	Up	iP	14 22 03
	Gb	iP	16 27 19				
	North Atlantic Ocean.			" 10	Sk	iP	15 09 38
" 9	Up	iP	02 49 35	" 10	Up	iP	15 22 58
		i	02 49 42			i	15 23 00
		i	02 49 53				
		iS	02 53 54	" 10	Up	i(P)	16 21 27
		i	02 53 56			i	16 23 01
	Ki	iP	02 50 18				
	Sk	e	02 50 32	" 10	Up	iP	19 10 14
		e	02 55 41				
	Gb	iP	02 49 41	" 10	Up	iP	20 52 09
		i	02 49 52				
		iPP	02 50 13	" 11	Up	iPKP	15 33 00
	Eastern Turkey.					i	15 33 05
" 9	Up	iP	05 03 15			iPP	15 34 23
	Ki	iP	05 04 02		Ki	iPKP	15 32 48
		i	05 04 45			i	15 32 58
" 9	Sk	iP	05 12 00		Sk	iPKP	15 32 59
					Gb	iPKP	15 33 12
" 9	Up	iP	08 28 31			i	15 33 21
		i	08 28 34		D'Entrecasteaux Islands.		
		i	08 28 36	" 11	Up	iPKP	16 56 33
	Sk	iP	08 29 13			iPP	16 57 57
	Strait of Otranto.				Ki	iPKP	16 56 21
" 9	Sk	iPKP	11 43 12			i	16 56 27
		iPKS	11 46 37		Gb	iPKP	16 56 45
	New Hebrides Islands.					i	16 56 51
" 9	Up	iP	16 57 46		D'Entrecasteaux Islands.		
" 9	Up	iP	17 54 37	" 11	Ki	e(P)	17 07 16
		i	17 54 46	" 12	Up	iPKP	04 15 03
	Ki	iP	17 55 13			iSKP	04 17 52
	Sk	iP	17 54 30			i	04 18 06
		i	17 54 39		Ki	iPKP	04 14 54
	Gb	iP	17 54 11			iSKP	04 17 30
		i	17 54 20		Gb	iPKP	04 15 17
	Azores Islands.				South of Fiji Islands.		
" 9	Up	iP	20 38 09		(h = 600 km).		
	Sk	iP	20 37 14	" 12	Up	iPKP	07 17 30 D
" 9	Up	iP	23 07 25			i	07 17 35
	Ki	iP	23 07 27		Gb	iPKP	07 17 40
" 10	Gb	iP	05 07 21			i	07 17 51
					Kermadec Islands.		
					(h = 250 km).		
				" 12	Up	iPKP	07 38 40
					cont.		

Up = Uppsala, Ki = Kiruna, Sk = Skälstugan, Gb = Göteborg

1960					1960				
June 12	Ki	iPKP	07 39 14		June 15	Up	iP	16 09 15	
cont.	South Pacific Ocean.				" 15	Sk	iP	20 33 53	
" 12	Up	iP	10 05 51				i	20 34 00	
" 12	Ki	iPKP	15 24 11		" 15	Up	iP	20 38 23	
	Southern Chile.				" 15	Up	iPKP	23 09 32	
" 12	Up	iP	23 14 14				i	23 09 37	
		i	23 14 28				i	23 09 40	
		i	23 17 50			Ki	iPKP	23 09 16	
		i	23 18 03			Sk	iPKP	23 09 25	
		i	23 19 51				i	23 09 35	
	Ki	iP	23 15 33			Gb	iPKP	23 09 42	
		i	23 23 31			Kermadec Islands.			
	Sk	iP	23 15 04		" 15	Up	iP	23 41 40	
		i	23 15 07				iPP	23 46 02	
		i	23 22 05			Ki	iP	23 41 21	
" 13	Ki	iPKP	06 06 22				i	23 41 27	
	Sk	iPKP	06 06 14			Western New Guinea.			
	Off coast of southern Chile.				" 15	Up	iPKP	23 51 16	
" 14	Up	iP	00 36 09				i	23 51 21	
							i	23 51 27	
" 14	Ki	iPKP	03 13 25			Ki	iPKP	23 51 00	
	Near coast of southern Chile.					Sk	iPKP	23 51 10	
" 14	Up	iP	04 38 04			Gb	iPKP	23 51 29	
	Kurile Islands.					South of Fiji Islands.			
" 14	Up	iP	11 17 58			(h = 600 km).			
" 14	Up	iPKP	23 57 03		" 16	Ki	iP	03 37 37	
	D'Entrecasteaux Islands.					Mariana Islands.			
" 15	Up	iP	03 05 21			(h = 150 km).			
" 15	Up	iP	13 21 29		" 16	Ki	iP	06 50 31	
" 15	Up	iP	15 48 05				i	06 50 40	
		i	15 48 18			Near coast of Samar,			
		i	15 48 53			Philippine Islands.			
		i	15 49 10		" 16	Up	iP	08 55 38	
	Ki	iP	15 47 23		" 16	Ki	e(P)	09 21 25	
		i	15 47 36				i	09 21 34	
	Sk	iP	15 47 58			Sk	e(P)	09 22 44	
		i	15 48 10			Local ?			
	Gb	i	15 48 25		" 16	Up	iP	09 23 10	
		i	15 48 32			Ki	iP	09 24 43	
	Near north coast of Honshu, Japan.				" 16	Ki	iP	10 08 29	
							i	10 08 44	
						Mariana Islands.			

Up = Uppsala, Ki = Kiruna, Sk = Skalistugan, Gb = Göteborg

1960				1960			
June 16	Up	iP	10 31 39	June 17	Ki	iP	18 10 50
	Ki	iP	10 32 01				
	Sk	iP	10 32 01	" 17	Up	i(P)	18 16 30
	Indian Ocean.				Ki	iP	18 15 47
" 16	Ki	iP	11 46 30	" 17	Ki	iP	20 46 21
" 16	Ki	iP	11 53 47	" 18	Ki	iP	01 52 42
" 16	Ki	e	12 41 21	" 18	Up	iP	02 09 44
		i	12 41 44			i	02 09 56
	Sk	i	12 42 49			i	02 10 32
		i	12 42 53		Ki	iP	02 10 51
	Local ?				Sk	iP	02 10 23
" 16	Up	iP	16 16 45			i	02 10 36
	Ki	iP	16 16 49	" 18	Up	eP	02 52 25
	Sk	iP	16 17 09			i	02 52 35
	Tadzhikistan, USSR.				Sk	iP	02 52 13
" 17	Up	e(P)	03 34 27	" 18	Up	iP	13 15 43
" 17	Up	iPKP	05 20 47		Gb	iP	13 15 10
		i	05 24 04	" 18	Ki	iP	14 04 56
	Ki	iPKP	05 20 39	" 18	Sk	iP	23 00 15
		iSKP	05 23 10	" 18	Up	iP	23 19 50
	Sk	iPKP	05 20 50			i	23 19 52
	Fiji Islands.					i	23 22 30
	(h = 600 km).				Ki	i(P)	23 21 16
" 17	Ki	iP	14 03 36	" 18	Up	iP	23 45 41
" 17	Up	iP	15 23 50			i	23 45 43
" 17	Up	iP	16 35 26			i	23 46 57
" 17	Up	iP	16 46 31		Ki	iP	23 45 40
		i	16 46 38			i	23 45 53
		i	16 46 51		Near south coast of		
	Ki	iP	16 45 35		Sumatra.		
		i	16 45 44	" 19	Up	iP	02 08 01
		i	16 46 29		Ki	iP	02 07 13
	Sk	iP	16 46 15	" 19	Up	iP	02 32 50
		i	16 46 49			i	02 34 54
	Gb	iP	16 46 56		Ki	iP	02 32 50
		i	16 47 08			i(P)	02 35 46
		i	16 47 16		Andaman Islands.		
	Andreanof Islands,			" 19	Up	iPKP	12 40 12
	Aleutian Islands.				Ki	iPKP	12 40 03
" 17	Up	iP	17 03 26		Fiji Islands region.		
" 17	Up	iP	17 14 59		(h = 500 km).		
	Ki	eP	17 15 06				

Up = Uppsala, Ki = Kiruna, Sk = Skalistugan, Gb = Göteborg

1960

June 19 Up iP 12 45 40
i 12 46 54
Ki iP 12 44 55
Kurile Islands.
" 19 Up iP 17 29 45
i 17 29 49
i 17 29 54
Ki iP 17 29 11
i 17 29 17
Sk iP 17 29 41
Gb iP 17 30 02
Bonin Islands.
" 20 Up iPKP 02 20 05
i 02 20 08
i 02 20 15
i 02 21 43
Ki iPKP 02 20 12
i 02 20 25
iPP 02 22 09
Sk iPKP 02 20 06
Gb iPKP 02 20 02
Near coast of Chile.
" 20 Ki iP 03 35 23
" 20 Up i(Sg) 05 35 05
i 05 35 18
i 05 35 42
Ki iP 05 32 28
i 05 32 35
iSg 05 33 22
Sk iP 05 32 35
iSg 05 33 22
i 05 33 25
i 05 33 39
Off coast of Norway.
" 20 Ki iP 08 12 06
" 20 Up iP 10 21 40
i 10 21 46
" 20 Up iPP 13 20 18
i 13 20 40
Ki iPKP 13 18 47
i 13 18 57
iPP 13 20 45
Sk iPKP 13 18 40
i 13 18 49
iPP 13 20 15
Chile.

1960

June 20 Ki aP 13 43 20
" 20 Ki iPKP 14 42 40
Near coast of southern Chile.
" 20 Ki iP 16 43 46
" 20 Up iP 17 06 45
Ki iP 17 06 00
Sk iP 17 06 29
i 17 06 37
Kodiak Island, Alaska.
" 20 Ki iPKP 17 18 38
Sk iPKP 17 18 30
Off coast of Chile.
" 20 Ki iP 17 57 58
" 20 Up iP 23 08 21
i 23 08 24
Ki iP 23 07 43
Sk iP 23 08 16
Gb iP 23 08 45
Honshu, Japan.
" 21 Ki iP 00 15 02
" 21 Ki iP 12 35 01
" 21 Up iP 12 57 05
Ki iP 12 56 48
Molucca Passage.
" 21 Ki iP 13 53 43
" 21 Up iPKP 21 52 45
Ki iPKP 21 53 01
Sk iPKP 21 52 51
Gb iPKP 21 52 45
Sandwich Islands region.
" 21 Up iP 23 32 11
i 23 32 27
" 22 Up iP 00 06 31
i 00 06 35
Sk iP 00 06 25
" 22 Up iPKP 02 47 10
i 02 47 14
Ki iPKP 02 46 53
cont.

Up = Uppsala, Ki = Kiruna, Sk = Skalistugan, Gb = Göteborg

1960				1960			
June 22	Sk	iPKP	02 47 03	June 23	Ki	i(P)	19 13 50
cont.	Gb	iPKP	02 47 23				
		Kermadec Islands.		" 23	Up	iP	19 34 13
" 22	Up	i(P)	05 55 28		Ki	i(P)	19 33 24
		i	05 55 35	" 23	Up	iP	22 00 49
" 22	Ki	iPKP	06 59 29			i	22 00 51
		Near coast of Chile.			Sk	iP	22 00 40
" 22	Ki	iPKP	08 31 06	" 23	Up	iP	23 41 26
		i	08 31 12		Ki	iP	23 40 32
	Sk	iPKP	08 30 58		Sk	iP	23 41 10
		Near coast of southern Chile.			Gb	i(P)	23 42 51
" 22	Up	iP	16 17 26	" 24	Up	iP	03 48 38
" 22	Up	iP	16 21 45			iSg	03 49 21
		i	16 21 57			i	03 49 23
	Ki	iP	16 22 17		Ki	iSg	03 51 57
	Sk	iP	16 22 14		Sk	iP	03 48 32
	Gb	iP	16 21 56			iSg	03 49 09
		Arabian Sea.				i	03 49 19
" 22	Sk	iP	17 56 03		Gb	i	03 49 58
	Gb	iP	17 55 18			iSg	03 50 06
" 22	Up	i(P)	18 41 51	" 24	Up	iPKP	22 54 31
		i	18 41 57			i	22 54 40
" 22	Ki	iPKP	20 32 21			i	22 54 44
	Sk	iPKP	20 32 11		Ki	iPKP	22 54 13
		Near coast of Chile.			Sk	iPKP	22 54 25
" 22	Up	iP	23 39 52			i	22 54 34
		i	23 39 55		Gb	iPKP	22 54 40
	Ki	iP	23 38 59			Kermadec Islands.	
		iPcP	23 39 44	" 25	Up	iPKP	02 22 25
	Sk	iP	23 39 30			i	02 22 33
	Gb	iP	23 40 09			i	02 22 34
		Andreanof Islands, Aleutian Islands.			Ki	iPKP	02 22 04
" 23	Up	iP	02 38 24		Sk	iPKP	02 22 18
	Ki	iP	02 38 18			i	02 22 33
	Sk	iP	02 38 39		Gb	iPKP	02 22 33
" 23	Up	i(P)	03 53 56			i	02 22 42
		i	03 54 04			Kermadec Islands.	
" 23	Up	iP	05 43 33	" 25	Up	iP	12 26 54
" 23	Up	iP	09 26 39		Sk	iP	12 27 32
					Gb	iP	12 26 42
				" 25	Sk	iP	13 18 14
				" 25	Up	iP	14 06 12
					Sk	iP	14 06 00
					Gb	iP	14 05 57
						i	14 06 38
						Colombia.	

Up = Uppsala, Ki = Kiruna, Sk = Skalistugan, Gb = Göteborg

1960

June 25	Up	iPKP	15 00 56
		i	15 01 05
		i	15 01 13
	Sk	iPKP	15 00 49
	Gb	iPKP	15 01 03
	Kermadec Islands.		
" 25	Up	iPKP	15 01 36
	Sk	iPKP	15 01 29
		i	15 01 38
	Gb	iPKP	15 01 44
	Kermadec Islands.		
" 25	Up	iPKP	15 18 48
	Sk	iPKP	15 18 39
	Gb	iPKP	15 18 52
		i	15 19 00
	Kermadec Islands.		
" 25	Up	iP	20 04 04
	Sk	iP	20 04 13
		i	20 04 19
	Gb	iP	20 04 31
" 25	Sk	iP	21 16 43
" 25	Sk	iP	23 57 55
" 26	Up	iP	23 59 47
		i	00 00 16
	Sk	iP	23 58 55
		i	23 59 06
	Gb	eP	23 59 31
" 27	Up	iP	10 23 14
		i	10 23 20
" 27	Up	iP	16 36 40
" 27	Up	iPKP	17 10 17
		i	17 10 29
	Ki	iPKP	17 09 57
		i	17 10 10
	Sk	iPKP	18 10 10
		i	17 10 23
	Gb	iPKP	17 10 20
	Kermadec Islands.		
" 27	Sk	i(PKP)	17 18 39
" 27	Gb	iP	17 48 54
		i	17 49 10
" 27	Up	iPKP	17 53 40
	cont.		

1960

June 27		i	17 53 44
cont.	Ki	iPKP	17 53 23
	Sk	iPKP	17 53 34
		i	17 53 41
	Gb	iPKP	17 53 46
	Kermadec Islands.		
" 28	Ki	iP	08 32 49
" 29	Ki	iPKP	02 16 26
	Sk	iPKP	02 16 18
	Southern Chile.		
" 29	Up	iPKP	04 49 00
		i	04 49 06
		i	04 49 19
	Ki	iPKP	04 48 42
		i	04 48 52
	Sk	iPKP	04 48 54
	Gb	iPKP	04 49 09
		i	04 49 18
	Kermadec Islands.		
" 29	Up	iP	05 26 09
		i	05 26 14
	Ki	iP	05 25 36
	South of Honshu, Japan. (h = 500 km).		
" 29	Up	iP	10 28 54
		i	10 29 04
	Ki	iP	10 29 32
	Gb	iP	10 28 42
	Atlantic Ocean.		
" 29	Up	iP	17 17 57
		i	17 18 04
	Ki	iP	17 17 03
		i	17 17 11
	Sk	iP	17 17 33
		i	17 17 46
	Gb	iP	17 18 26
	Fox Islands, Aleutian Islands.		
" 29	Up	iP	18 24 09
" 29	Up	i	23 49 33
		i(Sg)	23 50 16
	Ki	eP	23 47 04
		i	23 47 42
		iSg	23 47 57
	Sk	iP	23 47 06
		i	23 47 50
	cont.		

Up = Uppsala, Ki = Kiruna, Sk = Skalistugan, Gb = Göteborg

1960

June 29 iSg 23 48 02
cont. Off coast of Norway.

"	30	Up	iP	15 41 35
"	30	Up	iP	16 52 16
			i	16 52 29
			i	16 52 34
"	30	Up	iP	19 19 01
			i	19 19 14
			i	19 19 29
"	30	Up	iP	20 08 38
			i	20 08 57
			i	20 09 08
		Ki	iP	20 07 42
			i	20 07 58
		Sk	iP	20 08 10
			iPoP	20 09 09
		Gb	iP	20 08 52
			i	20 09 13
		Kenai Peninsula, Alaska.		
"	30	Ki	iP	21 11 43
"	30	Up	iP	21 51 26
			i	21 51 40
			i	21 51 44

Ingrid Pettersson
Feb. 20, 1961.

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PRELIMINARY
SEISMOLOGICAL BULLETIN

U P P S A L A, K I R U N A, S K A L S T U G A N, and G Ö T E B O R G

Uppsala (Up): $59^{\circ}51.5'N$, $17^{\circ}37.6'E$; h = 14 m.
Kiruna (Ki): $67^{\circ}50.4'N$, $20^{\circ}25.0'E$; h = 390 m.
Skalstugan (Sk): $63^{\circ}34.8'N$, $12^{\circ}16.8'E$; h = 580 m.
Göteborg (Gb): $57^{\circ}41.9'N$, $11^{\circ}58.7'E$; h = 66 m.

J U L Y 1 - 31, 1960
.....

July 1	Ki	1P	00 10 23	July 2	Up	1P	12 54 15
	Sk	1P	00 10 45			i	12 54 22
			Soemba Island.			i	12 56 49
" 1	Gb	1P	07 16 27		Ki	1P	12 53 37
						1pP	12 55 54
" 1	Gb	1P	07 47 56		Sk	1P	12 54 12
						i	12 56 38
" 1	Up	1P	08 09 24		Gb	1P	12 54 38
	Ki	1P	08 08 24				Sea of Japan.
		i	08 08 30				(h = 550 km).
	Sk	1P	08 09 06				
	Gb	1P	08 09 45	" 2	Up	1P	22 04 25
			Komandorskie Islands.		Ki	1P	22 03 31
" 1	Gb	1P	09 57 04				Andreanof Islands,
							Aleutian Islands.
" 1	Ki	1P	17 53 39	" 3	Up	1P	03 30 23
			Mariana Islands.		Ki	1P	03 29 28
			(h = 60 km).		Sk	1P	03 30 19
" 2	Up	1P	04 40 35				Andreanof Islands,
	Ki	1P	04 39 42				Aleutian Islands.
			Andreanof Islands,	" 3	Gb	1P	04 56 57
			Aleutian Islands.	" 3	Up	1P	05 27 12
" 2	Ki	1PKP	09 17 20		Ki	1P	05 26 17
			Southern Chile.				Andreanof Islands,
" 2	Up	1PKP	12 14 32				Aleutian Islands.
		i	12 14 38	" 3	Up	1P	07 27 19
		i	12 17 57		Ki	1P	07 26 24
	Ki	1PKP	12 14 47				Andreanof Islands,
		i	12 17 56				Aleutian Islands.
	Sk	1PKP	12 14 38	" 3	Up	1P	20 31 48
		i	12 18 01			i	20 31 58
			Sandwich Islands. Th phases			i	20 39 21
			at 12.17 - 12.18 probably			i	20 41 05
			belong to another earth-				cont.
			quake.				

Up = Uppsala, Ki = Kiruna, Sk = Skalistugan, Gb = Göteborg

1960					1960				
July 3		iP'P'	20 59 59		July 5	Up	iP	05 18 59	
cont.		i	21 00 13			Ki	iP	05 18 05	
	Ki	iP	20 30 54				i	05 18 50	
		i	20 31 04			Sk	e(P)	05 19 00	
		iP'P'	21 00 16			Andreanof Islands,			
	Sk	iP	20 31 37			Aleutian Islands.			
		iP'P'	21 00 13						
	Gb	iP	20 32 11		" 5	Ki	iPKP	06 04 30	
	Andreanof Islands,					Near coast of Chile.			
	Aleutian Islands.								
" 3	Up	iP	23 03 36		" 5	Gb	i(P)	07 19 34	
		i	23 03 46						
	Ki	iP	23 02 43		" 5	Ki	iP	15 59 24	
	Sk	iP	23 03 15		" 5	Up	iP	18 12 31	
	Gb	iP	23 03 51		" 5				
	Andreanof Islands,					Ki	iP	21 27 49	
	Aleutian Islands.					Sk	iP	21 27 33	
" 3	Up	iP	23 51 18			Gb	iP	21 27 29	
						Western Brazil (h = 600 km).			
" 3	Up	iP	23 58 17		" 6	Up	iP	05 24 11	
	Ki	iP	23 57 43				ipP	05 24 58	
" 4	Ki	iP	03 51 30				i	05 30 24	
						Ki	iP	05 24 20	
" 4	Up	iP	04 20 47				i	05 24 30	
	Ki	iP	04 20 12				i	05 24 39	
	Gb	iP	04 20 45				i	05 29 39	
" 4	Up	iP	04 39 22			Sk	iP	05 24 37	
	Ki	iP	04 38 35				i	05 26 21	
		i	04 38 42				i	05 29 46	
	Sk	iP	04 38 53			Gb	iP	05 24 30	
		iP'P'	05 08 14				i	05 24 38	
	Gb	iP	04 39 26			Hindu Kush region (h=200 km).			
	Queen Charlotte Islands.				" 6	Up	iP	13 27 54	
" 4	Up	iP	13 20 57			Ki	iP	13 27 41	
		i	13 21 03			Sk	iP	13 28 09	
	Ki	iP	13 20 07		" 6	Ki	iP	14 55 58	
	Sk	iP	13 20 19			Molucca Passage (h = 200 km).			
	Gb	iP	13 21 09		" 6	Up	iP	23 21 51	
	Queen Charlotte Islands.					Ki	iP	23 21 53	
" 4	Up	iP	14 00 58			Tadzhik, USSR.			
	Ki	iP	14 00 01		" 6	Ki	iP	23 23 46	
" 4	Ki	iP	14 18 47			Sk	iP	23 23 49	
" 4	Ki	iP	21 48 33		" 6	Ki	iP	23 31 05	
" 4	Ki	iPKP	21 58 34			Banda Sea.			
	Southern Chile.				" 6	Up	iP	23 33 00	
						Sk	iP	23 33 38	

Up = Uppsala, Ki = Kiruna, Sk = Skalistugan, Gb = Göteborg

1960					1960				
July 7	Ki	iP	16 06 23		July 8	Up	i(P)	19 43 11	
	Gb	iP	16 29 36						
" 7	Up	iP	17 14 57		" 9	Up	iP	00 35 53	
	Gb	iP	17 14 57			Ki	iP	00 35 00	
" 7	Ki	iPKP	17 56 50			Gb	iP	00 36 10	
		Chile.				Andreanof Islands, Aleutian Islands.			
" 7	Up	iP	21 27 54		" 9	Up	iP	00 54 22	
						Ki	iP	00 53 54	
" 7	Ki	iPKP	22 00 07			Sk	iP	00 54 35	
		Near coast of Chile.				Ryukyu Islands.			
" 7	Up	iP	22 45 06		" 9	Ki	iP	03 41 39	
	Ki	iP	22 45 10		" 9	Up	iP	04 15 46	
		i	22 45 18			Ki	iP	04 16 53	
	Sk	iP	22 45 26			Sk	iP	04 16 25	
		i	22 45 34		" 9	Up	iP	08 21 52	
" 7	Ki	iP	23 54 04			Ki	iP	08 21 40	
" 8	Up	iP	07 48 05			Sk	iP	08 22 04	
	Ki	iP	07 47 53		" 9	Ki	iP	09 31 21	
	Sk	iP	07 47 19		" 9	Ki	iP	09 34 31	
" 8	Up	iP	10 20 14		" 9	Ki	iP	18 06 37	
		i	10 20 19		" 9	Up	iP	22 47 17	
	Ki	iP	10 19 21				i	22 47 20	
	Sk	iP	10 19 52			Ki	iP	22 48 35	
		Andreanof Islands, Aleutian Islands.				Sk	iP	22 48 01	
" 8	Up	iP	13 02 58			Gb	iP	22 47 09	
	Ki	iP	13 02 27			Southern Yugoslavia.			
	Sk	iP	13 02 57		" 9	Ki	iP	23 33 35	
	Gb	iP	13 03 20		" 10	Up	iP	00 17 57	
		Near south coast of Kyushu, Japan.					i	00 18 08	
" 8	Ki	eP	13 30 32				i	00 18 21	
" 8	Ki	iP	14 58 44			Ki	iP	00 17 58	
		Banda Sea.					i	00 18 05	
" 8	Up	iPKP	15 42 29			Sk	iP	00 18 12	
	Sk	iPKP	15 42 25			Gb	iP	00 18 12	
		New Hebrides Islands.				Off west coast of Sumatra.			
" 8	Up	iP	15 45 34		" 10	Up	e(Sg)	01 02 39	
" 8	Up	iP	17 00 42			Ki	eP	00 59 07	
	Ki	iP	16 59 55				i	01 00 02	
	Sk	iP	17 00 31				i	01 00 12	
						Sk	eP	00 59 23	
							iSg	01 00 08	

Up = Uppsala, Ki = Kiruna, Sk = Skalistugan, Gb = Göteborg

1960				1960			
July 10	Up	iP	13 52 24	July 13	Sk	eP	06 42 16
	Ki	iP	13 52 17				
	Near coast of Nicaragua.			" 13	Ki	iPKP	08 15 02
	(h = 150 km).					i	08 15 16
					Bouvet Island region.		
" 10	Up	iP	13 57 04	" 13	Up	iP	10 25 07
		i	13 57 05		Ki	iP	10 26 17
	Ki	iP	13 57 41		Sk	iP	10 25 46
		iPP	13 59 25			i	10 25 52
	Sk	iP	13 57 39		Greece.		
	Persian Gulf.						
" 10	Ki	iPKP2	20 42 54	" 13	Up	iP	13 05 32
	South of Australia.					i	13 05 44
						i	13 05 55
" 11	Up	iP	07 19 21		Ki	iP	13 06 48
						i	13 06 53
" 11	Up	iPKP	07 53 07			i	13 15 44
	Ki	iPKP	07 53 17		Sk	iP	13 06 17
		i	07 55 01			i	13 06 22
	Sk	iPKP2	07 53 40		Gb	iP	13 05 24
	South of Australia.				Greece.		
" 11	Up	iP	12 05 22	" 13	Sk	iP	15 22 14
		i	12 05 23				
	Sk	iPoP	12 05 33	" 13	Up	iP	16 36 57
	Andreanof Islands,					i	16 37 03
	Aleutian Islands.				Ki	iP	16 36 12
" 11	Up	iPKP	12 14 32			ipP	16 36 46
	Sk	iPKP	12 14 27		Sk	iP	16 36 07
	Tonga Islands region.					ipP	16 36 43
					Oaxaca, Mexico (h = 150 km).		
" 11	Up	iP	18 26 42	" 13	Up	i(P)	16 48 03
" 12	Up	iP	12 11 21	" 13	Up	iP	20 39 31
" 12	Ki	iP	14 13 08		Ki	iP	20 38 52
	Sk	iP	14 12 18		Sk	iP	20 39 26
	Italy.				Off coast of Honshu, Japan.		
" 12	Up	iP	17 11 38	" 13	Ki	i(pP)	21 59 19
		iPoP	17 12 01		Central Peru (h = 150 km).		
	Ki	iP	17 10 56	" 14	Ki	iP	03 47 07
	Off coast of northern			" 14	Sk	iP	04 21 51
	Honshu, Japan.				Tolmezzo region, Italy.		
" 13	Up	iP	02 41 23	" 14	Sk	iP	04 26 57
		i	02 41 26	" 14	Up	i(P)	05 09 05
	Ki	iP	02 40 40	" 14	Sk	iP	07 19 52
	Sk	iP	02 41 15				
	Gb	iP	02 41 44				
	Near south coast of						
	Hokkaido, Japan.						

Up = Uppsala, Ki = Kiruna, Sk = Skalistugan, Gb = Göteborg

1960					1960				
July 14	Ki	iP	08 16 37		July 15	Sk	iP	21 44 57	
		i	08 16 40						
" 14	Up	iP	10 40 26		" 15	Sk	iP	23 49 01	
		i	10 40 44		" 16	Up	iP	00 27 35	
		i	10 40 51			Ki	iP	00 28 07	
	Ki	iP	10 40 09			Sk	iP	00 28 06	
		i	10 40 14		" 16	Ki	iP	01 18 20	
	Sk	iP	10 40 30		" 16	Sk	iP	04 25 09	
	Molucca Passage.				" 16	Up	iP	17 30 01	
" 14	Up	iPKP	11 03 25				i	17 30 05	
	Ki	iPKP	11 03 15			Ki	iP	17 29 32	
	Sk	iPKP	11 03 19			Sk	iP	17 29 58	
	Gb	iPKP	11 03 38			Gb	iP	17 30 16	
	South of Fiji Islands.					Mariana Islands region.			
	(h = 600 km).					(h = 300 km).			
" 14	Up	i(P)	11 35 39		" 16	Up	iPg	20 45 32	
" 14	Up	iP	18 49 10				i	20 45 43	
	Ki	iP	18 49 57				iSg	20 45 47	
	Gb	iP	18 49 08			Ki	eSg	20 49 42	
	Ethiopia.					Sk	eSg	20 48 00	
" 14	Up	iP	22 18 44		" 16	Up	iP	21 29 09	
		i	22 18 47			Ki	iP	21 28 09	
		i	22 18 50				i	21 28 13	
		i	22 20 50			Sk	iP	21 28 43	
	Ki	iP	22 18 53				i	21 28 48	
	Sk	iP	22 19 10			Gb	iP	21 29 26	
	Gb	iP	22 19 07			Seward Peninsula, Alaska.			
	Hindu Kush (h = 100 km).				" 16	Ki	iP	22 11 26	
" 15	Up	iP	05 13 48			Sk	iP	22 12 00	
	Ki	iP	05 14 25			Seward Peninsula, Alaska.			
		i	05 14 38		" 16	Sk	iP	22 45 03	
	Sk	iP	05 14 13				i	22 45 13	
	Gb	iP	05 13 47		" 17	Up	iP	02 28 06	
	Off northwest coast of					Ki	iP	02 27 41	
	Madagascar.					Sk	iP	02 28 12	
" 15	Up	i(P)	08 01 47			Samar, Philippine Islands.			
" 15	Up	e(P)	12 48 08		" 17	Up	iP	05 22 18	
	Ki	iP	12 47 15				i	05 23 52	
" 15	Up	iP	14 21 35			Ki	iP	05 22 27	
" 15	Ki	iP	14 47 51			Sk	iP	05 22 44	
" 15	Sk	iP	18 15 25				i	05 24 25	
" 15	Sk	iP	19 36 56			Gb	iP	05 22 41	
						Hindu Kush (h = 200 km).			

Up = Uppsala, Ki = Kiruna, Sk = Skalistugan, Gb = Göteborg

1960					1960			
July 17	Up	iP	12 01 55		July 18	Sk	iP	16 59 48
	Ki	iP	12 02 04		cont.		iPP	17 01 22
	Near coast of Venezuela. (h = 100 km).					Gb	iP	16 59 40
						Hindu Kush.		
" 17	Ki	iP	19 54 56		" 18	Up	iP	19 01 59
	Ascension Island region.						i	19 02 01
" 17	Ki	iP	20 13 32				i	19 02 08
" 18	Up	iP	01 05 50				i	19 02 14
		i	01 05 58			Ki	iP	19 02 34
		i	01 06 03			Sk	iP	19 02 27
	Ki	iP	01 05 50			Gb	iP	19 02 01
		i	01 06 08			Amirante Islands.		
	Sk	iP	01 06 11	" 19	Up	iP		03 26 10
	Gb	iP	01 06 12	" 19	Ki	iP		04 38 57
	Nicobar Islands.			" 19	Up	iP		07 50 46
" 18	Up	iP	01 27 11	" 19	Up	ipP		16 16 32
		i	01 27 19		Ki	ipP		16 16 17
	Ki	iP	01 27 12			i		16 16 38
	Nicobar Islands.				Sk	ipP		16 16 12
" 18	Up	iP	01 55 49			i		16 16 31
		i	01 55 51		Chiapas, Mexico (h=200 km).			
		i	01 55 57	" 19	Ki	iP		18 42 22
	Ki	iP	01 55 51		Mariana Islands (h=100 km).			
	Sk	iP	01 56 12	" 19	Up	iP		19 34 24
	Gb	iP	01 56 12	" 19	Ki	iP		21 00 00
	Nicobar Islands.			" 19	Ki	i(P)		21 15 24
" 18	Ki	iPKP	02 01 43	" 19	Ki	iP		22 17 45
	Sk	iPKP	02 01 55		Sk	iP		22 18 22
	New Britain region. (h = 200 km).					i		22 20 02
" 18	Up	iP	04 49 18			i		22 20 08
	Ki	iP	04 48 34	" 19	Ki	iP		22 22 50
	Sk	iP	04 49 16	" 20	Up	iP		09 23 46
	Lake Baikal, USSR.					i		09 23 50
" 18	Sk	iP	06 33 44		Gb	iP		09 23 37
" 18	Up	iP	09 37 51	" 20	Up	iP		09 41 32 D
" 18	Up	e(P)	09 53 52			i		09 41 37
	Ki	iP	09 53 40			i		09 41 48
		i	09 53 54		Ki	iP		09 40 41
" 18	Up	iP	16 59 20			i		09 40 47
	Ki	iP	16 59 29			i		09 40 57
		iPP	17 01 04		cont.			
	cont.				cont.			

Up = Uppsala, Ki = Kiruna, Sk = Skalistugan, Gb = Göteborg

1960					1960				
July 20	Sk	iP	09 41 18		July 22	Up	iP	19 31 19	
cont.		i	09 41 22				i	19 31 30	
	Gb	iP	09 41 54						
		i	09 41 59		" 22	Ki	iP	19 55 37	
		i	09 42 10						
	Kurile Islands region.				" 23	Up	eP	02 57 15	
" 20	Ki	iP	14 41 27			Sk	iP	02 57 05	
							i	02 57 13	
" 20	Up	iP	15 28 07			Gb	iP	02 57 36	
		i	15 29 01		" 23	Ki	iPKP	07 49 46	
	Northern Afghanistan.						iSKP	07 52 17	
" 20	Up	iP	17 33 21			Sk	ePKP	07 49 47	
	Sk	iP	17 34 05				iSKP	07 52 34	
						Gb	iPKP	07 50 04	
" 20	Up	iPKP	21 18 30			Fiji Islands (h = 600 km).			
	Ki	iPKP	21 18 15		" 23	Ki	iP	14 07 55	
		i	21 18 22				i	14 08 03	
	Sk	iPKP	21 18 26		" 23	Ki	iP	17 47 48	
	New Hebrides Islands.					Sk	iP	17 48 23	
	(h = 200 km).					Gb	i	17 49 51	
" 20	Ki	iPP	21 59 08		" 23	Ki	eP	17 52 42	
	Southern Chile.						i	17 53 29	
" 20	Gb	iP	22 16 30			Local ?			
" 21	Ki	iP	05 21 50		" 24	Up	iP	02 37 55	
	Sk	iP	05 22 05				i	02 38 06	
" 21	Ki	iP	07 32 53			Ki	iP	02 37 03	
						Gb	iP	02 38 12	
" 21	Sk	iP	07 37 01			Andreanof Islands,			
" 21	Up	iP	14 08 32			Aleutian Islands.			
" 21	Ki	iP	14 43 31		" 24	Up	iP	09 59 13	
" 21	Sk	iP	14 56 52				i	09 59 22	
" 21	Up	iP	17 14 20			Ki	iP	09 58 17	
" 21	Up	iP	21 03 45				i	09 58 26	
		i	21 03 51			Sk	iP	09 58 52	
	Ki	iP	21 03 09				i	09 58 58	
	Sk	iP	21 03 39			Gb	iP	09 59 32	
	Gb	iP	21 04 00			Near coast of Kamchatka.			
	Bonin Islands.				" 25	Up	iP	03 51 27	
" 22	Ki	iP	10 51 37				i	03 51 35	
" 22	Up	iP	14 25 27			Ki	iP	03 50 29	
						Gb	iP	03 51 45	
						Near coast of Kamchatka.			
					" 25	Up	iP	11 12 38	
					" 25	Up	iP	11 22 17	
							i	11 30 36	
						cont.			

Up = Uppsala, Ki = Kiruna, Sk = Skanstugan, Gb = Göteborg

1960					1960				
July 25	Ki	iP	11 21 23		July 27	Up	ePKP	10 24 03	
cont.		i	11 28 54			Ki	iPKP	10 24 08	
		i	11 31 10				i	10 26 31	
	Gb	iP	11 22 37			Gb	iPKP	10 23 56	
		i	11 23 05					Near coast of southern	
		i	11 24 55					Chile (h = 25 km).	
		i	11 32 19						
			Kamohatka (h = 100 km).		" 27	Ki	iPKP	13 46 21	
" 25	Up	iP	15 40 51					New Hebrides Islands.	
		i	15 40 56					(h = 55 km).	
	Ki	iP	15 39 57		" 27	Up	iP	13 59 48	
	Gb	iP	15 41 10				i	13 59 53	
			Near coast of Kamohatka.				i	13 59 58	
			(h = 152 km).			Ki	iP	13 59 44	
" 25	Gb	iP	15 58 52		" 27	Up	iPKP	21 20 40	
" 25	Ki	iP	16 56 58				i	21 20 55	
" 25	Up	iP	21 19 02					Kermadec Islands (h = 68 km).	
	Ki	iP	21 19 32		" 28	Ki	iP	01 38 03	
		i	21 20 55		" 28	Up	iP	15 28 27	
	Gb	iP	21 19 26		" 28	Up	iP	15 34 09	
			Iran.				i	15 34 19	
" 26	Up	iP	04 07 12		" 28	Ki	iP	17 08 01	
		i	04 07 25		" 29	Ki	iP	00 16 43	
	Ki	iP	04 06 29		" 29	Up	iPKP	00 43 28	
		iPT	04 08 51			Ki	iPKP	00 43 16	
	Gb	iP	04 07 34					Loyalty Islands.	
			Off east coast of		" 29	Up	iP	10 52 44	
			Hokkaido, Japan.				i	10 52 51	
" 26	Up	iP	12 41 23				iPoP	10 53 34	
		i	12 41 31			Ki	iP	10 52 40	
	Ki	iP	12 42 18				i	10 52 48	
		i	12 42 54			Gb	iP	10 53 07	
	Gb	iP	12 41 31					India.	
			Turkey.		" 29	Ki	iP	14 30 57	
" 26	Ki	i(P)	18 53 18		" 29	Up	iP	14 41 40	
" 27	Up	iPKP	04 16 19				i	14 41 44	
	Ki	iPKP	04 16 34			Ki	iP	14 41 56	
			Sandwich Islands.				iPP	14 43 42	
			(h = 65 km).			Gb	iP	14 42 01	
" 27	Up	iP	09 09 27				i	14 42 07	
		i	09 09 45					Eastern Afghanistan.	
	Ki	iP	09 09 27		" 29	Up	iP	16 53 17	
		i	09 09 43					cont.	
			Near coast of Sumatra.						
			(h = 93 km).						

Up = Uppsala, Ki = Kiruna, Sk = Skalsstugan, Gb = Göteborg

1960

July 29

cont.

Ki iP 16 53 52

Southern Iran.

(h = 159 km).

" 29 Up iP 17 42 50
iPP 17 45 26
i 17 47 01
Ki iP 17 42 07
iPP 17 44 28
Gb iP 17 43 11
i 17 43 24

Honshu, Japan.

(h = 50 km).

" 30 Up iP 14 22 50
Ki iP 14 21 54
Gb eP 14 23 09
Near coast of Kamohatka.

" 31 Up iPKP 03 14 25
i 03 14 32
i(PP) 03 15 21
iPKKP 03 25 04
Ki iPKP 03 14 18
i 03 14 42
iPKKP 03 25 24
i 03 25 32
Gb iPKP 03 14 39

New Britain.

(h = 25 km).

" 31 Up iP 04 47 14

" 31 Up iP 06 46 24

" 31 Up iPKP 15 14 00
Ki iPKP 15 14 08
i 15 14 18

Near coast of central
Chile (h = 97 km).

" 31 Up iP 22 34 33
Ki iP 22 35 03
i 22 36 56
Gb iP 22 34 48

Southern Iran.

Ingrid Pettersson

Feb 23, 1961.

Markus Båth.

PRELIMINARY
SEISMOLOGICAL BULLETIN

U P P S A L A , K I R U N A , S K A L S T U G A N , and G Ö T E B O R G

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.
Göteborg (Gb): 57°41.9'N, 11°58.7'E; h = 66 m.

AUGUST 1 - 31, 1960
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1960					1960			
Aug 1	Ki	iP	00 01 33		Aug 2	Up	iPKP	05 26 34
						Ki	iPKP	05 26 24
" 1	Up	iP	02 28 22				iPKS	05 29 39
		i	02 28 30			Gb	iPKP	05 26 38
		iPP	02 29 47			i		05 27 44
	Ki	iP	02 28 58			Loyalty Islands (h = 110 km).		
		i	02 29 15					
		iPP	02 30 35		" 2	Up	iP	06 25 48
	Gb	iP	02 28 35			i		06 26 00
	Southern Iran (h = 110 km).					Ki	iP	06 24 55
							iPoP	06 25 40
" 1	Ki	iP	04 00 08			Gb	iP	06 26 05
						Andreanof Islands, Aleutian Islands (h = 30 km).		
" 1	Up	iP	05 14 07					
		i	05 14 13		" 2	Up	iPKP	09 50 05
" 1	Ki	iP	12 50 49			Ki	iPKP	09 49 51
	Near north coast of Honshu, Japan (h = 100 km).					Gb	iPKP	09 50 05
						Kermadec Islands (h = 60 km).		
" 1	Ki	iP	14 27 53		" 2	Up	iPKP	10 25 57
						Kermadec Islands (h = 90 km).		
" 1	Up	iP	15 29 12		" 2	Up	iP	10 57 42
	Ki	iP	15 29 13		" 2	Up	iP	20 56 29
	Near coast of Sumatra (h = 25 km).					i		20 56 36
" 1	Up	iP	16 06 17			Ki	iP	20 54 59
						i		20 55 17
" 1	Up	iP	17 30 03			Gb	iP	20 56 46
		i	17 30 34			North Polar region (h = 40 km).		
		i	17 30 39					
	Ki	eP	17 31 09		" 2	Up	iP	21 02 52
" 1	Ki	eP	22 08 06			Ki	iP	21 01 22
	Bonin Islands (h = 30 km).					i		21 01 39
						North Polar region.		

Up = Uppsala, Ki = Kiruna, Sk = Skalistugan, Gb = Göteborg

1960					1960				
Aug	2	Ki	iP	21 09 05	Aug	6	Ki	iPKP	15 08 56
"	3	Gb	iP	07 11 05					Near coast of Chile
				West Pakistan.					(h = 40 km).
"	4	Up	iP	07 45 49	"	7	Up	iP	22 37 03
		Ki	iP	07 44 56			Ki	eP	22 36 12
		i		07 45 05					Rat Islands, Aleutian
		i		07 45 29					Islands (h = 90 km).
				Rat Islands, Aleutian	"	8	Ki	iP	01 28 45
				Islands. (h = 80 km).					Komandorskie Islands
"	4	Ki	iP	08 14 22					(h = 40 km).
"	4	Ki	iP	09 18 37	"	8	Up	i(P)	11 32 49
				Rat Islands, Aleutian	"	8	Up	iP	12 37 20
				Islands. (h = 100 km).			Ki	iP	12 38 02
"	4	Up	iP	14 16 25			Gb	iP	12 37 20
		Ki	iP	14 15 33					Gulf of Aden (h = 25 km).
				Rat Islands, Aleutian	"	8	Up	iP	15 45 07
				Islands (h = 60 km).			Ki	iP	15 45 57
"	5	Up	iP	08 04 55					South Atlantic Ocean
									(h = 60 km).
"	5	Up	iP	14 49 43	"	8	Up	iP	20 41 43
"	5	Up	iP	16 17 19			i		20 41 55
		i		16 17 33			iPP		20 42 15
		Ki	iP	16 16 23			Ki	iP	20 42 49
		i		16 16 34			Gb	iP	20 41 34
		Gb	iP	16 17 40			i		20 41 47
		i		16 17 52					Dodecanese Islands
				Off south coast of					(h = 90 km).
				Kamchatka (h = 40 km).	"	9	Up	iP	06 32 05
"	5	Up	iP	22 38 35			i		06 32 13
		i		22 38 38			Ki	iP	06 31 09
		Ki	iP	22 37 44			Gb	iP	06 32 28
				Rat Islands, Aleutian					Off east coast of
				Islands (h = 15 km).					Kamchatka (h = 10 km).
"	5	Up	eP	23 25 09	"	9	Up	iP	07 08 21
"	6	Up	iP	03 17 10			Ki	iP	07 07 26
		Ki	iP	03 16 59					Off east coast of
		Gb	iP	03 17 28					Kamchatka (h = 40 km).
				Bonin Islands region.	"	9	Up	iP	07 51 12
				(h = 580 km).			i		07 51 15
"	6	Up	iP	12 27 13			i		07 51 23
							Ki	iP	07 50 33
							i		07 50 38

Up = Uppsala, Ki = Kiruna, Sk = Skanstugan, Gb = Göteborg

1960					1960				
Aug 9	Gb	iP	07 51 15		Aug 11	Ki	iP	03 06 33	
cont.		i	07 51 20					Celebes (h = 50 km).	
			Off coast of northern		" 11	Up	iP	05 03 32	
			California (h = 25 km).			Ki	iP	05 03 14	
" 9	Ki	iP	14 12 28				i	05 03 37	
			Sakhalin Island (h = 40 km).			Gb	iP	05 03 46	
" 9	Up	iPKP	17 05 51					Mindanao, Philippine Islands	
		i	17 05 53					(h = 80 km).	
		i	17 06 01		" 11	Ki	i(P)	16 44 48	
	Ki	iPKP	17 05 40		" 12	Up	iP	13 24 02	
		iPKS	17 09 16				iPP	13 26 44	
	Gb	iPKP	17 05 58			Ki	iP	13 23 23	
		i	17 06 15				i	13 23 35	
		i	17 11 20			Gb	iP	13 24 24	
			Tonga Islands region				i	13 24 35	
			(h = 190 km).					Near east coast of Honshu,	
" 9	Up	i(P)	17 43 09					Japan (h = 100 km).	
" 9	Ki	iP	18 30 13		" 12	Gb	iP	14 00 06	
" 9	Ki	iP	22 07 49		" 12	Up	iP	15 06 35	
		i	22 07 53		" 13	Up	iP	05 02 43	
" 9	Ki	iPKP	23 55 35				i	05 03 07	
			Santa Cruz Islands		" 13	Up	iP	07 22 15	
			(h = 80 km).				i	07 22 28	
" 10	Up	iP	01 50 38				iPP	07 24 45	
	Ki	iP	01 49 52			Ki	iP	07 21 33	
" 10	Ki	iP	06 17 16				i	07 21 43	
" 10	Gb	iP	12 00 04			Sk	iP	07 22 08	
		i	12 00 07				i	07 22 22	
" 10	Ki	iP	12 51 30				iPP	07 24 36	
			Near coast of Costa Rica			Gb	iP	07 22 38	
			(h = 25 km).				i	07 22 51	
" 10	Up	iP	16 25 06				iPP	07 25 18	
								Near east coast of Honshu,	
" 11	Up	iP	02 40 24		" 13	Up	iP	13 32 14	
	Ki	iP	02 39 35		" 13	Up	iPKP	14 33 52	
" 11	Up	iP	02 47 46				i	14 34 02	
		i	02 48 19				iPP	14 35 40	
		i	02 48 25				iPKKP	14 43 34	
	Ki	iP	02 46 53			Ki	iPKP	14 33 59	
		i	02 47 30				iPP	14 36 06	
			Andreanof Islands, Aleutian			Sk	iPKP	14 34 00	
			Islands (h = 100 km).				i	14 34 01	
							iPKKP	14 43 37	

Up = Uppsala, Ki = Kiruna, Sk = Skalistugan, Gb = Göteborg

1960

Aug 13 cont.

Gb

iPKP

14 33 47

i

14 33 57

i(PP)

14 35 16

iPKKP

14 43 50

Near coast of southern Chile (h = 60 km).

" 14

Up

iP

04 11 58

i

04 12 03

i

04 12 15

Ki

iP

04 11 02

Sk

iP

04 11 38

Ryukyu Islands (h = 50 km).

" 14

Ki

iP

07 38 55

" 14

Up

iP

12 57 34

Ki

iP

12 58 44

Sk

iP

12 58 15

i

12 59 33

Gb

iP

12 57 25

Greece.

" 14

Ki

iP

21 33 44

Fox Islands, Aleutian Islands (h = 20 km).

" 14

Up

iP

22 44 48

Ki

iP

22 44 59

i

22 45 23

Sk

iP

22 45 15

Gb

iP

22 45 05

Hindu Kush (h = 70 km).

" 15

Ki

iP

05 44 42

Komandorskie Islands (h = 25 km).

" 15

Ki

iP

14 46 34

Indian Ocean (h = 25 km).

" 15

Up

iP

19 26 26

Ki

iP

19 26 12

Sk

iP

19 26 07

" 15

Sk

iP

21 15 48

" 15

Ki

iP

22 33 45

" 16

Up

iP

05 52 22

" 16

Ki

iP

10 43 02

Chagos Archipelago region (h = 60 km).

1960

Aug 17

Gb

iP

22 53 43

" 18

Gb

iP

12 00 58

" 18

Up

i(P)

15 03 57

" 18

Up

i(P)

15 10 05

" 18

Up

iP

20 58 02

i

20 58 06

i

20 58 21

Ki

iP

20 57 18

Sk

iP

20 57 52

Gb

iP

20 58 24

Kurile Islands (h = 30 km).

" 18

Up

iP

21 50 27

Ki

iP

21 49 54

Sk

iP

21 50 28

" 19

Up

iP

03 18 51

Ki

iP

03 18 43

Sk

iP

03 19 06

Northern Burma (h = 30 km).

" 19

Up

iP

12 53 19

Ki

iP

12 52 47

Sk

iP

12 53 16

iPP

12 56 20

Bonin Islands region (h = 280 km).

" 19

Up

iP

17 14 05

i

17 14 10

Ki

iP

17 13 09

Sk

iP

17 13 48

Near east coast of Kamohatka (h = 25 km).

" 19

Up

iP

20 25 41

" 20

Ki

iP

00 31 55

Sk

iP

00 31 50

Guatemala (h = 160 km).

" 20

Up

iP

14 55 31

Ki

iP

14 54 37

" 20

Ki

iPKP

20 27 16

Tristan da Cunha region (h = 40 km).

" 20

Up

iP

20 43 23

Up = Uppsala, Ki = Kiruna, Sk = Skanstugen, Gb = Göteborg

1960

Aug 20	K1	1P	22 35 54
		1	22 36 11
	Sk	1P	22 36 14
		1PP	22 40 15

Northern Celebes ($h = 60$ km).

"	21	Ki	1PKP	00	36	23
		Sk	1PKP	00	36	43
			1PP	00	37	13

New Guinea ($h = 40$ km).

" 21 Ki 1PP 01 18 10
Sk 1PP 01 18 47
New Britain (h = 180 km).

"	21	Up	iP	01 38 55
			i	01 38 56
		K1	iP	03 39 00
		Sk	iP	03 39 13
		Nepal-India border (h = 80 km).		

" 21 Up iP 12 44 24

"	21	Up	1P	13	02	35
			1	13	02	38
		Ki	1P	13	02	19
			1(pP)	13	03	07
		Sk	1P	13	02	40
		Gb	1P	13	02	51

Near south coast of
Mindanao, Philippine
Islands (h = 210 km).

" 21 K1 1P 17 18 01
Off coast of Mindanao,
Philippine Islands
(h = 200 km).

"	21	Up	1P	22 33 05
		Ki	1P	22 32 37

"	22	Up	eP	03 38 33
		Ki	1P	03 39 46

"	22	Up	iP	13	47	48
		Ki	i(P)	13	48	41

" 22 Sk 1P 18 26 32

"	22	Up	1P	21 06 58
			i	21 07 59

1960

Aug 22	Ki	1P	21 06 39
cont.		i	21 07 00
	Sk	1P	21 06 53

```

" 23 Ki 1(P) 00 25 02
      1 00 25 19

```

"	23	Up	1P	09 05 56
			1	09 06 01

Ki	1P	09	06	23
	i	09	06	28

Sk 1P 09 06 35
Southeastern Iran (h = 120
km).

" 23 Up iP 10 26 11

"	23	Up	1P	14	19	16
		Ki	1P	14	19	55
		Sk	1P	14	19	22

Atlantic Ocean ($h = 25$ km).

" 23 Up iP 15 13 42

"	24	Up	1P	01	54	33
			1	01	54	35
		K1	1P	01	53	27
			1	01	53	39
		Sk	1P	01	54	16
		Gb	1P	01	54	53

Near east coast of Kamchatka
(h = 25 km).

" 24 Sk 1PKP 06 08 36
Tonga Islands (h = 40 km).

"	24	Up	1P	07 27 51
		K1	$\Theta(P)$	07 27 18
		Sk	1P	07 28 33

24	Up	1P	12 04 03
		i	02 04 14
		i	12 04 27

" 24 Ki iP 12 08 27

"	24	Up	1P	15 43 55
			1	15 44 04

n	24	U _D	IP	16 01 49
			i	16 02 06

" 24 Up iP 16 28 52

Up = Uppsala, Ki = Kiruna, Sk = Skälstugan, Gb = Göteborg

1960				1960			
Aug	24	Up	iP	Aug	26	Up	iPKP
			i			Ki	iPKP
			i				i
						Sk	iPKP
							i
						Gb	iPKP
						New Hebrides Islands	
						(h = 60 km).	
"	24	Up	iP	"	26	Up	i(P)
			i				
		Ki	iP	"	27	Up	iP
			i			Ki	iP
						Sk	iP
		Sk	iP				i
			i			Gb	iP
		Gb	iP			Crete (h = 40 km).	
		Burma-India border					
		(h = 150 km).					
"	25	Ki	iP	"	27	Up	iP
"	25	Ki	i(P)				i
"	25	Up	iP			Ki	iP
			i			Sk	iP
		Ki	iP				i
			i			Gb	iP
		Sk	iP			Crete.	
		Gb	iP	"	27	Ki	iP
		Fox Islands, Aleutian					
		Islands (h = 40 km).		"	27	Up	iP
"	26	Up	iP				i
			i			Ki	iP
		Ki	iP			Sk	iP
			i			Gb	iP
		Sk	iP	"	27	Up	iPKP
		Gb	iP			Ki	iPKP
		West Pakistan (h = 70 km).				Gb	iPKP
"	26	Up	iP			Tonga Islands region	
		Ki	iP			(h = 160 km).	
		Sk	iP	"	27	Up	iP
		Gb	iP			Ki	iP
"	26	Sk	iP				i
"	26	Gb	iP			Sk	iP
"	26	Up	iP				i
"	26	Gb	iP			India (h = 110 km).	
"	26	Ki	iP	"	27	Up	iP
"	26	Up	iP				i
"	26	Gb	iP				i
"	26	Ki	iP			Ki	iP
"	26	Up	iP			Sk	iP
		Sk	iP				i
						Gb	iP
							i
						Kurilo Islands (h = 220 km).	

Up = Uppsala, Ki = Kiruna, Sk = Skalistugan, Gb = Göteborg

1960

Aug 27 Ki iP 23 30 49

" 27 Sk iP 23 33 44

" 29 Up iP 16 30 48

Ki iP 16 30 57

" 29 Up iP 18 05 57

i 18 06 01

Ki iP 18 07 10

i 18 07 18

Sk iP 18 06 41

i 18 06 55

Crete (h = 15 km).

" 30 Ki iP 20 32 33

" 30 Up iP 22 39 39

i 22 40 00

Ki eP 22 40 18

" 31 Up iP 15 15 28

" 31 Up iP 17 34 27

i 17 34 33

Ki iP 17 34 10

Sk iP 17 34 32

Near coast of Mindanao,

Philippine Islands

(h = 20 km).

" 31 Ki i(P) 21 30 07

i 21 30 08

" 31 Up iP 22 17 05

i 22 17 11

Ki iP 22 18 00

Sk iP 22 17 49

Gb iP 22 17 08

Turkey (h = 40 km).

Ingrid Pettersson

April 17, 1961.

Markus Båth.

Seismological Laboratory
Uppsala

PRELIMINARY
SEISMOLOGICAL BULLETIN

U P P S A L A , K I R U N A , S K A L S T U G A N , and G Ö T E B O R G

Uppsala (Up): $59^{\circ}51.5'N$, $17^{\circ}37.6'E$; h = 14 m.
Kiruna (Ki): $67^{\circ}50.4'N$, $20^{\circ}25.0'E$; h = 390 m.
Skalstugan (Sk): $63^{\circ}34.8'N$, $12^{\circ}16.8'E$; h = 580 m.
Göteborg (Gb): $57^{\circ}41.9'N$, $11^{\circ}58.7'E$; h = 66 m.

S E P T E M B E R 1 - 30, 1960

1960				1960					
Sep	1	Up	iP	03 06 53	Sep	1	Up	iP	15 47 50
"	1	Ki	iP	05 26 19			i		15 48 54
		Possibly explosion.				Ki	iP		15 46 55
"	1	Ki	iP	06 12 34			i		15 47 10
		Sk	iP	06 12 20		Sk	iP		15 47 23
		Panama-Colombia border				Gb	iP		15 48 01
		(h = 56 km).				Kodiak Island, Alaska.			
"	1	Gb	iP	07 03 42	"	1	Up	iP	15 51 14
		Seismic ?				Ki	iP		15 50 19
"	1	Up	iPKP	07 54 14		Sk	iP		15 50 46
			ipPKP	07 55 51		Gb	iP		15 51 27
		Sk	iPKP	07 54 13		Probably Kodiak Island			
		Gb	iPKP	07 54 23		aftershock.			
			ipPKP	07 55 57	"	1	Up	iP	16 39 01
		Tonga Islands region.				Ki	iP		16 38 07
		h = 400 km (Up, Gb).				Sk	iP		16 38 35
"	1	Gb	i(P)	08 09 25		Probably Kodiak Island			
"	1	Up	i	09 50 58		aftershock.			
			iSKP	09 51 07	"	1	Ki	iPKP	19 00 16
		Ki	iPKP	09 47 17		Fiji Islands.			
		Gb	iSKP	09 51 11	"	1	Up	eP	20 13 08
		New Hebrides Islands				Seismic ?			
		(h = 63 km).			"	1	Ki	iPKP	20 21 02
"	1	Up	i	10 57 36		Fiji Islands.			
			iSKP	10 57 44	"	2	Up	iPKP	11 11 15
		Ki	ePKP	10 54 06				iSKP	11 14 28
		New Hebrides Islands				Ki	iPKP		11 11 01
		(h = 27 km).				Sk	iPKP		11 11 12
"	1	Up	iPKP	12 17 31		New Hebrides Islands.			
		Kermadec Islands region.			"	2	Up	iP	13 40 53
"	1	Gb	iP	13 18 35	"	2	Up	iP	13 56 21
							i		13 56 58
						Ki	iP		13 56 08

Up = Uppsala, Ki = Kiruna, Sk = Skalistugan, Gb = Göteborg

1960
 Sep 2 i 13 56 12
 cont. Sk iP 13 56 31
 Gb iP 13 56 43
 Tibet.

 " 2 Up iP 16 41 08
 Ki e 16 42 01

 " 2 Up iP 18 52 34
 Ki iP 18 52 09
 Sk iP 18 52 36

 " 2 Up eP 20 27 08
 Seismic ?

 " 2 Ki iP 21 09 08
 i 21 09 11

 " 2 Up iP 22 01 41

 " 2 Up iP 22 13 47
 i 22 14 01
 iP'iP' 22 42 03
 Ki iP 22 12 53
 i 22 13 08
 i 22 13 23
 eP'iP' 22 42 15
 Sk iP 22 13 21
 iP'iP' 22 42 22
 Gb iP 22 14 02
 i 22 14 32
 Fox Islands, Aleutian
 Islands.

 " 3 Up iP 00 05 51
 i 00 05 55
 Ki iP 00 06 36
 i 00 07 10
 Sk iP 00 06 24
 Gb iP 00 05 55

 " 3 Up iP 00 30 21
 Ki iP 00 29 37
 Sk iP 00 30 13
 Near north coast of
 Hokkaido, Japan.

 " 3 Ki iP 00 50 58

 " 3 Up iPKP 12 59 30
 Ki iP 12 55 23
 iPKP 12 59 19
 iPP 13 00 03

1960
 Sep 3 Sk eP 12 55 49
 cont. iPKP 12 59 30
 i 13 00 10
 Gb iPKP 12 59 38
 i 13 02 35
 Solomon Islands.

 " 3 Up iP 13 33 56
 Ki iP 13 33 13
 Sk iP 13 33 47
 Near north coast of
 Honshu, Japan.

 " 3 Up iPKP 16 06 59
 Ki iPKP 16 06 39
 Sk iPKP 16 06 54
 i 16 07 08
 Kermadec Islands region.

 " 3 Up iP 17 10 08

 " 3 Ki iPn 17 54 35
 i(Sg) 17 55 34
 Sk iPn 17 54 40
 i(Sg) 17 55 27
 Local.

 " 3 Up iP 19 49 30
 i 19 49 38
 Ki iP 19 49 30
 Sk iP 19 49 49
 Gb iP 19 49 50
 Northern India.

 " 3 Up iP 23 57 28
 i 23 57 58
 Ki iP 23 56 41
 i 23 57 20
 Sk iP 23 57 16
 i 23 57 24
 Gb iP 23 57 49
 Kurile Islands.

 " 4 Up iP 05 31 52
 Ki iP 05 30 58
 Sk iP 05 31 25
 i 05 31 50
 Gb eP 05 32 03

 " 5 Up iP 04 43 51
 Ki iP 04 44 00
 Sk iP 04 44 17

Up = Uppsala, Ki = Kiruna, Sk = Skalistugan, Gb = Göteborg

1960						1960					
Sep	5	Sk	iP	21 38 09		Sep	8	Up	iP	10 32 26	
			i	21 38 21					i	10 32 36	
		(Greece).									
"	5	Up	iP	22 02 53		"	8	Ki	iP	10 55 36	
								Sk	e(P)	10 54 54	
"	5	Sk	iP	22 15 34		"	8	Up	iP	11 20 55	
"	6	Sk	iP	01 17 14				Ki	iP	11 20 38	
"	6	Up	iPKP	10 18 24					i	11 20 44	
			i	10 18 28					i	11 21 04	
		Ki	e(PKP)	10 17 45					e(SKS)	11 31 07	
			iPKP	10 18 01				Sk	iP	11 20 56	
		Sk	iPKP	10 18 12				Near east coast of Mindanao, Philippine Islands.			
		Kermadec Islands region.									
"	6	Up	iP	10 33 21		"	8	Ki	iP	11 36 46	
"	6	Ki	iPKP	11 34 58		"	8	Up	iP	14 42 31	
		Sk	iPKP	11 35 08					i	14 42 42	
		North of North Island, New Zealand.						Ki	iP	14 41 38	
"	6	Up	iPKP	12 53 25				Sk	iP	14 42 15	
		Sk	ePKP	12 53 56					i	14 42 24	
		Near north coast of New Guinea.						Kamchatka.			
"	6	Up	iPKP	14 22 17		"	8	Ki	iP	17 15 04	
		Ki	iPKP	14 22 07				Near south coast of Mindanao, Philippine Islands.			
		Sk	iPKP	14 22 14		"	8	Ki	iP	23 18 41	
		Loyalty Islands.				"	8	Up	iP	23 23 37	
"	6	Sk	iP	14 34 31				(Kurile Islands).			
"	6	Up	iP	15 35 36		"	9	Sk	iP	05 07 39	
			i	15 35 57		"	9	Up	iP	08 57 24	
		Ki	iP	15 34 55		"	9	Ki	iP	08 59 50	
		Sk	iP	15 35 30				Local, possibly explosion.			
			i	15 36 10		"	9	Up	iP	10 12 50	
		Near south coast of Hokkaido, Japan.							iSP	10 14 28	
"	6	Ki	iP	17 46 23				Ki	iP	10 12 58	
"	7	Ki	iP	04 03 22					i	10 13 38	
		Sk	iP	04 03 41				Sk	iP	10 13 15	
								Hindu Kush.			
"	7	Up	iP	11 55 55		"	9	Up	iP	16 22 38	
		Ki	iP	11 55 09					i(S)	16 25 42	
		Sk	iP	11 55 47					i	16 25 56	
		Kurile Islands.						Ki	iP	16 21 22	

Up = Uppsala, Ki = Kiruna, Sk = Skelstugan, Gb = Göteborg

1960

Sep 9
cont.

i 16 21 30
i(S) 16 23 03
eT 16 27 57
Sk iP 16 21 40
iS 16 23 23
Jan Mayen Island region.

" 9 Ki i(P) 17 42 54

" 9 Up iP 19 23 10
Ki e(P) 19 22 25

" 9 Up iP 19 40 11
e 19 43 19
i 19 43 30
Ki iP 19 38 54
i 19 39 03
i(S) 19 40 25
Sk iP 19 39 12
iS 19 40 57
Jan Mayen Island region.

" 9 Up iP 20 07 54
i 20 08 01
i 20 11 05
Ki iP 20 06 38
i 20 06 47
i(S) 20 08 08
eT 20 12 42
Sk iP 20 06 56
iS 20 08 39
Jan Mayen Island region.

" 10 Up iP 00 24 43
i 00 24 46
Ki iP 00 25 50
Sk iP 00 25 23
i 00 25 33

" 10 Ki iP 00 39 54
Sk iP 00 40 14
i(S) 00 41 58
Jan Mayen Island region.

" 10 Ki iP 10 04 07

" 10 Up iP 10 57 08
i 10 57 16
iPP 11 00 58
Ki iP 10 56 53
i 10 56 58
i 11 06 24
Sk iP 10 57 14
i 10 57 19

Celebes Sea.

1960

Sep 10 Sk iP 12 48 14

" 10 Up iP 15 57 18
i 15 57 26
Ki iP 15 57 20
Sk iP 15 57 35
Nicobar Islands.

" 11 Up iPKP 11 11 39
Ki. iPKP 11 11 23
Sk iPKP 11 11 33
Kermadec Islands region.

" 11 Up iP 12 16 28
i 12 16 34
Ki eP 12 17 08

" 12 Up iP 02 54 28
iPP 02 55 08
Ki iP 02 53 33
iPP 02 54 12
Sk iP 02 54 01
Southern Alaska (h = 175 km).

" 12 Ki i(P) 07 42 22

" 12 Ki iP 09 29 18

" 12 Ki iPg 11 01 07
iSg 11 01 36
Explosion northwest of
Tromsø, Norway.

" 12 Up iP 12 28 55
i 12 29 11
Ki iP 12 28 27
Sk iP 12 28 56
i 12 29 04

Ryukyu Islands.

" 12 Ki iP 14 58 32
Near coast of Sumatra.

" 12 Ki iPg 17 01 15
iSg 17 01 45
Explosion northwest of
Tromsø, Norway.

" 13 Up iP 03 20 42
i 03 21 01
i 03 23 56
Ki iP 03 20 11
i 03 20 20
Sk iP 03 20 39
i 03 20 46

Up = Uppsala, Ki = Kiruna, Sk = Skalistugan, Gb = Göteborg

1960				1960			
Sep 13		1	03 23 51	Sep 15	Ki	iP	18 09 24
cont.		Bonin Islands region.		cont.		iS	18 19 07
" 13	Ki	iP	16 20 35		Sk	iP	18 09 50
		1	16 20 41		Gb	iP	18 10 09
	Sk	eP	16 20 46		Volcano Islands region.		
" 14	Up	iP	00 46 48	" 16	Ki	iP	01 34 30
		1	00 46 56		Gb	iP	01 33 19
	Ki	iP	00 46 28	" 16	Up	iP	01 46 18
		1	00 46 44		Ki	iP	01 46 27
		1	00 47 12		Sk	iP	01 46 45
	Sk	iP	00 46 52			1	01 48 21
		1	00 47 10		Gb	eP	01 46 44
	Luzon, Philippine Islands.				Tadzhik, U.S.S.R.		
" 14	Up	iP	02 04 51	" 16	Up	iP	02 44 46
	Ki	iP	02 04 50		Ki	iP	02 43 49
	Sk	eP	02 04 34		Sk	eP	02 44 16
	Dominican Republic.			" 16	Up	i(P)	11 54 08
" 14	Up	iP	04 00 59	" 16	Ki	i(P)	17 17 05
		1	04 01 09	" 16	Up	iP	20 13 33
	Ki	iP	04 00 26		Ki	iP	20 13 13
	Sk	iP	04 00 55	" 17	Up	1	08 04 00
		1	04 01 16			1	08 04 07
		1	04 03 57		Ki	iP	08 02 44
" 14	Ki	iP	13 06 09		Sk	iP	08 03 21
" 14	Up	iPKP	23 37 59		Gb	iP	08 03 56
	Ki	ePKP	23 37 53		Kurile Islands.		
	Tonga Islands.			" 17	Up	iP	08 16 15
" 15	Ki	iPKP	03 50 12		Ki	iP	08 15 25
	New Hebrides Islands.				Sk	iP	08 16 01
" 15	Up	iP	05 11 03		Gb	iP	08 16 36
	Ki	iP	05 10 50		Kurile Islands.		
		1	05 12 41	" 17	Up	iPKP	20 15 32
	Sk	iP	05 11 25		Ki	ePKP	20 15 24
	Sinkiang, China.				Sk	iPKP	20 15 23
" 15	Sk	iP	07 02 20		Gb	iPKP	20 15 41
" 15	Ki	i(P)	12 08 00		Tonga Islands.		
		i(P)	12 26 18	" 18	Up	iP	03 45 33
" 15	Ki	i(Pg)	12 58 33	" 18	Ki	i(Pg)	06 02 16
		i(Sg)	12 59 28			e(Sg)	06 02 34
	Local.				Local.		
" 15	Up	iP	18 09 52	" 18	Up	iP	09 54 38
		1	18 11 09			1	09 55 06
		iS	18 20 03			eP	09 58 40

Up = Uppsala, Ki = Kiruna, Sk = Skalistugan, Gb = Göteborg

1960					1960			
Sep 18	Ki	1P	09 54 21	Sep 20	Up	1PKP	03 24 53	
cont.		1PT	09 58 41		Ki	1PKP	03 24 20	
	Sk	1P	09 54 41		Sk	1PKP	03 24 35	
		1PT	09 59 10		i		03 24 45	
	Banda Sea.				Gb	1PKP	03 25 08	
" 18	Up	1P	17 12 51		Off north coast of North Island, New Zealand.			
	Ki	1P	17 12 32					
	Sk	1(P)	17 12 07	" 20	Up	1PKP	03 55 17	
" 18	Up	1P	19 37 30		Ki	ePKP	03 54 56	
		1pP	19 37 43		Sk	ePKP	03 55 07	
	Ki	1P	19 36 37		Gb	ePKP	03 55 24	
		1pP	19 36 49		Kermadec Islands.			
	Sk	eP	19 37 39	" 20	Up	1P	04 13 38	
	Gb	1P	19 37 44		Ki	1P	04 13 07	
	Fox Islands, Aleutian Islands (h = 48 km).				i		04 13 13	
" 19	Up	1P	03 51 56		Sk	eP	04 13 46	
	i		03 51 59		Gb	1P	04 14 00	
	Ki	1P	03 51 36		U.S.S.R. (49.9°N, 88.4°E).			
	i		03 51 41	" 20	Up	1P	09 54 31	
	Sk	1P	03 52 03		Ki	1P	09 53 37	
	Luzon Island, Philippine Islands.				Sk	1P	09 54 14	
" 19	Up	1P	04 11 15	" 20	Ki	1P	10 38 17	
	Ki	eP	04 10 55		Sk	1P	10 38 54	
	Sk	eP	04 11 21		Off southeast coast of Kamohatka.			
	Near west coast of Luzon, Philippine Islands.			" 21	Ki	1P	00 22 37	
" 19	Ki	eP	19 11 05	" 21	Up	1P	02 20 40	
	Sk	1P	19 10 44		Ki	1P	02 20 08	
" 19	Up	1P	19 14 07		Sk	1P	02 20 37	
	i		19 14 17	" 21	Sk	1P	03 57 12	
	Ki	1P	19 14 06		Off coast of El Salvador.			
	i		19 14 10	" 21	Up	1PKP	07 44 46	
	Sk	1P	19 13 52		Kermadec Islands.			
	i		19 13 54	" 21	Ki	1P	10 37 03	
	i		19 17 12	" 21	Up	1P	10 49 22	
	Gb	1P	19 13 54		Ki	1P	10 48 29	
	i		19 13 58		Sk	1P	10 48 55	
	Colombia-Panama border.				Gb	1P	10 49 36	
" 20	Up	1PKP	01 01 21		Fox Islands, Aleutian Islands.			
	i		01 01 27	" 21	Up	1P	16 19 39	
	Ki	ePKP	01 01 14		i		16 19 49	
	Sk	1PKP	01 01 13		1pP		16 20 33	
	i		01 01 22					
	Gb	1PKP	01 01 27					
	Kermadec Islands.							

Up = Uppsala, Ki = Kiruna, Sk = Skalistugan, Gb = Göteborg

1960						1960					
Sep 21	Ki	1P	16 19 13			Sep 22	Sk	1P	15 24 11		
cont.		1pP	16 20 06			cont.		Near north coast of			
	Sk	1P	16 19 41					Colombia.			
		1pP	16 20 35								
	Gb	1P	16 19 59			" 22	Up	1P	22 58 05		
		1pP	16 19 53				i		22 58 19		
	East China Sea (h = 230 km).						Ki	1P	22 57 13		
" 21	Ki	1P	17 46 04				i		22 57 19		
" 21	Up	1P	23 12 01				Sk	1P	22 57 43		
	Ki	1P	23 12 37				i		22 57 51		
	Sk	1P	23 12 34				Gb	1P	22 58 20		
	Gb	1P	23 12 10			" 23	Ki	1P	00 31 25		
	Iran.						Sk	1P	00 31 00		
" 22	Up	1P	05 48 47				Atlantic Ocean.				
	i		05 49 16			" 23	Up	1P	05 30 32		
	Ki	1P	05 49 35				i		05 30 37		
	Sk	1P	05 49 13				Ki	eP	05 30 24		
	Gb	1P	05 48 37				Sk	1P	05 30 45		
	Congo.						India.				
" 22	Sk	1P	06 28 19			" 23	Gb	1P	20 22 54		
" 22	Up	1P	09 16 18			" 23	Ki	aPK	23 21 39		
	i		09 17 14				Gb	1PK	23 21 58		
	Ki	1P	09 16 57				Tonga Islands.				
	i		09 17 01			" 24	Ki	1PK1	11 26 21		
	Sk	1P	09 16 35				1PK2		11 26 31		
	i		09 16 42				North Island, New Zealand				
	i		09 18 55				region.				
	Gb	1P	09 16 01			" 24	Up	eP	19 19 33		
	i		09 16 07			" 24	Ki	i(P)	23 33 34		
	Congo.						Seismic ?				
" 22	Up	1P	09 25 29			" 25	Up	1P	03 07 23		
	Ki	1P	09 26 17			" 25	Up	1P	07 52 30		
	Sk	1P	09 25 51				Ryukyu Islands.				
	i		09 25 56			" 25	Up	1P	08 43 58		
	Gb	1P	09 25 21				Ki	1P	08 44 35		
	Congo.						Southern Iran.				
" 22	Up	1Pg	10 00 20			" 25	Up	1P	17 43 10		
	1Sg		10 00 38				Ki	1P	17 42 42		
	i		10 00 42				Mariana Islands.				
	D = 160 km = 1.4°					" 26	Up	1P	01 20 11		
	Sk	eSg	10 02 40				i		01 20 26		
	Explosion of 47 ton near						Ki	eP	01 20 46		
	Norrköping, Sweden.										
" 22	Ki	1(P)	12 17 54								
" 22	Ki	1P	15 24 25								

Up = Uppsala, Ki = Kiruna, Sk = Skalistugan, Gb = Göteborg

1960
Sep 26 Up 1P 09 00 09
i 09 00 16
Ki 1P 08 59 16
Off southeast coast of
Kamohatka.
" 26 Up 1P 15 24 32
Ki 1P 15 23 35
Gb eP 15 24 39
Fox Islands, Aleutian
Islands.
" 26 Up 1P 17 25 09
i 17 25 17
Ki 1P 17 24 38
" 27 Up 1P 06 02 17
Ki 1P 06 01 24
Sk 1P 06 01 57
Gb 1P 06 02 35
Rat Islands, Aleutian
Islands.
" 27 Up 1P 18 22 31
Gb 1(P) 18 22 46
" 27 Up 1P 18 49 05
Ki 1P 18 48 37
Mariana Islands.
" 28 Up 1P 04 00 53
Ki 1P 04 00 04
" 28 Up 1P 05 39 18
i 05 39 34
Ki 1P 05 39 05
i 05 39 09
Sk 1P 05 39 32
i 05 39 36
Sikang-Tsinghai border,
China.
" 28 Ki i 09 25 48
Seismic ?
" 28 Ki 1P 20 51 22
" 28 Up 1P 22 28 07
Sk 1P 22 28 44
" 28 Ki 1P 22 58 24
i 22 58 33
Sk 1P 22 58 51

1960
Sep 29 Ki 1P 00 47 49
" 29 Up 1P 11 31 07
i 11 31 32
eSKPTKT 11 58 57
Ki 1P 11 30 33
i(PHKT) 11 48 50
iSKPTKT 11 59 39
Sk 1P 11 31 04
i 11 31 06
1PP 11 34 42
1PKKT 11 48 39
Gb 1P 11 31 23
i 11 33 50
Mariana Islands.
" 29 Up 1P 19 06 59
Ki eP 19 06 51
Sk eP 19 06 41
Guatemala.
" 29 Up 1P 19 46 03
" 30 Up 1P 02 32 30
Ryukyu Islands.
" 30 Up 1P 06 46 12
Ki eP 06 45 35
Sk eP 06 45 35
i 06 45 42
Vancouver Island region.
" 30 Up 1P 20 31 26

Eysteinn Tryggvason
May 9, 1961.

Markus Båth

Seismological Laboratory
Uppsala

PRELIMINARY
SEISMOLOGICAL BULLETIN

U P P S A L A, K I R U N A, S K A L S T U G A N, G Ö T E B O R G, and
U M E Å

Uppsala	(Up):	59°51.5'N,	17°37.6'E;	h = 14 m
Kiruna	(K1):	67°50.4'N,	20°25.0'E;	h = 390 m
Skalstugan	(Sk):	63°34.8'N,	12°16.8'E;	h = 580 m
Göteborg	(Gb):	57°41.9'N,	11°58.7'E;	h = 66 m
Umeå	(Um):	63°49.0'N,	20°14.1'E;	h = 20 m

O C T O B E R 1 - 31, 1960
.....

1960				1960					
Oct	1	Up	1P	03 11 18	Oct	2	Up	1P	02 49 47
			i	03 11 41			Honshu, Japan.		
		K1	1P	03 11 12					
		Sk	1P	03 11 33	"	2	Up	1PKP	04 56 39
		Gb	1P	03 11 37				i	04 56 48
		Burma.					K1	1PKP	04 56 54
							Sk	1PKP	04 56 44
"	1	Up	1P	05 36 01			Sandwich Islands.		
			i	05 36 11					
			i	05 36 20	"	2	K1	1PKP	12 13 10
			i	05 36 43			Pacific Ocean, SE of		
		K1	1P	05 37 08			Easter Island.		
			i	05 37 13					
		Sk	1P	05 36 39	"	2	Up	1P	18 19 03
		Gb	1P	05 35 53				i	18 19 19
		Near Crete.					K1	1P	18 19 00
								i	18 19 16
"	1	K1	1P	06 39 33			Sk	1P	18 19 19
		Mindanao, Philippine						i	18 19 34
		Islands.					Gb	1P	18 19 22
								i	18 19 37
"	1	Up	1P _I	16 21 55			Burma.		
			1P _{II}	16 21 58					
			i	16 22 06	"	3	Up	1P	00 57 28
			1P'P'	16 49 52				i	00 57 31
		K1	1P _I	16 21 01				i	00 57 45
			1P _{II}	16 21 04				i	00 59 13
			1P'P'	16 50 32			K1	1P	00 57 45
		Sk	1P _{II}	16 21 35			Sk	1P	00 57 56
			i	16 21 45			Gb	1P	00 57 46
		Gb	1P _{II}	16 22 13				i	00 58 33
			i	16 22 20			West Pakistan.		
		Fox Islands, Aleutian							
		Islands.							

Up = Uppsala, Ki = Kiruna, Sk = Skälstugan, Gb = Göteborg, Um = Umeå

1960					1960				
Cot	3	Up	iP	02 44 54	Oot	6	Up	iP	20 01 03
		Ki	iP	02 44 15			i		20 01 10
		Sk	iP	02 44 48			Ki	iP	20 01 02
		Honshu, Japan.					i		20 01 08
"	3	Ki	ePKP	05 29 37			i		20 01 30
		Sk	ePKP	05 29 31			Sk	iP	20 00 31
		Near coast of southern Chile.					Gb	iP	20 00 44
							i		20 00 57
"	3	Ki	iP	10 26 06			North Atlantic Ocean.		
		Western New Guinea.			"	6	Up	iP	20 03 51
"	3	Up	iP	20 03 58			Sk	iP	20 03 20
		Ki	iP	20 03 58			North Atlantic Ocean.		
		Sk	iP	20 04 22	"	6	Up	iP	21 06 22
		Off coast of Sumatra.					Sk	iP	21 05 52
							North Atlantic Ocean.		
"	4	Ki	e	06 46 51	"	6	Up	iP	21 17 32
		i		06 47 24	"	6	Sk	iP	23 07 17
		Sk	i	06 47 54					
		Local.			"	7	Up	iP	03 20 57
"	4	Up	iPKP	10 11 13			Ki	iP	03 20 53
		Ki	iPKP	10 11 13			i		03 20 57
		Solomon Islands.					Sk	iP	03 20 25
"	4	Up	iP	10 56 44			Gb	iP	03 20 39
		Ki	iP	10 56 06			North Atlantic Ocean.		
		Sk	eP	10 56 38					
		Gb	iP	10 57 03	"	7	Up	iP	03 23 12
		Honshu, Japan.					Sk	iP	03 22 41
"	4	Up	iP	16 05 01			North Atlantic Ocean.		
		Ki	e(P)	16 06 01	"	7	Up	iP	10 20 47
"	4	Ki	i(P)	19 20 34	"	7	Sk	i(P)	12 54 17
		Local.			"	7	Up	iP	15 32 49
"	5	Ki	iP	12 36 07			i		15 34 32
		Local.					i		15 36 04
"	5	Up	iP	14 26 41			iPP		15 37 27
		Ki	i(P)	14 23 50			Ki	iP	15 32 34
			i(P)	14 27 29			i		15 33 25
		Gb	iP	14 26 48			i		15 35 44
"	6	Up	iP	16 27 41			iPP		15 36 59
		i		16 27 47			iPKKP		15 48 23
		Ki	iP	16 27 02			i		15 48 40
		i		16 27 09			Sk	iP	15 32 56
		Sk	iP	16 27 46			iPP		15 36 59
		i		16 30 00			Gb	iP	15 33 02
		Lake Baikal region.					i		15 33 27
"	6	Up	iP	18 16 09			iPP		15 37 38
							Banda Sea.		
"	6	Up	iP	18 16 09	"	7	Up	i(PKP)	20 19 01

Up = Uppsala, Ki = Kiruna, Sk = Skälstugan, Gb = Göteborg, Um = Umeå

1960					1960				
Oct 7	Easter Island region.				Oct 9	Gb	iP	09 11 59	
cont.					cont.		iPP	09 14 44	
" 7	Ki	iP	21 27 31				iS	09 21 17	
		i	21 27 36			Near coast of northern Honshu, Japan.			
" 8	Up	iP	02 04 34		" 9	Ki	iPKP	10 10 12	
	Ki	iP	02 04 20			Samoa Islands region.			
		i	02 04 54		" 9	Up	iP	13 17 12	
	Oaxaca, Mexico.					Ki	iP	13 16 37	
" 8	Up	iP	06 02 52			Sk	iP	13 17 10	
		iSP	06 10 53			Gb	iP	13 17 35	
		iP'P'	06 31 04			Sea of Japan.			
		i	06 31 14		" 9	Up	iP	21 51 43	
		iSKPP'	06 33 09				i	21 52 14	
	Ki	iP	06 02 15			Ki	iP	21 51 23	
		iPP	06 04 19		" 10	Ki	iP	16 26 05	
		iS	06 09 49		" 10	Ki	iP	17 23 35	
		i	06 30 59		" 10	Ki	i(P)	17 44 45	
		iP'P'	06 31 25			Gb	iP	17 43 44	
	Sk	iP	06 02 49		" 11	Up	iP	08 16 54	
	Gb	iP	06 03 13			Ki	iP	08 16 23	
		iPP	06 05 19			Um	iP	08 16 47	
		iPPaP	06 05 45			Western Colorado.			
		iP'P'	06 30 49		" 12	Ki	iP	00 32 20	
	Sea of Japan.					Um	iP	00 32 47	
	h = 650 km (Ki, Gb).					Near coast of Honshu, Japan.			
" 8	Up	iP	13 58 00		" 12	Up	iP	10 41 40	
	Ki	iP	13 59 17				i	10 41 46	
	Sk	iP	13 58 40				i	10 41 56	
		i	13 58 55			Ki	eP	10 42 54	
	Gb	iP	13 57 45			Sk	iP	10 42 20	
	Yugoslavia.					Gb	iP	10 41 26	
" 8	Ki	iPKP	17 53 23			Um	eP	10 42 27	
	Sk	iPKP	17 53 46			(Greece).			
	Near coast of North Island, New Zealand.				" 12	Ki	eP	17 25 41	
" 8	Up	iP	20 51 48			Banda Sea.			
	Ki	iP	20 51 50		" 13	Up	iP	02 24 49	
	Sk	iP	20 52 02				i	02 24 53	
	Gb	iP	20 51 55				i	02 25 04	
		i	20 52 05			Ki	iP	02 26 13	
	Nicobar Islands.						i	02 26 43	
" 9	Up	iP	09 11 38				i	02 32 27	
		iPP	09 14 11			Sk	iP	02 25 42	
	Ki	iP	09 10 56			Gb	iP	02 24 42	
		i	09 11 18						
		iPP	09 13 11						
		iS	09 19 19						
	Sk	iP	09 11 30						

Up = Uppsala, Ki = Kiruna, Sk = Skalistugan, Gb = Göteborg, Um = Umeå

1960					1960				
Oct 13		1		02 24 52	Oct 14	Sk	iP		13 21 37
cont.	Um	iP		02 25 32	cont.		i		13 21 44
		i		02 25 51		Gb	iP		13 22 15
		i		02 30 19		Um	iP		13 21 41
		Rumania.				Southeastern Alaska.			
" 13	Up	iP		02 38 42	" 14	Sk	iP		15 42 04
" 13	Up	e(P)		03 43 04		Um	iP		15 41 48
" 13	Um	i(P)		04 59 05		Near south coast of Mindanao.			
" 13	Sk	iP		06 12 28	" 14	Up	iP		15 50 13
		North of Crozet Islands.			" 14	Up	iP		21 30 10
" 13	Up	iP		15 02 54			i		21 30 14
		i		15 05 40			iP'iP'		21 58 25
	Sk	iP		15 02(38)			i		21 58 35
	Gb	iP		15 03 15	Sk	iP			21 29 50
		i		15 03 32			iP'iP'		21 58 30
	Um	i(P)		15 02 23			i		21 58 45
		i(T)		15 02 27	Gb	iP			21 30 25
		i		15 02 30			i		21 30 39
		Kamohatka.					iP'iP'		21 58 24
" 13	Up	iP		16 58 49	Um	iP			21 29 44
		Mariana Islands region.					i		21 29 47
" 13	Up	iP		21 48 55			i		21 30 22
" 14	Up	iP		01 11 07			iP'iP'		21 58 35
		i		01 11 19			i		21 58 48
	Ki	iP		01 10 49		Fox Islands, Aleutian Islands.			
	Sk	iP		01 11 24	" 14	Up	iP		23 01 30
	Near coast of Leyte,					Sk	iP		23 01 03
	Philippine Islands.					Gb	iP		23 01 00
" 14	Um	iP		11 43 47		Um	iP		23 01 35
		i		11 43 57		North Atlantic Ocean.			
		Fox Islands, Aleutian Islands.			" 14	Up	iP		23 09 26
" 14	Gb	i(P)		12 25 27		Sk	iP		23 09 02
" 14	Up	iP		12 29 25		Um	iP		23 09 25
		i		12 29 27		North Atlantic Ocean,			
	Sk	iP		12 29 38		aftershock.			
	Gb	iP		12 29 59	" 15	Up	iP		00 05 09
	Um	iP		12 29 24	" 15	Sk	eP		01 59 28
	Near coast of Sumatra.						i		01 59 35
" 14	Up	iP		13 22 07		North Atlantic Ocean,			
		i		13 22 11	" 15	Up	iP _n		06 20 51
							iP _x		06 21 01
							iS _n		06 21 44
							iS _x		06 21 53
							D = 530 km = 4.8°.		

Up = Uppsala, Ki = Kiruna, Sk = Skälstugan, Gb = Göteborg, Um = Umeå

1960

Oot 15 Sk iFn 06 20 31
cont. iSn 06 21 13
D = 340 km = 3.1°
Um iPg 06 19 47
iSg 06 19 55
D = 70 km = 0.6°
Northern Sweden, 64.4°N,
19.5°E. Origin time =
06 19 35.

" 15 Sk iF 06 41 17
(North Atlantic Ocean,
aftershock).

" 15 Ki iF 11 41 33
Off coast of Formosa.

" 16 Up iF 01 46 34
Ki i(P) 01 45 40
i 01 46 04
Sk iF 01 46 14
Um iF 01 46 05
Near Islands, Aleutian
Islands.

" 16 Gb iPKF 05 12 22
South of Fiji Islands.

" 16 Um iF 09 47 23
Off coast of Nicaragua.

" 16 Ki iPKF 13 47 25
Um ePKF 13 47 33
Near coast of North
Island, New Zealand.

" 16 Um iF 14 02 04

" 16 Ki iF 18 02 07
Central Alaska.

" 16 Up iF 19 30 32
Ki iF 19 29 42
Sk eF 19 30 16
Um iF 19 30 08
Kurile Islands.

" 16 Um iF 21 31 45

" 16 Um iF 21 52 28

" 17 Um iF 00 39 15

" 17 Um iPKF 13 55 47
Off coast of Chile.

1960

Oot 17 Up iF 15 58 24
i 15 58 29
Ki iF 15 58 26
i 15 58 30
Sk iF 15 58 12
Gb iF 15 58 13
Um iF 15 58 29
Off coast of Colombia.

" 17 Ki iF 16 09 03
Sk iF 16 08 50
Um iF 16 09 05
Near coast of Colombia.

" 17 Up iF 19 10 54
Ki iF 19 12 16
Sk iF 19 10 43
Gb eF 19 10 30
Um eF 19 11 05

" 17 Sk iF 22 27 52
i 22 29 27
Um iF 22 28 12
i 22 29 46
Mexico Guatemala Border.
Two shocks ?

" 18 Up iPKF 00 19 22
Gb iPKF 00 19 33
Um iPKF 00 19 20
South of Fiji Islands.

" 18 Ki iF 00 31 52
i 00 32 38
Sk iF 00 32 23
Gb iF 00 33 01
Um iF 00 32 20
i 00 32 32
Fox Islands, Aleutian Islands.

" 18 Ki iF 10 34 20
Sk iF 10 34 46
Kirghiz, U.S.S.R.

" 19 Ki iF 05 16 57
Um iF 05 17 41
(Arctic region).

" 19 Gb iPKF 07 27 36
Fiji Islands region.

" 19 Um iF 08 06 05

" 20 Um iF 06 24 53
Near coast of Venezuela.

Up = Uppsala, Ki = Kiruna, Sk = Skälstugan, Gb = Göteborg, Um = Umeå

1960					1960				
Oct	20	Up	iPKP	11 24 58	Oct	21	Up	iP	20 56 02
		Ki	iPKP	11 24 44					
		Sk	iPKP	11 24 55	"	22	Ki	i(P)	02 09 28
		Gb	iPKP	11 25 05					
		Um	iPKP	11 24 50	"	22	Up	iPKP	08 41 06
		Santa Cruz Islands region.					i	08 41 15	
"	20	Up	iSg	11 52 22			Ki	ePKP	08 40 40
		i		11 52 28			i	08 40 51	
		Sk	eSg	11 53 52			Sk	iPKP	08 40 47
		Gb	iSg	11 51 01			i	08 41 04	
		Um	eSg	11 54 27			Gb	ePKP	08 40 38
		Southern Sweden. Felt.					i	08 40 46	
		Macroseismic epicenter					Um	ePKP	08 40 55
		56.2°N, 13.2°E.					Solomon Islands region.		
"	20	Up	iP	12 29 19	"	22	Up	iP	19 21 09
		i		12 29 35			i	19 21 18	
		Ki	iP	12 30 27			Ki	iP	19 22 44
		Sk	iP	12 29 59			i	19 22 48	
		Gb	eP	12 29 25			e	19 27 08	
		(Eastern Mediterranean area).					Sk	iP	19 22 01
"	20	Ki	iP	12 50 34			i	19 22 09	
		Um	iP	12 51 14			Gb	eP	19 20 33
		(Arctic region).					i	19 20 50	
"	20	Up	iP	23 51 06			Um	iP	19 22 03
		i		23 51 31			Hungary-Rumania border.		
		Ki	iP	23 50 20	"	23	Ki	iP	06 41 21
		Um	iP	23 50 43			Sk	iP	06 40 47
		Kurile Islands region.					i	06 40 55	
"	21	Up	iP	00 03 02			Gb	i(P)	06 39 53
		Ki	iP	00 02 15			i	06 40 36	
		Sk	iP	00 02 51			Um	eP	06 41 16
		Gb	iP	00 03 22			Atlantic Ocean.		
		Um	iP	00 02 41	"	23	Ki	iP	07 51 03
"	21	Up	iP	02 11 48	"	23	Um	iP	09 21 49
		Ki	iP	02 11 51	"	23	Sk	iP	19 30 03
		Sk	iP	02 12 05	"	24	Um	i(P)	03 40 54
		Um	iP	02 11 51	"	24	Um	i(P)	04 09 16
"	21	Up	iP	10 19 59			Seismic ?		
"	21	Up	iP	14 45 34	"	24	Ki	iP	05 30 47
		i		14 46 06			Sk	eP	05 31 23
		Ki	e(P)	14 44 44			Um	iP	05 30 52
		i(P)		14 45 08			i	05 31 26	
		i		14 45 13			New Hebrides Islands region.		
		Gb	i(P)	14 45 12	"	24	Ki	iP	05 54 33
"	21	Ki	iP	19 17 19			Sk	eP	05 56 38
							Um	eP	05 54 43

Up = Uppsala, Ki = Kiruna, Sk = Skälstugan, Gb = Göteborg, Um = Umeå

1960				1960			
Oct 24	i	05 55 30		Oct 27	Ki iP	15 41 54	
cont.	Hindu Kush region.			cont.	iS	15 43 44	
					iS ^x	15 44 06	
" 24	Um i(P)	09 13 09			eT	15 49 52	
	Seismic ?				iT	15 50 35	
" 24	Sk i(P)	09 39 57		Sk iP	15 41 59		
	Seismic ?			i	15 42 06		
" 25	Um i(P)	00 02 37		iS	15 43 47		
	i	00 02 45		Gb iP	15 43 12		
	Seismic ?			i(S ^x)	15 46 29		
" 25	Ki i(P)	11 41 26		Um iP	15 42 25		
	Seismic ?			i	15 42 35		
				iS	15 44 43		
				iS ^x	15 45 15		
				Jan Mayen Island region.			
" 26	Up iP	01 58 35		" 27	Up iPKP	22 46 39	
	Ki iP	01 57 42			i	22 46 45	
	Sk iP	01 58 19		Ki iPKP	22 46 28		
	Um iP	01 58 14		i	22 46 31		
	Near coast of Kamchatka.			Sk iPKP	22 46 40		
" 26	Ki i(P)	11 20 50		Gb iPKP	22 46 42		
	Seismic ?			i	22 46 52		
" 26	Up iP	22 59 51		Um iPKP	22 46 28		
	Sk iP	23 00 34		i	22 46 38		
	Um eT	23 00 36		Samoa Islands region.			
	Greece.			" 28	Up iP	04 22 21	
" 27	Up iP	04 44 11			i	04 22 23	
	Ki iP	04 43 40			iS	04 25 06	
	Sk iP	04 44 09		Ki iP	04 21 16		
	Um iP	04 43 51		iS ^x	04 23 28		
	Bonin Islands region.			eT	04 29 50		
" 27	Up iP	11 04 04		Sk iP	04 21 22		
	Ki iP	11 03 40		Gb iP	04 22 30		
	Sk iP	11 04 10		i	04 22 57		
	Gb i(P)	11 04 41		i(S ^x)	04 25 46		
	Luzon, Philippine Islands.			Um iP	04 21 50		
" 27	Ki iP	12 48 10		i	04 21 54		
	Sk iP	12 48 15		iS	04 24 09		
	i(S ^x)	12 50 16		iS ^x	04 24 43		
	Um i(S ^x)	12 51 21		Jan Mayen Island.			
	Jan Mayen Island region.			" 28	Ki iP	05 29 45	
" 27	Ki iP	14 43 10			iS	05 31 32	
	Sk i(P)	14 44 03		Sk iP	05 29 51		
	i	14 46 22		i(S ^x)	05 31 51		
" 27	Up iP	15 42 58		Um iP	05 30 19		
	i	15 45 02		eS	05 32 40		
	iS	15 45 42		Jan Mayen Island region.			
				" 28	Up iP	07 50 17	
					i	07 50 22	
					iS ^x	07 53 38	

Up = Uppsala, Ki = Kiruna, Sk = Skälstugan, Gb = Göteborg, Um = Umeå

1960					1960				
Oot	28	Ki	iP	07 49 11	Oot	29	Ki	iP	07 59 50
cont.			i	07 49 21					
			i(S)	07 51 12	"	29	Up	i(Sg)	11 19 06
			eT	07 57 46			Ki	i(Sg)	11 19 00
		Sk	iP	07 49 15				i	11 19 31
			iS	07 51 09			Sk	i(Sg)	11 20 12
		Gb	iP	07 50 22			Um	e(Sg)	11 18 24
			i	07 50 28			South Finland ?		
			i	07 53 25					
		Um	iP	07 49 46	"	29	Up	iP	17 24 35
			iS	07 52 06				i	17 25 14
			iS ^x	07 52 37			Ki	iP	17 24 17
		Jan Mayen Island.					Um	iP	17 24 19
							Mindoro, Philippine Islands.		
"	28	Ki	i(T)	13 10 29	"	29	Up	iP	20 49 00
		Seismic ?						i	20 49 15
"	28	Up	iP	13 28 39			Ki	eP	20 50 12
		Ki	iP	13 27 47				i	20 52 07
			i	13 28 17			Sk	iP	20 49 40
			iP'iP'	13 57 43			Gb	eP	20 48 43
		Sk	iP	13 28 24			East of Sicily, Mediterranean Sea.		
		Gb	iP	13 29 00					
			i	13 29 29	"	30	Ki	eP	16 04 10
			iS	13 37 47			Spice Islands.		
		Um	iP	13 28 12	"	30	Up	i(T)	18 11 01
			i	13 28 42				i	18 11 12
			eP'iP'	13 57 38			Sk	iP	18 11 47
		Kamchatka.					(Eastern Mediterranean area).		
"	28	Up	iP	22 41 03	"	30	Up	iPT	21 51 31
			i	22 41 17			Ki	ePT	21 51 39
		Ki	iP	22 40 26			Sk	iPT	21 51 48
			i	22 40 40			Gb	iPT	21 51 07
		Sk	iP	22 40 57			Chile-Bolivia border.		
			i	22 41 11					
		Gb	iP	22 41 23	"	30	Ki	iP	22 01 41
			i	22 41 35			Sk	iP	22 02 30
		Um	iP	22 40 44	"	31	Ki	iP	00 30 23
			i	22 40 56			Seismic ?		
		Near east coast of Honshu, Japan.			"	31	Up	eP	06 18 32
"	29	Sk	eP	00 13 12	"	31	Up	i(T)	07 17 25
		Um	iP	00 13 19			Ki	iP	07 15 34
		Italy.					(Gulf of California).		
"	29	Up	iP	01 34 19	"	31	Sk	iP	10 25 37
		Ki	iP	01 34 41	"	31	Up	i(Sg)	12 18 28
		Sk	eP	01 34 48			Ki	i(Sg)	12 18 53
			i	01 35 10					
		Gb	eP	01 34 32					
		Um	eP	01 34 28					
		West Pakistan.							

Up = Uppsala, Ki = Kiruna, Sk = Skelstugan, Gb = Göteborg, Um = Umeå

1960

Oct	31	Sk	i(Pg)	12 15 57
cont.			i(Sn)	12 16 24
			i(Sg)	12 16 30
		Um	i(Sg)	12 18 27
			(Near west coast of Norway).	

"	31	Up	iP	14 00 07
		Ki	i(P)	14 00 30
			i	14 01 23
		Gb	i(P)	13 59 52

"	31	Ki	iP	21 02 26
		Um	iP	21 02 40
			South of Bonin Islands.	

"	31	Up	iP	23 54 37
		Ki	iP	23 53 42
		Um	iP	23 54 10
			Near southern coast of Kamchatka.	

Eysteinn Tryggvason
June 19, 1961.

Markus Båth

PRELIMINARY
SEISMOLOGICAL BULLETIN

U P P S A L A , K I R U N A , S K A L S T U G A N , G Ö T E B O R G , and
U M E Å

Uppsala: (Up): 59°51.5'N, 17°37.6'E; h = 14 m
 Kiruna (Kl): 67°50.4'N, 20°25.0'E; h = 390 m
 Skanstugan (Sk): 63°34.8'N, 12°16.8'E; h = 580 m
 Göteborg (Gb): 57°41.9'N, 11°58.7'E; h = 66 m
 Umeå (Um): 63°49.0'N, 20°14.1'E; h = 20 m

N O V E M B E R 1 - 30, 1960

1960				1960					
Nov	1	Um	1(P)	06 10 51	Nov	1	Up	1(Pg)	11 18 15
								iSg	11 18 47
"	1	Up	1P	06 27 10			Ki	1(Pg)	11 18 45
		Ki	1P	06 27 52			Sk	iSg	11 19 55
		Sk	1P	06 27 22			Um	iSg	11 18 06
		Um	1P	06 27 33			Local.		
Ascension Island region (h ~ 40 km).					"	1	Ki	iSg	11 23 03
							Sk	eSg	11 23 29
"	1	Up	1PKF	09 04 53			Um	iSg	11 21 49
		Ki	1PKF	09 05 00			Local.		
		i		09 05 09					
		i		09 06 57	"	1	Up	1(Pg)	11 24 05
		Sk	1PKF	09 04 50				iSg	11 24 35
		i		09 05 39			Ki	1(Pg)	11 24 35
		i		09 06 38			Sk	iSg	11 25 41
		Gb	1PKF	09 04 44			Um	iSg	11 23 54
		Um	1PKF	09 05 00			Local.		
Near coast of Chile (h ~ 100 km).					"	1	Up	1(Pg)	11 26 35
							i		11 26 59
"	1	Ki	1P	09 12 05				iSg	11 27 09
							Ki	e(Pg)	11 27 05
"	1	Up	1P	10 37 05				iSg	11 27 37
		i		10 37 19			Sk	iSg	11 28 11
		Ki	1P	10 37 05			Um	iSg	11 26 27
		i		10 37 19			Local.		
		Sk	1P	10 37 19					
		i		10 37 32	"	1	Up	1(Pg)	11 28 49
		Um	1P	10 37 03				iSg	11 29 30
		i		10 37 17			Ki	iSg	11 30 04
Near south coast of Sumatra (h ~ 40 km).							Sk	e	11 30 16
							i		11 30 37
							Um	iSg	11 28 46
							Local.		

Up = Uppsala, Ki = Kiruna, Sk = Skalistugan, Gb = Göteborg, Um = Umeå

1960

Nov 1 Up i(Pg) 11 33 19
 iSg 11 33 46
 Ki i(Pg) 11 33 45
 iSg 11 34 17
 Sk e 11 34 21
 iSg 11 34 56
 Um iSg 11 33 03
 Local. This shock and the
 preceding five shocks have
 the same origin.

" 1 Up iF 16 18 10
 i 16 18 20
 Ki iF 16 19 28
 i 16 19 51
 Sk iF 16 19 01
 Um iF 16 19 03
 Greece - Yugoslavia
 (h ~ 30 km).

" 1 Up iF 19 16 47
 i 19 17 19
 Ki iF 19 15 58
 Sk iF 19 16 34
 i(pF) 19 17 11
 Um iF 19 16 24
 Near coast of Kamchatka
 (h ~ 160 km).

" 2 Up iPKF 00 17 51
 i 00 17 54
 Ki iPKF 00 17 32
 Sk iPKF 00 17 46
 Um iPKF 00 17 43
 Kermadec Islands region
 (h ~ 40 km).

" 2 Ki iF 15 39 14
 Kodiak Island, Alaska
 (h ~ 100 km).

" 2 Up iF 16 42 13
 i 16 42 32
 i 16 42 57
 Ki iF 16 42 08
 i 16 42 27
 Sk iF 16 42 30
 Um iF 16 42 05
 Burma-East Pakistan border
 (h ~ 130 km).

" 2 Up iPKF 17 33 50
 Ki iPKF 17 33 37
 Sk iPKF 17 33 48

1960

Nov 2 Um iPKF 17 33 44
 oont. Santa Cruz Islands
 (h ~ 25 km).

" 2 Ki iF 19 52 22
 iF 19 54 17
 Tadjikistan, U.S.S.R.

" 3 Ki i(P) 01 52 48

" 3 Up i(P) 05 48 35

" 3 Ki iPKF 17 49 08
 Fiji Islands region
 (h ~ 25 km).

" 4 Sk iF 11 51 39

" 4 Up iF 12 51 24
 Ki iF 12 52 34
 Sk iF 12 52 09
 Um iF 12 52 12
 (Greece).

" 4 Up iF 14 31 51
 Ki iF 14 31 49
 Spice Islands (h ~ 25 km).

" 4 Up iF 20 34 49

" 5 Up iF 01 03 13
 Ki iF 01 02 52
 Kyushu, Japan (h ~ 70 km).

" 5 Um iF 17 13 03

" 5 Sk iF 19 25 41

" 5 Up iF 20 25 32
 i 20 29 33
 Sk iF 20 26 14
 i 20 27 12
 i 20 30 47
 Gb iF 20 25 19
 Um iF 20 26 12
 i 20 26 23
 Near coast of Greece
 (h ~ 50 km).

" 6 Up iF 04 48 47
 Sk iF 04 48 30
 Gb iF 04 49 14
 i 04 49 22
 Um iF 04 48 15

Up = Uppsala, Ki = Kiruna, Sk = Skälstugan, Gb = Göteborg, Um = Umeå

1960				1960			
Nov	6	Near coast of Kamohatka (h ~ 30 km).		Nov	8	Up	1PKP 00 16 21
"	6	Up	1PKP 06 34 36			i	00 16 39
		Sk	1PKP 06 34 30			Sk	1PKP 00 16 13
		Gb	1PKP 06 34 42			Um	1PKP 00 16 18
		Um	1P 06 34 22			i	00 16 30
		i	06 34 36			Kermadec Islands region (h ~ 25 km).	
		Gb	1PKP 06 34 42	"	8	Up	1PKP 00 53 05
		Kermadec Islands region (h ~ 180 km).				Sk	1PKP 00 52 59
"	.6	Up	1(Sg) 08 52 08			Um	1PKP 00 53 02
		i	08 52 23			i	00 53 13
		Sk	1Pg 08 50 31			Kermadec Islands region (h ~ 25 km).	
		iSg	08 51 00	"	8	Up	e(PKP) 03 03 10
		Um	1Pg 08 50 26			Sk	1(PKP) 03 03 43
		iSg	08 50 46			Um	1(PKP) 03 03 37
		Local.				Kermadec Islands region (h ~ 25 km).	
"	6	Up	1P 10 37 24	"	8	Sk	1P 04 37 09
		Um	1P 10 36 59			North Atlantic Ocean (h ~ 25 km).	
"	6	Up	1P 14 10 05	"	8	Up	1P 05 33 12
"	6	Up	1P 15 27 38			Ki	1P 05 32 25
		i	15 27 43			Sk	1P 05 33 04
		Um	1P 15 27 07			Kurile Islands (h ~ 25 km).	
		i	15 27 18	"	8	Up	1P 05 38 24
"	6	Ki	1P 16 58 09			Ki	1P 05 37 37
"	6	Ki	1(P) 21 03 08			Kurile Islands (h ~ 25 km).	
"	6	Up	1P 22 21 02	"	8	Up	1PKP 11 19 32
		Ki	1P 22 20 09			Sk	1PKP 11 19 26
		i	22 20 15			i	11 19 34
		Sk	1P 22 20 35			Um	1PKP 11 19 20
		i	22 21 06			Kermadec Islands (h ~ 20 km).	
		Gb	1P 22 21 16	"	8	Ki	1P 13 45 55
		i	22 21 36			Sk	1P 13 46 24
		Um	1P 22 20 29			Alaska Peninsula (h ~ 30 km).	
		i	22 21 06	"	8	Up	1P 19 12 34
		Fox Islands, Aleutian Islands (h ~ 40 km).				Ki	1P 19 12 25
"	7	Up	1P 13 34 31			Sk	1P 19 12 54
		i	13 34 38			Um	1P 19 12 28
		Ki	1P 13 34 08	"	9	Up	1PKP 03 36 54
		i	13 34 17			i	03 37 02
		Sk	eP 13 34 40			i	03 37 08
		Um	1P 13 34 32			Ki	1PKP 03 37 10
		i	13 34 40			Sk	1PKP 03 37 00
		Kyushu, Japan (h ~ 25 km).				i	03 37 14

Up = Uppsala, Ki = Kiruna, Sk = Skolstugan, Gb = Göteborg, Um = Umeå

1960				1960			
Nov 9	Gb	iPKT	03 36 49	Nov 10	Ki	iP	05 40 34
cont.	Um	iPKT	03 37 05		Sk	iP	05 40 02
	Sandwich Islands (h ~ 40 km).				i		05 50 04
" 9	Up	iP	10 53 51		North Atlantic Ocean		
	Ki	iP	10 53 30		(h ~ 30 km).		
		i	10 53 34	" 10	Gb	iP	13 53 36
	Sk	iP	10 53 59	" 10	Up	i(PKP)	15 03 38
		i	10 54 27		Ki	iP	14 58 44
	Gb	iP	10 54 11			i(PKT)	15 03 02
		i	10 54 18		Gb	i(PKP)	15 03 35
	Um	iP	10 53 37		Um	iP	14 58 55
		i	10 53 43		Near coast of New Guinea		
	Szechwan Province, China				(h ~ 25 km).		
	(h ~ 50 km).			" 10	Ki	iPKT	16 49 33
" 9	Up	i(P)	12 26 57		Um	iPKT	16 49 44
" 9	Ki	iP	12 40 33		Loyalty Islands region		
" 9	Up	iPKT2	19 52 43		(h ~ 130 km).		
	Ki	iPKT2	19 52 32	" 10	Up	iP	21 31 15
	Sk	iPKT	19 52 20		Ki	iP	21 29 51
		i	19 52 23	" 11	Up	iP	05 36 12
	Um	iPKP	19 52 18			i	05 36 16
		i	19 52 29		Ki	iP	05 37 28
	Kermadec Islands region					i	05 40 48
	(h ~ 70 km).				Sk	iP	05 36 53
" 9	Sk	iP	23 00 14		Gb	iP	05 36 01
" 10	Up	iP	01 45 25		Um	iP	05 36 56
		i	01 45 41		Greece-Albania region		
	Ki	iP	01 45 12		(h ~ 40 km).		
		i	01 45 27	" 11	Up	iP	13 55 36
	Sk	iP	01 45 04		Ki	iP	13 54 40
		i	01 45 19		Sk	iP	13 55 18
	Gulf of Mexico (h ~ 20 km).				Near east coast of Kamchatka		
" 10	Up	iP	02 02 27		(h ~ 30 km).		
		i	02 02 32	" 11	Up	iP	22 34 13
	Ki	iP	02 02 36		Ki	iP	22 34 15
	Sk	iP	02 02 52		Nicobar Islands (h ~ 25 km).		
		i	02 03 24	" 11	Up	iP	22 53 04
	Gb	iP	02 02 48		Ki	iP	22 52 10
		i	02 04 36		Gb	iP	22 53 25
	Um	iP	02 02 26		Near east coast of Kamchatka		
		i	02 03 02		(h ~ 40 km).		
	Hindu Kush (h ~ 60 km).			" 12	Up	iPg	09 11 23
" 10	Up	iP	02 10 39			iSg	09 11 42
	Ki	iP	02 10 48			i	09 11 46
	Sk	iP	02 11 05			i	09 11 50
	Hindu Kush.						

Up = Uppsala, Ki = Kiruna, Sk = Skalistugan, Gb = Göteborg, Um = Umeå

1960					1960				
Nov 12	Explosion of 40 ton dynamite near Norrköping, Sweden. Origin time = 09.10.57.8 (measured directly at the explosion site).				Nov 13	Ki	iP	14 02 41	
cont.							i	14 02 51	
						Fox Islands, Aleutian Islands (h ~ 50 km).			
" 12	Ki	iP	12 36 19		" 13	Ki	iP	14 39 28	
						Fox Islands, Aleutian Islands (h ~ 50 km).			
" 12	Ki	iP	12 45 00		" 13	Ki	iP	15 38 07	
						Fox Islands, Aleutian Islands (h ~ 80 km).			
" 12	Up	iP	18 47 49		" 13	Ki	iP	17 29 26	
		i	18 48 17			Fox Islands, Aleutian Islands (h ~ 80 km).			
	Ki	iP	18 47 03		" 13	Ki	iP	19 09 18	
	Kurile Islands (h ~ 170 km).					Fox Islands, Aleutian Islands (h ~ 80 km).			
" 13	Up	iP	06 50 41		" 13	Ki	i(T)	19 09 18	
		iPP	06 54 36		" 13	Ki	eP	19 28 25	
		i	06 54 45				i	19 29 12	
	Ki	iP	06 50 25		" 13	Ki	iP	20 52 42	
	Sk	iP	06 50 45			Azores, North Atlantic Ocean (h ~ 25 km).			
		i	06 54 25		" 14	Up	iP	16 06 26	
		iPP	06 54 43			Ki	iP	16 06 17	
	Molucca Passage (h ~ 60 km).						i	16 06 26	
" 13	Up	iP	09 31 40 C			Sk	iP	16 06 44	
	Ki	iP	09 30 46 D			Gb	iP	16 06 41	
		iS	09 39 06			Burma (h ~ 60 km).			
	Sk	iP	09 31 16		" 14	Up	iPKT	18 11 48	
	Gb	iP	09 31 54 D			Ki	iPKT	18 11 40	
		i	09 34 24			Fiji Islands region (h ~ 540 km).			
	Fox Islands, Aleutian Islands (h ~ 70 km).				" 14	Ki	iP	20 12 01	
" 13	Up	iP	09 59 45			Near coast of Chiapas, Mexico (h ~ 100 km).			
		i	09 59 50		" 14	Ki	iP	20 17 10	
	Ki	iP	10 00 07			Spain.			
		i	10 00 17		" 15	Up	iP	09 16 22	
	Sk	iP	09 59 57				i	09 16 32	
" 13	Up	iP	10 12 11			Ki	iP	09 16 16	
" 13	Ki	iP	12 35 50			Sk	iP	09 16 37	
		i	12 35 59				i	09 16 45	
	Fox Islands, Aleutian Islands (h ~ 40 km).					Gb	iP	09 16 51	
" 13	Ki	iP	13 34 41			Um	iP	09 16 12	
		i	13 34 50				i	09 16 38	
	Sk	iP	13 35 14			Near Burma-India border (h ~ 100 km).			
	Fox Islands, Aleutian Islands (h ~ 25 km).								
" 13	Ki	iP	13 38 20						
	Fox Islands, Aleutian Islands (h ~ 50 km).								

Up = Uppsala, Ki = Kiruna, Sk = Skolstugan, Gb = Göteborg, Um = Umeå

1960				1960			
Nov	15	Ki	1PKT 21 59 55	Nov	17	Ki	1(P) 17 30 24
		Um	ePKT 21 59 59				
		Off coast of North Island, New Zealand (h ~ 80 km).		"	17	Up	1P 19 57 47
"	16	Ki	1PKT 01 41 39			Ki	1P 19 56 54
		Sk	1PKT 01 41 35			Sk	1P 19 57 24
		Gb	1PKT 01 41 50			i	19 57 37
		Um	1PKT 01 41 36			Gb	1P 19 58 02
			1SKT 01 44 18			Fox Islands, Aleutian Islands (h ~ 50 km).	
		South of Fiji Islands (h ~ 550 km).		"	18	Up	1P 03 48 20
						Ki	1P 03 47 32
						Sk	1P 03 48 08
						Sea of Okhotsk (h ~ 300 km).	
"	16	Up	1P 13 20 38	"	18	Ki	1P 06 10 11
"	16	Sk	1(P) 13 26 35			Sk	1P 06 09 45
"	16	Gb	1P 13 49 04			Gb	1P 06 09 00
						East of Crete, Mediterranean Sea (h ~ 40 km).	
"	16	Up	1P 14 10 56	"	18	Up	1P 09 50 11
		Gb	1P 14 10 34			i	09 50 30
"	16	Sk	1P 14 40 39			i	09 50 45
						Sk	1P 09 50 53
"	16	Ki	1P 15 50 48	"	18	Up	1P 10 31 01
		Sk	1P 15 50 04			i	10 31 12
		Near coast of Colombia (h ~ 80 km).		"	18	Up	1P 10 33 43
"	16	Up	1P 23 08 37			i	10 34 10
		i	23 09 05	"	18	Up	1P 12 29 18
		Ki	1P 23 08 25			Ki	1P 12 29 11
			1PT 23 10 18			i	12 29 43
		Sk	1P 23 08 51			Gb	1P 12 29 30
		i	23 08 57	"	18	Up	1Pg 12 51 49
		Gb	1P 23 09 02			iSg	12 52 13
		i	23 09 07			Ki	1(P) 12 53 39
		Um	1P 23 08 31			Sk	iSg 12 54 06
			1PT 23 10 21			Gb	1(Pg) 12 51 09
		Sinkiang Province, China (h ~ 25 km).				iSg	12 51 24
"	17	Sk	1PKT 04 27 37			Local.	
		Um	1PKT 04 27 37	"	18	Up	1P 19 48 15
		i	04 27 49	"	18	Up	1P 20 04 45
		Kermadec Islands region (h ~ 70 km).		"	19	Ki	1P 12 29 54
"	17	Ki	1P 05 54 54			Caroline Islands region (h ~ 30 km).	
"	17	Up	1P 07 41 29	"	19	Ki	eP 13 21 35
		i	07 41 42			i	13 21 41

Up = Uppsala, Ki = Kiruna, Sk = Skälstugan, Gb = Göteborg, Um = Umeå

1960

Nov 19

Sk

1P

13 21 40

Nov 22

Up

1(Sg)

13 15 55

cont.

</

Up = Uppsala, Ki = Kiruna, Sk = Skolstugan, Gb = Göteborg, Um = Umeå

1960				1960			
Nov	24	Up	1PKP 05 08 51	Nov	27	Up	1P 12 09 59
		Ki	1PKP 05 08 38			i	12 10 31
		Sk	1PKP 05 08 49			Ki	1P 12 09 33
		Um	1PKP 05 08 43			Sk	1P 12 09 34
		New Britain region				i	12 10 01
		(h ~ 90 km).				Alaska (h ~ 170 km).	
"	24	Up	1PKP 07 12 13	"	27	Up	1P 15 28 08
		i	07 12 16			i(pF)	15 28 32
		Ki	1PKP 07 11 58			Ki	1P 15 27 25
		i	07 12 03			Sk	1P 15 27 59
		i	07 12 16			i(pF)	15 28 26
		Sk	1PKP 07 12 11			Gb	1P 15 28 30
		Gb	1PKP 07 12 23			i(pF)	15 28 52
		iP	07 15 43			Um	1P 15 27 45
		Um	1PKP 07 12 04			i(pF)	15 28 10
		i	07 12 13			Near coast of Hokkaido,	
		South of Tonga Islands				Japan (h ~ 120 km).	
		region (h ~ 25 km).					
"	24	Up	1PKP 08 36 35	"	27	Sk	1P 20 48 23
		Ki	1PKP 08 36 19			Um	1P 20 48 19
		Gb	1PKP 08 36 26			Gongo (h ~ 60 km).	
		South of Tonga Islands					
		region (h ~ 25 km).		"	28	Ki	1P 05 09 58
"	24	Ki	1PKP 08 45 56	"	28	Up	1P 05 18 12
		Gb	1PKP 08 45 56			i	05 18 17
		South of Tonga Islands				i	05 18 31
		region (h ~ 25 km).				Ki	1P 05 19 15
						Sk	1P 05 18 51
						Um	1P 05 19 00
"	24	Um	1P 15 05 31			Near coast of Turkey	
						(h ~ 70 km).	
"	25	Ki	i(P) 21 19 48	"	28	Ki	i(P) 11 27 40
"	25	Up	1P 22 05 23	"	28	Up	1Sg 13 15 12
		Ki	1P 22 04 44			Sk	1Sg 13 17 05
		i	22 05 08			Um	1Sg 13 15 51
		Sk	1P 22 05 17			Local.	
		i	22 05 41				
		Gb	1P 22 05 44	"	28	Up	1P 13 35 58
		Um	1P 22 05 02	"	28	Ki	1P 14 05 21
		Honshu, Japan (h ~ 160 km).		"	28	Ki	e(P) 14 17 32
"	26	Um	1P 07 48 04	"	29	Ki	i(P) 11 14 07
		Near coast of Honshu,		"	29	Up	1P 14 18 37
		Japan (h ~ 100 km).				i	14 18 47
						i	14 19 09
"	26	Um	1P 14 54 09			Ki	1P 14 18 10
						i	14 18 20
"	26	Ki	1P 16 55 49			Sk	1P 14 18 39
		i	16 55 58				
		Um	1P 16 56 09				
		Fox Islands, Aleutian					
		Islands (h ~ 90 km).					

Up = Uppsala, Ki = Kiruna, Sk = Skälstugan, Gb = Göteborg, Um = Umeå

1960

Nov 29		i	14 18 48
cont.	Gb	iP	14 19 00
	Um	iP	14 18 19
		i	14 18 35
	Ryukju Islands (h ~ 150 km).		
" 29	Ki	iP	15 29 25

Ingrid Pettersson
September 11, 1961

Markus Båth

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P R E L I M I N A R Y

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 , G Ö T E B O R G , and
U M E Å

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
Göteborg	(Gb):	57°41.9'N,	11°58.7'E;	h = 66 m
Umeå	(Um):	63°49.0'N,	20°14.1'E;	h = 20 m

D E C E M B E R 1 - 31, 1960

1960					1960			
Dec	1	Up	iP	04 07 34	Dec	2	Um	i(PKP) 09 29 30
			iPP	04 08 10		cont.		iPP 09 30 13
				Western Turkey (h ~ 140 km).				iPKKP 09 40 18
								Near coast of Chile
"	1	Ki	iP	11 57 25				(h ~ 40 km).
"	1	Up	iP	13 28 44	"	2	Up	iP 17 55 09
			i	13 28 50				Ryukyu Islands (h ~ 80 km).
		Sk	iP	13 29 27				
		Um	iP	13 29 36	"	3	Up	iP 04 33 29
							Ki	iP 04 33 00
"	1	Up	iP	21 00 49			Sk	iP 04 33 35
			i	21 00 59			Gb	iP 04 33 56
		Ki	iP	21 00 22				i 04 37 44
		Sk	iP	21 00 17				Outer Mongolia (h ~ 50 km).
				Off coast of Vancouver				
				Island (h ~ 15 km).	"	3	Up	iP 07 18 32
							i	07 19 17
"	2	Ki	iP	04 12 41			i	07 20 17
		Um	iP	04 13 08			Ki	iP 07 17 39
				Fox Islands, Aleutian				i 07 18 24
				Islands (h ~ 70 km).			Gb	iP 07 19 38
							Um	iP 07 18 02
"	2	Up	iPKT	09 29 22				i 07 18 52
			i(PT)	09 29 48				Andreanof Islands, Aleutian
		Ki	iPKT	09 29 17				Islands (h ~ 80 km).
			iPKKP	09 40 23				
		Gb	e(PKP)	09 29 17	"	3	Up	iP 09 23 54
			i	09 29 29				i 09 24 18

Up = Uppsala, Ki = Kiruna, Sk = Skanstugan, Gb=Göteborg, Um=Umeå

1960

Dec 3 Up iF 09 24 28
Ki iF 09 23 57
Um iF 09 24 05
Off south coast of Formosa
(h ~ 40 km).

" 3 Up iF 11 33 15

" 3 Up iF 11 45 58

" 3 Up iF 18 05 45
Ki iF 18 05 18
Um iF 18 05 24
Outer Mongolia (h ~ 25 km).

" 3 Ki iF 20 27 07
Sk iF 20 27 44
i 20 28 21
Laptev Sea (h ~ 30 km).

" 4 Up iF 16 32 22
i 16 32 35
Ki iF 16 31 45
Off coast of Honshu, Japan
(h ~ 110 km).

" 5 Up iPKT 00 13 53
Ki iPKT 00 13 46
Gb iPKT 00 14 03
Fiji Islands region
(h ~ 630 km).

" 5 Up i 03 22 18
i 03 23 08
i(Sg) 03 23 21
Ki iF 03 20 19
i 03 20 24
iSg 03 21 15
Um i 03 21 01
iSg 03 21 07
Local.

" 5 Up iF 08 47 58
Ki iF 08 47 30
Outer Mongolia (h ~ 60 km).

" 5 Ki iF 17 38 47

" 5 Up iF 18 00 05
i 18 00 10
Ki iF 17 59 10
Gb iF 18 00 25
Near east coast of Kamohatka
(h ~ 25 km).

1960

Dec 5 Up iF 18 17 51
Ki iF 18 16 56
i 18 17 07
Near east coast of Kamohatka
(h ~ 25 km).

" 5 Up iF 21 27 46
i 21 27 59
Ki iF 21 28 45
i 21 28 58
Gb iF 21 27 12
i 21 27 26
Straits of Gibraltar
(h ~ 70 km).

" 6 Up iF 03 44 41
Ki iF 03 44 13
Outer Mongolia (h ~ 60 km).

" 6 Up iF 09 08 30
Ki iF 09 08 56
Near coast of Panama
(h ~ 120 km).

" 6 Up i 09 15 10
Ki iPKT 09 14 51
Northern Chile (h ~ 25 km).

" 6 Up iF 18 32 30
Ki iF 18 32 10
Samar, Philippine Islands
(h ~ 25 km).

" 6 Ki iF 21 47 05
Sumatra (h ~ 50 km).

" 6 Up eF 22 19 51

" 7 Up iPKT 03 19 27
i 03 19 39
Ki iPKT 03 19 09
i 03 19 22
North Island, New Zealand
region (h ~ 25 km).

" 7 Ki iF 07 51 28
Alaska (h ~ 60 km).

" 7 Gb iF 08 32 13

" 7 Ki iF 14 14 37

" 8 Up iPKT 01 21 17
i 01 21 29

Up = Uppsala, Ki = Kiruna, Sk = Skalistugan, Gb = Göteborg, Um = Umeå

1960				1960			
Dec 8	Ki	iPKT	01 20 49	Dec 10	Up	iP	18 33 10
cont.		i	01 20 57		Sk	iP	18 33 01
	Sk	iPKT	01 21 01				
		i	01 21 12	" 11	Ki	iPKT	00 20 09
	North Island, New Zealand region (h ~ 80 km).				Loyalty Islands region (h ~ 140 km).		
" 8	Up	iPKT	01 42 29	" 11	Up	iP	01 02 49
	Ki	iPKT	01 42 22		Ki	iP	01 02 33
	Sk	iPKT	01 42 22	" 11	Up	iP	01 16 26
	Gb	iPKT	01 42 40		Ki	iP	01 16 15
		i	01 42 44		Sk	iP	01 16 40
	Fiji Islands region (h ~ 690 km).				Gb	iP	01 16 59
" 8	Up	i(P)	03 55 20		Sinkiang Province, China (h ~ 80 km).		
" 8	Ki	i(P)	08 48 21	" 11	Sk	iP	02 53 57
		i	08 48 30	" 11	Up	iP	03 31 57
" 8	Up	iPKT	14 52 26		Ki	iP	03 31 29
		i	14 52 29		Molucca Passage (h ~ 50 km).		
	Ki	ePKT	14 52 05	" 11	Gb	iP	09 44 47
		e	14 52 49	" 11	Up	iPKP	19 12 12
	Sk	iPKT	14 52 19			iSKP	19 15 34
	Gb	iPKT	14 52 34			i	19 15 41
	Kermadec Islands region (h ~ 70 km).				Ki	iPKT	19 11 57
" 8	Ki	i(P)	16 27 15			i	19 12 05
" 9	Um	iP	11 33 42		Sk	iPKT	19 12 07
" 9	Up	iP	21 28 18			iSKP	19 15 29
		i	21 31 32		Gb	iPKT	19 12 17
	Ki	iP	21 27 03			iSKT	19 15 48
		i	21 27 15		New Hebrides Islands region (h ~ 130 km).		
		eT	21 33 26	" 12	Gb	iP	17 03 36
		e	21 33 58	" 12	Ki	iP	21 26 37
	Sk	iP	21 27 18	" 12	Up	iP	21 30 09
		i	21 29 04	" 13	Up	iPKP2	07 57 04
	Jan Mayen Island region (h ~ 60 km).					i	07 57 18
" 10	Up	iP	06 41 37			iPP	08 00 57
	Ki	iP	06 41 17		Ki	iPKP	07 56 24
	Near north coast of Luzon, Philippine Islands (h ~ 60 km).					iPKP2	07 56 43
" 10	Up	iP	14 08 17		Sk	i(PKP2)	07 56 49
	Ki	iP	14 08 03			iPKP2	07 57 15
	Sk	iP	14 08 23			iPP	08 01 01
	Celebes Sea (h ~ 290 km).				Gb	iPKP	07 56 37
						iPKP2	07 57 31
					Masquarie Islands (h ~ 30 km).		

Up = Uppsala, Ki = Kiruna, Sk = Skelstugan, Gb = Göteborg, Um = Umeå

1960

Dec 13 Gb 1PKT 09 22 36
Tonga Islands (h ~ 80 km).

" 13 Up 1P 10 17 42
i 10 17 52
Ki 1P 10 17 09
i 10 17 16
Sk 1P 10 17 38
i 10 17 49
i(PP) 10 20 53
Gb 1P 10 18 01
Bonin Islands region
(h ~ 30 km).

" 14 Up 1P 04 14 08
Ki 1P 04 13 38
Sk 1P 04 13 56
Ryukyu Islands region
(h ~ 25 km).

" 14 Up 1PKT 08 33 11
Ki 1PKT 08 32 55
Sk 1PKT 08 33 05
Kermadec Islands region
(h ~ 25 km).

" 14 Up eP 21 33 24
Ki eP 21 33 40

" 15 Up 1P 00 04 52
i 00 04 56
i 00 05 01
Ki 1P 00 04 36
i 00 04 51
Sk 1P 00 04 59
Gb 1P 00 05 08
i 00 05 23
i 00 05 33
i 00 08 18
Molucca Passage (h ~ 80 km).

" 15 Up 1P 04 14 22
i 04 14 49

" 15 Ki 1P 11 27 33

" 15 Up 1P 12 22 18
Ki 1P 12 22 04
Luzon, Philippine Islands
(h ~ 150 km).

" 16 Up 1P 01 31 09
i 01 31 23
i 01 31 44

1960

Dec 16 Ki 1P 01 30 16
cont. i 01 30 29
Sk 1P 01 31 01
Gb 1P 01 31 24
Fox Islands, Aleutian
Islands (h ~ 30 km).

" 16 Up 1P 16 58 04
Ki 1P 16 58 54
Near coast of Eritrea
(h ~ 25 km).

" 16 Up 1P 18 27 55
Ki 1P 18 28 33
North Atlantic Ocean
(h ~ 20 km).

" 16 Ki 1P 21 09 09
i 21 09 13

" 17 Ki i(P) 02 11 26
i 02 11 29

" 17 Up 1P 02 15 35
i 02 15 45
Ki 1P 02 14 43
i 02 14 45
Gb 1P 02 15 51
Andreanof Islands, Aleutian
Islands (h ~ 90 km).

" 17 Up 1P 10 50 14
1P 10 51 18
1P 10 54 31
i 10 55 22
Ki 1P 10 50 10
1P 10 51 14
Java Sea (h ~ 300 km).

" 17 Up 1P 12 08 18
Ki 1P 12 08 53

" 17 Up 1P 12 35 23

" 17 Up 1P 16 55 42
i 16 55 54
i 16 56 02
Ki 1P 16 54 54
i 16 55 23
Sk 1P 16 55 29
Gb 1P 16 56 03
Kurile Islands (h ~ 15 km).

" 18 Sk 1P 17 05 30

Up = Uppsala, Ki = Kiruna, Sk = Skanstugan, Gb = Göteborg, Um = Umeå

1960

Dec 18 Up iF 18 33 56
Ki iF 18 33 32
Mindanao, Philippine
Islands (h ~ 40 km).

" 19 Up iF 00 09 16
i 00 09 19
Hindu Kush (h ~ 25 km).

" 19 Ki iPKF 07 19 01
Sk iPKF 07 19 16
Loyalty Islands region
(h ~ 25 km).

" 19 Ki iF 07 33 35

" 19 Up iF 13 39 26
Ki iF 13 38 33
i 13 38 52
Sk iF 13 39 07

" 19 Up iF 14 38 27
Sk iF 14 39 03
Italy.

" 19 Ki iF 19 12 44
Mariana Islands (h ~ 80 km).

" 20 Up iF 03 28 27
Gb iF 03 28 42

" 20 Up iF 06 16 17
Ki iF 06 15 52
Near north coast of
Formosa (h ~ 60 km).

" 20 Up iF 12 17 11
Ki iF 12 16 53
Gb iF 12 17 33

" 21 Ki iF 00 07 57
i 00 08 11
Southwestern Sumatra
(h ~ 160 km).

" 21 Up i(F) 01 33 58

" 21 Ki iF 03 27 01

" 21 Up iF 14 49 44
Ki iF 14 48 47
ipF 14 49 44
Sk iF 14 49 16
Alaska (h ~ 170 km).

1960

Dec 21 Ki iF 21 02 47
i 21 02 54

" 21 Ki iF 21 06 47
i 21 07 31
Mariana Islands region
(h ~ 70 km).

" 21 Ki ePKF2 22 50 52
North of Balleny Islands
(h ~ 30 km).

" 22 Up iPKF 02 44 33
i 02 44 38
ipPKF 02 46 15
Ki iPKF 02 44 17
i(SKP) 02 47 08
Sk iPKF 02 44 27
Gb iPKF 02 44 42
Kermadec Islands region
(h ~ 380 km).

" 22 Ki i(F) 03 08 01

" 22 Up iF 03 14 06
i 03 14 11
Ki iF 03 14 05
i 03 14 12
Sk iF 03 14 23
i 03 14 59
Gb iF 03 14 22
i 03 14 26
Niobar Islands (h ~ 60 km).

" 22 Up iPKF 06 51 07
i 06 51 13
i 06 51 32
Ki iPKF 06 50 44
i 06 50 53
Sk iPKF 06 51 01
Gb iPKF 06 51 15
i 06 51 26
Kermadec Islands region
(h ~ 50 km).

" 22 Up iF 07 26 10
i 07 26 17

" 22 Up iPKF 14 31 57
i 14 32 18
Ki iPKF 14 31 41
Sk iPKF 14 31 48
Gb iPKF 14 32 06
Kermadec Islands region
(h ~ 60 km).

Up = Uppsala, Ki = Kiruna, Sk = Skälstugan, Gb = Göteborg, Um = Umeå

1960				1960			
Dec 22	Ki	1P	14 37 37	Dec 25	Up	1P	11 30 17
		i	14 38 04			i	11 31 13
		Fox Islands, Aleutian Islands (h ~ 60 km).			Ki	1P	11 31 42
" 22	Ki	1P	18 56 31	" 25	Up	1P	18 52 13
" 22	Up	1PKP	21 20 39	" 25	Up	1P	20 37 55
	Ki	1PKP	21 20 27		Ki	1P	20 37 00
	Gb	1PKP	21 20 46		Sk	1P	20 37 38
	Solomon Islands (h ~ 470 km).				Gb	1P	20 38 15
" 23	Up	eP	04 56 01		Near east coast of Kamohatka (h ~ 40 km).		
" 23	Up	1P	05 57 19	" 26	Up	1P	01 14 28
		i	05 57 46		Ki	1P	01 14 07
		i	05 57 55	" 26	Gb	1PKP	01 15 59
" 23	Up	1P	09 54 37			i	01 16 10
	Ki	1P	09 54 36		Tonga Islands region (h ~ 60 km).		
		i	09 54 41	" 26	Up	1P	01 56 28
		i	09 54 52			i	01 56 32
	Sk	1P	09 54 50		Ki	1P	01 55 39
	Near coast of Sumatra (h ~ 130 km).					i	01 55 52
" 23	Up	1P	11 00 19		Sk	1P	01 56 20
	Ki	1P	11 00 20			i	01 56 25
" 23	Ki	1P	11 00 43		Gb	1P	01 56 50
	Mindanao, Philippine Islands (h ~ 70 km).				Near south coast of Honshu, Japan (h ~ 110 km).		
" 23	Ki	1P	12 30 50	" 26	Up	1PKP	04 51 21
" 23	Up	1PKP	19 26 19			i	04 51 48
		i	19 26 53			i	04 54 46
	Gb	1PKP	19 26 38		Ki	1PKP	04 51 37
	Kermadec Islands region (h ~ 260 km).					i	04 51 48
" 23	Ki	1P	19 42 46			i	04 52 06
	Near east coast of Luzon, Philippine Islands (h ~ 50 km).					i	04 52 41
" 23	Ki	i(P)	22 05 43			i	04 54 49
" 24	Up	1P	11 09 05	" 26	Up	1P	05 01 22
" 25	Up	1P	05 33 16			i	05 01 23
		i	05 33 18	" 26	Ki	1P	05 04 49
	Bonin Islands (h ~ 25 km).			" 26	Ki	1PKP ₂	14 03 30
					South of South Island, New Zealand (h ~ 40 km).		
				" 26	Up	i(P)	22 25 20

Up = Uppsala, Ki = Kiruna, Sk = Skelstugan, Gb = Göteborg, Um = Umeå

1960					1960				
Dec	26	Up	iP	22 56 14	Dec	30	Up	iPg	10 32 17
"	27	Ki	iP	10 46 25				iSg	10 32 41
			i	10 46 35				D = 200 km = 1.8°.	
		Gb	iP	10 47 08				Gulf of Bothnia.	
		Off coast of northern						Origin time = 10 31 41.	
		California (h ~ 30 km).			"	30	Up	iPg	10 39 11
"	28	Ki	iP	05 46 16				iSg	10 39 35
		Near coast of Greece						i	10 39 36
		(h ~ 70 km).						D = 200 km = 1.8°.	
"	28	Up	iP	19 55 40			Sk	iSg	10 41 07
		Sk	iP	19 55 13			Gulf of Bothnia.		
		Kodiak Island, Alaska					Origin time = 10 38 35.		
		(h ~ 30 km).			"	30	Up	iP	10 54 36
"	28	Up	iP	22 39 11				iSg	10 54 59
		Gb	iP	22 39 21				i	10 55 00
"	29	Up	i(P)	09 52 29				D = 200 km = 1.8°.	
			i	09 52 39			Sk	eSg	10 56 30
"	29	Up	iPKT	10 55 51			Gulf of Bothnia.		
			i	10 55 58			Origin time = 10 54 00.		
		Ki	iPKT	10 55 54	"	30	Up	iPg	10 59 19
		Near coast of southern						iSg	10 59 42
		Chile (h ~ 30 km).						i	10 59 44
"	29	Up	i(P)	13 23 23				D = 200 km = 1.8°.	
"	29	Up	iP	18 09 16			Ki	e(Sg)	11 02 24
"	29	Up	iP	18 25 00			Sk	iSg	11 01 13
		Ki	iP	18 26 11			Gulf of Bothnia.		
			i	18 26 22			Origin time = 10 58 43.		
		Near Crete, Mediterranean			"	30	Up	iPg	11 08 41
		Sea (h ~ 50 km).						i(S ^x)	11 09 03
"	29	Up	eP	23 20 04				iSg	11 09 04
"	30	Up	iP	01 52 11				D = 200 km = 1.8°.	
"	30	Up	iP	02 11 17			Ki	eSg	11 11 41
"	30	Ki	iP	08 38 16				D = 720 km = 6.5°.	
"	30	Up	iPg	10 18 43			Sk	iSg	11 10 35
			iSg	10 19 07				D = 500 km = 4.5°.	
		D = 200 km = 1.8°.					Gb	eSg	11 10 59
		Gulf of Bothnia.						D = 590 km = 5.3°.	
		Origin time = 10 18 07.					Gulf of Bothnia, 61.4 N,		
							19.5° E. Origin time = 11 08 05.		
					"	30	Up	iPg	11 22 57
								iSg	11 23 21
								D = 200 km = 1.8°.	
							Ki	eSg	11 26 02
							Sk	iSg	11 24 51
							Gb	i(Sg)	11 25 16
							Gulf of Bothnia.		
							Origin time = 11 22 21.		

Up = Uppsala, Ki = Kiruna, Sk = Skälstugan, Gb = Göteborg, Um = Umeå.

1960

Dec 30 Up iPg 11 23 00
 iSg 11 23 24
 D = 200 km = 1.8°.
 Gulf of Bothnia.
 Origin time = 11 22 24.

" 30 Up iP 21 40 50
 Ki iP 21 40 59
 i 21 42 03
 Hindu Kush (h ~ 200 km).

" 31 Up iPKP 00 27 51
 i 00 27 55
 Ki iPKP 00 27 34
 Gb iPKP 00 28 00
 Kermadec Islands region
 (h ~ 70 km).

" 31 Up iP 03 50 29
 i 03 50 51

" 31 Ki iP 05 12 54

" 31 Ki iPg 16 15 09
 iSg 16 15 18
 iL 16 15 22
 D = 80 km = 0.7°.
 Explosion of 14 ton dynamite
 at Malmberget, Gällivare.

" 31 Up iPKP 18 27 12
 Ki iPKP 18 27 19
 i 18 27 28
 Sk iPKP 18 27 11
 Near coast of southern
 Chile (h ~ 90 km).

" 31 Ki iP 19 28 46

Ingrid Pettersson
 September 25, 1961

Markus Båth