

SEISMOLOGICAL INSTITUTE
BOX 517
S-751 20 UPPSALA
SWEDEN

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

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

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

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

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

1974				1974							
Jan.	1	Up	iP	08 09 14.1	Jan.	1	(cont.)				
		Ki	iP	08 08 45.2 C		Up	iX	14 20 09.3			
		Sk	iP	08 09 11.2		X	Z'	micr sec 0.1 1.0			
		Um	iP	08 08 57.4 C		Ki	iP	14 19 45.5			
		Ud	iP	08 09 20.1 C		iX	iX	14 20 10.6			
		De	iP	08 09 31.4		P	Z'	micr sec 0.2 1.8			
		Mariana Islands (h = 330 km).				Sk	eX	14 20 25			
"	1	Ki	iSKPl	09 50 42.8		Um	iP	14 19 41.1			
				micr sec		iX	iX	14 20 06.3			
			SKPl	Z' 0.1 1.2		Ud	iP	14 19 54.8			
		Um	iSKPl	09 50 54.7		iX	iX	14 20 20.4			
		Ud	ePKPl	09 47 45		De	iP	14 19 52.8			
		De	iPKPl	09 47 55.4		Sumatra (h = 60 km).					
		Fiji Islands (h = 190 km).				If the phase X is interpreted as pP, the focal depth is 100 km.					
"	1	Ki	iP	10 34 36.2							
		Ud	iP	10 34 49.6							
		Kashmir-Sinkiang (h = N).									
"	1	Up	iPKPl	13 01 44.8 C		"	1	Up	iP	14 25 37.7	
				micr sec				Ki	eP	14 25 39	
			PKPl	Z' 0.1 0.9				Um	iP	14 25 34.4	
		Ki	iPKP	13 01 35.1				Ud	iP	14 25 48.2	
		Um	i(PKP)	13 01 32.6				Sumatra (h = N).			
			iPKP	13 01 42.9		"	1	Up	eP	15 13 28	
			iSKPl	13 04 26.5				Um	iP	15 13 05.4	
		Ud	iPKPl	13 01 46.4				Ud	eP	15 13 32	
			iSKPl	13 04 38.4				South of Japan (h = 10 km).			
		De	ePKP	13 01 56		"	1	Up	iP	18 16 40.1	
			iPKPl	13 01 57.5				Ki	iP	18 16 11.7 C	
		Tonga-Kermadec Islands (h = 500 km).							micr sec		
"	1	Up	iP	14 03 29.7 C				P	Z'	0.1 0.9	
		Ki	iP	14 03 24.9				Sk	iP	18 16 37.7 C	
		Um	iP	14 03 23.1 C				Um	iP	18 16 23.8 C	
		Ud	iP	14 03 42.5 C				Ud	iP	18 16 46.6 C	
		Mariana Islands (h = 320 km).						Mariana Islands (h = 320 km).			
"	1	Up	iP	14 19 43.5		"	2	Um	iP	00 17 43.0	
		(cont.).						Ud	iP	00 18 08.1	
								De	iP	00 18 31.5	

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

1974

Jan.	2	Up	ePKP	00 20 43
		Ki	iPKP	00 20 28.4
		Sk	iPKP	00 20 40.0
		Um	iPKP	00 20 34.5
		Ud	iPKP	00 20 44.2
			iSKPl	00 23 55.3
		De	iPKP	00 20 51.4
New Hebrides Islands (h = 180 km).				

"	2	Ud	iPKP1	05 56 36.3
		De	ePKP1	05 56 49

"	2	Um	iP	05 59 19.4
		Mariana Islands (h = 50 km).		

"	2	Um	i(Sgl)	10 52 16.3
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"	2	Up	iP	10 56 39.0
			i(PP)	11 00 25.0
			iPP	11 01 01.7
			iSKS	11 07 04
			iS	11 08 28

			iPKKP2	11 12 18.0
			iP'P'	11 20 27.7

			micr sec		
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P	Z'	0.2	1.5
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PP	Z'	6.4	2.4
----	----	-----	-----

Mx	E	52	23
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Mx	N	21	20
----	---	----	----

Mx	Z	97	24
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Ki	e(PP)	11 00 36
----	-------	----------

	iPP	11 01 26.1
--	-----	------------

	iSKS	11 07 19
--	------	----------

	iS	11 08 56
--	----	----------

	iSP	11 10 39
--	-----	----------

	iPKKP1	11 11 54.2
--	--------	------------

	iPKKP2	11 12 03.7
--	--------	------------

	iSS	11 16 41
--	-----	----------

	micr sec		
--	----------	--	--

PP	Z'	3.5	2.5
----	----	-----	-----

Mx	E	53	21
----	---	----	----

Mx	N	23	19
----	---	----	----

Mx	Z	51	20
----	---	----	----

Sk	iP	10 56 32.6
----	----	------------

	i(PP)	10 59 40.5
--	-------	------------

	iPP	11 00 53.6
--	-----	------------

	iPKKP1	11 12 07.5
--	--------	------------

	iPKKP2	11 12 24.4
--	--------	------------

	iP'P'	11 20 31.4
--	-------	------------

Um	iP	10 56 47.4
----	----	------------

	iPP	11 01 17.4
--	-----	------------

	iSKS	11 07 13
--	------	----------

	iPKKP1	11 11 56.0
--	--------	------------

	iPKKP2	11 12 07.4
--	--------	------------

	iP'P'	11 20 22.5
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(cont.)

1974

Jan.	2	(cont.)		
		Ud	iP	10 56 28.2
			iPP	11 00 49.0
			iPKKP2	11 12 25.8
		De	iP	10 56 25.9
			iPP	11 00 39.8
			iPKKP1	11 12 12.4
			iPKKP2	11 12 31.3
			iP'P'	11 20 30.8

Chile (h = 110 km).
 n = 7.3, M = 7.2 (Up,Ki).
 M uncorrected for focal depth.

"	2	Up	iSgl	12 29 23.0
		Ki	iSgl	12 31 20.3
		Sk	iSgl	12 31 05.7
		Um	iSgl	12 29 39.2
		Ud	iSgl	12 30 22.6
		De	iSgl	12 30 49.0

Western USSR.
 Explosion.

"	2	Up	iPP	13 52 20.9
			micr sec	
			PP	Z' 0.1 1.4
		Ud	iPP	13 52 09.5
		De	iPP	13 52 01.0

Chile (h = 100 km).

"	2	Up	iP	14 53 11.4 D
			ipP	14 54 01.5
			micr sec	
		P	Z' 0.6 0.8	
		Ki	iP	14 52 45.0 D
			ipP	14 53 36.0
			micr sec	
		P	Z' 0.9 1.3	
		Sk	iP	14 53 13.3
		Um	iP	14 52 54.7 D
		Ud	iP	14 53 20.7 D
			ipP	14 54 11.1
		De	iP	14 53 30.4 D
			ipP	14 54 21.3

Formosa.
 h = 210 km (Up,Ki,Ud,De).
 m = 6.4 (Up,Ki).

"	2	Um	iP	22 14 26.9
		Ud	iPP	03 53 44.7

Chile (h = 100 km).

"	3	Up	iP	04 05 29.7
		Ki	iP	04 05 00.7
		Sk	eP	04 05 26

(cont.)

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

1974

Jan.	3	(cont.)		1974	Jan.	4	(cont.)	
		Um iP	04 05 13.3				Sk iP	09 36 00.7 C
		Ud iP	04 05 36.4				Um eP	09 35 32
		De iP	04 05 47.3				ipP	09 35 40.3
		Mariana Islands (h = 140 km).					Ud iP	09 35 56.0 C
"	3	Up iP	07 44 29.3				ipP	09 36 04.3
		Um eP	07 45 01				iPP	09 37 44.3
		Ud iP	07 44 37.7				De iP	09 35 57.4
		De iP	07 44 02.0				iPP	09 37 44.0
		Turkey (h = N).					Kirghiz-Sinkiang.	
"	3	Up iPKP	11 34 34.7		"	4	Up iSgl	11 46 51.5
		Ki ePKP	11 34 24				Ki iSn	11 43 43.8
		Um iPKP	11 34 26.9				iSgl	11 44 08.8
		Ud iPKP	11 34 36.5				Sk iSgl	11 46 32.0
		De iPKP	11 34 45.4				Um iSn	11 44 20.4
		New Hebrides Islands (h = 10 km).					i	11 44 36.7
"	3	Ud iPKPl	12 29 14.0				iSgl	11 44 55.7
"	3	Um ePKP	15 00 28				Ud iSgl	11 47 30.6
		Ud iPKP	15 00 33.4				Northwest USSR.	
		New Hebrides Islands (h = 25 km).					Explosion.	
"	3	Up iSgl	15 54 36.2		"	4	Um iSgl	12 14 57.0
		Ki i	15 52 05.9				Ud eSgl	12 15 42
		iSgl	15 52 31.5				Western USSR.	
		micr sec					Explosion.	
		Sgl Z'	0.1 0.5				Sk iP	12 35 33.9
		Sk iS*	15 52 34.7		"	4	Ki iPgl	12 58 19.6
		iSgl	15 52 37.9				iSn	12 58 57.5
		Um iPgl	15 52 11.1				iSgl	12 59 11.7
		iSn	15 52 45.1				Um iSgl	13 00 46.7
		iSgl	15 52 58.3				Northwest USSR-Norway.	
		Ud iSgl	15 54 24.7				Explosion.	
		Nordland, Norway, 66.4°N, 14.6°E.			"	4	Ki eP	18 07 31
		Origin time = 15 51 09.					Mexico (h = 50 km).	
		Explosion.						
"	4	Ud iSKPl	00 51 33.9		"	4	Um iPKP	19 00 57.7
		New Hebrides Islands (h = 15 km).					Ud iPKP	19 01 08.9
"	4	Ud iP	01 27 35.5				New Hebrides Islands (h = 20 km).	
		Greece.						
"	4	Up iP	09 35 39.9		"	4	Um i(P)	21 30 47.0
		ipP	09 35 48.1				Ud iPKPl	22 41 11.1
		micr sec					De iPKPl	22 41 22.0
		pP	Z' 0.1 0.9					
		Ki iP	09 35 36.4 C				Up iP	04 31 34.2
		micr sec					Um iP	04 32 15.6
		P	Z' 0.1 0.8				Ud eP	04 31 51
		(cont.)					(cont.)	

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

1974

Jan. 5 (cont.)
 De eP 04 31 10
 Rumania ($h = 90$ km).

" 5 Ud iP 05 30 38.9
 " 5 Um iP 07 38 16.3
 Italy ($h = N$).

" 5 ✓ Up iP 08 47 37.3
 ipP 08 48 02.5
 i(PP) 08 51 28.6
 iPP 08 51 46.7
 micr sec

P Z' 0.2 1.5
 pP Z' 0.7 2.0
 Mx E 6.3 42
 Mx N 5.4 35
 Mx Z 13 45
 Ki iP 08 47 43.3
 iPP 08 52 00.2
 micr sec

PP Z' 0.3 2.0
 Mx E 3.8 24
 Mx N 3.1 26
 Sk iP 08 47 27.4
 iPP 08 51 26.2
 Um iP 08 47 43.3
 i(PP) 08 51 12.7
 iPP 08 52 01.6
 Ud iP 08 47 28.5
 ipP 08 47 55.1
 iPP 08 51 33.8
 De iP 08 47 27.4
 ipP 08 47 54.5
 iPP 08 51 25.2

Peru.
 $h = 100$ km (Up, Ud, De).
 $m = 6.7$, $M = 6.0$ (Up, Ki).

" 5 Ki iSn 11 22 49.8
 iSgl 11 23 10.3
 Northwest USSR.
 Explosion.

" 5 Um iSgl 12 13 55.2
 Western USSR.
 Explosion.

" 5 Ki iPn 12 21 11.2
 iSn 12 22 00.0
 iSgl 12 22 15.9
 Um eSgl 12 23 45
 Northwest USSR-Norway.
 Explosion.

1974

Jan. 5 ✓ Up iP 14 11 53.0
 micr sec
 P Z' 0.1 1.0
 Ki iP 14 11 00.1
 micr sec
 P Z' 0.1 0.8
 Sk iP 14 11 30.2
 Um iP 14 11 26.5
 Ud iP 14 11 52.6
 De iP 14 12 15.2
 Aleutian Islands
 $(h = 40$ km).
 $m = 6.0$ (Up, Ki).

" 5 Ud iP 15 35 32.1
 Off coast of Oregon ($h = N$).
 " 5 Up eP 15 49 04
 Um iP 15 48 46.4
 Ud iP 15 48 56.8
 Off coast of Oregon ($h = N$).

" 5 Up iP 16 05 34.7
 micr sec
 P Z' 0.2 1.5
 Ki eP 16 04 55
 Sk iP 16 05 08.5
 Um iP 16 05 16.7
 Ud iP 16 05 26.1
 De eP 16 05 47
 Off coast of Oregon ($h = N$).

" 5 Up iPKP1 16 40 17.1
 Ud iPKP1 16 40 19.5 C
 De iPKP1 16 40 29.7
 " 5 Ki iP 17 53 47.9
 Ud iP 17 54 26.7
 Off coast of Oregon ($h = N$).

" 5 Up epPKP 22 02 33
 iSKP1 22 06 00.7
 Ki iPKP 22 02 13.7
 ipPKP 22 02 19.4
 Sk ePKP 22 02 25
 Um iPKP 22 02 20.4
 ipPKP 22 02 25.8
 Ud iPKP 22 02 28.4

ipPKP 22 02 34.8
 iSKP1 22 06 03.5
 De ipPKP 22 02 44.9
 New Hebrides Islands.
 $h = 20$ km (Ki, Um, Ud).

" 5 Up eP 23 35 29
 (cont.)

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

1974

Jan. 5 (cont.)
 Ud iP 23 35 22.4
 Off coast of Oregon (h = N).

" 5 Up iP 23 40 51.2
 Sk eP 23 40 25
 Um iP 23 40 33.8
 ipP 23 40 39.3
 Ud iP 23 40 44.5
 ipP 23 40 50.0
 Off coast of Oregon.
 h = 20 km (Um,Ud).

" 6 Ud iPKP1 04 39 15.5
 De iPKP1 04 39 25.9
 Tonga Islands (h = N).

" 6 Ud iP 07 51 38.7
 East of Crete (h = 30 km).

" 6 Up iSn 09 03 43.5
 iSgl 09 04 39.8
 Ki iPn 09 00 29.5
 iSn 09 01 27.4
 iSgl 09 01 48.7
 Sk iSgl 09 04 11.5
 Um iSn 09 02 06.4
 i 09 02 22.4
 iSgl 09 02 39.7
 Ud iSn 09 04 06.9
 eSgl 09 05 15
 i 09 05 25.7

Northwest USSR.
 Explosion.

" 6 Up iP 10 12 44.8
 Ki iP 10 12 45.7
 Um iP 10 12 47.9
 Ud iP 10 12 25.4
 i 10 12 29.2
 De iP 10 12 38.2
 North Atlantic Ocean
 (h = N).

" 6 Up iP 10 38 38.3
 Ki iP 10 38 37.1
 Sk eP 10 38 09
 Um iP 10 38 41.0
 i 10 38 45.6
 Ud iP 10 38 19.2
 North Atlantic Ocean
 (h = N).

" 6 Up iSKP1 12 38 35.6
 Ki ePKP 12 34 56
 Um iPKP 12 35 03.1
 (cont.)

1974

Jan. 6 (cont.)
 Ud iPKP 12 35 09.4
 New Hebrides Islands
 (h = N).

" 6 Up iP 14 43 30.0 C
 micr sec
 P Z' 0.1 1.1
 Ki iP 14 44 14.3
 i 14 44 17.7
 micr sec
 P Z' 0.2 1.5

Sk iP 14 43 41.5 C
 Um i(P) 14 43 51.8
 iP 14 43 54.9 C
 i 14 44 00.1

Ud i(P) 14 43 20.7
 iP 14 43 23.9 C
 i 14 43 29.1

North of Ascension Island
 (h = N).
 m = 6.0 (Up,Ki).

" 6 Up iPKP1 15 33 15.9
 iPKP2 15 33 20.4
 Sk iPKP1 15 33 09.7
 Um iPKP1 15 33 04.3
 Ud iPKP1 15 33 17.9
 De iPKP1 15 33 26.4
 Kermadec Islands
 (h = 20 km).

" 6 Up iPKP 17 58 40.9
 iSKP1 18 01 52.6
 micr sec
 SKP1 Z' 0.1 0.9
 Ki iPKP 17 58 26.5
 Sk iPKP 17 58 37.3
 Um iPKP 17 58 32.8
 Ud iPKP 17 58 43.0
 iSKP1 18 01 56.4
 De i(PKP) 17 58 43.6
 iPKP 17 58 50.4

New Hebrides Islands
 (h = 120 km).

" 6 Up iRg 18 01 52.1
 Ud iRg 18 01 56.4
 Central Sweden.

" 6 Up i(P) 18 02 48.2

" 6 Ki iP 21 43 51.9
 Um iP 21 43 24.2
 De iP 21 43 03.1
 Turkey (h = N).

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

1974

Jan. 6 Sk iP 23 29 37.8
 Ud iP 23 29 01.3
 Aegean Sea (h = N).

" 6 Um iP 23 55 06.1
 Ud iP 23 54 31.2
 Aegean Sea (h = 45 km).

" 7 Ud iP 02 13 41.1

" 7 Up iP 04 07 46.7
 ipP 04 07 57.1
 micr sec
 pP Z' 0.1 0.9
 Ki iP 04 07 25.5
 Sk epP 04 08 05
 Um iP 04 07 33.6
 ipP 04 07 43.6
 Ud iP 04 07 55.6
 ipP 04 08 04.9

Luzon.

h = 35 km (Up,Um,Ud).

" 7 Up iP 05 28 44.6
 i 05 28 45.5
 ipP 05 29 08.6
 Ki iP 05 28 38.5
 Sk iP 05 29 01.2
 Um iP 05 28 37.2
 i 05 28 38.2
 Ud iP 05 28 57.7
 i 05 28 58.6
 De eP 05 29 01

Burma-India.

h = 100 km (Up).

" 7 Um iP 08 36 34.1 C
 Ud iP 08 36 59.9 C
 De iP 08 37 21.6 C

Alaska (h = 130 km).

" 7 Ki iP 08 59 16.2
 Sumatra (h = 140 km).

" 7 Um iSgl 11 09 43.4
 Western USSR.
 Explosion.

" 7 Ud iP 11 33 08.4
 Okhotsk Sea (h = 410 km).

" 7 Um iSgl 13 08 48.5
 Western USSR.
 Explosion.

" 7 Up iP 15 31 12.0 C
 (cont.)

1974

Jan. 7 (cont.) Up i 15 31 15.8
 micr sec

P Z' 0.1 0.9
 Ki iP 15 31 54.1 C
 i 15 31 57.8
 micr sec

P Z' 0.1 0.9
 Sk iP 15 31 52.7 C
 Um iP 15 31 30.1 C

Ud iP 15 31 27.9 C
 i 15 31 31.5
 De iP 15 31 09.2 C
 i 15 31 13.1
 Iran (h = 30 km).
 m = 5.6 (Up,Ki).
 Double P, in average 3.8
 sec apart.

" 7 Up iP 15 36 08.1
 micr sec

P Z' 0.1 1.1
 Ki iP 15 36 51.5
 Um iP 15 36 26.3
 Ud iP 15 36 23.1 C
 i 15 36 27.0
 De iP 15 36 04.8
 Iran (h = 35 km).

" 7 Ud iP 17 57 31.7
 Iran (h = 40 km).

" 7 Ki iP 23 39 44.1
 Um iP 23 39 57.9
 Bonin Islands (h = 520 km).

" 8 Ud iPKP1 04 45 32.0

" 8 Um iSgl 11 58 01.9
 Western USSR.
 Explosion.

" 8 Up iSgl 13 13 34.6
 Ki eSgl 13 15 31
 Sk eSgl 13 15 17
 Um iSgl 13 13 49.0
 Ud iSgl 13 14 35.7

Western USSR.
 Explosion.

" 8 Um iSgl 13 24 06.0
 Lake Ladoga region.
 Explosion.

" 8 Um iP 19 56 30.0
 Ud iP 19 56 59.5
 Japan (h = 10 km).

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

1974

Jan. 8 Ud i(P) 21 14 40.7

" 8 Up micr sec

Mx E 2.6 17
Mx N 3.2 18
Mx Z 4.8 22Ki iPP 22 06 23.7
iSP 22 15 24

micr sec

PP Z' 0.1 1.5

Mx E 5.9 22

Mx N 4.3 20

Mx Z 3.3 20

Um iPP 22 05 45.0
iSKS 22 12 08

iS 22 13 13

Indian Ocean (h = N).

M = 6.1 (Up,Ki).

" 8

Ki iP 23 22 53.6 C
Um iP 23 23 12.5 C
Ud iP 23 23 43.3

Japan (h = 70 km).

" 9

Up iP 03 00 22.1 C
micr sec

P Z' 0.6 1.1

Mx E 0.9 16

Mx N 1.2 14

Mx Z 2.1 16

Ki iP 02 59 29.8 C

micr sec

P Z' 0.5 1.0

Mx E 0.9 13

Mx N 1.4 14

Mx Z 1.4 15

Sk iP 03 00 06.1 C

Um iP 02 59 54.5 C

Ud iP 03 00 25.7 C

De iP 03 00 47.0 C

Kamchatka (h = N).

m = 6.6, M = 5.3 (Up,Ki).

" 9

Ki eP 03 28 49

" 9

Ki iSn 09 54 29.5

Northwest USSR-Norway.

Explosion.

" 9

Um iSgl 11 25 07.7

Western USSR.

Explosion.

" 9

Up iSgl 12 20 23.1

Ki iSgl 12 22 28.3

Sk iSgl 12 22 08.3

(cont.)

1974

Jan. 9 (cont.)

Um iSgl 12 20 39.9

Ud iSgl 12 21 25.1

Western USSR.

Explosion.

" 9

Um iSgl 12 33 04.3

Estonia.

Explosion.

" 9

Um iP 13 14 47.4

Adriatic Sea.

" 9

Um iP 21 18 17.2

Iran (h = N).

" 10

Ud iPKP1 00 58 16.9

De iPKP1 00 58 28.8

" 10

Up iP 02 47 37.4 C

ipP 02 47 48.1

micr sec

P Z' 0.2 1.1

Ki iP 02 46 44.9 C

micr sec

P Z' 0.1 1.1

Mx E 0.7 15

Mx N 0.9 15

Mx Z 1.1 15

Um iP 02 47 09.7 C

ipP 02 47 20.7

Ud iP 02 47 42.0 C

Kamchatka.

h = 40 km (Up,Um).

m = 6.1 (Up,Ki).

" 10

Up iP 05 29 30.6 C

ipP 05 29 41.2

micr sec

P Z' 0.3 1.0

Mx E 1.6 17

Mx N 1.7 16

Mx Z 2.3 17

Ki iP 05 28 38.0 C

ipP 05 28 48.5

micr sec

P Z' 0.3 0.9

Mx E 1.1 15

Mx N 1.5 15

Mx Z 2.1 16

Sk iP 05 29 14.0

Um iP 05 29 02.5 C

ipP 05 29 12.8

Ud iP 05 29 34.6

De iP 05 29 55.7

Kamchatka.

h = 40 km (Up,Ki,Um).

m = 6.4, M = 5.4 (Up,Ki).

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

1974

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

1974

Jan.	10	(cont.)	
		Um	i(PKP) 10 19 46.3
			iPKP 10 19 51.3
			ISKP1 10 23 10.2
		Ud	i(PKP) 10 19 56.3
			iPKP 10 20 01.4
			i(SKP1) 10 23 19.5
		De	ISKP1 10 23 24.9
			i(PKP) 10 19 57.2
			i(SKP1) 10 23 30.7
		New Hebrides Islands	
		(h = 70 km).	
"	10	Um	iP 10 41 08.9
		Russia-China (h = 540 km).	
"	10	Up	iSn 11 39 38.1
			iSgl 11 39 51.4
		Ki	iSgl 11 42 28.9
		Um	iSgl 11 40 27.1
		Ud	i(S*) 11 40 44.7
		De	eSgl 11 41 24
		Estonia.	
		Explosion.	
"	10	Ud	iP 11 57 55.8
		Tyrrhenian Sea (h = 340 km).	
"	10	Up	iP 12 56 14.8 C
			ipP 12 56 27.9
			micr sec
		P	Z' 0.1 1.0
		Ki	iP 12 55 32.3 C
		Sk	iP 12 56 09.0
		Um	iP 12 55 53.3 C
		Ud	iP 12 56 21.5 C
		De	iP 12 56 36.5 C
		Japan.	
		h = 50 km (Up).	
"	10	Ki	iP 16 24 30.9
		Um	iP 16 24 48.9
		Ud	iP 16 25 16.0
		De	eP 16 25 29
		Japan (h = 35 km).	
"	10	Um	iPKP1 16 28 50.1
		Ud	iPKP1 16 29 03.3
"	10	Ud	iP 16 43 09.9
		Iran.	
"	10	Um	iPKP1 16 50 16.3

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

1974

Jan.	10	Up	eP	22 37 20
				micr sec
		P	Z'	0.1 0.9
		Ki	iP	22 37 17.8
		i		22 37 22.5
				micr sec
		P	Z'	0.1 1.0
		Sk	iP	22 36 51.8
		Um	iP	22 37 25.5
		Ud	iP	22 37 02.7
		De	eP	22 37 15
		North Atlantic Ocean		
		(h = N).		
		m = 5.4 (Up,Ki).		
"	10	Ki	i(P)	23 12 53.7

"	11	Up	iP	02 04 48
				micr sec
		P	Z'	0.2 1.0
		Ki	iP	02 04 20
				micr sec
		Sk	iP	02 04 55.3
		Um	iP	02 04 54.6
		Ud	iP	02 04 33.6
		North Atlantic Ocean		
		(h = N).		
"	11	Up	iP	02 11 19.4 C
				micr sec
		P	Z'	0.1 1.1
		Sk	iP	02 11 44.8
		Um	iP	02 11 17.6 C
		Ud	iP	02 11 35.8 C
		De	iP	02 11 32.3
		Hindu Kush (h = 160 km).		
		m = 5.6 (Up,Ki).		

"	11	Um	iPKP	05 36 23.2
		Argentina (h = 120 km).		

"	11	Up	iPKP	05 55 38.3
			iSKP1	05 59 01.4
				micr sec
		Mx	E	3.8 20
		Mx	N	6.8 21
		Mx	Z	13 21
		Ki	iPKP	05 55 23.6
				micr sec
		PKP	Z'	0.1 1.0
		Mx	E	3.7 20
		Mx	N	5.6 22
		Mx	Z	6.8 21
		Sk	iPKP	05 55 36.0
		Um	iPKP	05 55 30.2
		Ud	iPKP	05 55 40.1
		(cont.).		

1974

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

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

1974

Jan. 11 Ki ePKP 23 44 23
 New Hebrides Islands
 (h = N).

" 12 Up iRg 11 08 18.7
 Ud iRg 11 08 05.3
 Central Sweden.

" 12 Ki iPn 12 31 54.8
 iSn 12 32 43.4
 iS* 12 32 57.9
 Um eSgl 12 34 27
 Northwest USSR-Norway.
 Explosion.

" 12 Ki i(S*) 12 45 56.7
 Northwest USSR.
 Explosion.

" 12 Ud iPKPl 12 54 21.9

" 12 Up iSgl 13 45 44.5
 Ki iSgl 13 46 25.8
 Sk eSgl 13 46 56
 Um iSgl 13 45 05.0
 Ud iSgl 13 46 41.9
 De iSgl 13 47 22.2
 Lake Ladoga region.
 Explosion.

" 12 Um iP 20 12 55.5
 Panama (h = 35 km).

" 13 Up eSgl 05 35 30
 Ki iSn 05 32 11.8
 iSgl 05 32 32.2
 Um iSgl 05 33 27.6
 Northwest USSR.
 Explosion.

" 13 Ki iSn 07 08 51.6
 iSgl 07 09 13.7
 Northwest USSR.
 Explosion.

" 13 Up iSgl 07 16 41.2
 Ki ePn 07 12 34
 ePgl 07 12 46
 iSn 07 13 32.2
 iS* 07 13 50.8
 Sk eSgl 07 16 22
 Um iSn 07 14 13.7
 iSgl 07 14 47.7
 Ud iSgl 07 17 19.5
 Northwest USSR.
 Explosion.

1974

Jan. 13 Ki iPKP 18 11 46.2
 Um iPKP 18 11 49.1
 New Hebrides Islands
 (h = N).

" 13 Up iSgl 18 28 59.5
 Ki iSgl 18 29 22.9
 Sk iPgl 18 27 46.3
 iSgl 18 28 12.6

Um iPgl 18 27 30.5
 iSgl 18 27 48.6
 Ud iPgl 18 28 14.1
 iSgl 18 29 04.4
 Ångermanland, Sweden,
 63.5°N, 17.1°E.

Origin time = 18 27 08.

" 13 Ud iP 21 42 23.1
 Atlantic Ocean (h = N).

" 14 Up iSgl 11 39 01.6
 Um iSgl 11 39 20.1
 Ud eSgl 11 40 02
 De eSgl 11 40 37
 Western USSR.
 Explosion.

" 14 Up iSgl 13 55 39.2
 Sk iSgl 13 57 37.0
 Um iSgl 13 56 22.3
 Ud iSgl 13 56 45.4
 Estonia.
 Explosion.

" 14 Up iSgl 13 55 39.2
 Sk iSgl 13 57 37.0
 Um iSgl 13 56 22.3
 Ud iSgl 13 56 45.4
 Estonia.
 Explosion.

" 14 Ki ePKP 16 35 40
 Um iPKP 16 35 47.9
 Ud ePKP 16 35 59
 iSKPl 16 39 31.9
 New Hebrides Islands
 (h = 5 km).

" 14 Up iP 20 42 30.5
 ✓ Ki iP 20 41 39.3
 micr sec
 P Z' 0.1 1.2

Sk iP 20 42 16.1
 Um iP 20 42 03.1
 Ud iP 20 42 34.7
 De iP 20 42 54.7
 Kurile Islands (h = 15 km).

" 14 Ki iP 21 35 04.5
 Kamchatka.

" 14 Ki iPKP 23 50 47.8
 Ud iPKP 23 51 03.9
 De iPKP 23 51 08.8
 Solomon Islands (h = 55 km).

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

1974

Jan.	15	Up	iPKP1	08 51 47.4	
			iPKP2	08 51 53.1	
				micr sec	
		PKP1	Z'	0.3 1.0	
		PKP2	Z'	0.2 0.7	
Ki		i(PKP)		08 51 25.0	
		iPKP		08 51 34.1	
				micr sec	
		PKP	Z'	0.1 1.0	
Sk		iPKP1		08 51 40.4	
Um		iPKP1		08 51 34.8	
Ud		iPKP		08 51 46.1	
		iPKP1		08 51 49.5	
		iPKP2		08 51 56.5	
De		iPKP1		08 51 57.2	
Kermadec Islands					
(h = 110 km).					

1974

Jan.	16	Um	iPKP1	04 05 04.6	
"	16	Up	iP	05 04 15.7	
				micr sec	
		P	Z'	0.1 1.0	
		Mx	N	1.1 15	
Ki		iP		05 03 52.5	
				micr sec	
		P	Z'	0.1 1.3	
		Mx	E	1.1 13	
		Mx	N	1.0 12	
		Mx	Z	0.9 10	
Um		iP		05 04 00.4	
Ud		iP		05 04 25.0	
De		iP		05 04 33.7	
Formosa (h = 60 km).					
m = 5.7, M = 5.4 (Up,Ki).					

"	15	Um	iSgl	13 03 03.7	
		Ud	iSgl	13 03 25.5	
Esthonia.					
Explosion.					

"	16	Ud	iPKP1	07 31 02.3
		De	iPKP1	07 31 12.4

"	15	Sk	iSgl	13 36 06.8	
		Um	iSgl	13 34 40.4	
Western USSR.					
Explosion.					

"	16	Ki	iP	09 56 51.2	
Mariana Islands (h = 120 km).					
"	16	Ki	iPKP	11 04 07.3	
New Hebrides Islands					
(h = 30 km).					

"	15	Ud	iP	17 39 34.8	
Greece (h = 40 km).					

"	16	Up	iSgl	12 22 59.0
		Um	iSgl	12 23 09.5
		Ud	iSgl	12 24 00.8

"	15	Ki	iP	19 12 53.0	
		Um	iP	19 13 03.7	
Mariana Islands (h = 220 km).					

"	16	Um	eP	19 51 37
		Ud	iP	19 52 09.3

"	15	Ki	iP	19 51 13.6	
		Sk	eP	19 50 48	
		Um	iP	19 51 24.7	
			i(pP)	19 51 30.7	
		Ud	iP	19 51 12.8	
			i(pP)	19 51 18.7	
Iceland (h = N).					

"	17	Up	iP	02 56 19.4 D
			ipP	02 56 39.7
				micr sec
		P	Z'	0.1 0.9
		Ki	iP	02 56 00.9 D
				micr sec

"	15	Up	iP	23 00 38.7
				micr sec
		P	Z'	0.1 0.9
		Mx	N	5.1 19

"	17	Up	iP	02 56 27
		Um	iP	02 56 07.0 D
		Ud	iP	02 56 29.2 D
		De	iP	02 56 35.2 D

		Ki	iP	23 00 16.3	
				micr sec	
		P	Z'	0.1 1.0	
		Mx	E	2.0 11	
		Mx	N	2.8 15	
		Mx	Z	2.0 12	
		Sk	eP	23 00 46	
		Um	iP	23 00 24.2	
		Ud	iP	23 00 51.1	
Szechwan, China (h = N).					
m = 5.8, M = 5.7 (Up,Ki).					

"	17	Up	iP	07 54 22.0 C	
		Um	iP	07 54 20.1	
		Ud	iP	07 54 38.3 C	
		De	iP	07 54 34.4	
Pakistan (h = 100 km).					

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

1974

Jan.	17	Up	iP	08 50 02.7 C	
				micr sec	
		P	Z'	0.2 1.0	
		Ki	iP	08 49 17.3	
				micr sec	
		P	Z'	0.1 1.0	
		Sk	iP	08 49 54.1	
		Um	iP	08 49 37.6	
		Ud	iP	08 50 09.3 C	
		De	iP	08 50 26.8 C	
		Kurile Islands (h = 80 km). m = 5.9 (Up,Ki).			

" 17 Ud iP 11 02 48.8

" 17 Um iSgl 12 24 31.8
De iSgl 12 25 28.8
Estonia.
Explosion.

" 17 Up iSgl 12 30 29.5
Um iSgl 12 30 53.6
Western USSR.
Explosion.

" 17 Up iSn 12 31 07.7
iSgl 12 31 21.2
Ki eSgl 12 33 11
Sk eSgl 12 33 03
Um iSgl 12 31 35.5
Ud iSgl 12 32 22.0
De iSgl 12 32 42.2
Western USSR.
Explosion.

" 17 Um iSgl 13 02 44.9
Western USSR.
Explosion.

" 17 Ud iPKP1 13 05 37.4
De iPKP1 13 05 48.5

Up	iP	13 05 49.4 C
Ki	iP	13 05 39.9 C
	ipP	13 06 45.5
	i(PP)	13 09 41.9
Um	i(PP)	13 09 43.2
	ipP	13 09 54.0
Ud	iP	13 05 57.7 C
	i(PP)	13 10 13.3
	ipP	13 10 22.3
De	eP	13 05 59
Bali Sea. h = 270 km (Ki).		

" 17 Um i(P) 14 46 25.0

1974

Jan.	18	Ki	eP	01 25 39
		Um	iP	01 25 43.0
		Ud	iP	01 26 03.3
		Mindanao (h = N).		

"	18	Up	iPKP2	07 13 06.8
				micr sec
		Mx	N	1.1 16
		Mx	Z	1.1 17
		Ki	iPKP2	07 13 14.7
				micr sec
		Mx	E	1.4 17
		Mx	N	1.8 18
		Mx	Z	2.1 19

Southwest of Macquarie Islands
(h = N).
M = 6.0 (Up,Ki).

" 18 Um iPKP1 10 39 24.3
New Zealand (h = N).

"	18	Um	iP	11 02 25.6
		Ud	iP	11 02 05.8
		Turkey (h = 25 km).		

"	18	Ki	iPn	11 46 32.9
		iSn	11 47 30.9	
		iSgl	11 47 55.1	
		Sk	i	11 50 04.7
		iSgl	11 50 21.8	
		Um	iSn	11 48 10.0
		i	11 48 25.8	
		iSgl	11 48 45.9	

Northwest USSR.
Explosion.

"	18	Ki	iSn	11 50 12.2
		Sk	iSgl	11 53 06.5
		Um	iSgl	11 51 28.3

Northwest USSR.
Explosion.

"	18	Up	iSgl	13 47 12.4
		Ki	iSgl	13 49 44.4
		Sk	eSgl	13 49 04
		Um	iSgl	13 47 45.3
		Ud	iSgl	13 48 14.7
		De	iSgl	13 48 40.8

Estonia.
Explosion.

"	18	Ud	iP	14 30 52.2
		Greece.		

(cont.)

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

1974

Jan. 18 (cont.)

Sk	iP	17 03 45.8
Um	iP	17 04 06.6 C
	ipP	17 04 28.6
Ud	iP	17 03 49.2
De	iP	17 03 53.0
Haiti.		
h = 80 km (Um).		

"

18

Up	iPgl	20 52 36.8
	iSgl	20 52 50.2
	iRg	20 52 52.5
Sk	iSn	20 54 06.2
	iSgl	20 54 22.8
Um	iSgl	20 54 17.9
Ud	iPgl	20 52 48.1
	i	20 53 06.5
	iSgl	20 53 10.9
	iRg	20 53 17.4
De	iSgl	20 54 34.4
Gästrikland, Sweden,		
60.5°N, 16.5°E.		
Origin time = 20 52 20.		
Explosion?		

"

19

Up	iP	01 07 13.5
Ki	iP	01 07 13.6 C
Um	iP	01 07 09.9
Ud	iP	01 07 24.6
Sumatra (h = 100 km).		

"

19

Um	iP	04 22 50.3
New Guinea (h = 80 km).		

"

19

Um	iP	09 04 02.8
Ud	iP	09 04 28.1
Aleutian Islands (h = 60 km).		

"

19

Ki	iP	10 40 17.2
Ryukyu Islands (h = 120 km).		

"

19

Up	iSgl	12 37 33.1
Um	iSgl	12 37 41.0
Ud	iS*	12 38 23.1
	iSgl	12 38 31.8

Western USSR.
Explosion.

"

19

Ki	iPn	12 46 50.5
	iSn	12 47 38.0
	iSgl	12 47 55.0

Northwest USSR-Norway.
Explosion.

"

19

Um	iP	21 44 34.0
Ud	iP	21 45 05.9

1974

Jan. 20

Up	iPKP	05 32 20.8
Ki	iPKP	05 32 06.5
	ipPKP	05 32 20.0
		micr sec
	PKP	Z' 0.1 1.0
Sk	iPKP	05 32 17.2
	ipPKP	05 32 31.1
Um	iPKP	05 32 12.3
	ipPKP	05 32 25.9
Ud	iPKP	05 32 21.9
	ipPKP	05 32 35.7
	iSKP1	05 35 43.9
De	iPKP	05 32 29.4
	ipPKP	05 32 42.3
	iSKP1	05 35 53.6
New Hebrides Islands.		
h = 45 km (Ki, Sk, Um, Ud, De).		

"

20

Ud	iPKP1	06 12 58.6
De	iPKP1	06 13 10.1
Ki	iSn	06 51 36.9
Um	iSgl	06 52 51.1
Northwest USSR.		
Explosion.		

"

20

Um	iP	15 59 29.3
Japan (h = N).		

"

20

Up	iP	20 15 44.3 C
Ki	iP	20 15 40.2
		micr sec
	P	Z' 0.1 1.0
Sk	iP	20 16 01.0
Um	iP	20 15 37.8 C
Ud	iP	20 15 57.6 C
India-Bangla Desh (h = N).		

"

21

Ud	iP	00 18 31.5
Dodecanese Islands		
(h = 70 km).		

"

21

Up	eP	00 55 00
Ki	eP	00 55 05
Um	ipP	00 55 07.9
Ud	iP	00 55 10.6
	ipP	00 55 20.9
De	eP	00 55 08

Sumatra.
h = 40 km (Ud).

"

21

Um	iSgl	12 43 16.7
Western USSR.		
Explosion.		

"

21

Up	iP	14 20 54.5
(cont.)		

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

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

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

1974

Jan. 23 Ki iSn 08 08 16.8
 iS* 08 08 30.0
 Northwest USSR-Norway.
 Explosion.

" 23 Up iSgl 10 25 52.5
 Ki iSgl 10 26 38.8
 Sk eSgl 10 27 06
 Um iSgl 10 25 13.8
 Ud iSgl 10 26 50.0
 De iSgl 10 27 34.9
 Lake Ladoga region.
 Explosion.

" 23 Up iSgl 14 00 50.9
 iRg 14 00 54.5
 Ud iRg 14 01 07.9
 Central Sweden.

" 23 Up iPKP1 14 09 42.3
 i(SKP1) 14 12 28.5
 micr sec
 PKP1 Z' 0.1 0.8
 (SKP1) Z' 0.1 0.9
 Ki iPKP 14 09 33.7
 iSKP1 14 12 22.2
 Sk e(PKP) 14 09 35
 iPKP 14 09 39.0
 Um i(PKP) 14 09 30.9
 iPKP 14 09 36.8
 iSKP1 14 12 33.2
 Ud iPKP1 14 09 43.7
 i 14 09 51.8
 De iPKP 14 09 54.4
 iPKP1 14 09 55.4
 Tonga-Kermadec Islands
 (h = 450 km).

" 23 Ki iP 18 19 29.9
 Um iP 18 19 26.4
 Ud iP 18 19 41.4
 Sumatra (h = 190 km).

" 23 Um iPKP 22 02 25.1
 i(pPKP) 22 03 11.7
 Argentina (h = 120 km).

" 23 Ud iP 22 13 03.6

" 23 Ud iP 22 21 57.3

" 24 Up iP 09 45 02.0
 ipP 09 45 10.9
 Sk eP 09 45 50
 Um iP 09 45 42.0
 ipP 09 45 49.1
 (cont.)

1974

Jan. 24 (cont.)
 Ud iP 09 45 11.6
 ipP 09 45 19.1
 De eP 09 44 37
 Greece.
 h = 40 km (Um, Ud).

" 24 Um iSgl 10 41 44.5
 Estonia.
 Explosion.

" 24 Ki iP 11 11 58.3
 Um iP 11 12 11.2
 Ud iP 11 12 33.7
 Volcano Islands (h = N).

" 24 Up iSn 12 07 34.6
 iSgl 12 07 43.6
 Ki iSgl 12 10 26.5
 i 12 10 36.0
 Um iSgl 12 08 34.9
 Ud iSgl 12 08 50.0
 De iSgl 12 09 17.5
 Estonia.
 Explosion.

" 24 Um iSgl 12 17 53.5
 Ud iSgl 12 18 42.2
 Western USSR.
 Explosion.

" 24 Up iSgl 12 42 33.5
 Ki iSgl 12 44 27.8
 Um iSgl 12 42 47.6
 Ud eSgl 12 43 35
 Western USSR.
 Explosion.

" 24 Up iP 13 23 30.4
 Ki iP 13 24 44.7
 Sk iP 13 24 05.1
 Ud iP 13 23 32.0
 De iP 13 22 55.4
 Tyrrhenian Sea (h = 360 km).

" 24 Up iSgl 13 36 26.3
 Um iSgl 13 36 46.2
 Western USSR.
 Explosion.

" 24 Um iP 14 43 37.3
 Ud iP 14 44 02.9
 Aleutian Islands (h = N).

" 24 Up iSgl 15 00 20.3
 Um iSgl 15 02 17.9
 (cont.)

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

1974

Jan. 24 (cont.)

Ud iPgl 14 59 37.1
 iSgl 14 59 58.5
 i 15 00 03.2
 iRg 15 00 09.5
 De iSgl 15 00 09.8

Västergötland, Sweden,

58.5°N, 14.1°E.

Origin time = 14 59 10.

Explosion.

" 24 Ki i(Sgl) 15 00 45.6
 " 24 Up ipP 18 53 33.0
 Ki eP 18 52 21
 Sk eP 18 52 48
 ipP 18 53 04.7
 Um iP 18 52 51.3
 i 18 53 02.8
 ipP 18 53 05.8
 Ud ipP 18 53 20.6
 De ipP 18 53 46.7

Alaska. h = 60 km (Sk,Um).

" 24 Up iP 19 23 54.1
 i 19 24 02.0
 ipP 19 24 08.0
 iPcP 19 24 22.8
 iS 19 32 55
 micr sec
 P Z' 0.5 1.0
 pP Z' 1.3 1.1
 Mx E 11 21
 Mx N 17 22
 Mx Z 30 20
 Ki iP 19 23 10.3
 i 19 23 11.7
 ipP 19 23 24.7
 iS 19 31 37
 micr sec
 P Z' 0.4 1.1
 Mx E 29 16
 Mx N 15 17
 Mx Z 27 17
 Sk iP 19 23 46.1 C
 ipP 19 23 59.2
 Um iP 19 23 30.1 C
 ipP 19 23 43.0
 iS 19 32 09
 Ud iP 19 24 00.7 C
 ipP 19 24 13.6
 De iP 19 24 17.7 C
 ipP 19 24 31.5

Japan.

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

m = 6.4, M = 6.5 (Up,Ki).

1974

Jan. 24

Up iP 23 49 12.7
 Ki iP 23 48 29.3
 Um iP 23 48 48.7
 i(pP) 23 49 05.0
 Ud iP 23 49 20.8
 Japan (h = 40 km).

" 25 Up i(P) 01 35 56.6

" 25 Ki iSn 08 16 40.3
 iSgl 08 16 55.2
 Um iSgl 08 18 33.3
 Northwest USSR-Norway.
 Explosion.

" 25 Ki iSn 10 07 45.1
 Um iSgl 10 09 00.8
 Northwest USSR.
 Explosion.

" 25 Up iP 10 15 33.5
 micr sec

Mx E 1.0 18
 Mx N 1.0 19
 Mx Z 1.2 18
 Ki iP 10 14 50.0
 micr sec
 Mx E 1.5 18
 Mx N 1.3 17
 Mx Z 1.7 17
 Sk iP 10 15 25.5
 Um iP 10 15 08.5
 ipP 10 15 21.5
 Ud iP 10 15 40.7
 Japan.
 h = 50 km (Um).
 M = 5.3 (Up,Ki).

" 25 Um iSgl 12 19 18.2
 Western USSR.
 Explosion.

" 25 Um iSgl 12 40 53.0
 Western USSR.
 Explosion.

" 25 Ud i(Sgl) 12 45 18.7
 Sk i(P) 13 45 18.6
 Um i(P) 13 45 48.5

" 25 De iPKP1 14 30 00.6
 Fiji Islands (h = 610 km).

" 25 Um iPKP1 15 08 47.6

" 24 Up iP 21 45 21.7
 i 21 45 29.7

" 25 Up iP 20 40 59.2 D
 (cont.)

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

1974

Jan. 25 (cont.)

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

Mariana Islands.

$h = 140$ km (Up, De).

$m = 6.3$, $M = 5.7$ (Up, Ki).

M uncorrected for focal depth.

" 25 Ud IP 22 03 16.9

" 25 Um iPKP 22 59 30.5

Ud iPKP 22 59 39.7

Samoa Islands ($h = 10$ km).

" 25 Um IP 23 07 37.5

Ud IP 23 07 58.1

" 26 Up IP 01 36 18.1

micr sec

P Z' 0.1 1.1

Ki IP 01 35 25.3

Um eP 01 35 51

Ud IP 01 36 22.1

De IP 01 36 43.1

Kamchatka ($h = N$).

" 26 Up IP 03 22 15.1

Ki IP 03 21 21.6

Um IP 03 21 47.8

ipP 03 22 03.2

Ud IP 03 22 14.1

De IP 03 22 36.8

Aleutian Islands.

$h = 55$ km (Um).

1974

Jan. 26

Ud iP 05 24 38.1
Turkey ($h = 25$ km).

"	26	Up	ePl	05 48 27
		iS	05 58 54	
			micr sec	

Mx	E	4.3 22
----	---	--------

Mx	N	3.8 18
----	---	--------

Mx	Z	8.5 18
----	---	--------

Ki	iPl	05 48 09
----	-----	----------

	eP2	05 48 18
		micr sec

Mx	E	14 17
----	---	-------

Mx	N	9.0 21
----	---	--------

Mx	Z	14 17
----	---	-------

Sk	iP2	05 48 19.7
----	-----	------------

Um	iPl	05 48 20.3
----	-----	------------

	iP2	05 48 30.4
--	-----	------------

	iS	05 58 55
--	----	----------

De	iP2	05 48 40.2
----	-----	------------

Mexico ($h = N$).

$M = 6.2$ (Up, Ki).

Pl and P2 probably derive from two consecutive shocks.

" 26 Ud iPKP1 07 03 26.4

De iPKP1 07 03 37.2

" 26 Ud i(pP) 10 31 41.1

Japan ($h = 55$ km).

" 26 Um iSgl 12 37 53.9

Northwest USSR.

Explosion.

" 26 Up iSgl 13 14 08.0

Sk eSgl 13 13 32

Um iSgl 13 12 01.8

Northwest USSR-Finland.

Explosion.

" 26 Sk eSgl 13 14 26

Um iSgl 13 12 54.1

Northwest USSR-Finland.

Explosion.

" 26 Sk eSgl 13 16 27

Um iSgl 13 15 07.0

Northwest USSR-Norway.

Explosion.

" 26 Up ipP 16 36 10.0

iPcP 16 36 19.8

Ud eP 16 36 02

ipP 16 36 15.7

Japan.

$h = 50$ km (Ud).

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

1974

Jan.	27	Up	iP	07 10 56.1
		Sk	ipP	07 11 04.3
		Um	iP	07 10 34.2
			ipP	07 10 47.5
		Ud	iP	07 11 03.6
			ipP	07 11 16.6
		De	iP	07 11 18.0
		Japan.		

$h = 50 \text{ km}$ (Um, Ud).

"	27	Up	iP	07 18 17.0
			ipP	07 19 05.8
		Ki	iP	07 17 48.2
			ipP	07 18 35.8
		Sk	iP	07 18 13.9
		Um	iP	07 18 00.5 D
			i	07 18 31.0
			ipP	07 18 48.8
		Ud	iP	07 18 23.5
			ipP	07 19 12.1
		De	iP	07 18 34.7 D
		Mariana Islands.		
		$h = 200 \text{ km}$ (Up, Ki, Um, Ud).		

"	27	Ud	iPKP	07 52 00.1
		Fiji Islands ($h = 610 \text{ km}$).		

"	27	Up	iP	08 16 44.8
		Ud	iP	08 16 55.7
		Formosa ($h = 40 \text{ km}$).		

"	27	Up	iP	08 28 36.0
		Um	iP	08 28 19.9
		Ud	iP	08 28 47.2
		Formosa ($h = 30 \text{ km}$).		

"	27	Up	iP	08 57 52.6
			i	08 58 14.3
		Um	iP	08 58 12.8
		De	iP	08 57 37.6
		North Atlantic Ocean		
		$(h = N)$.		

"	27	Up	iSn	09 29 08.9
			i	09 29 57.7
		Ki	iSgl	09 30 14.5
			iPn	09 25 58.5
		Sk	iSn	09 26 56.8
			iSgl	09 27 17.3
		Um	iPn	09 27 02.8
			iSn	09 28 58.3
			iSgl	09 29 51.5
		Up	iPn	09 26 22.9
			ipgl	09 26 38.9
			iSn	09 27 36.9
			i	09 27 51.6
		(cont.)		

1974

Jan.	27	(cont.)		
		Um	iSgl	09 28 10.3
		Ud	iPn	09 27 27.2
			iSn	09 29 34.5
			i	09 30 36.6
			iSgl	09 30 42.1
		De	iSgl	09 32 08.2
			i	09 32 20.8

Northwest USSR.

Explosion.

"	27	Ud	iP	10 54 10.9
		Formosa ($h = 35 \text{ km}$).		
"	27	Ud	i(Sgl)	12 07 08.2
"	27	Up	iPKP	12 26 15.1
		Ki	iPKP	12 26 07.3
		Um	iPKP	12 26 12.6
			ipPKP	12 26 28.4
		Santa Cruz Islands.		
		$h = 55 \text{ km}$ (Um).		

"	27	Up	iP	21 11 40.0
		Ki	iP	21 12 47.9
		Sk	eP	21 12 19
		Um	iP	21 12 11.9
		Ud	iP	21 11 47.6
		De	iP	21 11 14.9
		Crete ($h = 70 \text{ km}$).		

"	27	Ud	iPKPl	22 29 59.3
		De	iPKPl	22 30 09.9
		Fiji Islands ($h = 600 \text{ km}$).		

"	27	Ud	iP	23 15 46.0
		Aegean Sea.		
"	28	Up	eSKP1	02 22 12
		Ki	iPKP	02 18 31.5
		Um	iPKP	02 18 38.0
		Ud	iSKP1	02 22 16.9
		New Hebrides Islands		
		$(h = 25 \text{ km})$.		

"	28	Up	ePKP	02 20 43
			iSKP1	02 24 11.0
		Ki	iPKP	02 20 28.8
		Um	iPKP	02 20 35.9
		Ud	iPKP	02 20 44.5
			iSKP1	02 24 15.6
		De	iPKP	02 20 54.1
		New Hebrides Islands		
		$(h = 25 \text{ km})$.		
"	28	Up	eP	02 26 26
		(cont.)		

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

1974

Jan. 28 (cont.)

Ki	iP	02 26 00.9
		micr sec
P	Z'	0.1 1.0
Um	iP	02 26 10.9
Ud	iP	02 26 32.0
Mariana Islands (h = 60 km).		

"

28	Up	iP	03 44 28.1
			micr sec
	P	Z'	0.1 0.9
	Ki	iP	03 45 38.4
			micr sec
	P	Z'	0.1 1.3
	Sk	iP	03 44 53.7
	Um	iP	03 45 06.4
	Ud	iP	03 44 23.9 D
	De	iP	03 43 51.5 D
Algeria (h = N).			
m = 5.6 (Up,Ki).			

"

28	Ud	iPKPl	04 16 03.4
	De	iPKPl	04 16 15.1
Tonga-Kermadec Islands			
(h = 570 km).			

"

28	Ud	iP	05 38 29.2
Greece.			

"

28	Up	iPKPl	06 22 41.2
	Um	i(PKP)	06 22 29.6
		iPKP	06 22 39.1
		iSKPl	06 25 20.8
	Ud	iPKPl	06 22 43.3
	De	iPKPl	06 22 54.1
Tonga-Kermadec Islands			
(h = 590 km).			

"

28	Ud	iP	06 47 28.6
----	----	----	------------

"

28	Up	iP	06 48 18.2
----	----	----	------------

"

28	Up	iPKPl	08 47 22.2
	Ud	iPKPl	08 47 25.0
	De	iPKPl	08 47 35.1

"

28	Up	iP	12 25 04.1
	Ki	iP	12 24 33.7
	Um	iP	12 24 47.6
	Ud	iP	12 25 10.1
	De	iP	12 25 21.2
Mariana Islands (h = 140 km).			

"

28	Ki	iSgl	12 48 49.2
	Sk	iSgl	12 48 56.2
	Um	iSn	12 49 02.2
(cont.)			

1974

Jan. 28 (cont.)

Um	iSgl	12 49 16.8
Ud	iSgl	12 50 43.8
Nordland, Norway,		
66.5°N, 14.2°E.		
Origin time = 12 47 22.		
Explosion.		

"

28	Um	i(Sgl)	13 36 19.2
	Up	iSgl	13 36 45.4
	Sk	eSgl	13 38 41
	Um	iSgl	13 37 08.0
	De	eSgl	13 38 21
Western USSR.			
Explosion.			

"

28	Up	iSn	13 45 12.0
		iSgl	13 45 23.9
	Ki	iSgl	13 47 55.9
	Sk	iSgl	13 47 16.4
	Um	iSgl	13 45 59.3
	Ud	iSn	13 46 01.1
		iSgl	13 46 28.1
	De	iSgl	13 46 54.3
Estonia.			
Explosion.			

"

28	Ud	iP	14 28 03.6
India (h = 40 km).			
	Up	iP	20 13 48.7
	Ki	iP	20 13 08.3
	Um	iP	20 13 26.1
	Ud	iP	20 13 56.6
	De	eP	20 14 12
Japan (h = 55 km).			

"

29	Um	i(P)	11 13 53.3
----	----	------	------------

"

29	Up	iSgl	12 13 23.3
----	----	------	------------

"

29	Sk	iSgl	12 15 16.5
----	----	------	------------

"

29	Um	iSgl	12 13 41.2
----	----	------	------------

"

29	Ud	iSgl	12 14 24.0
----	----	------	------------

Western USSR.

Explosion.

"

29	Um	iSgl	12 22 03.4
----	----	------	------------

"

29	De	eSgl	12 22 57
----	----	------	----------

Estonia.

Explosion.

"

29	Sk	iSgl	12 39 26.7
----	----	------	------------

"

29	Um	iSgl	12 37 39.6
----	----	------	------------

Lake Ladoga region.

Explosion.

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

1974

Jan.	29	De	i(P)	12 51 22.2
"	29	Sk	iP	13 39 28.8
			i	13 39 33.8
		Ud	iP	13 38 59.8
		Sicily.		
"	29	Up	iP	15 17 31.9 C
		Ki	eP	15 18 47
		Sk	iP	15 18 15.3 C
		Um	iP	15 18 12.1
		Ud	iP	15 17 40.0
		De	iP	15 17 03.0
		Greece (h = 30 km).		

1974

Jan.	30	(cont.)		
		Ki	iP	05 03 41.5 C
"				micr sec
			P	Z' 0.2 0.6
		Sk	iP	05 04 12.5 C
			iPP	05 05 35.4
		Um	iP	05 03 42.1
		Ud	iP	05 04 13.4 C
			iPn	05 05 25.8
		De	iP	05 04 20.8
		Kazakh SSR.		
		m = 6.0 (Up,Ki).		
		Underground explosion.		
"	30	Up	iSgl	09 54 27.6
		Ki	eSgl	09 57 05
		Um	iSgl	09 55 02.7
		Ud	iSgl	09 55 34.2
		Estonia.		
		Explosion.		
"	30	Ud	iP	10 04 35.4

" 29 Ud i(P) 16 32 34.6

" 29 Up iPP 19 15 38.0	
	micr sec
	PP Z' 0.1 1.3
Ki	iP 19 10 56.4
	iPP 19 15 17.4
	micr sec
	P Z' 0.1 1.0
Sk	iPKP 19 15 23.3
Um	iP 19 11 00.8
	iPKP 19 15 17.4
	iPP 19 15 22.4
Ud	iP 19 11 18.5
	iPKP 19 15 24.4
Banda Sea (h = 150 km).	
m = 6.4 (Up,Ki).	

" 30 Up iSgl 09 54 27.6
Ki eSgl 09 57 05
Um iSgl 09 55 02.7
Ud iSgl 09 55 34.2

" 29 Up iP 21 08 36.1

" 29 Ki iP 22 51 08.3	
Um iP 22 51 12.1	
	iPKP 22 55 28.8
	iPP 22 55 33.6
Banda Sea (h = 150 km).	

" 30 Up iPP 10 07 28.3
iPP 10 11 50.8

" 30 Um i(P) 00 01 13.0

" 30 Up iP 05 03 52.0	
Ki iP 05 03 36.8	
Sk eP 05 04 08	
Um iP 05 03 37.8	
Ud iP 05 04 08.7	
Kazakh SSR.	
Underground explosion.	

iPP 10 11 33.7
micr sec

" 30 Up iP 05 03 56.8 C

iPn 05 05 02.8
iPP 05 05 15.1
PP Z' 0.1 1.0
(cont.)

P Z' 0.1 1.2
i Z' 0.3 1.4

PP Z' 0.6 2.0
Mx E 11 20

Mx N 12 19
Mx Z 8.4 18

Sk iP 10 07 31.6
iPP 10 11 55.0

Um iP 10 07 15.7
i 10 07 20.8

i 10 07 35.0
iPP 10 11 44.2

Ud iP 10 07 36.2 C
i 10 07 40.2

i 10 07 55.6
i 10 12 22.7

De iPKP 10 11 43.2
Aroe Islands (h = N).

m = 6.8, M = 6.5 (Up,Ki).

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

1974

 Jan. 30 Um iSgl 12 15 16.8
 Western USSR.
 Explosion.

1974

 Jan. 31 Ud iPKP1 05 40 26.5
 De iPKP1 05 40 37.2

 " 30 Up iSgl 12 58 14.0
 Sk iSgl 13 00 14.1
 Um iSgl 12 58 35.4
 Ud iSgl 12 59 19.9
 De iSgl 12 59 44.9
 Western USSR.
 Explosion.

 " 31 V Up iP 07 15 28.9
 iP 07 15 39.2
 micr sec
 P Z' 0.1 1.3
 pP Z' 0.2 1.0
 Mx E 3.6 12
 Mx N 4.2 16
 Mx Z 7.0 15
 Ki iP 07 14 56.8
 iP 07 15 08.7
 micr sec
 P Z' 0.1 1.0
 pP Z' 0.1 1.0
 Mx E 9.6 15
 Mx N 8.8 18
 Mx Z 7.4 15

 " 30 Up iSgl 14 45 01.6
 Sk eSgl 14 46 57
 Um iPgl 14 44 39.6
 iSgl 14 45 41.5
 Ud iPn 14 44 40.3
 i 14 45 06.5
 iSgl 14 46 03.5
 De iPn 14 44 53.7
 iSn 14 46 04.8
 iSgl 14 46 37.3
 Estonia.
 Explosion.

 Sk eP 07 15 29
 iP 07 15 39.5
 Um iP 07 15 09.4
 i 07 15 15.3
 iP 07 15 21.3
 Ud iP 07 15 38.0
 iP 07 15 49.1
 De iP 07 15 51.7
 iP 07 16 01.4

 " 30 Up iSgl 14 52 19.0
 Sk iSgl 14 54 17.7
 Um iSgl 14 52 57.3
 Ud iPn 14 51 54.6
 iSgl 14 53 19.8
 De iSgl 14 53 55.6
 Estonia.
 Explosion.

 Japan.
 $h = 40 \text{ km}$ (Up, Ki, Sk, Um, Ud, De).
 $m = 5.9, M = 6.2$ (Up, Ki).

 " 30 Up iS* 15 57 19.6
 iSgl 15 57 24.6
 Ki iPn 15 54 40.5
 iPgl 15 54 42.9
 iSgl 15 55 19.6
 iRg 15 55 35.9
 micr sec
 Sk Sgl Z' 0.1 0.5
 iPgl 15 54 45.5
 iSgl 15 55 26.3
 Um iPn 15 54 51.2
 iPgl 15 54 58.6
 iSn 15 55 33.2
 iSgl 15 55 48.1
 Ud iSn 15 56 46.7
 iSgl 15 57 14.3
 De iSgl 15 59 05.5
 Nordland, Norway,
 $66.5^\circ\text{N}, 14.3^\circ\text{E}$.
 Origin time = 15 53 54.
 Explosion.

 " 31 Ud iPKP1 08 49 57.3 D
 De iPKP1 08 50 08.0

 " 31 Up i(P) 12 12 14.8
 Ki iSKP1 15 30 59.7
 Sk iPKP 15 28 40.4
 iSKP1 15 31 17.2
 Um iPKP 15 28 36.4
 iSKP1 15 31 12.4
 Ud iPKP 15 28 42.5
 iSKP1 15 31 26.8
 De iPKP 15 28 48.6
 Fiji Islands ($h = 580 \text{ km}$).

 " 31 De i(P) 15 34 42.0
 " 31 Up iP 20 06 22.5 C
 micr sec
 P Z' 0.3 1.0
 Ki iP 20 05 29.2 C
 micr sec
 P Z' 0.5 0.9
 Sk iP 20 05 59.3 C
 (cont.)

" 30 Ud iP 18 17 57.2

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

1974

Jan. 31 (cont.)
 Um iP 20 05 56.3 C
 Ud iP 20 06 21.9 C
 De iP 20 06 44.7 C
 Aleutian Islands (h = 35 km).
 m = 6.5 (Up,Ki).

1974

Jan. 31 Ki ePKP 23 56 39
 Um iPKP 23 56 42.4
 Ud iPKP 23 56 51.3
 i 23 57 00.7
 De iPKP 23 56 56.5
 i 23 57 04.8

Solomon Islands.

Origin time = 23 38 02.

" 31 Up iP 20 26 50.3
 Ki iP 20 25 57.2 C
 micr sec
 P Z' 0.1 0.9
 Sk iP 20 26 27.1
 Um iP 20 26 23.8 C
 Ud iP 20 26 49.5 C
 De iP 20 27 11.9 C
 Aleutian Islands (h = 45 km).

" 31 ✓ Up iPKP 20 35 05.9
 micr sec
 Mx E 1.4 18
 Mx N 1.8 20
 Mx Z 1.9 20
 Ki micr sec
 Mx E 1.8 20
 Mx N 2.0 21
 Um iPKP 20 34 58.6
 Ud iPKP 20 35 07.4
 De iPKP 20 35 12.7
 Solomon Islands (h = 60 km).
 M = 5.9 (Up,Ki).

" 31 ✓ Up iPKP 23 48 52.1
 i 23 48 58.4
 iPP 23 50 13
 iSP 00 00 06
 micr sec
 PKP Z' 0.1 0.9
 Mx E 30 21
 Mx N 66 25
 Mx Z 53 22
 Ki iPKP 23 48 40.8
 micr sec
 Mx E 52 23
 Mx N 51 23
 Mx Z 21 21
 Sk iPKP 23 48 50.9
 iPP 23 50 18.3
 Um i(PKP) 23 48 39.0
 iPKP 23 48 45.8
 iPP 23 49 56.0
 Ud i(PKP) 23 48 47.3
 iPKP 23 48 54.2
 iPP 23 50 25.0
 De iPKP 23 48 59.8
 iPP 23 50 49.1
 Solomon Islands (h = 35 km).
 M = 7.2 (Up,Ki).

Markus Båth
 Klaus Meyer
 Rutger Wahlström

September 23, 1975

SEISMOLOGICAL INSTITUTE
BOX 517
S-751 20 UPPSALA
SWEDEN

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

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

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

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

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

1974

Feb.	1	Up	iP	00 05 55.1 D	
				micr sec	
		P	Z'	0.4 1.4	
		Ki	iP	00 07 06.0	
				micr sec	
		P	Z'	0.1 1.0	
		Sk	iP	00 06 39.3	
		Um	iP	00 06 30.5	
		Ud	iP	00 06 06.4	
		De	iP	00 05 32.0	
		Turkey (h = 30 km).			
		m = 5.7 (Up,Ki).			

1974

Feb.	1	(cont.)			
		Ki	iPKP	03 31 12.5	
			iPKKP	03 42 16.9	
				micr sec	
		PKP	Z'	0.1 1.0	
		Mx	E	75 20	
		Mx	N	82 20	
		Mx	Z	45 19	
		Sk	iPKP	03 31 20.3	
		i		03 31 28.4	
		Um	i(PKP)	03 31 11.8	
			iPKP	03 31 15.6	
			iPKKP1	03 41 57.9	
"	1	Um	iPKP	03 31 23.8	
"	1	Ud	iPKP	03 41 34.0	
"	1	De	iPKP	03 31 28.3	
"	1	Solomon Islands (h = 50 km).			
"	1	In the present series of			
"	1	Solomon Islands earthquakes,			
"	1	De at a distance of about			
"	1	122° appears as our most			
"	1	sensitive station.			
"	1	Ki	iP	03 27 17.9	
"	1	Sk	iP	03 28 07.0	
"	1	Um	iP	03 28 01.9	
"	1	Up	iPKP	03 31 19.2	
"	1	i		03 31 24.5	
"	1	i		03 31 29.4	
"	1	iPKKP		03 41 58.7	
"	1			micr sec	
"	1	PKP	Z'	0.1 1.0	
"	1	Mx	E	47 27	
"	1	Mx	N	70 26	
"	1	Mx	Z	60 21	
"	1	Solomon Islands.			
"	1	Um	iPKP	03 50 27.5	
"	1	De	iPKP	03 50 41.8	
"	1	Solomon Islands.			
"	1	De	iPKP	03 51 53.0	
"	1	Solomon Islands.			
"	1	De	iPKP	03 53 45.4	
"	1	Solomon Islands.			

(cont.)

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

1974

Feb. 1 De iPKP 03 54 53.4
Solomon Islands.

" 1 De iPKP 04 05 31.4
Solomon Islands.

" 1 De iPKP 04 30 26.7
Solomon Islands.

" 1 De iPKP 04 33 10.5
Solomon Islands.

" 1 De iPKP 04 33 42.1
Solomon Islands.

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

" 1 De iPKP 04 50 21.7
Solomon Islands.

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

" 1 De iPKP 06 09 29.5
Solomon Islands.

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

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

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

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

" 1 De iPKP 08 43 26.2
Solomon Islands.

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

1974

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

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

" 1 Ki iPn 12 03 04.8
iSn 12 04 05.0
iSgl 12 04 28.4
Sk iSgl 12 06 47.3

Um iSn 12 04 43.3
iSgl 12 05 18.4
Ud iSgl 12 07 49.8

De i 12 09 20.1
iSgl 12 09 28.7
Northwest USSR.

Explosion.

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

" 1 Up iP 12 13 50.8
micr sec

P Z' 0.1 0.9
Ki iP 12 13 49.8
micr sec

P Z' 0.2 1.0
Sk iP 12 14 03.4
Um iP 12 13 47.4
Ud iP 12 14 00.4
De iP 12 13 59.5

Sumatra (h = 140 km).
m = 6.2 (Up,Ki).

" 1 Up i(P) 12 48 37.3

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

Explosion.

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

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

" 1 Um iSgl 14 09 11.8
Ud iSgl 14 09 46.6
De iSgl 14 10 10.9

Western USSR.

Explosion.

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

1974

Feb.	1	Up	iP	15 15 10.2 C
				micr sec
		P	Z'	0.2 1.0
		Ki	iP	15 14 15.7 C
			P	Z' 0.1 0.8
		Sk	iP	15 14 52.5
		Um	iP	15 14 41.5
		Ud	iP	15 15 13.4 C
			ipP	15 15 27.9
		De	iP	15 15 35.1 C
			ipP	15 15 48.7

Kamchatka.
 $h = 50$ km (Ud,De).
 $m = 6.0$ (Up,Ki).

1974

Feb.	2	De	iPKP	08 17 17.8
				Solomon Islands.
		Up	iPKP	08 46 27.1
			iSKPl	08 49 31.6
		Ki	iPKP	08 46 13.1
		Sk	iPKP	08 46 23.4
		Um	iPKP	08 46 18.2
			iSKPl	08 49 17.9
		Ud	i(PKP)	08 46 19.6
			iPKP	08 46 29.2
			iSKPl	08 49 38.5
		De	iPKP	08 46 27.1
			iSKPl	08 49 38.2

New Hebrides Islands
 $(h = 270$ km).

" 1 De iPKP 15 14 17.6
 Solomon Islands ($h = 40$ km).

" 2 Up iPP 12 03 37.5
 i 12 03 50.8
 micr sec

" 1 De iPKP 15 42 55.3
 Solomon Islands ($h = 50$ km).

Mx E 1.3 17
 Mx N 1.9 18
 Mx Z 3.8 19

" 1 Ud iP 21 22 49.8

Ki micr sec

" 1 Up i(Sgl) 21 28 35.8

Mx E 2.3 19
 Mx N 3.2 19
 Mx Z 2.3 18

" 1 Ud iP 22 17 52.9

Um iPP 12 03 13.7
 iS 12 10 49

" 1 De iPKP 22 54 59.0

Ud iPP 12 03 48.9
 i 12 04 04.7

Solomon Islands.

De iPP 12 03 59.2
 i 12 04 14.8

" 1 Um iPKP 23 35 31.9
 Ud iPKP 23 35 42.4
 De iPKP 23 35 46.3
 Solomon Islands ($h = 45$ km).

Aroe Islands ($h = N$).
 $M = 5.9$ (Up,Ki).

" 2 De iPKP 02 27 23.9
 Solomon Islands ($h = N$).

" 2 De iPKP 15 54 14.3
 Solomon Islands ($h = N$).

" 2 De iPKP 02 38 04.6
 Solomon Islands ($h = 35$ km).

" 2 Ud iP 16 02 41.5

" 2 Up iP 03 45 07.0
 Ki iP 03 45 34.0
 micr sec

" 2 Up iP 16 05 19.1
 P Z' 0.1 1.2

P Z' 0.1 1.1
 Um iP 03 45 24.4
 De iP 03 44 47.2
 Azores Islands ($h = N$).

Ki iP 16 04 22.8
 micr sec

" 2 Um iP 05 17 45.8
 Japan ($h = 100$ km).

Sk iP 16 04 49.6
 ipP 16 05 00.7

" 2 Um iP 06 20 06.3

Um iP 16 04 51.9
 ipP 16 05 03.1

" 2 Sk iP 07 20 03.8
 Um iP 07 20 18.5
 Ud eP 07 20 12

Ud iP 16 05 15.7
 ipP 16 05 26.3

Mexico ($h = 80$ km).

De iP 16 05 39.9
 ipP 16 05 51.2

Alaska.
 $h = 40$ km (Sk,Um,Ud,De).
 $m = 5.7$ (Up,Ki).

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

1974

Feb. 2 Up iPKP1 19 54 53.2
 Ud iPKP1 19 54 55.7
 De iPKP1 19 55 08.8
 Tonga-Kermadec Islands.

" 2 ✓ Up iP 20 09 27.7
 i 20 09 43.3
 micr sec
 Mx E 1.3 17
 Mx N 2.0 22
 Mx Z 2.4 20
 Ki iP 20 09 26.2
 i 20 09 39.5
 micr sec
 i Z' 0.1 1.2
 Mx E 2.0 16
 Mx N 2.1 17
 Mx Z 2.8 20
 Sk iP 20 09 40.8
 iPP 20 13 34.2
 Um iP 20 09 22.5
 iPP 20 13 03.6
 Ud iP 20 09 34.9
 i 20 09 36.9
 iPP 20 13 21.2
 De iP 20 09 35.7
 Sunda Strait (h = N).
 M = 5.8 (Up,Ki).

" 2 Um iP 23 14 22.2
 Japan (h = 40 km).

" 2 Um iP 23 51 22.8

" 3 Up iPKP1 03 36 22.5
 Sk iPKP1 03 36 14.8
 Um iPKP1 03 36 09.8
 Ud iPKP1 03 36 23.9
 De iPKP1 03 36 32.3
 Tonga-Kermadec Islands.

" 3 Up iPKP1 04 29 44.7
 Ud iPKP1 04 29 47.2
 De iPKP1 04 29 57.7
 Tonga-Kermadec Islands.

" 3 Ki iP 06 37 14.3
 Um iP 06 36 53.3
 Arabian Sea (h = N).

" 3 Ki iP 09 03 58.5
 Um iP 09 03 37.0
 Arabian Sea (h = N).

" 3 ✓ Up iP 10 20 54.5 D
 ipP 10 21 05.0
 iS 10 30 54
 (cont.)

1974

Feb. 3 (cont.)

	Up	micr	sec
	P	Z'	0.2 0.9
	pP	Z'	0.4 1.1
	Mx	E	2.2 15
	Mx	N	3.1 16
	Mx	Z	7.4 14
Ki	iP	10 20	35.2 D
	ipP	10 20	45.0
		micr	sec
	P	Z'	0.2 0.9
	pP	Z'	0.3 1.0
	Mx	E	8.1 14
	Mx	N	3.9 14
	Mx	Z	6.1 13
Sk	iP	10 20	59.5
	ipP	10 21	09.9
Um	iP	10 20	41.5 D
	ipP	10 20	51.1
	iS	10 30	29
Ud	iP	10 21	04.7 D
	ipP	10 21	14.9
De	iP	10 21	11.4 D
	ipP	10 21	21.5
Luzon.			
h = 35 km (Up,Ki,Sk,Um,Ud, De).			
m = 6.1, M = 6.1 (Up,Ki).			

" 3 Sk iPKP1 10 25 47.1
 Um iPKP1 10 25 40.4
 Ud iPKP1 10 25 53.9
 De iPKP1 10 26 05.8
 Kermadec Islands.

" 3 Ud iP 15 06 01.9
 De iP 15 05 42.2
 Iran (h = 40 km).

	Up	micr	sec
	Mx	E	1.2 20
	Mx	N	1.1 20
	Mx	Z	1.8 22
Ki		micr	sec
	Mx	E	2.1 18
	Mx	N	1.6 17
	Um	iPKP	16 31 36.6
		Solomon Islands (h = 45 km).	
	M	= 5.8 (Up,Ki).	

" 3 Um i(P)	18 19 06.8
" 3 Um iPP	19 04 06.6
	Aroe Islands (h = N).
" 3 Up iPKP	20 41 00.1
	ipPKP 20 41 12.7
(cont.)	

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

1974

Feb. 3 (cont.)

Um	iPKP	20 40 53.1
	ipPKP	20 41 04.6
Ud	iPKP	20 41 02.9
	ipPKP	20 41 16.0
De	iPKP	20 41 08.1
	ipPKP	20 41 21.0

Solomon Islands.
h = 45 km (Up,Um,Ud,De).

"

4

Up	iP	03 34 24.0
Ki	iP	03 33 40.7
Sk	iP	03 34 16.7
Um	iP	03 34 00.0 C
Ud	iP	03 34 30.8
De	iP	03 34 47.7

Japan (h = 220 km).

"

4

Um	ePKP	09 29 13
Ud	ePKP	09 28 59

South Pacific Ocean (h = N).

"

4

Um	i(Sgl)	10 45 23.2
----	--------	------------

"

4

Up	iP	12 53 40.2
----	----	------------

"

4

Up	i(P)	14 50 09.0
----	------	------------

"

4

Up	iPKP1	17 13 06.9
Um	i(PKP1)	17 13 05.0
Ud	iPKP1	17 13 09.2

"

4

Ud	iP	19 58 27.9
----	----	------------

"

4

Up	iPKP	20 29 24.9
----	------	------------

i	20 29 34.5
---	------------

micr sec

Mx	E	2.3	20
----	---	-----	----

Mx	N	3.6	20
----	---	-----	----

Mx	Z	5.1	22
----	---	-----	----

Ki	iPKP	20 29 16.5
----	------	------------

i	20 29 22.7
---	------------

iSP	20 39 30
-----	----------

micr sec

Mx	E	4.3	19
----	---	-----	----

Mx	N	2.8	20
----	---	-----	----

Mx	Z	3.8	20
----	---	-----	----

Sk	iPKP	20 29 28.5
----	------	------------

i	20 29 36.2
---	------------

Um	iPKP	20 29 17.0
----	------	------------

Ud	iPKP	20 29 29.7
----	------	------------

i	20 29 37.8
---	------------

De	iPKP	20 29 32.8
----	------	------------

i	20 29 41.9
---	------------

Solomon Islands (h = 55 km).

M = 6.1 (Up,Ki).

(cont.)

1974

Feb. 4 (cont.)

Double onsets, small and large, about 8 sec apart.		
Um	iPKP	21 17 40.1
Ud	iPKP	21 17 48.8
De	i(PKP)	21 17 45.1
	iPKP	21 17 54.6

Solomon Islands (h = 55 km).

"

4

Um	iPKP	21 43 36.6
De	iPKP	21 43 47.4

Solomon Islands (h = 55 km).

"

4

Ki	iP	23 21 24.0
Sk	eP	23 20 39

Ud	iP	23 20 05.3
----	----	------------

"

5

Um	i(PKP)	00 03 20.1
	iPKP	00 03 30.5
Ud	iPKP	00 03 39.6
De	iPKP	00 03 45.2

Solomon Islands (h = 50 km).

"

5

Um	iP	02 32 36.0
Ud	iP	02 32 10.6
De	iP	02 31 51.6

Turkey.

"

5

Up	iP	02 35 02.7
	ipP	02 35 19.6
Ki	iP	02 34 05.5
	ipP	02 34 23.2
Sk	iP	02 34 33.5
	ipP	02 34 51.3
Um	iP	02 34 34.1
	ipP	02 34 52.4
Ud	iP	02 34 58.7
De	iP	02 35 24.0
	ipP	02 35 41.4

Alaska.

h = 70 km (Up,Ki,Sk,Um,De).

"

5

De	iP	06 46 47.9
----	----	------------

Algeria (h = N).

"

5

Sk	eSgl	12 16 33
Um	iSgl	12 15 09.3
Ud	iSgl	12 15 50.7
De	iSgl	12 16 15.5

Western USSR.
Explosion.

"

5

Um	iP	12 19 35.8
----	----	------------

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

1974

Feb. 5 Um iSgl 13 36 22.0
 i 13 36 36.6
 Estonia.
 Explosion.

1974

Feb. 6 (cont.)
 Um iP 03 01 24.4
 Ud iP 03 01 56.9
 Kamchatka (h = N).

" 5 De iPgl 14 38 03.7
 iSgl 14 38 22.6
 iRg 14 38 27.3

" 6 ✓ Up iP 04 15 00.7
 i 04 15 10.0
 iPP 04 17 40.6
 iS 04 23 48

" 5 Up iP 15 10 24.2 C
 Ki iP 15 11 30.8
 i 15 11 45.3
 Sk iP 15 11 03.7 C
 Um iP 15 10 56.6
 Ud iP 15 10 32.6 C
 De iP 15 10 01.3 C
 iS 15 13 47.5

iP'P' 04 43 29.3
 micr sec
 P Z' 0.4 1.1
 i Z' 0.7 1.4
 Mx E 14 18
 Mx N 31 23
 Mx Z 26 19
 Ki iP 04 14 06.9
 iS 04 22 10
 iP'P' 04 43 47.9
 micr sec

" 5 Up iP 15 17 27.0
 Sk iP 15 17 39.0
 Um iP 15 17 36.0
 De iP 15 17 20.9

P Z' 0.6 1.0
 Mx E 26 18
 Mx N 18 18
 Mx Z 18 19

" 5 Ki iP 15 29 43.9
 Sk iP 15 29 47.7
 Um iP 15 29 05.5
 Probably central Russia.

Sk iP 04 14 36.8
 i 04 14 44.0
 Um iP 04 14 34.1
 iPP 04 17 07.4
 iS 04 22 58
 iP'P' 04 43 35.1

" 5 Ud iPKPl 17 15 04.0
 Kermadec Islands (h = 310 km).

Ud iP 04 14 59.2
 De iP 04 15 22.5
 Unimak Island (h = 2 km).

" 5 Um iP 18 29 08.6
 Turkey (h = 40 km).

m = 6.6, M = 6.5 (Up, Ki).

" 5 Um i(P) 21 32 01.4

" 6 Um iP 07 03 17.4 C
 Japan (h = 70 km).

" 5 Up iP 22 18 14.2
 Ki eP 22 17 58
 Um iP 22 18 04.3
 Ud iP 22 18 21.8
 Molucca Passage (h = 110 km).

" 6 Up iP 08 26 42.8
 Ki iP 08 26 46.1
 Sk iP 08 26 30.1
 Ud iP 08 26 32.6
 De iP 08 26 33.8
 Colombia (h = 160 km).

" 5 Up iSgl 22 35 17.8
 Sk eSgl 22 36 53
 Um iSgl 22 37 20.4
 Ud iSgl 22 35 02.1
 De iSgl 22 34 51.1
 Västergötland, Sweden,
 58.1°N, 14.0°E.
 Origin time = 22 33 59.
 Felt.

" 6 Ki iP 08 59 46.7
 Kamchatka (h = N).
 " 6 Ud iP 10 29 57.7
 Formosa (h = 60 km).

" 6 Up iP 03 01 52.4
 Ki iP 03 00 59.5
 (cont.)

" 6 Um iSgl 12 23 36.7
 Ud iSgl 12 24 17.7
 Western USSR.
 Explosion.

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

1974

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

1974

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

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

1974

Feb. 7 (cont.)
 Ud ipP 16 36 19.8
 Talaud Islands.
 h = 60 km (Ki,Ud).

" 7 Up iP 18 22 11.0
 Um iP 18 21 57.0
 Ud iP 18 22 21.1
 " 7 Up iP 19 14 46.6
 Ki iP 19 13 54.8
 Um iP 19 14 19.1
 Ud iP 19 14 51.2
 Kurile Islands (h = 45 km).

" 7 Um iP 19 38 46.8
 De iP 19 38 21.0

" 7 Ud iPKPl 20 31 37.6
 De iPKPl 20 31 50.2

" 8 Ki iPn 10 08 28.2
 iPgl 10 08 36.5
 iSn 10 09 14.5
 iSgl 10 09 27.4
 Sk iSgl 10 12 11.9
 Um iSn 10 10 24.2
 iSgl 10 11 01.3
 Northwest USSR-Norway.

Explosion.

" 8 Um iSgl 10 42 05.6
 Lake Ladoga.
 Explosion.

" 8 Ud iP 12 11 19.6
 Kurile Islands (h = 60 km).

" 8 Ki iPn 12 57 04.2
 i 12 57 46.6
 eSn 12 58 03
 iSgl 12 58 22.7
 Sk eSgl 13 00 50
 Um iSgl 12 59 14.5
 Northwest USSR.
 Explosion.

" 8 De iPKPl 13 44 27.2
 Fiji Islands (h = 610 km).

" 8 Up iP 14 32 05.8 C
 micr sec
 P Z' 0.2 0.9
 Ki iP 14 31 11.5 C
 micr sec
 P Z' 0.3 0.9
 Sk iP 14 31 47.2 C
 (cont.)

1974

Feb. 8 (cont.)
 Um iP 14 31 37.2 C
 Ud iP 14 32 08.4 C
 De iP 14 32 30.6
 Komandorsky Islands (h = N).
 m = 6.3 (Up,Ki).

" 8 Ki iPKP 18 43 46.0
 Um i(PKP) 18 43 46.1
 iPKP 18 43 54.0
 Ud iPKP 18 44 02.9
 Loyalty Islands (h = N).

" 8 Um iP 20 34 31.9
 iPcP 20 34 54.4
 Japan (h = 50 km).

" 8 Um iP 22 08 29.9
 Um iPKP 22 28 10.2
 New Hebrides Islands
 (h = 35 km).

" 9 Up Mx 01 07
 micr sec
 Mx E 1.4 18
 Mx Z 1.9 18
 Ki Mx 01 06
 micr sec
 Mx N 1.0 16
 South Pacific Ocean (h = N).

M = 6.0 (Up,Ki).

" 9 Ud iP 03 43 18.3
 Molucca Passage (h = N).

" 9 Ki iP 04 16 20.6
 Um iP 04 16 06.8
 Ud iP 04 16 21.1
 De iP 04 16 13.4
 Pakistan (h = N).

" 9 Ud iP 04 36 12.7
 Um iP 05 03 07.3

" 9 Up iPKPl 07 29 55.6
 Sk iPKPl 07 29 48.3
 Um iPKPl 07 29 43.4
 Ud iPKPl 07 29 59.2

De iPKPl 07 30 07.9
 Kermadec Islands (h = 100 km).
 (cont.)

" 9 Up i 08 09 53.5
 iSgl 08 09 57.1
 Sk iSgl 08 10 59.9
 Um iSgl 08 10 39.7
 (cont.)

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

1974

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

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

" 9 Um iP 10 04 56.3
 " 9 Ki iSn 12 49 30.9
 i 12 49 42.7
 Northwest USSR.
 Explosion.

" 9 Um i(P) 15 19 27.1
 " 9 Ud iP 17 16 29.9
 Formosa (h = 60 km).

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

" 9 Um iP 18 48 36.9
 Guatemala (h = 110 km).
 " 10 De iPKP 02 34 09.3
 Solomon Islands (h = 40 km).

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

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

1974

Feb. 10 Um iSgl 14 17 44.0
 Ud iSgl 14 18 40.2
 " 10 Ud iP 16 38 04.1
 Pamir.

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

" 10 Ud iP 18 13 50.4
 De iP 21 36 18.9
 De iP 21 36 40.9
 Aleutian Islands (h = N).

" 10 Um iP 21 42 52.1

" 10 Up iP 22 15 52.9
 Ki iP 22 14 58.4
 Sk iP 22 15 26.0
 Um iP 22 15 27.4
 Ud iP 22 15 50.7
 De iP 22 16 17.4

Alaska (h = 60 km).
 " 11 Up iP 00 24 13.6 C
 Ki iP 00 23 55.1

Sk iP 00 24 17.6
 Um iP 00 24 02.1
 Ud iP 00 24 22.0 C
 Mindanao (h = N).

" 11 Up iP 01 54 00.0
 ipP 01 54 15.5
 iPP 01 57 36.3

i 01 57 58.7
 micr sec
 P Z' 0.1 0.9
 Ki iP 01 53 58.9 C
 ipP 01 54 12.9

micr sec
 P Z' 0.1 1.0
 Sk iP 01 54 11.3
 Um iP 01 53 56.7 C
 ipP 01 54 11.0

Ud iP 01 54 09.3 C
 ipP 01 54 24.6
 i(PP) 01 57 41.0
 Sunda Strait.
 h = 55 km (Up,Ki,Um,Ud).
 m = 6.2 (Up,Ki).

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

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

1974

Feb.	11	Um	iP	05 23 46.4
		Ud	iP	05 24 11.5

"	11	Up	iP	05 48 53.7
		Um	iP	05 48 30.3 C
		Ud	iP	05 49 01.5
Japan (h = 110 km).				

"	11	Um	i(P)	08 29 34.6
---	----	----	------	------------

"	11	Um	iPKPl	09 11 50.8
		Ud	iPKPl	09 12 01.9

"	11	Up	iP	14 22 01.1
		Ki	iP	14 22 04.5
			ipP	14 22 15.2
		Um	iP	14 21 58.3
			ipP	14 22 09.5
		Ud	iP	14 22 12.7 C
			ipP	14 22 23.1

Nicobar Islands.
h = 40 km (Ki,Um,Ud).

"	11	Up	iP	17 12 48.7
		Ki	iP	17 12 01.1
		Sk	eP	17 12 36
		Um	iP	17 12 23.3
		Ud	iP	17 12 54.1

Kurile Islands.

"	11	Up	iP	17 15 35.4
		Ki	iP	17 16 03.2

Arabian Sea (h = N).

"	11	Up	iP	21 57 59.0
			ipP	21 58 09.3
		Um	iP	21 57 41.5
			ipP	21 57 53.2

Mariana Islands.

h = 40 km (Up,Um).

"	12	Ki	iP	01 38 32.0
		Um	iP	01 38 50.8

Japan (h = 180 km).

"	12	Ki	iP	01 53 51.3
		Ud	iP	01 54 21.3

"	12	Up	iP	02 47 34.4
		Ki	iP	02 47 05.5
		Um	iP	02 47 17.9
		Ud	iP	02 47 40.8

Mariana Islands (h = 290 km).

"	12	Up	iP	10 00 10.6
			ipP	10 00 31.2

(cont.)

1974

Feb. 12 (cont.)

Up	micr	sec
P	Z'	0.3 0.7
Ki	iP	09 59 54.1 C
	ipP	10 00 14.2

micr	sec	
P	Z'	0.2 0.8
Sk	iP	10 00 17.0

Um	iP	09 59 59.7 C
Ud	iP	10 00 20.4 C
	ipP	10 00 41.1

De	iP	10 00 26.1
Mindoro.		

h = 80 km (Up,Ki,Ud).
m = 6.3 (Up,Ki).

"	12	Up	iSgl	14 30 04.4
		De	iPgl	14 28 10.2
		i		14 28 11.7

		iSgl		14 28 26.1
Baltic Sea, south of Sweden,				

55.7°N, 15.3°E.
Origin time = 14 27 50.

Explosion.				
"	13	Ud	iPKPl	00 32 58.2
		De	iPKPl	00 33 10.4
		i		00 33 21.8

Tonga Islands (h = N).				
"	13	Ud	iSgl	04 22 10.3

"	13	Um	iSgl	12 13 30.3
		Ud	iSgl	12 14 19.1

De	iSgl	12 14 41.2
Western USSR.		

Explosion.				
"	13	Up	iSgl	12 45 01.2
		Um	iSgl	12 45 35.3

Esthonia.				
"	13	Up	iSn	17 10 06.7

		iSgl		17 10 20.0
		Um	iSgl	17 10 52.8

		Ud	iSgl	17 11 21.8
		De	eSgl	17 11 46

Esthonia.				
"	13	Up	iP	21 33 56.5

Explosion.			Um	iP	21 33 32.4
		Um	iP	21 33 32.4	

		Ud	iP	21 34 01.2
		De	iP	21 34 19.8

Japan (h = 70 km).

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

1974

Feb. 13 ✓ Up iP 23 51 27.3
 i(PP) 23 55 15.2
 iPP 23 55 23.5
 micr sec
 PP Z' 0.1 0.9
 Ki iP 23 51 13.2 C
 micr sec
 P Z' 0.1 1.0
 Sk iP 23 51 34.0
 Um iP 23 51 17.4 C
 iPP 23 55 01.7
 Ud iP 23 51 34.9
 i(PP) 23 55 29.4
 De iP 23 51 39.9 C
 i 23 52 12.3
 iPP 23 55 48.2
 Celebes (h = 10 km).
 m = 6.2 (Up,Ki).

" 14 Up iPKP1 02 26 33.5
 Um iPKP1 02 26 21.9
 Ud iPKP1 02 26 35.8
 De iPKP1 02 26 46.6
 Tonga-Kermadec Islands.

" 14 Up iP 02 49 13.4
 Ud iP 02 49 13.0

" 14 Um iP 03 17 08.7
 Ud eP 03 17 31

" 14 Up iP 06 50 31.9 C
 micr sec
 P Z' 0.1 1.0
 Ki iP 06 50 30.7
 Sk iP 06 50 46.0
 Um iP 06 50 27.7
 Ud iP 06 50 42.1 C
 De iP 06 50 40.9 C
 Sumatra (h = 35 km).

" 14 Up iP 06 51 22.7
 micr sec
 P Z' 0.1 1.1
 Ki iP 06 51 22.6
 micr sec
 P Z' 0.1 1.2
 Sk iP 06 51 37.7
 Um iP 06 51 19.0
 Ud iP 06 51 33.6
 De iP 06 51 32.7
 Sumatra.
 Origin time = 06 38 58.
 m = 6.0 (Up,Ki).

1974

Feb. 14 Um iP 08 01 10.5
 Haiti (h = 7 km).

" 14 Up eP 08 31 26
 Ki iP 08 32 00.3
 Um iP 08 31 40.0
 Indian Ocean (h = N).

" 14 Um iPKP1 10 13 36.4

" 14 Up i(P) 10 42 16.5
 i 10 46 08.3
 iLg2 10 47 26.2

Ki iP 10 40 20.1
 iPP 10 40 28.0
 iS 10 41 59.5

Sk e 10 41 39
 i 10 45 46.5
 Um iP 10 41 18.4

iS 10 43 28.8
 Ud iP 10 42 09.7
 i 10 46 34.8

iLg2 10 47 33.4
 De iP 10 42 51.6
 Svalbard.

" 14 Up iP 12 10 51.9
 micr sec
 P Z' 0.1 1.1

Ki iP 12 11 14.3
 Sk iP 12 10 42.3
 Um iP 12 11 06.3

Ud iP 12 10 38.6
 De iP 12 10 32.9
 North Atlantic Ocean (h = N).

" 14 Sk iSgl 13 45 40.7
 Um iSgl 13 43 52.1
 Lake Ladoga.

Explosion.

" 14 Um iSgl 14 05 30.1
 Western USSR.
 Explosion.

" 14 Up iP 14 56 25.3
 iPP 14 56 36.0

Ki iP 14 55 05.6
 iSS 14 56 45.3

Sk iP 14 55 27.2 C
 iS 14 57 07.7
 Um iP 14 55 46.7

Ud iP 14 56 15.3
 Norwegian Sea (h = N).

" 14 Up iS* 19 25 27.6
 iSgl 19 25 34.0
 (cont.)

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

1974

Feb. 14 (cont.)

Ki	ePgl	19 22 53
	iSgl	19 23 29.5
		micr sec
Sk	Sgl	Z' 0.1 0.5
	iPgl	19 22 55.6
	iSgl	19 23 35.9
Um	iPgl	19 23 08.2
	iSn	19 23 42.7
	iSgl	19 23 57.2
Ud	iSgl	19 25 23.4
De	iSgl	19 27 16.9
Norland, Norway, 66.4° N, 14.3° E.		
Origin time = 19 22 04. Explosion.		

"	14	Um	iP	19 51 20.4
"	15	Um	iP	03 01 41.7
"	15	Up	ipP	04 03 54.9
		Ki	eP	04 03 26
			ipP	04 03 36.6
		Sk	ipP	04 04 02.8
		Um	iP	04 03 34.2
			ipP	04 03 45.0
		Ud	iP	04 03 57.4
			ipP	04 04 08.1
Luzon-Formosa. h = 40 km (Ki,Um,Ud).				

"	15	Ki	iP	06 15 03.8
		Um	iP	06 15 33.2
Alaska (h = 130 km).				

"	15	Up	iP	07 05 53.7
		Sk	iP	07 06 06.1
		De	iP	07 06 11.3

"	15	Ud	iP	07 39 25.9
		Iran.		

"	15	Up	iP	08 35 40.4
		Um	iP	08 35 27.3
		Ud	iP	08 35 54.6
Ryukyu Islands (h = 45 km).				

"	15	Up	iSgl	11 16 05.3
		Ki	IPn	11 11 49.6
			iSn	11 12 51.3
			iSgl	11 13 14.2
		Sk	iSgl	11 15 38.9
		Um	iSgl	11 14 03.2
		Ud	iSgl	11 16 35.2
		De	iSgl	11 18 06.8
Northwest USSR. Explosion.				

1974

Feb. 15

Sk	eSgl	13 00 43	
Um	i	12 58 32.7	
	iSgl	12 59 13.0	
Ud	iSgl	12 59 56.5	
De	eSgl	13 00 21	
Western USSR. Explosion.			
Sk	iP	13 19 39.5	
Greece.			
"	15	Um iSgl	13 29 24.7
Ud	iSgl	13 30 05.8	
De	iSgl	13 30 31.7	
Western USSR. Explosion.			

"	15	Um iSgl	14 53 05.7
Lake Ladoga. Explosion.			

"	15	Ud iP	22 04 37.0
"	15	Ud iPKPl	23 33 30.5
De	iPKPl	23 33 42.7	
Tonga-Kermadec Islands (h = 580 km).			

"	15	Ud iP	23 49 24.9
Luzon-Formosa. h = 40 km (Ki,Um,Ud).			

"	16	Up iP	00 40 38.1
Ki	iP	00 40 22.8	
Sk	iP	00 40 36.8	
Um	iP	00 40 27.0	
Ud	iP	00 40 46.1	
Banda Sea (h = N).			

"	16	Um iP	01 57 29.1
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"	16	Up iP	02 02 35.6 C
		ipP	02 02 42.7
		iS	02 11 56

		micr sec	
Ki	P	Z' 0.2 1.4	
	iP	02 02 37.1 C	
		micr sec	

		Z' 0.2 1.2
Sk	iP	02 02 54.2
Um	iP	02 02 32.2 C
	ipP	02 02 39.6
	iS	02 11 52

Ud	iP	02 02 47.7 C
	ipP	02 02 54.7
De	iP	02 02 45.4 C

Andaman Islands.		
h = 25 km (Up,Um,Ud).		
m = 6.1 (Up,Ki).		

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

1974

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

Andaman Islands.
 $h = 25$ km (Up, Ki, Sk, Um, Ud, De).
 $m = 6.2$, $M = 6.1$ (Up, Ki).

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

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

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

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

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

1974

Feb.	16	(cont.)	
		Up i	05 59 18.5
		ipPKP1	06 00 47.5
		iPP	06 02 21.0
			micr sec
		PKP1	Z' 0.2 0.9
		PKP2	Z' 0.4 1.0
		Ki	iPKP1 05 58 25.5
		Sk	iPKP1 05 58 40.8
		ipPKP1	06 00 42.7
		Um	iPKP1 05 58 34.9
		ipPKP1	06 00 34.6
		Ud	iPKP1 05 58 48.4
		ipPKP2	05 58 57.1
		ipPKP1	06 00 47.0
		De	iPKP1 05 58 56.3
		ipPKP2	05 59 09.8
		i	05 59 31.7
		ipPKP1	06 00 57.6

Kermadec Islands.
 $h = 530$ km (Up, Sk, Um, Ud, De).

" 16	Um	iP	06 15 02.0
	Ud	iP	06 15 12.7
	Iran.		
" 16	Up	iPn	07 31 59.9
	Ki	i(Pn)	07 32 27.4
	Ud	iP	07 32 07.2
		i(Pn)	07 32 14.7

Caspian Sea.

" 16	Um	i(P)	07 37 45.5
" 16	Um	iSgl	09 50 01.2
	Lake Ladoga.		
	Explosion.		
" 16	Ki	iPn	15 15 17.1
		iSn	15 16 06.5
		iSgl	15 16 20.8
	Um	iSgl	15 17 51.2

Northwest USSR-Norway.
 Explosion.

" 16	Up	iP	16 21 26.3
			micr sec
	P	Z'	0.1 1.0
	Ki	iP	16 21 04.6
	Sk	iP	16 21 34.1
	Um	iP	16 21 11.6
	Ud	iP	16 21 36.2
	De	iP	16 21 43.9

Formosa ($h = 120$ km).
 Japan.
 Intermediate depth.

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

1974					1974				
Feb.	17	Um	i(P)		Feb.	17	Ud	iP	
"	17	✓ Up	iP	02 05 42.8	"	17	Um	iP	15 40 19.2
			isP	04 46 13.1			Ud	iP	19 14 43.2
				04 46 33.1			Ud	iP	19 15 09.1
				micr sec					Formosa (h = 80 km).
			P	Z' 0.1 0.9			Up	iP	21 30 42.6
			sP	Z' 0.1 1.2			Ki	iP	21 29 49.2
		Ki	iP	04 45 45.2			Sk	iP	21 30 18.7
			isP	04 46 04.1			Um	iP	21 30 16.3
				micr sec			Ud	iP	21 30 41.2
			P	Z' 0.1 1.0			De	iP	21 31 04.2
			sP	Z' 0.2 0.9					Unimak Island (h = N).
		Sk	iP	04 46 10.4					
			isP	04 46 30.4					
		Um	iP	04 45 57.4	"	18	Ud	iP	02 03 25.3
			ipP	04 46 11.9					Tien-Shan.
		Ud	iP	04 46 19.3					
		De	iP	04 46 30.6	"	18	Um	iPKP1	06 31 53.0
			isP	04 46 51.7					
				Mariana Islands.	"	18	Ud	iPKP1	09 10 58.0
				h = 55 km (Up, Ki, Sk, Um, De).			De	iPKP1	09 11 08.8
				m = 6.0 (Up, Ki).					
				sP is here in general more	"	18	Um	iP	10 10 41.9
				pronounced than pP.					Lake Tanganyika (h = 5 km).
"	17	Up	iP	05 07 59.9	"	18	Up	iSgl	11 26 11.4
			i	05 08 07.0			Ud	iSgl	11 25 43.1
		Sk	iP	05 08 39.8			De	iSgl	11 26 02.5
		Um	iP	05 08 38.9					Västergötland, Sweden,
		Ud	iP	05 08 06.8					58.6°N, 13.5°E.
		De	iP	05 07 30.5					Origin time = 11 24 56.
				Greece (h = N).					
"	17	Up	iP	06 18 41.6	"	18	Um	iSgl	11 35 26.4
		Ud	iP	06 18 55.3			De	iSgl	11 36 35.6
									Probably western USSR.
									Explosion.
"	17	Up	i(P)	07 16 40.6	"	18	Um	iSgl	12 59 22.8
"	17	Ud	iP	07 24 00.0	"	18	Ki	iSgl	13 14 26.9
"	17	Ki	iP	08 44 14.8			Sk	iSgl	13 13 46.4
				Kurile Islands (h = 60 km).			Um	iSgl	13 12 28.4
"	17	Up	iP	11 43 16.0			Ud	iSn	13 12 30.6
		Ud	iP	11 43 24.3				iSgl	13 13 00.0
				Ionian Sea (h = 8 km).			De	iSgl	13 13 28.0
									Western USSR.
									Explosion.
"	17	Ud	iP	12 04 45.4	"	18	Up	i	13 38 10.6
				Ionian Sea.				i	13 38 22.1
"	17	Up	iP	12 20 11.8				i(Sgl)	13 38 24.2
		Um	iP	12 21 03.2					
		Ud	iP	12 20 18.1	"	18	Up	iP	13 44 49.0
		De	iP	12 19 43.3			Um	iP	13 44 14.6
				Ionian Sea.			Ud	iP	13 44 49.0
"	17	Um	i(P)	15 11 30.4					Aleutian Islands (h = 140 km).
		Ud	i(P)	15 11 09.7					

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

1974

Feb. 18 Um iP 18 29 44.4
 Ud iP 18 29 40.6
 Turkey (h = 20 km).

" 18 Up eP 21 12 32
 Ki eP 21 11 57
 micr sec
 Mx E 2.0 19
 Mx N 1.4 20
 Um iP 21 12 16.0
 Ud iP 21 12 46.1 C
 Japan (h = N).

" 18 Um iP 21 18 33.4
 Ud iP 21 19 00.8
 Celebes Sea (h = 360 km).

" 19 Up iPP 01 42 31.0
 Ki ePP 01 42 02
 i 01 42 08.3
 Um iPP 01 42 07.6
 Ud iP 01 38 09.0
 iPP 01 42 37.1
 De i(PP) 01 42 30.0
 Timor (h = N).

" 19 Up iP 02 14 16.3
 Ki iP 02 13 32.7
 Sk eP 02 14 15
 Um iP 02 13 51.7
 Ud iP 02 14 29.3
 Lake Baikal region.

" 19 V Up iP 03 42 58.1
 ipP 03 43 04.1
 i 03 45 31.6
 iPP 03 46 14.5
 iS 03 53 19
 micr sec
 P Z' 1.2 2.1
 pP Z' 1.1 1.6
 Mx E 12 22
 Mx N 38 21
 Mx Z 17 19

Ki iP 03 42 38.9
 ipP 03 42 45.8
 iPP 03 45 56.3
 micr sec

P Z' 0.9 2.0
 pP Z' 0.7 1.6
 Mx E 25 23
 Mx N 43 23
 Mx Z 22 23

Sk iP 03 43 04.5
 ipP 03 43 09.2
 iPP 03 46 32.0
 Um iP 03 42 44.7

(cont.)

1974

Feb. 19 (cont.)
 Um ipP 03 42 51.8
 iS 03 53 01
 Ud iP 03 43 06.0

ipP 03 43 13.0
 De ipP 03 43 18.3
 Luzon.
 h = 25 km (Up, Ki, Sk, Um, Ud).
 m = 6.7, M = 6.6 (Up, Ki).

" 19 Up iP 04 16 41.7
 iPP 04 18 12.7
 Ki iP 04 16 51.1
 Sk iP 04 17 07.6
 Um iP 04 16 40.2
 iPP 04 18 20.6
 Ud iP 04 16 58.5
 iPP 04 18 35.8
 De iP 04 16 55.3
 Hindu Kush (h = 90 km).

" 19 Um iP 07 58 36.8
 Ud iP 07 58 55.0
 De iP 07 58 53.5
 Hindu Kush.
 Intermediate depth.

" 19 Sk eSgl 09 53 23
 Ud iSgl 09 53 18.2
 West coast of Norway,
 60.6°N, 4.6°E.
 Origin time = 09 50 54.
 By combination with Bergen
 and Kongsberg readings.

" 19 Up iSgl 10 56 24.4
 Sk iSgl 10 58 12.3
 Um i 10 56 28.0
 iSgl 10 56 45.2
 Ud iSgl 10 57 26.5
 i 10 57 34.8
 Western USSR.
 Explosion.

" 19 Sk iPg1 11 53 34.1
 i 11 53 40.8
 iSg2 11 53 45.2
 Um iSgl 11 55 26.2
 iSg2 11 55 31.5
 Ud iSgl 11 54 45.2
 Norway-Sweden border region,
 near 67 3/4°N, 16 1/2°E.
 Origin time = 11 53 20.

" 19 Um iSgl 12 12 46.4
 Western USSR.
 Explosion.

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

1974

Feb. 19 Um i 12 42 00.3
 iSgl 12 42 07.3
 Western USSR.
 Explosion.

1974

Feb. 20 Ud iPKP1 00 55 54.1
 iPKP2 00 56 01.7
 De iPKP1 00 56 04.6
 Tonga Islands (h = 60 km).

" 19 Up iSgl 13 01 18.9
 Ki iSgl 13 04 10.9
 Sk iSgl 13 03 15.3
 Um iSgl 13 02 07.7
 Ud iSgl 13 02 24.4
 De iSgl 13 02 47.1
 Estonia.
 Explosion.

" 20 Um i(P) 02 38 20.1
 Ki iPKP 03 21 25.5
 iPKP1 03 31 50.2
 Um iPKP 03 21 23.1 C
 iPKP1 03 31 54.1
 Ud iPKP 03 21 14.5
 iPKP2 03 32 16.3
 De iPKP2 03 32 12.5
 Argentina (h = 120 km).

" 19 Um iSgl 14 02 49.8
 Lake Ladoga.
 Explosion.

" 20 Um iSgl 05 53 09.0
 Ud eSgl 05 53 35

" 19 Ud i(P) 14 06 30.7

" 20 Ki ePg1 07 03 52
 i 07 04 10.2
 iSgl 07 04 11.7

" 19 Up i(P) 14 39 49.5

Origin time = 07 03 27.

" 19 Up iP 19 47 53.6
 Um iP 19 47 39.4 C
 Ud iP 19 48 00.7 C
 Luzon (h = 45 km).

" 20 Ud iP 08 25 08.4
 Up eP 11 50 29
 iPP 11 52 02.9
 Ki iP 11 50 30.8

" 19 Up iP 20 35 46.3

Sk iP 11 50 37.5
 ipP 11 50 52.7

" 19 Up iP 21 37 33.2
 Ki iP 21 37 42.2
 Um iP 21 37 29.6
 Ud iP 21 37 49.9
 De eP 21 37 46
 Afghanistan-USSR (h = N).

Ki iP 11 50 59.9
 i 11 53 12.4
 Um iP 11 50 23.6
 ipP 11 50 30.2
 Ud iP 11 50 46.2
 ipP 11 50 52.8

" 19 Ki iP 22 07 33.8
 Um iP 22 07 59.9

De iP 11 50 45.8
 ipP 11 50 53.6
 Kirghiz SSR.
 h = 35 km (Ki, Sk, Um, Ud, De).

" 19 Up iP 23 01 08.3
 Ud iP 23 01 09.3
 Greece.

" 20 Up iSgl 12 29 35.7
 Um iSgl 12 30 03.6
 Ud iSgl 12 30 40.6

" 19 Up iP 23 47 06.6
 ipP 23 47 24.6
 Ki ipP 23 48 31.2
 Um ipP 23 48 02.7
 Ud iP 23 47 14.4
 ipP 23 47 34.6
 De iP 23 46 40.0
 ipP 23 47 00.3
 Greece.
 h = 100 km (Up, Ud, De).

De iSgl 12 31 03.6
 Western USSR.
 Explosion.
 " 20 Um iSgl 12 35 23.5
 Ud iSgl 12 36 08.1
 De eS* 12 36 24
 iSg2 12 36 41.9
 Western USSR.
 Explosion.
 " 20 Ki iPgl 13 39 07.7
 iSn 13 39 44.5
 (cont.)

" 20 Long-period microseisms
 (periods around 16-18 sec),
 especially clear on Um LP N.

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary							
1974				1974			
Feb.	20	(cont.)		Feb.	21	(cont.)	
		Ki iSgl	13 39 58.3			Ki i	19 00 52.9
		Um iSn	13 40 26.1			Um iP	19 00 47.1
		i	13 40 42.1			Ud iP	19 01 07.3
		iSgl	13 40 54.0			Samar (h = N).	
		Probably northwest USSR. Explosion.				" 22 Up iP	00 35 49.8
"	20	Ki iP	16 22 53.2			Ud iP	00 36 16.2
		Sk iP	16 22 35.5			Turkmen SSR.	
		ipP	16 22 42.8	"	22	Up √ iP	00 47 52.2
		Um iP	16 22 55.3			i	00 47 54.3
		ipP	16 23 00.6			ipP	00 49 20.5
		Ud iP	16 22 39.3			iS	00 56 54
		ipP	16 22 45.2			isS	00 59 27
		Haiti. h = 20 km (Sk,Um,Ud).					micr sec
"	21	Ki iP	00 25 09.9			P Z'	0.9 0.9
		Um iP	00 24 52.3			Mx E	4.2 20
		Atlantic Ocean (h = N).				Mx N	6.3 17
"	21	Ud iPKP1	01 05 39.3			Mx Z	6.8 17
		De iPKP1	01 05 50.9			Ki iP	00 47 17.1
"	21	Ki iPKP	05 49 03.4			i	00 47 19.7
		South Sandwich Islands (h = 90 km).				ipP	00 48 44.1
"	21	Um iP	08 21 12.8			iS	00 55 50
		Mariana Islands (h = 45 km).				iScS	00 56 35
"	21	Ki iP	10 47 56.7			iP'P'	01 15 25.2
		Mariana Islands (h = 170 km).					micr sec
"	21	Um iSgl	12 11 58.6			P Z'	1.2 1.5
		Ud iSgl	12 12 37.7			Mx E	3.9 16
		Western USSR. Explosion.				Mx N	3.5 15
"	21	Um iSgl	12 29 51.1			Mx Z	5.1 17
		Western USSR. Explosion.				Sk iP	00 47 49.7
"	21	Ud iP	12 56 18.7			i	00 47 52.7
		Colombia (h = 70 km).				ipP	00 49 15.9
"	21	Ud iP	13 26 30.1			Um iP	00 47 32.0
"	21	Up i(P)	13 59 40.2			i	00 47 34.2
"	21	Um iPKP1	14 12 42.6			iS	00 56 15
		Ud iPKP1	14 12 56.4			isS	00 58 49
"	21	Um iPP	17 39 23.4			iP'P'	01 15 14.0
		Banda Sea (h = 170 km).				Ud iP	00 47 59.8
"	21	Ki iP	19 00 40.6			i	00 48 02.0
		(cont.).				i	00 48 56.4
						ipP	00 49 29.2
						iS	00 57 05.8
						De iP	00 48 12.7
						i	00 48 14.8
						ipP	00 49 41.6
						iPP	00 51 17.7
						i(S)	00 57 34.8
						Japan.	
						h = 380 km (Up,Ki,Sk,Um,Ud, De).	
						m = 6.5, M = 5.9 (Up,Ki).	
						M uncorrected for focal depth	
						Double P, small and large, separated by 2.4 sec in average.	

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

1974

Feb.	22	Up	iP	01 17 42.3
		i		01 17 44.4
				micr sec
		P	Z'	0.1 1.0
		Um	iP	01 17 37.2
		Ud	iP	01 17 43.3
"	22	Up	iP	03 41 01.5 C
		iPn		03 41 58.1
				micr sec
		P	Z'	0.5 1.4
		Ki	iP	03 41 09.5 C
		ipP		03 41 34.9
				micr sec
		P	Z'	0.2 1.2
		Sk	iP	03 41 26.7
		Um	iP	03 40 59.2 C
		ipP		03 41 23.0
		Ud	iP	03 41 18.2 C
		ipP		03 41 40.9
		De	iP	03 41 14.5 C
				Afghanistan-USSR.
				$h = 120$ km (Ki,Um,Ud).
				$m = 5.9$ (Up,Ki).

" 22 Um iSgl 05 56 08.0

" 22 Up iP 07 14 44.8
 Ki iP 07 15 02.4
 Sk iP 07 15 13.1
 Um iP 07 14 48.0
 Ud iP 07 15 00.3
 De iP 07 14 52.8
 Pakistan ($h = N$).

" 22 Um iP 09 34 46.5
 Ud iP 09 35 05.3
 De iP 09 35 02.0
 Hindu Kush.
 Intermediate depth.

" 22 Ud iP 10 03 35.5
 " 22 Um iSgl 12 21 35.2
 Western USSR.
 Explosion.

" 22 Up iP 13 44 16.0
 i 13 44 30.2
 Um iP 13 44 56.0
 Ud iP 13 44 30.2
 De iP 13 43 56.1
 Rumania ($h = 150$ km).

" 22 Ud iP 15 18 38.8
 " 22 Up iP 15 31 32.2
 Ionian Sea.

1974

Feb.	22	Up	iP	20 57 50.2
		Ud	iP	22 35 25.6
				Hindu Kush.
				Intermediate depth.
"	23	Up	iP	01 33 33.8
				micr sec
		P	Z'	0.1 0.9
		Sk	iP	01 34 22.2
		Um	iP	01 34 15.1
		Ud	iP	01 33 43.0
		De	iP	01 33 05.5
				Greece ($h = 45$ km).
"	23	Up	iP	04 25 54.7 C
				micr sec
		P	Z'	0.1 1.0
		Ki	iP	04 25 11.2 C
				micr sec
		P	Z'	0.1 1.0
		Um	iP	04 25 30.3 C
		Ud	iP	04 26 01.4 C
		De	iP	04 26 18.2 C
				Japan ($h = 60$ km).
				$m = 5.8$ (Up,Ki).

"	23	Um	iPKP1	06 51 41.5
		Ud	iPKP	09 14 16.3
		De	iPKP	09 14 27.5
"	23	Ud	iPKP1	14 00 53.3
"	23	Up	iP	21 00 07.1
		Sk	iP	21 00 47.5
		Um	iP	21 00 45.9
		Ud	iP	21 00 13.6
				Greece ($h = N$).

"	23	Up	iP	21 02 52.7
		Sk	iP	21 03 35.6
		Um	iP	21 03 31.7
		Ud	iP	21 03 00.2
				Greece.

"	24	Um	iP	04 36 11.6
		Ud	eP	04 36 41
				Japan ($h = 20$ km).

"	24	Ki	iSn	06 27 36.9
			iSgl	06 28 00.0
		Um	iSn	06 28 16.8
			iSgl	06 28 51.9
		Ud	iSgl	06 31 21.4
				Northwest USSR.
				Explosion.

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

1974

Feb. 24 Um iP 06 28 28.4
 Ud iP 06 28 56.1
 Tien-Shan.

" 24 Um iPKPl 08 26 39.9

" 24 Up e 09 29 45
 Ki iSgl 09 29 53.9
 iPn 09 25 39.5
 iSn 09 26 38.7
 iSgl 09 26 57.5
 Sk iSgl 09 29 26.0
 Um iSn 09 27 16.1
 iSgl 09 27 45.1
 Ud i(Sgl) 09 30 22.4
 Northwest USSR.
 Explosion.

" 24 Ud iP 09 45 33.1

" 24 Up iP 12 16 41.7
 Ud iP 12 16 38.1

" 24 Um iP 15 07 10.6
 Ud iP 15 07 36.3
 De iP 15 07 58.8
 Aleutian Islands (h = 100 km).

" 24 Up iP 16 34 56.4

" 24 Up iP 19 21 04.1
 Ki iP 19 21 02.3
 Um iP 19 20 59.3
 Ud iP 19 21 16.5
 De iP 19 21 16.8
 Sunda Strait (h = 90 km).

" 24 Ud iP 20 26 55.6
 De iP 20 26 37.5

" 24 Up iP 21 40 52.9
 Ki iP 21 40 57.8
 Sk iP 21 41 15.6
 Um iP 21 40 49.9
 Ud iP 21 41 08.4
 De iP 21 41 08.6
 Himalaya (h = 45 km).

" 24 Ud iP 22 53 33.0

" 25 Um iP 01 44 22.0
 Ud iP 01 43 54.4
 De iP 01 43 35.7
 Ascension Island (h = N).

" 25 Up iP 05 57 28.2 D
 iPcP 05 57 51.8
 (cont.)

1974

Feb. 25 (cont.)

	Up	micr	sec
	P	Z'	0.1 1.1
	Mx	E	1.5 20
	Mx	N	1.9 18
	Mx	Z	2.4 18
Ki	iP	05 56	42.2 D
		micr	sec
	P	Z'	0.2 1.2
	Mx	E	3.7 19
	Mx	N	3.6 20
	Mx	Z	4.3 19
Sk	iP	05 57	18.3
Um	iP	05 57	03.2 D
i		05 57	04.3
Ud	iP	05 57	34.6 D
De	iP	05 57	52.9 D
		Kurile Islands (h = 10 km).	
		m = 6.1, M = 5.6 (Up,Ki).	

" 25 De iP 11 07 38.3
 Hindu Kush.

Intermediate depth.

" 25 Up iSgl	12 14 36.4
Um iSgl	12 14 59.5
Ud iSgl	12 15 43.1
De iSgl	12 16 08.7

Western USSR.
 Explosion.

" 25 Ud iP	12 18 09.2
Japan (h = 330 km).	

" 25 De iP	16 19 03.4
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" 25 Up iS	20 09 29.2
i	20 09 35.0
Ud iS	20 08 54.3

i 20 09 08.1
 De iP 20 06 21.7

i 20 06 29.2
 iS 20 08 16.9

i 20 08 23.2
 United Kingdom (h = N).

" 26 De iPKPl	00 21 12.4
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" 26 Sk i(Sgl)	04 14 15.1
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" 26 Um iP	05 32 41.9
South of Japan (h = 220 km).	

" 26 Up iP	06 34 09.0 C
P	Z' 0.2 0.7
Ki iP	06 33 15.0 C
(cont.)	

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

1974				1974			
Feb.	26	(cont.)		Feb.	26	Up	iSgl
		Ki iPcP	06 34 14.9			iSgl	14 55 37.2
			micr sec			iSgl2	14 55 45.2
		P Z'	0.1 0.9			Sk iSgl	14 54 57.7
		Sk iP	06 33 51.9			Ud iSgl	14 54 35.3
		iPcP	06 34 35.3			De iSgl	14 55 17.9
		Um iP	06 33 40.4 C			West coast of Norway, 60.0°N, 4.8°E.	
		iPcP	06 34 28.8			Origin time = 14 52 19.	
		Ud iP	06 34 12.5			By combination with Bergen readings.	
		iPcP	06 34 48.1				
		De iP	06 34 34.2 C	"	26	Ud iP	17 18 21.8
		iPcP	06 35 01.7	"	26	Up iP	23 27 45.3
		Kamchatka (h = 50 km).				Off coast of Oregon (h = N).	
		m = 6.0 (Up, Ki).					
"	26	Ki iP	10 08 20.9	"	27	Um iP	03 53 17.7
"		Um iP	10 08 29.9			Ud iP	03 53 24.6
"		Mariana Islands (h = 25 km).				De iP	03 53 48.1
"	26	Ki iP	10 11 38.8			Off coast of Oregon (h = 15 km).	
"		Um iP	10 11 48.9	"	27	Up iP	03 54 46.3
"		Ud iP	10 12 12.7			i	03 54 52.4
"		Mariana Islands (h = 45 km).				Um iP	03 54 26.9
"	26	Ki iSn	11 00 56.5			i	03 54 33.9
"		Um iSgl	11 02 45.8			Ud iP	03 54 39.8
"		Northwest USSR-Norway. Explosion.				i	03 54 45.9
"	26	Up iP	11 18 22.3			De iP	03 55 00.1
"		Sk eP	11 19 05			Off coast of Oregon (h = N).	
"		Um iP	11 19 07.3			Double P, possibly a double shock.	
"		Ud iP	11 18 32.2	"	27	Up iP	03 56 56.4
"		De eP	11 17 52			Um iP	03 56 39.5
"		i	11 18 00.9			Ud iP	03 56 50.5
"		Ionian Sea (h = N).				De iP	03 57 11.5
"	26	Um iSgl	12 08 56.8			Off coast of Oregon (h = N).	
"		Ud iSgl	12 09 28.1				
"		De iSgl	12 09 53.0	"	27	Ud iP	04 06 24.2
"		Estonia. Explosion.					
"	26	Um i	12 10 19.6	"	27	Up iP	04 40 12.2
"		iSgl	12 10 23.2			i	04 40 18.7
"		Ud iSgl	12 11 10.2			Um iP	04 40 38.1
"		De iSgl	12 11 35.1			Ud iP	04 40 08.2
"		Western USSR. Explosion.				De iP	04 39 49.7
"						Ascension Island (h = N).	
"	26	Um i(P)	12 25 30.7	"	27	Up iP	08 32 45.0
"		West of Crete (h = N).				Greece-Bulgaria (h = 20 km).	
"	26	Up eP	14 24 42	"	27	Ud i	10 47 45.4
"		Sk eP	14 25 16			iSgl	10 47 48.4
"		Ud iP	14 24 45.7	"	27	Up iSgl	11 49 33.2
"		De iP	14 24 10.8			(cont.)	

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

1974

Feb. 27 (cont.)

Up	i	11 49 50.0
Ud	iSgl	11 49 34.3
	i	11 49 47.8
De	iPg1	11 47 35.3
	i	11 47 36.8
	iSgl	11 47 52.4
	iRg	11 47 59.1

Baltic Sea, south of Sweden,
 55.6° N, 15.3° E.
 Origin time = 11 47 14.
 Explosion.

"

27

Up	iSgl	12 11 35.4
Um	iSgl	12 12 11.6
Ud	iSgl	12 12 38.3
De	iSgl	12 13 11.2

Estonia.
 Explosion.

"

27

Up	iP	17 11 48.7 C
		micr sec
P	Z'	0.1 1.0
Ki	iP	17 11 14.5 C
		micr sec
P	Z'	0.2 1.4
Sk	iP	17 11 22.4 C
Um	iP	17 11 34.1 C
Ud	iP	17 11 40.7 C
De	iP	17 11 57.4

Nevada.
 $m = 6.0$ (Up,Ki).
 Underground explosion.

"

27

Up	iP	18 14 16.0 D
	ipP	18 14 24.8
	i(P)	18 17 07.2
	iPP	18 17 28.8
		micr sec
P	Z'	0.4 1.0
Ki	iP	18 14 17.0 D
	ipP	18 14 26.1
		micr sec
P	Z'	0.7 1.0
Sk	iP	18 14 30.9 D
	iPP	18 17 47.7
Um	iP	18 14 13.5 D
	ipP	18 14 22.6
	iPP	18 17 19.4
Ud	iP	18 14 26.4 D
	ipP	18 14 36.8
	i(P)	18 17 28.7
	iPP	18 17 42.3
De	iP	18 14 24.5 D
	ipP	18 14 35.1
	i(P)	18 17 23.1
	iPP	18 17 39.0

(cont.)

1974

Feb. 27 (cont.)

Sumatra.
 $h = 35$ km (Up,Ki,Um,Ud,De).
 $m = 6.7$ (Up,Ki).

Clear cases of early PP,
 denoted (PP).

"	27	Ki	iPKP	20 56 51.6
		Um	iPKP	20 56 59.5
		Tonga Islands ($h = N$).		

"	27	Um	i(P)	21 30 30.9
		Ud	iP	21 29 55.4

"	27	Up	i(P)	21 40 40.6
		Ud	iPKP1	21 43 15.2
		De	iPKP1	21 43 26.0

"	27	Up	iP	23 17 44.5
		De	iP	23 17 17.3

"	27	Up	iP	23 18 06.8
		Sk	iP	23 18 47.4
		Ud	iP	23 18 04.5

Sicily.

"	28	Ki	iP	00 50 55.7
		Ud	iP	00 51 11.2

Burma.

"	28	Ud	iPKP1	05 06 14.6
		De	iPKP1	05 06 25.7

Tonga-Kermadec Islands
 $(h = N)$.

"	28	Um	iP	07 49 00.0
		Ud	eP	07 48 57

"	28	Up	iSgl	10 28 41.9
		Um	iSgl	10 29 15.9
		Ud	iSgl	10 29 45.4

Estonia.

Explosion.

"	28	Up	iSgl	12 19 09.6
		Um	i	12 19 09.4
			iSgl	12 19 22.7

"	28	Ud	iSgl	12 20 07.3
		De	iSgl	12 20 27.5

Western USSR.

Explosion.

"	28	Up	iP	13 44 49.7
---	----	----	----	------------

		Um	iP	13 45 31.2
--	--	----	----	------------

		Ud	iP	13 44 49.2
--	--	----	----	------------

Sicily.

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

1974

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

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

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

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

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

1974

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

"	28	Up	iP	16 09 25.6	
		Um	iP	16 09 00.4	
		Ud	iP	16 09 32.6	
		De	iP	16 09 48.1	
		Japan (h = 70 km).			
		Um	iPKP	16 25 20.9	
		Ud	iPKP	16 25 30.5	
		Tonga Islands (h = 100 km).			
		Ki	iP	17 43 55.2	
		Ud	iP	17 43 15.9	
		North Atlantic Ocean (h = N).			

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

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

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

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

1974

Feb. 28 (cont.)

	Ki	micr	sec
	Mx	E	12 16
	Mx	N	9.2 17
	Mx	Z	14 16
Sk	iP		20 32 40.1 C
	i		20 32 47.6
Um	iP		20 32 55.8 C
	iPP		20 36 26
	iS		20 43 23
Ud	iP		20 32 45.8 C
De	iP		20 32 50.3 C
Costa Rica (h = 45 km).			
m = 6.5, M = 6.2 (Up, Ki).			
Double P, 7.6 sec apart			
in average.			

" 28 Um iP 20 51 31.6

" 28 Um iP 21 48 38.6
 " " i 21 48 48.1
 Ud iP 21 48 28.2
 Costa Rica (h = 55 km).

" 28 Up iP 22 23 46.6
 Ki iP 22 22 19.8
 Um iP 22 23 05.7
 " " i 22 23 09.4
 Ud iP 22 23 41.3
 Greenland Sea (h = N).

Markus Båth

October 5, 1975

BOX 517
S-751 20 UPPSALA
SWEDEN

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, U M E Å,

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

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

M A R C H 1 - 31, 1974

1974

Mar. 1 Ud iP 00 59 09.0
 " 1 Up iSgl 01 57 36.6
 Ki iPg1 01 52 58.8
 iSgl 01 53 32.8
 iSg2 01 53 36.1
 micr sec
 Sg2 Z' 0.2 0.5
 Sk iSn 01 55 20.5
 iSgl 01 55 59.4
 Um i(Pg1) 01 54 00.0
 iSn 01 55 01.5
 iSgl 01 55 33.2
 iSg2 01 55 42.0
 Ud eSgl 01 57 43
 Coast of north Norway,
 70.2° N, 19.7° E.
 Origin time = 01 52 15.
 Solution checked with Tromsoe
 readings.

" 1 Up eP 03 11 18
 Um iP 03 12 03.0
 Ud iP 03 11 24.4
 Albania (h = N).

" 1 Up iPKP1 04 43 18.4
 Ki iPKP1 04 43 00.1
 Um iPKP1 04 43 11.9
 New Zealand (h = N).

" 1 Up iPKP2 04 45 57.9
 Ki iPKP1 04 45 27.0
 Um iPKP1 04 45 35.0
 New Zealand (h = 15 km).

" 1 Ud iP 06 22 10.3
Iran (h = N).

1974

1974
 Mar. 1 Ki iP 06 35 39.9
 Um iP 06 36 07.9
 Ud iP 06 36 33.4
 Aleutian Islands (h = 20 km)

 " 1 Ud iP 08 49 32.9
 Ionian Sea.

 " 1 Ki iPn 10 57 34.0
 iSn 10 58 29.4
 iSgl 10 58 52.5
 Northwest USSR.
 Explosion.

 " 1 Ki iSgl 11 08 37.5
 Um iSgl 11 10 06.3
 Northwest USSR-Norway.
 Explosion.

" 1 Ki iSgl 11 09 10.6
 Um iSgl 11 10 39.5
 Northwest USSR-Norway.
 Explosion.

" 1 Ki iSgl 11 25 25.8
 Northwest USSR.
 Explosion.

" 1 Up iSgl 11 38 44.2
 Ki iSn 11 35 26.4
 iSgl 11 35 48.2
 Sk iSgl 11 38 14.7
 Um iSn 11 36 05.3
 i 11 36 21.4
 iSgl 11 36 40.0
 Ud iSgl 11 39 15.6
 De eSgl 11 40 49
 Northwest USSR.
 Explosion.

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

1974

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

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

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

" 1 Up iPKP1 21 35 42.5
Sk ePKP1 21 35 37
Um iPKP1 21 35 32.1
Ud iPKP1 21 35 43.6
New Zealand.
Origin time = 21 15 48.

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

" 2 Up iPKP2 05 06 05.5
micr sec
PKP2 Z' 0.2 1.2
Ki iPKP1 05 05 34.7
micr sec
PKP1 Z' 0.1 1.5
Sk iPKP1 05 05 48.5
Um iPKP1 05 05 43.3
Ud iPKP2 05 06 10.0
New Zealand (h = 30 km).

" 2 Ki iPKP1 05 27 05.2
Sk ePKP1 05 27 11
Um iPKP1 05 27 04.1
New Zealand (h = 35 km).

" 2 Ud iP 09 09 19.8

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

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

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

1974

Mar. 2 Um iPKP1 16 01 42.1
Ud iPKP1 16 01 54.4

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

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

" 2 Um iPKP1 21 27 57.9
Ud iP 23 24 11.1

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

" 3 Up iP 05 02 19.9 C
i~~KA~~_{MA} 05 02 21.5
i~~KA~~_{AZ} 05 02 29.0
ipP 05 02 33.8
iS 05 11 44
micr sec

il Z' 0.3 1.3
i2 Z' 0.2 1.0
pP Z' 0.5 1.2
Mx E 6.9 25
Mx N 6.6 24
Mx Z 8.7 25

Ki iP 05 01 41.7 C
il 05 01 43.5
iS 05 10 35
micr sec

P Z' 0.1 1.0
il Z' 0.2 1.2
Mx E 7.4 20
Mx N 4.8 17
Mx Z 5.7 18

Sk iP 05 02 14.4 C
il 05 02 16.1
ipP 05 02 28.2

Um iP 05 01 58.3 C
il 05 02 00.1
i2 05 02 06.8
iS 05 11 05
Ud iP 05 02 27.2 C

(cont.)

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

1974

Mar. 3 (cont.)

Ud	i1	05 02 28.9
	i2	05 02 36.6
	ipP	05 02 39.7
De	iP	05 02 41.6 C
	i1	05 02 43.4
	ipP	05 02 52.7

Japan.

$h = 45$ km (Up, Sk, Ud, De).
 $m = 6.0$, $M = 6.0$ (Up, Ki).
 Multiple P-phases i1 and i2,
 in average 1.7 and 9.0 sec
 after the first onset.

"

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

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

"

3	Ki	iSgl	06 50 02.2
---	----	------	------------

Northwest USSR.
 Explosion.

"

3	Ud	iP	07 23 33.8
---	----	----	------------

"

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

Jan Mayen region,
 near $71^{\circ}1/2'N$, $8^{\circ}W$.
 Origin time = 07 47 42.

"

3	Ud	iP	11 49 04.9
---	----	----	------------

California ($h = N$).

"

3	Ud	iP	12 03 16.5
---	----	----	------------

Kurile Islands ($h = N$).

"

3	Up	iPKP1	13 11 43.7
		iPKP2	13 11 55.3

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

(cont.)

1974

Mar. 3 (cont.)

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

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

"

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

New Zealand ($h = 10$ km).

"

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

New Zealand ($h = N$).

"

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

Probably New Zealand.
 Origin time = 13 50 11.

"

3 ✓	Up	iPKP	14 41 59.2
			micr sec
	Mx	E	2.1 22
	Mx	N	4.8 22
	Mx	Z	7.8 22

Ki	iPKP	14 41 42.7
		micr sec
	PKP	Z' 0.1 1.0
	Mx	E 4.1 21
	Mx	N 5.6 22
	Mx	Z 4.3 20

Sk	iPKP	14 41 53.5
Um	iPKP	14 41 49.2
Ud	i(PKP)	14 41 54.8
	PKP	14 42 01.5
De	iPKP	14 42 07.4

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

"

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

South of Svalbard ($h = N$).

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

1974					1974			
Mar.	3	Um	iPKP1	17 14 03.8	Mar.	4	(cont.)	
"	3	Sk	iP	19 04 23.8	Ki		micr sec	
"	3	Ud	iP	21 42 05.0	Sk	SKP1	Z' 1.2	2.2
		De	iP	21 41 33.6	iPKP	12 57 07		
				Crete (h = N).	iSKP1	13 00 04.4		
"	4	Ki	eP	01 12 08	Um	iPKP	12 57 02.0	
		Um	iP	01 11 53.0	i	12 57 07.3		
				Azores Islands (h = N).	ipPKP	12 58 41.8		
"	4	Ud	iP	02 36 40.0	iSKP1	12 58 57.2		
"	4	Ki	iP	06 22 17.7 C	Ud	iPKP	12 57 08.9	
				micr sec	iSKP1	13 00 11.7		
		P	Z'	0.1 1.0	iSKP2	13 00 22.1		
		Sk	eP	06 23 06	De	iPKP	12 57 14.6	
		Um	iP	06 22 56.7 C	Fiji Islands.			
		Ud	eP	06 23 35	h = 420 km (Um).			
				Arctic Ocean (h = N).				
"	4	Sk	iP	07 04 02.3	"	4	Ki	iSgl 13 45 37.6
		Ud	iP	07 04 28.3			Um	eSgl 13 45 37
				Alaska (h = 35 km).			East-central Finland,	
							65.5°N, 29.3°E.	
"	4	Up	iS*	09 08 47.6			Origin time = 13 43 29.	
			iSgl	09 08 53.9			Solution from Finnish	
		Sk	eSgl	09 10 01			station readings.	
		Um	iSgl	09 08 11.0	"	4	Sk	i(Sgl) 13 46 21.3
		Ud	eSgl	09 09 46				
		De	iSgl	09 10 30.3	"	4	Up	i(P) 13 50 53.0
				Lake Ladoga region.				
				Explosion.				
"	4	De	i(P)	11 45 39.9	"	4	Ki	iP 14 55 09.1
"	4	Up	iSgl	12 16 14.2			Ud	iP 14 55 16.9
		Ki	eSgl	12 18 06			Hindu Kush.	
		Sk	iSgl	12 17 54.5			Intermediate depth.	
		Um	iSgl	12 16 29.9	"	4	Sk	iP 15 09 13.3
			iRg	12 17 00.8			Um	iP 15 09 30.8
		Ud	iSgl	12 17 11.9			Guatemala (h = 80 km).	
		De	iSn	12 16 54.6	"	4	Up	iP 15 15 27.8
			iSgl	12 17 36.9			Ki	iP 15 14 59.5
				Western USSR.			Sk	iP 15 15 25.2
				Explosion.			Um	iP 15 15 12.0
"	4	Um	iP	12 22 59.9			Ud	iP 15 15 34.7
							Mariana Islands (h = 360 km).	
"	4	Up	iPKP	12 57 06.1	"	4	Ki	iP 18 28 15.3
			iSKP1	13 00 08.1			Off coast of Oregon (h = N).	
			iSKP2	13 00 19.5				
				micr sec	"	4	Um	iPKP1 21 24 30.3
			SKP2	Z' 0.1 1.4				
		Ki	iPKP	12 56 58.2	"	4	Up	iSgl 23 04 10.2
			iSKP1	12 59 43.9			Sk	iSgl 23 02 43.9
				(cont.)				

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

1974				1974			
Mar.	4	(cont.)		Mar.	5	Sk	iSgl
		Ud iSgl	23 03 09.1			Ud	iPgl
		Western Norway, near 61.8°N, 6.6°E.				iSgl	13 35 01.5
		Origin time = 23 01 06.				South coast of Norway, 58.3°N, 6.7°E.	
		By combination with Bergen readings.				Origin time = 13 32 57.	
"	5	Ud iP	00 28 08.8	"	5	Ki	eSgl
		Hindu Kush. Intermediate depth.				Um	iSgl
"	5	Up iP	03 22 53.1	"	5	Um	iP
		Ud iP	03 23 06.1			Off Pacific coast of Central America (h = 35 km).	15 06 53.2
		i	03 23 32.1	"	5	Um	iP
"	5	Ki eSgl	09 45 05	"	5	Ki	iP
		Um iSgl	09 43 48.5			Sk	e(pP)
		Lake Ladoga region. Explosion.				Um	iP
"	5	Up iPKP1	11 11 51.7	"	6	Up	iP
		micr sec				ipP	01 52 29.2
		PKP1 Z'	0.1 1.4			iPP	01 56 17
		Sk iPKP1	11 11 46.2	"	6	iS	02 03 07
		Um iPKP1	11 11 39.9			iPKKP	02 10 55.6
		Ud iPKP1	11 11 52.8			micr sec	
"	5	Up iSn	12 10 05.4			P Z'	0.1 1.1
		iSgl	12 10 17.2			pP Z'	0.4 1.3
		Sk iSn	12 11 34.1			PP Z'	1.1 2.0
		eSgl	12 12 08			Mx E	3.8 20
		Um iSgl	12 10 50.7			Mx N	2.5 20
		Ud iSgl	12 11 20.8			Mx Z	8.3 24
		De iSgl	12 11 46.5		Ki	iP	01 52 49.9
		Esthonia. Explosion.				ipP	01 53 21.8
"	5	Up iSn	12 27 14.2			iPP	01 56 07
		iSgl	12 27 26.5			iS	02 02 56
		Ki iSgl	12 30 00.3			iPKKP	02 10 56.9
		Sk iSgl	12 29 16.4			micr sec	
		Um iSgl	12 28 01.9			P Z'	0.3 1.7
		Ud iSn	12 28 02.8			pP Z'	1.7 2.4
		iSgl	12 28 33.0			PP Z'	0.7 2.0
		Esthonia. Explosion.				Mx E	6.7 19
"	5	Sk iP	12 38 39.7			Mx N	5.2 22
		Hindu Kush. Intermediate depth.				Mx Z	7.7 19
"	5	Up iSgl	12 52 51.3		Sk	iP	01 52 41.7
		Ki eSgl	12 55 02			ipP	01 53 12.2
		Um iSgl	12 53 15.9			iPP	01 55 56.9
		Western USSR. Explosion.				iPKKP	02 11 02.6
						Um iP	01 52 56.3
						(cont.)	

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

1974

Mar. 6 (cont.)

Um	ipP	01 53 28.0
	iPP	01 56 18
	iPKKP	02 10 54.0
	iS	02 03 06
	iP'P'	02 19 02.1
	i	02 19 29.1
Ud	iP	01 52 46.5
	ipP	01 53 19.2
	iPP	01 56 08.6
	iPKKP	02 10 59.3
De	iP	01 52 52.6
	ipP	01 53 24.7
	iPP	01 56 15.7

Nicaragua.

h = 120 km (Up, Ki, Sk, Um, Ud, De).

m = 6.2, M = 6.1 (Up, Ki).

M uncorrected for focal depth.

"

6	Up	iP	02 44 51.7
	Ki	iP	02 45 36.3
		ipP	02 45 42.4
	Um	iP	02 45 15.5
		ipP	02 45 22.4
	Ud	iP	02 44 46.7
		ipP	02 44 52.8

Ascension Island.

h = 25 km (Ki, Um, Ud).

"

6	Um	iPKP	04 01 07.2
	Ud	iPKP1	04 01 08.2
	De	iPKP1	04 01 18.9

"

6	Um	iPKP	04 38 17.8
	New Hebrides Islands		
	(h = 250 km).		

"

6	Ud	iP	05 05 26.2
	Talaud Islands (h = 55 km).		

"

6	Ki	eP	05 19 22
	Um	iP	05 19 09.1
	North Atlantic Ocean (h = N).		

"

6	Um	iP	06 42 18.1
	Ud	iP	06 42 50.8
	Kurile Islands (h = N).		

"

6	Um	iPKP1	07 33 20.9
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"

6	Up	iSgl	10 41 15.2
	Sk	iSgl	10 43 07.1
	Um	iSgl	10 41 50.7
	Ud	eSgl	10 42 22
	De	iSgl	10 42 50.5

Esthonia.
Explosion.

1974

"

6	Um	i(Sgl)	10 43 12.5
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"	6	Up	iSgl	12 08 10.9
		Um	iSgl	12 08 33.6

Western USSR.

Explosion.

"	6	Up	iSn	12 37 52.2
			iSgl	12 38 06.6

Um	iSgl	12 38 42.9
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De	eSgl	12 39 40
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Estonia.

Explosion.

"	6	Ki	iPn	12 40 43.7
			iSn	12 41 39.0

Northwest USSR-Norway.
Explosion.

"	6	Um	iSgl	12 43 40.1
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Western USSR.
Explosion.

"	6	Sk	e	12 53 33
			eSgl	12 54 41

Um	iSgl	12 52 51.0
----	------	------------

Lake Ladoga region.

Explosion.

"	6	Ki	iPKP1	13 17 04.1
		Um	iPKP1	13 17 12.2

New Zealand (h = N).

"	6	Ud	iP	13 48 03.7
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"	6	Up	i(P)	15 02 18.3
---	---	----	------	------------

"	6	Um	iP	15 46 55.8
---	---	----	----	------------

"	6	Up	iSgl	17 47 03.0
---	---	----	------	------------

	Ki	i	17 44 47.8
		iSgl	17 44 59.9

micr sec

Sgl	Z'	0.1	0.8
-----	----	-----	-----

Sk	ePgl	17 44 26
----	------	----------

iS*	17 45 04.2
-----	------------

iSgl	17 45 08.3
------	------------

Um	iPg1	17 44 39.8
----	------	------------

iSn	17 45 13.5
-----	------------

iSgl	17 45 28.1
------	------------

Ud	iSgl	17 46 54.2
----	------	------------

Nordland, Norway,
66.4°N, 14.5°E.

Origin time = 17 43 37.

Explosion.

"	6	Um	iPKP1	18 30 48.9
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Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974				1974					
Mar.	6	Up	iPP	19 47 50.0	Mar.	7	Um	iSgl	10 38 23.1
		iS		19 55 11			Ud	iSgl	10 38 54.2
			micr sec		"	7	Up	iSgl	11 00 03.6
		PP	Z'	0.3 1.9			Sk	iSgl	11 01 49.0
		Mx	E	4.9 23			Um	iSgl	11 00 27.1
		Mx	N	7.8 25			Ud	iSgl	11 01 08.1
		Mx	Z	16 23			De	iSgl	11 01 35.0
	Ki	iP		19 43 07.2					Western USSR.
		iPP		19 47 23.0					Explosion.
			micr sec						
		PP	Z'	0.4 2.4	"	7	Up	iSgl	11 10 09.0
		Mx	E	7.7 19			Sk	iSgl	11 12 11.7
		Mx	N	7.8 21			Um	iSgl	11 12 20.5
		Mx	Z	5.8 21			Ud	iSgl	11 10 16.8
	Sk	e(PP)		19 47 35			De	iPgI	11 08 11.1
	Um	iP		19 43 12.1				iSgl	11 08 28.9
		iPP		19 47 31.2					Baltic Sea, off coast of
	Ud	iPP		19 48 08.8					south Sweden, 55.4°N, 15.2°E.
	De	ePP		19 48 19					Origin time = 11 07 49.
				Banda Sea (h = 25 km).					Explosion.
				m = 6.5, M = 6.4 (Up,Ki).					
"	6	Ki	iPgI	20 41 12.1	"	7	Up	iSgl	11 10 27.6
			iSgl	20 41 42.4			Ud	iSgl	11 10 33.9
		Sk	eSgl	20 43 17			De	iSgl	11 08 45.4
		Um	iSgl	20 41 50.0					Same location as for the
				Swedish coast of northern					preceding event.
				Baltic Sea, 65.9°N, 23.1°E.					Origin time = 11 08 06.
				Origin time = 20 40 33.					Explosion.
				Checked with Finnish station	"	7	Up	iP	11 42 35.8
				readings.			i		11 42 39.6
							micr sec		
"	6	Up	iP	20 52 03.2			P	Z'	0.1 1.0
		Ki	iP	20 51 21.5			Mx	E	1.6 11
		Sk	iP	20 51 55.5			Mx	N	2.9 10
		Um	iP	20 51 39.8			Mx	Z	2.9 11
			ipP	20 51 58.0		Ki	iP	11 43 04.1	
		Ud	iP	20 52 10.2		i		11 43 07.7	
		De	iP	20 52 27.2		iPP		11 44 16.4	
				Japan.			micr sec		
				h = 70 km (Um).			P	Z'	0.1 1.0
"	6	Up	i(P)	21 16 27.0			Mx	E	4.5 12
"	6	Ki	eP	21 42 58			Mx	N	7.2 13
		Sk	eP	21 43 28			Mx	Z	4.3 12
		Um	iP	21 42 58.5		Sk	iP	11 43 10.1	
				Kazakh-Sinkiang (h = N).		i		11 43 13.8	
"	7	Ud	iP	03 56 11.6		iPP		11 44 23.3	
				Crete (h = N).		Um	iP	11 42 43.1	
"	7	Up	iSgl	09 09 20.0		i		11 42 47.4	
		Ud	iPgI	09 08 01.6		iS		11 48 08	
			iSgl	09 08 35.9		Ud	iP	11 42 53.0	
		De	iSgl	09 08 41.6		i		11 42 56.7	
				Off coast of Bohuslän,		De	iP	11 42 41.0	
				Sweden, 58.2°N, 10.7°E.		i		11 42 44.8	
				Origin time = 09 07 19.				Iran-USSR (h = 20 km).	
				Explosion.				m = 5.7, M = 5.6 (Up,Ki).	
								Double P, in average 3.8 sec apart.	

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

1974

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

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

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

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

" 8 Um iP 02 19 56.2

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

" 8 Um iPKP1 04 32 20.2

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

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

" 8 Ki iP 08 54 36.4
Turkey-Iran.

" 8 Up iP 09 36 41.7
(cont.)

1974

Mar.	8	(cont.)		
		Up	ipP	09 36 53.2
				micr sec
			Mx	E 1.0 18
			Mx	N 0.8 19
			Mx	Z 2.0 19
		Ki	iP	09 36 08.6
			ipP	09 36 20.3
				micr sec

		Mx	E 0.9 18
		Mx	N 1.1 17
		Mx	Z 1.5 18
		Sk	iP 09 36 40.3
			ipP 09 36 51.8
		Um	iP 09 36 22.7
			ipP 09 36 33.8
		Ud	iP 09 36 49.8
			ipP 09 37 01.4
		De	ipP 09 37 14.4
			Japan.
			h = 45 km (Up, Ki, Sk, Um, Ud).
			M = 5.2 (Up, Ki).

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

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

"	8	Sk	iP 12 30 58.6
"	8	Ud	iP 12 35 50.9
		De	iP 12 35 17.4
Crete (h = N).			

"	8	Um	iPKP1 13 59 36.2
"	8	Up	iP 19 26 51.0
		Um	iP 19 26 36.3

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

"	9	Um	i(P) 02 44 30.4
"	9	Ud	iP 03 57 39.8
			il 03 57 47.6
		De	il 03 57 16.3
Crete (h = 55 km).			

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

1974

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

1974

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

"	9	Ki	ePKP1	05 29 29	"	10	Ud	iPKP1	00 16 28.4	
		Um	iPKP1	05 29 31.3			De	iPKP1	00 16 38.5	
		i		05 29 40.7			Fiji Islands	(h = 590 km).		
"	9	Ud	ePKP1	07 02 32	"	10	Up	iP	00 23 47.7	
"	9	Ki	iSn	13 12 40.1			Um	iP	00 23 21.2	
		Um	i(Sn)	13 13 23.8			Ud	iP	00 23 47.3 D	
		iSgl		13 14 03.4			Aleutian Islands (h = 30 km).			
Northwest USSR. Explosion.					"	10	Um	iP	00 41 52.4	
"	9	Ki	iPKP	17 59 50.0	"	10	Ki	iPKP1	06 44 14.9	
		Um	iPKP	17 59 56.6			Um	iPKP1	06 44 24.0 D	
		New Hebrides Islands (h = 290 km).					New Zealand (h = N).			
"	9	Um	iSgl	19 08 42.7	"	10	Um	iPKP	08 06 08.2	
		Probably local explosion.					Ud	iPKP	08 06 18.2	
"	9	Um	iSgl	19 31 47.4			Solomon Islands (h = 55 km).			
		Probably local explosion.			"	10	Ki	iP	10 08 49.1	
"	9	Up	ePKP	20 33 15			Alaska (h = 120 km).			
		Ki	ePKP	20 33 03	"	10	Up	iP	12 42 31.2	
		Sk	iPKP	20 33 10.8			Ki	iP	12 43 47.0	
		Um	iPKP	20 33 06.9			Sk	iP	12 43 14.2	
		Ud	iPKP	20 33 16.1			Um	iP	12 43 12.0	
		De	iPKP	20 33 21.5			Ud	iP	12 42 35.5	
Solomon Islands (h = 50 km).							Greece.			
"	9	Up	iPKP	20 36 53.7	"	10	Ud	iP	16 16 23.4	
		iPP		20 38 10			Kurile Islands.			
				micr sec						
			Mx	E 5.8 20						
			Mx	N 6.8 19						
			Mx	Z 10 20						
		Ki	iSP	20 47 07						
				micr sec						
			Mx	E 12 20						
			Mx	N 7.1 20						
(cont.)										

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

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

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

1974

Mar.	13	Um	iP	08 32 30.5
"	13	Up	iPKPl	08 49 58.0
		Sk	ePKP	08 49 57
		Um	iPKP	08 49 51.9
		Ud	iPKPl	08 49 59.8 C
		De	iPKPl	08 50 10.6 C
Tonga-Kermadec Islands (h = 490 km).				

"	13	Ud	iSgl	11 22 56.0
		De	iSgl	11 23 15.5

"	13	Up	iSgl	11 27 50.7
		Sk	eSgl	11 29 41
		Um	iSgl	11 28 10.7
		Ud	iSgl	11 28 53.9
		De	iSgl	11 29 13.6
Western USSR. Explosion.				

"	13	Um	iPKPl	11 31 40.7 D
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"	13	Sk	iP	11 48 13.0
		Um	iP	11 48 28.1
		Ud	iP	11 48 20.4
		De	iP	11 48 27.1
Guatemala (h = 90 km).				

"	13	Up	iSgl	12 14 36.0
		Ki	iSgl	12 16 41.3
		Sk	iSgl	12 16 17.0
		Um	iS*	12 14 44.5
			iSgl	12 14 52.0
		Ud	iSgl	12 15 34.3
		De	iSgl	12 15 59.9
Western USSR. Explosion.				

"	13	Ud	iSgl	12 50 28.5
		De	iSgl	12 50 18.6

"	13	Ud	iSgl	13 35 33.0
		De	iSgl	13 34 42.1

"	13	Ud	i	15 15 39.2
			iSgl	15 16 01.3
		De	ePgl	15 13 16
			i	15 14 00.7
			iSgl	15 14 07.4

"	13	De	iPgl	15 46 25.2
			iSgl	15 47 08.7

"	13	Ki	iP	16 54 08.0
		Um	eP	16 54 13
		Ud	iP	16 54 34.8
Halmahera (h = N).				

1974

Mar.	13	Up	iSgl	17 14 35.0
		Sk	eSgl	17 14 58
		Ud	iPgl	17 13 13.1
			iSgl	17 13 35.6
			iRg	17 13 44.9
		De	iSgl	17 14 33.1

Oslo Fjord, Norway, 59.5°N, 10.7°E.				
Origin time = 17 12 45.				
Checked with Kongsberg readings.				

"	13	Up	eP	17 26 11
		i		17 26 31.1
		Ki	iP	17 27 18.0
		Sk	iP	17 26 48.5
		Um	eP	17 26 44
		Ud	iP	17 26 15.9
			i	17 26 17.3
			i	17 26 43.3
		De	iP	17 25 44.5
Crete (h = 50 km).				

"	13	Up	iP	18 22 20.4
		Ud	iP	18 22 27.7
		De	iP	18 21 52.4
Greece.				

"	13	Up	iP	19 30 14.2
		Um	eP	19 30 54
		Ud	iP	19 30 22.6
Greece.				
"	13	Ud	iP	23 45 29.5
"	13	Ud	iP	23 52 43.8
"	13	Um	i(Sgl)	23 59 46.0

"	14	Um	iP	00 43 38.1
"	14	De	iP	01 29 06.3
"	14	Um	i(Sgl)	02 15 11.5

"	14	Um	iP	08 40 11.2
		Ud	iP	08 40 38.6
		De	iP	08 40 56.1
Aleutian Islands (h = N).				

"	14	De	iPKP	09 42 28.6
New Hebrides Islands (h = 180 km).				

"	14	De	iPKP	10 31 48.5
New Hebrides Islands (h = 1 km).				

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

1974

Mar. 14 Ud iP 11 04 04.3
Mindanao (h = 80 km).

" 14 Um i(P) 11 29 49.7
" 14 Up iSgl 12 17 21.8
Ki iSgl 12 19 19.2
Sk iSgl 12 19 09.5
Um iSgl 12 17 36.0
iRg 12 18 04.8
Ud iSgl 12 18 20.3
De iSgl 12 18 43.7
iSg2 12 18 55.0
Western USSR.
Explosion.

" 14 Up iSgl 13 19 40.4
Um iSgl 13 20 15.7
Ud iSgl 13 20 44.5
De iSgl 13 21 08.8
Estonia.
Explosion.

" 14 Ki iSn 15 01 54.9
iSgl 15 02 12.5
Um iSgl 15 03 38.6
Northwest USSR-Norway.
Explosion.
Checked with Tromsoe
readings.

" 14 De i(P) 15 18 23.5
" 14 Up iPKP2 15 36 40.5
Um iPKP1 15 36 23.8
Ud iPKP1 15 36 35.4

" 14 Ud iPKP1 17 54 37.2
De iPKP1 17 54 48.5

" 14 Ud iPKP1 19 55 00.5
De iPKP1 19 55 11.4

" 14 Up iP 21 01 45.5
Sk eP 21 02 28
Um iP 21 02 27.7
Ud iP 21 01 51.2
i 21 01 54.2
De eP 21 01 14
Albania (h = N).

" 14 Ud iP 21 10 30.6
Japan (h = 270 km).

" 14 Up iPKP 21 18 01.3 D
iSKP1 21 21 23.6
(cont.)

1974

Mar. 14 (cont.)
Up iSKP 21 21 35.8

micr sec
PKP Z' 0.1 1.4
Mx E 2.1 22
Mx N 2.8 22
Mx Z 4.8 22
Ki iPKP 21 17 47.5
micr sec
PKP Z' 0.1 1.0
Mx E 2.0 21
Mx N 1.8 20
Mx Z 2.4 20
Sk iPKP 21 17 58.1
Um iPKP 21 17 53.8 D
iPP 21 19 41.5
Ud iPKP 21 18 03.0 D
iSKP1 21 21 25.3
De i(PKP) 21 17 55.9
iPKP 21 18 10.1 D
iSKP1 21 21 35.8
iSKP 21 21 41.1

New Hebrides Islands
(h = 20 km).
M = 6.1 (Up,Ki).

" 14 Ki ePKP 21 54 24
Um iPKP 21 54 31.0
New Hebrides Islands
(h = N).

" 14 Um iP 22 22 06.6

" 14 Ki iPKP 23 12 17.6
Um i(PKP) 23 12 21.4
iPKP 23 12 25.2
Ud iPKP1 23 12 24.7
De iPKP1 23 12 34.8
Fiji Islands (h = 540 km).

" 15 Um i(P) 02 29 26.0
i 02 30 09.0

" 15 Sk iSgl 09 05 38.1
Ud iSgl 09 05 29.2
De iSgl 09 06 30.5
West coast of Norway,
60.6°N, 5.2°E.
Origin time = 09 03 16.
By combination with Bergen
and Kongsberg readings.

" 15 Up iSgl 09 23 51.7
Sk iSgl 09 23 35.6
Um iSgl 09 25 05.5
Ud iSgl 09 22 51.5
(cont.)

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

1974

Mar. 15 (cont.)
 De iSgl 09 23 40.5
 South Norway,
 59.7°N, 7.6°E.
 Origin time = 09 21 20.
 By combination with Bergen
 and Kongsberg readings.

" 15 Ki i(P) 10 03 12.0
 Um i(P) 10 04 02.0

" 15 Up iP 10 11 49.0
 Ud iP 10 11 59.4
 Luzon.

" 15 Up iSgl 10 44 34.9
 Ki iSgl 10 47 09.5
 Sk eSgl 10 46 27
 Um iSgl 10 45 10.4
 Ud iSgl 10 45 42.9
 De iSgl 10 46 09.8
 Estonia.
 Explosion.

" 15 Um i(Sgl) 13 25 04.0

" 15 Ud iPKP1 16 46 06.6
 De iPKP1 16 46 18.5 D

" 15 Up iP 21 24 41.3
 Ki iP 21 24 05.9
 Sk eP 21 24 38
 Um iP 21 24 21.6
 i 21 24 33.3
 Ud iP 21 24 48.2
 South of Japan (h = 30 km).

" 15 Ki eP 21 56 58
 Um iP 21 57 00.6
 Ud iP 21 57 24.9
 Panay (h = N).

" 15 Up iP 22 22 16.1
 ipP 22 22 28.8
 micr sec
 P Z' 0.1 1.1
 Ki iP 22 21 25.9
 Sk iP 22 22 05.3
 Um iP 22 21 49.0
 ipP 22 22 01.5
 Ud iP 22 22 20.3
 ipP 22 22 32.9
 De iP 22 22 42.7
 Kurile Islands.
 h = 45 km (Up,Um,Ud).

" 16 De iPKP1 04 13 56.8

1974

Mar. 16 Sk eP 04 30 15
 Um iP 04 30 32.7
 " 16 Ki iSn 07 35 02.8
 iS* 07 35 15.0
 Um iSgl 07 36 50.5
 Northwest USSR-Norway.
 Explosion.

" 16 Up iP 09 31 55.6
 i 09 32 04.9

Ki eP 09 31 22
 Um iP 09 31 35.0
 Ud iP 09 32 02.6
 Bonin Islands (h = 10 km).

" 16 Ki iSgl 10 13 20.8
 Um iSn 10 13 49.1
 i 10 14 03.0
 iSgl 10 14 16.6
 Northwest USSR-Finland.
 Explosion.

" 16 Ki iSgl 10 13 52.9
 Um i 10 14 32.9
 iSgl 10 14 48.4

Northwest USSR-Finland.
 Explosion.

" 16 Ki iSn 12 46 50.2
 iSgl 12 47 12.6
 Um iSn 12 47 35.8
 i 12 47 49.7
 iSgl 12 48 06.5
 Probably northwest USSR.
 Explosion.

" 16 Up iP 13 21 51.8
 Ki iP 13 20 58.6
 Um iP 13 21 24.3
 Ud iP 13 21 53.0
 ipP 13 22 35.2
 Aleutian Islands.
 h = 170 km (Ud).

" 16 Ud i(P) 14 30 17.1
 " 16 Ud i(Sg2) 15 17 13.0
 iRg 15 17 15.7
 " 16 Ud iPKP1 15 20 21.4
 De iPKP1 15 20 33.2
 Tonga-Kermadec Islands
 (h = 160 km).

" 16 Up iP 16 09 23.4
 Ki iP 16 08 44.8
 (cont.)

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

1974

Mar. 16 (cont.)

Um iP 16 09 06.2
Ud iP 16 09 16.6
California (h = N).

" 16 Um iP 19 53 42.7

" 16 Up iRg 22 03 20.3
Ud iRg 22 03 01.7
Central Sweden.

" 17 Up iP 00 03 26.9
Ud iP 00 03 36.7
Kurile Islands (h = 100 km).

" 17 Up iP 01 30 45.4 D
Ki iP 01 29 59.1 D
Um iP 01 30 20.2 D
Ud iP 01 30 51.5 D
De iP 01 31 09.0
Kurile Islands (h = 110 km).

" 17 ✓ Up iP 04 09 33.4 D
ipP 04 09 50.0
iPP 04 12 47.4
micr sec

P Z' 0.4 1.3
Ki iP 04 09 33.7 D
ipP 04 09 49.6

Sk iP 04 09 47.8
ipP 04 10 04.6

Um iP 04 09 30.3 D
ipP 04 09 46.9

Ud iP 04 09 43.6 D
i 04 09 56.3

ipP 04 09 59.6
De iP 04 09 42.2 D

ipP 04 09 58.7
Sumatra.
h = 60 km (Up, Ki, Sk, Um, Ud, De).

m = 6.3 (Up, Ki).

" 17 Up iS* 06 48 32.6
iSgl 06 48 40.6

micr sec

Ki iPn 06 44 23.8
iSn 06 45 23.0

iS* 06 45 43.2
micr sec

Sk iSgl 06 48 10.6
Um iSn 06 46 00.5

i 06 46 15.8
iS* 06 46 32.2

(cont.)

1974

Mar. 17 (cont.)

Um iSgl 06 46 39.2
Ud iSn 06 48 13.5
iSgl 06 49 12.8
De iSgl 06 50 41.1

Northwest USSR.
Origin time = 06 43 12.
Explosion.

" 17 Ud iP 07 40 06.6
Sudan (h = N).

" 17 Ud iPKP 11 30 34.6
Loyalty Islands (h = 15 km).

" 17 Ud iP 13 05 18.6
Um iP 13 36 49.9
Gulf of Aden (h = N).

" 17 Up iP 16 24 05.8
Ki iP 16 23 38.1
Sk iP 16 24 06.4
Um iP 16 23 48.1
Ud iP 16 24 14.6 D
Ryukyu Islands (h = 70 km).

" 17 Up iP 19 07 11.3
Ki iP 19 06 47.4
Sk eP 19 07 14
Um iP 19 06 55.1
Ud iP 19 07 20.2
Formosa (h = 80 km).

" 17 Sk ePKP1 19 31 31
Um iPKP1 19 31 27.0
Ud iPKP1 19 31 39.2

" 17 Ud iPKP1 19 53 19.3
De iPKP1 19 53 30.4

" 18 Um iPKP 04 57 38.4
South Sandwich Islands
(h = N).

" 18 Ki iPn 05 00 10.2
iPg1 05 00 15.9

iSn 05 00 35.5
iSgl 05 00 45.3

Sk e(Sgl) 05 02 22
Um iSgl 05 02 13.5

Coast of northern Norway,
68.3°N, 15.0°E.

Origin time = 04 59 38.

" 18 Ki iPg1 05 37 40.0
iSgl 05 38 14.7

Um iSgl 05 40 17.4
(cont.)

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

1974						1974					
Mar.	18	(cont.)				Mar.	18	Up	iP	23 50 47.3 C	
		Off coast of north Norway, 70.1°N, 17.3°E.							ipP	23 51 23.8	
		Origin time = 05 36 55.							micr sec		
		By combination with Tromsøe and Finnish station readings.						P	Z' 0.1 0.9		
"	18	Up iP 10 48 42.9						pP	Z' 0.4 1.7		
"		Ki iP 10 48 06.7						Ki iP	23 50 19.5		
"		Um iP 10 48 21.7						ipP	23 50 55.5		
"		Ud iP 10 48 50.5							micr sec		
"		De iP 10 49 04.3						pP	Z' 0.3 1.9		
		Japan (h = 300 km).						Sk iP	23 50 48.3 C		
"	18	Ud iPKP1 10 58 54.9						Um iP	23 50 29.9 C		
"		De iPKP1 10 59 05.8						ipP	23 51 05.9		
		Tonga-Kermadec Islands (h = 590 km).						Ud iP	23 50 56.5 C		
"	18 ✓	Up iPKP 11 15 26.0						ipP	23 51 32.8		
"		i 11 15 44.9				"	19	Um iPKP	08 03 08.1		
		micr sec				"		Ud iPKP	08 03 19.3		
		i Z' 0.1 1.5				"		Fiji Islands (h = 570 km).			
		Mx E 1.4 18				"	19	Ud iP	08 54 16.9		
		Mx N 1.7 19				"	19	Ki iPn	09 28 47.7		
		Mx Z 1.8 17				"		iSn	09 29 43.0		
		Ki iPKP 11 15 10.4				"		Um iSn	09 30 41.8		
		i 11 15 29.1				"		iSgl	09 31 20.6		
		micr sec									
		i Z' 0.1 1.0									
		Mx E 2.4 21									
		Mx N 2.1 20				"	19	Um iP	10 38 30.2		
		Mx Z 3.3 20				"	19	Sk eSgl	11 56 25		
		Um iPKP 11 15 20.4				"		Ud iSgl	11 56 12.6		
		i 11 15 37.2									
		iPP 11 17 38.7									
		Ud iPKP 11 15 28.6									
		i 11 15 45.1									
		De iPKP 11 15 32.5									
		ipPKP 11 15 41.1									
		Samoa Islands.									
		h = 30 km (De).									
		M = 5.9 (Up, Ki).									
		PKP is followed after in average 17.7 sec by a larger onset - another event in the same area?				"	19	Up iP	12 12 25.3 D		
"	18	Up iSgl 12 36 30.8				"		Ki iP	12 11 47.6		
		Sk eSgl 12 38 09				"		Sk eP	12 12 20		
		Um iSgl 12 36 46.7				"		Um iP	12 12 03.8 D		
		iRg 12 37 18.3				"		Ud iP	12 12 32.7		
		Ud iSgl 12 37 32.0									
		De iSgl 12 38 03.2									
		Western USSR. Explosion.									
"	18	Um iSgl 12 12 31.7									
		Western USSR. Explosion.									
"	19	Um iSgl 12 22 13.6									
		Eastern Finland. Explosion?									
"	19	Up iP 12 44 37.4									
		(cont.)									

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

1974				1974			
Mar. 19	(cont.)			Mar. 20	Um	iSgl	12 21 56.1
	Um	iP	12 44 22.3		Western USSR.		
	Ud	iP	12 44 46.3		Explosion.		
	Formosa (h = 60 km).				"	20	Um iSgl 12 57 46.2
" 19	Ud	i(P)	14 00 19.9		Lake Ladoga region.		
" 19	Ki	iP	17 14 03.7		Explosion.		
	Crete (h = N).				"	20	Up iPn 15 19 11.3
" 20	Up	iP	04 02 33.1		iSn 15 19 59.8		
	Ki	iP	04 01 59.4		i 15 20 08.0		
	Um	iP	04 02 14.0		iS* 15 20 12.1		
	Ud	iP	04 02 39.8		iSgl 15 20 15.4		
	Japan (h = 110 km).				i 15 20 22.3		
" 20	Ud	iP	07 33 44.5		Sk iSg2 15 22 41.6		
" 20	Up	iP	07 58 25.1		Um iSgl 15 22 03.3		
	Ud	iP	07 58 37.3		iSg2 15 22 14.9		
" 20	Ki	i(P)	08 23 25.5		Ud iSgl 15 20 56.1		
	Sk	e(P)	08 23 43		De iPn 15 19 07.8		
	Um	i(P)	08 23 32.4		iPgl 15 19 16.6		
" 20	At 09 01 and 09 52 several explosions off coast of south Sweden are recorded at Up, Ud and De.				iSgl 15 20 08.3		
" 20	Ud	iP	09 41 36.0		i 15 20 16.0		
" 20	De	i(Pgl)	10 23 28.3		Coast of Latvia, 56.2°N, 20.6°E.		
		i(Sgl)	10 23 43.3		Origin time = 15 18 09.		
	Probably explosion off coast of south Sweden.				Explosion.		
" 20	Up	iSg2	11 18 19.9		" 20	Up iSgl 15 31 52.1	
	Ki	i(P*)	11 15 27.6		Sk iSgl 15 33 22.3		
		iPgl	11 15 29.5		Um iSgl 15 33 55.0		
		i	11 15 52.8		Ud iPgl 15 31 08.1		
		iSgl	11 16 05.2		iSgl 15 31 30.6		
		micr sec			iRg 15 31 42.7		
	Sk	Sgl	Z' 0.1 0.5		De iSgl 15 31 41.4		
		iPgl	11 15 31.0		Västergötland, Sweden,		
		iSgl	11 16 09.3		58.4°N, 14.0°E.		
	Um	iPgl	11 15 45.2		Origin time = 15 30 41.		
		iSn	11 16 19.1		Explosion.		
		iSgl	11 16 33.1		" 20	De iP 15 38 21.6	
	Ud	iSn	11 17 27.1		Hindu Kush.		
		iSgl	11 17 58.7		Intermediate depth.		
	De	eSg2	11 20 01		" 20	Um iP 15 46 27.4	
	Nordland, Norway, 66.3°N, 14.5°E. Origin time = 11 14 42.				Aleutian Islands (h = 90 km).		
	Explosion.				" 20	Um iP 17 04 16.0	
					Ud iP 17 04 45.2		
					Japan-Kurile Islands.		
					" 20	Um iP 17 07 36.1	
					Mariana Islands (h = N).		
					" 20	Um iPKPl 17 43 43.5	
					" 20	Um iP 20 47 41.9	
					Japan.		

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

1974							1974							
Mar.	20	Up	iP	22	12	48.8	Mar.	21	(cont.)					
		Um	iP	22	12	27.6			Northwest USSR.					
		Ud	iP	22	12	55.2			Explosion.					
		Japan (h = 80 km).					"	21	Ki	iSgl	17	39	37.7	
"	20	Up	iP	23	43	42.4			Sk	iSgl	17	39	44.1	
		Ud	iP	23	43	48.0			Um	iSn	17	39	51.9	
		i		23	43	57.4			iSgl		17	40	05.6	
		Greece (h = 110 km).							Nordland, Norway, 66.5°N, 14.1°E.					
"	21	Ud	iPKP1	00	30	02.6			Origin time = 17 38 10.					
"	21	Up	iP	06	00	19.3 C	"	21	Up	iS*	17	55	26.3	
				micr sec					iSgl		17	55	31.1	
		P	Z'	0.1		1.2			Ki	iSgl	17	56	10.5	
		Mx	N	0.7		15			Sk	eSgl	17	56	38	
		Mx	Z	1.1		16			Um	iSgl	17	54	50.4	
		Ki	iP	05	59	40.1 C			Ud	iSgl	17	56	27.1	
				micr sec					De	eSgl	17	57	08	
		P	Z'	0.1		1.0			Lake Ladoga region.					
		Mx	E	1.6		15			Explosion.					
		Mx	N	1.3		17	"	22	Ki	iP	01	34	05.1	
		Sk	iP	06	00	13.2			Aleutian Islands (h = N).					
		Um	iP	05	59	57.5 C			Up	iP	02	10	44.8	
		iS		06	08	59	"	22						
		Ud	iP	06	00	26.5 C			micr sec					
		De	iP	06	00	41.8			P	Z'	0.1		1.0	
		Japan (h = 45 km).							Ki	iP	02	10	25.9	
		m = 5.7, M = 5.3 (Up,Ki).							Um	iP	02	10	31.9	
"	21	Ki	iPgl	12	13	26.1				ipP		02	10	43.0
		iSn		12	14	04.3			Ud	iP	02	10	54.3	
		iS*		12	14	17.4			ipP		02	11	06.3	
		Sk	iSgl	12	17	10.5			De	iP	02	11	00.3	
		Um	iSgl	12	15	53.8			ipP		02	11	11.7	
		Northwest USSR-Norway.							Luzon.					
		Explosion.					"	22	Up	iPKP1	03	54	13.7	
"	21	Up	iSgl	12	16	22.3								
		Ki	iSgl	12	18	26.6			micr sec					
		Sk	eSgl	12	18	12			PKP1	Z'	0.1		1.0	
		Um	iSgl	12	16	39.6			Sk	iPKP1	03	54	06.0	
		iRg		12	17	13.0			Um	iPKP1	03	54	01.0	
		Ud	iSgl	12	17	21.6			Ud	iPKP1	03	54	15.1	
		De	iSgl	12	17	51.1			De	iPKP1	03	54	24.4	
		Western USSR.							Kermadec Islands (h = 55 km).					
		Explosion.					"	22	Up	iP	05	56	02.9	
"	21	Up	iP	13	53	17.8			Ki	iP	05	55	14.2 D	
		Ki	iP	13	54	00.1			i		05	55	27.1	
		Sk	eP	13	53	27			Um	iP	05	55	41.8 D	
		Um	iP	13	53	41.3			Ud	iP	05	56	06.2 D	
		Ud	iP	13	53	11.0			De	iP	05	56	29.7 D	
		Atlantic Ocean (h = N).							Unimak Island (h = N).					
"	21	Ud	iRg	14	03	40.9	"	22	Up	iP	07	14	51.4	
"	21	Ki	eSgl	14	41	24			Ki	eP	07	14	01	
		(cont.).							Sk	iP	07	14	31.3	
									Um	iP	07	14	28.8	
									Ud	iP	07	14	53.3	
									i		07	15	04.4	
									Unimak Island (h = N).					

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

1974							1974						
Mar.	22	Ki	iSn	09 01 16.9			Mar.	22	Up	iPKP1	14 32 11.9		
			iSgl	09 01 35.2					Um	i(PKP)	14 32 00.4		
		Um	iSgl	09 03 05.0						iPKP	14 32 07.7		
		Northwest USSR-Norway.							Ud	iPKP1	14 32 14.7		
		Explosion.							De	iPKP1	14 32 25.8 D		
"	22	Ki	iP	09 07 13.3			"	22	Up	iP	17 06 45.6		
		Um	eP	09 07 22					Ki	eP	17 08 02		
		Ud	iP	09 07 46.7					Sk	iP	17 07 27.9		
		Formosa (h = 60 km).							Um	iP	17 07 25.2		
"	22	Sk	eSgl	09 23 14			"	22		i	17 07 34.3		
"	22	De	iPg1	10 19 10.4					Ud	iP	17 06 52.1		
			iSgl	10 19 26.7						i	17 06 57.9		
		Probably explosion off coast of south Sweden.							De	iP	17 06 12.3		
		Greece-Albania (h = N).							Greece-Albania (h = N).				
"	22	Ki	iPn	10 27 45.3			"	22	✓ Up	iP	18 21 22.7 C		
			iSn	10 28 44.4					i	18 21 28.0			
			iSgl	10 29 06.2						micr sec			
		Sk	iSgl	10 31 32.0					P	Z' 0.1	0.7		
		Um	iSn	10 29 24.2					Mx	E 0.8	11		
			i	10 29 39.3					Mx	N 1.7	12		
			iSgl	10 29 57.8					Mx	Z 1.3	10		
		Northwest USSR.							Ki	iP	18 20 56.8 C		
		Explosion.							i	18 21 01.8			
"	22	De	e(Pg1)	10 29 31					iSS	18 29 15			
			iSgl	10 29 49.5					micr sec				
		Explosion off coast of south Sweden?							P	Z' 0.1	0.8		
"	22	Ki	ePn	10 31 06					Mx	E 2.2	12		
			iSn	10 32 05.5					Mx	N 3.6	16		
			iSgl	10 32 28.3					Mx	Z 1.8	11		
		Sk	eSgl	10 34 52					Sk	iP	18 21 31.8 C		
		Um	iSn	10 32 44.7					Um	iP	18 21 03.4 C		
			i	10 32 58.6					i	18 21 08.7			
			iSgl	10 33 17.5					i	18 22 38.5			
		Northwest USSR.							ipcP	18 23 13.2			
		Explosion.							Ud	iP	18 21 37.5		
"	22	Um	iSgl	12 18 48.1					i	18 21 42.6			
		De	eSgl	12 20 00					De	iP	18 21 47.9 C		
		Western USSR.							USSR-Mongolia (h = N).				
		Explosion.							m = 5.7, M = 5.4 (Up, Ki).				
"	22	Up	iSn	12 23 02.8					Double P, in average 5.2 sec apart. If the second phase is interpreted as pP, the focal depth is 25 km.				
			iSgl	12 23 14.9									
		Ki	i	12 25 23.6					P	Z' 0.1	1.1		
			iSgl	12 25 51.9					Mx	E 0.7	14		
		Sk	iSgl	12 25 09.8					Mx	N 1.5	17		
		Um	iSgl	12 23 49.6					Mx	Z 1.7	16		
		Ud	iSgl	12 24 19.5					Ki	iP	19 13 23.4		
		De	eSn	12 24 11					eS	19 15 36			
			iSgl	12 24 45.1					micr sec				
		Estonia.							Mx	E 1.1	15		
		Explosion.							Mx	N 2.0	15		
		(cont.)											

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

1974				1974						
Mar.	22	(cont.)		Mar.	23	(cont.)				
		Ki				Ki				
		Mx	Z	0.6	10	P	Z'			
		Sk	iP	19 13	25.5	Mx	E			
			iS	19 15	38.2	Mx	N			
		Um	iP	19 13	56.1	Sk	iP			
			i	19 14	03.6		ipP			
		Ud	iP	19 14	05.3	Um	iP			
		De	iP	19 14	45.1	Ud	iP			
		Jan Mayen (h = 20 km). (M = 4.3, Up,Ki).					ipP			
"	22	Um	iP	20 49	41.1	De	iP			
"	22	Ud	iP	23 41	14.8	North Atlantic Ocean. h = 40 km (Sk,Ud). M = 4.6 (Up,Ki).				
"	22	De	iP	23 41	14.6	"	23	Up	i	
		Tien-Shan.				iLgl				
"	23	Up	iPKP	01 46	53.7			10 16	39.3	
		Ki	iPKP	01 47	09.5			10 30	12	
		Sk	ePKP	01 47	01			micr	sec	
		Um	iPKP	01 47	01.9	Mx	E			
		Ud	iPKP	01 46	51.9	Mx	N			
		South Sandwich Islands (h = 60 km).				Mx	Z			
"	23	Um	i(P)	02 37	23.7	Ki	e			
"	23	Up	iP	07 02	15.5			10 16	25	
		Ki	iP	07 01	27.2			micr	sec	
		Sk	eP	07 02	02	Mx	E			
		Um	iP	07 01	49.5	Mx	N			
		Ud	iP	07 02	20.4	Sk	e			
		De	eP	07 02	40	Ud	iP			
		Kurile Islands (h = N).				i				
"	23	Ud	iP	07 10	48.9	"	23	De	iP	
		North Atlantic Ocean (h = N).					"	23	Ud	iP
"	23	Up	iP	07 15	00.3			11 16	24.6	
		Ki	iP	07 15	02.1			12 02	18.6	
			ipP	07 15	08.3			New Hebrides Islands		
		Sk	iP	07 14	35.1			(h = 40 km).		
			ipP	07 14	42.2	"	23	Ud	iSKPl	
		Um	iP	07 15	04.5			12 07	13.2	
		Ud	iP	07 14	40.1			iSgl	12 27 50.7	
			ipP	07 14	46.2			Northwest USSR.		
		North Atlantic Ocean. h = 30 km (Ki,Sk,Ud).						Explosion.		
"	23	Up	iP	07 25	11.1	"	23	Ki	iPgI	
					micr			iSn	12 25 43.5	
					sec			iSgl	12 26 25.9	
		Mx	E	0.9	18			Sk	12 26 47.0	
		Mx	N	0.7	16			eSgl	12 29 18	
		Mx	Z	1.8	19			Um	12 27 13.2	
		Ki	iP	07 25	14.7			iSgl	12 27 50.7	
		(cont.)						Northwest USSR-Norway.		
								Explosion.		

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

1974

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

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

" 23 Up iPKP1 14 47 01.4
 ipPKP1 14 49 09.0
 iSKP1 14 49 52.6
 iPKS 14 50 44
 iSKKP 14 58 15.6
 micr sec
 PKP1 Z' 1.3 0.8
 SKP1 Z' 5.4 2.0
 Mx E 5.6 22
 Mx N 8.3 22
 Mx Z 9.7 19

Ki i(PKP) 14 46 41.0
 i(PKP) 14 46 43.6
 iPKP 14 46 51.9
 iSKP1 14 49 34.0
 iSKS 14 53 14
 micr sec
 (PKP) Z' 0.1 0.9
 PKP Z' 0.5 1.0
 SKP1 Z' 4.1 1.8

Mx E 8.4 19
 Mx N 16 21

Sk i(PKP) 14 46 54.1
 iPKP 14 47 01.6
 epPKP 14 49 06

Um i(PKP) 14 46 48.0
 i(PKP) 14 46 51.0

iPKP 14 46 58.0
 ipPKP 14 49 04.5

iSKP1 14 49 49.3
 i(PKP) 14 46 48.0

i(PKP) 14 46 51.0
 iPKP 14 46 58.0

ipPKP 14 49 04.5
 iSKP1 14 49 44.4

Ud iPKP1 14 47 03.7 C
 ipPKP1 14 49 09.4

iSKP1 14 49 56.8
 iPKP 14 56 09.9

iSKKP 14 58 13.9
 De iPKP 14 47 12.8

iPKP1 14 47 13.7
 ipPKP1 14 49 15.4

iSKP1 14 50 05.2
 Tonga-Kermadec Islands.

h = 550 km (Up, Sk, Um, Ud, De).

M = 6.7 (Up, Ki).

M uncorrected for focal depth.

1974

Mar. 23 Ud iPKP1 14 54 36.2
 De iPKP1 14 54 46.7
 Tonga-Kermadec Islands.
 Origin time = 14 36 08.

" 23 Ud iPKP1 14 55 21.3
 De iPKP1 14 55 31.8
 Tonga-Kermadec Islands.
 Origin time = 14 36 53.

" 23 Up iPKP1 15 00 05.5
 i 15 00 18.3
 Ud iPKP1 15 00 07.9
 i 15 00 20.0
 De ePKP1 15 00 18
 Tonga-Kermadec Islands.
 Origin time = 14 41 39.

" 23 Ud iPKP1 15 05 02.3
 De ePKP1 15 12 06.4
 Tonga-Kermadec Islands.
 Origin time = 14 53 38.

" 23 Up iPKP1 15 12 33.6
 micr sec
 PKP1 Z' 0.1 0.7
 Ki i(PKP) 15 12 14.7
 iPKP 15 12 23.3
 micr sec

Sk PKP Z' 0.1 1.1
 i(PKP) 15 12 27.2
 iPKP 15 12 36.8
 iSKP1 15 15 19.3
 Um i(PKP) 15 12 20.8
 i(PKP) 15 12 22.1
 iPKP 15 12 33.1
 iSKP1 15 15 14.4
 Ud iPKP1 15 12 35.5
 De iPKP1 15 12 45.9
 Tonga-Kermadec Islands
 (h = 570 km).

" 23 Up iPKP1 15 19 26.8
 Um iPKP 15 19 24.7
 Ud iPKP1 15 19 29.0
 De iPKP1 15 19 39.7
 Tonga-Kermadec Islands.
 Origin time = 15 01 01.

" 23 Um iP 15 22 38.5
 " 23 Ud i(PKP1) 15 23 27.1

" 23 Ud i(P) 15 24 15.9

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

1974

Mar.	23	Ud	i(P)	15 26 14.4
"	23	Up	iPKP1	15 30 48.7 D
		Ki	ePKP	15 30 39
		Um	i(PKP)	15 30 36.2
			iPKP	15 30 46.5
		Ud	iPKP1	15 30 50.7 D
		De	iPKP1	15 31 01.3
		Tonga-Kermadec Islands. Origin time = 15 12 22.		
"	23	Ud	iPKP1	15 37 41.6
"	23	Ud	iPKP1	16 07 15.4
		De	iPKP1	16 07 26.2
		Tonga-Kermadec Islands. Origin time = 15 48 47.		
"	23	Ud	iPKP1	16 23 22.1
		De	ePKP1	16 23 32
		Tonga-Kermadec Islands. Origin time = 16 04 53.		
"	23	Up	iPKP1	18 32 02.1
		Um	i(PKP)	18 31 56.2
			iPKP	18 32 00.7
		Ud	iPKP1	18 32 04.3
		De	iPKP1	18 32 14.9
		Tonga-Kermadec Islands (h = 530 km).		
"	23	Up	iP	19 32 02.4
		Um	iP	19 31 38.1
		Ud	iP	19 32 09.1
		Japan (h = 80 km).		
"	23	Up	iPKP1	20 30 02.9 D
		Um	iPKP	20 30 01.2
		Ud	iPKP1	20 30 05.1 D
		De	iPKP1	20 30 15.9 D
		Tonga-Kermadec Islands (h = 530 km).		
"	23	Up	iPKP	20 45 14.9
			micr sec	
		Mx	E	1.9 20
		Mx	N	2.9 20
		Mx	Z	4.3 20
		Ki	ePKP	20 45 01
			i	20 45 07.8
			micr sec	
		Mx	E	3.3 21
		Mx	N	2.5 20
		Sk	e(PKP)	20 45 09
			iPKP	20 45 11.1
		Um	e(PKP)	20 45 03
			iPKP	20 45 08.1

(cont.)

1974

Mar.	23	(cont.)		
		Ud	iPKP	20 45 15.2
		De	i(PKP)	20 45 19.3
			iPKP	20 45 24.8
		New Hebrides Islands (h = N). M = 6.2 (Up,Ki).		
"	23	Up	iPKP1	21 10 34.0
		Ki	iPKP	21 10 23.7
		Um	e(PKP)	21 10 23
			iPKP	21 10 32.3
			iSKP1	21 13 16.4
		Ud	iPKP1	21 10 35.8 C
		De	iPKP1	21 10 46.8 C
		Tonga-Kermadec Islands (h = 520 km).		
"	23	Um	iP	21 51 55.9
		Ud	iP	21 51 24.4
		Atlantic Ocean (h = N).		
"	23	Ud	iP	22 03 32.6
"	23	Um	iP	22 22 36.8
"	23	Up	iP	22 26 19.3 C
			i	22 26 23.9
			P	micr sec
			Z'	0.1 0.6
		Ki	iP	22 26 02.4
			i	22 26 06.4
		Sk	iP	22 26 31.1 C
			i	22 26 36.2
		Um	iP	22 26 05.1 C
			i	22 26 10.5
		Ud	iP	22 26 32.8 C
			i	22 26 38.2
		De	iP	22 26 39.0
			i	22 26 44.4
		Tsinghai, China (h = N). Double P, in average 5.2 sec apart.		
"	24	Um	iP	00 18 50.9
		Ud	iP	00 19 20.9
		Japan (h = 90 km).		
"	24	Up	ePKP	00 30 55
		Um	iPKP	00 30 55.8
			iSKP1	00 33 30.8
		De	iPKP1	00 31 07.6
		South of Fiji Islands (h = 600 km).		
"	24	Ud	iPKP	03 08 39.4

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

1974

Mar.	24	✓ Up	iP	04 34 24.4
			iPP	04 38 17.2
			iSKS	04 44 50
				micr sec
			Mx	E 3.1 30
			Mx	N 1.6 18
			Mx	Z 5.6 30
		Ki	iP	04 33 58.5
			iSKS	04 44 21
			iS	04 44 43
				micr sec
			P	Z' 0.4 1.5
			Mx	E 2.0 19
			Mx	N 2.5 20
			Mx	Z 2.6 21
		Sk	iP	04 34 22.8
		Um	iP	04 34 08.7
			iSKS	04 44 34
		Ud	iP	04 34 31.3
			iPP	04 38 24.2
			iSKS	04 45 02.1
		De	eP	04 34 46
			iSKS	04 45 14.4
				Mariana Islands (h = 80 km).
				M = 5.8 (Up,Ki).

"	24	Up	ePKP	04 51 12
		Um	ePKP	04 51 20
		Ud	iPKP	04 51 08.2

"	24	Up	iP	05 48 10.6
			i	05 48 18.6

"	24	Um	iP	06 45 07.8
		Ud	iP	06 45 33.4

"	24	Up	iPn	07 42 16.4
			i	07 42 21.3
		Um	iP	07 42 23.5
		Ud	iP	07 42 28.7
				Caucasus (h = N).

"	24	Ki	iSn	08 19 39.8
			iS*	08 19 57.7
		Um	iSn	08 20 28.7
			i	08 20 42.6
			iSgl	08 21 03.8
				Northwest USSR.
				Explosion.

"	24	Ki	iSn	08 30 29.9
		Um	iSgl	08 31 54.5
				Northwest USSR.
				Explosion.

"	24	Ki	iSn	08 30 43.1
			(cont.)	

1974

Mar.	24	(cont.)	
		Northwest USSR.	
		Explosion.	

"	24	Um	iPKP	10 27 19.3
			Chile-Argentina (h = 100 km).	

"	24	Ud	iP	10 37 52.5

"	24	Up	iP	14 25 36.8
			i	14 25 38.4

			iS	14 33 17
				micr sec

			P	Z' 0.2 0.9
			Mx	E 6.9 16

			Mx	N 6.4 18
			Mx	Z 16 16

		Ki	iP	14 25 35.7
			i	14 25 37.5

				micr sec
--	--	--	--	----------

			P	Z' 0.4 1.0
			Mx	E 10 14

			Mx	N 3.8 11
			Mx	Z 12 15

		Sk	iP	14 25 56.0
			i	14 25 57.5

		Um	iP	14 25 30.8
			i	14 25 32.3

			iS	14 33 06
		Ud	iP	14 25 50.7

			i	14 25 52.7
		De	iP	14 25 51.0

				Nepal (h = N).
--	--	--	--	----------------

				m = 6.3, M = 6.1 (Up,Ki).
--	--	--	--	---------------------------

				Double P, small and large, in average 1.7 sec apart.
--	--	--	--	--

"	24	Up	iP	16 27 14.6
		Ki	iP	16 27 13.1

		Sk	iP	16 27 33.6
		Um	iP	16 27 08.6

		Ud	iP	16 27 28.6
			De	eP 16 27 29

				Nepal (h = N).
--	--	--	--	----------------

"	24	Ud	iP	19 13 44.2

"	25	Um	iPKP	04 27 30.8
		Ud	iPKP	04 27 38.0

				Tonga-Fiji Islands (h = N).
--	--	--	--	-----------------------------

"	25	Up	micr sec	
		Mx	E 0.8 15	

		Mx	N 1.8 15	
		Mx	Z 1.7 16	

(cont.)

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

1974

Mar. 25 (cont.)

Ki	micr	sec
Mx	E	2.7 15
Mx	N	2.9 17
Mx	Z	3.0 15
Um	iP	07 49 52.3
Mexico (h = 90 km).		
M = 5.8 (Up,Ki).		

" 25 Ki iP 08 34 39.7
Hindu Kush.
Intermediate depth.

" 25 Ud ePKP 12 03 35
Solomon Islands (h = 60 km).

" 25 Up iSgl 12 56 51.5
Sk iSgl 12 58 41.9
Um iSgl 12 57 15.4
Ud eSgl 12 57 56
Western USSR.
Explosion.

" 25 Sk eP 13 52 37
Um iP 13 52 09.6
Pakistan.

" 25 Ud iPKP1 14 01 21.2
" 25 Up iP 16 45 09.5
Um iP 16 45 05.3
Ud iP 16 45 18.9
Java (h = 90 km).

" 25 Um iP 17 03 45.5
il 17 03 53.3
Ud il 17 04 21.0
Japan (h = 60 km).

" 25 De iPKP1 17 41 04.7

" 25 Up iSgl 17 44 15.5
Sk eSgl 17 43 30
Ud iSgl 17 43 17.2
West coast of Norway,
60.6°N, 5.2°E.
Origin time = 17 41 05.
By combination with
Kongsberg readings.

" 25 Up iP 21 25 42.5
Ki iP 21 25 40.3
Sk iP 21 25 59.1
Um iP 21 25 37.2
i 21 25 54.7
Ud iP 21 25 55.1
De eP 21 25 56
Burma (h = N).

1974

Mar. 26

Ud	iPKP1	00 27 11.3 C
De	iPKP1	00 27 22.3 C

" 26 Ud iP 04 54 12.3
De iP 04 54 09.5
Pakistan (h = 45 km).

" 26 Ud eP 07 01 21
Greece (h = 110 km).

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

Aleutian Islands (h = 40 km).

Um	iP	08 38 18.5
Ud	iP	08 38 49.6

Kurile Islands.

De	iPgl	08 51 19.8
	iSgl	08 51 35.2

Probably explosion off coast
of south Sweden.

Up	iSgl	10 40 03.2
Sk	iSgl	10 38 45.6
Um	iSgl	10 40 36.1
Ud	iS*	10 38 54.1

iSgl	10 39 00.7	
De	eSgl	10 40 05

Off west coast of Norway,
near 61°N, 4°E.
Origin time = 10 36 25.

By combination with Bergen
readings.

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

Western USSR.
Explosion.

Up	iPgl	12 19 55.7
	iSn	12 20 18.6
	iSgl	12 20 22.3

Sk	iSn	12 20 27.9
	iSgl	12 20 31.7
Um	iSgl	12 21 01.7

Ud	iPgl	12 19 41.7
	iSn	12 20 00.9
	iSgl	12 20 01.9

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

Up	iSgl	12 30 47.8
(cont.)		

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

1974				1974			
Mar.	26	(cont.)		Mar.	27	Ud	iP
		Sk eSgl	12 32 44				10 12 13.7
		Um iSgl	12 31 36.6	"	27	Up iSgl	12 17 43.8
		De eSgl	12 32 16			Um iSgl	12 18 19.6
		Esthonia. Explosion.				Esthonia. Explosion.	
"	26	Up iSgl	12 47 51.0	"	27	Ud iP	12 21 01.1
		Sk eSgl	12 50 10			De eP	12 20 51
		Um iSgl	12 49 56.4				
		Ud iSgl	12 48 39.5	"	27	Ud iP	13 16 54.3
		De iSgl	12 48 27.1				
		Near Gotland, Sweden, 57.9°N, 19.1°E.		"	27	Up i iSgl	13 22 32.0 13 22 48.9
		Origin time = 12 46 46.				Sk iSgl	13 22 52.1
		Explosion?				Ud i	13 21 45.9
"	26	Up iP	14 17 49.6			iSgl	13 21 52.7
		Ud iP	14 17 58.9			De eSn	13 21 44
"	26	Ud iP	21 49 27.8			iSgl	13 22 07.0
"	26	Um i(Sgl)	23 56 40.7				Near south coast of Norway, 58.4°N, 6.6°E.
"	27	De ePKP1	01 07 14				Origin time = 13 19 47.
"	27	Up iPKP1	03 26 57.5 D	"	27	Um iPKP1	13 23 13.6
		ipPKP1	03 27 08.2			Ud iPKP1	13 23 26.8
		micr sec		"	27	Sk i(Sg2)	14 47 12.1
		PKP1 Z'	0.2 1.0			iRg	14 47 14.5
		Ki iPKP	03 26 44.5				
		Sk iPKP1	03 26 48.8	"	27	Ud iP	14 48 33.1
		Um iPKP1	03 26 44.5				
		iPKP	03 26 52.0	"	27	Um iP	14 49 35.6
		Ud iPKP1	03 26 59.1 D			ipP	14 49 50.1
		ipPKP1	03 27 09.3			Ud ipP	14 50 17.4
		De iPKP	03 27 03.7				Japan.
		iPKP1	03 27 08.8 D				h = 55 km (Um).
		ipPKP1	03 27 19.4				
		Kermadec Islands.		"	27	Sk eSgl	16 11 17
		h = 35 km (Up, Ud, De).				Um iSgl	16 11 39.1
"	27	Um i(P)	03 32 21.9	"	27	Up iP	16 12 18.6
"	27	De iPKP1	03 45 34.2			Ki eP	16 11 23
"	27	Um i(P)	03 47 04.7			Ud iP	16 12 19.8
"	27	Up eP	08 20 00				Aleutian Islands (h = 45 km).
		Um iP	08 19 59.7				
		Ud iP	08 20 10.7				
"	27	Up eP	09 16 38			Up iP	16 39 52.9 D
		Um iP	09 16 13.1			ipP	16 40 04.3
		Ud iP	09 16 43.9			iPcP	16 40 12.6
						iP'P'	17 07 54.6
						micr sec	
"	27	Up eP	09 16 38			Z' 0.8 1.1	
		Um iP	09 16 13.1			Ki iP	16 39 00.9 D
		Ud iP	09 16 43.9			ipP	16 39 11.8
						(cont.)	

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

1974

Mar. 27 (cont.)

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

Aleutian Islands.

$h = 40$ km (Up, Ki, Sk, Um).

$m = 6.8$ (Up, Ki).

The fact that the surface waves are very weak compared to the P waves could suggest greater depth, alternatively special source mechanism and/or special structure around the source.

" 27 Up iSgl 17 40 33.4
 Ud iSgl 17 40 36.4
 De iPgl 17 38 36.9
 iSgl 17 38 52.0
 iTSgl 17 39 13.0
 Baltic Sea, south of Sweden,
 55.7° N, 15.0° E.
 Origin time = 17 38 18.
 Explosion.
 Well developed T-phase.

" 27 Up iSgl 17 40 42.9
 De iPgl 17 38 47.5
 iSgl 17 39 01.9
 iTSgl 17 39 23.8
 From the same area as the preceding event.
 Origin time = 17 38 29.
 Explosion.
 Well developed T-phase.

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

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

1974

Mar. 27 (cont.)

Baltic Sea, south of Sweden,
 55.5° N, 15.0° E.
 Origin time = 18 09 59.
 Explosion.

" 27 Up iSgl 18 12 25.5
 Sk eSgl 18 14 17
 Ud iPgl 18 11 29.7
 iSgl 18 12 27.9
 De iPgl 18 10 27.1
 iSgl 18 10 44.0
 From the same area as the preceding event.
 Origin time = 18 10 06.
 Explosion.

" 27 Ud iP 19 04 05.1
 " 27 Ud eP 19 50 18
 " 27 Up i(P) 21 00 33.3

" 28 Um i(Sgl) 01 58 20.6
 " 28 Up ePKPl 02 18 28
 Um i(PKP) 02 18 13.7
 iPKP 02 18 26.7
 Ud iPKPl 02 18 28.7
 De iPKPl 02 18 38.6
 Tonga-Fiji Islands ($h = 290$ km).

" 28 Um i(Sgl) 04 01 00.8
 " 28 Up iPKP 04 18 18.3
 i 04 18 27.3
 Ud ePKP 04 18 16
 Scotia Sea ($h = N$).

" 28 Ud iP 04 26 28.3
 " 28 Um iSgl 04 57 26.7
 iRg 04 57 31.7

" 28 Ud iPKPl 05 17 26.6
 De iPKPl 05 17 33.7
 Norfolk Island ($h = N$).

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

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

1974				1974			
Mar.	28	(cont.)		Mar.	29	Um	i(Sgl)
		Um iSn	11 12 34.4		"	Um	i(Sgl)
		iSgl	11 12 56.6		"	Um	i(Sgl)
		Ud eSgl	11 13 16		"	Um	iP
		De eSn	11 13 17		"	Um	00 31 26.5
		iSgl	11 13 53.3			Japan (h = 40 km).	
		Estonia. Explosion.			"	Um	iPKPl
	"	28	Ud eP	11 19 30	"	Up eP	02 46 32
	"	28	Up iSgl	12 16 09.3		Ud eP	02 46 38
			iSg2	12 16 17.4		Japan (h = N).	
			Sk eSgl	12 17 58	"	Up eP	03 58 07
			Um iSgl	12 16 26.5		Ud iP	03 58 08.8
			Ud iSgl	12 17 09.3		Um iP	06 24 57.2
			De iSgl	12 17 34.5	"	Ud eP	06 25 23
		Western USSR. Explosion.				Bonin Islands.	
	"	28	Um iSgl	12 23 33.2	"	Um i(P)	07 54 05.6
		Western USSR. Explosion.			"	Ud iRg	10 09 32.2
	"	28	Ud iSgl	14 29 38.2	"	Ki iSgl	11 34 41.6
			De iSgl	14 29 35.3		Sk eSgl	11 37 14
		Skagerrak. By combination with Kongsberg readings.				Um iSgl	11 35 35.0
						Ud iSgl	11 38 04.0
						Northwest USSR. Explosion.	
	"	28	Up iSgl	14 59 30.9	"	Up iPn	12 52 28.9
			Ki eSgl	15 01 46		iSn	12 53 13.0
			Sk iSgl	15 01 22.3		iSgl	12 53 25.9
			Um iSgl	14 59 56.8		Ki iS*	12 55 48.9
			Ud iSgl	15 00 34.3		iSgl	12 55 55.7
			De iSgl	15 01 04.0		Sk iSgl	12 55 14.2
		Estonia. Explosion.				Um iSgl	12 54 00.8
	"	28	Up eP	17 37 38		Ud iSn	12 54 01.9
			i	17 37 46.6		iS*	12 54 24.3
		Queen Elizabeth Islands (h = N).				iSgl	12 54 28.2
						De iSgl	12 54 51.0
						Estonia. Explosion.	
	"	28	Up iP	18 03 01.7	"	Up ePKPl	13 15 49
			Aleutian Islands (h = 200 km).			Sk iPKPl	13 15 44.5
	"	28	Up iP	21 37 38.0		Um iPKPl	13 15 39.5
			i	21 37 41.6		Ud iPKPl	13 15 50.6
			Sk eP	21 38 15		Up iSgl	13 26 35.1
			Um iP	21 38 16.2		Sk iSgl	13 27 59.2
			i	21 38 20.6		Um iSgl	13 26 09.7
			Ud iP	21 37 40.0		Ud iSgl	13 27 35.4
			i	21 37 44.0		De iSgl	13 28 21.6
			De eP	21 37 06		Lake Ladoga region. Explosion.	
		Sicily (h = N).					

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

1974

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

" 29 Up iPKP1 13 44 30.4
 Ud iPKP1 13 44 33.3
 Tonga-Kermadec Islands
 (h = 540 km).

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

" 29 Um iSgl 15 05 00.5

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

" 29 De iPKP1 17 05 14.7
 Tonga Islands (h = 70 km).

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

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

" 29 Up iP 22 00 56.5 D
 iP 22 01 11.6
 iS 22 09 18
 i(P'P') 22 29 47.4
 iP'P' 22 30 00.4
 micr sec
 P Z' 0.8 1.6
 Mx N 0.6 18
 Mx Z 1.1 20
 Ki iP 22 00 01.6 D
 micr sec
 P Z' 0.3 0.9
 Mx E 0.9 22
 Mx N 1.7 22
 Mx Z 1.2 20
 (cont.)

1974

Mar. 29 (cont.)
 Sk iP 22 00 29.3 D
 iP'P' 22 30 10.5
 Um iP 22 00 29.7 D
 iS 22 08 26
 iP'P' 22 30 07.8
 Ud iP 22 00 53.4 D
 iP'P' 22 29 55.5
 De iP 22 01 17.4 D
 iP 22 01 33.6

Kodiak Island.
 h = 55 km (Up,De).
 m = 6.4, M = 5.1 (Up.Ki).

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

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

" 30 Um iP 01 58 19.5
 " 30 Up iPKP1 02 10 22.8
 Um i(PKP) 02 10 16.6
 iPKP 02 10 21.4
 Ud iPKP1 02 10 25.0 C
 De iPKP1 02 10 35.7
 Tonga-Kermadec Islands
 (h = 570 km).

" 30 Up iP 02 16 10.4
 Ki iP 02 15 55.2
 " 30 Up eP 03 05 01
 Greece.

" 30 Ud iP 04 14 05.8
 " 30 Up iP 04 24 36.5
 Um iP 04 24 34.6
 Ud iP 04 24 52.7
 Hindu Kush.
 Intermediate depth.

" 30 Up iPKP1 05 42 05.7
 Ud iPKP1 05 42 07.8
 De iPKP1 05 42 18.8
 " 30 Ud eP 06 53 14
 " 30 Up iP 08 36 11.5
 Ki iP 08 36 45.6
 Um iP 08 36 31.7
 Ud iP 08 36 01.1
 Atlantic Ocean (h = N).

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

1974

Mar. 30 Up iP 08 45 13.6
 Ud iP 08 45 20.0
 Kurile Islands (h = 55 km).

" 30 Up iSgl 09 56 25.8
 Ki iSgl 09 57 10.0
 Sk iSgl 09 57 41.7
 Um iSgl 09 55 51.1
 Ud iSn 09 56 38.1
 iSgl 09 57 21.9
 De iSgl 09 58 04.0
 Lake Ladoga region.
 Explosion.

" 30 Ud i(Sgl) 10 58 09.1
 " 30 Ud eP 11 31 16
 Japan (h = 45 km).

" 30 Up iSgl 12 12 32.0
 Um iSgl 12 12 49.2
 Ud iSgl 12 13 31.0
 Western USSR.
 Explosion.

" 30 Up iSn 13 15 36.2
 iSgl 13 16 43.7
 Ki i(Pn) 13 12 02.6
 iPn 13 12 03.6
 iPgl 13 12 13.2
 iSn 13 12 52.9
 iS* 13 13 05.0

micr sec
 Pn Z' 0.1 1.1
 Sn Z' 0.1 0.7
 S* Z' 0.1 0.8
 Sk iSgl 13 15 54.4
 Um ePn 13 12 42
 iSn 13 14 00.0
 i 13 14 15.3
 iSgl 13 14 35.5
 Ud iSn 13 15 53.0
 iSgl 13 17 04.5
 Northwest USSR-Norway.
 Explosion?

" 30 Ki ePgl 13 43 05
 iSn 13 43 46.3
 iSgl 13 44 02.8
 Um i 13 44 38.9
 iSgl 13 44 54.0
 Northwest USSR-Finland.
 Explosion.

" 30 Up iP 16 07 37.8
 Um iP 16 07 16.5
 (cont.)

1974

Mar. 30 (cont.)
 Ud iP 16 07 46.2
 Japan (h = N).

" 30 Ki micr sec
 Mx E 0.5 14
 Mx N 0.5 11
 Sk iP 18 45 09.6
 Ud iP 18 45 32.0
 Iceland (h = N).

" 30 Up iP 19 14 28.9
 Ki iP 19 14 12.1
 Sk iP 19 13 43.5
 Um iP 19 14 22.7
 Ud iP 19 14 06.0
 Iceland (h = N).

" 30 Ki iP 19 31 06.3
 Ud iP 19 31 15.1
 Sumatra (h = N).

" 30 Up iP 19 37 08.4
 Ki micr sec
 Mx E 0.8 17
 Mx N 0.7 17
 Mx Z 0.7 17
 Um eP 19 36 53
 i 19 37 08.3
 Ud iP 19 37 15.3
 Japan (h = 40 km).

" 30 Up eP 20 21 05
 Ki micr sec
 Mx N 0.5 12
 Sk iP 20 20 19.0
 Um iP 20 20 58.3
 Ud iP 20 20 41.8
 Iceland (h = N).

" 30 Sk iP 20 27 09.6
 Ud iP 20 27 28.2

" 30 Ud iPKP 21 43 39.0

" 31 Ud eP 02 00 06
 " 31 Between 02^h and 04^h, several local explosions are recorded at Um.

" 31 Ud iPKP 02 53 19.7

" 31 Up ePKP 05 08 07
 iX 05 08 13.3
 Ki eX 05 08 14
 (cont.)

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

1974

Mar. 31 (cont.)

Sk	eX	05 08 07
Um	iPKP	05 08 08.5
Ud	iPKP	05 08 02.7
Pacific Ocean (h = N).		

"	31	Up	iSgl	06 11 04.6
		Ki	iSn	06 07 54.4
			iSg2	06 08 22.5
		Sk	iSgl	06 10 39.4
		Um	iSn	06 08 33.9
			i	06 08 48.2
			iSgl	06 09 07.0
		Ud	iSgl	06 11 38.8
Northwest USSR.				
Explosion.				

"	31	Up	eP	07 01 59
				micr sec
		Mx	E	0.8 16
		Mx	N	0.8 17
		Mx	Z	1.6 17
		Ki	iP	07 01 35.2
				micr sec
		Mx	E	2.7 19
		Mx	N	1.5 18
		Mx	Z	2.1 19
		Um	iP	07 01 46.6
			iSP	07 15 12
		Ud	iP	07 02 06.6
			i	07 02 12.2
New Guinea (h = N).				
M = 5.7 (Up,Ki).				

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

"	31	Ud	ePKPl	10 22 45
"	31	Ud	iSKPl	14 58 42.9
New Hebrides Islands				
(h = 25 km).				

1974

Mar.	31	Um	iP	15 21 22.4
			ipP	15 21 35.0
		Ud	iP	15 21 51.9
			ipP	15 22 04.0
Japan.				

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

"	31	Ud	iP	16 06 32.4
			Uzbek SSR.	
"	31	Ud	eP	19 50 51
"	31	Ud	iPKPl	21 05 09.2
"	31	Up	iP	21 22 14.1
		Um	iP	21 22 37.8
		Ud	iP	21 22 03.2
			i	21 22 09.8
North Atlantic Ocean				
(h = N).				

"	31	Up	iP	21 26 29.4
		Ki	iP	21 26 22.8
		Sk	iP	21 26 15.1
		Um	iP	21 26 28.6
		Ud	iP	21 26 20.1
		De	iP	21 26 25.0
Nicaragua (h = 50 km).				

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October 18, 1975

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 SWEDEN

SEISMOLOGICAL BULLETIN

UPPSALA, KIRUNA, SKALSTUGAN, UMEÅ,

UDDDEHOLM and DELARY

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

APRIL 1 - 30, 1974

1974					1974				
Apr.	1	Up	iP	00 27 53.9	Apr.	1	Ud	iP	15 36 11.1
			ipP	00 28 06.4					
			i	00 28 21.3		"	1	Up	15 45 46.0
		Ki	iP	00 29 04.4				Ud	15 45 51.4
				micr sec					Japan (h = 80 km).
			P	Z' 0.1 1.0		"	1	Up	iPKP 20 43 08.0
		Sk	iP	00 28 31.8				i	20 43 16.4
			ipP	00 28 45.7				Ki	20 43 23.9
		Um	iP	00 28 28.3				Sk	20 43 12.1
		Ud	iP	00 28 00.1				Um	20 43 15.3
			i	00 28 10.3				Ud	20 43 05.9
		De	iP	00 27 25.8					South Sandwich Islands
				Crete.					(h = N).
				h = 70 km (Up, Sk).					
"	1	Ki	iPgl	08 51 58.5	"	1	Up	iP	22 02 50.5
			iSn	08 52 37.2				iPP	22 05 48.2
			iS*	08 52 50.5				micr sec	
		Um	iSgl	08 54 25.8				P	Z' 0.1 1.1
				Northwest USSR-Norway.				Mx	E 1.0 18
				Explosion.				Mx	N 1.1 16
								Mx	Z 1.1 16
"	1	Up	iSgl	11 18 07.2			Ki	iP	22 02 17.2
		Um	iSgl	11 18 45.5				micr sec	
		Ud	iSg2	11 19 18.9				Mx	E 1.5 16
		De	iSg2	11 19 44.2				Mx	N 1.5 15
				Esthonia.				Mx	Z 1.4 15
				Explosion.				Sk	iP 22 02 47.7
"	1	Um	iP	11 47 24.5				Um	iP 22 03 31.2
		Ud	iP	11 47 31.8				Ud	iP 22 02 58.2
"	1	Um	iSgl	12 25 00.0				De	iP 22 03 13.4
				Western USSR.					South of Japan (h = 15 km).
				Explosion.					M = 5.5 (Up, Ki).
"	1	Up	iP	13 40 11.7		"	1	Ki	iP 23 29 48.6
		Um	iP	13 39 46.9				i	23 29 52.7
		Ud	iP	13 40 17.7				iS	23 31 06.3
				Japan (h = 70 km).				i	23 31 21.9
								Sk	eP 23 30 10
									(cont.).

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

1974				1974			
Apr.	1	(cont.)		Apr.	2	(cont.)	
		Sk eS	23 31 49			Ud iPKPl	06 21 52.0
		Um iS	23 32 24.2			De iPKPl	06 22 02.7 C
		i	23 32 45.5			Tonga-Kermadec Islands	
		Norwegian Sea, near 72°N, 5°E.				(h = 500 km).	
		Origin time = 23 28 03.		"	2	Up iP	07 20 36.9
		Checked with Tromsoe and Finnish station readings.				Ki iP	07 19 54.0
"	2	Ki i(P)	00 05 51.2			Sk eP	07 20 29
		iS	00 07 06.5			Um iP	07 20 13.1
		i	00 07 18.4			Ud iP	07 20 44.0
		Sk iP	00 06 08.2	"	2	Ki iP	07 22 27.6
		Um iP	00 06 26.9			ipP	07 22 40.6
		iS	00 08 20.0			Sk epP	07 23 05
		i	00 08 44.9			Um iP	07 22 38.2
		Norwegian Sea, near 72°N, 5°E.				ipP	07 22 49.9
		Origin time = 00 04 01.				Ud ipP	07 23 13.5
		Checked with Tromsoe and Finnish station readings.				Mariana Islands.	
"	2	Up iP	03 35 30.5			h = 45 km (Ki,Um).	
		i	03 36 06.3				
		Ki iP	03 34 48.2 C				
		Sk iP	03 35 24.1				
		Um iP	03 35 07.1 C				
		Ud iP	03 35 38.2	"	2	Ud i(Sgl)	08 48 34.1
		De iP	03 35 54.1				
		Japan (h = 40 km).					
"	2	Up iP	04 07 23.7				
		ipP	04 07 35.3				
		Ki iP	04 06 56.8	"	2	Ud iPgl	13 20 55.4
		ipP	04 07 10.5			iSgl	13 21 15.0
		Sk epP	04 07 38			Origin time = 13 20 31.	
		Um iP	04 07 09.9				
		ipP	04 07 21.3	"	2	Um iPKP	19 55 04.1
		Ud eP	04 07 29			Ud iPKP	19 54 55.0
		ipP	04 07 42.4			Argentina (h = 170 km).	
		Luzon.					
		h = 45 km (Up,Ki,Um,Ud).		"	2	Up iP	21 24 16.8
		The phase interpreted as pP has larger amplitudes than P.				Ki iP	21 24 45.4
						i	21 24 51.5
"	2	Up iPKP	04 21 15.9	"	3	Up iPKPl	00 39 03.7
		Ki iPKP	04 21 06.3			Ud iPKPl	00 39 06.0
		Sk iPKP	04 21 14.8				
		Um iPKP	04 21 09.5	"	3	Sk eP	01 30 13
		Ud iPKP	04 21 19.3			Um iP	01 30 01.8
		De iPKP	04 21 24.3			Ud iP	01 30 28.7
		Solomon Islands (h = 45 km).					
"	2	Up iPKPl	06 21 49.2	"	3	Um iP	02 03 13.0
		(cont.)				Ud iP	02 03 42.7
						Japan (h = 35 km).	

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

1974						1974					
Apr.	3	Um	i(P)	03 18 24.9		Apr.	3	(cont.)	Ki	i	
"	3	Up	iP	04 38 00.5					iSgl	15 53 05.9	
		Um	iP	04 37 36.6				Sk	eSgl	15 53 32	
		Ud	iP	04 38 07.7				Um	iSgl	15 51 40.9	
		Japan (h = 120 km).						Ud	iSgl	15 53 10.3	
								iSg2	15 53 20.1		
"	3	Up	eSgl	08 04 14				De	iSgl	15 53 58.5	
		Ki	iPn	07 59 31.0				Lake Ladoga region.			
			iPgl	07 59 39.8				Explosion.			
			iSn	08 00 17.1			"	3	Ud	iP	18 04 09.6
			iS*	08 00 27.7			"	3	Up	i(P)	20 57 27.9
		Sk	eSgl	08 03 12			"	3	Sk	i(P)	20 57 52.9
		Um	iSgl	08 02 04.5			"	3	Ud	i(P)	20 56 45.5
		Ud	e	08 04 08							
		Northwest USSR-Norway.									
		Explosion.									
"	3	Up	iSgl	10 50 58.3			"	4	Up	eP	03 14 13
		Ki	eSgl	10 53 34					ipP	03 14 23.9	
		Sk	eSgl	10 52 48				Um	iP	03 13 48.3	
		Um	iSgl	10 51 30.7				Ud	iP	03 14 18.6	
		Ud	iSn	10 51 33.5					ipP	03 14 29.0	
			iSgl	10 51 59.9					Kurile Islands.		
			De	eSgl	10 52 31					h = 40 km (Up,Ud).	
		Estonia.									
		Explosion.									
"	3	Up	iRg	11 51 06.6			"	4	Up	iPl	04 27 25.0
		Um	iSgl	11 53 02.3					iP2	04 27 31.9	
		Ud	iRg	11 51 21.7					iPP	04 28 59.1	
		De	iSgl	11 51 54.2				Ki	iPl	04 27 36.7	
		Västmanland, Sweden,							iP2	04 27 39.1	
		near 59 1/2° N, 16° E.						Um	iPl	04 27 26.8	
		Near-surface event.							iP2	04 27 31.1	
"	3	Um	iSgl	12 10 05.0					Ud	iP2	04 27 47.1
		De	iSgl	12 11 17.4					De	iPl	04 27 44.6
		Western USSR.								iP2	04 27 47.7
		Explosion.								Tadzhik SSR (h = 20 km).	
										Double onsets, Pl smaller	
										and P2 larger.	
"	3	Um	iSgl	12 20 38.4			"	4	Up	iSgl	04 44 49.2
		Western USSR.							Sk	iSgl	04 46 41.8
		Explosion.							Um	iSgl	04 45 31.3
"	3	Ud	iSgl	12 51 07.6					Ud	iSgl	04 45 52.2
			iRg	12 51 15.7					De	eSgl	04 46 26
"	3	Ud	iRg	13 45 25.4					Estonia.		
"	3	Ki	iSgl	14 12 43.5					Explosion.		
		Um	iSgl	14 11 33.8							
		Lake Ladoga region.									
		Explosion.									
"	3	Up	iSgl	15 52 17.7			"	4	Up	iSgl	04 49 08.7
		(cont.)							Sk	eSgl	04 51 02
									Um	iSgl	04 49 52.0
									De	eSgl	04 50 49
									Estonia.		
									Explosion.		

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

1974							1974						
Apr.	4	Up	iSn	05 01 24.9		Apr.	4	(cont.)	Lake Vener region, Sweden.	Origin time = 11 28 08.			
			iSgl	05 01 32.3					Up	iSgl	12 18 29.2		
		Sk	iSgl	05 03 24.9					Sk	eSgl	12 20 12		
		Um	iSgl	05 02 15.4					Um	iSgl	12 18 42.4		
		Ud	i	05 02 25.7	"	4			Ud	iSgl	12 19 29.3		
			iSgl	05 02 37.0					De	iSgl	12 19 54.1		
		De	iPn	05 01 23.0						Western USSR.			
			iSn	05 02 35.1						Explosion.			
			iSgl	05 03 08.8									
		Estonia.											
		Explosion.											
"	4	Ud	iP	05 11 31.2	"	4	Up	iSgl	12 26 09.4				
		Talaud Islands (h = N).					Ki	iSn	12 26 29.2				
"	4	Sk	ipPKP	07 24 00.2	"	4	Sk	iSgl	12 27 26.8				
		Um	iPKP	07 23 07.8			Um	iSgl	12 25 39.4				
		Ud	ipPKP	07 24 02.7			Ud	iS*	12 26 56.6				
		New Hebrides Islands (h = 200 km).						iSgl	12 27 07.9				
"	4	Up	iP	07 48 17.0 C	"	4	De	iSgl	12 27 50.8				
			iPcP	07 48 34.3				Up	Up	12 52 15.0			
				micr sec			De	iP	12 51 58.5				
		P	Z'	0.1 1.0	"	4	Ud	iP	12 54 49.5				
		Ki	iP	07 47 37.1 C			Ki	iP	12 54 37.5				
				micr sec				i	12 55 13.2				
		P	Z'	0.1 1.0				Um	iP	12 54 40.4			
		Sk	iP	07 48 10.8 C				Ud	iP	12 54 58.2			
		Um	iP	07 47 54.6 C				De	iP	12 55 03.1			
			iPcP	07 48 18.8					Celebes Sea (h = 35 km).				
		Ud	iP	07 48 23.8 C	"	4	Up	iSgl	13 13 21.6				
		De	iP	07 48 39.1 C			Ki	iSgl	13 15 14.6				
		Japan (h = 100 km). m = 5.6 (Up,Ki).					Um	iSgl	13 14 03.7				
"	4	Ki	iSn	07 58 46.1	"	4	Ud	iSn	13 14 03.3				
			iS*	07 58 58.9			De	iPn	13 13 12.6				
		Northwest USSR-Norway. Explosion.						eSn	13 14 26				
"	4	Up	iP	10 29 48.7	"	4	Up	iSgl	13 13 43.1				
			eLgl	10 34 05			Um	iSgl	13 14 25.4				
		Um	iLg2	10 35 51.8				Esthonia.					
		Ud	iP	10 30 02.0 C				Explosion.					
			iLg2	10 34 52.8									
		De	iP	10 29 18.1									
		Rumania (h = N).			"	4	Up	iSgl	13 46 14.3				
"	4	Up	eSgl	11 29 25			Ki	iSgl	13 48 08.1				
		Ud	iPgl	11 28 32.6			Um	iPgl	13 45 55.2				
			iSgl	11 28 51.7				iSgl	13 46 55.5				
			i	11 28 54.2			Ud	iSn	13 46 56.8				
			iRg	11 29 01.0				iSgl	13 47 26.2				
		De	iPgl	11 28 50.9				De	iPn	13 46 05.5			
			iSgl	11 29 23.9					eSgl	13 47 45			
		(cont.)						Esthonia.					
								Explosion.					

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

1974				1974							
Apr.	4	Up	iP	15 01 55.7	Apr.	5	Up	iP	08 03 24.9		
			ipP	15 02 02.0			i		08 03 34.4		
		Ki	eP	15 02 35			Ki	iP	08 02 58.2		
		Sk	eP	15 02 10			Um	iP	08 03 05.7		
		Um	iP	15 02 18.0			Ud	iP	08 03 34.3		
			ipP	15 02 24.9			Formosa (h = 60 km).				
		Ud	iP	15 01 50.8		"	5	Up	iP	09 04 36.8	
			ipP	15 01 58.3			Ki	iP	09 03 43.8		
		De	iP	15 01 32.1			Um	iP	09 04 05.7		
			ipP	15 01 40.2			Ud	iP	09 04 38.1		
		South of Ascension Island.					De	iP	09 04 58.7		
		h = 25 km (Up,Um,Ud,De).					Aleutian Islands (h = 80 km).				
"	4	Ud	iPKPl	18 38 02.7		"	5	Um	iSgl	11 15 55.9	
		De	iPKPl	18 38 13.9			De	iSgl	11 16 34.1		
		Fiji Islands (h = 580 km).					Esthonia.				
"	4	Um	iP	19 44 09.7				Explosion.			
			i	19 44 23.2		"	5	Up	iSgl	11 18 21.1	
		Japan (h = 80 km).					Um	iSgl	11 18 52.3		
"	4	Up	i(P)	20 53 24.8			Ud	iSgl	11 19 25.9		
			i	20 53 28.1			Esthonia.				
"	4	Up	iP	22 44 45.7		"	5	Up	iSgl	12 12 15.7	
		Ki	iP	22 44 19.7			Um	iSgl	12 12 58.9		
		Um	iP	22 44 29.8			De	iS*	12 13 18.3		
		Ud	iP	22 44 52.1				iSgl	12 13 26.5		
		Mariana Islands (h = 200 km).					Western USSR.				
"	4	De	iPKP	23 50 39.1				Explosion.			
		Solomon Islands (h = 55 km).				"	5	Ki	iSn	12 40 32.6	
"	5	Up	iP	01 43 45.8				Northwest USSR-Norway.			
		Ud	iP	01 43 48.0				Explosion.			
		De	iP	01 43 57.9		"	5	Ud	i(Sgl)	12 49 22.0	
"	5	Up	iP	03 57 04.6				De	i(Sgl)	12 49 10.7	
			micr sec				"	5	Um	iSgl	13 27 02.7
		P	Z'	0.1 0.8					Lake Ladoga region.		
		Ki	iP	03 57 00.3					Explosion.		
		Sk	iP	03 57 20.5			"	5	Um	iSgl	13 40 13.0
		Um	iP	03 56 58.1 D					Lake Ladoga region.		
			ipP	03 57 11.8					Explosion.		
		Ud	iP	03 57 17.7 D		"	5	Up	iSgl	17 28 33.2	
			ipP	03 57 31.3				Ki	iPgI	17 25 51.5	
		De	iP	03 57 18.0					iSgl	17 26 30.4	
		Burma.							micr sec		
		h = 50 km (Um,Ud).						Sk	Sgl	Z' 0.1 0.6	
"	5	Up	eP	05 05 07						17 25 55.0	
		Sk	eP	05 05 00					is*	17 26 34.9	
		Ud	eP	05 04 58					iSgl	17 26 37.1	
		De	eP	05 04 54				Um	iPn	17 26 00.8	
		North Atlantic Ocean							(cont.)		
		(h = N).									

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

1974

Apr.	5	(cont.)	
Um	iPg1	17 26 08.1	
	iSn	17 26 43.1	
	iSgl	17 26 57.3	
Ud	i	17 27 59.8	
	iSgl	17 28 23.8	
De	iSgl	17 30 18.5	
Nordland, Norway, 66.5°N, 14.1°E.			
Origin time = 17 25 01.			
Explosion.			
Unusually large for this explosion area.			
"	5	Up iP	20 46 45.8
		i	20 46 48.7
"	5	Up iP	21 54 48.8
"	6 ✓	Up iP	02 04 27.8 C
		iS	02 13 02
		iP'P'	02 33 05.8
		i	02 33 18.6
		micr sec	
P	Z'	0.3	0.6
Mx	E	0.6	17
Mx	N	1.8	24
Mx	Z	2.7	27
Ki	iP	02 03 33.5 C	
	iP'P'	02 33 29.7	
	i	02 33 39.7	
		micr sec	
P	Z'	1.0	0.8
Mx	E	0.6	18
Mx	N	1.3	19
Sk	iP	02 04 02.6 C	
Um	iP	02 04 01.1 C	
	iS	02 12 15	
	iP'P'	02 33 17.2	
	i	02 33 28.0	
Ud	iP	02 04 25.6 C	
De	iP	02 04 48.9 C	
	iP'P'	02 33 00.1	
Alaska (h = 25 km).			
m = 6.8, M = 5.2 (Up,Ki).			
Double P onsets, a smaller phase with arrival times as given above, followed after 0.5 sec by a much larger onset.			
Remarkably large difference m - M.			
"	6	Up i(PKP)	02 30 50.5
		iPKP	02 30 55.0
		i(SKP1)	02 34 14.5
(cont.)			

1974

Apr.	6	(cont.)		
Up	iSKP1	02 34 22.7		
Ki	i(PKP)	02 30 36.6		
	iPKP	02 30 41.2		
		micr sec		
	PKP	Z' 0.1	1.0	
Sk	i(PKP)	02 30 48.3		
	iPKP	02 30 52.0		
Um	i(PKP)	02 30 42.7		
	iPKP	02 30 47.2		
Ud	i(PKP)	02 30 52.6		
	iPKP	02 30 57.3		
	i(SKP1)	02 34 17.8		
	iSKP1	02 34 24.8		
De	i(PKP)	02 30 58.9		
	iPKP	02 31 03.5		
	i(SKP1)	02 34 27.6		
	iSKP1	02 34 34.8		
New Hebrides Islands (h = 8 km).				
Clear precursors not only to PKP but also to SKP1.				
"	6	Up iP	02 38 00.3	
	Ki iP	02 37 06.3		
	Um iP	02 37 34.0		
	Ud iP	02 37 58.9		
	De iP	02 38 21.6		
Alaska (h = N).				
"	6 ✓	Up i(PKP)	03 02 34.7	
	iPKP	03 02 38.2		
	i(SKP1)	03 05 56.6		
	iSKP1	03 06 04.8		
		micr sec		
Mx	E	0.7	24	
Mx	N	1.1	21	
Mx	Z	1.4	20	
Ki	i(PKP)	03 02 20.5		
	iPKP	03 02 24.3		
		micr sec		
	PKP	Z' 0.1	1.3	
	Mx	N 0.8	19	
Sk	i(PKP)	03 02 32.2		
	iPKP	03 02 35.5		
Um	i(PKP)	03 02 26.7		
	iPKP	03 02 30.5		
Ud	i(PKP)	03 02 36.3		
	iPKP	03 02 40.3		
	i(SKP1)	03 06 00.4		
	iSKP1	03 06 07.5		
De	i(PKP)	03 02 42.9		
(cont.)				

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

1974

Apr. 6 (cont.)

De	iPKP	03 02	46.9
	i(SKPl)	03 06	11.1
	iSKPl	03 06	18.4

New Hebrides Islands

(h = 15 km).

M = 5.6 (Up,Ki).

Cf note to Apr. 6, 02 30.

"

6

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

New Hebrides Islands.

Origin time = 02 45 35.

"

6

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

New Hebrides Islands
(h = 35 km).

"

6

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

New Hebrides Islands
(h = 20 km).

"

6

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

(cont.)

1974

Apr. 6 (cont.)

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

Alaska.

h = 60 km (Up,Ki,Sk,Um,Ud,De).

m = 6.8, M = 5.4 (Up,Ki).

The P'P' group exhibits three clear onsets (Up,Um,De).

As for the Apr. 6, 02 04, Alaska earthquake, the m - M difference is remarkably large.

"	6	Up	iP	05 22	44.9
		Ki	iP	05 21	49.9
				micr	sec
			P	Z'	0.1 1.2
		Sk	iP		05 22 16.9
		Um	iP		05 22 17.8
		Ud	iP		05 22 41.2
			i		05 23 01.2
		De	iP		05 23 05.5
			Kodiak Island (h = 55 km).		
"	6	Up	iSKPl	05 29	50.5
		Sk	iPKP	05 26	12.7
		Um	i(PKP)	05 26	09.1
			iPKP	05 26	13.7

(cont.)

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

1974				1974				
Apr.	6	(cont.)		Apr.	6	Um	i(P)	
		Ud	iSKP1	05 29 53.7		Ud	i(P)	
		De	iPKP	05 26 24.9			11 09 19.7	
			iSKP1	05 30 07.0	"	Ki	iSn	
		(New Hebrides Islands).					iS*	
"	6	Up	iPKP1	06 19 26.5		Sk	iSgl	
		Um	iPKP	06 19 26.6		Um	iSn	
			iSKP1	06 22 02.5			i	
		Ud	iPKP1	06 19 26.9			iSgl	
		De	iPKP1	06 19 37.9			Northwest USSR.	
		Fiji Islands (h = 580 km).					Explosion.	
"	6	Up	iPKP	08 01 11.2	"	6	Up	
			iSKP1	08 04 43.5		Ki	iPKP2	
		Ki	iPKP	08 00 58.2			iPKP1	
		Sk	iPKP	08 01 10.5			iPKP2	
		Um	iPKP	08 01 04.0			12 36 30.8	
		Ud	iPKP	08 01 13.4			12 36 51.9	
			iSKP1	08 04 45.0			Um	
		De	iPKP	08 01 20.1			iPKP2	
			iSKP1	08 04 58.1	"	6	Up	
		New Hebrides Islands				Ki	iP	
		(h = 20 km).				Up	12 44 43.7	
"	6	Up	i(PKP)	08 10 30.1			Ki	12 44 29.2
			iPKP	08 10 34.2			Up	12 44 56.6
		Ki	iSKP1	08 14 01.2	"			iPcP
			i(PKP)	08 10 16.3	6	Up	12 45 28.9	
			iPKP	08 10 20.7		Ki	Yunnan, China (h = N).	
			micr sec					
		Sk	PKP Z'	0.1 0.9	"	6	Up	
			i(PKP)	08 10 28.0		Up	iP	
			iPKP	08 10 31.7	"		15 07 26.8	
		Um	i(PKP)	08 10 21.2			Kurile Islands.	
			iPKP	08 10 25.7				
		Ud	i(PKP)	08 10 32.8				
			iPKP	08 10 36.4		P	20 18 41.9	
			i(SKP1)	08 13 56.4		Z'	20 27 15.0	
			iSKP1	08 14 04.6		micr sec	0.1 0.8	
		De	i(PKP)	08 10 37.7		Mx	0.8 14	
			iPKP	08 10 41.3		Mx	1.0 14	
			i(SKP1)	08 14 07.3		Mx	1.5 14	
			iSKP1	08 14 14.7		Ki	20 27 21.5	
		New Hebrides Islands					micr sec	
		(h = 20 km).				P	0.1 1.0	
"	6	Up	iSn	10 29 18.4		Z'	0.8 12	
			iSgl	10 29 25.9		Mx	0.8 12	
		Um	iSgl	10 30 03.3		Mx	1.0 12	
		Ud	iSgl	10 30 32.4		Mx	Z 1.0 12	
		De	iSgl	10 30 59.1		Sk	20 27 40.2 D	
		Esthonia.				Um	20 27 12.3 D	
		Explosion.				Up	20 28 44.3	
"	6	Um	i(Sgl)	11 05 42.1		Ud	20 27 31.5 D	
						iPP	20 29 16.4	
						De	20 27 29.4 D	
						ePP	20 29 12	
						Tadzhik SSR (h = 80 km).		
						m	= 5.7, M = 5.1 (Up, Ki).	
					"	6	Up	
						Ki	iSgl	
						Sk	20 40 58.8	
						ePgl	20 38 44	
						(cont.)		

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

1974

Apr. 6 (cont.)

Sk iSgl 20 39 11.8
 Um iSgl 20 41 05.9
 Ud ePgl 20 39 18
 iSn 20 39 53.5
 iSgl 20 40 09.5

Near coast of Norway,
 62.9°N , 8.2°E .
 Origin time = 20 38 10.
 Checked with Bergen reading.

1974

Apr. 7

Up iSgl 04 50 03.9
 Ki iSn 04 46 45.8
 iSgl 04 47 08.7
 Sk iSgl 04 49 34.6
 Um iSn 04 47 26.5
 i 04 47 43.4
 iSgl 04 48 01.7
 Ud iSn 04 49 24.6
 iSgl 04 50 34.8
 De iSgl 04 52 07.7

Northwest USSR.

Explosion.

" 6 Sk iP 20 46 10.3
 Ud iP 20 47 05.8

" 7 Up iP 06 12 53.4
 Um iP 06 12 26.5
 Ud iP 06 12 57.6

" 6 Ud iP 21 10 04.6

Kurile Islands (h = N).

" 6 Ud iP 21 33 01.1

" 7 Up iP 06 30 55.6

" 6 Up iP 22 18 13.2

Ki iP 06 30 50.0

ipP 22 18 29.2

Um iP 06 30 43.4

Um iP 22 17 47.6

Ud iP 06 31 08.6

Ud iP 22 18 18.8

Burma.

De eP 22 18 36

" 7 Up iP 06 44 09.6

Kurile Islands.

i 06 44 22.2

h = 60 km (Up).

micr sec

z' 0.1 1.3

" 7 Ud iP 00 45 41.9

Ki iP 06 43 21.1

De iP 00 46 05.9

Um iP 06 43 43.6

Ud iP 06 44 14.7

" 7 Up iP 01 02 18.3

Kurile Islands (h = 20 km).

Ki iP 01 03 29.9

" 7 Up iSn 09 03 40.8

Ud iP 01 02 12.0

eS* 09 04 28

De iP 01 01 40.3

iSgl 09 04 35.0

Algeria (h = N).

Ki iPn 09 00 26.2

" 7 Ud i(PKP1) 01 59 42.1

iSn 09 01 24.8

De iPKP1 01 59 45.9

iSgl 09 01 45.8

" 7 Ud iP 02 30 57.7

Sk iSgl 09 04 12.1

Um iPn 09 02 03.0

i 09 02 15.5

" 7 Up iPKP1 03 34 51.4

iSgl 09 02 36.5

ipPKP1 03 35 36.0

Ud iSn 09 04 04.3

micr sec

i 09 04 58.1

pPKP1 z' 0.1 1.0

iSgl 09 05 12.3

Um iPKP1 03 34 39.4

De iSgl 09 06 37.6

Ud iPKP1 03 34 52.9 C

i 09 06 46.6

ipPKP1 03 35 39.2

Northwest USSR.

De iPKP1 03 35 02.5

Explosion.

ipPKP1 03 35 47.4

Kermadec Islands.

" 7 Up iP 11 30 16.1

h = 180 km (Up, Ud, De).

Ud iP 11 30 17.6

" 7 Ud iP 04 25 15.0

i 11 30 28.6

De eP 11 29 48

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

1974							1974							
Apr.	7	Ki	iSgl	13 33 34.5		Apr.	8	Up	i	17 59 02.0				
			Northwest USSR.					De	i(Pgl)	17 58 25.3				
			Explosion.					i(Sgl)	17 59 16.1					
"	7	Up	iP	14 28 13.6		"	8	Ud	iPKP1	18 23 06.5				
			iPn	14 28 36.4										
			iS	14 32 37		"	8	Up	eP	22 19 47				
				micr sec				Ki	iP	22 19 33.1				
		Mx	E	2.8 15				Um	ipP	22 19 41.0				
		Mx	N	2.5 13				Ud	eP	22 19 42				
		Mx	Z	2.6 13				De	epP	22 19 53				
		Ki	iP	14 29 21.4						Sumatra (h = N).				
				micr sec										
		Mx	E	3.6 18		"	9	Ki	iP	01 19 09.3				
		Mx	N	5.0 12				Ud	iP	01 19 18.2				
		Mx	Z	5.3 12						Sumatra (h = N).				
		Sk	iP	14 28 50.9										
			ipP	14 28 59.2		"	9	Ud	iP	04 45 26.3				
		Um	iP	14 28 45.6					i	04 45 32.4				
			iS	14 33 34										
		Ud	iP	14 28 19.6		"	9	Um	iSgl	12 17 01.1				
			ipP	14 28 28.0						Western USSR.				
			iPn	14 28 46.2						Explosion.				
		De	iP	14 27 46.7										
			ipP	14 27 55.4		"	9	Up	iSgl	13 00 36.1				
		Crete.							Sk	iSgl	13 02 34.8			
		h = 40 km (Sk,Ud,De).							Um	iSgl	13 01 25.1			
		M = 5.3 (Up,Ki).							De	iSgl	13 02 03.9			
		Pn (Up,Ud) is rather unusual for this epicenter location.								Esthonia.				
										Explosion.				
"	7	Up	iP	16 15 49.5		"	9 ✓	Up	iP	13 22 02.7 C				
		Ki	iP	16 16 02.6					i	13 22 13.1				
		Sk	iP	16 16 15.6						iPcP	13 22 29.5			
		Um	iP	16 15 50.7						micr sec				
		Ud	iP	16 16 05.5					P	Z' 0.1 0.7				
			i	16 16 19.9				Ki	iP	13 21 15.6 C				
		De	iP	16 15 58.9						micr sec				
		Pakistan (h = 45 km).							P	Z' 0.2 1.0				
"	7	Up	iP	17 50 56.3				Sk	iP	13 21 51.5 C				
		Um	iP	17 50 42.8				Um	iP	13 21 37.1 C				
		Ud	iP	17 51 09.0						ipP	13 22 13.2			
		De	iP	17 51 14.3				Ud	iP	13 22 08.7 C				
		Yunnan, China (h = N).									ipcP	13 22 34.8		
								De	iP	13 22 26.8 C				
											Kurile Islands.			
"	8	Um	iSgl	13 10 17.4										
		Ud	iSgl	13 11 08.5							h = 150 km (Um).			
		De	eSgl	13 11 34							m = 5.9 (Up,Ki).			
		Western USSR. Explosion.												
"	8	De	iP	17 40 18.3			"	9	Um	i(Sgl)	13 48 01.5			
		Aegean Sea. Intermediate depth.												
"	8	Ud	iP	17 54 59.9 C			"	9	Ud	iP	15 27 30.5			
									i	15 27 37.8				
"	8	Up	iP	17 54 59.9 C			"	9	Up	i(P)	15 35 09.9			

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

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

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

1974

Apr. 10 (cont.)

Ki		micr	sec
P	Z'	0.1	1.4
Mx	E	0.9	13
Mx	N	0.7	16
Mx	Z	0.7	13
Sk	eP	23 11	44
Um	iP	23 11	27.3
i		23 11	32.4
Ud	iP	23 11	49.1
i		23 11	57.1
De	iP	23 11	59.0

Formosa (h = 55 km).

m = 5.6, M = 5.4 (Up,Ki).

" 11 Up iPKP1 03 29 11.4
 Sk iPKP1 03 29 06.7
 Ud iPKP1 03 29 18.4
 De iPKP1 03 29 27.3

" 11 Ki iP 07 03 10.5
 Um iP 07 03 36.4
 Ud iP 07 04 01.7
 Aleutian Islands (h = N).

" 11 Up iSn 11 40 36.7
 iSgl 11 40 47.4
 Ki iSgl 11 43 16.7
 Sk iSgl 11 42 40.3
 Um iSgl 11 41 20.1
 Ud iSn 11 41 22.4
 iSgl 11 41 47.5
 De iSgl 11 42 15.8
 Estonia.
 Explosion.

" 11 Um iSgl 13 20 17.3
 De iSgl 13 21 25.4
 Western USSR.
 Explosion.

" 11 Sk iPKP1 19 58 41.3
 Um iPKP1 19 58 41.6

" 11 Ud iP 21 09 53.8
 Iran (h = 25 km).

" 11 Up iP 21 48 51.1 C
 i 21 48 54.9
 iPcP 21 49 14.4
 micr sec
 P Z' 0.2 0.9
 i Z' 0.1 0.7
 Ki iP 21 48 07.6 C
 i 21 48 10.1
 (cont.)

1974

Apr. 11 (cont.)

Ki		micr	sec
P	Z'	0.1	1.0
i	Z'	0.1	1.0
Sk	iP	21 48	42.8 C
i		21 48	45.6
Um	iP	21 48	27.1 C
i		21 48	30.6
Ud	iP	21 48	58.1 C
i		21 49	02.1
De	iP	21 49	14.9
i		21 49	19.0

Japan (h = 80 km).

m = 5.9 (Up,Ki).

Double P phases suggest two events of the same magnitude, apparently with a slight shift in epicenter location.

" 11 Um iP 22 57 53.1
 Ud iP 22 58 19.1

" 12 Ud iP 01 18 21.4

" 12 Ud iP 06 49 04.4

" 12 Ki iPn 11 18 44.5
 iSgl 11 19 48.9
 Northwest USSR-Norway.
 Explosion.

" 12 Ki iSn 11 31 50.7
 iS* 11 32 10.0
 Um iSgl 11 33 06.9
 Northwest USSR.
 Explosion.

" 12 Sk iPKP 12 35 01.2
 New Hebrides Islands
 (h = 240 km).

" 12 Up iP 17 58 16.4
 i 17 58 17.2

micr sec
 P Z' 0.1 1.0
 Ki iP 17 57 53.2

i 17 57 54.0
 micr sec
 P Z' 0.1 1.0

Sk eP 17 58 17
 i 17 58 17.8
 Um iP 17 58 02.6
 Ud iP 17 58 23.7
 i 17 58 24.6
 De iP 17 58 33.2
 (cont.)

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

1974				1974			
Apr.	12	(cont.)		Apr.	13	Ud	iP
		Philippine Sea (h = N). m = 6.0 (Up,Ki).		"	13	Up	iP
		Double P, a small compression followed after 0.8 sec by a larger dilatation.				Sk	iP
"	12	Sk iP 18 37 07.8 Ud iP 18 37 10.4 Colombia (h = 150 km).	"	13	Um	iP	05 09 30.8
"	12	Ud iP 19 32 36.7	"	13	Ud	iP	05 10 08.2
"	12	Up iPKP1 19 35 26.4 Um iPKP1 19 35 15.6 Ud iPKP1 19 35 28.1 De iPKP1 19 35 37.4 i 19 35 43.3	"	13	De	iP	05 10 25.5
"	12	Ki iPP 09 07 44.2 Sk iPP 09 08 05.0 Um iP 09 06 08.8 Ud iP 09 06 30.8	"	13	Ki	iPP	Lake Baikal (h = N).
"	12	Ud iP 19 35 33.5	"	13	Sk	iPP	
"	12	Up iPKP1 19 50 23.1 Ki iP 19 49 38.7 Um iP 19 49 58.5 Ud iP 19 50 27.3 i 19 50 29.7	"	13	Um	iPP	09 06 33.5
"	12	Japan (h = 80 km).	"	13	Ud	iP	Kazakh SSR (h = 35 km).
"	12	Up iX 20 26 30.0 Ud eP 20 26 26 iX 20 26 38.3 De iP 20 25 53.6	"	13	De	iP	09 06 33.5
"	12	Crete (h = 100 km).	"	13	Ki	iSn	12 32 34.3
"	12	Up iX 20 26 30.0 Ud eP 20 26 26 iX 20 26 38.3 De iP 20 25 53.6	"	13	Sk	iSgl	12 32 55.1
"	12	Crete (h = 100 km).	"	13	Um	iSgl	12 35 36.9
"	12	Up iX 20 26 30.0 Ud eP 20 26 26 iX 20 26 38.3 De iP 20 25 53.6	"	13	Ud	iSgl	12 33 59.4
"	12	Northwest USSR. Explosion.	"	13	Ki	iPn	13 04 34.8
"	12	Up iX 20 26 30.0 Ud eP 20 26 26 iX 20 26 38.3 De iP 20 25 53.6	"	13	iSn	iSgl	13 05 24.4
"	12	Northwest USSR-Norway. Explosion.	"	13	Um	eSgl	13 05 42.1
"	12	Up iX 20 26 30.0 Ud eP 20 26 26 iX 20 26 38.3 De iP 20 25 53.6	"	13	Ki	iSgl	13 07 05
"	12	Northwest USSR-Finland. Explosion.	"	13	Um	iSgl	Northwest USSR-Finland.
"	12	Up iX 20 26 30.0 Ud eP 20 26 26 iX 20 26 38.3 De iP 20 25 53.6	"	13	Ud	iSgl	Explosion.
"	12	Ki i(P) 23 38 16.5	"	13	Ki	iP	15 42 38.0
"	12	Um i(P) 23 39 58.5	"	13	Sk	iP	15 42 38.6
"	12	Up iX 20 26 30.0 Ud eP 20 26 26 iX 20 26 38.3 De iP 20 25 53.6	"	13	Um	iP	15 42 59.8
"	12	Hindu Kush.	"	13	Ud	iP	15 42 31.9
"	12	Intermediate depth.	"	13	De	iP	15 42 54.1
"	13	Up iX 20 26 30.0 Ud eP 20 26 26 iX 20 26 38.3 De iP 20 25 53.6	"	13	Kashmir-Sinkiang (h = 110 km).	iP	15 42 53.1
"	13	Hindu Kush.	"	13	Up	eSgl	18 12 13
"	13	Intermediate depth.	"	13	Um	iSgl	18 11 48.3
"	13	Up iX 20 26 30.0 Ud eP 20 26 26 iX 20 26 38.3 De iP 20 25 53.6	"	13	Ud	iSgl	18 13 13.9
"	13	Hindu Kush.	"	13	Kashmir-Sinkiang (h = 110 km).	iP	Lake Ladoga region.
"	13	Intermediate depth.	"	13	Up	iP	Explosion.
"	13	Up iX 20 26 30.0 Ud eP 20 26 26 iX 20 26 38.3 De iP 20 25 53.6	"	13	Um	iPKP1	
"	13	Hindu Kush.	"	13	Ki	iP	
"	13	Intermediate depth.	"	13	Sk	eP	
"	13	Hindu Kush.	"	13	Um	iP	
"	13	Intermediate depth.	"	13	Ud	iP	
"	13	Hindu Kush.	"	13	Kamchatka (h = N).	iP	
"	13	Intermediate depth.	"	13	Ki	iP	
"	13	Hindu Kush.	"	13	Sk	eP	
"	13	Intermediate depth.	"	13	Um	iP	
"	13	Hindu Kush.	"	13	Ud	iP	
"	13	Intermediate depth.	"	13	Kamchatka (h = N).	iP	
"	13	Hindu Kush.	"	13	Ki	iP	
"	13	Intermediate depth.	"	13	Sk	eP	
"	13	Hindu Kush.	"	13	Um	iP	
"	13	Intermediate depth.	"	13	Ud	iP	
"	13	Hindu Kush.	"	13	Kamchatka (h = N).	iP	
"	13	Intermediate depth.	"	13	Ki	iP	
"	13	Hindu Kush.	"	13	Sk	eP	
"	13	Intermediate depth.	"	13	Um	iP	
"	13	Hindu Kush.	"	13	Ud	iP	
"	13	Intermediate depth.	"	13	Kamchatka (h = N).	iP	
"	13	Hindu Kush.	"	13	Ki	iP	
"	13	Intermediate depth.	"	13	Sk	eP	
"	13	Hindu Kush.	"	13	Um	iP	
"	13	Intermediate depth.	"	13	Ud	iP	
"	13	Hindu Kush.	"	13	Kamchatka (h = N).	iP	
"	13	Intermediate depth.	"	13	Ki	iP	
"	13	Hindu Kush.	"	13	Sk	eP	
"	13	Intermediate depth.	"	13	Um	iP	
"	13	Hindu Kush.	"	13	Ud	iP	
"	13	Intermediate depth.	"	13	Kamchatka (h = N).	iP	
"	13	Hindu Kush.	"	13	Ki	iP	
"	13	Intermediate depth.	"	13	Sk	eP	
"	13	Hindu Kush.	"	13	Um	iP	
"	13	Intermediate depth.	"	13	Ud	iP	
"	13	Hindu Kush.	"	13	Kamchatka (h = N).	iP	
"	13	Intermediate depth.	"	13	Ki	iP	
"	13	Hindu Kush.	"	13	Sk	eP	
"	13	Intermediate depth.	"	13	Um	iP	
"	13	Hindu Kush.	"	13	Ud	iP	
"	13	Intermediate depth.	"	13	Kamchatka (h = N).	iP	
"	13	Hindu Kush.	"	13	Ki	iP	
"	13	Intermediate depth.	"	13	Sk	eP	
"	13	Hindu Kush.	"	13	Um	iP	
"	13	Intermediate depth.	"	13	Ud	iP	
"	13	Hindu Kush.	"	13	Kamchatka (h = N).	iP	
"	13	Intermediate depth.	"	13	Ki	iP	
"	13	Hindu Kush.	"	13	Sk	eP	
"	13	Intermediate depth.	"	13	Um	iP	
"	13	Hindu Kush.	"	13	Ud	iP	
"	13	Intermediate depth.	"	13	Kamchatka (h = N).	iP	
"	13	Hindu Kush.	"	13	Ki	iP	
"	13	Intermediate depth.	"	13	Sk	eP	
"	13	Hindu Kush.	"	13	Um	iP	
"	13	Intermediate depth.	"	13	Ud	iP	
"	13	Hindu Kush.	"	13	Kamchatka (h = N).	iP	
"	13	Intermediate depth.	"	13	Ki	iP	
"	13	Hindu Kush.	"	13	Sk	eP	
"	13	Intermediate depth.	"	13	Um	iP	
"	13	Hindu Kush.	"	13	Ud	iP	
"	13	Intermediate depth.	"	13	Kamchatka (h = N).	iP	
"	13	Hindu Kush.	"	13	Ki	iP	
"	13	Intermediate depth.	"	13	Sk	eP	
"	13	Hindu Kush.	"	13	Um	iP	
"	13	Intermediate depth.	"	13	Ud	iP	
"	13	Hindu Kush.	"	13	Kamchatka (h = N).	iP	
"	13	Intermediate depth.	"	13	Ki	iP	
"	13	Hindu Kush.	"	13	Sk	eP	
"	13	Intermediate depth.	"	13	Um	iP	
"	13	Hindu Kush.	"	13	Ud	iP	
"	13	Intermediate depth.	"	13	Kamchatka (h = N).	iP	
"	13	Hindu Kush.	"	13	Ki	iP	
"	13	Intermediate depth.	"	13	Sk	eP	
"	13	Hindu Kush.	"	13	Um	iP	
"	13	Intermediate depth.	"	13	Ud	iP	
"	13	Hindu Kush.	"	13	Kamchatka (h = N).	iP	
"	13	Intermediate depth.	"	13	Ki	iP	
"	13	Hindu Kush.	"	13	Sk	eP	
"	13	Intermediate depth.	"	13	Um	iP	
"	13	Hindu Kush.	"	13	Ud	iP	
"	13	Intermediate depth.	"	13	Kamchatka (h = N).	iP	
"	13	Hindu Kush.	"	13	Ki	iP	
"	13	Intermediate depth.	"	13	Sk	eP	
"	13	Hindu Kush.	"	13	Um	iP	
"	13	Intermediate depth.	"	13	Ud	iP	
"	13	Hindu Kush.	"	13	Kamchatka (h = N).	iP	
"	13	Intermediate depth.	"	13	Ki	iP	
"	13	Hindu Kush.	"	13	Sk	eP	
"	13	Intermediate depth.	"	13	Um	iP	
"	13	Hindu Kush.	"	13	Ud	iP	
"	13	Intermediate depth.	"	13	Kamchatka (h = N).	iP	
"	13	Hindu Kush.	"	13	Ki	iP	
"	13	Intermediate depth.	"	13	Sk	eP	
"	13	Hindu Kush.	"	13	Um	iP	
"	13	Intermediate depth.	"	13	Ud	iP	
"	13	Hindu Kush.	"	13	Kamchatka (h = N).	iP	
"	13	Intermediate depth.	"	13	Ki	iP	
"	13	Hindu Kush.	"	13	Sk	eP	
"	13	Intermediate depth.	"	13	Um	iP	
"	13	Hindu Kush.	"	13	Ud	iP	
"	13	Intermediate depth.	"	13	Kamchatka (h = N).	iP	
"	13	Hindu Kush.	"	13	Ki	iP	
"	13	Intermediate depth.	"	13	Sk	eP	
"	13	Hindu Kush.	"	13	Um	iP	
"	13	Intermediate depth.	"	13	Ud	iP	
"	13	Hindu Kush.	"	13	Kamchatka (h = N).	iP	
"	13	Intermediate depth.	"	13	Ki	iP	
"	13	Hindu Kush.	"	13	Sk	eP	
"	13	Intermediate depth.	"	13	Um	iP	
"	13	Hindu Kush.	"	13	Ud	iP	
"	13	Intermediate depth.	"	13	Kamchatka (h = N).	iP	
"	13	Hindu Kush.	"	13	Ki	iP	
"	13	Intermediate depth.	"	13	Sk	eP	
"	13	Hindu Kush.	"	13	Um	iP	
"	13	Intermediate depth.	"	13	Ud	iP	
"	13	Hindu Kush.	"	13	Kamchatka (h = N).	iP	
"	13	Intermediate depth.	"	13	Ki	iP	
"	13	Hindu Kush.	"	13	Sk	eP	
"	13	Intermediate depth.	"	13	Um	iP	
"	13	Hindu Kush.	"	13	Ud	iP	
"	13	Intermediate depth.	"	13	Kamchatka (h = N).	iP	
"	13	Hindu Kush.	"	13	Ki	iP	
"	13	Intermediate depth.	"	13	Sk	eP	
"	13	Hindu Kush.	"	13	Um	iP	
"	13	Intermediate depth.	"	13	Ud	iP	
"	13	Hindu Kush.	"	13	Kamchatka (h = N).	iP	
"	13	Intermediate depth.	"	13	Ki	iP	
"	13	Hindu Kush.	"	13	Sk	eP	
"	13	Intermediate depth.	"	13	Um	iP	
"	13	Hindu Kush.	"	13	Ud	iP	
"	13	Intermediate depth.	"	13	Kamchatka (h = N).	iP	
"	13	Hindu Kush.	"	13	Ki	iP	
"	13	Intermediate depth.	"	13	Sk	eP	
"	13	Hindu Kush.	"	13	Um	iP	
"	13	Intermediate depth.	"	13	Ud	iP	
"	13	Hindu Kush.	"	13	Kamchatka (h = N).	iP	
"	13	Intermediate depth.	"	13	Ki	iP	
"	13	Hindu Kush.	"	13	Sk	eP	
"	13	Intermediate depth.	"	13	Um	iP	
"	13	Hindu Kush.	"	13	Ud	iP	
"	13	Intermediate depth.	"	13	Kamchatka (h = N).	iP	
"	13	Hindu Kush.	"	13	Ki	iP	
"	13	Intermediate depth.	"	13	Sk	eP	
"	13	Hindu Kush.	"	13	Um	iP	
"	13	Intermediate depth.	"	13	Ud	iP	
"	13	Hindu Kush.	"	13	Kamchatka (h = N).	iP	
"	13	Intermediate depth.	"				

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

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

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

1974				1974			
Apr.	14	Ud	iP	12 07 48.6	Apr.	15	(cont.)
Dodecanese Islands ($h = 45$ km).							
"	14	Up	iP	12 20 58.0		Um	iP
			ipP	12 21 19.9			ipP
		Ki	iP	12 20 22.4		Ud	iP
		Um	iP	12 20 35.2			ipP
			ipP	12 20 58.8		De	eP
		Ud	iP	12 21 05.3			
			ipP	12 21 27.3		Luzon.	
South of Japan.							
				$h = 80$ km (Up,Um,Ud).	"	15	Up iP
"	14	Up	iP	13 53 05.4			05 49 54.2 C
		Ud	eP	13 53 14		Ki	iP
			i	13 53 31.0		Um	iP
					"	15	Ud iP
"	14	Ki	iP	15 51 45.2			05 50 03.8
		Um	iP	15 52 14.6			ipP
		Ud	iP	15 52 44.6		Luzon.	
		De	iP	15 53 10.6			$h = 55$ km (Ud).
Eastern Siberia ($h = N$).							
"	14	Up	iP	17 26 33.5	"	15	Up iP
			ipP	17 26 40.9		11 32 31.7	
		Ki	iP	17 26 04.4		Ud	iPKPl
			ipP	17 26 12.6		11 32 33.6	
		Um	iP	17 26 08.7	"	15	Ki iP
		Ud	iP	17 26 43.0		12 13 46.5	
			ipP	17 26 49.9		Talaud Islands ($h = 20$ km).	
Ryukyu Islands.							
				$h = 30$ km (Up,Ki,Ud).	"	15	Up i
"	14	Up	iP	23 33 39.9			12 17 31.8
		Ki	iP	23 32 58.2			iSgl
		Um	iP	23 33 17.0			i
		Ud	iP	23 33 47.5 C		Sk	ePn
		De	iP	23 34 03.7			iSn
Japan ($h = 40$ km).							
"	15	Sk	iP	02 38 49.5	"	15	Um iSn
		Ud	iP	02 39 10.5			i
Eastern Siberia ($h = N$).							
"	15	Up	iP	03 55 58.8	"	15	iSgl
			ipP	03 56 13.2		12 19 27.2	
				micr sec		Ud	iPn
		P	Z'	0.1 0.8			iSn
		Mx	E	0.8 16			i(TSn)
		Mx	N	0.9 17		De	iSn
		Mx	Z	1.4 20		Off coast of southwest Norway, 60.2° N, 3.2° E.	
		Ki	iP	03 55 38.4			Origin time = 12 14 42.
				micr sec			Solution checked with Bergen
		P	Z'	0.1 1.0			and Kongsberg readings.
		Sk	iP	03 56 06.7	"	15	Up iP
(cont.)						13 00 22.1	
					"	15	Um iP
						15 46 51.2	
						Ud iP	
						15 47 06.5	
						Ud iP	
						15 46 57.2	
						Malagasay ($h = N$).	

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

1974

Apr.	15	Ki	iP	16 36 47.6
		Sk	iP	16 37 10.7
		Um	iP	16 37 13.0
		Ud	iP	16 37 35.4
		De	iP	16 37 55.5
Alaska (h = 7 km).				

"	15	Up	iP	21 53 02.4
		Um	iP	21 53 46.6
Italy (h = N).				

"	16	Ud	iSKPl	00 53 00.6
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"	16	Ud	iP	01 03 38.9
---	----	----	----	------------

"	16	Ud	iP	01 54 27.4
---	----	----	----	------------

"	16	Ud	eP	02 22 40
---	----	----	----	----------

"	16	Up	iP	05 21 44.9
		Ki	iP	05 21 33.1
		Um	iP	05 21 40.8
Mexico (h = 120 km).				

"	16	Up	iP	05 59 54.9
		Ki	iP	05 59 38.1
		Sk	iP	06 00 10.5
		Um	iP	05 59 39.5
		Ud	iP	06 00 11.4
		De	iP	06 00 18.9

Kazakh SSR.

Origin time = 05 53 00.

Underground explosion?

"	16	Ki	iPn	11 02 19.9
			i	11 03 06.0
			iSn	11 03 08.2

		Sk	eSn	11 04 37
		Um	iSn	11 04 34.4
		Ud	i	11 05 34.9
			eSn	11 06 01

Norwegian Sea,
 71.4° N, 15.4° E.

Origin time = 11 01 17.

By combination with Tromsoe
 and Finnish station readings.

"	16	Up	iP	11 24 18.0
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"	16 ✓	Up	iP	11 35 12.2 C
			i	11 35 14.0
			ipP	11 35 42.2
			iX	11 35 52.9

		P	Z'	0.1 0.9
		Ki	iP	11 34 55.1 C
			iX	11 35 34.7

(cont.)

1974

Apr.	16	(cont.)		
		Ki	micr	sec
		P	Z'	0.1 0.8
		Sk	iP	11 35 17.7
			i	11 35 19.4
			ipP	11 35 48.9
			iX	11 35 58.6
		Um	iP	11 34 58.9 C
			i	11 35 00.7
			iX	11 35 39.3
		Ud	iP	11 35 21.5 C
			i	11 35 23.4
			ipP	11 35 51.2
			iX	11 36 01.7
		De	iP	11 35 27.0
			iX	11 36 07.1
Mindoro.				
h = 120 km (Up, Sk, Ud).				
m = 5.6 (Up, Ki).				
Double P, 1.8 sec apart in average.				
X is probably P of another event in the same location, 40.3 sec later.				

"	16	Up	eSgl	12 03 13
		Um	iSgl	12 03 45.9
		Ud	eSgl	12 04 11
Estonia.				
Explosion.				

"	16	Up	iSgl	13 00 40.2
		Sk	iSgl	13 02 37.9
		Um	iSgl	13 01 32.8
		Ud	iSgl	13 01 44.6
Estonia.				
Explosion.				

"	16	Up	iP	13 11 28.0
"	16	Up	i(P)	18 17 19.9
		Ki	iP	18 16 35.8
		Um	iP	18 17 01.9
		Ud	iP	18 17 30.9
Aleutian Islands (h = 40 km).				

"	16	Ud	iP	18 34 49.7
"	16	Up	iPKP2	18 38 00.4
		Ki	iPKP	18 37 23.6
		Um	iPKP	18 37 30.8
			iPKP2	18 37 38.3
		Ud	iPKP2	18 38 08.2
New Zealand (h = N).				

"	16	Ud	iP	22 28 36.0
		Hindu Kush.		

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

1974

Apr. 16 Ud iP 22 28 59.3
 Could instead be pP to the
 preceding event.

" 16 Um eP 22 43 28
 Ud iP 22 42 55.2

" 16 Sk i(P) 23 51 39.6
 Ud iP 23 52 01.2
 De iP 23 52 28.7

" 17 Up iP 00 40 09.6
 i 00 40 11.9
 iS 00 46 27
 micr sec

P Z' 0.1 1.5
 Mx E 1.0 20
 Mx N 2.1 23
 Mx Z 1.7 21

Ki iP 00 40 35.4
 i 00 40 40.1
 micr sec

P Z' 0.1 1.1
 Mx E 1.1 15
 Mx N 2.2 22
 Mx Z 1.1 19

Sk iP 00 39 59.6
 i 00 40 02.9

Um iP 00 40 26.8
 i 00 40 31.3

iS 00 46 59
 Ud iP 00 39 55.9
 De iP 00 39 49.9

i 00 39 51.8
 i 00 40 13.1

North Atlantic Ocean

(h = N).

m = 5.6, M = 5.2 (Up,Ki).
 Double P, characteristic
 for Atlantic earthquakes
 recorded at our stations.

" 17 Sk eP 00 50 16
 Um iP 00 50 10.6
 Ud iP 00 50 38.1
 De iP 00 51 00.2

Aleutian Islands (h = 45 km).

" 17 Up iP 01 34 57.8
 Um iP 01 35 42.5
 Ud iP 01 35 02.1
 De iP 01 34 16.4

Rumania (h = N).

" 17 Um iP 01 56 45.8
 ipP 01 57 01.2
 Ud iP 01 57 14.4

(cont.)

1974

Apr. 17 (cont.)

Japan.

h = 55 km (Um).

Um iP 03 49 19.5
 Ud iP 03 49 50.3
 Kurile Islands (h = 45 km).

Up iP 04 26 50.3
 Ud iP 04 26 53.5

Up iP 04 28 40.2
 Sk eP 05 56 03
 Ud iP 05 56 18.9
 Kurile Islands (h = N).

Ud iP 06 26 09.9
 Kurile Islands (h = N).

Up iP 06 28 18.0
 Ud iP 06 28 25.7
 Kurile Islands (h = N).

Up iP 11 43 49.7
 iSgl 11 44 00.8

Ki iSgl 11 46 35.0
 Sk iSg2 11 46 02.6

Um iSgl 11 44 35.9
 Ud iSn 11 44 37.7

iSgl 11 45 06.0
 De eSn 11 44 59

iSgl 11 45 31.6
 Estonia.
 Explosion.

Um iSgl 12 10 47.3
 Ud iSgl 12 11 30.3

Western USSR.

Explosion.

Up iSgl 12 52 33.0
 Um iSgl 12 54 32.3

Ud iSgl 12 53 08.3
 De iSgl 12 53 08.9

Off coast of Östergötland,

Sweden, 58.3°N, 17.5°E.

Origin time = 12 51 45.

Explosion.

Up iPgl 14 49 27.5
 iSgl 14 49 42.7

iRg 14 49 48.1
 Ud iSg2 14 49 22.6
 iRg 14 49 25.2

Central Sweden.

Origin time = 14 49 09.

Near-surface event.

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

1974				1974					
Apr.	17	Up	iP	15 34 58.4		Apr.	18	(cont.)	
		Ki	iP	15 34 41.6	micr sec			Sk	iP
			P	Z' 0.1 1.1				Um	iP
		Sk	iP	15 35 02.5				Ud	iP
			i	15 35 07.4				De	iP
		Um	iP	15 34 46.5					Colombia (h = 25 km).
			i	15 34 51.9	" 18			Ud	iPKP 07 54 46.4
		Ud	iP	15 35 05.1				De	iPKP 07 54 52.3
			i	15 35 10.6					Solomon Islands (h = 90 km).
			i	15 38 10.7					
		De	eP	15 35 15	" 18			De	iPKPl 08 24 04.4
			Molucca Passage (h = N). Double P, 5.3 sec apart, of which De has recorded only the second one.						Fiji Islands (h = 540 km).
"	17	Up	iP	18 35 51.8				Ud	iSgl 09 11 09.1
			iS	18 42 30	micr sec				Near Bergen, Norway.
			P	Z' 0.1 1.5	" 18				Origin time = 09 08 57.
			Mx	E 0.9 18					By combination with Bergen readings.
			Mx	N 0.8 18				Ki	iPKP 09 18 36.7
			Mx	Z 1.1 16					South Sandwich Islands (h = N).
		Ki	iP	18 36 42.0	" 18			Ud	i(Sgl) 09 23 19.1
			i	18 36 46.6					
			P	Z' 0.1 1.0	" 18			Ud	iP 10 21 20.8
			Mx	E 1.1 20				De	iP 10 20 48.8
			Mx	N 0.9 13					Crete (h = N).
			Mx	Z 0.5 13	" 18			Up	iP 10 41 33.1
		Sk	iP	18 36 26.6				Ki	iP 10 40 35.7
		Um	iP	18 36 14.4				i	10 40 51.9
			iPcP	18 37 40.7				Sk	eP 10 41 13
			iS	18 43 18				Um	iP 10 41 01.7
		Ud	iP	18 36 01.9				Ud	iP 10 41 35.3
		De	iP	18 35 38.4				De	iP 10 41 59.3
			Red Sea (h = N). m = 5.7, M = 5.1 (Up,Ki).						Kamchatka (h = 45 km).
"	17	Ud	iP	18 52 14.2	" 18			Um	iSgl 12 10 12.7
"	17	Ud	iPKPl	19 49 22.1					Western USSR.
"	17	Up	iPKPl	19 50 14.6	" 18				Explosion.
"	17	Ud	iPKPl	19 50 16.5				Ud	iPgI 12 14 11.7
"	17	Up	iRg	19 57 02.5				iSgl	12 14 31.7
"	17	Ud	iSg2	19 56 34.8				i	12 14 34.7
"	17		iRg	19 56 38.3				iRg	12 14 43.6
			Central Sweden. Near-surface event.					De	iSgl 12 14 51.0
									Västergötland, Sweden, 58.6°N, 13.5°E.
									Origin time = 12 13 47.
									Explosion.
"	18	Up	iP	01 31 55.0	" 18			Up	iSgl 15 01 13.2
		Ki	iP	01 31 56.4				Sk	i 15 00 43.6
		(cont.)							(cont.)

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

1974				1974			
Apr.	18	(cont.)		Apr.	19	(cont.)	
		Sk iSgl	15 00 49.8			De iPKP1	07 23 41.7 D
		Um iSgl	15 02 02.5			ipPKP1	07 26 01.9
		Ud iPgl	14 59 47.6			iSKP1	07 26 25.3
		i	15 00 08.0			Tonga-Kermadec Islands.	
		iSgl	15 00 10.8			h = 650 km (Ki,Um,De).	
		iRg	15 00 21.1				
		De iSgl	15 01 43.9	"	19	Up iPKP1	08 21 33.6
		Southeastern Norway, 60.8°N, 10.6°E.				Ki iPKP	08 21 24.4
		Origin time = 14 59 18.				eSKP1	08 23 59
"	18	Sk iP	19 24 33.4			Sk iPKP	08 21 26.6
"		Um iP	19 24 17.8			iSKP1	08 24 14.2
"		Ud iP	19 24 46.4			Um iPKP	08 21 21.5
"		Japan (h = 60 km).				iSKP1	08 24 09.7
"	18	Ki ePKP	21 25 15			Ud iPKP1	08 21 35.9 D
"		Um iPKP	21 25 13.2			De iPKP1	08 21 46.6 D
"		Ud ePKP	21 25 06			iSKP1	08 24 30.2
"		Southeast Pacific Ocean (h = N).		"	19	Um iP	11 06 26.8
"	18	Ki iP	21 34 36.4	"	19	Ud iP	11 19 30.2
"		i	21 34 51.0			Hindu Kush. Intermediate depth.	
"		Kurile Islands.		"	19	Um iSgl	12 17 59.4
"	19	Ki iP	03 41 03.2			Western USSR. Explosion.	
"		Ud iP	03 42 01.8				
"	19	Ki iPKP	07 04 39.0	"	19	Ki i	12 18 11.6
"		Ud iPKP1	07 04 44.5			iSgl	12 18 20.3
"		De iPKP1	07 04 56.1			Um iSgl	12 19 13.1
"	19	Up iPKP1	07 23 28.7 D			Northwest USSR. Explosion.	
"		i	07 24 10.1				
"		iSKP1	07 26 14.6	"	19	Um iSgl	12 34 57.7
"		micr sec				Western USSR. Explosion.	
		PKP1	Z' 0.1 0.7				
		SKP1	Z' 0.1 1.2				
		Ki i(PKP)	07 23 06.1	"	19	Um iSgl	14 27 14.5
		iPKP	07 23 18.9			Ud iSgl	14 27 53.5
		ipPKP	07 25 42.0			Western USSR. Explosion.	
		iSKP1	07 25 51.6				
		micr sec					
		PKP	Z' 0.1 1.2	"	19	Up iPn	15 29 53.9
		SKP1	Z' 0.7 2.3			iSgl	15 30 44.6
		Sk i(PKP)	07 23 21.1			Ki iSgl	15 33 21.7
		iPKP	07 23 22.2			Sk iSn	15 32 04.1
		iSKP1	07 26 10.1			iSgl	15 32 40.8
		Um i(PKP)	07 23 16.2			Um iPgl	15 30 23.4
		i	07 23 17.3			iSgl	15 31 24.0
		iPKP	07 23 23.0			Ud iPn	15 30 21.9
		ipPKP	07 25 48.7			iSn	15 31 24.8
		iSKP1	07 26 04.9			iSgl	15 31 51.1
		Ud iPKP1	07 23 31.4 D			De iPn	15 30 34.9
		iSKP1	07 26 17.5			iPgl	15 30 55.2
		De iPKP	07 23 40.6			(cont.)	
		(cont.)					

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

1974

Apr. 19 (cont.)

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

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

" 19	Up	iP	18 30 12.7
	Ki	iP	18 29 35.8
	Sk	eP	18 30 09
	Um	iP	18 29 51.3
	Ud	iP	18 30 20.2
	Japan (h = 130 km).		

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

" 20	Up		micr sec
	Mx	E	0.6 20
	Mx	N	0.5 20
	Mx	Z	0.8 20
	Ki		micr sec
	Mx	E	0.9 22
	Mx	N	1.0 21
	Um	i	03 29 44.5
	Ud	iPKP	03 29 36.6
	De	iPKP1	03 29 37.6
	Loyalty Islands (h = N).		
	M = 5.6 (Up,Ki).		

" 20	Up	iP	04 39 33.3
		i	04 39 42.0
	Ki	iP	04 39 13.6
	Um	iP	04 39 20.3
	Ud	iP	04 39 41.8
	Philippine Islands (h = N).		

" 20	Up	iP	08 00 54.4
		i	08 00 59.2
	Ki	iP	08 00 55.1
	Um	iP	08 00 51.5
	Ud	iP	08 01 06.0
	De	iP	08 01 03.2
	Nicobar Islands (h = N).		

" 20	Ud	iP	08 33 12.8
	De	iP	08 33 37.7
	Aleutian Islands (h = 40 km).		

" 20	Up		micr sec
	Mx	E	0.8 20
	Mx	N	1.0 22
	Mx	Z	1.4 21
	(cont.)		

1974

Apr. 20 (cont.)

Ki		micr	sec
	Mx	E	0.9 20
	Mx	N	1.0 19
	Mx	Z	0.9 19
Ud	iPKP	08 46	40.5
Loyalty Islands (h = N).			
M = 5.7 (Up,Ki).			

" 20	Up	iP	08 48 05.3
" 20	Ki	i(P)	10 44 05.9
	i	10 44 11.0	
	i	10 44 23.5	

" 20	Ki	iSn	12 20 50.9
		iSgl	12 21 10.5
	Um	eSgl	12 22 12
Northwest USSR.			

" 20	Up	iSgl	14 51 39.5
	Ki	iSn	14 48 30.1
		iSgl	14 48 45.8
	Sk	iSgl	14 51 11.0
	Um	iSgl	14 49 40.4
	Ud	e	14 51 25
		iSgl	14 52 08.0
Northwest USSR-Finland.			
Explosion.			

" 20	Ud	iPKP1	14 58 53.8
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" 20	Up	iP	15 02 17.5
" 20	Ki	eP	16 09 30
	Ud	iP	16 09 53.6

" 20	Up	iP	16 13 55.3 C
		iPcP	16 14 17.2
		micr sec	
	Ki	P	Z' 0.1 1.0
		iP	16 13 12.0 C
		ipP	16 13 25.7
		P	micr sec
		Z'	0.1 0.9
	Sk	iP	16 13 47.0

	Um	iP	16 13 31.3 C
		ipP	16 13 47.1
	Ud	iP	16 14 02.1 C
		iPcP	16 14 24.3

	De	iP	16 14 18.8 C
	Japan.		
	h = 55 km (Ki,Um).		
	m = 5.8 (Up,Ki).		

" 20	Ud	iPKP1	16 19 14.0
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Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1974

Apr.	20	Up	iP	17 49 28.5
		Ki	iP	17 48 34.5
		Ud	iP	17 49 27.7
Aleutian Islands (h = 40 km).				

"	20	Ud	iP	19 59 52.8
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"	20	Up	eP	23 25 15
		Ud	iP	23 25 24.1

"	21	Ud	eP	00 40 23
---	----	----	----	----------

"	21	Um	iPKP	01 01 15.2
		Ud	iPKP1	01 01 23.2
		De	iPKP1	01 01 34.6
Fiji Islands (h = 670 km).				

"	21 ✓ Up	iPKP	01 12 47.2
			micr sec
		Mx	E 1.0 21
		Mx	N 1.2 22
		Mx	Z 2.3 21

Ki micr sec

Mx	E	1.1 22
Mx	N	1.4 20
Mx	Z	1.2 20

Um	iPKP	01 12 46.9
	i	01 13 01.9
	iSKP1	01 16 13

Ud	ePKP	01 12 52
De	iPKP1	01 12 57.5
	i	01 13 05.7

Loyalty Islands (h = N).

M = 5.8 (Up,Ki).

"	21	Up	iP	01 35 44.1
			iPcP	01 36 06.4
		Ki	iP	01 34 58.8
		Um	iP	01 35 18.8
		Ud	iP	01 35 50.0
		De	iP	01 36 07.3
Kurile Islands (h = 60 km).				

"	21	Up	iP	02 18 47.3
			ipP	02 18 55.3
				micr sec
		Ki	pP	Z' 0.1 1.0
			iP	02 18 01.4
			ipP	02 18 10.0
				micr sec

P Z' 0.1 1.5

pP Z' 0.1 1.0

Sk	iP	02 18 36.4
	ipP	02 18 45.9

Um	iP	02 18 22.0
	ipP	02 18 30.8

(cont.)

1974

Apr.	21	(cont.)	
		Ud	iP 02 18 53.5
			ipP 02 19 02.4
		De	iP 02 19 11.8
			ipP 02 19 20.3

		iPcP 02 19 36.1
--	--	-----------------

Okhotsk Sea.

h = 30 km (Up,Ki,Sk,Um,Ud,

De).

m = 5.9 (Up,Ki).

"	21	Um	iP 04 05 26.0
		Ud	iP 04 04 54.2
		Italy.	

"	21	Up	iP 04 56 13.3
		Ki	iP 04 55 25.2
		Um	iP 04 55 56.0
		Ud	iP 04 56 14.1

Queen Elisabeth Islands
(h = 30 km).

All our stations exhibit
large positive residuals
(+5 to +15 sec) in relation
to the NEIS solution.

"	21	Up	i(P) 06 13 21.9
		i	01 13 01.9
		iSKP1	01 16 13

"	21	Up	iPKP2 07 15 22.0
		Ud	iPKP2 07 15 20.1
		i	07 15 29.7

Macquarie Islands (h = N).

"	21	Up	iSgl 09 27 51.9
		Ki	iPn 09 23 44.0
			iSn 09 24 40.8

		iSgl 09 25 01.7
		Sk i 09 26 13.7
		iSgl 09 27 28.3

		Um iSn 09 25 23.3
		i 09 25 38.1
		iS* 09 25 51.7

		iSgl 09 25 56.8
		Ud iSn 09 27 20.8
		iSgl 09 28 21.5

		iSg2 09 28 36.6
		De eSgl 09 29 50
		Northwest USSR. Explosion.

"	21	Ki	iSn 09 31 53.9
		Northwest USSR. Explosion.	

(cont.)

11 09 22.5

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

1974

Apr. 21 (cont.)

Up	iSn	11 09 46.0
	i	11 10 07.7
	iSgl	11 10 19.7

micr sec

Sgl	Z'	0.1 0.7
Ki	eSn	11 10 35

iSgl		11 11 17.2
Sk	iPn	11 07 56.1

i		11 07 59.2
iPgl		11 08 03.6

iSn		11 08 35.0
i		11 08 42.2

iSgl		11 08 47.1
Um	i(Pn)	11 08 36.4

iPn		11 08 46.9
i		11 09 41.9

i		11 10 07.3
iSgl		11 10 30.5

Ud	i(Pn)	11 08 06.8
iPn		11 08 11.9

iPgl		11 08 23.4
i		11 08 45.3

iSn		11 09 06.4
i		11 09 17.5

iSgl		11 09 24.3
De	iSn	11 10 07.3

i		11 10 21.5
i		11 10 46.7

iSgl		11 10 50.6
Off coast of west Norway,		

62.5°N, 5.7°E.		
Origin time = 11 07 03.		

The appearance of double Pn (and Sn) is probably related to the detailed structure of the Moho discontinuity (for a discussion, see R. Wahlström, Seismolog. Inst., Uppsala, Rep. No. 3-75, 1975).

1974

Apr. 21 (cont.)

Formosa.

h = 200 km (Up,Ki,Um,Ud).

m = 5.5 (Up,Ki).

Up i(P) 16 40 23.5

Up iPKPl 19 29 45.5

Um iPKPl 19 29 34.2

Ud iPKPl 19 29 47.8 C

De iPKPl 19 29 58.0

Up ePKPl 23 08 26

Ki iPKPl 23 07 56.6

Um iPKPl 23 08 12.7

Ud iPKPl 23 08 26.7

Ud iP 23 19 30.5

Kurile Islands.

Intermediate depth.

Up iP 00 40 20.4

i 00 40 24.5

micr sec

Mx E 0.9 18

Mx N 3.4 19

Mx Z 2.0 14

Ki iP 00 39 53.3 C

i 00 39 57.3

micr sec

P Z' 0.1 0.8

Mx E 0.9 15

Mx N 0.9 15

Mx Z 0.5 13

Sk eP 00 40 27

Um iP 00 40 03.0 C

i 00 40 07.4

Ud iP 00 40 30.6 C

i 00 40 34.9

De iP 00 40 41.3 C

i 00 40 45.8

Eastern China (h = N).

M = 5.3 (Up,Ki).

Double P, 4.3 sec apart.

Up iP 01 50 06.9 C

Ki iP 01 50 05.9 C

Sk iP 01 50 23.2

ipP 01 50 34.4

Um iP 01 50 02.4 C

ipP 01 50 13.8

Ud iP 01 50 19.3 C

isP 01 50 36.3

De iP 01 50 18.0 C

Andaman Islands.

h = 40 km (Sk,Um,Ud).

(cont.)

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

1974							1974									
Apr.	22	Ud	iP		01	57	50.5	Apr.	22	(cont.)	Um	iSgl	09	47	13.3	
"	22	Up			micr	sec					Northwest USSR-Norway.					
			Mx	Z	0.6	21					Explosion.					
		Um	iPKP		02	24	38.8									
		De	iPKPl		02	24	49.0	"	22	Up	eSgl	12	13	25		
			Loyalty Islands	(h = 40 km).						Sk	eSgl	12	15	06		
"	22	Up	iP		02	40	33.3			Um	iSgl	12	13	41.8		
			iPcP		02	40	52.7			De	eSgl	12	14	48		
		Ki	iP		02	39	40.0			Western USSR.						
			iPcP		02	40	08.8			Explosion.						
		Ud	iP		02	40	32.0	"	22	Up	iP	12	34	26.5		
			iPcP		02	40	52.2			Ud	iP	12	34	30.5		
		De	eP		02	40	57									
			iPcP		02	41	11.5	"	22	Ki	iPn	12	54	09.3		
			Aleutian Islands	(h = 70 km).							iPgl	12	54	18.4		
"	22	Up	iP		03	25	40.9				iSn	12	54	57.9		
		Ki	iP		03	26	46.3				iSgl	12	55	13.9		
		Sk	iP		03	26	19.2			Northwest USSR-Norway.						
		Um	iP		03	26	11.4			Explosion.						
		Ud	iP		03	25	48.6 D	"	22	Ki	iSgl	14	12	58.7		
		De	iP		03	25	17.9			Sk	iSgl	14	13	01.4		
			Crete (h = 70 km).							Um	iSn	14	13	11.7		
"	22	Um	eP		04	32	59				iSgl	14	13	26.6		
		Ud	iP		04	33	24.0			Ud	iSgl	14	14	56.8		
			Aleutian Islands	(h = 45 km).						Nordland, Norway,						
										66.5°N, 13.9°E.						
"	22	Up	iP		04	41	56.3			Origin time = 14 11 28.						
		Ki	iP		04	41	03.0			Explosion.						
		Sk	iP		04	41	34.3	"	22	Up	iSn	14	19	10.1		
		Um	iP		04	41	29.8				iSgl	14	19	23.6		
		Ud	iP		04	41	55.4			Ki	eSgl	14	21	49		
		De	iP		04	42	18.4			Sk	iSgl	14	21	13.5		
			Aleutian Islands	(h = 30 km).						i	14	21	19.5			
"	22	Up	eSgl		08	24	06			Um	iSgl	14	19	57.6		
		Ki	iPgl		08	21	28.4			Ud	iSn	14	19	58.8		
			i		08	21	50.5				iSgl	14	20	24.6		
			iSgl		08	22	05.5			De	iSgl	14	20	52.1		
		Sk	iPgl		08	21	31.2			Esthonia.						
			iSgl		08	22	12.0			Explosion.						
		Um	iPgl		08	21	44.4	"	22	Ki	iP	15	37	40.8		
			iSn		08	22	19.5			Ud	iP	15	36	57.2		
			iSgl		08	22	33.7			i	15	37	05.2			
		Ud	iSgl		08	23	59.9			De	iP	15	36	56.1		
			Nordland, Norway,							North Atlantic Ocean						
			66.5°N, 14.4°E.							(h = N).						
			Origin time = 08 20 40.													
			Explosion.					"	22	Ud	iSgl	15	39	41.7		
"	22	Ki	ePn		09	44	40				De	iPgl	15	38	15.7	
			iSn		09	45	26.5				iSgl	15	38	40.2		
			iSgl		09	45	41.8				iRg	15	38	50.9		
			(cont.)								Origin time = 15 37 44.					

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

1974				1974			
Apr.	22	Ki	iP	16 09 54.0	Apr.	23	(cont.)
		Kurile Islands.				Um	i 17 49 52.1
"	22	Up	iP 18 03 22.0			Ud	iP 17 49 22.0
		Sk	iP 18 04 04.0			Atlantic Ocean (h = N).	
		Um	iP 18 04 01.5	"	23	Um	iP 18 55 42.4
		Ud	iP 18 03 28.9			Ud	iP 18 55 10.6
		De	iP 18 02 53.0			i	18 55 17.4
		Greece (h = 70 km).				De	i(P) 18 55 16.2
"	22	Up	iP 19 15 29.1	"	23	Ki	iP 19 35 54.3
		Ki	iP 19 14 48.0			Um	iP 19 35 31.4
		Um	iP 19 15 05.9			Ud	iP 19 35 33.7
		Ud	iP 19 15 36.2			De	iP 19 35 17.2
		Japan (h = 70 km).				Iran (h = N).	
"	22	Up	iP 20 59 51.1	"	23	Up	i(P) 19 57 12.3
		Ki	iP 20 59 14.8				
		Um	iP 20 59 29.5	"	24	Ud	iPKP 01 27 28.1
		Ud	iP 20 59 58.4			De	iPKP 01 27 35.8
		Japan (h = 60 km).				Tonga Islands (h = 310 km).	
"	23	Up	i 08 02 00.4	"	24	Up	iP 03 05 16.7
		i(Sgl)	08 02 31.4			Ki	iP 03 05 43.2
		Sk	i 08 04 05.3			i	03 05 49.4
		De	e 08 03 02			Sk	eP 03 05 48
"	23	Um	iPKPl 08 41 26.2			Um	iP 03 05 24.0
		Ud	iPKPl 08 41 39.5			i	03 05 34.7
		De	iPKPl 08 41 53.5			Ud	iP 03 05 25.3
		Kermadec Islands (h = N).				i	03 05 30.6
"	23	Sk	iP 11 53 47.2			De	iP 03 05 10.3
		Guatemala-Mexico (h = 180 km).				i	03 05 15.9
"	23	Um	iSgl 11 54 54.8	"	24	Um	iP 07 00 40.1
		Estonia.					
		Explosion.		"	24	Um	iP 07 01 19.4
"	23	Up	iP 12 03 23.6	"	24	Up	iP 09 22 11.5 C
		Sk	eP 12 03 18			Ki	iP 09 22 03.3
		Um	iP 12 03 02.1			Um	iP 09 21 58.8 C
		Ud	iP 12 03 31.4			Ud	iP 09 22 20.5
		De	iP 12 03 46.2			De	iP 09 22 22.1 C
		Japan (h = 60 km).				Sumbawa Island (h = 70 km).	
"	23	Sk	i(P) 12 04 41.5	"	24	Um	iSgl 12 16 56.7
"	23	Um	iSgl 12 49 16.2			Western USSR.	
		i	12 49 21.9			Explosion.	
		Western USSR.		"	25	Um	iP 00 07 07.7
		Explosion.				Ud	iP 00 07 34.9
"	23	Up	iP 17 49 23.9			Kurile Islands (h = 60 km).	
		Ki	eP 17 49 55	"	25	Ki	iP 00 14 40.1
		Um	eP 17 49 38				micr sec
		(cont.)				P	Z' 0.1 1.0
						(cont.)	

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

1974				1974			
Apr.	25	(cont.)		Apr.	26	Um	i(P)
		Sk iP	00 14 18.8	"	26	Up i	06 39 45.7
		Um iP	00 14 14.6			iSgl	06 39 56.2
		Ud iP	00 13 55.5			Ki iSgl	06 40 40.1
		Uganda (h = N).				Sk eSgl	06 41 05
"	25	Up iP	05 19 11.1			Um iSgl	06 39 14.8
		Ki iP	05 19 47.6			De iSgl	06 41 33.3
		Um iP	05 19 27.3			Lake Ladoga region.	
		Ud iP	05 19 30.8			Explosion.	
		Iran.		"	26	Um i(P)	07 14 01.0
"	25	Ki iS*	09 38 39.6	"	26	Um i(P)	08 21 59.3
		iSgl	09 38 45.1				
		Northwest USSR.					
		Explosion.		"	26	Up eP	09 05 05
"	25	Ki iP	10 50 48.9	"	26	Up iSgl	10 02 44.4
		Ud iP	10 51 13.3			Ki i(Pn)	09 58 05.1
		Halmahera (h = 50 km).				iPn	09 58 09.1
"	25	Um iSgl	12 25 43.1			i	09 58 11.2
		Ud iSgl	12 26 28.8			iPgl	09 58 12.6
		Western USSR.				iSn	09 58 42.7
		Explosion.				iSgl	09 58 48.0
"	25	Up iSgl	13 56 30.6				micr sec
		Um iSgl	13 56 52.8			Pgl	Z' 0.1 0.5
		Western USSR.				Sn	Z' 0.4 0.3
		Explosion.				Sgl	Z' 0.7 0.5
"	25	Up iP	16 00 20.3			Sk e(Pgl)	09 59 35
		Ki iP	15 59 48.1			i	10 00 37.5
		ipP	15 59 59.8			i(S*)	10 01 01.3
		Um iP	16 00 00.6			iSgl	10 01 06.5
		Ud iP	16 00 28.4		Um	i	09 59 26.3
		ipP	16 00 38.8			iSn	10 00 06.6
		De iP	16 00 40.0			iS*	10 00 37.4
		Ryukyu Islands.				iSgl	10 00 44.9
		h = 40 km (Ki, Ud).				Ud	i
							10 02 14.1
"	25	Ud iP	16 58 30.0				iSgl
		i	16 58 38.1				10 02 51.9
		De iP	16 58 01.3				De iSgl
							10 04 39.0
						Off coast of north Norway, 70.2°N, 18.1°E.	
"	25	Ud iP	16 58 30.0			Origin time = 09 57 27.	
		i	16 58 38.1			By combination with Tromsoe and Finnish station readings.	
"	26	Up iP	00 03 48.1	"	26	Ki iSgl	10 24 44.2
"	26	Up ipP	02 29 14.7			Northwest USSR-Norway.	
		Ki iP	02 28 12.6			Explosion.	
		ipP	02 28 28.4	"	26	Ki iSn	10 33 35.6
		Sk epP	02 29 05			iSgl	10 33 57.4
		Um iP	02 28 36.0 C			Um i	10 34 32.7
		ipP	02 28 49.7			iSgl	10 34 47.7
		Ud iP	02 29 06.9 C			Northwest USSR.	
		ipP	02 29 20.3			Explosion.	
		Kurile Islands.					
		h = 50 km (Ki, Um, Ud).		"	26	Ki iSn	10 34 43.0
						(cont.)	

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

1974

Apr. 26 (cont.)

Ki	iS*	10 35 02.4
Sk	e(S*)	10 37 22
	iSg2	10 37 47.9
Um	iSn	10 35 22.7
	iSgl	10 35 57.1
Ud	iSgl	10 38 31.4
Northwest USSR.		
Explosion.		

1974

Apr. 27

Ud	iPKP1	02 27 59.5 C
"	Ki	iP 04 38 05.8
	Um	i(P) 04 38 26.0
	Ud	iP 04 39 08.9
"	Up	iSgl 06 15 12.2
	Ud	iPg1 06 14 11.1
		iSgl 06 14 32.4
Origin time = 06 13 44.		

"

26

Up	iP	12 07 12.8
Um	iP	12 07 04.8
	i	12 07 10.4
De	iP	12 07 24.6 C

"	27	Up	iSKS 06 26 01
		iS 06 27 05	
		Um	iSKS 06 26 05
		iS 06 27 07	
"	26	Sk	eSgl 13 56 19
		Um	iSgl 13 54 34.4
Lake Ladoga region.			
Explosion.			

"

26

Sk	iP	14 17 19.0
Ud	iP	14 16 46.0

"	26	Up	iPKP1 07 44 25.5 D
		iPKP1 07 44 39.7	
		iPP 07 47 40	
		i 07 55 18.1	
		micr sec	
		PKP1 Z' 1.5 1.2	
		Mx E 0.9 18	
		Mx N 1.7 19	
		Mx Z 2.2 20	
		Ki i(PKP) 07 44 03.2	
		iPKP 07 44 12.9	
		ipPKP 07 44 26.3	
		iPP 07 46 56	
		iSKP1 07 47 44	

"

26

Um	i(P)	19 13 40.8
Tanimbar Islands (h = N).		

"	26	Up	iPKP1 07 44 17.3
		iPKP 07 44 22.3	
		iPP 07 47 16.2	
		Mx Z' 0.2 1.4	
		Mx E 2.0 19	
		Mx N 1.6 17	
		Mx Z 1.9 18	
		Sk iPKP1 07 44 17.3	

"

26

Up	iP	22 36 13.3
Ud	iP	22 36 13.6
De	eP	22 35 43
Greece.		

"	26	Up	iPKP1 07 44 14.7
		iPKP 07 44 19.8	
		iPP 07 47 14.1	
		iSKP1 07 47 51	
		i 07 55 29.2	
		Um iPKP1 07 44 14.7	

"

26

Ki	iP	23 07 54.7 C
	ipP	23 08 24.3
	iPP	23 09 32.6

		Sk iP 23 08 11.1 C
		ipP 23 08 40.9
		iPP 23 10 02.4
		Um iP 23 07 43.8 C
		i 23 08 04.9
		ipP 23 08 13.3
		Ud iP 23 08 01.2 C

		ipP 23 08 30.9
		iPP 23 09 42.5
		De iP 23 07 57.3
		Hindu Kush.
		Tonga-Kermadec Islands.
		h = 45 km (Up, Ki, Ud, De).
		M = 6.0 (Up, Ki).

$h = 140 \text{ km (Ki, Sk, Um, Ud)}$.

"	27	Up	iPKP1 08 03 30.6
		(cont.)	

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

1974

Apr. 27 (cont.)

Up ipPKP1 08 03 42.0
 Ud iPKP1 08 03 32.3
 ipPKP1 08 03 43.4
 De ipPKP1 08 03 54.1
 Tonga-Kermadec Islands.
 h = 40 km (Up, Ud).
 Origin time = 07 44 00.

"

27

Up iPKP1 08 59 37.5
 i 08 59 43.9
 Sk iPKP1 08 59 32.1
 Um iPKP1 08 59 27.1 D
 Ud iPKP1 08 59 39.6 D
 i 08 59 46.4
 De ePKP 08 59 45
 Probably Tonga-Kermadec
 Islands.
 Origin time = 08 40 07.

"

27

Up iPKP1 09 05 59.3
 Ud iPKP1 09 06 00.8

"

27

Up iP 09 27 44.4
 ipP 09 28 22.2
 Ki iP 09 27 47.5
 Sk iP 09 28 07.4
 Um iP 09 27 39.6
 ipP 09 28 18.5
 Ud iP 09 28 00.4
 ipP 09 28 38.9
 Tadzhik-Sinkiang.
 h = 190 km (Up, Um, Ud).

"

27

Up iP 10 11 16.2 D
 ipP 10 11 23.8
 micr sec
 P Z' 0.1 1.0
 Ki iP 10 10 21.0 D
 ipP 10 10 27.8
 Sk iP 10 10 57.9
 Um iP 10 10 46.6
 Ud iP 10 11 19.8
 De iP 10 11 43.1
 Kamchatka.
 h = 25 km (Up, Ki).

"

27

Ud iPKP1 10 13 34.9

"

27

Up iPKP1 10 21 19.8
 Ki iPKP 10 21 09.6
 iSKP1 10 23 52.3
 Sk iSKP1 10 24 07.6
 Um iSKP1 10 24 03.0
 Ud iPKP1 10 21 21.9
 iSKP1 10 24 14.7
 (cont.)

1974

Apr. 27 (cont.)

De iPKP1 10 21 32.1
 Tonga-Kermadec Islands
 (h = 520 km).

"

27

Up iPKP1 10 30 46.0
 Ki iPKP 10 30 38.9
 Ud iPKP1 10 30 48.3

"

27

Ki iSn 12 05 53.0
 i 12 06 06.7
 iSgl 12 06 15.6
 Um iSn 12 06 37.3
 iSgl 12 07 15.6
 Northwest USSR.
 Explosion.

"

27

Um iSgl 12 20 04.8
 Western USSR.
 Explosion.

"

27

Ud iPKP1 14 39 07.3
 Up iPKP1 15 19 32.6
 Ud iPKP1 15 19 33.4
 Up iPKP1 17 31 19.2
 Ud iPKP1 17 31 50.2
 Kurile Islands (h = 80 km).

"

27

Ud iP 18 04 45.1

"

27

Up iPKP1 19 30 10.2
 Ud iPKP1 19 30 10.6

"

27

Up iPKP1 19 31 09.7
 ipPKP1 19 31 20.3
 Um iP 19 31 05.1
 Ud iPKP1 19 31 11.1
 ipPKP1 19 31 21.3

"

27

Up iPKP1 21 09 28.0
 Ud iPKP1 21 09 30.0

"

27

Up ePKP1 21 26 29
 Um iPKP1 21 26 13.2
 i 21 26 17.3

"

28

Up eP 01 00 59
 Ki iP 01 01 59.6
 Um iP 01 01 25.3
 Ud iP 01 01 11.6
 Turkey (h = N).

"

28

Ud iPKP 03 49 21.5
 Fiji Islands (h = 280 km).

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

1974

Apr.	28	Up	e	07 53 10		1974				
			iSgl	07 53 16.9		Apr.	28	Ud	iP	16 05 08.7
		Ki	iPn	07 49 02.3	"		28	Um	iP	16 26 34.7
			iSn	07 50 00.1						
			iS*	07 50 18.1	"		28	Sk	iP	16 35 39.3
		Sk	e	07 52 11				De	iP	16 34 36.2
			iSgl	07 52 48.2						Crete (h = N).
		Um	iSn	07 50 40.5	"					
			iSgl	07 51 13.4				De	iPKPl	17 19 33.7
		Ud	iSn	07 52 38.4						Loyalty Islands (h = 30 km).
			iS*	07 53 35.9	"					
			iSgl	07 54 46.7				Ud	iP	18 34 05.7
		De	iSgl	07 55 28.4	"					
		Northwest USSR. Explosion.				"	28	Up	iP	19 03 56.6
								Ki	iP	19 03 33.3
								Um	iP	19 03 41.6
		"	28	Up	iP			De	eP	19 04 14
			iPn	12 54 58.4						Formosa (h = N).
			i	12 55 23.3						
			iSn	12 56 32.5	"			Ud	iP	21 04 40.8
			i	12 56 46.3				i		21 05 01.5
			iSgl	12 57 28.3						
				micr sec						
					"			Up	iPKPl	21 34 39.2
		Ki	Sgl	Z' 0.3 0.7						
			iPn	12 53 21.7 D	"					
			i	12 53 33.3				Um	iP	23 32 11.2
				micr sec						Celebes (h = 80 km).
			Pn	Z' 1.7 0.5	"					
			i	Z' 4.2 0.5						
		Sk	iPn	12 54 13.5	"			Um	iP	00 05 20.4
			iPgl	12 54 31.0				Ud	iP	00 05 20.0
			iSn	12 55 11.2	"					
			iSgl	12 55 44.3				Up	iP	02 03 45.4
		Um	iPn	12 54 08.7 D						Hindu Kush (h = 130 km).
			i	12 54 21.7	"					
			iPgl	12 54 26.6				Um	iP	08 39 10.4
			iSn	12 55 03.8						Bonin Islands (h = 500 km).
			iSgl	12 55 36.4	"			Um	iSgl	12 24 56.1
		Ud	iPn	12 54 56.8						Western USSR.
			i	12 54 58.3						Explosion.
			i	12 55 04.7						
			i	12 55 17.3	"			Ud	iP	13 31 30.2
			iPgl	12 55 28.7						Tadzhik SSR.
			iSn	12 56 32.2						
			i	12 56 44.1	"			Um	i(Sgl)	15 36 24.7
			iSgl	12 57 28.6						
		De	iPn	12 55 45.3	"					
			iSn	12 57 52.8				Um	iP	16 26 10.8
			i	12 58 37.9				Ud	iP	16 26 21.5
			iSgl	12 59 17.6						Off coast of Oregon (h = N).
		Near coast of north Norway, 68.9°N, 17.3°E. Origin time = 12 52 54. Checked with Norwegian and Finnish station readings.				"	29	Up	iP	20 10 52.9
									ipP	20 11 01.4
									iPP	20 11 41.8
								Ki	iP	20 11 54.4 C
									(cont.)	

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

1974

Apr. 29 (cont.)

Ki		micr	sec
	P	Z'	0.1 1.0
Sk	iP		20 11 31.9 C
	ipP		20 11 40.9
Um	iP		20 11 21.3
	ipP		20 11 29.2
	iPP		20 12 36.1
Ud	iP		20 11 02.9 C
	ipP		20 11 11.0
De	iP		20 10 35.2
	ipP		20 10 43.7

Egypt.
h = 40 km (Up, Sk, Um, Ud, De).

"

29 Ki i(P)

Um	iP	21 39 36.5
Ud	iP	21 39 36.7
	i	21 40 02.3
		21 40 10.0

Mindoro (h = 150 km).

"

29 Up iP

Ki	iP	22 33 32.5
Sk	iP	22 33 34.9
	i(pP)	22 33 18.5
Um	iP	22 33 37.3
Ud	iP	22 33 36.2
De	iP	22 33 23.0 C
		22 33 25.1

Colombia (h = 90 km).

"

29 Up iP

Ki	iP	22 47 45.6
Ud	iP	22 48 30.5
De	iP	22 48 01.4
		22 47 41.7

Iran-Iraq (h = N).

"

30 Ki iP

	iPcP	01 11 14.6
Um	iP	01 12 03.2
Ud	iP	01 11 27.9
		01 12 11.8

Kurile Islands (h = 50 km).

"

30 Up iP

Ki	iP	02 38 05.4
Sk	eP	02 37 21.1
Um	iP	02 37 56
Ud	iP	02 37 40.8
		02 38 11.6

Japan (h = 50 km).

"

30 Up iP

03 06 06.5

"

30 Up eP

Ki	iP	03 33 41
Sk	iP	03 33 12.5 C
Um	iP	03 33 39.2
		03 33 23.8

(cont.)

1974

Apr. 30 (cont.)

Ud	iP	03 33 48.1
Mariana Islands (h = N).		
"	30 Ki iSn	07 29 16.2
	iSgl	07 29 39.5
Um	iSgl	07 32 10.9
		07 30 34.6
Northwest USSR.		
Explosion.		
"	30 Up iP	07 34 49.4
	ipP	07 35 01.3
Ki	iP	07 34 28.4 D
	ipP	07 34 40.1
Sk	ipP	07 35 06.6
Um	iP	07 34 35.2 D
	ipP	07 34 48.0
Ud	iP	07 34 59.0
Luzon.		
h = 45 km (Up, Ki, Um).		

"	30 Um iPKPl	08 23 24.2
"	30 Um iP	08 46 49.6
"	30 Up iSgl	11 56 41.1
	i	11 56 43.8
Ud	iPgl	11 56 34.5
	e	11 56 40
	iSgl	11 56 55.0
	iRg	11 57 01.7
De	eSgl	11 57 37
Södermanland-Närke, Sweden,		
59.2°N, 16.0°E.		
Origin time = 11 56 08.		

"	30 Ki iPn	12 31 47.0
	iPgl	12 31 56.1
	iSn	12 32 35.3
Northwest USSR-Norway.		

"	30 Ki iPn	12 38 28.6
	iPgl	12 38 36.8
	iSn	12 39 15.1
	iS*	12 39 27.8
Sk	iSgl	12 42 12.7

Um	iSgl	12 41 02.5
Ud	iSgl	12 43 33.9
Northwest USSR-Norway.		
Explosion.		

"	30 Up iSgl	12 47 59.8
	(cont.)	

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

1974

Apr. 30 (cont.)

Sk	eSgl	12 49 44
Um	i	12 48 02.8
	iSgl	12 48 14.6
Ud	iSgl	12 48 56.4
De	iSgl	12 49 21.6

Western USSR.

Explosion.

"	30	Up	iP	12 50 55.7
---	----	----	----	------------

"	30	Up	iP	14 21 53.0
		Ki	iP	14 21 36.0
		Sk	iP	14 22 12.7
		Um	iP	14 21 34.6
		De	iP	14 22 23.5

"	30	Ud	iP	16 16 16.2
---	----	----	----	------------

"	30	Um	iP	19 21 18.0
---	----	----	----	------------

"	30	Up	iPKP1	19 49 23.9
		Ud	iPKP1	19 49 24.2
		De	iPKP1	19 49 35.6 C

Fiji Islands ($h = 550$ km).

"	30	Up	iP	19 58 46.8
			ipP	19 59 01.4
		Ki	iP	19 57 52.9
			ipP	19 58 08.1
		Um	iP	19 58 19.3
			ipP	19 58 34.0
		Ud	iP	19 58 45.5
			ipP	19 59 00.2
		De	iP	19 59 09.7
			ipP	19 59 24.2

Aleutian Islands.

$h = 55$ km (Up, Ki, Um, Ud, De).

"	30	Ki	iPKP	20 14 38.0
		New Hebrides Islands		
		$(h = 160$ km).		

"	30	Up	iP	21 43 22.5
		Afghanistan-USSR ($h = 150$ km).		

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November 10, 1975

SEISMOLOGICAL INSTITUTE
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 SWEDEN

SEISMOLOGICAL BULLETIN

UPPSALA, KIRUNA, SKALSTUGAN, UMEA,

UDDDEHOLM and DELARY

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

M A Y 1 - 31, 1974

1974

May	1	Up	iP	00 42 26.5
		Ki	iP	00 41 39.3
		Sk	eP	00 42 15
		Um	iP	00 42 00.4

Kurile Islands (h = 180 km).

"	1	Up	iPKP1	05 17 29.2
			iPKP1	05 17 42.0
			micr sec	
		De	PKP1	Z' 0.2 1.0
			iPKP1	05 17 41.1
			iPKP1	05 17 54.4

Tonga-Kermadec Islands.
 h = 45 km (Up,De).

"	1	Up	iPKP1	05 37 52.0
			iPKP1	05 38 03.9
		Ud	iPKP1	05 37 53.5
			iPKP1	05 38 05.8
		De	iPKP1	05 38 03.6
			iPKP1	05 38 13.9

Tonga-Kermadec Islands.
 h = 40 km (Up,Ud,De).
 Origin time = 05 18 21.

"	1	Ud	iPKP1	05 39 53.8
"	1	Up	iP	05 59 42.5
		Um	iP	05 59 42.1
"	1	Um	iPKP	11 49 46.5
"	1	Ud	iPKP1	12 43 47.7
		De	iPKP1	12 43 57.8
"	1	Up	iPKP	13 02 37.8
		Ki	ePKP	13 02 53

(cont.)

1974

May	1	(cont.)		
		Ki	i	13 02 59.7
		Um	iPKP	13 02 46.0
		Ud	iPKP	13 02 36.0
		South Sandwich Islands (h = 35 km).		
"	1	Up	iP	15 34 40.2 D
			iPP	15 38 22.9
			P	micr sec
		De	iPKP1	Z' 0.2 0.9
			iPKP1	15 34 12.7 D
			Sk	micr sec
			iPKP1	Z' 0.5 1.0
			iPP	15 34 37.4 D
		Um	iP	15 38 16.9
			iPP	15 34 24.0 D
		Ud	iP	15 37 52.9
			iPP	15 34 46.2 D
		De	iP	15 38 33.7
			iPP	15 34 57.0 D
		Mariana Islands (h = 460 km).		
			m = 6.1 (Up,Ki).	
"	1	Ud	iP	15 51 53.0
		Greece.		
"	1	Up	iPKP1	18 54 18.3
		Ud	iPKP1	18 54 20.3 C
		De	iPKP1	18 54 30.9 C
"	1	Um	iPKP	Tonga-Kermadec Islands (h = 520 km).
"	1	Ud	iPKP1	19 32 16.3
		De	iPKP1	South Sandwich Islands (h = N).
"	1	Ki	iPKP	19 39 00.4
		Um	iPKP1	19 39 12.4

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

1974

May	1	Up	iP	22 06 43.8
		Ki	iP	22 05 49.7
		Um	iP	22 06 15.4
		Ud	iP	22 06 47.3
		De	iP	22 07 11.1

Kamchatka (h = N).

"	2	Up	iP	04 16 32.6
		Ki	eP	04 15 57
				micr sec
		Mx	E	0.7 17
		Mx	N	0.7 16
		Mx	Z	1.0 18
		Sk	iP	04 16 29.4
		Um	iP	04 16 10.9
		Ud	iP	04 16 39.4

Japan (h = 40 km).

"	2	Um	eP	05 45 35
		Ud	iP	05 46 03.9

Japan (h = N).

"	2	Up	iP	05 47 10.2
		Ki	iP	05 46 32.7
				micr sec
		Mx	E	1.2 18
		Mx	N	0.9 18
		Mx	Z	1.1 19
		Sk	iP	05 47 07.9
		Um	iP	05 46 48.6
		Ud	iP	05 47 16.8

Japan (h = 15 km).

"	2	Um	iP	06 01 38.2
---	---	----	----	------------

"	2	Up	iPKP1	07 44 08.0
		Ud	iPKP1	07 44 09.5
		De	iPKP1	07 44 23.2

"	2	Ki	iSgl	07 46 14.2
		Sk	i	07 46 17.2
			iSgl	07 46 19.9

Um iSgl 07 46 41.4

Nordland, Norway,

66.5°N, 14.1°E.

Origin time = 07 44 45.

Explosion?

"	2	Ki	iP	10 50 11.0
---	---	----	----	------------

		Um	iP	10 50 37.7
--	--	----	----	------------

		Ud	iP	10 51 03.4
--	--	----	----	------------

Aleutian Islands (h = 130 km).

"	2	Up	iP	13 21 44.4
---	---	----	----	------------

		Ki	iP	13 21 41.1
--	--	----	----	------------

(cont.)

1974

May 2 (cont.)

Um	iP	13 21 40.0	
Ud	iP	13 21 54.1	
De	iP	13 21 51.8	
Sunda Strait (h = 90 km).			
"	2	Ki i(P)	14 17 33.3
		Ud iP	14 18 19.8
		De iP	14 18 41.6
Aleutian Islands (h = 55 km).			

"	2	Ud i(P)	14 32 26.6
	2	Ud iP	15 06 25.1
	2	De iP	15 06 23.7
Tadzhik SSR.			

"	2	Up iSgl	15 20 51.2
	2	Sk iSgl	15 20 52.2
	2	Ud iSn	15 19 36.8
	2	iSgl	15 19 54.3

Southern Norway.

"	2	Up iPKP1	17 18 10.0
	2	Ud iPKP1	17 18 10.3
	2	De iPKP1	17 18 22.2
Tonga-Kermadec Islands			
(h = 170 km).			

"	2	Ud iP	17 21 09.2
	2	De iP	17 21 27.2

"	2	Up iPKP1	18 01 07.9
	2	Ud iPKP1	18 01 09.3
	2	De iPKP1	18 01 19.6

"	2	Ud iPKP1	18 26 30.4
	2	i	18 26 34.2

"	2	Up iP	21 44 17.9
		micr sec	
		Mx N	0.8 19
		Mx Z	0.7 20

Ki iP 21 43 40.1 D

Sk iP 21 44 11.7

Um iP 21 43 56.4 D

Ud iP 21 44 25.6 D

De iP 21 44 39.4

Japan (h = N).

"	2	Ud iP	21 56 33.6
Aleutian Islands (h = 45 km).			

"	2	Up iP	22 46 48.7 C
		micr sec	
		P Z'	0.1 0.9

(cont.)

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

1974				1974			
May	2	(cont.)		May	3	(cont.)	
Ki	iP	22 45 56.0 C		Ud	iP	14 09 39.2	
		micr sec			ipP	14 10 12.4	
P	Z'	0.1 0.8		De	iP	14 09 35.7	
Um	iP	22 46 20.9 C			ipP	14 10 08.0	Hindu Kush.
Ud	iP	22 46 52.2 C					h = 160 km (Up,Ud,De).
De	iP	22 47 13.0 C		"	3	Um iP	22 46 19.8
Kamchatka (h = 60 km). m = 5.9 (Up,Ki).				Japan (h = N).			
"	2	Up iPKP1	23 13 12.4	"	3	Um iP	22 51 44.0
		i	23 13 19.5		Ud iP	22 52 12.1	
Ud	iPKP1	23 13 14.0					Japan (h = 15 km).
		i	23 13 21.8	"	4	Up ePKP1	05 23 50
De	iPKP1	23 13 24.2 C				i	05 24 00.7
		i	23 13 28.3		Ud iPKP1	05 23 52.4	
"	3	Um iPKP1	00 18 48.4			i	05 24 01.7
"	3	Um iP	01 48 25.3	"	4	Up iPKP1	05 25 06.4
"	3	Ud iP	04 55 54.9		Ud iPKP1	05 25 08.5	
"	3	Ki iP	08 09 14.1	"	4	Up iP	08 12 34.2
		Guatemala (h = 55 km).			Ki iP	08 11 41.0	
"	3	Ud iP	11 38 42.7			i	08 11 49.2
		Luzon (h = 45 km).			Sk iP	08 12 08.2	
"	3	Um iSgl	12 18 26.4			i	08 12 16.5
		Western USSR-Finland. Explosion.			Um iP	08 12 08.7	
"	3	Up iPKP	12 37 26.3			i	08 12 16.6
		i	12 37 28.7		Ud iP	08 12 32.0	
Ki	iPKP	12 37 12.8			i	08 12 39.3	
		i	12 37 14.6		De iP	08 12 54.2	
Sk	ePKP	12 37 24			i	08 13 03.4	
		i	12 37 25.6	"	Ki iP	08 56 46.3	
Um	iPKP	12 37 18.9			i	08 56 54.5	
		i	12 37 20.9		Sk iP	08 57 13.2	
Ud	iPKP	12 37 28.7			Ud iP	08 57 37.3	
		i	12 37 30.7				Kodiak Island (h = 2 km).
De	iPKP	12 37 35.8		"	4	Sk iP	09 19 20.5
		i	12 37 37.5				Kodiak Island (h = 70 km).
New Hebrides Islands (h = 50 km).				"	4	Up iPKP1	09 28 29.5 D
Double PKP, smaller and larger, in average 2.0 sec apart.						iSKP1	09 31 22.3
"	3	Up iP	14 09 23.7				micr sec
		ipP	14 09 54.8			PKP1	Z' 0.2 0.8
Ki	eP	14 09 35				SKP1	Z' 0.1 1.0
		(cont.)				Ki iPKP	09 28 10.5
						iSKP1	09 31 00.6
						(cont.)	

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

1974		1974		
May	4	(cont.)	May	4
Ki		micr sec	De	iP 15 19 07.3
Sk	SKP1	Z' 0.1 0.9	Algeria (h = N).	
Um	iPKP1	09 28 21.9	" 4	Ki iP 18 06 54.5
	iSKP1	09 31 17.0		ipP 18 07 04.2
Ud	iPKP1	09 28 17.5		micr sec
	iSKP1	09 31 10.9		Z' 0.2 1.7
De	iPKP	09 28 39.9	Sk iP 18 06 42.8	
	iPKP1	09 28 42.3 D		ipP 18 06 52.7
Tonga-Kermadec Islands			Um iP 18 06 59.0	
(h = 550 km).				ipP 18 07 08.1
" 4	Ud eP 11 04 13		Ud iP 18 06 47.9 C	
Japan (h = 60 km).				ipP 18 06 57.1
" 4	Ki iSn 12 20 54.1		Panama.	
	iSgl 12 21 13.7			
Um	iSn 12 21 45.8		h = 35 km (Ki, Sk, Um, Ud).	
	iSgl 12 22 19.2			
Northwest USSR.				
Explosion.				
" 4	Um iSgl 12 43 49.4		Ud iP 19 15 07.3	
Western USSR.			Pamir.	
Explosion.				
" 4	Up i(PKP) 13 05 21.8			
	iPKP 13 05 31.5			
	iSKP1 13 08 04.5			
	iPKS1 13 08 58			
	micr sec			
	PKP Z' 0.1 0.9			
	SKP1 Z' 0.1 1.1			
Ki	iPKP 13 05 17.0			
	micr sec			
	PKP Z' 0.3 0.9			
Sk	i(PKP) 13 05 19.6			
	iPKP 13 05 28.3			
	i(SKP1) 13 07 47.3			
	iSKP1 13 07 52.7			
Um	i(PKP) 13 05 09.6			
	i(PKP) 13 05 17.6			
	iPKP 13 05 23.8			
	iPP 13 07 27			
	iSKP1 13 07 41.8			
	iPKS1 13 08 39			
Ud	i(PKP) 13 05 21.0			
	iPKP 13 05 33.2			
	iSKP1 13 08 05.7			
De	i(PKP) 13 05 27.2			
	iPKP 13 05 40.4			
	iSKP1 13 08 16.9			
New Hebrides Islands				
(h = 600 km).				
Very clear examples of PKP precursors, denoted (PKP).				
" 4	Ki iP 23 57 13.4			
	ipP 23 57 25.5			
	Um eP 23 57 21			
	Ud iP 23 57 39.0			
	ipP 23 57 51.2			
Mindanao.				
h = 45 km (Ki, Ud).				

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

1974							1974								
May	5	Um	iP	00	15	39.8	May	5	Up	iSgl	12	28	12.0		
		Ud	iP	00	15	58.6			Um	iSgl	12	28	28.1		
Afghanistan-USSR (h = 150 km).															
"	5	Up	iP	06	09	30.0	"	5	Um	iP	13	14	04.6		
				micr	sec										
		P	Z'	0.1	0.8										
		Mx	E	1.0	17										
		Mx	N	1.1	16	"	5	Up	iSgl	13	58	09.3			
		Mx	Z	1.8	19			Um	iSgl	13	58	30.9			
		Ki	iP	06	09	06.7			Ud	iSgl	13	59	13.3		
				micr	sec										
		P	Z'	0.2	1.0										
		Mx	E	0.9	15	"	5	Up	iP	14	30	33.7 C			
		Mx	N	0.8	17				ipP	14	30	45.1			
		Mx	Z	0.7	14					micr	sec				
		Sk	iP	06	09	34.5				P	Z'	0.2	1.2		
		Um	iP	06	09	15.0				Mx	E	0.7	18		
		Ud	iP	06	09	40.1				Mx	N	0.8	18		
		De	iP	06	09	47.9				Mx	Z	0.8	19		
		Formosa (h = 25 km).													
		m = 6.1, M = 5.4 (Up,Ki).													
"	5	De	eP	06	14	14			Ki		micr	sec			
		Algeria (h = 30 km).													
"	5	Up		micr	sec				Mx	E	1.2	16			
			Mx	E	0.9	22			Mx	N	0.7	18			
			Mx	N	1.2	22			Mx	Z	1.0	17			
			Mx	Z	1.4	20			Sk	iP	14	30	27.2 C		
		Ki	iPKP	08	36	52.2				ipP	14	30	39.2		
				micr	sec				Um	iP	14	30	11.6 C		
			Mx	E	0.8	19			Ud	iP	14	30	41.0 C		
			Mx	N	1.0	21				ipP	14	30	52.4		
			Mx	Z	1.0	21			De	iP	14	30	56.1 C		
			Sk	iPKP	08	37	04.3	"	5	Ud	iP	16	38	30.5	
			Um	iPKP	08	36	57.6								
			Ud	iPKP	08	37	08.3								
		New Hebrides Islands (h = N).													
		M = 5.7 (Up,Ki).													
"	5	Up	iSn	10	24	20.6	"	5	Up	iP	19	21	19.6		
			iSgl	10	24	32.9				ipCp	19	21	45.9		
			Sk	eSgl	10	26	26			ipP	19	21	54.6		
			Um	iSgl	10	25	06.6			Sk	iP	19	21	09.0	
			Ud	iSgl	10	25	37.0				ipCp	19	21	39.5	
		Esthonia. Explosion.													
		Kurile Islands. h = 140 km (Up,Um,Ud).													
"	5	Up	iPKP	11	46	33.1	"	5	Up	ePgl	19	41	41		
			Um	iPKP	11	46	24.7			iSgl	19	42	34.0		
			Ud	iPKP	11	46	34.0			i	19	42	41.7		
		New Hebrides Islands (h = 600 km).													
		(cont.)													
										Sk	eSgl	19	43	09	
											i	19	43	19.6	
										Um	iSgl	19	44	13.0	

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

1974				1974			
May	5	(cont.)		May	6	Sk	iSgl
		Ud iPg1	19 41 08.9			Um iSgl	12 14 42.9
		iSgl	19 41 42.8			iRg	12 13 46.3
		i	19 41 50.6			Ud iSgl	12 13 56.4
		De iSn	19 41 46.5			Western USSR.	
		iSgl	19 41 54.3			Explosion.	
		Skagerrak, 58.4°N, 10.1°E.					
		Origin time = 19 40 25.		"	6	Ki iP	13 53 44.5
"	6	Ud iP	01 16 24.4			Sk iP	13 54 10.5
"		Nepal (h = N).				Ud iP	13 54 07.5
"	6	Ud iP	06 36 36.5	"	6	Ki iP	22 41 36.1
"		Mindanao (h = 90 km).				Sk iP	22 42 10.6
"	6	Ki eP	10 38 35			Um iP	22 41 49.6
"		Um iP	10 38 42.8			Northeast China (h = N).	
"		Ud iP	10 38 54.6	"	6	Ki iP	22 45 33.2
"		Talaud Islands (h = 40 km).				Sk iP	22 46 07.0
"	6	Up iP	10 44 49.0			Um iP	22 45 45.4
"		micr sec				Northeast China (h = N).	
"		Mx E	0.8 17	"	7	Up i(PKPl)	00 02 45.2
"		Mx N	2.0 22			Um iPKPl	00 02 26.6
"		Mx Z	1.5 18			Ud iPKPl	00 02 39.4
"		Ki iP	10 44 50.1 C	"	7	Ki iP	01 56 17.4
"		micr sec				Sk iP	01 56 45.5
"		Mx E	1.8 18			Um iP	01 56 26.4
"		Mx N	1.4 20			Ud iP	01 56 51.4
"		Mx Z	1.5 18			Formosa (h = 35 km).	
"		Sk iP	10 45 04.5 C				
"		Um iP	10 44 46.1	"	7	Ki iP	02 44 14.2
"		Ud iP	10 44 59.7			Um iP	02 44 21.3
"		De iP	10 44 57.4 C			Ud iP	02 44 29.6
"		Sumatra (h = N).				Fiji Islands (h = N).	
"		M = 5.6 (Up,Ki).					
"		Surface waves (Mx) mixed with those of the preceding earthquake.		"	7	Up iP	03 15 41.3
"		micr sec				Mx E	1.9 20
"	6	Up iSn	11 23 59.2			Mx N	3.6 20
"		iSgl	11 24 11.0			Mx Z	13 24
"		Ki iSgl	11 26 46.4		Ki iP	03 16 02.5	
"		Sk iSgl	11 26 03.0		micr sec		
"		Um iSgl	11 24 46.0		Mx E	3.0 19	
"		Ud iSgl	11 25 14.6		Mx N	5.9 21	
"		De iSgl	11 25 39.1		Mx Z	4.7 20	
"		Esthonia.			Sk eP	03 15 33	
"		Explosion.			Um iP	03 15 56.8	
"	6	Ki iP	11 57 23.5		Ud iP	03 15 24.5	
"		Um iP	11 57 28.6		i	03 15 28.2	
"		Tonga Islands (h = 15 km).			North Atlantic Ocean (h = N).		
"		M = 5.8 (Up,Ki).			Surface waves (Mx) mixed with those of the preceding earthquake.		

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

1974				1974				
May	7	Um	iPKP1	03 49 22.0	May	8	(cont.)	
"	7	Ki	iPgl	09 04 56.6			Ud iPP 11 12 44.4	
			iSn	09 05 34.3			Okhotsk Sea (h = 450 km).	
			iS*	09 05 47.2	"	8	Up iSgl 11 27 10.5	
		Sk	eSgl	09 08 35			Ki iPn 11 22 54.6	
		Um	iSgl	09 07 19.1			iSn 11 23 53.4	
		Northwest USSR-Norway. Explosion.					iSgl 11 24 17.7	
"	7	Um	iP	12 07 22.1			Sk iSn 11 25 47.5	
			Panama (h = N).				iSgl 11 26 41.6	
"	7	Ud	iP	12 19 06.1			Um iSn 11 24 34.0	
			Samar (h = 100 km).				i 11 24 47.9	
"	7	Sk	eSgl	12 24 43			iSgl 11 25 06.9	
		Um	iSgl	12 23 16.0			Ud iSn 11 26 34.5	
		Ud	iSgl	12 23 58.8			iSgl 11 27 42.9	
		Western USSR. Explosion.					De iSgl 11 29 17.2	
"	7	Ki	iSgl	13 05 00.4			Northwest USSR. Explosion.	
		Um	iSgl	13 02 55.9			iPKP 11 39 02.8	
		Estonia. Explosion.					ipPKP 11 39 18.1	
"	7	Up	iSgl	14 38 35.8			Ki iPKP 11 39 17.1	
		Um	iSgl	14 39 10.9			ipPKP 11 39 33.4	
		Ud	eSgl	14 39 36			Sk iPKP 11 39 10.1	
		Estonia. Explosion.					ipPKP 11 39 26.0	
"	7	Um	i(Sgl)	13 14 18.9			Um iPKP 11 39 10.3	
"	7	Up	iSgl	14 38 35.8			ipPKP 11 39 25.9	
		Um	iSgl	14 39 10.9			Ud iPKP 11 39 01.3	
		Ud	eSgl	14 39 36			ipPKP 11 39 17.4	
		South Sandwich Islands. h = 55 km (Up,Ki,Sk,Um,Ud).						
"	7	Ud	iP	18 58 11.6	"	8	Ud iPKP 12 10 39.4	
"	7	Ki	iP	21 13 47.7			Fiji Islands (h = 630 km).	
		Ud	iP	21 14 39.2				
		Kurile Islands (h = N).						
"	8	Ki	iP	04 35 58.8	"	8	Ki iPn 12 32 20.0	
		Sk	iP	04 36 31.9			iSn 12 33 08.2	
		Alaska (h = 10 km).					iSgl 12 33 24.2	
"	8	Up	iP	08 02 37.7			Northwest USSR-Norway. Explosion.	
		Ki	iP	08 03 11.8				
		Sk	iP	08 03 08.9			Um iSgl 12 35 19.9	
		Um	iP	08 02 51.1			Northwest USSR-Norway. Explosion.	
		Arabian Sea (h = N).						
"	8	Ud	iP	09 04 21.9	"	8	Up iSgl 12 44 32.5	
		Japan (h = 80 km).					Ki iSgl 12 46 45.7	
"	8	Up	iP	11 09 48.4			Sk eSgl 12 46 21	
		Ki	iP	11 09 02.4			Um iSgl 12 44 57.3	
		Ud	iP	11 09 54.7			De iSgl 12 46 05.0	
		(cont.).					Western USSR. Explosion.	

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

1974				1974					
May	8	Ki	iP	15 24 47.4	May	8	(cont.)		
		Um	iP	15 25 11.9			Ki		
		Ud	iP	15 25 44.6			P3 Z' 0.2 0.9		
"	8	Ki	i(P)	16 10 28.0			P4 Z' 0.4 1.7		
		Sk	i(P)	16 10 29.8			PP Z' 1.0 2.3		
"	8	Ki	iP	16 44 46.1			Mx E 100 20		
		Mindanao (h = 45 km).					Mx N 120 19		
"	8	Ki	iSgl	20 38 36.4			Mx Z 36 17		
		Sk	is*	20 38 39.6			Sk iP1 23 44 59.7		
			iSgl	20 38 44.0			iP2 23 45 01.2		
		Um	iPg1	20 38 15.6			iP3 23 45 04.2		
			iSn	20 38 50.0			iP4 23 45 22.3		
			iSgl	20 39 03.3			iPP 23 47 47.2		
		Nordland, Norway, 66.4° N, 14.5° E.					Um iP1 23 44 42.4		
		Origin time = 20 37 13. Explosion.					iP2 23 44 43.9		
"	8	Up	eP	22 17 31			iP3 23 44 47.1		
		Ud	iP	22 17 45.7			iP4 23 45 05.5		
		De	iP	22 17 44.7			iPP 23 47 14.6		
"	8	Up	iP	22 36 12.1			Ud iP1 23 45 11.1		
		Ki	iP	22 35 56.2			iP2 23 45 12.6		
		Sk	iP	22 36 17.0			iP3 23 45 15.8		
		Um	iP	22 36 01.3			iP4 23 45 34.6		
		Ud	iP	22 36 20.2			De iP1 23 45 25.4		
			ipP	22 36 41.4			iP2 23 45 26.5		
		De	iP	22 36 25.9			iP3 23 45 29.2		
		Molucca Passage. h = 80 km (Ud).					iP4 23 45 48.0		
"	8	Up	iP1	23 45 03.3			iPP 23 48 15.6		
			✓ iP2	23 45 04.9	"	Ki	iP 23 50 04.5		
			iP3	23 45 08.1		Um	iP 23 50 16.3		
			iP4	23 45 26.9		Japan (h = 2 km). m = 6.3 (P3), 6.6 (P4), M = 7.2 (Up, Ki).			
			iPP	23 47 53.1		Multiple onsets (in average P2-P1 = 1.4 sec, P3-P1 = 4.4 sec, P4-P1 = 22.9 sec): multiple event, alternatively some depth phase (pP).			
			iS	23 54 35					
				micr sec					
			P2	Z' 0.1 0.8					
			P3	Z' 0.3 1.2					
			P4	Z' 1.2 1.7	"	Ud	iP 03 04 13.6 D		
			PP	Z' 0.8 2.2			i 03 04 37.8		
			Mx	E 35 17					
			Mx	N 71 15					
			Mx	Z 47 16					
		Ki	iP1	23 44 27.6					
			iP2	23 44 28.8					
			✓ iP3	23 44 31.4					
			- iP4	23 44 49.7	"	Up	iPKP1 05 35 20.4		
			iPP	23 46 53.4		Sk	iPKP1 05 35 13.1		
			iS	23 53 22		Um	iPKP1 05 35 07.2		
		(cont.)				Ud	iPKP1 05 35 21.7		
						De	iPKP1 05 35 29.8		
							i 05 35 43.9		
						Kermadec Islands.			
						"	Ki	iP 05 35 19.9	
							ipP	05 35 30.4	
							Sk	eP 05 35 55	
							Um	iP 05 35 45.3	
							(cont.)		

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

1974

May 9 (cont.)
 Ud iP 05 36 16.8
 ipP 05 36 28.7
 Kamchatka.
 h = 40 km (Ki, Ud).

" 9 Um iP 06 07 00.5
 South of Java (h = N).

" 9 Up iPgI 09 30 49.5
 iSgl 09 31 08.9
 iRg 09 31 14.8
 Sk e 09 33 01
 iSgl 09 33 24.6
 Um iSgl 09 33 00.6
 Ud iPgl 09 31 19.1
 iSn 09 31 54.9
 De iSgl 09 32 23.7
 Baltic Sea, 58.8°N, 19.4°E.
 Origin time = 09 30 25.
 Explosion?

" 9 Ki iP 09 44 50.1
 Sk iP 09 44 31.2
 Um iP 09 44 52.2
 Mona Passage (h = 30 km).

" 9 Um iSgl 12 19 41.2
 Western USSR-Finland.
 Explosion.

" 9 Up iPKP1 13 40 50.7
 Ud iPKP1 13 40 52.2
 i 13 40 57.9
 i 13 41 05.6
 De iPKP1 13 41 02.0
 i 13 41 15.8

" 9 Up micr sec
 Mx E 1.2 20
 Mx N 1.9 21
 Mx Z 2.4 20
 Ki iP 13 40 59.6
 i 13 41 10.6
 micr sec

P Z' 0.1 1.0
 Mx E 1.5 18
 Mx N 0.8 19
 Mx Z 1.2 16
 Sk eP 13 41 19
 Um iP 13 41 04.5
 i 13 41 12.3
 iSKS 13 51 30
 iS 13 52 14
 (cont.)

1974

May 9 (cont.)
 Ud iP 13 41 23.3
 i 13 41 32.9
 Molucca Passage (h = 20 km).
 M = 5.6 (Up, Ki).

" 9 Ki iP 13 44 17.2
 Sk iP 13 44 36.2
 Ud iP 13 44 35.9

" 9 Up iPKP 16 27 00.7
 Ki iPKP 16 26 46.9
 Sk iPKP 16 27 00.3
 Um iPKP 16 26 55.6
 Ud iPKP 16 27 02.2
 De iPKP 16 27 12.1
 Loyalty Islands (h = 35 km).

" 9 Up iP 17 07 37.0
 Ki iP 17 08 44.9
 Sk iP 17 08 23.3
 Ud iP 17 07 47.3
 i 17 07 51.4
 De iP 17 07 19.7
 Dodecanese Islands (h = N).

" 9 Ud iP 18 33 50.1

" 9 Sk i(P) 19 15 42.3
 " 10 Up iSKS 00 21 32
 iSP 00 24 27
 micr sec
 Mx E 3.8 18
 Mx N 2.9 20
 Mx Z 6.0 21

Ki iPKP 00 15 17.2
 i 00 15 23.1
 micr sec
 Mx E 3.3 19
 Mx N 4.6 20
 Mx Z 3.8 18

Um iPKP 00 15 06.2
 iSKS 00 21 46
 iSP 00 25 14
 Ud iPP 00 15 19.4
 Prince Edward Island (h = N).
 M = 6.2 (Up, Ki).

" 10 Ud iP 01 51 55.1

" 10 Up iPKP 02 23 00.5 C
 iPKP1 02 23 05.1 D
 (cont.)

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

1974				1974			
May	10	(cont.)		May	10	Up	
Up	iPKP2	02 23 10.3				i(PP)	08 30 49.4
		micr sec				iPP	08 30 57.6
	PKP1	Z' 0.3 0.9				iSP	08 40 13
	PKP2	Z' 0.4 0.8				PP	micr sec
Ki	iPKP1	02 22 41.4				Z' 0.1 1.3	
	i	02 22 50.2				Mx	E 0.8 17
		micr sec				Mx	N 1.2 22
	PKP1	Z' 0.1 1.0				Mx	Z 3.8 23
Sk	iPKP	02 22 57.2 C		Ki	iP	08 26 14.0	
	iPKP1	02 22 59.1 D			i(PP)	08 30 26.7	
Um	iPKP1	02 22 53.3 D			iPP	08 30 37.7	
Ud	iPKP	02 23 01.8 C			P	micr sec	
	iPKP1	02 23 07.0 D			Z' 0.1 1.3		
	iPKP2	02 23 13.1 C			PP	Z' 0.1 1.3	
De	iPKP	02 23 06.2 C			Mx	E 3.7 21	
	iPKP1	02 23 14.9 D			Mx	N 3.4 22	
	iPKP2	02 23 26.6 C			Mx	Z 3.4 19	
	Kermadec Islands (h = 230 km).				Sk	iP	08 26 09.1
	The clear distribution of C					i(PP)	08 30 23.1
	and D (PKP C, PKP1 D, PKP2 C)					iPP	08 30 27.2
	suggests an interesting effect				Um	iP	08 26 22.5
	of source mechanism.					i(PP)	08 30 33.3
"	10	Up	05 37 27.0			ePP	08 30 56
		ipP	05 37 36.2			Ud	i(PP)
			micr sec				08 30 32.8
		Mx	E 0.7 15			iPP	08 30 42.3
		Mx	N 0.4 12		"	Um	Eastern Pacific Ocean (h = N).
		Mx	Z 1.0 15			iSgl	12 18 29.5
		Ki	iP	05 36 57.5 C			Western USSR-Finland.
			ipP	05 37 06.6			Explosion.
				micr sec	"	Up	13 53 52.1
			Mx	E 0.5 13		iPP	13 55 14.0
			Mx	N 0.7 17		Ki	13 54 26.4
			Mx	Z 0.5 13		iPn	13 55 44.6
		Sk	iP	05 37 26.5		iPP	13 55 56.7
			ipP	05 37 36.8		Ud	13 54 08.5
		Um	iP	05 37 09.2 C		i	13 54 13.7
			ipP	05 37 18.3		De	eP
		Ud	iP	05 37 35.2			13 53 57
			ipP	05 37 45.6			Iran (h = 70 km).
	Ryukyu Islands.				"	Um	18 08 58.5
	h = 35 km (Up, Ki, Sk, Um, Ud).					iP	18 09 23.2
	M = 5.3 (Up, Ki).					De	18 09 45.7
"	10	Um	06 30 56.1		"	10	Up
		ipP	06 31 20.2			Up	iPl
		Ud	iP	06 31 27.0			✓IP2
		De	iP	06 31 42.3			IP3
	Japan.						IP4
	h = 100 km (Um).						iS
"	10	Um	07 54 41.7				19 44 25
	South of Japan (h = 380 km).						micr sec
						/P2	Z' 0.1 0.9
						P3	Z' 0.2 0.6
						P4	Z' 1.1 1.3
						(cont.)	

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

1974				1974			
May	10	(cont.)		May	11	(cont.)	
		Up	micr sec			Ki	00 56 59.8
		Mx	E 15 18			i	00 57 03.0
		Mx	N 75 21			iSKS	01 07 34
		Mx	Z 30 14			iS	01 08 06
		Ki	ip2 19 35 34.3			micr sec	
		✓ ip3	19 35 36.5			P Z' 0.1 1.2	
		ip4	19 35 43.7			i Z' 0.6 1.3	
		iS	19 43 57			Mx E 10 25	
			micr sec			Mx N 5.3 18	
		✓ P3	Z' 0.4 0.9			Mx Z 9.2 24	
		P4	Z' 0.5 1.0			Sk iP 00 57 20.4	
		Mx	E 55 13			i 00 57 23.5	
		Mx	N 180 21			Um iP 00 57 04.8	
		Mx	Z 40 12			i 00 57 08.1	
		Sk	ip2 19 36 00.8			iSKS 01 07 40	
		ip3	19 36 03.4			iS 01 08 16	
		ip4	19 36 10.5			Ud iP 00 57 24.2	
		Um	ip2 19 35 38.2			i 00 57 27.2	
		ip3	19 35 40.5			i(PP) 01 00 32.8	
		ip4	19 35 47.7			De eP 00 57 30	
		iS	19 44 04			i(PP) 01 00 59.9	
		Ud	ip1 19 36 02.1			Molucca Passage (h = N).	
		ip2	19 36 03.1			m = 6.6, M = 6.3 (Up,Ki).	
		ip3	19 36 05.4			Double P, in average 3.2 sec apart.	
		ip4	19 36 14.0			Clear cases of early PP, denoted (PP).	
		iS	19 44 55.8		" 11	Up iPP 01 14 24.9	
		De	ip2 19 36 10.4			Ki iP 01 10 10.6	
		ip3	19 36 13.4			iPP 01 14 04.3	
		ip4	19 36 20.4			micr sec	
		Szechwan, China (h = 10 km). m = 6.6 (P3), 6.8 (P4), M = 7.0 (Up,Ki).				P Z' 0.1 1.4	
		Multiple onsets (in average P2-P1 = 1.2 sec, P3-P1 = 3.6 sec, P4-P1 = 11.1 sec); ~f May 8 at 23 45.				Sk iP 01 10 34.4	
"	10	Up	iP 19 44 48.2			i(PP) 01 13 52.0	
"	10	Um	iP 19 44 36.2			i 01 14 17.4	
"	10	Szechwan, China.				Um iP 01 10 15.4	
"	10	Up	eP 19 48 16			iPP 01 14 01.5	
"	10	Um	iP 19 48 06.6			Ud iP 01 10 34.6	
"	10	Ud	iP 19 48 29.9			i(PP) 01 13 48.3	
"	11	✓ Up	eP 00 57 15			i 01 14 16.4	
"	11	i	00 57 18.1			Molucca Passage (h = N).	
"	11	i(PP)	01 00 35.1			Up iP 02 37 50.7	
"	11	iSKS	01 07 50			i 02 38 04.1	
"	11	iS	01 08 33			Ki iP 02 37 49.6	
"	11		micr sec			Um iP 02 37 47.7	
"	11	P	Z' 0.1 1.1			i 02 38 01.6	
"	11	Mx	E 4.7 22			Ud iP 02 37 59.9	
"	11	Mx	N 3.8 23			Sunda Strait (h = 90 km).	
"	11	Mx	Z 9.8 23			Interpreting the second, clear phase at Up,Um as pP yields h = 50 km only.	
		(cont.)				" 11	Up iP 03 27 10.4
						Ki iP 03 26 53.4	
						(cont.)	

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

1974

May 11 (cont.)
 Ud iP 03 27 18.7
 Talaud Islands (h = N).

" 11 Up eP 05 39 29
 Um iP 05 39 17.1
 Ud iP 05 39 40.9
 Szechwan, China (h = N).

" 11 Up iP 06 27 12.0
 i 06 27 29.7
 iPP 06 30 48.2
 micr sec
 P Z' 0.6 1.0
 PP Z' 0.1 1.0
 Mx E 2.3 20
 Mx N 3.4 19
 Mx Z 4.3 21
 Ki iP 06 26 43.0
 i 06 26 59.9

micr sec
 P Z' 0.8 1.1
 Mx E 6.1 21
 Mx N 5.2 19
 Mx Z 7.1 20
 Sk iP 06 27 09.1
 iPP 06 30 40.3
 Um iP 06 26 55.4
 i 06 27 13.0
 iS 06 37 36
 Ud iP 06 27 17.8
 De iP 06 27 30.1
 i 06 27 46.8
 iPP 06 31 17.8
 Mariana Islands (h = 6 km).
 m = 6.8, M = 6.0 (Up,Ki).
 After in average 17.2 sec,
 P is followed by another
 clear onset (Up,Ki,Um,De).

" 11 Up eP 09 22 04
 Ki iP 09 21 47.0
 Sk eP 09 21 12
 Um iP 09 21 58.0
 Ud iP 09 21 37.1
 Iceland (h = 15 km).

" 11 Up iP 09 49 47.7
 Ki iP 09 49 34.9
 Szechwan, China (h = N).

" 11 Ki iPn 10 18 55.3
 iSn 10 19 49.8
 Um iSgl 10 21 39.0
 Northwest USSR-Norway.
 Explosion.

1974

May 11 Up iP 10 42 53.8
 Ud iP 10 43 06.5

" 11 Up ePKP 13 19 50
 micr sec
 Mx E 1.0 21
 Mx N 1.3 23
 Mx Z 2.0 19

Ki iPKP 13 20 07.4
 i 13 20 11.8

micr sec
 PKP Z' 0.2 1.6
 Mx E 1.5 18
 Mx N 1.8 20
 Mx Z 1.9 18

Sk ePKP 13 19 53
 Um ePKP 13 20 03

South Atlantic Ocean (h = N).
 M = 5.8 (Up,Ki).

" 11 Up iP 14 41 48.6
 Um eP 14 41 28

South of Japan (h = 10 km).

" 11 Ki iP 15 52 49.1
 Molucca Passage (h = N).

" 11 Up iP 18 16 44.8
 Ki iP 18 16 30.3

Um iP 18 16 33.5
 Ud iP 18 16 58.4

Szechwan, China.

" 11 Up micr sec
 Mx N 0.7 20
 Mx Z 0.9 22

Ud iPKP 18 24 49.8
 New Hebrides Islands

(h = 5 km).

" 11 Up iP 19 21 18.2
 Ki iP 19 20 24.2

Sk iP 19 20 51.6
 Um iP 19 20 52.3 C

Ud iP 19 21 15.6 C
 De iP 19 21 38.7

Kodiak Island (h = 25 km).

" 11 Up iP 21 06 47.9
 micr sec

Mx E 1.0 21
 Mx N 1.9 26
 Mx Z 2.7 24

Ki iP 21 06 31.8
 iSKS 21 17 03

(cont.)

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

1974				1974					
May	11	(cont.)		May	12	(cont.)			
		Ki				Ud	iP		
		P	Z'	0.1	1.0	e	10 23 55		
		Mx	E	2.0	21	iPP	10 23 58.5		
		Mx	N	1.8	20	De	iPP		
		Mx	Z	2.1	21	Chile (h = 110 km).			
		Sk	iP	21 06 52.5		"	12		
		Um	iP	21 06 37.2		Um	iSgl		
		iSKS		21 17 08		Estonia.			
		iS		21 17 44		Explosion.			
		Ud	iP	21 06 56.2		"	12		
		Molucca Passage (h = N).				Up	iPKP		
		M = 5.6 (Up, Ki).				Ki	iPKP		
"	11	Up	iP	23 55 38.7		Mx	E		
"	11	Ki	eP	23 55 46		Mx	N		
"	11	Um	iP	23 55 36.4		Mx	Z		
"	11	Ud	iP	23 55 53.9		South Sandwich Islands			
"	11	Pakistan (h = 40 km).				(h = N).			
"	12	Up	iP	00 25 57.7	"	Up	eP		
"	12		iS	00 30 02.6	"	Ki	eP		
"	12	Ki	iP	00 27 04.5	"	Sk	eP		
"	12	Sk	eP	00 26 37	"	Um	iP		
"	12	Um	iP	00 26 33.6	"	Ud	iP		
"	12	Ud	iP	00 26 06.3	"	Molucca Passage (h = N).			
"	12		isS	00 31 16.8	"	Ki	eP		
"	12	De	iP	00 25 35.2	"	Um	eP		
"	12		iS	00 29 24.5	"	Ud	eP		
"	12	Dodecanese Islands (h = 160 km).				Molucca Passage (h = N).			
"	12	Up	iP	02 18 48.3	"	Up	iSgl		
"	12	Sk	iP	02 19 11.4	"	Ki	eSgl		
"	12	Um	iP	02 18 57.0	"	Um	iSgl		
"	12	Ud	iP	02 18 58.8	"	Ud	iSgl		
"	12	Indian Ocean (h = N).				De	eSgl		
"	12	Up	iP	03 01 01.1		Western USSR.			
"	12	Ki	iP	03 00 43.9		Explosion.			
"	12	Sk	iP	03 01 10.4	"	Ki	iP		
"	12	Um	iP	03 00 49.1	"	12 45 31.0			
"	12	Ud	iP	03 01 11.9	"	Molucca Passage (h = N).			
"	12	Szechwan, China (h = N).				"	12 46 48.2		
"	12	Um	iP	04 23 40.1	"	Ud	iP		
"	12	Japan (h = 45 km).				Kurile Islands.			
"	12	Up	i	10 24 08.1	"	Up	iP		
"	12		iPP	10 24 11.1	"	Ki	iP		
"	12			micr sec		Um	iP		
"	12	Ki	PP	Z' 0.1	1.5	Ud	iP		
"	12	Ki	ePP	10 24	46	Szechwan, China (h = N).			
"	12	Sk	iP	10 19	51.5	"	12		
"	12	Um	iPP	10 24	26.6	Up	iP		
"	12		iSKS	10 30	29	Um	iP		
"	12	(cont.).				Ud	iP		
"	12					19 22 19.0			
"	12					Um	iP		
"	12					Ud	iP		
"	12					19 22 26.0			
"	12					Japan (h = 140 km).			

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

1974

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

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

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

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

" 13 Ud iP 01 37 59.1

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

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

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

1974

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

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

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

Western USSR.
 Explosion.
 " 13 Ud iP 12 54 12.0
 De iP 12 54 21.2 C
 Fiji Islands (h = 600 km).

" 13 Up iP 17 47 52.5 C
 i 17 48 07.8
 iP 17 48 35.8
 isP 17 48 56.6

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

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

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

1974				1974					
May	13	(cont.)		May	14	Up	iSgl		
Ki	iSKS	19 18 14		Ki	iSgl	08 36 47.4			
	iS	19 18 50		Sk	e	08 40 50.8			
		micr sec			iSgl	08 37 28			
P	Z'	0.2 1.8		Um	iPgl	08 39 09.6			
Mx	E	2.9 15		i	36 51.1	08 37 05.0			
Mx	Z	2.0 13		iSgl	08 38 35.2				
Sk	eP	19 07 58		Ud	ePgl	08 36 11			
Um	iP	19 07 41.6		is*	08 37 24.4				
	ipP	19 07 51.0		iSgl	08 37 31.4				
	iPP	19 11 24.8		De	eSgl	08 36 32			
	iS	19 18 43		Near coast of Lithuania, near 56°N, 20°E.					
Ud	iP	19 07 54.1		Origin time = 08 34 33.					
	ipP	19 08 03.3		Explosion?					
	iPP	19 11 49.9		"	14	Up	iP		
De	iP	19 07 51.7		"	14	Japan (h = 330 km).	08 50 01.5		
	iPP	19 11 47.4		"	14	Up	iPKPl		
Sumatra.				"	14	Ud	iPKPl		
h = 35 km (Ki,Um,Ud).				"	14	Um	iSgl		
M = 5.8 (Up,Ki).				"	14	Esthonia.	11 40 54.6		
"	13	Ki	iP	19 43 53.4	"	Explosion.	11 40 56.0		
			ipP	19 44 01.2	"	Um	iSgl		
				micr sec	"	Japan (h = 60 km).	12 05 07.5		
		Um	pP	Z' 0.1 1.3	"	14	12 11 45.0		
			iP	19 43 50.5	"	Up	iSgl		
			ipP	19 43 58.9	"	Ki	iSgl		
		Ud	eP	19 44 02	"	Um	iSgl		
			ipP	19 44 10.8	"	12 12 40.1	12 12 54.4		
		Sumatra.				Ud	iSgl		
		h = 30 km (Ki,Um,Ud).				De	iSgl		
"	13	Up	eP	20 16 01	"	Western USSR.			
		Ki	iP	20 15 42.0	"	Explosion.			
		Um	iP	20 15 47.2	"	Ki	iP		
		Ud	iP	20 16 06.3	"	Um	iP		
		Molucca Passage (h = N).				Ud	iP		
"	13	Ki	eP	20 20 43	"	13 20 26.8			
		Um	iP	20 20 46.8	"	13 20 32.5			
		Molucca Passage (h = N).				13 20 51.5			
"	13	Up	iP	21 29 34.0	"	Molucca Passage (h = 40 km).			
		Ki	iP	21 29 43.6	"	Ki	iSgl		
		Um	iP	21 29 32.5	"	Um	iSgl		
		Ud	iP	21 29 50.3	"	14 01 01.7	14 00 26.4		
		Hindu Kush (h = 230 km).				Up	iP		
"	14	Sk	iPKP	06 28 28.3	"	Ki	iP		
		Um	iPKP	06 28 23.0	"	14 17 27.1	14 17 57.8		
		Solomon Islands (h = N).				Sk	iP		
"	14	Up	iP	08 20 18.6 D	"	14 18 36.5	14 18 34.9 C		
		Ki	iP	08 19 29.1 D	"	Um	iP		
		Um	iP	08 19 52.3 D	"	14 17 54.9 C	14 18 19.9 C		
		Ud	iP	08 20 24.0 D	"	iPcP	14 18 43.2		
		De	iP	08 20 43.4	"	Unimak Island (h = 25 km).	16 15 09.4		
		Okhotsk Sea (h = 520 km).				Up	i(Sgl)		

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

1974				1974					
May	14	Um	iP	20 38 19.5	May	15	Ki	iP	09 04 27.0
		i		20 38 33.0			Ud	iP	09 03 52.5
		Japan (h = 30 km).					North Atlantic Ocean (h = N).		
"	15	Up	iP	00 20 48.2 C	"	15	Ki	iSn	09 17 23.2
		Ki	iP	00 20 50.3 C			iSgl		09 17 37.8
				micr sec			Northwest USSR-Norway.		
		P	Z'	0.1 0.6			Explosion.		
		Sk	iP	00 21 11.4 C	"	15	Ki	iP	10 29 40.3
		Um	iP	00 20 43.6 C			Ud	iP	10 29 05.7
		Ud	iP	00 21 04.3 C			North Atlantic Ocean (h = N).		
		De	eP	00 21 03			Kashmir-Sinkiang (h = 60 km).		
"	15	Um	iP	00 47 56.8	"	15	Ud	iP	10 42 18.9
		Japan (h = 330 km).					North Atlantic Ocean (h = N).		
"	15	Up	iP	04 01 28.4 D	"	15	Ki	iP	10 43 30.9
		Sk	iP	04 01 45.5 D			Sk	eP	10 43 00
		i		04 01 52.6			Um	iP	10 43 20.1
		Um	iP	04 01 21.4 D			Ud	iP	10 42 57.1
		Ud	iP	04 01 42.2 D			De	iP	10 42 51.7
		India (h = 30 km).					North Atlantic Ocean (h = N).		
"	15	Um	i	04 09 45.5	"	15	Ud	iP	10 56 45.0
		Ud	i(SKP)	04 10 13.1	"	15	Ki	iP	11 17 40.8
"	15	Ki	iP	04 47 12.2			Sk	iP	11 17 09.2
		Sk	iP	04 46 40.8			Ud	iP	11 17 06.8
		Ud	iP	04 46 38.2			North Atlantic Ocean (h = N).		
		North Atlantic Ocean (h = N).			"	15	Up	iSgl	11 23 09.1
"	15	Ud	iP	05 45 10.7			Ki	eSgl	11 25 45
		North Atlantic Ocean (h = N).					Sk	eSgl	11 25 03
"	15	Ki	iP	07 32 20.7			Um	iSgl	11 23 44.9
		Ud	iP	07 31 47.7			Ud	iSgl	11 24 13.4
		North Atlantic Ocean (h = N).					De	eSgl	11 24 45
"	15	Ud	iP	07 34 08.7	"	15	Estonia.		
		North Atlantic Ocean (h = N).					Explosion.		
"	15	Ki	iP	07 39 49.0	"	15	Up	iPKPl	11 32 21.2
		ipP		07 39 55.5			Ud	iPKPl	11 32 23.5
"	15	Ud	iP	07 39 15.7	"	15	Ud	iP	12 43 18.7
		ipP		07 39 21.9			North Atlantic Ocean.		
		h = 25 km (Ki, Ud).			"	15	Up	iP	13 14 59.3 C
							P	Z'	micr sec
"	15	Ki	iP	08 04 37.7			0.1	0.1	1.0
		ipP		08 04 43.8			Ki	iP	13 14 06.1 C
		Ud	iP	08 04 04.1					micr sec
		ipP		08 04 09.8			P	Z'	0.2 0.9
		North Atlantic Ocean.					Sk	iP	13 14 36.3 C
		h = 20 km (Ki, Ud).					Um	iP	13 14 32.9 C
							Ud	iP	13 14 58.5 C
							De	iP	13 15 21.0 C
							ipP		13 15 32.9
							(cont.).		

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

1974

May 15

(cont.)

Aleutian Islands.

h = 45 km (De).

m = 6.1 (Up,Ki).

" 15

Ki iP 13 46 43.8

Sk eP 13 46 12

Ud iP 13 46 09.1

North Atlantic Ocean (h = N).

" 15

Ki iP 13 53 43.9

Sk iP 13 53 14.0

Ud iP 13 53 10.7

North Atlantic Ocean (h = N).

" 15

Ki iP 14 08 48.4

Sk eP 14 08 17

Ud iP 14 08 15.8

De eP 14 08 09

North Atlantic Ocean (h = N).

In general, P Z' exhibit
relatively long periods in
this sequence of North
Atlantic earthquakes.

" 15

Ki iP 15 01 38.0

Ud iP 15 01 03.9

North Atlantic Ocean (h = N).

" 15

De i 15 52 10.5

i 15 52 15.7

iSgl 15 52 36.6

" 15

Ki iP 17 00 29.8

Ud eP 16 59 57.6

" 15

De i 17 13 04.0

i 17 13 08.7

iSgl 17 13 31.4

" 15

Ki iP 17 23 13.2

Sk iP 17 22 42.2

Ud iP 17 22 39.6

North Atlantic Ocean.

" 15

De i 17 56 34.0

iSgl 17 56 59.4

" 15

Up iPKP 18 58 55.2

ipPKP 18 59 27.7

Ki iPKP 18 59 10.5

ipPKP 18 59 42.6

iSKP1 19 02 35.3

micr sec

PKP Z' 0.1 1.0

(cont.)

1974

May 15

(cont.)

Sk ePKP 18 59 00

Um iPKP 18 59 04.0

ipPKP 18 59 35.6

Ud iPKP 18 58 53.6

ipPKP 18 59 25.8

South Sandwich Islands.

h = 120 km (Up,Ki,Um,Ud).

" 15

Up iP 19 10 32.5 C

iS 19 19 09

micr sec

P Z' 0.2 1.0

Mx E 21 20

Mx N 55 21

Mx Z 84 21

Ki iP 19 09 41.0 C

iS 19 17 35

micr sec

P Z' 0.6 1.0

Mx E 32 19

Mx N 36 23

Mx Z 22 22

Sk iP 19 10 18.1 C

Um iP 19 10 05.8 C

iS 19 18 21

i(P'P') 19 39 15.3

Ud iP 19 10 37.0 C

De iP 19 10 57.6 C

i(P'P') 19 38 58.9

Kurile Islands (h = 55 km).

m = 6.3, M = 6.7 (Up,Ki).

" 15

Up iP 19 38 46.5

Ki iP 19 39 07.0

Sk iP 19 38 35.8

Um iP 19 38 58.8

i 19 39 06.8

Ud iP 19 38 31.9

De iP 19 38 31.7

North Atlantic Ocean (h = N).

" 15

Ki iP 22 31 12.2

ipPKP 22 31 19.0

Sk iP 22 30 40.8

Ud iP 22 30 38.0

North Atlantic Ocean.

h = 25 km (Ki).

" 16

Up iPKP1 01 27 33.6

Sk ePKP1 01 27 28

Um iPKP1 01 27 23.3

i 01 27 43.5

Ud iPKP1 01 27 35.4

" 16

Up iP 03 09 53.0 C

(cont.)

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

1974				1974						
May	16	(cont.)		May	16	Up	iSgl			
		Up	iPn	03 11 00.5		Sk	eSgl			
			iPP	03 11 11.7		Um	iSgl			
				micr sec		Ud	eSgl			
		P	Z'	0.1 0.9	"		13 20 48.5			
		Ki	iP	03 09 37.5 C	16	Up	iSgl			
			iPn	03 10 36.9		Sk	eSgl			
				micr sec		Um	iSgl			
		P	Z'	0.2 0.5		Ud	eSgl			
		Sk	iP	03 10 09.1 C		Western USSR.	13 22 44			
			iPP	03 11 31.6		Explosion.	13 21 08.1			
		Um	iP	03 09 37.9 C			13 21 52			
		i		03 10 27.4						
			iPn	03 10 39.3		Ki	micr sec			
		Ud	iP	03 10 09.3 C		Mx	E 0.5 13			
			iPn	03 11 22.3		Mx	N 0.5 13			
		De	iP	03 10 16.2 C		Mx	Z 0.5 13			
			iPP	03 11 41.6		Ki	micr sec			
		Kazakh SSR.				Mx	E 0.4 10			
		Underground explosion.				Mx	N 0.2 8			
		m = 6.0 (Up,Ki).				Sk	eP 15 13 24			
"	16	Ki	iP	05 22 42.3		Ud	iP 15 12 52.0			
"	16	Sk	eP	05 23 14		De	iP 15 12 20.0			
"	16	Um	eP	05 23 05		Dodecanese Islands (h = N).				
"	16	Ud	iP	05 23 35.3		M = 4.5 (Up,Ki).				
"	16	De	iP	05 23 58.3						
"	16	Aleutian Islands (h = N).								
"	16	Ki	iP	08 11 33.5	"	Up	iP 16 15 16.2			
"	16	Sk	iP	08 11 52.1		Ki	iP 16 15 24.4			
"	16	Um	iP	08 11 24.3		Sk	iP 16 15 42.1			
"	16	Ud	iP	08 11 44.0		Um	iP 16 15 14.6			
"	16	De	iP	08 11 41.0		Ud	iP 16 15 32.8			
"	16	Pamir.				De	iP 16 15 29.8			
"	16	Intermediate depth.				Afghanistan-USSR (h = 240 km).				
"	16	Ki	iP	17 25 25.7						
"	16	Sk	iP	17 24 52.0						
"	16	Um	iP	North Atlantic Ocean.						
"	16	Ud	iP	Origin time = 17 15 53.						
"	16	De	iP							
"	16	Ki	iP	17 30 44.3						
"	16	Sk	iP							
"	16	Um	iP							
"	16	Ud	i(P)	09 05 46.3	"	Up	iPgl 18 19 42.3			
"	16			09 04 59.8			iSgl 18 19 59.7			
"	16						i 18 20 02.2			
"	16						iRg 18 20 06.9			
"	16	Um	i(Sgl)	09 52 20.2		Um	iSgl 18 20 44.2			
"	16	Ud	iSgl	18 20 17.3		Ud	iSgl 18 20 17.3			
"	16	Up	iPKPl	10 32 51.9		Hälsingland, Sweden,				
"	16	Ud	iPKPl	10 32 53.6			61.2°N, 17.0°E.			
"	16	Ud	iPgl	13 07 30.7			Origin time = 18 19 17.			
"	16		iSgl	13 07 58.3			Explosion?			
"	16		iRg	13 08 10.6	"	Up	eSgl 18 56 35			
"	16	De	iSgl	13 08 03.0		Ki	eSgl 18 54 31			
"	16	Bohuslän, Sweden,				Sk	eS* 18 54 34			
"	16			58.3°N, 11.9°E.		Um	iSgl 18 54 39.2			
"	16			Origin time = 13 06 55.		Ud	iSgl 18 54 58.0			
"	16	Sk	iP	13 15 00.4			18 56 24.1			
"	16	Ud	iP	13 15 21.4			Norland, Norway,			
"	16	State of Washington					66.5°N, 14.3°E.			
"	16	(h = 55 km).					Origin time = 18 53 03.			
"	16						Explosion.			

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

1974

May 16 ✓ Up iP 20 11 27.6 D
iPP 20 14 41.0

iS 20 20 55
micr sec

P Z' 0.4 0.9
PP Z' 0.5 1.5

Mx E 0.5 16
Mx N 0.8 17

Mx Z 0.7 20
Ki iP 20 10 56.6 D

iS 20 19 57
micr sec

P Z' 0.4 1.0
Mx E 0.7 16

Mx N 0.7 16
Sk iP 20 11 24.7 D

iPP 20 14 36.7
Um iP 20 11 10.0 D

iPP 20 14 13.4
iS 20 20 21.2

Ud iP 20 11 34.3 D
iPP 20 14 52.4

De iP 20 11 46.2 D
ipP 20 13 42.6

iPP 20 15 13.1

Bonin Islands.

h = 530 km (De).

m = 5.9, M = 5.3 (Up,Ki).

M uncorrected for focal depth.

" 16 Um iP 20 25 07.9

" 16 Sk iP 20 30 00.1
Ud iP 20 29 55.2

" 16 Ki iP 21 33 21.1
Ud iP 21 32 47.1
North Atlantic Ocean (h = N).

" 16 Ud iP 22 17 34.4

" 16 Up iP 22 25 06.4
Um iP 22 25 04.3
Ud iP 22 25 22.6

Hindu Kush.

Intermediate depth.

" 16 ✓ Up eP 23 20 23
i 23 20 41.1
micr sec
Mx E 1.1 19
Mx N 1.1 20
Mx Z 2.7 20
Ki eP 23 20 26
(cont.)

1974

May 16 (cont.)

Ki micr sec
Mx E 3.3 18
Mx N 2.4 17

Sk eP 23 20 17
Um iP 23 20 28.3
i 23 20 41.3

iS 23 30 56
Ud eP 23 20 17
i 23 20 31.3

Nicaragua (h = 35 km).
M = 5.7 (Up,Ki).

" 17 Up iP 02 35 41.6
Ud iP 02 35 48.6

Um iP 03 45 48.4
Ud iP 03 46 14.0

" 17 Up epPKP 04 10 40
Ki ipPKP 04 10 26.5

Sk ipPKP 04 10 39.7
Um ePKP 04 10 17
ipPKP 04 10 32.7

Solomon Islands.
h = 55 km (Um).

" 17 Up iP 10 29 41.5
Kurile Islands.

" 17 Up eSgl 12 23 01
Ki ePgl 12 18 58

iSn 12 19 45.3
iS* 12 20 04.1

Sk iSgl 12 22 33.7
Um iSn 12 20 23.9

iSgl 12 21 00.8
Ud iSgl 12 23 30.1

Northwest USSR.
Explosion.

" 17 Ki iSn 12 21 49.9
Sk eSgl 12 24 40

Um eSgl 12 23 05
Northwest USSR.
Explosion.

" 17 Up iP 13 52 37.7 C
ipP 13 53 23.8
micr sec

P Z' 0.4 0.9
Ki iP 13 52 46.3 C
ipP 13 53 30.9
micr sec

P Z' 0.3 0.6
(cont.)

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

1974

May 17 (cont.)

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

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

" 17

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

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

" 17

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

1974

May 17 (cont.)

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

Peru.
 $h = 110$ km (Up, Ki, Sk, Um, Ud, De).

$M = 5.6$ (Up, Ki).
 M uncorrected for focal depth.
 pP and sP are considerably larger than P.

" 17 Up iP 17 23 42.8 D
 micr sec
 P Z' 0.2 0.9
 Mx E 4.8 17
 Mx N 8.3 18
 Mx Z 17 14
 Ki iP 17 23 16.1 D
 micr sec
 P Z' 0.1 0.9
 Mx E 8.3 14
 Mx N 7.2 13
 Mx Z 6.6 14
 Sk iP 17 23 45.2 D
 Um iP 17 23 26.2 D
 Ud iP 17 23 52.0 D
 De iP 17 24 01.7 D
 Ryukyu Islands ($h = 20$ km).
 $m = 6.1$, $M = 6.3$ (Up, Ki).

" 17 Up iP 19 53 19.3
 i 19 53 22.9
 Ki eP 19 54 00
 i 19 54 07.3
 iPP 19 55 44.0
 Sk eP 19 53 59
 Um iP 19 53 34.0
 i 19 53 39.4
 Ud iP 19 53 35.6
 i 19 53 39.0
 De iP 19 53 20.6
 i 19 53 24.7
 Iran ($h = N$).
 Double P phases, suggesting a double event with a slight shift in epicenter.

" 17 Up iSgl 20 30 32.4
 iRg 20 30 36.0
 (cont.)

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

1974		1974	
May	17	(cont.)	
Um	iPgl	20 31 05.6	May 17 Um iP 21 31 56.6
	iSgl	20 31 59.5	i 21 32 06.6
Ud	iRg	20 30 21.2	South of Bali Island (h = N).
De	eSgl	20 31 56	" 17 Sk iP 21 38 15.5
Dalarna, Sweden,			Um iP 21 38 27.8
60.4°N, 15.3°E.			De iP 21 38 35.4
Origin time = 20 29 55.			
Near-surface event.			" 17 Up iP 21 38 29.8
" 17 Up iP 20 37 29.1			Ud iP 21 38 46.0
Ki iP 20 36 57.5			De iP 21 38 28.3
Um iP 20 37 11.3			Separation between this event
Ud iP 20 37 36.0			and the preceding one
Bonin Islands (h = 510 km).			questionable, especially for
" 17 ✓ Up iP 21 08 19.7 C			Up and De.
ipP 21 08 54.9		" 17 Ud iP 21 51 17.2	
iSKS 21 18 39			
iS 21 19 19		" 17 Up e(PKP) 23 25 07	
iSP 21 20 37			iPKPl 23 25 21.1
micr sec			ipPKPl 23 27 23.9
P Z' 0.4 1.1			micr sec
Mx E 0.8 17			PKPl Z' 0.4 1.0
Mx N 1.3 18		Ki ePKP 23 25 10	
Mx Z 1.7 21			iSKPl 23 27 55.4
Ki iP 21 08 16.9 C			micr sec
ipP 21 08 53.5			SKPl Z' 0.1 1.0
iSKS 21 18 31.1			Sk iPKP 23 25 17.7
i 21 18 50.6			Um e(PKP) 23 25 08
iSP 21 20 42.7			iPKP 23 25 15.2
micr sec			iSKPl 23 28 06.7
P Z' 0.7 1.0			Ud iPKPl 23 25 21.3 C
Mx E 1.6 17			De iPKPl 23 25 32.9 C
Mx N 2.6 17			iPKP2 23 25 37.5
Mx Z 1.4 15			ipPKPl 23 27 35.0
Sk iP 21 08 32.8 C			Tonga-Kermadec Islands.
ipP 21 09 07.9			h = 540 km (Up,De).
i 21 20 53.1		" 17 Up iPKPl 23 37 27.3	
iSP 21 21 08.4		Ud iPKPl 23 37 29.8	
Um iP 21 08 16.1 C		De iPKPl 23 37 39.7	
ipP 21 08 51.6			
iSKS 21 18 34		" 18 Up iP 02 43 46.2 C	
iS 21 19 10		Ki iP 02 44 00.6	
Ud iP 21 08 28.9 C		Sk iP 02 44 12.9	
ipP 21 09 04.1		Um iP 02 43 48.3 C	
i 21 18 27.8		Ud iP 02 44 01.6 C	
De iP 21 08 28.3 C		De iP 02 43 54.7	
ipP 21 09 03.0		India.	
i 21 18 26.4		Underground explosion.	
iSP 21 20 55.7			
Java.		" 18 Ki iPgl 10 51 05.3	
h = 140 km (Up,Ki,Sk,Um,Ud, De).		iSn 10 51 39.2	
m = 6.7, M = 5.7 (Up,Ki).		iSgl 10 51 54.9	
M uncorrected for focal depth.		Northwest USSR-Norway.	
		Explosion.	

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

1974

May 18 Ki iSn 11 56 44.2
 iSgl 11 57 01.6
 Northwest USSR-Norway.
 Explosion.

" 18 Up iPKPl 12 17 38.4
 Ki ePKP 12 17 21
 Sk iPKPl 12 17 32.3 C
 Um iPKPl 12 17 28.2 C
 Ud iPKP 12 17 34.3
 iPKPl 12 17 40.3 C
 De iPKP 12 17 41.1
 iPKPl 12 17 48.4 C
 Kermadec Islands (h = 45 km).

" 18 Ki iSgl 12 23 11.3
 Northwest USSR.
 Explosion.

" 18 Ud iPKPl 14 17 17.7
 Up eP 18 57 07
 i 18 57 16.1
 Ud iP 18 57 17.7
 i 18 57 25.2

" 18 Um iP 19 44 45.7
 Ud eP 19 45 14

" 18 Ud eP 20 05 33

" 18 Up i(P) 20 06 23.7
 Ud iP 20 06 38.5
 Pamir.

" 18 Up iP 20 40 15.7
 Um iP 20 39 55.5
 Ud iP 20 40 23.0

" 18 Ud iP 23 00 11.8

" 18 Up eP 23 44 11
 iS 23 47 41
 micr sec

Mx E 0.5 14
 Mx N 0.7 15
 Ki iP 23 43 50.8
 micr sec

Mx E 0.5 12
 Mx N 0.7 13
 Mx Z 0.5 12

Sk iP 23 43 23.0
 i 23 43 25.6
 Um iP 23 44 02.5
 i 23 44 04.7

(cont.)

1974

May 18 (cont.)
 Ud iP 23 43 50.4
 De iP 23 44 13.8
 Iceland.
 M = 4.3 (Up,Ki).

" 19 Um iPKPl 03 15 07.0
 Ud iP 03 34 50.6

" 19 Up iS* 04 37 31.1
 iSgl 04 37 38.9
 Ki iPn 04 33 22.0
 iSn 04 34 20.1

" 19 Sk iSgl 04 37 07.6
 Um iSn 04 35 00.9
 i 04 35 14.8

" 19 Ud iPn 04 34 50.3
 eSn 04 36 56
 iSgl 04 38 05.4
 De eSgl 04 39 45
 Northwest USSR.
 Explosion.

" 19 Ki iSn 06 32 24.1
 Um iSgl 06 33 40.7
 Northwest USSR.

" 19 Up iP 08 27 04.2

" 19 Ud iPn 15 58 33.1
 i 15 58 39.8
 iSgl 16 00 27.1
 Sk eS* 16 00 44

" 19 iSgl 16 00 49.7
 Um iSgl 16 02 04.5
 Ud ePn 15 58 09

" 19 i 15 59 04.5
 iSn 15 59 11.2
 iSgl 15 59 34.1

" 19 North Sea, 56.6°N, 6.0°E.
 Origin time = 15 56 51.
 By combination with Bergen
 and Kongsberg readings.

" 19 Ki iP 19 01 41.7
 Ud iP 19 02 34.1
 Alaska (h = N).

" 19 Up iP 22 06 25.2
 ipP 22 06 42.3
 iS 22 10 42.6
 (cont.)

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

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

1974

May 21 (cont.)

Ki		micr	sec
	SKPl	Z'	0.1 1.4
Um	iPKP		02 21 54.0
Ud	iPKP		02 21 44.1
South Sandwich Islands			
(h = 160 km).			

" 21	Up	iPKP1	05 05 56.7
		iSKP1	05 08 47.4
	Ki	iPKP	05 05 49.8
		iSKP1	05 08 24.3
			micr sec
		SKPl	Z' 0.1 1.4
	Sk	iSKP1	05 08 40.7
	Um	iPKP	05 05 55.2
		iSKP1	05 08 35.8
	Ud	iPKP1	05 05 57.7
		iSKP1	05 08 49.0
	De	iPKP	05 06 08.6
		iPKP1	05 06 09.9
		iSKP1	05 08 58.1
Tonga-Kermadec Islands			
(h = 570 km).			

" 21	Up	iP	07 45 53.9
	Germany.		

" 21	Up	iP	08 10 46.9
	Sk	iP	08 10 59.3
	Um	iP	08 10 39.2
	Ud	iP	08 10 56.2
Java (h = 90 km).			

" 21	Up	iSgl	09 28 09.4
	Ud	iSgl	09 28 13.8
	De	iPgl	09 26 09.5
		iSgl	09 26 25.2
Baltic Sea, south of Sweden,			
55.5° N, 15.0° E.			
Origin time = 09 25 50.			
Explosion.			

" 21	Up	iSgl	09 37 10.0
	Ud	iSgl	09 37 13.8
	De	iPgl	09 35 10.7
		iSgl	09 35 28.5
Baltic Sea, south of Sweden,			
55.5° N, 15.0° E.			
Origin time = 09 34 50.			
Explosion.			

" 21	Up	iPgl	09 41 07.9
		iSgl	09 41 35.6
	Ud	eSgl	09 42 27
(cont.)			

1974

May 21 (cont.)

De	iPgl	09 41 29.7
	eSgl	09 42 15
Near Gotland, Sweden.		
Origin time = 09 40 31.		
Underwater explosion.		

" 21	Um	i(P)	10 44 01.2
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" 21	Up	iSn	11 49 47.1
		iSgl	11 49 58.1
	Ki	iSgl	11 52 31.0
	Sk	iSgl	11 51 47.0

	Um	iSgl	11 50 34.1
	Ud	iSn	11 50 35.2
		iSgl	11 51 02.4
	De	iSgl	11 51 32.2
Estonia.			
Explosion.			

" 21	Up	iSgl	12 09 02.1
	Sk	eSgl	12 10 50
	Um	iSgl	12 09 20.7
		iRg	12 09 54.6
	Ud	iSgl	12 10 04.3
	De	iSgl	12 10 32.7
		iSg2	12 10 43.4

Western USSR.
Explosion.

" 21	Sk	iP	12 14 05.0
	Um	iP	12 14 27.7
	Ud	iP	12 14 07.0

" 21	Up	iSgl	12 46 43.7
	Um	iSgl	12 46 54.5
		eRg	12 47 32
	Ud	iSgl	12 47 36.7
	De	eSgl	12 48 10
Western USSR.			
Explosion.			

" 21	Up	iSgl	13 02 15.4
	Sk	iSgl	13 04 16.0
	Um	iSgl	13 03 06.9
	De	iSgl	13 03 46.2
Estonia.			
Explosion.			

" 21	Up	iSgl	14 51 04.5
	Um	iSgl	14 51 19.0
Probably western USSR.			
Explosion.			

" 21	Up	iSgl	14 55 33.4
	(cont.)		

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

1974				1974						
May	21	(cont.)		May	21	(cont.)				
Um	iSgl	14 57 33.4		De	iPgl	16 49 49.0				
Ud	iSgl	14 56 19.2			iSgl	16 50 28.2				
De	eSgl	14 56 41		Near Gotland, Sweden,						
Off coast of Södermanland, Sweden, 58.9°N, 17.7°E.				58.0°N, 18.4°E.						
Origin time = 14 55 02. Explosion.				Origin time = 16 48 58. Underwater explosion.						
"	21	Up	iPgl	14 55 39.1	"	21	Up			
			iSgl	14 55 53.1			ePgl	16 52 12		
			iRg	14 55 59.7			iSn	16 52 38.6		
		Um	iSgl	14 57 54.0			iSgl	16 52 50.0		
		Ud	iSgl	14 56 38.5			i	16 52 51.3		
		De	iPn	14 56 11.9		Ki	iSgl	16 56 36.4		
			iSgl	14 56 58.2		Sk	ePgl	16 52 50		
		Off coast of Södermanland, Sweden, 58.9°N, 17.7°E.					iSn	16 53 41.0		
		Origin time = 14 55 22. Explosion.					iSgl	16 54 04.8		
"	21	Up	iSgl	15 09 22.4			i	16 54 20.1		
		Ud	iSn	15 08 09.4		Um	eSn	16 54 09		
			iS*	15 08 20.6		i	16 54 28.7			
			iSgl	15 08 27.0		i	16 54 40.0			
		Coast of south Norway, 58.2°N, 6.4°E.					i	16 54 43.2		
		Origin time = 15 06 17. By combination with Bergen and Kongsberg readings.				De	iPgl	16 54 44.4		
"	21	Ki	iPgl	15 34 33.5		Ud	iPgl	16 51 51.6 C		
			i	15 34 49.6		i	16 51 54.0 D			
			iSgl	15 34 52.1		iSgl	16 52 15.8			
		Um	iPgl	15 35 19.0		i	16 52 17.4			
			i	15 35 48.5		De	iPgl	16 51 52.4 D		
			iSn	15 35 55.4		iSgl	16 52 17.8			
		Swedish Lapland. Origin time = 15 34 10.				Västergötland, Sweden, 58.3°N, 12.8°E.				
"	21	Up	eP	16 10 33		Origin time = 16 51 21.				
		Ki	iP	16 10 33.8		Felt.				
		Sk	iP	16 10 02.5		By combination with Bergen				
		Um	iP	16 10 36.9		and Kongsberg readings.				
		Ud	iP	16 10 16.4	"	21	Up			
		De	iP	16 10 29.9		iP	19 23 24.3			
		North Atlantic Ocean (h = N).				Um	iP	19 23 15.3		
"	21					Ud	iP	19 23 33.7		
"	21	Up	iPgl	16 49 28.5	"	22	Um	iP	06 31 05.0	
			iSgl	16 49 54.4	"	22	Up	iP	07 45 03.6	
		Um	iSgl	16 51 58.4		Ud	iP	07 45 07.2		
		Ud	iPgl	16 49 55.2		Greece (h = 130 km).				
			iSgl	16 50 37.8	"	22	Ud	iSgl	10 15 37.0	
			i	16 50 45.3		De	iPgl	10 13 18.0		
		De	iPn	16 49 43.0		eSgl	10 13 50			
"	21	(cont.)				"	22	Ki	iPgl	10 53 01.6
								iSn	10 53 39.7	
								iSgl	10 53 55.0	
								Northwest USSR-Norway.		
								Explosion.		
"	21	Up	iSgl	12 09 15.0		"	22	Up	iSgl	12 09 15.0
		(cont.)								

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

1974				1974				
May	22	(cont.)		May	23	(cont.)		
	Ki	eSgl	12 11 13		Um	iPKP1	07 02 56.2	
	Ud	iSgl	12 10 12.8		Ud	iPKP1	07 03 10.0	
	De	iSgl	12 10 44.1		De	iPKP1	07 03 19.6	
	Western USSR. Explosion.					ipPKP1	07 03 36.2	
"	22	Up	iSn	12 12 08.9		Kermadec Islands. h = 60 km (De).		
			iSgl	12 12 16.5		M = 5.7 (Up,Ki).		
		Ki	eSgl	12 14 55	"	Ki	eP	09 25 53
		Sk	iSgl	12 14 14.0		i	09 26 01.9	
		Ud	iSgl	12 13 22.9		Ud	eP	09 26 21
		De	iSgl	12 13 49.4		Mindanao (h = 70 km).		
	Estonia. Explosion.				"	Ki	iP	09 32 33.0
"	22	Up	iPKP1	17 51 21.2		Ud	iP	09 31 59.9
		Ud	iPKP1	17 51 23.6 C		North Atlantic Ocean (h = N).		
"	22	Up	iPKP1	19 28 12.5	"	Up	iSgl	09 41 44.0
		Ud	iPKP1	19 28 14.8 C		Ki	iSgl	09 43 52.9
		De	iPKP1	19 28 25.4 C		Sk	iSgl	09 43 33.6
"	22	Up	iRg	21 15 56.0		Um	iS*	09 41 57.7
		Ud	iRg	21 15 42.7		iSgl	09 42 05.8	
	Central Sweden. Explosion.					Ud	iSgl	09 42 44.9
"	22	Ki	eP	21 58 48		De	iSgl	09 43 11.3
"	23	Ki	iP	02 19 03.4	"	Um	i(P)	09 47 58.9
			i	02 19 07.1	"	Up	iP	11 17 38.2
		Ud	iP	02 19 18.4			micr sec	
		De	eP	02 19 19		P	Z'	0.1 1.4
	Sinkiang, China (h = N).					Ki	iP	11 17 58.0
"	23	Ud	eP	02 22 19			ipP	11 18 04.9
"	23	Up	iP	05 28 00.3 C		Sk	iP	11 17 25.1
		Ki	iP	05 27 07.8		Um	eP	11 17 50
		Um	iP	05 27 32.9		Ud	iP	11 17 23.7
		Ud	iP	05 28 00.8			ipP	11 17 30.5
	Aleutian Islands (h = 35 km). h = 25 km (Ki,Ud).					De	iP	11 17 19.9
"	23	Up	iPKP1	07 03 08.3		North Atlantic Ocean.		
			i	07 03 15.5				
			i	07 03 30.5				
				micr sec				
		Mx	N	0.8 19				
		Mx	Z	1.1 20				
		Ki	iPKP	07 02 50.8				
				micr sec				
		Mx	E	0.9 20	"	Up	iSgl	12 21 15.1
		Mx	N	1.1 20		Ki	eSgl	12 23 12
		Mx	Z	1.2 20	"	Um	iSgl	12 21 30.1
		Sk	iPKP1	07 03 01.9		Ud	iSgl	12 22 14.0
	(cont.)					De	iSg2	12 22 47.5
						Western USSR. Explosion.		
					"	Um	i(P)	12 41 11.0
					"	Up	iSgl	13 47 11.3
					"	Ki	iSgl	13 48 20.3
						(cont.)		

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

1974				1974			
May	23	(cont.)		May	24	(cont.)	
		Sk iSgl	13 48 28.6			solution. Moreover,	
		Um iSgl	13 46 42.2			interpreting the second phase	
		Ud e	13 47 17			at Um, Ud as pP gives h = 50 km.	
		eSgl	13 48 08	"	24	Ud eP	09 43 40
		De eSgl	13 48 57			Greece.	
		Lake Ladoga region.					
		Explosion.					
"	23	Up iP	13 50 19.6	"	24	Sk i(Sgl)	10 05 38.7
		Ki eP	13 49 45			Ud iSgl	10 03 41.4
		Um iP	13 50 04.1			De iPgl	10 01 24.1
		Ud iP	13 50 11.2			iSgl	10 02 13.0
		De iP	13 50 27.5	"	24	Ki iPn	10 53 00.8
		Nevada (h = 5 km).				iSn	10 54 00.8
"	23	Up iSgl	14 14 48.3			iS*	10 54 19.4
		Ki eSgl	14 15 05			Um i	10 54 53.1
		Um iSgl	14 14 14.3			iSgl	10 55 13.0
		East of Lake Ladoga.				Ud iSgl	10 57 44.6
		Explosion?				Northwest USSR.	
"	23	Up iSgl	15 18 13.1	"	24	Ki iPn	11 05 45.3
		Ki eSgl	15 18 56			iSn	11 06 33.4
		Um iSgl	15 17 32.6			iS*	11 06 47.2
		Ud eSgl	15 19 10			Um iSgl	11 08 19.5
		Lake Ladoga region.				Northwest USSR-Norway.	
		Explosion.				Explosion.	
"	23	Ki iP	15 55 49.1	"	24	Ki eSgl	12 36 14
		(Greece).				Um eSgl	12 34 26
"	23	Up iP	19 55 22.8			Ud iSgl	12 35 13.3
		Ki iP	19 56 48.0			Western USSR.	
		Sk iP	19 56 06.5			Explosion.	
		Um iP	19 56 07.2	"	24	Ki eSgl	13 02 56
		Ud iP	19 55 26.6			Um iSgl	13 01 29.0
		Yugoslavia (h = N).				Ud iSgl	13 02 53.6
"	23	Ki iP	20 58 20.6			Lake Ladoga region.	
		Um iP	20 59 03.6			Explosion.	
		Ud iP	20 59 39.8	"	24	Ki eSgl	13 29 39
		Greenland Sea.				Sk iSgl	13 30 01.2
"	24	Up iP	01 35 11.2			Um iSgl	13 28 10.9
		Ud iP	01 35 12.9			Ud iSgl	13 29 35.9
		De iP	01 34 36.4			Lake Ladoga region.	
"	24	Up iP	09 33 15.8	"	24	Ki eSgl	13 29 39
		Um iP	09 32 54.5			Sk iSgl	13 30 01.2
		i	09 33 08.1			Um iSgl	13 28 10.9
		Ud iP	09 33 22.3			Ud iSgl	13 29 35.9
		i	09 33 35.8			Explosion.	
		Japan (h = 15 km).					
		The P arrivals are 8-9 sec late compared to the NEIS					
		(cont.).					
				"	24	Up iP	20 37 02.2
						Ki iP	20 36 08.4
						Sk iP	20 36 45.1
						Um iP	20 36 33.4
						Ud iP	20 37 05.7
						De iP	20 37 27.2
						i	20 37 37.9
						Kamchatka (h = N).	

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

1974				1974			
May	24	Ud	iP	21	32	33.5	(cont.)
		Turkey.					Northwest USSR-Finland. Explosion.
"	24	Ud	iPKPl	22	12	55.6	" 25 Ud eP 15 38 16
"	24	Ki	iP	22	39	16.7	Japan (h = 60 km).
		Ud	iP	22	40	08.8	
		Alaska (h = 130 km).					" 25 Um i(P) 15 40 51.4
"	24	Ud	iP	23	58	21.0	" 25 Ki iP 15 55 33.6
"	25	Ki	ePgl	01	34	32	Ud iP 15 55 02.3
			eSn	01	35	13	North Atlantic Ocean (h = N).
			iSgl	01	35	29.7	" 25 Up iP 16 17 40.1
		Northwest USSR-Finland. Explosion?					Ki iP 16 17 33.9
"	25	Up	iPKP	04	37	25.8	Um iP 16 17 33.5
			i	04	37	38.6	Ud iP 16 17 53.6
		Ki	ePKP	04	37	39	ipP 16 18 17.2
		Um	iPKP	04	37	33.3	Burma.
		Ud	iPKP	04	37	23.4	" 25 h = 90 km (Ud).
		South Sandwich Islands (h = 100 km).					" 25 Ud iPKPl 16 41 48.5
"	25	Ud	iP	06	18	39.0	De iPKPl 16 42 00.4
"	25	Up	iP	09	42	59.7	Tonga-Kermadec Islands (h = 550 km).
			ipP	09	43	10.0	" 25 Up iP 19 06 31.2
		Ki	iP	09	42	29.9	Ki iP 19 06 12.9
		Sk	iP	09	42	59.7	Um iP 19 06 18.9
		Um	eP	09	42	42	Ud iP 19 06 41.1
			ipP	09	42	51.7	ipP 19 06 51.7
		Ud	iP	09	43	08.2	Luzon.
			ipP	09	43	17.9	" 25 h = 40 km (Ud).
		De	iP	09	43	19.4	Ryukyu Islands.
		h = 35 km (Up,Um,Ud).					" 25 Up iP 20 17 48.6
"	25	Um	iSgl	11	52	50.1	Ki iP 20 17 00.5
		Western USSR-Finland. Explosion.					Sk iP 20 16 56.3
							Um iP 20 17 25.8
"	25	Ud	iP	12	08	25.5	Ud iP 20 17 34.0
		West of Gibraltar (h = N).					De iP 20 18 08.1
"	25	Ki	iSn	12	56	28.4	i 20 18 19.7
		Um	iSgl	12	57	49.5	Greenland (h = N).
		Northwest USSR. Explosion.					" 25 Up iPKPl 21 11 40.1
"	25	Ki	iSn	14	30	58.1	Um iPKP 21 11 28.8
			iSgl	14	31	15.3	iSKPl 21 14 12.4
		Um	iSn	14	31	43.0	Ud iPKPl 21 11 42.6
			iSgl	14	32	09.3	iSKPl 21 14 24.2
		(cont.).					De iPKPl 21 11 52.6
							Tonga-Kermadec Islands (h = 680 km).
"	25	Ki	iSn	14	30	58.1	" 25 Ud iP 21 31 35.7
			iSgl	14	31	15.3	Aegean Sea.
		Um	iSn	14	31	43.0	" 25 Ud iP 22 35 02.7
			iSgl	14	32	09.3	Japan (h = 40 km).

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

1974		1974	
May 26	Up	iPKP	01 51 27.3
		iSKPl	01 54 53.2
			micr sec
		PKP	Z' 0.2 1.8
		SKPl	Z' 0.1 1.5
		Mx	E 1.5 20
		Mx	N 2.6 18
		Mx	Z 4.1 20
	Ki	iPKP	01 51 13.3
		iPP	01 53 03
			micr sec
		PKP	Z' 0.1 1.2
		Mx	E 2.6 20
		Mx	N 2.8 20
		Mx	Z 2.4 20
	Sk	iPKP	01 51 24.0
	Um	iPKP	01 51 19.3
		iSKPl	01 54 41.4
	Ud	iPKP	01 51 29.4
		iPP	01 54 00.4
		iSKPl	01 54 58.3
	De	iPKP	01 51 33.5
		iSKPl	01 55 05.4
	New Hebrides Islands (h = 15 km).		" 26
	M = 6.1 (Up,Ki).		Ki iPKP 06 07 27.6
			micr sec
" 26	Up	iPKP	01 56 01.7
		ipPKP	01 56 09.1
		iSKPl	01 59 35.7
	Ki	iPKP	01 55 46.6
		ipPKP	01 55 54.6
	Um	iPKP	01 55 52.7
		ipPKP	01 55 58.6
	Ud	ipPKP	01 56 11.4
	De	iPKP	01 56 08.7
		ipPKP	01 56 14.9
	New Hebrides Islands. h = 25 km (Up,Ki,Um,De).		" 26
	Origin time = 01 36 45.		Ki iPKP 06 11 38.6
			Sk iPKP 06 11 51.4
			Ud iPKP 06 11 56.4
	New Hebrides Islands (h = 55 km).		New Hebrides Islands
" 26	Up	ipPKP	02 34 48.3
	Ki	iPKP	02 34 24.5
		ipPKP	02 34 32.6
	Um	iPKP	02 34 32.4
		ipPKP	02 34 40.9
	De	iPKP	02 34 48.3
	New Hebrides Islands. h = 25 km (Ki,Um).		" 26
			Ki eSn 06 39 15
			Um iSgl 06 40 38.7
	Northwest USSR. Explosion.		Northwest USSR.
" 26	Up	iP	03 51 27.4
	Ud	IP	03 51 40.8
" 26	Ki	iPKP	05 56 41.8
	New Hebrides Islands (h = 15 km).		" 26
			Ki iPKP 07 34 44.2
			Um iPKP 07 34 50.4
			Ud iPKP 07 35 01.0
	New Hebrides Islands (h = 25 km).		New Hebrides Islands

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

1974

May 26 Ki iPKP 08 33 50.9
 Sk iPKP 08 34 04.9
 New Hebrides Islands
 (h = 10 km).

" 26 Up iPKP 08 55 46.4
 Ki iPKP 08 55 30.1
 Um iPKP 08 55 38.9
 New Hebrides Islands
 (h = 10 km).

" 26 Ki iPKP 09 11 57.9
 Sk iPKP 09 12 08.9
 New Hebrides Islands
 (h = N).

" 26 Ki iPKP 10 21 42.2
 Um iPKP 10 21 47.9
 De iPKP 10 22 04.2
 New Hebrides Islands
 (h = 25 km).

" 26 Up iPKP 11 43 27.1
 Ki iPKP 11 43 15.0
 Ud iPKP 11 43 30.1
 New Hebrides Islands
 (h = 20 km).

" 26 Up iP 12 54 00.3
 Ki iP 12 53 38.4
 Formosa (h = 20 km).

" 26 Up iP 13 11 49.5
 ipP 13 12 02.6
 i 13 12 10.3
 Ki eP 13 13 01
 Sk ipP 13 12 43.4
 Um iP 13 12 35.4
 Ud iP 13 11 54.2
 i 13 12 02.2
 ipP 13 12 07.3
 Greece.
 h = 70 km (Up,Ud).

" 26 Up iP 13 19 49.7
 Ud iP 13 19 55.2
 Kurile Islands.

" 26 Up iP 20 52 14.4
 Um iP 20 51 52.9
 ipP 20 52 05.6
 Ud iP 20 52 21.8
 Japan.
 h = 45 km (Um).

" 26 Ki i(P) 23 23 52.0

1974

May 27 Ud iP 03 34 33.9 C
 Tadzhik SSR (h = 240 km).

" 27 Up iP 04 51 59.2 C
 i 04 52 51.3
 micr sec

i Z' 0.1 1.1
 Mx E 3.2 21
 Mx N 6.8 21
 Mx Z 14 22
 Ki iP 04 51 06.1
 micr sec

Mx E 5.5 20
 Mx N 6.5 22
 Mx Z 5.8 22

Sk iP 04 51 44.1
 iPcP 04 52 28.2
 Um iP 04 51 31.7
 i 04 51 58.8
 iPcP 04 52 14.9

Ud iP 04 52 03.2
 iPcP 04 52 33.9
 De iP 04 52 24.8
 Kurile Islands (h = 45 km).

M = 5.9 (Up,Ki).

" 27 Up iP 05 13 55.6
 ipP 05 14 06.8

i 05 14 14.9
 ✓Ki iP 05 13 39.7
 ipP 05 13 50.9

micr sec
 Z' 0.1 1.2
 Sk iP 05 13 35.2
 i 05 14 13.7
 Um iP 05 13 49.6
 De iP 05 13 55.2
 Mexico.
 h = 40 km (Up,Ki).

" 27 Ud iP 07 45 06.5

" 27 Up iP 10 50 02.2
 i 10 50 05.9

micr sec
 Mx E 1.2 20
 Mx N 1.6 22

Mx Z 2.2 20
 Ki iP 10 49 47.2
 i 10 49 51.7

micr sec
 Mx E 3.0 18
 Mx N 2.3 18

Mx Z 2.3 18
 Sk iP 10 50 04.4
 (cont.)

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

1974

May 27 (cont.)

Um iP 10 49 57.8
 Ud iP 10 50 13.7
 Mindanao (h = 35 km).
 M = 5.7 (Up,Ki).

1974

May 27 (cont.)

Alaska.
 h = 20 km (Up,Ki,Sk,Um,Ud,
 De).
 m = 5.9 (Up,Ki).

" 27

Up iSn 12 17 25.7
 iSgl 12 17 37.7
 Ki iSgl 12 20 10.4
 Um iSgl 12 18 10.9
 Ud i(S*) 12 18 37.2
 iSgl 12 18 40.8
 De iSgl 12 19 06.9
 Estonia.
 Explosion.

" 28

Um iP 00 16 30.9
 Japan (h = 310 km).

" 27

Up iP 12 28 54.6
 Ki iP 12 29 16.2
 Ud iP 12 28 42.0
 De iP 12 28 36.2
 North Atlantic Ocean
 (h = N).

" 28

Up iPKP1 03 14 47.0
 iPKP2 03 14 53.7
 epPKP1 03 16 44
 micr sec
 PKP1 Z' 0.1 0.9
 PKP2 Z' 0.3 1.0
 Ki iPKP1 03 14 25.8 C
 Sk iPKP1 03 14 41.6 C
 iPKP2 03 14 45.4
 ipPKP1 03 16 34.9
 Um iPKP1 03 14 35.7
 ipPKP1 03 16 29.0
 Ud iPKP1 03 14 48.8 C
 iPKP2 03 14 57.0
 ipPKP1 03 16 42.4
 De iPKP1 03 14 56.0
 iPKP2 03 15 11.1

" 27

Ud iP 13 32 48.4
 i 13 32 56.4

" 27

Ud iP 13 49 20.9

Kermadec Islands.
 h = 490 km (Sk,Um,Ud).

" 27

Up iSgl 13 58 40.2
 Ki eSgl 14 00 51
 Sk eSgl 14 00 37
 Um iSgl 13 59 01.9
 Western USSR.
 Explosion.

" 28

Up iSgl 11 07 18.8
 Um iSgl 11 08 10.9
 Estonia.
 Explosion.

" 27

Up iP 14 11 45.3 C
 ipP 14 11 49.8
 iPcP 14 12 29.8
 micr sec

Up iSgl 14 04 48.0
 Western USSR.
 Explosion.

P Z' 0.1 1.3
 pP Z' 0.1 1.0
 Ki iP 14 10 49.8 C
 ipP 14 10 55.0
 micr sec
 P Z' 0.2 1.0
 pP Z' 0.2 1.0
 Sk iP 14 11 15.7 C
 ipP 14 11 20.7
 Um iP 14 11 18.4 C
 ipP 14 11 23.4
 Ud iP 14 11 40.9 C
 ipP 14 11 46.4
 iPcP 14 12 26.6
 De iP 14 12 05.6 C
 ipP 14 12 10.7

Up iPg1 14 05 04.8
 iSgl 14 05 11.7
 iRg 14 09 09.2
 Ki iSgl 14 07 25.6
 Sk iSgl 14 07 03
 Um eSgl 14 05 50.4
 Ud i(S*) 14 05 52.3
 iSgl 14 05 54.0
 De iPn 14 05 17.5
 i 14 05 39.4
 iSgl 14 06 06.6
 i 14 06 12.4
 Off coast of Södermanland,
 Sweden, 58.7°N, 18.2°E.
 Origin time = 14 04 27.
 Explosion.

(cont.)

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

1974				1974			
May	28	Ud	iPKPl	17 18 02.6	May	29	Um iSgl
		De	iPKPl	17 18 15.3			Western USSR.
"	28	Up	i(P)	21 53 43.1			Explosion.
"	28	Up	iP	23 25 44.9	"	29	Sk i(P)
			ipP	23 25 52.7	"	29	Ki eP
		Um	iP	23 25 56.9			16 00 37
			ipP	23 26 04.2			Celebes Sea (h = N).
		Ud	iP	23 25 57.9	"	29	Ud iPKPl
			ipP	23 26 05.5			17 10 17.1
		Indian Ocean.				"	Up iP
		h = 30 km (Up, Um, Ud).					Ki eP
		Origin time = 23 15 23.					Ud iP
"	28	Up	iP	23 28 45.9			01 10 53.1
			ipP	23 28 55.0			Ki eP
		Ki	iP	23 29 16.7			01 10 06
		Um	iP	23 28 58.2	"	30	Ud iP
			ipP	23 29 06.4			01 16 03.1
		Ud	iP	23 28 58.3			Kurile Islands (h = N).
			ipP	23 29 06.7	"	30	Ki iPn
		Indian Ocean.					10 27 04.4
		h = 30 km (Up, Um, Ud).					ipPgl
"	29	Ud	iP	01 54 51.1			10 27 12.6
		Tien-Shan.					iSn
"	29	Up	iP	04 27 31.0			10 27 50.9
		Ki	iP	04 28 05.3			iS*
		Um	iP	04 27 41.7			10 28 02.4
		Ud	iP	04 27 43.0	"	30	Sk iSgl
		Indian Ocean (h = N).					10 30 56.5
"	29	Um	iP	07 19 38.2			Um iSn
		Ud	iP	07 20 07.4			10 29 01.6
		Japan (h = 30 km).					iSgl 10 29 39.6
"	29	Up	iP	08 23 46.7			Northwest USSR-Norway.
		Ki	iP	08 23 45.8 D			Explosion.
		Sk	iP	08 23 59.9 D	"	30	Up iSgl
		Um	iP	08 23 43.5 D			Ki iSgl
		Ud	iP	08 23 55.9 D			Um iSgl
		Sumatra (h = 130 km).					11 50 08.9
"	29	Up	i(P)	11 30 44.3			Ki iSgl
"	29	Ud	iP	12 08 35.7			Um iSgl
		Tien-Shan.					11 50 34.1
"	29	Up	iSgl	12 42 22.3	"	30	Up iPKPl
		Um	iSgl	12 42 41.6			13 19 22.6
		Ud	iSgl	12 43 25.1			Ud iPKPl
		Western USSR.					13 19 26.6
		Explosion.					De iPKPl
		(cont.)					13 19 36.0
		Kermadec Islands (h = N).					
		Esthonia.					
		Explosion.					
		South Norway.					
		By combination with Bergen					
		and Kongsberg readings.					
		13 21 46.8					
		13 22 09.4					
		13 24 43.5					
		13 24 00.1					
		13 22 45.2					
		13 23 10.3					

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

1974

May 30 (cont.)

De eSgl 13 23 41

Esthonia.

Explosion.

" 30

Up	iP	15 44 21.7
Ki	iP	15 45 36.9
Um	iP	15 45 02.4
Ud	iP	15 44 31.4
Aegean Sea (h = 40 km).		

" 31

Ki	eP	02 06 22
Kamchatka (h = 110 km).		

" 31

Up	iP	03 24 00.8
		micr sec
Mx	N	0.8 17
Mx	Z	0.6 17
Ki	iP	03 23 06.0
	ipP	03 23 16.0
		micr sec
Mx	E	0.7 17
Mx	N	0.7 16
Mx	Z	0.8 16
Sk	epP	03 23 47
Um	iP	03 23 33.1
	ipP	03 23 43.7
Ud	iP	03 23 58.8
De	iP	03 24 21.9
Unimak Island.		
h = 40 km (Ki,Um).		
M = 5.1 (Up,Ki).		

" 31

Up	iP	03 33 55.1 C
	iPn	03 35 01.3
	iPP	03 35 13.5
		micr sec
P	Z'	1.7 1.0
Pn	Z'	0.1 0.7
PP	Z'	0.2 0.8
Ki	iP	03 33 38.7 C
	iPn	03 34 38.5
		micr sec
P	Z'	1.8 1.1
Pn	Z'	0.2 0.7
Sk	iP	03 34 10.1 C
	iPn	03 35 27.9
	iPP	03 35 33.6
Um	iP	03 33 39.7 C
	iPn	03 34 44.0
	iPP	03 34 52.3
Ud	iP	03 34 11.5 C
De	iP	03 34 18.8 C
	i	03 35 17.8
(cont.)		

1974

May 31 (cont.)

De iPn 03 35 42.0

Kazakh SSR.

m = 6.9 (P), 6.2 (PP) (Up,Ki).
Underground explosion.

" 31 De iPKPl 06 28 03.2

Fiji Islands (h = 570 km).

" 31 Ud iP 06 53 49.7

" 31 Up iSgl 07 27 10.6

Ki iSgl 07 27 53.7

Sk iSgl 07 28 20.2

Um iSgl 07 26 29.4

Ud iSgl 07 28 07.7

De iSgl 07 28 50.3

Lake Ladoga region.

Explosion.

" 31 De i(P) 08 04 49.8

Ki iP 09 20 12.2

Sk iP 09 20 50.7

Um eP 09 20 38

Ud iP 09 21 10.3

De iP 09 21 31.3

Kamchatka (h = N).

" 31 Sk i(P) 12 34 02.5

" 31 Up iSgl 12 36 09.7

Sk iSgl 12 37 58.3

Um iSgl 12 36 25.8

Ud iPn 12 35 06.5

iSgl 12 37 11.1

De iPn 12 35 18.5

i 12 35 25.1

eSg2 12 37 42

Western USSR.

Explosion.

" 31 Up iP 14 13 47.0

Ki iP 14 13 55.7 C

Um iP 14 13 45.5 C

Ud iP 14 14 03.8 C

De iP 14 14 00.5

Afghanistan-USSR (h = 240 km).

" 31 V Up iP 14 17 27.9

i 14 17 37.0

iPP 14 20 47.7

iS 14 27 51

(cont.)

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

1974

May 31 (cont.)

		micr	sec
Up	P	Z'	0.1 1.5
	i	Z'	0.7 2.1
	PP	Z'	0.2 1.5
	Mx	E	9.6 20
	Mx	N	10 20
	Mx	Z	17 19
Ki	iP		14 17 00.4
	i		14 17 06.9
		micr	sec
	P	Z'	0.1 1.5
	i	Z'	0.5 2.1
	Mx	E	32 19
	Mx	N	23 17
	Mx	Z	26 17
Sk	iP		14 17 01.7
	i		14 17 13.4
Um	iP		14 17 19.5
	iS		14 27 30
Ud	iP		14 17 22.4
De	iP		14 17 32.1
	i		14 17 39.3
	iPP		14 20 54.2

Gulf of California (h = N).

m = 6.4, M = 6.6 (Up,Ki).

Generally small-amplitude
beginnings, followed by
larger onsets.

" 31 Ud iPKPl 20 07 14.0

Markus Båth
Klaus Meyer
Rutger Wahlström

November 30, 1975

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SEISMOLOGICAL BULLETIN

UPPSALA, KIRUNA, SKALSTUGAN, UMEÅ,

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

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

J U N E 1 - 30, 1974

1974	June	1	Um	iP	00 12 53.2	1974	June	1	Ki	iSgl	10 44 18.3
			Japan.						Um	iSgl	10 45 15.2
"	1	Up	iP	00 34 10.1					Ud	iSgl	10 47 45.5
		Um	iP	00 33 42.7							Northwest USSR.
		Ud	iP	00 34 08.7							Explosion.
		De	iP	00 34 31.4	"	1	Up	iP	13 25 19.9		
			Aleutian Islands.				Um	i(P)	13 24 43.5		
"	1	Ud	iP	03 00 31.6			Ud	iP	13 25 26.1		
"	1	Up	iP	03 36 01.2	"	1	Ud	iP	13 26 52.7 C		
		i		03 36 24.4		1	Ki	iSn	15 27 01.7		
		Ki	iP	03 35 44.6				iSgl	15 27 23.1		
		Sk	iP	03 36 08.8						Northwest USSR.	
		Ud	iP	03 36 13.4						Explosion.	
			Szechwan, China (h = 15 km).		"	1	Up	iP	16 12 18.7		
"	1	Ud	iP	05 08 17.9			Ki	iP	16 13 29.8		
"	1	Ud	iP	06 15 57.3	"		Sk	iP	16 12 58.0		
"	1	Ud	iPKP1	09 01 23.2			Um	iP	16 12 55.0		
"	1	Up	iSgl	10 45 53.8			Ud	iP	16 12 25.5 D		
		Ki	iPn	10 41 37.6	"		De	iP	16 11 51.1		
			iPg1	10 41 52.6						Greece (h = 40 km).	
			iSn	10 42 37.1		1	Up	iP	20 28 12.4		
			iSgl	10 43 01.2			Ki	iP	20 28 14.4		
		Sk	iSgl	10 45 24.7			Sk	iP	20 27 46.0		
		Um	iSn	10 43 16.4			Um	iP	20 28 16.6		
		i		10 43 32.3			Ud	iP	20 27 55.0		
		iS*		10 43 46.5			De	iP	20 28 04.2		
		iSgl		10 43 52.0						North Atlantic Ocean	
		Ud	iSgl	10 46 23.1	"					(h = N).	
		De	iSgl	10 47 59.5		1	Up	iPKP1	23 12 43.1		
			Northwest USSR.				Um	iPKP1	23 12 27.2		
			Explosion.				Ud	iPKP1	23 12 40.0		
										Kermadec Islands	
										(h = 450 km).	

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

1974							1974									
June	2	Up	iP	04	26	02.5	June	2	(cont.)	Sk	iP	23	16	17.1		
		Sk	iP	04	26	03.7				ipP		23	16	28.1		
		Um	iP	04	25	45.3				ipP		23	16	43.9		
		Ud	iP	04	26	13.4				ipP		23	16	19.9		
		Ryukyu Islands (h = N).								ipP		23	16	29.9		
"	2	Sk	iP	05	30	20.3				De	iP	23	16	22.2		
"		Um	iP	05	30	23.1				ipP		23	16	33.6		
"		i		05	30	33.2				Colombia.						
"		Ud	iP	05	29	57.2				h = 40 km (Up,Ki,Sk,Ud,De).						
		Adriatic Sea.						"	3	Um	iP	03	09	16.1		
"	2	Ki	iSn	05	54	21.6				Ud	iP	03	09	09.7		
"		Northwest USSR.								De	iP	03	08	46.8		
"		Explosion.						"	3	Ud	iPKPl	06	04	26.7		
"	2	Ud	iPP	07	07	40.2				Up	iP	11	53	09.8		
"		Indian Ocean (h = N).						"	3	ipP		11	53	33.9		
"	2	Up	iP	12	07	06.1				iPP		11	54	43.8		
"		Ud	iP	12	07	17.5				micr				sec		
"		De	iP	12	07	15.6				pP	Z'	0.2	1.3			
"		Nicobar Islands (h = N).								PP	Z'	0.3	1.5			
"	2	Ud	iP	13	39	19.0				Mx	N	1.0	12			
"		Talaud Islands (h = 70 km).								Ki	eP	11	53	17		
"	2	Up								ipP		11	54	54.1		
"		Mx		micr	sec					micr				sec		
"		Mx	E	1.8	19					P	Z'	0.1	1.0			
"		Mx	N	2.5	20					PP	Z'	0.1	1.3			
"		Mx	Z	2.7	20					Mx	E	0.5	8			
"		Ki	eP			16 13 02				Mx	N	0.8	11			
"						micr	sec			Mx	Z	0.8	10			
"		Mx	E	2.0	21					Sk	iP	11	53	35.4		
"		Mx	N	2.5	20					ipP		11	54	00.0		
"		Mx	Z	3.0	19					iPP		11	55	20.4		
"		Ud	iP	16	13	27.5				Um	iP	11	53	07.1		
"		Talaud Islands (h = N).								ipP		11	53	31.8		
"		M = 5.8 (Up,Ki).								iPP		11	54	44.6		
"	2	Ki	i(P)	18	14	53.6				Ud	iP	11	53	26.0		
"		Sk	iP	18	15	23.4				ipP		11	53	50.6		
"		Ud	iP	18	15	45.7				iPP		11	55	05.1		
"		Aleutian Islands								De	iP	11	53	22.2		
"		(h = 70 km).								ipP		11	53	47.8		
"	2	Up	iPKPl	22	46	31.8				isP		11	54	00.5		
"		Um	iPKP	22	46	30.9				iPP		11	54	59.9		
"		Ud	iPKPl	22	46	34.0				Afghanistan-USSR.						
"		De	iPKPl	22	46	45.4				h = 120 km (Up,Sk,Um,Ud,De).						
"		Tonga-Kermadec Islands								m = 5.6, M = 5.0 (Up,Ki).						
"		(h = 580 km).								M uncorrected for focal depth.						
"	2	Up	iP	23	16	31.3				"	3	Um	iSgl	12	16	48.3
"		ipP		23	16	41.0				Ud	eSgl	12	17	33		
"		Ki	iP	23	16	30.7				Western USSR.						
"		ipP		23	16	42.5				Explosion.						
"		(cont.).						"	3	Up	iP	15	14	32.0		
										Ud	eP	15	14	50		

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

1974				1974				
June	3	Up	iPKPl	23 07 50.9	June	4	(cont.)	
		Ud	iPKPl	23 07 52.7			De ipPKP 04 34 31.0	
		De	iPKPl	23 08 02.6			iSKPl 04 36 21.6	
"	3	Up	iP	23 42 52.3 C			Tonga Islands.	
		Ki	iP	23 42 56.1			h = 310 km (Um,De).	
		Sk	iP	23 43 14.7			m = 6.5, M = 6.2 (Up,Ki).	
			iPP	23 44 52.6			M uncorrected for focal	
		Um	iP	23 42 49.2			depth. Unusually large	
		Ud	iP	23 43 08.2 C			surface waves for this	
			iPP	23 44 41.2			focal depth.	
		De	iP	23 43 06.7	"	4	Up iP 04 45 11.5	
		Tadzhik SSR (h = 60 km).					Ki iP 04 45 13.1	
"	4	Ud	iP	02 25 17.7			i 04 45 41.9	
"	4	Ud	iPKPl	02 38 12.1	"	4	Um iP 04 45 00.5	
		De	iPKPl	02 38 22.8			i(P) 04 45 38.2	
"	4	Ud	iP	03 14 51.5	"	4	Ki iP 04 56 08.2	
		Kurile Islands.					Um iP 04 55 48.8	
"	4	Up	i(PKP)	04 32 48.5	"	4	Up iP 05 08 59.1	
			ipKP	04 33 02.1			Ki iP 05 08 22.5	
			iPP	04 35 37.2			Um iP 05 08 41.9	
			iSKPl	04 36 08.0			Ud iP 05 08 59.5	
				micr sec			Following NORSAR, these	
			PKP	Z' 0.2 1.2			phases may be SKP.	
			PP	Z' 1.0 2.0	"	4	Um iP 09 37 58.3	
			SKPl	Z' 1.2 2.0				
			Mx	E 5.2 26	"	4	Up iSn 11 25 50.3	
			Mx	N 3.7 25			iSgl 11 26 01.5	
			Mx	Z 4.5 25			Ki iSgl 11 28 32.1	
		Ki	i(PKP)	04 32 38.2			Sk iSgl 11 27 48.5	
			ipKP	04 32 49.2			Um iSgl 11 26 33.3	
			iPP	04 34 47.5			Ud iSgl 11 27 03.6	
				micr sec				
			PKP	Z' 0.5 1.3			Estonia.	
			PP	Z' 0.8 2.5			Explosion.	
			Mx	E 3.3 19	"	4	Ud iPKPl 11 48 06.9	
			Mx	N 3.9 21			De iPKPl 11 48 17.9	
			Mx	Z 2.4 20			Tonga-Kermadec Islands	
		Sk	i(PKP)	04 32 45.6			(h = 620 km).	
			ipKP	04 32 58.8				
			iPP	04 35 20.6				
			iSKPl	04 36 00.9	"	4	Ki iSgl 13 05 53.5	
		Um	i(PKP)	04 32 42.2			Sk iSgl 13 04 59.7	
			ipKP	04 32 56.0			Um iSgl 13 03 48.5	
			iPP	04 34 13.8			Estonia.	
			iSKPl	04 35 11.1			Explosion.	
		Ud	i(PKP)	04 32 48.9	"	4	Up iP 13 05 10.5	
			ipKP	04 33 05.6				
			iPP	04 35 41.1	"	4	Ud iP 14 24 00.5	
			iSKPl	04 36 11.5			Ionian Sea.	
		De	i(PKP)	04 33 00.7	"	4	Um iSgl 14 45 00.7	
			ipKP	04 33 13.3			Lake Ladoga region.	
			(cont.)				Explosion.	

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

1974							1974						
June	4	Ud	iP		15 16 25.2		June	5	Um	iPKP		02 05 34.5	
"	4	Up	eP		15 24 45				Ud	iPKP		02 05 44.0	
		Ud	iP		15 24 35.7				New Britain	(h = 50 km).			
		North Atlantic Ocean (h = N).						"	5	Up	iPKP	05 39 07.2	
"	4	Up	i(P*)		23 14 32.0				Ki	iPKP	05 38 53.0 C		
			iPgl		23 14 33.8				Sk	iPKP	05 39 05.2 C		
			iSgl		23 15 05.3				Um	iPKP	05 38 59.9		
					micr sec				Ud	iPKP	05 39 09.2 C		
			Sgl	Z'	0.2 0.6				De	iPKP	05 39 16.4		
		Ki	iPgl		23 15 29.7				New Hebrides Islands				
			iSn		23 16 15.5				(h = 160 km).				
			iS*		23 16 40.7		"	5	Ud	iPKPl	08 37 06.6		
			iSgl		23 16 44.5				De	iPKPl	08 37 17.1		
					micr sec				Fiji Islands	(h = 350 km).			
		Sk	Sgl	Z'	0.1 0.6								
			i(P*)		23 14 31.4		"	5	Up	iSgl	11 17 17.0		
			iPgl		23 14 34.3				Ki	iSgl	11 19 50.7		
			iS*		23 15 03.9				Um	iSgl	11 17 50.7		
			iSgl		23 15 06.5				Ud	iSgl	11 18 23.4		
		Um	iPgl		23 14 23.1 C				De	iSgl	11 18 50.4		
			iSgl		23 14 48.4				Esthonia.				
		Ud	iP*		23 14 38.2					Explosion.			
			iPgl		23 14 41.1								
			iSn		23 15 03.4		"	5	Ud	iPKP2	12 04 57.7		
			iS*		23 15 17.8				Macquarie Islands	(h = N).			
			iSgl		23 15 19.3								
		De	iSn		23 16 29.9		"	5	Um	iP	12 36 56.1		
			i		23 16 35.3				Ud	iP	12 37 26.0		
			iS*		23 16 56.9				Japan	(h = 40 km).			
			iSgl		23 17 00.5								
		Medelpad, Sweden, 62.3°N, 17.2°E. Origin time = 23 13 51.						"	5	Up	iP	12 40 53.0	
										i	12 40 56.1		
									Ki	iP	12 40 37.1		
										micr sec			
									P	Z'	0.1 0.9		
"	5	Up	iP		00 12 22.8				Sk	iP	12 41 04.4		
			i		00 12 24.5				Um	iP	12 40 40.9		
					micr sec				i	12 40 43.2			
			P	Z'	0.1 1.0				Ud	iP	12 41 06.0		
			Mx	E	0.6 13				i	12 41 08.6			
			Mx	N	1.5 17				Szechwan, China (h = N).				
			Mx	Z	0.9 14				Double P, average separation				
		Ki	iP		00 12 08.8				2.7 sec.				
					micr sec								
			P	Z'	0.1 0.9		"	5	Um	iSgl	14 23 12.1		
			Mx	E	0.6 11				Ud	iSgl	14 23 58.4		
			Mx	N	1.0 16				De	iSgl	14 24 19.3		
		Sk	iP		00 12 36.2				Western USSR.				
		Um	iP		00 12 12.0				Explosion.				
		Ud	iP		00 12 35.7								
		De	eP		00 12 42		"	5	Ud	iPKP	22 20 06.2		
			i		00 12 47.6				Tonga Islands	(h = N).			
			Szechwan, China (h = N). m = 5.9, M = 5.4 (Up, Ki).						"	6	Ud	iP	07 08 44.8
"	5	Up	iP		00 50 28.1					6	Ki	iPn	07 28 32.3
											Northwest USSR.		
											Explosion.		

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

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

1974				1974						
June	7	Um	iSgl	14 49 45.5	June	7	Up			
		Esthonia.					iPKP1			
		Explosion.					22 47 24.3			
"	7	Up	eP	14 51 11			Um	iPKP1	22 47 13.2	
			i	14 51 14.6			Ud	iPKP1	22 47 25.6	
			i	14 51 19.7			De	iPKP1	22 47 36.7 C	
		Sk	IP	14 51 52.5	"	7	Up	iP	Tonga-Kermadec Islands	
		Um	IP	14 51 46.5			iSKS	(h = 280 km).	23 01 53.2	
		Ud	IP	14 51 18.0					23 12 17	
		Greece-Albania (h = 35 km).					Mx	micr sec	2.7 23	
"	7	Sk	i(Sgl)	14 54 42.9			Mx	E	2.3 25	
		Ud	i(Sgl)	14 53 45.2		Ki	Z	5.3 24		
		De	i(Sgl)	14 52 15.0			iP	23 01 51.3		
"	7	Um	iSgl	16 25 04.2			eSKS	23 12 13		
		Esthonia.						micr sec		
		Explosion.					P	0.1 2.0		
"	7	Ki	iPgl	17 31 28.0			Mx	E	3.3 21	
			iSg2	17 31 32.7			Mx	N	3.7 23	
			iRg	17 31 35.2			Mx	Z	2.9 22	
		Um	iSgl	17 33 22.7		Um	iP	23 01 55.1		
		Swedish Lapland, 67.7°N, 21.2°E. Origin time = 17 31 22. Shallow event, possibly explosion. By combination with Tromsoe reading.				iSKS	23 12 21			
						Ud	iP	23 01 44.2		
						South of Panama (h = N). M = 5.8 (Up,Ki).				
"	7	Up	iP	18 01 15.2 C	"	7	Up	i(P)	23 29 24.7	
			ipP	18 01 25.7						
				micr sec	"	8	Up	iP	03 18 45.3	
		P	Z'	0.1 1.1			Ki	iP	03 17 57.5	
		Ki	iP	18 00 22.0			Um	iP	03 18 19.2	
			ipP	18 00 33.0	"		Ud	iP	03 18 51.1	
				micr sec	8	Up	iP	Kurile Islands (h = 260 km).		
		P	Z'	0.1 0.8		Ki	iP	08 49 25.4		
		Sk	iP	18 00 52.6		Up	iP	08 49 38.8		
		Um	iP	18 00 48.3		Ki	iP	10 49 10.5		
			ipP	18 00 59.2	"	Up	iP	10 49 08.8		
		Ud	iP	18 01 14.3		Ki	iP	10 49 19.6		
			ipP	18 01 25.0		Ud	iP	Sunda Strait (h = 60 km).		
		De	iP	18 01 35.9						
			ipP	18 01 47.2						
		Aleutian Islands. h = 40 km (Up,Ki,Um,Ud,De). m = 6.0 (Up,Ki).				"	Ki	eSn	12 17 26	
"	7	Ki	iPn	19 07 06.4				iSgl	12 17 54.1	
			iSn	19 07 53.4			Sk	eSgl	12 20 24	
			iSgl	19 08 08.3			Um	iSgl	12 18 49.5	
		Um	iSgl	19 09 41.0	"		Northwest USSR. Explosion.			
		USSR-Norway. Explosion.				8	Ki	iP	12 30 11.7	
							Um	iP	12 30 27.2	
							Ud	iP	12 30 54.8	
							Japan (h = 35 km).			
						"	Up	iPKP1	12 54 46.5	
							Um	iPKP	12 54 42.0	
							(cont.)			

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

1974

June 8 (cont.)

Ud iPKP1 12 54 48.7
De iPKP1 12 54 58.9
Tonga-Kermadec Islands
(h = 520 km).

"

8 Up i 14 35 15.0
iSgl 14 35 17.4
Sk iSgl 14 36 10.8
Um iSgl 14 36 57.8
Ud iPgl 14 34 12.5
i 14 34 26.0
iSgl 14 34 26.9
De iSgl 14 35 19.7
Värmland-Dalsland, Sweden,
59.1°N, 12.5°E.
Origin time = 14 33 55.

"

8 Ki iPn 14 46 11.9
iSn 14 47 00.8
iSgl 14 47 17.3
Sk eSgl 14 50 01
Um iSgl 14 48 43.9
USSR-Norway.
Explosion.

"

8 Up micr sec
Mx E 0.5 17
Mx N 0.5 17
Mx Z 1.3 19
Ki micr sec
Mx E 0.8 17
Mx N 0.6 16
Mx Z 0.8 18
De iPKP 17 34 18.6
Solomon Islands (h = N).
M = 5.5 (Up,Ki).

"

8 Up iP 20 48 50.3
ipP 20 49 01.3
Ki iP 20 48 08.3
Um iP 20 48 25.9
ipP 20 48 37.7
Ud iP 20 48 57.1
ipP 20 49 09.3
Japan.
h = 45 km (Up,Um,Ud).

"

8 Up iPKP 21 45 14.2
Um iPKP 21 45 07.7
Ud iPKP 21 45 17.2
De iPKP 21 45 22.8
Solomon Islands (h = 45 km).

"

8 Up iPKP 22 14 57.7
Ki iPKP 22 14 44.8
(cont.)

1974

June 8 (cont.)

Sk iPKP 22 14 56.0
Um iPKP 22 14 49.7
Ud iPKP 22 14 59.7
De iPKP 22 15 05.5
Solomon Islands (h = 35 km).

" 9 Ud iPKP1 02 25 41.1
" 9 Ud iPKP 03 20 51.9
Samoa Islands (h = N).

" 9 Ki iP 04 10 08.0
Um iP 04 10 35.3
Ud iP 04 11 01.1
Aleutian Islands (h = 50 km).

" 9 Um iP 06 13 17.7
ipP 06 13 28.3
Aleutian Islands.
h = 40 km (Um).

" 9 Ki iSn 06 49 04.7
Um iSgl 06 50 14.6
Northwest USSR.
Explosion.

" 9 Up eSgl 07 42 39
Ki iPn 07 38 23.1
iSn 07 39 21.2
iSgl 07 39 44.9
Sk iSn 07 41 16.5
iSgl 07 42 06.5
Um iSn 07 40 00.1
i 07 40 15.4
i 07 40 32.6
iSgl 07 40 36.4
Ud iS* 07 42 57.5
iSgl 07 43 11.3
Northwest USSR.
Explosion.

" 9 Ki iP 11 52 43.0
Sk iP 11 52 36.7
Um iP 11 52 50.9
Ud iP 11 52 44.5

" 9 Up eP 14 29 40
micr sec
Mx E 1.0 20
Mx N 0.7 20
Mx Z 0.9 21
Ki eP 14 29 42
micr sec
Mx E 1.4 22
Sk iP 14 29 29.2
Um iP 14 29 44.8
(cont.)

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

1974				1974			
June	9	(cont.)		June	10	(cont.)	
		Um i	14 29 54.6			Ki iP	14 44 13.9
		Ud iP	14 29 32.0			Sk iP	14 44 43.3
		Peru (h = 50 km).				Um iP	14 44 41.7
		M = 5.5 (Up,Ki).				Ud iP	14 45 05.6
"	9	Up iPKP1	16 16 03.3			De iP	14 45 29.3
		Ud iPKP1	16 16 05.7	"	10	Alaska (h = 10 km).	
"	9	Up iPKP1	21 20 45.3			Ki eSn	17 12 51
		Um iPKP	21 20 42.8			iS*	17 13 10.7
		Ud iPKP1	21 20 46.7			Sk iSgl	17 15 40.6
		De iPKP1	21 20 57.6			Northwest USSR.	
"	10	Ki iP	04 48 09.3	"	10	Explosion.	
		Um iP	04 48 12.5			Up iSgl	19 10 36.7
		Celebes (h = 130 km).				Ki iPgl	19 07 55.5
"	10	Up iP	05 14 26.2			i	19 08 06.5
		i	05 14 29.2			i	19 08 31.8
		micr sec				iSgl	19 08 32.4
		P Z' 0.1 1.1				Sgl Z' 0.1 0.7	
		Ki iP	05 15 49.0			Sk iPgl	19 06 58.8
		i	05 15 54.4			iS*	19 08 35.9
		Sk eP	05 15 18			iSgl	19 08 40.0
		i	05 15 22.2			Um iSn	19 08 45.2
		Um iP	05 15 06.5			iSgl	19 09 00.0
		i	05 15 11.5			Ud iSgl	19 10 25.3
		Ud iP	05 14 43.0			De iSgl	19 12 20.4
		i	05 14 46.6			Nordland, Norway,	
		De eP	05 14 06			66.5°N, 14.3°E.	
		i	05 14 09.3			Origin time = 19 07 08.	
		Rumania (h = 170 km).				Explosion.	
		Double P, suggesting a double		"	10		
		event with a slight shift in				Up iSKP1	19 24 59.1
		hypocenter.				i	19 25 03.7
"	10	Ud iP	07 46 36.3			micr sec	
		California (h = 20 km).				SKP1 Z' 0.1 1.0	
"	10	Ki iP	09 06 48.4			Sk iSKP1	19 24 52.0
		Sk iP	09 07 25.2			Um iSKP1	19 24 45.1
		Um iP	09 07 10.6			Ud iSKP1	19 25 02.2
		Ud iP	09 07 41.3			De iSKP1	19 25 11.6
		De iP	09 08 00.3			New Hebrides Islands	
		Kurile Islands (h = N).				(h = 180 km).	
"	10	Up iP	10 27 19.2	"	11	Um iP	00 10 08.6
		North Atlantic Ocean (h = N).				Ki iP	02 13 10.7
"	10	Sk eSgl	12 19 28			Sk iP	02 12 44.8
		Um iSgl	12 18 00.0			Ud iP	02 12 13.7
		Ud iSgl	12 18 41.5			De iP	02 11 43.2
		Western USSR.				East of Crete (h = 45 km).	
		Explosion.		"	11	Up iP	06 27 00.1
"	10	Up iP	14 45 08.0			Ud iP	06 27 17.2
		(cont.)				Ki iP	11 45 41.4
						Ceram (h = N).	

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

1974				1974			
June	12	(cont.)		June	12	(cont.)	
		Iceland (h = 15 km).				Up	micr sec
		M = 4.3 (Up,Ki).				Mx	E 3.4 15
		Our readings exhibit rather				Mx	N 7.1 15
		large positive residuals				Mx	Z 5.0 17
		compared to the NEIS				Ki	iP 17 59 04.0
		solution.				P	micr sec
"	12	Ki iP 16 29 08.6				Z'	0.5 1.5
		Sk iP 16 29 26.1				Mx	E 14 17
		Um iP 16 29 02.7				Mx	N 18 16
		Ud iP 16 29 26.1				Mx	Z 8.9 17
		Andaman Islands.				Sk	iP 17 58 36.9
"	12	Up iP 16 37 35.3				i	17 58 41.2
		iS 16 47 12				Um	iP 17 59 16.2
		micr sec				i	17 59 20.6
		Mx E 2.7 20				iS	18 02 31
		Mx N 2.2 18				Ud	iP 17 59 02.4
		Mx Z 5.1 21				i	17 59 05.8
		Ki iP 16 37 43.4				De	iP 17 59 25.3
		iS 16 47 30				i	17 59 30.3
		micr sec				Iceland (h = 15 km).	
		P Z' 0.1 0.8				m = 5.4, M = 5.4 (Up,Ki).	
		Mx E 3.6 22				Our readings exhibit rather	
		Mx N 4.7 22				large positive residuals	
		Mx Z 3.1 18				compared to the NEIS	
		Sk iP 16 37 23.7				solution, in addition to	
		Um iP 16 37 43.1		"	12	double onsets.	
		iS 16 47 31				Venezuela (h = 35 km).	
		Ud iP 16 37 24.3				M = 5.8 (Up,Ki).	
		De iP 16 37 23.6				"	12
		Venezuela (h = 35 km).				Um iP 19 45 52.4	
"	12	M = 5.8 (Up,Ki).				i 19 46 18.1	
		Ki iP 16 56 35.6 C				South Sandwich Islands	
		Sk eP 16 57 07				(h = N).	
		iPcP 16 57 40.4		"	12	Um iP 21 46 06.9	
		Um iP 16 57 02.3				Solomon Islands (h = N).	
		iPcP 16 57 37.9				"	12
		Ud iP 16 57 27.8 C				Um iP 22 59 54.2	
		De iP 16 57 50.9				"	13
		Aleutian Islands (h = 45 km).				Um iP 00 23 52.8	
"	12					Ud iP 00 24 10.6	
		Ki iP 17 19 01.7				Hindu Kush (h = 220 km).	
		Sk iP 17 19 21.4				"	13
		i 17 19 28.0				Um iP 07 17 43.5	
		Um iP 17 19 01.1				"	13
		Ud iP 17 19 18.6				Up iP 08 10 04.9	
		Burma.				i 08 10 33.0	
"	12	Up iP 17 59 24.2				iSgl 08 10 34.3	
		i 18 00 27.1				Sk eSgl 08 12 34	
		micr sec				Um iSgl 08 11 38.9	
		P Z' 0.7 2.0				Ud iSgl 08 11 37.1	
		(cont.)				De iSgl 08 12 11.6	
						(cont.)	

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

1974				1974			
June	13	(cont.)		June	13	(cont.)	
		Baltic Sea, 59.6°N, 21.8°E.				Sk e(S*)	17 44 35
		Origin time = 08 09 27.				Ud iPgl	17 42 39.4
		Explosion.				iSgl	17 42 59.0
"	13	Up iPgl	08 10 50.3			iRg	17 43 06.5
		i	08 11 19.1	"	13	De iSgl	17 43 29.7
		iSgl	08 11 19.6			Dalsland, Sweden,	
		Um iSgl	08 12 23.5			58.8°N, 12.1°E.	
		Ud iSgl	08 12 21.4			Origin time = 17 42 14.	
		De iSgl	08 12 57.0			Near-surface event.	
		Baltic Sea, 59.6°N, 21.8°E.		"	13	Ud iP	18 39 50.1
		Origin time = 08 10 12.				De iP	18 39 13.1
		Explosion.		"	13	Up iP	21 54 39.2
"	13	Up iSgl	10 33 11.0			Sk iP	21 54 29.9
		Um iSgl	10 33 43.9			Um iP	21 54 39.6
		Ud iSgl	10 34 15.6			Caribbean Sea (h = N).	
		De iSgl	10 34 43.6	"	14	Up eP	00 47 03
		Estonia.				Um iP	00 47 13.4
		Explosion.		"	14	Ud iP	06 34 38.5
"	13	Ud i(P)	12 07 26.1			Kurile Islands.	
"	13	Sk iP	12 09 38.5	"	14	Sk ePKPl	06 54 48
		Um iP	12 09 51.2			Um iPKPl	06 54 42.7
		Mexico (h = 100 km).				ipPKPl	06 56 24.5
"	13	Up i	12 16 33.8			Ud iPKPl	06 54 55.0
		Sk eSgl	12 18 08			De iPKPl	06 55 04.1
		Um iSgl	12 16 40.2			Kermadec Islands.	
		eRg	12 17 07			h = 430 km (Um).	
		Ud iSgl	12 17 24.7	"	14	Up iPKPl	08 44 47.7
		De eSgl	12 17 51			Sk iPKPl	08 44 36.7
		Western USSR.				Um iPKPl	08 44 32.4
		Explosion.				Ud iPKPl	08 44 44.6
"	13	Sk i	13 04 01.3			De iPKPl	08 44 53.4
		iSgl	13 04 05.0			Kermadec Islands.	
		Um iSgl	13 02 17.4	"	14	Up iSgl	11 42 20.0
		iRg	13 02 47.9			Ki iPn	11 38 06.7
		Ud eSgl	13 03 41			iSn	11 39 05.7
		Probably Lake Ladoga region				iS*	11 39 24.8
		explosion.				Sk eSn	11 41 02
"	13	Sk i(P)	13 43 35.8			iSgl	11 41 55.2
		i	13 43 49.4			Um iSn	11 39 44.4
		Um i(P)	13 44 23.5			i	11 39 59.6
"	13	Ki iP	13 56 33.7			iS*	11 40 13.7
		Um iP	13 56 37.4			Ud iSgl	11 42 53.4
		Mindanao (h = 55 km).				De iSgl	11 44 22.4
		Explosion.				Northwest USSR.	
"	13	Up iSn	17 43 39.6	"	14	Up iSgl	12 27 41.7
		iSgl	17 43 49.7			Ki iSgl	12 29 46.5
		(cont.)				(cont.)	

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1974				1974				
June	14	(cont.)		June	14	(cont.)		
		Sk iSgl	12 29 31.9			Ud ipP	18 01 25.7	
		Um iSgl	12 27 57.9			Afghanistan-USSR.		
		Ud iSgl	12 28 39.2			h = 140 km (Um,Ud).		
		De e	12 28 43	"	14	Ud iP	18 15 22.6	
		Western USSR.		"	14	Up iPKP1	18 57 33.6	
		Explosion.				Um iPKP	18 57 25.8	
"	14	Ki iSn	12 46 36.0			i	18 57 33.9	
		iS*	12 46 48.7			Ud iPKP1	18 57 35.4	
		Sk eSgl	12 49 44			De iPKP1	18 57 46.7	
		Um iSgl	12 48 28.8			Tonga-Kermadec Islands		
		Ud eSgl	12 50 56			(h = 600 km).		
		USSR-Norway.		"	14	Up iRg	21 16 17.8	
		Explosion.				Ud iRg	21 16 06.4	
"	14	Ki iP	12 50 45.2			Central Sweden.		
		Java (h = 80 km).		"	14	Up iP	21 19 59.2	
"	14	Up iPKP	13 07 28.3			Um iP	21 19 40.6	
		Ki iPKP	13 07 12.2			Ud iP	21 20 06.2	
		Sk iPKP	13 07 22.7	"	14	Um iP	22 11 45.0	
		Um iPKP	13 07 18.3			Ud iP	22 12 04.5	
		Ud iPKP	13 07 28.3	"	15	Up iP	00 57 15.4	
		iSKP1	13 10 39.3			iLgl	01 04 38	
		De iPKP	13 07 35.3				micr sec	
		iSKP1	13 10 50.1			P	Z' 0.1 1.5	
		New Hebrides Islands				Mx	E 0.7 13	
		(h = 160 km).				Mx	N 0.7 13	
"	14	Um iP	13 13 39.9			Mx	Z 1.0 13	
"	14	Up e(PKP)	13 43 41		Ki	iP	00 57 54.6	
		iPKP	13 43 50.4			iPn	00 58 27.6	
		micr sec					micr sec	
		PKP	Z' 0.1 0.9			Mx	E 0.6 14	
		Ki iPKP	13 44 03.4			Mx	N 0.9 15	
		micr sec				Mx	Z 0.7 15	
		Mx E	0.9 20			Sk eP	00 58 00	
		Mx N	0.8 19			Um iP	00 57 27.8	
		Sk iPKP	13 43 53.7			Ud iP	00 57 32.2	
		Um i(PKP)	13 43 49.3			De iP	00 57 18.7	
		iPKP	13 43 56.5			Caucasus (h = 45 km).		
		Ud iPKP	13 43 47.7			M = 4.6 (Up,Ki).		
		De iPKP	13 43 43.2		"	15	Um iP	01 21 52.2
		Scotia Sea (h = N).				Ud iP	01 22 12.2	
"	14	Um iP	14 00 00.3			Mindanao (h = 50 km).		
		Ud iP	14 00 32.1		"	15	Up iP	02 47 51.2
		Japan (h = 130 km).				ipP	02 48 28.0	
"	14	Um iP	15 48 54.3			iX	02 48 33.7	
		Celebes (h = 190 km).				eP'P'	03 16 05	
"	14	Ki iP	18 00 47.3			i	03 16 09.3	
		Um iP	18 00 38.2			micr sec		
		ipP	18 01 06.1			X	Z' 0.3 1.0	
		Ud iP	18 00 57.0		Ki	iP	02 46 57.9	
		(cont.)				(cont.)		

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

1974				1974			
June	15	(cont.)		June	15	(cont.)	
		Ki	ix	02 47 39.2		Ud	iP
			iP'P'	03 16 28.0		De	iP
				micr sec		Szechwan, China (h = 40 km).	
		Sk	X Z'	0.2 1.3		m = 6.3, M = 5.5 (Up,Ki).	
			iP	02 47 30.9	"	Up	iP
			ix	02 48 12.6	15	i	07 26 27.3 C
			iP'P'	03 16 18.9		Ki	iP
		Um	iP	02 47 23.8		i	07 26 30.9
			ipP	02 48 00.5			07 26 10.7
			ix	02 48 05.8			07 26 13.3
			iP'P'	03 16 17.3			micr sec
		Ud	iP	02 47 51.9		P	Z' 0.1 0.9
			ipP	02 48 29.3		Sk	eP
			ix	02 48 34.2		Um	iP
		De	iP	02 48 14.8		i	07 26 38
			ix	02 48 56.8		Ud	iP
			iP'P'	03 16 03.7		De	iP
		Aleutian Islands.				Szechwan, China (h = N).	
		h = 150 km (Up,Um,Ud).				Double P, average separation	
		X is probably P of another				= 3.1 sec.	
		larger event in the same					
		area, 42.0 sec later.					
"	15	Ki	iP	03 42 34.0	"	15	Um iP
"	15	Um	iP	03 42 11.3			09 42 02.9
"	15	Ud	iP	03 42 08.2	"	15	Up iSgl
"	15	Gulf of Aden (h = N).				Um	iSgl
"	15	Um	iP	04 00 10.9		Ud	i
"	15	Ud	iP	04 00 38.8		iSgl	09 53 24.4
"	15	Japan (h = 370 km).				De	iSn
"	15	Up	eP	04 03 06		iSgl	09 53 25.6
"	15	Um	iP	04 03 17.6	"	Ki	eSgl
"	15	Ud	iP	04 03 21.6	15	Um	iSgl
"	15	Caucasus.				De	iS*
"	15	Ki	iP	06 46 22.8		iSgl	09 53 34.9
"	15	Mariana Islands (h = 430 km).				Gulf of Finland.	
"	15/	Up	iP	07 13 31.9 C	"	15	Ki iP
"	15/			micr sec		Up	iP
"	15/	P	Z'	0.2 1.1		i	10 29 29.9
"	15/	Mx	E	0.7 15			10 29 33.8
"	15/	Mx	N	1.0 14			micr sec
"	15/	Mx	Z	0.9 12		Ki	Z' 0.1 0.8
"	15/	Ki	iP	07 13 15.5 C		iP	10 29 14.0
"	15/			micr sec		i	10 29 18.2
"	15/	P	Z'	0.3 0.9			micr sec
"	15/	Mx	E	1.7 12		P	Z' 0.1 0.9
"	15/	Mx	N	2.4 16		Mx	E 0.7 15
"	15/	Mx	Z	1.4 12		Mx	N 0.5 14
"	15/	Sk	iP	07 13 42.0 C		Mx	Z 0.6 14
"	15/	Um	iP	07 13 19.3 C		Sk	iP
"	15/	(cont.)				Um	iP
"	15/					i	10 29 41.9
"	15/					i	10 29 45.2
"	15/					Um	iP
"	15/					i	10 29 17.3
"	15/					Ud	iP
"	15/					i	10 29 21.1
"	15/					Ud	iP
"	15/					(cont.)	10 29 43.1

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

1974				1974				
June	15	(cont.)		June	15	(cont.)		
		Ud i	10 29 46.8			Szechwan, China (h = 10 km).		
		De iP	10 29 48.7			m = 5.9 (Up,Ki).		
		i	10 29 52.5					
		Szechwan, China (h = N).		"	15	Ki iSgl	17 14 21.4	
		m = 6.0 (Up,Ki).				Sk iSgl	17 14 52.6	
		Double P, small and large,				Um iSgl	17 13 02.2	
		average separation = 3.8				Ud iSn	17 13 50.7	
		sec.				iSgl	17 14 39.9	
		Lake Ladoga region.						
"	15	Ki iSn	11 35 11.0			Explosion.		
		iSg2	11 35 30.6					
		Sk iSgl	11 37 53.1	"	16	Up eP	01 32 12	
		Um iSn	11 35 52.0					
		iSgl	11 36 19.0	"	16	Ud iP	02 42 15.7	
		USSR-Finland.				i	02 42 22.1	
		Explosion.						
"	15	Ki iSgl	11 35 52.3	"	16	Ki iSn	06 30 24.8	
		Um iSgl	11 36 48.8			Um iSgl	06 31 44.1	
		USSR-Finland.				Northwest USSR.		
		Explosion.				Explosion.		
"	15	Ki iPn	12 57 34.8	"	16	Sk iP	09 09 45.7	
		iSgl	12 58 40.1			Um iP	09 09 39.2	
		Um eSgl	13 00 07			Ud iP	09 09 13.0	
		USSR-Norway.				Aegean Sea (h = N).		
		Explosion.						
"	15	Ki iPn	12 58 02.6	"	16	Ud iP	11 14 50.1	
		iS*	12 59 04.5			Kurile Islands.		
		Um iS*	13 00 29.8					
		iSgl	13 00 35.2	"	16	Up iP	12 25 55.9	
		USSR-Norway.				Um iP	12 28 23.2	
		Explosion.				Ud iP	12 28 28.4	
						De iP	12 28 44.4	
"	15	Um iSgl	13 12 50.8	"	16	Up iPKP1	12 28 40.4	
		Karelian SSR.				Um iPKP	13 36 52.5	
		Explosion.				Ud iPKP	13 36 44.7	
		From Helsinki regional				De iPKP1	13 37 02.3	
		bulletin.						
						Fiji Islands (h = 650 km).		
"	15	Up i(P)	14 17 20.3	"	16	Um iP	13 37 03.3	
"	15	Up iP	/ 14 38 05.0 C	"	16	Up iPKP1	13 37 28.3	
			micr sec			Um iPKP	13 37 40.4	
		P	Z' 0.1 0.9	"	17	Ud iP	13 37 52.5	
		Ki iP	14 37 48.3			De iPKP1	13 37 55.9	
			micr sec					
		P	Z' 0.1 1.3	"	17	Up iP	14 01 10.8	
		Mx	N 0.6 16			Um iP	14 01 41.5	
		Sk iP	14 38 14.6			Ud iP	Kurile Islands (h = N).	
		Um iP	14 37 52.2 C			De iP		
		Ud iP	14 38 17.2 C					
		De iP	14 38 23.0					
		(cont.)						

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1974				1974				
June	17	Ki	e	03 36 18	June	17	(cont.)	
		i		03 36 27.1			Off west coast of Norway, near 64 1/2°N, 10°E. Origin time = 15 28 38.	
		i(Sgl)		03 36 36.3				
"	17	Ki	ePn	05 13 06	"	17	Up iP 16 47 40.1	
			iSgl	05 13 46.8			Ki iP 16 46 57.7 C	
			iSg2	05 13 52.8			Sk iP 16 47 32.7 C	
		Sk	iSgl	05 14 01.7			Um iP 16 47 16.8 C	
		Um	iSgl	05 14 27.3			Ud iP 16 47 47.1 C	
		Coast of Nordland, Norway, near 66 3/4°N, 13°E.					De iP 16 48 03.8	
		Origin time = 05 12 17.					Japan (h = 60 km).	
"	17	Up	iP	06 08 22.3	"	17	Ud iPKP1 18 57 32.9	
				micr sec			De iPKP1 18 57 45.1	
		Mx	Z	0.4 13	"	17	Up iP 19 30 33.0	
		Ki		micr sec			Ud iP 19 30 41.6	
			Mx	E 0.5 14			Ionian Sea (h = N).	
			Mx	N 0.3 10				
			Mx	Z 0.5 11	"	17	Up iP 22 04 02.8	
		Sinkiang, China. Probably atmospheric explosion.					Ki iP 22 03 09.7	
							Sk iP 22 03 42.4	
							Um iP 22 03 35.8 C	
"	17	Up	iP	07 29 53.2			Ud iP 22 04 03.5	
			iPP	07 31 07.9			De iP 22 04 25.6	
		Ki	iP	07 30 22.3			Aleutian Islands	
				micr sec			(h = 190 km).	
		Mx	E	0.4 14	"	18	Ud iP 00 13 50.6	
		Mx	N	0.6 16			Iran (h = 50 km).	
		Mx	Z	0.5 14				
		Sk	iP	07 30 24.8	"	18	Up iP 00 30 30.2	
		Ud	iP	07 30 09.9				
			ipP	07 30 18.0				
		Iran. h = 40 km (Ud).				"	Up eSgl 00 33 16	
							Um iSgl 00 34 01.3	
							De eSgl 00 34 58	
"	17	Up	i(Sgl)	12 17 33.1			Gulf of Finland.	
		Ud	i(Sgl)	12 17 03.9			Explosion.	
		De	i(Sgl)	12 17 24.1	"	18	Up i(P) 02 24 11.4	
"	17	Ud	iP	12 23 25.6			i 02 24 24.3	
		Hindu Kush. Intermediate depth.				"	Up eSgl 02 42 57	
							Um iSgl 02 43 41.2	
"	17	Up	iSgl	14 15 40.9			De eSgl 02 44 36	
		Sk	eSgl	14 17 28			Gulf of Finland.	
		Um	iSgl	14 16 01.6			Explosion.	
		Ud	iSgl	14 16 49.7	"	18	Um iPKP1 07 55 44.9	
		Western USSR. Explosion.					Ud iPKP1 07 55 56.7	
"	17	Ki	iSgl	15 31 28.8	"	18	Up iP 08 30 59.1 C	
		Sk	iSgl	15 29 26.9			iPP 08 31 27.6	
			iRg	15 29 36.0			micr sec	
		Um	iSgl	15 31 03.0			P Z' 0.1 0.8	
		(cont.)					(cont.)	

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1974	June	19	(cont.)	Ki	micr	sec	1974	June	19	Ki	iP	17 38 10.2		
				Mx	E	1.8 20					iPKPl	Kamchatka (h = N).		
				Mx	N	1.7 22	"			Ud	iPKPl	18 11 30.9		
				Mx	Z	1.1 18								
				Sk	iP	03 18 28.8	"			Up	iP	19 03 41.2		
				Um	iP	03 18 15.2				Ki	iP	19 03 49.8		
				i		03 18 54.0				Sk	iP	19 04 06.9		
				Ud	iP	03 18 50.1				Ud	iP	19 03 57.6		
				De	iP	03 19 14.8				De	iP	19 03 54.6		
				Eastern Siberia (h = N).						Hindu Kush.				
				M = 5.1 (Up,Ki).						Intermediate depth.				
"	19			Up	iP	07 08 39.2	"	19		Up	iP	19 33 24.1		
"				Ud	iP	07 08 45.2				i		19 33 29.3		
"				De	iP	07 08 13.0				Sk	iP	19 32 57.6		
				Greece.						Um	iP	19 33 05.6		
"	19			Ud	iP	07 24 58.8				Ud	iP	19 33 17.3		
"	19			Hindu Kush.						California (h = N).				
"				Intermediate depth.										
"	19			Ki	iP	11 45 05.9				Up	iP	21 25 51.9		
"				Sk	iP	11 45 35.9				ipP		21 27 34.6		
"				Um	iP	11 45 33.0				Ki	iP	21 25 18.6		
"				Ud	iP	11 45 57.6				Sk	iP	21 25 48.9		
"				De	iP	11 46 20.6				Um	iP	21 25 33.3		
				Unimak Island (h = N).						Ud	iP	21 25 59.2		
				South of Japan.						De	iP	21 26 12.0		
				h = 460 km (Up).										
"	19			Ki	eSgl	12 14 29	"	19		Um	iP	22 08 05.1		
"				Um	iSgl	12 12 36.4				Ud	iP	22 07 24.4		
"				Ud	iSgl	12 13 20.8				Ionian Sea.				
				Western USSR.										
				Explosion.										
"	19									"	20	Up	ePKP2	01 49 09
"										Ki	iPKPl	01 48 38.8		
"										Sk	iPKPl	01 48 53.0		
"	19			Up	iP	16 11 48.7				Um	iPKPl	01 48 48.9		
"				Ki	iP	16 11 14.1				Ud	iPKP2	01 49 16.1		
"				Sk	iP	16 11 22.6				South of Kermadec Islands.				
"				Um	iP	16 11 34.0								
"				Ud	iP	16 11 40.5	"	20		Up	iP	05 36 35.3		
				Nevada.						Um	iP	05 36 10.8		
				Underground explosion?						Japan (h = 100 km).				
"	19			Sk	eSgl	16 37 39	"	20		Up	iPKPl	06 54 25.5 C		
"				Ud	i	16 37 16.1				ipPKPl		06 56 34.4		
"					iSgl	16 37 24.9				iSKPl		06 57 18.3		
				Off coast of southwest						micr sec				
				Norway, 60.2°N, 4.4°E.						PKPl	Z'	0.1 0.8		
				Origin time = 16 34 59.						Ki	iPKP	06 54 12.3		
				By combination with						isKPl		06 56 58.8		
				Kongsberg readings.						(cont.)				

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

1974				1974			
June	20	(cont.)		June	20	(cont.)	
		Ki				Ud	iP
		SKPl	Z'	0.1	1.0		
		Sk	iPKPl	06 54	18.8		
		Um	iPKPl	06 54	14.0	"	20
		iSKPl		06 57	08.7	Up	iP
		Ud	iPKPl	06 54	27.9 C	P	Z'
		iSKPl		06 57	19.9	Mx	E
		De	iPKPl	06 54	37.4	Mx	N
		ipPKPl		06 56	40.4	Mx	Z
		Tonga-Kermadec Islands.				Ki	iP
		h = 560 km (Up,De).					
						P	Z'
"	20	Ki	eSgl	08 53	42	Mx	E
"	20	Sk	eSgl	08 54	13	Mx	N
"	20	Um	i	08 53	14.7	Mx	Z
"	20	iSgl		08 53	24.2	Sk	iP
"	20	Ud	iSgl	08 54	01.7	Um	iP
"	20	Lake Ladoga region.				i	
"	20	Explosion.				Ud	iP
"	20	Up	iP	09 32	10.9	De	iP
"	20			micr	sec		
"	20	Mx	E	1.0	14	Yugoslavia.	
"	20	Mx	N	0.9	10		m = 5.2, M = 4.6 (Up,Ki).
"	20	Mx	Z	1.2	9		
"	20	Ki	iP	09 33	43.2		
"	20			micr	sec		
"	20	Mx	E	1.6	15		
"	20	Mx	N	1.2	12		
"	20	Mx	Z	1.1	13	Ki	iP
"	20	Sk	iP	09 32	59.2		
"	20	Um	iP	09 33	02.2		
"	20	iS		09 36	34	Mx	E
"	20	Ud	iP	09 32	16.8 C	Sk	eP
"	20	De	eP	09 31	28	Um	iP
"	20	Yugoslavia (h = N).				Ud	iP
"	20	M = 4.6 (Up,Ki).				iSn	
"	20	Um	iSgl	13 28	34.0	De	iP
"	20	eRg		13 29	02	iLgl	
"	20	Ud	iSgl	13 29	16.8		
"	20	Western USSR.					
"	20	Explosion.					
"	20	Um	iSgl	14 15	37.0	"	20
"	20	Western USSR.				Up	iP
"	20	Explosion.					ipP
"	20	Um	iPKPl	15 05	27.3		
"	20	Up	eP	17 11	53		
"	20		iS	17 14	40.5		
"	20		S	Z'	0.4		
"	20	Ki	iP	17 13	18.1		
"	20	Um	iP	17 12	38.9		
"	20	(cont.)					
"	21	Sk	iP	01 15	05.2		
"	21	Ud	iP	01 14	25.4		
"	21	i		01 14	35.6		
"	21	Greece-Bulgaria.					

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

1974				1974			
June	21	Up	iSn	06 34 18.4	June	21	(cont.)
		i		06 34 35.8			Um iSgl 12 13 54.3
		iSgl		06 34 58.1			Ud iSgl 12 14 40.5
		Ki	iPgl	06 32 02.9			Western USSR.
			iSn	06 32 33.9			Explosion.
			iS*	06 32 41.3			
			iSgl	06 32 44.5	"	21	Up iSgl 13 00 31.9
				micr sec			Ki iSgl 13 03 07.6
		S*	Z'	0.1 0.5			Sk iSg2 13 02 29.7
			Sgl	Z' 0.2 0.7			Um iSgl 13 01 04.9
		Sk	i	06 34 13.6			Ud iSgl 13 01 34.8
			iSgl	06 34 36.5			De eSgl 13 02 01
		Um	iPgl	06 32 14.4			Esthonia.
			i(Pg2)	06 32 16.9			Explosion.
			iSn	06 32 46.4	"	21	Up eP 16 13 02
			i	06 32 50.2			Ki iP 16 13 45.1
			iS*	06 32 57.4			Sk eP 16 13 31
			iSgl	06 33 00.4			Um iP 16 13 21.1
		De	i	06 36 08.0			Gulf of Aden (h = N).
			iSgl	06 37 00.9			
		Finland, 66.0°N, 26.8°E.					
		Origin time = 06 31 08.				"	21 Um iP 20 10 08.3
		Clear double Sn phases at					Ud iP 20 10 40.1
		Um.				"	21 Up iP 21 05 23.9
"	21	Ud	iPKP	07 44 15.7			i 21 05 45.4
		Fiji Islands (h = 310 km).					micr sec
"	21	Up	iP	08 52 11.9 C			Mx E 0.7 15
				micr sec			Mx N 0.5 12
		Ki	P	Z' 0.1 1.4			Mx Z 0.5 12
			iP	08 52 09.6		Ki	iP 21 04 36.8
				micr sec			micr sec
			P	Z' 0.1 1.8			Mx E 1.2 14
		Sk	iP	08 51 41.0 C			Mx N 1.3 15
				micr sec			Mx Z 1.0 18
		Um	iP	08 52 14.7		Sk	iP 21 05 19.5
		Ud	iP	08 51 54.7		Um	iP 21 04 56.4
		De	iP	08 52 05.9 C			iS 21 11 28
		North Atlantic Ocean (h = N).					Ud iP 21 05 34.0
		m = 5.1 (Up,Ki).					De iP 21 05 52.8 C
"	21	Up	iS*	11 34 06.9			East of Lake Baikal (h = N).
			iSgl	11 34 15.5			M = 5.1 (Up,Ki).
		Ki	iPn	11 29 59.9	"	21	Up iSgl 22 12 11.9
			iSn	11 30 59.3		Ki	iPn 22 08 25.9
			iSgl	11 31 20.9			i 22 08 33.9
		Sk	eSgl	11 33 48			iPgl 22 08 41.4
		Um	iSn	11 31 37.3			iSn 22 09 24.8
			i	11 31 52.1			iS* 22 09 45.5
			iSgl	11 32 12.0	Sk	iSgl 22 12 30.9	
			i	11 32 17.3	Um	iSn 22 10 24.4	
		Ud	iSgl	11 34 47.8			iSgl 22 11 10.2
		De	eSgl	11 36 15			Ud iSn 22 12 22.3
		Northwest USSR.					iSgl 22 13 44.1
		Explosion.					Northwest USSR.
"	21	Sk	eSgl	12 15 25			Explosion?
		(cont.)					

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

1974				1974			
June	22	(cont.)		June	22	(cont.)	
		Ki iS*	14 27 03.3			Up	micr sec
		Northwest USSR.				P Z' 0.1 1.2	
		Explosion.				Mx E 1.0 14	
"	22	Up iP	16 17 36.2			Mx N 1.0 12	
"	22	Ki iP	16 16 52.4		Ki	Mx Z 1.6 12	
"	22	Sk iP	16 17 28.8			iP 23 35 51.7	
"	22	Ud iP	16 17 43.1			micr sec	
"	22	ipP	16 18 03.8			P Z' 0.1 0.9	
		Japan.				Mx E 0.8 11	
		h = 80 km (Ud).				Mx N 0.9 11	
"	22	Up iP	18 21 03.6		Sk	iP 23 35 19.3	
"	22	Ud iP	18 21 17.0			i 23 35 24.6	
"	22	Up iP	18 59 09.5		Um	iP 23 35 13.5	
"	22	Sk iP	18 59 25.1		Ud	iP 23 34 43.2 C	
"	22	Ud iP	18 59 22.4		De	iP 23 34 04.9	
		Burma-India (h = 110 km).			Greece-Bulgaria (h = N).		
"	22✓	Up iP	19 34 14.9 D		m = 5.2, M = 4.6 (Up,Ki).		
"	22✓	ipP	19 34 40.2		Double P onsets.		
"	22✓	iPP	19 37 53.2				
"	22✓		micr sec				
"	22✓	P Z' 0.1 0.7					
"	22✓	Ki iP	19 33 46.3 D				
"	22✓	ipP	19 34 13.1				
"	22✓		micr sec				
"	22✓	P Z' 0.2 0.9					
"	22✓	Sk iP	19 34 12.2		"	Ki iSn 05 50 48.0	
"	22✓	Um iP	19 33 58.7			iS* 05 51 07.7	
"	22✓	ipP	19 34 26.3			Northwest USSR.	
"	22✓	Ud iP	19 34 21.1 D			Explosion.	
"	22✓	De iP	19 34 32.6		"	Up iPKP1 06 31 17.3	
		Mariana Islands.				Ud iPKP1 06 31 18.5	
		h = 100 km (Up,Ki,Um).				De iPKP1 06 31 29.4	
		m = 6.1 (Up,Ki).				Fiji Islands (h = 490 km).	
"	22	Ud iP	19 44 20.5		"	Up iPKP 06 39 30.1 C	
"	22	Up iP	20 46 35.4			iPKK1 06 49 48.1	
"	22	Aleutian Islands (h = 50 km).				Ki iPKP 06 39 19.6	
"	22	Up ePKP2	21 34 16			Sk iPKP 06 39 28.8	
"	22	Ki iPKP1	21 34 04.5			Ud iPKP 06 39 32.7 C	
"	22	Ud iPKP2	21 34 27.1			iPKK1 06 49 43.0	
"	22	West of Macquarie Islands				De iPKP 06 39 38.5 C	
"	22	(h = N).				Solomon Islands (h = 70 km).	
"	22	Ud iP	21 44 33.5		"	Up iP 09 47 06.2	
"	22	De iP	21 43 59.1			Ud iP 09 47 13.6	
"	22	Up iP	23 34 33.5 C			Japan (h = 90 km).	
"	22	i	23 34 40.3		"	Up iPKP 14 47 41.9	
"	22	iS	23 38 03			De iPKP 14 47 49.2	
		(cont.)				New Guinea (h = 110 km).	
				"	Up iPKP2 15 29 27.1		
					(cont.)		

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

1974				1974				
June	23	(cont.)		June	24	Up ✓	ePKP	
		Ki iPKP1	15 28 54.8 C			i	20 53 18	
		Sk iPKP1	15 29 08.4			iSKP	20 54 23.3	
		Ud iPKP1	15 29 10.2			iSP	20 56 45.6	
		De iPKP2	15 29 44.1				21 04 45	
		New Zealand (h = 80 km).				micr sec		
"	23	Up i(P)	17 34 27.5			SKP	Z' 0.1 1.7	
"	23	Up iPKP1	19 18 59.1		Ki	Mx	E 1.8 23	
"	23	Ud iPKP1	19 19 01.2			Mx	N 3.2 25	
"	23	Up iP	20 22 15.9			Mx	Z 3.6 26	
"	23	Ki iP	20 21 59.9			Ki	iPKP	20 53 33.2
"	23	Ud iP	20 22 28.7			iPP	20 55 38.2	
"	23	Szechwan, China (h = N).				iSKP1	20 56 44.1	
"	23	Ki iP	21 12 26.0				micr sec	
"	23	Sk iP	21 12 12.0			PKP	Z' 0.1 1.1	
"	23	Turkey (h = N).				PP	Z' 0.2 1.8	
"	24	De iPKP	03 35 22.9			SKP1	Z' 0.4 2.0	
"	24	Solomon Islands (h = 90 km).				Mx	E 2.4 21	
"	24	Sk i(P)	16 41 52.5			Mx	N 1.8 18	
"	24	Um i(P)	16 41 00.9			Mx	Z 2.1 19	
"	24	i	16 41 07.0			Sk	iPKP	20 53 25.3
"	24	Ud i(P)	16 41 51.9			iSKP	20 56 49.5	
"	24	i	16 41 55.6			Um	iPKP	20 53 26.1
"	24	Sk i(P)	17 00 47.8			iPP	20 55 12.7	
"	24	Ud i(P)	17 00 45.1			iSKP	20 56 53.8	
"	24	Up ePKP	17 22 34		"	24 ✓ Up	micr sec	
"	24	iPKP1	17 22 41.9			Mx	E 1.9 20	
"	24	Sk iPKP1	17 22 31.8			Mx	N 2.7 19	
"	24	Um iPKP1	17 22 23.2			Mx	Z 3.5 25	
"	24	Ud iPKP1	17 22 35.0		Ki	iP	21 49 07.3	
"	24	De iPKP2	17 22 58.4			micr sec		
"	24	South of Kermadec Islands (h = 45 km).				Mx	E 3.3 19	
"	24	Up iP	19 12 40.6 C			Mx	N 3.8 23	
"	24	i	19 13 07.5			Mx	Z 3.1 21	
"	24	iS	19 21 42.6			Um	iP	21 49 14.7
"	24	Ki iP	19 12 05.9 C			De	iPKP	21 53 43.1
"	24	micr sec				New Guinea (h = N).		
"	24	P Z' 0.1 0.8			"	M = 6.0 (Up,Ki).		
"	24	Sk iP	19 12 36.6		24	Up iP	22 57 12.6	
"	24	Um iP	19 12 20.2 C		Ki iP	22 57 19.8		
"	24	Ud iP	19 12 47.9 C		Um iP	22 57 09.8		
"	24	iS	19 21 57.5		isP	22 57 58.4		
"	24	De iP	19 12 59.2 C		Ud iP	22 57 29.4		
"	24	Japan (h = 390 km).				De iP	22 57 26.5	
"	24	Ud iPKP1	20 21 25.3			Afghanistan-USSR (h = 150 km).		
"	24	Ki iPKP	23 51 41.6					
"	24	South Sandwich Islands (h = 70 km).						

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1974				1974			
June	25	Ki	iP	03 20 44.4	June	25	Up
		Ud	iP	03 21 14.2			i(pP)
"	25	Up	iP	03 56 28.4			iSKS
		Ki	iP	03 55 43.2			Mx
		Sk	iP	03 56 19.5			Mx
		Um	iP	03 56 03.9		Ki	Z
		Ud	iP	03 56 35.5			micr
		De	iP	03 56 53.1			sec
		Japan (h = 190 km).				Mx	E
"	25	Ki	iP	04 03 37.0			0.9
		Sk	iP	04 04 08.1			0.6
		Um	iP	04 03 38.1 C			1.4
		Ud	iP	04 04 09.0			micr
		Kazakh SSR.					sec
		Underground explosion.				Mx	E
"	25	Up	iP	04 25 35.9	"	25	Up
		Ki	iP	04 25 07.0 D			iSgl
			ipP	04 25 44.0			iSn
				micr sec			iSgl
			pP	Z' 0.1 1.0			11 45 35.4
		Sk	iP	04 25 31.9			11 45 45.3
		Um	iP	04 25 19.4 D			11 46 10.2
			ipP	04 25 59.1			11 46 27.2
		Ud	iP	04 25 42.4			i
		De	iP	04 25 53.8			11 46 42.7
		Mariana Islands.				Probably Esthonian region.	
		h = 150 km (Ki,Um).				Explosion.	
"	25	Up	iP	04 56 13.6	"	25	Ud
"	25	Up	iP	05 13 51.5			i
		Ki	iP	05 13 38.9			13 59 05.2
		Sk	iP	05 13 28.6 C			iSgl
		Um	iP	05 13 42.4			13 59 29.4
		Ud	iP	05 13 43.0			De
		De	iP	05 13 48.7			iSgl
		Mexico (h = 25 km).					14 00 25.0
"	25	Up		micr sec	"	25	Up
			Mx	E 1.2 20			iP
			Mx	N 1.8 24			eP
			Mx	Z 2.8 23			i(PP)
		Ki	iPKP2	05 26 01.3			iPP
				micr sec			iSKS
			Mx	E 0.9 18			(PP)
			Mx	N 2.6 24			Z' 0.4 2.1
			Mx	Z 1.7 22			PP Z' 0.5 1.9
		Ud	iPKP2	05 26 04.5			Mx E 12 22
		South Pacific Ocean (h = N).					Mx N 18 24
		M = 6.1 (Up,Ki).					Mx Z 27 18
"	25	Up	iP	06 36 02.3		Ki	iP
							17 36 23.2
							i(PP)
							17 39 26.2
							iPP
							17 40 47.9
							iSKS
							17 46 59
							micr sec
						P	Z' 0.1 1.5
						PP	Z' 0.2 1.9
						Mx	E 14 17
						Mx	N 16 17
						Mx	Z 12 17
						Sk	i(P)
							17 36 37.6
							iPP
							17 40 50.9
						Um	iP
							17 36 15
							i(PP)
							17 39 36.7
							iPP
							17 40 35.6
						(cont.)	

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

1974				1974					
June	25	(cont.)		June	26	Up	iSgl		
		Um	iSKS	17	46	50	Ki		
		Ud	i(P)	17	36	29.0	eSgl		
			i(PP)	17	39	22.5	Sk		
			iPP	17	40	40.6	eSgl		
		De	i(P)	17	36	22.8	Um		
			i(PP)	17	39	35.1	iPn		
			iPP	17	40	17.7	iSn		
		South Indian Ocean (h = N).				iSgl	06 12 21.4		
		m = 6.5, M = 6.7 (Up,Ki).				Ud	06 15 00		
"	25	Up	iP	17	51	34.9	iSn		
"		Ki	iP	17	50	59.2	iSgl		
"		Um	iP	17	51	13.5	De		
"		Ud	iP	17	51	41.9	eSnl		
"		De	iP	17	51	57.9	iSgl		
"		Japan (h = 9 km).				De	06 13 24		
"	25	Um	i(P)	19	27	38.3	iSgl	06 13 55.9	
"	25	Up	iP	22	27	42.1	Gulf of Finland.		
"			i(S)	22	31	00	Explosion.		
					micr	sec			
		P	Z'	0.5		2.0			
		Mx	E	1.2		20			
		Mx	N	1.1		21			
		Mx	Z	2.6		21			
		Ki	iP	22	27	20.6			
					micr	sec			
		P	Z'	0.9		2.4			
		Mx	E	4.1		17			
		Mx	N	2.2		14			
		Mx	Z	3.4		16			
		Sk	iP	22	26	51.3			
		Um	iP	22	27	33.1			
		Ud	iP	22	27	21.2			
		i		22	27	25.4			
		De	iP	22	27	45.8			
		Iceland (h = N).				Gulf of Finland.			
		m = 5.4, M = 4.6 (Up,Ki).				Explosion.			
"	26	Ki	iP	01	24	12.4			
"		Um	iP	01	25	04.3			
"		Ud	iP	01	25	54.9			
"		i		01	25	57.6			
"	26	Ki	iPKP	04	18	48.4			
"		South Atlantic Ocean							
"		(h = N).							
"	26	Um	iSgl	06	09	58.2			
"		De	eSgl	06	10	57			
		Gulf of Finland.							
		Explosion.							

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1974				1974			
June	26	Up	iSgl	12 21 23.0	June	26	(cont.)
		Ki	iSgl	12 24 17.0	Ki	SKP1	micr sec
		Um	iSgl	12 22 12.4	Sk	i(PKP)	0.1 1.4
		Estonia.				iPKP	23 51 45.4
		Explosion.				iSKP1	23 51 53.0
"	26	Ki	iSgl	12 36 53.6	Um	i(PKP)	23 54 39.8
"		Um	iSgl	12 34 46.8		iPKP	23 51 41.1
"		Ud	iSgl	12 35 12.1		i	23 51 49.7
"		De	eSgl	12 35 41		iSKP1	23 53 34.3
		Estonia.				23 54 33.2	
		Explosion.				Ud	23 51 55.3
"	26	Um	iSgl	13 37 47.6		iSKP1	23 54 47.2
"		Western USSR.				De	23 52 05.0
"		Explosion.				ipPKP1	23 54 12.7
"	26	Ud	iP	13 46 23.8	"	iSKP1	23 54 56.2
"	26	Um	iSgl	14 13 51.3	27 ✓ Up	Tonga-Kermadec Islands.	
"		Western USSR.				h = 570 km (De).	
"		Explosion.					
"	26	Um	iSgl	14 54 38.8			
"		Lake Ladoga region.				P	02 00 49.6
"		Explosion.				X	02 00 58.4
"	26	Up	iSgl	16 57 52.0		iPP	02 03 34.0
"		Ki	i	16 58 20.9		iS	02 10 25
"						micr sec	
"						P	0.1 0.9
"						X	1.2 1.4
"						PP	0.1 1.2
"						Mx	E 13 19
"						Mx	N 13 17
"						Mx	Z 17 20
"	26	Sk	iSgl	16 58 46.5	Ki	iP	02 00 13.0
"		Sk	iSgl	16 59 08.3		iX	02 00 22.0
"		Um	eSgl	16 57 18		iPP	02 02 52.2
"		Ud	eSgl	16 58 49		micr sec	
"		De	iSgl	16 59 34.0		P	Z' 0.2 1.4
"		Lake Ladoga region.				X	Z' 1.3 1.9
"		Explosion.				PP	Z' 0.3 1.6
"	26	Sk	e(P)	18 54 05		Mx	E 37 19
"		Ud	iP	18 53 49.0		Mx	N 15 14
"		North Atlantic Ocean				Mx	Z 9.6 15
"		(h = N).				Sk	02 00 45.9
"	26	Ki	i(P)	19 05 32.1		iX	02 00 53.6
"		Sk	iP	19 05 01.6		iPP	02 03 31.4
"		Ud	iP	19 04 52.3	Um	iP	02 00 27.8
"		North Atlantic Ocean				iX	02 00 36.9
"		(h = N).				i	02 02 49.3
"	26	Up	iPKP1	23 51 53.2		iS	02 09 46
"						Ud	02 00 56.6
"						iP	02 01 04.1
"						iX	02 03 10.7
"						i	02 01 10.9
"						De	02 01 19.4
"						iX	02 04 16.3
"						IPP	Japan (h = 15 km).
"						m = 6.0 (P), 6.8 (X),	
"						M = 6.6 (Up,Ki).	
"						(cont.)	

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1974				1974			
June	27	(cont.)		June	27	(cont.)	
		The phase X, in average 8.4 sec after P and considerably larger than P, may be P of another earthquake in the same area; alternatively, it may be pP with h = 30 km.				Ki	iPKP 08 04 34.3 micr sec
"	27	Um	iP 02 15 41.3			Mx	E 2.5 23
"	27	Up	i(P) 03 38 21.6			Mx	N 2.0 21
		i	03 38 46.5			Mx	Z 1.5 18
			micr sec			Sk	iPKP 08 04 45.7
			i Z' 0.1 1.5			Um	iPKP 08 04 39.3 C
"	27	Up	iPKP1 03 50 37.0 C			Ud	iPKP 08 04 48.3
			micr sec			iPP	08 06 12.1
			PKP1 Z' 0.1 0.7	"	27	De	iPKP 08 04 53.8 C
		Ki	iSKP1 03 53 11.7			iPKP	08 05 10.6
		Um	iSKP1 03 53 21.7	"	27	iPKKP	08 15 28.1
		Ud	iPKP1 03 50 38.9 C			New Britain.	
		De	iPKP1 03 50 49.0			h = 60 km (De).	
		Tonga-Kermadec Islands				M = 5.9 (Up,Ki).	
		(h = 500 km).					
"	27	Um	iP 04 29 33.8	"	27	Ud	iP 08 22 00.8
		Japan (h = N).				iSgl	10 19 20.8
"	27	Up	iP 05 00 44.4			Um	iSgl 10 19 51
			micr sec			Ud	eSgl 10 20 07
		Mx	E 1.3 14			De	e 10 20 19.5
		Mx	N 1.4 16			iSgl	Esthonia.
		Mx	Z 2.2 13				Explosion.
		Ki	i 05 00 23.7				
			micr sec				
		Mx	E 1.2 16	"	27	Up	iSgl 13 33 45.0
		Mx	N 1.7 16			Sk	iSgl 13 33 47.9
		Mx	Z 1.7 17			Ud	i 13 32 43.5
		Sk	iP 05 00 45.4			iSgl	13 32 47.7
		Um	iP 05 00 25.2			i	13 32 50.1
		i	05 00 40.7			De	eSn 13 32 42
		Ud	iP 05 00 55.4			Southwest Norway,	
		i	05 01 05.4			58.5°N, 6.9°E.	
		Japan (h = 40 km).				Origin time = 13 30 47.	
		M = 5.5 (Up,Ki).				By combination with Bergen	
						and Kongsberg readings.	
"	27	Up	iP 05 50 05.8	"	27	Sk	iPKP2 13 52 50.6
"	27	✓ Up	iPKP 08 04 45.7 C			Um	iPKP2 13 52 47.9
		i(PP)	08 05 19.5			Ud	iPKP2 13 53 06.6
		iPKKP	08 15 43.9			South of Kermadec Islands	
			micr sec			(h = 25 km).	
		(PP)	Z' 0.1 1.5	"	27	Up	iSgl 14 01 55.3
		PKKP	Z' 0.1 1.5			Sk	i 14 01 50.9
		Mx	E 1.3 23			iSgl	14 01 54.4
		Mx	N 2.4 26			Ud	iSgl 14 00 53.7
		Mx	Z 3.5 25			Similar location as the	
		(cont.)				13 30-event.	
						Origin time = 13 58 53.	
						Sk	i(PKP1) 15 51 12.0
						Ud	iPKP1 15 51 24.6
						De	iPKP1 15 51 36.1
						South of Kermadec Islands	
						(h = N).	

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1974					1974			
June	27	Up	iPKP2	17 07 50.0	June	28	(cont.)	
		i		17 08 01.4			Ud	iPKP1 02 30 32.7
		Sk	iPKP1	17 07 38.0			De	iPKP2 02 30 57.7
		Um	iPKP1	17 07 30.5			South of Kermadec Islands	
		Ud	iPKP1	17 07 41.9			(h = 60 km).	
		De	iPKP1	17 07 52.7	"	28	Up	iPKP2 02 52 45.9
			iPKP2	17 08 07.0			i	02 53 14.3
				South of Kermadec Islands			Ki	iPKP1 02 52 17.2
				(h = N).			Sk	iPKP1 02 52 33.1
"	27	Up	iPKP2	17 18 45.2			Um	iPKP1 02 52 28.5
"	27	Up	iP	18 57 28.7			Ud	iPKP1 02 52 40.6
		Ki	iP	18 58 04.2			De	iPKP2 02 53 01.7
		Ud	iP	18 57 20.7			South of Kermadec Islands	
				Atlantic Ocean (h = N).			(h = 40 km).	
"	27	Up	iP	19 04 06.6 C	"	28	Um	iPKP1 03 22 07.3
				micr sec			Ud	ePKP1 03 22 22
		P	Z'	0.1 0.9	"	28	Um	i(PKP1) 05 48 34.8
		Ki	iP	19 04 07.8 C			Ki	eSn 10 00 17
		Sk	iP	19 04 23.3 C			Northwest USSR.	
		Um	iP	19 04 03.2 C			Explosion.	
		Ud	iP	19 04 18.2	"	28	Up	iP 11 14 58.1
		De	iP	19 04 16.3 C			i	11 15 16.4
				Andaman Islands (h = N).			iS	11 19 25
"	27	Up	iPKP2	22 58 51.4				micr sec
		Sk	iPKP1	22 58 35.4			P	Z' 0.3 1.1
		Um	iPKP1	22 58 31.0			Mx	E 0.5 11
		Ud	iPKP1	22 58 42.5			Mx	N 0.5 11
				South of Kermadec Islands			Mx	Z 0.6 15
				(h = N).			Ki	11 16 08.3
"	27	Up	iP	23 02 11.8				micr sec
				micr sec			P	Z' 0.1 1.3
		P	Z'	0.1 1.2			Mx	E 1.0 14
		Ki	iP	23 02 47.0			Mx	N 0.6 14
				micr sec			Mx	Z 0.5 12
		P	Z'	0.1 1.3			Sk	iP 11 15 23.7
		Sk	iP	23 02 15.7			Um	iP 11 15 35.4
		Um	iP	23 02 32.7			Ud	iP 11 14 52.5
		Ud	iP	23 02 02.5			De	iP 11 14 20.3
		De	iP	23 01 56.4				Algeria (h = N).
				Atlantic Ocean (h = N).				m = 5.7, M = 4.7 (Up,Ki).
				m = 5.8 (Up,Ki).	"	28	Up	iP 11 18 35.6
"	27	Ud	iP	23 31 24.7			Um	iP 11 18 45.0
"	28	Ud	iP	01 33 13.4 C			Ud	iP 11 18 34.1
		De	iP	01 33 09.8			De	iP 11 18 28.4
				Hindu Kush.	"	28	Up	iSg1 11 35 49.0
				Intermediate depth.			Ki	iSg1 11 38 06.3
"	28	Up	iPKP1	02 30 29.4			Sk	iSg1 11 37 39.2
		Sk	iPKP1	02 30 25.5			Um	iSg1 11 36 13.5
		Um	iPKP1	02 30 20.2			Ud	eSg1 11 36 53
				(cont.)				(cont.).

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1974				1974			
June	28	(cont.)		June	29	Um	iPKP2
		De iSgl	11 37 20.3			Ki iSgl	13 21 28.3
		i	11 37 24.9	"	29	Sk iSgl	13 23 55.0
		Western USSR.				Um iSgl	13 22 23.0
		Explosion.				USSR-Finland.	
"	28	Um iSgl	13 06 43.4			Explosion.	
		Western USSR.		"	29	Ki	micr sec
		Explosion.				Mx	E 0.5 16
"	28	Up eSgl	13 17 07			Mx	N 0.7 17
		Um iSgl	13 17 21.1			Mx	Z 0.5 14
		Ud iSgl	13 18 06.3			Ud iP	14 18 56.1
		De iSgl	13 18 38.0			Iran.	
		iSg2	13 18 49.4				
		Western USSR.		"	29	Sk iP	15 28 57.9
		Explosion.				Ud iP	15 28 45.8
"	28	Um iSgl	18 24 12.9			De eP	15 28 36
		Ud iSgl	18 25 39.0			South Atlantic Ocean	
						(h = N).	
"	28	Sk iSgl	18 33 45.1	"	29	Up iP	21 34 10.1
		Ud iSgl	18 34 44.8			Ud iP	21 34 17.1
		De iSgl	18 35 58.3			Ionian Sea.	
"	28	Up iP	20 48 55.7 C	"	29	Up iX	21 49 23.4
						Ki eP	21 48 17
"	29	Up iP	01 12 17.5			iX	21 48 35.2
		iS	01 16 44			Ud iX	21 49 27.2
			micr sec			De iP	21 49 34.2
		P	Z' 0.3 1.6			iX	21 49 49.3
		Mx	E 0.7 14			Kamchatka (h = 30 km).	
		Mx	N 0.6 13			X could be P of another	
		Mx	Z 0.5 15			earthquake in the same area,	
		Ki	iP			with a tentative origin	
			01 13 26.6			time = 21 38 48.	
			micr sec				
		P	Z' 0.1 1.5	"	29	Ud iP	22 21 34.7
		Mx	E 0.5 12			Ionian Sea.	
		Mx	N 0.8 14				
		Mx	Z 0.7 13				
		Sk	iP	01 12 45.5	"	Up iP	22 36 35.9
		Um	iP	01 12 55.8		Sk eP	22 37 17
		iS	01 17 43			Um iP	22 37 19.6
		Ud	iP	01 12 12.0		Ud iP	22 36 40.7
		De	iP	01 11 38.8		Ionian Sea (h = N).	
		Algeria (h = N).					
		m = 5.6, M = 4.6 (Up, Ki).				"	29
						Ud iPKP1	22 42 10.0
						De iPKP1	22 42 20.7
"	29	Up iP	06 00 35.6	"	30	Ud iP	04 01 05.9
		Ud iP	06 00 36.2			(Crete).	
"	29	Ud iP	07 28 24.7	"	30	Up iSgl	05 57 49.6
"	29	Ud iP	09 41 01.0			Ki iPn	05 53 30.6
"	29	Ki iSn	12 45 28.3			iSn	05 54 30.0
		Northwest USSR.				iSgl	05 54 53.2
		Explosion.				(cont.).	

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1974				1974			
June	30	(cont.)		June	30	Ki	eP
		Sk iSgl	05 57 18.7			Sk iP	13 35 43
		i	05 57 25.2			Ud iP	13 35 28.0
		Um e	05 55 26			Ethiopia (h = N).	
		iSgl	05 55 44.7				
		Ud i	05 57 26.8	"	30	Up iSgl	14 43 06.2
		iSgl	05 58 18.3			Ki iPg2	14 38 56.6
		Northwest USSR.				iSg2	14 39 00.1
		Explosion.					micr sec
"	30	Ki eSn	06 55 01			Pg2	Z' 0.3 0.2
"		Sk eSgl	06 57 55			Sg2	Z' 2.8 0.2
		Northwest USSR.				Sk iSgl	14 41 45.9
		Explosion.				Um iSgl	14 40 59.1
"	30	Ki iPKP	07 08 00.7			Near Kiruna, Sweden,	
		Ud iPKP	07 07 48.4			67.9°N, 19.8°E.	
		Argentina (h = 190 km).				Origin time = 14 38 52.	
						By combination with Finnish station readings.	
"	30 ✓ Up	iPKP	08 52 56.7	"	30	Up iPKP	18 14 26.4
		i(PP)	08 55 17.8				micr sec
		iSKPl	08 56 25.2			PKP	Z' 0.1 1.2
			micr sec			Ki iPKP	18 14 14.2
		SKPl	Z' 0.1 1.4			Sk iPKP	18 14 25.6
		Mx E	1.1 23			Um iPKP	18 14 19.1
		Mx N	1.0 23			Ud iPKP	18 14 29.2
		Mx Z	1.6 23			De iPKP	18 14 34.5
		Ki i(PKP)	08 52 40.3			Solomon Islands (h = 55 km).	
		iPKP	08 52 43.3				
			micr sec	"	30	Ud iPKPl	18 32 30.6
		PKP	Z' 0.1 1.0			De iPKPl	18 32 41.4
		Mx E	0.8 19			"	
		Mx N	1.4 23	"	30	Up iP	18 35 27.0
		Mx Z	1.0 21			Ki iP	18 34 32.6
		Sk i(PKP)	08 52 42.6			Sk iP	18 35 10.0
		iPKP	08 52 52.5			Ud iP	18 35 30.6
		iSKPl	08 56 15.7			De iP	18 35 52.4
		Um i(PKP)	08 52 47.2			Kamchatka (h = N).	
		iPKP	08 52 49.7				
		iSKPl	08 56 06.8	"	30	Ki iP	19 10 35.2
		iPKKP	09 03 06			Ud iP	19 09 18.1
		Ud i(PKP)	08 52 44.6			Italy (h = N).	
		iPKP	08 52 58.9				
		iSKPl	08 56 26.7				
		De e(PKP)	08 52 54				
		iPKP	08 53 06.1 C				
		iSKPl	08 56 34.3				
		New Hebrides Islands					
		(h = 60 km).					
		M = 5.7 (Up,Ki).					
"	30	Up iP	09 05 02.0				
		Ud iP	09 05 22.9				
"	30	Ud iP	13 20 27.1			Markus Båth	
"	30	Ud iP	13 27 21.2			Rutger Wahlström	
						December 18, 1975	