SEISMOLOGICAL DEPARTMENT
BOX 2101
S-750 02 UPPSALA
SWEDEN

SEISMOLOGICAL DEPARTMENT
BOX 2101
S-750 02 UPPSALA
SWEDEN

SEISMOLOGICAL BULLETIN

UPPSALA, KIRUNA, UMEÅ, UDDEHOLM

DELARY and MYRVIKEN

Uppsala	(UPP)	59°51.5'N,	17°37.6'E;	h = 14 m
Kiruna	(KIR)	67°50.4'N,	20°25.0'E;	h = 390 m
Umeå	(UME)	63°48.9'N,	20°14.2'E;	h = 16 m
Uddeholm	(UDD)	60°05.4'N,	13°36.4'E;	h = 240 m
Delary	(DEL)	56°28.2'N,	12°52.2'E;	h = 150 m
Myrviken	(MYV)	62°56.5'N,	14°20.8'E;	h = 345 m

JANUARY 1 - 31, 1992

1992				
Jan.	1	UPP	iSg1	08 08 03.0
		KIR	iPn	08 04 32.2 C
			iPg1	08 04 34.2
			iSn	08 04 57.8
			iSg1	08 04 59.7
		UME	iPn	08 05 04.1 C
			iSn	08 05 55.1
			iSg1	08 06 13.0
		DEL	iLg1	08 09 50.1
		MYV	iPn	08 05 08.0
			iSg1	08 06 23.0
		Coast of northern Norway,		
		67.7°N, 15.4°E.		
		Origin time = 08 03 58.		
		M_L(UPP) = 3.9 (0.33) 3.		
		Felt.		
		By combination with Finnish and		
		Norwegian station readings.		
"	1	KIR	iPn	08 39 35.9
			iSg1	08 40 03.8
		UME	iSg1	08 41 17.6
		Coast of northern Norway,		
		67.8°N, 15.2°E.		
		Origin time = 08 39 00.		
		M_L(UPP) = 2.8 (0.30) 2.		
		Felt.		
		By combination with Finnish and		
		Norwegian station readings.		
"	1	KIR	iPn	10 15 45.8
			iSg1	10 16 13.9
		(cont).		

1992				
Jan.	1	(cont).		
		UME	iSg1	10 17 29.2
		Coast of northern Norway,		
		67.7°N, 15.2°E.		
		Origin time = 10 15 09.		
		M_L(UPP) = 2.7 1.		
		By combination with Finnish and		
		Norwegian station readings.		
"	1	KIR	iPn	22 33 02.1
		Jan Mayen Island region (h = 10 km).		
"	2	UPP	iP	16 51 42.9
				micr sec
			P Z'	0.1 1.0
		KIR	iP	16 50 59.0
		UME	iP	16 51 21.7
		Vancouver Island region (h = 10 km).		
"	2	UPP	iP	19 54 11.3 D
			ipP	19 54 48.0
				micr sec
			P Z'	0.7 0.9
		KIR	iP	19 54 14.2 D
			ipP	19 54 49.9
				micr sec
			P Z'	1.0 1.2
		UME	iP	19 54 15.6 D
			ipP	19 54 51.4
		Colombia.		
		h = 130 km (UPP,KIR,UME).		
		m = 6.5 (UPP,KIR).		

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992
Jan. 3 KIR iP 06 55 25.6
UME iP 06 56 14.6
i 06 56 19.7
Greenland Sea (h = 25 km).

" 4 UPP iP 01 05 06.8
i 01 05 11.2
micr sec
P Z' 0.2 1.1
KIR eP 01 04 18
UME iP 01 04 47.6
Northwest Territories, Canada
(h = 20 km).

" 4 UPP iP 03 43 29.3
KIR eP 03 43 43
UME iP 03 43 29.7
Pakistan (h = 30 km).

" 4 KIR iPn 03 44 18.0
iSg1 03 44 46.3
UME iSg1 03 46 00.6
Coast of northern Norway,
67.7°N, 14.9°E.
Origin time = 03 43 43.
M_L(UPP) = 2.9 1.
By combination with Norwegian
station readings.

" 4 UPP iSg1 04 19 06.7
KIR iPn 04 15 38.4
iPg1 04 15 40.6
iSn 04 16 05.7
iSg1 04 16 06.7
UME iPn 04 16 10.3
i 04 16 12.9
iSn 04 17 01.1
iSg1 04 17 19.4
MYV ePg1 04 16 26
iSg1 04 17 30.0
Coast of northern Norway,
67.8°N, 15.1°E.
Origin time = 04 15 03.
M_L(UPP) = 3.5 (0.27) 3.
Felt.
By combination with Finnish and
Norwegian station readings.

" 4 UPP iPn 06 02 48.1
iSn 06 04 17.8
(cont).

1992
Jan. 4 (cont).
UPP iSg1 06 04 55.6
KIR iPn 06 01 27.8
iSg1 06 01 55.9
UME iPn 06 01 59.4
iSn 06 02 50.0
iSg1 06 03 08.3
DEL iLg1 06 06 51.4
MYV iPn 06 02 03.4
iSg1 06 03 20.0
Coast of northern Norway,
67.8°N, 15.2°E.
Origin time = 06 00 52.
M_L(UPP) = 4.0 (0.37) 4.
Felt.
By combination with Finnish and
Norwegian station readings.

" 4 KIR iPn 09 07 04.9
iSg1 09 07 33.3
UME iPn 09 07 39.6
iSn 09 08 27.6
iSg1 09 08 46.1
MYV eSg1 09 08 58.0
Coast of northern Norway
67.8°N, 15.2°E.
Origin time = 09 06 29.
M_L(UPP) = 3.3 (0.20) 2.
By combination with Finnish and
Norwegian station readings.

" 5 KIR iPn 01 21 23.3
iSg1 01 21 51.6
UME iSg1 01 23 05.6
MYV iSg1 01 23 16.0
Coast of northern Norway
67.7°N, 15.2°E.
Origin time = 01 20 47.
M_L(UPP) = 2.8 1.
By combination with Finnish and
Norwegian station readings.

" 5 KIR iSg1 02 32 05.7
Coast of northern Norway
67.7°N, 14.8°E.
Origin time = 02 31 04.
M_L(UPP) = 2.2 1.
Solution from Norwegian station
readings.

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992 Jan. 5
KIR iPn 05 12 31.5
iSg1 05 12 59.6
UME iSg1 05 14 13.6
Coast of northern Norway, 67.8°N, 15.2°E.
Origin time = 05 11 56.
M_L(UPP) = 2.7 1.
By combination with Finnish and Norwegian station readings.

" 5
UPP iSg1 05 40 10.5
UME iSg1 05 44 41.8
MYV iSg1 05 43 17.0
Norwegian Sea, 61.2°N, 4.0°E.
Origin time = 05 40 32.
M_L(UPP) = 3.2 1.
By combination with Finnish and Norwegian station readings.

" 5
KIR iPn 07 54 12.8
iSg1 07 54 41.0
UME iSg1 07 55 55.8
Coast of northern Norway, 67.7°N, 14.9°E.
Origin time = 07 53 38.
M_L(UPP) = 2.4 1.
Solution from Norwegian station readings.

" 5
KIR iP 17 21 41.4
Tajikistan (h = 15 km).

" 5
KIR iSg1 20 01 10.2
Coast of northern Norway, 67.7°N, 15.0°E.
Origin time = 20 00 07.
Solution from Norwegian station readings.

" 6
KIR iSg1 08 27 25.0
Coast of northern Norway, 67.7°N, 15.0°E.
Origin time = 08 26 22.
Solution from Norwegian station readings.

" 6
UME iP 11 28 26.9

" 6
UME iP 20 52 55.0
South of Honshu, Japan (h = 20 km).

1992 Jan. 7
UPP ePKP1 07 22 48
Kermadec Islands region (h = 310 km).

" 7
UPP iP 17 36 50.0
KIR iP 17 36 03.1
Kuril Islands (h = 45 km).

" 9
UPP iP 13 50 35.7 D
i 13 50 41.7
micr sec
P Z' 0.2 0.6
KIR iP 13 51 47.0
UME iP' 13 51 10.9
Southern Greece (h = 30 km).

" 10
UPP iP 00 50 26.5
micr sec
P Z' 0.1 0.8
KIR iP 00 50 09.0
UME iP 00 50 14.4
Mindoro, Philippine Islands (h = 140 km).

" 10
KIR iPg1 07 47 01.4
iSg1 07 47 19.0
UME iSg1 07 48 32.0
MYV eSg1 07 49 35.0
Norrbotten, Sweden, 67.2°N, 23.6°E.
Origin time = 07 46 36.
M_L(UPP) = 2.9 (0.29) 2.
Felt with maximum intensity I_0 = IV (MM). Radius of perceptibility is 35 km and macroseismic magnitude M_M = 3.0. Focal depth deduced from macroseismic data is 15 km.
By combination with Finnish and Norwegian station readings.

" 10
UPP iSg1 22 02 42.7
UME iSg1 22 03 10.0
Norwegian Sea, 61.6°N, 3.3°E.
Origin time = 21 59 03.
M_L(UPP) = 3.4 1.
Solution from Norwegian station readings.

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992 Jan. 10
KIR iPn 22 26 17.1
iSg1 22 26 45.4
UME iSg1 22 27 58.6
Coast of northern Norway, 67.7°N, 15.0°E.
Origin time = 22 25 42.
M_L(UPP) = 3.0 (0.07) 2.
Felt.
By combination with Finnish and Norwegian station readings.

" 11
KIR ePn 01 18 05
iSg1 01 18 31.8
Coast of northern Norway, 67.7°N, 14.9°E.
Origin time = 01 17 29.
Solution from Norwegian station readings.

" 11
KIR iSg1 01 46 38.7
Coast of northern Norway, 67.7°N, 14.9°E.
Origin time = 01 45 37.
M_L(UPP) = 2.5 1.
Solution from Norwegian station readings.

" 11
UPP iP 06 28 15.8 C
micr sec
P Z' 0.2 1.2
UME iP 06 28 15.9
Bay of Bengal (h = 20 km).

" 12
UPP iP 00 21 38.1 C
micr sec
P Z' 0.2 0.9
Gansu, China (h = 20 km).

" 13
UME i(PKP) 09 55 51.4
iPKP 09 55 57.0
Fiji Islands region (h = 580 km).

" 13
UPP iP 11 52 25.9
UME iP 11 52 12.2
Luzon, Philippine Islands (h = 25 km).

" 13
UPP eP 12 11 52
UME iP 12 11 38.1
Halmahera, Indonesia (h = 110 km).

1992 Jan. 15
UPP iPKP1 03 52 02.6
Kermadec Islands region (h = N).

" 15
UPP iP 05 12 48.5 C
Mindoro, Philippine Islands (h = 150 km).

" 15
UPP iP 07 10 06.9
micr sec
P Z' 0.2 1.5
UME iP 07 10 11.8
Dominican Republic region (h = 10 km).

" 16
UPP i(P) 04 30 34.3

" 16
UME iP 18 57 25.2
Hokkaido, Japan region (h = 70 km).

" 17
UPP iP 00 25 53.5
UME iP 00 25 24.3
Off east coast of Kamchatka (h = 45 km).

" 18
UPP iP 17 51 42.4
i 17 52 00.4
KIR iP 17 51 52.2
UME iP 17 51 40.4
i 17 51 57.8
Hindu Kush region (h = 110 km).

" 18
UPP iP 23 22 23.6
KIR iP 23 22 10.4
micr sec
P Z' 0.1 1.0
UME iP 23 22 13.4 D
Celebes Sea (h = 540 km).

" 19
UPP iPKP1 07 15 47.0
South of Fiji Islands (h = 500 km).

" 19
UPP eP 20 27 04
UME iP 20 27 41.0
Northern Algeria (h = 10 km).

" 19
UPP iP 23 52 26.1
KIR iP 23 51 52.8
UME iP 23 52 06.9
South of Honshu, Japan (h = 420 km).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992						
Jan.	20	UPP	iP		09 06 46.6	
					micr	sec
			Mx	Z	3.7	14
		KIR	iP		09 07 06.1	
					micr	sec
			Mx	Z	3.7	12
		UME	iP		09 06 50.9	
		Pakistan (h = 25 km).				
		M = 5.5 (UPP,KIR).				
"	20	UPP	iP		13 48 20.4	
			i		13 48 21.6	
			ipP		13 50 15.2	
			iPP		13 51 33.1	
			iS		13 57 41.6	
					micr	sec
			i	Z'	0.6	0.9
			Mx	Z	7.5	16
		KIR	iP		13 47 50.7	
			iS		13 56 42.4	
					micr	sec
			P	Z'	0.7	1.0
			Mx	Z	7.0	16
		UME	iP		13 48 02.5	
			i		13 48 03.9	
			iS		13 57 07.1	
		Bonin Islands region.				
		h = 510 km (UPP).				
		m = 6.0, M = 6.0 (UPP,KIR).				
		M uncorrected for focal depth.				
"	21	KIR	iPn		03 13 08.6	
			iSg1		03 13 36.8	
		UME	iSg1		03 15 31.8	
		MYV	iSg1		03 15 43.0	
		Coast of northern Norway,				
		69.3°N, 16.8°E.				
		Origin time = 03 12 33.				
		M_L(UPP) = 2.8 (0.24) 2.				
		By combination with Finnish and				
		Norwegian station readings.				
"	21	UPP	iPKP1		05 05 11.1	
		South of Fiji Islands (h = 30 km).				
"	21	UPP	iP		20 21 43.9	
		UME	iP		20 22 22.7	
		Greece (h = 10 km).				

1992						
Jan.	21	UPP	iP		22 16 31.2	
					micr	sec
			P	Z'	0.1	0.6
		KIR	iP		22 16 51.9	
		UME	iP		22 16 35.8	
		Pakistan (h = 25 km).				
"	22	UPP	iP		01 18 02.0	
			i		01 18 31.6	
					micr	sec
			P	Z'	0.2	1.4
		KIR	iP		01 17 22.9	
					micr	sec
			P	Z'	0.8	2.2
		UME	iP		01 17 39.7	
		Eastern Honshu, Japan (h = 120 km).				
		m = 6.0 (UPP,KIR).				
"	22	UME	iPKP		06 43 26.7	
		Vanuatu Islands (h = 200 km).				
"	22	UME	iPKP1		07 43 19.5	
		South of Kermadec Islands				
		(h = 80 km).				
"	22	UPP	iSg1		19 02 30.5	
		KIR	iPn		18 58 59.6	C
			iPg1		18 59 01.6	
			iSn		18 59 26.6	
			iSg1		18 59 27.5	
		UME	iPn		18 59 31.2	
			i		18 59 33.8	
			iSn		19 00 21.9	
			iSg1		19 00 40.3	
		UDD	iSg1		19 02 28.3	
		DEL	eLg1		19 04 15	
		MYV	iPn		18 59 34.2	
			iSg1		19 00 51.0	
		Coast of northern Norway,				
		67.8°N, 15.1°E.				
		Origin time = 18 58 23.				
		M_L(UPP) = 3.5 (0.35) 4.				
		Felt.				
		By combination with Finnish and				
		Norwegian station readings.				
"	22	UPP	iP		21 52 12.5	
					micr	sec
			P	Z'	0.1	0.9
			Mx	Z	3.1	14
		(cont).				

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992
Jan. 22 (cont).

KIR	iP		21 51 41.3
		micr	sec
	Mx	Z 3.1	18
UME	iP		21 51 52.9

Yellow Sea (h = N).
M = 5.5 (UPP,KIR).

" 23

UPP	iP		04 29 04.6 C
	iS		04 32 59
		micr	sec
	P	Z' 0.1	0.8
	Mx	Z 10	11
KIR	iP		04 30 19.0
UME	iP		04 29 43.2
	i		04 29 45.2

Greece (h = 15 km).

" 23

UPP	iP		06 32 28.1 C
		micr	sec
	P	Z' 0.1	0.6
KIR	iP		06 33 43.4
UME	iP		06 33 06.3

Greece (h = 10 km).

" 24

UPP	iP		05 12 48.3 C
	iPP		05 14 29.0
		micr	sec
	P	Z' 0.3	1.0
KIR	iP		05 12 54.1 C
		micr	sec
	P	Z' 0.4	0.9
UME	iP		05 12 44.4 C

Northwestern Kashmir (h = 45 km).
m = 6.2 (UPP,KIR).

" 25

UPP	iP	08 26 46.4

" 25

KIR	ePg1	11 08 15
	i	11 08 30.1
	iSg1	11 08 37.8
UME	iSg1	11 09 52.0

" 25

KIR	iSg1	11 57 37.4
MYV	iSg1	12 00 02.0

Coast of northern Norway,
67.6°N, 15.4°E.
Origin time = 11 57 35.
M_L(UPP) = 2.9 1.
By combination with Finnish and
Norwegian station readings.

1992
Jan. 25

UPP	eSg1		12 20 53
KIR	iPn		12 17 22.2 C
	iPg1		12 17 24.2
	iSn		12 17 49.6
	iSg1		12 17 50.6
UME	iPn		12 17 53.9
	i		12 17 56.9
	iSn		12 18 45.2
	iSg1		12 19 03.1
UDD	iSg1		12 20 52.3
MYV	iPn		12 18 02.0
	iSg1		12 19 15.0

Coast of northern Norway,
67.7°N, 15.1°E.
Origin time = 12 16 47.
M_L(UPP) = 3.3 (0.36) 4.
Felt.
By combination with Finnish and
Norwegian station readings.

" 25

KIR	iPn		12 27 04.8
	iSg1		12 27 33.1
UME	iSg1		12 28 47.6

Coast of northern Norway,
67.7°N, 15.4°E.
Origin time = 12 26 30.
M_L(UPP)=2.9 (0.33) 2.
By combination with Finnish and
Norwegian station readings.

" 25

KIR	iPn	19 13 26.8
	iSg1	19 13 54.7
UME	iSg1	19 15 09.1
MYV	iSg1	19 15 19.0

Coast of northern Norway,
67.6°N, 15.4°E.
Origin time = 19 12 53.
M_L(UPP)=2.9 1.
By combination with Finnish and
Norwegian station readings.

" 25

UME	iPKP1	23 15 45.4

Kermadec Islands region (h = N).

" 26

KIR	iPn	01 57 34.7

Norwegian Sea, 72.6°N, 5.1°E.
Origin time = 01 55 50.
Solution from Norwegian station
readings.

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992 Jan. 26
UPP iP 08 21 11.6 C
micr sec
P Z' 0.1 0.7
KIR iP 08 20 41.1 C
micr sec
P Z' 0.2 0.5
UME iP 08 20 53.3 C
Ryukyu Islands (h = 150 km).
m = 5.9 (UPP,KIR).

" 26 UME iP 09 33 12.2
Alaska Peninsula (h = N).

" 26 UME iP 12 24 11.7
Fox Islands, Aleutian Islands (h = N).

" 26 UPP iP 18 52 39.9
KIR iP 18 51 46.6
UME iP 18 52 12.1
Near east coast of Kamchatka
(h = 140 km).

" 30 UPP eP 02 02 54
Kyushu, Japan (h = 15 km).

" 30 UME iP 04 57 21.2
North of Ascension Island
(h = 10 km).

" 30 UPP iP 05 30 29.7
i 05 32 18.5
micr sec
Mx Z 4.3 16
KIR eP 05 30 57
micr sec
Mx Z 16.2 16
UME ipP 05 30 52.7
Off coast of Pakistan (h = 30 km).

" 30 UME iPKP1 06 44 56.0
South of Kermadec Islands (h = N).

" 30 UPP iP 16 07 40.3
KIR iP 16 07 24.7
UME iP 16 07 29.9
Halmahera, Indonesia (h = 30 km).

" 30 UPP iP 18 25 28.0
UME iP 18 25 11.1
Ryukyu Islands (h = 140 km).

1992 Jan. 30 UPP i(P) 18 55 32.1

" 30 UME iPKP2 23 02 38.5
West of Mocquarie Island
(h = 10 km).

" 30 KIR iP 23 46 01.0
UME iP 23 46 13.3
Volcano Islands region (h = N).

" 31 UME iP 11 20 27.5

April 6, 1993

Conny Holmqvist
Klaus Meyer

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UPPSALA, KIRUNA, UMEÅ, UDDEHOLM

DELARY and MYRVIKEN

Uppsala	(UPP)	59°51.5'N,	17°37.6'E;	h = 14 m
Kiruna	(KIR)	67°50.4'N,	20°25.0'E;	h = 390 m
Umeå	(UME)	63°48.9'N,	20°14.2'E;	h = 16 m
Uddeholm	(UDD)	60°05.4'N,	13°36.4'E;	h = 240 m
Delary	(DEL)	56°28.2'N,	12°52.2'E;	h = 150 m
Myrviken	(MYV)	62°56.5'N,	14°20.8'E;	h = 345 m

FEBRUARY 1 - 29, 1992

1992					
Feb.	1	UPP	iP		03 49 05.7
		Kuril Islands (h = 100 km).			
"	1	UPP	iP		09 33 42.0
		UME	iP		09 33 40.5
		Hindu Kush region, Afghanistan			
		(h = 200 km).			
"	1	UPP	iP		19 15 29.0
			ipP		19 15 58.0
					micr sec
			P	Z'	0.3 1.3
		KIR	iP		19 14 52.7
					micr sec
			P	Z'	0.1 1.0
		UME	iP		19 15 08.8 D
		Near S. coast of Honshu, Japan			
		(h = 100 km).			
		m = 5.8 (UPP,KIR).			
"	1	UPP	iP		23 59 19.9
		KIR	iP		23 58 47.2
		UME	iP		23 59 00.9
		South of Honshu, Japan			
		(h = 440 km).			
"	2	UPP	iPKP1		00 41 49.0
		KIR	iPKP1		00 41 47.3
		UME	iPKP1		00 41 46.6
		South of Australia (h = 10 km).			

1992					
Feb.	2	UPP	iPKP1		00 51 15.0
					micr sec
			Mx	Z	4.3 21
		KIR	iPKP		00 51 11.1
					micr sec
			Mx	Z	3.3 20
		UME	iPKP		00 51 10.2
		South of Australia (h = 10 km).			
		M = 6.1 (UPP,KIR).			
"	2	UPP	iP		17 54 33.4
					micr sec
			Mx	Z	3.3 24
		KIR	iP		17 53 47.4
					micr sec
			Mx	Z	4.3 19
		UME	iP		17 54 08.3
		Kuril Islands (h = 35 km).			
		M = 5.5 (UPP,KIR).			
"	2	UPP	iP		19 53 30.7
		UME	iP		19 53 15.3
		Moriana Islands (h = 120 km).			
"	4	KIR	iPn		16 16 07.5
		Norwegian Sea, 72.2°N, 0.6°E.			
		Origin time = 16 14 02			
		Solution from Bergen regional			
		bulletin.			

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992 Feb. 5 UPP iP 05 44 10.2
micr sec
P Z' 0.1 1.0
KIR iP 05 43 25.2
UME iP 05 43 46.3
Kuril Islands (h = 50 km).

" 5 UPP iP 13 24 37.2
KIR iP 13 23 44.1
UME iP 13 24 10.8
Fox Islands, Aleutian Islands (h = N).

" 5 UPP iP 23 18 49.1
micr sec
Mx Z 11 15
Afghanistan (h = 20 km).

" 6 UPP iP 01 25 47.6 C
i 01 36 20
micr sec
P Z' 0.1 0.9
Mx Z 15 19
KIR iP 01 25 47.1
micr sec
P Z' 0.3 1.4
Mx Z 13 17
UME iP 01 25 44.8 C
Southern Sumatera (h = 35 km).
m = 6.4, M = 6.4 (UPP,KIR).

" 6 UPP iP 03 45 15.7 C
micr sec
P Z' 0.2 1.0
KIR iP 03 45 04.1
UME iP 03 45 01.6
Eastern Xijang - India border reg.
(h = 15 km).

" 6 UPP iP 04 07 46.6
Southern Sumatera (h = 35 km).

" 6 UPP iP 04 48 10.6
Southern Sumatera (h = 35 km).

" 6 KIR iSg1 12 45 33.4
Northern Norway, 67.8°N, 15.3°E.
Origin time = 12 44 28.
M_L(UPP) = 2.5 1.
Solution from Finnish station
readings.

1992 Feb. 6 UPP iP 20 39 48.7 C
micr sec
P Z' 0.1 1.0
UME iP 20 39 20.6 C
Off east coast of Kamchatka
(h = 45 km).

" 6 UPP iP 21 36 14.2
Bonin Islands region (h = 440 km).

" 7 UPP iP 00 17 29.5
micr sec
P Z' 0.2 0.8
KIR iP 00 16 45.1
micr sec
P Z' 0.2 1.0
UME iP 00 17 04.6
Kuril Islands (h = 55 km).
m = 6.1 (UPP,KIR).

" 7 UPP iP 06 45 51.5
KIR iP 06 44 57.9
UME iP 06 45 23.3
Off east coast of Kamchatka
(h = 50 km).

" 7 UPP iP 09 58 39.2
KIR iP 09 57 43.9
Kamchatka (h = 150 km).

" 7 UPP iPKP 16 37 42.7
South of Fiji Islands (h = 60 km).

" 8 UPP iP 02 26 52.5
Hokkaido, Japan region (h = 40 km).

" 9 KIR iP 04 11 54.3
UME iP 04 12 17.2

" 9 UPP iP 04 52 08.6
Sichuan, China (h = 15 km).

" 9 UPP iP 08 00 15.3
UME iP 07 59 49.9
Andreanof Islands, Aleutian Is.
(h = 35 km).

" 9 UPP iP 12 54 53.5
Eastern Xijang - India border reg.
(h = 10 km).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992
Feb. 9 UPP iP 13 20 36.5
Qinghai, China (h = N).

" 9 UPP iP 22 12 34.4 C
i 22 13 03.0
KIR iP 22 11 45.9 C
micr sec
P Z' 0.2 0.6
UME iP 22 12 08.0 C
Kuril Islands (h = 120 km).

" 10 UPP iP 03 30 50.0
KIR iP 03 30 17.0
UME iP 03 30 31.3 C
South of Honshu, Japan (h = 15 km).

" 10 UPP iP 09 02 07.9
Central Italy (h = 10 km).

" 10 UPP eP 12 50 58
KIR iP 12 50 36.7
Taiwan region (h = 20 km).

" 10 UPP iP 16 47 19.3
KIR iP 16 46 40.1
UME iP 16 47 07.5
Northern Iran (h = 45 km).

" 11 UPP iP 22 22 22.1
micr sec
P Z' 0.1 1.0
KIR iP 22 21 28.8
UME iP 22 21 54.8
Andreanof Islands, Aleutian Is.
(h = 50 km).

" 11 UPP iP 22 43 24.1
KIR iP 22 42 31.3
Andreanof Islands, Aleutian Is.
(h = 45 km).

" 12 UPP iP 01 12 58.8
i 01 13 13.7
micr sec
P Z' 0.1 0.9
KIR iP 01 12 05.7
UME iP 01 12 31.8
Rat Islands, Aleutian Islands
(h = 50 km).

" 12 UPP i(P) 03 31 38.8

1992
Feb. 12 KIR iP 12 09 27.9
UME iP 12 09 46.8
Near coast of Guerrero, Mexico
(h = 30 km).

" 12 UPP iP 16 00 11.9
UME iP 16 00 38.3
Turkey (h = 10 km).

" 12 UPP eP 16 04 49
KIR iP 16 05 45.8
UME iP 16 05 14.3
Turkey (h = 10 km).

" 12 UPP iP 23 12 55.8

" 13 UPP i(PKP) 01 48 17.4
iPKP 01 48 25.1
micr sec
Mx Z 31 20
KIR iPKP 01 48 11.6
micr sec
Mx Z 20 22
UME iPKP 01 48 16.6
Vanuatu Islands (h = 10 km).
M = 6.8 (UPP,KIR).

" 13 UPP iP 02 29 18.2
UME iP 02 28 41.5
Near north coast of Greenland
(h = 10 km).

" 13 UPP iP 02 49 05.6
micr sec
P Z' 0.1 1.0
KIR iP 02 48 12.1
micr sec
P Z' 0.2 0.9
UME iP 02 48 39.3 C
Fox Islands, Aleutian Islands
(h = 45 km).
m = 6.0 (UPP,KIR).

" 14 UPP iP 03 32 42.0
Turkey (h = 15 km).

" 14 UPP iP 08 26 51.4
micr sec
Mx Z 11 14

(cont).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992 Feb. 14 (cont).

KIR	iP		08 26 16.5	
			micr	sec
	P	Z'	0.4	1.8
	Mx	Z	2.4	10
UME	iP		08 26 27.2	

Lake Baykal region (h = 20 km).
M = 5.6 (UPP,KIR).

" 15

UPP	iP		12 58 10.9
KIR	iP		12 58 49.0
UME	iP		12 58 23.4

Eastern Caucasus (h = 15 km).

" 15

UPP	eP		13 42 58
KIR	eP		13 43 36
UME	iP		13 43 11.1

Eastern Caucasus (h = N).

" 17

UPP	iP		00 08 48.2	D
	iPP		00 10 02	
	iS		00 14 18	
			micr	sec
	P	Z'	0.5	1.5
	Mx	Z	8.5	16
KIR	iP		00 07 38.5	D
			micr	sec
	P	Z'	1.0	1.7
	Mx	Z	10	15
UME	iP		00 08 11.6	

East of Severnaya Zemlya
(h = 10 km).
m = 6.2, M = 5.5 (UPP,KIR).

" 17

UME	iP		14 25 17.4

Off east coast of Honshu, Japan
(h = 45 km).

" 17

UME	iP		14 41 55.1

East of Kuril Islands (h = N).

" 18

UME	iP		10 12 21.8

Jan Mayen Island region (h = 10 km).

" 18

UPP	iPKP1		17 26 33.1

Kermadec Islands region
(h = 490 km).

" 19

KIR	iPn		03 00 36.0

(cont).

1992 Feb. 19 (cont).

UME	iPn		03 01 12.6
UDD	iPn		03 01 34.2
MYV	iPn		03 01 03.0

Norwegian Sea, 71.7°N, 1.5°W.
Origin time = 02 58 32.
Solution from Bergen regional bulletin.

" 19

KIR	iPn		04 49 07.6
UME	iPn		04 49 41.5
UDD	iPn		04 50 04.6

Norwegian Sea, 71.4°N, 0.1°W.
Origin time = 04 47 08.
Solution from Bergen regional bulletin.

" 19

UPP	iPn		06 40 25.2	
	iPg		06 40 33.5	
	iSn		06 41 04.3	
	i		06 41 14.0	
	iSg		06 41 17.6	
KIR	iSn		06 43 36.4	
	iSg1		06 44 30.4	
UME	iPn		06 41 21.4	
	iSg1		06 42 49.0	
UDD	iPg1		06 39 59.7	C
	iSg1		06 40 20.6	
DEL	iPn		06 40 21.2	C
	iPg1		06 40 26.9	
	iSn		06 40 57.9	
	iSg1		06 41 08.9	
MYV	iPn		06 40 33.6	
	iPg1		06 40 44.0	
	iSg1		06 41 36.0	

Southeastern Norway, 59.3°N, 11.0°E.
Origin time = 06 39 32.
M_L(UPP) = 3.7 (0.09) 4.
Felt with maximum intensity I_0 = V (MM). Radius of perceptibility is 70 km and macroseismic magnitude M_M = 3.6. Focal depth deduced from macroseismic data is 15 km.

" 19

UPP	iP		11 49 11.3
KIR	iP		11 48 37.5
		micr	sec
	P	Z' 0.3	1.8
UME	iP		11 48 52.1

Bonin Islands region (h = 30 km).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992						
Feb.	19	UPP	iP		15 17 59.2	
		KIR	iP		15 19 06.5	
		UME	iP		15 18 31.4	
		Crete (h = 25 km).				
"	19	UPP	iP		20 26 53.3	
		KIR	iP		20 26 06.4	
					micr	sec
			P	Z'	0.1	0.9
		UME	iP		20 26 27.7	C
		Kuril Islands (h = N).				
"	20	UPP	eP		18 00 44	
					micr	sec
			Mx	Z	3.3	20
		KIR	iP		18 00 17.2	
					micr	sec
			P	Z'	0.2	1.2
			Mx	Z	0.9	16
		UME	iP		18 00 27.8	
		South of Mariana Islands				
		(h = 45 km).				
		M = 5.5				
"	20	UPP	iPKP1		20 55 12.0	
		KIR	iPKP1		20 54 51.2	
		UME	iPKP1		20 54 59.1	D
		South of Kermadec Islands				
		(h = 50 km).				
"	21	UPP	iP		17 26 49.9	
		KIR	iP		17 26 32.1	
					micr	sec
			P	Z'	0.1	1.0
		Halmahera, Indonesia (h = 80 km).				
"	21	KIR	eP		18 44 01	
		Northern Molucca Sea (h = N).				
"	21	UPP	iP		22 44 45.5	
		Southern Greece (h = 25 km).				
"	23	UPP	iPKP1		20 01 04.1	C
		South of Fiji Islands (h = 440 km).				
"	24	UPP	iSg1		10 26 22.0	
		UME	iSg1		10 27 05.2	
		UDD	iSn		10 24 47.9	
			iSg1		10 25 22.1	

(cont).

1992						
Feb.	24	(cont).				
		MYV	iSn		10 25 15.0	
			iSg1		10 25 36.0	
"	24	UPP	iSg1		10 46 45.0	
		UME	iSg1		10 47 36.5	
		UDD	iSg1		10 45 55.1	
		MYV	iSg1		10 46 08.0	
"	24	UPP	iSg1		14 05 57.3	
		UME	iSg1		14 06 22.7	
		UDD	iSg1		14 04 58.0	
		DEL	iSg1		14 06 10.3	
		MYV	iSn		14 04 46.0	
			iSg1		14 05 12.0	
"	24	UDD	iSg1		18 37 56.5	
		MYV	iSg1		18 38 08.0	
"	24	UDD	iSg1		19 01 10.5	
		MYV	iSg1		19 01 22.0	
"	25	UDD	iSg1		12 04 20.3	
		MYV	iSg1		12 04 12.0	
		Off coast of southwestern Norway,				
		62.0°N, 4.9°E.				
		Origin time = 12 01 54.				
		M_L(UPP) = 2.4 1.				
		Solution from Bergen regional				
		bulletin.				
"	25	KIR	ePg1		22 09 51	
			iSg1		22 10 21.9	
		UME	iSn		22 10 44.9	
			iSg1		22 11 02.9	
		MYV	iPn		22 09 53.0	
			iSg1		22 10 56.0	
		Coast of northern Norway,				
		66.8°N, 13.9°E.				
		Origin time = 22 08 57.				
		M_L(UPP) = 2.8 (0.27) 2.				
		By combination with Finnish station				
		readings.				
"	26	UPP	iP		03 55 02.4	D
			iS		04 02 52	
					micr	sec
			P	Z'	0.6	1.1
			Mx	Z	6.4	30

(cont).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992

Feb.	26	(cont).					
		KIR	iP		03	55	34.6 D
					micr		sec
			P	Z'	0.5		1.3
		UME	iP		03	55	13.1 D
		Arabian Sea (h = 10 km).					
		m = 6.5 (UPP,KIR).					
"	27	UPP	Mx		21	10	
					micr		sec
			Mx	Z	23		24
		KIR	Mx		21	07	
					micr		sec
			Mx	Z	31		25
		Eastern New Guinea reg., P. N. G.					
		(h = 40 km).					
		M = 6.7 (UPP,KIR).					
"	29	UPP	iP		05	56	06.7
		South of Mariana Islands					
		(h = 35 km).					
"	29	UPP	iP		21	49	49.1
		UME	iP		21	49	46.6
		Afghanistan - Tajikistan bord. reg.					
		(h = 190 km).					
"	29	UPP	iP		23	07	10.8
		Sea of Okhotsk (h = 410 km).					

September 16, 1993

Conny Holmqvist
Klaus Meyer

SEISMOLOGICAL DEPARTMENT
BOX 2101
S-750 02 UPPSALA
SWEDEN

SEISMOLOGICAL DEPARTMENT
BOX 2101
S-750 02 UPPSALA
SWEDEN

SEISMOLOGICAL BULLETIN

UPPSALA, KIRUNA, UMEÅ, UDDEHOLM

DELARY and MYRVIKEN

Uppsala	(UPP)	59°51.5'N,	17°37.6'E;	h = 14 m
Kiruna	(KIR)	67°50.4'N,	20°25.0'E;	h = 390 m
Umeå	(UME)	63°48.9'N,	20°14.2'E;	h = 16 m
Uddeholm	(UDD)	60°05.4'N,	13°36.4'E;	h = 240 m
Delary	(DEL)	56°28.2'N,	12°52.2'E;	h = 150 m
Myrviken	(MYV)	62°56.5'N,	14°20.8'E;	h = 345 m

MARCH 1 - 31, 1992

1992 Mar.	2	UPP	iP	03 59 33.6		
		UME	iP	03 59 07.3		
		Kuril Islands (h = 40 km).				
"	2	UPP	iP	04 39 02.4		
		UME	iP	04 38 36.4		
		Kuril Islands (h = 40 km).				
"	2	UPP	iPKP1	09 24 56.2		
		UME	iPKP1	09 25 48.4		
		North Island, New Zealand (h = 30 km).				
"	2	UPP	iP	12 40 06.3		
			iS	12 48 30		
			iP'P'	13 09 04.7		
				micr	sec	
			P	Z' 1.5	1.0	
			Mx	Z 104	21	
		UME	iP	12 39 38.4 C		
		Off east coast of Kamchatka (h = 40 km).				
		m = 7.1 (UPP,KIR).				
"	2	UPP	iP	14 18 27.6		
		Off east coast of Kamchatka (h = 35 km).				
"	2	UPP	iP	20 36 42.2		
		UME	eP	20 37 29		
		Romania (h = 25 km).				
1992 Mar.	3	UPP	iPKP	01 37 22.8		
			iSKP1	01 40 32.5		
				micr	sec	
			P	Z' 0.2	1.0	
		UME	iPKP	01 37 14.5		
			iSKP1	01 40 19.5		
		Vanuatu Islands (h = 150 km).				
"	3	UPP	iP	03 22 46.8		
				micr	sec	
			P	Z' 0.3	0.9	
		UME	iP	03 22 21.1 C		
		Kuril Islands (h = 20 km).				
"	3	UPP	iP	04 39 04.9		
				micr	sec	
			P	Z' 0.2	0.9	
			Mx	Z 7.9	17	
		UME	iP	04 38 39.1		
		Kuril Islands (h = 40 km).				
"	3	UPP	iP	04 53 58.3		
		Kuril Islands (h = 30 km).				
"	3	UPP	iP	20 16 02.6		
		East of Kuril Islands (h = N).				
"	3	UPP	iP	23 32 02.6		
		Philippine Islands region (h = 40 km).				

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992
Mar. 4 UPP Mx 04 50
micr sec
Mx Z 20 30
Bismarck Sea (h = 20 km).

" 4 UPP iP 08 55 25.9
Near east coast of Kamchatka
(h = N).

" 4 UPP iP 12 04 51.6
micr sec
P Z' 0.2 1.0
UME iP 12 05 04.6
Northern Iran (h = 20 km).

" 4 UME iSg1 12 29 19.1
Norrbotten, Sweden, 66.7°N, 22.5°E.
Origin time = 12 27 46.
M_L(UPP) = 2.4 1.
By combination with Finnish station
readings.

" 5 UPP iP 02 22 44.0
UME iP 02 22 37.4
Kashmir - Xijang border region
(h = 35 km).

" 5 UPP iP 09 04 17.3
iS 09 11 36
micr sec
Mx Z 17 25
KIR micr sec
Mx Z 14 16
UME iP 09 05 35.7
Ethiopia (h = 5 km).
M = 6.0 (UPP,KIR).

" 5 UPP iP 14 49 35.9
i 14 49 37.7
iS 14 58 05.5
iP'P' 15 18 16.3
i 15 18 35.7
micr sec
P Z' 1.7 1.0
Mx Z 16 20
KIR micr sec
Mx Z 9.9 18
UME iP 14 50 07.7 C
Off east coast of Kamchatka
(h = 45 km).
m = 6.9, M = 6.0 (UPP,KIR).

1992
Mar. 6 UPP iPKP1 03 21 27.9
iPKP2 03 21 32.6
UME iPKP1 03 21 15.6
Kermadec Islands region (h = N).

" 7 UPP iP 02 06 14.5
ipP 02 06 35.5
iPP 02 09 40
iSKS 02 16 31
iS 02 16 44
isS 02 17 21
iSS 02 22 35
micr sec
P Z' 1.0 1.0
Mx Z 11.9 28
KIR micr sec
Mx Z 3.1 16
UME iP 02 06 14.9 C
Costa Rica.
h = 80 km (UPP).
m = 7.0, M = 5.9 (UPP,KIR).
M uncorrected for focal depth.

" 7 UPP Mx 19 45
micr sec
Mx Z 11 19
KIR Mx 19 45
micr sec
Mx Z 2.7 17
Bismarck Sea (h = 15 km).
M = 6.1 (UPP,KIR).

" 7 UPP iPKP1 20 18 53.6
UME iPKP1 20 18 36.2
South of Kermadec Islands (h = N).

" 8 UPP iP 03 54 47.6
i 03 54 52.8
micr sec
P Z' 0.1 1.2
UME iP 03 54 30.4
i 03 54 34.8
Near coast of northern Calif.
(h = 15 km).

" 8 UPP iP 16 07 46.9
UME iP 16 07 19.0
Off east coast of Kamchatka
(h = 30 km).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992
Mar. 8 UPP eP 21 42 18
Kuril Islands (h = 20 km).

" 9 UPP iP 17 07 53.9
Pakistan (h = 20 km).

" 9 UME iP 18 26 32.0
Near s. coast of Honshu, Japan
(h = 25 km).

" 10 UPP eP 05 53 55
East of Kuril Islands (h = N).

" 11 UME ePKP1 18 44 43
Kermadec Islands, New Zealand
(h = 230 km).

" 11 UPP iP 19 06 21.4
UME iP 19 06 01.1
Off east coast of Honshu, Japan
(h = 25 km).

" 11 UPP Mx 20 52
micr sec
Mx Z 8.0 21
Bismarck Sea (h = 30 km).

" 11 UDD iSg1 22 07 30.0
MYV iSg1 22 07 13.6
Southwestern coast of Norway,
62.5°N, 5.7°E.
Origin time = 22 05 12.
M_L(UPP) = 2.6 1.
Felt.
Solution from Bergen regional
bulletin.

" 12 UPP iP 00 14 23.2
UME iP 00 14 55.7
Near Islands, Aleutian Islands
(h = 25 km).

" 13 UPP iP 12 46 23.2
UME iP 12 47 02.7
Ionian Sea (h = 10 km).

" 13 UPP iP 16 11 38.5 C
i 16 12 25.0
iS 16 20 14
iP'P' 16 39 52.4
(cont.)

1992
Mar. 13 (cont).
micr sec
P Z' 0.6 0.9
UME iP 16 11 10.6 C
Andreanof Islands, Aleutian Is.
(h = 200 km).

" 13 UPP iP 17 23 57.4 D
iS 17 28 25.8
micr sec
P Z' 8.8 1.5
Mx Z 123 17
KIR micr sec
Mx Z 217 17
UME iP 17 24 17.6
Turkey (h = 25 km).
m = 7.0, M = 6.6 (UPP,KIR).

" 13 UPP iPKP 18 08 49.3
D'Entrecasteaux Islands region
(h = 25 km).

" 13 UPP iP 18 43 15.3
UME iP 18 43 31.5
Turkey (h = 10 km).

" 15 UPP iP 01 13 20.5
micr sec
P Z' 0.2 1.0
Mx Z 19 17
KIR micr sec
Mx Z 5.5 17
UME iP 01 13 04.4
Southwestern Ryukyu Islands
(h = 30 km).
M = 6.1 (UPP,KIR).

" 15 UPP iP 07 34 07.9
UME iP 07 33 42.2
Kuril Islands (h = N).

" 15 UPP iP 16 21 45.2
iS 16 26 12
micr sec
P Z' 1.0 1.8
Mx Z 10 15
KIR micr sec
Mx Z 15.7 19
UME iP 16 22 05.9
Turkey (h = 20 km).
m = 6.1, M = 5.5 (UPP,KIR).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992
Mar. 15 UME iP 17 49 53.6
Ascension Island region
(h = 10 km).

" 16 UPP iP 01 27 52.9
Xijang (h = N).

" 16 UPP iPKP1 21 54 27.3
Kermadec Islands region (h = N).

" 16 UPP iPKP1 23 41 05.6
UME iPKP1 23 40 55.7
i 23 41 35.3
Off e. coast of N. Island, N. Z.
(h = 180 km).

" 17 UPP iP 02 26 22.7
UME iP 02 26 19.1
Nicobar Islands, India (h = 70 km).

" 17 UPP iP 06 56 43.7
Near coast of Chiapas, Mexico
(h = 60 km).

" 17 UPP iP 23 48 08.6
KIR iP 23 49 04.4
Afghanistan - Tajikistan bord. reg.
(h = 230 km).

" 18 UPP iP 16 36 08.1
KIR iP 16 35 22.6
Kuril Islands (h = 35 km).

" 18 UPP iP 18 20 02.0
KIR iP 18 19 13.5
Kuril Islands (h = N).

" 18 UPP iPKP1 20 10 59.0
South of Fiji Islands (h = 220 km).

" 19 KIR iP 06 27 36.1
Leeward Islands (h =35 km).

" 19 UPP iP 06 46 44.8
i 06 46 52.3
iS 06 56 55
micr sec
P Z' 0.7 1.6
Mx Z 9.6 16

(cont).

1992
Mar. 19 (cont).
KIR iP 06 46 24.6
micr sec
P Z' 0.5 1.5
Mx Z 4.9 14
UME iP 06 46 17.3
Luzon, Philippine Islands h = 15 km.
m = 6.4, M = 6.1 (UPP,KIR).

" 19 UPP iP 07 58 32.1
KIR eP 07 58 14
Luzon, Philippine Islands (h = 20 km).

" 19 KIR iPn 08 35 49.2
MYV iPn 08 36 50.0
Greenland Sea, 72.8°N, 8.3°E.
Origin time = 08 34 14.
By combination with Finnish station readings.

" 19 KIR iPn 10 49 42.5
UME iPn 10 50 31.3
UDD iPn 10 51 08.0
MYV iPn 10 50 36.0
Greenland Sea (h = 10 km).

" 19 KIR iPn 11 04 24.7
UME iPn 11 05 14.5
UDD iPn 11 05 51.0
MYV iPn 11 05 15.0
Greenland Sea (h = 10 km).

" 19 KIR iPn 12 06 00.0
UME iPn 12 06 48.9
Greenland Sea (h = 10 km).

" 19 KIR iPn 12 14 14.6
UME iPn 12 15 01.5
Greenland Sea (h = 10 km).

" 19 KIR iPn 12 18 39.2
UME iPn 12 19 28.5
UDD iPn 12 20 08.5
MYV iP 12 19 30.6
Greenland Sea (h = 10 km).

" 19 KIR iPn 15 24 15.5
UME iPn 15 25 07.4
Greenland Sea (h = 10 km).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992 Mar. 19
KIR iP 19 22 30.6
UME iP 19 22 04.5
Eastern Caucasus (h = N).

" 19
KIR iPn 20 07 57.7
UME iPn 20 08 44.9
UDD iPn 20 09 28.5
MYV iPn 20 08 53.0
Greenland Sea (h = 10 km).

" 19
UPP iP 23 26 39.9
KIR iP 23 26 20.4
Luzon, Philippine Islands
(h = 15 km).

" 20
UPP iP 02 31 53.7
Greece (h = 10 km).

" 20
UPP iP 05 42 33.5
i 05 42 45.0
iS 05 46 50
micr sec
Mx Z 4.9 11
KIR iP 05 43 44.7
micr sec
Mx Z 7.4 12
Southern Greece (h = 15 km).
M = 5.4 (UPP,KIR).

" 20
UPP iP 09 44 36.2
i 09 44 45.0
iS 09 48 50
micr sec
Mx Z 1.9 12
KIR micr sec
Mx Z 3.7 12
UME iP 09 45 09.1
Southern Greece (h = 10 km).
M = 5.0 (UPP,KIR).

" 20
UME iP 17 29 00.6
Near coast of Guatemala (h = 60 km).

" 20
UPP iPKP 19 03 49.5
KIR iPKP 19 04 04.8 C
micr sec
P Z' 0.3 1.0
UME iPKP 19 03 56.2 C
South Sandwich Islands region
(h = 110 km).

1992 Mar. 21
UPP ePKP1 12 25 51
UME iPKP1 12 25 33.5
Kermadec Islands region
(h = 300 km).

" 21
UPP iP 17 38 16.3
UME iP 17 37 47.3
Kuril Islands (h = 30 km).

" 21
UPP iP 20 51 53.2
KIR iP 20 50 59.3
UME iP 20 51 24.5
Near Islands, Aleutian Islands (h = N).

" 21
UPP iP 20 56 37.6 C
micr sec
P Z' 0.1 1.0
KIR iP 20 55 44.0 C
micr sec
P Z' 0.1 1.0
UME iP 20 56 09.7 C
Near Islands, Aleutian Islands (h = N).
m = 5.8 (UPP,KIR).

" 21
UPP eP 23 21 11
KIR iP 23 22 01.4
UME iP 23 21 30.2
Turkey (h = 15 km).

" 22
UPP iP 01 59 27.6
KIR iP 01 59 29.4
UME iP 01 59 23.6
Andaman Islands, India (h = N).

" 22
UME iP 08 34 20.4
Kuril Islands (h = 35 km).

" 22
UPP iP 11 54 45.8
UME iP 11 54 24.6
South of Honshu, Japan (h = 150 km).

" 22
UPP iP 16 57 04.6
KIR eP 16 58 15
UME iP 16 57 38.8
Turkey (h = 20 km).

" 22
UME iPKP 21 04 23.3
Vanuatu Islands (h = N).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992 Mar. 23
KIR iPg1 03 22 13.5
iSg1 03 22 23.4
UME iSg1 03 23 58.8
Norrbotten, Sweden, 67.6°N, 22.3°E.
Origin time = 03 22 00.
M_L(UPP) = 2.5 1.
By combination with Norwegian station readings.

" 23
UME iP 06 56 08.6
Southern Greece (h = 15 km).

" 23
UPP iPKP1 07 31 44.2
iPKP2 07 31 48.6
UME iPKP1 07 31 31.8
Kermadec Islands region
(h = 310 km).

" 23
UME iP 10 54 16.0
Panama (h = 15 km).

" 24
KIR iPn 01 15 53.5
iPg1 01 16 00.5
iSg1 01 16 41.4
UME iSn 01 17 59.5
iSg1 01 18 41.0
UDD iLg1 01 20 27.0
MYV iSn 01 18 18.2
Norwegian Sea, 70.6°N, 17.4°E.
Origin time = 01 15 07.
M_L(UPP) = 3.4 (0.08) 2.
By combination with Finnish station readings.

" 24
KIR ePn 08 18 56
iPg1 08 19 03.5
iSg1 08 19 39.6
UME iSn 08 21 03.5
iSg1 08 21 43.5
Norwegian Sea, 70.4°N, 16.7°E.
Origin time = 08 18 09.
M_L(UPP) = 3.9 1.
By combination with Finnish station readings.

" 24
KIR iP 17 32 42.2
Bali Sea (h = 280 km).

" 24
KIR iP 19 41 08.0
UME iP 19 40 58.9
Xijang (h = 15 km).

1992 Mar. 24
UPP iP 21 09 55.5 C
KIR iP 21 10 04.2
UME iP 21 09 52.7
Pakistan (h = 15 km).

" 24
KIR iP 23 00 44.6
UME iP 23 00 19.2
Taland Islands, Indonesia (h = 55 km).

" 25
UPP eP 04 03 50
UME iP 04 04 09.7
Turkey (h = 10 km).

" 25
UPP iP 17 27 20.4 C
micr sec
P Z' 0.1 0.7
KIR iP 17 26 55.6
UME iP 17 27 03.2
Southwestern Ryukyu Islands
(h = 80 km).

" 25
UPP i(P) 17 30 13.0

" 25
UPP iPKP1 17 47 34.8
KIR iPKP1 17 47 15.4
UME iPKP1 17 47 19.6
North Island, New Zealand
(h = 35 km).

" 25
UPP iP 21 51 30.2
ipP 21 52 05.7
KIR iP 21 50 35.0
ipP 21 51 11.4
Near east coast of Kamchatka.
h = 140 km (UPP,KIR).

" 25
UPP iP 22 42 50.2 C
ipP 22 43 16.3
micr sec
P Z' 0.3 1.0
KIR iP 22 42 41.5
UME iP 22 42 41.4 C
ipP 22 43 06.2
Myanmar.
h = 100 km (UPP,UME).

" 26
UPP iP 13 13 31.1
UME iP 13 13 43.0

" 26
KIR iP 14 21 10.3
Mariana Islands (h = 55 km).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992
Mar. 26 UPP iP 14 25 10.4
iPP 14 27 31.1
iS 14 33 54
micr sec
P Z' 0.7 1.0
Mx Z 3.6 18
KIR iP 14 24 16.9 C
micr sec
P Z' 0.2 1.0
Mx Z 2.1 19
UME iP 14 24 42.6
Andreanof Islands, Aleutian Is.
(h = N).
m = 6.4, M = 5.4 (UPP,KIR).

" 26 UPP iP 16 41 48.3
KIR iP 16 41 14.1
UME iP 16 41 32.4
Southern Nevada.
Underground explosion.

" 26 UPP iP 16 44 43.9
Andreanof Islands, Aleutian Is.
(h = N).

" 27 UPP iP 00 15 54.8 D
micr sec
P Z' 0.1 0.7
KIR iP 00 15 45.3 D
micr sec
P Z' 0.1 0.6
UME iP 00 15 47.2 D
i 00 16 10.7
Myanmar (h = 100 km).
m = 5.9 (UPP,KIR).

" 27 UPP iP 10 47 21.4
UME iP 10 47 17.6
Pakistan (h = 35 km).

" 27 UPP iP 11 25 48.3
Southern Iran (h = 35 km).

" 27 UPP iP 13 33 39.3
micr sec
P Z' 0.2 1.4
KIR eP 13 32 46
UME iP 13 33 10.5
Andreanof Islands, Aleutian Is.
(h = 180 km).

1992
Mar. 27 UPP iP 19 26 11.4
KIR eP 19 27 00
UME iP 19 26 30.4
Northwestern Caucasus (h = N).

" 27 UPP iP 20 38 08.3 C
i 20 38 37.5
iS 20 46 12.6
micr sec
P Z' 0.3 0.6
KIR iP 20 38 22.4
micr sec
P Z' 0.5 0.9
UME iP 20 38 42.1 C
Northwest of Kuril Islands
(h = 450 km).
m = 6.0 (UPP,KIR).

" 28 UME iPKP 00 44 13.6
Santa Cruz Islands (h = 200 km).

" 28 UPP iPKP1 02 19 19.5
iPKP2 02 19 26.0
KIR iPKP1 02 19 00.3
UME iPKP1 02 19 04.4
South of Kermadec Islands
(h = 35 km).

" 28 UPP iP 03 01 10.6
Myanmar (h = N).

" 29 UME iP 00 14 01.9
Mariana Islands region (h = N).

" 29 UPP iP 00 44 53.1
KIR iP 00 44 12.5
UME iP 00 44 31.5
Sakhalin Island (h = 310 km).

" 29 UPP iP 08 39 55.9
Near east coast of Honshu, Japan
(h = 70 km).

" 29 UPP iPKP1 12 37 42.5
KIR ePKP 12 37 40.5
Fiji Islands region (h = 540 km).

" 29 UPP iP 13 13 00.8
KIR iP 13 12 28.8
Bonin Islands region (h = 35 km).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992
Mar. 29 UPP iP 23 49 03.0
eS 23 51 51
Ukraine - Moldova - SW Russia region (h = N).

" 30 UPP iPKP1 06 29 25.4
Kermadec Islands (h = 30 km).

" 30 KIR iPKP1 07 22 48.5
UME iPKP1 07 22 47.8
South Island, New Zealand (h = 10 km).

" 30 KIR iP 12 28 20.1
Mariana Islands (h = 210 km).

" 30 UPP iP 19 17 09.4

" 30 UPP iP 19 20 42.6
micr sec
Mx Z 3.5 11
North Atlantic Ocean (h = 10 km).

" 30 UPP iP 19 36 25.5
UME iP 19 37 04.9
Albania (h = 10 km).

" 30 UPP iP 20 56 40.1 C
micr sec
P Z' 0.1 0.8
KIR iP 20 55 55.9 C
micr sec
P Z' 0.2 1.0
UME iP 20 56 14.7 C
Hokkaido, Japan region (h = 40 km).
m = 6.1 (UPP,KIR).

" 30 UPP iP 22 33 03.5

" 31 UPP iP 03 02 47.2
KIR eP 03 01 48
Eastern Greenland (h = 10 km).

" 31 UPP iPKP 03 51 50.8
KIR ePKP 03 51 45.2
Southern East Pacific Rise (h = 10 km).

" 31 UPP iP 09 45 26.8
KIR eP 09 44 44
Kuril Islands (h = 60 km).

1992
Mar. 31 UPP iP 15 08 04.3
eS 15 10 54
KIR eP 15 09 29
UME iP 15 08 43.5
Romania (h = 150 km).

" 31 UPP iP 21 09 26.3
KIR eP 21 09 10
Near coast of Guerrero, Mexico (h = 50 km).

September 20, 1993
Atalay Ayele
Conny Holmqvist
Klaus Meyer

SEISMOLOGICAL DEPARTMENT
BOX 2101
S-750 02 UPPSALA
SWEDEN

SEISMOLOGICAL DEPARTMENT
BOX 2101
S - 750 02 UPPSALA
SWEDEN

SEISMOLOGICAL BULLETIN

UPPSALA, KIRUNA, UMEÅ, UDDEHOLM

DELARY and MYRVIKEN

Uppsala	(UPP)	59°51.5'N,	17°37.6'E;	h = 14 m
Kiruna	(KIR)	67°50.4'N,	20°25.0'E;	h = 390 m
Umeå	(UME)	63°48.9'N,	20°14.2'E;	h = 16 m
Uddeholm	(UDD)	60°05.4'N,	13°36.4'E;	h = 240 m
Delary	(DEL)	56°28.2'N,	12°52.2'E;	h = 150 m
Myrviken	(MYV)	62°56.5'N,	14°20.8'E;	h = 345 m

APRIL 1 - 30, 1992

1992					
Apr.	1	UPP	iP	13 31 07.1	
"	1	UPP	iPKP	15 26 39.4	
		UME	iPKP	15 26 21.8	
		Kermadec Islands region (h = 10 km).			
"	1	UPP	iP	21 03 03.2	
		Xijang (h = 50 km).			
"	1	KIR	iPKP	21 20 25.9	
		UME	iPKP	21 20 30.8	
		Vanuatu Islands region (h = 620 km).			
"	1	KIR	iSg1	23 32 29.8	
		UME	iSn	23 32 50.9	
			iSg1	23 33 09.3	
		MYV	iSg1	23 33 04.2	
		Off coast of northern Norway, 66.9°N, 13.4°E.			
		Origin time = 23 31 03.			
		Solution from Norwegian station readings.			
"	2	UPP	Mx	07 37 micr	sec
			Mx Z	0.9	22
		Southern Mid-Atlantic Ridge (h = 10 km).			
"	2	UPP	iP	21 13 47.0	
		KIR	iP	21 14 17.2	
		Central Mid-Atlantic Ridge (h = 10 km).			

1992					
Apr.	3	UPP	Mx	04 31 micr	sec
			Mx Z	12	20
		KIR	Mx	04 29 micr	sec
			Mx Z	5.0	18
		New Britain region (h = 25 km).			
		M = 6.3 (UPP,KIR).			
"	3	UPP	iP	14 09 28.6	
		Ryukyu Islands (h = 30 km).			
"	3	UPP	iP	16 22 36.2	
		Southwestern Ryukyu Islands (h = 30 km).			
"	3	UPP	iP	17 25 18.7	
"	3	UPP	iP	18 20 30.9	
		Myanmar (h = N).			
"	4	UPP	iPKP	01 29 19.8	
			iSKP	01 32 10.2	
		KIR	iPKP	01 29 14.6	
		UME	iPKP	01 29 17.1	
		Fiji Islands region (h = 570 km).			
"	4	UPP	iP	10 00 47.2	
		KIR	iP	10 00 11.0	
		UME	iP	10 00 25.6	
		South of Honshu, Japan (h = 70 km).			

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992 Apr. 4 UPP iP 16 33 42.2
micr sec
P Z' 0.1 1.4
KIR iP 16 32 46.7
micr sec
P Z' 0.1 0.9
UME iP 16 33 08.7
Off east coast of Kamchatka
(h = 30 km).
m = 5.8 (UPP,KIR).

" 4 UPP iP 17 52 58.8
micr sec
P Z' 0.1 1.0
Xijang (h = N).

" 4 UPP Mx 23 03
micr sec
Mx Z 1.7 25
Santa Cruz Islands (h = 45 km).

" 5 UPP iP 00 11 14.8

" 5 UPP iP 07 56 14.5
i 07 56 20.4
iS 08 03 03
micr sec
P Z' 0.1 0.9
P Z' 0.3 0.9
Mx Z 3.5 12
KIR iP 07 56 12.9
ipP 07 56 17.4
micr sec
pP Z' 0.3 1.0
Mx Z 5.1 12
UME iP 07 56 05.6
iP 07 56 10.7
Kashmir - Xijang border region
(h = 20 km).
m = 6.3, M = 5.6 (UPP,KIR).

" 5 UPP Mx 12 59
micr sec
Mx Z 4.5 22
KIR Mx 12 58
micr sec
Mx Z 2.8 24
Santa Cruz Islands (h = 50 km).
M = 5.9 (UPP,KIR).

1992 Apr. 5 UPP iP 13 35 50.5
micr sec
P Z' 0.1 0.9
KIR iP 13 35 00.3
UME iP 13 35 22.2
Kuril Islands (h = 60 km).

" 5 UPP Mx 15 01
micr sec
Mx Z 1.7 24
KIR Mx 15 05
micr sec
Mx Z 2.6 19
Near coast of Nicaragua (h = 30 km).
M = 5.4 (UPP,KIR).

" 6 UPP iP 03 46 01.5
KIR iP 03 45 16.7
UME iP 03 45 35.4
Kuril Islands (h = 80 km).

" 6 UPP iP 13 13 29.2
Sicily (h = 20 km).

" 6 UPP iP 14 05 32.8
i 14 05 38.2
iS 14 14 26
iP'P' 14 34 07.8
micr sec
P Z' 0.1 1.0
i Z' 0.3 1.4
Mx Z 98 23
KIR iP 14 04 45.8
ipP 14 04 50.9
micr sec
P Z' 1.6 2.8
pP Z' 0.9 1.8
Mx Z 76 20
UME iP 14 05 06.0
ipP 14 05 11.6
Vancouver Island region (h = 20 km).
m = 6.5, M = 6.8 (UPP,KIR).

" 6 UPP iP 14 59 24.9 D
i 14 59 35.4
micr sec
P Z' 0.1 0.6
KIR iP 14 59 26.1
micr sec
P Z' 0.2 0.9
(cont).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992
Apr. 6 (cont).
UME iP 14 59 21.4
Southwest of Sumatera, Indonesia
(h = 30 km).
m = 6.3 (UPP,KIR).

" 6 UPP iP 15 27 03.2
micr sec
P Z' 0.1 1.2
Mx Z 9.0 22
KIR iP 15 26 17.3
Vancouver Island region (h = 10 km).

" 6 UPP iP 15 38 43.0
North Atlantic Ocean (h = 10 km).

" 6 UPP iP 16 20 57.3
micr sec
P Z' 0.4 1.4
KIR iP 16 20 54.0
micr sec
P Z' 0.2 1.2
UME iP 16 20 57.1
North Atlantic Ocean (h = 10 km).
m = 5.8 (UPP,KIR).

" 6 UPP iP 16 25 04.8
North Atlantic Ocean (h = 10 km).

" 6 UPP iP 16 30 42.8

" 6 UPP iP 17 44 47.4

" 6 UPP iP 19 33 23.1

" 6 UPP iP 19 25 06.1
North Atlantic Ocean (h = 10 km).

" 8 UPP Mx 24 01
micr sec
Mx Z 5.7 20
Vanuatu Islands (h = 15 km).

" 8 UPP Mx 15 23
micr sec
Mx Z 3.2 23
Vanuatu Islands (h = 15 km).

" 9 UPP iPKP2 05 22 55.9
Kermadec Islands region (h = 10 km).

1992
Apr. 9 UPP iP 08 26 53.1
KIR iP 08 26 00.6
Near east coast of Kamchatka (h = N).

" 9 UPP iP 21 25 01.8 C
i 21 25 15.4
micr sec
P Z' 0.2 1.1
Mx Z 0.8 20
KIR iP 21 24 08.2
micr sec
P Z' 0.3 0.9
Mx Z 0.8 15
UME iP 21 24 32.5
Off east coast of Kamchatka
(h = 45 km).
m = 6.2, M = 4.9 (UPP,KIR).

" 10 UPP iP 16 27 42.6
KIR iP 16 27 41.1
UME iP 16 27 38.5
Southern Sumatera (h = 230 km).

" 12 UPP iP 18 48 59.0
i 18 49 10.7
micr sec
P Z' 0.2 1.0
Mx Z 2.4 15
KIR iP 18 48 48.3
micr sec
P Z' 0.2 1.2
Southeast of Ryukyu Islands
(h = 40 km).
m = 6.1 (UPP,KIR).

" 13 UPP iP 01 22 33.0
iS 01 24 31.5
micr sec
P Z' 0.2 0.9
Mx Z 47 11
KIR iP 01 24 11.3
iS 01 27 33.5
micr sec
P Z' 0.7 1.7
Mx Z 21 10
UME iP 01 23 25.2
iS 01 26 08.2
UDD iP 01 22 30.3
MYV iP 01 22 58.0
iS 01 25 12.0
The Netherlands (h = 20 km).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992
Apr. 13 UPP iP 06 10 00.6
KIR iP 06 09 18.7
Near east coast of Honshu, Japan
(h = 60 km).

" 14 UPP iP 03 15 17.9
KIR iP 03 14 39.9
Eastern Honshu, Japan (h = 55 km).

" 14 UPP iPn 13 11 43.7
iSn 13 12 36.0
iSg1 13 13 13.1
KIR iSn 13 14 48.1
iSg1 13 15 41.4
UME iSn 13 13 27.7
iSg1 13 14 19.8
UDD iPn 13 11 13.1
iPg1 13 11 19.7
iSg1 13 12 09.0
MYV iPn 13 11 27.0
iPg1 13 11 44.8
iSg1 13 12 52.8
Southwestern Norway, 59.5°N, 5.7°E.
Origin time = 13 10 08.
M_L(UPP) = 4.0 (0.13) 2.
Felt.
By combination with Finnish and
Norwegian station readings.

" 15 UPP iP 01 42 26.0
iS 01 50 46
micr sec
Mx Z 0.8 20
KIR iP 01 42 19.4
micr sec
P Z' 0.4 1.0
Mx Z 0.7 14
UME iP 01 42 17.6
Myanmar - India border region
(h = 120 km).
M = 4.9 (UPP,KIR).
M uncorrected for focal depth.

" 15 UPP iP 04 09 36.4

" 15 UPP iP 05 46 10.3
i 05 46 20.3
i 05 46 29.9

(cont).

1992
Apr. 15 (cont).
UPP
micr sec
P Z' 0.3 1.0
i Z' 0.5 1.0
KIR iP 05 45 17.4
ipP 05 45 16.4
micr sec
P Z' 0.3 1.0
UME iP 05 45 42.3
ipP 05 45 54.0
Andreanof Islands, Aleutian Is.
h = 45 km (UPP,KIR).
m = 6.4 (UPP,KIR).

" 16 UPP Mx 09 00
micr sec
Mx Z 1.6 20
KIR Mx 08 59
micr sec
Mx Z 2.1 19
Minihassa Peninsula (h = 30 km).
M = 5.5 (UPP,KIR).

" 16 UPP iSg1 10 24 03.0
KIR iSn 10 23 25.4
iSg1 10 23 36.9
UME iPg1 10 21 50.2
iSg1 10 21 54.9
MYV iPg1 10 22 33.2
iSg1 10 23 13.8
Västerbotten, Sweden, 64.2°N, 20.6°E.
Origin time = 10 21 43.
M_L(UPP) = 2.8 (0.35) 2.
Felt with maximum intensity
I_0=IV (MM).
By combination with Finnish and
Norwegian station readings.

" 16 UPP iP 16 21 04.6
Afghanistan - Tajikistan border region
(h = 90 km).

" 17 UPP iP 08 02 20.6

" 17 UPP iP 12 02 55.8

" 17 UPP iP 18 40 25.7

" 18 UPP iP 07 25 42.4
Indian Sea (h = 10 km).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992
Apr. 18 UPP iP 09 30 01.4
i 09 30 05.1
iS 09 41 04
micr sec
P Z' 0.1 1.0
P Z' 0.1 1.0
Mx Z 21 20
KIR iP 09 30 00.9
micr sec
P Z' 0.1 1.0
Mx Z 9.6 18
UME iP 09 29 57.3
Southern Sumatera, Indonesia
(h = 30 km).
m = 6.4, M = 6.4 (UPP,KIR).

" 18 KIR iP 13 51 02.0
Halmahera, Indonesia (h = 130 km).

" 18 UPP iP 14 41 21.8
i 14 41 36.6
KIR iP 14 41 21.7
Southern Sumatera, Indonesia
(h = 30 km).

" 19 UPP iP 18 44 07.2
iS 18 53 57
micr sec
P Z' 0.2 1.0
Mx Z 34 21
KIR iP 18 43 43.5
micr sec
P Z' 0.3 1.1
Mx Z 26 12
UME iP 18 43 47.4
Taiwan (h = 15 km).
m = 6.2, M = 6.6 (UPP,KIR).

" 19 UPP iP 20 47 16.5
micr sec
P Z' 0.1 0.9
KIR iP 20 46 33.3
micr sec
P Z' 0.1 1.0
UME iP 20 46 51.8
Hokkaido, Japan region (h = 60 km).
m = 5.8 (UPP,KIR).

" 20 UPP ipP 16 28 27.4

(cont).

1992
Apr. 20 (cont).
UPP micr sec
P Z' 0.1 1.0
KIR ipP 16 28 01.1
Taiwan (h = 15 km).

" 20 KIR iP 18 11 10.9
Turkey (h = 15 km).

" 20 KIR ipP 19 20 06.0
Northern Mid-Atlantic region
(h = 10 km).

" 21 UPP iP 17 48 21.9
micr sec
Mx Z 1.0 18
KIR iP 17 49 19.0
Crete (h = 25 km).

" 23 UPP iP 05 02 31.2
iPP 05 05 28.2
iS 05 12 34
micr sec
P Z' 0.2 1.5
micr sec
Mx Z 14 22
KIR iP 05 01 54.8
micr sec
P Z' 0.2 1.3
micr sec
Mx Z 9.2 16
Southern California (h = 10 km).
m = 6.0, M = 6.2 (UPP,KIR).

" 23 UPP Mx 06 18
micr sec
Mx Z 3.3 20
Queen Charlotte Islands region
(h = 10 km).

" 23 UPP iP 12 33 00.3 D
micr sec
P Z' 0.2 0.9
Mx Z 3.0 16
KIR iP 12 32 27.7
micr sec
P Z' 0.2 1.0
Mx Z 2.4 14
Southeast of Ryukyu Islands
(h = 40 km).
m = 6.1, M = 5.6 (UPP,KIR).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992 Apr. 23 UPP iP 14 29 26.2
i 14 29 31.1
iS 14 38 20
micr sec
P Z' 0.1 1.0
i Z' 0.5 1.1
Mx Z 13 17
KIR iP 14 29 17.5
ipP 14 29 21.5
micr sec
P Z' 0.7 1.3
Mx Z 16 15
Myanmar - China border region
(h = 10 km).
m = 6.7, M = 6.2 (UPP,KIR).

" 23 UPP iP 15 43 39.8
i 15 43 43.1
iS 15 52 34
micr sec
P Z' 0.1 0.7
P Z' 0.4 1.0
Mx Z 14 17
KIR iP 15 43 31.3
micr sec
P Z' 0.5 1.1
Mx Z 19 20
Myanmar - China border region
(h = 10 km).
m = 6.6, M = 6.2 (UPP,KIR).

" 23 UPP iP 17 25 51.9
Myanmar - China border region
(h = N).

" 23 UPP iP 18 29 04.5
Myanmar - China border region
(h = N).

" 24 UPP iP 01 31 01.4
KIR iP 01 30 14.7
Kuril Islands (h = 15 km).

" 24 UPP iP 07 15 47.0
iS 07 22 33
micr sec
P Z' 0.5 1.1
Mx Z 18 12
KIR iP 07 16 07.5

(cont).

1992 Apr. 24 (cont).
KIR micr sec
P Z' 0.3 0.9
Mx Z 24 13
Pakistan (h = 25 km).
m = 6.3, M = 6.2 (UPP,KIR).

" 24 UPP Mx 18 37
micr sec
Mx Z 1.3 24
KIR Mx 18 46
micr sec
Mx Z 1.2 16
Central coast Pacific Rise
(h = 10 km).
M = 5.5 (UPP,KIR).

" 24 UPP iP 18 54 46.3

" 25 UPP iP 06 52 46.4
Iceland (h = 10 km).

" 25 UPP iP 12 50 43.6 D
iS 12 54 24.3
micr sec
P Z' 0.2 0.9
KIR iP 12 51 57.7
micr sec
P Z' 0.1 1.1
Sicily (h = 250 km).
m = 5.5 (UPP,KIR).

" 25 UPP iP 18 17 47.4 C
iS 18 27 28
micr sec
P Z' 0.7 1.0
Mx Z 182 18
KIR iP 18 17 09.0
micr sec
P Z' 2.2 1.6
Mx Z 139 18
Near coast of northern Calif.
(h = 15 km).
m = 6.9, M = 7.3 (UPP,KIR).

" 25 UPP iP 18 24 06.8

" 26 UPP iP 07 53 22.4 C
iS 08 03 04

(cont).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992
Apr. 26 (cont).

UPP			micr	sec
	P	Z'	0.6	1.2
	Mx	Z	50	20
KIR	iP		07 52	43.4
	ipP		07 52	50.3
			micr	sec
	P	Z'	3.5	2.9
	Mx	Z	31	18
UME	iP		07 53	04.8

Near coast of northern Calif.
(h = 20 km).
m = 6.7, M = 6.6 (UPP,KIR).

" 26

UPP	iP	11 30	07.9 C
	i	11 30	17.3
	i	11 39	46
		micr	sec
	P	Z' 2.1	1.5
	Mx	Z 33	19
KIR	iP	11 29	29.6
	ipP	11 29	38.3
		micr	sec
	P	Z' 2.3	1.6
	Mx	Z 28	19
UME	iP	11 29	50.8

Near coast of northern Calif.
(h = 20 km).
m = 7.0, M = 6.5 (UPP,KIR).

" 27 KIR iP 08 42 22.2
Near coast of Nicaragua (h = 80 km).

" 28

UPP	iP	02 08	10.0
	iS	02 18	28
	i	02 21	40
		micr	sec
	P	Z' 0.1	0.9
KIR	iP	02 07	54.3
		micr	sec
	P	Z' 0.1	1.0

Mindanao, Philippine Islands
(h = 480 km).
m = 5.8 (UPP,KIR).

" 29 UPP iPKP2 07 01 20.1
Kermadec Islands, New Zealand
(h = 80 km).

1992
Apr. 29

UPP	Mx	10 38	
		micr	sec
	Mx Z	1.1	20

Santa Cruz Islands (h = 35 km).

" 30

UPP	iP	11 50	05.1
	i	11 50	28.7
	iS	11 54	30
		micr	sec
	P Z'	0.2	1.0
	Mx Z	42	12
KIR	iP	11 51	12.6
		micr	sec
	P Z'	0.3	1.1
	Mx Z	17	11
UME	iP	11 50	36.9

Crete (h = 20 km).
m = 6.0, M = 6.0 (UPP,KIR).

" 30 UPP iSg1 16 10 37.0

" 30 UPP iP 19 23 07.9

December 15, 1993

Conny Holmqvist
Ota Kulhánek
Klaus Meyer
Xin Pi

SEISMOLOGICAL DEPARTMENT
BOX 2101
S-750 02 UPPSALA
SWEDEN

SEISMOLOGICAL DEPARTMENT
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S-750 02 UPPSALA
SWEDEN

SEISMOLOGICAL BULLETIN

UPPSALA, KIRUNA, UMEÅ, UDDEHOLM

DELARY and MYRVIKEN

Uppsala	(UPP)	59°51.5'N,	17°37.6'E;	h = 14 m
Kiruna	(KIR)	67°50.4'N,	20°25.0'E;	h = 390 m
Umeå	(UME)	63°48.9'N,	20°14.2'E;	h = 16 m
Uddeholm	(UDD)	60°05.4'N,	13°36.4'E;	h = 240 m
Delary	(DEL)	56°28.2'N,	12°52.2'E;	h = 150 m
Myrviken	(MYV)	62°56.5'N,	14°20.8'E;	h = 345 m

MAY 1 - 30, 1992

1992 May 2 UPP iPKP1 01 26 46.9
Kermadec Islands region
(h = 280 km).

" 3 UPP iP 08 41 02.5
KIR iP 08 42 09.5
Crete (h = 30 km).

" 3 UPP iP 10 44 23.3
KIR iP 10 43 50.9
Bonin Islands region (h = 40 km).

" 3 UPP iP 16 20 50.7
KIR iP 16 20 19.2
Kyushu, Japan (h = 170 km).

" 3 UPP iP 19 36 56.2
KIR iP 19 36 32.9

" 4 UPP iPdiff 08 59 08.7
iPKP 09 02 04.1
micr sec
Mx Z 0.7 17
KIR iPdiff 08 58 52.6
micr sec
Mx Z 1.2 22
Banda Sea (h = 90 km).
M = 5.3 (UPP,KIR).
M uncorrected for focal depth.

" 4 UPP iP 09 25 27.3
KIR iP 09 24 50.3
Eastern Idaho (h = 10 km).

1992 May 4 UPP iP 11 02 36.8 C
KIR iP 11 02 54.0
Pakistan (h = 10 km).

" 5 UPP iP 00 43 50.5
Off east coast of Kamchatka
(h = 50 km).

" 5 UPP iPn 08 02 52.5
Poland (h = 20 km).

" 5 UPP iP 09 06 52.3
UME iP 09 06 26.2
East of Kuril Islands (h = 40 km).

" 5 UPP iP 20 39 58.0
KIR iP 20 39 05.1
Fox Islands, Aleutian Islands
(h = N).

" 5 UPP iP 21 31 31.0
Ukraine - Moldova - SW Russia
region (h = 10 km).

" 6 UPP iP 02 09 34.8

" 7 UPP iP 06 34 48.9
iS 06 44 00
micr sec
P Z' 0.2 1.0
Mx Z 12 18

(cont).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992
May 7 (cont).

KIR	iP		06 34 07.4	
			micr	sec
	P	Z'	0.3	1.0
	Mx	Z	15	18

Hokkaido, Japan region (h = 15 km).
m = 6.3, M = 6.2 (UPP,KIR).

" 7 KIR iPn 08 27 01.9
Svalbord region (h = 10 km).

" 7

UPP	iP		19 20 33.3
KIR	iP		19 21 23.5

Turkey (h = 20 km).

" 9 KIR iP 06 34 52.3
Iran - Iraq border region (h = 45 km).

" 9 UPP iP 13 10 09.7

" 10

UPP	iP		04 12 17.3	
	iS		04 18 32	
			micr	sec
	P	Z'	0.3	1.3
	Mx	Z	12	10
KIR	iP		04 12 22.7	
			micr	sec
	P	Z'	0.3	1.3
	Mx	Z	11	15

Tajikistan (h = N).
m = 5.9, M = 5.9 (UPP,KIR).

" 10

UPP	iP		18 09 45.3
KIR	iP		18 09 06.0

Near coast of northern California
(h = 15 km).

" 10 KIR iP 23 03 21.3
Tajikistan (h = N).

" 11

UPP	iP		10 18 58.7
	i		10 19 15.3
KIR	iP		10 18 36.5

Near east coast of Honshu, Japan
(h = 60 km).

" 12

UPP	iP		03 49 26.5
	ipP		03 49 57.6
KIR	iP		03 48 30.8

Southern Alaska.
h = 140 km (UPP).

1992
May 12 UPP iP 04 19 27.0

" 12

UPP	iPdiff		16 00 41.2
KIR	iPdiff		16 00 44.7

Near coast of northern Peru
(h = 60 km).

" 12

UPP	iPKP		18 25 02.0	
	iPP		18 28 35	
			micr	sec
	Mx	Z	16	22
KIR	iPKP		18 24 47.6	
			micr	sec
	Mx	Z	17	22

Samoa Islands region (h = 15 km).
M = 6.6 (UPP,KIR).

" 14

UPP	iP		03 46 08.6
KIR	iP		03 45 15.5

Off east coast of Kamchatka
(h = 40 km).

" 14

UPP	ePKP1		08 33 11
UME	iPKP1		08 33 08.6

South of Kermadec Islands
(h = 80 km).

" 14

UPP	eP		13 02 21
UME	iP		13 02 09.0

South of Kermadec Islands (h = N).

" 15

UPP	iP		05 33 00.4
KIR	iP		05 32 07.0 C

Off east coast of Kamchatka
(h = 40 km).

" 15 UPP iPKP1 05 55 58.7
South of Kermadec Islands (h = N).

" 15

UPP	iPKP1		05 59 34.8
	i		05 59 50.2

South of Kermadec Islands (h = N).

" 15 KIR iP 05 58 57.2
Off east coast of Kamchatka
(h = 45 km).

" 15

UPP	iPKP1		06 20 54.1
	i		06 21 02.0

South of Kermadec Islands (h = N).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992 May 15
UPP iPKP 07 23 39.5
iPKKP 07 34 22.3
KIR ePKP 07 23 31
iPP 07 23 53.0
Eastern New Guinea reg.
(h = 60 km).

" 15
UPP iP 08 15 19.9 C
micr sec
P Z' 0.6 1.5
Mx Z 93 24
KIR iP 08 15 22.1 C
micr sec
P Z' 0.6 1.5
Mx Z 91 24
Kyrgyzstan (h = 50 km).
m = 6.2, M = 6.5 (UPP,KIR).

" 15
UPP iP 22 17 21.1
KIR iP 22 16 27.0
Fox Islands, Aleutian Islands (h = N).

" 16
UPP iPKP1 02 58 19.8
KIR ePKP 02 58 12
South of Kermadec Islands (h = N).

" 16
UPP iP 08 43 45.2
Myanmar - China border region
(h = N).

" 16
UPP iSKP1 15 20 55.5
Vanuatu Islands (h = 170 km).

" 16
UPP ePKP2 18 17 26
KIR iPKP1 18 16 53.5
North Island, New Zealand
(h = 45 km).

" 16
UPP iP 20 29 31.0 C
Qinghai, China (h = 15 km).

" 16
UPP Mx 21 54
micr sec
Mx Z 2.0 24
Near coast of Peru (h = 55 km).

" 17
UPP iP 10 02 29.2
i 10 02 33.2
iS 10 12 59

(cont).

1992 May 17 (cont).
UPP micr sec
P Z' 0.5 2.0
i Z' 0.2 1.0
KIR iP 10 02 10.3
i 10 02 13.4
micr sec
P Z' 0.5 1.0
Mindanao, Philippine Islands
(h = 35 km).
m = 6.7 (UPP,KIR).

" 17
UPP iP 10 28 42.4
i 10 28 46.8
iS 10 39 13
micr sec
P Z' 2.1 3.0
i Z' 0.1 0.8
Mx Z 261 18
KIR iP 10 28 24.5 C
micr sec
P Z' 0.8 1.4
Mx Z 143 18
Mindanao, Philippine Islands
(h = N).
m = 6.9, M = 7.5 (UPP,KIR).

" 17
KIR iP 15 49 14.9
Mindanao, Philippine Islands
(h = 40 km).

" 18
UPP Mx 04 13
micr sec
Mx Z 6.0 21
KIR Mx 04 12
micr sec
Mx Z 3.1 21
Off coast of central Chile
(h = 30 km).
M = 6.0 (UPP,KIR).

" 18
UPP iSn 05 31 12.3
iSg1 05 31 50.7
UME iSg1 05 33 25.8
UDD iSn 05 30 34.9
iSg1 05 31 00.0
MYV iSn 05 31 31.0
iSg1 05 32 11.0

(cont).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992
May 18 (cont).
Off coast of southern Norway,
57.1°N, 6.7°E.
Origin time = 05 28 37.
M_L(UPP) = 3.0 (0.14) 2.
By combination with Norwegian
station readings.

" 18 UPP iPKP1 11 20 00.0
Fiji Islands region (h = 540 km).

" 18 UPP iSg1 13 50 42.5
KIR iPn 13 47 46.2
iSg1 13 48 30.1
UME iPn 13 48 05.7
iSn 13 48 50.6
iSg1 13 49 08.1
UDD iSn 13 49 56.1
iSg1 13 50 30.5
MYV iPn 13 48 02.0
iSg1 13 49 04.0
Coast of northern Norway,
66.9°N, 13.6°E.
Origin time = 13 47 02.
M_L(UPP) = 3.3 (0.14) 3.
Felt.
By combination with Finnish station
readings.

" 18 UPP iP 23 32 11.6
iS 23 42 58
micr sec
Mx Z 7.7 24
KIR iP 23 32 10.3
micr sec
P Z' 1.3 3.0
Mx Z 3.1 18
UME iP 23 32 14.1
South of Panama (h = 20 km).
M = 5.8 (UPP,KIR).

" 19 KIR iPg1 08 30 56.3
iSg1 08 31 23.5
UME iSg1 08 32 37.8
Off coast of northwestern Norway.
68.1°N, 14.9°E.
Origin time = 08 30 25.
M_L(UPP) = 2.9 1.
Solution from Norwegian station
readings.

1992
May 19 UPP iP 10 56 04.7
Northwestern Balkan region
(h = 10 km).

" 19 UPP iP 12 32 35.8 C
micr sec
P Z' 0.1 0.9
Mx Z 1.8 15
KIR iP 12 33 09.5 C
micr sec
P Z' 0.3 1.1
Mx Z 2.1 10
UME iP 12 32 48.1 C
Southern Iran (h = N).
m = 5.8, M = 5.2 (UPP,KIR).

" 19 UPP Mx 19 59
micr sec
Mx Z 2.6 21
Solomon Islands (h = 35 km).

" 20 UPP iP 12 28 37.4
iPP 12 30 20
iS 12 35 02
micr sec
P Z' 0.4 1.1
Mx Z 30 16
KIR iP 12 28 47.9
micr sec
P Z' 0.9 1.5
Mx Z 50 12
UME iP 12 28 38.2
Pakistan (h = 15 km).
m = 6.3, M = 6.4 (UPP,KIR).

" 21 UPP iP 05 08 25.0 C
i 05 08 46.7
iPP 05 10 11.0
micr sec
P Z' 2.5 0.7
Mx Z 2.9 10
KIR iP 05 08 09.9 C
i 05 08 28.2
iPP 05 09 53.0
micr sec
P Z' 2.1 0.8
Mx Z 2.2 14
UME iP 05 08 11.2 C
Southern Xinjiang, China.
m = 7.2, M = 5.3 (UPP,KIR).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992
May 21 UPP iP 14 04 37.1
iS 14 14 51
KIR iP 14 03 02.2
UME iP 14 04 17.3
South of Honshu, Japan
(h = 140 km).

" 21 UPP iP 14 35 41.7
KIR iP 14 35 43.7
UME iP 14 35 36.3 C
Kyrgyzstan (h = 20 km).

" 21 UPP Mx 15 14
micr sec
Mx Z 2.8 25
KIR Mx 15 13
micr sec
Mx Z 2.3 25
Eastern New Guinea reg., P.N.G.
(h = 50 km).
M = 5.7 (UPP,KIR).

" 21 UPP iP 20 52 10.7
iPP 20 55 09.2
iS 21 02 04.0
micr sec
Mx Z 2.9 18
KIR iP 20 51 35.9
micr sec
Mx Z 2.7 17
UME iP 20 51 51.0
South of Honshu, Japan (h = 15 km).
M = 5.6 (UPP,KIR).

" 21 UPP iP 20 57 39.9
KIR iP 20 57 04.3
UME iP 20 57 20.0 C
South of Honshu, Japan (h = N).

" 21 KIR iP 22 08 41.0
UME iP 22 08 46.8
Panay, Philippine Islands (h = N).

" 21 UPP iP 22 41 21.4
KIR iP 22 40 45.7
UME iP 22 41 01.2
South of Honshu, Japan (h = N).

1992
May 22 UPP Mx 02 29
micr sec
Mx Z 1.7 21
Near coast of central Chile
(h = 45 km).

" 22 UPP iP 05 57 37.0
Sichuan, China (h = N).

" 22 UPP iP 08 26 53.1
micr sec
P Z' 0.1 0.9
Mx Z 1.7 21
KIR iP 08 25 59.1
micr sec
P Z' 0.1 1.0
Mx Z 1.1 15
UME iP 08 26 25.3
Rat Islands, Aleutian Islands (h = N).
m = 5.8, M = 5.1 (UPP,KIR).

" 22 KIR iSg1 08 28 10.8
UME iSg1 08 28 19.3
MYV iSg1 08 29 43.0
Northern Finland, 65.8°N, 28.9°E.
Origin time = 08 26 07.
M_L(UPP) = 2.7 1.
Felt.
By combination with Finnish station readings.

" 22 UPP iSg1 08 43 44.7
KIR i 08 45 07.8
iSg1 08 45 21.6
UME iSn 08 43 35.4
iSg1 08 44 22.6
UDD iPn 08 41 27.4
iPg1 08 41 42.5
iSn 08 42 20.2
iSg1 08 42 44.1
MYV iPn 08 41 33.4
iPg1 08 41 51.0
iSn 08 42 30.0
iSg1 08 42 56.0
Norwegian Sea, 61.1°N, 4.3°E.
Origin time = 08 40 19.
M_L(UPP) = 3.4 (0.10) 3.
By combination with Finnish station readings.

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992 May 22
UPP iP 14 22 06.1
UME iP 14 21 54.8
Off w. coast of Baja California
(h = 10 km).

" 22
UPP iP 14 48 04.3
KIR iP 14 47 09.5
UME iP 14 47 37.9
Alaska Peninsula (h = 90 km).

" 22
UPP iP 16 29 30.9
i 16 29 40
ipP 16 31 25
iS 16 37 20
iScS 16 38 24
micr sec
P Z' 0.1 0.7
KIR iP 16 28 43.8
ipP 16 30 36.6
micr sec
P Z' 0.3 1.0
UME iP 16 29 05.5
Sea of Okhotsk.
h = 590 km (UPP,KIR).
m = 5.4 (UPP,KIR).

" 22
UPP iP 16 39 04.7
KIR iP 16 38 28.9
UME iP 16 38 45.0
South of Honshu, Japan (h = 15 km).

" 22
UPP iS 22 09 12
micr sec
Mx Z 9.4 25
KIR micr sec
Mx Z 7.0 25
UME iPKP 21 59 13.0
Near n. coast of New Guinea, PNG.
(h = N).
M = 6.1 (UPP,KIR).

" 22
UPP iPn 23 07 35.4
iPg1 23 07 44.4
iSg1 23 08 40.4
KIR iPn 23 07 33.7
iPg1 23 07 41.8
iSg1 23 08 36.3
UME iPg1 23 06 37.1
i 23 06 40.1
iSg1 23 06 43.3
(cont).

1992 May 22
(cont).
UDD iPg1 23 07 59.9
iSg1 23 09 06.5
MYV iPn 23 07 22.8
iPg1 23 07 26.0
iSn 23 07 58.0
iSg1 23 08 58.0
Gulf of Bothnia, 63.9°N, 21.3°E.
Origin time = 23 06 29.
M_L(UPP) = 3.1 (0.15) 3.
Felt with maximum intensity.
I_0 = III + (MM)

" 23
UPP iP 09 59 29.4
KIR iP 09 58 45.8
Kuril Islands (h = 60 km).

" 23
UPP iP 10 43 13.8
i 10 43 15.0
iS 10 53 48
micr sec
Mx Z 3.8 19
KIR iP 10 43 05.1
micr sec
Mx Z 1.2 16
El Salvador (h = 80 km).
M = 5.6 (UPP,KIR).

" 23
UPP iPKP1 15 15 01.5
South of Fiji Islands (h = 100 km).

" 23
UPP iP 22 58 24.0
KIR iP 22 59 27.2
UME iP 22 58 52.6
Turkey (h = 40 km).

" 24
UME iP 00 30 13.1
i 00 30 20.5

" 24
UPP eP 01 56 44
Crete (h = N).

" 24
UPP iPKP1 04 26 01.6
UME iPKP1 04 25 52.4
Fiji Islands region (h = 540 km).

" 24
UPP eP 04 52 05
Crete (h = 20 km).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992 May 24 UPP iP 06 49 31.1
UME iP 06 50 12.6
Greece - Albania border region
(h = 50 km).

" 24 UPP iP 13 01 14.6
Andreanof Islands, Aleutian Is.
(h = 50 km).

" 24 UPP iP 20 50 06.5
KIR iP 20 49 50.0
UME iP 20 49 56.6
Halmahera, Indonesia (h = 140 km).

" 25 UPP iP 01 55 02.6
Kyrgyzstan (h = N).

" 25 UPP ePdiff 03 06 02
iPP 03 10 37.6
micr sec
Mx Z 1.4 20
KIR iPdiff 03 05 40.5
Irian Jaya, Indonesia (h = N).

" 25 UPP iP 05 15 51.4
KIR iP 05 16 00.6
UME iP 05 15 50.3
Afghanistan - Tajikistan bord. reg.
(h = 50 km).

" 25 UPP iP 08 33 49.5
KIR iP 08 33 13.1
UME iP 08 33 29.0
South of Honshu, Japan (h = 40 km).

" 25 UPP iP 08 43 59.5
Mindoro, Philippine Islands
(h = 90 km).

" 25 UPP iP 17 06 50.4 C
iS 17 16 32
micr sec
P Z' 0.3 1.1
Mx Z 109 30
KIR iP 17 06 45.0
i 17 06 47.4
micr sec
P Z' 1.4 1.6
Mx Z 44 16

(cont).

1992 May 25 (cont).
UME iP 17 06 51.5 C
Cuba region (h = 25 km).
m = 6.5, M = 6.9 (UPP,KIR).

" 25 UME iP 18 40 50.3
Cuba region (h = N).

" 25 UME iP 19 00 21.1
Cuba region (h = N).

" 25 UPP iP 20 53 03.7
KIR iP 20 52 38.5
UME iP 20 52 53.9
Gulf of California (h = 10 km).

" 26 UPP iP 03 56 20.6
Ryukyu Islands (h = 90 km).

" 26 UME iP 13 44 26.0
South of Honshu, Japan (h = 70 km).

" 26 UPP Mx 17 30
micr sec
Mx Z 0.9 22
Irian Jaya region, Indonesia
(h = 55 km).

" 26 UPP iP 19 08 57.0
UME iP 19 08 42.8
Philippine Islands region (h = 55 km).

" 27 KIR iP 01 04 48.5
UME iP 01 04 38.4
Arabian Sea (h = 10 km).

" 27 UPP iPKP1 02 58 53.1
UME iPKP1 02 58 43.1
South of Kermadec Islands (h = N).

" 27 UPP iPdiff 05 29 17
iPKP 05 32 38.9
iPP 05 34 30
micr sec
Mx Z 32 18
KIR iPKP 05 32 26.5
micr sec
Mx Z 28 34
UME iPKP 05 32 31.7
Santa Cruz Islands (h = 20 km).
M = 6.9 (UPP,KIR).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992
May 27 UPP iP 08 33 25.7
UME iP 08 33 04.4
Near east coast of Honshu, Japan
(h = 50 km).

" 27 UPP iP 12 15 07.9
KIR iP 12 15 07.7
UME iP 12 15 04.9
Northern Sumatera, Indonesia
(h = 130 km).

" 27 UPP iP 17 30 14.9
KIR iP 17 29 39.8
UME iP 17 29 56.1
South of Honshu, Japan (h = N).

" 27 UME iP 17 44 36.7
Halmahera, Indonesia (h = 35 km).

" 27 UPP iPKP2 22 50 47.6
KIR iPKP1 22 50 14.2
UME iPKP1 22 50 21.3
South Island, New Zealand
(h = 90 km).

" 28 UPP iPKP 09 46 48.0
iPKP1 09 46 51.8
micr sec
P Z' 0.2 0.9
KIR iPKP1 09 46 28.5
UME iPKP1 09 46 40.0
Kermadec Islands, New Zealand
(h = 25 km).

" 28 UPP Mx 10 48
micr sec
Mx Z 1.0 24
Kermadec Islands, New Zealand
(h = 25 km).

" 28 UPP iP 14 18 37.9
KIR iP 14 18 31.9
UME iP 14 18 31.1
Myanmar (h = 90 km).

" 28 UPP iP 18 10 03.1
KIR iP 18 09 24.2
UME iP 18 09 41.1 C
Near east coast of Honshu, Japan
(h = 70 km).

1992
May 28 UPP iP 21 35 42.2 C
i 21 35 43.1
iS 21 44 37
micr sec
P Z' 0.6 1.2
Mx Z 3.8 19
KIR iP 21 34 52.2 C
micr sec
P Z' 0.7 1.5
Mx Z 3.8 18
UME iP 21 35 15.4 C
i 21 35 16.2
East of Kuril Islands (h = 15 km).
m = 6.6, M = 5.6 (UPP,KIR).

" 28 UPP iP 23 31 26.4 C
eS 23 41 12
micr sec
Mx Z 2.6 11
KIR iP 23 31 03.0 C
micr sec
Mx Z 4.9 12
UME iP 23 31 11.4 C
Taiwan (h = 15 km).
M = 5.9 (UPP,KIR).

" 29 UPP iP 08 43 01.5
micr sec
P Z' 0.6 1.5
Mx Z 1.1 16
KIR iP 08 42 11.6
micr sec
P Z' 0.2 1.3
Mx Z 0.8 15
UME iP 08 42 34.3 D
East of Kuril Islands (h = 45 km).
m = 6.3, M = 5.0 (UPP,KIR).

" 29 UPP iP 10 24 01.2
UME iP 10 24 16.1
Southern Iran (h = N).

" 29 UPP iP 12 51 00.5
KIR iP 12 50 31.8
UME iP 12 50 42.8
Ryukyu Islands (h = 100 km).

" 29 UPP iP 21 41 21.9
KIR iP 21 41 16.8

(cont).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992 May 29 (cont).

UME	iP		21 41	22.9

Mindanao, Philippine Islands (h = 45 km).

" 29

UPP	iP		22 04	26.5
	iS		22 14	18
			micr	sec
	P	Z'	0.1	1.0
	Mx	Z	3.2	23
KIR	iP		22 03	50.4
			micr	sec
	P	Z'	0.3	1.1
	Mx	Z	8.2	17
UME	iP		22 04	05.9

South of Honshu, Japan (h = 45 km). m = 6.0, M = 5.8 (UPP,KIR).

" 30

UPP	iP		04 55	24.2

" 30

UPP	iPKP1		06 49	16.9
UME	iPKP1		06 49	05.4

Kermadec Islands, New Zealand (h = N).

" 30

UME	iP		08 16	00.8

Bonin Islands region (h = N).

" 30

UPP	iPKP1		10 04	44.3
	iPKP2		10 04	49.8
UME	iPKP1		10 04	33.9

Kermadec Islands region (h = 470 km).

" 30

UPP	iP		10 59	12.8

Fox Islands, Aleutian Islands (h = N).

" 30

UPP	iP		12 29	17.8
KIR	iP		12 28	56.4
UME	iP		12 29	03.5

Philippine Islands region (h = 50 km).

" 30

UPP	iP		12 54	04.1
	i		12 54	05.2
	iS		13 04	00
			micr	sec
	i	Z'	0.3	1.0
	Mx	Z	6.4	17

(cont).

1992 May 30 (cont).

KIR	iP		12 53	29.5
			micr	sec
	P	Z'	0.4	1.3
	Mx	Z	7.5	17
UME	iP		12 53	44.2
	i		12 53	45.1

South of Honshu, Japan (h = 20 km). m = 6.3, M = 6.0 (UPP,KIR).

" 30

UPP	iP		13 51	36.2
	i		13 51	44.5
UME	iP		13 51	24.4
	i		13 51	32.9

Samar, Philippine Islands (h = 230 km).

" 30

UPP	iP		16 42	46.0
	iS		16 53	12
			micr	sec
	Mx	Z	19	22
KIR	iP		16 42	34.1
			micr	sec
	P	Z'	2.4	3.5
			micr	sec
	Mx	Z	19	20
UME	iP		16 42	42.3

Near coast of Chiapas, Mexico (h = 55 km). M = 6.4, (UPP,KIR).

" 30

UPP	iP		18 47	24.4

Near coast of Chiapas, Mexico (h = 55 km).

" 30

UPP	iP		19 00	30.8
	iS		19 04	30
			micr	sec
	P	Z'	0.1	0.7
	Mx	Z	1.1	16
KIR	iP		19 01	45.0
			micr	sec
	Mx	Z	1.4	12
UME	iP		19 01	08.7
	i		19 01	14.3

Greece (h = 30 km). M = 4.5 (UPP,KIR).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992

May	30	UPP	iP		23 46 55.3		
		UME	iP		23 46 51.5		
		Near coast of Chiapas, Mexico					
		(h = 50 km).					
"	31	UPP	iP		06 32 07.7	C	
			iS		06 42 02		
					micr	sec	
			P	Z'	0.1	0.8	
			Mx	Z	3.4	17	
		KIR	iP		06 31 33.2	C	
					micr	sec	
			P	Z'	0.1	1.0	
			Mx	Z	3.4	17	
		UME	iP		06 31 48.4	C	
		South of Honshu, Japan (h = 30 km).					
		m = 5.8, M = 5.7 (UPP,KIR).					
"	31	UPP	iP		07 56 33.8		
		Hokkaido, Japan region (h = N).					

October 22, 1993

Conny Holmqvist
Klaus Meyer

SEISMOLOGICAL DEPARTMENT
BOX 2101
S-750 02 UPPSALA
SWEDEN

SEISMOLOGICAL DEPARTMENT
BOX 2101
S-750 02 UPPSALA
SWEDEN

SEISMOLOGICAL BULLETIN

UPPSALA, KIRUNA, UMEÅ, UDDEHOLM

DELARY and MYRVIKEN

Uppsala	(UPP)	59°51.5'N,	17°37.6'E;	h = 14 m
Kiruna	(KIR)	67°50.4'N,	20°25.0'E;	h = 390 m
Umeå	(UME)	63°48.9'N,	20°14.2'E;	h = 16 m
Uddeholm	(UDD)	60°05.4'N,	13°36.4'E;	h = 240 m
Delary	(DEL)	56°28.2'N,	12°52.2'E;	h = 150 m
Myrviken	(MYV)	62°56.5'N,	14°20.8'E;	h = 345 m

JUNE 1 - 30, 1992

1992						
June	1	UPP	iPKP1		09 11 49.4	
		South of Fiji Islands (h = 520 km).				
"	1	UPP	iP		14 02 47.8	
			iS		14 12 12	
					micr	sec
			Mx	Z	1.6	20
		KIR	iP		14 02 09.0	
					micr	sec
			Mx	Z	2.7	18
		UME	iP		14 02 26.0	C
		Near east coast of Honshu, Japan				
		(h = 55 km).				
		M = 5.4 (UPP,KIR).				
"	1	UPP	iP		18 41 11.7	C
			iS		18 50 59	
					micr	sec
			P	Z'	0.2	1.0
		KIR	iP		18 40 37.5	C
					micr	sec
			P	Z'	0.2	1.0
		UME	iP		18 40 52.1	C
		South of Honshu, Japan				
		(h = 130 km).				
		m = 5.9 (UPP,KIR).				
"	2	UME	iP		09 51 42.4	
		South of Honshu, Japan (h = 40 km).				
1992						
June	2	UPP	iP		11 57 17.1	
		KIR	iP		11 56 27.6	
		UME	iP		11 56 50.5	
		East of Kuril Islands (h = 45 km).				
"	2	UPP	iP		11 59 50.6	
			iS		12 08 46	
					micr	sec
			P	Z'	0.2	1.0
			Mx	Z	1.2	18
		KIR	iP		11 59 01.4	
					micr	sec
			P	Z'	0.1	1.0
			Mx	Z	1.2	16
		UME	iP		11 59 24.1	C
		East of Kuril Islands (h = 45 km).				
		m = 6.0, M = 5.1 (UPP,KIR).				
"	2	UME	iP		20 16 52.5	
		South Indian Ocean (h = 25 km).				
"	2	UPP	iP		21 18 33.1	
					micr	sec
			Mx	Z	3.8	20
		KIR	eP		21 18 38	
					micr	sec
			Mx	Z	4.6	22
		UME	iP		21 18 34.5	
		South Indian Ocean (h = 15 km).				
		M = 5.9 (UPP,KIR).				

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992
June 2 UPP iP 22 16 55.2
micr sec
P Z' 0.1 1.0
KIR iP 22 16 57.1
UME iP 22 16 51.9
i 22 17 04.5
Nepal - India border region
(h = 55 km).

" 3 UME iP 00 23 42.4

" 3 UME iP 01 23 18.0
Off east coast of Honshu, Japan
(h = 35 km).

" 3 UPP Mx 02 44
micr sec
Mx Z 1.5 18
KIR Mx 02 42
micr sec
Mx Z 0.9 13
Ryukyu Islands (h = 55 km).
M = 5.2 (UPP,KIR).

" 3 UPP Mx 04 20
micr sec
Mx Z 2.5 17
KIR Mx 04 16
micr sec
Mx Z 1.8 13
Ryukyu Islands (h = 50 km).
M = 5.5 (UPP,KIR).

" 3 UPP iP 06 21 53.4
iS 06 30 52
micr sec
P Z' 0.3 1.1
Mx Z 4.8 17
KIR iP 06 21 00.1
micr sec
P Z' 0.1 1.0
Mx Z 7.6 18
UME iP 06 21 26.1
iP'P' 06 50 19.9
Rat Islands, Aleutian Islands
(h = 20 km).
m = 6.1, M = 5.8 (UPP,KIR).

" 3 UPP iPKP1 11 45 31.5
Kermadec Islands region (h = 60 km).

1992
June 3 UPP iP 13 35 01.1
Southern Xinjiang, China (h = 10 km).

" 4 UPP iP 04 15 50.1
iS 04 25 28
micr sec
Mx Z 15 15
KIR eP 04 15 23
micr sec
Mx Z 9.2 13
Ryukyu Islands (h = 15 km).
M = 6.3 (UPP,KIR).

" 4 UPP Mx 16 53
micr sec
Mx Z 1.8 14
KIR Mx 16 53
micr sec
Mx Z 1.1 13
Ryukyu Islands (h = 30 km).
M = 5.4 (UPP,KIR).

" 4 UPP iPKP1 21 54 13.6
South of Fiji Islands (h = N).

" 5 UPP iP 00 31 47.5
micr sec
Mx Z 1.7 18
KIR iP 00 31 58.8
micr sec
Mx Z 2.7 12
Pakistan (h = N).
M = 5.2 (UPP,KIR).

" 5 UPP iPKP1 10 08 34.3
micr sec
P Z' 0.1 0.8
Kermadec Islands region
(h = 480 km).

" 5 UPP iP 21 58 25.2
i 21 58 32.7
KIR iP 21 57 46.6
Near coast of northern Calif.
(h = 20 km).

" 6 UPP Mx 01 29
micr sec
Mx Z 2.6 14

(cont).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992						
June	6	(cont).				
		KIR	Mx		01 27	
					micr	sec
			Mx	Z	2.0	14
		Ryukyu Islands (h = 20 km).				
		M = 5.3 (UPP,KIR).				
"	6	UPP	iP		01 13 04.5	
		Pakistan (h = N).				
"	6	UPP	eP		16 04 19	
		KIR	eP		16 04 09	
		Off coast of Central America				
		(h = 90 km).				
"	6	UPP	iP		18 46 50.7	
		Republic of South Africa				
		(h = 10 km).				
"	6	UPP	iP		20 24 57.8	
"	6	UPP	iP		21 54 11.8	
					micr	sec
			Mx	Z	3.0	20
		KIR	iP		21 53 57.3	
					micr	sec
			Mx	Z	4.6	18
		Minahassa Peninsula (h = 20 km).				
		M = 5.8 (UPP,KIR).				
"	6	UPP	iP		23 42 57.3	
		KIR	iP		23 42 40.7	
					micr	sec
			P	Z'	0.1	1.0
		Talaud Islands, Indonesia				
		(h = 45 km).				
"	7	UPP	iP		01 41 21.6	
		KIR	iP		01 40 28.5	
		Fox Island, Aleutian Islands (h = N).				
"	7	UPP	iP		01 46 04.0	
		KIR	iP		01 45 28.0	
		South of Honshu, Japan (h = 50 km).				
"	7	UPP	iP		11 49 45.9	
		Northwestern Balkan region				
		(h = 10 km).				
"	7	UPP	iPKP1		14 45 22.5	
		South of Fiji Islands (h = 65 km).				

1992						
June	8	UPP	iP		03 48 56.7	
		KIR	iP		03 48 02.7	
		Kamchatka (h = 180 km).				
"	8	UPP			micr	sec
			Mx	Z	1.1	16
		KIR	iP		09 35 41.2	
			i		09 35 49.8	
					micr	sec
			P	Z'	0.2	1.0
			Mx	Z	0.9	16
		East of Severnaya Zemlya, Russia				
		(h = 30 km).				
		M = 4.5 (UPP,KIR).				
"	9	UPP	iPKP1		00 44 11.6	
		KIR	iPKP		00 44 03.7	
		South of Fiji Islands (h = 80 km).				
"	9	UPP	iP		00 45 30.5	
			iSKS		00 56 00	
			iS		00 56 50	
					micr	sec
			Mx	Z	3.0	22
		KIR	iP		00 45 25.5	
					micr	sec
			Mx	Z	2.9	22
		Jawa, Indonesia (h = 65 km).				
		M = 5.7 (UPP,KIR).				
"	9	UPP	Mx		15 45	
					micr	sec
			Mx	Z	1.1	20
		KIR	Mx		15 44	
					micr	sec
			Mx	Z	1.0	17
		Minihassa Peninsula, Sulawesi				
		(h = 40 km).				
		M = 5.3 (UPP,KIR).				
"	10	UME	iSn		00 34 13.9	
			iSg1		00 33 34.1	
		Northwestern USSR, 65.7°N, 30.1°E.				
		Origin time = 00 31 12.				
		By combination with Finnish station readings.				
"	10	UPP	iP		01 34 55.1	

(cont).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992
June 10 (cont).

KIR	iP		01 34 01.0	C
			micr sec	
	P	Z'	0.1 0.8	

Fox Islands, Aleutian Islands (h = N).

" 10

UPP	iP		02 27 16.0	
	iPP		02 31 02.0	
			micr sec	
	Mx	Z	4.6 19	
KIR	eP		02 27 01	
	iPP		02 30 41.2	
			micr sec	
	Mx	Z	6.4 19	

Minahassa Peninsula (h = 30 km).
M = 6.0 (UPP,KIR).

" 10

UPP	iPKP		13 04 06.7	
	i		13 04 08.2	
KIR	iPKP		13 04 22.8	

South Sandwich Islands region
(h = N).

" 10

UPP	iP		13 51 48.5	
KIR	iP		13 51 38.8	

Myanmar (h = N).

" 11

UPP	iP		02 17 05.1	
			micr sec	
	Mx	Z	0.8 20	
KIR	iP		02 16 50.7	
			micr sec	
	Mx	Z	1.0 21	
UME	iP		02 16 55.3	

Minahassa Peninsula (h = 30 km).
M = 5.2 (UPP,KIR).

" 11

UPP	iP		18 41 33.7	
			micr sec	
	P	Z'	0.1 1.0	
KIR	iP		18 40 58.4	
			micr sec	
	Mx	Z	0.1 1.0	
UME	iP		18 41 13.9	

South of Honshu, Japan (h = 50 km).
m = 5.7 (UPP,KIR).

" 12

UME	iPKP		00 24 25.5	

South Sandwich Islands region
(h = N).

1992
June 12

KIR	iPg1		04 49 12.2	
	i		04 49 28.2	
	iSg1		04 49 40.3	
UME	iSg1		04 50 53.5	
MYV	iSg1		04 51 05.0	

Northern Norway, 67.7°N, 15.1°E.
Origin time = 04 48 36.
M_L(UPP) = 2.9 (0.24) 2.
By combination with Finnish station readings.

" 12

UPP	iP		07 38 16.7	
KIR	iP		07 37 28.4	
UME	iP		07 37 50.5	

Kuril Islands (h = 30 km).

" 12

UPP	iP		11 19 52.2	
			micr sec	
	P	Z'	0.1 0.8	
KIR	iP		11 19 36.1	D
			micr sec	
	P	Z'	0.2 1.2	
UME	iP		11 19 40.9	D

Talaud Islands (h = 80 km).
m = 6.4 (UPP,KIR).

" 12

UME	iP		16 27 27.1	

South of Honshu, Japan (h = N).

" 12

UPP	iP		18 23 44.5	
KIR	iP		18 23 43.7	C
			micr sec	
	P	Z'	0.1 0.9	
UME	iP		18 23 41.6	C

Southern Sumatera, Indonesia
(h = 40 km).

" 12

UPP	iP		19 22 20.1	
	iS		19 26 54	
			micr sec	
	P	Z'	0.1 0.8	
	Mx	Z	0.8 20	
KIR	iP		19 23 31.2	
			micr sec	
	P	Z'	0.2 1.0	
UME	iP		19 22 57.6	

Tunesia (h = 10 km).
m = 5.7 (UPP,KIR).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992
June 13 UPP iP 06 11 21.0
UME iP 06 11 02.8 D
Bonin Islands region (h = 390 km).

" 13 UPP iP 14 18 57.4
KIR eP 14 18 42
Northern Sumatera, Indonesia
(h = 80 km).

" 13 UPP iP 15 30 26.9
iS 15 40 12
KIR iP 15 29 50.4
UME iP 15 30 06.0 C
South of Honshu, Japan (h = 55 km).

" 13 UPP iP 15 49 20.9
micr sec
Mx Z 1.6 15
KIR iP 15 49 21.8
Nepal (h = 35 km).

" 13 UPP eP 17 02 58
micr sec
Mx Z 0.6 9
KIR iP 17 02 53.3
UME iP 17 02 49.0
Southern Xinjiang, China
(h = 35 km).

" 13 UPP iP 20 13 43.6
KIR eP 20 14 35
UME iP 20 14 06.1
Turkey (h = N).

" 14 UPP iP 01 34 24.4
KIR iP 01 34 20.1
UME iP 01 34 14.1
Sunda Strait (h = 55 km).

" 14 UPP iPKP1 04 03 01.7
South of Fiji Islands (h = N).

" 14 UPP iPKP1 04 04 07.3
South of Fiji Islands (h = N).

" 14 UPP iP 04 12 46.3

" 14 UPP iPKP1 04 36 02.6
South of Fiji Islands (h = 100 km).

1992
June 14 UPP iPKP1 05 12 10.2
South of Fiji Islands (h = N).

" 14 UPP iP 10 53 55.2
KIR iP 10 53 57.2
UME iP 10 53 52.9
Off w. coast of northern Sumatera
(h = 35 km).

" 14 UPP iP 13 02 26.3
micr sec
Mx Z 0.7 17
KIR iP 13 01 29.1
micr sec
Mx Z 0.8 15
UME iP 13 02 05.3 C
South of Honshu, Japan (h = 45 km).
M = 5.0 (UPP,KIR).

" 14 UPP iPKP1 17 26 28.6
South of Fiji Islands (h = 45 km).

" 14 UPP iP 17 32 11.4 C
micr sec
P Z' 0.1 0.7
KIR iP 17 31 53.9
UME iP 17 31 59.3
Mindoro, Philippine Islands
(h = 110 km).

" 15 UPP iP 01 58 13.1
KIR iP 01 57 36.3
UME iP 01 57 52.2
Near s. coast of Honshu, Japan
(h = 25 km).

" 15 UPP iP 02 59 28.1
iS 03 07 00
micr sec
P Z' 0.3 1.0
Mx Z 36 17
KIR iP 02 59 19.7
micr sec
P Z' 1.0 1.9
Mx Z 27 14
UME iP 02 59 19.1
Myanmar (h = 15 km).
m = 6.5, M = 6.5 (UPP,KIR).

" 15 UPP iPKP1 05 26 51.5
South of Fiji Islands (h = N).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992						
June	15	UPP	iP		11 28 34.7	
		Kuril Islands (h = N).				
"	15	UPP	iP		12 18 57.5	
					micr	sec
			P	Z'	0.2	0.9
		KIR	iP		12 18 09.0	D
					micr	sec
			P	Z'	0.2	1.0
		UME	iP		12 18 31.3	D
		Sea of Okhotsk (h = 520 km).				
		m = 5.5 (UPP,KIR).				
"	15	UPP	iP		20 52 31.0	
		KIR	iP		20 52 17.4	C
					micr	sec
			P	Z'	0.2	1.0
		UME	iP		20 52 21.8	C
		Minahassa Peninsula, Sulawesi				
		(h = 130 km).				
"	16	UPP	iP		06 01 12.3	
			i		06 01 13.9	
			iS		06 09 28	
					micr	sec
			i	Z'	0.2	0.9
		UME	iP		06 00 47.7	
		Hokkaido, Japan region (h = 320 km).				
		m = 5.8 (UPP,KIR).				
"	17	UPP	iP		00 18 01.0	
		KIR	iP		00 17 14.1	
		UME	iP		00 17 34.8	
		Kuril Islands (h = 50 km).				
"	17	UPP	Mx		09 50	
					micr	sec
			Mx	Z	1.4	20
		South Shethland Islands (h = 10 km).				
"	17	KIR	iSg1		18 44 53.4	
		Coast of northwestern Norway				
		68.4°N, 13.1°E.				
		Origin time = 18 43 38				
		Solution from Bergen regional				
		bulletin.				
"	18	UME	iP		21 52 54.6	
		Near east coast of Honshu, Japan				
		(h = 40 km).				

1992						
June	19	UPP	iP		09 13 50.1	
		KIR	iP		09 12 57.1	
		UME	iP		09 13 21.8	
		Near east coast of Kamchatka				
		(h = 55 km).				
"	19	UPP	iP		14 16 27.1	
			i		14 16 32.5	
		KIR	iP		14 16 34.2	
		Afghanistan - Tajikistan bord. reg.				
		(h = 130 km).				
"	19	UPP	iP		20 47 33.8	
		Luzon, Philippine Islands (h = N).				
"	20	UPP	iPKP1		15 46 28.7	
		South of Fiji Islands (h = 520 km).				
"	20	UPP	iP		19 25 16.6	
		KIR	iP		19 26 27.1	
		Central Mediterranean Sea				
		(h = 50 km).				
"	20	UPP	iSg1		21 41 19.0	
		KIR	iPg1		21 37 49.4	
			iSg1		21 38 17.5	
		UME	iPn		21 38 21.5	
			iSg1		21 39 30.9	
		UDD	iSg1		21 41 13.0	
		MYV	iPn		21 38 35.0	
			iSg1		21 39 41.0	
		Northern Norway, 67.8°N, 15.2°E.				
		Origin time = 21 37 13.				
		M_L(UPP) = 3.2 (0.26) 2.				
		By combination with Finnish and				
		Norwegian station readings.				
"	20	UPP	iSn		23 04 56.4	
			iSg1		23 05 36.5	
		KIR	iPg1		23 02 05.4	C
			iSg1		23 02 33.7	
		UME	iPn		23 02 37.5	
			iSn		23 03 29.0	
			iSg1		23 03 47.4	
		UDD	iPn		23 03 19.1	
			iSn		23 04 50.4	
			iSg1		23 05 28.2	
		DEL	iSg1		23 07 23.4	

(cont).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992
June 20 (cont).

MYV	iPn		23 02 41.0	
	iSg1		23 03 58.0	

Northern Norway, 67.8°N, 15.2°E.
Origin time = 23 01 30.
M_L(UPP) = 3.5 (0.46) 4.
By combination with Finnish and Norwegian station readings.

" 21

UME	iP		07 40 11.4	

Fox Islands, Aleutian Islands (h = 40 km).

" 21

UPP	iP		11 29 02.7	

Qinghai, China (h = 20 km).

" 21

UPP	iPKP2		18 03 21.7	
			micr	sec
	Mx	Z	6.8	20
KIR	iPKP		18 02 49.2	
	iPKP1		18 02 54.3	
			micr	sec
	Mx	Z	5.2	21
UME	iPKP1		18 02 57.9	

North Island, New Zealand (h = 10 km).
M = 6.3 (UPP,KIR).

" 21

UPP	iP		19 03 44.1	
	i		19 03 51.7	
			micr	sec
	P	Z'	0.3	0.7
KIR	iP		19 05 00.1	
UME	iP		19 04 30.6	

Greece - Albania border region (h = 35 km).

" 22

UPP	iPKP		04 19 39.2	
			micr	sec
	Mx	Z	3.3	24
KIR	iPKP		04 19 54.6	
UME	iPKP		04 19 46.5	

Southwestern Atlantic Ocean (h = 10 km).

" 22

UPP	iP		15 09 17.1	
UME	iP		15 08 56.9	

South of Honshu, Japan (h = 40 km).

1992
June 22

UPP	iP		15 30 51.0	
UME	iP		15 30 35.0	

Mariana Islands region (h = 70 km).

" 23

UPP	Mx		12 33	
			micr	sec
	Mx	Z	0.9	21

Southern Pacific Ocean (h = 10 km).

" 23

UPP	iPKP1		22 05 50.6	

South of Fiji Islands (h = 650 km).

" 23

UPP	i(P)		22 59 03.8	

" 24

KIR	iPg1		09 14 18.1	
	iSg1		09 14 46.0	
UME	iSg1		09 14 48.4	

Norrbotten, Sweden, 65.9°N, 21.6°E.
Origin time = 09 13 41.
M_L(UPP) = 2.3 (0.23) 2.
By combination with Finnish station readings.

" 24

UPP	iP		12 22 26.6	
			micr	sec
	Mx	Z	2.1	25
KIR	iP		12 21 33.2	
UME	iP		12 21 49.7	

Andreanof Islands, Aleutian Is. (h = N).

" 24

UME	iP		12 40 15.8	

Southern Sumatera, Indonesia (h = 45 km).

" 25

UME	iP		04 48 24.5	

Andreanof Islands, Aleutian Is. (h = N).

" 25

UPP	iPKP1		06 50 29.6	
			micr	sec
	P	Z'	1.0	0.9
	Mx	Z	11	20
UME	iPKP1		06 50 18.2	

Kermadec Islands region (h = 20 km).

" 25

UPP	iP		09 49 37.9	

Southern Xinjiang, China (h = N).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992
June 25 UDD iSg1 20 37 05.8
Southern Norway, 62.3°N, 7.4°E.
Origin time = 20 35 06.
M_L(UPP) = 2.3 1.
Solution from Bergen regional bulletin.

" 26 UPP iPKP1 02 28 11.7
UME i(PKP) 02 28 04.6
iPKP 02 28 11.4
South of Fiji Islands (h = 600 km).

" 26 UPP iP 03 38 42.4
micr sec
P Z' 0.1 1.0
UME iP 03 38 30.9
South of Kermadec Islands (h = N).

" 26 UME iP 07 39 24.8

" 26 UPP iP 11 45 25.5
iSKS 11 55 52
iS 11 56 16
micr sec
Mx Z 1.8 22
KIR iP 11 45 52.6
micr sec
P Z' 0.7 2.3
UME iP 11 45 26.8
i 11 45 29.4
South of Panama (h = 10 km).

" 27 UPP iP 00 48 17.4
UME iP 00 47 56.0
Off east coast of Honshu, Japan (h = 40 km).

" 27 UPP iP 01 29 03.9
UME iP 01 28 40.1
Northwest Territories, Canada (h = 20 km).

" 27 UPP iP 02 21 51.4
micr sec
Mx Z 1.6 20
KIR iP 02 21 48.3
UME iP 02 21 44.8
Southern Xinjiang, China (h = N).

1992
June 27 UPP iP 13 29 51.9
KIR iP 13 29 51.1
UME iP 13 29 45.6
i 13 29 49.8
Southern Xinjiang, China (h = N).

" 27 UPP iP 14 28 18.4 D
KIR iP 14 28 12.3 D
micr sec
P Z' 0.1 1.0
UME iP 14 28 18.7 D
Caribbean Sea (h = 10 km).

" 28 UPP iP 06 20 25.7
KIR iP 06 19 30.7
UME iP 06 19 56.1
Near east coast of Kamchatka (h = N).

" 28 UPP iPKP1 07 02 55.9
Kermadec Islands region (h = 430 km).

" 28 UPP iP 12 09 39.7
i 12 09 42.5
iS 12 19 38
micr sec
i Z' 0.4 1.2
Mx Z 692 22
KIR micr sec
Mx Z 547 17
UME iP 12 09 26.0
i 12 09 28.0
Southern California (h = 1 km).
M = 7.9 (UPP,KIR).

" 28 UPP iSg1 12 26 52.1
UME iSg1 12 27 17.5
UDD iSg1 12 25 51.8
MYV iPg1 12 24 51.2
iSg1 12 25 51.0
Coast of southwestern Norway, 61.9°N, 4.8°E.
Origin time = 12 23 33.
M_L(UPP) = 2.9 (0.22) 2.
Felt.
By combination with Finnish and Norwegian station readings.

" 28 UPP iP 12 52 58.2
Southern California (h = 5 km).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992
June 28 UPP iP 14 55 26.4
UME iP 14 54 12.6
Southern California (h = 5 km).

" 28 UPP iP 15 17 35.3
i 15 17 37.7
micr sec
i Z' 0.5 1.2
UME iP 15 17 21.9
i 15 17 26.8
Southern California (h = 5 km).

" 28 UPP iP 21 09 43.1
UME iP 21 09 15.9
Andreanof Islands, Aleutian Is.
(h = N).

" 28 UPP iP 23 37 54.7
micr sec
P Z' 0.1 1.0
UME iP 23 37 27.0
Near Islands, Aleutian Islands
(h = 40 km).

" 29 UPP iP 07 49 03.6
UME iP 07 48 42.9
South of Honshu, Japan (h = 40 km).

" 29 UPP iP 10 26 13.2
micr sec
P Z' 0.2 1.0
Mx Z 1.6 20
KIR micr sec
Mx Z 3.8 15
UME iP 10 25 58.4
California - Nevada border region
(h = 10 km).
M = 5.5 (UPP,KIR).

" 29 UPP iP 13 40 06.8

" 29 UPP iP 14 25 46.1
UME iP 14 25 31.3
Southern California (h = 10 km).

" 29 UPP iP 16 15 28.3 D
micr sec
P Z' 0.2 1.0
Mx Z 2.4 20

(cont).

1992
June 29 (cont).
KIR micr sec
Mx Z 1.7 17
UME iP 16 15 10.4 D
Bonin Islands region (h = 560 km).
M = 5.4 (UPP,KIR).
M uncorrected for focal depth.

" 30 UPP iSg1 15 06 17.6
UME iSg1 15 07 15.3
UDD iPg1 15 05 02.7
iSg1 15 05 20.0
DEL iSg1 15 06 57.9
MYV iPn 15 05 21.0
iPg1 15 05 24.0
iSg1 15 05 56.0
Southeastern Norway, 60.9°N, 11.4°E.
Origin time = 15 04 37.
M_L(UPP) = 2.8 (0.27) 3.
By combination with Finnish and
Norwegian station readings.

" 30 UPP iP 19 34 12.3
UME iP 19 33 51.8
South of Honshu Japan (h =130 km).

November 4, 1993

Conny Holmqvist
Klaus Meyer

SEISMOLOGICAL DEPARTMENT
BOX 2101
S-750 02 UPPSALA
SWEDEN

SEISMOLOGICAL DEPARTMENT
BOX 2101
S - 750 02 UPPSALA
SWEDEN

SEISMOLOGICAL BULLETIN

UPPSALA, KIRUNA, UMEÅ, UDDEHOLM

DELARY and MYRVIKEN

Uppsala	(UPP)	59°51.5'N,	17°37.6'E; h = 14 m
Kiruna	(KIR)	67°50.4'N,	20°25.0'E; h = 390 m
Umeå	(UME)	63°48.9'N,	20°14.2'E; h = 16 m
Uddeholm	(UDD)	60°05.4'N,	13°36.4'E; h = 240 m
Delary	(DEL)	56°28.2'N,	12°52.2'E; h = 150 m
Myrviken	(MYV)	62°56.5'N,	14°20.8'E; h = 345 m

JULY 1 - 31, 1992

1992 July 1 UPP iP 07 52 34.4
UME iP 07 52 19.9
Southern California (h = 10 km).

" 1 UPP iPKP1 14 32 29.7
South of Fiji Islands (h = 170 km).

" 1 UME iP 17 14 42.1
Banda Sea (h = 140 km).

" 1 UPP ePKP2 20 23 16
UME iPKP2 20 23 02.8
South of Kermadec Islands (h = N).

" 2 UPP eP 04 31 44
UME iP 04 31 24.2
South of Honshu, Japan (h = 40 km).

" 2 UPP iP 06 33 29.6
i 06 33 35.6
UME iPKP 06 33 18.8
South of Kermadec Islands
(h = 10 km).

" 2 UPP iP 22 20 38.3
Myanmar - India border region
(h = 160 km).

" 3 UPP iP 12 29 58.6
Andreanof Islands, Aleutian Islands
(h = N).

1992 July 4 UPP iP 03 35 59.9
micr sec
P Z' 0.1 1.0
UME iP 03 35 30.2
Near east coast of Kamchatka
(h = 30 km).

" 5 UPP iP 21 30 30.8
micr sec
Mx Z 1.7 18
KIR micr sec
Mx Z 1.4 15
UME iP 21 30 17.7
Southern California (h = 0 km).
M = 5.3 (UPP,KIR).

" 6 UPP iP 09 40 26.5
UME iP 09 39 15.0
Andaman Islands, India (h = 45 km).

" 6 UPP iP 10 38 51.0
micr sec
Mx Z 0.9 17
KIR micr sec
Mx Z 0.7 14
Crete (h = 20 km).
M = 4.4 (UPP,KIR).

" 6 UPP iP 12 35 15.9
UME iP 12 35 11.1
ipP 12 35 18.5
Andaman Islands, India (h = 25 km).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992
July 6 UPP iP 16 42 58.4
UME iP 16 42 51.5
Myanmar (h = N).

" 6 UPP iSg1 23 20 41.3
UDD iSg1 23 19 47.7
DEL iSg1 23 21 21.2
Off coast of western Norway,
62.9°N, 6.3°E.
Origin time = 23 17 31.
M_L(UPP) = 2.5 1.
Solution from Norwegian station readings.

" 7 UPP iP 12 53 51.8
Central Mediterranean Sea
(h = 10 km).

" 8 UPP iP 10 20 26.5
ipP 10 20 38.5
micr sec
P Z' 0.1 1.0
UME iP 10 20 18.8
ipP 10 20 30.6
Myanmar.
h = 40 km (UPP,UME).

" 8 UPP iP 16 15 49.2
micr sec
P Z' 0.2 0.9
UME iP 16 15 22.9
Andreanof Islands, Aleutian Is.
(h = N).

" 9 UPP iP 01 56 05.1
micr sec
P Z' 0.1 1.3
Mx Z 1.5 16
KIR micr sec
Mx Z 1.9 15
UME iP 01 55 51.0
Southern California (h = 0 km).
M = 5.4 (UPP,KIR).

" 9 UPP iP 19 59 24.0
Romania (h = N).

" 9 UPP iP 21 44 30.3
ipP 21 44 39.9

(cont).

1992
July 9 (cont).
UPP micr sec
P Z' 0.2 1.1
UME iP 21 44 24.3
ipP 21 44 33.3
Bangladesh.
h = 30 km (UPP,KIR).

" 10 UPP iP 09 42 29.7
eS 09 51 25
iP'P' 10 10 43
micr sec
P Z' 0.4 1.1
Mx Z 26 17
KIR micr sec
Mx Z 19 18
UME iP 09 42 03.2
Kuril Islands (h = 20 km).
m = 6.3, M = 6.4 (UPP,KIR).

" 10 UPP iP 14 08 32.2
UME iP 14 08 07.0
Kuril Islands (h = 50 km).

" 11 UME iP 17 04 07.5
South of Honshu, Japan (h = 35 km).

" 11 UPP iPKP 11 02 56 D
ipPKP 11 04 46
iSKP1 11 06 06
i 11 08 24
iSKKP 11 14 32.0
micr sec
P Z' 0.3 0.8
Mx Z 7.3 24
KIR micr sec
Mx Z 4.2 21
UME i(PKP) 11 02 44.0
South of Fiji Islands (h = 380 km).
M = 6.2 (UPP,KIR).
M uncorrected for focal depth.

" 11 UPP iP 13 06 14.8
i 13 06 30.9
UME iP 13 06 10.3
Southern Sumatera, Indonesia
(h = 55 km).

" 11 UPP iSg1 14 36 04.5
UME iSg1 14 36 31.8
(cont).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992 July 11 (cont).

UDD	iPn	14 33 44.8	
	iPg1	14 34 01.5	
	iSg1	14 35 04.0	
DEL	iSg1	14 36 22.6	
MYV	iSg1	14 34 59.0	

Off coast of southwestern Norway, 62.2°N, 4.0°E.
Origin time = 14 32 31.
M_L(UPP) = 3.0 1.
Solution from Bergen regional bulletin.

" 11 UPP eP 16 19 49
South Mid-Atlantic Ridge (h = 10 km).

" 11 UPP iP 18 26 18.1

		micr	sec
	Mx Z	0.9	17
UME	iP	18 26 00.9	

Central California (h = 10 km).

" 11 UPP iPKP1 21 21 44.7
South of Fiji Islands (h = 570 km).

" 12 UPP iPKP1 01 36 32.9
Kermadec Islands region (h = 80 km).

" 12 UPP eP 03 30 13

" 12 UPP iP 10 18 14.4
UME iP 10 17 46.7
Kuril Islands (h = 50 km).

" 12 UPP iP 11 19 56.1

	i	11 19 56.6	
	iS	11 28 56	
		micr	sec
	P Z'	0.3	1.1
	Mx Z	20	19
KIR		micr	sec
	Mx Z	6.4	16
UME	iP	11 19 29.3	

Hokkaido, Japan region (h = 60 km).
m = 6.1, M = 6.1 (UPP,KIR).

" 12 UPP eP 13 25 14

(cont).

1992 July 12 (cont).

UPP		micr	sec
	P Z'	0.1	0.8
	Mx Z	2.0	17
KIR		micr	sec
	Mx Z	2.8	20
UME	iP	13 24 47.5	

Kuril Islands (h = 55 km).
M = 5.4 (UPP,KIR).

" 12 UPP eP 13 32 30
UME eP 13 32 03
Kuril Islands (h = 50 km).

" 12 UPP iP 16 15 48.4

" 12 UPP iP 20 26 46.1
Rumania (h = 45 km).

" 12 UPP iP 23 53 15.9
iS 24 02 50
UME iP 23 53 05.9
Celebes Sea (h = 620 km).

" 13 UPP iP 10 55 44.8
Myanmar (h = N).

" 13 UPP iP 11 07 56.1
Northeast of Taiwan (h = 200 km).

" 13 UPP iP 14 30 06.0
KIR iP 14 29 22.8
UME iP 14 29 41.7
Hokkaido, Japan region (h = 70 km).

" 13 UPP iP 15 44 39.3

	iS	15 33 12	
		micr	sec
	Mx Z	9.2	23
KIR	eP	15 43 47	
		micr	sec
	Mx Z	5.3	18
UME	eP	15 44 11	

Near east coast of Kamchatka (h = 45 km).
M = 5.7 (UPP,KIR).

" 13 UPP iP 16 13 26.0
UME iP 16 13 26.1

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992
July 13 UPP iP 18 24 49.0 D
ipP 18 25 18
iSKS 18 35 12
micr sec
P Z' 0.1 1.0
Mx Z 2.4 20
KIR iP 18 24 51.9
ipP 18 25 21.9
micr sec
P Z' 0.1 1.0
Mx Z 1.0 17
UME iP 18 24 52.9 D
ipP 18 25 23.6
Northern Peru.
h = 120 km (UPP,KIR,UME).
m = 6.2, M = 5.5 (UPP,KIR).
M uncorrected for focal depth.

" 13 UPP iP 19 54 21.4

" 14 UPP iP 04 31 55.6
KIR iP 04 32 43.3
Turkey (h = 20 km).

" 14 KIR iP 07 16 03.3
UME iP 07 16 06.9
Banda Sea (h = 470 km).

" 14 UPP eP 07 55 36
KIR iP 07 55 36.6
UME iP 07 55 34.1
South Sumatera, Indonesia
(h = 55 km).

" 14 KIR iP 13 27 23.0
Northern Sumatera, Indonesia
(h = N).

" 14 UPP iP 15 28 08.0
micr sec
P Z' 0.1 0.8
Mx Z 2.4 20
KIR iP 15 27 20.6
micr sec
P Z' 0.1 1.0
Mx Z 1.6 15
UME iP 15 27 41.6
Kuril Islands (h = 45 km).
m = 5.8, M = 5.3 (UPP,KIR).

1992
July 14 KIR iP 16 53 57.9
Kuril Islands (h = 45 km).

" 14 KIR iP 18 52 41.1
Turkey (h = 10 km).

" 15 KIR iP 09 33 04.9
UME iP 09 33 32.2
Fox Islands, Aleutian Islands (h = N).

" 15 UPP iP 18 18 10.7
KIR iP 18 17 59.8
UME iP 18 18 00.9
Flores region, Indonesia (h = 130 km).

" 15 UPP iP 18 22 24.3

" 16 UPP iP 00 12 00
iS 00 21 17
micr sec
P Z' 0.3 1.5
Mx Z 9.8 15
KIR iP 00 11 18.0
micr sec
P Z' 0.2 1.5
Mx Z 14 15
UME iP 00 11 35.8
Off east coast of Honshu, Japan
(h = 30 km).
m = 6.1, M = 6.2 (UPP,KIR).

" 17 UPP iP 04 22 39.2
KIR iP 04 21 51.7
UME iP 04 22 12.8
East of Kuril Islands (h = 45 km).

" 17 UPP iP 04 30 31.6 C
micr sec
Mx Z 3.4 18
KIR iP 04 29 43.8
micr sec
Mx Z 3.1 16
UME iP 04 30 05.3
East of Kuril Islands (h = 20 km).
M = 5.5 (UPP,KIR).

" 17 UPP iP 06 53 05.9
KIR iP 06 53 09.9
UME iP 06 53 01.6
Northwestern Kashmir (h = 30 km).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992
July 17 UPP iP 08 49 16.9
KIR iP 08 49 20.7
UME iP 08 49 13.3
Eastern Kashmir (h = N).

" 17 UPP iP 11 12 49.7
micr sec
P Z' 0.1 1.0
UME iP 11 12 17.8
Eastern Siberia, Russia (h = 25 km).

" 17 UPP iP 11 49 56.5
Eastern Siberia, Russia (h = N).

" 17 UPP iP 11 57 26.1
Eastern Siberia, Russia (h = N).

" 17 UPP iP 17 18 52.1
KIR eP 17 17 58
Andreanof Islands, Aleutian Islands
(h = N).

" 17 UPP Mx 19 43
micr sec
Mx Z 2.1 22
Near coast of Peru (h = 45 km).

" 18 UPP iP 08 26 34.8
KIR iP 08 25 53.3
UME iP 08 26 11.6
Off east coast of Honshu, Japan
(h = 20 km).

" 18 UPP iP 08 31 20.2 C
micr sec
P Z' 0.1 1.0
KIR iP 08 30 37.7
micr sec
P Z' 0.1 1.0
UME iP 08 30 56.1
Off east coast of Honshu, Japan
(h = 20 km).
m = 6.0 (UPP,KIR).

" 18 UPP iP 08 48 18.0 C
iS 08 57 35
micr sec
P Z' 0.6 1.3
Mx Z 192 16

(cont).

1992
July 18 (cont).
KIR iP 08 47 36.0 C
micr sec
P Z' 0.4 1.1
Mx Z 174 14
UME iP 08 47 54.3
Off east coast of Honshu, Japan
(h = 30 km).
m = 6.6, M = 7.4 (UPP,KIR).

" 18 UPP iP 08 50 22.7
micr sec
P Z' 1.3 1.5
KIR iP 08 49 40.6
micr sec
P Z' 0.5 1.0
Off east coast of Honshu, Japan
(h = 35 km).
m = 6.8 (UPP,KIR).

" 18 UPP iP 09 21 15.1
Off east coast of Honshu, Japan
(h = N).

" 18 UPP iP 09 56 22.4
KIR eP 09 55 41
Off east coast of Honshu, Japan
(h = 35 km).

" 18 UPP iP 10 31 30.6 C
micr sec
P Z' 0.8 1.5
KIR iP 10 30 48.8 C
micr sec
P Z' 0.7 1.5
UME iP 10 31 07.0 C
Off east coast of Honshu, Japan
(h = 25 km).
m = 6.6 (UPP,KIR).

" 18 UPP iP 11 10 59.1
micr sec
P Z' 0.2 1.0
UME iP 11 10 34.9
ipP 11 10 42.3
Off east coast of Honshu, Japan
(h = 25 km).

" 18 UPP iP 11 21 31.8

(cont).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992 July 18 (cont).

UME iP 11 21 06.8
Off east coast of Honshu, Japan
(h = 30 km).

" 18 UPP iP 11 22 30.7
UME iP 11 22 06.9
Off east coast of Honshu, Japan
(h = 30 km).

" 18 UME iP 11 57 10.7
Off east coast of Honshu, Japan
(h = 30 km).

" 18 UPP iP 11 59 40.7 C
micr sec
P Z' 0.1 1.2
KIR iP 11 58 58.7
micr sec
P Z' 0.1 1.0
UME iP 11 59 17.1
Off east coast of Honshu, Japan
(h = 30 km).
m = 5.9 (UPP,KIR).

" 18 UPP iP 12 14 01.8
micr sec
P Z' 0.2 1.5
KIR iP 12 13 19.3
micr sec
P Z' 0.1 1.5
UME iP 12 13 37.7
Off east coast of Honshu, Japan
(h = 25 km).
m = 5.9 (UPP,KIR).

" 18 KIR iPg1 13 51 48.7
i 13 51 53.4
iSg1 13 52 14.7
i 13 52 20.0
UME iSg1 13 53 50.2
Northern Finland, 68.4°N, 25.5°E.
Origin time = 13 51 12.
M_L(UPP) = 2.9 (0.17) 2.
Felt.
By combination with Finnish station
readings.

" 18 UPP iP 14 08 13.7 C
iS 14 17 29
(cont).

1992 July 18 (cont).

UPP micr sec
P Z' 0.1 1.0
Mx Z 11 18
KIR iP 14 07 30.4 C
micr sec
P Z' 0.2 0.8
Mx Z 13 13
UME iP 14 07 48.3
Near east coast of Honshu, Japan
(h = 25 km).
m = 6.1, M = 6.2 (UPP,KIR).

" 18 UPP iP 14 57 05.1
i 14 57 19.9
KIR iP 14 56 23.3
UME iP 14 56 41.3
Off east coast of Honshu, Japan
(h = 25 km).

" 18 UPP iP 17 38 29.8
i 17 38 40.8
micr sec
P Z' 0.1 1.0
KIR iP 17 37 46.7
micr sec
P Z' 0.1 1.0
UME iP 17 38 04.9
Off east coast of Honshu, Japan
(h = 30 km).
m = 6.0 (UPP,KIR).

" 18 UPP iP 18 23 33.4
i 18 23 42.4
micr sec
P Z' 0.1 1.0
Mx Z 2.3 19
KIR iP 18 22 51.1 C
micr sec
P Z' 0.1 1.0
Mx Z 3.7 16
UME iP 18 23 10.0
Off east coast of Honshu, Japan
(h = 30 km).
m = 6.0, M = 5.5 (UPP,KIR).

" 18 KIR eP 19 21 28
UME iP 19 21 46.2
Off east coast of Honshu, Japan
(h = 30 km).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992						
July	18	UPP	iP		21 06 30.2	
			i		21 06 38.0	
			iS		21 15 48	
					micr	sec
			P	Z'	0.2	1.1
		KIR	iP		21 05 48.3	
					micr	sec
			P	Z'	0.2	1.2
		UME	iP		21 06 06.3	
		Off east coast of Honshu, Japan				
		(h = 25 km).				
		m = 6.2 (UPP,KIR).				
"	18	UPP	iP		21 30 15.8	
					micr	sec
			P	Z'	0.2	1.1
			Mx	Z	13	20
		KIR	iP		21 29 32.9	
					micr	sec
			P	Z'	0.2	1.0
			Mx	Z	12	15
		UME	iP		21 29 53.1	
		Off east coast of Honshu, Japan				
		(h = 35 km).				
		m = 6.2, M = 6.1 (UPP,KIR).				
"	18	KIR	iP		21 41 43.0	
		UME	iP		21 42 01.4	
		Off east coast of Honshu, Japan				
		(h = 30 km).				
"	18	KIR	iP		21 42 57.0	
		UME	iP		21 43 15.3	
		Off east coast of Honshu, Japan				
		(h = 35 km).				
"	18	UPP	iP		21 47 27.6	
			i		21 47 29.1	
					micr	sec
			P	Z'	0.5	1.2
		KIR	iP		21 46 54.4	
					micr	sec
			P	Z'	0.2	1.0
		UME	iP		21 47 07.1	
		South of Honshu, Japan				
		(h = 480 km).				
		m = 6.4 (UPP,KIR).				
"	18	KIR	eP		21 56 12	

(cont).

1992						
July	18	(cont).				
		UME	iP		21 56 30.8	
		Off east coast of Honshu, Japan				
		(h = 25 km).				
"	18	UPP	iP		23 40 55.0	
			i		23 41 07.6	
		KIR	iP		23 40 06.8	
					micr	sec
			P	Z'	0.1	1.0
		UME	iP		23 40 28.7	
		East of Kuril Islands (h = N).				
"	19	UPP	iP		04 56 07.9	
"	20	UPP	iP		07 51 13.5	
			i		07 51 19.3	
			iS		07 54 48	
					micr	sec
			i	Z'	1.7	2.5
			Mx	Z	38	18
		KIR	iP		07 49 30.8	
					micr	sec
			P	Z'	0.8	1.0
			Mx	Z	33	11
		UME	iP		07 50 22.3	
		Svalbard region (h = 10 km).				
"	20	KIR	iP		09 28 15.4	
		UME	iP		09 29 06.0	
		Greenland Sea (h = 10 km).				
"	20	UPP	iP		19 51 15.9	
		KIR	iP		19 50 34.0	
		UME	iP		19 50 52.4	
		Off east coast of Honshu, Japan				
		(h = 25 km).				
"	20	UPP	iPKP1		20 40 07.5	
			iPKP2		20 40 13.2	
		KIR	iPKP		20 39 44.3	
		UME	iPKP1		20 39 55.4	
		Kermadec Islands region				
		(h = 340 km).				
"	20	UPP	iP		21 39 34.0	
		KIR	iP		21 40 40.1	
		UME	iP		21 40 04.8	
		Crete (h = 10 km).				

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992 July 21

UPP iP 00 11 47.1
KIR iP 00 11 05.5
UME iP 00 11 23.2
Off east coast of Honshu, Japan
(h = 25 km).

" 21

UPP iP 00 50 46.1
KIR iP 00 50 04.0
UME iP 00 50 22.3
Off east coast of Honshu, Japan
(h = N).

" 21

UME iP 03 08 05.1
Mariana Islands region (h = 35 km).

" 21

KIR eP 15 44 08
UME iP 15 44 16.8
Caribbean Sea (h = 10 km).

" 21

UPP iP 16 36 26.9
Kuril Islands (h = 45 km).

" 21

KIR iP 20 32 21.7
UME iP 20 32 38.0
Eastern Honshu, Japan (h = 260 km).

" 23

UPP iPKP2 10 31 10.7
KIR iPKP1 10 31 04.3
UME iPKP1 10 31 02.0
West of Macquarie Island
(h = 10 km).

" 23

UPP iP 20 17 17.3
i 20 17 24.1
iS 20 21 06
micr sec
Mx Z 6.9 13
KIR eP 20 18 35
UME iP 20 17 59.7
Aegean Sea (h = 5 km).

" 23

UPP iP 21 58 29.3 D
micr sec
P Z' 0.2 1.0
KIR iP 21 57 34.5
UME iP 21 58 00.1
Near east coast of Kamchatka
(h = 110 km).

1992 July 24

UPP iP 02 29 46.3
Afghanistan - Tajikistan border
region (h = 80 km).

" 24

UPP eP 06 33 58
Xijang (h = N).

" 24

UPP iP 12 02 07.1
micr sec
Mx Z 1.4 21
KIR eP 12 02 10
micr sec
Mx Z 2.1 16
UME iP 12 01 28.5
Off east coast of Honshu, Japan
(h = 35 km).
M = 5.3 (UPP,KIR).

" 25

UPP iP 03 04 52.1 C
iS 03 14 13
micr sec
P Z' 0.3 1.0
Mx Z 7.4 19
KIR iP 03 04 10.7 C
micr sec
P Z' 0.3 1.1
Mx Z 7.9 15
UME iP 03 04 28.7
Off east coast of Honshu, Japan
(h = 15 km).
m = 6.4, M = 6.0 (UPP,KIR).

" 25

UPP iP 09 23 19.4
KIR iP 09 23 57.6
UME iP 09 22 41.8
Central Mid-Atlantic Ridge
(h = 10 km).

" 27

UPP eP 04 32 26
KIR iP 04 31 40.6
UME iP 04 32 04.9
Vancover Island region (h = 10 km).

" 27

KIR iPg1 12 10 52.9
iSg1 12 11 19.8
UME eSg1 12 13 16
MYV iSg1 12 13 33.0

(cont).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992 July 27 (cont).
Northern Norway, 69.4°N, 17.2°E.
Origin time = 12 10 16.
M_L(UPP) = 2.6 1.
By combination with Finnish station readings.

" 27
UPP iP 19 44 33.7
KIR iP 19 43 41.7
UME iP 19 44 04.4
Near east coast of Kamchatka
(h = 110 km).

" 28
KIR iPKP 02 12 33.2
UME iPKP 02 12 41.8
Off E. coast of N. Island, N.Z.
(h = 120 km).

" 28
KIR iP 17 43 31.1
UME iP 17 43 35.4
Banda Sea (h = 300 km).

" 29
UPP iP 02 38 33.2
micr sec
P Z' 0.2 1.1
Mx Z 3.0 17
KIR iP 02 37 51.7
micr sec
P Z' 0.2 1.2
Mx Z 2.7 15
UME iP 02 38 08.1
Off east coast of Honshu, Japan
(h = 25 km).
m = 6.2, M = 5.5 (UPP,KIR).

" 29
UPP iP 04 42 09.0
iPP 04 44 40
iPPP 04 46 31
iS 04 51 24
micr sec
P Z' 0.3 1.0
Mx Z 16 16
KIR iP 04 41 25.6
micr sec
P Z' 0.4 1.5
Mx Z 28 16
UME iP 04 41 42.6
Off east coast of Honshu, Japan
(h = 15 km).
m = 6.4, M = 6.4 (UPP,KIR).

1992 July 29
KIR eP 10 03 10
UME iP 10 03 26.9
South of Honshu, Japan (h = 35 km).

" 29
UPP iP 23 46 51.7
KIR iP 23 46 09.6
UME iP 23 46 28.3
Off east coast of Honshu, Japan
(h = 30 km).

" 30
UPP iP 08 34 27.6
iPP 08 36 36
iPP 08 38 00
iS 08 42 21
micr sec
P Z' 0.5 1.0
Mx Z 12 13
KIR iP 08 34 21.3
micr sec
P Z' 0.6 1.2
Mx Z 12 12
UME iP 08 34 16.0
Xijang (h = 15 km).
m = 6.5, M = 6.1 (UPP,KIR).

" 31
UPP iP 11 57 03.2

" 31
UPP eP 14 15 51
KIR eP 14 15 34
UME eP 14 15 29
Philippine Islands region (h = 50 km).

" 31
KIR iPKP 14 30 59.9
UME iPKP1 14 31 13.8
North Island, New Zealand
(h = 40 km).

February 15, 1994

Conny Holmqvist
Ota Kulhánek
Xin Pi

SEISMOLOGICAL DEPARTMENT
BOX 2101
S-750 02 UPPSALA
SWEDEN

SEISMOLOGICAL BULLETIN

UPPSALA, KIRUNA, UMEÅ, UDDEHOLM

DELARY and MYRVIKEN

Uppsala	(UPP)	59°51.5'N,	17°37.6'E;	h = 14 m
Kiruna	(KIR)	67°50.4'N,	20°25.0'E;	h = 390 m
Umeå	(UME)	63°48.9'N,	20°14.2'E;	h = 16 m
Uddeholm	(UDD)	60°05.4'N,	13°36.4'E;	h = 240 m
Delary	(DEL)	56°28.2'N,	12°52.2'E;	h = 150 m
Myrviken	(MYV)	62°56.5'N,	14°20.8'E;	h = 345 m

AUGUST 1 - 31, 1992

1992								
Aug.	1	UPP	iPKP1	06 24 50.0				
		Fiji Islands region (h = 630 km).						
"	1	UPP	iP	13 14 57.6				
		UME	iP	13 14 39.0				
		Bonin Islands region (h = 430 km).						
"	1	UPP	iP	13 55 48.9				
		UME	iP	13 55 21.7				
		Alaska Peninsula (h = 55 km).						
"	1	UPP	iPKP1	18 37 13.3				
		UME	iPKP	18 37 01.4				
			iSKP1	18 39 47.9				
		Fiji Islands region (h = 630 km).						
"	2	UPP	Mx	01 31				
				micr	sec			
			Mx	Z 0.9	23			
		KIR	Mx	01 33				
				micr	sec			
			Mx	Z 0.6	16			
		Guatemala (h = 50 km).						
		M = 5.1 (UPP,KIR).						
"	2	UPP	iP	06 04 10.8				
				micr	sec			
			Mx	Z 5.7	22			
		KIR		micr	sec			
			Mx	Z 4.0	16			
		UME	iP	06 03 52.1				
		Halmahera, Indonesia (h = 20 km).						
		M = 6.0 (UPP,KIR).						

1992								
Aug.	2	UPP	iPdiff	12 16 27.6 D				
				micr	sec			
			P	Z' 0.2	1.0			
			Mx	Z 2.5	23			
		KIR	iPdiff	12 16 15.6 D				
				micr	sec			
			P	Z' 0.4	1.0			
			Mx	Z 2.1	17			
		UME	iPdiff	12 16 18.7 D				
		Flores Sea (h = 490 km).						
		m = 6.7, M = 5.6 (UPP,KIR).						
		M uncorrected for focal depth.						
"	3	UPP	iP	03 05 05.1 D				
		KIR	iP	03 05 13.6 D				
				micr	sec			
			P	Z' 0.1	1.0			
		UME	iP	03 05 12.1 D				
		Leeward Islands (h = 45 km).						
"	3	UME	iPKP1	04 18 23.9				
		Kermadec Islands, New Zealand						
		(h = N).						
"	3	UPP	iSg1	11 19 29.2				
		KIR	iPg1	11 16 56.7				
			iSn	11 17 33.4				
			iSg1	11 17 40.0				
		UME	iPn	11 17 00.3				
			iPg1	11 17 10.3				
			iSn	11 17 48.0				
			iSg1	11 18 02.4				
		(cont).						

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992
Aug. 3 (cont).

MYV	iPn	11 16 53.6	
	iSg1	11 17 46.4	

Coast of western Norway,
66.4°N, 13.2°E.
Origin time = 11 15 58
M_L(UPP) = 3.4 (0.12) 3.
Felt.
By combination with Finnish and
Norwegian station readings.

" 3

UPP	Mx	12 33	
		micr	sec
	Mx Z	0.8	20

Santa Cruz Islands region
(h = 25 km).

" 3

UPP	iP	12 28 02.7
KIR	eP	12 27 37
UME	eP	12 27 47

Philippine Islands region (h = 20 km).

" 4

UPP	iPKP1	07 17 23.9
UME	iPKP	07 17 23.5
	iSKP1	07 20 34.3

Fiji Islands region (h = 250 km).

" 4

UPP	iPKP	21 27 36.6	
	ipPKP	21 28 03.6	
		micr	sec
	Mx Z	6.5	27
KIR	iPKP	21 27 22.7	
	ipPKP	21 27 48.9	
		micr	sec
	Mx Z	2.1	21
UME	iPKP	21 27 28.1	
	ipPKP	21 27 54.0	

Santa Cruz Islands.
h = 100 km (UPP,KIR,UME).
M = 5.9 (UPP,KIR).
M uncorrected for focal depth.

" 5

UPP	iP	02 22 50.6
KIR	iP	02 22 50.2
UME	iP	02 22 47.0

Southern Sumatera, Indonesia
(h = 35 km).

" 5 UME iP 11 54 55.0
Off east coast of Honshu, Japan
(h = 25 km).

1992
Aug. 5 UME iP 19 45 48.2
Southern Sumatera, Indonesia
(h = 80 km).

" 6

UPP	iSn	07 35 12.8
	iSg1	07 35 38.3
UME	iSn	07 36 05.0
	iSg1	07 36 39.8
DEL	iPn	07 34 00.1
	iSn	07 35 00.1
	iSg1	07 35 25.4
MYV	iPn	07 33 59.0
	iPg1	07 34 10.0
	iSg1	07 35 16.0

Southern Norway, 59.9°N, 6.2°E.
Origin time = 07 32 42.
M_L(UPP) = 3.7 (0.26) 3.
Felt.
By combination with Finnish and
Norwegian station readings.

" 6

UPP	iP	21 41 09.5	
		micr	sec
	Mx Z	2.7	18
KIR		micr	sec
	Mx Z	1.2	16
UME	iP	21 40 46.4	

Taiwan region (h = 20 km).
M = 5.4 (UPP,KIR).

" 7

UPP	iPKP1	10 22 10.7
UME	iPKP1	10 21 57.3

South of Kermadec Islands
(h = 15 km).

" 7

UPP	iP	11 22 26.7	C
	iS	11 31 14	
		micr	sec
	P Z'	0.2	0.9
UME	iP	11 22 05.3	

Western Honshu, Japan (h = 360 km).

" 7

UPP	iP	13 21 36.7
KIR	eP	13 21 18

Xijang (h = N).

" 7

UPP	iP	18 29 39.8
	iS	18 38 02
	iP'P'	18 58 49.0

(cont).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992
Aug. 7 (cont).

UPP				micr	sec
	P		Z'	1.2	1.4
	Mx		Z	37	24
KIR	iP			18 28 46.4	
				micr	sec
	P		Z'	2.7	2.0
	Mx		Z	16	15
UME	iP			18 29 13.3	

Gulf of Alaska (h = 15 km).
m = 6.9, M = 6.3 (UPP,KIR).

" 7 UPP iP 23 35 14.0
UME iP 23 34 55.6
Ryukyu Islands (h = 35 km).

" 8 UPP iPKP1 01 27 07.8 D

				micr	sec
	P		Z'	0.2	1.0
KIR	iPKP1			01 26 46.6	
UME	iPKP1			01 26 57.1	D

Kermadec Islands region
(h = 390 km).

" 8 UPP iP 03 0313.3
KIR iP 03 02 55.0
UME iP 03 03 02.3
Philippine Islands region (h = 50 km).

" 8 UPP iP 15 03 20.6 C

				micr	sec
	P		Z'	0.1	1.2
KIR	iP			15 02 37.2	
UME	iP			15 02 56.3	C

Hokkaido, Japan region (h = 55 km).

" 9 UPP iP 03 16 20.0
Chagos Archipelogo region
(h = 10 km).

" 9 UPP iP 20 03 02.2 D

	eS			20 13 33	
				micr	sec
	P		Z'	0.1	0.8
	Mx		Z	3.6	26
KIR	iP			20 02 46.0	D
				micr	sec
	P		Z'	0.3	1.0
	Mx		Z	3.5	24

(cont).

1992
Aug. 9 (cont).

UME	iP			20 02 51.8	D

Talaud Islands, Indonesia (h = 70 km).
m = 6.5, M = 5.7 (UPP,KIR).
M uncorrected for focal depth.

" 9 UPP iP 21 05 39.6
Andreanof Islands, Aleutian Is.
(h = N).

" 9 UPP iP 22 44 17.0
Xijang (h = 35 km).

" 10 UPP Mx 07 12

				micr	sec
	Mx		Z	1.0	15
KIR	Mx			07 04	
				micr	sec
	Mx		Z	1.1	15
UME	iP			06 21 57.8	

Near coast of Nicaragua (h = N).
M = 5.3, (UPP,KIR).

" 10 UPP iP 13 50 05.4 C

	i			13 50 31.7	
				micr	sec
	P		Z'	0.1	0.8
KIR	iP			13 50 16.8	D
				micr	sec
	P		Z'	0.1	1.0
UME	iP			13 50 05.5	C

Hindu Kush region (h = 110 km).
m = 5.5 (UPP,KIR).

" 10 UPP iP 19 55 27.0

" 11 UPP iP 01 56 32.2
KIR iP 01 56 01.7
UME iP 01 56 14.5
Volcano Islands region (h = 190 km).

" 11 UPP iP 04 08 30.5

	iS			04 12 25	
KIR	iP			04 07 01.6	
				micr	sec
	P		Z'	0.4	1.4
UME	iP			04 07 48.9	

North of Svalbard (h = 20 km).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992
Aug. 11 UPP iP 09 44 22.0 D
iS 09 52 35
micr sec
P Z' 0.2 1.0
KIR iP 09 43 40.8 D
micr sec
P Z' 0.2 0.8
UME iP 09 43 58.5 D
Near southeast coast of Russia
(h = 360 km).
m = 5.6 (UPP,KIR).

" 11 UPP iP 15 26 47.9
iS 15 36 35
i 15 36 59
micr sec
P Z' 0.1 0.9
Mx Z 18 16
KIR iP 15 26 12.1
micr sec
P Z' 0.2 1.3
micr sec
Mx Z 26 15
UME iP 15 26 27.4
South of Honshu, Japan (h = 15 km).
m = 5.9, M = 6.5 (UPP,KIR).

" 11 KIR ePn 20 44 17
iPg1 20 44 19.9
iSn 20 44 53.0
iSg1 20 45 05.2
UME iPg1 20 43 33.3 C
iSg1 20 43 43.2
UDD iSg1 20 46 12.8
MYV iPg1 20 44 20.0
i 20 44 39.0
iSg1 20 45 06.0
Västerbotten, Sweden,
64.5°N, 21.0°E.
Origin time = 20 43 19.
M_L(UPP) = 2.6 (0.00) 2.
Felt.
By combination with Finnish station readings.

" 12 UPP eP 06 48 03
iS 06 57 47
micr sec
P Z' 0.1 1.2
Mx Z 3.2 17
(cont).

1992
Aug. 12 (cont).
KIR iP 06 47 27.0
micr sec
P Z' 0.2 1.4
Mx Z 2.8 16
UME iP 06 47 43.3
South of Honshu, Japan (h = N).
m = 5.8, M = 5.6 (UPP,KIR).

" 13 UPP iP 13 42 50.5
UME iP 13 42 48.8
Hindu Kush region (h = 80 km).

" 13 UPP iPKP1 15 59 53.4
South of Fiji Islands (h = 380 km).

" 13 UPP Mx 21 45
micr sec
Mx Z 5.1 30
KIR micr sec
Mx Z 3.9 25
New Britain region, P.N.G.
(h = 45 km).
M = 5.9 (UPP,KIR).

" 14 UPP iP 01 55 01.4
UME iP 01 54 41.6
South of Honshu, Japan (h = 40 km).

" 14 KIR iPn 04 58 08.7
eSn 04 58 51
UME iPn 04 58 41.6
iSn 04 59 39.9
MYV iPn 04 58 41.2
iSn 04 59 37.0
Northwestern Norway,
68.2°N, 12.6°E.
Origin time = 04 57 23.
By combination with Finnish and Norwegian station readings.

" 14 UPP iP 17 38 11.2
Taiwan (h = 15 km).

" 15 UME iP 18 21 28.5
Off east coast of Honshu, Japan
(h = 25 km).

" 15 UPP iP 19 14 42.6 D
i 19 15 28.2
(cont).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992
Aug. 15 (cont).
UPP iS 19 25 12
micr sec
P Z' 0.2 0.8
UME iP 19 14 47.1
Colombia (h = 120 km).

" 15 UPP iP 21 42 55.5
Mariana Islands (h = 190 km).

" 16 UPP iP 02 40 36.6
Kyushu, Japan (h = 70 km).

" 16 UPP Mx 11 31
micr sec
Mx Z 0.8 19
KIR micr sec
Mx Z 1.1 18
Eastern New Guinea reg., P.N.G
(h = 220 km).
M = 5.3 (UPP,KIR).
M uncorrected for focal depth.

" 16 UPP iP 15 01 23.0 C
i 15 01 38.5
micr sec
P Z' 0.2 1.0
UME iP 15 01 25.3 C
South Indian Ocean (h = N).

" 16 UPP iP 20 26 22.9
UME iP 20 26 14.1
Xijang (h = N).

" 17 UPP iP 00 12 21.4
iS 00 15 02.8
UME iP 00 13 02.9
Romania (h = 110 km).

" 17 UME iP 15 38 01.4 C
South of Honshu, Japan (h = 35 km).

" 18 UPP iPKP1 20 20 21.1
i 20 21 13.2
micr sec
P Z' 0.2 0.9
UME iPKP1 20 20 08.6
Kermadec Islands region
(h = 200 km).

" 18 UPP i(P) 23 39 05.6

1992
Aug. 19 UPP iP 01 08 49.3 D
i 01 09 01.4
iS 01 17 52
iP'P' 01 36 52.3
micr sec
P Z' 0.8 1.0
Mx Z 8.3 24
KIR micr sec
P Z' 0.5 1.6
Mx Z 3.3 20
UME iP 01 08 22.9 D
iP'P' 01 36 59.4
Andreanof Islands, Aleutian Is.
(h = 10 km).
m = 6.6, M = 5.6 (UPP,KIR).

" 19 UPP iP 02 11 54.9
iS 02 17 42
micr sec
P Z' 5.6 1.2
Mx Z 275 13
KIR micr sec
Mx Z 275 11
UME iP 02 10 48.1
Kyrgyzstan (h = 25 km).
M = 7.2 (UPP,KIR).

" 19 UPP iP 02 42 16.2
micr sec
P Z' 0.1 1.0
Kyrgyzstan (h = N).

" 19 UPP iP 03 19 22.6 C
micr sec
P Z' 0.5 1.0
UME iP 03 19 16.1 C
Kyrgyzstan (h = 20 km).

" 19 UPP iP 03 27 49.3
micr sec
P Z' 1.5 1.0
Kyrgyzstan (h = 20 km).

" 19 UPP iP 03 49 51.4
Kyrgyzstan (h = 20 km).

" 19 UPP iP 04 13 40.6
UME iP 04 13 33.8
Kyrgyzstan (h = 20 km).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992
Aug. 19 UPP iP 06 17 39.2
iS 06 28 08
UME eP 06 17 28
Luzon, Philippine Islands
(h = 25 km).

" 19 UPP iP 10 24 51.5
UME iP 10 24 44.9
Kyrgyzstan (h = 25 km).

" 19 UPP Mx 15 42
micr sec
Mx Z 0.3 8
KIR micr sec
Mx Z 0.4 8
UME iP 14 24 51.4
Kyrgyzstan (h = N).

" 19 UPP iP 22 53 09.2
micr sec
Mx Z 0.3 8
KIR micr sec
Mx Z 0.4 8
UME iP 22 53 02.4
Kyrgyzstan (h = 20 km).

" 20 UPP iP 01 35 20.8
Kyrgyzstan (h = N).

" 20 UPP iP 02 54 12.8
i 02 54 17.2
UME iP 02 54 05.4
Kyrgyzstan (h = 15 km).

" 20 UPP iP 12 30 06.1
UME iP 12 29 59.1
Kyrgyzstan (h = 20 km).

" 20 UPP micr sec
Mx Z 0.5 13
KIR micr sec
Mx Z 0.6 16
UME iP 18 43 39.9
Volcano Islands region (h = N).
M = 5.0 (UPP,KIR).

" 21 UPP iP 01 13 53.2
micr sec
P Z' 0.2 1.6
UME iP 01 13 26.8
Off coast of Oregon (h = 20 km).

1992
Aug. 21 UPP iP 04 21 50.5
UME iP 04 21 43.2
Kyrgyzstan (h = N).

" 21 UPP iP 09 20 32.2
Greece (h = 5 km).

" 21 UPP iP 11 21 23.3
Xijang (h = N).

" 21 UPP iP 19 16 16.6
UME iP 19 16 31.1
Northwestern Caucasus (h = 35 km).

" 22 UPP iP 12 30 14.2
UME iP 12 30 12.2
Off east coast of United States
(h = 10 km).

" 22 UPP iP 17 39 53.4
Afghanistan (h = N).

" 23 UPP iP 04 37 08.4
UME iP 04 36 45.3
Off east coast of Honshu, Japan
(h = 25 km).

" 23 UPP iP 07 22 25.5
Kyrgyzstan (h = N).

" 23 UPP iP 09 11 51.5
UME iP 09 11 44.6
Kyrgyzstan (h = 20 km).

" 23 UME iPKP1 20 13 22.7
South of Kermadec Islands
(h = 410 km).

" 23 UME iP 20 42 18.5
Kyrgyzstan (h = N).

" 24 UPP iP 03 16 27.9
Southwestern Ryukyu Islands
(h = 25 km).

" 24 UPP iP 07 10 28.0 D
iS 07 19 16
micr sec
P Z' 0.9 1.0
Mx Z 2.2 20
(cont).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992
Aug. 24 (cont).

KIR			micr	sec
	Mx	Z	2.4	16
UME	iP		07 10 04.3	D

Hokkaido, Japan region (h = 120 km).
M = 5.4 (UPP,KIR).
M uncorrected for focal depth.

" 24

UPP	Mx		10 19	
			micr	sec
	Mx	Z	0.7	13

Xijang (h = 60 km).

" 24

UPP	iPKP		19 59 14.3	
			micr	sec
	Mx	Z	1.9	20
UME	iPKP		19 59 22.4	

South Sandwich Islands region
(h = 110 km).

" 24 UPP i(P) 20 38 14.2

" 25

UPP	iP	01 37 58.4
UME	iP	01 37 31.3

Kuril Islands (h = 60 km).

" 25

UPP	Mx		03 24	
			micr	sec
	Mx	Z	1.4	20

Solomon Islands (h = 25 km).

" 25 UME iPKP 08 43 32.4
Tonga Islands (h = 70 km).

" 26

UME	iPn	03 51 49.8
	iPg1	03 51 57.8
	iSn	03 52 34.5
	iSg1	03 52 50.4
MYV	iSg1	03 52 42.0

Coast of northwestern Norway,
66.9°N, 13.3°E.
Origin time = 03 50 45.
M_L(UPP) = 2.8 1.
Solution from Norwegian station
readings.

" 26

UPP	iP	07 47 54.4
UME	iP	07 47 47.7 C

Kyrgyzstan (h = N).

1992
Aug. 26

UPP	iP	15 12 23.0
	i	15 12 31.7
UME	iP	15 13 02.4

Greece - Albania border region
(h = 55 km).

" 26

UPP	iP	18 46 06.1
	i	18 46 13.9
UME	iP	18 46 48.2 C
	i	18 46 56.6

Northwestern Balkan region
(h = 35 km).

" 26

UPP	iP	22 08 33.1
UME	iP	22 08 26.5

Kyrgyzstan (h = N).

" 27

UPP	iP	04 21 13.7
UME	iP	04 20 51.9

Eastern Honshu, Japan (h = 60 km).

" 27

UPP	iP	06 15 15.7
UME	iP	06 14 56.0

South of Honshu, Japan (h = N).

" 27

UPP	iPKP1	07 09 46.2
UME	iPKP1	07 09 35.9

South of Kermadec Islands
(h = 160 km).

" 27

UPP	iP		08 53 37.1	
	iS		08 56 58.0	
			micr	sec
	Mx	Z	1.2	13
KIR			micr	sec
	Mx	Z	1.6	11
UME	iP		08 54 01.9	

Northwestern Caucasus (h = 20 km).
M = 4.5 (UPP,KIR).

" 27 UME iP 12 39 52.0
Near east coast of Honshu, Japan
(h = 50 km).

" 28

UPP	iP		00 59 07.2	
	i		00 59 09.3	
	iS		01 05 44	
			micr	sec
	i	Z'	0.2	1.0
	Mx	Z	6.7	13

(cont).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992 Aug. 28 (cont).

KIR			micr	sec
	Mx	Z	7.3	16
UME	iP		00 59	11.2

Pakistan (h = 10 km).
M = 5.7 (UPP,KIR).

" 28

UPP	iPKP1		17 33 21.2

South of Fiji Islands (h = 600 km).

" 28

UPP	iP		18 29	28.2
	i		18 29	29.8
	i		18 37	24
	iS		18 38	13
			micr	sec
	i	Z'	0.4	1.2
	Mx	Z	150	23
KIR			micr	sec
	Mx	Z	99	17
UME	iP		18 29	53.9

North of Ascension Island
(h = 15 km).
M = 7.1 (UPP,KIR).

" 28

UPP	iSn		18 40 22.5
	iSg1		18 40 42.1
UME	iSg1		18 41 50.4
UDD	iPg1		18 38 55.3
	iSn		18 39 21.7
	iSg1		18 39 42.9
MYV	iPn		18 39 05.6
	iSg1		18 40 23.0

Southern Norway, 59.8°N, 6.7°E.
Origin time = 18 37 51.
M_L(UPP) = 2.9 (0.12) 2.
Felt.
By combination with Finnish and Norwegian station readings.

" 29

UPP	iP		13 21	03.5
			micr	sec
	P	Z'	0.1	1.2

Komandorsky Islands region
(h = 35 km).

" 29

UPP	iP	15 19 32.7

Komandorsky Islands region
(h = 30 km).

" 29

UPP	iP	19 30 16.7 D
	ipP	19 31 28.0
	iS	19 39 27
	i	19 39 52
	isS	19 41 32

(cont).

1992 Aug. 29 (cont).

UPP			micr	sec
	P	Z'	1.8	1.1
	Mx	Z	3.7	14
KIR			micr	sec
	P	Z'	2.8	16
UME	iP		19 29	56.9 D
	ipP		19 31	07.2

Near s. coast of Honshu, Japan.
h = 300 km (UPP,UME).
M = 5.7 (UPP,KIR).
M uncorrected for focal depth.

" 30

UME	iP		07 36 51.3

" 30

UME	iP		20 10 40.3

" 30

UPP	iPKP1		20 27 11.6
	iSKP		20 30 06
UME	i(PKP)		20 27 00.5
	iPKP		20 27 15.5
	iSKP1		20 29 53.6

Fiji Islands region (h = 570 km).

" 30

UME	iP		21 53 45.3

Bonin Islands region (h = N).

" 31

UPP	iP		07 35	09.7
KIR			micr	sec
	Mx	Z	1.8	12
UME	iP		07 34	49.6 C

Mongolia (h = 35 km).

" 31

UPP	eP		16 31 31
UME	iP		16 31 11.3

Bonin Islands region (h = 25 km).

" 31

UPP	iSn		18 29 28.4
UDD	iSn		18 28 52.7

North Sea, 55.1°N, 3.9°E.
Origin time = 18 25 53.
Solution from Norwegian station readings.

December 7, 1993

Conny Holmqvist
Klaus Meyer

SEISMOLOGICAL DEPARTMENT
BOX 2101
S-750 02 UPPSALA
SWEDEN

SEISMOLOGICAL DEPARTMENT
BOX 2101
S-750 02 UPPSALA
SWEDEN

SEISMOLOGICAL BULLETIN

UPPSALA, KIRUNA, UMEÅ, UDDEHOLM

DELARY and MYRVIKEN

Uppsala	(UPP)	59°51.5'N,	17°37.6'E; h = 14 m
Kiruna	(KIR)	67°50.4'N,	20°25.0'E; h = 390 m
Umeå	(UME)	63°48.9'N,	20°14.2'E; h = 16 m
Uddeholm	(UDD)	60°05.4'N,	13°36.4'E; h = 240 m
Delary	(DEL)	56°28.2'N,	12°52.2'E; h = 150 m
Myrviken	(MYV)	62°56.5'N,	14°20.8'E; h = 345 m

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1992 Sep. 1 UPP iP 16 52 58.0 C
iS 17 02 37
micr sec
P Z' 0.4 1.1
Mx Z 5.9 19
KIR micr sec
Mx Z 2.6 19
UME iP 16 52 42.5
Taiwan (h = 55 km).
M = 5.7 (UPP,KIR).

" 2 UPP iP 00 28 54.5
iPP 00 32 21
iS 00 39 16
micr sec
Mx Z 81 19
KIR micr sec
Mx Z 71 18
UME iP 00 28 42.0
Near coast of Nicaragua (h = 45 km).
M = 7.1 (UPP,KIR).

" 2 UME iP 00 41 07.1
Off coast of Costa Rica (h = 10 km).

" 2 UME iP 00 43 46.6
Near coast of Nicaragua (h = 10 km).

" 2 UME iP 01 26 55.1
Off coast of Costa Rica (h = 10 km).

1992 Sep. 2 UME iP 01 28 59.5
Near east coast of Honshu, Japan
(h = 80 km).

" 2 UPP iP 06 02 30.3
iSKS 06 12 58
micr sec
P Z' 0.1 0.8
Mx Z 1.9 20
KIR micr sec
Mx Z 2.2 14
UME iP 06 02 24.0 D
ipP 06 04 40.7
Jawa, Indonesia (h = 630 km).
M = 5.6 (UPP,KIR).
M uncorrected for focal depth.

" 2 UME iP 10 37 07.1
South of Mariana Islands (h = 35 km).

" 2 UPP iP 10 38 03.5 D
i 10 38 08.7
micr sec
P Z' 0.3 1.0
P Z' 1.1 1.8
Mx Z 2.9 21
KIR micr sec
Mx Z 1.5 16
UME iP 10 37 49.7 D
Utah (h = 15 km).
M = 5.4 (UPP,KIR).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992
Sep. 2 UPP iP 17 03 40.3
iS 17 12 04
micr sec
Mx Z 2.0 28
KIR micr sec
Mx Z 1.9 20
UME iP 17 03 39.4
Off coast of Costa Rica (h = 10 km).
M = 5.4 (UPP,KIR).

" 2 UPP iS 18 52 10
micr sec
Mx Z 4.1 20
KIR micr sec
Mx Z 3.4 17
Near coast of Nicaragua (h = 10 km).
M = 5.8 (UPP,KIR).

" 3 UPP iP 01 07 07.8
Xizang (h = N).

" 4 UME iP 07 48 21.2
Off east coast of Honshu, Japan
(h = 30 km).

" 4 UME iSg1 21 59 12.1
Gulf of Bothnia, 65.9°N, 22.0°E.
Origin time = 21 58 06.
By combination with Finnish station
readings.

" 5 UPP micr sec
Mx Z 3.6 19
KIR micr sec
Mx Z 3.0 19
UME iP 22 00 57.6
Near coast of Nicaragua (h = 10 km).
M = 5.8 (UPP,KIR).

" 6 UME iP 08 31 35.4
Near east coast of Honshu, Japan
(h = 60 km).

" 6 KIR eP 08 49 40
UME iP 08 49 20.7
Norther Iran (h = 20 km).

" 6 UPP iS 13 35 44
micr sec
Mx Z 2.0 19
(cont).

1992
Sep. 6 (cont).
KIR micr sec
Mx Z 1.5 18
Near coast of Nicaragua (h = 25 km).
M = 5.4 (UPP,KIR).

" 6 KIR ePn 14 05 44
UME iP 14 06 45.6
Svalbard region (h = 10 km).

" 6 UPP iP 23 17 48.6
KIR iP 23 17 41.7
UME iP 23 17 40.7
Myanmar - India border region
(h = 120 km).

" 8 UPP iP 00 45 38.1 C
KIR iP 00 46 16.1 C
UME iP 00 45 51.9 C
Southern Iran (h = 20 km).

" 8 UPP i(P) 11 04 16.3

" 9 UPP iP 13 12 47.3
iS 13 15 44
micr sec
P Z' 0.5 1.6
Mx Z 22 19
KIR iP 13 11 07.5
i 13 11 09.6
micr sec
P Z' 1.0 1.4
Mx Z 33 20
UME iP 13 11 59.6 C
Svalbard region (h = 25 km).

" 9 UPP iPKP1 14 54 10.2
UME iPKP1 14 53 53.2
Kermadec Islands region (h = N).

" 9 UPP iP 17 19 33.1
KIR iP 17 20 03.1
UME iP 17 19 42.2
Northern Iran (h = 50 km).

" 9 UPP iPKP1 21 03 12.7
KIR i(PKP) 21 02 54.8
iPKP 21 03 03.1
UME i(PKP) 21 03 00.5
iPKP 21 03 11.0
(cont).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992
Sep. 9 (cont).
UME iSKP1 21 05 51.3
South of Fiji Islands (h = 550 km).

" 9 UPP iP 21 48 58.4
KIR iP 21 49 37.6
UME iP 21 49 14.5
Southern Iran (h = 40 km).

" 10 UPP micr sec
Mx Z 2.4 20
KIR micr sec
Mx Z 2.4 20
UME iPKP 11 02 43.0
Tonga Islands region (h = 40 km).
M = 5.9 (UPP,KIR).

" 10 UPP iP 14 58 29.9
KIR iP 14 56 50.0
micr sec
P Z' 0.4 1.0
UME iP 14 57 41.7 C
i 14 57 44.0
Svalbard region (h = 30 km).

" 10 UPP micr sec
Mx Z 4.4 28
KIR iP 15 16 01.9
micr sec
Mx Z 1.5 18
UME iP 15 16 07.7
Off coast of Costa Rica (h = 25 km).
M = 5.5 (UPP,KIR).

" 10 UPP iP 16 07 18.7

" 10 UPP iSKP1 20 33 38.6
KIR iPKP 20 29 56.5
UME iPKP 20 30 03.2
Vanuatu Islands (h = 20 km).

" 11 UME iPKP 01 19 10.8
iSKP1 01 21 52.9
South of Fiji Islands (h = 610 km).

" 11 UPP iP 04 08 14.8 D
ipP 04 08 22.9
iS 04 17 00.0

(cont).

1992
Sep. 11 (cont).
UPP micr sec
P Z' 3.4 2.0
Mx Z 15 22
KIR iP 04 09 02.6 D
micr sec
P Z' 3.4 1.9
Mx Z 8.4 18
UME iP 04 08 38.5 D
iP'P' 04 36 38.2
Zaire (h = 10 km).
m = 7.1, M = 6.1 (UPP,KIR).

" 11 UPP iP 12 13 13.6
micr sec
Mx Z 0.7 14
KIR iP 12 13 52.9
UME iP 12 13 28.3
Southern Iran (h = 15 km).

" 11 UPP iP 17 11 47.1
KIR iP 17 12 13.5
UME iP 17 11 54.5
Southern Iran (h = 10 km).

" 11 UPP iP 17 25 59.6
Central Mediterranean Sea
(h = 10 km).

" 11 UPP iSg1 17 35 33.9
UDD iPg1 17 34 45.2
iSg1 17 35 01.2
MYV iSg1 17 36 31.0
Lake Vänern, Sweden,
59.0°N, 13.7°E.
Origin time = 17 34 27.
M_L(UPP) = 2.1 (0.19) 3.
By combination with Finnish station readings.

" 11 UPP iP 17 47 22.5 D
KIR iP 17 47 31.3
UME iP 17 47 20.8 D
Pakistan (h = 70 km).

" 11 UPP iP 18 11 00.5 C
micr sec
P Z' 0.1 0.8
KIR iP 18 11 09.0 C

(cont).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992
Sep. 11 (cont).

KIR			micr	sec
	Mx	Z	0.2	0.5
UME	iP		18 10 58.3	C

Hindu Kush region, Afghanistan
(h = 210 km).
m = 5.6 (UPP,KIR).

" 11

UPP	iP	18 31 58.1	
KIR	iP	18 32 25.4	
UME	iP	08 32 06.5	

Northern Iran (h = N).

" 11

UPP	iP	22 38 13.4	
KIR	iP	22 37 57.2	
UME	iP	22 38 02.7	

Talaud Islands, Indonesia
(h = 45 km).

" 12

UPP	iP	02 42 37.0	
KIR	iP	02 43 03.1	
UME	iP	02 42 44.3	

Southern Iran (h = 25 km).

" 12

UME	iPg1	04 17 42.1	
	iSg1	04 17 44.6	

Gulf of Bothnia, 63.7°N, 21.1 °E.
Origin time = 04 17 35.
M_L(UPP) = 1.9 1.
By combination with Finnish station readings.

" 12

UPP	iP		12 57 44.7	

Southwestern Ryukyu Islands
(h = 25 km).

" 12

UPP	iP		15 09 57.6	
			micr	sec
	P	Z'	0.1	1.0
KIR	iP		15 09 02.6	
			micr	sec
	P	Z'	0.1	1.3
UME	iP		15 09 30.7	C

Alaska Peninsula (h = 55 km).
m = 5.7 (UPP,KIR).

" 12

UPP	iP	17 20 51.7	D
KIR	iP	17 21 00.6	D
UME	iP	17 20 49.7	D

Hindu Kush region, Afghanistan
(h = 200 km).

1992
Sep. 12

UPP	iPKP1	19 59 25.6	

South of Fiji Islands (h = 500 km).

" 14

UPP	iPKP1	00 25 30.8	

Kermadec Islands region
(h = 150 km).

" 14

UME	iP	02 57 56.3	

Near east coast of Honshu, Japan
(h = N).

" 14

UPP	eP		13 28 19	
			micr	sec
	Mx	Z	1.1	12
KIR	iP		13 28 03.8	
			micr	sec
	Mx	Z	1.0	12
UME	iP		13 28 11.0	

Taiwan region (h = 15 km).
M = 5.3 (UPP,KIR).

" 14

UPP	i	17 28 50.7	
KIR	iP	17 27 14.8	
UME	iP	17 28 03.2	

North of Svalbard (h = 10 km).

" 14

UPP	iP		20 43 57.3	
	ipP		20 44 08.6	
	iS		20 52 30	
			micr	sec
	P	Z'	0.2	1.1
	Mx	Z	0.9	14
KIR	iP		20 43 03.4	
	ipP		20 43 13.3	
			micr	sec
	P	Z'	0.2	1.1
UME	iP		20 43 28.8	
	ipP		20 43 39.3	

Komandorsky Islands region.
h = 40 km (UPP,KIR,UME).
m = 6.1 (UPP,KIR).

" 15

UPP	iP	00 04 56.6	

Komandorsky Islands region
(h = 30 km).

" 15

UME	iP	02 32 18.4	

Off east coast of Honshu, Japan
(h = 25 km).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992 Sep. 15 UPP iPKP1 02 46 15.2
iSKP1 02 49 05.1
UME iPKP 02 46 13.6
iSKP1 02 48 53.2
Fiji Islands region (h = 580 km).

" 15 UPP iP 03 04 18.1
Greece (h = 10 km).

" 15 KIR iP 08 58 48.0
Southern California (h = 10 km).

" 15 UPP iP 09 14 18.4
KIR iP 09 13 25.8
UME iP 09 13 50.5
Off east coast of Kamchatka
(h = 35 km).

" 15 UPP iP 17 18 06.2
KIR iP 17 18 01.2
Myanmar (h = N).

" 15 UPP iP 18 53 18.6
micr sec
Mx Z 3.2 23
KIR eP 18 53 12
micr sec
Mx Z 0.9 16
UME iP 18 53 19.7
Near coast of Nicaragua (h = 30 km).
M = 5.4 (UPP,KIR).

" 15 UPP i(PKP) 21 22 32.5
iPKP 21 22 45.9
iPP 21 24 52.4
iSKP 21 25 52.0
iPKS 21 26 06
iSKKP 21 35 15.7
micr sec
Mx Z 0.6 15
KIR i(PKP) 21 22 23.4
iPKP 21 22 32.4
iPKKP 21 32 29.8
UME i(PKP 21 22 28.0
iPKP 21 22 38.9 C
Vanuatu Islands (h = 180 km).
(PKP) is an early precursor to the
main PKP (DF) branch.

1992 Sep. 16 UPP iP 02 37 15.7
ipP 02 37 26.9
KIR iP 02 36 23.6
i 02 36 34.2
UME iP 02 36 48.2
ipP 02 36 58.8
Off east coast of Kamchatka.
h = 40 km (UPP,KIR,UME).

" 16 UPP iP 04 34 30.5 C
micr sec
P Z' 0.2 0.9
KIR iP 04 34 30.9 C
micr sec
P Z' 0.2 0.9
UME iP 04 34 26.5 C
Andaman Islands, India (h = 150 km).
m = 5.8 (UPP,KIR).

" 17 UME iP 00 04 30.3
Near coast of Nicaragua (h = 55 km).

" 17 UME iP 07 13 19.6
Off coast of Oregon (h = 10 km).

" 17 KIR iSg1 09 06 25.4
Norrbotten, Sweden, 65.8°N, 21.9°E.
Origin time = 09 05 24.
Solution from Finnish station
readings.

" 17 UPP iSg1 11 02 53.5
UDD iSg1 11 01 47.5
MYV iSg1 11 02 36.0
Southwestern Norway, 59.0°N, 5.5°E.
Origin time = 10 59 41.
M_L(UPP) = 2.7 1.
By combination with Norwegian
station readings.

" 17 UPP ipP 22 26 20.4
micr sec
P Z' 0.1 1.0
KIR iP 22 25 22.0 C
ipP 22 25 25.6
micr sec
P Z' 0.4 1.0
UME iP 22 25 50.6
ipP 22 25 54.5
Southwestern Alaska.
h = 15 km (KIR,UME).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992
Sep. 18 UPP micr sec
Mx Z 1.9 18
KIR iP 01 18 25.2
micr sec
Mx Z 0.5 14
Taiwan region (h = 30 km).
M = 5.1 (UPP,KIR).

" 18 UPP i(P) 08 52 10.7

" 18 KIR iP 11 03 41.4
South of Panama (h = 20 km).

" 19 UPP iP 00 00 52.1
KIR iP 00 01 12.3
UME iP 00 00 55.9
Pakistan (h = 25 km).

" 19 UME iP 08 59 42.4
Near east coast of Honshu, Japan
(h = 35 km).

" 20 UPP iP 02 02 56.6
Off east coast of Kamchatka (h = N).

" 20 UPP iP 08 07 17.1 D
micr sec
P Z' 0.1 1.0
KIR iP 08 07 45.0
UME iP 08 07 34.2
Azores Islands region (h = 10 km).

" 20 UPP iP 21 40 04.6
Hindu Kush region, Afghanistan
(h = 140 km).

" 21 UPP iP 10 30 13.3
iS 10 39 37
micr sec
P Z' 0.2 1.5
KIR iP 10 30 56.3
micr sec
P Z' 0.4 1.5
UME iP 10 30 36.8
Ascension Island region (h = 10 km).
m = 6.1 (UPP,KIR).

" 21 UPP iP 12 27 43.7
ipP 12 27 56.5

(cont).

1992
Sep. 21 (cont).
KIR iP 12 27 39.4
UME ipP 12 27 49.2
Myanmar - India border region
(h = 35 km).

" 21 UPP iP 18 40 40.0
i 18 40 47.3
KIR iP 18 41 02.7
UME iP 18 40 48.2
i 18 40 55.6
Chagos Archipelago region
(h = 10 km).

" 21 UPP iP 20 41 38.8
KIR iP 20 40 46.0
Andreanof Islands, Aleutian Is.
(h = N).

" 22 UPP iP 14 12 23.9
i 14 12 34.1
KIR iP 14 12 58.0
UME iP 14 12 35.1
i 14 12 44.6
Northern Iran (h = 35 km).

" 23 UPP iPKP1 00 21 39.2
South of Fiji Islands (h = 610 km).

" 23 UPP iP 13 49 52.7 C
micr sec
P Z' 0.4 0.9
KIR iP 13 49 20.9 C
micr sec
P Z' 0.4 1.0
UME iP 13 49 32.7 C
Kyushu, Japan (h = 160 km).
m = 6.1 (UPP,KIR).

" 23 UPP iP 15 03 17.0
KIR iP 15 04 04.3
Zaire (h = 10 km).

" 23 UPP i(P) 20 36 37.1

" 23 UPP iP 22 06 29.5
KIR iP 22 07 08.6
Southern Iran (h = 35 km).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992
Sep. 24 UPP iPKP 01 10 41.7
South Sandwich Islands region
(h = 20 km).

" 24 UME iPKP1 01 51 32.3
South of Kermadec Islands
(h = 460 km).

" 24 UPP Mx 20 00
micr sec
Mx Z 2.4 22
KIR Mx 20 00
micr sec
Mx Z 0.9 20
Balleny Islands region (h = 10 km).
M = 5.8 (UPP,KIR).

" 25 UPP iP 08 08 22.9
KIR iP 08 08 08.8
Southern Xinjiang, China
(h = 10 km).

" 25 KIR iP 09 10 47.8
Southern Sumatera, Indonesia
(h = 30 km).

" 25 UME iP 14 31 34.5
Near east coast of Honshu, Japan
(h = 55 km).

" 25 KIR iPKP 20 25 46.1
South Sandwich Islands region
(h = 40 km).

" 26 UPP iP 05 49 46.0
iS 05 53 06
micr sec
P Z' 0.6 1.6
Mx Z 6.8 20
KIR iP 05 49 29.8
micr sec
P Z' 1.0 1.9
Mx Z 7.9 15
UME iP 05 49 39.2
Iceland (h = 10 km).
m = 5.6 (UPP,KIR).

" 26 UPP iP 22 29 39.5
i 22 29 48.5

(cont).

1992
Sep. 26 (cont).
UPP iPP 22 33 42
iS 22 41 04
micr sec
i Z' 0.1 0.9
Mx Z 18 22
KIR iP 22 29 21.8
micr sec
P Z' 0.2 1.0
Mx Z 16 20
UME iP 22 29 26.9
Halmahera, Indonesia (h = 30 km).
m = 6.5, M = 6.5 (UPP,KIR).

" 27 UPP micr sec
Mx Z 2.4 20
KIR eP 10 18 06
micr sec
Mx Z 1.5 18
Halmahera, Indonesia (h = 30 km).
M = 5.6 (UPP,KIR).

" 27 KIR iP 10 22 38.9
Halmahera Indonesia (h = 30 km).

" 27 UPP iP 17 59 01.0
iS 18 07 53
micr sec
P Z' 0.2 1.2
Mx Z 2.2 20
KIR iP 17 58 07.5 D
micr sec
P Z' 0.4 1.5
Mx Z 1.1 15
UME iP 17 58 34.8
South of Alaska (h = N).
m = 6.1, M = 5.2 (UPP,KIR).

" 27 UME iPKP1 18 47 54.7
South of Kermadec Islands (h = N).

" 28 UPP iPKP1 00 45 26.6
South of Fiji Islands (h = 670 km).

" 28 UPP micr sec
Mx Z 5.5 26
KIR iP 07 54 00.0
micr sec
Mx Z 7.2 19

(cont).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992
Sep. 28 (cont).
Near coast of Guatemala (h = 70 km).
M = 5.9 (UPP,KIR).
M uncorrected for focal depth.

" 28 UPP iSg1 13 33 41.3
UME iSg1 13 35 50.2
UDD iSg1 13 33 27.3
DEL i 13 31 16.5
iPg1 13 31 19.2
i 13 31 22.5
iSg1 13 31 41.9
MYV iSg1 13 35 00.6
Southwestern Baltic Sea,
55.1°N, 12.8°E.
Origin time = 13 30 50.
M_L(UPP) = 3.3 (0.29) 4.
By combination with Danish and
Finnish station readings.

" 28 UPP iP 14 17 51.0 C
micr sec
Mx Z 36 16
KIR iP 14 17 26.3 C
micr sec
P Z' 1.0 2.5
Mx Z 8.6 16
UME iP 14 17 34.0
Taiwan region (h = 30 km).
M = 6.4 (UPP,KIR).

" 28 UME iPg1 14 49 17.9
iSg1 14 49 33.3
MYV iSg1 14 50 48.4
Norrbotten, Sweden, 65.0°N, 21.3°E.
Origin time = 14 48 55.
M_L(UPP) = 2.3 1.
By combination with Finnish station
readings.

" 29 KIR iP 00 00 37.8
UME iP 00 00 21.6
Carlsberg Ridge (h = 10 km).

" 29 KIR iP 00 07 05.1
Carlsberg Ridge (h = 10 km).

" 29 KIR iP 00 09 24.9
UME iP 00 09 07.7
Carlsberg Ridge (h = 10 km).

1992
Sep. 29 KIR iP 00 27 46.3
UME iP 00 27 28.2
Carlsberg Ridge (h = 10 km).

" 29 UME iP 05 15 50.1
South of Honshu, Japan
(h = 210 km).

" 29 KIR iP 15 30 02.5
UME iP 15 30 06.4
Southern Molucca Sea (h = 40 km).

" 29 UME iP 19 28 16.0
Jalisco, Mexico (h = 100 km).

" 30 UPP iP 03 38 58.2 C
iS 03 47 48
micr sec
P Z' 0.3 0.9
Mx Z 3.0 22
KIR micr sec
Mx Z 1.4 17
UME iP 03 38 30.8 C
Andreanof Islands, Aleutian Islands
(h = 25 km).
M = 5.3 (UPP,KIR).

" 30 UPP iP 05 44 59.9
iS 05 54 10
iP'P' 06 13 08.6
micr sec
P Z' 0.3 0.9
Mx Z 24 21
KIR iP 05 44 07.2
micr sec
P Z' 0.2 1.0
Mx Z 9.5 16
UME iP 05 44 33.4
iP'P' 06 13 16.1
Andreanof Islands, Aleutian Is.
(h = N).
m = 6.3, M = 6.2 (UPP,KIR).

" 30 UPP iP 06 14 26.0
Andreanof Islands, Aleutian Is.
(h = N).

" 30 UPP iP 07 35 25.2
KIR iP 07 34 32.1

(cont).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992
Sep. 30 (cont).
UME iP 07 34 58.2
Andreanof Islands, Aleutian Is.
(h = N).

" 30 UPP iP 09 53 53.4 C
micr sec
P Z' 0.3 1.1
Mx Z 4.6 18
KIR iP 09 53 00.6 C
micr sec
P Z' 0.1 1.0
Mx Z 1.9 18
UME iP 09 53 26.3 C
Andreanof Islands, Aleutian Is.
(h = 15 km).
m = 6.1, M = 5.5 (UPP,KIR).

" 30 UPP iP 10 10 03.6
micr sec
P Z' 0.3 1.3
KIR iP 10 09 11.1
micr sec
P Z' 0.1 1.0
UME iP 10 09 36.4 C
Andreanof Islands, Aleutian Is.
(h = N).
m = 5.9 (UPP,KIR).

" 30 UPP iP 10 16 25.7
Andreanof Islands, Aleutian Is.
(h = N).

" 30 UPP iP 16 58 02.5
Andreanof Islands, Aleutian Is.
(h = N).

" 30 UPP iP 22 20 00.2
KIR iP 22 19 42.1
UME iP 22 19 47.5
Philippine Islands region (h = 20 km).

" 30 UPP iP 23 39 18.9
micr sec
P Z' 0.1 1.1
KIR iP 23 38 25.4
UME iP 23 38 51.1
Andreanof Islands, Aleutian Is.
(h = N).

January 17, 1994

Conny Holmqvist
Klaus Meyer

SEISMOLOGICAL DEPARTMENT
BOX 2101
S-750 02 UPPSALA
SWEDEN

SEISMOLOGICAL DEPARTMENT
BOX 2101
S-750 02 UPPSALA
SWEDEN

SEISMOLOGICAL BULLETIN

UPPSALA, KIRUNA, UMEÅ, UDDEHOLM

DELARY and MYRVIKEN

Uppsala	(UPP)	59°51.5'N,	17°37.6'E;	h = 14 m
Kiruna	(KIR)	67°50.4'N,	20°25.0'E;	h = 390 m
Umeå	(UME)	63°48.9'N,	20°14.2'E;	h = 16 m
Uddeholm	(UDD)	60°05.4'N,	13°36.4'E;	h = 240 m
Delary	(DEL)	56°28.2'N,	12°52.2'E;	h = 150 m
Myrviken	(MYV)	62°56.5'N,	14°20.8'E;	h = 345 m

OCTOBER 1 - 31, 1992

1992 Oct. 1
UPP iP 05 13 35.9 C
P Z' micr 0.5 sec 1.2
KIR iP 05 12 42.8 C
P Z' micr 0.2 sec 1.2
UME iP 05 13 09.9
Andreanof Islands, Aleutian Is.
(h = 15 km).
m = 6.4, M = 5.5 (UPP,KIR).

" 1
KIR iPn 06 03 08.7
UME iPn 06 03 46.2
UDD iPn 06 04 12.2
MYV iPn 06 03 40.0
iSn 06 05 45.2
Norwegian Sea, 71.5°N, 4.1°W.
Origin time = 06 01 00.
Solution from Norwegian station readings.

" 1
UPP iPKP 08 37 46.9
KIR iPKP 08 37 54.1
UME iPKP 08 37 52.1
Off coast of central Chile
(h = 30 km).

" 1
UPP iP 16 48 04.2
KIR eP 16 47 11
Andreanof Islands, Aleutian Is.
(h = N).

1992 Oct. 2
KIR iPKP 06 49 44.0
Easter Island region (h = 20 km).

" 2
UPP iP 07 16 05.6
Andreanof Islands, Aleutian Is.
(h = N).

" 2
UPP iPKP1 11 10 32.0
UME iPKP 11 10 18.6
Kermadec Islands, New Zealand
(h = N).

" 2
UPP iP 14 46 15.9
KIR iP 14 46 20.1
UME iP 14 46 11.8
Tajikistan - Xinjiang border reg.
(h = 120 km).

" 2
UPP iP 17 39 43.1
Andreanof Islands, Aleutian Is.
(h = N).

" 3
UPP iP 07 53 23.8
P Z' micr 0.1 sec 1.0
UME iP 07 52 57.3
Rat Islands, Aleutian Islands (h = N).

" 3
UPP Mx 08 28
Mx Z micr 2.0 sec 15

(cont).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992 Oct. 3 (cont).

KIR	Mx		08 24	
			micr	sec
	Mx	Z	1.9	15

Gulf of California (h = 10 km).
M = 5.5 (UPP,KIR).

" 3

UPP	iP		09 29 40.2
KIR	iP		09 28 45.7
UME	iP		09 29 13.8

Kodiak Island region (h = N).

" 3

UPP	iP		14 08 31.0	C
			micr	sec
	P	Z'	0.1	0.8
KIR	iP		14 08 07.8	
UME	iP		14 08 15.9	

Taiwan region (h = 35 km).

" 3 KIR eP 22 08 39
Andreanof Islands, Aleutian Is.
(h = N).

" 4 UPP iP 15 30 49.6
Myanmar (h = 85 km).

" 4 UPP iP 19 26 21.1
Greece-Albania border region
(h = 10 km).

" 4

UPP	iP	21 09 33.6
UME	iP	21 09 08.4

Kuril Islands (h = 120 km).

" 5

UPP	iP	02 02 14.7
KIR	eP	02 02 46

Northern Mid-Atlantic Ridge
(h = 10 km).

" 5

UPP	iP	19 09 52.5
KIR	iP	19 09 19.8
UME	iP	19 09 28.9

Rat Islands, Aleutian Islands
(h = 70 km).

" 6 UPP eP 09 04 28
Turkmenistan - Iran border region
(h = 10 km).

1992 Oct. 6

UPP			micr	sec
	Mx	Z	3.2	23
KIR	iPKP		10 46 49.9	
UME	iPKP		10 46 54.3	

New Britain region (h = 50 km).

" 6 UPP iP 15 25 53.7
Andreanof Islands, Aleutian Is.
(h = N).

" 6

UPP	iP	17 30 08.1
KIR	iP	17 29 15.6

Andreanof Islands, Aleutian Is.
(h = N).

" 6 UPP iP 19 06 07.5

" 7 KIR iP 15 54 15.4 C
Alaska Peninsula (h = N).

" 7

UPP	iP	16 22 38.1
	i	16 22 48.2

Andreanof Islands, Aleutian Is.
(h = N).

" 8

UPP	iP		16 45 55.0	
			micr	sec
	P	Z'	0.1	1.0

Andreanof Islands, Aleutian Is.
(h = 20 km).

" 9

UPP	iP	12 27 55.1
KIR	iP	12 26 59.8
	i	12 27 16.5

Andreanof Islands, Aleutian Is.
(h = N).

" 11 KIR iP 17 10 37.7
Taiwan region (h = 130 km).

" 11

UPP	e(PKP)	19 43 17
	iPKP	19 43 26.0
	i	19 43 39.5
	iPP	19 46 01.5
	i	19 46 39.3
	i	19 46 48.2
	i	19 52 43
	i	19 55 17.0

(cont).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992 Oct. 11 (cont).

UPP			micr	sec	
	PKP	Z'	0.1	1.0	
	i	Z'	0.3	1.3	
KIR	iPKP		19 43 15.6		C
	i		19 43 24.2		
	i		19 54 31.1		
			micr	sec	
	PKP	Z'	0.2	1.0	
	i	Z'	1.0	1.2	
	Mx	Z	33	26	
UME	iPKP		19 43 19.2		

Vanuatu Islands (h = 130 km).

" 11 UPP iP 23 30 40.5

		micr	sec	
P	Z'	0.3	1.0	
KIR iP		23 29 50.6		
		micr	sec	
P	Z'	0.6	1.5	
UME iP		23 30 13.2		

Kuril Islands (h = 280 km).
m = 6.0 (UPP,KIR).

" 12 KIR iP 03 46 10.0
Afghanistan - Tajikistan bord. reg.
(h = N).

" 12

UPP	iP		13 16 16.9	
	ipP		13 16 24.4	
	iS		13 21 24	
			micr	sec
	P	Z'	0.1	0.8
	pP	Z'	0.2	1.0
	Mx	Z	3.9	17
KIR	iP		13 17 18.0	
	ipP		13 17 26.4	
			micr	sec
	P	Z'	0.5	0.8
	pP	Z'	0.9	1.0
	Mx	Z	3.3	15
UME	iP		13 16 45.2	
	ipP		13 16 52.4	

Egypt.
h = 30 km (UPP,KIR,UME).
m = 6.2, M = 5.2 (UPP,KIR).

" 12

UPP	iP	19 37 09.7
	i	19 37 22.4

(cont).

1992 Oct. 12 (cont).

UPP	i		19 39 47.7	
			micr	sec
	P	Z'	0.1	1.0
KIR	eP		19 38 35	
UME	iP		19 37 51.8	

Romania (h = 100 km).

" 13

UPP	iP	06 09 15.7
	i	06 09 40.3

Ionian Sea (h = 40 km).

" 13 UPP iP 17 32 41.5
Taiwan region (h = 10 km).

" 14

UPP	iP	08 07 16.7
UME	iP	08 06 50.5

Kuril Islands (h = 40km).

" 14 UPP iPKP1 15 50 08.1
South of Fiji Islands (h = 490 km).

" 14 KIR eP 22 50 40
Baffin Bay (h = 10 km).

" 15

UPP	iP	02 49 41.3
KIR	i	02 49 47.3

Kyrgyzstan (h = 15 km).

" 15 UPP iPKP1 05 42 48.6
South of Fiji Islands (h = 500 km).

" 15 KIR iP 19 49 49.2
Tajikistan - Xinjiang border reg.
(h = 140 km).

" 15

UPP	iPKP		22 56 12.0	
	i		22 56 14.5	
	iSKP1		22 59 31.4	
			micr	sec
	Mx	Z	47	20
KIR	iPKP		22 55 58.1	
	i		22 56 00.3	
	iSKP1		22 59 13.4	
			micr	sec
	Mx	Z	20	21
UME	iPKP		22 56 04.7	
	iSKP1		22 59 21.6	

Vanuatu Islands (h = 25 km).
M = 6.9 (UPP,KIR).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992					
Oct.	15	KIR	iP	23 09 27.2	
"	16	KIR	iPKP	01 27 43.5	
				micr	sec
			P Z'	0.1	0.1
		UME	iPKP1	01 27 56.9	
		Off e. coast of N. Island, N.Z.			
		(h = 40 km).			
"	16	KIR	iPg1	02 48 51.7	
			iSg1	02 49 20.0	
		UME	iSg1	02 50 31.4	
		MYV	iSg1	02 50 41.0	
		Northern Norway, 67.7°N, 15.1°E.			
		Origin time = 02 48 15.			
		M_L(UPP) = 2.1 1.			
		By combination with Finnish and			
		Norwegian station readings.			
"	16	UPP	iP	05 13 48.6	
		KIR	iP	05 12 57.2	
		Andreanof Islands, Aleutian Is.			
		(h = N).			
"	16	UPP	iPKP1	06 14 23.7	
			iPKP2	06 14 34.7	
		KIR	iPKP	06 14 03.8	
		UME	iPKP1	06 14 14.1	
		East of North Island, N.Z.			
		(h = 30 km).			
"	16	KIR	iP	07 10 41.4	
		East of North Island, N.Z. (h = N).			
"	16	KIR	iP	18 46 16.5	
		Minahassa Peninsula, Sulawesi			
		(h = 160 km).			
"	17	KIR	iP	01 49 21.2	
		Kashmir - Xinjiang border region			
		(h = N).			
"	17	UPP	iSn	02 22 52.5	
		UME	iSn	02 23 04.8	
		UDD	iPn	02 21 03.9	
			iSn	02 22 06.1	
		DEL	eSn	02 23 03	
		MYV	iPn	02 20 04.8	

(cont).

1992					
Oct.	17	(cont).			
		Norwegian Sea, 62.0°N, 2.2°E.			
		Origin time = 02 19 39.			
		By combination with Finnish and			
		Norwegian station readings.			
"	17	UPP		micr	sec
			Mx Z	5.7	23
		KIR	iPKP	03 10 58.8	
				micr	sec
			Mx Z	4.7	21
		Vanuatu Islands (h = 10 km).			
		M = 6.1 (UPP,KIR).			
"	17	UPP	iP	08 45 23.8	
			ipP	08 45 27.6	
			iS	08 55 46	
				micr	sec
			pP Z'	0.2	1.0
			Mx Z	36	23
		KIR	iP	08 45 24.3	C
			ipP	08 45 26.9	
				micr	sec
			pP	Z'1.0	1.2
			Mx Z	34	24
		UME	iP	08 45 28.5	
		Northern Columbia.			
		h = 10 km (UPP,KIR).			
		m = 6.6, M = 6.6 (UPP,KIR).			
"	18	KIR	iP	01 11 56.5	
		South of Sumbawa, Indonesia			
		(h = 25 km).			
"	18	UPP	iP	05 02 39.8	
		KIR	iP	05 02 06.4	
		UME	iP	05 02 20.7	
		South of Honshu, Japan (h = 440 km).			
"	18	KIR	iP	06 00 11.6	
"	18	KIR	iP	11 04 04.4	
		Northern Columbia (h = 15 km).			
"	18	UPP	iP	13 22 55.1	
		KIR	iP	13 22 40.3	
		Banda Sea (h = 120 km).			
"	18	UPP	iP	15 24 42.8	C
			i	15 24 49.4	

(cont).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992 Oct. 18 (cont).

UPP	iSKS		15 35 04		
	iS		15 35 16		
			micr	sec	
	P	Z'	0.2	1.2	
	i	Z'	0.9	1.3	
	Mx	Z	193	23	
KIR	iP		15 24 42.0		C
	i		15 24 44.0		
	i		15 24 50.1		
			micr	sec	
	i	Z'	1.0	1.5	
	i	Z'	3.5	1.6	
	Mx	Z	137	22	
UME	iP		15 24 44.7		C
	i		15 24 47.0		
	i		15 24 51.9		
	i		15 26 34.9		

Northern Colombia (h = 10 km).
m = 7.1, M = 7.3 (UPP,KIR).
Multiple P, on average 2.2 s and 7.3 s apart, with gradually increasing amplitudes.

" 18

UPP	iP		16 18 25.8		
			micr	sec	
	P	Z'	0.2	1.7	
KIR	iP		16 18 27.9		
	i		16 18 31.5		
			micr	sec	
	P	Z'	0.2	1.4	
UME	iP		16 18 30.5		
	i		16 18 34.6		

Northern Colombia (h = 12 km).

" 18

UPP	iP		16 22 02.6		C
	i		16 22 07.7		
KIR	iP		16 22 02.7		
	i		16 22 08.4		
			micr	sec	
	i	Z'	0.1	0.7	
UME	iP		16 21 56.6		
	i		16 22 01.3		

Kyrgyzstan (h = 20 km).
Double P, on average 5.2 s apart. The second onset, when interpreted as pP, provides a focal depth of 20 km.

" 18 UPP iP 17 56 10.9

(cont).

1992 Oct. 18 (cont).

UPP			micr	sec	
	P	Z'	0.1	1.0	
KIR	iP		17 56 07.7		
			micr	sec	
	P	Z'	0.3	1.0	
UME	iP		17 56 06.4		

Sunda Strait (h = 35 km).

" 18 UME iPKP 18 29 38.8
Fiji Islands region (h = 35 km).

" 18

UPP	iP		18 40 12.7		
	i		18 40 16.7		
KIR	iP		18 40 13.9		
	i		18 40 18.2		
			micr	sec	
	P	Z'	0.2	1.5	
	i	Z'	0.4	1.5	
UME	iP		18 40 16.3		
	i		18 40 20.7		

Northern Colombia (h = 20 km).
Double P, small and large on average 4.2 s apart. The second onset, when interpreted as pP, provides a focal depth of 15 km.

" 18

UPP	iP		19 20 00.6
KIR	iP		19 20 02.8
UME	iP		19 20 05.3
	i		19 20 07.9

Northern Colombia (h = 15 km).

" 18

KIR	iP		20 56 33.7
UME	iP		20 56 37.3

Northern Colombia (h = 15 km).

" 19 UPP iP 04 11 44.3

" 19

UPP	eP		04 11 32.0
	i		04 11 49.3
KIR	iP		04 11 35.2

Northern Colombia (h = 10 km).

" 19 UME iP 05 16 47.2
Northern Colombia (h = 10 km).

" 19 UPP eP 07 37 17.1
Aegean Sea (h = 10 km).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992 Oct. 19 UPP micr sec
Mx Z 5.2 25
KIR iPKP 12 22 33.3
micr sec
Mx Z 2.1 21
UME i 12 22 44.1
Vanuatu Islands (h = 20 km).
M = 5.9 (UPP,KIR).

" 19 UPP iPn 13 23 24.0
KIR iPn 13 22 07.8
i 13 22 17.3
UME iPn 13 22 47.4
UDD iPn 13 23 12.0
DEL iPn 13 23 58.8
MYV iPn 13 22 38.0
Norwegian Sea, 72.2°N, 2.5°W.
Origin time = 13 20 03.
By combination with Finnish and Norwegian station readings.

" 19 KIR iP 20 09 16.3
Northern Colombia (h = 10 km).

" 20 UPP iP 04 50 23.9
iS 04 58 46
micr sec
P Z' 0.2 1.5
Mx Z 7.7 19
KIR iP 04 49 26.8
micr sec
P Z' 0.1 1.3
Mx Z 6.3 21
Komandorsky Islands region
(h = 25 km).
m = 5.9, M = 5.7 (UPP,KIR).

" 20 UPP iP 07 30 39.0
KIR iP 07 30 14.4
Southwestern Ryukyu Islands
(h = 20 km).

" 20 KIR iP 14 45 24.3

" 20 UPP iPKP 16 07 21.8
KIR iPKP 16 07 08.0
South of Fiji Islands (h = 60 km).

" 21 UPP iP 05 32 04.5
Andreanof Islands, Aleutian Is.
(h = N).

1992 Oct. 21 UPP Mx 13 22
micr sec
Mx Z 6.1 19
KIR Mx 13 27
micr sec
Mx Z 3.8 19
New Guinea, Papua New Guinea
(h = 20 km).
M = 6.1 (UPP,KIR).

" 21 UPP iP 15 16 10.7
UME iP 15 16 39.1
Zaire (h = 10 km).

" 22 UPP iPKP 00 49 30.3
South of Fiji Islands (h = 170 km).

" 22 UPP iPKP1 09 24 07.6
i 09 24 10.2
iSS 09 46 44
micr sec
Mx Z 9.0 22
UME iPKP1 09 23 55.1
i 09 24 07.9
Kermadec Islands (h = 25 km).
M = 6.4 (UPP,KIR).

" 22 UME iPKP 09 51 27.1
Kermadec Islands region (h = 10 km).
Late arrival when compared with the NEIC solution.

" 22 UME iP 18 39 08.6 D
Banda Sea (h = 320 km).

" 22 UPP iPKP1 19 16 23.4
UME iPKP1 19 16 11.6
Kermadec Islands, New Zealand
(h = 10 km).

" 22 UPP iP 19 12 03.7
UME iP 19 12 42.1
Ionian Sea (h = 10 km).

" 22 UPP iPKP1 23 28 13.2
i 23 28 16.4
iSS 23 50 51
micr sec
Mx Z 6.9 21

(cont).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992
Oct. 22 (cont).

KIR			micr	sec
	Mx	Z	5.8	23
UME	iPKP1		23 28 00.1	

Kermadec Islands, New Zealand
(h = 15 km).
M = 6.3 (UPP,KIR).

" 22

UME	iPKP		23 38 26.3

Kermadec Islands, New Zealand
(h = N).
Early arrival, when compared with the NEIC solution.

" 23

UPP	iPKP1		00 04 37.2
UME	iPKP1		00 04 23.9

Kermadec Islands, New Zealand
(h = 30 km).

" 23

UPP	iPKP1		01 17 32.5
UME	iPKP1		01 17 20.9

Kermadec Islands, New Zealand
(h = 10 km).

" 23

UPP	iPKP1		02 00 25.1
	i		02 00 35.0
UME	iPKP1		02 00 11.4

Kermadec Islands, New Zealand
(h = N).

" 23

UPP	iPKP1		02 17 01.9

Kermadec Islands, New Zealand
(h = 10 km).

" 23

UME	iPKP		04 47 24.3

Kermadec Islands region (h = N).

" 23

UPP	iPKP1		08 50 08.5
UME	iPKP1		08 49 55.7

Kermadec Islands region (h = 10 km).

" 23

UPP	eP		09 17 33	
	iS		09 22 42	
KIR	eP		09 18 36	
			micr	sec
	P	Z'	0.1	1.2
UME	iP		09 18 08.6	

Marocco (h = 30 km).

1992
Oct. 23

UPP	iP		09 24 38.1	
	iS		09 27 05.0	
			micr	sec
	P	Z'	0.1	1.1
KIR	iP		09 26 04.4	
			micr	sec
	P	Z'	0.3	1.0
UME	iP		09 25 18.4	

Romania (h = 70 km).
m = 5.3 (UPP,KIR).

" 23

UPP	iP		09 40 46.3
KIR	iP		09 40 47.8
UME	iP		09 40 45.0

Near west coast of Colombia
(h = 10 km).

" 23

UPP	iP		10 51 55.3
KIR	iP		10 51 20.5
UME	iP		10 51 35.6

South of Honshu, Japan (h = N).

" 23

UPP			micr	sec
	Mx	Z	11	20
KIR			micr	sec
	Mx	Z	7.0	22
UME	iPKP		13 23 09.8	

New Britain region (h = 30 km).
M = 6.3 (UPP,KIR).

" 23

UME	iPKP		15 47 40.0

New Britain region (h = N).

" 23

UPP	iP		21 38 46.5
	iPP		21 43 00.8
KIR	iP		21 38 34.7

Savu Sea (h = N).

" 23

UPP	iP		23 25 00.9	C
	iS		23 29 18	
			micr	sec
	P	Z'	0.8	0.7
KIR	iP		23 25 41.5	C
			micr	sec
	P	Z'	1.5	1.0
	Mx	Z	4.1	17
UME	iP		23 25 15.1	C

Eastern Caucasus (h = 15 km).
m = 6.6 (UPP,KIR).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992 Oct. 24 UPP iP 00 19 54.3
KIR iP 00 20 33.3
UME iP 00 20 06.8
Northwestern Caucasus (h = N).

" 24 UPP iPKP1 01 19 33.4 C
KIR i 01 19 31.1
UME iPKP1 01 19 21.0
Kermadec Islands, New Zealand
(h = 10 km).

" 24 UPP iP 01 45 37.2

" 24 UPP iPKP1 04 46 17.9
UME iPKP1 04 46 04.6
Kermadec Islands, New Zealand
(h = 10 km).

" 24 UPP iPKP1 08 42 44.4 C
micr sec
Mx Z 9.0 22
KIR iPKP 08 42 25.3 C
micr sec
Mx Z 4.5 23
UME iPKP1 08 42 32.0
Kermadec Islands, New Zealand
(h = 20 km).
M = 6.3 (UPP,KIR).

" 24 UPP iPKP1 12 07 02.0
UME iPKP1 12 06 49.7
Kermadec Islands, New Zealand
(h = 10 km).

" 24 KIR iP 13 05 11.9
Kyushu, Japan (h = 100 km).

" 24 UPP iPKP1 13 58 52.0
KIR iPKP 13 58 37.4
Kermadec Islands, New Zealand
(h = 45 km).

" 24 KIR iPKP 17 28 30.6
Kermadec Islands region (h = N).

" 24 KIR iP 22 29 04.0
micr sec
P Z' 0.1 1.0
UME iP 22 29 14.4
South of Mariana Islands
(h = 45 km).

1992 Oct. 24 UPP iPKP1 23 20 14.3
i 23 20 17.9
KIR iPKP 23 19 57.8
UME iPKP1 23 20 02.7
Kermadec Islands, New Zealand
(h = 10 km).

" 25 UPP iPKP1 00 49 01.1 C
KIR iPKP 00 48 41.0
UME iPKP1 00 48 47.5
Kermadec Islands, New Zealand
(h = 25 km).

" 25 UPP iPKP1 05 01 55.7
Kermadec Islands region (h = 10 km).

" 25 UPP iPKP1 07 42 21.8
Kermadec Island region (h = N).
Late arrival when compared with the
NEIC solution.

" 25 UPP iP 15 13 16.6
KIR iP 15 13 15.5
UME iP 15 13 12.7
Southern Sumatera, Indonesia
(h = 55 km).

" 25 UPP iSn 22 20 20.0
KIR iSn 22 19 49.5
UME iSn 22 20 11.9
UDD iSn 22 19 43.6
MYV iPg1 22 18 12.0
i 22 18 54.0
iSn 22 19 05.0
Norwegian Sea, 65.1°N, 0.7°E.
Origin time = 22 16 25.
By combination with Finnish and
Norwegian station readings.

" 26 UME iPKP1 17 20 38.7
Kermadec Islands, New Zealand
(h = N).

" 27 KIR iP 03 02 07.9
ipP 03 02 47.3
UME iP 03 01 59.7
ipP 03 02 38.9
Tajikistan.
h = 190 km (KIR,UME).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992 Oct. 27
KIR ePg1 14 58 47
iSg1 14 59 25.5
UME iSg1 15 00 01.3
MYV ePg1 14 59 06
iSg1 14 59 54.0
Central Norway, 66.8°N, 14.4°E.
Origin time = 14 58 00.
M_L(UPP) = 2.6 (0.01) 2.
By combination with Finnish and Norwegian station readings.
Probable explosion.

" 28 UPP iP 07 13 06.7
KIR iP 07 13 01.4
micr sec
P Z' 0.2 1.5
UME iP 07 12 59.5
Myanmar (h = 35 km).

" 28 UPP iPKP1 10 22 41.2
Kermadec Islands region (h = N).

" 28 UPP iPKP1 10 38 32.3
Kermadec Island region (h = 10 km).

" 28 UPP iPKP1 13 50 52.1
Kermadec Islands, New Zealand (h = 10 km).

" 29 UPP iP 07 43 07
iSKS 07 53 30
iS 07 54 02
micr sec
Mx Z 7.2 22
KIR iP 07 42 48.8
micr sec
P Z' 0.1 1.2
Mx Z 6.2 17
UME iP 07 12 51.3
Mindanao, Philippine Islands (h = N).
M = 6.0 (UPP,KIR).

" 29 UPP iPKP2 19 51 50.1
i 19 52 00.2
KIR iPKP1 19 51 28.6
UME iPKP1 19 51 37.8
East of North Island, New Zealand (h = 55 km).

" 29 KIR iP 22 08 50.8
Northern Colombia (h = 35 km).

1992 Oct. 29
KIR iP 22 57 26.9
Northern Colombia (h = 35 km).

" 30 UPP iP 03 01 07.2 D
ipP 03 02 40.0
iPP 03 04 09
iS 03 10 24.7
micr sec
P Z' 0.8 1.2
Mx Z 4.6 20
KIR iP 03 00 34.0 D
ipP 03 02 05.6
iS 03 09 23.3
micr sec
P Z' 1.5 2.0
Mx Z 5.2 16
UME iP 03 00 48.2 D
ipP 03 02 18.9
South of Honshu, Japan.
h = 400 km (UPP,KIR,UME).
m = 6.3, M = 5.8 (UPP,KIR).
M uncorrected for focal depth.

" 30 UPP iP 05 01 26.3
Southern Greece (h = 30 km).

" 30 UPP ipP 05 42 38.8
KIR ipP 05 44 07.5
UME iP 05 43 14.2
Northwestern Balkan region (h = 25 km).

" 30 UPP iP 06 14 51.9
Southern Greece (h = 50 km).

" 30 UPP iP 10 50 26.6
iS 10 55 34
micr sec
Mx Z 2.5 11
KIR iP 10 51 28.0
micr sec
P Z' 0.2 1.3
Mx Z 2.9 14
UME iP 10 50 57.2
i 10 51 06.8
Marocco (h = 25 km).
M = 5.2 (UPP,KIR).

" 30 UPP iPKP1 15 16 00.4
KIR ePKP 15 15 42
(cont).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992
Oct. 30 (cont).
UME iPKP1 15 15 49.0 C
Kermadec Islands (h = 50 km).

" 30 KIR iP 17 06 52.6
Jawa, Indonesia (h = 70 km).

" 30 UPP iP 21 57 06.9
KIR iP 21 56 12.8
Alaska peninsula (h = 45 km).

" 31 KIR eP 05 27 52
Mindanao, Philippine Islands
(h = 50 km).

" 31 UPP i(PKP) 11 49 48.7
KIR iPKP 11 49 41.3
UME iPKP 11 49 43.3
Fiji Islands region (h = 640 km).

" 31 KIR iP 13 31 36.6
Near north coast of Colombia
(h = 10 km).

" 31 UPP iPdiff 14 48 44.5
i 14 52 53.7
iS 15 00 56
i 15 02 34
micr sec
Mx Z 23 20
KIR iPdiff 14 48 23.6
micr sec
Mx Z 15 20
Near n. coast of New Guinea
(h = 30 km).
M = 6.6 (UPP,KIR).

March 23, 1994

Atia El-Sayed
Conny Holmqvist
Ota Kulhánek

SEISMOLOGICAL DEPARTMENT
BOX 2101
S-750 02 UPPSALA
SWEDEN

SEISMOLOGICAL DEPARTMENT
BOX 2101
S-750 02 UPPSALA
SWEDEN

SEISMOLOGICAL BULLETIN

UPPSALA, KIRUNA, UMEÅ, UDDEHOLM

DELARY and MYRVIKEN

Uppsala	(UPP)	59°51.5'N,	17°37.6'E;	h = 14 m
Kiruna	(KIR)	67°50.4'N,	20°25.0'E;	h = 390 m
Umeå	(UME)	63°48.9'N,	20°14.2'E;	h = 16 m
Uddeholm	(UDD)	60°05.4'N,	13°36.4'E;	h = 240 m
Delary	(DEL)	56°28.2'N,	12°52.2'E;	h = 150 m
Myrviken	(MYV)	62°56.5'N,	14°20.8'E;	h = 345 m

NOVEMBER 1 - 30, 1992

1992 Nov.	1	KIR	iPKP	01 31 46.0
		Vanuatu Islands (h = 60 km).		
"	1	UPP	iPKP2	07 56 06.7
		KIR	ePKP1	07 55 36
		UME	ePKP1	07 55 46
		East of North Island, N.Z. (h = 30 km).		
"	1	KIR	ePKP	09 55 13
		UME	ePKP	09 55 10
		Chile - Argentina border region (h = 110 km).		
"	1	KIR	iPKP	10 22 20.4
		South Sandwich Islands region (h = 25 km).		
"	2	UPP	iP	05 00 24.5
		KIR	iP	05 00 30.6
		Afghanistan - Tajikistan border region (h = 130 km).		
"	2	KIR	iP	18 07 19.5
		UME	iP	18 07 40.6
		Hokkaido, Japan region (h = 220 km).		
"	2	UPP	ePKP	20 56 04
			iPKP2	20 56 13.2
		UME	ePKP	20 55 58
		Kermadec Islands region (h = 10 km).		

1992 Nov.	3	UPP	iSg1	00 15 26.0
		KIR	iPg1	00 13 32.9
			i	00 14 03.1
			iSg1	00 14 15.0
		UME	iPg1	00 13 06.5
			i	00 13 08.0
			iSg1	00 13 20.4
		UDD	iSg1	00 15 41.6
		MYV	iPn	00 13 39.2
			iPg1	00 13 44.0
			iSn	00 14 17.0
			iSg1	00 14 26.2
		Västerbotten, Sweden, 65.0°N, 20.3°E. Origin time = 00 12 46. M_L(UPP) = 3.0 (0.29) 4. Felt with maximum intensity I_0=IV. By combination with Finnish station readings.		
"	3	UPP	Mx	12 20 micr sec
			Mx Z	6.0 23
		KIR	Mx	12 29 micr sec
			Mx Z	3.1 25
		Pacific - Antarctic Ridge (h = 10 km). M = 6.2 (UPP,KIR).		
"	4	UPP		micr sec
			Mx Z	9.6 22

(cont).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992
Nov. 4 (cont).

KIR	iPKP2		02 20 05.9	
			micr	sec
	Mx	Z	4.3	16

Balleny Islands region (h = 10 km).
M = 6.4 (UPP,KIR).

" 4

UPP	iPKP		18 32 25.7	
			micr	sec
	Mx	Z	11	26
KIR	iPKP		18 32 09.4	
			micr	sec
	Mx	Z	4.3	19
UME	iPKP		18 32 13.6	

Vanuatu Islands (h = 15 km).
M = 6.2 (UPP,KIR).

" 4

UPP	Mx		22 42	
			micr	sec
	Mx	Z	4.5	17
KIR	Mx		22 53	
			micr	sec
	Mx	Z	1.3	19

Near coast of central Chile
(h = 20 km).
M = 5.8 (UPP,KIR).

" 5

UPP	ipP		15 47 49.1
KIR	iP		15 48 20.2

Northwestern Caucasus (h = 40 km).

" 5

KIR	iP		18 49 12.9
UME	eP		18 48 39

Egypt (h = 25 km).

" 5

UPP			micr	sec
	Mx	Z	5.6	18
KIR	iPKP		20 11 54.5	
			micr	sec
	Mx	Z	2.4	17

New Britain region (h = 20 km).
M = 6.0 (UPP,KIR).

" 6

UPP	iP		07 29 16.4
	i		07 29 20.4
KIR	iP		07 29 18.4
UME	iP		07 29 10.4

Kyrgyzstan (h = 40 km).

1992
Nov. 6

UPP	iP		19 13 08.6	
	i		19 13 17.6	
	iS		19 17 14.5	
			micr	sec
	i	Z'	0.2	1.1
	Mx	Z	46	11
KIR	iP		19 14 18.3	
	i		19 14 25.0	
			micr	sec
	P	Z'	0.1	1.0
	i	Z'	0.4	1.0
	Mx	Z	16	12
UME	iP		19 13 43.8	

Aegean Sea (h = 15 km).
m = 5.9, M = 6.0 (UPP,KIR).

" 8

UPP	Mx		04 59	
			micr	sec
	Mx	Z	17	23
KIR	Mx		04 57	
			micr	sec
	Mx	Z	6.0	19

Fiji Islands region (h = 10 km).
M = 6.4 (UPP,KIR).

" 8

UPP	iP		18 30 43.8
KIR	iP		18 30 06.3
UME	iP		18 30 22.5

Off east coast of Honshu, Japan
(h = 50 km).

" 8

UPP	iPn		19 14 19.9
	iSn		19 15 38.5
	iSg1		19 16 23.0
KIR	iPn		19 14 47.4
	iSn		19 16 29.1
	i		19 16 54.6
UME	iPn		19 14 29.7
	iSn		19 15 55.9
UDD	iPn		19 13 53.0
	iSn		19 14 48.4
	iSg1		19 15 21.2
DEL	iPn		19 14 27.8
	iSn		19 15 44.6
MYV	iPn		19 13 52.0
	iSn		19 14 55.0

Norwegian Sea, 61.8°N, 3.1°E.
Origin time = 19 12 35.
M_L(UPP) = 3.8 (0.12) 3.
By combination with Finnish and
Norwegian station readings.

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992 Nov. 8
UME iP 20 57 29.4
Tajikistan (h = 60 km).

" 9
UME iSg1 17 56 36.7
UDD iSg1 17 54 46.0
MYV iSg1 17 55 09.2
Southwestern Norway, 60.4°N, 5.1°E.
Origin time = 17 52 33.
M_L(UPP) = 2.4 1.
Felt.
By combination with Norwegian station readings.

" 10
UPP iP 01 20 41.4
i 01 20 55.0
KIR iP 01 22 04.5
UME iP 01 21 22.9
Rumania (h = 150 km).

" 10
UPP iP 10 09 08.6
KIR iP 10 08 15.9
UME iP 10 08 42.2
Andreanof Islands. Aleutian Islands (h = N).

" 10
MYV iPn 20 26 26.8
iSn 20 27 14.0
Norwegian Sea, 66.3°N, 7.0°E.
Origin time = 20 25 17.
By combination with Finnish and Norwegian station readings.

" 10
UPP iP 21 19 17.7
micr sec
Mx Z 5.4 22
KIR iP 21 18 23.0
UME iP 21 18 48.6
Near east coast of Kamchatka (h = 55 km).

" 10
UPP iP 22 19 40.4
KIR iP 22 20 55.5
Greece (h = 60 km).

" 10
KIR iP 23 11 00.2
UME iP 23 11 14.6
Volkano Islands region (h = 20 km).

" 11
UPP iP 01 49 28.7

1992 Nov. 11
UPP iPKP1 12 28 01.8
KIR iPKP 12 27 37.4
Kermadec Island, New Zealand (h = 270 km).

" 11
UPP iP 14 09 44.5
i 14 09 57.7
KIR iP 14 11 06.6
Rumania (h = 140 km).

" 11
UPP iP 19 50 02.2
Southern Greece (h = 10 km).

" 11
UPP iP 21 37 13.4 C
iS 21 46 10
micr sec
P Z' 0.6 1.1
Mx Z 5.7 17
KIR iP 21 36 19.8
micr sec
P Z' 0.2 1.1
Mx Z 7.2 19
UME iP 21 36 45.9
ipP 21 36 55.2
Andreanof Islands, Aleutian Islands (h = N).
m = 6.3, M = 5.8 (UPP,KIR).

" 12
KIR eP 13 54 20
Andreanof Islands. Aleutian Islands (h = 230 km).

" 12
UPP Mx 16 13
micr sec
Mx Z 7.2 21
KIR Mx 16 13
micr sec
Mx Z 4.7 20
South Atlantic Ocean (h = 10 km).
M = 6.2 (UPP,KIR).

" 12
UPP iP 20 48 29.6 C
iS 20 57 04
micr sec
P Z' 1.8 1.0
KIR iP 20 48 38.8
micr sec
P Z' 2.0 1.2
Hindu Kush region, Afghanistan (h = 200 km).
m = 6.6 (UPP,KIR).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992
Nov. 12 UPP iPKP 22 47 38.6
micr sec
P Z' 0.2 0.9
KIR iPKP 22 47 20.6
iSKP1 22 50 24.3
South of Fiji Islands (h = 360 km).

" 13 UME iSg1 22 01 13.6
Västerbotten, Sweden,
64.9°N, 20.7°E.
Origin time = 20 01 33.
By combination with Finnish station readings.

" 14 UPP iPKP 08 38 00.0
South of Fiji Islands (h = 550 km).

" 15 KIR iP 14 41 18.4
Central Mediterrenean Sea
(h = 100 km).

" 15 KIR iPg1 18 39 28.9
iSg1 18 39 57.1
Northern Norway, 67.7°N, 15.0°E.
Origin time = 18 38 54.
M_L (UPP) = 2.6 1.
Solution from Norwegian station readings.

" 15 KIR iPg1 18 45 21.6
iSg1 18 45 48.9
Northern Norway, 67.7°N, 14.7°E.
Origin time = 18 44 47.
M_L(UPP) = 2.5 1.
Solution from Norwegian station readings.

" 15 KIR iPg1 18 59 15.9
iSg1 18 59 44.1
Northern Norway, 67.7°N, 14.8°E.
Origin time = 18 52 42.
M_L(UPP) = 2.5 1.
Solution from Norwegian station readings.

" 15 KIR iPKP 23 15 40.0
Vanuatu Islands. (h = 150 km).

" 16 KIR iPg1 01 30 54.5
iSg1 01 31 22.9
(cont).

1992
Nov. 16 (cont).
MYV iSg1 01 32 47.4
Northern Norway, 67.7°N, 14.9°E.
Origin time = 01 30 21.
M_L(UPP) = 2.9 1.
By combination with Norwegian station readings.

" 16 UPP iP 08 06 43.5
Bonin Islands region (h = N).

" 17 UPP iP 02 46 09.1
i 02 46 36.2
KIR iP 02 46 51.0
Afghanistan (h = 35 km).

" 17 KIR iPKP 04 42 58.0
Near coast of Central Chile
(h = 55 km).

" 17 KIR iP 07 00 34.9
Banda Sea (h = N).

" 17 KIR iSg1 13 03 25.8
Northern Norway, 67.9°N, 15.5°E.
Origin time = 13 02 20.
By combination with Norwegian station readings.

" 17 UPP iP 20 42 17.2
KIR iP 20 41 45.4
UME iP 20 41 59.0
Bonin Islands region (h = 530 km).

" 17 KIR eP 21 53 32
UME iP 21 53 42.4
Ryukyu Islands (h = 110 km).

" 17 UPP iP 23 33 00.8
KIR eP 23 32 07
Andreanof Islands, Aleutian Islands.
(h = N).

" 18 UME iP 06 19 57.7
Off coast of Oregon (h = 10 km).

" 18 KIR iPg1 09 45 24.6
iSg1 09 45 52.5

(cont).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992 Nov. 18 (cont).
Northern Norway, 69.0°N, 13.4°E.
Origin time = 10 18 32.
M_L(UPP) = 2.7 1.
By combination with Norwegian station readings.

" 18 UPP iP 21 15 32.9
iS 21 19 30
micr sec
P Z' 1.6 1.4
Mx Z 44 10
KIR iP 21 16 47.1
micr sec
P Z' 0.9 1.4
Mx Z 25 9
UME iP 21 16 11.2
Greece (h = 15 km).
m = 6.4, M = 6.1 (UPP,KIR).

" 18 KIR iP 21 39 32.0
Jawa, Indonesia (h = 50 km).

" 19 UPP iP 01 01 02.4
KIR iP 01 00 28.3
Kyushu Japan (h = 35 km).

" 19 UPP iP 01 04 45.7
KIR iP 01 04 12.5
UME iP 01 04 25.0
Kyushu Japan (h = 35 km).

" 20 UPP iPKP 05 01 16.7
South of Fiji Islands (h = 560 km).

" 20 KIR iP 22 01 37.2
UME eP 22 01 57
Hokkaido, Japan region (h = 230 km).

" 20 UPP iP 23 17 33.8
KIR iP 23 16 44.8
UME iP 23 17 07.9
Sakhalin Islands. (h = 35 km).

" 21 UPP iP 03 17 42.3
KIR iP 03 17 39.5
Jawa, Indonesia (h = 50 km).

1992 Nov. 21 UPP iP 05 12 33.1 C
iS 05 16 49.0
micr sec
P Z' 1.3 0.6
Mx Z 17 18
KIR iP 05 13 43.6
micr sec
P Z' 3.6 1.2
Mx Z 3.6 9
UME iP 05 13 08.1
Central Mediterrenean Sea
(h = 70 km).
m = 6.8, M = 5.4 (UPP,KIR).
M uncorrected for focal depth.

" 21 UPP iP 08 32 39.2
UME iP 08 32 09.4
Fox Islands, Aleutian Islands.
(h = N).

" 21 UPP iP 09 08 06.7
KIR iP 09 07 13.9
micr sec
P Z' 0.1 0.8
UME iP 09 07 40.9
Fox Islands, Aleutian Islands
(h = N).

" 21 UPP iP 12 59 13.7
iS 13 01 54.0
KIR iP 13 00 36.4
UME iP 12 59 54.5
Romania (h = 140 km).

" 21 UPP iP 22 58 22.4
micr sec
Mx Z 10 19
KIR iP 22 58 37.6
micr sec
P Z' 0.6 1.5
Mx Z 10 21
UME eP 22 58 31
South Sandwich Islands region
(h = 20 km).
M = 6.4 (UPP,KIR).

" 21 KIR iPKP 23 30 54.3
South Sandwich Islands region
(h = N).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992
Nov. 22 KIR iPKP 00 46 54.9
South Sandwich Islands region
(h = N).

" 22 KIR iPKP 02 34 56.4
South Sandwich Islands region
(h = N).

" 22 UPP iP 11 53 26.3
i 11 53 45.6
micr sec
P Z' 0.1 0.7
KIR iP 11 53 22.0
micr sec
P Z' 0.2 1.5
UME iP 11 53 19.6
Myanmar (h = 70 km).

" 22 KIR iP 15 58 28.5
Fox Islands, Aleutian Islands
(h = N).

" 22 KIR iP 20 19 35.1
Fox Islands, Aleutian Islands
(h = N).

" 23 KIR iP 07 18 47.3
UME iP 07 18 37.0
Afghanistan - Tajikistan bord. region
(h = 230 km).

" 23 UPP iP 23 18 40.3
micr sec
P Z' 0.2 1.2
Mx Z 5.3 10
KIR iP 23 18 44.8
micr sec
P Z' 0.2 0.9
Mx Z 4.9 9
UME iP 23 18 40.3
Tajikistan (h = 40 km).
M = 5.6 (UPP,KIR).

" 24 UPP iP 01 04 42.8
micr sec
P Z' 0.1 0.8
Mx Z 3.6 19
KIR iP 01 03 49.3
micr sec
Mx Z 1.4 17
(cont).

1992
Nov. 24 (cont).
UME eP 01 04 11
Rat Islands, Aleutian Islands (h = N).
M = 5.3 (UPP,KIR).

" 24 UPP eP 23 56 15
KIR iP 23 56 04.3
UME iP 23 56 04.6
Minahassa Peninsula, Sulawesi
(h = 200 km).

" 25 UPP iP 06 15 32.5
i 06 15 50.7
micr sec
P Z' 0.2 1.2
KIR iP 06 15 22.5
micr sec
P Z' 0.8 0.9
UME iP 06 15 20.0
Southern Sumatera (h = 60 km).

" 25 UPP ipP 10 17 14.3
KIR iP 10 16 49.7
UME iP 10 16 55.6
Halmahera, Indonesia (h = 30 km).

" 25 UPP iP 10 30 05.9
i 10 30 11.9
KIR iP 10 29 48.3
micr sec
P Z' 0.2 1.2
UME iP 10 29 54.2
Halmahera, Indonesia (h = 25 km).

" 25 UPP eP 23 36 46
Andreanof Islands, Aleutian Islands
(h = N).

" 26 KIR iPg1 11 19 54.3
i 11 19 55.5
iSg1 11 20 19.7
UME iSg1 11 22 24.4
Northern Norway, 69.6°N, 22.5°E.
Origin time = 11 19 21.
M_L(UPP) = 3.0 1.
By combination with Finnish station
readings.

" 26 UPP iP 12 53 36.7
Xizang (h = N).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992 Nov. 27
UPP iP 02 04 57.8
KIR iP 02 04 02.5
Near east coast of Kamchatka
(h = 30 km).

" 27
UPP iPKP2 04 59 31.3
KIR iPKP 04 59 01.6
UME iPKP1 04 59 10.3
iPKP2 04 59 15.0
East of North Island New Zealand
(h = 60 km).

" 27
UPP iP 14 04 30.4
KIR iP 14 04 16.3
ipP 14 04 20.8
UME iP 14 04 11.0
Halmahera, Indonesia (h = 20 km).

" 27
KIR iP 16 12 29.5
Southern California (h = 2 km).

" 27
UPP iP 16 17 34.0
KIR iP 16 17 17.8
UME iP 16 17 20.0
Southern Xinjiang - China
(h = 15 km).

" 27
UPP iP 20 13 47.4
KIR iP 20 13 27.4
UME eP 20 13 28
Ryukyu Islands (h = N).

" 27
UPP iP 21 16 07.8
micr sec
Mx Z 2.7 12
KIR iP 21 16 34.0
micr sec
Mx Z 1.4 10
UME iP 21 16 11.6
Turkmenistan - Iran border region
(h = 25 km).
M = 5.1 (UPP,KIR).

" 28
UPP iP 00 58 13.7
KIR iP 00 57 35.0
UME iP 00 57 51.4
East Honshu, Japan (h = 60 km).

" 28
UPP ePn 02 04 32
UME iS 02 07 41.7
(cont).

1992 Nov. 28
(cont).
UDD iP 02 04 43.6
DEL iPn 02 03 57.6
Poland (h = 10 km).

" 28
UPP eSg1 02 54 26
UDD iSg1 02 54 33.6
DEL iPg1 02 52 24.0
iSg1 02 52 45.1
Southwestern Baltic Sea,
54.9°N, 14.4°E.
Origin time = 02 51 55.
M_L(UPP) = 2.2 1.
By combination with Danish station readings.

" 28
UPP iP 03 32 27.9
micr sec
Mx Z 16 22
KIR iP 03 32 23.9
micr sec
Mx Z 7.6 19
UME iP 03 32 21.4
Near coast of Central Chile
(h = 10 km).
M = 6.4 (UPP,KIR).

" 28
KIR iP 17 58 56.5
Halmahera, Indonesia (h = 35 km).

" 29
UPP iPKP2 03 23 59.1
UME iPKP 03 23 40.4
Kermadec Islands, New Zealand
(h = 10 km).

" 29
UPP iP 04 31 50.3
KIR iP 04 31 34.0
UME eP 04 31 39
Mindanao, Philippine Islands
(h = 70 km).

" 29
UPP iP 11 13 11.6
KIR iP 11 12 23.4
UME iP 11 12 46.0
Kuril Islands (h = 45 km).

" 29
UPP iP 17 49 29.4
KIR eP 17 49 13
Qinghai, China (h = N).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992						
Nov.	30	UPP	iP		00 31	42.0
		KIR	iP		00 30	58.1
		Hokkaido, Japan region (h = 70 km).				
"	30	UPP	iP		09 40	20.9
			ipP		09 40	28.1
			iS		09 46	44
					micr	sec
			P	Z'	0.6	1.7
			P	Z'	0.9	1.6
		KIR	iP		09 40	47.8
					micr	sec
			P	Z'	0.8	1.5
			Mx	Z	2.5	15
		UME	iP		09 40	38.9
			ipP		09 40	45.8
		Azores Island region (h = 20 km).				
		m = 6.2 (UPP,KIR).				

April 21, 1994

Conny Holmqvist
Ota Kulhánek
Xin Pi

SEISMOLOGICAL DEPARTMENT
BOX 2101
S-750 02 UPPSALA
SWEDEN

SEISMOLOGICAL DEPARTMENT
BOX 2101
S-750 02 UPPSALA
SWEDEN

SEISMOLOGICAL BULLETIN

UPPSALA, KIRUNA, UMEÅ, UDDEHOLM

DELARY and MYRVIKEN

Uppsala	(UPP)	59°51.5'N,	17°37.6'E; h = 14 m
Kiruna	(KIR)	67°50.4'N,	20°25.0'E; h = 390 m
Umeå	(UME)	63°48.9'N,	20°14.2'E; h = 16 m
Uddeholm	(UDD)	60°05.4'N,	13°36.4'E; h = 240 m
Delary	(DEL)	56°28.2'N,	12°52.2'E; h = 150 m
Myrviken	(MYV)	62°56.5'N,	14°20.8'E; h = 345 m

DECEMBER 1 - 31, 1992

1992 Dec. 1
UPP ePKP 00 42 44
iSKP 00 46 11.6
KIR iPKP 00 42 27.1
micr sec
P Z' 0.1 1.2
UME iPKP 00 42 35.5
iSKP 00 45 59.4
Vanuatu Islands (h = 30 km).

" 1
UPP iP 23 02 23.7
ipP 23 02 32.0
KIR eP 23 03 34
Southern Greece. (h = N).

" 2
UPP iP 18 13 31.7
KIR iP 18 12 35.0
UME iP 18 13 04.4
Southern Alaska. (h = 70 km).

" 3
KIR iP 14 17 26.7
Kuril Islands (h = N).

" 4
UPP iP 11 44 05.1
ipP 11 44 32.0
iS 11 52 38
micr sec
pP Z' 0.4 0.7
Mx Z 2.9 10
KIR iP 11 44 10.7
ipP 11 44 38.2
micr sec
P Z' 0.9 0.8
(cont).

1992 Dec. 4
(cont).
UME iP 11 44 01.8
Tajikistan.
h = 120 km (UPP,KIR).
m = 6.5 (UPP,KIR).

" 4
UME iP 19 16 11.6
Northwestern Balkan Region
(h = 10 km).

" 6
UPP eP 01 53 40
KIR eP 01 54 13
UME eP 01 53 53
Carlsberg Ridge (h = 10 km).

" 6
UPP iP 03 51 57.9 D
micr sec
P Z' 0.2 0.8
KIR iP 03 52 04.1
micr sec
P Z' 0.4 0.8
UME iP 03 51 55.2
Tajikistan (h = 130 km).
m = 6.2 (UPP,KIR).

" 6
UPP iP 22 36 15.8
Southern Sumatera, Indonesia
(h = 100 km).

" 7
UPP iP 02 22 40.8
iS 02 31 36

(cont).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992
Dec. 7 (cont).

			micr	sec
	Mx	Z	9.1	17
KIR	iP		02 21	55.3
			micr	sec
	Mx	Z	9.9	17
UME	iP		02 22	14.6

Kuril Islands (h = 45 km).
M = 6.0 (UPP,KIR).

" 8 UME iP 04 21 34.5
Talaud Islands, Indonesia
(h = 100 km).

" 8

UPP	iP	05 33	32.1
KIR	eP	05 32	34

Kuril Islands (h = 35 km).

" 8

UPP	iP		07 20	13.8 D
	i		07 29	40.6
	i		07 30	13.5
			micr	sec
	P	Z'	0.7	1.1
KIR	iP		07 20	15.6 D
	ipP		07 20	33.6
			micr	sec
	P	Z'	0.8	1.0
UME	iP		07 20	10.2

Nicobar Islands. India (h = 70 km).
m = 6.6 (UPP,KIR).

" 8

UPP	iPKP		16 13	32.5
			micr	sec
	P	Z'	0.1	0.8

South of Tonga Islands (h = 90 km).

" 9

UPP	iP	02 49 10.7
KIR	eP	02 48 41
UME	eP	02 48 53

Ryukyu Islands (h = 35 km).

" 9

UPP	iP	05 24 00.7
KIR	eP	05 23 16
UME	iP	05 23 37.3

Off east coast of Honshu, Japan
(h = 30 km).

" 9 UME iP 07 24 28.2
Near east coast of Honshu, Japan
(h = 45 km).

1992
Dec. 9

UPP	iP	20 35	21.8
KIR	iP	20 36	06.4
UME	iP	20 35	39.0

Eastern Caucasus (h = 15 km).

" 9 UPP iP 23 47 07.2
Romania (h = 140 km).

" 12

UPP	iP	05 13	51.3
UME	iP	05 13	26.2

Off east coast of Honshu, Japan
(h = 20 km).

" 12

UPP	iPdiff		05 43	34.8
	i		05 47	30.8
	iPP		05 47	55.2
			micr	sec
	Mx	Z	163	20
KIR	iP		05 43	23.9
	i		05 47	07.3
			micr	sec
	Mx	Z	179	19
UME	iP		05 43	22.8
	iPP		05 47	23.8

Flores Islands region, Indonesia
(h = 30 km).
M = 7.5 (UPP,KIR).

" 12

UPP	iP	14 31	02.2
	ipP	14 31	13.6
KIR	iP	14 30	58.0
UME	iP	14 30	55.5

India - Bangladesh border region
(h = 40 km).

" 13 UPP iP 12 40 47.8
Rat Islands, Aleutian Islands
(h = 80 km).

" 14

UPP	iP	03 02 49.5
KIR	iP	03 01 55.7
UME	iP	03 02 21.5

Rat Islands, Aleutian Islands
(h = 130 km).

" 14

UPP	iPKP	07 59	01.4
	iSKP1	08 01	28.4
KIR	iPKP	07 58	45.6
		micr	sec
	P	Z' 0.2	1.0

(cont).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992 Dec. 14 (cont).

UME	iPKP	07 58 53.1	
Vanuatu Islands region (h = 620 km).			
" 14 UPP	iP	09 02 26.2	
" 14 UME	iSn	15 06 57.8	
	eSg1	15 07 20	
UDD	iSn	15 07 18.1	
MYV	iPn	15 05 35.0	
	iSn	15 06 19.0	
	i	15 06 22.0	
Norwegian Sea, 66.1°N, 7.8°E.			
Origin time = 15 04 29.			
M_L(UPP) = 3.0 1.			
By combination with Finnish and Norwegian station readings.			
" 14 UPP	iPKP1	19 32 29.0	
	iPKP2	19 32 38.2	
KIR	iPKP	19 32 08.7	
UME	iPKP	19 32 17.5	
South of Kermadec Islands (h = 250 km).			
" 15 UPP	iPKP	04 10 08.2	
	i	04 10 21.5	
Kermadec Islands, New Zealand (h = N).			
" 15 UPP	iP	04 34 12.2	
Arabian sea (h = 10 km).			
" 15 KIR	eP	07 37 39	
UME	iP	07 37 46.8	
Mindanao, Philippine Islands (h = 20 km).			
" 15 UPP	iP	10 29 22.5	
KIR	iP	10 30 44.1	
UME	iP	10 30 02.6	
Romania (h = 150 km).			
" 15 KIR	iP	12 58 53.4	
		micr sec	
	P Z'	0.1 1.3	
Mindanao, Philippine Islands (h = 35 km).			

1992 Dec. 17

UPP	iP	10 47 45.3	C
	ipP	10 47 54.6	
		micr sec	
	P Z'	0.3 0.9	
KIR	iP	10 48 11.6	C
		micr sec	
	P Z'	0.4 0.8	
UME	iP	10 47 53.2	
Southern Iran (h = N).			
m = 6.4 (UPP,KIR).			
" 17 UPP	iP	17 50 38.7	
		micr sec	
	P Z'	0.2 1.1	
KIR		micr sec	
	Mx Z	66 10	
UME	iP	17 50 37.7	
Afghanistan - Tajikistan border region (h = 35 km).			
" 18 UME	ePKP	03 32 33	
Eastern New Guinea region (h = 30 km).			
" 18 UME	iP	10 02 20.0	
" 18 UPP	iP	11 32 13.8	
Yunnan, China (h = 30 km).			
" 19 UPP	eP	09 37 31	
Northwestern Balkan region (h = 25 km).			
" 19 UPP	iP	12 24 52.0	D
		micr sec	
	P Z'	0.1 0.7	
KIR	iP	12 23 59.8	
		micr sec	
	P Z'	0.5 0.9	
UME	iP	12 24 23.4	
Near east coast of Kamchatka (h = 55 km).			
m = 6.3 (UPP,KIR).			
" 19 UPP	iP	22 10 42.2	
Minahassa Peninsula, Sulawesi (h = 130 km).			

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992
Dec. 20 UPP iP 05 30 00.5
micr sec
P Z' 0.1 1.1
KIR eP 05 29 11
Kuril Islands (h = 35 km).

" 20 UPP eP 11 55 06
Afghanistan - Tajikistan border region
(h = 45 km).

" 20 UPP iPKP 16 57 21.3 C
micr sec
P Z' 0.3 0.7
KIR iPKP 16 57 10.1
UME iPKP 16 57 09.1
South of Fiji Islands (h = 500 km).

" 20 UPP iP 18 01 52.4
Southern Greece (h = 40 km).

" 20 UPP eP 19 47 07
KIR eP 19 46 44
Qinghai, China (h = 20 km).

" 20 UPP iPdiff 21 06 54.3
i 21 06 59.9
ipP 21 07 14.4
micr sec
Mx Z 68 22
KIR iPdiff 21 06 39.1
ipP 21 06 58.6
micr sec
Mx Z 43 20
UME iPdiff 21 06 43.5
ipP 21 07 02.6
Banda Sea.
h = 70 km (UPP,KIR,UME).
M = 7.0 (UPP,KIR).
M uncorrected for focal depth.

" 20 UPP iP 21 22 26.1

" 21 UPP iP 06 24 23.0
KIR eP 06 23 31
Rat Islands, Aleutian Islands
(h = 100 km).

" 21 UPP iPKP1 11 14 30.0
iPKP2 11 14 34.2

(cont).

1992
Dec. 21 (cont).
UME iPKP 11 14 18.6
Kermadec Islands, New Zealand
(h = 10 km).

" 21 UME iP 18 53 54.7
Kuril Islands (h = 80 km).

" 22 UME iP 00 29 32.8
Myanmar - India border region
(h = N).

" 22 KIR iP 05 08 10.7
UME iP 05 08 15.6
Banda Sea (h = 70 km).

" 22 KIR eP 12 42 20
Southern Xinjiang, China (h = N).

" 22 KIR iP 16 51 30.9
UME iP 16 51 28.9
Xizang (h = N).

" 23 KIR iP 00 43 14.3
UME iP 00 43 31.9
ipP 00 43 41.8
Off east coast of Honshu, Japan
(h = 30 km).

" 23 KIR iP 03 14 34.5
micr sec
P Z' 0.1 1.0
UME iP 03 14 38.8
Banda Sea (h = 100 km).

" 23 KIR eP 07 31 12
UME iP 07 31 17.1
Costa Rica (h = 160 km).

" 24 UPP iPKP 00 53 29.5
i 00 53 42.5
KIR iPKP 00 53 17.0
Tonga Islands (h = 25 km).

" 24 UPP iP 05 16 56.9
KIR eP 05 16 59
UME iP 05 16 51.1
Kyrgyzstan (h = 40 km).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992 Dec. 24
UPP iP 17 17 13.8
KIR eP 17 17 09.6
Kashmir - Xizang border region
(h = N).

" 26
UPP eP 00 52 34
KIR eP 00 53 44
Central Mediterranean Sea
(h = 40 km).

" 26
UPP iSg1 05 27 24.5
UME iSn 05 27 18.3
iSg1 05 28 19.2
UDD iSn 05 26 01.7
iSg1 05 26 29.3
Norwegian Sea, 59.3°N, 1.4°E.
Origin time = 05 23 10.
M_L(UPP) = 3.4 (0.06) 2.
By combination with Finnish and
Norwegian station readings.

" 26
UPP eP 06 20 42
New Britain region (h = 40 km).

" 26
UPP iP 11 52 28.0
i 11 52 31.2
KIR iP 11 52 35.8
UME iP 11 52 24.2
Afghanistan - Tajikistan border region
(h = 90 km).

" 26
UPP iPKP1 19 34 17.3 C
KIR ePKP 19 34 00
UME iPKP1 19 34 06.5
South of Kermadec Islands
(h = 10 km).

" 26
UPP iPKP1 19 47 57.7
UME iPKP1 19 47 47.0
South of Kermadec Islands
(h = 10 km).

" 26
UPP iPKP1 19 58 00.2
KIR ePKP1 19 57 48
UME iPKP1 19 57 49.6
South of Kermadec Islands
(h = 10 km).

" 26
UPP iP 20 03 23.4

(cont).

1992 Dec. 26
(cont).
KIR iP 20 03 57.0
micr sec
Mx Z 22 14
UME iP 20 03 47.7
Central Mid-Atlantic Ridge
(h = 25 km).

" 26
UPP iP 22 22 35.1
KIR iP 22 21 57.7
UME iP 22 22 16.4
Off coast of Oregon (h = 10 km).

" 27
UPP iP 16 32 36.0
iS 16 41 54
micr sec
Mx Z 7.9 17
KIR iP 16 31 55.6
micr sec
Mx Z 12 16
UME iP 16 32 14.5
Near east coast of Honshu, Japan
(h = 30 km).
M = 6.1 (UPP,KIR).

" 27
UPP iP 16 43 19.5
South of Fiji Islands (h = 10 km).

" 27
UPP iP 22 01 37.1
micr sec
P Z' 0.1 1.1
KIR iP 22 01 30.6
micr sec
P Z' 0.2 1.2
UME iP 22 01 31.1
Jawa, Indonesia (h = 600 km).
m = 6.2 (UPP,KIR).

" 28
UPP eP 05 35 11
ipP 05 35 20.9
KIR eP 05 34 47
Taiwan (h = 35 km).

" 28
UPP iP 08 54 17.4 C
micr sec
P Z' 0.1 1.0
KIR iP 08 54 47.2
micr sec
P Z' 0.1 1.2

(cont).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992
Dec. 28 (cont).
UME iP 08 54 21.6
Pakistan (h = 45 km).
m = 5.8 (UPP,KIR).

" 28 UPP eP 13 50 20
Pakistan (h = 15 km).

" 28 KIR eP 23 30 47
Virgin Islands (h = 30 km).

" 29 UPP eP 11 46 31
KIR iP 11 47 32.4
UME iP 11 46 58.2
Cyprus region (h = 60 km).

" 29 UPP iP 14 55 22.4
Greece - Albania border region
(h = 5 km).

" 29 UME iP 20 50 12.1
San Juan Province, Argentina
(h = 130 km).

" 29 KIR ePdiff 21 31 23
Timor region, Indonesia
(h = 100 km).

" 30 UPP eP 03 19 06
Greece - Albania border region
(h = 50 km).

" 30 UPP ePKP 05 28 42
UME iPKP 05 28 36.0
Kermadec Islands region (h = 10 km).

" 30 UME iPKP 06 44 06.1
Solomon Islands (h = 50 km).

" 30 UME iP 13 10 03.4
Kuril Islands (h = 130 km).

" 30 UPP iP 16 07 07.1
KIR iP 16 06 49.7
UME iP 16 06 55.0
Mindanao, Philippine Islands
(h = 60 km).

" 30 KIR eP 18 16 46
Turkey (h = 5 km).

1992
Dec. 30 UPP eP 20 31 57
KIR eP 20 32 00
Venezuela (h = 180 km).

" 31 UPP iP 01 40 25.5
KIR iP 01 40 28.9
micr sec
P Z' 0.3 1.3
UME iP 01 40 30.8
Northern Colombia (h = 170 km).

" 31 UPP eP 04 40 17
i 04 40 49.7
KIR eP 04 37 24
UME eP 04 38 41

" 31 UPP iP 07 14 02.8
i 07 14 10.3
ipP 07 14 12.9
KIR iP 07 13 21.7
i 07 13 29.3
ipP 07 13 31.8
UME iP 07 13 40.2
i 07 13 47.9
ipP 07 13 50.1
Near east coast of Honshu, Japan
h = 35 km (UPP,KIR,UME).

" 31 UPP iP 07 37 24.4
i 07 37 34.5
ipP 07 37 35.5
micr sec
Mx Z 4.1 17
KIR iP 07 36 42.9
i 07 36 53.0
ipP 07 36 54.5
micr sec
Mx Z 3.6 15
UME iP 07 37 01.4
i 07 37 11.0
ipP 07 37 12.3
Near east coast of Honshu, Japan
h = 40 km (UPP,KIR,UME).
M = 5.7 (UPP,KIR).

" 31 UPP eP 10 40 24
Qinghai, China (h = N).

" 31 UPP eP 11 55 35
Andreaof Islands, Aleutian Islands
(h = N).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1992

Dec.	31	UPP	iPKP		20 36 52.8
			iPKP1		20 36 58.7
					micr sec
			Mx	Z	8.6 21
		KIR	iPKP		20 37 37.7
					micr sec
			Mx	Z	7.3 21
		UME	iPKP		20 36 47.1
		South of Kermadec Islands			
		(h = 15 km).			
		M = 6.4 (UPP,KIR).			
"	31	UPP	ePKP1		20 49 02
		UME	iPKP		20 48 50.3
		Kermadec Islands region (h = 10 km).			
"	31	UPP	ePKP		21 44 33
			ePKP1		21 44 38
		Kermadec Islands region (h = 10 km).			
"	31	UPP	ePKP1		21 57 39
			ePKP2		21 57 47
		UME	iPKP1		21 57 28.1
		Kermadec Islands region (h = 10 km).			
"	31	UPP	ePKP1		22 33 50
			ePKP2		22 33 54
		UME	iPKP		22 33 34.3
		Kermadec Islands region (h = 10 km).			

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