

UNIVERSITY OF HELSINKI
SEISMOLOGICAL LABORATORY



PRELIMINARY
SEISMOLOGICAL BULLETIN

1961

Address:

Siltavuorenpenger 20,
Helsinki,
Finland

Stations:

Helsinki	(He)	60°10'32"N	24°57'25"E
Nurmijärvi	(Nu)	60°30'32"N	24°39'18"E
Sodankylä	(So)	67°22'16"N	26°37'45"E

Unless otherwise stated, the locations are according to the USCGS preliminary determinations.

January

1	So	eP	01 34 21
1	He	eP	13 34 33
	Nu	iP	13 34 29
1	So	iP	14 04 10
	Philippine Islands		
1	Nu	iP	16 34 24
	So	eP	16 34 28
1	He	i	16 56 42
	Nu	iPKP	16 56 34
		i	39
		iSKP	59 18
	So	ePKP	16 56 27
		iSKP	58 57
	Fiji Islands		
1	So	iP	18 50 25
	Arctic Ocean		
1	Nu	iP	21 41 46
1	He	ePKP	22 30 43
	Nu	iPKP	22 30 42
	Kermadec Islands		
2	So	eP	02 03 49
2	So	eP	09 09 53

January

2	He	iPKP	10 30 42
		i	31 04
	Nu	iPKP	10 30 41
		i	31 02
		iSKS	37 39
	So	ePKP	10 30 31
	Santa Cruz Islands		
2	Nu	iP	10 40 24
	So	iP	10 40 45
2	Nu	eP	13 02 26
		e	50
	So	eP	13 02 08
	Philippine Islands		
2	Nu	iP	13 48 46
2	He	iP	16 31 52
	Nu	eP	16 31 49
	So	eP	16 31 07
	Kamchatka		
3	So	eP	02 40 27
	Kurile Islands		
3	Nu	iP	04 31 32
3	So	eP	08 22 48
	Mid-Atlantic Ocean		
3	So	eP	09 37 02

January

3	Nu	eP	11 54 28
		i	57 31
	So	eP	11 54 27
	Banda Sea		
3	So	eP	19 40 42
	Banda Sea		
3	Nu	iP	22 48 11
4	So	iP	02 02 04
	Celebes Sea		
4	Nu	eP	12 17 46
	So	eP	12 17 27
	Mexico		
4	So	eP	19 29 46
	Banda Sea		
5	He	eP	14 17 22
		e	21 33
	Nu	iP	14 17 19
		iPcP	48
		i	21 25
		eS	26 15
		iScS	27 14
	So	iP	14 16 34
		eP'P'	45 55
	Andreanof Islands		

January

5 He iP 15 20 23
Nu iP 15 20 20
So iP 15 19 42
Kurile Islands

5 Nu iP 16 08 05
iPKP 12 21
i 34
So iP 16 07 50
i 08 13
iPKP 12 09
ePKKP 23 39
New Guinea

5 He ePKP 18 17 06
iSKP 20 36
Nu iPKP 18 17 03
iSKP 20 32
So iPKP 18 16 53
i 56
iSKP 20 16
Loyalty Islands

5 He iPKP 18 33 53
iSKP 37 22
Nu iPKP 18 33 50
iSKP 37 19
So iPKP 18 33 40
Loyalty Islands

5 So eP 20 18 06
Mariana Islands

6 He iPKP 00 17 04
Nu iPKP 00 17 01
So ePKP 00 16 45
Kermadec Islands

6 He iP 01 31 20
Nu iP 01 31 17
i 38
i 32 00
So iP 01 30 42
Hokkaido, Japan

6 Nu iP 06 32 30
So eP 06 31 42
Andreanof Islands

6 He eP 07 16 05
Nu iP 07 16 03
iPcP 45
So eP 07 15 17
iPcP 16 20
Kamchatka

January

6 So eP 11 01 22
Mexico

6 Nu iP 23 20 42
So iP 23 19 54
Kamchatka

7 He iP 10 36 08
i 20
Nu iP 10 36 12
iS 40 30
So eP 10 37 12
iPcP 40 02
iS 42 16
Dodecanese Islands

7 Nu iSKP 11 51 28
Fiji Islands

7 So iP 13 38 56

7 He iP 15 57 56
eS 16 01 57
Nu iP 15 57 56
ePP 58 23
iS 16 02 04
So iP 15 59 02
W coast of Greece

7 He iPKP 18 35 49
i 36 07
Nu iPKP 18 35 48
i 58
i 36 06
So iPKP 18 36 01
iPKS 39 26
Sandwich Islands

7 So iP 21 48 35

8 So eP 01 28 20
Halmahera

8 So iP 03 09 27
Halmahera

8 Nu ePKP 10 19 35
iSKP 22 31
So iSKP 10 22 15
Kermadec Islands

8 So eP 21 42 40

9 So eP 03 17 55
N Atlantic Ocean

January

9 Nu iPKP 08 13 57
i 14 15
Kermadec Islands

9 Nu iP 10 06 37

9 Nu iP 11 18 27
So eP 11 18 28
Leeward Islands

9 Nu iP 19 33 31
So eP 19 33 35
i 47
Leeward Islands

9 So eP 19 36 32
Leeward Islands

9 Nu iP 22 25 14
So eP 22 24 56
Outer Mongolia

10 Nu iP 02 31 25
So eP 02 30 48

10 So eP 07 34 38

10 So iP 09 26 35
Banda Sea

10 He iP 14 32 46
iPcP 33 25
Nu iP 14 32 44
iPcP 33 23
iPP 35 01
i 36 49
eS 41 33
iScS 42 35
So iP 14 32 02
iPcP 58
eP'P' 15 01 46
Kurile Islands

10 Nu iP 14 42 42
So iP 14 42 12

10 So eP 14 58 21

11 Nu iP 12 09 13
So eP 12 08 29
Fox Islands

January				January				January					
11	He	eP	12 10 52	15	Nu	iP	20 46 30	16	So	iP	12 47 32		
	Nu	iP	12 10 48		So	iP	20 46 28		He	eP	13 20 28		
		iS	19 41		Java Sea				Nu	iP	13 20 26		
	So	iP	12 10 04		16	So	eP	04 11 25		i	36		
		eP'P'	39 26		Mexico				So	iP	13 19 55		
	Fox Islands				16	He	iP	07 31 28		i	20 06		
12	He	iP	14 23 51			iS	40 41		E coast of Honshu				
	Nu	iP	14 23 48			iPS	58	16	He	iP	14 15 14		
		iPcP	24 26		Nu	iP	07 31 27		Nu	iP	14 15 12		
	So	iP	14 23 01			iPP	34 04			iPP	17 46		
		i	30			iS	40 43			eS	24 24		
		iPcP	24 02			iPS	58			iPS	38		
	Alaska Peninsula				So	iP	07 30 55		So	iP	14 14 41		
14	Nu	iP	02 36 52			iPcP	31 27		E coast of Honshu				
		i	37 18			iPP	33 14	16	Nu	iP	14 55 22		
	So	eP	02 36 20			iS	39 45		So	iP	14 54 51		
	Aleutian Islands					iPS	40 00		Honshu, Japan				
14	Nu	iP	03 32 49			eP'P'	59 23		16	So	iP	15 46 52	
	E coast of Honshu				16	Nu	iP	08 59 25		16	He	iP	15 52 28
14	Nu	iP	11 55 45			So	iP	08 58 54			iS	16 01 41	
	E coast of Honshu					E coast of Honshu					iPS	59	
14	Nu	iP	16 29 58		16	So	iP	10 24 44		Nu	iP	15 52 26	
	So	iP	16 29 57			E coast of Honshu				iS	16 01 38		
	Colombia				16	He	iP	11 30 54			iPS	56	
14	He	iP	16 49 44			Nu	iP	11 30 53		So	iP	15 51 55	
	Nu	iP	16 49 41				i	31 11			iPP	54 23	
	So	iP	16 48 55				iPP	33 30			iS	16 00 41	
	Unimak Island						eS	40 07			iPS	59	
15	So	ePKP	01 22 33			So	iP	11 30 22		E coast of Honshu			
	South of Australia					E coast of Honshu			16	Nu	iP	16 33 08	
15	So	eP	04 17 16		16	Nu	iP	11 52 15		So	iP	16 32 38	
	S of Honshu, Japan						i	25	17	Nu	iP	00 40 43	
15	Nu	iP	12 04 23			So	iP	11 51 45		So	iP	00 40 14	
	So	eP	12 03 32				i	55		E coast of Honshu			
		i	48			E coast of Honshu			17	Nu	iP	06 52 47	
	E coast of Honshu				16	He	iP	12 23 45			i	56	
15	He	ePKP	17 03 37				iS	32 59		So	iP	06 52 16	
	Nu	ePKP	17 03 38				iPS	33 16			i	26	
		i	43			Nu	iP	12 23 42		Honshu, Japan			
		iSKP	06 58				iS	32 56		18	Nu	iP	05 15 16
		iPKS	07 13				iPS	33 16		So	iP	05 15 00	
	So	ePKP	17 03 32			So	iP	12 23 10		E coast of Honshu			
	Loyalty Islands						iPP	25 40		18	So	iP	07 23 24
15	So	eP	20 15 19				eS	31 59		E coast of Honshu			
	E coast of Honshu						iPS	32 17		E coast of Honshu			
	E coast of Honshu					Honshu, Japan							

January

18 So eP 07 38 23
E coast of Honshu

18 Nu iP 14 18 23
i 44
So iP 14 18 07

18 So eP 14 40 30

18 Nu iP 16 59 42
So eP 16 59 03
E coast of Honshu

18 Nu iP 20 04 53
So eP 20 04 04
Southern Alaska

19 Nu iP 04 40 20
i 28
So iP 04 40 18
New Hebrides

19 Nu ePKP 06 13 42
Loyalty Islands

19 Nu iP 13 14 28

19 He iP 17 32 49
iPcP 33 25
Nu iP 17 32 44
iPcP 33 23
So eP 17 32 03
Kurile Islands

19 Nu iP 21 04 46
i 05 05

19 Nu iP 23 16 09

20 So eP 00 55 43

20 He iP 01 07 29
Nu iP 01 07 26
So iP 01 06 39
Kodiak Island

20 Nu iP 01 11 55
So eP 01 11 09

20 Nu iP 01 55 02

20 Nu iP 04 26 42

January

20 Nu iP 05 33 41
Kodiak Island

20 Nu iP 09 00 36
So eP 08 59 47
Southern Alaska

20 Nu iP 13 43 40
So iP 13 42 52
Kodiak Island

20 He iP 17 19 46
Nu iP 17 19 43
So iP 17 18 56
Sea of Okhotsk

20 He iP 17 23 40
Nu iP 17 23 37
So iP 17 22 49

20 Nu eP 19 53 51
So eP 19 53 07

20 Nu iP 20 36 50
So iP 20 36 03

20 Nu iP 21 09 02
So eP 21 08 46

20 He eP 21 41 38
Nu iP 21 41 33
So iP 21 40 46
Kodiak Island

20 Nu iP 21 47 55
i 48 05
So iP 21 47 03
Kodiak Island

20 Nu iP 21 57 38
i 48
So iP 21 57 17

20 Nu iP 22 22 38

20 He eP 22 45 56
i 46 08
Nu iP 22 45 54
i 46 06
So iP 22 45 23
i 35
E coast of Honshu

January

21 Nu eP 05 32 07
iS 33 52
So eP 05 31 16
eS 32 27

21 Nu iP 06 30 23

21 Nu iP 13 29 52
So iP 13 29 06
Kodiak Island

21 So iP 17 53 43
Honshu, Japan

22 He ePKP 03 43 07
Nu iP 03 43 01
So ePKP 03 42 52
i 43 13
Santa Cruz Islands

22 So eP 03 53 10

22 Nu iP 06 35 29
Santa Cruz Islands

22 Nu iP 13 07 12

22 He iP 16 29 11
Nu iP 16 29 10
i 20
Kermadec Islands

22 Nu iP 19 23 51
Santa Cruz Islands

22 He iP 19 35 14
Nu iP 19 35 13
So iP 19 35 02
Philippine Islands

23 So eP 03 22 15

23 He iP 04 59 09
Nu iP 04 59 06
So iP 04 58 32
Hokkaido, Japan

24 He iP 07 43 51
Nu iP 07 43 50
i 44 29
So iP 07 43 38
New Hebrides

January

24 Nu iP 17 18 52
 25 He iP 01 06 56
 Nu iP 01 06 52
 So iP 01 06 56
 W coast of Sumatra
 25 Nu iPKP 05 40 27
 New Hebrides
 25 So eP 17 33 33
 Celebes
 25 He eP 19 14 46
 iPcP 15 23
 Nu iP 19 14 44
 iPcP 15 21
 So eP 19 14 01
 Kurile Islands
 25 He eP 19 27 01
 Nu iP 19 27 00
 i 14
 26 So eP 01 57 52
 i 58 02
 Southern Sumatra
 26 Nu iPKP 13 31 32
 Loyalty Islands
 26 Nu iPKP 16 32 34
 iSKP 36 09
 Loyalty Islands

January

26 Nu iP 17 18 56
 26 He i 19 08 05
 Nu iPKP 19 07 56
 i 08 06
 iSKP 11 28
 So ePKP 19 07 54
 Loyalty Islands
 27 Nu eP 20 17 39
 So eP 20 17 02
 Kurile Islands
 28 Nu iP 07 22 58
 So iP 07 24 04
 Northern Creece
 28 Nu iP 11 15 40
 28 Nu iP 11 27 41
 So iP 11 27 47
 28 So iP 12 58 09
 28 He iPKP 14 25 54
 Nu iPKP 14 25 54
 So ePKP 14 25 50
 S Pacific Ocean
 29 Nu iP 18 44 29
 29 He iP 22 42 59
 Nu iP 22 42 55

January

30 Nu iP 00 27 36
 30 Nu iP 12 22 10
 So eP 12 21 15
 Central Alaska
 31 He iP 00 59 12
 Nu iP 00 59 10
 eS 01 07 50
 So iP 00 58 22
 iS 01 06 18
 Kodiak Island
 31 He eP 18 43 13
 iPcP 40
 Nu iP 18 43 09
 iPcP 38
 So eP 18 42 21
 iPcP 43 09
 Andreanof Islands

March 7, 1961

M. T. Porkka

Aili Huovila

February

1 Nu iP 00 46 57
 So iP 00 46 14
 Vancouver Island
 1 Nu iP 04 52 03
 i 13
 1 Nu iP 05 06 54
 So eP 05 06 33
 Mariana Islands

February

1 Nu eP 18 50 07
 So eP 18 49 36
 N coast of Honshu
 2 Nu iP 00 54 51
 So eP 00 54 32
 i 51
 Philippine Islands
 2 Nu iP 11 26 30
 So eP 11 26 09
 Mariana Islands

February

2 Nu iP 13 17 05
 3 Nu iP 02 36 34
 So iP 02 36 03
 3 Nu iP 02 37 56
 So iP 02 38 00
 3 Nu iPKP 12 52 42
 So iPKP 12 52 27
 North Island



Note.

The seismograph station of Helsinki discontinued operation on February 18, 1961, on account of building repairs. The station is to be moved to another part of the city.

The data from the Kajaani station are included in the Bulletin.
Kajaani (Ka) 64.1°N, 27.7°E.

Direction of earth's movement; U = up, D = down.

February	February	February
3 Nu iP 13 42 52 i 43 04 So iP 13 42 20 U i 32 Ka iP 13 42 32 U Honshu, Japan	5 Nu iP 02 52 20 So iP 02 52 28 5 Nu ePKP 07 58 05 iSKP 08 00 50 So iSKP 08 00 30 Ka iPKP 07 58 06 Fiji Islands	6 He iP 18 26 09 Nu iP 18 26 05 iPcP 36 So iP 18 25 29 iPcP 26 15 Ka iP 18 25 43 Kurile Islands
4 He iP 09 01 37 Nu iP 09 01 36 U ipP 02 06 iS 09 33 i 43 So iP 09 01 37 U ipP 02 08 iS 09 34 Ka iP 09 01 30 U ipP 02 00 Northern Burma	5 Nu iP 11 31 02 So eP 11 31 03 5 Nu iP 13 43 54 U i 44 07 5 Nu iP 13 49 30 i 44 5 Nu iP 15 51 36 D So iP 15 51 30 D Ka iP 15 51 39 D South of Panama	6 He iPKP 22 03 51 iPKKP 14 29 Nu iPKP 22 03 50 iPKKP 14 26 i 46 So eP 21 59 42 iPKP 22 03 37 i 45 iPKKP 14 42 Ka iPKP 22 03 44 ePKKP 14 33 Solomon Islands
4 Nu iP 12 59 48 D So iP 12 59 06 Kamchatka	5 So eP 23 04 33 6 He eP 12 23 18 Nu iP 12 23 15 D i 31 So iP 12 22 31 iPcP 23 17 Ka iP 12 22 52 D Andreanof Islands	7 So iP 03 07 35 7 He iP 05 24 29 Nu iP 05 24 30 U i 25 47 So iP 05 24 33 U Ka iP 05 24 28 U i 37 Sumatra
4 Nu iP 15 43 21 D i 32 So iP 15 43 26 D	6 Nu eSb 14 00 08 iSg 28 So eSb 13 59 56 iSg 14 00 14 Ka iSb 14 00 03 iSg 21 Swedish Prel. Bull.: 64.8°N, 11.9°E	7 So eP 14 47 41 i 48 02 E coast of Honshu 7 So iP 15 39 47 Ka eP 15 39 47 E coast of Formosa
4 He iP 19 20 46 Nu iP 19 20 43 eS 30 11 iScS 45 So iP 19 20 28 U Ka iP 19 20 31 U Formosa	5 He iP 00 09 35 Nu iP 00 09 32 So iP 00 08 56 Ka iP 00 09 11 Kurile Islands	

February

7 He iP 21 12 25
Nu iP 21 12 23 D
iPcP 54
So iP 21 11 45 D
Ka iP 21 12 00
i 43
Kurile Islands

7 So eP 22 19 25
Kurile Islands

7 So eP 23 37 20
Ka eP 23 37 41
Andreanof Islands

8 He iPKP 02 55 32
Nu iPKP 02 55 29
So iPKP 02 55 20
Ka ePKP 02 55 18
New Hebrides

8 He ePKP 18 09 02
iSKP 11 55
Nu iPKP 18 09 00
iSKP 11 53
iPKS 12 42
So eSKP 18 11 31
Ka ePKP 18 08 48
i 09 04
iSKP 11 41
Tonga Islands

9 He iPKP 02 27 51 U
Nu iPKP 02 27 48
iSKP 31 28
iPKS 44
So ePKP 02 27 37
iSKP 31 13
iPKS 31
Ka iPKP 02 27 36
Kermadec Islands

9 Nu iP 20 36 39

10 Nu iPKP 00 57 07
i 14
Kermadec Islands

10 Nu iP 01 31 43

10 So eP 08 52 01

February

10 Nu iP 15 10 27

11 So iP 02 46 38 D
i 51
Ka eP 02 46 57
Mariana Islands

11 He iP 06 23 36
Nu iP 06 23 36 D
iS 32 42
i 33 50
So iP 06 23 12 D
Ka iP 06 23 20 D
Bonin Islands

11 Nu eP 06 27 19
So eP 06 27 47
Ka eP 06 27 33

11 Nu iP 09 18 52

11 So iP 12 36 31
Ka eP 12 36 35
Philippine Islands

11 He iPKP 21 20 40
iPKS 24 19
Nu iPKP 21 20 37 U
iPKS 24 18
So iPKP 21 20 18
i 21
iPP 23 37
iSKP 24 01
iPKS 14
Ka iPKP 21 20 27 U
Kermadec Islands

11 So iP 21 56 31

12 So ePKP 01 38 38
Easter Island

12 Nu iP 10 37 12
So iP 10 38 01

12 Nu iPKP 12 28 05 D
So ePKP 12 27 53
Ka ePKP 12 27 57
Samoa Islands

February

12 Nu iPKP 13 15 14
i(PP) 17 32
i(pP') 58
Ka iPKP 13 15 08
New Hebrides

12 Nu eP 14 04 31
So eP 14 03 43
Kenai Peninsula

12 He iP 22 04 31
i 13 14
Nu iP 22 04 29 U
i 08 50
iS 13 06
iPS 18
i 14 24
eP'P' 33 17
So iP 22 03 51
iS 12 03
Ka iP 22 04 06
Kurile Islands

12 Nu iP 23 02 18 D
Ka eP 23 01 53
Kurile Islands

12 Nu eP 23 05 06
Ka iP 23 04 43

12 Nu eP 23 23 54
So eP 23 23 13
Ka iP 23 23 29

12 He iP 23 37 22
Nu iP 23 37 22
i 38 03
iS 46 08
So iP 23 36 44 U
Ka iP 23 36 58
Kurile Islands

13 Nu iP 00 42 42
So eP 00 42 04
Ka iP 00 42 19 U
Kurile Islands

13 Nu iP 02 40 53
So eP 02 40 13
Ka iP 02 40 30
Kurile Islands

February

13 He iP 02 42 05
Nu iP 02 42 03
So eP 02 41 25
Ka iP 02 41 41 U
Kurile Islands

13 Nu eP 04 54 10
i 21
So eP 04 53 33
Ka eP 04 53 48
Kurile Islands

13 So eP 05 04 16

13 Nu ePKP 07 04 49
iPKS 08 15
Tonga Islands

13 Nu iP 09 17 44
So iP 09 17 07
Ka eP 09 17 22
Kurile Islands

13 Nu eP 16 14 40

13 Nu iP 16 19 00 D
So iP 16 19 10 D
Ka eP 16 18 58
Nepal-Tibet border

13 Nu eP 16 31 05
So eP 16 30 57
Ka eP 16 30 57
Banda Sea

13 He iP 16 38 12
Nu iP 16 38 09 U
iS 46 56
So iP 16 37 36
Ka iP 16 37 48 U
Kurile Islands

13 Nu iP 18 01 00
So eP 18 00 24
Ka iP 18 00 37 U
Kurile Islands

13 Nu iP 21 22 25
So eP 21 21 42
Ka eP 21 22 03
Kurile Islands

February

13 He i 22 48 04
Nu iP 22 48 00
So eP 22 47 22
Ka iP 22 47 38 D
Kurile Islands

14 Nu iP 00 26 21 U
So eP 00 25 43
Ka iP 00 25 59
Kurile Islands

14 He iP 03 01 54
Nu iP 03 01 52
So iP 03 01 15
Ka eP 03 01 30
Kurile Islands

14 Nu iP 03 26 12 U
So eP 03 25 37
Ka iP 03 25 51 U
Kurile Islands

14 He i 03 32 52
Nu iP 03 32 48 U
iS 41 37
So iP 03 32 12 D
Ka iP 03 32 27 U
Kurile Islands

14 So iPKP 06 03 34
Southern Chile

15 So eP 01 50 41

15 Nu ePKP 06 46 31
Tonga Islands

15 So iP 10 55 22 D
i 35
iPcP 56 08
Ka eP 10 55 36
Kurile Islands

15 Nu iP 11 37 37
So iP 11 37 42 D
Ka eP 11 37 31
Tibet

15 Nu eP 18 29 39

February

15 So iP 20 48 19
Ka eP 20 48 34

16 Nu iP 03 49 19 D
So eP 03 50 31
Ka eP 03 50 00
Albania

16 Nu eP 09 05 50
Ka eP 09 05 34
South of Honshu

16 He iP 14 05 38
Nu iP 14 05 36 D
i 46
Ka iP 14 05 13
Kurile Islands

16 Nu iP 14 42 34 U
16 Nu iP 15 05 12
Kurile Islands

16 Nu iP 16 22 43
Ka eP 16 22 38
Java

16 Nu iP 17 26 31 U
Ka eP 17 26 06

17 Nu iP 02 45 51

17 He iPn 03 23 09
iSn 24 06
Δ: 543 km

Nu iPn 03 23 03
iSn 55
Δ: 509 km

So iPn 03 22 35
iSn 23 07
Δ: 273 km

Ka iPn 03 22 26
iSn 50
Δ: 212 km

According to the
Finnish seismograph
station net:
Off coast of Finland
65.1°N, 23.9°E
H: 03 21 52

February

23 Nu iP 21 51 00
Dodecanese Islands

23 Nu iP 21 51 47
iS 55 43
So eP 21 52 46
Aegean Sea

23 Nu iP 22 01 58
So eP 22 03 05
Turkey

24 Nu iP 03 15 40
So eP 03 15 19
i 21
Ka iP 03 15 25 U
Ryukyu Islands

24 Nu iP 12 45 35

24 Nu eP 14 25 25

24 Nu eP 15 53 02

25 Nu ePKP 01 37 58
New Hebrides

25 Nu ePKP 05 13 48
iSKP 16 24
So iSKP 05 16 06
Ka iSKP 05 16 13
Fiji Islands

25 Nu ePKP 08 42 54
iSKP 45 44
Ka ePKP 08 42 52
South of Fiji Islands

25 So eP 15 17 01

25 Nu iP 15 21 16
So ePKP 15 21 03
Ka ePKP 15 21 10
Samoa Islands

February

25 Nu iP 15 34 15 D
So iP 15 33 45
Ka iP 15 33 56 D

26 So eP 03 57 46

26 Nu iP 06 08 16
So iP 06 08 11
Ka ePKP 06 08 15
Easter Islands

26 Nu iP 18 00 10
So eP 17 59 45
Ka iP 17 59 54

26 Nu iP 18 22 00 U
iS 31 07
So iP 18 21 35 U
ePP 24 06
eS 30 29
iP'P' 50 13
Ka iP 18 21 44 U
iS 30 36
i 31 51
Kyushu, Japan

26 Nu iP 21 13 11
So iP 21 12 59 U
Ka iP 21 13 00 U
Philippine Islands

27 Nu i 01 21 04
So iP 01 20 22
Ka eP 01 20 27
Colombia

27 Nu iP 01 23 23
Ka iP 01 23 01

27 So ePKP 10 48 51
Southern Chile

February

27 So iP 12 26 33

27 Nu iP 13 17 24 U
So iP 13 16 39 U
Ka iP 13 17 01 U
Fox Islands

27 So iP 18 01 05 U
Ka iP 18 00 53 U
Tadzhik

27 Nu eP 21 45 13

27 Nu iP 21 59 45
So iP 22 00 49
Aegean Sea

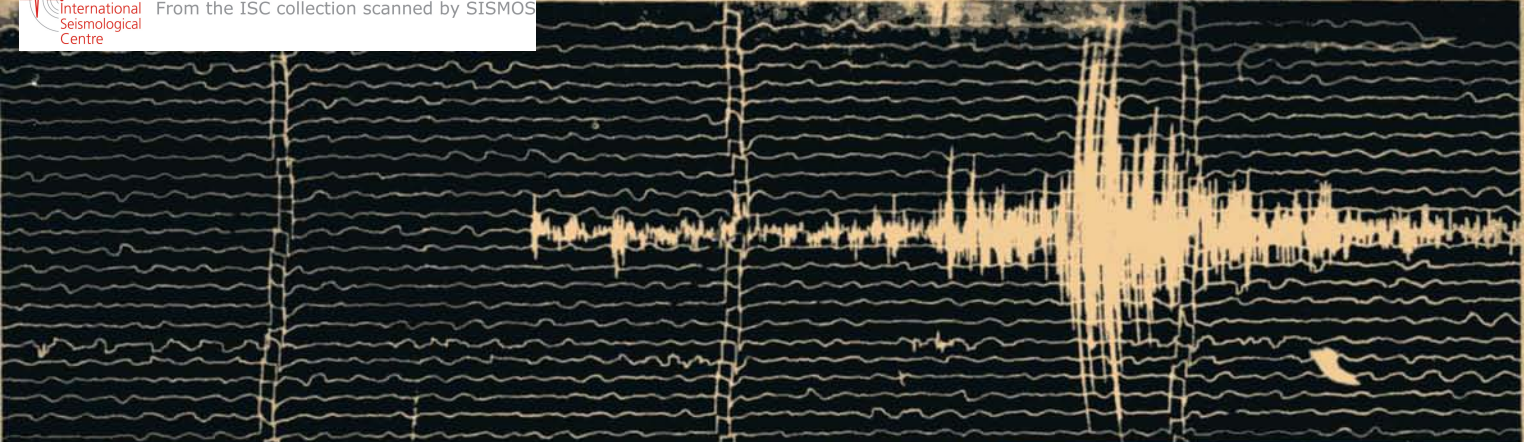
28 So iP 12 43 34
Ka iP 12 43 52
Kurile Islands

28 Nu iP 21 40 47
So iP 21 40 03
Ka iP 21 40 24

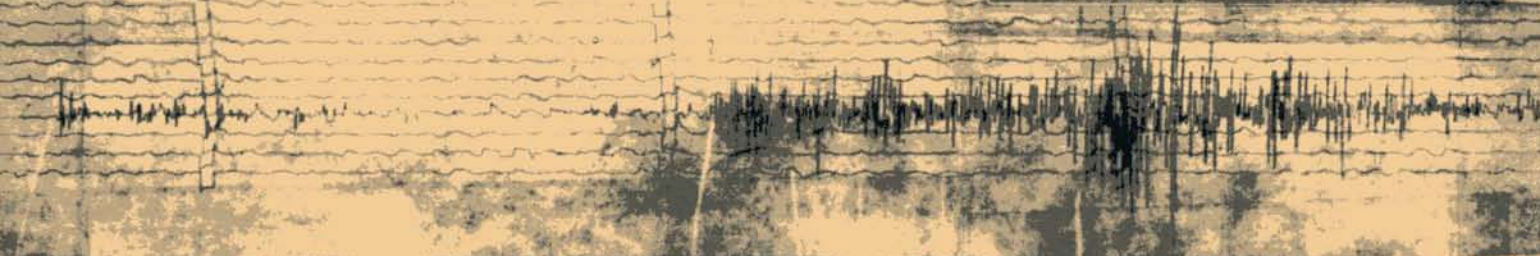
April 17, 1961

M. T. Porkka
Aili Huovila

Feb. 17, 1961 IPE 03-23-01



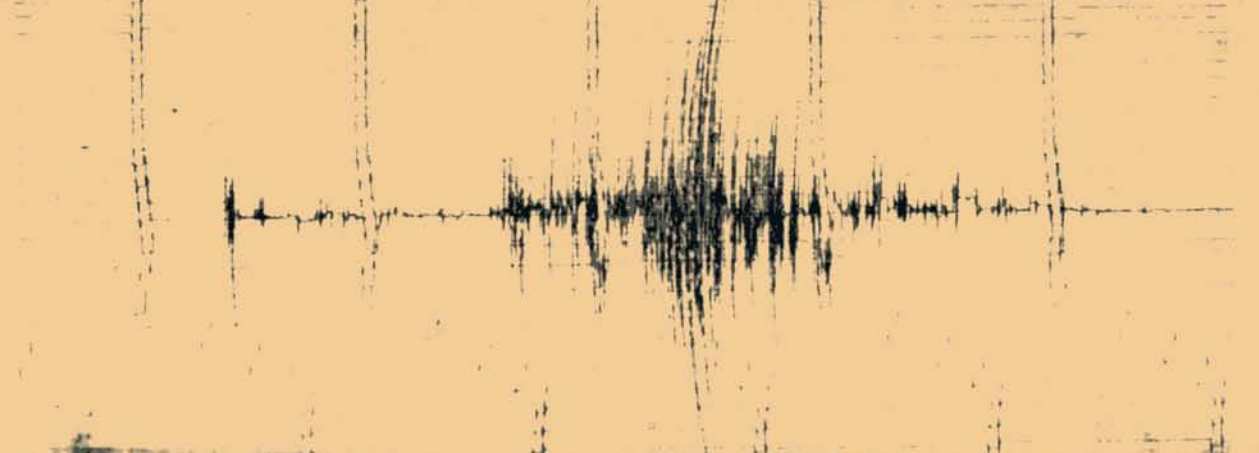
Feb. 20, 1961 IPE 04-11-11



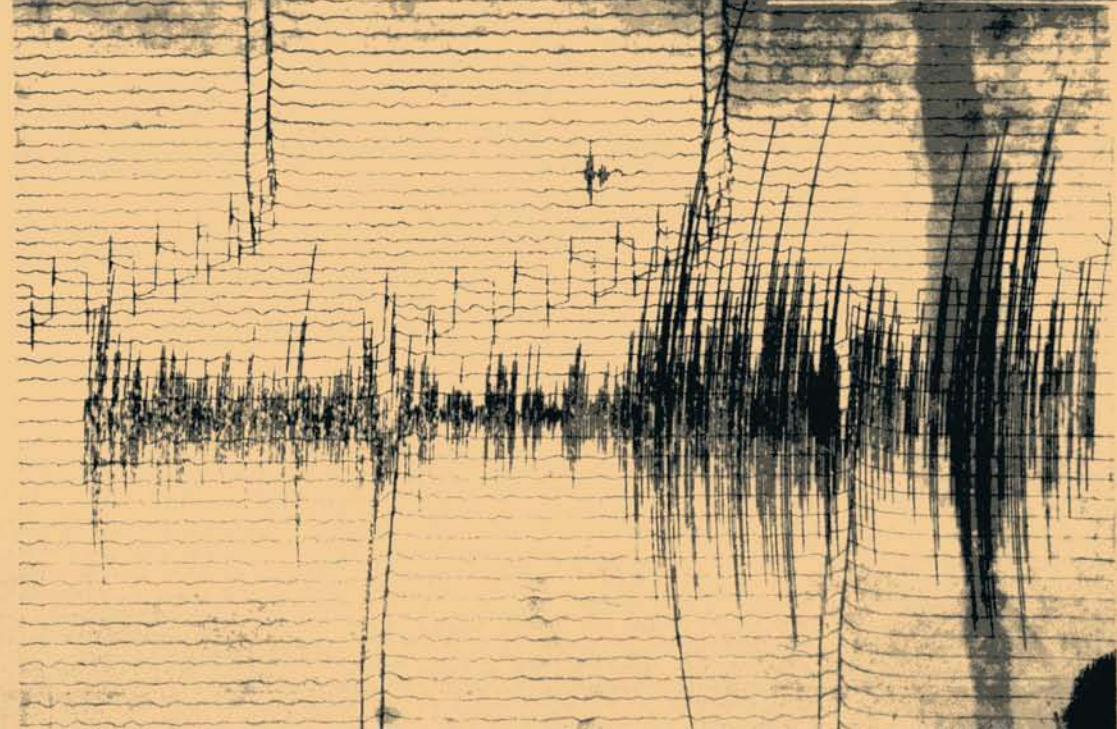
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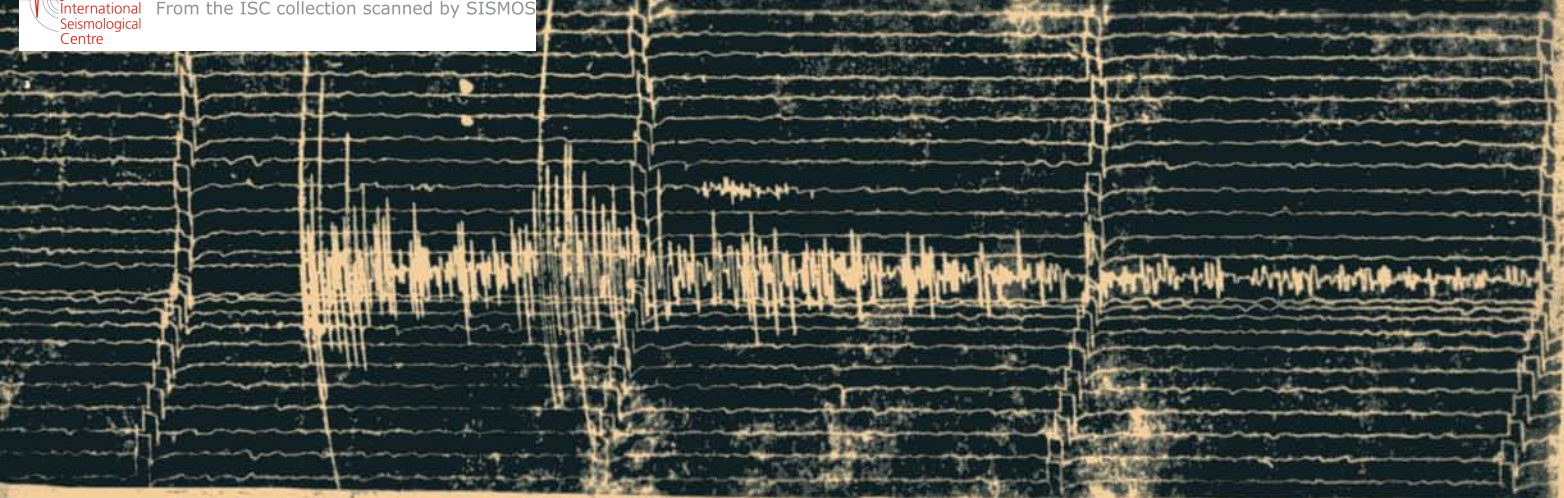
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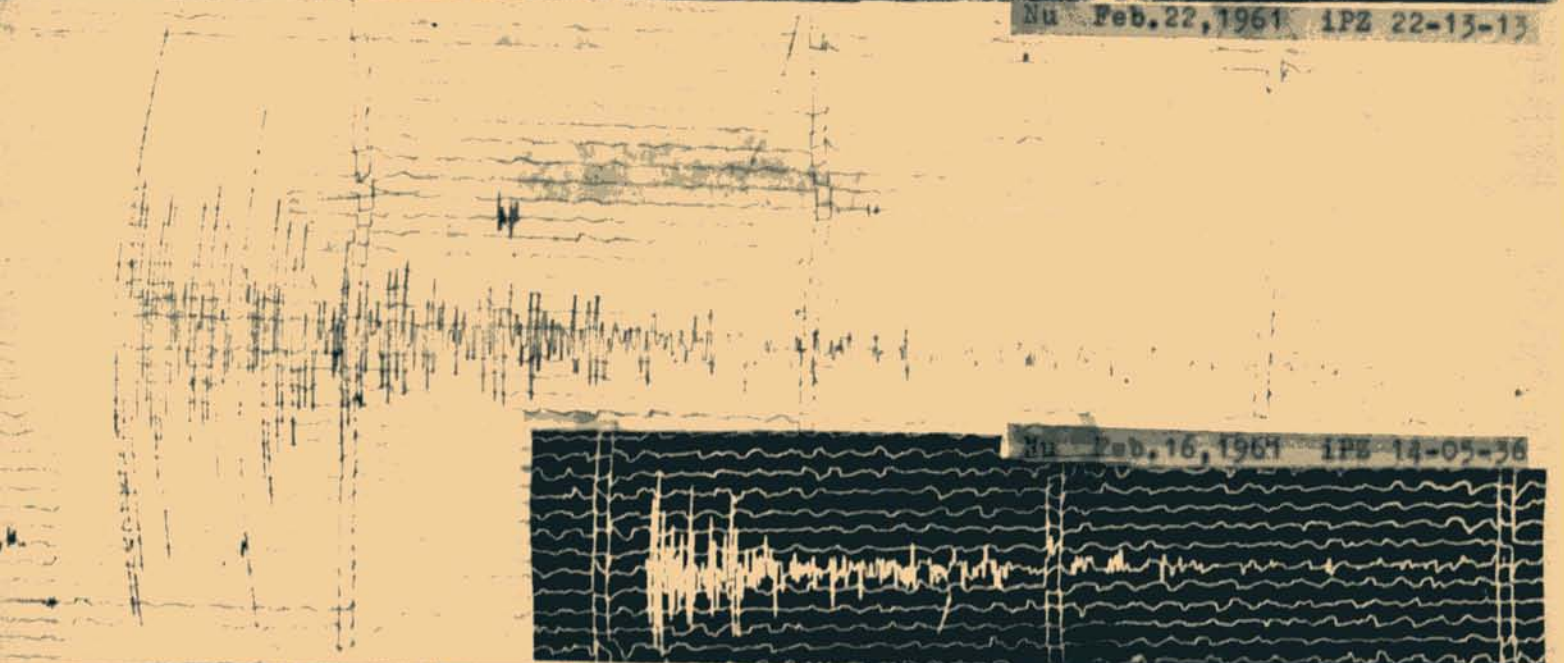
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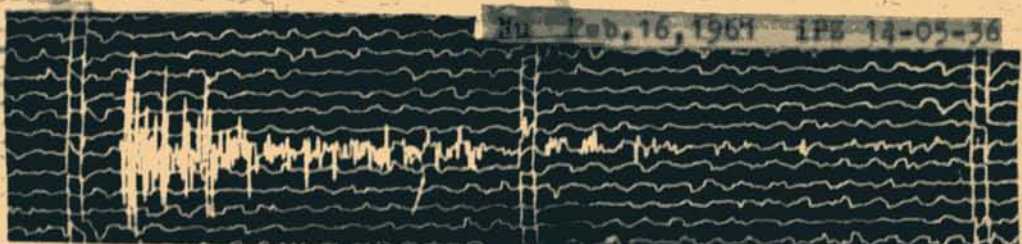
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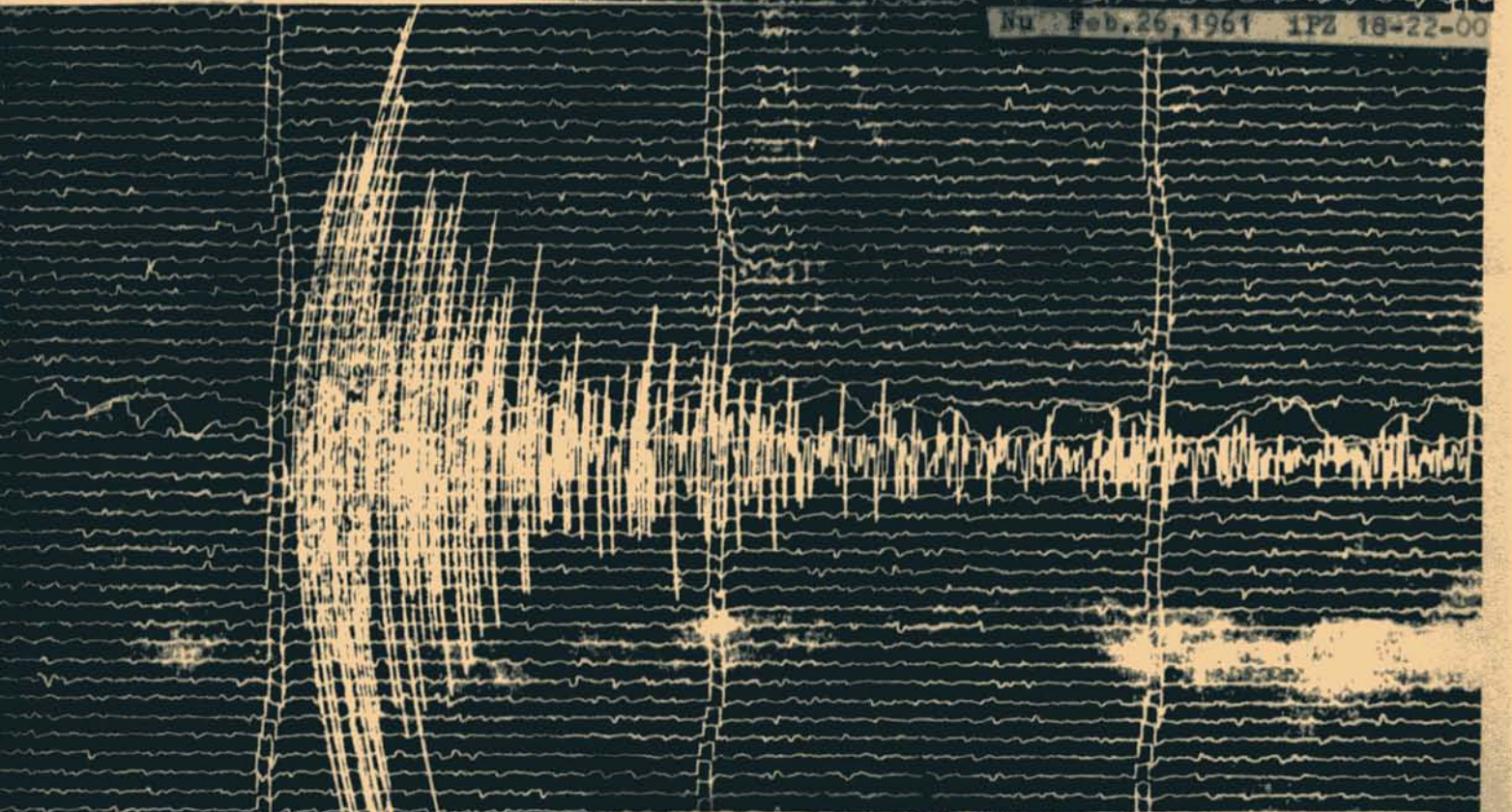
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Nu Feb.16,1961 1PS 14-05-36



Nu Feb.26,1961 1PZ 18-22-00



Ka Feb.23,1961 1PZ 04-27-03

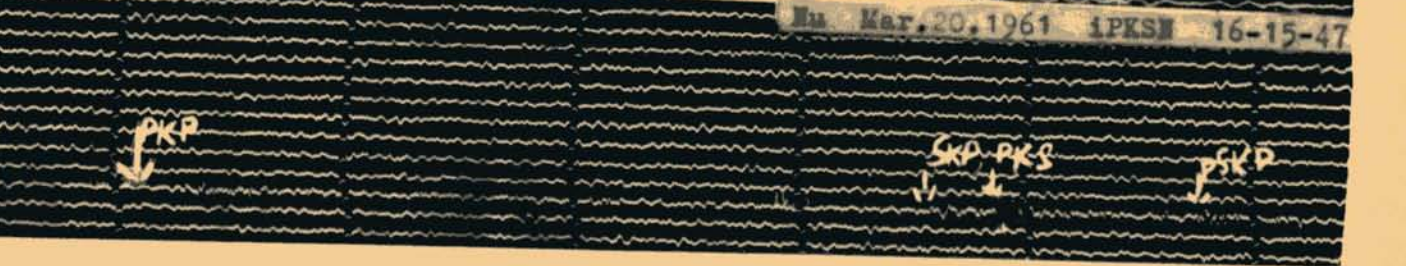
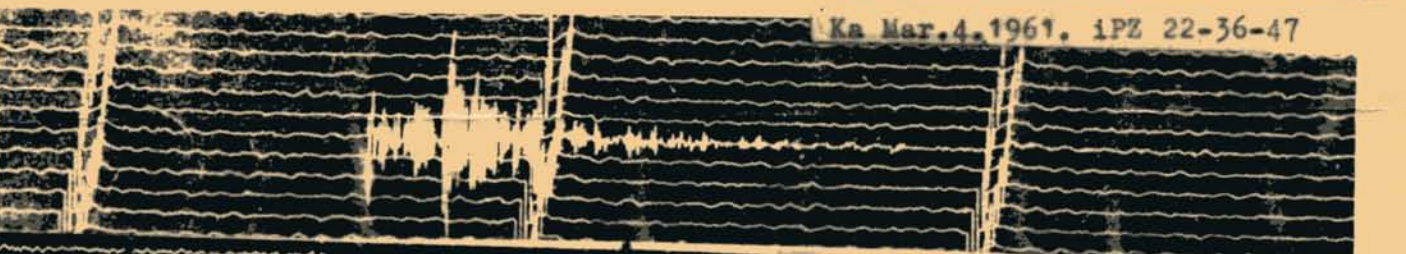
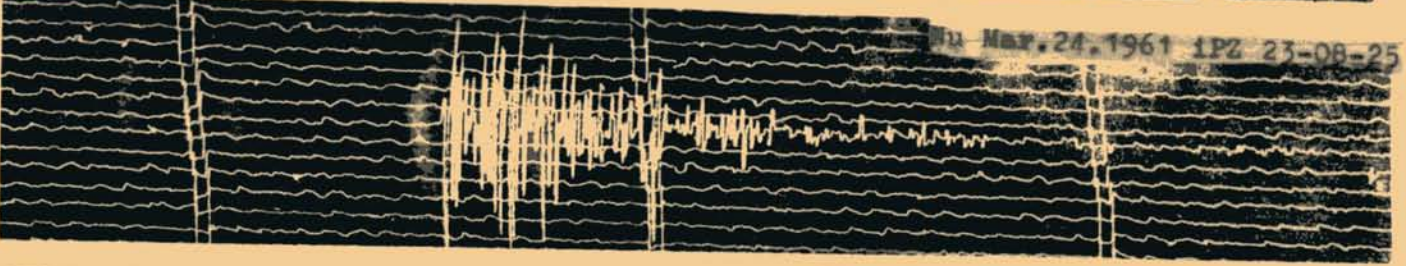
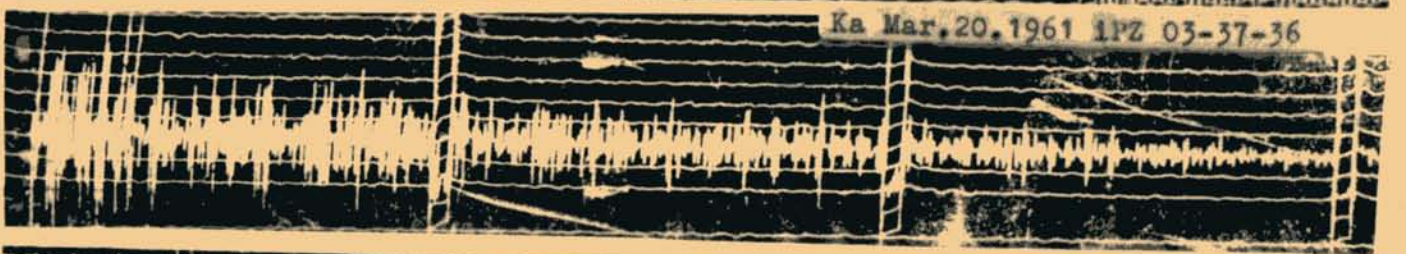
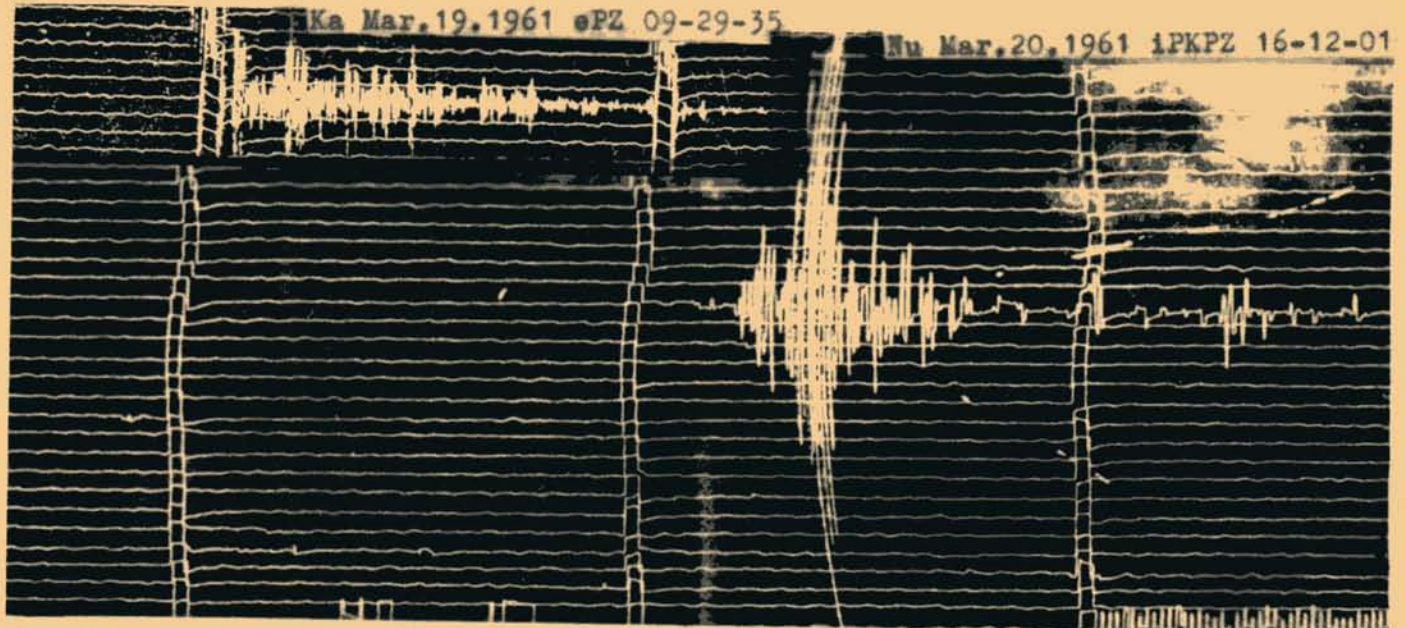


March				March				March			
15	Nu	iP	23 32 30	18	Ka	eP	10 27 26	20	Nu	iP	03 37 37
	So	iP	23 32 16 U		Bonin Islands				So	iP	03 37 52
										iPcP	39 58
16	Nu	iPKP	04 49 05	18	Nu	iPKP	15 15 13		Ka	iP	03 37 36 U
		iSKP	52 02			i	19 03		Hindu Kush		
	So	iSKP	04 51 45			i	39	20	Nu	iP	11 48 28
	Ka	ePKP	04 48 58		So	iPKP	15 14 57			iPcP	49 04
		i	49 09		Ka	iPKP	15 14 56			ipP	48
		iSKP	51 53		S of Zealand					i	50 30
	Kermadec Islands			18	So	eP	17 52 15			iS	56 26
16	Nu	iP	05 08 44 D		Ka	iP	17 52 16			i	57 44
	So	iP	05 08 00 D		Philippine Islands				So	iP	11 47 52
		iPcP	49	18	So	iP	18 50 20		Ka	iP	11 48 06 U
	Ka	iP	05 08 21		Sakhalin Island						
	Rat Islands			18	So	iP	20 18 05	20	Nu	iP	14 08 14 U
16	Nu	iP	10 53 06		Ka	eP	20 18 07			i	38
	Ka	eP	10 52 57		N coast of Formosa				So	iP	14 08 24
16	Nu	eP	13 59 23	19	Nu	iP	05 02 49		Ka	iP	14 08 11 U
		ePP	14 03 22		So	iP	05 02 14 D		Northern India		
	So	iP	13 59 04		Ka	iP	05 02 27 D	20	Nu	iPKP	16 12 01
		ePP	14 02 53		N of Honshu, Japan					ipPKP	13 13
		ePKKP	15 38	19	Nu	iP	05 12 16			iSKP	15 31
	Ka	eP	13 59 47			i	29			iPKS	47
		ePP	14 03 08		So	iP	05 12 17			ipSKP	16 42
	Flores Island				Ka	iP	05 12 13		So	iPKP	16 11 53
17	So	iP	01 39 59		Soenda Strait					i	02
17	Nu	iP	12 19 53	19	Nu	iPKP	07 34 08			iPP	14 11
	So	iP	12 19 37		So	ePKP	07 33 45			iSKP	15 08
17	Nu	eP	14 21 35		Ka	ePKP	07 33 59			iPKS	23
	So	eP	14 21 17		New Hebrides				Ka	ePKP	16 11 56
17	Nu	ePKP	14 26 11	19	Nu	eP	08 04 53			iSKP	15 19
	Tonga Islands				So	iP	08 04 40			iPKS	38
17	Nu	iPKP	20 29 59		Ka	eP	08 04 38		Tonga Islands		
	So	ePKP	20 29 43		Molucca Passage			20	Nu	iP	16 48 11
		eSKP	33 35	19	Nu	iP	09 29 56				
	Ka	ePKP	20 29 58		So	iP	09 29 24	21	Nu	iPKP	00 02 01
	Tonga Islands				Ka	eP	09 29 35		So	iPKP	00 01 55
17	Nu	iP	22 51 39 U		Honshu, Japan				Tonga Islands		
	So	iP	22 51 09 U	19	Nu	iPKP	12 24 58	21	Nu	iP	05 00 11
	Ka	iP	22 51 20 U		So	iPKP	12 24 46		Ka	iP	05 00 16
	Off S coast of Japan				Ka	ePKP	12 24 50	21	Nu	iP	06 12 45 U
18	Nu	iP	04 01 55		New Hebrides				Ka	iP	06 12 37
	So	eP	04 02 34	20	So	iP	02 29 39	21	Nu	iP	09 36 32
18	Nu	iPKP	09 59 37		Mariana Islands				So	iP	09 36 14
	Kermadec Islands								Ka	iP	09 36 01

March				March				March			
22	So	iP	02 30 20	26	So	iP	02 02 55	28	Ka	iP	15 06 55
22	Nu	iP	12 01 29	26	Nu	iP	09 51 22	28	Ka	iP	15 36 36
22	Nu	iP	14 44 00	26	So	iP	09 51 06				Celebes region
	So	eP	14 44 14	26	Nu	iP	14 42 16	29	Nu	iP	06 55 03
22	So	iP	18 00 50	26	So	iP	14 42 04 U	29	So	iP	06 54 34
	Ka	iP	18 01 06		i		30	29	So	iP	09 48 07
22	Nu	iPKP	21 47 09		Ka	iP	14 42 06				Northern Celebes
		iSKP	50 02				Philippine Islands	29	Nu	iP	13 23 57
	So	iSKP	21 49 43	26	Nu	eP	15 12 53	29	Nu	iP	13 25 37
	Ka	ePKP	21 47 07	26	So	iP	20 21 01 D	29	Nu	iP	16 03 03
		iSKP	49 52		So	iP	20 20 14 D	29	Nu	iP	18 21 28 D
	S of Fiji	Islands			ipP		59	29	So	iP	18 20 56 D
23	Nu	eP	01 06 59		Ka	iP	20 20 36 D				E coast of Honshu
	NE Italy						Bristol Bay	30	So	eP	01 35 15
23	So	iP	02 00 39	26	So	iP	23 20 33				Northern Celebes
	Ka	eP	02 00 37				Southern Tibet	30	So	eP	07 55 44
	Celebes			27	Nu	iP	11 29 54				Gulf of California
24	So	iP	05 48 04		So	eP	11 28 47	30	So	ePKP	09 08 47
24	Ka	eP	19 23 08	27	Nu	iPKP	16 48 38 D				Samoa Islands
	Philippine Islands				So	iPKP	16 48 18	30	So	eP	12 09 38
24	Nu	iP	23 08 25 U		Ka	iPKP	16 48 25				China
	iPcP		46				Kermadec Islands	30	Nu	iP	13 09 08
	ipP		52	28	Nu	iP	00 48 57	31	So	eP	05 31 01
	i		09 01	28	Nu	iP	06 10 39				South of Honshu
	iPP		10 58		So	iP	06 09 53	31	Nu	iP	11 11 03
	iS		17 35		Ka	iP	06 10 15 U		So	iP	11 10 44
So	iP		23 07 55 U				Fox Islands				Outer Mongolia
	ePP		10 19	28	Nu	iP	09 49 08				
Ka	iP		23 08 06 U		iPP		53 01				
	eS		17 01		iSKS		59 29				
	E coast of Honshu				iS		10 00 02				
24	So	eP	23 50 59		ePKKP		06 04				
	New Guinea			So	iP		09 49 00 U				
25	Nu	iP	13 21 51		i		58 44				
	So	iP	13 22 54		iS		59 49				
25	So	eP	16 21 31				Northern Celebes				
	Philippine Islands			28	Nu	iP	12 40 01				
26	Nu	iP	01 33 58		eP'P'		13 08 30				
	i		34 08	So	iP		12 39 15				
So	iP		01 33 46		iP'P'		13 08 40				
	i		56	Ka	iP		12 39 35				
Ka	iP		01 33 47		eP'P'		13 08 21				
	Philippine Islands						Andreanof Islands				

April 27, 1961

M. T. Porkka
Aili Huovila





April

April

April

1 Nu iP 02 52 16 U
So iP 02 51 48 U
South of Honshu

1 Nu iP 08 18 49
So iP 08 18 05
Kamchatka

1 Nu iP 15 25 47
iPP 27 15
iS 31 44
So iP 15 25 53
iPP 27 21
iS 31 56
iLg1 38 43
Ka iP 15 25 41
eS 31 30
iLg1 38 10
Sinkiang Province

2 Nu iP 12 59 39 U
So eP 13 00 17

2 Nu iP 13 13 00 D
So iP 13 13 03 D
i 17
Ka eP 13 12 57
Sumatra

2 So eP 17 45 42

3 So iP 01 22 59 D
Ka iP 01 23 06
Colombia

3 Nu eP 02 54 04
So eP 02 53 21
Ka eP 02 53 40
Kamchatka

3 Nu iP 08 08 12 D
Ka iP 08 08 12
N of Swan Island

3 Nu iP 16 42 21
iPcP 43 01
So iP 16 41 35
iPcP 42 35
Ka iP 16 41 54
Kamchatka

4 Nu iP 01 25 19 D
So iP 01 25 24 D
Ka iP 01 25 13
Sinkiang Province

4 Nu iP 01 33 29
iPP 34 57
So iP 01 33 35
Ka eP 01 33 24
Sinkiang Province

4 Nu iP 07 50 15
So iP 07 49 54
Ka eP 07 49 59
Ryukyu Islands

4 Nu iP 09 54 00 U
i 07
iPP 55 23
iPPP 53
iPcP 56 21
iS 10 00 01
i(Sa) 02 26
iLg1 06 52
So iP 09 54 07
i 14
iPP 55 40
i 10 03 06
iLg1 07 04
Ka iP 09 53 54
iLg1 10 06 21
Sinkiang Province

4 Nu iP 11 52 19

4 Nu iP 12 06 01
Ka iP 12 06 18
Persian Gulf

4 Nu iP 13 01 04
So iP 13 00 15

4 Nu iP 13 55 25
So iP 13 55 32

4 Nu iP 22 45 15
iS 47 10
Δ: 1180 km
So eP 22 45 28
eS 47 32
Δ: 1270 km
Ka iP 22 45 30
iS 47 35
Δ: 1285 km
According to the
Finnish seismograph
station net:
Norwegian Sea
62.0°N, 2.2°E
H: 22 42 44

5 Nu eP 04 54 06
So eP 04 53 48
Ka iP 04 53 52

5 Nu iP 06 54 28 U
So iP 06 54 32
Ka iP 06 54 21
Sinkiang Province

5 Nu iP 10 19 56
So iP 10 21 14

5 Nu eP 14 02 10

5 Nu iP 19 14 25

5 So iP 22 42 23

6 Nu iP 01 41 11 D
iLg1 53 51
So iP 01 41 17
iLg1 54 24
Ka iP 01 41 04
Sinkiang Province

6 Nu iP 03 29 15
So iP 03 28 38
Ka iP 03 28 52
Kurile Islands

6 Nu eP 04 16 40
So iP 04 15 56
Ka eP 04 16 15
Northern California

6 So eP 07 31 50

6 Nu iP 14 17 09 U
i 24
So iP 14 17 16 U
Ka iP 14 17 07 U
i 16
Sumatra

6 Nu iPKP 15 52 45
So ePKP 15 52 35
Loyalty Islands

6 Nu iP 18 20 03 U
iPP 21 39
iS 26 09
So iP 18 20 39
iPP 22 33
Ka iP 18 20 16
iPP 21 57
eS 26 25
i 35
Southern Iran

April

6	Nu	eP	21	32	49	
6	Nu	iP	22	38	37	U
	So	iP	22	38	43	D
		i			54	
	Ka	iP	22	38	35	U
		i			47	
	Sumatra					
7	Nu	iP	04	47	51	D
	So	iP	04	48	09	
	Ka	iP	04	47	51	
		i			48	17
	Hindu Kush					
7	Nu	iP	04	59	56	
	So	iP	05	00	13	
	Ka	iP	04	59	56	
		i	05	00	21	
	Hindu Kush					
7	Nu	iP	06	56	32	
		i			57	00
	So	iP	06	57	01	
	Ka	iP	06	56	42	
7	Nu	iP	10	19	09	D
	So	iP	10	19	16	D
	Sumatra					
7	Nu	iP	20	04	48	D
	So	iP	20	04	01	D
		i			10	
		iPcP		05	14	
	Kamchatka					
7	Nu	iP	21	24	49	
		i			59	
		iPP		26	22	
		eS		30	41	
		i(Sa)		33	03	
	So	iP	21	25	01	
		i			11	
		iPP		26	34	
		iLg1		37	40	
	Ka	iP	21	24	46	
	Kirghiz-Tadzhik					
8	So	iP	14	23	07	
8	Nu	iPKP	16	18	52	
	So	ePKP	16	18	38	
	New Hebrides					
8	Nu	iPKP	18	18	45	
	So	iPKP	18	18	49	
	Chile					

April

8	Nu	eP	19	29	43	
		iPcP		30	14	
		ipP			29	
	So	iP	19	29	13	
		i			42	
	Ka	eP	19	29	27	
		i		30	14	
	Honshu, Japan					
8	Nu	iP	21	49	36	
	So	iP	21	49	16	
	Ka	iP	21	49	23	
	Mariana Islands					
9	So	iP	00	42	27	
	Mariana Islands					
9	Nu	iP	01	42	33	
9	Nu	iP	01	45	01	
9	Nu	iP	07	35	26	D
	So	iP	07	34	54	
	California					
9	Nu	eP	07	37	49	
	So	iP	07	37	18	
	California					
9	Nu	iPKP	09	39	45	
		i		40	33	
		iSKP		42	30	
		i			44	
	So	iPKP	09	39	41	
		iSKP		42	13	
	Ka	iPKP	09	39	39	
		iSKP		42	22	
	S of Fiji Islands					
9	Nu	iP	15	46	37	D
		iPP		49	22	
		iS		55	57	
		iScS		56	40	
	So	iP	15	46	20	D
		iPP		48	55	
		eS		55	40	
	Ka	iP	15	46	25	
		i			36	
		iS		56	22	
	Formosa					
9	So	iP	20	08	46	
	Mariana Islands					
10	Nu	iP	02	39	42	
	So	iP	02	39	13	
	Ka	iP	02	39	24	

April

10	So	iP	07	08	27	D
		i			10	34
	Formosa					
10	So	iP	17	26	30	
		i			48	
	Ka	eP	17	26	58	
	Honshu, Japan					
10	So	iP	20	58	48	
11	Nu	iP	00	40	56	
	So	iP	00	40	25	D
		iPcP			41	01
	Ka	iP	00	40	36	
	Honshu, Japan					
11	So	iP	04	36	12	
	Ka	iP	04	36	20	
11	Nu	iP	10	20	14	
	So	iP	10	20	19	
11	So	iP	14	03	07	
11	Nu	iP	18	46	08	
	Soembawa Island					
12	Nu	iPKP	03	26	16	
		i			20	
	Ka	iPKP	03	26	09	
		i			16	
	Kermadec Islands					
12	So	eP	08	00	16	
	Ka	iP	08	00	15	
12	Nu	iPKP	10	16	46	
		i			57	
	Kermadec Islands					
12	Nu	eP	15	12	41	
	So	eP	15	12	04	
	Kurile Islands					
12	Nu	iP	17	31	02	
	So	iP	17	30	55	
	Ka	iP	17	30	54	
	Northern Celebes					
12	Nu	eP	17	38	21	
	So	eP	17	37	40	
	Kurile Islands					

April				April				April			
12	Nu	iP	18 04 20	15	Nu	iPKP	01 36 52	17	Nu	ePKP	21 06 29
	So	iP	18 03 57		So	iPKP	01 36 40			iSKP	09 21
	Ka	iP	18 04 04		Ka	iPKP	01 36 44		So	iPKP	21 06 25
		i	21			New Hebrides				iSKP	09 02
	Mariana Islands								Ka	ePKP	21 06 27
12	So	iP	18 18 42	15	So	eP	03 03 01		Tonga Islands		
						Sinkiang Province					
12	Nu	iP	22 33 21 U	15	Nu	iPKP	09 55 58	18	Nu	iPKP	04 30 26
		ipP	53		Ka	ePKP	09 55 47		Ka	iPKP	04 30 16
		iPP	36 55			Kermadec Islands			Kermadec Islands		
		iS	43 53					18	So	iP	05 09 37
	So	iP	22 33 11 U	15	So	eP	10 49 28				
		iPP	36 35			W coast of Luzon		18	Nu	iP	05 17 34
	Ka	iP	22 33 21						So	iP	05 17 17
		iPP	36 51	15	Nu	iP	17 20 08		Ka	eP	05 17 18
	El Salvador				Ka	eP	17 19 48				
13	Nu	eP	04 36 01	16	Nu	iP	06 28 26 D	18	So	iP	12 21 45
	So	iP	04 36 01		So	iP	06 28 00 D		Ka	iP	12 21 47
	Central Burma				Ka	iP	06 28 08 D	18	Nu	iP	17 51 28
13	So	iP	10 12 52			South of Honshu		18	Nu	iP	22 06 32
13	So	iP	15 37 08	16	Nu	iP	11 50 51 D	18	Nu	iP	22 16 51
	Ryukyu Islands					iPcP	51 34		So	iP	22 16 55
13	Nu	iP	16 42 02 U		So	iP	11 50 06 D				
		iPP	43 31			iPcP	51 09		Sumatra		
		iS	48 03		Ka	iP	11 50 24 D	19	Nu	iP	07 05 23
		i(Sa)	50 39			i	56			i	07 04
		iLg1	54 43			Kamchatka			So	iP	07 05 44
	So	iP	16 42 07	16	Nu	eP	12 33 35	19	Nu	iP	16 23 13
		iPP	43 34			i	40			iS	31 54
		i	52 22		So	iP	12 32 52		So	iP	16 22 35
		iLg1	54 54		Ka	eP	12 33 19		Ka	iP	16 22 49
	Ka	iP	16 41 58			Vancouver Island			Kurile Islands		
		eS	47 57	16	Nu	iP	17 07 56 D	19	Nu	iP	18 24 01 D
		iLg1	54 23		Ka	eP	17 07 56			i	25
	Sinkiang, China			16	Nu	eP	23 26 45		So	iP	18 23 15 D
13	So	eP	20 20 48		So	eP	23 26 33		Ka	iP	18 23 34
	Sinkiang Province					New Guinea			Kamchatka		
14	Nu	iPKP	04 22 08	17	Nu	eP	13 19 52	19	Nu	iP	20 30 34
	Ka	ePKP	04 21 58			iPcP	20 05		So	iP	20 29 56
	Kermadec Islands				So	eP	13 19 24		Ka	iP	20 30 11
14	Nu	eP	19 10 52			South of Honshu				i	23
	So	eP	19 10 55						Kurile Islands		
	Sumatra			17	Nu	iP	16 32 27	19	Nu	iP	22 18 35
15	Nu	iP	00 26 08		So	iP	16 32 51		So	iP	22 17 57
		i(pP)	34			Mid-Atlantic Ocean			Ka	iP	22 18 13
	So	iP	00 25 39						Kurile Islands		
	Ka	eP	00 25 49	17	Nu	eP	18 37 48	20	Nu	iP	04 07 25 D
	Honshu, Japan								Ka	iP	04 07 16

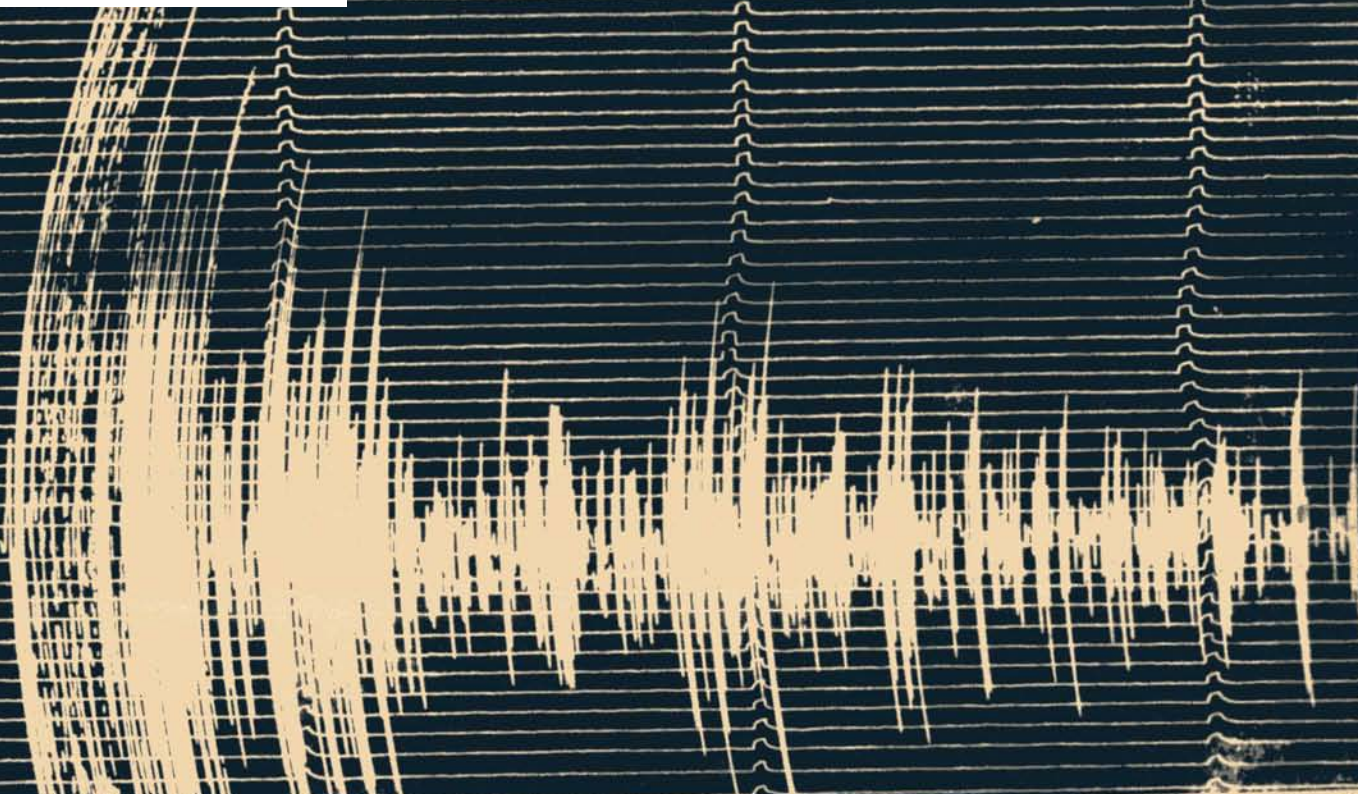
April				April				April			
20	Nu	iP	13 30 11 D	23	Nu	iP	05 26 03 D	24	Nu	iP	13 07 22
	So	iP	13 29 26		So	iP	05 25 42 D		Ka	iP	13 07 11
	i		58		Ka	iP	05 25 47 D				
	Near Islands				Ryukyu Islands			24	Nu	iPKP	13 29 31
20	Nu	iP	14 15 08	23	Nu	iP	05 37 42		Kermadec Islands		
20	So	iP	14 24 47	23	Nu	iP	09 12 26 U	24	Nu	eP	16 30 54
	Kamchatka				iS		21 08	24	Nu	iP	17 51 14
20	Nu	iPKP	19 39 08		iScS		22 22	24	Nu	iP	21 16 31 D
	Ka	iPKP	19 38 59		So	iP	09 11 48		So	iP	21 16 34
	Kermadec Islands				Ka	iP	09 12 04 U		Ka	iP	21 16 29 D
					Kurile Islands						
20	Nu	iPKP	21 58 24	23	Nu	iP	12 28 40 D	25	Nu	iP	00 25 49 D
	So	iPKP	21 58 16		So	iP	12 28 02 D		So	eP	00 26 09
	Ka	ePKP	21 58 17		Ka	iP	12 28 17	25	Nu	iP	00 29 11
	S of Samoa Islands				Kurile Islands*						
21	Nu	iP	05 08 02	23	Nu	eP	15 06 07	25	Nu	iP	00 38 58
21	Nu	iP	14 08 28 D	23	Nu	iP	17 01 47 D		So	iP	00 38 19
	Ka	iP	14 08 17		So	iP	17 01 08 D		Ka	eP	00 38 34
21	Nu	eP	19 41 14		Ka	iP	17 01 23		Kurile Islands		
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21	Nu	iP	20 21 17		Fox Islands				Ka	iP	00 39 03
	iPcP		51	23	Nu	iP	21 13 22	25	Nu	eP	01 21 56
	So	iP	20 20 37 U		i		14 12		Guatemala		
	Ka	iP	20 20 54		So	eP	21 13 26	25	Nu	iP	01 25 29
	Kurile Islands			23	Nu	iP	22 15 14 D	25	Nu	iP	01 28 24
21	Nu	iP	21 37 35 U		So	iP	22 14 50 D		i		39
	So	iP	21 36 50		Bonin Islands				So	iP	01 27 44
	iPcP		37 35	23	Nu	iP	23 57 14		Ka	iP	01 28 01
	Ka	iP	21 37 12		Ka	iP	23 57 04		Kurile Islands		
	Andreanof Islands			24	Nu	iP	01 24 29	25	Nu	iP	11 16 26
22	Nu	eP	01 37 47	24	Nu	iP	02 27 18 D		Nu	iPKP	11 36 25
22	So	iP	04 56 58		i		29		Ka	iPKP	11 36 15
22	So	eP	05 03 39		Ka	iP	02 27 09		Kermadec Islands		
22	Nu	iP	10 55 47 U		i		19	25	Nu	iP	11 55 29
22	Nu	iP	19 08 48	24	Nu	eP	05 03 17	25	Nu	iP	12 14 56 U
	So	eP	19 09 22		So	eP	05 02 39		i		15 08
22	Nu	eP	19 12 22		Ka	iP	05 02 54		Ka	iP	12 14 46
	So	eP	19 12 30		Fox Islands			25	Nu	iP	14 02 52
22	Nu	eP	21 14 57	24	Nu	iP	12 38 23	25	Nu	iP	19 55 56
					So	iP	12 37 41	25	Nu	iP	21 11 24
					Ka	eP	12 38 00				
					Kurile Islands						

April				April				April			
25	Nu	iP	23 52 04	26	So	eP	17 06 27	29	Nu	iP	10 54 37 D
		i	16		Northern Celebes				So	iP	10 54 17
	So	iP	23 51 42							i	46
	Ka	eP	23 51 49	26	Nu	iP	19 43 19 D		Ka	iP	10 54 19 D
	Ryukyu Islands					i	33		Outer Mongolia		
26	Nu	iP	00 48 54		So	iP	19 42 40 D	30	So	eP	00 24 22
	So	eP	00 48 16		Ka	iP	19 42 56 D				
	Kurile Islands				Kurile Islands						
26	Nu	eP	02 04 43	27	Nu	ePKP	00 44 18	30	Nu	iP	07 29 51 U
						iSKP	47 17			i	30 03
26	Nu	iP	02 21 24		Ka	iPKP	00 44 19	30	Nu	iP	07 40 14
	So	eP	02 21 30		S of Fiji Islands					iPcP	43 07
	Ka	iP	02 21 17	27	Nu	eP	07 09 23		So	iP	07 40 15
										i	43 14
26	Nu	iP	02 34 08	27	Nu	eP	11 17 44		Ka	iP	07 40 21
	Southern Sumatra				So	eP	11 17 14		North Atlantic Ocean		
26	Nu	iP	05 30 21 U	27	Nu	iP	13 43 56	30	Nu	iP	11 11 22 D
		i	31 32						So	iP	11 10 42 D
	So	iP	05 30 37	27	Nu	iP	14 28 34		Ka	iP	11 10 58
	Ka	iP	05 30 20 U		So	eP	14 27 58		Kurile Islands		
		i	31 07	28	So	iP	09 08 40	30	Nu	iP	11 26 02
26	Nu	iP	06 15 46						So	iP	11 25 23
		i	53	28	So	eP	15 45 37		Ka	iP	11 25 40
	Ka	iP	06 15 35						Kurile Islands		
26	Nu	ePKP	07 41 06	28	Nu	eP	22 25 28	30	So	ePKP	15 07 17
		iSKP	43 50		So	eP	22 25 05		Samoa Islands		
	Ka	ePKP	07 41 05		Ka	iP	22 25 13	30	Nu	eP	17 42 25
	Fiji Islands			29	Nu	iP	08 40 35		So	iP	17 41 51
26	Nu	iP	07 49 43						Northern California		
		i	59	29	Nu	iP	09 31 20	30	Nu	iP	18 28 01
		i	54 18			i	27		So	eP	18 29 03
		eS	58 30		So	iP	09 30 44	30	So	iP	21 56 27
	So	iP	07 49 06		Ka	iP	09 31 03		Ka	iP	21 56 50
	Ka	iP	07 49 20		Northern California						
		i	40	29	Nu	iP	09 33 06				
	Kurile Islands					iS	36 03				
26	Nu	eP	10 15 54			Δ : 1830 km					
	So	eP	10 15 45		So	iP	09 32 11				
26	Nu	iP	11 56 25 D			iS	34 29				
	So	iP	11 56 25			Δ : 1390 km					
	India-Burma border				Ka	iP	09 32 45				
						iS	35 25				
26	Nu	iP	12 13 25			Δ : 1640 km					
	So	eP	12 13 59		According to the						
	Ka	iP	12 13 38		Finnish seismograph						
					station net:						
26	Nu	iP	13 34 42		Jan Mayen						
					71.2°N, 7.3°W						
26	Nu	iP	15 41 12		H: 09 29 10						

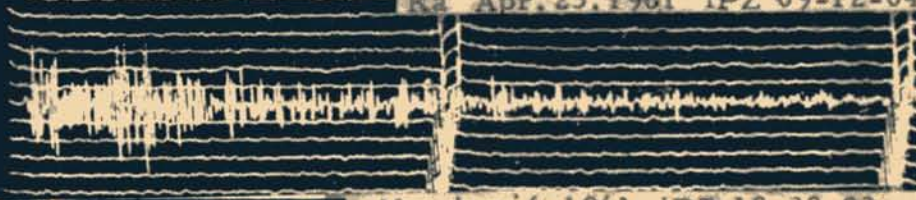
June 10, 1961

 M. T. Porkka
 Aili Huovila

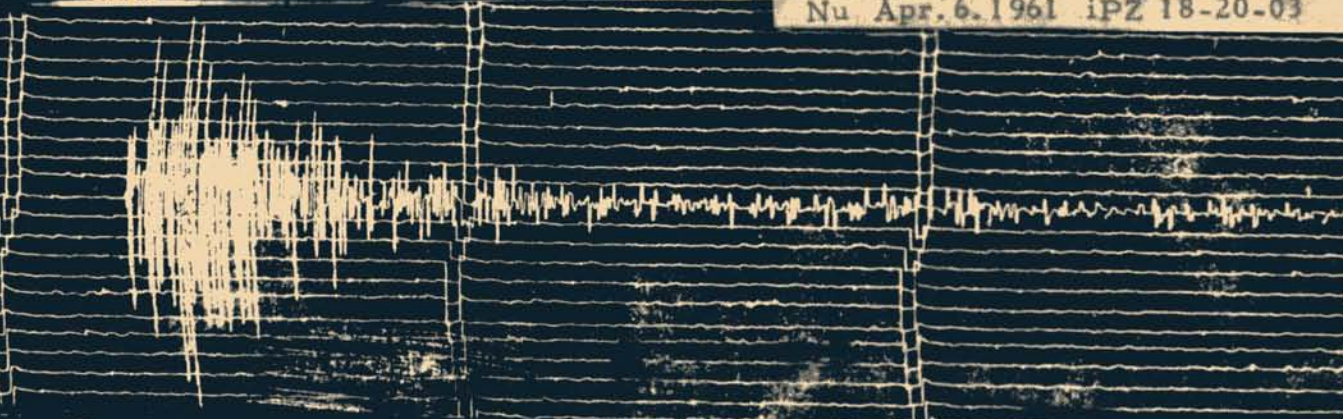
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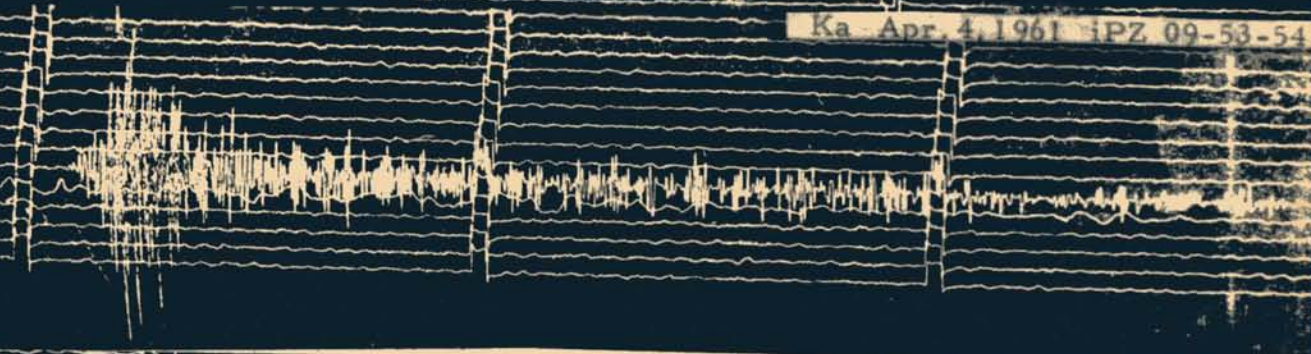
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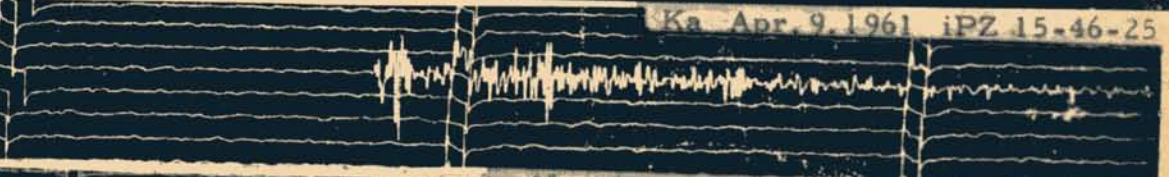
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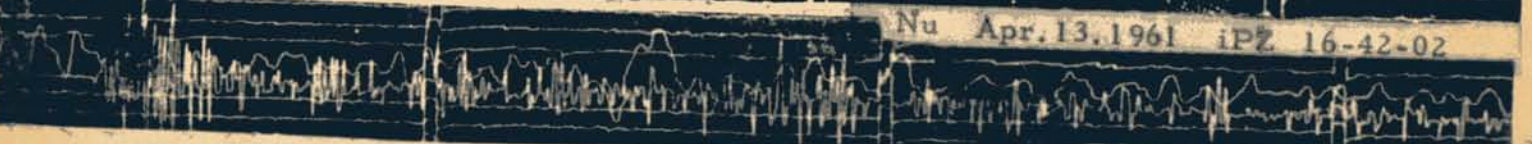
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Ka Apr. 9, 1961 iPZ 15-46-25



Nu Apr. 13, 1961 iPZ 16-42-02





May	May	May
1 Nu iP 00 53 23 So iP 00 52 50 Honshu, Japan	2 Nu iP 19 57 44 Kermadec Islands	3 Nu iP 13 22 01 D So iP 13 21 47 Ka iP 13 21 50 D Philippine Islands
1 Nu eP 01 44 24 i 45 27 So eP 01 44 47 i 46 00	2 Nu iP 19 59 07 Kermadec Islands	3 Nu eP 14 16 13 So iP 14 15 54 Mexico
1 So iP 02 52 55 Northern California	2 Nu iP 21 28 53 Ka iP 21 28 44	3 Nu iP 17 13 45 D So ePKP 17 13 49 Kermadec Islands
1 Nu eP 03 02 38 So iP 03 02 01 Northern California	2 Nu iP 21 44 11 Ka iP 21 44 01	3 Nu iP 17 22 37 Kermadec Islands
1 Nu eP 03 35 49 Northern California	2 Nu eP 22 27 42	3 Nu iP 19 20 14 Kermadec Islands
1 Nu iP 07 33 15 So eP 07 32 36 Northern California	2 Nu eP 22 49 51 Northern California	4 Nu iP 01 20 11 So eP 01 19 57 Ka iP 01 19 58
1 Nu eP 07 55 54 Kurile Islands	2 Nu iP 23 02 59	4 Nu iP 02 29 24 i 32 So iP 02 28 47 D i 54 Ka eP 02 29 11 Northern California
1 Nu iP 12 30 59 D So eP 12 30 20 Ka eP 12 30 42 Northern California	2 Nu iP 23 04 17 U So ePKP 23 04 13 iPP 07 02 iPKS 41 Ka ePKP 23 04 09 ePP 07 11 ePKS 48 Kermadec Islands	4 Nu iP 03 51 20 Fiji Islands
1 Nu iP 18 57 16 U So iP 18 56 38 Northern California	2 Nu iP 23 15 07 Ka eP 23 14 57	4 Nu iP 07 11 19 So iP 07 11 29 Atlantic Ocean
2 Nu eP 01 41 44	2 Nu iP 23 43 30 So ePKP 23 43 21 Ka ePKP 23 43 28 Kermadec Islands	4 Nu iP 15 35 42 D So iP 15 35 46 Ka eP 15 35 39 Sumatra
2 So iP 03 08 03	2 Nu iP 23 47 36	4 So iP 17 21 30 Ka eP 17 21 42
2 Nu iP 03 15 42 iS 18 38 So iP 03 14 44 Ka iP 03 15 19 eS 18 01 Jan Mayen	3 Nu iP 00 37 36 D So iP 00 38 05 D Ka iP 00 37 56 Mid-Atlantic Ocean	4 So eP 17 59 25 Philippine Islands
2 Nu iP 08 34 15 So eP 08 33 20 Ka eP 08 33 52	3 Nu eP 03 45 13	4 Nu eP 21 10 57 So iP 21 10 20 Northern California
2 Nu ePKP 19 10 19 Samoa Islands	3 Nu iP 12 27 41 So iP 12 26 56 Ka eP 12 27 18 Fox Islands	5 Nu iP 06 58 36 D i 48 Kermadec Islands

May	May	May
5 Nu iPKP 09 03 50 Kermadec Islands	6 Nu iP 21 29 30 D ipP 54 So iP 21 29 18 D Ka iP 21 29 20 Philippine Islands	7 Nu iP 12 25 21 U So iP 12 24 53 U Ka eP 12 25 02 Honshu, Japan
5 Nu iP 12 34 06 So eP 12 33 10 Ka iP 12 33 50 U	6 Nu iP 22 36 11 So eP 22 35 21 Andreanof Islands	7 Nu iP 15 20 06 So eP 15 20 43
5 Nu eP 13 19 44 So eP 13 19 08 Northern California	6 Nu iP 22 45 43 So iP 22 45 32 D Ka iP 22 45 32 D Philippine Islands	7 Nu iP 15 44 44 iS 47 39 iL 48 23 So iP 15 43 49 Ka iP 15 44 28 eS 46 59 iLi 47 58 Jan Mayen
5 Nu iPKP 14 02 51 So iPKP 14 02 43 Kermadec Islands	6 Nu iPKP 23 32 33 iPKS 35 54 So iPKP 23 32 22 New Hebrides	7 So eP 16 30 19 Northern California
5 Nu eP 15 03 24 Yellowstone	7 Nu ePKP 00 44 12 Solomon Islands	7 Nu eP 22 09 17 Kodiak Island
5 Nu iP 15 33 39	7 Nu iP 01 09 54 D So iP 01 09 16 D Ka iP 01 09 30 Kurile Islands	8 Nu iP 09 01 27
5 Nu eP 15 35 39	7 So iP 02 08 32 Atlantic Ocean	8 So iP 12 54 54 Northern California
5 Nu iPKP 15 48 22 Kermadec Islands	7 Nu iP 04 44 55 D Kurile Islands	8 Nu ePKP 14 44 20 Kermadec Islands
5 Nu iP 16 36 55	7 Nu iP 04 45 33 U i 54 ePP 48 52 i 59 28 So iP 04 45 32 U Ka iP 04 45 30 U Near coast of Java	8 So eP 23 05 08 Ka iP 23 05 08 Northern Celebes
5 Nu iPKP 19 21 48 Kermadec Islands	7 Nu iPKP 08 05 26 U Kermadec Islands	9 So iP 00 09 48
5 Nu eP 20 56 44	7 Nu iP 10 35 42 D i 36 15 iS 46 31 So iP 10 35 30 D iS 46 12 Ka iP 10 35 32 D eSKS 45 55 eS 46 12 Philippine Islands	9 So eP 02 14 34
5 Nu iPKP 21 06 29 Kermadec Islands		9 Nu ePKP 08 35 35 Kermadec Islands
5 So eP 21 31 59		9 So eP 12 17 31 Northern California
6 Nu iP 16 09 53 D i 10 21 So iP 16 10 52 D Mediterranean Sea		9 Nu eP 16 46 44
6 So iP 18 12 11		9 So eP 16 48 49
6 So iP 19 13 17		9 So iP 17 39 47 Ka eP 17 39 46
6 Nu eP 19 49 11 So iP 19 49 45 Ka eP 19 49 34 Atlantic Ocean		
6 So eP 21 16 44		

May				May				May				
10	Nu	ePKP	10 24 28	12	Nu	iP	06 39 44	13	Nu	iP	16 00 18 D	
		Samoa Islands			Ka	iP	06 39 21			iPcP	49	
10	So	eP	15 37 44	12	Nu	iPKP	06 44 51 D		So	iP	15 59 42 D	
					Ka	iPKP	06 44 46			Ka	iP	15 59 55
10	So	iP	16 57 31			Solomon Islands				Hokkaido, Japan		
10	Nu	iP	17 13 35	12	Nu	eP	06 58 54	13	Nu	iP	19 30 35 D	
	So	iP	17 14 35		So	iP	06 58 36 D			iPcP	55	
10	Nu	iP	23 43 43		Ka	eP	06 58 41			ipP	31 31	
						Ryukyu Islands			So	iP	19 30 18 D	
11	So	iP	02 43 15	12	Nu	iPKP	07 43 40			Ka	iP	19 30 21 D
						i	51			Formosa		
11	Nu	iP	05 11 18			Kermadec Islands		13	Nu	iP	23 39 02	
	So	iP	05 10 40	12	Nu	iP	17 48 52	14	Nu	iPKP	00 32 29	
	Northern California				So	eP	17 48 10		So	iPKP	00 32 17	
11	Nu	ePKP	05 45 04			Northern California			Ka	iPKP	00 32 23	
		iSKP	05 47 53	12	Nu	iPKP	21 44 57	14	Nu	iPKP	03 02 55	
	So	iSKP	05 47 28			Fiji Islands			So	ePKP	03 02 38	
	Fiji Islands								Kermadec Islands			
11	Nu	iPKP	08 57 27	13	So	iP	03 26 24	14	Nu	eP	03 16 52	
	So	iPKP	08 57 30	13	So	iP	05 05 40		So	eP	03 16 56	
	Southern Chile								Ka	iP	03 16 57	
11	Nu	iP	12 44 25	13	Nu	iP	08 59 26	14	Nu	eP	03 33 07	
11	Nu	iP	13 36 31		So	iP	08 58 50	14	Nu	iP	12 18 37	
	So	iP	13 35 53		Ka	eP	08 59 10		So	iP	12 18 14	
	Hokkaido, Japan					Northern California			Ka	eP	12 18 21	
11	Nu	iP	13 47 21	13	Nu	iPKP	14 01 22 U	14	Nu	iP	12 27 49	
	So	iP	13 46 43			Kermadec Islands			So	iP	12 27 25	
	Ka	iP	13 46 59	13	Nu	iPKP	14 38 16 D	14	Nu	iP	13 58 15	
	Kurile Islands					iPKS	41 58					
11	Nu	iP	19 00 39		So	ePKP	14 38 07	14	Nu	eP	15 07 51	
	So	iP	19 00 02 U		Ka	ePKP	14 38 16		So	iP	15 07 20	
	Northern California					Kermadec Islands		14	Nu	eP	15 12 34	
12	Nu	iP	01 46 53 D	13	Nu	ePKP	15 11 01		So	iP	15 12 03	
						i	13		Ka	iP	15 12 24	
12	Nu	eP	03 52 32			ipPKP	13 26	14	Nu	iP	15 09 40	
	So	eP	03 52 38			iPP	48		So	iP	15 09 08	
		i	46			iSKP	54	14	Nu	eP	15 12 34	
	Ka	eP	03 52 38			iPKS	14 43		So	iP	15 12 03	
	Sumatra				So	iPKP	15 11 01	14	Nu	eP	15 12 34	
12	Nu	iPKP	05 04 02 U			iSKP	13 33		So	iP	15 12 03	
		Kermadec Islands				iPKS	14 21		Ka	iP	15 12 24	
					Ka	iPKP	15 11 07		North of Iceland			
						iSKP	13 44					
						Fiji Islands						

May	May	May
14 Nu iP 15 42 40 eS 46 31 So iP 15 42 08 Ka iP 15 42 32 North of Iceland	17 Nu eP 08 44 32 Kurile Islands	19 Nu ePKP 02 39 47 i 56 iSKP 42 33 So ePKP 02 39 43 Ka iPKP 02 39 50 Fiji Islands
14 Nu eP 19 43 23 So iP 19 42 45 Northern California	17 Nu eP 14 30 42 So iP 14 31 23	19 So eP 09 38 17 Nicaragua
15 Nu iPKP 19 31 11 D So ePKP 19 31 01 Santa Cruz Islands	17 Nu iP 19 40 01 U iPP 42 13 iS 48 39 iScS 49 54 iP'P' 20 08 47 So iP 19 39 16 U eP'P' 20 09 06 Ka iP 19 39 37 D eScS 49 25 Near Islands	19 Nu iP 14 59 32 So iP 14 58 55 Ka eP 14 59 14
15 Nu iPKP 20 08 14 D New Hebrides	Ka iP 19 39 37 D eScS 49 25 Near Islands	19 Nu iP 16 48 58 U iS 58 26 So iP 16 48 41 U Ka iP 16 48 44 U eS 57 58 Ryukyu Islands
15 Nu iPKP 21 12 04 i 13 iSKP 15 00 So iPKP 21 12 02 iSKP 14 41 Ka iPKP 21 12 07 Tonga Islands	17 Nu iP 20 31 59	19 Nu iP 21 37 29 D i 38 15 iPP 50 So iP 21 37 42 Ka iP 21 37 28 D iPP 38 51 Tadzhik
16 Nu iP 03 43 05 D So iP 03 42 18 Ka iP 03 42 41 Fox Islands	18 Nu iP 00 33 11 D i 13 So iP 00 33 03 D Ka iP 00 32 59 Sinkiang Province	19 Nu iP 21 45 08
16 Nu iP 04 03 33 So iP 04 02 47 Ka iP 04 03 09 U Fox Islands	18 Nu iP 09 42 44 D So iP 09 41 32 Ka iP 09 42 13	20 Nu iP 00 55 00 D So iP 00 54 15 Ka eP 00 54 37 Fox Islands
16 Nu iPKP 17 47 06 i 18 So ePKP 17 46 57 Kermadec Islands	18 Nu eP 13 08 34 So eP 13 07 32 Ka iP 13 08 13	20 Nu iP 07 10 12 So iP 07 09 06 Ka iP 07 09 32 Arctic Ocean
16 So iP 18 09 41 Honduras	18 Nu iP 15 03 20	20 Nu iP 12 01 45 So iP 12 01 09 Ka iP 12 01 23 Kurile Islands
16 Nu iP 21 56 48 D iPP 59 29 iS 22 06 07 iScS 50 So iP 21 56 23 D eS 22 05 21 Ka iP 21 56 31 D i 42 eS 22 05 33 eScS 06 23 Ryukyu Islands	18 Nu iP 20 50 54 U i 51 36 i 52 So iP 20 50 42 i 51 21 Ka iP 20 50 44 U Philippine Islands	20 Nu eP 17 26 52 So eP 17 25 41 Ka iP 17 26 23 Svalbard region
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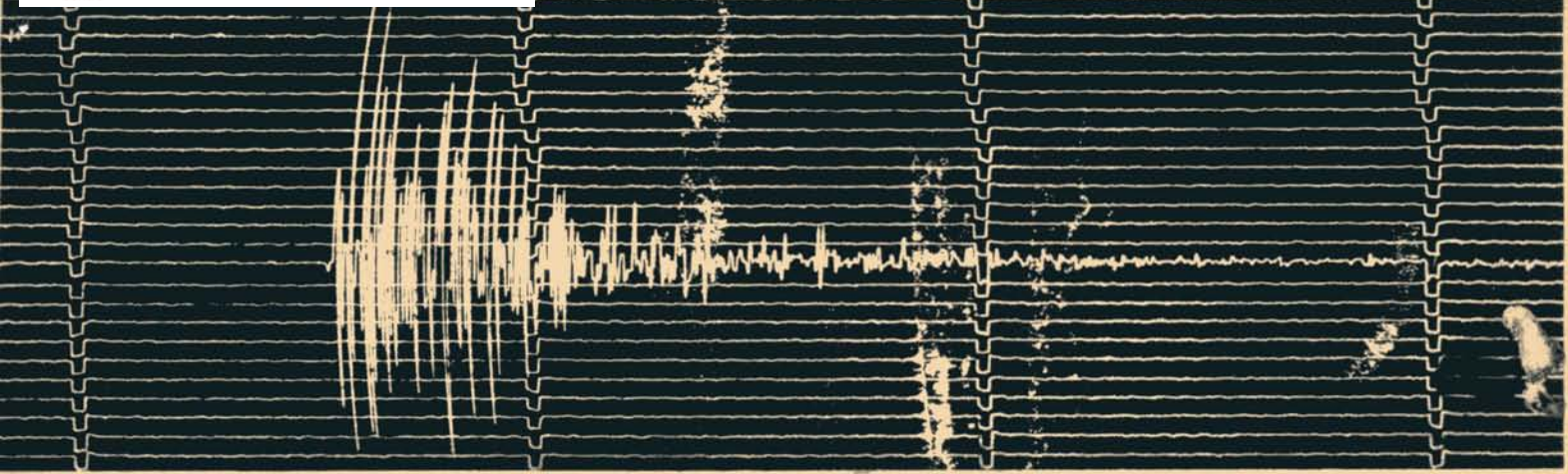
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	Ka	iP 17 50 11 U			iPKS 25			iPP 17 01 18
	Arctic Ocean			So	ePKP 17 51 45			ePKKP 15 20
20	Nu	iP 18 02 51			eSKP 55 00	So	iP 16 57 34	
	So	iP 18 03 33		Ka	iPKP 17 51 38			i 58
	Ka	iP 18 03 21			i 42			iPP 17 00 59
	Tanganyika				eSKP 55 19			iPKKP 15 25
21	Nu	iP 01 12 59 D	22	So	eP 18 27 27		Ka	eP 16 57 45
		i 13 14						iPP 17 01 15
	So	iP 01 12 49	23	Nu	ePKP 00 05 35	23	Nu	iP 17 08 36
	Kazakh S.S.R. - Sinkiang, China			Ka	iPKP 00 05 35		So	iP 17 08 24
21	So	eP 02 28 09	23		Tonga Islands		Ka	iP 17 08 22
21	Nu	eP 03 53 02	23	Nu	iP 01 12 27	24	Nu	eP 11 02 29
	So	iP 03 52 27		Andreanof Islands		24	So	iP 13 45 24
21	Nu	iP 05 35 06 U	23	Nu	iP 02 50 29 U		Coast of Oregon	
	So	iP 05 34 31			iS 54 37	25	Nu	iP 09 30 12 D
	Ka	iP 05 34 45 U		So	iP 02 51 32 U		So	iP 09 29 45 D
21					iS 56 21		Ka	iP 09 29 53 D
				Ka	iP 02 51 01 U		South of Honshu	
				Dodecanese Islands		25	So	iP 13 40 56
21	Nu	iP 10 25 18 D	23	So	eP 03 21 11		Ka	eP 13 40 47
	Ka	iP 10 25 03 D	23	Nu	eP 03 23 48	25	Nu	iP 14 01 47 U
	Ryukyu Islands		23	Nu	iP 03 53 16	25	So	iP 15 48 43
21	Nu	iP 15 27 08		So	eP 03 53 08	25	Nu	iP 19 45 50 D
	Northern California			Costa Rica			So	iP 19 45 53
21	Nu	iP 19 27 15 D	23	Nu	iP 03 56 00		Ka	iP 19 45 47
	So	eP 19 26 51		So	eP 03 55 46		Sumatra	
	Ka	iP 19 26 59 D	23	Nu	iP 05 30 32	25	Nu	ePKP 21 25 58
22	Nu	iP 08 29 48 U		So	iP 05 30 16		Fiji Islands	
22	Nu	eP 09 07 45	23	Nu	iP 07 15 17	26	Nu	ePKP 03 41 30
	So	eP 09 07 00		So	iP 07 14 07		Easter Island	
	Kurile Islands			Ka	iP 07 14 46	26	Nu	ePKP 04 55 32
22	Nu	iPKP 14 03 49	23				Easter Island	
		i 06 54		Nu	iP 16 25 18 U	26	Nu	ePKP 04 55 32
		iPKS 07 31		Ka	iP 16 25 01 U		Easter Island	
	So	ePKP 14 03 44						
	Ka	ePKP 14 03 50						
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	Tonga Islands							

May				May				May			
26	So	iP	05 18 55	27	Nu	iP	22 50 31	29	So	iP	16 30 51
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	Western Guatemala				Ka	iP	22 50 20		Philippine Islands		
26	Nu	iP	23 00 53 D	28	Nu	eP	02 15 53	29	Nu	iP	17 03 43
	So	iP	23 00 21 D						So	iP	17 03 30
		i	36		Southern Sumatra				Philippine Islands		
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	Honshu, Japan				So	eP	04 12 47		So	iP	19 33 53 U
27	Nu	iP	05 21 52 U		Fiji Islands				Ka	eP	19 33 33
		ePP	23 17	28	Nu	iPKP	13 00 53	29	Nu	iP	19 49 31
	So	iP	05 22 08 U		Fiji Islands				So	iP	19 50 17
		iPP	23 39	28	Nu	iPKP	19 47 30	29	Nu	iP	21 48 55
	Ka	iP	05 21 50 U		So	iPKP	19 47 16	29	Nu	iP	21 48 55
	Hindu Kush				Ka	ePKP	19 47 20	30	Nu	iP	13 20 19
27	Nu	iP	07 28 50 U		Fiji Islands			30	Nu	iP	17 19 54
		ePP	31 12	29	Nu	iP	00 33 44	31	Nu	eP	05 31 14
	So	iP	07 28 16			i	56	31	So	iP	08 06 59
	Ka	iP	07 28 28 U		So	iP	00 32 59	31	Ka	iP	08 07 00
	Honshu, Japan				Ka	iP	00 33 21	31	So	iP	14 30 11
27	Nu	iP	10 34 02 U		Fox Islands				So	eP	14 29 42
		i	21	29	Nu	iP	05 08 44 U		Gulf of California		
	So	iP	10 33 30		So	iP	05 09 30	31	Nu	iP	14 49 53
	Ka	iP	10 33 40	29	So	eP	07 35 53			iPcP	50 29
		i	59		Volcano Islands				So	iP	14 49 08
27	Nu	iP	10 45 02	29	Nu	iPKP	07 47 16		Ka	eP	14 49 27
	So	iP	10 45 20		So	iPKP	07 47 22		Kurile Islands		
	Ka	eP	10 45 04		Southern Chile						
	Hindu Kush			29	Nu	eP	08 13 15				
27	So	eP	12 07 46	29	So	iP	09 41 30				
27	Nu	iP	17 04 34	29	Nu	iP	10 41 28 U				
		i	44		So	iP	10 41 03				
	So	iP	17 04 40 U		Ka	iP	10 41 10 U				
	Ka	iP	17 04 31		Bonin Islands						
	Northern Sumatra			29	Nu	iP	11 01 04				
27	Nu	iP	17 38 46 D		So	iP	11 01 53				
		i	55		Ethiopia						
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	Sumatra										
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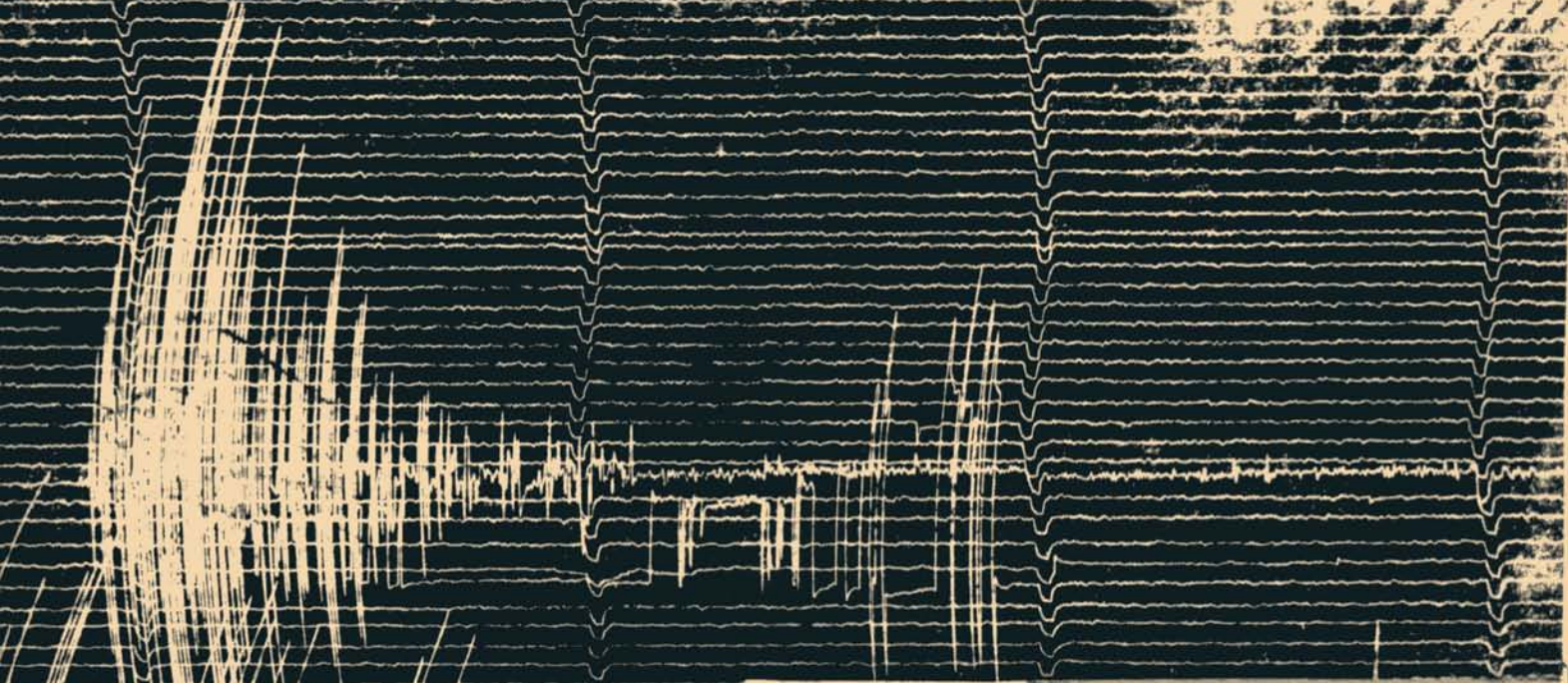
August 2, 1961

M. T. Porkka
Aili Huovila

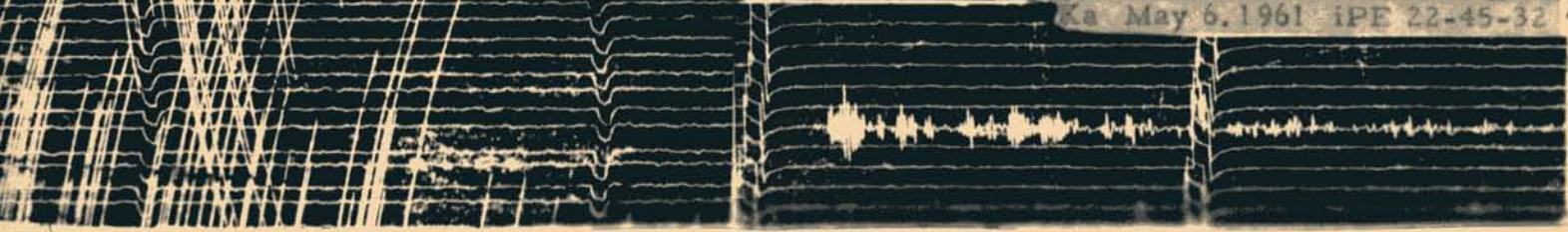
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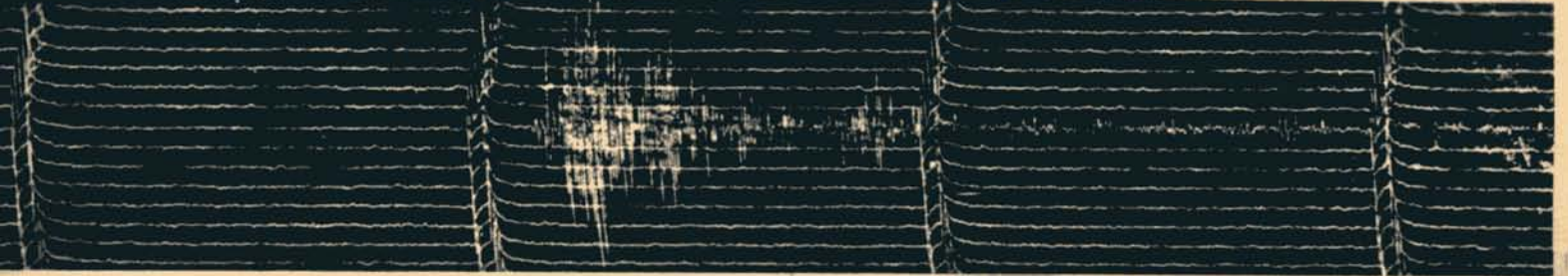
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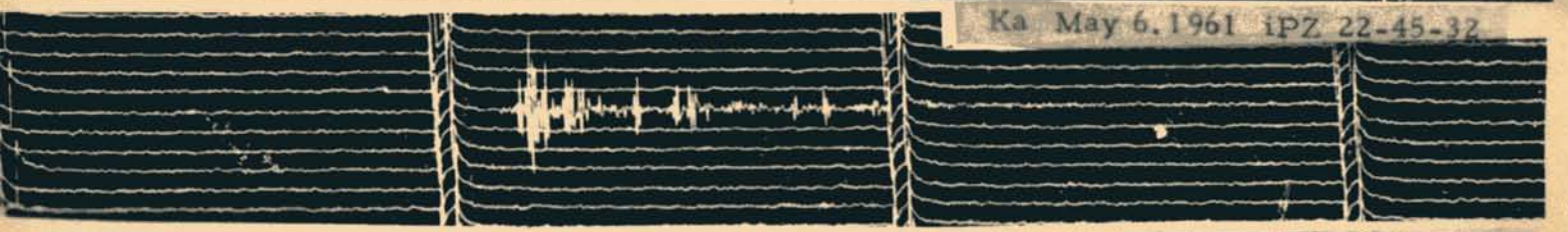
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Ka May 6, 1961 iPZ 22-45-32



Ka May 16, 1961 iPE 21-56-31





5-5-4

June

June

June

1	Nu	iP	03	37	46	2	Nu	iP	00	19	08	U	2	Nu	iP	06	26	16	
	So	iP	03	36	59		So	iP	00	19	53			So	iP	06	27	02	
	Ka	iP	03	37	19		Ka	eP	00	19	30			i		29	34		
	Kamchatka													Ethiopia					
1	Nu	iP	06	08	51	2	Nu	iP	00	22	45		2	Nu	iP	06	39	16	
	So	eP	06	08	15	2	Nu	iP	00	30	26	U	2	Nu	iP	07	11	54	
	Ka	iP	06	08	29		So	iP	00	31	12			eS		19	18		
1	So	eP	07	02	01	2	Nu	iP	01	07	02			So	iP	07	12	40	
	Ka	iP	07	02	04		So	iP	01	07	48			Ka	eP	07	12	15	
	Dominican Republic													Ethiopia					
1	Nu	eP	10	14	26	2	Nu	iP	01	25	17		2	Nu	iP	07	30	49	
	So	iP	10	14	22		So	iP	01	26	03			So	iP	07	31	36	
	Ethiopia						Ka	eP	01	25	40			Ka	iP	07	31	12	
1	Nu	iP	12	12	28	2	Nu	iP	01	28	39		2	Nu	iP	11	11	16	
1	So	iP	13	45	31	2	Nu	eP	01	45	54			So	iP	11	09	53	
	Ka	eP	13	45	36									Svalbard region					
	Northern Celebes					2	Nu	iP	01	50	44		2	Nu	iP	13	14	27	
1	Nu	iP	16	36	57	U	2	Nu	iP	02	44	38		2	Nu	iP	18	22	02
	Southern Turkey						So	iP	02	45	25			So	iP	18	21	38	
1	Nu	eP	17	59	38		2	Nu	iP	03	28	45			i		48		
	Kamchatka													Mariana Islands					
1	Nu	eP	18	59	16	2	Nu	iP	03	58	17	U	2	Nu	iP	22	28	37	
	So	iP	18	59	07		So	iP	03	59	03			2	Nu	iP	23	41	41
	Ka	eP	18	59	05		2	Nu	iP	05	00	17	D		So	eP	23	42	26
	Celebes Sea						eS		07	42			3	So	iP	00	22	22	
1	Nu	iP	21	16	21		So	iP	05	01	04	D		3	Nu	iP	01	23	29
	So	eP	21	17	06		Ka	iP	05	00	40	D			i		38		
	Ethiopia													So	iP	01	22	43	
1	Nu	iP	23	38	22	D	2	Nu	iP	05	22	15	D		i		52		
	iS		45	49			2	Nu	iP	05	31	36			Ka	eP	01	23	11
	So	iP	23	39	09	D		eS		38	57			Kamchatka					
	Ka	iP	23	38	50		So	iP	05	32	22		3	Nu	iP	02	14	39	
	eS		46	24			i		27										
	Ethiopia						Ka	iP	05	31	57								
2	Nu	iP	00	05	53		Ethiopia						3	Nu	ePKP	03	37	41	
	So	iP	00	06	39									New Hebrides					
	Ethiopia					2	Nu	iP	05	42	47		3	Nu	ePKP	03	59	29	
2	Nu	iP	00	10	49	U									New Hebrides				
	So	iP	00	11	35	U								3	Nu	iP	06	18	31
	Ka	eP	00	11	12		2	Nu	iP	05	53	58							
	Ethiopia						iS		06	01	21								
2	Nu	iP	00	17	59	D	So	iP	05	54	45		3	Nu	iP	06	21	08	
	So	iP	00	18	46		Ka	eP	05	54	24			eS		25	22		
	Ka	eP	00	18	22		Ethiopia							Turkey					
	Ethiopia					2	Nu	iP	06	18	02								

June

3 So iP 09 24 19
 3 Nu eP 09 42 35
 3 Nu iP 10 44 37
 3 Nu iP 15 29 31
 So iP 15 30 17
 Ka eP 15 29 53
 Ethiopia
 3 Nu iP 15 32 22 D
 So iP 15 33 08 D
 Ka eP 15 32 45
 Ethiopia
 3 So iP 15 56 58
 3 Nu iP 16 34 56 U
 So eP 16 35 45
 Ka eP 16 35 22
 3 So eP 17 56 24
 Ka iP 17 56 27
 Northern Celebes
 3 Nu eP 22 57 32
 So iP 22 56 19
 Ka iP 22 56 58
 e 59 42
 4 Nu eP 00 50 45
 4 Nu iP 07 41 19 D
 iPcP 43 03
 iS 47 58
 So iP 07 41 26 D
 iPcP 43 03
 Ka iP 07 41 15 D
 iPcP 43 01
 Tibet
 4 Nu iP 07 52 00 U
 iPcP 53 42
 So iP 07 52 06
 iPcP 53 43
 Ka iP 07 51 55
 Tibet
 4 Nu iP 11 25 32
 So eP 11 25 46
 Hindu Kush

June

4 Nu iP 13 59 45
 iPcP 14 01 28
 So iP 13 59 53
 iPcP 14 01 30
 Ka iP 13 59 44
 Tibet
 4 Nu iPcP 23 13 32
 New Hebrides
 4 Nu iP 23 43 23
 So iP 23 43 37
 Ka iP 23 43 23
 Northern India
 5 Nu iP 02 19 58
 So iP 02 19 46 D
 Ka iP 02 19 46
 5 Nu iP 03 38 16
 eS 44 06
 So iP 03 38 55
 iPP 40 44
 Ka eP 03 38 32
 Southern Iran
 5 Nu iP 04 52 26
 5 Nu iP 06 18 48
 5 Nu eP 06 47 49
 So iP 06 47 32
 Ka eP 06 47 35
 6 Nu eP 00 44 58
 Leeward Islands
 6 Nu iP 02 28 17
 6 Nu iP 09 53 20
 So iP 09 54 00
 Iran
 6 Nu iP 17 45 18
 So iP 17 45 30 D
 6 Nu iP 17 55 41
 6 Nu iP 21 03 35
 So eP 21 03 44
 Sinkiang Province

June

7 Nu eP 05 13 48
 Kurile Islands
 7 Nu iP 13 15 34 U
 So eP 13 15 08 U
 Ka eP 13 15 09 U
 Korea-China border
 7 Nu iP 13 35 29
 7 Nu iP 14 26 40
 iPP 29 22
 ePPP 31 02
 So iP 14 27 16
 Ascension Island
 7 Nu iP 15 10 20 D
 So iP 15 11 06 D
 7 Nu iPcP 15 56 49 D
 Santa Cruz Islands
 8 Nu iP 04 06 19 D
 So iP 04 06 34 D
 Ka eP 04 06 18
 Hindu Kush
 8 Nu iP 09 12 49
 8 Nu iP 11 02 20 D
 Ka iP 11 01 56
 8 Nu eP 14 27 34
 8 Nu eP 14 55 08
 8 Nu iP 18 13 50
 So iP 18 13 54
 8 Nu eP 20 41 20
 8 Nu iP 21 29 26
 9 Nu iP 04 03 26 D
 So iP 04 03 39 D
 Ka iP 04 03 25
 Northern India



June				June				June			
9	Nu	iP	09 42 16 D	11	Nu	iP	04 13 06 D	11	Nu	iP	06 58 49
		iS	46 46		So	iP	04 12 23 D		So	iP	06 59 27
	So	iP	09 42 55			ePP	14 19			iPP	07 01 12
		i	43 24		Ka	eP	04 12 43		Ka	eP	06 59 04
		iS	48 30		Kamchatka				Southern Iran		
		i	49 00								
	Ka	iP	09 42 29	11	Nu	iP	05 17 46 U	11	Nu	eP	07 13 41
		iS	47 12			iS	23 44				
	Caspian Sea				So	iP	05 18 24 U	11	Nu	eP	07 24 31
					Ka	iP	05 18 03				
9	Nu	iP	14 34 28 D			eS	24 12	11	Nu	eP	07 32 21
	So	iP	14 34 02 D		Southern Iran						
	Ka	iP	14 34 11	11	Nu	iP	05 28 37	11	Nu	iP	07 36 57
	South of Honshu				Ka	iP	05 28 53	11	Nu	eP	07 46 16
9	Nu	iP	15 29 33	11	Nu	eP	05 32 25	11	Nu	iP	08 11 27
	So	iP	15 29 39 U		So	eP	05 33 03		Iran		
	Ka	iP	15 29 31								
	Sumatra			11	Nu	iP	05 37 32	11	Nu	eP	08 46 02
9	Nu	iP	15 54 31 D			iS	43 26	11	Nu	eP	09 11 12
		i	57 23		So	iP	05 38 11				
		iS	16 03 58		Ka	iP	05 38 12	11	Nu	iP	09 18 03
	So	eP	15 54 04			eS	44 14				
		i	56 31		Southern Iran						
	Ka	iP	15 54 13	11	Nu	iP	05 49 26	11	Nu	iP	09 28 58
	South of Honshu				So	iP	05 50 26		So	eP	09 29 37
9	Nu	eP	17 43 55	11	Nu	eP	05 57 51		Ka	eP	09 29 14
9	Nu	eP	18 52 41						Iran		
9	Nu	eP	18 56 15	11	Nu	iP	06 01 06 U	11	Nu	iP	10 07 56
9	Nu	iPKP	19 11 29	11	Nu	iP	06 03 18 U	11	Nu	iP	10 10 27
	Santa Cruz Islands				So	iP	06 02 34 U		So	iP	10 11 04
					Ka	eP	06 02 55	11	Nu	iP	11 31 29
					Kamchatka				So	eP	11 32 05
10	Nu	eP	05 43 19	11	Nu	iP	06 18 01		Iran		
10	Nu	eP	06 03 34		So	iP	06 18 40	11	So	iP	11 44 52
	Kamchatka			11	Nu	iP	06 26 48				
10	Nu	eP	08 41 21	11	Nu	iP	06 27 35	11	Nu	iP	12 37 43
					So	iP	06 27 27		So	iP	12 38 21 D
									Iran		
10	Nu	iP	11 43 07	11	Nu	iP	06 39 21	11	Nu	iP	12 38 47 U
	So	iP	11 42 22		Ka	eP	06 39 38			iPP	40 12
	Andreanof Islands									iS	44 44
10	Nu	iPKP	12 03 36	11	Nu	iP	06 46 48		So	iP	12 39 25 U
	So	iPKP	12 03 40	11	Nu	iP	06 54 08		Ka	iP	12 39 02
	Argentina					iS	07 00 02			eS	45 14
					So	iP	06 54 48		Iran		
10	Nu	ePKP	20 51 07			ePP	56 29	11	Nu	iP	12 50 05
	So	ePKP	20 50 59		Ka	iP	06 54 23		Iran		
	Easter Island				Iran						

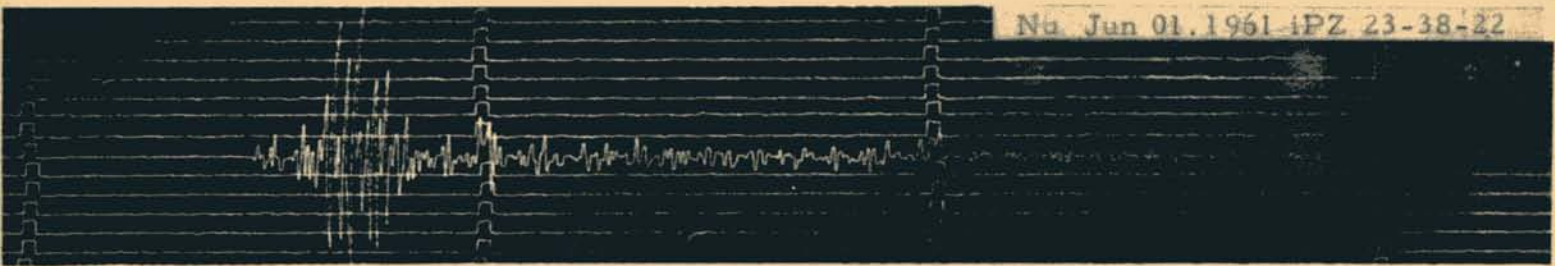
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11	Nu	iP	14 05 19 U	12	Nu	eP	07 10 56	13	Nu	iP	04 15 34
		iPP	06 45						So	eP	04 16 37
		iPcP	07 33	12	Nu	ePKP	07 55 24		Ka	iP	04 15 49
		iS	11 14		So	iPKP	07 55 19				
	So	iP	14 05 57 D		Ka	iPKP	07 55 20	13	Nu	iP	04 34 01
		iPP	07 35		Ne# Zealand						
	Ka	iP	14 05 36	12	Nu	iP	10 09 09 U	13	Nu	iP	07 28 50
		iPP	07 10		So	iP	10 09 03 U		South Atlantic Ocean		
		iS	11 41		Ka	iP	10 09 01	13	Nu	iPKP	13 35 52
	Southern Iran				North Viet-Nam				i		36 46
11	Nu	iP	15 13 35	12	Nu	iP	10 50 10		Kermadec Islands		
	So	iP	15 14 15		So	iP	10 49 27	13	Nu	eP	14 12 40
	Ka	eP	15 14 03		Kamchatka						
	Southern Iran			12	Nu	eP	11 32 28	13	Nu	iP	15 26 56
11	Nu	iP	17 00 26		So	eP	11 31 45		So	iP	15 26 18
11	Nu	iP	17 09 33		Ka	iP	11 32 29		Kurile Islands		
	So	eP	17 10 54	12	Nu	iP	13 08 37	13	Nu	iPKP	21 56 57
11	So	eP	17 15 08						i		57 07
11	Nu	iP	17 25 45	12	Nu	eP	14 47 38		ipPKP		48
	So	iP	17 25 40		So	iP	14 47 27		iPP		59 55
	Burma-China border			12	Nu	eP	15 40 13		iSKP	22 00 29	
11	Nu	eP	20 40 45						iPKS		41
11	Nu	iP	20 53 16 D	12	So	iP	16 03 52		iSKKS	06 34	
	So	iP	20 52 32 D		Nu	iP	17 12 23	So	iPKP	21 56 53	
	Kamchatka				So	iP	17 13 04		ipPKP	57 36	
					Iran				iPP	59 15	
11	Nu	eP	22 13 00	12	Nu	eP	17 40 23		iSKP	22 00 09	
	So	iP	22 12 35		So	eP	17 39 53		iPKS		22
	ipP		13 01						iSKKS	05 58	
	Volcano Islands			12	Nu	iP	21 10 01	Ka	ePKP	21 56 58	
11	Nu	iP	22 19 46		So	eP	21 10 39		i	57 01	
					Iran				iSKP	22 00 19	
11	Nu	iP	23 20 27	12	Nu	eP	21 55 54		Tonga Islands		
	So	iP	23 21 05		So	iP	21 56 31	14	Nu	iP	00 31 46
	ePP		22 51		ipP		58 20		So	iP	00 32 24
	Ka	iP	23 20 46		Iran				iPP		34 11
	Iran								Ka	eP	00 32 02
				12	Nu	iP	23 03 09		Iran		
12	Nu	iP	03 59 19					14	Nu	iP	00 51 09
12	Nu	eP	04 26 12	12	Nu	eP	23 24 32		eS		59 07
12	Nu	iP	06 38 36	12	Nu	iP	23 48 01		So	iP	00 51 09
12	Nu	iP	07 07 58	13	Nu	iP	01 17 28		Ka	iP	00 51 04
	Ka	iP	07 07 55						Northern Burma		
	South coast of Java			13	Nu	eP	02 35 15	14	Nu	iP	01 49 51
					So	eP	02 34 30	14	Nu	iP	04 50 19
					Andreanof Islands			14	Nu	iP	06 13 31
								14	Nu	eP	08 21 01



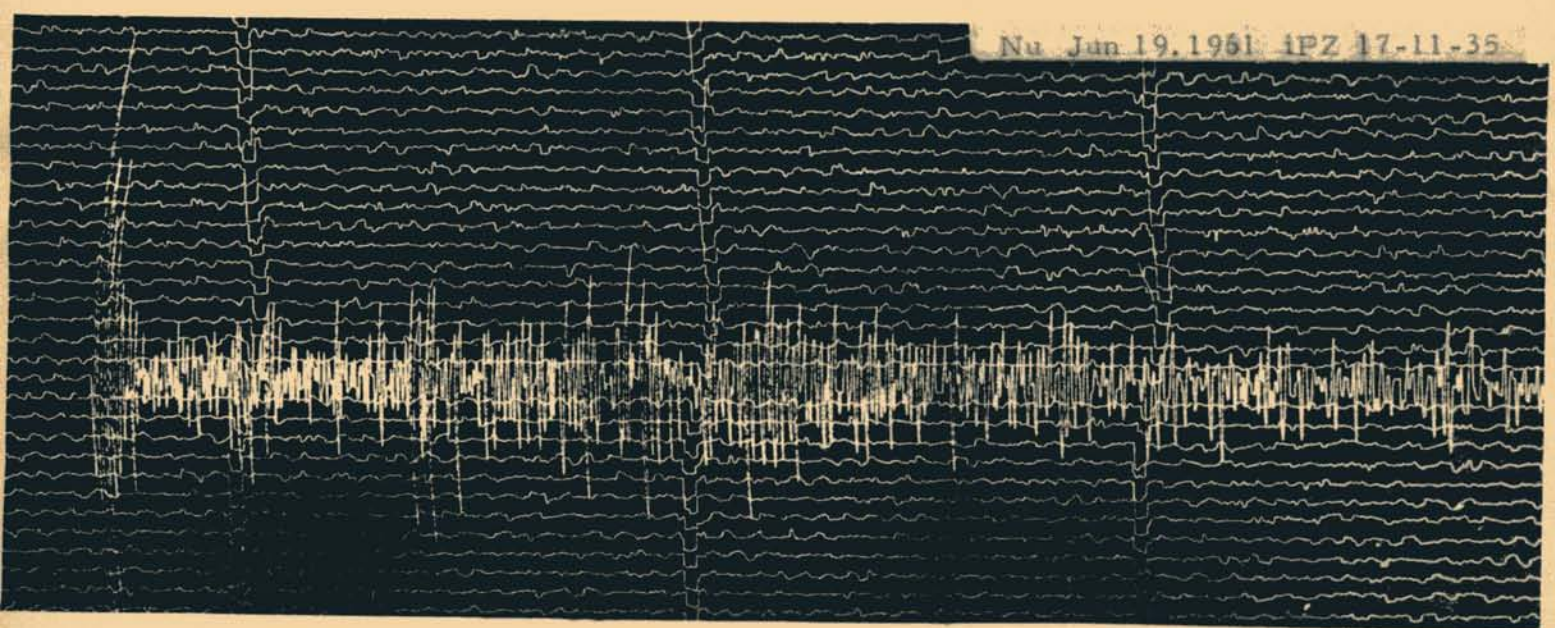
June	June	June
18 Nu iPKP 14 14 08 So iPKP 14 13 52 iSKP 16 55 Ka iPKP 14 13 59 Kermadec Islands	20 Nu iP 11 33 03	22 Nu ePKP 05 52 42 Loyalty Islands
19 Nu iP 01 57 45 So iP 01 57 33 iPP 02 00 41 Ka iP 01 57 34 Philippine Islands	21 So iP 02 54 49 Mariana Islands	22 Nu iP 09 12 34 D
19 So iP 02 35 03 Ka iP 02 35 03 Philippine Islands	21 Nu iP 04 10 22 So iP 04 10 10 D NW Honduras	23 Nu eP 09 07 27 So iP 09 06 48 Off coast of Oregon
19 Nu iP 02 57 00 D So iP 02 56 25 Ka iP 02 56 38 Honshu, Japan	21 Nu iP 06 46 44 U iPP 48 15 iS 52 38 So iP 06 47 22 U iPP 49 03 Ka iP 06 46 57 U Iran	23 Nu iP 09 34 19 U So iP 09 33 40 U Off coast of Oregon
19 Nu iP 03 03 20 So iP 03 03 08 Ka iP 03 03 10	21 Nu eP 16 09 49 So eP 16 10 50	23 So iP 10 17 36 Ka iP 10 17 44 Mariana Islands
19 Nu iP 07 49 26 So iP 07 48 53 Ka iP 07 49 05 Honshu, Japan	21 So iP 19 10 11 i 41	23 Nu iP 11 16 07 So iP 11 15 36 Ka iP 11 15 47 Honshu, Japan
19 Nu iP 08 10 39 So iP 08 10 06 Ka iP 08 10 19 Honshu, Japan	21 Nu iP 19 21 57 So iP 19 22 34 iPP 24 15 Ka iP 19 22 14 Iran	23 Nu iP 13 30 55 So iP 13 30 14 Kurile Islands
19 Nu iP 17 11 35 U ipP 12 12 So iP 17 11 52 U ipP 12 33 Ka iP 17 11 37 U Hindu Kush	21 Nu iP 20 38 07 D iSKS 48 30 iS 49 08 So iP 20 38 06 D iSKS 48 29 Ka iP 20 38 03 D iSKS 48 24 N coast of Java	23 Nu iP 16 43 46 iPP 45 21 iS 49 40 So iP 16 44 24 iPP 46 11 Ka iP 16 44 00 eS 50 04 Iran
19 Nu iP 22 27 25 iPcP 28 13 So iP 22 26 41 Kamchatka	21 Nu iP 20 40 20 iS 50 28 So iP 20 39 36 Ka iP 20 39 54	24 So eP 09 47 55 Sumatra
20 Nu iP 03 30 28 So iP 03 31 12 Ka iP 03 30 53 Gulf of Aden	21 So iP 21 27 21	24 So iP 16 33 08 ePKP 37 13 New Guinea
20 Nu iP 10 23 10	21 So iP 22 19 55	24 So eP 19 48 11 Ceram Sea
	22 Nu iP 01 00 18 So iP 01 01 29 Ka iP 01 01 00 Alban.-Jugosl. border	25 Nu iP 02 40 24 So iP 02 39 50 D Ka eP 02 40 03 Honshu, Japan
		25 Nu iPKP 09 28 32 Fiji Islands

June				June				June				
25	So	iP	10 21 54	27	Nu	iP	08 02 28 D	28	Nu	iP	13 28 12 D	
						iPcP	03 14			i	35	
25	Nu	eP	12 47 39		So	iP	08 01 44 U		So	iP	13 28 16	
	So	eP	12 48 18			iPcP	02 48		Sumatra			
		ePP	50 00		Ka	iP	08 02 02		28	Nu	iP	20 55 35 D
	Iran				Kamchatka					i	45	
25	So	iP	16 33 20	27	So	iP	08 06 21		29	So	iP	08 34 37
	Philippine Islands											
25	Nu	eP	16 59 09	27	So	iP	10 55 49		29	Nu	iPKP	09 41 55
	So	iP	16 58 43		Ka	eP	10 55 04				i	42 14
	Mariana Islands								New Hebrides			
25	So	iP	19 24 47 D	27	Nu	iPKP	11 00 17 D		29	Nu	iP	11 45 35 D
	Honshu, Japan				Kermadec Islands					So	iP	11 44 56
25	So	eP	19 43 53	27	Nu	eP	11 20 34		29	Nu	iP	14 13 26
26	Nu	iP	03 01 45	27	Nu	eP	11 56 21				i	48
		i	56						So	iP	14 12 41	
	So	iP	03 01 28	27	Nu	eP	12 03 23				i	13 04
	Ka	iP	03 01 35		So	iP	12 03 18				iPcP	27
26	Nu	ePKP	07 22 12	27	Nu	eP	12 29 37		Ka	iP	14 13 03	
	Loyalty Islands				So	eP	12 28 37		Andreanof Islands			
26	Nu	iP	14 58 05	27	Nu	eP	13 09 13		29	Nu	iP	18 12 19
		i	59 14								i	36
	So	iP	14 57 20	27	Nu	iP	14 55 15		So	eP	18 13 39	
		i	58 10						Ka	iP	18 13 04	
	Ka	iP	14 57 39	27	Nu	iP	15 13 39		29	Nu	iP	20 12 44
	Near Islands				So	iP	15 13 29		29	Nu	eP	22 07 32
26	Nu	iP	16 39 26	27	So	iP	22 05 56			So	iP	22 06 14
					Yunan Province, China				Ka	iP	22 06 46	
26	So	eP	16 56 30		Severnaya Zemlya				30	Nu	iP	05 10 53
	Colombia			28	Nu	iP	04 31 48 U			So	iP	05 11 55
										Ka	eP	05 11 26
27	Nu	iP	03 32 50		So	iP	04 31 36		30	Nu	iP	15 59 27
	So	iP	03 32 04		Ka	iP	04 31 35					
	Unimak Island				Szechwan Province				30	Nu	eP	20 27 14
				28	Nu	eP	06 22 39					
27	Nu	iP	07 13 39 U	28	Nu	iP	06 37 17 D					
		iS	21 45			i	30					
	So	iP	07 13 35									
		i	39	28	Nu	iP	08 16 06		September 2, 1961			
	Ka	iP	07 13 30						M. T. Porkka			
	Yunan Province, China			28	Nu	iP	08 42 31		Aili Huovila			
27	So	iP	07 31 41			i	42					

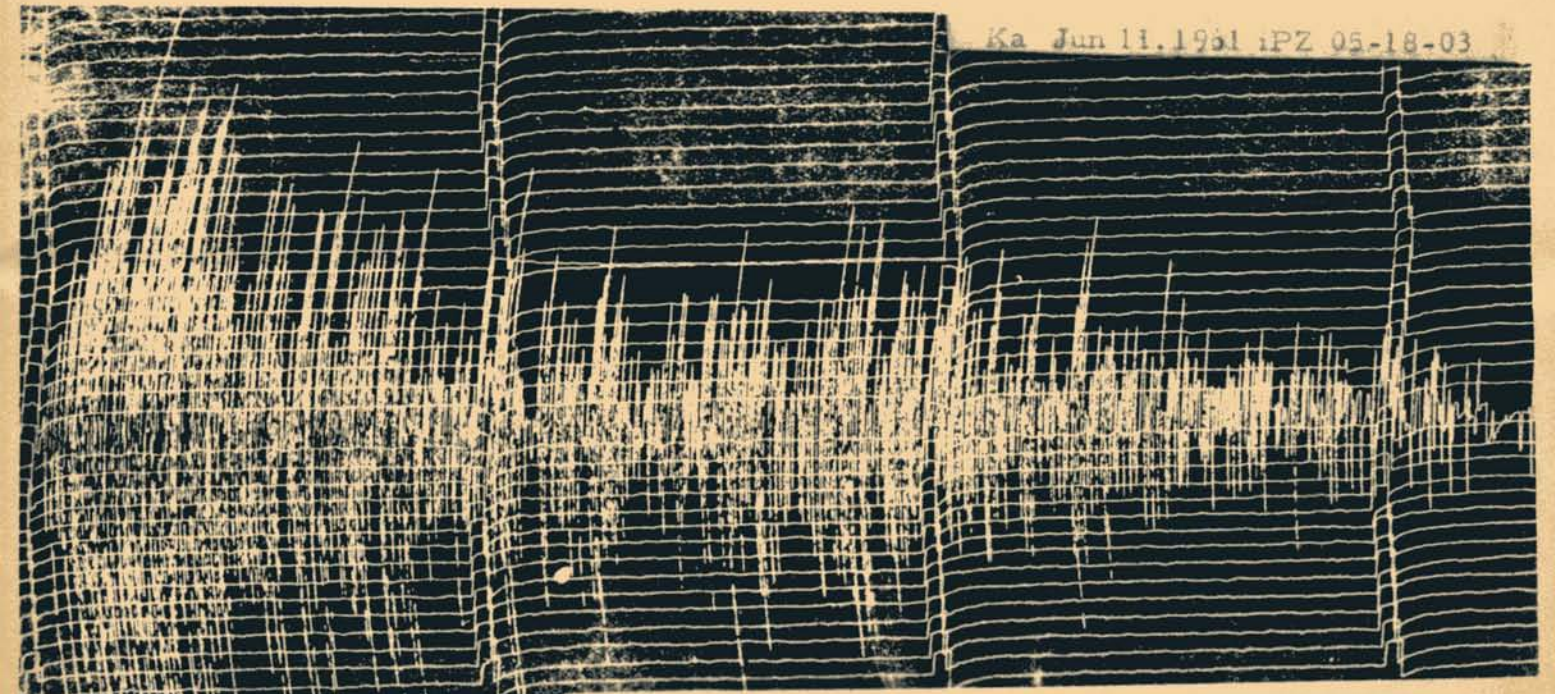
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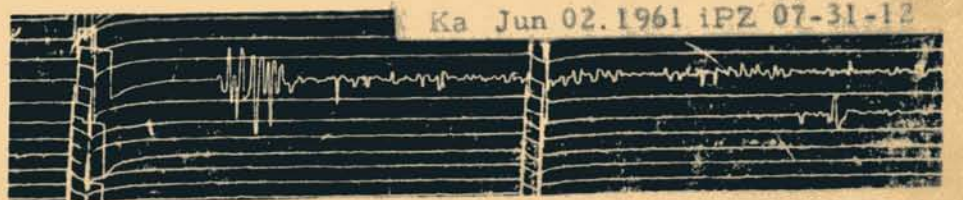
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Nu Jun 19. 1961 iPZ 17-11-35

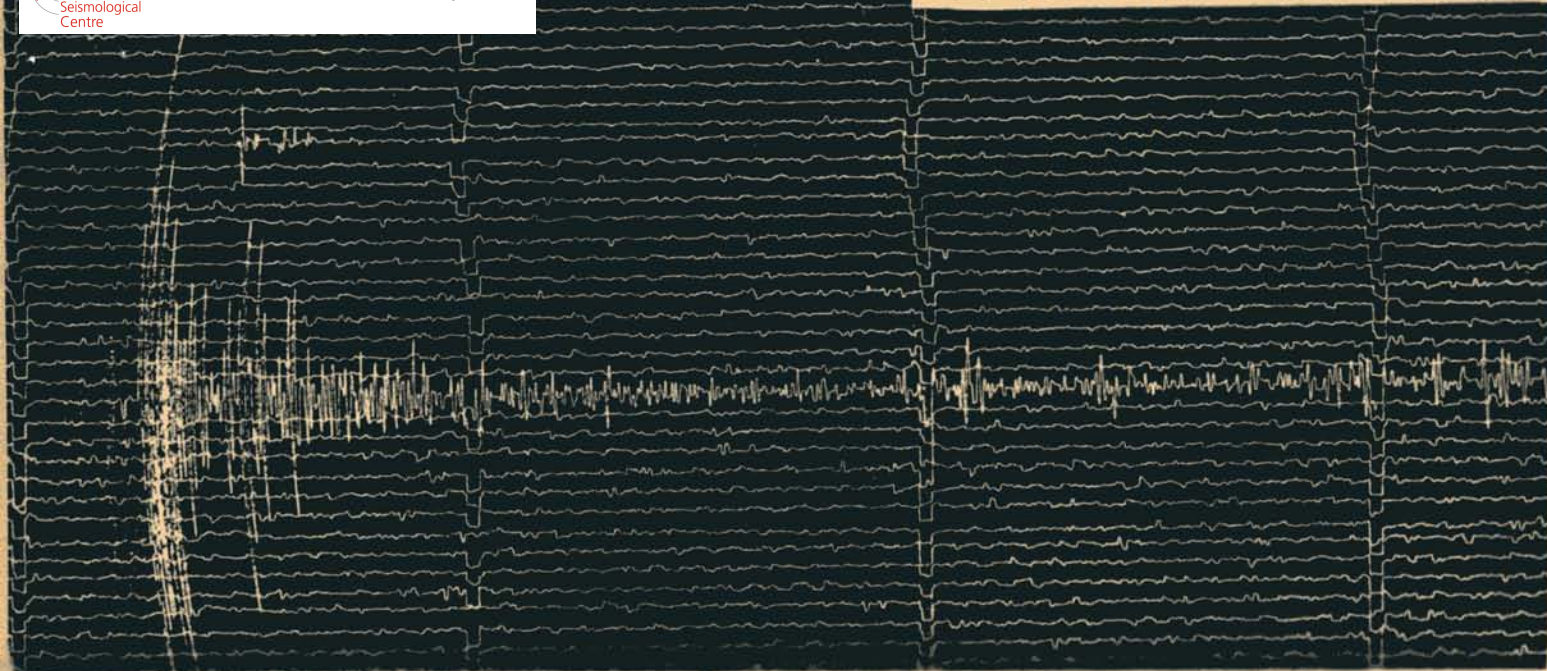


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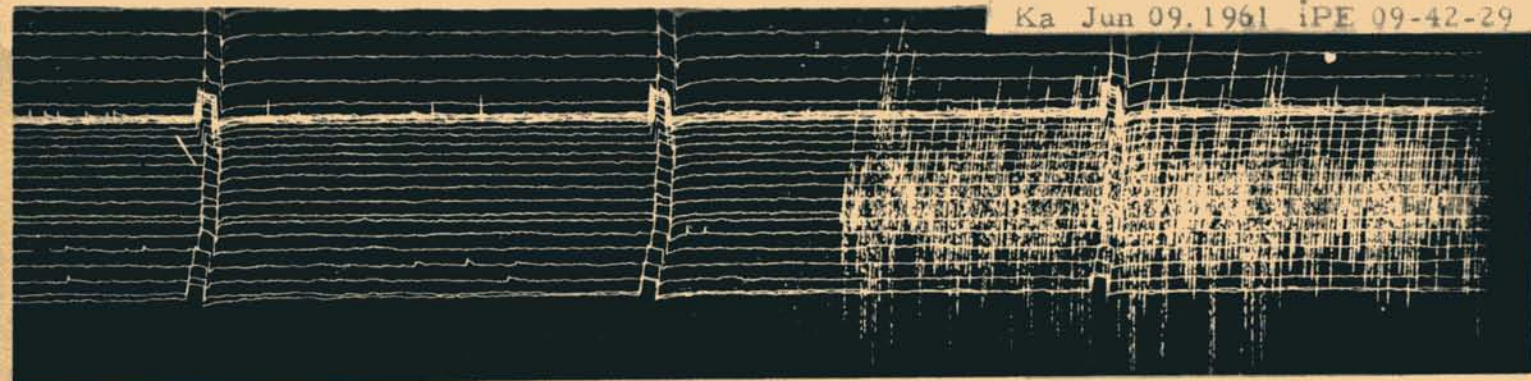


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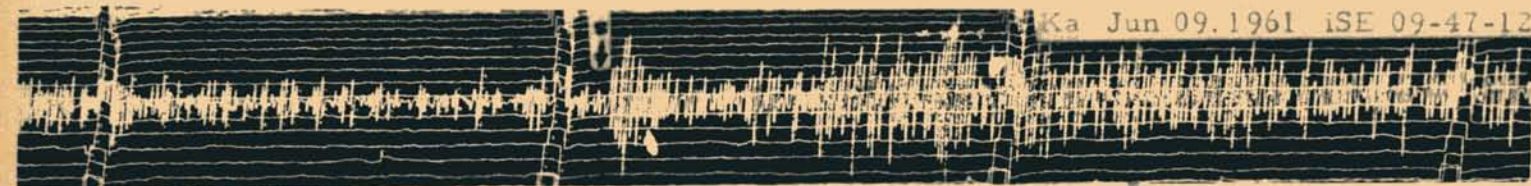
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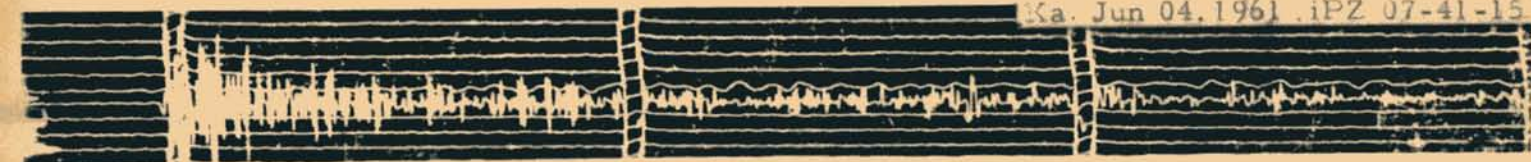
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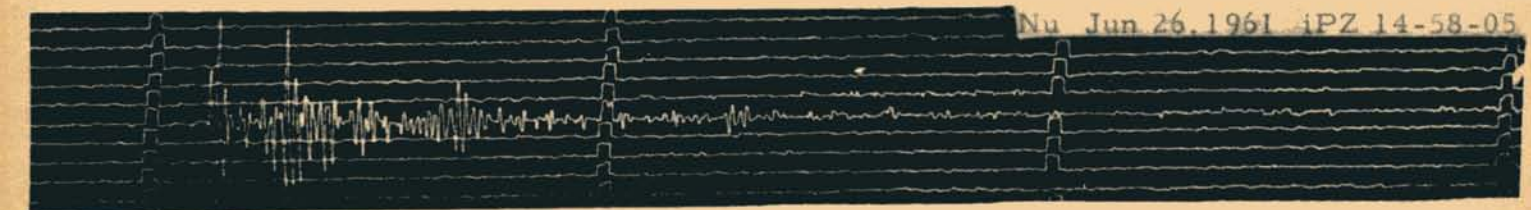
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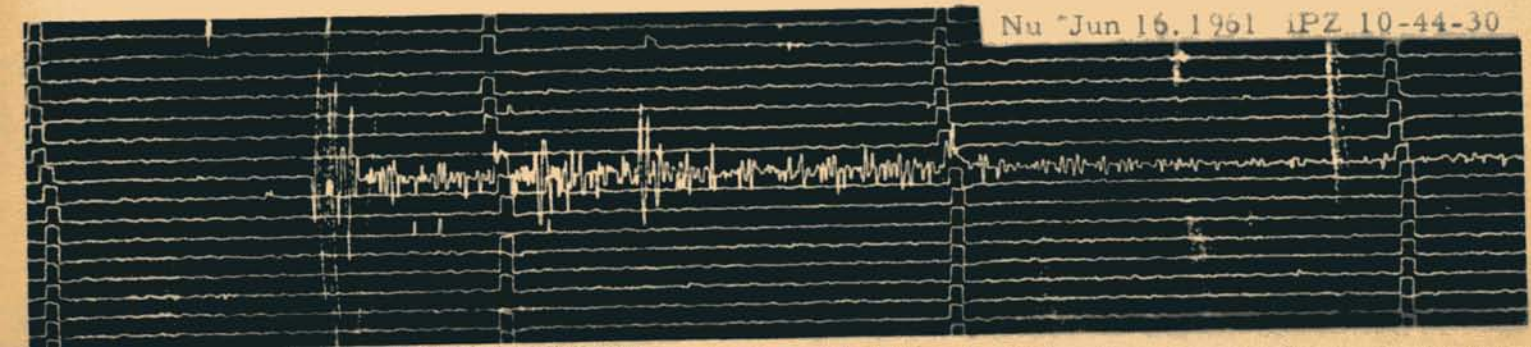
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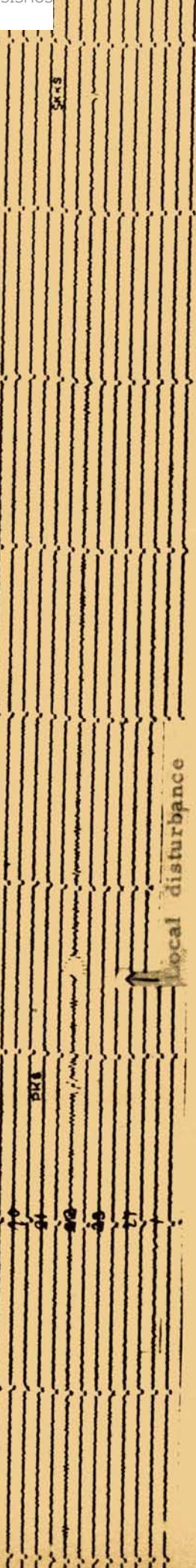
Nu Jun 16.1961 iPZ 10-44-30



Nu Jun 13, 1961 iPKPZ 21-56



Nu Jun 13, 1961 iPKSE 22-00



Nu Jun 16, 1961 iPZ 10-44-30



Nu Jun 16, 1961 iSKSN 10-54-40



Seismology

5-5-11

mt Kemp - library

July

July

July

1 Nu iP 00 13 23 D
So iP 00 12 39
Ka eP 00 13 00
Unimak Island

1 Nu eP 03 17 24

1 Nu iP 03 28 21 U
i 34

1 Nu iP 08 11 46 U
So iP 08 11 20 D
Ka iP 08 11 29
Bonin Islands

1 So eP 15 50 27

1 Nu iPKP 19 09 12
iSKP 11 50
Fiji Islands

1 Nu iP 23 54 34 U
So iP 23 53 51
Near Islands

2 Nu iP 02 17 45 U
So iP 02 17 10
Hokkaido, Japan

2 Nu eP 07 03 01

2 Nu iP 09 06 15 U
So iP 09 05 58

2 So iP 09 11 35

2 Nu iP 10 22 47
So iP 10 22 24 D
Ka iP 10 22 31 D
Bonin Islands

2 Nu ePKP 17 06 25
New Hebrides

2 So eP 22 18 28

3 So eP 12 01 27

4 Nu eP 05 07 39
So iP 05 07 04
Ka eP 05 07 25
Western Nevada

4 Nu iP 06 23 27 U
iPP 26 53
So iP 06 23 04 U
Ka iP 06 23 11 U
Mariana Islands

4 Nu iPKP 12 26 15
Kermadec Islands

4 Nu iP 15 06 30

4 Nu ePKP 19 37 40
So ePKP 19 37 32
Macquarie Island

4 Nu ePKP 20 18 22
Macquarie Island

5 Nu iP 02 33 20 D
i 34
So iP 02 32 58
Ryukyu Islands

5 So ePKP 02 48 21
Macquarie Island

5 Nu iP 03 59 00

5 Nu iP 05 14 01
So iP 05 14 04
Ka iP 05 14 08
Windward Islands

5 Nu iP 05 57 55
So iP 05 57 45
Ka eP 05 57 41

5 So eP 06 29 31

5 Nu iP 06 41 51
So iP 06 41 57
Ka iP 06 41 45

5 Nu iP 08 25 13
So eP 08 25 57

5 Nu eP 15 40 24

6 Nu iP 08 21 58

6 Nu iP 14 46 14

6 Nu iP 16 19 56
So iP 16 20 30
Ascension Island

6 Nu ePKP 22 28 33
i 42
iPP 31 09
iSKP 32 08
iSKS 35 51
iSKKS 37 57
iSKKP 41 23
So ePKP 22 28 23
i 33
iPP 30 32
iPKS 31 53
iSKKP 41 37
Ka ePKP 22 28 33
i 39
ePP 30 41
iSKP 31 57
New Hebrides

7 So iP 02 08 01

7 Nu iP 02 12 34
So iP 02 11 45
Kenai Peninsula

7 Nu iPKP 03 40 02
New Hebrides

7 Nu iP 08 15 38
So iP 08 14 58
Ka eP 08 15 13
Kurile Islands

7 Nu ePKP 13 29 22
iSKS 36 19
So iP 13 25 05
iPKP 29 16
New Britain

7 Nu eP 13 40 14
So iP 13 40 22

7 Nu eP 15 03 23

7 Nu iP 15 38 31
So iP 15 37 44
Ka eP 15 38 02
Kamchatka

July

7 Nu eP 15 52 54
So iP 15 53 00

7 Nu iP 16 07 38 U
So eP 16 06 54
Ka eP 16 07 08

7 Nu iP 16 13 51
So eP 16 13 06

7 Nu eP 17 12 06
So eP 17 12 02
Burma-China border

7 Nu iP 19 37 17
So eP 19 38 20

7 Nu eP 21 20 22
So eP 21 20 24

7 Nu iPKP 22 38 43
i 54
iSKP 42 05
iPKS 08
i 19
So iPKP 22 38 31
i 42
Ka ePKP 22 38 35
Loyalty Islands

7 Nu eP 23 07 20
So eP 23 07 20

7 Nu eP 23 43 49
So iP 23 43 54

8 Nu iPKP 02 54 33
iPKS 58 00
So ePKP 02 54 19
Ka ePKP 02 54 25
Loyalty Islands

8 Nu iP 06 44 31
So iP 06 45 11
Ka iP 06 44 47

8 Nu iP 07 56 05
So eP 07 54 55

8 Nu iP 07 59 27
So eP 07 58 13
Ka iP 07 58 54

July

8 Nu eP 09 22 42
So iP 09 22 22

8 Nu iP 10 26 59
Ka iP 10 27 37

8 Nu eP 11 26 07

8 Nu eP 14 10 30
So eP 14 09 15
Ka iP 14 09 57

8 Nu iP 15 27 45

8 Nu iPKP 15 53 50
iPKS 57 17
So iPKP 15 53 40
Ka iPKP 15 53 44
Loyalty Islands

8 Nu iPKP 15 59 27
iPKS 16 02 55
So ePKP 15 59 21

8 Nu ePKP 21 33 04
iPKS 36 42
So ePKP 21 32 52
Loyalty Islands

8 Nu iPKP 22 07 58
iPKS 11 23
So ePKP 22 07 48
Loyalty Islands

8 Nu iP 22 21 16

9 So eP 05 09 58
British Honduras

9 Nu eP 06 45 28
So iP 06 45 17
Ka eP 06 45 28
Honduras

9 Nu iP 08 13 03 U
iS 18 57
So iP 08 13 41
ePP 15 25
Ka iP 08 13 17
Iran

9 Nu eP 09 05 27

July

9 Nu iP 16 56 48
So iP 16 56 03
Rat Islands

10 Nu iPKP 14 40 24
i 33
Kermadec Islands

11 Nu iP 01 31 56
Hokkaido, Japan

11 Nu iPKP 06 04 59 D
Kermadec Islands

11 Nu eP 09 43 09
iS 52 29
So iP 09 43 17
Nicobar Islands

11 Nu iP 13 36 15

11 Nu eP 17 32 41
Northeastern India

12 Nu iP 02 53 16
So iP 02 54 22
Northeastern Greece

12 So iP 05 00 28
Molucca Passage

12 Nu eP 05 08 43
So iP 05 07 42

12 Nu iP 13 40 41 D
So iP 13 40 03 D
Kurile Islands

13 Nu iP 02 23 10
So iP 02 22 45
Volcano Islands

13 Nu iP 03 13 43
So iP 03 14 22

13 Nu iP 03 30 04

13 Nu eP 04 05 20

13 Nu iP 09 36 17 D
iS 42 12
So iP 09 36 55 D
iPP 38 33
Iran

July				July				July			
13	Nu	ePKP	14 04 26	15	Nu	iP	11 28 09	17	Nu	iP	01 14 06
			Tonga Islands		So	iP	11 28 46		So	iP	01 13 49 D
											Oaxaca, Mexico
13	Nu	eP	21 56 08	15	Nu	ePKP	20 51 41	17	So	iP	03 43 30
	So	iP	21 55 52			iSKP	54 30				Oaxaca, Mexico
		i	56 08		So	iSKP	20 54 10				
	Ka	iP	21 55 57				Fiji Islands				
			Formosa	16	Nu	iP	00 57 58	17	Nu	iP	05 20 46 D
13	Nu	ePKP	22 28 32		So	iP	00 57 15			iPP	22 20
		iSKP	31 31				Southeastern Alaska			iS	26 46
	So	iSKP	22 31 14						So	iP	05 21 23
			Kermadec Islands	16	Nu	iP	04 27 18			iPP	23 09
											Iran
13	Nu	iP	23 52 40	16	Nu	iP	04 31 11 D	17	Nu	iP	15 00 17 D
	So	eP	23 52 10		So	iP	04 31 49			i	24
	Ka	iP	23 52 19						So	iP	15 00 26 D
				16	Nu	iPKP	05 41 38		Ka	iP	15 00 13
14	Nu	iP	00 18 41 D		Ka	iPKP	05 41 30				Kirghiz S.S.R.
	So	iP	00 18 30 D				Tonga Islands	17	Nu	iP	15 35 39
	Ka	iP	00 18 30 D	16	Nu	iPKP	07 06 17	17	Nu	iP	16 31 33 D
			Philippine Islands			iSKP	09 35			iPP	34 15
14	Nu	eP	01 09 30			iPKS	56		So	iP	16 31 03
14	Nu	iP	02 42 01		So	iPKP	07 06 10		Ka	iP	16 31 14
	So	iP	02 43 04			iSKP	09 13				Honshu, Japan
	Ka	iP	02 42 38		Ka	iPKP	07 06 15				
							Tonga Islands	18	Nu	eP	05 24 44
14	Nu	iP	21 54 56	16	Nu	iP	09 11 38 U		So	eP	05 24 25
	So	iP	21 54 11		So	iP	09 11 55 U		Ka	eP	05 24 45
	Ka	iP	21 54 31		Ka	iP	09 11 39 U				
			Fox Islands				Hindu Kush	18	Nu	iPKP	07 36 29 D
15	So	eP	00 10 38	16	Nu	iPKP	14 20 59				Tonga Islands
15	Nu	iP	00 30 05			iPKS	24 28	18	Nu	iP	07 47 33
		iS	40 12		So	ePKP	14 20 48	18	Nu	iP	14 15 03 D
	So	iP	00 29 53				Loyalty Islands			iS	24 25
	Ka	iP	00 29 54	16	Nu	iPKP	20 19 51			eP'P'	42 33
			Philippine Islands		So	iPKP	20 19 34		So	iP	14 14 40 D
15	So	eP	01 27 54				Kermadec Islands			eS	23 41
15	Nu	iP	05 53 47 U	16	Nu	iP	21 19 15			iP'P'	42 50
	So	eP	05 53 04			iPcP	52		Ka	iP	14 14 47 D
			Kamchatka		So	iP	21 18 33				N Ryukyu Islands
							Kurile Islands	18	Nu	iP	14 45 27 D
15	So	ePKP	08 17 30	16	Nu	ePKP	23 21 35			ePP	48 12
			Macquarie Island			i	43			iS	54 49
15	So	eP	08 25 36		So	iPKP	23 21 29		So	iP	14 45 03
							Fiji Islands		Ka	iP	14 45 11 D
											N Ryukyu Islands

July				July				July				
18	Nu	iP	15 27 38	19	Nu	iP	06 44 46	20	Nu	iP	00 55 59	
		i	48		So	iP	06 44 22		Ka	iP	00 55 58	
	So	iP	15 27 15		N Ryukyu Islands				20	Nu	iP	02 09 13
	N Ryukyu Islands				19	Nu	eP	07 55 24		i	22	
18	Nu	iP	15 48 15	19	Nu	iP	08 13 03	20	Nu	iP	02 24 42	U
	So	iP	15 47 54		So	iP	08 12 40		i	55		
	N Ryukyu Islands				19	Nu	iP	09 30 35		So	iP	02 24 48
18	Nu	iP	16 31 31		So	iP	09 30 04		i	25 00		
	So	iP	16 31 08		Honshu, Japan				Ka	eP	02 24 39	
	Ka	iP	16 31 15	19	Nu	iP	10 44 47	20	Nu	iP	03 16 07	
	N Ryukyu Islands				eS	49 03		So	iP	03 15 44		
18	Nu	iP	17 00 02		So	iP	10 45 50		Ka	iP	03 15 52	
	So	iP	16 59 39		N Ryukyu Islands				N Ryukyu Islands			
	N Ryukyu Islands			19	Nu	iP	10 47 07	20	Nu	iP	05 56 35	
18	So	iP	18 44 39		So	iP	10 46 47		i	43		
	N Ryukyu Islands				Ka	iP	10 46 55	20	Nu	iP	07 00 19	
18	Nu	iP	19 40 33		N Ryukyu Islands				So	iP	07 00 08	
	i	41 24		19	Nu	iP	12 10 11		Ka	iP	07 00 09	
	So	iP	19 40 13		So	iP	12 09 47		N Ryukyu Islands			
	N Ryukyu Islands				Ka	iP	12 09 55	20	Nu	eP	07 06 21	
18	Nu	iP	19 45 14		N Ryukyu Islands			20	Nu	eP	08 48 00	
18	Nu	iP	21 35 42	19	Nu	iP	12 16 53	20	Nu	eP	08 57 23	
	So	eP	21 36 14		So	eP	12 16 26		Jalisco, Mexico			
	Arabian Sea			19	Nu	iP	17 23 22	20	Nu	iP	09 14 06	U
18	Nu	iP	23 54 02	19	Nu	ePKP	18 45 07		So	iP	09 13 42	U
	So	iP	23 53 38		iSKP	47 55		Ka	eP	09 13 48		
	Ka	eP	23 53 50		Fiji Islands				N Ryukyu Islands			
	N Ryukyu Islands			19	Nu	iP	19 56 57	20	Nu	eP	10 03 35	
19	Nu	iP	00 21 27		So	iP	19 56 34		N Ryukyu Islands			
	So	iP	00 20 54		N Ryukyu Islands			20	Nu	iP	10 20 43	
	i	21 08		19	Nu	iP	22 47 28	20	Nu	eP	12 24 30	
	Ka	iP	00 21 07		iPcP	56		20	So	eP	12 36 43	
	Honshu, Japan				So	eP	22 46 36	20	Nu	iP	13 24 20	
19	Nu	eP	01 28 51		Andreanof Islands			20	Nu	ePKP	15 28 43	
19	Nu	iPKP	04 09 40	19	Nu	iP	23 06 00		iSKP	31 24		
	So	iPKP	04 09 52		iS	10 07		Fiji Islands				
	Sandwich Islands				So	eP	23 07 02	20	Near coast of Greece			
19	Nu	iP	05 41 22		Ka	iP	23 06 36	20	Nu	eP	15 44 28	
	So	iP	05 40 59		Near coast of Greece				So	iP	15 44 09	
	N Ryukyu Islands			19	Nu	eP	23 58 49					

July				July				July			
20	Nu	iPKP	20 17 44	22	Nu	eP	20 40 34	23	Nu	ePKP	23 41 20
	So	iPKP	20 17 27							ePKS	44 54
	Ka	ePKP	20 17 35	22	Nu	eP	21 00 06	New Hebrides			
Kermadec Islands					So	iP	21 00 23 U	24	Nu	iPKP	00 05 29
20	Nu	iP	20 23 02		Ka	iP	21 00 09			iPKS	08 51
				Kirghiz S.S.R.					So	iPKP	00 05 18
20	Nu	iP	20 36 09	22	Nu	iP	22 40 54		Ka	ePKP	00 05 23
	So	eP	20 36 48		So	iP	22 40 30	New Hebrides			
					Ka	iP	22 40 36	24	Nu	ePKP	01 49 02
20	Nu	iP	23 03 42 U	23	Nu	iP	05 57 15			iSKP	51 50
	So	iP	23 03 43 U							ePKS	52 46
	Ka	iP	23 03 35	23	Nu	ePKP	14 22 49		So	ePKP	01 48 55
21	Nu	ePKP	01 30 12			iPKS	26 12			iSKP	51 30
Loyalty Islands					So	iPKP	14 22 39		Ka	ePKP	01 49 05
21	So	iP	03 00 38	New Hebrides						iSKP	51 38
Nicobar Islands				23	Nu	iPKP	14 35 45	Fiji Islands			
21	So	iP	18 10 14			iPKS	39 08	24	Nu	iPKP	02 18 02
N Ryukyu Islands				New Hebrides						iPKS	21 24
21	So	eP	18 45 21	23	Nu	ePKP	14 56 32	New Hebrides			
					So	iP	14 51 53	24	Nu	eP	09 01 19
21	Nu	iP	19 02 19 D			iPKP	56 10		So	iP	09 01 11
	So	iP	19 01 54 U	Pacific Ocean					Ka	iP	09 01 12
	Ka	iP	19 01 58	23	Nu	eP	15 07 44	Northern Celebes			
N Ryukyu Islands								24	Nu	iP	10 20 52
21	So	eP	19 08 50	23	Nu	ePKP	15 49 27		So	eP	10 21 47
						iPKS	52 49		Ka	iP	10 21 10
21	So	iP	22 50 56		So	iPKP	15 49 14	New Hebrides			
	Ka	iP	22 51 02	23	Nu	iP	19 35 59	25	Nu	iP	06 09 48 U
N Ryukyu Islands								Kamchatka			
22	So	iP	10 56 27	23	Nu	ePKP	22 10 12	25	Nu	iP	12 12 44
22	Nu	iP	11 41 43			iPP	12 32		So	iP	12 12 27
						iPKS	13 40		Ka	iP	12 12 22
22	Nu	iP	14 00 51 D			iSKKS	19 24	Formosa			
	So	iP	14 01 07 U		So	ePKP	22 10 05	25	Nu	iP	18 51 46 D
	Ka	iP	14 00 52 D			iPP	11 54		So	iP	18 51 13 D
NE Afghanistan					Ka	iPKP	22 10 12		Ka	iP	18 51 26 D
				New Hebrides							
22	Nu	iPKP	18 32 08	23	Nu	ePKP	22 21 05	25	Nu	iP	18 52 46
	So	iPKP	18 32 10			iPKS	24 29		So	iP	18 52 37
South of Tasmania					So	iPKP	22 20 55		Ka	iP	18 52 39
22	Nu	eP	19 42 57		Ka	iPKP	22 21 00	Northern Celebes			
				New Hebrides							

July						July						July					
26	Nu	iPKP	09 38 39	U		28	Nu	iP	01 18 50			30	So	eP	03 38 36		
	So	iPKP	09 38 25	U				iPP	22 47								
	Ka	iPKP	09 38 30					iSKS	29 12								
	North Island						So	iP	01 18 49			30	Nu	iP	11 15 43		
								ipP	19 26								
27	Nu	ePKP	02 26 18					iPP	22 41			30	Nu	iP	14 17 11		
	Kermadec Islands							iSKS	29 13								
								ePKKP	35 27								
27	Nu	eP	13 28 47				Ka	iP	01 18 55			30	Nu	iPKP	14 25 23		
								ipP	19 31				New Hebrides				
27	Nu	iP	14 09 46				Ecuador										
	So	iP	14 09 29														
	Ka	eP	14 09 37			28	Nu	iPKP	06 30 45			30	Nu	iP	16 18 23		
								iPKS	34 15				So	iP	16 18 17		
27	Nu	iP	15 10 10	D			So	ePKP	06 30 40				New Hebrides				
	So	iP	15 09 53	D			New Hebrides										
27	Nu	iP	15 43 45			28	So	iP	10 26 32			31	Nu	eP	00 19 18		
	So	iP	15 42 49				Pacific Ocean						California				
27	Nu	iP	15 53 29			28	So	iP	10 51 03			31	Nu	eP	00 29 37		
	So	iP	15 53 12				Pacific Ocean										
27	Nu	eP	16 25 09			28	So	eP	13 33 45			31	So	iP	23 58 27		
	So	iP	16 24 52				Celebes										
27	Nu	eP	18 41 09			28	Nu	iP	15 30 26								
	So	iP	18 42 11				So	iP	15 29 49								
	Aegean Sea							iPcP	30 35								
							Ka	iP	15 30 02								
27	Nu	iP	20 45 34					i	27								
	So	iP	20 45 17				Kurile Islands										
	Ka	eP	20 45 24														
27	So	iP	23 00 13			28	So	iP	23 05 44								
28	So	iP	00 07 02			28	So	iP	23 59 43								
	Lake Baikal																
28	So	iP	00 14 02			29	So	iP	03 06 53	U							
	Ka	iP	00 14 03														
	North of Celebes																
28	Nu	iP	00 45 31	U		30	Nu	iP	02 43 44	D		September 14, 1961					
	So	iP	00 45 10				So	iP	02 43 47	D		M.T. Porkka					
	Ka	iP	00 45 14				Ka	iP	02 43 42			Aili Huovila					
	Ryukyu Islands						Sumatra										

Nu Jul 06. 1961 ISKKPZ 22-41-23

PKP

SKKP

Nu Jul 06. 1961 !PKSN 22-32-08

SKK

Nu Jul 06. 1961 !PKSE 22-32-08

SKS

Nu Jul 18. 1961 !PE 14-15-03

P

Nu Jul 18. 1961 !PN 14-15-03

P

Nu Jul 18. 1961 !SN 14-24-25

Nu Jul 18. 1961 !SE 14-24-25





PKP

5 B

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Nu Jul 23, 1961 ePKPZ 22-10-

So Jul 23, 1961 ePKPZ 22-10-



PKP

BP

PKS

PKS

Nu Jul 23, 1961 ePKPE 22-10-



PKP

BP

PKS

PKS

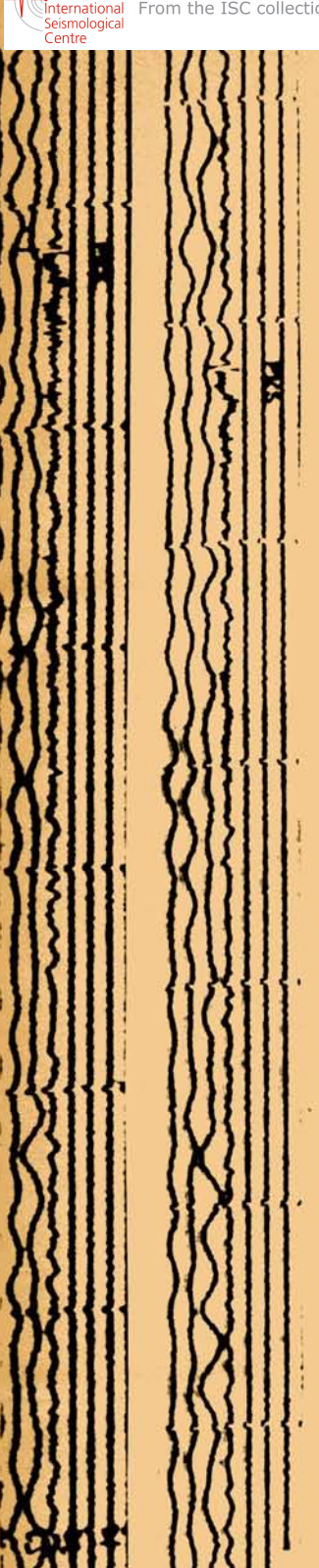
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PKP

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PKS

Nu Jul 23, 1961 iPKSE 22-24-2

Nu Jul 23, 1961 iPKSN 22-24-2

August

August

August

1 Nu iP 01 14 24 D	2 So ePKP 04 18 33	4 Nu eP 19 42 33
So eP 01 14 10	Sandwich Islands	i 45 02
Ka iP 01 14 11		e 46 48
	2 Nu iP 12 22 44 D	So iP 19 43 47
1 Nu iPKP 01 36 49	i 23 10	Ka eP 19 43 08
So iPKP 01 36 38	So iP 12 22 07	e 44 02
Ka iPKP 01 36 41	Kurile Islands	e 46 22
i 47		
New Hebrides	2 Nu iP 14 42 42	
	So eP 14 41 59	4 Nu iP 23 03 37
1 Nu iPKP 05 58 42	Kamchatka	So iP 23 02 59
i 52		Kurile Islands
So iPKP 05 58 34	3 Nu eP 00 50 27	4 Nu ePKP 23 50 57
Ka iPKP 05 58 35	So iP 00 51 08	iSKP 53 57
Solomon Islands	Ka iP 00 50 45	So iSKP 23 53 39
	Gulf of Aden	Ka ePKP 23 50 58
1 Nu ePKP 07 40 08		iSKP 53 48
So iPKP 07 40 20	3 Nu iP 03 19 31	S of Fiji Islands
iPP 42 42	So iP 03 19 32 D	
iSKP 43 40	Ka iP 03 19 37	5 Nu iP 02 36 16 U
Ka ePKP 07 40 12	Puerto Rico	So iP 02 35 27 U
Sandwich Islands		Ka iP 02 35 51
1 So iPKP 09 43 29	3 Nu iP 14 35 37 D	Kenai Peninsula
Sandwich Islands	iPcP 36 09	5 So eP 06 19 40
	So iP 14 34 51	Kamchatka
1 Nu ePKP 09 53 36	iPcP 35 43	5 Nu iPKP 07 02 35 D
So iPKP 09 53 46	Near Islands	Kermadec Islands
Ka ePKP 09 53 41	3 Nu iPKP 15 38 13	
Sandwich Islands	i 18	5 Nu iP 19 10 30
	Kermadec Islands	So iP 19 10 33
1 So eP 13 17 32		Ka iP 19 10 24
	3 Nu iP 23 46 51 U	Burma
1 Nu iP 14 43 37	So iP 23 46 31 U	6 Nu iP 03 32 43
So iP 14 43 18	Ka eP 23 46 37	So iP 03 32 18 U
Near coast of Mexico	Mariana Islands	Ka iP 03 32 26 U
1 So eP 19 23 11		Bonin Islands
	4 Nu iP 04 03 43	6 Nu iP 09 09 29
1 Nu iP 21 17 21	So iP 04 03 15	So iP 09 10 32
So iP 21 17 55		Ka iP 09 10 02
Ascension Island	4 Nu iP 07 28 34	Crete
1 Nu iPKP 22 30 39	So iP 07 27 58	
New Hebrides	Ka eP 07 28 09	7 Nu iP 04 12 54 U
	Eastern Hokkaido	i 13 16
2 Nu eP 01 40 16		So iP 04 12 20
So eP 01 40 12	4 Nu eP 18 09 15	i 40
	4 So iP 18 44 12	Ka iP 04 12 33
2 So iPKP 02 50 34	N Atlantic Ocean	Hokkaido, Japan
eSKP 54 13		
Sandwich Islands		

August			August			August		
7	Nu iP	04 35 47	9	Nu iP	04 13 18	11	Nu iP	16 02 17 U
	So iP	04 35 40		i	30		iS	11 00
	Ka iP	04 35 40		So iP	04 12 44		iScS	12 04
	Celebes			Ka iP	04 12 56		iP'P'	31 03
				Honshu, Japan		So	iP	16 01 41 U
7	So iP	10 56 28					iS	09 53
	Celebes		9	Nu ePKP	16 21 31		iScS	11 25
				i	44		i	49
7	Nu iPKP	12 41 56		i	58		iP'P'	31 09
	Kermadec Islands			iPP	24 00	Ka	iP	16 01 55 U
				iSKP	25 08		iS	10 18
7	Nu iPKP	17 17 20 U		i	22		eP'P'	31 05
	So ePKP	17 16 58		So iPKP	16 21 33		E Hokkaido, Japan	
	Ka iPKP	17 17 10		ePP	23 33			
	i	20		Ka iPKP	16 21 38	11	Nu iP	11 17 42
	Kermadec Islands			New Hebrides			iPP	21 37
7	Nu iPKP	23 49 38 D	10	Nu eP	01 43 31		So iP	11 17 35
	Kermadec Islands			So iP	01 42 51		Ka iP	11 17 36
				Eastern U.S.S.R.			Northern Celebes	
8	Nu iPKP	00 38 25	10	Nu eP	01 57 26	11	Nu iP	22 50 49
	Kermadec Islands						So iP	22 50 45 U
8	So iP	01 55 02	10	Nu ePKP	02 02 59		Ka iP	22 50 43
				Kermadec Islands			Eastern Celebes	
8	So iP	05 46 52	10	Nu iPKP	05 43 22	11	Nu iP	23 22 26 U
	Andreanof Islands			iSKP	46 52		ipP	51
8	Nu iP	12 29 21 D	10	Nu ePKP	06 55 47		So iP	23 21 53 U
	iS	38 18		iSKP	58 43		ipP	22 17
	iScS	39 26		Fiji Islands			Ka iP	23 22 05 U
	eP'P'	57 36	10	Nu eP	12 14 19		Honshu, Japan	
	So iP	12 28 35		So iP	12 13 50	11	Nu iP	23 44 34 U
	eS	36 55		Honshu, Japan			iS	53 16
	iP'P'	57 52					So iP	23 43 59 U
	Ka iP	12 28 57					Ka iP	23 44 12 U
	Fox Islands						Hokkaido, Japan	
8	So iP	13 48 05	10	Nu eP	12 16 08	13	Nu eP	03 31 44
	Fox Islands			So iP	12 15 33		Ka eP	03 31 52
				Ka eP	12 15 46	13	Nu iPKP	04 07 41
8	Nu iP	15 54 22 U	11	Nu eP	00 53 28		Kermadec Islands	
	So iP	15 53 36		So eP	00 52 46			
	Fox Islands			Kamchatka		13	Nu eP	06 12 24
							So iP	06 12 09
8	Nu iP	19 01 04	11	Nu iP	03 41 05		Ka iP	06 12 15
	iPP	02 40					N coast of Formosa	
	So eP	19 01 18	11	Nu iP	06 19 28	13	So eP	06 47 21
	Northern India			Eastern Kyushu		13	So eP	13 48 07
8	Nu iP	23 56 13					Windward Islands	
8	Nu iP	24 00 14	11	Nu ePKP	10 44 09	13	Nu iP	16 05 10
	So iP	23 59 27		iSKP	47 30		So iP	16 04 24
	Fox Islands			Ka ePKP	10 43 59		Fox Islands	
				New Hebrides				

August			August			August		
13	Nu	iSKP 22 20 07 S of Fiji Islands	16	Nu	iP 12 30 11 D So iP 12 30 26 D Hindu Kush	18	Nu	iSKP 11 22 47 Ka iP 11 19 43 iSKP 22 37 Kermadec Islands
13	Nu	iP 22 38 24 So iP 22 39 33 North central Italy	16	Nu	iP 16 04 26 D So iP 16 03 58 S coast of Honshu	19	Nu	iP 02 53 44 U So iP 02 53 08 Ka iP 02 53 22 Eastern Hokkaido
14	Nu	eP 01 07 03 So iP 01 08 08 BCIS: North Italy	16	Nu	iP 16 28 11 So iP 16 28 41 Ascension Island	19	Nu	iP 05 22 41 iP 24 55 ePP 26 51 iSKS 32 19 iS 57 ipSKS 34 59 iPKKP 38 41 iSS 40 53 So iP 05 22 44 iSKS 32 22 iPKKP 39 01 Ka iP 05 22 48 iSKS 32 27 iS 33 43 Peru-Brazil border
14	Nu	iP 13 56 19 D So iP 13 55 31 Alaska Peninsula	16	Nu	ePKP 19 38 43 Kermadec Islands			
14	So	eP 18 01 21	16	So	iP 22 34 30 Philippine Islands			
14	Nu	ePKP 19 10 14 So ePKP 19 10 02 Tonga Islands	17	Nu	eP 01 24 23			
14	Nu	eP 22 16 15 i 24 So eP 22 15 49 S coast of Kyushu	17	Nu	iP 03 42 41 D So eP 03 42 59 Hindu Kush			
14	Nu	ePKP 23 47 46 i 56 ipPKP 48 08 iPKS 51 23 i 37 So ePKP 23 47 41 i 44 New Hebrides	17	So	iP 07 02 10 S of Honshu, Japan	19	Nu	iP 05 44 37 iPP 46 56 iS 53 43 So iP 05 44 08 eS 52 45 iP'P' 06 12 56 Ka iP 05 44 18 W coast of Honshu
15	Nu	eP 02 26 00	17	Nu	iP 11 48 01 So iP 11 47 29 Central Honshu			
15	Nu	iP 19 15 31 D i 18 02 So iP 19 15 01 i 14 Ka iP 19 15 11 S of Honshu, Japan	17	So	eP 12 47 02	19	Ka	iP 08 40 30
16	Nu	eP 01 05 07	17	Nu	iP 13 14 30 Kermadec Islands	19	Nu	iP 12 55 44 D So iP 12 55 08 Ka iP 12 55 22 E coast of Hokkaido
16	Nu	iPKP 03 53 32 D So iP 03 53 17 Kermadec Islands	17	Nu	iP 21 26 49 D iS 35 12 i 58 iScS 36 26 So iP 21 26 11 D eS 34 03 iScS 35 45 i 36 59 Ka iP 21 26 28 D iS 34 32 iScS 36 01 Kurile Islands	19	Nu	iP 15 04 09 So iP 15 04 05 i 31 Ka iP 15 04 14 i 40 Mona Passage
16	Nu	eP 04 23 48	18	Nu	eP 00 34 42	19	Nu	iP 20 38 24 So iP 20 38 30 Ka iP 20 38 24 W coast of Sumatra
16	Nu	iP 09 09 17 So iP 09 08 47 S of Honshu, Japan	18	Nu	iP 05 41 09 Ka iP 05 40 52 Bonin Islands			

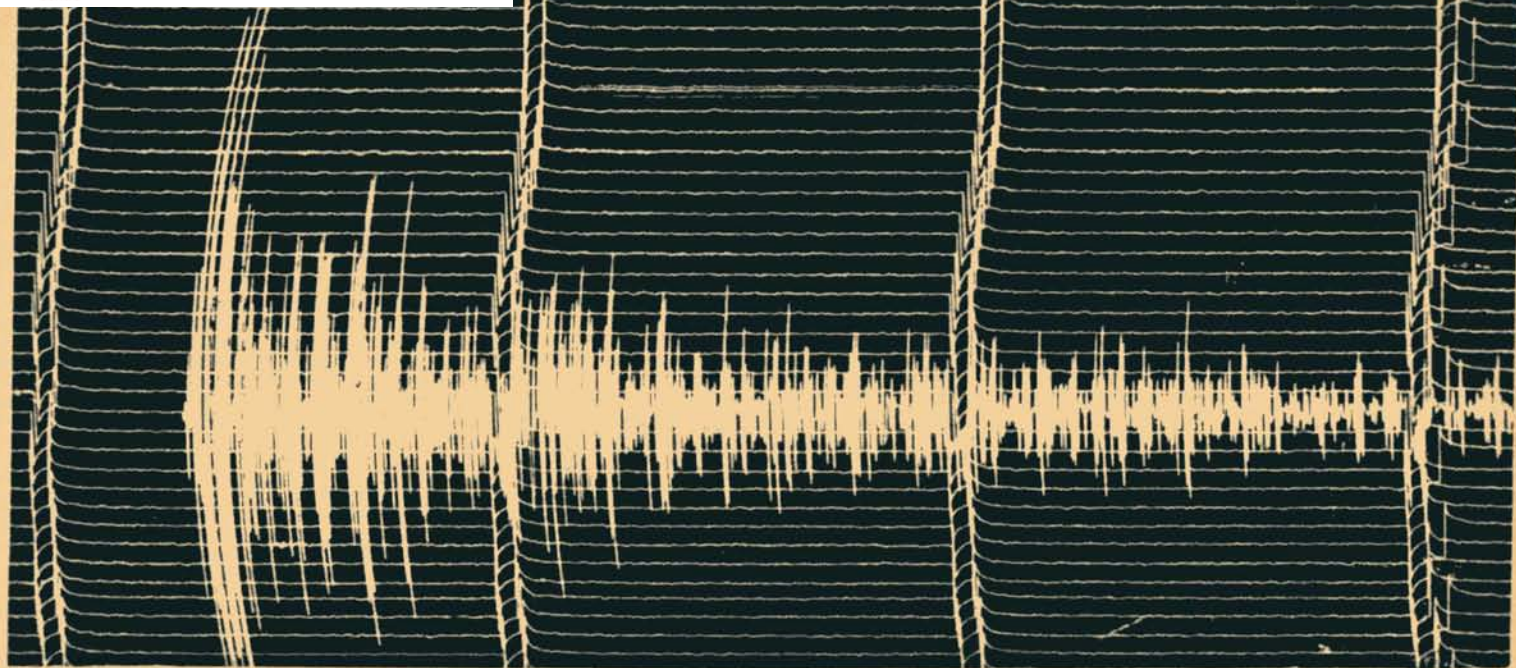
August				August				August			
20	Nu	iPKP	05 22 31	24	Nu	iP	05 03 06 D	26	Nu	ePKP	18 21 28
		iSKP	25 11		So	iP	05 02 30 D			New Hebrides	
		iPKS	26 01			i	54				
	So	iPKP	05 22 19		Ka	iP	05 02 40	26	So	eP	19 01 03
		iSKP	24 47			Eastern Hokkaido					
		iPKS	25 38					26	Nu	eP	19 02 37
	Ka	iPKP	05 22 24	24	Nu	iP	10 01 46		So	iP	19 02 16 D
		iSKP	24 45		So	iP	10 01 10		Ka	iP	19 02 20
		iPKS	25 48		Ka	iP	10 01 19			Mariana Islands	
	Fiji Islands										
21	Nu	iP	07 07 30 D	24	Nu	iP	22 51 38 U	27	Nu	iP	02 04 08
		ipP	55		So	iP	22 51 02		So	iP	02 04 38
	So	iP	07 07 45		Ka	iP	22 51 10		Ka	iP	02 04 23
		ipP	08 11			Eastern Hokkaido				Ascension Island	
	Ka	iP	07 07 28	25	So	iP	00 30 28	27	Nu	eP	04 17 28
	Hindu Kush				Ka	iP	00 30 23		So	eP	04 18 06
21	Nu	iPKP	16 26 11 D	25	So	eP	04 47 37		Ka	eP	04 17 40
		iPKS	29 44					27	So	iSKP	07 04 25
	Ka	iPKP	16 26 02	25	So	iP	05 54 34			Fiji Islands	
		iPKS	29 25			Northern Honduras					
	Tonga Islands										
21	Nu	iP	17 11 21 U	25	Nu	iP	07 10 18	27	Nu	iP	16 32 51 U
	So	iP	17 10 48 U		So	iP	07 09 33			iS	41 33
	Ka	iP	17 10 58 U		Ka	iP	07 09 51			iScS	42 43
	N Honshu, Japan					Alaska Peninsula		So	iP	16 32 10 U	
22	So	eP	06 22 17	25	Nu	eP	12 25 32			eS	40 27
	Ka	iP	06 22 28			eLg	30 09		Ka	iP	16 32 24
	E coast of Hokkaido				So	eP	12 26 45			eS	40 47
						BCIS: The Alps				Kurile Islands	
22	Nu	ePKP	09 18 21	25	So	iP	20 13 34	27	Nu	iP	16 37 45
	New Hebrides				Ka	iP	20 13 23		Ka	iP	16 37 17
22	So	iP	18 05 55	25	So	iP	21 39 56	27	Nu	iP	17 00 37 D
23	Nu	iP	04 19 28 U		Ka	iP	21 39 50			iSKS	11 00
		iPP	20 48	25				So	iP	17 00 15 U	
		i(Sa)	26 41			Flores Sea			eS	10 29	
	So	iP	04 19 46 U	26	Nu	eP	06 49 57		Ka	iP	17 00 20
		i	21 01		So	eP	06 49 46			iSKS	10 46
		i(Sa)	27 43		Ka	eP	06 49 33			Mariana Islands	
	Ka	iP	04 19 25 U	26	Nu	iP	07 17 43	27	So	iP	17 15 12
	Tadzhik S.S.R.				So	iP	07 17 09		Ka	eP	17 15 10
23	So	eP	14 50 44		Ka	iP	07 17 17			Halmahera	
	Ka	eP	14 50 43	26	Nu	iP	08 55 53	27	So	eP	17 35 39
	Philippine Islands				So	iP	08 55 18		Ka	eP	17 35 47
23	Nu	iP	19 24 38		Ka	iP	08 55 26			Mariana Islands	
	So	iP	19 25 12			Kurile Islands		27	So	iP	18 10 25
	Ka	iP	19 24 56						Ka	iP	18 10 27
										Mariana Islands	

August				August				August			
27	Nu	iP	20 01 25	28	Nu	ePKP	20 45 13	31	Nu	iPKP	00 42 18 U
	So	iP	20 00 45		So	ePKP	20 45 02		So	ePKP	00 42 11
	Ka	iP	20 00 58		Easter Island				Ka	ePKP	00 42 04
	Kurile Islands								Kermadec Islands		
27	Nu	iP	21 06 59 U	28	So	iP	23 15 14	31	Nu	iP	02 01 29
		iPcP	07 31		Ka	eP	23 14 59			ipP	03 39
	So	iP	21 06 18 U	29	Nu	iP	04 12 56			iPP	05 49
	Ka	iP	21 06 30							iSKS	11 08
	Kurile Islands			29	Nu	iP	06 06 21			eS	12 22
27	Nu	iP	21 10 23		So	iP	06 05 46	So	iP	02 01 34	
	So	iP	21 09 45		Ka	iP	06 05 54			iPP	05 57
					Kurile Islands					iSKS	11 15
27	So	iP	21 24 05	29	Nu	iP	15 02 05			iS	12 28
	Ka	iP	21 24 09		So	iP	15 01 20			ePKKP	17 53
					Ka	iP	15 01 38	Ka	eP	02 01 34	
27	Nu	iP	22 14 06 D		Fox Islands				Peru-Brazil border		
		eS	18 28	29	So	iP	15 09 56	31	Nu	iP	02 09 58
	So	iP	22 15 08							ipP	12 16
	Ka	iP	22 14 36	29	Nu	iP	20 00 37 D			iPP	14 19
	West coast of Crete				So	iP	19 59 57			iSKS	19 38
27	So	iP	22 35 13		Kurile Islands					i	20 17
	Ka	eP	22 35 17	29	Nu	iPKP	21 52 47			iS	48
					New Hebrides					ipSKS	22 16
28	So	iP	00 24 29	30	So	iP	01 08 49			IPS	23 44
										iPKKP	25 58
28	Nu	iPKP	07 59 18	30	Nu	iP	02 36 26	So	iP	02 10 03	
	Ka	iPKP	07 59 06		So	iP	02 35 39			ePP	14 16
	Santa Cruz Island				Ka	iP	02 35 59			iSKS	19 44
28	So	iP	09 29 32		Fox Islands					i	20 22
	Ka	iP	09 29 28	30	Nu	eP	03 46 15			eS	54
					So	eP	03 46 27			i	22 38
28	Nu	iPKP	10 02 32		N Atlantic Ocean					IPS	23 54
	So	iPKP	10 02 20	30	Nu	iP	04 57 41			iPKKP	26 26
	Ka	ePKP	10 02 17		So	iP	12 02 25			iSS	28 08
	Fiji Islands							Ka	iP	02 10 05	
28	Nu	iP	12 24 30 U	30	Nu	iP	04 57 41		Peru-Brazil border		
	So	iP	12 23 49		So	eP	12 02 25	31	Nu	iP	02 34 12
	Ka	iP	12 24 01						So	iP	02 34 21
	Kurile Islands			30	Nu	iP	14 59 00	31	Nu	iP	02 51 59
28	Nu	iP	13 18 45 D		So	eP	14 59 04		So	eP	02 52 04
	So	iP	13 18 05		Ka	eP	14 58 48	31	So	iP	16 59 44
	Ka	eP	13 18 16		Sinkiang Province						
	Kurile Islands			30	Nu	iPKP	19 30 13				
28	So	iP	17 45 22		Ka	ePKP	19 30 03				
					Loyalty Islands						
28	Nu	iP	18 12 39	30	Nu	iP	22 58 56				
	So	iP	18 11 59								
	Kurile Islands										

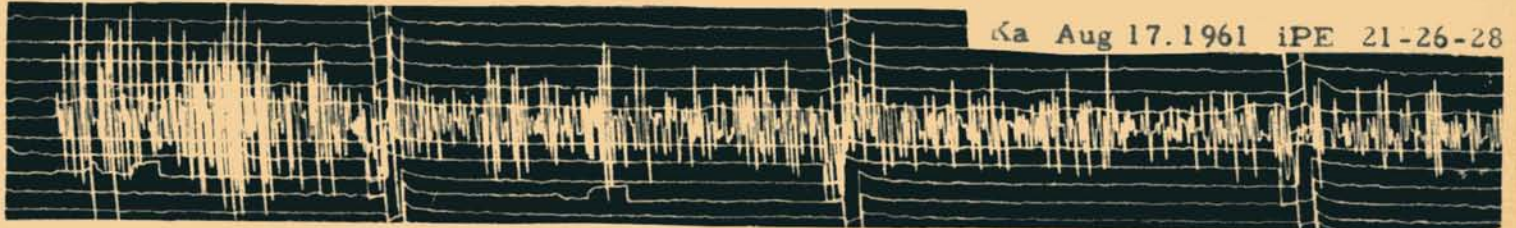
October 10, 1961

M. T. Porkka
Aili Huovila

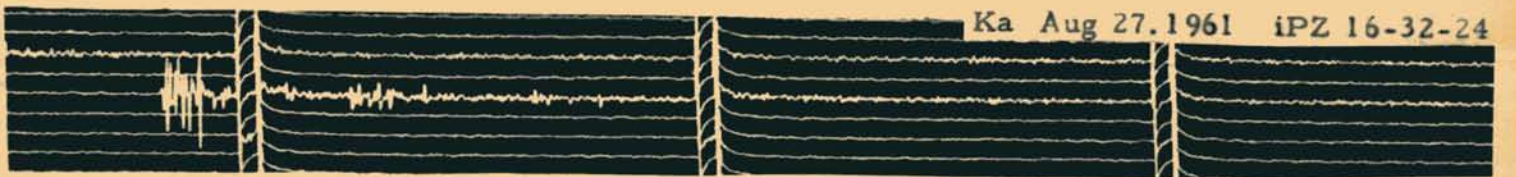
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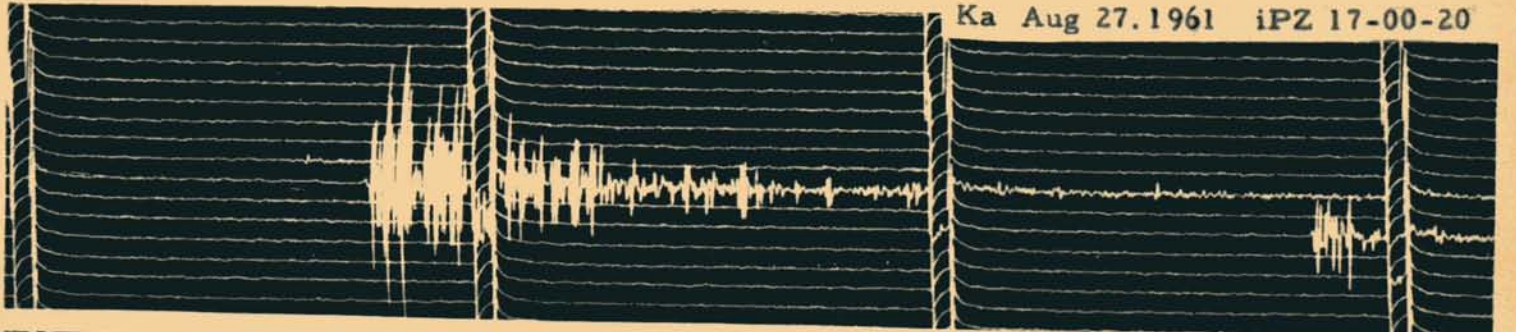
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Ka Aug 27.1961 iPZ 16-32-24



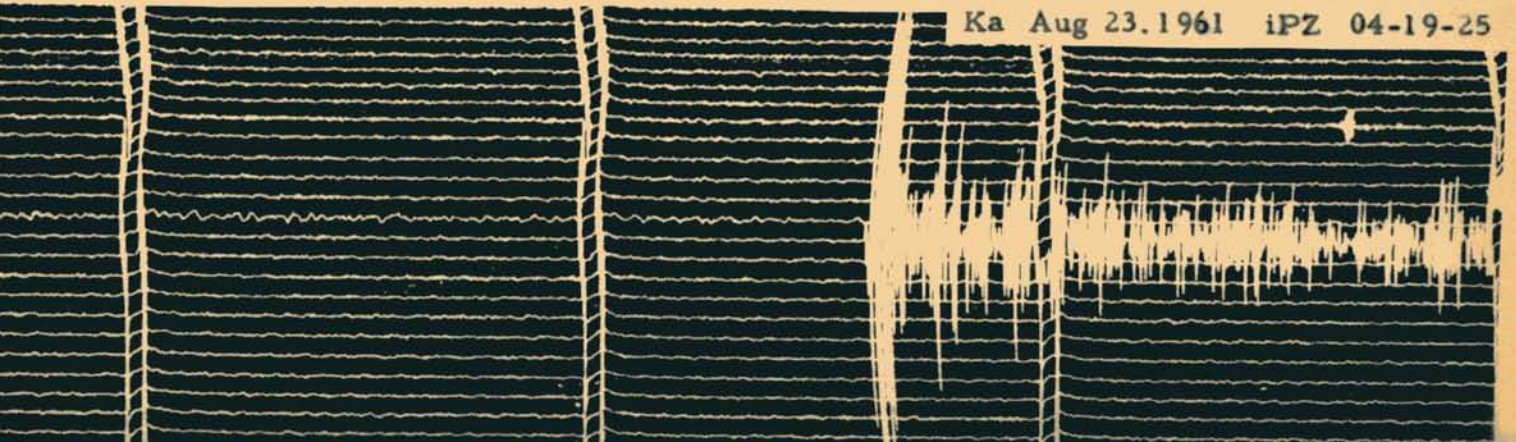
Ka Aug 27.1961 iPZ 17-00-20



Ka Aug 27.1961 iPZ 22-14-36



Ka Aug 23.1961 iPZ 04-19-25



Nu Aug 8.1961 iSN 12-38-18

S

Nu Aug 8.1961 iSE 12-38-18

S

So Aug 11.1961 iSN 16-09-53

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So Aug 11.1961 iSE 16-09-53

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Nu Aug 31.1961 iSKSN 02-19-38

S

SKS

Nu Aug 31.1961 iSKSE 02-19-38

SS

Nu Aug 19.1961 iSKSN 05-32-19

SKS

S

SKS

Nu Aug 19.1961 iSKSE 05-32-19

SKS

S

SKS

SKS

December

December

December

1 Nu eP 07 44 13
So eP 07 43 26
Ka iP 07 43 46

Kamchatka

1 So iP 08 11 15 D
Ka iP 08 11 17

Philippine Islands

1 He iP 20 29 43
Nu iP 20 29 40
i 30 14
So iP 20 29 16 D
Ka iP 20 29 25 D

Volcano Islands

1 He iP 21 24 09
i 25 01
i 48
Nu iP 21 24 08 D
i 25 00
i 45
i 30 35
e 33 00
So iP 21 23 48
i 24 40
i 25 25
Ka iP 21 23 52
i 24 46
i 25 40

East China Sea

2 He iP 12 45 48
Nu iP 12 45 48
i 46 24
So iP 12 46 45
Ka eP 12 46 26

Northern Tunisia

3 Nu eP 04 16 45

3 He iP 08 51 43
i 52 19
Nu iP 08 51 43 D
i 52 17
So iP 08 51 25
i 52 00

Formosa

3 So eP 09 39 34

Kirghiz S.S.R.

3 Nu iPKP 16 33 18
So ePKP 16 33 07

Santa Cruz Islands

3 He iP 18 36 55
Nu iP 18 36 58
eS 41 25
So iP 18 37 47 D
iLg1 47 08
Ka iP 18 37 18 D

Armenia-Turkey

3 He iP 20 04 47
i 05 15
i 37
Nu iP 20 04 47 D
i 05 14
i 06 02
iS 12 37
iScS 13 53
So iP 20 04 15 D
i 43
iPP 06 08
iScP 08 26
iS 11 38
iScS 13 20
Ka iP 20 04 25
iS 11 58

Near Vladivostok

3 Nu iP 20 12 38 D

4 Nu iP 03 53 09 D
So iP 03 52 24

Alaska Peninsula

4 He iP 12 47 20
Nu iP 12 47 22
iPP 49 16
iS 54 51
So iP 12 47 16
iPcP 48 33
iS 54 40
Ka iP 12 47 13

Tibet

4 Nu iP 17 41 26
i 44 17
i 45 11
So iP 17 40 31
Ka iP 17 41 05
i 43 39

5 Nu eP 00 40 35

5 So eP 01 26 59

5 So ePKP 07 03 31

Southern Chile

5 He i 13 20 38
Nu ePKP 13 20 34
So iPKP 13 20 34

SW of Tasmania

5 He iPKP 13 21 23
iSKP 24 23
Nu iPKP 13 21 20
i 22 16
iSKP 24 23
iPKS 41

New Hebrides

6 Nu iP 02 27 06
So iP 02 26 34 D

Honshu, Japan

6 He iP 05 59 35
Nu iP 05 59 35 U
So iP 05 59 41 U
Ka iP 05 59 33

Andaman Islands

6 So eP 09 30 59

6 He i 13 55 18
Nu ePKP 13 55 11
So iPKP 13 55 02

Tonga Islands

6 He iP 16 50 04
Nu iP 16 50 03
iPcP 40
So iP 16 49 21 D
i 50 39

Kurile Islands

7 So eP 08 05 54

8 Nu iP 03 16 05
So iP 03 15 53

8 So iP 03 32 50

December

8 So iP 09 50 08
 New Guinea

8 Nu iP 10 28 48
 So iP 10 28 54
 Tibet

8 Nu iP 10 49 39
 So iP 10 50 18
 Gulf of Aden

9 Nu iP 02 25 53 D
 i 26 03
 iPcP 27
 So iP 02 25 06 U
 i 32
 Kodiak Island

9 Nu iPcP 04 45 43 U
 i 55
 i 46 04
 So iPcP 04 45 27 U
 Ka iPcP 04 45 31
 i 57
 NE of New Zealand

9 So iP 10 31 14
 Java

9 He i 11 37 24
 i 32
 Nu iPcP 11 37 20
 i 24
 i 31
 iPKS 40 47
 So iPcP 11 37 24
 i 28
 i 36
 iPKS 41 01
 Southern Chile

9 So iP 16 49 17
 South of Java

December

9 He ePKP 20 07 52
 i 08 01
 iSKP 10 43
 Nu iPcP 20 07 51
 i 08 00
 iPcP 10 18
 iSKP 42
 iPKS 11 35
 So ePKP 20 07 36
 i 45
 i 50
 iPcP 10 08
 iSKP 22
 iPKS 11 14
 Ka iPcP 20 07 55
 iPKS 11 24
 Fiji Islands

9 Nu iP 21 32 20 D
 So iP 21 31 33 D
 Kodiak Island

10 Nu eP 05 09 04
 So iP 05 08 17
 Kodiak Island

10 He iP 08 44 36
 Nu eP 08 44 37
 So iP 08 45 43
 Aegean Sea

10 So eP 12 31 09

10 Nu eP 19 12 03
 So iP 19 11 36
 Nuclear explosion
 New Mexico

11 He iPcP 05 27 55
 Nu iPcP 05 27 54
 Kermadec Islands

11 So iP 09 50 37

11 He iP 10 02 16
 Nu eP 10 02 16
 So iP 10 02 17 U
 i 44
 Burma

11 Nu eP 10 31 34

December

11 He iP 16 58 18
 i 35
 Nu eP 16 58 21
 i 39
 iPcP 17 02 00
 iS 33
 So iP 16 59 22 U
 Southern Greece

12 He iP 17 35 43
 Nu iP 17 35 43 D
 So iP 17 35 18
 Ka iP 17 35 27
 N Mariana Islands

12 So iP 17 49 22

12 He iP 23 17 04
 i 22
 Nu iP 23 17 02 U
 i 20 19
 i 52
 iS 25 45
 So iP 23 16 25
 Ka iP 23 16 41 U
 Hokkaido, Japan

13 Nu eP 08 52 22
 So iP 08 52 09
 Ka eP 08 52 13
 Ryukyu Islands

13 Nu eP 17 40 28

14 So iP 07 24 20
 New Guinea

14 So iP 17 35 04
 Ka iP 17 35 14

14 So iP 18 03 55
 Ka iP 18 04 05

15 He iP 22 08 41
 Nu eP 22 08 42
 So iP 22 09 41
 Ka eP 22 09 10

16 He iP 01 49 48
 Nu iP 01 49 49 D
 i 50 01
 So eP 01 49 36
 Ka iP 01 49 37 D
 Philippine Islands

December

16 He iP 13 50 47
i 51 00
Nu iP 13 50 45 D
i 56
So iP 13 50 01
i 14
Ka iP 13 50 19 D
i 32
Kamchatka

16 So iP 18 52 21

16 He iPKP 20 54 26
Nu iPKP 20 54 25 D
iSKP 57 28
Ka ePKP 20 54 14
i 22
iSKP 57 19
Kermadec Islands

17 So iP 02 24 07

17 Nu eP 14 39 07

17 He iPKP 22 32 12
Nu ePKP 22 32 11
So iPKP 22 32 18
i 35
Ka ePKP 22 32 14
South of Tasmania

17 So iP 22 40 19
Ka eP 22 40 15

18 He iP 02 30 20
Nu iP 02 30 20
So iP 02 30 06
Ka iP 02 30 07
Philippine Islands

18 So iP 09 38 58

18 Nu iP 16 52 11
So iP 16 52 08 U
Ka iP 16 52 03
Burma-India border

18 Nu iP 21 40 31
So eP 21 41 31
Ka iP 21 41 06

19 So iP 03 51 08 D

December

19 So iP 15 54 15
Talaud Islands

19 Nu eP 17 41 33
So iP 17 41 19
Ka iP 17 41 22
Formosa

20 So iP 01 57 11
Ka iP 01 57 10
Borneo

20 He iP 13 38 22
ipP 39 04
isP 20
iPP 42 00
ipPP 52
Nu iP 13 38 20 D
ipP 39 02
isP 19
iPP 42 02
ipPP 50
i 43 48
iSKS 48 36
iS 49 04
isSKS 54
isS 50 18
isPS 51 02
So iP 13 38 16 D
ipP 39 00
isP 18
iPP 41 59
iS 49 00
isSKS 50
isS 50 10
Ka iP 13 38 22
ipP 39 09
iS 49 15
West-central Colombia

22 Nu eP 10 05 01

22 Nu eP 13 58 22
Ka iP 13 58 12

22 Nu iP 15 09 06 D
So iP 15 08 19 D
Kodiak Island

22 Nu iP 19 00 49

22 So iP 22 58 36
Ka iP 22 58 42
Mariana Islands

December

22 Nu iP 23 55 40
So iP 23 55 23
Ka iP 23 55 29
Philippine Islands

23 Nu eP 12 55 20
So iP 12 55 10
Ka iP 12 55 12

23 He iP 18 16 06
Nu iP 18 16 08 D
i 17 32
So iP 18 16 23
Ka iP 18 16 07
i 17 26
Hindu Kush

23 So iP 19 22 18
Ka eP 19 22 26
Honshu, Japan

23 So iP 22 49 25

24 So iP 02 12 47 U
Ka iP 02 13 13

24 He iP 07 01 26
Nu iP 07 01 24
iPcP 54
So iP 07 00 46 U
Ka iP 07 01 02
Hokkaido, Japan

24 He iP 07 22 07
Nu iP 07 22 08 U
iPP 24 00
So iP 07 22 16
iPP 24 11
Ka iP 07 22 06
i 23 10
Nepal

24 So iP 19 22 01

24 Nu iP 20 31 50
So iP 20 30 22
iS 31 58

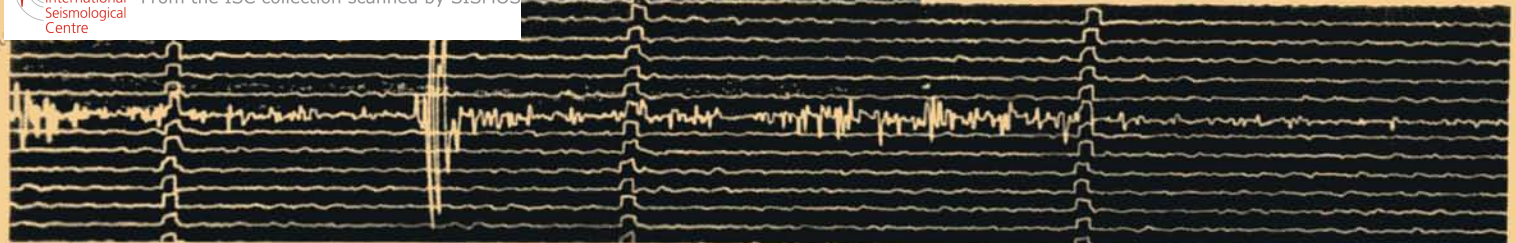
25 So ePKP 00 02 20
Near coast of Chile

25 So iP 11 28 43
Bhutan-India border

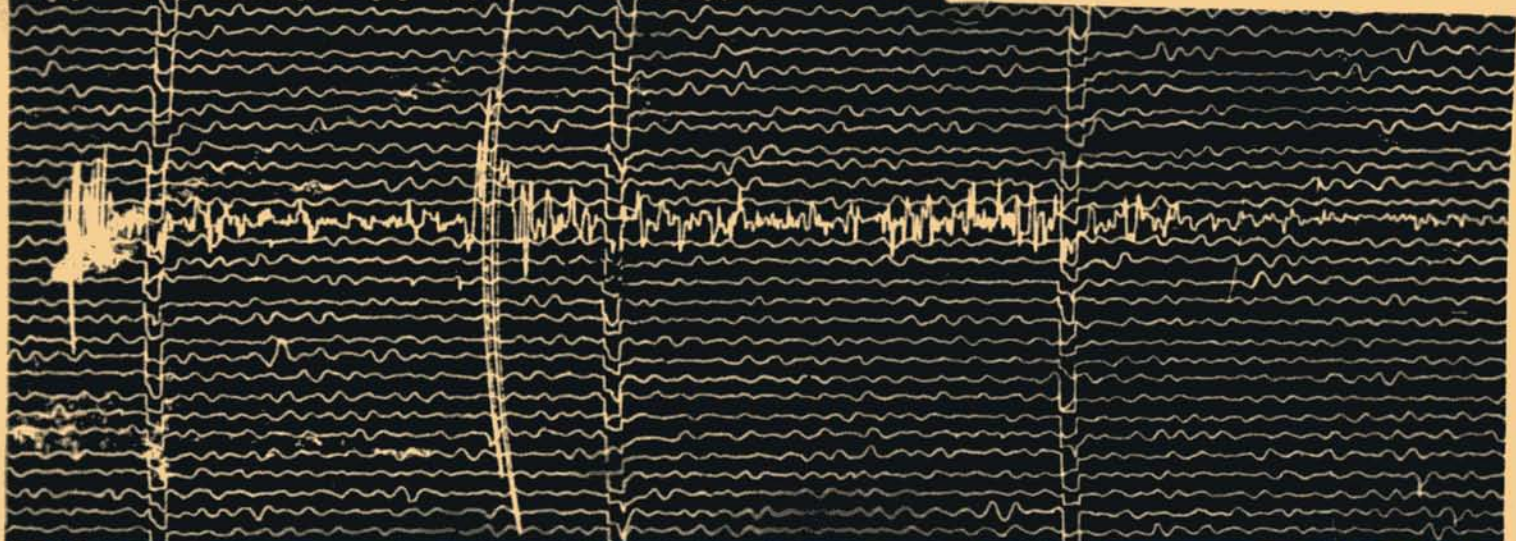
December				December				December				
25	Nu	iPKP	14 14 51	29	So	iP	00 24 50	30	He	iP	18 31 17	
	Ka	iPKP	14 14 51						Nu	iP	18 31 17	
	Tonga Islands			29	Nu	iP	08 10 50 U		So	eP	18 31 05	
25	He	iP	21 58 00		So	iP	08 10 15		Ka	eP	18 31 09	
	Nu	iP	21 57 58 U		Hokkaido, Japan				Philippine Islands			
	So	iP	21 57 23 U	30	He	iP	00 50 08	30	So	eP	18 47 03	
	Ka	iP	21 57 36		Nu	iP	00 50 08 U					
	Hokkaido, Japan					ePP	52 43					
25	So	eP	21 58 26			iS	58 56	31	So	iP	13 58 57 D	
	Sinkiang Province				So	iP	00 49 20		Halmahera			
26	He	iP	04 37 11			iPcP	50 16	31	So	iP	16 20 59	
	Nu	iP	04 37 13			iPP	51 27		Near coast of Java			
		isP	40 11		Ka	iP	00 49 42	31	So	iP	17 58 34	
		iPP	41 04			ePP	52 01		Ka	iP	17 58 55	
		iS	47 29			ePPP	53 30		Fox Islands			
	So	iP	04 37 12			eP'P'	01 19 03	31	So	iP	17 58 34	
	Ka	iP	04 37 08		Rat Islands				Ka	iP	17 58 55	
		ipP	39 09		30	He	iP	07 15 55				
	Java Sea					Nu	iP	07 15 53 U				
27	He	iP	16 57 35				iLg1	28 47				
	Nu	iP	16 57 34				iLg2	30 27				
	So	iP	16 58 10				i	32 01				
	Ka	iP	16 57 55		So	iP	07 16 00					
	Atlantic Ocean					iLg1	29 09					
28	He	iPKP	00 07 59		Ka	iP	07 15 48					
	Nu	iPKP	00 07 58 D		Sinkiang Province							
		i	08 09	30	Nu	iP	10 25 20					
	So	iPKP	00 07 45		So	eP	10 24 35					
	Ka	iPKP	00 07 49		Ka	iP	10 24 56					
	North Island				Rat Islands							
28	Nu	iP	14 00 19	30	Nu	iP	15 31 22					
29	He	iPKP	00 14 47	30	Nu	eP	16 52 38					
	Nu	iPKP	00 14 47		So	iP	16 51 52					
		i	15 03			iPcP	52 41					
	So	ePKP	00 14 37		Ka	iP	16 52 10					
	Santa Cruz Islands					i	24					
						iPcP	52					
					Rat Islands							

February 2, 1962
M. T. Porkka
Aili Huovila

Nu Dec 01.1961 iPZ 21-24-08



So Dec 01.1961 iPZ 21-23-48



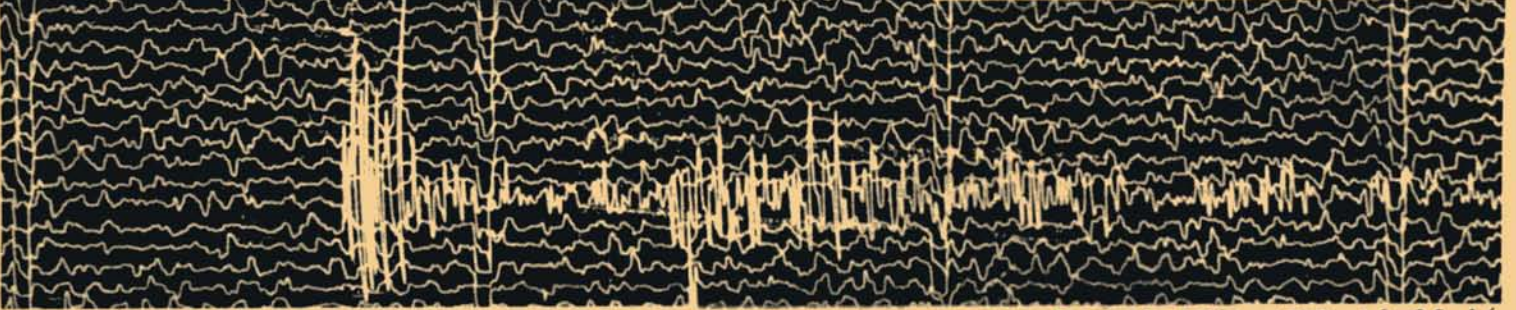
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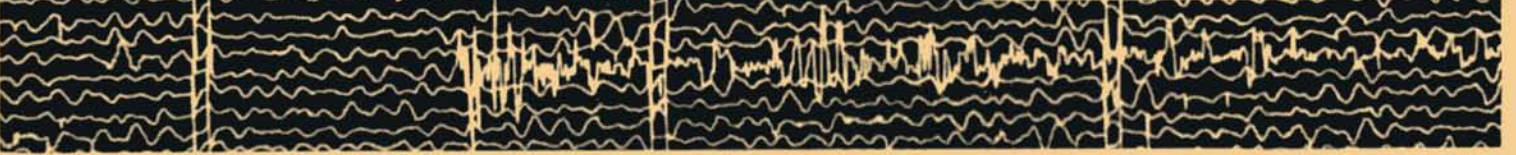
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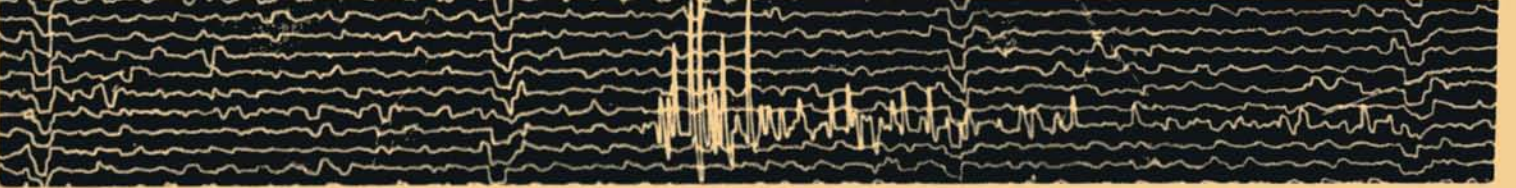
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So Dec 20.1961 iPZ 13-38-16



He Dec 29.1961 iPZ 00-50-08



So Dec 30.1961 iPZ 00-49-20

