

TEHRAN Copied  
~~JAN-MARCH 63~~  
 June '63

SEISMOLOGICAL BULLETIN OF  
 INSTITUTE OF GEOPHYSICS  
 TEHRAN UNIVERSITY, IRAN

*Panel to ISS*  
**KEW OBSERVATORY**  
 -9 MAY 1963  
**RICHMOND, SURREY.**

Lat. 35°44'16" N. a = + 0.50773  
 Long. 51°23'08" E. b = + 0.63570  
 Height ... 1360 M. c = + 0.58146

JANUARY 1963 **6 MAY 1963**

- |  |   |
|--|---|
| 1. ePZ 00 15 12 S.H.<br>Minor trace of local shock.  | 4. ePZ 00 36 07 S.H.<br>H: 00 23 55.1, h: 33 Km.<br>South of cape Verde Is.                                     |
| 1. ePE 19 29 11 S.H.<br>e?NE 30 49 S.H.  | 4. ePZ 03 41 19 S.H.<br>eSNE 34 S.H.  |
| 1. ePNE 19 55 30 S.H.<br>SNE 48.7 S.H.   | 4. ePZ 05 54 11 S.H.<br>eSE 06 03 46 G.<br>H: 05 42 35.3, h: 33 Km.<br>Bonin Is. region.                        |
| 1. iPZ 23 51 39.5 G.<br>ePPZ 54 58 G.  | 5. ePZ 01 43 25 S.H.<br>eSN 35 S.H.   |
| 2. eSN 00 01 56 S.H.<br>eSSE 07 37 G.<br>H: 23 39 05.6, h: 50 Km.<br>Alaska Peninsula.<br>Mag. 6½ (Pas), 5¾ (Pal). | 5. ePZ 13 29 03 S.H.,G.<br>eSEZ 39 15 G.<br>H: 13 16 43.0, h: 33 Km.<br>Timor.                                  |
| 2. ePZ 04 01 35 S.H.<br>Minor trace.   | 6. ePZ 02 55 33 S.H.<br>Minor trace.  |
| 2. ePZ 10 40 31 S.H.<br>Local.   | 6. ePZ 19 59 14 S.H.<br>Minor trace of dis. shock.  |
| 2. ePZ 15 08 53 S.H.<br>eSNE 19 31 G.<br>H: 14 56 05.4, h: 33 Km.<br>Near south coast of western<br>New Guinea.    | 6. ePZ 21 32 28 S.H.<br>eSNE 42 01 G.<br>H: 21 20 56.5, h: 33 Km.<br>Kurile Is.                                 |
| 2. iPZ 17 39 22.9 S.H.<br>eSNZ 36 S.H.   | 6. ePZ 22 13 24 S.H.<br>Minor trace of dis. shock.  |
| 2. ePZ 21 43 49 S.H.<br>Minor trace.   | 6. ePZ 23 57 16 S.H.<br>Minor trace.  |
| 3. ePZ 00 54 17 S.H.<br>eSNZ 36 S.H.   | 7. ePZ 12 00 15 S.H.,G.<br>eSE 10 01 G.<br>H: 11 48 22.7, h: 42 Km.<br>Halmahera region.<br>Mag. 5½ - 5¾ (Pal). |
| 3. ePZ 08 28 09 S.H.<br>eSEnz 27 S.H.  |   |
| 3. ePZ 14 32 30 S.H.<br>Minor trace.   |   |

- |     |                               |            |         |     |                            |          |         |
|-----|-------------------------------|------------|---------|-----|----------------------------|----------|---------|
| 8.  | ePZ                           | 01 36 35   | S.H.    | 12. | ePZ                        | 16 36 38 | S.H.    |
|     | Minor trace.                  |            |         |     | eSNE                       | 58       | S.H.    |
| 8.  | ePZ                           | 08 26 14   | S.H.    | 13. | ePZ                        | 20 29 21 | S.H.    |
|     | eSNEZ                         | 27         | S.H.    |     | Minor trace.               |          |         |
| 8.  | ePZ                           | 15 57 12   | S.H.    | 14. | ePZ                        | 11 38 58 | S.H.    |
|     | Minor trace.                  |            |         |     | Minor trace.               |          |         |
| 9.  | ePZ                           | 03 25 28   | S.H.    | 14. | ePZ                        | 16 20 01 | S.H.    |
|     | Minor trace.                  |            |         |     | eSEZ                       | 23       | S.H.    |
| 9.  | ePZ                           | 15 02 55   | S.H.    | 14. | ePZ                        | 18 38 03 | S.H.    |
|     | Minor trace of local shock.   |            |         |     | eSNE                       | 41 53    | G.      |
| 9.  | ePZ                           | 18 30 39   | S.H.    |     | H: 18 33 25.3, h: 132 Km.  |          |         |
|     | Minor trace of dis. shock     |            |         |     | Romania.                   |          |         |
| 10. | ePZ                           | 00 22 51   | S.H.    | 15. | ePZ                        | 00 34 55 | S.H.    |
|     | eSNE                          | 23 05      | S.H.    |     | Minor trace.               |          |         |
| 11. | ePZ                           | 01 15 02   | S.H.    | 15. | ePZ                        | 01 41 13 | S.H.    |
|     | Minor trace.                  |            |         |     | e?NE                       | 51 59    | G.      |
| 11. | ePZ                           | 06 53 26   | S.H.    |     | Minor trace of dis. shock. |          |         |
|     | eSNEZ                         | 45         | S.H.    | 15. | ePZ                        | 02 45 17 | S.H.    |
| 11. | ePZ                           | 11 03 03   | S.H.    |     | Minor trace.               |          |         |
|     | Local.                        |            |         | 15. | ePZ                        | 11 47 41 | S.H.    |
| 11. | PZ                            | 11 33 49.2 | S.H.    |     | Minor trace.               |          |         |
|     | SNE                           | 34 07.8    | S.H.    | 15. | ePZ                        | 12 22 38 | S.H.    |
|     | Ini. motion of P: Dil.        |            |         |     | Local.                     |          |         |
| 11. | PZ                            | 11 38 18.3 | S.H.    | 15. | ePZ                        | 15 09 07 | S.H.    |
|     | eSNEZ                         | 36         | S.H.    |     | Minor trace.               |          |         |
|     | Ini. motion of P: Dil.        |            |         | 15. | ePZ                        | 19 44 55 | S.H.    |
| 11. | eP'Z                          | 12 31 43   | S.H.,G. |     | e?E                        | 48 29    | G.      |
|     | ePPZ                          | 34 37      | G.      | 15. | ePZ                        | 22 30 51 | S.H.,G. |
|     | ePPPZ                         | 37 43      | G.      |     | ePPZ                       | 34 21    | S.H.,G. |
|     | H: 12 12 16.2, h: 33 Km.      |            |         |     | eSKSNE                     | 41 57    | G.      |
|     | Near coast of southern Chile. |            |         |     | H: 22 17 50.9, h: 33 Km.   |          |         |
| 12. | ePZ                           | 06 23 42   | S.H.,G. |     | South Atlantic Ocean.      |          |         |
|     | Minor trace of distant shock. |            |         | 16. | ePZ                        | 05 57 11 | S.H.    |
| 12. | ePZ                           | 08 26 07   | S.H.    |     | Minor trace.               |          |         |
|     | Local.                        |            |         | 16. | ePZ                        | 12 04 34 | S.H.    |
| 12. | ePZ                           | 09 30 12   | S.H.    |     | Minor trace.               |          |         |
|     | eSNE                          | 31         | S.H.    | 16. | ePZ                        | 21 20 02 | S.H.    |
|     |                               |            |         |     | Minor trace.               |          |         |

17. ePZ 01 06 25 S.H.  
Local.

17. ePZ 04 21 45 S.H.  
Local.

17. ePZ 09 22 18 S.H.  
eSNEZ 35 S.H.

17. ePZ 20 51 31 S.H.  
Minor trace.

17. ePZ 23 16 14 S.H.  
Minor trace.

19. ePZ 02 39 31 S.H.  
eSNE 43 13 S.H.  
H: 02 35 06.8, h: 33 Km.  
Sinkiang Province, China.

19. ePZ 03 15 06 S.H.  
e?NE 36 S.H.

19. ePZ 15 23 36 S.H.  
Minor trace.

19. ePZ 22 20 25 S.H.  
Local.

20. ePZ 04 15 44 S.H.  
eSNEZ 16 03 S.H.

20. ePNE 07 26 03 S.H.  
Local.

20. ePZ 13 43 39 S.H.  
eSNE 54 S.H.

20. ePZ 20 54 52 S.H.  
Local.

21. ePZ 14 24 20 S.H.  
Local.

21. ePZ 16 01 38 S.H.  
Local.

21. ePZ 19 55 50 S.H.  
Local.

22. ePZ 08 11 31 S.H.  
Minor trace.

22. ePZ 15 08 25 S.H.  
Minor trace.

23. ePZ 01 42 05 S.H.  
eSNEZ 20 S.H.

23. ePZ 01 54 29 S.H.  
Minor trace.

23. ePZ 03 49 49 S.H.  
eSNE 50 11 S.H.

23. ePZ 08 04 40 S.H.  
Minor trace.

23. ePZ 19 32 08 S.H.  
Minor trace.

23. ePZ 21 14 08 S.H.  
Minor trace.

24. ePZ 04 24 54 S.H.  
Minor trace.

24. ePZ 09 39 40 S.H.  
eSNE 48 09 G.  
H: 09 29 11.6, h: 493 Km.  
Java Sea.

24. ePZ 15 44 23 S.H.  
eSNE 46 56 G.  
H: 15 42 23.5, h: 10 Km.  
Southern Iran.

24. ePZ 16 33 28 S.H.  
eSNEZ 54 S.H.

24. ePZ 18 49 14 S.H.  
Minor trace.

24. ePZ 22 16 23 S.H.  
Local.

24. ePZ 22 39 01 S.H., G.  
Minor trace of dis. shock.

24. ePZ 23 57 09 S.H.  
Minor trace.

25. ePZ 02 40 32 S.H.  
Local.

25. ePZ 04 14 56 S.H.  
Local.

- 25. ePZ 13 01 29 S.H.  
eSNE 11 16 G.  
H: 12 49 42.0, h: 190 Km.  
Mariana Is. region.
- 25. ePZ 21 14 40 S.H.  
Local.
- 26. ePZ 00 50 10 S.H.  
Local.
- 26. ePZ 08 40 37 S.H.  
eSNE 51 S.H.
- 26. ePZ 17 20 19 S.H.  
eSNEZ 32 S.H.
- 26. ePZ 22 30 40 S.H.  
Minor trace.
- 27. ePZ 01 17 33 S.H.  
Minor trace.
- 27. ePZ 02 16 04 S.H.  
Local.
- 27. ePZ 15 57 34 S.H.  
eSE 51 S.H.
- 27. ePZ 18 17 42 S.H.  
Minor trace.
- 27. ePZ 19 36 35 S.H.,G.  
eSNE 37 33 S.H.  
H: 19 35 14.3, h: 33 Km.  
Caspian Sea, Near Azerbaijan,  
S.S.R.  
Mag.  $5\frac{1}{2}$  - 53/4 (Pal).
- 27. ePZ 20 18 14 S.H.  
Minor trace.
- 27. ePZ 21 22 10 S.H.  
Minor trace.
- 28. ePZ 04 16 34 S.H.  
Minor trace of dis. shock.
- 28. ePZ 12 30 20 G.  
e?Z 45 06 G.  
Distant shock.
- 28. PZ 13 13 29.2 S.H.,G.  
eSNE 23 57 S.H.  
H: 13 00 50.7, h: 33 Km.  
Alaska Peninsula.  
Mag. 6 -  $6\frac{1}{2}$  (Pas).
- 29. ePZ 03 43 23 S.H.  
Minor trace.
- 29. ePZ 07 36 23 S.H.  
Minor trace.
- 29. iPZ 09 32 24.3 S.H.,G.  
e?Z 36 49 G.  
eSNE 41 34 G.  
e?E 42 16 G.  
H: 09 21 14.3, h: 126 Km.  
Kurile Is.
- 29. ePZ 14 42 02 S.H.  
e?NE 51 G.
- 29. ePZ 21 20 15 S.H.  
eSE 30 27 G.  
H: 21 07 57.7, h: 144 Km.  
Maraina Is.
- 30. ePZ 04 14 57 S.H.  
eSNEZ 15 19 S.H.
- 30. ePZ 04 52 35 S.H.  
Minor trace.
- 30. eP'Z 10 28 29 S.H.  
ePPZ 29 32 S.H.,G.  
e?NE 35 32 S.H.  
e?NE 36 36 S.H.  
ePSNZ 49 29 G.  
H: 10 10 04.1, h: 33 Km.  
Sandwich Is. region.  
Mag.  $6\frac{1}{2}$  (Pas).
- 31. ePZ 05 17 12 G.  
ePPPZ 21 06 G.  
eSN 25 49 G.  
H: 05 06 46.0, h: 33 Km.  
Ryukyu Is.
- 31. ePZ 11 40 09 S.H.  
Minor trace.

			S.H.						
	eSNE	16 31	G.	31.	ePZ	18 14 34	S.H.		
	H: 15 07 00.4,	h: 33 Km.			Minor trace.				
	Ionian Sea,	West of Crete.		31.	ePZ	18 48 42	S.H.		
					Minor trace.				
31.	ePZ	17 07 24	S.H.						
	eSNE	08 23	S.H.,G.	31.	ePZ	19 43 16	S.H.		
	H: 17 06 04.4,	h: 33 Km.			e?E	44 22	S.H.		
	Turkmen,	S.S.R.							

SEISMOLOGICAL BULLETIN OF  
INSTITUTE OF GEOPHYSICS  
TEHRAN UNIVERSITY, IRAN

*dup.*  
*base to ISS. 1/2*

NEW  
OBSERVATORY  
- 9 MAY 1963  
RICHMOND,  
SURREY.

Lat. 35°44'16" N. a = + 0.50773  
Long. 51°23'08" E. b = + 0.63570  
Height ... 1360 M. c = + 0.58146

FEBRUARY 1963

6 MAY 1963

1. ePZ 03 58 21 S.H.  
eSE 35 S.H.

1. ePZ 12 29 23 S.H.  
Minor trace.

1. ePZ 16 18 33 S.H.  
Minor trace.

2. PZ 09 55 01.2 S.H.  
eSE 21 S.H.

2. ePZ 11 29 28 S.H.  
eSE 46 S.H.

2. PZ 18 48 05.7 S.H.  
eSE 23 S.H.

2. ePZ 21 20 05 S.H.  
eSE 23 S.H.

2. ePZ 22 39 03 S.H.  
eSE 21 S.H.

3. ePZ 10 48 33 S.H.  
eSE 56 S.H.

3. ePZ 11 00 56 S.H.  
eSE 01 12 S.H.

3. ePZ 14 48 32 S.H.  
Minor trace.

3. ePZ 16 47 56 S.H.  
Minor trace.

4. PZ 05 16 31.5 S.H.  
eSN 19 20 G.

H: 05 14 25.6, h: 34 Km.  
Southern Iran.  
Felt: Lar and Bastak.

4. ePZ 07 20 10 S.H.  
eSE 22 58 S.H.  
H: 07 18 06.9, h: 33 Km.  
Southern Iran.  
Felt: Lar and Bastak.

4. PZ 08 00 03.5 S.H.  
SE 18.4 S.H.

4. PZ 11 08 03.4 S.H.  
SE 18.4 S.H.

4. ePZ 11 19 59 S.H.  
eSE 20 21 S.H.

4. ePZ 15 04 18 S.H.  
eSE 39 S.H.

4. iPZ 23 32 28.7 S.H.,G.  
?Z 40 S.H.,G.  
?Z 34 51 S.H.  
H: 23 21 09.0, h: 85 Km.  
Kurile Islands.

5. PZ 00 46 50.2 S.H.  
eSE 47 04 S.H.

5. ePZ 20 16 05 S.H.  
Minor trace.

5. ePZ 20 58 30 S.H.  
ePZ 40 S.H.,G.  
PPZ 21 01 19 S.H.,G.  
?Z 38 G.  
?Z 02 12 G.  
eSKSPZ 11 34 G.  
ePPSN 13 47 G.  
H: 20 39 21.6, h: 41 Km.  
Near Coast of Central Chile.  
Mag. 6 $\frac{1}{4}$ -6 $\frac{1}{2}$  (Pas), 6-6 $\frac{1}{4}$  (Brk),  
53/4-6 (Pal).

- |    |   |            |         |     |                                    |            |      |
|----|---|------------|---------|-----|------------------------------------|------------|------|
| 6. | ePZ   | 01 40 50   | S.H.    | 9.  | ePZ                                | 06 03 54   | S.H. |
|    | ePZ   | 59         | S.H.    |     | eSE                                | 04 19      | S.H. |
|    | PPZ   | 43 31      | S.H.,G. |     |                                    |            |      |
|    | H: 01 21 29.0, h: 33 Km.                      |            |         | 9.  | PZ                                 | 10 09 10.4 | S.H. |
|    | Near coast of Central Chile.                  |            |         |     | eSNE                               | 31         | S.H. |
|    | Mag. 5 $\frac{1}{4}$ - 5 $\frac{1}{2}$ (Pal). |            |         |     |                                    |            |      |
| 6. | ePZ   | 18 28 42   | S.H.    | 9.  | ePZ                                | 16 16 29   | S.H. |
|    | ePPZ  | 31 27      | S.H.    | H:  | 16 05 03.0                         | h: 33 Km.  |      |
|    | H: 18 17 10.9, h: 33 Km.                      |            |         |     | Kurile Is. region.                 |            |      |
|    | Komandorskie Is. region.                      |            |         |     | Mag. 4.8 (CGS).                    |            |      |
| 6. | ePZ   | 22 02 36   | S.H.    | 9.  | ePZ                                | 17 21 33   | S.H. |
|    | Minor trace.                                  |            |         |     | eSNE                               | 23 38      | G.   |
| 6. | ePZ   | 23 32 18   | S.H.    | 9.  | ePZ                                | 19 48 57   | S.H. |
|    | eSE   | 36         | S.H.    |     | SE                                 | 49 15.7    | S.H. |
| 7. | ePZ   | 07 49 46   | S.H.    | 10. | PZ                                 | 00 25 43.8 | S.H. |
|    | eSE   | 50 29      | S.H.    |     | eSE                                | 26 06      | S.H. |
| 7. | PZ  | 16 49 32.5 | S.H.    | 10. | ePZ                                | 13 37 08   | S.H. |
|    | eSE   | 53 29      | G.      |     | ePZ                                | 13 37 08   | S.H. |
|    | H: 16 44 45.3, h: 33 Km.                      |            |         |     | eSE                                | 56         | G.   |
|    | Gulf of Aden.                                 |            |         | 10. | iPZ                                | 15 32 19.7 | S.H. |
| 7. | ePZ   | 17 03 17   | S.H.    |     | eSE                                | 30         | S.H. |
|    | Minor trace.                                  |            |         |     | Ini. motion of P:<br>Dilatation.   |            |      |
| 7. | ePZ   | 21 40 54   | S.H.    | 10. | ePZ                                | 17 46 15   | S.H. |
|    | Minor trace.                                  |            |         |     | iSE                                | 38.6       | S.H. |
| 8. | ePZ   | 00 54 54   | S.H.    | 10. | ePZ                                | 21 46 57   | S.H. |
|    | SNE   | 55 14.7    | S.H.    |     | eSEN                               | 56 04      | G.   |
| 8. | ePZ   | 06 05 21   | S.H.    | H:  | 21 35 48.7                         | h: 67 Km.  |      |
|    | H: 06 03 09.9, h: 33 Km.                      |            |         |     | Kurile Is. region.                 |            |      |
|    | Persion Gulf.                                 |            |         |     | Mag. 5 (CGS).                      |            |      |
|    | Mag. 4.1 (CGS).                               |            |         |     |                                    |            |      |
| 8. | ePZ   | 07 15 41   | S.H.    | 11. | ePZ                                | 08 29 10   | S.H. |
|    | Minor trace.                                  |            |         |     | eSE                                | 29         | S.H. |
| 8. | PZ  | 12 31 10.4 | S.H.    | 11. | iPZ                                | 15 16 03.9 | S.H. |
|    | SE  | 31.4       | S.H.    |     | eSE                                | 21         | S.H. |
|    |   |            |         |     | Ini. motion of P:<br>Condensation. |            |      |
| 8. | PZ  | 16 03 18.3 | S.H.    | 11. | ePZ                                | 15 17 28   | S.H. |
|    | SE  | 34.3       | S.H.    |     | Local.                             |            |      |
| 8. | ePZ   | 23 39 16   | S.H.    | 11. | ePZ                                | 16 58 34   | S.H. |
|    | eSE   | 37         | S.H.    |     | Minor trace.                       |            |      |
| 9. | ePZ   | 01 51 06   | S.H.    |     |                                    |            |      |
|    | Minor trace.                                  |            |         |     |                                    |            |      |

- |     |   |            |         |  |  |
|-----|---|------------|---------|--|--|
| 12. | iPZ   | 08 25 44.0 | S.H.    |  |  |
|     | eSNE  | 26 03      | S.H.    |  |  |
| 12. | ePZ   | 11 40 50   | S.H.    |  |  |
|     | eSN   | 41 38      | G.      |  |  |
| 12. | ePZ   | 16 50 28   | S.H.    |  |  |
|     | Minor trace.  |            |         |  |  |
| 12. | ePZ   | 17 21 49   | S.H.    |  |  |
|     | eSE   | 22 44      | G.      |  |  |
| 12. | eP'Z  | 23 25 35   | S.H.    |  |  |
| H:  | 23 07 28.9, h: 583 Km.<br>Fiji Islands.<br>Mag. 5.5 (CGS).  |            |         |  |  |
| 13. | ePZ   | 01 39 50   | S.H.    |  |  |
|     | eSNE  | 43 02      | G.      |  |  |
| H:  | 01 34 40.4, h: 33 Km.<br>Arabian Sea.   |            |         |  |  |
| 13. | ePZ   | 03 08 46   | S.H.    |  |  |
|     | eSN   | 11 40      | G.      |  |  |
| 13. | ePZ   | 06 56 21   | S.H.    |  |  |
|     | Minor trace.  |            |         |  |  |
| 13. | ePZ   | 07 16 41   | S.H.    |  |  |
|     | eSE   | 57         | S.H.    |  |  |
| 13. | ePZ   | 09 00 16   | S.H.    |  |  |
|     | eSE   | 08 25      | S.H.    |  |  |
| H:  | 08 50 02.2, h: 33 Km.<br>Northern Formosa.<br>Mag. $7\frac{1}{4}$ (Pas), $7\frac{1}{4}$ (Brk),<br>7 - $7\frac{1}{4}$ (Pal).         |            |         |  |  |
| 13. | ePE   | 09 40 34   | S.H.    |  |  |
| H:  | 09 30 34.6, h: 33 Km.<br>Northern Formosa.<br>Mag. 5.4 (CGS).   |            |         |  |  |
| 13. | ePZ   | 18 28 35   | G.      |  |  |
|     | eP'Z  | 32 19      | G.      |  |  |
|     | epPZ  | 33 08      | G.      |  |  |
|     | eSNE  | 42 47      | G.      |  |  |
|     | e?NE  | 43 49      | G.      |  |  |
|     | e?E   | 44 28      | G.      |  |  |
| H:  | 18 13 55.1, h: 29 Km.<br>Solomon Islands.<br>Mag. $6\frac{1}{2}$ (Pas), $6\frac{1}{2}$ (Brk),<br>$6-6\frac{1}{4}$ (Pal), 5.8 (CGS). |            |         |  |  |
| 13. | ePZ   | 20 00 57   | S.H.,G. |  |  |
| H:  | 19 55 36.0, h: 33 Km.<br>Socotra region.  |            |         |  |  |
| 14. | PZ  | 07 16 50.5 | S.H.    |  |  |
|     | epPZ  | 20 12      | G.      |  |  |
|     | e?N   | 21 38      | G.      |  |  |
|     | eSE   | 27 08      | G.      |  |  |
|     | e?N   | 28 18      | G.      |  |  |
|     | eP'P'Z  | 43 16      | S.H.    |  |  |
|     | eSKPP'Z   | 46 20      | S.H.    |  |  |
| H:  | 07 04 40.8, h: 197 Km.<br>Banda Sea, Australia.<br>Mag. $6\frac{1}{2}$ (Pas), 5.8 (CGS).  |            |         |  |  |
| 14. | ePZ   | 12 21 27   | S.H.    |  |  |
|     | ePPZ  | 24 47      | G.      |  |  |
|     | eSN   | 31 56      | G.      |  |  |
| H:  | 12 09 11.4, h: 33 Km.<br>Mid-Atlantic Ocean.<br>Mag. 4.6 (CGS).   |            |         |  |  |
| 14. | ePZ   | 12 53 26   | S.H.    |  |  |
|     | Minor trace.  |            |         |  |  |
| 14. | ePZ   | 22 21 11   | S.H.    |  |  |
|     | eSKSN   | 32 30      | G.      |  |  |
|     | eSKKSN  | 33 04      | G.      |  |  |
|     | eSN   | 58         | G.      |  |  |
|     | eP'P'Z  | 46 35      | S.H.    |  |  |
| H:  | 22 07 54.3, h: 80 Km.<br>eastern New Guinea.<br>Mag. $6\frac{1}{2}$ (Pas), 6 (Pal),<br>6.0 (CGS).                                   |            |         |  |  |
| 15. | ePZ   | 02 51 20   | S.H.    |  |  |
|     | eSE   | 40         | S.H.    |  |  |
| 15. | ePZ   | 10 23 49   | S.H.    |  |  |
| H:  | 10 18 26.3, h: 33 Km.<br>Albania.<br>Mag. 4.6 (CGS).  |            |         |  |  |
| 15. | ePZ   | 12 39 44   | S.H.    |  |  |
|     | Minor trace.  |            |         |  |  |
| 16. | ePZ   | 06 25 29   | S.H.    |  |  |
| H:  | 06 21 36.0, h: 101 Km.<br>Near coast of Turkey.<br>Mag. 4.1 (CGS).  |            |         |  |  |
| 16. | ePZ   | 10 57 08   | S.H.    |  |  |
|     | eSE   | 11 05 58   | G.      |  |  |
| H:  | 10 46 32.0, h: 561 Km.<br>Flores Sea.<br>Mag. 4.6 (CGS).  |            |         |  |  |



16.	ePZ	12 22 59	S.H.	20.	ePZ	17 04 46	S.H.
	eSNEZ	25 59	G.		Minor trace.		
	ePcSE	31 20	G.	20.	ePZ	17 27 10	S.H.
	eScSE	34 20	G.		Minor trace.		
	H: 12 19 31.1, h: 216 Km.			20.	ePZ	20 54 41	S.H.
	Hindu Kush.				Minor trace.		
	Mag. 5.2 (CGS).			21.	ePZ	02 44 31	S.H.
16.	ePZ	13 02 19	S.H.		Minor trace.		
	eSE	40	S.H.	21.	ePZ	09 21 45	S.H.
17.	ePZ	08 37 28	S.H.		Minor trace.		
	Minor trace.			21.	iPZ	13 09 04.7	S.H.
17.	ePZ	22 29 37	S.H.		SNE	30.7	S.H.
	eSE	30 07	S.H.	21.	ePZ	15 51 18	S.H.
18.	ePZ	02 19 48	S.H.		Minor trace.		
	eSE	20 06	S.H.	21.	iPZ	17 20 02.7	S.H.
18.	PZ	05 40 40.8	S.H.		eSE	24 36	S.H.
	eSN	59	S.H.		H: 17 14 35.7, h: 33 Km.		
18.	ePZ	10 16 24	S.H.		Near coast of Libya.		
	Minor trace.				Mag. 5.0 (CGS).		
18.	ePZ	11 24 08	S.H.	21.	ePZ	18 38 32	S.H.
	Minor trace.				H: 18 33 06.8, h: 33 Km.		
18.	ePZ	12 08 02	S.H.		Near coast of Libya.		
	Minor trace.				Mag. 4.5 (CGS).		
18.	ePZ	14 05 10	S.H.	21.	PZ	20 32 10.7	S.H.
	eSE	06 30	S.H.		H: 20 26 43.8, h: 33 Km.		
18.	ePEZ	14 28 51	S.H.,G.		Near coast of Libya.		
	eSEZ	31 47	S.H.,G.		Mag. 4.4 (CGS).		
	H: 14 25 18.9, h: 225 Km.			22.	ePZ	07 19 30	S.H.
	Hindu Kush.				ePcPZ	20 45	G.
	Mag. 4.9 (CGS).				ePPZ	21 29	G.
20.	ePZ	04 04 49	S.H.		H: 07 10 28.0, h: 33 Km.		
	Minor trace.				North Polar region.		
20.	ePZ	08 56 15	S.H.		Mag. 5.0 (CGS).		
	Minor trace.			22.	ePZ	14 18 15	S.H.
20.	ePZ	10 29 51	S.H.		Minor trace.		
	Minor trace.			22.	ePZ	18 11 14	S.H.
20.	ePZ	16 56 30	S.H.		Minor trace.		
	Minor trace.			22.	ePZ	21 07 29	S.H.
					eSE	52	S.H.

23. ePZ 17 22 19 S.H.  
Minor trace.

23. ePZ 18 11 09 S.H.  
Minor trace.

25. ePZ 15 55 09 S.H.  
Minor trace.

25. ePZ 17 21 15 S.H.  
Minor trace.

26. iPZ 08 59 09.5 S.H.  
SNE 31.5 S.H.  
Ini. motion of P:  
Condensation.

26. ePZ 16 57 54 S.H.  
eSEZ 58 15 S.H.

26. ePZ 20 27 27 S.H.  
iPPZ 31 33.3 G.  
eSPPZ 32 32 G.  
eSKSZ 38 01 G.  
ePSZ 40 07 G.

H: 20 14 08.7, h: 171 Km.  
Eastern New Guinea.  
Mag.  $7\frac{1}{4}$ - $7\frac{1}{2}$  (Pas),  $7$ - $7\frac{1}{4}$  (Brk),  
 $6\frac{3}{4}$ - $7$  (Pal), 7.1 (CGS).

27. ePZ 22 58 18 S.H.  
Minor trace.

27. PZ 23 48 58.5 S.H.  
Minor trace.

28. ePZ 01 40 35 S.H.  
e?N 43 23 G.  
H: 01 31 13.2, h: 33 Km.  
Indian Ocean.

28. ePZ 06 21 09 S.H.  
Minor trace.

SEISMOLOGICAL BULLETIN OF  
INSTITUTE OF GEOPHYSICS  
TEHRAN UNIVERSITY, IRAN

Lat. 35°44'16" N. a = + 0.50773  
 Long. 51°23'08" E. b = + 0.63570  
 Height ... 1360 M. c = + 0.58146

20 JUN 1963  
 MARCH 1963

- |  |  |
|--|--|
| 1. ePZ 02 24 18 S.H.<br>eSE 37 S.H.  | 3. ePZ 00 49 05 S.H.<br>Minor trace of local shock.  |
| 1. ePZ 03 21 43 S.H.,G.<br>SE 23 53.5 S.H.,G.<br>H: 03 20 02.4, h: 33 Km.<br>Mag. 4.8 (CGS).<br>Northern Iran. | 3. ePZ 00 55 05 S.H.<br>SE 49 S.H.,G.<br>3. ePZ 17 08 43 S.H.<br>eSNE 11 46 G.<br>H: 17 05 03.7, h: 156 Km.<br>Hindu Kush. |
| 1. iPZ 07 12 47.3 S.H.,G.<br>iSE 13 01.8 S.H.,G.<br>Dilatation.  | 4. ePZ 07 50 52 S.H.<br>ePPZ 53 11 G.<br>H: 07 41 51, h: 33 Km.<br>North Polar region.<br>Mag. 5.0                         |
| 1. ePZ 18 32 05 S.H.<br>Minor trace of local shock.  | 4. ePZ 09 33 16 S.H.<br>eSE 51 S.H.  |
| 1. ePZ 19 26 32 S.H.<br>eSE 36 07 G.<br>H: 19 14 13.1, h: 33 Km.<br>Atlantic Ocean.                            | 4. ePZ 13 48 54 S.H.<br>ePPZ 51 11 G.<br>eSNEZ 57 15 G.<br>H: 13 38 41.0, h: 33 Km.<br>Formosa.<br>Mag. 4.8 (CGS).         |
| 1. ePZ 20 40 58 S.H.<br>Near shock.  | 4. iPZ 15 15 05.4 S.H.,G.<br>eSNE 19 06 S.H.,G.<br>H: 15 10 19.2, h: 42 Km.<br>Crete.<br>Mag. 4.8 (CGS).                   |
| 2. ePZ 04 29 01 S.H.<br>eSE 31 12 G.   | 4. ePZ 16 02 07 S.H.<br>Minor trace.   |
| 2. ePZ 04 49 00 S.H.<br>SEZ 21 S.H.  | 5. ePZ 07 58 17 S.H.<br>Minor trace of local shock.  |
| 2. ePZ 09 37 22 S.H.,G<br>Minor trace.   |  |
| 2. ePZ 11 23 29 S.H.<br>Minor trace.   |  |
| 2. PZ 21 48 45 S.H.<br>SNE 53 S.H.,G.  |  |
| 2. PZ 23 05 53 S.H.<br>Minor trace of local shock.   |  |

7. P<sub>1</sub>Z 05 42 06 S.H.,G.  
eP<sub>1</sub>SP<sub>1</sub>Z 54 04 G.  
H: 05 22 01.1, h: 33 Km.  
Aproximately 500 Km West of  
Easter Island.  
Mag. 6 $\frac{3}{4}$  (Pas), 6 $\frac{3}{4}$  (Brk),  
5.6 (CGS).

7. eP<sub>1</sub>Z 12 35 47 S.H.,G.  
eP<sub>2</sub>Z 56 G.  
PPZ 38 48 G.  
?E 39 32 G.  
PPPEZ 41 52 G.  
H: 12 16 28.5, h: 45 Km.  
Near coast of southern chile.  
Mag. 5.6 (CGS).

7. PZ 16 56 42 S.H.  
iSE 57 00.2 S.H.

7. ePZ 17 59 10 S.H.  
Minor trace.

7. FZ 21 53 09 S.H.,G.  
SNE 56 10 S.H.,G.  
H: 21 49 32.6, h: 202 Km.  
Hindu Kush.

8. ePZ 04 16 10 S.H.  
eSE 32 S.H.

9. ePZ 01 46 35 S.H.  
eSE 47 38 G.

9. PZ 02 21 35 S.H.,G.  
eSNE 24 46 G.  
H: 02 17 39.5, h: 33 Km.  
Arabian Sea.  
Mag. 5.1 (CGS).

9. ePZ 05 02 40 S.H.  
eSNZ 03 05 S.H.

9. ePZ 06 53 30 S.H.  
eSE 52 S.H.

9. ePZ 08 35 37 S.H.  
eSE 57 S.H.

9. ePZ 12 52 18 S.H.  
eSE 36 S.H.

9. ePZ 16 33 17 S.H.  
Minor trace.

9. ePZ 21 47 34 S.H.  
eSNEZ 48 09 S.H.

9. ePZ 22 02 38 S.H.  
eSE 03 01 S.H.

9. ePZ 23 10 20 S.H.  
eSE 56 S.H.

10. iPZ 01 38 44.0 S.H.  
PPZ 42 04 G.  
eSNE 49 17 G.  
H: 01 26 04.1, h: 33 Km.  
Kodiak Island, Alaska.  
Mag. 5.1 (CGS).

10. PZ 03 03 45 S.H.  
SNE 12 07 G.  
Lg<sub>2</sub> 28.3 G.

H: 02 53 33.0, h: 33 Km.  
Near east coast of Formosa.  
Mag. 4.9 (CGS).

10. ePZ 06 09 16 S.H.  
Minor trace.

10. eP<sub>1</sub>Z 11 10 59 S.H.  
?E 14 22 G.  
PKSE 50 G.

H: 10 51 48.1, h: 70 Km.  
Naer coast of Central chile.  
Mag. 6-6 $\frac{1}{4}$  (Pas), 5.5 (CGS).

10. ePZ 12 01 32 S.H.  
H: 11 50 26.3, h: 60 Km.  
Near coast of Honshu, Japan.  
Mag. 4.6 (CGS).

10. ePZ 14 02 54 S.H.  
H: 13 51 04.3, h: 41 Km.  
Celebes Sea.

10. ePZ 14 22 46 S.H.  
eSE 23 03 S.H.

10. ePZ 16 01 05 S.H.  
eSE 24 S.H.

10. ePZ 16 13 40 S.H.  
Minor trace.

10. ePZ 18 24 22 S.H.  
eSE 44 S.H.

10. ePZ 21 52 00 S.H.  
Minor trace.

10. ePZ 22 16 37 S.H.  
eSE 17 55 S.H.

11. iPZ 00 22 38.8 S.H.  
SEZ 23 02 S.H.  
Compression.

11. PZ 03 31 16.2 S.H.  
SE 34 S.H.

11. ePZ 07 31 32 S.H.  
iSE 35 01 S.H.,G.  
H: 07 27 22.0, h: 33 Km.  
Turkey. Felt.  
Mag. 5.5 (CGS).

11. PZ 10 31 22 S.H.  
eSE 33 S.H.

11. ePZ 18 59 08 S.H.  
Minor trace.

11. iPZ 19 39 57.8 S.H.  
SNE 40 05 S.H.,G.

12. ePZ 03 56 51 S.H.  
eSE 57 07 S.H.

12. ePZ 12 41 12 S.H.  
eSNE 44 05 G.  
H: 12 38 54, h: 70 Km.  
Turkey.  
Mag. 4.0 (CGS).

12. ePZ 15 26 10 S.H.  
Minor trace.

13. ePZ 00 44 03 S.H.  
Minor trace.

13. ePZ 02 42 32 S.H.  
eSE 52 S.H.

13. ePZ 05 00 25 S.H.  
eSE 01 52 S.H.

13. ePZ 07 04 37 S.H.  
eSE 59 S.H.

13. ePZ 15 32 03 S.H.  
eSE 26 S.H.

14. ePZ 01 55 33 S.H.  
Minor trace.

14. ePZ 05 32 30 S.H.  
eSE 33 11 S.H.

14. ePZ 08 10 35 S.H.  
eSE 18 21 G.  
L<sub>1</sub>N 28 G.  
L<sub>r1</sub> 34 G.  
H: 08 00 15.6, h: 51 Km.  
Off coast of northern Luzon,  
Philippine Islands.  
Mag. 5.0 (CGS).

14. iPZ 09 29 16.8 S.H.  
iSNEZ 36.5 S.H.  
Compression.

14. ePZ 09 49 40 S.H.  
Minor trace.

14. ePZ 15 07 57 S.H.  
eSE 08 19 S.H.

14. ePZ 15 18 10 S.H.  
Minor trace.

14. ePZ 15 45 51 S.H.  
eSEZ 46 07 S.H.

14. PZ 18 42 07.4 S.H.  
Minor trace.

15. ePZ 00 27 21 S.H.  
eSE 36 36 G.  
H: 00 16 01.3, h: 117 Km.  
Mindanao, Philippine Is.  
Mag. 5.0 (CGS).

15. ePZ 11 04 28 S.H.  
Minor trace.

15. ePZ 13 56 42 S.H.  
Minor trace.

15. ePZ 14 39 35 S.H.  
Minor trace.

15. ePZ 20 11 25 S.H.  
Minor trace.

15. ePZ 22 18 12 S.H.  
Minor trace.

- |     |                          |            |      |     |                                      |            |      |
|-----|--------------------------|------------|------|-----|--------------------------------------|------------|------|
| 16. | ePZ                      | 02 44 23   | S.H. | 20. | iPZ                                  | 18 04 54.0 | S.H. |
|     | Minor trace.             |            |      |     | iSNEZ                                | 05 17.5    | S.H. |
| 16. | PZ                       | 08 56 20.3 | S.H. | 21. | ePZ                                  | 12 48 53   | S.H. |
|     | SNE                      | 09 05 48   | S.H. |     | eSE                                  | 49 15      | S.H. |
| H:  | 08 44 48.3               | h: 26 Km.  |      | 21. | ePZ                                  | 18 43 52   | S.H. |
|     | Kurile Islands region.   |            |      |     | eSE                                  | 44 53      | S.H. |
|     | Mag. 7(Pas), 73/4(Brk),  |            |      | 21. | ePZ                                  | 21 12 20   | S.H. |
|     | 63/4(Pal), 6.2(CGS).     |            |      |     | eSE                                  | 35         | S.H. |
| 16. | ePZ                      | 12 08 03   | S.H. | 21. | ePZ                                  | 23 47 19   | S.H. |
|     | SNE                      | 18         | S.H. |     | Minor trace.                         |            |      |
| 16. | ePZ                      | 22 32 48   | S.H. | 22. | ePZ                                  | 00 37 42   | S.H. |
|     | eP PZ                    | 38 24      | S.H. |     | SE                                   | 38 04      | S.H. |
| H:  | 22 <sup>c</sup> 28 56.7, | h: 73 Km.  |      | 22. | ePZ                                  | 03 16 38   | S.H. |
|     | Tadzhik S.S.R.           |            |      |     | eSE                                  | 56         | S.H. |
|     | Mag. 5.0(CGS).           |            |      | 22. | PZ                                   | 04 21 10   | S.H. |
| 17. | iPZ                      | 09 43 28.4 | S.H. |     | SE                                   | 24         | S.H. |
|     | iSNE                     | 52.0       | S.H. | 22. | ePZ                                  | 19 29 43   | S.H. |
|     | Compression.             |            |      |     | eSE                                  | 30 05      | S.H. |
| 17. | PZ                       | 16 05 47.4 | S.H. | 22. | iPZ                                  | 19 39 40.1 | S.H. |
|     | iSE                      | 06 06.4    | S.H. |     | iSE                                  | 40 11.9    | S.H. |
| 17. | ePZ                      | 17 48 19   | S.H. |     | Dilatation.                          |            |      |
|     | eSNE                     | 50.0       | G.   | 22. | ePZ                                  | 22 32 24   | S.H. |
| 17. | ePZ                      | 21 25 39   | S.H. |     | Minor trace.                         |            |      |
|     | eSE                      | 54         | S.H. | 23. | ePZ                                  | 00 32 16   | S.H. |
| 19. | ePZ                      | 00 28 05   | S.H. |     | Minor trace.                         |            |      |
|     | Minor trace.             |            |      | 23. | ePZ                                  | 00 49 40   | S.H. |
| 19. | ePZ                      | 06 21 19   | S.H. |     | Minor trace.                         |            |      |
|     | SE                       | 29         | S.H. | 23. | ePZ                                  | 18 47 20   | S.H. |
| 19. | ePZ                      | 13 15 21   | S.H. |     | eSE                                  | 40         | S.H. |
|     | eSE                      | 31         | S.H. | 24. | ePZ                                  | 00 02 14   | S.H. |
| 19. | ePZ                      | 21 44 30   | S.H. |     | Minor trace.                         |            |      |
|     | eSE                      | 46.5       | G.   | 24. | PZ                                   | 02 19 17.8 | S.H. |
| 20. | ePZ                      | 14 50 10   | S.H. |     | SNE                                  | 29 14      | G.   |
|     | Minor trace.             |            |      |     | LE                                   | 39.0       | G.   |
| 20. | ePZ                      | 16 52 11   | S.H. | H:  | 02 07 12.8, h: 33 Km.                |            |      |
|     | eSE                      | 17 02 14   | G.   |     | Sumba Island region.                 |            |      |
| H:  | 16 38 55.8, h: 40 Km.    |            |      |     | Mag. 6 $\frac{1}{4}$ (Pas), 6 (Pal), |            |      |
|     | Western New Guinea.      |            |      |     | 5.4 (CGS).                           |            |      |
|     | Mag. 5.5 (CGS).          |            |      |     |                                      |            |      |

24. iPZ 07 12 45.3 S.H. iSN 13 02.0 S.H. Compression.	24. ePZ 21 34 00 S.H. Minor trace.
24. iPZ 09 22 00.8 S.H. iSNEZ 22.8 S.H. Compression.	24. iPZ 21 47 45.2 S.H.,G. Compression. H: 21 35 24.4, h: 57 Km. Andreanof Is. Aleutian Is. Mag. 6 (Pas), 5(Pal), 5.5 (CGS).
24. ePZ 09 27 56 S.H. Minor trace.	25. ePZ 01 48 03 S.H. eSE 49 S.H.
24. ePZ 09 54 41 S.H. SNE 10 04 02 G. H: 09 43 20.2, h: 51 Km. Midanao region, Philipin Is. Mag. 5.2 (CGS).	25. ePZ 02 16 18 S.H. eSE 17 17 S.H.
24. ePZ 11 33 04 S.H. Minor trace.	25. ePZ 02 54 06 S.H. eSN 48 S.H.
24. iPZ 12 44 53.0 S.H. H: 12 44 03.2, h: 33 Km. Western Iran. 20 injured and minor damage in Kangavar area. Mag. 5 $\frac{1}{2}$ -5 $\frac{3}{4}$ (Pal), 5.2(CGS).	25. ePZ 03 43 17 S.H. Minor trace.
24. ePZ 13 35 01 S.H. eSE 43 S.H.	25. ePZ 05 06 24 S.H. Minor trace.
24. ePZ 13 46 43 S.H. Minor trace.	25. ePZ 06 00 17 S.H. eSE 01 03 S.H.
24. ePZ 13 51 47 S.H. eSE 52 35 S.H.	25. ePZ 06 07 13 S.H. eSN 08 01 S.H.
24. ePZ 14 12 58 S.H. eSE 13 40 S.H.	25. ePZ 08 06 10 S.H. eSE 55 S.H.
24. ePZ 14 40 11 S.H. Minor trace.	25. ePZ 08 59 11 S.H. eSE 09 00 01 S.H.
24. ePZ 14 41 49 S.H. eSE 42 31 S.H.	25. ePZ 11 23 52 S.H. Minor trace.
24. ePZ 16 08 47 S.H. eSE 09 31 S.H.	25. iPZ 15 59 00.1 S.H. Compression.
24. ePZ 17 47 10 S.H. eSN 54 S.H.	25. ePZ 16 43 11 S.H. Minor trace.
24. ePZ 19 55 10 S.H. eSN 54 S.H.	25. iPZ 22 55 41.9 S.H.,G. Dilatation. H: 22 46 16.2, h: 30 Km. Off southwest coast of Sumatra. Mag. 5.6 (CGS).

25.	ePZ	23 42 10	S.H.	27.	ePZ	07 06 12	S.H.
		Minor trace.				Minor trace.	
26.	ePZ	02 26 27	S.H.	27.	ePZ	07 24 36	S.H.
		Minor trace.			eSE	25.5	S.H.
26.	ePZ	03 08 31	S.H.	27.	ePZ	14 06 14	S.H.
	eSN	59	S.H.		eSE	51	S.H.
26.	P'Z	10 07 41	S.H.	28.	iPNEZ	00 24 50	S.H.,G.
	iPKSN	11 19	S.H.,G.		iPPNEZ	26 49.5	G.
	H: 09 48 19.7, h: 45 Km.				iSE	31 54	G.
	Kermadec Islands,				iSSZ	35 59.5	G.
	Mag. 6 $\frac{3}{4}$ -7 (Pas), 7(Brk),				?Z	42 09	G.
	7 (Pal).				H: 00 15 47.5, h: 15 Km.		
26.	eP'Z	13 44 21	S.H.		Iceland.		
	iPKSE	48 07	S.H.,G.		Mag. 7-7 $\frac{1}{4}$ (Pas), 6 $\frac{1}{2}$ (Brk),		
	H: 13 25 02.6, h: 42 Km.				6 $\frac{1}{2}$ -6 $\frac{3}{4}$ (Pal).		
	Kermadec Islands.			28.	ePZ	03 59 50	S.H.
	Mag. 7 $\frac{1}{4}$ (Pas), 6 $\frac{1}{2}$ (Pal).				Minor trace.		
26.	PZ	17 03 10	S.H.	28.	ePZ	05 29 12	S.H.
	SE	32	S.H.		Minor trace.		
26.	PZ	17 52 25	S.H.	28.	ePZ	09 58 31	S.H.
	eSE	49	S.H.		Minor trace.		
26.	PZ	17 56 51	S.H.	28.	ePZ	11 31 54	S.H.
	SE	57 04	S.H.		Minor trace.		
26.	iPZ	19 58 47.5	S.H.	28.	ePZ	11 35 14	S.H.
	iSPZ	59 23	S.H.		Minor trace.		
	Compression.			28.	PZ	17 16 13	S.H.
	H: 19 47 46.0, h: 110 Km.				eP PZ	21 50	S.H.
	Kurile Islands.				H: 17 <sup>c</sup> 12 23.1, h: 24 Km.		
	Mag. 5.6 (CGS).				Hindu Kush.		
26.	PZ	21 45 28	S.H.,G.	28.	ePZ	23 48 31	S.H.
	iSNE	54 20	G.		Minor trace.		
	Compression.			29.	ePZ	02 51 07	S.H.
	H: 21 34 41.1, h: 33 Km.				eSE	28	S.H.
	Near east coast of Honshu,			29.	PZ	03 13 49	S.H.
	Japan.				eSNE	17 39	G.
	Mag. 6 $\frac{1}{2}$ (Pas), 6 $\frac{1}{2}$ (Brk),				H: 03 09 11.2, h: 33 Km.		
	6-6 $\frac{1}{4}$ (Pal), 5.9 (CGS).				North west, Turkey.		
27.	ePZ	01 35 13	S.H.		Mag. 4.4 (CGS).		
	eSE	52	S.H.	29.	ePZ	12 18 55	S.H.
27.	ePZ	03 42 50	S.H.		eSE	19 12	S.H.
	Minor trace.						



- |  |   |            |         |  |                         |            |      |
|--|---|------------|---------|--|-------------------------|------------|------|
| 29.  | ePZ   | 20 02 29   | S.H.    | 30.  | PZ                      | 23 10 42.0 | S.H. |
|  | eSE   | 51         | S.H.    |  | iSEZ                    | 11 08.9    | S.H. |
| 29.  | ePZ   | 21 56 28   | S.H.    | 31.  | ePZ                     | 00 54 39   | S.H. |
| 30.  | P'Z   | 02 12 09.3 | S.H.    |  | eSZ                     | 55 00      | S.H. |
|  | ?Z  | 15 27      | S.H.    | 31.  | PZ                      | 02 28 20.6 | S.H. |
|  | i?E   | 18 58.0    | S.H.,G. |  | eSN                     | 29 58      | G.   |
|  | i?E   | 20 35.0    | G.      | 31.  | ePZ                     | 02 54 48   | S.H. |
|  | e?Z   | 29 13      | S.H.    |  | Minor trace.            |            |      |
| H: 01 53 28.8, h: 160 Km.<br>New Hebrides Islands.<br>Mag. 6.1(CGS).                                 |   |            |         | 31.  | eP'Z                    | 05 50 11   | S.H. |
| 30.  | ePZ   | 05 17 26   | S.H.    |  | ?E                      | 53 51      | G.   |
| 30.  | ePZ   | 12 35 07   | S.H.    |  | ?E                      | 54 16      | G.   |
| 30.  | ePZ   | 13 33 21   | S.H.    |  | i(SKSP)NE 06 03 15.0 G. |            |      |
|  | eSE   | 34         | S.H.    |  | i(KSP)NE 54.0 G.        |            |      |
| 30.  | iPZ   | 15 52 32   | S.H.    | H: 05 30 49.3, h: 48 Km.<br>Kermadec Is.<br>Mag. $6\frac{1}{4}$ - $6\frac{1}{2}$ (Pas), $6\frac{1}{2}$ (Brk),<br>5.7(CGS), $6$ - $6\frac{1}{4}$ (Pal). |                         |            |      |
|  | iSNE  | 54.5       | S.H.    | 31.  | eP'Z                    | 19 42 09   | G.   |
|  | Dilatation.                                 |            |         |  | ?EZ                     | 45 52      | G.   |
| 30.  | iPZ   | 17 03 10.3 | S.H.,G. | H: 19 22 53.3, h: 50 Km.<br>Kermadec Is.<br>Mag. $6\frac{1}{4}$ - $6\frac{1}{2}$ (Pas), $6\frac{1}{2}$ (Brk),<br>5.8(CGS).                             |                         |            |      |
|  | iSNE  | 12 17      | G.      |  |                         |            |      |
|  | ?N  | 42         | G.      |  |                         |            |      |
|  | iScSN                                       | 13 10      | G.      |  |                         |            |      |
|  | Compression.                                |            |         |  |                         |            |      |
| H: 16 51 56.6, h: 33 Km.<br>Kurile Islands.<br>Mag. $5\frac{1}{4}$ - $5\frac{1}{2}$ (Pal), 6.3(CGS). |   |            |         |  |                         |            |      |
| 30.  | (P)Z  | 17 29 40   | S.H.    |  |                         |            |      |
| 30.  | e(P)Z                                       | 17 34 41   | S.H.    |  |                         |            |      |
|  | Probably three above shocks<br>are related. |            |         |  |                         |            |      |
| 30.  | ePZ   | 21 33 35   | S.H.    |  |                         |            |      |
|  | Minor trace.                                |            |         |  |                         |            |      |

April - June 63

SEISMOLOGICAL BULLETIN OF  
INSTITUTE OF GEOPHYSICS  
TEHRAN UNIVERSITY, IRAN

Lat.  $35^{\circ}44'16''$  N. a = + 0.50773  
Long.  $51^{\circ}23'08''$  E. b = + 0.63570  
Height ... 1360 M. c = + 0.58146

APRIL 1963

- |  |  |
|--|--|
| 1. ePZ 02 42 03 G.<br>Local.   | 2. ePZ 04 18 14 S.H.<br>H: 04 06 57.3, h: 33 Km.<br>Kamchatka.<br>Mag. 4.9 (CGS).  |
| 1. iPZ 04 39 05.4 S.H., G.<br>eSE 47 33 G.<br>H: 04 28 44.3, h: 255 Km.<br>Offwest coast of Hokkaido,<br>Japan.<br>Mag. 5.6 (CGS). | 2. ePZ 04 43 51 S.H.<br>Minor trace.   |
| 1. ePZ 05 36 32 S.H.<br>SNEZ 54.6 S.H.   | 2. ePZ 05 23 52 S.H.<br>eSE 24 12 S.H.   |
| 1. ePZ 06 56 00.5 S.H.<br>Minor trace of local shock.  | 2. ePZ 10 29 56 S.H.<br>Minor trace.   |
| 1. ePZ 09 26 19 S.H.<br>eSNE 29 20 G.<br>H: 09 22 51.8, h: 100 Km.<br>Hindukush.<br>Mag. 4.8 (CGS).                                | 2. ePZ 11 46 25 S.H.<br>Minor trace.   |
| 1. ePZ 12 29 01 S.H.<br>Minor trace.   | 2. ePZ 14 27 33 S.H.<br>Minor trace of local shock.  |
| 1. ePZ 16 36 04 S.H.<br>H: 16 31 28.6, h: 203 Km.<br>Sinkiang Province, China.<br>Mag. 4.0 (CGS).                                  | 2. PZ 16 31 11.7 S.H.<br>epPZ 50 S.H.<br>esPZ 54 S.H.<br>epPPZ 34 12 S.H.<br>eSNE 41 28 G.<br>H: 16 18 55.6, h: 142 Km.<br>Compression.<br>Andreanof Is., Aleutian Is.<br>Mag. $6\frac{1}{4}$ - $6\frac{1}{2}$ (Pas), $5\frac{1}{2}$ (Brk),<br>5.7(CGS). |
| 1. ePZ 18 09 35 S.H.<br>Minor trace of local shock.  | 2. ePZ 21 08 12 S.H.<br>Minor trace of deep shock.   |
| 1. iPZ 18 33 30.1 S.H.<br>eSNEZ 53 S.H.<br>Compression.  | 3. ePZ 00 37 17 S.H.<br>Minor trace.   |
| 1. ePZ 18 39 57 S.H.<br>H: 18 36 25.7, h: 244 Km.<br>Hindukush.<br>Mag. 4.3 (CGS).   | 3. ePZ 03 22 44 S.H.<br>eSNE 23 02 S.H.  |
|  | 3. PZ 05 17 24 S.H.<br>SZ 46.5 S.H.  |

- 3. ePZ 12 29 35 S.H.  
eSE 30 23 S.H.
- 3. ePZ 14 33 03 S.H.  
Minor trace.
- 3. eP<sub>1</sub>Z 15 07 50 S.H.  
eP<sub>2</sub>Z 08 19 S.H.  
H: 14 47 55.5, h: 33 Km.  
South Pacific Ocean.  
Mag. 5.8 (CGS).
- 4. ePZ 04 00 09 S.H.  
Minor trace.
- 4. ePZ 08 18 05 S.H.  
SNEZ 24.7 S.H.
- 4. ePZ 11 41 45 S.H.  
eSE 42 06 S.H.
- 4. ePZ 14 43 37 S.H.  
eSNE 56 S.H.
- 4. ePZ 14 54 35 S.H.  
Minor trace.
- 4. ePZ 17 11 44 S.H.  
eSE 12 09 S.H.
- 5. ePE 13 44 18 S.H.  
Minor trace of local shock.
- 5. ePE 18 05 49 S.H.  
Minor trace.
- 5. ePE 21 36 11 S.H.  
eSE 32 S.H.
- 5. ePE 22 08 09 S.H.  
eSE 30 S.H.
- 6. ePE 03 53 53 S.H.  
Minor trace of local shock.
- 6. ePE 11 31 26 S.H.  
Minor trace of local shock.
- 6. ePE 12 06 07 S.H.  
SE 25 S.H.
- 6. ePE 13 39 36 S.H.  
Minor trace of distant shock.
- 6. ePE 17 54 27 S.H.  
eSNE 59 07 S.H.,G.  
H: 17 48 53.3, h: 33 Km.  
Tibet.
- 7. ePE 00 18 45 S.H.  
Minor trace of local shock.
- 7. ePZ 11 24 43 S.H.  
epPNEZ 26 50 S.H.,G.  
H: 11 16 03.8, h: 33 Km.  
Jan Mayen Is. region.  
Mag. 4.6 (CGS).
- 7. ePZ 13 51 20 S.H.  
eSNE 52 36 G.
- 7. ePZ 15 18 18 S.H.  
H: 15 07 34.9, h: 33 Km.  
Ryukyu Is. region.
- 7. PZ 15 40 12.5 S.H.  
epPZ 41 02 S.H.  
H: 15 28 01.8, h: 202 Km.  
Fox Is., Aleutian Is. region.  
Mag. 6.0 (CGS).
- 7. iPZ 22 46 25.8 S.H.  
eSN 54 50 G.  
H: 22 36 03.4, h: 72 Km.  
Compression.  
Near southwest coast of  
Sumatra.  
Mag. 6.1 (CGS).
- 7. ePZ 23 15 27 S.H.  
Minor trace.
- 8. ePZ 09 22 17 S.H.  
eSE 55 S.H.
- 8. ePZ 14 50 28 S.H.  
H: 14 38 27.0, h: 33 Km.  
North Atlantic Ocean.  
Mag. 5.0 (CGS).
- 9. ePZ 01 47 49 S.H.  
ePPPZ 50 49.5 S.H.  
H: 01 39 08.6, h: 20 Km.  
Off east coast of Greenland.

9. eP'Z 02 20 38 S.H.  
epP'Z 23 14 S.H.  
H: 02 02 25.1, h: 538 Km.  
Fiji Is. region.  
Mag. 4.9 (CGS).
9. ePZ 03 13 08 S.H.  
eSN 14 40 G.
9. ePZ 05 16 45 S.H.  
eSNE 53 S.H.
9. ePZ 15 48 35 S.H.  
Minor trace.
9. ePZ 16 05 09 S.H.  
Minor trace of local shock.
9. ePZ 18 53 03 S.H.  
Minor trace.
9. ePZ 20 39 41 S.H.  
Minor trace.
9. ePZ 22 25 58 S.H.  
Minor trace of local shock.
9. ePZ 23 26 34 S.H.  
Minor trace.
10. ePE 03 26 23 S.H.  
eSE 34 S.H.
10. ePZ 08 02 48 S.H.  
H: 07 50 30.2, h: 33 Km.  
Timor.  
Mag. 5.2 (CGS).
11. ePZ 00 31 48 S.H.  
Minor trace of distant shock.
11. ePZ 03 00 57 S.H.  
Minor trace.
11. ePZ 08 42 30 S.H.  
SE 50 S.H.
11. ePZ 10 15 57 S.H.  
Minor trace.
11. ePZ 10 51 18 S.H.  
Minor trace.
11. PZ 11 41 40.5 S.H.  
SNEZ 55 S.H.
11. ePZ 15 05 55 S.H.  
Minor trace of local shock.
12. ePZ 00 46 36 G.  
eSN 50 56 G.  
eScSN 57 44 G.  
H: 00 41 27.9, h: 33 Km.  
Northern India.  
Mag. 5.4 (GCS).
12. ePZ 13 50 32 S.H.  
H: 13 38 03.0, h: 33 Km.  
Andreanof Is. Aleutian Is,  
Mag. 4.2 (CGS).
12. ePZ 18 38 33 S.H.  
eSE 54 S.H.
12. ePPZ 19 58 16 S.H.  
H: 19 47 54.8, h: 33 Km.  
Svalbard region.  
Mag. 5.2 (CGS).
12. ePZ 21 35 59 S.H.  
eSE 36 43 S.H.
13. eP'Z 02 39 43 S.H.,G.  
epP'Z 40 14 G.  
ePPZ 41 24 S.H.,G.  
eSKSN 45 40 G.  
eSKKSN 47 32 G.  
esKsPZ 51 06 G.  
H: 02 20 57.5, h: 125 Km.  
Central Peru.  
Mag. 6.3/4-7(Pas), 6.3(CGS).
13. ePZ 03 27 24 S.H.  
eSE 38 S.H.
13. ePZ 13 57 12 S.H.  
Minor trace of local shock.
13. ePZ 14 43 19 S.H.  
eSN 54 44 G.  
H: 14 31 21.0, h: 31 Km.  
Near north coast of New Guinea.  
Mag. 5.6 (CGS).
13. ePZ 18 52 01 S.H.  
Minor trace.
13. ePZ 21 01 22 S.H.  
Minor trace of local shock.

14. ePZ 01 08 15 S.H.  
Minor trace of local shock.
14. ePZ 01 53 48 S.H.  
Minor trace of local shock.
15. ePE 04 05 15 S.H.  
SE 34 S.H.
16. ePZ 01 41 28 G.  
ePPZ 44 34 S.H.  
H: 01 29 19.4, h: 33 Km.  
Halmahera region.  
Mag. 7(Pas), 6.1(CGS).
16. ePZ 02 07 27 G.  
H: 01 55 10.9, h: 32 Km.  
Halmahera region.  
Mag. 6.0(CGS).
16. ePZ 07 16 35 S.H.  
Minor trace of local shock.
16. ePZ 10 32 12 S.H.  
Minor trace of local shock.
16. ePZ 10 39 16 S.H.  
Minor trace.
16. ePZ 10 46 35 S.H.  
Minor trace.
16. ePZ 12 15 44 S.H.  
H: 12 03 42.5, h: 33 Km.  
Halmahera region.  
Mag. 4.7(CGS).
16. ePZ 18 00 18 S.H.  
Minor trace.
16. ePZ 18 48 35 S.H.,G.  
eSNE 50 11 S.H.,G.  
H: 18 47 08.8, h: 104 Km.  
Iraq.  
Mag. 5.2(CGS).
16. ePZ 19 30 53 S.H.  
Minor trace.
17. ePZ 01 22 17 S.H.,G.  
eSNE 32 15 G.  
H: 01 10 16.6, h: 89 Km.  
Halmahera region.
17. eP'Z 02 30 35 S.H.,G.  
ePKSNE 34 01 G.  
ePPSZ 44 53 G.  
H: 02 11 26.1, h: 33 Km.  
Fiji Islands.  
Mag. 6 $\frac{1}{2}$ -63/4(Pas), 6(Brk),  
5.9(CGS).
17. ePZ 10 48 53 S.H.  
eSNE 52 21 G.  
ePcPNEZ 54 03 G.  
H: 10 45 21.1, h: 140 Km.  
Hindukush.
17. iPZ 11 07 48.7 S.H.,G.  
eSNEZ 08 05 S.H.,G.  
Dilatation.
17. ePZ 18 43 05 S.H.  
Minor trace of distant shock.
17. ePZ 21 59 31 S.H.  
Minor trace.
17. ePZ 23 45 43 S.H.  
Minor trace of distant shock.
18. ePZ 08 33 09 S.H.  
Minor trace of local shock.
18. ePZ 11 57 10 S.H.  
Minor trace of local shock.
18. ePZ 14 20 17 S.H.  
Minor trace.
18. ePZ 14 40 07 S.H.  
Minor trace of local shock.
18. ePZ 20 22 25 S.H.  
Minor trace of distant shock.
18. ePZ 21 03 29 S.H.  
Minor trace of local shock.
19. ePZ 03 59 34 S.H.  
Minor trace.
19. ePZ 07 35 04 S.H.  
eSNE 39 06 G.  
H: 07 30 19.2, h: 47 Km.  
Crete.

- |     |                             |            |         |     |                             |          |         |
|-----|-----------------------------|------------|---------|-----|-----------------------------|----------|---------|
| 19. | iPZ                         | 07 42 31.8 | S.H.,G. | 22. | ePZ                         | 03 07 57 | S.H.    |
|     | ePPZ                        | 44 02      | G.      |     | Minor trace of local shock. |          |         |
|     | eSNE                        | 48 19      | S.H.    | 22. | ePZ                         | 07 44 53 | S.H.    |
|     | eLg <sub>1</sub>            | 50 35      | S.H.    |     | Minor trace of deep shock.  |          |         |
|     | H: 07 35 23.7, h: 33 Km.    |            |         | 22. | ePZ                         | 11 46 59 | S.H.    |
|     | Dilatation.                 |            |         |     | Minor trace of deep shock.  |          |         |
|     | Tsinghai Province, China    |            |         | 22. | ePZ                         | 15 41 05 | S.H.    |
|     | Mag. 7(Pas), 63/4-7(Brk),   |            |         |     | eSNE                        | 43 25    | G.      |
|     | 6.1 (CGS).                  |            |         |     | e?NE                        | 44 47    | G.      |
|     |                             |            |         |     | e?NE                        | 45 15    | G.      |
| 19. | ePZ                         | 16 34 49   | S.H.    |     | H: 15 38 19.1, h: 33 Km.    |          |         |
|     | Minor trace.                |            |         |     | Black Sea.                  |          |         |
| 20. | ePZ                         | 00 37 25   | S.H.    |     | Mag. 5.3 (CGS).             |          |         |
|     | Minor trace.                |            |         | 23. | ePZ                         | 02 21 41 | S.H.    |
| 20. | ePZ                         | 01 20 10   | S.H.    |     | eSNE                        | 22 47    | S.H.,G. |
|     | Minor trace of dist. shock. |            |         | 23. | ePZ                         | 02 58 57 | S.H.    |
| 20. | ePZ                         | 10 13 04   | S.H.    |     | ePPPZ                       | 03 01 13 | G.      |
|     | eSNE                        | 18         | S.H.    |     | eSNE                        | 04 59    | G.      |
| 20. | iPZ                         | 13 55 07.0 | S.H.,G. |     | eLr <sub>1</sub> NE         | 08 05    | G.      |
|     | SNE                         | 26         | S.H.    |     | eLr <sub>2</sub> NE         | 13 43    | G.      |
|     | Compression.                |            |         |     | H: 02 51 17.2, h: 33 Km.    |          |         |
| 20. | ePZ                         | 17 43 46   | S.H.    |     | Outer Mongolia.             |          |         |
|     | Minor trace of local shock. |            |         |     | Mag. 5.1 (CGS).             |          |         |
| 20. | ePZ                         | 23 14 56   | S.H.    | 23. | ePZ                         | 06 40 54 | S.H.    |
|     | eSNE                        | 15 17      | S.H.,G. |     | Local.                      |          |         |
| 21. | ePZ                         | 00 44 43   | S.H.    | 23. | ePZ                         | 10 03 02 | S.H.,G. |
|     | Minor trace.                |            |         |     | ePPZ                        | 04 45    | G.      |
| 21. | ePZ                         | 02 11 05   | S.H.    |     | eSE                         | 09 25    | G.      |
|     | Minor trace.                |            |         |     | H: 09 55 06.8, h: 33 Km.    |          |         |
| 21. | ePZ                         | 04 48 37   | S.H.    |     | Yunnan Province, China.     |          |         |
|     | Minor trace.                |            |         |     | Mag. 5.1 (CGS).             |          |         |
| 21. | ePZ                         | 05 24 07   | S.H.    | 23. | ePZ                         | 23 03 24 | S.H.    |
|     | Minor trace of local shock. |            |         |     | e(S)NE                      | 06 23    | G.      |
| 21. | ePZ                         | 09 37 59   | S.H.    | 24. | ePZ                         | 16 34 29 | S.H.,G. |
|     | eSNE                        | 38 43      | S.H.    |     | eSNE                        | 54       | S.H.,G. |
| 21. | ePZ                         | 16 54 14   | S.H.    | 24. | ePZ                         | 19 02 03 | S.H.    |
|     | Minor trace.                |            |         |     | SNE                         | 21       | S.H.    |
| 21. | ePZ                         | 18 50 12   | S.H.    | 24. | ePZ                         | 20 34 47 | S.H.    |
|     | Minor trace.                |            |         |     | Minor trace.                |          |         |
| 21. | ePZ                         | 23 28 15   | S.H.    | 24. | ePZ                         | 22 00 35 | S.H.    |
|     | Minor trace of local shock. |            |         |     | Minor trace.                |          |         |

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|-----|-----------------------------|----------|------|-----|----------------------------|----------|------|
| 24. | ePZ                         | 23 24 21 | S.H. | 26. | ePZ                        | 03 29 53 | S.H. |
|     | e(S)NE                      | 27 06    | G.   |     | eSE                        | 30 07    | S.H. |
| 25. | ePZ                         | 04 15 46 | S.H. | 26. | ePZ                        | 09 56 55 | S.H. |
|     | eSNE                        | 16 01    | S.H. |     | Minor trace of deep shock. |          |      |
| 25. | ePZ                         | 04 39 31 | S.H. | 26. | ePZ                        | 10 09 13 | S.H. |
|     | Minor trace of local shock. |          |      |     | eSNEZ                      | 39       | S.H. |
| 25. | ePZ                         | 08 23 23 | S.H. | 26. | ePZ                        | 12 16 18 | S.H. |
|     | ePcPZ                       | 46       | S.H. |     | Minor trace.               |          |      |
|     | epPZ                        | 25 14    | G.   | 26. | ePZ                        | 17 04 15 | S.H. |
|     | eSNE                        | 31 28    | G.   |     | Minor trace of deep shock. |          |      |
|     | H: 08 12 57.2, h: 610 Km.   |          |      | 26. | ePZ                        | 23 55 18 | S.H. |
|     | Celebes Sea.                |          |      |     | H: 23 45 01.2, h: 33 Km.   |          |      |
|     | Mag. 5.5 (CGS).             |          |      |     | Off east coast of Formosa. |          |      |
| 25. | ePZ                         | 08 55 10 | S.H. |     | Mag. 4.9 (CGS).            |          |      |
|     | Minor trace of local shock. |          |      | 27. | ePZ                        | 00 55 01 | S.H. |
| 25. | ePZ                         | 11 30 33 | S.H. |     | Minor trace.               |          |      |
|     | epPPPNEZ                    | 35 50    | G.   | 27. | ePZ                        | 02 44 21 | S.H. |
|     | H: 11 19 18.4, h: 53 Km.    |          |      |     | eSNEZ                      | 43       | S.H. |
|     | South of Honshu, Japan.     |          |      | 27. | ePZ                        | 03 34 40 | S.H. |
|     | Mag. 4.1 (CGS).             |          |      |     | Local.                     |          |      |
| 25. | ePZ                         | 12 17 12 | S.H. | 27. | ePZ                        | 03 47 55 | S.H. |
|     | eSNE                        | 20 28    | G.   |     | eSNEZ                      | 48 14    | S.H. |
|     | ePcPNEZ                     | 22 40    | G.   | 27. | ePZ                        | 08 55 06 | S.H. |
|     | H: 12 14 01.1, h: 210 Km.   |          |      |     | ePPZ                       | 58 21    | S.H. |
|     | Hindukush region.           |          |      |     | H: 08 42 58, h: 33 Km.     |          |      |
| 25. | ePZ                         | 15 07 09 | S.H. |     | Halmahera region.          |          |      |
|     | Minor trace.                |          |      |     | Mag. 4.9 (CGS).            |          |      |
| 25. | ePZ                         | 16 48 12 | S.H. | 27. | ePZ                        | 10 00 56 | S.H. |
|     | ePPZ                        | 51 16    | G.   |     | eSNE                       | 01 49    | S.H. |
|     | eSNE                        | 58 16    | G.   | 27. | ePZ                        | 10 17 19 | S.H. |
|     | H: 16 35 56.2, h: 33 Km.    |          |      |     | eSNE                       | 18 13    | S.H. |
|     | Halmahera region.           |          |      | 27. | ePZ                        | 16 14 47 | S.H. |
|     | Mag. 5.3 (CGS).             |          |      |     | Local.                     |          |      |
| 25. | ePZ                         | 18 19 57 | S.H. | 28. | ePZ                        | 00 46 12 | S.H. |
|     | eSNE                        | 20 23    | S.H. |     | H: 00 42 11, h: 160 Km.    |          |      |
| 25. | ePZ                         | 23 24 43 | S.H. |     | Northwestern Turkey.       |          |      |
|     | eSNE                        | 25 02    | S.H. | 28. | ePZ                        | 01 46 56 | S.H. |
| 26. | ePZ                         | 00 23 50 | S.H. |     | Local.                     |          |      |
|     | eSNE                        | 24 13    | S.H. |     |                            |          |      |
| 26. | ePZ                         | 03 05 13 | S.H. |     |                            |          |      |
|     | eSNEZ                       | 28       | S.H. |     |                            |          |      |

28. ePZ 02 08 52 S.H.  
Minor trace.

28. ePZ 03 23 36 S.H.,G.  
eSNE 24 00 S.H.,G.

28. ePZ 04 15 40 S.H.  
Minor trace of distant shock.

28. ePZ 10 12 15 S.H.  
Minor trace of deep shock.

28. ePZ 11 16 42 S.H.  
eSNE 17 02 S.H.

28. ePE 17 07 05 S.H.  
eSNE 19 S.H.

29. ePZ 06 21 41 S.H.  
(S)Z 22 25.5 S.H.  
Probably different shocks.

29. eP'Z 15 10 58 S.H.  
H: 14 51 52.4, h: 33 Km.  
Balleny Is. region.  
Mag. 5.9 (CGS).

29. PZ 16 21 50 S.H.  
eSE 22 10 S.H.

29. PZ 21 56 32.2 S.H.,G.  
epPZ 50 S.H.,G.  
eSNE 22 06 47 G.  
H: 21 44 17.1, h: 60 Km.  
Andreanof Is. Aleutian Is.  
Mag. 6 (Pas), 5-5 $\frac{1}{4}$  (Brk),  
6 (Pal), 5.6 (CGS).

30. ePZ 01 10 30 S.H.,G.  
ePPZ 13 53 G.  
eSNE 20 13 G.  
eSSN 25 13 G.  
H: 00 58 18.3, h: 33 Km.  
Halmahera region.  
Mag. 6 $\frac{3}{4}$  (Pas), 6 $\frac{1}{2}$  (Pal),  
5.6 (CGS).

30. PZ 07 19 30.7 S.H.  
H: 07 07 55.9, h: 64 Km.  
Rat Is. Aleutian Is.  
Mag. 5.1 (CGS).

30. ePZ 07 33 31 S.H.  
eSE 34 49 S.H.

30. ePZ 10 29 15 S.H.  
Minor trace of deep shock.



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Lat. 35°44'16" N. a = + 0.50773  
Long. 51°23'08" E. b = + 0.63570  
Height ... 1360 M. c = + 0.58146

MAY 1963

1.	ePZ	07 09 24	S.H.	2.	ePZ	17 13 18	S.H.
	eSNE	47	S.H.		Minor trace.		
1.	ePZ	08 18 38	S.H.	2.	ePZ	19 29 01	S.H.
	Local shock.				Local shock.		
1.	PZ	09 57 10.2	S.H.	2.	ePZ	19 35 26	S.H.
	SE	17.0	S.H.		Minor trace.		
1.	eP'Z	10 22 01	S.H.	2.	ePZ	20 28 13	S.H.
	pPZ	40.0	S.H.,G.		Minor trace.		
	epPPZ	24 12	G.	2.	PZ	21 49 52.5	S.H.
	SKS	28 52	G.		Local shock.		
	H: 10 03 20.0, h: 140 Km. New Hebrides Islands. Mag. 7(Pas), 63/4-7(Brk), 6.2(CGS).			3.	ePZ	10 45 45	S.H.
					Iran.		
1.	ePZ	20 12 10	S.H.	<del>3.</del>	ePZ	10 56 13	S.H.
	eSE	27	S.H.		Minor trace.		
2.	iPZ	01 46 49.1	S.H.	3.	ePZ	20 10 07	S.H.
	iSE	47 06.2	S.H.		eSE	19	S.H.
	Compression.			4.	ePZ	04 03 04	S.H.
2.	ePZ	02 00 20	S.H.		Minor trace.		
	Naer shock.			4.	ePZ	19 35 18	S.H.
2.	ePZ	05 00 35	S.H.		Minor trace.		
	iSE	51.4	S.H.	5.	ePZ	01 54 51	S.H.
2.	ePZ	07 37 31	S.H.		Minor trace.		
	Minor trace.			5.	ePE	15 56 51	S.H.
2.	ePZ	07 43 47	S.H.		Minor trace.		
	Minor trace.			5.	ePE	19 07 47	S.H.
2.	ePZ	09 22 34	S.H.		eSE	08 08	S.H.
	Local shock.			6.	ePZ	08 49 52	S.H.
2.	ePZ	15 09 49	S.H.		SNEZ	59 15	S.H.,G.
	Local shock.				H: 08 38 33.3, h: 84 Km. Near south coast of Java. Mag. 5.7 (CGS).		

7. ePZ 19 28 32 S.H.  
eSE 49 S.H.
7. ePZ 22 25 06 S.H.  
Local shock.
8. ePZ 01 10 28 S.H.  
eSNE 11 58 S.H.,G.
8. ePZ 09 03 24 S.H.  
H: 08 50 56.0, h: 89 Km.  
Unimak Islands, Aleutian Is.  
region.  
Mag. 5.6 (CGS).
8. ePZ 09 25 45 S.H.  
eSN 27 17 S.H.,G.
8. PZ 10 33 17.3 S.H.,G.  
eSNEZ 42 28 G.  
H: 10 22 11, h: 53 Km.  
Honshu Japan.  
Mag. 6.1 (CGS).
8. ePZ 15 35 30 S.H.  
H: 15 24 00.3, h: 70 Km.  
Off coast of Mindanao,  
Philippines Islands.  
Mag. 5.6 (CGS).
8. ePZ 19 33 13 S.H.  
Minor trace.
8. ePZ 22 38 31 S.H.  
Minor trace.
9. ePZ 16 48 12 S.H.  
Minor trace.
10. ePZ 00 07 30 S.H.  
Minor trace.
10. ePZ 00 29 25 S.H.  
Minor trace.
10. ePZ 08 57 39 S.H.  
eSE 52 S.H.
10. ePZ 10 59 01 S.H.  
H: 10 57 34.7, h: 150 Km.  
Azerbaijan S. S. R.
10. ePZ 21 36 39 S.H.  
eSNE 37 21 S.H.
10. eP'Z 22 41 37 S.H.  
H: 22 22 42.2, h: 33 Km.  
Ecuador.  
Mag. 6.3/4(Pas), 6(Brk),  
6(Pal), 5.7(CGS).
12. iPZ 06 22 02.0 S.H.  
SE 10.9 S.H.  
Compression.
12. P'Z 10 02 01 S.H.  
H: 09 42 58.3, h: 44 Km.  
Macquarie Islands region.  
Mag. 6.2 (CGS).
12. ePZ 10 50 08 S.H.  
Local shock.
12. iPZ 20 21 11.9 S.H.,G.  
iPPZ 23.0 G.  
PPZ 24 29.5 G.  
eSNE 31 34 S.H.,G.  
H: 20 08 43.0, h: 80 Km.  
Kodiak Island, Alaska.  
Mag. 5.9 (CGS).
12. ePZ 20 48 36 S.H.  
H: 20 37 12.9, h: 33 Km.  
Near east coast of  
Kamchatka.  
Mag. 5.1 (CGS).
13. iPZ 02 02 13.0 S.H.  
SE 29.8 S.H.
14. ePZ 10 17 13 S.H.  
eSE 24 S.H.
14. PZ 12 11 15.7 S.H.  
SE 17.5 S.H.
14. ePZ 14 31 39 S.H.  
Local shock.
14. ePZ 14 35 23 S.H.  
Local shock.
14. ePZ 18 45 19 S.H.  
Local shock.
14. ePZ 19 04 33 S.H.  
Local shock.

15. ePZ 06 39 54 S.H.  
H: 06 35 24.8, h: 33 Km.  
Hindu Kush region.  
Mag. 4.4 (CGS).
15. ePZ 11 02 23 S.H.  
Local shock.
15. ePZ 12 18 18 S.H.  
Minor trace.
15. ePZ 14 09 16 S.H.  
Minor trace,
16. ePZ 12 10 18 S.H.  
eSNEZ 42 S.H.,G.
17. PZ 04 17 58 S.H.,G.  
H: 04 06 36.2, h: 33 Km.  
Kurile Islands region.  
Mag. 5.9 (CGS).
17. PZ 06 19 45 S.H.,G.  
eSN 28 14 G.  
eScSN 29 32 G.  
H: 06 09 18.2, h: 80 Km.  
Near west coast of Luzon,  
Philippine Islands.  
Mag. 5.5 (CGS).
17. PZ 07 07 04 S.H.  
iSE 28.0 S.H.
17. ePZ 07 34 31 S.H.  
Minor trace.
17. PZ 10 48 22.5 S.H.  
SNE 27.5 S.H.
17. ePZ 12 20 01 S.H.  
H: 12 09 05.6, h: 47 Km.  
South of Hokkaido.  
Mag. 4.8 (CGS).
17. ePZ 13 44 39 S.H.  
iSE 45 02.2 S.H.
17. ePZ 17 53 43 S.H.  
Minor trace.
17. ePZ 21 07 20 S.H.  
eSEZ 40 S.H.
18. eP'Z 05 52 42 S.H.  
ePPZ 54 51 S.H.  
?Z 55 56 S.H.  
H: 05 33 25.0, h: 29 Km.  
Larioja Province.  
Argentina.
18. ePZ 12 32 07 S.H.  
H: 12 20 31.9, h: 39 Km.  
Bali.  
Mag. 5.9 (CGS).
18. ePZ 13 15 12 S.H.  
H: 13 03 35.8, h: 68 Km.  
Bali.
18. ePZ 20 32 46 S.H.  
Minor trace.
18. iPZ 23 45 56.6 S.H.  
iSNEZ 46 15.6 S.H.  
Compression.
19. eP'Z 01 22 20 S.H.  
ePPZ 25 16 S.H.,G.  
e?NZ 26 12 G.  
eSKSPNZ 34 22 G.  
eSKSPZ 35 22 G.  
ePPSNZ 37 42 G.  
e?Z 38 40 G.  
eSSN 43 36 G.  
H: 01 03 04.1, h: 33 Km.  
Coast of southern Chile.  
Mag. 6.3/4(Pas), 6.5(CGS).
19. ePZ 04 42 30 S.H.  
eSE 43 25 S.H.
19. ePZ 11 16 48 S.H.  
eSNE 17 08 S.H.
19. ePZ 19 33 08 S.H.  
H: 19 21 22, h: 166 Km.  
Halmahera region.  
Mag. 4.3 (CGS).
19. ePZ 19 49 44 S.H.  
Minor trace.
19. ePZ 19 57 41 S.H.  
Minor trace.

19. PZ 21 48 10.4 S.H.  
 eSN 58 33 G.  
 Compression.  
 H: 21 35 49.6, h: 33 Km.  
 North Atlantic Ocean.  
 Mag.  $6\frac{1}{2}$ (Pas),  $6\frac{1}{4}$ - $6\frac{1}{2}$ (Brk),  
 6.0(CGS).

20. ePZ 10 21 17 S.H.  
 eSN 23 32 G.

20. eP'Z 11 57 18 S.H.  
 ePPZ 12 00 24 G.  
 e?Z 00 56 G.  
 ?N 09 46 G.  
 H: 11 38 00.9, h: 34 Km.  
 Kermadec Island region.  
 Mag.  $6\frac{3}{4}$ -7(Pas),  $6\frac{1}{2}$ (Brk),  
 6.2(CGS),

20. ePZ 23 28 47 S.H.  
 eSE 29 08 S.H.

20. ePZ 23 57 46 S.H.  
 eSE 58 04 S.H.

21. iPZ 03 47 57.0 S.H.  
 SE 48 10.5 S.H.  
 Compression.

21. ePZ 03 58 41 S.H.  
 eSE 59 19 S.H.

21. ePZ 04 58 23 S.H.  
 SE 39.5 S.H.

22. ePZ 00 14 26 S.H.  
 eSE 33 S.H.

22. ePZ 13 49 13 S.H.  
 eSE 50 21 S.H.

22. ePZ 14 08 06 S.H., G.  
 epPZ 10 59 G.  
 SN 17 28.0 G.  
 i(ScS)N 18 10.0 G.  
 H: 13 56 43.0, h: 22 Km.  
 Kurile Islands region.  
 Mag.  $6\frac{1}{2}$ (Pas), 6(Brk),  
 6.3 (CGS).

22. PZ 15 54 35.0 S.H.  
 ?Z 54 G.  
 iSN 16 04 17.0 G.  
 i(ScS)N 42.0 G.  
 Compression.

H: 15 42 48.3, h: 58 Km.  
 Molucca Passage.  
 Mag. 5.0 (CGS).

22. ePZ 16 38 20 S.H.  
 H; 16 25 36.8, h: 33 Km.  
 Fox Is. Aleutian Is.  
 Mag. 4.2 (CGS).

22. ePZ 17 32 24 S.H.  
 Minor trace.

22. PZ 19 42 57.9 S.H.  
 SNEZ 43 16.1 S.H.

22. ePZ 22 04 36 S.H.  
 iSN 14 11 G.  
 eSSN 19 20 G.  
 eLN 22 52 G.  
 H: 21 53 02.5, h: 33 Km.  
 Java Sea.  
 Mag. 5.6 (CGS).

22. ePZ 22 39 53 S.H.  
 Minor trace.

23. ePZ 01 03 32 S.H.  
 H: 00 51 40.3, h: 33 Km.  
 Molucca Passage.  
 Mag. 4.8 (CGS).

23. ePZ 10 10 59 S.H.  
 H: 10 15 08.9, h: 226 Km.  
 Naer south coast of Turkey.

23. ePZ 15 23 34 S.H.  
 H: 15 12 05.7, h: 88 Km.  
 Near east coast of Mindanao,  
 Philippine Islands,  
 Mag. 5.5 (CGS).

23. ePZ 16 39 03 S.H.  
 H: 16 27 42.5, h: 52 Km.  
 Kurile Islands region.  
 Mag. 5.6 (CGS).

23. ePZ 18 11 57 S.H.  
 eSNEZ 12 16 S.H.

23.	ePZ	20 59 40	S.H.	27.	ePZ	13 50 16	S.H.
	eSE	32	S.H.		Minor trace.		
23.	ePZ	21 21 53	S.H.	27.	PZ	15 46 53.7	S.H.
	Minor trace of local shock.				eSE	47 10	S.H.
24.	ePZ	08 14 51	S.H.	28.	PZ	09 28 13.0	S.H.
	Minor trace.				SNEZ	35.9	S.H.
24.	ePZ	16 01 31	S.H.	28.	iPZ	10 33 09.6	S.H.,G.
	eSE	02 15	S.H.		SNE	26.5	S.H.
24.	ePZ	22 23 22	S.H.		Compression.		
	eSE	46	S.H.	28.	ePZ	18 04 09	S.H.
25.	ePZ	07 32 26	S.H.		eSNE	19	S.H.
	eSE	50	S.H.	28.	PZ	21 15 21.2	S.H.
26.	ePZ	02 19 30	G.	✓	H: 21 04 10, h: 120 Km.		
	Minor trace of local shock.				Kurile Islands region.		
26.	PZ	11 14 20.0	S.H.	✓	Mag. 4.9 (CGS).		
	SE	43.5	S.H.	29.	PZ	00 49 38.3	S.H.
26.	ePZ	18 46 36	S.H.	✓	H: 00 47 50.8, h: 45 Km.		
	eSE	59	S.H.		Western Iran.		
26.	ePZ	21 05 32	S.H.		Mag. 4.8 (CGS).		
	eSE	06 44	S.H.	29.	ePZ	08 37 42	S.H.
	H: 21 03 49.2, h: 33 Km.			✓	H: 08 35 02.9, h: 33 Km.		
	Caspian Sea.				Southern Iran.		
	Mag. 5.3 (CGS).				Mag. 5.4 (CGS).		
26.	ePZ	23 18 09	S.H.,G.	29.	ePZ	10 36 23	S.H.
	eSZ	27 31	G.		Minor trace.		
	eLZ	46.2	G.	29.	ePZ	21 19 10	S.H.
	H: 23 06 55.0, h: 47 Km.				eSNE	28	S.H.
	Near east coast of Kamchatka.			30.	PZ	00 09 36.9	S.H.
	Mag. $5\frac{1}{4}$ - $5\frac{1}{2}$ (Pal), 5.3 (CGS).				SE	57.0	S.H.
27.	ePZ	04 10 00	S.H.,G.	30.	ePZ	01 33 19	S.H.
	epPZ	12 42	G.		SE	32	S.H.
	epPPZ	14 23	G.	30.	PZ	03 56 16	S.H.
	eSZ	19 26	G.		H: 03 44 50.7, h: 50 Km.		
	eP'P'Z	37 52	S.H.		Kurile Islands region.		
	H: 03 58 47.9, h: 54 Km.				Mag. 4.8 (CGS).		
	Near east coast of Kamchatka.			30.	ePZ	20 42 36	S.H.
	Mag. $5\frac{1}{4}$ (Pal), 5.7 (CGS).				eSE	54	S.H.
27.	iPZ	06 43 56.1	S.H.	31.	ePZ	19 14 38	S.H.
	iSNEZ	44 09.9	S.H.		Compression.		
	Compression.			31.	ePZ	19 38 02	S.H.
27.	ePZ	07 47 42	S.H.		eSE	25	S.H.
	eSE	57	S.H.				

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Lat. 35°44'16" N.      a = + 0.50773  
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Height ... 1360 M.      c = + 0.58146

JUNE 1963

- |   |   |
|---|---|
| <p>1. ePZ 10 11 29 S.H.<br/>Local shock.</p> <p>1. ePZ 10 53 40 S.H.<br/>eSNE 56 45 S.H.<br/>H: 10 49 54.8, h: 70 Km.<br/>Hindu Kush.<br/>Mag. 5.3 (CGS).</p> <p>1. ePZ 18 31 53 S.H.<br/>H: 18 24 07.0, h: 33 Km.<br/>Chita region U.S.S.R.</p> <p>1. PZ 20 41 45.4 S.H.<br/>H: 20 36 09.5, h: 285 Km.<br/>Mediterranean Sea.<br/>Mag. 4.4 (CGS).</p> <p>1. eP'Z 21 33 11 S.H.<br/>e(PKS)NEZ 36 45 G.<br/>H: 21 13 52.7, h: 33 Km.<br/>Samoa Islands region.<br/>Mag. 5.5 (CGS).</p> <p>2. ePPZ 10 18 19 S.H.<br/>H: 10 00 00.1, h: 49 Km.<br/>Solomon Islands region.<br/>Mag. 5½-5¾(Pal), 5.8(CGS).</p> <p>2. e(P')Z 21 22 34 S.H.,G.<br/>ePPZ 21 23 23 S.H.,G.<br/>eSKSN 29 28 G.<br/>H: 21 04 24.2, h: 50 Km.<br/>Sandwich Islands region.<br/>Mag. 6-6¼(Pal), 5.9(CGS).</p> <p>3. ePZ 07 46 59 S.H.<br/>eSN 56 06 G.<br/>LN 08 17.8 G.<br/>H: 07 35 54.3, h: 43 Km.<br/>Mag. 5.3 (CGS).</p> | <p>3. ePZ 12 38 20 S.H.<br/>H: 12 34 42.1, h: 33 Km.<br/>Tadzhik S.S.R.<br/>Mag. 4.7 (CGS).</p> <p>3. ePZ 14 37 02 S.H.<br/>eSNEZ 25 S.H.</p> <p>4. ePZ 06 16 59 S.H.<br/>eSZ 17 25 S.H.</p> <p>4. ePZ 08 52 29 S.H.<br/>eSEZ 46 S.H.</p> <p>4. ePZ 19 34 11 S.H.<br/>H: 19 21 56.6, h: 110 Km.<br/>Mariana Islands<br/>Mag. 5.5 (CGS).</p> <p>4. ePZ 20 33 55 S.H.<br/>eSE 34 15 S.H.</p> <p>4. PZ 21 16 47.7 S.H.,G.<br/>SNE 26 44 G.<br/>H: 21 04 42.3, h: 31 Km.<br/>Halmahera region.<br/>Mag. 5.2 (CGS).</p> <p>4. ePZ 21 52 30 S.H.<br/>eSE 45 S.H.</p> <p>4. ePZ 22 16 53 S.H.<br/>H: 22 11 31.8, h: 33 Km.<br/>Greece.<br/>Mag. 4.7 (CGS).</p> <p>5. ePZ 00 07 01 S.H.<br/>Minor trace.</p> <p>5. ePZ 12 47 22 S.H.<br/>Minor trace.</p> |
|---|---|

- |    |                            |            |         |     |  |            |         |
|----|----------------------------|------------|---------|-----|--|------------|---------|
| 2. | ePZ                        | 11 19 51   | S.H.    | 9.  | ePE  | 04 07 47   | S.H.    |
|    | eSN                        | 20 20      | S.H.    |     | eSE  | 08 10      | S.H.    |
| 5. | ePZ                        | 21 22 58   | S.H.    | 9.  | ePZ  | 07 47 05   | S.H.    |
|    | eSE                        | 23 41      | S.H.    |     | eSE  | 48 26      | S.H.    |
| 5. | ePZ                        | 22 02 29   | S.H.    | 9.  | ePZ  | 20 50 34   | S.H.    |
|    | Minor trace.               |            |         |     | Minor trace.   |            |         |
| 5. | ePZ                        | 23 06 01   | S.H.    | 10. | ePZ  | 04 35 29   | S.H.    |
|    | eSE                        | 15 35      | S.H.    |     | ePPZ   | 36 59      | S.H.,G. |
| H: | 22 54 28.7, h: 75 Km.      |            |         |     | e?NE   | 43 59      | G.      |
|    | Celebes.                   |            |         | H:  | 04 16 37.7, h: 33 Km.  |            |         |
| 6. | iPZ                        | 05 29 14.0 | S.H.,G. |     | 800 Km. West of Macquarie Islands.   |            |         |
|    | PPZ                        | 31 47      | G.      |     | Mag. $6\frac{1}{4}$ (Pas), $5\frac{3}{4}$ -6(Pal),                                 |            |         |
|    | SNE                        | 37 42      | G.      |     | 6.1 (CGS).   |            |         |
|    | Lg <sub>2</sub> E          | 55.8       | G.      | 10. | eP'Z   | 06 57 55   | S.H.,G. |
|    | eP'P'Z                     | 58 24      | G.      |     | PPZ  | 59 19.2    | G.      |
|    | Dilatation.                |            |         |     | (PP)NEZ  | 27.2       | G.      |
| H: | 05 18 55.1, h: 33 Km.      |            |         |     | SKSE   | 07 04 59.4 | G.      |
|    | Off north coast of Luzon,  |            |         |     | (SKS)N   | 05 03.0    | G.      |
|    | Philippine Islands.        |            |         |     | ?NE  | 06 29      | G.      |
|    | Mag. 5.8 (CGS).            |            |         |     | PSNEZ  | 09 17      | G.      |
| 6. | PZ                         | 12 16 09.0 | S.H.,G. |     | ?NE  | 16 01      | G.      |
|    | eSE                        | 26 03      | G.      | H:  | 06 39 04.0, h: 18 Km.  |            |         |
| H: | 12 04 14.3, h: 33 Km.      |            |         |     | 800 Km. West of Macquarie Islands.   |            |         |
|    | Northeast of Kerguelen,Is. |            |         |     | Mag. $6\frac{1}{4}$ - $6\frac{1}{2}$ (Pas), $6\frac{1}{4}$ - $6\frac{1}{2}$ (Pal), |            |         |
|    | Mag. 5.3 (CGS).            |            |         |     | 6.0(CGS).  |            |         |
| 6. | ePZ                        | 17 47 34   | S.H.    | 10. | ePZ  | 10 58 28   | S.H.,G. |
|    | Local shock.               |            |         |     | ?E   | 11 05 43   | G.      |
| 6. | ePZ                        | 21 32 49   | S.H.    |     | SN   | 08 01      | G.      |
|    | Minor trace.               |            |         | H:  | 10 46 58.1, h: 33 Km.  |            |         |
| 6. | ePZ                        | 23 33 21   | S.H.    |     | Off coast of Kamchatka.  |            |         |
|    | eSE                        | 42         | S.H.    |     | Mag. 5.3 (CGS).  |            |         |
| 7. | ePZ                        | 16 00 26   | S.H.    | 10. | ePZ  | 19 33 27   | S.H.    |
|    | eSE                        | 09 05      | G.      |     | SNE  | 47.4       | S.H.    |
|    | Lg <sub>2</sub> E          | 26.1       | G.      | 11. | ePZ  | 03 29 13   | S.H.    |
| H: | 15 49 57.4, h: 33 Km.      |            |         |     | eSNE   | 32 16      | G.      |
|    | Off north coast of Luzon   |            |         | H:  | 03 25 40.7, h: 38 Km.  |            |         |
|    | Philippine Islands.        |            |         |     | Hindu Kush.  |            |         |
|    | Mag. 4.7 (CGS).            |            |         |     | Mag. 4.3 (CGS).  |            |         |
| 7. | eP'Z                       | 22 56 46   | G.      | 11. | ePZ  | 10 52 44   | S.H.    |
|    | e(PKS)E                    | 23 00 23   | G.      |     | Minor trace.   |            |         |
| H: | 22 37 30.0, h: 33 Km.      |            |         | 11. | ePZ  | 13 20 39   | S.H.    |
|    | Samoa Islands region.      |            |         |     | Minor trace.   |            |         |
|    | Mag. 5.0 SD 0.2 (CGS).     |            |         |     |  |            |         |



11. ePZ 15 58 24 S.H.  
Minor trace.

11. ePZ 18 13 43 S.H.  
eSE 19 04 G.  
H: 18 07 24.1, h: 33 Km.  
Tibet.  
Mag. 4.5 (CGS).

11. ePZ 18 37 44 S.H.  
e(PcP)NEZ42 17 G.  
H: 18 34 24.4, h: 200 Km.  
Hindu Kush.  
Mag. 4.1 (CGS).

12. ePZ 15 35 02 S.H.  
Minor trace.

13. ePZ 08 43 37 S.H.  
Minor trace.

13. PZ 10 47 11.0 S.H.  
H: 10 34 52.4, h: 150 Km.  
Banda Sea.  
Mag. 4.9 (CGS).

14. ePZ 00 45 42 S.H.  
Minor trace.

14. ePZ 13 02 47 S.H.  
Minor trace.

14. ePZ 23 00 22 S.H.  
Minor trace.

15. iPZ 09 43 22.5 S.H.  
SNE 43.5 S.H.  
Compression.

15. PZ 14 21 54.0 S.H.  
SNEZ 22 10.0 S.H.

15. ePZ 15 50 38 S.H.  
Minor trace.

16. ePZ 09 41 10 S.H.  
eSNE 31 S.H.

17. PZ 05 54 07.8 S.H.  
SNE 24 S.H.

17. ePZ 11 13 16 S.H.  
Minor trace.

17. iPZ 17 40 45.6 S.H.  
SN 59.1 S.H.  
Dilatation.

17. ePZ 18 44 43 S.H.,G.  
epPZ 47 57 S.H.,G.  
eSN 54 08 G.  
H: 18 32 14.5, h: 33 Km.  
South-Weatern Yukon.  
Mag.  $5\frac{1}{4}$ - $5\frac{1}{2}$ (Pal),  
5.1 SD 0.4 (CGS).

17. ePZ 23 12 21 S.H.  
iSNEZ 20 39.4 S.H.,G.  
e(ScS)E 22 05 G.  
e(P'P')Z 41 35 G.  
H: 23 02 06.6, h: 73 Km.  
Near south coast of sumatra.  
Mag. 6.1 (CGS).

18. ePZ 04 13 11 S.H.  
H: 04 02 31.0, h: 33 Km.  
Ryukyu Islands.  
Mag. 5.5 (CGS).

18. ePZ 12 03 44 S.H.  
Local.

19. ePZ 04 14 57 S.H.  
Minor trace.

19. ePZ 04 17 10 S.H.  
Local.

19. PZ 09 20 40.0 S.H.,G.  
epPZ 21 06 S.H.  
eSPZ 18 G.  
ePPZ 23 29 S.H.  
eSN 30 16 G.  
?E 21.2 G.  
(ScS)E 55 G.  
Compression.  
H: 09 09 04.0, h: 83 Km.  
Talaud Islands region.  
Mag.  $5\frac{1}{4}$ - $5\frac{1}{2}$ (Pal),6.2(CGS).

19. PZ 10 54 28.0 S.H.,G.  
eSNE 11 00 08 G.  
Compression.  
H: 10 47 24.7, h: 51 Km.  
Assam India.  
Mag. 5.7 (CGS).



- |     |  |            |         |  |  |
|-----|--|------------|---------|--|--|
| 19. | PZ   | 23 15 15   | G.      |  |  |
|     | ePPZ   | 15 53      | G.      |  |  |
|     | PPPZ   | 17 43      | G.      |  |  |
|     | SNE  | 22 36      | G.      |  |  |
|     | eP'P'Z   | 41 01      | G.      |  |  |
|     | H: 23 01 51.5, h: 38 Km.<br>South of Honshu, Japan.<br>Mag. $5\frac{1}{2}$ (Bsk), $5\frac{1}{4}$ (Pal),<br>5.0 SD 0.4 (CGS). |            |         |  |  |
| 20. | ePZ  | 11 59 49   | S.H.    |  |  |
|     | Local.   |            |         |  |  |
| 20. | eP'Z   | 23 05 41   | S.H.,G. |  |  |
|     | (PKS)E   | 09 19      | G.      |  |  |
|     | H: 22 46 18.1, h: 41 Km.<br>Kermadec Islands,<br>Mag. 5.2 SD 0.1 (CGS).  |            |         |  |  |
| 21. | ePZ  | 13 54 17   | S.H.    |  |  |
|     | LNE  | 14 16 45   | G.      |  |  |
|     | H: 13 44 24.6, h: 33 Km.<br>Eastern Manchuria.<br>Mag. 4.9 SD 0.2 (CGS).   |            |         |  |  |
| 21. | PZ   | 15 33 33.2 | S.H.,G. |  |  |
|     | Compression.<br>H: 15 26 31.0, h: 56 Km.<br>Eastern India.<br>Mag. 5.6 (CGS).  |            |         |  |  |
| 21. | ePZ  | 21 58 58   | S.H.    |  |  |
|     | Local.   |            |         |  |  |
| 22. | PZ   | 07 02 44.2 | S.H.    |  |  |
|     | eSE  | 03 01      | S.H.    |  |  |
| 22. | ePZ  | 07 50 17   | S.H.    |  |  |
|     | Local.   |            |         |  |  |
| 22. | ePZ  | 08 16 17   | S.H.    |  |  |
|     | Local.   |            |         |  |  |
| 22. | PZ   | 09 15 25.4 | S.H.    |  |  |
|     | SNE  | 51         | S.H.    |  |  |
| 22. | ePZ  | 11 21 16   | S.H.    |  |  |
|     | Local.   |            |         |  |  |
| 22. | ePZ  | 18 27 50   | S.H.    |  |  |
|     | Local.   |            |         |  |  |
| 22. | ePZ  | 18 38 22   | S.H.    |  |  |
|     | Local.   |            |         |  |  |
| 22. | ePZ  | 21 00 48   | S.H.    |  |  |
|     | Minor trace.   |            |         |  |  |
| 23. | ePZ  | 05 31 18   | S.H.    |  |  |
|     | eSEZ   | 59         | S.H.    |  |  |
| 24. | ePZ  | 00 49 22   | S.H.    |  |  |
|     | eSE  | 40         | S.H.    |  |  |
| 24. | iPZ  | 03 44 01.4 | S.H.    |  |  |
|     | eSNE   | 27         | S.H.    |  |  |
|     | Compression.   |            |         |  |  |
| 24. | PZ   | 04 01 00.0 | S.H.    |  |  |
|     | SE   | 25.0       | S.H.    |  |  |
| 24. | PZ   | 04 39 01.0 | G.      |  |  |
|     | ?Z   | 10.6       | G.      |  |  |
|     | PPZ  | 42 01.6    | G.      |  |  |
|     | SNE  | 49 21      | G.      |  |  |
|     | LNE  | 05 00.5    | G.      |  |  |
|     | H: 04 26 37.9, h: 52 Km.<br>Cook Inlet.<br>Mag. $6\frac{3}{4}$ (Pas), 5.7(CGS).  |            |         |  |  |
| 24. | iPZ  | 07 39 06.3 | S.H.    |  |  |
|     | SN   | 32.8       | S.H.    |  |  |
|     | Compression.   |            |         |  |  |
| 24. | ePZ  | 14 04 40   | S.H.    |  |  |
|     | Minor trace.   |            |         |  |  |
| 24. | PZ   | 16 29 49.2 | S.H.    |  |  |
|     | eSNE   | 40 12      | G.      |  |  |
|     | H: 16 17 15.4, h: 33 Km.<br>Fox Islands region,<br>Aleutian Islands.<br>Mag. 5.4 SD 0.3 (CGS).                               |            |         |  |  |
| 25. | ePZ  | 00 08 54   | S.H.    |  |  |
|     | eSE  | 09 14      | S.H.    |  |  |
| 25. | ePZ  | 14 43 08   | S.H.    |  |  |
|     | ePPZ   | 45 38      | S.H.    |  |  |
|     | e(S)E  | 51 32      | G.      |  |  |
|     | e(S)N  | 52 07      | G.      |  |  |
|     | H: 14 32 14.3, h: 78 Km.<br>Near south coast of Java.<br>Mag. 5.4 (CGS).   |            |         |  |  |
| 26. | ePZ  | 09 53 14   | S.H.    |  |  |
|     | H: 09 41 31.2, h: 33 Km.<br>Off coast of Mindanao, P.I.<br>Mag. 4.9 (CGS).   |            |         |  |  |

26. ePZ 14 13 53 S.H.  
 eSNE 17 40 G.  
 H: 14 09 13.0, h: 33 Km.  
 Sinkiang province, China.  
 Mag. 5.3 (CGS).

26. ePZ 16 03 04 S.H.  
 eSNE 27 S.H.

26. PZ 18 09 53.9 S.H.  
 eSE 10 18 S.H.  
 Compression.

26. ePZ 18 27 30 S.H.  
 eSE 54 S.H.

27. PZ 07 20 30.0 S.H.  
 PPZ 23 41 S.H.  
 H: 07 08 01.7, h: 29 Km.  
 Yukon Territory.  
 Mag. 4.6 SD 0.3 (CGS).

27. ePZ 10 07 15 S.H.  
 Minor trace.

27. PZ 10 44 22.7 S.H.  
 ?E 48 29 G.  
 ?E 51 53 G.

27. PZ 11 37 48.0 S.H.  
 ?E 41 26 G.

27. ePZ 15 40 56 S.H.  
 SN 47 25.0 G.  
 H: 15 32 53.1, h: 33 Km.  
 Andaman Islands region.  
 Mag. 5.2 (CGS).

28. ePZ 02 00 02 S.H.  
 Minor trace.

28. PZ 02 39 26 K S.H.,G.  
 ePPZ 41 50 G.  
 ePPPZ 43 11 G.  
 eSNE 48 06 G.  
 Dilatation.  
 H: 02 28 51.6, h: 33 Km.  
 Indian Ocean.  
 Mag. 6.0 (CGS).

28. ePZ 10 51 41 S.H.  
 Minor trace.

28. iPZ 22 07 01.0 S.H.,G.  
 e(S)E 17 07 S.H.  
 Compression.  
 H: 21 55 38.8, h: 33 Km.  
 Kurile Islands region.  
 Mag. 6.3/4 (Pas), 6.1 SD 0.3 (CGS).

28. PZ 22 36 30.6 S.H.  
 Compression.  
 H: 22 25 04.5, h: 33 Km.  
 Kurile Islands region.  
 Mag. 5.1 (CGS).

28. PZ 23 08 31.0 S.H.  
 Dilatation.  
 H: 22 57 03.4, h: 33 Km.  
 Kurile Islands region.  
 Mag. 4.8 (CGS).

28. ePZ 23 43 54 S.H.  
 Minor trace.

29. iPZ 00 05 23.7 S.H.  
 Compression.  
 H: 23 53 56.1, h: 33 Km.  
 Kurile Islands region.  
 Mag. 5.3 SD 0.3 (CGS).

29. ePZ 01 59 21 S.H.  
 eSNE 45 S.H.

29. ePZ 02 18 22 S.H.  
 eSE 43 S.H.

29. PZ 02 33 14.0 S.H.  
 Compression.  
 H: 02 21 45.8, h: 33 Km.  
 Kurile Islands region.  
 Mag. 4.4 SD 0.3 (CGS).

29. PZ 04 18 40 S.H.  
 H: 04 07 10.0, h: 33 Km.  
 Kurile Islands region.  
 Mag. 4.7 SD 0.3 (CGS).

29. ePZ 05 50 23 S.H.  
 H: 05 38 56.2, h: 33 Km.  
 Kurile Islands region.  
 Mag. 4.7 (CGS).

29. ePZ 06 54 14 S.H.  
 Minor trace.

29. ePZ 12 56 21 S.H.  
 eSE 13 06 42 G.  
 H: 12 43 47.5, h: 30 Km.  
 Mariana Islands region.  
 Mag. 5.2 SD 0.2 (CGS).

29. PZ 13 25 32.1 S.H.  
 Dilatation.  
 H: 13 14 04.2, h: 33 Km.  
 Kurile Islands region.  
 Mag. 4.7 SD 0.2 (CGS).

29. PZ 14 32 24.0 S.H.  
 H: 14 20 56.3, h: 33 Km.  
 Kurile Islands region.  
 Mag. 4.4 SD 0.4 (CGS).

29. ePZ 16 55 01 S.H.  
 Minor trace.

29. PZ 18 53 42 S.H.  
 H: 18 42 14.8, h: 33 Km.  
 Kurile Islands region.  
 Mag. 4.9 SD 0.1 (CGS).

29. PZ 20 27 08.7 S.H.  
 H: 20 16 40.6, h: 33 Km.  
 Kurile Islands region.  
 Mag. 4.6 SD 0.4 (CGS).

30. PZ 00 53 49.7 S.H.  
 H: 00 42 23.1, h: 33 Km.  
 Kurile Islands region.  
 Mag. 4.5 SD 0.3 (CGS).

30. PZ 06 55 34.8 S.H.  
 iSNE 07 03 36.6 S.H.,G.  
 SoSE 05 09 G.  
 H: 06 45 36.8, h: 160 Km.  
 Sumatra.  
 Mag. 5.5 (CGS).

30. PZ 07 39 15.8 S.H.  
 eSE 57 S.H.

30. PZ 07 41 57 S.H.  
 SE 42 37 S.H.  
 H: 07 41 08.2, h: 40 Km.  
 Western Iran.  
 Mag. 5.0 (CGS).

30. iPZ 22 16 19.2 G.  
 Compression.  
 H: 22 04 52.8, h: 33 Km.  
 Kurile Islands region.  
 Mag. 4.9 SD 0.3 (CGS).



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TEHRAN

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1963

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Long. 51°23'08" E. b = + 0.63570  
Height ... 1360 M. c = + 0.58146

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- |  |  |
|--|--|
| 1. ePZ 08 40 35 S.H.                                 | 4. ePZ 20 45 06 S.H.                                   |
| eSNE 53 S.H.   | eSE 57 S.H.  |
| 1. ePZ 17 37 04 G.                                   | 4. PZ 23 08 33.0 G.                                    |
| SNE 38 18.4 S.H.,G.                                  | eSE 18 18 50 G.  |
| 1. x LNE 21 33.6 G.                                  | X H: 22 56 15.7, h: 33 Km.                             |
| X H: 21 10 28.5, h: 33 Km.                           | St. Helena Islands region.                             |
| Tsinghai Province, China.                            | Mag. 5 $\frac{1}{4}$ -5 $\frac{1}{2}$ (Pal), 5.6(CGS). |
| Mag. 5.3 (CGS).                                      |  |
| 2. ePE 08 16 45 S.H.                                 | 5. PZ 09 41 59.7 S.H.                                  |
| eSE 17 00 S.H.                                       | eSE 42 09 S.H.   |
| 3. ePZ 02 13 48 S.H.                                 | 5. ePZ 13 15 37 S.H.                                   |
| eSE 14 09 S.H.                                       | SE 19 04.6 G.  |
| 3. ePZ 08 59 21 S.H.                                 | H: 13 11 37.5, h: 111 Km.                              |
| Minor trace.   | Hindu Kush.  |
|  | Mag. 5.0 (CGS).  |
| 4. ePE 10 32 37 S.H.                                 | 5. ePZ 16 41 49 S.H.                                   |
| eS <sub>1</sub> E 53 S.H.                            | eSE 42 53 S.H.   |
| iS <sub>2</sub> E 58.7 S.H.                          | 5. ePZ 17 12 12 S.H.                                   |
|  | Minor trace.   |
| 4. eP'Z 11 17 10 G.                                  | 5. iPNE 23 49 38.9 S.H.                                |
| epPZ 18 03 G.  | SNE 49.0 S.H.  |
| PPZ 20 03.0 G.                                       | 6. PE 03 56 14.0 S.H.                                  |
| SKPZ 36.0 G.   | SE 25 S.H.   |
| iPKSE 56.5 G.  | 6. ePZ 20 37 52 G.                                     |
| SKKPZ 29 28 G.                                       | eSNE 38 42 G.  |
| ePSE 30 08 G.  | 7. iPZ 14 55 40.2 S.H.                                 |
| H: 10 58 13.2, h: 158 Km.                            | SZ 58.8 S.H.   |
| Tonga Islands region.                                | Dilatation.  |
| Mag. 6 $\frac{3}{4}$ (Pas), 6 $\frac{3}{4}$ -7(Bka), | 7. iPZ 20 45 11.9 S.H.                                 |
| 6.5 (CGS).   | SNZ 30.4 S.H.  |
| 4. ePE 13 54 16 S.H.                                 |  |
| Local.   |  |
| 4. iPE 14 55 28.9 S.H.                               |  |
| SE 50.8 S.H.   |  |
| 4. ePE 19 02 31 S.H.                                 |  |
| eSE 53 S.H.  |  |

Based to  
JSS

8. ePZ 09 00 24 S.H.  
 H: 08 58 04.8, h: 33 Km.  
 Near South Coast of Iran.  
 Mag. 4.8 (CGS).
9. ePZ 15 38 51 S.H.  
 Minor trace.
9. ePZ 19 18 43 S.H.  
 Minor trace.
10. PZ 02 15 51.3 S.H.,G.  
 SE 18 57 G.  
 H: 02 11 58.3, h: 33 Km.  
 Hindu Kush.  
 Mag. 4.9 (CGS).
10. PZ 03 26 08.8 S.H.,G.  
 H: 03 14 41.8, h: 33 Km.  
 Kurile Islands region.  
 Mag. 4.8 (CGS).
10. ePZ 05 34 23 S.H.,G.  
 SNE 14 00 G.  
 H: 05 22 57.1, h: 33 Km.  
 Kurile Islands region.  
 Mag. 5.6 (CGS).
10. ePZ 10 02 15 S.H.  
 Minor trace.
10. ePZ 14 05 50 S.H.  
 Minor trace.
10. ePZ 18 25 46 S.H.  
 Minor trace.
10. ePZ 20 04 24 S.H.  
 H: 19 52 19.4, h: 171 Km.  
 Mariana Islands region.  
 Mag. 5.4 (CGS).
10. ePZ 20 28 08 S.H.  
 eSEZ 29 36 S.H.
11. ePZ 08 38 51 S.H.  
 Minor trace.
12. PEZ 15 39 34.0 S.H.,G.  
 eSNE 49 02 G.  
 eScSNE 43 G.  
 LNE 16 13.0 G.  
 H: 15 28 08.5, h: 33 Km.  
 Kuril Islands region.  
 Mag. 5-5 $\frac{1}{4}$  (Pal), 4.8 (CGS).
13. iPZ 08 25 56.0 S.H.  
 iSE 27 09.0 S.H.  
 H: 08 24 24.7, h: 44 Km.  
 Near West coast of Iran.  
 Mag. 5.0 (CGS).
13. ePZ 11 09 04 S.H.  
 Minor trace.
13. ePZ 11 59 09 S.H.  
 eSE 12 00 55 G.
13. ePZ 12 11 01 S.H.  
 eSE 12 26 G.
13. ePZ 13 03 13 S.H.  
 eSE 05 07 G.
13. ePZ 14 09 44 S.H.  
 H: 13 58 25.7, h: 33 Km.  
 Kurile Islands region.  
 Mag. 4.6 (CGS).
13. ePZ 14 16 40 S.H.  
 H: 14 06 23.7, h: 33 Km.  
 Ryukyu Islands.  
 Mag. 4.9 (CGS).
13. ePZ 19 13 06 S.H.  
 H: 19 08 39.1, h: 33 Km.  
 East Pakistan.
14. eP'Z 00 21 50 S.H.  
 PKSEZ 25 27 G.  
 ?E 31 37 G.  
 H: 00 02 22.8, h: 33 Km.  
 Kermadec Islands region.  
 Mag. 5.3 (CGS).
14. (SKS) 06 06 19 G.  
 ?E 07 27 G.  
 H: 05 41 43.0, h: 24 Km.  
 Off coast of northern,  
 Venezuela.  
 Mag. 5 $\frac{3}{4}$ (Brk), 5 $\frac{3}{4}$ (Pal), 6(Pas)  
 555(CGS).
14. ePZ 06 10 37 S.H.  
 SN 11 27 S.H.
14. ePZ 07 47 54 S.H.  
 SN 49 31 G.  
 H: 07 46 21.4,  
 Persian Gulf.

14. ePZ 10 55 17 S.H.  
 eSNE 58 22 G.  
 H: 10 51 42.7, h: 120 Km.  
 Hindu Kush.  
 Mag. 5.1 (CGS).
14. ePZ 17 23 15 S.H.  
 ?Z 48 S.H.  
 ?NE 27 30 G.  
 ?E 30 35 G.  
 ?N 32 55 G.  
 H: 17 06 38.6, h: 189 Km.  
 North Islands New Zealand  
 Mag. 6.0 (CGS).
15. ePZ 09 09 57 S.H.  
 eSN 10 17 S.H.
16. 1PNEZ 18 29 53.4 S.H.,G.  
 SNE 32 02 G.  
 Dilatation.  
 H: 18 27 18.4, h: 33 Km.  
 Georgia S.S.R.  
 Mag. 5.8 (CGS).
16. ePZ 21 57 50 S.H.  
 Minor trace.
16. ePZ 22 13 49 S.H.  
 H: 22 11 23.0, h: 17 Km.  
 Georgia S.S.R.  
 Mag. 4.9 (CGS).
17. ePZ 03 37 05 S.H.  
 Minor trace.
17. PZ 11 59 41 S.H.  
 eSNE 12 01 51 G.  
 Dilatation.  
 H: 11 57 06.7, h: 33 Km.  
 Georgia S.S.R.  
 Mag. 5.3 (CGS).
17. ePZ 21 01 33 S.H.  
 eSE 51 S.H.
17. ePZ 22 29 29 S.H.  
 Local.
18. ePZ 01 32 28 S.H.  
 Minor trace.
18. (eSKKS)NE  
 05 25 30 G.  
 ?NE 27 23 G.  
 (eSS)NE 33 21 G.  
 H: 04 58 09.2, h: 33 Km.  
 Sandwich Islands region.  
 Mag. 6.0 (CGS).
19. PZ 05 52 09.6 S.H.  
 SE 57 41 S.H.,G.  
 H: 05 45 28.0, h: 33 Km.  
 Ligurian Sea.  
 Mag. 5.5 (Pal), 5.5 (CGS).
19. PNEZ 05 52 47.0 S.H.,G.  
 H: 05 46 05.2,  
 Ligurian Sea.  
 Mag. 5.6 (CGS).
19. ePZ 07 47 14 S.H.  
 Minor trace.
19. ePZ 09 11 50 S.H.  
 H: 09 00 44.8, h: 70 Km.  
 Near east coast of Honshu,  
 Japan.  
 Mag. 4.6 (CGS).
19. ePZ 15 50 21 S.H.  
 Local.
19. ePZ 21 53 34 S.H.  
 eSNE 44 S.H.
19. ePZ 22 32 54 S.H.  
 eSE 35 35 G.
20. ePZ 00 23 39 S.H.  
 Minor trace.
20. ePZ 00 54 29 S.H.  
 eSE 57 43 S.H.,G.
20. ePZ 02 24 56 S.H.  
 Minor trace.
20. eP'Z 06 55 09 S.H.  
 ?E 57 27 G.  
 SSE 07 13 30 G.  
 H: 06 36 10.8, h: 33 Km.  
 Macquarie Islands region.  
 Mag. 6 (Pal), 5.6 (CGS).

- |     |                             |            |          |      |     |   |            |            |
|-----|-----------------------------|------------|----------|------|-----|---|------------|------------|
| 20. | ePZ                         | 12 09 40   | S.H.     |      | 26. | PZ  | 04 22 31.5 | S.H.,G.    |
|     | Local.                      |            |          |      |     | eSNE  | 26 54.6    | G.         |
| 21. | iPZ                         | 00 27 38.7 | S.H.     |      |     | ?Z  | 31 04      | G.         |
|     | iSNEZ                       | 44.4       | S.H.     |      | H:  | 04 17 16.7, h: 33 Km.   |            |            |
|     | Dilatation.                 |            |          |      |     | Southern Yugoslavia Skopje.                                       |            |            |
| 21. | ePZ                         | 05 33 56   | S.H.     |      |     | Mag. $5\frac{1}{2}$ - $5\frac{3}{4}$ (Brk), $5\frac{1}{2}$ (Pal), |            |            |
|     | Minor trace.                |            |          |      |     | 5.4 (CGS).  |            |            |
| 21. | ePZ                         | 06 06 43   | S.H.     |      | 26. | ePE   | 16 16 35   | S.H.       |
|     | iSE                         | 10 49.0    | G.       |      |     | eSE   | 57         | S.H.       |
|     | PcPZ                        | 58.2       | G.       |      | 26. | ePE   | 19 50 46   | S.H.       |
| H:  | 06 01 57.3, h: 33 Km.       |            |          |      |     | Distante. shock.  |            |            |
|     | Arabian Sea.                |            |          |      | 26. | ePE   | 22 46 15   | S.H.       |
| 22. | ePZ                         | 07 49 13   | S.H.     |      |     | Local.  |            |            |
|     | Near shock.                 |            |          |      | X   | 27.   | ePZ        | 06 05 06   |
| 22. | ePZ                         | 16 08 12   | S.H.     |      |     | Minor.trace.  |            | S.H.       |
|     | Local.                      |            |          |      | 27. | ePZ   | 09 51 59   | S.H.       |
| 22. | ePZ                         | 23 11 47   | S.H.     |      |     | Local.  |            |            |
|     | Local.                      |            |          |      | 27. | ePZ   | 13 49 41   | S.H.       |
| X   | 23.                         | ePZ        | 06 28 43 | S.H. |     | Minor.trace.  |            |            |
|     | Distance.                   |            |          |      | X   | 28.   | ePZ        | 08 06 58   |
| 23. | ePZ                         | 10 09 39   | S.H.     |      |     | eSNE  | 16 24      | S.H.,G.    |
|     | eSNE                        | 11 00      | G.       |      | H:  | 07 55 21.9, h: 21 Km.   |            |            |
| 23. | ePZ                         | 21 15 42   | S.H.     |      |     | Off coast of Java.  |            |            |
|     | Minor trace.                |            |          |      |     | Mag. 5.1 (CGS).   |            |            |
| 24. | ePZ                         | 03 12 13   | S.H.     |      | 28. | ePZ   | 13 33 36   | S.H.       |
|     | Minor trace.                |            |          |      |     | ePPZ  | 35 26      | S.H.       |
| 24. | ePZ                         | 11 42 31   | S.H.,G.  |      | H:  | 13 25 18.1, h: 33 Km.   |            |            |
|     | SNE                         | 50 56.0    | G.       |      |     | Jan Mayen Islands region.   |            |            |
|     | eSSE                        | 55 28      | G.       |      |     | Mag. 4.5 (CGS).   |            |            |
| H:  | 11 32 17.7, h: 33 Km.       |            |          |      | X   | 28.   | iPZ        | 19 03 02.7 |
|     | Near east coast of Formosa. |            |          |      |     | Compression.  |            | S.H.,G.    |
|     | Mag. 5.3 (CGS).             |            |          |      | H:  | 18 51 36.7, h: 33 Km.   |            |            |
| 24. | ePZ                         | 13 15 53   | S.H.     |      |     | Kurile Islands region.  |            |            |
|     | Local.                      |            |          |      |     | Mag. 5.0 (CGS).   |            |            |
| 24. | ePZ                         | 16 13 44   | S.H.     |      | 29. | iPZ   | 06 12 28.4 | S.H.,G.    |
|     | Local.                      |            |          |      |     | S <sub>1</sub> E  | 14 02      | G.         |
| 24. | PZ                          | 18 55 08.0 | S.H.     |      |     | S <sub>2</sub> NEZ  | 50         | G.         |
|     | eSN                         | 28         | S.H.     |      |     | Compression.  |            |            |
|     |                             |            |          |      | H:  | 06 10 22.6, h: 37 Km.   |            |            |
|     |                             |            |          |      |     | Southern Iran.  |            |            |
|     |                             |            |          |      |     | Mag. 5.2 (CGS).   |            |            |

- |     |  |            |         |  |  |
|-----|--|------------|---------|--|--|
| 29. | ePZ  | 12 09 34   | S.H.    |  |  |
|     | eSE  | 11 00      | G.      |  |  |
| 29. | ePZ  | 12 18 36   | S.H.    |  |  |
|     | SE   | 19 55      | S.H.    |  |  |
| 29. | ePZ  | 15 52 21   | S.H.    |  |  |
|     | eSE  | 53 54      | G.      |  |  |
| 29. | eP'Z   | 20 33 30   | S.H.,G. |  |  |
|     | iPKSEZ   | 37 10      | G.      |  |  |
|     | PPPNEZ   | 39 42      | G.      |  |  |
|     | ?E   | 45 54      | G.      |  |  |
|     | H: 20 14 07.3, h: 39 Km.<br>Kermadec Islands.<br>Mag. $6\frac{1}{2}$ -63/4(Bks), 5.7(CGS). |            |         |  |  |
| 29. | eP'Z   | 20 35 57   | G.      |  |  |
|     | ePKSNEZ  | 39 42      | G.      |  |  |
|     | H: 20 16 36.9, h: 33 Km.<br>Kermadec Islands<br>Mag. 5.5 (CGS).                            |            |         |  |  |
| 30. | ePZ  | 01 25 35   | S.H.    |  |  |
|     | eSNE   | 27 16      | G.      |  |  |
| 30. | ePZ  | 02 04 31   | S.H.    |  |  |
|     | Minor trace.   |            |         |  |  |
| 30. | ePZ  | 03 27 12   | S.H.    |  |  |
|     | Minor trace.   |            |         |  |  |
| 30. | eP'Z   | 06 05 19   | S.H.,G. |  |  |
|     | ePPZ   | 08 18      | G.      |  |  |
|     | ePKSEZ   | 51         | G.      |  |  |
|     | H: 05 45 53.3, h: 33 Km.<br>Kermadec Islands region.<br>Mag. 5.3 (CGS).                    |            |         |  |  |
| 30. | ePZ  | 07 16 23   | S.H.    |  |  |
|     | iSNEZ  | 42.1       | S.H.    |  |  |
| 30. | ePZ  | 08 08 16   | S.H.    |  |  |
|     | SNE  | 09 04      | S.H.    |  |  |
| 30. | eP'Z   | 14 11 20   | S.H.    |  |  |
|     | SKKSNE   | 19 13      | G.      |  |  |
|     | H: 13 51 57.8, h: 33 Km.<br>Sandwich Islands.<br>Mag. 6.2 (CGS).                           |            |         |  |  |
| 30. | eP'Z   | 14 42 43   | S.H.    |  |  |
|     | Kermadec Islands region.<br>Mag. 5.2 (CGS).  |            |         |  |  |
| 31. | PZ   | 02 22 46.1 | S.H.    |  |  |
|     | eSNE   | 23 04      | S.H.    |  |  |
| 31. | ePZ  | 17 52 18   | S.H.    |  |  |
|     | Minor trace.   |            |         |  |  |
| 31. | PZ   | 20 00 46.0 | S.H.    |  |  |
|     | SNEZ   | 01 09      | S.H.    |  |  |
| 31. | ePZ  | 20 12 10   | S.H.    |  |  |
|     | eSNEZ  | 33         | S.H.    |  |  |
| 31. | ePZ  | 20 37 13   | S.H.    |  |  |
|     | Minor trace.   |            |         |  |  |
| 31. | ePZ  | 21 18 04   | S.H.    |  |  |
|     | eSNEZ  | 23         | S.H.    |  |  |
| 31. | ePZ  | 21 52 19   | S.H.    |  |  |
|     | eSNE   | 55 01      | G.      |  |  |



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Lat.  $35^{\circ}44'16''$  N.      a = + 0.50773  
Long.  $51^{\circ}23'08''$  E.      b = + 0.63570  
Height ... 1360 M.      c = + 0.58146

AUGUST 1963

- |    |                          |            |         |      |                                   |          |         |
|----|--------------------------|------------|---------|------|-----------------------------------|----------|---------|
| 1. | ePZ                      | 08 08 16   | S.H.    | 3.   | ePZ                               | 16 42 06 | S.H.    |
|    | eSNEZ                    | 38         | S.H.    |      | Minor trace.                      |          |         |
| 1. | ePZ                      | 08 26 06   | S.H.    | X 3. | eP'Z                              | 20 45 20 | S.H.    |
|    | Local.                   |            |         |      | H: 20 26 04, h: 37 Km.            |          |         |
|    |                          |            |         |      | Kermadec Islands.                 |          |         |
| 1. | ePZ                      | 09 55 16   | S.H.    |      | Mag. 5.2 (CGS).                   |          |         |
|    | Minor trace.             |            |         |      |                                   |          |         |
| 1. | ePZ                      | 10 56 17   | S.H.    | 4.   | ePZ                               | 01 12 39 | S.H.    |
|    | Minor trace.             |            |         |      | Minor trace.                      |          |         |
| 1. | ePZ                      | 23 23 02   | S.H.    | X 4. | ePZ                               | 07 20 13 | S.H.    |
|    | Minor trace.             |            |         |      | iSEZ                              | 29 41.3  | S.H.,G. |
| 2. | ePZ                      | 05 50 30   | S.H.    |      | H: 07 08 47.1, h: 117 Km.         |          |         |
|    | Minor trace.             |            |         |      | South of Java.                    |          |         |
|    |                          |            |         |      | Mag. 5.5 (CGS).                   |          |         |
| 2. | ePZ                      | 06 27 29   | S.H.    | 4.   | ePZ                               | 20 19 57 | S.H.    |
|    | Minor trace.             |            |         |      | eSEN                              | 20 13    | S.H.    |
| 2. | ePZ                      | 06 39 26   | S.H.    | X 5. | eP'Z                              | 00 12 30 | S.H.    |
|    | Minor trace.             |            |         |      | ep'Z                              | 14 56    | S.H.,G. |
|    |                          |            |         |      | ePPZ                              | 15 08    | S.H.,G. |
|    |                          |            |         |      | ?E                                | 59       | G.      |
| 2. | ePZ                      | 12 53 01   | S.H.    |      | H: <u>23 54 14.0</u> , h: 515 Km. |          |         |
|    | Minor trace.             |            |         |      | Fiji Islands region.              |          |         |
|    |                          |            |         |      | Mag. 5.2 (CGS).                   |          |         |
| 2. | ePZ                      | 18 05 41   | S.H.    | 5.   | ePZ                               | 05 49 46 | S.H.    |
|    | eSE                      | 08 23      | G.      |      | Local.                            |          |         |
| 2. | ePZ                      | 23 40 12   | S.H.    | 6.   | ePZ                               | 13 28 50 | S.H.    |
|    | Minor trace.             |            |         |      | Local.                            |          |         |
| 3. | iPZ                      | 10 34 02.6 | S.H.,G. | X 6. | ePZ                               | 13 46 30 | S.H.    |
|    | ePPZ                     | 37 15      | S.H.,G. |      | SE                                | 54 39    | G.      |
|    | ePPPZ                    | 38 29      | G.      |      | H: 13 36 35.6, h: 33 Km.          |          |         |
|    | iSN                      | 44 30.0    | S.H.,G. |      | North Atlantic ocean.             |          |         |
|    | ePPSN                    | 45 29      | S.H.    |      | Mag. 5.1 (CGS).                   |          |         |
|    | Compression.             |            |         |      |                                   |          |         |
|    | H: 10 21 36.6, h: 33 Km. |            |         | 6.   | ePZ                               | 23 34 10 | S.H.    |
|    | Mid - Atlantic ocean.    |            |         |      | Minor trace.                      |          |         |
|    | Mag. 6.1 (CGS).          |            |         |      |                                   |          |         |

- X ✓ 04 33 42.7, h: 33 Km.  
X ✓ Sakhalin Island, U.S.S.R.  
 Mag. 5.1 (CGS).
- 7. PZ 15 39 27.3 S.H.  
 eSE 45 S.H.
- 7. ePZ 20 48 20 S.H.  
 Local.
- X ✓ 8. iPZ 02 26 37.0 S.H.,G.  
 PPZ 29 25.0 G.  
 ePPPZ 31 08 S.H.  
 eSNE 36 15 G.  
 LNE 45.0 G.  
 Compression.  
 H: 02 14 54.4, h: 33 Km.  
 Fox Islands, Aleutian Islands.  
 Mag. 5.5 (CGS).
- 8. PZ 04 38 36.0 S.H.  
 SNZ 55 S.H.
- 8. ePZ 10 42 12 S.H.  
 Minor trace.
- X ✓ 8. PZ 14 05 21.5 S.H.  
X ✓ H: 13 53 42.2, h: 423 Km.  
 Mariana Islands region.  
 Mag. 4.9 (CGS).
- 9. ePZ 04 35 53 S.H.  
 Minor trace.
- X ✓ 9. ePZ 14 56 02 S.H.  
 ?NEZ 59 35.0 G.  
 H: 14 36 45.9, h: 33 Km.  
 Fiji Islands region.  
 Mag. 5.5 (CGS).
- 9. ePZ 17 53 20 S.H.  
 eSE 36 S.H.
- 10. ePZ 01 25 20 S.H.  
 Local.
- 10. PZ 04 29 25.3 S.H.  
 eSNE 31 41 G.  
 H: 04 27 33.5, h: 46 Km.  
 Southern Iran.  
 Mag. 4.8 (CGS).
- 10. ePZ 18 11 41 S.H.  
 eSNEZ 12 03 S.H.
- 11. ePZ 08 44 39 S.H.  
 eSEZ 45 31 G.  
 H: 08 43 48, h: 33 Km.  
 Northern Iran.  
 Mag. 4.4 (CGS).
- 11. ePZ 17 11 14 S.H.  
 Local.
- 11. ePZ 17 24 15 S.H.  
 eSNE 45 S.H.
- 12. PZ 07 21 51.0 S.H.  
 eSE 23 56 G.  
 H: 07 19 54.9, h: 33 Km.  
 Near south west coast of Iran.  
 Mag. 5.0 (CGS).
- 12. ePZ 11 34 17 S.H.  
 eSNE 43 S.H.
- 12. ePZ 11 40 49 S.H.  
 eSNE 41 00 S.H.
- 12. ePZ 11 57 23 S.H.  
 eSNE 58 08 S.H.
- 12. ePZ 15 59 15 S.H.  
 eSNE 16 01 47 S.H.  
 ?NE 02 27 G.
- X ✓ 12. ePZ 18 32 59 S.H.,G.  
 eSE 35 49 G.  
 PcPZ 37 51 G.  
 ?Z 38 19 G.  
 H: 18 29 38.8, h: 33 Km.  
 Near coast of west Pakistan.  
 Mag. 5.2 (CGS).
- 12. ePZ 20 56 43 S.H.  
 Minor trace.
- X ✓ 13. ePZ 03 39 28 S.H.  
 Minor trace.
- X ✓ 13. PZ 07 07 24.0 S.H.,G.  
 iSNEZ 10 23 S.H.,G.  
 ?E 12 13 G.  
 PcPZ 25 G.  
 Dilatation.  
 H: 07 03 49.6, h: 244 Km.  
 Hindu - Kush.  
 Mag. 4.7 (CGS).

- |     |              |                            |         |     |                   |                           |         |
|-----|--------------|----------------------------|---------|-----|-------------------|---------------------------|---------|
| 13. | ePZ          | 13 36 20                   | S.H.    | 16. | ePZ               | 05 59 31                  | S.H.    |
|     | ePPZ         | 38 14                      | S.H.    |     | Minor trace.      |                           |         |
|     | H:           | 13 28 02.2, h: 33 Km.      |         |     |                   |                           |         |
|     |              | Svalbard region.           |         |     |                   |                           |         |
|     |              | Mag. 4.7 (CGS).            |         |     |                   |                           |         |
| 13. | ePZ          | 14 31 44                   | S.H.    | 17. | iPZ               | 11 23 21.6                | S.H.,G. |
|     | Local.       |                            |         |     | ePPPZ             | 27 22                     | G.      |
| 13. | ePZ          | 23 11 13                   | S.H.    |     | eSNE              | 32 17                     | G.      |
|     | H:           | 23 00 24.8, h: 448 Km.     |         |     | ?Z                | 39 55                     | G.      |
|     |              | Bonin Islands region.      |         |     | Lg <sub>2</sub> Z | 47 41                     | G.      |
|     |              | Mag. 4.8 (CGS).            |         |     | P'P'Z             | 52 06                     | S.H.    |
|     |              |                            |         |     | Compression.      |                           |         |
|     |              |                            |         |     | H:                | 11 12 41.2, h: 33 Km.     |         |
|     |              |                            |         |     |                   | Ryukyu Islands region.    |         |
|     |              |                            |         |     |                   | Mag. 5.6 (CGS).           |         |
| 14. | ePZ          | 02 31 30                   | S.H.    | 17. | ePZ               | 22 00 34                  | S.H.    |
|     | eSE          | 51                         | S.H.    |     | eSN               | 02 33                     | S.H.,G. |
| 14. | ePZ          | 16 07 57                   | S.H.    |     | H:                | 21 58 54.4, h: 33 Km.     |         |
|     | eSNEZ        | 08 17                      | S.H.    |     |                   | Northern Iran.            |         |
|     |              |                            |         |     |                   | Mag. 4.8 (CGS).           |         |
| 14. | PZ           | 18 56 41.0                 | S.H.    | 18. | ePZ               | 10 57 19                  | S.H.    |
|     | Compression. |                            |         |     | eSNE              | 58 26                     | G.      |
|     | H:           | 18 43 55.5, h: 33 Km.      |         |     |                   |                           |         |
|     |              | West Iran.                 |         |     |                   |                           |         |
|     |              | Mag. 6.4 (CGS).            |         |     |                   |                           |         |
| 15. | ePZ          | 02 28 00                   | S.H.    | 18. | iPZ               | 18 55 47.6                | S.H.    |
|     | H:           | 02 17 16.9, h: 476 Km.     |         |     | iSNE              | 19 06 13.6                | G.      |
|     |              | Bonin Islands.             |         |     | Dilatation.       |                           |         |
|     |              | Mag. 4.7 (CGS).            |         |     | H:                | 18 43 16.1, h: 33 Km.     |         |
|     |              |                            |         |     |                   | Andreanof Islands,        |         |
|     |              |                            |         |     |                   | Aleutian Islands.         |         |
|     |              |                            |         |     |                   | Mag. 5.5 (CGS).           |         |
| 15. | ePZ          | 05 56 35                   | S.H.    | 18. | ePZ               | 20 47 08                  | S.H.    |
|     | eSE          | 58 21                      | G.      |     | e?EZ              | 50 46                     | G.      |
| 15. | iPZ          | 06 22 38.7                 | S.H.,G. | 18. | ePZ               | 22 59 50                  | S.H.    |
|     | ePPZ         | 25 10                      | G.      |     | eSNE              | 23 00 30                  | S.H.    |
|     | SNE          | 31 42                      | G.      | 19. | ePZ               | 13 56 44                  | S.H.    |
|     | ScSE         | 33 02.0                    | S.H.    |     | eSNE              | 57 26                     | G.      |
|     | SSE          | 36 47                      | G.      | 20. | ePZ               | 03 25 18                  | S.H.    |
|     | Compression. |                            |         |     | eSNE              | 36                        | S.H.    |
|     | H:           | 06 11 34.6, h: 59 Km.      |         | 20. | ePZ               | 15 59 12                  | S.H.    |
|     |              | Near east coast of Honshu, |         |     | pPZ               | 26.4                      | S.H.,G. |
|     |              | Japan.                     |         |     | eSNE              | 16 08 38                  | G.      |
| 15. | ePZ          | 17 39 51                   | G.      |     | eScSNE            | 09 36                     | G.      |
|     | iP'Z         | 43 18.2                    | G.      |     | Lg <sub>2</sub> E | 26 53                     | G.      |
|     | iPPZ         | 44 49.4                    | G.      |     | H:                | 15 48 12.2, h: 50 Km.     |         |
|     | ?Z           | 47 57                      | G.      |     |                   | Off east coast of Honshu, |         |
|     | ?Z           | 54 26                      | G.      |     |                   | Japan.                    |         |
|     | ?Z           | 55 29                      | G.      |     |                   | Mag. 4.5 (CGS).           |         |
|     | ?Z           | 56 38                      | G.      |     |                   |                           |         |
|     | H:           | 17 25 05.9, h: 543 Km.     |         |     |                   |                           |         |
|     |              | Peru-Bolivia border.       |         |     |                   |                           |         |
|     |              | Mag. 7.3/4(Pas), 8(Bks).   |         |     |                   |                           |         |

20. ePZ 18 30 34 S.H.  
Local.

21. ePZ 02 26 13 S.H.  
Local.

21. ePZ 05 50 33 S.H.  
Minor trace.

21. ePZ 13 28 17 S.H.  
Local.

21. PZ 18 14 18.2 S.H.  
epPZ 37 S.H.  
eSN 23 48 G.  
H: 18 02 44.4, h: 33 Km.  
Kurile Islands region.  
Mag. 4.9 (CGS).

21. ePZ 22 40 02 S.H.  
Minor trace.

21. ePZ 22 49 17 S.H.  
Local.

22. ePZ 13 15 27 S.H.  
Local.

22. e?Z 20 10 19 S.H.  
e?Z 56 S.H.  
e?Z 12 24 G.  
iSKSE 17 35.6 G.  
iSKKSE 18 30.6 G.  
e?Z 21 11 G.  
H: 19 52 25.0, h: 33 Km.  
Solomon Islands.  
Mag. 6 $\frac{3}{4}$ -7(Pas), 6-6 $\frac{1}{4}$ (Brk),  
6.1 (CGS).

22. ePZ 22 03 47 S.H.  
Minor trace.

23. ePZ 13 20 51 S.H.  
H: 13 09 25.3, h: 33 Km.  
Off east coast of Kamchatka.  
Mag. 4.5 (CGS).

23. ePZ 16 47 45 S.H.  
Minor trace.

23. iPZ 23 48 05.8 S.H.  
iSNZ 27.8 S.H.  
Dilatation.

24. ePZ 00 39 20 S.H.  
eSNZ 44 S.H.

24. ePZ 02 39 27 S.H.  
Local.

24. iPZ 17 01 58.1 S.H.  
iSEZ 02 17.3 S.H.  
Compression.

25. ePZ 02 31 12 S.H.  
Minor trace.

25. ePZ 06 14 22 S.H.,G.  
SNE 16 40 S.H.,G.  
e?NE 17 46 S.H.,G.  
H: 06 11 43.3, h: 33 Km.  
Central Turkey.  
Mag. 4.6 (CGS).

25. e?Z 12 36 30 S.H.  
iP'Z 24.4 S.H.,G.  
ipP'NEZ 38 53.6 S.H.,G.  
pPPZ 40 53 G.  
PPPEZ 41 52 G.  
pPPPEZ 43 03.8 G.  
PPSE 51 56.0 G.  
sSPEZ 52 30 G.  
SssE 13 01 55 G.  
H: 12 18 12.5, h: 565 Km.  
Fiji Islands region.  
Mag. 6 $\frac{1}{2}$ (Pas), 6-6 $\frac{1}{4}$ (Brk),  
6.1(CGS).

26. PZ 01 35 29.6 S.H.  
eSNE 54 S.H.

26. ePZ 08 36 36 S.H.  
eSE 51 S.H.

26. ePZ 19 48 07 S.H.  
eSEZ 32 S.H.

26. ePZ 20 05 08 S.H.  
eSE 06 26 S.H.

27. PZ 18 26 56.8 S.H.  
iSNEZ 27 14.9 S.H.  
Compression.

28. ePZ 12 46 32 S.H.  
SEZ 51.0 S.H.

28. ePZ 13 44 21 S.H.  
 eSE 45 08 S.H.

28. ePZ 15 02 28 S.H.  
 eSE 48 S.H.

28. ePZ 17 17 42 S.H.  
 Minor trace.

28. ePZ 18 44 56 S.H.  
 Minor trace.

29. ePZ 00 52 50 S.H.  
 eSE 53 20 S.H.

29. iPZ 08 58 05.0 S.H.,G.  
 SNE 09 01 40.2 S.H.,G.  
 Compression.  
 H: 08 53 48.4, h: 31 Km.  
 Sinkiang Province, China  
 Mag. 5.5 (CGS).

29. iP'Z 15 49 39.6 S.H.  
 ePPZ 51 38 S.H.,G.  
 e?Z 16 02 09 S.H.  
 Dilatation.  
 H: 15 30 31.4, h: 23 Km.  
 Off coast of Peru  
 Mag.  $6\frac{1}{2}$  (Pas), 6.1 (CGS).

29. ePZ 18 20 33 S.H.  
 Minor trace.

29. ePZ 21 19 27 S.H.  
 SE 20 26 S.H.

30. ePZ 00 27 46 S.H.  
 Minor trace.

30. iPZ 02 53 37.2 S.H.,G.  
 eSNE 54 S.H.  
 Compression.

30. PZ 04 51 24.8 S.H.  
 ePPZ 53 S.H.  
 eSE 55 58 G.  
 H: 04 46 25.0, h: 33 Km.  
 China Kazakh S.S.R. border.  
 Mag. 4.9 (CGS).

31. ePZ 08 29 14 S.H.  
 Minor trace.

31. ePZ 08 38 37 S.H.  
 eSNE 44 20 G.

31. ePZ 10 47 58 S.H.  
 eSNE 49 33 G.

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Lat.  $35^{\circ}44'16''$  N.      a = + 0.50773  
Long.  $51^{\circ}23'08''$  E.      b = + 0.63570  
Height.... 1360 M.      c = + 0.58146

SEPTEMBER 1963

- |   |  |
|---|--|
| <p>2. PZ 01 38 55.4 S.H.,G.<br/>eSNEZ 42 35 S.H.,G.<br/>H: 01 34 30.3, h: 33 Km.<br/>Northern India.<br/>Mag. 5.1 (CGS).</p> <p>2. ePZ 16 30 45 S.H.<br/>SE 31 04.7 S.H.</p> <p>2. iPZ 23 56 20.5 S.H.,G.<br/>eSN 00 05 40 G.<br/>Compression.<br/>H: 23 45 00.1, h: 33 Km.<br/>Kurile Islands.<br/>Mag. 4.9 (CGS).</p> <p>3. ePZ 05 41 01 S.H.<br/>Minor trace.</p> <p>3. iPZ 08 21 19.2 S.H.<br/>eSEZ 41 S.H.<br/>Compression.</p> <p>3. ePZ 17 18 23 S.H.<br/>eSE 42 S.H.</p> <p>4. ePZ 01 30 04 S.H.<br/>Minor trace.</p> <p>4. ePEZ 05 13 56 G.<br/>ePPEZ 15 23 G.<br/>eSE 19 44 G.<br/>H: 05 06 47.0, h: 38 Km.<br/>Near east of Algeria,<br/>Bir Hadada.<br/>Mag. 5.2 (CGS).</p> | <p>4. ePZ 13 43 03 S.H.,G.<br/>iPPZ 45 24.0 S.H.,G.<br/>ePPPZ 47 05 S.H.,G.<br/>SNE 51 57 S.H.,G.<br/>ScSN 53 03.0 G.<br/>eSSNE 56 14 G.<br/>LE 59 25 G.<br/>H: 13 32 12.3, h: 33 Km.<br/>Near east coast of Baffin Is.<br/>Mag. <math>6\frac{1}{4}</math>-<math>6\frac{1}{2}</math>(Pas), 6(Bks),<br/>5.9 (CGS).</p> <p>5. ePZ 08 56 30 S.H.<br/>Minor trace.</p> <p>5. iPZ 18 54 28.9 S.H.<br/>SE 43.0 S.H.<br/>Dilatation.</p> <p>6. PZ 06 14 14.7 S.H.<br/>eSN 22 42 G.<br/>eScSN 23 44 G.<br/>LN 29 32 G.<br/>H: 06 03 52.1, h: 33 Km.<br/>Sea of Japan.<br/>Mag. 5.4 (CGS).</p> <p>6. ePZ 10 37 43 S.H.<br/>Distant shock.</p> <p>7. PZ 01 27 17.6 S.H.,G.<br/>eSN 35 42 G.<br/>LN 42 34 G.<br/>H: 01 16 55.1, h: 33 Km.<br/>Off east coast of south Korea.<br/>Mag. 5.3 (CGS).</p> <p>7. ePZ 06 27 56 S.H.<br/>Minor trace.</p> |
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7. PZ 07 25 02.0 S.H., G. H: 07 13 39.9, h: 33 Km. Kurile Islands. Mag. 5.2 (CGS).	10. ePZ 17 13 51 S.H. Distant.
7. ePZ 08 56 41 S.H. Minor trace.	11. ePZ 00 08 49 S.H. Minor trace.
7. ePZ 12 03 26 S.H. Minor trace.	11. iPZ 08 53 25.5 S.H. SE 50.0 S.H. Compression.
7. ePZ 12 55 14 S.H. Minor trace.	11. ePZ 23 11 37 S.H. Minor trace.
8. ePZ 04 35 03 S.H. Minor trace.	12. ePZ 08 22 37 S.H., G. eSN 25 34 G. H: 08 18 57.9, h: 55 Km. Cyprus. Mag. 5.0 (CGS).
8. iPZ 06 29 02.2 S.H. iSNE 18.5 S.H. Compression.	12. ePZ 12 19 17 S.H. SNE 20 23.0 G.
8. ePZ 16 57 43 S.H. Local.	12. ePZ 22 32 30 S.H. eSE 33 56 S.H.
8. ePZ 20 08 48 S.H. PPZ 11 29 S.H., G. H: 19 50 29.8, h: 550 Km. Fiji Islands region. Mag. 5.7 (CGS).	13. ePZ 14 34 01 S.H. eSNE 35 51 S.H., G.
9. ePZ 02 25 14 S.H. SNEZ 31.5 S.H.	13. PZ 20 00 06.7 S.H. SEZ 25.0 S.H.
9. ePZ 02 59 38 G. ePPEZ 03 03 49 G. eSKSE 10 31 G. (PPS)E 13 31 G. H: 02 45 45.5, h: 34 Km. New Britain. Mag. 5.6 (CGS).	14. ePZ 00 28 17 S.H. Minor trace.
9. iPZ 06 57 19.4 S.H. iSE 35.7 S.H.	14. ePZ 01 08 39 S.H. eSEZ 57 S.H.
10. ePZ 13 13 41 S.H. Minor trace.	14. ePZ 04 11 44 S.H. Distant.
10. ePZ 13 47 20 S.H. SNE 48 25.3 S.H., G.	14. ePZ 07 28 38 S.H. Minor trace.
10. ePZ 16 10 31 S.H. SN 11 29 S.H., G.	14. ePZ 09 43 31 S.H. Minor trace.
	14. ePZ 11 17 54 S.H. eSE 18 42 S.H.
	14. ePZ 12 07 01 S.H. SE 48 S.H.

14. ePZ 12 33 54 S.H.  
eSE 34 36 S.H.

14. ePZ 14 06 02 S.H.  
Local.

15. ePZ 01 01 47 S.H.,G.  
P'Z 05 16 S.H.,G.  
PPZ 06 37.8 S.H.  
?EZ 07 37.2 S.H.  
?E 09 33 S.H.  
H: 00 46 54.1, h: 43 Km.  
Santa cruz Islands.  
Mag.  $7\frac{1}{4}$ (Pas),  $6\frac{3}{4}$ (Pal),  
6.3 (CGS).

15. ePZ 02 04 09 S.H.  
Minor trace.

15. iPZ 02 31 54.3 S.H.  
iSNE 32 11.8 S.H.  
Dilatation.

15. ePZ 04 38 47 S.H.  
Minor trace.

15. ePZ 09 44 05 S.H.  
eSE 21 S.H.

16. ePZ 09 01 56 S.H.  
eSE 02 51 S.H.

16. ePZ 16 04 24 S.H.  
eSE 05 23 S.H.

17. ePZ 19 35 04 G.  
eP'Z 38 53 G.  
PPZ 39 51.5 G.  
ePSEZ 49 34 S.H.  
H: 19 20 08.2, h: 17 Km.  
Santa cruz Islands.  
Mag.  $7\frac{1}{4}$ (Pas),  $7\frac{1}{2}$ (Brk),  
7(Pal), 6.1(CGS).

18. iPZ 08 22 11.5 S.H.  
SNEZ 30.2 S.H.  
Compression.

18. ePZ 15 43 23 S.H.  
eSNE 44 24 G.  
H: 15 42 02.7, h: 33 Km.  
Turkmen. S.S.R.  
Mag. 5.1 (CGS).

18. ePZ 16 01 45 S.H.  
eSNE 02 43 S.H.

18. iPNEZ 17 02 24.4 S.H.  
iSNE 06 09.2 G.  
?Z 08 35 S.H.,G.  
Dilatation.  
H: 16 58 12.5, h: 33 Km.  
Turkey.  
Mag.  $6\frac{1}{4}$ (Pas),  $5\frac{3}{4}$ (Pal),  
5.2(CGS).

18. ePZ 22 52 11 S.H.  
Minor trace.

19. ePZ 00 52 09 S.H.  
Minor trace.

19. ePZ 03 36 10 S.H.  
eSEZ 37 03 S.H.

19. iPZ 05 10 28.5 S.H.  
iSNE 46.5 S.H.

19. ePZ 10 48 09 S.H.  
Minor trace.

19. ePZ 16 34 27 S.H.  
H: 16 31 15.0, h: 37 Km.  
Afghanistan, Pakistan border.  
Mag. 4.2 (CGS).

19. ePZ 16 58 58 S.H.  
Minor trace.

19. ePZ 18 54 27 S.H.  
Minor trace.

19. ePZ 21 36 58 S.H.  
Minor trace.

20. ePZ 03 11 54 S.H.  
ePPZ 13 41 S.H.  
ePPPZ 14 45 S.H.  
H: 03 03 32.9, h: 33 Km.  
Svalbard region.  
Mag. 4.7 (CGS).

20. ePZ 10 34 08 S.H.  
eSE 35 50 S.H.

20. ePZ 12 42 22 S.H.  
eSE 48 S.H.



20. ePZ 21 16 11 S.H.  
Minor trace.

21. PZ 01 05 42.8 S.H.  
eSE 06 06 S.H.

21. ePZ 09 08 21 S.H.  
Minor trace.

21. ePZ 17 25 11 S.H.  
Minor trace.

22. eP'Z 03 15 28 S.H.  
e?EZ 17 48 G.  
ePKSEZ 19 08 G.  
H: 02 56 24.3, h: 28 Km.  
Fiji Islands region.  
Mag. 5.8 (CGS).

22; ePZ 10 42 50 S.H.  
eSNZ 45 31 G.  
H: 10 40 55.8, h: 33 Km.  
Southern Iran.  
Mag. 4.7 (CGS).

22. PZ 14 01 55.8 S.H.  
eSNEZ 02 09 S.H.

22. ePZ 22 37 30 S.H.  
H: 22 32 10.0, h: 33 Km.  
Ionian Sea.  
Mag. 4.6 (CGS).

23. PZ 06 50 17.5 S.H.,G.  
ePPZ 52 26 G.  
eSE 58 14 G.  
H: 06 40 36.5, h: 33 Km.  
Northern Rhodesia.  
Mag. 5.5 (CGS).

23. PZ 09 11 37.4 S.H.,G.  
ePPZ 13 42 G.  
SE 19 35.5 G.  
eLN 32.5 G.  
Dilatation.  
H: 09 01 56.8, h: 33 Km.  
Northern Rhodesia.  
Mag. 5.8 (CGS).

23. ePZ 17 14 59 S.H.  
Distant.

23. iPZ 18 35 17.6 S.H.  
eSN 52 S.H.  
Compression.  
H: 18 33 47.4, h: 39 Km.  
Persian Gulf.  
Mag. 4.7 (CGS).

23. ePZ 19 21 15 S.H.  
SNE 23 02.9 G.

23. ePZ 22 33 18 S.H.  
Distant.

24. PZ 00 44 50.5 S.H.  
Local.

24. ePZ 02 14 59 S.H.  
SNE 18 31.0 G.  
H: 02 10 44.9, h: 33 Km.  
Turkey.  
Mag. 4.6 (CGS).

24. ePZ 07 24 01 S.H.  
Local.

24. ePZ 09 23 19 S.H.  
Distant.

24. ePZ 12 34 13 S.H.  
eSE 35 48 S.H.,G.

24. P'Z 16 49 16.7 S.H.,G.  
pP'Z 41.0 G.  
PPZ 51 19.0 G.  
pPPZ 33.0 G.  
?Z 52 34 G.  
(SKS)Z 58 14 G.  
?Z 17 01 15 G.  
H: 16 30 16.0, h: 80 Km.  
Near coast of Peru.  
Mag. 7(Pas), 6.5(Brk), 6.0(CGS).

25. PZ 07 13 35.9 S.H.,G.  
ePPZ 15 39 G.  
H: 07 03 54.6, h: 33 Km.  
Northern Rhodesia.  
Mag. 5.8 (CGS).

26. PZ 05 40 38.9 S.H.,G.  
eSNE 51 09 G.  
H: 05 28 07.3, h: 33 Km.  
Andreanof Islands, Aleutian Is.  
Mag. 5.3 (CGS).

27. ePE 00 57 05 S.H.  
Minor trace.

27. ePZ 11 15 27 S.H.  
eSE 24 55 G.  
eScSNE 25 41 G.  
H: 11 04 17.3, h: 17 Km.  
Off east coast of Leyte,  
Philippine Islands.  
Mag. 5.3 (CGS).

27. ePZ 17 13 00 S.H.  
e?N 16 38 G.  
H: 17 09 33, h: 88 Km.  
West Pakistan.  
Mag. 4.7 (CGS).

28. ePZ 07 19 29 S.H.  
Minor trace.

28. ePZ 14 31 45 S.H.  
Local.

28. ePZ 18 52 41 S.H.  
Minor trace,

28. ePZ 23 11 40 S.H.  
Local.

29. ePZ 02 44 13 S.H.  
Minor trace.

29. ePZ 10 43 27 S.H.  
H: 10 39 58.4, h: 214 Km.  
Hindu Kush.  
Mag. 4.8 (CGS).

29. ePZ 13 39 58 S.H.,G.  
eSNE 43 34 G.  
H: 13 35 45.3, h: 33 Km.  
Near north coast of Turkey.  
Mag. 4.5 (CGS).

29. ePZ 15 35 18 S.H.  
H: 15 31 31.4, h: 150 Km.  
Hindu Kush.  
Mag. 4.9 (CGS).

29. ePZ 19 36 26 S.H.  
eSNE 40 46 G.  
H: 19 31 22.7, h: 33 Km.  
Arabian Sea.

29. PZ 19 46 24.0 S.H.,G.  
epPZ 48 G.  
eSNE 55 44 G.  
H: 19 35 01.6, h: 117 Km.  
Mindanao, Philippine Is.  
Mag. 5.3 (CGS).

29. iPZ 22 22 17.9 S.H.  
SNE 27 07 G.  
H: 22 16 38.6, h: 47 Km.  
Ionian Sea.  
Mag. 5.3 (CGS).

29. ePZ 05 39 13 S.H.  
Minor trace.

*Sup*

SEISMOLOGICAL BULLETIN OF  
INSTITUTE OF GEOPHYSICS  
TEHRAN UNIVERSITY, IRAN

Lat. 35°44'16" N. a = + 0.50773  
Long. 51°23'08" E. b = + 0.63570  
Height.... 1360 M. c = + 0.58146

SEPTEMBER 1963

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|---|--|
| <p>2. PZ 01 38 55.4 S.H.,G.<br/>eSNEZ 42 35 S.H.,G.<br/>H: 01 34 30.3, h: 33 Km.<br/>Northern India.<br/>Mag. 5.1 (CGS).</p> <p>2. ePZ 16 30 45 S.H.<br/>SE 31 04.7 S.H.</p> <p>2. iPZ 23 56 20.5 S.H.,G.<br/>eSN 00 05 40 G.<br/>Compression.<br/>H: 23 45 00.1, h: 33 Km.<br/>Kurile Islands.<br/>Mag. 4.9 (CGS).</p> <p>3. ePZ 05 41 01 S.H.<br/>Minor trace.</p> <p>3. iPZ 08 21 19.2 S.H.<br/>eSEZ 41 S.H.<br/>Compression.</p> <p>3. ePZ 17 18 23 S.H.<br/>eSE 42 S.H.</p> <p>4. ePZ 01 30 04 S.H.<br/>Minor trace.</p> <p>4. ePEZ 05 13 56 G.<br/>ePPEZ 15 23 G.<br/>eSE 19 44 G.<br/>H: 05 06 47.0, h: 38 Km.<br/>Near east of Algeria,<br/>Bir Hadada.<br/>Mag. 5.2 (CGS).</p> | <p>4. ePZ 13 43 03 S.H.,G.<br/>iPPZ 45 24.0 S.H.,G.<br/>ePPPZ 47 05 S.H.,G.<br/>SNE 51 57 S.H.,G.<br/>ScSN 53 03.0 G.<br/>eSSNE 56 14 G.<br/>LE 59 25 G.<br/>H: 13 32 12.3, h: 33 Km.<br/>Near east coast of Baffin Is.<br/>Mag. <math>6\frac{1}{4}</math>-<math>6\frac{1}{2}</math>(Pas), 6(Bks),<br/>5.9 (CGS).</p> <p>5. ePZ 08 56 30 S.H.<br/>Minor trace.</p> <p>5. iPZ 18 54 28.9 S.H.<br/>SE 43.0 S.H.<br/>Dilatation.</p> <p>6. PZ 06 14 14.7 S.H.<br/>eSN 22 42 G.<br/>eScSN 23 44 G.<br/>LN 29 32 G.<br/>H: 06 03 52.1, h: 33 Km.<br/>Sea of Japan.<br/>Mag. 5.4 (CGS).</p> <p>6. ePZ 10 37 43 S.H.<br/>Distant shock.</p> <p>7. PZ 01 27 17.6 S.H.,G.<br/>eSN 35 42 G.<br/>LN 42 34 G.<br/>H: 01 16 55.1, h: 33 Km.<br/>Off east coast of south Korea.<br/>Mag. 5.3 (CGS).</p> <p>7. ePZ 06 27 56 S.H.<br/>Minor trace.</p> |
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22 JAN 1964  
RICHMOND,  
SURREY. - 1 -

7.	PZ	07 25 02.0	S.H. G.	10.	ePZ	17 13 51	S.H.
	H:	07 13 39.9, h: 33 Km.			Distant.		
		Kurile Islands.		11.	ePZ	00 08 49	S.H.
		Mag. 5.2 (CGS).			Minor trace.		
7.	ePZ	08 56 41	S.H.	11.	iPZ	08 53 25.5	S.H.
	Minor trace.				SE	50.0	S.H.
7.	ePZ	12 03 26	S.H.		Compression.		
	Minor trace.			11.	ePZ	23 11 37	S.H.
7.	ePZ	12 55 14	S.H.		Minor trace.		
	Minor trace.			12.	ePZ	08 22 37	S.H.,G.
8.	ePZ	04 35 03	S.H.		eSN	25 34	G.
	Minor trace.				H:	08 18 57.9, h: 55 Km.	
8.	iPZ	06 29 02.2	S.H.		Cyprus .		
	iSNE	18.5	S.H.		Mag. 5.0 (CGS).		
	Compression.			12.	ePZ	12 19 17	S.H.
8.	ePZ	16 57 43	S.H.		SNE	20 23.0	G.
	Local.			12.	ePZ	22 32 30	S.H.
8.	eP'Z	20 08 48	S.H.		eSE	33 56	S.H.
	PPZ	11 29	S.H.,G.	13.	ePZ	14 34 01	S.H.
	H:	19 50 29.8, h: 550 Km.			eSNE	35 51	S.H.,G.
		Fiji Islands region.		13.	PZ	20 00 06.7	S.H.
		Mag. 5.7 (CGS).			SEZ	25.0	S.H.
9.	ePZ	02 25 14	S.H.	14.	ePZ	00 28 17	S.H.
	SNEZ	31.5	S.H.		Minor trace.		
9.	ePZ	02 59 38	G.	14.	ePZ	01 08 39	S.H.
	ePPEZ	03 03 49	G.		eSEZ	57	S.H.
	eSKSE	10 31	G.	14.	ePZ	04 11 44	S.H.
	(PPS)E	13 31	G.		Distant.		
	H:	02 45 45.5, h: 34 Km.		14.	ePZ	07 28 38	S.H.
		New Britain.			Minor trace.		
		Mag. 5.6 (CGS).		14.	ePZ	09 43 31	S.H.
9.	iPZ	06 57 19.4	S.H.		Minor trace.		
	iSE	35.7	S.H.	14.	ePZ	11 17 54	S.H.
10.	ePZ	13 13 41	S.H.		eSE	18 42	S.H.
	Minor trace.			14.	ePZ	12 07 01	S.H.
10.	ePZ	13 47 20	S.H.		SE	48	S.H.
	SNE	48 25.3	S.H.,G.				
10.	ePZ	16 10 31	S.H.				
	SN	11 29	S.H.,G.				

14.	ePZ	12 33 54	S.H.	18.	ePZ	16 01 45	S.H.
	eSE	34 36	S.H.		eSNE	02 43	S.H.
14.	ePZ	14 06 02	S.H.	18.	iPNEZ	17 02 24.4	S.H.
	Local.				iSNE	06 09.2	G.
15.	ePZ	01 01 47	S.H.,G.		?Z	08 35	S.H.,G.
	P'Z	05 16	S.H.,G.		Dilatation.		
	PPZ	06 37.8	S.H.	H:	16 58 12.5, h: 33 Km.		
	?EZ	07 37.2	S.H.		Turkey.		
	?E	09 33	S.H.		Mag. $6\frac{1}{4}$ (Pas), 53/4-6(Pal),		
H:	00 46 54.1, h: 43 Km.				5.2(CGS).		
	Santa cruz Islands.			18.	ePZ	22 52 11	S.H.
	Mag. $7\frac{1}{4}$ - $7\frac{1}{2}$ (Pas), 63/4-7(Pal),				Minor trace.		
	6.3 (CGS).			19.	ePZ	00 52 09	S.H.
15.	ePZ	02 04 09	S.H.		Minor trace.		
	Minor trace.			19.	ePZ	03 36 10	S.H.
15.	iPZ	02 31 54.3	S.H.		eSEZ	37 03	S.H.
	iSNE	32 11.8	S.H.	19.	iPZ	05 10 28.5	S.H.
	Dilatation.				iSNE	46.5	S.H.
15.	ePZ	04 38 47	S.H.	19.	ePZ	10 48 09	S.H.
	Minor trace.				Minor trace.		
15.	ePZ	09 44 05	S.H.	19.	ePZ	16 34 27	S.H.
	eSE	21	S.H.	H:	16 31 15.0, h: 37 Km.		
16.	ePZ	09 01 56	S.H.		Afghanistan, Pakistan border.		
	eSE	02 51	S.H.		Mag. 4.2 (CGS).		
16.	ePZ	16 04 24	S.H.	19.	ePZ	16 58 58	S.H.
	eSE	05 23	S.H.		Minor trace.		
17.	ePZ	19 35 04	G.	19.	ePZ	18 54 27	S.H.
	eP'Z	38 53	G.		Minor trace.		
	PPZ	39 51.5	G.	19.	ePZ	21 36 58	S.H.
	ePSEZ	49 34	S.H.		Minor trace.		
H:	19 20 08.2, h: 17 Km.			20.	ePZ	03 11 54	S.H.
	Santa cruz Islands.				ePPZ	13 41	S.H.
	Mag. $7\frac{1}{4}$ (Pas), $7\frac{1}{2}$ (Brk),				ePPPZ	14 45	S.H.
	7(Pal), 6.1(CGS).			H:	03 03 32.9, h: 33 Km.		
18.	iPZ	08 22 11.5	S.H.		Svalbard region.		
	SNEZ	30.2	S.H.		Mag. 4.7 (CGS).		
	Compression.			20.	ePZ	10 34 08	S.H.
18.	ePZ	15 43 23	S.H.		eSE	35 50	S.H.
	eSNE	44 24	G.	20.	ePZ	12 42 22	S.H.
H:	15 42 02.7, h: 33 Km.				eSE	48	S.H.
	Turkmen. S.S.R.						
	Mag. 5.1 (CGS).						

20. ePZ 21 16 11 S.H.  
Minor trace.
21. PZ 01 05 42.8 S.H.  
eSE 06 06 S.H.
21. ePZ 09 08 21 S.H.  
Minor trace.
21. ePZ 17 25 11 S.H.  
Minor trace.
22. eP'Z 03 15 28 S.H.  
e?EZ 17 48 G.  
ePKSEZ 19 08 G.  
H: 02 56 24.3, h: 28 Km.  
Fiji Islands region.  
Mag. 5.8 (CGS).
- 22; ePZ 10 42 50 S.H.  
eSNZ 45 31 G.  
H: 10 40 55.8, h: 33 Km.  
Southern Iran.  
Mag. 4.7 (CGS).
22. PZ 14 01 55.8 S.H.  
eSNEZ 02 09 S.H.
22. ePZ 22 37 30 S.H.  
H: 22 32 10.0, h: 33 Km.  
Ionian Sea.  
Mag. 4.6 (CGS).
23. PZ 06 50 17.5 S.H.,G.  
ePPZ 52 26 G.  
eSE 58 14 G.  
H: 06 40 36.5, h: 33 Km.  
Northern Rhodesia.  
Mag. 5.5 (CGS).
23. PZ 09 11 37.4 S.H.,G.  
ePPZ 13 42 G.  
SE 19 35.5 G.  
eLN 32.5 G.  
Dilatation.  
H: 09 01 56.8, h: 33 Km.  
Northern Rhodesia.  
Mag. 5.8 (CGS).
23. ePZ 17 14 59 S.H.  
Distant.
23. iPZ 18 35 17.6 S.H.  
eSN 52 S.H.  
Compression.  
H: 18 33 47.4, h: 39 Km.  
Persian Gulf.  
Mag. 4.7 (CGS).
23. ePZ 19 21 15 S.H.  
SNE 23 02.9 G.
23. ePZ 22 33 18 S.H.  
Distant.
24. PZ 00 44 50.5 S.H.  
Local.
24. ePZ 02 14 59 S.H.  
SNE 18 31.0 G.  
H: 02 10 44.9, h: 33 Km.  
Turkey.  
Mag. 4.6 (CGS).
24. ePZ 07 24 01 S.H.  
Local.
24. ePZ 09 23 19 S.H.  
Distant.
24. ePZ 12 34 13 S.H.  
eSE 35 48 S.H.,G.
24. P'Z 16 49 16.7 S.H.,G.  
pP'Z 41.0 G.  
PPZ 51 19.0 G.  
pPPZ 33.0 G.  
?Z 52 34 G.  
(SKS)Z 58 14 G.  
?Z 17 01 15 G.  
H: 16 30 16.0, h: 80 Km.  
Near coast of Peru.  
Mag. 7(Pas), 6½(Brk), 6.0(CGS).
25. PZ 07 13 35.9 S.H.,G.  
ePPZ 15 39 G.  
H: 07 03 54.6, h: 33 Km.  
Northern Rhodesia.  
Mag. 5.8 (CGS).
26. PZ 05 40 38.9 S.H.,G.  
eSNE 51 09 G.  
H: 05 28 07.3, h: 33 Km.  
Andreanof Islands, Aleutian Is.  
Mag. 5.3 (CGS).

27. ePE 00 57 05 S.H.  
Minor trace.
27. ePZ 11 15 27 S.H.  
eSE 24 55 G.  
eScSNE 25 41 G.  
H: 11 04 17.3, h: 17 Km.  
Off east coast of Leyte,  
Philippine Islands.  
Mag. 5.3 (CGS).
27. ePZ 17 13 00 S.H.  
e?N 16 38 G.  
H: 17 09 33, h: 88 Km.  
West Pakistan.  
Mag. 4.7 (CGS).
28. ePZ 07 19 29 S.H.  
Minor trace.
28. ePZ 14 31 45 S.H.  
Local.
28. ePZ 18 52 41 S.H.  
Minor trace,
28. ePZ 23 11 40 S.H.  
Local.
29. ePZ 02 44 13 S.H.  
Minor trace.
29. ePZ 10 43 27 S.H.  
H: 10 39 58.4, h: 214 Km.  
Hindu Kush.  
Mag. 4.8 (CGS).
29. ePZ 13 39 58 S.H.,G.  
eSNE 43 34 G.  
H: 13 35 45.3, h: 33 Km.  
Near north coast of Turkey.  
Mag. 4.5 (CGS).
29. ePZ 15 35 18 S.H.  
H: 15 31 31.4, h: 150 Km.  
Hindu Kush.  
Mag. 4.9 (CGS).
29. ePZ 19 36 26 S.H.  
eSNE 40 46 G.  
H: 19 31 22.7, h: 33 Km.  
Arabian Sea.
29. PZ 19 46 24.0 S.H.,G.  
epPZ 48 G.  
eSNE 55 44 G.  
H: 19 35 01.6, h: 117 Km.  
Mindanao, Philippine Is.  
Mag. 5.3 (CGS).
29. iPZ 22 22 17.9 S.H.  
SNE 27 07 G.  
H: 22 16 38.6, h: 47 Km.  
Ionian Sea.  
Mag. 5.3 (CGS).
29. ePZ 05 39 13 S.H.  
Minor trace.

*Swp*

SEISMOLOGICAL BULLETIN OF  
INSTITUTE OF GEOPHYSICS  
TEHRAN UNIVERSITY, IRAN

Lat.  $35^{\circ}44'16''$  N.      a = + 0.50773  
Long.  $51^{\circ}23'08''$  E.      b = + 0.63570  
Height ... 1360 M.        c = + 0.58146

OCTOBER 1963

1. ePZ 01 48 36 S.H.      4. ePZ 06 19 59 S.H.  
Minor trace.              Local.

1. ePZ 17 26 57 S.H.      4. ePNEZ 13 34 10 G.  
eSE 31 19 G.              eSNE 37 56 G.  
H: 17 21 54.0, h: 106 Km.      H: 13 29 44.6, h: 33 Km.  
South of Greece.              Arabian Sea.  
Mag. 4.6 (CGS).              Mag. 5.3 (CGS).

1. ePZ 18 32 41 S.H.      5. ePZ 02 32 58 G.  
Minor trace.              Distant shock.

1. ePZ 18 49 38 S.H.      5. ePZ 03 04 51 G.  
eSEZ 50 43 S.H.,G.        eSN 06 02 G.

*X* 2. eP'Z 06 06 32 G.      5. ePZ 15 03 12 G.  
e?NEZ 10 09 G.              eSNEZ 07 46 G.  
ePPSE 21 39 G.              *X* H: 14 57 47.4, h: 33 Km.  
H: 05 47 05.5, h: 33 Km.      French Somaliland.  
Tonga Islands.              Mag. 5.3 (CGS).

2. ePZ 09 01 27 S.H.      5. ePZ 17 23 50 G.  
eSE 02 24 G.              eSNEZ 28 30 G.  
H: 17 18 25.0, h: 33 Km.  
French Somaliland.

2. ePZ 15 01 13 S.H.      5. ePZ 20 39 02 S.H.  
Local.                      Distant shock.

*X* 2. ePZ 21 10 13 S.H.      5. ePZ 21 48 25 S.H.,G.  
H: 21 05 14.7, h: 72 Km.      e?NE 53 03 G.  
Near west coast of Crete.      Distant shock.  
Mag. 4.5 (CGS).

3. ePE 14 51 14 S.H.      6. ePZ 05 06 32 S.H.  
eSNE 52 39 G.              Distant shock.

*X* 3. iPZ 23 35 11.9 G.      6. ePZ 07 34 20 S.H.  
eSE 44 03 G.              eSNZ 39 S.H.  
H: 23 24 34.7, h: 33 Km.      6. ePZ 17 37 03 S.H.  
Compression.              Minor trace.  
Kyushu, Japan.

Mag.  $6\frac{1}{2}$ (Pas), 6(Pal), 5.7(CGS).



- |    |   |             |            |      |   |             |            |          |      |
|----|---|-------------|------------|------|---|-------------|------------|----------|------|
| 6. | ePZ   | 18 51 40    | S.H.       | 9.   | ePZ   | 18 22 40    | S.H.       |          |      |
|    | e?NE  | 56 17       | G.         |      | eSE   | 24 49       | S.H.       |          |      |
|    | Distant shock.                                      |             |            |      |   |             |            |          |      |
| 7. | ePPZ  | 13 35 23    | S.H.,G.    | 9.   | ePZ   | 20 49 14    | S.H.       |          |      |
|    | e?Z   | 39 15       | G.         |      | Local.  |             |            |          |      |
|    | eSKKSE  | 41 23       | G.         | 9.   | ePZ   | 22 52 55    | S.H.       |          |      |
| X  | H:  | 13 14 24.6, | h: 550 Km. |      | eSNE  | 53 34       | G.         |          |      |
|    | Fiji Islands region.                                |             |            |      |   |             |            |          |      |
|    | Mag. 5.7 (CGS).                                     |             |            | 10.  | ePZ   | 10 26 43    | S.H.       |          |      |
|    |   |             |            |      | Minor trace.  |             |            |          |      |
| X  | 7.  | ePZ         | 23 42 50   | S.H. | 12.   | iPZ         | 11 38 13.8 | S.H.     |      |
|    | H:  | 23 34 26.6, | h: 33 Km.  |      | ePPZ  | 41 13       | S.H.       |          |      |
|    | Outer Mongolia, Inner Mongolia                      |             |            | X    | ePPPZ   | 42 13       | S.H.       |          |      |
|    | border.   |             |            |      | eSE   | 47 53       | G..        |          |      |
|    | Mag. 4.9 (CGS).                                     |             |            |      | H:  | 11 26 57.9, | h: 40 Km.  |          |      |
|    |   |             |            |      | Kurile Islands.                                     |             |            |          |      |
|    |   |             |            |      | Mag. 6 $\frac{3}{4}$ -7(Pas),7(Bks),                |             |            |          |      |
|    |   |             |            |      | 6 $\frac{3}{4}$ -4(Pal).                            |             |            |          |      |
| X  | 8.  | eP'Z        | 00 36 24   | S.H. | X   | 12.         | ePZ        | 13 18 22 | S.H. |
|    | ePKSEZ  | 39 53       | G.         |      | H:  | 13 07 07.9, | h: 50 Km.  |          |      |
|    | H:  | 00 17 01.1, | h: 33 Km.  |      | Mag. 4.8 (CGS).                                     |             |            |          |      |
|    | Samoa Islands region.                               |             |            |      |   |             |            |          |      |
|    | Mag. 6(Pas),5 $\frac{1}{2}$ -5 $\frac{3}{4}$ (Bks), |             |            |      | 12.   | ePZ         | 15 28 51   | S.H.     |      |
|    | 5.7 (CGS).  |             |            |      | Local.  |             |            |          |      |
| 8. | ePZ   | 01 37 07    | S.H.       | 12.  | ePZ   | 19 11 57    | S.H.       |          |      |
|    | Local.  |             |            |      | Minor trace.  |             |            |          |      |
| 8. | ePZ   | 02 58 36    | S.H.       |      |   |             |            |          |      |
|    | Minor trace.  |             |            | 13.  | PZ  | 05 29 11.8  | S.H.       |          |      |
| 8. | ePZ   | 04 02 47    | S.H.       | X    | H:  | 05 17 57.1, | h: 60 Km.  |          |      |
|    | Distant shock.                                      |             |            |      | Compression.  |             |            |          |      |
| 8. | ePZ   | 05 45 52    | S.H.       |      | Kurile Islands.                                     |             |            |          |      |
|    | eScSE   | 56 47       | G.         |      | Mag. 8 $\frac{1}{4}$ (Pas),7 $\frac{3}{4}$ -8(Pal). |             |            |          |      |
|    | H:  | 05 40 28.7, | h: 33 Km.  |      | 13.   | ePZ         | 12 41 04   | S.H.     |      |
|    | Near Ionian coast of Greece.                        |             |            |      | H:  | 12 29 39.2, | h: 30 Km.  |          |      |
|    | Mag. 4.3 (CGS).                                     |             |            |      | Kurile Islands.                                     |             |            |          |      |
| 8. | ePZ   | 13 24 40    | S.H.       |      | Mag. 5.0 (CGS).                                     |             |            |          |      |
|    | Distant shock.                                      |             |            |      |   |             |            |          |      |
| 8. | ePZ   | 18 53 42    | S.H.       | 13.  | ePZ   | 12 52 04    | S.H.       |          |      |
|    | eSE   | 55 51       | G.         |      | H:  | 12 40 44.2, | h: 45 Km.  |          |      |
| 9. | ePZ   | 04 38 36    | S.H.       |      | Kurile Islands.                                     |             |            |          |      |
|    | eSE   | 40 45       | G.         |      | Mag. 4.6 (CGS).                                     |             |            |          |      |
|    | H:  | 04 36 43.6, | h: 35 Km.  | X    | 13.   | ePZ         | 12 53 29   | S.H.     |      |
|    | Eastern Turkey.                                     |             |            |      | H:  | 12 42 13.0, | h: 55 Km.  |          |      |
|    | Mag. 4.6 (CGS).                                     |             |            |      | Kurile Islands.                                     |             |            |          |      |
| 9. | ePZ   | 06 06 03    | S.H.       |      | Mag. 5.2 (CGS).                                     |             |            |          |      |
|    | eSNEZ   | 07 00       | S.H.       |      |   |             |            |          |      |

13. iPZ 13 09 39.8 S.H.  
 H: 12 58 21.6, h: 50 Km.  
 Kurile Islands.  
 Mag. 5.4 (CGS).

13. ePZ 14 05 51 S.H.  
 H: 13 54 24.8, h: 50 Km.  
 Kurile Islands.  
 Mag. 4.8 (CGS).

13. ePZ 14 37 30 S.H.  
 H: 14 26 11.9, h: 50 Km.  
 Kurile Islands.  
 Mag. 5.1 (CGS).

13. iPZ 16 11 11.8 S.H.  
 eSN 20 25 G.  
 H: 15 59 52.9, h: 35 Km.  
 Compression.  
 Kurile Islands.  
 Mag. 6.1 (CGS).

13. ePZ 16 40 18 S.H.  
 H: 16 28 58.2, h: 40 Km.  
 Kurile Islands.  
 Mag. 5.2 (CGS).

13. ePZ 17 37 18 S.H.  
 H: 17 25 55.4, h: 45 Km.  
 Kurile Islands.  
 Mag. 4.6 (CGS).

13. ePZ 19 37 27 S.H.  
 H: 19 26 04.2, h: 30 Km.  
 Kurile Islands.  
 Mag. 4.6 (CGS).

13. ePZ 19 39 00 S.H.  
 H: 19 27 38.2, h: 45 Km.  
 Kurile Islands.  
 Mag. 5.5 (CGS).

13. ePZ 21 47 02 S.H.  
 H: 21 35 37.3, h: 45 Km.  
 Kurile Islands.  
 Mag. 4.7 (CGS).

13. PZ 22 06 26.4 S.H.  
 e?Z 30 S.H.  
 ?Z 08 06.8 S.H.  
 eSN 15 57 G.  
 H: 21 55 00.8, h: 50 Km.  
 Dilatation.  
 Kurile Islands.  
 Mag. 5.5 (CGS).

13. ePZ 22 14 19 S.H.  
 H: 22 02 58.1, h: 45 Km.  
 Kurile Islands.  
 Mag. 4.9 (CGS).

13/14. ePZ 00 03 45 S.H.  
 H: 23 52 22.8, h: 50 Km.  
 Kurile Islands.  
 Mag. 5.5 (CGS).

14. ePZ 00 14 23 S.H.  
 H: 00 03 04.1, h: 60 Km.  
 Kurile Islands.  
 Mag. 4.7 (CGS).

14. ePZ 04 17 20 S.H.  
 H: 04 06 01.7, h: 50 Km.  
 Kurile Islands.  
 Mag. 5.3 (CGS).

14. PZ 04 22 35.8 S.H.  
 H: 04 11 14.0, h: 45 Km.  
 Compression.  
 Kurile Islands.  
 Mag. 5.3 (CGS).

14. ePZ 05 35 35 S.H.  
 H: 04 24 12.3, h: 55 Km.  
 Kurile Islands.  
 Mag. 4.9 (CGS).

14. ePZ 08 05 56 S.H.  
 H: 07 54 33.9, h: 55 Km.  
 Kurile Islands.  
 Mag. 5.1 (CGS).

14. PZ 13 33 06.4 S.H.  
 SN 42 26.4 G.  
 H: 13 21 45.2, h: 60 Km.  
 Compression.  
 Kurile Islands.  
 Mag. 5.3/4(Bks), 5.9(CGS).

14. ePZ 18 01 35 S.H.  
 H: 17 50 15.3, h: 60 Km.  
 Kurile Islands.  
 Mag. 5.0 (CGS).

14. ePZ 21 16 26 S.H.  
 Distant shock.

X ✓ 15. ePZ 08 11 34 S.H.  
e?Z 46 S.H.  
H: 08 00 11.5, h: 40 Km.  
Kurile Islands.  
Mag. 4.9 (CGS).

X ✓ 15. PZ 09 13 26.1 S.H.  
H: 09 02 08.3, h: 40 Km.  
Kurile Islands.  
Mag. 5.4 (CGS).

X ✓ 15. ePZ 10 08 24 S.H.  
ePPZ 10 20 S.H.  
eSN 15 40 G.  
eSSN 19 18 G.  
H: 09 59 30.1, h: 33 Km.  
North of Iceland.  
Mag. 5½(Pal), 5.2 (CGS).

X ✓ 15. ePZ 10 58 29 S.H.  
H: 10 47 12.6, h: 50 Km.  
Kurile Islands.  
Mag. 5.4 (CGS).

15. ePZ 12 05 10 S.H.  
H: 11 53 45.5, h: 55 Km.  
Kurile Islands.  
Mag. 4.8 (CGS).

X ✓ 15. ePZ 18 35 29 S.H.  
eSN 44 42 G.  
H: 18 23 57.8, h: 35 Km.  
Kurile Islands.  
Mag. 4.9 (CGS).

X ✓ 15. ePZ 21 57 22 S.H.  
eSN 22 07 36 G.  
H: 21 44 58.0, h: 27 Km.  
Ceram.  
Mag. 5.2 (CGS).

16. ePZ 05 26 58 S.H.  
H: 05 15 36.1, h: 33 Km.  
Kurile Islands.  
Mag. 5.2 (CGS).

16. ePZ 08 45 07 S.H.  
H: 08 33 42.0, h: 45 Km.  
Kurile Islands.  
Mag. 5.0 (CGS).

16. ePZ 10 42 15 S.H.  
H: 10 30 55.2, h: 45 Km.  
Kurile Islands.  
Mag. 5.0 (CGS).

X ✓ 16. iPZ 15 47 05.3 G.  
eSNEZ 50 36 S.H.,G.  
H: 15 43 00.8, h: 33 Km.  
Compression.  
Tadzhik S.S.R.  
Mag. 5.9 (CGS).

16. ePZ 19 04 38 S.H.  
eSN 07 18 G.  
H: 19 02 25.0, h: 32 Km.  
Southern Iran.  
Mag. 4.8 (CGS).

X ✓ 16. ePZ 20 35 15 S.H.  
H: 20 31 15, h: 70 Km.  
Tadzhik S.S.R.

X ✓ 16. ePZ 21 42 12 S.H.  
e?Z 16 S.H.  
H: 21 30 52.7, h: 80 Km.  
Kurile Islands.  
Mag. 5.0 (CGS).

17. ePZ 08 22 16 S.H.  
H: 08 10 55.2, h: 45 Km.  
Kurile Islands.  
Mag. 4.7 (CGS).

X ✓ 17. ePZ 09 37 30 S.H.  
eSN 40 52 G.  
H: 09 33 24.0, h: 40 Km.  
Tadzhik S.S.R.  
Mag. 4.4 (CGS)

17. ePZ 23 35 49 G.  
eSN 44 00 G.  
H: 23 24 34.4, h: 45 Km.  
Kurile Islands.  
Mag. 5.4 (CGS).

X ✓ 18. ePZ 09 04 51 S.H.  
H: 08 53 33.9, h: 60 Km.  
Kurile Islands.  
Mag. 5.0 (CGS).

- |   |   |
|---|---|
| 18. ePZ 18 06 19 S.H.<br>H: 17 55 00.2, h: 40 Km.<br>Kurile Islands.<br>Mag. 5.2 (CGS).                             | 19. ePZ 18 13 21 S.H.<br>Distant shock.   |
| 18. ePZ 20 16 37 S.H.<br>H: 20 05 14.4, h: 40 Km.<br>Kurile Islands.<br>Mag. 5.1 (CGS).                             | X 20. ePZ 01 04 30 S.H.,G.<br>eSN 14 01 S.H.<br>H: 00 53 07.2, h: 25 Km.<br>Kurile Islands.<br>Mag. 6.3/4-7(Pas). 7 $\frac{1}{4}$ -7 $\frac{1}{2}$ (Pal), |
| X 18. ePZ 21 34 13 S.H.<br>e?Z 25 S.H.<br>H: 21 22 52.7, h: 45 Km.<br>Kurile Islands.<br>Mag. 5.0 (CGS).            | 20. ePZ 06 21 48 S.H.<br>H: 06 10 25.0, h: 50 Km.<br>Kurile Islands.<br>Mag. 5.2 (CGS).   |
| X 19. ePZ 02 30 03 S.H.<br>eSN 39 30 G.<br>H: 02 18 37.9, h: 45 Km.<br>Kurile Islands.<br>Mag. 5.2 (CGS).           | 20. ePZ 08 37 32 S.H.<br>H: 08 26 12.3, h: 33 Km.<br>Kurile Islands.<br>Mag. 4.9 (CGS).   |
| 19. ePZ 03 26 28 S.H.<br>H: 03 15 02.5, h: 40 Km.<br>Kurile Islands.<br>Mag. 5.1 (CGS).                             | X 20. ePZ 09 22 04 S.H.<br>e?Z 09 S.H.<br>eSNE 31 23 G.<br>H: 09 10 43.9, h: 40 Km.<br>Kurile Islands.<br>Mag. 5.5 (CGS).                                 |
| X 19. ePZ 03 45 46 S.H.,G.<br>H: 03 34 19.6, h: 33 Km.<br>Kurile Islands.<br>Mag. 5 $\frac{1}{2}$ (Pal), 5.4 (CGS). | X 20. PZ 12 03 40.4 S.H.,G.<br>e?Z 48 S.H.<br>eSNE 13 01 G.<br>H: 11 52 20.7, h: 45 Km.<br>Compression.<br>Kurile Islands.<br>Mag. 5.1 (CGS).             |
| X 19. PZ 03 58 35.0 S.H.<br>H: 03 47 07.7, h: 25 Km.<br>Compression.<br>Kurile Islands.<br>Mag. 5.2 (CGS).          | X 20. ePZ 13 07 50 S.H.<br>H: 12 59 58.6, h: 0 Km.<br>Southern Algeria.<br>Mag. 5.6 (CGS).  |
| 19. ePZ 06 50 08 S.H.<br>H: 06 46 06.7, h: 33 Km.<br>Kirghiz S.S.R.<br>Mag. 5.0 (CGS).                              | 20. ePZ 13 32 33 S.H.<br>H: 13 21 14.1, h: 45 Km.<br>Kurile Islands.<br>Mag. 5.2 (CGS).   |
| X 19. ePZ 16 26 37 S.H.<br>eSN 35 59 G.<br>H: 16 15 21.4, h: 120 Km.<br>Kurile Islands.<br>Mag. 5.1 (CGS).          | X 20. ePZ 17 52 46 S.H.<br>H: 17 41 27.3, h: 45 Km.<br>Kurile Islands.<br>Mag. 4.8 (CGS).   |
| 19. ePZ 18 06 25 S.H.<br>Minor trace.   | X 20. ePZ 18 10 16 S.H.<br>H: 17 58 58.7, h: 45 Km.<br>Kurile Islands.<br>Mag. 5.0 (CGS).   |

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|---|--|
| 21. ePZ 13 20 28 S.H.<br>e?Z 40 S.H.<br>H: 13 09 05.4, h: 45 Km.<br>Kurile Islands.<br>Mag. 4.8 (CGS).                  | 24. iPZ 01 17 47.2 S.H.<br>e?Z 18 00 S.H.<br>eSNE 27 07 G.<br>H: 01 06 25.9, h: 45 Km.<br>Compression.<br>Kurile Islands.<br>Mag. 5.0 (CGS).                   |
| 21. ePZ 14 53 19 S.H.<br>H: 14 49 14.9, h: 84 Km.<br>Tadzhik S.S.R.<br>Mag. 4.8 (CGS).                                  | 24. ePZ 01 56 40 S.H.<br>Minor trace.  |
| 21. ePZ 15 49 38 S.H.<br>H: 15 38 24.3, h: 55 Km.<br>Kurile Islands.<br>Mag. 5.4 (CGS).                                 | 24. ePZ 05 34 11 S.H.<br>Minor trace.  |
| 21. ePZ 17 32 07 S.H.<br>H: 17 20 46.0, h: 65 Km.<br>Kurile Islands.<br>Mag. 5.0 (CGS).                                 | 24. PZ 07 36 46.4 S.H.,G.<br>e?Z 37 00 S.H.<br>SNE 45 14.0 G.<br>H: 07 26 23.9, h: 50 Km.<br>Compression.<br>Off coast of Sumatra.<br>Mag. 6.0(Pal), 6.1(CGS). |
| 21. ePZ 23 30 03 S.H.<br>H: 23 18 41.3, h: 50 Km.<br>Kurile Islands.<br>Mag. 4.9 (CGS).                                 | 24. ePZ 20 29 32 S.H.<br>Minor trace.  |
| 21. ePZ 23 44 32 S.H.<br>H: 23 33 16.1, h: 55 Km.<br>Kurile Islands.<br>Mag. 4.7 (CGS).                                 | 25. ePZ 17 03 39 S.H.<br>eSE 59 S.H.   |
| 22. PZ 03 28 34.7 G.<br>eSNE 37 55 G.<br>H: 03 17 15.2, h: 45 Km.<br>Compression.<br>Kurile Islands.<br>Mag. 5.2 (CGS). | 25. ePZ 20 11 49 S.H.,G.<br>eSNE 22 01 G.<br>H: 19 58 58.3, h: 29 Km.<br>Mariana Islands.<br>Mag. 5.4 (CGS).   |
| 22. ePZ 17 08 31 S.H.<br>Minor trace.   | 26. ePZ 04 06 59 S.H.<br>eSNE 16 17 G.<br>H: 03 55 39.7, h: 55 Km.<br>Kurile Islands.<br>Mag. 5.1 (CGS).   |
| 23. ePZ 00 17 35 S.H.<br>H: 00 06 09.0, h: 20 Km.<br>Kurile Islands.<br>Mag. 5.2 (CGS).                                 | 26. ePZ 06 11 02 S.H.<br>H: 05 59 44.2, h: 60 Km.<br>Kurile Islands.<br>Mag. 5.1 (CGS).  |
| 23. ePZ 09 58 14 S.H.<br>Distant shock.   | 26. ePZ 07 28 28 S.H.<br>Minor trace.  |
| 23. ePZ 18 46 00 S.H.<br>H: 18 34 38.0, h: 50 Km.<br>Kurile Islands.<br>Mag. 4.2 (CGS).                                 | 26. ePZ 11 33 07 S.H.<br>H: 11 21 47.6, h: 55 Km.<br>Kurile Islands.<br>Mag.5(Pal), 5.4 (CGS).   |

- |     |      |  |         |     |                |  |      |
|-----|------|--|---------|-----|----------------|--|------|
| 26. | ePZ  | 11 43 12   | S.H.    | 28. | ePZ            | 21 59 34   | S.H. |
|     | H:   | 11 31 53.0, h: 55 Km.                                |         |     | Minor trace.   |  |      |
|     |      | Kurile Islands.                                      |         | 29. | ePZ            | 22 30 30   | S.H. |
|     |      | Mag. 5.1 (CGS).                                      |         |     | Distant shock. |  |      |
| 26. | ePZ  | 12 10 34   | S.H.    | 29. | PZ             | 23 14 42.1                                       | S.H. |
|     | eSNE | 11 56  | G.      |     | SEZ            | 15 00.9  | S.H. |
| 27. | ePZ  | 00 10 24   | S.H.    |     | Compression.   |  |      |
|     |      | Minor trace.   |         | 30. | ePZ            | 11 03 06   | S.H. |
| 27. | PZ   | 02 54 59.7   | S.H.    |     | Minor trace.   |  |      |
|     | SNE  | 55 35.7  | S.H.,G. | 30. | ePZ            | 15 04 09   | S.H. |
| 27. | ePZ  | 13 44 30   | S.H.    |     | eSE            | 25   | S.H. |
|     |      | Minor trace.   |         | 31. | eP'Z           | 03 37 08   | S.H. |
| 27. | ePZ  | 20 16 57   | S.H.    |     | e?Z            | 38 16  | G.   |
|     |      | Minor trace.   |         |     | ePPEZ          | 40 44  | G.   |
| 27. | ePZ  | 20 43 38   | S.H.    | X   | H:             | 03 17 42.0, h: 33 Km.                            |      |
|     | SNE  | 52.6   | S.H.    |     |                | Tonga Islands.                                   |      |
| 28. | ePZ  | 12 04 39   | S.H.    |     |                | Mag. $6\frac{1}{4}$ (Pas), $5\frac{1}{2}$ (Bks), |      |
|     |      | Local.   |         |     |                | $6\frac{1}{4}$ - $6\frac{1}{2}$ (Pal), 5.2(CGS). |      |
| 28. | ePZ  | 12 14 45   | S.H.    | 31. | ePZ            | 09 59 12   | S.H. |
|     | eSNE | 24 05  | G.      |     | eSNE           | 10 02 05   | G.   |
| X   | H:   | 12 03 19.8, h: 33 Km.                                |         |     | H:             | 09 57 01.0, h: 35 Km.                            |      |
|     |      | Off east coast of Kamchatka.                         |         |     |                | Southern Iran.                                   |      |
|     |      | Mag. $5-5\frac{1}{4}$ (Bks), $5-5\frac{1}{4}$ (Pal), |         |     |                | Mag. 5.3 (CGS).                                  |      |
|     |      | 5.7 (CGS).   |         | 31. | ePZ            | 20 14 21   | S.H. |
| 28. | ePZ  | 20 48 13   | S.H.    |     | H:             | 20 10254.2, h: 105 Km.                           |      |
|     | H:   | 20 36 56.0, h: 45 Km.                                |         |     |                | Hindu Kush region.                               |      |
|     |      | Kurile Islands.                                      |         |     |                | Mag. 4.5 (CGS).                                  |      |
|     |      | Mag. 4.7 (CGS).                                      |         | 31. | ePZ            | 21 25 40   | S.H. |
|     |      |  |         |     |                | Local.   |      |

*One Panel 6955.*

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Lat. 35°44'16" N.      a = + 0.50773  
Long. 51°23'08" E.      b = + 0.63570  
Height ... 1360 M.      c = + 0.58146



NOVEMBER 1963

- |  |   |
|--|---|
| <p>1. PZ 01 28 18.9 S.H.<br/>SSNEZ 36.4 S.H.</p> <p>1. ePZ 07 07 29 S.H.,G.<br/>eSE 11 31 G.<br/>H: 07 02 41.7, h: 33 Km.<br/>Gulf of Aden.<br/>Mag. 5.1 (CGS).</p> <p>X 1. PZ 22 52 35.5 S.H.<br/>H: 22 41 23.8, h: 60 Km.<br/>Kurile Islands.<br/>Mag. 5.5 (CGS).</p> <p>2. iPZ 03 24 42.5 S.H.<br/>eSE 58 S.H.<br/>Dilatation.</p> <p>2. ePZ 20 09 51 S.H.<br/>eSE 10 08 S.H.</p> <p>X 3. eP'Z 03 29 09 S.H.<br/>ePPZ 30 52 S.H.<br/>SKSEN 36 12.4 G.<br/>SKKSEN 37 47.5 G.<br/>H: 03 10 12.7, h: 33 Km.<br/>Peru Ecuador boarder.<br/>Mag. 6<sup>3</sup>/<sub>4</sub>(Pas), 6-6<sup>1</sup>/<sub>4</sub>(Bks),<br/>6.0(Pal), 6.0(CGS).</p> <p>X 4. PZ 01 29 35.5 S.H.,G.<br/>SKSEN 39 52 S.H.<br/>H: 01 14 32.8, h: 154 Km.<br/>ComperSSION.<br/>New Hebrides Islands.<br/>Mag. 6<sup>3</sup>/<sub>4</sub>-7(Pas), 5.8(CGS).</p> <p>5. ePZ 04 25 52 S.H.<br/>Minor trace.</p> <p>5. ePZ 18 35 17 S.H.<br/>Minor trace.</p> | <p>6. ePZ 00 04 45 S.H.<br/>Minor trace.</p> <p>X 6. PZ 02 26 11.4 S.H.,G.<br/>?Z 30 20 G.<br/>?Z 32 30 G.<br/>SNE 37 02 G.<br/>H: 02 13 16.8, h: 33 Km.<br/>Dilatation.<br/>Western New Guinea.<br/>Mag. 5.7 (CGS).</p> <p>6. ePZ 03 13 12 S.H.<br/>Minor trace.</p> <p>X 6. PZ 09 36 21.0 S.H.,G.<br/>H: 09 24 49.2, h: 33 Km.<br/>Dilatation.<br/>Nera West coast of Kamchatka.<br/>Mag. 5.4 (CGS).</p> <p>6. IPZ 16 52 54.3 S.H.,G.<br/>SNE 53 18 S.H.<br/>Compression.</p> <p>7. ePZ 03 26 02 S.H.<br/>Minor trace.</p> <p>7. ePZ 09 34 17 S.H.<br/>Minor trace.</p> <p>7. ePZ 13 08 03 S.H.<br/>Minor trace.</p> <p>7. ePZ 17 06 03 S.H.<br/>Minor trace.</p> <p>7. ePZ 19 00 31 S.H.<br/>Minor trace.</p> <p>7. ePZ 20 49 20 S.H.<br/>Minor trace.</p> |
|--|---|

- |   |  |
|---|--|
| 8. iPZ 08 19 30.0 S.H.<br>H: 08 08 09.2, h: 40 Km.<br>Compression.<br>Kurile Islands.<br>Mag. 4.8 (CGS).  | 10. ePZ 09 01 23 S.H.<br>H: 08 50 06.1, h: 45 Km.<br>Kurile Islands.<br>Mag. 4.9 (CGS).  |
| 8. ePZ 10 09 06 S.H.<br>Minor trace.  | 10. ePZ 11 23 13 S.H.<br>eSE 27 09 G.<br>H: 11 18 32, h: 34 Km.<br>Aegean Islands region.<br>Mag. 4.5 (CGS).                                     |
| 8. ePZ 23 16 08 S.H.<br>Local.  | 10. ePZ 17 28 59 S.H.<br>SNE 38 16.0 G.<br>eP'P'Z 55 59 G.<br>H: 17 17 42.7, h: 40 Km.<br>Kurile Islands.<br>Mag. 5.5 (CGS).                     |
| 9. ePZ 02 56 41 S.H.<br>Minor trace.  | 11. ePZ 10 00 58 S.H.<br>Minor trace.  |
| 9. ePZ 07 38 14 S.H.<br>Local.  | 11. ePZ 11 55 17 S.H.<br>Local.  |
| 9. ePZ 08 38 50 S.H.<br>Local.  | 11. ePZ 13 11 47 S.H.<br>Minor trace.  |
| 9. PZ 09 02 38.5 S.H.<br>H: 08 51 18.6, h: 33 Km.<br>Compression.<br>Kurile Islands.<br>Mag. 5.2 (CGS).   | 12. PZ 07 10 37.0 S.H.,G.<br>SNEZ 13 59.0 G.<br>H: 07 06 31.2, h: 69 Km.<br>Dilatation.<br>Near southwest coast of<br>Turkey.<br>Mag. 5.0 (CGS), |
| 9. iPZ 12 49 49.7 S.H.<br>Compression.<br>Local.  | 12. ePZ 08 44 38 S.H.<br>H: 08 33 15.9, h: 50 Km.<br>Kurile Islands.<br>Mag. 4.9(CGS).   |
| 9. ePZ 19 42 17 S.H.<br>Minor trace.  | 12. ePZ 09 25 03 S.H.<br>eSE 22 S.H.   |
| 9. eP'Z 21 33 22 S.H.,G.<br>ePPZ 35 01 G.<br>ePPPZ 38 13 G.<br>H: 21 15 30.4, h: 600 Km.<br>Western Brazil.<br>Mag. $6\frac{3}{4}$ -7(Pas), $6\frac{3}{4}$ (Bks),<br>5.6 (CGS). | 12. iPZ 09 37 54.1 S.H.<br>SE 38 13 S.H.<br>Dilatation.  |
| 10. ePZ 01 18 28 S.H.<br>ePPZ 20 07 G.<br>H: 01 00 38.8, h: 600 Km.<br>Western Brazil.<br>Mag. $6\frac{1}{2}$ - $6\frac{3}{4}$ (Pas), $6\frac{1}{2}$ (Bks),<br>5.6 (CGS).       | 12. ePZ 17 30 30 S.H.<br>eSE 32 40 G.  |
| 10. ePZ 01 28 31 S.H.<br>Minor trace.   | 12. ePZ 19 46 10 S.H.<br>Minor trace.  |



- |     |  |            |          |  |     |  |            |      |  |
|-----|--|------------|----------|--|-----|--|------------|------|--|
| 12. | PZ   | 22 50 59.0 | S.H.     |  | 17. | ePZ  | 01 00 36   | S.H. |  |
|     | SE   | 51 09      | S.H.     |  |     | SN   | 11 07      | G.   |  |
|     |  |            |          |  | H:  | 00 48 02.6,  | h: 33 Km.  |      |  |
| 13. | ePZ  | 00 41 13   | S.H.     |  |     | North Atlantic Ocean.  |            |      |  |
|     | Local.   |            |          |  |     | Mag. $6\frac{1}{4}$ - $6\frac{1}{2}$ (Pas), $5\frac{1}{2}$ - $5\frac{3}{4}$ (Bks); |            |      |  |
|     |  |            |          |  |     | 6- $6\frac{1}{4}$ (Pal), 5.9 (CGS).  |            |      |  |
| 13. | PE   | 17 16 55.1 | S.H.     |  | 17. | ePZ  | 08 04 08   | S.H. |  |
|     | SE   | 17 14      | S.H.     |  |     | eSE  | 05 23      | S.H. |  |
| 14. | ePZ  | 05 18 33   | S.H.     |  | 18. | ePZ  | 01 45 00   | S.H. |  |
|     | Minor trace.   |            |          |  | H:  | 01 42 55.9,  | h: 33 Km.  |      |  |
| 15. | ePZ  | 11 37 40   | S.H.     |  |     | Southern Iran.   |            |      |  |
|     | Local.   |            |          |  |     | Mag. 5.0 (CGS).  |            |      |  |
| 15. | PZ   | 21 17 49.2 | S.H.     |  | 18. | eP'Z   | 14 57 33   | S.H. |  |
|     | SNZ  | 27 05.2    | G.       |  |     | e?Z  | 15 07 40   | G.   |  |
|     | eP'P'Z   | 45 38      | G.       |  |     | e?N  | 08 57      | G.   |  |
| H:  | 21 06 34.0,  | h: 50 Km.  |          |  | H:  | 14 38 28.9,  | h: 14 Km.  |      |  |
|     | Dilatation.  |            |          |  |     | Gulf of California.  |            |      |  |
|     | Kurile Islands.  |            |          |  |     | Mag. $6\frac{1}{2}$ (Pas), $6\frac{1}{2}$ - $6\frac{3}{4}$ (Pal),                  |            |      |  |
|     | Mag. 6.0 (Bks), $6\frac{1}{4}$ - $6\frac{1}{2}$ (Pal), |            |          |  |     | 5.7 (CGS).   |            |      |  |
|     | 6.0 (CGS).   |            |          |  | 19. | ePZ  | 23 30 40   | S.H. |  |
| 16. | PZ   | 02 41 13.0 | S.H.     |  |     | eSE  | 31 31      | S.H. |  |
|     | Minor trace.   |            |          |  | 19. | PZ   | 04 47 14.3 | S.H. |  |
| 16. | ePZ  | 04 41 21   | S.H.     |  | H:  | 04 37 56.8,  | h: 537Km.  |      |  |
|     | Minor trace.   |            |          |  |     | Off east Coast of Korea.   |            |      |  |
| 16. | ePZ  | 04 43 24   | S.H.     |  |     | Mag. 4.4 (CGS).  |            |      |  |
|     | eSE  | 44 36      | S.H.     |  | 19. | PZ   | 11 12 11.5 | S.H. |  |
| 16. | ePZ  | 06 17 25   | S.H.     |  |     | ?Z   | 21.5       | S.H. |  |
|     | Near shock.  |            |          |  |     | eSE  | 21 28      | G.   |  |
| 16. | ePZ  | 06 49 17   | S.H.     |  |     | eScSE  | 22 28      | G.   |  |
|     | Minor trace.   |            |          |  |     | LN   | 44 25      | G.   |  |
|     |  |            |          |  | H:  | 11 00 54.3,  | h: 33 Km.  |      |  |
|     |  |            |          |  |     | Dilatation.  |            |      |  |
|     |  |            |          |  |     | Kurile Islands.  |            |      |  |
|     |  |            |          |  |     | Mag. 5.8 (CGS).  |            |      |  |
| 16. | P'Z  | 07 05 59   | S.H.     |  | 19. | ePZ  | 18 27 38   | S.H. |  |
| H:  | 06 46 15.7,  | h: 11 Km.  |          |  |     | eSNE   | 35 51      | G.   |  |
|     | Off coast of Chile.                                    |            |          |  | H:  | 18 17 02.2,  | h: 37 Km.  |      |  |
|     | Mag. 5.3 (CGS).  |            |          |  |     | Off south coast of Sumatra.  |            |      |  |
| 16. | eP'Z   | 23 02 51   | S.H., G. |  |     | Mag. 5.4 (CGS).  |            |      |  |
|     | ?Z   | 06 23      | G.       |  | 19. | iPZ  | 21 19 16.2 | S.H. |  |
| H:  | 22 43 26.4,  | h: 33 Km.  |          |  |     | SE   | 28.0       | S.H. |  |
|     | Tonga Islands.   |            |          |  |     | Compression.   |            |      |  |
|     | Mag. 6(Pas), $5\frac{1}{4}$ - $5\frac{1}{2}$ (Bks),    |            |          |  | 20. | ePZ  | 14 11 09   | S.H. |  |
|     | 5.6 (CGS).   |            |          |  |     | eSE  | 27         | S.H. |  |

20. ePZ 22 44 48 S.H.  
Minor trace.

21. ePZ 21 12 52 S.H.  
H: 21 01 35.3, h: 80 Km.  
Southern Kamchatka.  
Mag. 5.3 (CGS).

22. ePZ 00 28 58.5 S.H.  
Minor trace.

22. ePZ 11 44 37 S.H.  
eSNE 45 49 G.

22. ePZ 12 38 38 S.H.  
Minor trace.

22. ePZ 14 56 55 G.  
SN 15 06 26.5 G.  
?NE 44 G.  
H: 14 45 51.7, h: 33 Km.  
Kurile Islands.  
Mag. 5.6 (CGS).

22. ePZ 16 24 17 S.H.  
eSE 31 19 G.  
H: 16 15 54.0, h: 33 Km.  
Andaman Islands region.  
Mag. 5.7 (CGS).

22. ePZ 20 04 19 S.H.  
Minor trace.

22. ePZ 20 30 06 S.H.  
eSNE 33 25 G.  
H: 20 26 00.2, h: 28 Km.  
Southwestern Turkey.  
Mag. 4.4 (CGS).

22. ePZ 21 45 40 S.H.  
eSNE 48 56 G.  
H: 21 41 31, h: 20 Km.  
Southwest Turkey.  
Mag. 5.1 (CGS).

23. ePZ 02 35 40 S.H.  
Minor trace.

23. ePZ 14 30 13 S.H.  
Minor trace.

23. ePZ 19 12 00 S.H.  
H: 19 00 35.6, h: 45 Km.  
Kurile Islands.  
Mag. 4.0 (CGS).

24. PZ 11 17 02.0 S.H.  
H: 11 05 56.8, h: 260 Km.  
Dilatation.  
South of Honshu, Japan.  
Mag. 5.2 (CGS).

24. PZ 18 20 14.8 S.H.  
H: 18 09 08.7, h: 40 Km.  
Dilatation.  
Kurile Islands.  
Mag. 4.9 (CGS).

25. PZ 06 54 45.0 S.H.  
H: 06 43 23.5, h: 50 Km.  
Kurile Islands.  
Mag. 4.8 (CGS).

25. ePZ 10 13 42 S.H.  
H: 10 02 23.8, h: 55 Km.  
Kurile Islands.  
Mag. 4.9 (CGS).

25. ePZ 10 36 39 S.H.  
Minor trace.

26. ePZ 16 24 11 S.H.  
Minor trace.

27. ePZ 07 59 58 S.H.  
Minor trace.

27. iPZ 15 32 18.6 S.H.  
SE 31.4 S.H.  
Compression.

27. ePZ 20 29 23 S.H.  
H: 20 18 01, h: 40 Km.  
Kurile Islands.  
Mag. 4.4 (CGS).

27. ePZ 21 15 50 S.H.  
eSE 20 08 G.  
H: 21 10 39.9, h: 33 Km.  
Northern India.  
Mag. 5.1 (CGS).

28. ePZ 21 07 36 S.H.  
eSE 53 S.H.

X 30. ePZ 09 59 54 S.H.  
eSNE 10 09 44 G.  
H: 09 47 59.0, h: 61 Km.  
Halmahera region.  
Mag. 5.5 (CGS).

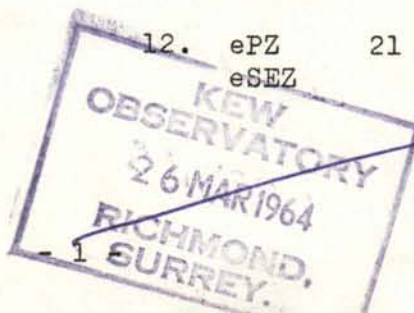
*Sup*

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TEHRAN UNIVERSITY, IRAN

Lat.  $35^{\circ}44'16''$  N.     $a = + 0.50773$   
 Long.  $51^{\circ}23'08''$  E.     $b = + 0.63570$   
 Height ... 1360 M.         $c = + 0.58146$

DECEMBER 1963

2.	ePZ	21 04 44	G.	9.	ePZ	09 04 56	S.H.
	ePPNZ	06 38	G.		Minor trace.		
	eSE	11 52	G.	9.	ePZ	12 34 04	S.H.
	LE	15 32	G.		Distant shock.		
H:	20 55 58.8, h: 33 Km.			9.	ePZ	18 05 34	S.H.
	Svalbard region.				Minor trace.		
	Mag. 5.1 (CGS).			9.	ePZ	19 50 15	S.H.
3.	ePE	04 29 12	S.H.		Near shock.		
	Minor trace.			9.	ePZ	20 25 01	S.H.
3.	ePZ	23 22 50	S.H.		Local shock.		
	Distant shock.			10.	ePZ	03 43 08	G.
4.	ePZ	01 39 03	S.H.		epPZ	44 31	G.
	eSN	48 31	G.		eSN	52 55	G.
H:	01 27 34.1, h: 20 Km.			H:	03 31 21.1, h: 366 Km.		
	Kurile Islands.				Banda Sea.		
	Mag. 5.2 (CGS).				Mag. 5.6 (CGS).		
4.	ePZ	02 31 39	S.H.	10.	ePE	03 51 36	S.H.
	eSNE	33 03	G.		eSE	57	S.H.
4.	ePZ	02 54 56	S.H.	11.	ePE	19 43 14	S.H.
	e?Z	55 10	S.H.		Local.		
H:	02 43 30.4, h: 50 Km.			11.	ePE	22 52 43	S.H.
	Kurile Islands.				Distant shock.		
	Mag. 4.8 (CGS).			12.	ePZ	07 43 37	S.H.
4.	ePZ	08 35 44	S.H.		Minor trace.		
H:	08 24 17.1, h: 33 Km.			12.	ePZ	13 25 15	S.H.
	Kurile Islands.				Local,		
	Mag. 5.3 (CGS).			12.	ePZ	21 09 01	S.H.
4.	ePZ	15 56 20	S.H.		eSEZ	10 03	S.H.
	Distant shock.						
4.	ePZ	16 20 21	G.				
	Distant shock.						
6.	ePZ	19 05 26	S.H.				
	Local shock.						



*Handwritten signatures and notes*

12. ePZ 23 35 47 S.H. H: 23 24 36.6, h: 90 Km. Kurile Islands Mag. 5.2 (CGS).	18. eP'Z 00 49 08 S.H. e?Z 52 40 G. ePKSZ 53 42 G. eSKSPZ 01 02 09 G. ePPSZ 04 44 G. H: 00 30 02.6, h: 46 Km. Tonga Islands. Mag. 6.5 (CGS).
13. ePZ 16 53 45 S.H. eSNE 54 49 S.H.	18. ePZ 06 45 32 S.H. Distant shock.
14. ePZ 08 03 16 S.H. Minor trace.	19. ePZ 16 42 03 S.H. Minor trace.
15. ePE 09 04 15 S.H. eSNE 05 33 S.H.,G.	19. ePZ 17 23 12 S.H. Distant shock.
15. iPZ 19 44 35.3 G. PcPZ 58.9 G. PPZ 47 19.9 G. iSNE 52 39.4 S.H.,G. H: 19 34 45.5, h: 650 Km. Dilatation. Java Sea. Mag. 6.4 (CGS).	19. ePZ 18 48 18 S.H. Minor trace.
16. ePZ 02 02 14 G. eSNE 10 51 S.H.,G. H: 01 51 23.2, h: 36 Km. Near east coast of Sumatra. Mag. 6.1 (CGS).	20. ePZ 15 58 43 S.H. Distant shock,
16. ePZ 11 19 54 S.H. Minor trace.	20. ePZ 20 51 03 S.H. eSNE 24 S.H.
16. ePZ 11 21 34 S.H. eSNEZ 47 S.H.	21. iPZ 04 51 11.2 S.H. eSNE 38 S.H. H: 04 50 39.7, h: 51 Km. Dilatation. Iran Felt Kashan. Mag. 4.5 (CGS).
16. ePZ 13 53 17 G. eSNE 57 36 G. H: 13 47 56.4, h: 15 Km. Ionian Sea. Mag. 5.6 (CGS).	21. ePZ 10 36 40 S.H. eSNEZ 58 S.H.
16. ePE 15 14 14 S.H. Minor trace.	21. ePZ 12 57 03 S.H. Distant shock.
16. ePE 15 30 06 S.H. Local.	21. ePZ 13 19 35 S.H. eSE 28 08 G. H: 13 09 09.6, h: 49 Km. Near west east of Luzan, P.I. Mag. 5.6 (CGS).
17. ePZ 05 21 14 S.H. Minor trace.	23. ePZ 07 02 17 S.H. Local shock.
17. ePE 13 56 21 S.H. eSE 57 33 G.	24. ePZ 01 20 01 S.H. eSNE 57 G.

24. ePZ 02 37 23 S.H.  
H: 02 26 01.4, h: 50 Km.  
Kurile Islands.  
Mag. 4.5 (CGS).

X ✓ 24. ePZ 03 12 18 S.H.  
H: 03 00 57.3, h: 50 Km.  
Kurile Islands.  
Mag. 4.9 (CGS).

X ✓ 24. ePZ 03 38 44 S.H.  
H: 03 27 23.9, h: 45 Km.  
Kurile Islands.  
Mag. 4.8 (CGS).

26. ePZ 15 54 54 S.H.  
eSE 55 57 G.

X 26. ePZ 20 54 03 S.H.  
eSE 57 05 G.  
H: 20 50 21.2, h: 140 Km.  
Hindu Kush.  
Mag. 4.9 (CGS).

26. ePZ 21 00 21 S.H.  
eSNE 01 34 S.H.,G.

27. ePZ 14 42 41 S.H.  
Local shock.

28. ePZ 06 02 21 S.H.  
Distant shock.

28. ePZ 09 23 17 S.H.  
Minor trace.

28. ePZ 20 39 41 S.H.  
eS<sub>1</sub>NE 58 S.H.  
eS<sub>2</sub>NE 40 03 S.H.

29. ePZ 17 36 17 S.H.  
Distant shock.

X ✓ 30. ePZ 01 27 33 S.H.  
eSNE 37 18 G.  
H: 01 15 24.5, h: 120 Km.  
Mariana Islands region.  
Mag. 5.2 (CGS).

X ✓ 30. iPZ 13 40 44.1 S.H.  
eSN 49 58 G.  
eScSN 50 48 G.  
H: 13 29 25.3, h: 40 Km.  
Kurile Islands.  
Mag. 5.7 (CGS).

30. ePZ 15 15 30 S.H.  
Minor trace.

X ✓ 31. ePZ 15 19 38 S.H.  
eSNE 21 08 G.

X ✓ 31. ePZ 17 52 15 G.  
eP'Z 57 00 S.H.  
e?Z 59 29 G.  
eSKSNE 18 03 55 G.  
H; 17 37 32.1, h: 30 Km.  
Sandwich Islands.  
Mag. 5 $\frac{1}{4}$ (Pal), 6.3(CGS).