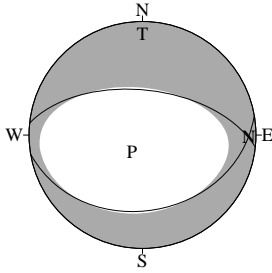


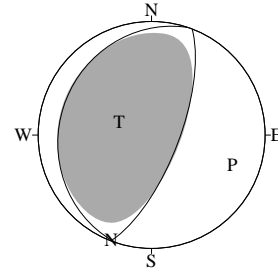
CMT SOLUTIONS FOR EARTHQUAKES IN JULY, 2020

2020/07/02 04:22:33.5  
NW OFF ISHIGAKIJIMA IS  
Hypo.:24°55.4'N 123°28.2'E 17km



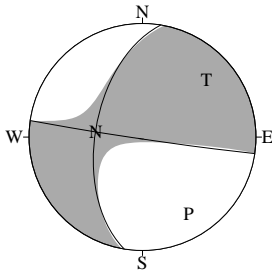
Cent.:24°55.4'N 123°28.1'E 17km  $\Delta t = 0.6$   
Mo:  $1.44 \times 10^{16}$  N·m Mw:4.7 Mj:5.0 (sec)  
mrr:-1.37 mtt: 1.24 mff: 0.13  
mrt: 0.58 mrf:-0.21 mtf: 0.05 ( $\times 10^{16}$  N·m)  
STR DIP SLIP MOM AZM PLG  
NP1: 80° 34° -103° P-axis:-1.52 212° 76°  
NP2:276° 57° -81° T-axis: 1.36 360° 12°  
N-axis: 0.16 91° 7°  
V.R.: 75%  $\epsilon$ : -0.11 N:7 COMP:10

2020/07/03 14:12:55.0  
E OFF FUKUSHIMA PREF  
Hypo.:37°30.4'N 141°34.3'E 46km



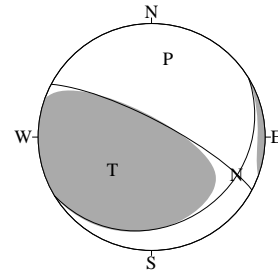
Cent.:37°30.6'N 141°34.7'E 46km  $\Delta t = 0.6$   
Mo:  $1.65 \times 10^{16}$  N·m Mw:4.7 Mj:4.9 (sec)  
mrr: 1.11 mtt:-0.22 mff:-0.89  
mrt: 0.47 mrf: 1.19 mtf:-0.27 ( $\times 10^{16}$  N·m)  
STR DIP SLIP MOM AZM PLG  
NP1: 21° 70° 91° P-axis:-1.59 110° 25°  
NP2:199° 20° 88° T-axis: 1.72 292° 65°  
N-axis:-0.13 201° 1°  
V.R.: 68%  $\epsilon$ : 0.07 N:30 COMP:63

2020/07/05 15:09:49.8  
HIDA MOUNTAINS REGION  
Hypo.:36°15.6'N 137°37.2'E 4km



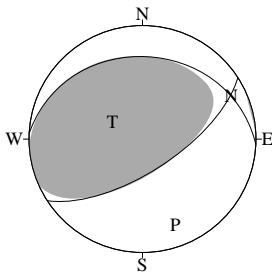
Cent.:36°14.6'N 137°37.2'E 10km  $\Delta t = 3.1$   
Mo:  $1.50 \times 10^{16}$  N·m Mw:4.7 Mj:4.8 (sec)  
mrr: 0.11 mtt:-0.46 mff: 0.35  
mrt: 0.84 mrf:-0.06 mtf:-1.17 ( $\times 10^{16}$  N·m)  
STR DIP SLIP MOM AZM PLG  
NP1: 98° 88° 146° P-axis:-1.56 149° 22°  
NP2:189° 56° 2° T-axis: 1.43 48° 25°  
N-axis: 0.13 276° 56°  
V.R.: 73%  $\epsilon$ : -0.08 N:31 COMP:54

2020/07/06 21:58: 7.0  
MARIANA ISLANDS REGION  
Hypo.:21°22.7'N 145° 2.1'E 121km



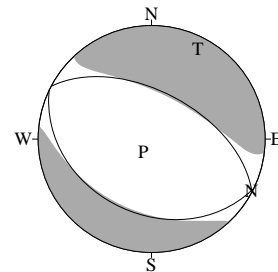
Cent.:21°11.5'N 145° 3.3'E 133km  $\Delta t = 3.0$   
Mo:  $2.40 \times 10^{17}$  N·m Mw:5.5 Mj:5.8 (sec)  
mrr: 1.00 mtt:-1.30 mff: 0.29  
mrt:-1.72 mrf: 1.20 mtf:-0.16 ( $\times 10^{17}$  N·m)  
STR DIP SLIP MOM AZM PLG  
NP1: 59° 22° 33° P-axis:-2.30 12° 30°  
NP2:298° 78° 109° T-axis: 2.50 230° 53°  
N-axis:-0.20 114° 19°  
V.R.: 84%  $\epsilon$ : 0.09 N:49 COMP:86

2020/07/09 06:05:29.3  
SW IBARAKI PREF  
Hypo.:36° 3.8'N 139°50.6'E 45km



Cent.:36° 6.6'N 139°50.7'E 46km  $\Delta t = 0.6$   
Mo:  $1.51 \times 10^{16}$  N·m Mw:4.7 Mj:4.7 (sec)  
mrr: 1.10 mtt:-1.07 mff:-0.03  
mrt: 0.73 mrf: 0.71 mtf:-0.27 ( $\times 10^{16}$  N·m)  
STR DIP SLIP MOM AZM PLG  
NP1: 57° 67° 74° P-axis:-1.46 159° 20°  
NP2:273° 28° 122° T-axis: 1.56 300° 65°  
N-axis:-0.10 64° 14°  
V.R.: 67%  $\epsilon$ : 0.06 N:43 COMP:83

2020/07/09 14:14: 4.0  
SE OFF ETOROFU  
Hypo.:45° 7.9'N 149°35.9'E 146km

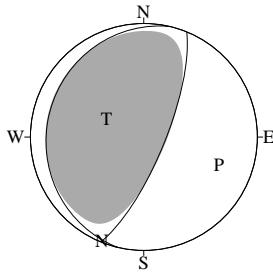


Cent.:45°24.0'N 149°36.4'E 139km  $\Delta t = 1.9$   
Mo:  $3.27 \times 10^{16}$  N·m Mw:4.9 Mj:5.2 (sec)  
mrr:-2.83 mtt: 2.52 mff: 0.32  
mrt: 1.03 mrf:-0.57 mtf:-1.49 ( $\times 10^{16}$  N·m)  
STR DIP SLIP MOM AZM PLG  
NP1:116° 34° -92° P-axis:-3.06 212° 79°  
NP2:298° 56° -89° T-axis: 3.49 27° 11°  
N-axis:-0.44 117° 1°  
V.R.: 78%  $\epsilon$ : 0.12 N:23 COMP:49

EQUAL AREA PROJECTON, LOWER HEMISPHERE.

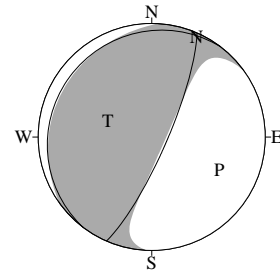
Hypo.:Location of hypocenter, Cent.:Location of centroid,  $\Delta t$ :Centroid time minus origin time  
Mo:Total scalar moment, Mw:Moment Magnitude, Mj:JMA Magnitude  
mrr,mtt,mff,mrt,mrf,mtf:Moment tensor components, STR,DIP,SLIP:Fault parameters of nodal plane  
MOM,AZM,PLG:Moment tensor component, azimuth and plunge of P-, T-, N-axis  
V.R.:Variance Reduction,  $\epsilon$ :Non-double couple component ratio, N:Number of stations, COMP:Number of components

2020/07/12 18:32:22.4  
 E OFF AOMORI PREF  
 Hypo.:40°52.9'N 143° 9.3'E 22km



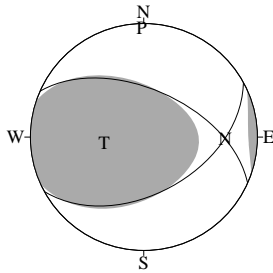
Cent.:40°48.0'N 143°10.3'E 22km  $\Delta t = 0.8$   
 Mo:  $2.17 \times 10^{16}$  N·m Mw:4.8 Mj:4.9 (sec)  
 mrr: 1.16 mtt:-0.20 mff:-0.96  
 mrt: 0.74 mrf: 1.72 mtf:-0.25 ( $\times 10^{16}$  N·m)  
 STR DIP SLIP MOM AZM PLG  
 NP1: 22° 75° 93° P-axis:-2.10 110° 30°  
 NP2:193° 15° 81° T-axis: 2.24 296° 60°  
 N-axis:-0.13 202° 2°  
 V.R.: 58%  $\epsilon$ : 0.06 N:37 COMP:59

2020/07/13 10:42:46.6  
 E OFF AOMORI PREF  
 Hypo.:41° 2.4'N 142°47.1'E 31km



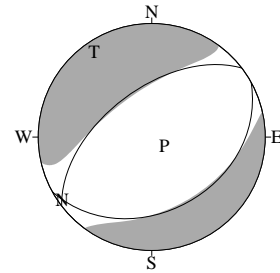
Cent.:41° 3.7'N 142°47.6'E 32km  $\Delta t = 0.7$   
 Mo:  $2.61 \times 10^{16}$  N·m Mw:4.9 Mj:4.9 (sec)  
 mrr: 0.84 mtt:-0.05 mff:-0.80  
 mrt: 0.96 mrf: 2.22 mtf:-0.58 ( $\times 10^{16}$  N·m)  
 STR DIP SLIP MOM AZM PLG  
 NP1: 24° 79° 87° P-axis:-2.74 116° 34°  
 NP2:217° 11° 104° T-axis: 2.48 290° 56°  
 N-axis: 0.26 24° 3°  
 V.R.: 65%  $\epsilon$ :-0.10 N:34 COMP:53

2020/07/14 04:38:39.0  
 MARIANA ISLANDS REGION  
 Hypo.:21°59.5'N 142°51.7'E 312km



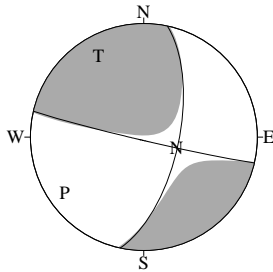
Cent.:21°59.7'N 142°58.0'E 294km  $\Delta t = 0.6$   
 Mo:  $3.13 \times 10^{16}$  N·m Mw:4.9 Mj:5.7 (sec)  
 mrr: 2.43 mtt:-2.87 mff: 0.44  
 mrt:-0.38 mrf: 1.63 mtf:-0.17 ( $\times 10^{16}$  N·m)  
 STR DIP SLIP MOM AZM PLG  
 NP1: 61° 49° 49° P-axis:-2.90 359° 4°  
 NP2:294° 55° 126° T-axis: 3.37 262° 61°  
 N-axis:-0.47 91° 29°  
 V.R.: 74%  $\epsilon$ : 0.14 N:42 COMP:45

2020/07/14 22:21: 9.1  
 E OFF HOKKAIDO  
 Hypo.:43°47.3'N 147° 8.9'E 88km



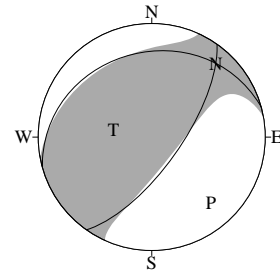
Cent.:43°48.4'N 147° 9.3'E 88km  $\Delta t = 0.8$   
 Mo:  $3.05 \times 10^{16}$  N·m Mw:4.9 Mj:4.9 (sec)  
 mrr:-2.63 mtt: 2.00 mff: 0.63  
 mrt: 0.81 mrf: 0.75 mtf: 1.59 ( $\times 10^{16}$  N·m)  
 STR DIP SLIP MOM AZM PLG  
 NP1: 61° 35° -83° P-axis:-2.85 125° 79°  
 NP2:233° 56° -95° T-axis: 3.25 326° 10°  
 N-axis:-0.40 235° 4°  
 V.R.: 81%  $\epsilon$ : 0.12 N:20 COMP:43

2020/07/17 05:03: 6.9  
 SHIKOKU BASIN  
 Hypo.:30°13.0'N 137° 0.0'E 536km



Cent.:30°18.5'N 136°58.7'E 532km  $\Delta t = 0.4$   
 Mo:  $5.94 \times 10^{16}$  N·m Mw:5.1 Mj:5.1 (sec)  
 mrr:-0.12 mtt: 2.40 mff:-2.27  
 mrt: 2.60 mrf:-0.10 mtf: 4.82 ( $\times 10^{16}$  N·m)  
 STR DIP SLIP MOM AZM PLG  
 NP1: 12° 65° 177° P-axis:-5.71 235° 16°  
 NP2:103° 88° 25° T-axis: 6.17 331° 19°  
 N-axis:-0.46 108° 65°  
 V.R.: 87%  $\epsilon$ : 0.08 N:43 COMP:83

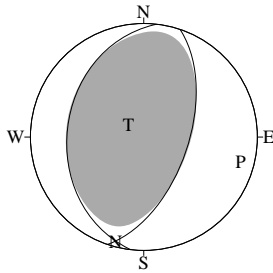
2020/07/20 14:25: 6.7  
 NEAR MIYAKOJIMA ISLAND  
 Hypo.:24°18.8'N 125°15.5'E 43km



Cent.:24°15.7'N 125°15.7'E 35km  $\Delta t = 1.3$   
 Mo:  $2.51 \times 10^{16}$  N·m Mw:4.9 Mj:5.0 (sec)  
 mrr: 1.44 mtt:-1.03 mff:-0.41  
 mrt: 0.95 mrf: 1.53 mtf:-1.23 ( $\times 10^{16}$  N·m)  
 STR DIP SLIP MOM AZM PLG  
 NP1: 35° 69° 74° P-axis:-2.70 138° 23°  
 NP2:254° 26° 126° T-axis: 2.32 281° 62°  
 N-axis: 0.37 41° 15°  
 V.R.: 75%  $\epsilon$ :-0.14 N:8 COMP:13

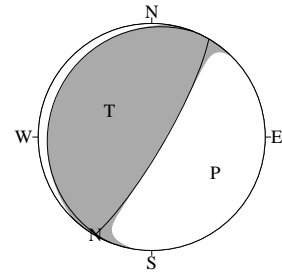
EQUAL AREA PROJECTON, LOWER HEMISPHERE.

2020/07/21 17:54:22.4  
 E OFF TANEGASHIMA ISLAND  
 Hypo.:30° 1.8'N 131°16.9'E 23km



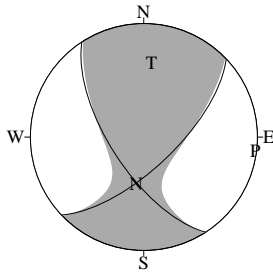
Cent.:29°55.9'N 131°17.8'E 24km  $\Delta t = 1.3$   
 Mo:  $1.56 \times 10^{16}$  N·m Mw:4.7 Mj:4.6 (sec)  
 mrr: 1.45 mtt:-0.13 mff:-1.31  
 mrt: 0.32 mrf: 0.60 mtf:-0.27 ( $\times 10^{16}$  N·m)  
 STR DIP SLIP MOM AZM PLG  
 NP1: 19° 58° 96° P-axis:-1.52 104° 13°  
 NP2:187° 33° 80° T-axis: 1.61 308° 76°  
 N-axis:-0.09 195° 5°  
 V.R.: 61%  $\epsilon$ : 0.06 N:27 COMP:48

2020/07/23 22:19: 3.2  
 E OFF FUKUSHIMA PREF  
 Hypo.:36°43.2'N 142°17.7'E 19km



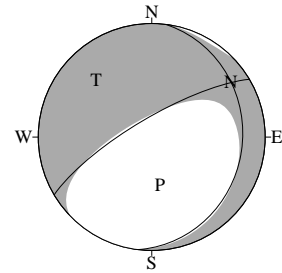
Cent.:36°43.2'N 142°18.3'E 10km  $\Delta t = 0.6$   
 Mo:  $1.06 \times 10^{16}$  N·m Mw:4.6 Mj:4.6 (sec)  
 mrr: 0.32 mtt:-0.04 mff:-0.28  
 mrt: 0.51 mrf: 0.87 mtf:-0.16 ( $\times 10^{16}$  N·m)  
 STR DIP SLIP MOM AZM PLG  
 NP1: 30° 81° 91° P-axis:-1.08 119° 36°  
 NP2:203° 10° 82° T-axis: 1.04 302° 54°  
 N-axis: 0.04 210° 1°  
 V.R.: 71%  $\epsilon$ :-0.04 N:43 COMP:71

2020/07/26 21:52:28.9  
 NW OFF ISHIGAKIJIMA IS  
 Hypo.:24°10.1'N 122°24.1'E 51km



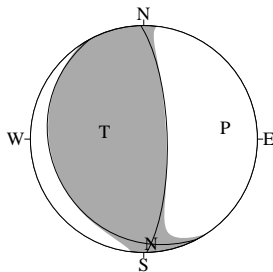
Cent.:23°49.4'N 122°25.2'E 43km  $\Delta t = 2.6$   
 Mo:  $9.30 \times 10^{16}$  N·m Mw:5.2 Mj:5.5 (sec)  
 mrr: 3.34 mtt: 6.20 mff:-9.54  
 mrt: 3.64 mrf:-0.18 mtf:-1.91 ( $\times 10^{16}$  N·m)  
 STR DIP SLIP MOM AZM PLG  
 NP1: 47° 68° 154° P-axis:-9.77 97° 1°  
 NP2:147° 66° 24° T-axis: 8.83 6° 34°  
 N-axis: 0.94 189° 56°  
 V.R.: 68%  $\epsilon$ :-0.10 N:41 COMP:92

2020/07/27 10:12:45.5  
 FAR SE OFF HOKKAIDO  
 Hypo.:42° 5.2'N 148° 9.2'E 18km



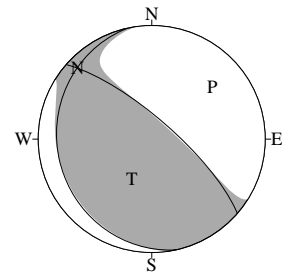
Cent.:42° 5.2'N 148° 9.4'E 18km  $\Delta t = 0.5$   
 Mo:  $5.99 \times 10^{15}$  N·m Mw:4.5 Mj:5.0 (sec)  
 mrr:-2.85 mtt: 0.41 mff: 2.44  
 mrt: 4.78 mrf: 2.04 mtf: 1.46 ( $\times 10^{15}$  N·m)  
 STR DIP SLIP MOM AZM PLG  
 NP1: 7° 21°-140° P-axis:-6.35 170° 55°  
 NP2:239° 77° -73° T-axis: 5.63 316° 30°  
 N-axis: 0.72 55° 16°  
 V.R.: 83%  $\epsilon$ :-0.11 N:17 COMP:19

2020/07/30 09:35:53.6  
 NEAR TORISHIMA IS  
 Hypo.:30°44.5'N 142° 9.1'E 20km



Cent.:30°46.7'N 142° 8.2'E 16km  $\Delta t = 5.8$   
 Mo:  $7.30 \times 10^{17}$  N·m Mw:5.8 Mj:6.0 (sec)  
 mrr: 3.83 mtt: 0.32 mff:-4.15  
 mrt: 0.07 mrf: 6.04 mtf: 1.15 ( $\times 10^{17}$  N·m)  
 STR DIP SLIP MOM AZM PLG  
 NP1:359° 73° 98° P-axis:-7.50 82° 28°  
 NP2:152° 19° 65° T-axis: 7.10 281° 61°  
 N-axis: 0.40 176° 8°  
 V.R.: 81%  $\epsilon$ :-0.05 N:33 COMP:62

2020/07/31 14:16:29.0  
 NEAR TORISHIMA IS  
 Hypo.:30°40.0'N 142°14.5'E 45km



Cent.:30°35.4'N 142°12.7'E 10km  $\Delta t = 1.0$   
 Mo:  $4.56 \times 10^{16}$  N·m Mw:5.0 Mj:4.7 (sec)  
 mrr: 2.00 mtt:-0.38 mff:-1.63  
 mrt:-3.04 mrf: 2.49 mtf: 1.42 ( $\times 10^{16}$  N·m)  
 STR DIP SLIP MOM AZM PLG  
 NP1:167° 18° 125° P-axis:-4.73 49° 30°  
 NP2:311° 76° 80° T-axis: 4.39 207° 58°  
 N-axis: 0.34 314° 10°  
 V.R.: 75%  $\epsilon$ :-0.07 N:18 COMP:34

EQUAL AREA PROJECTON, LOWER HEMISPHERE.