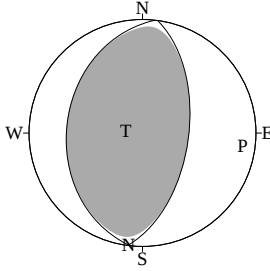


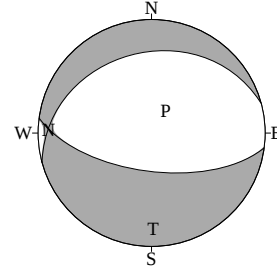
# CMT SOLUTIONS FOR EARTHQUAKES IN JULY, 2023

2023/07/01 23:38:54.8  
NEAR CHOSHI CITY  
Hypo.:35°33.2'N 140°59.2'E 36km



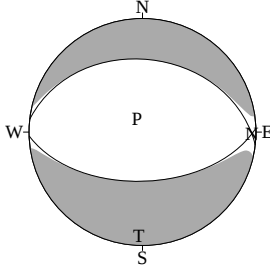
Cent.:35°39.1'N 140°58.8'E 43km  $\Delta t = 8.5$   
Mo:  $4.84 \times 10^{16}$  N·m Mw:5.1 Mj:4.9 (sec)  
mrr: 4.49 mtt:-0.15 mff:-4.34  
mrt: 0.29 mrf: 1.88 mtf:-0.52 ( $\times 10^{16}$  N·m)  
STR DIP SLIP MOM AZM PLG  
NP1: 8° 57° 91° P-axis:-4.79 97° 12°  
NP2:186° 33° 89° T-axis: 4.88 280° 78°  
N-axis:-0.09 187° 1°  
V.R.: 74%  $\epsilon$ : 0.02 N:41 COMP:90

2023/07/09 04:47:10.9  
TAIWAN REGION  
Hypo.:21°49.5'N 121°35.8'E 39km



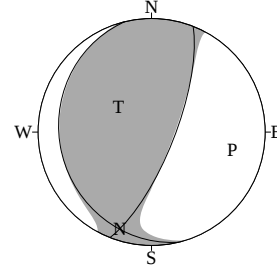
Cent.:21°43.1'N 121°34.9'E 10km  $\Delta t = 0.9$   
Mo:  $3.90 \times 10^{17}$  N·m Mw:5.7 Mj:5.8 (sec)  
mrr:-3.17 mtt: 3.27 mff:-0.10  
mrt:-2.13 mrf: 0.64 mtf: 0.23 ( $\times 10^{17}$  N·m)  
STR DIP SLIP MOM AZM PLG  
NP1: 98° 62° -79° P-axis:-3.90 32° 71°  
NP2:255° 30° -110° T-axis: 3.90 179° 17°  
N-axis: 0.00 272° 10°  
V.R.: 89%  $\epsilon$ :-0.01 N:10 COMP:27

2023/07/09 06:22: 3.3  
TAIWAN REGION  
Hypo.:21°50.1'N 121°34.9'E 35km



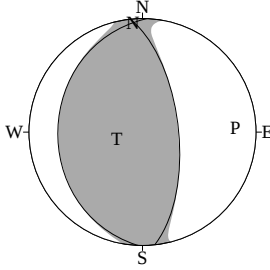
Cent.:21°52.5'N 121°35.1'E 10km  $\Delta t = 3.0$   
Mo:  $4.60 \times 10^{16}$  N·m Mw:5.0 Mj:5.0 (sec)  
mrr:-4.29 mtt: 4.42 mff:-0.14  
mrt:-1.45 mrf:-0.27 mtf:-0.18 ( $\times 10^{16}$  N·m)  
STR DIP SLIP MOM AZM PLG  
NP1: 88° 54° -95° P-axis:-4.55 337° 80°  
NP2:277° 36° -83° T-axis: 4.66 182° 9°  
N-axis:-0.12 91° 4°  
V.R.: 89%  $\epsilon$ : 0.03 N:7 COMP:17

2023/07/13 13:43:53.9  
NE OFF IWATE PREF  
Hypo.:40° 2.1'N 142°43.3'E 34km



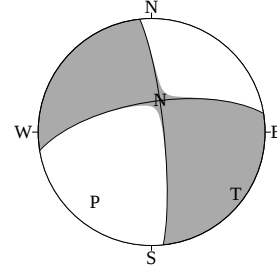
Cent.:40° 0.7'N 142°43.7'E 34km  $\Delta t = 0.8$   
Mo:  $3.20 \times 10^{16}$  N·m Mw:4.9 Mj:5.0 (sec)  
mrr: 1.62 mtt: 0.33 mff:-1.95  
mrt: 1.08 mrf: 2.40 mtf:-0.22 ( $\times 10^{16}$  N·m)  
STR DIP SLIP MOM AZM PLG  
NP1: 21° 74° 101° P-axis:-3.29 102° 28°  
NP2:166° 20° 56° T-axis: 3.10 307° 60°  
N-axis: 0.19 198° 11°  
V.R.: 68%  $\epsilon$ :-0.06 N:36 COMP:56

2023/07/13 23:10:41.6  
E OFF HACHIJOJIMA ISLAND  
Hypo.:32°48.8'N 141°58.2'E 61km



Cent.:32°49.8'N 141°58.6'E 10km  $\Delta t = 4.5$   
Mo:  $3.78 \times 10^{16}$  N·m Mw:5.0 Mj:5.1 (sec)  
mrr: 2.90 mtt: 0.14 mff:-3.04  
mrt:-0.34 mrf: 2.30 mtf: 0.12 ( $\times 10^{16}$  N·m)  
STR DIP SLIP MOM AZM PLG  
NP1:354° 64° 86° P-axis:-3.84 87° 19°  
NP2:182° 26° 97° T-axis: 3.71 256° 71°  
N-axis: 0.13 355° 3°  
V.R.: 87%  $\epsilon$ :-0.03 N:37 COMP:79

2023/07/13 23:40:59.6  
NW SHIGA PREF  
Hypo.:35°11.3'N 135°58.9'E 345km

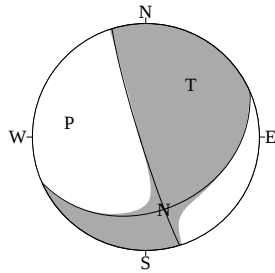


Cent.:35°11.4'N 135°58.9'E 349km  $\Delta t = 1.0$   
Mo:  $1.67 \times 10^{16}$  N·m Mw:4.7 Mj:4.5 (sec)  
mrr:-0.17 mtt:-0.32 mff: 0.49  
mrt: 0.31 mrf:-0.57 mtf: 1.48 ( $\times 10^{16}$  N·m)  
STR DIP SLIP MOM AZM PLG  
NP1:261° 68° -9° P-axis:-1.69 219° 22°  
NP2:354° 81° -158° T-axis: 1.66 126° 9°  
N-axis: 0.03 15° 66°  
V.R.: 85%  $\epsilon$ :-0.02 N:24 COMP:39

## EQUAL AREA PROJECTON, LOWER HEMISPHERE.

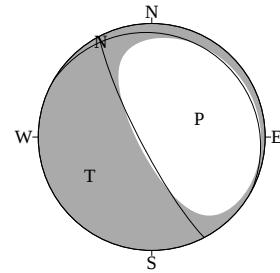
Hypo.:Location of hypocenter, Cent.:Location of centroid,  $\Delta t$ :Centroid time minus origin time  
Mo:Total scalar moment, Mw:Moment Magnitude, Mj:JMA Magnitude  
mrr,mtt,mff,mrt,mrf,mtf:Moment tensor components, STR,DIP,SLIP:Fault parameters of nodal plane  
MOM,AZM,PLG:Moment tensor component, 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

2023/07/14 00:52: 8.3  
NEAR TORISHIMA IS  
Hypo.:29°55.2'N 139° 5.7'E 451km



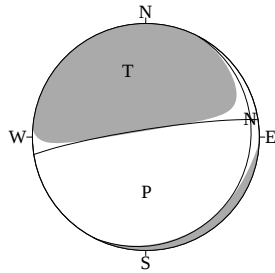
Cent.:29°56.7'N 139° 3.3'E 464km  $\Delta t = -0.8$   
Mo:  $9.27 \times 10^{16}$  N·m Mw:5.2 Mj:5.3 (sec)  
mrr:-1.12 mtt: 3.10 mff:-4.22  
mrt: 2.31 mrf:-7.17 mtf:-3.89 ( $\times 10^{16}$  N·m)  
STR DIP SLIP MOM AZM PLG  
NP1: 67° 35° 173° P-axis:-9.50 281° 32°  
NP2:163° 86° 55° T-axis: 9.04 41° 39°  
N-axis: 0.46 166° 34°  
V.R.: 85%  $\epsilon$ :-0.05 N:26 COMP:40

2023/07/14 11:01:52.3  
NEAR CHICHIJIMA ISLAND  
Hypo.:28°43.0'N 142°55.1'E 38km



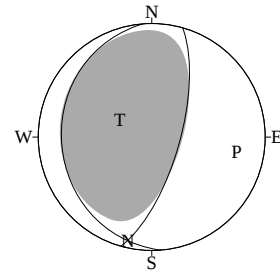
Cent.:29° 2.2'N 143° 2.1'E 16km  $\Delta t = -0.2$   
Mo:  $8.32 \times 10^{16}$  N·m Mw:5.2 Mj:5.5 (sec)  
mrr:-3.02 mtt: 1.98 mff: 1.04  
mrt:-3.41 mrf: 7.16 mtf:-0.65 ( $\times 10^{16}$  N·m)  
STR DIP SLIP MOM AZM PLG  
NP1:299° 10°-123° P-axis:-8.95 69° 53°  
NP2:152° 82° -85° T-axis: 7.69 238° 36°  
N-axis: 1.26 332° 5°  
V.R.: 64%  $\epsilon$ :-0.14 N:44 COMP:73

2023/07/17 09:37:11.9  
TOKACHI REGION  
Hypo.:42°47.2'N 143°21.4'E 111km



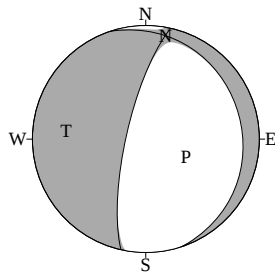
Cent.:42°48.1'N 143°21.5'E 111km  $\Delta t = 0.4$   
Mo:  $8.13 \times 10^{15}$  N·m Mw:4.5 Mj:4.5 (sec)  
mrr:-1.24 mtt: 1.43 mff:-0.19  
mrt: 7.82 mrf: 1.23 mtf: 1.34 ( $\times 10^{15}$  N·m)  
STR DIP SLIP MOM AZM PLG  
NP1: 28° 9°-143° P-axis:-7.84 179° 50°  
NP2:261° 85° -83° T-axis: 8.42 345° 39°  
N-axis:-0.58 80° 7°  
V.R.: 85%  $\epsilon$ : 0.07 N:20 COMP:28

2023/07/22 10:52:28.7  
NORTHERN IBARAKI PREF  
Hypo.:36°26.4'N 140°41.3'E 52km



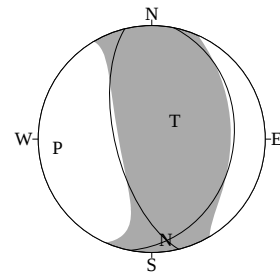
Cent.:36°30.3'N 140°41.8'E 52km  $\Delta t = 0.7$   
Mo:  $1.74 \times 10^{16}$  N·m Mw:4.8 Mj:4.8 (sec)  
mrr: 1.20 mtt:-0.12 mff:-1.07  
mrt: 0.46 mrf: 1.24 mtf:-0.06 ( $\times 10^{16}$  N·m)  
STR DIP SLIP MOM AZM PLG  
NP1: 16° 70° 97° P-axis:-1.66 100° 25°  
NP2:176° 21° 71° T-axis: 1.83 298° 64°  
N-axis:-0.17 193° 7°  
V.R.: 69%  $\epsilon$ : 0.09 N:46 COMP:73

2023/07/22 21:14:27.0  
HYUGANADA REGION  
Hypo.:32°36.9'N 132°13.6'E 37km



Cent.:32°39.9'N 132°13.3'E 28km  $\Delta t = 3.2$   
Mo:  $3.47 \times 10^{16}$  N·m Mw:5.0 Mj:5.0 (sec)  
mrr:-1.64 mtt:-0.09 mff: 1.73  
mrt: 0.79 mrf: 2.93 mtf:-0.10 ( $\times 10^{16}$  N·m)  
STR DIP SLIP MOM AZM PLG  
NP1:342° 16°-120° P-axis:-3.50 114° 58°  
NP2:193° 76° -82° T-axis: 3.45 276° 30°  
N-axis: 0.05 11° 8°  
V.R.: 83%  $\epsilon$ :-0.01 N:41 COMP:95

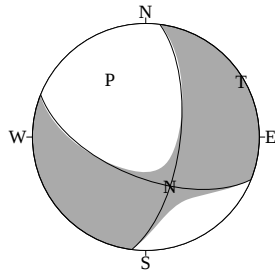
2023/07/26 21:37: 0.7  
OKINOSHIMA ISLAND REGION  
Hypo.:36°37.6'N 132°44.7'E 37km



Cent.:36°37.6'N 132°43.6'E 10km  $\Delta t = 0.4$   
Mo:  $6.02 \times 10^{15}$  N·m Mw:4.5 Mj:4.5 (sec)  
mrr: 4.08 mtt: 1.49 mff:-5.57  
mrt: 1.02 mrf:-3.40 mtf: 0.40 ( $\times 10^{15}$  N·m)  
STR DIP SLIP MOM AZM PLG  
NP1: 11° 29° 112° P-axis:-6.70 265° 18°  
NP2:166° 64° 78° T-axis: 5.35 52° 69°  
N-axis: 1.36 172° 11°  
V.R.: 77%  $\epsilon$ :-0.20 N:21 COMP:42

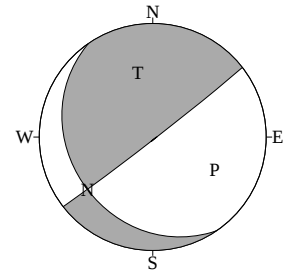
EQUAL AREA PROJECTON, LOWER HEMISPHERE.

2023/07/27 06:31:30.5  
 NW OFF HOKKAIDO  
 Hypo.:44°18.1'N 140°38.9'E 241km



Cent.:44°20.2'N 140°38.7'E 243km  $\Delta t = 0.8$   
 Mo:  $9.58 \times 10^{15}$  N·m Mw:4.6 Mj:4.5 (sec)  
 mrr:-3.64 mtt:-1.74 mff: 5.38  
 mrt:-4.28 mrf:-3.11 mtf:-6.45 ( $\times 10^{15}$  N·m)  
 STR DIP SLIP MOM AZM PLG  
 NP1: 7° 65° -32° P-axis:-9.95 328° 40°  
 NP2:112° 61°-151° T-axis: 9.21 60° 3°  
 N-axis: 0.74 154° 50°  
 V.R.: 83%  $\epsilon$ :-0.07 N:12 COMP:22

2023/07/29 19:34:12.2  
 SW IBARAKI PREF  
 Hypo.:36°20.8'N 139°57.5'E 77km



Cent.:36°20.8'N 139°57.9'E 77km  $\Delta t = 0.5$   
 Mo:  $9.31 \times 10^{15}$  N·m Mw:4.6 Mj:4.6 (sec)  
 mrr: 0.49 mtt: 3.78 mff:-4.27  
 mrt: 6.62 mrf: 4.98 mtf:-1.28 ( $\times 10^{15}$  N·m)  
 STR DIP SLIP MOM AZM PLG  
 NP1:146° 27° 4° P-axis:-9.31 118° 38°  
 NP2: 52° 88° 117° T-axis: 9.31 347° 41°  
 N-axis: 0.00 231° 27°  
 V.R.: 73%  $\epsilon$ : 0.00 N:15 COMP:30

EQUAL AREA PROJECTON, LOWER HEMISPHERE.