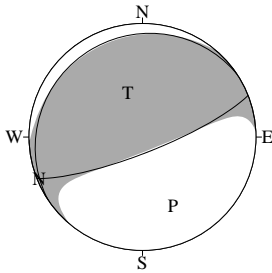


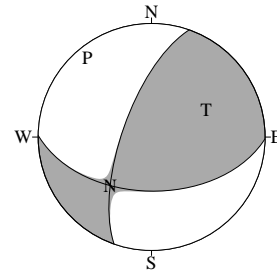
CMT SOLUTIONS FOR EARTHQUAKES IN AUGUST, 2019

2019/08/01 22:52:22.0  
NEAR ETOROFU ISLAND  
Hypo.:44°45.3'N 147°50.9'E 179km



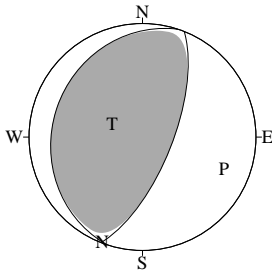
Cent.:44°45.3'N 147°51.9'E 179km  $\Delta t = 0.7$   
Mo:  $1.68 \times 10^{16}$  N·m Mw:4.7 Mj:4.6 (sec)  
mrr: 0.58 mtt:-0.55 mff:-0.03  
mrt: 1.44 mrf: 0.56 mtf:-0.34 ( $\times 10^{16}$  N·m)  
STR DIP SLIP MOM AZM PLG  
NP1: 68° 79° 92° P-axis:-1.75 156° 34°  
NP2:236° 12° 78° T-axis: 1.61 342° 56°  
N-axis: 0.14 248° 2°  
V.R.: 76%  $\epsilon$ :-0.08 N:13 COMP:19

2019/08/04 03:04:18.5  
NORTHERN IWATE PREF  
Hypo.:39°39.8'N 141°30.7'E 73km



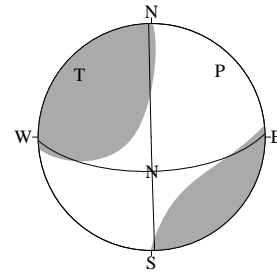
Cent.:39°39.8'N 141°30.8'E 73km  $\Delta t = 0.4$   
Mo:  $3.23 \times 10^{15}$  N·m Mw:4.3 Mj:4.4 (sec)  
mrr: 1.48 mtt:-1.54 mff: 0.06  
mrt: 0.24 mrf:-1.80 mtf:-2.20 ( $\times 10^{15}$  N·m)  
STR DIP SLIP MOM AZM PLG  
NP1: 91° 51° 152° P-axis:-3.25 321° 11°  
NP2:199° 69° 43° T-axis: 3.21 63° 45°  
N-axis: 0.03 220° 43°  
V.R.: 74%  $\epsilon$ :-0.01 N:16 COMP:22

2019/08/04 19:23: 3.5  
E OFF FUKUSHIMA PREF  
Hypo.:37°42.4'N 141°37.9'E 45km



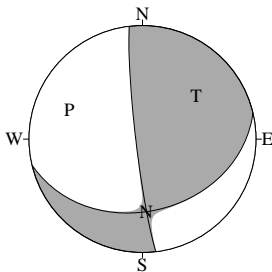
Cent.:37°44.2'N 141°38.2'E 51km  $\Delta t = 6.4$   
Mo:  $3.56 \times 10^{16}$  N·m Mw:6.3 Mj:6.4 (sec)  
mrr: 2.45 mtt:-0.33 mff:-2.12  
mrt: 0.99 mrf: 2.42 mtf:-0.74 ( $\times 10^{16}$  N·m)  
STR DIP SLIP MOM AZM PLG  
NP1: 22° 69° 91° P-axis:-3.53 111° 24°  
NP2:198° 21° 87° T-axis: 3.59 294° 66°  
N-axis:-0.06 201° 1°  
V.R.: 75%  $\epsilon$ : 0.02 N:31 COMP:65

2019/08/08 06:28: 3.4  
TAIWAN REGION  
Hypo.:24°22.4'N 121°52.1'E 38km



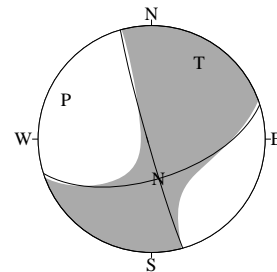
Cent.:24°15.1'N 121°52.9'E 34km  $\Delta t = 6.2$   
Mo:  $1.05 \times 10^{18}$  N·m Mw:5.9 Mj:6.4 (sec)  
mrr:-0.22 mtt: 0.02 mff: 0.20  
mrt: 0.15 mrf: 0.44 mtf: 0.95 ( $\times 10^{18}$  N·m)  
STR DIP SLIP MOM AZM PLG  
NP1: 88° 65° 0° P-axis:-0.90 46° 17°  
NP2:178° 90°-155° T-axis: 1.19 311° 17°  
N-axis:-0.29 179° 65°  
V.R.: 68%  $\epsilon$ : 0.25 N:11 COMP:26

2019/08/15 14:32:52.9  
SHIMOKITA PENINSULA REG  
Hypo.:40°47.5'N 141°20.3'E 93km



Cent.:40°55.6'N 141°20.7'E 85km  $\Delta t = 5.5$   
Mo:  $1.90 \times 10^{17}$  N·m Mw:5.5 Mj:5.5 (sec)  
mrr: 0.26 mtt: 0.27 mff:-0.53  
mrt: 0.26 mrf:-1.51 mtf:-1.07 ( $\times 10^{17}$  N·m)  
STR DIP SLIP MOM AZM PLG  
NP1: 77° 37° 172° P-axis:-1.90 292° 31°  
NP2:173° 85° 54° T-axis: 1.90 51° 39°  
N-axis: 0.00 177° 36°  
V.R.: 80%  $\epsilon$ :-0.01 N:26 COMP:45

2019/08/15 15:06: 8.6  
SHIMOKITA PENINSULA REG  
Hypo.:40°47.5'N 141°19.4'E 91km

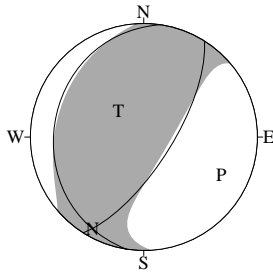


Cent.:40°47.5'N 141°19.4'E 91km  $\Delta t = 0.6$   
Mo:  $1.10 \times 10^{16}$  N·m Mw:4.6 Mj:4.5 (sec)  
mrr: 0.15 mtt: 0.48 mff:-0.63  
mrt: 0.10 mrf:-0.51 mtf:-0.79 ( $\times 10^{16}$  N·m)  
STR DIP SLIP MOM AZM PLG  
NP1: 72° 61° 176° P-axis:-1.17 295° 18°  
NP2:164° 87° 29° T-axis: 1.03 32° 22°  
N-axis: 0.14 170° 61°  
V.R.: 81%  $\epsilon$ :-0.12 N:19 COMP:24

EQUAL AREA PROJECTON, LOWER HEMISPHERE.

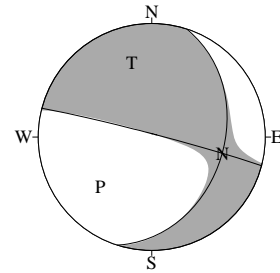
Hypo.:Location of hypocenter, Cent.:Location of centroid,  $\Delta t$ :Centroid time minus origin time  
Mo:Total scalar moment, Mw:Moment Magnitude, Mj:JMA Magnitude  
mrr,mtt,mff,mrt,mrf,mtf:Moment tensor components, STR,DIP,SLIP:Fault parameters of nodal plane  
MOM,AZM,PLG:Moment tensor component,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

2019/08/15 18:07:35.5  
E OFF MIYAGI PREF  
Hypo.:38°35.4'N 142°16.7'E 39km



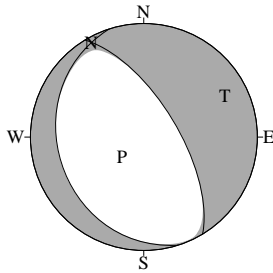
Cent.:38°35.0'N 142°16.8'E 39km  $\Delta t = 0.6$   
Mo:  $1.41 \times 10^{16}$  N·m Mw:4.7 Mj:4.6 (sec)  
mrr: 0.78 mtt: 0.07 mff:-0.85  
mrt: 0.59 mrf: 0.89 mtf:-0.47 ( $\times 10^{16}$  N·m)  
STR DIP SLIP MOM AZM PLG  
NP1: 32° 70° 98° P-axis:-1.53 116° 25°  
NP2:189° 22° 68° T-axis: 1.29 316° 64°  
N-axis: 0.24 209° 8°  
V.R.: 75%  $\epsilon$ :-0.16 N:23 COMP:35

2019/08/15 18:15: 4.1  
SE OFF TOKACHI  
Hypo.:42° 8.9'N 143°48.7'E 68km



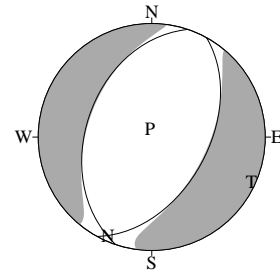
Cent.:42° 8.9'N 143°48.6'E 68km  $\Delta t = 0.4$   
Mo:  $4.53 \times 10^{15}$  N·m Mw:4.4 Mj:4.4 (sec)  
mrr:-0.29 mtt: 1.49 mff:-1.20  
mrt: 3.45 mrf:-1.19 mtf: 2.32 ( $\times 10^{15}$  N·m)  
STR DIP SLIP MOM AZM PLG  
NP1: 18° 37°-176° P-axis:-4.65 226° 37°  
NP2:285° 88° -54° T-axis: 4.41 345° 33°  
N-axis: 0.24 103° 36°  
V.R.: 76%  $\epsilon$ :-0.05 N:24 COMP:31

2019/08/18 07:28:37.3  
FAR E OFF IZU ISLANDS  
Hypo.:31° 0.7'N 142°42.9'E 44km



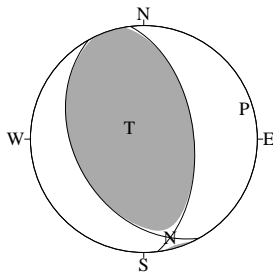
Cent.:31° 0.7'N 142°45.4'E 10km  $\Delta t = 0.5$   
Mo:  $8.70 \times 10^{15}$  N·m Mw:4.6 Mj:4.8 (sec)  
mrr:-6.54 mtt: 1.14 mff: 5.41  
mrt: 3.30 mrf:-4.73 mtf:-2.42 ( $\times 10^{15}$  N·m)  
STR DIP SLIP MOM AZM PLG  
NP1:329° 66° -96° P-axis:-8.77 228° 69°  
NP2:162° 25° -78° T-axis: 8.63 63° 21°  
N-axis: 0.14 331° 5°  
V.R.: 71%  $\epsilon$ :-0.02 N:17 COMP:33

2019/08/20 21:52:22.4  
NEAR AMAMI-OSHIMA ISLAND  
Hypo.:28° 2.4'N 130°55.1'E 75km



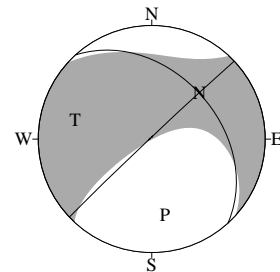
Cent.:27°53.7'N 130°54.9'E 13km  $\Delta t = 4.2$   
Mo:  $1.30 \times 10^{17}$  N·m Mw:5.4 Mj:5.0 (sec)  
mrr:-1.27 mtt: 0.13 mff: 1.14  
mrt:-0.17 mrf:-0.12 mtf: 0.55 ( $\times 10^{17}$  N·m)  
STR DIP SLIP MOM AZM PLG  
NP1: 29° 49° -83° P-axis:-1.30 348° 84°  
NP2:199° 42° -98° T-axis: 1.40 114° 4°  
N-axis:-0.10 204° 5°  
V.R.: 87%  $\epsilon$ : 0.07 N:13 COMP:30

2019/08/24 08:44:52.3  
NEAR ISHIGAKIJIMA ISLAND  
Hypo.:24°21.9'N 124°42.4'E 54km



Cent.:24° 1.4'N 124°42.9'E 37km  $\Delta t = 2.2$   
Mo:  $4.75 \times 10^{16}$  N·m Mw:5.1 Mj:5.2 (sec)  
mrr: 4.44 mtt:-0.36 mff:-4.09  
mrt: 0.52 mrf: 1.45 mtf: 1.36 ( $\times 10^{16}$  N·m)  
STR DIP SLIP MOM AZM PLG  
NP1:353° 54° 104° P-axis:-4.70 73° 8°  
NP2:151° 38° 72° T-axis: 4.79 309° 77°  
N-axis:-0.09 165° 11°  
V.R.: 68%  $\epsilon$ : 0.02 N:16 COMP:32

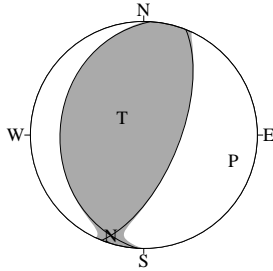
2019/08/24 13:52:46.5  
E OFF FUKUSHIMA PREF  
Hypo.:37°23.2'N 142°25.1'E 25km



Cent.:37°26.3'N 142°24.9'E 25km  $\Delta t = 4.0$   
Mo:  $8.21 \times 10^{16}$  N·m Mw:5.2 Mj:5.6 (sec)  
mrr: 0.07 mtt:-5.46 mff: 5.39  
mrt: 5.60 mrf: 3.08 mtf:-0.43 ( $\times 10^{16}$  N·m)  
STR DIP SLIP MOM AZM PLG  
NP1:227° 89° -49° P-axis:-9.22 170° 33°  
NP2:318° 41°-178° T-axis: 7.20 284° 31°  
N-axis: 2.02 46° 41°  
V.R.: 75%  $\epsilon$ :-0.22 N:22 COMP:42

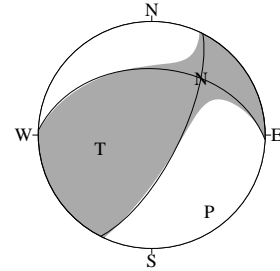
EQUAL AREA PROJECTON, LOWER HEMISPHERE.

2019/08/25 03:51: 3.0  
 E OFF AOMORI PREF  
 Hypo.:41°29.0'N 142° 1.7'E 63km



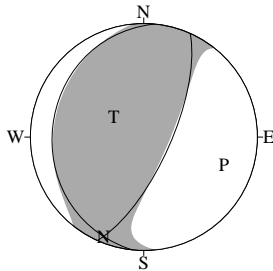
Cent.:41°29.0'N 142° 1.9'E 63km  $\Delta t = 0.5$   
 Mo:  $5.80 \times 10^{15}$  N·m Mw:4.4 Mj:4.1 (sec)  
 mrr: 4.44 mtt:-0.01 mff:-4.42  
 mrt: 1.65 mrf: 3.19 mtf:-1.04 ( $\times 10^{15}$  N·m)  
 STR DIP SLIP MOM AZM PLG  
 NP1: 22° 64° 98° P-axis:-5.85 106° 19°  
 NP2:183° 27° 73° T-axis: 5.75 309° 70°  
 N-axis: 0.10 198° 7°  
 V.R.: 62%  $\epsilon$ :-0.02 N:15 COMP:24

2019/08/27 00:13:30.9  
 EASTERN YAMANASHI PREF  
 Hypo.:35°29.9'N 139° 4.1'E 14km



Cent.:35°29.8'N 139° 4.0'E 14km  $\Delta t = 0.3$   
 Mo:  $1.48 \times 10^{15}$  N·m Mw:4.0 Mj:4.2 (sec)  
 mrr: 0.75 mtt:-0.81 mff: 0.06  
 mrt: 0.21 mrf: 0.89 mtf:-0.86 ( $\times 10^{15}$  N·m)  
 STR DIP SLIP MOM AZM PLG  
 NP1: 27° 70° 53° P-axis:-1.54 143° 17°  
 NP2:272° 41° 149° T-axis: 1.42 255° 51°  
 N-axis: 0.12 41° 34°  
 V.R.: 62%  $\epsilon$ :-0.08 N:20 COMP:27

2019/08/29 08:46:39.3  
 E OFF AOMORI PREF  
 Hypo.:40°58.8'N 143° 1.6'E 21km



Cent.:40°59.2'N 143° 1.7'E 33km  $\Delta t = 6.9$   
 Mo:  $1.13 \times 10^{16}$  N·m Mw:6.0 Mj:6.1 (sec)  
 mrr: 0.64 mtt: 0.06 mff:-0.70  
 mrt: 0.38 mrf: 0.79 mtf:-0.24 ( $\times 10^{16}$  N·m)  
 STR DIP SLIP MOM AZM PLG  
 NP1: 24° 71° 96° P-axis:-1.18 109° 26°  
 NP2:186° 20° 73° T-axis: 1.07 304° 64°  
 N-axis: 0.12 202° 6°  
 V.R.: 76%  $\epsilon$ :-0.10 N:32 COMP:78

EQUAL AREA PROJECTON, LOWER HEMISPHERE.