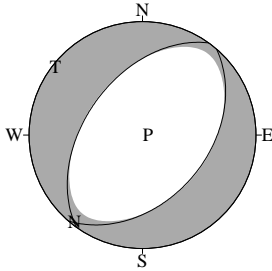


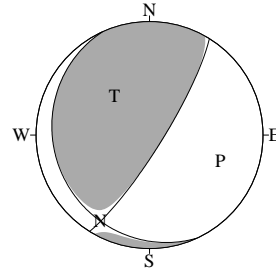
CMT SOLUTIONS FOR EARTHQUAKES IN DECEMBER, 2016

2016/12/04 08:34:39.9
E OFF FUKUSHIMA PREF
Hypo.:37° 9.5'N 141°29.2'E 28km



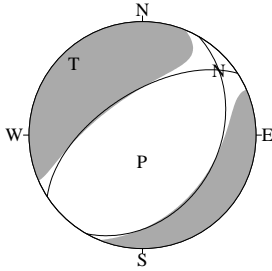
Cent.:37° 9.6'N 141°29.0'E 10km $\Delta t = 0.4$
Mo: 4.01×10^{15} N·m Mw:4.3 Mj:4.7 (sec)
mrr:-4.06 mtt: 1.59 mff: 2.47
mrt: 0.11 mrf: 0.44 mtf: 1.82 ($\times 10^{15}$ N·m)
STR DIP SLIP MOM AZM PLG
NP1: 41° 42° -86° P-axis: -4.09 88° 86°
NP2: 216° 48° -93° T-axis: 3.93 308° 3°
N-axis: 0.16 218° 3°
V.R.: 76% ϵ : -0.04 N:29 COMP:41

2016/12/04 16:05:13.3
FAR E OFF SANRIKU
Hypo.:40°17.1'N 144° 1.8'E 26km



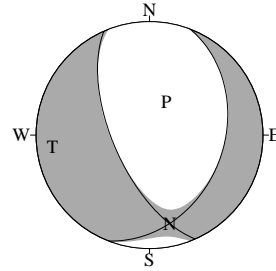
Cent.:40°11.1'N 144° 1.4'E 10km $\Delta t = 10.0$
Mo: 4.34×10^{16} N·m Mw:5.0 Mj:5.1 (sec)
mrr: 1.40 mtt: 0.48 mff: -1.89
mrt: 2.28 mrf: 3.28 mtf: -0.10 ($\times 10^{16}$ N·m)
STR DIP SLIP MOM AZM PLG
NP1: 32° 81° 104° P-axis: -4.29 110° 34°
NP2: 156° 17° 35° T-axis: 4.39 318° 52°
N-axis: -0.09 210° 14°
V.R.: 72% ϵ : 0.02 N:14 COMP:30

2016/12/04 20:42:23.5
E OFF FUKUSHIMA PREF
Hypo.:37°11.7'N 141°31.7'E 36km



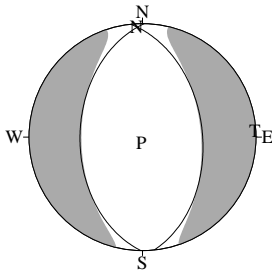
Cent.:37°11.7'N 141°31.8'E 10km $\Delta t = 0.4$
Mo: 3.03×10^{15} N·m Mw:4.3 Mj:4.6 (sec)
mrr:-2.41 mtt: 1.16 mff: 1.25
mrt: 1.35 mrf: 0.54 mtf: 1.68 ($\times 10^{15}$ N·m)
STR DIP SLIP MOM AZM PLG
NP1: 29° 33° -114° P-axis: -2.86 181° 71°
NP2: 237° 60° -75° T-axis: 3.20 316° 14°
N-axis: -0.34 50° 13°
V.R.: 78% ϵ : 0.11 N:17 COMP:28

2016/12/05 06:48:23.8
FAR E OFF CENTRAL HONSHU
Hypo.:33°56.3'N 142°24.5'E 60km



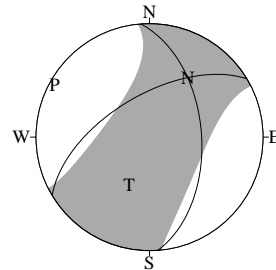
Cent.:33°50.8'N 142°23.6'E 18km $\Delta t = 1.1$
Mo: 2.38×10^{16} N·m Mw:4.9 Mj:4.7 (sec)
mrr:-1.76 mtt: -0.28 mff: 2.04
mrt: -0.97 mrf: 1.03 mtf: -0.03 ($\times 10^{16}$ N·m)
STR DIP SLIP MOM AZM PLG
NP1: 21° 35° -51° P-axis: -2.43 27° 63°
NP2: 156° 64° -114° T-axis: 2.33 263° 15°
N-axis: 0.10 167° 21°
V.R.: 68% ϵ : -0.04 N:20 COMP:21

2016/12/06 01:11:16.7
FAR E OFF CENTRAL HONSHU
Hypo.:33°57.4'N 142°25.0'E 59km



Cent.:33°57.4'N 142°27.0'E 10km $\Delta t = 0.4$
Mo: 2.79×10^{15} N·m Mw:4.2 Mj:4.6 (sec)
mrr:-2.67 mtt: -0.23 mff: 2.90
mrt: 0.15 mrf: -0.09 mtf: -0.14 ($\times 10^{15}$ N·m)
STR DIP SLIP MOM AZM PLG
NP1: 354° 46° -95° P-axis: -2.68 194° 86°
NP2: 181° 44° -85° T-axis: 2.91 87° 1°
N-axis: -0.23 357° 3°
V.R.: 74% ϵ : 0.08 N:16 COMP:24

2016/12/06 09:05:12.0
NORTHERN GIFU PREF
Hypo.:36° 0.4'N 137°20.6'E 5km

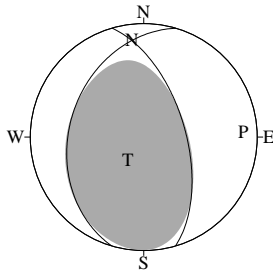


Cent.:36° 0.4'N 137°20.4'E 10km $\Delta t = 0.3$
Mo: 2.62×10^{15} N·m Mw:4.2 Mj:4.5 (sec)
mrr: 1.68 mtt: 0.44 mff: -2.12
mrt: -0.50 mrf: -0.18 mtf: -2.00 ($\times 10^{15}$ N·m)
STR DIP SLIP MOM AZM PLG
NP1: 356° 52° 39° P-axis: -3.25 299° 5°
NP2: 239° 60° 135° T-axis: 1.99 203° 52°
N-axis: 1.26 33° 38°
V.R.: 74% ϵ : -0.39 N:12 COMP:16

EQUAL AREA PROJECTON, LOWER HEMISPHERE.

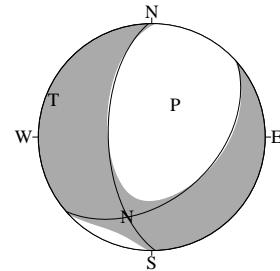
Hypo.:Location of hypocenter, Cent.:Location of centroid, Δt :Centroid time minus origin time
Mo:Total scalar moment, Mw:Moment Magnitude, Mj:JMA Magnitude
mrr,mtt,mff,mrt,mrf,mtf: Moment tensor components, STR,DIP,SLIP:Fault parameters of nodal plane
MOM,AZM,PLG: Moment tensor component, azimuth and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

2016/12/08 19:58:54.5
 ISHIKARI BAY REGION
 Hypo.: 43°32.6'N 140°43.2'E 11km



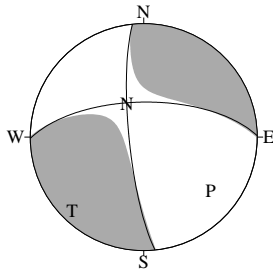
Cent.: 43°32.6'N 140°43.0'E 11km $\Delta t = 0.4$
 Mo: 2.85×10^{15} N·m Mw: 4.2 Mj: 4.5 (sec)
 mrr: 2.46 mtt: -0.01 mff: -2.45
 mrt: -0.90 mrf: 1.16 mtf: -0.05 ($\times 10^{15}$ N·m)
 STR DIP SLIP MOM AZM PLG
 NP1: 344° 60° 72° P-axis: -2.72 87° 13°
 NP2: 196° 35° 118° T-axis: 2.98 215° 70°
 N-axis: -0.26 353° 15°
 V.R.: 79% ϵ : 0.09 N: 9 COMP: 11

2016/12/11 22:45:20.7
 FAR E OFF CENTRAL HONSHU
 Hypo.: 36°32.5'N 143°53.0'E 67km



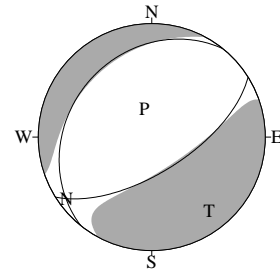
Cent.: 36°26.2'N 143°54.4'E 15km $\Delta t = 0.7$
 Mo: 1.53×10^{16} N·m Mw: 4.7 Mj: 4.7 (sec)
 mrr: -1.18 mtt: 0.04 mff: 1.13
 mrt: -0.53 mrf: 0.60 mtf: 0.62 ($\times 10^{16}$ N·m)
 STR DIP SLIP MOM AZM PLG
 NP1: 49° 44° -49° P-axis: -1.60 36° 61°
 NP2: 178° 58° -122° T-axis: 1.46 291° 8°
 N-axis: 0.14 197° 27°
 V.R.: 83% ϵ : -0.09 N: 51 COMP: 56

2016/12/14 11:01:23.2
 MARIANA ISLANDS REGION
 Hypo.: 21°58.6'N 145° 3.1'E 8km



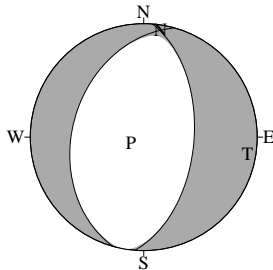
Cent.: 20°47.0'N 144°40.9'E 16km $\Delta t = -8.6$
 Mo: 1.54×10^{18} N·m Mw: 6.1 Mj: 6.3 (sec)
 mrr: -0.33 mtt: 0.30 mff: 0.02
 mrt: 0.12 mrf: 0.61 mtf: -1.38 ($\times 10^{18}$ N·m)
 STR DIP SLIP MOM AZM PLG
 NP1: 269° 65° -168° P-axis: -1.48 129° 25°
 NP2: 174° 79° -26° T-axis: 1.61 224° 10°
 N-axis: -0.13 333° 63°
 V.R.: 92% ϵ : 0.08 N: 1 COMP: 5

2016/12/20 01:41:11.4
 E OFF FUKUSHIMA PREF
 Hypo.: 37°18.5'N 141°38.3'E 33km



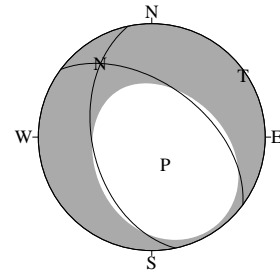
Cent.: 37°17.5'N 141°39.1'E 11km $\Delta t = 2.8$
 Mo: 6.80×10^{16} N·m Mw: 5.2 Mj: 5.5 (sec)
 mrr: -4.88 mtt: 2.96 mff: 1.93
 mrt: -3.73 mrf: -1.99 mtf: 3.28 ($\times 10^{16}$ N·m)
 STR DIP SLIP MOM AZM PLG
 NP1: 58° 64° -82° P-axis: -6.43 345° 69°
 NP2: 219° 27° -107° T-axis: 7.18 142° 19°
 N-axis: -0.76 234° 8°
 V.R.: 86% ϵ : 0.11 N: 15 COMP: 30

2016/12/24 02:25: 2.7
 E OFF FUKUSHIMA PREF
 Hypo.: 36°43.6'N 141°51.1'E 40km



Cent.: 36°36.7'N 141°51.9'E 31km $\Delta t = 5.8$
 Mo: 3.01×10^{16} N·m Mw: 4.9 Mj: 5.1 (sec)
 mrr: -2.87 mtt: 0.09 mff: 2.78
 mrt: 0.15 mrf: -0.88 mtf: 0.50 ($\times 10^{16}$ N·m)
 STR DIP SLIP MOM AZM PLG
 NP1: 4° 53° -97° P-axis: -3.02 245° 80°
 NP2: 196° 37° -81° T-axis: 2.99 99° 8°
 N-axis: 0.03 9° 5°
 V.R.: 78% ϵ : -0.01 N: 37 COMP: 71

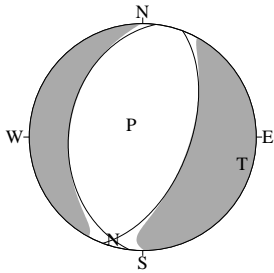
2016/12/28 21:38:49.0
 NORTHERN IBARAKI PREF
 Hypo.: 36°43.2'N 140°34.4'E 11km



Cent.: 36°53.1'N 140°34.2'E 10km $\Delta t = 7.1$
 Mo: 0.94×10^{18} N·m Mw: 5.9 Mj: 6.3 (sec)
 mrr: -0.87 mtt: 0.27 mff: 0.60
 mrt: 0.43 mrf: 0.18 mtf: -0.33 ($\times 10^{18}$ N·m)
 STR DIP SLIP MOM AZM PLG
 NP1: 307° 52° -118° P-axis: -1.06 154° 68°
 NP2: 168° 46° -59° T-axis: 0.81 56° 3°
 N-axis: 0.25 325° 22°
 V.R.: 83% ϵ : -0.24 N: 30 COMP: 86

EQUAL AREA PROJECTON, LOWER HEMISPHERE.

2016/12/31 05:08:27.6
 E OFF FUKUSHIMA PREF
 Hypo.: 37°21.3'N 141°24.5'E 27km



Cent.: 37°22.0'N 141°24.6'E 18km $\Delta t = 5.2$
 $M_0 = 6.66 \times 10^{16} \text{N}\cdot\text{m}$ $M_w = 5.1$ $M_j = 5.4$ (sec)
 $m_{rr} = -5.96$ $m_{tt} = -0.05$ $m_{ff} = 6.01$
 $m_{rt} = -1.28$ $m_{rf} = -2.12$ $m_{tf} = 1.59$ ($\times 10^{16} \text{N}\cdot\text{m}$)
 STR DIP SLIP MOM AZM PLG
 NP1: 21° 56° -82° P-axis: -6.48 317° 78°
 NP2: 187° 35° -101° T-axis: 6.84 105° 10°
 N-axis: -0.36 196° 6°
 V.R.: 83% ϵ : 0.05 N:38 COMP:87

EQUAL AREA PROJECTON, LOWER HEMISPHERE.