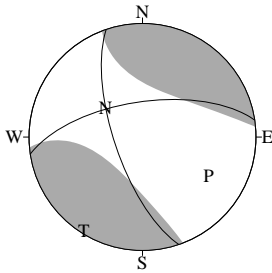


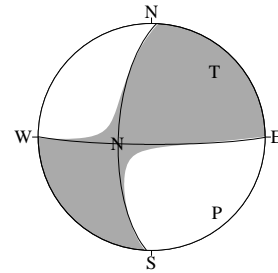
CMT SOLUTIONS FOR EARTHQUAKES IN NOVEMBER, 2019

2019/11/03 14:02:41.9
E OFF FUKUSHIMA PREF
Hypo.:37°17.9'N 141°46.6'E 42km



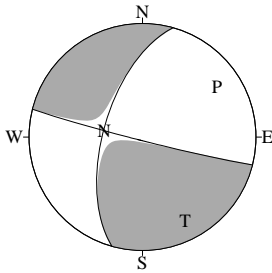
Cent.:37°16.3'N 141°47.4'E 32km $\Delta t = 0.4$
Mo: 1.31×10^{16} N·m Mw:4.7 Mj:5.0 (sec)
mrr:-0.66 mtt: 0.87 mff:-0.21
mrt: 0.03 mrf: 0.29 mtf:-1.10 ($\times 10^{16}$ N·m)
STR DIP SLIP MOM AZM PLG
NP1:161° 70° -27° P-axis:-1.07 120° 33°
NP2:262° 65° -157° T-axis: 1.56 212° 3°
N-axis:-0.50 308° 56°
V.R.: 68% ϵ : 0.32 N:12 COMP:36

2019/11/07 07:03: 9.4
E OFF AOMORI PREF
Hypo.:40°55.4'N 142°41.8'E 21km



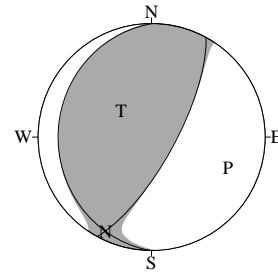
Cent.:40°55.4'N 142°42.6'E 21km $\Delta t = 0.4$
Mo: 4.27×10^{15} N·m Mw:4.4 Mj:4.5 (sec)
mrr: 0.51 mtt:-0.46 mff:-0.04
mrt: 1.68 mrf:-0.22 mtf:-3.90 ($\times 10^{15}$ N·m)
STR DIP SLIP MOM AZM PLG
NP1: 90° 85° 156° P-axis:-4.40 139° 13°
NP2:182° 66° 6° T-axis: 4.14 44° 21°
N-axis: 0.26 259° 65°
V.R.: 57% ϵ :-0.06 N:18 COMP:30

2019/11/08 18:18:23.3
E OFF IBARAKI PREF
Hypo.:36°32.4'N 140°50.2'E 52km



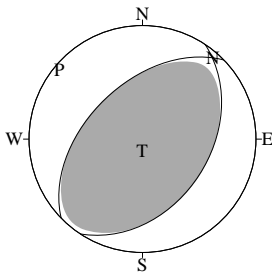
Cent.:36°32.5'N 140°51.4'E 52km $\Delta t = 0.4$
Mo: 3.48×10^{15} N·m Mw:4.3 Mj:4.4 (sec)
mrr:-0.22 mtt: 1.65 mff:-1.43
mrt:-1.58 mrf: 0.47 mtf: 2.65 ($\times 10^{15}$ N·m)
STR DIP SLIP MOM AZM PLG
NP1:196° 62° -177° P-axis:-3.43 56° 22°
NP2:104° 87° -28° T-axis: 3.54 153° 18°
N-axis:-0.11 279° 62°
V.R.: 63% ϵ : 0.03 N:16 COMP:25

2019/11/10 19:46: 4.5
FAR E OFF SANRIKU
Hypo.:40°16.5'N 143°49.6'E 17km



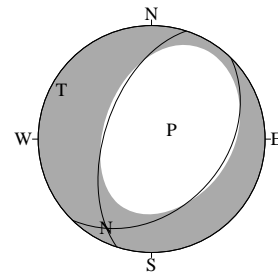
Cent.:40°15.2'N 143°50.2'E 12km $\Delta t = 8.7$
Mo: 1.00×10^{17} N·m Mw:5.3 Mj:5.4 (sec)
mrr: 0.53 mtt: 0.02 mff:-0.55
mrt: 0.43 mrf: 0.71 mtf:-0.17 ($\times 10^{17}$ N·m)
STR DIP SLIP MOM AZM PLG
NP1: 29° 73° 99° P-axis:-1.00 112° 28°
NP2:181° 19° 63° T-axis: 1.00 311° 61°
N-axis: 0.00 206° 8°
V.R.: 82% ϵ :-0.04 N:38 COMP:93

2019/11/12 21:55:36.8
E OFF IBARAKI PREF
Hypo.:36°25.6'N 141° 1.0'E 46km



Cent.:36°25.6'N 141° 1.3'E 46km $\Delta t = 0.4$
Mo: 5.81×10^{15} N·m Mw:4.4 Mj:4.4 (sec)
mrr: 5.76 mtt:-2.36 mff:-3.40
mrt:-1.12 mrf:-0.32 mtf:-2.70 ($\times 10^{15}$ N·m)
STR DIP SLIP MOM AZM PLG
NP1: 33° 41° 81° P-axis:-5.71 310° 5°
NP2:226° 50° 98° T-axis: 5.91 182° 82°
N-axis:-0.20 41° 6°
V.R.: 59% ϵ : 0.03 N:30 COMP:51

2019/11/16 11:51:51.5
FAR SE OFF BOSO PEN
Hypo.:34° 3.8'N 141°39.4'E 50km

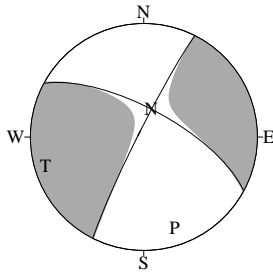


Cent.:34° 4.7'N 141°41.0'E 18km $\Delta t = 0.7$
Mo: 2.75×10^{16} N·m Mw:4.9 Mj:4.9 (sec)
mrr:-2.67 mtt: 0.91 mff: 1.75
mrt:-0.24 mrf: 1.15 mtf: 0.92 ($\times 10^{16}$ N·m)
STR DIP SLIP MOM AZM PLG
NP1: 44° 37° -68° P-axis:-3.00 65° 74°
NP2:198° 56° -106° T-axis: 2.49 299° 10°
N-axis: 0.51 207° 13°
V.R.: 79% ϵ :-0.17 N:48 COMP:97

EQUAL AREA PROJECTON, LOWER HEMISPHERE.

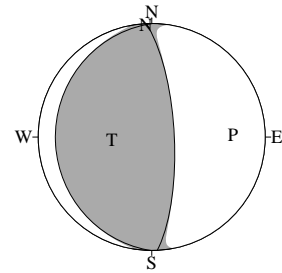
Hypo.:Location of hypocenter, Cent.:Location of centroid, Δt :Centroid time minus origin time
Mo:Total scalar moment, Mw:Moment Magnitude, Mj:JMA Magnitude
mrr,mtt,mff,mrt,mrf,mtf: Moment tensor components, STR,DIP,SLIP:Fault parameters of nodal plane
MOM,AZM,PLG: Moment tensor component, azimuth and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

2019/11/17 20:05:33.1
NEAR IZU-OSHIMA ISLAND
Hypo.:34°38.3'N 139° 3.1'E 13km



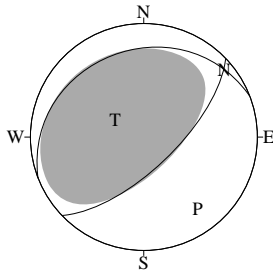
Cent.:34°32.9'N 139° 3.6'E 13km $\Delta t = 0.8$
Mo: $1.12 \times 10^{16} \text{N}\cdot\text{m}$ Mw:4.6 Mj:4.7 (sec)
mrr:-0.11 mtt:-0.81 mff: 0.92
mrt: 0.21 mrf: 0.32 mtf:-0.60 ($\times 10^{16} \text{N}\cdot\text{m}$)
STR DIP SLIP MOM AZM PLG
NP1:207° 86° -20° P-axis:-1.09 161° 17°
NP2:298° 70° -175° T-axis: 1.15 254° 11°
N-axis:-0.06 15° 69°
V.R.: 77% ϵ : 0.06 N:50 COMP:88

2019/11/19 15:10:26.9
NEAR TORISHIMA IS
Hypo.:29°17.7'N 142°10.4'E 52km



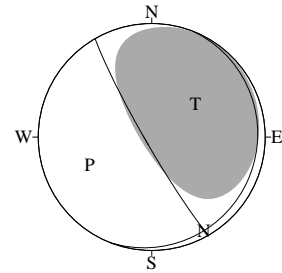
Cent.:29°15.9'N 142°14.8'E 14km $\Delta t = 1.3$
Mo: $3.14 \times 10^{16} \text{N}\cdot\text{m}$ Mw:4.9 Mj:4.8 (sec)
mrr: 1.65 mtt: 0.05 mff:-1.70
mrt:-0.14 mrf: 2.65 mtf: 0.04 ($\times 10^{16} \text{N}\cdot\text{m}$)
STR DIP SLIP MOM AZM PLG
NP1:357° 74° 89° P-axis:-3.16 88° 29°
NP2:180° 16° 93° T-axis: 3.11 266° 61°
N-axis: 0.05 357° 1°
V.R.: 65% ϵ :-0.02 N:15 COMP:30

2019/11/22 05:23:49.9
SW IBARAKI PREF
Hypo.:36° 4.2'N 139°53.4'E 45km



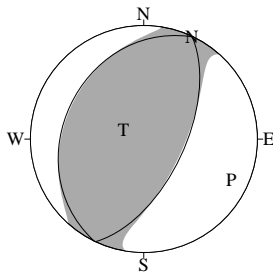
Cent.:36° 4.2'N 139°53.5'E 45km $\Delta t = 0.5$
Mo: $9.36 \times 10^{15} \text{N}\cdot\text{m}$ Mw:4.6 Mj:4.5 (sec)
mrr: 7.00 mtt:-4.84 mff:-2.16
mrt: 4.24 mrf: 5.14 mtf:-2.37 ($\times 10^{15} \text{N}\cdot\text{m}$)
STR DIP SLIP MOM AZM PLG
NP1: 46° 68° 81° P-axis:-8.81 143° 22°
NP2:249° 24° 111° T-axis: 9.92 301° 66°
N-axis:-1.11 50° 8°
V.R.: 68% ϵ : 0.11 N:18 COMP:36

2019/11/22 07:31:57.0
FAR S OFF TOKAI DISTRICT
Hypo.:32°33.8'N 137°26.2'E 420km



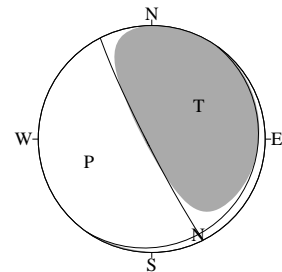
Cent.:32°35.1'N 137°25.9'E 418km $\Delta t = 1.5$
Mo: $4.18 \times 10^{16} \text{N}\cdot\text{m}$ Mw:5.0 Mj:4.9 (sec)
mrr: 1.13 mtt:-0.33 mff:-0.80
mrt: 2.20 mrf:-3.46 mtf:-0.47 ($\times 10^{16} \text{N}\cdot\text{m}$)
STR DIP SLIP MOM AZM PLG
NP1: 22° 8° 141° P-axis:-3.74 246° 40°
NP2:150° 85° 84° T-axis: 4.61 53° 50°
N-axis:-0.87 151° 6°
V.R.: 86% ϵ : 0.19 N:48 COMP:75

2019/11/22 18:05: 8.1
HYUGANADA REGION
Hypo.:31°56.2'N 131°54.7'E 24km



Cent.:31°42.5'N 131°54.8'E 36km $\Delta t = 0.9$
Mo: $6.87 \times 10^{16} \text{N}\cdot\text{m}$ Mw:5.2 Mj:5.2 (sec)
mrr: 5.62 mtt:-0.72 mff:-4.90
mrt: 1.50 mrf: 3.22 mtf:-2.58 ($\times 10^{16} \text{N}\cdot\text{m}$)
STR DIP SLIP MOM AZM PLG
NP1: 25° 61° 90° P-axis:-7.12 115° 16°
NP2:206° 29° 91° T-axis: 6.61 294° 74°
N-axis: 0.51 25° 0°
V.R.: 70% ϵ :-0.07 N:34 COMP:82

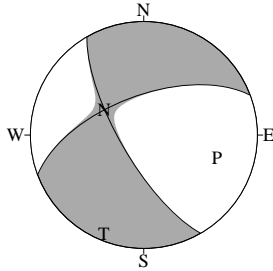
2019/11/23 21:58: 9.9
E OFF HOKKAIDO
Hypo.:43°37.0'N 147°10.7'E 34km



Cent.:43°28.0'N 147°10.8'E 10km $\Delta t = 8.5$
Mo: $1.20 \times 10^{17} \text{N}\cdot\text{m}$ Mw:5.3 Mj:5.4 (sec)
mrr: 0.21 mtt: 0.01 mff:-0.22
mrt: 0.55 mrf:-1.01 mtf:-0.09 ($\times 10^{17} \text{N}\cdot\text{m}$)
STR DIP SLIP MOM AZM PLG
NP1: 36° 8° 152° P-axis:-1.10 250° 41°
NP2:153° 86° 83° T-axis: 1.20 55° 48°
N-axis:-0.10 154° 7°
V.R.: 84% ϵ : 0.09 N:21 COMP:52

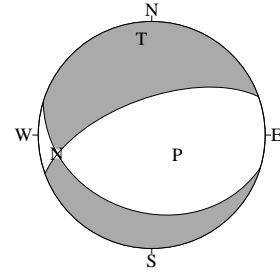
EQUAL AREA PROJECTON, LOWER HEMISPHERE.

2019/11/26 15:09:10.9
 HIUCHINADA SETONAIKAI
 Hypo.:34° 2.7'N 133° 3.8'E 16km



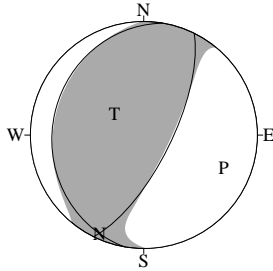
Cent.:34° 3.1'N 133° 4.0'E 17km $\Delta t = 0.5$
 Mo: 6.37×10^{15} N·m Mw:4.5 Mj:4.6 (sec)
 mrr:-1.69 mtt: 4.98 mff:-3.29
 mrt: 0.13 mrf: 3.15 mtf:-3.37 ($\times 10^{15}$ N·m)
 STR DIP SLIP MOM AZM PLG
 NP1:249° 62° -161° P-axis:-6.43 107° 33°
 NP2:150° 73° -30° T-axis: 6.30 202° 7°
 N-axis: 0.13 303° 56°
 V.R.: 69% ϵ :-0.02 N:14 COMP:23

2019/11/28 16:41:15.4
 OFF NEMURO PENINSULA
 Hypo.:42°49.5'N 145°14.9'E 49km



Cent.:42°49.5'N 145°15.1'E 49km $\Delta t = 0.6$
 Mo: 1.17×10^{16} N·m Mw:4.6 Mj:4.7 (sec)
 mrr:-0.89 mtt: 1.00 mff:-0.11
 mrt: 0.57 mrf: 0.38 mtf: 0.03 ($\times 10^{16}$ N·m)
 STR DIP SLIP MOM AZM PLG
 NP1:107° 32° -58° P-axis:-1.17 127° 67°
 NP2:250° 63° -108° T-axis: 1.17 354° 16°
 N-axis: 0.00 259° 16°
 V.R.: 78% ϵ : 0.00 N:18 COMP:30

2019/11/29 13:01:39.5
 FAR E OFF SANRIKU
 Hypo.:39° 7.5'N 143° 2.0'E 26km



Cent.:39° 8.3'N 143° 1.9'E 30km $\Delta t = 4.8$
 Mo: 1.60×10^{17} N·m Mw:5.4 Mj:5.6 (sec)
 mrr: 0.96 mtt: 0.02 mff:-0.98
 mrt: 0.59 mrf: 1.11 mtf:-0.39 ($\times 10^{17}$ N·m)
 STR DIP SLIP MOM AZM PLG
 NP1: 26° 70° 96° P-axis:-1.70 112° 25°
 NP2:189° 20° 74° T-axis: 1.60 306° 64°
 N-axis: 0.10 204° 5°
 V.R.: 75% ϵ :-0.08 N:38 COMP:96

EQUAL AREA PROJECTON, LOWER HEMISPHERE.