

REFERENCES

Agreement

Data downloaded from IPSI 1.5 must be cited as:

- Mariucci M.T., Montone P., 2022. *IPSI 1.5, Database of Italian Present-day Stress Indicators*, Istituto Nazionale di Geofisica e Vulcanologia (INGV), <http://doi.org/10.13127/IPSI.1.5>

- Mariucci M.T., Montone P., 2020. *Database of Italian present-day stress indicators, IPSI 1.4*, *Scientific Data* 7, 298, doi:[10.1038/s41597-020-00640-w](https://doi.org/10.1038/s41597-020-00640-w)

- Montone P., Mariucci M.T., 2016. *The new release of the Italian contemporary stress map*, *Geophysical Journal International*, 205, 1525–1531, doi:[10.1093/gji/ggw100](https://doi.org/10.1093/gji/ggw100)

The use of a specific subset of data should also include the related references cited in the data tables and provided in the **References**.

References of Borehole Breakout data (BO)

Amato, A. & Montone, P., 1997. Present-day stress field and active tectonics in southern peninsular Italy, *Geophysical Journal International*, 130, 519-534.

Amato, A., Montone, P. & Cesaro, M., 1995. State of stress in Southern Italy from borehole breakout and focal mechanism data, *Geophysical Research Letters*, 22, 3119-3122.

Barba, S., Carafa, M.M.C., Mariucci, M.T., Montone, P. & Pierdominici, S., 2010. Present-day stress-field modelling of southern Italy constrained by stress and GPS data, *Tectonophysics*, 482(1-4), 193–204, doi:10.1016/j.tecto.2009.10.017.

Cesaro, M., 1993. Plateau Ibleo: Campo di stress da studi di breakout, analisi e modello interpretativo, Internal Report, Agenzia Ital. Pet. (AGIP), San Donato Milanese, Italy.

Cox, J.W., 1983, Long axis orientation in elongated boreholes and it's correlation with rock stress data, 24th Annual Logging Symposium Transactions: Society of Professional Well Log Analysts, 17 p.

Cucci, L., Pondrelli, S., Frepoli, A., Mariucci, M.T. & Moro, M., 2004. Local patterns of stress field and seismogenic sources in the Pergola-Melandro Basin and the Agri Valley (southern Italy), *Geophys. J. Int.*, 156, 575–583, doi:10.1111/j.1365-246X.2004.02161.x.

Mariucci M.T., Amato, A. & Montone, P., 1999. Recent tectonic evolution and present stress in the northern Apennines. *Tectonics*, 18, 108– 118.

Mariucci, M.T., Amato, A., Gambini, R., Giorgioni, M. & Montone, P., 2002. Along-depth stress rotations and active faults: An example in a 5-km deep well of southern Italy, *Tectonics*, 21(4), 1021, doi:10.1029/2001TC001338.

Mariucci, M.T., Montone, P. & Pierdominici, S., 2008. Active stress field in central Italy: a revision of deep well data in the Umbria region, *Ann. Geophys.*, 51(2–3), 433–442.

Mariucci, M.T., Montone, P. & Pierdominici, S., 2010. Present-day stress in the surroundings of 2009 L'Aquila seismic sequence (Italy), *Geophys. J. Int.*, 182(2), 1096–1102, doi:10.1111/j.1365-246X.2010.04679.x.

Montone, P. & Mariucci, M.T., 1999. Active stress in the NE external margin of the Apennines: the Ferrara arc, northern Italy, *J. Geodyn.*, 28(2–3), 251–265.

- Montone, P. & Mariucci, M.T., 2016. The new release of the Italian contemporary stress map, *Geophys. J. Int.*, 205, 1525–1531, doi: 10.1093/gji/ggw100.
- Montone, P., Amato, A., Chiulli, R. & Funiciello, R., 1992. Metodologie per la determinazione del campo di stress attuale da dati di perforazioni profonde. Paper presented at the 11th Meeting of Gruppo Nazionale di Geofisica della Terra Solida, Cons. Naz. delle Ric., Rome, Italy.
- Montone, P., Amato, A., Chiarabba, C., Buonasorte, G. & Fiordelisi, A., 1995. Evidence of active extension in Quaternary volcanoes of central Italy from breakout analysis and seismicity, *Geophys. Res. Lett.*, 22, 1909–1912.
- Montone, P., Amato, A., Frepoli, A., Mariucci, M.T. & Cesaro, M., 1997. Crustal stress regime in Italy, *Ann. Geofis.*, 40, 741–757.
- Montone P., Amato A. & Pondrelli S., 1999. Active stress map of Italy. *J. Geophys. Res.*, 104, 25,595–25,610.
- Montone, P., Mariucci, M.T., Pondrelli, S. & Amato, A., 2004. An improved stress map for Italy and surrounding regions (central Mediterranean), *J. Geophys. Res.*, 109, B10410, doi:10.1029/2003JB002703.
- Montone, P., Mariucci, M.T. & Pierdominici, S., 2012. The Italian present-day stress map, *Geophys. J. Int.*, 189, 705–716, doi:10.1111/j.1365-246X.2012.05391.x.
- Pierdominici, S., Mariucci, M.T., Montone, P. & Cesaro, M., 2005. Comparison between active stress and tectonic structures in northern Italy, Lombardia region, *Annals of Geophysics*, 48, 6, 867-881.
- Pierdominici, S., Mariucci, M.T. & Montone, P., 2011. A study to constrain the geometry of an active fault in southern Italy through borehole breakouts and downhole logs, *J. Geodyn.*, 52(3–4), 279–289, doi:10.1016/j.jog.2011.02.006.
- Ragg, S., 1995. Das Spannungsfeld im zentralen Mittelmeerraum: Breakout-Analyse und Modellierung, Diploma Thesis, Geophysical Institute, University of Karlsruhe.
- Ragg, S., Grasso, M. & Müller, B., 1999. Patterns of tectonic stress in Sicily from borehole breakout observations and finite element modelling, *Tectonics*, 18, 669-685.

References of Earthquake Focal Mechanism data (FMS)

- Anderson, H. & Jackson, J., 1987. Active tectonics of the Adriatic region, *Geophys. J. R. Astron. Soc.*, 91, 937-987.
- Boschi, E., Guidoboni, E., Ferrari, G., Valensise, G. & Gasperini, P., 1997. Catalog of Strong Italian Earthquakes From 461 B.C. to 1990, 973 pp., *Storia Geofis. Ambiente*, INGV, Rome, Italy.
- European-Mediterranean RCMT Catalog, <http://rcmt2.bo.ingv.it/>.
- Gasparini, C., Iannaccone, G. & Scarpa, R., 1985. Fault-plane solutions and seismicity of the Italian peninsula, *Tectonophysics*, 117, 59-78.
- Italian CMT dataset, <http://rcmt2.bo.ingv.it/Italydataset.html>.
- Montone, P. & Mariucci, M.T., 2016. The new release of the Italian contemporary stress map, *Geophysical Journal International*, 205, 1525–1531, doi: 10.1093/gji/ggw100.
- Pondrelli, S. (2002). European-Mediterranean Regional Centroid-Moment Tensors Catalog (RCMT) [Data set]. Istituto Nazionale di Geofisica e Vulcanologia (INGV). <https://doi.org/10.13127/rcmt/euromed>.

- Pondrelli, S. & Salimbeni, S. (2006). Italian CMT Dataset [Data set]. Istituto Nazionale di Geofisica e Vulcanologia (INGV). <https://doi.org/10.13127/rcmt/italy>.
- Pondrelli, S., Salimbeni, S., Ekström, G., Morelli, A., Gasperini, P. & Vannucci, G., 2006. The Italian CMT dataset from 1977 to the present, *Phys. Earth Planet. Int.*, 159(3-4), 286-303, doi:10.1016/j.pepi.2006.07.008.
- Quick Regional Moment Tensors, <http://autorcmt.bo.ingv.it/quicks.html>.
- Scognamiglio, L., Tinti, E. & Quintiliani, M. (2006). Time Domain Moment Tensor (TDMT) [Data set]. Istituto Nazionale di Geofisica e Vulcanologia (INGV). <https://doi.org/10.13127/TDMT>.
- Selvaggi, G., Castello, B. & Azzara, R., 1997. Spatial distribution of scalar seismic moment release in Italy (1983-1996): Seismotectonic implications for the Apennines, *Ann. Geofis.*, 40, 1565-1578.
- TDMT-INGV, Time Domain Moment Tensor catalogue, <http://cnt.rm.ingv.it/en/tdmt>.
- Ward, S.N. & Valensise, G., 1989. Fault parameters and slip distribution of the 1915, Avezzano, Italy earthquake derived from geodetic observations, *Bull. Seismol. Soc. Am.*, 79, 690-710.
- Westaway, R., 1987. The Campania, southern Italy, earthquakes of 1962 August 21, *Geophys. J. R. Astron. Soc.*, 88, 1-24.

References of Formal Inversion data (FMF)

- Boncio, P., Brozzetti, F. & Lavecchia G., 1996. State of stress in the northern Umbria-Marche Apennines (central Italy): Inferences from microearthquake and fault kinematic analyses, *Ann. Tectonicae*, 10, 80-97.
- Bressan, G., Bragato, P.L. & Venturini, C., 2003. Stress and strain tensors based on focal mechanisms in the seismotectonic framework of the Friuli- Venezia Giulia region (northeastern Italy), *Bull. Seismol. Soc. Am.*, 93(3), 1280-1297.
- Caccamo, D., Neri, G., Sarao, A. & Wyss, M., 1996. Estimates of stress directions by inversion of earthquake fault-plane solutions in Sicily, *Geophys. J. Int.*, 125, 857-868.
- Eva, E., Solarino, S., Eva, C. & Neri, G., 1997. Stress tensor orientation derived from fault plane solutions in the southwestern Alps, *J. Geophys. Res.*, 102, 8171-8185.
- Frepoli, A. & Amato, A., 2000a. Spatial variation in stresses in peninsular Italy and Sicily from background seismicity, *Tectonophysics*, 317(1-2), 109-124.
- Frepoli, A. & Amato, A., 2000b. Fault plane solutions of crustal earthquakes in southern Italy (1988-1995), seismotectonic implications, *Ann. Geofis.*, 43, 437-467.
- Frepoli, A., Cimini, G.B., De Gori, P., De Luca, G., Marchetti, A., Monna, S., Montuori, C. & Pagliuca, N.M., 2017. Seismic sequences and swarms in the Latium-Abruzzo-Molise Apennines (central Italy): New observations and analysis from a dense monitoring of the recent activity, *Tectonophysics*, 712-713, 312-329, doi:10.1016/j.tecto.2017.05.026.
- Montone, P. & Mariucci, M.T., 2016. The new release of the Italian contemporary stress map, *Geophysical Journal International*, 205, 1525-1531, doi: 10.1093/gji/ggw100.
- Montone, P., Amato, A., Chiarabba, C., Buonasorte, G. & Fiordelisi, A., 1995. Evidence of active extension in Quaternary volcanoes of central Italy from breakout analysis and seismicity, *Geophys. Res. Lett.*, 22, 1909-1912.

Musumeci, C., Patanè, D., Scarfi, L. & Gresta, S., 2005. Stress directions and shearwave anisotropy: observations from local earthquakes in southeastern Sicily, Italy, *Bull. seism. Soc. Am.*, 95(4), 1359-1374, doi:10.1785/0120040108.

References of Fault Slip data (GFS)

Benedetti, L., Tapponier, P., King, G.C.P. & Piccardi, L., 1998. Surface rupture of the 1857 southern Italy earthquake, *Terra Nova*, 10, 206-210.

Cinti, F.R., Cucci, L., Pantosti, D., D'Addezio, G. & Meghraoui, M., 1997. A major seismogenic fault in a silent area: The Castrovillari fault (southern Apennines, Italy), *Geophys. J. Int.*, 130, 595-605.

Civico, R., Pucci, S., Villani, F., Pizzimenti, L., De Martini, P.M., Nappi, R., & the Open EMERGEO Working Group, 2018. Surface ruptures following the 30 October 2016 Mw 6.5 Norcia earthquake, central Italy, *Journal of Maps*, 14(2), doi: 10.1080/17445647.2018.1441756.

Cucci, L. & Valensise, G., 1995. Drainage pattern characteristics for the investigation of active faulting in Italy, *Terra Abstr.*, 7, 38.

D'Addezio, G., Masana, E. & Pantosti, D., 2001. The Holocene paleoseismicity of the Aremogna-Cinque Miglia Fault (central Italy), *J. Seismol.*, 5, 181-205.

Di Bucci, D., Corrado, S. & Naso, G., 2002. Active faults at the boundary between Central and Southern Apennines (Isernia, Italy), *Tectonophysics*, 359, 47-63.

Di Bucci, D., Naso, G., Corrado, S. & Villa, I.M., 2005. Growth, interaction and seismogenic potential of coupled active normal faults (Isernia Basin, Central-Southern Italy), *Terra Nova*, 17, 44-55, doi:10.1111/j.1365-3121.2004.00582.x.

Di Bucci, D., Vannoli, P., Burrato, P., Fracassi, U. & Valensise, G., 2011. Insights from the Mw6.3, 2009 L'Aquila earthquake (Central Apennines)- unveiling new seismogenic sources through their surface signatures: the adjacent San Pio Fault, *Terra Nova*, 23(2), 108-115, doi:10.1111/j.1365-3121.2011.00990.x.

EMERGEO Working Group, 2016. Coseismic effects of the 2016 Amatrice seismic sequence: First geological results, *Ann. Geophys.*, 59(5), doi:10.4401/ag-7195.

Fracassi, U. & Valensise, G., 2007. Unveiling the sources of the catastrophic 1456 multiple earthquake: Hints to an unexplored tectonic mechanism in Southern Italy, *Bull. Seismol. Soc. Am.*, 97(3), 725-748, doi:10.1785/0120050250.

Galli, P. & Bosi V., 2002. Paleoseismology along the Cittanova fault: Implications for seismotectonics and earthquake recurrence in Calabria (southern Italy), *J. Geophys. Res.*, 107(B3), 2044, doi:10.1029/2001JB000234.

Galli, P. & Bosi, V., 2004. Catastrophic 1638 earthquakes in Calabria (southern Italy): New insights from paleoseismological investigation, *J. Geophys. Res.*, 108(B1), doi:10.1029/2001JB001713.

Galli, P. & Naso, G., 2009. Unmasking the 1349 earthquake source (southern Italy). Paleoseismological and archaeoseismological indications from the Aquae Iuliae fault, *J. Struct. Geol.*, 31, 128-149.

Gori, S., Giaccio, B., Galadini, F., Falcucci, E., Messina, P., Sposato, A. & Dramis, F., 2011. Active normal faulting along the Mt. Morrone south-western slopes (central Apennines, Italy), *International Journal of Earth Sciences*, 100(1), 157-171.

- Michetti, A.M., Ferrelì, L., Serva, L. & Vittori, E., 1997. Geological evidence for strong historical earthquakes in an aseismic region: The Pollino case (southern Italy), *J. Geodyn.*, 24, 67-86.
- Montone, P. & Mariucci, M.T., 2016. The new release of the Italian contemporary stress map, *Geophysical Journal International*, 205, 1525–1531, doi: 10.1093/gji/ggw100.
- Moro, M., Amicucci, L., Cinti, F.R., Doumaz, F., Montone, P., Pierdominici, S., Saroli, M., Stramondo, S. & Di Fiore, B., 2007. Surface evidence of active tectonics along the Pergola-Melandro fault: a critical issue for the seismogenic potential of the southern Apennines, Italy, *J. Geodyn.*, 44(1-2), 19-32, doi:10.1016/j.jog.2006.12.003.
- Pantosti, D., D'Addezio, G. & Cinti, F.R., 1996. Paleoseismicity of the Ovindoli-Pezza fault, central Apennines, Italy: A history including a large, previously unrecorded earthquake in the Middle Ages (860-1300 A.D.), *J. Geophys. Res.*, 101, 5937-5959.
- Villani, F. & Pierdominici, S., 2010. Late Quaternary tectonics of the Vallo di Diano basin (southern Apennines, Italy), *Quat. Sci. Rev.*, 29(23-24), 3167-3183, doi:10.1016/j.quascirev.2010.07.003.

References of Overcoring data (OC)

- Grasso, M., Reuther, C.D., Baumann, H. & Becker, A., 1986. Shallow crustal stress and neotectonic framework of the Malta Platform and the Southeastern Pantelleria Rift (Central Mediterranean), *Geologica Romana*, 25, 191-212.
- Baumann, H. & Reuther, C.D., 1985. In situ stress: Pantelleria Rift, (Central Mediterranean), *Terra Cognita*, 5, 1, 84.