

# Curriculum Vitae

## INFORMAZIONI PERSONALI

**Nome** MIMMO  
**Cognome** PALANO  
**E-mail** mimmo.palano@unipa.it

## FORMAZIONE TITOLI

### Titoli di Studio

- 01/11/2000 - 31/10/2003. Dottorato di ricerca in "Evoluzione geologica di orogeni di tipo Mediterraneo" (Università degli Studi di Catania). Titolo conseguito in data 02/04/2004.
- 03/10/1994 - 17/07/2000. Laurea in Scienze Geologiche (votazione finale 110/110, e lode), indirizzo "Geofisico e Geologico-Strutturale", (Università degli Studi di Catania).

### Abilitazioni

- 14/05/2020 - 14/05/2031. Abilitazione Scientifica Nazionale alla funzione di Professore di Prima fascia nel settore 04/A4 GEOFISICA (Ministero dell'Università e della Ricerca).
- 09/09/2019 - 09/09/2030. Abilitazione Scientifica Nazionale alla funzione di Professore di Seconda fascia nel settore 04/A4 GEOFISICA (Ministero dell'Università e della Ricerca).

## INCARICHI / CONSULENZE

### Partecipazione a comitati editoriali di riviste scientifiche

- Dal 01/04/2024: Associate Editor della rivista scientifica "Spatial Information Research"
- Dal 01/04/2023: Editor della rivista scientifica "Scientific Data".
- Dal 04/11/2022: Editor-in-Chief della rivista scientifica "Results in Geophysical Sciences".
- Dal 01/08/2022: Membro dell'editorial board della rivista scientifica "Scientific Reports".
- Dal 01/01/2020: Membro dell'editorial board della rivista scientifica "Geoscience".
- Dal 01/04/2014: Reviewer Editor della rivista scientifica "Frontiers in Earth Science - Volcanology".
- 01/03/2020 - 04/11/2022. "Section Editor" della rivista scientifica "Results in Geophysical Sciences".
- 01/01/2020 - 25/02/2022. Editor della rivista scientifica "Tectonophysics".
- 01/11/2024 - 24/07/2025. Guest Editor del volume speciale "Plate tectonics modelling" per la rivista scientifica "Scientific Reports".
- 01/10/2022 - 31/09/2023. Guest Editor del volume speciale "Ground Deformation Detection and Geomatic Applications by InSAR and GNSS Techniques II" per la rivista scientifica "Remote Sensing".
- 01/10/2019 - 31/10/2021. Guest Editor del volume speciale "Ground Deformation Patterns Detection by InSAR and GNSS Techniques" per la rivista scientifica "Remote Sensing".

### Partecipazione a comitati scientifici di conferenze nazionali ed internazionali

- 09/11/2021 - 21/09/2022. Membro del Comitato Scientifico del congresso congiunto della Società Geologica Italiana e della Società Italiana di Mineralogia e Petrologia che si terrà a Torino il 19-20-21 settembre 2022 con il titolo: Geoscienze per un futuro sostenibile.
- 02/01/2023 - 20/10/2023. Membro del Comitato Scientifico del International Workshop on Geosciences in Active Areas che si terrà a Lanzarote (Canarie, Spagna) il 16-20 ottobre 2023.

### Valutazione di progetti di ricerca Internazionali

- Revisore scientifico di progetti di ricerca per conto della "Latvian Science Council".
- Revisore scientifico di progetti di ricerca per conto della "French National Research Agency".
- Revisore scientifico di progetti di ricerca per conto della "German Research Foundation".

### Attività di revisione "peer-review" di articoli scientifici per le seguenti riviste internazionali:

- Advances in Space Research
- Bulletin of the Seismological Society of America
- Bulletin of Volcanology
- Earth and Planetary Science Letters
- Frontiers Earth Science
- Geodesy and Geodynamics
- Geology
- Geophysical Journal International
- Geophysical Research Letters
- Geoscience Frontiers

- Geosciences Journal
- Journal of Applied Remote Sensing
- Journal of Geodynamics
- Journal of Geophysical Research (Solid Earth)
- Journal of Volcanology and Geothermal Research
- Nature Communications
- Pure and Applied Geophysics
- Remote Sensing
- Scientific Reports
- Solid Earth
- Tectonophysics.

#### ASSOCIAZIONI SCIENTIFICHE

- Membro della European Geophysical Union (AGU) dal 2003.
- Membro della American Geophysical Union (AGU) dal 2009.
- Membro della Società Geologica Italiana (SGI) dal 2017.
- Membro della Unione Geofisica Italiana (UGI) dal 2024.

#### PUBBLICAZIONE

Beccaro, L., Albano, M., Tolomei, C., Spinetti, C., Pezzo, G., **Palano, M.**, & Chiarabba, C. (2023). Insights into post-emplacement lava flow dynamics at Mt. Etna volcano from 2016 to 2021 by synthetic aperture radar and multispectral satellite data. *Frontiers in Earth Science*, 11. <https://doi.org/10.3389/feart.2023.1211450>

Billi, A., Cuffaro, M., Orecchio, B., **Palano, M.**, Presti, D., & Totaro, C. (2023). Retracing the Africa–Eurasia nascent convergent boundary in the western Mediterranean based on earthquake and GNSS data. *Earth and Planetary Science Letters*, 601, 117906. <https://doi.org/10.1016/j.epsl.2022.117906>

**Palano, M.**, Billi, A., Conti, A., Cuffaro, M., Orecchio, B., Presti, D., Scolaro, S., Sparacino, F., & Totaro, C. (2023). The intra-orogenic normal Lakes Fault (Sila, Calabria, southern Italy): new insights from geodetic and seismological data. *Italian Journal of Geosciences*, 142(3), 384–397. <https://doi.org/10.3301/ijg.2023.18>

**Palano, M.**, Calcaterra, S., Gambino, P., Porfidia, B., & Sparacino, F. (2023). GNSS-based long-term deformation at Mount Etna volcano (Italy). *Results in Geophysical Sciences*, 14, 100056. <https://doi.org/10.1016/j.ringps.2023.100056>

Pezzo, G., Billi, A., Carminati, E., Conti, A., De Gori, P., Devoti, R., Lucente, F. P., **Palano, M.**, Petracchini, L., Serpelloni, E., Tavani, S., & Chiarabba, C. (2023). Seismic source identification of the 9 November 2022 Mw 5.5 offshore Adriatic sea (Italy) earthquake from GNSS data and aftershock relocation. *Scientific Reports*, 13(1). <https://doi.org/10.1038/s41598-023-38150-5>

Pezzo, G., **Palano, M.**, Beccaro, L., Tolomei, C., Albano, M., Atzori, S., & Chiarabba, C. (2023). Coupling Flank Collapse and Magma Dynamics on Stratovolcanoes: The Mt. Etna Example from InSAR and GNSS Observations. *Remote Sensing*, 15(3), 847. <https://doi.org/10.3390/rs15030847>

Di Luccio, F., **Palano, M.**, Chiodini, G., Cucci, L., Piromallo, C., Sparacino, F., Ventura, G., Improta, L., Cardellini, C., Persaud, P., Pizzino, L., Calderoni, G., Castellano, C., Cianchini, G., Cianetti, S., Cinti, D., Cusano, P., De Gori, P., De Santis, A., . . . Zuccarello, L. (2022). Geodynamics, geophysical and geochemical observations, and the role of CO<sub>2</sub> degassing in the Apennines. *Earth-Science Reviews*, 234, 104236. <https://doi.org/10.1016/j.earscirev.2022.104236>

Fernández, J., Escayo, J., Camacho, A., **Palano, M.**, Prieto, J. F., Hu, Z., Samsonov, S. V., Tiampo, K. F., & Ancochea, E. (2022). Shallow magmatic intrusion evolution below La Palma before and during the 2021 eruption. *Scientific Reports*, 12(1). <https://doi.org/10.1038/s41598-022-23998-w>

**Palano, M.** (2022). Editorial for the special issue: “Ground Deformation Patterns Detection by INSAR and GNSS Techniques.” *Remote Sensing*, 14(5), 1104. <https://doi.org/10.3390/rs14051104>

- Palano, M.**, Sparacino, F., Gambino, P., D'Agostino, N., & Calcaterra, S. (2022). Slow slip events and flank instability at Mt. Etna volcano (Italy). *Tectonophysics*, 836, 229414. <https://doi.org/10.1016/j.tecto.2022.229414>
- Pezzo, G., **Palano, M.**, & Chiarabba, C. (2022). Rotation at subduction margins: How complexity at fault-scale (the 2019 Albanian M w 6.4 earthquake) mirrors the regional deformation. *Terra Nova*, 34(3), 244–252. <https://doi.org/10.1111/ter.12584>
- Polcari, M., Secreti, V., Anderlini, L., Albano, M., **Palano, M.**, Serpelloni, E., Stramondo, S., Trasatti, E., & Pezzo, G. (2022). Multi-technique geodetic detection of onshore and offshore subsidence along the Upper Adriatic Sea coasts. *International Journal of Applied Earth Observation and Geoinformation*, 108, 102756. <https://doi.org/10.1016/j.jag.2022.102756>
- Secreti, V.**, Polcari, M., Anderlini, L., Albano, M., Palano, M., Serpelloni, E., Stramondo, S., Trasatti, E., & Pezzo, G. (2022). Cross-validated multi-technique geodetic dataset of the Upper Adriatic Sea coastal area of Italy. *Data in Brief*, 43, 108342. <https://doi.org/10.1016/j.dib.2022.108342>
- Sparacino, F., Galuzzi, B. G., **Palano, M.**, Segou, M., & Chiarabba, C. (2022). Seismic coupling for the Aegean - Anatolian region. *Earth-Science Reviews*, 228, 103993. <https://doi.org/10.1016/j.earscirev.2022.103993>
- Fernández, J., Escayo, J., Hu, Z., Camacho, A., Samsonov, S., Prieto, J. F., Tiampo, K. F., **Palano, M.**, Mallorquí, J. J., & Ancochea, E. (2021). Detection of volcanic unrest onset in La Palma, Canary Islands, evolution and implications. *Scientific Reports*, 11(1). <https://doi.org/10.1038/s41598-021-82292-3>
- Fonseca, J. F. B. D., **Palano, M.**, Falcão, A. P., Hrysiwicz, A., & Fernández, J. (2021). Interseismic strain accumulation near Lisbon (Portugal) from space geodesy. *Geophysical Research Letters*, 48(24). <https://doi.org/10.1029/2021gl096862>
- Pino, N. A., **Palano, M.**, & Ventura, G. (2021). Comment on the paper by Barreca et al.: "The Strait of Messina: Seismotectonics and the source of the 1908 earthquake" (*Earth-Science Reviews* 218, 2021, 103685). *Earth-Science Reviews*, 223, 103865. <https://doi.org/10.1016/j.earscirev.2021.103865>
- Polcari, M., **Palano, M.**, & Moro, M. (2021). Performance evaluation of different SAR-Based techniques on the 2019 Ridgecrest sequence. *Remote Sensing*, 13(4), 685. <https://doi.org/10.3390/rs13040685>
- Rashwan, M., Sawires, R., Radwan, A. M., Sparacino, F., Peláez, J. A., & **Palano, M.** (2021). Crustal Strain and Stress Fields in Egypt from Geodetic and Seismological Data. *Remote Sensing*, 13(7), 1398. <https://doi.org/10.3390/rs13071398>
- Sawires, R., Peláez, J. A., Sparacino, F., Radwan, A. M., Rashwan, M., & **Palano, M.** (2021). Seismic and Geodetic Crustal Moment-Rates comparison: New insights on the seismic hazard of Egypt. *Applied Sciences*, 11(17), 7836. <https://doi.org/10.3390/app11177836>
- Borzi, A. M., Giuffrida, M., Zuccarello, F., **Palano, M.**, & Viccaro, M. (2020). The Christmas 2018 eruption at Mount Etna: enlightening how the volcano factory works through a multiparametric inspection. *Geochemistry Geophysics Geosystems*, 21(10). <https://doi.org/10.1029/2020gc009226>
- Camacho, A., Fernández, J. M. G., Samsonov, S., Tiampo, K. F., & **Palano, M.** (2020). 3D multi-source model of elastic volcanic ground deformation. *Earth and Planetary Science Letters*, 547, 116445. <https://doi.org/10.1016/j.epsl.2020.116445>
- Cambiotti, G., **Palano, M.**, Orecchio, B., Marotta, A., Barzaghi, R., Neri, G., & Sabadini, R. (2020). New Insights into Long-Term Aseismic Deformation and Regional Strain Rates from GNSS Data Inversion: The Case of the Pollino and Castrovillari Faults. *Remote Sensing*, 12(18), 2921. <https://doi.org/10.3390/rs12182921>
- Escayo, J., Fernández, J., Prieto, J. F., Camacho, A., **Palano, M.**, Aparicio, A., Rodríguez-Velasco, G., & Ancochea, E. (2020). Geodetic study of the 2006–2010 ground deformation in La Palma (Canary Islands): observational results. *Remote Sensing*, 12(16), 2566. <https://doi.org/10.3390/rs12162566>

Palano, M., Pezzo, G., Serpelloni, G., Riguzzi, F., Devoti, R., Augustino, C., Cardillo, F., Rossi, G., Sparacino, F., Anderlini, L., & Selvaggi, G. (2020). Geopositioning time series from offshore platforms in the Adriatic Sea. *Scientific Data*, 7(1). <https://doi.org/10.1038/s41597-020-00705-w>

Palano, M., Ursino, A., Spampinato, S., Sparacino, F., Polonia, A., & Gasperini, L. (2020). Crustal deformation, active tectonics and seismic potential in the Sicily Channel (Central Mediterranean), along the Nubia–Eurasia plate boundary. *Scientific Reports*, 10(1). <https://doi.org/10.1038/s41598-020-78063-1>

Pezzo, G., Palano, M., Tolomei, C., Gori, D., Calcaterra, S., Gambino, P., & Chiarabba, C. (2020). Flank sliding: A valve and a sentinel for paroxysmal eruptions and magma ascent at Mount Etna, Italy. *Geology*, 48(11), 1077–1082. <https://doi.org/10.1130/g47656.1>

Pezzo, G., Petracchini, L., Devoti, R., Maffucci, R., Anderlini, L., Antoncicchi, I., Billi, A., Carminati, E., Ciccone, F., Cuffaro, M., Livani, M., Palano, M., Petricca, P., Pietrantonio, G., Riguzzi, F., Rossi, G., Sparacino, F., & Doglioni, C. (2020). Active Fold-Thrust belt to foreland transition in northern Adria, Italy, tracked by seismic reflection profiles and GPS offshore data. *Tectonics*, 39(11). <https://doi.org/10.1029/2020tc006425>

Sparacino, F., Palano, M., Peláez, J. A., & Fernández, J. (2020). Geodetic Deformation versus Seismic Crustal Moment-Rates: Insights from the Ibero-Maghrebian Region. *Remote Sensing*, 12(6), 952. <https://doi.org/10.3390/rs12060952>

Cintorrino, A. A., Palano, M., & Viccaro, M. (2019). Magmatic and tectonic sources at Vulcano (Aeolian Islands, Southern Italy): A geodetic model based on two decades of GPS observations. *Journal of Volcanology and Geothermal Research*, 388, 106689. <https://doi.org/10.1016/j.jvolgeores.2019.106689>

Viccaro, M., Giuffrida, M., Zuccarello, F., Scandura, M., Palano, M., & Gresta, S. (2019). Violent paroxysmal activity drives self-feeding magma replenishment at Mt. Etna. *Scientific Reports*, 9(1). <https://doi.org/10.1038/s41598-019-43211-9>

Cammarata, L., Catalano, S., Gambino, S., Palano, M., Pavano, F., Romagnoli, G., Scaltrito, A., & Tortorici, G. (2018). Seismological and structural constraints on the 2011–2013, Mmax 4.6 seismic sequence at the south-eastern edge of the Calabrian arc (North-eastern Sicily, Italy). *Tectonophysics*, 723, 56–67. <https://doi.org/10.1016/j.tecto.2017.11.021>

Cannata, A., Di Grazia, G., Giuffrida, M., Gresta, S., Palano, M., Sciotto, M., Viccaro, M., & Zuccarello, F. (2018). Space-Time evolution of magma storage and transfer at Mt. Etna Volcano (Italy): the 2015–2016 reawakening of Voragine Crater. *Geochemistry Geophysics Geosystems*, 19(2), 471–495. <https://doi.org/10.1002/2017gc007296>

Cucci, L., Currenti, G., Palano, M., & Tertulliani, A. (2018). The dewatering of the Fucino Lake did not promote the M7.1 1915 Fucino earthquake: Insights from Numerical simulations. *Tectonics*, 37(8), 2633–2646. <https://doi.org/10.1029/2017tc004940>

De Guidi, G., Brighenti, F., Carnemolla, F., Imposa, S., Marchese, S., Palano, M., Scudero, S., & Vecchio, A. (2018). The unstable eastern flank of Mt. Etna volcano (Italy): First results of a GNSS-based network at its southeastern edge. *Journal of Volcanology and Geothermal Research*, 357, 418–424. <https://doi.org/10.1016/j.jvolgeores.2018.04.027>

Fernández, J., Prieto, J. F., Escayo, J., Camacho, A., Luzón, F., Tiampo, K. F., Palano, M., Abajo, T., Pérez, E. O., Velasco, J., Herrero, T., Brú, G., Molina, Í., López, J. a. M., Rodríguez-Velasco, G., Gómez, I., & Mallorquí, J. J. (2018). Modeling the two- and three-dimensional displacement field in Lorca, Spain, subsidence and the global implications. *Scientific Reports*, 8(1). <https://doi.org/10.1038/s41598-018-33128-0>

Montuori, A., Anderlini, L., Palano, M., Albano, M., Pezzo, G., Antoncicchi, I., Chiarabba, C., Serpelloni, E., & Stramondo, S. (2018). Application and analysis of geodetic protocols for monitoring subsidence phenomena along on-shore hydrocarbon reservoirs. *International Journal of Applied Earth Observation and Geoinformation*, 69, 13–26. <https://doi.org/10.1016/j.jag.2018.02.011>

Neres, M., Neves, M., Custódio, S., Palano, M., Fernandes, R., Matias, L., Carafa, M. M. C., & Terrinha, P. (2018).

Gravitational Potential energy in Iberia: a driver of active deformation in High-Topography Regions. *Journal of Geophysical Research: Solid Earth*, 123(11). <https://doi.org/10.1029/2017jb015002>

**Palano, M.**, Imprescia, P., Agnon, A., & Gresta, S. (2018). An improved evaluation of the seismic/geodetic deformation-rate ratio for the Zagros Fold-and-Thrust collisional belt. *Geophysical Journal International*, 213(1), 194–209. <https://doi.org/10.1093/gji/ggx524>

Chiarabba, C., & **Palano, M.** (2017). Progressive migration of slab break-off along the southern Tyrrhenian plate boundary: Constraints for the present day kinematics. *Journal of Geodynamics*, 105, 51–61. <https://doi.org/10.1016/j.jog.2017.01.006>

Meccariello, M., Ferranti, L., Barreca, G., & **Palano, M.** (2017). New insights on the tectonics of the Lampedusa Plateau from the integration of offshore, onland and space geodetic data. *Italian Journal of Geosciences*, 136(2), 206–219. <https://doi.org/10.3301/ijg.2017.02>

Orecchio, B., Aloisi, M., Cannavò, F., **Palano, M.**, Presti, D., Pulvirenti, F., Totaro, C., Siligato, G. E., & Neri, G. (2017). Present-day kinematics and deformation processes in the southern Tyrrhenian region: new insights on the northern Sicily extensional belt. *Italian Journal of Geosciences*, 136(3), 418–433. <https://doi.org/10.3301/ijg.2017.01>

**Palano, M.**, Piromallo, C., & Chiarabba, C. (2017). Surface imprint of toroidal flow at retreating slab edges: The first geodetic evidence in the Calabrian subduction system. *Geophysical Research Letters*, 44(2), 845–853. <https://doi.org/10.1002/2016gl071452>

**Palano, M.**, Viccaro, M., Zuccarello, F., & Gresta, S. (2017). Magma transport and storage at Mt. Etna (Italy): A review of geodetic and petrological data for the 2002–03, 2004 and 2006 eruptions. *Journal of Volcanology and Geothermal Research*, 347, 149–164. <https://doi.org/10.1016/j.jvolgeores.2017.09.009>

Polcari, M., Fernández, J., Albano, M., Bignami, C., **Palano, M.**, & Stramondo, S. (2017). An improved data integration algorithm to constrain the 3D displacement field induced by fast deformation phenomena tested on the Napa Valley earthquake. *Computers & Geosciences*, 109, 206–215. <https://doi.org/10.1016/j.cageo.2017.09.002>

Cannavò, F., & **Palano, M.** (2016). Defining Geodetic Reference Frame using Matlab®: PlatEMotion 2.0. *Pure and Applied Geophysics*, 173(3), 937–944. <https://doi.org/10.1007/s00024-015-1112-z>

Gambino, S., Cannata, A., Cannavò, F., La Spina, A., **Palano, M.**, Sciotto, M., Spampinato, L., & Barberi, G. (2016). The unusual 28 December 2014 dike-fed paroxysm at Mount Etna: Timing and mechanism from a multidisciplinary perspective. *Journal of Geophysical Research: Solid Earth*, 121(3), 2037–2053. <https://doi.org/10.1002/2015jb012379>

Greco, F., Currenti, G., **Palano, M.**, & Pepe, A. (2016). Evidence of a shallow persistent magmatic reservoir from joint inversion of gravity and ground deformation data: The 25–26 October 2013 Etna lava fountaining event. *Geophysical Research Letters*, 43(7), 3246–3253. <https://doi.org/10.1002/2016gl068426>

**Palano, M.** (2016). Episodic slow slip events and seaward flank motion at Mt. Etna volcano (Italy). *Journal of Volcanology and Geothermal Research*, 324, 8–14. <https://doi.org/10.1016/j.jvolgeores.2016.05.010>

Polcari, M., **Palano, M.**, Fernández, J., Samsonov, S., Stramondo, S., & Zerbini, S. (2016). 3D displacement field retrieved by integrating Sentinel-1 InSAR and GPS data: the 2014 South Napa earthquake. *European Journal of Remote Sensing*, 49(1), 1–13. <https://doi.org/10.5721/eujrs20164901>

Viccaro, M., Zuccarello, F., Cannata, A., **Palano, M.**, & Gresta, S. (2016). How a complex basaltic volcanic system works: Constraints from integrating seismic, geodetic, and petrological data at Mount Etna volcano during the July-August 2014 eruption. *Journal of Geophysical Research: Solid Earth*, 121(8), 5659–5678. <https://doi.org/10.1002/2016jb013164>

Bonì, R., Herrera, G., Meisina, C., Notti, D., Béjar-Pizarro, M., Zucca, F., González, P. J., **Palano, M.**, Tomás, R., Fernández,

J., Merodo, J. a. F., Mulas, J., Aragón, R., Guardiola-Albert, C., & Mora, O. (2015). Twenty-year advanced DInSAR analysis of severe land subsidence: The Alto Guadalentín Basin (Spain) case study. *Engineering Geology*, 198, 40–52. <https://doi.org/10.1016/j.enggeo.2015.08.014>

Cannata, A., Spedalieri, G., Behncke, B., Cannavò, F., Di Grazia, G., Gambino, S., Gresta, S., Gurrieri, S., Liuzzo, M., & **Palano, M.** (2015). Pressurization and depressurization phases inside the plumbing system of Mount Etna volcano: Evidence from a multiparametric approach. *Journal of Geophysical Research: Solid Earth*, 120(9), 5965–5982. <https://doi.org/10.1002/2015jb012227>

Ferranti, L., Milano, G., Burrato, P., **Palano, M.**, & Cannavò, F. (2015). The seismogenic structure of the 2013–2014 Matese seismic sequence, Southern Italy: implication for the geometry of the Apennines active extensional belt. *Geophysical Journal International*, 201(2), 823–837. <https://doi.org/10.1093/gji/ggv053>

**Palano, M.** (2015). On the present-day crustal stress, strain-rate fields and mantle anisotropy pattern of Italy. *Geophysical Journal International*, 200(2), 969–985. <https://doi.org/10.1093/gji/ggu451>

**Palano, M.**, González, P. J., & Fernández, J. (2015). The Diffuse Plate boundary of Nubia and Iberia in the Western Mediterranean: Crustal deformation evidence for viscous coupling and fragmented lithosphere. *Earth and Planetary Science Letters*, 430, 439–447. <https://doi.org/10.1016/j.epsl.2015.08.040>

**Palano, M.**, Schiavone, D., Loddo, M., Neri, M., Presti, D., Quarto, R., Totaro, C., & Neri, G. (2015). Active upper crust deformation pattern along the southern edge of the Tyrrhenian subduction zone (NE Sicily): Insights from a multidisciplinary approach. *Tectonophysics*, 657, 205–218. <https://doi.org/10.1016/j.tecto.2015.07.005>

Spampinato, L., Sciotto, M., Cannata, A., Cannavò, F., La Spina, A., **Palano, M.**, Salerno, G., Privitera, E., & Caltabiano, T. (2015). Multiparametric study of the February–April 2013 paroxysmal phase of Mt. Etna New South-East crater. *Geochemistry Geophysics Geosystems*, 16(6), 1932–1949. <https://doi.org/10.1002/2015gc005795>

Cannavò, F., Scandura, D., **Palano, M.**, & Musumeci, C. (2014). A joint inversion of ground deformation and focal mechanisms data for magmatic source modelling. *Pure and Applied Geophysics*, 171(8), 1695–1704. <https://doi.org/10.1007/s00024-013-0771-x>

De Guidi, G., Imposa, S., Scudero, S., & **Palano, M.** (2014). New evidence for Late Quaternary deformation of the substratum of Mt. Etna volcano (Sicily, Italy): clues indicate active crustal doming. *Bulletin of Volcanology*, 76(5). <https://doi.org/10.1007/s00445-014-0816-8>

Ferranti, L., **Palano, M.**, Cannavò, F., Mazzella, M. E., Oldow, J. S., Gueguen, E., Mattia, M., & Monaco, C. (2014). Rates of geodetic deformation across active faults in southern Italy. *Tectonophysics*, 621, 101–122. <https://doi.org/10.1016/j.tecto.2014.02.007>

González, P. J., & **Palano, M.** (2014). Mt. Etna 2001 eruption: New insights into the magmatic feeding system and the mechanical response of the western flank from a detailed geodetic dataset. *Journal of Volcanology and Geothermal Research*, 274, 108–121. <https://doi.org/10.1016/j.jvolgeores.2014.02.001>

Musumeci, C., Scarfì, L., **Palano, M.**, & Patanè, D. (2014). Foreland segmentation along an active convergent margin: New constraints in southeastern Sicily (Italy) from seismic and geodetic observations. *Tectonophysics*, 630, 137–149. <https://doi.org/10.1016/j.tecto.2014.05.017>

Aloisi, M., Bruno, V., Cannavò, F., Ferranti, L., Mattia, M., Monaco, C., & **Palano, M.** (2013). Are the source models of the M 7.1 1908 Messina Straits earthquake reliable? Insights from a novel inversion and a sensitivity analysis of levelling data. *Geophysical Journal International*, 192(3), 1025–1041. <https://doi.org/10.1093/gji/ggs062>

De Guidi, G., Lanzafame, G., **Palano, M.**, Puglisi, G., Scaltrito, A., & Scarfì, L. (2013). Multidisciplinary study of the Tindari Fault (Sicily, Italy) separating ongoing contractional and extensional compartments along the active Africa–Eurasia convergent

boundary. *Tectonophysics*, 588, 1–17. <https://doi.org/10.1016/j.tecto.2012.11.021>

**Palano, M.**, González, P. J., & Fernández, J. (2013). Strain and stress fields along the Gibraltar Orogenic Arc: Constraints on active geodynamics. *Gondwana Research*, 23(3), 1071–1088. <https://doi.org/10.1016/j.gr.2012.05.021>

**Palano, M.**, Imprescia, P., & Gresta, S. (2013). Current stress and strain-rate fields across the Dead Sea Fault System: Constraints from seismological data and GPS observations. *Earth and Planetary Science Letters*, 369–370, 305–316. <https://doi.org/10.1016/j.epsl.2013.03.043>

Bruno, V., Mattia, M., Aloisi, M., **Palano, M.**, Cannavò, F., & Holt, W. E. (2012). Ground deformations and volcanic processes as imaged by CGPS data at Mt. Etna (Italy) between 2003 and 2008. *Journal of Geophysical Research*, 117(B7). <https://doi.org/10.1029/2011jb009114>

González, P. J., Tiampo, K. F., **Palano, M.**, Cannavò, F., & Fernández, J. (2012). The 2011 Lorca earthquake slip distribution controlled by groundwater crustal unloading. *Nature Geoscience*, 5(11), 821–825. <https://doi.org/10.1038/ngeo1610>

Mattia, M., Bruno, V., Cannavò, F., & **Palano, M.** (2012). Evidences of a contractional pattern along the northern rim of the Hyblean Plateau (Sicily, Italy) from GPS data. *Geologica Acta*, 10(1), 63–70. <https://doi.org/10.1344/105.000001705>

**Palano, M.**, Ferranti, L., Monaco, C., Mattia, M., Aloisi, M., Bruno, V., Cannavò, F., & Siligato, G. (2012). GPS velocity and strain fields in Sicily and southern Calabria, Italy: Updated geodetic constraints on tectonic block interaction in the central Mediterranean. *Journal of Geophysical Research*, 117(B7). <https://doi.org/10.1029/2012jb009254>

**Palano, M.**, Guarrera, E., & Mattia, M. (2012). GPS ground deformation patterns at Mount St. Helens (Washington, USA) from 2004 to 2010. *Terra Nova*, 24(2), 148–155. <https://doi.org/10.1111/j.1365-3121.2011.01049.x>

Aloisi, M., Mattia, M., Ferlito, C., **Palano, M.**, Bruno, V., & Cannavò, F. (2011). Imaging the multi-level magma reservoir at Mt. Etna volcano (Italy). *Geophysical Research Letters*, 38(16), n/a. <https://doi.org/10.1029/2011gl048488>

Bonanno, A., **Palano, M.**, Privitera, E., Gresta, S., & Puglisi, G. (2011). Magma intrusion mechanisms and redistribution of seismogenic stress at Mt. Etna volcano (1997–1998). *Terra Nova*, 23(5), 339–348. <https://doi.org/10.1111/j.1365-3121.2011.01019.x>

**Palano, M.**, Cannavò, F., Ferranti, L., Mattia, M., & Mazzella, M. E. (2011). Strain and stress fields in the Southern Apennines (Italy) constrained by geodetic, seismological and borehole data. *Geophysical Journal International*, 187(3), 1270–1282. <https://doi.org/10.1111/j.1365-246x.2011.05234.x>

**Palano, M.**, Rossi, M., Cannavò, F., Bruno, V., Aloisi, M., Pellegrino, D., Pulvirenti, M., Siligato, G., & Mattia, M. (2010). Etn@ref: a geodetic reference frame for Mt. Etna GPS networks. *Annals of Geophysics*, 53(4). <https://doi.org/10.4401/ag-4879>

Mattia, M., **Palano, M.**, Bruno, V., & Cannavò, F. (2009). Crustal motion along the Calabro-Peloritano Arc as imaged by twelve years of measurements on a dense GPS network. *Tectonophysics*, 476(3–4), 528–537. <https://doi.org/10.1016/j.tecto.2009.06.006>

**Palano, M.**, Gresta, S., & Puglisi, G. (2009). Time-dependent deformation of the eastern flank of Mt. Etna: After-slip or viscoelastic relaxation? *Tectonophysics*, 473(3–4), 300–311. <https://doi.org/10.1016/j.tecto.2009.02.047>

Bonforte, A., Bonaccorso, A., Guglielmino, F., **Palano, M.**, & Puglisi, G. (2008). Feeding system and magma storage beneath Mt. Etna as revealed by recent inflation/deflation cycles. *Journal of Geophysical Research*, 113(B5). <https://doi.org/10.1029/2007jb005334>

Giammanco, S., **Palano, M.**, Scaltrito, A., Scarfi, L., & Sortino, F. (2008). Possible role of fluid overpressure in the generation of earthquake swarms in active tectonic areas: The case of the Peloritani Mts. (Sicily, Italy). *Journal of Volcanology and Geothermal Research*, 178(4), 795–806. <https://doi.org/10.1016/j.jvolgeores.2008.09.005>

Mattia, M., Aloisi, M., Di Grazia, G., Gambino, S., **Palano, M.**, & Bruno, V. (2008). Geophysical investigations of the plumbing system of Stromboli volcano (Aeolian Islands, Italy). *Journal of Volcanology and Geothermal Research*, 176(4), 529–540. <https://doi.org/10.1016/j.jvolgeores.2008.04.022>

Mattia, M., **Palano, M.**, Aloisi, M., Bruno, V., & Bock, Y. (2008). High rate GPS data on active volcanoes: an application to the 2005–2006 Mt. Augustine (Alaska, USA) eruption. *Terra Nova*, 20(2), 134–140. <https://doi.org/10.1111/j.1365-3121.2008.00798.x>

Mattia, M., **Palano, M.**, Bruno, V., Cannavò, F., Bonaccorso, A., & Gresta, S. (2008). Tectonic features of the Lipari–Vulcano complex (Aeolian archipelago, Italy) from 10 years (1996–2006) of GPS data. *Terra Nova*, 20(5), 370–377. <https://doi.org/10.1111/j.1365-3121.2008.00830.x>

**Palano, M.**, Puglisi, G., & Gresta, S. (2008). Ground deformation patterns at Mt. Etna from 1993 to 2000 from joint use of InSAR and GPS techniques. *Journal of Volcanology and Geothermal Research*, 169(3–4), 99–120. <https://doi.org/10.1016/j.jvolgeores.2007.08.014>

Puglisi, G., Bonforte, A., Ferretti, A., Guglielmino, F., **Palano, M.**, & Prati, C. (2008). Dynamics of Mount Etna before, during, and after the July–August 2001 eruption inferred from GPS and differential synthetic aperture radar interferometry data. *Journal of Geophysical Research*, 113(B6). <https://doi.org/10.1029/2006jb004811>

Bonforte, A., Branca, S., & **Palano, M.** (2007). Geometric and kinematic variations along the active Pernicana fault: Implication for the dynamics of Mount Etna NE flank (Italy). *Journal of Volcanology and Geothermal Research*, 160(1–2), 210–222. <https://doi.org/10.1016/j.jvolgeores.2006.08.009>

Bonforte, A., Carbone, D., Greco, F., & **Palano, M.** (2007). Intrusive mechanism of the 2002 NE-rift eruption at Mt Etna (Italy) modelled using GPS and gravity data. *Geophysical Journal International*, 169(1), 339–347. <https://doi.org/10.1111/j.1365-246x.2006.03249.x>

Bonforte, A., Gambino, S., Guglielmino, F., Obrizzo, F., **Palano, M.**, & Puglisi, G. (2007). Ground deformation modeling of flank dynamics prior to the 2002 eruption of Mt. Etna. *Bulletin of Volcanology*, 69(7), 757–768. <https://doi.org/10.1007/s00445-006-0106-1>

**Palano, M.**, Puglisi, G., & Gresta, S. (2007). Ground deformation at Mt. Etna: a joint interpretation of GPS and InSAR data from 1993 to 2000. *Bollettino Di Geofisica Teorica Ed Applicata*, 48(2), 81–98.

Bonaccorso, A., Bonforte, A., Guglielmino, F., **Palano, M.**, & Puglisi, G. (2006). Composite ground deformation pattern forerunning the 2004-2005 Mount Etna eruption. *Journal of Geophysical Research*, 111(B12). <https://doi.org/10.1029/2005jb004206>

**Palano, M.**, Aloisi, M., Amore, M., Bonforte, A., Calvagna, F., Cantarero, M., Consoli, O., Consoli, S., Guglielmino, F., Mattia, M., Puglisi, B., & Puglisi, G. (2006). Kinematics and strain analyses of the eastern segment of the Pernicana Fault (Mt. Etna, Italy) derived from geodetic techniques (1997-2005). *Annals of Geophysics*, 49(4–5). <https://doi.org/10.4401/ag-3103>

Bonforte, A., Guglielmino, F., **Palano, M.**, & Puglisi, G. (2004). A syn-eruptive ground deformation episode measured by GPS, during the 2001 eruption on the upper southern flank of Mt Etna. *Bulletin of Volcanology*, 66(4), 336–341. <https://doi.org/10.1007/s00445-003-0314-x>

**ALTRE ATTIVITA**

## Convenor in convegni di carattere scientifico

- 11/02/2025 - 14/02/2025. Convenor e chairperson della sessione "1.2 - The role of geofluids in earthquakes, volcanoes and geothermal fields" del 43° Convegno Nazionale del Gruppo Nazionale di Geofisica della Terra Solida (GNGTS), tenutosi a Bologna.
- 13/02/2024 - 16/02/2024. Convenor e chairperson della sessione "1.2 - Volcanoes and geothermal fields" del 42° Convegno Nazionale del Gruppo Nazionale di Geofisica della Terra Solida (GNGTS), tenutosi a Ferrara.
- 07/02/2023 - 09/02/2023. Convenor e chairperson della sessione "1.2 - Volcanoes and geothermal fields" del 41° Convegno Nazionale del Gruppo Nazionale di Geofisica della Terra Solida (GNGTS), tenutosi a Bologna.
- 27/06/2022 - 29/06/2022. Convenor e chairperson della sessione "1.2 - Vulcani e Campi geotermici" del 40° Convegno Nazionale del Gruppo Nazionale di Geofisica della Terra Solida (GNGTS), tenutosi a Trieste.
- 19/04/2022 - 23/04/2022. Co-Convenor per la sessione "Tectonics and Seismicity of Intraplate Regions", del SSA 2022 Annual Meeting, che si terrà il 19-23 Aprile 2022 a Bellevue, Washington (USA).
- 22/06/2021 - 24/06/2021. Convenor e chairperson della sessione "1.2 - Vulcani e Campi geotermici" del 39° Convegno Nazionale del Gruppo Nazionale di Geofisica della Terra Solida (GNGTS). Il convegno si è tenuto in modalità on-line.
- 12/11/2019 - 14/11/2019. Convenor e chairperson della sessione "1.3 - Vulcani e Geotermia" del 38° Convegno Nazionale del Gruppo Nazionale di Geofisica della Terra Solida (GNGTS), tenutosi a Roma.
- 12/09/2018 - 14/09/2018. Convenor e chairperson della sessione "S21 - Linking deep and surface processes: advances in volcanology from a multidisciplinary perspective" del Congresso congiunto SGI - SIMP "Geosciences for the environment, natural hazard and cultural", tenutosi a Catania.
- 07/09/2016 - 09/09/2016. Co-Convenor della sessione "P4 - Fluid-rock interactions: metamorphism, geothermal resources, faulting processes and induced seismicity" dell' 88° congresso della Società Geologica Italiana (SGI), tenutosi a Napoli.