

Curriculum Vitae

INFORMAZIONI PERSONALI

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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 CO₂ 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 Mw 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>
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- 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>

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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>

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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).

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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>

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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>

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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>

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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>

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ALTRE ATTIVITA

Concensor 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.