



Pubblicazioni 2018

1. Abate, T., Branca, S., 2018. L'introduzione del colore per la rappresentazione dei prodotti vulcanici: Il caso della cartografia geologica dell'Etna nel XIX secolo. *Rendiconti Online Societa Geologica Italiana* 44, 80–87. <https://doi.org/10.3301/ROL.2018.12>
2. Aiuppa, A., de Moor, J.M., Arellano, S., Coppola, D., Francofonte, V., Galle, B., Giudice, G., Liuzzo, M., Mendoza, E., Saballos, A., Tamburello, G., Battaglia, A., Bitetto, M., Gurrieri, S., Laiolo, M., Mastrolia, A., Moretti, R., 2018. Tracking Formation of a Lava Lake From Ground and Space: Masaya Volcano (Nicaragua), 2014–2017. *Geochemistry, Geophysics, Geosystems* 19, 496–515. <https://doi.org/10.1002/2017GC007227>
3. Aloisi, M., Bonaccorso, A., Cannavò, F., Currenti, G.M., 2018. Coupled Short- And Medium-Term Geophysical Signals at Etna Volcano: Using Deformation and Strain to Infer Magmatic Processes From 2009 to 2017. *Frontiers in Earth Science* 6. <https://doi.org/10.3389/feart.2018.00109>
4. Amoroso, O., Festa, G., Bruno, P.P., D'Auria, L., De Landro, G., Di Fiore, V., Gammaldi, S., Maraio, S., Pilz, M., Roux, P., Russo, G., Serlenga, V., Serra, M., Woith, H., Zollo, A., 2018. Integrated tomographic methods for seismic imaging and monitoring of volcanic caldera structures and geothermal areas. *Journal of Applied Geophysics* 156, 16–30. <https://doi.org/10.1016/j.jappgeo.2017.11.012>
5. Andronico, D., Behncke, B., De Beni, E., Cristaldi, A., Scollo, S., Lopez, M., Lo Castro, M.D., 2018a. Magma Budget From Lava and Tephra Volumes Erupted During the 25-26 October 2013 Lava Fountain at Mt Etna. *Frontiers in Earth Science* 6. <https://doi.org/10.3389/feart.2018.00116>
6. Andronico, D., Di Roberto, A., De Beni, E., Behncke, B., Bertagnini, A., Del Carlo, P., Pompilio, M., 2018b. Pyroclastic density currents at Etna volcano, Italy: The 11 February 2014 case study. *Journal of Volcanology and Geothermal Research* 357, 92–105. <https://doi.org/10.1016/j.jvolgeores.2018.04.012>
7. Barreca, G., Branca, S., Monaco, C., 2018. Three-Dimensional Modeling of Mount Etna Volcano: Volume Assessment, Trend of Eruption Rates, and Geodynamic Significance. *Tectonics* 37, 842–857. <https://doi.org/10.1002/2017TC004851>
8. Boselli, A., Scollo, S., Leto, G., Sanchez, R.Z., Sannino, A., Wang, X., Coltelli, M., Spinelli, N., 2018. First Volcanic Plume Measurements by an Elastic/Raman Lidar Close to the Etna Summit Craters. *Frontiers in Earth Science* 6. <https://doi.org/10.3389/feart.2018.00125>
9. Bottari, C., Albano, M., Capizzi, P., D'Alessandro, A., Doumaz, F., Martorana, R., Moro, M., Saroli, M., 2018a. Recognition of Earthquake-Induced Damage in the Abakainon Necropolis (NE Sicily): Results From Geomorphological, Geophysical and Numerical Analyses. *Pure and Applied Geophysics* 175, 133–148. <https://doi.org/10.1007/s00024-017-1653-4>
10. Bottari, C., Barbano, M.S., 2018. Was the ancient harbour of Catania (Sicily, southern Italy) buried by medieval lava flows? *Archaeological and Anthropological Sciences* 10, 1737–1750. <https://doi.org/10.1007/s12520-017-0490-9>
11. Bottari, C., Martorana, R., Scudero, S., Capizzi, P., Cavallaro, D., Pisciotta, A., D'Alessandro, A., Coltelli, M., Lodato, L., 2018b. Coseismic Damage at an Archaeological Site in Sicily, Italy: Evidence of Roman Age Earthquake Surface Faulting. *Surveys in Geophysics* 39, 1263–1284. <https://doi.org/10.1007/s10712-018-9482-2>



12. Calvari, S., Cannavò, F., Bonaccorso, A., Spampinato, L., Pellegrino, A.G., 2018a. Paroxysmal Explosions, Lava Fountains and Ash Plumes at Etna Volcano: Eruptive Processes and Hazard Implications. *Frontiers in Earth Science* 6. <https://doi.org/10.3389/feart.2018.00107>
13. Calvari, S., Ganci, G., Victória, S.S., Hernandez, P.A., Perez, N.M., Barrancos, J., Alfama, V., Dionis, S., Cabral, J., Cardoso, N., Fernandes, P., Melian, G., Pereira, J.M., Semedo, H., Padilla, G., Rodriguez, F., 2018b. Satellite and ground remote sensing techniques to trace the Hidden growth of a lava flow field: The 2014-2015 effusive eruption at Fogo Volcano (Cape Verde). *Remote Sensing* 10. <https://doi.org/10.3390/rs10071115>
14. Camacho, A.G., Fernández, J., Cannavò, F., 2018. PAF: A software tool to estimate free-geometry extended bodies of anomalous pressure from surface deformation data. *Computers and Geosciences* 111, 235–243. <https://doi.org/10.1016/j.cageo.2017.11.014>
15. 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>
16. 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, 471–495. <https://doi.org/10.1002/2017GC007296>
17. Carcione, J.M., Currenti, G., Johann, L., Shapiro, S., 2018. Modeling fluid injection induced microseismicity in shales. *Journal of Geophysics and Engineering* 15, 234–248. <https://doi.org/10.1088/1742-2140/aa8a27>
18. Chester, D., Duncan, A., Coutinho, R., Wallenstein, N., Branca, S., 2018. Communicating Information on Eruptions and Their Impacts from the Earliest Times Until the Late Twentieth Century. *Advances in Volcanology* 419–443. https://doi.org/10.1007/11157_2016_30
19. Civico, R., Pucci, S., Villani, F., Pizzimenti, L., De Martini, P.M., Nappi, R., Agosta, F., Alessio, G., Alfonsi, L., Amanti, M., Amoroso, S., Aringoli, D., Auciello, E., Azzaro, R., Baize, S., Bello, S., Benedetti, L., Bertagnini, A., Binda, G., Bisson, M., Blumetti, A.M., Bonadeo, L., Boncio, P., Bornemann, P., Branca, S., Braun, T., Brozzetti, F., Bru-Nori, C.A., Burrato, P., Caciagli, M., Campobasso, C., Carafa, M., Cinti, F.R., Cirillo, D., Commerci, V., Cucci, L., De Ritis, R., Deiana, G., Del Carlo, P., Del Rio, L., Delorme, A., Di Manna, P., Di Naccio, D., Falconi, L., Falcucci, E., Farabollini, P., Faure Walker, J.P., Ferrarini, F., Ferrario, M.F., Ferry, M., Feuillet, N., Fleury, J., Fracassi, U., Frigerio, C., Galluzzo, F., Gambillara, R., Gaudiosi, G., Goodall, H., Gori, S., Gregory, L.C., Guerrieri, L., Hailemikael, S., Iezzi, F., Invernizzi, C., Jablonská, D., Jacques, E., Jomard, H., Kastelic, V., Klinger, Y., Lavecchia, G., Leclerc, F., Liberi, F., Lisi, A., Livio, F., Lo Sardo, L., Malet, J.P., Mariucci, M.T., Materazzi, M., Mazzarini, F., McCaffrey, K.J.W., Michetti, A.M., Mildon, Z.K., Montone, P., Moro, M., Nave, R., Odin, M., Pace, B., Paggi, S., Pagliuca, N., Pambianchi, G., Pantosti, D., Patera, A., Pérouse, E., Pezzo, G., Piccardi, L., Pierantoni, P.P., Pignone, M., Pinzi, S., Pistolesi, E., Point, J., Pozzi, A., Proposito, M., Puglisi, C., Puliti, I., Ricci, T., Ripamonti, L., Rizza, M., Roberts, G.P., Roncoroni, M., Sapia, V., Saroli, M., Sciarra, A., Scotti, O., Skupinski, G., Smedile, A., Tarabusi, G., Tarquini, S., Terrana, S., Tesson, J., Tondi, E., Valentini, A., Vallone, R., Van Der Woerd, J., Vannoli, P., Venuti, A., Vittori, E., Volatili, T., Wedmore, L.N.J., Wilkinson, M., Zambrano, M., 2018. Surface ruptures following the 30 October 2016 Mw 6.5 Norcia earthquake, central Italy. *Journal of Maps* 14, 151–160. <https://doi.org/10.1080/17445647.2018.1441756>



20. Contrafatto, D., Fasone, R., Ferro, A., Larocca, G., Laudani, G., Rapisarda, S., Scuderi, L., Zuccarello, L., Privitera, E., Cannata, A., 2018. Design of a seismo-acoustic station for Antarctica. *Review of Scientific Instruments* 89. <https://doi.org/10.1063/1.5023481>
21. Corradini, S., Guerrieri, L., Lombardo, V., Merucci, L., Musacchio, M., Prestifilippo, M., Scollo, S., Silvestri, M., Spata, G., Stelitano, D., 2018. Proximal monitoring of the 2011-2015 Etna Lava fountains using msg-seviri data. *Geosciences (Switzerland)* 8. <https://doi.org/10.3390/geosciences8040140>
22. 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, 2633–2646. <https://doi.org/10.1029/2017TC004940>
23. Currenti, G., 2018. Viscoelastic modeling of deformation and gravity changes induced by pressurized magmatic sources. *Journal of Volcanology and Geothermal Research* 356, 264–277. <https://doi.org/10.1016/j.jvolgeores.2018.03.020>
24. De Guidi, G., Brighenti, F., Carnemolla, F., Imposa, S., Marchese, S.A., 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>
25. Di Traglia, F., Calvari, S., D’Auria, L., Nolesini, T., Bonaccorso, A., Fornaciai, A., Esposito, A., Cristaldi, A., Favalli, M., Casagli, N., 2018. The 2014 effusive eruption at Stromboli: New insights from in situ and remote-sensing measurements. *Remote Sensing* 10. <https://doi.org/10.3390/rs10122035>
26. Díaz-Moreno, A., Barberi, G., Cocina, O., Koulakov, I., Scarfi, L., Zuccarello, L., Prudencio, J., García-Yeguas, A., Álvarez, I., García, L., Ibáñez, J.M., 2018. New Insights on Mt. Etna’s Crust and Relationship with the Regional Tectonic Framework from Joint Active and Passive P-Wave Seismic Tomography. *Surveys in Geophysics* 39, 57–97. <https://doi.org/10.1007/s10712-017-9425-3>
27. Edwards, M.J., Pioli, L., Andronico, D., Scollo, S., Ferrari, F., Cristaldi, A., 2018. Shallow factors controlling the explosivity of basaltic magmas: The 17–25 May 2016 eruption of Etna Volcano (Italy). *Journal of Volcanology and Geothermal Research* 357, 425–436. <https://doi.org/10.1016/j.jvolgeores.2018.05.015>
28. Ercoli, M., Di Matteo, L., Pauselli, C., Mancinelli, P., Frapiccini, S., Talegalli, L., Cannata, A., 2018. Integrated GPR and laboratory water content measures of sandy soils: From laboratory to field scale. *Construction and Building Materials* 159, 734–744. <https://doi.org/10.1016/j.conbuildmat.2017.11.082>
29. Esse, B., Burton, M., Varnam, M., Kazahaya, R., Wallace, P.A., Von-Aulock, F., Lavallée, Y., Salerno, G., Scollo, S., Coe, H., 2018. Quantification of ash sedimentation dynamics through depolarisation imaging with AshCam. *Scientific Reports* 8. <https://doi.org/10.1038/s41598-018-34110-6>
30. Falsaperla, S., Neri, M., Di Grazia, G., Langer, H., Spampinato, S., 2018. Radon Tells Unexpected Tales of Mount Etna’s Unrest. *Eos* 99. <https://doi.org/10.1029/2018eo094693>
31. Favalli, M., Fornaciai, A., Nannipieri, L., Harris, A., Calvari, S., Lormand, C., 2018. UAV-based remote sensing surveys of lava flow fields: a case study from Etna’s 1974 channel-fed lava flows. *Bulletin of Volcanology* 80. <https://doi.org/10.1007/s00445-018-1192-6>
32. Fernandez, J., Prieto, J.F., Escayo, J., Camacho, A.G., Luzón, F., Tiampo, K.F., Palano, M., Abajo, T., Pérez, E., Velasco, J., Herrero, T., Bru, G., Molina, I., López, J., 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. <https://doi.org/10.1038/s41598-018-33128-0>



33. Freret-Lorgeril, V., Donnadieu, F., Scollo, S., Provost, A., Fréville, P., Guéhenneux, Y., Hervier, C., Prestifilippo, M., Coltelli, M., 2018. Mass eruption rates of tephra plumes during the 2011–2015 lava fountain paroxysms at Mt. Etna from doppler radar retrievals. *Frontiers in Earth Science* 6. <https://doi.org/10.3389/feart.2018.00073>
34. Gambino, S., Distefano, G., Maiolino, V., Gresta, S., 2018. Seismic vs. geodetic moments at Mt. Etna volcano: A tool for a rapid understanding the eruptive behaviour? *Journal of Volcanology and Geothermal Research* 367, 1–6. <https://doi.org/10.1016/j.jvolgeores.2018.10.012>
35. Gambino, S., Scaltrito, A., 2018a. Volcanic-tectonic seismicity at Stromboli (2005–2016). *Journal of Volcanology and Geothermal Research* 350, 1–6. <https://doi.org/10.1016/j.jvolgeores.2017.11.008>
36. Gambino, S., Scaltrito, A., 2018b. Volcanic-tectonic seismicity at Stromboli (2005–2016). *Journal of Volcanology and Geothermal Research* 350, 1–6. <https://doi.org/10.1016/j.jvolgeores.2017.11.008>
37. Ganci, G., Cappello, A., Bilotta, G., Herault, A., Zago, V., Del Negro, C., 2018. Mapping volcanic deposits of the 2011–2015 etna eruptive events using satellite remote sensing. *Frontiers in Earth Science* 6. <https://doi.org/10.3389/feart.2018.00083>
38. Giammanco, S., Cinti, D., Condarelli, D., Di Stefano, G., Galli, G., Longo, V., Quattrocchi, F., Sciarra, A., Voltattorni, N., 2018. Discrete monitoring of chemical parameters in ground waters of Mt. Etna volcano: 2000–2006. *Journal of Volcanology and Geothermal Research* 358, 273–287. <https://doi.org/10.1016/j.jvolgeores.2018.06.001>
39. Giampiccolo, E., Tuvè, T., 2018. Regionalization and dependence of coda Q on frequency and lapse time in the seismically active Peloritani region (northeastern Sicily, Italy). *Journal of Seismology* 22, 1059–1074. <https://doi.org/10.1007/s10950-018-9750-0>
40. Giuffrida, M., Viccaro, M., Ottolini, L., 2018. Ultrafast syn-eruptive degassing and ascent trigger high-energy basic eruptions. *Scientific Reports* 8. <https://doi.org/10.1038/s41598-017-18580-8>
41. Hasselle, N., Rouwet, D., Aiuppa, A., Jácome-Paz, M.P., Pfeffer, M., Taran, Y., Campion, R., Bitetto, M., Giudice, G., Bergsson, B., 2018. Sulfur Degassing From Steam-Heated Crater Lakes: El Chichón (Chiapas, Mexico) and Víti (Iceland). *Geophysical Research Letters* 45, 7504–7513. <https://doi.org/10.1029/2018GL079012>
42. Lo Presti, D., Gallo, G., Bonanno, D.L., Bonanno, G., Bongiovanni, D.G., Carbone, D., Ferlito, C., Immè, J., la Rocca, P., Longhitano, F., Messina, A., Reito, S., Riggi, F., Russo, G., Zuccarello, L., 2018. The MEV project: Design and testing of a new high-resolution telescope for Muography of Etna Volcano. arXiv.
43. Marchese, F., Neri, M., Falconieri, A., Lacava, T., Mazzeo, G., Pergola, N., Tramutoli, V., 2018. The contribution of multi-sensor infrared satellite observations to monitor Mt. Etna (Italy) Activity during May to August 2016. *Remote Sensing* 10. <https://doi.org/10.3390/rs10121948>
44. McGonigle, A.J.S., Sellitto, P., Salerno, G.G., 2018. Volcanic plumes: Impacts on the atmosphere and insights into volcanic processes. *Geosciences (Switzerland)* 8. <https://doi.org/10.3390/geosciences8050158>
45. Mereu, L., Scollo, S., Mori, S., Boselli, A., Leto, G., Marzano, F.S., 2018. Maximum-Likelihood Retrieval of Volcanic Ash Concentration and Particle Size from Ground-Based Scanning Lidar. *IEEE Transactions on Geoscience and Remote Sensing* 56, 5824–5842. <https://doi.org/10.1109/TGRS.2018.2826839>
46. Miller, C.A., Currenti, G., Hamling, I., Williams-Jones, G., 2018. Mass transfer processes in a post eruption hydrothermal system: Parameterisation of microgravity changes at Te Maari craters, New Zealand. *Journal of Volcanology and Geothermal Research* 357, 39–55. <https://doi.org/10.1016/j.jvolgeores.2018.04.005>
47. 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>
48. Moretti, R., Métrich, N., Arienzo, I., Di Renzo, V., Aiuppa, A., Allard, P., 2018. Degassing vs. eruptive styles at Mt. Etna volcano (Sicily, Italy). Part I: Volatile stocking, gas fluxing, and the shift from low-energy to highly explosive basaltic eruptions. *Chemical Geology* 482, 1–17. <https://doi.org/10.1016/j.chemgeo.2017.09.017>
49. Moschella, S., Cannata, A., Di Grazia, G., Gresta, S., 2018. Insights into lava fountain eruptions at mt. Etna by improved source location of the volcanic tremor. *Annals of Geophysics* 61. <https://doi.org/10.4401/ag-7552>
50. Moussallam, Y., Bani, P., Schipper, C.I., Cardona, C., Franco, L., Barnie, T., Amigo, Á., Curtis, A., Peters, N., Aiuppa, A., Giudice, G., Oppenheimer, C., 2018. Unrest at the Nevados de Chillán volcanic complex: a failed or yet to unfold magmatic eruption? *Volcanica* 1, 19–32. <https://doi.org/10.30909/vol.01.01.1932>
51. Neres, M., Neves, M.C., Custódio, S., Palano, M., Fernandes, R., Matias, L., Carafa, M., Terrinha, P., 2018. Gravitational Potential Energy in Iberia: A Driver of Active Deformation in High-Topography Regions. *Journal of Geophysical Research: Solid Earth* 123, 10,277–10,296. <https://doi.org/10.1029/2017JB015002>
52. Neri, M., Rivalta, E., Maccaferri, F., Acocella, V., Cirrincione, R., 2018. Etnean and Hyblean volcanism shifted away from the Malta Escarpment by crustal stresses. *Earth and Planetary Science Letters* 486, 15–22. <https://doi.org/10.1016/j.epsl.2018.01.006>
53. Nicolosi, I., Caracciolo, F.D.A., Branca, S., Speranza, F., Chiappini, M., 2018. Unravelling Mount Etna's early eruptive history by three-dimensional magnetic modeling. *Bulletin of the Geological Society of America* 130, 1664–1674. <https://doi.org/10.1130/B31793.1>
54. Nicotra, E., Giuffrida, M., Viccaro, M., Donato, P., D'Oriano, C., Paonita, A., De Rosa, R., 2018. Timescales of pre-eruptive magmatic processes at Vulcano (Aeolian Islands, Italy) during the last 1000 years. *Lithos* 316–317, 347–365. <https://doi.org/10.1016/j.lithos.2018.07.028>
55. 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, 194–209. <https://doi.org/10.1093/gji/ggx524>
56. Paratore, M., Zuccarello, L., Tusa, G., Contrafatto, D., Patanè, D., 2018. Seismic amplification effects and soil-to-structure interaction study nearby a fault zone: The Tremestieri fault and Madre Teresa di Calcutta school (Catania). *Annals of Geophysics* 61.
57. Pellegrino, A.G., Zhang, B., Speranza, F., Maniscalco, R., Yin, C., Hernandez-Moreno, C., Winkler, A., 2018. Tectonics and Paleomagnetic Rotation Pattern of Yunnan (24°N–25°N, China): Gaoligong Fault Shear Versus Megablock Drift. *Tectonics* 37, 1524–1551. <https://doi.org/10.1029/2017TC004899>
58. Pfeffer, M.A., Bergsson, B., Barsotti, S., Stefánsdóttir, G., Galle, B., Arellano, S., Conde, V., Donovan, A., Ilyinskaya, E., Burton, M., Aiuppa, A., Whitty, R.C.W., Simmons, I.C., Arason, Þ., Jónasdóttir, E.B., Keller, N.S., Yeo, R.F., Arngrímsson, H., Jóhannsson, Þ., Butwin, M.K., Askew, R.A., Dumont, S., Von Löwis, S., Ingvarsson, Þ., La Spina, A., Thomas, H., Prata, F., Grassa, F., Giudice, G., Stefánsson, A., Marzano, F., Montopoli, M., Mereu, L., 2018. Ground-Based measurements of the 2014–2015 holuhraun volcanic cloud (Iceland). *Geosciences (Switzerland)* 8. <https://doi.org/10.3390/geosciences8010029>
59. Poland, M.P., Carbone, D., 2018. Continuous Gravity and Tilt Reveal Anomalous Pressure and Density Changes Associated With Gas Pistoning Within the Summit Lava Lake of Kīlauea Volcano, Hawai'i. *Geophysical Research Letters* 45, 2319–2327. <https://doi.org/10.1002/2017GL076936>



60. Poret, Matthieu, Corradini, S., Merucci, L., Costa, A., Andronico, D., Montopoli, M., Vulpiani, G., Freret-Lorgeril, V., 2018. Reconstructing volcanic plume evolution integrating satellite and ground-based data: Application to the 23 November 2013 Etna eruption. *Atmospheric Chemistry and Physics* 18, 4695–4714. <https://doi.org/10.5194/acp-18-4695-2018>
61. Poret, M., Costa, A., Andronico, D., Scollo, S., Gouhier, M., Cristaldi, A., 2018. Modeling Eruption Source Parameters by Integrating Field, Ground-Based, and Satellite-Based Measurements: The Case of the 23 February 2013 Etna Paroxysm. *Journal of Geophysical Research: Solid Earth* 123, 5427–5450. <https://doi.org/10.1029/2017JB015163>
62. Porreca, M., Minelli, G., Ercoli, M., Brobia, A., Mancinelli, P., Cruciani, F., Giorgetti, C., Carboni, F., Mirabella, F., Cavinato, G., Cannata, A., Pauselli, C., Barchi, M.R., 2018. Seismic Reflection Profiles and Subsurface Geology of the Area Interested by the 2016–2017 Earthquake Sequence (Central Italy). *Tectonics* 37, 1116–1137. <https://doi.org/10.1002/2017TC004915>
63. Roberts, T.J., Vignelles, D., Liuzzo, M., Giudice, G., Aiuppa, A., Coltelli, M., Salerno, G., Chartier, M., Couté, B., Berthet, G., Lurton, T., Dulac, F., Renard, J.B., 2018. The primary volcanic aerosol emission from Mt Etna: Size-resolved particles with SO₂ and role in plume reactive halogen chemistry. *Geochimica et Cosmochimica Acta* 222, 74–93. <https://doi.org/10.1016/j.gca.2017.09.040>
64. Salerno, G.G., Burton, M., Di Grazia, G., Caltabiano, T., Oppenheimer, C., 2018. Coupling between magmatic degassing and volcanic tremor in basaltic volcanism. *Frontiers in Earth Science* 6. <https://doi.org/10.3389/feart.2018.00157>
65. Salvatore, V., Silleni, A., Corneli, D., Taddeucci, J., Palladino, D.M., Sottili, G., Bernini, D., Andronico, D., Cristaldi, A., 2018. Parameterizing multi-vent activity at Stromboli Volcano (Aeolian Islands, Italy). *Bulletin of Volcanology* 80. <https://doi.org/10.1007/s00445-018-1239-8>
66. Scarfi, L., Barberi, G., Barreca, G., Cannavò, F., Koulakov, I., Patanè, D., 2018. Slab narrowing in the Central Mediterranean: The Calabro-Ionian subduction zone as imaged by high resolution seismic tomography. *Scientific Reports* 8. <https://doi.org/10.1038/s41598-018-23543-8>
67. Scudero, S., Martorana, R., Capizzi, P., Pisciotta, A., D'Alessandro, A., Bottari, C., Di Stefano, G., 2018. Integrated Geophysical Investigations at the Greek Kamarina Site (Southern Sicily, Italy). *Surveys in Geophysics* 39, 1181–1200. <https://doi.org/10.1007/s10712-018-9483-1>
68. Sellitto, P., Spampinato, L., Salerno, G.G., La Spina, A., 2018. Aerosol optical properties of Pacaya volcano plume measured with a portable sun-photometer. *Geosciences (Switzerland)* 8. <https://doi.org/10.3390/geosciences8020036>
69. Solana, M.C., Calvari, S., Kilburn, C.R.J., Gutierrez, H., Chester, D., Duncan, A., 2018. Supporting the Development of Procedures for Communications During Volcanic Emergencies: Lessons Learnt from the Canary Islands (Spain) and Etna and Stromboli (Italy). *Advances in Volcanology* 289–305. https://doi.org/10.1007/11157_2016_48
70. Spatola, D., Micallef, A., Sulli, A., Basilone, L., Ferreri, R., Basilone, G., Bonanno, A., Pulizzi, M., Mangano, S., 2018. The Graham Bank (Sicily Channel, central Mediterranean Sea): Seafloor signatures of volcanic and tectonic controls. *Geomorphology* 318, 375–389. <https://doi.org/10.1016/j.geomorph.2018.07.006>
71. Spina, L., Morgavi, D., Cannata, A., Campeggi, C., Perugini, D., 2018. An experimental device for characterizing degassing processes and related elastic fingerprints: Analog volcano seismo-acoustic observations. *Review of Scientific Instruments* 89. <https://doi.org/10.1063/1.5020004>
72. Terray, L., Gauthier, P.J., Salerno, G., Caltabiano, T., La Spina, A., Sellitto, P., Briole, P., 2018. A new degassing model to infer magma dynamics from radioactive disequilibria in volcanic plumes. *Geosciences (Switzerland)* 8. <https://doi.org/10.3390/geosciences8010027>



73. Trovato, M.C., Andronico, D., Sciacchitano, S., Ruggeri, R.M., Picerno, I., Di Pietro, A., Visalli, G., 2018. Nanostructures: Between natural environment and medical practice. *Reviews on Environmental Health* 33, 295–307. <https://doi.org/10.1515/reveh-2017-0036>
74. Urlaub, M., Petersen, F., Gross, F., Bonforte, A., Puglisi, G., Guglielmino, F., Krastel, S., Lange, D., Kopp, H., 2018. Gravitational collapse of Mount Etna's southeastern flank. *Science Advances* 4. <https://doi.org/10.1126/sciadv.aat9700>
75. Viccaro, M., 2018. Doped bentonitic grouts for implementing performances of low-enthalpy geothermal systems. *Geothermal Energy* 6. <https://doi.org/10.1186/s40517-018-0090-7>
76. Violeau, D., Leroy, A., Joly, A., Hérault, A., 2018. Spectral properties of the SPH Laplacian operator. *Computers and Mathematics with Applications* 75, 3649–3662. <https://doi.org/10.1016/j.camwa.2018.02.023>
77. Zago, V., Bilotta, G., Hérault, A., Dalrymple, R.A., Fortuna, L., Cappello, A., Ganci, G., Del Negro, C., 2018. Semi-implicit 3D SPH on GPU for lava flows. *Journal of Computational Physics* 375, 854–870. <https://doi.org/10.1016/j.jcp.2018.07.060>
78. Zahorec, P., Papčo, J., Vajda, P., Greco, F., Cantarero, M., Carbone, D., 2018. Refined prediction of vertical gradient of gravity at Etna volcano gravity network (Italy). *Contributions to Geophysics and Geodesy* 48, 299–317. <https://doi.org/10.2478/congeo-2018-0014>
79. Zuccarello, L., Tusa, G., Paratore, M., Musumeci, C., Patanè, D., 2018. Structural health monitoring and earthquake early warning: Preliminary studies for application in eastern Sicily. *Annals of Geophysics* 61.

Rapporti tecnici

1. Sicali A, Cappuccio P, Amantia A - Generatore di segnale IRIG-B per la sincronizzazione di strumentazione scientifica attraverso l'uso del Network Time Protocol (NTP). *Rapporti Tecnici INGV*, 395
2. Sicali A, Amantia A, Cappuccio P - Realizzazione di un sistema operativo Client-Server per la gestione di stazioni geomagnetiche remote e relativo simulatore in ambiente Unix. *Rapporti Tecnici INGV*, 399
3. Cassisi C, Consoli S, Montalto P - Software per la gestione del parco auto dell'INGV della Sezione di Catania - Osservatorio Etneo: progettazione e implementazione. *Rapporti Tecnici INGV*, 402
4. Sicali A, Amantia A, Cappuccio P - Evoluzione ventennale (1998-2018) del sistema Mag-Net per l'acquisizione dei segnali dalla rete magnetica dell'Etna e dell'isola di Stromboli. *Rapporti Tecnici INGV*, 403