



Pubblicazioni 2016

1. Acocella, V., Neri M., Behncke B., Bonforte A., Del Negro C. and Ganci G. (2016). Why Does a Mature Volcano Need New Vents? The Case of the New Southeast Crater at Etna, *Frontiers in Earth Science*, 4, Article 67.
2. Andronico, D. and Del Carlo (2016). PM10 measurements in urban settlements after lava fountain episodes at Mt. Etna, Italy: pilot test to assess volcanic ash hazard to human health, *Natural Hazards and Earth System Sciences (NHESS)*, 16, 29–40.
3. Azzaro, R., D’Amico S. and Tuvè T. (2016). Seismic hazard assessment in the volcanic region of Mt. Etna (Italy): a probabilistic approach based on macroseismic data applied to volcano-tectonic seismicity, *Bulletin of Earthquake Engineering*, 14, 7, 1813–1825
4. Barberi, G., Giampiccolo E., Musumeci C., Scarfi L., Bruno V., Cocina O., Diaz Moreno A., Sicali S., Tusa G., Tuvè T., Zuccarello L., Ibanez J. M. and Patanè D. (2016). Seismic and volcanic activity during 2014 in the region involved by TOMO-ETNA seismic active experiment, *Annals of Geophysics*, 59, 4, S0429–31.
5. Barone, G., Mazzoleni, P., Corsaro, R.A., Costagliola, P., Di Benedetto, F., Ciliberto, E., Gimeno, D., Bongiorno, C., Spinella, C. (2016). Nanoscale surface modification of Mt. Etna volcanic ashes. *Geochimica et Cosmochimica Acta*, 174, 70–84. doi:10.1016/j.gca.2015.11.011
6. Barreca, G., Scarfi L., Cannavò F., Koulakov I. and Monaco C. (2016). New structural and seismological evidence and interpretation of a lithospheric-scale shear zone at the southern edge of the Ionian subduction system (central-eastern Sicily, Italy), *Tectonics*, 35, 6, 1489–1505.
7. Behncke, B., Fornaciai A., Neri M., Favalli M., Ganci G. and Mazzarini F. (2016). Lidar surveys reveal eruptive volumes and rates at Etna, 2007–2010, *Geophysical Research Letters*, 43, 9, 4270–4278.
8. Bernharðsdóttir, A. E., Musacchio G., Ferreira M.A. and Falsaperla S. (2016). Informal Education for Disaster Risk Reduction, *Bulletin of Earthquake Engineering*, 14, 7, 2105–2116.
9. Bilotta, G., Hérault, A., Cappello, A., Ganci, G. and Del Negro C. (2016). GPUSPH: a Smoothed Particle Hydrodynamics model for the thermal and rheological evolution of lava flows, *Geological Society of London*, 426 (1), 387–408, doi: 10.1144/SP426.24.
10. Bisson, M., Spinetti C., Neri M. and Bonforte A. (2016). Mt. Etna volcano high-resolution topography: airborne LiDAR modelling validated by GPS data, *International Journal of Digital Earth*, 9, 710–732.
11. Bombrum, M., Spampinato L., Harris A., Barra V. and Caltabiano T. (2016). On the transition from strombolian to fountaining activity: a thermal energy-based driver, *Bulletin of volcanology*, 78, 15.
12. Bonaccorso, A., Linde A., Currenti G., Sacks S. and Sicali A. (2016). The borehole dilatometers network of Mt. Etna : a powerful tool to detect and infer volcano dynamics, *Journal of geophysical research - solid earth*, 121, 6, 4655–4669.



13. Bonadonna, C., Cioni R., Costa A., Druit T., Philips J., Pioli L., Andronico D., Harris A., Scollo S. et al. (2016). MeMoVolc report on classification and dynamics of volcanic explosive eruptions, *Bulletin of volcanology*, 78, 84.
14. Bonforte, A., Fagone S., Giardina C., Genovese S., Aiesi G., Calvagna F., Cantarero M., Consoli O., Consoli S., Guglielmino F., Puglisi B., Puglisi G. and Saraceno B. (2016). Global positioning system survey data for active seismic and volcanic areas of eastern Sicily, 1994 to 2013, *Scientific Data*, 3, ID 160062.
15. Bonforte, A., Gonzales P.J. and Fernandez J. (2016). Joint Terrestrial and Aerial Measurements to Study Ground Deformation: Application to the Sciara Del Fuoco at the Stromboli Volcano (Sicily), *Remote Sensing*, 7, 463.
16. Bonforte, A., Hernandez D.A., Gutierrez E., Handal L., Polio C., Rapisarda S. and Scarlato P. (2016). The unrest of the San Miguel volcano (El Salvador, Central America): installation of the monitoring network and observed volcano-tectonic ground deformation, *Natural Hazards and Earth System Sciences (NHES)*, 16, 1755–1769.
17. Branca, S., Branciforti M.G., Chiavetta A.F. and Corsaro R.A. (2016). The geology of the 2nd century A.D. Amphitheater Area of Catania, Italy: Historical Eruptions Affecting the Urban District, *Geoarchaeology*, 31, 3-16.
18. Brancato, A., Buscema P.M., Massini G. and Gresta S. (2016). Pattern Recognition for Flank Eruption Forecasting: An Application at Mount Etna Volcano (Sicily, Italy), *Open Journal of Geology*, 6, 583-597.
19. Bruno, V., Ferlito C., Ferlito M., Monaco C., Rossi M. and Scandura D. (2016). Evidence of a shallow magma intrusion beneath the NE Rift system of Mt. Etna during 2013, *Terra nova*, 28, 5, 356-363
20. Calabrese, S., Randazzo L., Daskalopoulou K., Milazzo S., Scaglione S., Vizzini S., Tramati C.D., D'Alessandro W., Brusca L., Bellomo S., Giuffrida G., Pecoraino G., Montana G., Salerno G., Giammanco S., Caltabiano T. and Parello F. (2016). Mount Etna volcano (Italy) as a major “dust” point source in the Mediterranean area, *Arabian Journal of Geosciences*, 9, 219.
21. Calvari, S., Intrieri E., Di Traglia F., Bonaccorso A., Casagli N. and Cristaldi A. (2016). Monitoring crater-wall collapse at active volcanoes: a study of the 12 January 2013 event at Stromboli, *Bulletin of volcanology*, 78, 39.
22. Cannavo, F. and Palano M. (2016). Defining Geodetic Reference Frame Using Matlab®: PlatEMotion 2.0, *Pure and Applied Geophysics*, 173, 3, 937–944.
23. Cannavo, F. and Nunnari G.. (2016). On a Possible Unified Scaling Law for Volcanic Eruption Durations, *Scientific Reports*, 6, 22289
24. Cannavo, F., Gambino S., Puglisi B. and Velardita R. (2016). Modeling ground deformation associated with the destructive earthquakes occurring on Mt. Etna’s southeastern flank in 1984, *Natural Hazards and Earth System Sciences (NHES)*, 16, 2443–2453
25. Cappello, A., Ganci G., Calvari S., Perez N.M., Hernandez P.A., Silva S.V., Cabral J. and Del Negro C. (2016). Lava flow hazard modeling during the 2014–2015 Fogo eruption, Cape Verde, *Journal of Geophysical Research: Solid Earth*, 121, 4, 2290–2303.



26. Cappello, A., Hérault, A., Bilotta, G., Ganci, G. and Del Negro C. (2016). MAGFLOW: a physics-based model for the dynamics of lava-flow emplacement, *Geological Society of London*, 426 (1), 357-373, doi: 10.1144/SP426.16.
27. Cassisi, C., Prestifilippo M., Cannata A., Montalto P., Patanè D. and Privitera E. (2016). Probabilistic Reasoning Over Seismic Time Series: Volcano Monitoring by Hidden Markov Models at Mt. Etna, *Pure and Applied Geophysics*, 173, 1420-9136.
28. Cavallaro, D., Cocchi L., Coltelli M., Muccini F., Carmisciano C., Firetto Carlino M., Ibanez J., Patanè D., Filippone M. and Buttaro E. (2016). Acquisition procedures, processing methodologies and preliminary results of magnetic and ROV data collected during the TOMO-ETNA experiment, *Annals of Geophysics*, 59, 4, S0431.
29. Coco, A., Currenti G., Gottsmann J., Russo G. and Del Negro C. (2016). A hydro-geophysical simulator for fluid and mechanical processes in volcanic areas, *Journal of Mathematics in Industry*, 6, 6, 1-20.
30. Coco, A., Gottsmann J., Whitaker F., Rust A., Currenti G., Jasim A. and Bunney S. (2016). Numerical models for ground deformation and gravity changes during volcanic unrest: simulating the hydrothermal system dynamics of a restless caldera, *Journal of Geophysical Research: Solid Earth*, 7, 557–577.
31. Coltelli, M., Cavallaro D., D’Anna G., D’Alessandro A., Grassa F., Mangano G., Patanè D. and Gresta S. (2016). Exploring the submarine Graham Bank in the Sicily Channel, *Annals of Geophysics*, 59, 2, S0208.
32. Coltelli, M. et al (2016). The marine activities performed within the TOMO-ETNA experiment, *Annals of Geophysics*, 59, 4, 2016, S0428.
33. Corradini, S., Montopoli M., Guerrieri L., Ricci M., Scollo S., Merucci L., Marzano F., Pugnaghi S., Prestifilippo M., Ventress L., Grainger R.G., Carboni E., Vulpiani G. and Coltelli M. (2016). A Multi-Sensor Approach for Volcanic Ash Cloud Retrieval and Eruption Characterization: The 23 November 2013 Etna Lava Fountain, *Remote Sensing*, 8, 1, 58.
34. Corsaro, R.A. , Métrich, N. (2016). Chemical heterogeneity of Mt. Etna magmas in the last 15 ka. Inferences on their mantle sources. *Lithos*, 252–253, 123–134doi:10.1016/j.lithos.2016.02.006
35. D’Aleo, R., Bitetto M., Delle Donne D., Tamburello G., Battaglia A., Coltelli M., Patanè D., Prestifilippo M., Sciotto M. and Aiuppa A. (2016). Spatially resolved SO₂ flux emissions from Mt Etna, *Geophysical Research Letters*, 43, 7511-7519.
36. D’Amato D., Pace B., Di Nicola L., Stuart F.M., Visini F., Azzaro R., Branca S., Barfod D.N. (2016) Holocene slip rate variability along the Pernicana fault system (Mt. Etna, Italy): Evidence from offset lava flows. *GSA Bulletin*, 128, doi: 10.1130/B31510.1
37. D’Amico, S., Meroni F., Sousa M.L. and Zonno G. (2016). Building vulnerability and seismic risk analysis in the urban area of Mt. Etna volcano (Italy), *Bulletin of Earthquake Engineering*, 14, 7, 2031–2045.
38. Del Negro, C., Cappello A., and Ganci G. (2016). Quantifying lava flow hazards in response to effusive eruption, *GSA Bulletin*, 128, 5/6, 752–763, doi:10.1130/B31364.1.
39. Diaz-Moreno, A., Koulakov I., García-Yeguas A., Jakovlev A., Barberi G., Cocina O., Zuccarello L., Scarfi L., Patanè D., Álvarez I., García L., Benítez C., Prudencio J. and Ibáñez J. M. (2016). PARTOS - Passive



- and Active Ray TOMography Software: description and preliminary analysis using TOMO-ETNA experiment's dataset. *Annals of Geophysics*, 59, 4, S0435.
40. Dominguez, L., Pioli L., Bonadonna C., Connor C.B., Andronico D., Harris A.J.L. and Ripepe M. (2016). Quantifying unsteadiness and dynamics of pulsatory volcanic activity, *Earth and planetary science letters*, 444, 160-168.
 41. Donnadieu, F., Freville, P., Hervier, C., Coltelli, M., Scollo, S., Prestifilippo, M., Valade, S., Rivet, S. and Cacault, P. (2016). Near-source Doppler radar monitoring of tephra plumes at Etna, *Journal of Volcanology and Geothermal Research*, 312, 26–39.
 42. Firetto Carlino, M., Zgur F., Bruno P.P., Coltelli M., Sormani L., Cavallaro D., Ibanez J. And Patanè D. (2016). Acquisition and preliminary analysis of multi-channel seismic reflection data, acquired during the oceanographic cruises of the TOMO-ETNA experiment, *Annals of Geophysics*, 59, 4, 2016, S0430.
 43. Gambino, S. (2016). Tilt offset associated with local seismicity: the Mt. Etna January 9, 2001 seismic swarm, *Open Geosciences*, 8, 514–522.
 44. Gambino, S., Aloisi M., Falzone G. and Ferro A. (2016). Tilt signals at Mount Melbourne, Antarctica: evidence of a shallow volcanic source, *Polar Research*, 35, 28269.
 45. Gambino, S., Cannata A., Cannavò F., La Spina A., Palano M., Sciotto M., Spampinato L. and 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, 2037–2053. 43
 46. Ganci, G., Bilotta, G., Cappello, A., Herault, A. and Del Negro C. (2016). HOTSAT: a multiplatform system for the thermal monitoring of volcanic activity using satellite data, *Geological Society of London*, 426 (1), 207-221, doi: 10.1144/SP426.21.
 47. Garcia, L., Alvarez I., Benitez C., Titos M., Bueno A., Mota S., De La Torre A., Segura J.C., Alguacil G., Diaz-Moreno A., Prudencio J., Garcia-Yeguas A., Ibanez J.M., Zuccarello L., Cocina O. and Patanè D. (2016). Advances on the automatic estimation of the P-wave onset time, *Annals of Geophysics*, 59,4.
 48. Giammanco, S., Gladys M., Neri M., Hernandez P., Sortino F., Barrancos J., Lopez M., Pecoraino G. and Perez N. (2016). Active tectonic features and structural dynamics of the summit area of Mt. Etna (Italy) revealed by soil CO₂ and soil temperature surveying, *Journal of volcanology and geothermal research*, 311, 79–98.
 49. Giammanco, S., Carbone S. and Pistorio A.. (2016). Il Geosito “Sistema delle Salinelle del Monte Etna” (Paternò e Belpasso – Sicilia orientale), *Geologia dell'Ambiente*, 3, 42-47.
 50. Greco, F., Currenti G., Palano M., Pepe A. and Pepe S. (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.
 51. Giammanco, S., Gladys M., Neri M. Hernandez P., Sortino F., Barrancos J., Lopez M., Pecoraino G. and Perez N. (2016). Active tectonic features and structural dynamics of the summit area of Mt. Etna (Italy) revealed by soil CO₂ and soil temperature surveying, *Journal of volcanology and geothermal research*, 311, 79–98. 49.
 52. Harris, A.J.L., Carn, S., Dehn, J., Del Negro, C., Guðmundsson, M.T., Cordonnier, B., Barnie, T., Chahi, E., Calvari, S., Catry, T., De Groeve, T., Coppola, D., Davies, A., Favalli, M., Ferrucci, F., Fujita, E., Ganci, G.,



- Garel, F., Huet, P., Kauahikaua, J., Kelfoun, K., Lombardo, V., Macedonio, G., Pacheco, J., Patrick, M., Pergola, N., Ramsey, M., Rongo, R., Sahy, F., Smith, K., Tarquini, S., Thordarson, T., Villeneuve, N., Webley, P., Wright, R. and Zakšek K. (2016). Conclusion: recommendations and findings of the RED SEED working group, Geological Society of London, 426 (1), 567-648, doi: 10.1144/SP426.11.
53. Ibanez, J. M., Díaz-Moreno A., Prudencio J., Patanè D., Zuccarello L., Cocina O., Luhr B., Carrión F., Coltelli M., Bruno P. P. M., Bianco F., Hellweg M., Abreu R., Alguacil G., Álvarez I., Aranda C., Benítez C., Buontempo L., Feriche M., García L., García-Quiroga D., Martín J. B., Morales, J., Serrano, I., Titos, M., Urbano, L., Aiesi, G., Azzaro, R., Barberi, G., Cantarero, M., Cappuccio, P., Cavallaro, D., Contrafatto, D., Di Prima, S., Falsaperla, S., Carlino, M. F., Giampiccolo, E., Graziano, L., Musumeci, C., Paratore, M., Pellegrino, D., Pulvirenti, M., Rapisarda, S., Sassano, M., Scarfi, L., Scuderi, L., Sicali, A., Tusa, G., Tuvè, T., Del Pezzo, E., Fiore, S., Galluzzo, D., La Rocca, M., Longobardi, M., Nocerino, L., Scognamiglio, S., Bottari, C., Criscuoli, F., De Gori, P., Giovani, L., Messina, A., Silvestri, M., Salimbeni, S., Dahm, T., García-Yeguas, A., Ontiveros, A., Coello, E., Cordero, M., Guillén, C., Romero, M. C., McCann, H., Bretón, M., Boyd, S., Koulakov, I. and Abramenkov, S. (2016). TOMO-ETNA experiment at Etna volcano: Activities on land, *Annals of Geophysics*, 59, 4, S0427. 51.
54. Ibáñez, J.M., Prudencio, J., Díaz-Moreno, A., Patané, D., Puglisi, G., Luehr, B.G., Carrión, F., Dañobeitia, J.J., Coltelli, M., Bianco, F., Del Pezzo, E., Dahm, T., Willmott, V., Mazauric, V. (2016). The TOMO-ETNA experiment: an imaging active campaign at Mt. Etna volcano. Context, main objectives, working-plans and involved research projects. *Annals of Geophysics*, Vol 59, No 4 (2016) doi:10.4401/ag-7079.
55. Kereszturi, G., Németh, K., Moufti, M.R., Cappello, A., Murcia, H., Ganci, G., Del Negro, C., Procter, J. and Zahran H.M. (2016). Emplacement conditions of the 1256 AD Al-Madinah lava flow field in Harrat Rahat, Kingdom of Saudi Arabia — Insights from surface morphology and lava flow simulations, *Journal of Volcanology and Geothermal Research*, 309, 14–30, <http://dx.doi.org/10.1016/j.jvolgeores.2015.11.002>.
56. Kozłowska, B., Walencik-Lata A., Immè G., Catalano R., Mangano G., Morelli D. and Giammanco S. (2016). Natural radioactivity content in groundwater of Mt. Etna's eastern flank and gamma background of surrounding rocks, *Annals of Geophysics*, 59, 1, S0103.
57. Langer, H., Tusa G., Scarfi L. and Azzaro R. (2016). Ground-motion scenarios on Mt Etna inferred from empirical relations and synthetic simulations, *Bulletin of Earthquake Engineering*, 14, 7, 1917–1943. 54.
58. Latutrie, B., Andredakis, I., De Groeve, T., Harris, A.J.L., Langlois, E., van Wyk de Vries, B., Saubin, E., Bilotta, G., Cappello, A., Crisci, G.M., D'ambrosio, D., Del Negro, C., Favalli, M., Fujita, E., Iovine, G., Kelfoun, K., Rongo, R., Spataro, W., Tarquini, S., Coppola, D., Ganci, G., Marchese, F., Pergola, N. and Tramutoli V. (2016). Testing a geographical information system for damage and evacuation assessment during an effusive volcanic crisis, *Geological Society of London*, 426 (1), 649-672, doi: 10.1144/SP426.11.
59. Meroni, F., Zonno G., Azzaro R., D'Amico S., Tuvè T., Oliveira C.S., Ferreira M. A., Mota de Sa F., Brambilla C., Rotondi R. and Varini E. (2016). The role of the urban system dysfunction in the assessment of seismic risk in the Mt. Etna area (Italy), *Bulletin of Earthquake Engineering*, 14, 7, 1979–2008.



60. Moretti M., Pondrelli S., Margheriti L., Abruzzese L., Anselmi M., Arroucau P., Baccheschi P., Bapchie B., Bonardio R., Bono A., Bucci A., Buttinelli M., Capello M., Cardinale V., Castagnozzi A., Attaneo M., Cecere G., Chiarabba C., Chiaraluce L., Cimini G.B., Cogliano R., Colasanti G., Colasanti M., Criscuoli F., D'Alema E., D'Alessandro A., D'Ambrosio C., Danecek P., De Caro M., De Gori P., Delladio A., De Luca G., Demartin M., Di Nezza M., Di Stefano R., Falco L., Fares M., Frapiccini M., Frepoli A., Galluzzo D., Giandomenico E., Giovani L., Giunchi C., Govoni A., Hawthorn D., Ladina C., Lauciani V., Lindsay A., Mancini S., Mandiello A.G., Marzorati S., Massa M., Memmolo A., Migliari F., Minichiello F., MOonachesi G., Montuori C., Moschillo R., Murphy S., Pagliuca N.M., Pastori M., Piccinini D., Piccolini U., Pintore S., Poggiali G., Rao S., Saccorotti G., Segou M., Serratore A., Silvestri M., Silvestri S., Vallocchia M., Valoroso L., Zuccarello L., Michelini A., Mazza S. (2016). SISMICO: emergency network deployment and data sharing for the 2016 central Italy seismic sequence. *Annals of Geophysics*, vol. 59, ISSN: 2037-416X, doi: 10.4401/ag- 7212
61. Mulas, M., Cioni R., Andronico D. and Mundula F. (2016). The explosive activity of the 1669 Monti Rossi eruption at Mt. Etna (Italy), *Journal of volcanology and geothermal research*, 328, 115–133.
62. Musacchio, G., Falsaperla S., Bernharðsdóttir A.E., Ferreira M.A., Sousa M.L., Cavalho A. and Zonno G. (2016). Education: can a bottom-up strategy help for earthquake disaster prevention? *Bulletin of Earthquake Engineering*, 14, 7, 2069–2086.
63. Musacchio G., Falsaperla S., Sansivero F., Ferreira M.A., Oliveira C.S., Nave R., Zonno G. (2016) Dissemination strategies to instil a culture of safety on earthquake hazard and risk, *Bulletin of Earthquake Engineering*, 14, 7, 2087–2103.
64. Napoli, R. and Currenti G. (2016). Reconstructing the Vulcano Island evolution from 3D modeling of magnetic signatures, *Journal of volcanology and geothermal research*, 320, 40-49.
65. Neri, M., Ferrara E., Giammanco S., Currenti G., Cirrincione R., Patanè G. and Zanon V. (2016). Soil radon measurements as a potential tracer of tectonic and volcanic activity, *Scientific Reports*, 6, 24581.
66. Nicolosi, I., D'Ajello Caracciolo F., Branca S., Ferlito C. and Chiappini M. (2016). The earliest open conduit eruptive center of the Etnean region: evidence from aeromagnetic, geophysical, and geological data, *Bulletin of volcanology*, 78, 50.
67. 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. 54.57.
68. Panzera F., Lombardo G., Longo E., Langer H., Branca S., Azzaro R., Cicala L., Trimarchi F. (2016) Exploratory seismic site response surveys in a complex geologic area: a case study from Mt. Etna volcano (southern Italy). *Nat. Hazards* DOI 10.1007/s11069-016-2517-4 55.
69. Pardini, F., Burton, M., De' Michieli Vitturi, M., Corradini, S., Salerno, G., Merucci, L., Di Grazia, G., (2016). Retrieval and intercomparison of volcanic SO₂ injection height and eruption time from satellite maps and ground-based observations, *J. Volcanol. Geot Res.*, doi:10.1016/j.jvolgeores.2016.12.008
70. Poland, M. and Carbone D. (2016). Insights into shallow magmatic processes at Kīlauea Volcano, Hawai'i, from a multiyear continuous gravity time series, *Journal of geophysical research - solid earth*, 121, 7, 5477–5492.



71. Polcari, M., Palano M., Fernandez J., Samsonov S., Stramondo S. and 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, 1-13. 57.
72. Pulvirenti F., Aloisi M. and Jin S. (2016). Time-dependent Coulomb stress changes induced by the 2002-2003 Etna magmatic intrusions and implications on following seismic activities. *Journal of Volcanology and Geothermal Research*, Volcano Geodesy Special Volume, doi: 10.1016/j.jvolgeores.2016.11.001.
73. QUEST W.G., Azzaro R., Tertulliani A., Bernardini F., Camassi R., Del Mese S., Ercolani E., Graziani L., Locati M., Maramai A., Pessina V., Rossi A., Rovida A., Albinì P., Arcoraci L., Berardi M., Bignami C., Brizuela B., Castellano C., Castelli V., D'Amico S., D'Amico V., Fodarella A., Leschiutta I., Piscini A. and Sbarra M. (2016) The 24 August 2016 Amatrice earthquake: macroseismic survey in the damage area and EMS intensity assessment, *Annals of Geophysics*, 59, DOI: 10.4401/ag-7203
74. Scarfi, L., Langer H., Garcia-Fernandez M. and Jimenez M. (2016). Path effects and local elastic site amplification: two case studies on Mt Etna (Italy) and Vega Baja (SE Spain), *Bulletin of Earthquake Engineering*, 14, 7, 2117-2127.
75. Scarfi, L., Barberi G., Musumeci C. and Patanè D. (2016). Seismotectonics of northeastern Sicily and southern Calabria (Italy): New constraints on the tectonic structures featuring in a crucial sector for the central Mediterranean geodynamics, *Tectonics*, 35, 3, 812–832. 60.
76. Sellitto, P., Di Sarra, A., Corradini, S., Boichu, M., Herbin, H., Dubuisson, P., Seze, G., Meloni, D., Monteleone, F., Merucci, L., Rusalem, J., Salerno, G., Briole, P., Legras, B.(2016), Synergistic use of Lagrangian dispersion and radiative transfer modelling with satellite and surface remote sensing measurements for the investigation of volcanic plumes: the Mount Etna eruption of 25-27 October 2013, *Atmos. Chem. Phys.*, 16, 6841–6861, doi:10.5194/acp-16-6841-2016
77. Sicard, M., Barragan R., Muñoz-Porcar C., Comerón A., Mallet M., Dulac F., Pelon J., Alados Arboledas L., Amodeo A., Boselli A., Bravo-Aranda J. A., D'Amico G., Granados Muñoz M. J., Leto G., Guerrero Rascado J. L., Madonna F., Mona L., Pappalardo G., Perrone M. R., Burlizzi P., Rocadenbosch F., Rodríguez-Gómez A., Scollo, S., Spinelli N., Titos G., Wang X. and Wang X. (2016). Contribution of EARLINET/ACTRIS to the summer 2013 Special Observing Period of the ChArMEx project: monitoring of a Saharan dust event over the western and central Mediterranean, *International Journal of Remote Sensing*, 37, 19, 4698-4711.
78. Tusa, G. and Langer H. (2016). Prediction of ground-motion parameters for the volcanic area of Mount Etna, *Journal of Seismology*, 20, 1, 1–42.
79. Viccaro, M., Zuccarello F., Cannata A. and Palano M. (2016). How a complex basaltic volcanic system works: constraints from integrating seismic, geodetic and petrological data at Mt. Etna volcano during the July-August 2014 eruption, How a complex basaltic volcanic system works, *Journal of geophysical research - solid earth*, 121, 5659–5678. 69.
80. Wei, Z., Dalrymple, R.A., Rustico, E., Héroult, A. and Bilotta G. (2016). Simulation of nearshore tsunami breaking by smoothed particle hydrodynamics method, *Journal of Waterway, Port, Coastal and Ocean Engineering*, 142, 4, [http://dx.doi.org/10.1061/\(ASCE\)WW.1943-460.0000334#sthash.7mPdCLIA.dpuf](http://dx.doi.org/10.1061/(ASCE)WW.1943-460.0000334#sthash.7mPdCLIA.dpuf).



81. Zuccarello, L., Paratore M., La Rocca M., Ferrari F., Messina A., Branca S., Contrafatto D., Galluzzo D. and Rapisarda S. (2016). Shallow velocity model in the area of Pozzo Pitarrone, Mt. Etna, from single station, array methods and borehole data, *Annals of Geophysics*, 59, 4, S0433.

Capitoli di libri

1. Abate T., Branca S. (2016) L'eruzione del 1669 dell'Etna e la trasformazione del paesaggio: lo sguardo dei disegnatori. In: *Delli Aspetti de Paesi. Vecchi e nuovi Media per l'Immagine del Paesaggio*. F. Capano, M.I. Pascariello, M. Visone (Eds.), Tomo II Rappresentazione, memoria, conservazione, 469-477, CIRICE e-book, ISBN 978-88-99930-01-1
2. Harris, A.J.L., Carn S., Dehn J., Del Negro C. et al. (2016). Conclusion: recommendations and findings of the RED SEED working group, Publisher: The Geological Society of London, Editors: Harris, A. J. L., De Groeve, T., Garel, F., Carn, S. A., 1- 82.

Abstracts estesi e Proceedings

1. Martino, M., Marsella M., Scifoni S., Coltelli M., Proietti C., Chowdhury T.A., Minet C and Giannone F. (2016). Monitoring an active volcanic area and mapping lava flows with multisource data: The case of Mount Etna from 2011 to 2015, 2016 IEEE 16th International Conference on Environment and Electrical Engineering (EEEIC)
2. Greco F., Giammanco S., Napoli R., Currenti G., Vicari A., La Spina A., Salerno G., Spampinato L., Amantia A., Cantareo M., Messina A., Sicali A. A multidisciplinary strategy for in-situ and remote sensing monitoring of areas affected by pressurized fluids: application to mud volcanoes. 2016 IEEE Sensors Applications Symposium (SAS 2016) Proceedings. IEEE Catalog Number: FP16SAS-USB - ISBN: 978-1-4799-7249-4, pp. 291-296.
3. Greco F., Giammanco S., Napoli R., Currenti G., Vicari A., La Spina A., Salerno G., Spampinato L., Amantia A., Cantarero M., Messina A., Sicali A. Prospezioni multiparametriche per la caratterizzazione del geosito delle Salinelle di Paternò. A multidisciplinary strategy for in-situ and remote sensing monitoring of areas affected by pressurized fluids: Application to mud volcanoes: *Geologia dell'Ambiente*, Periodico trimestrale della SIGEA (Società Italiana di Geologia Ambientale). Supplemento al n. 3/2016, Anno XXIV - luglio-settembre 2016. ISSN 1591-5352, pp. 211-216.
4. Greco F., Currenti G., Palano M. Insights into a shallow persistent magmatic reservoir from joint analysis of gravity and GPS data: the 25-26 October 2013 Etna lava fountaining event. IAG Symposium on Terrestrial Gravimetry: static and mobile measurements (TG-SMM 2016). 12-15 April 2016, Saint Petersburg, Russia, pp. 136-142.

Rapporti tecnici e monografie

1. Branca S., Lanzafame G. (2016). La miscellanea di Alfred Rittmann (1839-1980): uno sguardo su un secolo di Scienze della Terra. *Miscellanea INGV*, N. 30, ISSN 2039-6651.
2. Cannata, A., Milluzzo V., Aliotta M., Cassisi C., Gambino S., Montalto P. and Prestifilippo M. (2016). Sviluppo di un software per la deteazione e classificazione in near real-time degli eventi sismo-vulcanici, *Rapporti Tecnici INGV*, 300.



3. Cannata, A., Privitera E., Sciotto M., Scuderi L., Aliotta M., Cassisi C., Montalto P. and Rapisarda S. (2016). Sistema di elaborazione automatica dei segnali infrasonici al Monte Etna, Quaderni di Geofisica, 131.
4. Cassisi, C., Montalto P., Aliotta M., Cannata A. and Prestifilippo M. (2016). TSDSystem: un database multidisciplinare per la gestione di serie temporali, Rapporti Tecnici INGV, 304.
5. Cassisi, C., Fiumara S., Cannata A., Montalto P., Aliotta M. and Scarpa M. (2016). Algoritmi di Change Point Analysis delle serie temporali: il tremore vulcanico registrato sul vulcano Etna come caso di studio, Rapporti Tecnici INGV, 317.
6. Cassisi, C., Montalto P., Aliotta M., Amore M., Cannavò F., D'Agostino M., La Via M., Mangiagli S., Prestifilippo M., Rossi M., Saraceno B. and Torrisi O. (2016). Sistema integrato per la gestione dell'attività di sorveglianza sismo-vulcanica presso la sala operativa INGV della Sezione di Catania – Osservatorio Etneo, Rapporti Tecnici INGV, 338.
7. Montalto, P., De Beni E., Cassisi C., Aliotta M., D'Agostino M., Mangiagli S., Prestifilippo M. and Torrisi O. (2016). Il GeoDatabase dell'INGV della Sezione di Catania - Osservatorio Etneo: progettazione ed implementazione, Rapporti Tecnici, 351.
8. Paratore, M., Zuccarello L. and Tusa G. (2016). Acquisizione di noise sismico ambientale nell'area denominata Boschetto Playa (Catania), Rapporti Tecnici, 331.
9. Scropo M.S., Mangiagli S., Aliotta M., Cassisi C., D'Agostino M. and Torrisi O. (2016). Progettazione di un'architettura cluster High Availability per il portale web dell'Osservatorio Etneo, Rapporti Tecnici, 353.
10. Zuccarello, L., Paratore M., La Rocca M., Ferrari F., Messina A., Branca S., Contrafatto D., Galluzzo D., Rapisarda S. and Garcia L. (2016). Borehole experiment at Pozzo Pitarrone NE flank of Mt. Etna Volcano: preliminary results of 3D array analysis, MISCELLANEA INGV, 31,