



## Pubblicazioni 2009

1184. Acocella, V., **M. Neri** and R. Sulpizio (2009). Dike propagation within active central volcanic edifices: constraints from Somma-Vesuvius, Etna and analogue models, *Bull. Volcanol.*, **71**, 219–223.
1185. Acocella, V., **M. Neri** and T. R. Walter (2009). Structural features of Panarea volcano in the frame of the Aeolian Arc (Italy): Implications for the 2002–2003 unrest, *Journal of Geodynamics*, **47**, 288–292.
1186. **Aloisi, M., A. Bonaccorso, F. Cannavò, S. Gambino, M. Mattia, G. Puglisi** and E. Boschi (2009). A new dyke intrusion style for the Mount Etna May 2008 eruption modelled through continuous tilt and GPS data, *Terra Nova*, **21**, 4, 316–321.
1187. Andò, B., **D. Carbone** (2009). A LabVIEW environment to compensate temperature-driven fluctuations in the signal from continuously running spring gravimeters, *Computers & Geosciences*, **10**, 35.
1188. **Andronico, D., A. Cristalli, P. Del Carlo**, and J. Taddeucci (2009). Shifting styles of basaltic explosive activity during the 2002–03 eruption of Mt. Etna, Italy, *J. Volcanol. Geoth. Res.*, **180**, 2–4, 110–122.
1189. Arevalo, C.M, **C. Musumeci and D. Patane`** (2009). Evidence of a partial melt zone beneath Stromboli volcano (Italy) from inversion of teleseismic receiver functions, *Terra Nova*, **21**, 386–392.
1190. **Azzaro, R., S. D'Amico, A. Mostaccio, L. Scarfi**, and **T. Tuvè** (2009). Terremoti con effetti macrosismici in Sicilia orientale nel periodo Gennaio 2006 - Dicembre 2008, *Quaderni di Geofisica*, **72**.
1191. **Behncke, B.** (2009). Hazards from pyroclastic density currents at Mt. Etna (Italy). *J. Volcanol. Geoth. Res.*, **180**, 148–160.
1192. **Behncke, B., S. Falsaperla and E. Pecora** (2009). Complex magma dynamics at Mount Etna revealed by seismic, thermal, and volcanological data, *J. Geophys. Res.*, **114**, B03211.
1193. **Behncke, B., S. Falsaperla and E. Pecora** (2009). Reply to comment by Ferlito et al. on “Complex magma dynamics at Mount Etna revealed by seismic, thermal, and volcanological data”, *J. Geophys. Res.*, **114**, B12205.
1194. **Behncke, B.** and C.A. Pshenichny (2009). Modeling unusual eruptive behavior of Mt. Etna, Italy, by means of event bush, *J. Volcanol. Geoth. Res.*, **185**, 157–171.
1195. Bisson, M., **B. Behncke**, A. Fornaciai and **M. Neri** (2009). LiDAR-based digital terrain analysis of an area exposed to the risk of lava flow invasion: the Zafferana Etnea territory, Mt. Etna (Italy), *Natural Hazards*, **50**, 321–334.
1196. **Bonaccorso, A., A. Bonforte, S. Gambino, M. Mattia, F. Guglielmino, G. Puglisi** and E. Boschi (2009). Insight on recent Stromboli eruption inferred from terrestrial and satellite ground deformation measurements, *J. Volcanol. Geot. Res.*, **182**, 172–181.
1197. **Bonforte, A., S. Gambino and M. Neri** (2009). Intrusion of eccentric dikes: The case of the 2001 eruption and its role in the dynamics of Mt. Etna volcano, *Tectonophysics*, **471**, 78–86.

1198. **Branca, S., P. Del Carlo, D. Lo Castro, E. De Beni** and J. Wijbrans (2009). The occurrence of Mt Barca flank eruption in the evolution of the NW periphery of Etna volcano (Italy), *Bull Volcanol.*, **71**, 79–94.
1199. Burton, M., **T. Caltabiano, F. Murè, G. Salerno and D. Randazzo** (2009). SO<sub>2</sub> flux from Stromboli during the 2007 eruption: Results from the FLAME network and traverse measurements, *J. Volcanol. Geot. Res.*, **182**, 214–220.
1200. Camassi, R., P. Galli, A. Tertulliani, S. Castenetto, A. Lucantoni, D. Molin, G. Naso, E. Peronace, F. Bernardini, V. Castelli, A. Cavaliere, E. Ercolani, S. Salimbeni, D. Tripone, G. Vannucci, L. Arcoraci, M. Berardi, C. Castellano, S. Del Mese, L. Graziani, I. Leschiutta, A. Maramai, A. Massucci, A. Rossi, M. Vecchi, **R. Azzaro, S. D'Amico, F. Ferrari, N. Mostaccio, R. Platania, L. Scarfi, T. Tuvé, L. Zuccarello**, S. Carlino, A. Marturano, P. Albini, A. Gomez Capera, M. Locati, F. Meroni, V. Pessina, C. Piccarreda, A. Rovida, M. Stucchi, G. Buffarini, S. Paolini, V. Verrubbi, M. Mucciarelli, R. Gallipoli, M.S. Barbano, I. Cecic and M. Godec (2009). L'indagine macrosismica: metodologia, parametri del terremoto, questioni aperte, *Progettazione Sismica*, **3**, 1.
1201. **Cannata, A., P. Montalto, E. Privitera**, G. Russo and S. Gresta (2009). Tracking eruptive phenomena by infrasound: May 13, 2008 eruption at Mt. Etna, *Geophys. Res. Lett.*, **36**, L05304.
1202. **Cannata, A., P. Montalto, E. Privitera** and G. Russo (2009). Characterization and location of infrasonic sources in active volcanoes: Mount Etna, September–November 2007, *J. Geophys. Res.*, **114**, B08308.
1203. **Cannata, A.**, M. Hellweg, **G. Di Grazia**, S. Ford, **S. Alparone, S. Cresta, P. Montalto and D. Patanè** (2009). Long period and very long period events at Mt. Etna volcano: Characteristics, variability and causality, and implications for their sources, *J. Volcanol. Geoth. Res.*, **187**, 3–4, 227–249.
1204. **Carbone, D.**, P. Jousset and **C. Musumeci** (2009). Gravity “steps” at Mt. Etna volcano (Italy): Instrumental effects or evidences of earthquake-triggered magma density changes?, *Geophys. Res. Lett.*, **36**, L02301.
1205. **Carbone, D., S. D'Amico and C. Musumeci** (2009). Comparison between the 1994–2006 seismic and gravity data from Mt. Etna: New insight into the long-term behavior of a complex volcano, *Earth and Planetary Science Letters*, **279**, 282–292.
1206. Catalano, S., G. De Guidi, **G. Lanzafame**, C. Monaco and I. Tortrici (2009). Late Quaternary deformation on the island of Pantelleria: New constraints for the recent tectonic evolution of the Sicily Channel Rift (southern Italy), *Journal of Geodynamics*, **48**, 2, 75–82.
1207. **Condarelli, D., A. Messina, S. Rapisarda and H. Langer** (2009). Acquisizione di noise sismico ambientale nell'area urbana di Catania, *Rapporti Tecnici INGV*, **110**.
1208. **Corsaro, R.A.**, N. Me´trich, P. Allard, **D. Andronico, L. Miraglia** and C. Fourmentraux (2009). The 1974 flank eruption of Mount Etna: An archetype for deep dike-fed eruptions at basaltic volcanoes and a milestone in Etna's recent history, *J. Geophys. Res.*, **114**, B07204.
1209. **Corsaro, R.A.**, L. Civetta and V. Di Renzo (2009). Petrology of lavas from the 2004–2005 flank eruption of Mt. Etna, Italy: inferences on the dynamics of magma in the shallow plumbing system, *Bull Volcanol.*, **71**, 781–793.
1210. **Currenti, G., C. Del Negro, A. Di Stefano and R. Napoli** (2009). Numerical simulation of stress induced piezomagnetic fields at Etna volcano, *Geophys. J. Int.*, **179**, 1469–1476.
1211. De Barros, L., C.J. Bean, I. Lokmer, G. Saccorotti, **L. Zuccarello**, G.S. O'Brien, J.P. Metaxian and D. Patanè (2009). Source geometry from exceptionally high resolution Long Period event observations at Mt Etna during the 2008 eruption, *Geophys. Res. Lett.*, **36**, L24305.
1212. **Del Negro, C., G. Currenti, D. Scandura** (2009). Temperature-dependent viscoelastic modeling of ground deformation: Application to Etna volcano during the 1993–1997 inflation period, *Physics of the Earth and Planetary Interiors*, **172**, 299–309.

1213. **Di Grazia, G., A. Cannata, P. Montalto, D. Patanè, E. Privitera, L. Zuccarello** and E. Boschi (2009). A multiparameter approach to volcano monitoring based on 4D analyses of seismo-volcanic and acoustic signals: The 2008 Mt. Etna eruption, *Geophys. Res. Lett.*, **36**, L18307.
1214. **Falzone, G., G. Lanzafame** and P. Rossi (2009). L'isola che non c'è: il vulcano Ferdinandea nel Canale di Sicilia, *Geoitalia*, **29**, 15-20.
1215. Galli, P., R. Camassi, **R. Azzaro**, F. Bernardini, S. Castenetto, D. Molin, E. Peronace, A. Rossi, M. Vecchi and A. Tertulliani, Terremoto de L'Aquila del 6 aprile 2009: rilievo macrosismico, distribuzione delle intensità macrosismiche ed implicazioni sismotettoniche, *Il Quaternario*, **22**.
- 1216. Gambino S., L. Cammarata** and **S. Rapisarda** (2009). High precision locations of long-period events at La Fossa Crater (Vulcano Island, Italy), *Annals of Geophysics*, **52**, 2.
1217. **Giammanco, S., G. Immè, G. Mangano, D. Morelli** and **M. Neri** (2009). Comparison between different methodologies for detecting Radon in soil along an active fault: the case of the Pernicana fault system, Mt. Etna, *Applied Radiation and Isotopes*, **67**, 178-185.
1218. **Giammanco, S.** and Bonfanti P. (2009). Cluster analysis of soil CO<sub>2</sub> data from Mt. Etna (Italy) reveals volcanic influences on temporal and spatial patterns of degassing, *Bull Volcanol.*, **71**, 201–218.
1219. **Giammanco, S., B. Justin, N. Speh** and M. Veder (2009). A case-study of complex gas–water–rock–pollutants interactions in shallow groundwater: Šalek Valley (Slovenia), *Environmental Geology*, **57**, 75-89.
1220. Jean-Baptiste, P., **P. Allard**, E. Fourre, T. Ferriera, R. Coutinho, G. Queiroz and J. Gaspar (2009). Helium isotopes in hydrothermal volcanic fluids of the Azores Arcipelago, *Earth Plan. Sci. Letters*, **281**, 70-80.
1221. Harris, A. J. L., **L. Lodato**, J. Dehn and **L. Spampinato** (2009). Thermal characterization of the Vulcano fumarole field, *Bull Volcanol.*, **71**, 441–458.
1222. Imposa, S., J.P. Forno, R. Raffaele, **A. Scaltrito** and **L. Scarfi** (2009). Accurate hypocentre locations in the Middle-Durance Fault Zone, South-Eastern France, *Central European Journal of Geosciences*.
1223. Kozłowska, B., D. Morelli, A. Walencik, J. Dorda, I. Altamore, V. Chieffalo, **S. Giammanco**, G. Imme and W. Zipper (2009). Radioactivity in waters of Mt. Etna (Italy), *Radiation Measurements*, **44**, 384-389.
1224. Landi, P., **R.A. Corsaro**, L. Francalanci, L. Civetta, **L. Miraglia**, M. Pompilio and R. Tesoro (2009). Magma dynamics during the 2007 Stromboli eruption (Aeolian Islands, Italy): Mineralogical, geochemical and isotopic data, *J. Volcanol. Geoth. Res.*, **182**, 255-268.
1225. **Lnger, H., S. Falsaperla**, M. Masotti, R. Campanili, **S. Spampinato** and **A. Messina** (2009). Synopsis of supervised and unsupervised pattern classification techniques applied to volcanic tremor data at Mt Etna, Italy, *Geophys. J. Int.*, **178**, 2.
1226. Lombardo, V., A. J. L. Harris, **S. Calvari** and M. F. Buongiorno (2009). Spatial variations in lava flow field thermal structure and effusion rate derived from very high spatial resolution hyperspectral (MIVIS) data, *J. Geophys. Res.*, **114**, B02208.
1227. Marchetti, E., M. Ripepe, G. Uliveri, S. Caffo and **E. Privitera** (2009). Infrasonic evidences for branched conduit dynamics at Mt. Etna volcano, Italy, *Geophys. Res. Lett.*, **36**, L19308.
1228. Marsella, M., **C. Proietti**, A. Sonnessa, **M. Coltelli**, P. Tommasi and E. Bernardo (2009). The evolution of the Sciara del Fuoco subaerial slope during the 2007 Stromboli eruption: Relation between deformation processes and effusive activity, *J. Volcanol. Geoth. Res.*, **182**, 3-4, 201-144.

1229. **Mattia, M., M. Palano, V. Bruno, F. Cannavò** (2009). Crustal motion along the Calabro-Peloritan Arc as imaged by twelve years of measurements on a dense GPS network, *Tectonophysics*, **476**, 528-537.
1230. **Neri, M., F. Casu, V. Acocella, G. Solaro, S. Pepe P. Berardino, E. Sansosti, T. Caltabiano, P. Lundgren and R. Lanari** (2009). Deformation and eruptions at Mt. Etna (Italy): A lesson from 15 years of observations, *Geophys. Res. Lett.*, **36**, L02309.
1231. **Neri, M.** and G. Lanzafame (2009). Structural features of the 2007 Stromboli eruption, *J. Volcanol. Geoth. Res.*, **182**, 137-144.
1232. Norini, G., **E. De Beni, D. Andronico**, M. Polacci, M. Burton and F. Zucca (2009). The 16 November 2006 flank collapse of the south-east crater at Mount Etna, Italy: Study of the deposit and hazard assessment, *J. Geophys. Res.*, **114**, B02204.
1233. **Palano, M., S. Gresta and G. Puglisi** (2009). Time-dependent deformation of the eastern flank of Mt. Etna: after-slip or viscoelastic relaxation?, *Tectonophysics*, **473**, 300-311.
1234. Polacci, M., M.R. Burton, **A. La Spina, F. Murè**, S. Favretto and F. Zanini (2009). The role of syn-eruptive vesiculation on explosive basaltic activity at Mt. Etna, Italy, *J. Volcanol. Geot. Res.*, **179**, 265–269.
1235. **Proietti, C., M. Coltelli**, M. Marsella and E. Fujita (2009). A quantitative approach for evaluating lava flow simulation reliability: LavaSIM code applied to the 2001 Etna eruption, *Geochemistry, Geophysics, Geosystems*, **10**, 9, Q09003.
1236. **Rapisarda, S., S. Alparone, L. Cammararata, A. Cannata, D. Contrafatto, F. Ferrari, M. Manni, M. Maturano, V. Milluzzo, P.F. Platania, L. Scuderi, O. Torrisi, L. Zuccarello, and S. Gambino** (2009). Installazione di 5 stazioni digitali a larga-banda sull'isola di vulcano: un contributo alla conoscenza della sismicità superficiale della fossa, *Quaderni di Geofisica*, **67**.
1237. **Salerno, G.G., M. Burton, C. Oppenheimer, T. Caltabiano, D. Randazzo, N. Bruno and V. Longo** (2009). Three-years of SO<sub>2</sub> flux measurements of Mt. Etna using an automated UV scanner array: comparison with conventional traverses and uncertainties in flux retrieval, *J. Volcanol. Geot. Res.*, **183**, 76–83.
1238. **Salerno, G.G., M.R. Burton, C. Oppenheimer, T. Caltabiano, V. Tsanev, N. Bruno** (2009). Novel retrieval of volcanic SO<sub>2</sub> abundance from ultraviolet spectra, *J. Volcanol. Geot. Res.*, **181**, 141–153.
1239. **Scarfi, L., H. Langer and A. Scaltrito** (2009). Seismicity, seismotectonics and crustal velocity structure of the Messina Strait (Italy), *Physics of the Earth and Planetary Interiors*, **177**, 1-2, 65-78.
1240. **Scollo, S., M. Prestifilippo, G Spata, M. D'Agostino and M. Coltelli** (2009). Monitoring and forecasting Etna volcanic plumes, *Nat. Hazards Earth Syst. Sci.*, **9**, 1573–1585.
1241. Spinetti, C., F. Mazzarini, R. Casacchia, L. Colini, **M. Neri, B. Behncke**, R. Salvatori, M.F. Buongiorno and M.T. Pareschi (2009). Spectral properties of volcanic materials from hyperspectral field and satellite data compared with LiDAR data at Mt. Etna, *International Journal of Applied Earth Observation and Geoinformation*, **11**, 142-155.
1242. Walter, T. R., R. Wang, V. Acocella, **M. Neri**, H. Grosser, J. Zschau (2009). Simultaneous magma and gas eruptions at three volcanoes in southern Italy: an earthquake trigger?, *Geology*, **37**,3, 251-254.
1243. Wright, T., M. Burton, D.M. Pyle and **T. Caltabiano** (2009). Visualising volcanic gas plumes with virtual globes, *Computers and Geosciences*, **35**, 1837-1842.
1244. Zanon, V., **M. Neri and E. Pecora** (2009). Interpretation of data from the monitoring thermal camera of Stromboli volcano (Aeolian Islands, Italy), *Geol. Mag.*, **146**, 4, 591-601.