



Pubblicazioni 2003

- 0834 a **Calvari S., Neri M. and Pinkerton H.**, 2003. Effusion rate estimations during the 1999 summit eruption on Mt. Etna, and growth of two distinct lava flow fields. *Journal of Volcanology and Geothermal Research*, 119, 107-123.
- 0863 **Acocella, V., M. Neri**, 2003. What controls flank eruptions?: the 2001 Etna eruption and the possible triggering mechanisms. *Bull Volcanol*, 65: 517-529, DOI: 10.1007/s00445-003-0280-3.
- 0864 **Acocella, V., B. Behncke, M. Neri, S. D'Amico**, 2003. Link between major flank slip and eruptions at Mt. Etna (Italy). *Geophysical Research Letters*, 30, 24, 2286, doi:10.1029/2003GL018642.
- 0865 **Aloisi, M., A. Bonaccorso, S. Gambino, M. Mattia, G. Puglisi**, 2003. Etna 2002 eruption imaged from continuous tilt and GPS data. *Geophys. Res. Letters*, 23, 23, 2214, 10.1029/2003GL018896.
- 0866 **Alparone, S., S. Gambino**, 2003. High precision locations of multiplets on south-eastern flank of Mt. Etna (Italy): reconstruction of fault plan geometry. *Phys. Earth Plan. Int.*, 135, 281-289.
- 0867 **Alparone, S., D. Andronico, L. Lodato, T. Sgroi**, 2003. Relationship between tremor and volcanic activity during the Southeast Crater eruption on Mount Etna in early 2000. *J. Geophys. Res.*, 108,B5, 2241, doi:10.1029/2002JB001866.
- 0868 **Azzaro, R., R. Camassi, S. D'Amico, A. Mostaccio e L. Scarfi**, 2003. Il terremoto di Palermo del 6 Settembre 2002: Effetti macrosismici, *Quaderni di Geofisica*, 31, 14 pp.
- 0869 **Badalamenti, B., N. Bruno, T. Caltabiano, F. Di Gangi, S. Giammanco, G. Salerno**, 2003. Continuous soil CO₂ and discrete plume SO₂ measurements at Mt. Etna (Italy) during 1997-2000: a contribution to volcano monitoring. *Bull. Volc.*, published online 08 August 2003.
- 0870 **Behncke, B., M. Neri**, 2003. Cycles and trends in the recent eruptive behaviour of Mount Etna (Italy), *Canadian Journal of Earth Sciences*, 40, 1405-1411, doi: 10.1139/E03-052.
- 0871 **Behncke, B., M. Neri**, 2003. The July-August 2001 eruption of Mt. Etna (Sicily). *Bull Volcanol*, 65, 461-476, DOI: 10.1007/s00445-003-0274-1.
- 0872 **Behncke, B., M. Neri, R. Carniel**, 2003. An exceptional case of lava dome growth spawning pyroclastic avalanches at Mt. Etna (Italy): the 1999 Bocca Nuova eruption. *J. Volcanol. Geotherm. Res.*, 124,1-2,115- 128.

- 0873 **Billi, A., V. Acocella, R. Funicello, G. Giordano, G. Lanzafame, M. Neri**, 2003. Mechanisms for groundsurface fracturing and incipient slope failure associated to the July-August 2001 eruption of Mt. Etna, Italy: analysis of ephemeral field data. *J. Volcanol. Geotherm. Res.*, 122, 3-4, 281-294.
- 0874 **Bonaccorso, A., S. Calvari, G. Garfi, L. Lodato and D. Patané**, 2003. December 2002 flank failure and tsunamis at Stromboli volcano inferred by volcanological and geophysical observations. *Geophysical Research Letters*, 30, 18, 1941-1944.
- 0875 **Bonforte, A., G. Puglisi**, 2003. Magma uprising and flank dynamics on Mount Etna volcano, studied using GPS data (1994–1995), *J. Geoph. Res.*, 108, B3, 2153, 10.1029/2002JB001845.
- 0876 **Branca, S.**, 2003. Geological and geomorphologic evolution of the Etna volcano NE flank and relationships between lava flow invasions and erosional processes in the Alcantara Valley (Italy). *Geomorph.*, 53, 247-261.
- 0877 **Branca, S., D. Carbone, F. Greco**, 2003. Intrusive mechanism of the 2002 NE-Rift eruption at Mt. Etna (Italy) inferred through continuous microgravity data and volcanological evidences. *Geoph. Res. Lett.*, 30, 20, 2077, 10.1029/2003GL018250.
- 0878 **Burton, M., P. Allard, F. Murè, C. Oppenheimer**, 2003. FTIR remote sensing of fractional magma degassing at Mt. Etna, Sicily, in *Volcanic degassing*, Geological Society Special Publications, 213, 281-293.
- 0879 **Carbone, D., G. Budetta, F. Greco, H. Rymer**, 2003. Combined discrete and continuous gravity observations at Mt. Etna, *J. Volcanol. Geoth. Res.*, 2581, 1-13.
- 0880 **Carbone, D., G. Budetta, F. Greco**, 2003. Possible mechanisms of magma redistribution under Mt. Etna during the 1994-1999 period detected through microgravity measurements, *Geoph. J. Int.*, 152, 1-14.
- 0881 **Carbone, D., G. Budetta, F. Greco**, 2003. Bulk processes some months before the start of the 2001 Mt. Etna eruption, evidenced through microgravity studies. *J. Geoph. Res.*, 108, B12, 2556, 10.1029/2003JB002542.
- 0882 **Cioni, R., A. Longo, G. Macedonio, R. Santacroce, A. Sbrana, R. Sulpizio, D. Andronico**, 2003. Assessing pyroclastic fall hazard through field data and numerical simulations: the example from Vesuvius, *Journal Geophys. Res.*, 108, B2, 2063.
- 0883 **Crisci, G.M., S. Di Gregorio, R. Rongo, M. Scarpelli, W. Spataro, S. Calvari**, 2003. Revisiting the 1669 Etnean eruptive crisis using a cellular automata model and implications for volcanic hazard in the Catania area. *Journal of Volcanology and Geothermal Research*, 123, 1/2, 211-230.
- 0884 **Currenti, G., C. Del Negro, L. Fortuna, A. Vicari**, 2003. Nonlinear identification of complex geomagnetic models: an innovative approach. *Nonlinear Phenomena in Complex Systems*, 6, 1, 524-533.
- 0885 **Del Negro, C., G. Currenti**, 2003. Volcanomagnetic signal associated with the 2001 flank eruption of Mt. Etna., *Geophys. Res. Lett.*, 30, 7.

- 0886 **Duffell, HJ, C. Oppenheimer, D.M. Pyle, B. Galle, A.J.S. McGonigle, M.R. Burton**, 2003. Changes in gas composition prior to a minor explosive eruption at Masaya volcano, Nicaragua, *Journal of Volcanology and Geothermal Research*, 126,3-4,327-339.
- 0887 **Dubosclard, G., F. Donnadieu, P. Allard, R. Cordesses, C. Hervier, M. Coltelli, E. Privitera, J. Kornprobst.**, 2003. Doppler radar sounding of volcanic eruption dynamics at Mount Etna. *Bulletin of Volcanology*, DOI: 10.1007/s00445-003-0324-8.
- 0888 **Falsaperla, S., S. Alparone, S. Spampinato**, 2003. Seismic features of the June 1999 tectonic swarm in the Stromboli volcano region, Italy. *J. Volcanol. Geotherm. Res. Special issue on "Understanding Volcanoes Through Multiparameter Measurements and Their Interpretation: In memory of Bruno Martinelli"*, 125/1-2 121-136.
- 0889 **Falsaperla, S., S. Spampinato**, 2003. Seismic insight into explosive paroxysms at Stromboli volcano, Italy. *J. Volcanol. Geoth. Res., Special issue on "Understanding Volcanoes Through Multiparameter Measurements and Their Interpretation: In memory of Bruno Martinelli"*, 125,1-2,137-150.
- 0890 **Frezzotti, M.L., A. Peccerillo, V. Zanon, I. Nikogosian**, 2003. Silica-rich melts in quartz xenoliths from Vulcano Island and their bearing on processes of crustal anatexis and crust-magma interaction beneath the Aeolian arc, southern Italy. *J. Petrol.*, 45,1, 3-26.
- 0891 **Giampiccolo, E., S. Gresta, G. Ganci**, 2003. Attenuation of body waves in Southeastern Sicily (Italy). *Phys. Earth. Planet. Inter.*,135, 267-279.
- 0892 **Horrocks, L., C. Oppenheimer, M. Burton, H. Duffell**, 2003. Compositional variation in tropospheric volcanic gas plumes: evidence from ground-based remote sensing, in *Volcanic degassing, Geological Society Special Publications*, 213, 349-369.
- 0893 **Hunter, G., H. Pinkerton, R. Airey, S. Calvari**, 2003. The application of a long-range laser scanner for monitoring volcanic activity on Mount Etna. *Journal of Volcanology and Geothermal Research*, 123, 1/2, 203-210.
- 0894 **Langer, H., S. Falsaperla**, 2003. Seismic monitoring at Stromboli Volcano (Italy): a case study for data reduction and parameter extraction. *J. Volcanol. Geoth. Res.*, 128, 233-245.
- 0895 **Langer, H., S. Falsaperla, G. Thompson**, 2003. Application of Artificial Neural Networks for the classification of the seismic transients at Soufrière Hills volcano, Montserrat. *Geophys. Res. Letters.*, 30, 21, 2090,10.1029/2003GL018082.
- 0896 **Lanzafame, G., M. Neri, V. Acocella, A. Billi, R. Funicello, G. Giordano**, 2003. Structural features of the July-August 2001 Mount Etna eruption: evidence for a complex magma supply system. *J. Geol. Soc. London*, 160, 531-544.
- 0897 **Lundgren, P., P. Berardino, M. Coltelli, G. Fornaro, R. Lanari, G. Puglisi, E. Sansosti, M. Tesauo**, 2003. Coupled magma chamber inflation and sector collapse slip observed with synthetic aperture radar interferometry on Mt. Etna volcano, *J. Geoph. Res.*, 108, B5, 2247 doi:10.1029/2001JB000657.

- 0898 **McGonigle A.J.S., C. Oppenheimer, A.Hayes, B. Galle, M. Edmonds, T. Caltabiano, G. Salerno, and M. Burton**, 2003. Volcanic sulphur dioxide fluxes from Etna, Vulcano and Stromboli measured with an automated scanning ultraviolet spectrometer, *J Geoph. Res.*, 108, B9, 2455, doi:10.1029/2002JB002261.
- 0899 **Muscato, G., D. Caltabiano, S. Guccione, D. Longo, M. Coltelli, A. Cristaldi, E. Pecora, V. Sacco, P. Sim, G.S. Virk, P. Briole, A. Semerano and T. White**, 2003. ROBOVOLC (2003): a robot for volcano exploration result of first test campaign. *Industrial Robot: An International Journal*, 30, 3, 231-242.
- 0900 **Musumeci, C., G. Di Grazia, S. Gresta**, 2003. Minimum 1-D velocity model in Southeastern Sicily (Italy) from local earthquake data: an improvement in location accuracy. *Journal of Seismology*, 7, 469-478.
- 0901 **Neri, G., G. Barberi, B. Orecchio, A. Mostaccio**, 2003. Seismic strain and seismogenic stress regimes in the crust of the Southern Tyrrhenian region. *Earth Plan.Sc.Lett.*, 213, 97-112.
- 0902 **Patane', D. et al**, 2003. Seismological constrains for the dyke emplacement of July-August 2001 lateral eruption at Mt. Etna volcano, Italy. *Annals of Geophysics*, Volume 44, 4, 599-608.
- 0903 **Patanè, D., P. De Gori, C. Chiarabba, A. Bonaccorso**, 2003. Magma ascent and the pressurization of Mount Etna's volcanic system. *Science*.
- 0904 **Privitera, E., T. Sgroi , S. Gresta**, 2003. Statistical analysis of intermittent volcanic tremor associated with the September 1989 summit explosive eruptions at Mount Etna, Sicily. *Journal of Volcanology and Geothermal Research*, 120, 235-247.
- 0905 **Rapicetta, S., V. Zanon**, 2003. Etna: vulnerabilità ambientale alla ricaduta di materiale piroclastico. *Geologia dell'Ambiente*, 4, 3, 21-25.
- 0906 **Scarfi, L., H. Langer, S. Gresta**, 2003. High precision relative locations of two microearthquake clusters in southeastern Sicily, Italy. *Bull. Seismol. Soc. Am.*, 93, 4, 1479-1497.
- 0907 **Schorlemmer, D., G. Neri, S. Wiemer, and A. Mostaccio**, 2003. Stability and significance tests for b-value anomalies: Example from the Tyrrhenian Sea, *Geophys. Res. Lett.*, 30,16, 1835, doi:10.1029/2003GL017335.
- 0908 **Zanon V., M.L. Frezzotti M.L., A. Peccerillo**, 2003. Magmatic feeding system and crustal magma accumulation beneath Vulcano Island (Italy): evidence from CO₂ fluid inclusions in quartz xenoliths. *Journal Geophys. Res.*, 108, B6, 2298.