



## Pubblicazioni 2004

- 0909 **Aiuppa, A., M. Burton, F. Mure and S. Inguaggiato**, 2004. Intercomparison of volcanic gas monitoring methodologies performed on Vulcano Island, Italy, *Geophys. Res. Lett.*, 31, 2, L02610.
- 0910 **Alparone, S., D. Andronico, S. Giammanco and L. Lodato**, 2004. A multidisciplinary approach to detect active pathways for magma migration and eruption at Mt. Etna (Sicily, Italy) before the 2001 and 2002-03 eruptions, *J. Volcanol. Geotherm. Res.* 136 (1-2), 121-140.
- 0911 **Andò, B., M. Coltelli and M. Sambaturo**, 2004. A measurement tool for investigating cooling lava properties, *IEEE T INSTRUM MEAS* 53, 2, 507-513.
- 0912 **Andò, B. and D. Carbone**, 2004. A test on a Neuro-Fuzzy algorithm used to reduce continuous gravity records for the effect of meteorological parameters, *Phys. of the Earth and Planet. Int.*, 142, 37-47.
- 0913 **Azzaro, R., M.S. Barbano, R. Camassi, S. D'Amico, A. Mostaccio, D. Piangiamore and L. Scarfi**, 2004. The earthquake of 6 September 2002 and the seismic history of Palermo (northern Sicily, Italy): implications for the seismic hazard assessment of the city, *Journal of Seismology*, 8, 4, 525-543.
- 0914 **Barberi, G., O. Cocina, V. Maiolino, C. Musumeci and E. Privitera**, 2004. Insight into Mt. Etna (Italy) kinematics during 2002-2003 eruption as inferred by seismic stress and strain tensors inversion, *Geophys. Res. Lett.*, 31, L2164, doi:10.1029/2004GL020918.
- 0915 **Barberi, G., M.T. Cosentino, A. Gervasi, I. Guerra, G. Neri and B. Orecchio**, 2004. Crustal seismic tomography in the Calabrian Arc region, south Italy, *Phys. Earth Planet. Inter.*, 147, 297-314.
- 0916 **Behncke, B., M. Neri and G. Sturiale**, 2004. Rapid morphological changes at the summit of an active volcano: reappraisal of the poorly documented 1964 eruption of Mount Etna (Italy), *Geomorphology*, 63/3-4, 203-218, doi:10.1016/j.geomorph.2004.04.004.
- 0917 **Bonaccorso, A., S. D'Amico, M. Mattia and D. Patanè**, 2004. Intrusive mechanism at Mt Etna forerunning the July-August 2001 eruption, *Pure Appl. Geophys.*, 161, 7, 1469-1487.
- 0918 **Bonaccorso, A., E. Sansosti and P. Berardino**, 2004. Modelled deformation pattern from integrated geodetic data and observed pattern from SAR for inferring magma storage sources at Mt. Etna during the 1991-93 eruption, *Pageoph*, 161, 7.

- 0919 **Bonforte, A., F. Guglielmino, M. Palano and G. Puglisi**, 2004. A syn-eruptive ground deformation episode measured by GPS, during the 2001 eruption on the upper southern flank of Mt Etna, *Bull. Volcanol.*, 66, 4, 366-341.
- 0920 **Budetta G., Carbone D., Greco, F.**, 2004. Technological improvements in gravity monitoring of active volcanoes. *Quaderni di Geofisica*, 35, 103-109.
- 0921 **Burton, M., M. Neri and D. Condarelli**, 2004. High spatial resolution radon measurements reveal hidden active faults on Mt. Etna, *Geophys. Res. Lett.* 31, 7, L07618, doi:10.1029/2003GL019181.
- 0922 **Calvari, S. and H. Pinkerton**, 2004. Birth, growth and morphologic evolution of the 'Laghetto' cinder cone during the 2001 Etna eruption, *J. Volcanol. Geotherm. Res.*, 132, 225-239.
- 0923 **Calvari, S. et al**, 2004. The first period of the 2002 Etna eruption (27 October-5 November): preliminary results, *Quaderni di Geofisica*, 32, 1-10.
- 0923 a **Calvari S., Lodato L., Spampinato L.**, 2004. Monitoring active volcanoes using a handheld thermal camera. *Thermosense XXVI- SPIE*, The International Society for Optical Engineering, v. 5405, pp. 199-209, doi: 10.1117/12.547497, Bellingham, WA, 14 April 2004.
- 0924 **Corsaro, R.A. and M. Pompilio**, 2004. Magma dynamics in the shallow plumbing system of Mt.Etna as recorded by compositional variations in volcanics of recent summit activity (1995-1999), *J. Volcanol. Geotherm. Res.*, 137,55-71.
- 0925 **Corsaro, R.A. and M. Pompilio**, 2004. Buoyancy of magmas at Mt.Etna, *Terra Nova*, 16, 6-22.
- 0926 **Currenti, G., C. Del Negro, L. Fortuna, R. Napoli and A. Vicari**, 2004. Non-linear analysis of geomagnetic time series from Etna volcano, *Nonlin. Proc.Geophys.*, 11, 119-125, Sref-ID: 1607-7946/npg/2004-11-119.
- 0927 **Currenti, G., C. Del Negro, V. Lapenna and L. Telesca**, 2004. Fluctuation analysis of the hourly time variability of volcano-magnetic signals recorded at Mt. Etna Volcano, Sicily (Italy), *Chaos,Solitons and Fractals*, 23, 1921-1929, doi:10.1016/j.chaos.2004.07.035.
- 0928 **de Lorenzo, S., G. Di Grazia, E. Giampiccolo, S. Gresta, H. Langer, G. Tusa and A. Ursino**, 2004. Source and Qp parameters from pulse width inversion of microearthquake data in Southeastern Sicily, Italy, *J. Geophys. Res.*, 109, B07308, doi:10.1029/2003JB002577.
- 0929 **Del Carlo, P. and M. Pompilio**, 2004. The relationship between volatile content and the eruptive style of basaltic magma: the Etna case, *Annals of Geophysics*, 47,4
- 0930 **Del Negro, C., G. Currenti, R. Napoli and A. Vicari**, 2004. Volcanomagnetic changes accompanying the Onset of the 2002-2003 Eruption of Mt. Etna (Italy), *Earth Planet. Sci. Lett.*, 229, 1-2, 1-14, doi:10.1016/j.epsl.2004.10.033.
- 0931 **Del Negro, C., L. Fortuna and A. Vicari**, 2004. Modelling lava flows by Cellular Nonlinear Networks (CNN): preliminary results, *Nonlin. Proc.Geophys.*, 11,1-9, SRef-ID:1607-7946/npg/2004-11-1.

- 0932 **Duncan, A.M., J.E. Guest, E. Stofan, S. Anderson, H. Pinkerton and S. Calvari**, 2004. Development of tumuli in the medial portion of the 1983 aa flow-field, Mount Etna, Sicily, *J. Volcanol. Geotherm. Res.*, 132, 173-187, doi:10.1016/S0377-0273(03)00344-5.
- 0933 **Gambino, S.**, 2004. Continuous dynamic response along a pre-existing structural discontinuity induced by the 2001 eruption at Mt Etna, *Earth Planets Space*, 56, 447-456.
- 0934 **Gambino, S., A. Mostaccio, D. Patanè, L. Scarfi and A. Ursino**, 2004. High-precision locations of the microseismicity preceding the 2002–2003 Mt. Etna eruption, *Geophys. Res. Lett.*, 31, L18604, doi:10.1029/2004GL020499.
- 0935 **Giampiccolo, E., S. Gresta and F. Rasconà**, 2004. Intrinsic and scattering attenuation from observed seismic codas in Southeastern Sicily, Italy, *Phys. Earth. Planet. Int.*, 145,1-4, 55-66.
- 0936 **Gresta, S., M. Ripepe, E. Marchetti, S. D'Amico, M. Coltelli, A.J.L. Harris and E. Privitera**, 2004. Seismoacoustic measurements during the July-August 2001 eruption at Mt. Etna volcano, Italy, *J. Volcanol. Geoth. Res.*, 137, 1-3, 219-230.
- 0937 **Gresta, S., H. Langer, M. Mucciarelli, M. Gallipoli, S. Imposa, J. Letticia and C. Monaco**, 2004. The site response in the city of Ragusa-Ibla (Sicily) by using microtremors and strong ground motion simulations. In. BREBBIA ,C.A (Eds.), *Risk Analysis IV*, WIT Press, Wessex.
- 0938 **Houghton B.F., C.J.N. Wilson, P. Del Carlo, M. Coltelli, J.E. Sable, R. Carey**, 2004. The influence of conduit processes during two basaltic plinian eruptions: Tarawera 1886 and Etna 122 BC, *J Volcanol Geoph Res*, 137, 1-14.
- 0939 **Lautze, N.C., A.J.L. Harris, J.E. Bailey, M. Ripepe, S. Calvari, J. Dehn, S. Rowland and K. Evans-Jones**, 2004. Pulsed lava effusion at Mount Etna during 2001. *J. Volcanol. Geotherm. Res.*, 137, 231-246.
- 0940 **Lombardo, G., R. Rigano, S. Gresta, H. Langer, C. Monaco and G . De Guidi**, 2004. Evaluation of the Local Seismic Response in the Area of Catania (Italy). In. Brebbia ,C.A (eds.), *Risk Analysis IV*, WIT Press, Wessex.
- 0941 **Mattia, M., M. Rossi, F. Guglielmino, M. Aloisi and Y. Bock**, 2004. The shallow plumbing system of Stromboli Island as imaged from 1 Hz instantaneous GPS positions, *Geophys. Res. Lett.*, 31, L24610, doi:10.1029/2004GL021281.
- 0942 **Métrich, N., P. Allard, N. Spilliaert, D. Andronico and M. Burton**, 2004. 2001 flank eruption of the alkali- and volatile-rich primitive basalt responsible for Mount Etna's evolution in the last three decades, *Earth Planet Science Letter*, 228, 1-17.
- 0943 **Musumeci, C., O. Cocina, P. De Gori and D. Patanè**, 2004. Seismological evidences of stress induced by dike injection during the 2001 Mt. Etna eruption, *Geophys. Res. Lett.*, 31, L07617, doi:10.1029/2003GL019367.
- 0944 **Neri, G., G. Barberi, G. Oliva and B. Orecchio**, 2004. Tectonic stress and seismogenic faulting in the area of the 1908 Messina earthquake, south Italy, *Geophys. Res. Lett.*, 31, L10602, doi:10.1029/2004GL019742.

- 0945 **Neri, M., V. Acocella and B.Behncke**, 2004. The role of the Pernicana Fault System in the spreading of Mount Etna (Italy) during the 2002-2003 eruption. *Bull. Volcanol.*, 66, 417-430, DOI: 10.1007/s00445-003-0322-x.
- 0946 **Occhipinti, R., M. Elia, A. Bonaccorso and G. La Rosa**, 2004. Finite element analysis of ground deformation due to dike intrusion with applications at Mt. Etna volcano, *Annals of Geophysics*, 47, 5
- 0947 **Polacci, M., P. Papale, D. Del Seppia, D. Giordano and C. Romano**, 2004. Dynamics of magma ascent and fragmentation in trachytic versus rhyolitic eruptions, *J. Volcanol. Geotherm. Res.*, 131, 93-108.
- 0948 **Puglisi G. and A. Bonforte**, 2004. Dynamics of Mount Etna Volcano inferred from static and kinematic GPS measurements, *J. Geophys. Res.*, 109, B11, B11404, doi:10.1029/2003JB002878.
- 0949 **Rosi, M., P. Landi, M. Polacci, A. Di Muro and D. Zandomenighi**, 2004. Role of conduit shear on ascent of the crystal-rich magma feeding the 800 yr BP Plinian eruption of Quilotoa Volcano (Ecuador), *Bull Volcanol*, 66, 307-321 DOI: 10.1007/s00445-003-0312-z.
- 0950 **Saccorotti, G., L. Zuccarello, E. Del Pezzo, J. Ibanez and S. Gresta**, 2004. Quantitative analysis of the tremor wavefield at Etna Volcano, Italy, *J. Volcanol. Geotherm. Res.*, 136, 3-4, 223-245.
- 0951 **Tanner, L.H. and S. Calvari**, 2004. Unusual sedimentary deposits on the SE side of Stromboli volcano, Italy: products of a tsunami caused by the ca. 5000 years BP Sciara del Fuoco collapse? *J. Volcanol. Geotherm. Res.*, 137, 329-340, doi:10.1016/j.jvolgeores.2004.07.003.
- 0952 **Tusa, G., S.D. Malone, E. Giampiccolo, S. Gresta and C. Musumeci**, 2004. Attenuation of Short-Period P Waves at Mount St. Helens, *Bull. Seism. Soc. Am.*, 94, 1441-1455.
- 0953 **Aiuppa, A., P. Allard, W. D'Alessandro, S. Giammanco, F. Parello and M. Valenza**, 2004. Magmatic Gas Leakage at Mount Etna (Sicily, Italy): Relationships With the Volcano-Tectonic Structures, the Hydrological Pattern and the Eruptive activity. In: "Etna Volcano Laboratory" Calvari, Bonaccorso, Coltelli, Del Negro, Falsaperla (Eds), AGU (Geophysical monograph series), 129-145.
- 0954 **Azzaro, R.**, 2004. Seismicity and Active Tectonics in the Etna Region: Constraints for a Seismotectonic Model. In: "Etna Volcano Laboratory" Calvari, Bonaccorso, Coltelli, Del Negro, Falsaperla (Eds), AGU (Geophysical monograph series), 205-220.
- 0955 **Bonaccorso, A. and P.M. Davis**, 2004. Modeling of Ground Deformation Associated with Recent Lateral Eruptions: Mechanism of Magma Ascent and Intermediate Storage at Mt. Etna. In: "Etna Volcano Laboratory", Bonaccorso A., Calvari S., Coltelli M., Del Negro C., Falsaperla S. (Eds), AGU (Geophysical monograph series), 293-306.
- 0956 **Bonaccorso, A., O. Campisi, G. Falzone, and S. Gambino**, 2004. Continuous Tilt Monitoring: Lesson Learned From 20 Years Experience at Mt. Etna. In: "Etna Volcano Laboratory", Bonaccorso A., Calvari S., Coltelli M., Del Negro C., Falsaperla S. (Eds), AGU (Geophysical monograph series), 307-320.
- 0957 **Bousquet, J.C. and G. Lanzafame**, 2004. The Tectonics and Geodynamics of Mt. Etna: Synthesis and Interpretation of Geological and Geophysical Data. In: "Etna Volcano Laboratory", Bonaccorso A., Calvari S., Coltelli M., Del Negro C., Falsaperla S. (Eds), AGU (Geophysical monograph series), 29-47.

- 0958 **Branca, S. and P. Del Carlo**, 2004. Eruption of Mt. Etna During the Past 3,200 Years: A Revised Compilation Integrating the Historical and Stratigraphic Records. In: "Etna Volcano Laboratory", Bonaccorso A., Calvari S., Coltelli M., Del Negro C., Falsaperla S. (Eds), AGU (Geophysical monograph series), 1-27.
- 0959 **Branca, S., M. Coltelli and G. Groppelli**, 2004. Geological Evolution of Etna Volcano. In: "Etna Volcano Laboratory", Bonaccorso A., Calvari S., Coltelli M., Del Negro C., Falsaperla S. (Eds), AGU (Geophysical monograph series), 49-63.
- 0960 **Budetta, G., D. Carbone, F. Greco and H. Rymer**, 2004. Microgravity Studies at Mount Etna (Italy). In: "Etna Volcano Laboratory", Bonaccorso A., Calvari S., Coltelli M., Del Negro C., Falsaperla S. (Eds), AGU (Geophysical monograph series), 221-240.
- 0961 **Caltabiano, T., M. Burton, S. Giammanco, P. Allard, N. Bruno, F. Murè and R. Romano**, 2004. Volcanic Gas Emission From the Summit Craters and Flanks of Mt. Etna, 1987-2000. In: "Etna Volcano Laboratory" Calvari, Bonaccorso, Coltelli, Del Negro, Falsaperla (Eds), AGU (Geophysical monograph series), 111-128.
- 0962 **Calvari, S., L.H. Tanner, G. Groppelli and G. Norini**, 2004. Valle del Bove, eastern flank of Etna volcano: a comprehensive model for the opening of the depression and implications for future hazards. In: "Etna Volcano Laboratory", Bonaccorso A., Calvari S., Coltelli M., Del Negro C., Falsaperla S. (Eds), AGU (Geophysical monograph series), 65-75.
- 0963 **Chiarabba, C., P. De Gori, and D. Patanè**, 2004. The Mt. Etna Plumbing System: The contribution of Seismic Tomography. In: "Etna Volcano Laboratory", Bonaccorso A., Calvari S., Coltelli M., Del Negro C., Falsaperla S. (Eds), AGU (Geophysical monograph series), 191-204.
- 0964 **Corsaro, R.A. and M. Pompilio**, 2004. Dynamics of Magmas at Mount Etna. In: "Etna Volcano Laboratory" Calvari, Bonaccorso, Coltelli, Del Negro, Falsaperla (Eds), AGU (Geophysical monograph series), 91-110.
- 0965 **Del Carlo, P., L. Vezzoli and M. Coltelli**, 2004. Last 100 Ka Tephrostratigraphic Record of Mount Etna. In: "Etna Volcano Laboratory", Bonaccorso A., Calvari S., Coltelli M., Del Negro C., Falsaperla S. (Eds), AGU (Geophysical monograph series), 77-89.
- 0966 **Del Negro, C. and R. Napoli**, 2004. Magnetic Field Monitoring at Mt. Etna During the Last 20 Years. In: "Etna Volcano Laboratory" Calvari, Bonaccorso, Coltelli, Del Negro, Falsaperla (Eds), AGU (Geophysical monograph series), 241-262.
- 0967 **Incoronato, A. and C. Del Negro**, 2004. Magnetic Stratigraphy Procedures at Etna. In: "Etna Volcano Laboratory" Calvari, Bonaccorso, Coltelli, Del Negro, Falsaperla (Eds), AGU (Geophysical monograph series), 263-271.
- 0968 **Mauriello, P., D. Patella, Z. Petrillo, A. Siniscalchi, T. Iuliano and C. Del Negro**, 2004. A Geophysical Study of the Mount Etna Volcanic Area. In: "Etna Volcano Laboratory" Calvari, Bonaccorso, Coltelli, Del Negro, Falsaperla (Eds), AGU (Geophysical monograph series), 273-291.
- 0969 **Patanè, D., O. Cocina, S. Falsaperla, E. Privitera and S. Spampinato**, 2004. Mt Etna Volcano: A Seismological Framework. In: "Etna Volcano Laboratory", Bonaccorso A., Calvari S., Coltelli M., Del Negro C., Falsaperla S. (Eds), AGU (Geophysical monograph series), 147-165.

- 0970 **Patanè, D. and E. Giampiccolo**, 2004. Faulting Processes and Earthquake Source Parameters at Mount Etna: State of the Art and Perspectives. In: "Etna Volcano Laboratory", Bonaccorso A., Calvari S., Coltelli M., Del Negro C., Falsaperla S. (Eds), AGU (Geophysical monograph series), 167-189.
- 0971 **Puglisi, G., P. Briole, and A. Bonforte**, 2004. Twelve Years of Ground Deformation Studies on Mt. Etna Volcano Based on GPS Surveys. In: "Etna Volcano Laboratory", Bonaccorso A., Calvari S., Coltelli M., Del Negro C., Falsaperla S. (Eds), AGU (Geophysical monograph series), 321-341.