

Programme

Unrest at Santorini Caldera (2011-2012)

27 & 28 March 2012, Santorini

Organized by ISMOSAV, ESF and EPOS

with the support of the Municipality of Thira and the EU

26 March - Arrival of participants

26 March 17.00 - Meeting of the National Scientific Committee for the Monitoring of Santorini Volcano

26 March 20.30 - Welcome dinner

Day 1 (Tuesday 27 March)

09.30 to 10.10 *Welcome and introductory speeches (open to the media)*

09.30 - 09.40 Thira Municipality welcome.

09.40 - 09.50 Kosmas Stylianidis (National Scientific Committee for the Monitoring of Santorini Volcano).

09.50 - 10.10 Georges Vougioukalakis (Organizing committee)

10.20 to 12.30 *Kameni and Kolumbo volcanism in the context of the evolution of Santorini Volcanic Field*

10.20 - 10.40 Vougioukalakis, G. Overview of the system; Historic activity: Precursors, evolution, hazard assessment.

10.40 - 11.00 Druitt, T., Scaillet, B., Cadoux, A., Andujar, J., Costa, F., Deloule, E. Volcanological and petrological context of Kameni volcanism.

11.00 – 11.30 Coffee break

11.30 - 11.50 Pyle, D., Nomikou, P., Parks, M., Mather, T., Elliott, J. Volcanological development of the Kameni islands.

11.50 - 12.10 Francalanci, L., Petrone, C.M., Vaggelli, G., Vougioukalakis, G. Lava-enclave magma interaction at Kameni: Evidence from detailed petrochemical investigations.

12.10 - 12.30 Sakellariou, D., Rousakis, G., Nomikou, P., Croff Bell, K., Carey, S., Sigurdsson, H. The caldera of Santorini underwater: Swath bathymetry, seismic stratigraphy, structural interpretation and evolution.

12.30 - 12.50 Nomikou, P., Kilias, S., Godelitsas, A., Sakellariou, D., Argiraki, A., Bejelou, K., Carey S., Cantner, K., Croff Bell, K., Roman, C., Ballard B. Evidence of the Kolumbo magmatic system from the study of erupted products and hydrothermal activity.

12.50 to 14.20 Lunch

14.20 to 18.00 *Unrest 2011-2012*

14.20 - 14.30 Fytikas, M. Monitoring Santorini Volcano, a retrospective.

14.30 - 14.50 Papazachos, C., Panagiotopoulos, D., Vougioukalakis, G., Albanakis, K., Laopoulos, Th., Stiros, E., Fytikas, M., Karagianni, E., Vamvakaris, D.. Current volcanic unrest in the Santorini caldera, as revealed by seismicity, temperature and sea-level data.

14.50 - 15.10 Chouliaras, G., Makropoulos, K. Real-Time seismic monitoring of the Santorini volcanic complex by the permanent and portable seismological networks of the Institute of Geodynamics, National Observatory of Athens.

15.10 – 15.20 Papadimitriou, P., Voulgaris, N., Kaviris, G., Karakonstantis, A., Kapetanidis, V., Kolaitis, A., Kouskouna, V., Kassaras, I., Makropoulos, K. Monitoring of the volcanoseismic activity in the broader Santorini area: Preliminary Results.

15.20 - 15.40 Newman, A., Stiros, S., Feng, L., Psimoulis, P., Moschas, F., Saltogianni, V., Jiang, Y., Briole, P., Geodetic studies of the Santorini caldera inflation.

- 15.40 - 16.00 Parcharidis, I., Papageorgiou, E., Foumelis, M. Long and short term deformation monitoring of Santorini Volcano: Unrest evidence by DInSAR analysis.
- 16.00 – 16.30 Coffee break
- 16.30 - 16.50 Lagios, E., Novali, F., Sakkas¹ V., Vlachou¹ K. Ground deformation in Santorini (1992-2012) based on PSInSAR and DGPS observations.
- 16.50 - 17.10 Pyle, D., Parks, M., England, P., Biggs, J., Mather, T., Nomikou, P., Palamartchouk, K., Papanikolaou, X., Paradissis, D., Parsons, B., Raptakis, C., Zacharis, V. Santorini deformation from satellite geodesy and triangulation.
- 17.10 - 17.30 Vaselli, O, Tassi¹, F., Vougioukalakis, G., Giannini, L. Fluid geochemistry of the fumarolic gas discharges at Nea Kameni.
- 17.30 - 17.50 Carapezza M.L., Barberi, F., Gattuso, A., Ranaldi, M., Tarchini, L., Sortino, F., Granieri, D., Vougioukalakis, G. A geochemical contribution to the evaluation of the present Santorini unrest and plans for the improvement for the geochemical monitoring.
- 17.50 - 18.00 Vougioukalakis, G. Thermal and chemical monitoring future planning.

18.00 to 19.00 *General discussion on Kameni – Kolumbo volcanism and Santorini unrest*

Day 2 (Wednesday 28 March)

09.00 to 10.00 *Discussion on EPOS*

- 09.00 – 09.20 Cocco, M. EPOS general presentation (through Skype).
- 09.20 – 09.40 Puglisi, G. Creation of an integrated initiative infrastructure for the European Volcano Observatories.
- 09.40 – 10.00 Sigmundsson, F. Stakeholders for the European volcanology.

10.00 to 11.00 *Unrest and precursor phenomena at other volcanoes*

- 10.00 - 10.20 Sigmundsson, F. and 19 colleagues. Volcanic unrest and eruptions in Iceland: Measurements, models and mitigation.
- 10.20 - 10.40 Orsi, G., Civetta, L., D'Antonio, M. Moretti, R. Caldera unrest: the Italian Campi Flegrei case.
- 10.40 - 11.00 Tait, S., Taisne, B. Pressure changes and deformation in a shallow magmatic system.
- 11.00 - 11.30 Coffee break

11.30 to 12.50 *Monitoring and modelling of volcanic processes and hazards*

- 11.30 - 11.50 Ripepe, M. Volcano-acoustic monitoring.
- 11.50 - 12.10 Neuberg, J. Seismic monitoring strategies.
- 12.10 - 12.30 Puglisi, G. Geodetic monitoring of volcanic processes: state of the art and perspectives.
- 12.30 - 12.50 Barsotti, S., de'Michilei Vitturi, M., Esposti Ongaro, T., Neri, A. Modelling of volcanic processes and hazards.

12.50 – 14.20 Lunch

14.20 to 16.20 *Volcanic hazards and risk management*

- 14.20- 14.40 Barberi, F. Risk assessment for volcano emergency planning.
- 14.40 - 15.00 Loughlin, S., Baptie, B. Volcanic crisis management: lessons from Soufriere Hills and other eruptions.
- 15.00 - 15.20 Hincks, T., Philips J., Sheldrake, T., Sparks, R.S.J., Vougioukalakis, G. Assessment of ash and gas hazards during a future eruption of Santorini.
- 15.20 - 15.40 Papazachos, C., Skarlatoudis, A., Vougioukalakis, G. A preliminary deterministic seismic hazard assessment for the Santorini island for the current volcanic unrest.
- 15.40 - 16.00 Poyiadji, E. IGME future research within NSRF on GeoHazards – Santorini case study site.
- 16.00 – 16.20 Vougioukalakis G., Sparks, R.S.J., Pyle, D., Druitt, T., Barberi, F., Papazachos, K., Fytikas, M. Scenarios of Santorini reactivation and relative response proposals.
- 16.20 – 16.50 Coffee break

16.50 to 19.00 *Round-table discussion, general questions, proposals, final remarks*

20.00 to 21.00 *Presentation of the meeting conclusions at Belonias or Nomikos Center (media and public).*