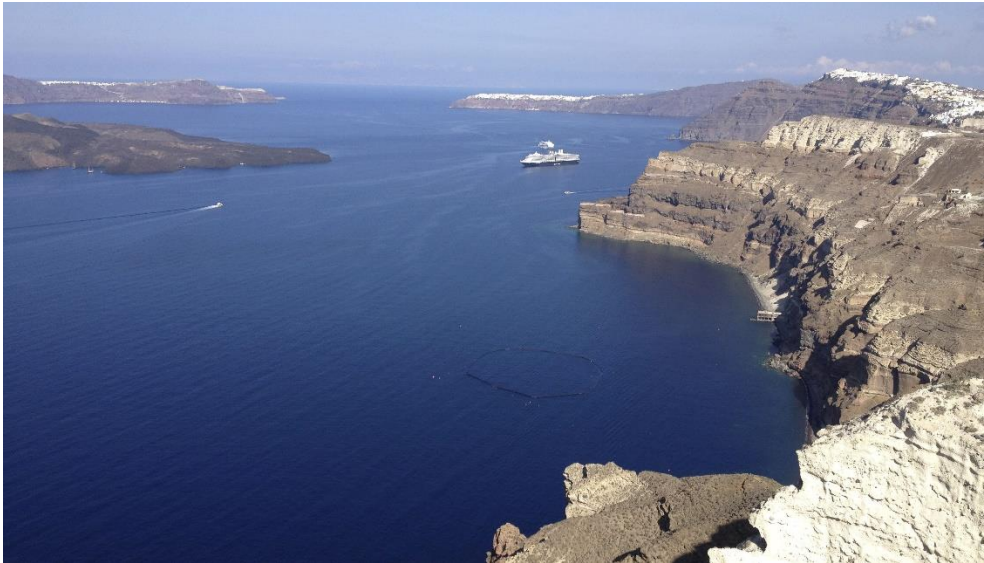




VIII International Workshop on Collapse Calderas Santorini Caldera (Greece), September 20-25, 2020

From Magma to Risk: A Multidisciplinary Workshop on Caldera Unrest



We are pleased to invite you to the 8th International Workshop on Collapse Calderas, offered by the Commission on Collapse Calderas of IAVCEI. Santorini is one of the best studied island-arc calderas in the world, and for many years has been used as a natural laboratory for the study of volcanological and magmatic processes. This is due to the spectacular sections afforded by the caldera cliffs, the long history of explosive volcanism, the large range of pyroclastic facies present, the famous Late Bronze Age (LBA) eruption and its impact on the Minoan civilisation of Crete, and the presence beneath the LBA products of an ancient town, frozen at a moment in time. The historical activity (last eruption 1950) of the intracaldera Kameni edifice is very well documented. Finally, Santorini is located in a subduction-generated rift zone stretching from the extinct Christiana Volcano, through Santorini to the submarine Kolumbo Volcano and associated cones. Kolumbo last erupted in 1650 and caused many deaths. Bradyseismic unrest at Santorini in 2011-12 reminded us of the possibility of eruption at this major Mediterranean tourist centre.

Santorini has played a role in the development of a number of concepts over the years: the collapse origin of calderas (Fouqué in 1879), the characterisation of proximal pyroclastic flow facies, the two-stage model of caldera collapse, and field criteria for the recognition and mapping of multi-cyclic calderas. A IAVCEI field excursion at Santorini is very timely given new research initiatives: high-resolution marine studies of the caldera and its surrounding rift zone, a high-resolution seismic tomography experiment that is yielding new images of the caldera structure and underlying magma storage regions, and petrological studies of the products of the caldera-forming eruptions that have led to a model of rapid magma chamber assembly prior to large eruptions. Moreover the rift zone and Santorini caldera are targets for deep-sea drilling in an IODP proposal currently under evaluation. Combined with previous studies, these new initiatives provide an exciting context for the workshop.

Expression of interest

People interested in participating in the workshop are requested to contact Tim Druitt as soon as possible, since places are limited to 32. See below for the registration procedure.

Workshop format and programme

Presentations

There will be three days of senior-scientist-led and early-career-researcher-led presentations, breakout sessions, and brainstorming with the aim of planning a white paper on fundamental issues of caldera volcanism, unrest, and risk, and the multidisciplinary strategies needed to address them. This will include a number of keynote talks, and a larger number of poster presentations. All participants will be expected to submit an abstract to the workshop and bring a poster on their latest caldera-related research. We plan one day of presentations and breakout discussions led by senior scientists, and another led by early career researchers. The third day at the Bellonio Centre will be devoted to discussions and brainstorming on key issues related to caldera volcanism, and the drafting of ideas for a IAVCEI white paper on the subject.

Field days

Three days of the workshop will be spent in the field. Transport will be by coach, and you will be provided with a comprehensive field guide. Field discussion topics will include the processes and products of caldera volcanism, caldera cycles and their origins, the structure and architecture of caldera volcanoes, the generation of magma chambers, and the causes of caldera unrest. Any walking will be only moderately strenuous (e.g., hike down and up a caldera wall trail), and will involve short distances. No more than strong trainers are necessary for the field. The itinerary on 22 Sept will include a boat tour of the caldera. Sun hats and sun cream are essential.



Programme

Day	Events	Evening events
Sat 19	Arrival of participants	
Sun 20	Senior-scientist-led presentations and breakout discussion sessions	Dinner, Agia Paraskevi village
Mon 21	Field excursion in southern Thera with emphasis on the processes and products of the Late Bronze-Age eruption	
Tue 22	Boat to Nea Kameni, followed by caldera tour. Guided visit of the archaeological excavations of Bronze-Age Akrotiri	
Wed 23	Field discussions in northern Thera	Dinner, Ammoudi port
Thu 24	Early Career Researcher-led presentations and breakout sessions	Optional caldera wall outcrop by foot
Fri 25	Discussions/brainstorming/drafting of IAVCEI white paper	Dinner, Pyrgos village
Sat 26	Departure of participants	

Organisation

The scientific organisers on behalf of IAVCEI are:

- Tim Druitt, Clermont-Auvergne University, Clermont-Ferrand, France
- Paraskevi Nomikou, University of Athens, Greece
- David Pyle, University of Oxford, UK
- Darren Gravley, University of Canterbury, New Zealand
- Guido Giordano, University of Rome, Italy

The logistics organisers are CONVIN, Greece

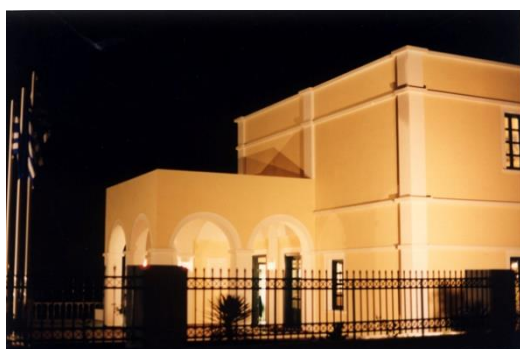
All enquiries should be addressed to Tim Druitt (tim.druitt@uca.fr)

Financial support

We acknowledge financial subsidies for the workshop by IAVCEI and by the Clermont-Ferrand Centre for Volcano Research (ClerVolc).

Workshop location

The workshop will take place in Fira, the capital town of Santorini, on the rim of the caldera. Fira is a busy tourist centre with easy access by foot to shops, bars, restaurants, taxis and evening strolls along the caldera wall. There are many banks and cash dispensers, and credit cards are accepted almost everywhere. The currency is euros.



Meeting venue

Three days of the workshop will be devoted to presentations and discussions, and these will take place in the Bellonio Cultural Centre (www.bellonio.gr/) in the centre of Fira. The centre is located in a beautiful traditional building, and is equipped with wifi. A fine library on Santorini and Aegean culture is located in the basement.

Accommodation

We have booked en-suite twin rooms for seven nights (19, 20, 21, 22, 23, 24, 25 Sept) in the New Haroula Hotel (www.haroulahotel.gr/) in the centre of Fira, a short walk from the meeting venue. The hotel has a swimming pool. The number of rooms has been planned on the basis of shared, same-gender accommodation, and we will ask participants who they wish to share with.

Workshop registration

The workshop is restricted to members of IAVCEI; please join before the workshop. The workshop registration fee of 750 euros will cover all accommodation, transport and food on-island, apart from four evening meals, which we have left free to allow participants to explore the culinary landscape and socialise in small groups. We will reduce this to three non-covered evening meals if the budget allows. Some participants may be required to take taxis to/from the airport (15 min) at their own expense if their travel arrangements do not correspond to those of the majority of participants. Registration will proceed as follows. (1) Written expression of interest to Tim Druitt, including the title

of your presentation on caldera-related research (and accompanied, if relevant, by your application for a IAVCEI grant for young career scientists; see below). (2) Payment of the registration fee using a personal online link that we will send you within a couple of weeks. (3) Successful grant applicants will be reimbursed 200 euros of their fee. *Places on the workshop will be allocated on a first-pay basis.* It is suggested that participants express interest in the workshop as soon as possible, since the maximum number planned at present is 32. Registration fees will not be reimbursed at a later date unless a replacement can be found, because the hotels have been pre-paid.

IAVCEI participation grants for early career scientists

IAVCEI is offering ten grants of 200 euros each to ten young career scientists in order to reduce their registration fees. Potential applicants are requested to include a letter of motivation, a short CV and one abstract with their email expressing interest in the workshop. Priority for grants will be given to young career scientists from developing countries and volcano observatories. ***The deadline for grant applications is 22 March.***

Presentation abstracts

All participants will be expected to present their research, either as talks, in poster form or both (depending on time and space, to be assessed later). Abstracts will be requested following workshop registration (apart from young scientists requesting a IAVCEI participation grant; see above).

Travel

Travel to and from Santorini is not included in the registration fee. There are direct flights to Santorini from some European cities, and multiple flights from Athens each day by Olympic Airlines and Aegean Airlines. You can also plan to travel by sea (www.ferries.gr/booking/), although this is discouraged due to potential weather issues. Participants are requested to arrive on 19 Sept and leave on 26 Sept. We have arranged for two buses to transfer people from the airport to the hotel, and will organise these according to the times of highest flux of people. Those arriving outside of these times will be asked to take a 15 min taxi ride between the airport and Fira. People arriving before, or leaving after, these dates will need to find additional accommodation. We advise early booking of travel, since September is high tourist season.

Eating arrangements

Breakfast is provided each day at the hotel. Coffee breaks and a light lunch are provided on each of the three presentation/discussion days at the Bellonio Centre, and packed lunches and water will be provided on the three field excursion days. Three communal dinners (with vegetarian options) are included in the registration fee. On the other evenings participants are free to find their own meals in Fira. An evening meal can range from an inexpensive snack to an expensive restaurant meal. Eating vegetarian is easy in Greece.