

# Cities on **VOLCANOES** 11

Volcanoes and Society: environment, health and hazards

**Main Conference**

**23-27** May 2020

**Pre-Conference Field Trips**

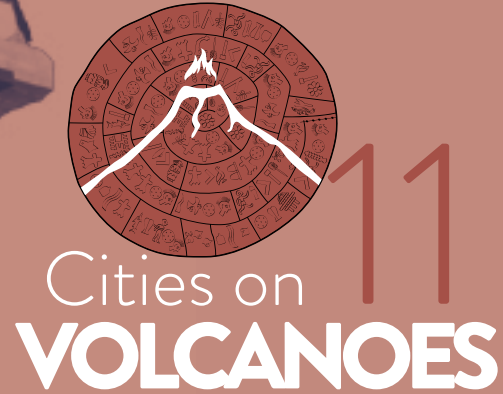
**21-22** May 2020

**Post-Conference Field Trips**

**28-31** May 2020

**Heraklion**  
Crete

**First Circular**



## WELCOME ADDRESS

Dear Colleagues,

We, the National and Kapodistrian University of Athens (NKUA), in collaboration with post graduate programme of “Environmental, Disaster and Crisis Management Strategies” (EDCM) and the Natural History Museum of Crete (University of Crete), are honored to invite you to participate in the Cities on Volcanoes 11, in Heraklion, Crete, Greece.

It will be our pleasure to welcome you to Crete and give you the opportunity to visit Knossos (the largest Bronze Age archaeological site on Crete called the oldest city of Europe), and the Heraklion Archaeological Museum (one of Europe’s most important museums with archaeological finds from all over Crete, covering over 5500 years of the island’s history).

Additionally, we will organize several field trips to Methana, Milos, Santorini, Knossos, Psiloritis UNESCO Global Geopark, etc.

We strongly believe that Crete, considered as one of the top global tourist destinations, having easy access and the appropriate infrastructure, will fulfill all your expectations for a successful meeting.

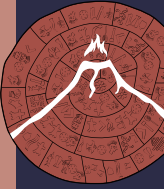
Sincerely,

**Dr. Paraskevi V. Nomikou**

Geologist - Oceanographer

Assistant Professor in Geological Oceanography & Natural Geography

Faculty of Geology and Geoenvironment of NKUA



# Volcanoes and Society: environment, health and hazards

## ORGANIZERS



### In collaboration with



HELLENIC REPUBLIC  
National and Kapodistrian  
University of Athens  
— EST. 1837 —

ENVIRONMENTAL, DISASTER AND CRISES  
MANAGEMENT STRATEGIES



NATIONAL & KAPODISTRIAN UNIVERSITY OF ATHENS  
POST GRADUATE PROGRAM





## LOCAL ORGANIZING COMMITTEE

<b>Paraskevi Nomikou</b>	Dept. of Geology and Geoenvironment, NKUA (President)
<b>Efthimios Lekkas</b>	Dept. of Geology and Geoenvironment, NKUA
<b>Dimitrios Papanikolaou</b>	Dept. of Geology and Geoenvironment, NKUA
<b>Konstantinos Kyriakopoulos</b>	Dept. of Geology and Geoenvironment, NKUA
<b>Gerasimos Papadopoulos</b>	Institute of Geodynamics National Observatory of Athens
<b>Charalampos Fassoulas</b>	Natural History Museum of Crete
<b>Maria Manousaki</b>	Earthquake Planning and Protection Organization, Athens, EPPO

## IMPORTANT DATES

<b>April 6, 2019</b>	First Circular
<b>April 30, 2019</b>	Web-Site launch and opening of Call for Session/ Workshop
<b>July 20, 2019</b>	Deadline for submission of Session/Workshop proposals
<b>September 1, 2019</b>	II Circular (containing the scientific-technical program, with sessions, workshops and field trips)
<b>November 1, 2019</b>	Abstract submission and Registration opening
<b>January 25, 2020</b>	Deadline for abstract submission
<b>February 28, 2020</b>	Final conference program
<b>March 9, 2020</b>	Deadline for Early registration
<b>April 30, 2020</b>	Closing date for pre-registrations

## INVITATION TO PARTICIPATE

The hosting National and Kapodistrian University of Athens in collaboration with the Natural History Museum of Crete of the University of Crete invites the international scientific community and authorities that are involved in managing risks and hazards in volcanically active areas to participate in the Cities on Volcanoes 11 Conference to be held in Heraklion, Crete from May 23th until May 27th, 2020. The title of the meeting will be 'Volcanoes and Society: environment, health and hazards'. It will be focused on multidisciplinary monitoring volcanic environments in the vicinity of cities and highly touristic areas. At the same time, the ability to recognize the hazards and their impact on people, emergency management by civil protection authorities, community education, case studies and risk mitigation to reduce the impacts of volcanism and its effects on society will undoubtedly be discussed.

Crete is a well-known island in the Mediterranean not only because of its geographic position at the crossroads of three continents, but also because of its friendly and warm people, amazing landscapes, delicious food and famous archaeological sites like Knossos, the largest Bronze Age archaeological site on Crete. Heraklion is the capital of Crete and one of the most fascinating and vibrant cities in the Mediterranean. It is full of places to discover, like the wonderful mediaeval city centre. The city is also the commercial and technological centre of the island. It has a strategic geopolitical position in the south-eastern Mediterranean Sea connecting three continents and many different cultures. It offers a wealth of museums, a summer-long arts festival, historical sightseeing, amazing nightlife and events throughout the year. Heraklion has been the home town of some of Greece's most significant spirits, including the novelist Nikos Kazantzakis, the poet and Nobel Prize winner Odysseas Elytis and the world-famous painter Domenicos Theotokopoulos (El Greco).

## MAIN TOPIC

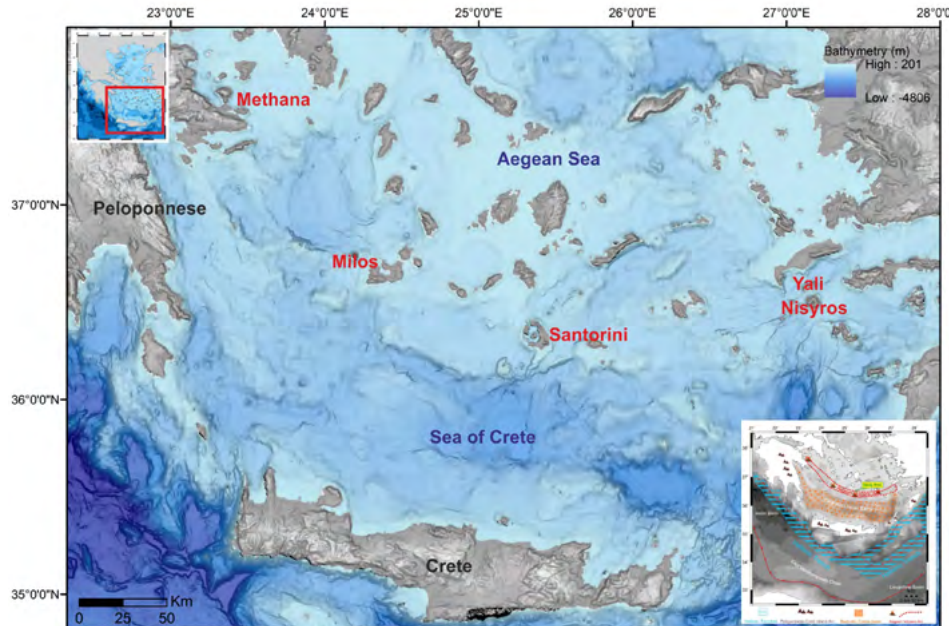
The Cities and Volcanoes Commission of IAVCEI aims to provide a link between the volcanology community and emergency managers, to serve as a conduit for exchange of ideas and experience among people living and working in 'cities on volcanoes', and promote multi-disciplinary applied research, involving the collaboration of physical and social scientists and city officials.

The Commission selected Heraklion as the venue for the Cities on Volcanoes Conference in 2020.



## VOLCANISM IN THE AEGEAN SEA

The Aegean Volcanic Arc has been formed at the back arc region of a convergent plate boundary, where the oceanic crust of the African plate is subducting northwards underneath the active margin of the European plate. The volcanoes of the Aegean Volcanic Arc have been especially active in the Late Pleistocene – Holocene. Four groups of volcanic rocks comprise the volcanic arc, including both onshore and offshore outcrops:



Methana group, including Paphsanias submarine volcano, at the western edge of the volcanic arc in western Saronikos Gulf

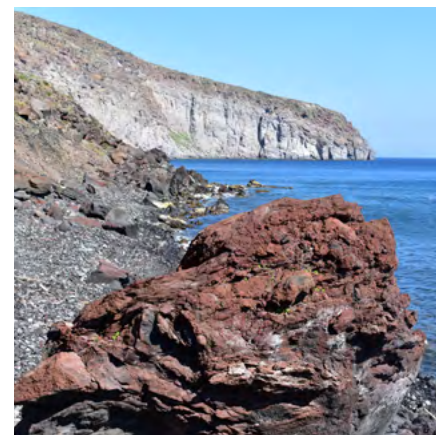


## / VOLCANISM IN THE AEGEAN SEA

Milos island and volcanic centres in the surrounding islands of Kimolos, Polyaeagos, Antimilos



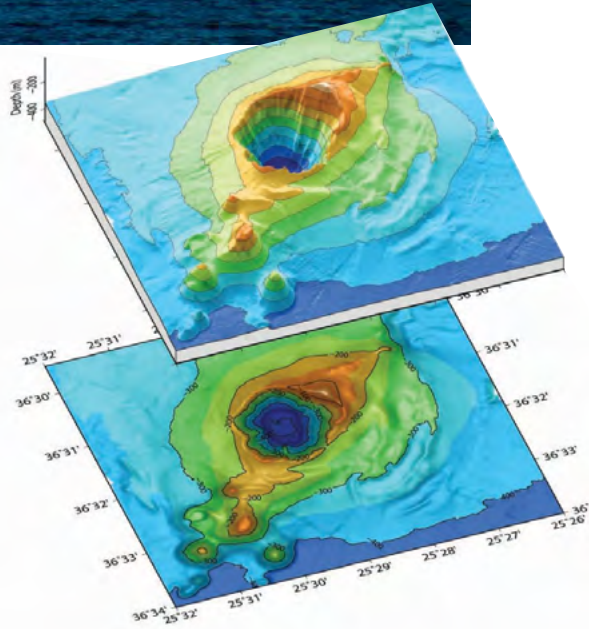
Nisyros group at the eastern edge including several submarine volcanic features







Santorini volcanic group together with Kolumbo volcanic chain at the submarine area northeast of Santorini



## SCIENTIFIC-TECHNICAL AND NATIONAL STEERING COMMITTEES AND MULTIDISCIPLINARY REFERENCE GROUP

They will be announced in the Second Circular.

### SPECIAL SESSIONS-WORKSHOPS

Deadline for submission of Session/Workshop proposals: **July 20, 2019**

The Symposia of Cities on Volcanoes 11 are the following:

**Symposium 1:** Volcano Observatory work and monitoring

**Symposium 2:** Physical Sciences

**Symposium 3:** Civil protection, education, community members, news media, citizen science, hazards and risk specialists

**Symposium 4:** Geoheritage and parks, archeology, social and applied science, Law, economics, planning, governance

Make submittals as:

- > Title of the session or workshop
- > Core connection between the proposed session and societal risk mitigation -Name, affiliation, and email address of the proponent(s)
- > Brief session description (250 words max.) -Any special accommodations required of your workshop or session.

Send submission and any questions to Paraskevi (Evi) Nomikou at [evinom@geol.uoa.gr](mailto:evinom@geol.uoa.gr)

#### Special Sessions

The Cities and Volcanoes Commission (CaV) seeks to nudge the focus of COV meetings towards addressing the core links between science and society, including emphases on successful science-to-society partnerships, and the inclusion at the conference of your professional colleagues within social science, emergency management, infrastructure risk mitigation, park interpretation/safety, and education.

CaV encourages submitters of proposals for Special Sessions to create new formats that can move beyond the traditional 15-minute science talk, and towards more interactive configurations.

Send submission and any questions to Paraskevi (Evi) Nomikou at [evinom@geol.uoa.gr](mailto:evinom@geol.uoa.gr)

### PRELIMINARY SCIENTIFIC-TECHNICAL ISSUES

- > Emergency plans and crisis managements: recent case studies
- > Environmental impacts of volcanic eruptions and health effects on local communities
- > Eruption impacts on communities along the border
- > Education and communication with communities and authorities
- > Geoarchaeology, geoparks and tourism in volcanic areas
- > International collaboration at volcanoes: the ALVO mission
- > Volcanic eruptions: processes and hazards mapping
- > Volcano monitoring: alert levels and uncertainties
- > Remote sensing: application to monitoring techniques
- > Volcanic risk: evaluation and mitigation
- > Land use planning in volcanic areas
- > Monitoring Andean volcanoes: state of the art for warning and communicating with communities.

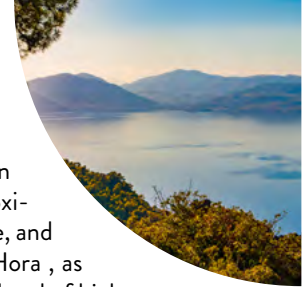


## PRELIMINARY FIELD TRIPS

### PRE-CONFERENCE

#### **Methana volcanic peninsula, 2 DAYS**

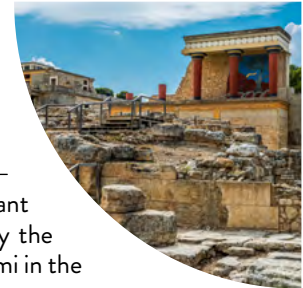
Methana peninsula is located at the northeastern part of Peloponnese. It is one of the older touristic resorts of Saronikos, known not only for its hot springs along its SE beach but also for Mavri Petra volcano at Kameni Chora village. Methana city is 163km away from Athens and visitors are able to reach it in approximately 2 hours either by car through the Greek National Road 8, or alternatively by Ferry Boat from Piraeus port with an intermediate station at Aegina island. Methana peninsula is a complex andesite–dacite volcanic centre of approximately 35 km<sup>2</sup> surface area. Volcanism is considered to have started during the late Pliocene, and the most recent activity was the eruption in 230 BC producing andesitic lava, at Kameni Hora, as described by Strabo, Pausanias and Ovidius. At the entrance of the city there is an organized and of high safety marine for yachts and Aghioi Anargyroi isle with lush vegetation.



### INTRA-CONFERENCE

#### **Knossos, Archaeological Museum, Amnisos, 1 DAY**

Knossos is the largest Bronze Age archaeological site on Crete and has been called Europe's oldest city. Settled as early as the Neolithic period, the name Knossos survives from ancient Greek references to the major city of Crete. The palace of Knossos eventually became the ceremonial and political centre of the Minoan civilization and culture. The palace was abandoned at some unknown time at the end of the Late Bronze Age, c. 1380–1100 BC. The Heraklion Archaeological Museum is regarded as one of Europe's most important museums hosting unique samples of cretan archaeology. The Amnisos area and especially the Minoan Villa of the Lilies is the place where the hypothesis for the impact of Santorini tsunami in the Minoan civilization was born in 1932 by professor Spiridon Marinatos.



## / PRELIMINARY FIELD TRIPS

### POST-CONFERENCE

#### **Psiloritis UNESCO Global Geopark, 1 DAY**

Within the island of Crete, renowned for its culture and history, stands Psiloritis UNESCO Global Geopark, a place where the secrets of life and nature have been preserved for hundreds of centuries. The highest mountain of the Island, “Psiloritis”, rose up through the sea few millions of years ago when tremendous forces within the Earth were unleashed as the African continent encroached on Europe. Different types of Mediterranean rocks mixed together to create a unique environment within which life adapted and evolved. The combination of hundreds of plants and animals, which live exclusively in these mountains, has produced a region characterized by its great biodiversity. The UNESCO Global Geopark of Psiloritis is an excellent destination for geotourists and provides opportunities for both recreation and education.



#### **Santorini volcano, 4 DAYS**

One of the greatest attractions of Santorini and of utmost importance is the volcano, whose former intense activity gave the island its current shape and morphology. Before the several volcanic eruptions that occurred throughout the years, some of which were submarine, the size and the shape of Santorini were quite different. Today the result of these eruptions is the creation of five separate islands, Santorini, Therasia, an uninhabited island called Aspronisi and the volcanic islands of Palaia Kammeni and Nea Kammeni. They compose a nice sight across the Aegean Sea, facing Santorini, and you can visit them as well. The existence of the volcano is visible all over the island of Santorini, especially on the bizarre beaches that are covered, in their majority, in black sand and pebbles made of solidified lava. The red volcanic rocks in Red beach, which reminds a lunar landscape, form a rare sight. Another spectacular outcome is the formation of the volcanic caldera that covers a great part of the island. This unique terrain morphology is what makes Santorini such an exceptionally beautiful island, as the settlements that are built on the caldera cliffs offer a wild beauty and a sublime view.



#### **Milos Volcano, 4 DAYS**

Milos is the most south-westerly island in the Cyclades archipelago. Located in the South Aegean Active Volcanic Arc, Milos is generally accepted as an example of an emerged volcanic edifice (1.4 Ma) created from monogenetic pulses of effusive and explosive magmatism, but has remained dormant for the last 90 kyr. The island of Milos is the largest worldwide exporter of bentonite, and is home to a significant range of metal and non-metalliferous mineral deposits. It is a preserved on-land laboratory to study hydrothermal ore-forming processes from the shallow submarine environment.





## TRANSPORTATION

There are two ways to get to the island of Crete in Greece, either by airplane or by ferry boat. There are two airports on the island; one is located near Heraklion town and the other is located to the west of the island, called Chania. The main harbors are located in Heraklion and Chania. There are also plenty of airline companies that fly regularly to Crete, especially during the season between May and October.

Duration by ferry from the port of Piraeus: 9hours

Duration by plane from Athens International Airport: 45 minutes

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### **Airport**

Heraklion International Airport, or Nikos Kazantzakis Airport is located about 5 kilometres (3 miles) east of the city. The airport is named after Heraklion native Nikos Kazantzakis, a writer and a philosopher. It is the second busiest airport of Greece after Athens International Airport, first in charter flights and the 65th busiest in Europe, because of Crete being a major holiday destination with 7.480.408 travelers in 2017 (List of the busiest airports in Europe).

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### **Port**

Heraklion is an important shipping port and ferry dock. Travelers can take ferries and boats from Heraklion to destinations including Santorini, Ios Island, Paros, Mykonos, and Rhodes. There are direct ferries to Naxos, Karpathos, Kasos, Sitia, Anafi, Chalki and Diafani. There are also several daily ferries to Piraeus, the port of Athens in mainland Greece.

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### **Highway network**

European route E75 runs through the city and connects Heraklion with the three other major cities of Crete: Agios Nikolaos, Chania, and Rethymno.

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### **Public transportation**

Urban buses serve the city, with 39 different routes. Intercity buses connect Heraklion to many major destinations in Crete.

## CONGRESS VENUE

Aquila Atlantis Conference Centre  
Ilgias 2, Heraklion, 712 02, Crete, Greece  
Tel. +30 281 022 9103 • <http://www.theatlantishotel.gr/>



## CONFERENCE WEBSITE

[www.citiesonvolcanoes11.com](http://www.citiesonvolcanoes11.com)

## REGISTRATION FEES

They will be announced in the Second Circular.

## ACCOMMODATION

A number of rooms have been secured at the venue hotel, as well as in various hotels of all categories, in close proximity to the meeting venue. A discount will be guaranteed for group reservations.

## ORGANIZING SECRETARIAT



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