



# 10<sup>th</sup> International Training School on **CONVECTIVE AND VOLCANIC CLOUDS (CVC)** detection, monitoring and modelling

*23 September - 1 October 2025, Vulcano Island, Italy*

The purpose of the School is to train students with primary research interest in:

- techniques to detect, monitor, and model convective and volcanic clouds
- state-of-the-art instruments and satellite missions (present and future)
- early warning systems and aviation safety for supporting policymakers



## **Nine days with in-depth lectures, exercises with data analysis and excursions.**

The tenth CVC training school will be organized at **Vulcano Island** (Sicily, Italy), the southernmost island of the Aeolian archipelago. Due to its frequent and well-known eruptive activity, it was called Hieria by the Greeks, who made it the seat of the forge of the God Hephaestus. In Roman times it became Vulcano, the name which now defines mountains characterized by past and current volcanic activity.

At the end of the school, the organization will provide a **certificate** allowing the participants to get up to **6 ECTS** points. All the students will present their research activity.

## Topics addressed during the school:

- Hazardous convective volcanic clouds: state of the art, challenges and future
- Satellite volcanic clouds monitoring in the TIR, UV and MW spectral ranges
- Volcanic cloud detection and retrieval
- Volcanic Plume modelling
- Atmospheric convection
- Deep convection from satellite
- Numerical Weather prediction models
- Convective clouds monitoring in the MW spectral range
- Machine Learning (ML) techniques for volcanic and convective clouds detection
- GNSS for monitoring convective and volcanic clouds
- Volcanic and convective cloud monitoring using ground-based systems
- Decision support tools for ATM and provision of early warnings for aviation
- Synergistic use of atmospheric data: the Complete Data Fusion method



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## Applications

The CVC school is open to researchers, pilots, air traffic managers and anybody interested in the topics with priority to graduate students, PhD students and early career researchers. More info here <http://www.CVCtrainingschool.org>

**Dates:** Registration deadline 30 May 2025

**Contacts:** [info@islandofmeetings.com](mailto:info@islandofmeetings.com)

## Registration fee

The registration fee is **500€** and includes: teaching material, accommodation in a \*\*\*\* Hotel, breakfasts, coffee breaks, lunches, and the excursion.

## Grants Available!

The grant will cover teaching material, accommodation in a \*\*\*\* Hotel, breakfasts, coffee breaks, lunches, and the excursion. The grant will not cover the travel expenses to/from Vulcano. The priority is given to scientists resident in least developed countries and, at a second stage, resident in the developing countries. All info available in our website. The deadline for requesting the grant is 15 March 2025.

