

Scientists depict the issues of air pollution & climate change. They explain the importance of atmospheric research & the workflow of three key Research Infrastructures (RIs):

ACTRIS, IAGOS & ICOS



**Summaries** 



### Easy & quick learning with:























A free badge will be awarded upon successful completion of the final quiz



Subscribe to web alerts













2 weeks





Air pollution & climate change are two critical atmospheric issues that have become global concerns. In this MOOC, scientists will explain their complex interconnections, highlight the importance of atmospheric research, & outline the workflow of atmospheric Research Infrastructures (RIs).

Enrol to discover how three RIS, ACTRIS, IAGOS & ICOS, take care of the future of our atmosphere



Course from May 12 to June 8, 2025 Registration from March 31, 2025 Commitment of about 2.5 hours/week





#### By the end of the course, you will be able to:

- assess the role & interest of atmospheric research
  - describe different means of monitoring the atmosphere
  - summarise the goals & framework of the 3 RIs
  - explain the workflow of an atmospheric RI
  - access & process the 3 RIs data on your own





## **Prerequisites**

Undergraduate level in science Basic level in general chemistry

# MOOC plan

Week 1: Air Pollution (AP) & Climate Change (CC), what is happening in our atmosphere & what should we do?

Part 1: Air pollution vs Climate change

Part 2: Aerosols & Clouds

Part 3: Trace gases & Greenhouse gases

Part 4: Atmospheric Research Infrastructures

Part 5: In-depth Questions & Answers on AP & CC



## Week 2: Three Atmospheric Research Infrastructures on their way to addressing atmospheric issues

Part 1: ACTRIS (Aerosol, Clouds & Trace Gases Research Infrastructure)

Part 2: IAGOS (In-service Aircraft for a Global Observing System)

Part 3: ICOS (Integrated Carbon Observation System)

Part 4: The workflow & benefits of a coordinated approach

Part 5: MEET the Atmospheric Simulation Chambers

To go further: How to access & process the RIs data



www.atmo-access.eu/massiveopen-online-course-mooc/