

The vision

ACTRIS is the fundamental European Research Infrastructure for short-lived atmospheric constituents increasing the excellence in Earth system research and proving information and knowledge on developing sustainable solutions to societal challenges.

The mission

ACTRIS shall establish, operate, and develop a pan-European distributed research infrastructure for short-lived atmospheric constituents. ACTRIS shall provide effective access for a wide user community to its resources and services, in order to facilitate high-quality Earth system research.

The challenge

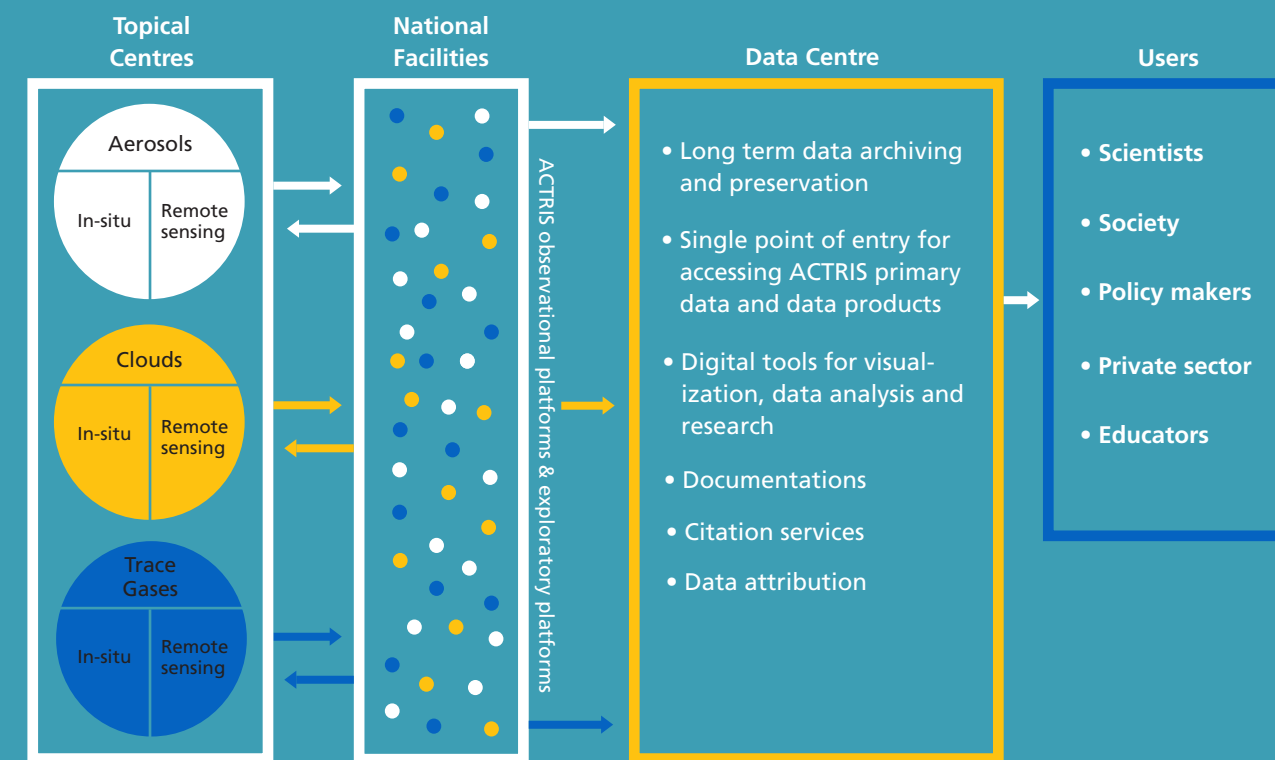
Short-lived atmospheric components – aerosols, clouds, trace gases – are some of the most significant anthropogenic pollutants affecting Earth's radiation balance, having a big impact on climate, health and ecosystems. Long-term data on concentrations and distribution of aerosols, clouds and trace gases are instrumental to understand how the climate is changing, and to reduce air pollution and related adverse effects on health and environment.

European level Central Facilities	Head Office Coordination and Management Service Access Management
	Data Centre
National Facilities	Centre for Aerosol In Situ Measurements Centre for Aerosol Remote Sensing Centre for Cloud In Situ Measurements Centre for Cloud Remote Sensing Centre for Reactive Trace Gases In Situ Measurements Centre for Reactive Trace Gases Remote Sensing
	Observational Platforms Exploratory Platforms

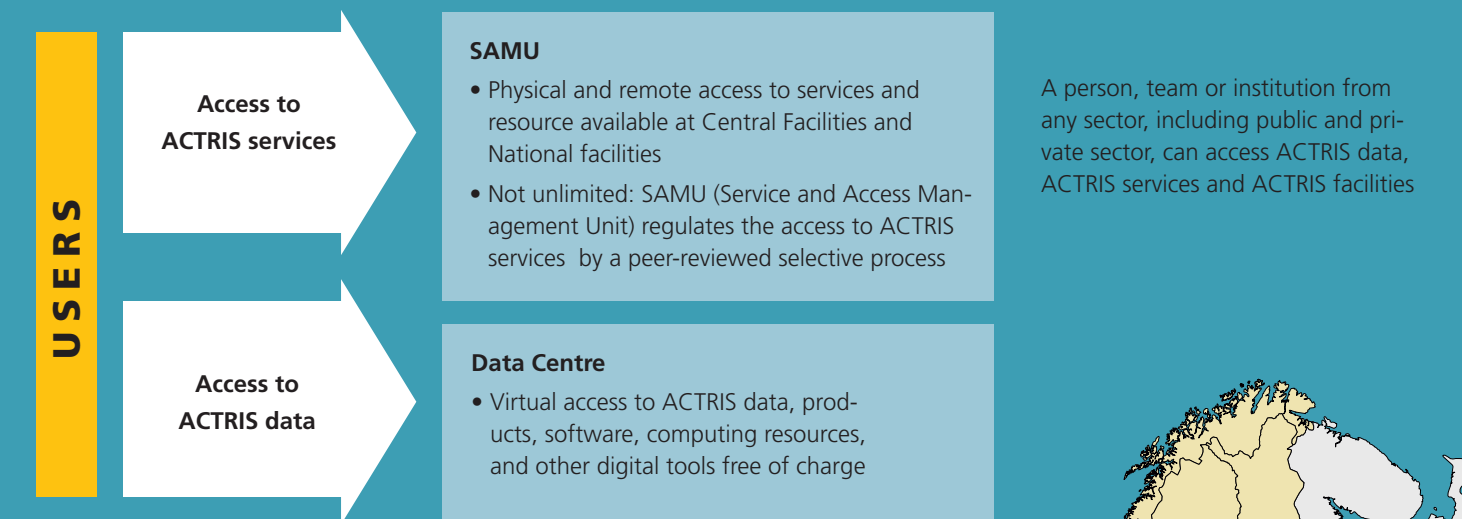
HIGH-CLASS AND QUALITY CHECKED ATMOSPHERIC VARIABLES THROUGH THE BEST PRACTICES FOR DATA PROCESSING

Aerosols, clouds, and reactive trace gases are the main scientific themes around which ACTRIS Topical Centres are organized with a particular focus on either remote sensing or in-situ techniques. The Topical Centres support the National Facilities by developing standard operating procedures and providing tools for quality assurance and quality control, as well as fostering improvements of measurements methodologies and validation techniques.

ACTRIS data are generated by the observatory and exploratory platforms of the National Facilities following a harmonized and standardized scheme. ACTRIS data are collected and handled by the Data Centre which compile, archive and provide free access to well traceable and documented measurements and data products to all interested users via ACTRIS Data Portal.



A COMMITMENT TO OPEN ACCESS



ACTRIS COMMUNITY

- 23 countries participating in establishing ACTRIS a long-term research infrastructure
- More than 100 research institutes and organisations involved
- 260 existing & planned facilities

ACTRIS LIFECYCLE PHASES

- ACTRIS is currently in preparation phase. Some parts of ACTRIS have been around for decades, others are currently being built.
- ACTRIS is planned to start its operations in 2020, and to be fully operational by 2025



**A STATE-OF-THE-ART
ATMOSPHERIC RESEARCH INFRASTRUCTURE
NOW AVAILABLE TO USERS**

- ACTRIS enables free-access to high-class and quality assurance long-term atmospheric data
- ACTRIS serves a vast community of users working in research, space agencies, operational services, public and private sectors
- ACTRIS promotes opportunities for world-class research and international collaboration
- ACTRIS supports training of researchers and early-career scientists to become future leaders in the field of atmospheric research
- ACTRIS provide access to best research environments and expertise at Topical Centres and at selected National Facilities
- ACTRIS develops new technologies and algorithms for monitoring activities relevant for climate and air quality models, satellite retrievals, and forecasts systems

www.actris.eu



Aerosols, Clouds, and Trace Gases
Research Infrastructure

Atmospheric observations
for the excellence in
Earth system research

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