

Climate Change Service

The Copernicus Climate Change Service is part of the Copernicus Programme, which is an EU Programme managed by the European Commission (EC) and implemented in partnership with the Member States, the European Space Agency (ESA), the European Organisation for the Exploitation of Meteorological Satellites (EUMETSAT), the European Centre for medium-range Weather Forecasts (ECMWF), EU Agencies and Mercator Océan. The Programme is aimed at developing a set of European information services based on satellite Earth Observation and in-situ (non-space) data analyses.



What is the Copernicus Climate Change Service?

The Copernicus Climate Change Service is designed to respond to changes in the environment and society associated with climate change.

The service will provide information for monitoring and predicting climate change and help to support adaptation and mitigation strategies. It will provide access to several climate indicators (e.g. temperature increase, sea level rise, ice sheet melting, ocean warming) and climate indices (e.g. based on records of temperature, precipitation, drought events) for both the identified climate drivers and the expected climate impacts.

The Copernicus Climate Change Service will enter a pre-operational stage by the end of 2017. The operational phase will start before the end of 2018.

This pre-operational phase is also supported by

a series of projects funded by the EU research framework programme related to climate modelling and observation analyses.

Visit the climate change project page of the Copernicus website for more information about this initiative: <http://www.copernicus.eu/main/climate-change> and <http://www.ecmwf.int/en/about/what-we-do/copernicus/copernicus-climate-change-service>.

What does the Climate Change Service do?

The Copernicus Climate Change Service will contribute to the provision of Essential Climate Variables, climate re-analyses, multi-model seasonal forecasts and climate projections at temporal and spatial



scales relevant to European Union sectoral policies. It will deliver climate data records to monitor major climate drivers (e.g. greenhouse gases) and to document climate fingerprints (e.g. surface temperature and precipitation).

The Copernicus Climate Change Service will also provide relevant information to EU sectors including agriculture, forestry, health, energy, water management and tourism.



How will the Copernicus Climate Change Service be organised?

The service is based on four pillars:

- A climate data store that contains the geophysical information needed for analysing the climate change indicators in a consistent and harmonized manner;
- A sectoral information system providing information tailored to the needs of the end users and in particular those linked with existing EU legislation;
- An evaluation and quality control of the information set up in order to guarantee the reliability of the service and the quality of the delivered information;
- Outreach and dissemination activities to deliver the information to the general public and public authorities and fulfil an educational task.

What is the added value of the Copernicus Climate Change Service?

The Copernicus Climate Change service will provide the EU and its member states with access to high quality information in order to support the legislation in response to adaptation and mitigation measures.

For the first time, Europe is setting up a unique system to address climate change issues and ensure the provision of relevant information to EU citizens.



The Copernicus data policy promotes the access, use and sharing of Copernicus information and data on a full, free and open basis.

