



# 13 September 2021: ECMWF opens new offices in Bonn, Germany



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ECMWF's new offices in Bonn, Germany, formally open on 13 September 2021. The new facility complements the headquarters in Reading, UK, and data centre in Bologna, Italy, and positions ECMWF for increased scientific collaboration across Europe.

## Overview

The decision that ECMWF should open new facilities within the European Union came as a consequence of the United Kingdom's decision to leave the European Union. The new offices in Bonn will ensure that the constructive partnership with the European Union on research projects, on the ground-breaking EU Copernicus Programme, and the inspiring planned Destination Earth initiative can continue to flourish.

The new location will also provide ECMWF with a very favourable central location in Europe, as well as a high density of world-class scientific institutions in the immediate surroundings, not only in Germany but also across Europe.

## Focus of activities

The focus of work in Bonn will be on activities that ECMWF conducts in partnership with the European Union (EU), including the Copernicus Earth observation programme and the planned Destination Earth initiative.

To ensure the scientific and technical synergies and collaboration which have been key to ECMWF's success over the years continue to flourish, some of the Centre's core activities are also moving to the new location.

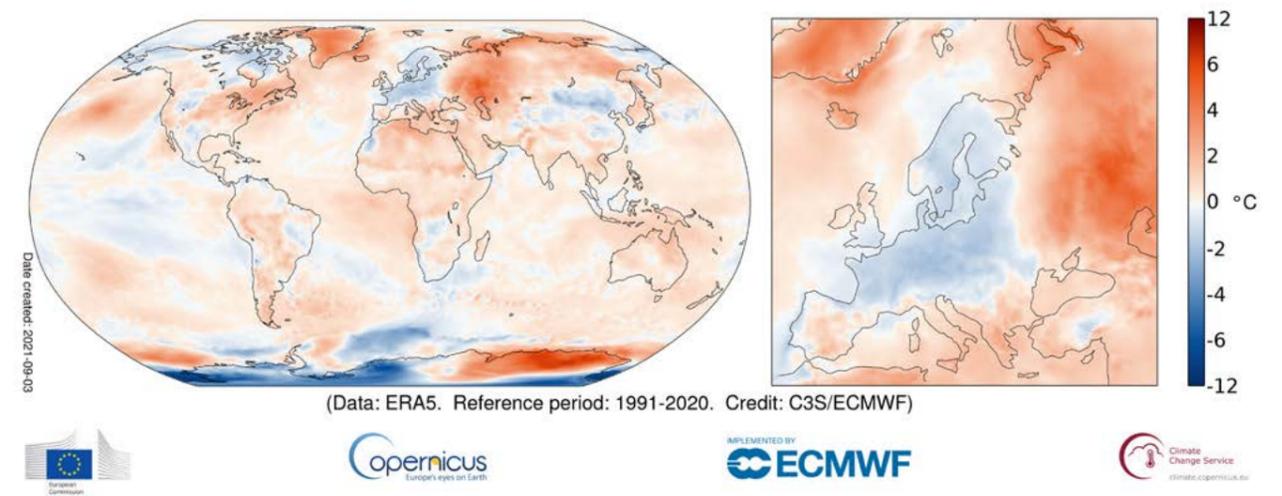
## Copernicus services

Following the successful implementation of the Copernicus Climate Change Service (C3S) and Atmosphere Monitoring Service (AMS) in the first phase of Copernicus, ECMWF signed an agreement with the European Commission in July 2021 to continue for the next seven years. Prior to Copernicus, ECMWF was already a pioneer in atmosphere composition monitoring and a world leader in climate reanalysis, so well placed to deliver the Services, which have been able to use and build upon ECMWF's modelling and scientific expertise, as well as infrastructure. Since their launch, C3S and AMS have become a go-to source for reliable free-to-use data on climate change, atmospheric composition and air quality. Their data are widely used in smartphone apps, by the press, in television network air quality and climate updates, by businesses, and by service providers.

C3S's ongoing activity will include its climate updates, published online for everyone and issued to the media on a monthly basis, covering surface air temperature, sea ice, precipitation and soil moisture. It also produces the annual European State of the Climate report, a detailed review of annual and seasonal conditions in Europe and the European Arctic.

CAMS provides consistent information on the atmosphere anywhere in the world, with daily information on the air we breathe, data such as hourly estimates of wildfire emissions and estimates of net fluxes of greenhouse gases, as well as historical data on solar radiation to support the renewable energy sector. The data provided by the Services form part of the body of evidence used by the IPCC working group 1 in their most recent and widely reported Assessment Report.

Surface air temperature anomaly for August 2021



In this new phase, these ECMWF-implemented Copernicus Services will be key actors in paving the way towards the achievement of the European Green Deal goals and supporting the EU's target plan to further reduce net greenhouse gas emissions by at least 55% by 2030.

The Services will undertake new challenges, such as the development of an anthropogenic CO<sub>2</sub> monitoring and verification support capacity, which will support the global stocktaking exercise on greenhouse gas emissions committed to as part of the UN Paris Agreement.

ECMWF is already involved in the pre-cursor projects to develop the systems that underpin this new component, which will benefit from the modelling, data processing infrastructure and expertise that already exists within its Copernicus Services.

## Destination Earth

The EU's Destination Earth (DestinE) initiative, due to start in late 2021, aims to develop a high-precision digital model of the Earth to monitor and simulate natural and human activity. ECMWF is expecting to be a key part of this exciting and ambitious project, alongside institutions such as the European Space Agency (ESA) and the European Organisation for the Exploitation of Meteorological Satellites (EUMETSAT).

The key milestone planned for this project will be the launch of the first two digital twins by December 2023. One of these will be the Digital Twin on Weather-Induced and Geophysical Extremes. Managed by ECMWF, this digital twin will provide capabilities and services for the assessment and prediction of environmental extremes.

There will also be a Digital Twin on Climate Change Adaptation. This will support the generation of analytical insights and testing of predictive scenarios in support of climate adaptation and mitigation policies at decadal timescales, at regional and national levels.

**▲ Air temperature**  
Surface air temperature anomaly map for August 2021, relative to the August average for the period 1991-2020.

Data source: ERA5, Copernicus Climate Change Service, ECMWF.

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## ◀ Digital Twins

Understand the past, predict the future.

## Scientific synergies

The move to Bonn enables further collaboration with scientific institutions across Germany and the region and closer connection with our Member States.

ECMWF will in particular collaborate with the Center for Earth System Observations and Computational analysis (CESOC), which integrates research at the Universities of Bonn and Cologne as well as the Forschungszentrum Jülich.

ECMWF will host a Fellowship programme due to start in 2023, for which the topics of water cycle, atmospheric composition, and ocean topography have been agreed. The collaboration aims to comprehensively observe, understand and forecast the Earth system. To do so, it focuses on the physical, mathematical, and biogeochemical modelling of the coupled Earth system by developing interdisciplinary approaches and working closely with computer scientists and mathematicians.

In addition, a visiting scientist programme targeting activities in Bonn is due to start in 2022.

## Facilities and location

ECMWF staff are initially based in temporary offices within the headquarters of the German Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU), next to the campus where the future building will be built.

The new facility will be constructed from 2023 to 2025 in Bonn's international quarter close to the UN Campus and directly next to the Rheinaue Leisure Park. It will become available in 2026. The German Institute for Federal Real Estate (BImA) will own the facility and after completion, will provide facility management services, either itself or through a third party.

## Staffing

The COVID pandemic is having an impact on the ability of staff to relocate, but it is planned that there should be around 35 to 40 ECMWF staff located in Bonn by the end of 2021. Numbers will grow to 70 by the end of 2022 and should reach 130 by the end of 2023.



Visualization: Render Vision; Design: SL/A Architekten

## ◀ Bonn offices

The permanent facility to be ready in 2026.

## About ECMWF

ECMWF is the European Centre for Medium-Range Weather Forecasts.

Headquartered in Reading in the UK, and with its data centre in Bologna, Italy, and new offices in Bonn, Germany, ECMWF is an independent intergovernmental organisation supported by 34 Member and Co-operating States, mostly in Europe. ECMWF is both a research institute and a 24/7 operational service, producing global numerical weather predictions at medium and long ranges for its Member and Co-operating States and the broader community. The Centre also holds one of the largest archives of numerical weather prediction data in the world.

Over the years, ECMWF has developed a strong partnership with the EU and is an entrusted entity for the implementation and operation of the Climate Change and Atmosphere Monitoring Services of the ground-breaking EU Copernicus Programme. In order to maintain its activities with the EU, whilst remaining headquartered in the UK, ECMWF has opened new offices in Bonn, Germany (autumn 2021).

[www.ecmwf.int](http://www.ecmwf.int)

## Contact

For more information, interviews, B-roll, or queries, please contact [pressoffice@ecmwf.int](mailto:pressoffice@ecmwf.int).

## Further reading and images

- Bonn to host new ECMWF premises in 2021
- <https://www.flickr.com/photos/ecmwf/albums>



## ▲ ECMWF

Three ECMWF sites in the UK, Germany and Italy.

# #OneECMWF