Copernicus Emergency Management Service - CEMS

CEMS provides information for emergency response in relation to different types of disasters, including **meteorological hazards**, **geophysical hazards**, **deliberate and accidental man-made disasters** and **other humanitarian disasters as well as prevention**, **preparedness, response** and **recovery activities.**

Four modules constitute the Copernicus EMS:

1. Emergency Mapping
2. European and Global Flood Awareness System (EFAS, GloFAS)
3. European Forest Fire Information System (EFFIS)
4. European Drought Observatory

ECMWF is the computational centre for EFAS, GloFAS and EFFIS.

Here you will find information on some of the products we have been developing for the CEMS

ABOUT ECMWF and CEMS

ECMWF contributes to the Copernicus Emergency Management Service (CEMS), in particular the early warning systems for flood and fire danger.

The Copernicus Emergency Management Service provides information for emergency response in relation to different types of disasters, including meteorological hazards, geophysical hazards, deliberate and accidental man-made disasters and other humanitarian disasters as well as prevention, preparedness, response and recovery activities. ECMWF contributes to early warning systems for flood awareness and forest fire information.

CEMS-Floods in brief

The European Flood Awareness System (EFAS) became operational in 2012 and several European organisations are responsible for producing and providing the flood information. It provides pan-European overview maps of flood probabilities up to 15 days in advance, seasonal streamflow outlooks up to 4 months ahead, and flash-flood risk.

ECMWF runs the computational centre for EFAS, with responsibility for running the forecasts, post-processing, and hosting the EFAS information system platform.

We also run and manage the Global Flood Awareness System (GloFAS), which became a fully operational 24/7 service in 2018.

Click here for the User documentation on CEMS-Flood

CEMS-Fire in brief

At the end of 2017, ECMWF became the computational centre for the Copernicus Emergency Management Service - Fire. This activity is undertaken in collaboration with MétéoFrance.

ECMWF provides fire danger calculations from high-resolution and ensemble forecasts up to 15 days ahead on a daily basis. The data feeds into the European Forest Fire information System (EFFIS) . Twice a week and every month we also provide temperature and precipitation anomalies from the extended-range and seasonal system.

EFFIS was established to support the national authorities responsible for management of forest fires in the European Union and neighbouring countries, as well as to provide the European Commission and the European Parliament with reliable information on trends associated with these incidents.

Click here for the User documentation for CEMS-Fire