



# The Copernicus Emergency Management Service



Early warning  
and monitoring

Copernicus is an EU programme aimed at developing European information services based on satellite Earth Observation and in situ data. The Copernicus Emergency Management Service (CEMS) supports all actors involved in the management of natural or manmade disasters by providing geospatial data and images for informed decision making. CEMS constantly monitors Europe and the globe for signals of an impending disaster or evidence of one happening in real time. It immediately notifies national authorities of their findings or can be activated on-demand and offers to provide them with maps, time-series or other relevant information to better manage disaster risk. CEMS products show information about a disaster event on a scale, timeline, and perspective that only geospatial information can provide. They can examine changes to an area of Earth over a series of days, weeks, months, or years. The Copernicus Emergency Management service has two main components: On demand Mapping as well as Early Warning and Monitoring.

On-demand  
mapping



Rapid  
Mapping



Risk and Recovery  
Mapping

Early warning  
and monitoring



Floods



Fires

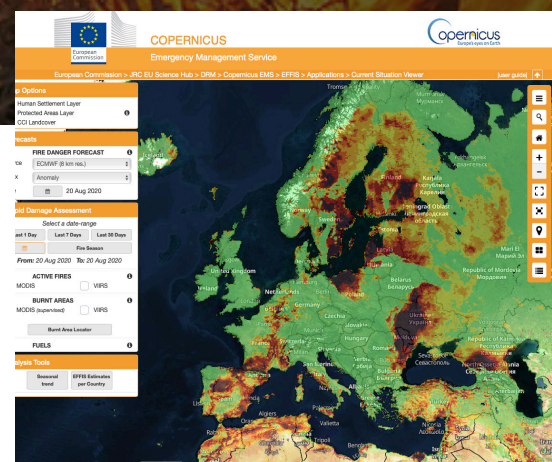


Droughts

## FIRES – EUROPEAN FOREST FIRE INFORMATION SYSTEM (EFFIS)

The **Early Warning and Monitoring** component offers critical geospatial information at European and global level through continuous observations and forecasts for floods, droughts and forest fires.<sup>3</sup> It provides continuous disaster forecasting and monitoring information to assist with preparedness and emergency response. The continuous monitoring products of this component support serve also as a basis for prevention planning and recovery during a disaster.

The **European Forest Fire Information System (EFFIS)** monitors forest fire activity in near-real time. It supports wildfire management at the national and regional level for EU member states and across the Middle East and North Africa.<sup>5</sup> EFFIS supports the services in charge of the protection of forests against fires in the EU countries and provides the European Commission services and the European Parliament with updated and reliable information on wildland fires in Europe. EFFIS is supported by the Expert Group on Forest Fires, which consists of experts from 43 countries in European, Middle East and North African countries.



Space

# Near real-time fire information and forecasts



EFFIS provides information on forest fires and their ecological impacts in the European, Middle East and North Africa regions. Fire monitoring in EFFIS encompasses the full fire cycle, comprising near-real time information services regarding the current and future fire danger forecast, active fires and burned areas, and post-fire damage assessments.

## MAIN MODULES

- Fire Danger Forecast
- Active Fire Detection
- Rapid Damage Assessment
- Fire Damage Assessment
- European Fire Database
- Seasonal Forecast
- Monthly Forecast

## APPLICATIONS

**Current situation:** meteorological fire danger maps, forecast up to 10 days +more

**Long-term monthly fire weather forecast:** Temp and rainfall anomalies for following 6 weeks

**Long-term seasonal fire weather forecast:** temperature and rainfall anomalies for the following 6 months

**Fire News:** On wildland fires in Europe

## REPORTS & PUBLICATIONS

- Annual Fire Reports
- Forest Focus Studies
- EFFIS Related Publications
- Country/Regional Wildfire Maps



EFFIS Current Situation Map



Access to Applications

## KEY FACTS

43 countries involved

**Daily fire forecasts**

**6 updates per day** on active fires & Burned Areas

Expert Group on Forest Fires (EGFF) as additional network

Fire **forecasts up to 10 days out**

## HOW TO REQUEST THE SERVICE

All the EFFIS activities of JRC are coordinated with the European Commission Directorate General for Environment (DG ENV) to reach the final users, that is, the Civil Protection and Forest Services in the countries monitored by EFFIS. 14 Services are available for users from Europe, Middle East and North African countries via filling in a service request.

<https://effis.jrc.ec.europa.eu/applications/data-request-form/>

The usage is targeted towards the Civil Protection Unit of DG ECHO, European Commission services, the European Parliament, wildfire experts, the general public as well as app developers.



<https://effis.jrc.ec.europa.eu/>

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