

The European Forest Fire Information System (EFFIS)

Towards a Global Wildfire Information System (GWIS)

Forest fires are a common component of many European ecosystems. However changes induced by human behavior (such as increased population density in some areas and rural depopulation in others), coupled with recurrent severe weather conditions are shaping fire frequency and fire intensity in Europe.

As a result, every year forest fires cause substantial losses in terms of human lives, damage to property and to the environment. Fire danger forecasts, monitoring of fire activity, assessment of damages due to fires and post fire recovery are essential tools to support the services in charge of forest fire prevention and fighting.

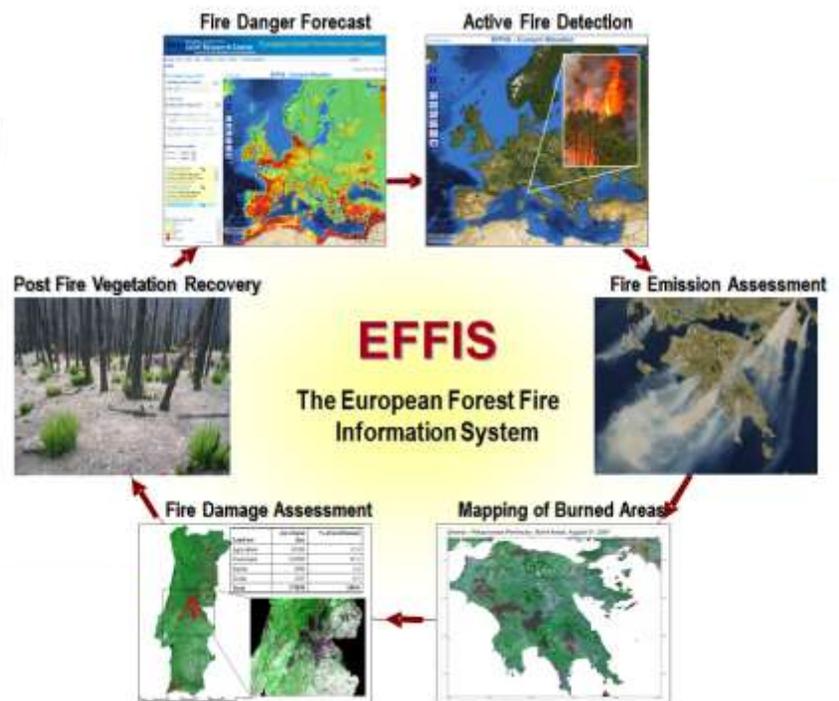


The European Forest Fire Information System (EFFIS) has been established by the European Commission Joint Research Centre and DG Environment and is running since the year 2000 to provide the European institutions and citizens with near real time harmonized information on forest fires and their effects, to facilitate international collaboration in forest fire prevention and fighting.

EFFIS enables an improved prediction of critical fire danger situations and facilitates international collaboration in forest firefighting during critical fire events.

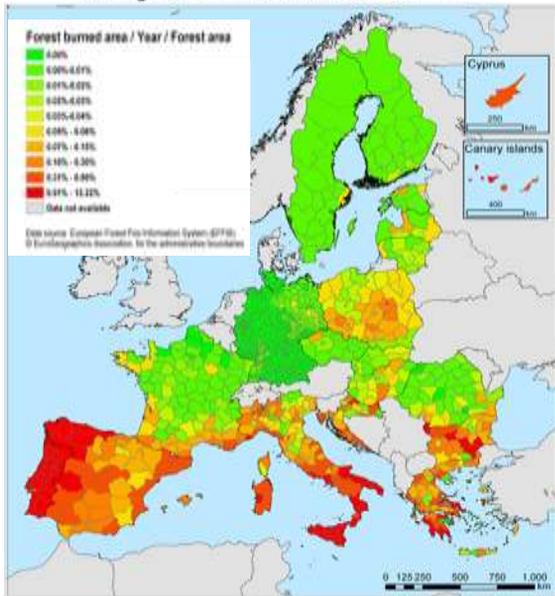
The EFFIS web application delivers fire danger predictions up to six days in advance, provides daily updated information on active fires, burned areas and fire damages in Europe.

Additional modules in EFFIS analyze post-fire effects (such as on soil erosion and greenhouse gases emissions) and make use of satellite imagery to monitor the recovery of vegetation in the burned areas.



<http://effis.jrc.ec.europa.eu>
www.jrc.ec.europa.eu

Average burned forest fraction



The European Fire Database of EFFIS shows an annual average of 65,000 forest fires occurring in Europe, burning more than 500,000 hectares of forest.

The Fire Database contains a description of almost 2 million individual fire events of the last 25 years. Country data is compiled yearly by the national fire services and is harmonized and stored by EFFIS at the JRC.



Towards a Global Wildfire Information System (GWIS)

GWIS is conceived as an extension of EFFIS at global level, and is based on the same logic and technology.

A pilot study is under development in collaboration with the European Centre for Medium Range Weather Forecast (ECMWF).

Currently the experimental portal can provide:

- Global fire danger forecasts up to 15 days, using different fire danger indices.
- Maps of hot spots from satellite imagery for global real time active fire monitoring



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