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EFFIS

The European Forest Fire Information System (EFFIS)

European Commission
Joint Research Centre – DG Environment

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

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UNECE ToS on Forest Fires, Geneva April 1st, 2009

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Outline

1. Fire situation in Europe
2. EFFIS – Definition and background
3. Current status of EFFIS
 - European Forest Fire Database
 - Fire Danger Forecast
 - Hot spot mapping
 - Rapid fire damage assessment
 - Fire damage assessment (seasonal)
 - Forest fire emissions
4. EFFIS web interfaces
5. Foreseen improvements
 - EFFIS damage assessment – further development of the existing system;
 - Fuel map of Europe;
 - Forest fire emissions;
 - Economic and social impacts of forest fires;
 - Forest fire causes determination and harmonization.

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EFFIS current status

European Forest Fire database

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EU Fire status

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EFFIS current status

EFFIS definition and background

- The European Forest Fire Information System (EFFIS) has been established by the Joint Research Centre (JRC) and the Directorate General for Environment (DG ENV) of the European Commission (EC) in close collaboration with the Member States and neighbor countries.
- It supports the services in charge of the protection of forests against fires in EU and neighbor countries, and provides the EC services and the European Parliament with information on forest fires in Europe.
- Aims at providing up-to-date, reliable information on forest fires at the European level, providing European level assessments during both pre-fire and post-fire phases, thus supporting fire prevention, preparedness, fire fighting and post-fire evaluations.
- EFFIS is intended as complementary system to national and regional systems in the countries, which provides harmonized information required for international collaboration on forest fire prevention and fighting and in cases of trans-boundary fire events.

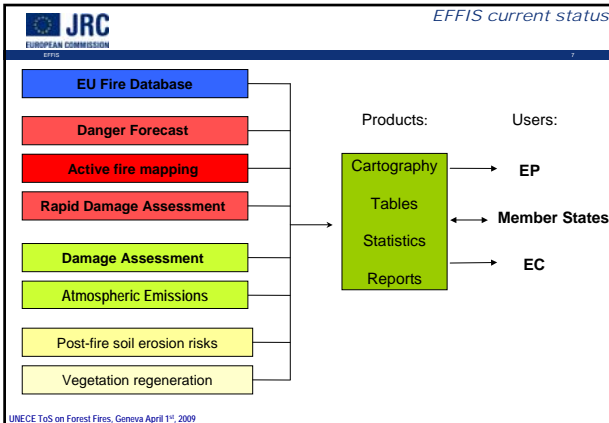
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Main steps in the development of the system

- 1992 - Regulation 2158/92 for the establishment of European Forest Information Systems in the countries.
- 1994 - Establishment of the Common Core of Information on Forest fires, and creation of the EU Database.
- 1998 – First discussions for the establishment of the European Forest Fire Information System
- 2000 – Transfer of the Common Core of forest fire data to EFFIS → EU Fire Database.
- 2000 – First pre-operation EFFIS fire campaign.
- 2002 - Community Action Plan on Civil Protection to improve cooperation in forest fire preparedness and fighting.
- 2003 – Forest Focus regulation, Official establishment of the EFFIS in text of this regulation.
- 2006 – Agreement with FAO/Silva Mediterranea for the extension of EFFIS to cover countries in this network.

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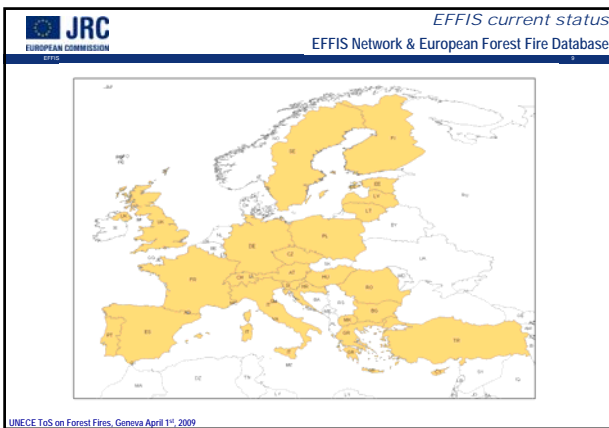
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EFFIS Network & European Forest Fire Database

Country	Joined EFFIS	Data from - to	Number of years
Portugal	2000	1985 - 2006	22
Spain	2000	1985 - 2006	22
France	2000	1985 - 2006	22
Italy	2000	1985 - 2006	22
Finland	2000	2004 - 2005	2
Germany	2000	1994 - 2006	13
Greece	2000	1985 - 2004	20
Bulgaria	2002	2006	1
Cyprus	2002	2000 - 2006	7
Romania	2002	2004 - 2005	2
Austria	2003		0
Czech Republic	2004	2004 - 2006	3
Hungary	2004	2002 - 2007	6
Latvia	2004	2004 - 2006	3
Lithuania	2004	2004 - 2006	3
Poland	2004	1993 - 2006	14
Slovenia	2004		0
Slovakia	2004	2004 - 2006	3
Sweden	2004	1996 - 2006	11
Turkey	2004	2005 - 2005	1
U. K.	2005		0
Croatia	2006	1996 - 2006	11
Estonia	2006	2005 - 2006	2
Switzerland	2006		0
Montenegro	2007		0
	2008		0

- Joint effort of national and EC services
- 26 Countries, 22-1 years
- Individual fire event records delivered yearly by MSOM
- About 1.8 million records

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European Forest Fire Database

WHEN ?

FIRE TIME

Date and Time of first alert
Date and Time of first intervention
Date and Time of fire extinction

WHERE ?

FIRE LOCATION

Country
NUTS level 3 code (province)
NUTS level 5 code (commune)

HOW ?

FIRE SIZE

Total Burned Area
Forest Burned Area
Non Forest Burned Area

WHY ?

FIRE CAUSES

Presumed cause (4 classes)

Three maps of Europe showing fire location and size. The first map shows fire locations with colored dots. The second map shows fire size with colored areas. The third map shows fire causes with colored areas.

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Main applications

A screenshot of the EFFIS website main page. The page features a header with the JRC logo and the title 'European Forest Fire Information System'. Below the header, there is a 'WELCOME TO EFFIS' section with a brief introduction. The page is divided into several sections: 'Applications' (listing various tools and services), 'CURRENT FIRE SITUATION' (providing real-time updates), 'FIRE NEWS' (recent news articles), and 'MEMBER AREA' (for registered users). The page is designed with a clean, professional layout and includes navigation menus.

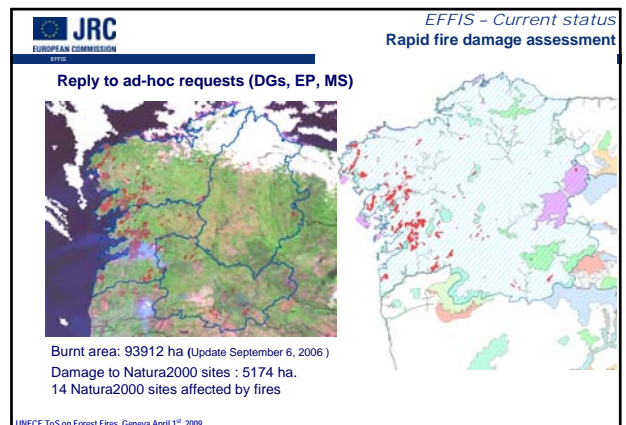
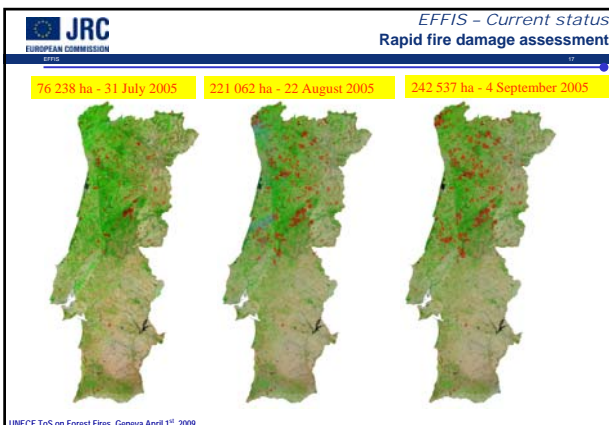
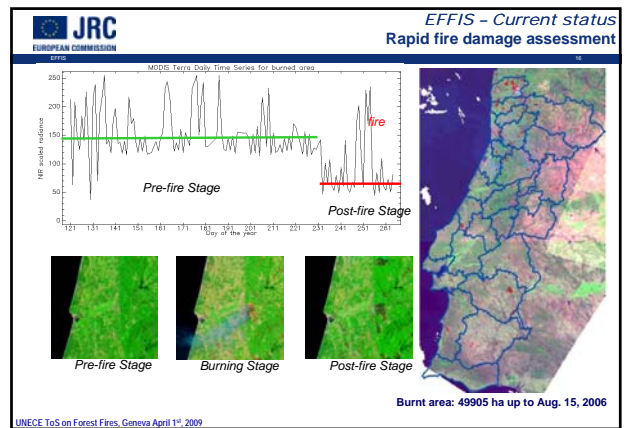
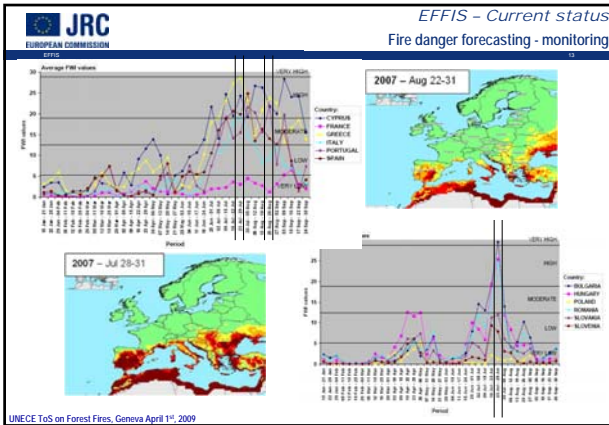
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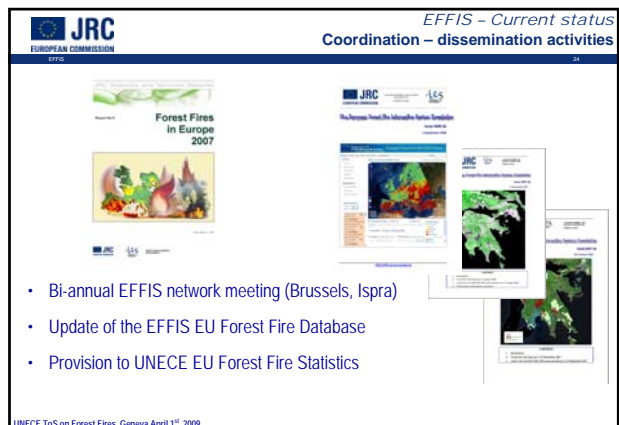
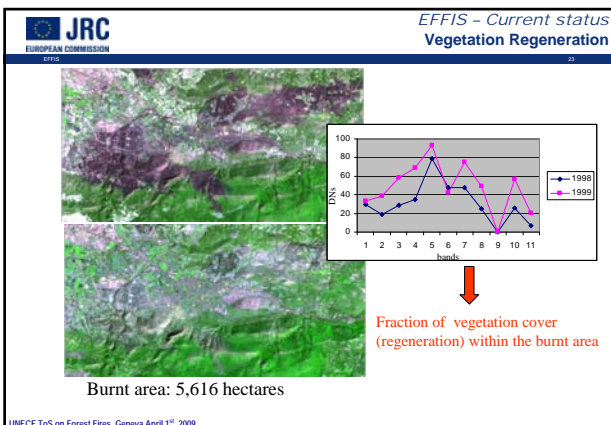
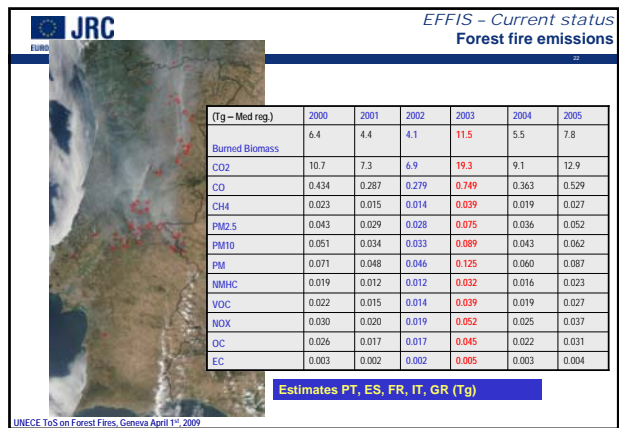
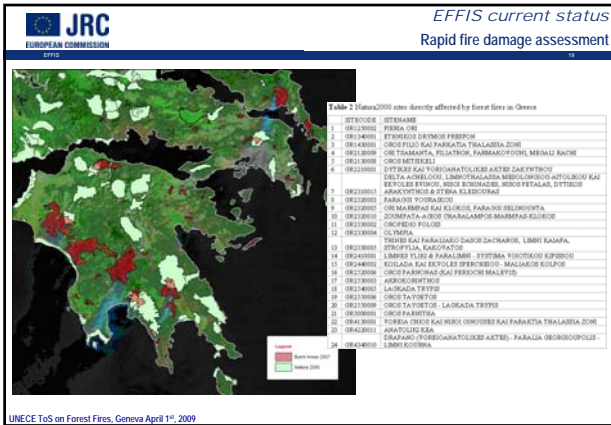
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Fire Danger Forecast

A screenshot of the EFFIS Fire Danger Forecast interface. The interface shows a map of Europe with a color-coded fire danger forecast. The map is overlaid with a grid and various data points. The interface includes a search bar, a list of applications, and a 'Fire Danger Forecast' section with a 'Daily Model' and 'Fire Danger Forecast' options. The page is designed to be user-friendly and informative, providing clear visual feedback on fire danger levels across Europe.

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The Commission is implementing the pilot project "forest protection and conservation" following the European Parliament Resolution of May 2006

Focus on the further development of the European Forest Fire Information System (EFFIS)

Tenders published 17/06/2008

- Budget of 3 million EUR and duration of 40 months, includes the development of the following modules:

1. - EFFIS rapid damage assessment (RDA) and damage assessment (DA) – further development of the existing system;
2. - Fuel map of Europe;
3. - Forest fire emissions;
4. - Forest fire causes determination and harmonization.
5. - Economic and social impacts of forest fires;

Thank you for your attention