

Agencia de Medio Ambiente y Agua & ANYWHERE

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Who we are?

Agencia de Medio Ambiente y Agua is a public agency, attached to the Regional Ministry of Environment and Spatial Planning of the Government of Andalusia (Junta de Andalucía), which provides essential services on environment and water in the region of Andalusia, particularly for the declared emergency situations. Its purpose is to conduct, by itself or through public or private subsidiary entities, activities related to protection, conservation, regeneration or improvement of environment and water.

Public Agency belonging to the andalusian government
National reference in the environmental sector
Annual turnover greater than 150 million €
More than 5.000 employees
Headquarters located in Sevilla and presence all through Andalusia region
Specially focused in environmental emergencies

Wildfires & Environmental Emergencies Department INFOCA (INcendios FOrestales Comunidad Andaluza) Human & material resources

3500 people

Main task: **Wildfires**

But also other **environmental emergencies**

Distributed **all through the region** (forest areas)

As an emblematic element of forestry policies in Andalusia, running for more than 25 years, **INFOCA Plan** against forest fires has combined actions of prevention and social participation with the enhancement of operational capacities.

Environmental Information Network Department REDIAM (Red de Información Ambiental de Andalucía)



CLIMA Subsystem-collect data from meteorological stations across the region managed by different entities (AEMET, CAPDR, CMAOT)

EFAS Hydrological data collection centre- **REDIAM** (ES) and **ELIMCO** (ES) collect historic and realtime discharge and water level data across Europe

Consortium

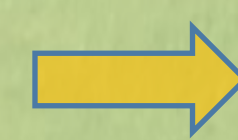
Our expertise & ANYWHERE

Tools for the analysis and monitoring of forest fires

Wildfire monitoring bulletin (weekly periodicity)

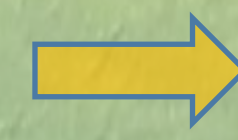
The main objective of the monitoring bulletin is sharing standardized information about fire behavior and evolution throughout the territory and along the year. This bulletin is based on monitoring sheets completed by technicians on site, describing behavior of fire in the area, meteorology and developed actions during the week before. Bulletin contents are then complemented by a summary of meteorological observations and predictions and drought indexes to provide information about availability of fuels and fire behavior.

With this information available you can support from the start decision making in sizing and distribution of resources and relations with the population and media. It will also provide information and knowledge about the influence of the climatology and meteorology in behavior, severity and extent of damage to forests by fires.



Monitoring sheet

Use of standard sheets for fire data collection by technicians, allow us to categorize and update forest fires produced each year all through andalusian territory. This sheet primarily describes the behavior of fire, both in the whole fire and in a more detailed way in the technician working area, and also the operations developed and results obtained.



Weather monitoring sheet & types of fire (daily periodicity in high-risk)

Daily information from synoptic and meso-scale models is collected to identify expected fire rates and their severity depending on the wind, atmospheric instability, condition and intensity of warm and dry air mass (continental Saharan), etc.

When occurrence of a fire with a foreseen bad evolution, it is generated a zonal map locating the incident in order to provide to the technicians onsite with information about the elements of the landscape and meteorology details which can support the evaluation and assessment of strategies and tactics to be used for incident control.



The **analysis and monitoring** of fires in a normalized context is a fundamental management tool. It serves both in the operations office and firefighting (identifying risk situations and helping fire chiefs in decision making) and prevention actions to reduce fire risk. It is a basic tool to manage knowledge since it learns from the past to improve present and future.

Foreseen ANYWHERE outcomes and tools

Products and tools for forest fires

- Validate procedures for estimating severity and risk of forest fires (historical situations)
- Integrate an automatic alert system for severity and risk of forest fires.
- Automatic identification of synoptic and meso-scale situations in large wildfire incidents (pluviometric drought, strong winds, heat waves (Saharan air layer influence), convective storms and instability, etc.
- Integration of remote sensing products and local observations in fire predictions.

Products and tools for other meteorological extreme events

- Integrate an automatic alert system for meteorological extreme events.
- Special interest in flash floods, convective storms.