



Generalitat de Catalunya
 Departament d'Interior
 Relacions Institucionals i Participació
**Direcció General de Prevenció,
 Extinció d'Incendis i Salvaments**
 Divisió Operativa
GRAF

Lo Forestalillo

Nº 114 30-01-2008

Catalan Wildfire Status Report



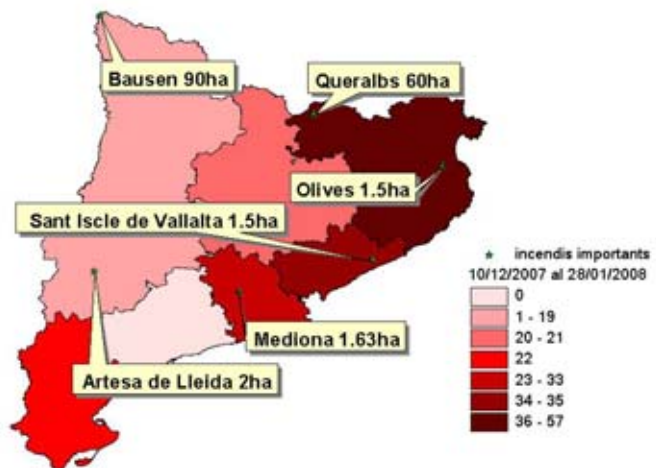
Photo: Catalan and Valencian fireman during a prescribed burning in Orientals Pyrenees.

What we had

Compared trend from the beginning of year until:

	28/01/2007	28/01/2008
Nº services (VA+VU+VF)	318	258
Surface (ha)	16.05	11.18

(*) Provisional surface pending validation



Number of services (VA+VU+VF) since 10/12/07 until 28/01/0 and services >2ha.





Description of the situation

Drought Evolution (live and coarse dead fuels availability)

Rainfall since 2nd January to 8th January felt with a regular distribution all over the country, but with different intensities. Major precipitations were concentrated on the northern third of Catalonia, affecting Girona and Lleida regions. Consequently, Index Drought Code show lower values than 2007 in these areas and in Terres de l'Ebre, while drought is still pronounced in the center of the country (Plana de Lleida and Depressió Central).



Fig. 2. Accumulated (Drought Code index) of 23/01/07.

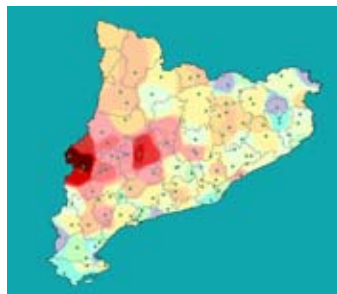


Fig.3. Accumulated (Drought Code index) of 14/01/08.

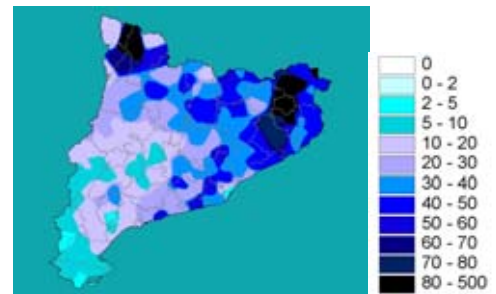


Fig.4. Map of accumulated precipitation between 02/01/08 and 08/01/08

Fire services trend (VA, VU y VF)

Wind episodes have increased the number of forestry services in general, but specifically in Girona (Graph 1). The most important forest fire at the end of 2007 was in Queralbs, and at the beginning of 2008 in Bausen.

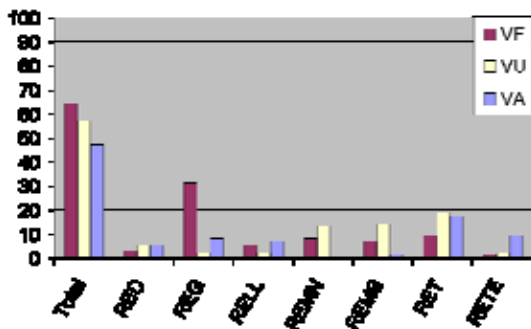


Chart 1. Total services and region services according to the type of vegetation involved, for the last week 13/01/08 al 28/01/08.

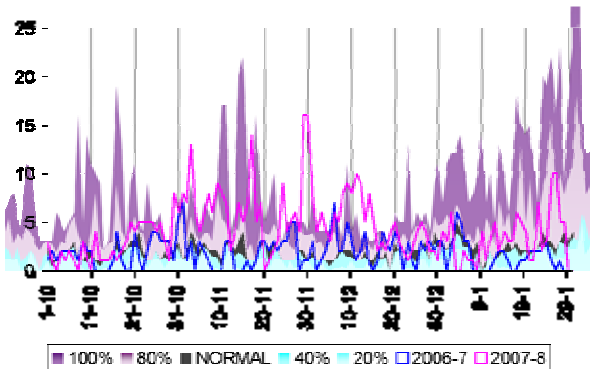


Chart 2. Mbs13 (services of forest vegetation) from 01/10/07 until 28/01/08, compared with the same period in 2006/7. It also compares the developments in the years with the number of normal services (gray, the percentiles 50 per cent), lower than normal (blue) and maxima (lilac) for the last 5 years.





Per regions

REG	<p>Els darrers episodis de vent de mestral, han fet baixar les humitats i la temperatura de rosada, posant el combustible fi i mig disponible. Cal destacar l'incendi de Queralbs (60ha) que mostra la sequera de les àrees de muntanya.</p> <p>Què es preveu La situació de vents de mestral i ponent, que s'allarga fins diumenge, es tradueix en tramuntana a la regió, afectant especialment a la zona de l'Alt Empordà. Hi ha possibilitats de precipitacions als Pirineus durant el dissabte.</p>
REMN	<p>L'activitat en aquesta regió es poc intensiva i no s'observa cap incendi destacable.</p> <p>Què es preveu La situació de vent sembla que afectarà en menor mesura en aquesta regió i es preveu que el mestral sigui moderat. Durant l'episodi de vent la direcció d'aquest anirà oscil·lant d'oest a nord.</p>
REMS	<p>L'activitat en aquesta regió es poc intensiva tot hi n'hi ha cap i no s'observa cap servei destacable.</p> <p>Què es preveu La situació de vent sembla que afectarà en menor mesura en aquesta regió i es preveu que el mestral sigui moderat. Durant l'episodi de vent la direcció d'aquest anirà oscil·lant d'oest a nord.</p>
REC	<p>L'activitat en aquesta regió es poc intensiva tot hi n'hi ha cap i no s'observa cap servei destacable</p> <p>Què es preveu Es mantindrà la situació d'oest fins diumenge amb probabilitat de precipitacions al nord de la regió de cara a dissabte. El mestral i el ponent tindran velocitats moderades a la regió.</p>
RETE	<p>Els darrers episodis de vent d'oest ha fet baixar les humitats i la temperatura de rosada, posant el combustible fi i mig disponible. Les humitats no es recuperen aquests dies.</p> <p>Què es preveu Aquesta regió serà una de les més afectades per l'episodi de vent que es mantindrà fins diumenge. Caldrà estar al cas dels possibles incendis que puguin sortir sobretot de cara a dissabte.</p>
RET	<p>Els darrers episodis de vent d'oest ha fet baixar les humitats i la temperatura de rosada, posant el combustible fi i mig disponible. Les humitats no es recuperen aquestes dies.</p> <p>Què es preveu Igual que a la RETE aquesta regió serà on les intensitats de vent seran majors. Caldrà estar al cas dels possibles incendis que puguin sortir sobretot de cara a dissabte.</p>
RELL	<p>Les humitats dels darrers dies no han recuperat i per tant el combustible fi i mig està disponible. D'aquests darrers dies cal destacar l'incendi a Bausen del dia 28 i 29 de gener que mostra clarament la sequera acumulada.</p> <p>Què es preveu Es mantindrà la situació d'oest fins al diumenge i hi ha la possibilitat de precipitacions al Pirineu i Pre-Pirineu de cara al cap de setmana.</p>

Grau d'activitat

Baixa Normal Mitja Important Crítica Gran incendi



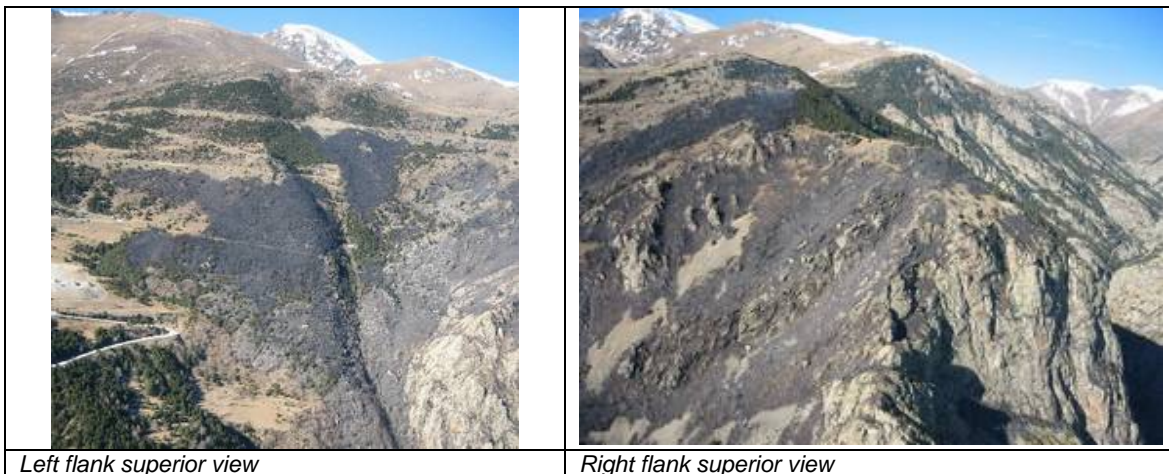
Important information

3.1.- Forest fire in Queralbs

Forest fire in Queralbs started at dawn from 30th to 31th December 2007. A notice was received at 03:23h, and the origin of forest fire was situated near train's line to Núria (Cremallera). Meteorological situation was characterized by a general north wind, cold and drought, which in interaction with Puigmal and Nuria's mountains generated turbulences and backwind. From Queralbs to Fontalba refuge, backwinds pushed fire up-slope. When fire arrived to pasture areas, near the refuge, the general wind stopped the head, permitting flanks openings.

Refuge's access path was used to stabilize left flank with a hose line. The queue was stopped at funicular's access and railway access with hose lines; nevertheless, this was a risk area due to stone fall. From the top of the mountain, we acceded to the right flank using manual tools and some aerial discharges to put out active points. This flank rested blocked by wind and Oratori's area rocks. At the top, general wind from N-NW stopped fire propagation.

About 60 hectares were burnt during this forest fire, and 20 BRP, 2 GRAF units, 2 HB, 1 AVA and 1 CCA worked till fire stabilization.



3.2.- Operative exchanges of prescribes burnings in pastures

During January, exchanges between Catalan, French and Valencian firemen took place in the Pyrenees for a workshop related with prescribed burnings of pastures. These exchanges are possible thanks to DGPEIS participation in INTERREG IIIb European Project, based on use of fire as a tool management. In this project, French forest managers and firemen, the University and Portuguese forest managers also participate.

Collaboration with forest managers is a good chance to introduce knowledge about fire as a tool management, and to practice manoeuvres which will be used during forest fire campaign (back fire, burn out, perimeters definition,...).



The next points are challenges for firemen interested on learning and exchanging experiences:

- Accidental orography
- Differential warming dynamics on sunny and shady slopes
- Different degree of fuel availability (pastures, drought brush, pine forest, beech forest...)
- Team coordination between fire brigades coming from different countries.



Working in another country, with less responsibility and tensions, lets us to estimate fuel state and to extrapolate the real risk. During this workshop, we have observed that in the northern side of Oriental Pyrenees there is a 2-years drought, while in the southern side there is a 3-years drought. In the northern side, torrents start to loose water, while in the other side, this situation is frequent. Vegetation hydric stress is higher that expected. Normally, during vegetative break, tissues rest without water to prevent them freezing. However, this time humidity is lower due to lack of rainfall.

There is no snow on the southern side. Elevation snow in upon 2000m at Canigou, and the Costabona seems to be in April conditions. *Gentiana lutea* is flowering, which proves drought and cold conditions in the Pyrenees.

The next participants of these exchanges will inform about news.

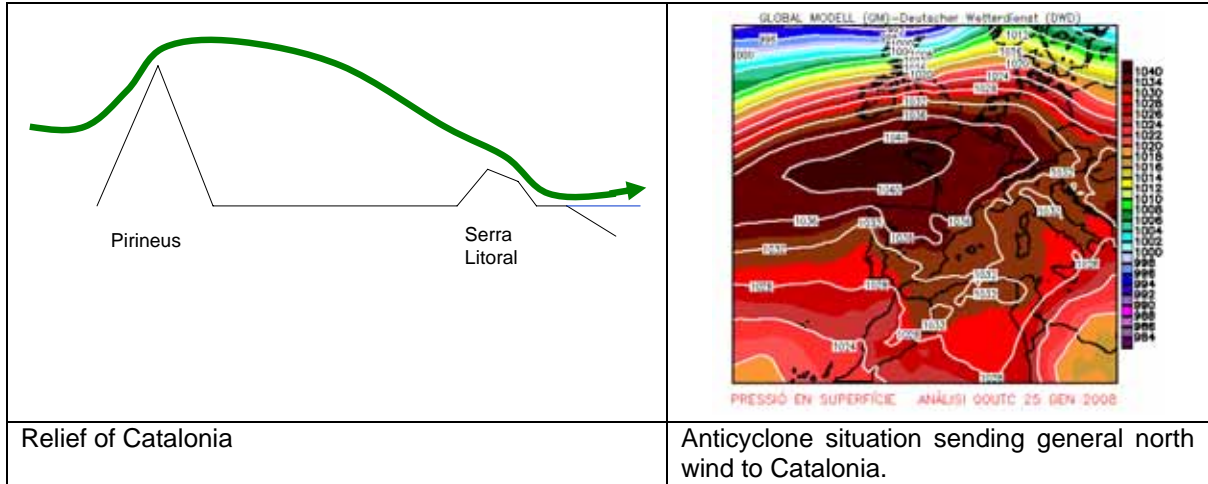
3.3.- How synoptic general situation affects to the territory?

In Catalonia, synoptic situations increase forest fire risk, and facilitates the origin of a huge forest fire. These situations come from south, north and west, and their affection is situated in different sites of the territory, depending on the synoptic situation.

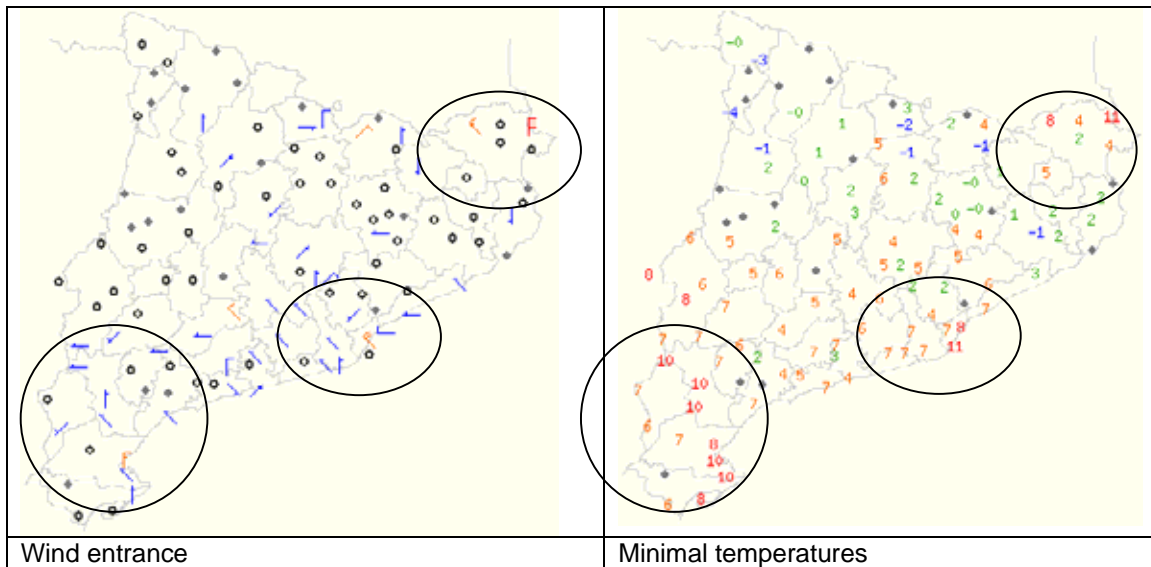
Normally, to explain synoptic situation, we use isobaric maps at different elevations, where we can observe anticyclones and depression distribution. This indicates which general wind is present in the territory. In this article, effects of synoptic situation at European and peninsular scale on our country will be explained.

Normally, we use images as right-map to explain synoptic situation which involve risk in Catalonia. These images are very general and difficult to extrapolate to relief level. Left drawing shows a schema of Catalonian relief; at left, Pyrenees, and at right Littoral Mountains. Green line indicates the movement of north wind when coming from Europe and crashes with Pyrenees.





In Catalonia, this is translated as:



These two maps show how north wind entering to Catalonia affects to certain sites of the territory. Ebre's Canal is a wind exit, which have an effect on temperatures along this Canal. The same situation is repeated at the north extreme (Alt Empordà) and in central area (Llobregat). In these three sites, minimal temperatures go from 8 and 10 °C, and the direction and sense of wind are the same. This way, from a European synoptic situation, we can have a Catalan situation.