



Hard and Intense Episode



Fire operations at La Donzell Forest Fire (07/17/09). Burn out tactics on stubbles field.

What we got?

Compared trend from the beginning of the year until:

	07/30/2008	07/30/2009
N. fires	2.688	4.037
(VA+VU+VF)		
Area (ha)	694,87	9.158,77

PROVISIONAL DATA WAITING FOR VALORATION

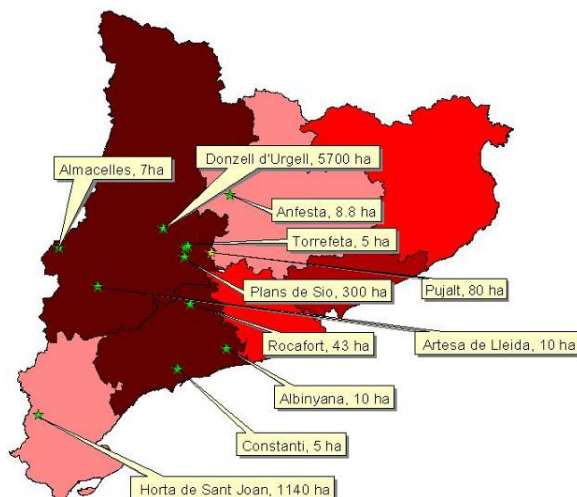


Fig 1 Number of fires (VA+VU+VF) from 07/04/09 to 07/30/09, larger than >1ha..





Description of the situation

Drought Evolution (Availability of live fuel and coarse dead fuel)

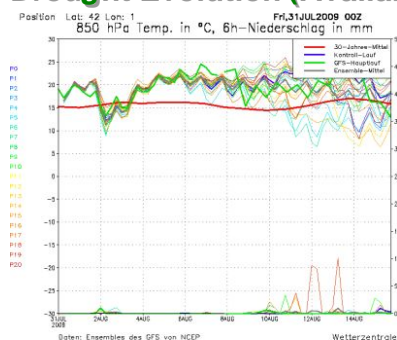


Fig. 2 P and T forecast since 08/14/09.
 (Source www.wetterzentrale.com)

The last heat wave of south episode caused an important coarse fuel drought at north extreme (Alt Empordà), south extreme (Terra Alta, Ports) and northern part of La Noguera.

Meteorological models show a new powerful and hard south heat wave for next week, reaching up to central Europe. It is going to be necessary a nocturnal moisture monitoring to value that heat wave and also consider moisture content of fine fuels during night as a potential active spot fires. Mediterranean territory keeps on accumulating drought rate on live fuels, mostly on Tarragona and Costa Brava.

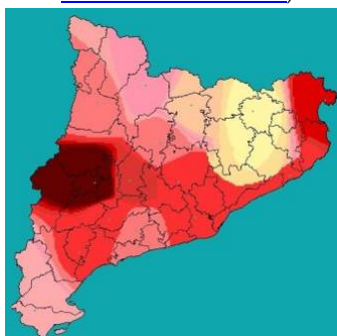


Fig. 3 Accumulated drought (Drought Code Index) of 07/30/03.

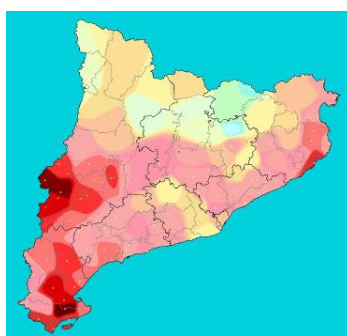


Fig. 4 Accumulated drought (Drought Code Index) of 07/27/09.

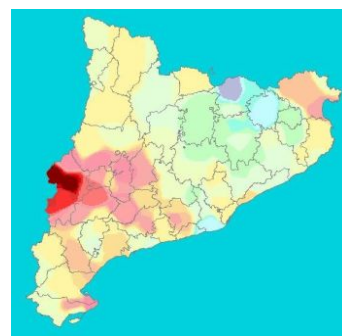
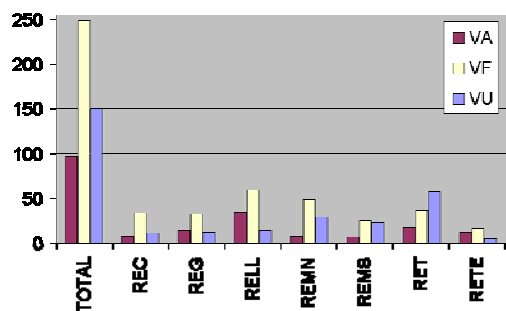


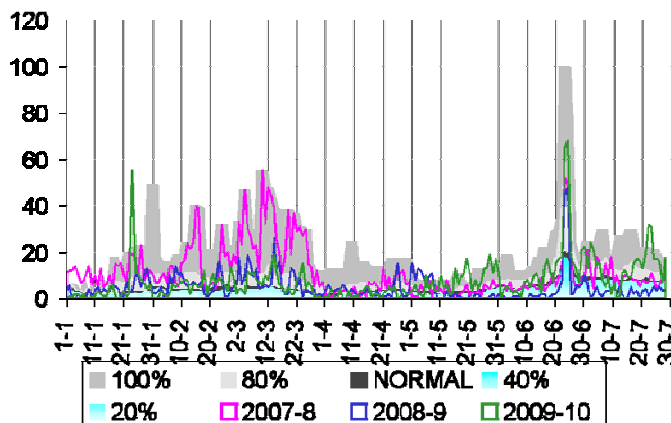
Fig. 5 Accumulated drought (Drought Code Index) of 07/27/08.

Fire Services Trend (VA, VU and VF)



Plot 1. Total services and region services according to the type of vegetation involved from 07/17/09 to 07/30/09.

Plot 1: Gives us a general increase of activity, especially as an important increase of VF at all the regions and VU at RET.



Graph 2. Fire Index Mbs13 (services in forest vegetation) from 01/01/09 until 07/30/09, compared by the same period in 2008/9 and 2007/8. Trends over time and number of normal services (grey, 50% percentile) less than normal services (cyan) and maximum services (lilac) for the last 7 years..





Por regiones

REG

Se incrementa la sequía acumulada en la zona de la Costa Brava y la disponibilidad de los combustibles muertos en la zona del Cap de Creus para el viento y falta de recuperación de humedad de los últimos días.

Qué se prevé La nueva entrada de sur implicará días de no recuperación de humedad nocturna y mantendrá los niveles de sequía acumulados. Hay que estar atentos a las lluvias de los frentes que puedan llegar.

REMN

Los últimos días ha aumentado la sequía en la zona del Maresme y Valleses, la falta de lluvias y las altas temperaturas han acelerado este proceso.

Qué se prevé El bochorno será intenso a nivel de costa, pero en el interior de los Valleses debido al viento de sur, tendremos altas temperaturas y la baja humedad mantendrán el nivel de secada.

REMS

La parte sur de la región va acumulando sequía de manera progresiva, sobre todo la zona del Penedès i Garraf. La Anoia ha entrado de pleno en el proceso de cosecha del cereal.

Qué se prevé Seguirá aumentando la sequía con la nueva entrada de sur y hay que prever una mayor actividad de fuegos en las zonas cerealísticas.

REC

La zona sur de la región está acumulando sequía de manera intensa, hay que estar atentos especialmente en el Bages y sur de Solsonès porque interaccionará el viento de sur con la entrada de las marinadas (ejes de Cardener y Llobregat). El incendio de Pujalt es el actual referente de comportamiento de la zona.

Qué se prevé El paso de frentes implicará inestabilidad y comportamientos erráticos de los fuegos. El sur reforzará marinadas y topográficos de grandes valles. Hay que hacer el seguimiento de las actividades de cereal.

RETE

Los Ports, Montsià y la Ribera son las zonas que han sufrido más el último episodio de sur, aumentando el nivel de sequía y, por lo tanto, ya hay posibilidad de ver comportamientos de fuego más intensos. El incendio de Horta de Sant Joan ha mostrado comportamientos intensos, fuegos de copas y focos secundarios incluso de noche.

Qué se prevé no está prevista demasiada agua en los pasos de frente, habrá que hacer el seguimiento de rayos porque el combustible grueso está disponible para mantenerlos unos días.

RET

Aumento generalizado de la sequía en los principales macizos de la región, como Llaberia-Vandellòs, Montsant y el Montmell. El incendio de Rocafort de Queralt ya marca pautas de comportamientos intensos.

Qué se prevé Hace falta estar atentos a las zonas de cereales de la Conca de Barberà y al proceso de secado del Priorat, la entrada de sur que se prevé reforzará los vientos de marinada en ejes norte-sur.

RELL

La zona de la Plana mantiene la actividad de cereal y ha incrementado la sequía de la zona forestal, los incendios de La Donzell d'Urgell y Plans de Sió del mismo día 17 han mostrado los comportamientos del fuego en estas masas forestales dentro del mosaico agrícola.

Qué se prevé La nueva entrada de sur seguirá afectando las zonas de los Montsecs, Comiols y los contrafuertes del Prepirineo, sobre todo se refuerzan los vientos de los grandes valles del Segre y las Nogueras. Hay que prestar especial atención en las zonas forestales de los alrededores de la Plana, tanto de Garrigues y sur del Segrià, como de los límites con la REC i la REMS

Grado de actividad

Baja
 Normal
 Media
 Importante
 Crítica
 Gran incendio

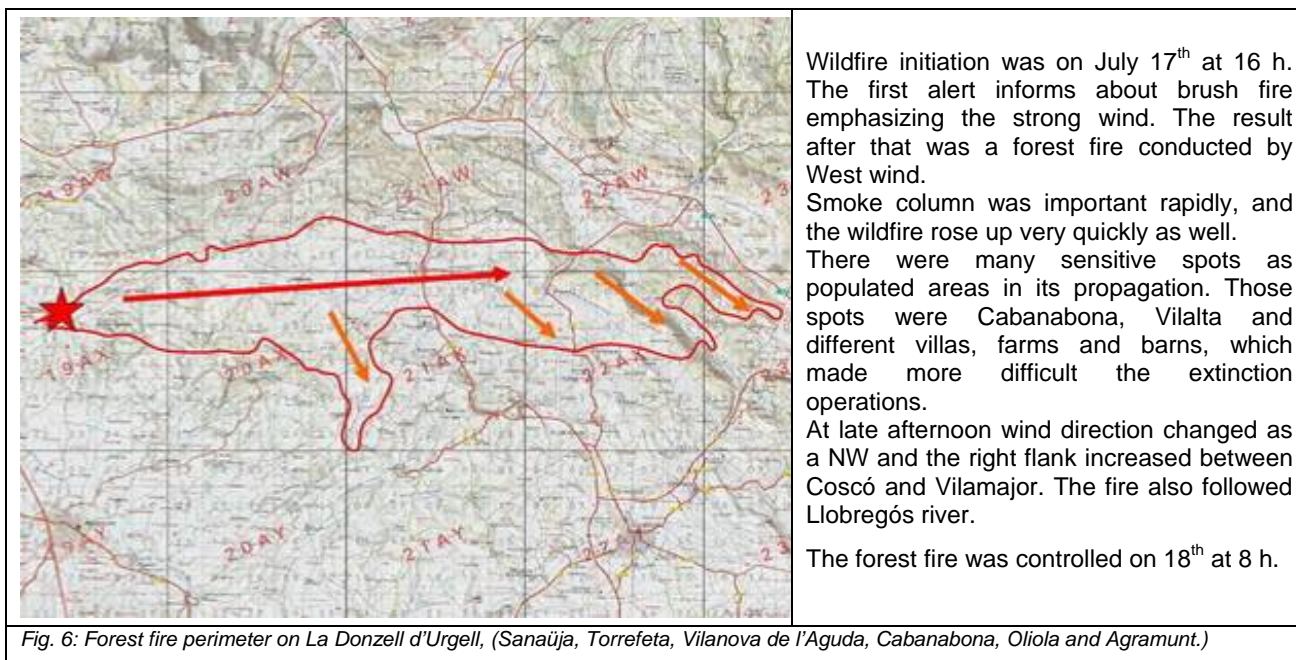




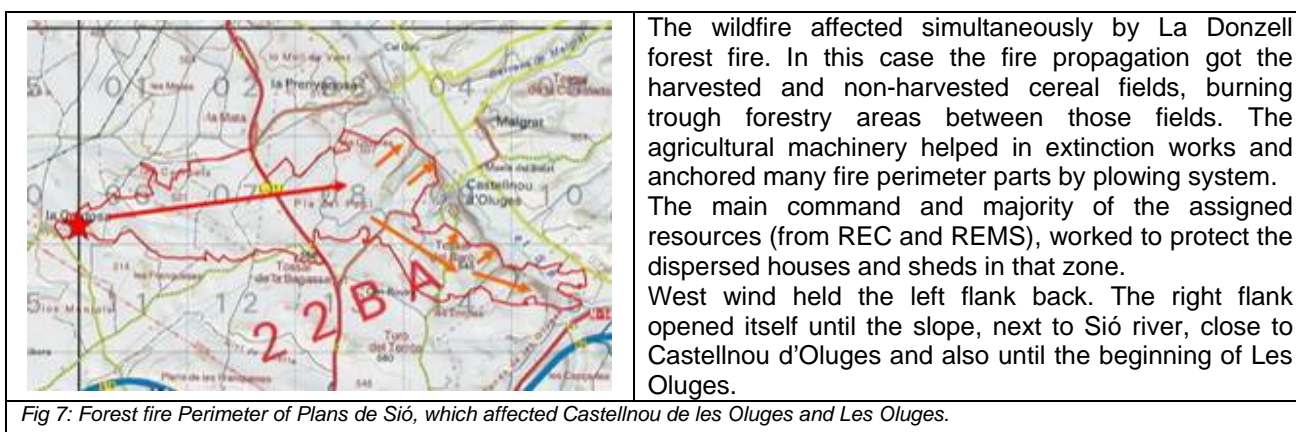
Aspectos más importantes

3.1. Last forest fire summary

07/17/09 La Donzell d'Urgell - Agramunt (RELL), 5700 ha agricultural vegetation.



07/17/09 Plans de Sió (RELL), 314 ha agricultural vegetation and dry oak forest (*Quercus faginea*)



07/20/09 Horta de Sant Joan (RETÉ), 1140 ha agricultural vegetation and forestry vegetation (*Pinus nigra*, *P. halepensis* y *Quercus ilex*)





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

Subdirecció General Operativa
 Divisió de Grups Especials
 Àrea GRAF

From UT GRAF we won't divulge any analysis and either extract any operative conclusions of this forest fire since the "secret indictment" will be concluded. Once we could publish the technical report of Firefighters, which it's going on, we'll explain properly as we have done always and others fire departments have done in same cases.

Thank you very much for your comprehension and respect about this legal proceeding, and also your contribution to develop it in its natural rate.

23/07/09 Rocafort de Queralt 49,1 ha agricultural vegetation.

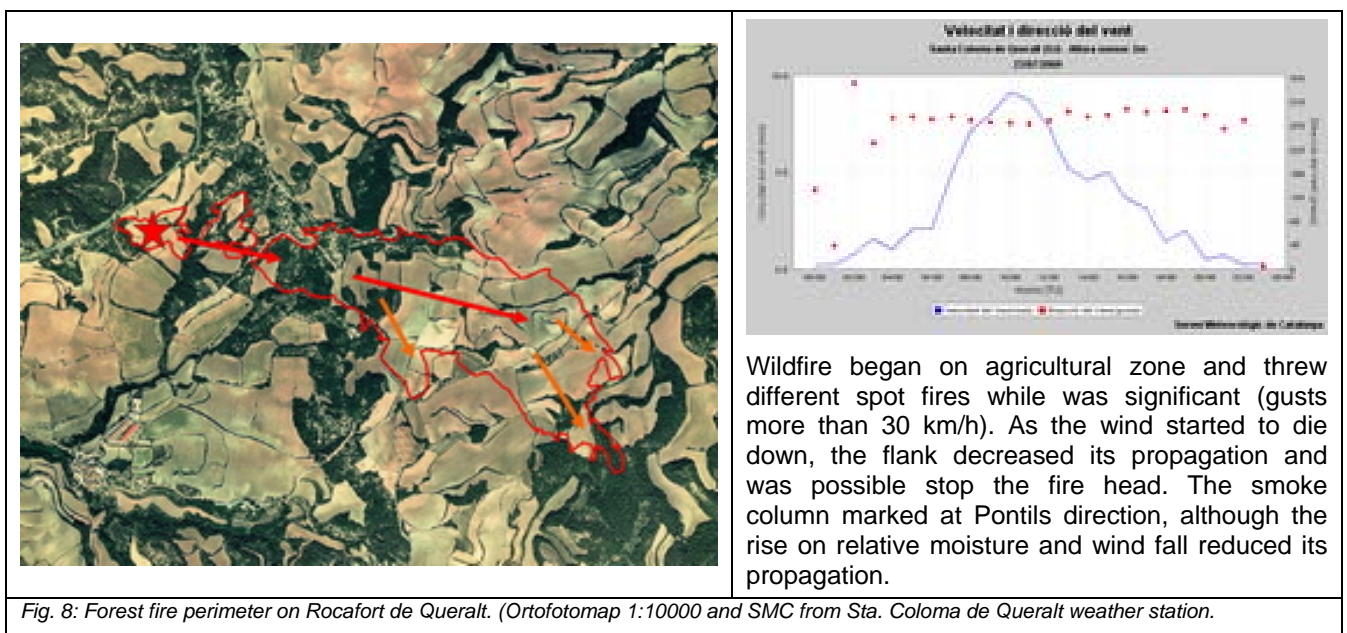


Fig. 8: Forest fire perimeter on Rocafort de Queralt. (Ortofotomap 1:10000 and SMC from Sta. Coloma de Queralt weather station.)

24/07/09 Pujalt (REC), 90ha agricultural vegetation

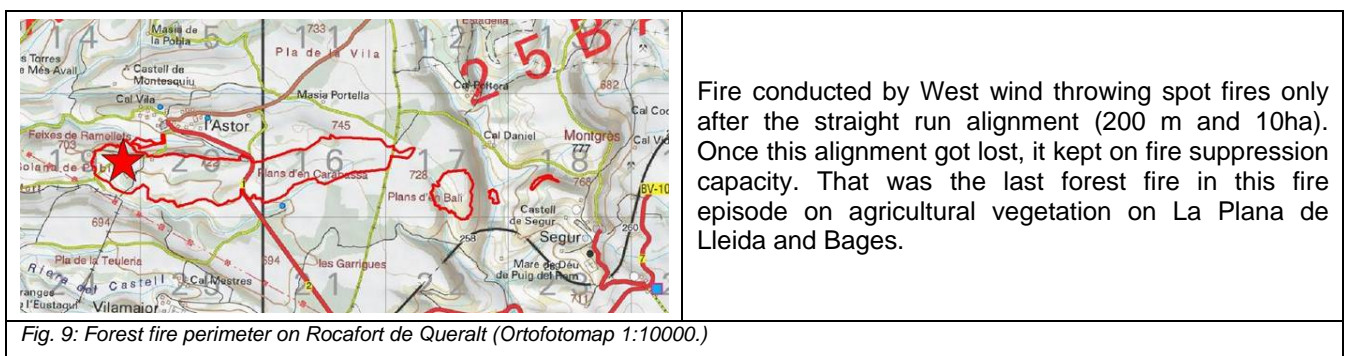


Fig. 9: Forest fire perimeter on Rocafort de Queralt (Ortofotomap 1:10000.)





3.2. Firestorm in Iberian Peninsula.

The last South wave in July (from 20th to 26th) left an important forest fire trace at all Mediterranean region.

The Iberian Peninsula has resulted specially affected by violent fires in extreme weather conditions. Also Corsica and Sardinia islands have suffered important forest fires.

Next tables and maps show approximated data and localization of the last fire episode. Check the last heat wave development in temperature/geopotential altitude maps (850hPa). It details July 21st, 23rd, 25th and 27th days.



Fig. 10: Iberian Peninsula significant forest fires localization.

Table 1: Iberian Peninsula significant forest fires.

Província	Indret	Data inici	Ha afectades	Observacions
Teruel	<i>Cañizar del Olivar, Fuentespalda</i>	21/07/2009		
	<i>Alloza, Los Olmos y Corbalán-Cedrillos</i>	22/07/2009	12.000	1 víctima bomber
	<i>Aliaga</i>	22/07/2009		
Tarragona	<i>Horta de Sant Joan</i>	20/07/2009	1.200	5 víctimes bombers
Cuenca	<i>Poyatos</i>	21/07/2008	1.850	
Almeria	<i>Mojácar</i>	23/07/2009	2.600	
Cáceres	<i>Las Hurdes</i>	25/07/2009	3.000	
Castelló	<i>Segorbe, Pedreguer, Onda</i>	23/07/2009	1.180	
Avila	<i>Valle del Tiétar</i>	28/07/2009	5.000	2 víctimes (1 civil, 1 tècnic TRAGSA)



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

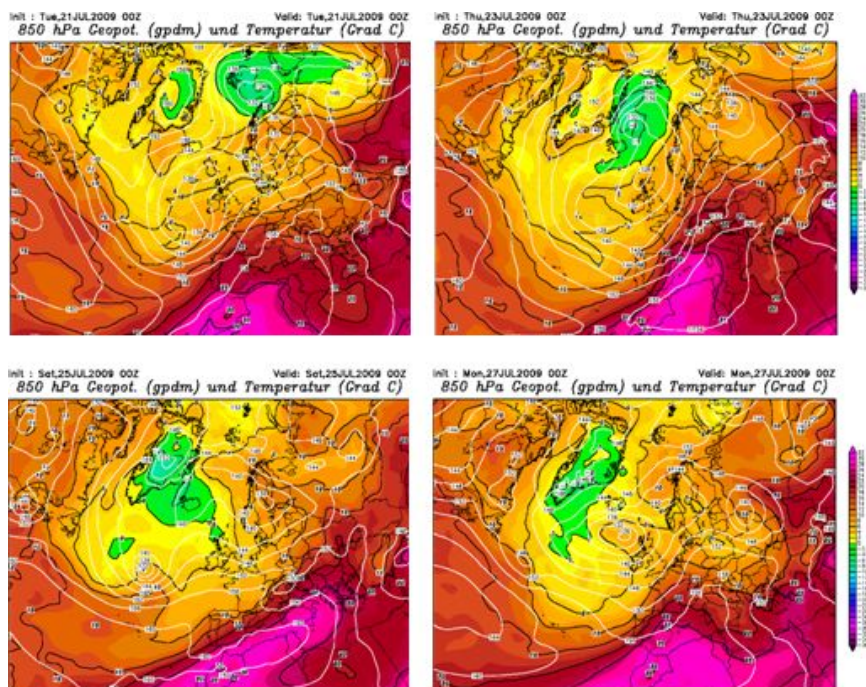


Fig. 11: Heat wave tendency (850 hPa)



Fig. 12: Significant forest fires localization on Mediterranean shore.

Table 2: Important forest fires out of Iberian Peninsula.

País	Indret	Data inici	Ha afectades	Observacions
França	Corsega	23/07/2009	6.000	
	Marsella	23/07/2009	1.100	
Itàlia	Sardenya	23/07/2009	25.000	2 víctimes civils





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

3.3. From Paper to Reality. The academic formation of forest engineers in Portugal

Marta Mendes – degree in Geography and **António Estevens** – degree in Forest Engineering

In the last years Portugal was affected by forest fires of great dimensions and its being necessary an reflection of the competent entities, public administration and civil society about the methods and organization during the combat of wildfires. It was reached the conclusion that would be necessary modify the organization of National System of Defesa de la Floresta Contra Incendios through the clarification of competences of the several intervening entities, the modification to appropriate legislation and above all to bet in the professional formation.

In the need of filling this gap was being created the course of technological specialization in Forest Defense against Wildfires at the Agriculture College of Coimbra that checks competences for operational planning and executes concrete actions of prevention and combat forest fires. These actions are through the knowledge of techniques of preventive silviculture, pré-suppression, initial attack, extended attack, ground control and post-fire rehabilitation. This course allows a complete practical formation allowing the contact with different entities to know the reality of forest fires to ensure a better strategy of the extinction means. This practical formation are prescribed fire and indirect attack with Gaufo (Grupo de análise e uso do fogo); formation about the use of chain-saws and brush cutters at Center of Operations and Forest Techniques in Lousã; in direct attack in the National School of Firemen and in pré-suppression, initial attack and ground control with specialized Chilean firemen in first intervention to render service to Afocelca.

Besides this practical contact with fire management this formation enables us to work in other areas such as regeneration, maintenance and forest exploration and operations of maintenance of infrastructures of DFCI, namely, strips of fuel administration, roads and water points. This course has a practical plenty component but the main gap is the lack of study of fire behavior models, the lack use of programs for simulation the fire behavior and the lack of an appropriate geographical information system according our necessities about detection and prediction of forest fires.

In the end of the course is necessary the accomplishment of 600 hours of formation in work context. This formation takes place in the months of summer, during the critical fire period, in several linked institutions to DFCI. After having concluded the course the technicians are qualified to carry out several professional functions in the different tied institutions to DFCI because they have all the technical knowledge that is necessary to integrate the national system.



Foto d'una crema controlada

