



Generalitat de Catalunya
**Departament
d'Interior**

bombers
■ ■ ■ ■

Bioeconomy and wildfires

A fire-fighter approach



CC: New emergency management scenario

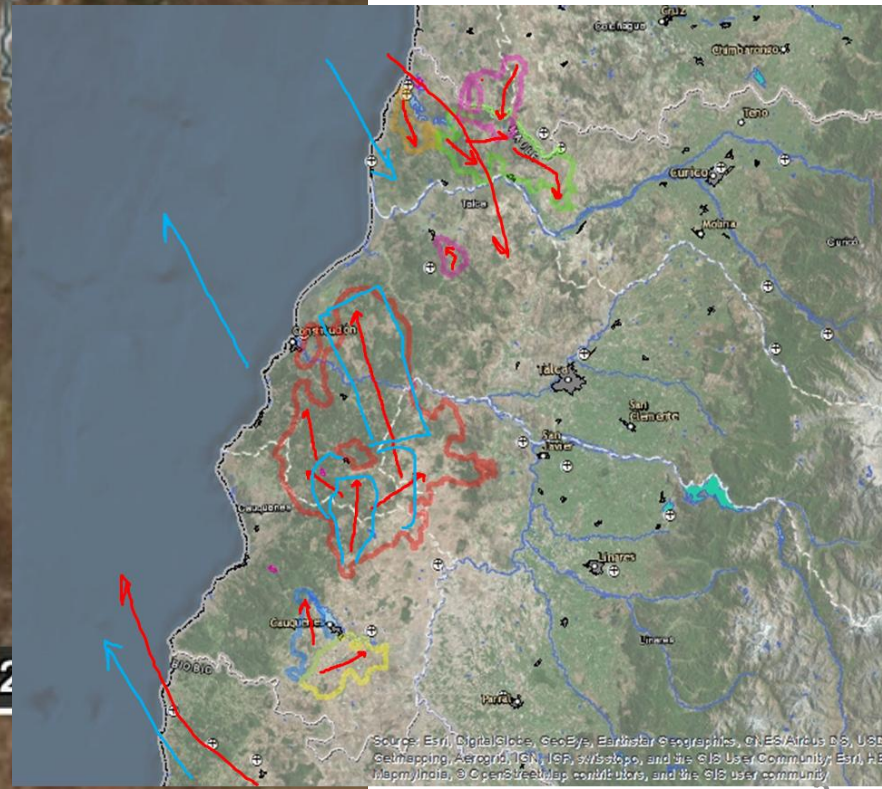
- Solsonès 1998: 19.000ha en 12h (1.500ha/h)
 - 90's Mitjana de 10.000 ha/dia crític
 - 00's Mitjana de 1.700ha/dia crític
- La Jonquera 2012: 8.000ha en 7h (1.100ha/h), 7.7km/h





CC: New emergency management scenario

- Feb Chile: Las Máquinas 100.000 ha/dia (11m)
- June Portugal: Pedrogao Grande 18km/21min = 70km/h
- Set-oct California and Portugal



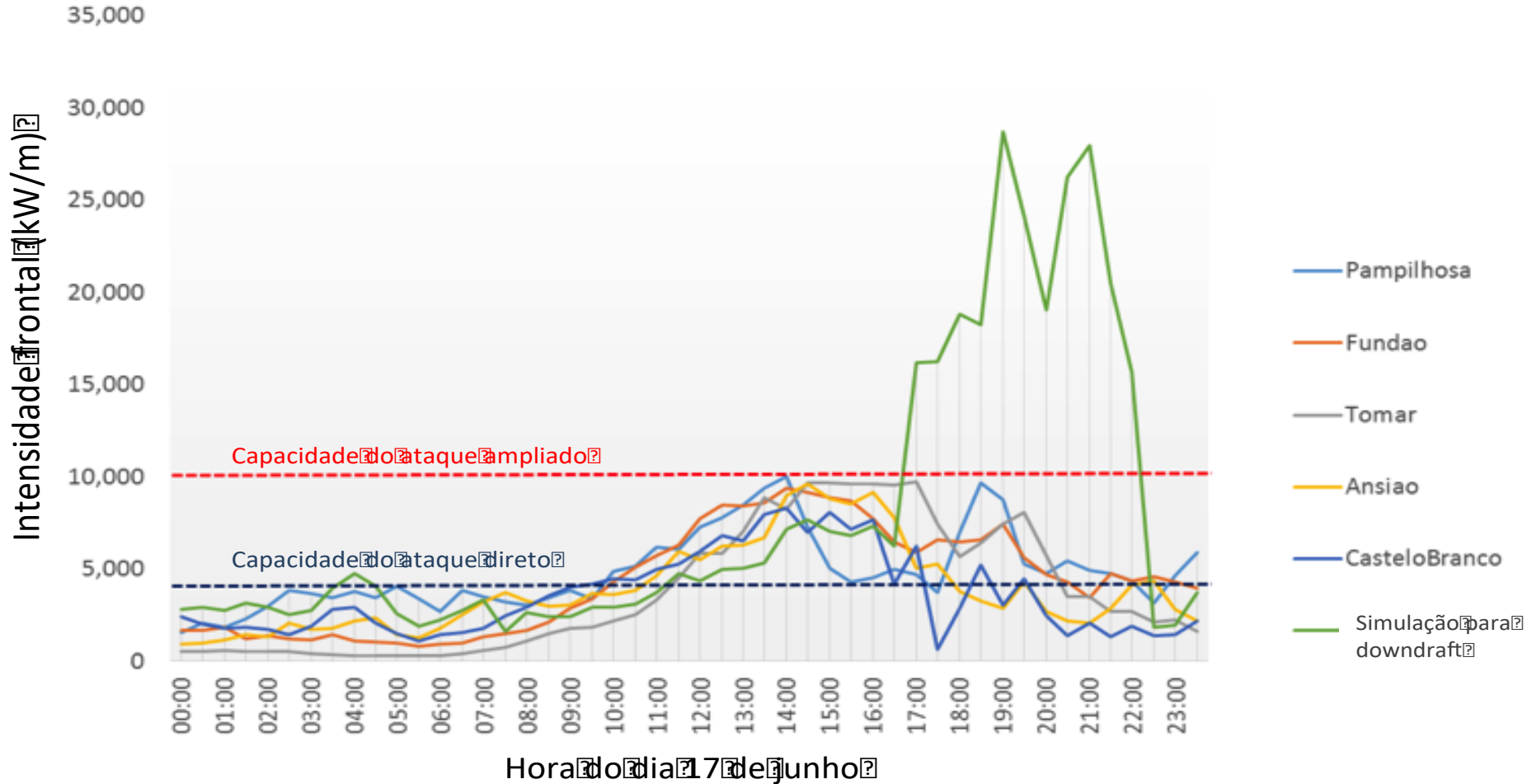
CC: New emergency management scenario



CC: New emergency management scenario

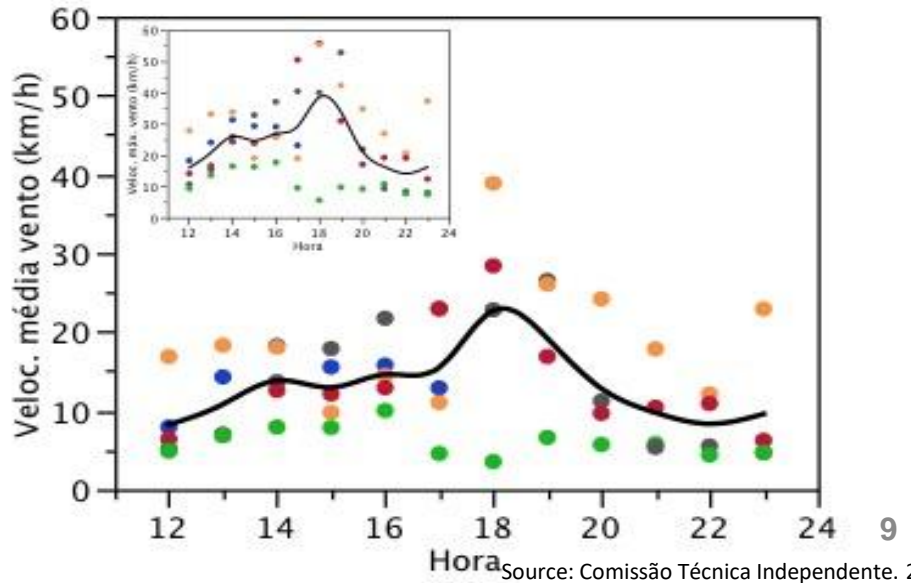
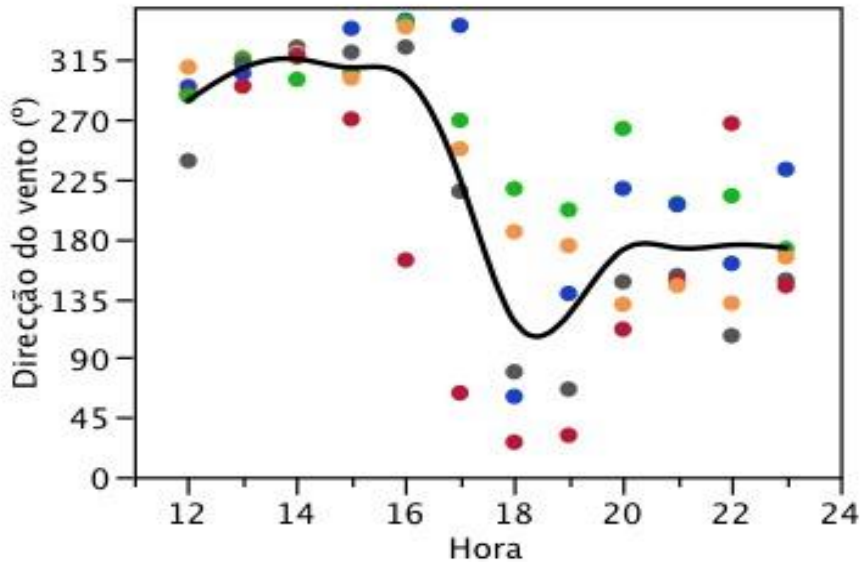
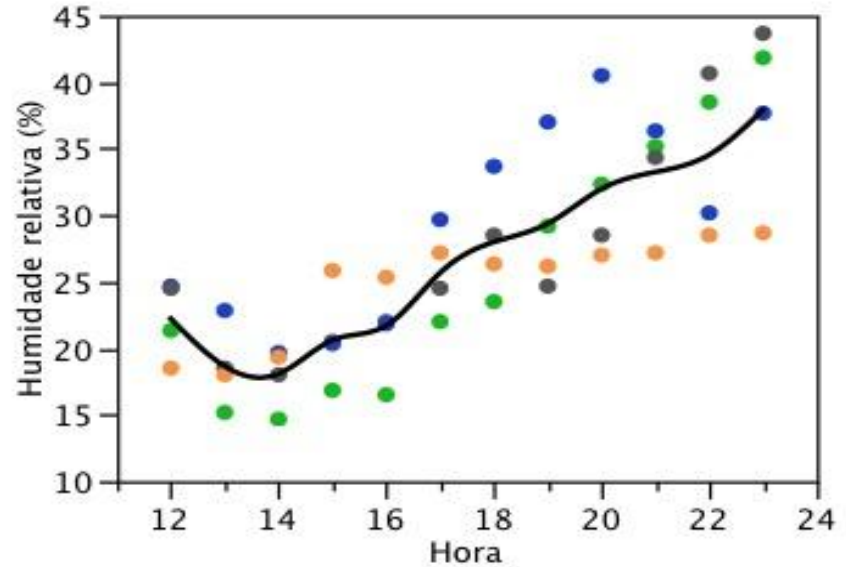
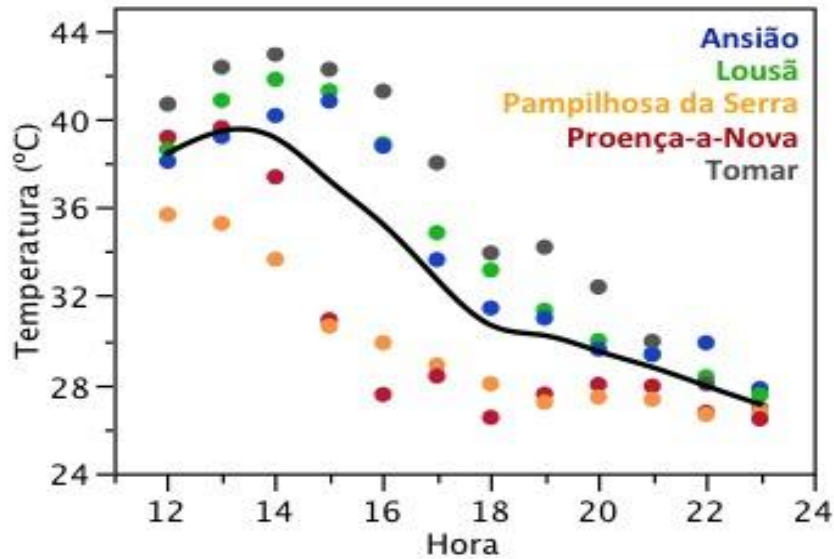


CC: New emergency management scenario



Source: Comissão Técnica Independente. 2018b. Análise e apuramento dos factos relativos aos incêndios que ocorreram em Pedrogão Grande, Castanheira de Pera, Ansião, Alvaiázere, Figueiro dos Vinhos, Arganil, Góis, Penela, Pampilhosa da Serra, Oleiros e Sertã, entre 17 e 24 de junho de w017 Assembleia da Republica Lisboa.

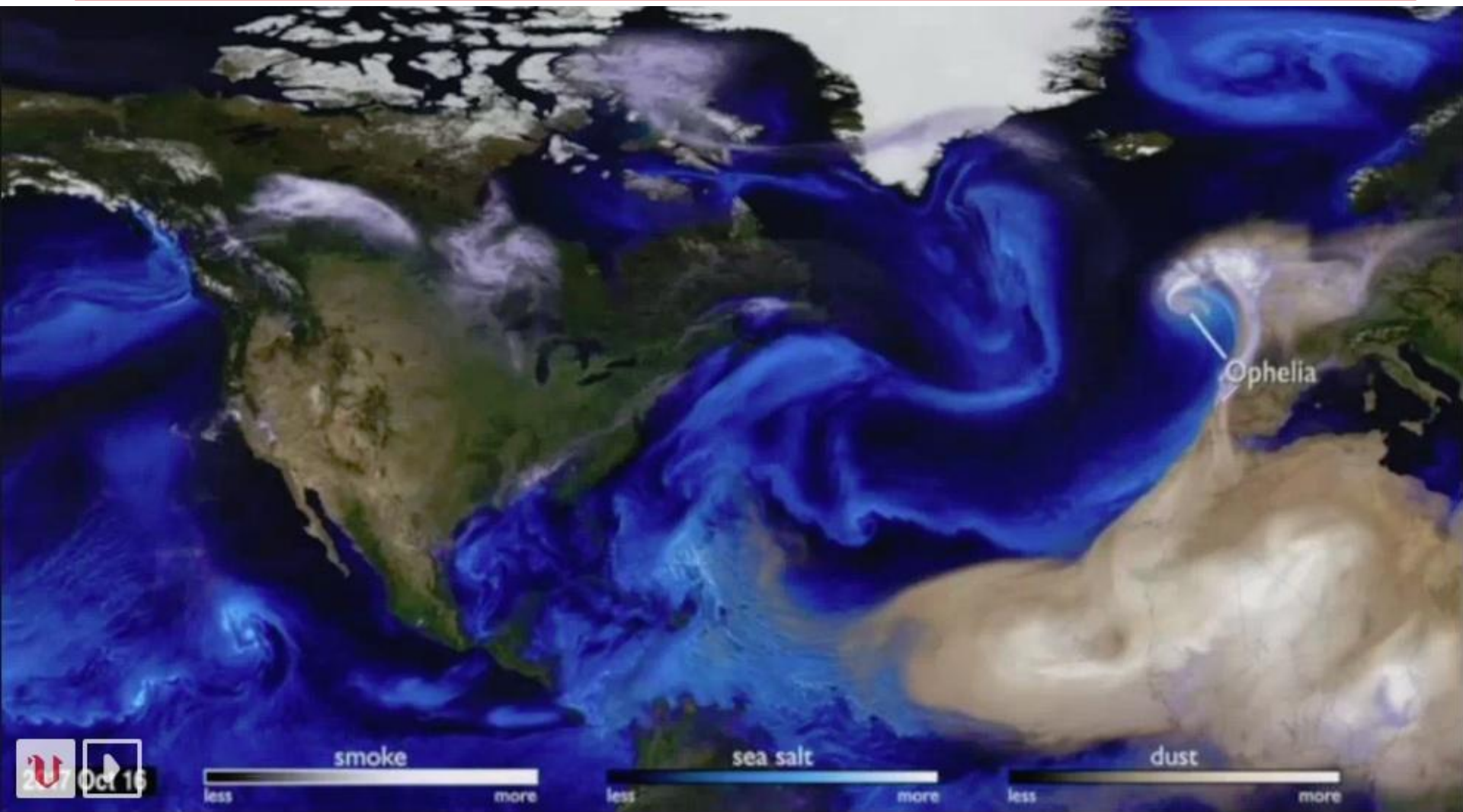
CC: New emergency management scenario



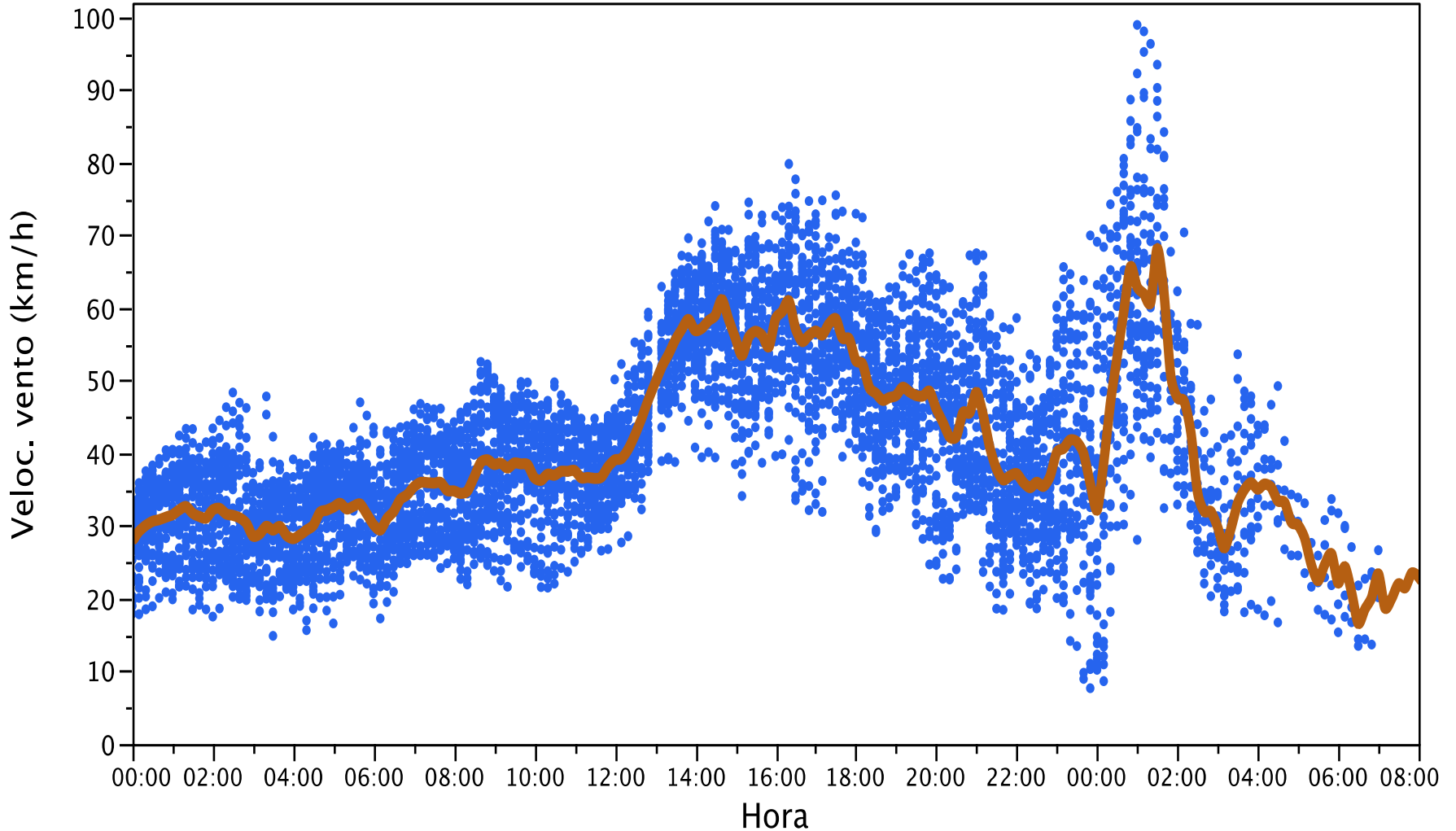
CC: New emergency management scenario



CC: New emergency management scenario



CC: New emergency management scenario



CC: New emergency management scenario

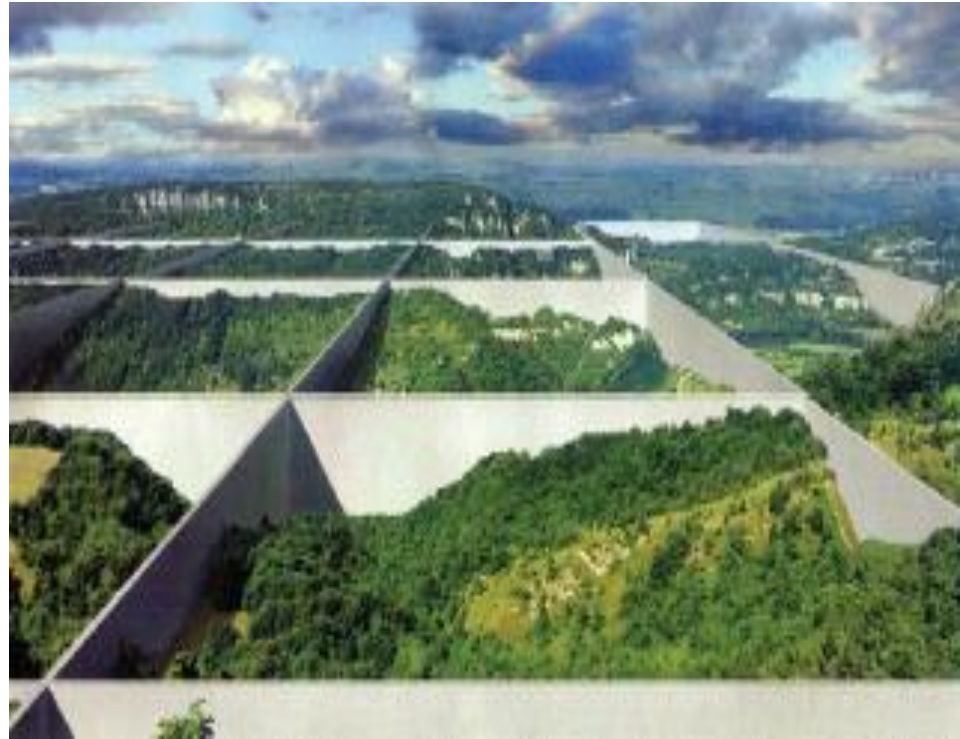
Yes, we are a risky sector... SURE!



How we understand OUR wildfires problem?



1st GEN Fuel continuity > fuel-breaks



2nd GEN High rate of spread > hard initial attack



3rd GEN High intensity and crown fires > GIF & analysis



3rd GEN High intensity and crown fires > GIF & analysis

Fire spread speed higher than fire suppression (0,5-2 km/h)



Fire intensity (flame length) > 3-6 m

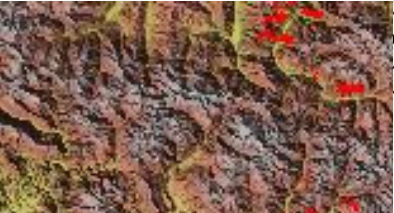


Fire spread by points rather than continuously



Crown fire





Now Online o
trónico

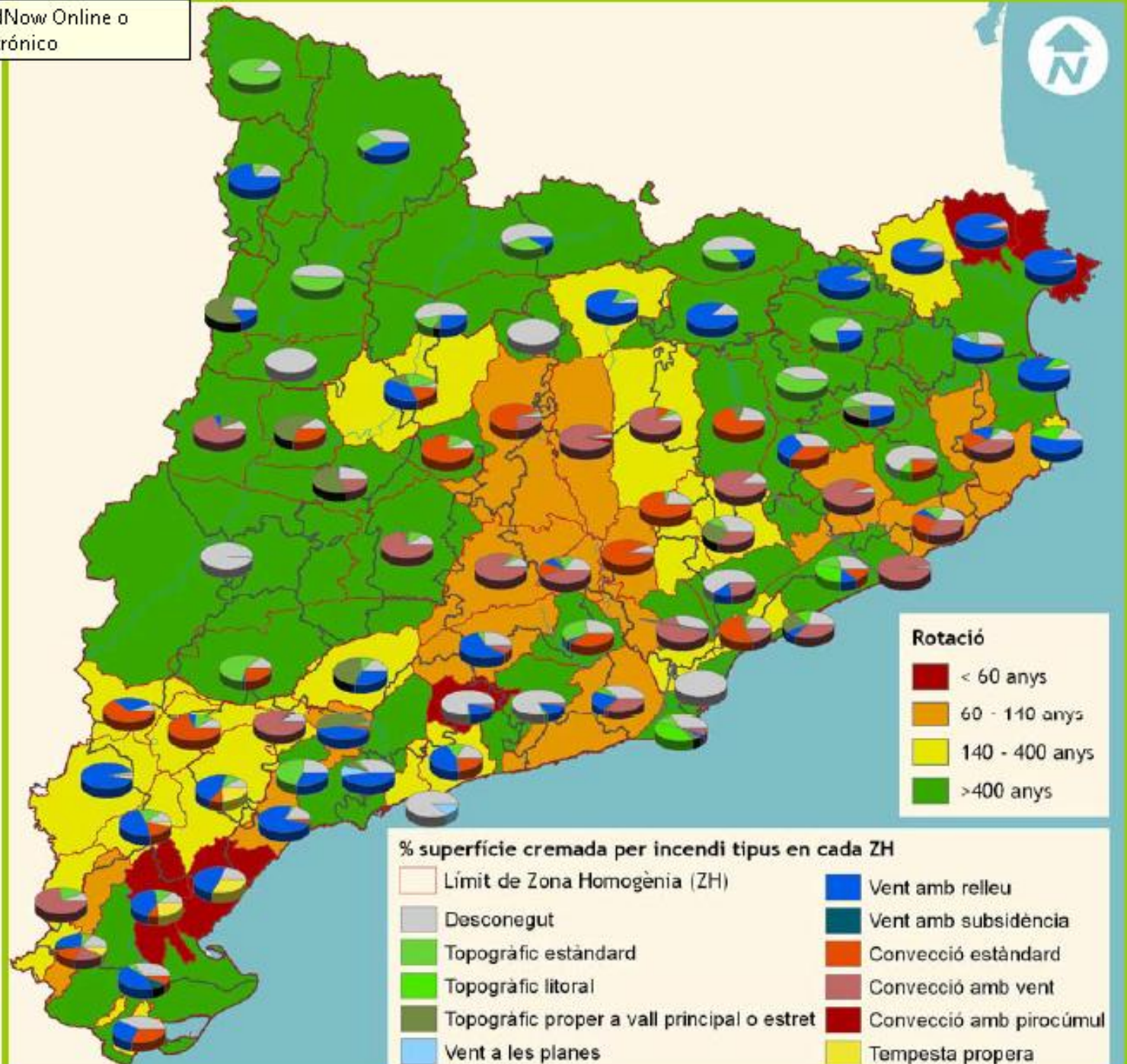
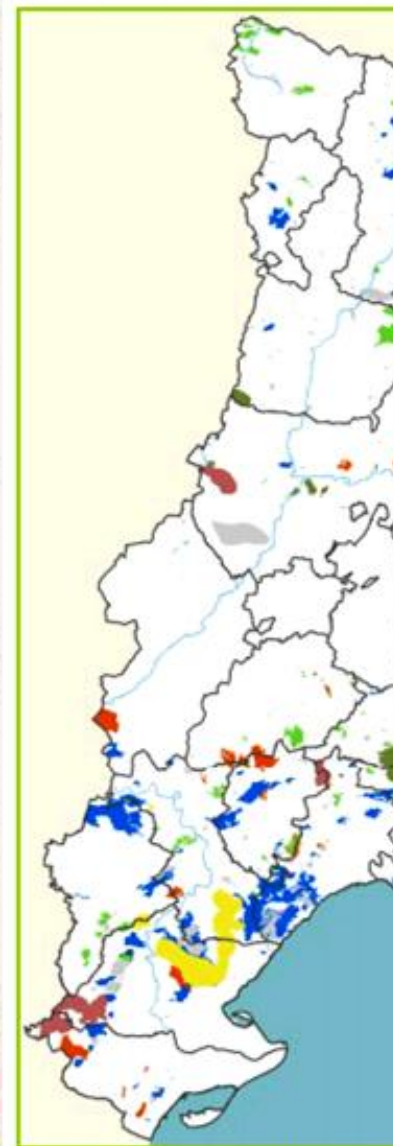
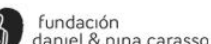


Figura 15. Perimetres d'incendi a

3rd GEN High intensity and crown fires > GIF & analysis



3rd GEN High intensity and crown fires > GIF & analysis



GESTIÓ DEL RISC D'INCENDIS AMB PASTURES

How we understand OUR wildfires problem?



4th GEN wildland-urban interface





4th GEN wildland-urban interface

Canvi en la normativa. Consciència del risc Ordenació del territori



4th GEN wildland-urban interface

Canvi en la normativa. Consciència del risc Ordenació del territori

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ bombers ■ ■ ■ ■

Self-protection fire management guide

RISK AWARENESS



■ ■ ■ ■ ■ ■ ■ ■ ■ ■ bombers ■ ■ ■ ■

Self-protection fire management guide

PREPARING THE PROPERTY
VEGETATION MANAGEMENT



■ ■ ■ ■ ■ ■ ■ ■ ■ ■ bombers ■ ■ ■ ■

Self-protection fire management guide

SURVIVING A FOREST FIRE

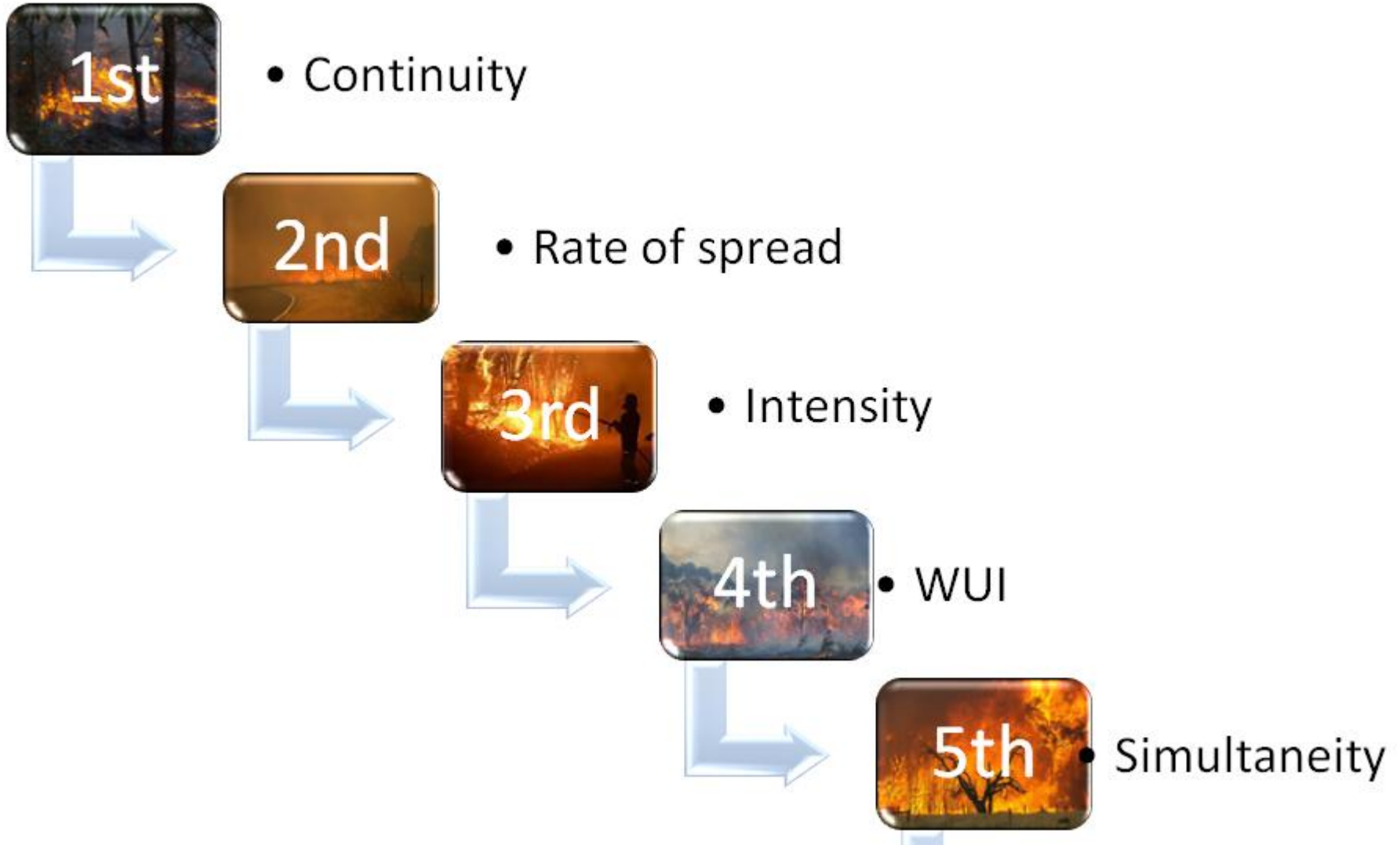


4th GEN wildland-urban interface

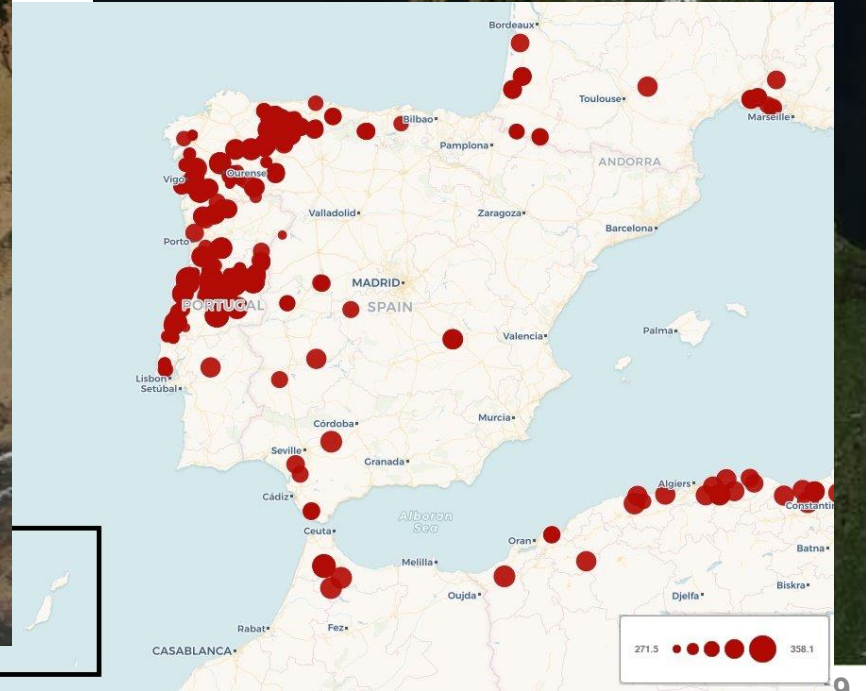


**... But
SAFETY!
...please!**

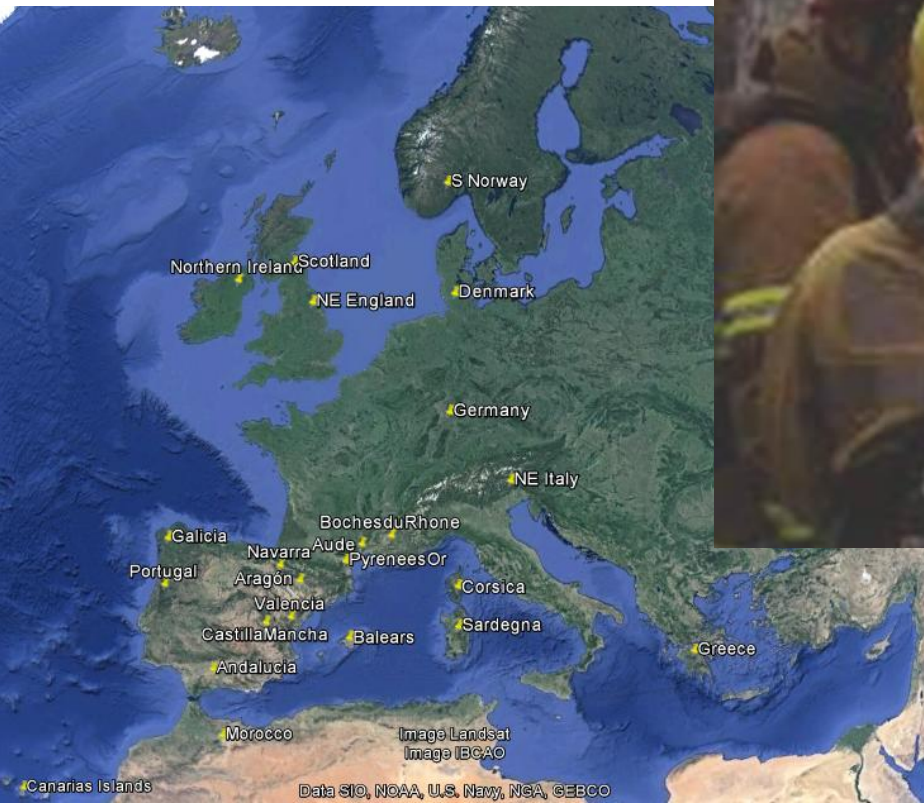
How we understand OUR wildfires problem?



5th GEN simultaneity and interna



5th GEN simultaneity and international cooperation



5th GEN simultaneity and international cooperation

People

Property

Forest

Fire Service Collapse

Common Value

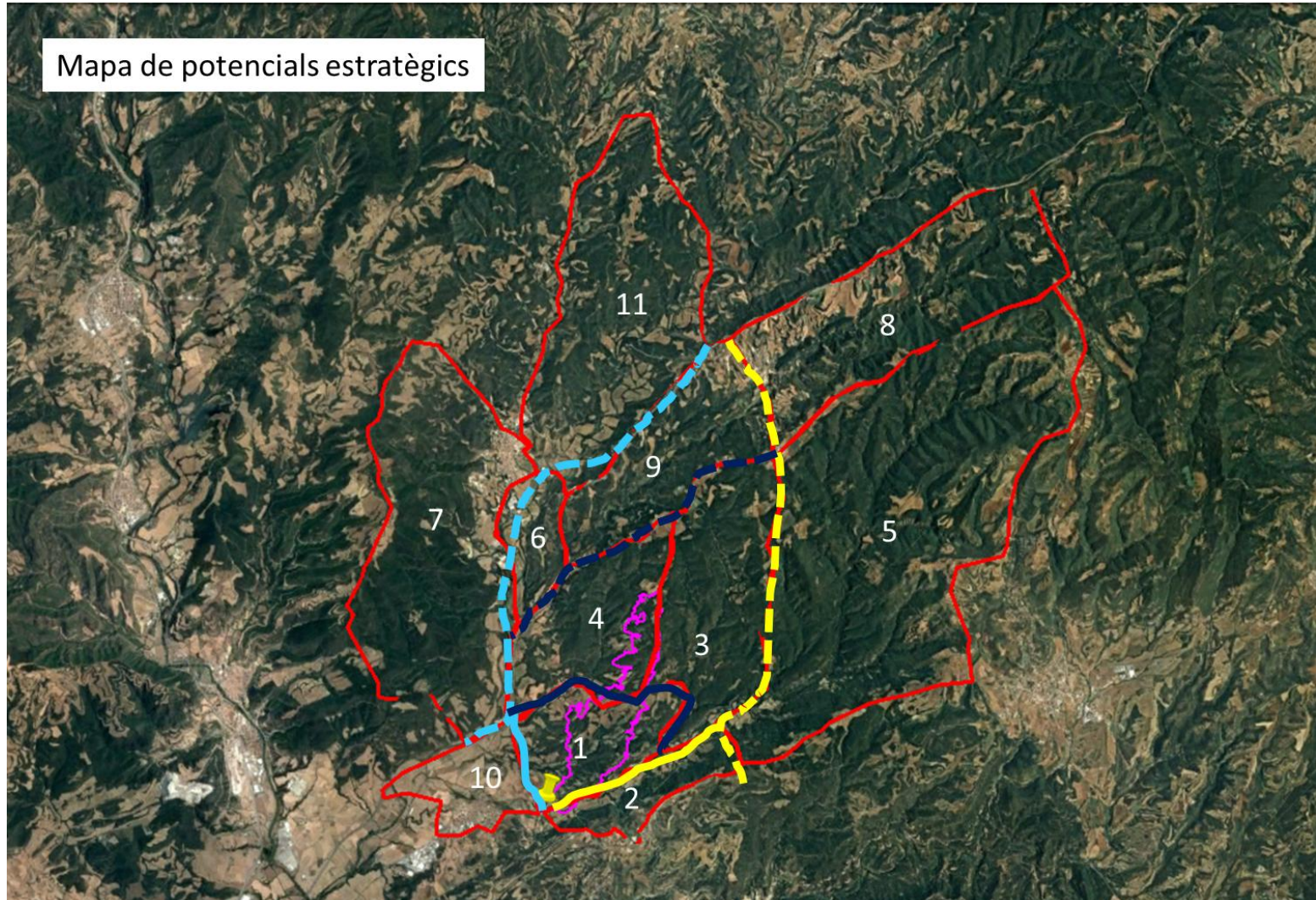
Driving
single
operations

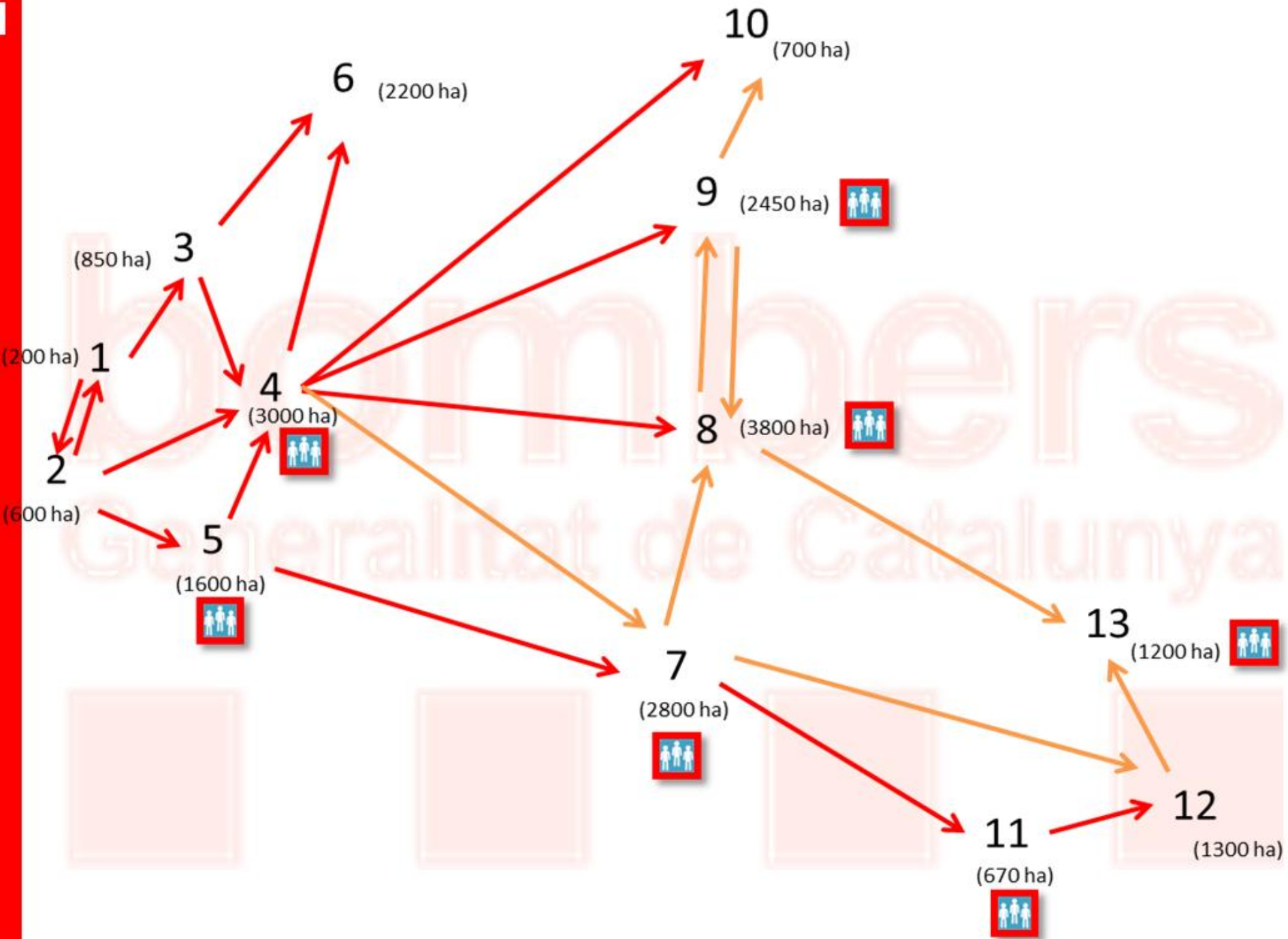
Driving
Service
decisions

Driving
Society
decisions

5th GEN simultaneity and international cooperation

Mapa de potencials estratègics



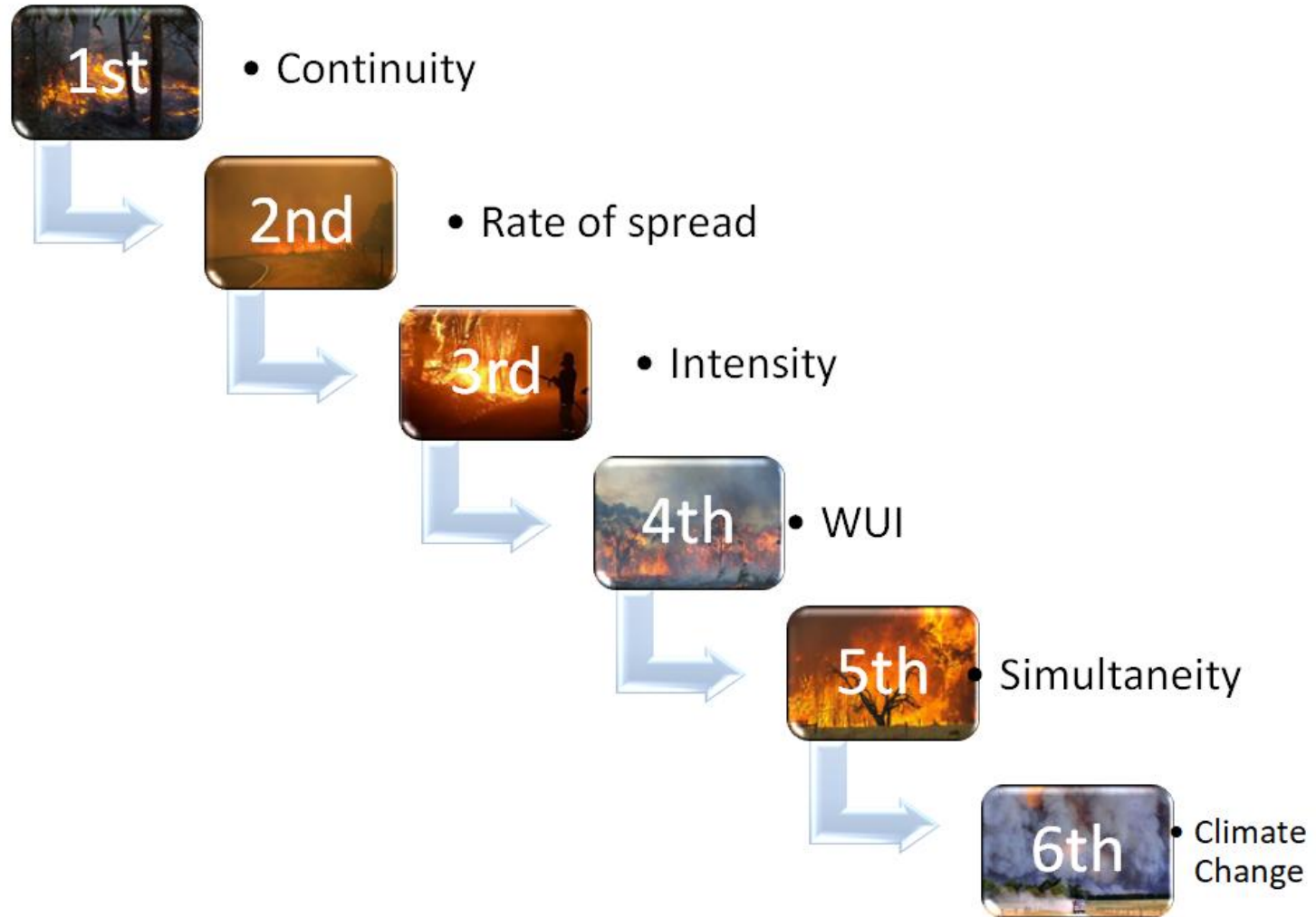


5th GEN simultaneity and international cooperation



ICTA-UAB

How we understand OUR wildfires problem?

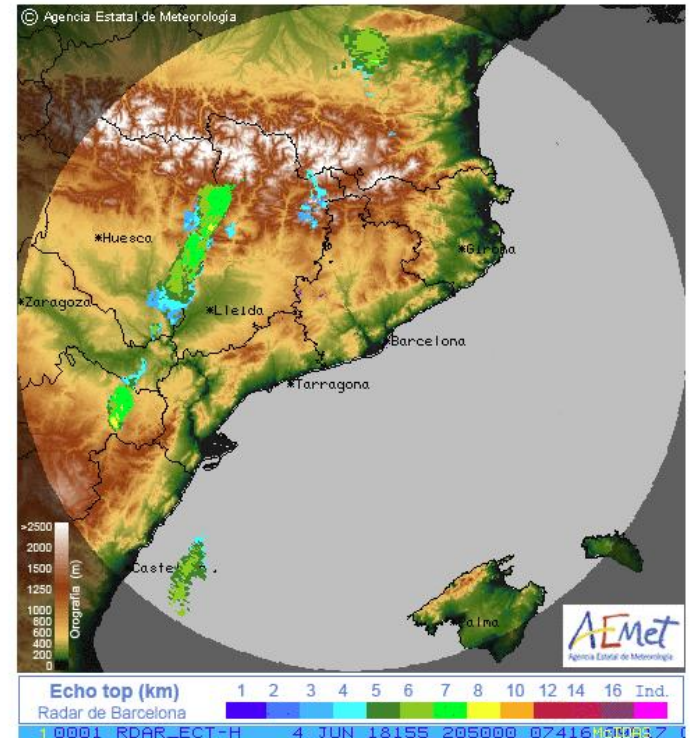
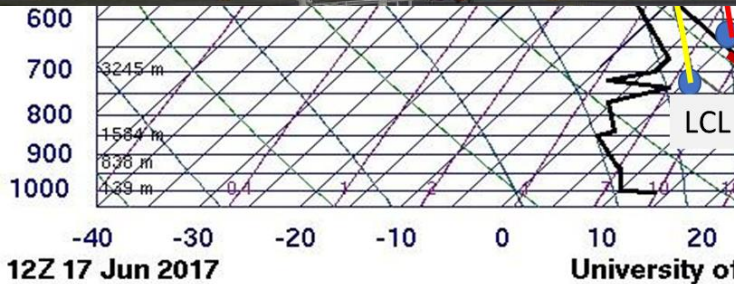


6th GEN megafires and climate change



SLAT 38.76
 SLON -9.13
 SELV 105.0
 SHOW -0.11
 LIFT -0.98

ec. Acumulada en 6 horas



Landscape and fire management framework



Landscape and fire management framework



Landscape and fire management framework



Integració del risc de grans incendis forestals (GIF) en la gestió forestal



Incendis tipus i vulnerabilitat de les estructures forestals al foc de capçades



Orientacions de gestió forestal sostenible de Catalunya (ORGEST)



Tipologies forestals arbrades





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