



Modelling crisis management for improved action and preparedness

Wildfire risk management and training support

CRISMA Business Day

4th June 2015, Brussels

Domingos Xavier Viegas - ADAI



ADAI / Support on wildfire applications

The offer:

- **Support to customization:**

- ADAI provides the CRISMA system to applications involving the risk of **wildfires**.
- ADAI prepares the input data required for forest fire simulation like fuel maps, meteorological data, fire spread and smoke dispersion charts.

- **Training** on the use of the CRISMA System in the context of wildfires.

- **Consultation** and advising on the follow up of CRISMA applications and improvements.

The targeted market:

- Civil Protection Agencies and other public and private institutions in charge of forest management and wildfire suppression at a national and regional level.
- Agencies in charge of providing training to forest fire managers.

Conditions of the Offer:

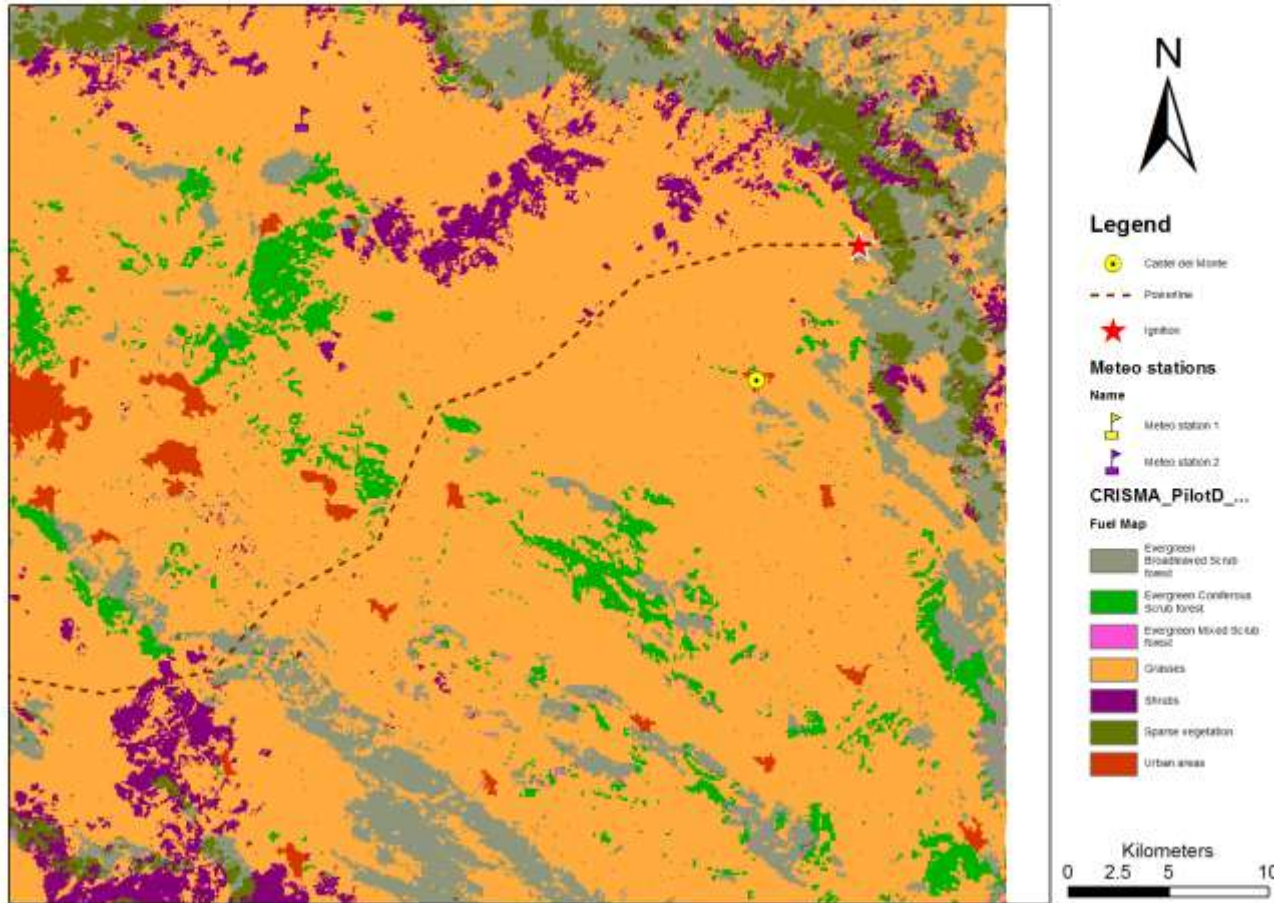
Business approach:

- Direct approach based on contacts; dissemination in technical meetings and other events.

Access conditions:

- Contract agreements to be defined case by case.

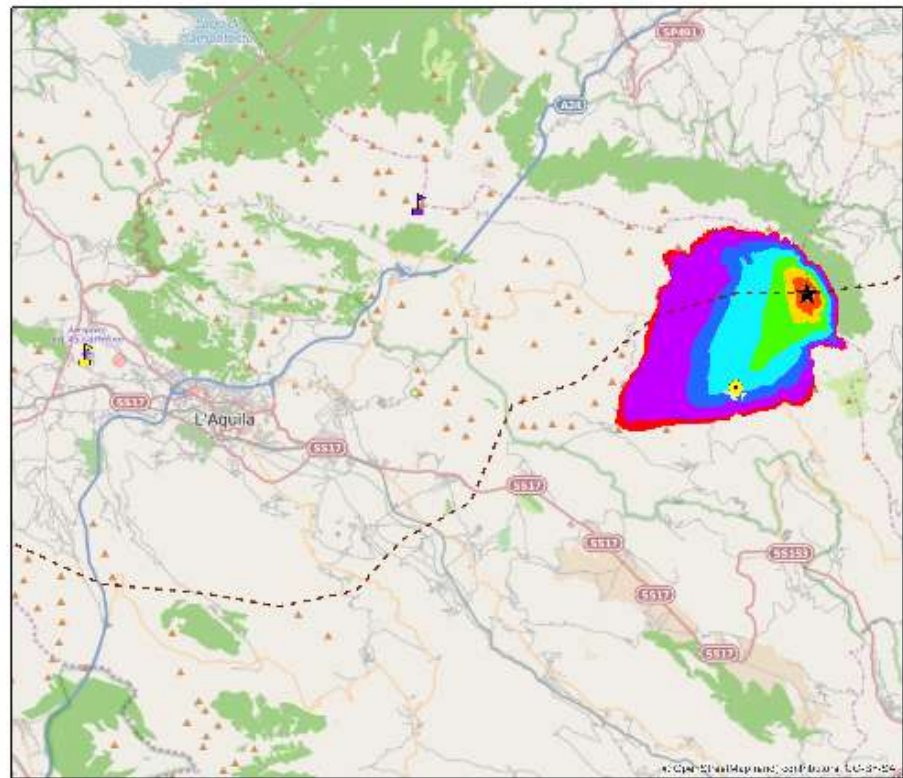
Example of an application to the Region of L'Aquila (Italy)



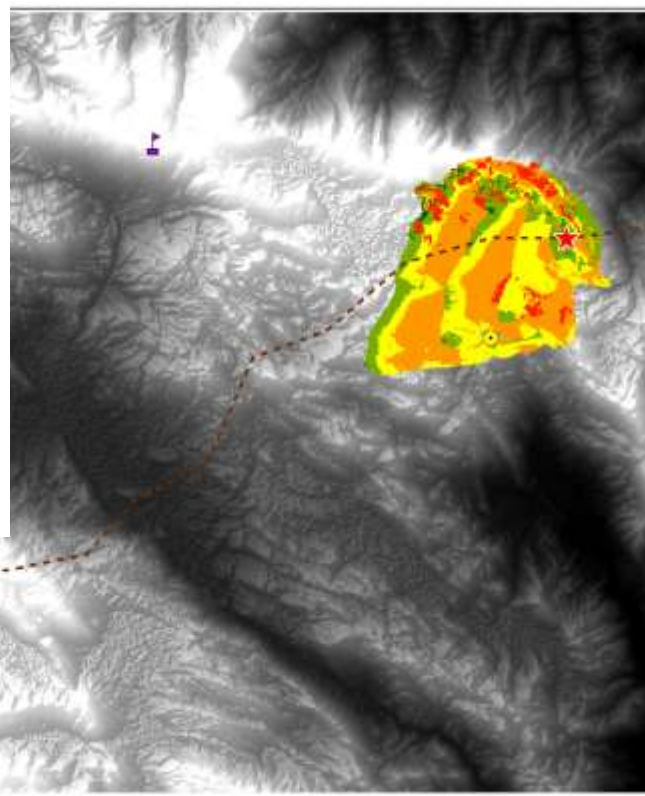
Fuel management options can be planned and tested with fire behaviour simulations

Fuel map of the area

Fire Behaviour Prediction



Fire contours after every hour



Fire line intensity contours

Smoke Dispersion modelling



Legend

- Castel del Monte
- Roads
- Meteo station 1
- Meteo station 2
- Ignition
- Powerline

NO₂ concentration at 2m
(Microgram/m³)
High : 37895
Low : 267.271

Kilometers
0 1.5 3 6 9 12

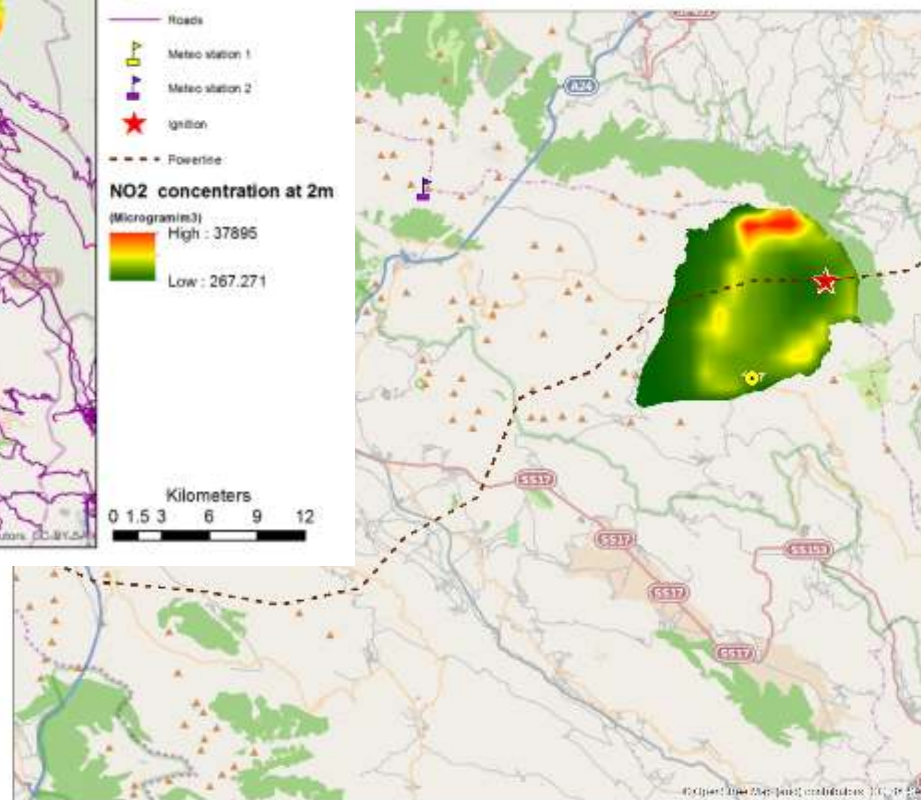
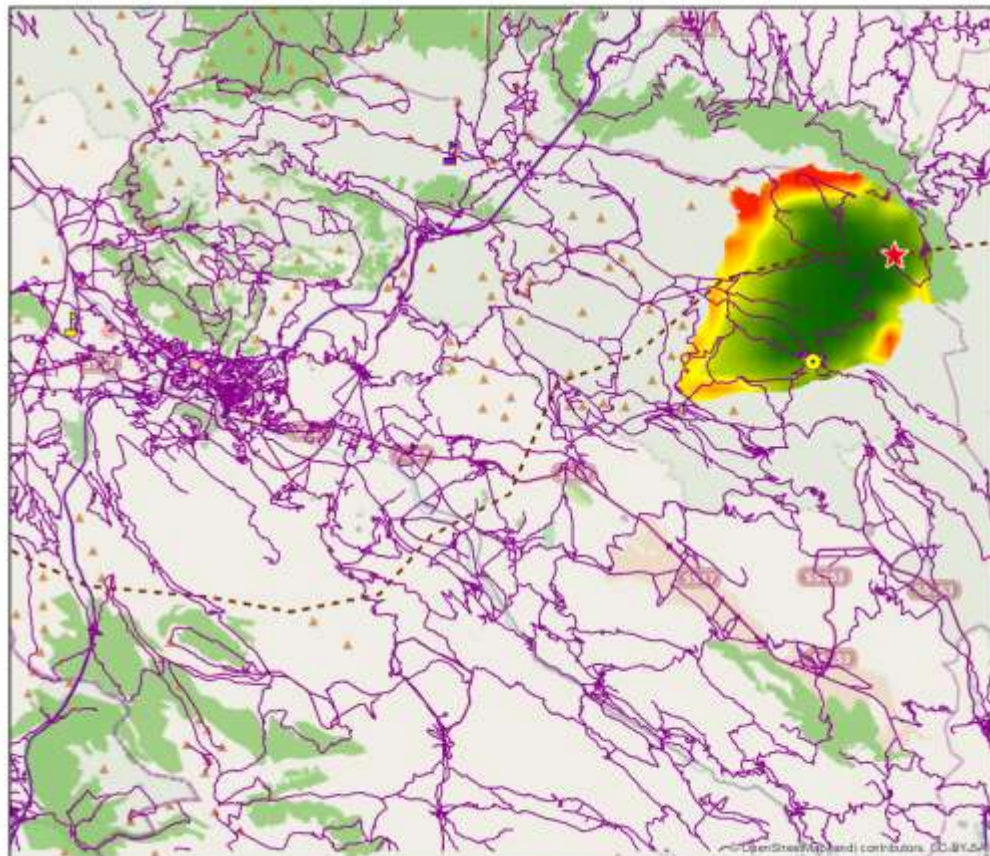


Legend

- Castel del Monte
- Powerline
- Ignition
- Meteo stations**
- Name
- Meteo station 1
- Meteo station 2

PM_{2.5} concentration at 2m
(Microgram/m³)
High : 184898
Low : 63.718

Kilometers
0 3.25 6.5 13



NO₂ concentration 2m above the ground

2.5 µm Particulate concentration 2m above the ground

Contact

Association for the Development of Industrial Aerodynamics



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