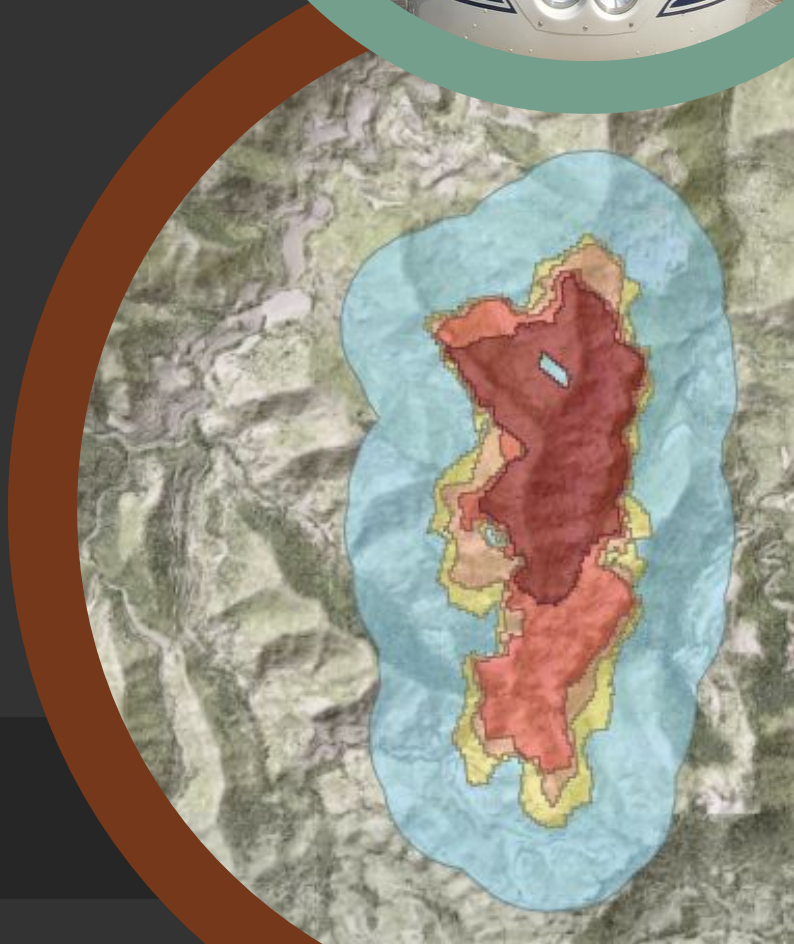




SALUS

Image by Vlad Alvazovsky from Pixabay



Data Viewer

Wildfire Risk
Solutions for Spain

SALUS - Data Viewer

The data viewer allows to explore spatially and temporally the evolution of the simulated propagation maps and exposure data inside the polygons.

The time slider permits to scroll through the simulated event and visualize the evolution of the wildfire. Additionally, the viewer shows different categories of infrastructure located inside these polygons and summarizes their occurred in the chart.

SALUS: Wildfire Propagation Data Viewer

* Propagation Probability Map for hour 1 of 9

Select Exposure Data: Buildings

Amount of Assets

Hour

Probability of Burned Area

- 0 - 25%
- 25 - 50%
- 50 - 75%
- 75 - 100%
- Buffer zone

Select Basemap: PNOA Lidar

Time Slider

* Propagation Probability Map for hour 1 of 9

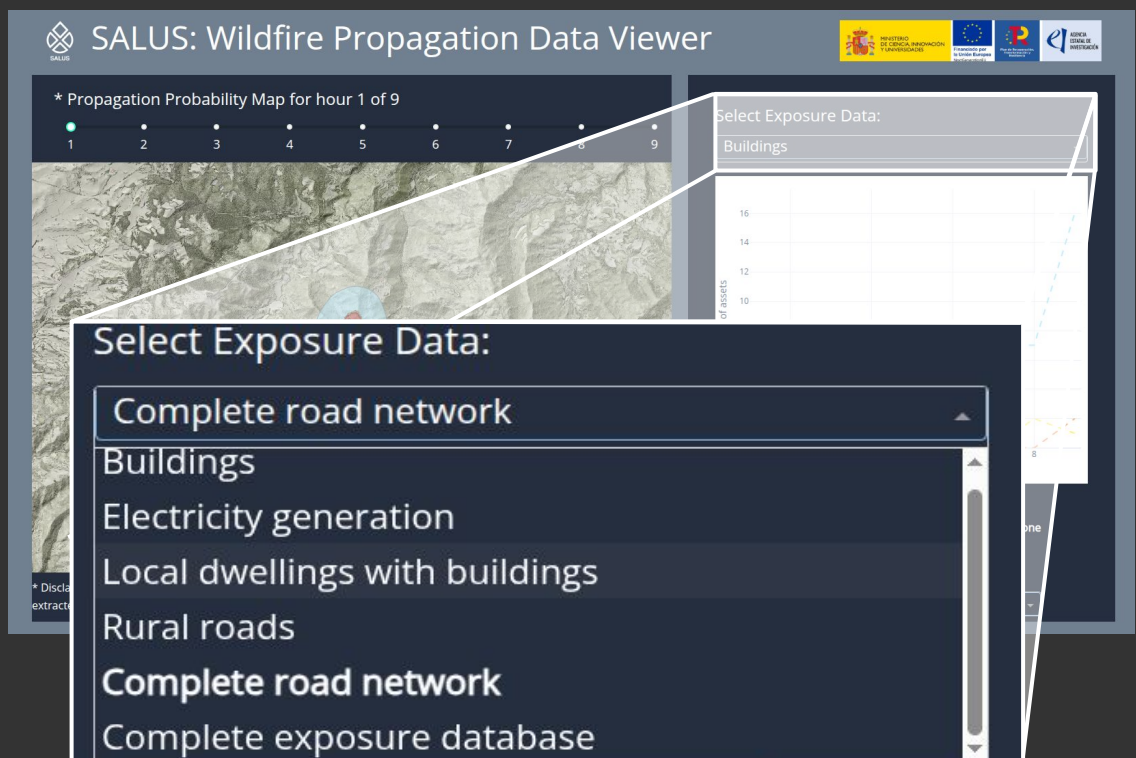
Basemaps

Exposure Data

Based on OpenStreetMap database a range of exposure data was extracted and classified into the following categories:

- Rail network
- Road network
- General buildings
- High voltage grid network
- Infrastructure for power generation (e.g. solar plants, wind farms)
- Buildings related to emergency services (e.g. police station, fire fighters, hospital)

The exposure data can be selected through a drop-down menu which is only populated with the categories located inside the study area of the wildfire event:



Temporal Evolution

Maps on the left show three snapshots during the simulated wildfire event of 9 hours in duration. Using the time slider the map content and the chart are updated for each hour.

* Propagation Probability Map for hour 1 of 9

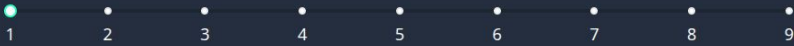
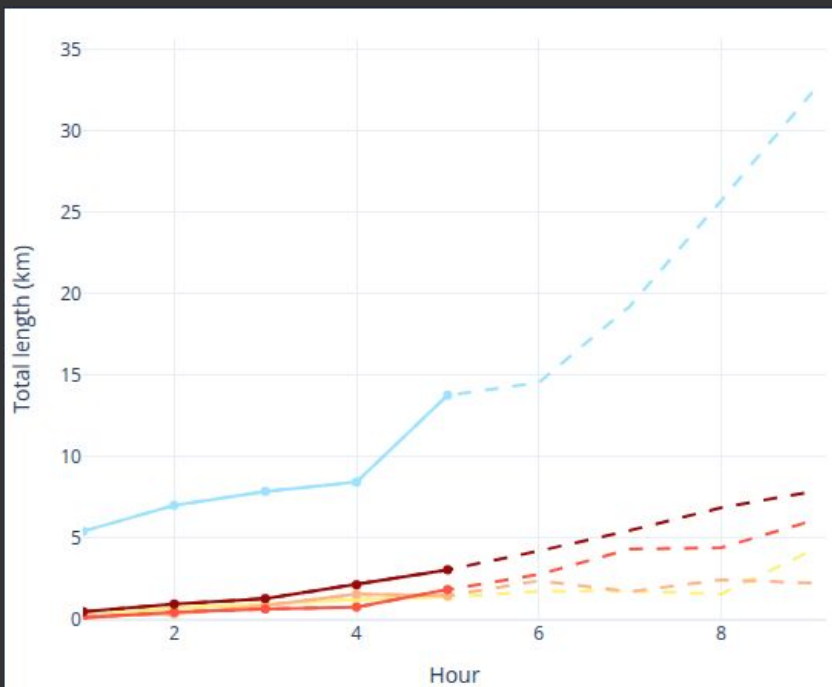
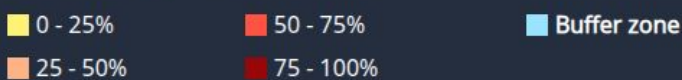


Chart shows in dashed lines the temporal evolution of affected infrastructure (length or number of features) throughout the simulation. Solid lines represent evolution to the selected hour.

Chart: for hour 5



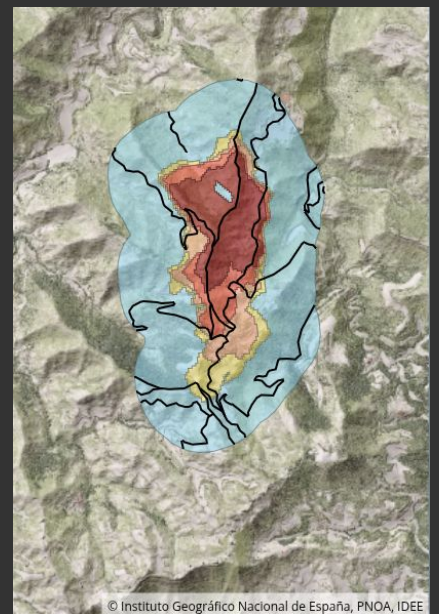
Probability of Burned Area



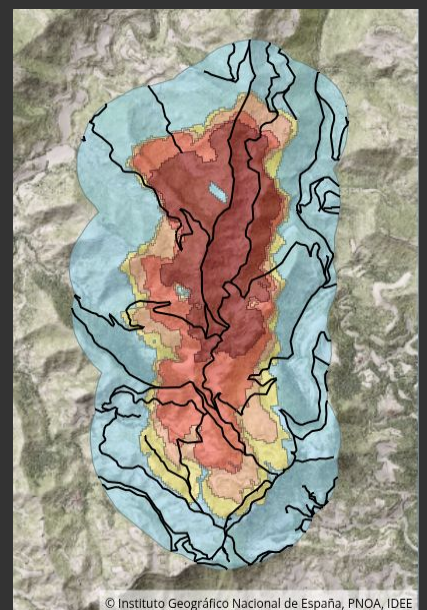
Hour 1



Hour 5



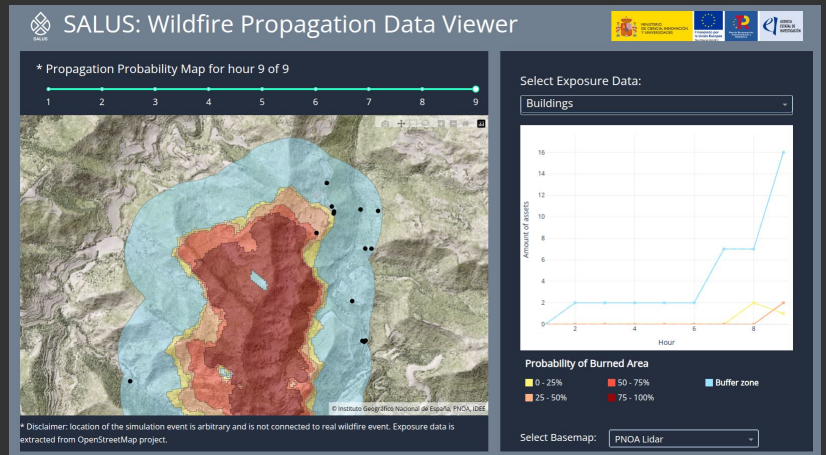
Hour 9



Temporal Evolution

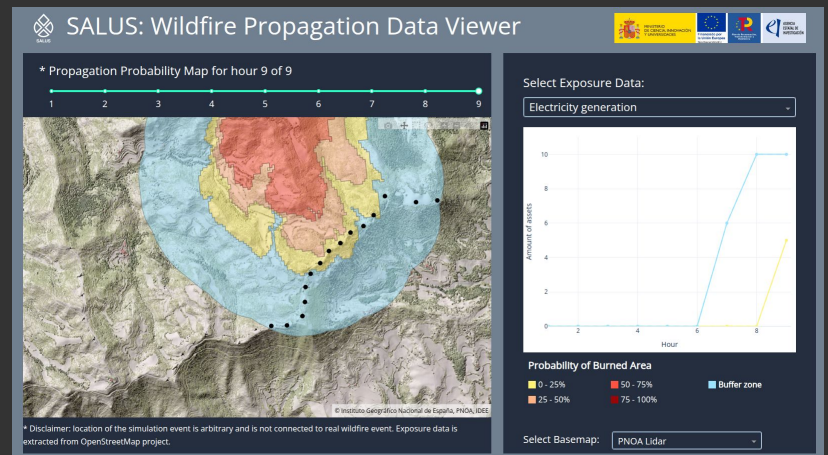
Example of general buildings represented by individual points in the map.

On the left side the chart presents the summarized statistics of amount of buildings located inside the buffer zone or in one of the propagation probability zones.



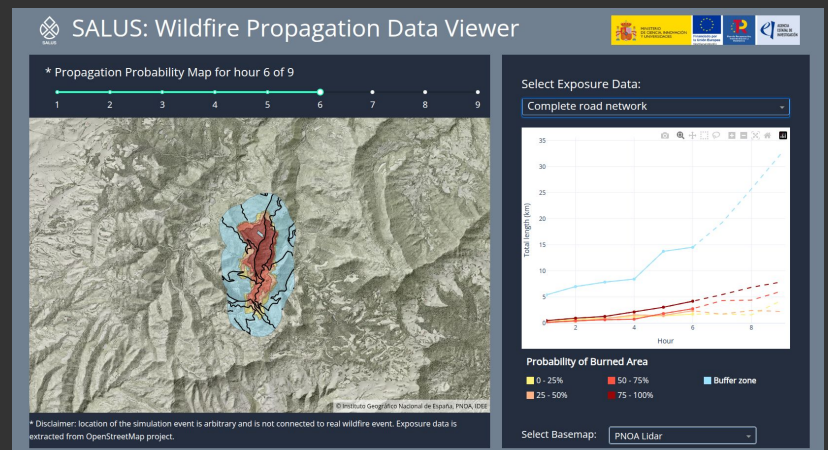
This second example shows the locations of wind turbines which often are located along ridges.

Chart on the right shows the distribution of the wind turbines with the different propagation zones.



Third example shows the road network intersecting the propagation polygons.

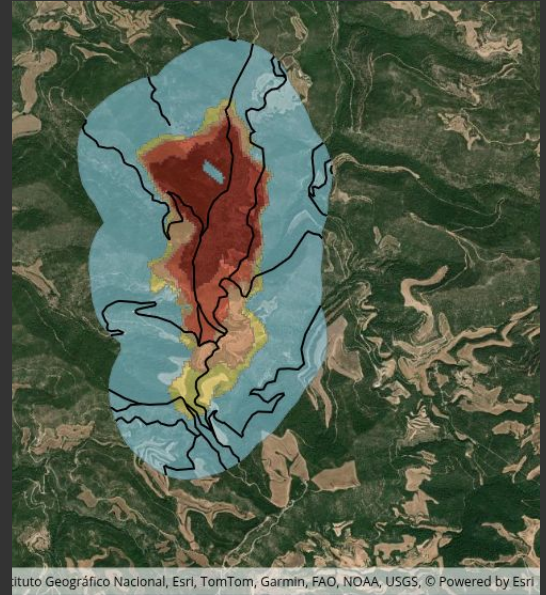
For line features such as roads or rail network the total length in kilometers are show in the chart on the right.



Basemaps

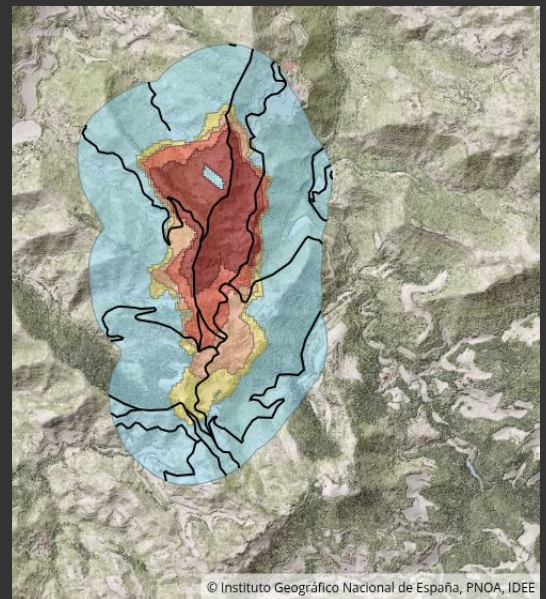
ESRI Satellite

Using high resolution satellite imagery as a basemap for more accurate representation of surface cover and vegetation.



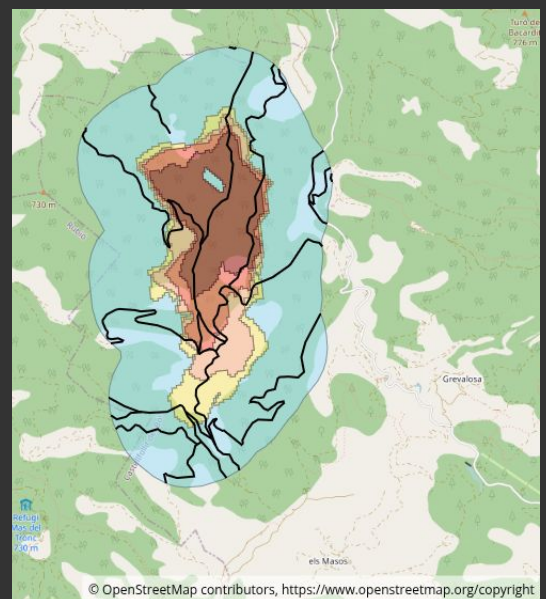
Colored Lidar Map
PNOA

The shaded DSM from Lidar measurements provide a detailed representation of topography and it's texture on predominant vegetation and buildings which are distinctly colored.



Open Street Map

The Open Street Map highlights the main elements of roads, buildings and other infrastructure which are potentially exposed to the fire.



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Wildfire Risk
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