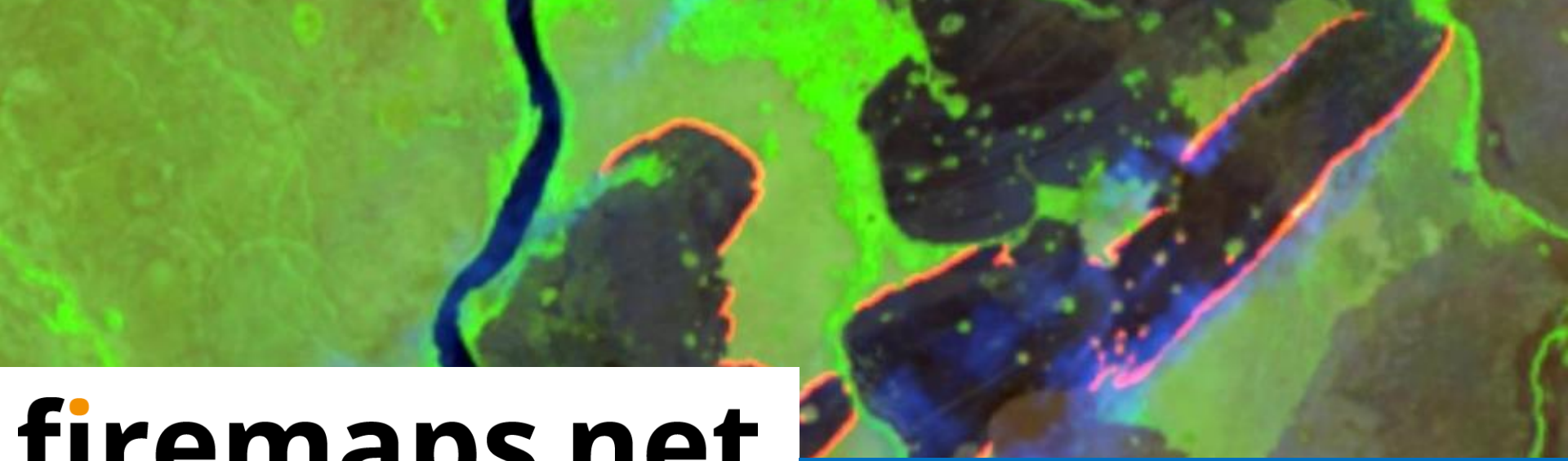


firemaps.net

fire information from space at your fingertips

A fire information system to support fire management: from monitoring to action

ZEBRIS

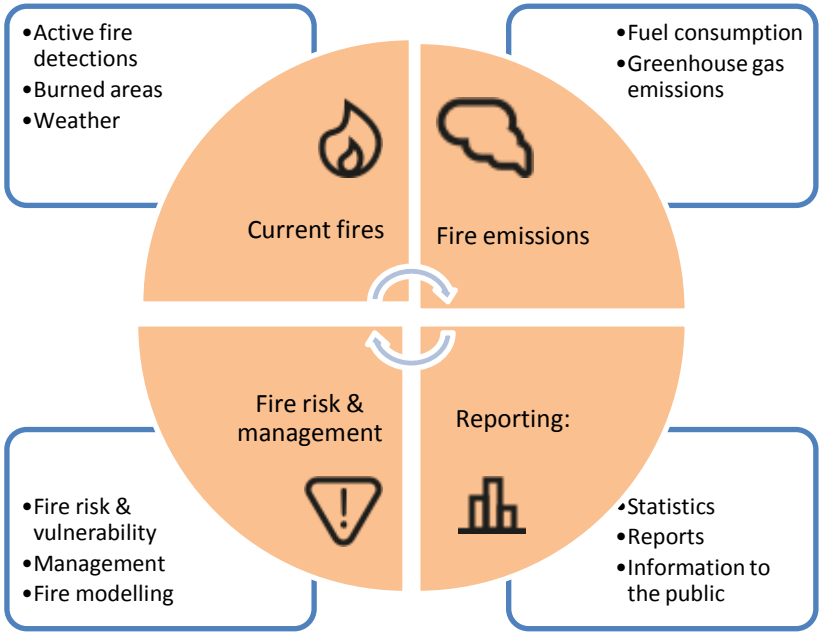
Users of fire information

Questions to information systems

Management questions

- What is the current situation?
- Where do we come from?
- Where are we heading and which management actions are appropriate?
- How do I communicate it to management, public, etc..?

Information provided



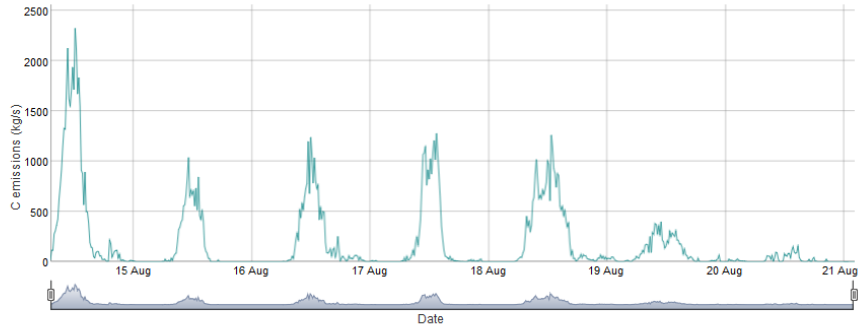
Firemaps dashboard

Dashboard
Current Fires
Fire Risk and Management
Emissions
Basemaps
Statistics
Downloads
Settings
Controllers

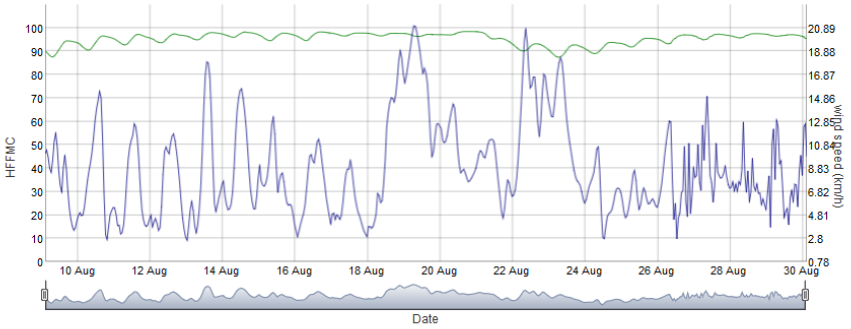
8	0	98	9.36
Fire detections	Emissions	Flamability	Wind speed
Active fire clusters	Fire emissions rate (kg C/s)	Fine Fuel Moisture Code	Wind speed in km/h

Dashboard updated every 15 minutes with latest fire detections, weather forecast

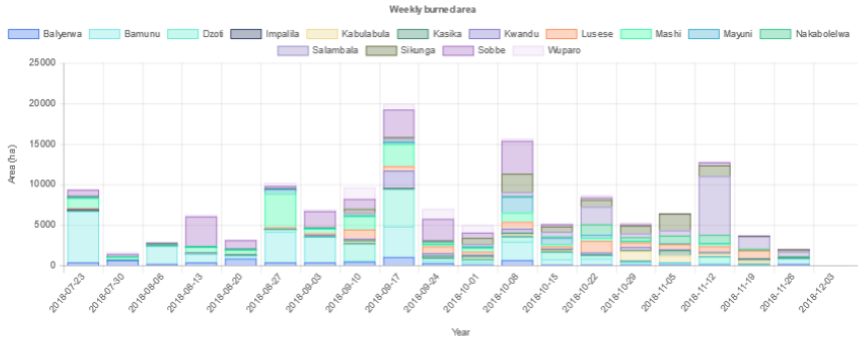
Carbon Emissions (kg/s) derived from Fire detections



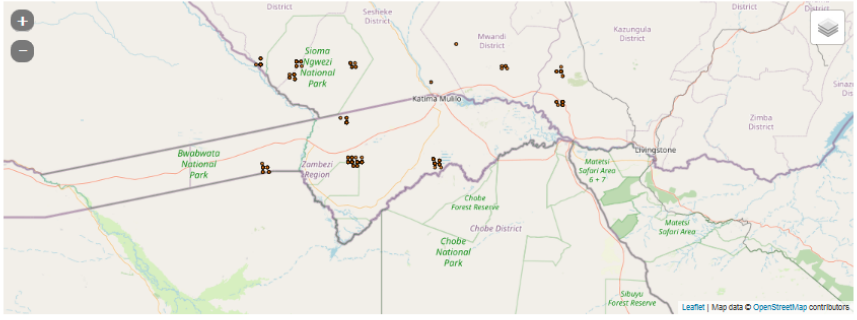
Fire Weather Fine fuel moisture code and wind speed



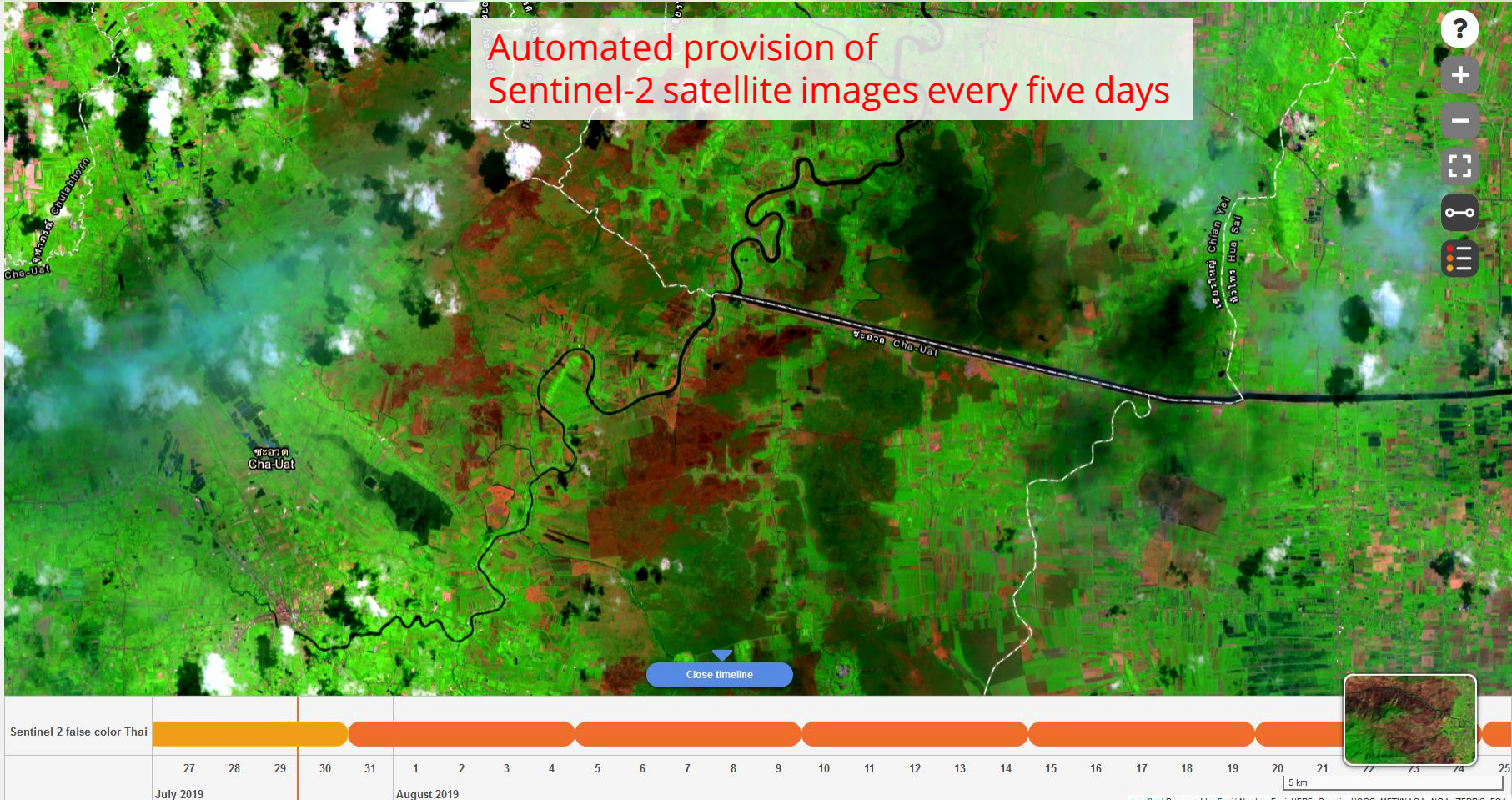
Weekly burned area from Sentinel 2



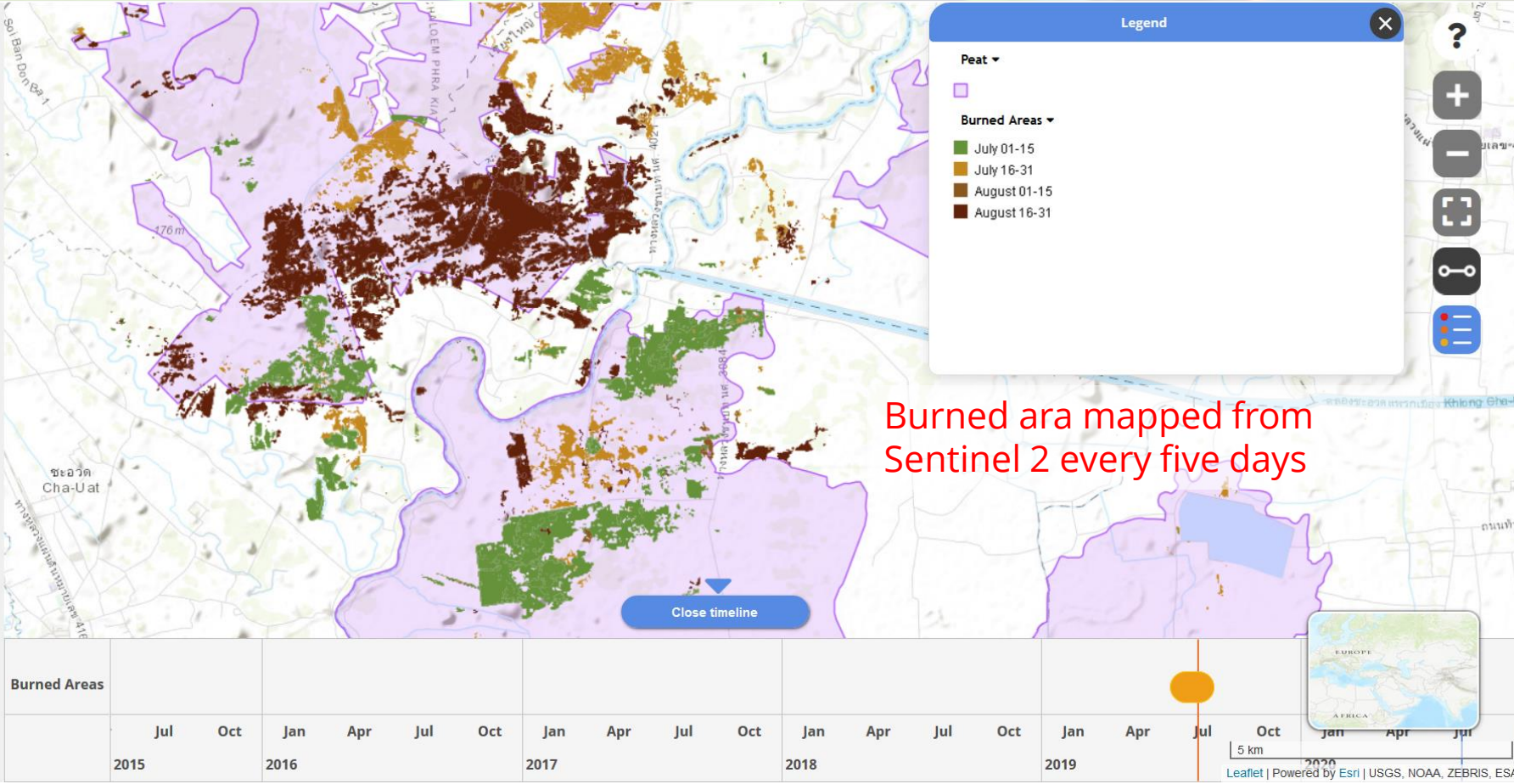
Fire situation map with daily fire detections



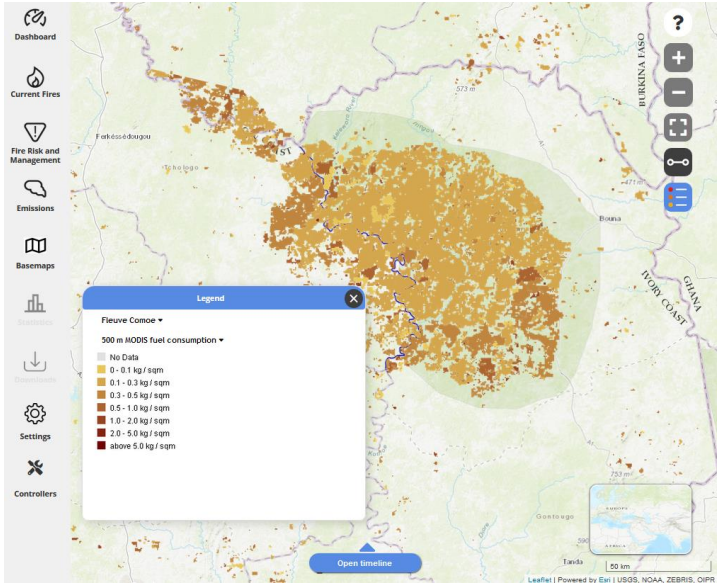
Time-enabled satellite images

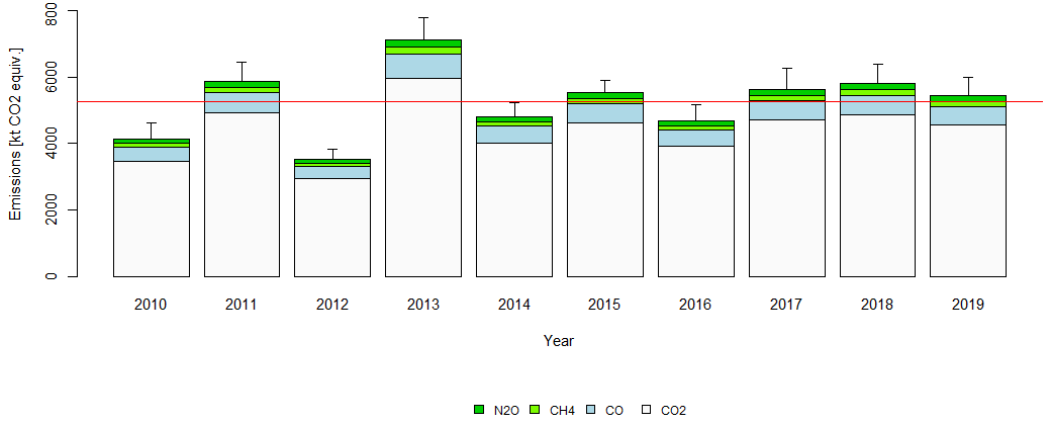


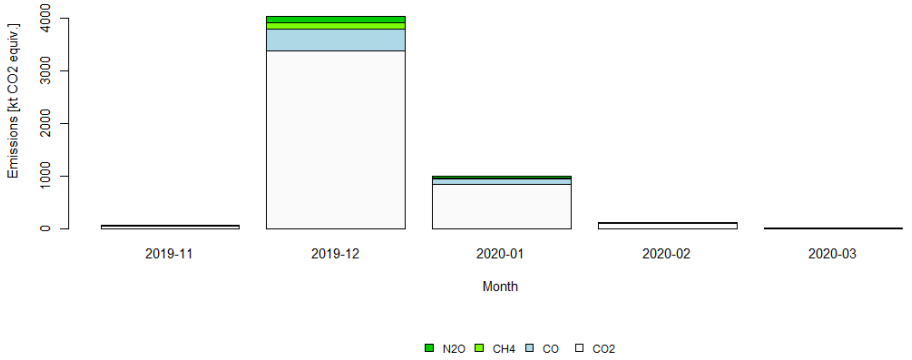
Burned area module



Fire GHG emission reporting



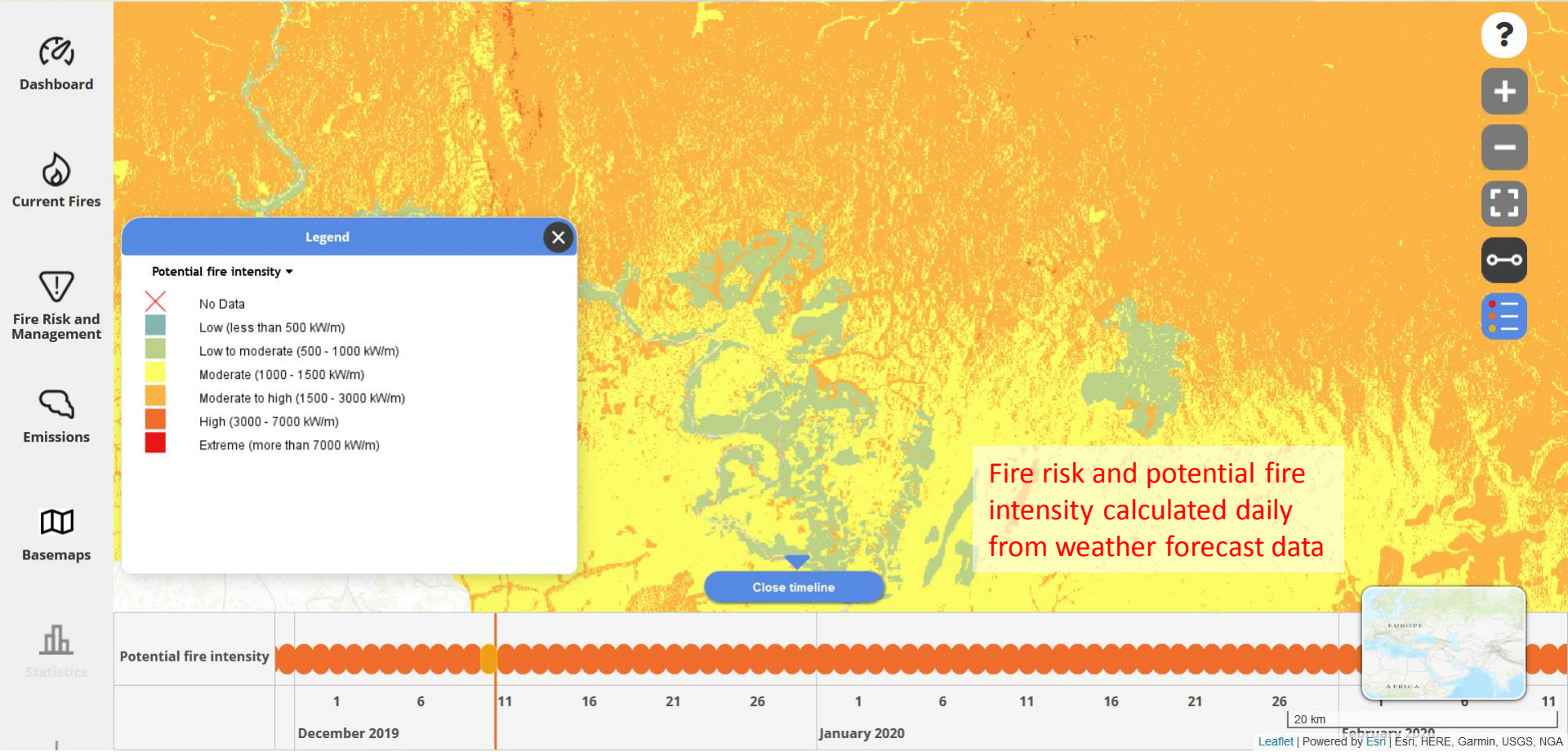




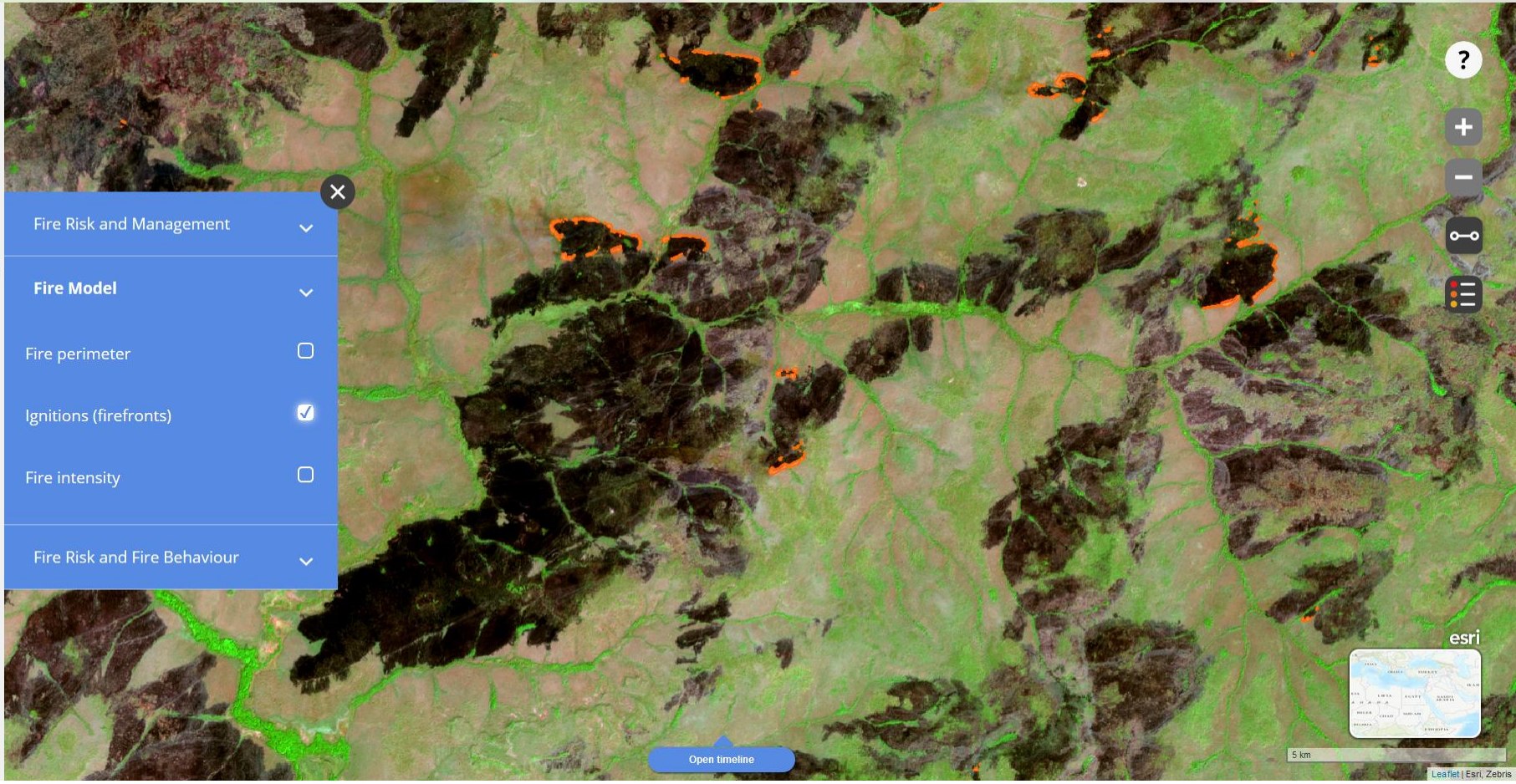
Fuel consumption and emission estimates:

- Based on 500 m MODIS (for long time series) or 20 m Sentinel 2 burned area (from 2016)
- Estimated from burned area and fire heat release (Fire Radiative Power, FRP) observed by satellites
- C, CO_2, CO, N_2O, CH_4, also particulate matter and other species

Fire Risk: Potential Fire Intensity

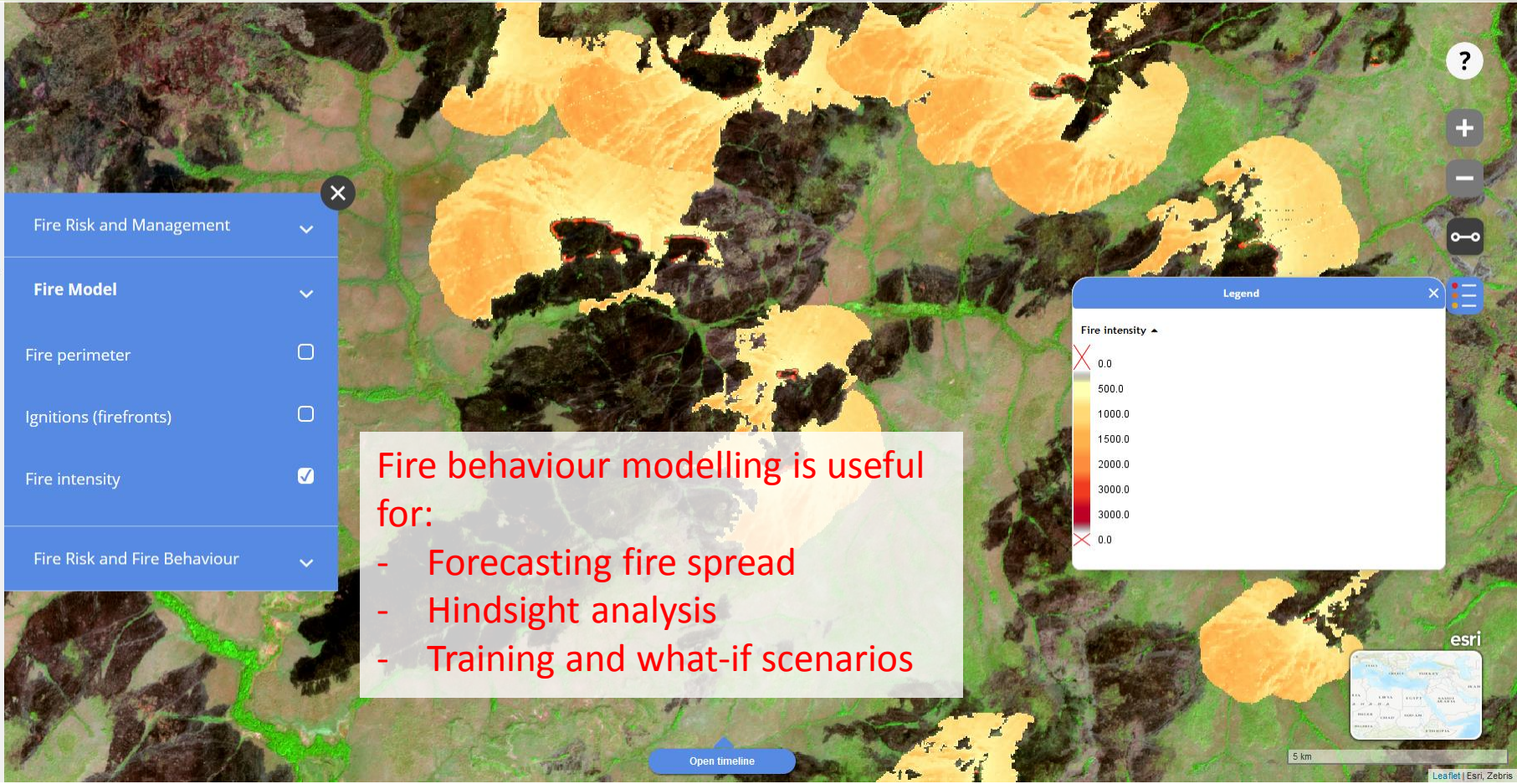


Online fire behaviour modelling



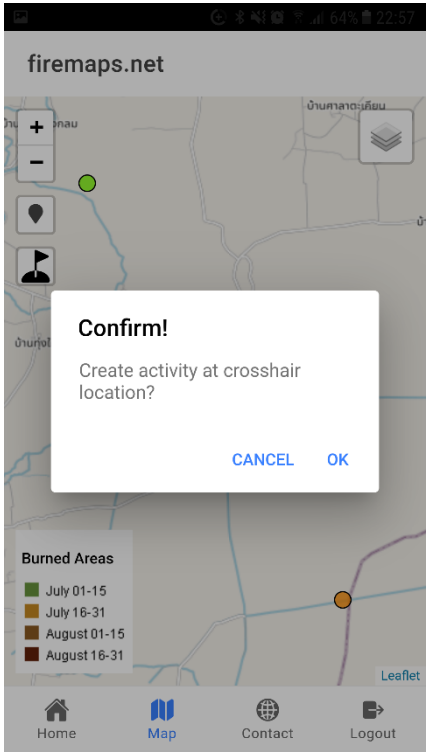
Online fire behaviour modelling

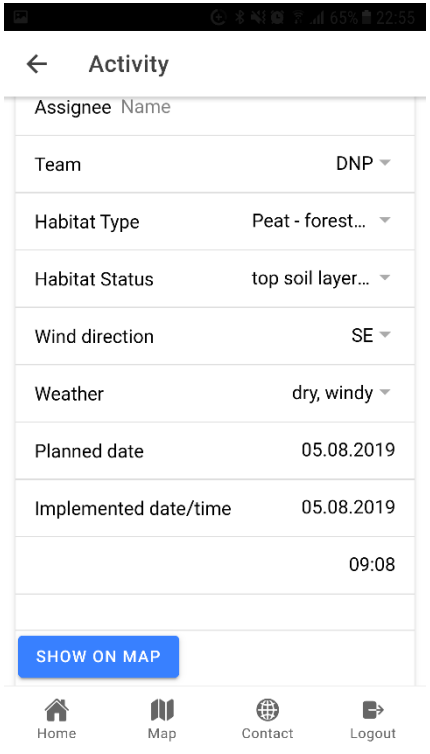
Online fire behaviour modelling



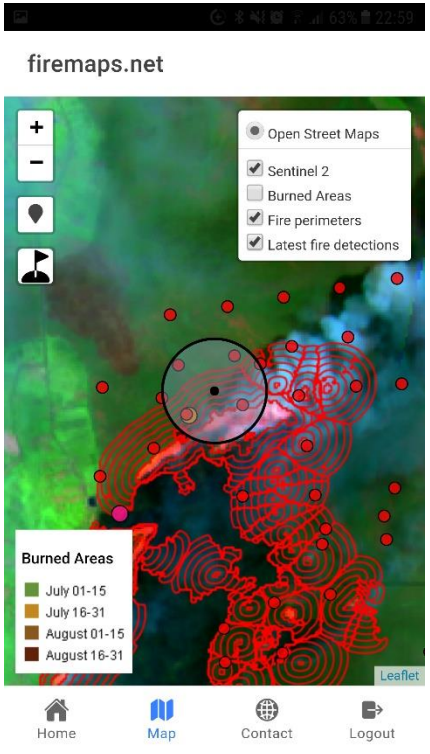
Planning of Management Activities

Mobile App

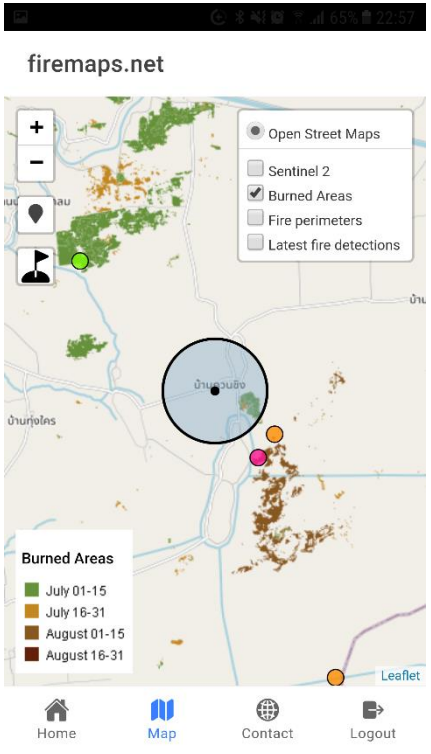




Plan and document activities

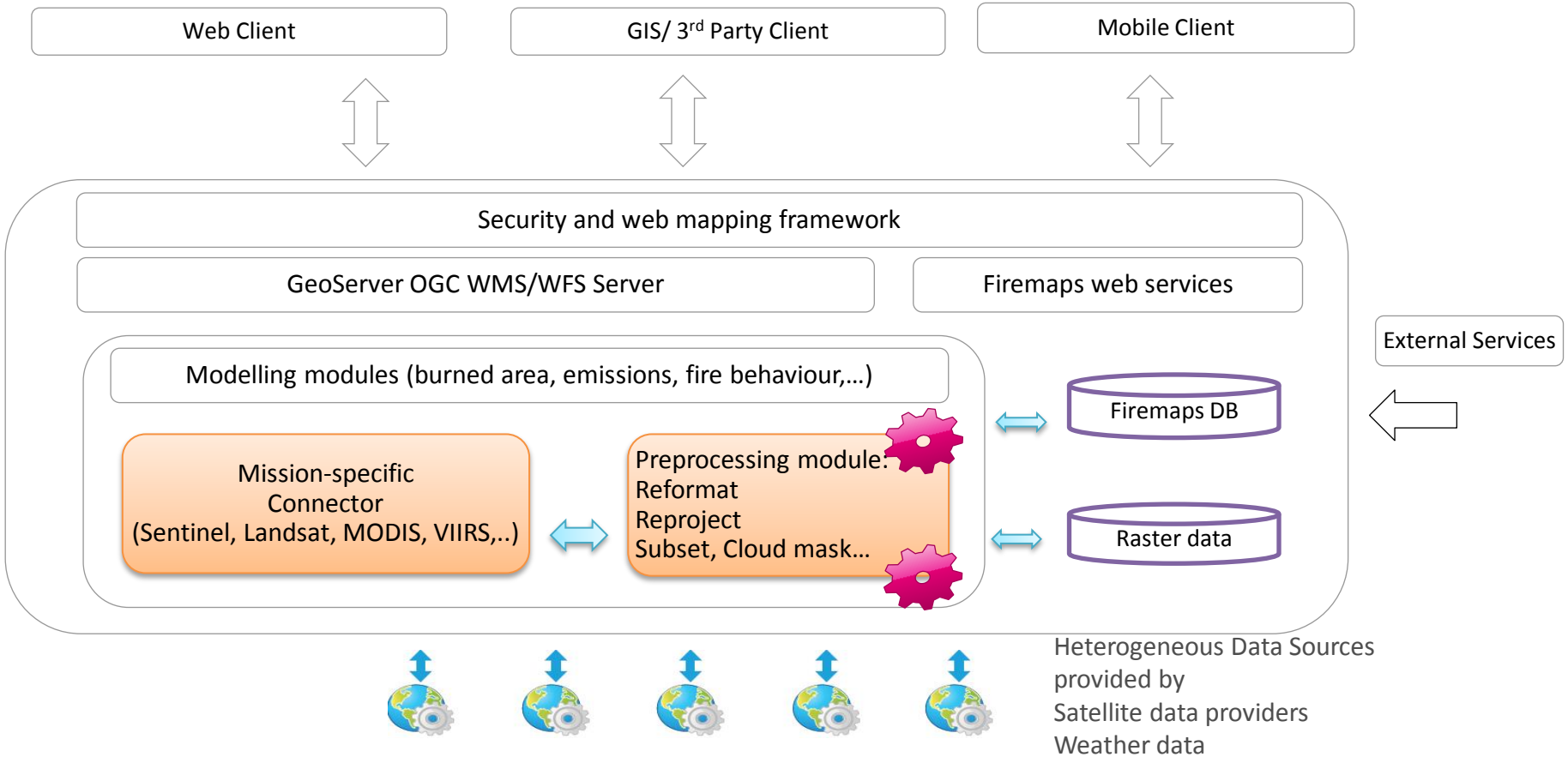


Fire model offline



Field-checks

firemaps.net: Architecture



Summary

- Firemaps.net serves government, NGO and private sector users in fire management, climate mitigation, nature conservation, insurance and re-insurance…
- firemaps.net is a platform to generate and distribute fire information, plan and document management activities, and keep track of results.
- Firemaps.net is intended for use as a Monitoring, Reporting and Verification (MRV) tool in emission mitigation projects
- firemaps.net architecture is open and standards-based. firemaps.net can be deployed in multiple nodes to work in distributed environments.
- Built-in security and scalability makes firemaps.net suitable for use in enterprise environments
- Open architecture enables easy integration of third party services.
- firemaps.net can be easily adapted to client requirements and can be run in the cloud, on customer premises or in a mixed environment

Thank you!

www.firemaps.net
www.zebris.com

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Foto: A.A. Hoffmann

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OIPR
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Projeto Cerrado-Jalapão
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