P23: Wildfire danger forecasting (Global Wildfire Information System (GWIS))

Maturity score

Mean: 2.5	**STD:** 0.63

Constraints and limitations

- The vegetation state which is the main indicator of fuel type is not used for the Fire Weather Index Rating System (FWI), so this index lacks such important information for forest fire forecasting.
- Fuel conditions used for the Ignition Component (IC) and the Fire Danger Index (FDI) have been provided in a mean climatological way and might not be accurate enough.
- For fire danger, it is necessary to handle human behaviour data.
- The many factors approaching fire danger/risk are not universally interpreted in the same way.

Relevant user needs

UN12: analysis of potential risks in specific regions.

UN13: need to geo-map clients.

UN14: need to screen the feasibility of projects against different hazards criteria.

UN44: need to measure the area vulnerable to wildfires before events.

R&D gaps

- Low spatial resolution (8km)
- Only up to 10 days of forecasting.

Potential improvements drivers

New products with higher resolution and long forecasting

Utilisation level review

Utilisation score

Mean: 2.71	**STD:** 0.70

No utilisation

Low utilisation

- The product is already satisfying the technical and usability requirements.

Medium utilisation

- Unawareness of the existence of the best available commercial EO product with better specifications.

Higher use in developed, and low in emerging countries.

High utilisation

Critical gaps related to relevant user needs