



Main events in relation to GWIS in the last year

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The Global Wildfire Information System (GWIS)

GWIS is a **Global Initiative of GEO** lead by the JRC, which builds on the activities of GOFC Fire IT and its networks and is supported by programs such as NASA GEO GWIS and the EU Copernicus programs

Wildfire Monitoring and Fire Danger Forecasts in Chile

Wildfires continue to present a major risk in many countries. It is estimated that nearly 400 million hectares of natural areas are burnt every year, causing loss of life, tremendous environmental and economic damage, and contributing to the increase of carbon emissions worldwide.

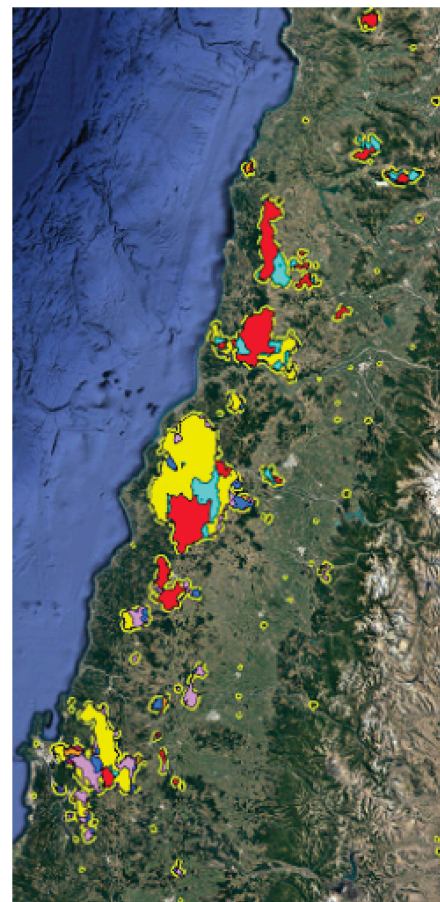
The Global Wildfire Information System (GWIS) is a joint initiative of the GEO and the Copernicus Work Programs. GWIS brings together existing information sources at regional and national levels to provide a comprehensive view and evaluation of fire patterns and effects at a global level.

A long drought at the end of 2016 created extreme fire danger conditions in Chile. This led to a large number of wildfires early in 2017 that caused unprecedented damage to the environment and required evacuation of many people. In total, over half a million hectares of forest and natural areas were burned.

Following a request by Chile, the European Commission's Emergency Response Coordinating Centre led the provision of European assistance, including experienced firefighting crews from European Mediterranean countries. GWIS provided near-real time information on active fires and burnt areas and fire danger forecasts (up to 10 days in advance) supporting preparedness against fire outbreaks and firefighting operations. Active fires and burnt areas were identified using NASA MODIS and VIIRS sensors, and fire danger predictions were based on numerical weather predictions from the European Centre for Medium Range Weather Forecasts.

While GWIS is currently still under development, it is able to provide accurate information on fire activity anywhere in the world. In 2017, reports on critical fires were also provided for Australia, the USA, and Canada. Ongoing collaboration on real-time monitoring is also underway in other fire-prone regions, including Indonesia and central Africa.

 For more information: gwis.jrc.ec.europa.eu



Above: Colours represent areas burned on different days, showing the progression of the fires.



Copernicus is the European Union's Earth observation and monitoring program. It provides users with free, full and open access to data.

Summary of GWIS activities 2017-2018:

1. Dec. 7th. ARSET training discussion R. Field
2. Dec. 11th. Meeting on Early Warning Systems with the EC Humanitarian Office – Emergency Response Coordinating Centre – one potential key user of GWIS
3. Dec. 15th. Meeting with UNISDR to discuss on the Global Assessment of Risk (2019) and the Global Risk Assessment Framework – GRAF.
4. Feb. 16th. Workshop on Megafires in Portugal – forest fires and climate change
5. March 5th. Visit of CEMADEN to JRC – agreement of collaboration on fire monitoring in the areas of the Amazon.

Summary of GWIS activities 2017-2018:

6. April 16th. Contribution to the organization of the SAFNET meeting, on April 16th-18th at Kruger Nat. Park, South Africa.
7. June 7th. Expert Group on Forest Fires – basic criteria for wildfire risk assessment in the pan-European region → GWIS
8. June 22nd. Report to GEO on the implementation of GWIS.
9. June 30th. Request by the GEO Secretariat on the contribution of GWIS to pillars of Paris Agreement (adaptation, loss & damage, technology transfer, etc.) and Sustainable Development Goals (SDGs).
10. July 2nd. IUFRO and World Bank Global Fire Expert network meeting.



Summary of GWIS activities 2017-2018:

11. July 19th. GWIS Webinar by NASA ARSET – hands on demonstration on the use of GWIS.
12. July 31st. Teleconference conference with L. Boschetti & D. Roy, followed by teleconference with FAO for reporting of emissions in LULUCF.
13. Sept. 14th. Reporting on GWIS highlights to GEO for the plenary 2018.
14. August 25th. Request from GEO Secretariat for project proposals for the further development of GWIS to showcase the system at the GEO plenary in 2019.
15. Sept. 21st. ARSET conference on training – R. Field, Sept. 21
16. August-Sept. Preparation of the 3rd GWIS & GOFC Fire IT Meeting.

Thank you

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