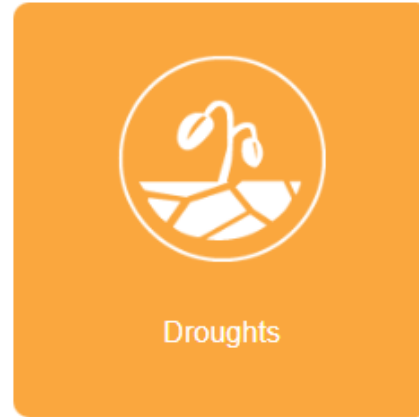
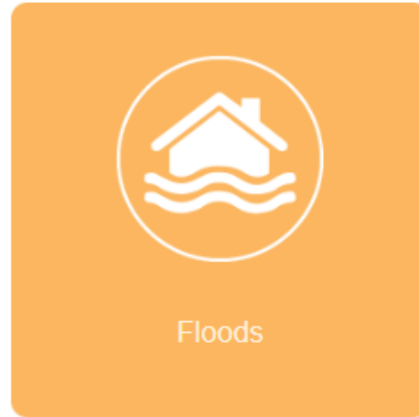
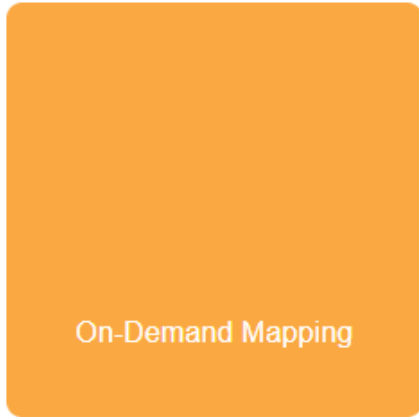




GWIS and the Group of Experts in Forest Fires of Latin America and The Caribbean

An effort towards standardized wildfire monitoring information



EFFIS objectives



Provide standardized up to date and reliable information on wildland fires in Europe.

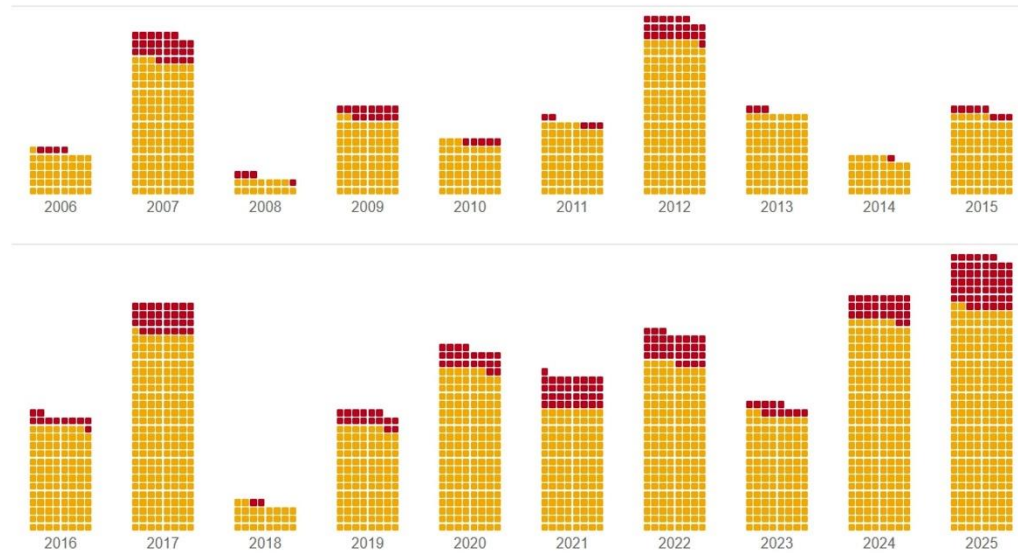
Support European Commission services, European Parliament and national bodies in charge of the protection against wildfires.

Complement existing systems from countries.

Number of fires $\geq 1\,000$ hectares in EU from 2006 to 2025

Yearly data, source: EFFIS/CEMS/JRC

■ $\geq 1\,000$ and $< 5\,000$ ha
 ■ $\geq 5\,000$ ha
 Each square = 1 fire



© European Union, 2026.

Fire occurrence at EU Northern latitudes in EU from 2006 to 2025

Yearly data, source: EFFIS/CEMS/JRC



Data includes only fires above 30 hectares to ensure consistency for year-on-year comparisons.

© European Union, 2026.



GOFC-GOLD

GLOBAL OBSERVATION OF FOREST
AND LAND COVER DYNAMICS



Current Situation Viewer

Provides fire danger forecast up to 10 days in advance, 1-day lightning forecast and near-real time information on active fires...

[Read more >](#)



Current Statistics Portal

Statistics are provided at national level and for regions of interest, such as the "Brazilian Legal Amazon" and the Arctic Monitoring and Assessment Program (AMAP).

[Read more >](#)



Country Profile

Provides historical overviews of fire regimes at country and sub-country level for the period 2002-2019.

[Read more >](#)



Long-term fire weather forecast

Monthly and seasonal forecast of temperature and rainfall anomalies that are expected to prevail over the world.

[Read more >](#)

Data & Services

Provides access to the data used in the GWIS applications. Data from the Current Situation Viewer are provided from the WMS.

[Read more >](#)

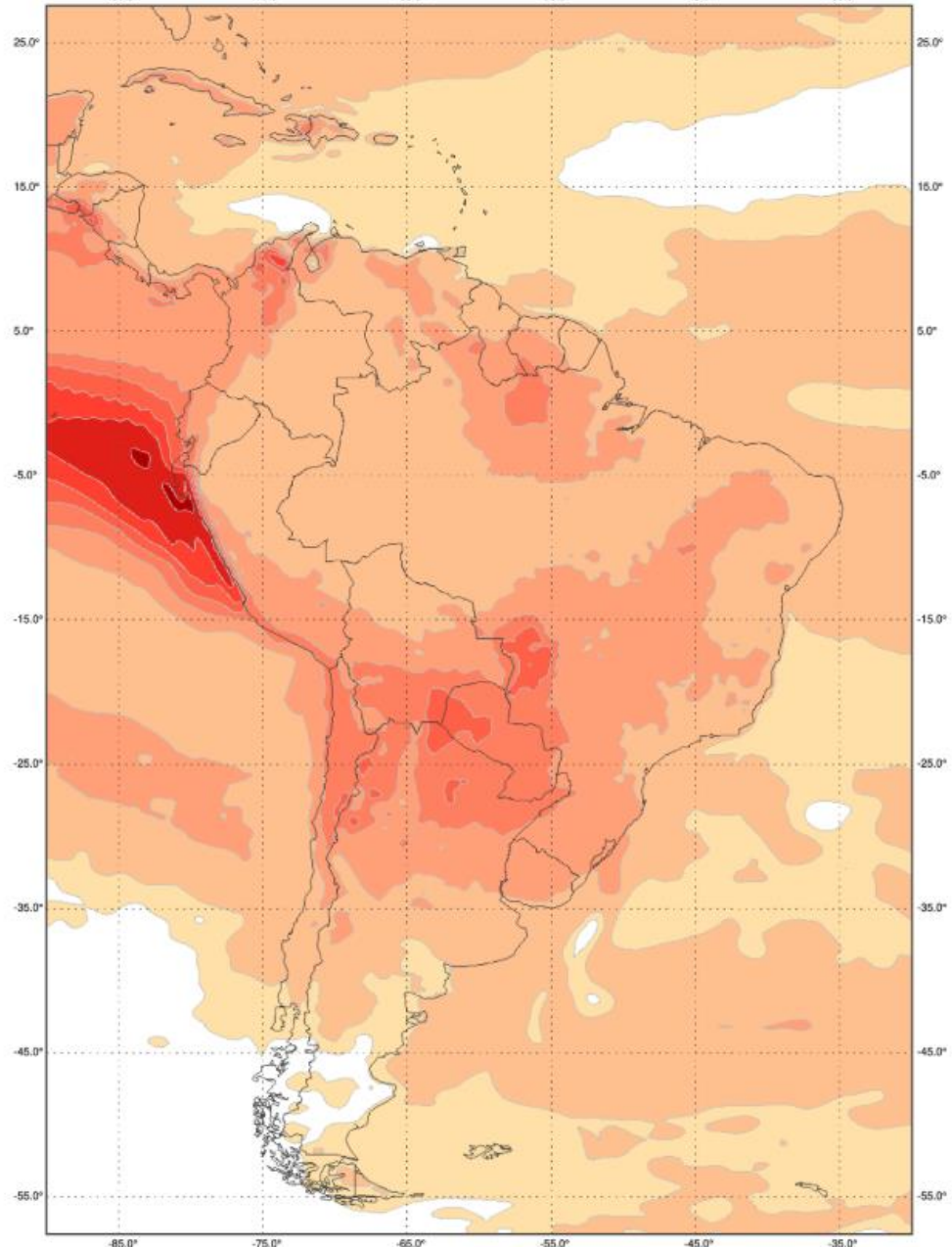


European
Commission

Seasonal Temperature (T2m) Anomalies valid for month: August 2026

Map processed by EFFIS Sytem based on ECMWF Seasonal Forecast System (S5) initiated on 01 April 2026

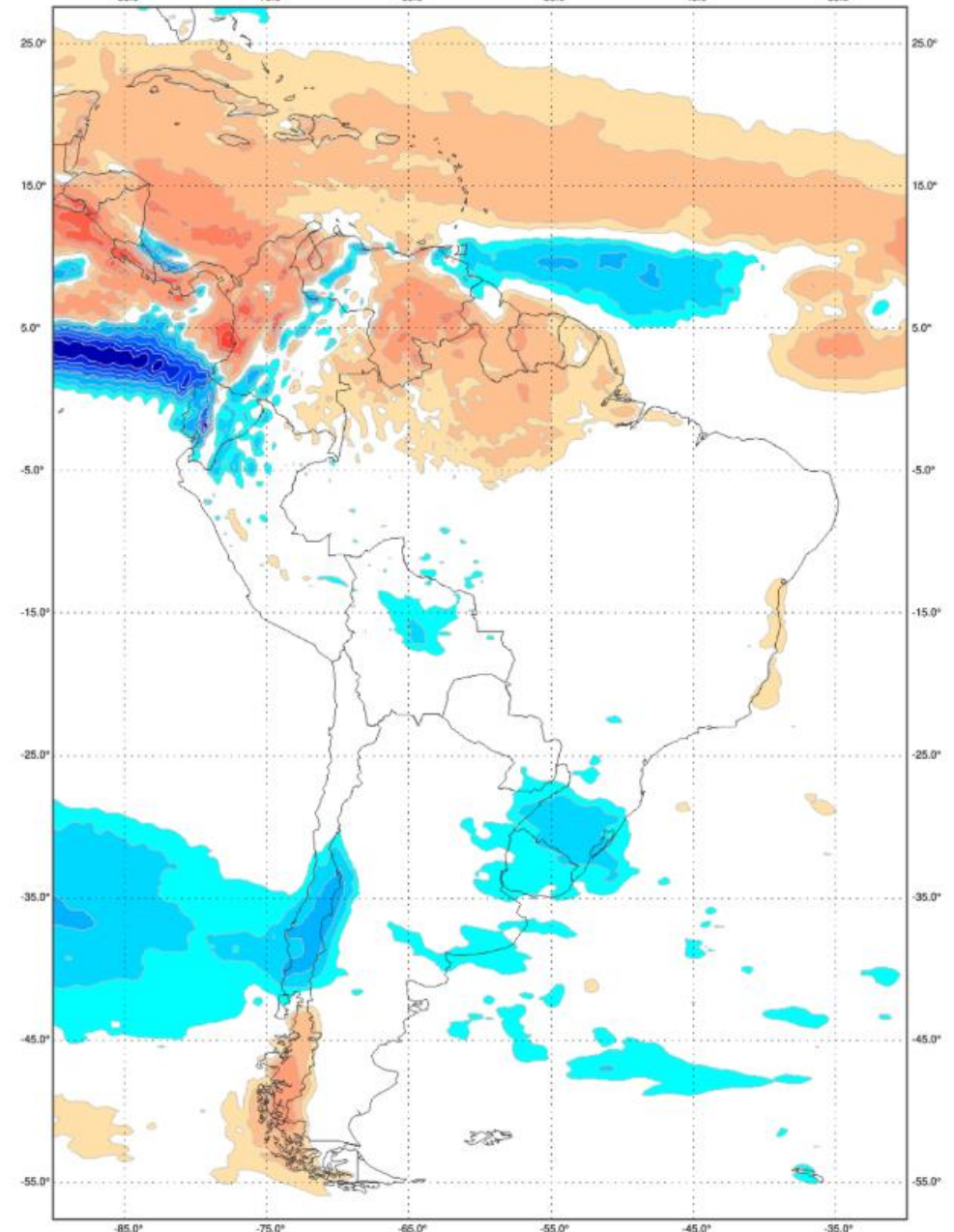
Estimated deviation (anomaly) of the mean from model climate in Celsius degrees



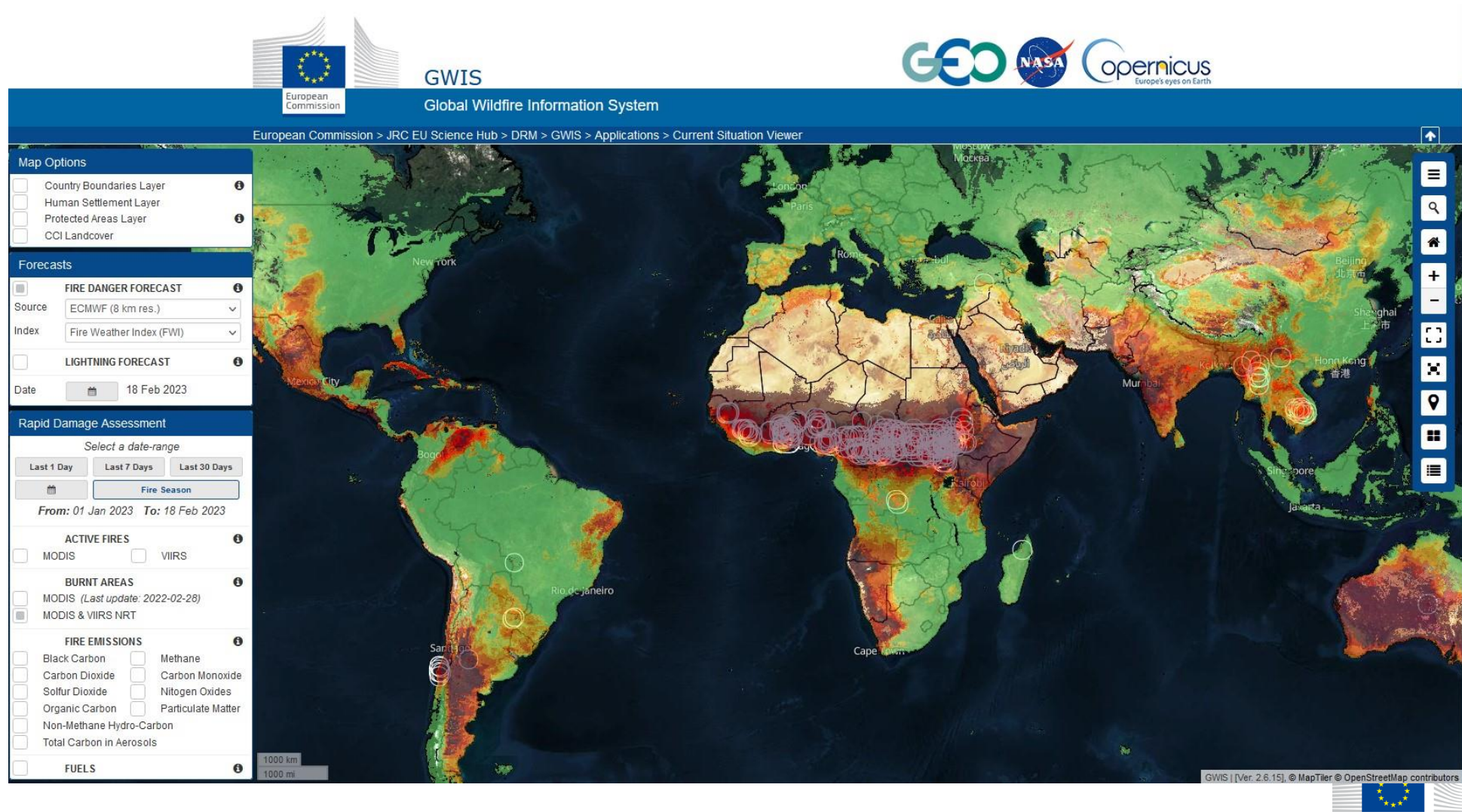
Seasonal Rain Anomalies valid for month: August 2026

Map processed by EFFIS Sytem based on ECMWF Seasonal Forecast System (S5) initiated on 01 April 2026

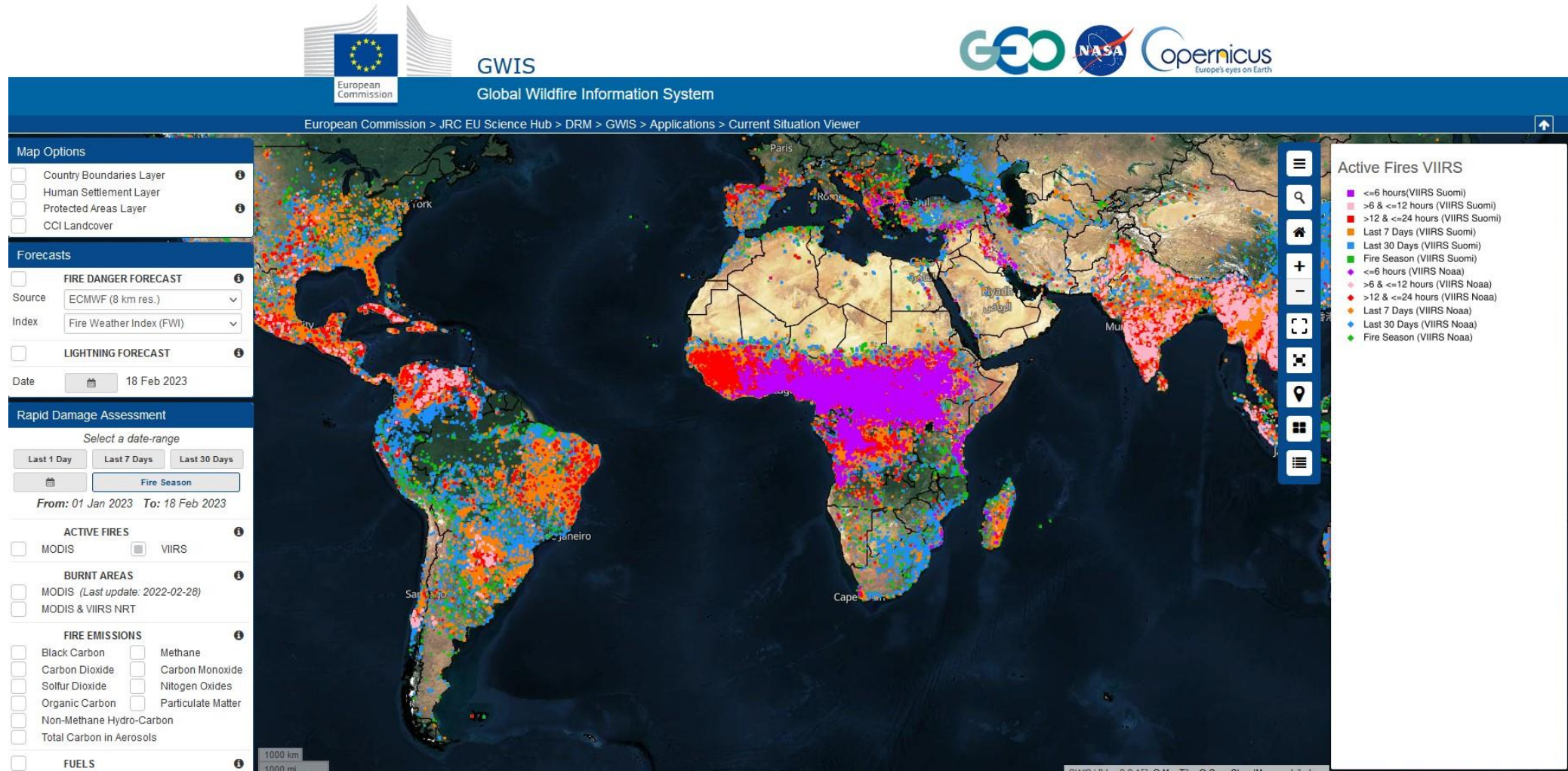
Estimated deviation (anomaly) of the mean from model climate in millimeters (mm)



Current situation viewer – Fire danger forecast



Active fire mapping with VIIRS and MODIS sensors



Near-real time maps of burnt areas



https://gwis.jrc.ec.europa.eu/apps/gwis_current_situation/

Near-real time maps of emissions – CO₂



Country profiles

The image displays the GWIS (Global Wildfire Information System) Country Profile interface for Angola. The main screen is titled "COUNTRY PROFILE" and features six regional map thumbnails: Americas, Europe, Asia, Americas, Africa, and Oceania. Each thumbnail has a dropdown menu below it with the text "Please select a country".

Below the regional maps, there are logos for the European Union, Copernicus, NASA, GEO, and the University of Idaho. A table of statistics for Angola is shown, including Year, Population, Area, and other metrics.

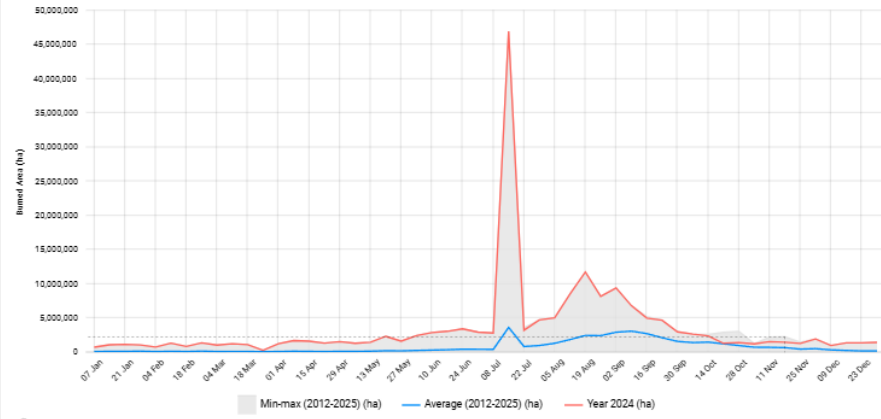
Four detailed data panels are shown in the foreground, all for Angola:

- Yearly Burned Area & Number of Fires (2002-2022):** A bar chart showing the annual burned area (red bars) and the number of fires (blue line).
- Yearly Burned Area Seasonality (2002-2022):** A heatmap showing the seasonal distribution of burned area.
- Yearly Burned Area by Landcover (2002-2022):** A stacked bar chart showing the burned area broken down by land cover type.
- Yearly Burned Area by Landcover (2004-2022):** A stacked bar chart showing the burned area broken down by land cover type for a more recent period.

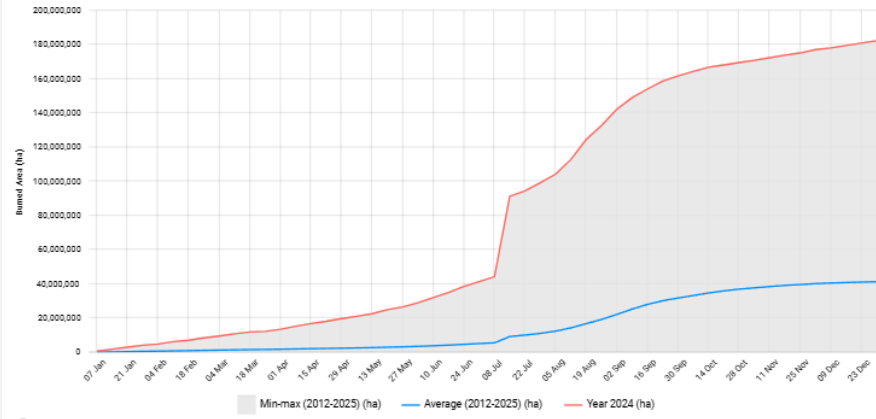
Other panels include a map of Angola, a satellite image of a forest, and a map of the MESSI Landcover.

Burnt area

GWIS Weekly Burnt Areas



GWIS Weekly Cumulative Burnt Areas



- Africa
- Americas
- Asia
- Europe
- Oceania
- Areas Of interest

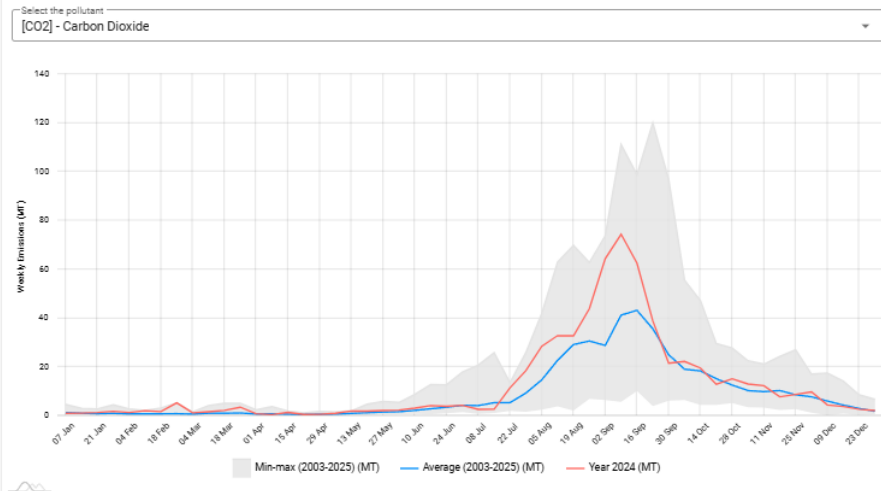
Please, select a zone
Areas Of interest

Overview

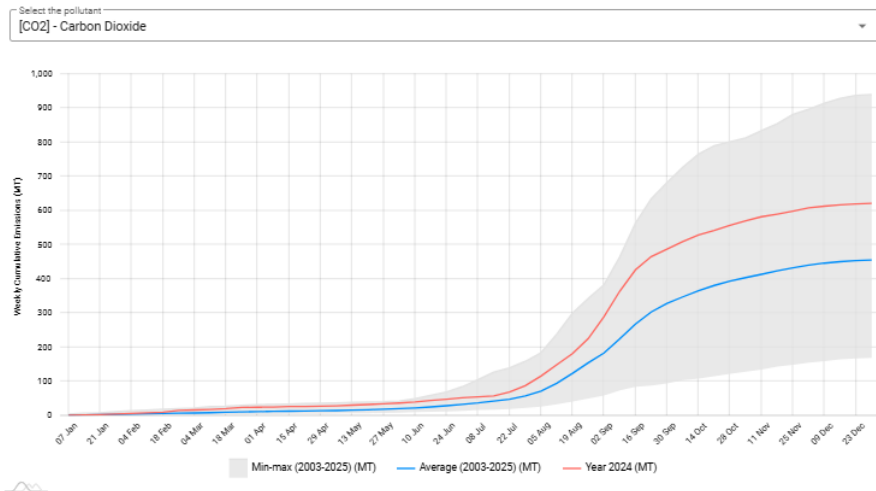
- Amazon Regional Observatory (ARO)
- Arctic Monitoring & Assessment Programme
- Brazil Legal Amazon
- Central EU
- European Union
- HKH Himalaya Region
- Latin America and the Caribbean (LAC)
- Mediterranean EU
- Middle East & North Africa
- North America
- Northern EU
- South America
- World

Carbon emissions

GWIS Weekly Emissions - [CO2] - Carbon Dioxide



GWIS Weekly Cumulative Emissions - [CO2] - Carbon Dioxide



Article

Articles / Volume 22, issue 19 / BG, 22, 5247–5256, 2025

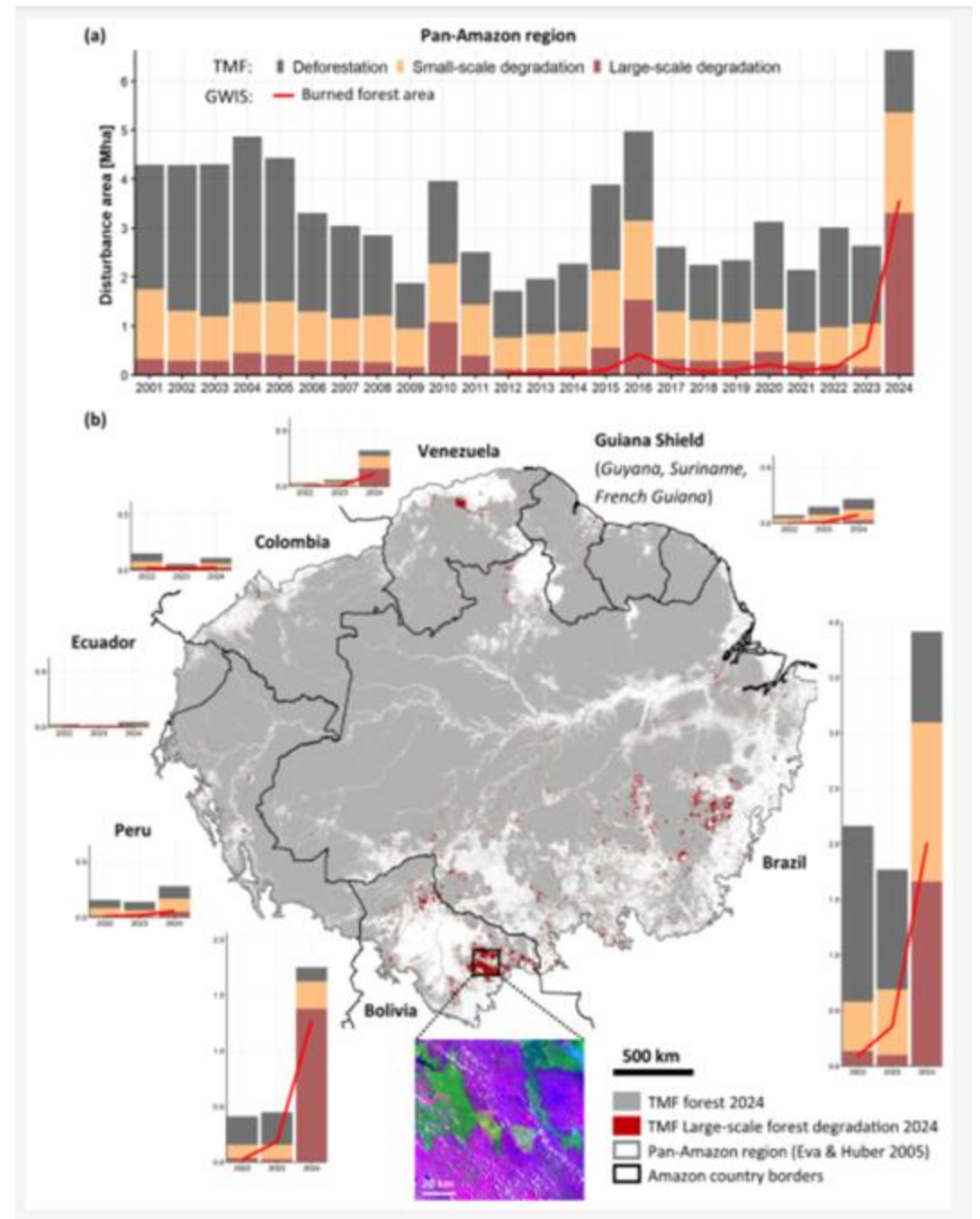
<https://doi.org/10.5194/bg-22-5247-2025>
© Author(s) 2025. This work is distributed under the Creative Commons Attribution 4.0 License.

Article Peer review

BG Letters | Highlight paper | 

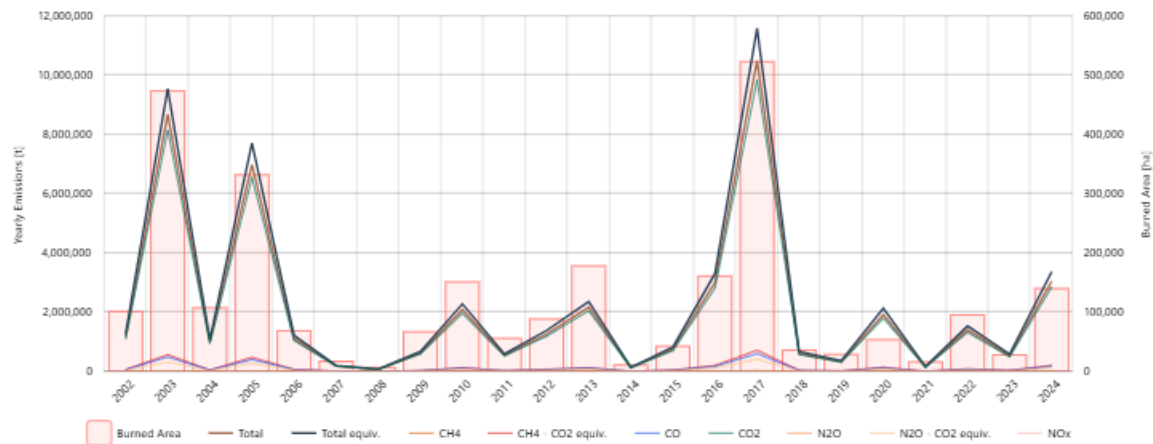
Extensive fire-driven degradation in 2024 marks worst Amazon forest disturbance in over 2 decades

Clément Bourgoin , René Beuchle, Alfredo Branco, João Carreiras, Guido Ceccherini, Duarte Oom, Jesus San-Miguel-Ayanz, and Fernando Sedano



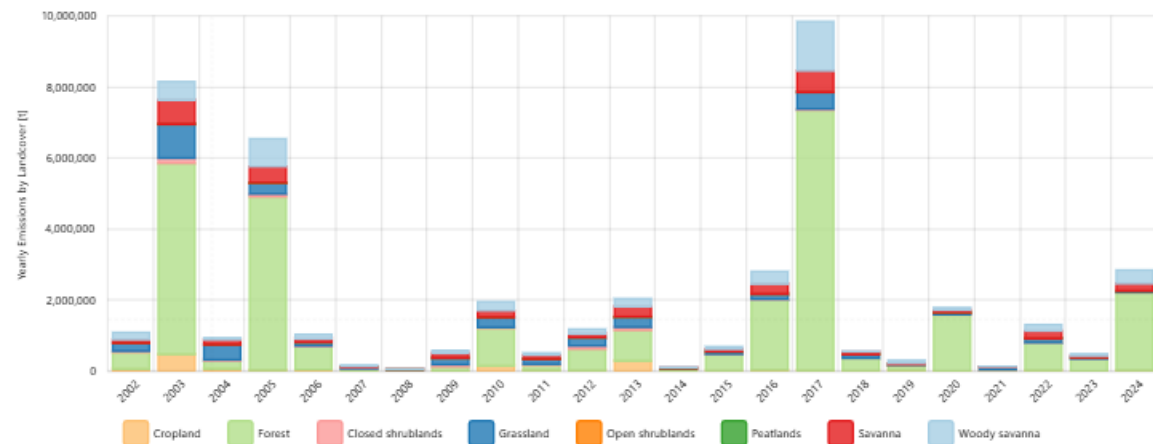


Yearly Emissions & Burned Area (FAOSTAT) - [2002-2024]

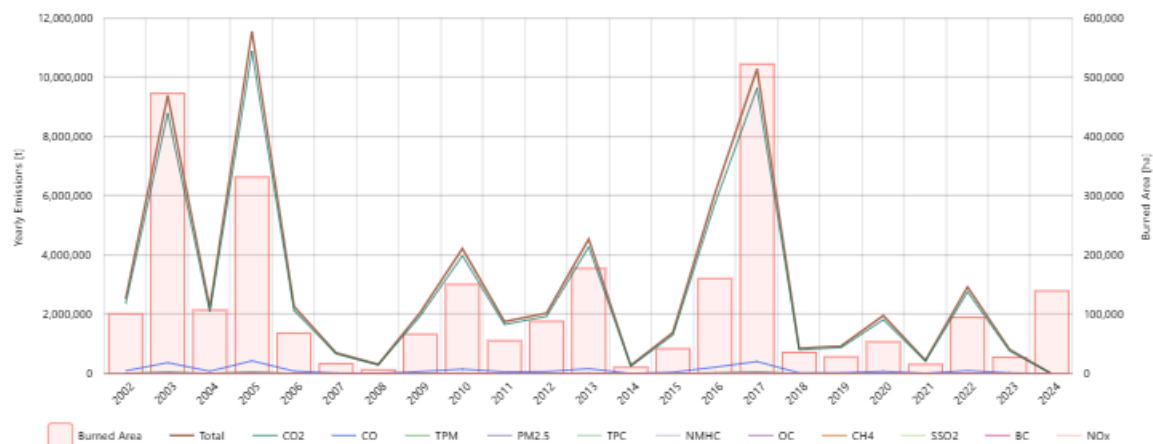


Yearly Emissions by Landcover (FAOSTAT) (*) [2002-2024]

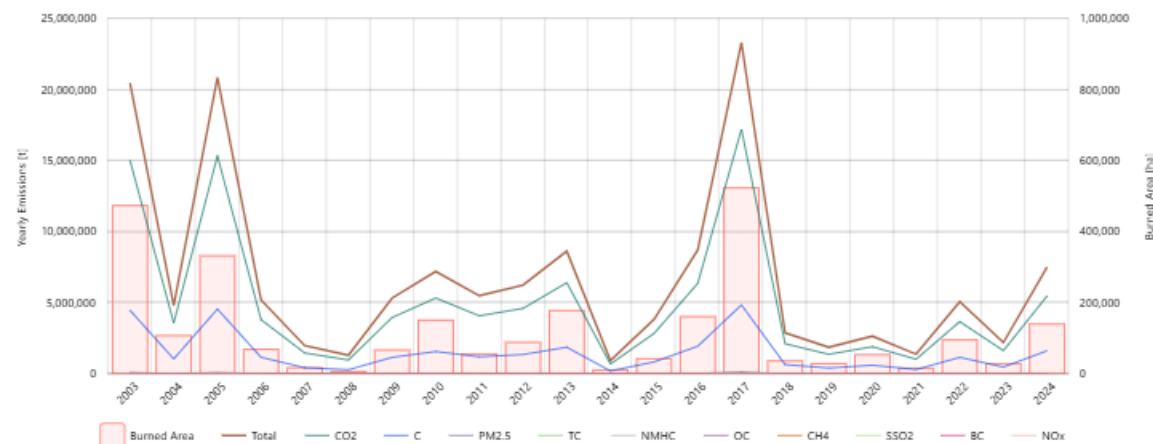
[CO2] - Carbon Dioxide



Yearly Emissions & Burned Area (GFED) - [2002-2024]

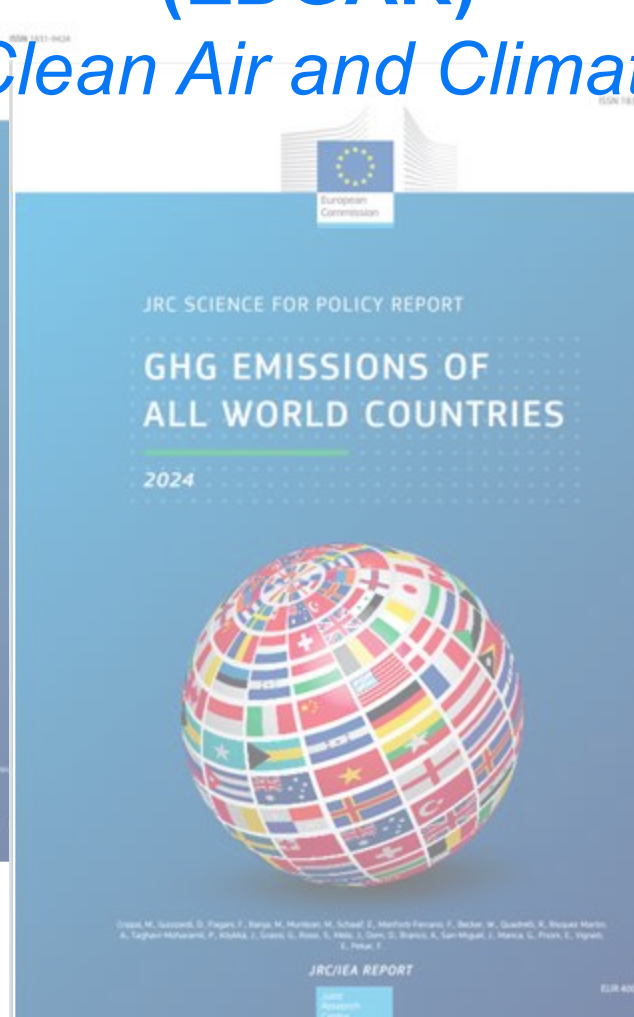


Yearly Emissions & Burned Area (GFAS) - [2002-2024] - Country level only

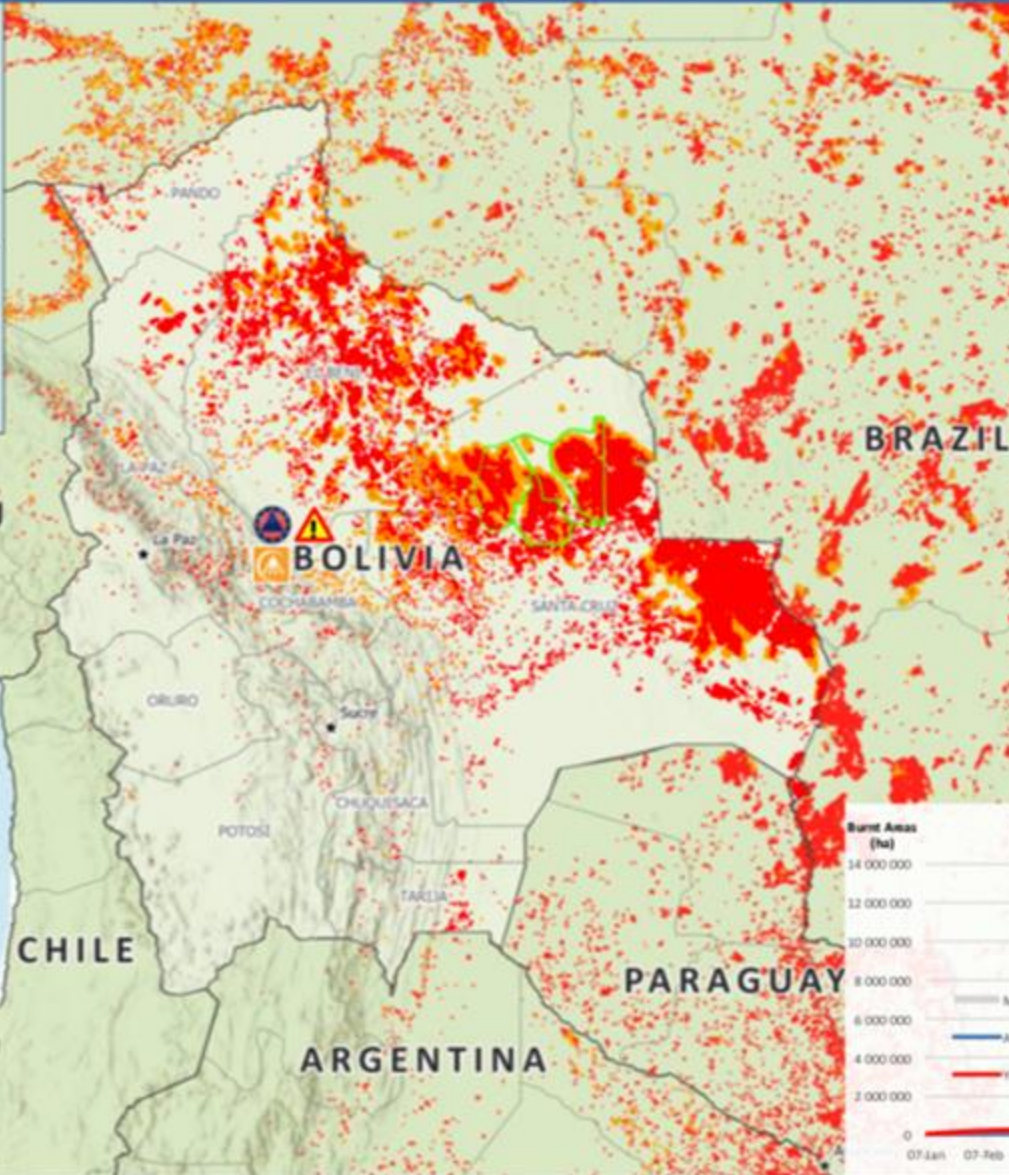
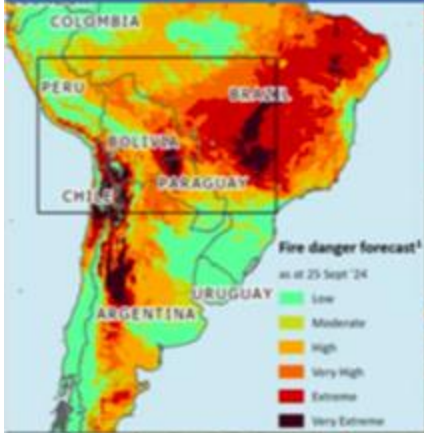


Emission Database for Global Atmospheric Research (EDGAR)

JRC Clean Air and Climate Unit



Bolivia | Wildfires and UCPM response



UCPM RESPONSE

as at 25 September, 12:00 UTC

Bolivia made a request for assistance via the EU Civil Protection Mechanism (UCPM)

- 6 August: requesting aerial firefighting means, firefighters, firefighting tools and personal protective equipment.
- 9 September: request updated for Incident Command Specialists, firefighting equipment and fire analysis experts
- Spain offered 1x FAST (forest firefighting assessment and advisory team) (8 pax) and 1 x GFFF (ground forest firefighting team) (41 pax), deployed on 24 September.

The ERCC activated the Copernicus Emergency Management Service Rapid mapping (EMSR.765) on 23 September.

2 108
 1 1 (ECPP) 49

Burnt areas
Source: JRC GWIS
1 July – 22 September

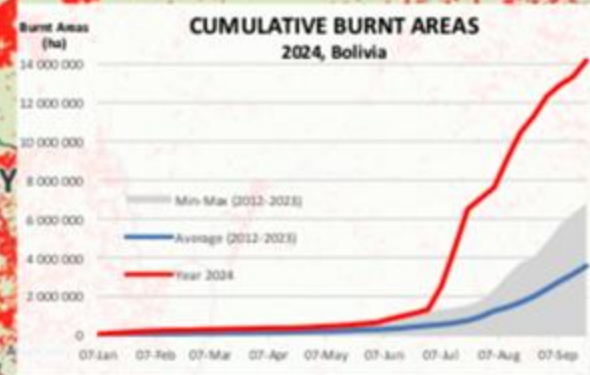
Active fire detection
Source: JRC GWIS
22 September '24

- UCPM activation
- Copernicus EMS (EMSR.765)
Activation date: 23 September '24
- Areas of Interest
- Department boundary
- Country boundary
- State of National Emergency
- Ground forest firefighting module (GFFF)
- Forest firefighting assessment and advisory team (FAST)
- Total personnel deployed

0 180 360 Kilometres

¹The fire_danger_forecast module of GWIS generates maps of forecasted fire danger level using numerical weather predictions.

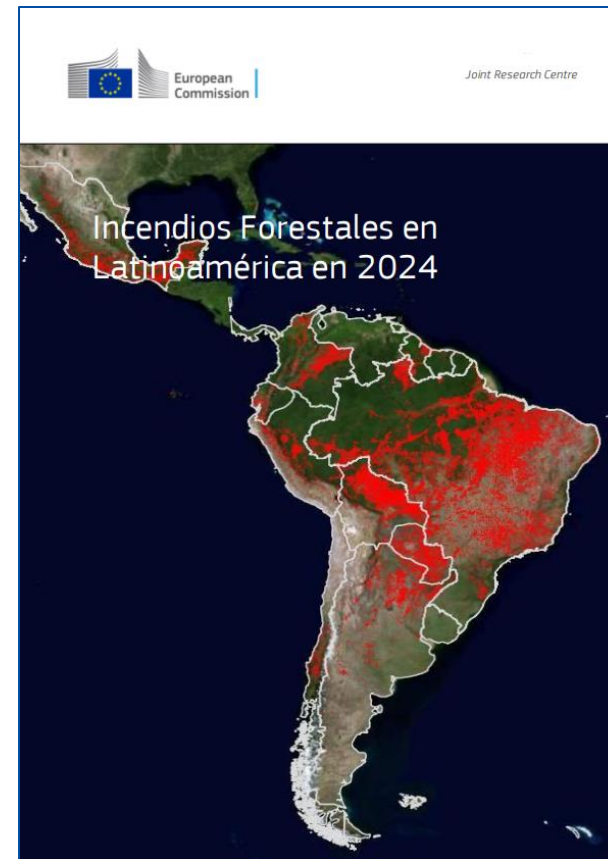
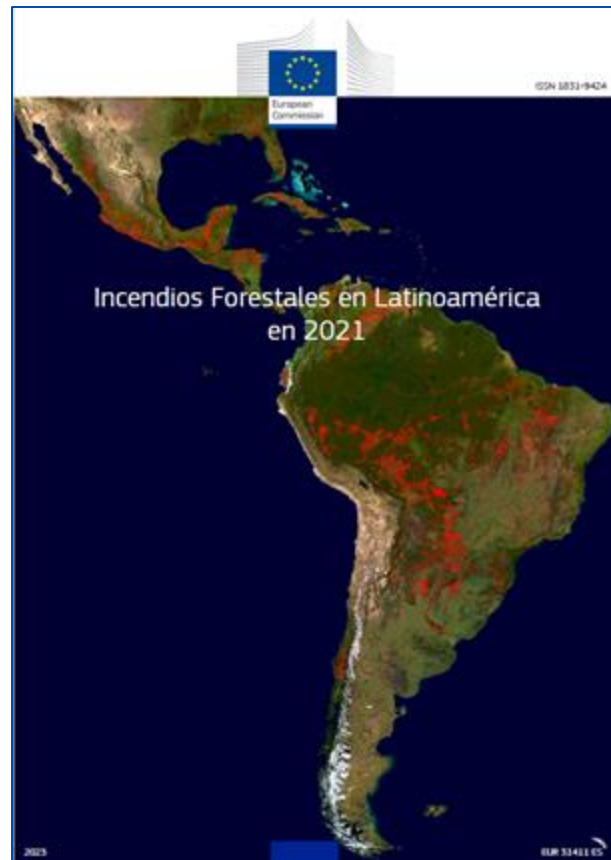
© European Union, 2024. Map produced by the ERCC Analytical Team. The boundaries and the names shown on this map do not imply official endorsement or acceptance by the European Union.



Expert Group Forest Fires Latin America and the Caribbean (GEFF LAC)

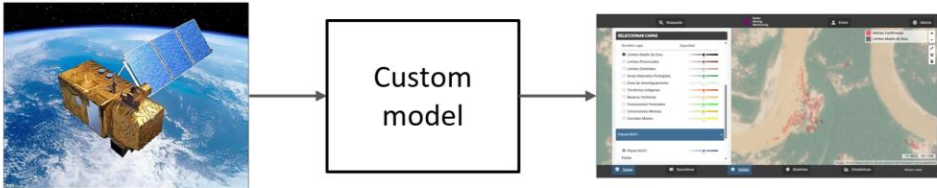


Date	Type of record	Location	Title
2025/12/18	Report	Online	Forest Fires in Latin America in 2024
2023/10/25	Report	Online	Forest Fire Information and Management Systems in Latin America and the Caribbean
2023/10/01	Report	Online	Forest Fires in Latin America in 2021

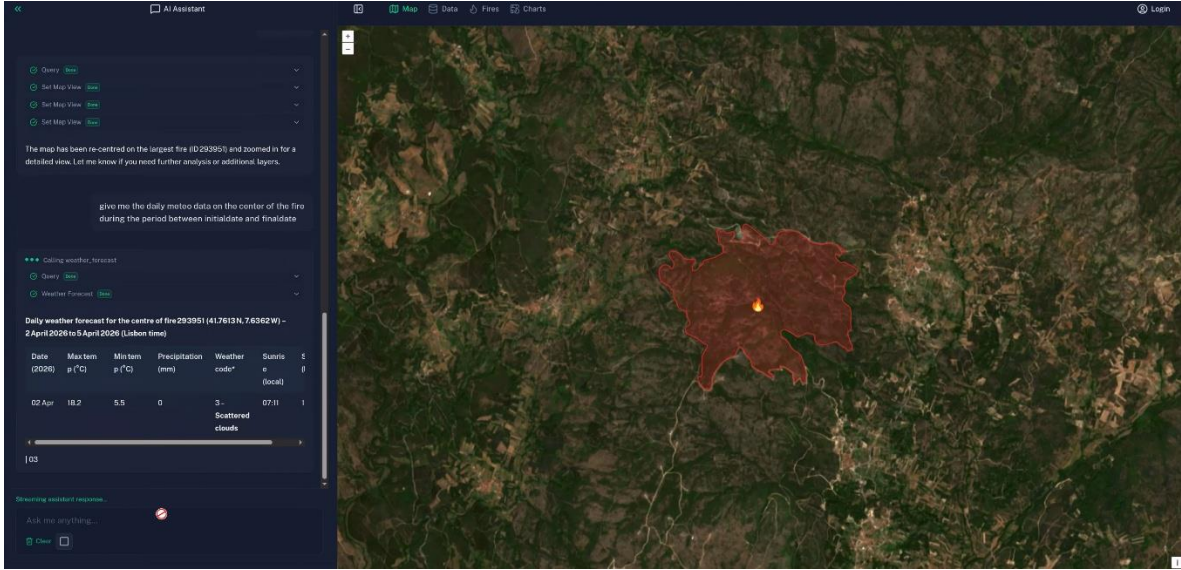
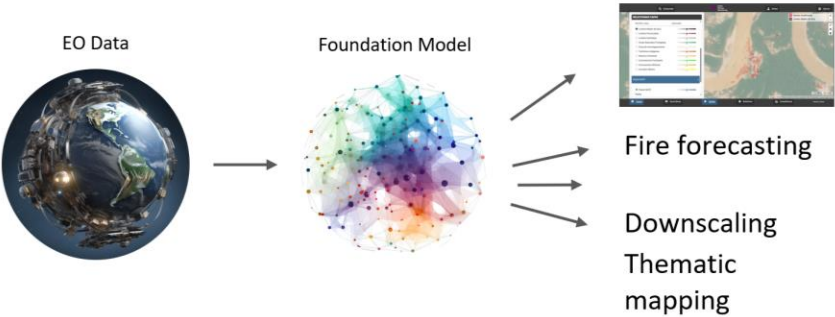


Global Wildfire Decision Support System

YESTERDAY:



TODAY:



From David Saah, AI4PublicGood Workshop

Adapting to a changing landscape of wildfire monitoring sensors

- MODIS approaching decommissioning (2026?)
- Enhanced capabilities of Geostationary sensors (e.g. METEOSAT Third Generation – FCI)
- WildFireSat Global coverage!
- Increasing potential of high-resolution (10 – 30m) sensors for regular burned area mapping
- Commercial constellations for wildfire monitoring.



Thank you

- Fernando.sedano@ec.europa.eu
- jrc-effis@ec.europa.eu



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Disaster
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Coordination
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DRMKC –
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INFORM



Copernicus
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ECHO –
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