



# EXPLORE EARTH

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## Earth Information System (EIS)

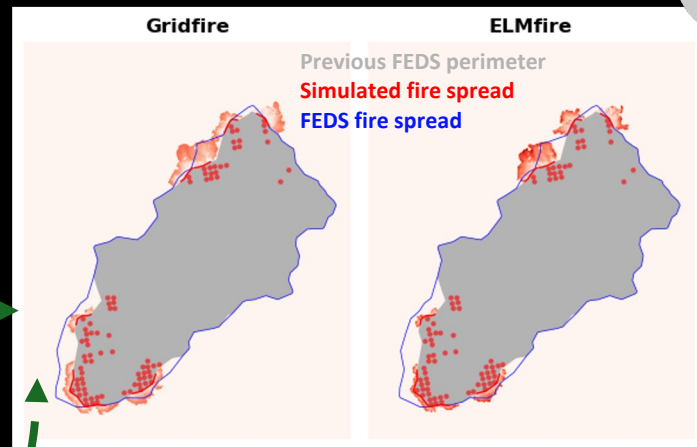
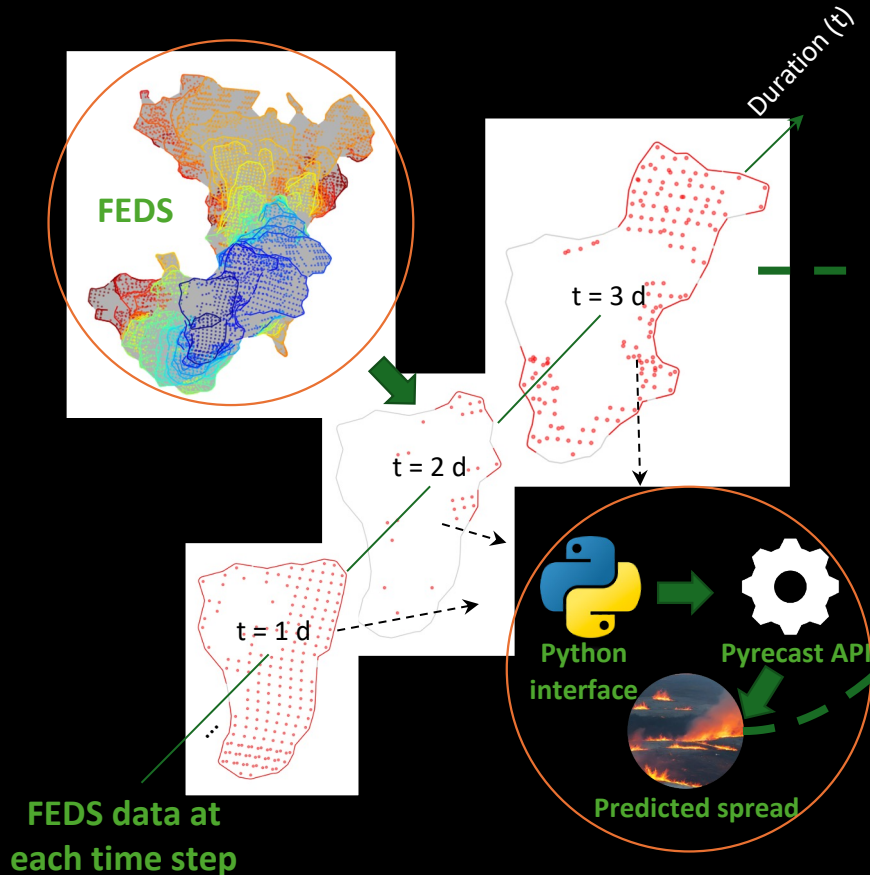
Monthly Highlights  
March 2024



<https://www.earthdata.nasa.gov/eis>

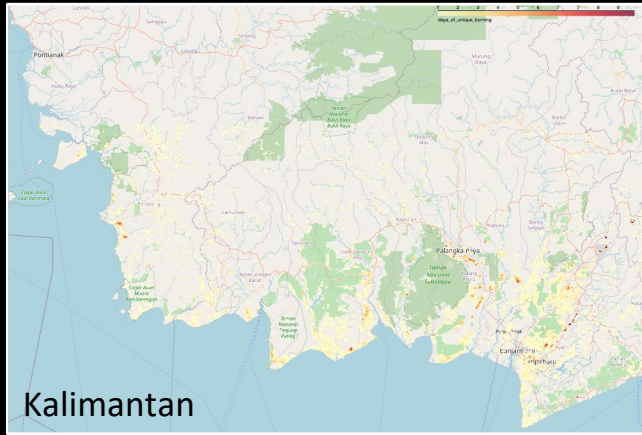
# Systematic Fire Spread Model Evaluation & Optimization

Partnership with Pyregence Consortium



In partnership with the Pyregence Consortium, we've developed the Pyrecast API — a web-based fire spread simulation system. This innovation integrates with the FEDS fire tracking database, enabling a systematic assessment of fire simulations under varied conditions.

# EIS Fire Supports Indonesian Stakeholders

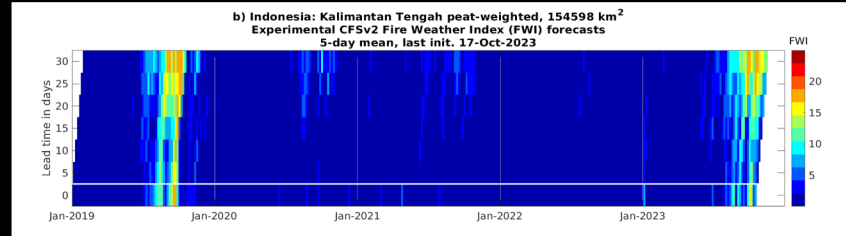
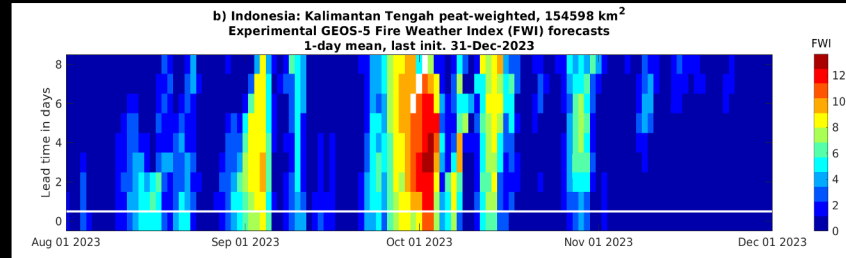


Low visibility at Palangka Raya, October 10  
% Mr. Guswanto, Deputy for Meteorology, BMKG



## Indonesian peat fires returned during the 2023 El Niño

EIS Fire shared NRT FEDS fire event information and forecasts of Fire Weather Index (FWI) with colleagues at Badan Meteorologi, Klimatologi, dan Geofisika (BMKG) and the Indonesian Ministry of Environment and Forestry



Forecast “chiclet” plots of FWI forecast  
Solid color vertical line = perfect forecast

GEOS-based FWI forecasts have a high-bias, but with **strong differentiation between low and high FWI at 8-day lead times (top).**

There was **strong differentiation in subseasonal (30-day) FWI forecasts between 2023 and the three quiet years prior (bottom).**



# EIS Monitoring 'Megafires' in Roraima, Brazil



Images Global Maps Articles Blogs

NASA earth observatory

EO Explorer

## Amazon Forest Fires Rage in Roraima

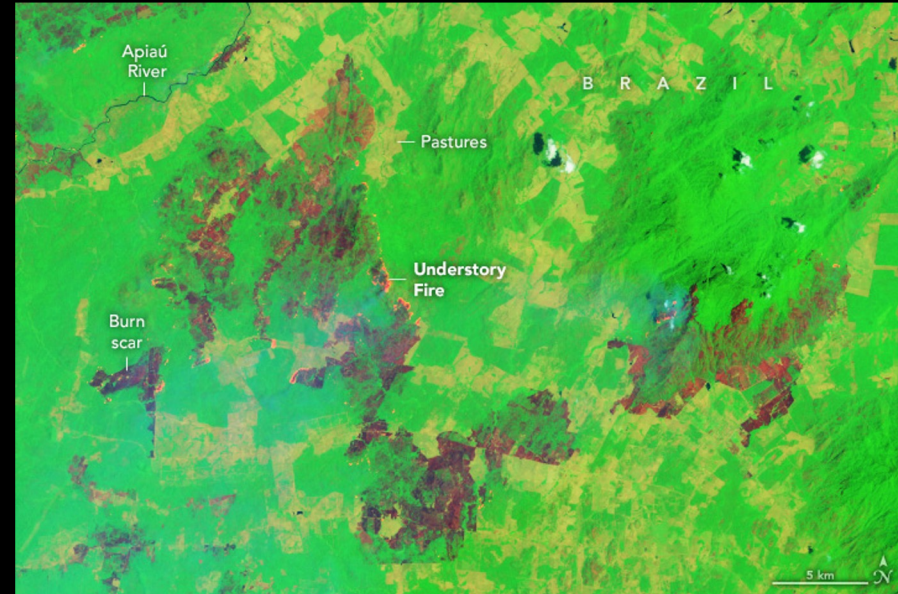


View this area in EO Explorer

Huge understory fires are spreading throughout the state in northern Brazil as drought and heat turn the rainforest into tinder.

Image of the Day for March 2, 2024

Instruments:  
Aqua — MODIS  
Landsat 9 — OLI-2



El Niño drought conditions have allowed forest fires to spread for months in the northern Amazon. EIS is providing fire tracking data through the Amazon Dashboard and VIIRS candidate fires to fire managers and Embrapa scientists in Roraima.



# EIS Engagement and Outreach Activities

Organization/ Meeting	Date(s)/Location	Thematic Area	Activity/ Outcome
Tropical forest fires: an integrated view to avoid the tipping point	Mar 25-28, Yale University	Fire	Presentation
WMO meeting of the expert team on operational hydrology	Mar 5, Virtual	Freshwater	Discussion of ongoing efforts on water cycle monitoring and forecasting
Meeting with EPA ORD and Gulf of Mexico Hypoxia Task Force	Mar 25, Virtual	Freshwater	Discussion of ongoing efforts in water quality modeling