Amazon Cooperation Treaty Organization - ACTO
Amazon Regional Observatory - ARO

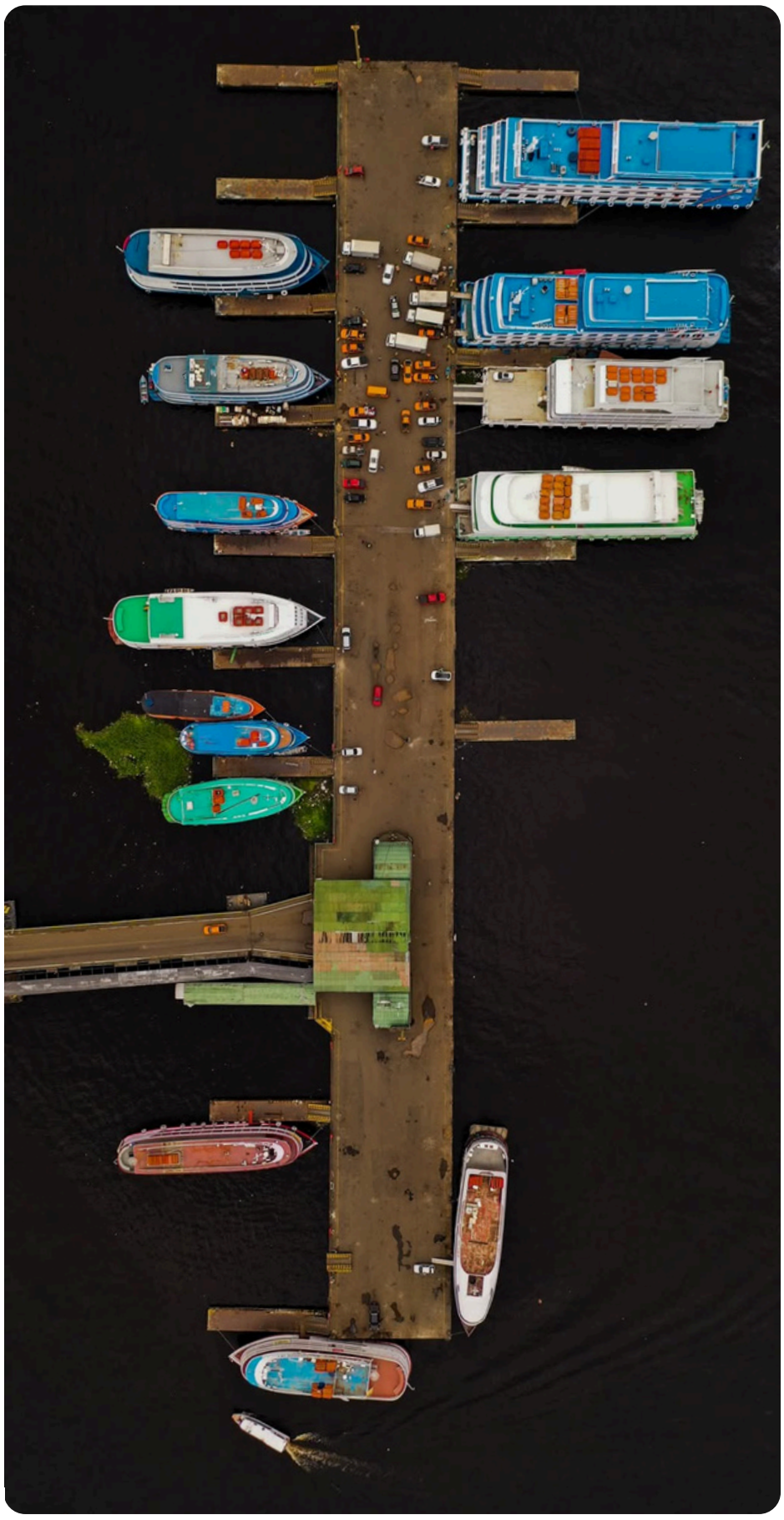
September 2026
Reference: August 2026

# DROUGHT ADVANCES AND HOTSPOTS INCREASE IN THE AMAZON IN AUGUST

The Amazon reached the end of August with **less rainfall, higher temperatures, and a sharp increase in hotspots**. Out of the 32 sub-basins analyzed by the Amazon Regional Observatory (ARO), 18 showed drought conditions, compared with six in July. Average precipitation fell from approximately 90 mm to 55 mm between the two months, while the average temperature reached 25.85 °C, 1.36 °C above the historical average. Hotspots also increased significantly, rising from 2,757 in July to 12,123 in August.

This regional scenario manifests itself in different ways across Amazonian countries. In Bolivia, recent alerts point to a rainfall deficit, loss of soil moisture, and a higher risk of drought in Amazonian areas. In the Peruvian Amazon, the main rivers of Loreto continued to recede in August, with levels below normal at some points and impacts on navigation. In Ecuador, INAMHI (National Institute of Meteorology and Hydrology) warned at the end of the month of rainfall episodes of varying intensity in the Amazon region, showing that drier conditions at a regional scale can coexist with localized events of intense precipitation.

These contrasts reinforce the importance of monitoring the Amazon in an integrated and continuous manner. Persistent precipitation deficits, above-average temperatures, and the rapid growth in hotspots are warning signs for the coming months, especially given the possibility of intensifying conditions associated with El Niño.



**Cage-type boats on the Rio Negro, at the port of Manaus (Brazil). Photo: Maycon Castro.**

## CREDITS

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*The Spanish and English versions were produced with the support of artificial intelligence tools.*

# DROUGHT ADVANCES FROM 6 TO 18 SUB-BASINS IN AUGUST

**Nearly half of the Amazon Basin recorded below-expected precipitation, with deficits persisting in the north of the region**

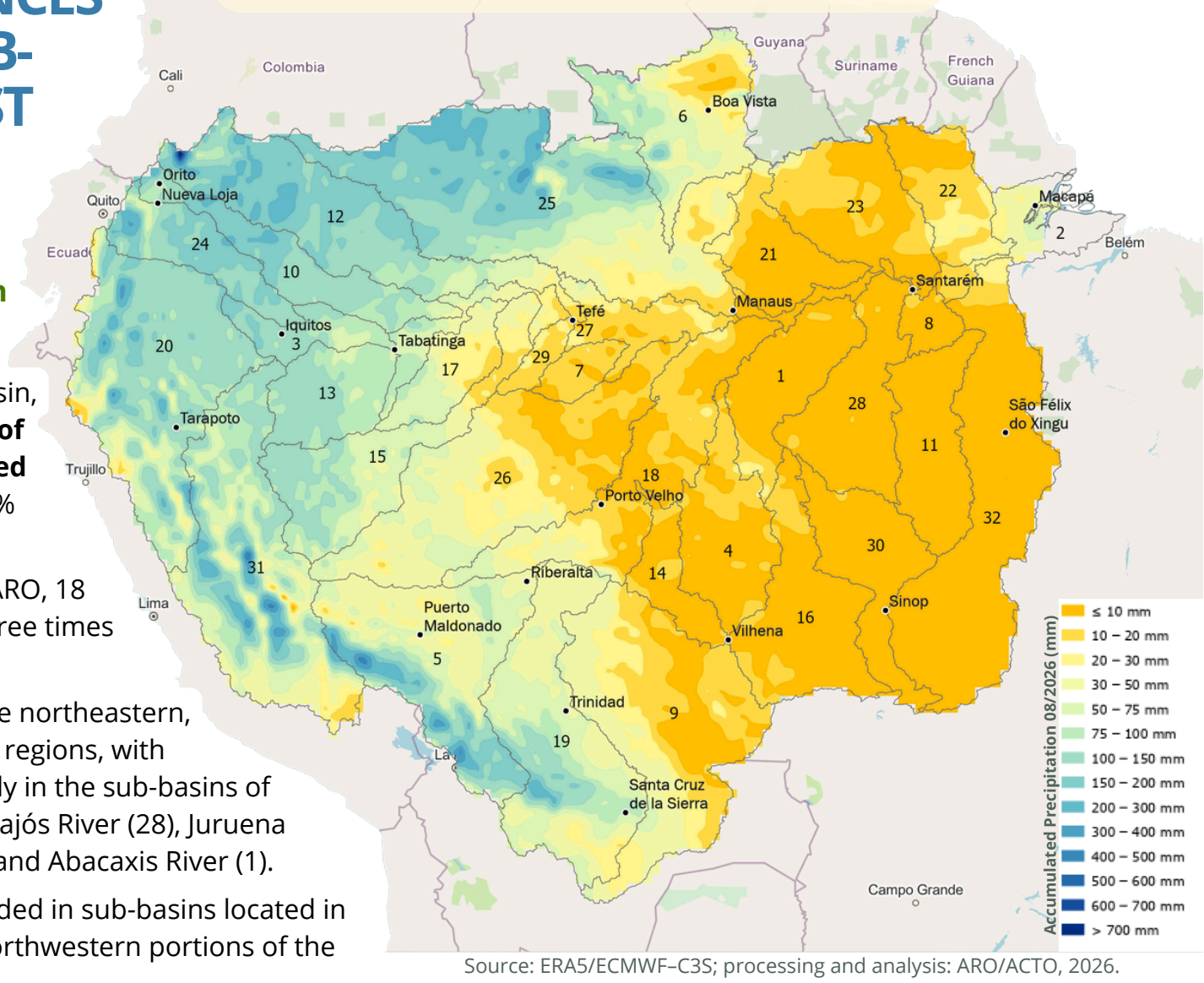
Considering the entire Amazon Basin, which covers 5.9 million km², **48% of the area recorded below-expected precipitation in August**, while 52% remained near normal.

Of the 32 sub-basins analyzed by ARO, 18 recorded below-normal rainfall, three times more than in July.

The lowest volumes occurred in the northeastern, eastern, central, and southeastern regions, with accumulations below 10 mm mainly in the sub-basins of the Xingu (32), Teles Pires (30), Tapajós River (28), Juruena (16), Iriri (11), Curuá Una River (8), and Abacaxis River (1).

Volumes above 50 mm were recorded in sub-basins located in the western, southwestern, and northwestern portions of the Amazon.

## PRECIPITATION DISTRIBUTION MAP - AUGUST




Source: ERA5/ECMWF–C3S; processing and analysis: ARO/ACTO, 2026.

| 32 | 18 | 14 | 0 |
|---|---|---|---|
| Total sub-basins | Sub-basins under drought conditions | Sub-basins with rainfall within normal range | Sub-basins above normal |

## KEY MESSAGES

The drought condition rose from **6 sub-basins in July to 18 in August.**

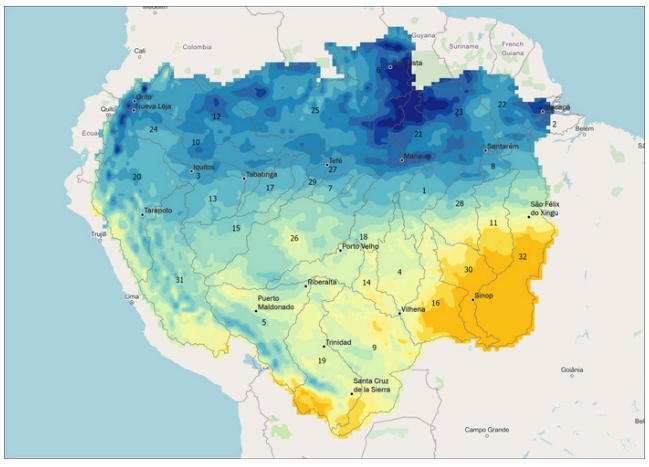
The sharpest deficits occurred in the **Xingu** (32), **Teles Pires** (30), **Tapajós River** (28), **Juruena** (16), **Iriri** (11), **Curuá Una River** (8), and **Abacaxis River** (1) sub-basins, with rainfall significantly below the climatological average.

Between May and August, a progressive reduction in accumulated rainfall was observed, especially in the northern and southeastern regions.

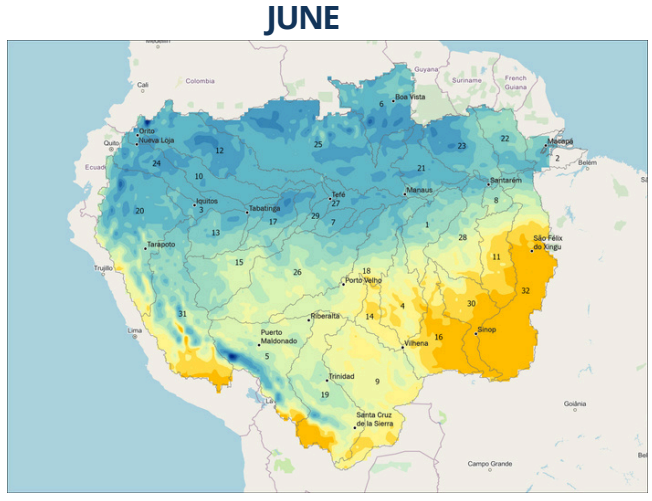
## WHAT REQUIRES ATTENTION?

Although reduced rainfall is characteristic of this time of year in the eastern, central, and southern regions of the Amazon Basin, precipitation **in August was below the historical average**. This deficit, combined with high temperatures and the influence of **El Niño**, which tends to favor warmer and drier conditions in parts of the Amazon, may increase the risk of forest fires and intensify the dry season and the decline in river levels.

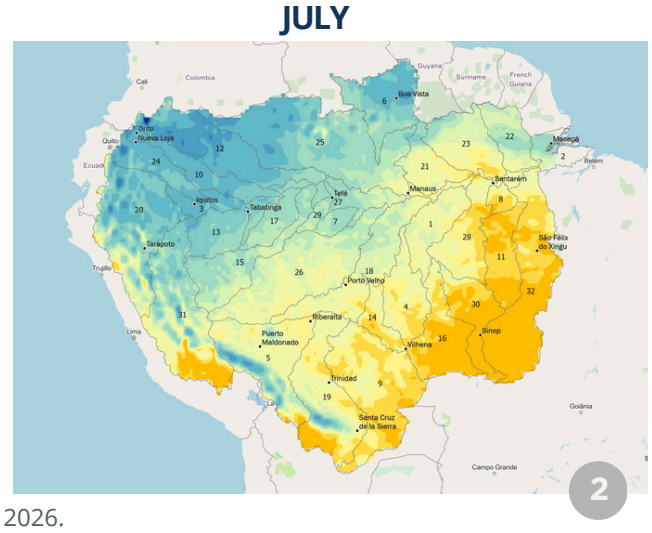
**MAY**



**JUNE**



**JULY**



Source: ERA5/ECMWF–C3S; processing and analysis: ARO/ACTO, 2026.

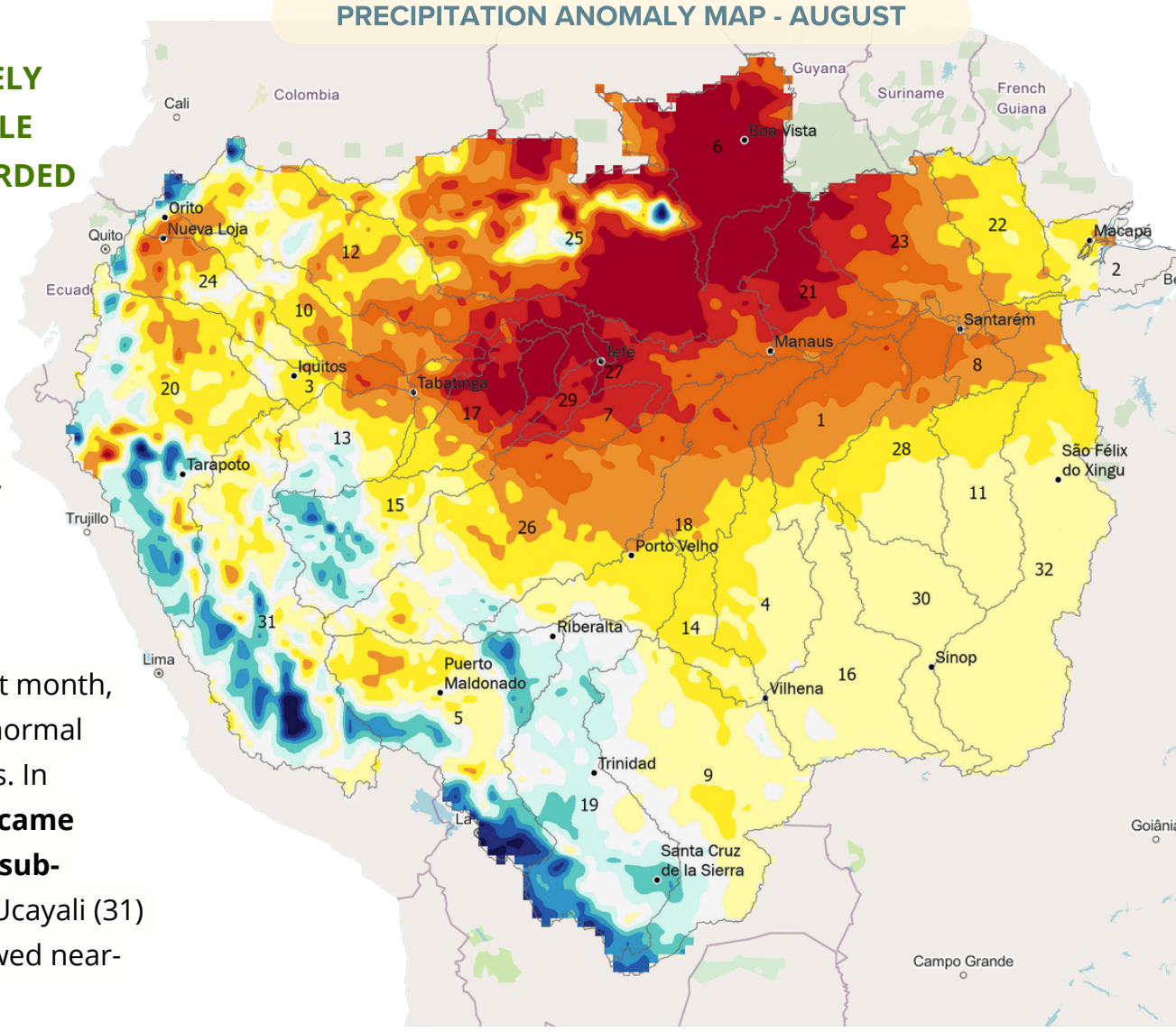
# AUGUST COMBINES RAINFALL DEFICIT AND ABOVE-AVERAGE TEMPERATURES

## PRECIPITATION WAS APPROXIMATELY 36 MM BELOW CLIMATOLOGY, WHILE THE AVERAGE TEMPERATURE RECORDED A POSITIVE ANOMALY OF 1.36 °C

Negative precipitation anomalies expanded across the Amazon Basin in August. The sharpest deficits remained in the sub-basins of the **Uatumã–Nhamundá** (21), **Negro** (25), **Branco** (6), and **Trombetas** (23) rivers and also advanced over the **Tefé** (29), **Jutaí** (17), and **Purus** (26) sub-basins.

The change from July is significant. In that month, 24 of the 32 sub-basins were within the normal range and six showed drought conditions. In August, **below-normal precipitation became predominant in more than half of the sub-basins analyzed.** The Mamoré (19) and Ucayali (31) river sub-basins, on the other hand, showed near-normal conditions.

PRECIPITATION ANOMALY MAP - AUGUST

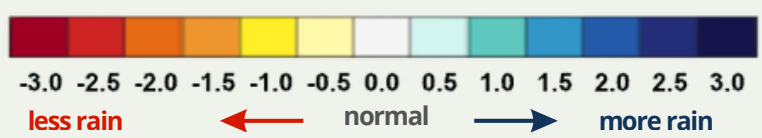



Source: ERA5/ECMWF–C3S; processing and analysis: ARO/ACTO, 2026.

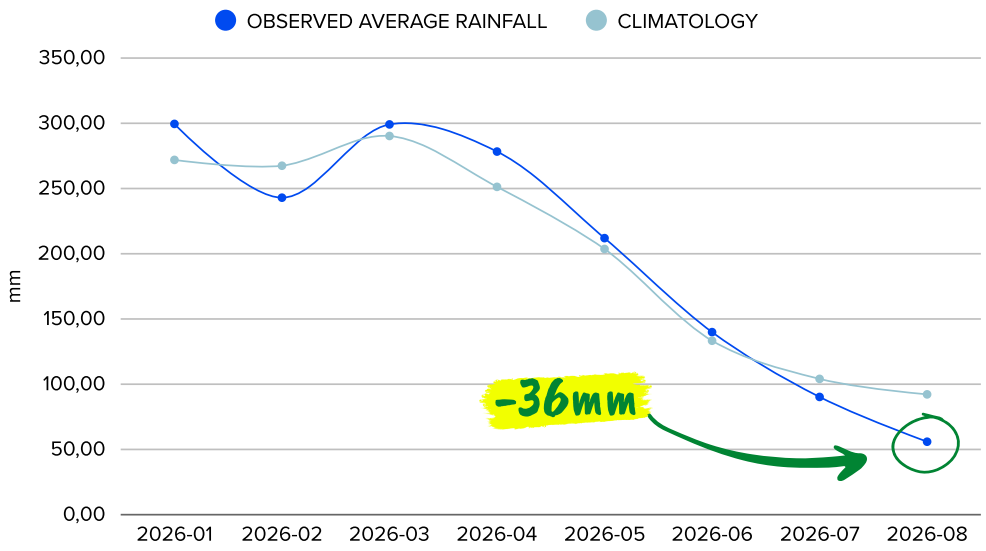
## WHAT REQUIRES ATTENTION?

The persistence of deficits should be monitored especially in the **Negro, Branco, Trombetas, Uatumã–Nhamundá, Tefé, Jutaí, and Purus river** sub-basins. The continuation of these conditions may affect flows and soil moisture and expand conditions favorable to fires during the dry season.

PRECIPITATION ANOMALY

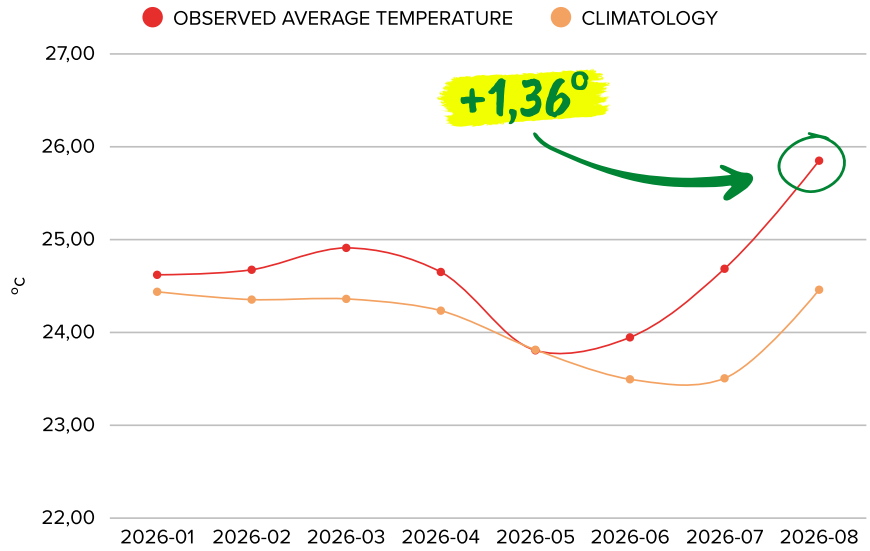



AVERAGE MONTHLY PRECIPITATION IN THE AMAZON BASIN




Source: ERA5/ECMWF–C3S; processing and analysis: ARO/ACTO, 2026.

AVERAGE MONTHLY TEMPERATURE IN THE AMAZON BASIN




Source: ERA5/ECMWF–C3S; processing and analysis: ARO/ACTO, 2026.

In August 2026, **average precipitation** in the Amazon Basin was approximately 55 mm, about **36 mm below the average for the period.**

Regarding the **observed average temperature**, August 2026 recorded approximately 25.85 ºC, an anomaly of **1.36 ºC above the average for the period.**

# HOTSPOTS MORE THAN QUADRUPLE BETWEEN JULY AND AUGUST

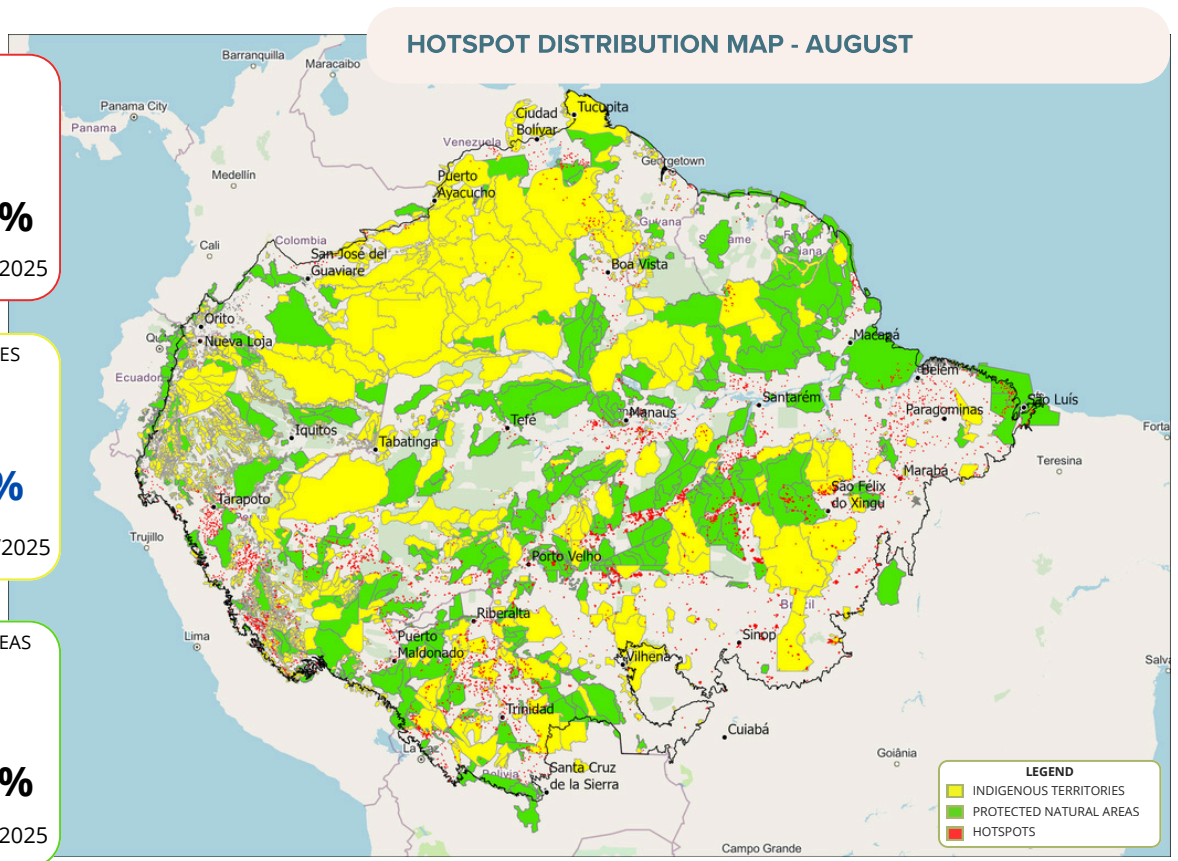
## August recorded 12,123 hotspots, 24.5% above the same month in 2025

The number of hotspots increased sharply in August. A total of 12,123 hotspots were recorded, compared with 2,757 in July — a volume approximately 4.4 times higher. Compared with August 2025, the increase was 24.5%. The hotspots were concentrated mainly in the central-eastern, southwestern, and southeastern regions of the Amazon.

AMAZON
**12.123**
hotspots in August
**24,5%**
compared with August/2025

INDIGENOUS TERRITORIES
**1.586**
hotspots in August
**7,2%**
compared withj August/2025

PROTECTED NATURAL AREAS
**2.160**
hotspots in August
**19,7%**
compared with August/2025



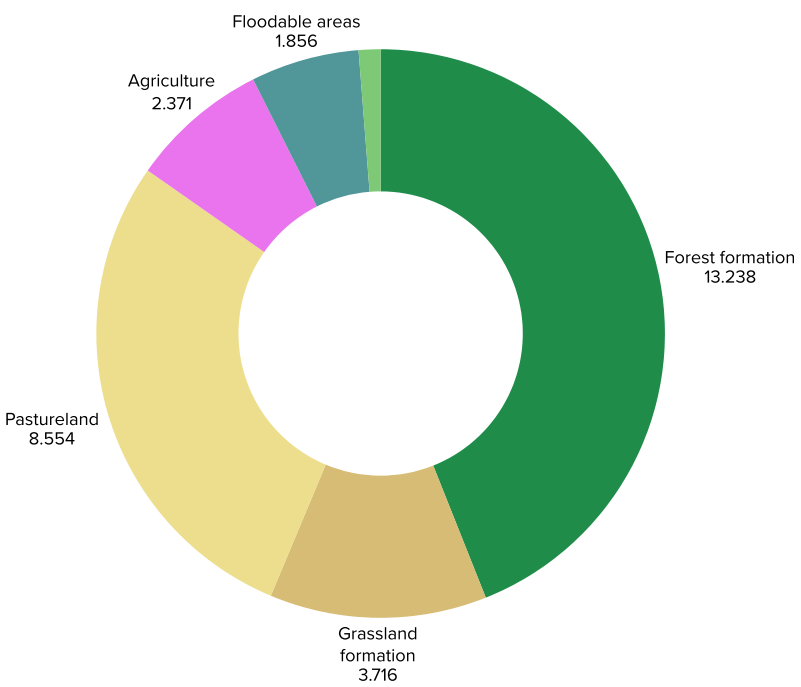

Source: Aqua - T/NASA/INPE; processing and analysis: ARO/ACTO, 2026.

## YEAR-TO-DATE TOTAL

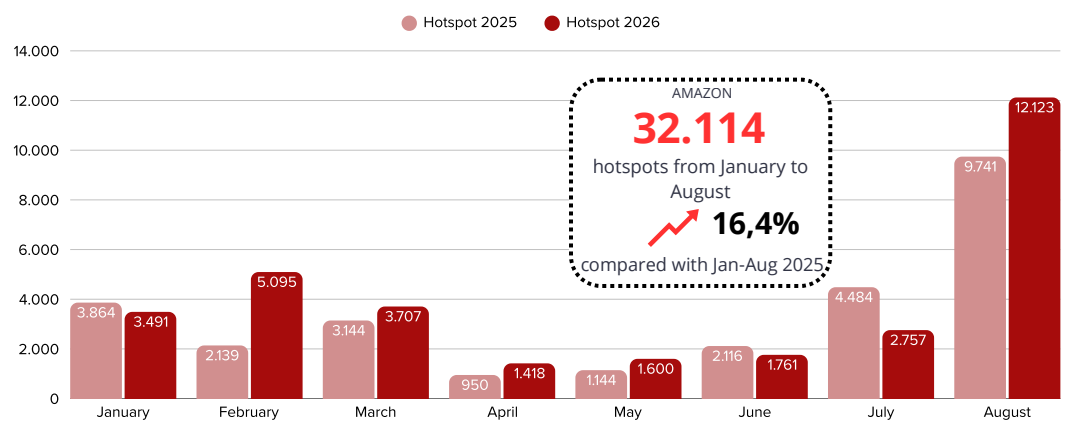
Between January and August 2026, forest formations concentrated the largest number of hotspots in the Amazon, with 13,238 records (41%), followed by pastures, with 8,554 (26%), and grassland formations, with 3,716 (11%).

### DISTRIBUTION OF HOTSPOTS BY LAND COVER

JANUARY TO AUGUST 2026

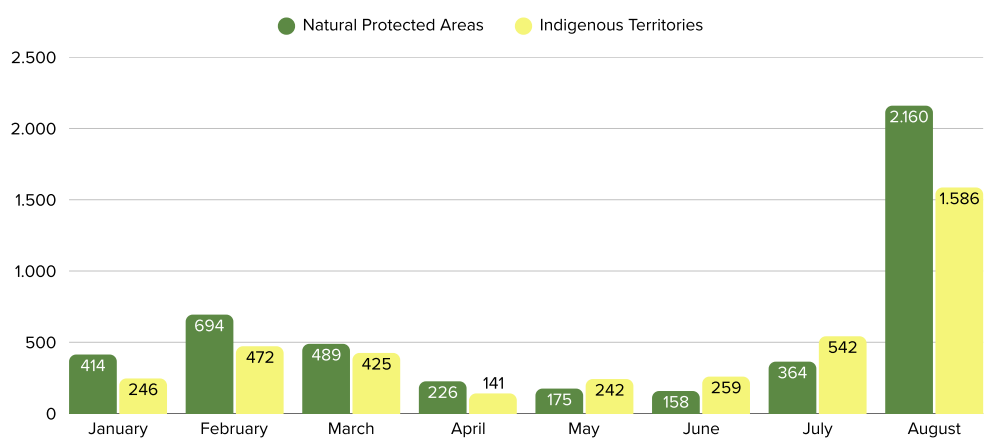



### MONTHLY DISTRIBUTION OF HOTSPOTS - AMAZON




Of the total recorded in August, 2,160 hotspots occurred in Protected Natural Areas, corresponding to approximately 18%, and 1,586 in Indigenous Territories, approximately 13%. Compared with August 2025, records increased by 19.7% in Protected Natural Areas and 7.2% in Indigenous Territories.

### MONTHLY DISTRIBUTION OF HOTSPOTS BY INDIGENOUS TERRITORIES AND PROTECTED NATURAL AREAS




PROTECTED NATURAL AREAS
**4.684**
hotspots from January to August
**15,3%**
compared with 2025

INDIGENOUS TERRITORIES
**3.926**
hotspots from January to August
**3,5%**
compared with 2025

# BURNT AREA DECLINES IN JUNE, BUT THE 2026 TOTAL REMAINS ABOVE 2025

## A total of 602 km² was burnt during the month; from January to June, the area reached 6,856 km²

In June 2026, 602 km² of burnt area was recorded in the Amazon, 35% less than in the same month of 2025. Of this total, 67 km² occurred in Protected Natural Areas and 89 km² in Indigenous Territories.

Despite the monthly reduction, the year-to-date total remains above 2025. Between January and June, the Amazon recorded 6,856 km² of burnt area, an increase of 26% compared with the same period of the previous year.

### YEAR-TO-DATE TOTAL

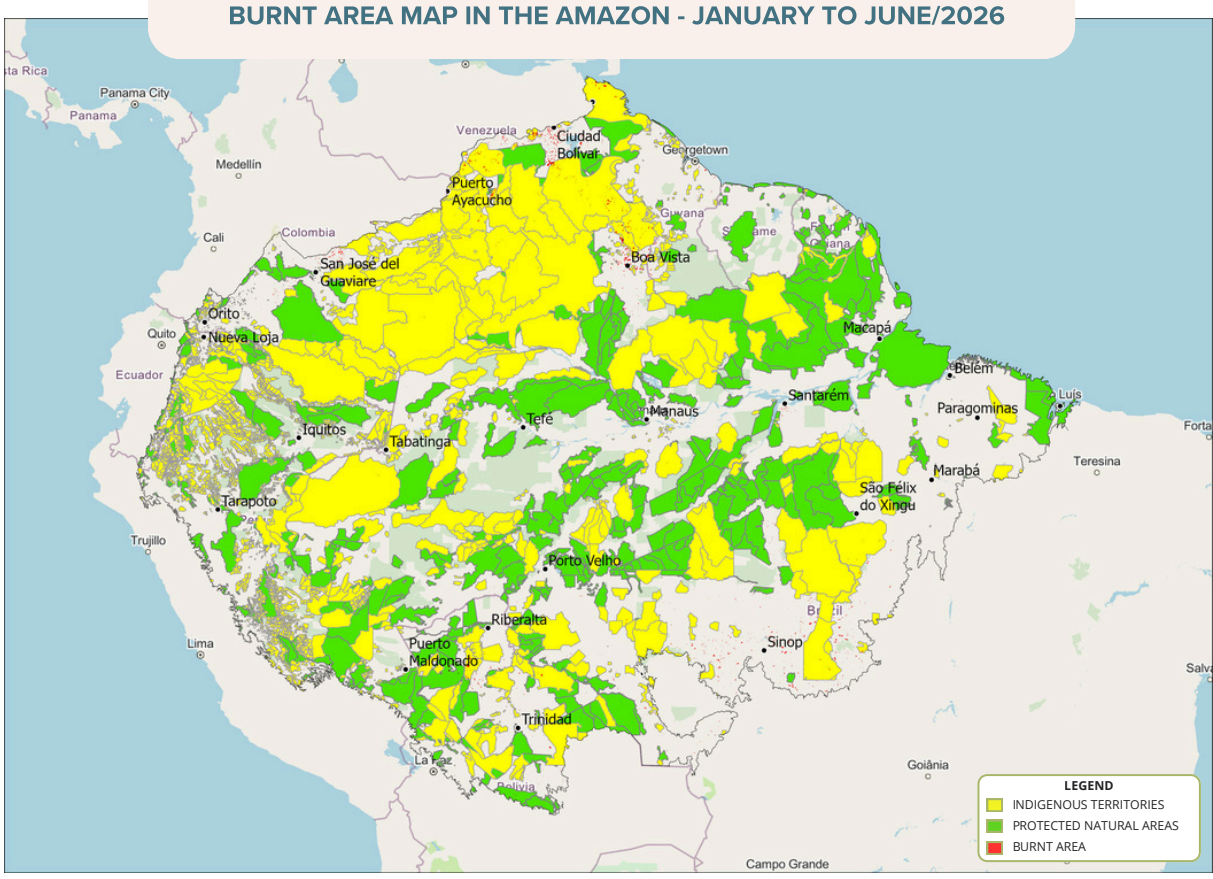
Between January and August 2026, forest formations concentrated the largest number of hotspots in the Amazon, with 13,238 records (41%), followed by pastures, with 8,554 (26%), and grassland formations, with 3,716 (11%).

AMAZON
**602 Km²**
of burnt area in JUNE
**35%**
compared with June/2025

INDIGENOUS TERRITORIES
**89 Km²**
of burnt area in JUNE
**47%**
compared with June/2025

PROTECTED NATURAL AREAS
**67 Km²**
of burnt area in JUNE
**21%**
compared with June/2025

BURNT AREA MAP IN THE AMAZON - JANUARY TO JUNE/2026



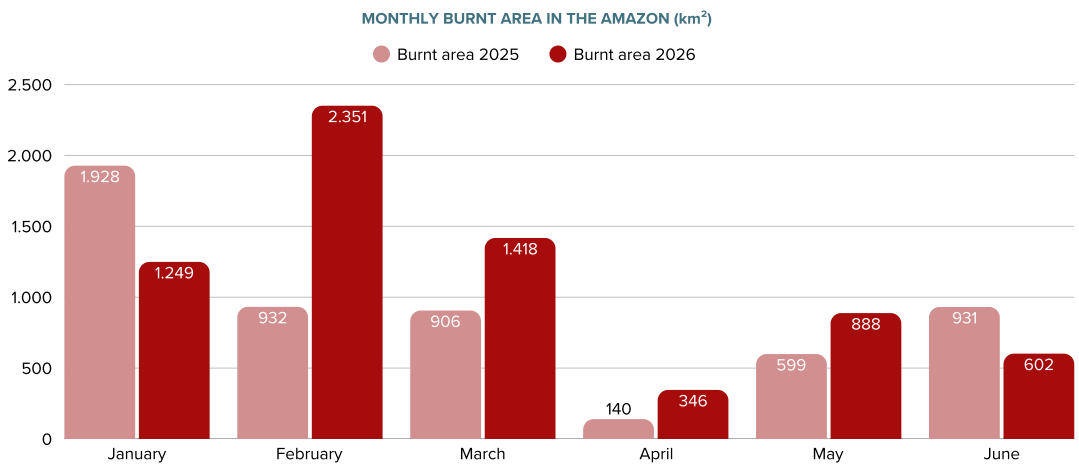

Source: MODIS/MCD64A1; processing and analysis: ARO/ACTO, 2026.

AMAZON
**6.856 Km²**
of burnt area from Jan - Jun
**26%**
compared with Jan-Jun 2025

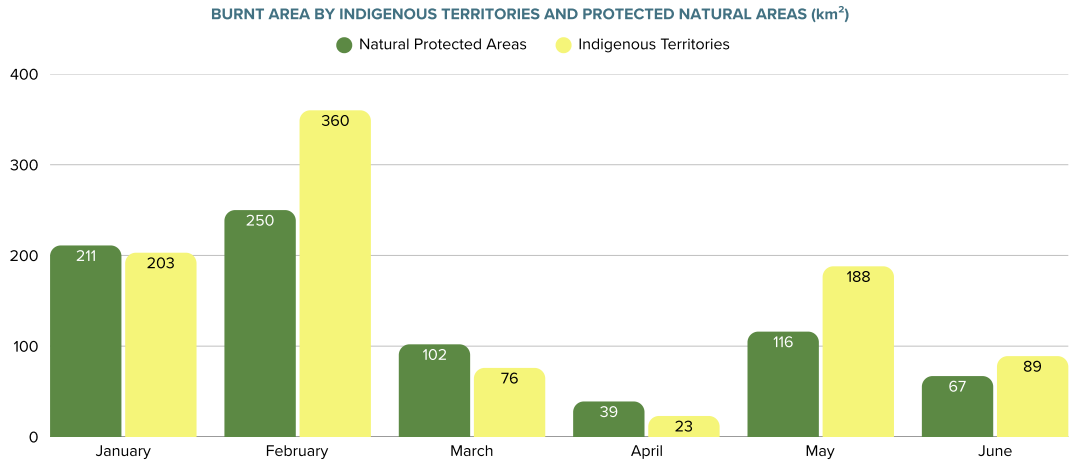
INDIGENOUS TERRITORIES
**943 Km²**
of burnt area from Jan - Jun
**24%**
compared with Jan-Jun 2025

PROTECTED NATURAL AREAS
**787 Km²**
of burnt area from Jan - Jun
**43%**
compared with Jan-Jun 2025

MONTHLY BURNT AREA IN THE AMAZON (km²)

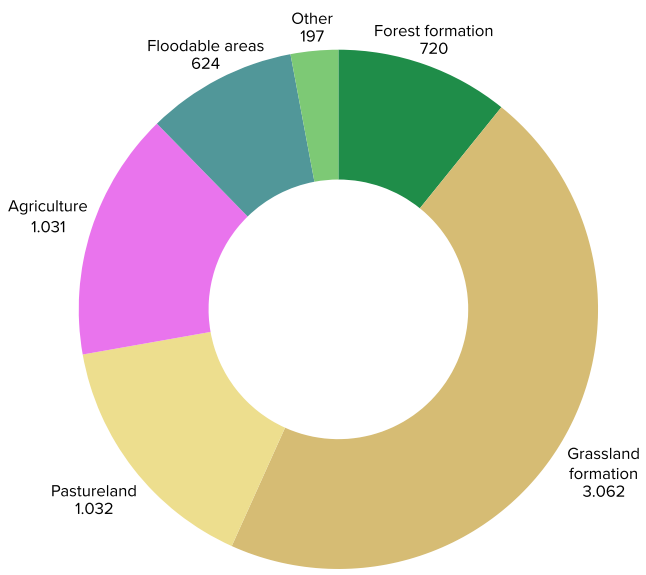



BURNT AREA BY INDIGENOUS TERRITORIES AND PROTECTED NATURAL AREAS (km²)



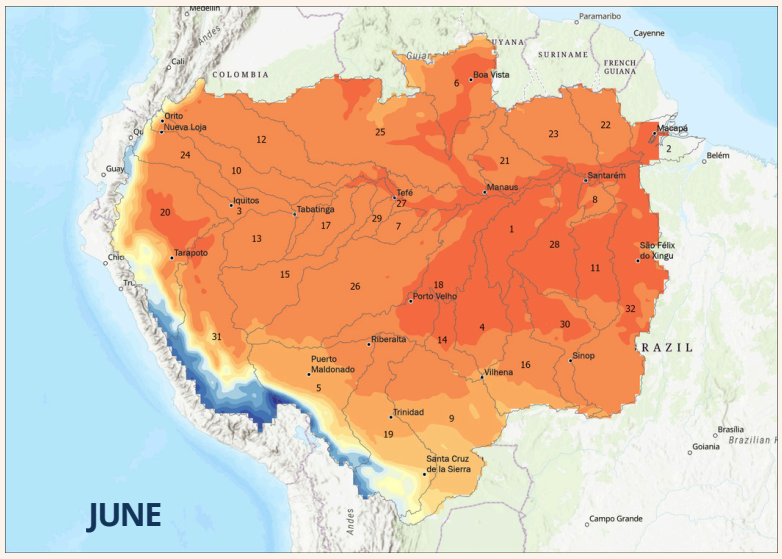

Source of charts: MODIS/MCD64A1; processing and analysis: ARO/ACTO, 2026.

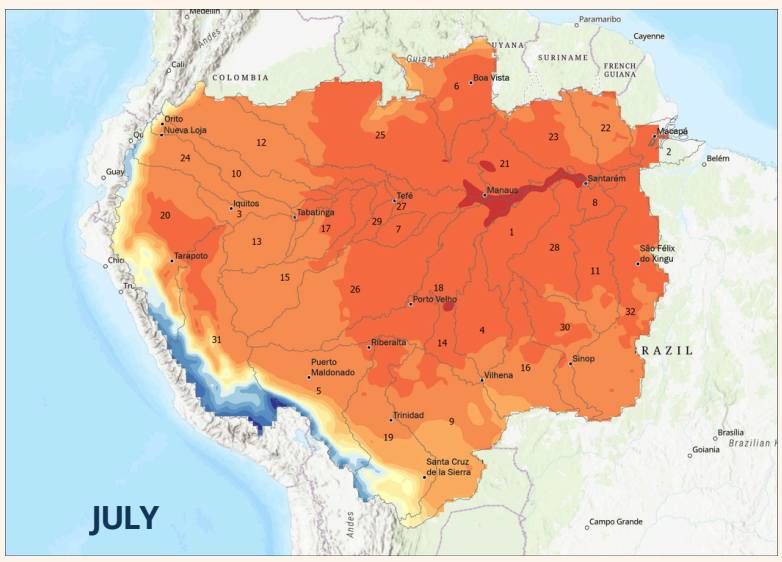
## DISTRIBUTION OF BURNT AREA IN THE AMAZON BY LAND COVER
### JANUARY TO JUNE 2026 (km²)

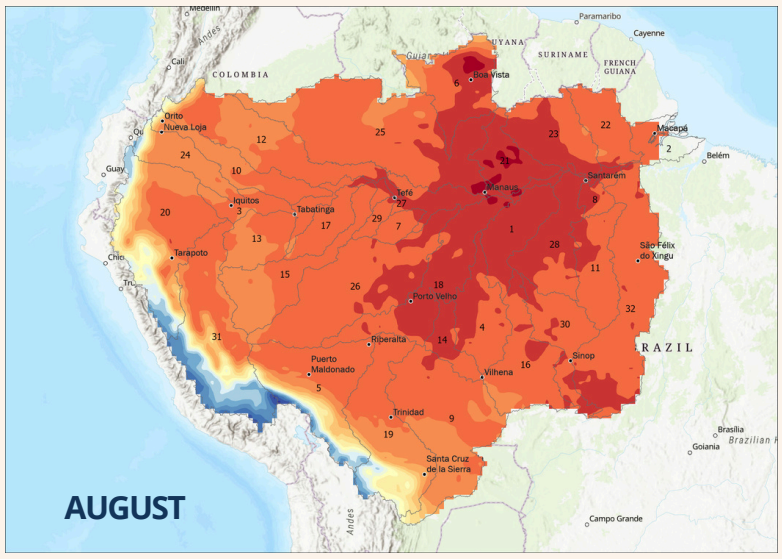


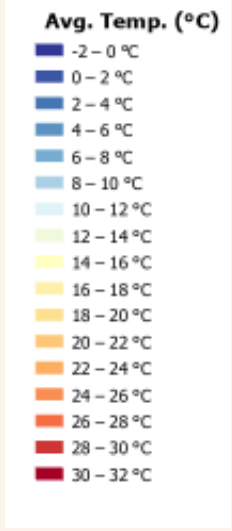

**Attention!**

(*) The data comes from the MODIS/MCD64A1 sensor and were processed by the Amazon Regional Observatory (ARO). At this time, the 2026 series is available only through June.




Source: ERA5/ECMWF–C3S; processing and analysis: ARO/ACTO, 2026.

# TEMPERATURES BETWEEN 28°C AND 32°C ADVANCE ACROSS THE AMAZON IN AUGUST

## Warming intensifies in the central, central-eastern, southeastern, and northern regions of the Basin

The June, July, and August maps show the **expansion of higher-temperature bands across the Amazon Basin**. In August, average values between 28 °C and 32 °C began to occupy extensive areas of the central, central-eastern, southeastern, and northern regions.

Between June and August, the advance of higher temperatures was observed mainly in the sub-basins of the Abacaxis (1), Peruvian Amazon (3), Branco (6), Curuá-Una (8), Ji-Paraná (14), Madeira (18), Marañón (20), Uatumã (21), Trombetas (23), and Ucayali (31) rivers.

The lowest temperatures remained concentrated in the western region, especially in the higher-altitude areas near the Andes.

### AUGUST IN FOCUS

**25,85 °C**
Basin average temperature

**+1,36 °C**
compared with the historical average

# SOURCES OF PROCESSED DATA

### Precipitation

- Data: ERA5/ECMWF–C3S
- Reference climatology: 1991–2020
- Sub-products: Accumulated precipitation and precipitation anomaly
- Available at: European Space Agency - ESA
- https://cds.climate.copernicus.eu/live

### Temperature

- Data: ERA5/ECMWF–C3S
- Reference climatology: 1991–2020
- Sub-products: Monthly average surface temperature, temperature anomaly.
- Available at: European Space Agency - ESA
- https://cds.climate.copernicus.eu/live

### Hotspots

- Data: MODIS/AQUA-T
- Reference: 2003–present
- Sub-products: Hotspot statistics for the Amazon region.
- Available at: National Institute for Space Research - INPE
- https://www.inpe.br/queimadas

### Burnt Area

- Data: MODIS/MCD64A1
- Reference: 2001–May/2026
- Sub-products: Burnt-area statistics for the Amazon region.
- Available at: Distributed Active Archive Centers (DAACs) / NASA
- ladsweb.modaps.eosdis.nasa.gov