

A LANDSCAPE 360 OCCASIONAL FACT SHEET | FOREST FIRES IN INDONESIA

A Tale of Two Burning Maps

Kalimantan, August 13 to 22

By confidence level



By satellite



Figure 1. Composition of the 3,174 SiPongi hotspot detections recorded in Kalimantan between August 21, 18:19 and August 22, 13:48 Western Indonesia Time, by confidence level and by satellite. Source: SiPONGI KEMENHUT, Ministry of Forestry, KMZ export generated August 22, 2026.



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What a Hotspot Is

Indonesia already publishes its own fire data. Reading it well means knowing what a hotspot is and what the filters take out.

The government of Indonesia already operates a national dashboard for forest and land fire monitoring. It is called SiPongi and it is run by the Ministry of Forestry. SiPongi publishes satellite hotspot locations for the whole country and refreshes them through the day. A user can filter by a time window of 12, 24 or 48 hours, by province, by satellite, and by confidence level of high, medium or low. The results download as a spreadsheet, a text file or a KMZ for mapping. Anyone working on fire in Indonesia should begin there.

A hotspot is not a fire. It is a pixel that a satellite recorded as hotter than its surroundings. It can be a gas flare, an industrial site, a hot bare surface, or a fire that had already burned out before anyone could reach it. One hotspot is also not one fire. A single fire seen by three satellites on day and night passes yields several hotspots, and a large fire covers many pixels at once. In the export used here, 3,174 detections in Kalimantan reduce to 2,301 distinct ground positions.

The confidence filter needs particular care. Of those 3,174 detections, only 340 carry high confidence, which is 11 percent of the total. Filtering to high confidence alone cuts the Kalimantan figure roughly ninefold. For some questions that is the right setting. For emissions it is the wrong one, because most of what the filter removes is low intensity smouldering, and smouldering peat releases the greater part of the carbon. Two analysts working from the same day of SiPongi data can report numbers that differ by a factor of nine.

Responsible analysis should state which filter it used. It should not present a count of points as a measure of area. It should not place a hotspot number beside a hectare number as though the two could be compared. This fact sheet keeps them apart. Figure 2 sets the fire-affected area for August 13 to 20 beside the SiPongi hotspots for August 21 and 22, with each district shown as a share of its own period total.

Onto the Peat

Where the fire moved between the two maps, and why the ground underneath it matters more than the area.

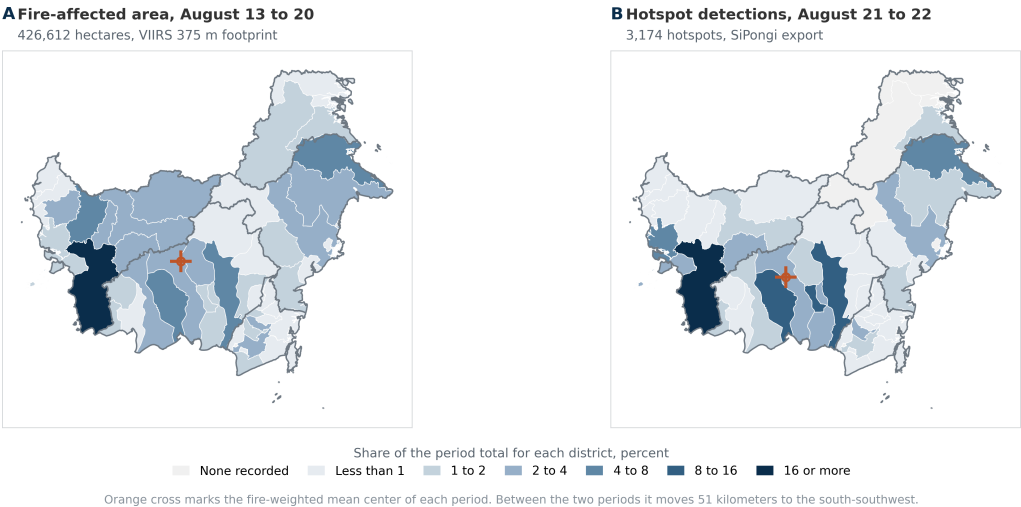


Figure 2. Share of each period's total fire activity held by each district, percent. Panel A is the VIIRS 375 meter fire-affected footprint for August 13 to 20, 2026. Panel B is the SiPongi hotspot export for August 21 and 22. The panels measure different quantities and are comparable only as shares. Source: Landscape Advisory analysis of VIIRS active fire detections and of SIPONGI KEMENHUT.

Central Kalimantan has passed West Kalimantan

Across the week of August 13 to 20, West Kalimantan held the largest share of the fire-affected footprint at 42.6 percent, with Central Kalimantan second at 27.7 percent. In the hotspot export for August 21 and 22 the order reverses. Central Kalimantan holds 47.0 percent and West Kalimantan 34.4 percent.

The districts that gained are peat districts

Fifteen districts gained share and forty lost it. Weighted by the size of the gain, the gainers carry an average peat share of 55 percent, against 6

percent for those that lost. Kapuas gained 8.4 percentage points, Kotawaringin Timur 7.1, Kota Palangka Raya 6.8 and Kubu Raya 4.1. Sanggau lost 5.3 points. The fire-weighted center of activity moved 51 kilometers to the south-southwest.

Peat raises the cost of every hectare

Applying each district's peat share from the earlier week, the implied share of activity on peat rises from 19 percent to 35 percent. At the central fuel loads used for the week, a hectare burning under the new pattern carries about 55 percent more dry matter than a hectare burning under the old one. Suppression also gets harder, because peat burns below the surface where water bombing cannot reach.

Table 1. Share of fire activity by province, percent of each period total.

Province	Week hectares	Week share	Aug 21 to 22 hotspots	Aug 21 to 22 share	Change points
Central Kalimantan	118,209	27.7	1,491	47.0	+19.3
West Kalimantan	181,617	42.6	1,091	34.4	-8.2
East Kalimantan	64,842	15.2	351	11.1	-4.1
South Kalimantan	49,247	11.5	208	6.6	-5.0
North Kalimantan	12,811	3.0	33	1.0	-2.0
Kalimantan	426,727	100.0	3,174	100.0	

Hectares are the deduplicated VIIRS 375 meter footprint for August 13 to 20. Hotspots are raw detections from the SiPongi export and are not an area measure. Change is the difference in share, in percentage points.

Sources and method

Hotspot detections from SIPONGI KEMENHUT, Ministry of Forestry, KMZ export generated August 22, 2026 at 04:11, covering 3,174 detections in Kalimantan. Weekly footprint from Landscape Advisory analysis of VIIRS 375 meter active fire detections from Suomi NPP, NOAA-20 and NOAA-21 for August 13 to 20, 2026, snapped to a 375 meter grid in an equal-area projection and counted once per cell. Peat extent from the Ministry of Forestry peatland layer held by Landscape Advisory. Boundaries from geoBoundaries gbOpen. Fuel loads of 314 and 25 tonnes of dry matter per hectare for peat and mineral soil, following Kiely and colleagues 2019. The implied peat share for August 21 to 22 applies each district's peat share from the earlier week to that district's hotspot share, so it is an estimate and not a measurement. Full tables and the spatial layer are available on request.