MAAP #65: Deforestation Hotspots of 2017 in the Peruvian Amazon

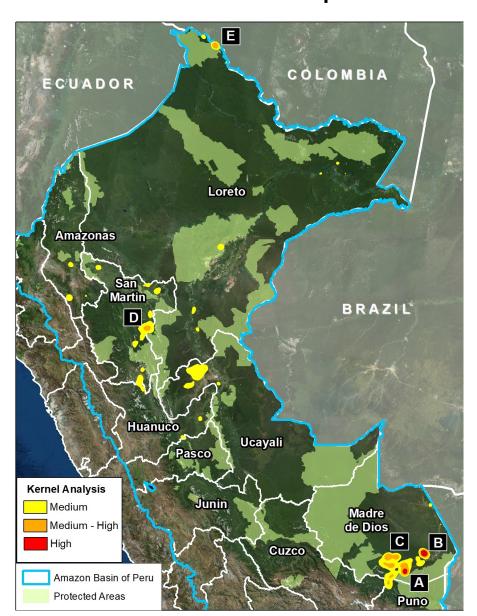


Image 65. Data: MINAM/PNCB, UMD/GLAD, SERNANP, MAAP

In an earlier report, <u>MAAP #40</u>, we highlighted the power of combining early warning GLAD* alerts with analysis of high-resolution satellite images (for example, from the company <u>Planet</u>), as part of a comprehensive **near real-time deforestation monitoring system.**

In the current report, we analyze the GLAD alerts for the first half of 2017 (through July 17) to identify current **deforestation hotspots** in the Peruvian Amazon.** These alerts indicate an estimated total forest loss of 37,000 acres (15,000 hectares) thus far during the year.

Image 65 (see right) highlights the 2017 deforestation hotspots, defined here as areas with medium to high density of forest loss.

Below, we describe and show images of the most intense hotspots, indicated in red and orange.

These areas include:

- Buffer zones of Tambopata National Reserve and Cordillera Azul National Park
- Natural loss due to blowdowns from "hurricane winds," in the Madre de Dios region
- · Northwest border with Colombia

Buffer Zone of Tambopata National Reserve

Inset A indicates an area of high intensity deforestation due to **gold mining** activity in the buffer zone of Tambopata National Reserve in the southern Peruvian Amazon (Madre de Dios region). Image 65a shows the deforestation of 1,210 acres (490 hectares) in this area in 2017. The Peruvian government recently (early July) led a <u>major raid</u> in this area. However, the most recent satellite images (late July - early August) indicate that mining camps are still present in the area.

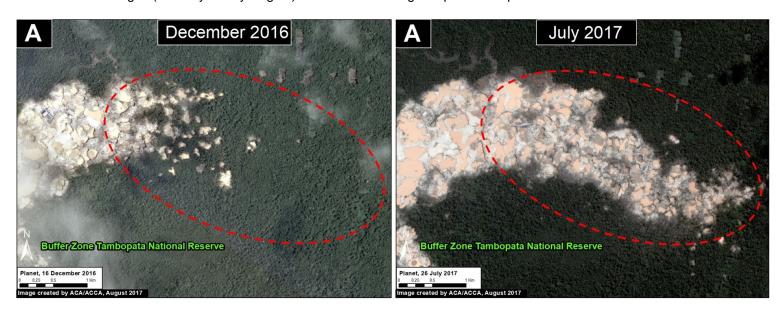


Image 65a. Data: Planet

Hurricane Winds

Insets B and C indicate two areas in the southern Peruvian Amazon (Madre de Dios region) that experienced the natural forest loss of 980 acres (400 hectares) caused by **hurricane winds**, localized thunderstorms with strong winds. Images 65b and 65c show the recent 2017 forest loss. See MAAP #54 and MAAP #55 for more details about hurricane winds.

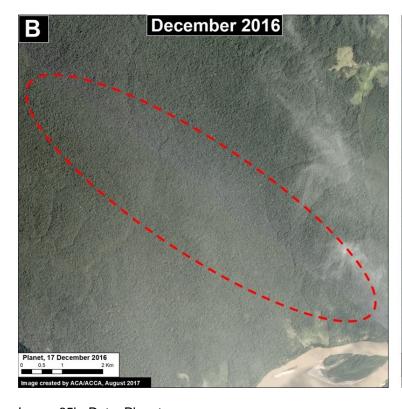




Image 65b. Data: Planet



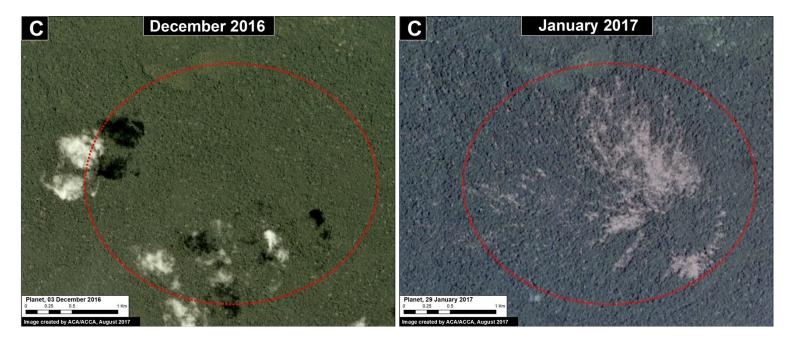


Image 65c. Data: Planet

Buffer Zone of Cordillera Azul National Park

Inset D shows an area of medium intensity deforestation in the buffer zone of Cordillera Azul National Park, in the central Peruvian Amazon (San Martin region). Image 65d shows an example of the deforestation (138 acres) in this area in 2017. The main cause of the deforestation appears to be agricultural activity.

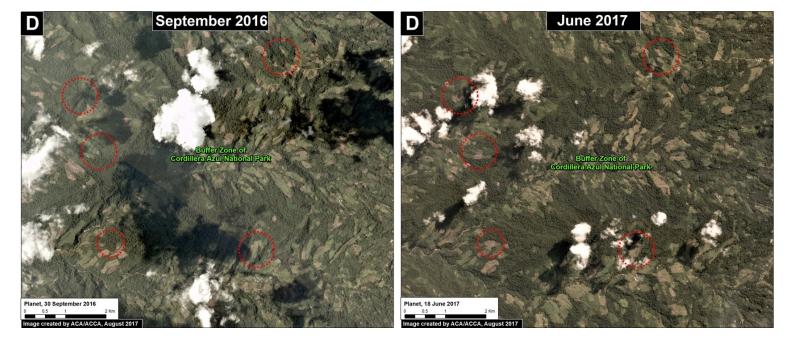
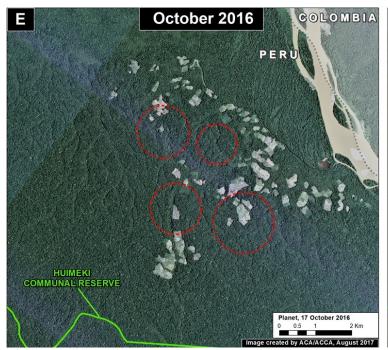


Image 65d. Data: Planet

Northwest Border with Colombia

Inset E indicates a medium intensity hotspot in the extreme northern Peruvian Amazon (Loreto region), along the border with Colombia. The deforestation is approaching the limit of the Huimeki Communal Reserve. Image 65e shows the deforestation of

390 acres (158 hectares) in this area in 2017. The driver appears to be linked to agricultural activities and illicit crops (The <u>United Nations</u> has confirmed coca in this area).



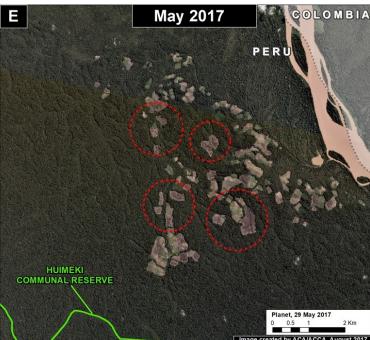


Image 65e. Data: Planet

Notes

*GLAD alerts are a powerful new tool to monitor tropical forest loss in near real-time. This early warning system, created by the GLAD (Global Land Analysis and Discovery) laboratory at the University of Maryland and supported by Global Forest Watch, was launched in March 2016 as the first Landsat-based (30-meter resolution) forest loss alert system (previous systems were based on lower-resolution imagery). The alerts are updated weekly and can be accessed through Global Forest Watch.

**We performed a kernel density estimation, an analysis that calculates the magnitude per unit area of a particular phenomenon, in this case, forest loss.

Reference

Planet Team (2017). Planet Application Program Interface: In Space for Life on Earth. San Francisco, CA. https://api.planet.com.

Citation

Novoa S, Finer M (2017) Deforestation Hotspots in the Peruvian Amazon in 2017. MAAP: 65.