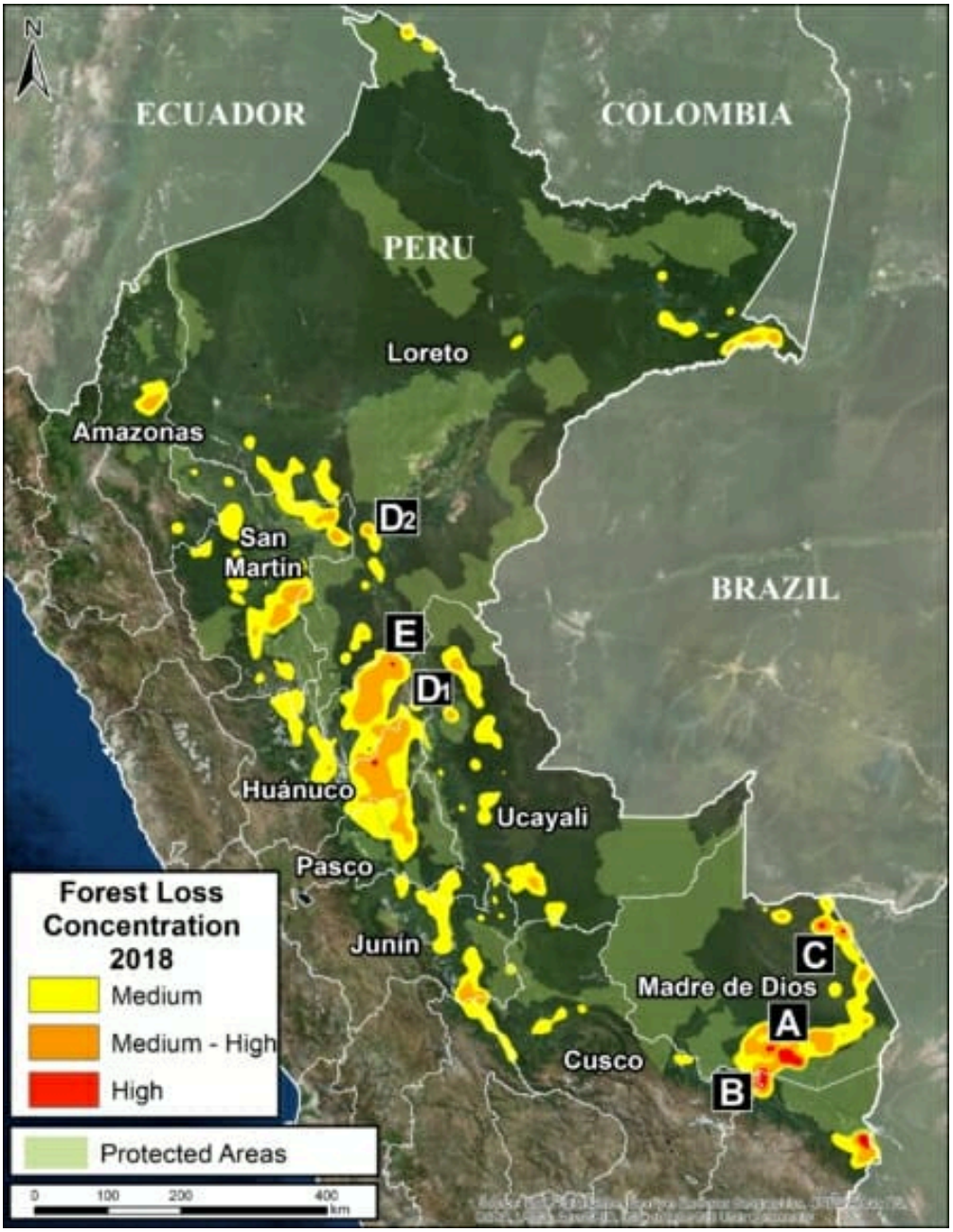
MAAP #98: Deforestation Hotspots in the Peruvian Amazon, 2018

March 1, 2019



(https://www.maapprogram.org/wp-content/uploads/2019/02/MapBase01_HSPeru2018_PNCB_Eng_300dpi.jpg)

Base Map. 2018 Deforestación Hotspots. Data: PNCB/MINAM, SERNANP

Thanks to early warning forest loss alerts,* we are able to make an initial assessment of the **2018 deforestation hotspots** in the Peruvian Amazon.

The **Base Map** highlights the medium (yellow) to high (**red**) hotspots. In this context, hotspots are the areas with the highest density of forest loss alerts.

Note that the most intense hotspots are concentrated in the southern Peruvian Amazon, particularly the **Madre de Dios** region. In previous years, intense hotspots were also concentrated in the central Peruvian Amazon.

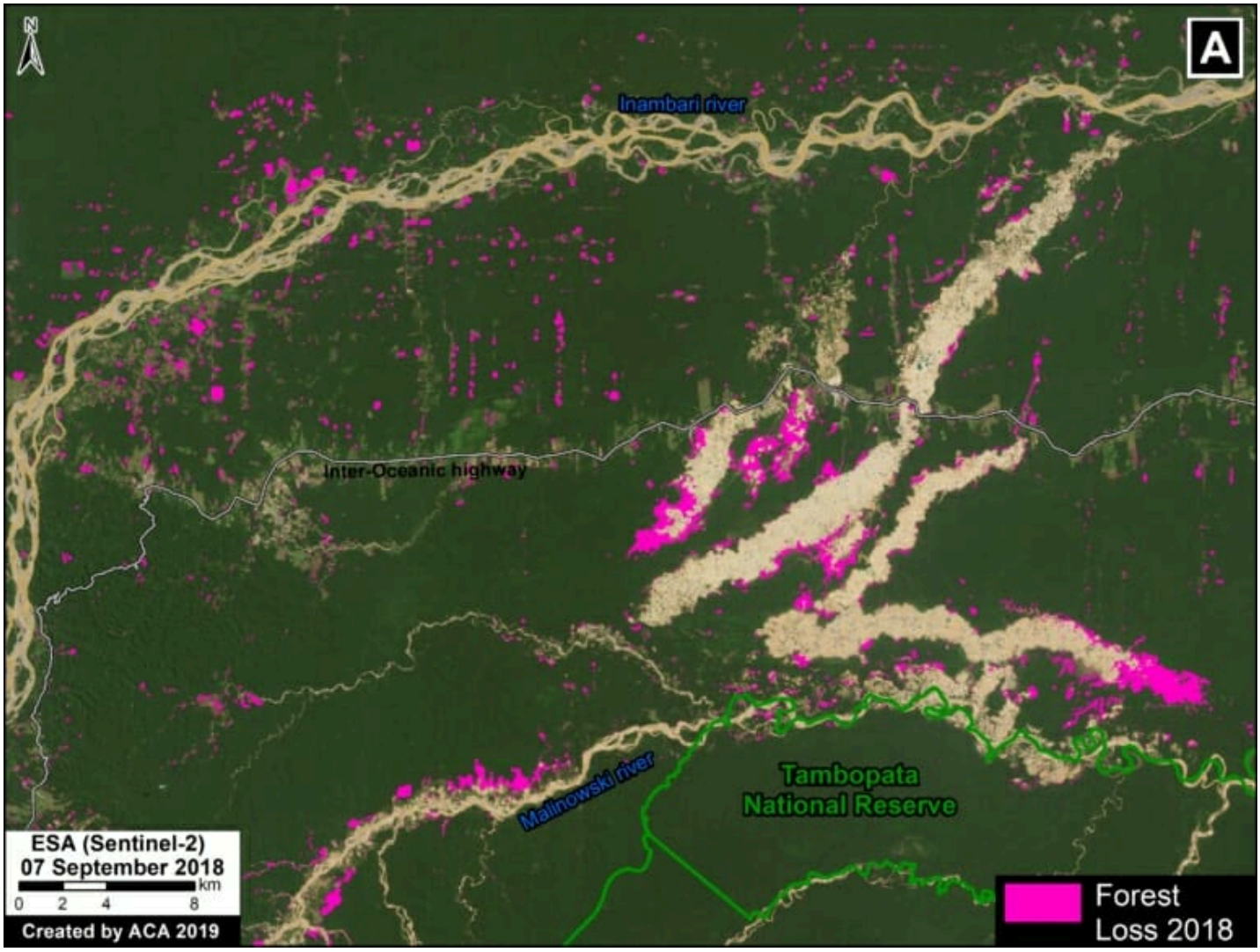
Next, we focus on 5 hotspots of interest (Zooms A-E).

A. **La Pampa** (Madre de Dios)
B. **Bahuaja Sonene National Park (surroundings)** (Madre de Dios, Puno)
C. **Iberia** (Madre de Dios)
D. **Organized Deforestation** (Ucayali, Loreto)
E. **Central Amazon** (Ucayali, Huánuco)

*The data presented in this report is an estimate based on early warning data generated by the National Program of Forest Conservation for the Mitigation of Climate Change of the Ministry of the Environment of Peru (PNCB/MINAM). We also analyzed University of Maryland GLAD alerts, obtained from Global Forest Watch (https://www.globalforestwatch.org/map).

A. La Pampa (Madre de Dios)

Zoom A shows two important cases in the southern Peruvian Amazon (Madre de Dios region). First, **gold mining** deforestation south of the Interoceanic Highway in the area known as La Pampa. It is important to emphasize that the Peruvian government just started "**Operation Mercury 2019** (https://www.cnbc.com/2019/02/19/reuters-america-peru-launches-sustained-crack-down-on-illegal-mining-in-amazon.html)" (Operación Mercurio 2019), a multi-sectoral and comprehensive mega-operation aimed at eradicating illegal mining and associated crime in La Pampa, as well as promote development in the region. Second, deforestation due to agricultural activity north of the highway. As in all the zoom maps below, **pink** indicates forest loss in 2018.

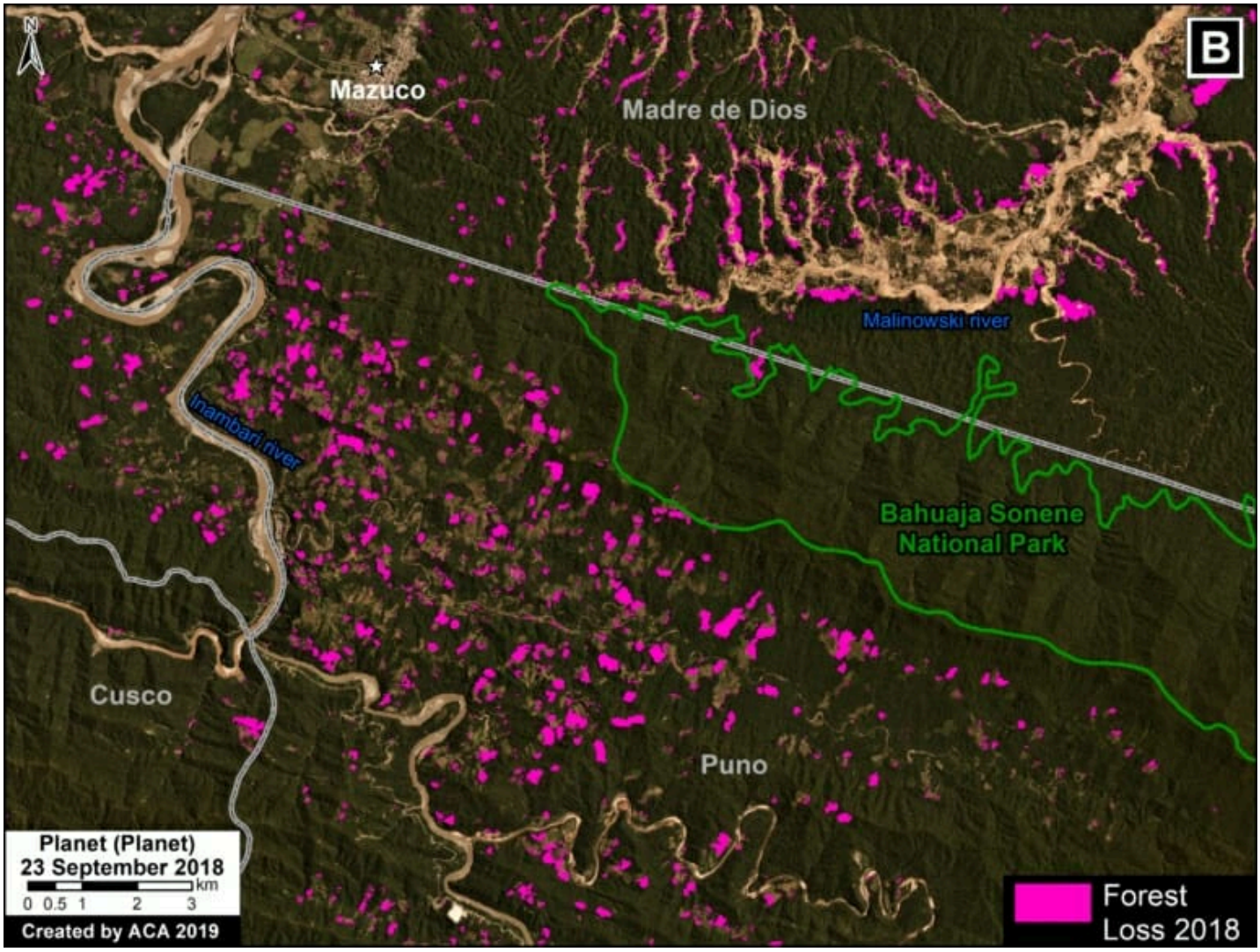


(https://www.maapprogram.org/wp-content/uploads/2019/02/A-Map_LaPampa-SantaRita_Eng_500dpi.jpg)

Zoom A. La Pampa. Data: PNCB/MINAM, SERNANP, ACCA, ESA

B. Bahuaja Sonene National Park (surroundings) (Madre de Dios, Puno)

Zoom B also shows two important cases in the southern Peruvian Amazon (regions of Madre de Dios and Puno), surrounding Bahuaja Sonone National Park. First, to the north of the park, is **gold mining** deforestation along the upper Malinowski River. The Peruvian protected areas agency (SERNANP) points out that they have limited the deforestation south of the river (direction towards the national park) due to their intensified patrols on that side. Second, to the south of the park, is non-mining (partly agricultural) deforestation.



(https://www.maapprogram.org/wp-content/uploads/2019/02/B-Map_Bahuaja-Malinowski_Eng_500dpi.jpg)

Zoom B. Bahuaja Sonene (surroundings). Data: PNCB/MINAM, SERNANP, Planet

C. Iberia (Madre de Dios)

Zoom C takes us to the other side of Madre de Dios, around the town of Iberia, near the border with Brazil and Bolivia. This area is experiencing extensive deforestation due to agricultural activity. There most intense deforestation is just of Iberia, where a religious community of farmers (Arca Pacahuara) is reportedly establishing large corn plantations (References 1-2). Much of the 2018 (and 2017) deforestation is occurring within forest concessions, where agriculture is not permitted.

(https://www.maapprogram.org/wp-content/uploads/2019/02/C-Map02_Iberia_Eng_400dpi.jpg)

Zoom C. Iberia. Data: PNCB/MINAM, SERNANP, Planet

D. Organized Deforestation (Ucayali, Loreto)

In 2018 we documented two similar cases in the central Peruvian Amazon. Both have similar forms of organized deforestation, characterized by what seems to be agricultural plots arranged along new access roads. **Zoom D** shows the Masisea case (left panel, zoom D1) and the Sarayaku case (right panel, zoom D2). See MAAP #92 (https://www.maapprogram.org/2018/newthreats-2/) for more information.

(https://www.maapprogram.org/wp-content/uploads/2019/02/D1-D2-Map_Imiria-Sarayacu_Contamana_Eng_400dpi.jpg)

Zoom D. Organized deforestation. Data: PNCB/MINAM, SERNANP, ESA

E. Central Amazon (Ucayali, Huánuco)

As in previous years (https://www.maapprogram.org/2016/hotspot-huanuco/), there was extensive deforestation in the central Peruvian Amazon (Ucayali and Huánuco regions). **Zoom E** shows an example: small and medium-scale deforestation surrounding a pair of large-scale oil palm plantations. Some of the recent deforestation is occurring within "Permanent Production Forests," forestry-zoned areas where agriculture is not permitted. This area also corresponds to the proposed territorial title of the indigenous Shipibo community of Santa Clara de Uchunya (see here (http://www.forestpeoples.org/en/node/50281) for more information).

(https://www.maapprogram.org/wp-content/uploads/2019/02/E-Map02_AmzCentral_Eng_400dpi.jpg)

Zoom E. Central Amazon. Data: PNCB/MINAM, SERNANP, ESA

Methodology

We conducted this analysis using the Kernel Density tool from Spatial Analyst Tool Box of ArcGIS, using the following parameters:

Search Radius: 15000 layer units (meters)
Kernel Density Function: Quartic kernel function
Cell Size in the map: 200 x 200 meters (4 hectares)
Everything else was left to the default setting.

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References

1. CIFOR 2016 (http://www.cifor.org/publications/pdf_files/WPapers/WP209Kowler.pdf)

2. GOREMAD 2016 (http://regionmadrededios.gob.pe/new/contenido/noticias/742)

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Citation

Finer M, Mamani N (2018) Deforestation Hotspots in the Peruvian Amazon, 2018. MAAP: 98.