MAAP #74: Landslides in the Peruvian Amazon

November 27, 2017

(https://www.maapprogram.org/wp-content/uploads/2017/11/MAAP_74_landslides_base_v2_en.jpg)

Image 74. Base Map. Data: SERNANP

In addition to the human-caused deforestation emphasized in MAAP, there is also **natural Amazonian forest loss**. The causes include meandering rivers, wind storms (see MAAP #70 (https://www.maapprogram.org/2017/hurricane-winds-trends/)), and the subject of this report: **landslides**.

Amazon landslides may be caused by heavy rains in rugged areas. Many landslides occur in protected areas, which often include steep and unstable areas.

Here, we show **satellite images** of 3 recent examples of large landslides in protected areas in the Peruvian Amazon. We document the natural forest loss of 685 acres (280 hectares) in these examples, indicating that landslides are an important natural phenomenon in the Amazon.
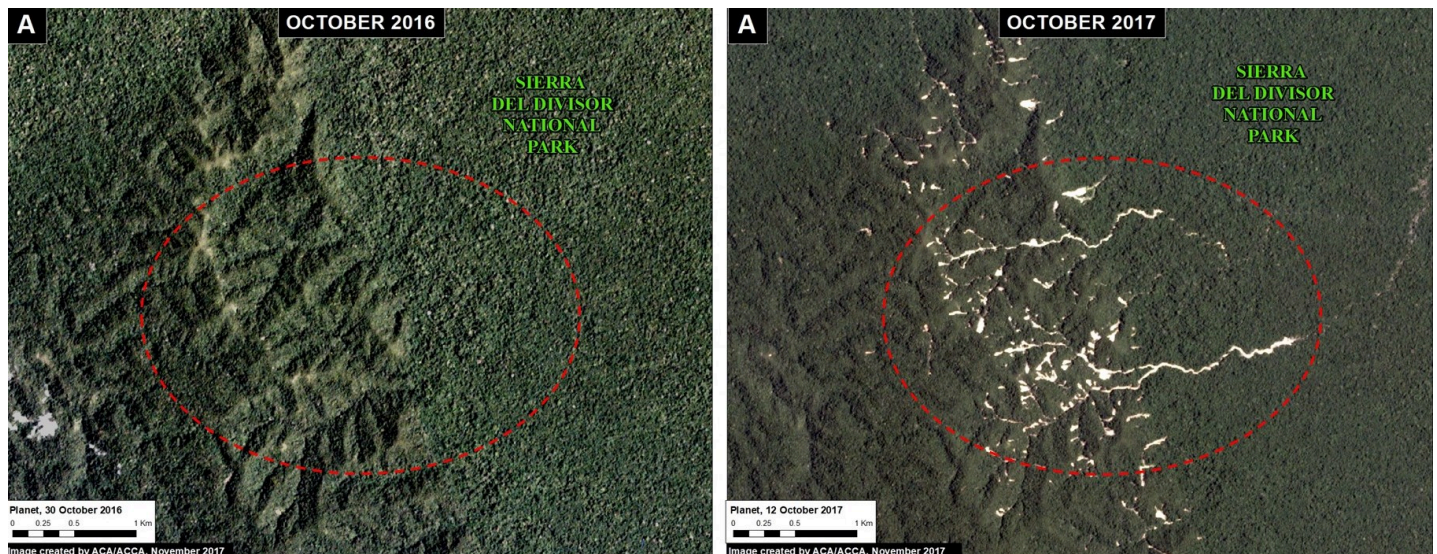
Example A: Sierra del Divisor National Park
Example B: Cordillera Azul National Park
Example C: Bahuaja Sonene National Park

Example A: Sierra del Divisor National Park

Image 74a shows landslides within Sierra del Divisor National Park between October 2016 (left panel) and October 2017 (right panel). The natural forest loss is 74 acres.
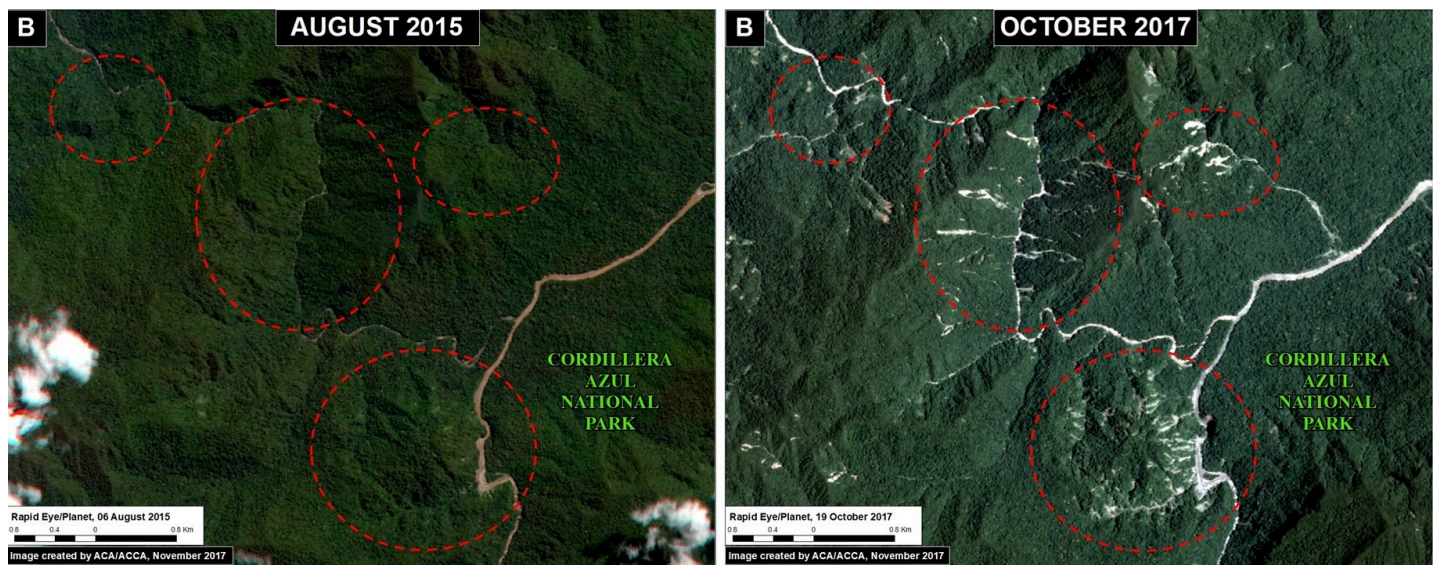

(https://www.maapprogram.org/wp-content/uploads/2017/11/MAAP_74_landslides_PNSDD_m_v1_en.jpg)

Image 74a. Data: Planet

Example B: Cordillera Azul National Park

Image 74b shows landslides within Sierra del Divisor National Park between August 2015 (left panel) and October 2017 (right panel). The natural forest loss is 490 acres.
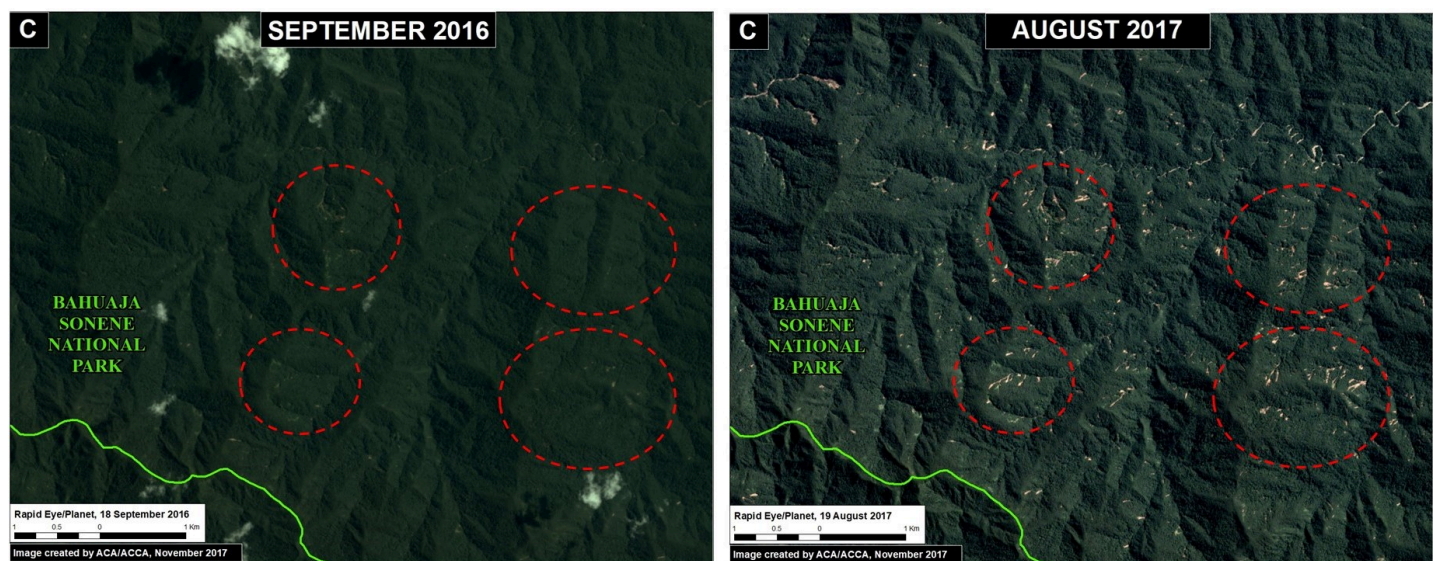

(https://www.maapprogram.org/wp-content/uploads/2017/11/MAAP_74_landslides_PNCA_m_v1_en.jpg)

Image 74b. Data: Planet

Example C: Bahuaja Sonene National Park

Image 74c shows landslides within Sierra del Divisor National Park between September 2015 (left panel) and August 2017 (right panel). The natural forest loss is 120 acres.

(https://www.maapprogram.org/wp-content/uploads/2017/11/MAAP_74_landslides_PNBA_m_v1_en.jpg)

Image 74c. Data: Planet

Natural Forest Loss in the Peruvian Amazon

The Resilient Amazon project, executed jointly by UNDP (United Nations Development Program) and the Peruvian protected areas agency (SERNANP), estimates that natural forest loss is around 2.95% of the total documented forest loss in Peru. This estimate is based on a detailed analysis in the central and southern Peruvian Amazon. If this finding is extrapolated to the entire Peruvian Amazon, there is an estimated natural forest loss of **11,365 acres** (4,600 hectáreas) every year (based on the previous 5-year average of 159,000 hectares total forest loss).

Coordinates

Example A: -6.97, -73.85
Example B: -8.47, -75.85
Example C: -13.65, -69.68

References

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

Citation

Finer M, Novoa S (2017) Landslides in the Peruvian Amazon. MAAP: 74.