Thank you for joining AmazonTEC! We will start promptly at 2:00 pm EST.

Did you know?

Real-time, satellite-based forest loss monitoring (such as GLAD alerts) can quickly detect any possible new threats, even across vast and remote areas.

Amazon Conservation is comField patrols with drone flights can then verify these alerts and capture very high resolution images that can be submitted to authorities.

Learn more at: https://maaproject.org/2020/drones-peru/

AmazonTEC

Science and Technology for a Sustainable Amazon

Thank you for joining AmazonTEC! We will start promptly at 2:00 pm EST.

Did you know?

Amazon Conservation's Monitoring of the Andean Project (MAAP) performs real-time, satellite-based forest loss and fire monitoring across 83% of the Amazon, covering 5 countries - Brazil, Bolivia, Colombia, Ecuador, and Peru.

See more: maaproject.org

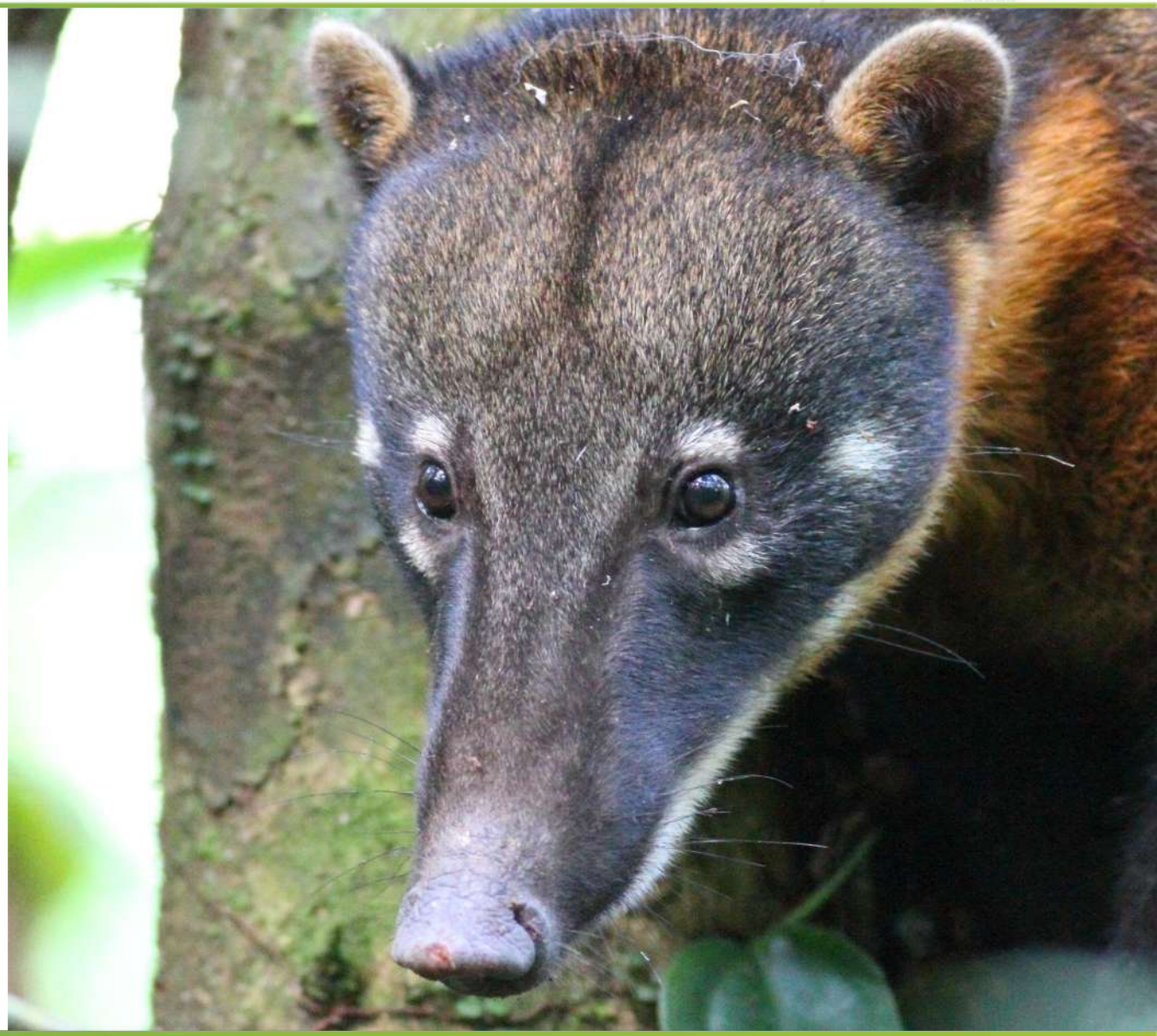
Follow us for the latest updates:

@ACA_DC

@AmazonConservation

Amazon Conservation

Amazon Conservation



AmazonTEC

Science and Technology for a Sustainable Amazon

Thank you for joining AmazonTEC! We will start promptly at 2:00 pm.

Did you know?

Amazon Conservation's camera trap program in the Bolivian Amazon has captured over 10,000 videos and images of wildlife, including endangered species and several species which had previously been declared as no longer living in the area. This melanistic jaguar captured by one of our cameras was the first ever photographed in Bolivia!

Follow us for more camera trap photos:

@AmazonConservation

@ACA_DC

Amazon Conservation

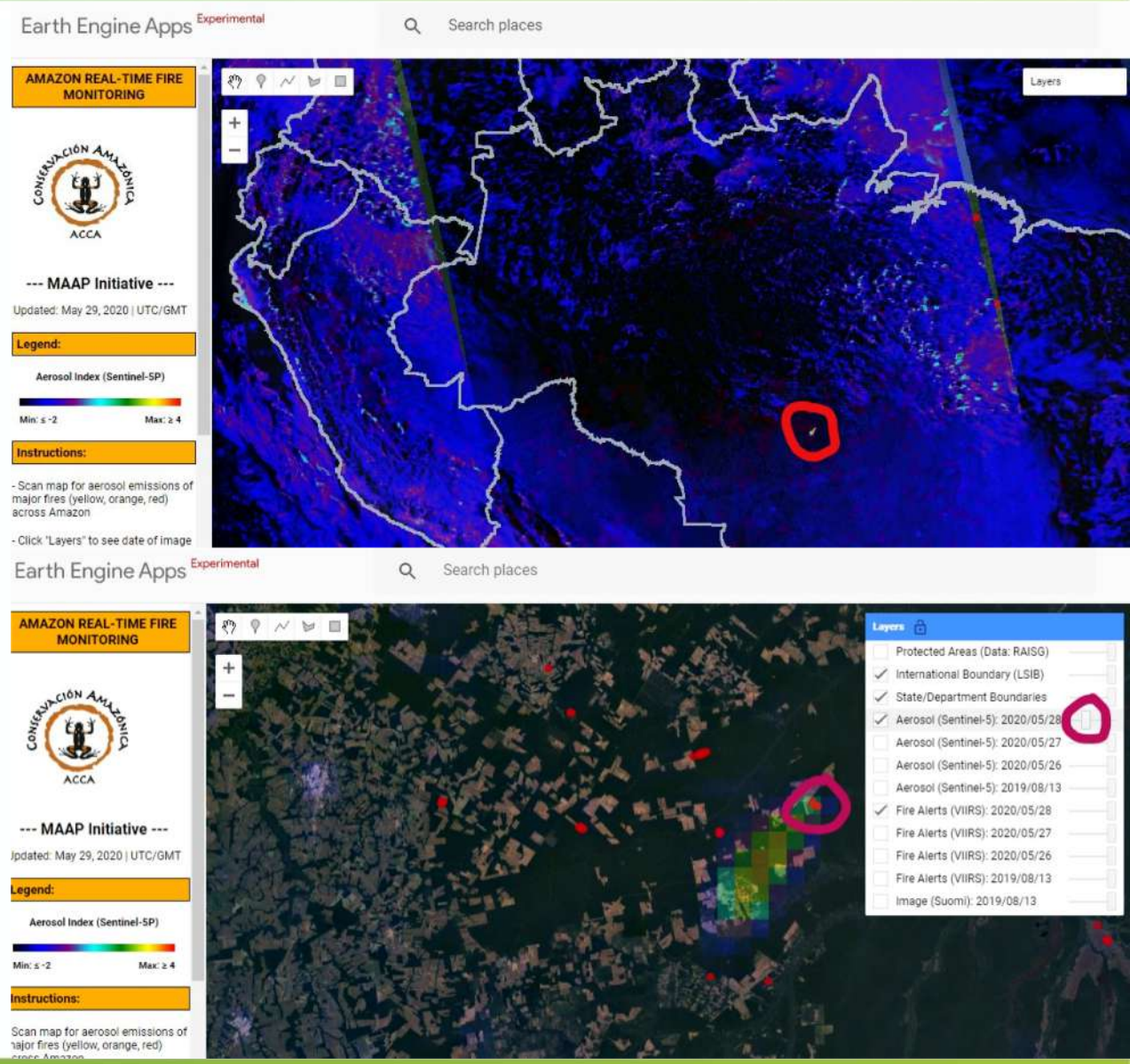
Amazon Conservation

Thank you for joining AmazonTEC! We will start promptly at 2:00 pm.

Did you know?

This past summer Amazon Conservation released an updated version of our real-time fire monitoring app, able to predict and locate major fires across the Amazon based on the aerosol emissions detected by the new Sentinel-5P satellite.

Learn more at:
https://maaproject.org/2020/amazon-fire-app/



Thank you for joining AmazonTEC! We will start promptly at 2:00 pm.

Did you know?

Though this year's fire season didn't get as much media attention as last year, it was just as severe if not more so. With our real-time fire tracker app, we have detected:

- Over 2,500 major fires across the Amazon in 2020
- In Brazil, 52% of fires burned recently deforested areas (1.8 M acres)
- An estimated 41% of aburned forest (5.3 M acres)

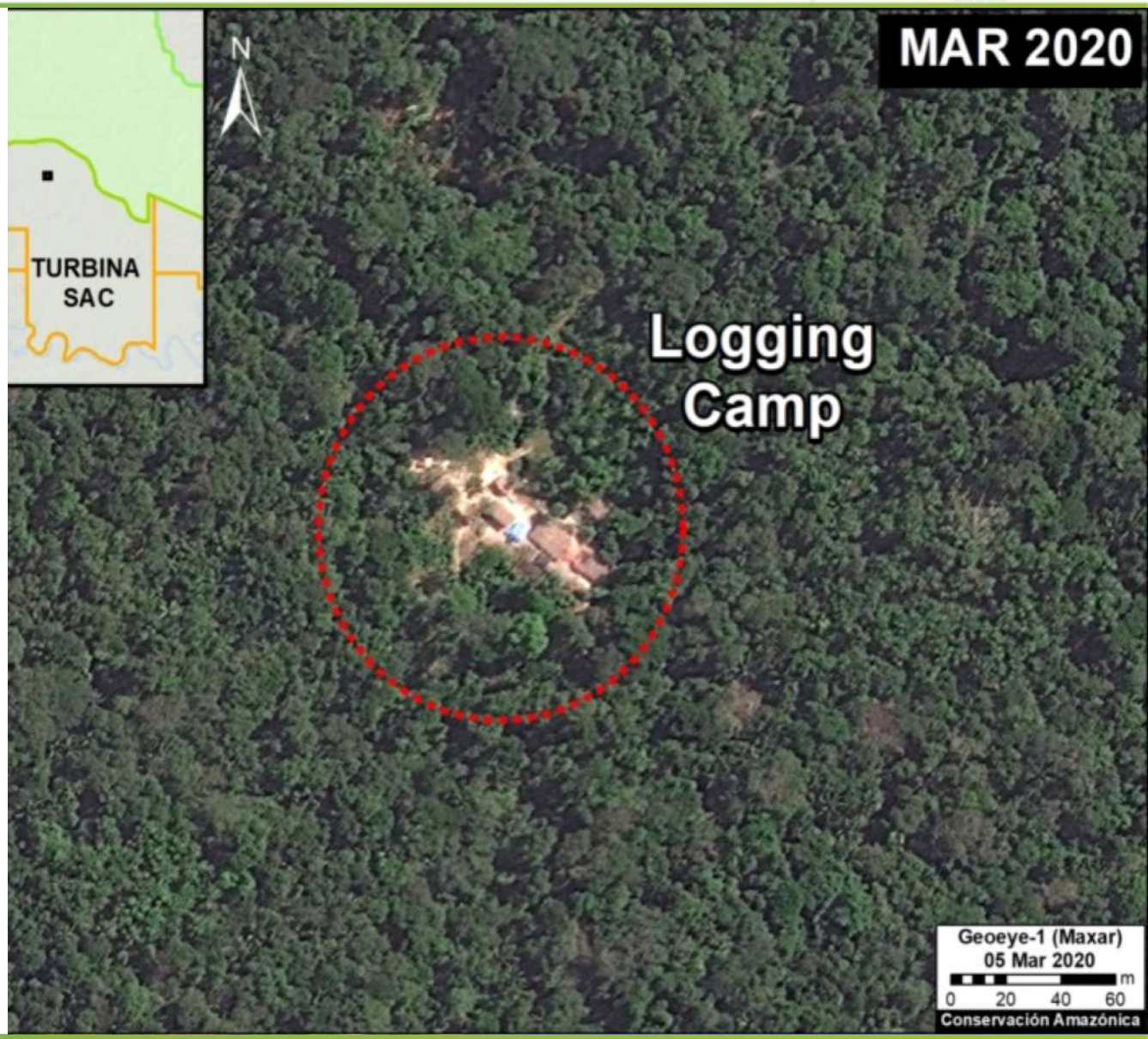
Thank you for joining AmazonTEC! We will start promptly at 2:00 pm.

Did you know?

There is enormous potential to identify illegal logging using very high resolution satellite imagery (<70 cm). The leading entities that offer this type of data are Planet (Skysat) and Maxar (Worldview).

Illegal logging in the Peruvian Amazon is mainly selective and, until now, difficult to detect through satellite information. This technique has the potential to detect the illegal activity in real time, when preventive action is still possible.

See more: https://maaproject.org/2020/high-res-satellites/



AmazonTEC

Science and Technology for a Sustainable Amazon

Building a Sustainable Amazon Through Science, Technology, and Governance

ORGANIZED BY

AMAZON CONSERVATION

ACCA 20

Norad

General Welcome and Event Introduction

John Beavers

Executive Director of
Amazon Conservation

Photo of Wayqecha Cloud Forest by Jess Suarez

Welcome and Announcements from Norway

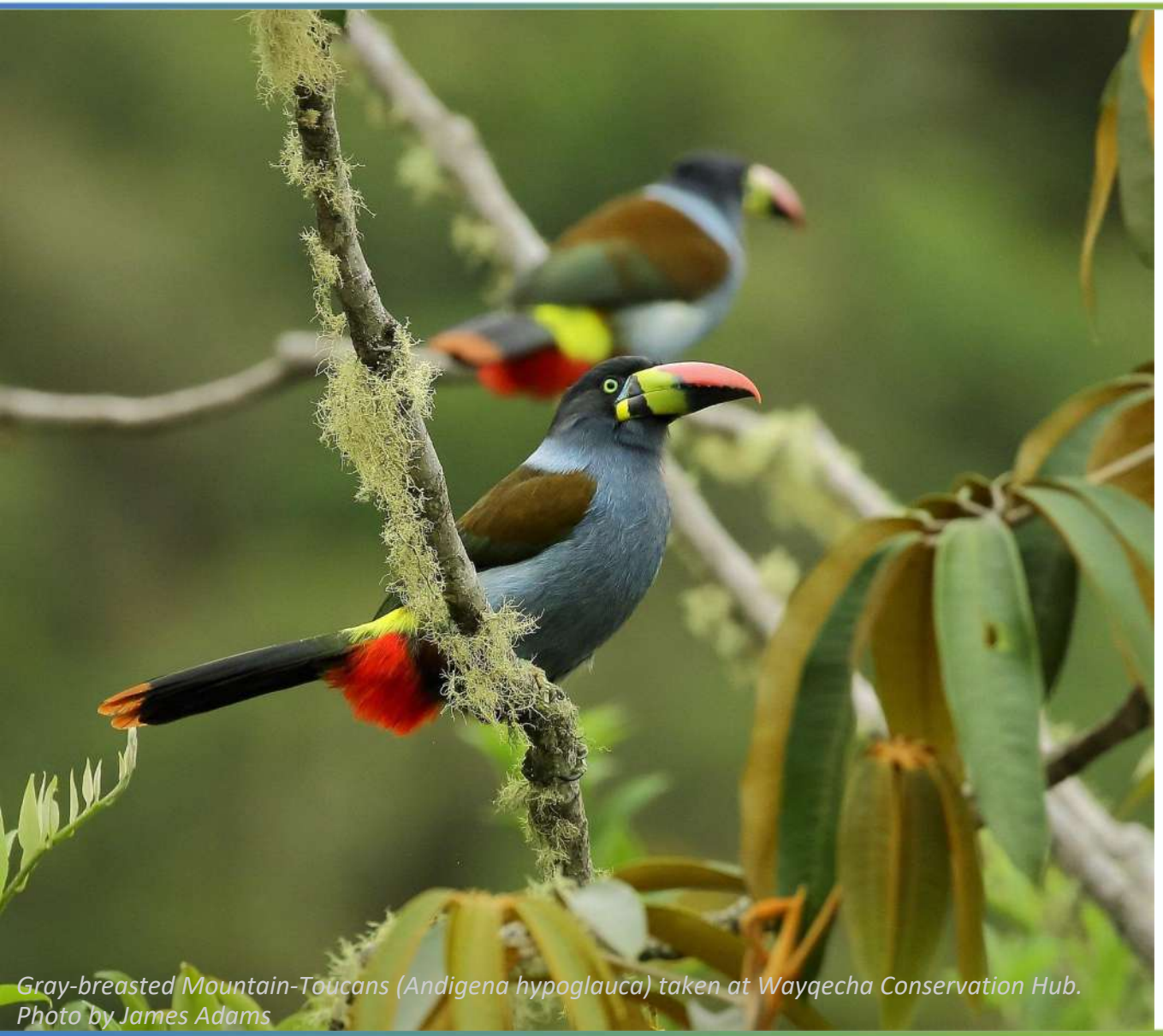
Henrik Fliflet

Senior Adviser at Norway's International Climate and Forest Initiative (NICFI), Norwegian Ministry of Climate and Environment

Opening Remarks

Manuel Pulgar Vidal

Leader of the Climate & Energy Global Practice, World Wild Fund for Nature International (WWF)



Gray-breasted Mountain-Toucans (Andigena hypoglauca) taken at Wayqecha Conservation Hub. Photo by James Adams

Panel Overview and Panelist Introductions

Enrique Ortiz [Moderator]

Senior Program Director at the Andes Amazon Fund (AAF)

Technology Solutions for Conservation Panel

Dan Irwin

Research Scientist at NASA and Global Program Manager for the NASA/ USAID program SERVIR

Matt Finer

Director of the Monitoring of the Andean Amazon Project (MAAP) at Amazon Conservation

Sidney Novoa

Director of GIS and Technology for Conservation at Conservación Amazónica - ACCA

Adrian Forsyth

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Daniel Rodriguez Fernandez

Specialist in Uncontacted Indigenous Peoples protection and Technical Advisor for FENAMAD (an Indigenous Federation in southeastern Peru)

Flor Rumayna

Local Sustainable Business Owner and Forest Guardian in Peru

Technology Solutions for Conservation

Dan Irwin

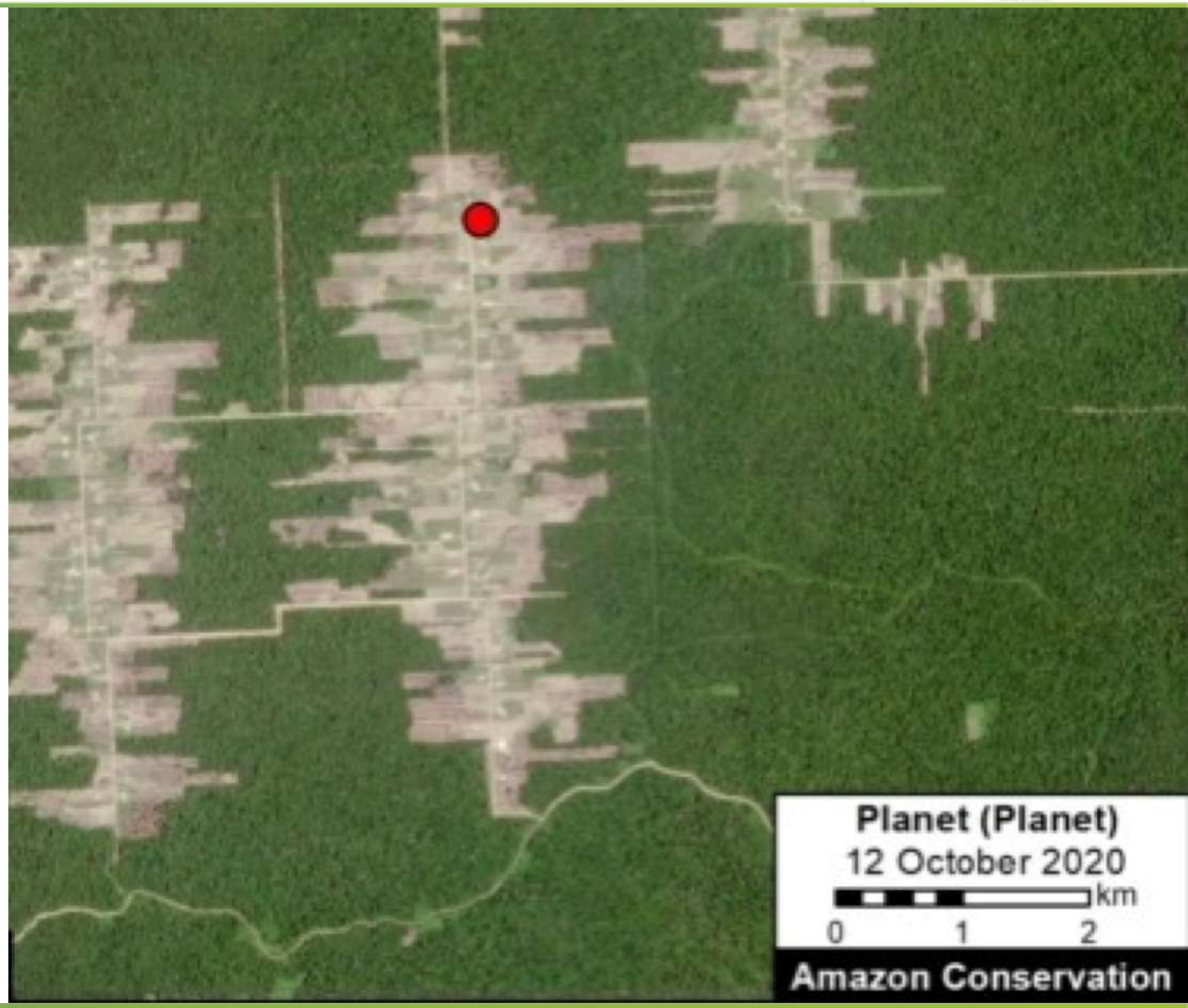
Research Scientist at NASA and Global Program Manager for the NASA/ USAID SERVIR program

Photo by Zander Nassikas

Technology Solutions for Conservation

Matt Finer

Director of the Monitoring of the Andean Amazon Project (MAAP) at Amazon Conservation

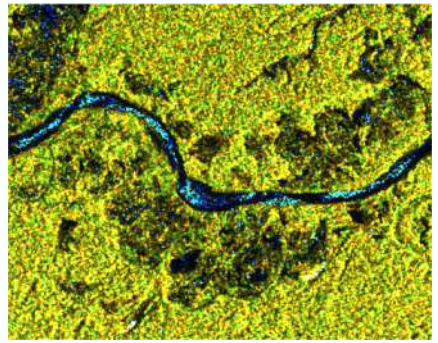


TECHNOLOGY SOLUTIONS FOR CONSERVATION:

Satellites for Real-time Monitoring

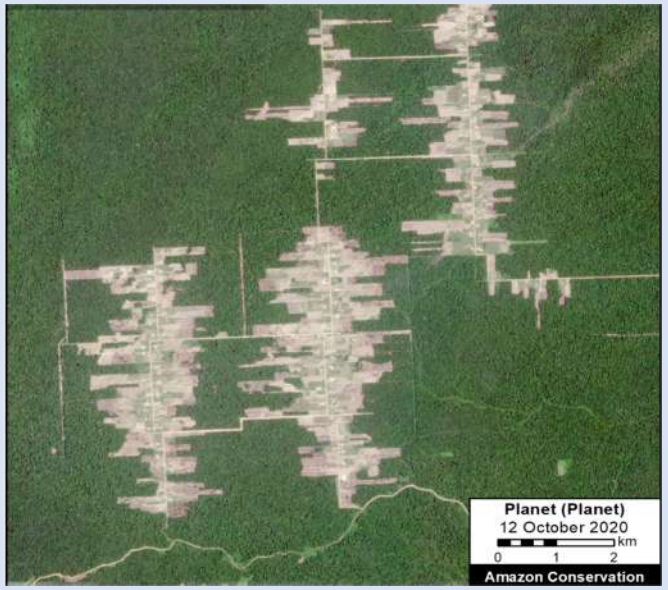
Part 1: MAAP

Part 2: New Satellite based Solutions



MAAP: Real-time Monitoring Program (since 2015)
Linking Tech and Policy

Deforestation



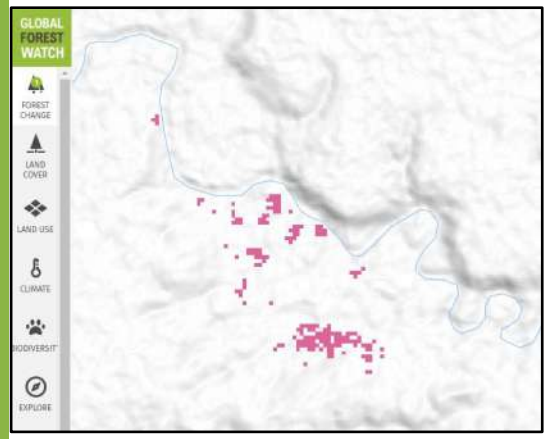
Degradation (Logging)

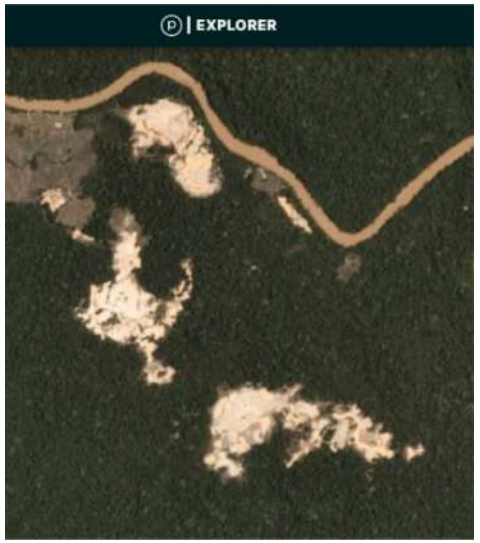
Fire

https://maaproject.org

Deforestation

Alerts >> High Res >> Reports >> Action





ACCA AMAZON

RESUMEN DE POLÍTICAS
ACA/ACCA-2019-12
10-04-2019

INCREMENTO DE LA MINERIA AURIFERA EN EL RIO PARIAMANU

En el presente reporte se muestra el incremento de la actividad minera a lo largo del rio Pariamanu, en el distrito de Tambopata, provincia de Tambopata, departamento de Madre de Dios.

En menos de dos meses (después del inicio de la operación Mercurio), entre el 22 de febrero y el 08 de abril del 2019, el incremento de la deforestación por minería aurífera fue de 17 ha en esta zona. Anteriormente la deforestación en la zona fue de 80 ha. Un total de 97 ha fueron deforestadas, de las cuales el 21% a ocurrido desde el 22 de febrero.

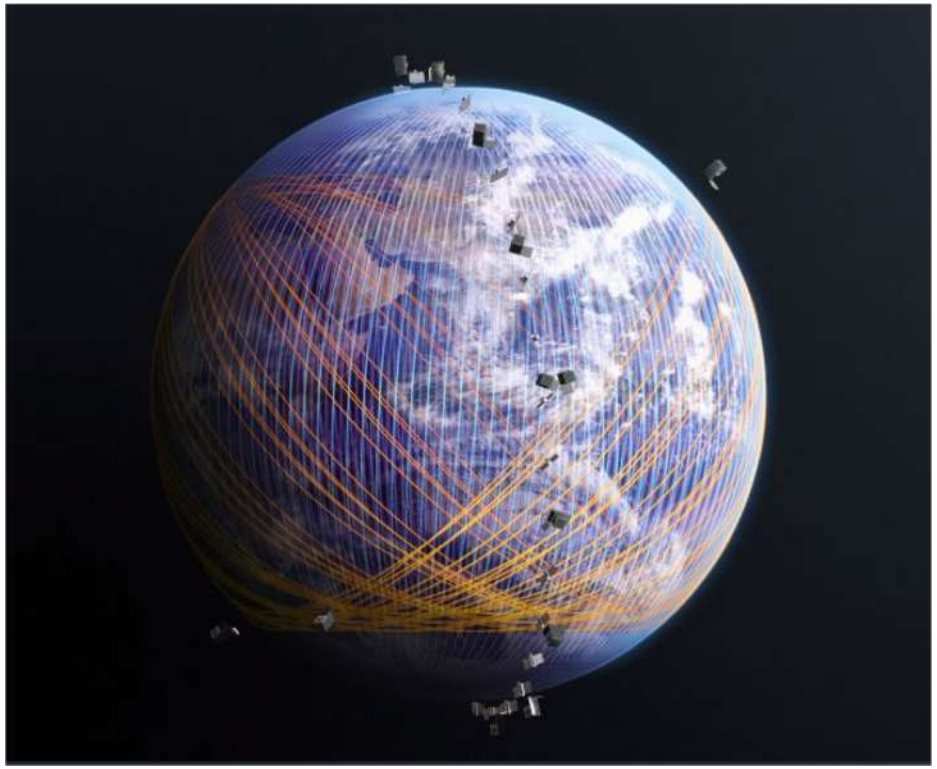
En la **Imagen 1,** mapa base, se describe el contexto general de la zona donde se ubica del presente análisis. Se observa al rio Pariamanu, a 1 km de su desembocadura con el rio Las Piedras, ubicado al noroeste de la ciudad

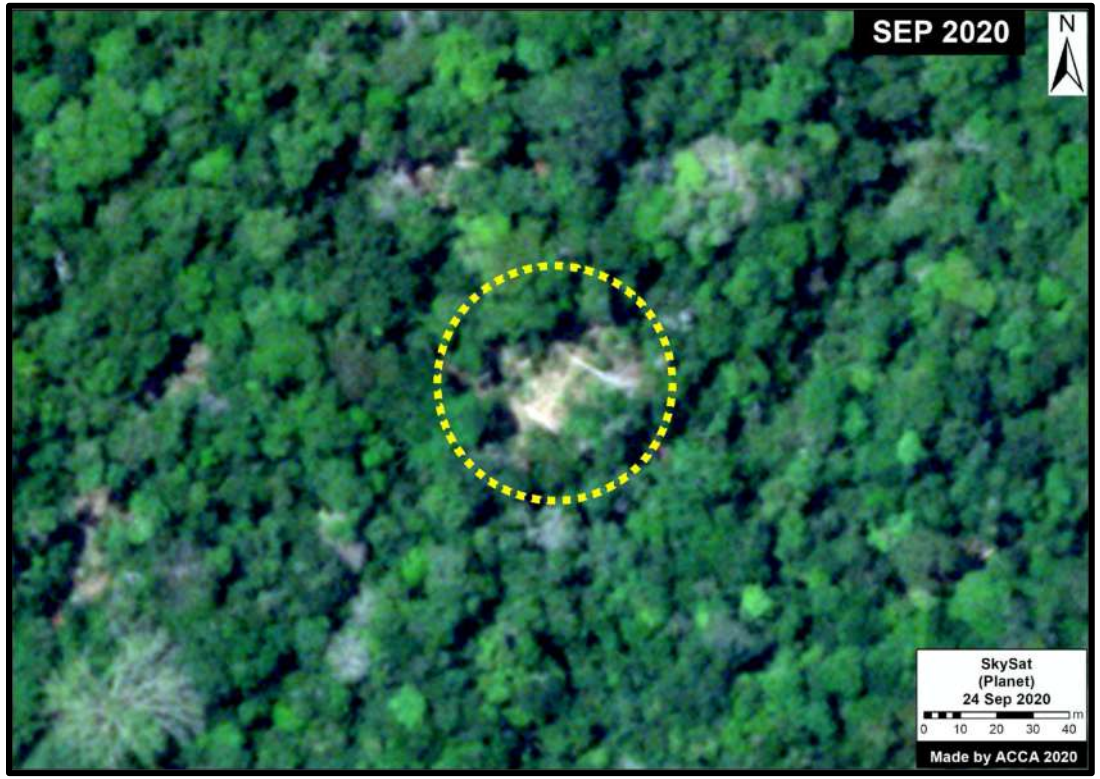
Perú: destruyen 45 campamentos en nuevo foco de minería ilegal en Pariamanu

por **Enrique Vera** en 28 septiembre 2020

Degradation (Logging)

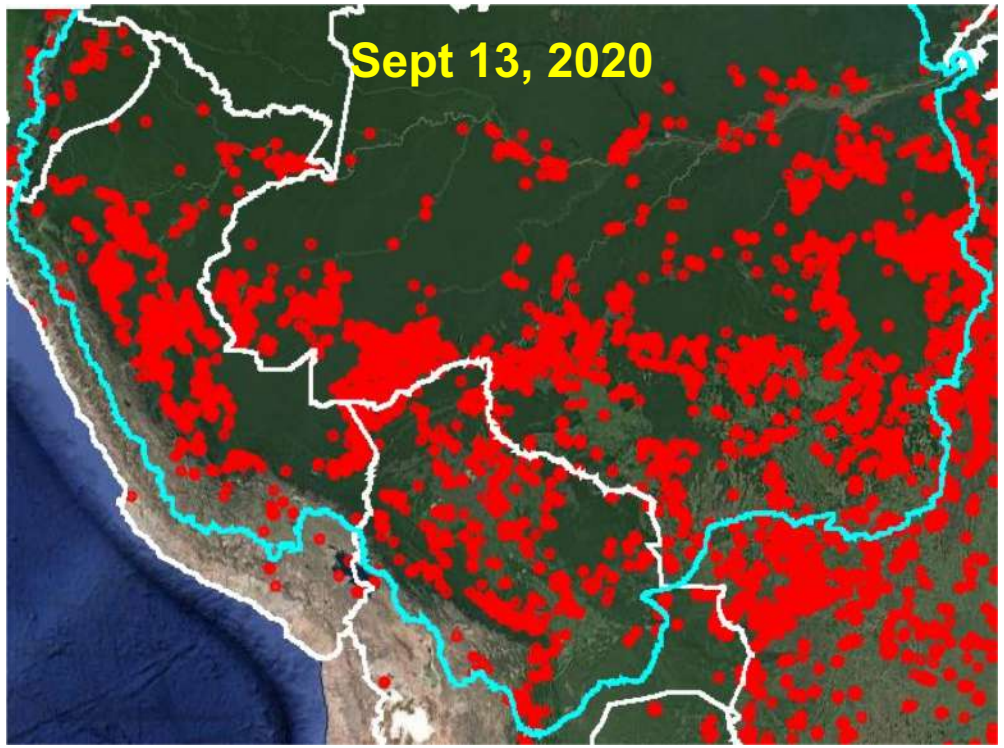
Tasking Very High Res (Skysat)

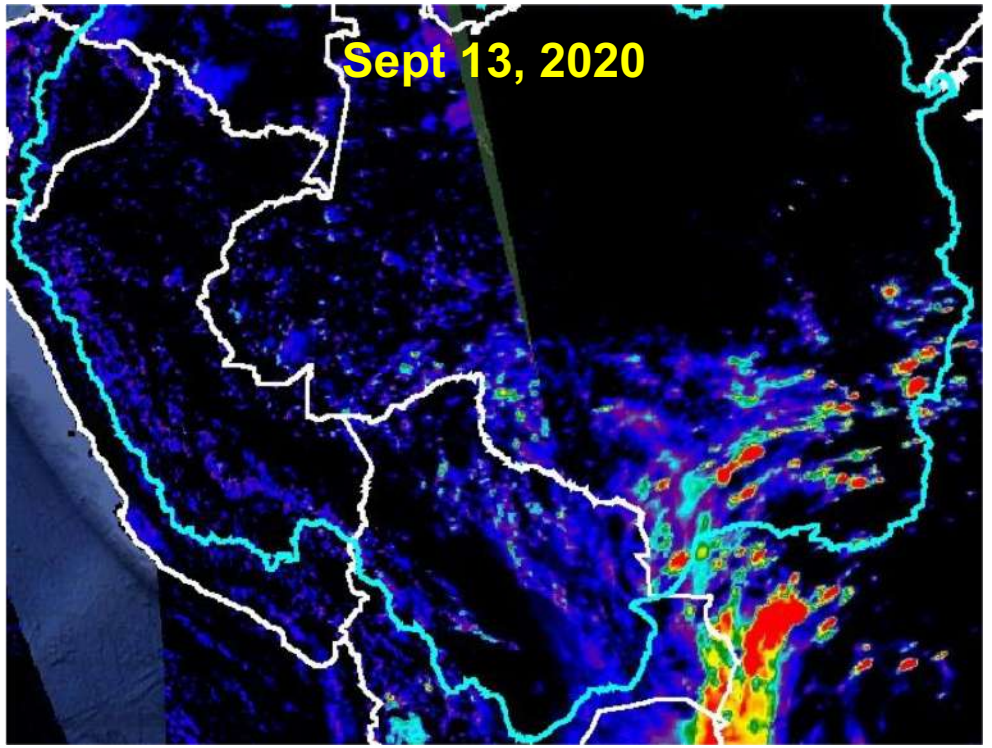




Fire

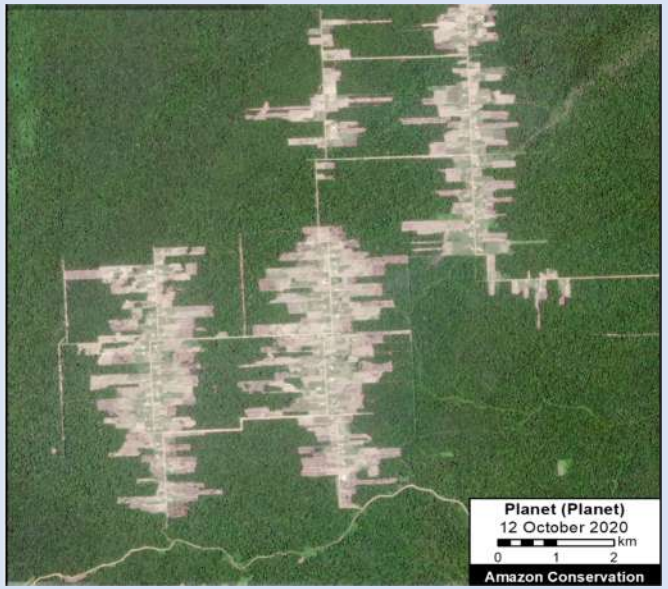
New App based on Aerosol





MAAP: Real-Time Monitoring
Linking Technology with Policy

Deforestation



Degradation (Logging)

Fire

https://maaproject.org

Technology Solutions for Conservation

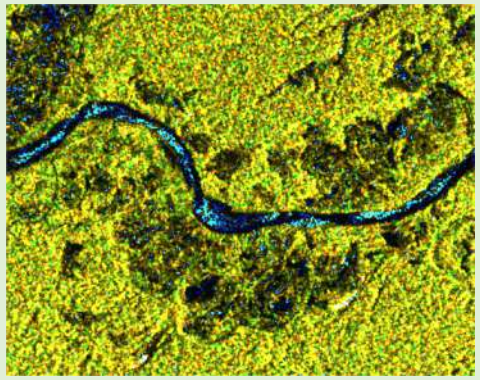
Sidney Novoa

Director of GIS and Technology for Conservation at Conservación Amazónica - ACCA

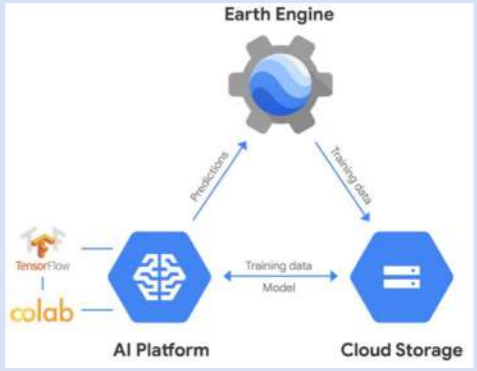
Key Satellite-Based Advances

Drones

Radar (Mining)



Google Earth Engine (big data)



AI (Logging)

Drones for Monitoring

MAAP #126: DRONES AND LEGAL ACTION IN THE PERUVIAN AMAZON

PERU, MAPS OCT 7, 2020

Download PDF of this article

The southern **Peruvian Amazon** (Madre de Dios region), is threatened by illegal mining, logging, and illegal deforestation.

In response, an association of forest concessionaires (known as ACOMAT) is implementing a **comprehensive monitoring system** that links the use of technology (satellites and drones) with legal action.

ACOMAT was formed in 2012 and now comprises 15 forestry concessions, covering 440,000 acres (178,000 hectares) in the southern Peruvian Amazon (see Base Map). Most of the concessions are alternatives to logging, such as Brazil nuts, Conservation, and Ecotourism.

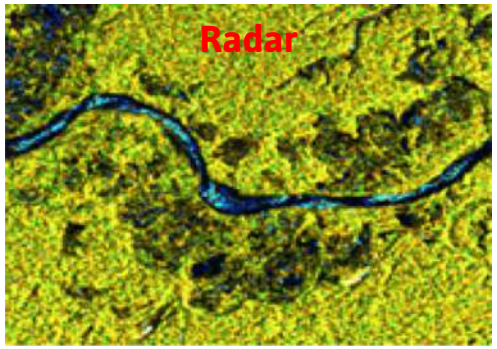
This comprehensive system has three main elements:

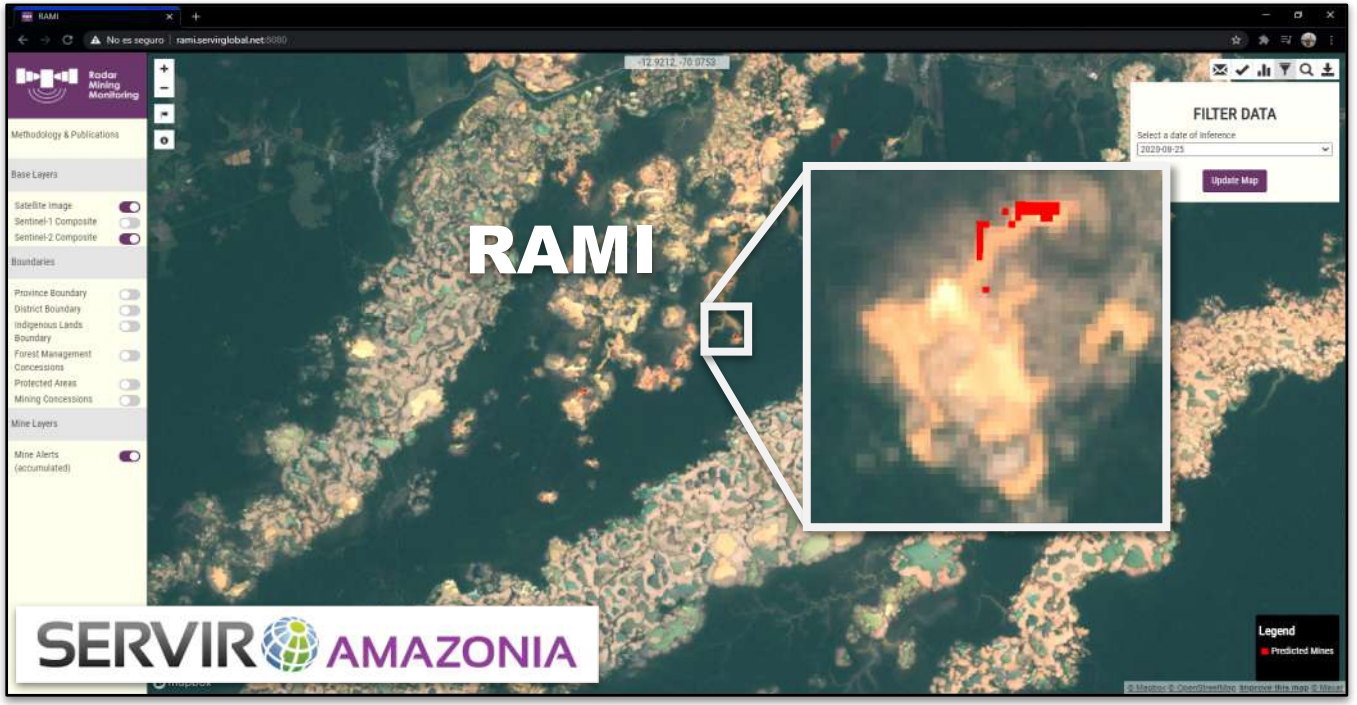
1) **Real-time, satellite-based forest loss monitoring** (such as GLAD alerts) to quickly detect any possible new threats, even across vast and remote areas.

2) Field patrols with **drone flights** to verify forest alerts (or monitor threatened areas) with very high resolution images.

Radar Based Monitoring

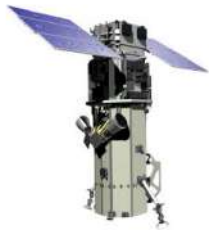
VS

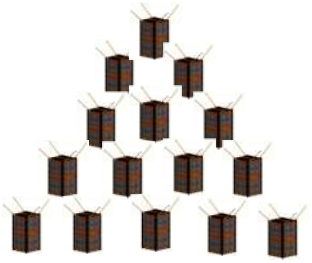


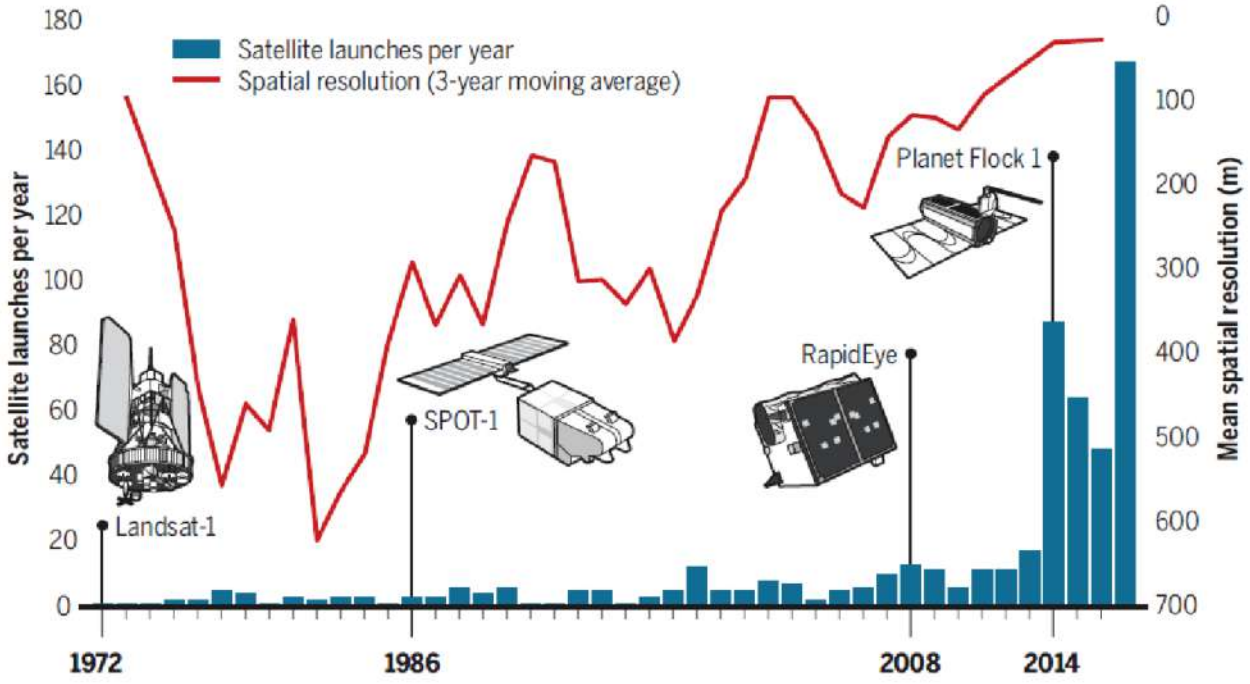


http://rami.servirglobal.net:8080/

New Era of Information: Big Data







GB

Gigabytes

VS

PB

Petabytes

Source: Finer et al 2018. Combating deforestation: From satellite to intervention. SCIENCE(22):1303-1305

Google Earth Engine

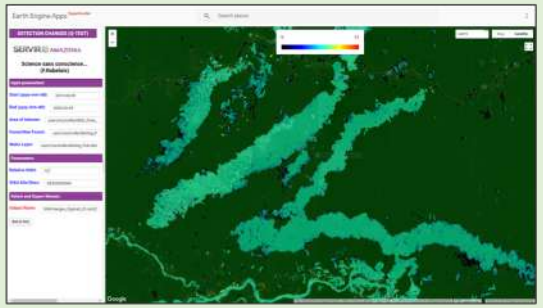
Google Earth Engine

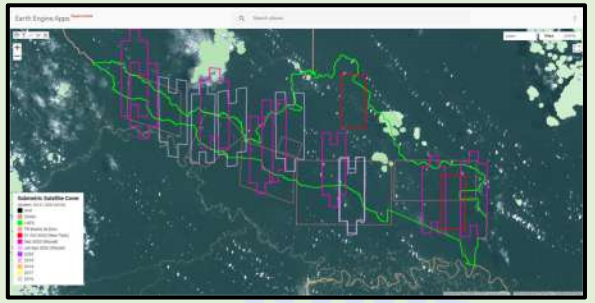
colab

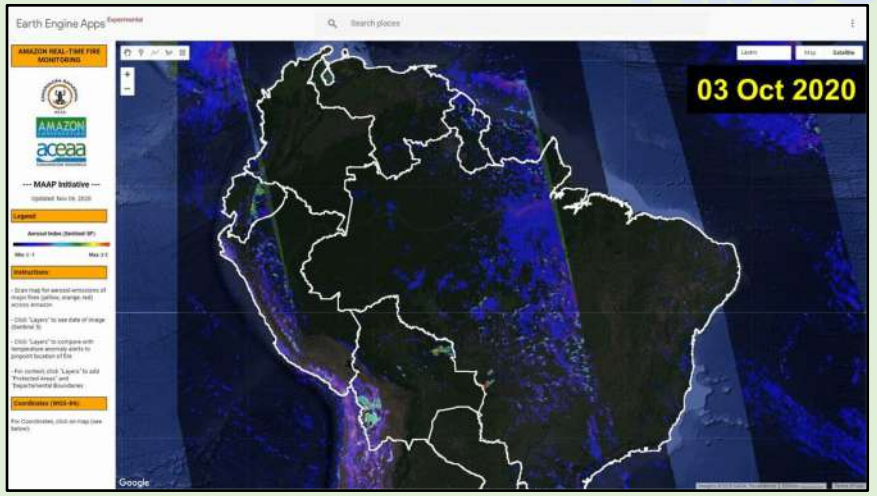
Virtual Machine

Google Cloud Platform

Smart Apps

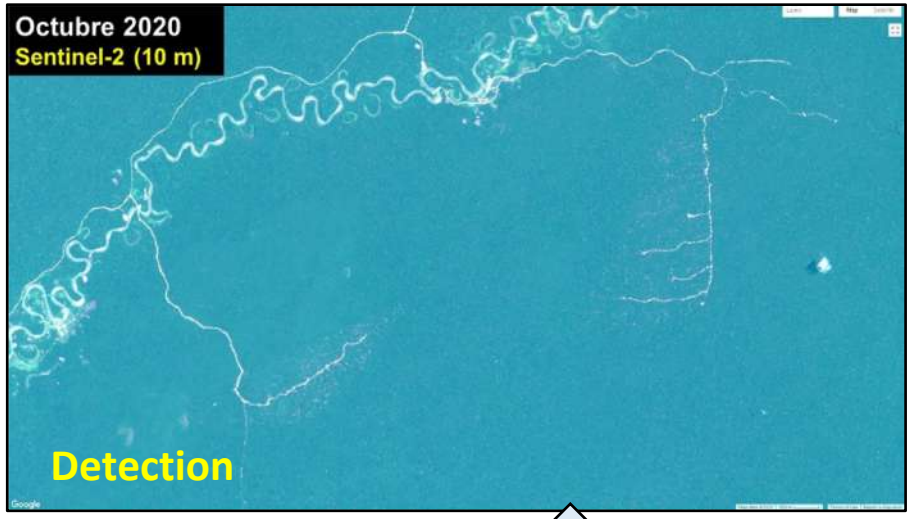


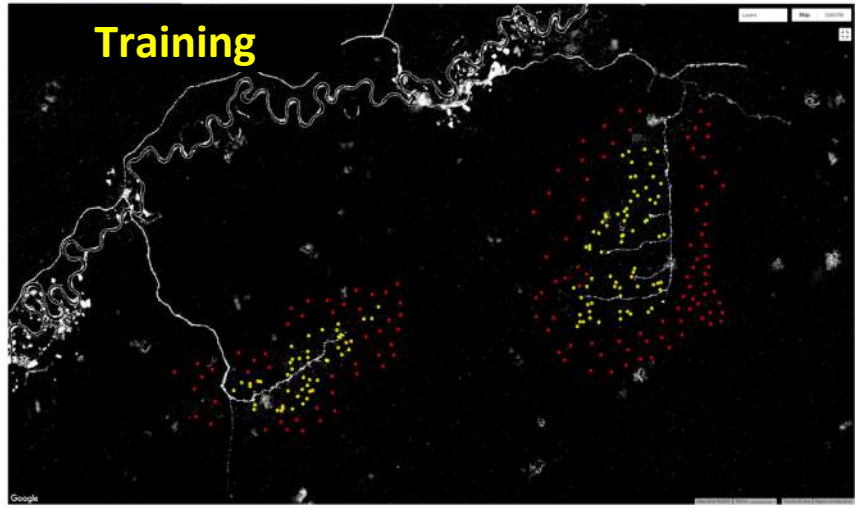




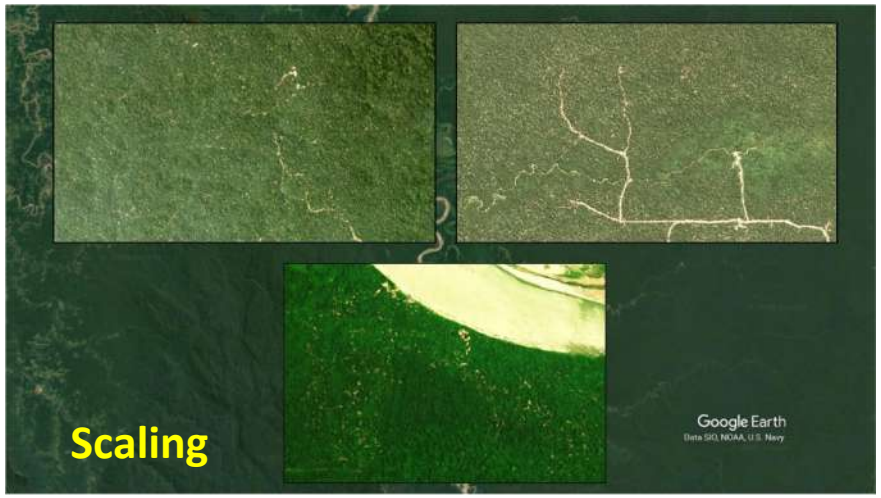
https://luciovilla.users.earthengine.app/view/monitoring-amazon-fires

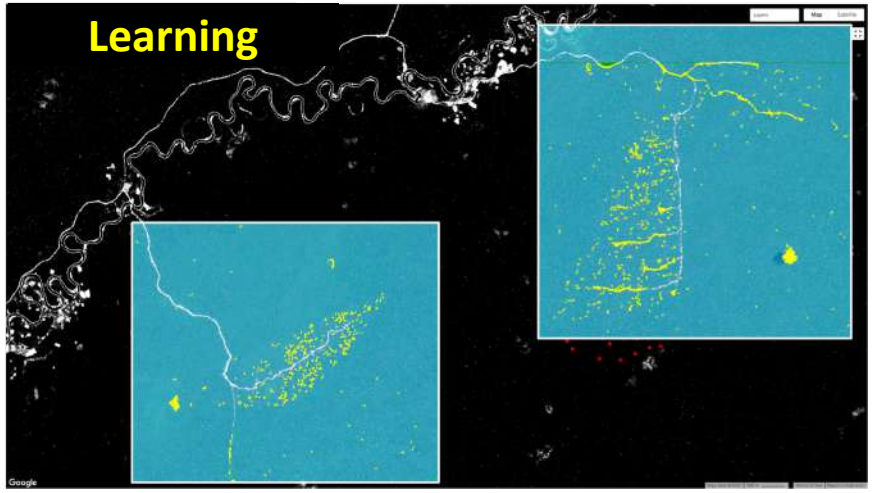
Artificial Intelligence (AI)





LOGGING MONITORING





Technology Solutions for Conservation

Adrian Forsyth

Tropical Ecologist and Strategic Advisor for the Gordon and Betty Moore Foundation

Photo by Sean Williams

AmazonTEC

Science and Technology for a Sustainable Amazon

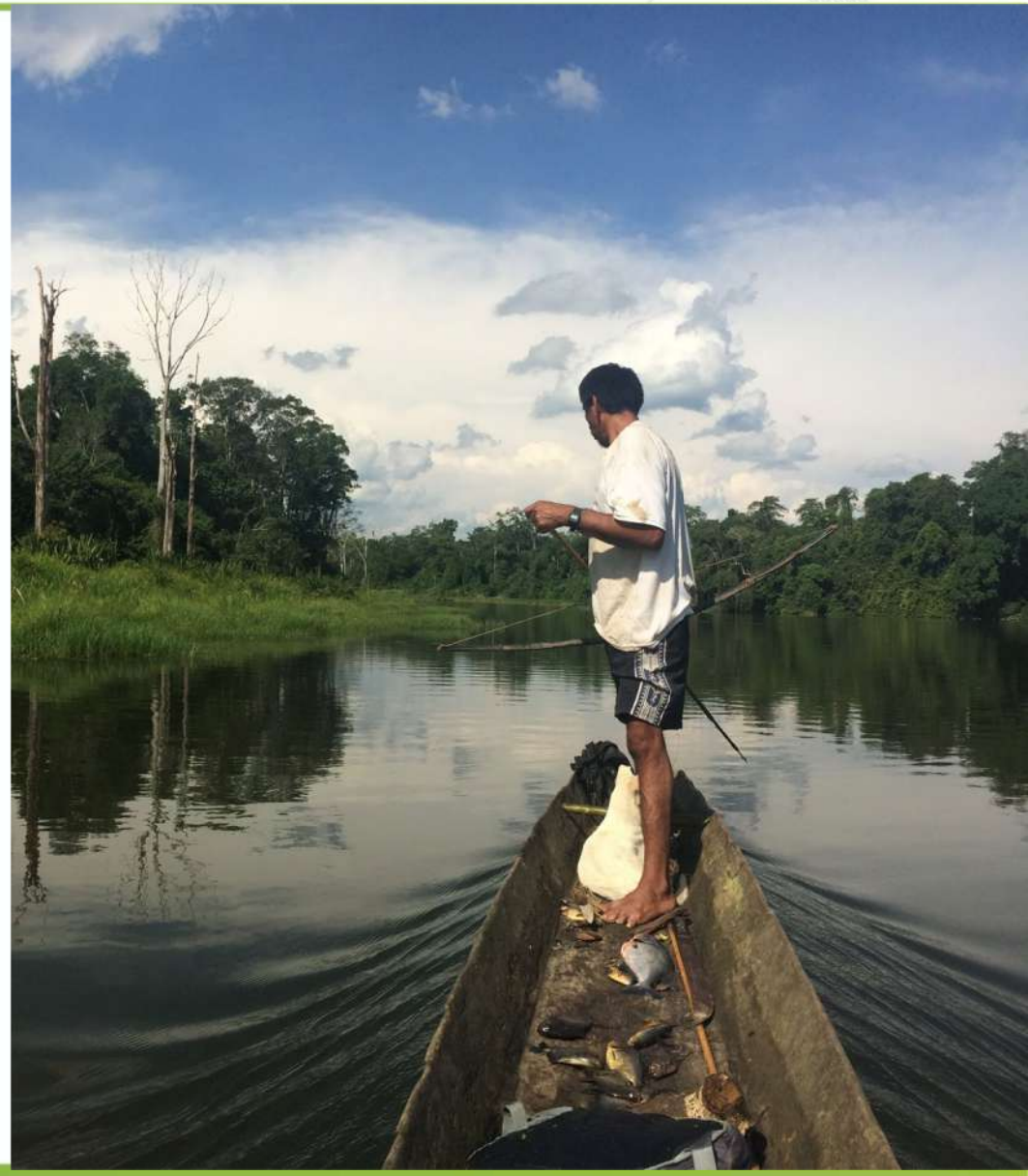
Incorporating Technology into FENAMAD's Community-Based Monitoring Systems

Daniel Rodriguez Fernandez

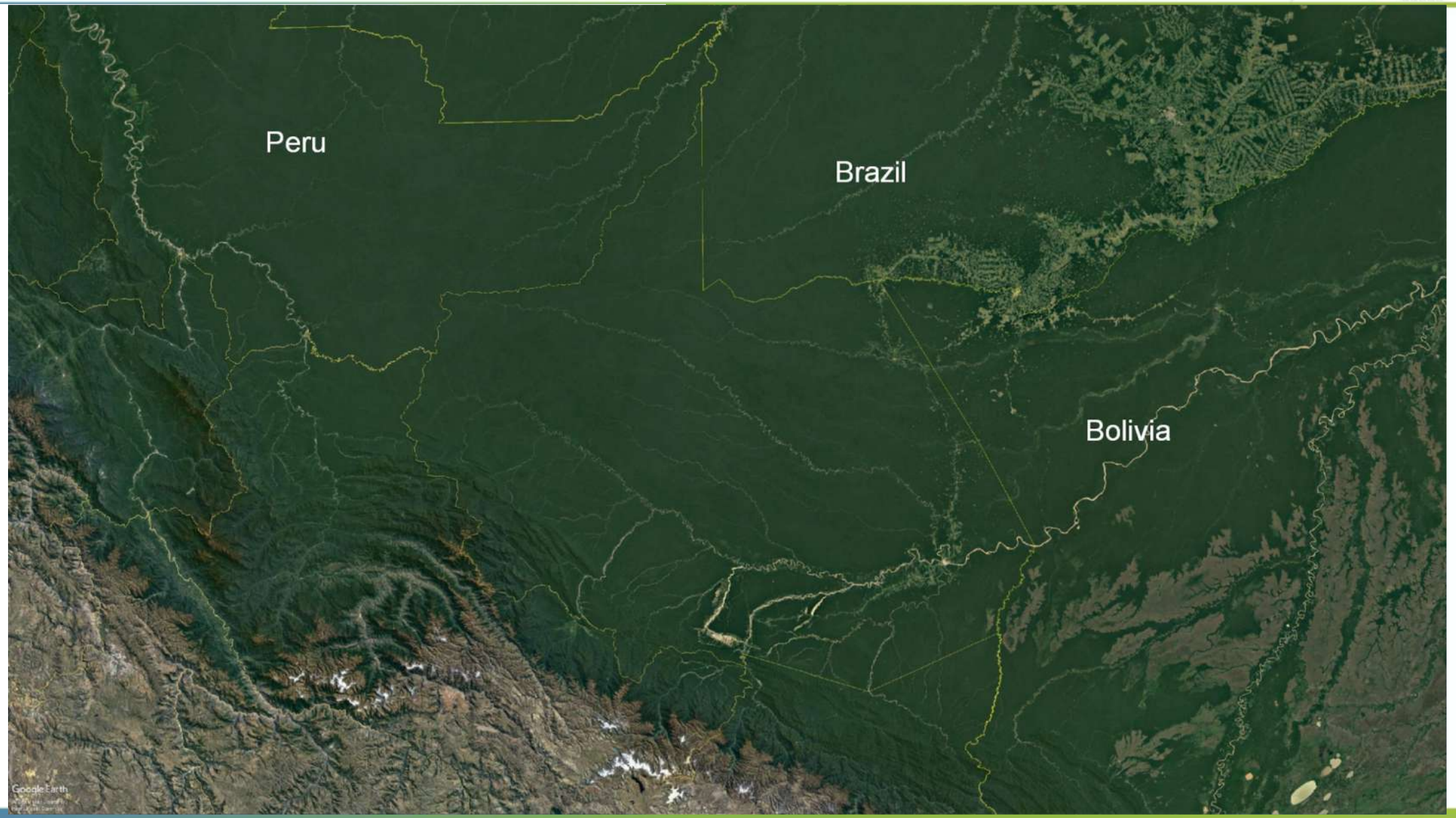
Specialist in Uncontacted Indigenous Peoples protection and Technical Advisor for FENAMAD

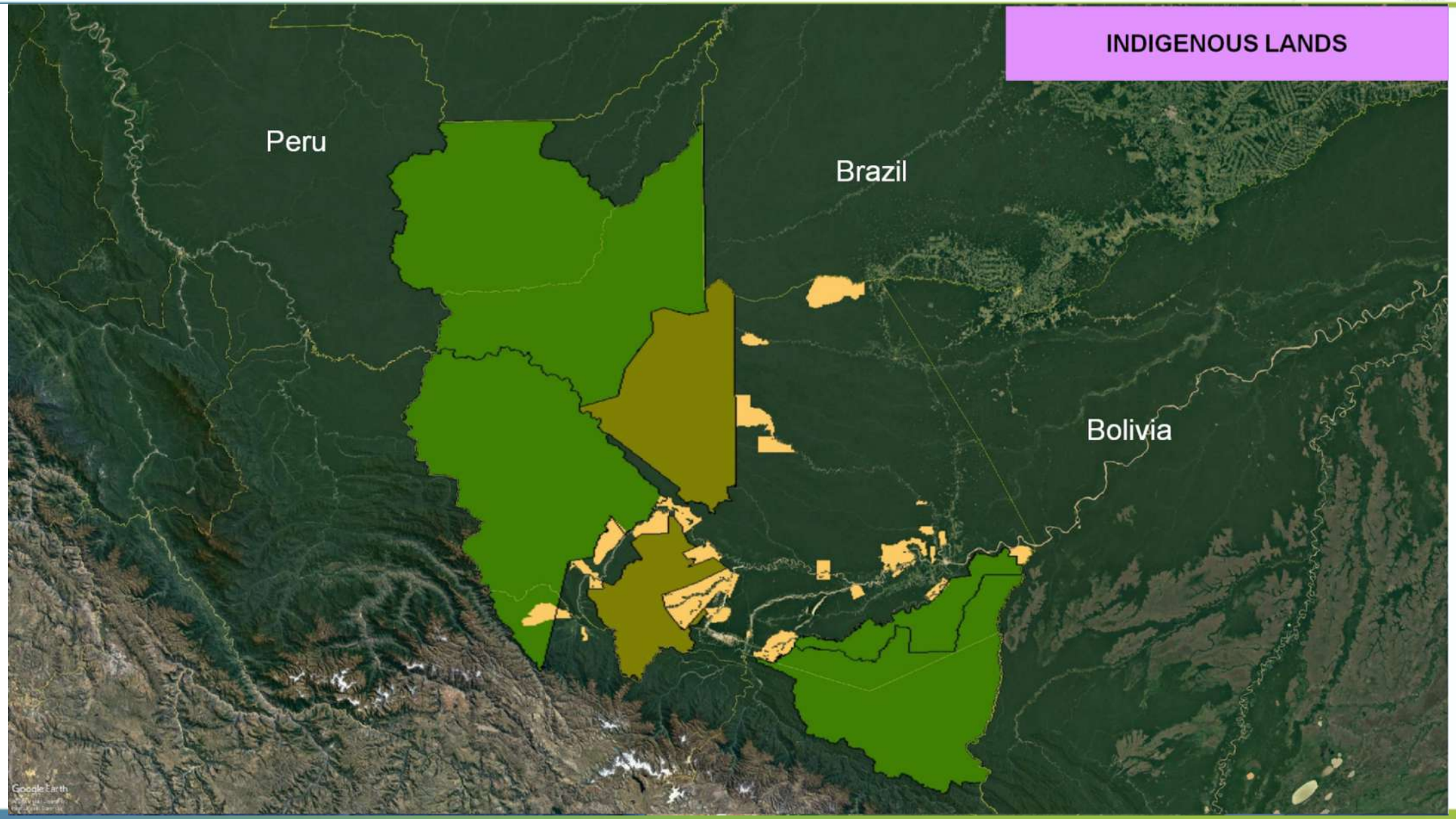
FEDERACIÓN NATIVA DEL RÍO MADRE DE DIOS Y AFLUENTES - FENAMAD

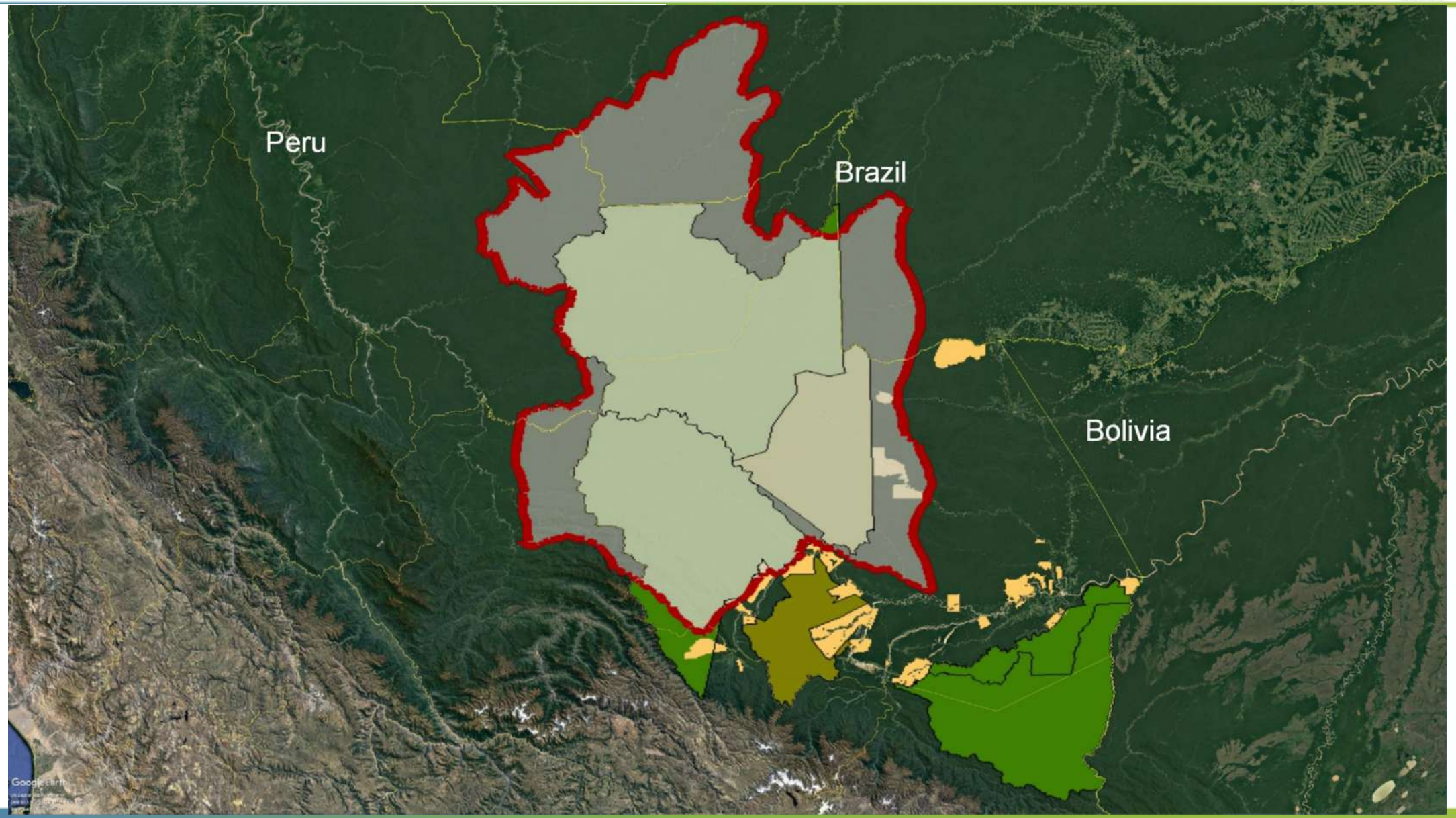
- Native Federation of the Madre de Dios river and its Tributaries
- Representative organization of the indigenous peoples in Madre de Dios (37 communities, 7 ethnic groups)
- Created in 1982 by the communities to defend their territories and collective rights




Peru
Brazil
Bolivia
Madre de Dios region
Google Earth


Peru
Brazil
Bolivia
Google Earth


INDIGENOUS LANDS
Peru
Brazil
Bolivia


Peru
Brazil
Bolivia

FEDERACIÓN NATIVA DEL RÍO MADRE DE DIOS Y AFLUENTES - FENAMAD

- “Biodiversity Capital of Peru”
- 60% of the region’s surface categorised as Nature Protected Areas
- Territory of 7 indigenous peoples in 37 communities, also includes several indigenous peoples in isolation and initial contact (PIACI)

Technology Solutions for Conservation

Flor Rumayna

Local Sustainable Business Owner and Forest Guardian in Peru

Bridging the Gap: Technology, Governance, and Action Panelists

Fabiola Muñoz

Peru's Former Minister of the Environment
Former Minister of Agriculture, and
Former Executive Director of the Peruvian National Forest and Wildlife Service (SERFOR)

Hector Gonzalez Rubio

Technical Advisor for Colombia's Institute of Hydrology, Meteorology, and Environmental Studies (IDEAM)

Open Question and Answer Session for Panelists

Dan Irwin

Research Scientist at NASA and Global Program Manager for the NASA/ USAID program SERVIR

Matt Finer

Director of the Monitoring of the Andean Amazon Project (MAAP) at Amazon Conservation

Sidney Novoa

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Fabiola Muñoz

Peru's Former Minister of the Environment, Former Minister of Agriculture, and Former Executive Director of the Peruvian National Forest and Wildlife Service (SERFOR)

Tying it All Together and Key Takeaways

Manuel Pulgar Vidal

Leader of the Climate & Energy Global Practice, World Wild Fund for Nature International (WWF)

Photo by Sean Williams


Photo by Sean Williams

Closing Remarks, Acknowledgments, and What's Next

John Beavers

Executive Director of
Amazon Conservation

AmazonTEC

Science and Technology for a Sustainable Amazon

Thank you for participating in AmazonTEC!

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AMAZON CONSERVATION

ACCA 20

Norad

FIN

The remaining slides are template slides, not part of the presentation

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Experiencias de campo en el uso de tecnología como aliada de la conservación

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Experiencias de campo en el uso de tecnología como aliada de la conservación

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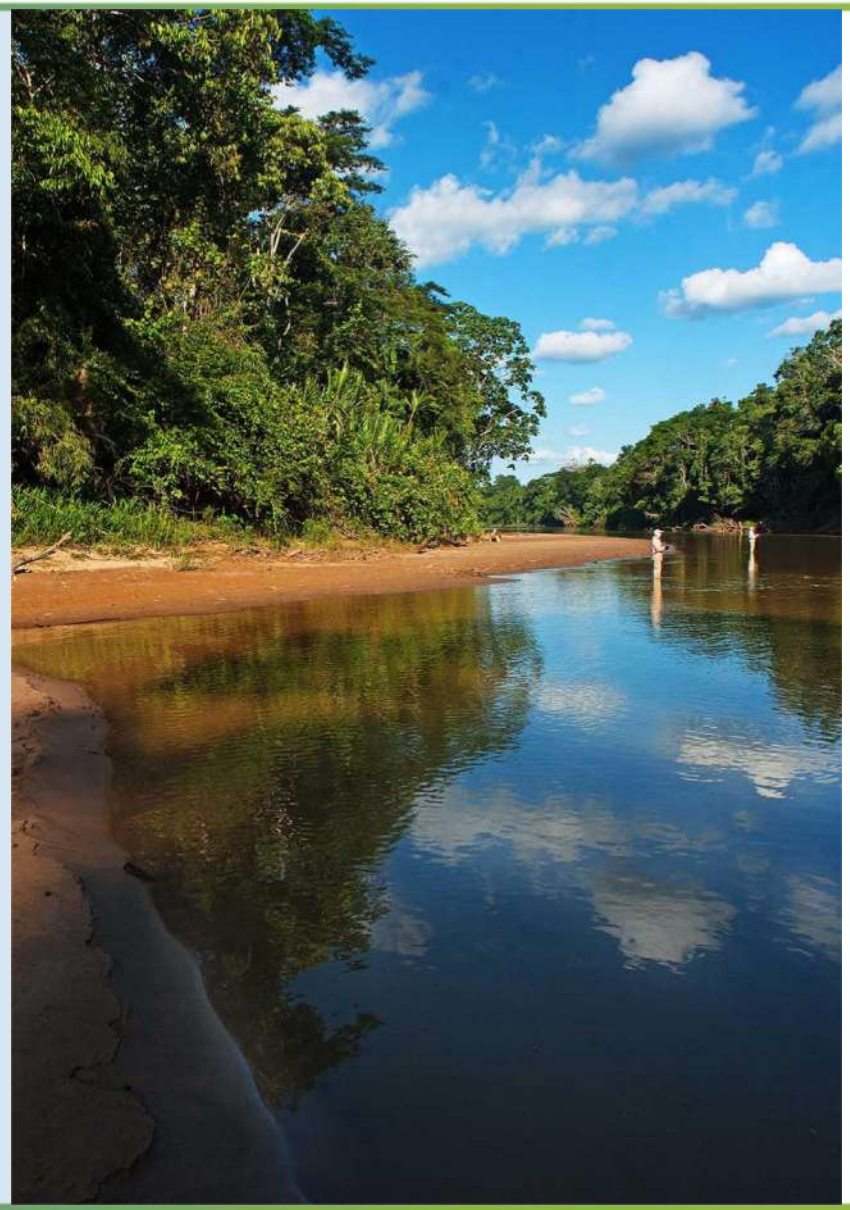

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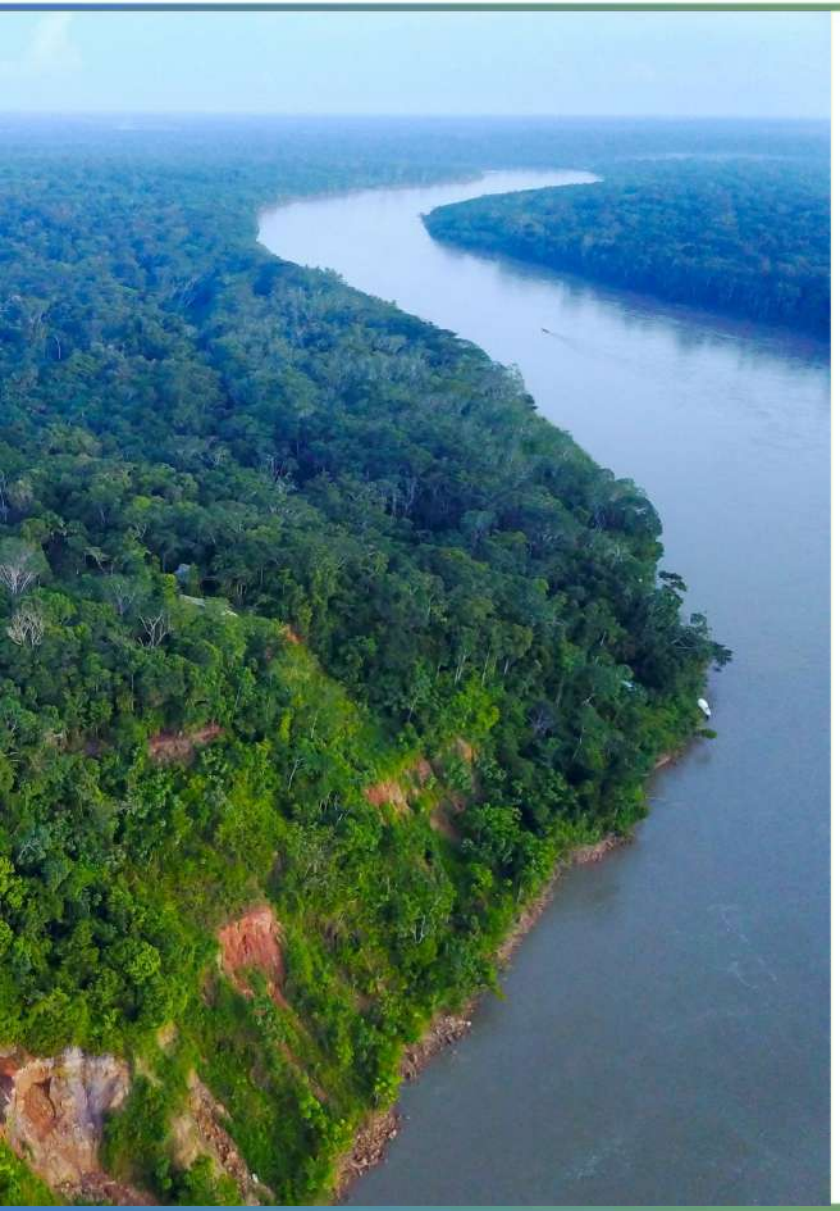

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