

Leveraging the NICFI Satellite Data Program to better monitor and report on forest cover change

The example of Lao PDR

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Timeline of Planet imagery use in Lao PDR

2018

First use of Planet monthly for forest degradation monitoring – project level

3 projects collaborated to mutually procure and use NICFI data to validate the detection of canopy disturbance as part of the Operational Logging and Degradation Monitoring System (OLDM).

Support law enforcement following the PM Decree 15 and the FLEGT VPA

2019

Planet data use at the national level to support the 1st MRV

F-REDD project (JICA) supported the procurement.

2020

Start of the NICFI program

The Department of Forestry (DOF) integrates the use of Planet imagery into the Provincial Deforestation Monitoring System.

The Department of Forest Inspection (DOFI) scales-up the OLDM.

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2022

1st MMR (FCPF-CF) – Forest degradation Monitoring at provincial level

Monthly Planet used for the Sample-Based Assessment conducted with Collect Earth Online.

The I-GFLL project accessed to Planet Level-2.

Enhanced transparency in reporting

2023

Planet Level-2 access

FAO provided the access to DOF and DOFI. Testing phase for validation of disturbance alert.

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**Future
Plan**

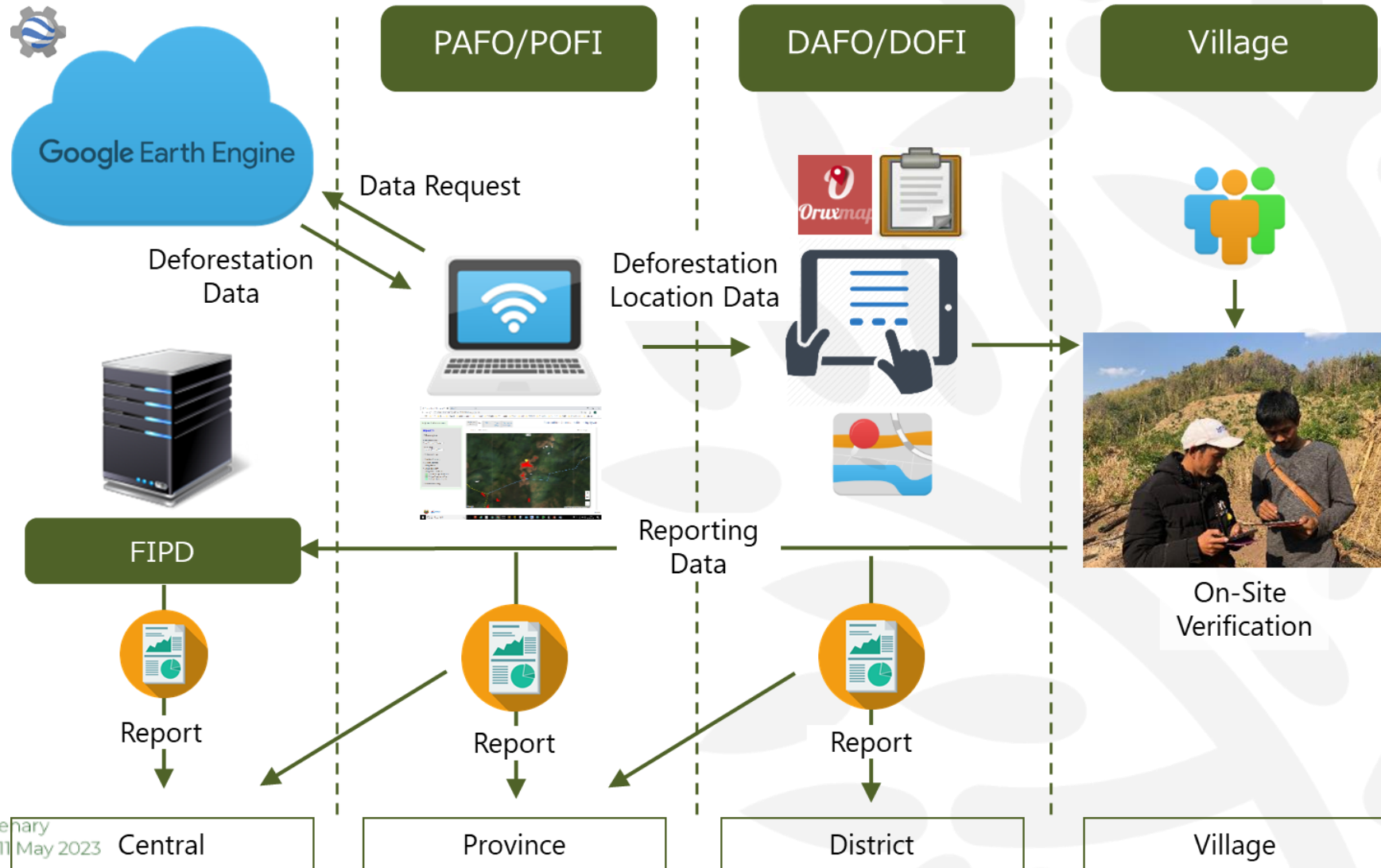
Using Planet level-2 for change detection

Change analysis for Near-Real Time monitoring.
Change analysis for tracking forest cover change (Deforestation/Degradation) linked to drivers (ex: Deforestation-free commodities supply chains)

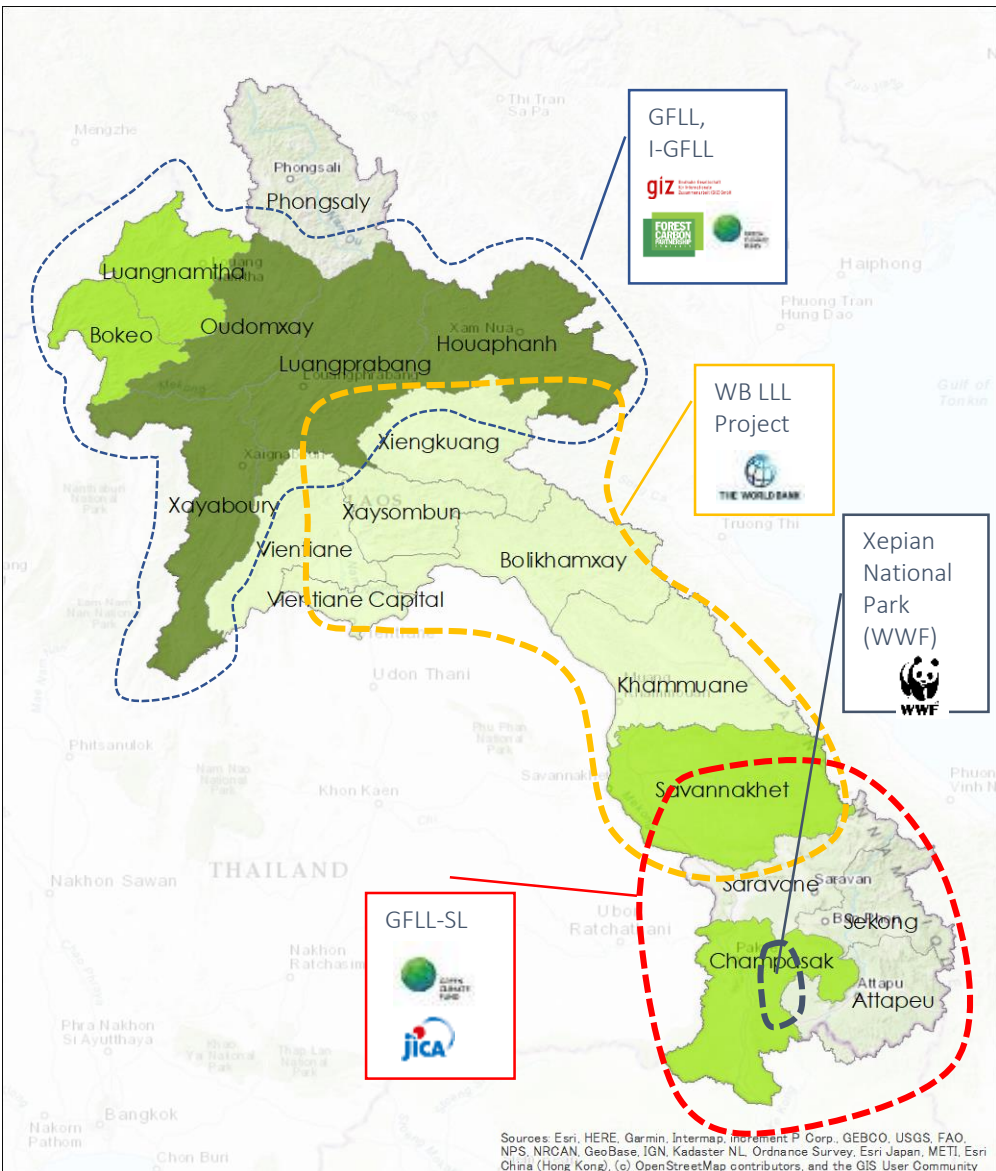


Near real-time Deforestation Monitoring

Overview of PDMS



Near real-time Deforestation Monitoring



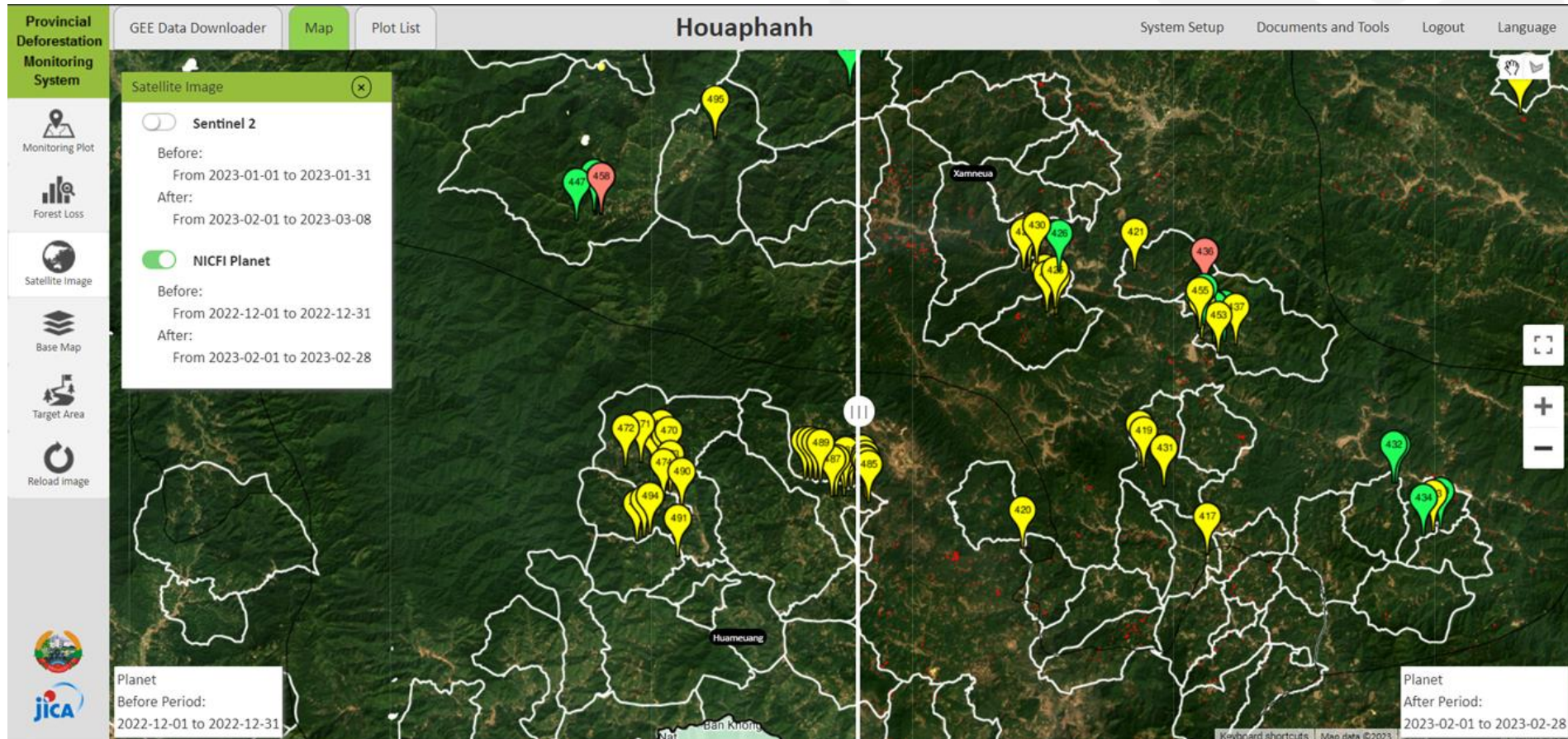
“We can easily identify the deforestation areas in the village forest area through the WebApp.”
(Forestry Officer, PAFO Luang Prabang)

“PDMS can be used in my mobile phone, even if the tablet is not available!” (District Forest Officer, DAFO, Oudomxay)

“We can identified the farmlands in the village forest area by the PDMS. We had given administrative guidance to the offenders, and collected a fine according to the regulation. The fines were saved into a village fund to be used for forest patrol activities in the village.”
(Technical Officer, PAFO).

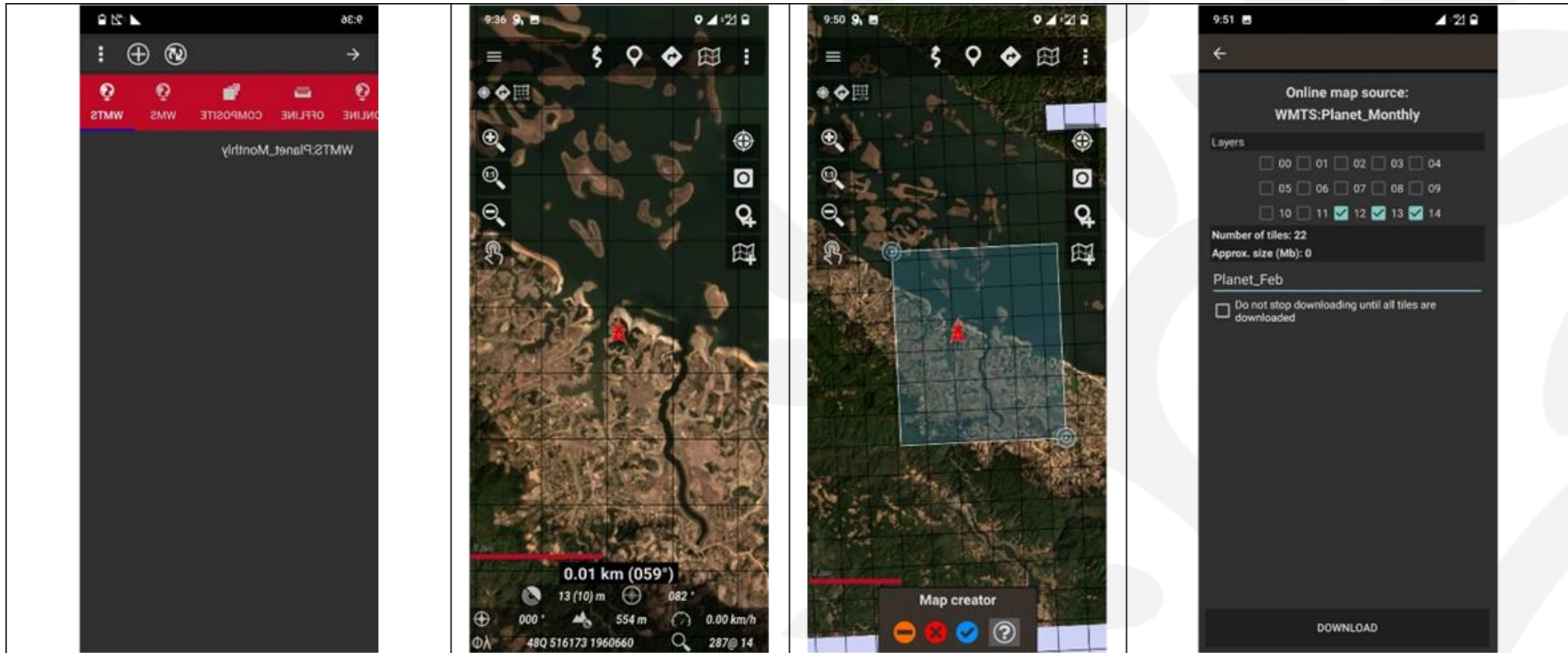
Near real-time Deforestation Monitoring

Support the validation of deforestation alerts from the near real-time forest monitoring tool PDMS (Provincial Deforestation Monitoring System).



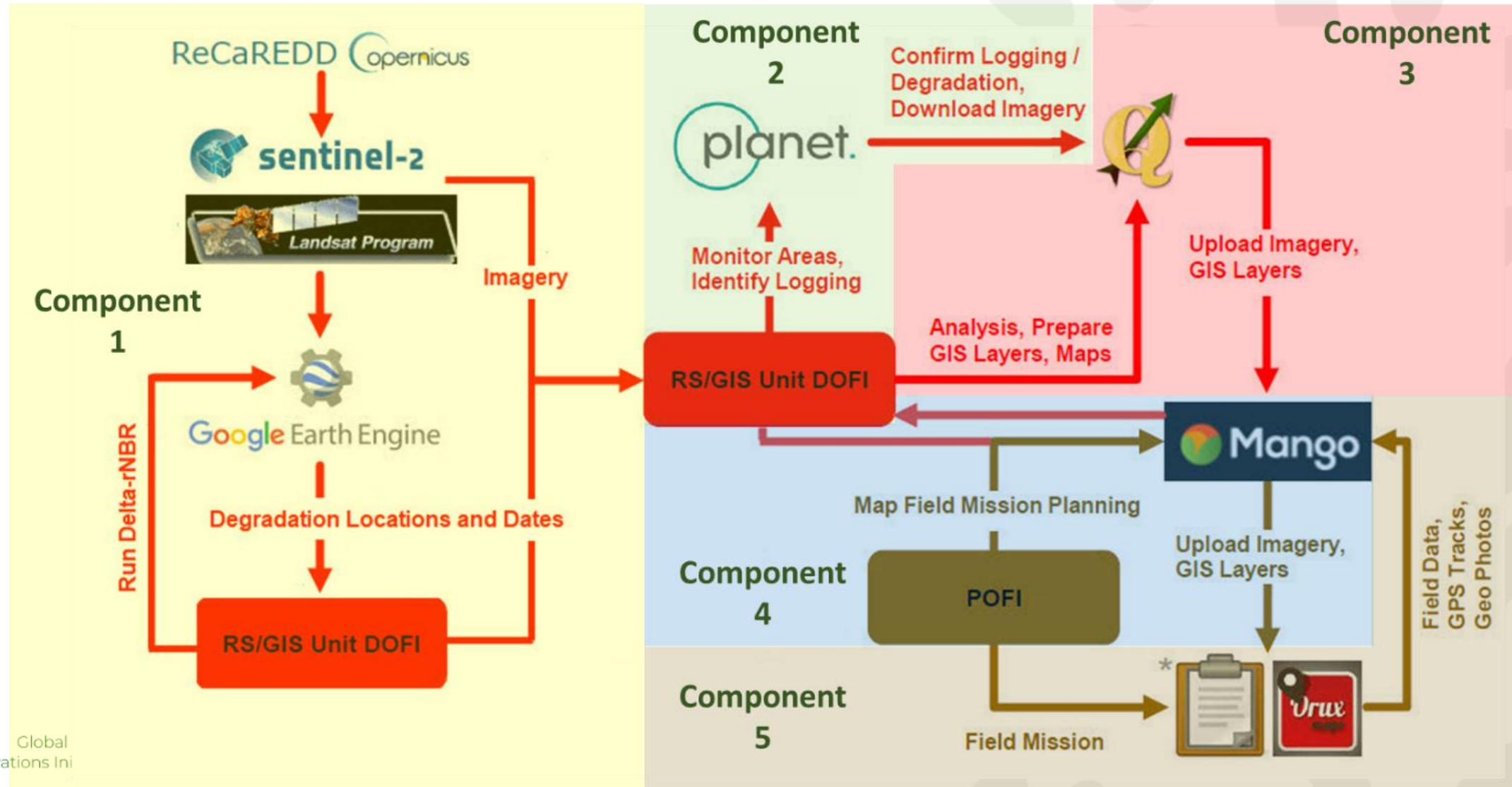
Near real-time Deforestation Monitoring

The PDMS field teams use the Planet satellite image with the mobile application through Web Tile Map Service (WMTS) to create offline map.



Operational Logging and Degradation Monitoring System (OLDM)

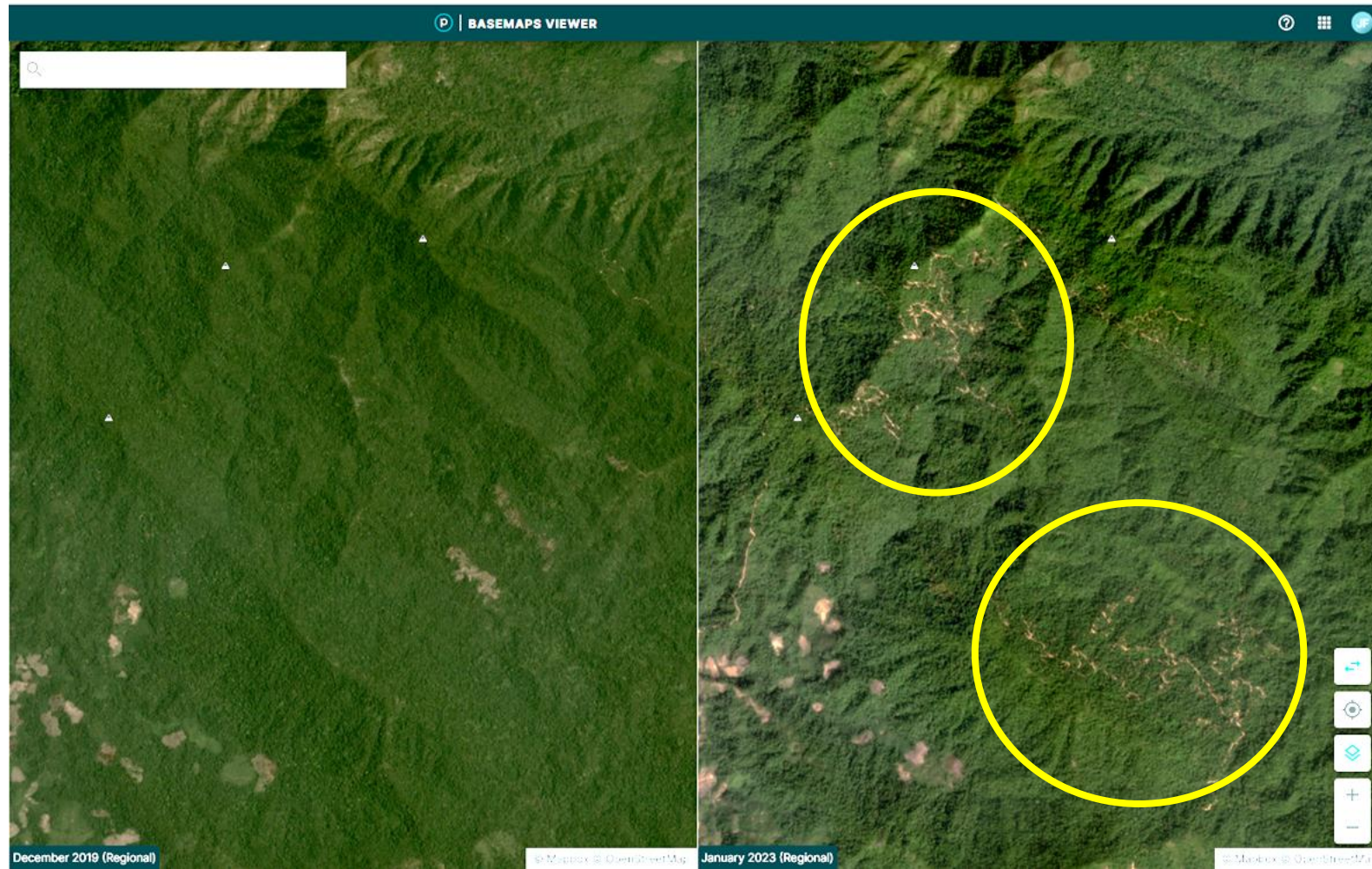
Overview



Monitoring Logging

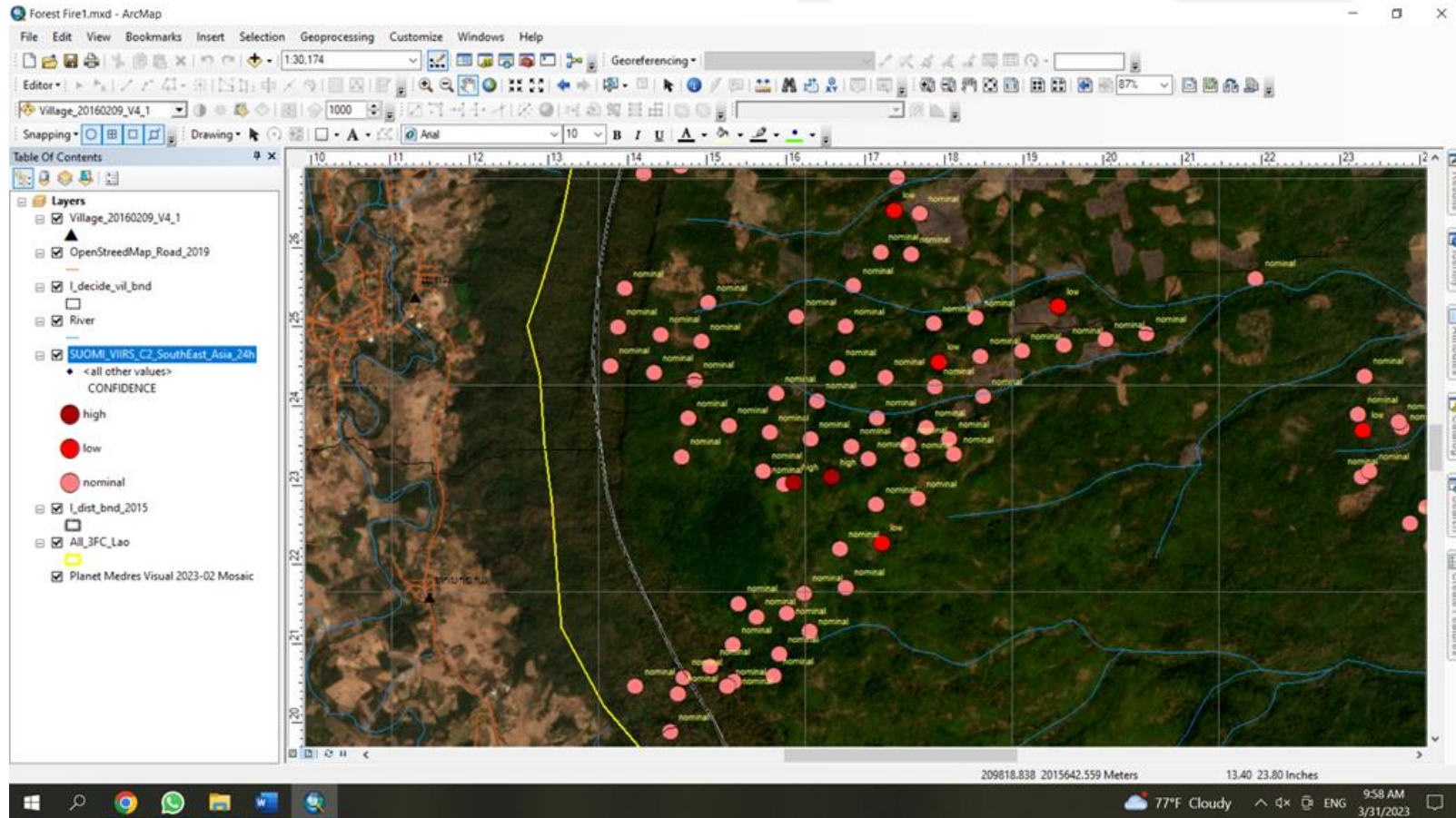
The DOFI (Department of Forest Inspection) uses Planet Imagery extensively to support its mission.

Level 2 greatly expands the capacity of the DOFI to closely monitor the change on a daily basis and respond accordingly.



Monitoring Forest Fire

Daily Planet Level 2 are used in combination with fire alerts (Modis or VIIRS) to check the date, the location, and the extent of the fire event.



Next Step

- ❖ **Build the Framework to connect alerts (PDMS & OLDm) with Activities Data Map**
- ❖ **Leveraging the coming products from Planet through NICFI (Alerts and Biomass Map)**
 - **Better assess forest disturbance**
 - **Forest degradation**
 - **Track drivers → Specific Crop → EU Deforestation Free Commodities**



Thank you.

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