The FOREST Consortium

AIRBUS DEFENCE & SPACE

NPL National Physical Laboratory | Centre for Carbon Measurement

I4CE INSTITUTE FOR CLIMATE ECONOMICS

LSCE

ONF International

AMAP

Funded by eit Climate-KIC
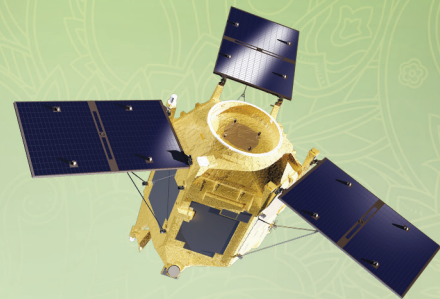
Improved Field Observations

REDD+

MRV

Fully Optimised and Reliable EmissionS Tool

FOREST

An Integrated Service
Tailored to the Needs of
Sustainable Forest Management

Enhanced Identification
Reduction of Uncertainty

FOREST provides a comprehensive offer and capacity building solutions for

- REDD+ (Baseline, reference emission level, monitoring, MRV)
- Inventory (national, forest concession, certification)
- Forest management, enhanced stocks
- Impact assessment (mining, oil & gas explorations, legal & illegal logging)

Stratification Maps

- Cropland
- Grassland - Shrubland
- Monodominant Gilbertiodendron
- Old growth forest
- Open forest
- Raphia
- Settlements
- Young secondary forest

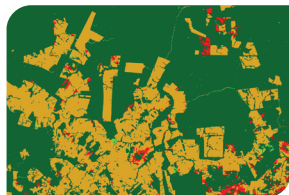Forest classification taking into account forest diversity

Benchmark Maps

- Forest
- Grassy bare soil and pastures
- Cropland
- Settlements
- Water
- Wetlands
- Degraded forest and saplings
- Plantations

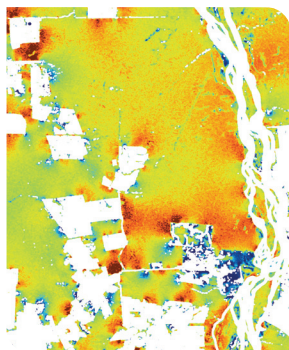Detailed land cover classification information (following IPCC classes)

Degradation Maps

Intensity of the forest canopy disturbance/ha

- None
- Very low
- Medium
- High

Identification of selective logging to monitor forest degradation; changes aggregated to 1 ha MMU

Baseline Maps

- Non-Forest
- Forest
- Regeneration
- Deforestation

Classification of forest and non-forest territory and change monitoring

Based on optical and radar satellite data FOREST provides products that deliver a global answer adapted to local challenges

Forest Mapping · Change Mapping & Analysis · Carbon Emission Mapping

Structure Maps

Precise estimation of forest structure parameters (above ground biomass, canopy height) for carbon emission models for the Monitoring, Reporting and Verification of REDD+ programs/ initiatives

Mean biomass

- Unclassified
- 231 Mg DM/ha
- 350 Mg DM/ha
- 380 Mg DM/ha
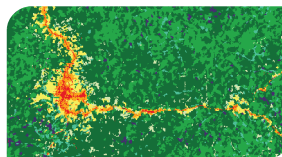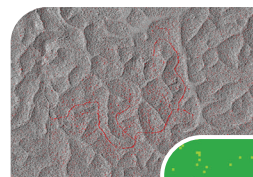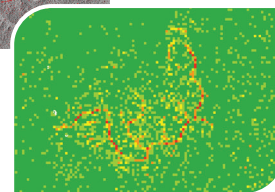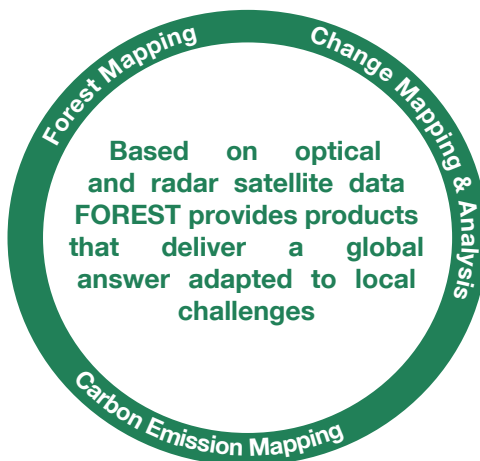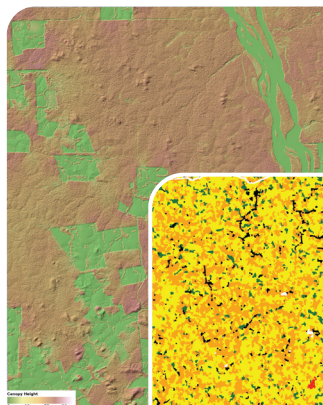- 499 Mg DM/ha

Carbon Stock Maps

Aboveground Carbon stock mean

- 0.41 MgC/ha
- 0.67 MgC/ha
- 1.18 MgC/ha
- 2.09 MgC/ha
- 2.61 MgC/ha
- 3.00 MgC/ha

Spatial estimates of the five carbon pools required for Tier 3 REDD+ projects

Quality Assurance framework & methodology integrated in FOREST services