



Global Forest  
Observations Initiative

*AmeriGEOSS Projects*

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# Earth Observations for Indigenous-Led Land Management

Karyn Tabor, Conservation International  
AmeriGEOSS proposals

## Objectives

Many indigenous territories are threatened by logging, fires, mining, and other activities. Promoting indigenous rights and sustainable land management are critical for:

- achieving the United Nations Sustainable Development Goals (SDGs)
- adapting to climate change, mitigating greenhouse gas emissions
- conserving global biodiversity
- protecting the heritage of indigenous cultures

## Societal Areas:

- food security and agriculture
- disaster resilience
- water resources management biodiversity
- ecosystem sustainability

## Activities

- Assessment of regional tools (AmeriGEOSS tool and partners)
- Design needs assessment
- Develop agenda and materials for one-day technical training at regional meeting of the World Bank Dedicated grant mechanism for Indigenous Peoples
- Develop curriculum for ARSET Webinar
- Design capacity building trainings based on needs assessment
- Evaluation of increased capacity

## Geographic Focus:

- Peru (Regional Office for the Development of Indigenous Peoples San Martín)
- Ecuador (Achuar Nation)
- Costa Rica (Indigenous network)

## Key Milestones



- DGM training event
- ARSET webinar – online Webinar
- Needs assessment In-person facilitated needs assessment/ network mapping analysis) (Fall 2018)
- In-person targeted capacity building (Spring 2019)
- Peer reviewed publication: methods for needs assessment (2019)
- Host side event at UNCCC COP (Nov 2020)
- Peer reviewed publication: best practices for increasing technical capacity of indigenous groups for improved sustainable land management (2020)

# Supporting the vision for GEOSS in the Americas: Community Building and Capacity Development in Support of AmeriGEOSS' Food Security and Sustainable Agriculture Area

Alyssa Whitcraft, University of Maryland  
AmeriGEOSS proposals

## Objectives

To enhance national and regional capacity to monitor food supply using Earth observations

To empower science-based decision making related to food security & agriculture in the Americas

To increase regional collaboration and cooperation around agriculture monitoring

To create a sustainable model for the FSSA WG by serving as a seed grant

To guide future capacity development activities related to EO

To enhance the adoption of NASA instruments' data

## Activities

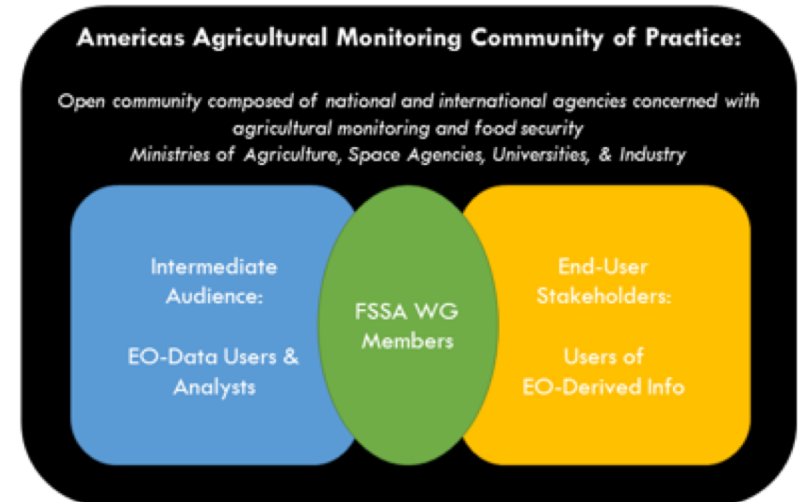
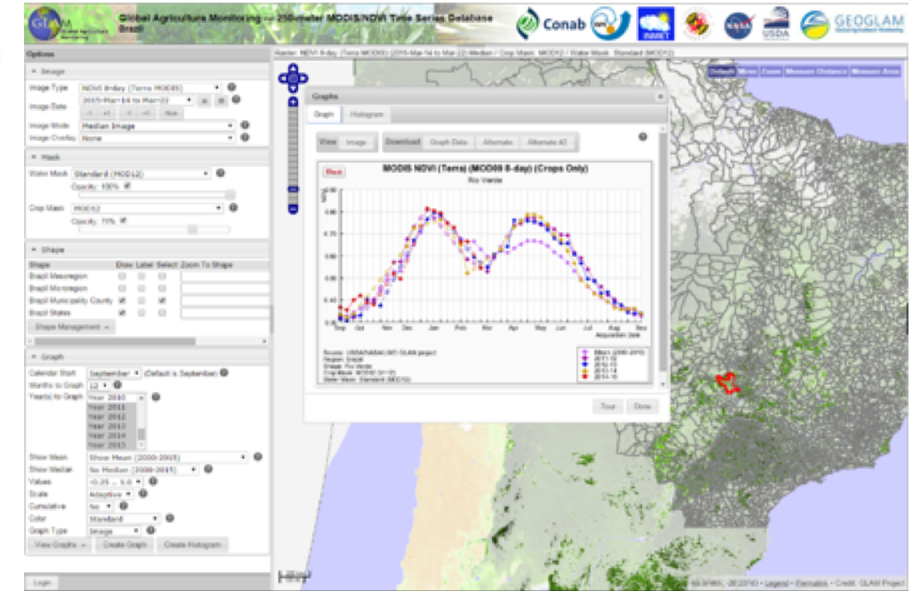
- CoP GrowthFSSA WG Staffing, Development, and Coordination
- 1. Stakeholder Identification and Multi-level, Repeated Needs Assessment
- 2. Linking with Related Working Groups and Activities
- 3. Comprehensive Capacity Development Plan
- 4. GLAM System

## Geographic Focus:

- GLAM System
  - Enhancements for Brazil and Argentina
  - New System for Chile

## Societal Areas:

- food security and agriculture



# SAR-CBC: A CAPACITY BUILDING CENTER FOR THE USE OF SAR IN DECISION MAKING

Franz Meyer, University of Alaska Fairbanks  
AmeriGEOSS proposals



## Objectives

Development of targeted training and capacity building materials as well as webinars and on-site trainings that build capacity in the use of SAR-based Earth observation data in decisions-making situations

Organization and distribution of materials through a SAR-CBC Web Portal, featuring online content and information about in-person trainings

Focus on the Central & South American sector of AmeriGEOSS

To sustain use of SAR remote sensing resources long term, development of cloud-based data processing solutions that enable SAR data analysis without expensive computing infrastructure.

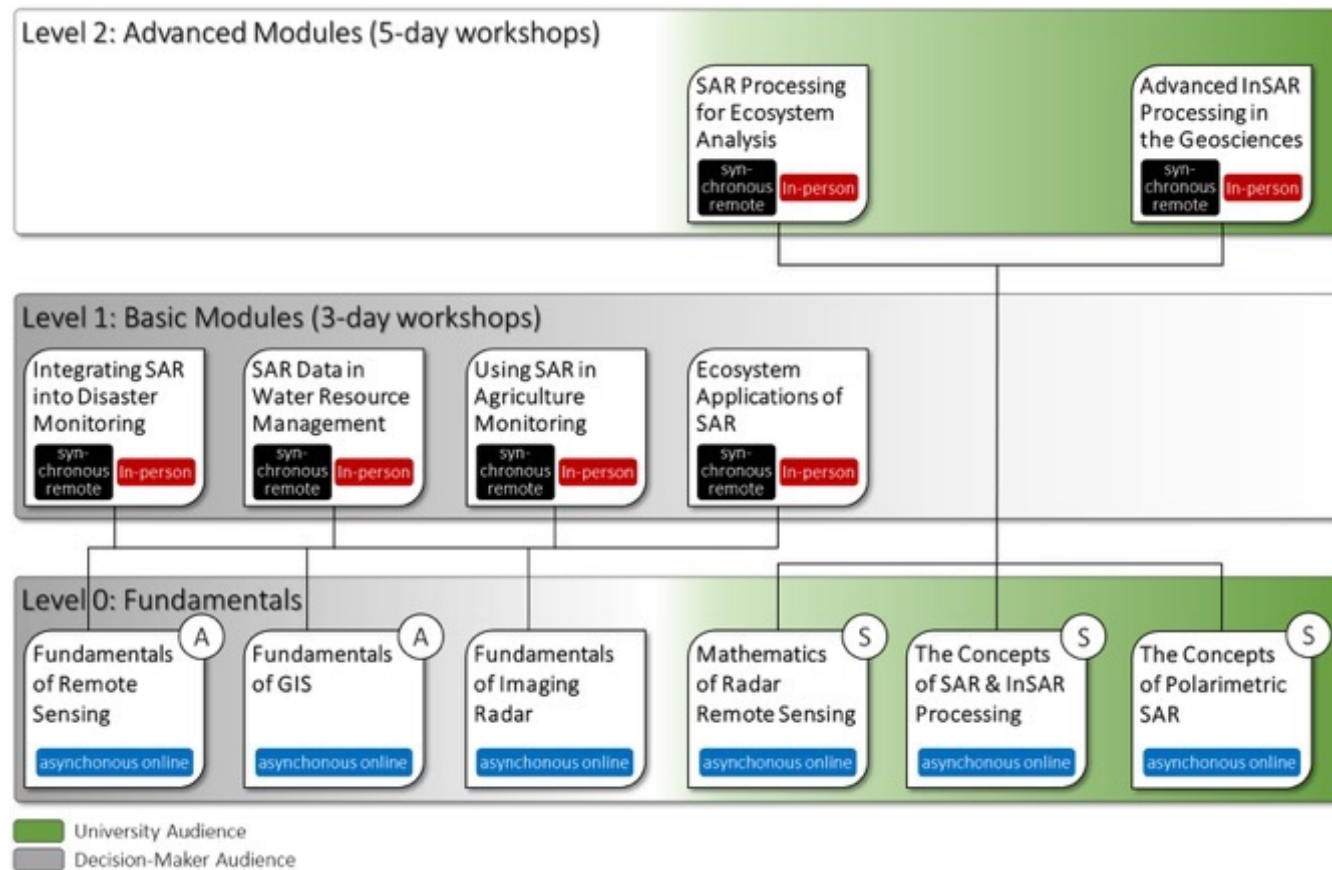
## Geographic Focus and in-region partners:

UCE, Ecuador; synthesize needs, co-develop curricula, co-instruct.

INIGEMM, Ecuador; needs definition, training target.

MARN, El Salvador; needs definition, case study co-development, training target

IDEAM, Colombia; needs definition, case study co-development, training target.



## Conceptual Outline of Curriculum and Targeted AmeriGEOSS Goals

### Societal Areas:

- food security and agriculture
- disaster resilience
- water resources management biodiversity
- ecosystem sustainability

# Additional relevant projects

- GEOBON:
- Improving linkages between EO and ecosystem service models with essential Biodiversity variables – Gretchen Dailey, Stanford
- Colombia Bio-Diversity Observing Network – Victor Gutierrez-Velez – Temple University
- Forest Vertical Structure via LiDAR, a GEOBON EBV Application in Colombia –Patrick Jantz, Northern Arizona University