



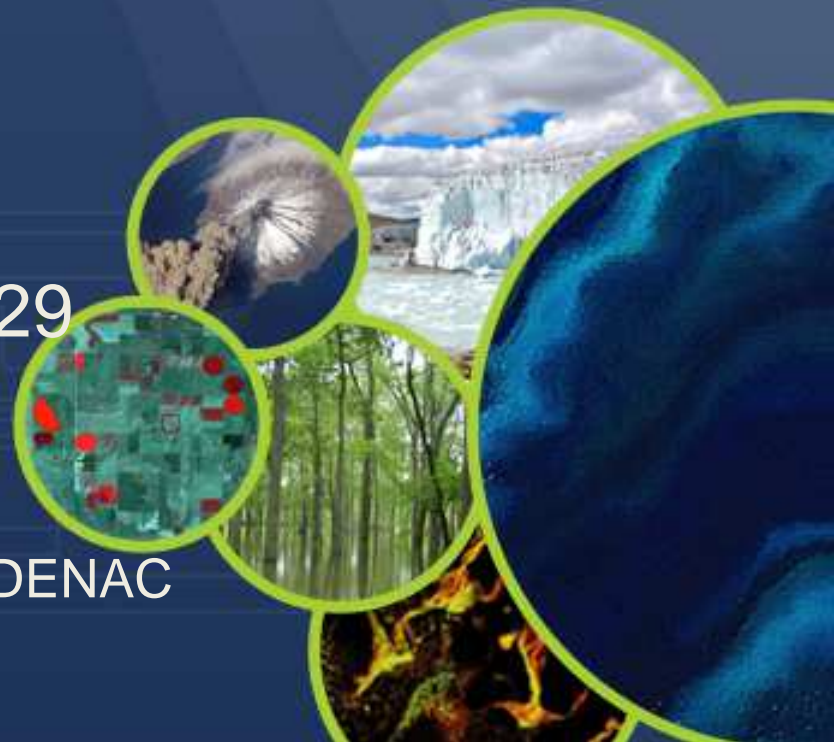
Committee on Earth Observation Satellites

RO Eta/Iota

Update on Activation

3 June 2021 for WGDIs telcon29

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Overview



- **Post Eta/Iota Recovery Observatory (RO) scope**
- **Objectives**
- **Partners and Management Approach**
- **Areas/Sectors to be addressed**
- **Imagery and resources**
- **Timeline**

RO Demonstrator was activated for Eta/Iota Hurricanes Recovery at the request of the World Bank in March 2021 on behalf of the tripartite partners (WB, UNDP, EU) for areas of interest (AOI) in the following countries:

- **Honduras:** AOI 1,200 sq km
- **Nicaragua:** AOI 7,500 sq km
- **Guatemala:** AOI 20,000 sq km (varying priorities)
- **El Salvador:** AOI 1,900 sq km

*The RO Demonstrator activation is **coordinated through CEPREDENAC**, as a regional institution with the mandate and capacity to support recovery planning and monitoring.*



Objectives and Timeframe



RO post Iota aims to:

- **Complete existing damage assessments by providing details on damage in remote areas and status of recovery efforts**
- **Identify new risk created by Eta/Iota and support risk reduction initiatives**
- **Assess capacity for use of EO for recovery in the region and develop capacity development plan**

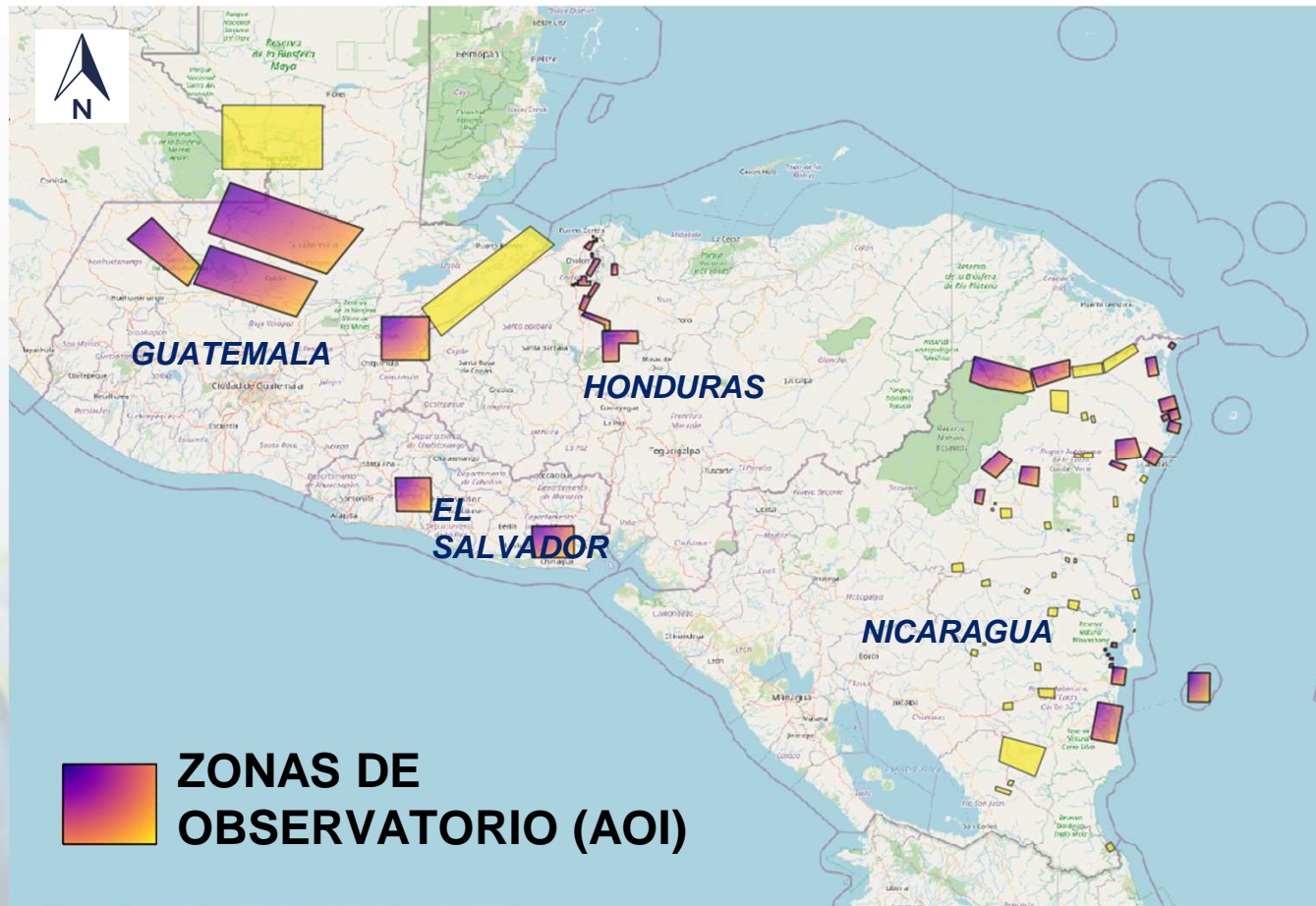
The RO Demonstrator activation “RO Iota” began in April 2021 and will run to September 2021.

On-going activities (e.g. capacity building) may continue outside the scope of the RO Demonstrator



Priority Damage Zones (post Eta/Iota)*

Honduras (1,200 km²), El Salvador (1,900 km²),
Nicaragua (7,500 km²), Guatemala (20,000 km²)



*AOI to be included in RO Iota as agreed by CEPREDENAC and 4 national country partners at 9th April “needs identification” meeting



RO Management Approach



The CEOS RO Demonstrator is a best effort initiative, managed through a consensus-based approach with all partners involved.

The post Eta/Iota RO is co-led by CEPREDENAC and CNES, in close coordination with a Project Team reporting to the CEOS RO Demo Team, including:

- **Country representatives: Guatemala, Honduras, Nicaragua, El Salvador.**
- **CEOS representatives: CNES, ASI, NASA, other space agencies TBC (CONAE, DLR, ...) and Copernicus EMS.**
- **The tripartite partners: WB, EU, UNDP.**
- **CEPREDENAC.**

CEPREDENAC is RO Liaison Officer (technical role)



RO Eta/Iota Project Team





RO Iota Project Team



Claudia Herrera, CEPREDENAC (RO Iota co-lead)

Helene de Boissezon, CNES/CEOS (RO Iota co-lead)

Marcelo Oyuela, CEPREDENAC (RO liaison officer)

Andrew Eddy, Athena Global (RO Secretary)

Rolando Duran, World Bank (tripartite agreement representative)

Carlos Mendez, SINAPRED Nicaragua

Genners Arturo Barrios, CONRED Guatemala

Luis Montenegro, Proteccion civil El Salvador

Bayron Martinez, COPECO Honduras

Peter Spruyt, Copernicus EMS

Ricardo Quirogas, NASA

Simona Zoffoli, ASI



Areas/Sectors to be addressed



The main focus sectors of the RO are :

- **Impact and damage assessment:** several months after Iota, a full damage assessment is not completed. Copernicus EMS RRM (Risk & Recovery Mapping) activations will be requested to complete the damage assessment and prioritize recovery efforts; a full repository of available damage information will be compiled and shared in region through CEPREDENAC.
- **Sectoral impact analysis:** areas to be considered are road and bridge infrastructure, agriculture, and flood containment infrastructure (and associated risk); working from damage assessment, a prioritized plan of recovery monitoring will be developed for areas still presenting change/evolution or risk.
- **Framework and decision tree analysis:** analysis of best practices for use of EO in recovery decision-making in the region.
- **Capacity building for interpretation and processing/integration of EO data:** capacity analysis and development of mid-term capacity development plan for reinforced EO capacity in the region.



Imagery and Resources (discussions on-going)



- **Copernicus EMS:** RRM “Standard” products (portfolio of 20 products) to be requested in three out of four countries affected (not in Honduras where existing activations cover needs). This provides baseline and builds on significant Copernicus work since Iota in the area (see Copernicus slide). Nicaragua underway and partially completed.
- **Mid-term VHR satellite monitoring:** CNES and NASA to identify areas for potential VHR acquisitions through September 2021. CNES data to be given to CEPREDENAC for their own use in Recovery; NASA to use Planet data for agricultural assessments.
- **Interferometric monitoring of flood infrastructure:** monitor Sula Valley for catastrophic flood infrastructure failure. ASI to provide data and eGEOS to provide analysis in September 2021 and January 2022.
- **Capacity development:** initialize work with CEOS WG CapD for support to local and regional capacity
- **Longer-term risk reduction monitoring:** proposal to GEO-DARMA for longer-term data access and input from WG CapD for support to local and regional capacity.



SICA Summit June 2021



SICA (Central American Integration System): SICA Member States are Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, Panama, and the Dominican Republic as Associated Member State.

CEPREDENAC: the regional and intergovernmental institution part of SICA, specialized in the reduction of vulnerability, prevention and mitigation of risk reduction of disasters.

SICA Heads of State Summit planned mid June 2021: CEPREDENAC has requested to place CEOS RO Eta/Iota activation on agenda for presentation



1st Copernicus RRM STD results (EMSN094, Nicaragua)



Sample from Sandy Bay Sirpi 1:5000 damage map, Nicaragua



First results available since last Friday, under analysis by users;

More results expected in coming weeks;

Will establish new baseline for recovery in remote areas





Prospective Timeline



RO post Eta/Iota – six months from April 2021:

- **April** – requests for Copernicus activations; initial capacity assessment; imagery acquisition planning; interferometric acquisition planning;
- **May** – first Copernicus EMS RRM results; tuning of imagery acquisition plans
- **June** – plan for longer term monitoring and possible additional resources; decision tree analysis; presentation of RO Iota to SICA Summit
- **July/August** – Monitoring and Reporting
- **September** – final RO report and hand-off for capacity development



¡Gracias!
Thank you!

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