

El futuro es de todos

Gobierno de Colombia

# RSO INSTITUTO GEOGRÁFICO AGUSTÍN CODAZZÍ – IGAC, COLOMBIA UN-SPIDER





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### Cadaster

### Agrology and the national soil map

### Geographic Research

Production, comunication and access to geographic information

### Geographic knowledge transfer and training



- Research, Development and Innovation in the use and application of geographic information technologies.
- Knowledge transfer and dissemination





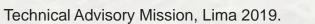


# What do we do?

IGAC promotes in Colombia the use of information obtained from space for different purposes and has supported UN-SPIDER in its activities conducted in Latin America and the Caribbean since 2011.

- Technical Advisory Missions
- Training Missions
- Research and Innovation projects









Training Mission, Ecuador 2019.



# **Research and Innovation projects**



# SMALL / CUBE SATS

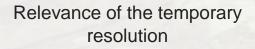
# 24/7 HD video images -Grounds

# End-to-end solutions

# UAVs with AI and data processing RV



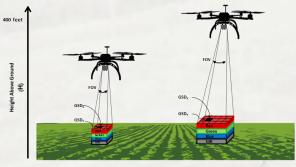








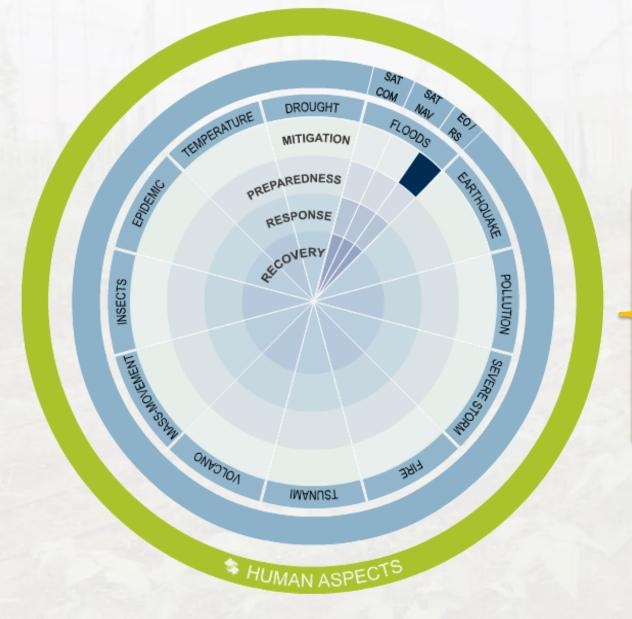






# **Research and Innovation projects**





Damage Assessment Map Flood Risk Monitoring Inundation Map Risk Map reservoir height measurement



# International Cooperation









# PROJECT ARGENTINA - COLOMBIA

## **Overall objetive**

Strengthen technical capacities for the identification, monitoring, spatialization and provision of fire information.





IGAC

# Identification of burned areas and severity



Producto Áreas Quemadas y Severidad de Incendios en Colombia. Proyecto Comixta Colombia-Argentina. IGAC-INTA 2020 Mepa temporada de incendios por departamento año 2017 a 2019. Indices dNBR derivados de Imagenes Sentinel 2, Bandas NIR y SWIR2

1. Seleccione un departamento

### Departamento... ¢

2. Seleccione una temporada de incendios

Temporada... \$

3. Seleccione el periodo de evaluación Fecha pre-incendio

2019-11-01

Fecha intermedia

2020-01-01

Fecha pos-incendio

2020-04-01

4. Seleccione los umbrales indice dNBR para cada nivel de severidad

Sin quema

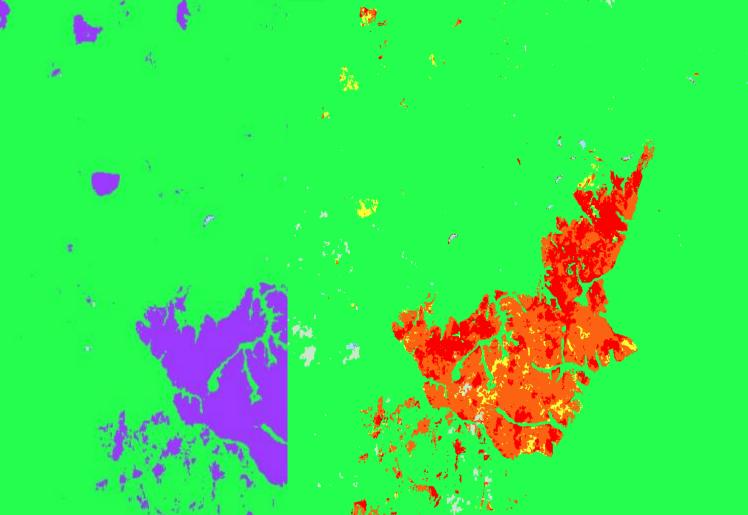
100

Severidad Baja

269







PROJECT ARGENTINA-COLOMBIA

AIV







# PROJECT PERÚ - COLOMBIA

## **Overall objetive**

To develop a methodology for Colombia, for spatial analysis and modeling of droughts and/or floods monitoring using PeruSAT-1 images.

# **Recommendations Virtual Regional Meeting of UN-SPIDER** Latin America and the Caribbean

1 - **Technical webinars** that focus on virtual practices and tools in order to promote the **use of geospatial technologies applied to risk management.** 

2 - Incorporate into the UN-SPIDER Knowledge Portal Case studies that illustrate how various institutions in the region make use of satellite technologies in disaster prevention, preparedness, response and recovery.

3 - Establish a group of professionals and experts who can contribute to the processing of satellite images to support national disaster management entities in the generation of maps.

4 - Promote **collaborative technical activities among the countries** of the region.

















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# THANK YOU

