RedLaTif Activities

María Isabel Cruz López
CONABIO

RedLaTIF
Red Latinoamericana
de Teledetección
e Incendios Forestales

- Capacity Building
- Training and Divulgation
- Collaboration
- Annual Meeting

Capacity Building

2021- Forest Fire Management Using the Google Earth Engine Platform Workshop

- 93 Students
- 6 Countries: Argentina, Bolivia, Paraguay, Spain, Peru, Mexico
- 10 Groups works presented.

The five best jobs were presented in REDLATIF Annual Meeting

START

RedLaTIF Red Latinoamericana de Teledetección e Incendios Forestales

GOFC-GOLD Global Observation of Forest and Land Cover Dynamics

Reunión virtual anual RedLaTIF
23-24 de Abril 2021

2022- Forest Fire Management Using the Google Earth Engine Platform Workshop

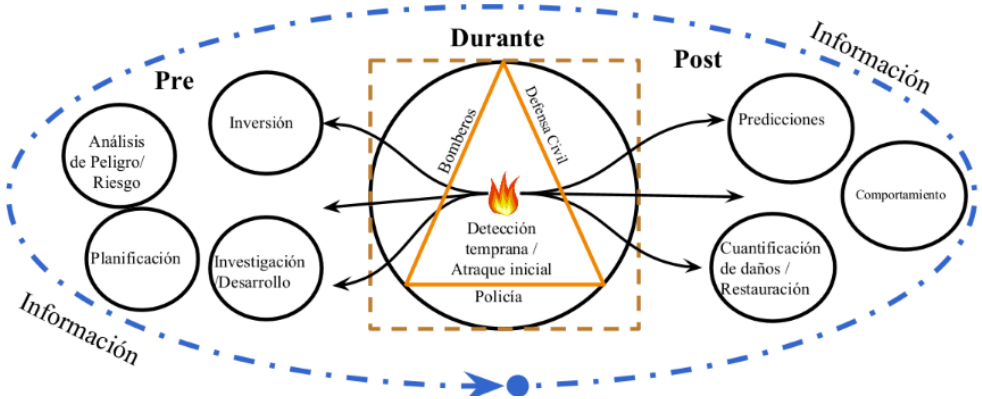
Mgter. Nicolás Mari
Dr. Alexander Ariza
Mgter. Armando Rodriguez Montellano
Dra. María Isabel Cruz López
Dra. Lilia Manzo
Mgter Fernanda Ferreyra
Dr. Germán Valencia
Ing. Abraham Coiman

- 140 Students
- 10 Countries: Argentina, Mexico, Chile, Guatemala, Paraguay, Ecuador, Honduras, Colombia, Bolivia, Peru,
- 13 Group works presented

The five best jobs were presented in REDLATIF Annual Meeting

Main Themes

- ✓ Fire management
- ✓ Fundamentals of the GEE platform
- ✓ Forest Fire Monitoring (Before - Fire Risk and Danger)
- ✓ Forest Fire Monitoring (Active Fire)
- ✓ Forest Fire Monitoring (After - Burned Areas and Severity)



2nd workshop

- ✓ Forest Fire Emissions
- ✓ Propagation Models

3rd workshop (October 2024)

- ➢ Fire Ecology
- ➢ Social Dimension of Forest Fires

Training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2023 The Spaceweek 2023 (Fortaleza, Brazil)

Satellite Remote Sensing of Fires: Priorities in South American Countries

- ✓ Introduction to Satellite Observation of Forest Fires.
- ✓ INPE Forest Fire Monitoring Tools.
- ✓ Forest Fire Monitoring Systems.
- ✓ Decision –Making Systems for Forest Fires “DSS-FIRE”.
- ✓ Tools for Analyzing Time Series of Earth Observation Data.
- ✓ Artificial Intelligence for Identifying Burned Areas

Mgter. Nicolás Mari
Dr. Fabiano Morelli
Dra. María Isabel Cruz López
Dr. Alexander Ariza
Mgter. Gerardo López Saldaña
Dr. Jesús Anaya

2024 AMERIGEO

AmeriGEO, the Americas Group on Earth Observations, and Formerly AmeriGEOSS, is the Regional Group on Earth observations

- ✓ Introduction (NOAA)
- ✓ **Pre-Fire:**
- Combining Conventional Fire Danger Rating Tools with Earth Observation Data
- ✓ **Active Fire:**
- Detection and Characterization of Active Fires
- Active Fire Analysis (Early Warning Forest Fire System (SATIF) for Mexico and Central America)
- ✓ **Post- Fire:**
- Monitoring Burned Areas
- Online Applications for Wildfire Severity Mapping

Dr. Wilfrid Schroeder
Dr. Robert Field &
Dra. Natasha Jurko
Dr. Ivan Csiszar &
Dra. María Isabel Cruz López
Dr. Alexander Ariza,
Mgter. Armando Rodriguez Montellano &
Dr. Javier Villegas Bravo

The topic of fires was presented, where participants found information about monitoring activities and online tools based on satellite data.

Participants learned about fire danger classification models, early warning systems for hot spots, and change detection for impact assessment.

Webinar

Sep. 2020 Situación de Incendios Forestales en Sudamérica herramientas de monitoreo
Fabiano Morelli Tecnólogo Senior e Investigador del programa Quemas del Instituto Nacional de Pesquisa Espaciales del Brasil – (INPE)

Jun 2020 Tools for Analyzing Times Series of Satellite Images – TATSSI
Consejo Nacional de Ciencia y Tecnología (CONACYT) asignado a la Comisión Nacional para el conocimiento y Uso de la Biodiversidad (CONABIO)
Comisión Nacional para el Conocimiento y Uso de la Biodiversidad (CONABIO) Assimila Ltd.
Científico en aplicaciones de observación de la Tierra.

Jun 2020 Introducción a productos y servicios satelitales de última generación para el monitoreo de incendios forestales
Alexander Ariza

Avances y desafíos para el monitoreo de la degradación Forestal: Un Abordaje para la Pan-Amazonia.
Carlos Souza Jr. Investigador Senior IMAZON https://imazon.org.br/

Meetings


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2022 - 2023

2022

1) **Virtual meeting** of the Latin American Network for Remote Sensing and Forest Fires (REDLATIF)
Date: February 23, 2022
Agenda:
1. Change of coordinator Armando Montellanos
2. Location of the next meeting
3. Other topics

2) **Virtual Annual Meeting 2022**: Observation and monitoring of forest fires for comprehensive fire management
October 6 and 7, 2022
(15 presentations)

2023

Meting of the Latin American Network for Remote Sensing and Forest Fires (REDLATIF)

In the The Spaceweek 2023 event

Session 7. Land cover, land cover change and fires
12 presentaciones

- Gerardo López Saldaña – México/Inglaterra
- Alexander Ariza – Colombia / Alemania
- Garik Gutman – NASA – Estados Unidos
- Jesús Anaya – Colombia
- Chris Justice – Universidad de Maryland – Estados Unidos
- María Isabel Cruz López – México
- Nicolás Alejandro Mari – Argentina
- Fabiano Morelli - Brasil

Collaboration

Conference Series

Technical and scientific perspectives for monitoring the Amazon.
What we have already done and what remains to be done?

Organized by Armando Montellanos

Mgter. Nicolás Mari
Dr. Alexander Ariza
Mgter. Armando Rodriguez Montellano
Dra. María Isabel Cruz López
Dr. Fabiano Morelli

Proyecto
Capacidad mejorada para estimar el riesgo de incendios, monitorear y verificar la ocurrencia de incendios en la frontera agrícola de Bolivia

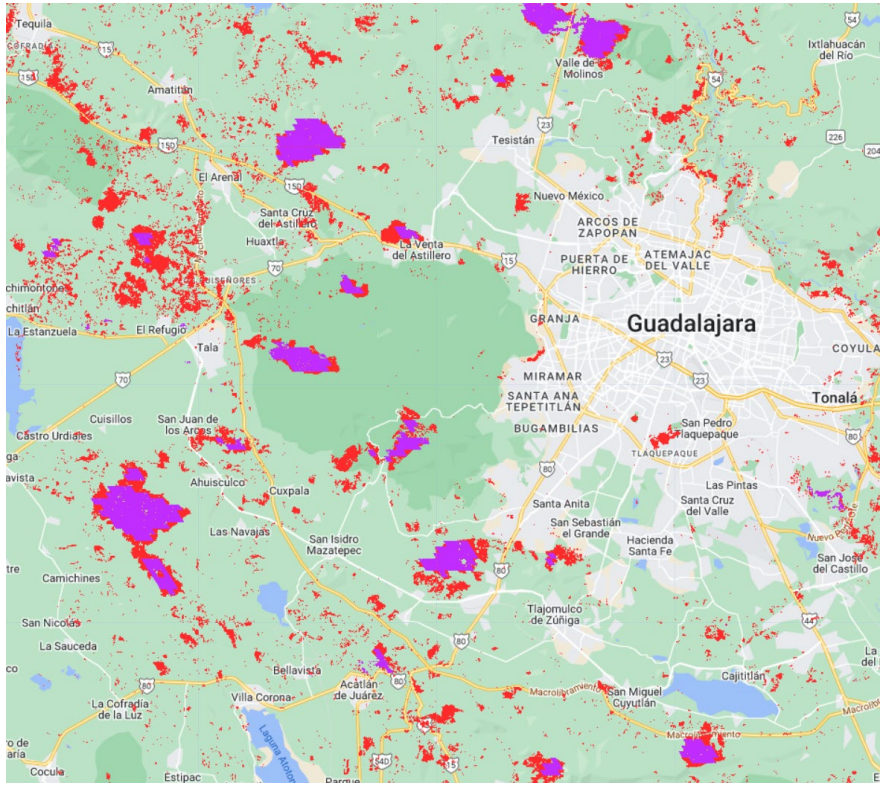
- Ciclo de Conferencias -

Perspectivas técnicas y científicas para monitorear la Amazonia. Qué ya hemos hecho y que falta por hacer.

Fecha: 21, 22 y 23 de marzo de 2022
Hora: 10:00 am (Bolivia); 11:00 (Brasil) y (Argentina); 08:00 (México): 15:30 (Alemania)
Lugar: Youtube - FAN
Participantes: Equipo FAN, WCS
Invitados: INPE, Conabio, INTA, UN-SPIDER, RAISG

Latin-American Burned Areas Map

- Initiative of Armando Montellanos together A. Bastarrica and others.
- RedLatif members will participate to validation map



Methods

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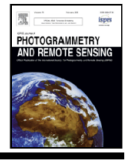

An automatic procedure for mapping burned areas globally using Sentinel-2 and VIIRS/MODIS active fires in Google Earth Engine

Aitor Bastarrika [a, b, *], Armando Rodriguez-Montellano [c], Ekhi Roteta [a], Stijn Hantson [d], Magí Franquesa [e], Leyre Torre [a], Jon Gonzalez-Ibarzabal [a, b], Karmele Artano [a], Pilar Martinez-Blanco [a], Amaia Mesanza [a, b], Jesús A. Anaya [f], Emilio Chuvieco [g]

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[b] Built Heritage Research Group, University of the Basque Country UPV/EHU, Vitoria-Gasteiz, Spain
[c] Fundación Amigos de la Naturaleza, casilla postal 2241, Km. 7 1/2 Doble Vía a La Guardia, Santa Cruz, Bolivia
[d] Max-Planck Tandem Group in Earth System Science, Faculty of Natural Sciences, Universidad del Rosario, Bogotá, Colombia
[e] Instituto Pirenaico de Ecología, Consejo Superior de Investigaciones Científicas (IPE-CSIC), Zaragoza, 50059, Spain
[f] Environmental Engineering Program, University of Medellin, Medellin, Colombia
[g] Universidad de Alcalá, Department of Geology, Geography and Environment, Environmental Remote Sensing Research Group, C/ Colegios, 2, 28801 Alcalá de Henares, Spain

remote sensing

MDPI

Article

Sentinel-2 Reference Fire Perimeters for the Assessment of Burned Area Products over Latin America and the Caribbean for the Year 2019

Jon Gonzalez-Ibarzabal [1,2,*], Magí Franquesa [3], Armando Rodriguez-Montellano [4] and Aitor Bastarrika [1,2]

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* Correspondence: jon.gonzalezi@ehu.eus

remote sensing

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Technical Note

Reference Data Accuracy Impacts Burned Area Product Validation: The Role of the Expert Analyst

Magí Franquesa [1,*], Armando M. Rodriguez-Montellano [2,3], Emilio Chuvieco [1] and Inmaculada Aguado [1]

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3 Facultad de Ciencias Agrícolas, Universidad Autónoma Gabriel René Moreno, El Vallecito km 9 carretera al Norte, Santa Cruz 2489, Bolivia
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Grazie
Thank you
Gracias

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