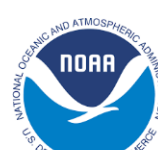**WMO RA-IV Costa Rica Virtual Training on Satellite Applications**
October 2020
Announcement and Registration link

The University of Costa Rica (UCR) in San Jose, Costa Rica is hosting a virtual satellite workshop in Spanish for participants from the Latin America and Caribbean region in October 2020. The training will be on Wednesdays and Thursdays for three consecutive weeks, October 14-15, 21-22, and 28-29, 2020. The workshop will cover both GOES-R and JPSS satellite capabilities and data access to support the World Meteorological Organization's (WMO) Region IV forecast challenges. This is a Spanish language only event with no simultaneous interpretation available.

Daily sessions will provide an overview of GOES-R and JPSS satellites, their instruments, data, products and tools, and provide hands-on exercises involving local case studies, for users of GOES/JPSS satellite data and products. Some participants will have the opportunity to present their work individually or in a group to review with the Subject Matter Experts and other workshop participants.

Each day will begin 09:00 AM Costa Rica time (15:00 UTC) and end 16:45 Costa Rica time (22:45 UTC). Participants will be required to provide their own computing accommodations. Because of COVID-19, the University will not allow participants to gather for the training.

Registration is required. Because of the virtual nature of the training, there will be a pre-orientation training session to confirm participation, data access, and provide the attendees with case studies and materials ahead of time. Please note that space will be limited and if the number of people registered exceeds the capacity of the webinar, we may implement a selection process to ensure that all Latin American and Caribbean countries are represented. There is no registration fee for the workshop.

The link to the current agenda is here.
The link to register for the workshop is here. Deadline to register for the workshop is 22 September 2020.

It is strongly recommended that participants complete the following online modules in advance to prepare for the workshop:

- GOES-R Satellites Orientation Course (Curso de orientación sobre los satélites GOES-R). Only three modules are suggested. The Spanish titles of these modules are:
  *Please note it is required to register in COMET for some of the modules.
  - GOES-R: beneficios de la observación ambiental de próxima generación
  - El ABI del GOES-R: la próxima generación de imágenes satelitales
  - El GLM del GOES-R: introducción al sensor de rayos geoestacionario

- Suomi NPP: A New Generation of Environmental Monitoring Satellites (Suomi NPP: Una nueva generación de satélites de observación ambiental)
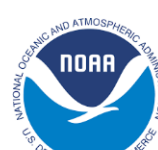
- [Satellite Foundation Course for JPSS (Curso básico de satélites para el JPSS)](). Only four modules are suggested. The Spanish titles of these modules are:

  - Introducción a la teledetección por microondas
  - Bandas de absorción del oxígeno y del vapor de agua
  - Emisividad superficial de microondas
 - Influencia de las nubes y la precipitación.

By the end of the workshop, participants will have a general working knowledge of the GOES-R Series and JPSS key instruments as well as develop competency in working with the data and products for weather forecasting, prediction, monitoring or research through hands-on exercises and case studies. A certificate of participation will be provided to participants actively engaged in all sessions.

A summarized version of the agenda is listed below.

Wednesday 14 Oct	**AM**: NOAA and WMO's role in the use of GOES-R Series/JPSS Products and Tools **PM:** Hands-on application of GOES-R and JPSS products and tools (HAnis, McIDAS and Python), using local case studies.
Thursday 15 Oct	**AM:** Applying atmospheric radiation principles with an emphasis on detecting fire, cloud phase and vegetation. **PM:** Hands-on case studies of detecting features by analyzing the spectral signature of surfaces.
Wednesday 21 Oct	**AM:** RGB compositing for applications in weather forecasting: Day Cloud Phase Distinction, Night Microphysics RGB, and others. **PM:** Hands-on exercises on the application of satellite tools to construct a weather forecast.
Thursday 22 Oct	**AM:** Communicating your forecast. **PM:** Satellite applications for aviation hazards; selected participant presentations and discussion on satellite applications.
Wednesday Oct 28	**AM:** NASA's role in improving the use of satellite information; Geostationary Lightning Mapper (GLM). **PM:** Hands-on exercises with GLM data.
Thursday Oct 29	**AM:** Professional Development Panel and Regional Connections **PM:** Selected participant presentations and discussion
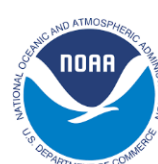
Case Study Abstract Submission

On October 22 and 29, there is the opportunity for participants to present a case study. Satellite Subject Matter Experts from the GOES and JPSS Programs will offer feedback on select case studies, and suggestions on satellite data or products that could be of value for forecasters and researchers.

For participants interested in presenting, please submit a one page abstract and up to one figure on the Abstract Submission form. (The abstract submission link is also available on the google registration form.) Workshop leaders will review all submissions and select a representation of case studies based on topic, instrument, and event. The following information will be collected for the abstract:

- Case Study Title
- Primary Author and Affiliation
- Secondary Author(s) and Affiliation(s) (optional)
- Topic area (such as precipitation, GOES-R rain rate)
- Key words (such as satellite instrument (e.g. GOES-R ABI, JPSS VIIRS/event)
- One page abstract
- Figure (optional)