

## Virtual Laboratory Management Group Seventh Meeting - VLMG-7

St. Petersburg, Russia – 22 to 25 July 2014



# NOAA/USA Contributions

Presented by: Bernie Connell (CIRA)

Includes contributions from:

Cooperative Institute for Research in the Atmosphere (CIRA)

NOAA National Weather Service (NWS) Training Division

NOAA NWS Weather Prediction Center (WPC) / International Desks

NOAA Office of Satellite and Product Operations (OSPO)

University Corporation for Atmospheric Research (UCAR) COMET

NOAA NWS International Activities (IA) Office and co-located UCAR

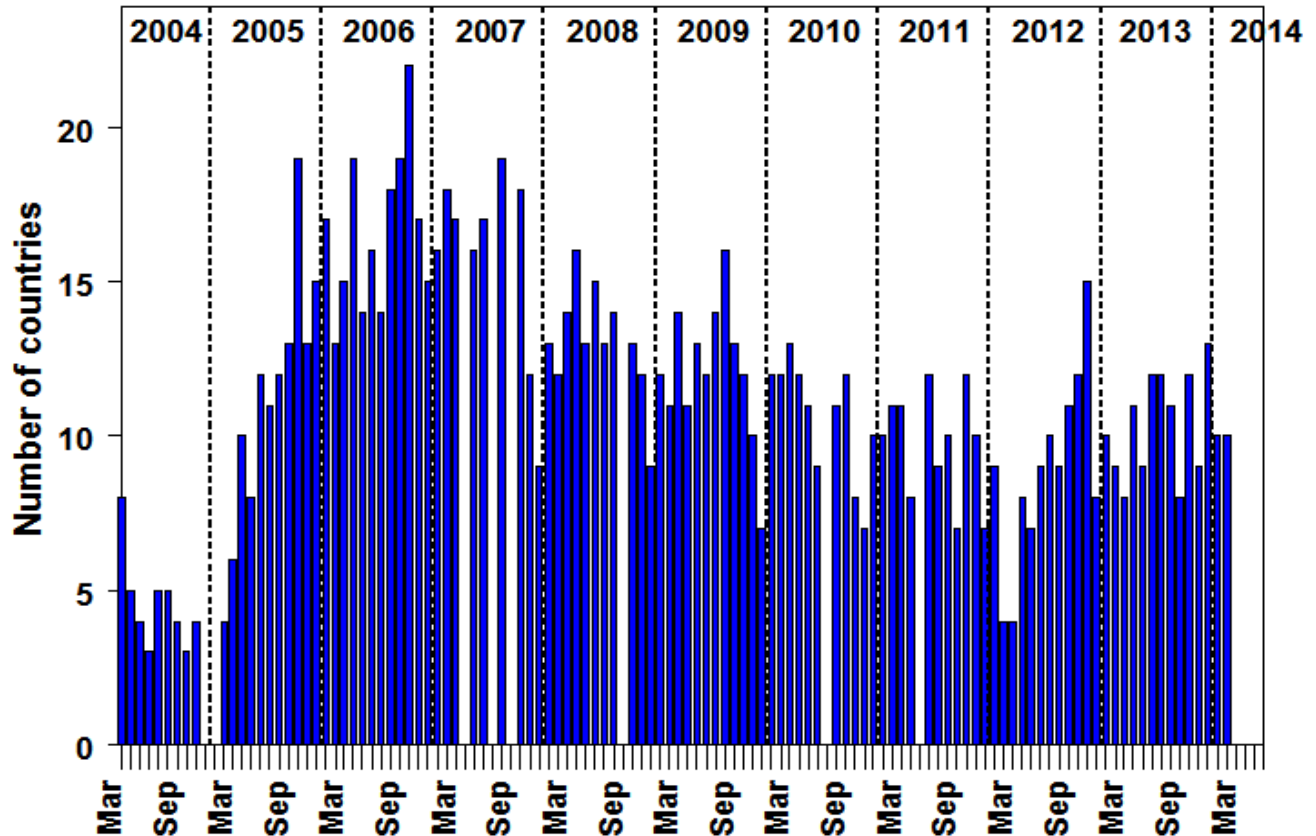
# VLab Most Important Achievements

- Americas and Caribbean Monthly Focus Group
- GEONETCast Americas awakening
- Special Seminars and online lessons
- WPC International Desk Visitor Program
- Preparing for GOES-R and using SNPP
- VLab TSO Support: active contributor and oversight for position via CIRA

# Americas and Caribbean Monthly Focus Group

CIRA-WMO VLab <http://rammb.cira.colostate.edu/vlab>

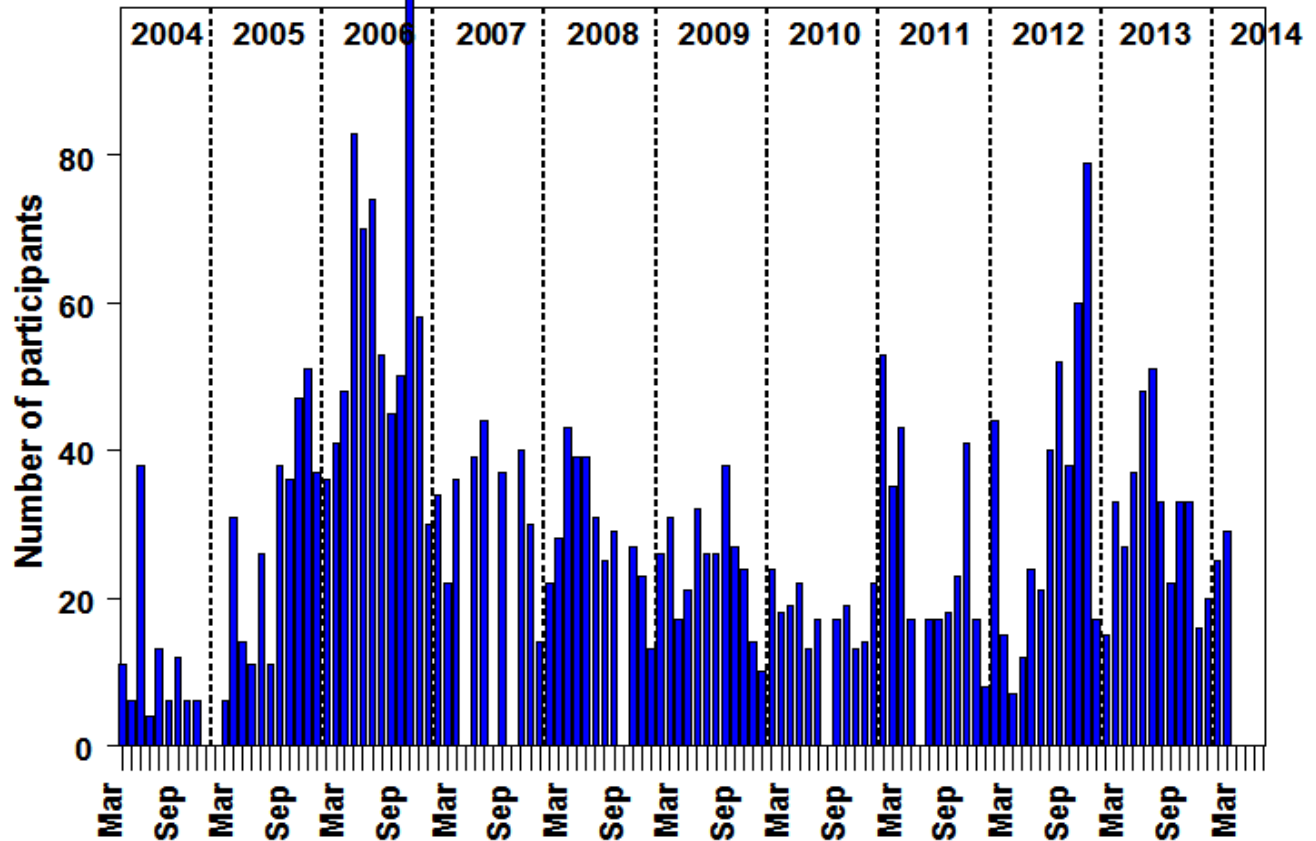
VLab Focus Group: Central and South America and the Caribbean



# Americas and Caribbean Monthly Focus Group

CIRA-WMO VLab <http://rammb.cira.colostate.edu/vlab>

VLab Focus Group: Central and South America and the Caribbean



# GEONETCast efforts

- NOAA / WMO VLab Train-the-Trainer  
GEONETCast Workshop  
6-7 April 2013
- NOAA Satellite Conference  
8 -11 April 2013 (+April 2015)
- WMO VLab Virtual Training  
GEONETCast - Americas  
December 3, 4, and 5, 2013  
English and Spanish versions



\* More specific information on GEONETCast on Wednesday

# Support to training activities

- 2 online sessions for Satellite Direct Readout:

8 Apr 2014 "Suomi NPP"

by Mitch Goldberg

7 countries; 40 participants

9 Apr 2014 "CSPP software"

by Liam Gumley

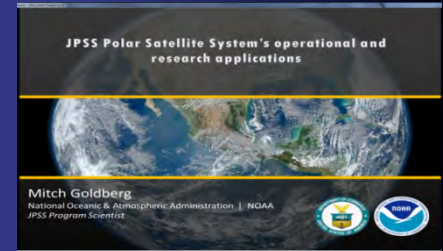
9 countries; 36 participants

- Product Updates from NHC

27 May 2014 by Todd Kimberlain and Gladys Rubio

bi-lingual (English and Spanish)

11 countries; 49 participants



# Lecture support to training activities

- Workshop on Numerical Weather Prediction and Quantitative Precipitation Forecasting Techniques
  - Tropical South America/Peru – November 2013 sponsored by Servicio Nacional de Meteorología e Hidrología de Perú (SENAMHI)
  - Northern South America and Central America – March 2013 sponsored by Instituto de Hidrología, Meteorología y Estudios Ambientales (IDEAM) Colombia
- EUMETRAIN World Wide Weather Briefing – Event Week in May 2013 (virtual)
- GOES-R presentation (Dec 2012) and NHC presentation (Dec 2013) for the Caribbean Aeronautical Continuing Professional Development Course (both virtual)

Included satellite interpretation techniques!



# New COMET MetEd Modules

- Remote Sensing Using Satellites, 2nd Edition
- Satellite Monitoring of Atmospheric Composition
- GOES-R ABI: Next Generation Satellite Imaging
- Advances in Space-Based Nighttime Visible Observation
- Multispectral Satellite Applications: Monitoring the Wildland Fire Cycle, 2nd Edition
- Satellite Feature Identification: Inferring Three Dimensions from Water Vapour Imagery
- Multispectral Satellite Applications: RGB Products Explained
- Advanced Satellite Sounding: The Benefits of Hyperspectral Observation - 2nd Edition

*See COMET  
Presentation  
on Monday*

**ESRC (in English, Spanish, French, ...)**

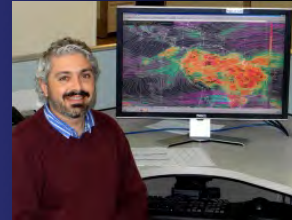
<http://www.meted.ucar.edu/esrc/index.php>





# WPC International Desk Visitor Program

- Two Desks: Tropical and South American
  - Coordinators : Mike Davison and Jose Galvez
- 3 month training
- 28 visitors Sept 2012 to June 2014
  - Argentina (4), Bahamas, Barbados, Bolivia, Brazil (3), Cayman Islands, Chile, Colombia, Costa Rica(2), Dominican Republic, El Salvador (2), Jamaica (2), Mexico (2), Paraguay, Peru (4), Uruguay
- Follow up: participation in the RFG



<http://www.hpc.ncep.noaa.gov/international/photo/photos.shtml>

# Preparing for New Satellites GOES-R

- National and International
- National success: Satellite Proving Ground
  - Satellite liaisons at the National Centers
  - Feedback: Research  Operations
- International
  - NOAA Satellite Conference
  - Various virtual presentations via RFG connection
  - COMET English, Spanish and French modules

# Challenges

- NOAA experienced significant internal budget cuts in Fiscal Years 2012 and 2013 and had limited resources to assist VISIT and COMET programs and the CoEs.
- Continue efforts to support:
  - inexpensive access to imagery and products
  - inexpensive software to display imagery, products, model output, and other observations
- Expand GOES-R training and Satellite Proving Ground for International Community



# Future Plans

- Data reception & Display software: GEONETCast opportunities and McIDAS-V
- Adapting existing GOES-R training on new channels and products for International Community - engage trainers via CALMet
- GOES-R training for International Community: NOAA satellite conference, RFG event week and COMET Module(s)
- Continue monthly RFG and special seminars
- Add International Component to Satellite Proving Ground: via WPC visitor program?

# VLab TSO

- NOAA through CIRA continues to provide funding and support for the VLab Technical Support Officer (TSO).
- GRRRRRRREAT idea! The TSO provides Wonderful support!



# Great Progress!!!

Every little bit of help contributes to the whole and many individuals with limited resources can work together to accomplish quite a lot!

# Training Links

- NOAA/CIRA WMO VLab activities  
<http://rammb.cira.colostate.edu/vlab>



- GOES-R Proving Ground  
<http://www.goes-r.gov/users/proving-ground.html>



- JPSS Proving Ground  
[http://www.jpss.noaa.gov/community\\_proving-ground.html](http://www.jpss.noaa.gov/community_proving-ground.html)



- NWS Training Portal  
<http://www.nws.noaa.gov/training/>



- VISIT - Virtual Institute for Satellite Integrated Training  
<http://rammb.cira.colostate.edu/visit/>



- SHyMet – Satellite Hydrology and Meteorology  
<http://rammb.cira.colostate.edu/training/shymet/>



- COMET MetEd <http://www.meted.ucar.edu>



- SPoRT – Short-term Prediction Research and Transition Center  
<http://weather.msfc.nasa.gov/sport/training/>



# Extra quick link and satellite launch schedule





# NOAA SATELLITE AND INFORMATION SERVICE

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

[Home](#)[About NESDIS](#)[Offices](#)[Contacts](#)[Staff Directory](#)[FAQs](#)[Satellite Licensing](#)

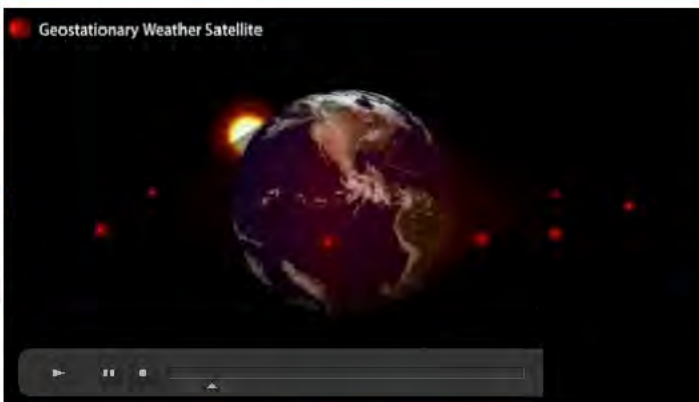
Weather.gov Forecast

[GO](#)[Satellite Products](#)[About NOAA Satellites](#)[Satellite Services](#)[Research](#)[Environmental Data](#)[Education & Outreach](#)[Multimedia](#)[One-page Info. Sheets](#)

For satellite imagery and animations, visit:



## About NOAA Satellites



### NESDIS Satellite Information

Using environmental satellites to observe the Earth from space is one of the key tools in forecasting weather, analyzing climate, and monitoring hazards worldwide. This 24-hour global coverage provides us with a never-ending stream of information critical for making decisions affecting everything from what you are going to wear today to governments making decisions about how to deal with climate change. The National Oceanic and Atmospheric Administration (NOAA) in collaboration with the National Aeronautics and Space Administration (NASA) and the U.S. Air Force, manages and operates fleets of weather and environmental monitoring satellites. There are two main types of environmental satellites geostationary and polar-orbiting

[GOES](#)[POES](#)[DMSP](#)[JASON-2](#)[JPSS](#)[GOES-R](#)

### Satellite Imagery

- [Geostationary Satellite Imagery](#)
- [Polar-orbiting Satellite Imagery](#)
  - [- Atlantic - Pacific](#)
  - [- Archived - Composite](#)
- [Significant Event Imagery](#)

### Historical Information

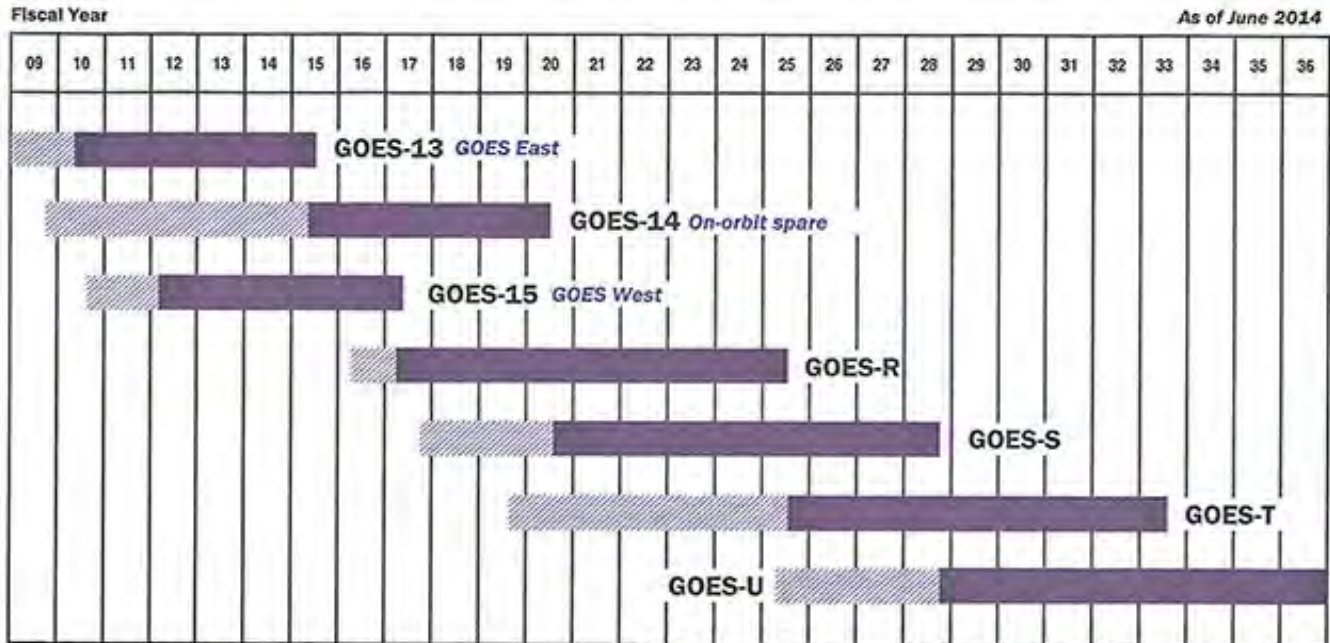
- [TIROS Online Bibliography](#)
- [David Simonds Johnson: A Pioneer in Satellite Meteorology](#)
- [History of the NOAA's Satellite Program](#)
- [Foundations of Environmental Satellites](#)



Select satellite



# Continuity of GOES Mission



Approved: Mary E. Kelly  
 Assistant Administrator for Satellite and Information Services

JUN 06 2014

GOES: Geostationary Operational Environmental Satellite

On-orbit storage

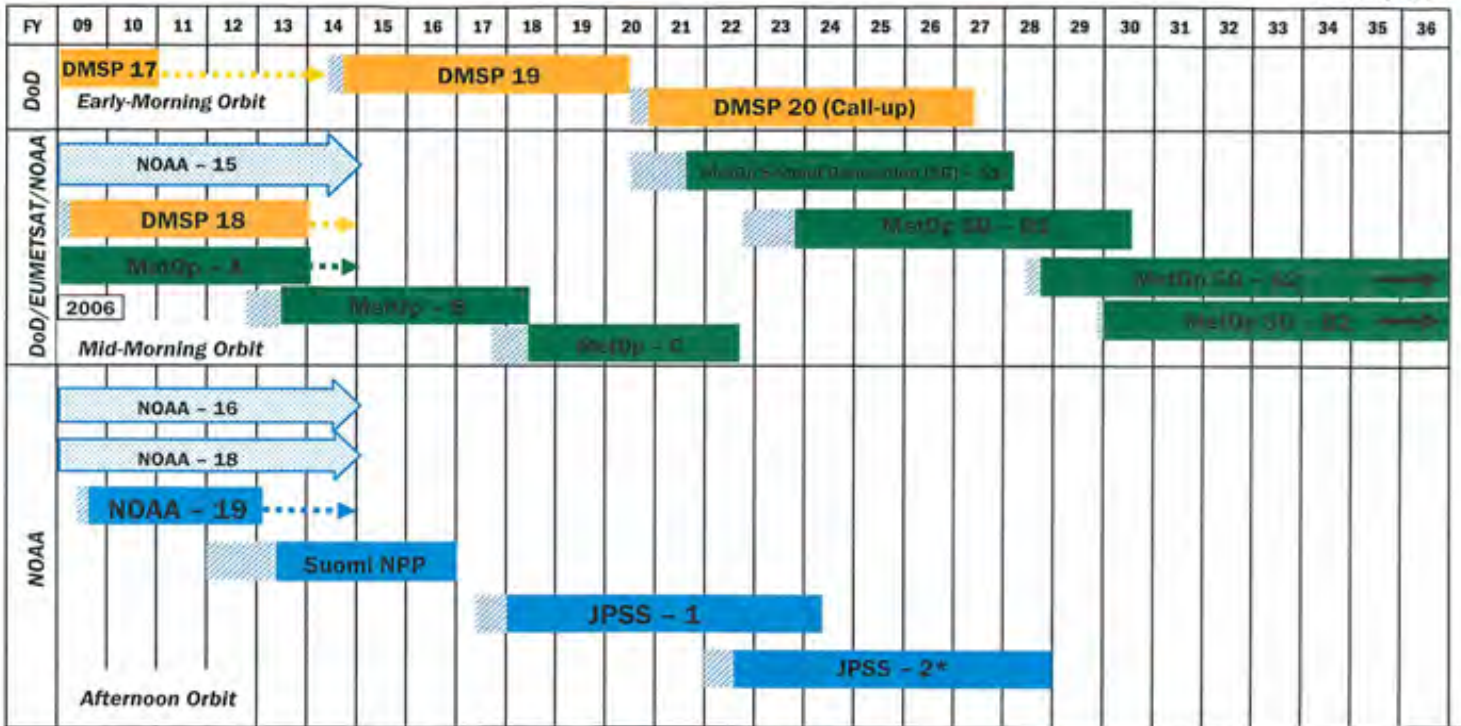
Operational



# Continuity of NOAA's Polar (Primary) Operational Weather Satellite Programs



As of May 2014



Approved: *Mary E. Kelly*  
 Assistant Administrator for Satellite and Information Services

\* Program funding provided through FY2025. The follow-on Program will provide funding for operations post 2025.

DMSP: Defense Meteorological Satellite Program  
 JPSS: Joint Polar Satellite Program  
 Suomi NPP: Suomi National Polar Partnership

- Post Launch Test
- Operational based on design life
- Secondary
- Operational beyond FY 2036
- In Extended Mission

Note: Extended operations are reflected through the current FY, based on current operating health.



VISIT

