

# JPSS User Readiness through Training: VISIT, SHyMet, WMO VLab, and a new Liaison

Bernadette Connell<sup>1</sup>

J. Torres<sup>1</sup>, S. Miller<sup>1</sup>, D. Bikos<sup>1</sup>, E. Szoke<sup>1</sup>, S. Bachmeier<sup>2</sup>,  
S. Lindstrom<sup>2</sup>, A. Mostek<sup>3</sup>, B. Motta<sup>3</sup>, L. Veeck<sup>1,4</sup>

<sup>1</sup> Cooperative Institute for Research in the Atmosphere

<sup>2</sup> Cooperative Institute for Meteorological Satellite Studies

<sup>3</sup> NWS/OAA/CLO/Forecast Decision Training Division

<sup>4</sup> WMO Virtual Lab for Education and Training in Satellite Meteorology



AMS 96 January 2016

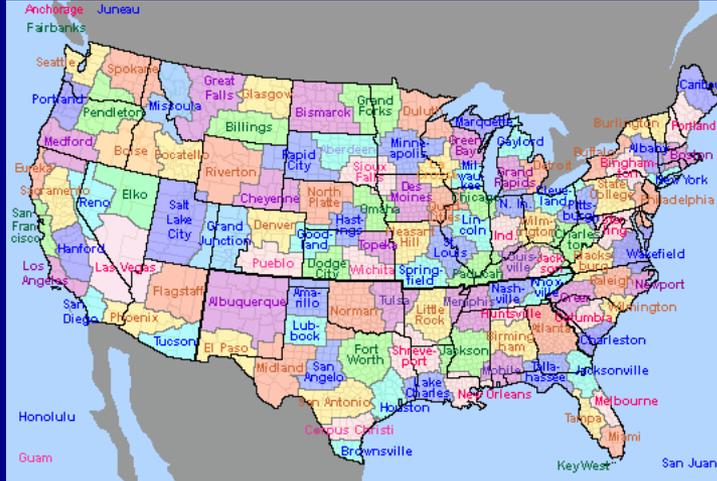


# Who are the users?

- National & International
  - Primary focus:
    - National Weather Service ★
  - Training is applicable to:
    - Academia
    - Media
    - General Public

# NOAA National Weather Service - Users

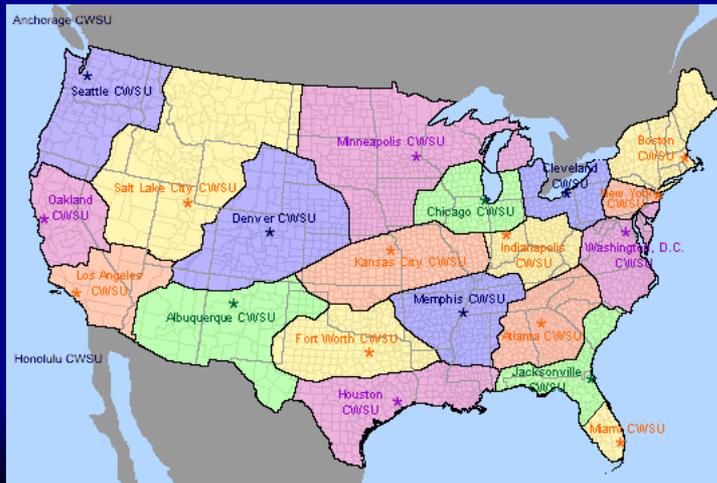
## 122 Weather Forecast Offices



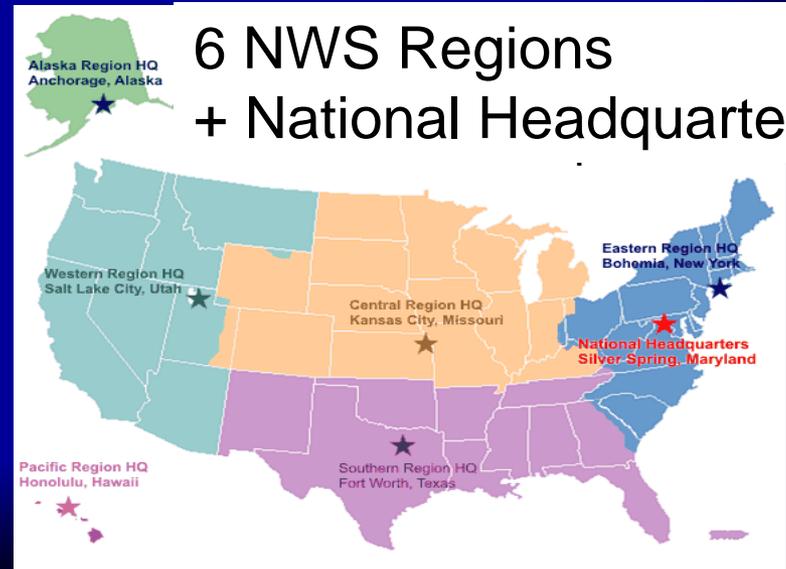
## 13 River Forecast Offices



## 22 Center Weather Service Units



## 6 NWS Regions + National Headquarters



# What is the user level of understanding?

Knowledgeable

Capable

Skilled

Expert

# What is the user level of understanding?

Knowledgeable

Capable

Skilled

Expert

## What are the training challenges?

- Adapting and presenting information for **all** audiences.
- Encouraging participation
- Keeping it simple and short

# VISIT

**Virtual Institute for  
Satellite Integrated Training**



**Satellite Hydrology  
and Meteorology**



**WMO-CGMS  
Virtual Laboratory for  
Education and Training  
in Satellite Meteorology**



Satellite Liaisons



**VISIT**  
Virtual Institute for  
Satellite Integrated Training



WMO-CGMS  
Virtual Laboratory for  
Education and Training  
in Satellite Meteorology



Satellite Hydrology  
and Meteorology

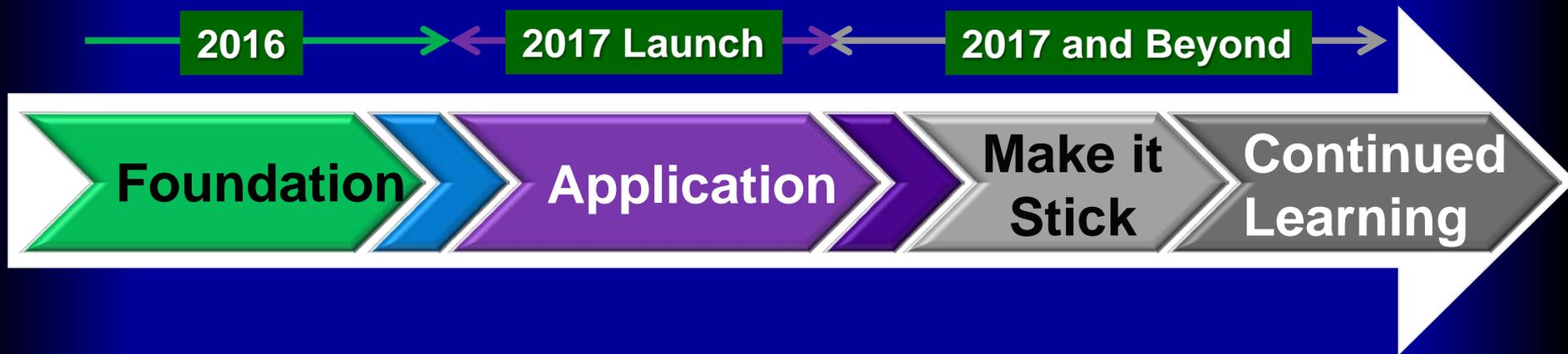


# NWS Training Guidance



- Basic Remote Sensing
- Characteristics of Satellites
- AVHRR vs JPSS
- Geo vs Polar
- Strengths & Weaknesses

# NWS Training Guidance



- Forecast / warning process
- Phenomena based
- Baseline products
- Service areas
- 10-15 minute modules
- Quick Guides in AWIPS

# NWS Training Guidance



ONE SIZE TRAINING  
DOES **NOT** FIT ALL  
USERS!

- Simulations
- Demonstrated performance
- Repeat...practice
- Operations ↔ Research
- Peer-to-peer sharing
- Blogs
- Storm-of-the month webinars
- Seasonal readiness

# VISIT

Virtual Institute for  
Satellite Integration Training  
Launched in 1998



**Mission:** To accelerate the transfer of research results from atmospheric remote sensing into NWS operations

**Method:** Distance education techniques: teletraining and online modules

<http://rammb.cira.colostate.edu/visit/>

# (Initial) Focus: stand-alone sessions

## Recent TOPICS

- Satellite Meteorology
- Severe Weather
- Winter Weather
- Tropical
- Environmental Hazards
- Current and Future Satellites (includes training specific to JPSS and GOES-R)

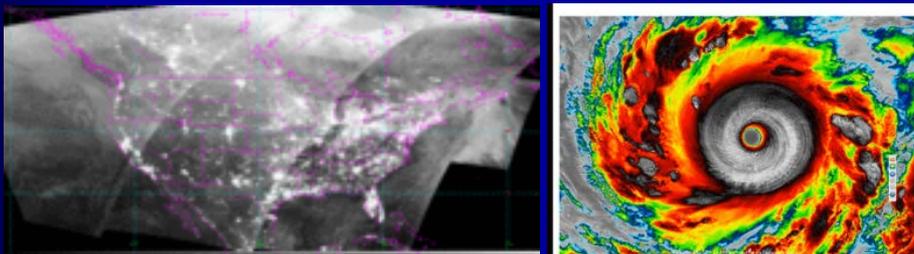


# Additional Focus



## Blogs

## Monthly Virtual VISIT Satellite Chat



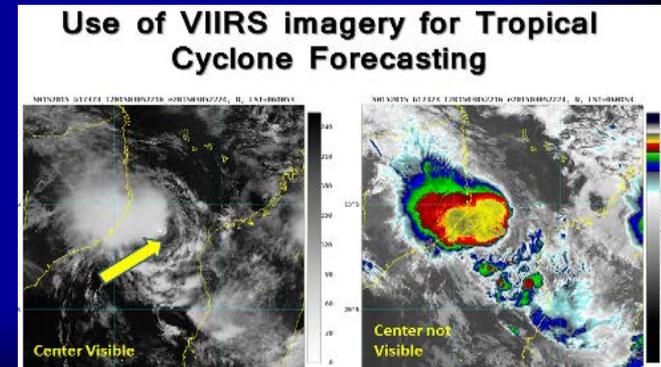
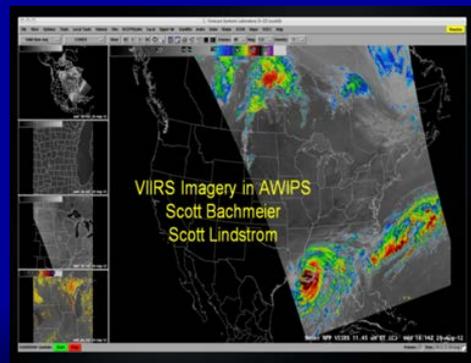
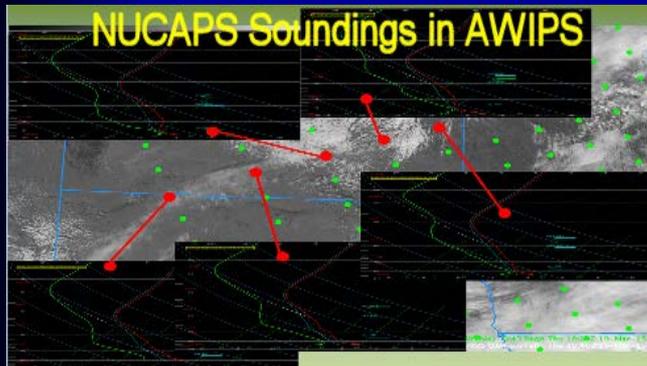
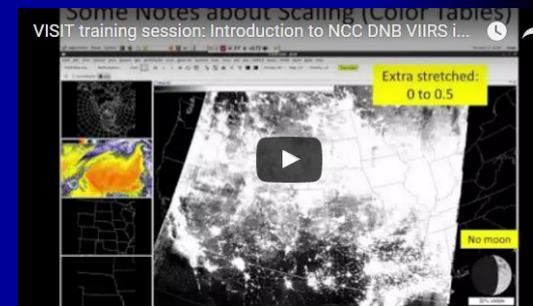
## NWS VLab Help desk

# VISIT

- VISIT Home
- Training Sessions
- Training Calendar
- Blog Sites
- VISIT Satellite Chat
- VISIT Satellite Help Desk
- The VISIT Program
- VISIT Contributors
- VISIT FAQ
- Links / Tutorials
- RAMSDIS Online

# JPSS specific training

- VIIRS DNB NCC imagery in AWIPS
- VIIRS Imagery for Tropical Cyclone Forecasting
- NUCAPS Soundings in AWIPS
- VIIRS Imagery in AWIPS





# Satellite Hydrology and Meteorology

**COURSES** dedicated to  
operational satellite meteorology

Intern / Forecaster / Severe Weather / Tropical

***Liaison goal:*** JPSS Instruments, Products, and  
Operational Applications

<http://rammb.cira.colostate.edu/shymet/>



# NOAA/NWS/OCLO

**NWS Personnel**

- Training Implementation Plan
- Residence & Virtual Courses
- Browse for NWS Training in New Commerce Learning Center (requires login)
- Job Aids, Downloads, & Other References
- PDS Page
- IDP Guide
- Training Directives
- Welcome to the NWS

**Partners & Volunteers**

- NWS Cooperative Observer Program
- Educators
- Emergency Managers

**NWS Training Portal**

Welcome to the NWS Training Portal! This portal is designed to provide access to all NWS training, including course listings, course descriptions, training schedules, and online materials. Our goal is to provide you with one stop shopping for training! If you have suggestions for improvements, or note any errors, please use the webmasters link at the bottom of the page to share them with the Portal team.

Skillssoft courses are available via the [Commerce Learning Center](#).

You may now subscribe to our RSS feed [XML](#). For information on RSS you can visit the [NWS RSS Library](#).

**News & Announcements**

- COMET has published [Introduction to Climatology for the Tropical Pacific Islands](#). This 1.5-hour lesson provides an introduction to the key features influencing climate in the tropical Pacific, including El Nino, the Madden-Julian Oscillation, and monsoons. To access this lesson in the NWS Commerce Learning Center, [click here](#). (10/28/15)
- VISIT has announced their [schedule of live teletraining sessions](#) through November. All VISIT teletraining is listed on the [Training Events Planning Calendar](#). (10/26/15)

**Upcoming Training Events**

Thursday, November 12

- A brief introduction to social scie
- NOAA/CIMSS ProbSevere Prod

Monday, November 16

- RAC Orientation (Session #1) - 1

Tuesday, November 17

- Cyclogenesis: Analysis Using G-
- RAC Orientation (Session #2) - 1
- Synthetic Impacts in Forecasting

*Best place to look for general and new satellite training:*

*NWS Training Portal*

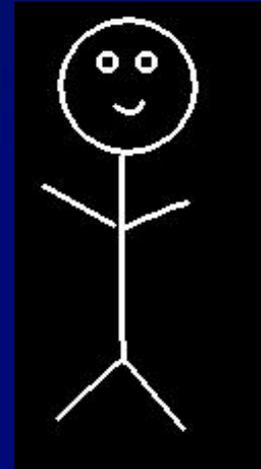
<http://www.nws.noaa.gov/training>

Forecast Decision Training Division (FDTD)

in Boulder, Colorado <http://www.fdtb.noaa.gov/>

# New JPSS Liaison

Jorel Torres



- Assess user needs
- Develop and promote *directed* training
- Gather feedback
- Promote dialogue and exchanges between the researcher and forecaster.



# International Activities coordinated with the WMO VLab

Designated Technical Support Officer: Luciane Veeck

## Centers of Excellence

- Argentina (Buenos Aires and Cordoba)
- Australia (Melbourne)
- Barbados (Bridgetown)
- Brazil (Cachoeira Paulista)
- China (Beijing and Nanjing)
- Costa Rica (San Jose)
- Kenya (Nairobi)
- Morocco (Casablanca)
- Niger (Niamey)
- Oman (Muscat)
- Republic of South Korea (Jincheon)
- Russian Federation (Moscow and St. Petersburg)
- South Africa (Pretoria)

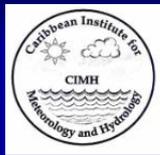




+



+



+



=

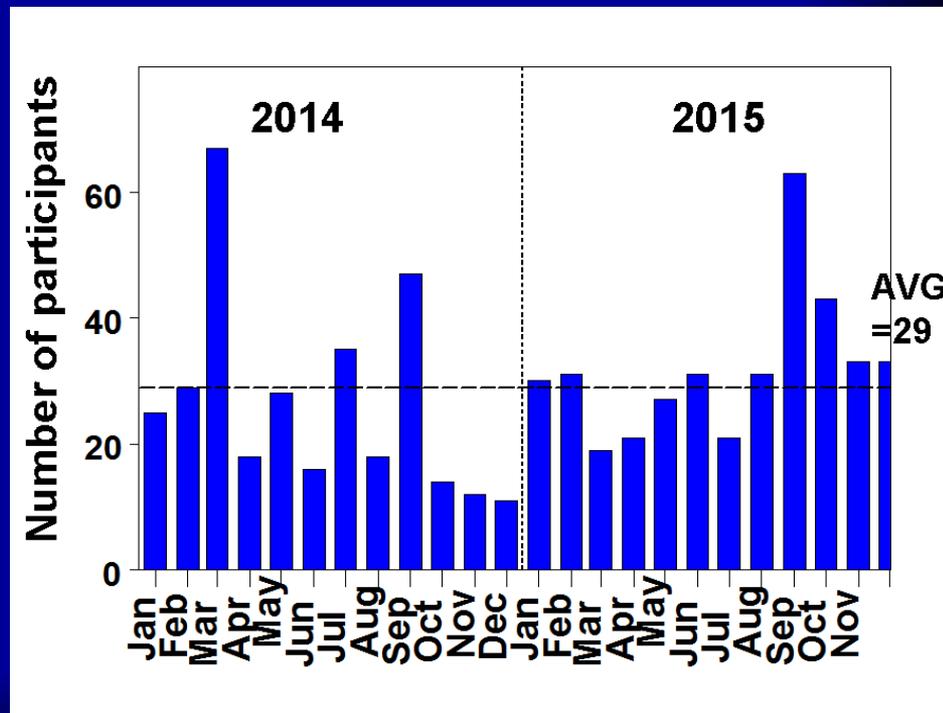
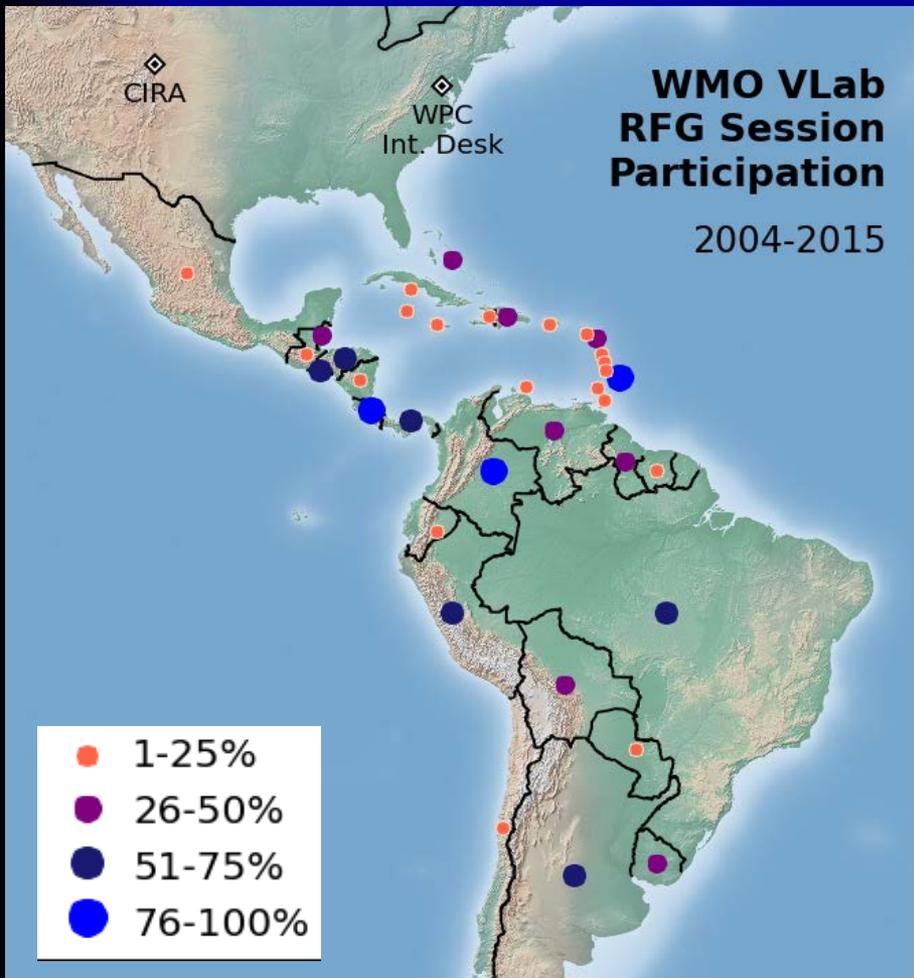


Collaboration

# Monthly Regional Focus Group Discussions for the Americas and the Caribbean

## WMO VLab RFG Session Participation

2004-2015





## WMO-CGMS VIRTUAL LABORATORY FOR EDUCATION AND TRAINING IN SATELLITE METEOROLOGY

<http://www.wmo-sat.info/vlab/>

Home

Vlab News

Centres of Excellence

Calendar of Events

Library

Regional Focus Group

### Calendar of Events

Event Weeks

Projects

Publications

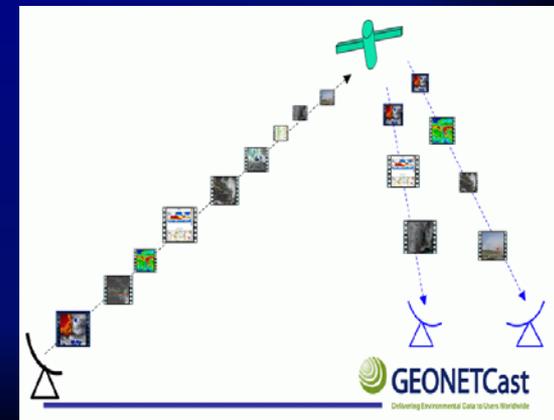
Contacts

This calendar of events shows the upcoming Training events, workshops, conferences and online sessions organised by VLab CoEs and Vlab collaborators.

Date	Title	Location	Initiative	CoE involv.	Type	Language	Attendance	Contact	Link
18/01/2016 - 21/01/2016	Introduction to ECMWF job scheduler: ecFlow	Reading, UK	Other		Classroom course	English	Limited	<a href="#">Anna Ghelli</a>	
21/01/2016	RFG of Central and South America and the Caribbean - 16:00 UTC	Online	VLab	Argentina, Barbados, Brazil, Costa Rica	RFG discussion	English, Spanish	Open	<a href="#">Bernie Connell</a>	
01/02/2016 - 05/02/2016	Use and interpretation of ECMWF products (for trainers and training champions)	Reading, UK	Other		Classroom course	English	Limited	<a href="#">Anna Ghelli</a>	
08/02/2016 - 12/02/2016	Use and interpretation of ECMWF products	Reading, UK	Other		Classroom course	English	Limited	<a href="#">Anna Ghelli</a>	
08/02/2016 - 28/02/2016	Baltic+ 2016 Online Phase	Online	EUMETSAT USC, NMS regional course		Online course	English	By invitation	<a href="#">Izabela Zablocka</a>	
18/02/2016	RFG of Central and South America	Online	VLab	Argentina, Barbados, Brazil, Costa Rica	RFG	English	Open	<a href="#">Bernie</a>	

# Virtual Event Weeks

- **Next Generation of Satellites**  
**16-20 November 2015**
- **Satellite Direct Readout focusing on Suomi NPP** 8-9 April 2014
- **GEONETCast** 3-5 December 2013



# Closing Remarks

- There are a variety of materials and approaches to training.
  - If you find something you like, share it with others!
  - If you don't find what you want, ask about it.
- In the US: Look for increased interaction and training from the new JPSS Satellite liaison.
- Internationally: Look for further collaborations with the WMO VLab.

[Bernie.Connell@colostate.edu](mailto:Bernie.Connell@colostate.edu)

[Jorel.Torres@colostate.edu](mailto:Jorel.Torres@colostate.edu)