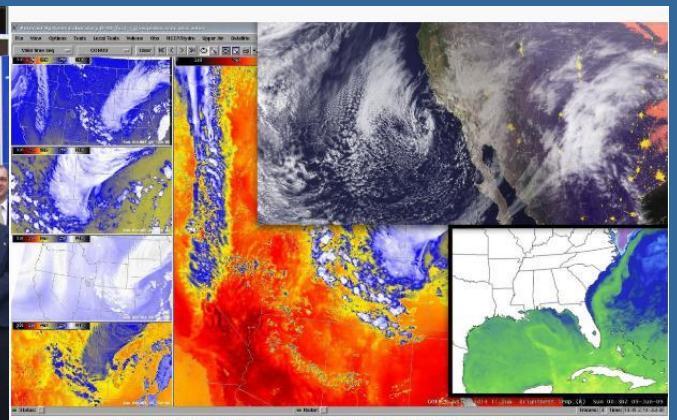
5.6 - Training in the NOAA Satellite Proving Ground

Anthony Mostek and LeRoy Spayd
NOAA/NWS/Training Division

With

Jim Gurka and Tim Schmit
NOAA/Satellite Information Service



Examples of GOES-R Proving Ground images and products

GOES-R Satellite Proving Ground Mission Statement

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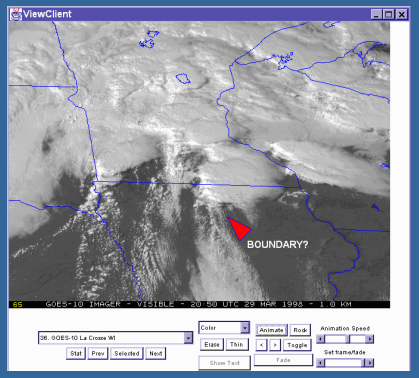
AMS
January 2012
New Orleans

Key Points for Satellite Training

- Integral to NOAA Programs/Goals
- Satellite Training Community
- NOAA GOES-R Proving Ground
- Include Polar Satellites (JPSS/NPP)
- Training Summary



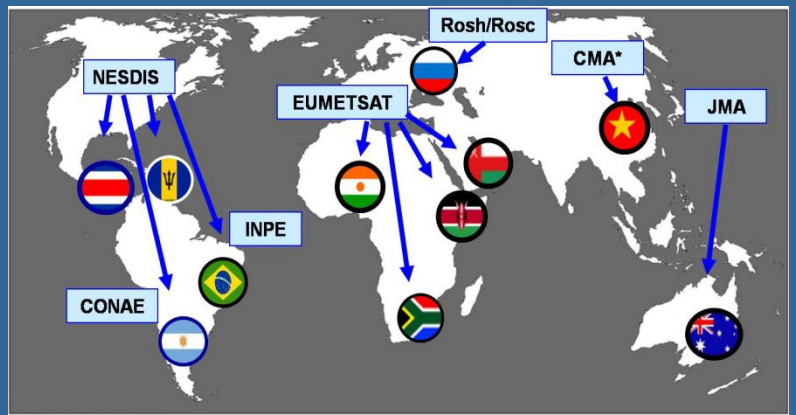
Training Community

- Dedicated NWS Training Division
  - Three Branches
- Many Partners in NOAA - -
  - Cooperative Institutes & Programs
- Multiple US Agencies
  - (DOD, NASA, DHS, …)

Training Community

International Collaboration

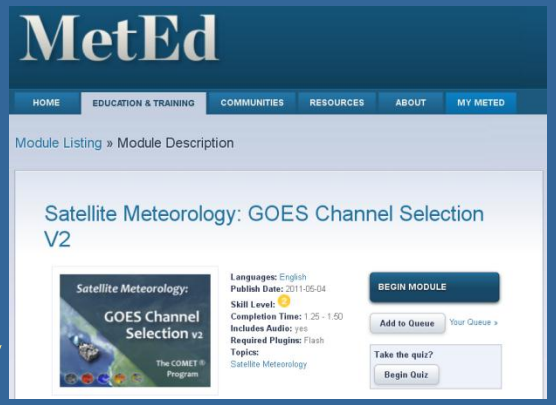
WMO Space Programme Virtual Laboratory, Centres of Excellence (Argentina, Costa Rica, Barbados, Brazil, …), Canada, EUMETSAT, and more…



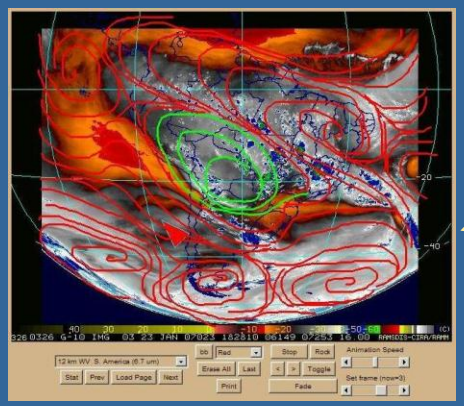
Working Together for Satellite Training

VISIT (CIRA/CIMSS)

NOAA Partners
EUMETSAT, DOD,
NASA, Canada,…



UCAR/COMET



WMO (Virtual Lab)

Satellite
Proving
Ground

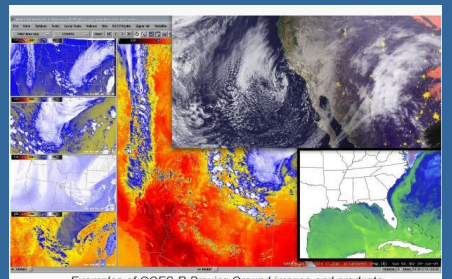
NWS Training
Division

Users & Developers

Training in GOES-R Proving Ground

Prepare NOAA Users and Developers

- Rapidly Evolving Technology
- Evolving Operations – Support Services
- Evolving Societal Needs & Impacts



Examples of GOES-R Proving Ground images and products

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Proving Ground Mission Statement

GOES-R Proving Ground engages NWS in pre-operational demonstrations of selected capabilities of next generation GOES.

- The Proving Ground accomplishes its mission by:
  - Sustained interaction between developers and end users for training, product evaluation, and solicitation of user feedback.

GOES-R Proving Ground

Ultimate tool to Ensure User Readiness

- Validate & optimize Decision Aids
- Optimize product display techniques
- Environmental event simulator for user & developer training

- Open up venues for direct user-developer interaction
- Direct links into Satellite Training Program

GOES-R Proving Ground - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://cimss.ssec.wisc.edu/goes_r/proving-ground.html

goesr proving

GOES-R Proving Ground

» Home » GOES-R Proving Ground

Resources

- Proving Ground Products List (Table)
  - CIMSS NOAA Testbed Support Products
  - CIRA Products
  - SPoRT Products
  - CIMSS "MODIS Imagery in D-2D"
- Meetings and Presentations Teleconferences
- NWS Collaborative Site Visits
- Proving Ground Timeline

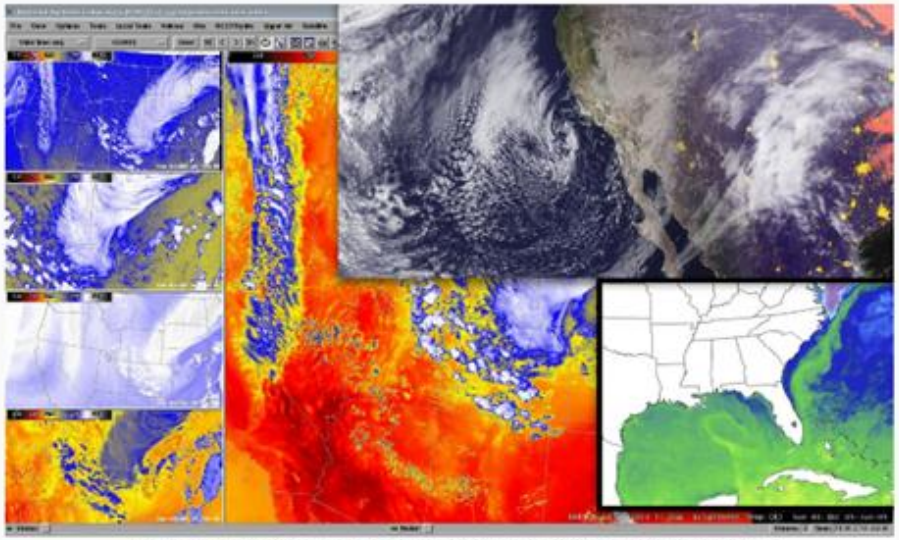
Proving Ground Partners

- Two-Page PPF
- Two-Page PDF
- Page 1 PNG
- Page 2 PNG

- GOES-R Advanced Baseline Imager (ABI) Bands
- GOES-R ABI Sample Product Table
- GOES-R ABI Weighting Function Examples

Related Links

- Proving Ground Overview
- GOES-R "101" VISITview lesson
- COMET GOES-R: Benefits of Next Generation Environmental Monitoring Module



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>> Read more

Proving Ground CIMSS

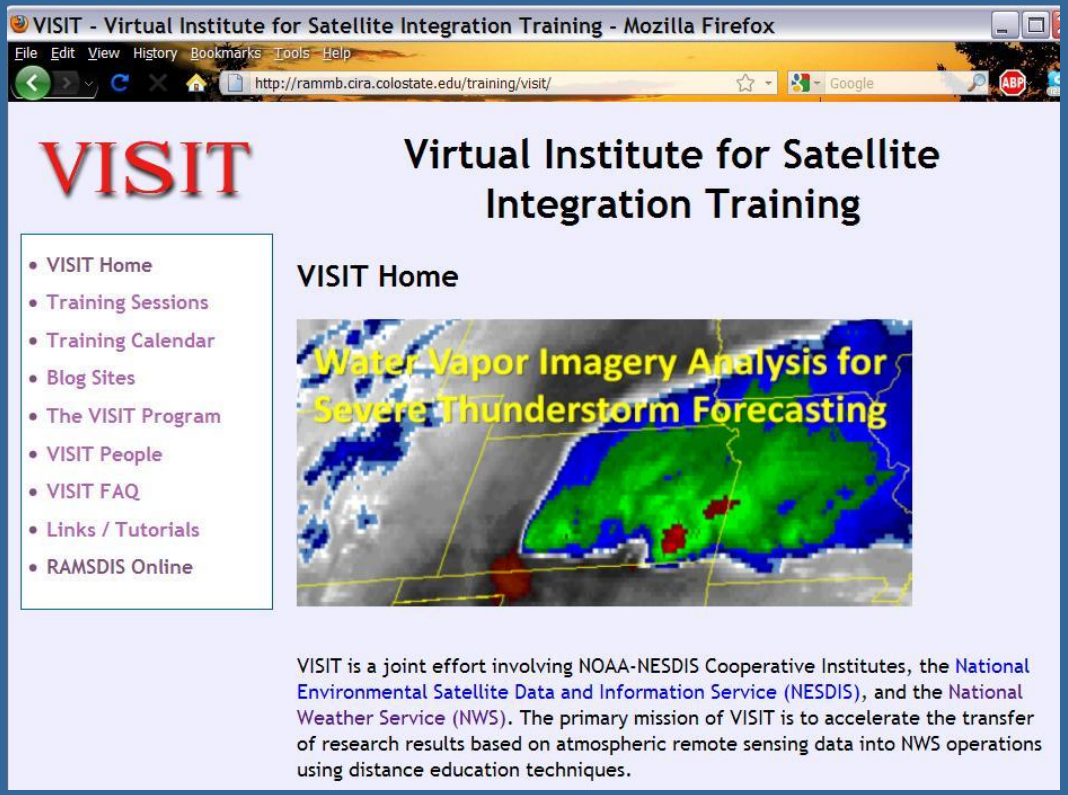
UW/CIMSS NOAA Proving Ground Decision Support Products

Product	Contact	Training		AWIPS Setup	Web Quicklooks	Satellite Platform	WFO Testbed Feedback	Product Type
		VISIT	PPT					
Convective Initiation(UWCI)	Wayne Feltz	X	X	X	X	GOES Imager	HWT, AWC, PR	Product Variant
Overshooting Top (OTTC) and Enhanced-V	Wayne Feltz Kris Bedka	X	X			GOES Imager, MODIS/AVHRR	HWT, HLT	AWG Proxy
WRF Simulated Radiances (ABI Simulated Radiances)	Justin Sieglaff		pdf		X		HWT	Risk Reduction
WildFire ABBA (WFABBA)	Chris Schmidt				X	GOES Imager	HWT	AWG Proxy
NearCast	Ralph Petersen	X	X	X	X	GOES Imager, GOES Sounder	HWT	Risk Reduction
Cloud Mask	Andrew Heidinger		X		X	GOES Imager, MODIS (Adaptable to any imager)	AAWU, AWC, HLT, PR, OPC	AWG Proxy
Cloud Height	Andrew Heidinger		X	Contact Researcher	X	GOES Imager, AVHRR (Adaptable to any imager)	AAWU, AWC, HLT, PR, OPC	AWG Proxy
Volcanic Ash	Mike Pavolonis	X	X	Contact Researcher		MODIS, SEVIRI	AAWU, AWC, HLT, PR	AWG Proxy
Low Clouds, Cloud Type, Fog	Mike Pavolonis		X Quick Facts			MODIS-Alaska, GOES-CONUS	AAWU, AWC, HLT, HWT	AWG Proxy
SO_2	Mike Pavolonis					MODIS	AAWU, AWC	AWG Proxy

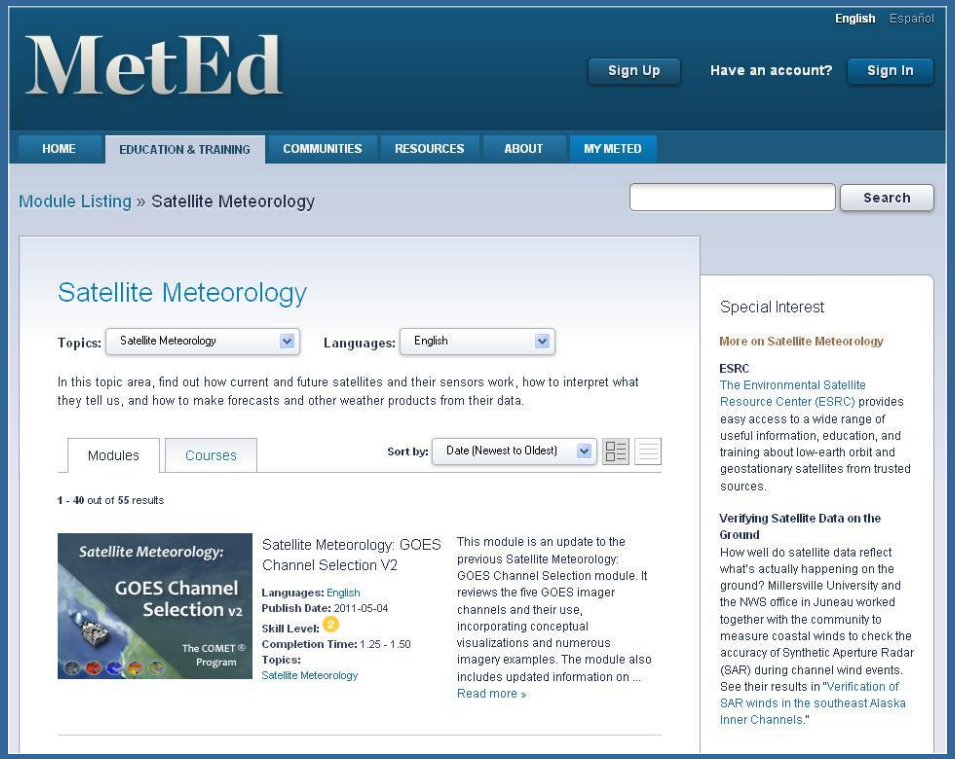
Proving Ground CIRA

Product	Contact	Related Training	Data Display	WFO / Testbed Feedback	Product Type	Usage
GeoColor Imagery	Steve Miller	Product Description	AWIPS web	WFO	New Imagery / Visualization Technique	Visualization
MODIS Simulated True Color Imagery	Steve Miller	Product Description	web	WFO	New Product	Visualization
GOES Low Cloud / Fog Imagery	Don Hillger	Product Description COMET	AWIPS web	WFO	Product Variant	Cloud determination
MODIS Cirrus Detection	Steve Miller	Product Description	AWIPS web	WFO	New Product	Cloud determination
Orographic Rain Index (ORI)	Steve Miller	Product Description	AWIPS web	HWT	New Product	Rainfall
Marine Stratus Cloud Climatology	Cindy Combs	Product Description VISIT student guide		WFO	New Product	Cloud determination
GOES Blowing Dust	Don Hillger	Product Description COMET COMET EUMETSAT training	AWIPS web	HWT	Product Variant	Volcanic Emissions / Dust
MODIS Based Blowing Dust	Steve Miller	Product Description COMET COMET EUMETSAT training	AWIPS web	HWT	Product Variant	Volcanic Emissions / Dust
MODIS Cloud / Snow Discriminator	Steve Miller	Product Description COMET	AWIPS web	WFO	Product Variant	Snow / Cloud determination
MODIS Cloud Layers & Snow Cover Discriminator	Steve Miller	Product Description COMET	AWIPS web	WFO	Product Variant	Snow / Cloud determination
GOES Snow / Cloud Discriminator (3-color technique)	Don Hillger	Product Description COMET	web	WFO	Product Variant	Snow / Cloud determination
GOES Volcanic Ash (PCI)	Don Hillger	Product Description VISIT student guide EUMETSAT training	web	HWT	Product Variant	Volcanic Emissions / Dust
MODIS Volcanic Ash	Steve Miller	Product Description VISIT student guide EUMETSAT training	web	HWT, AWC	Product Variant	Volcanic Emissions / Dust
MODIS Vegetation (NDVI)	Steve Miller	Product Description EUMETSAT training	web	WFO	New Product	Vegetation
SPC Hail Probability	Dan Lindsey	Product Description	N-AWIPS web	SPC Spring Experiment	New Product	Severe Thunderstorm
Synthetic NSSL WRF-ARW Imagery	Dan Lindsey	Product Description VISIT student guide VISIT student guide	AWIPS N-AWIPS web	SPC Spring Experiment WFO	New Product	Severe Thunderstorm
NHC Lightning-based TC Intensity Prediction	John Knaff	Product Description NHC Training ppt FACT SHEET pdf	N-AWIPS	NHC	New Product	Tropical Cyclone

VISIT & Satellite HydroMeteorology (SHyMet) Courses



COMET METED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Languages: English
In this topic area, find out how current and future satellites and their sensors work, how to interpret what they tell us, and how to make forecasts and other weather products from their data.
Modules
Courses
Sort by: Date (Newest to Oldest)
1 - 40 out of 55 results
Satellite Meteorology: GOES Channel Selection v2
The COMET® Program
Satellite Meteorology: GOES Channel Selection V2
Languages: English
Publish Date: 2011-05-04
Skill Level:
Completion Time: 1.25 - 1.50
Topics:
Satellite Meteorology
This module is an update to the previous Satellite Meteorology: GOES Channel Selection module. It reviews the five GOES imager channels and their use, incorporating conceptual visualizations and numerous imagery examples. The module also includes updated information on ...
Read more »
Special Interest
More on Satellite Meteorology
ESRC
The Environmental Satellite Resource Center (ESRC) provides easy access to a wide range of useful information, education, and training about low-earth orbit and geostationary satellites from trusted sources.
Verifying Satellite Data on the Ground
How well do satellite data reflect what's actually happening on the ground? Millersville University and the NWS office in Juneau worked together with the community to measure coastal winds to check the accuracy of Synthetic Aperture Radar (SAR) during channel wind events. See their results in "Verification of SAR winds in the southeast Alaska Inner Channels."


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Topics: Satellite Meteorology
Languages: English
In this topic area, find out how current and future satellites and their sensors work, how to interpret what they tell us, and how to make forecasts and other weather products from their data.
Modules
Courses
Sort by: Date (Newest to Oldest)
1 - 40 out of 51 results
SATELLITE PRECIPITATION PRODUCTS FOR HYDROLOGICAL MANAGEMENT IN SOUTH AFRICA
AN ASMET PROJECT
ASMET: Satellite Precipitation Products for Hydrological Management in Southern Africa
Languages: English
Publish Date: 2011-10-27
Skill Level:
Completion Time: .75 - 1.00 h
Topics:
Hydrology/Flooding, Satellite Meteorology
This module introduces a variety of meteorological and hydrological products that can improve the quality of heavy rainfall forecasts and assist with hydrological management during extensive precipitation events in Southern Africa. Among the products are the satellite-based ... Read more »
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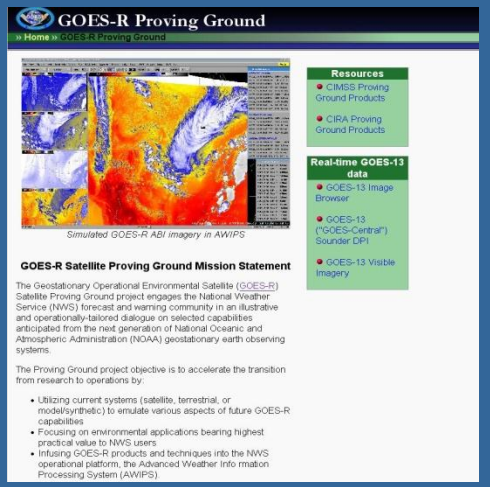
GOES-R:

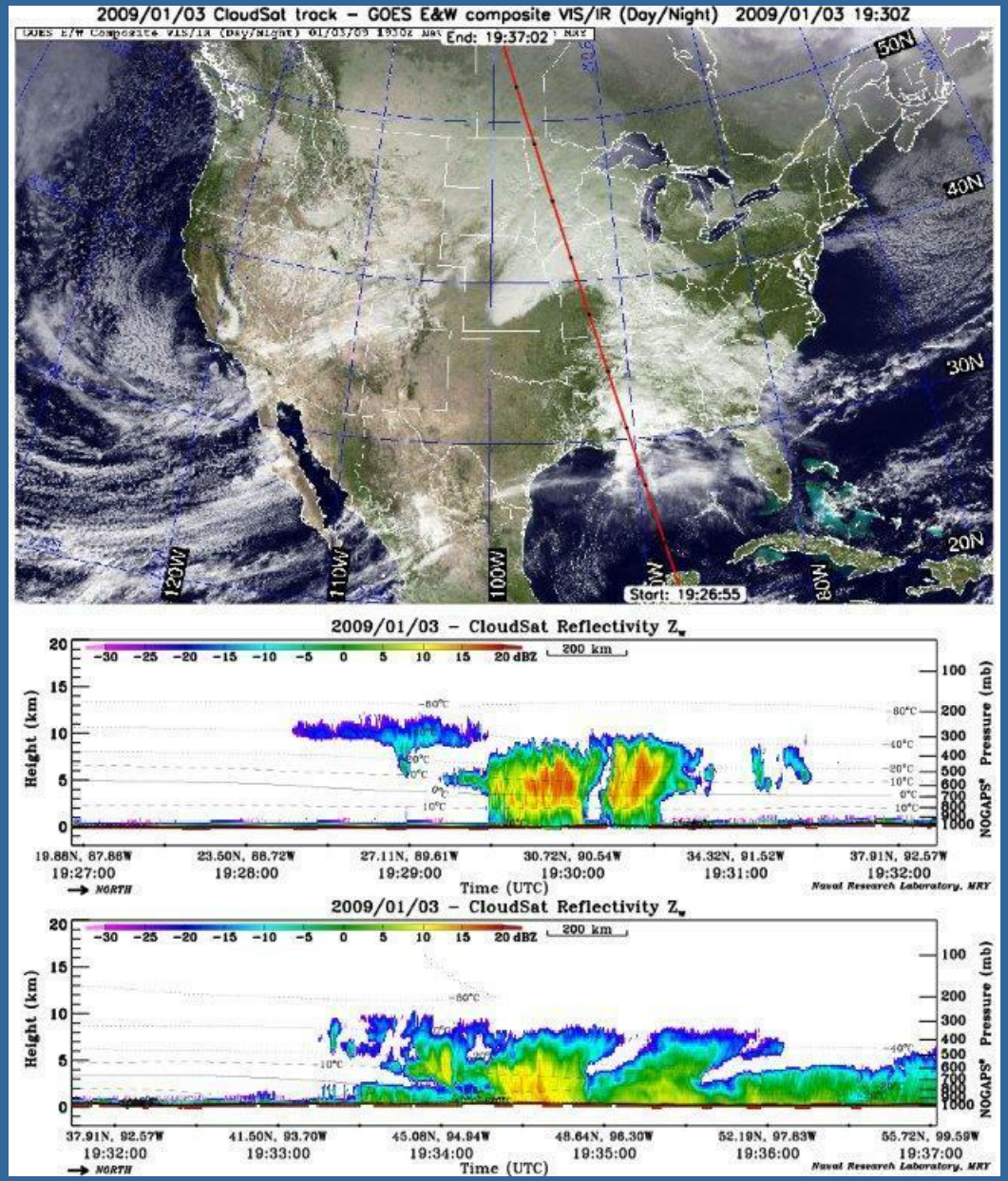
Benefits of Next-Generation Environmental Monitoring

Proving Ground
Advanced Training

- Use Commerce Learning Center, VISIT, SHyMet and COMET/METED
- Include Quizzes & Evaluations
- Cases (Weather Event Simulator - WES)
- Focus on Human Performance
- For All NOAA Staff
- Expand to International Users

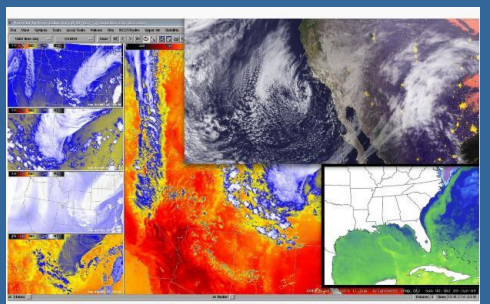


GEO/LEO (NPP) Synergy



Summary – Training Take Away

- Collaborative International Training Community
- Helps NOAA & Partners Meet Their Goals
- Integral to Proving Ground Success
- Include Polar Satellites (JPSS/NPP)



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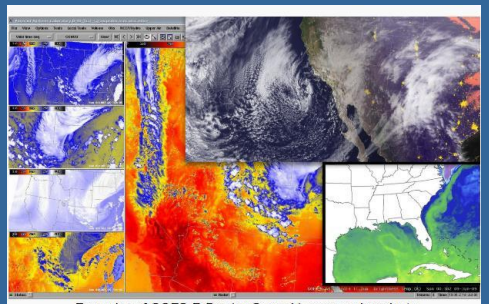
Contact Information

Anthony.Mostek@noaa.gov

VISIT - rammb.cira.colostate.edu/visit/visithome.asp

COMET METED - meted.ucar.edu

Proving Ground – cimss.ssec.wisc.edu/goes_r/proving-ground.html



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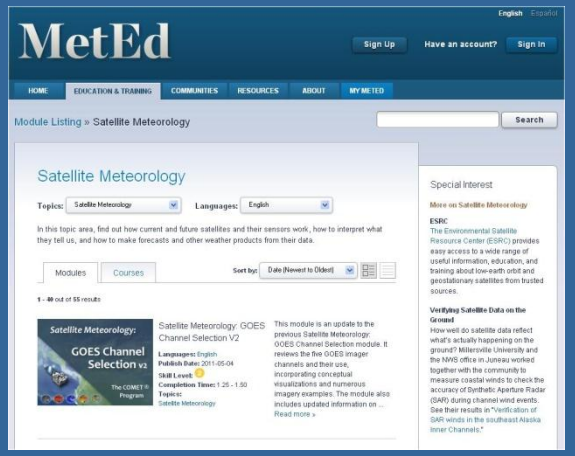
2007-11 MetEd/COMET Statistics*



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- **Over 199,000 registered users**
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* Registration Systems Started 2007