

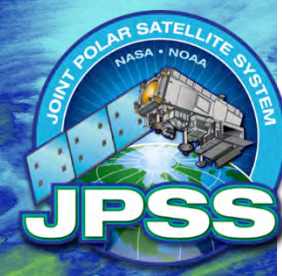
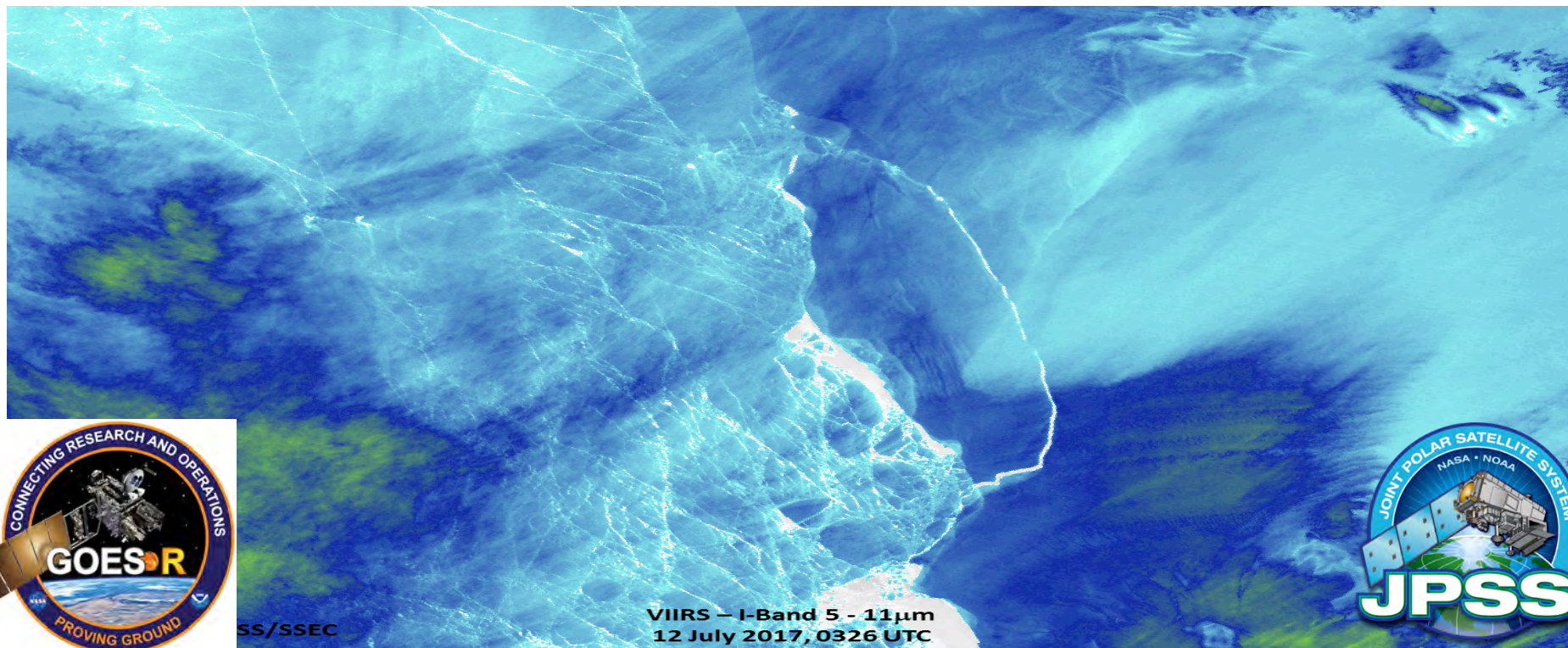


NOAA/NWS User Readiness for GOES-16/17 & NOAA-20



Leroy Spayd
NWS – Chief Learning Office

WMO VLAB meeting
Tuesday July 17, 2018



SS/SSEC

VIIRS – I-Band 5 - 11 μ m
12 July 2017, 0326 UTC



Outline



- Create Planning Team of users - NWS STAT Teams – Satellite Training Advisory Teams (GOES + POES)
- Develop Timeline - Step by Step approach
- Develop Foundation Courses to baseline entire staff knowledge
- Yearly User Readiness workshops with Satellite experts
- Develop Job Aids to streamline operational use
- Update Plans yearly

The screenshot shows the homepage of the NWS Commerce Learning Center. The header includes the Commerce Learning Center logo and a navigation menu with links for Home, Learning, Reports, Need Help?, and Programs. A large banner reads "WELCOME TO THE NWS COMMERCE LEARNING CENTER". Below the banner, there are several sections: "SEARCH FOR TRAINING" with a magnifying glass icon, "MY TRANSCRIPT / TRAINING IN PROGRESS" with a bar chart icon, "ONLINE TRAINING" with a computer monitor icon, and a "Learning Center News" section. The "Learning Center News" section contains a welcome message, information about a "Getting Started Job Aid", a video introduction to the Commerce Learning Center (CLC) User Training, and a note about browser settings. The "Training Announcements" section lists two upcoming events: "Predicting Convective Cessation for Aviation Forecasters" and "Communicating Climate Change Scenarios With Decision Makers".

Commerce Learning Center
YOUR DEVELOPMENT. OUR FUTURE.

Home Learning Reports Need Help? Programs

WELCOME TO THE
NWS COMMERCE LEARNING CENTER

SEARCH FOR TRAINING

MY TRANSCRIPT / TRAINING
IN PROGRESS

ONLINE TRAINING

Learning Center News

Welcome to the NWS Learning Center!

A **Getting Started Job Aid** is available to help you learn and navigate the system.

Commerce Learning Center (CLC) User Training is available. This video provides an introduction to the system's functionality and is an easy way to get familiar with the learning center.

Ensure your browser popup blocker is **DISABLED** or **TURNED OFF** while logged into the CLC site (doc.csod.com).

Update: Migration of Historical Transcripts.

Training Announcements

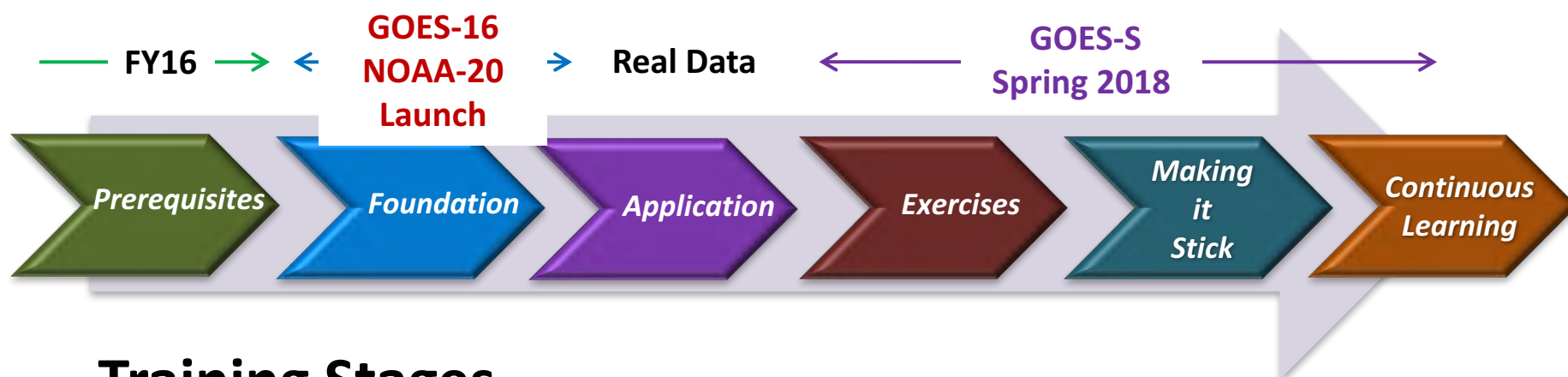
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Training Events
Planning Calendar

**Web-Based
Training Release Dates**

- COMET has announced the publication of **Predicting Convective Cessation for Aviation Forecasters**. During this 1-hour lesson, aviation forecasters will learn about multi-scale conceptual models of convective evolution and cessation, and then will test their knowledge within a convective event case simulator. (10/17/16)
- COMET has published **Communicating Climate Change Scenarios With Decision Makers**. In this one-hour lecture presented in three parts, research hydrologist Dr. Holly Hartmann discusses issues and approaches for communicating with decision-makers regarding climate.



Satellite Training Timeline



Training Stages

- **Prerequisites** – overall basics
- **Foundation** – satellite specifics
- **Application** – operational setting
- **Exercises** – simulations, practice
- **Making it Stick** – multi-situational, sharing
- **Continuous Learning** – evolve and update

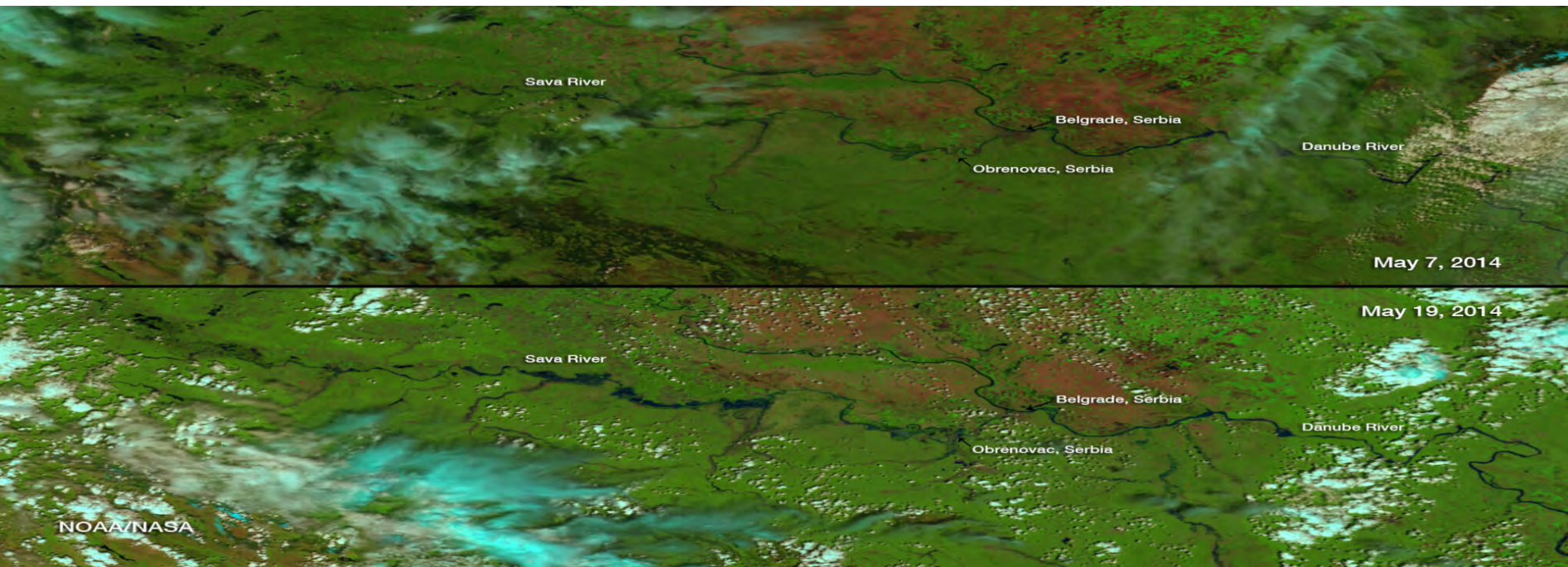


GOES-R/S and JPSS STAT teams



Purpose: Two Separate Teams (GOES/JPSS) of SOOs, OCLO staff and Training Partners which:

- Plan Training deliverables on a yearly basis
- Monitor available resources, schedules, deliverables
- Track progress in meeting deadlines for training delivery on a bi-weekly basis
- **Partners include: COMET, CIRA, CIMSS, CIMMS, SPoRT**





GOES-16 Foundational Course



- GOES-16 course available to NOAA and external users
 - * Nearly 2500 NOAA completions
 - * 39 mini-modules
 - * 8-12+ of Instruction

2. YouTube video:



2. YouTube video:



GOES-16 Foundational Course

Individual training modules are listed by "Title" and grouped under common topic categories. To sort by column, click the column heading at the top to reorder them. Length is given in minutes.

Topic	Title	Length	Contributor	Developed
Introduction	Basic Principles of Radiation	15	COMET	2016
Introduction	Basic Operations of ABI on GOES-R	15	Lindstrom (CIMSS)	2016
Introduction	GOES-R ABI Visible and Near-IR Bands	15	COMET	2016
Introduction	GOES-R ABI Near-IR Bands	15	COMET	2016
Introduction	GOES-R ABI IR Bands, Excluding Water Vapor	30	COMET	2016
Introduction	GOES-R ABI Water Vapor Bands	25	Bikos & Szoke (CIRA)	2016
Introduction	GOES-R Multi-channel interpretation approaches	30	Lindstrom (CIMSS)	2016
Introduction	GOES-R Aerosols in AWIPS	10	Lindstrom (CIMSS) & Kondragunta	2016
Introduction	GOES-R Cloud and microphysical products, fog and low stratus	15	Lindstrom (CIMSS)	2016
Introduction	GOES-R Fire characterization, land surface temperature and snow	10	Lindstrom (CIMSS)	2016
Introduction	GOES-R Baseline Product: Hurricane Intensity Estimate	10	Dagg (CIRA) & Olander	2016
Introduction	GOES-R Baseline Product: Rainfall rate	10	Bikos (CIRA) & Kuligowski	2016
Introduction	GOES-R Baseline Product: Legacy Atmospheric Profiles	10	Lindstrom (CIMSS)	2016
Introduction	GOES-R Baseline Product: Derived Motion Winds	10	Lindstrom & Bachmeier (CIMSS)	2016
Introduction	GOES-R Baseline Product: Volcanic Ash	10	Lindstrom (CIMSS) & Pavlonis	2016
GLM	Introduction to the GLM	30	COMET	2016
GLM	Visualizing the Geostationary Lightning Mapper (GLM) in AWIPS	10	Stano (SPoRT)	2016

GOES 16 Satellite Foundational Course

For External Users:

http://rammb.cira.colostate.edu/training/shymet/satfc-g_intro.asp

For Non-NOAA, register for course by sending email to:

nws.oaa.clo.shymet@noaa.gov

SHyMet: Satellite Foundational Course for GOES-R (SatFC-G)

SatFC-G: Satellite Foundational
Course for GOES-R



In preparation for the launch of the [GOES-R](#) satellite in November 2016, the NOAA/NWS has funded the development of the Satellite Foundational Course for GOES-R (SatFC-G). The SatFC-G will provide training to NWS operational forecasters to use new satellite data and products. The course was designed by the satellite training advisory team (STAT) which consists of SOOs from five regions, satellite liaisons and representatives from the NWS Office of the Chief Learning Officer ([OCLO](#)). Training developers include VISIT/SHyMet staff from the Cooperative Institutes at [CIMSS](#) and [CIRA](#), in addition to [COMET](#), the Cooperative Institute for Mesoscale Meteorological Studies ([CIMMS](#)), the Short-term Prediction Research and Transition Center ([SPoRT](#)) and OCLO.

The GOES-R satellite will introduce a variety of new and improved capabilities compared to previous GOES satellites. The objective of this course is to address training needs associated with the new GOES-R satellite. Specifically, topics will include an introduction to GOES-R highlighting improved spatial and temporal resolution and additional new channels that will be available followed by products and imagery that address a broad range of applications. The intended audience is forecasters but anyone is welcome to participate.

If you are a NOAA employee, register for this course via the NOAA/NWS [Commerce Learn Center](#) and follow directions there to receive credit for taking the SatFC-G course.

Non-NOAA employees may take the SHyMet version of the course, your first step is to register for the course by sending an email containing your name to:

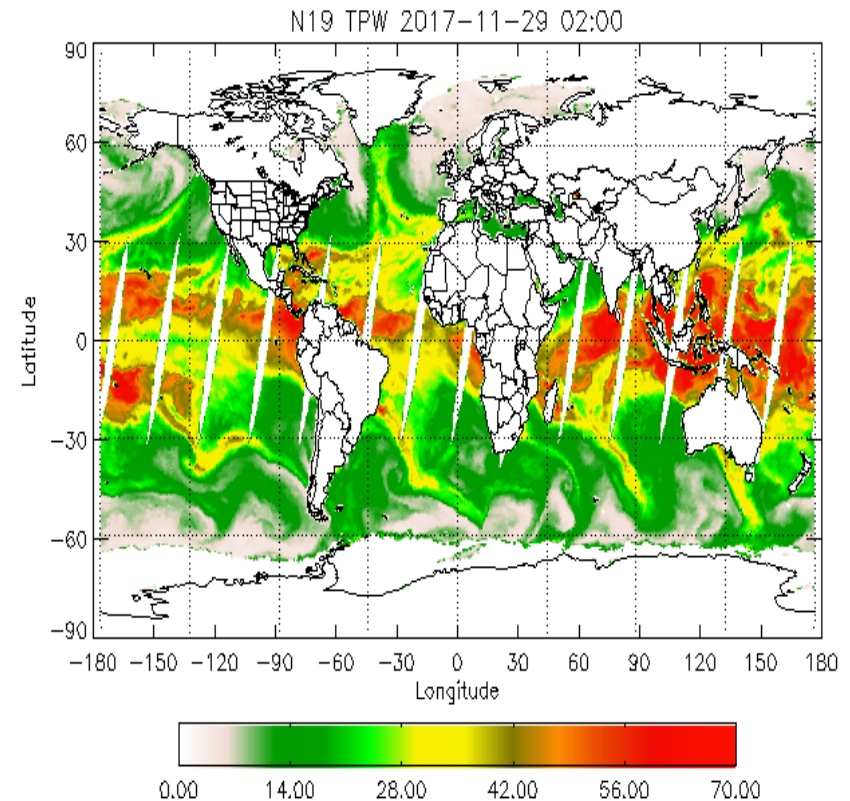
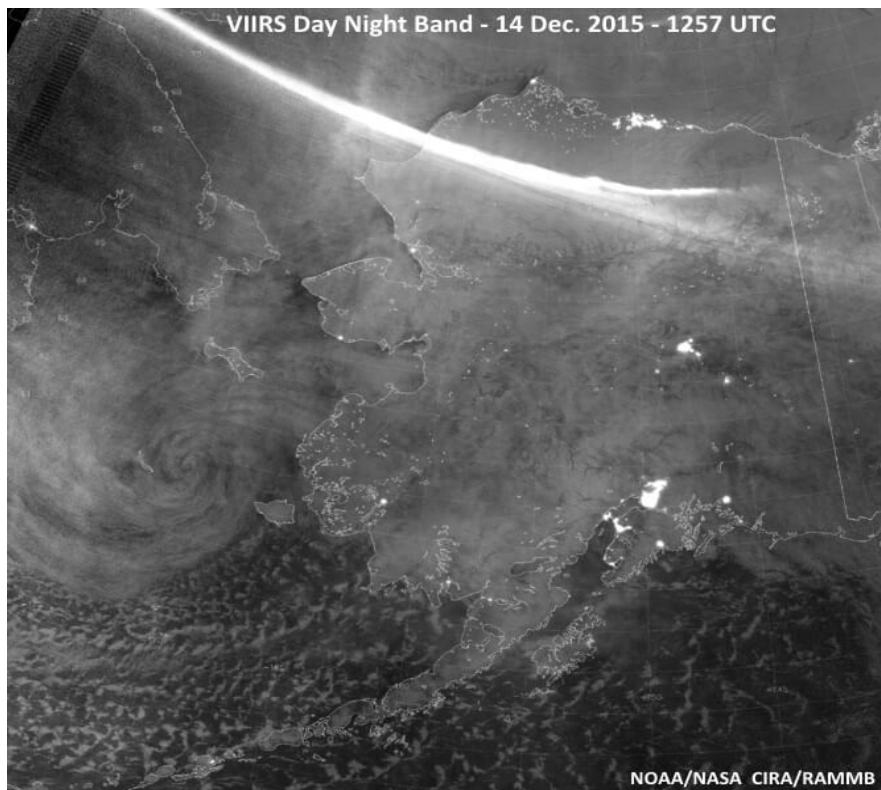
nws.oaa.clo.shymet AT noaa.gov

JPSS Foundation Course (under 3 hours)

A: Introduction to Microwave Remote Sensing

B: Introducing Suomi NPP, JPSS, GCOM, and GPM

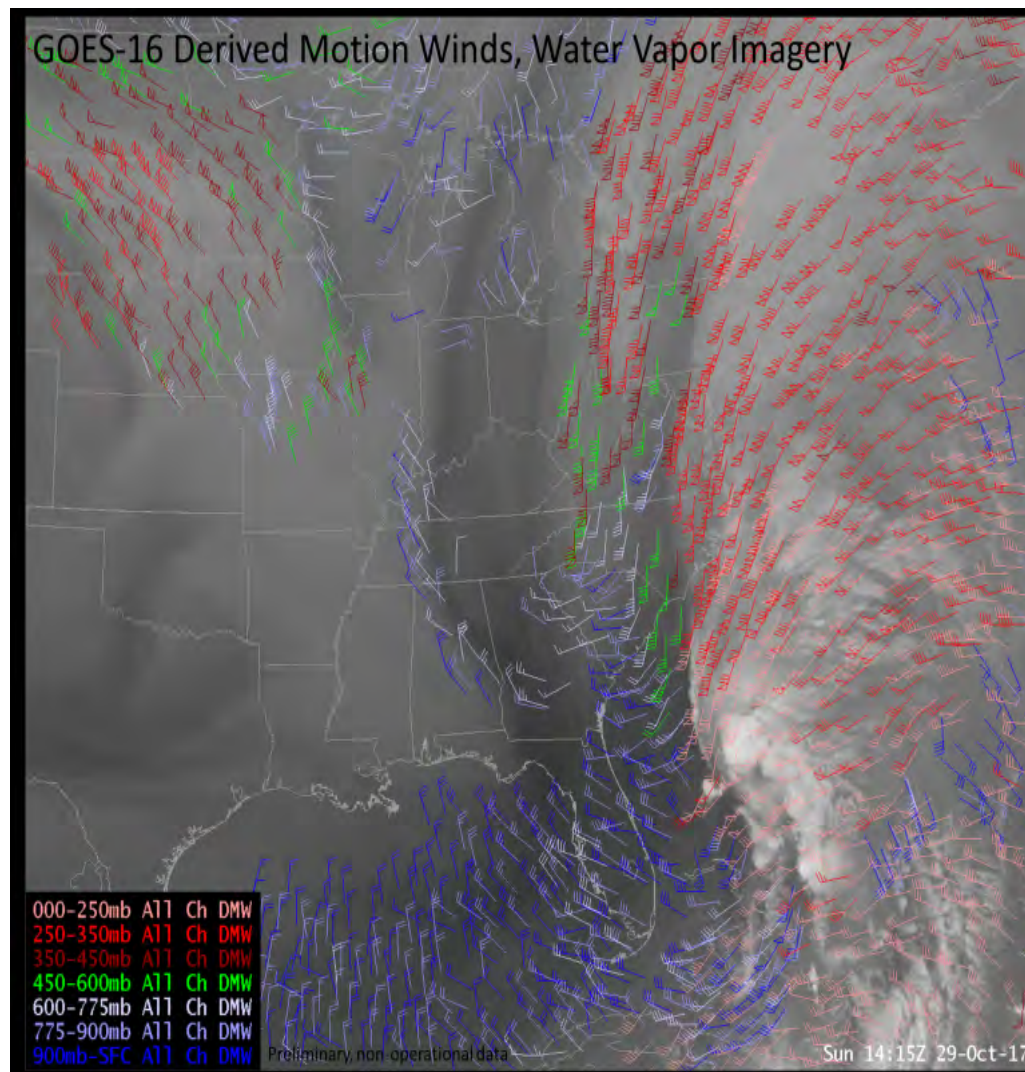
C: Beneficial Products and their Applications



Product Training Summary

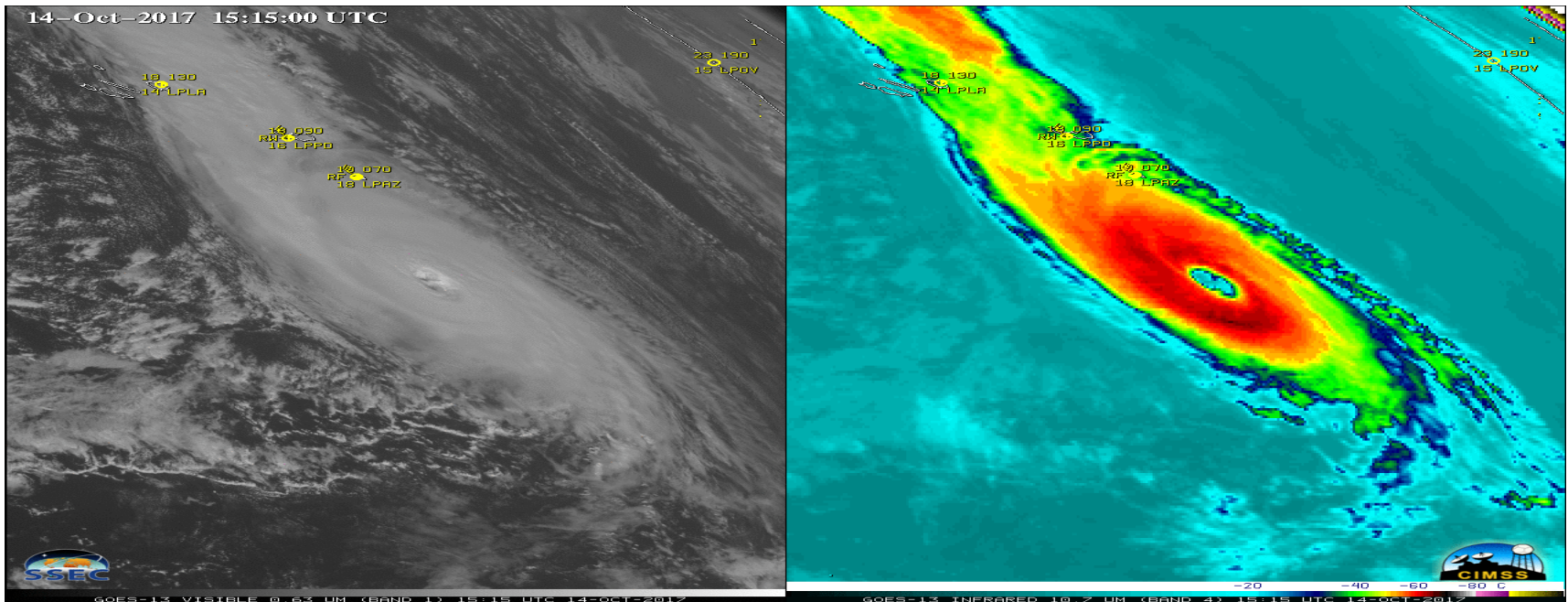
Training on GOES-16 and NOAA-20 derived products available operationally

- Training in the form of modules
 - On-line & self-paced
- Quick briefs
 - No longer than five minutes
- Quick guides
 - No longer than one page
 - Accompany the derived products.
- Job Aids
 - Used by forecasters/SOOs
 - Uses live AWIPS data
- NWS users will access on STOR –
 - AWIPS Interactive Reference (AIR)
 - Located on VLAB
 - Access at CIRA VISIT website



Integrated Training - future

- NWS STAT teams meeting in Sept. 2018 to finalize training plans thru 2019.
- Focus on Operational Application of Integrated GOES 16/17 and NOAA 20 with NWP data – Planning Summer 2019 User Readiness Workshop
- Forecast Challenges – Weather Event Simulator (WES)



Summary

- GOES 16 Foundational Course Available – being updated
- NOAA-20 Foundational Course being finalized
- Level 2 products Quick Guides, Quick Briefs and Job Aids being used
- Develop forecast challenges using Integrated data – User Readiness Workshop
- All training will be available to external users at CIRA website

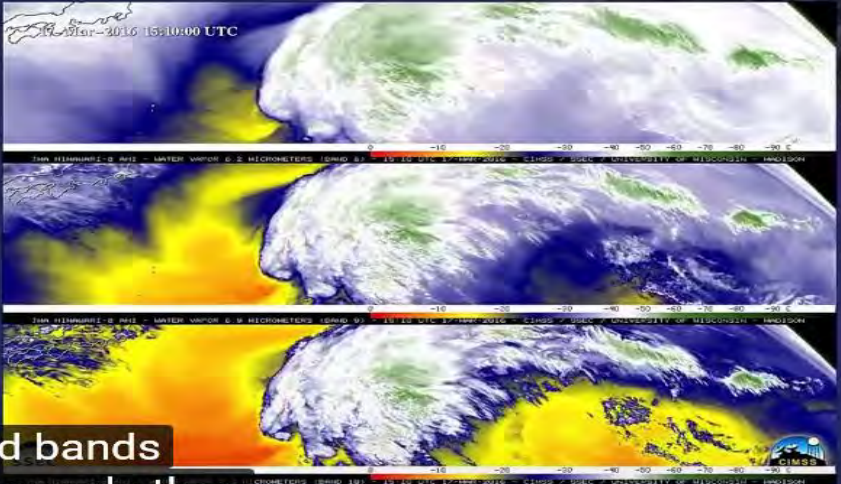
Orientation

Course structure

Introduction	
Orientation	25 min
Basic radiation principles	15 min
Basic operation of GOES-R series	15 min

ABI	
Spectral bands in visible and near-IR	15 min
Spectral bands in near-IR	15 min
Spectral bands in IR	30 min
Spectral bands in water vapor	30 min
Multi-channel interpretation	30 min

you a tour of thermal infrared bands including the water vapor channels then



12:29 / 28:10

CC HD