**From GOES-R and JPSS Satellite Data to Disaster Response: Every Decision Counts**

2020 AMS Annual Meeting

**Short Course Organizers**

Janel Thomas, STC contractor for GOES-R

 Bill Sjoberg, GST contractor for JPSS

**Boston Convention and Exhibition Center, Room 153 A**

**Sunday, January 12, 2019**

**8:00 am INTRODUCTION AND SUMMARY OF PLANNED ACTIVITIES**

 Janel Thomas, STC contractor for GOES-R

 Bill Sjoberg, GST contractor for JPSS

**8:10 am** **SATELLITE PROGRAM OVERVIEWS FOR GOES-R AND JPSS**

 Steve Goodman, Senior advisor to GOES-R program

 Mitch Goldberg, JPSS Program Office

**8:30 am TOP ENVIRONMENTAL DISASTERS WHERE SATELLITE DATA AND PRODUCTS**

 **PLAYED A KEY ROLE**

 William Straka, CIMSS/University of Wisconsin – Madison

 **9:00 am REFRESHMENT BREAK**

 **9:30 am ACTIVITY 1: SEVERE CONVECTION: NOAA SATELLITES EVER-WATCHFUL**

 **AFTER DARK**

 (What products can you use at night-time to ascertain the likelihood of severe weather?  Students will be

 led through an exercise of a severe weather event from May 2019 and will use ProbSevere, ABI Bands (and

 level 2 products), ABI RGBs, GLM and NUCAPS data to diagnose where convection might be most likely.)

 **Instructors**:

 Steve Goodman, Senior advisor to GOES-R program

 Jonathan Smith, CISESS/UMD

 Rebekah Esmaili, STC contractor for JPSS

 **Significant Contributors**:

 Dan Lindsey, GOES-R Program Office

 John Cinteneo, CIMSS/University of Wisconsin – Madison

 Scott Rudlosky, NESDIS/STAR

 Scott Lindstrom, CIMSS/University of Wisconsin – Madison

 Frank Alsheimer, NWS-Columbia, SC

 Bill Sjoberg, GST contractor for JPSS

 Steve Cobb, NWS-Tulsa, OK

 Sheldon Kusselson, CIRA/Colorado State University

 **10:30 am ACTIVITY 2: USING SATELLITE DATA TO ANALYZE CENTER POSITION AND**

 **INTENSITY** **CHANGE DURING A CRITICAL POINT IN HURRICANE DORIAN’S**

 **DEVELOPMENT**

 (Aircraft reconnaissance is currently on its way to investigate TS Dorian and forecasters believe

 there has been an unexpected shift in center location since the last advisory.  You'll be the forecasters in

 charge of analyzing the latest satellite data to help direct the aircraft to the current center and analyze

 intensity change at this this critical point in future-Hurricane Dorian's development.)

 **Instructors:**

Andrea Schumacher, CIRA/Colorado State University

 Kate Musgrave, CIRA/Colorado State University

 Chris Slocum,NESDIS/STAR

**Significant Contributors:**

Stephanie Stevenson, CIRA/NHC

**11:30 am LUNCH BREAK (Box Lunches Provided)**

Additional Presentations (participation optional):

 The Promise of Goes-R (video)

 The Promise of JPSS (video)

 Real-Time Access and Synchronous Sharing of NOAA JPSS & GOES Data into Decision

 Making Environments: Some examples of Putting NOAA Data to Work (demo)

**12:30 PM ACTIVITY 3: USE OF SATELLITES IN ANALYZING OF HEAVY PRECIPITATION**

 **FROM MIDWEST FLOODING FROM 2019**

(What products can you use to ascertain the likelihood of where heavy precipitation is going to occur or how can you determine where to direct resources as snow melts causing large areas of flooding? Students will be lead through an event where late Spring snow storm followed by convection lead to flooding along a major river in the United States, utilizing tools that can help show where heavy precipitation is likely to occur, how much moisture is contained in snow and showing where the flooding occurred.)

 **Instructors:**

 William Straka, CIMSS/University of Wisconsin – Madison

 **Significant Contributors:**

 Jun Dong, ESSIC/UMD

 Sheldon Kusselson, CIRA/Colorado State University

 Sanmei Li, George Mason University

 Shaorong Wu, NWS/CPC

 Huan Meng, NESDIS/STAR

 Bob Kuligowski, NESDIS/STAR

**1:30 pm GROUP ANALYSIS: AN EXERCISE IN HELPING A STAKEHOLDER /CUSTOMER**

 **MAKE HIGH IMPACT DECISIONS**

 **(**In this exercise, students will be presented with a myriad of satellite data for a convective event.

 Groups will work together to create a short briefing for a stakeholder/customer on how the event will

evolve, and answer direct questions from the stakeholder/customer to help him/her make a specific

high-impact decision.)

 **Instructors:**

Frank Alsheimer, NWS/WFO Columbia, SC

 Bill Sjoberg, GST contractor for JPSS

 **2:30 pm REFRESHMENT BREAK**

 **3:00 pm OUTBRIEF OF GROUP ANALYSIS**

**3:30 pm COURSE SUMMARY AND EVALUATION**

Janel Thomas, STC contractor for GOES-R

**3:45 pm COURSE END**