# 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**

   Dan Lindsey, GOES-R Program Office
   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:  DIAGNOSING SEVERE CONVECTION AT NIGHT**
   (What products can you use at night-time to ascertain the likelihood of severe weather?  Students will be lead
   through 2 exercises of severe weather events 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


**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, CIRA/Colorado State University

**Significant Contributors:**

Stephanie Stevenson, CIRA/NHC


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


**12:30 PM    ACTIVITY 3:  USE OF SATELLLITES IN ANALYZING OF HEAVY PRECIPITATION IN THE CARIBBEAN AND 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 localized heavy precipitation occurred in the tropics as well as an event where a late Spring snow storm followed by convection lead to the 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 the showing where the flooding is occurred.)

**Instructors:**

Sanmei Li, George Mason University
William Straka, CIMSS/University of Wisconsin – Madison

**Significant Contributors:**

Jun Dong, ESSIC/UMD
Sheldon Kusselson, CIRA/Colorado State 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**