



# **GOES-R Proving Ground CIRA / RAMMB Progress Report**

***PG All-Hands Meeting  
04 March 2013***



# Outline

- **Selected User Interactions**
- **Recent Product Examples**
- **Systems Report**
- **Conferences and Meetings**



# Selected User Interactions



- **WFO Pittsburgh:** Interested in getting synthetic imagery after participating in VISIT session in February
- **WFOs Boulder & Cheyenne:** In discussions with CIRA and SPoRT about Fire Weather experiment this spring/summer involving Colorado LMA network and a fire detection product (WFABBA).
  - Virtual poster on this for Science Week
  - AWIPS II “freeze” at BOU may delay start of project
- **WFOs Cheyenne/Albuquerque/Great Falls:** Discussions continue on collaboration project with these Front Range WFOs to test snow discriminator products from CIRA and SPoRT.
- **ORI evaluation project with West Coast WFOs:** Teleconference on 5 February with Chad Gravelle about setting up a formal evaluation of ORI next rainy season with WFOs along the West Coast.
  - Continue to examine cases – will show recent one from Hawaii



# South TX Duststorm – VIIRS imagery from 20 Feb



## Some METAR Observations from El Paso, Texas:

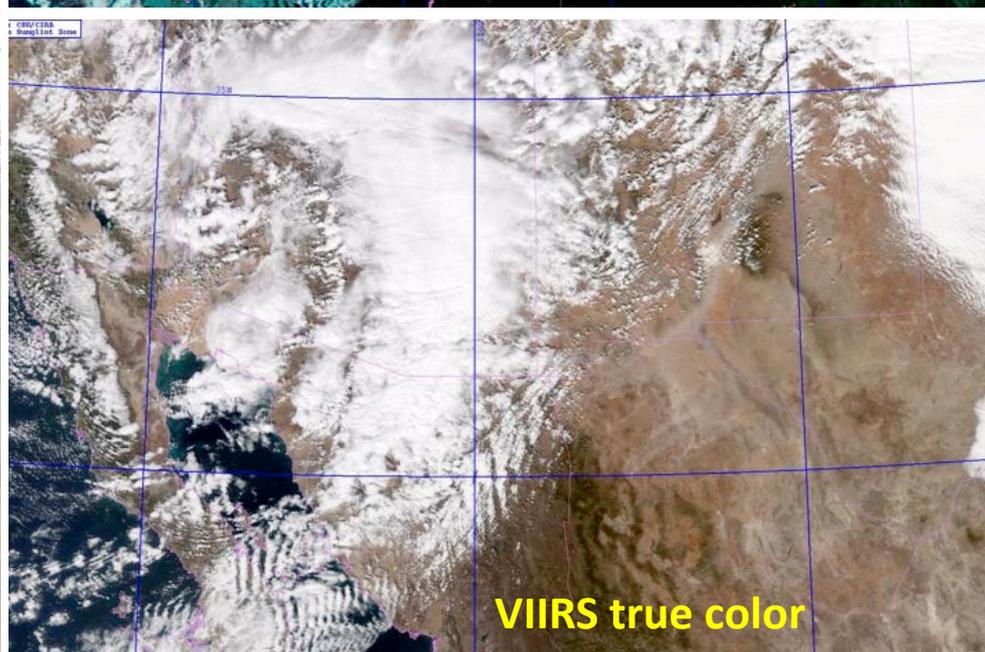
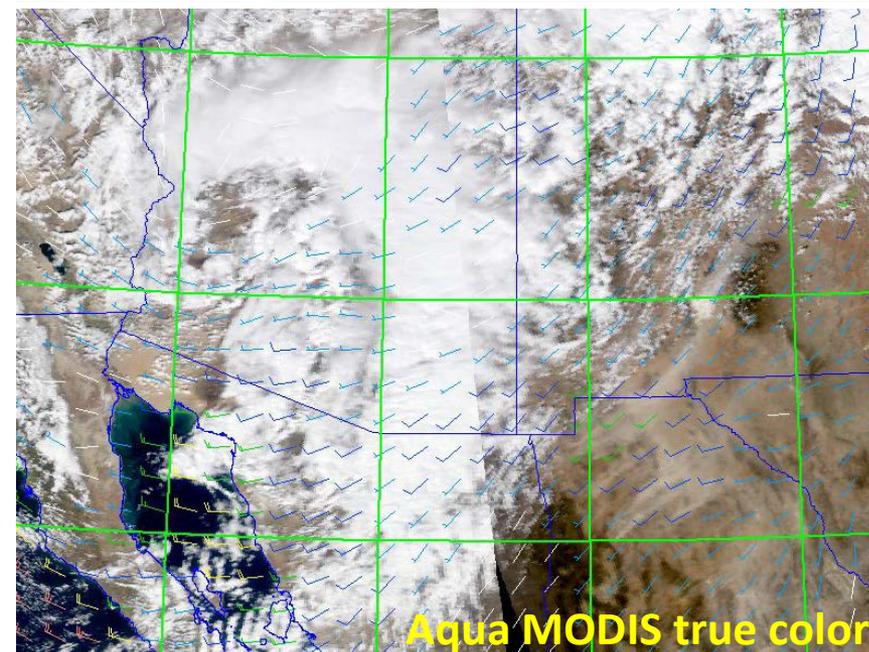
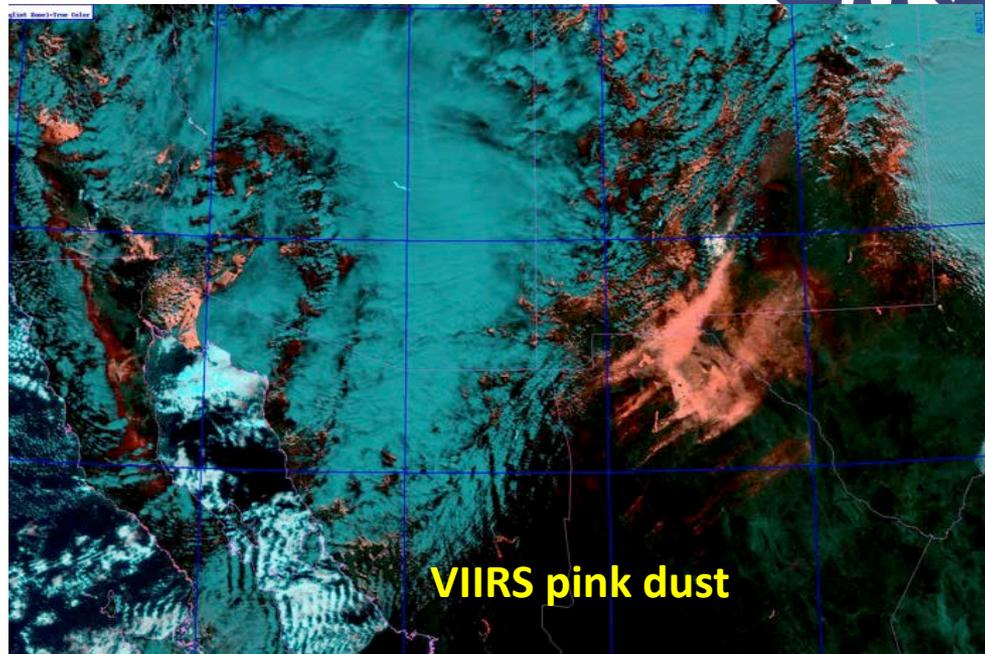
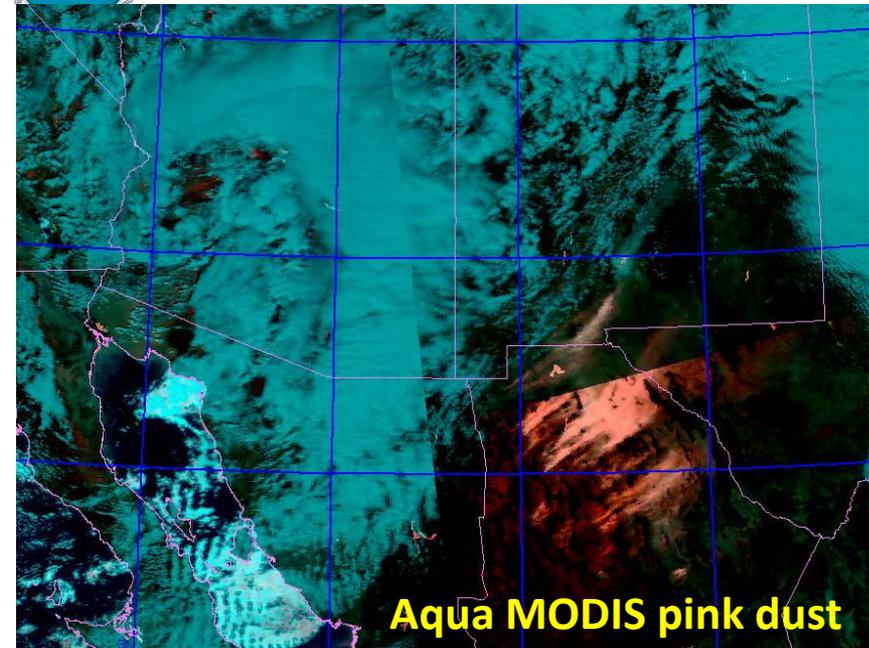
*Worst conditions appeared to be nearby but not at ELP*

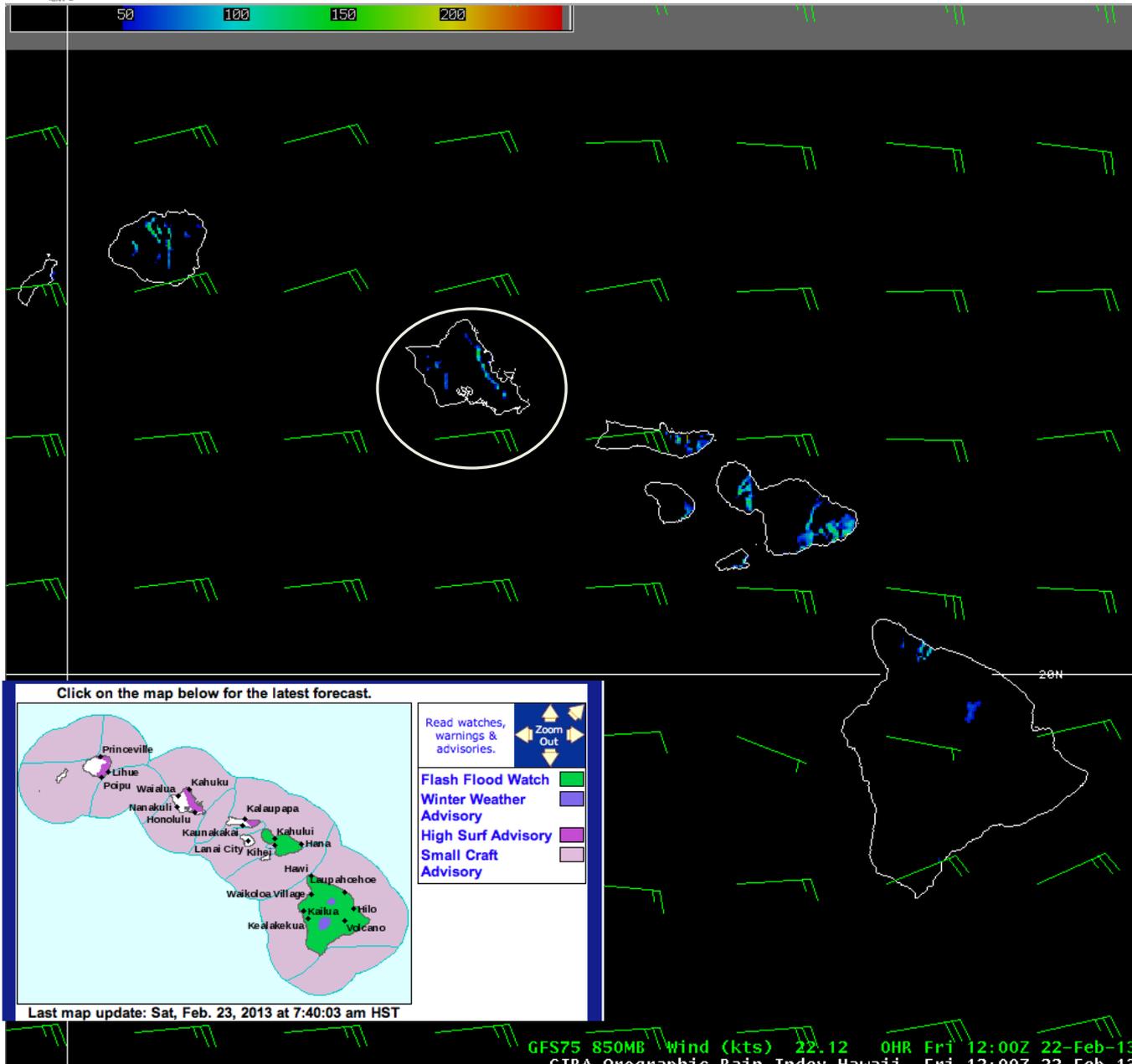
KELP 210051Z 25024G33KT **1SM BLDU** VV014 13/M07 A2956 RMK AO2 PK WND 25041/0041  
SLP979 MTNS OBSCD SW-NW T01331067

KELP 210033Z 25016G32KT **3/4SM BLDU** VV014 14/M08 A2957 RMK AO2 PK WND 24038/0004  
MTNS OBSCD SW-NW

KELP 210004Z 25022G38KT **1 1/2SM BLDU** VV014 14/M07 A2956 RMK AO2 PK WND 24038/0004  
MTNS OBSCD SW-NW

**Next we compare imagery near 2000 UTC for this event from VIIRS  
and MODIS**

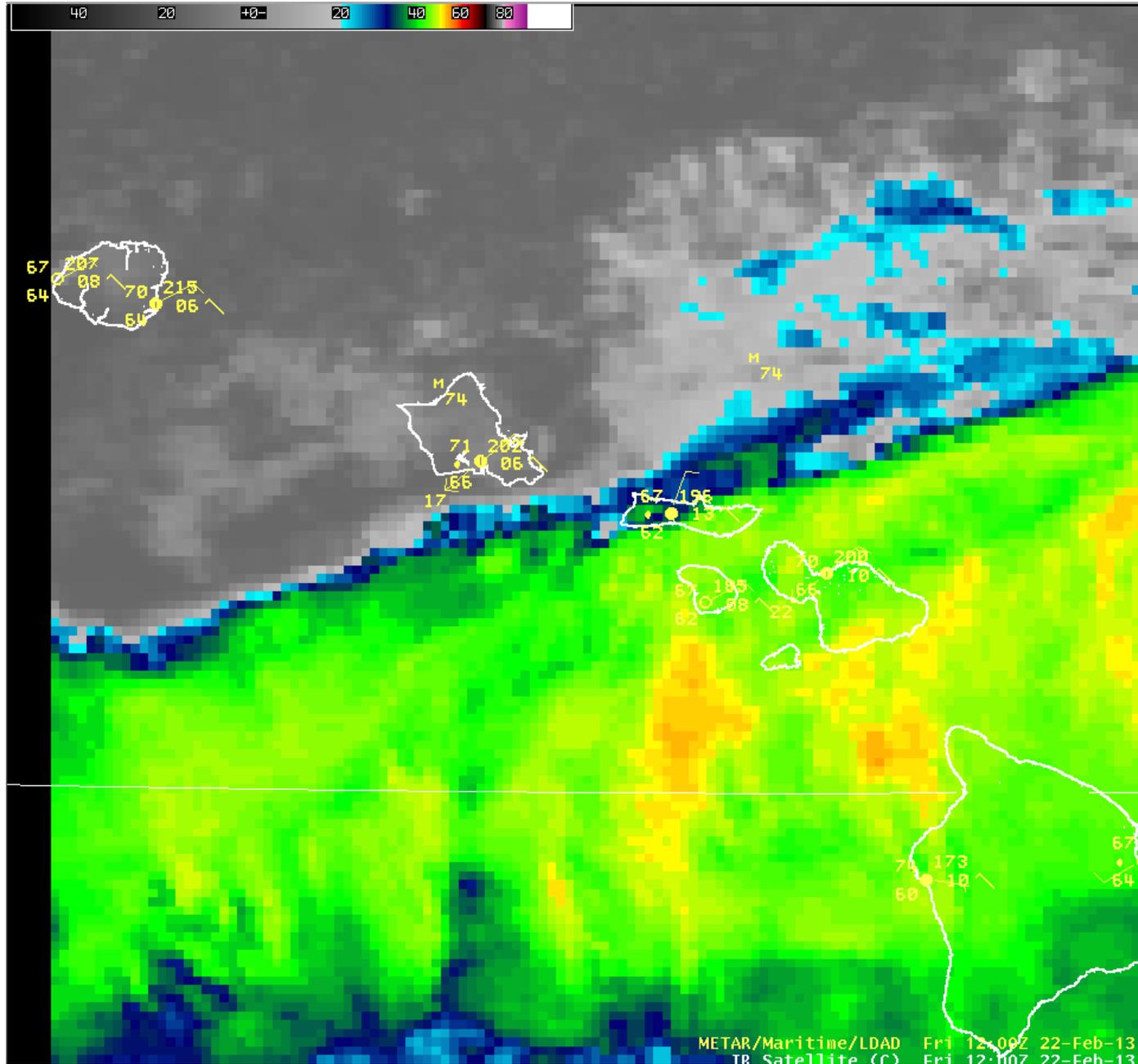




Strong trade winds produced locally heavy rains over a several day period. Shown here is the ORI product with 850 mb winds for Hawaii.

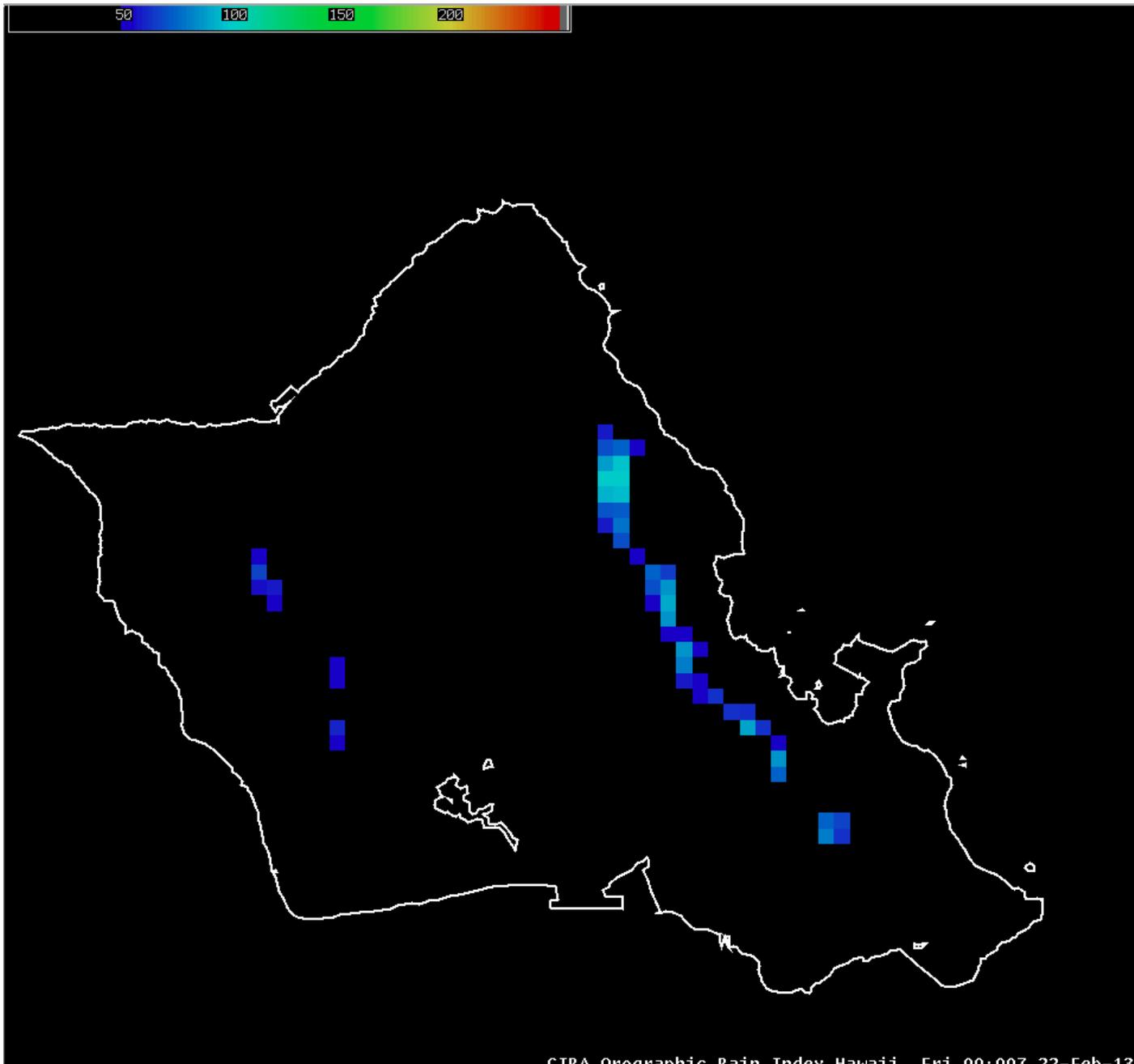
Insert shows area of Flash Flood Watch covering many of the islands. We will focus on the island circled.

# IR loop on 22 February: 12-15 UTC

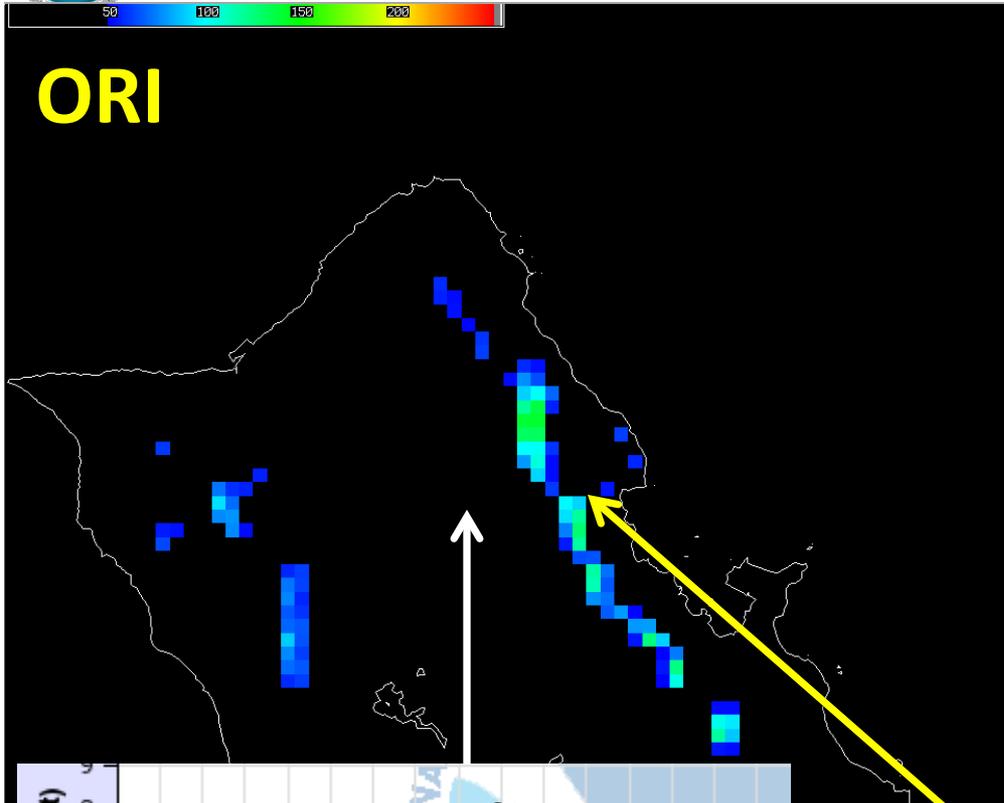




# ORI loop on 22 Feb: 03-15 UTC every 3h

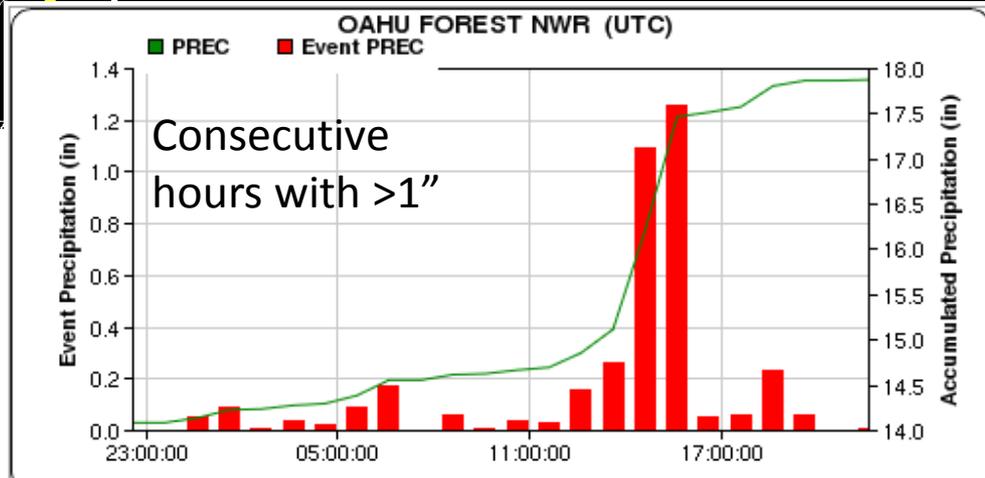
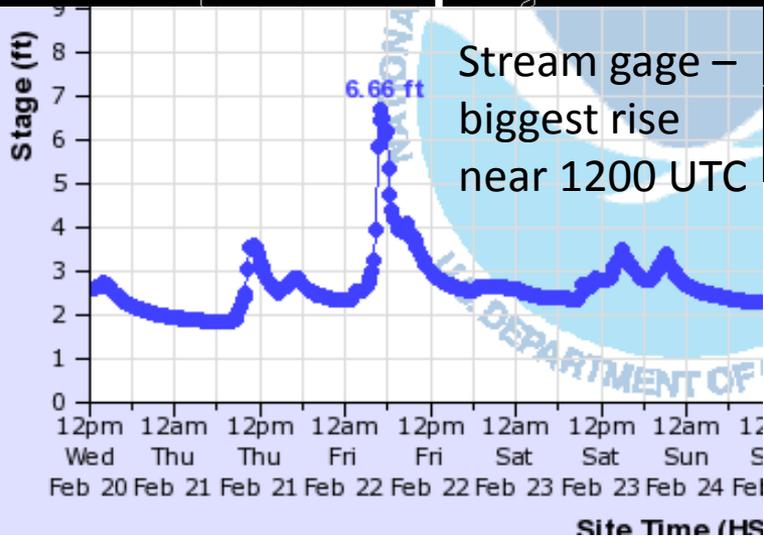
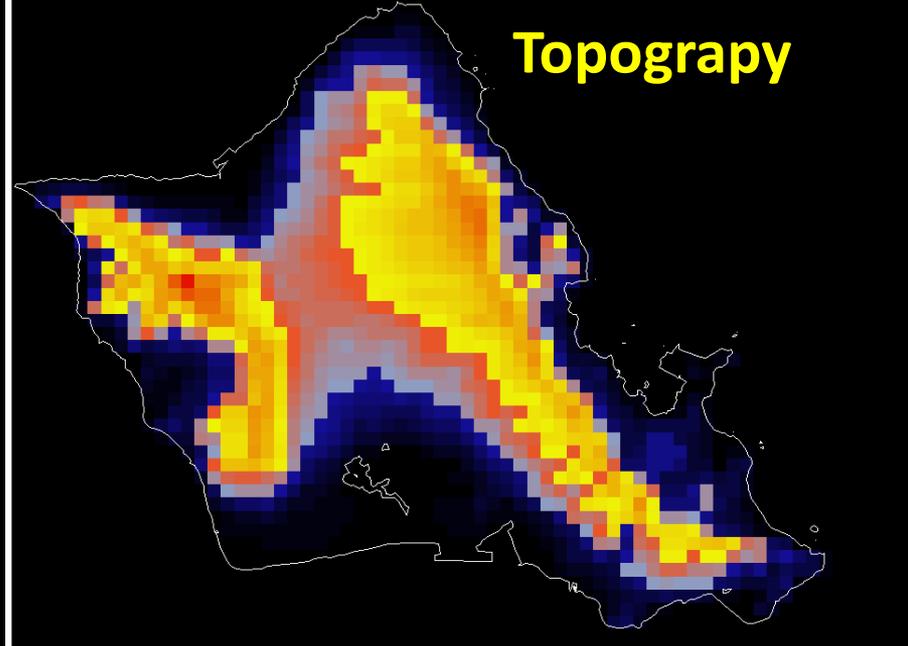


## ORI



ORI is closely related to orographically forced precip

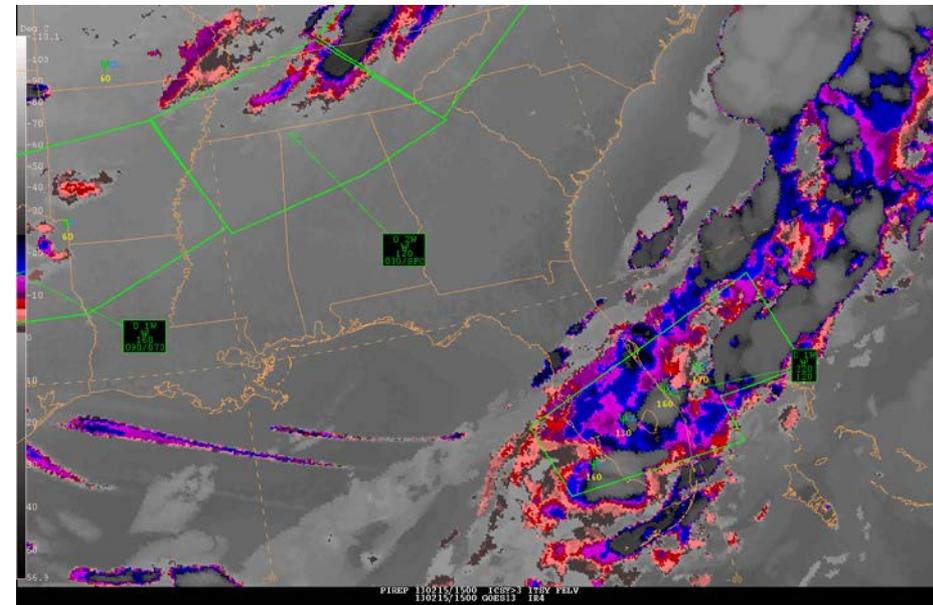
## Topography



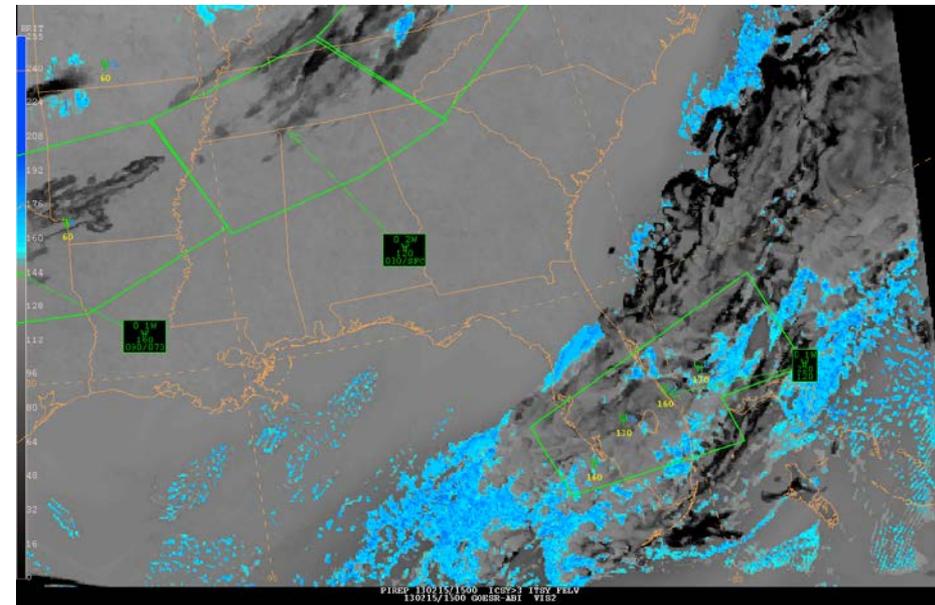
# Synthetic Imagery at Aviation Weather Testbed Winter Experiment

- CIRA synthetic imagery products tested at the AWT Winter Experiment in February
- Forecasters suggested modifying color table of IR imagery to highlight forecast clouds posing an icing danger
- 10.35-3.9  $\mu\text{m}$  used to identify liquid water clouds
- Feedback was very favorable, e.g., “[The simulated imagery] is so real'... many forecasters mentioned how appealing modeled imagery is. It is something they are used to seeing in operations and has done an excellent job in picking out specific feature.”

4-km NAM Nest Synthetic IR – 15 hr fcst



4-km NSSL WRF Synthetic 10.35-3.9 – 15 hr fcst



## AWIPS1

- **NSSL WRF Synthetic Imagery to PBZ (Pittsburg, PA)**
  - D. Lindsey sent installation instructions PBZ.
  - Matthew Kramer has installed the product on PBZ system

## AWIPS2

- **AWIPS2 products to BOU**
  - Efforts are underway to implement real-time CIRA 4 KM SIMWRF IR & WV AWIPS2 products at BOU.
- **CIRA Participation in the GOES-R Proving Ground Experimental Products Development Team (EPDT)**
  - D. Molenaar will attend the hands-on AWIPS2 plugin development training session at SPoRT March 12-14. She has also been participating in the bi-weekly Webex training sessions led by Jason Burks and the SPoRT team. The sessions have provided helpful information on the AWIPS2 Application Development Environment (ADE).



# Conferences / Meetings



## Recent:

- February 6-7: Hazardous Weather Workshop , Norman OK  
Dan Lindsey and Louie Grasso
- February 26: Eastern Region Virtual Satellite Workshop  
Dan Bikos presented, Ed Szoke participated

## Upcoming:

- March 5-7: Interdepartmental Hurricane Conference, College Park, MD  
John Knaff & Kate Musgrave  
Remotely Participating: Mark DeMaria & Andrea Schumacher
- March 12-14: EPDT/AWIPSII workshop at SPoRT  
Deb Molenaar
- March 18-22: NOAA Science Week
- March 25-29: Geoffrey Stan, SPoRT, visiting CIRA *\*subject to change*  
(GOES-R Visiting Scientist Program)
- April 8-12: NOAA Satellite Conference, College Park, MD  
Don Hillger, Bernie Connell, Curtis Seaman, Mark DeMaria,  
& Steve Miller



**Thanks!**

**Questions..?**