



# High Latitude Proving Ground Liaison

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# Background

- Location: Geographic Information Network of Alaska (GINA) at University of Alaska Fairbanks (UAF)
  - Synergy: one building away from WFO Fairbanks
- Been in this position since its inception, December 2012
- Partner with NWS Alaska Region
  - The “Pointy End of the Spear”: 3 WFOs, Alaska-Pacific RFC, CWSU, and Alaska Aviation Weather Unit

# Training the Satellite Liaison

- No formal training so far, but lots of OJT
- Missed the “Boot Camp” in summer, 2013
- Extensive training from years as forecaster and SOO, most of that time in Alaska Region



# Best Practices

- GINA succeeds best when collaborating with NOAA line offices, other CIs, and Satellite Program Offices to help them succeed in Alaska
- GINA's succeeds best when applying and adapting products and techniques to address unique Alaskan Challenges
  - Proving Ground imagery for the “Ice Desk”

# Training, Past and Future

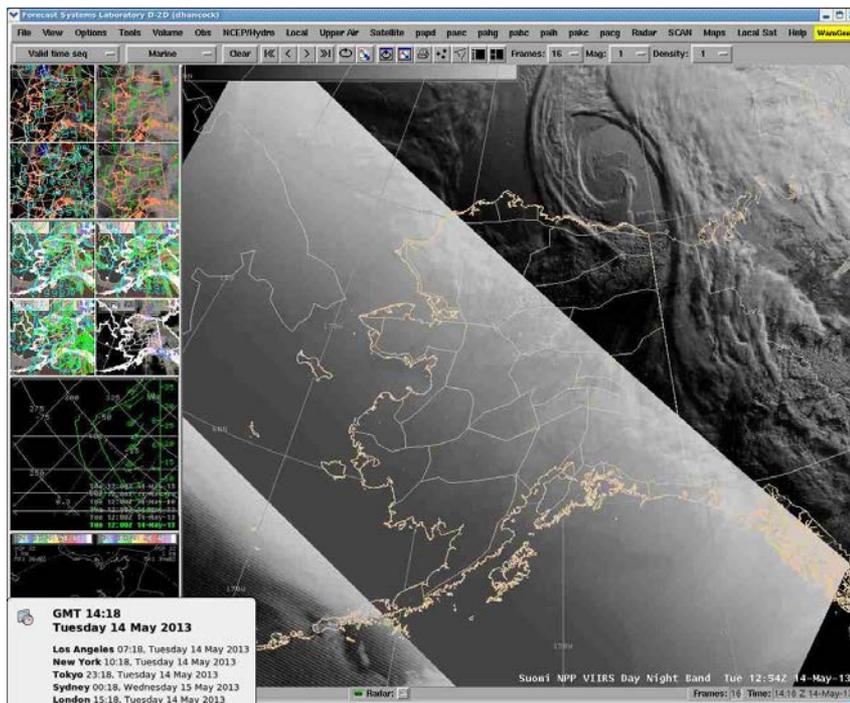
- Know your audience: accept and embrace diversity in training
  - Various media: hard copy Quick Guides, blog entries, COMET modules, training in person, etc
  - Liaison can identify one or two “spark plugs” in each operational office...train the “spark plugs,” and they will then spread the knowledge locally
  - Some forecasters want to see all new products ASAP, even if products are rough and unfinished. Other forecasters may want only finished products.
  - Training needs to be perceived as relevant, and different people have different definitions of relevant

# Closing the O2R-R2O Loop with Developers

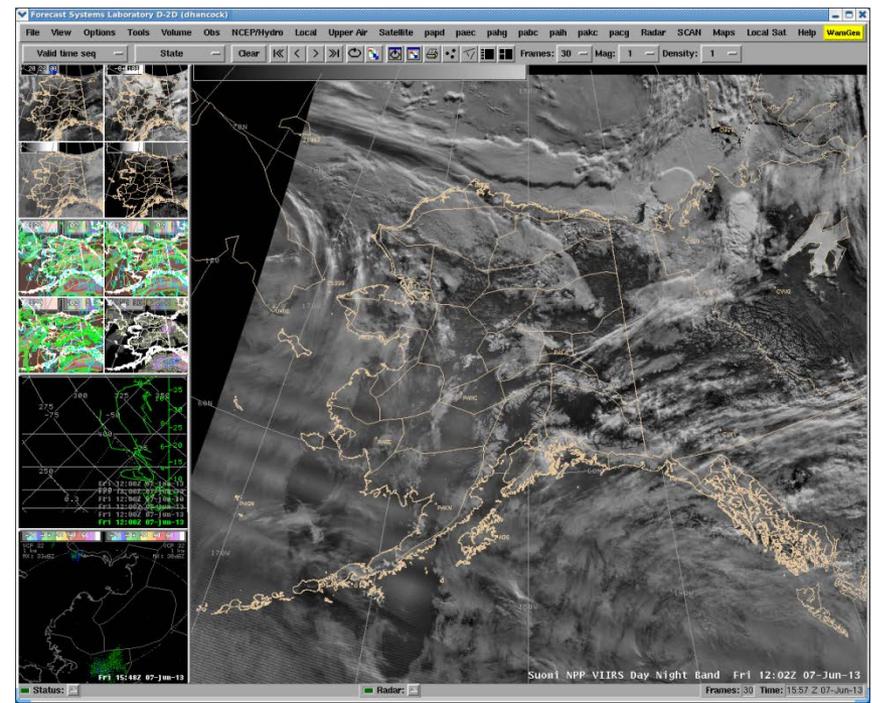
1. Refining existing products
  - Day-Night Band “striping” and stray light issues in 2013
2. Contributing to the design, deployment, and training of new products
  - New GMU/CCNY flood products
  - Cold Air Aloft from CrIS

# An Ongoing, Iterative Process: Improvement to CSPP and VIIRS Day-Night Band

Before: May 14, 2013



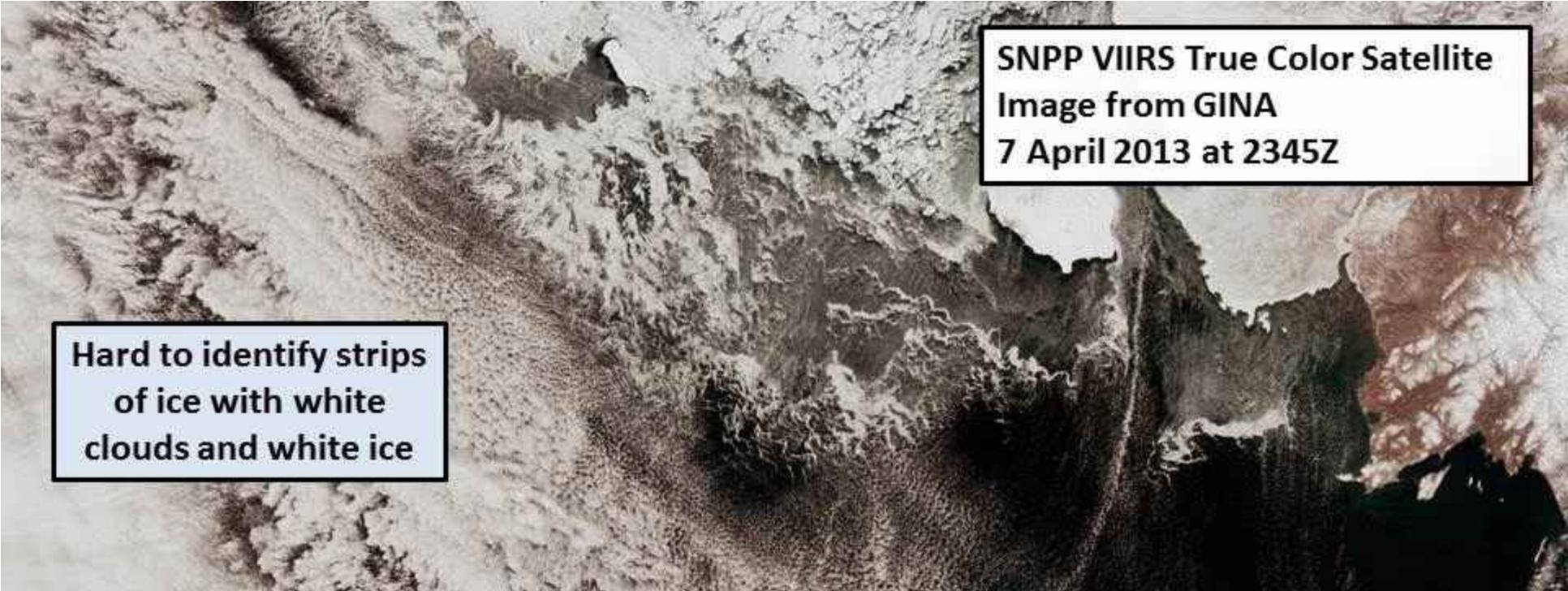
After: June 7, 2013



*“One can still see discontinuities in the processing, but they are not likely to be operationally significant. Personally, I'm delighted.”* –NWS Meteorologist Dan Hancock, June 7, 2013

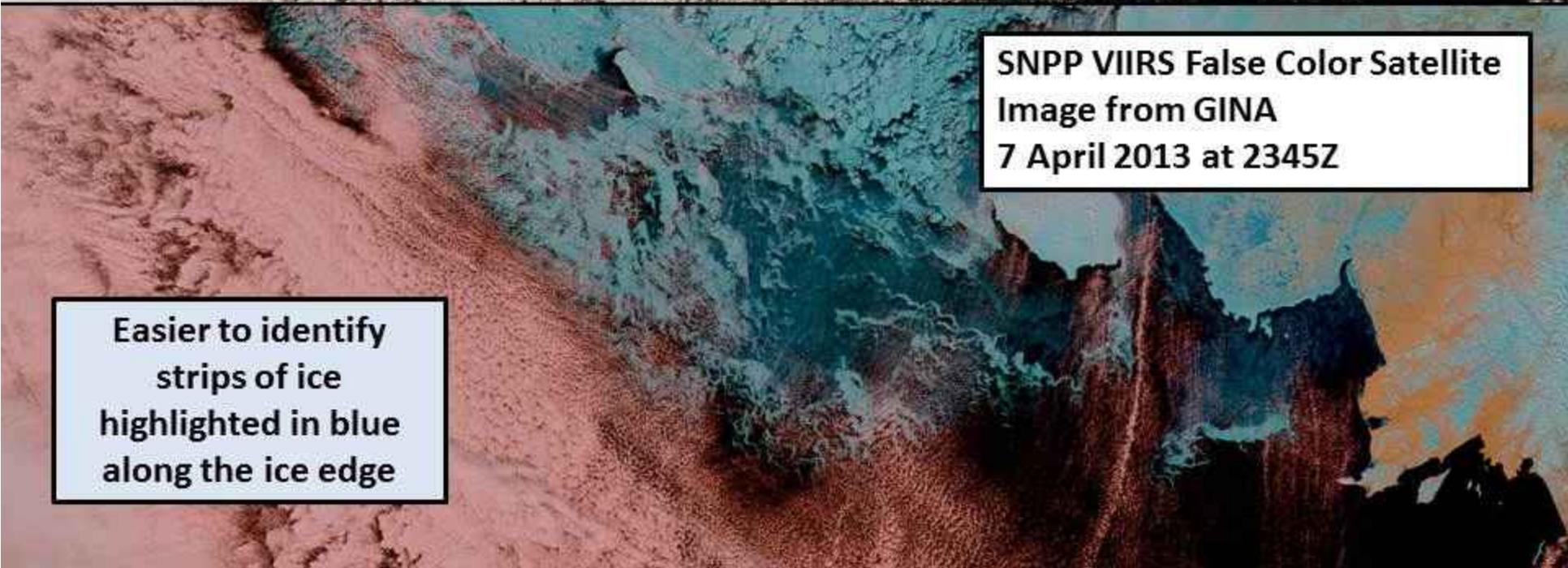
# Biggest Success Story

- The “Ice Desk” at WFO Anchorage
  - Where the Proving Ground most immediately and obviously helps the NWS in Alaska provide the best possible guidance to the public
  - NWS and GINA will collaborate to produce a JPSS Science Seminar on December 15, 2014
  - This is a success and validation of the entire Proving Ground process...Satellite Liaison is only one member of large and amazing team

A true color satellite image showing a complex ice formation. The image is dominated by shades of white, light gray, and dark gray, representing different ice textures and cloud cover. The overall appearance is somewhat blurry and lacks high contrast, making it difficult to distinguish between different ice types.

**SNPP VIIRS True Color Satellite  
Image from GINA  
7 April 2013 at 2345Z**

**Hard to identify strips  
of ice with white  
clouds and white ice**

A false color satellite image of the same ice formation. The image uses a color palette where ice is represented by various shades of blue and cyan, while the surrounding water or land is shown in shades of red, orange, and brown. This color scheme provides much higher contrast than the true color image, making the boundaries and internal structures of the ice much clearer.

**SNPP VIIRS False Color Satellite  
Image from GINA  
7 April 2013 at 2345Z**

**Easier to identify  
strips of ice  
highlighted in blue  
along the ice edge**

# Challenges

- NWS Alaska chronically short-staffed
  - Consequence: Because immediate operations come first at NWS, research and training get pushed aside
  - Good news: recent budget agreement is allowing some positions to be filled
- Forecasters are busy and already have too much data...and here we give them more data
  - Incumbent on CIs, developers, liaisons to demonstrate to forecasters why these products are simply too useful not to embrace

# Vision: the Satellite Liaison at GINA

- Is the one person on GINA's staff who “speaks operational meteorology”
- Liaison helps link together four different organizations within Alaska:
  - NOAA/NWS
  - NOAA/NESDIS
  - Alaska Fire Service
  - UAF/GINA
- Liaison helps link Alaska to “outside” organizations: CIs, Program Offices, etc
- Keeps eyes open for unique Alaskan “gotchas” and opportunities