

Alaska Region Proving Ground Activities, Demonstration and Evaluation

–or–

“Where We Are”

Eric Stevens

UAF / GINA

Outline

- An Inspirational Mission Vision
Core Value Statement Manifesto:
“Follow-through to Effectiveness”
- Case in Point: Day-Night Band
- Additional Products
 - GOES-R and MODIS products
 - VIIRS channels
- GINA’s website
 - Searchable Puffin Feeder
- PG Interactions



Follow-through to Effectiveness

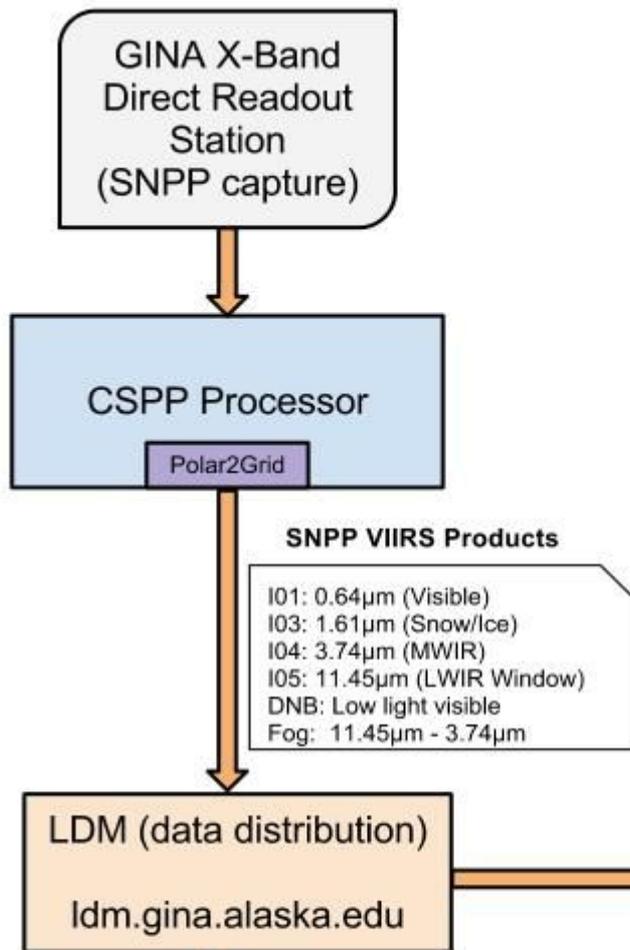
- Launch satellite
- Get data, produce products
- Distribute relevant products to NWS with minimal latency
 - Good: Products on an Internet site
 - Better: Products in AWIPS
 - Best: Products in AWIPS in an optimally-organized fashion
- Train forecasters and learn from NWS forecasters regarding the utility of these products in the forecast process
- Payoff: NWS forecasters use satellite products to protect lives and property
- *Note: This is an ongoing, iterative process.*



Case in Point: Day-Night Band

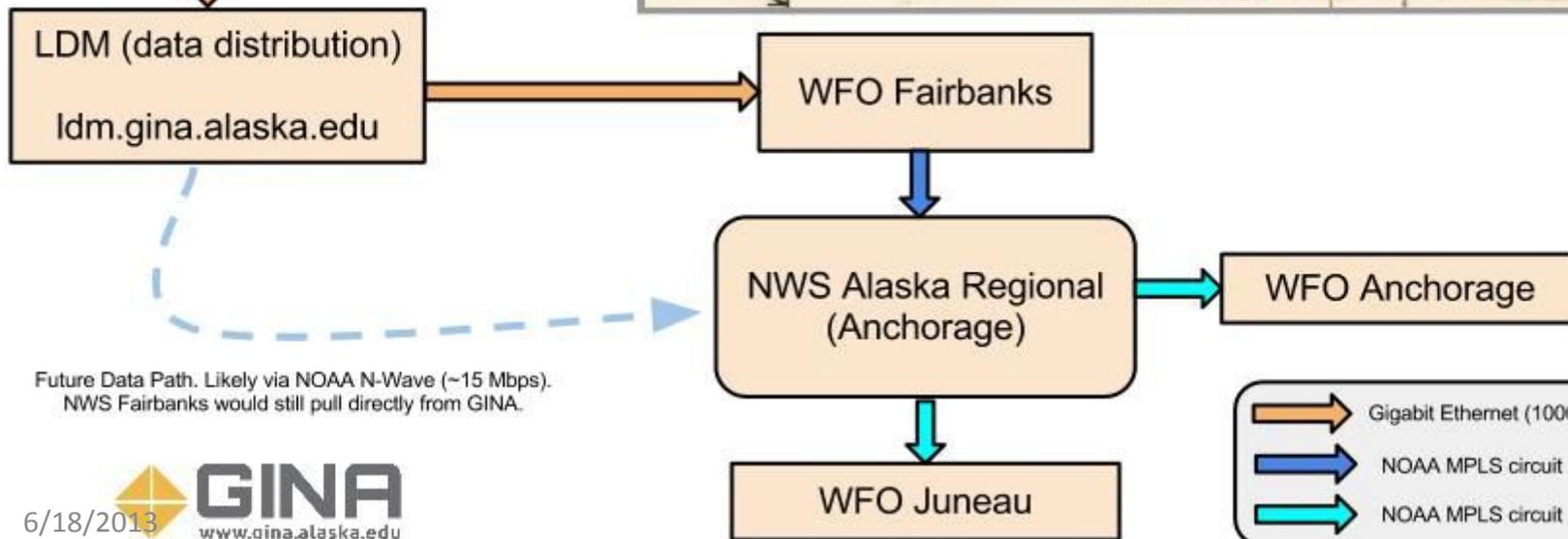
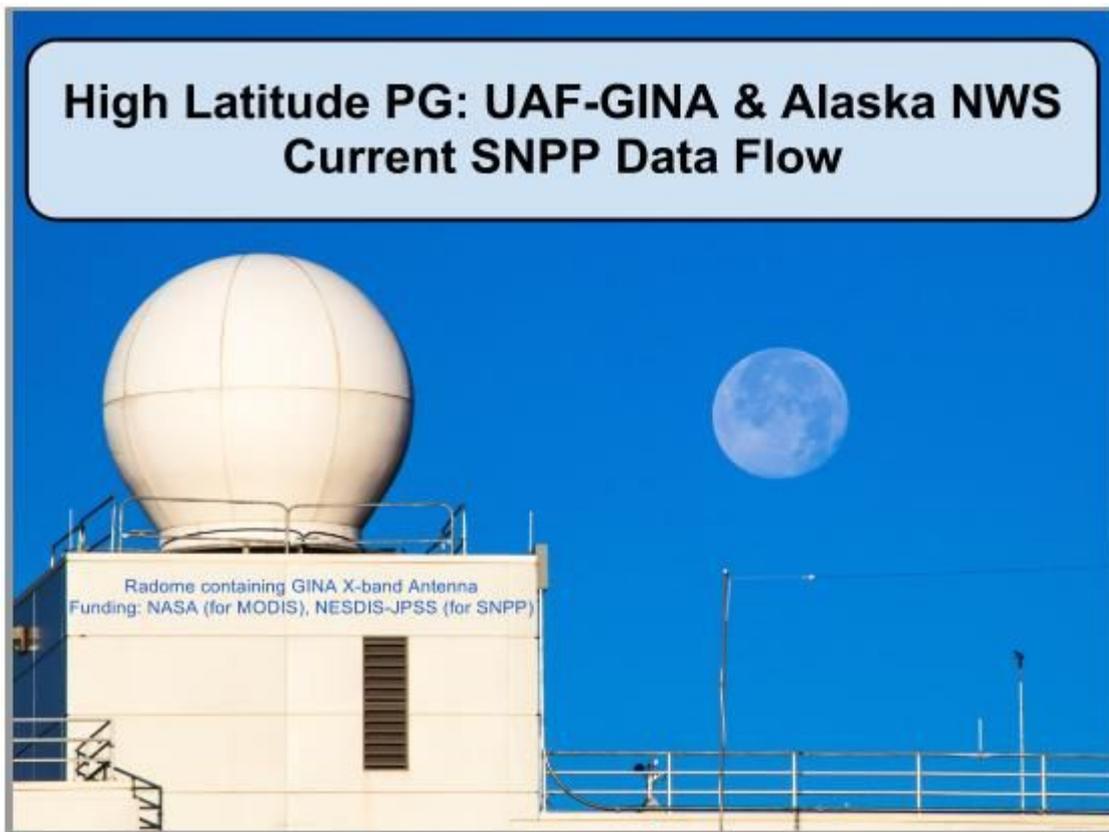


- Step 1: Launch Satellite
– October 2011

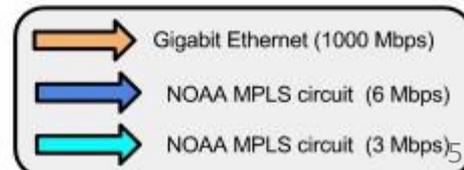


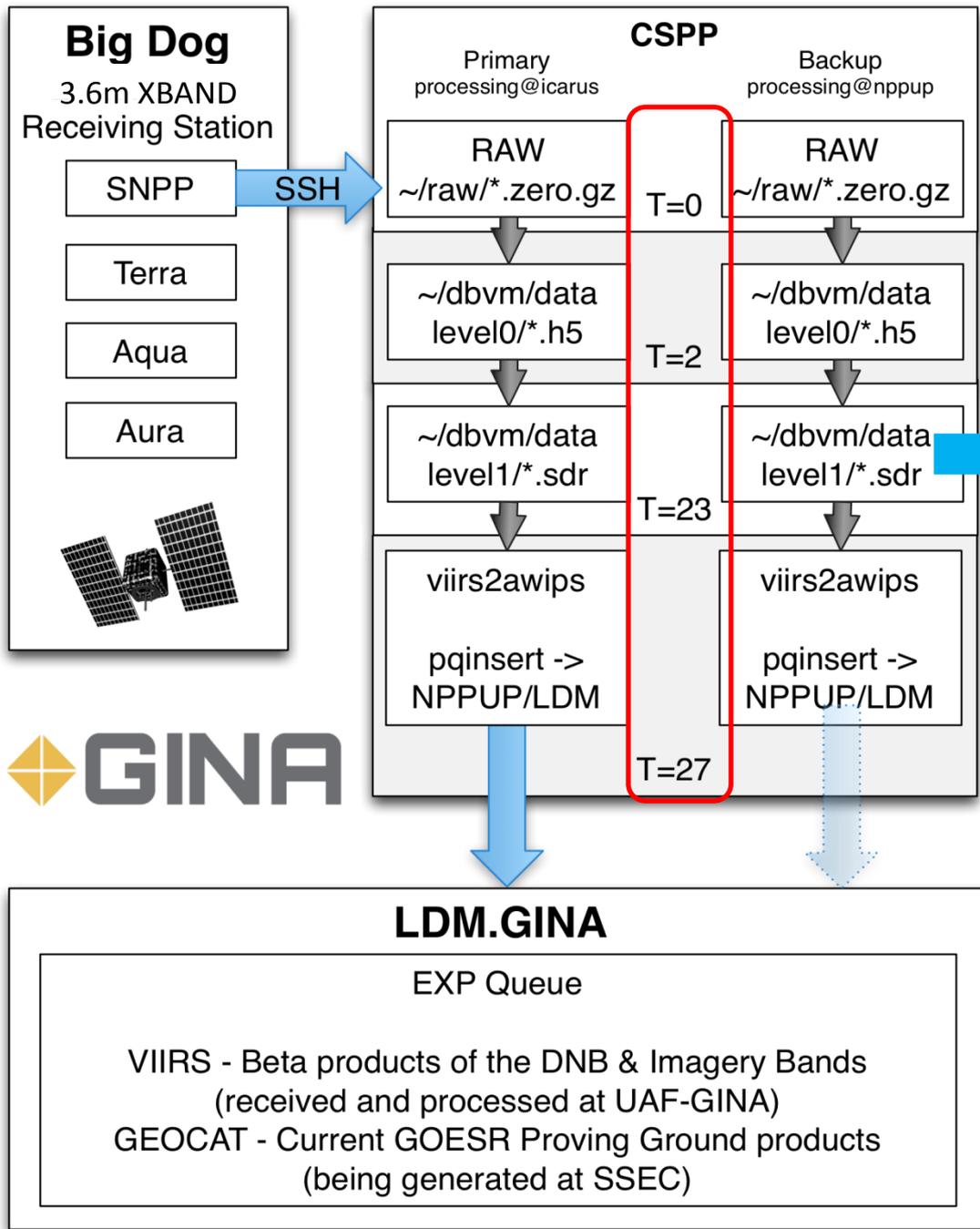
SNPP VIIRS Products

- I01: 0.64 μ m (Visible)
- I03: 1.61 μ m (Snow/Ice)
- I04: 3.74 μ m (MWIR)
- I05: 11.45 μ m (LWIR Window)
- DNB: Low light visible
- Fog: 11.45 μ m - 3.74 μ m



Future Data Path. Likely via NOAA N-Wave (~15 Mbps).
NWS Fairbanks would still pull directly from GINA.





To Feeder web site for use by NWS Anchorage Ice Desk



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MAIN MENU

[Imagery](#)[Animations](#)

SENSORS

Select: [All](#) / [None](#) MODIS

0

 Radar

0

 VIIRS

7139

 Webcam

0

FEEDS

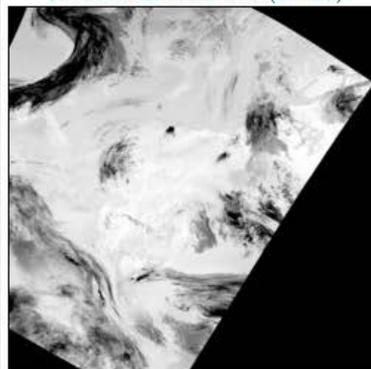
DATE SELECTION

Reset

Search

SNPP I05

2013-06-13 13:30 UTC (JD164)



Processed about 2 hours ago

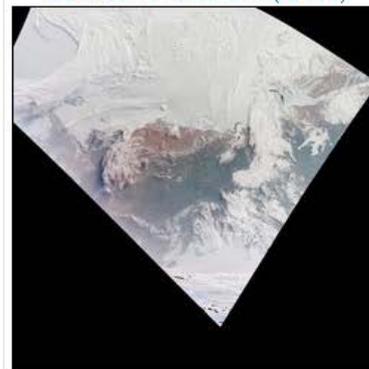
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Large

Original

SNPP Truecolor

2013-06-13 13:30 UTC (JD164)



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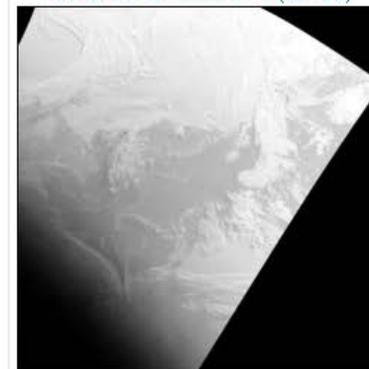
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Original

SNPP Day-Night-Band

2013-06-13 13:30 UTC (JD164)



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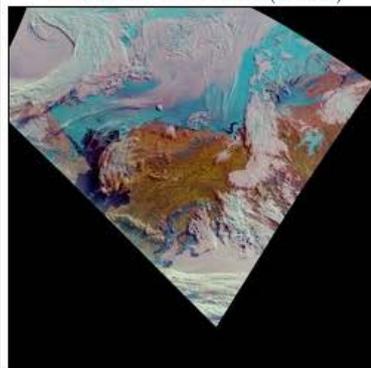
Medium

Large

Original

SNPP Landcover

2013-06-13 13:30 UTC (JD164)



Processed about 2 hours ago

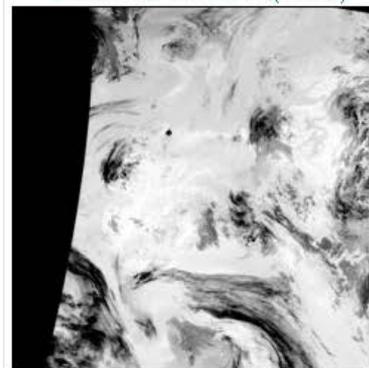
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Original

SNPP I05

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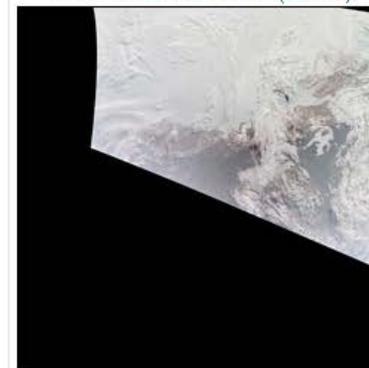
Medium

Large

Original

SNPP Truecolor

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Medium

Large

Original

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SNPP Landcover

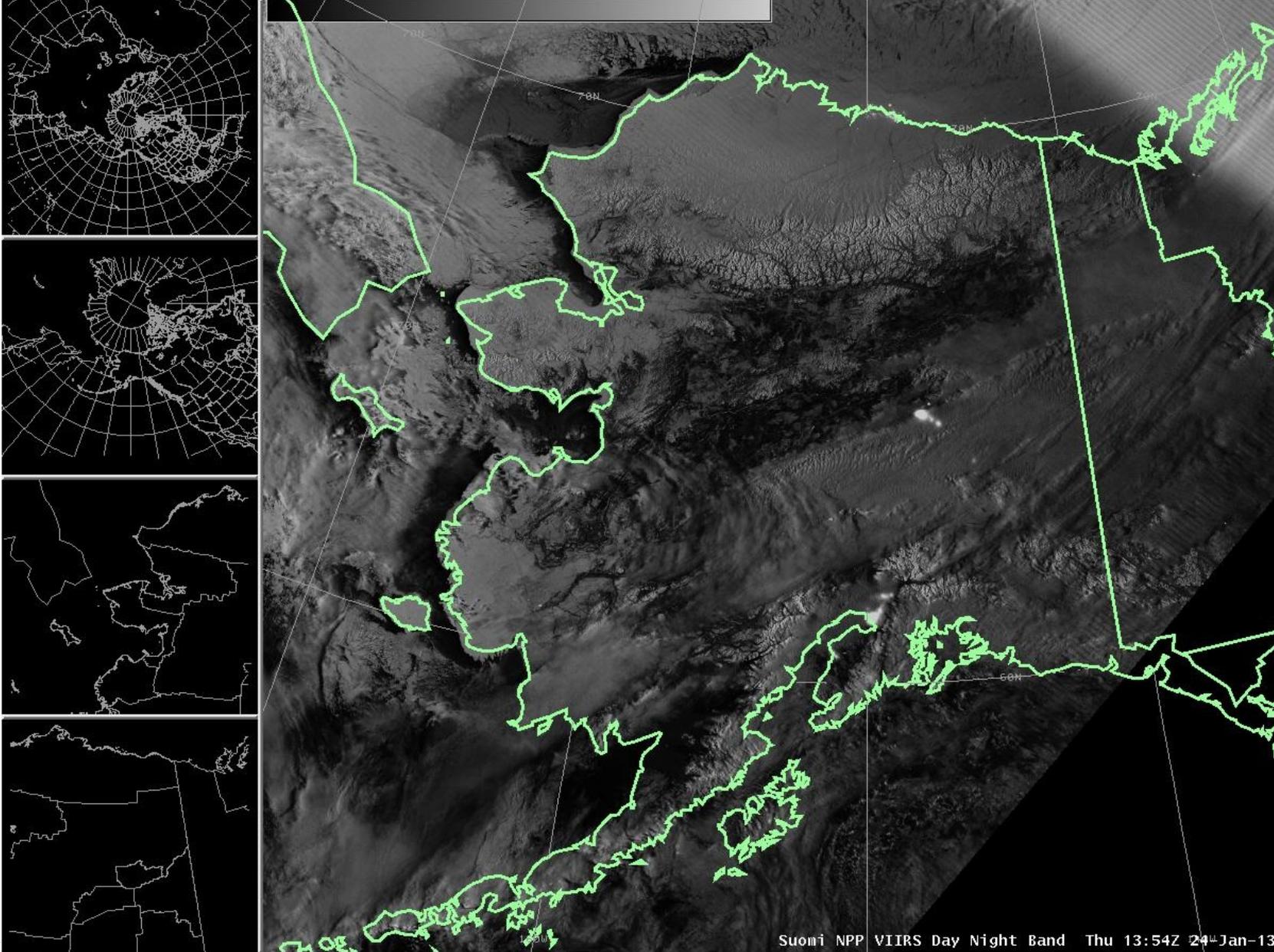
2013-06-13 11:50 UTC (JD164)



SNPP I05

2013-06-13 10:10 UTC (JD164)





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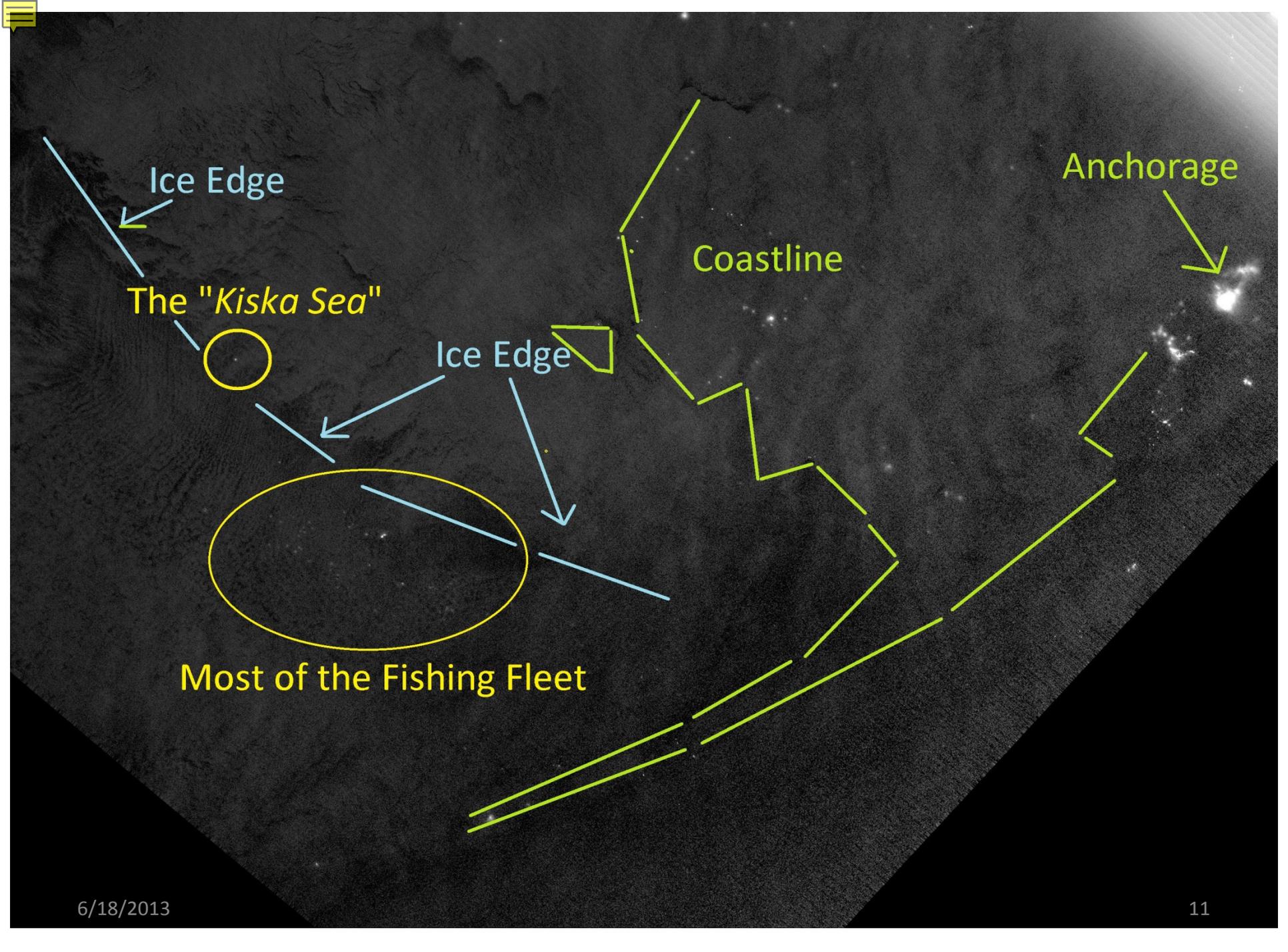
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Ice Edge

Anchorage

Coastline

The "Kiska Sea"

Ice Edge

Most of the Fishing Fleet

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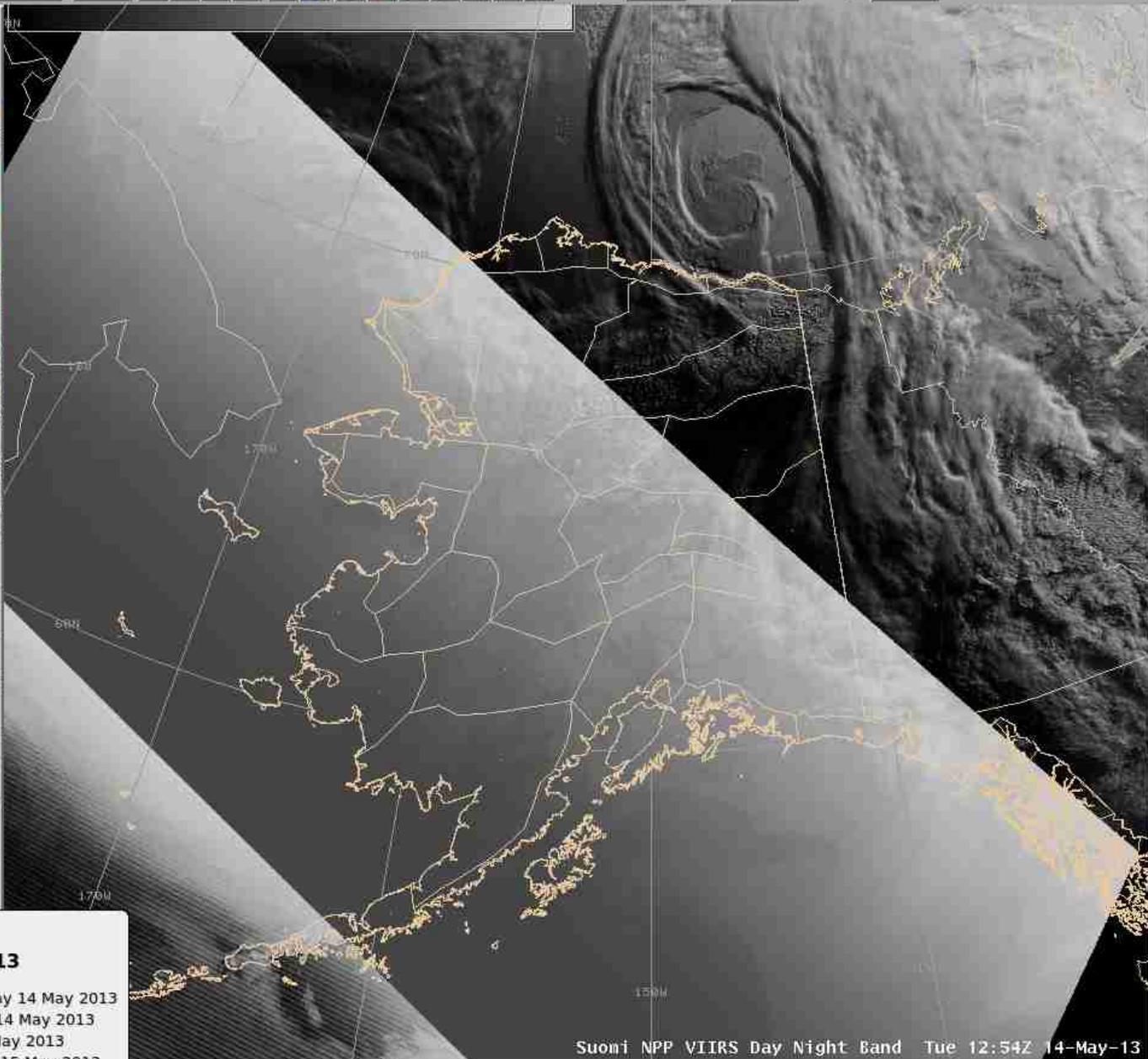
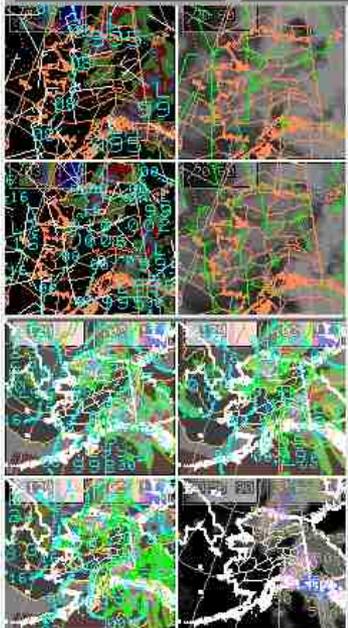
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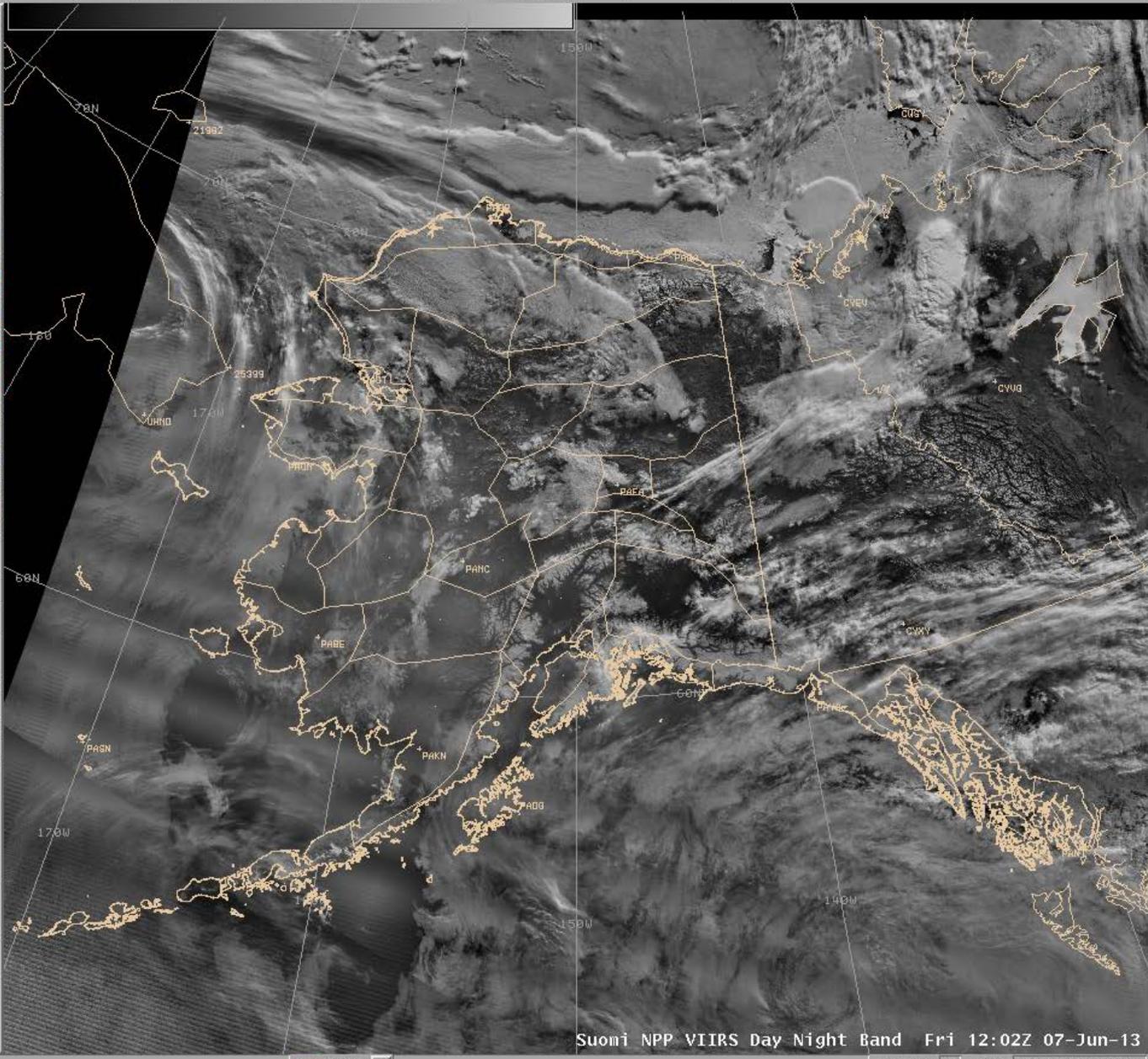
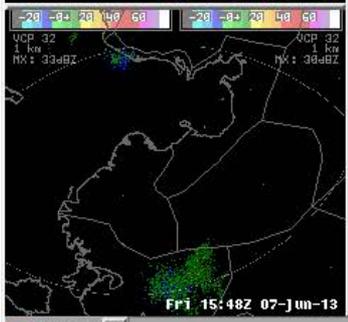
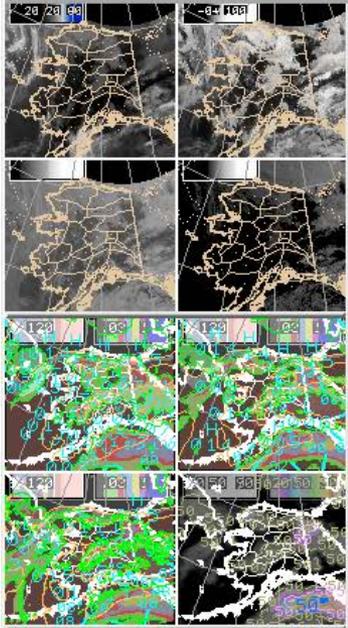
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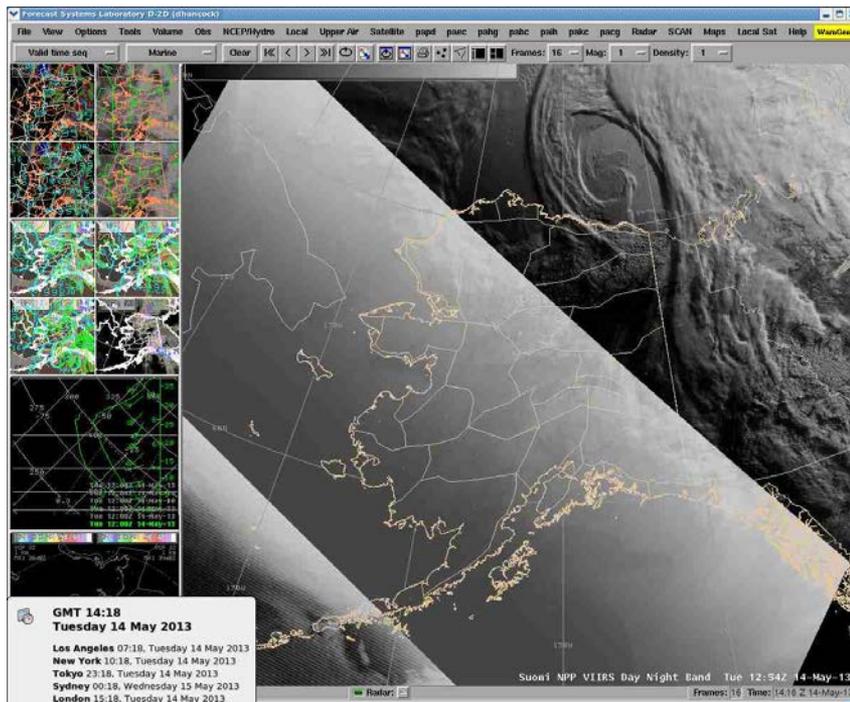
GMT 14:18
Tuesday 14 May 2013

Los Angeles 07:18, Tuesday 14 May 2013
New York 10:18, Tuesday 14 May 2013
Tokyo 23:18, Tuesday 14 May 2013
Sydney 00:18, Wednesday 15 May 2013
London 15:18, Tuesday 14 May 2013

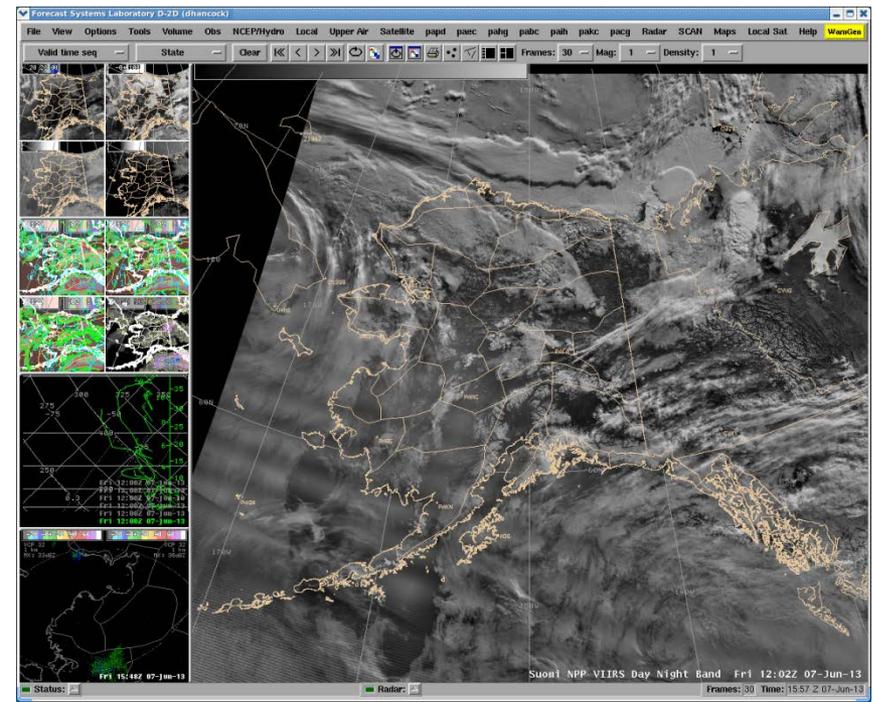


An Ongoing, Iterative Process: Improvement to CSPP and VIIRS Day-Night Band

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

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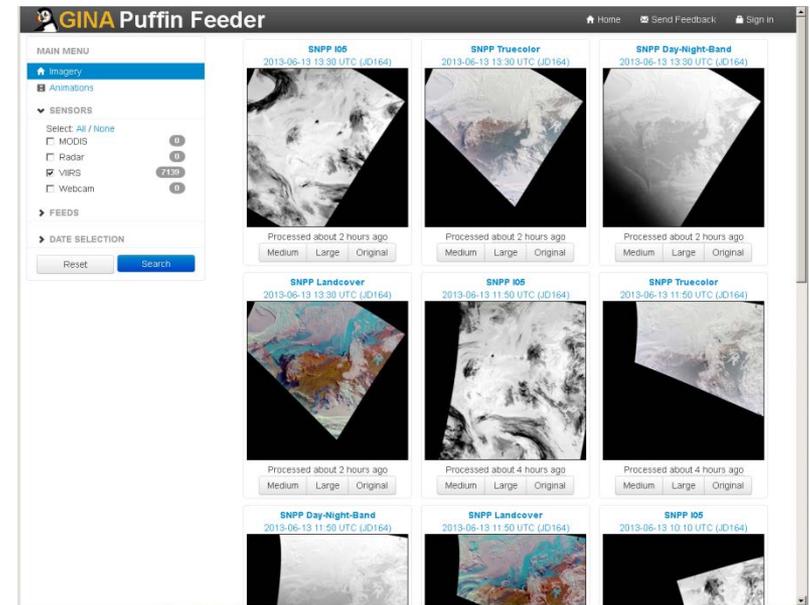


Additional Products

- MODIS Imagery
 - Ice Desk
 - Volcanic Ash
 - Fog & Low Stratus
 - To date, MODIS version preferred by NWS Alaska over GOES version
- Additional VIIRS channels
 - Including VIIRS i05 as requested by the National Ice Center

Puffin Feeder Website

- Recently upgraded to allow user to sort by
 - Data platform / sensor
 - Range of dates
- *“Archive is very useful when doing case studies,”* –Don Moore, Meteorologist in Charge, Alaska Aviation Weather Unit
 - Interface and products can still be improved



GINA's PG Interactions

- JPSS Science Seminar January 29, 2013
- Hosted Bill Smith's CrIS seminar, February 28, 2013
- NOAA Satellite Conference, April 2013
- CSPP/IMAPP Workshop, May 2013
- OCONUS Meeting June 17-21, 2013

Thank You!



- Questions?
- <http://feeder.gina.alaska.edu/>
- eric@gina.alaska.edu
- 907-474-7022