High Latitude Proving Ground / GINA Update

Proving Ground All-Hands Meeting

July 1, 2013

Presented by Tom Heinrichs, GINA
tom.heinrichs@alaska.edu
OCONUS Meeting: June 17-21, 2013 in Alaska
Logistics & Attendance

• Monday June 17 - Anchorage
  – Late afternoon gathering at WFO/AAWU/RFC
  – Reviewed NOAT directives
  – Discussion with SOOs

• Tuesday June 18 – Anchorage
  – Program updates
  – Alaska and Pacific Region experiences and needs
  – OCONUS products
OCONUS Meeting: June 17-21, 2013 in Alaska
Logistics & Attendance, continued

• Wednesday June 19 - Anchorage
  – Algorithm and products presentations
  – After lunch meeting at WFO/AAWU/RFC
  – Travel to Fairbanks in afternoon evening

• Thursday June 20 – Fairbanks
  – Fairbanks: local products and facilities
  – Fairbanks WFO presentations
  – Liaison presentations
OCONUS Meeting: June 17-21, 2013 in Alaska
Logistics & Attendance, continued 2

- Friday June 21 – Fairbanks
  - Fairbanks Command and Data Acquisition Station: FCDAS at Gilmore Creek
  - Army Corps of Engineers: permafrost tunnel
OCONUS Meeting: June 17-21, 2013 in Alaska
Action Items – Overview

• Broad-scale polar imagery, GOES + POES loops
  – SPoRT hybrid product
  – STAR/CIMSS polar mosaics

• Need for improved communications between PG and FOs
  – In general
  – Improved product feedback loops
OCONUS Meeting: June 17-21, 2013 in Alaska
Action Items – Overview, continued

• Specific product follow-ups
  – Hyperspectral / Sounders
  – VOG
  – Simulated imagery
  – Lightning
  – FLS & clouds

• Low latency access to satellite data
  – Himawari – Japanese GEO
  – SNPP direct readout, low latency, local processing
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
Pavlof SO₂

SO₂ mass: 0.000 kt; Area: 0 km²; SO₂ max: 5.16 DU at lon: -162.97 lat: 54.84 ; 22:45UTC

SO₂ column 5 km [DU]

0.0 0.3 0.6 0.9 1.2 1.5 1.8 2.1 2.4 2.7 3.0

Courtesy: GINA - NASA Direct Readout Laboratory - NPP Ozone PEATE (slide from Nick Krotkov, NASA)
Pavlof Ash Products
Puffin Feeder Website

- Recently upgraded to allow user to sort by
  - Data platform / sensor
  - Range of dates

- “Archive is useful when doing case studies,”
  - Don Moore, MIC AAWU

- Can still be improved

feeder.gina.alaska.edu