GOES-R/JPSS Update from UAF Hydrology Group

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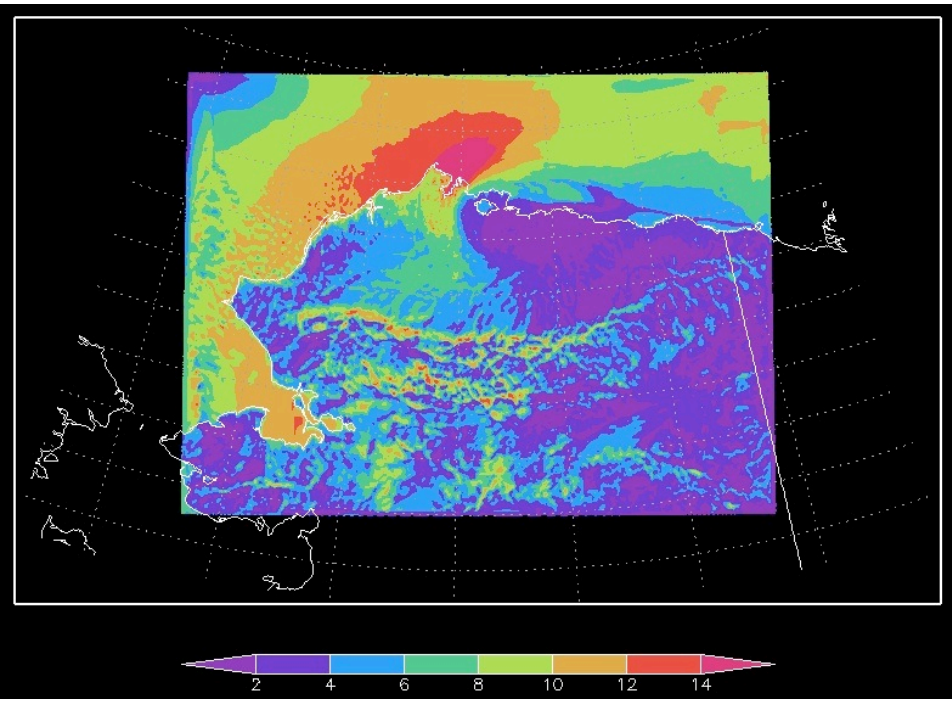
January 6, 2014 High Latitude PG All Hands

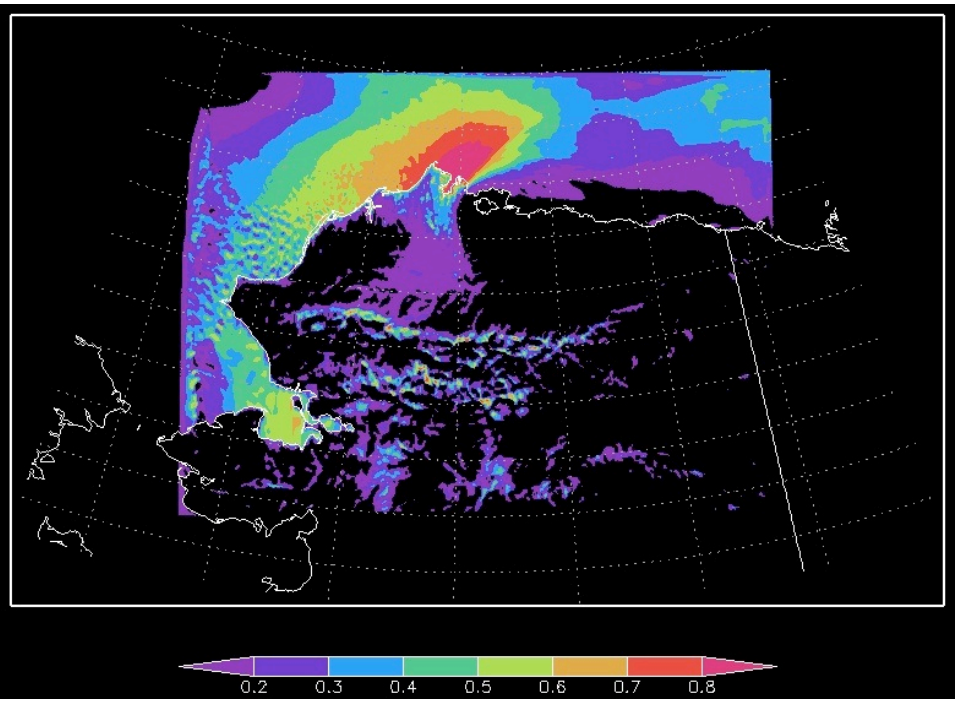
Testing Feasibility of Blowing Snow Probability Product

- Blowing snow causes a lot of problems for transportation, especially on Alaska's North Slope and Western regions
- Blowing snow is modeled as a function of air temp, windspeed and snow age
- Tested in research-mode, continuous WRF run and forecast-mode, HRRR-AK
- Manuscript by Cherry, Morton, Alexeev being submitted this month

Testing Feasibility of Blowing Snow Probability Product



Windspeed (m/s)



Blowing Snow Probability Index (0-1)

Testing Feasibility of Blowing Snow Probability Product

- Seeking collaborator for comparison/delineation of blowing snow events and low cloud/fog from GOES-R/JPSS PG products
- Interested? Email Jessie at jessica.cherry@alaska.edu

Leading Discussions

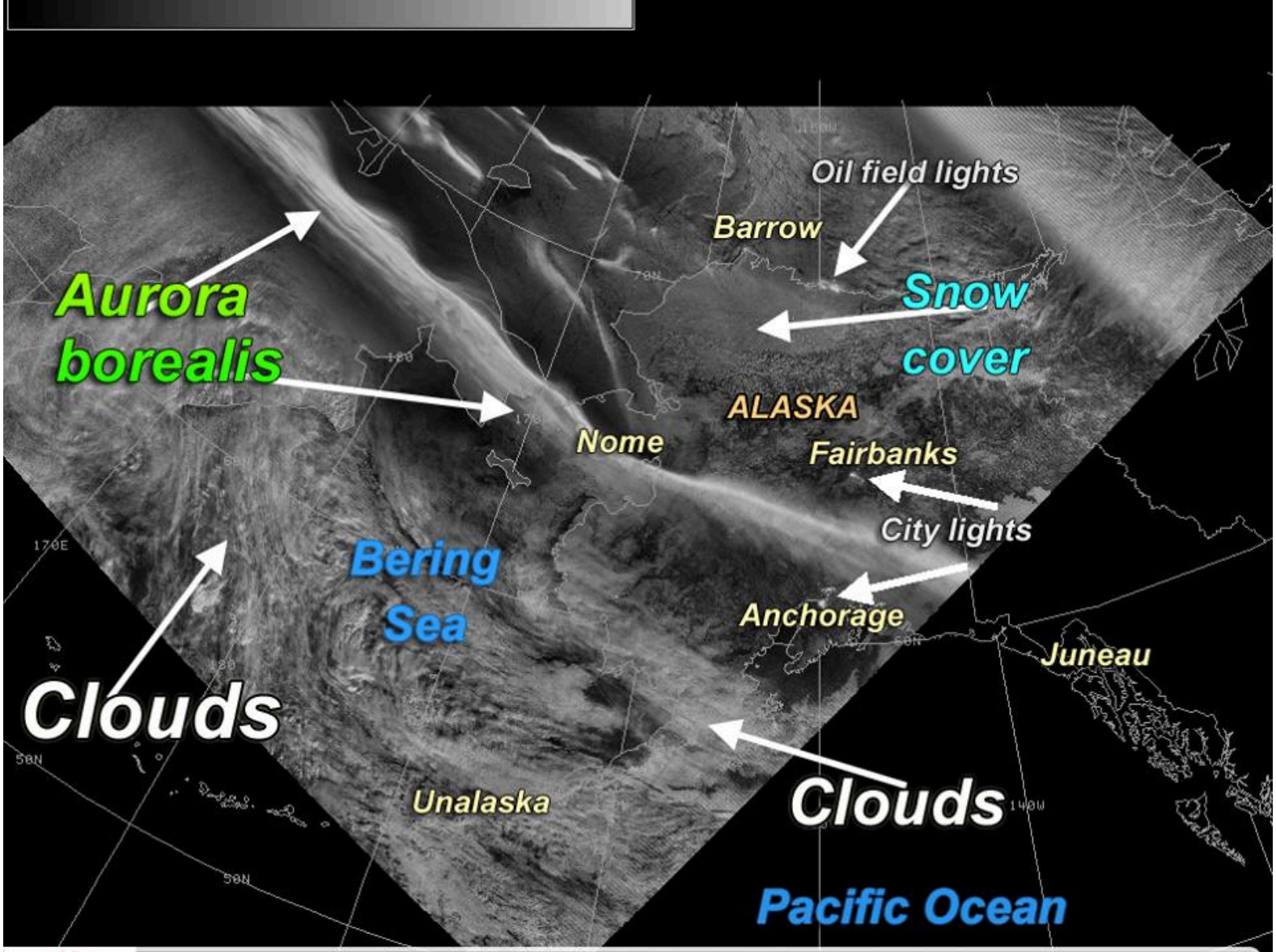
- Ongoing working group between UAF/GINA, NOHRSC, Alaska RFC, and SPoRT on model evaluation, remote sensing, and data assimilation for improved snowmelt and river runoff modeling
- Draft document outlines current information sources and modeling technology, emerging technology, and ‘low-hanging fruit’ research areas
- Seeking funding opportunities

Ongoing Activities

- Collaboration with NASA SPoRT concerning evaluation of RGB Night-Time Microphysics product by Alaskan NWS forecast offices.
- Collaboration with Alaska-Pacific RFC, North Central RFC, GMU, CCNY on River Ice and Flooding product

Upcoming Activities

- American Meteorological Society Annual Meeting in February
  - UAF's Jiang Zhu will present poster concerning Alaskan NWP modeling including hyperspectral sounders in data assimilation
- NOAA Satellite Science Week in March
  - UAF's Jessica Cherry to present blowing snow product



Rudolph's nose or Northern Lights?

NATIONAL WEATHER SERVICE
Alaska

Suomi NPP VIIRS Day Night Band Wed 14:18Z 25-Dec-13