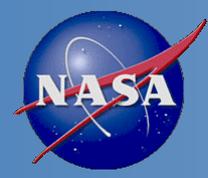


Cloud Breakout Summary

Andrew Heidinger

May 16, 2014





Cloud Breakout Presentations 1

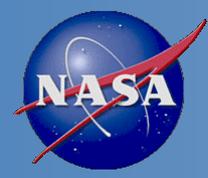


- **Eric Wong – NGAS:**

- Identified two issues that could be major driver of issues with IDPS NPOESS-era algorithms.
 - Inaccurate Surface Reflectance for Day COP
 - Wrong RTM used for Cloud Height
- Initial analysis shows IDPS results move towards NDE/CLAVR-x Performance with these fixes.

- **Curtis Seaman – CIRA:**

- Cloud Base issues mainly attributable to Cloud Height and Cloud Type.
- When Cloud Height works, cloud base is useful but issues still remain that can addressed using CloudSat information.
- Analysis shows NDE/CLAVR-x base performs better but room for improvement.



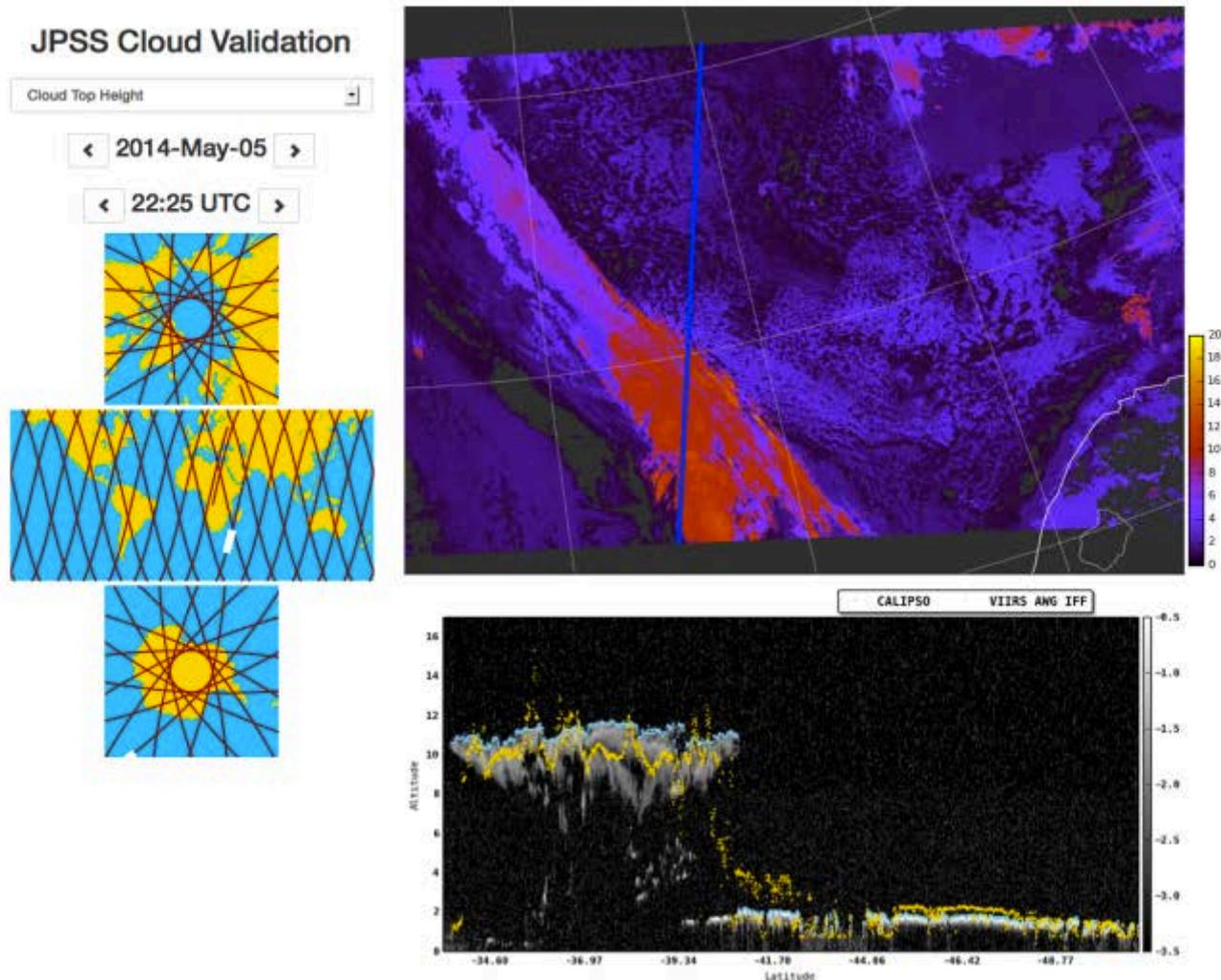
Cloud Breakout Presentations 2

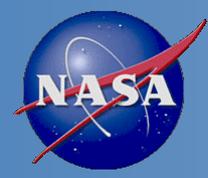


- **Kurt Brueske - Raytheon:**
 - Demonstrated Raytheon capabilities to diagnose issues and demonstrate impact of algorithm changes.
 - Example shown was a nighttime snow VCM issue.
- **Bob Holz - CIMSS:**
 - A new website is being developed using UW/Atmos PEATE tools.
 - Site will allow for comparison of individual granules or generate of long term metrics.
 - Tools are general and support many sensor matchups.
 - Using CALIPSO/CALIOP as a standard, NDE/CLAVR-x performance exceeds that of IDPS.

JPSS Cloud Validation Interface

Bob Holz et al.

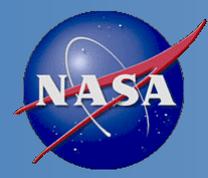




Issues Raised in Breakout



- Some of the Imagery Team consistency tests should be applied to cloud products.
- CLAVR-x/NDE performance is better than IDPS NPOESS-era algorithms. Move to NDE is going forward for cloud products. **Need sample data set for users to get ready. Minimize user confusion.**
- Any cloud mask switch should follow a more cautious path and move to NDE mask will occur only after Application Teams agree.
- Next time, a VCM breakout session would be good.



Potential Applications from User Breakout



- Routine Mesoscale Analysis or URMA are NWS applications that could benefit from VIIRS Cloud Products in the short term.
- NESDIS PSDI Alaskan Cloud Composites (AVHRR + GOES) are another good application for VIIRS
- JPSS-RR DNB VIIRS cloud products and cloud applications over Hawaii would be useful for the nighttime data-void.
- NWS AWC is interested in cloud layers from VIIRS.
- User applications identified here will be pursued likely in JPSS-PG.