



VIIRS Cloud Mask (VCM) CCR 12-418

Dr. Thomas Kopp – VCM Validation Lead

Dr. William Thomas – VCM JAM





VCM 30 Day Spin Up Objectives



CCR 12-382

- Adjust VCM thresholds to mitigate obvious errors
 - This goes directly to this briefing
- Identify sub-optimal results where software changes will be necessary to correct/improve the VCM
- Identify external issues that negatively impact the VCM
- Begin development of “Golden Granules”
- Produce initial results from match-ups with CALIPSO
- Produce initial results from comparison with the MODIS cloud mask
- Establish beta performance

CCR 12-418:

- Update maturity to the beta level



Beta Definition



- Early release product
- Initial calibration applied
- Minimally validated and may still contain significant errors
- Available to allow users to gain familiarity with data formats and parameters
- Product is not appropriate as the basis for quantitative scientific publication studies and applications



Beta Evaluation



- Early release product
 - VCM has been validated for only a 30 day period
 - VCM is already being evaluated for its impacts on other EDRs
 - Other teams understand VCM is in its early stages
- Initial calibration applied
 - As just noted, first set of tuning updates is ready for implementation
 - No software changes have yet been made to the VCM



Beta Evaluation



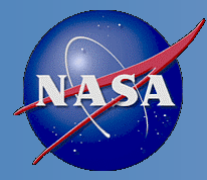
- Minimally validated and may still contain significant errors
 - Certain backgrounds and cloud types have not been tuned
 - Flags for cloud phase and aerosols have yet to be evaluated by the VCM team
- Available to allow users to gain familiarity with data formats and parameters
 - Documentation is correct regarding format and output parameters (bit flags)
 - Some in the community need to gain more familiarity with the VCM output flags (i.e. quality flags)



Beta Evaluation



- Product is not appropriate as the basis for quantitative scientific publication studies and applications
 - Many of the other Cal/Val teams at the recent Workshop identified concerns with the VCM
 - Results using pre-launch thresholds have varied from decent (Land) to sharply negative (SST)



Beta Considerations



- VCM has met the beta stage based on the definitions and the evidence shown supporting the tuning parameter update (CCR 12-0382)
 - This is the case based on the updated thresholds
 - Updated thresholds were promoted to operations May 1, 2012
- Remaining issues are known and at least a preliminary way ahead has been established
 - Most have DRs, what remains will be written as needed
- Understand some items still need to be completed
 - Submission of findings