VIIRS Cloud Mask (VCM)
CCR 12-418

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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