# SUOMI NPP EDR Product Maturity Readiness Review for VIIRS Cloud Mask, Imagery, Ice Surface Temperature, Snow Mask, and Soundings (Validated Stage 1); Cloud Properties, Sea Surface Temperature, Ocean Color, Surface Type (Provisional)

## January 7-8 2014

## NCWCP, College Park, MD

http://www.star.nesdis.noaa.gov/star/meeting_SNPPEDR2014.php

**Dial-in Number: 1-866-564-4509; Passcode: 9632506**
**WebEx: https://star-nesdis-noaa.webex.com**
**Day 1 - Meeting Number: 730 972 731; Password: Password: EDRVal1!**
**Day 2 - Meeting Number: 736 236 811; Password: EDRVal1!**

# Scope of the meeting

- To provide a forum for discussion on the **readiness** of various EDR products to **achieve the next maturity level** according to the SNPP maturity schedule.
- Follows and builds on the outcome of the **SNPP Sensor Data Record (SDR) Science and Products Review** held on December 18-20, 2013
- The expected outcome is a **recommendation from the EDR review panel and EDR leads to the Algorithm Engineering Review Board (AERB)** that the current products are at the given maturity level, or scheduled changes already approved by the AERB will result in a provisional quality EDR data products.
- If the data product is determined to not yet be at the given maturity level, this meeting will identify the **path forward to achieve this level**.

# Maturity criteria: EDR Provisional

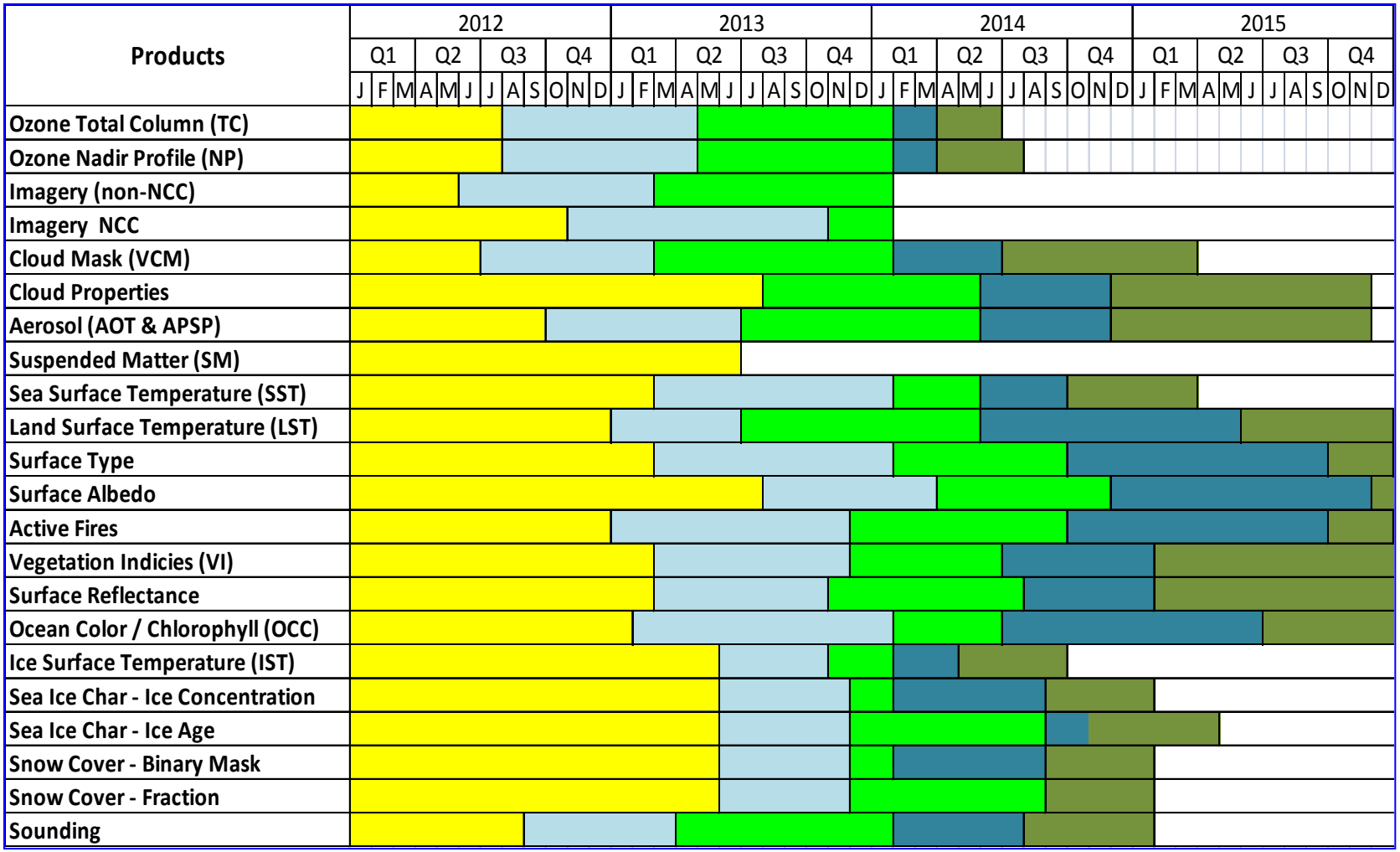
| Provisional Definition | Artifacts (Deliverables) |
|---|---|
| Product quality may not be optimal | None |
| Product accuracy is determined for a broader (but still limited) set of conditions. No requirement to demonstrate compliance with specifications. | None |
| Incremental product improvements are still occurring | Narrative, listing and discussing known errors. All DRs are identified and prioritized (1-5). Provisional readiness will address priorities 1-2. Pathway towards algorithm improvements to meet specifications is demonstrated. |
| Version control is in effect | Description of the development environment, algorithm version (IDPS build number), and LUTs/PCTs versions used to generate the product validation materials. ATBDs are accurate, up-to-date and consistent with the product running. |
| General research community is encouraged to participate in the QA and validation of the product, but need to be aware that product validation and QA are ongoing | ADP STAR will request feedback from appropriate users for the product. The notification letter will include a Provisional Maturity disclaimer. DPA will send request to Project Science to post Provisional Maturity disclaimer on CLASS. DPA will submit readme document to CLASS. |
| Users are urged to consult the EDR product status document prior to use of the data in publications | Warning of potential non-reproducibility of results due to continuing calibration and code changes. Identify known deficiencies regarding product quality. |
| Ready for operational evaluation | Key NOAA and non-NOAA end users are identified and feedback requested. |

# Maturity criteria: EDR Validated

| Validated Definition | Artifacts (Deliverables)<br>All Applicable to Stages 1-4 |
|---|---|
| **Validated Stage 1**: Using a **limited** set of samples, the algorithm output is shown to meet the threshold performance attributes identified in the **JPSS Level 1 Requirements Supplement with the exception of the S-NPP Performance Exclusions** | The list of required artifacts supporting each stage of Validated Maturity are identical:<br>• Algorithm Assessment<br>o Evaluation of algorithm performance to specification requirements<br>o Evaluation of the effect of required algorithm inputs<br>o Error Budget<br>o Quality Flag analysis/validation<br>o Input from key users<br>• Identification of the processing environment<br>o IDPS Build Number and effectivity date<br>o Version of LUT(s) used<br>o Version of PCT(s) used<br>o Description of environment used to achieve particular stage of Validated<br>• Documentation<br>o Current or updated ATBD<br>o Current or updated OAD (algorithm-related redline updates, if applicable)<br>o README file for CLASS<br>o Product User's Guide (Recommended)<br>• User Precautions<br>o Identification of known issues<br>o List of closed Discrepancy Reports between previous maturity milestone and current maturity milestone.<br>o Assessment of outstanding Discrepancy Reports |
| **Validated Stage 2:** Using a **moderate** set of samples, the algorithm output is shown to meet the threshold performance attributes identified in the **JPSS Level 1 Requirements Supplement with the exception of the S-NPP Performance Exclusions** | |
| **Validated Stage 3:** Using a **large** set of samples representing global conditions over four seasons, the algorithm output is shown to meet the threshold performance attributes identified in the **JPSS Level 1 Requirements Supplement with the exception of the S-NPP Performance Exclusions** | |
| **Validated Stage 4:** Using a **large** set of samples representing global conditions over four seasons, the algorithm output is shown to meet or exceed the objective performance attributes identified in the **JPSS Level 1 Requirements Supplement with the exception of the S-NPP Performance Exclusions** | |

# SNPP EDR Validation Schedule

http://www.star.nesdis.noaa.gov/jpss/Data.php




Beta | Provisional | Stage 1 | Stage 2 | Stage 3

# Agenda: January 7

| | | |
|---|---|---|
| **Session 1: Opening** | | |
| 8:30 – 8:45 | Opening remarks and logistics | Ivan Csiszar (STAR) |
| **Session 2: VIIRS Cloud Mask Validated** | | |
| 8:45 – 10:00 | VCM presentation | Tom Kopp (Aerospace) / Andrew Heidinger (STAR) |
| **Break** | | |
| 10:15 – 10:30 | VCM Feedback: SST | Alexander Ignatov (STAR) |
| 10:30 – 10:45 | VCM Feedback: Ocean Color | Menghua Wang (STAR) |
| 10:45 – 11:00 | VCM Feedback: Aerosol | Shobha Kondragunta / Istvan Laszlo (STAR) |
| 11:00 – 11:15 | VCM Evaluation: Land | Eric Vermote (NASA) |
| 11:15 – 11:30 | VCM Evaluation: Cryosphere | Jeff Key (STAR) |
| 11:30 – 12:00 | VCM discussion | |
| **Lunch** | | |
| **Session 3: Cloud Properties Provisional** | | |
| 1:00 – 2:00 | Clouds presentation | Andrew Heidinger (STAR) |
| 2:00 – 2:15 | Clouds User Feedback | Jeff Cetola (AFWA) |
| 2:15 – 2:45 | Clouds Discussion | |
| **Break** | | |
| **Session 4: Imagery Validated** | | |
| 3:00 – 3:30 | Imagery Presentation | Don Hillger (STAR) |
| 3:30 – 3:45 | Imagery User Feedback | Jeff Hawkins (NRL) |
| 3:45 – 4:00 | Imagery Discussion | |
| **Session 5: Surface Type Provisional** | | |
| 4:00 – 4:45 | Surface Type Presentation | Xiwu Zhan (STAR) |
| 4:45 – 5:00 | Surface Type User Feedback | Mike Ek (NCEP) |
| 5:00 – TBD | Panel discussion as needed | |

# Agenda: January 8

**Session 6: Sea Surface Temperature Provisional**

| | | |
|---|---|---|
| 8:30 – 10:00 | SST status and user readiness | Alexander Ignatov (STAR) |
| 10:00 – 10:15 | SST Discussion | |
| **Break** | | |

**Session 7: Ocean Color (OC) Provisional**

| | | |
|---|---|---|
| 10:30 – 12:00 | OC status and user readiness | Menghua Wang (STAR) |
| 12:00 – 12:30 | Ocean Color Discussion | |
| **Lunch** | | |

**Session 8: Cryosphere Validated**

| | | |
|---|---|---|
| 1:30 – 2:30 | IST /Snow Mask presentation | Jeff Key (STAR) |
| 2:30 – 2:45 | Cryosphere discussion | |
| **Break** | | |

**Session 9: Soundings Validated**

| | | |
|---|---|---|
| 3:00 – 4:00 | Soundings Presentation | Tony Reale (STAR) |
| 4:00 – 4:15 | Soundings User Evaluation | Brian Gockel (NWS) |
| 4:15 – 4:30 | Soundings Discussion | |
| 4:30 – 5:00 | Panel discussion | |
| 5:00 – 5:30 | Panel report back | |

# Review panel

- Mitch Goldberg (Chair)
- Jim Gleason
- Eric Gottschall
- Fuzhong Weng
- Jim Yoe
- Tom Schott
- Lihang Zhou
- Jeff Privette
- Mike Johnson
- Dave Benner

# Participant feedback

- Use Request for Action (RFA) form
  - Electronic or hard copy
- Turn in ASAP after the session for the respective product
- E-mail forms to Ivan.Csiszar@noaa.gov with cc to Tom.Atkins@noaa.gov

# Logistics

- Access to NCWPC – only those with proper authorization
- Dial-in and webex information listed online
- Emergency – follow the exit signs
- Restrooms – near the exit from the conference center
- Lunch – K-Kafe order / purchase or other arrangements on your own
- Coffee / refreshments – outside. No food or drinks in the auditorium!
- Agenda updates – e-mail(s) sent to registered participants and management
- Name tags – please turn them in for re-use

# Questions?

- Review content: Ivan.Csiszar@noaa.gov
- Dial-in, webex, agenda etc.: Tom.Atkins@noaa.gov
- Logistics (building access, food etc.): Danette.Warren@noaa.gov

# MARK YOUR CALENDAR

STAR JPSS Annual Science Conference
April 21-25 2014
NCWCP