# NOAA-20 Algorithm Maturity Review April 18, 2018

## Summary

All teams did an excellent job presenting N20 cal val results. The review panel recommends OMPS Total Column (TC) SDR and Active Fire (AF) EDR meet Provisional Maturity; SST, Aerosol, and MIRS products meets Provisional Maturity requirements scientifically, the declaration of Provisional of SST, Aerosol, and MIRS EDRs is pending verification of NDE implementation. ECM and Ozone TC and NP EDRs are at Beta Maturity.

**Note:** All NOAA-20 algorithms running in NDE must do an Operational Readiness Review (ORR) to satisfy ORR criteria especially ensuring NDE implementation and interfaces are correct (e.g., regression or validation testing against STAR offline results showing no or minimal differences) and an SPSRB ready for Ops briefing.

## Enterprise Cloud Mask (ECM)

ECM is clearly at **Beta maturity**. Excellent results and path forward to get to provisional and operations. Many thanks to the Cloud team for accelerating Beta readiness.

Mitch's recommendation is to demonstrate science with offline code and then get to provisional and make sure the operational implementation is verified against offline processing.

Need to figure out missing granule problem for NOAA-20, before Provisional.

# Active Fires (AF):

AF has demonstrated it has reached **provisional maturity** and met all the requirements for provisional maturity. Very good results with sufficient samples showing requirements vs performance. Recommend to prepare user's request for I-band fire implementation.

# Sea Surface Temperature (SST):

Meets provisional maturity requirements.

Next version of algorithm (v2.6) will be delivered next month and will run NOAA-20 data. For path forward slide, should include regression or validation testing to ensure what is implemented in NDE is consistent with the offline processing.

#### **Aerosol Detection:**

Slide 14: March 14, 2017 was towards the end of the VIIRS outgassing. Recommend not using this time period for validation.

Scientifically, ready for provisional.

Will need to wait for ECM missing granule fix though.

Note because AD uses clear pixels, ECM should only change yield not quality once running in NDE.

## AOD & Particle Size:

Meets provisional as long as LUT is updated and missing granules are fixed.

For all Aerosol products, as long as Cloud Mask is provisional, Aerosol products meet provisional.

# OMPS:

TC SDR looks good with LUT updates. Meets **provisional.** TC and NP EDRs are Beta with good path forward to provisional.

## MiRS:

Next MIRS DAP delivery can be considered the "provisional DAP" (ready for Ops). MiRS meets provisional.