



NOAA JPSS Monthly Program Office

AMP/STAR FY24 TTA

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November, 2023

Highlights from the Science Teams (October)

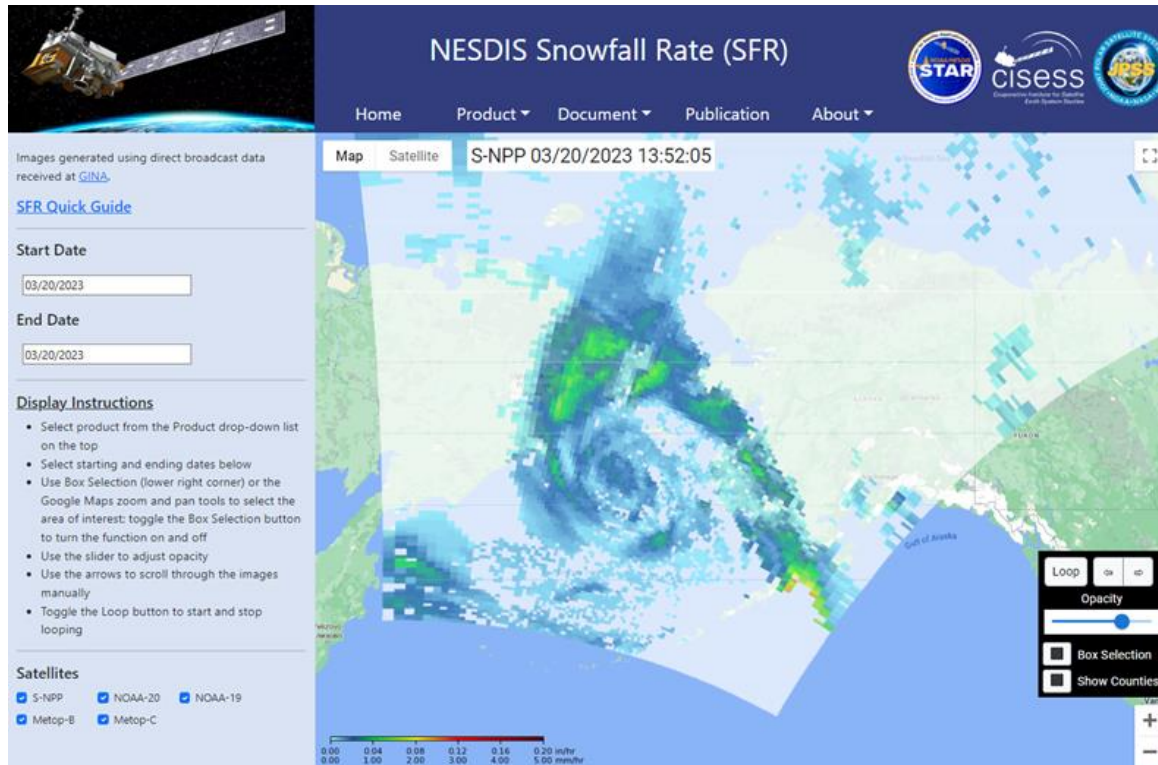
October Maturity Review and other meetings

The October JPSS-2 Maturity Review took place on October 26. The review committee found that the Clouds Products (Cloud Mask, Cloud Top Properties, Cloud Base Height, Cloud Phase, Cloud Cover Layers), Sea Ice Concentration, Ice Surface Temperature, and the Ozone Profile EDRs were all declared provisional (caveat - Ozone date upon implementation of table updates). The Cloud Optical and Microphysical Properties EDRs will be reviewed at the November Meeting.

STAR JPSS scientists attended the following meetings in October:

- CEOS Strategic Implementation Team Technical Workshop; virtual; 17-19 October 2023

Virtual Alaska Weather Symposium Seminar



H. Meng gave an invited seminar in the Virtual Alaska Weather Symposium (VAWS) Seminar Series on October 18th. The topic of the seminar was the STAR snowfall rate (SFR) product, specifically, the Alaska Regional SFR (AKSFR), which is being developed with the support of the JPSS Proving Ground and Risk Reduction Program. Much progress has been made on the AKSFR product using machine learning techniques. The product underwent a one-month user assessment at NWS Alaska last winter and received encouraging feedback; for example, 75% of the responses ranked the product as Useful or Very Useful. The assessment will resume this coming winter. The seminar attracted over forty attendees from a wide ranging organizations, including NWS, OAR, Forest Service, academia, and more.

Accomplishments

Delivery Date	Delivery Algorithm Packages (DAPs) – Enterprise Products:	Recipient
10/13/23	Patch CCAP delivery of Enterprise Flood Mapping (EN-FM) v1r3 to the NCCF S3 bucket.	NCCF
10/18/23	Patch CCAP delivery of JPSS Clouds (Mask/Phase/Height), updates only to the Cloud Height algorithm.	NCCF
10/18/23	Patch CCAP delivery of VIIRS Polar Winds to fix issues with the use of the latest version of the Cloud Height algorithm.	NCCF
10/19/23	An update to the AWIPS Patch CCAP has been re-uploaded to the original S3 Bucket locations for finding ACSPO product files within the application YAML	NCCF
10/20/23	First LUT Update (v1r1) delivery for the Enterprise V8TOz L2 and L3 CCAP for MetOP B and C, to NCCF for integration.	NCCF
10/20/23	Final delivery of the Standalone Snowfall Rate (SFR) v1 CCAP to the NCCF S3 bucket.	NCCF
10/27/23	Final CCAP delivery of ALPW (Advected Layer Precipitable Water derived using the MiRS retrievals). This is a new implementation and the first time ALPW is being delivered to NCCF.	NCCF
11/3/23	Final CCAP delivery for Ocean Color v1 for J2 capability.	NCCF
11/7/23	NUCAPS Production rules and documentation update	NCCF

NOAA-20/21/S-NPP Operational Calibration Support:

S-NPP	Weekly OMPS TC/NP Dark Table Updates	10/3/23, 10/11/23, 10/17/23 , 10/24/23 , 10/31/23 , 11/7/23
NOAA-20	Weekly OMPS TC/NP Dark Table Updates	10/3/23, 10/11/23, 10/17/23 , 10/24/23 , 10/31/23 , 11/7/23
NOAA-21	Weekly OMPS TC/NP Dark Table Updates	10/3/23, 10/11/23, 10/17/23 , 10/24/23 , 10/31/23 , 11/7/23
S-NPP	Bi-Weekly OMPS NP Wavelength & Solar Flux Update	9/12/23, 9/26/23, 10/11/23
NOAA-20	Bi-Weekly OMPS NP Wavelength & Solar Flux Update	10/3/23, 10/17/23 , 10/31/23
NOAA-21	Bi-Weekly OMPS NP Wavelength & Solar Flux Update	10/3/23, 10/17/23, 10/31/23
S-NPP	Monthly VIIRS LUT Update of DNB Offsets and Gains	10/23/23
NOAA-20	Monthly VIIRS LUT Update of DNB Offsets and Gains	10/23/23
NOAA-21	Monthly VIIRS LUT Update of DNB Offsets and Gains	10/23/23
NOAA-21	Monthly VIIRS DNB Straylight correction update	10/23/23

NOAA-21 Cal/Val Maturity Reviews

October, 2023 Maturity Reviews

Clouds (Cloud Mask Beta to Provisional), Cloud Phase/Type, Cloud Cover Layer, Cloud Base Height	Beta/Provisional	Review held: 10/26; Attained Provisional effective March 30.
Cryosphere (Ice Surface Temperature, Ice Concentration, Ice Thickness/Age, Binary Snow Cover, Fractional Snow Cover)	Provisional	Review held: 10/26; Attained Provisional effective May 1 for IST and Ice Concentration. Ice Thickness/Age, Binary Snow Cover, Fractional Snow Cover postponed until 1/25.
Ozone NP Ozone v8 Pro	Provisional	Review held:10/26; Effective date TBD based on the successful SDR and EDR Table updates. .

November, 2023 Maturity Reviews

Ocean Color	Beta	Combined Beta/Provisional planned for 1/25
Polar Winds	Beta	Combined Beta/Provisional planned for 1/25
OMPS LP (SDR & EDR)	Beta	Postponed until 1/25
Clouds – DCOMP and NCOMP	Provisional	11/30

December, 2023 Maturity Reviews

NUCAPS (AVTP, AVMP, O3, and OLR)	Provisional	Combined review with trace gases planned for 1/25
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JSTAR Code/LUT/Product Deliveries

Date	DAPs to DPMS
10/25/2023	ADR-10552/CCR-6773 NOAA -21, NOAA-20, SNPP OMPS NP Solar intrusion stray light correction - code change
11/6/2023	ADR-10550/CCR-6767 NOAA -21 OMPS NP Solar intrusion stray light correction - fast track

Date	Remaining J2-Ready DAPs to NCCF
March, 2023 (Delayed to January 2024)	ASSISTT delivered LP pre-processor CCAP for SCR on 9/29. Final J2 preliminary CCAP will be in November, and final delivery in January, 2024.



FY24 STAR JPSS Proposed Milestones

	Original Date	Forecast Date	Actual Completion Date	Variance Explanation
Algorithm Updates DAPs/CCAPs				
JPSS Cloud Height	Oct-23	Oct-23	Delivered on 10/18	
VIIRS Winds	Oct-23	Oct-23	Delivered on 10/18	
AWIPS Converter	Oct-23	Oct-23	Delivered on 10/19	
V8TOz L2 and L3 CCAP	Oct-23	Oct-23	Delivered on 10/20	
Snowfall Rate	Oct-23	Oct-23	Delivered on 10/20	
ALPW (Advection Layer Precipitable Water from MiRS)	Oct-23	Oct-23	Delivered on 10/27	
Ocean Color final CCAP	Nov-23	Nov-23		
RAVE	Nov-23	Nov-23		
Enterprise Fires	Nov-23	Nov-23		
eTRAP (Enterprise Tropical Rainfall Potential)	Nov-23	Nov-23		
Aerosols	Nov-23	Nov-23		
Enterprise Rainfall Estimate (Rain rate)	Dec-23	Dec-23		
Blended Global Biomass Burning Emissions Product (GBBEPx)	Dec-23	Dec-23		
VOLCAT (Phase 1)	Dec-23	Dec-23		
Heap with J2 LUTs	Dec-23	Dec-23		
LST	Dec-23	Dec-23		
Cloud Mask	Jan-24	Jan-24		

The above table is based on the ASSISTT CCAP delivery schedule, and gets updated every month removing the delivered items after a confirmation, and adding new items from a long list of ASSISTT schedule available until the end of FY24.



FY24 STAR JPSS Milestones

Milestones (Algorithm Cal/Val and LTM)	Original Date	Forecast Date	Actual Date	Variance Explanation
JPSS-3/JPSS-4 Data System Event	Jan-24	Jan-24	JPSS-3 JCT1 Dry Run (11/2/2023); JCT1 Event (01/01/2023)	
FY24 Program Management Review (all teams)	Jun-24	Jun-24		
GOSAT-GW End to End Test Report	Aug-24	Aug-24		
AST-2022 (VIIRS Annual Surface Type)	Sep-24	Sep-24		
Reprocessing and transfer of EDRs to CLASS	Sep-24	Sep-24		
JPSS-3 pre-launch test data review/analyze (SDR teams); JPSS-3/JPSS-4 activities/reviews support	Sep-24	Sep-24	On-schedule and on-going following JPSS-3 and JCT schedules	
Maintain / Update ICVS (develop ICVS modules to support various activities: monitoring, inter-sensor comparison, ...)	Sep-24	Sep-24	On-schedule and additional improvements are on-going	ICVS has implemented modules for NRT monitoring of NOAA-21 ATMS, OMPS-NM, OMPS-NP, CrIS, and VIIRS. ICVS demonstrated basic functions for LP using SNPP data as a proxy and is waiting to receive NOAA-21 LP data.
Maintain / Expand (to include JPSS-2 products) JSTAR Mapper	Sep-24	Sep-24	On-schedule and on-going and will be completed based on the Provisional Maturity of NOAA-21 EDR Products (March-24)	Currently NOAA-21 AF (EFIRE), MiRS, VIIRS I5 and True Color images are in JSTAR Mapper. Some of the NOAA-21 EDRs are unavailable in the SCDR, and once available after Provisional Maturity, JSTAR Mapper will assimilate them
Images of the Month	Monthly	Monthly	On-schedule and on-going (Monthly Quad Charts)	



FY24 STAR JPSS Cal/Val Maturity Reviews

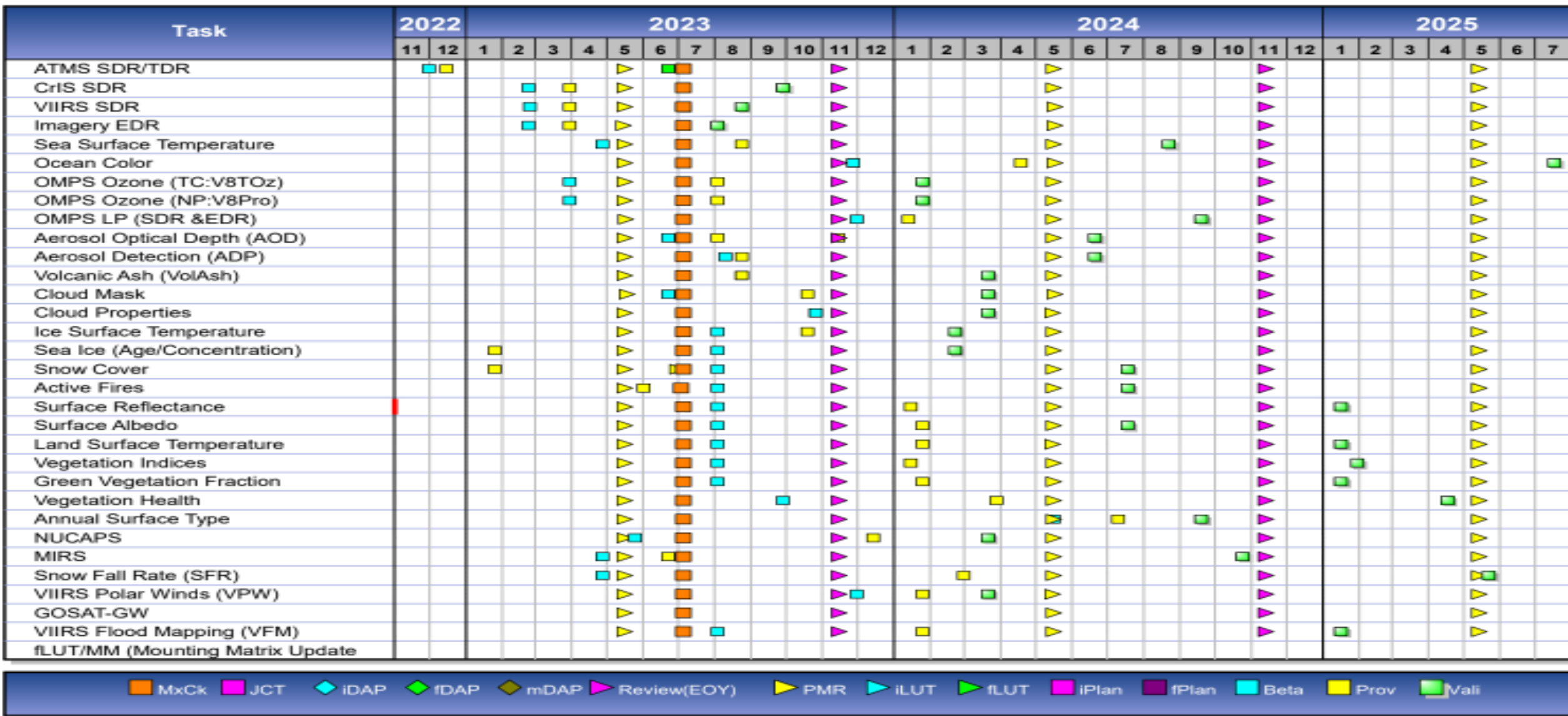
Milestones	Original Date	Forecast Date	Actual Date	Variance Explanation
Clouds (P: Nov-23; V: Mar-23)	Nov-23	Nov-23	Provisional Review held (except for DCOMP and NCOMP): 10/26; Attained Provisional effective March 30. DCOMP and NCOMP Provisional Review Planned for Nov 30.	
Aerosol AOD (V: June-24)	June-24	June-24	Attained Beta Provisional effective February 11, 2023	
Aerosol ADP (V: June-24)	June-24	June-24	Attained Provisional effective February 11, 2023	
Volcanic Ash (V: Mar-24)	Mar-24	Mar-24	Attained Provisional effective March 30, 2023	
Cryosphere (P: Jan-24; V: July-24)	July-24	July-24	Attained Provisional effective May 1, 2023	
Active Fires (V: July-24)	July-24	July-24	Attained Provisional effective March 30,2023.	
LST/LSA/SR/GVF/VI (P: Jan-24; V (LSA): July-24)	July-24	July-24	Attained Beta effective March 30, 2023	
Vegetation Health (V: Apr-25)	na	na	Attained Provisional effective March 30, 2023	
Ocean Color (B/P: Jan-24; V:July-25)	Jan-24	Jan-24	Beta/Provisional Planned for January 2024	
SST (V: Aug-24)	Aug-24	Aug-24	Attained Provisional effective March 20, 2023	
VPW (B/P: Jan-24; V: Mar-24)	Mar-24	Mar-24	Beta/Provisional Planned for January 2024.	
VFM (P: Jan-24; V: Jan-25)	Jan-24	Jan-24	Provisional Review held 8/24; Effective date will be upon successful integration of v1.1 to be delivered in September 2023.	
NUCAPS (P: Jan-24; V: Jun-2024)	Jun-24	Jun-24	Attained Beta effective 3/23, Provisional Planned: December 2023.	
MiRS (V:Oct-24)	na	na	Attained Provisional effective 5/12	
SFR (P: Feb-24; V: May-25)	Feb-24	Feb-24	Attained Beta effective 12/3/2022	
OMPS NP EDR V8Pro & V8TOz (P: Nov-23, V: Jan-24)	Jan-24	Jan-24	Beta Review held:03/30; Attained Beta: 4/3; ; Provisional maturity held on 8/3 for V8TOz, V8TOS. Effectivity upon successful implementation of soft calibration tables in August. Provisional review held for V8Pro: 10/26 , Effective date TBD based on the successful SDR and EDR Table updates. Delta review planned either through email or reconvening.	
OMPS LP (B/P:Jan-24;V:Sep-24)	Sep-24	Sep-24	Beta Planned 1/25/2024	



FY24 STAR JPSS Milestones

Operational/Program Support	Original Date	Forecast Date	Actual Completion Date
S-NPP: Weekly OMPS TC/NP Dark Table Updates	Weekly	Weekly	10/11/23, 10/17/23, 10/24/23, 10/31/23, 11/7/23
S-NPP: Bi-Weekly OMPS NP Wavelength & Solar Flux	Bi-Weekly	Bi-Weekly	10/17/23, 10/24/23, 11/7/23
S-NPP: Monthly VIIRS LUT update of DNB Offsets and Gains	Monthly	Monthly	10/23/23
NOAA-20: Weekly OMPS TC/NP Dark Table Updates	Weekly	Weekly	10/11/23, 10/11/23, 10/17/23, 10/24/23, 10/31/23, 11/7/23
NOAA-20: Bi-Weekly OMPS NP Wavelength & Solar Flux	Bi-Weekly	Bi-Weekly	10/17/23, 10/31/23
NOAA-20: Monthly VIIRS LUT update of DNB Offsets and Gains,	Monthly	Monthly	10/23/23
NOAA-21: Weekly OMPS TC/NP Dark Table Updates	Weekly	Weekly	10/11/23, 10/17/23, 10/24/23, 10/31/23, 11/7/23
NOAA-21: Bi-Weekly OMPS NP Wavelength & Solar Flux	Bi-Weekly	Bi-Weekly	10/3/23, 10/17/23, 10/31/23
NOAA-21: Monthly VIIRS LUT update of DNB Offsets and Gains	Monthly	Monthly	10/23/23
Mx builds deploy regression review/checkout (Mx9/MX10/MX11 - SDRs and VIIRS Imagery teams)			✓ Tentative dates: Mx9: Jan-24; Mx10: Mar-24; MX-11 July-24

STAR JPSS Schedule: TTA Milestones



■ MxCh ■ JCT ■ iDAP ■ fDAP ■ mDAP ▼ Review(EOY) ▼ PMR ▼ iLUT ▼ fLUT ▼ iPlan ▼ fPlan ▼ Beta ▼ Prov ▼ Vali

Due to financial system updates, we do not have charts for expenditures of prior year funds this month.

Color code:

Green: Completed Milestones

Gray: Ongoing FY24 Milestones

Link to the FY24 Milestones Quad Charts

<https://docs.google.com/presentation/d/1W2ehLvP0FaC1i7hT2zZPGsxfEJqYc48J/edit?usp=sharing&oid=105915692548068314829&rtpof=true&sd=true>