TOWR-S Update

June 21, 2024

https://meet.google.com/thn-pkwe-wbr

Best viewed in Google Slides. All are invited to insert comments.

Office of Observations | GOES-R Program

TOWR-S Team

Total Operational Weather Readiness - Satellites

Overview

1. TOWR-S resources and activities
2. New / upcoming satellite data products
3. NOAA-21 Transition to Operations
4. New / upcoming satellites
5. Documentation / Communication / Outreach

New TOWR-S resources

TOWRpro v25 *(TOWR-S RPM v25 + APP)*

Deployment to begin in July 2024. For details see SBC Spotlight Apr. 25, 2024.

Support for new products in AWIPS:

- GOES-19 L2s & gridded GLM
- ABI Flood Maps
- OSCAT-3 scatterometer wind vectors
- SAR winds (Pacific/Gulf/Atlantic, Great Lakes)

AWIPS configuration changes:

- New Gray color scale for the GOES Split Window Channel Difference
- Increase max range of NESDIS Snowfall rate in colormap/Style Rule
- Support for GOES-R Storage Slot (~105W; currently occupied by GOES-17)

New / changed CAVE menu entries:

- Combined entry for NUCAPS soundings from Metop-C and NOAA-20,21
- Improved display of NUCAPS soundings *(see below)*

+ Updates to the AWIPS Pre-Processor ("APP")

Planning one additional TOWRPro deployment in CY2024

ISatSS in IDP and NWS National Centers

(Integrated Satellite Support System)

Now running in IDP Dev:

- NHC: Global IR Mosaics
- SAB: SSMIS imagery and RGBs
- SAB: GPM GMI
- OPC/SAB: GOES-16/18 Geocolor
- OPC/SAB: AMSR-2 Ocean & MBT
- OPC/SAB: ATMS 88GHz Qv imagery
- OPC/SAB: Jason-3, SWOT, S6A, Altika Wave altimetry
- OPC/SAB/WPC: GOES LightningCast
- OPC/SAB: GOES Fog and Low Stratus (Full Disk)
- OPC/SAB: Proxyvis (GOES-16/18 / Meteosat-9/10, Himawari-9)
- AWC: GREMLIN radar emulation

In work:

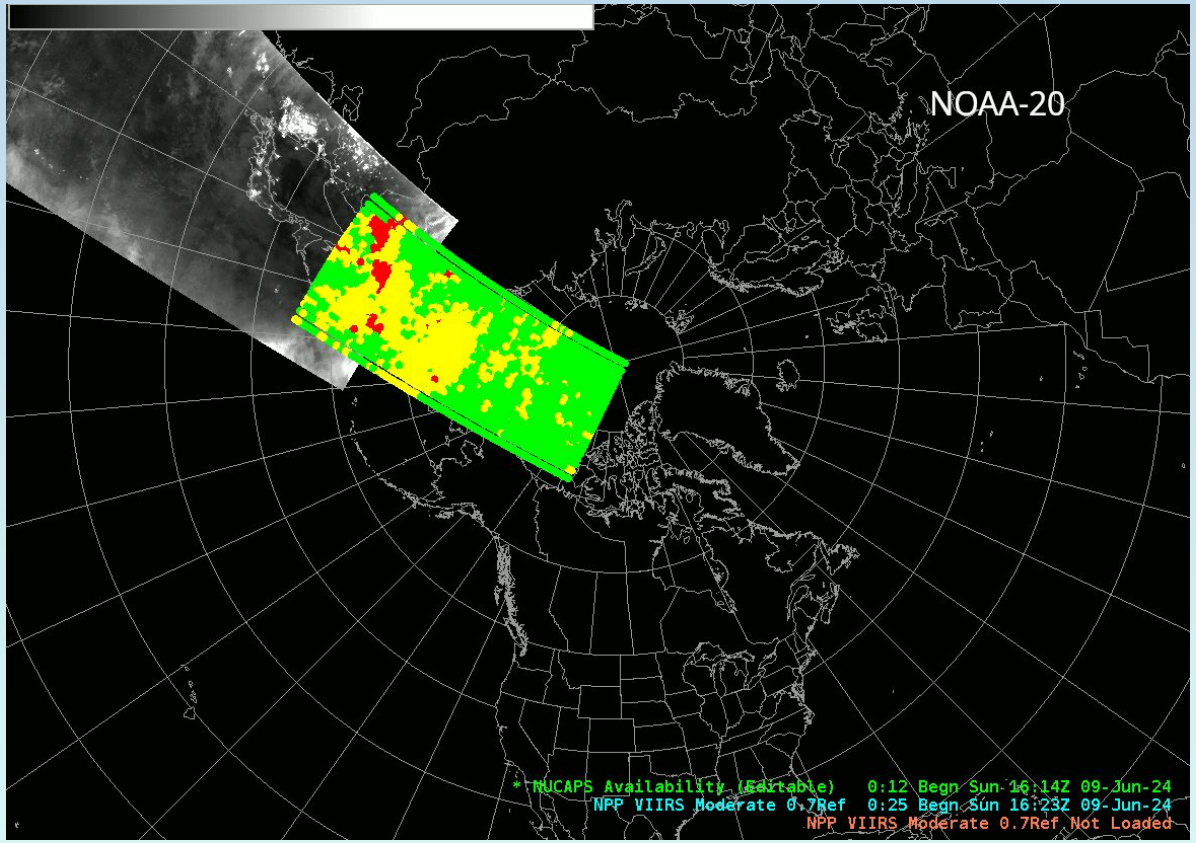
- IDPDev-IDPOps transition
  - Code checked in to IDP May 3rd
  - IDP staff integration underway
- GREMLIN devOps
- Full Disk GOES DMW for NHC/OPC
- AWC Mosaics
- MTG imagery tiles/area files
- SWOT Altimetry for NHC
- SAR Altimeter wind speeds

Further reading: TOWR CCB Monthly

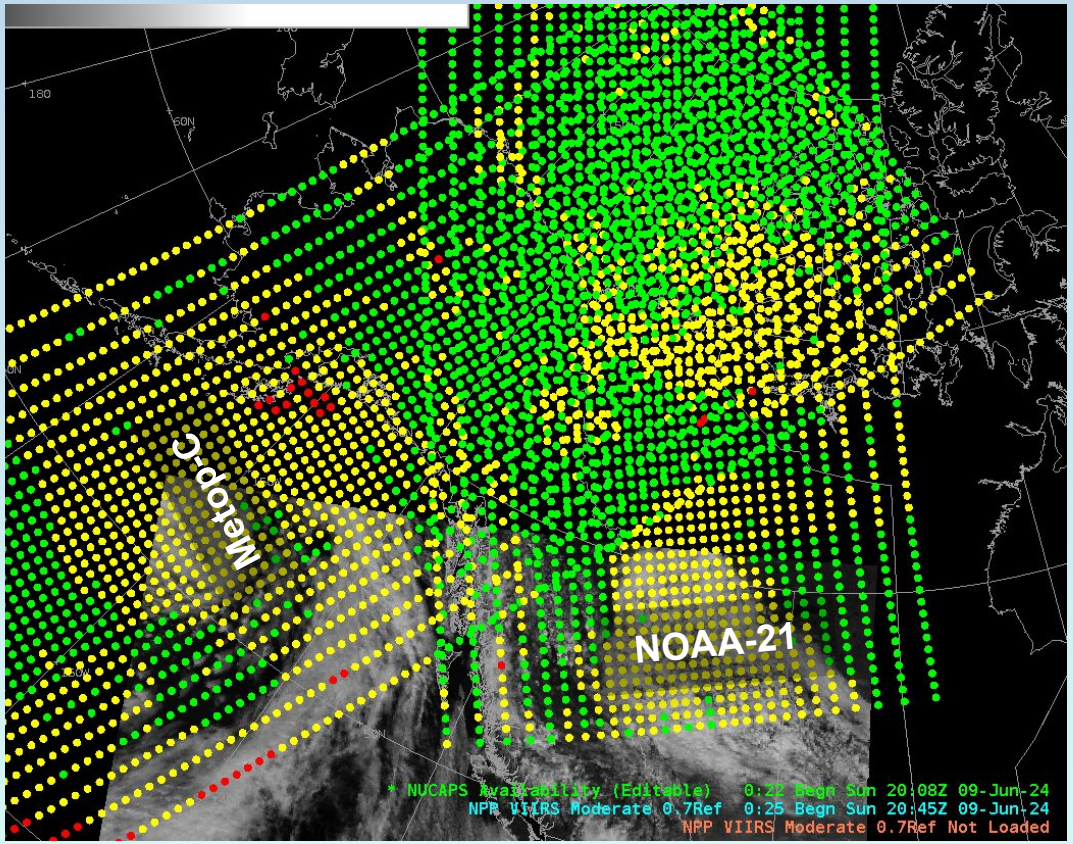
Recent and upcoming satellite data products / changes

Now on SBN: NUCAPS Soundings from 3 satellites

- NOAA-21 NUCAPS (in AWIPS since May 9, 2024) and NOAA-20 NUCAPS (in AWIPS since July 2019): Early afternoon satellite soundings
- Metop-C NUCAPS (in AWIPS since Mar. 8, 2024): Mid-morning satellite soundings



NUCAPS from Metop-C, NOAA-20, and NOAA-21 **over Alaska (NUCAPS Region 9)** on 9-10 June, 2024. Backdrop: NOAA-20 VIIRS NCC Imagery



NUCAPS over Alaska (NUCAPS Region 9) on 9-10 June, 2024
Metop-C: 20:08z - 20:30z / NOAA-21: 20:18z - 20:26z
Backdrop: NOAA-20 VIIRS NCC Imagery

Return to overview

GOES-R ASOS Satellite Cloud Products (SCP)

June 3, 2024: removed old & incorrect station IDs (SCN24-34)

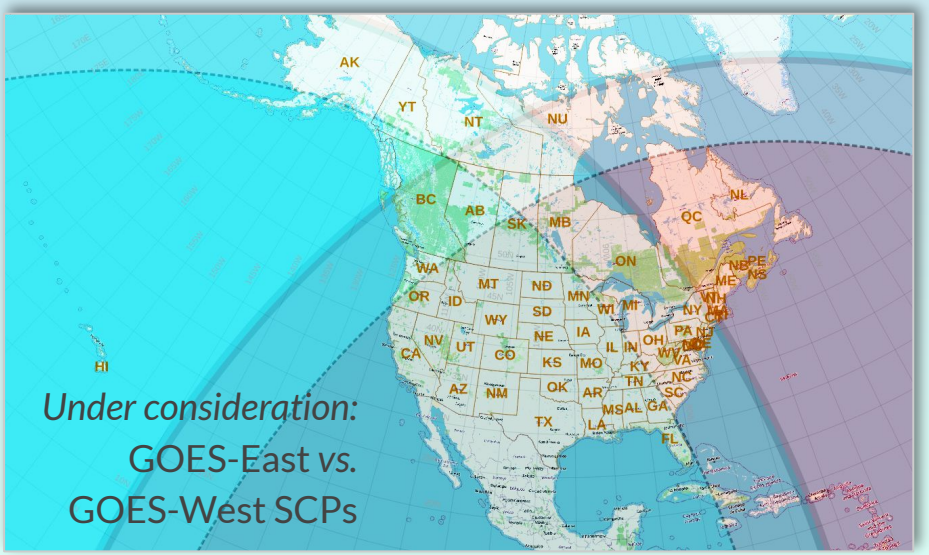
(149 of 3,267 stations – see Dataset Guide)

Search:

State	ICAO Code to be Removed	Location Name	Suggested Alternate ICAO Code	Suggested Alternate Location Name	Distance (km)
AK	5GN	TAHNETA PASS, AK	PASP	Sheep Mountain, AK	3.2
AK	BLAIR	Oklahoma	PAEI	EIELSON AFB, AK	43.0
AK	EIELS	Fairbanks	PAEI	EIELSON AFB, AK	1.7
AK	P0Z0	Deering	PADE	Deering, AK	1.8
AK	P9Z1	Klawock	PAKW	KLAWOCK, AK	2.4
AK	PBET	Bethel	PABE	Bethel, AK	1.6
AK	PBIG	Delta Junction/Ft. Greely	PABI	Ft. Greely, AK	2.7
AK	PBRW	Barrow	PABR	Barrow/Wiley Post-Will Rogers, AK	0.7
AK	PBTT	Bettles	PABT	Bettles Field, AK	0.7
AK	PCDB	Cold Bay	PACD	Cold Bay, AK	1.3

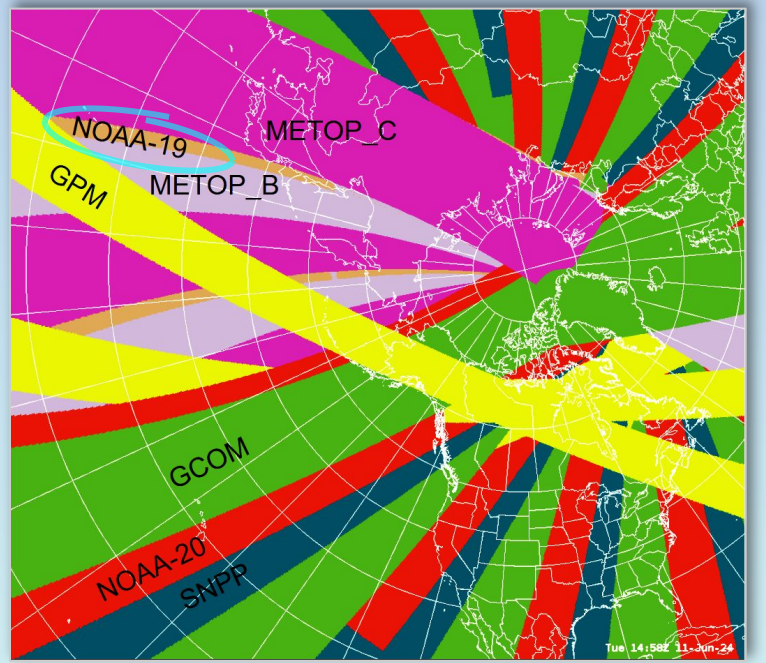
GOES-R ASOS SCP station locations are now synced with the AWIPS National Datasets Maintenance (NDM) repository on VLab:

NOAA community may request station changes via **https://vlab.noaa.gov/redmine/projects/awips-ndm/**



From OSPO: Legacy Product Retirements

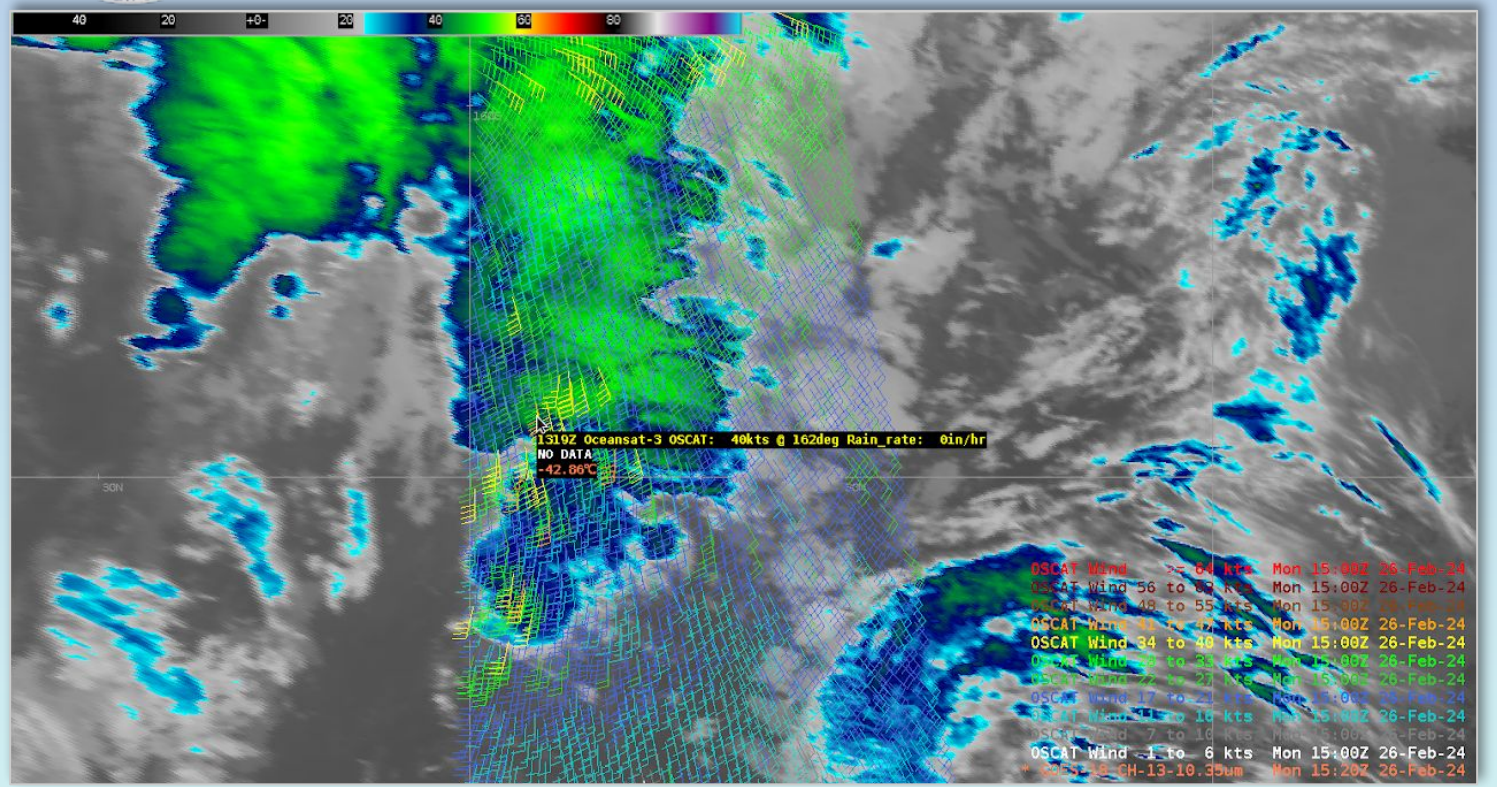
Algorithms/Products	Data Source Retired or to be Retired	Existing Missions/Mitigation	Date of Retirement
~~MODIS Winds~~	~~Aqua/Terra~~	SNPP and N20 DMV, Metop-B/C AVHRR Winds	~~Jan. 29, 2024~~
~~AVHRR Cloud Drift Polar Winds~~	~~NOAA 15/18/19~~	SNPP and N20 DMV (NDE) Metop-B/C AVHRR Winds (NCCF)	~~April 3 2024~~
Microwave Integrated Retrieval System (MIRS)	NOAA 19, DMSP 17/18	SNPP and N20 , Metop-B/C and GPM MIRS Products	July 23 2024
Blended Rain Rate & Blended TPW	NOAA 19, DMSP 17/18 MIRS	SNPP, N20, Metop-B/C, GPM, GCOM-W1	July 23 2024
AMSU TC	NOAA 19 MIRS	MetOp-B/C AMSU	July 31 2024
OMI SO2 Alert	Aura	OMPS SO2	Sept. 2024
Ensemble Tropical Rainfall Potential (eTRaP)	NOAA 19, DMSP 17/18 MIRS	MetOp-B/C, GOES-16, GOES-17/18, METEOSAT-9/11, Himawari-8/9, S-NPP, NOAA-20, GCOM-W, GPM	Sept. 2024
Ocean Heat Content	SARAL	JASON-CS/MF Sentinel-6A Poseidon 4	Sept. 2024



Blended Rain Rate: contributions from Metop-C, NOAA-19, Metop-B, and others

For details see https://www.ospo.noaa.gov/Products/retirements.html

OSCAT-3 scatterometer winds



OceanSat-3 / OSCAT-3

- L2 Ocean Surface Winds files from the OSCAT-3 scatterometer are now ready for AWIPS
- AWIPS support will be included in TOWRpro v25
- Several coastal and Great Lakes WFOs will participate in evaluating this product starting in July
- Expected to be on SBN in Jan. 2025
  (... hopefully sooner than that)
- This product will fill the gap left when SCATSAT ceased operating in Feb. 2021.

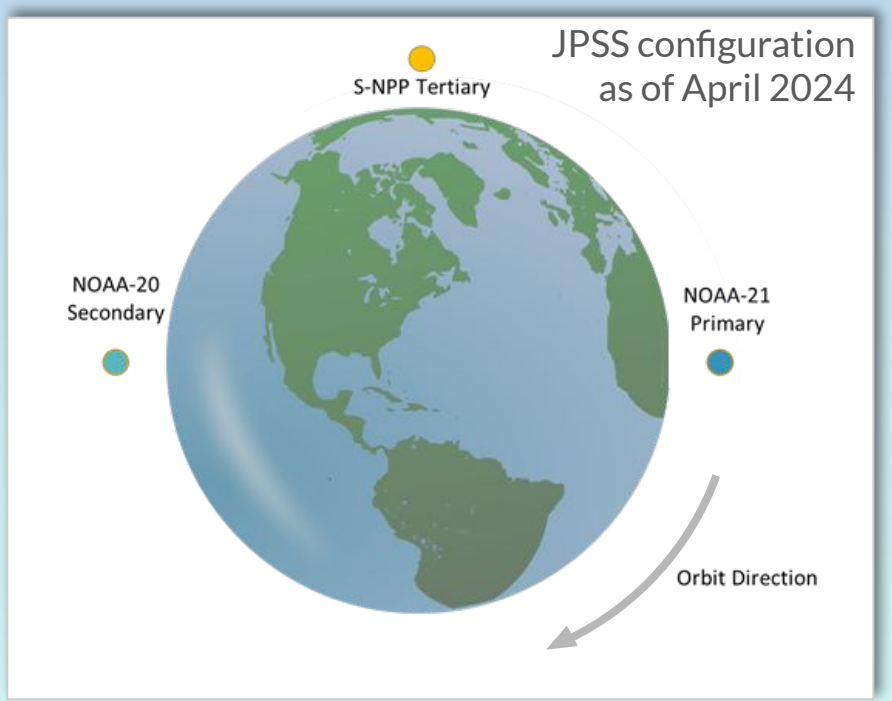
NOAA-21 Transition to operations

NOAA-21 T2O: NWS Operational Test & Evaluation (OT&E)

- from Ryan Brown, NWS OPPSD

- OT&E purpose: validate operational requirements independently from end to end in a live environment. Advise recommendation on full deployment to forecast operations.
- **The primary NOAA-21 OT&E has concluded with a Wrap-up meeting tentatively scheduled for late July 2024.**

Evaluation	Date Range	Status
Initial VIIRS Evaluation (Tertiary Position) via Direct Readout & Terrestrial feed to Alaska	Aug. 7, 2023 - Sep. 8, 2023	Completed
Initial NCC/ DNB Evaluation (Secondary Position) via SBN	Nov. 16, 2023 - Dec. 20, 2023	Completed
VIIRS Evaluation (Secondary to Primary Transition) via Direct Readout & Terrestrial feed to Alaska	Mar. 11, 2024 - Apr. 12, 2024	Completed
NCC/ DNB Evaluation (Secondary to Primary Transition) via SBN	Mar. 11, 2024 - Apr. 12, 2024	Completed
NUCAPS Evaluation (Primary Position) via SBN	May 13, 2024 - Jun. 7, 2024	Completed
Blended Hydro Products Evaluation (Primary Position) via SBN	Q1 2025	Planning for Follow-on OT&E
Active Fires Evaluation (Primary Position) via SBN	Q1 2025	Planning for Follow-on OT&E
Flood Mapping Evaluation (Primary Position) via SBN	Q1 2025	Planning for Follow-on OT&E



after J. McNitt et al.

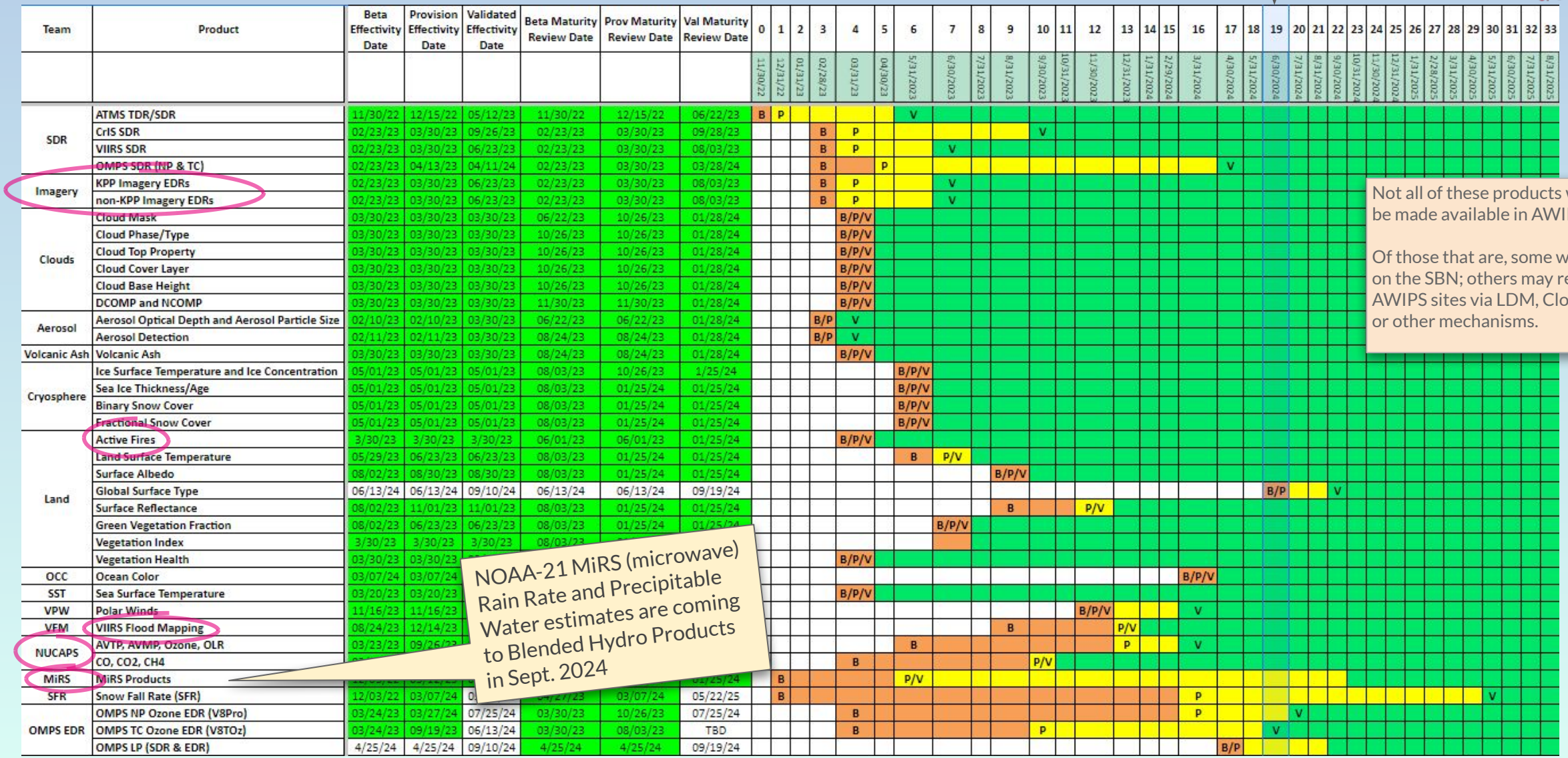
7 OT&E test sites:

- Alaska Region HQ (VRH)
- Anchorage, AK (AFC)
- WFO Medford, OR (MFR)
- WFO Gaylord, MI (APX)
- WFO Houston/Galveston, TX (HGX)
- WFO Buffalo, NY (BUF)
- RFC Portland, OR (NWRFC)

NOAA-21 T2O: Product Maturity timeline

we are here

Team	Product	Beta Effectivity Date	Provision Effectivity Date	Validated Effectivity Date	Beta Maturity Review Date	Prov Maturity Review Date	Val Maturity Review Date
SDR	ATMS TDR/SDR	11/30/22	12/15/22	05/12/23	11/30/22	12/15/22	06/22/23
SDR	CrIS SDR	02/23/23	03/30/23	09/26/23	02/23/23	03/30/23	09/28/23
SDR	VIIRS SDR	02/23/23	03/30/23	06/23/23	02/23/23	03/30/23	08/03/23
SDR	OMPS SDR (NP & TC)	02/23/23	04/13/23	04/11/24	02/23/23	03/30/23	03/28/24
Imagery	KPP Imagery EDRs	02/23/23	03/30/23	06/23/23	02/23/23	03/30/23	08/03/23
Imagery	non-KPP Imagery EDRs	02/23/23	03/30/23	06/23/23	02/23/23	03/30/23	08/03/23
Clouds	Cloud Mask	03/30/23	03/30/23	03/30/23	06/22/23	10/26/23	01/28/24
Clouds	Cloud Phase/Type	03/30/23	03/30/23	03/30/23	10/26/23	10/26/23	01/28/24
Clouds	Cloud Top Property	03/30/23	03/30/23	03/30/23	10/26/23	10/26/23	01/28/24
Clouds	Cloud Cover Layer	03/30/23	03/30/23	03/30/23	10/26/23	10/26/23	01/28/24
Clouds	Cloud Base Height	03/30/23	03/30/23	03/30/23	10/26/23	10/26/23	01/28/24
Clouds	DCOMP and NCOMP	03/30/23	03/30/23	03/30/23	11/30/23	11/30/23	01/28/24
Aerosol	Aerosol Optical Depth and Aerosol Particle Size	02/10/23	02/10/23	03/30/23	06/22/23	06/22/23	01/28/24
Aerosol	Aerosol Detection	02/11/23	02/11/23	03/30/23	08/24/23	08/24/23	01/28/24
Volcanic Ash	Volcanic Ash	03/30/23	03/30/23	03/30/23	08/24/23	08/24/23	01/28/24
Cryosphere	Ice Surface Temperature and Ice Concentration	05/01/23	05/01/23	05/01/23	08/03/23	10/26/23	1/25/24
Cryosphere	Sea Ice Thickness/Age	05/01/23	05/01/23	05/01/23	08/03/23	01/25/24	01/25/24
Cryosphere	Binary Snow Cover	05/01/23	05/01/23	05/01/23	08/03/23	01/25/24	01/25/24
Cryosphere	Fractional Snow Cover	05/01/23	05/01/23	05/01/23	08/03/23	01/25/24	01/25/24
Land	Active Fires	3/30/23	3/30/23	3/30/23	06/01/23	06/01/23	01/25/24
Land	Land Surface Temperature	05/29/23	06/23/23	06/23/23	08/03/23	01/25/24	01/25/24
Land	Surface Albedo	08/02/23	08/30/23	08/30/23	08/03/23	01/25/24	01/25/24
Land	Global Surface Type	06/13/24	06/13/24	09/10/24	06/13/24	06/13/24	09/19/24
Land	Surface Reflectance	08/02/23	11/01/23	11/01/23	08/03/23	01/25/24	01/25/24
Land	Green Vegetation Fraction	08/02/23	06/23/23	06/23/23	08/03/23	01/25/24	01/25/24
Land	Vegetation Index	3/30/23	3/30/23	3/30/23	08/03/23		
Land	Vegetation Health	03/30/23	03/30/23				
OCC	Ocean Color	03/07/24	03/07/24				
SST	Sea Surface Temperature	03/20/23	03/20/23				
VPW	Polar Winds	11/16/23	11/16/23				
VFM	VIIRS Flood Mapping	08/24/23	12/14/23				
NUCAPS	AVTP, AVMP, Ozone, OLR	03/23/23	09/26/23				
NUCAPS	CO, CO2, CH4						
MiRS	MiRS Products						01/25/24
SFR	Snow Fall Rate (SFR)	12/03/22	03/07/24	0		03/07/24	05/22/25
OMPS EDR	OMPS NP Ozone EDR (V8Pro)	03/24/23	03/27/24	07/25/24	03/30/23	10/26/23	07/25/24
OMPS EDR	OMPS TC Ozone EDR (V8TOz)	03/24/23	09/19/23	06/13/24	03/30/23	08/03/23	TBD
OMPS EDR	OMPS LP (SDR & EDR)	4/25/24	4/25/24	09/10/24	4/25/24	4/25/24	09/19/24



Not all of these products will be made available in AWIPS.

Of those that are, some will be on the SBN; others may reach AWIPS sites via LDM, Cloud, or other mechanisms.

NOAA-21 MiRS (microwave) Rain Rate and Precipitable Water estimates are coming to Blended Hydro Products in Sept. 2024

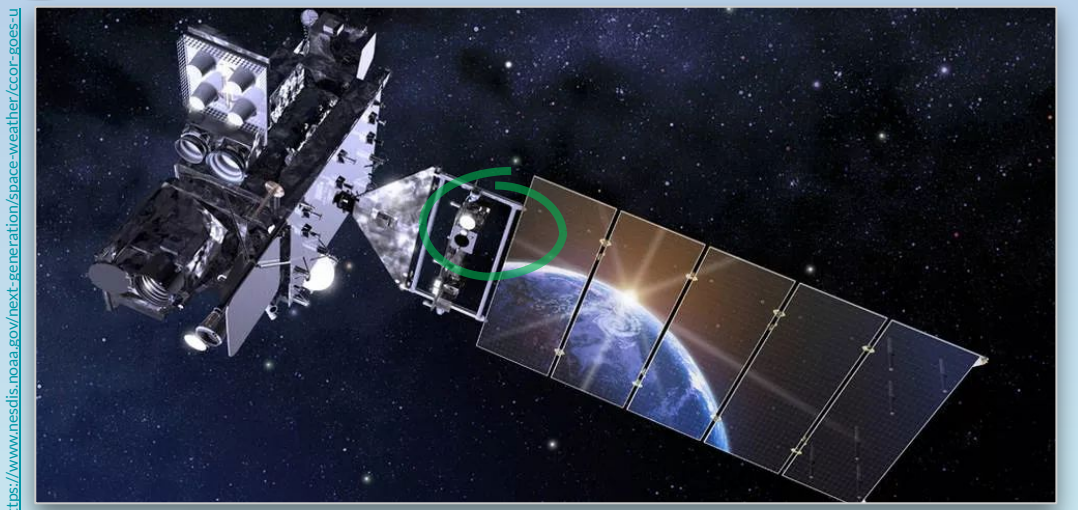
Source: NOAA-21 Maturity Review Schedule (J. Weinrich, JPSS Pgm. – last updated June 7)

Return to overview

New and upcoming satellites

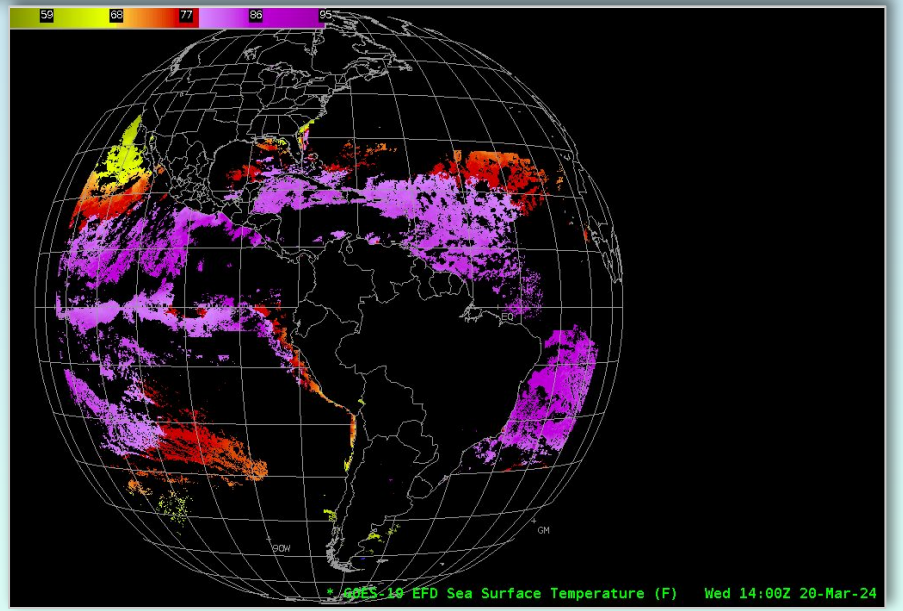
GOES-U

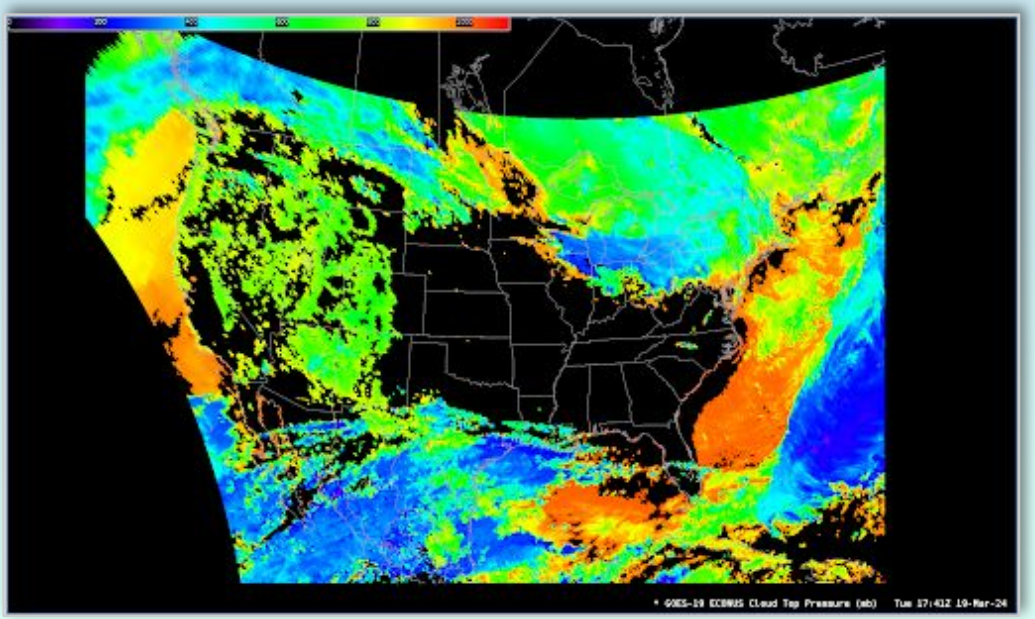
https://www.nesdis.noaa.gov/next-generation/space-weather/ccor-goes-u



GOES-U launching Tuesday, June 25, 2024

- Will be commissioned as GOES-East in April 2025, replacing GOES-16 (per OSPO)
- Will carry the new Compact Coronagraph (CCOR)

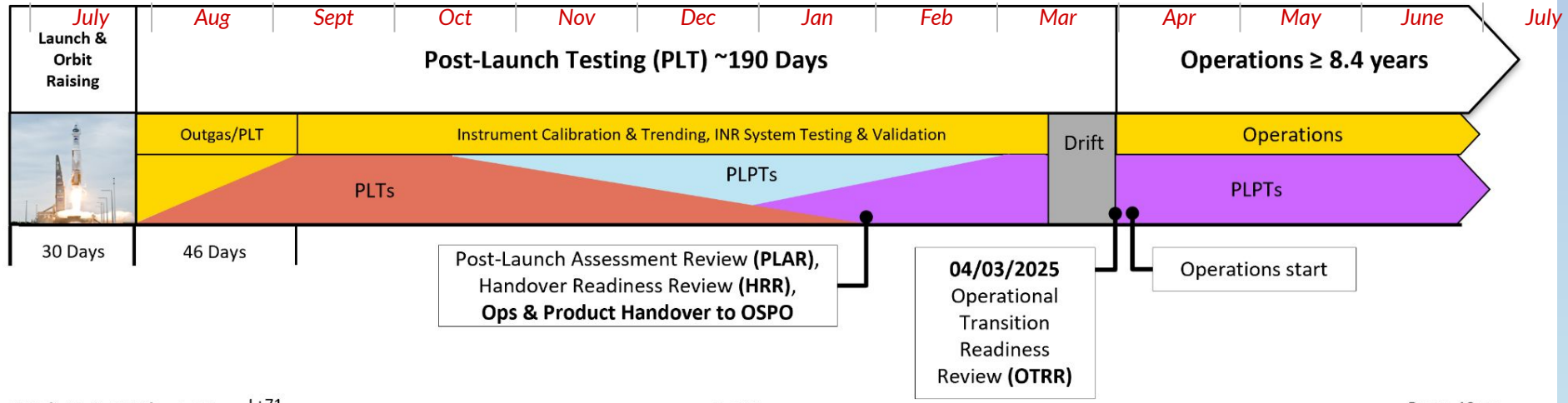


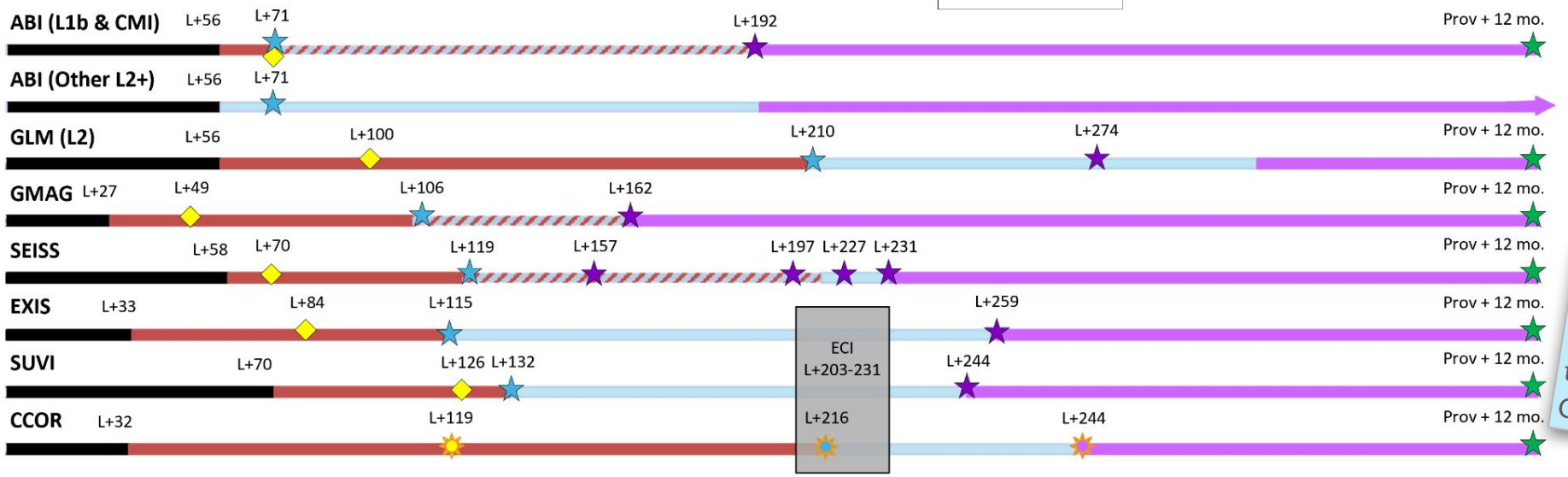


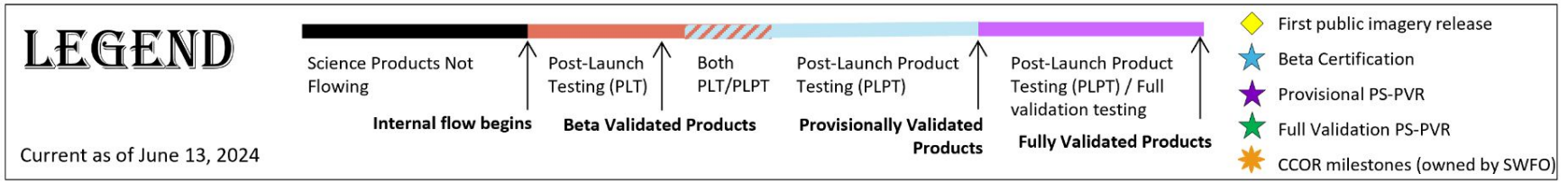
h/t Derek Van Pelt

AWIPS screenshots from Mar. 2024 DOE-U3 test with simulated GOES-19 data

GOES-U Post-Launch Science Product Validation Schedule







Further Details: see GOES-19 T2O schedule 20240412v2, presented to the GOES-R Steering Committee on Apr. 18, 2024

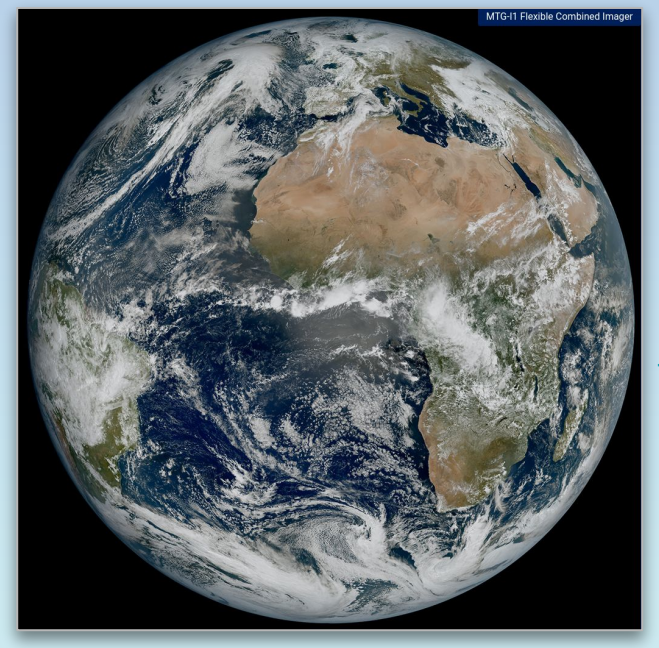
Note: All dates are subject to change.

Return to overview

MeteoSat 3rd Generation

- MeteoSat 3rd Generation (MTG-Imager1) launched Dec. 2022
  - Key instruments: **Lightning Imager** and **Flexible Combined Imager**
- MTG-I1 data availability schedule: *(updated June 5, 2024)*

Central facility MTG data release	Data type	Delivery mechanism	Accessible for
To be announced *(for details see footnote at MTG-I1 data availability schedule)*	**Flexible Combined Imager L1c** data - continuous feed (compressed via EUMETCast)	EUMETCast Data Store EUMETView	Pre-operational release to all users
	Flexible Combined Imager L2 data – continuous feed of a subset of products		
28 Mar 2024	**Lightning Imager** data - subset of groups and flashes	Open sftp	All users
Earliest Jun 2024	**Lightning Imager** data - continuous feed of all products	EUMETCast Data Store	Pre-operational release to all users



https://www.eumetsat.int

MTG-I1 First Light image (Mar. 18, 2023)

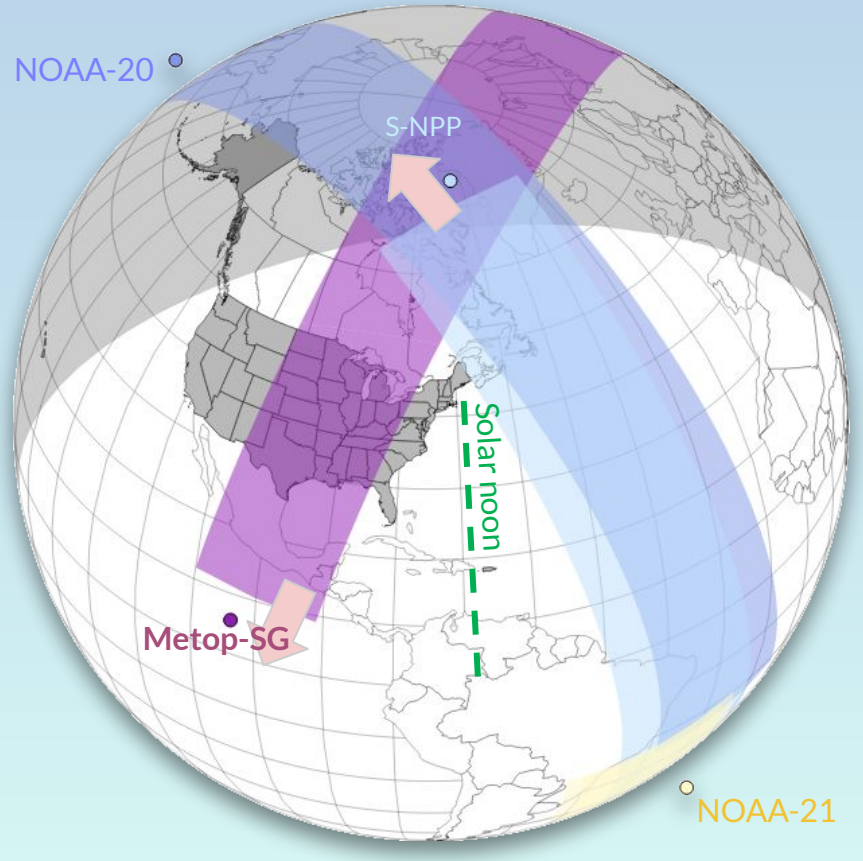
- MTG-I1's Flexible Combined Imager (FCI) resumed observations in May, but onboard calibration remains in question.
- MTG-I1's Lightning Imager (LI): pre-operational L2 sample data are now available; real-time feed may begin in June.
- (MTG-I1 will be referred to as Met-12 when declared operational)

Oct. 2024-Mar. 2025:
launch of MTG-Sounder1

Further reading:
https://www.eumetsat.int/our-satellites/meteosat-series

Metop-Second Generation (Metop-SG)

- Metop-SG-A1 (Metop 2nd Gen.) to launch April–June 2025
  - Sun-synchronous polar (morning) orbit
  - Key instruments:
    - **METimage: Meteorological Imager**
    - **IASI-NG: Infrared Atmospheric Sounder Interferometer - New Generation**
    - **MWS: Microwave Sounder**
    - Sentinel-5 UVNS: Ultra-violet, Visible and Near-infrared Sounder
    - RO: Radio Occultation sounder
    - RMU: Radiation Monitor Unit (a.k.a. NGRM)
    - 3MI: Multi-viewing Multi-channel Multi-polarisation Imager
  - Due to launch in 2026: **Metop-SG-B1**, w/ key instruments:
    - **MWI: Microwave Imager**
    - **SCA: Scatterometer**
    - ICI: Ice Cloud Imager
    - RO: Radio Occultation sounder
    - RMU: Radiation Monitor Unit (a.k.a. NGRM)
  - TOWR-S is drafting a NWS User Readiness Plan for Metop-SG.



https://vlab.noaa.gov/web/towr-s/polar-planner

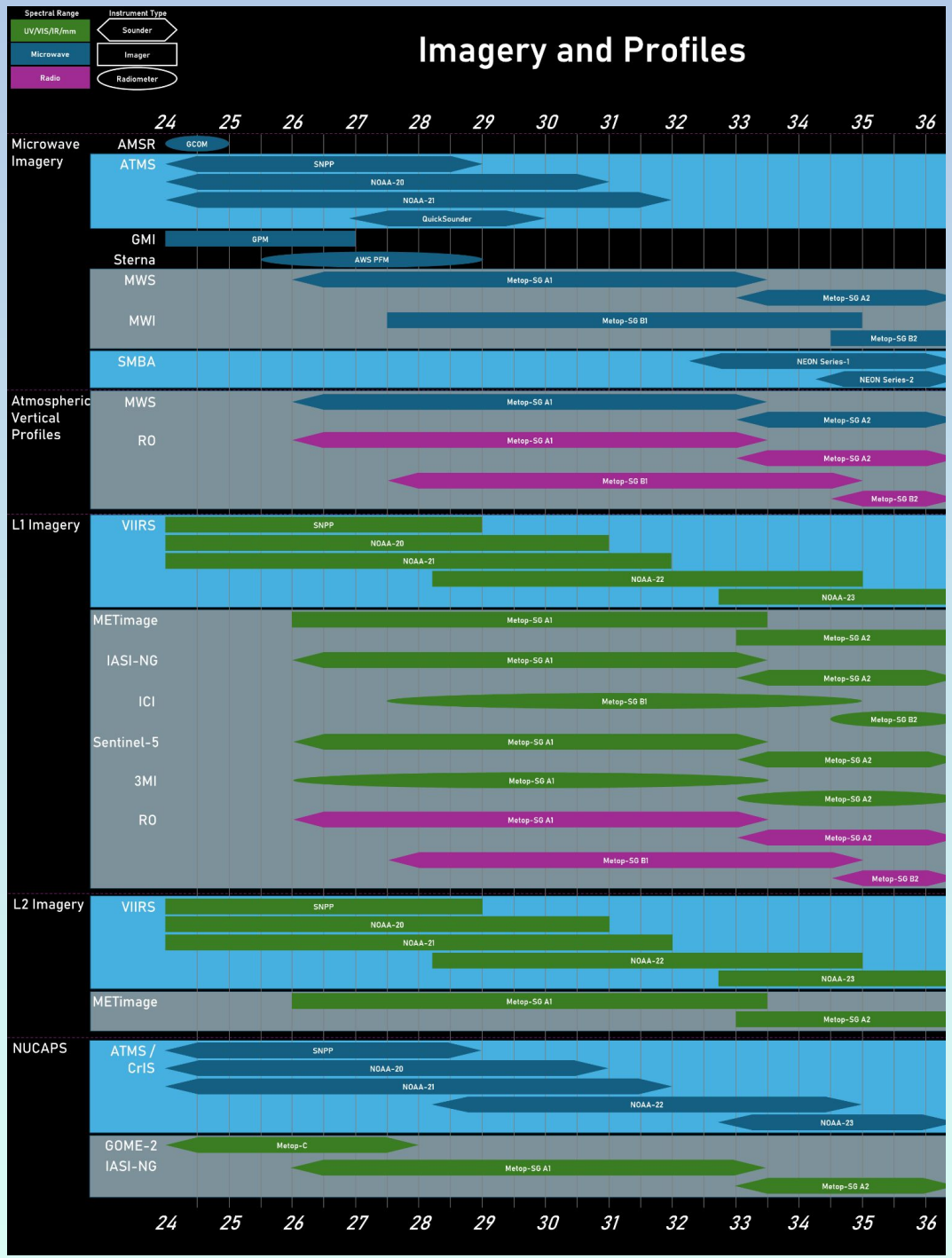
NWS LEO Readiness Plan

Defining the needs, capabilities, and strategies for Low-Earth Orbit (LEO) satellite products in NWS

What is Day-1 readiness?

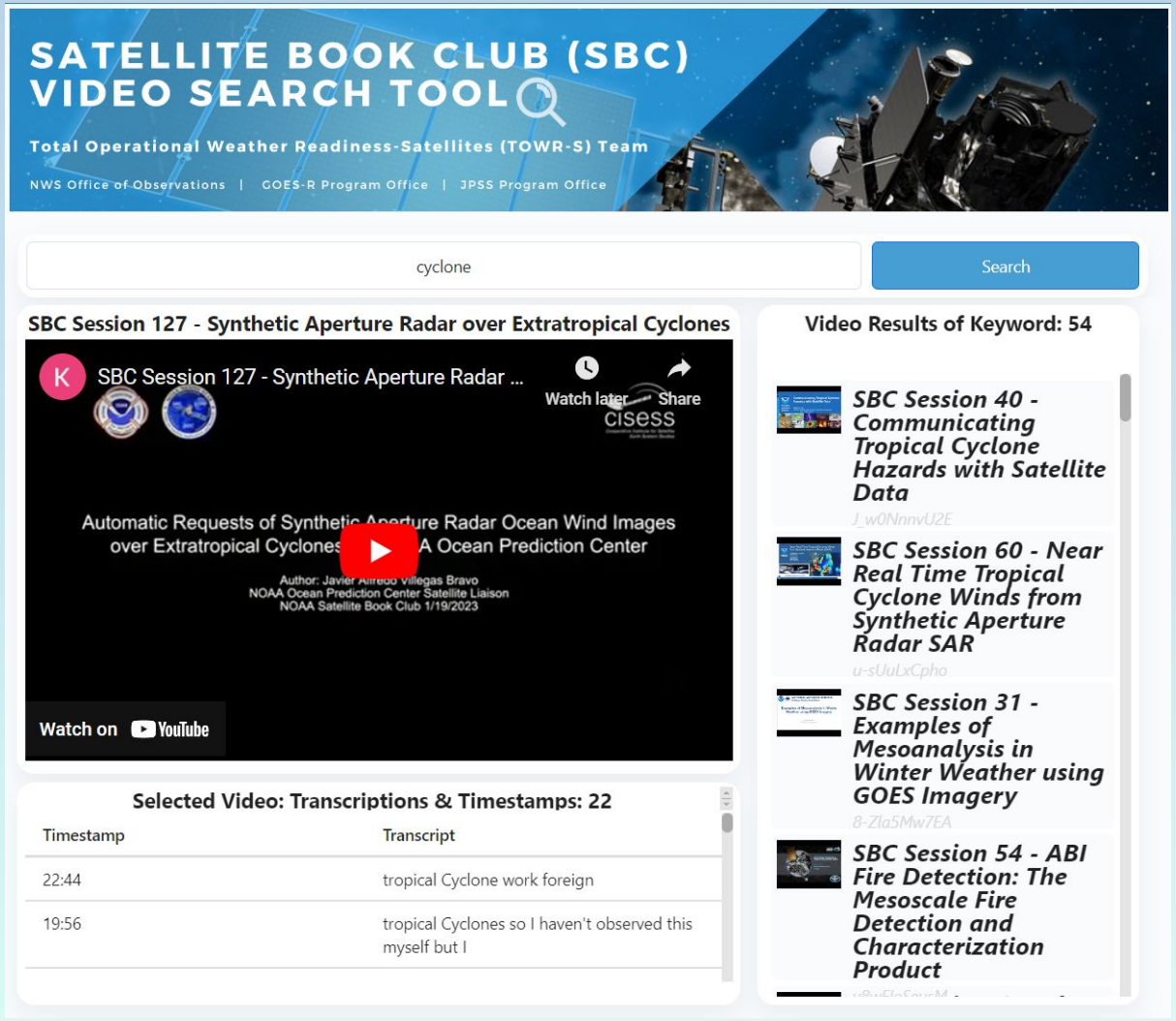
Visualizing the product portfolio and timelines (example draft seen here ->)

Metop-SG is the focus of this first document



Documentation / Communication / Outreach

Satellite Book Club (SBC) Seminar Series



- Thursdays, usually at Noon ET
- Usage examples shed light on user requirements for satellite data products and capabilities.
- Recordings are on YouTube and the NWS Commerce Learning Center (CLC) website.
- SBC videos are now searchable by keyword: https://vlab.noaa.gov/web/towr-s/sbc-video-search

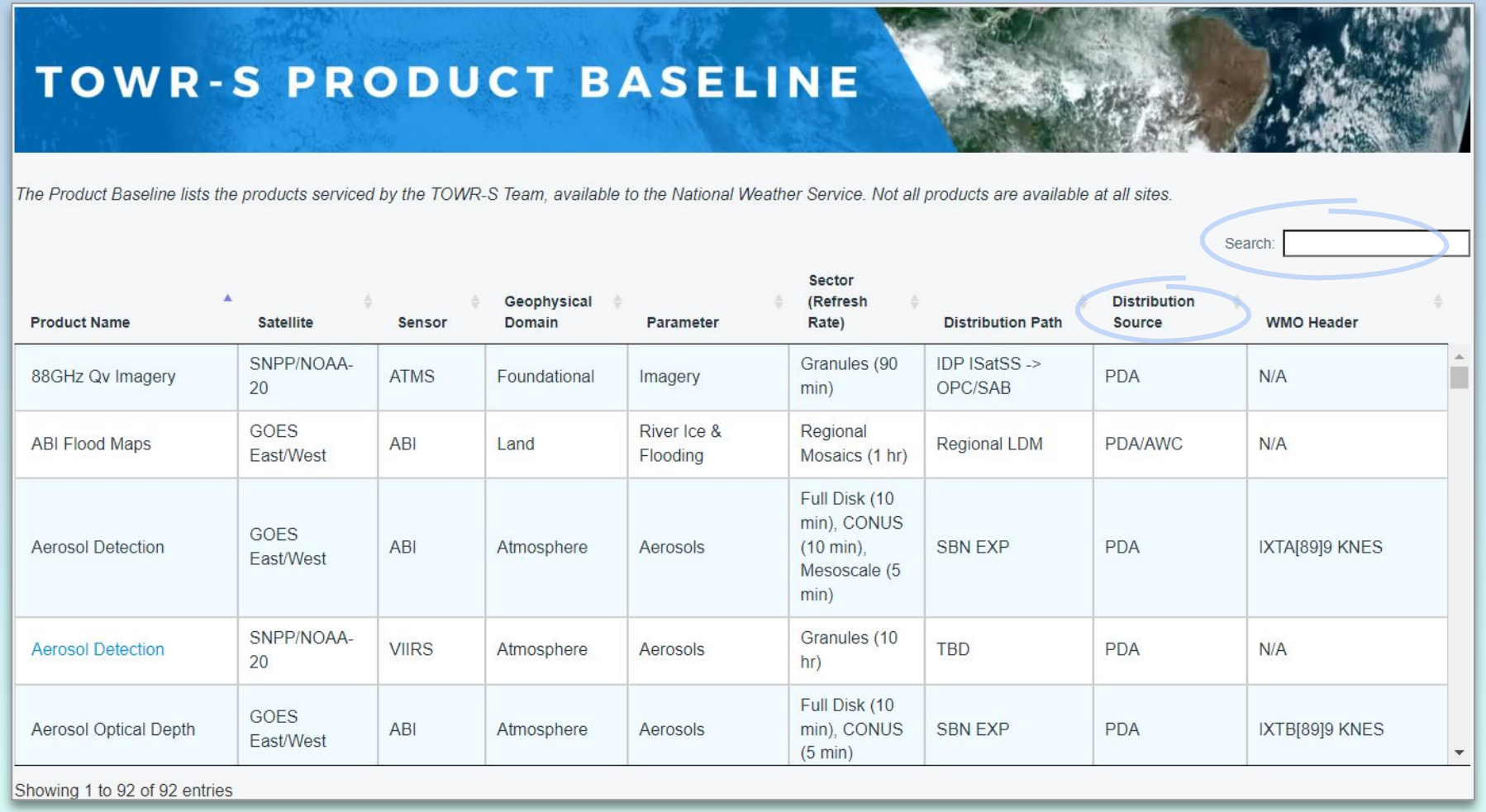
Upcoming sessions:

June 27: *The April 29, 2022 EF-3 Tornado: Lessons from a Near Miss* | Kelly Butler (ICT)

July 11: *GLM Background Imagery and Data Quality* | Eric Bruning (Texas Tech), Joseph Patton (CISESS), Kevin Thiel (CIWRO)

July 18: *GOES ASOS SCP Products* | Stuti Deshpande (TOWR-S)

TOWR-S Product Baseline



TOWR-S PRODUCT BASELINE

The Product Baseline lists the products serviced by the TOWR-S Team, available to the National Weather Service. Not all products are available at all sites.

Search:

Product Name	Satellite	Sensor	Geophysical Domain	Parameter	Sector (Refresh Rate)	Distribution Path	Distribution Source	WMO Header
88GHz Qv Imagery	SNPP/NOAA-20	ATMS	Foundational	Imagery	Granules (90 min)	IDP ISatSS -> OPC/SAB	PDA	N/A
ABI Flood Maps	GOES East/West	ABI	Land	River Ice & Flooding	Regional Mosaics (1 hr)	Regional LDM	PDA/AWC	N/A
Aerosol Detection	GOES East/West	ABI	Atmosphere	Aerosols	Full Disk (10 min), CONUS (10 min), Mesoscale (5 min)	SBN EXP	PDA	IXTA[89]9 KNES
Aerosol Detection	SNPP/NOAA-20	VIIRS	Atmosphere	Aerosols	Granules (10 hr)	TBD	PDA	N/A
Aerosol Optical Depth	GOES East/West	ABI	Atmosphere	Aerosols	Full Disk (10 min), CONUS (5 min)	SBN EXP	PDA	IXTB[89]9 KNES

Showing 1 to 92 of 92 entries

https://vlab.noaa.gov/web/towr-s/product-posture

TOWR-S maintains a table of all satellite data products that we are involved with integrating into NWS forecast operations.

Instant search, filter, and sort capability provides access by keyword, satellite, sensor, *etc.*

Many rows link to Dataset Guides with AWIPS details.

Note: Distribution Path "TBD" indicates a product in planning - not yet disseminated to users

TOWR-S Product Baseline

Graphical overview (Geophysical themes + Satellite sources)

Atmosphere

Aerosols
- ABI Aerosol Detection; Aerosol Optical Depth
- VIIRS Aerosol Detection; Optical Depth; Volcanic Ash

Cloud Liquid Water
- ATMS/CrIS MiRS CLW
- AMSR2-OCEAN

Convection
- ABI Derived Stability Indices

Derived Motion Winds
- ABI DMW
- Himawari AHI DMW
- VIIRS DMW

Fog & Low Stratus
- ABI FLS

Lightning
- GLM Flash Extent Density; Minimum Flash Area

Profiles
- ABI Soundings (Legacy Vertical Moisture Profile; Legacy Vertical Temperature Profile)
- ATMS/CrIS NUCAPS
- Metop B/C GOME-2 NUCAPS

Rain Rate/Qualitative Precipitation Estimation
- ABI RR/QPE; Global Hydro-Estimator
- AMSR2-OCEAN; AMSR2-PRECIP
- ATMS/CrIS MiRS RR
- Blended Hydro Suite RR
- Himawari AHI RR/QPE

Total Precipitable Water
- ABI TPW
- AMSR2-OCEAN
- ATMS/CrIS MiRS TPW
- Blended Hydro Suite TPW; %TPW

Turbulence
- ABI CIMSS Turbulence

Clouds

Cloud Layers
- ABI Cloud Cover Layers

Cloud Mask
- ABI Cloud Mask
- Himawari AHI Clear Sky Mask
- VIIRS Cloud Mask

Cloud Optical Depth
- ABI Cloud Optical Depth
- Himawari AHI Cloud Optical Depth
- VIIRS Cloud Optical Depth

Cloud Particle Size
- ABI Cloud Particle Size

Cloud Phase
- ABI Cloud Phase
- Himawari AHI Cloud Top Phase
- VIIRS Cloud Phase

Cloud Top Height
- ABI Cloud Top Height
- Himawari AHI Cloud Top Height
- VIIRS Cloud Top Height

Cloud Top Pressure
- ABI Cloud Top Pressure
- Himawari AHI Cloud Top Pressure
- VIIRS Cloud Top Pressure

Cloud Top Temperature
- ABI Cloud Top Temperature
- Himawari AHI Cloud Top Temperature
- VIIRS Cloud Top Temperature

Sky Cover
- ABI ASOS SCP

Land

Fires
- ABI Fire Hot Spot
- VIIRS Active Fires

Land Surface Temperature
- ABI LST
- VIIRS LST

River Ice & Flooding
- ABI Flood Maps
- VIIRS Flood Mapping

Soil Moisture
- AMSR2-SOIL

Ocean

Altimetry
- Cryosat-2 SIRAL Wave Altimetry
- JASON-3 Wave Altimetry
- Sentinel-3A/B SRAL Wave Altimetry
- Sentinel-6A Poseidon-4 Wave Altimetry

Sea Surface Temperature
- ABI SST
- AMSR2-OCEAN SST
- Himawari AHI ACSPO SST
- VIIRS ACSPO SST

Sea Surface Winds
- AMSR2-OCEAN Winds
- Cryosat-2 SIRAL Winds
- JASON-3 Winds
- Metop B/C ASCAT Winds
- OSCAT-3 Winds
- Sentinel-3A/B SRAL Winds

Cryosphere

Ice Age, Concentration, Thickness
- ABI Ice Age & Thickness
- ABI Ice Concentration & Extent
- AMSR2-SEAICE-NH
- ATMS/CrIS MiRS Ice
- VIIRS Ice Age, Concentration, Thickness

Snow Cover
- ABI Snow
- AMSR2-SNOW
- ATMS/CrIS MiRS Snow
- VIIRS Snow Cover

Foundational

Imagery
- 5 Geo Comp GMGSI Longwave IR; Visible; Water Vapor
- ABI SCMI Tiles
- AMSR2-MBT
- ATMS 88GHz Qv Imagery
- GPM GMI Microwave Imagery
- Himawari AHI Imagery
- SEVIRI VIS/IR/SWIR/WV
- SSMIS Microwave Imagery
- VIIRS Img.EDRs

https://vlab.noaa.gov/web/towr-s/product-posture

New VLab Resources

Search:

RGB Name	Use Case	Simple/ Adv./Old	Bands															Channel Differences											
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	5-2	7-13	8-10	9-10	10-8	12-13	13-7	13-11	14-11	15-13	Other
Air Mass	Inferring cyclogenesis; Identifying air masses	A								xd		d		d	d						x			x					
Ash	Ash detection; SO2 identification	A											d		xd	d	d										x	x	
CIMSS Natural Color	Human perspective from space	A	x	x																									x
CIRA Geocolor	Human perspective from space	A	x	x	x				d						xd										x				x
Day Cloud Convection	High convection clouds, low-mid water clouds, land surface distinction	S		xx											x														
Day Cloud Phase	Convective initiation; Snow squalls	S		x			x								x														

Showing 1 to 24 of 24 entries

x = included xx = two colors from same band included d = included in a channel difference xd = included as both a single band and channel difference

Table of GOES RGBs with Quick Guides, Use Cases and Bands

Table of GOES L2 products on the SBN with WMO Headers and PDA Shortnames

GOES-R L2 Products on SBN

The table below lists the GOES-R L2 products that are available via NOAAPort (Satellite Broadcast Network)

Search:

WMO Headers (East)	WMO Headers (West)	Product	PDA Shortname: Full Disk	PDA Shortname: CONUS	PDA Shortname: Meso1,2
IXTA99 KNES	IXTA89 KNES	Aerosol Detection	ABI_L2_ADPF	ABI_L2_ADPC	ABI_L2_ADPM
IXTB99 KNES	IXTB89 KNES	Aerosol Optical Depth	ABI_L2_AODF	ABI_L2_AODC	
IXTC99 KNES	IXTC89 KNES	Cloud Cover Layers	ABI_L2_CCLF	ABI_L2_CCLC	ABI_L2_CCLM
IXTD99 KNES	IXTD89 KNES	Cloud Top Phase	ABI_L2_CTPF	ABI_L2_CTPC	
IXTE99 KNES	IXTE89 KNES	Fog & Low Stratus		ABI_L2_GFLSC_AWIPS	
IXTF99 KNES	IXTF89 KNES	Rain Rate / Quant. Precip. Est.	ABI_L2_RRQPEF		
IXTG99 KNES	IXTG89 KNES	Cloud Top Height	ABI_L2_ACHAF	ABI_L2_ACHAC	ABI_L2_ACHAM
IXTH99 KNES	IXTH89 KNES	Cloud Mask	ABI_L2_ACMF		ABI_L2_ACMM
IXTI99 KNES	IXTI89 KNES	Cloud Top Temperature	ABI_L2_ACHTF	ABI_L2_ACMC	ABI_L2_ACHTM
IXTJ99 KNES	IXTJ89 KNES	Fire Detection	ABI_L2_FDCF	ABI_L2_FDCC	ABI_L2_FDCM

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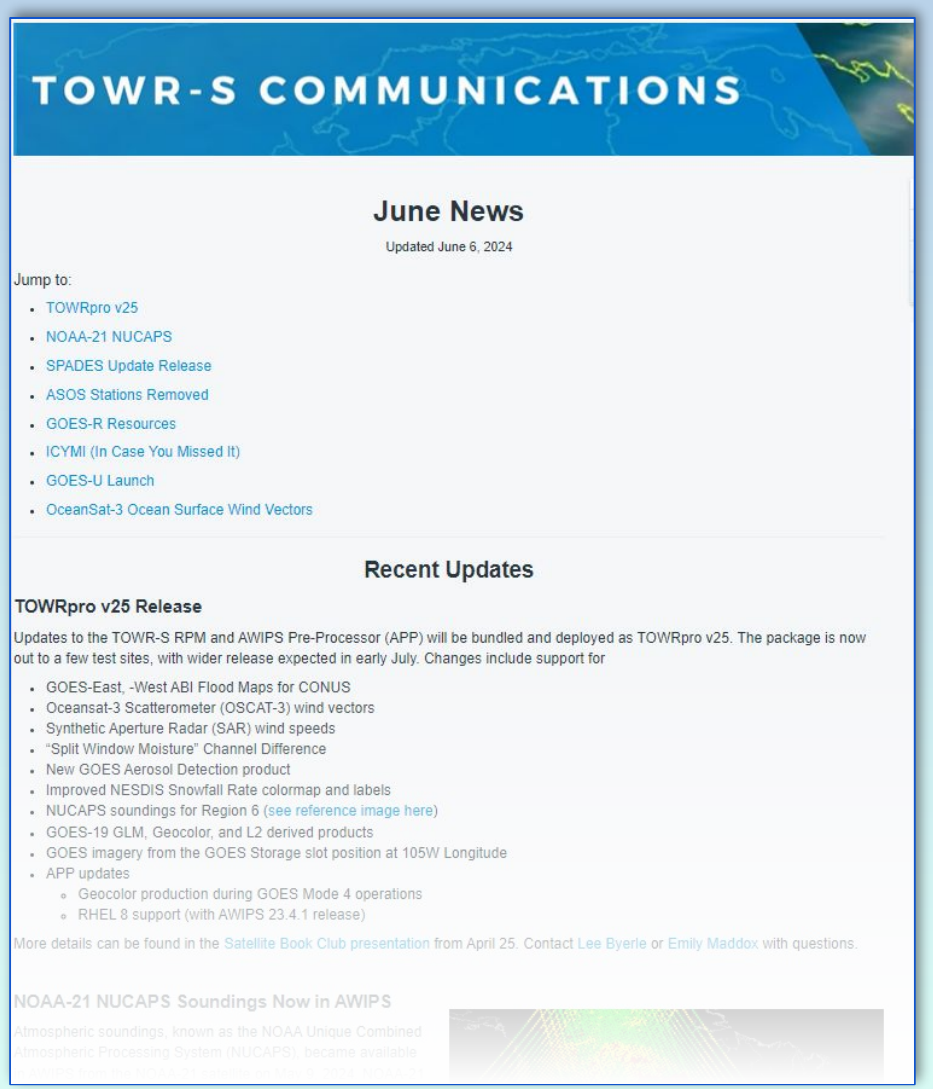
https://vlab.noaa.gov/web/towr-s/datasets

TOWR-S monthly news

- Supplements the quarterly TOWR-S Update briefings and the weekly / occasional TOWR-S mailers.

  See latest edition

- Emailed to TOWR-S Update attendees, SOOs, stakeholders, and posted to VLab. (https://vlab.noaa.gov/web/towr-s/communications)
  - Over 530 recipients
  - Comes out 1st or 2nd week of the month
    - June edition sent out on June 6
    - Expect July edition on July 10



TOWR-S COMMUNICATIONS

June News

Updated June 6, 2024

Jump to:

- TOWRpro v25
- NOAA-21 NUCAPS
- SPADES Update Release
- ASOS Stations Removed
- GOES-R Resources
- ICYMI (In Case You Missed It)
- GOES-U Launch
- OceanSat-3 Ocean Surface Wind Vectors

Recent Updates

TOWRpro v25 Release

Updates to the TOWR-S RPM and AWIPS Pre-Processor (APP) will be bundled and deployed as TOWRpro v25. The package is now out to a few test sites, with wider release expected in early July. Changes include support for

- GOES-East, -West ABI Flood Maps for CONUS
- Oceansat-3 Scatterometer (OSCAT-3) wind vectors
- Synthetic Aperture Radar (SAR) wind speeds
- "Split Window Moisture" Channel Difference
- New GOES Aerosol Detection product
- Improved NESDIS Snowfall Rate colormap and labels
- NUCAPS soundings for Region 6 (see reference image here)
- GOES-19 GLM, Geocolor, and L2 derived products
- GOES imagery from the GOES Storage slot position at 105W Longitude
- APP updates
  - Geocolor production during GOES Mode 4 operations
  - RHEL 8 support (with AWIPS 23.4.1 release)

More details can be found in the Satellite Book Club presentation from April 25. Contact Lee Byerle or Emily Maddox with questions.

NOAA-21 NUCAPS Soundings Now in AWIPS

Atmospheric soundings, known as the NOAA Unique Combined Atmospheric Processing System (NUCAPS), became available

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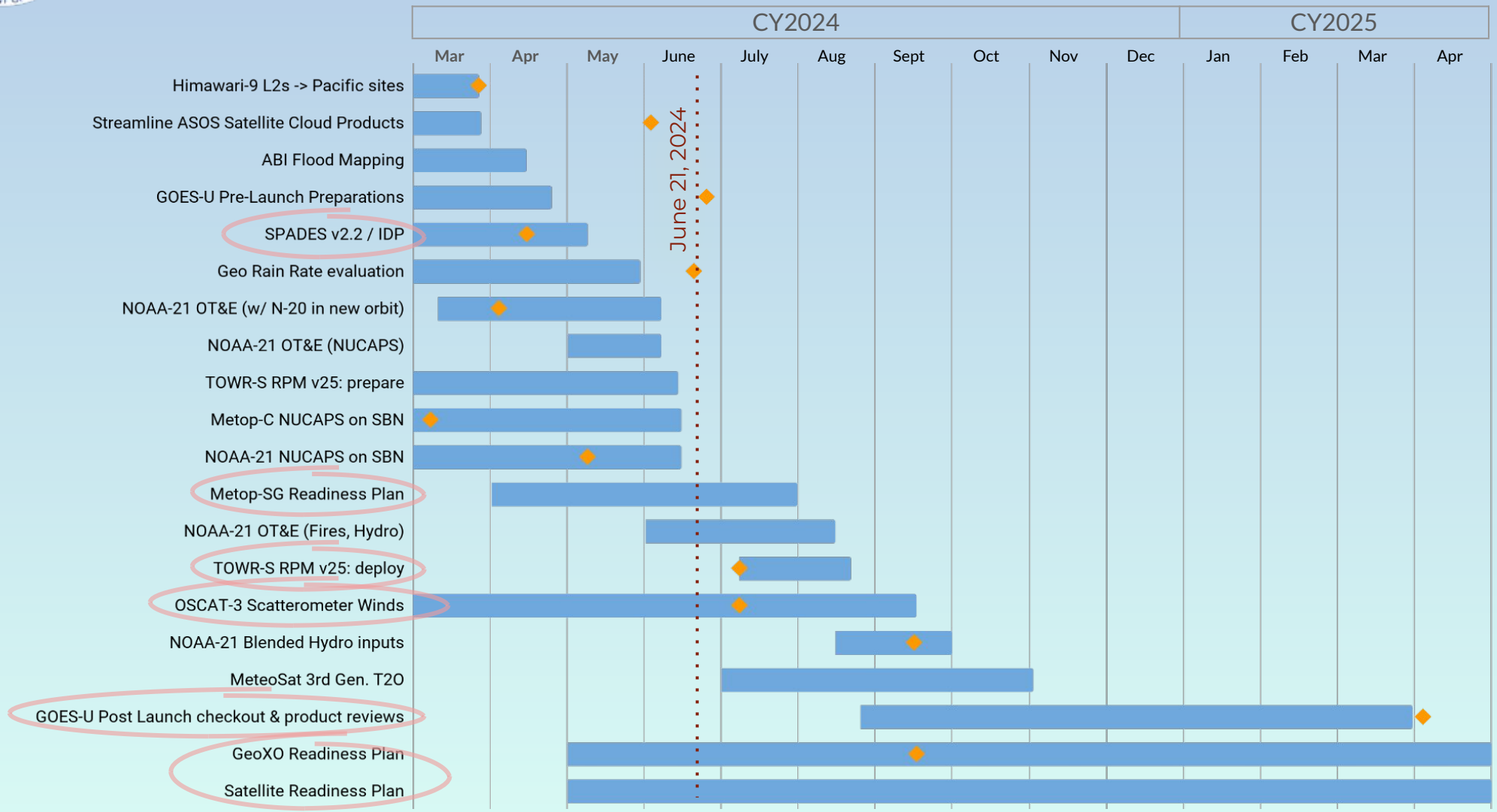
TOWR-S Activity Plan



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  - V Wegman - victoria.wegman@noaa.gov
  - Emily Maddox – emily.maddox@noaa.gov

- Links
  - NWSChat 2.0 **#towr-s Channel** 

  - TOWR-S on VLab (https://vlab.noaa.gov/web/towr-s)

Next TOWR-S Update

(tentative)
September 27, 2024

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