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Service Change Notice 22-113
National Weather Service Headquarters Silver Spring MD
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To: Subscribers:
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From: Ajay Mehta
 Director, NWS Office of Observations

Subject: Operational Transition of the GOES-18 Satellite to Become GOES-West on January 4, 2023

On or near January 4, 2023, at approximately 18:00 Coordinated Universal Time (UTC), GOES-18, the newest satellite in the Geostationary Orbiting Environmental Satellite (GOES) series, will become the operational GOES-West satellite, replacing GOES-17.

As of that date, all data products from GOES-18 will permanently replace those from GOES-17 on the Satellite Broadcast Network (SBN). This will include

1. Sectorized Cloud and Moisture Imagery (SCMI)
2. Level-2 (L2) derived products
3. Other products.

1. GOES-18 SCMI will, like GOES-17 SCMI, be disseminated on the "GRW" channel of SBN using the following World Meteorological Organization (WMO) headers for GOES-West, detailed in [Service Change Notice \(SCN\) 18-106](#):

TIRT{01..16} KNES for Full Disk imagery;
TIRW{01..16} KNES for West contiguous U.S. (CONUS) imagery;
TIRA{01..16} KNES for Alaska Regional Sector imagery;
TIU[A-Z]{01..16} KNES for Meso sector imagery.

GOES-18 SCMI will implement the spectral and geographic coverage changes described in the [SCN 22-94 Update](#) for GOES-West. That is, Full Disk Band 13 at 2km resolution; no Southern Hemisphere or Hawaii sector; and adding Band 13 imagery for a new American Samoa sector.

When these changes are in effect, the WMO headers "TIRH{01..16} KNES", currently used for GOES-17 Hawaii Regional Sector imagery, will not appear on SBN; and a new WMO header, "TIRZ13 KNES", will appear for American Samoa Regional Sector imagery.

As noted in the [SCN 22-94 Update](#), the changes listed therein will be temporarily reverted on or near January 31, 2023, and reinstated permanently on or near March 6, 2023.

(Although GOES-18 SCMI will use the same WMO headers as GOES-17 SCMI, users can still determine the satellite source via the "satellite_id" global attribute within each file.)

2. GOES-18 L2 Derived Products on the SBN, like those from GOES-17, will use the GOES-West WMO headers and SBN channels indicated below:

WMO Header	Product name	*Sector	Files /day	GB /day	SBN channel
IXTA89 KNES	Aerosol Detection	F, C, M	816	0.54	EXP
IXTB89 KNES	Aerosol Optical Depth	F, C	348	3.60	EXP
IXTD89 KNES	Cloud Top Phase	F, C, M	2868	0.96	EXP
IXTE89 KNES	Fog & Low Stratus	C	216	1.00	GRW
IXTF89 KNES	Rain Rate / Quant. Precip. Estimate	F	132	0.22	EXP
IXTG89 KNES	Cloud Top Height	F, C, M	2868	0.53	EXP
IXTH89 KNES	Clear Sky Mask	F, C, M	2867	4.90	EXP
IXTI89 KNES	Cloud Top Temperature	F, M	2652	3.88	EXP
IXTJ89 KNES	Fire/Hot Spot	F, C	432	0.42	EXP
IXTJ89 KNES	Fire/Hot Spot	M	2879	0.37	GRW
IXTK89 KNES	Land Surface Temperature	F, C, M	90	0.05	EXP
IXTM89 KNES	Sea Surface Temperature	F	24	0.83	EXP
IXTN89 KNES	Derived Stability Indices	F, C, M	2868	1.06	EXP
IXTO89 KNES	Total Precipitable Water	F, C, M	2868	0.42	EXP
IXTP89 KNES	Legacy Vertical Moisture Profiles (reduced levels)	C	48	0.48	EXP
IXTQ89 KNES	Legacy Vertical Temperature Profiles (reduced levels)	C	48	0.48	EXP
IXTU89 KNES	Derived Motion Winds	C	576	1.38	GRW
IXTU89 KNES	Derived Motion Winds	M	3456	0.87	EXP
IXTW81 KNES	Cloud Particle Size	F, C, M	2867	3.92	EXP
IXTX81 KNES	Cloud Top Pressure	F, C	348	0.25	EXP
IXTY81 KNES	Cloud Optical Depth	F, C	348	1.75	EXP

* F, C, and M denote the (GOES-West) Full Disk, CONUS, and Meso sectors, respectively.

These WMO headers and SBN channels are consistent with the following Service Change Notices:

- [SCN 20-22](#) (GOES-West Derived Motion Winds),
- [SCN 21-79](#) (GOES-West L2 products),
- [SCN 21-83](#) (GOES-West Fog & Low Stratus), and
- [SCN 22-79](#) (GOES-East, West Meso Fire Hotspots).

(Although GOES-18 L2 products will use the same WMO headers as those from GOES-17, users can still determine the satellite source via the "platform_ID" global attribute within each file.)

3. GOES-18 observations will also replace GOES-17 observations in the following products on the SBN:

WMO Header	Product name	Region	Files /day	MB /day	SBN channel
TICF02 KNES	Global Mosaic of Geostationary Sat. Imagery (Vis)	Global	8	53	OPT
TICF08 KNES	Global Mosaic of Geostationary Sat. Imagery (WV)	Global	8	36	OPT
TICF14 KNES	Global Mosaic of Geostationary Sat. Imagery (LWIR)	Global	8	54	OPT
TCUS50 KNES	ASOS Sat. Cloud Product	Eastern	24	0.4	NMC
TCUS51 KNES	ASOS Sat. Cloud Product	Central	24	0.7	NMC
TCUS52 KNES	ASOS Sat. Cloud Product	Southern	24	0.5	NMC
TCUS53 KNES	ASOS Sat. Cloud Product	Western	24	0.3	NMC
TCUS54 KNES	ASOS Sat. Cloud Product	Pacific	24	0.1	NMC
ZETA96 KNES	Global HydroEstimator: 6hr	CONUS	24	34	NMC
ZETA97 KNES	Global HydroEstimator: 3hr	CONUS	24	34	NMC
ZETA98 KNES	Global HydroEstimator: 1hr	CONUS	24	28	NMC
ZETA99 KNES	Global HydroEstimator: 15m	CONUS	99	113	NMC

These data products are further detailed in the following Service Change Notices:

- [SCN 20-67](#) (Global Mosaic of Geostationary Satellite Imagery)
- [SCN 20-83](#) (GOES-17 ASOS Satellite Cloud Product)

(Unlike SCMI and L2 products, these products do not indicate within each file which satellites' observations they derive from.)

Details on the GOES-18 Transition to Operations are available from the GOES-R Program at:

<https://www.ospo.noaa.gov/Operations/GOES/transition.html>

Technical details on the above data products are available on the NOAA Virtual Laboratory (VLab) at:

<https://vlab.noaa.gov/web/towr-s/dataset-guides>

SBN channel details (Port, PID, etc.) may be found in [SCN 20-77](#).

Critical weather or other factors may delay these changes on the SBN.

For questions pertaining to these changes, please contact:

NOAA/NWS Office of Observations
 Silver Spring, MD
 Email: nws-obs-satellites@noaa.gov

or

AWIPS Network Control Facility (NCF) Help Desk
NOAA/NWS Office of Central Processing
Silver Spring, MD
Phone: 888-808-8624

For questions regarding the content or distribution of the products listed here, please contact:

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National Service Change Notices are online at:

<https://www.weather.gov/notification/>

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