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Service Change Notice 25-30 National Weather Service Headquarters Silver Spring MD 4:30 PM EDT Tue Mar 18 2025

- To: Subscribers: -NOAA Weather Wire Service -Emergency Managers Weather Information Network -NOAAPort Other NWS Partners and NWS Employees
- From: William Burnett, PhD Acting Director, NWS Office of Observations

Subject: Operational transition of the GOES-19 satellite to become GOES-East on April 4, 2025.

On or after April 4, 2025, at approximately 15:10 UTC, GOES-19, the newest satellite in the Geostationary Operational Environmental Satellite (GOES) series, will become the operational GOES-East satellite, replacing GOES-16.

As of that date, all data products from GOES-19 will permanently replace those from GOES-16 on the Satellite Broadcast Network (SBN). This will include:

1. Sectorized Cloud and Moisture Imagery (SCMI),

- 2. Level-2 (L2) derived products, and
- 3. Other products.

1. GOES-19 SCMI will, like GOES-16 SCMI, be disseminated on the "GRE" channel of SBN using the following WMO headers for GOES-East:

TIRS{01..16} KNES for Full Disk imagery; TIRE{01..16} KNES for East CONUS imagery; TIRP{01..10,13,15} KNES for Puerto Rico Regional Sector imagery; TIS[A-Z]{01..16} KNES for Meso sector imagery.

Note: Although GOES-19 SCMI will use the same WMO headers as GOES-16 SCMI, users can still determine the satellite source via the "satellite id" global attribute within each file.

2. GOES-19 L2 Derived Products on the SBN, like those from GOES-16, will use the GOES-East WMO headers and SBN channels indicated below:

| WMO Header | Product name | *Sector | Files /day | GB /dav | SBN channel |
|-------------|-----------------------|---------|---------------|------------|----------------|
| | | | | | |
| IXTA99 KNES | Aerosol Detection | F, C, M | 816 | 0.54 | EXP |
| IXTB99 KNES | Aerosol Optical Depth | F, C | 348 | 3.60 | EXP |
| IXTC99 KNES | Cloud Cover Layers | F, C, M | 888 | 0.31 | EXP |

| IXTD99 | KNES | Cloud Top Phase | F, | С, | М | 2868 | 0.96 | EXP |
|--------|------|-----------------------------|----|----|---|--------|------|-----|
| IXTE99 | KNES | Fog & Low Stratus | | С | | 216 | 1.00 | GRE |
| IXTF99 | KNES | Rain Rate / | | | | | | |
| | | Quant. Precip. Estimate | F | | | 132 | 0.22 | EXP |
| IXTG99 | KNES | Cloud Top Height | F, | С, | М | 2868 | 0.53 | EXP |
| IXTH99 | KNES | Clear Sky Mask | F, | С, | М | 2867 | 4.90 | EXP |
| IXTI99 | KNES | Cloud Top Temperature | F, | | М | 2652 | 3.88 | EXP |
| IXTJ99 | KNES | Fire/Hot Spot | F, | С | | 432 | 0.42 | EXP |
| IXTJ99 | KNES | Fire/Hot Spot | | | М | 2879 | 0.37 | GRE |
| IXTK99 | KNES | Land Surface Temperature | F, | С, | М | 90 | 0.05 | EXP |
| IXTL99 | KNES | Fractional Snow Cover | F | | | 24 | 0.05 | EXP |
| IXTM99 | KNES | Sea Surface Temperature | F | | | 24 | 0.83 | EXP |
| IXTN99 | KNES | Derived Stability Indices | F, | С, | М | 2868 | 1.06 | EXP |
| IXTO99 | KNES | Total Precipitable Water | F, | С, | М | 2868 | 0.42 | EXP |
| IXTP99 | KNES | Legacy Vertical Moisture | | | | | | |
| | | Profiles (reduced levels) | | С | | 48 | 0.48 | EXP |
| IXTQ99 | KNES | Legacy Vertical Temperature | Э | | | | | |
| | | Profiles (reduced levels) | | С | | 48 | 0.48 | EXP |
| IXTR99 | KNES | Ice Concentration & Extent | F | | | 8 | 0.07 | EXP |
| IXTT99 | KNES | Ice Age and Thickness | F | | | 8 | 0.05 | EXP |
| IXTU99 | KNES | Derived Motion Winds | | С | | 576 | 1.38 | GRE |
| IXTU99 | KNES | Derived Motion Winds | | | М | 3456 | 0.87 | EXP |
| IXTW01 | KNES | Cloud Particle Size | F, | С, | М | 2867 | 3.92 | EXP |
| IXTX01 | KNES | Cloud Top Pressure | F, | С | | 348 | 0.25 | EXP |
| IXTY01 | KNES | Cloud Optical Depth | F, | С | | 348 | 1.75 | EXP |
| TIRS00 | KNES | Tiled GLM Lightning | F | | | ~30000 | 2.40 | GRE |

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

Note: Although GOES-19 L2 products will use the same WMO headers as those from GOES-16, users can still determine the satellite source via the "platform_ID" global attribute within each file.

3. GOES-19 observations will also replace GOES-16 observations in the following products on SBN:

| | | | Files | MB | SBN |
|-------------|--|-------------|-------|------|---------|
| WMO Header | Product name | Region | /day | /day | channel |
| TICF02 KNES | Global Mosaic of Geosta- tionary Sat. Imagery (VIS) | Global | 8 | 54 | OPT |
| TICF08 KNES | Global Mosaic of Geosta- tionary Sat. Imagery (WV) | Global | 8 | 36 | OPT |
| TICF14 KNES | Global Mosaic of Geosta- tionary 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 | in CONUS | 99 | 113 | NMC |

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

SCN20-67 (Global Mosaic of Geostationary Satellite Imagery) SCN20-83 (GOES-17 (now GOES-18) ASOS Satellite Cloud Product)

Unlike SCMI and L2 products, the Global Mosaics, ASOS Satellite Cloud Products, and Global HydroEstimators do not indicate within each file which satellite observations they derive from.

Details on the GOES-19 Transition to Operations are available from the GOES-R Program at https://www.goes-r.gov/users/transitionToOperations19.html

Technical details on all of the above data products are available on the NOAA VLab at https://vlab.noaa.gov/web/towr-s/dataset-guides

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 20910 Email: NWS-OBS-Satellites@noaa.gov

or

AWIPS Network Control Facility (NCF) Help Desk NOAA/NWS Office of Central Processing Silver Spring, MD 20910 Phone: 888-808-8624

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

GOES-R User Services Coordinator Greenbelt, Maryland 20771 Email: SPSD.Userservices@noaa.gov

National Service Change Notices are online at: https://www.weather.gov/notification/

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