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Service Change Notice 22-94 Updated National Weather Service Headquarters Silver Spring MD 430 PM EST Fri Jan 27 2023

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From: Ajay Mehta

Director, NWS Office of Observations

Subject: Updated: Changes to the Geographic and Spectral Coverage of GOES-East/West Imagery on the Satellite Broadcast Network: Effective December 1, 2022 (GOES-East) and January 4, 2023 (GOES-West)

Updated to inform users the product changes will now revert from January 30, to March 1, 2023.

The NWS is preparing for several changes to the geographic and spectral coverage of Sectorized Cloud and Moisture Imagery (SCMI) data products from Geostationary Orbiting Environmental Satellite (GOES)-R satellites (GOES-East and GOES-West) distributed via the Satellite Broadcast Network (SBN). These changes go into effect on or about December 1, 2022 for GOES-East (GOES-16), and January 4, 2023 for GOES-West (which will then be GOES-18).

Several of these changes were the subject of <u>Public Information Statement 21-60</u> (September 8, 2021), "Seeking Comments through October 8, 2021 on Changing the Geographic Coverage of GOES-R SCMI Data Available via the Satellite Broadcast Network."

Note 1. The effective date of this change is sooner than specified by NWS Instruction 10-1805. The reduced lead-time was approved because these changes and their timing were only recently finalized by the data provider, and minimal changes to software or configurations are necessary.

Note 2. Due to configuration changes upstream from NWS, the changes listed below will be temporarily reverted on or near January 30, 2023, and reinstated permanently on or near March 1, 2023.

The following timeline indicates when the changes listed below will be in effect for GOES-East and GOES-West:

	Dec. 1	Jan. 4	Jan. 30	Mar. 1
GOES-East				>
GOES-West				>

The SCMI products will remain on the SBN's GOES-East (GRE) and GOES-West (GRW) channels, but with the following five changes:

1. (GOES-East and GOES-West) Cease transmission of all reduced-resolution southern hemisphere imagery, for all bands (1-16), beginning on or near December 1, 2022 (for GOES-East) and January 4, 2023 (for GOES-West).

After this change, GOES-East and GOES-West imagery products on SBN that are denoted "Full Disk" will contain imagery only for the northern hemisphere.

This change is expected to reduce the combined usage of SBN GRE and GRW channels by $6.24~\mathrm{GB/day}$ (266 MB/hour).

Justification: NWS has limited forecast operations in the southern hemisphere. Furthermore, NWS Pacific Region has a GOES Rebroadcast (GRB) antenna to provide data to American Samoa and monitor oceanic service areas in the southern hemisphere. National Centers also have Full Disk SCMI from GRB data.

2. (GOES-East and GOES-West) Increase the spatial resolution of SCMI Band 13 (IR Window) to full (2 km) resolution (for the northern hemisphere), beginning on or near December 1, 2022 (for GOES-East) and January 4, 2023 (for GOES-West).

This change is expected to increase the combined usage of SBN GRE and GRW channels by $3.72~\mathrm{GB/day}$ (159 MB/hour).

Justification: Band 13 is crucial for monitoring weather systems outside of the contiguous U.S. (CONUS) (including over Canada) and an important alternative source for National Centers that provide services to our oceanic areas.

3. (GOES-West only) Cease creation and transmission of the Hawaii Regional sector, for all bands (1-16), beginning on or near January 4, 2023.

This change is expected to reduce the usage of the SBN GRW channel by $3.35~\mathrm{GB/day}$ (143 MB/hour).

Justification: The Hawaii Regional sector was established before the GOES-West CONUS (PACUS) sector was adjusted to cover Hawaii. GOES-West imagery products for the West CONUS (PACUS) sector arrive twice as frequently, providing adequate Hawaii coverage.

After this change becomes permanent in March 2023, the following (16) World Meteorological Organization (WMO) headers, denoting GOES-West Hawaii Regional sector SCMI (per SCN 18-106) will be retired:

TIRH01	KNES	TIRH02	KNES	TIRH03	KNES	TIRH04	KNES
TIRH05	KNES	TIRH06	KNES	TIRH07	KNES	TIRH08	KNES
TIRH09	KNES	TIRH10	KNES	TIRH11	KNES	TIRH12	KNES
TIRH13	KNES	TIRH14	KNES	TIRH15	KNES	TIRH16	KNES

4. (GOES-West only) Begin transmission of SCMI (Band 13 only) for a new American Samoa Regional sector spanning latitudes 25° S to 5° S and longitudes 170° E to 160° W, beginning on or near January 4, 2023.

This change is expected to increase the usage of the SBN GRW channel by $0.13~\mathrm{GB/day}$ ($5.5~\mathrm{MB/hour}$).

Band 13 SCMI for the American Samoa sector will be identified by a new WMO header code: TIR713 KNES.

Justification: This change will extend the full-resolution coverage of SCMI Band 13 outside the northern hemisphere to support the Pago Pago Weather Service Office.

5. (GOES-East only) Cease transmission of SCMI Bands 11, 12, 14 and 16 for the Puerto Rico Regional sector, occurring on December 1, 2022.

This change is expected to reduce the usage of the SBN GRE channel by $0.53~\mathrm{GB/day}$ (22.6 MB/hour).

Justification: SCMI Bands 11, 12, 14 and 16 are used for larger scale features only.

After this change becomes permanent in March 2023, the following four WMO headers, denoting GOES-East Puerto Rico Regional sector SCMI (per \underline{SCN} 18-66) will be retired:

TIRP11 KNES TIRP12 KNES TIRP14 KNES TIRP16 KNES

In all, these five changes are expected to reduce SBN usage by 6.27 GB/day (268 MB/hour): 1.8 GB/day (77 MB/hour) on the GRE channel and 4.47 GB/day (191 MB/hour) on the GRW channel.

Alternative ways to access and use data and imagery from GOES-R satellites may be found in the Beginner's Guide to GOES-R Series Data (https://go.usa.gov/xMcdJ).

In particular, the NOAA Open Data Dissemination Program provides access to ${\tt GOES-R}$ data and imagery:

https://www.noaa.gov/information-technology/open-data-dissemination

Also, NOAA's CLASS archive provides access to these and many other NOAA data, and to a help desk: https://www.class.noaa.gov.

Furthermore, NWS National Centers, OCONUS regions, and a few other SBN sites have access to full-resolution SCMI generated from GOES Rebroadcast (GRB) data.

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

Critical weather or other factors may affect the timing of these changes.

For questions about these planned 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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