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PNSWSH

Service Change Notice 17-133
National Weather Service Headquarters Silver Spring MD
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To: Subscribers:
 -NOAA Weather Wire Service
 -Emergency Managers Weather Information Network
 -NOAAPort
 Other NWS Partners, Users and Employees

From: Joseph Pica
 Director, NWS Office of Observations

Subject: Changes to Satellite Broadcast Network (SBN or NOAAPort) Products
Associated with GOES East Transition: Effective December 14, 2017 through
January 3, 2018

Between Thursday December 14, 2017, and Wednesday, January 3, 2018, there
will be changes to the suite of Geostationary Operational Environmental
Satellite (GOES) products on the SBN. These changes are associated with
the GOES East transition. This transition involves the phase-out of GOES-
13 and the phase-in of GOES-16 as GOES East.

The GOES-16 drift to 75.2 degrees West longitude completed successfully on
December 11, 2017. On or shortly after Thursday, December 14, 2017 at
1530 Coordinated Universal Time (UTC), it is anticipated that
dissemination of GOES-16 products will resume on the SBN. In general, the
GOES-16 product flows will resume with the same formats, cadence and
headings that were in use during testing throughout much of 2017, but
there will be a few minor changes (e.g., heading changes), as described
herein, reflecting the new location of GOES-16 and its imminent promotion
to GOES East.

1. GOES-16 Advanced Baseline Imager (ABI) Sectorized Cloud and Moisture
Imagery (SCMI) will resume flowing on the SBN's GOES-R East channel (PID
108) on or after Thursday, December 14, 2017, 1530 UTC. Refer to prior
[Service Change Notice \(SCN\) 17-24](#) which first introduced actual GOES-16
SCMI to the SBN and which more fully describes these products. The World
Meteorological Organization (WMO) headers follow these patterns:

TIREii KNES - for East CONUS sectors (previously GOES-16 CONUS sectors
were distributed under the TIRCii KNES, for "center CONUS")
TIRPii KNES - for Puerto Rico Regional sectors
TIRSii KNES - for East Full Disk sectors
TISjii KNES - for Mesoscale sectors

where j is the meso sector ID as defined in SCN 17-24; ii is the ABI
channel number (01 - 16); between the ii and KNES is a space, and KNES
signifies that NESDIS is the creating data center.

Product metadata will reflect the new location of GOES-16, now on station, about to become GOES East. The following specific product_name global attribute metadata changes will take effect with the resumption of the GOES-16 SCMI:

TMESO becomes EMESO
TCONUS becomes ECONUS
TFD becomes EFD
(PRREGI will not change)

The format of the GOES-16 SCMI imagery will remain netCDF4. The geographical coverage of the imagery will be similar to that broadcast previously, except for changes due the satellite's relocation to 75.2 degrees West. The mapping of this imagery will be consistent with that of the imagery disseminated on this channel between March and November 2017. Although alternately-mapped "fixed-grid" GOES-16 imagery was evaluated on the SBN during late 2017 (on a different SBN channel, see [SCN 17-95](#)), the transition of GOES-16 SCMI to the fixed-grid will take place later, during 2018, well after the GOES East transition. NWS will disseminate a SCN describing the SCMI fixed-grid transition before it takes place.

The GOES-16 ABI imagery has been evaluated and validated, and is considered generally suitable for operational use. However, validation efforts will continue through at least early 2018.

2. GOES-16 Advanced Baseline Imager (ABI) Level 2 Derived Products will resume flowing on the SBN's Experimental channel (PID 106) on or after Thursday, December 14, 2017, 1530 UTC. The same set of GOES-16 derived products that were flowing on the SBN's Experimental channel between June and November 2017 will resume flowing there on or after December 14, 2017. Refer to SCNs [17-61](#) and [17-73](#), which further describe these products:

Aerosol Detection (Smoke and Dust)
Aerosol Optical Depth
Cloud Top Phase
Cloud Top Height
Cloud Top Pressure
Cloud Top Temperature
Derived Stability Indices
Total Precipitable Water
Clear Sky Mask
Fire/Hot Spot Characterization
Land Surface (Skin) Temperature
Cloud Optical Depth
Cloud Particle Size Distribution
Derived Motion Winds

The basic formats and headers of these products will not change during the GOES East transition. However, there will be product-specific metadata changes within some of these files that reflect the new location of GOES-16 and its imminent transition to GOES East.

These GOES-16 derived products have been only partially validated, and these products remain in a pre-operational stage. Validation efforts will

continue well into 2018.

These GOES-16 derived product flows are experimental. Several of these products are likely to be discontinued after an evaluation period. Others in this product set will eventually be moved to other SBN channels and possibly modified. It is envisioned that these changes will begin during the first half of 2018. NWS will disseminate a SCN describing these changes before they occur.

3. Between Thursday, December 14 and Wednesday, December 20, 2017, NOAA will declare GOES-16 to be "GOES East," replacing GOES-13. Please refer to the NESDIS GOES East transition page for updates:

<https://www.goes-r.gov/users/transitionToOperations.html>

During this transition period, GOES-13 products will continue dissemination on the SBN, but only until on or shortly after Wednesday, January 3, 2018, 15 UTC. On that date, all remaining GOES-13 products on the SBN will be discontinued, as described in the bullets below.

4. Effective on or after 15 UTC Wednesday, January 3, 2018, there will be changes to the GOES Automated Surface Observing System (ASOS) Satellite Cloud Products (SCPs) on the SBN, as described in SCN 17-127:

https://www.weather.gov/media/notification/pdfs/scn17-127goes_cloud.pdf

5. Effective on or after 15 UTC Wednesday, January 3, 2018, dissemination of GOES-13 GINI-format imagery will cease on the SBN's legacy-GOES channel (PID 102). The affected headers are:

TIG*Eii* KNES - East CONUS Sector, where *ii* = 01, 02, 04, 05, 06

TIG*Pii* KNES - Puerto Rico Regional Mercator, where *ii* = 01, 02, 04, 05, 06

TIG*Qii* KNES - Puerto Rico National Polar Stereo where *ii* = 01, 02 and 05

where *ii* corresponds to legacy imager channel, between the *ii* and KNES is a space, and KNES signifies that the National Satellite, Data and Information Service (NESDIS) is the creating data center. The GOES-16 ABI SCMI products, described in item 1, above, are replacements for these products.

6. Effective on or after 15 UTC Wednesday, January 3, 2018, GOES-13 (legacy East satellite) imagery will be removed from the following SBN legacy-GOES satellite composites:

TIG*Nii* KNES - Supernational Two-GOES Composites, where where *ii* = 01, 02 and 05

TIG*Fii* KNES - Northern Hemisphere Two-GOES Composites, where *ii* = 01, 02 and 05

TIC*Fii* KNES - Multi-satellite Composites

where *ii* = 01, 02 and 04 and where *ii* corresponds to imager channel, between the *ii* and KNES is a space, and KNES signifies that NESDIS is the creating data center.

7. Effective on or after 15 UTC Wednesday, January 3, 2018, dissemination of GOES-13 High-Density Winds will cease on the SBN's NMC/NWSTG channel (PID 101). Potentially-affected headers include:

JACXii KNES
JBCXii KNES
JCCXii KNES
JECXii KNES
JGCXii KNES
JHCXii KNES
JICXii KNES
JJCXii KNES
JLCXii KNES
JMCXii KNES
JPCXii KNES
JQCXii KNES
JRCXii KNES

where ii = 01, 11, 21, 31, etc. and with most GOES-13 data messages being stored in products whose headers include ii values of 11, 21, 31 and 41. Products with many of these headers will continue to flow with GOES-15 (West) High Density Winds. Replacements for GOES-13 winds include the GOES-16 Derived Motion Winds on the SBN's experimental channel (see item 2 above).

8. Effective on or after 15 UTC Wednesday, January 3, 2018, the basis for GOES East data in the NESDIS Global Hydro-estimator Satellite Rainfall Estimates (on the SBN's NMC/NWSTG channel, PID 101) will change from GOES-13 to GOES-16. Affected headers include:

ZETA96 KNES - six-hour total product
ZETA97 KNES - three-hour total product
ZETA98 KNES - one-hour total product
ZETA99 KNES - fifteen-minute instantaneous product

Beyond this GOES East transition, additional GOES-16 products are planned for SBN addition in early 2018. Furthermore, GOES-S is scheduled for launch by NOAA in March 2018, and products from that satellite are planned for SBN addition beginning around May 2018. Subsequent SCNs will describe these SBN product additions in advance.

For questions pertaining to this change or other NOAAPort product changes associated with the GOES East transition, please contact:

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and

AWIPS Network Control Facility (NCF) Help Desk
NOAA/NWS Office of Central Processing
Silver Spring, MD
Email: nws.ncf.supervisors@noaa.gov

For questions regarding the scientific or technical content of the NOAAPort-disseminated GOES-16 products, please contact:

Environmental Satellite Processing Center (ESPC) Help Desk
Suitland, MD
Phone: 301-817-3880
Email: espcoperations@noaa.gov

National Service Change Notices are online at:

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

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