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From: Joseph Pica
Director, NWS Office of Observations

Subject: Add Geostationary Operational Environmental Satellite-16 (GOES-16) Imagery to the Satellite Broadcast Network (SBN or NOAAPORT), effective March 2, 2017

Effective on or after Thursday, March 2, 2017, at approximately 18UTC, GOES-16 Advanced Baseline Imager (ABI) Sectorized Cloud and Moisture Imagery (SCMI) will be added to the SBN (also known as NOAAPORT).

The SBN feed of GOES-16 ABI imagery will be in a pre-operational validation and testing phase through approximately November 2017. NOAA's GOES-16 satellite has not been declared operational and its data are preliminary and undergoing testing. Users receiving these data through any dissemination means assume all risk related to their use of GOES-16 data and NOAA disclaims any and all warranties, whether express or implied, including (without limitation) any implied warranties of merchantability or fitness for a particular purpose.

This preliminary imagery is being added to enable the testing of networks and systems with actual GOES-16 imagery and so that users will be able to evaluate the imagery during this validation/test period. It is not recommended that this preliminary imagery be used in operational forecast processes, especially during the initial months of this validation/test period. Any downstream postings of these data should clearly convey their preliminary, non-operational and in-testing nature. Furthermore, this data stream may be subject to temporary unannounced data outages during this validation and testing period. One or more follow-on notices will provide information on the progress and conclusion of the validation period.

Refer to prior Technical Implementation Notice 15-24, which introduced simulated GOES-R data to the SBN.

http://www.nws.noaa.gov/os/notification/tin15-24goes-r_imagery.htm
Eventually, the SBN will carry a range of GOES-16 products. This notice concerns only the addition of GOES-16 ABI imagery. A future notice will be issued for other GOES-16 products that will be added to the SBN at a later date.

GOES-16 is stationed over its designated 89.5 degrees west longitude station. From this location, it is undergoing checkout and validation and is not yet designated GOES East or West. Nevertheless, the SBN's GOES-R East channel (PID 108) will be used to disseminate the GOES-16 imagery, at least until the time when the spacecraft is repositioned to its final operational station. For the foreseeable future, the operational GOES-East (GOES-13) and GOES-West (GOES-15) data will remain unchanged on SBN PIDs 102 (for CONUS imagery) and 104 (for OCONUS imagery).

The WMO headers for the GOES-16 imagery are as follows, with references to the 11 character template:

Template: T1 T2 A1 A2 ii CCCC

T1 = T
T2 = I
A1 = R for large-scale (non-mesoscale) sectors
    = S for mesoscale sectors
A2 Where A1=R, for large-scale (non-mesoscale) sectors, A2 corresponds to geographical sectors as follows:
    = A for the Alaska Regional sector
    = E for the East CONUS sector
    = H for the Hawaii Regional sector
    = P for the Puerto Rico Regional sector
    = S for the East Full Disk
    = T for the West Full Disk
    = W for the West CONUS sector

Where A1=S, for mesoscale sectors, A2 values corresponds to geographical latitude/longitude areas as follows:
    = A for 45 deg. N <= Lat. < 60 deg. N and
      120 deg. W < Long. <= 135 deg W
    = B for 45 deg. N <= Lat. < 60 deg. N and
      105 deg. W < Long. <= 120 deg. W
    = C for 45 deg. N <= Lat. < 60 deg. N and
      90 deg. W < Long. <= 105 deg W
    = D for 45 deg. N <= Lat. < 60 deg. N and
      75 deg. W < Long. <= 90 deg W
    = E for 45 deg. N <= Lat. < 60 deg. N and
      60 deg. W < Long. <= 75 deg W
    = F for 30 deg. N <= Lat. < 45 deg. N and
      120 deg. W < Long. <= 135 deg W
    = G for 30 deg. N <= Lat. < 45 deg. N and
      105 deg. W < Long. <= 120 deg. W
    = H for 30 deg. N <= Lat. < 45 deg. N and
      90 deg. W < Long. <= 105 deg W
    = I for 30 deg. N <= Lat. < 45 deg. N and
      75 deg. W < Long. <= 90 deg W
    = J for 30 deg. N <= Lat. < 45 deg. N and
60 deg. W < Long. <= 75 deg. W
= K for 15 deg. N <= Lat. < 30 deg. N and
120 deg. W < Long. <= 135 deg. W

= L for 15 deg. N <= Lat. < 30 deg. N and
105 deg. W < Long. <= 120 deg. W

= M for 15 deg. N <= Lat. < 30 deg. N and
90 deg. W < Long. <= 105 deg. W

= N for 15 deg. N <= Lat. < 30 deg. N and
75 deg. W < Long. <= 90 deg. W

= O for 15 deg. N <= Lat. < 30 deg. N and
60 deg. W < Long. <= 75 deg. W

= P for 0 deg. N <= Lat. < 15 deg. N and
90 deg. W < Long. <= 135 deg. W

= Q for 0 deg. N <= Lat. < 15 deg. N and
60 deg. W < Long. <= 90 deg. W

= R for 45 deg. N <= Lat. < 90 deg. N and
135 deg. W < Long. <= 180 deg. W

= S for 0 deg. N <= Lat. < 45 deg. N and
135 deg. W < Long. <= 180 deg. W

= T for 60 deg. N <= Lat. < 90 deg. N and
90 deg. E < Long. <= 135 deg. W

= U for 0 deg. N <= Lat. < 60 deg. N and
90 deg. E < Long. <= 60 deg. W

= V for 0 deg. N <= Lat. < 90 deg. N and
180 deg. W < Long. <= 90 deg. E

= W and X are reserved for future use

= Y for 90 deg. S <= Lat. < 0 deg. S and
105 deg. W < Long. <= 90 deg. E

= Z for 90 deg. S <= Lat. < 0 deg. S and
90 deg. E < Long. <= 105 deg. W

Where mesoscale boxes T, U and Z extend across the prime meridian (0 deg. longitude) and boxes V and Y extend across the International Dateline (180 deg. longitude). Sector boundaries of 0 deg. N or 0 deg. S refer to the equator. The "<=" symbols refer to "less than or equal to." Note that some of the regions above are out of range from GOES-16 at its current location, but these regions could be within range after the satellite’s station changes.

\[ ii = \text{ABI channel number (01 - 16); between the ii and CCCC is a space} \]

\[ \text{CCCC = KNES (signifies that NESDIS is the creating data center)} \]

During this test and evaluation period, some sectors will be unavailable, and the set of available sectors will change.

Until recently, these headers had been used to disseminate simulated imagery on the GOES-R East channel for GOES-R testing. Tests of simulated GOES-R Series imagery will occur, at times, on the GOES-R West channel of the SBN.
The file format for these products is netCDF4.

Additional information about this new data stream (including headers, file-format descriptions, sector definitions, sample files and further information) has been posted at the following web site and will be periodically updated:


Critical weather or other factors could delay the activation of these products on the SBN.

For questions pertaining to this change or upcoming plans for the addition of GOES-16 products onto NOAAPORT, please contact:

Brian Gockel
NOAA/NWS Office of Observations
Surface and Upper Air Division, Services Branch
Silver Spring, MD 20910
Email: Brian.Gockel@noaa.gov

For questions regarding the scientific or technical content of the NOAAPORT-disseminated SCMI please contact:

ESPC Help Desk
Suitland, Maryland 20746
Phone: 301-817-3880
Email: ESPCOperations@noaa.gov

National Service Change Notices are online at:

http://www.weather.gov/os/notif.htm

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