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Service Change Notice 18-66 National Weather Service Headquarters Silver Spring MD 448 PM EDT Mon Jun 18 2018

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-Emergency Managers Weather Information Network

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From: Joseph Pica

Director, NWS Office of Observations

Subject: Transition of NOAAPORT Geostationary Operational Environmental Satellite-16 (GOES-16) Imagery to

Fixed Grid Effective June 19, 2018

On or after Tuesday, June 19, 2018, no earlier than 15UTC, NWS will transition GOES-16 Advanced Baseline Imager (ABI) Imagery on the Satellite Broadcast Network (SBN, also known as NOAAPORT) to a mapping referred to as the ABI Fixed Grid. This ABI imagery is sometimes referred to as Sectorized Cloud and Moisture Imagery (SCMI). The ABI Fixed Grid is a map projection based on the viewing perspective of the idealized location of a satellite in geostationary orbit. GOES-16 ABI SCMI on the Fixed Grid map projection was tested and evaluated by NWS (including SBN broadcast) during October and November 2017 as described in SCN 17-95:

http://www.nws.noaa.gov/os/notification/scn17-95goes16test.htm

and more recently on or about June 14-15, 2018, as described in PNS 18-17:

https://www.weather.gov/media/notification/pdfs/pns18-17goes16\_test.pdf

This change affects the SCMI that is disseminated on the SBN's GOES-R East channel (PID 108).

The WMO headers of the GOES-16 SCMI being transitioned to the fixed grid 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:

- = E for the East CONUS sector
- = P for the Puerto Rico Regional sector
   (Note that Full Disk imagery, whose A1=R and whose A2=S,
   is already disseminated across the SBN in the fixed-grid
   projection, so it will be unaffected by this transition.)

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
- = 0 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

If/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 of future GOES-R series satellites, such as GOES-17.

ii = ABI channel number (01 - 16); between the ii and CCCC is
 a space

CCCC = KNES (signifies products originated by NESDIS)

The file format for these products will remain netCDF4.

For information about the ABI Fixed Grid, please refer to the GOES-R Product Definition and Users' Guide:

http://www.goes-r.gov/users/docs/PUG-L1b-vol3.pdf

Critical weather or other factors could affect the timing of this transition.

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

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and

AWIPS Network Control Facility (NCF) Help Desk NOAA/NWS Office of Central Processing Silver Spring, MD 20910 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, Maryland 20746

Phone: 301-817-3880

Email: ESPCOperations@noaa.gov

National Service Change Notices are online at:

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

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