Subject line: Operational GOES-West Transition Plan (GOES-11 to GOES-15) Issued: October 7, 2011, 1735 UTC

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Date/Time Issued: October 7, 2011, 1735 UTC

Product(s) or Data Impacted: GOES-11 and GOES-15 Imager and Sounder data and associated products, including AWIPS, ancillary communication services (DCS/LRIT/EMWIN/SAR), and GVAR data

Date/Time of Initial Impact: December 6, 2011.

Date/Time of Expected End: N/A

Length of Outage: N/A

Details/Specifics of Change: On December 6, 2011 GOES-15 is scheduled to replace GOES-11 as the GOES-West operational spacecraft and GOES-15 GVAR will begin to flow through GOES-11 communication links. On December 14, 2011 GOES-15 GVAR will flow directly through GOES-15 communication links and GOES-11 will be decommissioned. A more detailed transition timeline is provided below. Characteristics of the Imager and Sounder are similar from GOES-11 to GOES-15; however, there are some differences:

- Increased spatial resolution to 4 km for all IR bands
- New 13.3 um band
- No 12 um on the imager
- GVAR format is going from GVAR format 1 to GVAR format 3 to support 4 km band 6
- Ground equipment may require adjustments to satellite ID, but the transition timeline and plans are intended to minimize disruptions to users who acquire the GOES-15 GVAR signal via a ground antenna.

Transition Timeline:

- August 22, 2011. GOES-15 began executing GOES-West frames (no Rapid (RSO), Super Rapid (SRSO) and the Full Disk (FD) frames) to accommodate advanced user testing of GOES-15 data.
- September 1, 2011 through October 15, 2011 is the GOES-15 Fall eclipse season for 2011.
- October 18, 2011 at 0321 UTC. GOES-15 will begin a westward drift from 89.5 degrees West to 135 degrees West at a rate ~ 0.78 degrees/day.
- December 1, 2011. A GOES-15 drift rate adjustment maneuver will be performed.
- December 6, 2011. As GOES-15 approaches 129 degrees West, the GOES-15 transition to GOES-West will occur. GOES-15 data will flow through GOES-11 communication links, thus, GOES-15 data becomes operational but is received through the GOES-11 downlink. In other words, the GOES-15 GVAR data are relayed through GOES-11. Users pointing to GOES-11 will start receiving GOES-15 data. Ancillary communication services (DCS/LRIT/EMWIN/SAR) will remain on GOES-11. Users do not re-point antennae. At this point GOES-15 data are considered operational, but should significant problems occur, GOES-11 data can be reestablished quickly.
- December 14, 2011. A GOES-15 stop maneuver will be performed. The GOES-11 signal is turned off and GOES-15 data are acquired directly from GOES-15. GOES-15 GVAR data will be relayed through GOES-15. Ancillary communication services (DCS/LRIT/EMWIN/SAR) will switch from GOES-11 to GOES-15.
- December 15, 2011. Pending successful arrival of GOES-15 at 135 degrees West, GOES-11 will perform de-orbit maneuvers, and GOES-11 will be decommissioned.

- These intricate steps are necessary to provide a continuous flow of data, with minimal impact to users. There should be no need to readjust antenna unless there is a desire to acquire GOES-15 data prior to GOES-15 becoming operational.

Current GOES-15 Data: ESPC Authorized Users of GOES data should currently have access to GOES-15 data via the SATESPDIST servers under the GCR server. GOES-15 GVAR non-operational data are currently being stored at NOAA's Comprehensive Large Array-Data Stewardship System (CLASS).

Contacts for Further Information: SPSD User Services at SPSD.UserServices@noaa.gov

Additional Web Site Resources:

- GOES status: http://www.oso.noaa.gov/goesstatus/
- Additional GVAR information: http://www.osd.noaa.gov/GVAR_Downloads/gvar_downloads.html and http://www.oso.noaa.gov/goes/goes-calibration/
- GOES-West Routine Imager schedule: http://www.ssd.noaa.gov/PS/SATS/GOES/WEST/s-routine.html
- Comprehensive Large Array-Data Stewardship System (CLASS): http://www.class.ncdc.noaa.gov/saa/products/welcome