

GOES East GEOTIFF Products for GNC-A
Full Disk Images
GNC-A Coordination Group Broadcast Committee
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NOAA/NESDIS/OSPO/SPSD operationally ingests and distributes GOES images. The GOES images are available to SPSSD in McIDAS AREA format. In order to meet the requirement of GNC-A users, SPSSD generates GOES East image products in GEOTIFF format. The GOES East Full Disk image products in GEOTIFF include channel 1 (Visible), channel 3 (Water Vapor), and channel 4 (Infrared Radiation).

1. The Pixel Value In GEOTIFF Image Products:

NOAA/NESDIS stores the value of Albedo in visible GEOTIFF files and the value of Brightness Temperature in WV and IR GEOTIFF files. SPSSD reserves only 1 byte in the full disk images to store the pixel value in these GEOTIFF image products due to the size of the GEOTIFF files. The real pixel value is multiplied by the factor 100. For example, the value in GEOTIFF file will be 972 if the real pixel value is 97.2.

Note that the value 0 is used in non-image area of GEOTIFF file.

2. The Coverage of GEOTIFF Image Products

The Full Disk GEOTIFF image products cover both Northern Hemisphere and Southern Hemisphere. Even though the Northern and Southern Hemisphere sector images cover the majority of the Americas, only the Full Disk images cover the Southern tip of South Americas and some of the oceanic areas. These also provide coverage during Rapid Scan Operations.

Note that sector info can be found at: <http://www.ospo.noaa.gov/Operations/GOES/schedules.html>

3. The Frequency of GEOTIFF Image Products:

Per the imaging schedule of GOES East satellite, NOAA/NESDIS generates the Full Disk image products every 3 hours starting at 00:45 during normal operations and 02:45 during Rapid Scan Operations.

4. The file name convention of GEOTIFF sector image products:

IMAGE PRODUCT	COVERAGE	NAME CONVENTION
GOES EAST VISIBLE	Full Disk	GoesEastFDSK1VJJJHHMM.tif
GOES EAST WATER VAPOR	Full Disk	GoesEastNH04I3JJJHHMM.tif
GOES EAST IR	Full Disk	GoesEastNH04I4JJJHHMM.tif