

NOUS41 KWBC 022040 AAA
PNSWSH

Service Change Notice 23-42 Updated
National Weather Service Headquarters Silver Spring MD
440 PM EDT Tue May 2 2023

To: Subscribers:
 -NOAA Weather Wire Service
 -Emergency Managers Weather Information Network
 -NOAAPort
 Other NWS Partners and NWS Employees

From: Ajay Mehta
 Director, NWS Office of Observations

Subject: Updated: Activation of GOES-East/West Ice and Snow Products on
 the Satellite Broadcast Network (SBN) on or after June 5, 2023

Updated to account for the Fractional Snow Cover product with fewer product transmissions, once every 60 minutes, with a decreased daily file volume. In addition, the parameter to describe units of fractional snow cover, changes from decimal to percentage of 100. One more change is the web address to describe the products. Sample images of these GOES cryosphere products are found on the VLab address near the end of this notice.

Effective on or after June 5, 2023, three ice and snow products from the GOES-East and GOES-West satellites will be activated on SBN:

Product	Source Satellite	WMO ID	Files /day	MB /day
Ice Concentration & Extent	GOES-East	IXTR99 KNES	8	68
Ice Concentration & Extent	GOES-West	IXTR89 KNES	8	68
Ice Age & Thickness	GOES-East	IXTT99 KNES	8	48
Ice Age & Thickness	GOES-West	IXTT89 KNES	8	48
Fractional Snow Cover	GOES-East	IXTL99 KNES	24	48
Fractional Snow Cover	GOES-West	IXTL89 KNES	24	48

These data products will be available only for the (GOES-East/West) Full Disk -- not for any CONUS, Regional, or Mesoscale sectors.

In all, these data products will add 80 files per day to the SBN, amounting to approximately 326 MB per day.

All of these data products will be encoded in the NetCDF format, and will be routed on the SBN EXP channel (Port 1208, PID 106) using the "WMO ID" strings above.

The Ice Concentration & Extent product provides the following parameters for each pixel (2x2km at nadir):

Parameter Name	Units / Semantics
Ice Concentration	percent (range: 0 to 100)
Ice Surface Temperature	Kelvin (range: 100-275 degrees)
Ice Mask	-3: no retrieval; -2: water; -1: land; 0: cloud; 1: day ice; 2: night ice

These parameters are quantitative out to latitude +/- 60 degrees; and qualitative out to the image limb.

Ice Concentration & Extent files may also be obtained via NOAA's Open Data Dissemination (NODD) website, at the following URLs:

<https://noaa-goes16.s3.amazonaws.com/index.html#ABI-L2-AICEF/>
<https://noaa-goes18.s3.amazonaws.com/index.html#ABI-L2-AICEF/>

The Ice Age & Thickness product provides the following parameters for each pixel (2x2km at nadir):

Parameter Name	Units / Semantics
Ice Thickness	meters (range: 0 to 3m)
Ice Age (3 category)	1: ice free; 2: first year ice; 3: older ice
Ice Age (8 category)	1: ice free; 2: new ice; 3: gray ice; 4: gray white ice; 5: thin first year ice; 6: medium first year ice; 7: thick first year ice; 8: old ice

These parameters are quantitative out to about latitude +/- 60 degrees; and qualitative out to the image limb.

Ice Age & Thickness files may also be obtained via NODD:

<https://noaa-goes16.s3.amazonaws.com/index.html#ABI-L2-AITAF/>
<https://noaa-goes18.s3.amazonaws.com/index.html#ABI-L2-AITAF/>

The Fractional Snow Cover product provides the following parameter for each pixel (2x2km at nadir):

The Fractional Snow Cover product provides the following parameter:

Parameter Name	Units / Semantics
Fractional Snow Cover	percent (range: 0 to 100)

The Fractional Snow Cover product is quantitative out to about latitude +/- 50 degrees; and qualitative out to the day/night line or the image limb. (Because this parameter is estimated only in daylight, its northern extent is significantly limited during winter months.)

Fractional Snow Cover files may also be obtained via NODD:

<https://noaa-goes16.s3.amazonaws.com/index.html#ABI-L2-FSCF/>
<https://noaa-goes18.s3.amazonaws.com/index.html#ABI-L2-FSCF/>

Further details on all of these data products may be found on VLab at:

<https://vlab.noaa.gov/web/towr-s/goes-cryosphere>

Critical weather or other factors may affect the timing of this change.

For questions pertaining to this change, please contact:

NOAA/NWS Office of Observations
Silver Spring, MD
Email: NWS-OBS-Satellites@noaa.gov

or

AWIPS Network Control Facility (NCF) Help Desk
NOAA/NWS Office of Central Processing
Silver Spring, MD
Phone: 888-808-8624

For questions regarding the content or distribution of the products listed here please contact:

Stephen Superczynski
GOES-R User Services Coordinator
Greenbelt, MD
Email: stephen.superczynski@noaa.gov

National Service Change Notices are online at:

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

NNNN