NOUS41 KWBC 221900 PNSWSH Service Change Notice 23-42 National Weather Service Headquarters Silver Spring MD 300 PM EDT Tue Mar 22 2023 To: Subscribers:

- -NOAA Weather Wire Service -Emergency Managers Weather Information Network -NOAAPort Other NWS Partners, Users and Employees
- From: Ajay Mehta Director, NWS Office of Observations

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

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

Product	Source Satellite	WMO ID	Files/ /day	MB/ /day
			/uay	/uay
Ice Concentration and Extent	GOES-East	IXTR99 KNES	8	68
Ice Concentration and Extent	GOES-West	IXTR89 KNES	8	68
Ice Age and Thickness	GOES-East	IXTT99 KNES	8	48
Ice Age and Thickness	GOES-West	IXTT89 KNES	8	48
Fractional Snow Cover	GOES-East	IXTL99 KNES	48	96
Fractional Snow Cover	GOES-West	IXTL89 KNES	48	96

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

In all, these data products will add 128 files per day to the SBN, amounting to approximately 420 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 "World Meteorological Organization (WMO) ID" strings above.

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

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

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 and 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 and 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	0.0 (no snow) to 1.0 (full snow cover)

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 the GOES-R website (https://www.goes-r.gov/resources/docs.html).

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/

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