

NOUS41 KWBC 071530  
PNSWSH

Service Change Notice 24-14  
National Weather Service Headquarters Silver Spring MD  
1030 AM EST Wed Feb 7 2024

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

From:         Ajay Mehta  
              Director, NWS Office of Observations

Subject: Metop-C NUCAPS Soundings to be Added to the Satellite Broadcast  
          Network on or near March 8, 2024

On or near March 8, 2024, NOAA-Unique Combined Atmospheric Processing  
System (NUCAPS) soundings from the European Metop-C polar-orbiting  
satellite will be added to the Satellite Broadcast Network (SBN).

Metop-C NUCAPS soundings estimate atmospheric temperature and moisture,  
around the globe, about three hours before local solar noon and midnight  
in each location. They provide insight into the morning pre-convective  
environment, complementing the early-afternoon soundings of the NOAA-20  
and NOAA-21 satellites.

Metop-C NUCAPS soundings will add 300 files/day (0.25GB/day) to the SBN.  
Each file (or "granule") spans about 1/34 of an orbit (3 minutes of time)  
and samples an area roughly 1,100km x 2,100km with a grid of 30x22 or  
30x23 atmospheric soundings. These soundings estimate the following  
parameters at 100 vertical levels between the Earth's surface and the  
upper atmosphere:

Parameter	Units
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Air Pressure	mb
Air temperature	K
Liquid water mixing ratio	g/g
Water vapor mixing ratio	g/g
Ozone mixing ratio	ppb
Sulfur dioxide mixing ratio	ppb

The Metop-C NUCAPS data will be broadcast via the SBN NMC3 channel (Port  
1205, PID 105) using the following nine WMO header codes:

IUTN01 KNES	IUTN04 KNES	IUTN07 KNES
IUTN02 KNES	IUTN05 KNES	IUTN08 KNES
IUTN03 KNES	IUTN06 KNES	IUTN09 KNES

These codes correspond to the geographic regions previously detailed in  
TIN14-03 for S-NPP NUCAPS (retired in 2021). They correspond to the

geographic regions previously detailed in TIN14-03  
(<https://www.weather.gov/media/notification/tins/tin14-03nucaps.pdf>).  
They were previously used for S-NPP NUCAPS (retired in 2021).

Additional details on NUCAPS products from Metop-C and other satellites  
are available on the NOAA VLab at <https://vlab.noaa.gov/web/towr-s/jpss-nucaps>.

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

For questions pertaining to these changes, please contact:

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

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email: [joseph.fiore@noaa.gov](mailto:joseph.fiore@noaa.gov)  
Google Voice: 240-622-5819

National Service Change Notices are online at:

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

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