

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  
              -NOAAPort  
              Other NWS Partners, Users and 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 |
|-----------------------------|-------|
| -----                       | ----- |
| 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 World Meteorological Organization (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 Technical Implementation Notice (TIN) 14-03 for S-NPP NUCAPS (retired in 2021). They correspond to the geographic regions previously detailed in TIN 14-03 (<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 Virtual Laboratory (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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