

NOUS41 KWBC 131530
PNSWSH

Service Change Notice 25-03
National Weather Service Headquarters Silver Spring MD
1030 AM EST Mon Jan 13 2025

To: Subscribers:
 -NOAA Weather Wire Service
 -Emergency Managers Weather Information Network
 -NOAAPort
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From: William Burnett, PhD
 Acting Director, NWS Office of Observations

Subject: Activation of Advected Layer Precipitable Water (ALPW) on the
Satellite Broadcast Network on or about March 28, 2025

Effective on or about March 28, 2025, the Advected Layer Precipitable Water (ALPW) product, derived from Microwave Integrated Retrieval System (MiRS) retrievals of temperature and moisture, will become available on the NWS Satellite Broadcast Network (SBN).

ALPW maps water vapor in millimeters at four vertical pressure levels: surface (SFC) to 850mb, 850-700mb, 700-500mb, and 500-300mb. Data is parsed in clear and cloudy conditions at 16km horizontal resolution. Imagery is refreshed from a composite of multiple Low Earth Orbit satellites, including the Joint Polar Satellite System (JPSS) constellation. ALPW data will be produced hourly with file sizes of ~30MB.

ALPW complements, rather than replaces, Total Precipitable Water and other comparable products. Depths of moisture as seen in ALPW are crucial for observing atmospheric rivers, forecasting flood events, and tropical waves.

Until activation on the SBN, ALPW is available from the National Environmental Satellite, Data, and Information Service (NESDIS) via the operational PDA (Product Distribution and Access) and over regional Local Data Manager (LDM), as well as from the Cooperative Institute for Research in the Atmosphere (CIRA). For NWS users, configurations to visualize these files in the Advanced Weather Interactive Processing System (AWIPS) will be included in TOWRpro version 25. This NESDIS product will be available under the World Meteorological Organization (WMO) Header KNES TICY70.

Further details on the ALPW product may be found from the National Centers for Environmental Prediction (NCEP) at:

[https://www.wpc.ncep.noaa.gov/international/QuickGuide LPW Advected 20180223.pdf](https://www.wpc.ncep.noaa.gov/international/QuickGuide_LPW_Advected_20180223.pdf)

Training for this product can be found at:

https://rammb2.cira.colostate.edu/trainings/visit/training_sessions/advected_layer_precipitable_water_product/

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:

NESDIS User Services
Email: spsd.userservices@noaa.gov

National Service Change Notices are online at:

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

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