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PNSWSH

Service Change Notice 25-23  
National Weather Service Headquarters Silver Spring MD  
1015 AM EST Thu Feb 27 2025

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

From:       Bruce Entwistle, Chief  
              Aviation and Space Weather Services Branch

Subject:     Operational Implementation of Updated Solar Cycle 25 Prediction  
Product:     Effective March 31, 2025

Effective on or about March 31, 2025, at 1700 Coordinated Universal Time (UTC), the National Weather Service will operationally implement an updated version of the prediction for Solar Cycle 25. The new product is currently available as an experimental product here:

<https://testbed.swpc.noaa.gov/products/solar-cycle-progression-interactive>

This updated prediction is an enhancement of the solar cycle progression products now distributed on the following public webpages:

<https://www.swpc.noaa.gov/products/solar-cycle-progression>

<https://www.swpc.noaa.gov/products/predicted-sunspot-number-and-radio-flux>

<https://services.swpc.noaa.gov/json/solar-cycle/predicted-solar-cycle.json>

The existing products include a prediction for Solar Cycle 25 from an international panel composed of experts from National Oceanic and Atmospheric Administration/National Aeronautics and Space Administration/International Space Environment Services that convened in 2019 and presented their findings at the 2019 Annual Space Weather Workshop.

The new product leverages the latest observations of the international sunspot number and the 10.7 cm radio flux to provide more accurate predictions of solar activity progression through the year 2030.

This new version provides the following products, each of which will be updated on a monthly basis (on or about the 2nd day of the month) as new observations become available:

1. A graphical figure showing the observed monthly sunspot number for Solar Cycle 25, which began in 2019, and the predicted sunspot number through 2032. Uncertainty in the prediction is portrayed as quartiles.
2. Similar to item 1 but showing observations and predictions for the F10.7 cm radio flux through 2032.
3. A file in JSON (JavaScript Object Notation) format containing quantitative values for the predicted sunspot number and F10.7 cm radio flux through 2032, with estimated uncertainties.

Effective on or about March 31, 2025, these new experimental products will replace the current Solar Cycle and F10.7 cm radio flux predictions on the Space Weather Prediction Center (SWPC) website.

A Product Description Document for the Operational Deployment of Updated Solar Cycle Prediction Product is provided online:

[https://nsdesk.servicenowservices.com/api/g\\_noa/nwspc/res2/c91e8a56973bd6508881bb7de053afbe](https://nsdesk.servicenowservices.com/api/g_noa/nwspc/res2/c91e8a56973bd6508881bb7de053afbe)

For any additional comments/feedback on this change at SWPC, please contact:

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National Service Change Notices are online at:

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

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