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Service Change Notice 24-96 National Weather Service Headquarters Silver Spring MD 335 PM EDT Tue Oct 15 2024

- To: Subscribers: -NOAA Weather Wire Service -Emergency Managers Weather Information Network -NOAAPort Other NWS Partners, Users and Employees
- From: Bruce Entwistle, Chief Aviation and Space Weather Services Branch

Subject: Improvements Made to the World Coordinate System Metadata in GONG H-Alpha Imagery on or about October 16, 2024

On or about October 16, 2024, at 2200 Coordinated Universal Time (UTC), the National Weather Service will deploy an update to the processing of Global Oscillation Network Group (GONG) near real-time space weather data that will yield additional and more standardized World Coordinate System (WCS) information in the GONG H-alpha FITS file headers. The existing WCSNAME, CTYPE1 and CTYPE2 header keywords will be modified to reflect a Helioprojective-cartesian WCS, and the following new keywords will be added: CDELT1, CDELT2, CUNIT1, CUNIT2, CROTA1, CROTA2, SOLAR_R and TIMESYS. These changes better define the relationship between image pixels and solar coordinates, allowing users to more easily relate positions on the observed images to locations on the Sun.

Example header excerpts before and after this change, can be viewed at https://testbed.swpc.noaa.gov/products/gong-halpha-wcs.

The most recent observed GONG H-alpha imagery data files are available at https://services.swpc.noaa.gov/products/gong/haf.

For any comments/feedback on this change at the Space Weather Prediction Center (SWPC), please contact:

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National Service Change Notices are online at:

https://www.weather.gov/notification

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