

Product Description Document
Experimental Weeks 3-4 Mean North American 500 Millibar Height Outlook
January 5, 2024

Part 1 – Mission Connection

a) Product Description:

The National Centers for Environmental Prediction's (NCEP's) Climate Prediction Center (CPC) issues an outlook of the Weeks 3-4 Mean North American 500-mb height pattern to provide insight into the Weeks 3-4 temperature and precipitation outlooks by indicating mean circulation patterns.

b) Purpose/Intended Use:

This product assists users in providing added insight to the Weeks 3-4 temperature and precipitation outlooks. This information will be used to inform preparedness measures and other decisions pertaining to sectors that benefit from advanced lead time of anomalous weather and climate variability, including emergency management, agriculture, water resources, and energy.

c) Audience/Users:

The audience is primarily decision makers with some technical background in weather and climate activities sensitive to subseasonal climate variability (e.g., weather risk management, energy/utilities, agriculture, hydrology, etc.).

d) Presentation Format:

CPC presents the outlooks as charts available on the CPC website in static graphical format. The Experimental Weeks 3-4 Mean North American 500 Millibar Height Outlook is available at

<https://www.cpc.ncep.noaa.gov/products/predictions/WK34/500mb.php>

e) Feedback Method:

The NWS is accepting comments through June 26, 2024, on the Experimental Weeks 3-4 Mean North American 500 Millibar Height Outlook

https://www.surveymonkey.com/r/ExpWeeks3_4MeanNA500mbHeightOutlook

For further information, please contact:

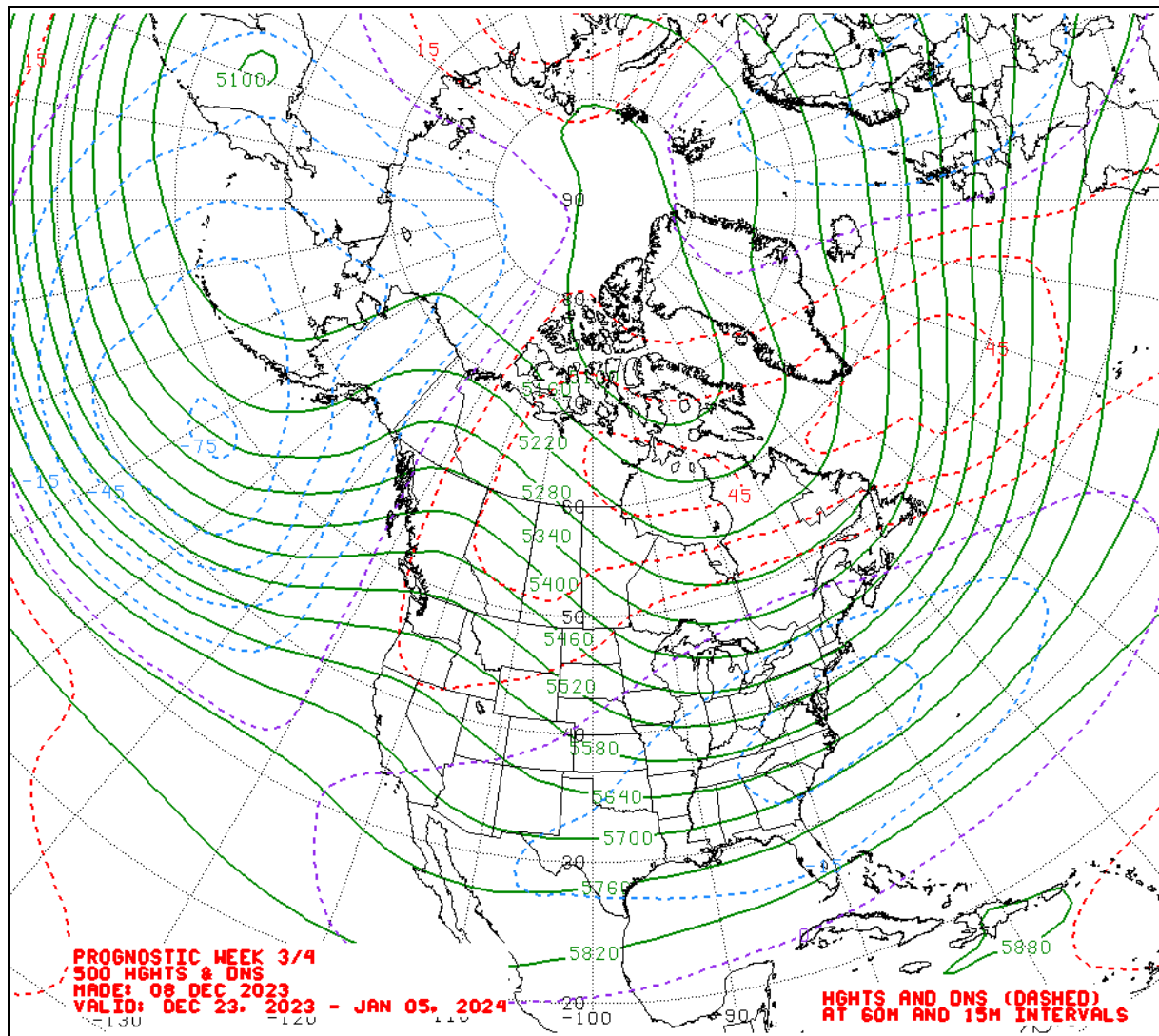
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Part 2 – Technical Description

a) Format and Science Basis:

CPC will plot the predicted average 500 millibar contour heights and height anomaly for the valid period. CPC plots the anomaly with respect to 30-year mean heights for the outlook period. CPC will plot solid height contour lines and dashed height anomaly lines at 60- and 15-meter intervals respectively.

The outlook is informed by objective post-processed ensemble systems from several operational centers and includes the Global Ensemble Forecast System (GEFS), the Climate Forecast System (CFS), the European Centre for Medium Range Weather Forecasts (ECMWF), the Japan Meteorological Agency (JMA), and a statistical forecast tool that combines potential influences from ENSO, the MJO and the secular temperature trend. The outlook is then created by forecaster-assigned weights assigned to each of the current above inputs.



Example of the CPC experimental Weeks 3-4 500 millibar official height outlook to accompany the CPC Weeks 3-4 temperature and precipitation outlooks

b) Availability:

During experimental implementation, the experimental Weeks 3-4 Mean North American 500 Millibar Height Outlook will be updated at the same time as the official Weeks 3-4 temperature and precipitation outlooks (by 4:00 PM ET each Friday).

Experimental Weeks 3-4 Mean North American 500 Millibar Height Outlook:

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