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To:           Subscribers:  
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From:        Marina Timofeyeva  
              Chief, NWS Climate Services Branch

Subject: Depiction and Output Formats of the Daily Antarctic Oscillation (AAO), Arctic Oscillation (AO), North Atlantic Oscillation (NAO) and Pacific North America (PNA) Teleconnection Products Will Change on or about February 15, 2022

The National Centers for Environmental Prediction (NCEP) Climate Prediction Center (CPC) will change the depiction and output formats of the daily AAO, AO, NAO and PNA teleconnection products on or about February 15, 2022. Comparable changes to the monthly teleconnection products will be announced at a later date.

The changes are the result of an ongoing effort to modernize and update the scripts that produce these teleconnection products.

The changes to depiction of the graphics include (1) an update of the Global Ensemble Forecast System (GEFS) related graphics to display all members of the ensemble; and (2) upgraded image quality utilizing Python software and output in Portable Network Graphic (png) format.

The changes to the output formats include (1) changing the output format of the daily index files from ascii to both csv and netcdf; (2) the addition of csv and netcdf files of the Global Forecast System (GFS) and GEFS forecasts of the indices initialized over the past 120 days; (3) changing the filenames to reflect the file content and (4) the discontinuation of output in binary and ctl formats. While the methodology used to calculate the teleconnection indices is unchanged, the statistics displayed in these graphics have changed slightly due to script updates and the utilization of the full ensemble size. A complete list of changes can be found at:

<https://www.cpc.ncep.noaa.gov/products/precip/CWlink/teleconnections/scn/>

The URLs for the current products referred to above are:

[https://www.cpc.ncep.noaa.gov/products/precip/CWlink/daily\\_ao\\_index/teleconnections.shtml](https://www.cpc.ncep.noaa.gov/products/precip/CWlink/daily_ao_index/teleconnections.shtml)

[https://www.cpc.ncep.noaa.gov/products/precip/CWlink/daily\\_ao\\_index/ao.shtml](https://www.cpc.ncep.noaa.gov/products/precip/CWlink/daily_ao_index/ao.shtml)

<https://www.cpc.ncep.noaa.gov/products/precip/CWlink/pna/nao.shtml>

<https://www.cpc.ncep.noaa.gov/products/precip/CWlink/pna/pna.shtml>

[https://www.cpc.ncep.noaa.gov/products/precip/CWlink/daily\\_ao\\_index/ao/ao.shtml](https://www.cpc.ncep.noaa.gov/products/precip/CWlink/daily_ao_index/ao/ao.shtml)

[https://www.cpc.ncep.noaa.gov/products/precip/CWlink/daily\\_ao\\_index/history/history.shtml](https://www.cpc.ncep.noaa.gov/products/precip/CWlink/daily_ao_index/history/history.shtml)

The changes listed above may impact users that currently utilize output or graphics from these products and thus code adjustments may be necessary. Samples of the new files can be found at:

<https://ftp.cpc.ncep.noaa.gov/cwlinks/para>

For any questions regarding these changes, please contact:

Laura Ciasto  
Meteorologist, Climate Prediction Center  
Email: [laura.ciasto@noaa.gov](mailto:laura.ciasto@noaa.gov)

or

Wanqiu Wang  
Operational Monitoring Branch, Climate Prediction Center  
Email: [wanqiu.wang@noaa.gov](mailto:wanqiu.wang@noaa.gov)

National Service Change Notices are online at:

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

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