Shannon
Shields
SAIC at NOAA/NWS/NCEP/EMC
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Oral
Subseasonal forecasts are important for decision support across numerous economic sectors. Subseasonal forecasts provide guidance to forecasters, stakeholders, and emergency managers for keeping the public informed and prepared for various weather phenomena. There has been increased focus on the Subseasonal to Seasonal (S2S) timescale due to the ability to fill emerging forecast needs in multiple industries. Two of the National Centers for Environmental Prediction (NCEP)'s global models cover the subseasonal forecast period: the Global Ensemble Forecast System (GEFS) and the Climate Forecast System (CFS). The current operational version of the GEFS is version 12.3 as of 2022 October 19. The current operational version of the CFS is version 2.3 as of 2022 March 9.

The Environmental Modeling Center (EMC) Verification System version 1.0 (EVSv1), which uses the METplus software developed by DTC, is a first-of-its-kind operational verification system. The subseasonal component of EVSv1 verifies forecasts at Days 1–35, including daily, weekly, monthly, Days 6–10, and Weeks 3–4 verification periods for the operational GEFS and CFS models in near real-time. The subseasonal component produces Mean Error/Bias, Root Mean Square Error (RMSE), and Performance Diagram verification graphics for 500-hPa geopotential height anomalies, 2-m temperature anomalies, sea-surface temperature (SST), and sea ice concentration. The verification graphics produced by EVSv1 are routinely disseminated to the public via EMC’s Verification webpages. This presentation provides an overview of the subseasonal verification currently being conducted at EMC, information on additional metrics that will be included in future versions of EVS, and provides links to EMC’s Verification webpages.
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