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Under the Unified Forecast System (UFS) Research to Operation Project (UFS R2O), a global coupled UFS has been built with six
components of the Earth system: atmosphere (FV3 dycore and CCPP physics), ocean (MOM6), sea ice (CICE6), land (NOAH-
MP), aerosols (GOCART), and ocean surface waves (WW3).This global coupled model is now being used as the basis for
developing the future Global Forecast System (GFS v17) for medium-range weather (deterministic), the Global Ensemble
Forecast System (GEFS v13) for subseasonal forecasts out to 48 days, and the a new Seasonal Forecast System (SFSv1) as a
replacement of the more than decade-old Climate Forecast System version 2 (CFSv2).
Current developmental activities to accelerate the S2S portion of the Unified Forecast System (UFS) include improvements to
existing physics parameterizations via the Common Community Physics Package (CCPP), physically based atmosphere and
ocean component stochastic perturbations for ensemble applications and numerical representations/perturbations of the coupling.This presentation aims to compare the results from current coupled ensemble prototypes experiments for both subseasonal and
seasonal applications, tuning of configurations in these coupled ensemble prototypes and other improvements to UFS model
components to help reduce systematic biases and improve overall forecast skills.
Presentation file
Mehra-Avichal.pdf
Meeting homepage
S2S Community Workshop
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