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Oral

Global forecast models are inevitably imperfect and hence, tend to suffer from systematic biases that often emerge during the earliest stages of the forecast. Here, a practical approach for addressing this issue is explored in which a neural network (NN) is used to perform in-line bias correction of the forecast model during runtime. The specific model adopted is a prototype version of the NOAA coupled UFS, which is run at a coarser resolution than normal, to accelerate scientific discovery. The NN training procedure makes use of an extended archive of 6-hourly analysis increments generated as part of "replaying" the UFS to an existing reanalysis product. The presentation will describe the methodology of the bias correction, as well as impacts on standard measures of forecast skill for lead times extending out to 4 weeks.

Presentation file

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