Prediction Skill of daily SSTs from CFSv1 and CFSv2 Mingyue Chen, Scott Weaver, Wanqiu Wang, Arun Kumar

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This study analyzes lead-time dependence and seasonal variations in the prediction skill of daily sea surface temperatures (SSTs) from NCEP CFS version 2 and 1 (CFSv2 and CFSv1). The analysis is based on the CFSv2 hindcast and the CFSv1 real time operational forecast. The results show that CFSv1 has a lower skill than CFSv2 and persistence at the first week in all seasons, suggesting the strong impacts of the initialization of the ocean surface conditions. As the lead time increases, the skills in the two systems become comparable. The seasonality of the daily SST prediction skill in both CFSv2 and CFSv1 are similar. Both CFSv2 and v1 show better prediction skill than the persistence of initial SST anomalies in most areas at lead time longer than 2 weeks.