



# AMS

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## Supplemental Material

*Weather and Forecasting*

Strength Outlooks for the El Niño–Southern Oscillation

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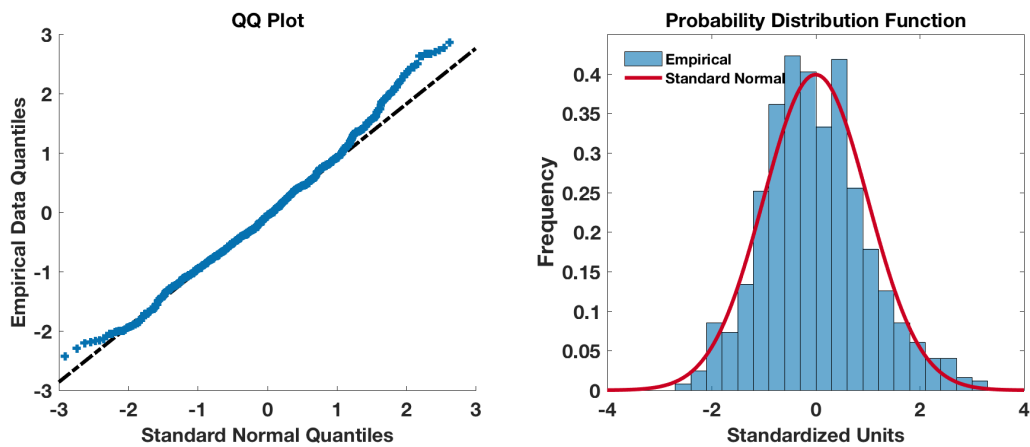
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1 **LIST OF FIGURES**

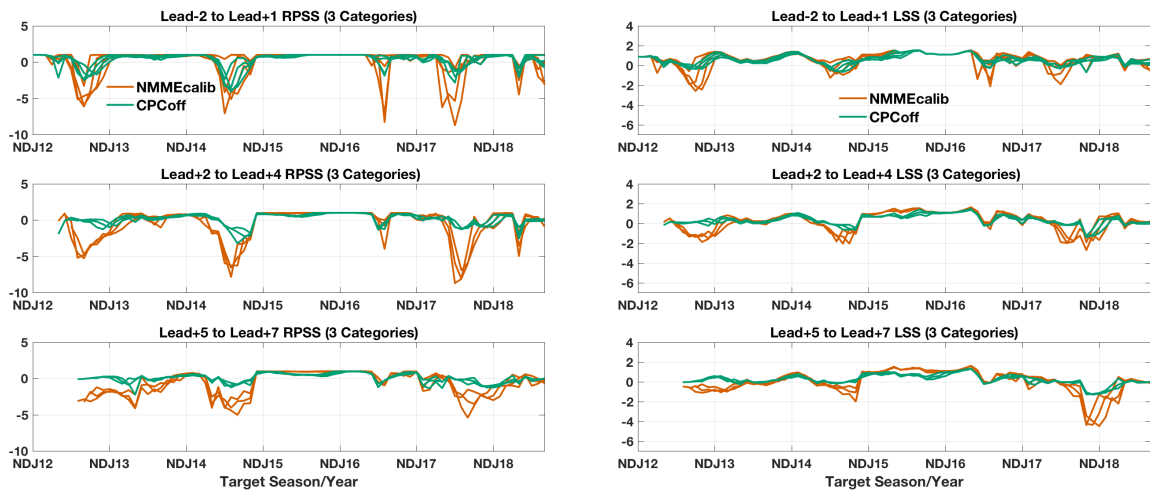
2 **Fig. S1.** Quantile-Quantile Plot (left) and Probability Distribution Functions (right) for standard-  
3 ized monthly values of Niño-3.4 between January 1950 and September 2018 using NOAA  
4 ERSSTv5 data. The index has been de-trended by subtracting out a moving 30-year monthly  
5 mean climatology, updated every 5years (as in the NOAA Oceanic Niño Index). . . . . 2

6 **Fig. S2.** By target season, NMMEcalib and CPCoff RPSS and LSS for forecasts initialized between  
7 January 2012 - September 2018. CPCcalib is not presented because mean Niño-3.4 forecasts  
8 did not begin until June 2015. . . . . 3

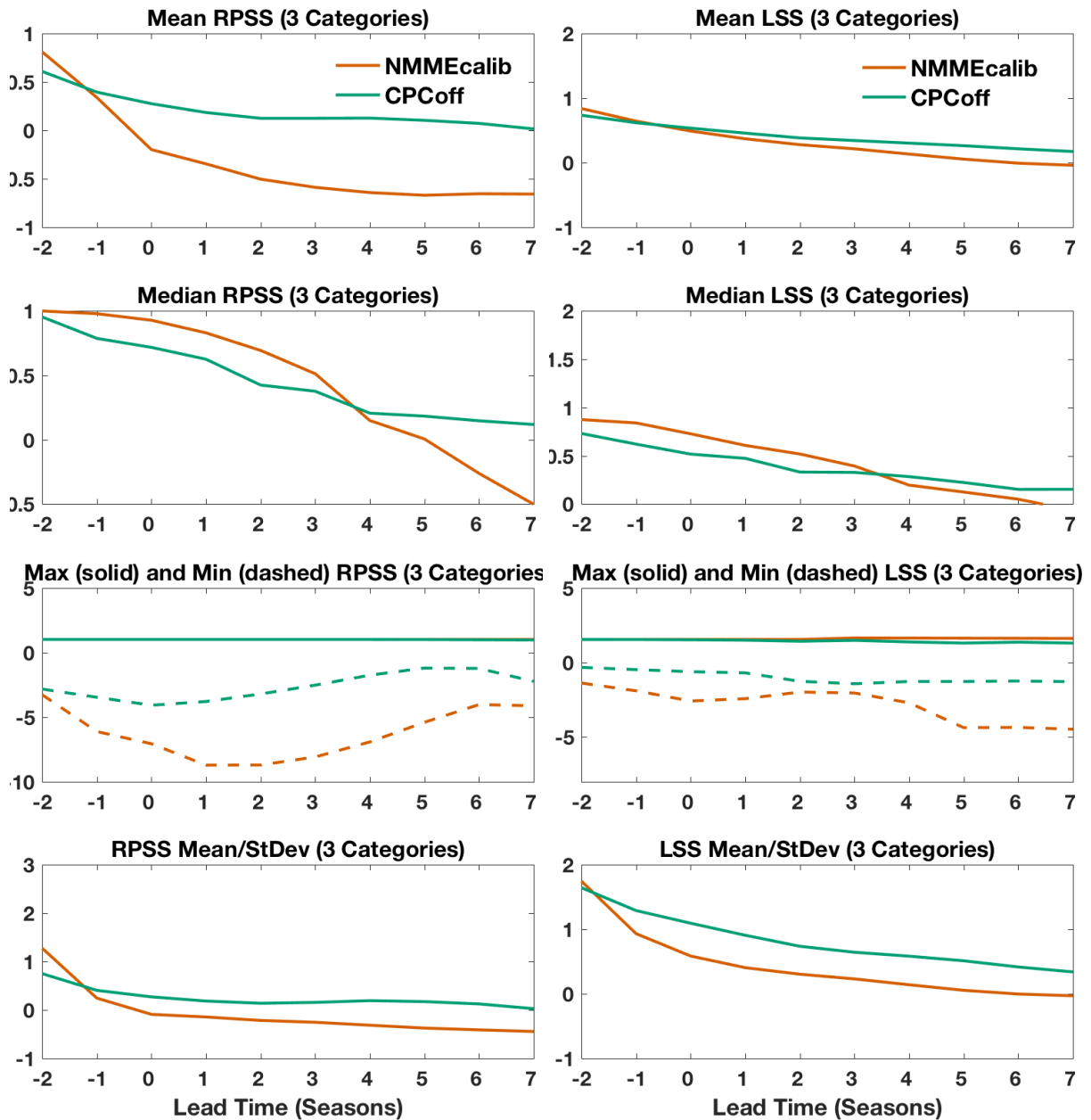
9 **Fig. S3.** By lead, NMMEcalib and CPCoff RPSS and LSS for forecasts initialized between January  
10 2012 - September 2018. CPCcalib is not presented because mean Niño-3.4 forecasts did not  
11 begin until June 2015. . . . . 4



12 FIG. S1. Quantile-Quantile Plot (left) and Probability Distribution Functions (right) for standardized monthly  
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 14 been de-trended by subtracting out a moving 30-year monthly mean climatology, updated every 5years (as in  
 15 the NOAA Oceanic Niño Index).



16 FIG. S2. By target season, NMMEcalib and CPCoff RPSS and LSS for forecasts initialized between January  
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19 FIG. S3. By lead, NMMEcalib and CPCoff RPSS and LSS for forecasts initialized between January 2012 -  
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