Electronic Supplementary Material to: Seasonal Forecasts of Precipitation during the First Rainy Season in South China Based on NUIST-CFS1.0*

Sinong LI, Huiping YAN, and Jing-Jia LUO

Institute for Climate and Application Research (ICAR)/CIC-FEMD/KLME/ILCEC, Nanjing University of Information Science and Technology, Nanjing 210044, China

ESM to: Li, S. N., H. P. Yan, and J.-J. Luo, 2023: Seasonal forecasts of precipitation during the first rainy season in South China based on NUIST-CFS1.0. *Adv. Atmos. Sci.*, **40**(10), 1895–1910, https://doi.org/10.1007/s00376-023-2318-0.

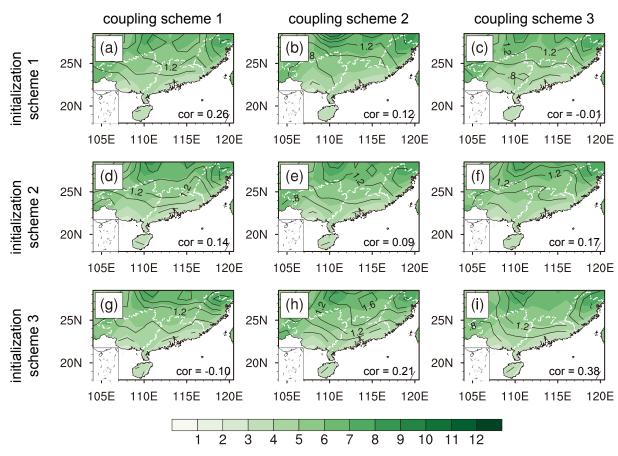


Fig. S1. The spatial distribution of climatological mean precipitation (shading), standard deviation of interannual precipitation anomaly (black line) (units: mm d⁻¹), and the correlation coefficient skill in predicting regionally averaged precipitation anomaly in the first rainy season (FRS, i.e., April–June) during 1982–2020 over South China. The initialization schemes and coupling schemes are detailed in section 2. White dashed lines denote the borders of Guangdong, Guangxi, and Fujian provinces.

^{*}The online version of this article can be found at https://doi.org/10.1007/s00376-023-2318-0.

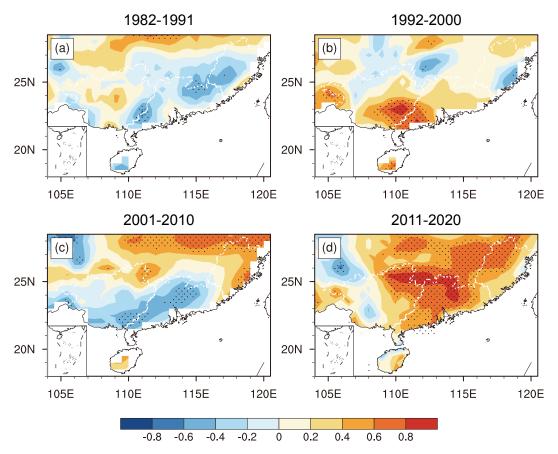


Fig. S2. The correlation coefficients of the FRS precipitation anomaly over South China between the observations and NUIST-CFS1.0 ensemble mean predictions during (a) 1982–91, (b) 1992–2000, (c) 2001–10, and (d) 2011–20. Dots indicate the results are statistically significant at 90% confidence level. White dashed lines denote the borders of Guangdong, Guangxi, and Fujian provinces.

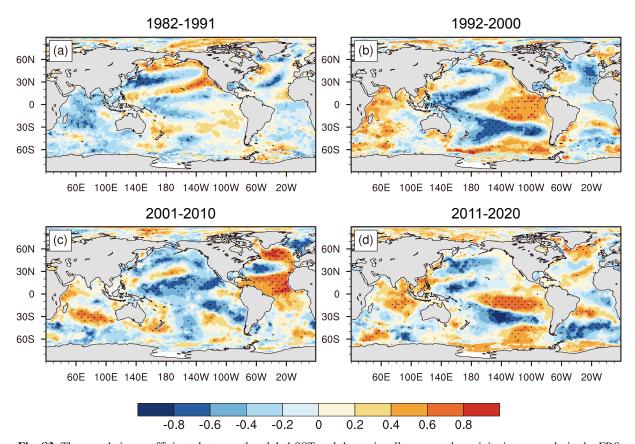


Fig. S3. The correlation coefficients between the global SST and the regionally averaged precipitation anomaly in the FRS over South China based on the observations during (a) 1982–91, (b) 1992–2000, (c) 2001–10, and (d) 2011–20. Dots indicate the results are statistically significant at 90% confidence level. Note that South China is defined as the area of Guangdong, Guangxi, Fujian, and Hainan provinces in this study.