

Supplementary

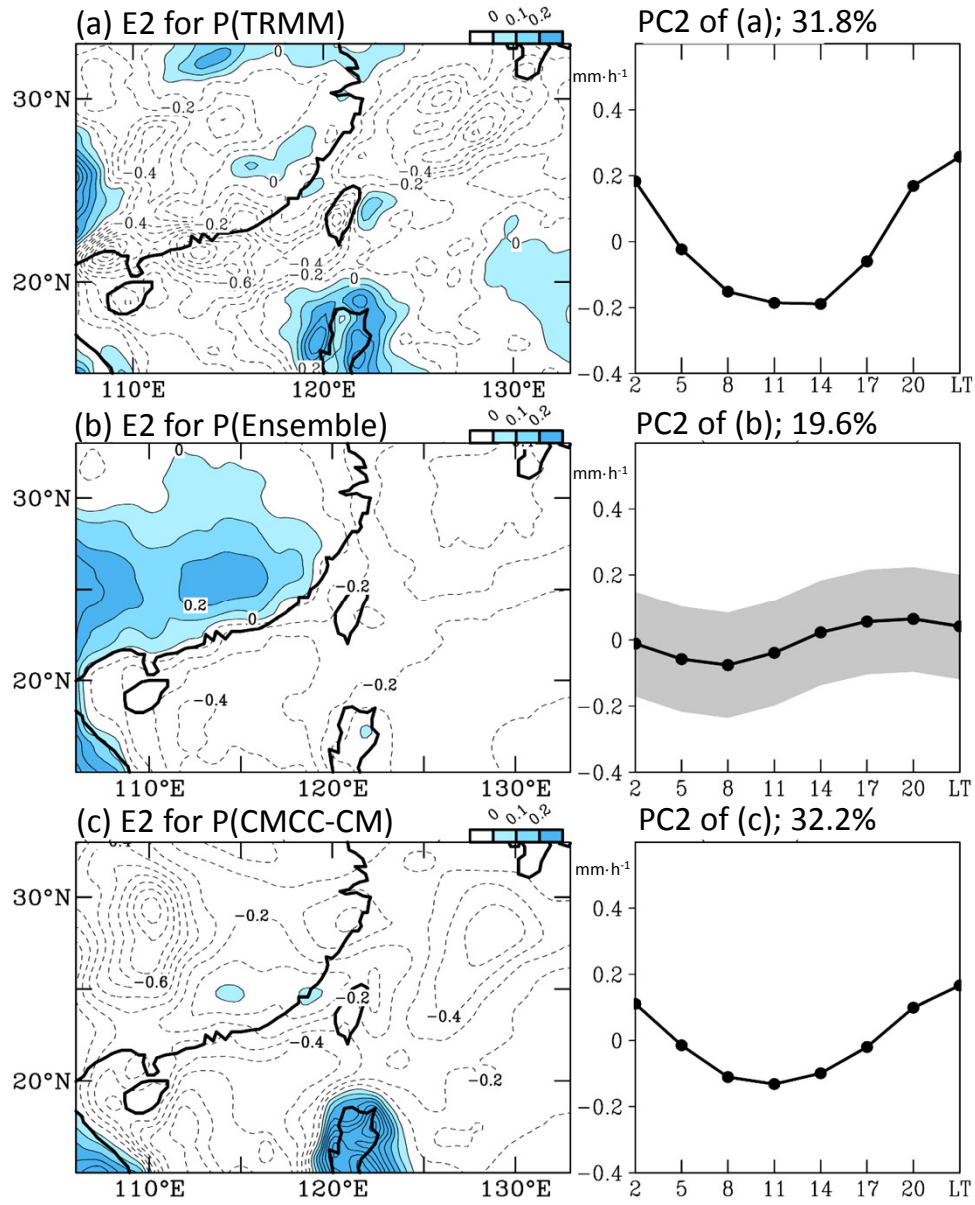


Fig. S1 (a) The second EOF mode corresponding to Fig. 1. (b) and (c) is similar to (a), but for the second EOF mode corresponding to Fig. 2a and Fig. 2b, respectively.

Supplementary

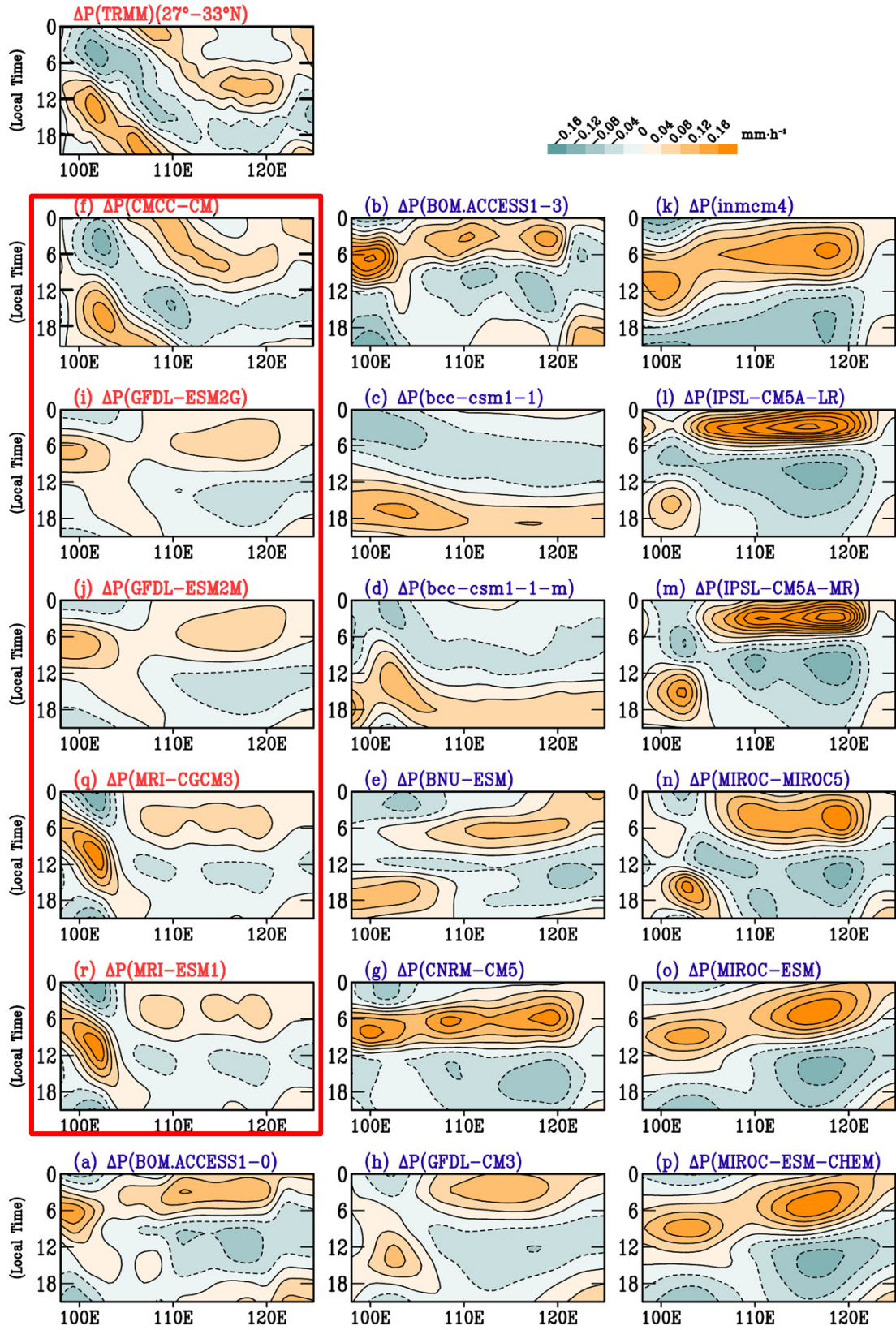


Fig. S2 Similar to Fig. 5c, but for the diurnal anomalies of precipitation (ΔP ; with daily mean removed) over the Yangtze River regime (27°–33°N) from observation and 18 CMIP models. The five better-skill models (as identified based on the results of Fig. 3 and Fig. 6) are outlined by red box.

Supplementary

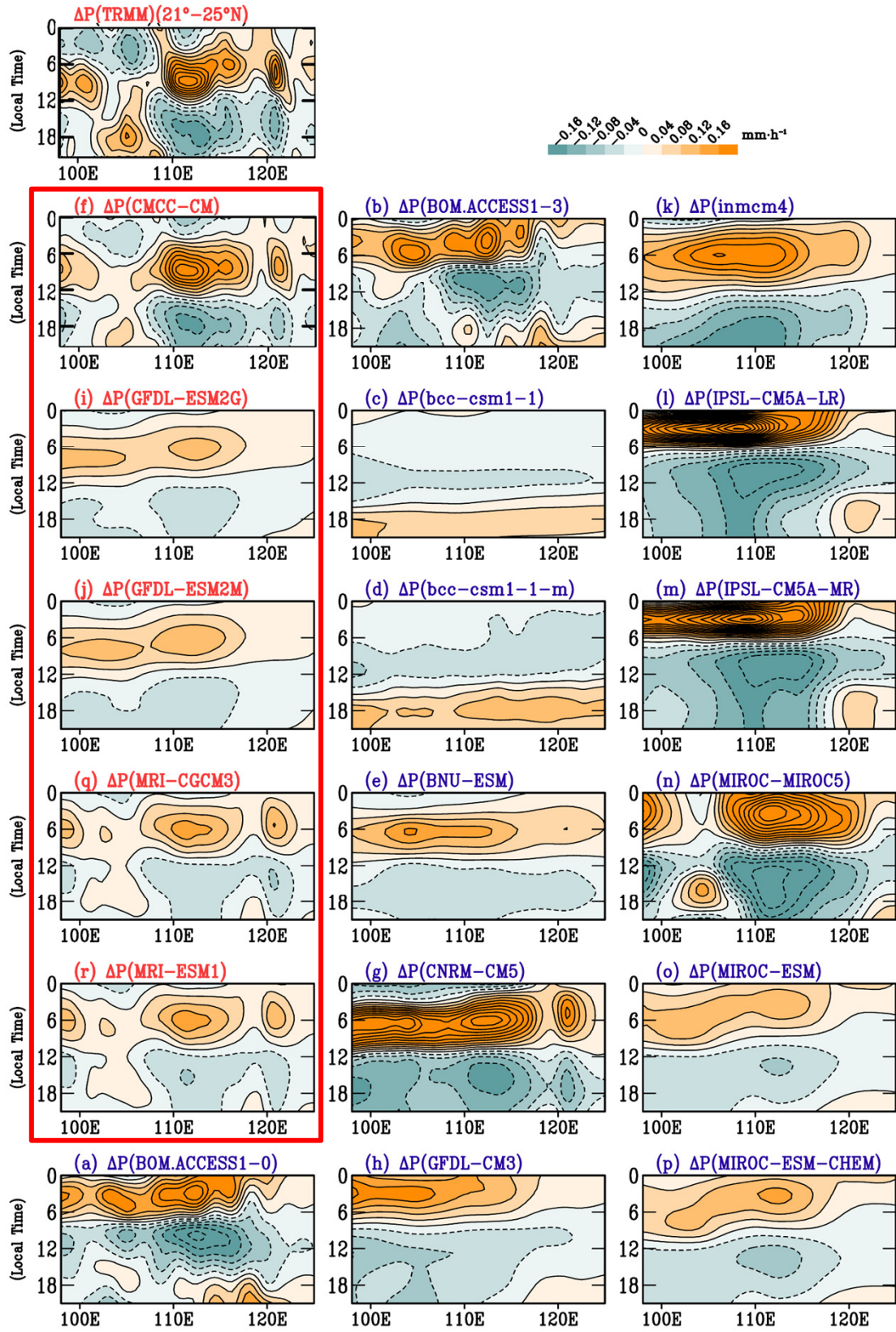


Fig. S3 Similar to Fig. S2, but for the diurnal anomalies of precipitation (ΔP ; with daily mean removed) over the southeast China regime (21°-25°N) .

Supplementary

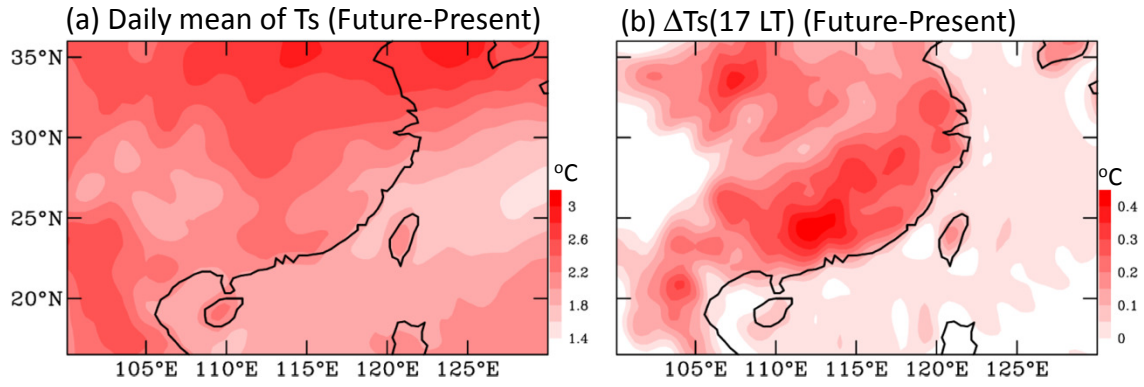


Fig. S4 The difference of CMCC-CM's surface temperature (T_s) between the future period of 2076-2100 (under RCP4.5) and the present period of 1981-2005: (a) daily mean of T_s , (b) diurnal anomalies of T_s at 1700 local time (i.e. the timing with maximum value for PC1 of Fig. 2b). The color scale of (a)-(b) is given in their right bottom.

Supplementary

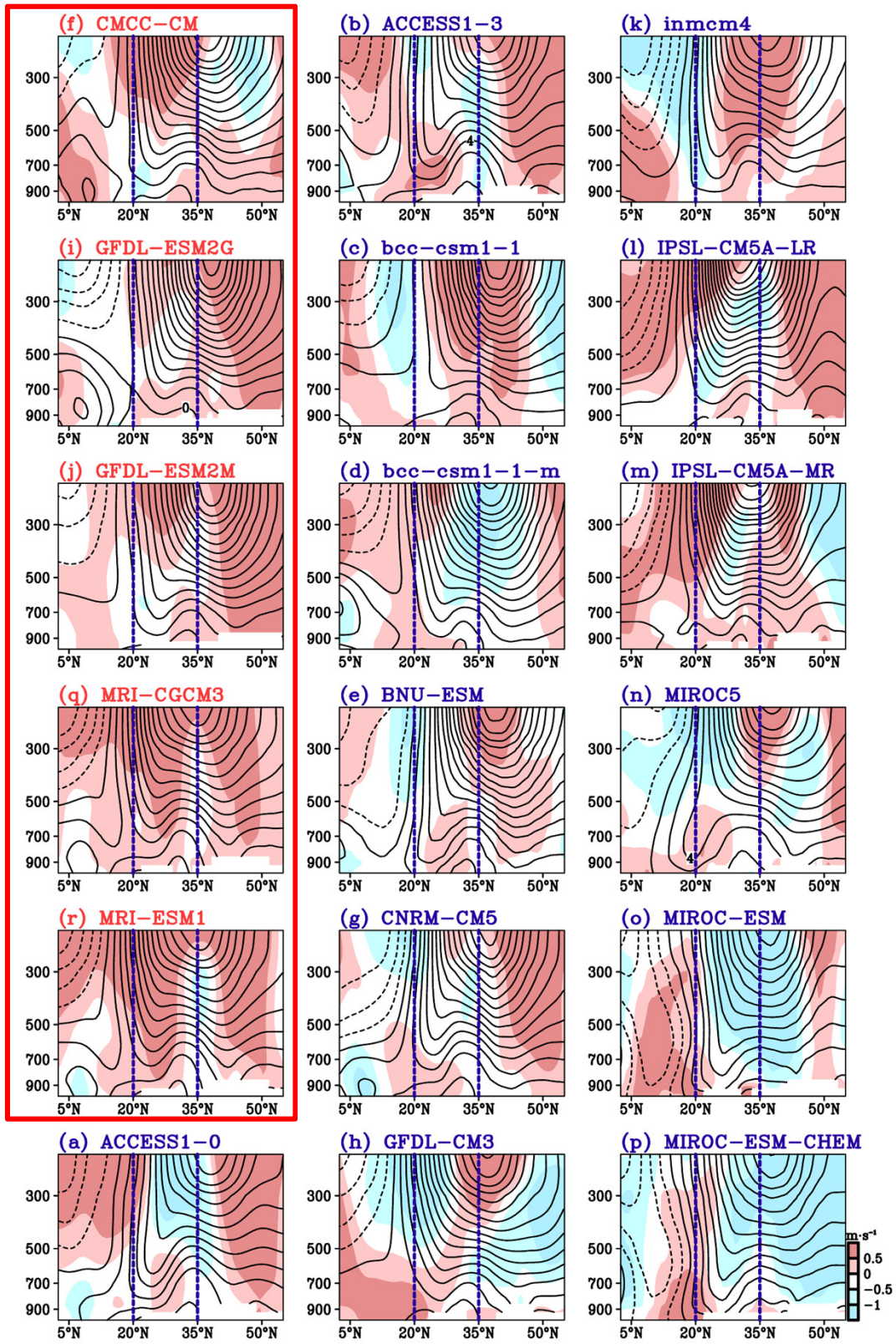


Fig. S5 Similar to Fig. 9c, but for 18 CMIP5 models. The five better-skill models (as identified based on the results of Fig. 3 and Fig. 6) are outlined by red box.

Supplementary

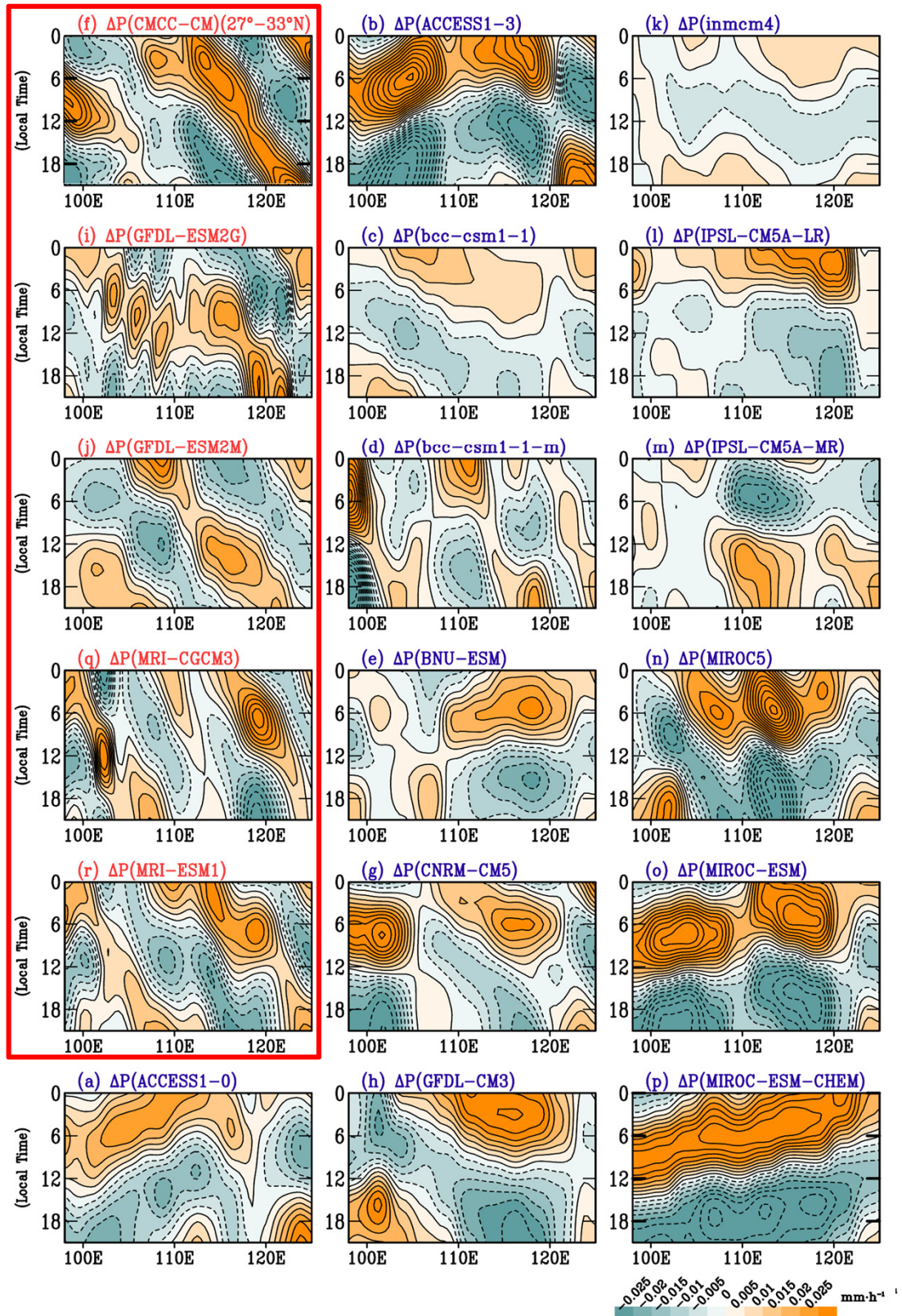


Fig. S6 Similar to Fig. 8a, but for 18 CMIP5 models. The five better-skill models (as identified based on the results of Fig. 3 and Fig. 6) are outlined by red box.

Supplementary

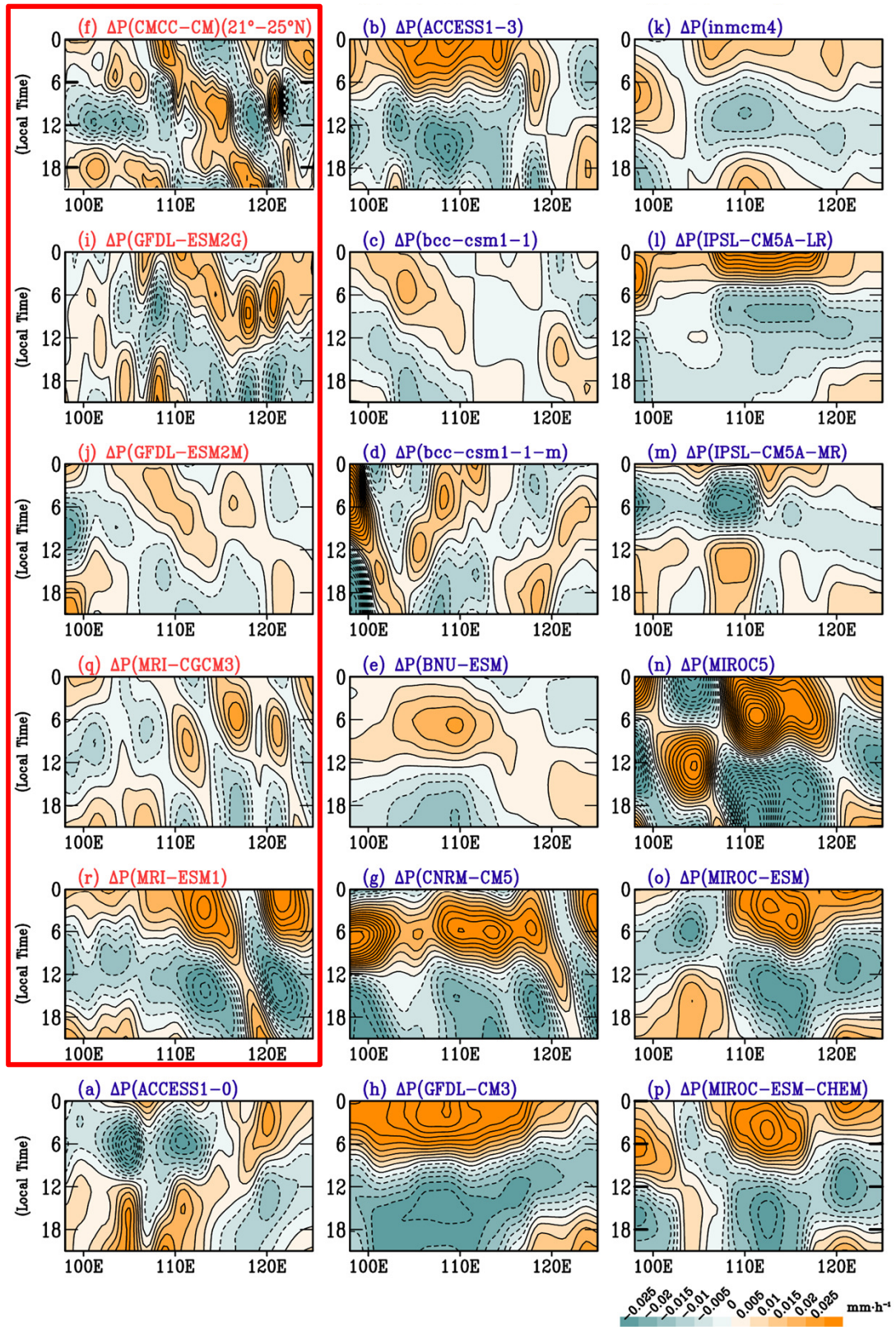


Fig. S7 Similar to Fig. 8b, but for 18 CMIP5 models. The five better-skill models (as identified based on the results of Fig. 3 and Fig. 6) are outlined by red box.