

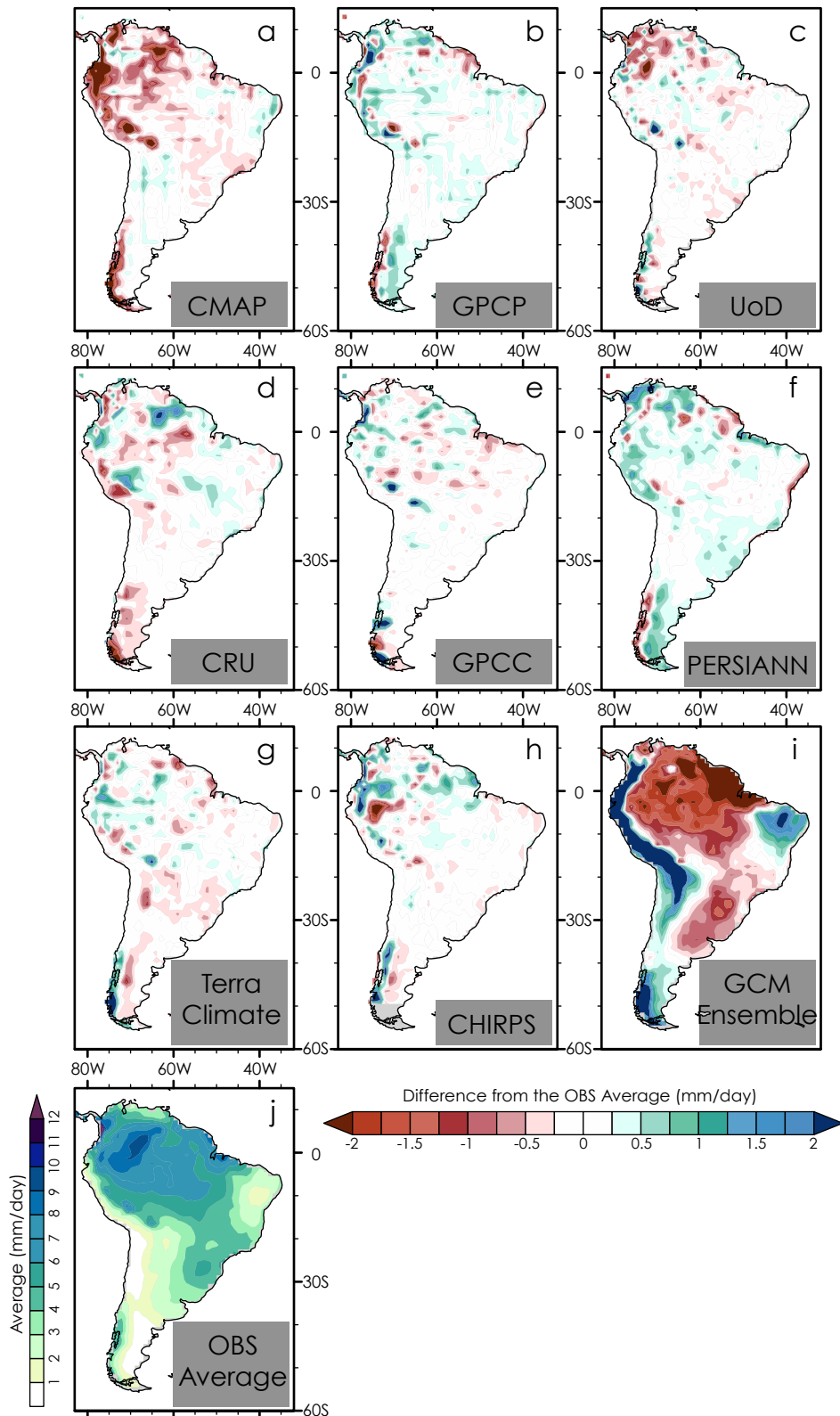


Figure S1. Difference (mm/day) of individual observations and GCM ensemble from 8-member observations ensemble average for annual precipitation mean. (a) CMAP, (b) GPCP, (c) UoD, (d) CRU, (e) GPCC, (f) PERSIANN, (g) TerraClimate, (h) CHIRPS, (i) GCM ensemble. (j) Average (mm/day) of all observations. These analyses are based on the 1995–2014 reference period.

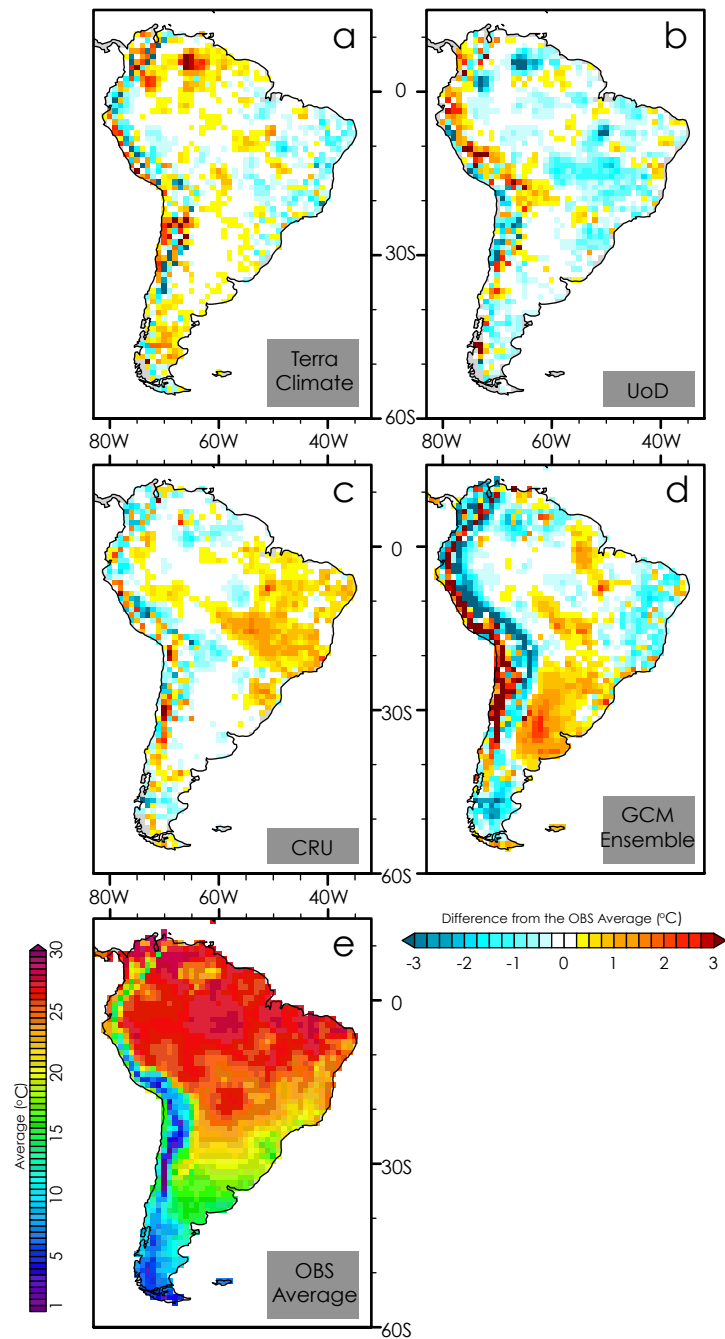


Figure S2. Difference (°C) of individual observations and GCM ensemble from 3-member observations ensemble average for annual temperature. (a) TerraClimate, (b) UoD, (c) CRU, (d) GCM ensemble. (e) Average (°C) of all observations. These analyses are based on the 1995–2014 reference period.

Fractional Changes in Monthly Contribution to Annual Mean

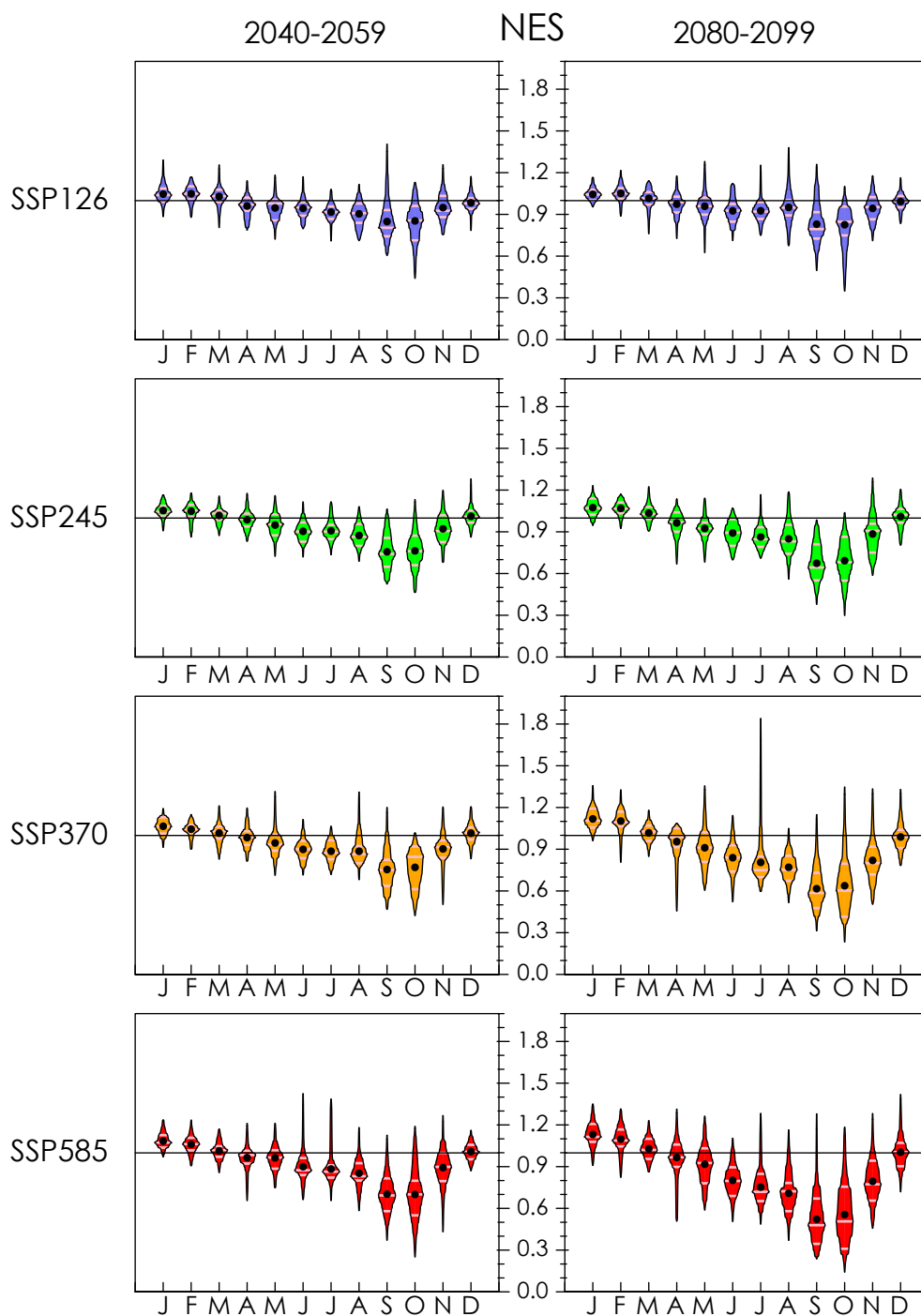


Figure S3. Fractional changes in the relative contribution of each month to annual total precipitation over NES sub-region with respect to the 1995–2014 reference period, shown as box percentiles for GCMs. The pink horizontal lines represent 25th, 50th and 75th percentile while black dot represents the mean. The shape of the box describes the distribution of data across the ensemble members. The horizontal line represents no change level, while values above (below) it increases (decreases) in relative contribution.

Fractional Changes in Monthly Contribution to Annual Mean

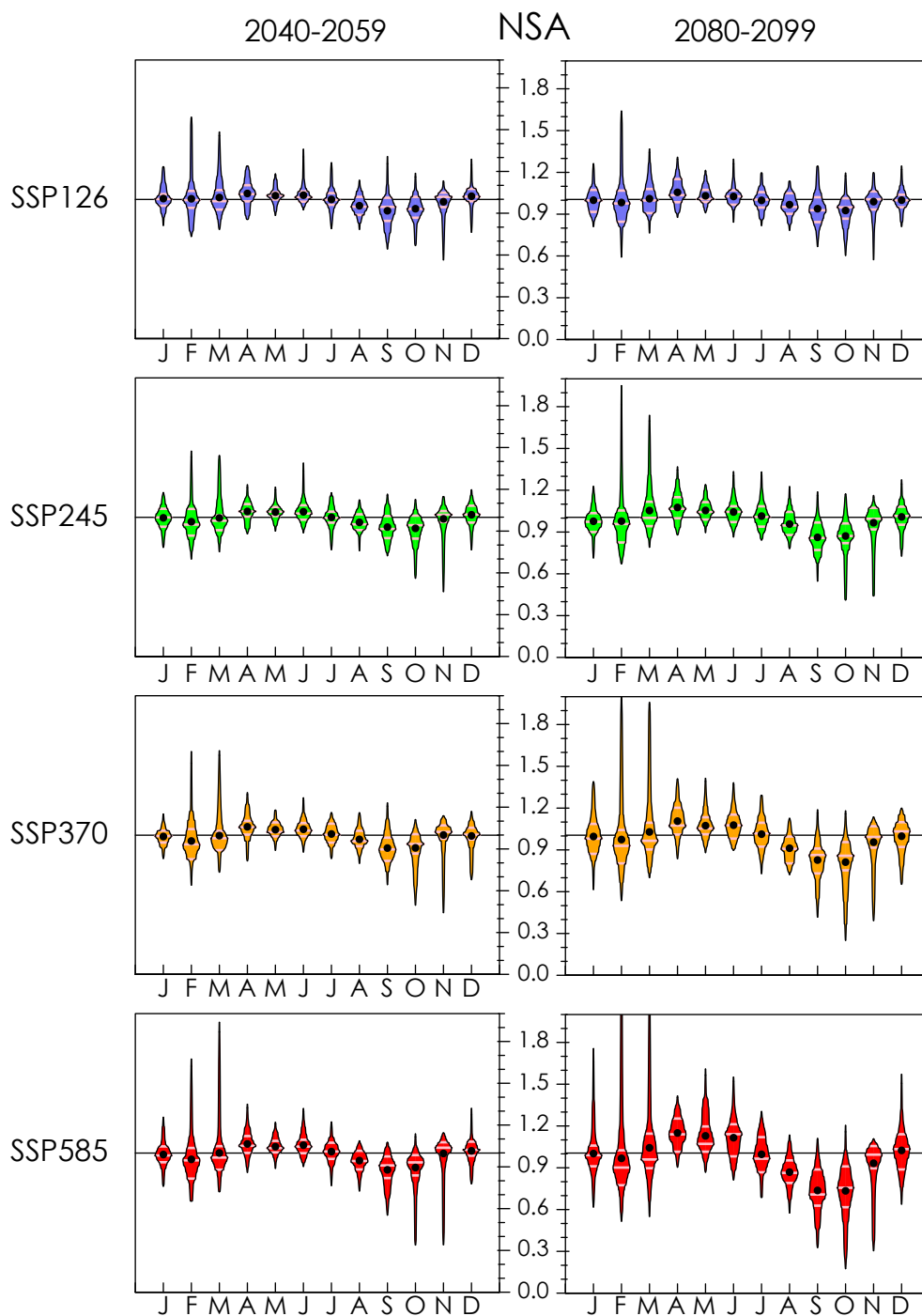


Figure S4. Same as in Figure S3 but for NSA sub-region.

Fractional Changes in Monthly Contribution to Annual Mean

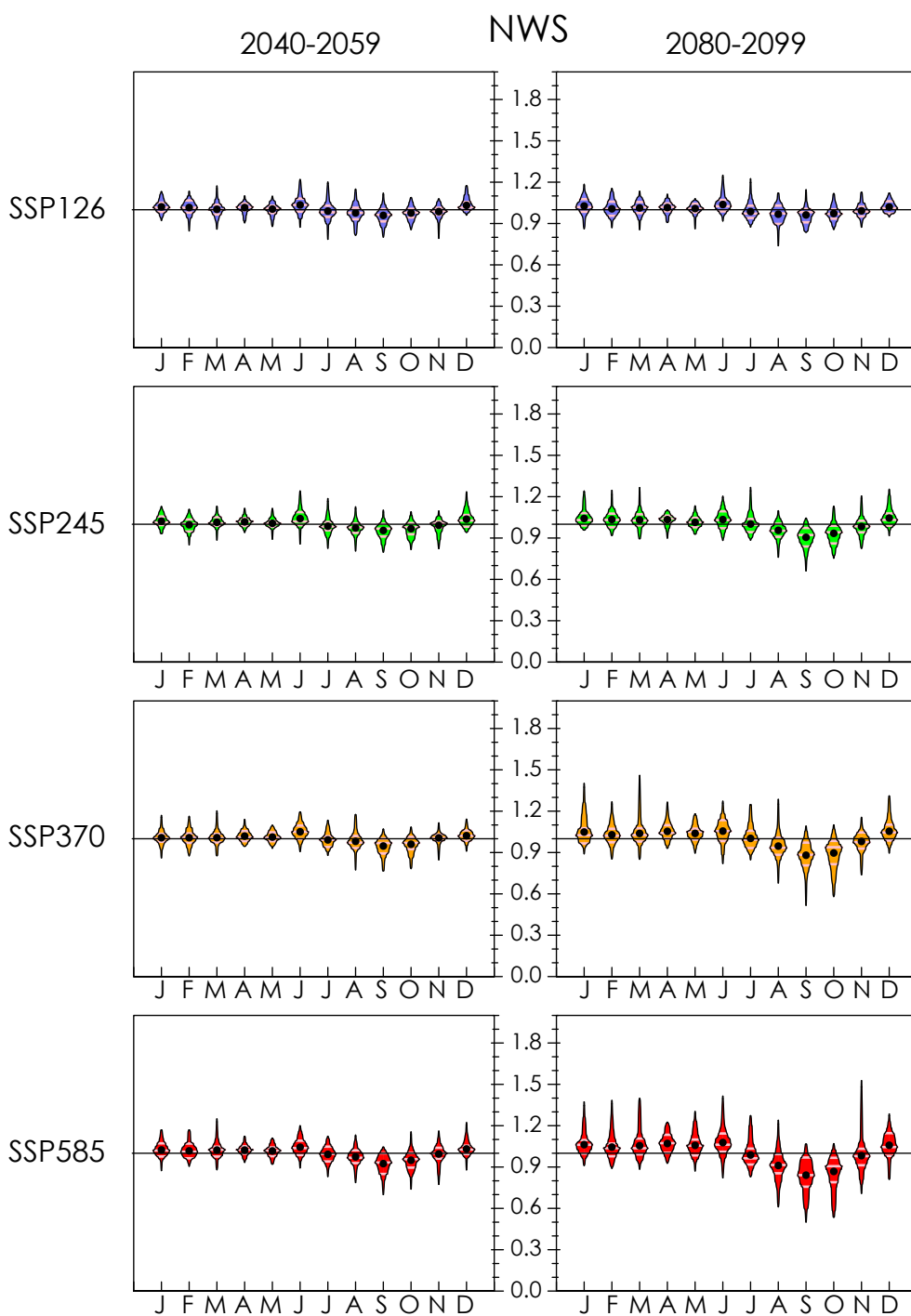


Figure S5. Same as in Figure S3 but for NWS sub-region.

Fractional Changes in Monthly Contribution to Annual Mean

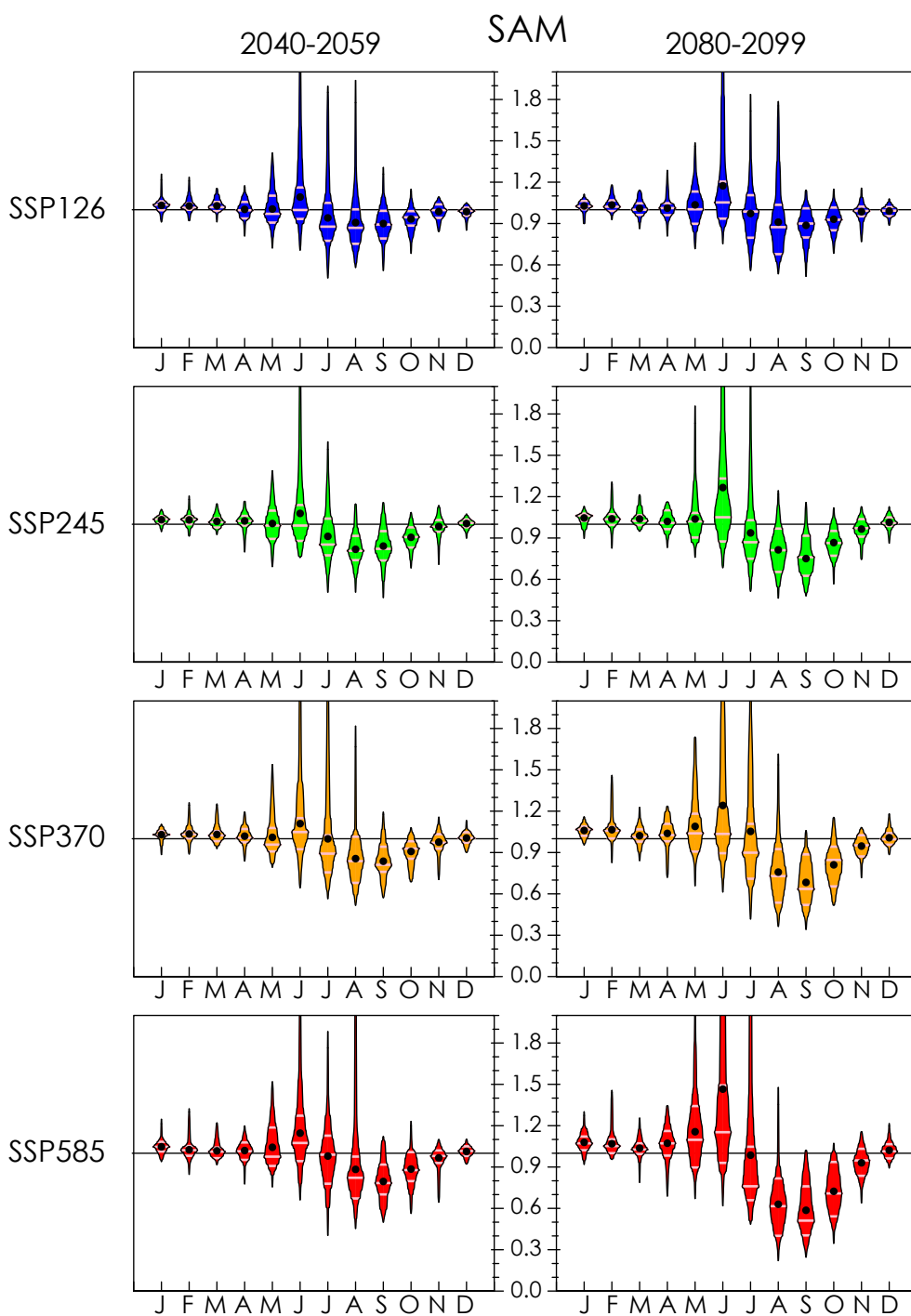


Figure S6. Same as in Figure S3 but for SAM sub-region.

Fractional Changes in Monthly Contribution to Annual Mean

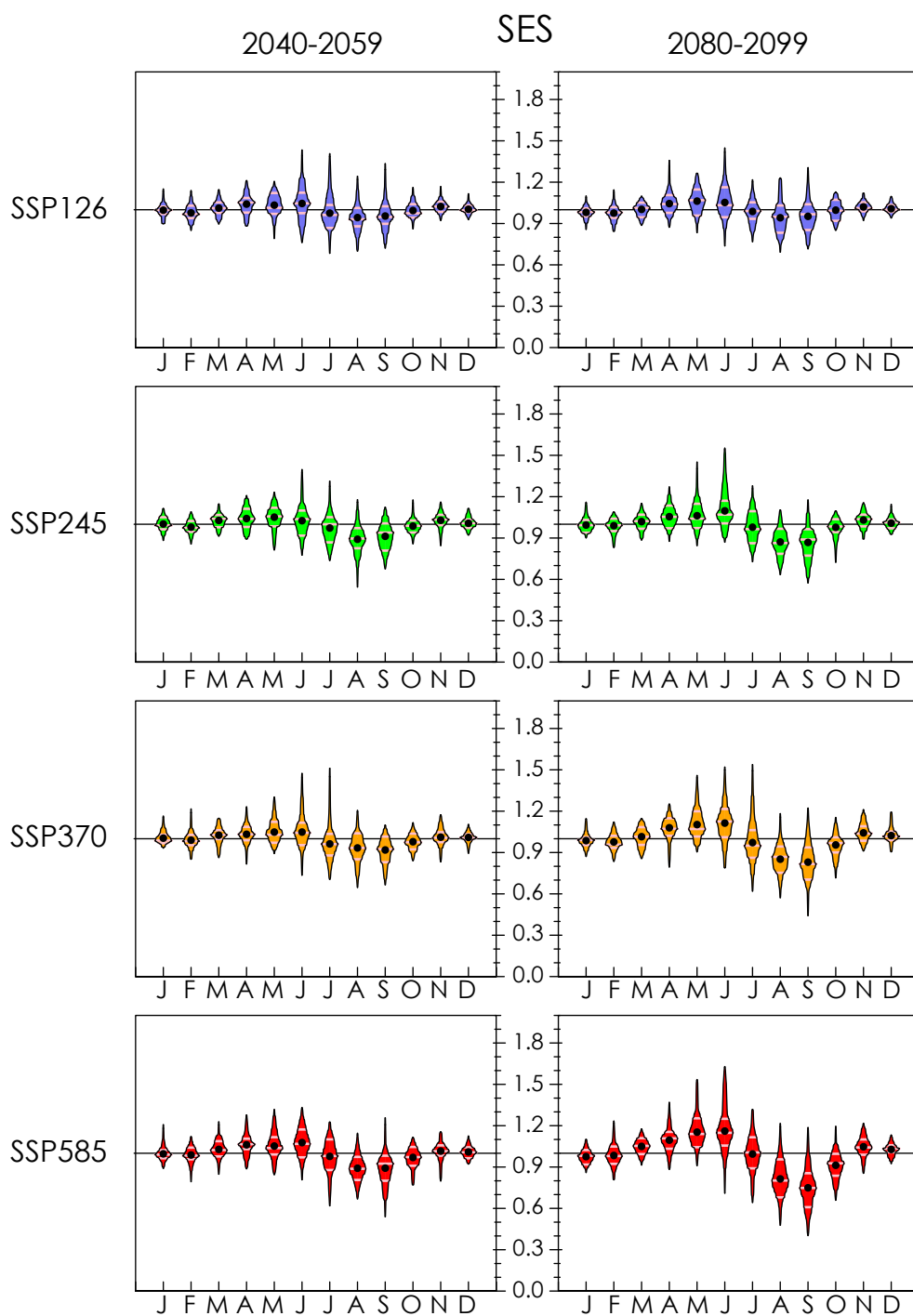


Figure S7. Same as in Figure S3 but for SES sub-region.

Fractional Changes in Monthly Contribution to Annual Mean

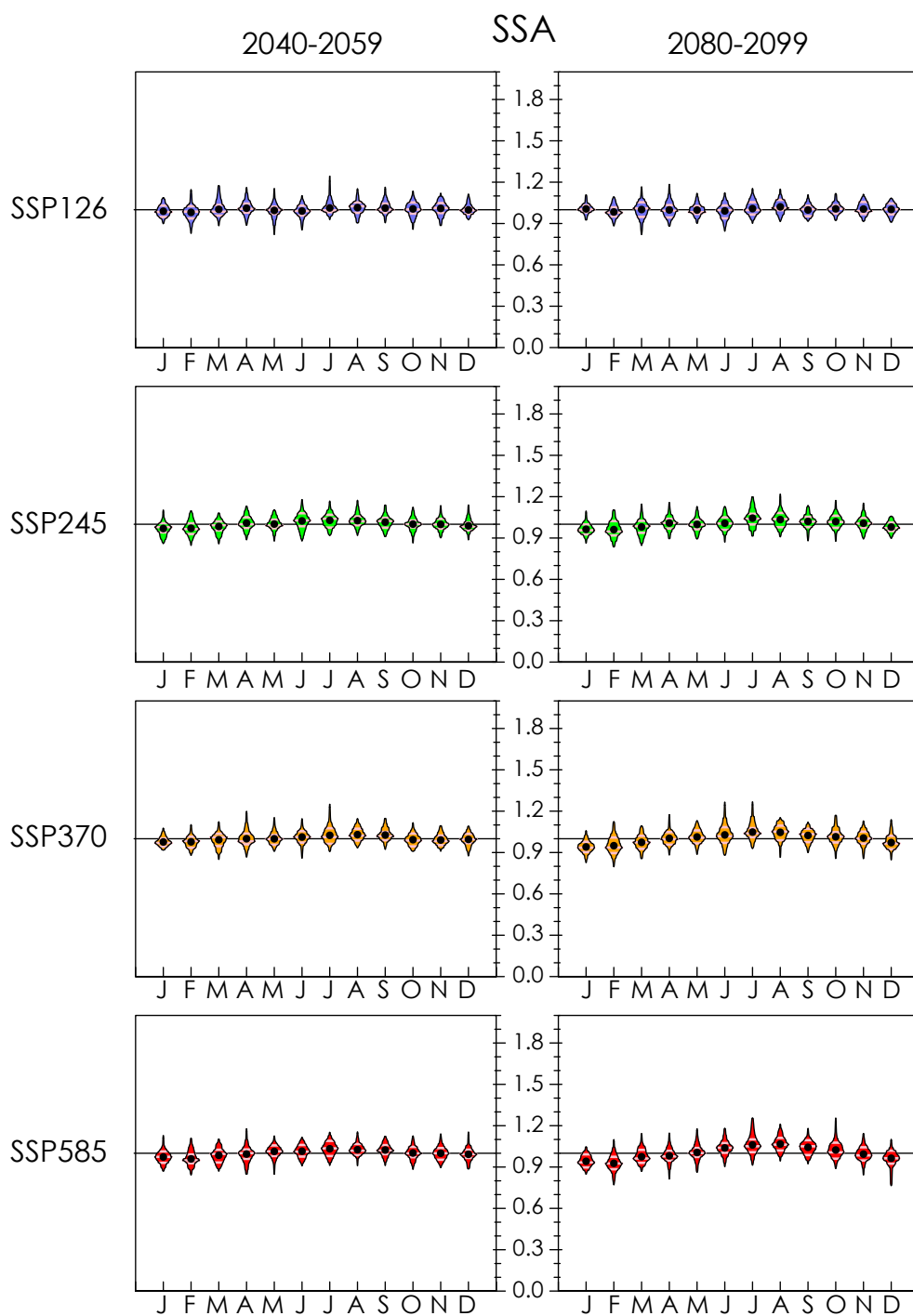


Figure S8. Same as in Figure S3 but for SSA sub-region.

Fractional Changes in Monthly Contribution to Annual Mean

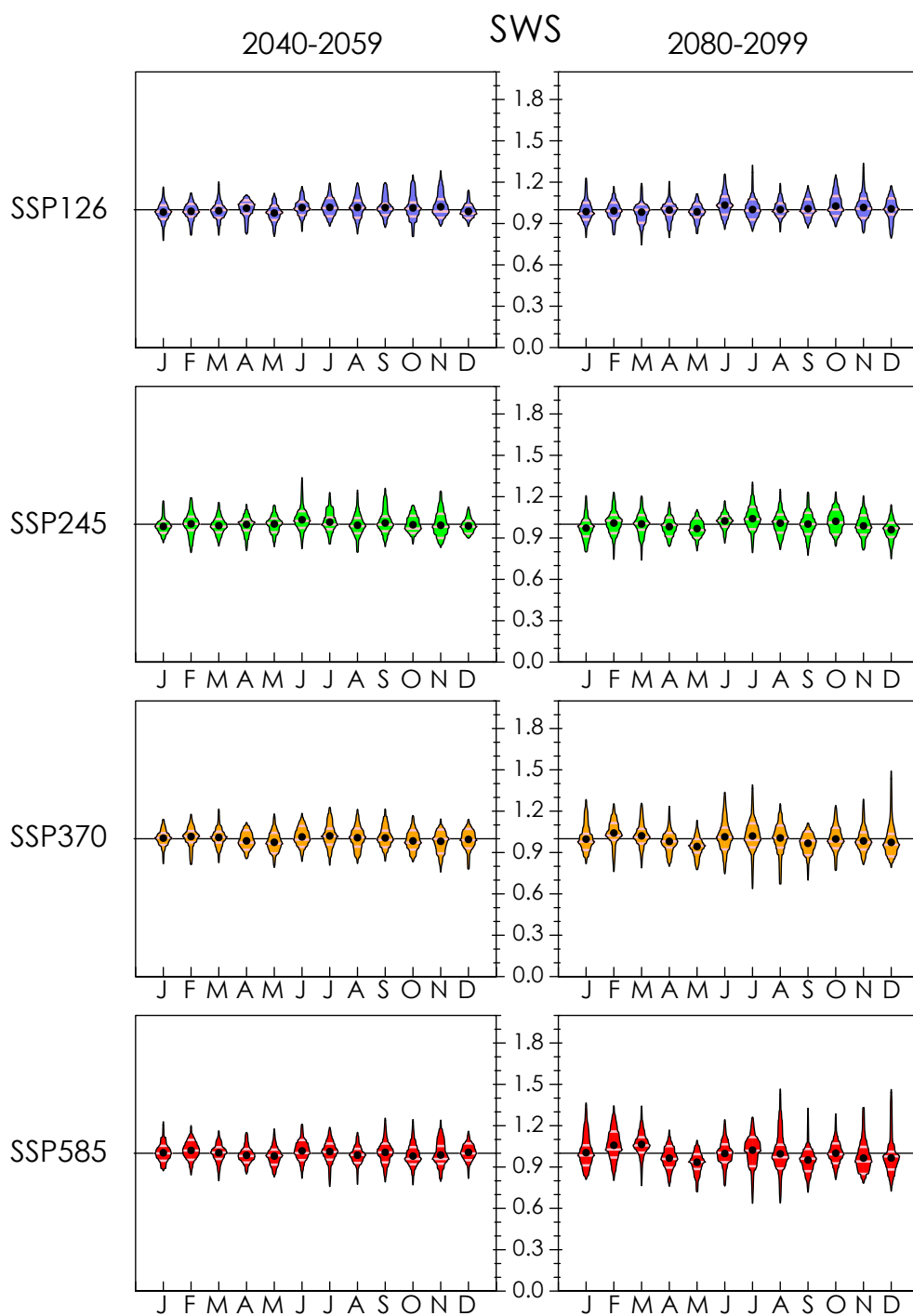


Figure S9. Same as in Figure S3 but for SWS sub-region.