Supplement. Comparable analyses using observations from the period 1951–2005

Fig. S1. Bias ratio (CMIP5:CRU) of selected climate model simulations of summer precipitation: June–August in the Northern Hemisphere, and December–February in the Southern Hemisphere. Similar to Fig. 2 in the main article, but for the period 1951–2005. CRU: Climatic Research Unit
Fig. S2. Bias ratio (CMIP5:CRU) of selected climate model simulations of winter precipitation: December to February in the Northern Hemisphere, and June to August in the Southern Hemisphere. Similar to Fig. 3 in the main article, but for the period 1951–2005. CRU: Climatic Research Unit.
Fig. S3. Global averages of the overall bias, mean quantile bias (MQB) above 75th (Q75) and 90th quantile (Q90) for CMIP5 models and their ensemble median. Similar to Fig. 4 in the main article, but for the period 1951–2005.
Fig. S4. CMIP5 climate model regional summer and winter biases over (a) Europe, (b) Amazonia, (c) central Africa, 
(d) Australia, (e) western USA, (f) Siberia, (g) Canada, (h) south China. Similar to Fig. 5 in the main article, but for 
the period 1951–2005
Fig. S5. CMIP5 climate model regional summer and winter monthly quantile bias (MQB) with 75th percentile threshold (Q75) over (a) Europe, (b) Amazonia, (c) central Africa, (d) Australia, (e) western USA, (f) Siberia, (g) Canada, (h) south China. Similar to Fig. 6 in the main article, but for the period 1951–2005.
Fig. S6. CMIP5 climate model regional summer and winter monthly quantile bias (MQB) with 90th percentile threshold (Q90) over (a) Europe, (b) Amazonia, (c) central Africa, (d) Australia, (e) western USA, (f) Siberia, (g) Canada, (h) south China. Similar to Fig. 7 in the main article, but for the period 1951–2005.
Fig. S7. Global averages of the overall bias, mean quantile bias (MQB) above 75th (Q75) and 90th quantile (Q90) for all the CMIP5 models and their ensemble median relative to the University of Delaware global precipitation data.
Fig. S8. Regional summer and winter biases relative to the University of Delaware global precipitation data over (a) Europe, (b) Amazonia, (c) central Africa, (d) Australia, (e) western USA, (f) Siberia, (g) Canada, (h) south China