**Supplementary Material for Inducing Factors and Impacts of October 2017 California Wildfires**

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We explore possible relationship between California summer precipitation and Southern Oscillation Index (SOI) in Figure S1 in the supplementary material. GPCP precipitation is averaged in California over the summer season (JJAS), which is shown as blue solid line in Fig. S1a. We also estimate SOI in the summer season, which is shown as the black solid line in Fig. S1a. Linear trends are also estimated and plotted in Fig. S1a. The linear trend of GPCP summer precipitation in California is -0.12 ± 0.09 mm/year, while the linear trend of summer SOI index is 0.015± 0.034/year. Detrended GPCP summer precipitation and detrended summer SOI are shown in Fig. S1b. The correlation coefficient of detrended GPCP summer precipitation and detrended summer SOI is -0.04 (58.9%), which suggests that there is no clear relationship between detrended GPCP summer precipitation and detrended summer SOI.

Figure S1: (a) GPCP precipitation averaged in California over the summer season (blue solid line) and linear trend (blue dashed line). Units are mm/mon. SOI averaged over the summer season (black solid line) and linear trend (black bashed line). (b) Detrended GPCP summer precipitation (blue solid line) and detrended SOI in the summer season (black solid line).

