Supplement to: Nonlinear response of extreme precipitation to warming in CESM1 2

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- 9 Figure S1. Nonlinear response of extreme precipitation to warming in simulation with fixed
- 10 anthropogenic aerosol forcing. Following Fig. 1 with a 20-member CESM1 ensemble with
- 11 anthropogenic aerosol forcing fixed at 1920 values.
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14 Figure S2. Change in extreme precipitation for (a) E3SM and (b) CESM2, two descendent

- 15 models of CESM1. (b) The same analysis on one member of the CESM1-LE shown for
- 16 comparison. Following Fig. 5, for 1pctCO2 CMIP6 DECK experiments.

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20 Figure S3. Two ways of quantifying the dynamic component: vertical pressure velocity at 500





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Figure S4. Timeseries of (a) global mean near surface air temperature anomaly and (b) change in maximum day of precipitation averaged globally each year (relative to 1986-2005 mean) for CESM1-LE simulations (black), 15 member ensemble with anthropogenic aerosols fixed at 2005 values (red), and the difference between them (blue).

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