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Supporting information for

**How Volcanic Aerosols Globally Inhibit Precipitation**

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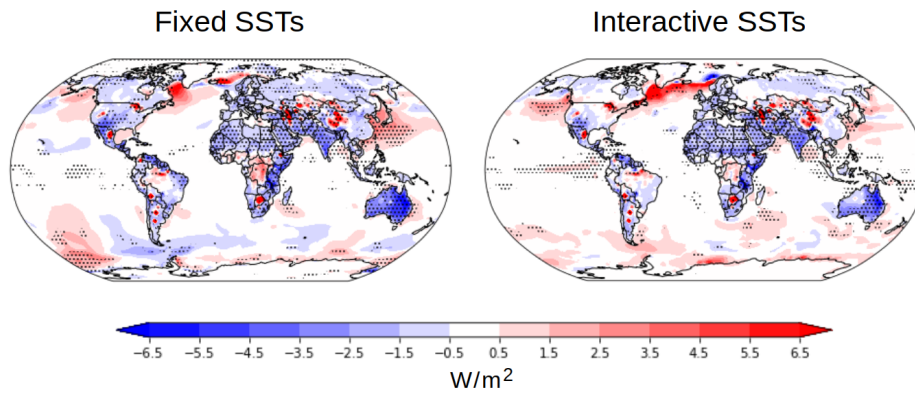
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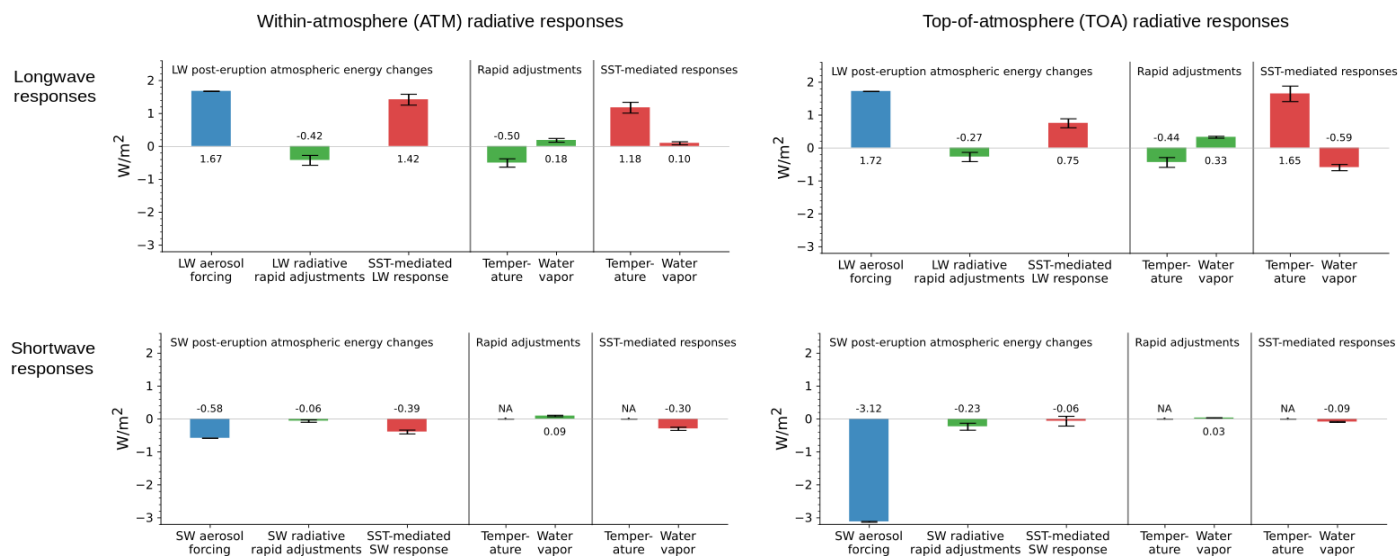
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Figures S1-S2



**Figure S1 | Surface sensible heat flux anomalies** in GISS ModelE2.2 simulations of a 20 Tg S eruption, with positive (red) values indicating enhanced flux from surface-to-atmosphere. Data shown is for the ensemble means, while stippling represents at least 80% agreement on sign among ensemble members.



**Figure S2 | Radiative responses to a 20 Tg S eruption** in GISS ModelE2.2 simulations, decomposed into longwave (LW, top panels) and shortwave (SW, bottom) effects and shown both for within-atmosphere (left) and top-of-atmosphere fluxes (right). As in Fig. 2, filled bars show ensemble mean values while error bars denote  $\pm 1$  standard deviation.