

Interactive comment on “The climatic effects of the direct injection of water vapour into the stratosphere by large volcanic eruptions” by M. M. Joshi and G. S. Jones

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S. Self comments

We welcome the comments expanding on the uncertainties in estimating the output of the Krakatau and Pinatubo eruptions. We note that the stratospheric aerosol produced by both eruptions is similar in the Sato et al climatology used in existing climate models, despite the apparent difference in eruption size, and so we do not think it explains the apparent difference between model and observations. There are unquantified uncertainties in the Sato aerosol dataset, but note that optical effects in the upper atmosphere following Krakatau were substantial, suggestive of large aerosol amounts

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in the stratosphere.

We have included more discussion about the uncertainties in our hypothesis and in the data used in the simulations.

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