Interactive comment on “Could aerosol emissions be used for regional heat wave mitigation?” by D. N. Bernstein et al.

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What is the injected aerosol mass in the region? from a rough calculation it appears to be enormous: 30 E-9 Kg m-2 s-1 * (assumed regional area: 1000km * 1000 km) = [1 E12 m2] * day = [86400 s] =2.592 E9 Kg day-1 = 2.6 MT/day! some comment on the magnitude of the injected aerosol is needed. This is such a vast quantity of material that it must weigh heavily on the answer to the question that the article asks. X Mt per YEAR is the order of magnitude that has been suggested for offsetting global warming with stratospheric aerosol injection and the feasibility of this scale of aerosol injection is questioned.

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