Interactive comment on “Global contrail radiative forcing and the impact of diurnal variations of air traffic” by N. Stuber and P. Forster

Anonymous Referee #2

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The radiative forcing of contrails is highly regional and transient, mainly along the routes of the fly paths and occurring for a short period of time. Even within the path, contrails have inhomogeneous characteristics. Therefore, the meaning of the term "global, annual mean radiative forcing" is difficult to apprehend. All the uncertainties (contrail optical properties, occurrence in the upper troposphere or lower stratosphere; scaling with fuel usage, etc.) and assumptions (optical depth, contrail vertical structure, and randomly overlapping), discussed in the study, further compound this problematic aspect of using the term, as also clearly reflected in the many assertive use of the contrail properties without justifications.

Interactive comment on Atmos. Chem. Phys. Discuss., 6, 9123, 2006.