



## Aircraft Emissions and Climate Impact

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submissions:

**closed (30 September 2022)**

### Message from the Guest Editor

This Special Issue aims to gather high quality scientific papers that focus on the atmospheric effects from aircraft emissions. Air traffic emits greenhouse and trace gases, soot, sulphur aerosols, water vapor and forms contrails. Contrails behind aircrafts are among the most evident of anthropogenic effects on the atmosphere. It is known that contrails dissipate quickly if the atmosphere is dry, vanishing within a few minutes or even seconds. If the atmosphere is humid enough, the contrails may persist and may turn into contrail-cirrus clouds. Global aviation is responsible for 2.5% of global anthropogenic carbon dioxide (CO<sub>2</sub>) emissions. It is estimated that, together, CO<sub>2</sub> and non-CO<sub>2</sub> aviation emissions account for approximately 3.5% of warming. We welcome studies that analyze aircraft emissions, aviation-induced clouds, cirrus clouds, changes, radiative forcing estimates, as well as studies that assess mitigation options for reducing the climate impact of air traffic, during periods with or without air travel restrictions and disruptions.





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## Message from the Editor-in-Chief

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