

Manuscript number: egusphere-2025-697

Full title: Satellite-based estimation of contrail cirrus cloud radiative forcing derived through a Rapid Contrail-RF Estimation Approach

Author(s): Dimitropoulou E. et al.

The authors have improved the manuscript substantially, and it looks better now. I understand that the current manuscript is to show the performance of the analysis system for the contrail-induced radiative forcing estimation (i.e., the Rapid Contrail-RF Estimation Approach), and the authors specified that an independent validation of the contrail-detection method is beyond the scope of the present work and is future work. However, there are still a significant number of descriptions stating that the authors are investigating the radiative forcing of contrails (e.g., L102, L131, L303, and many more). The authors should first define what the detected cloud cases are through the CTP filter (perhaps “high-altitude ice clouds” or “potential contrails”), and they should consistently use this terminology in the following sections. The topic in the present paper is suitable for *Atmospheric Measurement Techniques (AMT)*. As long as the above-mentioned inconsistency is resolved, it can be published. Please find the minor comments below for potential improvement of the manuscript.

Minor comments

1. Title: “**Satellite-based estimation of contrail cirrus cloud radiative forcing** derived through a Rapid Contrail-RF Estimation Approach.” The red-highlighted part is no longer relevant to the work. My impression is that the manuscript is focused on the validation of the Rapid Contrail-RF Estimation Approach. Please revise the title to be more relevant to the work.
2. Abstract, Page 1, L12 “seasons”: The authors only analyze 6 days of data, which is insufficient to resolve the seasonal variability of the cloud variables due to substantial daily variation. Please delete this word.
3. Page 3, Lines 61 “between”: Are there only two relevant studies? If there are more than two studies, suggest the authors rephrase it with “among”.
4. Page 3, Line 76 “In (Driver et al., 2025)”: This is a format error. Please correct it.
5. Page 13, Line 297 “Distinguishing between ice and cirrus clouds”: Cirrus clouds are part of ice clouds. Please rephrase it to make it unambiguous.