

We have addressed the minor points raised by the editor in blue. As discussed in our email exchange, the major points had already been addressed during the previous review phase.

L22: Consider changing However for Instead

Done

L108 SAGE III should be SAGE III/ISS. (There was a SAGEIII METEOP in 2001)

Corrected in L106 and L108

L115 SAGE III should be the Meteor-3M SAGE III

Yes, the version we used includes only Meteor-3M SAGE III. We corrected it.

L121 Please include equation 1,2, and 3 right after you discuss them.

We have reorganized the Radiative Forcing section so that each equation is presented immediately after it is introduced in the text.

L140 Please include equation 4 and 5 right after you discuss them

See previous response.

L180 Note that Figure A1 only shows 3 models. Why are you only showing 3 models for TROP? Is you only have TROP info for 3 models then change the sentence to: All models show qualitative agreement ....

We removed "five," as only three models provided data for the troposphere. In the radiative forcing section we added the following sentence:

" The radiative forcing at the three levels is presented for each model according to data availability."

L189 Please include the panel info as Figure 2 also shows the high southern latitudes. For example, Global means (Fig 2 a, d, and g) and hemispheric means ( Fig 2 b, e, and h) show the multi-model average and inter-model spread, highlighting the magnitude of the IRF in each injection experiment.

Done.

L196 Delete \*thus\*

Done.

L199 values, \*add space\* reflecting

Done.

L200 I suggest adding the figure information here to remind the reader where to look out, for example, Over the high southern latitudes (60-90S, Fig 2 c,f,i).

Done there and in the lines above.

L205 Delete extra space between the bracket and Fig. A3

Done.

L241: I think the correct reference is Millan et al 2024 10.1029/2024GL110841

Yes, corrected.

Figure 3. Panels (d) and (\*\*e\*\*) show the .... There is no panel f in the figure.

Corrected.

L 336 Do you mean Fig. 7a? Figure 7 only have two panels.

Corrected.

L339 Please point to panels Figure A8 g-i

Done.

Figure 7 Please consider changing the title to something like: a) Clear-sky (no clouds). And b) All-sky (with clouds) To help the reader remember the distinction between the two.

Done.

Table 4: This table also includes global information please update the caption.

Done.

Figure A1: Why only 3 models and not 5?

As answered for L180, only three models provided data for the troposphere.

Figure A2: .. under clear-sky conditions from \*\*\*five\*\*\* models

Corrected.

Figure A6 is not mentioned in the manuscript, please delete this figure or discuss it in the manuscript

We removed Figure A6.

Figure A7 please make sure that you are plotting the global net radiative forcing. The title of the figure suggest you are using 90S-EQ

We corrected the title.

Figure A5 is missing units

For the aerosol optical depth plots, no additional information is included since it is a dimensionless quantity.