

Geosci. Model Dev. Discuss., referee comment RC1
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Comment on gmd-2022-155

Anonymous Referee #1

Referee comment on "The Mission Support System (MSS v7.0.4) and its use in planning for the SouthTRAC aircraft campaign" by Reimar Bauer et al., Geosci. Model Dev. Discuss., <https://doi.org/10.5194/gmd-2022-155-RC1>, 2022

The article " The Mission Support System (MSS v7.0.0) and its use in planning for the SouthTRAC aircraft campaign" describes the main features of the latest version of the flight planning tool MSS (v7.0.0) and its utilization for sophisticated planning of research flights during the SouthTRAC campaign in Argentina.

The paper provides an update to the introduction of the MSS tool by Rautenhaus et al. 2012. The system architecture as well as the improvement of MSS by introducing more tools, e.g. the MSColab tool, is delineated neatly. A description of various possibilities for planning research flights by giving an example of its use during SouthTRAC completes this study.

I recommend to publish the manuscript after a few minor revisions/technical corrections:

P1, I08: the abbreviation SouthTRAC is not introduced in the abstract.

P1, I09: Argentina not Argentinia

P2, I32: The tool has also been used during the ML-Cirrus campaign in 2014, the NAWDEX campaign in 2016, the CoMet 1.0 campaign in 2018 as well as the AC3 campaign in 2022.

P3, Figure 1: introduce WSGI (Python Web Server Gateway Interface) in the main body of the text for completeness. What exactly is the "Data Tool Chain" indicated in the flow chart?

P4, l76: introduce XML as Extensible Markup Language for completeness

P4, l95: abbreviation "ERA5" not introduced to the reader

P6, l149: "research flights" not "research flight"

P8, l194: typo: vortex not cortex

P9, l237: introduce GW as gravity wave

P9, l237: Knobloch et al. 2022 has been rejected

P10: The chapter "conclusion" is rather a summary of the paper than a conclusion

P16, l289: DME – distance measuring equipment

The size of the figures should be increased as tick labels and figure titles are hard to read. I guess it's not the fault of the authors, but probably more a result of using the manuscript template. Most figures seem to be vector graphics, anyhow. Hence, it shouldn't be a problem to increase their size for a possible publication of the manuscript.

The manuscript title on the Discussion-Webpage has a typo: "theSouthTRAC"