

Response to the “Remarks from the preceding review file validation”

1) Your "Short summary" system section includes abbreviations. Please adapt your short summary by avoiding abbreviations to make it better understandable for non-experts and please pay attention to use only 500 characters including spaces.

Please see the revised as below.

This study investigates the impact of increased Global Navigation Satellite System radio occultation (GNSS-RO) profiles on numerical weather prediction (NWP) as part of the Radio Occultation Modeling EXperiment (ROMEX) effort. Leveraging the Joint Effort for Data assimilation Integration (JEDI), the next-generation data assimilation system adopted by NOAA, NASA, NRL and others, this impact study provides critical insights into the necessity of enhanced GNSS-RO observations for NWP applications.

2) Please provide at least the city and country for the authors' affiliation 1.

Done. Please see the revised manuscript; the tracked version has been uploaded as a supplement.

3) Please ensure that the colour schemes used in your maps and charts allow readers with colour vision deficiencies to correctly interpret your findings. Please check your figures using the Coblis – Color Blindness Simulator (<https://www.color-blindness.com/coblis-color-blindness-simulator/>) and revise the colour schemes accordingly. --> Figs. 4, 5, 6

Thank you for the guidance. Figs. 4-6 have been replotted and carefully checked with <https://www.color-blindness.com/coblis-color-blindness-simulator/>

In addition:

We have revised the format of the references.