

egosphere-2022-1509

Title: Electron radiation belt safety indices based on the SafeSpace modelling pipeline and dedicated to the internal charging risk

Author(s): Nour Dahmen et al.

MS type: Regular paper

Iteration: Revision

The authors have pretty much addressed my concern and comments. Some minor edits are still needed though.

1. Change 'radiative' to 'radiation' (throughout the paper)
 - a. After line 120, 'In addition, space radiative environment' → 'space radiation environment'
 - b. 'who are not radiative space environment experts' → 'who are not space radiation environment experts'
2. The space weather impacts (around lines 30-35) related to 'satellite drag' and 'communication and navigation' are not really related to energetic particles. But it is up to the authors to decide whether to keep or remove them.
3. Around line 220
 - a. 'On the MEO orbit'. → 'At the MEO orbit'
 - b. 'On the LEO...'. → 'At the LEO orbit'
4. Around 220, the following sentence is difficult to understand
 - a. 'contained as the system remains conservative and manages, at least, to discriminate between risky and non-risky states'. Please rewrite or make it clearer.
5. Between lines 230-235 'LEO,MEO,GEO' → it should have some proper spacing. 'LEO, MEO, GEO'
6. After line 240. 'With no doubts' → 'Without a doubt'
7. Between lines 235 – 240, this sentence is unclear. 'when compared to observation and a rough estimation of the index at the LEO orbit. Similarly, the warning system performance seem acceptable for the nowcast and forecast simulations.' Does it miss something, punctuation? Please check on it.
8. Around line 245, '(Ripoll et al., 2023).As a...' → need a space in between two sentences '(Ripoll et al., 2023). As a...'
9. After line 245, 'In front of the poor results' → 'With regard to the poor results'

Another comment: like to see more discussions on how to possibly make improvements regarding the poor performance at LEO.