Firstly, we thank the referee for providing the useful comments on our manuscript. Following the referee's comments, we will carefully go through the manuscript and revise it. Herewith, we provide the answers to the referee's comments:

Answers to the Referee Comments # RC1

The authors analyzed 31 type II bursts from e-CALLISTO observations during the period of May 2021 to December 2022 (the ascending phase of the current solar cycle). Based on measurements of the dynamic spectra, they estimated the physical parameters of the associated shocks. They also examined associated X-ray flares and CMEs. The authors further examined in detail space wheather effects of bursts on October 9, 2021, and during March 24 - April 3, 2022. They conclude that 15 of their events were associated with space weather events.

Their results are new and interesting, hence the article merits publication after some improvements:

1. The authors should provide a table with the statistics of their results (range of values, average, rms), together with values from previous works for easy comparison.

Answer: A table of statistics with comparisons of previous works that have analyzed more than two events.

Epoch	# events	Mean shock speed (km/s)	Mean Alfven speed (km/s)	B-field (G)	Height range (solar radius)	Authors
2021 - 2022	31	893	604	8.0 - 0.6	1.0 - 2.0	This work
2013 - 2014	4	843	-	1.8 - 1.3	1.68 - 1.91	Kishore et al., 2016
1996 - 2007	10	1288	555	0.105 - 0.006	3 - 15	Kim et al., 2012

2. Lines 107-109: please provide the values of the slope derived by Vršnak et al., 2002, and Umuhire et al., 2021.

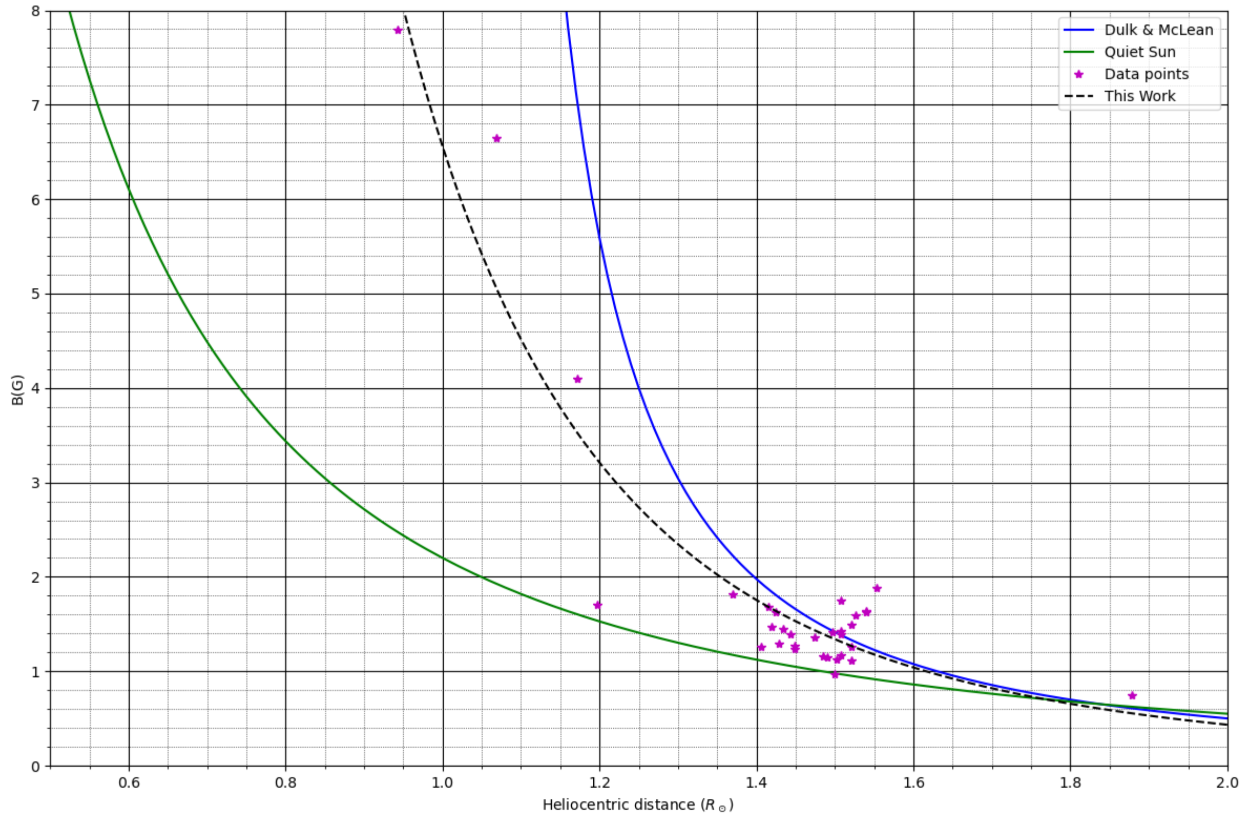
Answer: The slopes are $\epsilon = 1.89$ and $\epsilon = 1.33$ for Vršnak et al., 2002, and Umuhire et al., 2021, respectively.

3. The difference between the CME speed derived from the dynamic spectra and that of LASCO should be discussed further. I suppose you imply that the shock decelerates as it moves up in the corona. This should be included in the text, together with examples from the literature.

Answer: The difference in CME speed between dynamic spectra and LASCO is attributed to the CME's central position angle as observed by LASCO, implying that the shock may be weakened and dissipated before entering LASCO's field of view (FOV) (Gopalswamy et al., 2012, ApJ, 744,72). On the other hand, the shock decelerates in the case of a decline in its intensity or when it breaks. Furthermore, the shock can accelerate particles (electrons, protons, and heavy ions) if they become supercritical (MA > 1) (Kennel et al., 1985).The type II burst only serves as a time marker for when the shock occurs. It should be noted that type II radio emission can come from anywhere on the shock front: the nose or the flanks, depending on which location is best for electron acceleration (Gopalswamy et al., 2013. Ad. Spac. Resc, 51, 1981-1989).

4. (i) Figure 4: (a) Please label the axes; (b) Add your own measurements. (c) In the insert, replace equations with the model names.

Answer: (a) The axes labels are added. (b) Our own measurements are given by magenta starts and fitted with a dashed curve and (c) the equations are replaced by their corresponding model names.



(ii) Where does the "quiet Sun magnetic field model" come from?
Answer: It is found in Gopalswamy et al., 2001. J. Geophys. Res., 106, 25261.

5. Lines 200-220: Can you identify which TEC enhancements are associated with which type II? You should clarify your criteria of association and, based on these, give the burst numbers (from your table 1) that you can positively associate with space weather effects.

Answer: Because of their association with solar phenomena, type II bursts aid in tracking disturbed days. The TEC was analyzed on 25 type II radio bursts, which are associated with both solar flares and CMEs, by selecting GNSS stations in equatorial, mid-latitude and high-latitude regions. Particularly, the TEC enhancements of October 8 - 11, 2021, and that of March 24 - April 3, 2022, are described in more detail in the manuscript.

6. The authors conclude that 15 of their events were associated with space weather events. This is an important result and requires further discussion, preferably in a separate section. For example, what were the differences between these 15 and the other type IIs?

Are there any observable type II characteristics that enhance the probability of space weather effects? If not, you should still state that you could find no differences between the two type II groups.

Answer: In the present study, 15 of the 31 type II radio events were found to be related to space weather phenomena, including radio blackouts or polar cap absorption events brought on by solar proton enhancement and solar energetic particle phenomena. However, out of the 31 type II radio events, 18 are diagnostic of space weather, 10 of which have band-splitting characteristics, and the other 8 are preceded by type III bursts or followed by type IV radio bursts.