

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 whether 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: Figure 3 gives the statistics required and the comparison with previous was done in the text during discussion.

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

Answer: The correlation coefficients are $CC=0.93$ and $CC=0.83$ 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.

Answer: The difference is discussed in the revised version: LASCO Coronagraphs observe the Sun from 1.1 to 3, 2.5 to 6, and 4 to 32 solar radii (Rs) in C1, C2, and C3, respectively. LASCO-C2, which observes between 2.5 and 6 Rs, was used in

our study. The difference in CME speed from dynamic spectra and LASCO is attributed to the CME's central position angle as observed by LASCO, implying that the shock weakened and dissipated before entering LASCO's field of view (FOV) (Gopalswamy et al., 2012, ApJ, 744,72).

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 will be added. (b) Our own measurements are given by a dashed curve and (c) the equations will be 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?

Answer: Because of their association with solar phenomena, type II bursts aid in tracking disturbed days. If there is a significant increase in TEC on a specific day and a type II radio burst registration on that same day, it is proof that the two are linked. We did not reinstate type II bursts because the days for TEC calculations were chosen based on the occurrence of type II bursts.

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?

Answer: Solar radio bursts are electromagnetic radiation that travels at the speed of light. They are used as a proxy to provide early warning of upcoming events. According to a recent study by Chernov and Fomichev, 2021 (ApJ,922,82), the registration of type II radio bursts is a signature of shock acceleration in the solar corona. As a result, by observing type II radio bursts, it is possible to trace out

associated solar phenomena such as solar flares and coronal mass ejections, which are the drivers of space weather. Furthermore, those 15 type II bursts are all associated with the aforementioned space weather driver and either proton enhancement due to flare explosions or polar cap absorption events. Finally, it is affected by the location of associated active regions, whether they are associated with M or X classes of flares and the strength and direction of associated CMEs.

Finally, the authors may find interesting the review,
[doi:10.3389/fspas.2020.591075](https://doi.org/10.3389/fspas.2020.591075) on radio measurements of the magnetic field.