

The authors have largely improved the paper since the last version, in particular the section on type II bursts. The section 3 on associated space weather implication still needs major improvement and clarification.

Comments on section 3 :

The authors use TEC information from different GNSS stations to study the implication of type II bursts on space weather effects. They consider two periods to analyse these effects. They should introduce in this section the effects on TEC which are expected as a response to a flare (e.g. linked to the radio black-out phenomena mentioned earlier) or to particles. What are the time scales for the effects on TEC ? How are these effects varying with terrestrial longitude/latitude ? The figures showing the TEC evolution should be better explained so that the reader clearly understands what is usual diurnal variation and what is due the effect of the flares . The authors also mention several times in this section CIR. These phenomena are not described earlier in the paper and I wonder what is the link with the type II/shock/CME.

Additional comment on the abstract (lines 11 to 14) :

« The current study finds that 18/31 type II radio events are precursors for space weather because they are associated with immediate space weather events such as radio blackouts and polar cap absorption events and exhibit band-splitting features or are followed by type III and IV bursts »

This sentence should be split in two. As it is written, it can be understood that type II radio events are precursors for space weather because they exhibit band-splitting features, which is not the case. Also are they followed by or associated with type IV bursts. (This sentence appears in a more or less similar way elsewhere in the paper).