Ann. Geophys. Discuss.,
https://doi.org/10.5194/angeo-2019-68-RC1, 2019

Annales Geophysicae Discussions

Interactive comment on "Multi-point galactic cosmic rays measurements between 1 and 4.5 AU over a full Solar cycle" *by* Thomas Honig et al.

Anonymous Referee #1

Received and published: 4 June 2019

General comments

This paper presents a study of the different high energy particle deterctors which have been mounted on severl different ESA missions. As these missions have different objectives multi point measurements of Galactic Cosmic Rays are possible in the heliosphere. The paper is clear and well written and should be published in Annales Geophysicae after the following minor comments have been addressed

Minor comments

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Figure 1b the lines are a little difficult to distinguish on the printed page and the dot dash and dashed lines are difficult to distinguish here.

p5l19 I would like more details on the process to remove SPEs. Anything above a local average is removed? Would a method such as a hampel filter be more appropriate here? I would like a little more detail here.

Figures 2 and 3 can you quote a value for the goodness of fit like chi^2

Figure 4 and the related discussion the sun spot number is displayed but there is no source for this data. There are several different metrics which can be used as a 'sunspot number' see Lockwood 2014 and refs therein https://doi.org/10.1002/2014JA019970

Figure 4 what is the cadence of the data in Figure 4, are these averaged with over 27 days also? It would be interesting to also plot the variance or the stadard deviation for the same window width as the averaging of the magnetic field as a proxy for the fluctuation amplitude of the magnetic field fluctuations.

Interactive comment on Ann. Geophys. Discuss., https://doi.org/10.5194/angeo-2019-68, 2019.