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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.

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Overall, the paper presents interesting findings. However, a more detailed description of the physical processes leading to eg the gradient in GCR flux would improve the scientific content significantly.

Figure 1a: the green and blue are hard to distinguish, maybe another color combination would be better here

1. It is unclear to me why the instruments need cross-calibration. What are the technical reasons for the instruments different behaviour if they are essentially the same model? You mention sensitivity area, can you elaborate further? Do you have any reason to believe that the dependence of the countrate of two instruments is linear?

Could it also be something else? (second or third order?)

2. p7l3: the equation given here is not consistent with what is shown in Figure 2. From figure two the relationship should actually be: Count(Integral)=1.028 x count(Rosetta) -0.127 . Then all the other calibration functions should also be checked.

3. p11l21ff: The correlation is very obvious. You say this is something that was expected and address this briefly in the annex. I think it would be better suited here and needs to be explained in more scientific detail.

4. p12l11ff: Again, a physical explanation of why this gradient is expected would be good.

5. p15l22: However, they ARE highly.....

6. p15l31: demonstrate –> demonstrated

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