Intercalibration Guidelines: Recommendations of SEP Measurements Intercalibration Workshop, Boulder, Colorado, 11 April 2014

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Recommendation: guidelines for intercalibration (1 of 2)

- Guidelines should be drafted for the on-orbit cross-comparison of solar energetic particle measurements to address:
 - How do different users benefit from a cross-comparison activity?
 - Should there be accuracy objectives for different quantities such as flux and dose?
 - Should there be a standard set of differential energy channels to which measurements are reduced for cross-comparison purposes?
 - Should there be a single standard set of integral channels? If not, should different sets be recommended for different applications (hazards)?
 - What should the set of reference measurements be as a function of time and energy? How can existing long-baseline comparisons be extended into the future?

Recommendation: guidelines for intercalibration (2 of 2)

- Guidelines should be drafted for the on-orbit cross-comparison of solar energetic particle measurements to address:
 - What are the proper conditions for cross-comparisons that minimize effects such as interplanetary anisotropies and geomagnetic cutoffs?
 - Should methods be recommended for correcting for backgrounds due to penetrating radiation?
 - Should a set of algorithms be recommended for the rapid crosscomparison and transformation of data in accordance with these guidelines?
 - What is the minimum set of documentation on instrument performance that should be made public?
 - What should be the process for distributing reprocessed intercalibrated data?

J. V. Rodriguez, T. G. Onsager, D. Heynderickx, and P. T. A. Jiggens (2014), Meeting Report: Solar Energetic Particle Measurements Intercalibration Workshop, 11 April 2014, Boulder, Colorado, *Space Weather*, in press.