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The active Sun and its implication for the heliosphere  
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## **The Longitudinal Extent of $^3\text{He}$ -rich Solar Energetic Particle Events**

Wiedenbeck, M.E.<sup>1</sup>, Mason, G.M.<sup>2</sup>, Cohen, C.M.S.<sup>3</sup>, Nitta, N.V.<sup>4</sup>, Gómez-Herrero, R.<sup>5</sup> and Haggerty, D.K.<sup>2</sup>

<sup>1</sup>Jet Propulsion Laboratory, California Institute of Technology

<sup>2</sup>Applied Physics Laboratory, Johns Hopkins University

<sup>3</sup>California Institute of Technology

<sup>4</sup>Lockheed-Martin Solar and Astrophysics Lab

<sup>5</sup>Christian-Albrechts Universität

Under the solar minimum conditions prevailing from 2007 through 2010, the two STEREO spacecraft moved to their present positions leading and trailing the Earth by  $\sim 90^\circ$  in its orbit about the Sun. We have used the data from energetic-particle instruments on the STEREOs and ACE to made correlated observations of the  $^3\text{He}$ -rich solar energetic particle (SEP) events that occurred over this time period. We find that particle fluences have a strong dependence on heliolongitude and that the longitudinal extent of  $^3\text{He}$ -rich SEP events is often significantly larger than the rms spread previously inferred from single-spacecraft studies. We suggest that this apparent discrepancy may be attributable to instrumental sensitivity limitations. We also discuss the implications of the multispacecraft results for understanding the observed rate of  $^3\text{He}$ -rich SEP events and the fraction of the time that energetic  $^3\text{He}$  is detected in the interplanetary medium near 1 AU.