

STEREO Views the Farside: CME and Solar Wind Research from STEREO Observations At large Separation Angles STEREO Views the Farside: CME and Solar Wind Research from STEREO Observations At large Separation Angles

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In the last two years, the STEREO spacecraft have reached opposition and have moved towards the farside of the sun. They are the first man-made probes to image the solar corona and heliosphere from such widely-separated viewing angles. At the same time, we are treated to continuous coverage of the full 360 degree corona during the maximum of solar activity, thanks to the support from AIA and LASCO observations. These unprecedented viewing conditions have opened up new research avenues, such as the study of the lifetime of active regions, the large-scale coupling in eruptive events, and the surprising extent of solar energetic particles in the inner heliosphere.

In this talk, I review the latest research on these areas and outline the future plans for the STEREO observations of the farside of the Sun. I will conclude with a discussion of the implications for Space Weather studies, including an operational Space Weather mission of interest to the Japanese space physics community—a mission to the L5 Lagrangian point.

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