



Creating Tools for STEREO's IMPACT Investigation: Lessons Learned

P. C. Schroeder (1), J. G. Luhmann (1), W. Marchant (1), V. Toy (1), C. T. Russell (2), A. Lam (2), and A. Davis (3)

(1) Space Sciences Laboratory, University of California - Berkeley, California, United States (peters@ssl.berkeley.edu), (2) Institute of Geophysics and Planetary Physics, University of California - Los Angeles, California, United States, (3) California Institute of Technology, Pasadena, California, United States

STEREO's IMPACT (In-situ Measurements of Particles and CME Transients) investigation provides the first opportunity for long duration, detailed observations of 1 AU magnetic field structures, plasma and suprathermal electrons, and energetic particles at points bracketing Earth's heliospheric location. The IMPACT team has developed several online web interfaces which provide easy access to plots and data products. These portals integrate data from other heliospheric and solar missions as well as results from the modeling community to help scientists analyze events and trace features from their solar origins to 1 AU. We discuss lessons learned from our experience in creating these tools with implications for others who might develop similar sites for their own missions and provide insights for data providers who wish to have their data served through such sites. We emphasize the ongoing need in our community for well-documented and consistent online data access and the ways data providers can meet this need. Finally, we demonstrate how integrated data browsers, such as ours, can help to enable the kinds of cross-disciplinary research necessary for a more complete understanding of the physical processes that connect geospace with solar events.