



Traveling of slow Shock in the magnetosheath—Multi-spacecraft measurements

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A traveling slow-shock-like structure, total magnetic field decrease, and a corresponding plasma density increase, observed by ACE and WIND in the un-shocked up stream solar wind on March 31, 2001. The traveling shock propagated into the magnetosheath and observed by CLUSTER, POLAR, and GEOTAIL, all of the six spacecraft were located inside the magnetosheath simultaneously. Inside the structure, ion and electron densities, ion and electron temperature increases, and meanwhile, magnetic total field strength decreases. The propagation of the slow shock-like structure relative to the plasma frame has been derived from the observation.