Ordinary Phenomena During an Extraordinary Solar Minimum

C.T. RUSSELL¹, L.K. JIAN¹, H.R. LAI¹, J.G. LUHMANN², A.B. GALVIN³

¹ESS and IGPP, UCLA, Los Angeles, CA

²SSL, UCB, Berkeley, CA

³EOS Space Sciences, UNH, Durham, NH

The interplanetary magnetic field and solar wind plasma have been monitored nearly continually through solar cycle 23 by a series of spacecraft at 1 AU including Wind, ACE, STEREO A and STEREO B. These spacecraft measurements enable us to monitor the ambient solar wind and its embedded disturbances through the solar maximum and into the deep solar minimum. The magnetic field and solar wind density both dropped dramatically to previously unseen minima. ICME shocks essentially disappeared, although stream interaction shocks remained prevalent. Other phenomena such as interplanetary field enhancements appear to be unchanged during the solar minimum.