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Studying Alfven waves in high speed streams that follow a corotating interaction region SOHA ASLAM, CHRISTOPHER SHERRILL, KEVIN PHAM, RAMON LOPEZ, Univ. of Texas at Arlington — There is always a constant outflow of plasma away from the Sun, which we call the solar wind. The regions of solar wind originating from coronal holes are called high speed streams when their velocity is greater than 500 km/s. When a high speed stream overtakes the slower solar wind, it creates a compressed boundary between the fast and slow solar wind. This compressed layer is known as a corotating interaction region (CIR). In the CIR, and corresponding high speed stream, there are large amplitude Alfven waves that travel along the magnetic field and transverse to the propagation. The Alfven waves cause oscillations in the velocity and strength of the interplanetary magnetic field. By looking for specific deviations in plasma velocity and magnetic field magnitude, we will attempt to identify the presence of Alfven waves.

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