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Solar Wind Properties During High Speed Streams[1] MIKAYLA STREETMAN, TAYLOR CRIST, LAUREN DANIELS, JOCELIN JOHN, HECTOR CARRANZA, RAMON LOPEZ, University of Texas at Arlington — Solar wind is the continuous flow of particles from the sun. High speed streams are formed by higher speed solar wind originating from low density solar regions called coronal holes. High speed streams are of interest because they can produce a strong southward z-component (Bz) of the interplanetary magnetic field (IMF), the solar magnetic field dragged out by the solar wind. A strong southward Bz or long duration thereof drives magnetic storms. We are determining the properties of high speed streams by analyzing solar wind data from OMNIWeb; a database of various satellites that uses algorithms to propagate solar wind data to Earth's predicted bow shock. We will be presenting a collection of high speed streams and their corresponding solar wind properties; in particular, proton density and Bz fluctuations from the baseline average.

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