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**Statistical analysis of corotating interaction regions and high speed streams** KYLE VAN ZUIDEN, SOHA ASLAM, DERRIC EDWARDS, KEVIN PHAM, RAMON LOPEZ, Univ. of Texas at Arlington — Many people believe the solar wind to be a constant, steady flow of charged particles from the Sun; however, this is generally not the case. Coronal holes on the Sun produce very fast solar wind, known as a high-speed stream (HSS), which can greatly affect the Earth's magnetosphere. When a HSS compresses the slower-moving solar wind ahead of it, a corotating interaction region (CIR) is created. Due to the compression, CIRs have a density spike, intense magnetic fields, and they are followed by a HSS which is faster than the preceding solar wind. The interaction of CIRs/HSSs with Earth's magnetic field may cause geomagnetic storms and affect space weather, so understanding HSSs is important. Since the Sun is currently in a solar minimum, HSSs occur very frequently. We have collected a number of HSSs that follow CIRs, and we will present an analysis of the mean and standard deviation of varying parameters for this collection of HSSs.

Robert Bruntz  
Univ. of Texas at Arlington

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