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Analyzing the Parameters of Corotating Interaction Regions and Their Relationships with Geomagnetic Storms PHU NGUYEN, SOHA ASLAM, KYLE VAN ZUIDEN, KEVIN PHAM, RAMON LOPEZ, University of Texas at Arlington — A corotating interaction region (CIR) forms when a low speed solar wind stream is compressed by a high speed solar wind stream (HSS) behind it, creating a region of higher pressure and density. This interaction region rotates along with the Sun, hence the name "corotating interaction region." It is observed that HSSs occur after CIRs. CIRs and the following HSSs are often associated with geomagnetic storms. We have collected CIRs followed by HSSs from the period of the years 2000-2005. We will analyze the relationship between the average parameters of CIRs and HSSs to determine which parameters affect the size of geomagnetic storms.

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