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**Propagation time of solar wind flow pressure spikes from bow shock to ground magnetometers** BRIZY SCHOCK, DIOGO DE SOUZA, KEVIN PHAM, RAMON LOPEZ, University of Texas at Arlington — The Sun is constantly emitting plasma, known as the solar wind. One of the solar wind's parameters is its flow pressure. The solar wind flow pressure exerts a force onto the Earth's magnetosphere, causing it to compress when the flow pressure is stronger. In our study we looked for instances in which the flow pressure is steady and is followed by a sudden increase by a factor of 3 or more in the span of 1 to 2 minutes. After collecting these events we examine measurements made by ground magnetometers at local noon to identify a signature that corresponds to the sudden increase in solar wind flow pressure. We determined how long it for the event to be detected in space and then to reach the ground magnetometers. We will present a histogram of the times delays and discuss possible reasons for discrepancies.

Kevin Pham  
University of Texas at Arlington

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