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Propagation Time of Solar Wind Flow Pressure Spikes From Bow Shock to Ground Magnetometers BRIZY SCHOCK, KEVIN PHAM, RAMON LOPEZ, University of Texas at Arlington — The Sun is constantly emitting plasma known as solar wind. This wind has variations in the particle flow pressure that is measured with satellites in space. In our study we looked for instances of steady flow pressure followed by a sudden increase that occurred within 1 to 2 minutes that had an increase of a factor of 3 or more. After collecting these events we compare them to ground magnetometers at local noon. These variations in flow pressure condenses the near-Earth's magnetic field which is detected by observatories on the ground. We are looking at the distribution of time delays between the flow pressure changes in the solar wind and the changes in the ground magnetometers. This will allow us to estimate the uncertainty in timing using the OMNI data.

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