The Formation of Magnetic Decreases MDs in Interplanetary Space: Ulysses

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Magnetic Decreases are decreases in the magnitude of the ambient magnetic field. The displaced plasma pressure is supplanted by anisotropic $Tperp/Tpar > 1$, locally heated plasma so that there is pressure balance across the MD structures. Anisotropic spatial distributions of MDs are identified to further understand the conditions under which MDs form/evolve. We will show that Ulysses fast-latitude scans through corotating solar wind streams are good places to search for such spatial anisotropies. The properties of MDs within CIRs and high speed streams will be reported. A general generation mechanism will be described.

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