

A Study of Southern Hemisphere Poleward Moving Radar Auroral Forms

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Poleward moving radar auroral forms, PMRAFs, are radar signatures of magnetopause reconnection and strong indicators of flux transfer events. Due to a lack of instrumentation, the Southern Hemisphere has historically suffered from a lack of measurements capable of tracking the high density, high velocity plasma associated with PMRAFs. Using SuperDARN's high resolution imaging dataset and a temporal analysis of the data, we are able to discern features of PMRAFs at a higher resolution. We compare interplanetary magnetic field statistics and auroral indices of those PMRAFs at the time of each event to check for trends.

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