



## Extended magnetic reconnection X-lines at small field shear angles (or large guide field) in the solar wind

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Extended magnetic reconnection X-lines in the solar wind have recently been reported. All reported extended X-lines have high field shear angles ( $>60$  deg) [Phan et al., 2009]. This suggests that high shear magnetic reconnection in the solar wind results in a dominant X-line rather than a network of patchy and randomly distributed X-lines. However, reconnection exhausts in the solar wind occur most frequently with small field shear angles [Gosling et al., 2007]. It is unclear if low shear reconnection X-lines are extended similar to high shear X-lines. Small shear angle reconnection exhausts are typically quite narrow and convect past spacecraft in  $<100$ s [Gosling et al., 2007]. This has made previous identification of low shear reconnection exhausts difficult with data resolutions greater than 60s. The Wind and Themis spacecrafts have plasma data resolutions of 3s making them ideal for multi-spacecraft studies of low shear reconnection; and we have used them to survey reconnection exhausts in the solar wind.

We present a dataset of low shear ( $<60$  deg) reconnection exhausts in the solar wind. All of these exhaust events were observed by Wind and Themis. The exhausts are quite narrow and convect past the spacecraft on the order of tens of seconds. We will discuss the nature of low shear X-line extent based on our dataset of events.