

## IN THIS TALK

1. Two Polar satellite magnetopause crossings, of two second and six minute durations, are analyzed to show that reconnection was occurring but that the reconnection rate was uncertain due to oscillations of the normal direction.
2. A method is described for minimizing this uncertainty by using measurements of **only** the three large field components to obtain the three small components from correlations that result from the parallel electric field being zero on ion scales.
3. Of  $>100$  sub-solar magnetopause crossings, about 40% had correlations that suggest a constant reconnection rate. Detailed statistics are presented for 20 of these crossings.