SUMMARY

1. On the ion scale, reconnection can be directly observed by measuring the normal magnetic field and tangential electric field components.
2. These measurements are uncertain due to the uncorrected oscillation of the magnetopause normal.
3. In many cases, the normal magnetic field and tangential electric field can be obtained by analyses of the correlations between the normal electric field and tangential magnetic field that arise from the parallel electric field being zero.
4. These analyses show that reconnection at a constant rate may occur at the sub-solar magnetopause more than 40% of the time.
5. They suggest that reconnection at the sub-solar magnetopause may not depend on the guide magnetic field strength (the clock angle between the reconnecting fields) but that the reconnection rate may decrease with increasing guide magnetic field.