



## Survey of Magnetospheric Ions Near the Earth's Magnetopause

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Magnetospheric ions from the ring current, warm plasma cloak, and the plasmaspheric drainage plume all interact with the dusk flank magnetopause. During periods of strong magnetospheric convection, these ion populations may contribute significantly to the magnetospheric mass density at the magnetopause. The MMS spacecraft are completing their first pass of the dayside magnetopause and have observed these magnetospheric ion populations over a period of nearly 6 months. Results of a survey of these ion populations over the 6-month period will be presented. Particular focus is placed on the contributions these ion populations make to the mass density at the magnetopause and how these populations may affect magnetic reconnection at the boundary.