



## **Fine structure of the night-side equatorial magnetopause: ARTEMIS observations**

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We consider statistics of two ARTEMIS spacecraft observations of the night-side equatorial magnetopause at the lunar orbit. There is almost no effect of magnetic field on the magnetopause structure, which represents a boundary layer separating the hot, rarefied plasma sheet from dense cold magnetosheath plasmas. We demonstrate that kinetic pressure (plasma flow) does not contribute to the pressure balance across the boundary layer, and thus this layer is almost parallel to the magnetosheath plasma flow. Using advantages of two-spacecraft observations, we reconstruct a spatial scale of the boundary layer and compare this scale with a typical plasma scales (gyroradius, inertial length) calculated for plasma sheet and magnetosheath ions.