

# **Hemispheric Asymmetries in Atmospheric Escape**

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At Earth, a significant fraction of the atmospheric loss takes place through ion outflow from the polar cap regions. The production of ions is mainly caused by solar illumination, and thus modulated by the seasonal and diurnal variations of the rotational axis. The forces responsible for ion outflow, on the other hand, are dominated by electric and magnetic fields. Since the magnetic axis and rotational axis of the Earth are not aligned, time varying and persistent asymmetries in the outflow exist. In this presentation, we show examples of such asymmetries and discuss their consequences for magnetospheric dynamics.