



North-south asymmetries in plasma circulation at Mercury

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The circulation and precipitation of protons in the day side of Mercury has been simulated by means of a single-particle model. Different electric and magnetic field model parameters have been used to take into account different possible boundary conditions. In general, the presence of a non-zero IMF-B_x or IMF-B_y component leads to a magnetic field configuration that is not symmetric with respect to the equatorial plane. Here we discuss the influence of these asymmetries on the proton circulation around Mercury.