

JGR: Planets

Supporting Information for

The dynamic response of Jovian magnetotail reconnection to enhanced solar wind ram pressure

Junjie Chen^{1,2}, Binzheng Zhang^{1,2}, Peter A. Delamere³, Zhonghua Yao⁴, and Oliver Brambles⁵

¹Department of Earth Sciences, the University of Hong Kong, Pokfulam, Hong Kong SAR, China

²Laboratory for Space Research, the University of Hong Kong, Pokfulam, Hong Kong SAR, China

³Geophysical Institute, University of Alaska Fairbanks, Fairbanks, AK, USA

⁴Key Laboratory of Earth and Planetary Physics, Institute of Geology and Geophysics, Chinese Academy of Sciences, Beijing, China

⁵O.J. Brambles Consulting, Preston, UK

Contents of this file

Figure S1.

Additional Supporting Information (Files uploaded separately)

Caption for Movie S1.

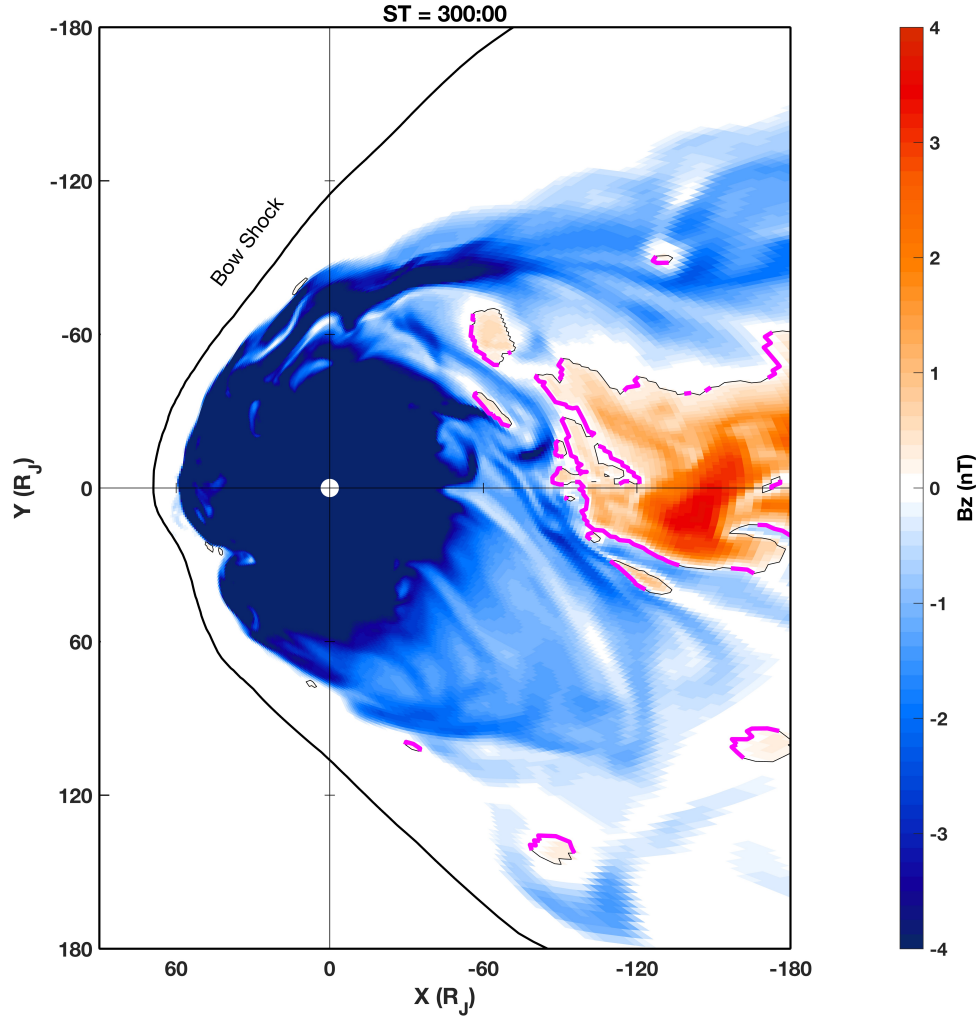


Figure S1. The distribution of the north-south component of the magnetic field (B_z , positive northward) at the equatorial plane of Jupiter's magnetosphere at 300:00 simulation time (ST) from the GAMERA. The magenta lines represent the B_z reversal positions, where B_z has a reversal from southward (parallel to the inner background field) to northward (antiparallel to the inner field) as radial distance increases at a given azimuthal angle on the nightside ($X < 0$).

Movie S1. The evolution of (a) the north-south component of the magnetic field (B_z , positive northward), (b) plasma number density (N), (c) azimuthal flow (V_ϕ , positive anticlockwise), and (d) radial flow (V_r , positive outflow) at the equatorial plane of Jupiter's magnetosphere during 300:00-390:00 ST from the GAMERA.