

Correction to “Interchange instability in the inner magnetosphere associated with geosynchronous particle flux decreases”

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INDEX TERMS: 2730 Magnetospheric Physics: Magnetosphere—inner; 2736 Magnetospheric Physics: Magnetosphere/ionosphere interactions; 2772 Magnetospheric Physics: Plasma waves and instabilities; 2411 Ionosphere: Electric fields (2712); 9900 Corrections. **Citation:** Sazykin, S., R. A. Wolf, R. W. Spiro, T. I. Gombosi, D. L. De Zeeuw, and M. F. Thomsen (2004), Correction to “Interchange instability in the inner magnetosphere associated with geosynchronous particle flux decreases,” *Geophys. Res. Lett.*, *31*, L05803, doi:10.1029/2003GL019191.

[1] In the paper “Interchange instability in the inner magnetosphere associated with geosynchronous particle flux decreases” by S. Sazykin, R. A. Wolf, R. W. Spiro, T. I. Gombosi, D. L. De Zeeuw, and M. F. Thomsen (*Geophysical Research Letters*, *29*, 1448, doi:10.1029/2001GL014416, 2002; *Geophysical Research Letters*, *29*,

1778, doi:10.1029/2002GL015846, 2002), Figure 2 showing the total particle energy is incorrect. The correct figure is shown below. The principal difference is the magnitude of the total particle energy, which in the original paper was approximately a factor of 3×10^5 lower due to an error in the conversion from the program units to SI units in generating Figure 2. The main point of Figure 2 was to demonstrate a relative decrease of a factor of ~ 3 in the total particle energy between 09 UT and 14 UT on September 25, 1998 and to compare it to the rapid recovery of the Dst during the same time interval (Figure 1 of the original paper), in the context of the Dessler-Parker-Sckopke relation. Since the error essentially amounts to a scaling of the overall curve in Figure 2 during post-processing only, it does not affect the conclusion of the paper regarding the rapid recovery of the ring current due to the interchange instability. Since this error is not related to the results of the model calculations, the rest of the paper is not affected.

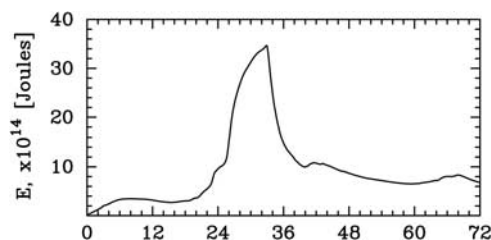


Figure 2. Total particle energy in the region $L \leq 6.6$.