

Effects of Field Aligned Currents in mid Latitude Observed in Data of the Oersted Satellite

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The Oersted satellite flew near noon-midnight meridian in August 1999. During the period, a clear tendency is observed in the east-west component of the magnetic field in every orbit. That is, it is positive (i.e., eastward) on the dayside in the southern hemisphere, and is negative in the northern hemisphere. The sense is opposite on the nightside.

The tendency is more prominent in geomagnetically disturbed period. We discuss the current system which would generate these magnetic deviations.