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Anharmonic oscillatory flow braking in the Earth's magnetotail

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Using near-Earth plasma sheet observations by five Time History of Events and Macroscale Interactions during Substorms (THEMIS) probes and simultaneous conjugate ground magnetometer observations, we show that the oscillatory flow braking may occur in an asymmetric potential causing anharmonicity. The anharmonic oscillatory braking may be responsible for second harmonic generation in the ground Pi2 pulsations.