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Localized low frequency waves in the equatorial magnetosphere

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The five Themis spacecraft offer new possibilities to analyze waves in the magnetosphere and to separate space from time variations. During the costal phase we observe many almost harmonical oscillations of the magnetic field with a period of about 10 minutes, an amplitude of about 5 nT, and a duration of about 4 hours. The observed events occur inside a well defined domain in the equatorial dusk side of the magnetosphere. We analyze these special waves using the unique string of pearls configuration of the Themis spacecraft during this phase of the mission.