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Multi-point observations of ULF pulsations in the terrestrial magnetosphere

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We present initial results from a comprehensive study of ULF pulsations in the terrestrial magnetosphere. In particular we study under what external and internal conditions the pulsations occur. We also address how the pulsations relate to injection events in the magnetosphere as well as their azimuthal propagation characteristics. We address these topics by combining data from the CLUSTER and THEMIS spacecraft flotillas. While CLUSTER makes detailed observations from a polar orbit of the wave electric and magnetic fields using four vantage points close enough to each other to permit a determination of the local nature of the pulsations, THEMIS, with a number of spacecraft at various locations in the equatorial region, provides a unique perspective which will help us to identify the source regions and drivers of the oscillations, or alternatively, to rule out the equatorial plane as the location of these regions.