

## Techniques to Investigate the ionospheric effect on ULF Waves

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### Abstract

New techniques are introduced to investigate the ionospheric effect on Pc 3-5 pulsations. One technique is to calculate the power ratio of the pulsations observed at high-latitude geomagnetic conjugate stations. The other is to extract the daily variation in amplitude of the pulsations from the geomagnetic data observed at three coordinated sites. Using these techniques, we found that Pc 3-5 amplitudes on the ground are relatively small as a consequence of the highly-conducting ionosphere (in the summer hemisphere and around local noon). These techniques are also found to be useful in order to understand aspects of magnetosphere-ionosphere coupling processes.