



Space Technology 5 Multipoint Observations of a ULF Wave Event

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The Space Technology 5 mission consists of three microsatellites which provide the first multipoint magnetic field measurements in low Earth orbit. The three satellites orbit in a “string-of-pearls” formation which provides magnetometer measurements across the same magnetic latitudes and local times with only a few minutes delay. These measurements provide increased information on the spatial-temporal characteristics of waves. We study the temporal and spatial changes in a ULF wave event which is observed by ST5 in the northern hemisphere. The wave activity is measured by all three spacecraft and range in location as the spacecraft passes from 75 to 62 degrees magnetic latitude and from 13 to 15 hours magnetic local time. The IMF is weakly northward for this event, which also occurs during the recovery phase of a weak substorm.