Spectral Characteristics of Long-Period Magnetic Pulsations Observed with HF Radar

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Spectral characteristics of long-period magnetic pulsations in the frequency range of 0.8 to a few mHz observed with HF Doppler radar at one of the SuperDARN stations, Pykkvibaer(65.02deg.N,68.57deg.E), for 10 pulsation events, are presented in this paper. It is to be noted that not only the wave frequency decreases with the increase in latitude, but also a discrete structure appears among dominant spectrum peaks along the latitudinal direction.These features are consistent with the calculated results of the waveguide theory presented by Harrold and Samson(1992) and Sunohara(1996).