An Explanation of Observation of Pulsing Hiss at Low latitude

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Pulsing hiss is a class of VLF emission having periodic or quasi-periodic band-limited structures with periods generally less than 10 seconds. In this paper we report pulsing hiss emissions observed at low latitude station, Jammu (geomag. Lat. 22^0 $16^/$ N, L = 1.17)) in which intensity decreases with increase in frequency. The entire dynamic spectra have irregular structure and varied from pulse to pulse. To explain the observed dynamic spectra we proposed that the hiss emissions are generated through Doppler-shifted Cyclotron interaction near equator and propagated to the earth in the whistler mode. Further, ULF waves propagated along the geomagnetic field lines may have modulated the intensity of the emission resulting into the pulsing hiss. The growth rate of the pulsing hiss have been also computed. The results of this study are discussed in the light of recent published works.