

VLF Emissions Observed at Low Latitude Indian Station Varanasi

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We have observed different types of VLF Emissions such as hiss, chorus, pulsing hiss, triggered emissions etc. during routine recording of VLF waves at the low latitude Indian Station Varanasi (geomag. lat. $14^{\circ} 55'$ N, geomag. lat. $153^{\circ} 55'$ E, $L=1.07$). In this paper interesting types of some of these events are reported. The analysis of these events have been carried out in order to understand their dynamic spectra in terms of generation and propagation mechanism of VLF waves in an inhomogeneous magnetoplasma. The detailed analysis shows that different events have propagated along different L-value in the magnetosphere, although they have been observed at the same receiving station. Suitable propagation mechanism has been discussed. Probable generation mechanism is evoked and its parameters are computed and compared with the observed spectra. The results are discussed and compared with the available work.