



Structure and Dynamics of AKR Source at the polar Boundary of auroral Region

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A flash-up of geomagnetic activity generates kinetic Alfvén waves in the region, close to the polar boundary of aurora. These waves heat particles and produce favorable conditions for AKR source formation. We have used measurements of electromagnetic waves and plasma parameters onboard INERBALL-2 satellite to study locations of AKR sources during geomagnetic disturbances. Maxima of AKR spectrum at low frequency cutoff have been detected in the same magnetic flux tube, where LF electromagnetic turbulence and heated ionospheric ions were observed. We assume that detected emission is waveguide mode generated in the AKR source and on the base of the frequency variation determine parameters of this source motion.