PRELIMINARY RESULTS OF COMBINED SATELLITE AND AURORAL MEASUREMENTS IN THE HIGH LATITUDE REGION

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Simultaneous observations of the auroral luminosity by a scanning photometer in three emissions (427.8 nm, 557.7 nm and 630.0 nm) and phase difference of the VHF coherent waves from Russian navigational satellites has been carried out in March, 2001 in Murmansk.

The auroral and wave measurements were compared for two satellite passes in the night sector during a moderate geomagnetic activity (Kp \approx 3). In both cases the comparison shows a reasonable agreement between the 630.0 nm emission intensity distribution and the phase curves at latitudes between 66° and 71°.