

Variations of equatorward boundary of auroral luminosity connected with some types of nonstationary solar wind streams

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The behavior of equatorward boundaries of auroral luminosity for different types of nonstationary solar wind streams is investigated. The average values of the equatorward boundary locations of the auroral luminosity in the midnight sector make: for solar flare-generated streams $\Phi' \sim 51^\circ$; for disturbed heliospheric current sheets $\Phi' \sim 61^\circ$; for leading edge of a high-speed solar wind streams from coronal holes $\Phi' \sim 58^\circ$. The average equatorward boundary locations of auroral luminosity for nonstationary solar wind streams are a few degrees lower than those for quasi-stationary streams indicating a higher geoefficiency of nonstationary streams.