



Long-term trends in E-sporadic layer frequency parameters

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At presented work significant trends of critical frequency of E-sporadic layer (foEs), blanketing frequency of Es layer (fbEs) and semitransparent range of E-sporadic layer (dfEs = foEs-fbEs) were detected on the basis of analysis of long-term variations above parameters for 22 midlatitude ionosphere sounding stations located in northern hemisphere. For season-averaged values of fbEs parameter statistically significant positive trends are prevail for all considered ionosphere sounding stations, whereas for season-averaged values of dfEs negative trends are prevail. For season-averaged values of foEs both positive and negative statistically significant trends are observed. As values of foEs parameter is present oneself a sum (foEs = fbEs+dfEs), we supposed, that sign of foEs parameter trends have determinated by interrelation of fbEs and dfEs trends magnitudes. Regional variability of sign of foEs season-averaged values trends are revealed : negative trends of foEs are prevail in Russia and positive trends - in West Europe. Also were revealed that magnitude of trends of night-time values of above E-sporadic layer parameters mostly exceed magnitudes of trends of light-time values. However, differences of revealed trends magnitudes for various seasons are not systematical. Attempt to explain of revealed trends reasons were made.