The quasi-biennial oscillations of the cosmic rays at the Earth orbit

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The quasi-biennial oscillations (QBO) were found in cosmic rays proton fluxes. Monthly values of proton (1, 2, 4, 10, 30 and 60 MeV) fluxes measured at the Earth orbit since 1973 were examined by means of singular spectrum analysis method. Principle components of these data sets were identified with 11-yr and QBO variations. This result confirms our earlier conclusions that the QBO is an essential property of the solar activity cycle and is well seen in all solar activity indicators. The form of QBO in proton fluxes time-series was found to be the same as in other solar activity indices (Wolf numbers, radio flux, etc.).