

ON THE CONNECTION BETWEEN THE SOLAR CYCLE LENGTH AND TERRESTRIAL CLIMATE

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The bidecadal variability in terrestrial climate was analyzed. It was shown, that this variation might arise if Earth's climate reacts on galactic cosmic ray intensity, integrated over its full quasi 11-year cycle. It was found, that this integral effect also could provide the effective link of climate with the duration of quasi 11-year cycle in cosmic ray flux. That, in turn, should result in appearance of connection between climate and the length of solar cycle, established for many climatic records. Analyses of temperature proxies, obtained for northern Fennoscandia, confirmed link of its climate just with the length of cycle in galactic cosmic ray intensity. Mechanisms, which can provide solar-climate relationship are discussed.