



## **Relations of PC indices to further geophysical activity parameters.**

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The Polar Cap (PC) indices, PCN for the index values derived from Thule magnetic data and PCS derived from Vostok data, relate to the polar cap ionospheric plasma convection driven mainly by the interaction of the solar wind with the magnetosphere. Thus, the PC indices serve to monitor the input power from the solar wind which drives a range of geophysical disturbances such as magnetic storms and substorms, energization of the plasma trapped in the Earth's near space, auroral activity, and heating of the upper atmosphere. The presentation will demonstrate the relations between the PC indices and further parameters and indices used to describe geophysical activity such as polar cap potentials, auroral electrojet activity, Joule and particle heating of the upper atmosphere, mid-latitude magnetic variations, and ring current indices Dst, SYM-H and ASY-H.