



## **Present (unified) and past Polar Cap (PC) index calculations.**

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The Polar Cap (PC) index was introduced by Troshichev and Andrezen (1985). Index values are derived from polar cap magnetic variations and are mainly related to the intensity of the variable transpolar ionospheric currents. These currents relate to the polar cap antisunward ionospheric plasma convection driven by the dawn-dusk electric field, which in turn is generated by the interaction of the solar wind with the Earth's magnetosphere. Thus the PC index is an important Space Weather parameter. Coefficients to calculate PC index values from polar magnetic variations have been derived by several different procedures in the past. Now, a unified procedure (Troshichev et al., 2005) has been adopted for both the PCN (north) and the PCS (south) index values. The presentation outlines and discusses the principles and the details of the unified procedure, which will be submitted to IAGA for formal approval. The PC index can be made available on-line in real-time for Space Weather applications.