



PCN-index derivation at World Data Center for Geomagnetism, Copenhagen, DTU Space

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The Polar Cap North (PCN) index is based on a correlation between geomagnetic disturbances at the Qaanaaq geomagnetic observatory (IAGA code THL) and the merging electric field derived from solar wind parameters. The index is therefore meant to provide a fast ground based single station indicator for variations in the merging electric field without being dependent on satellite observations.

The PC index will be subject to an IAGA endorsement process during IAGA Scientific Assembly 2013. Actually the WDC provides near real time PC-indices and post-processed final PC-indices based on former developed algorithms. However, the coefficients used for calculating the PCN distributed by the WDC Copenhagen are presently not reproducible. In the frame of the IAGA endorsement, DTU Space tests new coefficients mainly based on published algorithms. This presentation will report on activities at the WDC Copenhagen and on the current status at DTU Space with respect to the preparation for the IAGA endorsement process of the PCN-index.