



DTU Space magnetometer array

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DTU Space is monitoring the Earth's magnetic field with a network of ground stations in Greenland, Denmark, and the South Atlantic. An array with 17 stations at coastal locations is operated in Greenland. All stations provide full vector geomagnetic field variations with 1 Hz resolution, and 5 stations are geomagnetic observatories and calibrated to INTERMAGNET standards. The magnetometer array is listed as an asset for the ESA's Space Situational Awareness (SSA) program and it is an integral part in the EU FP7 project ESPAS. The outstanding location of the magnetometer array reaching from the geomagnetic pole over the auroral and subauroral region, and one observatory in the South Atlantic Anomaly region makes it useful for Space Weather applications and Space Physics investigations.

The observatory in Narsarsuaq (NAQ) is one of 12 stations contributing to the auroral electrojet index distributed by the WDC Kyoto. However, even for low indices $AE < 100$ we found considerable geomagnetic disturbances northward of NAQ station that can be attributed to auroral electrojet activity. The distribution in local time and latitude of such disturbances will be presented and discussed in this paper.