



On the scales for geomagnetic activity

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New NOAA Space Weather Scales published in March 2005 on the NOAA web aroused a discussion about their adequacy. The issue becomes, e.g., a subject of a session during the COST724 Workshop in October 2005. As regards geomagnetic activity, it was argued that Dst index may represent a better characteristics of geomagnetic storms than Kp index. In order to shed a bit more light into the problem we compare and analyze both approaches. The analysis is based on the physical causations of geomagnetic storms. We take into consideration parameters of solar wind (velocity, temperature and particle density), solar energetic proton flux and interplanetary magnetic field.