The aλ longitude sector geomagnetic indices

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A b s t r a c t: Various geophysical problems such as e.g., the precise monitoring of the main magnetic field from satellite magnetic data need information on the longitude modulation of the geomagnetic activity, that is its variation with longitude during a given UT time interval. Longitude sector geomagnetic activity indices based upon K indices from subauroral latitude observatories are well suited to provide this information.

In the frame of the Ørsted mission, the ISGI Publication Office started deriving and circulating routinely such longitude sector geomagnetic indices. Their derivation process is presented. Quick-look values are computed using K indices computer derived from minute values, automatically collected through data transfer procedures; provisional values are computed with the provisional K indices circulated by the observatories. The delay to get the data necessary to Quick-look values derivation is discussed.

An illustration of the variation with longitude of the intensity of the irregular activity in the Northern hemisphere is presented.

Key words: geomagnetic indices, irregular activity, longitude dependance

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