

EXTREMELY QUIET 2009 STATE OF GEOMAGNETIC FIELD AS A REFERENCE
LEVEL OF GEOMAGNETIC DISTURBANCES FOR ESTIMATING GEOMAGNETIC
ACTIVITY`

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We present a new technology of calculating the external geomagnetic field hourly amplitudes applicable for any hour and any day of the whole survey period of any observatory proceeding from the ground based magnetometer measurements. The calculated values may be used to find the amplitudes of the most magneto-quiet hour (day, month, year) and the most magneto-disturbed one for the whole measurement period. These data allow to estimate and to draw maps of the recent geomagnetic activity and the activity during specific geophysical events in the past at any point on the Earth. For the description of the past and recent geomagnetic activity we consider this method more opportune than that of $AE(AU, AL)$, Kp , Dst indices, out-of-date and not without drawback, since introduced more than half a century ago. A detailed description of the method is presented with examples, for estimation of the local geomagnetic activity, its seasonal variations and calculation of Dst -variation during the magnetic storms.