

A COMPARISON BETWEEN QUICK LOOK, PROVISIONAL AND DEFINITIVE am AND aa VALUES

MICHEL MENVIELLE^{1,2}

1. CNRS, Université Versailles St-Quentin, IPSL/LATMOS, 4 Avenue de Neptune,
F-94100 Saint Maur, France

2. Univ. Paris Sud, Département des sciences de la Terre, Orsay, France

Quick-look values of am and aa indices are routinely calculated and made available on a daily basis by the ISGI Publication Office, since the end of 1996. Since 2003, quick-look values of aa indices are routinely calculated and made available 30 minutes after the end of the 3-hour interval.

An analysis of the whole set of am quick-look values is presented and discussed in terms of delay of dissemination and quality of the quick-look values. The minute values are automatically got from the observatories on a daily basis through data transfer facilities like ftp procedure or e_mail. The K indices are then computed with the FMI algorithm, and stored. Quick-look values are finally computed when K indices from enough observatories are available.

During austral summer, the FMI algorithm may sometimes give spurious results, as a result of large decrease or increase in the diurnal variation around noon. In order to improve the quality of the aa quick-look values we have therefore slightly modified the FMI algorithm for Canberra K computation in austral summer.

Am provisional values are computed and circulated within about 6 weeks after the end of the month with K values provided by the stations. Provisional values are computed on an available data basis. These values aim at providing estimates of the definitive values of the indices. Aa provisional values are circulated within a one week delay, thanks to the Solar Influences Data analysis Centre (SIDC) at the Royal observatory of Belgium (Brussels). The up-to-date analysis of am quick-look, provisional, and definitive values is presented and discussed.

Geomagnetic indices – am and aa indices – quick-look values – on-line dissemination

Michel Menvielle, LATMOS, 4 Avenue de Neptune, F-94100 Saint Maur, France,
michel.menvielle@latmos.ipsl.fr