

K-index Quality Control Flag (QCF)

| QCF (numeric) | QCF (verbose) | Description | Output availability |
|------------------|-----------------------------|--|------------------------|
| 10 | nominal | Top (highest) quality complete and sound input dataset <i>(no gaps, no outliers, no problems of any sort encountered during data screening and processing)</i> | yes |
| 9 | very good | High quality 100% (latest 1h) & 95% (latest 3h) data (post-screening) availability | yes |
| 8 | very good | High quality 95% (latest 1h) & 95% (latest 3h) data (post-screening) availability <i>(lowest quality acceptable for operational alerts / warnings)</i> | yes |
| 7 | good | Good quality 95% (1h) & 75% (3h) input data (post-screening) availability | yes |
| 6 | good | Good quality 75% (1h) & 75% (3h) input data (post-screening) availability <i>(lowest quality acceptable for derivative products, e.g. hybrid models)</i> | yes |
| 5 | fair | Fair quality 75% (1h) & 66% (3h) input data (post-screening) availability | yes |
| 4 | fair | Fair quality 66% (1h) & 66% (3h) input data (post-screening) availability <i>(lowest quality acceptable for post-processing purposes, e.g. interpolation)</i> | yes |
| 3 | poor | Poor quality 66% (1h) & 33% (3h) input data (post-screening) availability | yes |
| 2 | poor | Poor quality 33% (1h) & 33% (3h) input data (post-screening) availability | yes |
| 1 | n/a (no assessment) | No quality assessment performed <i>(gross deficiencies encountered in data screening and/or processing, e.g. no data available from latest 1h or there is less than 33% data in latest 3h)</i> <i>(corresponding to K = -1)</i> | no |
| 0 | n/c (no calculations) | No calculations performed <i>(severe technicalities encountered during data acquisition)</i> <i>(corresponding to K = -1)</i> | no |

Reference :

Stankov, S. M., Stegen, K., Warnant, R. (2011): K-type geomagnetic index nowcast with data quality control. *Annals of Geophysics*, 54(3), 285-295.