

Flagging Scheme

Quality flags provide the user with information on the quality and errors of observations. The main aim is the assessment of the observation's suitability for analyses and research tasks. In accordance with existing standards (e.g. [UNESCO 2013](#)), we consider a primary and a secondary level. The primary level defines the quality flag, where the increasing flag value indicates a quality decrease of the observation. The secondary level provides the information that supports the primary level. The secondary level also extends the assessment of the observation to the technical level, where quality tests may suggest the causes of instrumentation malfunction and measurement inconsistencies. Current work implements primary and secondary levels in the O2A quality control module. When integrating multiple sources, where different flagging schemes are adopted, a common primary level should be considered.

Flag	Meaning
0	No quality control
1	Good data
2	Probably good
3	Probably bad
4	Bad
5	Missing value
6	Primal Error
7	Not used