

A detailed description of the header and data quality flags used is provided in the *Informe Investigación 014_08i.pdf*.

Data Quality Flags

Table 1 shown below is a shortened version. Flags assigned are similar to that used by IGOSS (Integrated Global Ocean Services System).

Flag	Quality	Description
0	No QC done	They have not yet been quality controlled.
1	Good data	The data pass all quality control process. Good data.
2	"Probably" good data	The data is inconsistent related with other data. Probably good data in which some features (probably real) are present but these are unconfirmed.
3	"Probably" bad data	Doubtful data. Suspect data in which unusual, and probably erroneous features are observed.
4	Bad data	Erroneous values are observed.
5	Changed	The data have been change. The original values (before the change) are preserved in the database.
6 - 7	Reserved	Flags 6 - 7 are reserved for future use.
8	Out of climatology	The data is anomalous compare with local climatology.
9	QC flag missing	Flag 9 data indicate that the element is missing.

Table 1. Data Quality Flag

Header Quality Flag

In QCEstación is kept the results of header quality control tests. A hexadecimal value was generated containing the results of the quality control tests. Each routine is represented by a digit (byte) in the hexadecimal number.

Byte: **1 2 3 4 5 6**

 x----- Date/Time

 x----- Increasing station number

 x----- Ship velocity

 x----- Regional ranges

 x----- Increasing pressure

 x—Depth vs Maximum depth CTD/Botella

Each byte, representing 4 binary bits, has the general structure:

- First position. If the test done, failed or not failed.
- Second position. Test not done.
- Third position. Test failed for missing value
- Fourth position. Depends on each routine.

The possible values are:

Binary	Hex	Results
0000	0	Test not done
0011	3	Test done, not failed
0010	2	Test done, failed
0110	6	Test done, failed because missing value
1010	A	Test done, failed – Depends on each routine
1011	B	Test done, not failed – Depends on each routine
1110	E	Test done, failed – Depends on each routine
	F	Error