

## Description of data Quality Flags used in the Swedish Ocean Archive database (SHARK), hosted by the Swedish Meteorological and Hydrological Institute (SMHI), National Oceanographic Data Centre (NODC)

### 1 Quality Flag description

SMHI Description	SMHI Description in Swedish	SMHI Flag	SMHI Interpretation of Flag		
			SeaDataNet	CMEMS	ICES
Good value. Data controlled by data host and/or by data deliverer	Ok värde. Data kontrollerad av datavärd och/eller av dataleverantör	Blank	1	1	
Suspect extreme value that is checked and ok	Misstänkt extremvärde som kontrollerats och funnits korrekt	E	1	1	
Suspect value, defined suspect based on quality control or poor sampling and analysis	Misstänkt värde. Anses misstänkt baserat på kvalitetskontroll eller brister i provtagning eller analys	S	3	3	
Bad/wrong value	Dåligt/felaktigt värde	B	4	4	
Value is under the limit of quantification	Värdet understiger kvantifieringsgränsen	<	Q	6	Q
Value exceeds the upper limit of the measurement range	Värdet överstiger mätområdets övre gräns	>	7		>
Interpolated or extrapolated	Uppskattat värde (genom interpolation eller extrapolation)	R	8	8	
Missing value	Värde saknas	M	9	9	
Zero by definition ( <i>deprecated since 2015</i> )	Nollvärde per definition. T.ex. syrehalt när svavelväte påvisas. <i>Används ej sedan 2015</i>	Z			

SeaDataNet Description	SeaDataNet Flag	SMHI Flag
No quality control	0	
Good value	1	Blank
Probably good value	2	
Probably bad value	3	S
Bad value	4	B
Changed value	5	
Value below detection	6	
Value in excess	7	>
Interpolated value	8	R
Missing value	9	M
Value phenomenon uncertain	A	
Nominal value	B	
Value below limit of quantification	Q	<

<b>CMEMS Description</b>	<b>CMEMS Flag</b>	<b>SMHI Flag</b>
No QC was performed	0	
Good data	1	Blank
Probably good data	2	
Bad data that are potentially correctable	3	S
Bad data	4	B
Value changed	5	
Value below detection	6	<
Nominal value	7	
Interpolated value	8	R
Missing value	9	M

<b>ICES Description</b>	<b>ICES Flag</b>	<b>SMHI Flag</b>
Less than	<	
Greater than	>	>
Reported value is less than the detection limit	D	
Reported value is less than the limit of quantification	Q	<

## 2 References

Swedish Ocean Archive database	<a href="http://shark.smhi.se/">http://shark.smhi.se/</a>
Ocean Data View quality flag scheme mapping	<a href="http://odv.awi.de/fileadmin/user_upload/odv/misc/ODV_QualityFlagSets.pdf">http://odv.awi.de/fileadmin/user_upload/odv/misc/ODV_QualityFlagSets.pdf</a>
SMHI quality flags NERC vocabulary	<a href="http://vocab.nerc.ac.uk/collection/L27/current/SMHI_QC/">http://vocab.nerc.ac.uk/collection/L27/current/SMHI_QC/</a>
SeaDataNet quality flags NERC vocabulary	<a href="http://vocab.nerc.ac.uk/collection/L20/current/">http://vocab.nerc.ac.uk/collection/L20/current/</a>
CMEMS quality information document 2.3	<a href="http://doi.org/10.13155/75807">http://doi.org/10.13155/75807</a>
ICES vocabulary qualifier flag	<a href="http://vocab.ices.dk/?codetypeguid=6cda004a-6dfe-4bb8-85d0-9f76cd4ac101">http://vocab.ices.dk/?codetypeguid=6cda004a-6dfe-4bb8-85d0-9f76cd4ac101</a>