

2007-15 DMS duplicates

Variability is assessed as the Relative % Difference.

See 2007-15_DMS_report.pdf for further details.

Precision statement for replicate samples drawn from a single Niskin bottle:

The pooled standard deviation for Dimethyl_Sulphide:Bottle for the range 0.51 to 19.04 nmol/l was 0.321
 $k = 7$ (0 outlier removed) where k is the number of pairs of duplicates.

The pooled standard deviation of pairs of samples (S_p) was calculated by:

$$S_p = \text{SQRT}\{\text{sum}(d^2)/2k\}$$

where k is the number of pairs and d is the difference between pairs.

Duplicate samples from a single Niskin bottle

Event Number	Sample Number	Station	Pressure dbar	DMS 1 nmol/l	DMS 2 nmol/l	Relative % Difference	Rejected yes / no
8	59	P4	20.8	0.54	0.51	5.7	
22	166	P12	19.3	13.83	14.46	4.5	
28	212	P16	17.4	17.16	17.87	4.1	
35	248	P20	18.9	16.19	16.91	4.4	
47	319	P26	19.9	14.18	14.12	0.4	
51	363	P26	18.2	13.68	13.66	0.1	
55	403	P26	19.8	18.92	19.04	0.6	

