

2013-01 DMS duplicates

Variability is assessed as the Relative % Difference.

No duplicates were rejected during this cruise.

See 2013-01_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 0.39 to 1.53 nmol/l was 0.107, $k = 5$ (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
23	126	P12	19.8	0.49	0.58	16.8	
28	153	P16	20.3	0.39	0.44	12.0	
41	277	P26	20.4	0.66	0.68	3.0	
61	330	P20	20.6	0.63	0.60	4.9	
75	420	P4	20.4	1.53	1.21	23.4	