

2012-13 DMS duplicates

Variability is assessed as the Relative % Difference.

No duplicates were rejected during this cruise.

See 2012-13_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 0.54 to 24.10 nmol/l was 1.077
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
5	28	P2	20.6	2.38	2.44	2.5	
8	47	P4	20.4	0.54	0.56	3.6	
26	169	P12	20.9	9.96	10.59	6.1	
42	326	P16	20.3	14.30	15.72	9.5	
70	565	P26	20.7	21.07	24.10	13.4	