

2009-03 DMS duplicates

Variability is assessed as the Relative % Difference.

No duplicates were rejected during this cruise.

See 2009-03_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 0.23 to 1.73 nmol/l was 0.049, $k = 5$ (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 Comments yes / no
7	44	P4	21.1	1.61	1.73	7.3	
31	233	P12	20.7	0.56	0.62	10.5	
34	267	P16	21.0	0.43	0.45	4.8	
37	339	P20	20.0	0.49	0.48	1.7	
44	442	P26	23.0	0.23	0.30	27.6	