

2009-09 DMS duplicates

Variability is assessed as the Relative % Difference.

No duplicates were rejected during this cruise.

See 2009-09_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 1.74 to 14.76 nmol/l was 0.195,
k = 5 (1 outlier removed) where k is the number of pairs of duplicates.

The pooled standard deviation of pairs of samples (Sp) 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	Comments
3	25	P2	20.2	1.95	1.88	3.5		
10	60	P4	20.6	14.76	14.15	4.2		
31	189	P12	20.2	1.43	2.45	52.6	yes	Instrument problems, data not reliable
39	252	P16	20.8	2.96	2.95	0.5		
56	356	P20	20.4	2.12	2.09	1.0		
75	490	P26	20.4	1.84	1.74	5.5		