

2020-001 DMS duplicates

Variability is assessed as the % Relative Difference.

When % relative difference is greater than 20% but less than 49%, quality flag is 3 with associated comment.

When % relative difference is greater than 49%, quality flag is 4 with associated comment.

No duplicates were rejected during this cruise.

See 2020-001_DMS_report.pdf for further details.

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

There was only one pair of duplicates for this cruise, with a standard deviation of 0.045.

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
35	186	P12	20.2	1.9	1.6	17.1	