

2009-03 Chlorophyll precision

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

The pooled standard deviation for Chlorophyll:Extracted:Bottle for the range 0.305 to 1.264 mg/m³ was 0.024,
k = 7 (0 outlier removed) where k is the number of pairs of duplicates.

Pooled standard deviation of pairs of samples (Sp) was calculated by:

$$Sp = \text{SQRT}\{\text{sum}(d^2)/2k\}$$

where k = number of pairs and d = difference between pairs

Duplicate samples from a single Niskin bottle

Event Number	Sample Number	Station	Pressure dbar	Chlorophyll 1 mg/m ³	Chlorophyll 2 mg/m ³	Rejected yes / no	Comment
4	19	P2	24.5	0.331	0.305		
7	45	P4	15.5	1.193	1.264		
18	142	P8	25.8	0.455	0.467		
31	236	P12	9.4	0.396	0.390		
34	273	P16	2.1	0.425	0.454		
37	342	P20	10.8	0.393	0.372		
44	445	P26	11.2	0.397	0.368		