

2008-27 Chlorophyll precision

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

The pooled standard deviation for Chlorophyll:Extracted:Bottle for the range 0.07 to 3.08 mg/m³ was 0.03,
k = 14 (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
6	23	P2	9.9	2.44	2.52		
13	63	P4	4.7	0.34	0.34		
39	221	P12	49.8	0.55	0.53		
50	252	P16	40.0	0.50	0.48		
115	610	SS1	30.2	0.74	0.71		
119	625	SS3	49.9	0.26	0.29		
127	642	SS7	29.5	0.77	0.77		
128	663	Ri1	19.9	0.33	0.34		
135	680	Ri4	39.8	0.20	0.18		
141	693	M2	100.1	0.07	0.07		
142	713	M3	10.3	3.08	3.02		
143	727	M4	30.3	1.37	1.36		
147	749	SS5	4.1	2.19	2.05		
149	767	CS02	25.1	0.89	0.91		