## 2009-09 Chlorophyll precision

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

The pooled standard deviation for Chlorophyll:Extracted:Bottle for the range 0.369 to 1.226 mg/m $^3$  was 0.030, k = 8 (0 outlier removed) where k is the number of pairs of duplicates.

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

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

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

## Duplicate samples from a single Niskin bottle

Sample Number	Station	Pressure dbar	Chlorophyll 1 mg/m^3	Chlorophyll 2 mg/m^3	Rejected yes / no	Comment
8	Si03	50.3	1.226	1.121		
20	P2	52.1	0.534	0.552		
58	P4	30.6	0.892	0.832		
147	P8	10.2	0.439	0.452		
190	P12	15.7	0.369	0.380		
252	P16	20.8	0.388	0.372		
355	P20	25.4	0.685	0.679		
485	P26	50.9	0.405	0.433		
	Number 8 20 58 147 190 252 355	Number  8 Si03 20 P2 58 P4 147 P8 190 P12 252 P16 355 P20	Number         dbar           8         Si03         50.3           20         P2         52.1           58         P4         30.6           147         P8         10.2           190         P12         15.7           252         P16         20.8           355         P20         25.4	Number         dbar         mg/m^3           8         Si03         50.3         1.226           20         P2         52.1         0.534           58         P4         30.6         0.892           147         P8         10.2         0.439           190         P12         15.7         0.369           252         P16         20.8         0.388           355         P20         25.4         0.685	Number         dbar         mg/m^3         mg/m^3           8         Si03         50.3         1.226         1.121           20         P2         52.1         0.534         0.552           58         P4         30.6         0.892         0.832           147         P8         10.2         0.439         0.452           190         P12         15.7         0.369         0.380           252         P16         20.8         0.388         0.372           355         P20         25.4         0.685         0.679	Number         dbar         mg/m^3         mg/m^3         yes / no           8         Si03         50.3         1.226         1.121           20         P2         52.1         0.534         0.552           58         P4         30.6         0.892         0.832           147         P8         10.2         0.439         0.452           190         P12         15.7         0.369         0.380           252         P16         20.8         0.388         0.372           355         P20         25.4         0.685         0.679