

## 2008-26 Oxygen duplicates

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

The pooled standard deviation for Oxygen:Dissolved:Bottle for the range 1.582 to 7.250 ml/l was 0.086,  
k = 11 (1 outlier removed) where k is the number of pairs of duplicates.

### Precision calculation for duplicate samples:

Precision was determined by analyzing replicate samples drawn from one Niskin.

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

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

where k is the number of pairs and d is the difference between pairs.

### Duplicate analysis for samples drawn from a single Niskin bottle:

Event Number	Sample Number	Station	Pressure dbar	Oxy:Dis 1 ml/l	Oxy:Dis 2 ml/l	Rejected yes / no	Comments
1	6	Si03	99.6	1.875	1.789		
3	18	P2	25.2	6.915	7.069		
9	64	P4	250.2	1.763	1.582	yes	CTD data suggests 2 <sup>nd</sup> value better
18	137	P8	151.3	3.633	3.646		
34	262	P16	74.9	7.250	7.025		
47	373	P20	75.2	7.073	7.083		
59	474	P26	250.1	1.910	2.012		
86	589	M4	99.8	3.75	3.593		
87	604	M3	25.1	4.236	4.098		
88	614	M2	10.1	5.221	5.149		
89	619	Ri1	199.8	3.079	3.066		
96	643	Ri4	125.2	2.602	2.458		