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Nitrate_plus_Nitrite:Bottle

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

The pooled standard deviation for Nitrate_plus_Nitrite:Bottle for the range 0.1 to 46.0 µmol/l was 0.11,
k = 26 (0 outlier removed) where k is the number of pairs of duplicates.

The pooled standard deviation of pairs of samples (Sp) was calculated by:
Sp = SQRT{sum (d*d)/2k}
where k is the number of pairs and d is the difference between pairs.

Nitrate data from 1000 to 4000 m agree with results averaged over 16 profiles at P26 from 1995 to 2001 to within 0.58 %.

Duplicate samples from a single Niskin bottle

Event Number	Sample Number	Station	Pressure dbar	Nitrate 1 µmol/l	Nitrate 2 µmol/l	Rejected yes / no	Comment
5	36	P2	6.1	0.1	0.1		
5	35	P2	12.0	0.2	0.1		
5	34	P2	26.0	5.8	5.9		
5	33	P2	49.8	26.7	26.6		
5	32	P2	76.3	29.2	29.0		
5	31	P2	76.1	29.1	29.0		
5	30	P2	100.2	33.8	33.9		
5	29	P2	112.9	33.8	33.9		
8	49	P4	250.8	33.4	33.7		
11	69	P4	29.5	2.5	2.4		
17	94	P8	100.1	12.6	12.5		
21	107	P12	175.2	25.6	25.4		
33	182	P16	1251.8	45	44.5		
39	211	P20	41.0	10.7	10.7		
43	239	P20	601.5	43.9	44.1		
66	328	P26	39.8	13.7	13.8		
68	360	P26	21.2	31.8	32.0		
70	369	P26	3500.9	38	38.0		
71	391	P26	301.6	41.5	41.6		
75	429	P1E93	1003.8	44.7	44.7		
77	464	S4	102.1	14	13.9		
86	533	S2	1250.5	45.8	46.0		
90	573	P32	26.1	13.4	13.3		
92	583	Z2	1251.5	44.5	44.5		
94	610	Z4	601.4	43.8	43.7		
98	635	Z6	400.6	43.5	43.5		

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Phosphate:Bottle

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

The pooled standard deviation for Phosphate:Bottle for the range 0.20 to 3.35 µmol/l was 0.007,
k = 26 (0 outlier removed) where k is the number of pairs of duplicates.

The pooled standard deviation of pairs of samples (Sp) was calculated by:
Sp = SQRT{sum (d*d)/2k}
where k is the number of pairs and d is the difference between pairs.

Phosphate data from 1000 to 4000 m agree with results averaged over 16 profiles at P26 from 1995 to 2001 to within 2.42 %.

Duplicate samples from a single Niskin bottle

Event Number	Sample Number	Station	Pressure dbar	Phosphate 1 µmol/l	Phosphate 2 µmol/l	Rejected yes / no	Comment
5	36	P2	6.1	0.20	0.21		
5	35	P2	12.0	0.24	0.23		
5	34	P2	26.0	0.82	0.80		
5	33	P2	49.8	2.13	2.14		
5	32	P2	76.3	2.37	2.38		
5	31	P2	76.1	2.38	2.37		
5	30	P2	100.2	2.79	2.78		
5	29	P2	112.9	2.78	2.77		
8	49	P4	250.8	2.47	2.47		
11	69	P4	29.5	0.66	0.66		
17	94	P8	100.1	1.21	1.22		
21	107	P12	175.2	1.86	1.86		
33	182	P16	1251.8	3.35	3.35		
39	211	P20	41.0	1.19	1.19		
43	239	P20	601.5	3.20	3.21		
66	328	P26	39.8	1.34	1.35		
68	360	P26	21.2	2.36	2.35		
70	369	P26	3500.9	2.77	2.77		
71	391	P26	301.6	2.93	2.93		
75	429	P1E93	1003.8	3.26	3.26		
77	464	S4	102.1	1.41	1.41		
86	533	S2	1250.5	3.31	3.31		
90	573	P32	26.1	1.33	1.32		
92	583	Z2	1251.5	3.27	3.25		
94	610	Z4	601.4	3.28	3.28		
98	635	Z6	400.6	3.24	3.23		

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Silicate:Bottle

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

The pooled standard deviation for Silicate:Bottle for the range 2.8 to 174.3 µmol/l was 0.27,
k = 26 (0 outlier removed) where k is the number of pairs of duplicates.

The pooled standard deviation of pairs of samples (Sp) was calculated by:
Sp = SQRT{sum (d*d)/2k}
where k is the number of pairs and d is the difference between pairs.

Silicate data from 1000 to 4000 m agree with results averaged over 16 profiles at P26 from 1995 to 2001 to within 2.56 %

Duplicate samples from a single Niskin bottle

Event Number	Sample Number	Station	Pressure dbar	Silicate 1 µmol/l	Silicate 2 µmol/l	Rejected yes / no	Comment
5	36	P2	6.1	2.8	2.8		
5	35	P2	12.0	3.3	3.2		
5	34	P2	26.0	11.7	11.8		
5	33	P2	49.8	39.6	39.4		
5	32	P2	76.3	47.3	47.4		
5	31	P2	76.1	47.5	47.4		
5	30	P2	100.2	64.1	64.3		
5	29	P2	112.9	64.5	64.6		
8	49	P4	250.8	60.8	61.3		
11	69	P4	29.5	6.3	6.3		
17	94	P8	100.1	13.4	13.3		
21	107	P12	175.2	36.6	37.5		
33	182	P16	1251.8	156.6	157.1		
39	211	P20	41.0	13.7	13.8		
43	239	P20	601.5	114.9	114.9		
66	328	P26	39.8	20.2	19.7		
68	360	P26	21.2	55.2	55.3		
70	369	P26	3500.9	174.3	174.3		
71	391	P26	301.6	85.0	85.1		
75	429	P1E93	1003.8	147.0	146.8		
77	464	S4	102.1	23.9	23.9		
86	533	S2	1250.5	146.6	146.5		
90	573	P32	26.1	23.3	23.3		
92	583	Z2	1251.5	160.6	160.7		
94	610	Z4	601.4	125.3	125.4		
98	635	Z6	400.6	107.7	106.3		