

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 3318
 CALIBRATION DATE: 13-Nov-12

SBE21 TEMPERATURE CALIBRATION DATA
 ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.16272586e-003
 h = 6.13406029e-004
 i = 1.84346406e-005
 j = 1.30382720e-006
 f0 = 1000.0

IPTS-68 COEFFICIENTS

a = 3.64763459e-003
 b = 5.84711886e-004
 c = 1.50942717e-005
 d = 1.30514866e-006
 f0 = 2364.632

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
0.9999	2364.632	1.0000	0.00013
4.4999	2558.526	4.4997	-0.00024
15.0000	3209.573	15.0003	0.00030
18.4999	3450.749	18.4998	-0.00011
24.0000	3855.480	23.9999	-0.00010
29.0000	4251.547	29.0000	-0.00005
32.5000	4545.234	32.5001	0.00007

Temperature ITS-90 = $1 / \{g + h[\ln(f_0/f)] + i[\ln^2(f_0/f)] + j[\ln^3(f_0/f)]\} - 273.15$ (°C)

Temperature IPTS-68 = $1 / \{a + b[\ln(f_0/f)] + c[\ln^2(f_0/f)] + d[\ln^3(f_0/f)]\} - 273.15$ (°C)

Following the recommendation of JPOTS: T_{68} is assumed to be $1.00024 * T_{90}$ (-2 to 35 °C)

Residual = instrument temperature - bath temperature

Date, Offset(mdeg C)

