

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 1578
 CALIBRATION DATE: 16-Dec-08

SBE21 TEMPERATURE CALIBRATION DATA
 ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.19556271e-003
 h = 5.93127424e-004
 i = 3.32790121e-006
 j = -1.98444679e-006
 f0 = 1000.0

IPTS-68 COEFFICIENTS

a = 3.64763807e-003
 b = 5.81903089e-004
 c = 8.89694062e-006
 d = -1.98406157e-006
 f0 = 2537.942

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
1.0000	2537.942	0.9998	-0.00023
4.5000	2746.982	4.5004	0.00040
15.0000	3447.047	15.0000	0.00003
18.5000	3705.937	18.4994	-0.00062
24.0000	4140.117	24.0003	0.00030
29.0000	4564.663	29.0005	0.00048
32.5001	4879.284	32.4997	-0.00037

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

