

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 1075
CALIBRATION DATE: 18-Feb-10

SBE3 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.86429447e-003
h = 6.81802485e-004
i = 2.64353560e-005
j = 1.94381268e-006
f0 = 1000.0

IPTS-68 COEFFICIENTS

a = 3.68121181e-003
b = 6.04100423e-004
c = 1.56755790e-005
d = 1.94529383e-006
f0 = 6358.982

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5000	6358.982	-1.5000	0.00004
1.0000	6722.961	1.0000	-0.00005
4.5000	7257.454	4.5000	0.00000
8.0000	7821.712	8.0000	-0.00004
11.5000	8416.554	11.5000	0.00001
15.0000	9042.736	15.0001	0.00008
18.5000	9700.970	18.5000	0.00000
22.0000	10392.014	22.0000	-0.00002
25.5000	11116.559	25.5000	-0.00001
29.0000	11875.256	28.9999	-0.00005
32.5000	12668.789	32.5000	0.00005

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

