

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0655
CALIBRATION DATE: 11-Jan-12

SBE16 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.17257083e-003
h = 5.87695996e-004
i = 3.41825310e-006
j = -1.76885475e-006
f0 = 1000.0

IPTS-68 COEFFICIENTS

a = 3.64763807e-003
b = 5.77380614e-004
c = 8.21859287e-006
d = -1.76849014e-006
f0 = 2459.865

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
0.9999	2459.865	0.9998	-0.00013
4.5000	2664.099	4.5002	0.00024
14.9999	3348.678	14.9998	-0.00009
18.5000	3602.070	18.4998	-0.00020
24.0000	4027.070	24.0001	0.00012
29.0000	4442.842	29.0002	0.00024
32.5000	4751.076	32.4998	-0.00018

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

