

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 1049
CALIBRATION DATE: 13-Sep-01

SBE3 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.84686804e-003
h = 6.77179705e-004
i = 2.69305029e-005
j = 2.16614719e-006
f0 = 1000.0

ITS-68 COEFFICIENTS

a = 3.67980331e-003
b = 6.00284957e-004
c = 1.50141496e-005
d = 2.16759928e-006
f0 = 6283.337

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.3960	6283.337	-1.3960	-0.00004
1.1104	6646.010	1.1105	0.00005
4.6071	7176.819	4.6072	0.00004
8.2055	7754.053	8.2054	-0.00006
11.6391	8334.988	11.6391	-0.00003
15.1967	8968.666	15.1967	0.00001
18.7007	9625.166	18.7007	0.00001
22.2001	10313.561	22.2002	0.00003
25.7597	11048.044	25.7596	-0.00001
29.1757	11786.081	29.1757	-0.00001
32.7093	12584.297	32.7093	0.00000

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 ITS-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

