

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 1049
CALIBRATION DATE: 25-Oct-97

SBE3 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.84751957e-003
h = 6.78072299e-004
i = 2.73605233e-005
j = 2.23346234e-006
f0 = 1000.0

ITS-68 COEFFICIENTS

a = 3.68153634e-003
b = 6.00363816e-004
c = 1.50918726e-005
d = 2.23493012e-006
f0 = 6265.701

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5239	6265.701	-1.5239	-0.00002
1.0376	6635.762	1.0376	-0.00000
4.6104	7177.896	4.6104	0.00005
8.1164	7740.035	8.1165	0.00004
11.6198	8332.341	11.6197	-0.00003
15.1797	8966.343	15.1796	-0.00011
18.6429	9614.952	18.6429	0.00001
22.1441	10303.229	22.1441	0.00001
25.6715	11030.501	25.6716	0.00007
29.1428	11779.948	29.1428	0.00000
32.6174	12564.274	32.6174	-0.00003

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

