

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 1324
CALIBRATION DATE: 11-Sep-92

SBE3 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.86210496e-003
h = 6.84473831e-004
i = 3.08457325e-005
j = 2.79852779e-006
f0 = 1000.0

ITS-68 COEFFICIENTS

a = 3.68093245e-003
b = 5.99083312e-004
c = 1.53024348e-005
d = 2.80008697e-006
f0 = 6389.095

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.4793	6389.095	-1.4794	-0.00003
1.0231	6758.272	1.0231	0.00003
4.4974	7296.005	4.4974	0.00002
8.0332	7874.086	8.0332	0.00001
11.4271	8458.963	11.4271	-0.00003
14.8928	9087.252	14.8927	-0.00003
18.3988	9755.518	18.3988	-0.00000
21.8747	10451.121	21.8748	0.00002
25.3798	11186.598	25.3798	0.00001
28.8259	11943.616	28.8259	0.00002
32.3628	12756.173	32.3627	-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

