

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 1324
CALIBRATION DATE: 16-Nov-99

SBE3 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.85830997e-003
h = 6.79686881e-004
i = 2.87667900e-005
j = 2.49787390e-006
f0 = 1000.0

ITS-68 COEFFICIENTS

a = 3.68139068e-003
b = 5.98935440e-004
c = 1.49037793e-005
d = 2.49936117e-006
f0 = 6382.611

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5131	6382.611	-1.5132	-0.00004
1.0483	6760.461	1.0483	0.00003
4.6212	7314.103	4.6213	0.00006
8.1280	7888.319	8.1280	0.00000
11.6314	8493.323	11.6314	-0.00006
15.1916	9140.979	15.1915	-0.00006
18.6552	9803.614	18.6552	0.00004
22.1560	10506.626	22.1560	0.00003
25.6834	11249.532	25.6834	0.00000
29.1546	12015.072	29.1547	0.00002
32.6298	12816.327	32.6298	-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

