

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 1609

CALIBRATION DATE: 21-Aug-03

SBE3 TEMPERATURE CALIBRATION DATA

ITS-90 TEMPRATURE SCALE

ITS-90 COEFFICIENTS

g = 4.86712816e-003

h = 6.81643422e-004

i = 2.69626500e-005

j = 2.13332916e-006

f0 = 1000.0

ITS-68 COEFFICIENTS

a = 3.68120702e-003

b = 6.03748996e-004

c = 1.51113372e-005

d = 2.13479247e-006

f0 = 6398.472

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.4996	6398.472	-1.4996	-0.00001
1.0004	6764.927	1.0004	0.00002
4.5004	7302.987	4.5005	0.00012
8.0004	7870.868	8.0001	-0.00027
11.5004	8469.520	11.5003	-0.00007
15.0004	9099.655	15.0008	0.00043
18.5004	9761.736	18.5003	-0.00015
22.0004	10456.788	22.0003	-0.00006
25.5004	11185.344	25.5004	-0.00002
29.0004	11948.048	29.0004	-0.00003
32.5004	12745.540	32.5004	0.00004

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

