

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 1692

CALIBRATION DATE: 21-Aug-03

SBE3 TEMPERATURE CALIBRATION DATA

ITS-90 TEMPRATURE SCALE

ITS-90 COEFFICIENTS

g = 4.80178535e-003

h = 6.71725383e-004

i = 2.55059327e-005

j = 2.00783227e-006

f0 = 1000.0

ITS-68 COEFFICIENTS

a = 3.68120786e-003

b = 6.00431157e-004

c = 1.48674354e-005

d = 2.00925263e-006

f0 = 5874.787

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.4996	5874.787	-1.4997	-0.00007
1.0004	6213.176	1.0005	0.00008
4.5004	6710.160	4.5005	0.00006
8.0004	7234.965	8.0004	-0.00003
11.5004	7788.352	11.5004	-0.00002
15.0004	8371.022	15.0004	0.00000
18.5004	8983.635	18.5003	-0.00013
22.0004	9626.946	22.0005	0.00007
25.5004	10301.507	25.5005	0.00009
29.0004	11007.942	29.0004	0.00000
32.5004	11746.871	32.5004	-0.00005

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

