

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 1701
CALIBRATION DATE: 14-Jul-05

SBE3 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPRATURE SCALE

ITS-90 COEFFICIENTS

g = 4.79037937e-003
h = 6.53668059e-004
i = 1.84239518e-005
j = 1.00352346e-006
f0 = 1000.0

ITS-68 COEFFICIENTS

a = 3.68121496e-003
b = 5.97834451e-004
c = 1.30999667e-005
d = 1.00466971e-006
f0 = 5913.557

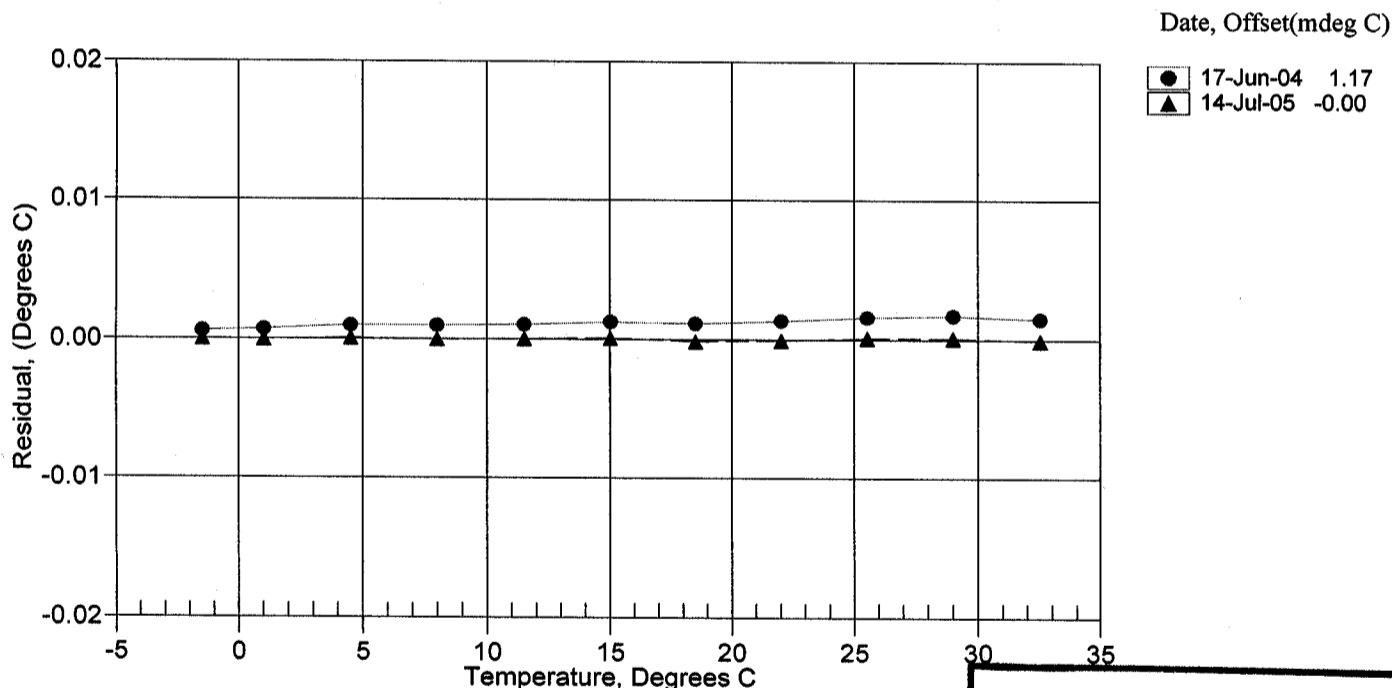
BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5002	5913.557	-1.5002	0.00000
0.9998	6255.622	0.9998	-0.00004
4.4998	6758.031	4.4999	0.00006
7.9998	7288.526	7.9998	-0.00002
11.4998	7847.908	11.4998	0.00001
14.9998	8436.909	14.9999	0.00009
18.4998	9056.189	18.4997	-0.00014
21.9998	9706.557	21.9997	-0.00008
25.4998	10388.670	25.4999	0.00010
28.9998	11103.133	28.9999	0.00011
32.4998	11850.573	32.4997	-0.00008

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



**POST CRUISE
CALIBRATION**