

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 1692
CALIBRATION DATE: 14-Jul-05

SBE3 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPRATURE SCALE

ITS-90 COEFFICIENTS

g = 4.80190693e-003
h = 6.71858186e-004
i = 2.55507250e-005
j = 2.01323012e-006
f0 = 1000.0

ITS-68 COEFFICIENTS

a = 3.68121538e-003
b = 6.00456639e-004
c = 1.48836677e-005
d = 2.01465324e-006
f0 = 5874.683

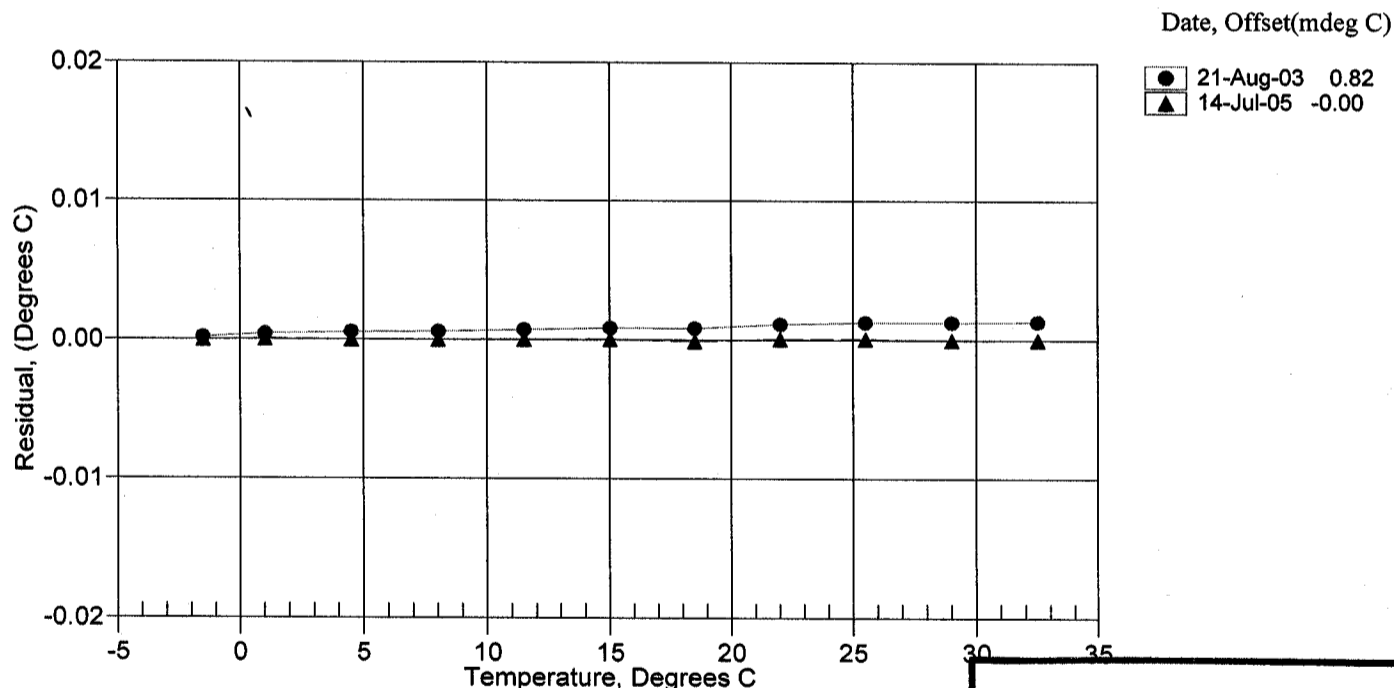
BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5002	5874.683	-1.5002	-0.00003
0.9998	6213.042	0.9998	0.00005
4.4998	6709.993	4.4998	-0.00001
7.9998	7234.783	7.9998	-0.00001
11.4998	7788.143	11.4998	0.00002
14.9998	8370.783	14.9998	0.00005
18.4998	8983.356	18.4997	-0.00013
21.9998	9626.631	21.9999	0.00005
25.4998	10301.153	25.4999	0.00006
28.9998	11007.554	28.9998	-0.00002
32.4998	11746.458	32.4998	-0.00001

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**