

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 2958
CALIBRATION DATE: 14-Jul-05

SBE3 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPRATURE SCALE

ITS-90 COEFFICIENTS

g = 4.39515031e-003
h = 6.73508623e-004
i = 3.04284067e-005
j = 2.88233592e-006
f0 = 1000.0

ITS-68 COEFFICIENTS

a = 3.68121463e-003
b = 6.16768247e-004
c = 2.08615436e-005
d = 2.88437512e-006
f0 = 3033.841

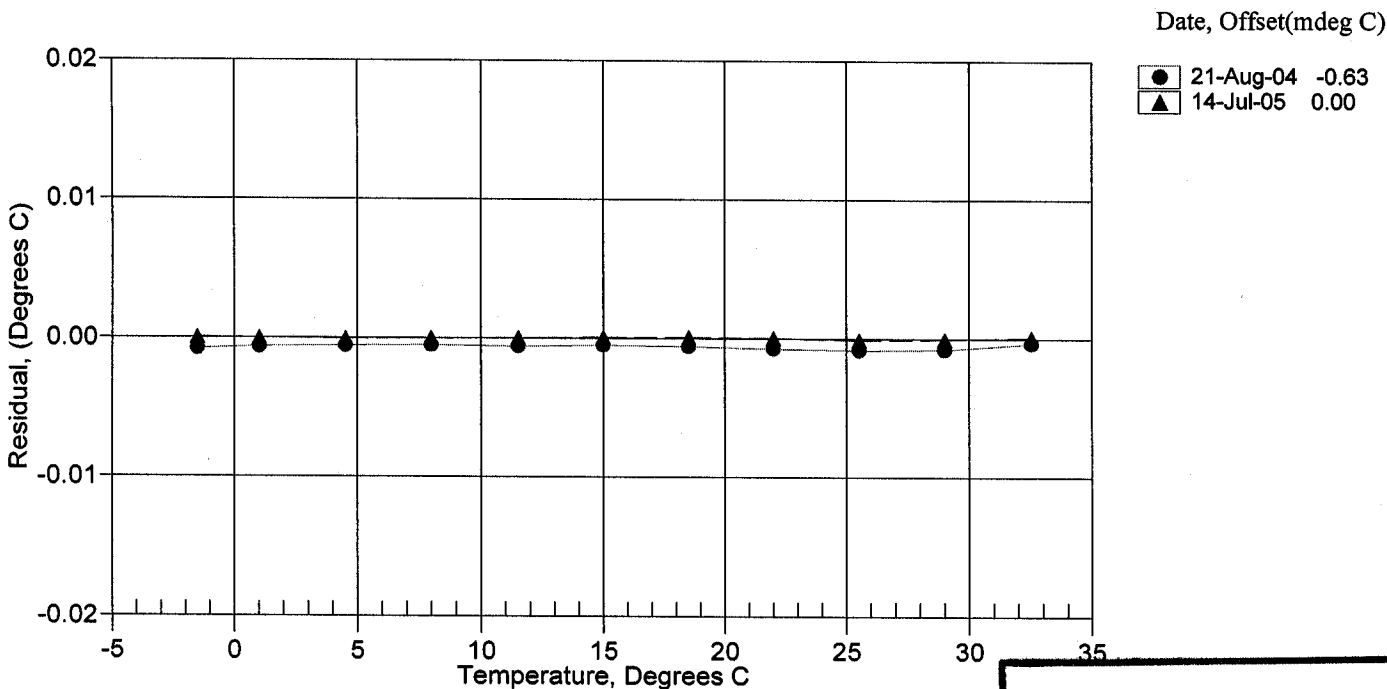
BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5002	3033.841	-1.5002	0.00003
0.9998	3203.902	0.9998	-0.00001
4.4998	3453.527	4.4997	-0.00005
7.9998	3716.965	7.9998	-0.00002
11.4998	3994.583	11.4998	0.00001
14.9998	4286.743	14.9998	0.00005
18.4998	4593.792	18.4999	0.00006
21.9998	4916.070	21.9998	0.00004
25.4998	5253.891	25.4997	-0.00012
28.9998	5607.605	28.9997	-0.00006
32.4998	5977.502	32.4999	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**