

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 1609
CALIBRATION DATE: 14-Jul-05

SBE3 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPRATURE SCALE

ITS-90 COEFFICIENTS

g = 4.86592363e-003
h = 6.79821966e-004
i = 2.61558549e-005
j = 2.01598972e-006
f0 = 1000.0

ITS-68 COEFFICIENTS

a = 3.68121313e-003
b = 6.03702786e-004
c = 1.49564629e-005
d = 2.01742759e-006
f0 = 6399.967

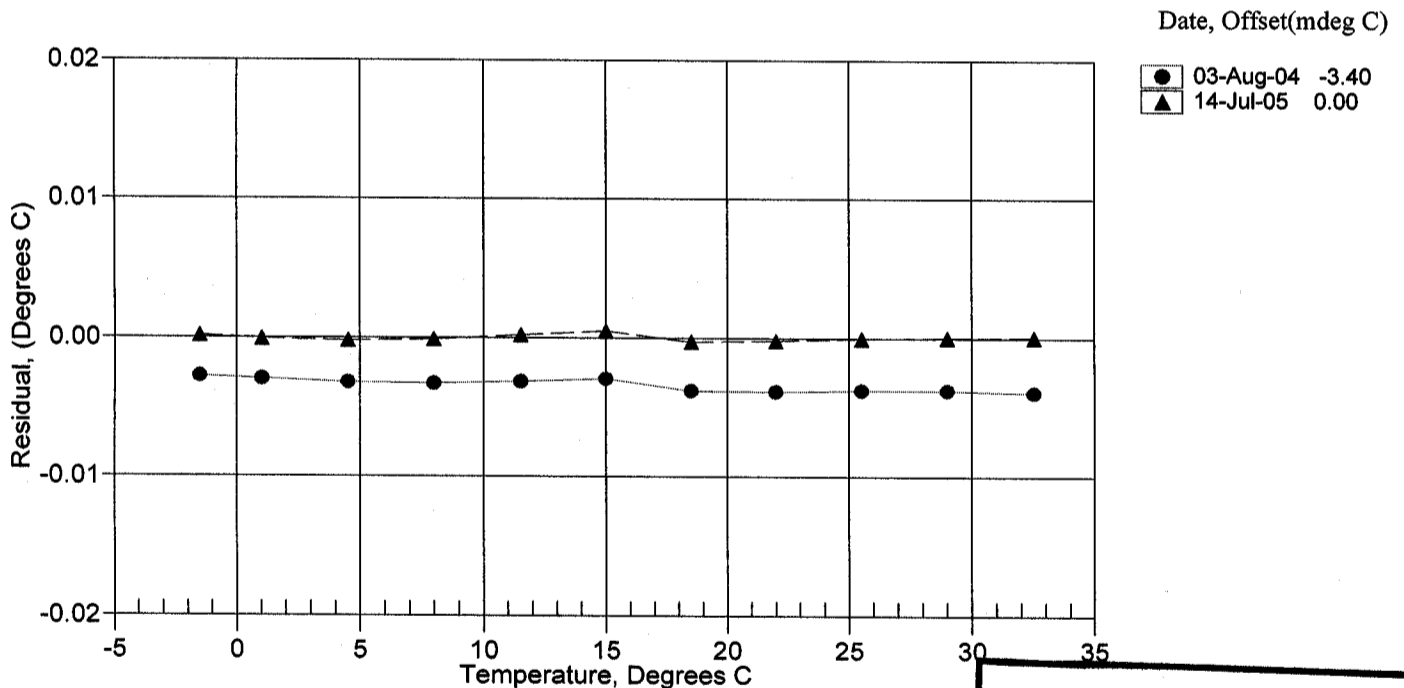
BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5002	6399.967	-1.5001	0.00014
0.9998	6766.494	0.9997	-0.00009
4.4998	7304.666	4.4996	-0.00021
7.9998	7872.766	7.9997	-0.00012
11.4998	8471.575	11.5000	0.00019
14.9998	9101.809	15.0003	0.00049
18.4998	9763.990	18.4995	-0.00027
21.9998	10459.175	21.9996	-0.00020
25.4998	11187.903	25.4998	-0.00004
28.9998	11950.785	28.9998	0.00004
32.4998	12748.442	32.4999	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



**POST CRUISE
CALIBRATION**