

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 2107
CALIBRATION DATE: 14-Apr-10

SBE3 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.14731881e-003
h = 6.27686897e-004
i = 2.08621420e-005
j = 2.11979852e-006
f0 = 1000.0

IPTS-68 COEFFICIENTS

a = 3.68121244e-003
b = 5.99785031e-004
c = 1.60543584e-005
d = 2.12132343e-006
f0 = 2138.949

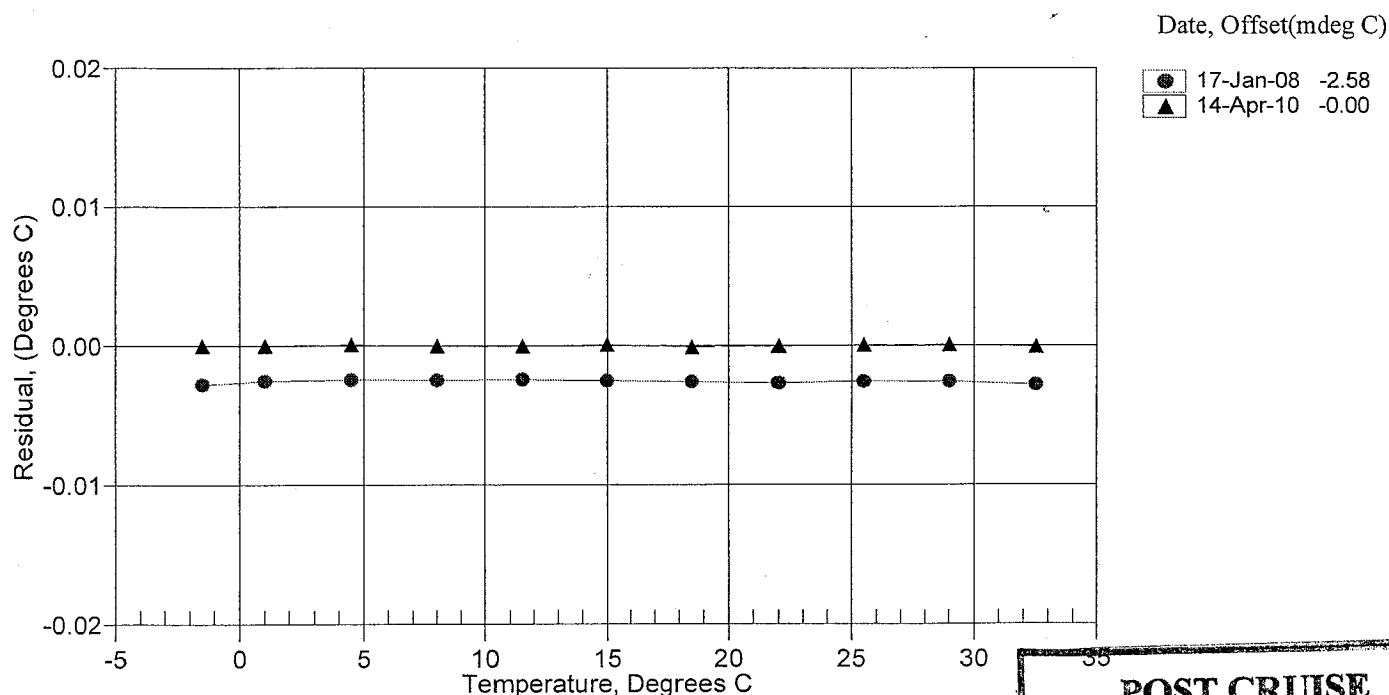
BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5000	2138.949	-1.5000	-0.00001
1.0000	2262.296	1.0000	-0.00002
4.5000	2443.535	4.5001	0.00007
8.0000	2634.996	8.0000	-0.00002
11.5000	2836.970	11.5000	-0.00004
14.9999	3049.728	15.0000	0.00008
18.5000	3273.524	18.4999	-0.00010
22.0000	3508.629	22.0000	-0.00003
25.5000	3755.282	25.5001	0.00006
29.0000	4013.713	29.0001	0.00007
32.5000	4284.143	32.4999	-0.00006

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 IPTS-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**