

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 1609
CALIBRATION DATE: 01-Feb-07

SBE3 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPRATURE SCALE

ITS-90 COEFFICIENTS

g = 4.86601217e-003
h = 6.79943246e-004
i = 2.62003274e-005
j = 2.02117274e-006
f0 = 1000.0

ITS-68 COEFFICIENTS

a = 3.68121086e-003
b = 6.03713245e-004
c = 1.49722184e-005
d = 2.02261173e-006
f0 = 6399.816

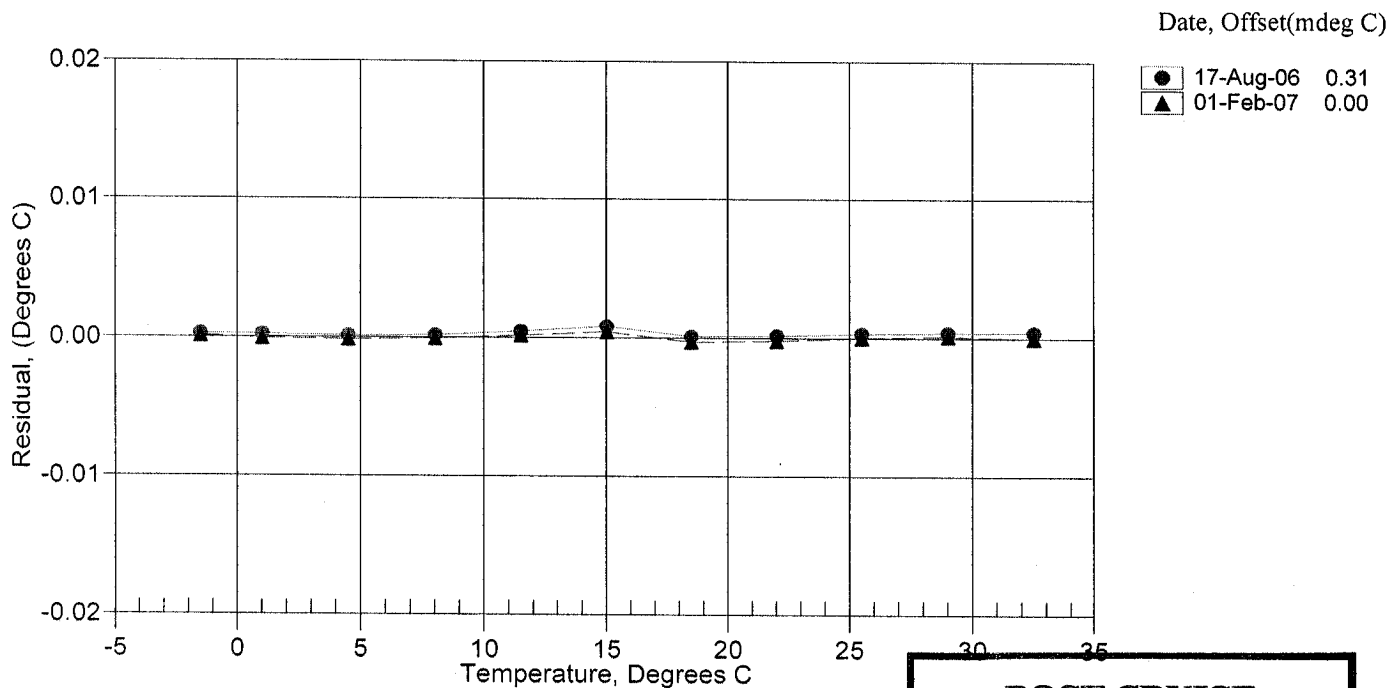
BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5000	6399.816	-1.4999	0.00011
1.0000	6766.335	0.9999	-0.00007
4.5000	7304.491	4.4998	-0.00016
8.0000	7872.570	7.9999	-0.00008
11.5000	8471.346	11.5002	0.00016
15.0000	9101.557	15.0004	0.00044
18.5000	9763.721	18.4997	-0.00031
22.0000	10458.893	21.9998	-0.00020
25.5000	11187.613	25.5000	0.00000
29.0000	11950.490	29.0001	0.00014
32.5000	12748.089	32.5000	-0.00002

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**