

SEA-BIRD ELECTRONICS, INC.

1808 136th Place N.E., Bellevue, Washington, 98005 USA

Phone: (425) 643 - 9866 Fax (425) 643 - 9954 Email: seabird@seabird.com

SENSOR SERIAL NUMBER: 1652
CALIBRATION DATE: 14-Jul-05

SBE3 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPRATURE SCALE

ITS-90 COEFFICIENTS

g = 4.83642997e-003
h = 6.76684332e-004
i = 2.52998504e-005
j = 1.87879338e-006
f0 = 1000.0

ITS-68 COEFFICIENTS

a = 3.68121343e-003
b = 6.03602292e-004
c = 1.51052104e-005
d = 1.88022492e-006
f0 = 6132.426

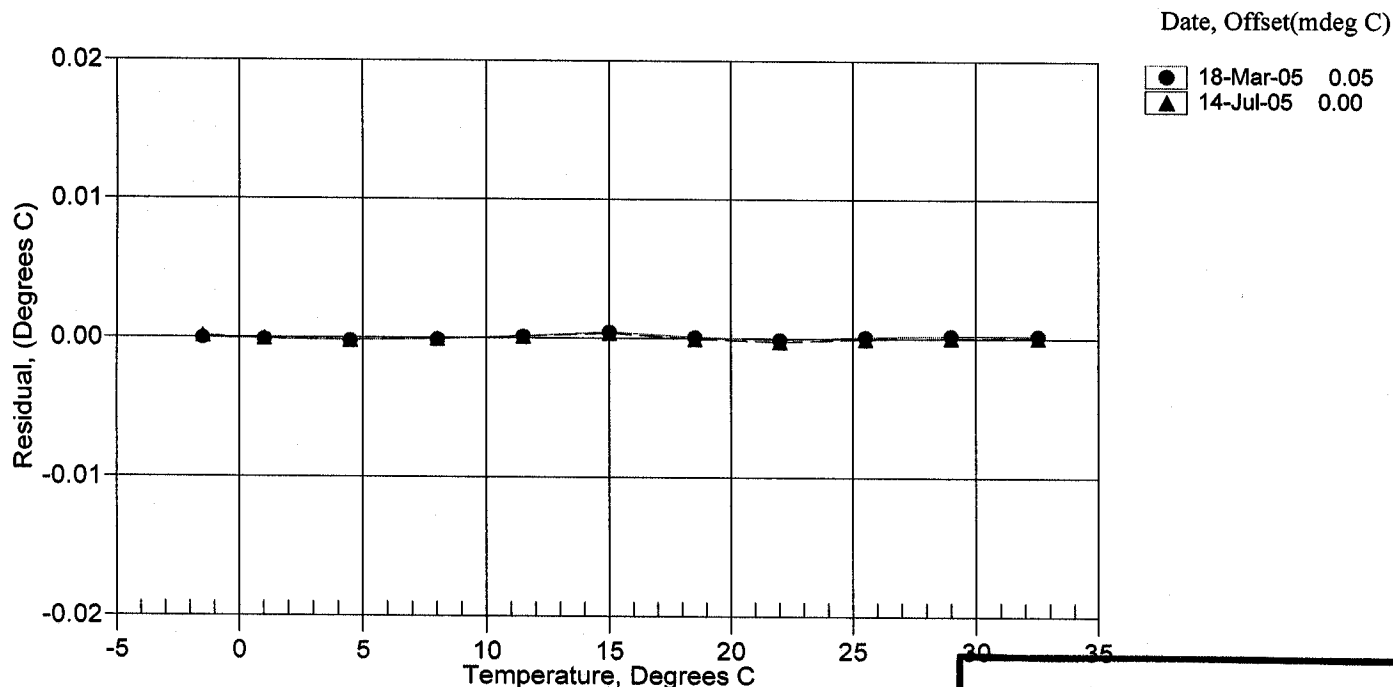
BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5002	6132.426	-1.5001	0.00012
0.9998	6483.703	0.9997	-0.00007
4.4998	6999.501	4.4996	-0.00019
7.9998	7544.025	7.9997	-0.00008
11.4998	8118.012	11.4999	0.00013
14.9998	8722.183	15.0002	0.00037
18.4998	9357.118	18.4997	-0.00006
21.9998	10023.663	21.9995	-0.00026
25.4998	10722.516	25.4997	-0.00005
28.9998	11454.214	28.9998	0.00003
32.4998	12219.376	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 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**