

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER = 1692
CALIBRATION DATE: 30-Apr-02s

TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

$g = 4.80196458e-03$
 $h = 6.71923272e-04$
 $i = 2.55835870e-05$
 $j = 2.01834811e-06$
 $f_0 = 1000.000$

IPTS-68 COEFFICIENTS

$a = 3.68121065e-03$
 $b = 6.00452409e-04$
 $c = 1.48891236e-05$
 $d = 2.01977154e-06$
 $f_0 = 5874.896$

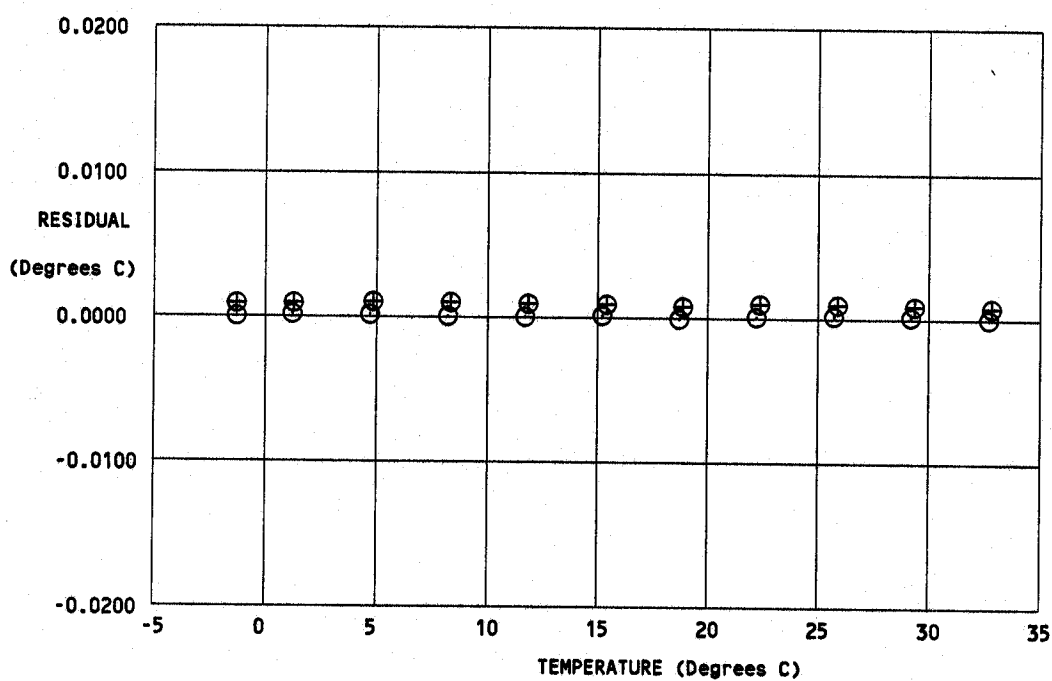
BATH TEMP (ITS-90 °C)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90 °C)	RESIDUAL (ITS-90 °C)
-1.4998	5874.896	-1.4999	-0.00008
1.0002	6213.282	1.0003	0.00009
4.5002	6710.258	4.5003	0.00005
8.0002	7235.062	8.0002	-0.00001
11.5003	7788.452	11.5002	-0.00006
15.0002	8371.116	15.0002	0.00005
18.5003	8983.733	18.5002	-0.00015
22.0003	9627.036	22.0003	0.00002
25.5002	10301.588	25.5003	0.00011
29.0002	11008.030	29.0003	0.00006
32.5003	11746.959	32.5002	-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 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



calibration date	delta T [mdeg C]
⊕ 14-Nov-00s	0.84
⊙ 30-Apr-02s	-0.00

POST CRUISE
CALIBRATION