

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER = 1701
CALIBRATION DATE: 30-Apr-02s

TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

$g = 4.79028508e-03$
 $h = 6.53474900e-04$
 $i = 1.83296336e-05$
 $j = 9.87995688e-07$
 $f_0 = 1000.000$

IPTS-68 COEFFICIENTS

$a = 3.68121037e-03$
 $b = 5.97827532e-04$
 $c = 1.30882213e-05$
 $d = 9.89136969e-07$
 $f_0 = 5913.981$

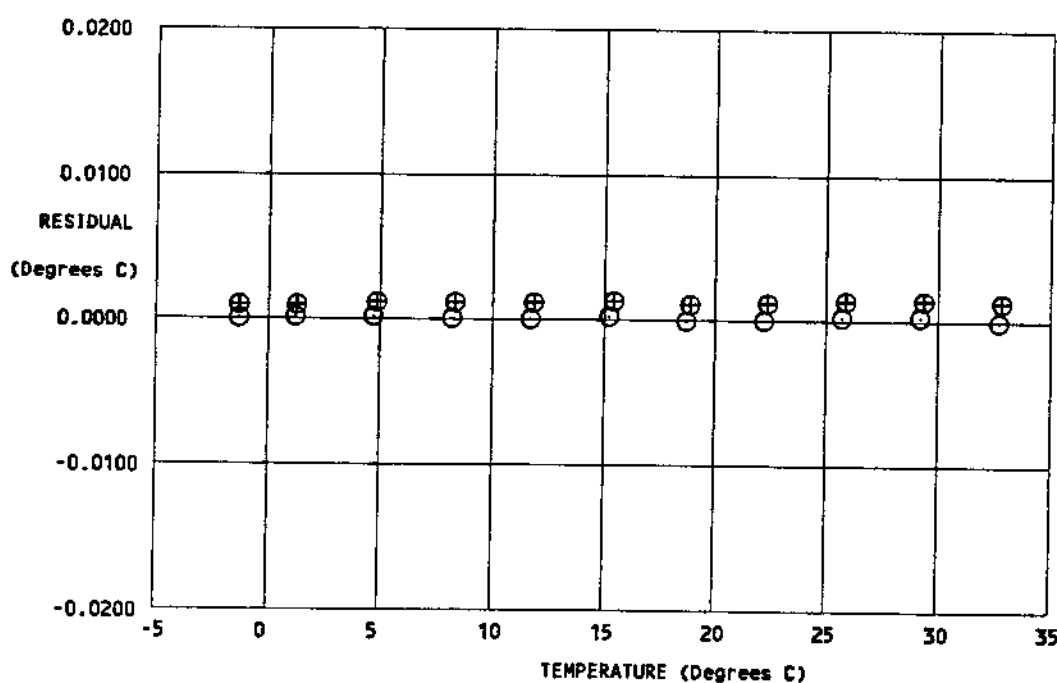
BATH TEMP (ITS-90 °C)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90 °C)	RESIDUAL (ITS-90 °C)
-1.4998	5913.981	-1.4999	-0.00006
1.0002	6256.093	1.0002	0.00004
4.5002	6758.536	4.5003	0.00009
8.0002	7289.066	8.0002	-0.00003
11.5003	7848.495	11.5002	-0.00008
15.0002	8437.549	15.0003	0.00013
18.5003	9056.886	18.5001	-0.00016
22.0003	9707.309	22.0002	-0.00010
25.5002	10389.472	25.5003	0.00013
29.0002	11104.004	29.0004	0.00016
32.5003	11851.517	32.5002	-0.00013

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	1.07
○ 30-Apr-02s	-0.00

POST CRUISE
CALIBRATION