

SEA-BIRD ELECTRONICS, INC.

1808 136th Place N.E., Bellevue, Washington 98005 USA  
Phone: (425) 643 - 9866 Fax: (425) 643 - 9954 Internet: seabird@seabird.com

SENSOR SERIAL NUMBER = 1075  
CALIBRATION DATE: 16-Jul-02s

TEMPERATURE CALIBRATION DATA  
ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.80966472e-03  
h = 6.66778832e-04  
i = 2.38334381e-05  
j = 1.73408542e-06  
f<sub>0</sub> = 1000.000

IPTS-68 COEFFICIENTS

a = 3.68120902e-03  
b = 5.98203464e-04  
c = 1.45365790e-05  
d = 1.73543890e-06  
f<sub>0</sub> = 6002.943

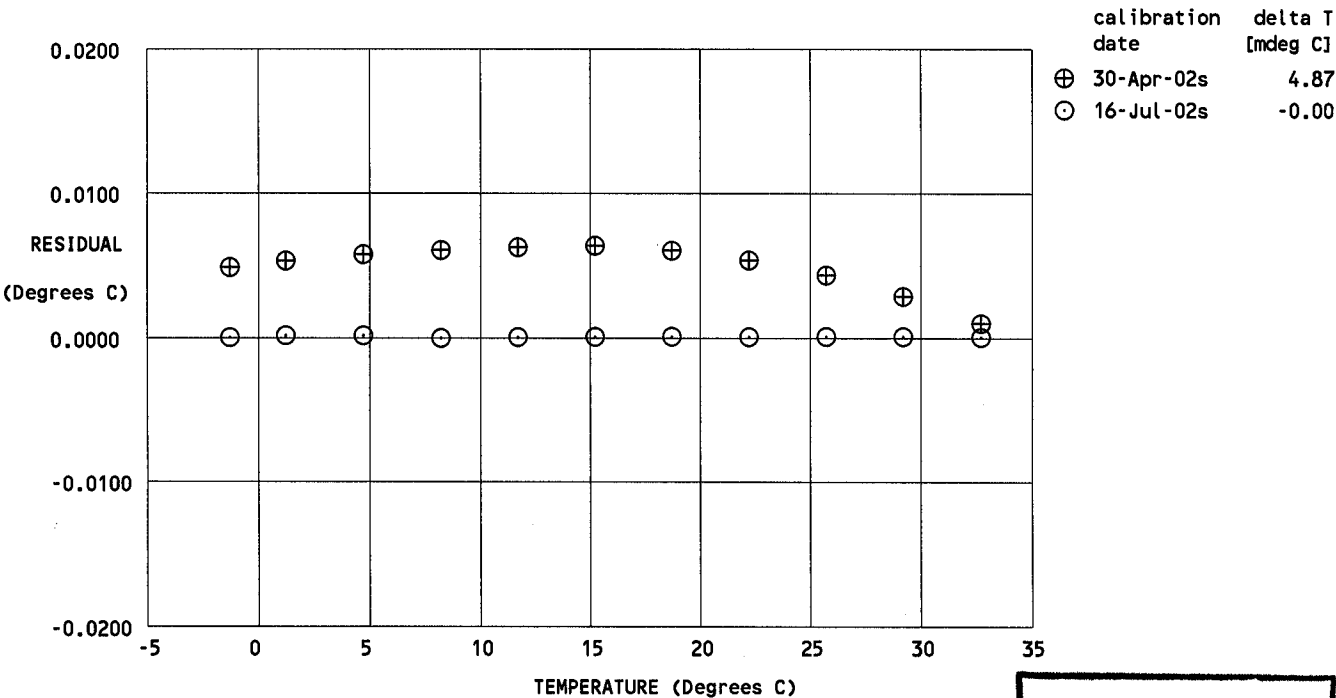
BATH TEMP (ITS-90 °C)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90 °C)	RESIDUAL (ITS-90 °C)
-1.4997	6002.943	-1.4998	-0.00006
1.0003	6350.027	1.0004	0.00007
4.5003	6859.898	4.5004	0.00008
8.0004	7398.442	8.0003	-0.00009
11.5003	7966.451	11.5003	-0.00002
15.0003	8564.676	15.0003	-0.00000
18.5003	9193.843	18.5003	0.00001
22.0003	9854.652	22.0003	-0.00000
25.5003	10547.801	25.5003	0.00002
29.0003	11273.936	29.0003	0.00002
32.5003	12033.684	32.5003	-0.00003

Temperature ITS-90 = 1/{g + h[ln(f<sub>0</sub>/f)] + i[ln<sup>2</sup>(f<sub>0</sub>/f)] + j[ln<sup>3</sup>(f<sub>0</sub>/f)]} - 273.15 (°C)

Temperature IPTS-68 = 1/{a + b[ln(f<sub>0</sub>/f)] + c[ln<sup>2</sup>(f<sub>0</sub>/f)] + d[ln<sup>3</sup>(f<sub>0</sub>/f)]} - 273.15 (°C)

Following the recommendation of JPOTS: T<sub>68</sub> is assumed to be 1.00024 \* T<sub>90</sub> (-2 to 35 °C).

Residual = instrument temperature - bath temperature



POST CRUISE  
CALIBRATION