

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 0066
CALIBRATION DATE: 16-Nov-08

GliderAPL TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.34016799e-003
h = 6.30434685e-004
i = 2.40213133e-005
j = 2.53582002e-006
f0 = 1000.0

IPTS-68 COEFFICIENTS

a = 3.64763777e-003
b = 5.85624487e-004
c = 1.53580271e-005
d = 2.53732550e-006
f0 = 3133.679

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
0.9999	3133.679	0.9998	-0.00011
4.4999	3390.273	4.5001	0.00020
15.0000	4251.270	14.9998	-0.00015
18.5000	4570.100	18.4999	-0.00007
24.0000	5104.743	24.0001	0.00012
29.0000	5627.474	29.0001	0.00010
32.5000	6014.734	32.4999	-0.00010

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

