

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 0073
CALIBRATION DATE: 04-Nov-09

GliderAPL TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.29313442e-003
h = 6.26375630e-004
i = 2.17546683e-005
j = 2.07181124e-006
f0 = 1000.0

IPTS-68 COEFFICIENTS

a = 3.64763591e-003
b = 5.87197979e-004
c = 1.51552263e-005
d = 2.07324182e-006
f0 = 2903.693

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
1.0000	2903.693	0.9999	-0.00007
4.5000	3140.776	4.5001	0.00012
15.0000	3935.955	15.0000	-0.00002
18.5000	4230.286	18.4999	-0.00014
24.0000	4723.799	24.0001	0.00007
29.0000	5206.270	29.0001	0.00015
32.5000	5563.677	32.4999	-0.00011

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

Date, Offset(mdeg C)

