

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 0073
CALIBRATION DATE: 26-Aug-10

GliderAPL TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.29433886e-003
h = 6.28738031e-004
i = 2.34683024e-005
j = 2.47730042e-006
f0 = 1000.0

IPTS-68 COEFFICIENTS

a = 3.64763439e-003
b = 5.87281673e-004
c = 1.55703998e-005
d = 2.47882313e-006
f0 = 2904.404

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
1.0000	2904.404	1.0000	0.00004
4.4999	3141.493	4.4998	-0.00008
15.0000	3936.929	15.0001	0.00010
18.5000	4231.359	18.4999	-0.00006
23.9999	4725.020	23.9999	0.00003
29.0000	5207.616	28.9999	-0.00009
32.5000	5565.135	32.5001	0.00005

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)

