SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 0075
CALIBRATION DATE: 04-Nov-09

GliderAPL TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.39945409e-003
h = 6.42679289e-004
i = 2.72238905e-005
j = 3.08686541e-006
f0 = 1000.0

IPTS-68 COEFFICIENTS

a = 3.64763522e-003
b = 5.90033476e-004
c = 1.59106496e-005
d = 3.08850198e-006
f0 = 3402.504

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
1.0000	3402.504	1.0000	-0.00002
4.5000	3678.935	4.5000	0.00003
15.0000	4605.580	15.0000	0.00002
18.5000	4948.317	18.4999	-0.00008
24.0000	5522.636	24.0001	0.00006
29.0000	6083.642	29.0000	0.00001
32.5000	6498.958	32.5000	-0.00002

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