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FEB 04 2005

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 2652
CALIBRATION DATE: 30-Dec-04

SBE3 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPRATURE SCALE

ITS-90 COEFFICIENTS

g = 4.36707309e-003
h = 6.48054725e-004
i = 2.36782515e-005
j = 2.23727907e-006
f0 = 1000.0

ITS-68 COEFFICIENTS

a = 3.68121025e-003
b = 6.04301699e-004
c = 1.63376695e-005
d = 2.23885124e-006
f0 = 2997.611

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.4998	2997.611	-1.4998	-0.00005
1.0002	3169.155	1.0003	0.00006
4.5002	3421.070	4.5003	0.00007
8.0002	3687.041	8.0001	-0.00012
11.5001	3967.470	11.5001	-0.00001
15.0002	4262.718	15.0002	0.00004
18.5002	4573.109	18.5002	0.00001
22.0002	4898.998	22.0002	-0.00001
25.5002	5240.716	25.5002	0.00003
29.0002	5598.563	29.0002	-0.00002
32.5002	5972.856	32.5002	0.00000

$$\text{Temperature ITS-90} = 1/\{g + h[\ln(f_0/f)] + i[\ln^2(f_0/f)] + j[\ln^3(f_0/f)]\} - 273.15 \text{ (}^\circ\text{C)}$$

$$\text{Temperature ITS-68} = 1/\{a + b[\ln(f_0/f)] + c[\ln^2(f_0/f)] + d[\ln^3(f_0/f)]\} - 273.15 \text{ (}^\circ\text{C)}$$

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)

● 11-Feb-04 0.35
▲ 30-Dec-04 -0.00

