

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 1367
CALIBRATION DATE: 26-Oct-07

SBE3 TEMPERATURE CALIBRATION DATA
IPTS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.86069559e-003
h = 6.76155790e-004
i = 2.71234593e-005
j = 2.17648078e-006
f0 = 1000.0

ITS-68 COEFFICIENTS

a = 3.68121232e-003
b = 5.97907207e-004
c = 1.49874128e-005
d = 2.17792855e-006
f0 = 6441.700

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5000	6441.700	-1.5000	-0.00000
1.0000	6814.338	1.0000	-0.00001
4.5000	7361.850	4.5000	0.00002
8.0000	7940.232	8.0000	0.00002
11.5000	8550.308	11.5000	-0.00002
15.0000	9192.893	15.0000	0.00001
18.5000	9868.737	18.5000	-0.00004
22.0000	10578.616	22.0000	0.00000
25.5000	11323.229	25.5000	0.00003
29.0000	12103.255	29.0000	0.00001
32.5000	12919.361	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

