

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 2786
CALIBRATION DATE: 27-Jan-11

SBE3 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.37643764e-003
h = 6.44423673e-004
i = 2.30121425e-005
j = 2.15231093e-006
f0 = 1000.0

IPTS-68 COEFFICIENTS

a = 3.68120930e-003
b = 6.01157521e-004
c = 1.58150775e-005
d = 2.15382615e-006
f0 = 3061.395

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.4998	3061.395	-1.4998	0.00002
1.0001	3237.508	1.0001	-0.00001
4.5001	3496.224	4.5001	-0.00003
8.0001	3769.470	8.0000	-0.00007
11.5001	4057.650	11.5001	0.00005
15.0001	4361.126	15.0002	0.00011
18.5001	4680.250	18.5001	-0.00003
22.0001	5015.404	22.0000	-0.00006
25.5001	5366.930	25.5001	0.00000
29.0001	5735.139	29.0001	-0.00001
32.5001	6120.357	32.5001	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

