

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 2329
CALIBRATION DATE: 19-Jul-11

SBE3 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.34008228e-003
h = 6.41590685e-004
i = 2.33473501e-005
j = 2.27179053e-006
f0 = 1000.0

IPTS-68 COEFFICIENTS

a = 3.68121210e-003
b = 5.99773091e-004
c = 1.61240995e-005
d = 2.27334211e-006
f0 = 2897.541

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5000	2897.541	-1.5000	0.00002
1.0000	3064.638	1.0000	0.00000
4.5001	3310.160	4.5000	-0.00006
8.0000	3569.539	8.0000	0.00001
11.5000	3843.162	11.5001	0.00007
15.0001	4131.385	15.0001	0.00000
18.5001	4434.560	18.5001	-0.00001
22.0001	4753.031	22.0001	-0.00003
25.5001	5087.131	25.5001	-0.00002
29.0001	5437.179	29.0001	0.00003
32.5001	5803.465	32.5001	-0.00000

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

