

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 2864
CALIBRATION DATE: 19-Jul-11

SBE3 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.38032603e-003
h = 6.47756688e-004
i = 2.35260577e-005
j = 2.19918187e-006
f0 = 1000.0

IPTS-68 COEFFICIENTS

a = 3.68121190e-003
b = 6.03477833e-004
c = 1.61639011e-005
d = 2.20073457e-006
f0 = 3065.123

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5000	3065.123	-1.5000	0.00003
1.0000	3240.764	1.0000	-0.00001
4.5001	3498.728	4.5000	-0.00008
8.0000	3771.117	8.0000	0.00001
11.5000	4058.323	11.5001	0.00008
15.0001	4360.712	15.0001	0.00003
18.5001	4678.637	18.5001	-0.00002
22.0001	5012.457	22.0001	-0.00005
25.5001	5362.514	25.5001	-0.00001
29.0001	5729.122	29.0001	0.00001
32.5001	6112.589	32.5001	0.00001

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

