

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 2946
 CALIBRATION DATE: 17-Mar-09

SBE3 TEMPERATURE CALIBRATION DATA
 ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.34438943e-003
 h = 6.39934413e-004
 i = 2.19398267e-005
 j = 1.95971238e-006
 f0 = 1000.0

IPTS-68 COEFFICIENTS

a = 3.68121328e-003
 b = 5.99798692e-004
 c = 1.56649588e-005
 d = 1.96118703e-006
 f0 = 2921.070

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5001	2921.070	-1.5001	0.00003
0.9999	3089.507	0.9999	-0.00002
4.4999	3336.972	4.4998	-0.00005
7.9999	3598.387	7.9999	-0.00001
11.4999	3874.128	11.5000	0.00006
15.0000	4164.562	15.0000	0.00004
18.4999	4470.027	18.4999	-0.00003
21.9999	4790.903	21.9999	-0.00004
25.4999	5127.519	25.4999	0.00001
28.9999	5480.186	28.9999	-0.00001
32.4999	5849.227	32.4999	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

