

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0277
CALIBRATION DATE: 01-Mar-13

SBE 49 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

a0 = 9.051721e-004

a1 = 2.661748e-004

a2 = -9.255469e-007

a3 = 1.523256e-007

BATH TEMP (ITS-90)	INSTRUMENT OUTPUT(n)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
0.9999	764048.881	1.0000	0.0001
4.5000	676791.203	4.4998	-0.0002
14.9999	454459.780	15.0001	0.0002
18.5000	393366.169	18.5001	0.0001
24.0000	309493.051	23.9998	-0.0002
29.0000	244928.017	29.0001	0.0001
32.5001	205641.000	32.5001	-0.0000

$MV = (n - 524288) / 1.6e+007$

$R = (MV * 2.295e+010 + 9.216e+008) / (6.144e+004 - MV * 5.3e+005)$

Temperature ITS-90 = $1 / \{a_0 + a_1[\ln(R)] + a_2[\ln^2(R)] + a_3[\ln^3(R)]\} - 273.15$ (°C)

Residual = instrument temperature - bath temperature

