

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 4139
CALIBRATION DATE: 11-Feb-14

SBE16plus TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

a0 = 1.282190e-003
a1 = 2.535503e-004
a2 = 8.328632e-007
a3 = 1.191648e-007

BATH TEMP (ITS-90)	INSTRUMENT OUTPUT(n)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
1.0000	632666.000	0.9999	-0.0001
4.5000	562057.400	4.5001	0.0001
15.0000	386453.300	14.9999	-0.0001
18.5000	339222.364	18.5000	0.0000
24.0000	275064.700	24.0000	0.0000
29.0000	226205.700	29.0001	0.0001
32.5000	196690.700	32.4999	-0.0001

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

$$R = (MV * 2.900e+009 + 1.024e+008) / (2.048e+004 - MV * 2.0e+005)$$

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

$$\text{Residual} = \text{instrument temperature} - \text{bath temperature}$$

