

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 4139
CALIBRATION DATE: 18-Jun-10

SBE16plus TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

a0 = 1.260471e-003
a1 = 2.615554e-004
a2 = -1.485970e-007
a3 = 1.592207e-007

BATH TEMP (ITS-90)	INSTRUMENT OUTPUT(n)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
1.0000	632635.750	1.0001	0.0001
4.5000	562042.750	4.4998	-0.0002
14.9999	386432.833	15.0001	0.0002
18.5000	339203.667	18.5001	0.0001
24.0000	275051.417	23.9998	-0.0002
29.0000	226194.333	29.0001	0.0001
32.5000	196683.417	32.5000	0.0000

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

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

$$\text{Temperature ITS-90} = 1 / \{ a0 + a1[\ln(R)] + a2[\ln^2(R)] + a3[\ln^3(R)] \} - 273.15 \text{ (}^\circ\text{C)}$$

Residual = instrument temperature - bath temperature

