

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 6132
CALIBRATION DATE: 10-Dec-10

SBE19plus TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

a0 = 1.310422e-003
a1 = 2.540548e-004
a2 = 5.617568e-007
a3 = 1.176680e-007

BATH TEMP (ITS-90)	INSTRUMENT OUTPUT(n)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
1.0000	615370.408	1.0001	0.0001
4.5000	544772.239	4.4999	-0.0001
15.0000	370465.014	15.0000	0.0000
18.5000	323950.986	18.5001	0.0001
24.0000	261061.380	23.9999	-0.0001
29.0000	213416.859	29.0000	-0.0000
32.5000	184750.507	32.5001	0.0001

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

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

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

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

