## Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 4424 CALIBRATION DATE: 07-Apr-17

SBE 16plus TEMPERATURE CALIBRATION DATA

**ITS-90 TEMPERATURE SCALE** 

## **COEFFICIENTS:**

a0 = 1.253232e-003 a1 = 2.588185e-004 a2 = 3.549355e-007 a3 = 1.346045e-007

BATH TEMP	INSTRUMENT	INST TEMP	RESIDUAL
(° C)	OUTPUT (counts)	(° C)	(° C)
0.9999	647124.000	0.9999	0.0000
4.5000	575776.900	4.5000	-0.0000
15.0000	397668.100	14.9999	-0.0001
18.5000	349595.200	18.5002	0.0002
24.0000	284175.600	24.0000	0.0000
29.0000	234258.200	28.9998	-0.0002
32.5000	204054.300	32.5001	0.0001

n = Instrument Output (counts)

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

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

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

Residual ( $^{\circ}$ C) = instrument temperature - bath temperature

