## Sea-Bird Electronics, Inc.

## 13431 NE 20th Street, Bellevue, WA 98005-2010 USA

Phone: (+1) 425-643-9866 Fax (+1) 425-643-9954 Email: seabird@seabird.com

SENSOR SERIAL NUMBER: 0554 CALIBRATION DATE: 05-Oct-16

SBE 39 TEMPERATURE CALIBRATION DATA ITS-90 TEMPERATURE SCALE

## **COEFFICIENTS:**

a0 = 6.795081e-005 a1 = 2.654457e-004 a2 = -1.871881e-006 a3 = 1.441005e-007

BATH TEMP (° C)	INSTRUMENT OUTPUT (counts)	INST TEMP (° C)	RESIDUAL (° C)
-1.5000	771138.8	-1.5000	0.0000
1.0000	687846.5	1.0000	-0.0000
4.5000	587823.7	4.4999	-0.0001
8.0000	503994.2	7.9999	-0.0001
11.5000	433496.1	11.5001	0.0001
14.9999	374017.4	15.0000	0.0001
18.5000	323669.6	18.5000	0.0000
22.0000	280919.0	22.0000	-0.0000
25.5000	244508.3	25.4999	-0.0001
29.0000	213403.8	29.0000	-0.0000
32.5000	186756.7	32.5000	0.0000

n = Instrument Output (counts)

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

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

