

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: 0516
CALIBRATION DATE: 07-Oct-16

SBE 39 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

a0 = 3.603634e-005
a1 = 2.688617e-004
a2 = -2.049906e-006
a3 = 1.480920e-007

BATH TEMP (° C)	INSTRUMENT OUTPUT (counts)	INST TEMP (° C)	RESIDUAL (° C)
-1.5000	793350.8	-1.5000	0.0000
1.0000	707938.2	1.0000	-0.0000
4.5000	605324.7	4.4999	-0.0001
8.0000	519280.2	8.0000	-0.0000
11.5000	446884.3	11.5000	0.0000
15.0000	385771.9	15.0000	0.0000
18.5000	334016.7	18.5001	0.0001
22.0000	290050.7	22.0000	-0.0000
25.5000	252586.0	25.4999	-0.0001
29.0000	220566.7	29.0000	-0.0000
32.5000	193122.4	32.5001	0.0001

n = Instrument Output (counts)

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

Residual (°C) = instrument temperature - bath temperature

