

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: 0512
CALIBRATION DATE: 11-Oct-16

SBE 39 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

a0 = -3.429503e-005
a1 = 2.797629e-004
a2 = -2.640894e-006
a3 = 1.662450e-007

BATH TEMP (° C)	INSTRUMENT OUTPUT (counts)	INST TEMP (° C)	RESIDUAL (° C)
-1.4999	756652.0	-1.4999	0.0000
1.0000	676349.1	1.0000	0.0000
4.5000	579677.6	4.5000	-0.0000
8.0000	498426.7	8.0000	-0.0000
11.5000	429909.0	11.5000	0.0000
15.0000	371940.2	15.0001	0.0001
18.5000	322742.0	18.5000	0.0000
22.0000	280858.1	22.0000	-0.0000
25.5000	245093.3	25.5000	-0.0000
29.0000	214464.6	29.0000	-0.0000
32.5000	188159.6	32.5000	0.0000

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

