

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: 0205
CALIBRATION DATE: 01-Feb-17

SBE 38 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

a0 = 2.643552e-005
a1 = 2.734648e-004
a2 = -2.161232e-006
a3 = 1.516937e-007

BATH TEMP (° C)	INSTRUMENT OUTPUT (counts)	INST TEMP (° C)	RESIDUAL (° C)
-1.5000	690472.3	-1.5000	0.0000
1.0000	616718.7	1.0000	-0.0000
4.5000	528020.7	4.5000	-0.0000
8.0000	453556.1	8.0000	-0.0000
11.5000	390827.2	11.5000	0.0000
15.0000	337813.2	15.0000	-0.0000
18.5000	292862.7	18.5000	0.0000
22.0000	254632.0	22.0000	0.0000
25.5000	222018.0	25.4999	-0.0001
29.0000	194111.6	29.0000	0.0000
32.5000	170166.9	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

