



Sea-Bird Scientific
13431 NE 20th Street
Bellevue, WA 98005
USA

+1 425-643-9866
seabird@seabird.com
www.seabird.com

SENSOR SERIAL NUMBER: 1426
CALIBRATION DATE: 11-Feb-24

SBE 39 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

a0 = 4.885404e-004
a1 = 1.653244e-004
a2 = 5.898686e-006
a3 = -5.346257e-008

BATH TEMP (° C)	INSTRUMENT OUTPUT (counts)	INST TEMP (° C)	RESIDUAL (° C)
-1.5000	773326.8	-1.4991	0.0009
1.0000	690294.2	0.9994	-0.0006
4.5000	590470.3	4.4992	-0.0008
8.0000	506735.6	7.9993	-0.0007
11.5000	436244.1	11.5002	0.0002
15.0000	376709.5	15.0013	0.0013
18.5000	326282.3	18.5014	0.0014
22.0000	283431.4	22.0004	0.0004
25.5000	246906.9	25.4980	-0.0020
29.0000	215647.0	28.9982	-0.0018
32.5000	188814.0	32.5018	0.0018

n = Instrument Output (counts)

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

Residual (°C) = instrument temperature - bath temperature

