



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

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

SENSOR SERIAL NUMBER: 0804
CALIBRATION DATE: 09-Sep-23

SBE 39 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

a0 = 2.708520e-005
a1 = 2.722131e-004
a2 = -2.211145e-006
a3 = 1.544969e-007

BATH TEMP (° C)	INSTRUMENT OUTPUT (counts)	INST TEMP (° C)	RESIDUAL (° C)
-1.5000	734606.1	-1.5000	0.0000
1.0000	655993.0	1.0000	-0.0000
4.5000	561466.5	4.5000	-0.0000
8.0000	482124.5	8.0000	-0.0000
11.5000	415304.0	11.5000	0.0000
15.0000	358843.2	15.0000	0.0000
18.5000	310984.6	18.5000	0.0000
22.0000	270289.7	22.0000	0.0000
25.5000	235583.0	25.5000	-0.0000
29.0001	205895.5	29.0000	-0.0001
32.5000	180427.8	32.5001	0.0001

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

