



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

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

SENSOR SERIAL NUMBER: 0385
CALIBRATION DATE: 10-Sep-21

SBE 37 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

a0 = 1.198557e-004
a1 = 2.689978e-004
a2 = -2.510642e-006
a3 = 1.674705e-007

BATH TEMP (° C)	INSTRUMENT OUTPUT (counts)	INST TEMP (° C)	RESIDUAL (° C)
1.0000	597651.2	1.0000	0.0000
4.5000	510144.3	4.4999	-0.0001
14.9999	323409.3	14.9999	0.0000
18.5000	279524.0	18.5001	0.0001
24.0000	223585.6	23.9999	-0.0001
29.0000	183600.9	29.0001	0.0001
32.5000	160472.3	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

