



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

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

SENSOR SERIAL NUMBER: 2023
CALIBRATION DATE: 28-May-21

SBE 37 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

a0 = -8.496333e-005
a1 = 2.903088e-004
a2 = -3.658778e-006
a3 = 1.892023e-007

BATH TEMP (° C)	INSTRUMENT OUTPUT (counts)	INST TEMP (° C)	RESIDUAL (° C)
1.0000	766750.7	1.0002	0.0002
4.5000	656012.3	4.4997	-0.0003
15.0000	418761.3	15.0002	0.0002
18.5000	362773.4	18.5002	0.0002
24.0000	291226.0	23.9997	-0.0003
29.0000	239927.7	29.0000	-0.0000
32.5000	210181.1	32.5001	0.0001

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

