



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

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

SENSOR SERIAL NUMBER: 3936
CALIBRATION DATE: 28-Sep-18

SBE 37 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

a0 = 1.064604e-005
a1 = 2.726724e-004
a2 = -2.020830e-006
a3 = 1.471061e-007

BATH TEMP (° C)	INSTRUMENT OUTPUT (counts)	INST TEMP (° C)	RESIDUAL (° C)
1.0000	642690.5	1.0001	0.0001
4.5000	550504.1	4.4998	-0.0002
15.0000	352646.9	15.0001	0.0001
18.5000	305851.4	18.5001	0.0001
24.0000	245969.3	24.0002	0.0002
29.0000	202978.1	28.9995	-0.0005
32.5000	178005.8	32.5003	0.0003

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

