



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: 13-Dec-17

SBE 37 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

a0 = 8.315587e-005
a1 = 2.777115e-004
a2 = -3.198422e-006
a3 = 1.855157e-007

BATH TEMP (° C)	INSTRUMENT OUTPUT (counts)	INST TEMP (° C)	RESIDUAL (° C)
1.0000	597683.0	1.0000	0.0000
4.5000	510167.2	4.5000	-0.0000
15.0000	323412.7	15.0000	0.0000
18.5000	279525.5	18.5000	-0.0000
24.0000	223581.1	24.0000	0.0000
29.0000	183597.6	29.0000	-0.0000
32.5000	160468.5	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

