



Sea-Bird Scientific  
13431 NE 20<sup>th</sup> Street  
Bellevue, WA 98005  
USA

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

SENSOR SERIAL NUMBER: 4078  
CALIBRATION DATE: 07-May-21

SBE 37 TEMPERATURE CALIBRATION DATA  
ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

a0 = 4.416408e-005  
a1 = 2.643734e-004  
a2 = -1.439735e-006  
a3 = 1.315306e-007

BATH TEMP (° C)	INSTRUMENT OUTPUT (counts)	INST TEMP (° C)	RESIDUAL (° C)
1.0000	666514.2	1.0000	0.0000
4.5000	570655.5	4.5000	-0.0000
14.9999	365102.4	14.9999	0.0000
18.4999	316528.4	18.4998	-0.0001
23.9999	254394.2	24.0001	0.0002
29.0000	209809.7	28.9998	-0.0002
32.5000	183928.7	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

