



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: 1842  
CALIBRATION DATE: 14-Sep-22

SBE 37 TEMPERATURE CALIBRATION DATA  
ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

a0 = 3.998900e-005  
a1 = 2.715513e-004  
a2 = -2.144720e-006  
a3 = 1.508001e-007

BATH TEMP (° C)	INSTRUMENT OUTPUT (counts)	INST TEMP (° C)	RESIDUAL (° C)
1.0000	640460.8	1.0000	0.0000
4.5000	547868.7	4.5000	-0.0000
15.0000	349618.5	14.9999	-0.0001
18.5000	302844.5	18.5001	0.0001
24.0000	243082.3	24.0000	-0.0000
29.0000	200244.7	29.0000	-0.0000
32.5000	175405.3	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

