



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: 1851  
CALIBRATION DATE: 08-Jun-23

SBE 37 TEMPERATURE CALIBRATION DATA  
ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

a0 = 7.367198e-006  
a1 = 2.749096e-004  
a2 = -2.255060e-006  
a3 = 1.551636e-007

BATH TEMP (° C)	INSTRUMENT OUTPUT (counts)	INST TEMP (° C)	RESIDUAL (° C)
1.0000	634075.2	1.0000	-0.0000
4.5000	543163.8	4.5001	0.0001
15.0000	348019.1	15.0000	-0.0000
18.5000	301852.3	18.4999	-0.0001
24.0000	242764.8	24.0000	0.0000
29.0000	200333.8	29.0001	0.0001
32.5000	175695.3	32.4999	-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

