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SENSOR SERIAL NUMBER: 0733  
 CALIBRATION DATE: 31-Jan-23

SBE 38 TEMPERATURE CALIBRATION DATA  
 ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

a0 = 8.908560e-005  
 a1 = 2.710884e-004  
 a2 = -2.237006e-006  
 a3 = 1.467533e-007

BATH TEMP (° C)	INSTRUMENT OUTPUT (counts)	INST TEMP (° C)	RESIDUAL (° C)
-1.5000	678702.7	-1.5000	0.0000
1.0000	604509.6	1.0000	-0.0000
4.5000	515583.2	4.5000	-0.0000
8.0000	441218.3	8.0000	-0.0000
11.5000	378812.2	11.5000	0.0000
15.0000	326264.6	15.0000	0.0000
18.5000	281872.7	18.5000	0.0000
22.0000	244249.7	22.0000	0.0000
25.5000	212264.5	25.5000	-0.0000
29.0000	184989.7	29.0000	-0.0000
32.5000	161662.1	32.5000	0.0000

n = Instrument Output (counts)

$$\text{Temperature ITS-90 (°C)} = 1 / \{ a_0 + a_1[\ln(n)] + a_2[\ln^2(n)] + a_3[\ln^3(n)] \} - 273.15$$

Residual (°C) = instrument temperature - bath temperature

