



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: 5774  
 CALIBRATION DATE: 03-Aug-24

SBE 3 TEMPERATURE CALIBRATION DATA  
 ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

g = 4.33671890e-003  
 h = 6.27175804e-004  
 i = 1.94622760e-005  
 j = 1.44648852e-006  
 f0 = 1000.0

BATH TEMP (° C)	INSTRUMENT OUTPUT (Hz)	INST TEMP (° C)	RESIDUAL (° C)
-1.5001	2939.887	-1.5001	-0.00002
0.9999	3112.190	0.9999	0.00004
4.5000	3365.580	4.5000	-0.00003
7.9999	3633.550	7.9999	0.00001
11.4999	3916.533	11.4999	0.00002
14.9999	4214.935	14.9999	0.00000
18.5000	4529.168	18.5000	-0.00005
22.0000	4859.622	22.0000	0.00002
25.5000	5206.673	25.5000	0.00002
29.0000	5570.698	29.0000	0.00000
32.4999	5952.049	32.4999	-0.00001

f = Instrument Output (Hz)

$$\text{Temperature ITS-90 (°C)} = 1 / \{g + h[\ln(f_0 / f)] + i[\ln^2(f_0 / f)] + j[\ln^3(f_0 / f)]\} - 273.15$$

$$\text{Residual (°C)} = \text{instrument temperature} - \text{bath temperature}$$

