



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: 1678  
 CALIBRATION DATE: 15-Nov-21

SBE 3 TEMPERATURE CALIBRATION DATA  
 ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

g = 4.77679645e-003  
 h = 6.57104662e-004  
 i = 2.87799107e-005  
 j = 2.76698972e-006  
 f0 = 1000.0

BATH TEMP (° C)	INSTRUMENT OUTPUT (Hz)	INST TEMP (° C)	RESIDUAL (° C)
-1.5000	5945.411	-1.5002	-0.00015
1.0000	6299.665	1.0001	0.00012
4.5000	6821.087	4.5002	0.00018
8.0000	7373.031	8.0000	0.00004
11.5000	7956.378	11.4999	-0.00010
15.0000	8571.960	14.9998	-0.00018
18.5000	9220.586	18.4999	-0.00013
22.0001	9903.040	22.0001	0.00002
25.5000	10619.982	25.5002	0.00022
29.0000	11372.111	29.0002	0.00020
32.5000	12160.023	32.4998	-0.00022

f = Instrument Output (Hz)

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

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

