



Sea-Bird Scientific
 13431 NE 20th Street
 Bellevue, WA 98005
 USA

+1 425-643-9866
 seabird@seabird.com
 www.seabird.com

SENSOR SERIAL NUMBER: 5023
 CALIBRATION DATE: 12-Jan-18

SBE 3 TEMPERATURE CALIBRATION DATA
 ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

g = 4.39216908e-003
 h = 6.38138379e-004
 i = 2.15316629e-005
 j = 1.89627249e-006
 f0 = 1000.0

BATH TEMP (° C)	INSTRUMENT OUTPUT (Hz)	INST TEMP (° C)	RESIDUAL (° C)
-1.5000	3172.503	-1.5000	0.00005
1.0000	3356.582	1.0000	0.00000
4.5001	3627.105	4.4999	-0.00015
8.0000	3912.973	8.0000	-0.00000
11.5000	4214.601	11.5001	0.00008
15.0000	4532.397	15.0002	0.00018
18.5000	4866.719	18.4999	-0.00011
22.0000	5218.022	21.9999	-0.00005
25.5001	5586.654	25.5001	-0.00002
29.0001	5972.951	29.0001	-0.00001
32.5000	6377.265	32.5000	0.00004

f = Instrument Output (Hz)

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

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

