



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

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

SENSOR SERIAL NUMBER: 5031
 CALIBRATION DATE: 16-Jan-19

SBE 3 TEMPERATURE CALIBRATION DATA
 ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

g = 4.33214316e-003
 h = 6.36981831e-004
 i = 2.10888832e-005
 j = 1.86000589e-006
 f0 = 1000.0

BATH TEMP (° C)	INSTRUMENT OUTPUT (Hz)	INST TEMP (° C)	RESIDUAL (° C)
-1.5000	2872.978	-1.4999	0.00006
1.0000	3038.906	0.9999	-0.00007
4.5000	3282.702	4.5000	-0.00003
8.0000	3540.239	8.0000	-0.00002
11.5000	3811.896	11.5001	0.00006
15.0000	4098.030	15.0001	0.00010
18.5000	4398.979	18.4999	-0.00006
22.0000	4715.116	21.9999	-0.00006
25.5000	5046.765	25.5000	0.00001
29.0000	5394.231	29.0000	0.00000
32.5000	5757.830	32.5000	0.00001

f = Instrument Output (Hz)

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

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

