



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: 2946  
CALIBRATION DATE: 01-Sep-23

SBE 3 TEMPERATURE CALIBRATION DATA  
ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

g = 4.34366645e-003  
h = 6.38500839e-004  
i = 2.09728325e-005  
j = 1.74613073e-006  
f0 = 1000.0

| BATH TEMP<br>(° C) | INSTRUMENT<br>OUTPUT (Hz) | INST TEMP<br>(° C) | RESIDUAL<br>(° C) |
|--------------------|---------------------------|--------------------|-------------------|
| -1.5000            | 2920.915                  | -1.4999            | 0.00011           |
| 1.0000             | 3089.354                  | 0.9999             | -0.00011          |
| 4.5000             | 3336.829                  | 4.4999             | -0.00012          |
| 8.0000             | 3598.245                  | 8.0000             | -0.00003          |
| 11.5000            | 3873.980                  | 11.5001            | 0.00012           |
| 15.0000            | 4164.396                  | 15.0002            | 0.00022           |
| 18.5000            | 4469.822                  | 18.4999            | -0.00008          |
| 22.0000            | 4790.664                  | 21.9999            | -0.00014          |
| 25.5000            | 5127.256                  | 25.5000            | -0.00004          |
| 29.0000            | 5479.906                  | 29.0000            | 0.00002           |
| 32.4999            | 5848.920                  | 32.4999            | 0.00004           |

f = Instrument Output (Hz)

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

Residual (°C) = instrument temperature - bath temperature

