



Sea-Bird Scientific
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SENSOR SERIAL NUMBER: 4303
 CALIBRATION DATE: 19-Oct-17

SBE 3 TEMPERATURE CALIBRATION DATA
 ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

g = 4.38502809e-003
 h = 6.47528128e-004
 i = 2.19218763e-005
 j = 1.64079432e-006
 f0 = 1000.0

| BATH TEMP (° C) | INSTRUMENT OUTPUT (Hz) | INST TEMP (° C) | RESIDUAL (° C) |
|--------------------|---------------------------|--------------------|-------------------|
| -1.5000 | 3084.100 | -1.4999 | 0.00010 |
| 1.0000 | 3260.503 | 0.9999 | -0.00008 |
| 4.5000 | 3519.582 | 4.4999 | -0.00013 |
| 8.0000 | 3793.159 | 8.0000 | -0.00001 |
| 11.5000 | 4081.618 | 11.5001 | 0.00009 |
| 15.0000 | 4385.354 | 15.0003 | 0.00027 |
| 18.5000 | 4704.685 | 18.4999 | -0.00014 |
| 22.0000 | 5040.069 | 21.9999 | -0.00014 |
| 25.5001 | 5391.850 | 25.5001 | -0.00001 |
| 29.0001 | 5760.332 | 29.0001 | 0.00003 |
| 32.5000 | 6145.851 | 32.5000 | 0.00002 |

f = Instrument Output (Hz)

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

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

