



Sea-Bird Scientific
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SENSOR SERIAL NUMBER: 5773
 CALIBRATION DATE: 06-Aug-24

SBE 3 TEMPERATURE CALIBRATION DATA
 ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

g = 4.35221970e-003
 h = 6.29797751e-004
 i = 1.98679905e-005
 j = 1.48010526e-006
 f0 = 1000.0

| BATH TEMP (° C) | INSTRUMENT OUTPUT (Hz) | INST TEMP (° C) | RESIDUAL (° C) |
|--------------------|---------------------------|--------------------|-------------------|
| -1.5000 | 3005.712 | -1.5001 | -0.00005 |
| 1.0000 | 3181.511 | 1.0001 | 0.00005 |
| 4.5000 | 3440.007 | 4.5000 | 0.00002 |
| 7.9999 | 3713.348 | 8.0000 | 0.00006 |
| 11.5000 | 4001.968 | 11.4999 | -0.00006 |
| 15.0000 | 4306.282 | 14.9999 | -0.00009 |
| 18.4999 | 4626.704 | 18.4999 | 0.00003 |
| 22.0000 | 4963.634 | 22.0000 | -0.00002 |
| 25.5000 | 5317.459 | 25.5001 | 0.00006 |
| 28.9999 | 5688.537 | 29.0000 | 0.00006 |
| 32.4999 | 6077.246 | 32.4998 | -0.00006 |

f = Instrument Output (Hz)

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

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

