

# SEA-BIRD ELECTRONICS, INC.

1808 136th Place N.E., Bellevue, Washington, 98005 USA

Phone: (425) 643 - 9866 Fax (425) 643 - 9954 Email: seabird@seabird.com

SENSOR SERIAL NUMBER: 0471  
CALIBRATION DATE: 06-Nov-08

SBE 37 TEMPERATURE CALIBRATION DATA  
ITS-90 TEMPERATURE SCALE

## ITS-90 COEFFICIENTS

a0 = -1.623900e-005

a1 = 2.821853e-004

a2 = -2.932067e-006

a3 = 1.689585e-007

| BATH TEMP<br>(ITS-90) | INSTRUMENT<br>OUTPUT | INST TEMP<br>(ITS-90) | RESIDUAL<br>(ITS-90) |
|-----------------------|----------------------|-----------------------|----------------------|
| 1.0000                | 665726.7             | 1.0000                | 0.0000               |
| 4.4999                | 569370.5             | 4.4999                | -0.0000              |
| 15.0000               | 363142.3             | 15.0000               | 0.0000               |
| 18.4999               | 314514.5             | 18.4999               | -0.0000              |
| 23.9999               | 252392.4             | 24.0000               | 0.0001               |
| 28.9999               | 207881.3             | 28.9998               | -0.0001              |
| 32.5001               | 182074.6             | 32.5002               | 0.0001               |

Temperature ITS-90 =  $1/[a_0 + a_1[\ln(n)] + a_2[\ln^2(n)] + a_3[\ln^3(n)]] - 273.15$  (°C)

Residual = instrument temperature - bath temperature

