## **SEA-BIRD ELECTRONICS, INC.**

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SENSOR SERIAL NUMBER: 0219 CALIBRATION DATE: 23-Jul-09

SBE 45 TEMPERATURE CALIBRATION DATA ITS-90 TEMPERATURE SCALE

## **ITS-90 COEFFICIENTS**

a0 = -5.714242e - 006a1 = 2.792481e-004a2 = -2.773781e-006a3 = 1.612426e-007

| BATH TEMP<br>(ITS-90) | INSTRUMENT<br>OUTPUT | INST TEMP<br>(ITS-90) | RESIDUAL<br>(ITS-90) |
|-----------------------|----------------------|-----------------------|----------------------|
| 0.9999                | 710478.3             | 1.0000                | 0.0001               |
| 4.5000                | 606878.2             | 4.4999                | -0.0001              |
| 15.0000               | 385682.3             | 15.0000               | -0.0000              |
| 18.4999               | 333657.0             | 18.5001               | 0.0002               |
| 23.9999               | 267300.9             | 23.9998               | -0.0001              |
| 29.0000               | 219829.6             | 28.9999               | -0.0001              |
| 32.5000               | 192345.7             | 32.5001               | 0.0001               |

Temperature ITS-90 =  $1/{a0 + a1[ln(n)] + a2[ln^2(n)] + a3[ln^3(n)]} - 273.15$  (°C)

Residual = instrument temperature - bath temperature

Date, Delta T (mdeg C)

0.29

