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SENSOR SERIAL NUMBER: 0164  
CALIBRATION DATE: 21-Apr-22

Glider Payload CTD CONDUCTIVITY CALIBRATION DATA  
PSS 1978: C(35,15,0) = 4.2914 Siemens/meter

COEFFICIENTS:

g = -9.783545e-001  
h = 1.364845e-001  
i = 1.732308e-003  
j = -1.163598e-004

CPcor = -9.5700e-008  
CTcor = 3.2500e-006  
WBOTC = 2.8395e-007

| BATH TEMP<br>(° C) | BATH SAL<br>(PSU) | BATH COND<br>(S/m) | INSTRUMENT<br>OUTPUT (Hz) | INSTRUMENT<br>COND (S/m) | RESIDUAL<br>(S/m) |
|--------------------|-------------------|--------------------|---------------------------|--------------------------|-------------------|
| 22.0000            | 0.0000            | 0.00000            | 2641.20                   | 0.00001                  | 0.00001           |
| 0.9999             | 34.6087           | 2.95990            | 5259.09                   | 2.95949                  | -0.00041          |
| 4.5000             | 34.5888           | 3.26537            | 5457.86                   | 3.26562                  | 0.00026           |
| 15.0000            | 34.5479           | 4.24216            | 6048.82                   | 4.24280                  | 0.00064           |
| 18.5000            | 34.5391           | 4.58555            | 6243.05                   | 4.58572                  | 0.00018           |
| 23.9999            | 34.5298           | 5.14069            | 6544.66                   | 5.13940                  | -0.00129          |
| 28.9999            | 34.5249           | 5.65993            | 6816.61                   | 5.66054                  | 0.00061           |
| 32.5000            | 34.5216           | 6.03038            | 7002.83                   | 6.02930                  | -0.00109          |

$f = \text{Instrument Output(Hz)} * \sqrt{1.0 + \text{WBOTC} * t} / 1000.0$

t = temperature (°C); p = pressure (decibars);  $\delta = \text{CTcor}$ ;  $\epsilon = \text{CPcor}$ ;

Conductivity (S/m) =  $(g + h * f^2 + i * f^3 + j * f^4) / (1 + \delta * t + \epsilon * p)$

Residual (Siemens/meter) = instrument conductivity - bath conductivity

