

# SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER = 1387  
CALIBRATION DATE: 30-Apr-02s

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

## GHIJ COEFFICIENTS

g = -4.05384022e+00  
h = 4.61683632e-01  
i = -1.55930252e-04  
j = 3.14875173e-05  
CPcor = -9.57e-08 (nominal)  
CTcor = 3.25e-06 (nominal)

## ABCDM COEFFICIENTS

a = 1.02002583e-05  
b = 4.61215255e-01  
c = -4.05246981e+00  
d = -8.57262817e-05  
m = 4.3  
CPcor = -9.57e-08 (nominal)

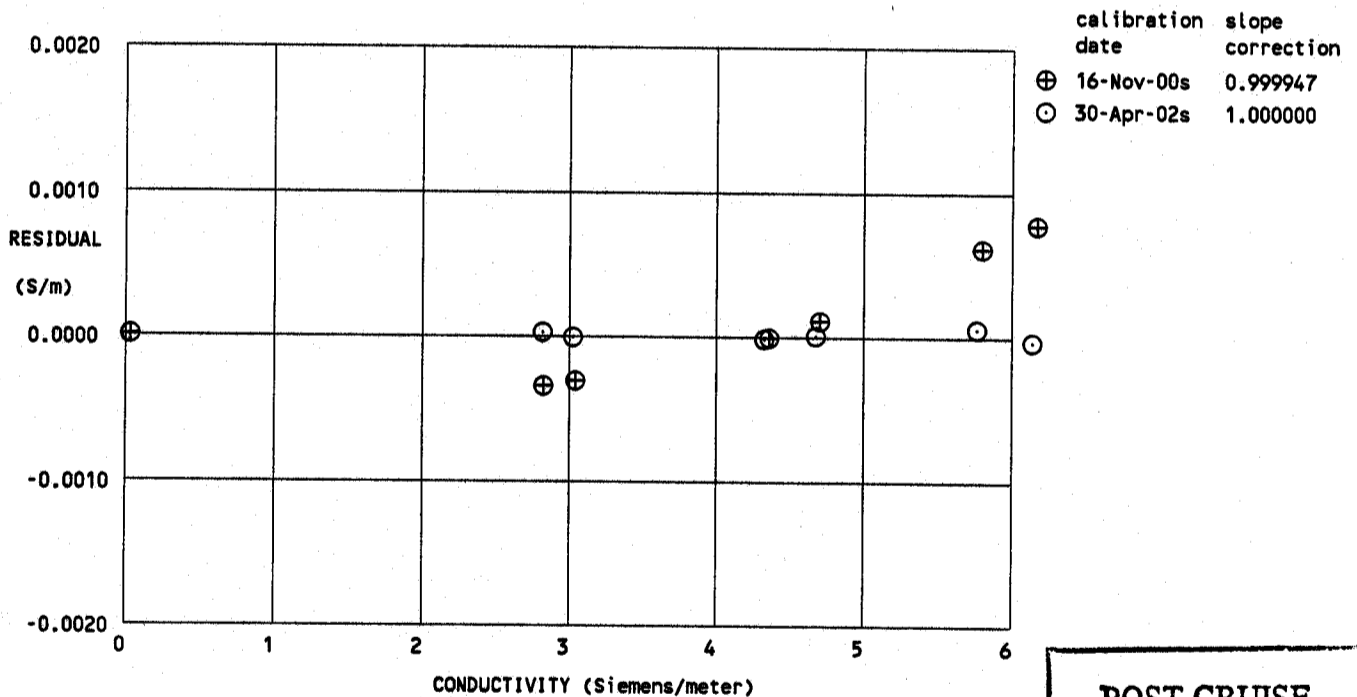
BATH TEMP (ITS-90 °C)	BATH SAL (PSU)	BATH COND (Siemens/m)	INST FREQ (kHz)	INST COND (Siemens/m)	RESIDUAL (Siemens/m)
0.0000	0.0000	0.00000	2.96379	-0.00000	-0.00000
-1.4008	35.0495	2.78752	8.30823	2.78754	0.00002
0.9992	35.0499	2.99395	8.57167	2.99394	-0.00001
14.9992	35.0502	4.29718	10.07490	4.29716	-0.00002
18.4992	35.0498	4.64590	10.43984	4.64590	0.00000
28.9992	35.0470	5.73574	11.50427	5.73579	0.00005
32.4992	35.0407	6.11059	11.84762	6.11056	-0.00003

Conductivity =  $(g + hf^2 + if^3 + jf^4) / [10(1 + \delta t + \epsilon p)]$  Siemens/meter

Conductivity =  $(af^m + bf^{2m} + c + dt) / [10(1 + \epsilon p)]$  Siemens/meter

t = temperature [deg C]; p = pressure [decibars];  $\delta$  = CTcor;  $\epsilon$  = CPcor;

Residual = (instrument conductivity - bath conductivity) using g, h, i, j coefficients



POST CRUISE  
CALIBRATION