

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0042
CALIBRATION DATE: 30-Mar-13

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

COEFFICIENTS:

g = -9.836165e-001
h = 1.480629e-001
i = -3.211359e-004
j = 4.684582e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = 1.6136e-007

BATH TEMP (ITS-90)	BATH SAL (PSU)	BATH COND (Siemens/m)	INST FREQ (Hz)	INST COND (Siemens/m)	RESIDUAL (Siemens/m)
22.0000	0.0000	0.00000	2581.95	0.00000	0.00000
0.9999	34.9343	2.98508	5184.39	2.98508	0.00000
4.5000	34.9145	3.29307	5381.20	3.29308	0.00001
15.0000	34.8718	4.27770	5966.17	4.27767	-0.00003
18.5000	34.8628	4.62387	6158.37	4.62386	-0.00001
24.0000	34.8530	5.18348	6456.67	5.18350	0.00002
29.0000	34.8479	5.70691	6723.34	5.70693	0.00002
32.5000	34.8455	6.08050	6907.16	6.08048	-0.00002

$$f = \text{INST FREQ} * \sqrt{1.0 + \text{WBOTC} * t} / 1000.0$$

$$\text{Conductivity} = (g + hf^2 + if^3 + jf^4) / (1 + \delta t + \epsilon p) \text{ Siemens/meter}$$

$$t = \text{temperature}[^{\circ}\text{C}]; p = \text{pressure}[\text{decibars}]; \delta = \text{CTcor}; \epsilon = \text{CPcor};$$

$$\text{Residual} = \text{instrument conductivity} - \text{bath conductivity}$$

Date, Slope Correction

