

Sea-Bird Electronics, Inc.

13431 NE 20th Street, Bellevue, WA 98005-2010 USA

Phone: (+1) 425-643-9866 Fax (+1) 425-643-9954 Email: seabird@seabird.com

SENSOR SERIAL NUMBER: 0118

CALIBRATION DATE: 24-May-14

Glider Payload CTD CONDUCTIVITY CALIBRATION DATA

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

COEFFICIENTS:

g = -9.772885e-001

h = 1.568095e-001

i = -1.907050e-004

j = 3.826370e-005

CPcor = -9.5700e-008

CTcor = 3.2500e-006

WBOTC = 4.6695e-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	2498.34	0.00000	0.00000
1.0000	34.6654	2.96429	5013.50	2.96428	-0.00001
4.5000	34.6451	3.27016	5203.79	3.27017	0.00001
15.0000	34.6010	4.24799	5769.47	4.24799	-0.00000
18.5000	34.5907	4.59166	5955.30	4.59167	0.00002
23.9999	34.5792	5.14723	6243.74	5.14721	-0.00002
29.0000	34.5730	5.66694	6501.72	5.66694	-0.00000
32.5000	34.5705	6.03796	6679.63	6.03796	0.00001

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

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

t = temperature[°C]; p = pressure[decibars]; δ = CTcor; ϵ = CPcor;

Residual = instrument conductivity - bath conductivity

