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SENSOR SERIAL NUMBER: 9163
CALIBRATION DATE: 01-Nov-19

Slocum Payload CTD PRESSURE CALIBRATION DATA
1450 psia S/N 4101209

COEFFICIENTS:

PA0 = 9.616285e-004
PA1 = 4.454496e-003
PA2 = -1.228166e-011
PTEMPA0 = -6.741051e+001
PTEMPA1 = 5.184593e-002
PTEMPA2 = -5.631137e-007

PTCA0 = 5.239334e+005
PTCA1 = -8.792816e-001
PTCA2 = 4.043674e-002
PTCB0 = 2.503363e+001
PTCB1 = -1.075000e-003
PTCB2 = 0.000000e+000

PRESSURE SPAN CALIBRATION

THERMAL CORRECTION

PRESSURE (PSIA)	INSTRUMENT OUTPUT (counts)	THERMISTOR OUTPUT (volts)	COMPUTED PRESSURE (PSIA)	RESIDUAL (%FSR)	TEMP (°C)	THERMISTOR OUTPUT (volts)	INSTRUMENT OUTPUT (counts)
14.74	527241.0	1761.0	14.75	0.00	32.50	1969	527269.80
314.88	594552.0	1762.0	314.81	-0.01	29.00	1899	527267.60
614.89	661879.0	1761.0	614.83	-0.00	24.00	1798	527261.40
914.86	729241.0	1763.0	914.90	0.00	18.50	1688	527254.80
1214.84	796608.0	1762.0	1214.87	0.00	15.00	1618	527251.20
1464.88	852763.0	1762.0	1464.84	-0.00	4.50	1408	527255.00
1214.89	796616.0	1762.0	1214.91	0.00	1.00	1339	527256.60
914.93	729250.0	1761.0	914.93	-0.00	TEMPERATURE (°C)		SPAN
614.92	661904.0	1761.0	614.94	0.00			
314.96	594592.0	1760.0	314.99	0.00			
14.74	527245.0	1761.0	14.76	0.00			
					-5.00		25.04
					35.00		25.00

y = thermistor output (counts)

$$t = PTEMPA0 + PTEMPA1 * y + PTEMPA2 * y^2$$

$$x = \text{instrument output} - PTCA0 - PTCA1 * t - PTCA2 * t^2$$

$$n = x * PTCB0 / (PTCB0 + PTCB1 * t + PTCB2 * t^2)$$

$$\text{pressure (PSIA)} = PA0 + PA1 * n + PA2 * n^2$$

$$\text{Residual (\%FSR)} = (\text{computed pressure} - \text{true pressure}) * 100 / \text{Full Scale Range}$$

Date, Offset (%FSR)

● 01-Nov-19 -0.00

