

MBARI DuraFET
DF#208 + VL#208 SO
ver3-PEEK

Ver 2.0
5/19/2015

Updated:
7/6/2017

By:
hwj

PT Chamber: 6/30/2017 7/7/2017
SW cal: 1/0/1900 1/0/1900

Drift 0.060 mV/d

k2 calcs Avg from 0 to 1600 m.

k2 used -9.81656E-04

r²= 1.0000

k0 HCl -1.40141

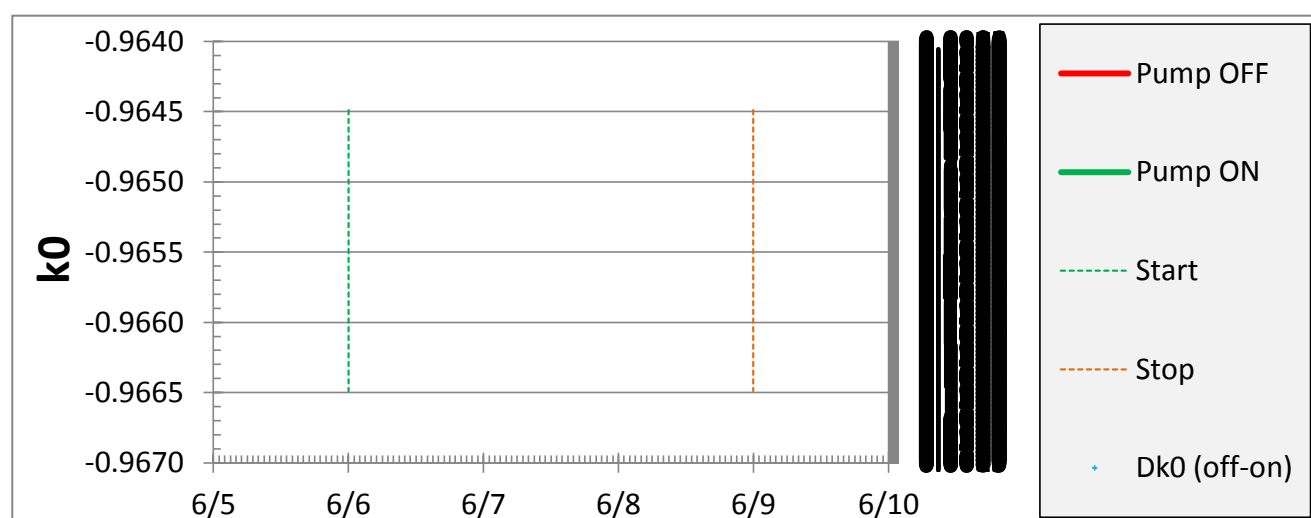
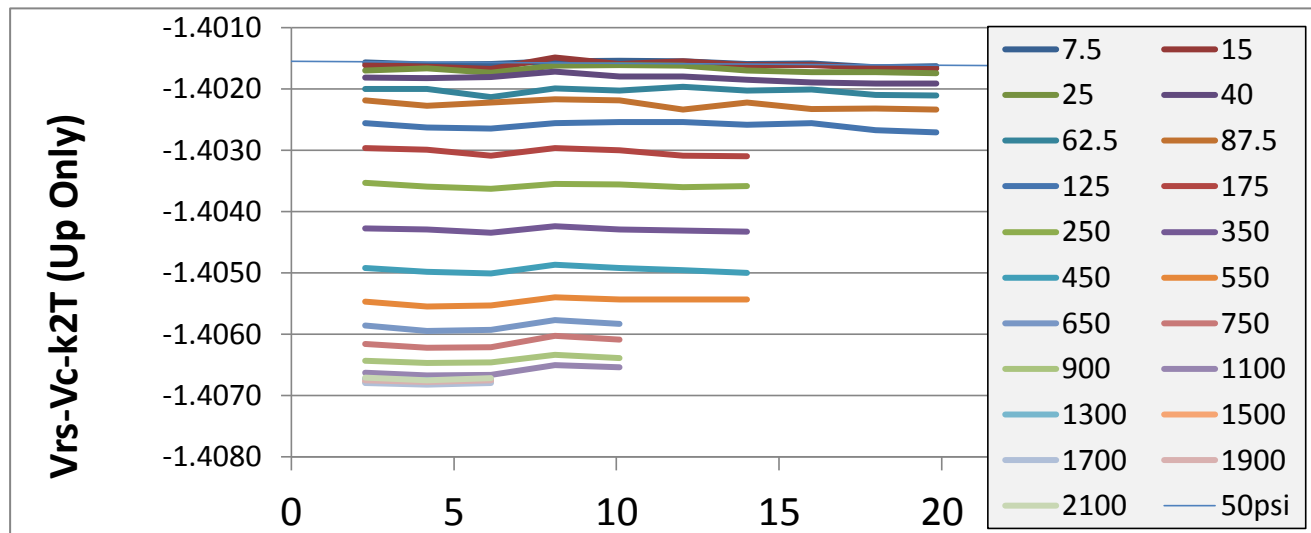
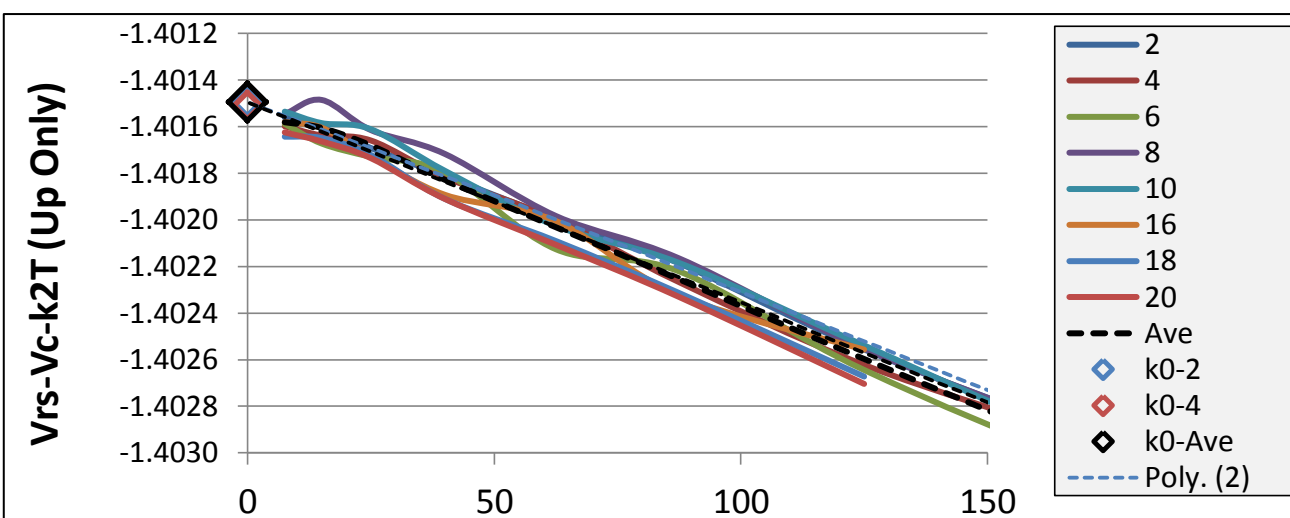
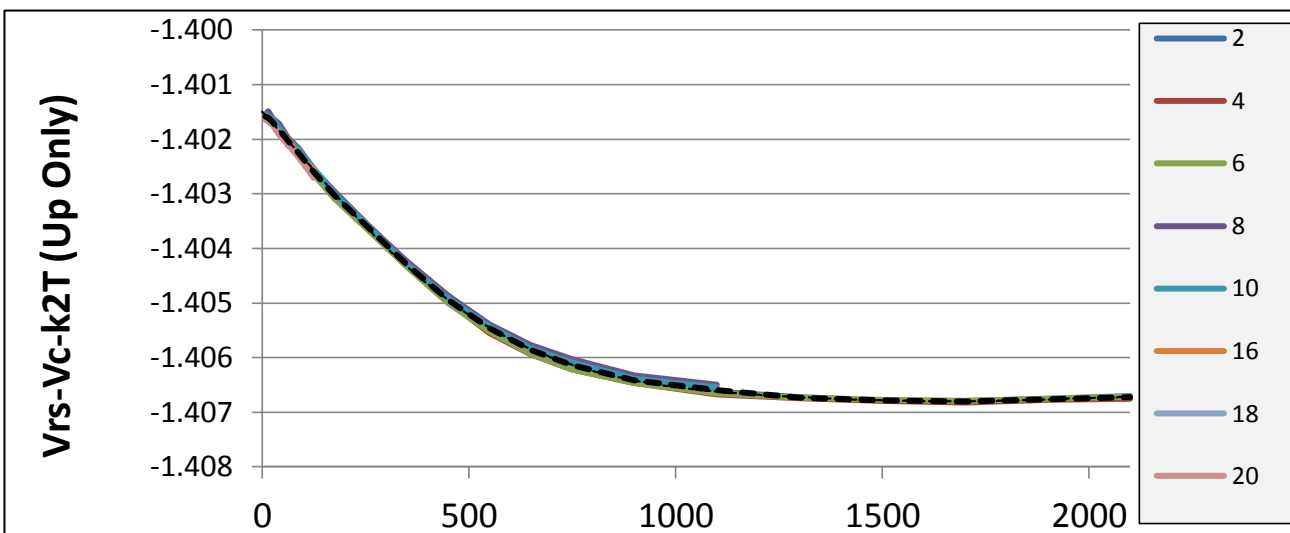
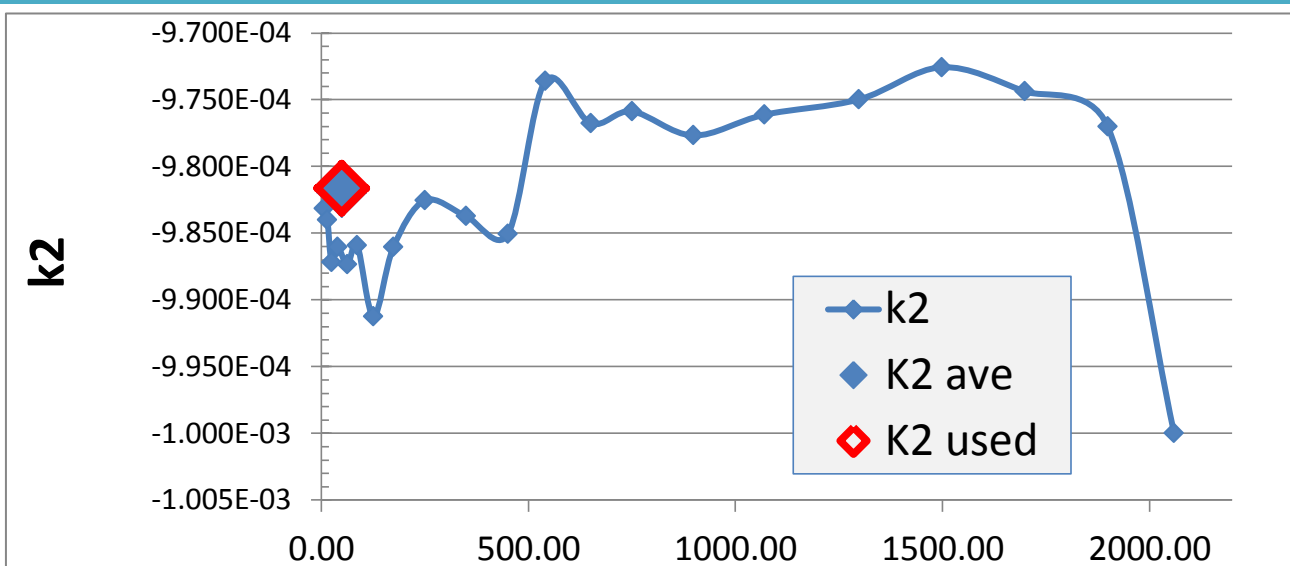
PT Channel D

MCS Logger

CTD#

APEX Float#

k0 SW #N/A

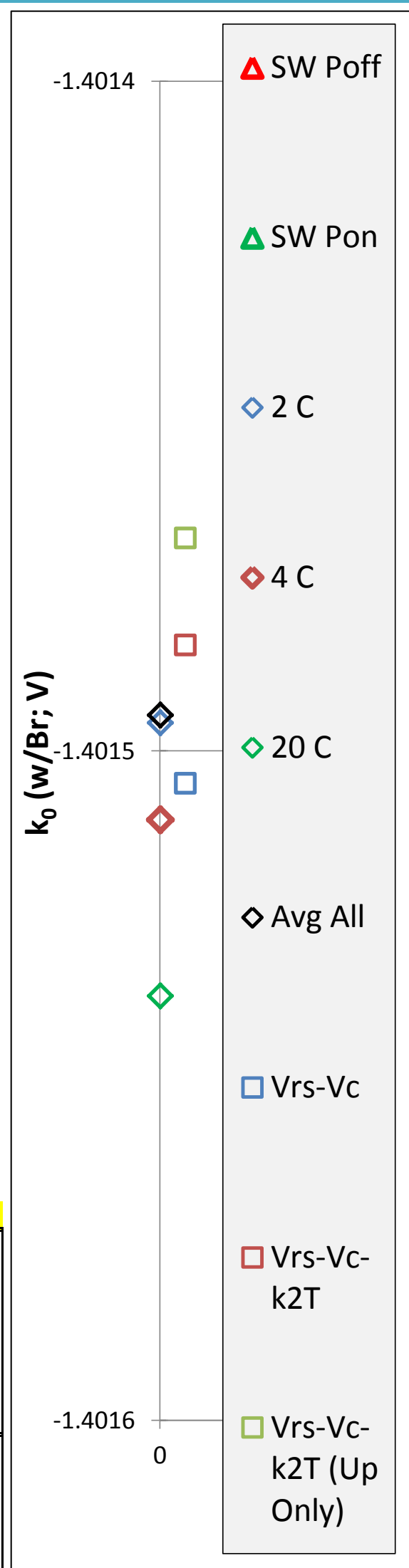


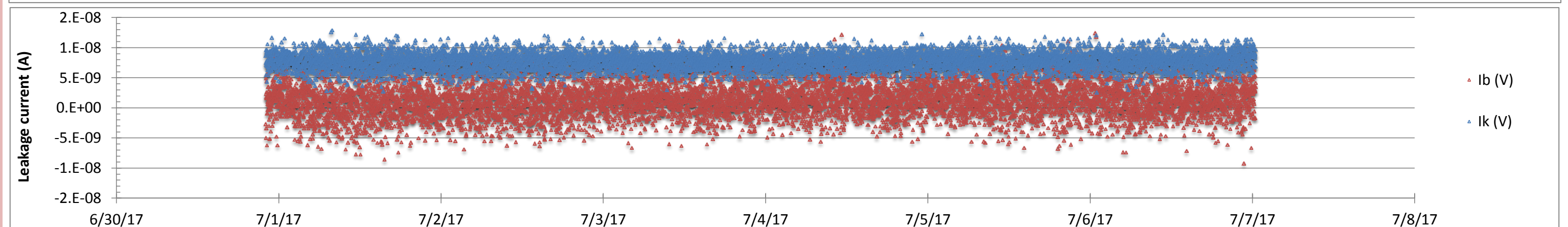
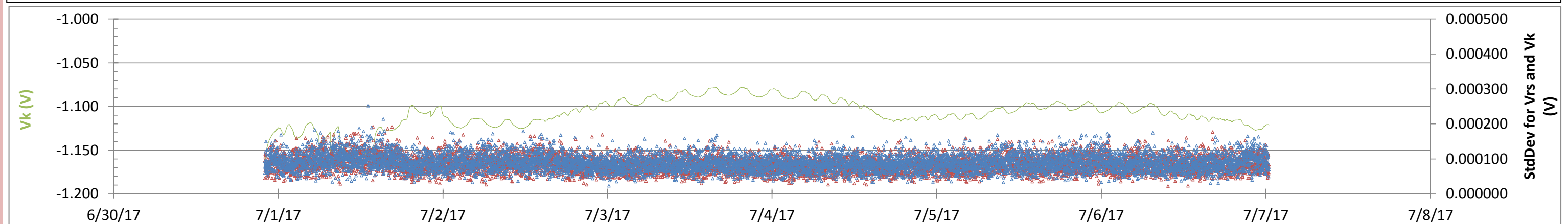
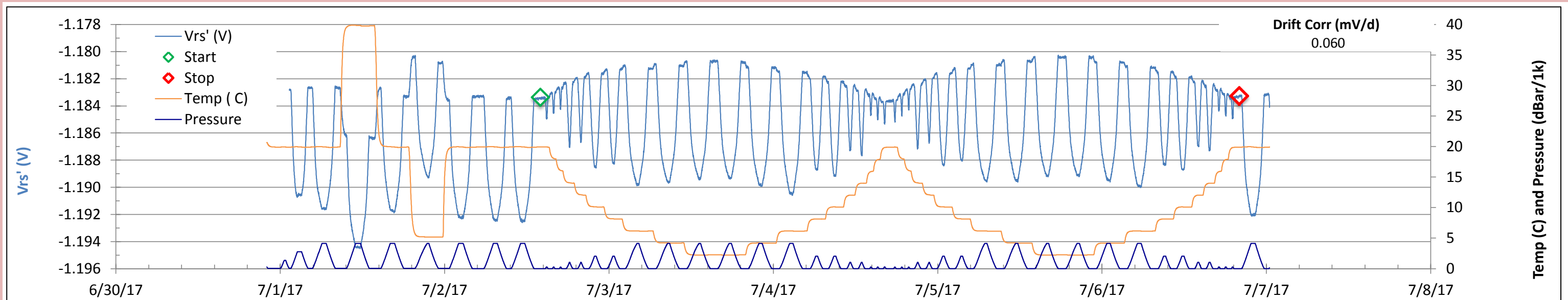
f(P) calcs	k6	k5	k4	k3	k2	k1	k0	R^2
2 C	-9.1034E-22	6.5839E-18	-1.7891E-14	2.1143E-11	-6.2801E-09	-7.7070E-06	-1.40150	0.9999576
4 C	-8.7651E-22	6.4073E-18	-1.7567E-14	2.0823E-11	-5.9719E-09	-7.9097E-06	-1.40151	0.9998163
6 C	-7.2961E-22	5.3561E-18	-1.4658E-14	1.6957E-11	-3.5304E-09	-8.4646E-06	-1.40152	0.9997709
20 C	3.2393E-14	-1.0548E-11	1.2496E-09	-6.5864E-08	1.4837E-06	-1.9588E-05	-1.40154	1.0000000
Avg All	-7.9662E-22	5.6892E-18	-1.5164E-14	1.7152E-11	-3.5296E-09	-8.3984E-06	-1.40149	0.9999252

k0 calcs	k0 SW	StDev	St Dev pH	k0 comparison (PT and k0 calcs)	from f(P) calcs	k0 HCl w/Br	Bromine Offset
SW Pon	#N/A	#N/A	#N/A	Ave PTC/PT	-1.4015 V	2 C	-1.40150
SW Poff	#N/A	#N/A	#N/A	Ave PTC/f(P)	-1.4015 V	4 C	-1.40151
Delta	#N/A	Pump effect	#N/A	Ave SW	#N/A	6 C	-1.40152
				Delta k0	#N/A	20 C	-1.40154
				pH offset	#N/A	Avg All	-1.40149
k0 Cal run?	No						

By interpolating Vrs signals to P=0:

	k0
Vrs-Vc	-1.401505
Vrs-Vc-k2T	-1.401484
Vrs-Vc-k2T (Up Only)	-1.401468
	k0 w/Br
Vrs-Vc	-1.401505
Vrs-Vc-k2T	-1.401484
Vrs-Vc-k2T (Up Only)	-1.401468
Hysteresis (V)	0.000032
Hysteresis (pH)	0.0005





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Engineering Data

Time range:	7/2/2017	7/6/2017
	<u>Average</u>	<u>StDev</u>
V_{rs} noise	0.000082	0.000021
V_k noise	0.000087	0.000022
I_k	7.81E-09	1.30E-09
I_b	1.51E-09	2.59E-09
$f(P)$ r^2	0.9998	0.0003
k_0 (all)	-1.401539	0.000270
k_0 (up only)	-1.401412	0.000232

