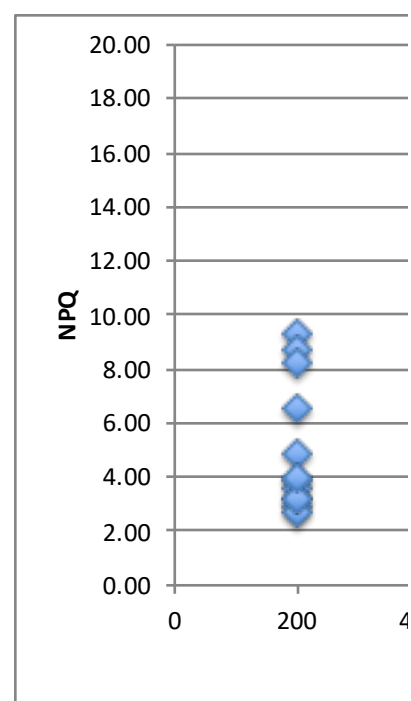
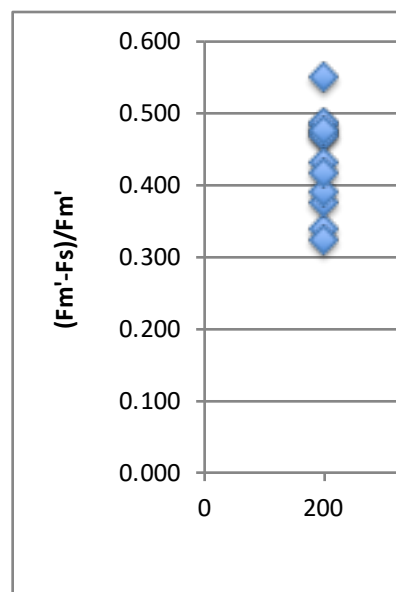
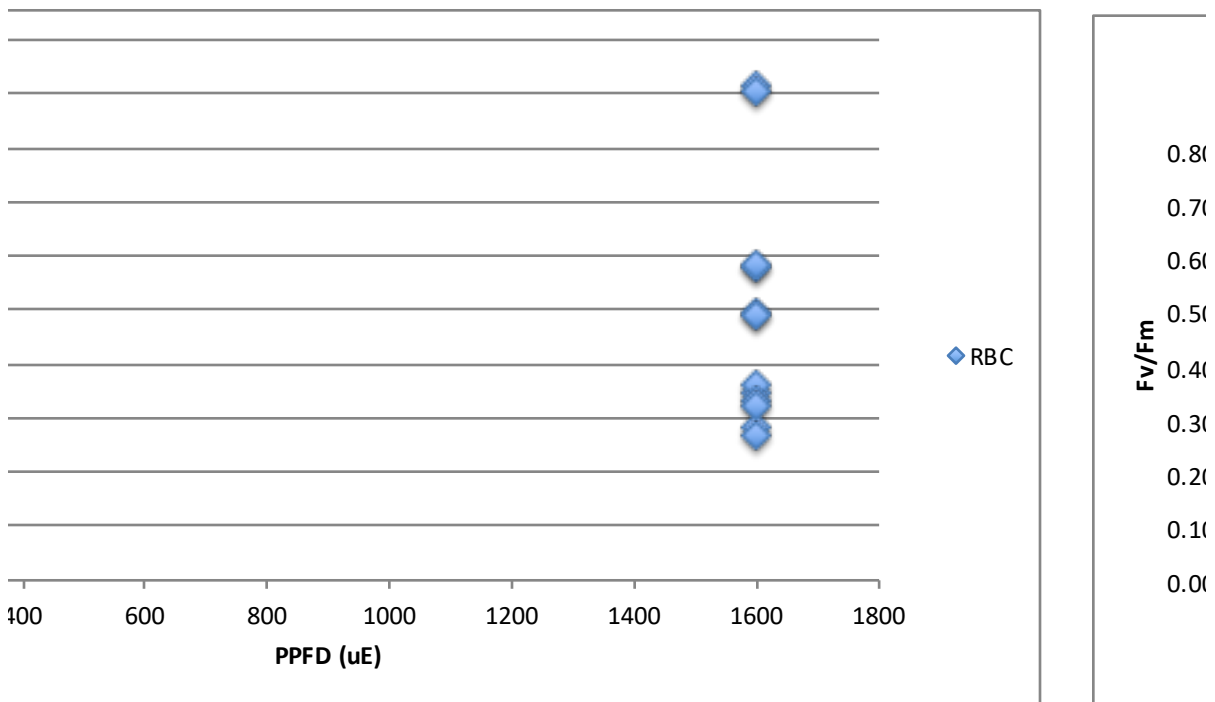
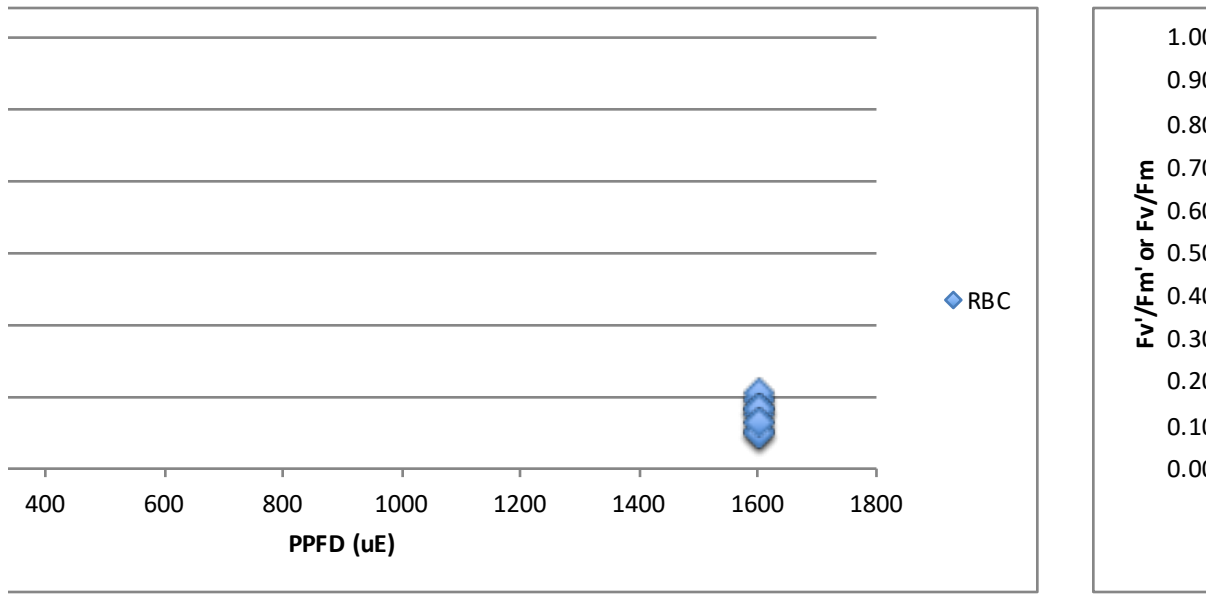


Date	Sample	Pulses in light			
		Pulse Time	Fm'	Fs	Qin
180806	180806 psgv B2 R1	1250	308	204	200
		1256	165.2	157.3	1600
180806	180806 psgv B2 R2	1305	394.9	208.7	200
		1310	231.7	209.7	1600
180806	180806 psgv B2 R3	1323	330.6	206.4	200
		1328	156.1	147.6	1600
180806	180806 pipu B1 R1	1340	173.3	89.3	200
		1345	92.4	83.5	1600
180806	180806 pipu B1 R2	1355	244.9	110.3	200
		1400	104.2	93.1	1600
180806	180806 pipu B1 R3	1409	136.9	70.3	200
		1414	69.6	63.9	1600
180806	180806 segi B1 R1	1425	271	143.8	200
		1430	160.2	148.2	1600
180806	180806 segi B1 R2	1439	318.6	166.8	200
		1444	172.5	158.4	1600
180806	180806 segi B1 R3	1456	316.6	180	200
		1502	208.8	191.2	1600
180806	180806 pini B1 R1	1535	266.1	162.1	200
		1540	178.8	167.6	1600
180806	180806 pini B1 R2	1555	194.3	131.7	200
		1600	142.3	135.4	1600
180806	180806 pini B1 R3	1609	254.3	147.9	200
		1615	152	142	1600

Tleaf	After Dark Pulse			After Dark adapting		calculated (Fm'-Fs)/Fm'
	Fv'	Fs	Fo'	Fm	Fo	
25.0	59	157.3	106	1793.63	541.811	0.338
25.1						0.048
25.0	126	209.7	105.2	1550.2	448.089	0.472
25.1						0.095
25.1	48	147.6	108.4	1232.89	313.933	0.376
25.1						0.054
25.0	58	83.5	34.6	1780.86	321.622	0.485
25.1						0.096
25.0	56	93.1	48.2	1121.91	223.989	0.550
25.1						0.107
25.1	31	63.9	39	1325.42	266.4	0.486
24.9						0.082
25.1	89	148.2	71.4	729.422	138.111	0.469
25.0						0.075
25.1	88	158.4	84.6	626.844	125.867	0.476
25.1						0.082
25.1	108	191.2	100.8	826.302	189.3	0.431
25.1						0.084
25.1	77	167.6	102	2008	381.322	0.391
25.0						0.063
25.1	64	135.4	77.8	1789.83	323.311	0.322
25.0						0.048
25.3	65	142	87.4	1924.78	350.444	0.418
25.0						0.066

calculated Fv'/Fm'	calculated Fv/Fm	calculated NPQ	for plotting Fv/Fm
0.656 0.358	0.698	4.82 9.86	0
0.734 0.546	0.711	2.93 5.69	0
0.672 0.306	0.745	2.73 6.90	0
0.800 0.626	0.819	9.28 18.27	0
0.803 0.537	0.800	3.58 9.77	0
0.715 0.440	0.799	8.68 18.04	0
0.856 0.757	0.811	3.89 7.27	0
0.878 0.774	0.799	3.16 6.68	0
0.877 0.813	0.771	3.19 5.35	0
0.853 0.782	0.810	3.98 6.41	0
0.799 0.726	0.819	8.21 11.58	0
0.847 0.743	0.818	6.57 11.66	0







Fv/Fm

◆ RBC

Date	Sample	Pulses in light			
		Pulse Time	Fm'	Fs	Qin
180807	180807 thob B1 R1	943	497.7	353.6	200
		948	412.4	407.1	1600
180807	180807 thob B1 R2	957	463.8	253.6	200
		1002	289.2	272.4	1600
180807	180807 thob B1 R3	1011	404.2	227.3	200
		1016	241.2	227	1600
180807	180807 pinh B1 R1	1038	234.4	141.4	200
		1043	171.6	160	1600
180807	180807 pinh B1 R2	1056	183.7	121.9	200
		1101	145.7	137.5	1600
180807	180807 pinh B1 R3	1112	152	98.9	200
		1117	119.2	113.1	1600
180807	180807 picc B1 R1	1135	158.8	100.6	200
		1141	94.7	90.8	1600
180807	180807 picc B1 R2	1154	161.9	98.8	200
		1159	87.5	83	1600
180807	180807 picc B1 R3	1210	99.4	69.5	200
		1216	65.4	64.9	1600
180807	180807 abco B1 R1	1228	215.2	137.9	200
		1234	143.4	136.3	1600
180807	180807 abco B1 R2	1246	277.2	193.6	200
		1251	210.2	202.2	1600
180807	180807 abco B1 R3	1302	268.4	202.2	200
		1307	218.9	211.7	1600
180807	180807 jswb B1 R1	1320	524.4	350.4	200
		1326	379.2	360	1600

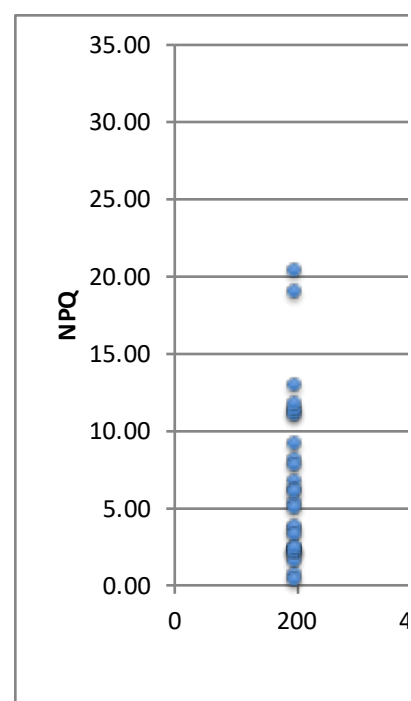
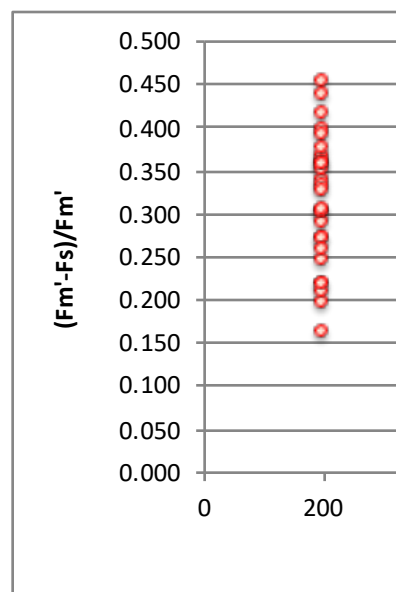
180807 180807 jswb B1 R2	1336	493.2	317.4	200
	1341	340.3	323.6	1600
180807 180807 jswb B1 R3	1350	431.6	300.4	200
	1355	317.3	304	1600
180807 180807 piwa B1 R1	1414	148.9	108.7	200
	1419	104.2	101.5	1600
180807 180807 piwa B1 R2	1429	168.1	113.2	200
	1434	111.2	107.4	1600
180807 180807 piwa B1 R3	1447	189.9	138.6	200
	1452	138	133.8	1600
180807 180807 cunp B1 R1	1503	399.2	295.8	200
	1508	296.6	287.4	1600
180807 180807 cunp B1 R2	1519	333.3	268.6	200
	1525	283.8	276.5	1600
180807 180807 cunp B1 R3	1535	368.2	288.7	200
	1540	312.1	304.5	1600
180807 180807 choc B1 R1	1552	1218.8	967	200
	1558	1021	996.1	1600
180807 180807 choc B1 R2	1608	902.5	757.9	200
	1613	778.8	763.5	1600
180807 180807 choc B1 R3	1622	392.9	307.4	200
	1627	322.3	313	1600
180807 180807 phvl B1 R1	1638	200.9	117.6	200
	1643	125.5	118.1	1600
180807 180807 phvl B1 R2	1653	215.1	138.2	200
	1658	154.8	146.7	1600
180807 180807 phvl B1 R3	1708	136.6	85.3	200
	1713	94.4	88.9	1600



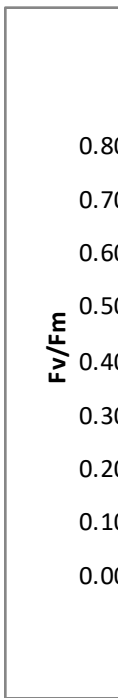
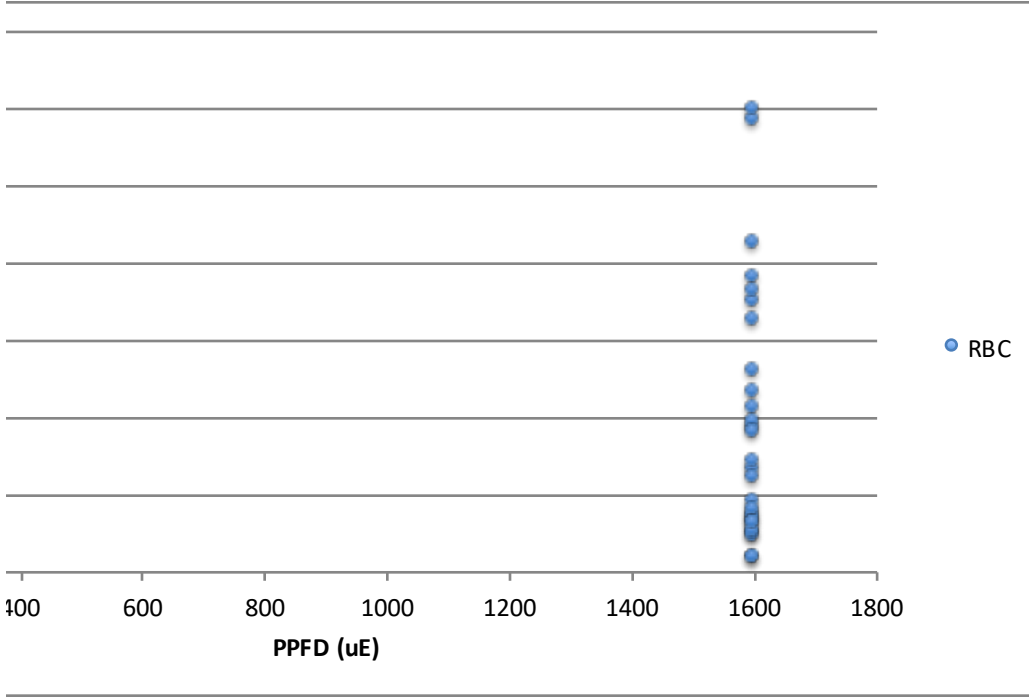
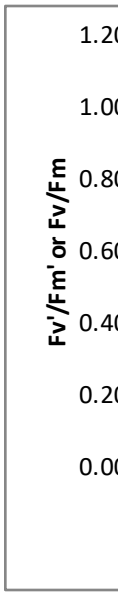
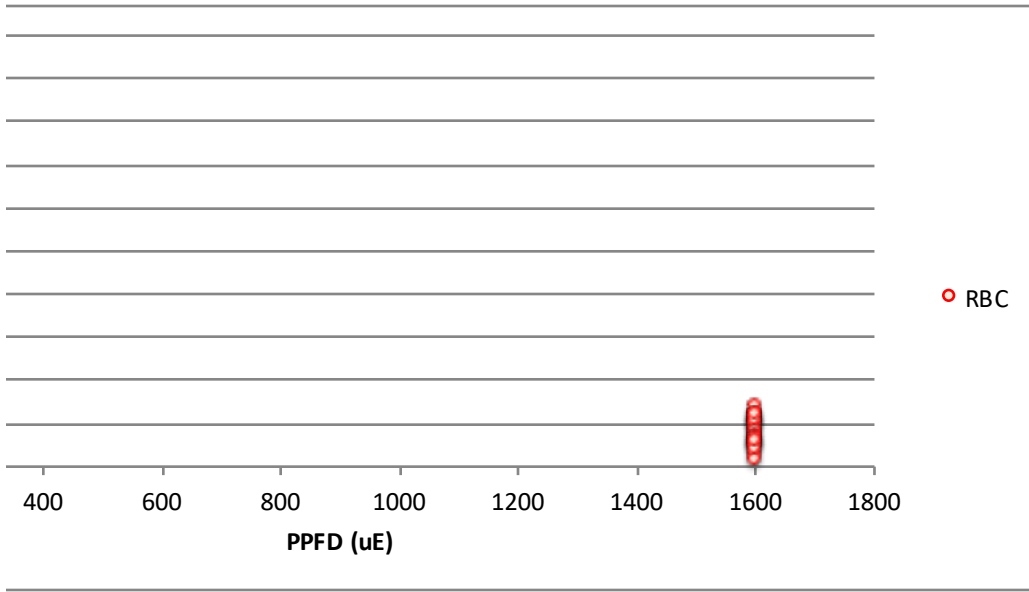
Tleaf	After Dark Pulse			After Dark adapting		calculated (Fm'-Fs)/Fm'
	Fv'	Fs	Fo'	Fm	Fo	
25.1	211	407.1	210.6	805.138	189.344	0.290
25.0						0.013
25.0	135	272.4	154.2	542.25	114.611	0.453
25.1						0.058
25.0	93	227	148.4	1837.93	364.122	0.438
25.0						0.059
25.0	87	160	85	1786.31	286.644	0.397
25.0						0.068
24.9	79	137.5	66.6	1836.88	304.533	0.336
25.0						0.056
25.1	65	113.1	54.6	1375.34	228.122	0.349
25.1						0.051
25.1	39	90.8	55.6	1896.55	373.5	0.366
25.1						0.041
25.0	53	83	34	1954.39	365.344	0.390
25.1						0.051
25.0	38	64.9	27	1981.46	348.522	0.301
25.0						0.008
25.1	61	136.3	82	1532.24	307.289	0.359
25.1						0.050
25.0	87	202.2	123.6	1719.31	341.311	0.302
25.1						0.038
25.1	93	211.7	125.6	1562.53	293.656	0.247
25.1						0.033
25.1	168	360	211	1715.57	328.233	0.332
25.1						0.051

25.1	145	323.6	195.2	1576.86	326.733	0.356
25.2						0.049
25.1	139	304	178.4	1336.35	269.289	0.304
25.1						0.042
25.0	44	101.5	60.6	1041.84	254.433	0.270
25.0						0.026
25.1	44	107.4	67.6	2063.5	445.333	0.327
25.1						0.034
25.1	52	133.8	86.4	2391.24	518.167	0.270
25.1						0.030
25.1	82	287.4	214.8	983.254	237.144	0.259
25.1						0.031
25.1	97	276.5	187	1560.84	350.689	0.194
25.1						0.026
25.1	118	304.5	194.6	1538.96	296.878	0.216
25.1						0.024
25.1	495	996.1	525.6	3611.58	708.344	0.207
25.0						0.024
25.1	378	763.5	400.4	2798.42	512.9	0.160
25.1						0.020
25.1	129	313	193.8	1320.18	269.5	0.218
25.1						0.029
25.1	60	118.1	65.2	1749.2	280.911	0.415
25.0						0.059
25.1	74	146.7	80.4	2967.17	487.9	0.358
25.0						0.052
25.0	47	88.9	47.2	2913.49	458.589	0.376
25.0						0.058

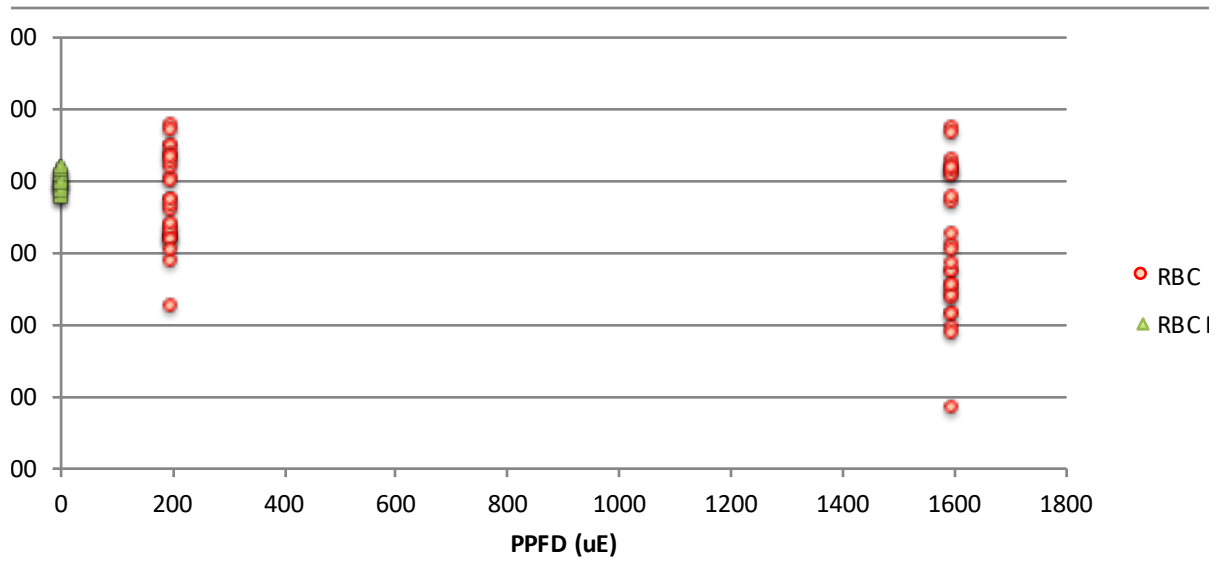
calculated Fv'/Fm'	calculated Fv/Fm	calculated NPQ	for plotting Fv/Fm
0.577	0.765	0.62	0
0.489		0.95	
0.668	0.789	0.17	0
0.467		0.88	
0.633	0.802	3.55	0
0.385		6.62	
0.637	0.840	6.62	0
0.505		9.41	
0.637	0.834	9.00	0
0.543		11.61	
0.641	0.834	8.05	0
0.542		10.54	
0.656	0.803	10.94	0
0.423		19.03	
0.663	0.813	11.07	0
0.376		21.34	
0.451	0.824	18.93	0
0.165		29.30	
0.746	0.799	6.12	0
0.619		9.69	
0.803	0.801	5.20	0
0.740		7.18	
0.797	0.812	4.82	0
0.751		6.14	
0.896	0.809	2.27	0
0.856		3.52	



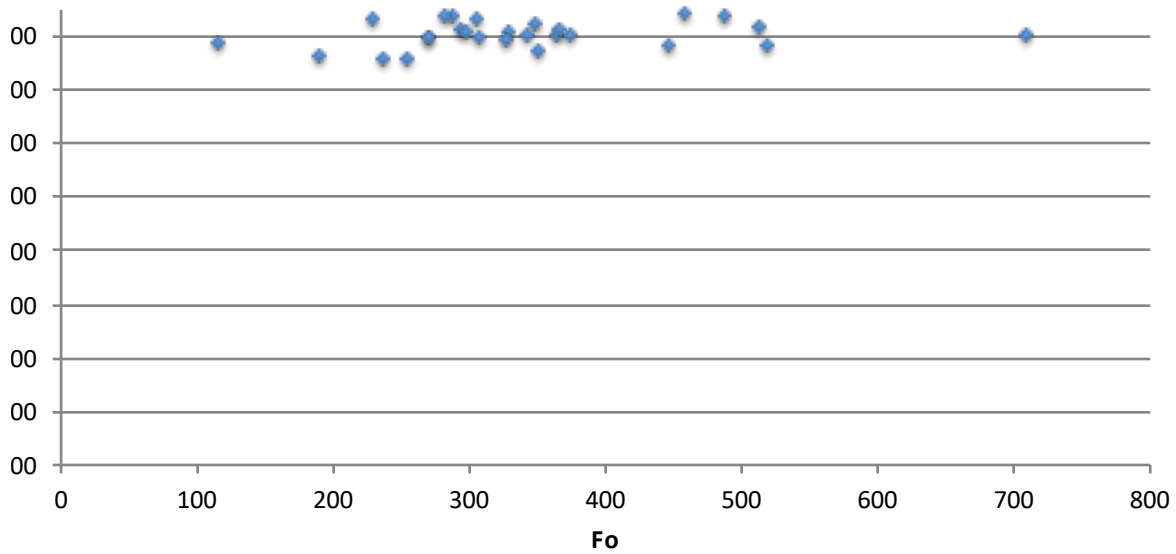
0.889	0.793	2.20	0
0.840		3.63	
0.873	0.798	2.10	0
0.828		3.21	
0.633	0.756	6.00	0
0.476		9.00	
0.675	0.784	11.28	0
0.509		17.56	
0.712	0.783	11.59	0
0.604		16.33	
0.863	0.759	1.46	0
0.816		2.32	
0.836	0.775	3.68	0
0.808		4.50	
0.852	0.807	3.18	0
0.825		3.93	
0.955	0.804	1.96	0
0.947		2.54	
0.940	0.817	2.10	0
0.930		2.59	
0.861	0.796	2.36	0
0.831		3.10	
0.728	0.839	7.71	0
0.565		12.94	
0.746	0.836	12.79	0
0.647		18.17	
0.600	0.843	20.33	0
0.422		29.86	







### dark adapted results - signal strength check







Fv/Fm

◆ RBC



Date	Sample	Pulses in light			
		Pulse Time	Fm'	Fs	Qin
180808	180808 pist B1 R1	1017	117.7	74.2	200
		1022	77.8	77.8	1600
180808	180808 pist B1 R2	1030	72.6	45.9	200
		1035	47.2	46	1600
180808	180808 pist B1 R3	1045	96.4	61.4	200
		1050	65.1	63.2	1600
180808	180808 cunj B1 R1	1106	454.8	295.5	200
		1111	304.6	288.3	1600
180808	180808 cunj B1 R2	1121	379.2	270.7	200
		1126	295.8	284.5	1600
180808	180808 cunj B1 R3	1136	492.3	371.5	200
		1141	403.5	389.3	1600
180808	180808 piog B1 R1	1153	1197.7	510.3	200
		1158	405.1	359.1	1600
180808	180808 piog B1 R2	1209	1215	566.5	200
		1214	413.6	368.8	1600
180808	180808 piog B1 R3	1224	1082.2	459.2	200
		1230	379.1	342.8	1600
180808	180808 akhs B1 R1	1242	1170.4	641	200
		1248	689.4	629.4	1600
180808	180808 akhs B1 R2	1257	870	489.2	200
		1302	541.4	499.3	1600
180808	180808 akhs B1 R3	1312	1049.5	609.7	200
		1318	693.7	645.8	1600
180808	180808 plif B1 R1	1336	200	116.7	200
		1341	102.6	94.3	1600

180808	180808 plif B1 R2	1350	198.5	125.1	200
		1356	111.9	105.1	1600
180808	180808 plif B1 R3	1405	143.4	96.4	200
		1411	91.3	86.7	1600
180808	180808 taca B1 R1	1421	1151	803.5	200
		1426	851	809.9	1600
180808	180808 taca B1 R2	1437	1054.7	755.1	200
		1443	811.6	774.6	1600
180808	180808 taca B1 R3	1454	1049.4	682.6	200
		1459	724.1	678.1	1600
180808	180808 ppsd B1 R1	1512	287.3	172.9	200
		1518	155.4	146.7	1600
180808	180808 ppsd B1 R2	1530	336.2	211.9	200
		1535	234.2	217.9	1600
180808	180808 ppsd B1 R3	1547	463.7	255.4	200
		1552	269.3	246.4	1600
180808	180808 piar B1 R1	1605	526.8	319.7	200
		1610	352.5	330	1600
180808	180808 piar B1 R2	1620	602.5	371.6	200
		1625	394.7	368.3	1600
180808	180808 piar B1 R3	1635	669.5	391.8	200
		1640	414.6	383.8	1600
180808	180808 piap B1 R1	1652	1397.3	650.4	200
		1657	506.1	457.1	1600
180808	180808 piap B1 R2	1708	1067	449.4	200
		1715	314.1	276.1	1600
180808	180808 piap B1 R3	1726	543	314.7	200
		1731	240	223	1600

180808	180808 pisp B1 R1	1742	293	150.5	200
		1747	143.1	127.6	1600
180808	180808 pisp B1 R2	1756	263.7	148.4	200
		1801	160.7	142.7	1600
180808	180808 pisp B1 R3	1810	282.7	139.6	200
		1815	134.7	118.5	1600

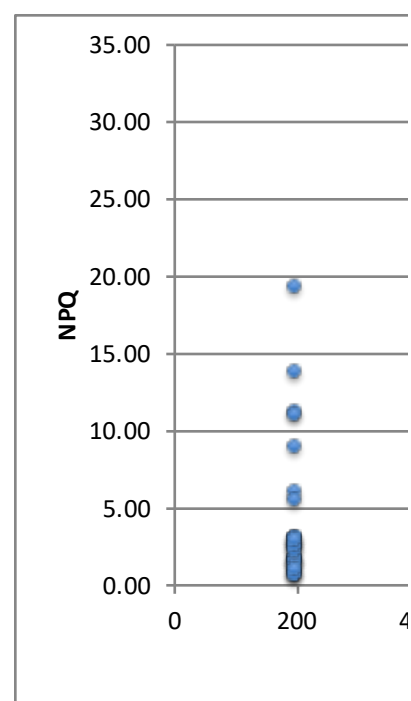
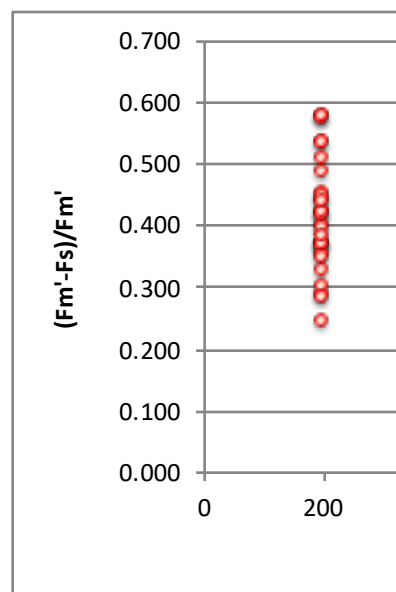
Tleaf	After Dark Pulse			After Dark adapting		calculated (Fm'-Fs)/Fm'
	Fv'	Fs	Fo'	Fm	Fo	
25.1	35	75.7	43	402.324	78.34	0.370
25.1						0.000
25.1	27	46	19.8	502.517	106.211	0.368
25.0						0.025
25.1	34	63.2	31.4	1161.82	210.144	0.363
25.1						0.029
25.1	115	288.3	189.8	1481.68	316.7	0.350
25.1						0.054
25.1	130	284.5	165.6	1428.29	271.089	0.286
25.1						0.038
25.2	170	389.3	233.8	1956.43	346.944	0.245
25.1						0.035
25.0	157	359.1	248.4	1911.18	358.578	0.574
25.0						0.114
25.1	169	368.8	244.6	2026.72	356.744	0.534
25.1						0.108
25.0	141	342.8	238	1797.26	373.389	0.576
25.0						0.096
25.0	228	629.4	461.8	3030.39	543.722	0.452
25.0						0.087
25.0	191	499.3	350.4	2210.69	406.189	0.438
25.0						0.078
25.0	310	645.8	384.2	2491.09	433.489	0.419
25.0						0.069
25.1	49	94.3	53.4	2950.57	474.533	0.417
25.1						0.081

25.1	50	105.1	61.6	2376.04	395.289	0.370
25.1						0.061
25.1	42	86.7	49.8	2887.56	473.11	0.328
25.0						0.050
25.0	422	809.9	429.4	2892.85	531.311	0.302
25.0						0.048
25.0	396	774.6	416	2649.03	494.189	0.284
25.0						0.046
25.0	344	678.1	380.6	2572.51	459.022	0.350
25.0						0.064
25.1	73	146.7	82.4	713.761	131.978	0.398
25.0						0.056
25.1	101	217.9	133.2	1188.33	191.333	0.370
25.0						0.070
25.1	114	246.4	155.4	1444.56	236.244	0.449
25.1						0.085
25.1	145	330	207.4	2084.93	297.844	0.393
25.1						0.064
25.1	141	368.3	254	2372.94	410.322	0.383
25.0						0.067
25.1	152	383.8	263	2325.19	414.244	0.415
25.1						0.074
25.0	194	457.1	312.4	2874.72	492.033	0.535
25.0						0.097
25.2	134	276.1	180.2	1699.58	281.944	0.579
25.0						0.121
25.1	99	223	141.4	1069.18	175.767	0.420
25.1						0.071

25.0	68	127.6	74.6	2894.14	425.244	0.486
25.0						0.108
25.1	72	142.7	88.6	2181.55	355.656	0.437
25.0						0.112
25.1	72	118.5	63.2	2614.75	424.456	0.506
25.1						0.120



calculated Fv'/Fm'	calculated Fv/Fm	calculated NPQ	for plotting Fv/Fm
0.635 0.447	0.805	2.42 4.17	0
0.727 0.581	0.789	5.92 9.65	0
0.674 0.518	0.819	11.05 16.85	0
0.583 0.377	0.786	2.26 3.86	0
0.563 0.440	0.810	2.77 3.83	0
0.525 0.421	0.823	2.97 3.85	0
0.793 0.387	0.812	0.60 3.72	0
0.799 0.409	0.824	0.67 3.90	0
0.780 0.372	0.792	0.66 3.74	0
0.605 0.330	0.821	1.59 3.40	0
0.597 0.353	0.816	1.54 3.08	0
0.634 0.446	0.826	1.37 2.59	0
0.733 0.480	0.839	13.75 27.76	0

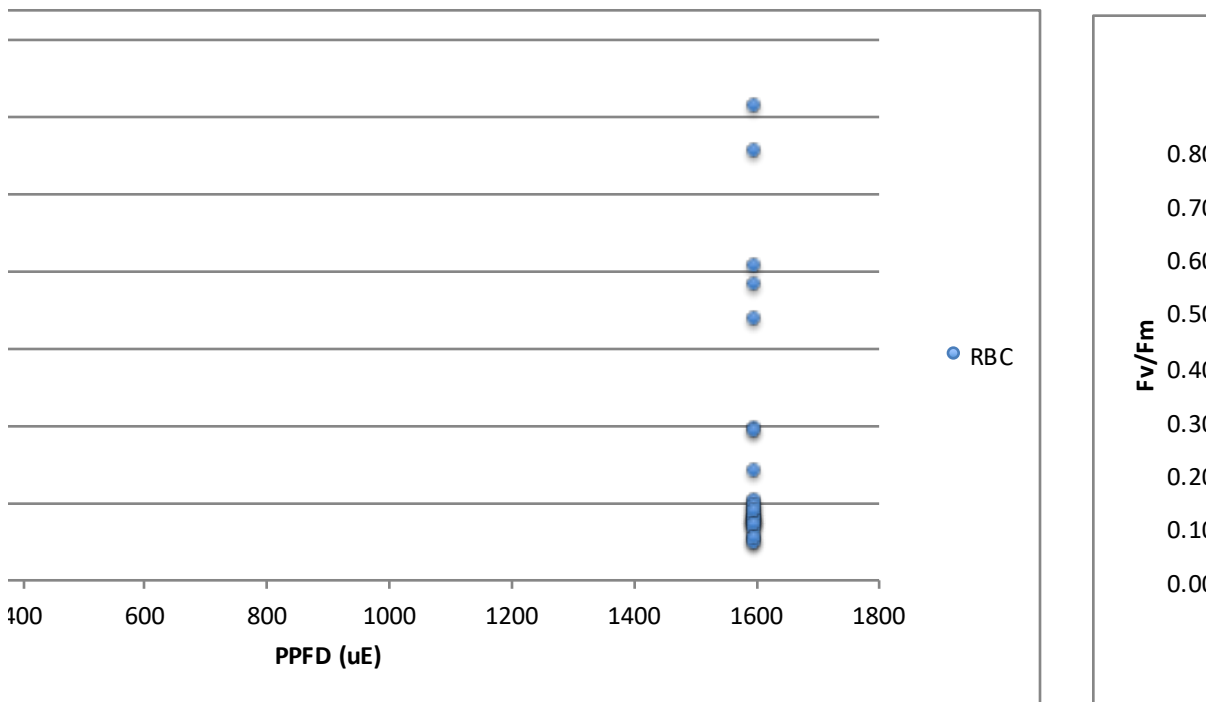
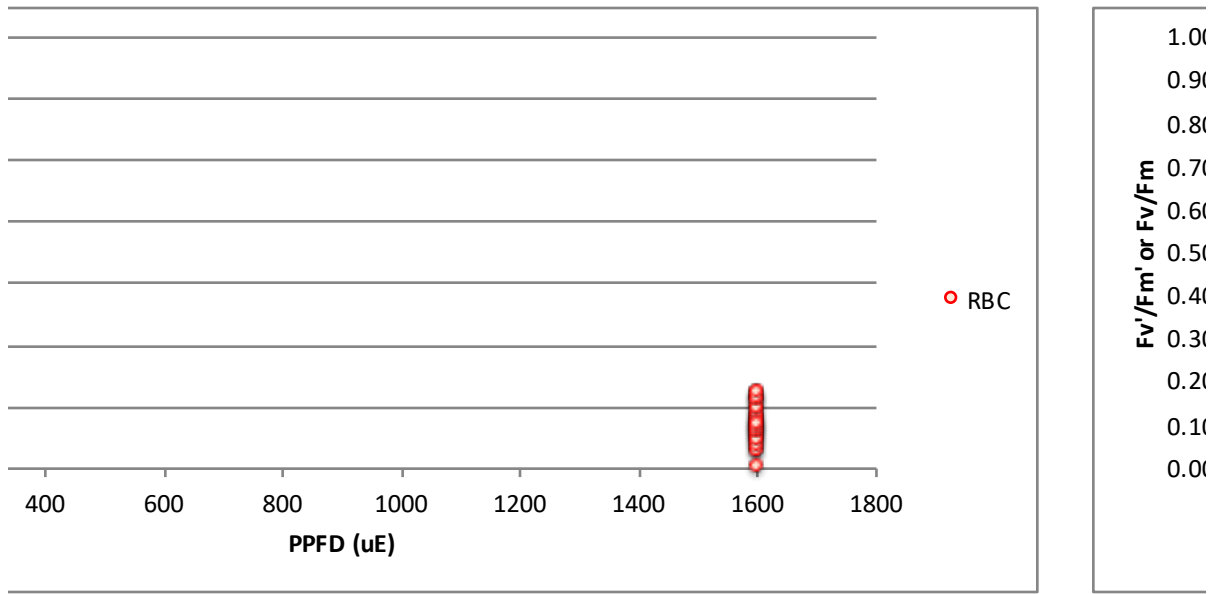


0.690	0.834	10.97	0
0.450		20.23	
0.653	0.836	19.14	0
0.455		30.63	
0.627	0.816	1.51	0
0.495		2.40	
0.606	0.813	1.51	0
0.487		2.26	
0.637	0.822	1.45	0
0.474		2.55	
0.713	0.815	1.48	0
0.470		3.59	
0.604	0.839	2.53	0
0.431		4.07	
0.665	0.836	2.12	0
0.423		4.36	
0.606	0.857	2.96	0
0.412		4.91	
0.578	0.827	2.94	0
0.356		5.01	
0.607	0.822	2.47	0
0.366		4.61	
0.776	0.829	1.06	0
0.383		4.68	
0.831	0.834	0.59	0
0.426		4.41	
0.740	0.836	0.97	0
0.411		3.45	

0.745	0.853	8.81	0
0.479		19.09	

0.664	0.837	5.45	0
0.449		9.58	

0.776	0.838	2.78	0
0.531		6.94	















Fv/Fm

◆ RBC





Date	Sample	Pulses in light			
		Pulse Time	Fm'	Fs	Qin
180809	180809 pinp B1 R1	1103	323.2	155.5	200
		1108	127.6	109.1	1600
180809	180809 pinp B1 R2	1117	209.1	105.8	200
		1123	95.4	83.2	1600
180809	180809 pinp B1 R3	1133	290.2	153.9	200
		1138	133.9	119.5	1600
180809	180809 pipp B1 R1	1150	751.3	442.2	200
		1155	458.6	419.7	1600
180809	180809 pipp B1 R2	1207	684.9	418.3	200
		1212	452.7	417.2	1600
180809	180809 pipp B1 R3	1223	660.7	410.3	200
		1228	425.9	396	1600
180809	180809 cade B1 R1	1247	530.5	321.8	200
		1252	335.3	314.6	1600
180809	180809 cade B1 R2	1309	479.4	364.9	200
		1314	321.2	302.6	1600
180809	180809 cade B1 R3	1325	604.6	399.4	200
		1330	456	431.2	1600
180809	180809 pian B1 R1	1348	751.9	547.3	200
		1353	479.3	464.1	1600
180809	180809 pian B1 R2	1407	1064	600.5	200
		1413	490.6	460.1	1600
180809	180809 pian B1 R3	1422	803.4	508	200
		1428	465.3	437.8	1600
180809	180809 jscc B1 R1	1440	478.1	319.4	200
		1445	337.4	320.8	1600

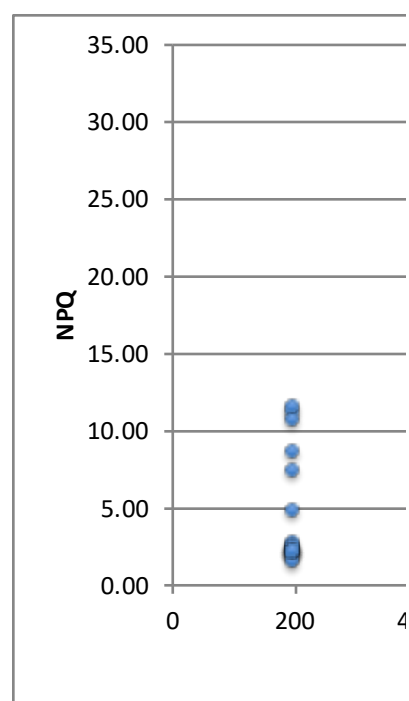
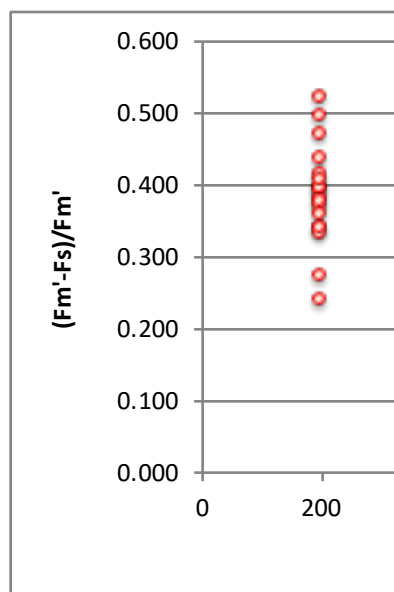
180809	180809	jssc B1 R2	1455	528.2	319.9	200
			1500	321.7	302.7	1600
180809	180809	jssc B1 R3	1515	594.6	381.3	200
			1520	429.3	408.4	1600
180809	180809	pizs B1 R1	1532	275.1	171.3	200
			1537	163.8	153.9	1600
180809	180809	pizs B1 R2	1546	188.1	124.3	200
			1551	123.4	116.3	1600
180809	180809	pizs B1 R3	1614	331.6	197.7	200
			1619	183.1	172.1	1600

Tleaf	After Dark Pulse			After Dark adapting		calculated (Fm'-Fs)/Fm'
	Fv'	Fs	Fo'	Fm	Fo	
25.1	67	109.1	61	3881.68	640.367	0.519
25.0						0.145
25.0	49	83.2	46	1991	340.667	0.494
25.0						0.128
25.0	55	119.5	78.8	2383.07	423.033	0.470
25.0						0.108
25.1	162	419.7	296.2	2483.1	379.544	0.411
25.1						0.085
25.1	163	417.2	289.6	2130.75	358.722	0.389
25.1						0.078
25.1	147	396	279	2450.21	393.678	0.379
25.1						0.070
25.1	150	314.6	185.4	1635.79	368.078	0.393
25.1						0.062
25.0	153	302.6	168	1527.23	287.7	0.239
25.0						0.058
25.1	210	431.2	245.6	2101.83	385.556	0.339
25.0						0.054
25.1	117	464.1	362.6	2468.58	758.8334	0.272
25.1						0.032
25.1	138	460.1	352.8	2514.61	640.533	0.436
25.1						0.062
25.1	126	437.8	339.6	2340.36	605.167	0.368
25.1						0.059
25.1	139	320.8	198	1525.41	276.3	0.332
25.1						0.049

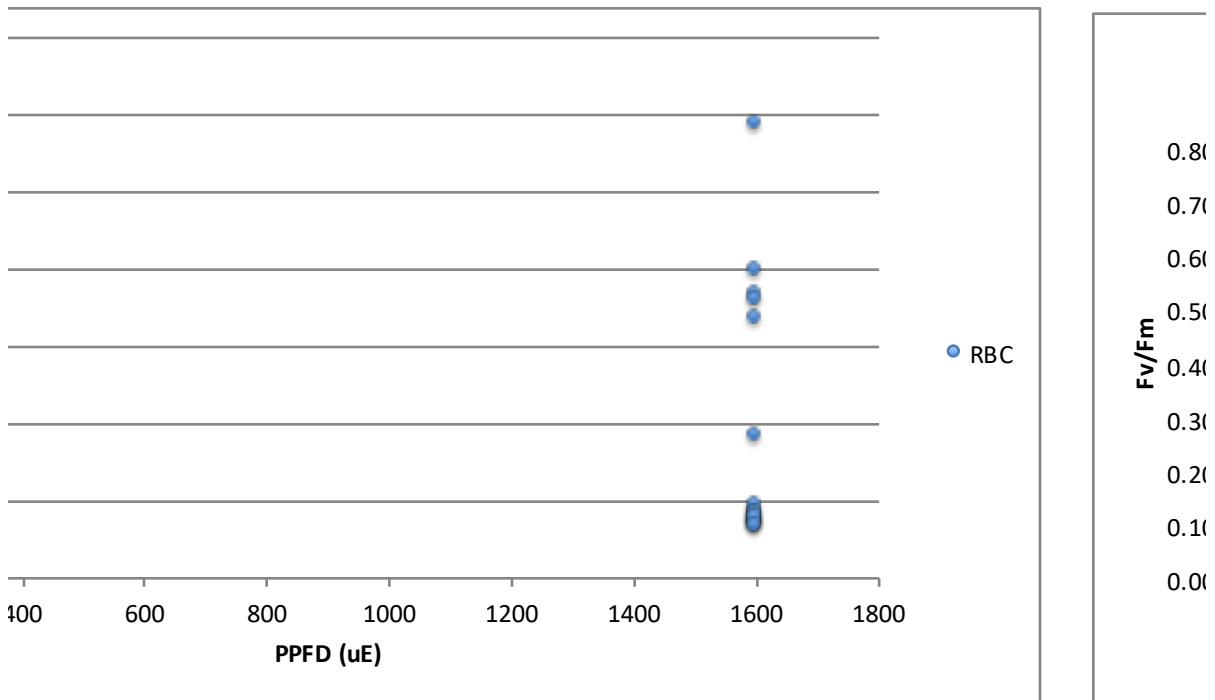
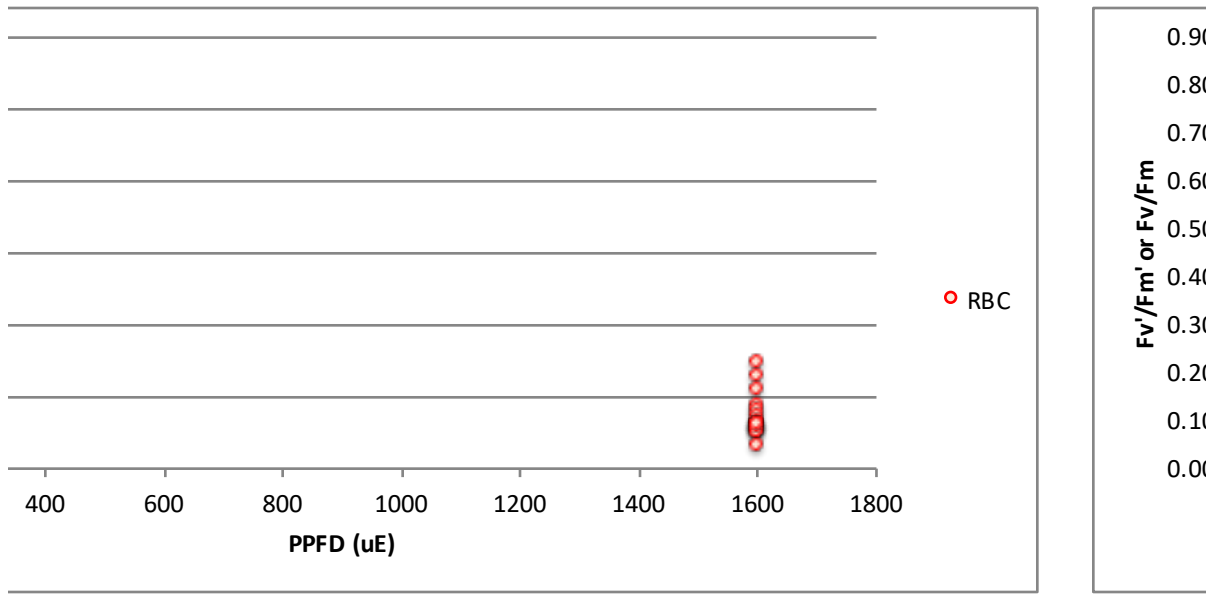
25.1	132	302.7	190.2	1554.06	281.867	0.394
25.1						0.059
25.1	189	408.4	240.4	1888.94	330.578	0.359
25.1						0.049
25.1	68	153.9	95.4	3164.47	509.889	0.377
25.0						0.060
25.1	50	116.3	73.6	2338.8	405.611	0.339
25.1						0.058
25.1	67	172.1	116.4	1870.38	318.9	0.404
25.0						0.060



calculated Fv'/Fm'	calculated Fv/Fm	calculated NPQ	for plotting Fv/Fm
0.811 0.522	0.835	11.01 29.42	0
0.780 0.518	0.829	8.52 19.87	0
0.728 0.412	0.822	7.21 16.80	0
0.606 0.354	0.847	2.31 4.41	0
0.577 0.360	0.832	2.11 3.71	0
0.578 0.345	0.839	2.71 4.75	0
0.651 0.447	0.775	2.08 3.88	0
0.650 0.477	0.812	2.19 3.75	0
0.594 0.461	0.817	2.48 3.61	0
0.518 0.243	0.693	2.28 4.15	0
0.668 0.281	0.745	1.36 4.13	0
0.577 0.270	0.741	1.91 4.03	0
0.586 0.413	0.819	2.19 3.52	0



0.640	0.819	1.94	0
0.409		3.83	
0.596	0.825	2.18	0
0.440		3.40	
0.653	0.839	10.50	0
0.418		18.32	
0.609	0.827	11.43	0
0.404		17.95	
0.649	0.829	4.64	0
0.364		9.22	









Fv/Fm

◆ RBC





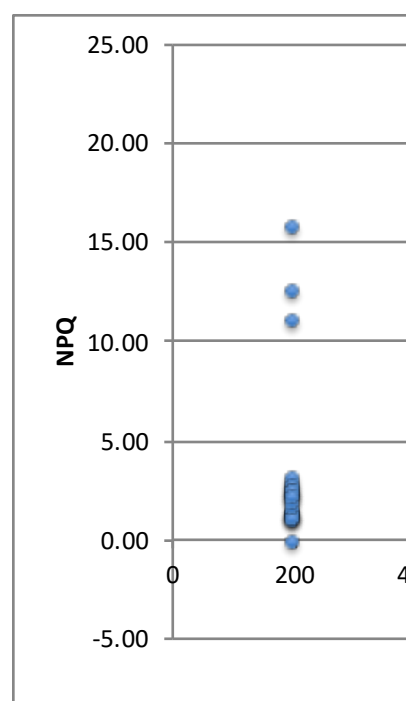
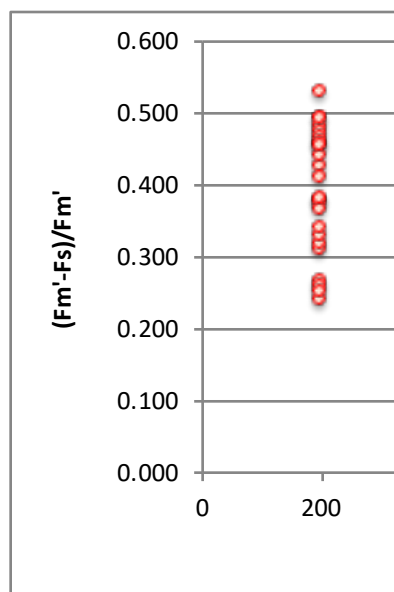
Date	Sample	Pulses in light			
		Pulse Time	Fm'	Fs	Qin
180810	180810 jsba B1 R1	1045	451.1	229.6	200
		1050	215.9	199.9	1600
180810	180810 jsba B1 R2	1103	370.9	192.3	200
		1107	173.3	159.1	1600
180810	180810 jsba B1 R3	1117	498.8	235.8	200
		1122	218.1	199.5	1600
180810	180810 ceag B1 R1	1158	436.8	302	200
		1203	298.7	285.6	1600
180810	180810 ceag B1 R2	1213	475	324.1	200
		1218	382.2	315.4	1600
180810	180810 ceag B1 R3	1228	441.4	335.8	200
		1233	346.2	336.8	1600
180810	180810 cagp B1 R1	1245	1301.9	751.5	200
		1250	823.5	742.2	1600
180810	180810 cagp B1 R2	1301	1391.1	757.6	200
		1306	789.8	706	1600
180810	180810 cagp B1 R3	1315	1011	629.8	200
		1321	662.2	609.8	1600
180810	180810 pasc B1 R1	1337	1024.4	541.2	200
		1342	557.1	513.1	1600
180810	180810 pasc B1 R2	1354	1214.2	650.2	200
		1359	678.1	624.9	1600
180810	180810 pasc B1 R3	1413	1044.2	568.2	200
		1419	620.2	573.7	1600
180810	180810 jvgc B1 R1	1437	565.2	287.8	200
		1442	281.8	262.1	1600

180810 180810 jvgc B1 R2	1453	464.6	290	200
	1459	280.8	267.5	1600
180810 180810 jvgc B1 R3	1508	789	441.3	200
	1513	432.1	404.2	1600
180810 180810 cdcp B1 R1	1527	555.4	329.1	200
	1532	365.6	341.3	1600
180810 180810 cdcp B1 R2	1544	740.9	469.7	200
	1549	529	501.5	1600
180810 180810 cdcp B1 R3	1559	1082.2	589.7	200
	1604	608	562	1600
180810 180810 pisy B1 R1	1616	149.8	100.9	200
	1621	112.7	107.3	1600
180810 180810 pisy B1 R2	1631	116.7	77	200
	1636	76.2	73.3	1600
180810 180810 pisy B1 R3	1646	108.1	66.9	200
	1651	77.6	72.2	1600
180810 180810 tdcf B1 R1	1700	551.8	405.5	200
	1705	481.2	463.4	1600
180810 180810 tdcf B1 R2	1715	623.5	463.3	200
	1720	504.1	489.1	1600
180810 180810 tdcf B1 R3	1730	643.2	483.5	200
	1735	569.3	551.1	1600

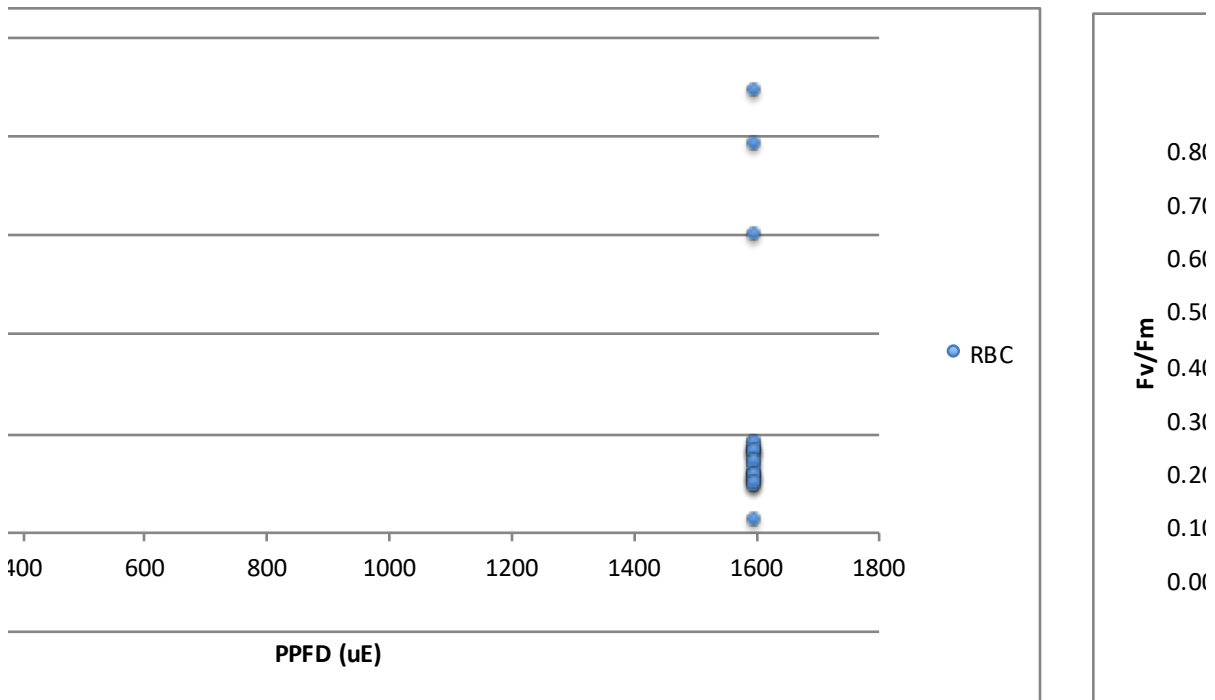
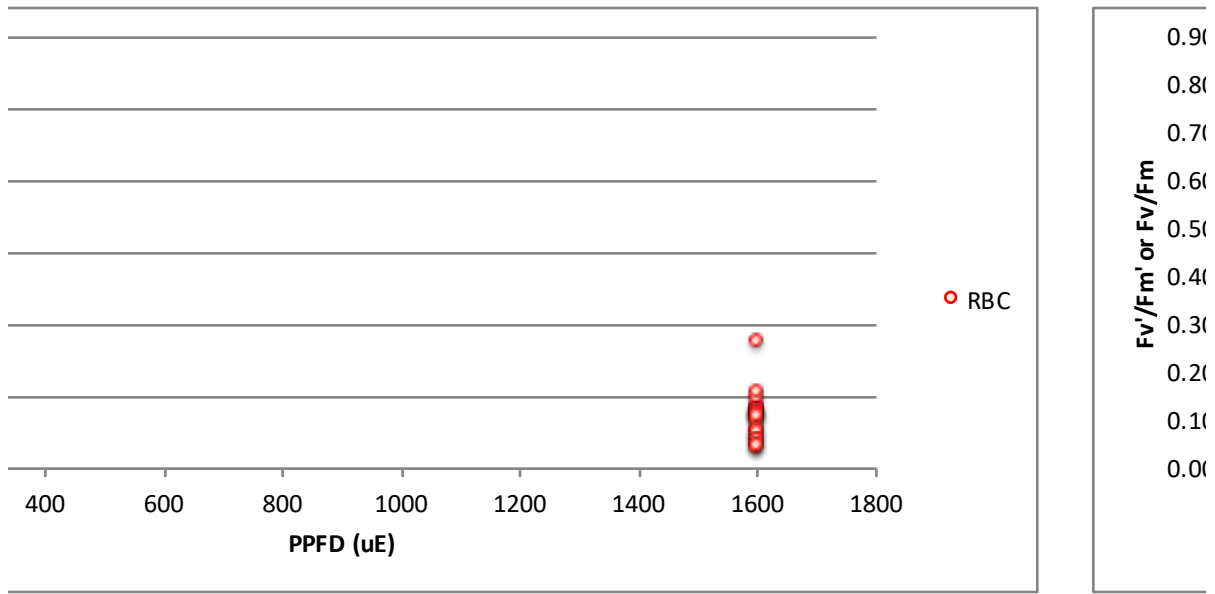
Tleaf	After Dark Pulse			After Dark adapting		calculated (Fm'-Fs)/Fm'
	Fv'	Fs	Fo'	Fm	Fo	
25.1	84	199.9	131.6	328.445	68.8444	0.491
25.0						0.074
25.0	72	159.1	101.8	845.789	166.878	0.482
25.1						0.082
25.1	90	199.5	128	1073.83	208.456	0.527
25.1						0.085
25.0	97	285.6	201.2	1618.93	346.289	0.309
25.0						0.044
25.1	87	315.4	241	1658.51	361.033	0.318
25.0						0.175
25.1	86	336.8	259.8	1759.01	376.689	0.239
25.0						0.027
25.0	315	742.2	508.8	4207.3	661.022	0.423
25.0						0.099
25.1	276	706	513.4	4150.58	649.978	0.455
25.0						0.106
25.2	226	609.8	436.6	3594.54	589.933	0.377
25.0						0.079
25.1	226	513.1	436.6	2180.83	399.544	0.472
25.1						0.079
25.1	288	624.9	390	2606.06	461.756	0.465
25.0						0.078
25.1	287	573.7	333.4	2389.66	389.889	0.456
25.0						0.075
25.0	149	262.1	133.2	1060.92	191.822	0.491
25.1						0.070

25.0	162	267.5	119.2	924.118	161.967	0.376
25.0						0.047
25.1	257	404.2	175	1533.95	255.856	0.441
25.1						0.065
25.0	133	341.3	232.2	1859.16	297.467	0.407
25.0						0.066
25.2	218	501.5	310.8	2225.29	369.456	0.366
25.2						0.052
25.1	231	562	376.6	2717.03	454.733	0.455
25.1						0.076
25.1	51	107.3	62.2	1796.2	277.144	0.326
25.1						0.048
25.1	34	73.3	42.4	1570.43	284.411	0.340
25.0						0.038
25.1	47	72.2	31	1806.16	290.744	0.381
25.0						0.070
25.1	551.8	405.5	405.5	1834.97	358.056	0.265
25.0						0.037
25.1	228	489.1	276.4	1702.43	342.422	0.257
25.1						0.030
25.1	232	551.1	337	1956.11	390.011	0.248
25.3						0.032

calculated Fv'/Fm'	calculated Fv/Fm	calculated NPQ	for plotting Fv/Fm
0.708 0.390	0.790	-0.27 0.52	0
0.726 0.413	0.803	1.28 3.88	0
0.743 0.413	0.806	1.15 3.92	0
0.539 0.326	0.786	2.71 4.42	0
0.493 0.369	0.782	2.49 3.34	0
0.411 0.250	0.786	2.99 4.08	0
0.609 0.382	0.843	2.23 4.11	0
0.631 0.350	0.843	1.98 4.26	0
0.568 0.341	0.836	2.56 4.43	0
0.574 0.216	0.817	1.13 2.91	0
0.679 0.425	0.823	1.15 2.84	0
0.681 0.462	0.837	1.29 2.85	0
0.764 0.527	0.819	0.88 2.76	0



0.743	0.825	0.99	0
0.575		2.29	
0.778	0.833	0.94	0
0.595		2.55	
0.582	0.840	2.35	0
0.365		4.09	
0.581	0.834	2.00	0
0.412		3.21	
0.652	0.833	1.51	0
0.381		3.47	
0.585	0.846	10.99	0
0.448		14.94	
0.637	0.819	12.46	0
0.444		19.61	
0.713	0.839	15.71	0
0.601		22.28	
0.265	0.805	2.33	0
0.157		2.81	
0.557	0.799	1.73	0
0.452		2.38	
0.476	0.801	2.04	0
0.408		2.44	











Fv/Fm

◆ RBC



Date	Sample	Pulses in light			
		Pulse Time	Fm'	Fs	Qin
180813	180813 juco B1 R1	1003	881.2	381.8	200
		1008	328.8	304.6	1600
180813	180813 juco B1 R2	1017	820.7	401.2	200
		1022	340.8	313.4	1600
180813	180813 juco B1 R3	1031	796.5	442.5	200
		1037	428.8	398.5	1600
180813	180813 pmgg B1 R1	1135	1084.2	584.2	200
		1140	551.2	520.6	1600
180813	180813 pmgg B1 R2	1150	867.4	507.9	200
		1155	479	452.2	1600
180813	180813 pmgg B1 R3	1220	798.7	505.9	200
		1225	486	460.8	1600
180813	180813 tabr B1 R1	1242	927	620.1	200
		1248	667.9	628.6	1600
180813	180813 tabr B1 R2	1257	798.7	650.6	200
		1302	666.6	647.1	1600
180813	180813 tabr B1 R3	1311	940	633.1	200
		1316	717.6	677.5	1600
180813	180813 cdss B1 R1	1333	1021.3	804.3	200
		1338	676.8	660.2	1600
180813	180813 cdss B1 R2	1349	730.3	578.8	200
		1354	517.8	505.7	1600
180813	180813 cdss B1 R3	1404	1161.8	903.9	200
		1410	783.2	764.1	1600
180813	180813 abam B1 R1	1425	1972.2	1197.9	200
		1430	815.9	751.3	1600

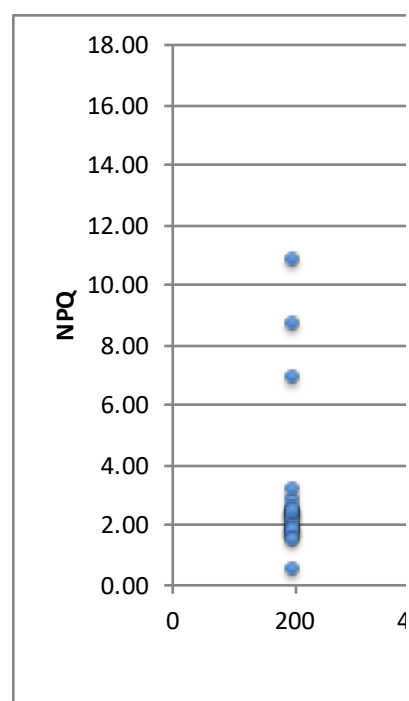
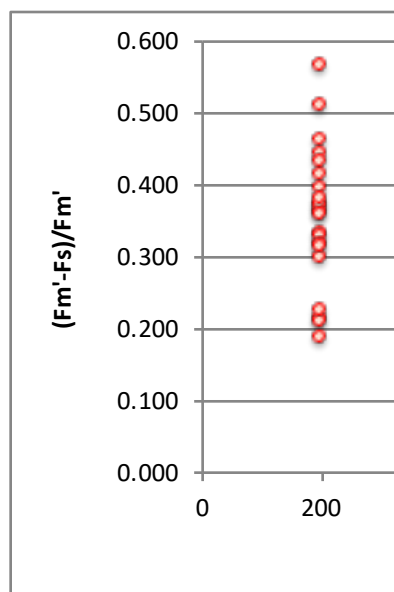
180813 180813 abam B1 R2	1441	749.8	479.5	200
	1447	480.2	457.9	1600
180813 180813 abam B1 R3	1459	614.2	385.5	200
	1504	388.3	370.2	1600
180813 180813 celi B1 R1	1522	953	541.3	200
	1528	613.5	565.4	1600
180813 180813 celi B1 R2	1539	921.2	593	200
	1544	681.6	643.8	1600
180813 180813 celi B1 R3	1554	727.9	451.2	200
	1559	545.5	514.4	1600
180813 180813 pfvp B1 R1	1610	187.6	131.5	200
	1615	133.2	127.4	1600
180813 180813 pfvp B1 R2	1625	192.3	131.7	200
	1630	141.3	134.8	1600
180813 180813 pfvp B1 R3	1640	188.7	129.7	200
	1645	138.5	131.6	1600

Tleaf	After Dark Pulse			After Dark adapting		calculated (Fm'-Fs)/Fm'
	Fv'	Fs	Fo'	Fm	Fo	
25.2	138	304.6	190.8	2889.64	516.122	0.567
25.1						0.074
25.1	139	313.4	201.8	3117.9	533.978	0.511
25.0						0.080
25.0	139	398.5	201.8	3304.92	574.867	0.444
25.1						0.071
25.1	178	520.6	373	3510.99	572.444	0.461
25.2						0.056
25.1	148	452.2	331.4	2961.21	489.333	0.414
25.1						0.056
25.0	156	460.8	330	2678.74	478.867	0.367
25.1						0.052
25.2	324	628.6	344.2	2848.09	464.1	0.331
25.3						0.059
25.1	388	647.1	279	2206.76	408.811	0.185
25.0						0.029
25.1	325	677.5	392.2	3106.2	548.333	0.326
25.1						0.056
25.0	127	660.2	549.6	2812.78	1047.38	0.212
25.1						0.025
25.0	132	505.7	385.8	2110.51	708.467	0.207
25.1						0.023
25.2	177	764.1	606	3022.65	1102.88	0.222
25.1						0.024
25.0	160	751.3	655.8	2918.54	1115.21	0.393
25.0						0.079

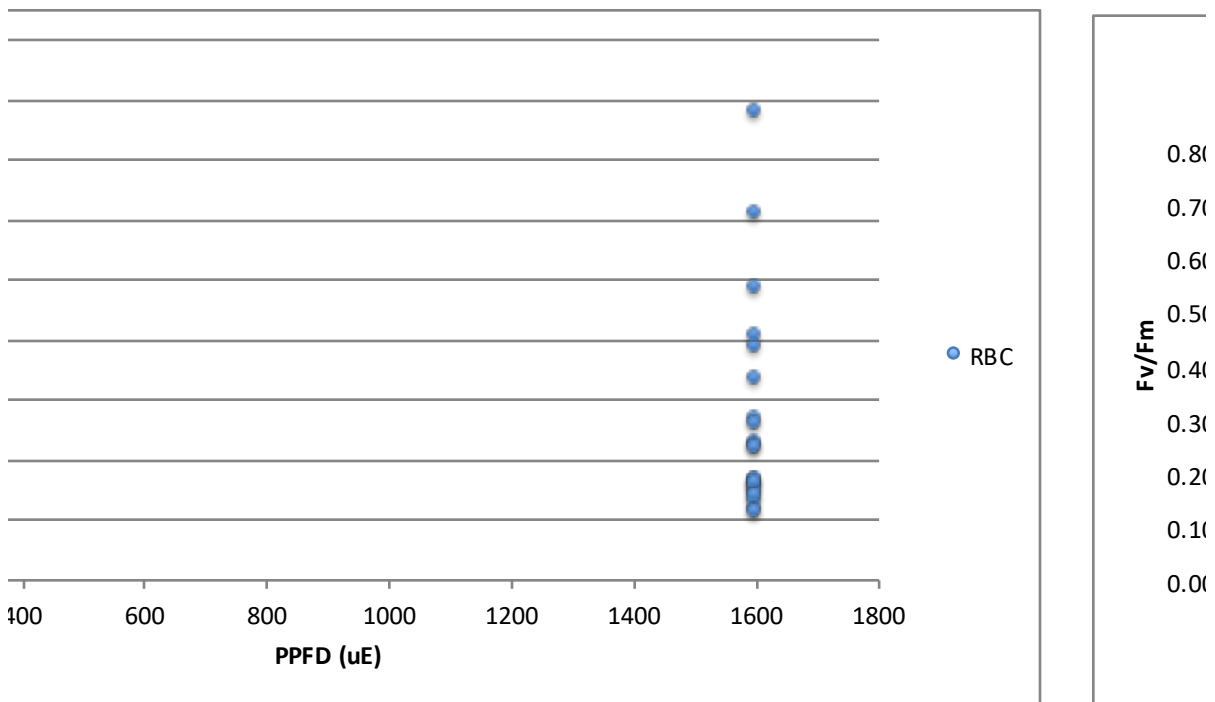
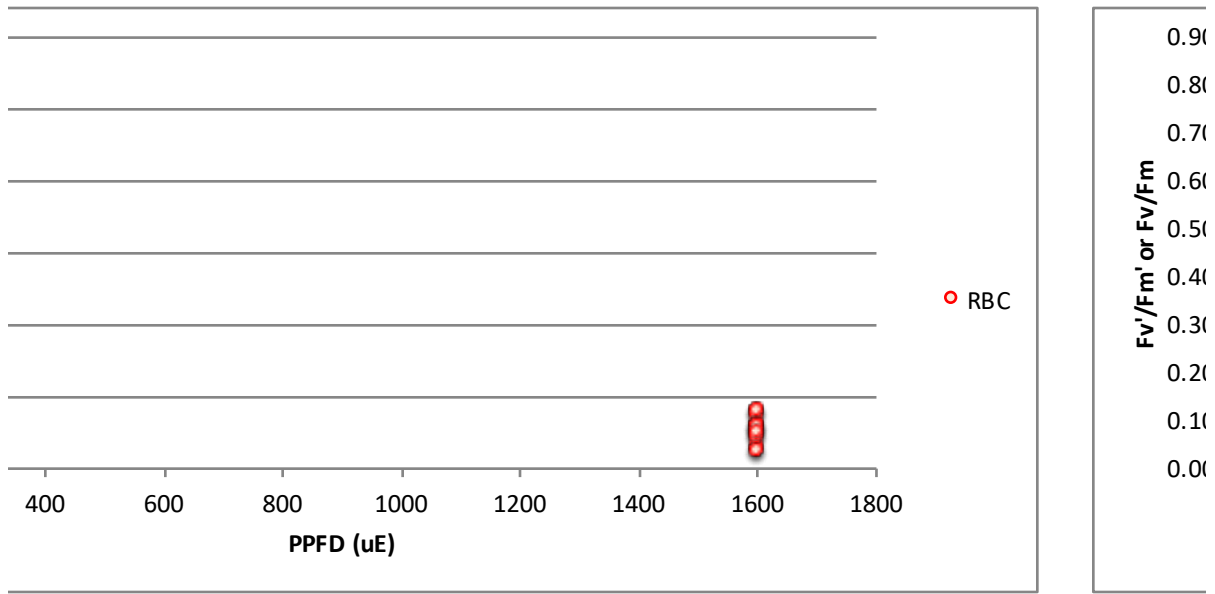
25.0	176	457.9	304.6	2643.1	472.789	0.360
25.1						0.046
25.1	138	370.2	242.2	2099.87	386.667	0.372
25.0						0.047
25.1	266	565.4	347.4	2595.85	427.144	0.432
25.1						0.078
25.1	311	643.8	370.6	2586.8	428.933	0.356
25.1						0.055
25.1	291	514.4	254.8	1749.82	300.578	0.380
25.0						0.057
25.0	55	127.4	78.6	2212.16	396.733	0.299
25.0						0.044
25.1	56	134.8	85.8	1510.31	292.244	0.315
25.0						0.046
25.1	60	131.6	78.8	1823.83	316.233	0.313
25.0						0.050



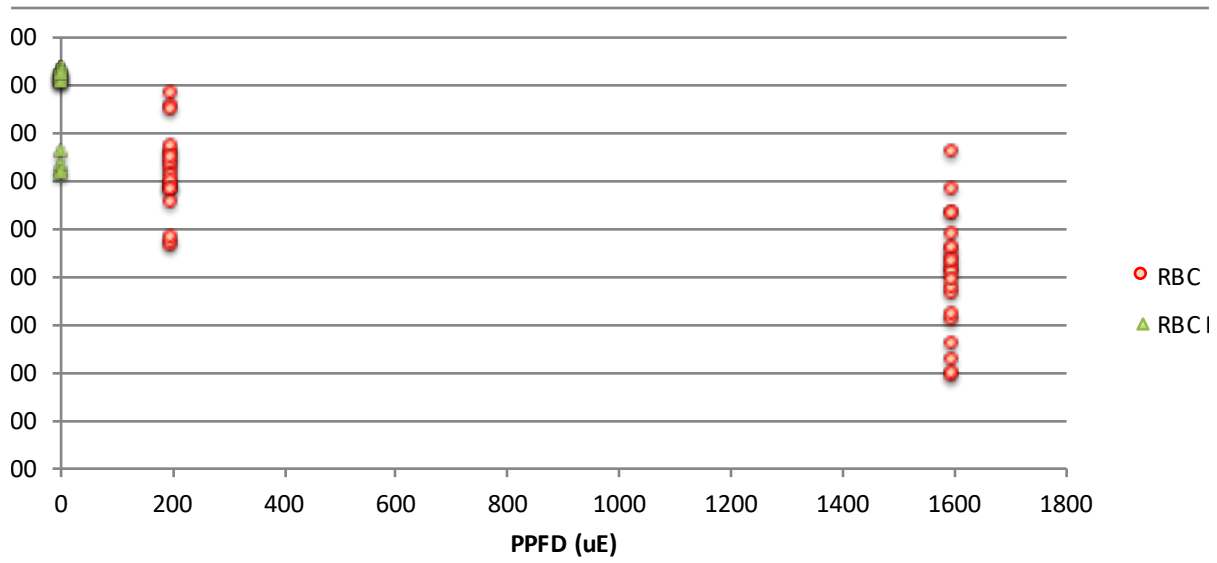
calculated Fv'/Fm'	calculated Fv/Fm	calculated NPQ	for plotting Fv/Fm
0.783 0.420	0.821	2.28 7.79	0
0.754 0.408	0.829	2.80 8.15	0
0.747 0.529	0.826	3.15 6.71	0
0.656 0.656	0.837	2.24 5.37	0
0.618 0.308	0.835	2.41 5.18	0
0.587 0.321	0.821	2.35 4.51	0
0.629 0.485	0.837	2.07 3.26	0
0.651 0.581	0.815	1.76 2.31	0
0.583 0.453	0.823	2.30 3.33	0
0.462 0.188	0.628	1.75 3.16	0
0.472 0.255	0.664	1.89 3.08	0
0.478 0.226	0.635	1.60 2.86	0
0.667 0.196	0.618	0.48 2.58	0



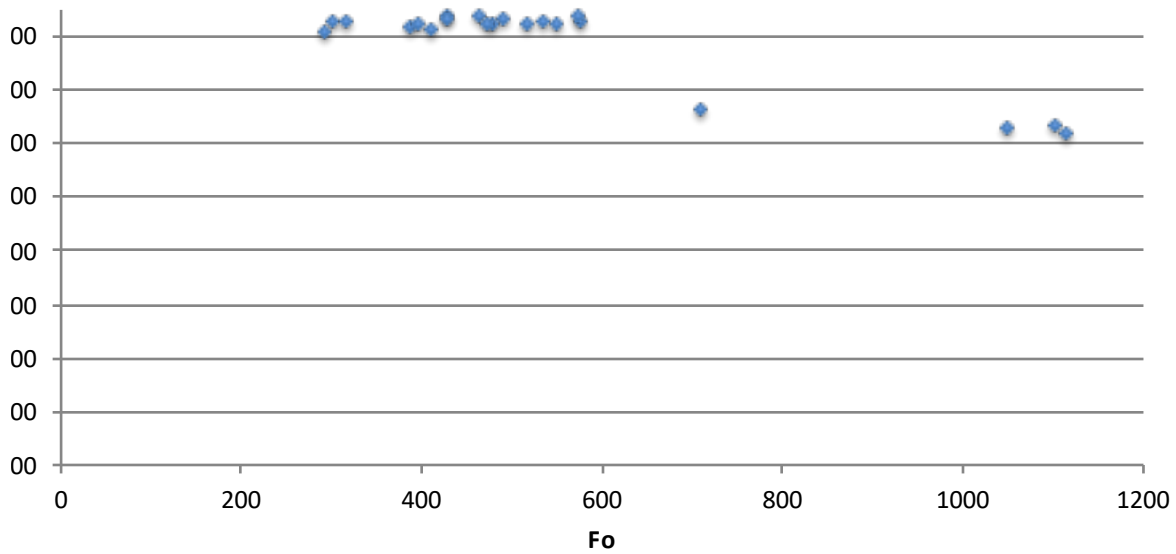
0.594	0.821	2.53	0
0.366		4.50	
0.606	0.816	2.42	0
0.376		4.41	
0.635	0.835	1.72	0
0.434		3.23	
0.598	0.834	1.81	0
0.456		2.80	
0.650	0.828	1.40	0
0.533		2.21	
0.581	0.821	10.79	0
0.410		15.61	
0.554	0.807	6.85	0
0.393		9.69	
0.582	0.827	8.67	0
0.431		12.17	







### dark adapted results - signal strength check





Fv/Fm

◆ RBC





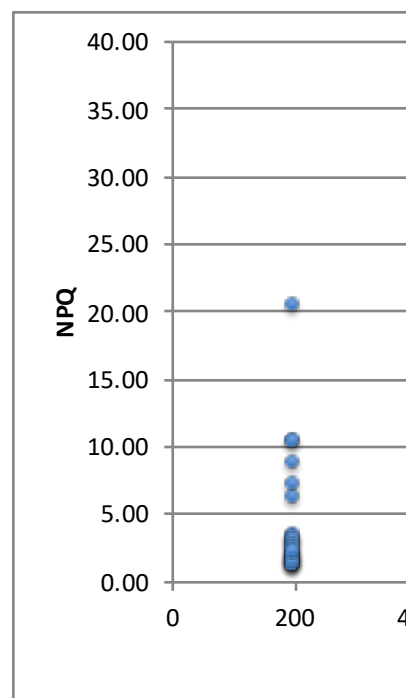
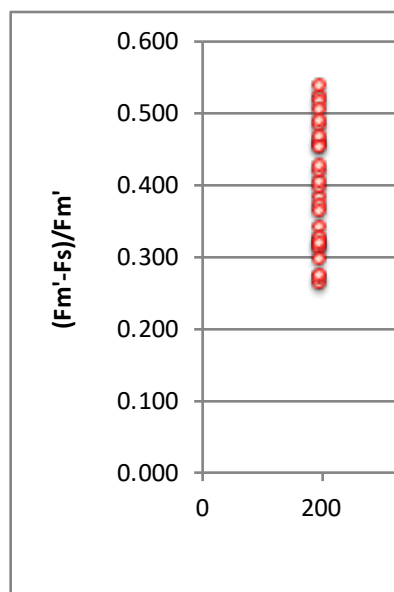
Date	Sample	Pulses in light			
		Pulse Time	Fm'	Fs	Qin
180814	180814 pars B1 R1	1020	1222.4	587.9	200
		1026	531.8	483.3	1600
180814	180814 pars B1 R2	1039	1065.6	519	200
		1044	480.2	433.3	1600
180814	180814 pars B1 R3	1053	1122.7	610.8	200
		1058	600.5	555.8	1600
180814	180814 sgpb B1 R1	1115	734.8	456.8	200
		1120	461.1	427.5	1600
180814	180814 sgpb B1 R2	1131	610.6	402.7	200
		1136	455.4	424.5	1600
180814	180814 sgpb B1 R3	1146	790.9	478.9	200
		1151	533.7	489.2	1600
180814	180814 pmup B1 R1	1202	549.6	379.6	200
		1207	387.2	366.6	1600
180814	180814 pmup B1 R2	1218	665.2	490.6	200
		1233	492.2	462.3	1600
180814	180814 pmup B1 R3	1255	632.6	463.6	200
		1300	463	441.8	1600
180814	180814 pipo B1 R1	1313	273.3	163.6	200
		1318	181.6	170.2	1600
180814	180814 pipo B1 R2	1329	342.4	170.6	200
		1334	150.5	139.3	1600
180814	180814 pipo B1 R3	1352	291.5	159.5	200
		1357	165	153.8	1600
180814	180814 piab B1 R1	1411	608.7	417.5	200
		1416	462.8	441.7	1600

180814 180814 piab B1 R2	1426	788.9	573	200
	1431	633.8	603.6	1600
180814 180814 piab B1 R3	1440	620.8	422.6	200
	1445	466.2	442.1	1600
180814 180814 pisp B1 R1	1455	243.2	141.6	200
	1500	128.5	120.8	1600
180814 180814 pisp B1 R2	1511	245.5	155.5	200
	1516	148.6	139.7	1600
180814 180814 pisp B1 R3	1527	171.1	109.2	200
	1532	104.2	99.3	1600
180814 180814 sgvm B1 R1	1548	443.8	231.7	200
	1553	253.1	223.5	1600
180814 180814 sgvm B1 R2	1603	1187.8	637.1	200
	1608	700.3	617.3	1600
180814 180814 sgvm B1 R3	1617	592.1	274.644	200
	1622	367.6	325.8	1600
180814 180814 piph B1 R1	1634	737.2	424.3	200
	1639	453.5	422.6	1600
180814 180814 piph B1 R2	1649	1042.7	574.9	200
	1654	593.4	549.6	1600
180814 180814 piph B1 R3	1704	1037.8	531.9	200
	1709	532.7	493.3	1600
180814 180814 jccm B1 R1	1719	1106.2	781.4	200
	1724	764.3	734.8	1600
180814 180814 jccm B1 R2	1733	808.3	545.2	200
	1738	560	532.6	1600
180814 180814 jccm B1 R3	1747	782.3	535.2	200
	1752	541.1	515.8	1600

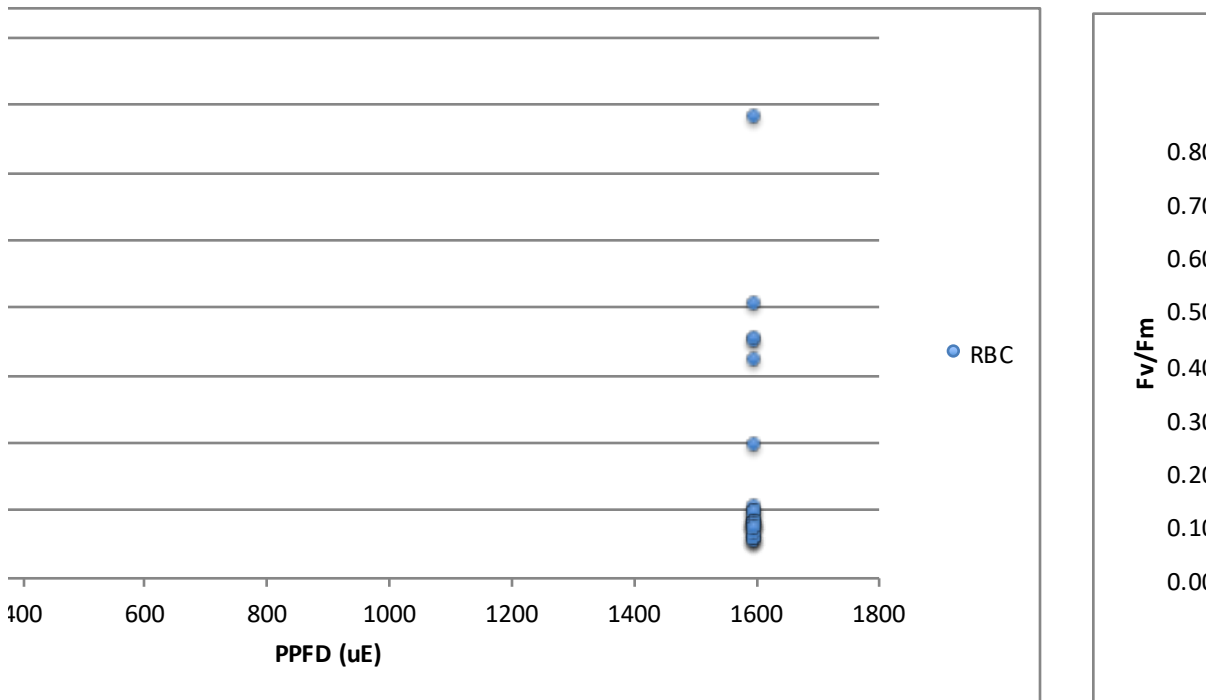
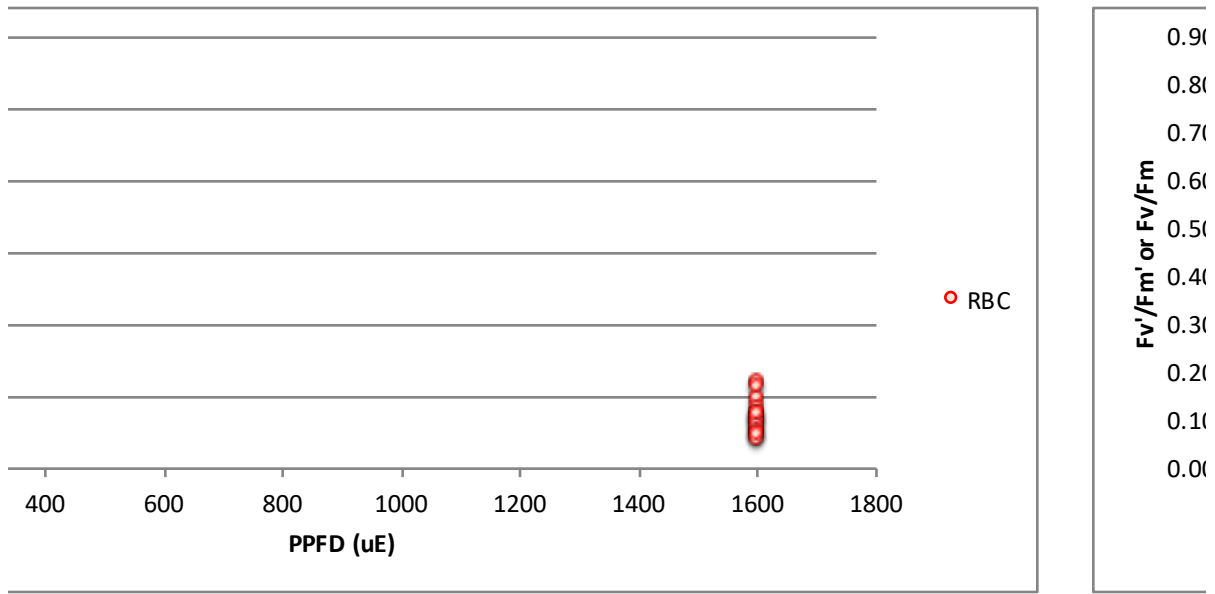
Tleaf	After Dark Pulse			After Dark adapting		calculated (Fm'-Fs)/Fm'
	Fv'	Fs	Fo'	Fm	Fo	
25.1	197	483.3	335.2	2842.16	511.822	0.519
25.1						0.091
25.2	163	433.3	316.8	2940.29	523.333	0.513
25.2						0.098
25.2	206	555.8	394	2959.76	538.656	0.456
25.1						0.074
25.0	198	427.5	262.8	1663.99	333.178	0.378
25.1						0.073
25.0	188	424.5	267.4	1741.98	329.011	0.340
25.0						0.068
25.0	241	489.2	292.4	1995.3	346.556	0.394
25.1						0.083
25.1	131	366.6	255.8	2207.36	345.256	0.309
25.1						0.053
25.1	156	462.3	335.8	2868.16	436.956	0.262
25.1						0.061
25.1	128	441.8	334.6	2663.83	399.911	0.267
25.0						0.046
25.0	85	170.2	96.4	1962.54	336.6	0.401
25.0						0.063
25.0	69	139.3	81.6	2762.22	467.056	0.502
25.1						0.074
25.0	81	153.8	84.2	2820.61	423.522	0.453
25.0						0.068
25.1	179	441.7	283.6	2294.53	417.067	0.314
25.1						0.046

25.0	212	603.6	422.2	3215.1	581.722	0.274
25.0						0.048
25.2	181	442.1	285	2206.43	400.633	0.319
25.0						0.052
25.1	47	120.8	81.2	2730.1	434.244	0.418
25.1						0.060
25.1	66	139.7	82.4	2780.76	442.3	0.367
25.0						0.060
25.1	43	99.3	60.8	3652.76	560.789	0.362
25.1						0.047
25.1	134	223.5	119	951.566	166.556	0.478
25.1						0.117
25.0	306	617.3	394.6	2732.17	494.433	0.464
25.1						0.119
25.0	157	325.8	211	1556.22	274.644	0.536
25.0						0.114
25.0	182	422.6	271.8	2274.47	339.7	0.424
25.0						0.068
25.1	228	549.6	365	2926.18	460.633	0.449
25.1						0.074
25.1	217	493.3	316	2602.16	407.067	0.487
25.0						0.074
25.0	273	734.8	491	3678.26	546.056	0.294
25.0						0.039
25.1	220	532.6	340	2522.05	387.678	0.325
25.1						0.049
25.0	185	515.8	356.2	2530.56	397.878	0.316
25.0						0.047

calculated Fv'/Fm'	calculated Fv/Fm	calculated NPQ	for plotting Fv/Fm
0.726 0.370	0.820	1.33 4.34	0
0.703 0.340	0.822	1.76 5.12	0
0.649 0.344	0.818	1.64 3.93	0
0.642 0.430	0.800	1.26 2.61	0
0.562 0.413	0.811	1.85 2.83	0
0.630 0.452	0.826	1.52 2.74	0
0.535 0.339	0.844	3.02 4.70	0
0.495 0.318	0.848	3.31 4.83	0
0.471 0.277	0.850	3.21 4.75	0
0.647 0.469	0.828	6.18 9.81	0
0.762 0.458	0.831	7.07 17.35	0
0.711 0.490	0.850	8.68 16.09	0
0.534 0.387	0.818	2.77 3.96	0

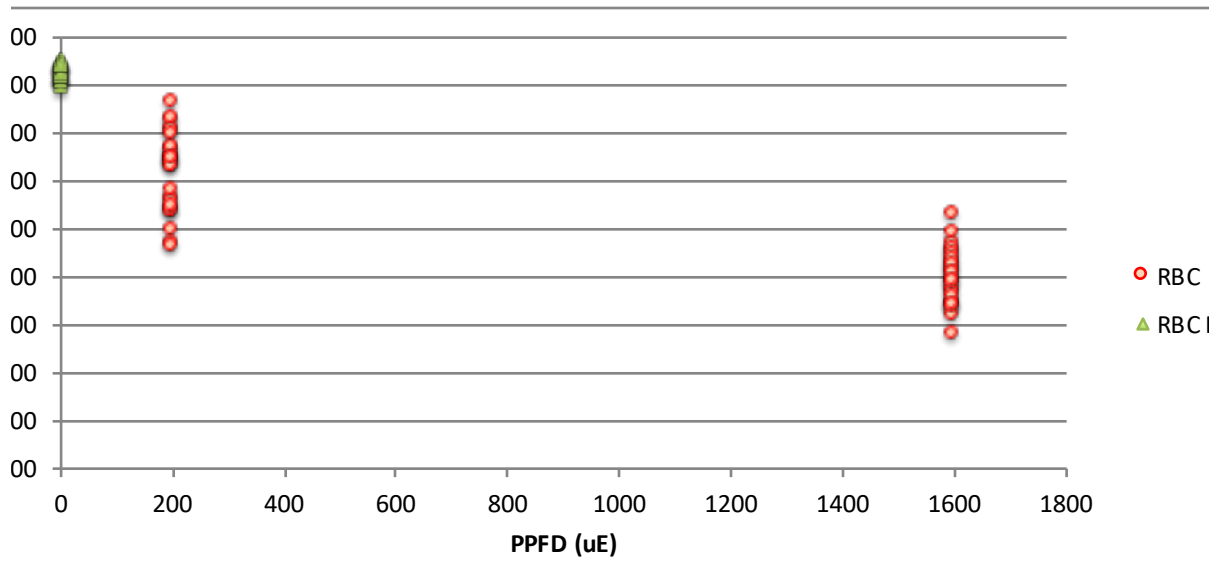


0.465	0.819	3.08	0
0.334		4.07	
0.541	0.818	2.55	0
0.389		3.73	
0.666	0.841	10.23	0
0.368		20.25	
0.664	0.841	10.33	0
0.445		17.71	
0.645	0.846	20.35	0
0.417		34.06	
0.732	0.825	1.14	0
0.530		2.76	
0.668	0.819	1.30	0
0.437		2.90	
0.644	0.824	1.63	0
0.426		3.23	
0.631	0.851	2.09	0
0.401		4.02	
0.650	0.843	1.81	0
0.385		3.93	
0.696	0.844	1.51	0
0.407		3.88	
0.556	0.852	2.33	0
0.358		3.81	
0.579	0.846	2.12	0
0.393		3.50	
0.545	0.843	2.23	0
0.342		3.68	

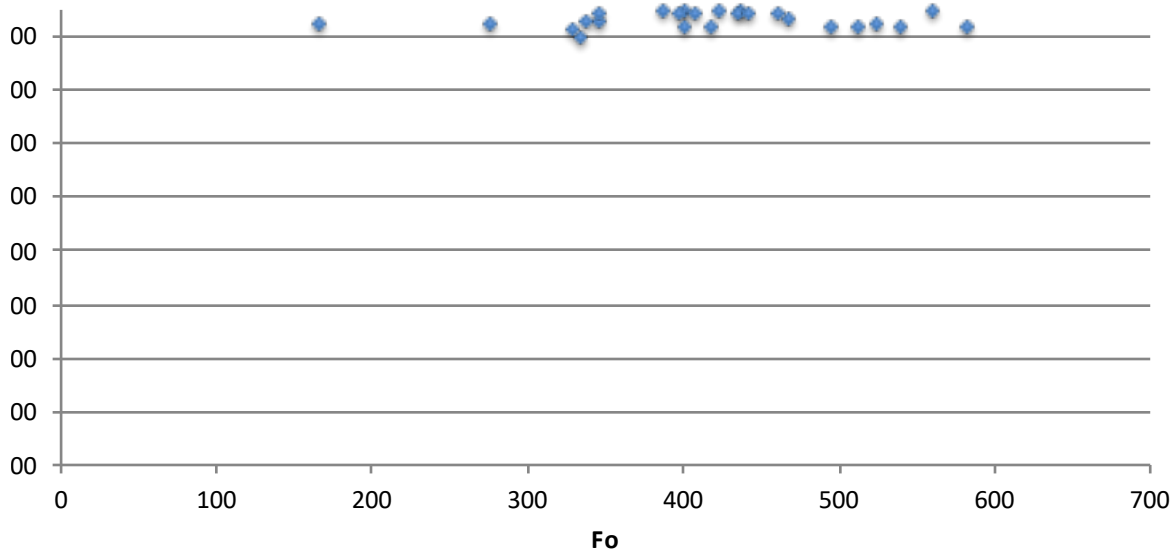








### dark adapted results - signal strength check





Fv/Fm

◆ RBC



Date	Sample	Pulses in light			
		Pulse Time	Fm'	Fs	Qin
180815	180815 pied B1 R1	1025	1020.8	651.5	200
		1031	738.7	686.3	1600
180815	180815 pied B1 R2	1040	784	498.1	200
		1045	578.7	537.3	1600
180815	180815 pied B1 R3	1055	933.2	581.9	200
		1100	676.2	626.3	1600
180815	180815 jcsg B1 R1	1120	618.1	400.3	200
		1125	448.8	426	1600
180815	180815 jcsg B1 R2	1137	635.4	389.2	200
		1142	442.9	422.3	1600
180815	180815 jcsg B1 R3	1158	597.4	308.6	200
		1203	320.1	301.5	1600
180815	180815 cusp B1 R1	1216	767.4	442.4	200
		1222	471.5	435	1600
180815	180815 cusp B1 R2	1232	770.2	453	200
		1237	512.2	473.6	1600
180815	180815 cusp B1 R3	1249	826.8	435.5	200
		1255	490.7	453.8	1600
180815	180815 pspe B1 R1	1325	112	71.8	200
		1331	74	70.8	1600
180815	180815 pspe B1 R2	1343	92.6	58.2	200
		1349	61.2	57.9	1600
180815	180815 pspe B1 R3	1359	146.4	92	200
		1405	81.4	78.3	1600
180815	180815 thod B1 R1	1423	770.9	528.2	200
		1428	615.9	590.5	1600

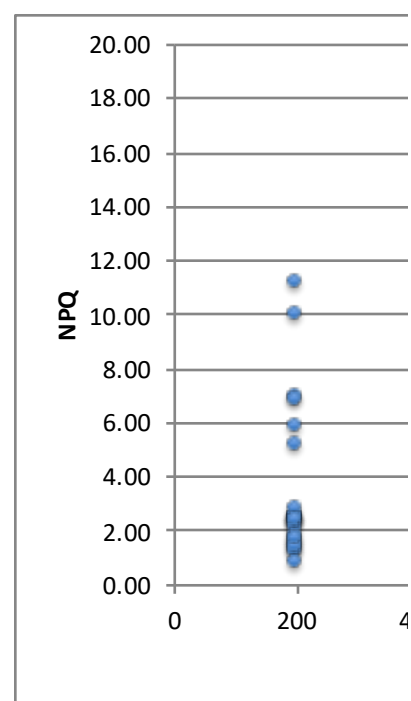
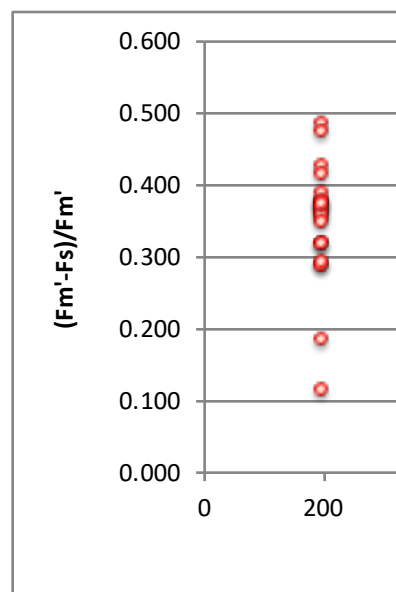
180815 180815 thod B1 R2	1438	1015.6	725.4	200
	1443	839.5	807.5	1600
180815 180815 thod B1 R3	1452	851.4	607.1	200
	1457	670.5	642.9	1600
180815 180815 scvw B1 R1	1514	284.6	232.5	200
	1519	260.1	254.5	1600
180815 180815 scvw B1 R2	1529	143.5	127.5	200
	1534	126.5	126	1600
180815 180815 scvw B1 R3	1545	343.3	224.5	200
	1550	266.9	257.1	1600
180815 180815 pipm B1 R1	1606	772.5	527.1	200
	1611	534.4	509.2	1600
180815 180815 pipm B1 R2	1620	544.8	385.7	200
	1625	390.4	370.3	1600
180815 180815 pipm B1 R3	1633	1009.2	689.4	200
	1638	669.7	633.9	1600
180815 180815 jusb B1 R1	1649	782.4	488.9	200
	1654	491.3	456.3	1600
180815 180815 jusb B1 R2	1707	615.2	388.6	200
	1712	361.9	335.1	1600
180815 180815 jusb B1 R3	1722	621.8	390.6	200
	1727	406.8	376.1	1600

Tleaf	After Dark Pulse			After Dark adapting		calculated (Fm'-Fs)/Fm'
	Fv'	Fs	Fo'	Fm	Fo	
25.2	319	686.3	420	3605.66	567.844	0.362
25.1						0.071
25.3	250	537.3	328.6	2638.35	430.889	0.365
25.1						0.072
25.2	292	626.3	384.6	3159.94	522.411	0.376
25.1						0.074
25.0	188	426	260.6	1908.15	352.333	0.352
25.1						0.051
25.0	193	422.3	249.8	1796.43	334.456	0.387
25.1						0.047
25.1	139	301.5	181.6	1319.17	230.344	0.483
25.1						0.058
25.1	225	435	246.4	1936.83	321.22	0.424
25.0						0.077
25.0	254	473.6	258.2	1985.16	326.6	0.412
25.0						0.075
25.0	226	453.8	264.8	1873.73	314.189	0.473
25.0						0.075
25.0	44	70.8	29.8	762.924	183.522	0.359
25.0						0.043
25.0	38	57.9	23.2	1130.67	270.611	0.371
25.1						0.054
25.0	38	78.3	43	896.516	206.844	0.372
25.1						0.038
25.1	278	590.5	338.2	2553.96	493.689	0.315
25.1						0.041

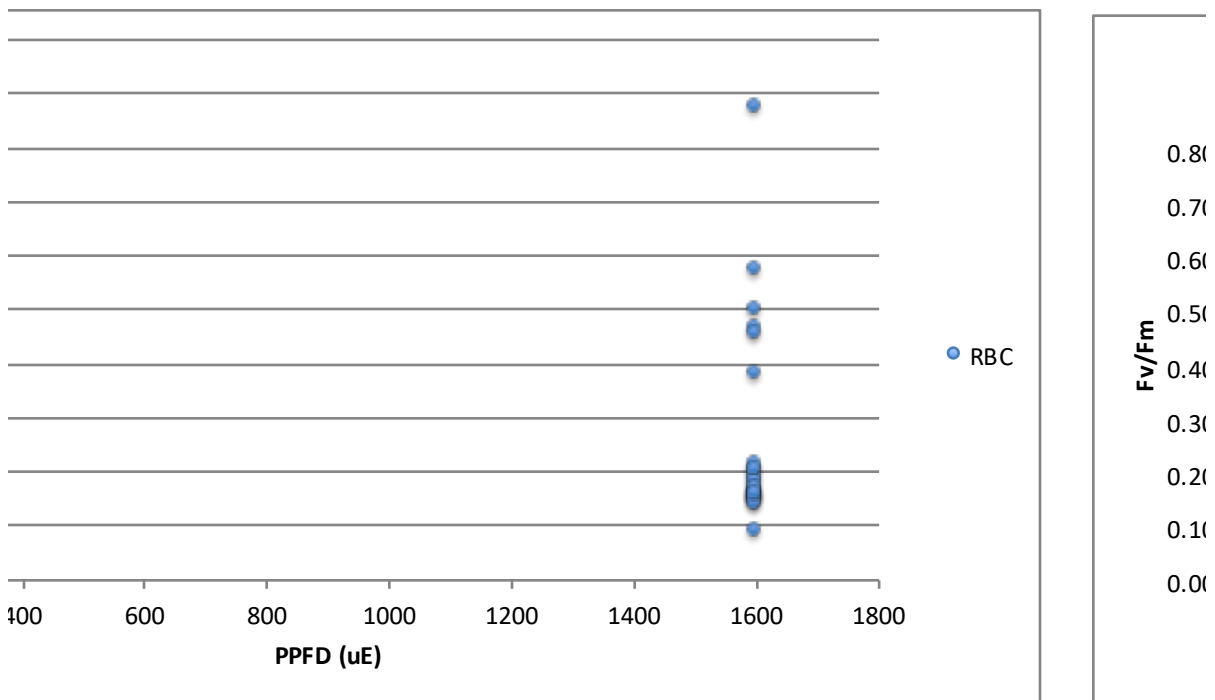
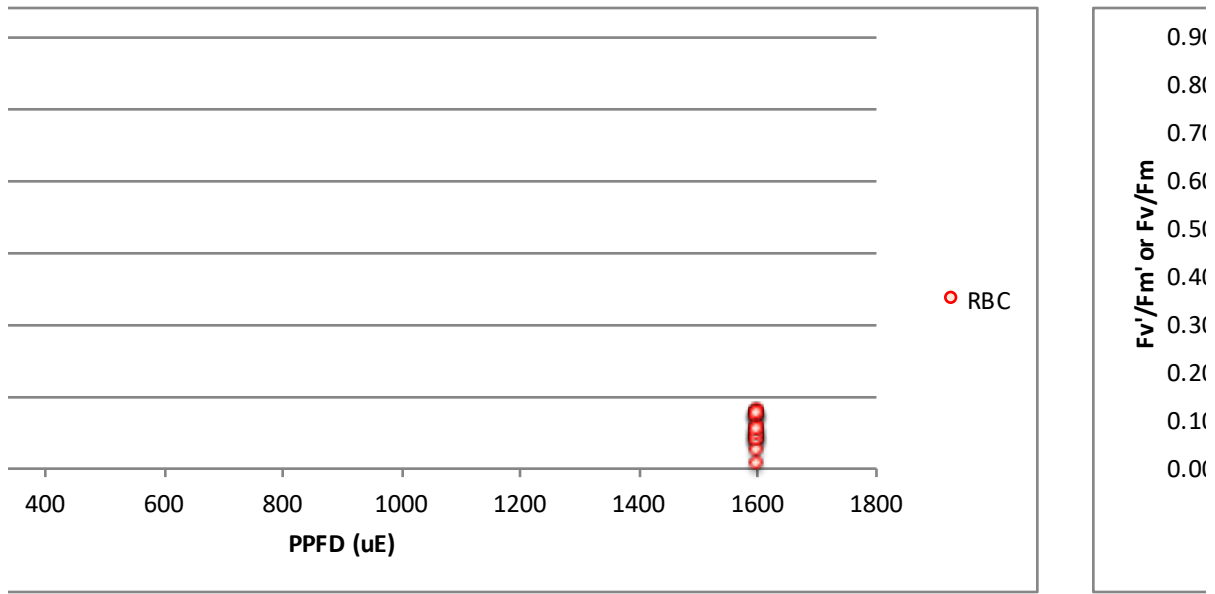
25.1	385	807.5	455	3557.88	615.267	0.286
25.1						0.038
25.1	305	642.9	365.6	2956.02	519.611	0.287
25.2						0.041
25.1	87	254.5	172.8	2247.68	526.8	0.183
25.0						0.022
25.1	45	126	126	1579.96	458.578	0.111
25.1						0.004
25.1	114	257.1	152.6	2689.66	496.867	0.346
25.1						0.037
25.1	178	509.2	356.6	2695.39	465.056	0.318
25.1						0.047
25.1	153	370.3	237	2068.16	345.989	0.292
25.1						0.051
25.1	251	633.9	418.6	3411.32	558.522	0.317
25.1						0.053
25.2	229	456.3	262	1384.16	238.711	0.375
25.2						0.071
25.1	180	335.1	182.4	1488.32	250.511	0.368
25.1						0.074
25.1	211	376.1	196	1709.71	294.733	0.372
25.1						0.075



calculated Fv'/Fm'	calculated Fv/Fm	calculated NPQ	for plotting Fv/Fm
0.589 0.431	0.843	2.53 3.88	0
0.581 0.432	0.837	2.37 3.56	0
0.588 0.431	0.835	2.39 3.67	0
0.578 0.419	0.815	2.09 3.25	0
0.607 0.436	0.814	1.83 3.06	0
0.696 0.433	0.825	1.21 3.12	0
0.679 0.477	0.834	1.52 3.11	0
0.665 0.496	0.835	1.58 2.88	0
0.680 0.460	0.832	1.27 2.82	0
0.734 0.597	0.759	5.81 9.31	0
0.749 0.621	0.761	11.21 17.48	0
0.706 0.472	0.769	5.12 10.01	0
0.561 0.451	0.807	2.31 3.15	0



0.552	0.827	2.50	0
0.458		3.24	
0.571	0.824	2.47	0
0.455		3.41	
0.393	0.766	6.90	0
0.336		7.64	
0.122	0.710	10.01	0
0.004		11.49	
0.555	0.815	6.83	0
0.428		9.08	
0.538	0.827	2.49	0
0.333		4.04	
0.565	0.833	2.80	0
0.393		4.30	
0.585	0.836	2.38	0
0.375		4.09	
0.665	0.828	0.77	0
0.467		1.82	
0.704	0.832	1.42	0
0.496		3.11	
0.685	0.828	1.75	0
0.518		3.20	









Fv/Fm

◆ RBC





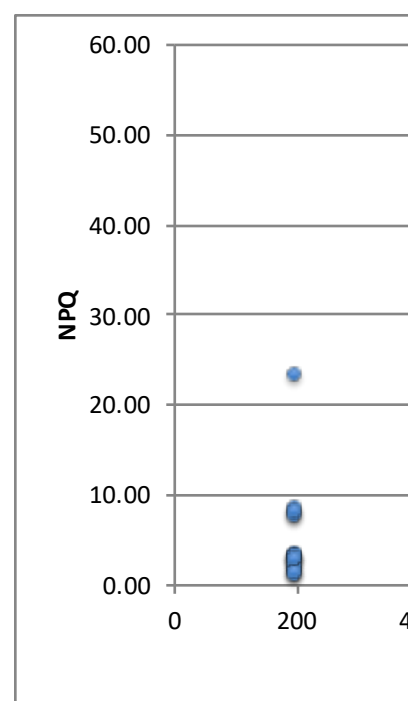
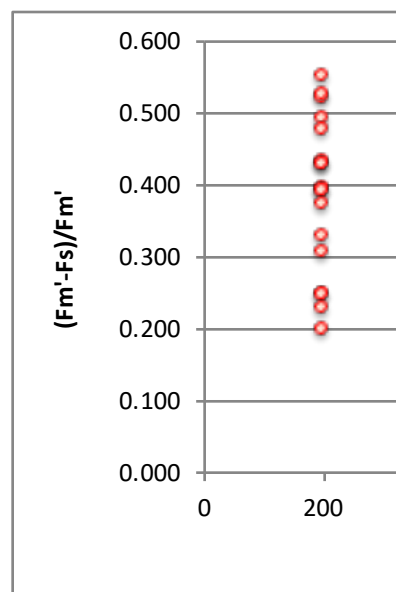
Date	Sample	Pulses in light			
		Pulse Time	Fm'	Fs	Qin
180816	180816 psgf B1 R1	948	463.7	280.2	200
		953	273.7	253.8	1600
180816	180816 psgf B1 R2	1002	266.6	135.9	200
		1008	134.9	120.2	1600
180816	180816 psgf B1 R3	1018	249.3	152	200
		1023	167	152.3	1600
180816	180816 pije B1 R1	1034	178.7	101.4	200
		1040	76.9	71.3	1600
180816	180816 pije B1 R2	1059	69.7	42.4	200
		1105	29.8	29.2	1600
180816	180816 pije B1 R3	1117	141.3	88.5	200
		1122	69.7	66.4	1600
180816	180816 ponc B1 R1	1133	1153.8	659.8	200
		1138	723	667.7	1600
180816	180816 ponc B1 R2	1148	1266.9	722.6	200
		1153	776.2	714.1	1600
180816	180816 ponc B1 R3	1204	1113.4	581.6	200
		1209	631	575.5	1600
180816	180816 abal B1 R1	1222	689.6	521.1	200
		1227	608.8	585.3	1600
180816	180816 abal B1 R2	1238	816.8	616.7	200
		1243	680.1	656.8	1600
180816	180816 abal B1 R3	1251	1104	887	200
		1256	981.4	949.1	1600
180816	180816 piba B1 R1	1311	1445.6	695.7	200
		1316	741.5	679.1	1600

180816 180816 piba B1 R2	1328	1718.2	772.3	200
	1334	720.1	660.5	1600
180816 180816 piba B1 R3	1345	1262.5	601.8	200
	1350	685.8	625.1	1600
180816 180816 psmf B1 R1	1406	1301.9	1004.9	200
	1412	956.1	922.3	1600
180816 180816 psmf B1 R2	1424	1023.9	710.1	200
	1429	749	717.5	1600
180816 180816 psmf B1 R3	1438	1116.2	752.2	200
	1443	785.9	751.1	1600

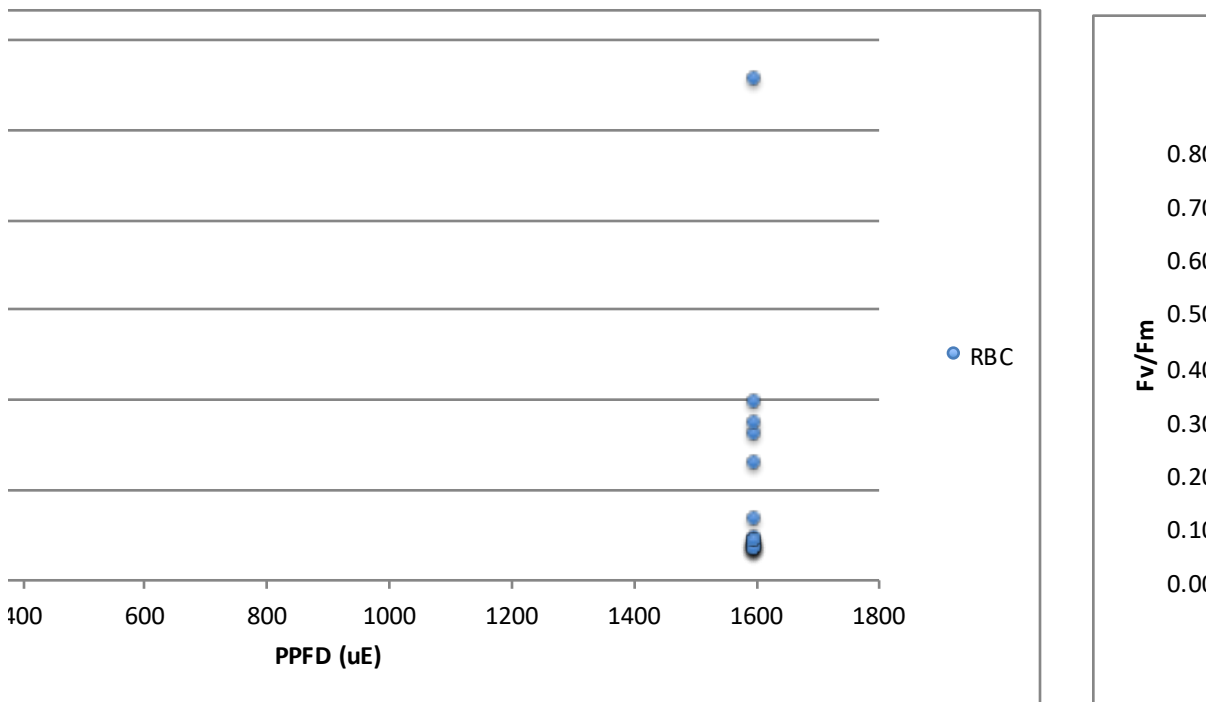
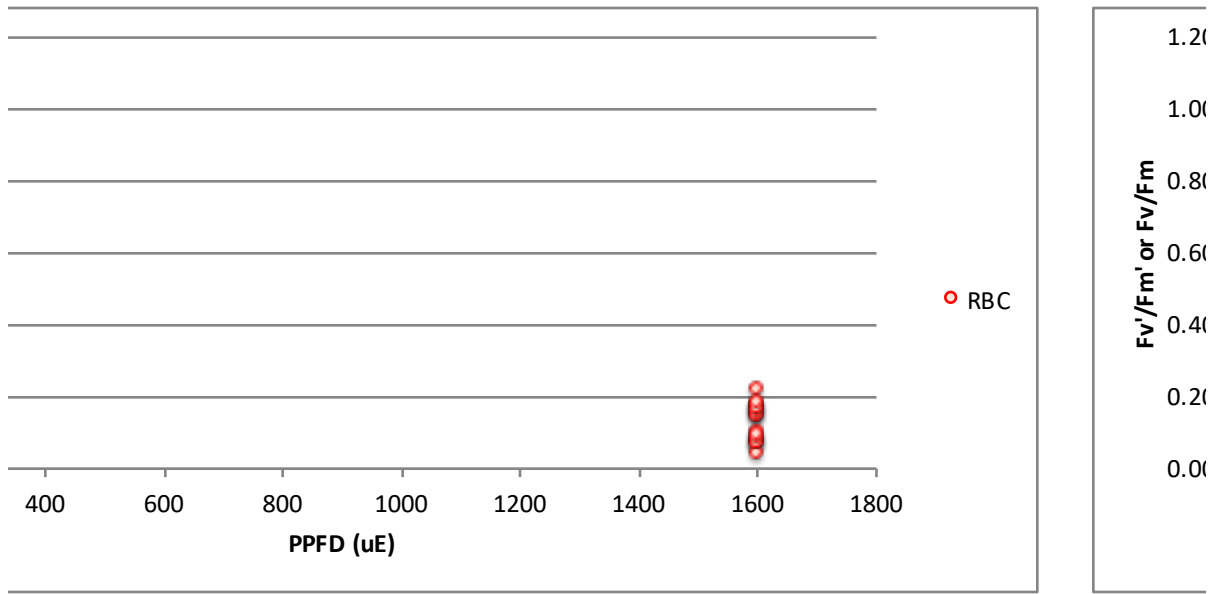
Tleaf	After Dark Pulse			After Dark adapting		calculated (Fm'-Fs)/Fm'
	Fv'	Fs	Fo'	Fm	Fo	
25.1	121	253.8	153.2	2060.28	299.456	0.396
25.0						0.073
25.0	68	120.2	66.8	2293.27	338.656	0.490
25.0						0.109
25.0	73	152.3	94.2	2304.18	338.878	0.390
25.1						0.088
25.0	38	71.3	39.2	1581.95	384.4	0.433
25.0						0.073
25.0	27	29.2	2.4	1685.01	412.989	0.392
25.0						0.020
25.1	35	66.4	35	1269	309.789	0.374
25.0						0.047
25.1	322	667.7	401	3106.96	519.256	0.428
25.0						0.076
25.1	347	714	714.1	3489.74	542.378	0.430
25.1						0.080
25.0	275	575.5	356.2	3489.74	542.378	0.478
25.0						0.088
25.1	236	585.3	373.2	2864.82	513.733	0.244
25.1						0.039
25.1	243	656.8	656.8	3074.81	594.678	0.245
25.0						0.034
25.2	324	949.1	657.2	4433.21	1026.13	0.197
25.1						0.033
25.1	298	679.1	444	3228.64	580.811	0.519
25.1						0.084

25.1	232	660.5	487.8	3389.65	671.122	0.551
25.2						0.083
25.2	292	625.1	393.4	2957.11	534.111	0.523
25.1						0.089
25.1	274	922.3	682.2	4851.72	1072.66	0.228
25.1						0.035
25.1	300	717.5	449.2	3996.76	653.333	0.306
25.1						0.042
25.2	296	751.1	490	4108.07	661.433	0.326
25.2						0.044

calculated Fv'/Fm'	calculated Fv/Fm	calculated NPQ	for plotting Fv/Fm
0.670 0.440	0.855	3.44 6.53	0
0.749 0.505	0.852	7.60 16.00	0
0.622 0.436	0.853	8.24 12.80	0
0.781 0.490	0.757	7.85 19.57	0
0.966 0.919	0.755	23.18 55.54	0
0.752 0.498	0.756	7.98 17.21	0
0.652 0.445	0.833	1.69 3.30	0
0.436 0.080	0.845	1.75 3.50	0
0.680 0.435	0.845	2.13 4.53	0
0.459 0.387	0.821	3.15 3.71	0
0.196 0.034	0.807	2.76 3.52	0
0.405 0.330	0.769	3.02 3.52	0
0.693 0.401	0.820	1.23 3.35	0

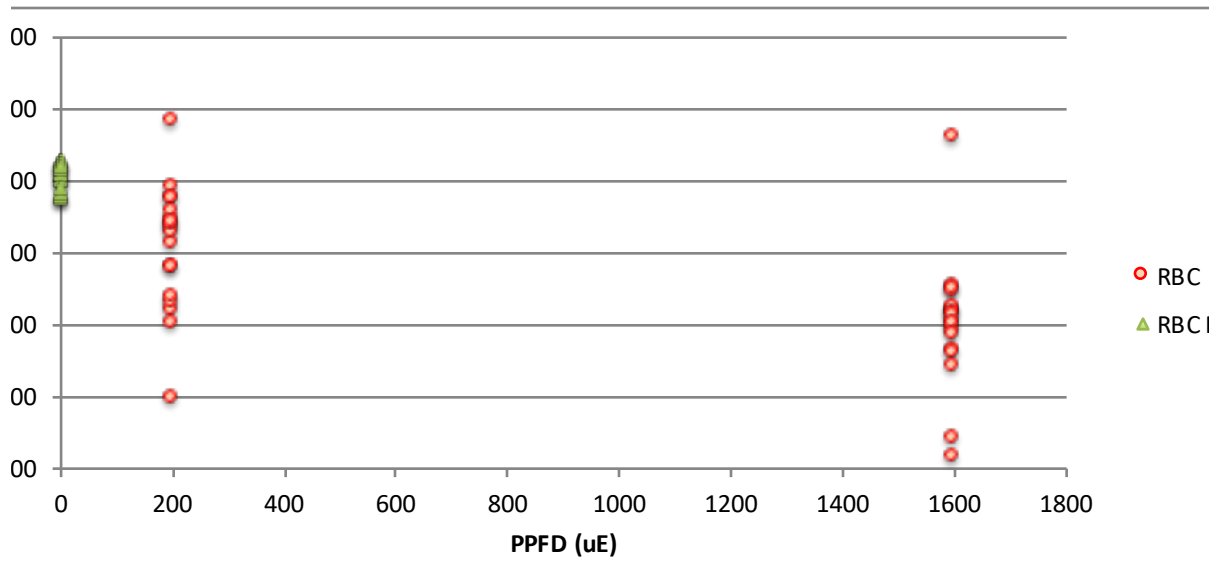


0.716	0.802	0.97	0
0.323		3.71	
0.688	0.819	1.34	0
0.426		3.31	
0.476	0.779	2.73	0
0.286		4.07	
0.561	0.837	2.90	0
0.400		4.34	
0.561	0.839	2.68	0
0.377		4.23	

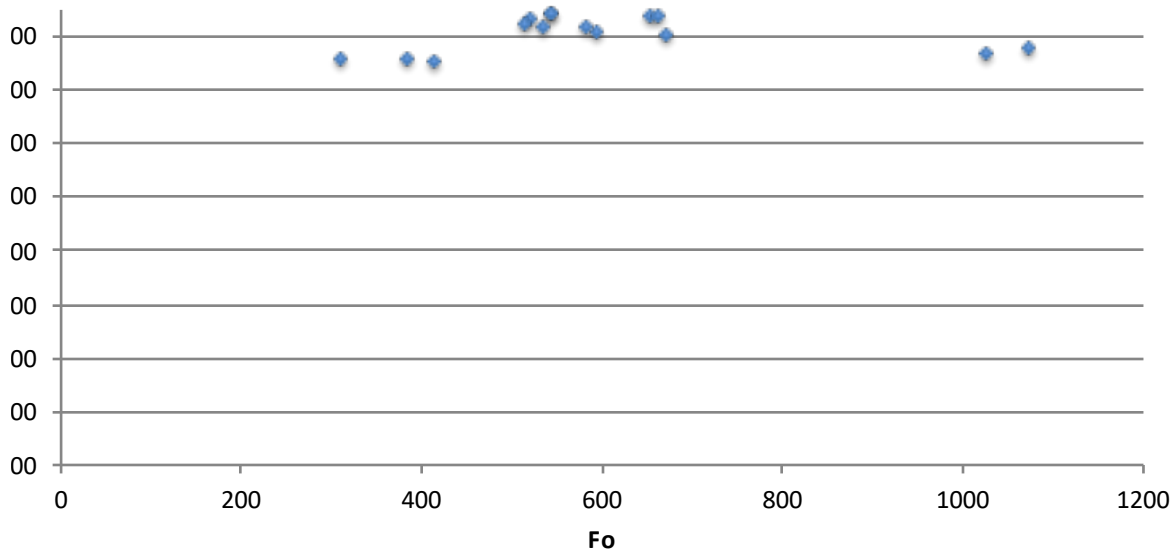








### dark adapted results - signal strength check





Fv/Fm

◆ RBC



Date	Sample	Pulses in light			
		Pulse Time	Fm'	Fs	Qin
180817	180817 tamd B1 R1	1015	875.8	464.3	200
		1021	520	476	1600
180817	180817 tamd B1 R2	1032	800.6	464.8	200
		1037	481.2	443.1	1600
180817	180817 tamd B1 R3	1049	918.3	613.6	200
		1054	675.3	638.7	1600
180817	180817 cehp B1 R1	1108	1522.9	888.3	200
		1113	865.5	806.3	1600
180817	180817 cehp B1 R2	1152	1403	803.4	200
		1157	835.8	784.1	1600
180817	180817 cehp B1 R3	1213	1355	821.7	200
		1219	809.7	758.7	1600
180817	180817 tscj B1 R1	1238	568.5	355.5	200
		1243	369.1	344	1600
180817	180817 tscj B1 R2	1253	401.9	265.5	200
		1258	269.7	257.2	1600
180817	180817 tscj B1 R3	1308	462.3	290.6	200
		1313	306	288.8	1600
180817	180817 mgmg B1 R1	1328	1193.6	974.1	200
		1333	1082.8	1057.4	1600
180817	180817 mgmg B1 R2	1344	1183.3	924.1	200
		1349	1008.1	979.8	1600
180817	180817 mgmg B1 R3	1401	1388	1111.6	200
		1407	1218	1189.5	1600
180817	180817 tadm B1 R1	1424	1193	608.5	200
		1430	681.5	630.1	1600

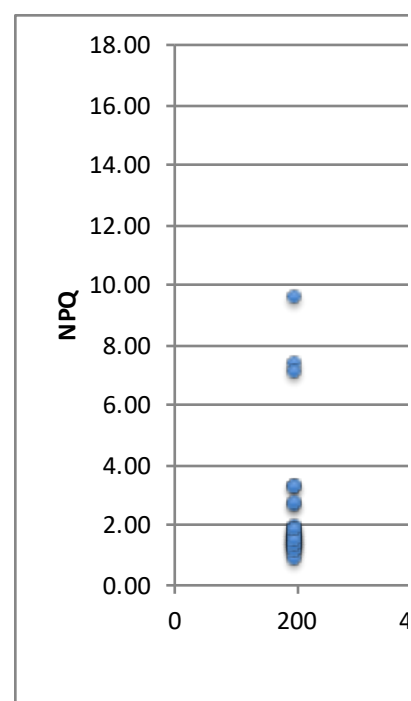
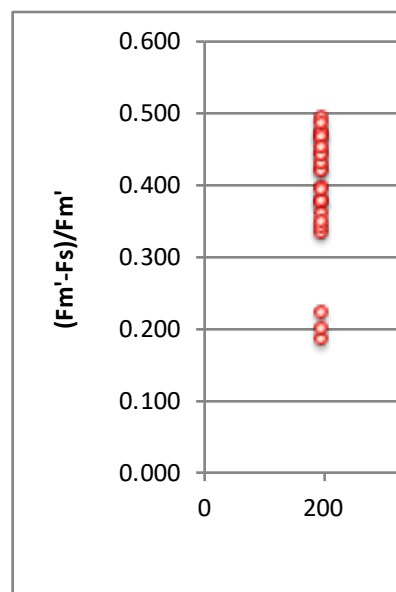
180817	180817 tadm B1 R2	1441	1237.2	667	200
		1446	695.1	644.7	1600
180817	180817 tadm B1 R3	1457	1080.8	570.6	200
		1502	605.3	560.9	1600
180817	180817 abpa B1 R1	1516	1096.9	567.7	200
		1521	540.6	500.1	1600
180817	180817 abpa B1 R2	1531	641.4	412.7	200
		1536	453.4	431.5	1600
180817	180817 abpa B1 R3	1545	1119.5	625.2	200
		1550	694.1	647.1	1600
180817	180817 psme B1 R1	1604	849.8	530.2	200
		1611	566.4	527.9	1600
180817	180817 psme B1 R2	1621	814.5	532.4	200
		1626	587.5	533.4	1600
180817	180817 psme B1 R3	1637	1004	612.3	200
		1642	644.4	600.5	1600
180817	180817 pibu B1 R1	1654	433	232.3	200
		1659	222.8	205.5	1600
180817	180817 pibu B1 R2	1709	408.3	228.6	200
		1714	249.1	231.2	1600
180817	180817 pibu B1 R3	1723	401.2	220.6	200
		1728	235.8	216.2	1600

Tleaf	After Dark Pulse			After Dark adapting		calculated (Fm'-Fs)/Fm'
	Fv'	Fs	Fo'	Fm	Fo	
25.1	256	476	264.2	2203.32	473.178	0.470
25.1						0.085
25.1	233	443.1	248.4	1934.48	445.611	0.419
25.0						0.079
25.1	347	638.7	328.6	2340.23	491.689	0.332
25.0						0.054
25.1	264	806.3	601	3169.34	936.578	0.417
25.0						0.068
25.1	235	784.1	600.4	2579.83	737.678	0.427
25.0						0.062
25.1	257	758.7	552.6	3062.52	674.689	0.394
25.1						0.063
25.1	137	344	232.4	1660.48	465.189	0.375
25.1						0.068
25.0	100	257.2	169.4	1139.31	302.733	0.339
25.0						0.046
25.0	121	288.8	184.6	1034.9	284.322	0.371
25.0						0.056
25.1	425	1057.4	658	3194.57	877.633	0.184
25.0						0.023
25.0	394	979.8	614.2	2956.4	735.6	0.219
25.1						0.028
25.0	477	1189.5	741	3590.67	888.622	0.199
25.0						0.023
25.1	318	630.1	363.8	2528.21	578.589	0.490
25.0						0.075

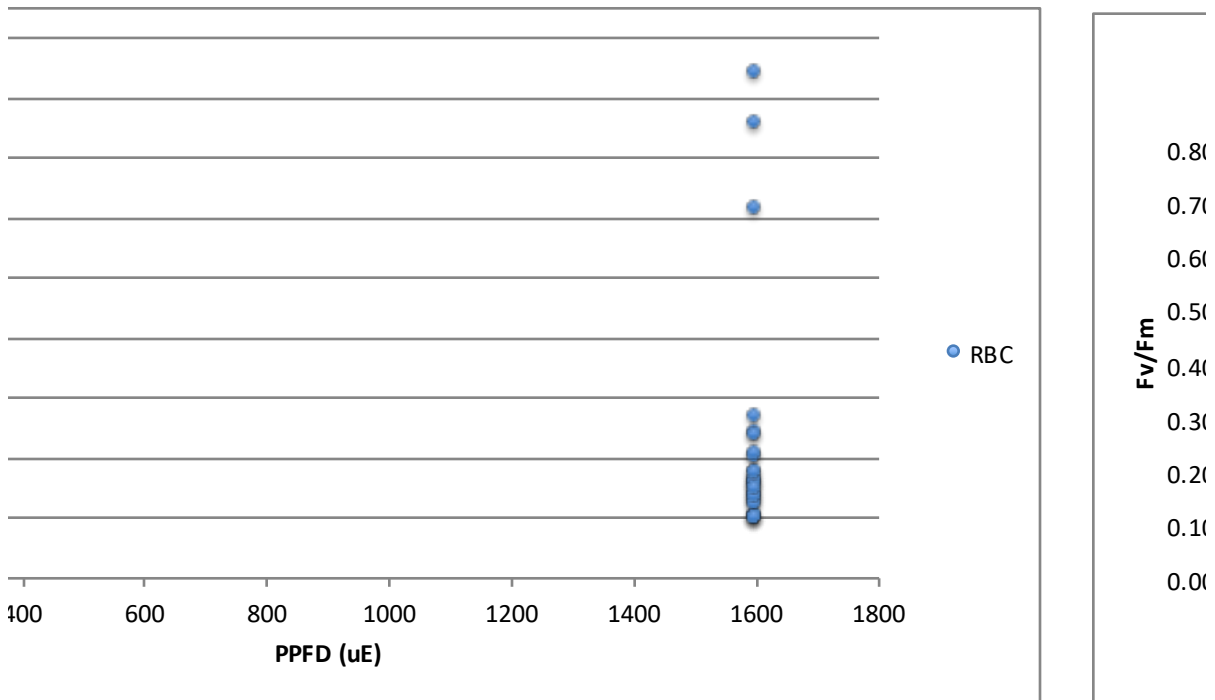
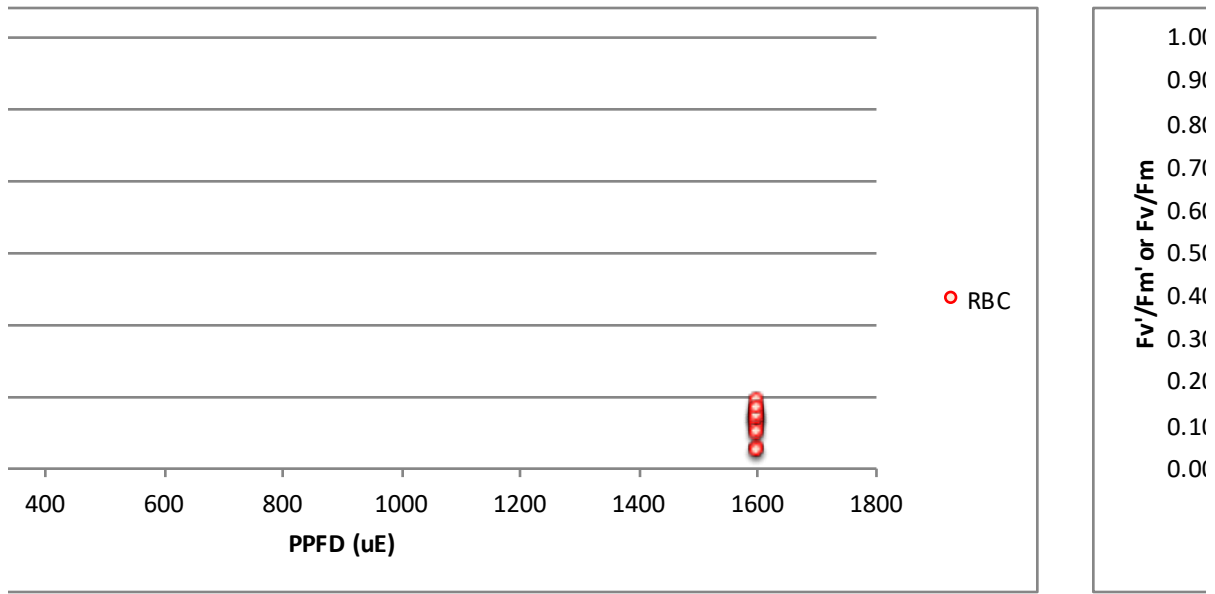
25.1	284	644.7	410.8	2880.48	587.689	0.461
25.1						0.073
25.1	261	560.9	344	2412.44	468.689	0.472
25.1						0.073
25.0	205	500.1	335.8	2706.7	429.522	0.482
25.0						0.075
25.0	171	431.5	282.4	2295.89	340.667	0.357
25.0						0.048
25.0	303	647.1	391.6	3084.56	445.644	0.442
25.0						0.068
25.1	188	527.9	378	3598.37	582.078	0.376
25.1						0.068
25.2	221	533.4	366.4	3434.85	528.644	0.346
25.1						0.092
25.1	226	600.5	418.8	3679.36	648.344	0.390
25.1						0.068
25.0	102	205.5	120.4	3591.5	540.211	0.464
25.0						0.078
25.1	119	231.2	130.4	3298.11	468.433	0.440
25.1						0.072
25.1	106	216.2	129.8	4206.96	647.311	0.450
25.1						0.083



calculated Fv'/Fm'	calculated Fv/Fm	calculated NPQ	for plotting Fv/Fm
0.698 0.492	0.785	1.52 3.24	0
0.690 0.484	0.770	1.42 3.02	0
0.642 0.513	0.790	1.55 2.47	0
0.605 0.306	0.704	1.08 2.66	0
0.572 0.282	0.714	0.84 2.09	0
0.592 0.318	0.780	1.26 2.78	0
0.591 0.370	0.720	1.92 3.50	0
0.579 0.372	0.734	1.83 3.22	0
0.601 0.397	0.725	1.24 2.38	0
0.449 0.392	0.725	1.68 1.95	0
0.481 0.391	0.751	1.50 1.93	0
0.466 0.392	0.753	1.59 1.95	0
0.695 0.466	0.771	1.12 2.71	0



0.668	0.796	1.33	0
0.409		3.14	
0.682	0.806	1.23	0
0.432		2.99	
0.694	0.841	1.47	0
0.379		4.01	
0.560	0.852	2.58	0
0.377		4.06	
0.650	0.856	1.76	0
0.436		3.44	
0.555	0.838	3.23	0
0.333		5.35	
0.550	0.846	3.22	0
0.376		4.85	
0.583	0.824	2.66	0
0.350		4.71	
0.722	0.850	7.29	0
0.460		15.12	
0.681	0.858	7.08	0
0.477		12.24	
0.676	0.846	9.49	0
0.450		16.84	









Fv/Fm

◆ RBC

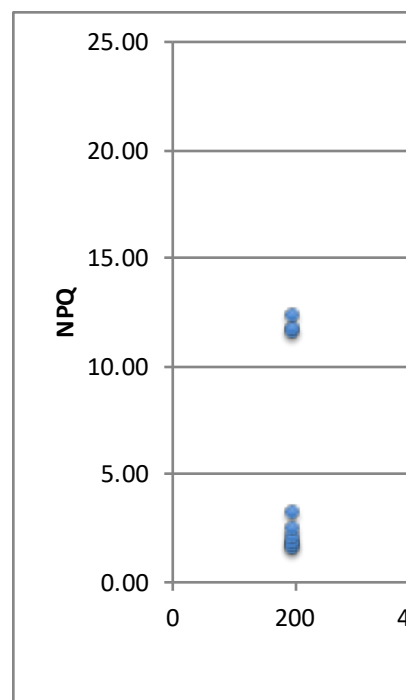
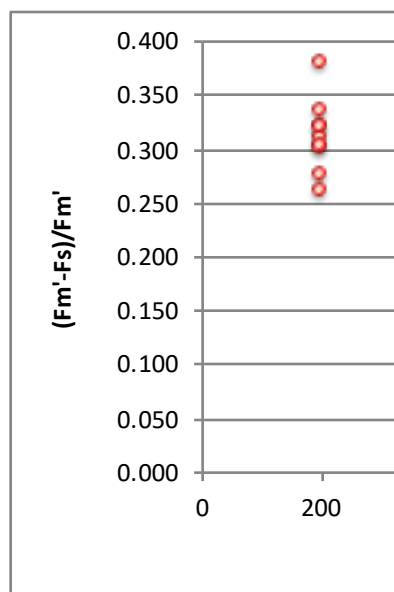


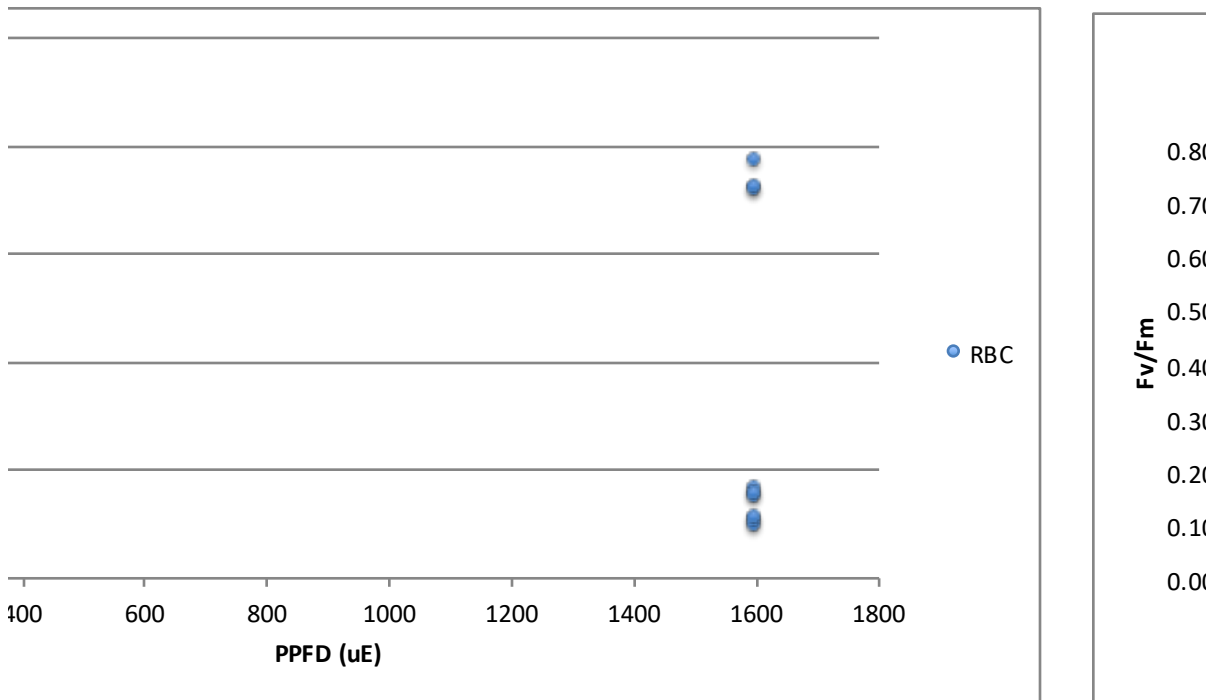
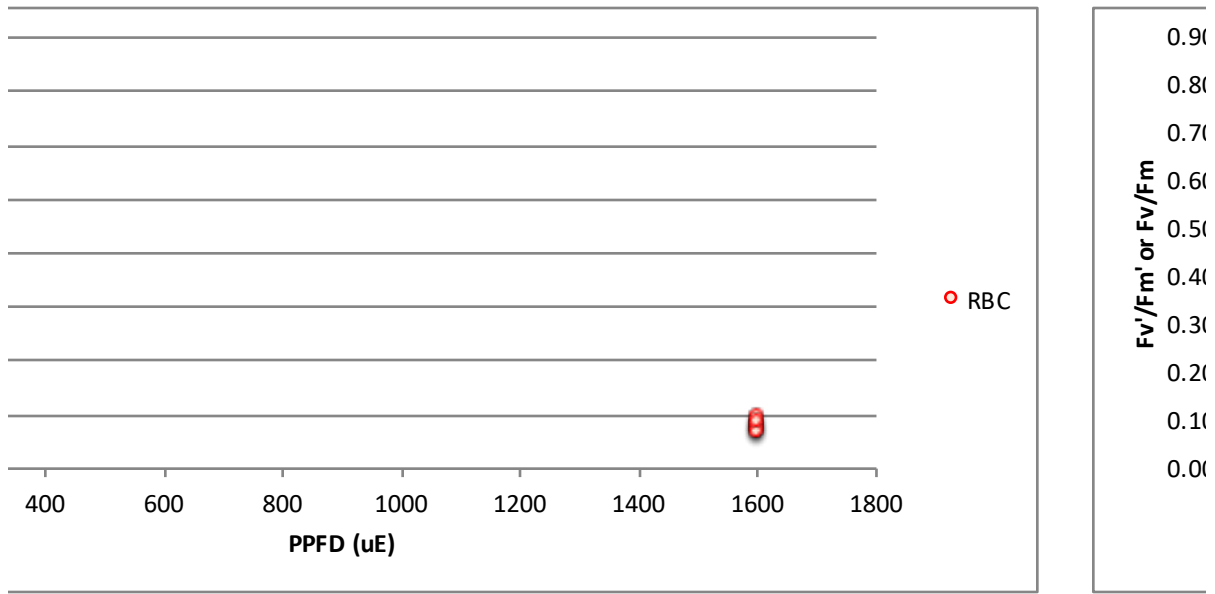


Date	Sample	Pulses in light			
		Pulse Time	Fm'	Fs	Qin
180820	180820 thpw B1 R1	1017	285.4	206.7	200
		1023	213.9	205.7	1600
180820	180820 thpw B1 R2	1035	273.4	186	200
		1040	196.9	188.7	1600
180820	180820 thpw B1 R3	1051	283.6	196	200
		1056	207.1	198.8	1600
180820	180820 pico B1 R1	1110	172.8	117.7	200
		1115	113.8	110.2	1600
180820	180820 pico B1 R2	1126	147.3	103.1	200
		1131	98	94.2	1600
180820	180820 pico B1 R3	1143	184.9	128.9	200
		1148	121.3	117.1	1600
180820	180820 akgc B1 R1	1200	923.4	683.1	200
		1205	739.2	715.7	1600
180820	180820 akgc B1 R2	1215	1113.2	691.2	200
		1220	715.3	681.3	1600
180820	180820 akgc B1 R3	1231	784.9	522.4	200
		1236	558.1	534.2	1600

Tleaf	After Dark Pulse			After Dark adapting		calculated (Fm'-Fs)/Fm'
	Fv'	Fs	Fo'	Fm	Fo	
25.0	101	205.7	113	715.722	159.522	0.276
25.0						0.038
25.1	90	188.7	107	717.025	154.622	0.320
25.0						0.042
25.1	98	198.8	109.4	780.334	156.3	0.309
25.0						0.040
25.0	40	110.2	73.8	2150.84	461.856	0.319
25.1						0.032
25.0	38	94.2	60.4	1866.52	407.544	0.300
25.0						0.039
25.0	44	117.1	77.2	2452.71	550.333	0.303
25.1						0.035
25.1	282	715.7	456.8	3750.28	650.511	0.260
25.0						0.032
25.1	255	681.3	460.8	3411.58	554.133	0.379
						0.048
25.1	186	534.2	372	2684.65	471.222	0.334
25.2						0.043

calculated Fv'/Fm'	calculated Fv/Fm	calculated NPQ	for plotting Fv/Fm
0.604 0.472	0.777	1.51 2.35	0
0.609 0.457	0.784	1.62 2.64	0
0.614 0.472	0.800	1.75 2.77	0
0.573 0.351	0.785	11.45 17.90	0
0.590 0.384	0.782	11.67 18.05	0
0.582 0.364	0.776	12.27 19.22	0
0.505 0.382	0.827	3.06 4.07	0
0.586 0.356	0.838	2.06 3.77	0
0.526 0.333	0.824	2.42 3.81	0







Fv/Fm

◆ RBC

taxon	Date	Sample	Pulses in light		Fs	Qin
			Pulse Time	Fm'		
psgv	180806	180806 psgv B2 R1	1250	308	204	200
			1256	165.2	157.3	1600
	180806	180806 psgv B2 R2	1305	394.9	208.7	200
			1310	231.7	209.7	1600
	180806	180806 psgv B2 R3	1323	330.6	206.4	200
			1328	156.1	147.6	1600
pipu	180806	180806 pipu B1 R1	1340	173.3	89.3	200
			1345	92.4	83.5	1600
	180806	180806 pipu B1 R2	1355	244.9	110.3	200
			1400	104.2	93.1	1600
	180806	180806 pipu B1 R3	1409	136.9	70.3	200
			1414	69.6	63.9	1600
segi	180806	180806 segi B1 R1	1425	271	143.8	200
			1430	160.2	148.2	1600
	180806	180806 segi B1 R2	1439	318.6	166.8	200
			1444	172.5	158.4	1600
	180806	180806 segi B1 R3	1456	316.6	180	200
			1502	208.8	191.2	1600
pini	180806	180806 pini B1 R1	1535	266.1	162.1	200
			1540	178.8	167.6	1600
	180806	180806 pini B1 R2	1555	194.3	131.7	200
			1600	142.3	135.4	1600
	180806	180806 pini B1 R3	1609	254.3	147.9	200
			1615	152	142	1600
thob	180807	180807 thob B1 R1	943	497.7	353.6	200
			948	412.4	407.1	1600
	180807	180807 thob B1 R2	957	463.8	253.6	200
			1002	289.2	272.4	1600

	180807 180807 thob B1 R3	1011	404.2	227.3	200
		1016	241.2	227	1600
pinh	180807 180807 pinh B1 R1	1038	234.4	141.4	200
		1043	171.6	160	1600
	180807 180807 pinh B1 R2	1056	183.7	121.9	200
		1101	145.7	137.5	1600
	180807 180807 pinh B1 R3	1112	152	98.9	200
		1117	119.2	113.1	1600
picc	180807 180807 picc B1 R1	1135	158.8	100.6	200
		1141	94.7	90.8	1600
	180807 180807 picc B1 R2	1154	161.9	98.8	200
		1159	87.5	83	1600
	180807 180807 picc B1 R3	1210	99.4	69.5	200
		1216	65.4	64.9	1600
abco	180807 180807 abco B1 R1	1228	215.2	137.9	200
		1234	143.4	136.3	1600
	180807 180807 abco B1 R2	1246	277.2	193.6	200
		1251	210.2	202.2	1600
	180807 180807 abco B1 R3	1302	268.4	202.2	200
		1307	218.9	211.7	1600
jswb	180807 180807 jswb B1 R1	1320	524.4	350.4	200
		1326	379.2	360	1600
	180807 180807 jswb B1 R2	1336	493.2	317.4	200
		1341	340.3	323.6	1600
	180807 180807 jswb B1 R3	1350	431.6	300.4	200
		1355	317.3	304	1600
piwa	180807 180807 piwa B1 R1	1414	148.9	108.7	200
		1419	104.2	101.5	1600
	180807 180807 piwa B1 R2	1429	168.1	113.2	200
		1434	111.2	107.4	1600



	180807 180807 piwa B1 R3	1447	189.9	138.6	200
		1452	138	133.8	1600
cunp	180807 180807 cunp B1 R1	1503	399.2	295.8	200
		1508	296.6	287.4	1600
	180807 180807 cunp B1 R2	1519	333.3	268.6	200
		1525	283.8	276.5	1600
	180807 180807 cunp B1 R3	1535	368.2	288.7	200
		1540	312.1	304.5	1600
choc	180807 180807 choc B1 R1	1552	1218.8	967	200
		1558	1021	996.1	1600
	180807 180807 choc B1 R2	1608	902.5	757.9	200
		1613	778.8	763.5	1600
	180807 180807 choc B1 R3	1622	392.9	307.4	200
		1627	322.3	313	1600
phvl	180807 180807 phvl B1 R1	1638	200.9	117.6	200
		1643	125.5	118.1	1600
	180807 180807 phvl B1 R2	1653	215.1	138.2	200
		1658	154.8	146.7	1600
	180807 180807 phvl B1 R3	1708	136.6	85.3	200
		1713	94.4	88.9	1600
pist	180808 180808 pist B1 R1	1017	117.7	74.2	200
		1022	77.8	77.8	1600
	180808 180808 pist B1 R2	1030	72.6	45.9	200
		1035	47.2	46	1600
	180808 180808 pist B1 R3	1045	96.4	61.4	200
		1050	65.1	63.2	1600
cunj	180808 180808 cunj B1 R1	1106	454.8	295.5	200
		1111	304.6	288.3	1600
	180808 180808 cunj B1 R2	1121	379.2	270.7	200
		1126	295.8	284.5	1600

	180808	180808 cunj B1 R3	1136	492.3	371.5	200
			1141	403.5	389.3	1600
piog	180808	180808 piog B1 R1	1153	1197.7	510.3	200
			1158	405.1	359.1	1600
	180808	180808 piog B1 R2	1209	1215	566.5	200
			1214	413.6	368.8	1600
	180808	180808 piog B1 R3	1224	1082.2	459.2	200
			1230	379.1	342.8	1600
akhs	180808	180808 akhs B1 R1	1242	1170.4	641	200
			1248	689.4	629.4	1600
	180808	180808 akhs B1 R2	1257	870	489.2	200
			1302	541.4	499.3	1600
	180808	180808 akhs B1 R3	1312	1049.5	609.7	200
			1318	693.7	645.8	1600
plif	180808	180808 plif B1 R1	1336	200	116.7	200
			1341	102.6	94.3	1600
	180808	180808 plif B1 R2	1350	198.5	125.1	200
			1356	111.9	105.1	1600
	180808	180808 plif B1 R3	1405	143.4	96.4	200
			1411	91.3	86.7	1600
taca	180808	180808 taca B1 R1	1421	1151	803.5	200
			1426	851	809.9	1600
	180808	180808 taca B1 R2	1437	1054.7	755.1	200
			1443	811.6	774.6	1600
	180808	180808 taca B1 R3	1454	1049.4	682.6	200
			1459	724.1	678.1	1600
ppsd	180808	180808 ppsd B1 R1	1512	287.3	172.9	200
			1518	155.4	146.7	1600
	180808	180808 ppsd B1 R2	1530	336.2	211.9	200
			1535	234.2	217.9	1600

	180808 180808 ppsd B1 R3	1547	463.7	255.4	200
		1552	269.3	246.4	1600
piar	180808 180808 piar B1 R1	1605	526.8	319.7	200
		1610	352.5	330	1600
	180808 180808 piar B1 R2	1620	602.5	371.6	200
		1625	394.7	368.3	1600
	180808 180808 piar B1 R3	1635	669.5	391.8	200
		1640	414.6	383.8	1600
piap	180808 180808 piap B1 R1	1652	1397.3	650.4	200
		1657	506.1	457.1	1600
	180808 180808 piap B1 R2	1708	1067	449.4	200
		1715	314.1	276.1	1600
	180808 180808 piap B1 R3	1726	543	314.7	200
		1731	240	223	1600
pisip	180808 180808 pisip B1 R1	1742	293	150.5	200
		1747	143.1	127.6	1600
	180808 180808 pisip B1 R2	1756	263.7	148.4	200
		1801	160.7	142.7	1600
	180808 180808 pisip B1 R3	1810	282.7	139.6	200
		1815	134.7	118.5	1600
pinp	180809 180809 pinp B1 R1	1103	323.2	155.5	200
		1108	127.6	109.1	1600
	180809 180809 pinp B1 R2	1117	209.1	105.8	200
		1123	95.4	83.2	1600
	180809 180809 pinp B1 R3	1133	290.2	153.9	200
		1138	133.9	119.5	1600
pipp	180809 180809 pipp B1 R1	1150	751.3	442.2	200
		1155	458.6	419.7	1600
	180809 180809 pipp B1 R2	1207	684.9	418.3	200
		1212	452.7	417.2	1600

	180809	180809 pipp B1 R3	1223	660.7	410.3	200
			1228	425.9	396	1600
cade	180809	180809 cade B1 R1	1247	530.5	321.8	200
			1252	335.3	314.6	1600
	180809	180809 cade B1 R2	1309	479.4	364.9	200
			1314	321.2	302.6	1600
	180809	180809 cade B1 R3	1325	604.6	399.4	200
			1330	456	431.2	1600
pian	180809	180809 pian B1 R1	1348	751.9	547.3	200
			1353	479.3	464.1	1600
	180809	180809 pian B1 R2	1407	1064	600.5	200
			1413	490.6	460.1	1600
	180809	180809 pian B1 R3	1422	803.4	508	200
			1428	465.3	437.8	1600
jssc	180809	180809 jssc B1 R1	1440	478.1	319.4	200
			1445	337.4	320.8	1600
	180809	180809 jssc B1 R2	1455	528.2	319.9	200
			1500	321.7	302.7	1600
	180809	180809 jssc B1 R3	1515	594.6	381.3	200
			1520	429.3	408.4	1600
pizs	180809	180809 pizs B1 R1	1532	275.1	171.3	200
			1537	163.8	153.9	1600
	180809	180809 pizs B1 R2	1546	188.1	124.3	200
			1551	123.4	116.3	1600
	180809	180809 pizs B1 R3	1614	331.6	197.7	200
			1619	183.1	172.1	1600
jsba	180810	180810 jsba B1 R1	1045	451.1	229.6	200
			1050	215.9	199.9	1600
	180810	180810 jsba B1 R2	1103	370.9	192.3	200
			1107	173.3	159.1	1600

	180810 180810 jsba B1 R3	1117	498.8	235.8	200
		1122	218.1	199.5	1600
ceag	180810 180810 ceag B1 R1	1158	436.8	302	200
		1203	298.7	285.6	1600
	180810 180810 ceag B1 R2	1213	475	324.1	200
		1218	382.2	315.4	1600
	180810 180810 ceag B1 R3	1228	441.4	335.8	200
		1233	346.2	336.8	1600
cagp	180810 180810 cagp B1 R1	1245	1301.9	751.5	200
		1250	823.5	742.2	1600
	180810 180810 cagp B1 R2	1301	1391.1	757.6	200
		1306	789.8	706	1600
	180810 180810 cagp B1 R3	1315	1011	629.8	200
		1321	662.2	609.8	1600
pasc	180810 180810 pasc B1 R1	1337	1024.4	541.2	200
		1342	557.1	513.1	1600
	180810 180810 pasc B1 R2	1354	1214.2	650.2	200
		1359	678.1	624.9	1600
	180810 180810 pasc B1 R3	1413	1044.2	568.2	200
		1419	620.2	573.7	1600
jvgc	180810 180810 jvgc B1 R1	1437	565.2	287.8	200
		1442	281.8	262.1	1600
	180810 180810 jvgc B1 R2	1453	464.6	290	200
		1459	280.8	267.5	1600
	180810 180810 jvgc B1 R3	1508	789	441.3	200
		1513	432.1	404.2	1600
cdcp	180810 180810 cdcp B1 R1	1527	555.4	329.1	200
		1532	365.6	341.3	1600
	180810 180810 cdcp B1 R2	1544	740.9	469.7	200
		1549	529	501.5	1600

	180810 180810 cdcp B1 R3	1559	1082.2	589.7	200
		1604	608	562	1600
pisy	180810 180810 pisy B1 R1	1616	149.8	100.9	200
		1621	112.7	107.3	1600
	180810 180810 pisy B1 R2	1631	116.7	77	200
		1636	76.2	73.3	1600
	180810 180810 pisy B1 R3	1646	108.1	66.9	200
		1651	77.6	72.2	1600
tdcf	180810 180810 tdcf B1 R1	1700	551.8	405.5	200
		1705	481.2	463.4	1600
	180810 180810 tdcf B1 R2	1715	623.5	463.3	200
		1720	504.1	489.1	1600
	180810 180810 tdcf B1 R3	1730	643.2	483.5	200
		1735	569.3	551.1	1600
juco	180813 180813 juco B1 R1	1003	881.2	381.8	200
		1008	328.8	304.6	1600
	180813 180813 juco B1 R2	1017	820.7	401.2	200
		1022	340.8	313.4	1600
	180813 180813 juco B1 R3	1031	796.5	442.5	200
		1037	428.8	398.5	1600
pmgg	180813 80813 pmgg B1 R1	1135	1084.2	584.2	200
		1140	551.2	520.6	1600
	180813 80813 pmgg B1 R2	1150	867.4	507.9	200
		1155	479	452.2	1600
	180813 80813 pmgg B1 R3	1220	798.7	505.9	200
		1225	486	460.8	1600
tabr	180813 180813 tabr B1 R1	1242	927	620.1	200
		1248	667.9	628.6	1600
	180813 180813 tabr B1 R2	1257	798.7	650.6	200
		1302	666.6	647.1	1600

	180813	180813 tabr B1 R3	1311	940	633.1	200
			1316	717.6	677.5	1600
cdss	180813	180813 cdss B1 R1	1333	1021.3	804.3	200
			1338	676.8	660.2	1600
	180813	180813 cdss B1 R2	1349	730.3	578.8	200
			1354	517.8	505.7	1600
	180813	180813 cdss B1 R3	1404	1161.8	903.9	200
			1410	783.2	764.1	1600
abam	180813	80813 abam B1 R1	1425	1972.2	1197.9	200
			1430	815.9	751.3	1600
	180813	80813 abam B1 R2	1441	749.8	479.5	200
			1447	480.2	457.9	1600
	180813	80813 abam B1 R3	1459	614.2	385.5	200
			1504	388.3	370.2	1600
celi	180813	180813 celi B1 R1	1522	953	541.3	200
			1528	613.5	565.4	1600
	180813	180813 celi B1 R2	1539	921.2	593	200
			1544	681.6	643.8	1600
	180813	180813 celi B1 R3	1554	727.9	451.2	200
			1559	545.5	514.4	1600
pfvp	180813	180813 pfvp B1 R1	1610	187.6	131.5	200
			1615	133.2	127.4	1600
	180813	180813 pfvp B1 R2	1625	192.3	131.7	200
			1630	141.3	134.8	1600
	180813	180813 pfvp B1 R3	1640	188.7	129.7	200
			1645	138.5	131.6	1600
pars	180814	180814 pars B1 R1	1020	1222.4	587.9	200
			1026	531.8	483.3	1600
	180814	180814 pars B1 R2	1039	1065.6	519	200
			1044	480.2	433.3	1600

	180814	180814	pars B1 R3	1053	1122.7	610.8	200
				1058	600.5	555.8	1600
sgpb	180814	180814	sgpb B1 R1	1115	734.8	456.8	200
				1120	461.1	427.5	1600
	180814	180814	sgpb B1 R2	1131	610.6	402.7	200
				1136	455.4	424.5	1600
	180814	180814	sgpb B1 R3	1146	790.9	478.9	200
				1151	533.7	489.2	1600
pmup	180814	180814	pmup B1 R1	1202	549.6	379.6	200
				1207	387.2	366.6	1600
	180814	180814	pmup B1 R2	1218	665.2	490.6	200
				1233	492.2	462.3	1600
	180814	180814	pmup B1 R3	1255	632.6	463.6	200
				1300	463	441.8	1600
pipa	180814	180814	pipa B1 R1	1313	273.3	163.6	200
				1318	181.6	170.2	1600
	180814	180814	pipa B1 R2	1329	342.4	170.6	200
				1334	150.5	139.3	1600
	180814	180814	pipa B1 R3	1352	291.5	159.5	200
				1357	165	153.8	1600
piab	180814	180814	piab B1 R1	1411	608.7	417.5	200
				1416	462.8	441.7	1600
	180814	180814	piab B1 R2	1426	788.9	573	200
				1431	633.8	603.6	1600
	180814	180814	piab B1 R3	1440	620.8	422.6	200
				1445	466.2	442.1	1600
pisf	180814	180814	pisf B1 R1	1455	243.2	141.6	200
				1500	128.5	120.8	1600
	180814	180814	pisf B1 R2	1511	245.5	155.5	200
				1516	148.6	139.7	1600



	180814	180814	pisf B1 R3	1527	171.1	109.2	200
				1532	104.2	99.3	1600
sgvm	180814	180814	sgvm B1 R1	1548	443.8	231.7	200
				1553	253.1	223.5	1600
	180814	180814	sgvm B1 R2	1603	1187.8	637.1	200
				1608	700.3	617.3	1600
	180814	180814	sgvm B1 R3	1617	592.1	274.644	200
				1622	367.6	325.8	1600
piph	180814	180814	piph B1 R1	1634	737.2	424.3	200
				1639	453.5	422.6	1600
	180814	180814	piph B1 R2	1649	1042.7	574.9	200
				1654	593.4	549.6	1600
	180814	180814	piph B1 R3	1704	1037.8	531.9	200
				1709	532.7	493.3	1600
jccm	180814	180814	jccm B1 R1	1719	1106.2	781.4	200
				1724	764.3	734.8	1600
	180814	180814	jccm B1 R2	1733	808.3	545.2	200
				1738	560	532.6	1600
	180814	180814	jccm B1 R3	1747	782.3	535.2	200
				1752	541.1	515.8	1600
pied	180815	180815	pied B1 R1	1025	1020.8	651.5	200
				1031	738.7	686.3	1600
	180815	180815	pied B1 R2	1040	784	498.1	200
				1045	578.7	537.3	1600
	180815	180815	pied B1 R3	1055	933.2	581.9	200
				1100	676.2	626.3	1600
jcsj	180815	180815	jcsj B1 R1	1120	618.1	400.3	200
				1125	448.8	426	1600
	180815	180815	jcsj B1 R2	1137	635.4	389.2	200
				1142	442.9	422.3	1600

	180815 180815 jcsG B1 R3	1158	597.4	308.6	200
		1203	320.1	301.5	1600
cubp	180815 180815 cubp B1 R1	1216	767.4	442.4	200
		1222	471.5	435	1600
	180815 180815 cubp B1 R2	1232	770.2	453	200
		1237	512.2	473.6	1600
	180815 180815 cubp B1 R3	1249	826.8	435.5	200
		1255	490.7	453.8	1600
pspe	180815 180815 pspe B1 R1	1325	112	71.8	200
		1331	74	70.8	1600
	180815 180815 pspe B1 R2	1343	92.6	58.2	200
		1349	61.2	57.9	1600
	180815 180815 pspe B1 R3	1359	146.4	92	200
		1405	81.4	78.3	1600
thod	180815 180815 thod B1 R1	1423	770.9	528.2	200
		1428	615.9	590.5	1600
	180815 180815 thod B1 R2	1438	1015.6	725.4	200
		1443	839.5	807.5	1600
	180815 180815 thod B1 R3	1452	851.4	607.1	200
		1457	670.5	642.9	1600
scvw	180815 180815 scvw B1 R1	1514	284.6	232.5	200
		1519	260.1	254.5	1600
	180815 180815 scvw B1 R2	1529	143.5	127.5	200
		1534	126.5	126	1600
	180815 180815 scvw B1 R3	1545	343.3	224.5	200
		1550	266.9	257.1	1600
pipm	180815 180815 pipm B1 R1	1606	772.5	527.1	200
		1611	534.4	509.2	1600
	180815 180815 pipm B1 R2	1620	544.8	385.7	200
		1625	390.4	370.3	1600

	180815	180815 pipm B1 R3	1633	1009.2	689.4	200
			1638	669.7	633.9	1600
jusb	180815	180815 jusb B1 R1	1649	782.4	488.9	200
			1654	491.3	456.3	1600
	180815	180815 jusb B1 R2	1707	615.2	388.6	200
			1712	361.9	335.1	1600
	180815	180815 jusb B1 R3	1722	621.8	390.6	200
			1727	406.8	376.1	1600
psgf	180816	180816 psgf B1 R1	948	463.7	280.2	200
			953	273.7	253.8	1600
	180816	180816 psgf B1 R2	1002	266.6	135.9	200
			1008	134.9	120.2	1600
	180816	180816 psgf B1 R3	1018	249.3	152	200
			1023	167	152.3	1600
pije	180816	180816 pije B1 R1	1034	178.7	101.4	200
			1040	76.9	71.3	1600
	180816	180816 pije B1 R2	1059	69.7	42.4	200
			1105	29.8	29.2	1600
	180816	180816 pije B1 R3	1117	141.3	88.5	200
			1122	69.7	66.4	1600
ponc	180816	180816 ponc B1 R1	1133	1153.8	659.8	200
			1138	723	667.7	1600
	180816	180816 ponc B1 R2	1148	1266.9	722.6	200
			1153	776.2	714.1	1600
	180816	180816 ponc B1 R3	1204	1113.4	581.6	200
			1209	631	575.5	1600
abal	180816	180816 abal B1 R1	1222	689.6	521.1	200
			1227	608.8	585.3	1600
	180816	180816 abal B1 R2	1238	816.8	616.7	200
			1243	680.1	656.8	1600

	180816	180816 abal B1 R3	1251	1104	887	200
			1256	981.4	949.1	1600
piba	180816	180816 piba B1 R1	1311	1445.6	695.7	200
			1316	741.5	679.1	1600
	180816	180816 piba B1 R2	1328	1718.2	772.3	200
			1334	720.1	660.5	1600
	180816	180816 piba B1 R3	1345	1262.5	601.8	200
			1350	685.8	625.1	1600
psmf	180816	180816 psmf B1 R1	1406	1301.9	1004.9	200
			1412	956.1	922.3	1600
	180816	180816 psmf B1 R2	1424	1023.9	710.1	200
			1429	749	717.5	1600
	180816	180816 psmf B1 R3	1438	1116.2	752.2	200
			1443	785.9	751.1	1600
tamd	180817	180817 tamd B1 R1	1015	875.8	464.3	200
			1021	520	476	1600
	180817	180817 tamd B1 R2	1032	800.6	464.8	200
			1037	481.2	443.1	1600
	180817	180817 tamd B1 R3	1049	918.3	613.6	200
			1054	675.3	638.7	1600
cehp	180817	180817 cehp B1 R1	1108	1522.9	888.3	200
			1113	865.5	806.3	1600
	180817	180817 cehp B1 R2	1152	1403	803.4	200
			1157	835.8	784.1	1600
	180817	180817 cehp B1 R3	1213	1355	821.7	200
			1219	809.7	758.7	1600
tscj	180817	180817 tscj B1 R1	1238	568.5	355.5	200
			1243	369.1	344	1600
	180817	180817 tscj B1 R2	1253	401.9	265.5	200
			1258	269.7	257.2	1600

	180817 180817 tscj B1 R3	1308	462.3	290.6	200
		1313	306	288.8	1600
mgmg	180817 180817 mgmg B1 R1	1328	1193.6	974.1	200
		1333	1082.8	1057.4	1600
	180817 180817 mgmg B1 R2	1344	1183.3	924.1	200
		1349	1008.1	979.8	1600
	180817 180817 mgmg B1 R3	1401	1388	1111.6	200
		1407	1218	1189.5	1600
tadm	180817 180817 tadm B1 R1	1424	1193	608.5	200
		1430	681.5	630.1	1600
	180817 180817 tadm B1 R2	1441	1237.2	667	200
		1446	695.1	644.7	1600
	180817 180817 tadm B1 R3	1457	1080.8	570.6	200
		1502	605.3	560.9	1600
abpa	180817 180817 abpa B1 R1	1516	1096.9	567.7	200
		1521	540.6	500.1	1600
	180817 180817 abpa B1 R2	1531	641.4	412.7	200
		1536	453.4	431.5	1600
	180817 180817 abpa B1 R3	1545	1119.5	625.2	200
		1550	694.1	647.1	1600
psme	180817 180817 psme B1 R1	1604	849.8	530.2	200
		1611	566.4	527.9	1600
	180817 180817 psme B1 R2	1621	814.5	532.4	200
		1626	587.5	533.4	1600
	180817 180817 psme B1 R3	1637	1004	612.3	200
		1642	644.4	600.5	1600
pibu	180817 180817 pibu B1 R1	1654	433	232.3	200
		1659	222.8	205.5	1600
	180817 180817 pibu B1 R2	1709	408.3	228.6	200
		1714	249.1	231.2	1600

	180817 180817 pibu B1 R3	1723	401.2	220.6	200
		1728	235.8	216.2	1600
thpw	180820 180820 thpw B1 R1	1017	285.4	206.7	200
		1023	213.9	205.7	1600
	180820 180820 thpw B1 R2	1035	273.4	186	200
		1040	196.9	188.7	1600
	180820 180820 thpw B1 R3	1051	283.6	196	200
		1056	207.1	198.8	1600
pico	180820 180820 pico B1 R1	1110	172.8	117.7	200
		1115	113.8	110.2	1600
	180820 180820 pico B1 R2	1126	147.3	103.1	200
		1131	98	94.2	1600
	180820 180820 pico B1 R3	1143	184.9	128.9	200
		1148	121.3	117.1	1600
akgc	180820 180820 akgc B1 R1	1200	923.4	683.1	200
		1205	739.2	715.7	1600
	180820 180820 akgc B1 R2	1215	1113.2	691.2	200
		1220	715.3	681.3	1600
	180820 180820 akgc B1 R3	1231	784.9	522.4	200
		1236	558.1	534.2	1600

Tleaf	After Dark Pulse		Fo'	After Dark adapting		Fv/Fm
	Fv'	Fs		Fm	Fo	
25.01 25.05	59	157.3	106	1793.63	541.811	0.69792488
25.03 25.05	126	209.7	105.2	1550.2	448.089	0.71094762
25.07 25.08	48	147.6	108.4	1232.89	313.933	0.7453682
25.03 25.05	58	83.5	34.6	1780.86	321.622	0.81940074
25.04 25.1	56	93.1	48.2	1121.91	223.989	0.8003503
25.06 24.93	31	63.9	39	1325.42	266.4	0.79900711
25.05 25.02	89	148.2	71.4	729.422	138.111	0.81065693
25.11 25.06	88	158.4	84.6	626.844	125.867	0.79920522
25.1 25.1	108	191.2	100.8	826.302	189.3	0.770907
25.05 25	77	167.6	102	2008	381.322	0.81009861
25.06 25.03	64	135.4	77.8	1789.83	323.311	0.81936217
25.3 24.98	65	142	87.4	1924.78	350.444	0.81793036
25.06 24.99	211	407.1	210.6	805.138	189.344	0.76483038
25.04 25.11	135	272.4	154.2	542.25	114.611	0.78863808

25.01 25.02	93	227	148.4	1837.93	364.122	0.80188473
25.04 25	87	160	85	1786.31	286.644	0.83953289
24.9 25.04	79	137.5	66.6	1836.88	304.533	0.83421182
25.14 25.06	65	113.1	54.6	1375.34	228.122	0.83413411
25.08 25.07	39	90.8	55.6	1896.55	373.5	0.80306346
25.01 25.08	53	83	34	1954.39	365.344	0.81306495
25.01 25	38	64.9	27	1981.46	348.522	0.82410849
25.08 25.1	61	136.3	82	1532.24	307.289	0.79945113
25.04 25.08	87	202.2	123.6	1719.31	341.311	0.80148373
25.08 25.05	93	211.7	125.6	1562.53	293.656	0.81206377
25.08 25.06	168	360	211	1715.57	328.233	0.80867408
25.14 25.18	145	323.6	195.2	1576.86	326.733	0.79279518
25.13 25.07	139	304	178.4	1336.35	269.289	0.79848917
25.04 25.02	44	101.5	60.6	1041.84	254.433	0.75578496
25.12 25.08	44	107.4	67.6	2063.5	445.333	0.78418561



25.09 25.09	52	133.8	86.4	2391.24	518.167	0.78330615
25.06 25.06	82	287.4	214.8	983.254	237.144	0.75881715
25.09 25.08	97	276.5	187	1560.84	350.689	0.77532034
25.11 25.06	118	304.5	194.6	1538.96	296.878	0.8070918
25.06 25	495	996.1	525.6	3611.58	708.344	0.80386867
25.09 25.08	378	763.5	400.4	2798.42	512.9	0.81671801
25.11 25.12	129	313	193.8	1320.18	269.5	0.79586117
25.09 25.01	60	118.1	65.2	1749.2	280.911	0.83940601
25.05 25	74	146.7	80.4	2967.17	487.9	0.83556722
25.03 25.02	47	88.9	47.2	2913.49	458.589	0.84259805
25.08 25.09	35	75.7	43	402.324	78.34	0.80528132
25.05 25	27	46	19.8	502.517	106.211	0.78864198
25.08 25.1	34	63.2	31.4	1161.82	210.144	0.81912517
25.07 25.14	115	288.3	189.8	1481.68	316.7	0.78625614
25.09 25.07	130	284.5	165.6	1428.29	271.089	0.81020031

25.2 25.11	170	389.3	233.8	1956.43	346.944	0.82266475
25.02 25.01	157	359.1	248.4	1911.18	358.578	0.81237874
25.07 25.06	169	368.8	244.6	2026.72	356.744	0.82397963
25.03 25.04	141	342.8	238	1797.26	373.389	0.79224542
25.04 25.03	228	629.4	461.8	3030.39	543.722	0.82057689
25.03 25.04	191	499.3	350.4	2210.69	406.189	0.81626144
25.01 25.04	310	645.8	384.2	2491.09	433.489	0.82598421
25.05 25.07	49	94.3	53.4	2950.57	474.533	0.83917243
25.08 25.05	50	105.1	61.6	2376.04	395.289	0.83363538
25.06 25.04	42	86.7	49.8	2887.56	473.11	0.83615579
25.04 25	422	809.9	429.4	2892.85	531.311	0.81633648
25.04 25.04	396	774.6	416	2649.03	494.189	0.8134453
25.03 25	344	678.1	380.6	2572.51	459.022	0.82156649
25.1 25.04	73	146.7	82.4	713.761	131.978	0.81509497
25.08 25.03	101	217.9	133.2	1188.33	191.333	0.83899001

25.08 25.09	114	246.4	155.4	1444.56	236.244	0.83645954
25.12 25.07	145	330	207.4	2084.93	297.844	0.85714436
25.14 25.04	141	368.3	254	2372.94	410.322	0.82708286
25.1 25.06	152	383.8	263	2325.19	414.244	0.8218451
25 25.04	194	457.1	312.4	2874.72	492.033	0.82884142
25.18 25	134	276.1	180.2	1699.58	281.944	0.8341096
25.09 25.1	99	223	141.4	1069.18	175.767	0.83560579
25.04 24.98	68	127.6	74.6	2894.14	425.244	0.85306723
25.09 25.03	72	142.7	88.6	2181.55	355.656	0.83697096
25.1 25.05	72	118.5	63.2	2614.75	424.456	0.83766861
25.1 25.0	67	109.1	61	3881.68	640.367	0.83502839
25.0 25.0	49	83.2	46	1991	340.667	0.82889653
25.0 25.0	55	119.5	78.8	2383.07	423.033	0.82248402
25.1 25.1	162	419.7	296.2	2483.1	379.544	0.84714913
25.1 25.1	163	417.2	289.6	2130.75	358.722	0.8316452

25.1	147	396	279	2450.21	393.678	0.83932887
25.1						
25.1	150	314.6	185.4	1635.79	368.078	0.77498456
25.1						
25.0	153	302.6	168	1527.23	287.7	0.81161973
25.0						
25.1	210	431.2	245.6	2101.83	385.556	0.81656176
25.0						
25.1	117	464.1	362.6	2468.58	758.8334	0.69260328
25.1						
25.1	138	460.1	352.8	2514.61	640.533	0.74527541
25.1						
25.1	126	437.8	339.6	2340.36	605.167	0.74142141
25.1						
25.1	139	320.8	198	1525.41	276.3	0.81886837
25.1						
25.1	132	302.7	190.2	1554.06	281.867	0.81862541
25.1						
25.1	189	408.4	240.4	1888.94	330.578	0.82499285
25.1						
25.1	68	153.9	95.4	3164.47	509.889	0.83887065
25.0						
25.1	50	116.3	73.6	2338.8	405.611	0.82657303
25.1						
25.1	67	172.1	116.4	1870.38	318.9	0.82949989
25.0						
25.1	84	199.9	131.6	328.445	68.8444	0.79039291
25.0						
25.0	72	159.1	101.8	845.789	166.878	0.80269547
25.1						

25.1 25.1	90	199.5	128	1073.83	208.456	0.80587616
25.0 25.0	97	285.6	201.2	1618.93	346.289	0.78610008
25.1 25.0	87	315.4	241	1658.51	361.033	0.78231485
25.1 25.0	86	336.8	259.8	1759.01	376.689	0.7858517
25.0 25.04	315	742.2	508.8	4207.3	661.022	0.84288689
25.05 25.04	276	706	513.4	4150.58	649.978	0.84340068
25.16 25.03	226	609.8	436.6	3594.54	589.933	0.83588081
25.06 25.1	226	513.1	436.6	2180.83	399.544	0.81679269
25.14 25.04	288	624.9	390	2606.06	461.756	0.82281452
25.1 25.04	287	573.7	333.4	2389.66	389.889	0.83684332
25.04 25.07	149	262.1	133.2	1060.92	191.822	0.81919278
25 25.04	162	267.5	119.2	924.118	161.967	0.82473342
25.1 25.1	257	404.2	175	1533.95	255.856	0.83320447
25.02 25.01	133	341.3	232.2	1859.16	297.467	0.83999925
25.2 25.18	218	501.5	310.8	2225.29	369.456	0.833974

25.11 25.08	231	562	376.6	2717.03	454.733	0.832636
25.09 25.1	51	107.3	62.2	1796.2	277.144	0.84570538
25.05 25.04	34	73.3	42.4	1570.43	284.411	0.8188961
25.05 24.96	47	72.2	31	1806.16	290.744	0.83902644
25.1 25.02	551.8	405.5	405.5	1834.97	358.056	0.80487092
25.08 25.06	228	489.1	276.4	1702.43	342.422	0.7988628
25.11 25.25	232	551.1	337	1956.11	390.011	0.80061909
25.17 25.1	138	304.6	190.8	2889.64	516.122	0.82138882
25.06 25	139	313.4	201.8	3117.9	533.978	0.82873793
25.04 25.05	139	398.5	201.8	3304.92	574.867	0.82605721
25.11 25.17	178	520.6	373	3510.99	572.444	0.83695653
25.12 25.08	148	452.2	331.4	2961.21	489.333	0.83475235
24.95 25.08	156	460.8	330	2678.74	478.867	0.82123424
25.2 25.29	324	628.6	344.2	2848.09	464.1	0.83704869
25.11 25	388	647.1	279	2206.76	408.811	0.81474605

25.11 25.08	325	677.5	392.2	3106.2	548.333	0.82347144
25.03 25.09	127	660.2	549.6	2812.78	1047.38	0.62763529
25.02 25.1	132	505.7	385.8	2110.51	708.467	0.66431479
25.15 25.11	177	764.1	606	3022.65	1102.88	0.63512812
25.03 25.03	160	751.3	655.8	2918.54	1115.21	0.61788771
25.03 25.12	176	457.9	304.6	2643.1	472.789	0.8211233
25.08 25.02	138	370.2	242.2	2099.87	386.667	0.81586146
25.08 25.1	266	565.4	347.4	2595.85	427.144	0.8354512
25.12 25.05	311	643.8	370.6	2586.8	428.933	0.83418393
25.09 25.04	291	514.4	254.8	1749.82	300.578	0.82822347
25.04 25.02	55	127.4	78.6	2212.16	396.733	0.82065809
25.09 25	56	134.8	85.8	1510.31	292.244	0.80650065
25.1 25.03	60	131.6	78.8	1823.83	316.233	0.82661048
25.1 25.1	197	483.3	335.2	2842.16	511.822	0.81991795
25.2 25.2	163	433.3	316.8	2940.29	523.333	0.82201313

25.2	206	555.8	394	2959.76	538.656	0.81800687
25.1						
25.0	198	427.5	262.8	1663.99	333.178	0.79977163
25.1						
25.0	188	424.5	267.4	1741.98	329.011	0.81112814
25.0						
25.0	241	489.2	292.4	1995.3	346.556	0.82631384
25.1						
25.1	131	366.6	255.8	2207.36	345.256	0.84358872
25.1						
25.1	156	462.3	335.8	2868.16	436.956	0.84765285
25.1						
25.1	128	441.8	334.6	2663.83	399.911	0.84987368
25.0						
25.0	85	170.2	96.4	1962.54	336.6	0.82848757
25.0						
25.0	69	139.3	81.6	2762.22	467.056	0.83091282
25.1						
25.0	81	153.8	84.2	2820.61	423.522	0.84984737
25.0						
25.1	179	441.7	283.6	2294.53	417.067	0.81823424
25.1						
25.0	212	603.6	422.2	3215.1	581.722	0.81906566
25.0						
25.2	181	442.1	285	2206.43	400.633	0.81842479
25.0						
25.1	47	120.8	81.2	2730.1	434.244	0.84094209
25.1						
25.1	66	139.7	82.4	2780.76	442.3	0.84094276
25.0						



25.1 25.1	43	99.3	60.8	3652.76	560.789	0.84647527
25.1 25.1	134	223.5	119	951.566	166.556	0.82496642
25.0 25.1	306	617.3	394.6	2732.17	494.433	0.81903286
25.0 25.0	157	325.8	211	1556.22	274.644	0.82351853
25.0 25.0	182	422.6	271.8	2274.47	339.7	0.85064652
25.1 25.1	228	549.6	365	2926.18	460.633	0.84258214
25.1 25.0	217	493.3	316	2602.16	407.067	0.84356573
25.0 25.0	273	734.8	491	3678.26	546.056	0.85154502
25.1 25.1	220	532.6	340	2522.05	387.678	0.84628457
25.0 25.0	185	515.8	356.2	2530.56	397.878	0.84277077
25.2 25.14	319	686.3	420	3605.66	567.844	0.84251316
25.29 25.14	250	537.3	328.6	2638.35	430.889	0.8366824
25.21 25.12	292	626.3	384.6	3159.94	522.411	0.83467692
25.03 25.05	188	426	260.6	1908.15	352.333	0.81535361
25 25.06	193	422.3	249.8	1796.43	334.456	0.81382186

25.05 25.07	139	301.5	181.6	1319.17	230.344	0.82538718
25.06 25.03	225	435	246.4	1936.83	321.22	0.83415168
25.04 25.03	254	473.6	258.2	1985.16	326.6	0.83547926
25.03 25.02	226	453.8	264.8	1873.73	314.189	0.83231896
25.02 25.03	44	70.8	29.8	762.924	183.522	0.75944917
25.01 25.05	38	57.9	23.2	1130.67	270.611	0.76066315
25.01 25.05	38	78.3	43	896.516	206.844	0.76928019
25.13 25.05	278	590.5	338.2	2553.96	493.689	0.80669666
25.14 25.11	385	807.5	455	3557.88	615.267	0.82706921
25.1 25.16	305	642.9	365.6	2956.02	519.611	0.82421939
25.07 25.01	87	254.5	172.8	2247.68	526.8	0.765625
25.05 25.09	45	126	126	1579.96	458.578	0.70975341
25.08 25.09	114	257.1	152.6	2689.66	496.867	0.81526773
25.05 25.06	178	509.2	356.6	2695.39	465.056	0.82746245
25.1 25.07	153	370.3	237	2068.16	345.989	0.83270685

25.12 25.06	251	633.9	418.6	3411.32	558.522	0.83627394
25.15 25.15	229	456.3	262	1384.16	238.711	0.82754089
25.05 25.09	180	335.1	182.4	1488.32	250.511	0.83168203
25.11 25.1	211	376.1	196	1709.71	294.733	0.82761229
25.05 25.04	121	253.8	153.2	2060.28	299.456	0.85465277
25.04 25.02	68	120.2	66.8	2293.27	338.656	0.85232615
25.03 25.06	73	152.3	94.2	2304.18	338.878	0.85292902
25 25.03	38	71.3	39.2	1581.95	384.4	0.75700876
25.04 25.03	27	29.2	2.4	1685.01	412.989	0.75490413
25.05 25	35	66.4	35	1269	309.789	0.75587943
25.08 25.04	322	667.7	401	3106.96	519.256	0.83287329
25.1 25.08	347	714	714.1	3489.74	542.378	0.84457925
25.04 25.04	275	575.5	356.2	3489.74	542.378	0.84457925
25.1 25.06	236	585.3	373.2	2864.82	513.733	0.8206753
25.1 25	243	656.8	656.8	3074.81	594.678	0.80659683

25.2 25.1	324	949.1	657.2	4433.21	1026.13	0.76853567
25.11 25.11	298	679.1	444	3228.64	580.811	0.82010661
25.11 25.15	232	660.5	487.8	3389.65	671.122	0.80200847
25.2 25.14	292	625.1	393.4	2957.11	534.111	0.81938075
25.13 25.13	274	922.3	682.2	4851.72	1072.66	0.7789114
25.12 25.13	300	717.5	449.2	3996.76	653.333	0.83653434
25.21 25.18	296	751.1	490	4108.07	661.433	0.83899179
25.1 25.1	256	476	264.2	2203.32	473.178	0.78524318
25.09 25.02	233	443.1	248.4	1934.48	445.611	0.76964817
25.12 25	347	638.7	328.6	2340.23	491.689	0.78989715
25.06 25	264	806.3	601	3169.34	936.578	0.704488
25.05 25.01	235	784.1	600.4	2579.83	737.678	0.71405945
25.1 25.1	257	758.7	552.6	3062.52	674.689	0.77969483
25.1 25.05	137	344	232.4	1660.48	465.189	0.71984667
25.01 25.04	100	257.2	169.4	1139.31	302.733	0.73428391

25.01 25.04	121	288.8	184.6	1034.9	284.322	0.72526621
25.1 25.02	425	1057.4	658	3194.57	877.633	0.72527351
25.03 25.05	394	979.8	614.2	2956.4	735.6	0.75118387
25.01 25.03	477	1189.5	741	3590.67	888.622	0.75251917
25.11 25.03	318	630.1	363.8	2528.21	578.589	0.77114678
25.05 25.1	284	644.7	410.8	2880.48	587.689	0.79597532
25.13 25.1	261	560.9	344	2412.44	468.689	0.80571994
25.02 25.03	205	500.1	335.8	2706.7	429.522	0.84131156
25.02 25.04	171	431.5	282.4	2295.89	340.667	0.85161876
25.04 25.04	303	647.1	391.6	3084.56	445.644	0.85552429
25.1 25.05	188	527.9	378	3598.37	582.078	0.83823842
25.15 25.05	221	533.4	366.4	3434.85	528.644	0.84609401
25.1 25.1	226	600.5	418.8	3679.36	648.344	0.82378892
25.04 25.04	102	205.5	120.4	3591.5	540.211	0.84958625
25.1 25.09	119	231.2	130.4	3298.11	468.433	0.85796926

25.12 25.1	106	216.2	129.8	4206.96	647.311	0.84613331
25.03 25.03	101	205.7	113	715.722	159.522	0.77711737
25.07 25.01	90	188.7	107	717.025	154.622	0.78435619
25.09 25.03	98	198.8	109.4	780.334	156.3	0.79970115
25.04 25.1	40	110.2	73.8	2150.84	461.856	0.78526715
25.04 25.04	38	94.2	60.4	1866.52	407.544	0.7816557
25 25.05	44	117.1	77.2	2452.71	550.333	0.77562247
25.08 25.03	282	715.7	456.8	3750.28	650.511	0.82654335
25.09	255	681.3	460.8	3411.58	554.133	0.83757291
25.1 25.2	186	534.2	372	2684.65	471.222	0.82447544

25.0689474  
0.05054101

<b>Fv/Fm (avg)</b>	<b>PSII Red. State</b>	<b>PSII Red. State (avg)</b>	<b>PSII eff. (200)</b>	<b>PSII eff. (200 avg)</b>	<b>PSII eff. (1600)</b>
0.71808023	0.253960396	0.263698674	0.337662338	0.394951565	0.047820823
	0.360717984		0.471511775		0.094950367
	0.176417642		0.375680581		0.054452274
0.80625271	0.352559481	0.278389014	0.484708598	0.506935724	0.096320346
	0.228266396		0.549612087		0.106525912
	0.254341164		0.486486486		0.081896552
0.79358972	0.384769539	0.373020183	0.469372694	0.459097153	0.074906367
	0.315384615		0.47645951		0.08173913
	0.418906395		0.431459255		0.084291188
0.81579705	0.399756246	0.407106283	0.390830515	0.377138723	0.062639821
	0.494420601		0.322182192		0.048489108
	0.327142001		0.41840346		0.065789474
0.78511773	0.684430512	0.457828254	0.289531846	0.393466355	0.0128516
	0.381782946		0.453212592		0.058091286

	0.307271306		0.437654626		0.058872305
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	0.605465414		0.336418073		0.056280027
	0.600616016		0.349342105		0.051174497
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	0.383111806		0.389746757		0.051428571
	0.523480663		0.300804829		0.00764526
0.80433288	0.407657658	0.507439195	0.359200743	0.30247828	0.049511855
	0.51171875		0.301587302		0.038058991
	0.602941176		0.246646796		0.032891731
0.79998614	0.475430759	0.467451265	0.33180778	0.33074688	0.050632911
	0.430872483		0.356447689		0.049074346
	0.496050553		0.303985171		0.041916168
0.77442557	0.463193658	0.439061524	0.269979852	0.288904449	0.025911708
	0.3960199		0.326591315		0.034172662



	0.457971014		0.27014218		0.030434783
0.78040976	0.393709328	0.546176836	0.259018036	0.22301757	0.031018206
	0.611756664		0.194119412		0.02572234
	0.633064516		0.215915263		0.024351169
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	0.598694124		0.217612624		0.028855104
0.83919043	0.389830508	0.449492787	0.414634146	0.382563777	0.058964143
	0.4922049		0.357508136		0.052325581
	0.466442953		0.375549048		0.058262712
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	0.496212121		0.367768595		0.025423729
	0.489230769		0.363070539		0.029185868
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	0.55664794		0.286128692		0.038201487

	0.601547389		0.245378834		0.035192069
0.8095346	0.116612241	0.122913966	0.573933372	0.561119133	0.113552209
	0.127988458		0.533744856		0.108317215
	0.124141199		0.575679172		0.095753099
0.82094085	0.236522721	0.305431794	0.452323992	0.436360612	0.087032202
	0.28656659		0.437701149		0.077761359
	0.393206072		0.419056694		0.069050022
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	0.417241379		0.369720405		0.069598634

	0.295167045		0.449212853		0.085035277
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	0.327977044		0.383236515		0.066886243
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	0.108141633		0.578819119		0.120980579
	0.203187251		0.420441989		0.070833333
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	0.251936219		0.506190308		0.120267261
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	0.228080932		0.494021999		0.1278826
	0.192526017		0.469676085		0.107542942
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	0.322792816		0.389253906		0.078418379

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	0.43224149		0.238840217		0.057907846
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	0.150871766		0.435620301		0.062168773
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0.82082888	0.438414852	0.415187796	0.331938925	0.361675227	0.049199763
	0.332840237		0.394358198		0.059061237
	0.4743083		0.358728557		0.048683904
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	0.372925764		0.339181287		0.057536467
	0.258828996		0.403799759		0.060076461
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	0.212931996		0.48153141		0.081938834

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	0.373289902		0.440684411		0.064568387
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	0.612791703		0.256936648		0.029756001
	0.699216199		0.248289801		0.031969085
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	0.180319922		0.511149019		0.080399061
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	0.225373134		0.414456998		0.055949896
	0.279069767		0.366595718		0.051851852
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	0.708293246		0.185426318		0.029252925

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	0.28445484		0.22198313		0.02438713
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	0.344339623		0.360496132		0.046438984
	0.344086022		0.372354282		0.046613443
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	0.496185979		0.356274425		0.055457746
	0.548721201		0.380134634		0.057011916
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	0.155582265		0.51295045		0.097667638

	0.222039248		0.455954396		0.074437968
0.81240454	0.348940678	0.400491871	0.378334241	0.371102101	0.072869226
	0.457750583		0.340484769		0.067852437
	0.394784353		0.394487293		0.083380176
0.84703842	0.377127297	0.373630138	0.309315866	0.279648252	0.053202479
	0.384031573		0.26247745		0.060747664
	0.359731544		0.267151439		0.045788337
0.83641592	0.41718485	0.324724159	0.401390413	0.45199098	0.06277533
	0.221242331		0.501752336		0.074418605
	0.335745297		0.452830189		0.067878788
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	0.494682302		0.273672202		0.047649101
	0.467837999		0.319265464		0.051694552
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	0.35131821		0.366598778		0.059892328



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	0.280761473		0.463630241		0.118520634
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	0.411274824		0.325497959		0.048928571
	0.374559962		0.315863479		0.046756607
0.83795749	0.443242344	0.447365597	0.361775078	0.367630027	0.070935427
	0.458278437		0.364668367		0.071539658
	0.440576012		0.376446635		0.073794735
0.81818755	0.462657343	0.399457301	0.352370167	0.407756938	0.050802139
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	0.288359788		0.483428189		0.058106842
0.8339833	0.361996161	0.372999406	0.423507949	0.43620649	0.077412513
	0.420703125		0.41184108		0.075361187
	0.336298932		0.47327044		0.075198696
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	0.628790582		0.285742418		0.038117927
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	0.364544531		0.316884661		0.053456772
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	0.352818854		0.368335501		0.074053606
	0.42296853		0.371823738		0.07546706
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	0.267267267		0.490247562		0.108969607
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	0.398216939		0.391678623		0.020134228
	0.295390405		0.373673036		0.047345768
0.84067727	0.354277365	0.21457204	0.428150459	0.445139304	0.07648686
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	0.653312444		0.196557971		0.032912166
0.81383194	0.234724441	0.21389431	0.518746541	0.530863753	0.084153742
	0.140360858		0.550517984		0.082766282
	0.26659763		0.523326733		0.08850977
0.81814584	0.387445538	0.423752416	0.22812812	0.286903265	0.035351951
	0.466852271		0.306475242		0.042056075
	0.416959438		0.326106433		0.044280443
0.78159617	0.346304774	0.408251674	0.469856132	0.407033444	0.084615385
	0.352589641		0.419435423		0.079177057
	0.525860607		0.331808777		0.054198134
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	0.228881136		0.427369922		0.061856904
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	0.642417853		0.219048424		0.028072612
	0.693199382		0.199135447		0.023399015
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	0.28303485		0.460879405		0.072507553
	0.294381107		0.472057735		0.073352057
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	0.415320334		0.356563767		0.04830172
	0.351009754		0.4415364		0.067713586
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	0.372684669		0.346347452		0.092085106
	0.310492139		0.390139442		0.068125388
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	0.490985577		0.319678127		0.041645505
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	0.388952819		0.300067889		0.03877551
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**PSII eff. (1600 avg)**

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