FFB data

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https://logbooks.jlab.org/entry/4405437
https://logbooks.jlab.org/entry/4405345

Diff Mean

	18796	18797	18798	18799	18800	18801	18802	18803	18806	18808	18809	18810	18811	18812
bpm11X	-0.051	0.01	-0.026	-0.059	-0.043	-0.045	-0.013	-0.018	-0.049	-0.022	-0.018	-0.032	0.022	-0.003
bpm12X	-0.033	-0.094	-0.136	-0.135	-0.124	-0.151	-0.158	-0.179	-0.172	-0.158	-0.188	-0.078	-0.262	-0.099
bpm16X	-0.015	-0.265	-0.231	-0.264	-0.121	-0.173	-0.26	-0.3	-0.323	-0.203	-0.43	-0.073	-0.377	-0.194
bpm1X	-0.034	-0.028	-0.017	-0.032	-0.038	-0.008	-0.007	-0.008	0	0.006	-0.014	-0.018	-0.022	0.001
bpm4aX	-0.024	0.003	0.061	0.033	-0.026	0.063	0.054	0.033	0.12	0.031	0.135	0.018	0.072	0.034
bpm4eX	-0.028	0.045	0.069	0.053	-0.037	0.052	0.077	0.077	0.129	0.05	0.169	-0.004	0.056	0.038

	18796	18797	18798	18799	18800	18801	18802	18803	18806	18808	18809	18810	18811	18812
bpm11Y	0.204	-0.084	0.05	-0.176	-0.027	0.053	-0.128	-0.004	-0.166	0.107	-0.131	0.19	0.234	0.074
bpm12Y	0.046	-0.056	0.07	-0.103	-0.011	0.068	-0.118	-0.039	-0.138	0.079	-0.099	0.167	0.131	0.036
bpm16Y	-0.093	0.025	0.072	-0.027	-0.027	0.074	-0.012	0.026	-0.046	0.104	-0.001	0.161	0.191	0.07
bpm1Y	-0.25	0.172	-0.062	0.128	-0.053	-0.084	0.125	-0.015	-0.017	-0.096	0.042	-0.17	-0.106	-0.137
bpm4aY	-0.417	0.262	-0.21	0.239	-0.177	-0.127	0.148	-0.04	-0.038	-0.084	0.053	-0.243	0.033	-0.181
bpm4eY	-0.428	0.23	-0.233	0.223	-0.149	-0.151	0.162	-0.073	-0.027	-0.121	0.037	-0.299	-0.29	-0.195

Diff Sigma

	18796	18797	18798	18799	18800	18801	18802	18803	18806	18808	18809	18810	18811	18812
bpm11X	2.729	3.161	3.149	3.878	3.231	2.979	3.145	3.058	4.243	3.671	3.326	3.009	2.838	2.624
bpm12X	5.906	5.875	5.595	5.644	5.489	5.438	5.677	5.453	7.923	6.25	8.098	8.463	7.715	8.35
bpm16X	12.232	12.326	11.172	11.059	10.869	10.575	9.888	8.922	13.336	10.043	15.505	15.708	15.811	14.035
bpm1X	1.513	1.501	1.367	1.342	1.300	1.177	1.137	1.149	1.172	1.095	1.370	1.325	1.500	1.089
bpm4aX	3.829	3.765	3.589	3.582	3.449	3.468	3.247	3.397	4.474	3.469	4.577	4.647	4.668	4.293
bpm4eX	4.466	4.441	4.099	4.078	3.892	3.884	3.567	3.697	5.161	3.844	5.805	5.887	5.956	5.274

	18796	18797	18798	18799	18800	18801	18802	18803	18806	18808	18809	18810	18811	18812
bpm11Y	20.517	22.238	17.618	17.266	16.752	12.265	11.848	8.32	10.71	11.551	23.854	20.062	27.30	7.844
bpm12Y	14.455	15.54	12.525	12.476	12.145	9.566	9.399	7.58	8.554	9.089	16.574	14.242	18.679	6.67
bpm16Y	9.236	9.769	8.51	8.700	8.785	8.044	8.212	7.09	7.617	7.668	9.30	8.542	9.861	6.306
bpm1Y	21.819	23.567	18.21	18.175	16.995	11.668	10.884	7.037	8.288	10.073	26.143	22.025	29.911	6.917
bpm4aY	33.15	35.612	27.432	27.367	25.573	17.329	16.002	9.819	11.273	14.764	39.766	33.303	44.89	9.273
bpm4eY	36.493	39.37	30.247	30.28	28.30	18.988	17.532	10.481	12.102	16.169	43.893	36.799	50.333	9.819

FFB on/off

- Comparing runs 18803 and 18812, both runs were FFB off, RMS is high for 18812 in X but RMS is low in Y. except bpm 1X, 11X.

Same settings

- Comparing runs 18797 and 18809 have same settings. But for run 18809, both X, Y RMS increased except bpm1X and 16Y.

DC offset

- DC offset is increased in run 18811 (offset=0.1) from run 18810 (offset=0.005). RMS increased in both X&Y except bpm11X,12X
- Comparing runs 18797 (offset=0.05) and 18810 (offset=0.005). decreasing DC offset lower RMS value except bpm4aX, 4eX, 12X, 16X
- Comparing runs 18801 (offset=0.5) and 18802 (offset=0.01) decreasing DC offset reduces both X,Y RMS except bpm11X,12X,16Y

60Hz gain

- Comparing runs 18797 (60Hz at 0.05) and 18798 (60Hz at 0.025), decreasing 60 Hz gain reduce both X & Y RMS significantly.

180 Hz

- Reducing 180Hz gain, comparing runs 18799 (180 Hz at 0.01) and 18800 (180Hz at 0.005) reduces both X and Y RMS but effect is not very significant.