Mutrig/MuTr Status

RIKEN/RBRC
Itaru Nakagawa

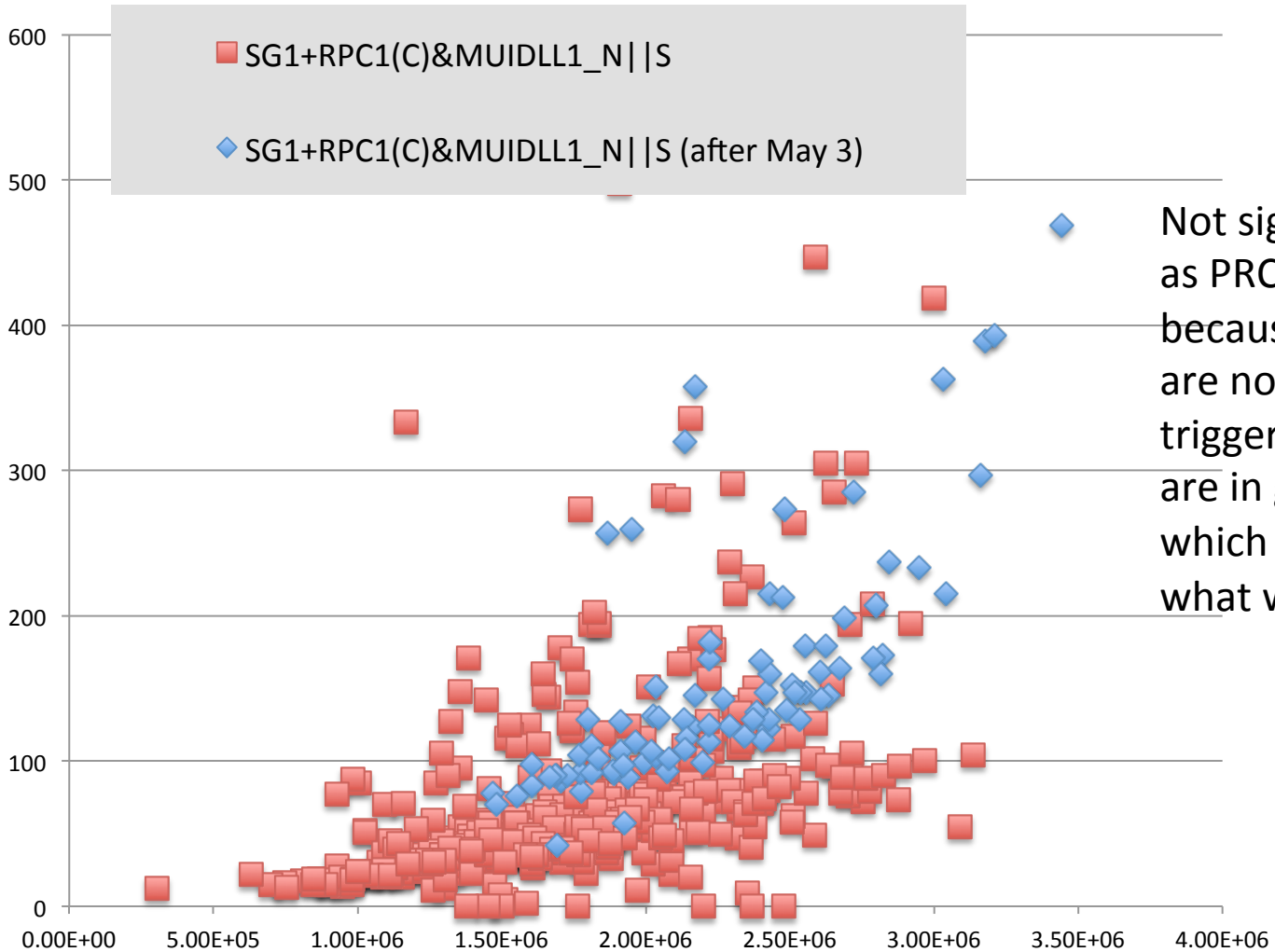
W trigger status

Period	
Mar 11 - April 27	Wrong RPC1 Mapping
April 27 – May 3	Removed RPC1 from Trigger
May 3 - Present	Correct Mapping

$$\mathrm{SG1_N||S \times RPC1_N||S(C) \times MUID_N||S1D}$$
$$\mathrm{SG1_N \times RPC3_N \times RPC1_N(B||C)}$$
$$\mathrm{SG1_N \times RPC3_N(A) \times MUID_N1D}$$
$$\mathrm{SG1_S \times RPC3_S \times RPC1_S(B||C)}$$
$$\mathrm{SG1_S \times RPC3_S(A) \times MUID_S1D}$$

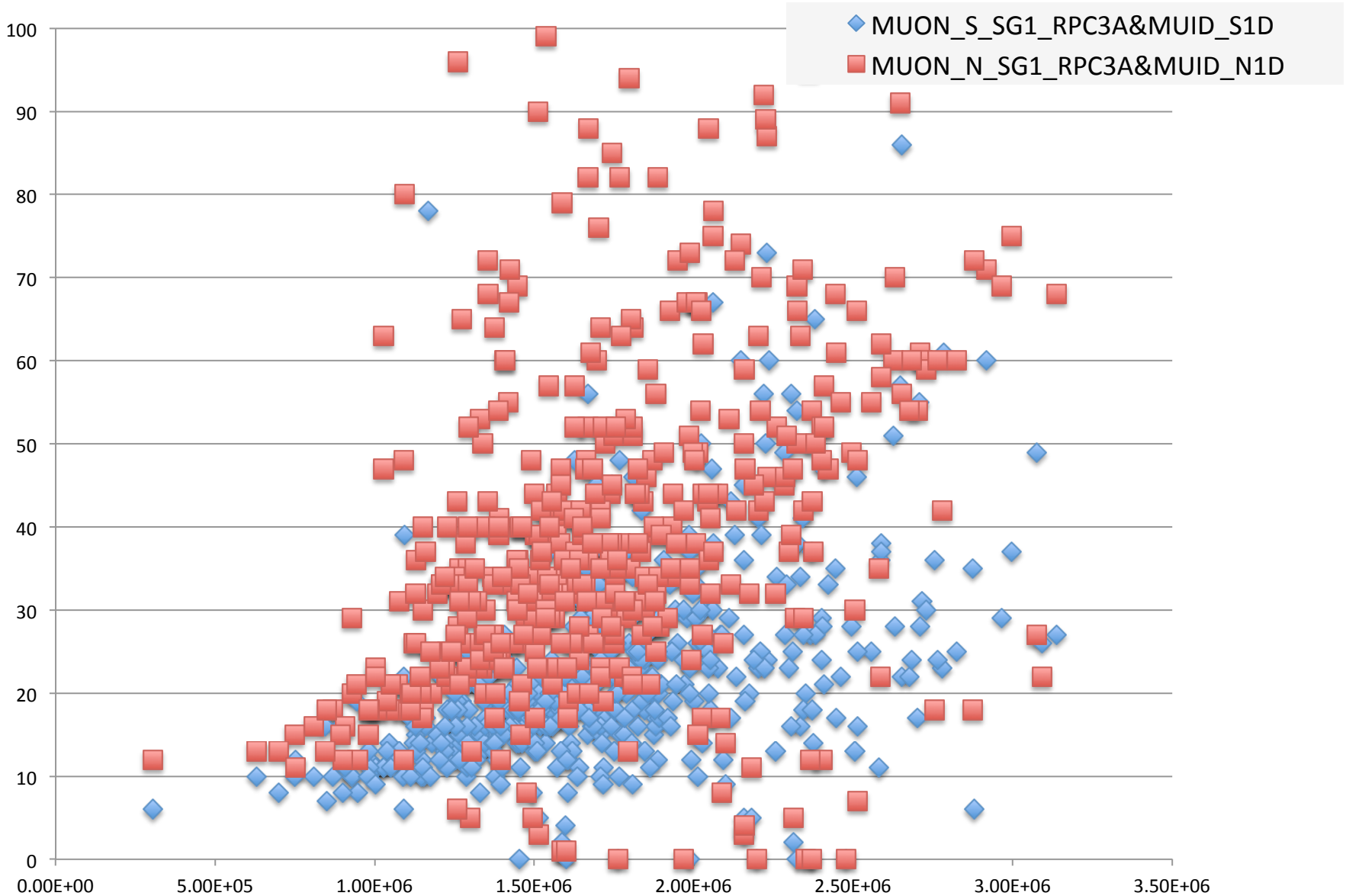
Compare above trigger rates in three different periods.

SG1+RPC1(C)&MUIDLL1_N||S



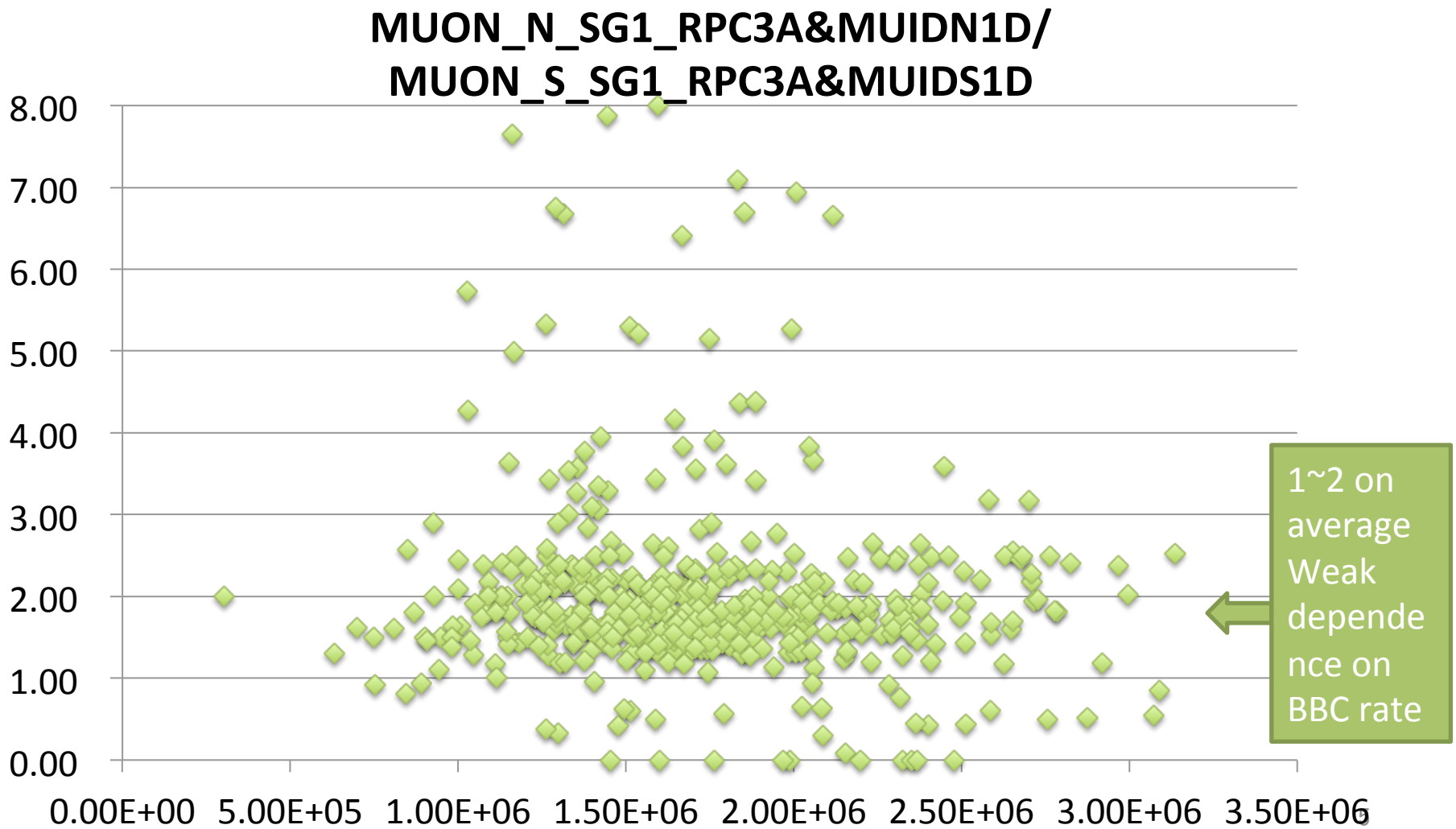
Not significantly distinctive as PRC3(B||C) section because North and South are not separated in this trigger mix. However, rates are in general higher range which is consistent with what we expect.

North vs. South for RPC3A Section

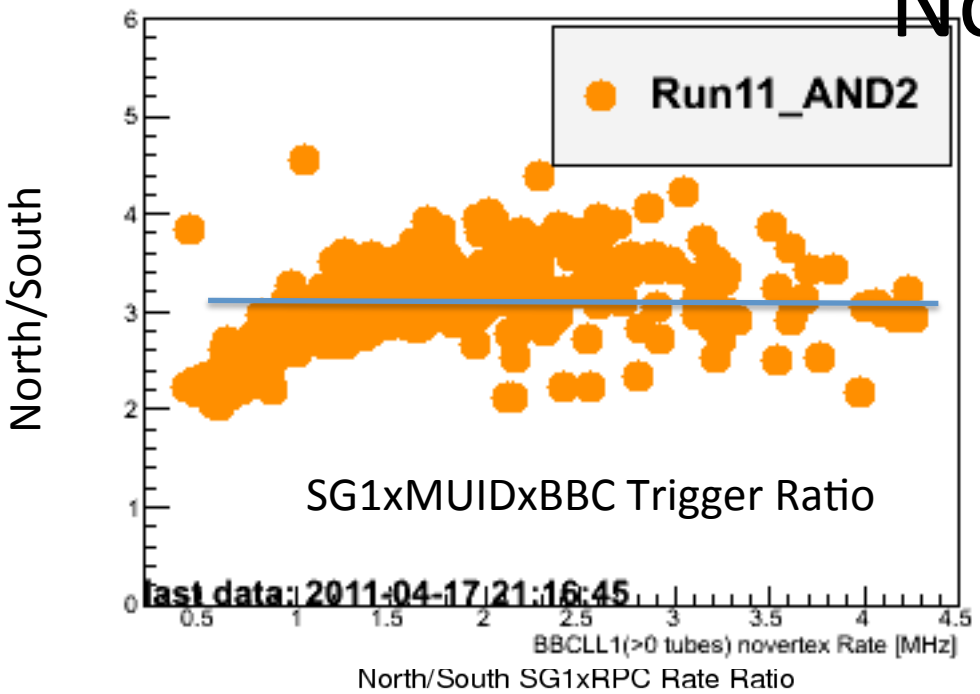


BBCw/VTX rates [Hz]

North vs. South Ratio RPC3A Section



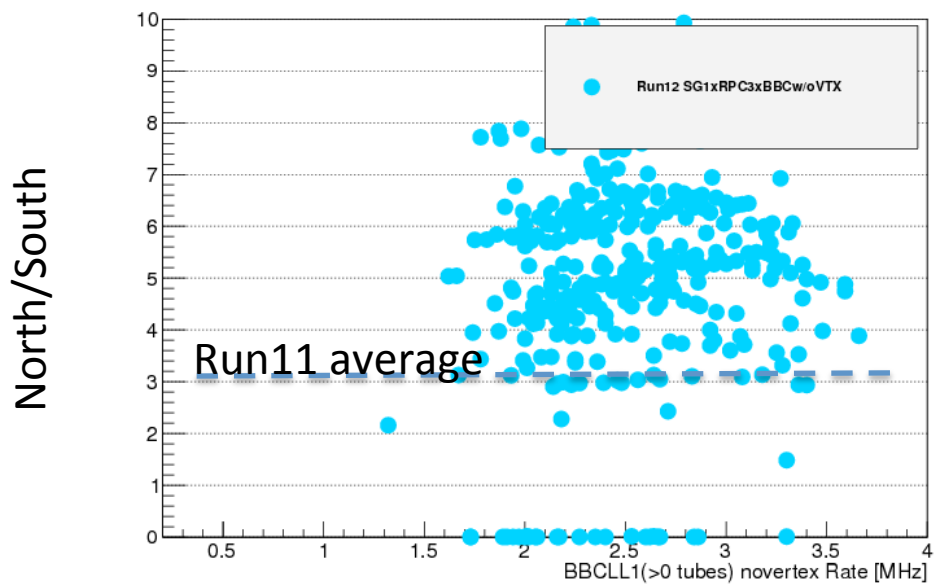
North vs. South History



Run11

SG1xMUIDxBBC Trigger Ratio

~ 3



Run12

SG1xRPC3xBBC Trigger Ratio

4 ~ 7

North vs. South Rates Summary

	Trigger Mix	North / South Ratio
Run11	SG1xMUIDxBBC	3
Run12	SG1xRPC3xBBC	4 ~ 7
Run13	SG1xRPC3_1_B||C	2 ~ 4
Run13	SG1xRPC3AxMUID	1 ~ 2

MuTrig-FEE

- One ADTX board channel in North Station-1, Octant-7 hung the DAQ on May 15th.
- Regular recovery process didn't cure the problem. -> Disabled.
- Access to IR on May 16th 15:00 and found the optical driver for GTM signal was dead. Once the driver was replaced by spare, the board is back in working.
- Now All ADTX are functioning. No disabled channel.

South MuTr HV

itaru@rssh01:~

about 30 seconds till the next update... Type n|s|x for North, South or Exit

May 14 11:25:47 SOUTH MUON TRACKER HV SUMMARY

S111	S112	S113	S121	S122	S123	S131	S132	S133	S141	S142	S143
1916.2	1905.9	1915.9	1895.1	1884.6	1896.2	1895.4	1874.7	1885.4	1914.1	1905.1	1915.4
-.--	-.--	-.--	-.--	-.--	-.--	-.--	-.--	-.--	-.--	-.--	-.--
-.--	-.--	-.--	-.--	-.--	-.--	-.--	-.--	-.--	-.--	-.--	-.--
0.90	0.87	0.93	0.73	0.69	0.85	0.12	0.75	0.78	0.52	0.79	0.90
0.90	0.85	0.95	0.78	0.71	0.78	0.70	0.89	0.64	0.87	0.88	1.01
0.68	0.55	0.72	0.52	0.49	0.55	0.46	0.58	0.52	0.83	0.59	0.68
0.64	0.69	0.60	0.55	0.00	0.48	0.40	0.51	0.51	0.63	0.55	0.59
0.59	0.58	0.50	0.52	0.44	0.40	0.45	0.42	-.--	0.53	0.55	0.56
0.46	0.33	0.36	0.41	0.50	0.38	0.43	0.45	0.42	0.26	0.34	0.43

S151	S152	S153	S161	S162	S163	S171	S172	S173	S181	S182	S183
1896.8	1916.2	1895.0	1879.7	1885.0	1914.9	1925.0	1895.2	1897.2	1905.8	1905.7	1915.2
-.--	-.--	-.--	-.--	-.--	-.--	-.--	-.--	-.--	-.--	-.--	-.--
-.--	-.--	-.--	-.--	-.--	-.--	-.--	-.--	-.--	-.--	-.--	-.--
0.00	0.87	0.84	0.81	1.03	0.94	0.68	0.74	0.85	0.02	0.77	1.03
0.83	1.02	0.86	1.01	1.05	0.96	0.92	0.77	0.68	0.88	0.97	0.96
0.54	0.64	0.62	0.70	0.73	0.75	0.79	0.62	0.68	0.66	0.43	0.66
0.57	0.56	0.49	0.58	0.65	0.62	0.72	0.39	0.57	0.49	0.58	0.57
0.66	0.54	0.55	0.44	0.72	0.53	0.53	0.56	0.00	0.57	0.54	0.63
0.43	0.32	0.57	0.51	0.50	0.49	0.63	0.30	0.48	0.46	0.36	0.55

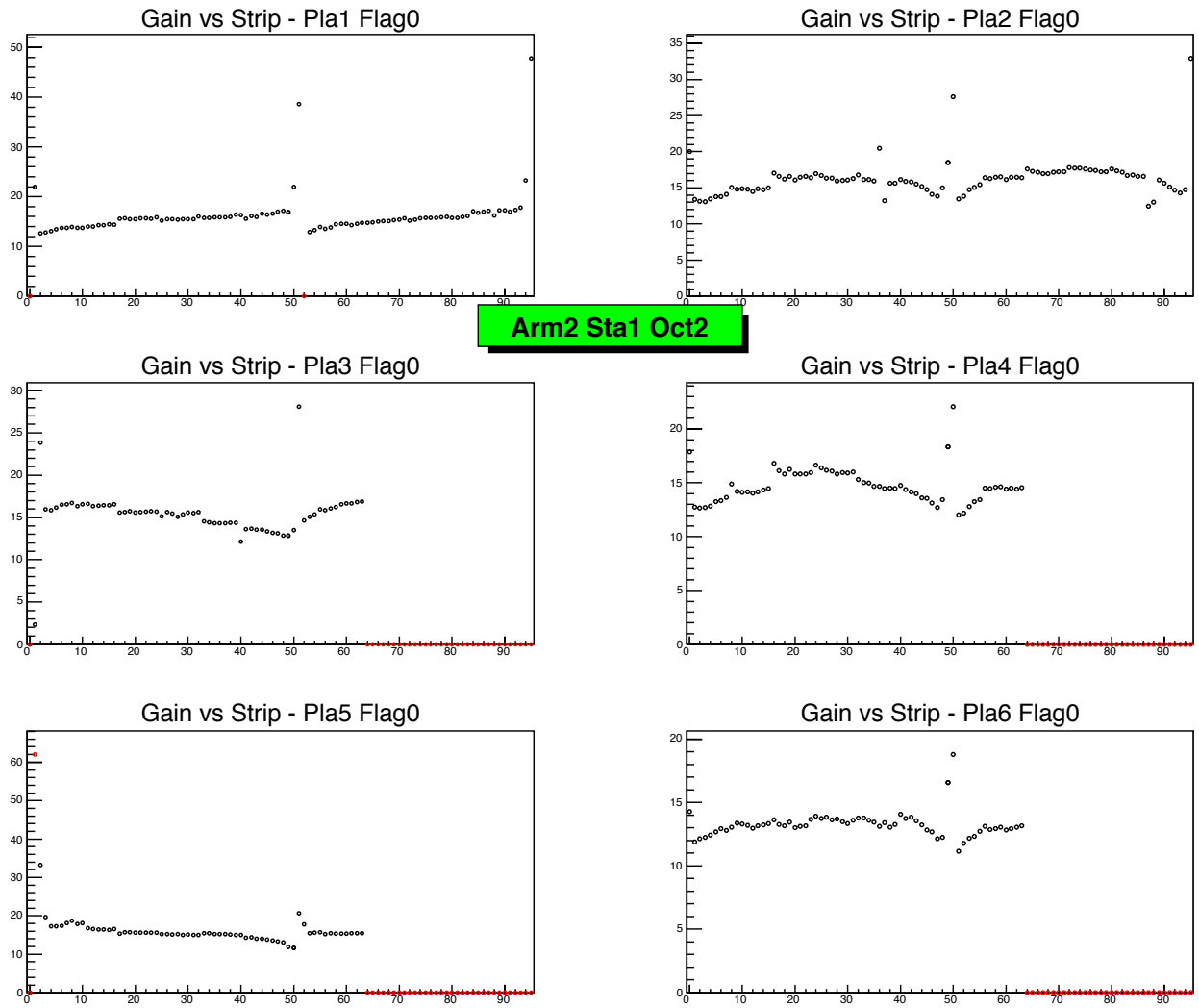
S211	S213	S222	S231	S233	S242	S251	S253	S262	S271	S273	S282
1950.2	1939.7	1941.4	1931.2	1939.8	1950.4	1950.5	1899.7	1921.3	1920.6	1921.1	1931.2
0.59	-0.55	0.61	0.93	0.45	0.75	0.58	0.33	0.56	0.76	0.51	1.10
0.88	0.72	0.76	1.29	0.66	0.86	0.92	0.54	0.52	0.57	0.47	0.13
1.35	-0.17	0.89	1.50	0.99	1.24	1.09	0.77	0.76	0.74	0.62	0.71
0.35	1.52	1.05	1.77	1.01	1.00	1.09	0.61	0.71	0.68	0.75	0.53
0.64	0.74	0.78	1.20	0.77	0.92	1.10	0.50	0.52	0.64	0.69	0.61
0.87	0.67	0.76	1.33	0.71	0.93	0.96	0.50	0.47	0.55	0.49	0.58
1.05	0.80	0.97	1.66	0.89	1.06	1.06	0.68	0.62	0.78	0.52	0.80
0.83	0.73	0.95	1.59	0.93	1.12	1.04	0.63	0.68	0.80	0.54	0.78

S311	S321	S331	S341	S351	S361	S371	S381
1975.6	1975.2	1967.0	1944.9	1934.9	1975.1	1.2	1.0
-.--	0.61	0.69	1.21	1.77	0.30	1.00	1.00
0.78	1.25	1.02	1.00	1.15	0.96	1.00	1.00
1.24	1.30	0.01	1.82	2.13	1.43	1.00	1.00
0.56	0.55	0.55	1.84	1.03	0.84	1.00	1.00
0.46	0.59	0.69	0.87	1.46	1.27	1.00	1.00
0.88	1.30	1.10	1.54	1.18	2.20	1.00	1.00
1.46	1.41	1.82	1.94	2.02	2.87	1.00	1.00
0.63	0.56	0.94	0.85	1.04	-.--	1.00	1.00

about 30 seconds till the next update... Type n|s|x for North, South or Exit

Lost HV module in May 14th.
2 octants out of 8 octants are dead. -> Fixed by the Evening.
(Dead for 1 entire fill)

MuTr N.Station-1 Octant-2 Lost Gain



Lost gain in the calibration on May 17, 22:07 in North Station-1, Octant-2, Gap2&3, Strip#64-96.
The gain is back in the next calibration 16 hours later.

Calibration history

North-18May13_1424 OK

North-17May13_2207 missing

North-16May13_1607 OK

Presumably removing 0 gain entry from calibration data base will resolve.