

MIPP Update

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- Statistics
- Detector and Beam

MIPP Statistics

- Last week MIPP finished collecting the priority 1 H₂ data set:

Momentum	Target	spill	emptyspill	kint	piint	pint	pkint	int_total	spillevt_total	run_time	start_date	end_date
-80	empty Cryo	6532	190	38767	43542	970	0	83279	113829	0 days 05:01:52	2005-04-03	2005-04-04
-80	LH2	27679	1363	167227	202511	4518	0	374256	471491	3 days 07:51:25	2005-03-31	2005-04-07
-59	empty Cryo	14379	797	56259	74669	8300	0	139228	175583	1 day 13:32:14	2005-03-14	2005-03-21
-59	LH2	28458	1575	135308	185296	20661	0	341265	412306	3 days 11:41:12	2005-03-15	2005-03-25
-20	empty Cryo	5514	471	24227	23708	30422	0	78357	88904	0 days 06:11:56	2005-04-16	2005-04-20
-20	LH2	24587	1300	86957	126793	149471	0	363221	405671	2 days 22:43:21	2005-04-14	2005-04-22
-5	LH2	19516	762	0	101347	0	42314	143661	246211	2 days 03:30:17	2005-04-23	2005-04-29
5	LH2	14511	1480	0	30634	0	58794	89428	207573	1 day 13:56:07	2005-04-26	2005-04-28
20	empty Cryo	5310	39	22010	25463	24208	0	71681	96700	0 days 12:28:01	2005-04-09	2005-04-10
20	LH2	27116	808	142101	126621	127527	0	396249	505978	2 days 15:39:33	2005-04-08	2005-04-14
59	empty Cryo	17880	1242	65337	93541	77290	0	236168	263625	1 day 22:38:32	2005-03-02	2005-03-14
59	LH2	42155	2746	131502	203966	184321	0	519789	602726	4 days 16:50:07	2005-03-04	2005-03-14
80	empty Cryo	4809	120	5357	18296	43796	0	67449	91957	0 days 11:39:45	2005-03-27	2005-03-27
80	LH2	24813	1510	27498	103596	278172	0	409266	510463	2 days 13:26:00	2005-03-25	2005-03-30

- We are now taking data on a 2% interaction length carbon target at +20GeV/c
 - 163k interaction on target and 48k interactions on empty target last week
 - Continue this week

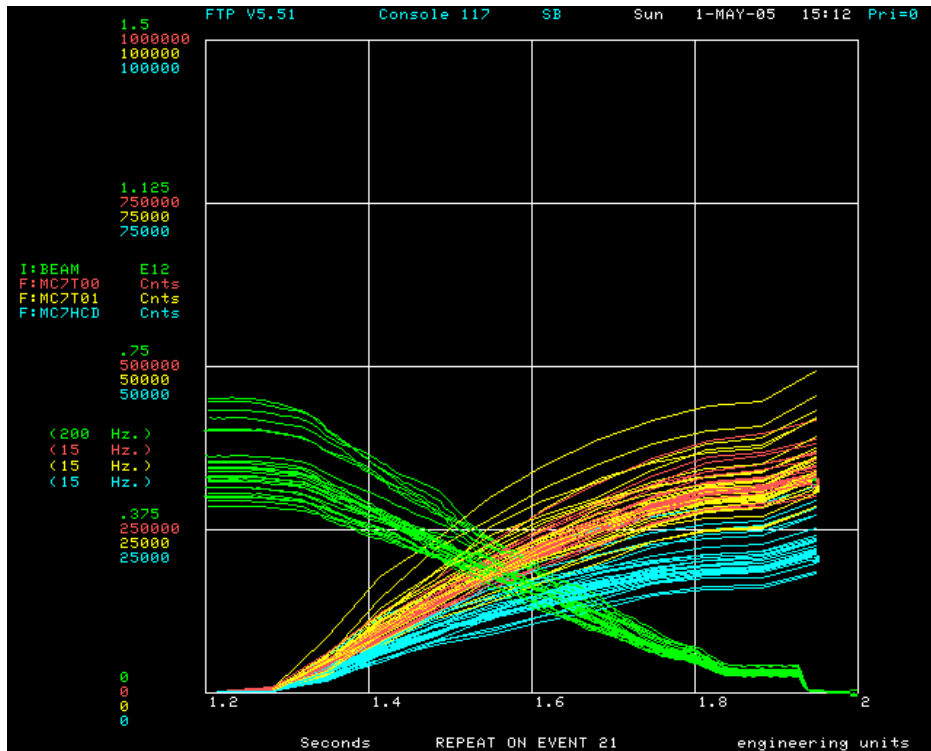
MIPP detector status

- The detector was working well last week with two exceptions:
 - Scheduled downtime on friday for switch from cryo-target to solid targets
 - Cryo-target warmed up and removed friday morning
 - Target wheel re-installed in MC7 on friday afternoon
 - Routine maintainance of A/C, gas systems
 - Some work on EMCAL
 - Unscheduled downtime on friday night and saturday for Bckov vacuum pump problem
 - Pump used to reduce gas density in upstream Bckov failed.
 - Pump oil was found in valves and on the floor
 - Repair failed, pump was replaced saturday morning
 - Valves have to be operated manually until further repairs/cleaning
 - Controlled accesses necessary when changing secondary beam momentum

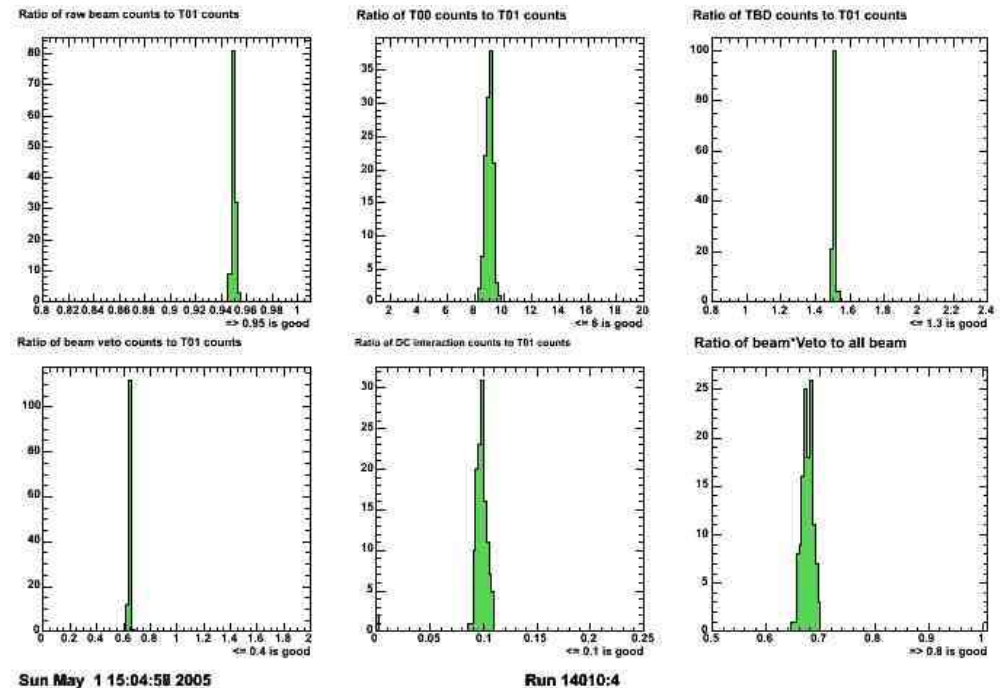
MIPP beam status

- Beam at 5 GeV/c was of uniform relatively low quality (large spot on secondary target).
- Beam at 20 GeV/c is good, as it was previously.

+20 GeV/c spill



+20 GeV/c quality



MIPP plan

- MIPP will collect thin target data below 120 GeV/c in May
- 120GeV/c on NuMI target in June