

Summary of 2017/01

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Introduction 2017/01

- Primary goal of 2017/01 was to record some Liquid Hydrogen data at the end of the cycle.
- In order to prioritise this the superconducting magnets were not to be run during the cycle.
- Many objectives needed to be completed, including a test of the Liquid Hydrogen system with Neon gas.
- In addition, tracker maintenance severely delayed the readiness of the trackers.

Shift & Personnel

May 2017 today < >

Mon	Tue	Wed	Thu	Fri	Sat	Sun
1	2	3	4	5	6	7
8	9	10	11	12	13	14
16:00 - 23:59 [daniel.kaplan/IIT]					16:00 - 23:59* [alan.bross/Fermilab]	
16:00 - 23:59* [durga.rajaram/IIT]					16:00 - 23:59 [chris.booth/Sheffield]	
BLOC [henry.nebrensk]	BLOC [henry.nebrensk]	BLOC [henry.nebrensk]	BLOC [henry.nebrensk]	BLOC [henry.nebrensk]	BLOC Available [1 pts]	BLOC [Joe.Langlands/]
15	16	17	18	19	20	21
16:00 - 23:59 [chris.booth/Sheffield]			16:00 - 23:59* [daniel.bowring/Fermilab]			
16:00 - 23:59* [alan.bross/Fermilab]			16:00 - 23:59 [chris.booth/Sheffield]			
BLOC [Joe.Langlands/]	BLOC [Joe.Langlands/]	BLOC [Joe.Langlands/]	BLOC [Joe.Langlands/]	BLOC [Joe.Langlands/]	BLOC Available [1 pts]	BLOC Available [1 pts]
22	23	24	25	26	27	28
16:00 - 23:59* [daniel.bowring/Ft]	00:00 - 08:00 [ken.jong/Imperia]		00:00 - 08:00* [francois.drielsma/]			00:00 - 08:00* [francois.drielsma/]
16:00 - 23:59 [chris.booth/Sheffi]	08:00 - 16:00 [tanaz.mohayai/IIT]		08:00 - 16:00 [raymond.game/]			BLOC [raymond.game/]
BLOC [henry.nebrensk]	08:00 - 16:00* [pavel.snopok/IIT]		16:00 - 23:59 [lucien.cremaldi/Mississippi]			00:00 - 08:00 [christopher.hunt/]
	16:00 - 23:59* [david.sanders/Mississippi]		00:00 - 08:00 Available [1 pts]			08:00 - 16:00* [henry.nebrensky/]
	BLOC [tanaz.mohayai/]	BLOC [tanaz.mohayai/]	BLOC [tanaz.mohayai/]	BLOC [tanaz.mohayai/]	BLOC [tanaz.mohayai/]	08:00 - 16:00 [raymond.game/]
			00:00 - 08:00 [misha.federova]	00:00 - 08:00 [misha.federova]		16:00 - 23:59 [yagmur.torun/IIT]
						16:00 - 23:59* [david.neuffer/Fer]
29	30	31	1	2	3	4
00:00 - 08:00 [christopher.hunt/Imperia]			00:00 - 08:00 [john.nugent/Gl/]			
00:00 - 08:00* [francois.drielsma/Geneva]			00:00 - 08:00* [jaroslav.pasten]			
08:00 - 16:00 [raymond.game/Liverpool]			BLOC [henry.nebrensk]			
08:00 - 16:00* [henry.nebrensky/Brunei]						
16:00 - 23:59* [david.neuffer/Fermilab]						
16:00 - 23:59 [yagmur.torun/IIT]						
BLOC [raymond.game/]	BLOC [raymond.game/]	BLOC [raymond.game/]	BLOC [henry.nebrensk]			
5	6	7	8	9	10	11

- MOMs:
 - Victoria Blackmore: 8/May → 23/May
 - Edward Overton: 23/May → 2/Jun
- DC:
 - Alan Young, Craig Macwaters, Paul Hodgson
- Shifts ramped up from 8hr to 24hr running as the cycle

8 May – 26 May

- Expert led run 8th May (without trackers)
- Recorded TOF calibration data
- Hall was mostly in the hands of the liquid hydrogen team
- Shifters were able to help monitor ongoing Neon tests.
- During this time things were very chaotic:
 - False (and real) alarms from working (and broken) equipment.
 - Difficulty from state machines
- Performed beambump tuning to prepare for data taking

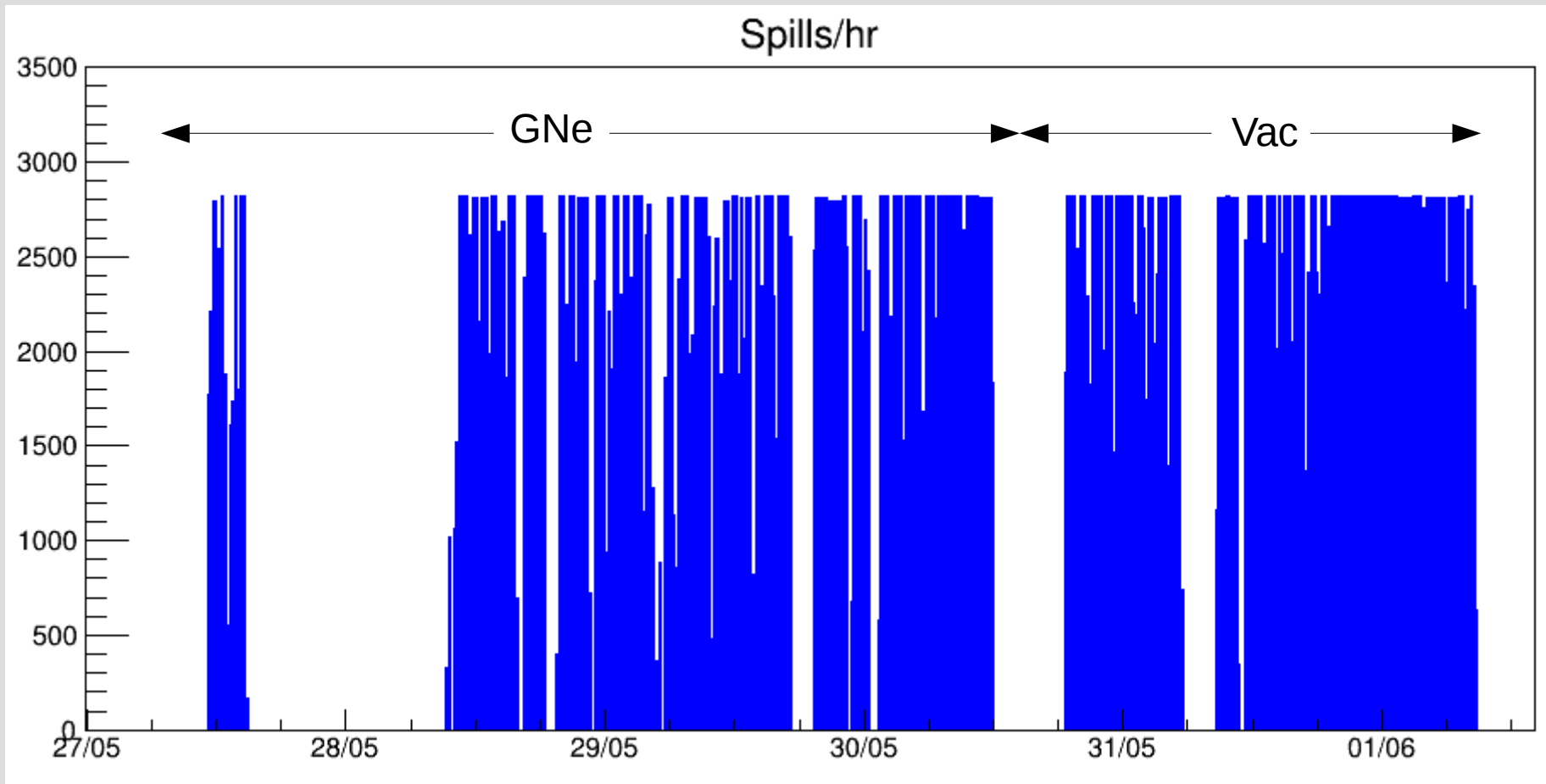
27 May onwards

- 27 May:
 - Performed a tracker timing scan to ensure trigger efficiency.
- 28 May:
 - Both trackers were ready for operation, and we begun taking gaseous neon data
 - Run plan based on the LH2 settings provided by John Nugent.
 - 140, 170, 200, 240 settings with and without gaseous neon.
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Data Summary

	Tag	Time (mins)	Dips	P.Trig(k)	TOF2(k)	Runs
GNe	ToF-Calib+300	24	1158	78	14	9311
GNe	400MeV+pi_pa82	306	14359	1029	343	9355,9356,9357,9358,9370,9371,9372
GNe	300MeV+pi_pa82	227	10675	1020	262	9354,9360,9365,9367,9368,9369
GNe	PionReference-DS	53	2523	197	51	9310,9319
GNe	3-140+M3-Test2	716	33545	914	166	9361,9362,9363,9364,9373,9374,9375,9376,9377,9312,9318
GNe	3-170+M3-Test1	457	21410	950	180	9349,9324,9325,9328,9329,9331,9333,9335,9342
GNe	3-200+M3-Test1	315	14784	953	129	9351,9326,9327,9330,9334,9337
GNe	3-240+M3-Test1	249	11707	1032	88	9345,9352,9339,9340,9341
Vac	3-140+M3-Test2	703	32960	1097	210	9387,9401,9402,9403,9404,9405,9406,9407,9408,9409,9410
Vac	3-170+M3-Test1	495	23217	1002	193	9378,9380,9390,9391,9394,9395,9396,9397,9400
Vac	3-200+M3-Test1	391	18358	1103	148	9379,9381,9388,9389,9392,9393,9398,9399,9411
Vac	3-240+M3-Test1	271	12704	1121	96	9382,9383,9384,9385,9386

Data Summary



Once running data was recorded consistently. Gaps were mainly caused by ISIS problems.

Conclusion

- 2017/01 was mostly spent commissioning
 - Lots of work on the LH2, Tracker and Controls.
- Once data taking started a good amount of stability was found
 - However some false alarms still existed
- We were able to take Gaseous Neon scattering data, in substitute of any LH2 data.
- I would like to thank all the shifters for their time and patience going through the cycle.