

# Report on run to-date and tentative scheduling for 'near' term

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# 2010, the early days

- Official Score: 2 run weeks completed.
- $\approx$  7 days of XP time; rest calibrations etc.
- Early run plagued with data acquisition (event trigger) problems, and normal working out control and PCS issues.
- Start-up otherwise very promising.

- Schedule posted in Drag & Drop folder

NSTX FY2010 Run Schedule (Start-up)  
Last Updated: 04/26/2010

	Monday 29-Mar	Tuesday 30-Mar	Wednesday 31-Mar	Thursday 1-Apr	Friday 2-Apr
	XMP 064	XMP 066	XMP 066	XMP 066	Kugel (XP1000) LLD commissioning

Shots

35

	5-Apr	6-Apr	7-Apr	8-Apr	9-Apr
	Kugel (XP1000) LLD commissioning	Kugel (XP1000) LLD commissioning	Kugel (XP1000) LLD commissioning	Kugel XP1000 LLD commissioning	Calibrations MSE Shots Menard XP1004 early EFC

Shots

35

26

44

42

24

	Menard 12-Apr	Menard 13-Apr (TTF)	Menard 14-Apr (TTF)	Menard 15-Apr (TTF)	Menard 16-Apr (TTF)
BES install.	LITER Installation	Gerhardt XMP65 beta control Sabbagh XP1023 Opt. RWM @ high $\beta$	MSE Calibration	Sabbagh XP1023 Opt. RWM @ high $\beta$ Berkery XP1020 RWM passive stability	Maintenance (OH water leak)

Shots

na

34

na

46

na

CHERS Ne glow

	Menard 19-Apr (Sherwood)	Menard 20-Apr (Sherwood)	Menard 21-Apr (Sherwood)	Menard 22-Apr (Sherwood)	Menard 23-Apr (Sherwood)
	Maintenance	Maintenance	Maintenance	Maintenance	Maintenance

Shots

Boundary Physics, Lithium Research, Macroscopic Stability,  
Wave-Particle interactions, Turbulence & Transport,  
Solonoid-Free Startup, Advanced Scenarios and Control,  
Cross-cutting & Enabling, ITER

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# Following schedule under negotiations

- Possible 2-3 week revisit of LLD under consideration - potentially starting EPS week (June 21-25).
- Alternative schedule w/LLD awaiting plans from LR group.
- Still sorting out availability of needed personnel.

## NSTX FY2010 Run Schedule

Last Updated: 04/26/2010

	Monday 26-May (PSI)	Tuesday 27-May (PSI)	Wednesday 28-May (PSI)	Thursday 29-May (PSI)	Friday 30-May (PSI)
7	XMP 064	XP1003 Kolemen	Battaglia XP1030 ELM Suppression  Buttery XP1032 EF in H-modes	Park XP1048 RMP/ELM w/q95  Zweben XP1051 BEAP	Kaye XP1028 Density L/H

Hours

	31-May (ITER)	1-June (ITER)	2-June (ITER)	3-June (ITER)	4-June (ITER)
8	Memorial Day	XP1045 Soukhanovski (Snowflake)	Maingi XP1043 Heat flux profiles 1 of 3	Maingi XP1043 Heat flux profiles 2 of 3	Menard XP1004 Early EFC  McLean XP1021 Halo Currents w/LLD

Hours

	7-June	8-June	9-June	10-June	11-June
9	XMP 26 HHFW Plasma Conditioning	XMP 26 HHFW Plasma Conditioning	Hosea XP1017 Divertor Heating (0.5)  Hosea XP1016 Coupling w/ELMs	Taylor XP1009 Low Te/lp (0.5)  Hosea XP1017 Divertor Heating (0.5)	Battaglia XP1036 L-H power thrshld

Hours

	14-June	15-June	16-June	17-June	18-June
10	Maingi XP1043 Heat flux profiles 3 of 3	BES Commissioning	Maingi XP1049 LH Threshold  R Bell XP1041 Momentum	Diallo XP1044 Pedestal Height (1)	Solomon XP1042 Momentum  Kaye XP936 Momentum

Hours

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# NSTX FY2010 Run Schedule

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	Monday 21-June (EPS)	Tuesday 22-June (EPS)	Wednesday 23-June (EPS)	Thursday 24-June (EPS)	Friday 25-June (EPS)
	XMP 26 HHFW Plasma Conditioning	Park XP1018 Error field threshold	LeBlanc XP1012 HHFW Heating Efficiency (1)	Bell XP1007 High non-inductive	Yuh XP939 (1040) ITBs  Hosea XP1016 Coupling w/ELMs

Hours

11	28-June	29-June	30-June	1-July	2-July
	Gerhardt XP1019 Opt. beta control	Ren XP1037 High-k parametric	Berkey XP1020 RWM passive stability	Canik XP1027 RMP below ELM threshold  Canik XP1064 EPH mode	Tritz XP1013 *AE electron transp.  Ahn XP1046 ELM heat flux profiles
	Smith XP1038 multi-scale turb.		Sabbagh XP1023 Opt. RWM fdbk		

Hours

12	5-July	6-July	7-July	8-July	9-July
	"July 4"	XP1034 Raman	XP1034 Raman	XP1034 Raman	XP1034 Raman

Hours

13	12-July	13-July	14-July	15-July	16-July
	XMP 26 HHFW Plasma Conditioning	Taylor XP1010 100% non inductive	Taylor XP1009 Low Te/lp	Heidbrink XP1014 HHFW/Angelfish (0.5)  Guoyong Fu XP1015 M3D-k validation	Gerhardt XP1006 High Kappa

Hours

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### NSTX FY2010 Run Schedule

Last Updated: 04/26/2010

	Monday 21-June (EPS)	Tuesday 22-June (EPS)	Wednesday 23-June (EPS)	Thursday 24-June (EPS)	Friday 25-June (EPS)
	LLD-fill/maintenance	LLD-fill/maintenance	Kugel (XP1057) LLD commissioning	Kugel (XP1057) LLD commissioning	Kugel (XP1057) LLD commissioning

Hours

11	28-June	29-June	30-June	1-July	2-July
	Soukhanovskii XP1002 LLD Pumping	Soukhanovskii XP1002 LLD Pumping	LLD-fill/maintenance	Gerhardt XP1066 LLD Survey	Gerhardt XP1066 LLD Survey

Hours

12	5-July	6-July	7-July	8-July	9-July
	"July 4"	XP1034 Raman	XP1034 Raman	XP1034 Raman	XP1034 Raman

Hours

13	12-July	13-July	14-July	15-July	16-July
	XMP 26 HHFW Plasma Conditioning	Taylor XP1010 100% non inductive	Taylor XP1009 Low Te/lp	Heidbrink XP1014 HHFW/Angelfish (0.5)  Guoyong Fu XP1015 M3D-k validation	Gerhardt XP1006 High Kappa

Hours

# non-LLD Milestone-related XPs done by end of July

- Additional Priority 1 XP days unassigned:
  - 5.25 days priority 1 Additional
  - Revisit XP1000 “LLD Commissioning” 3 days?
  - 7.5 priority 1 days requesting/needing LLD
- Somewhat past 13 weeks, leaving 2 weeks for priority 2?
- What is run schedule for August/September?



1.0 o o Loarte XP1026 ELM suppression	3.0 o o Maingi XP1043 Heat flux	1.0 x x Diallo XP1044 Pedestal Height	1.0 o o Soukhanovski XP1045 Snowflake	0.5 o o Ahn XP1046 ELM heat flux	0.5 o o Canik XP1047 density pumpout LLD	0.5 o o Park XP1048 RMP/ELM w/q95	0.5 x o Maingi XP1049 edge profile w/LLD LLD	0.5 o o Soukhanovski XP1050 divertor detachment LLD	0.5 o o Zweben XP1051 BEAP	
3.0 x x d XP1000 Kugel LLD	XP1059 Kugel	2.0 x x XP1001 Soukanovskii LLD	1.0 o o XP1002 Soukanovskii LLD	0.75 x o XP1056 Mansfield Droppers	0.5 o o XP1054 Kugel LLD	1.0 x o XP1057 Skinner LLD	2.0 x x XP1066 Gerhardt LLD			
1.0 x o Park XP1018 Error field threshold HHFW	0.5 x x Gerhardt XP1019 Opt. beta control	1.0 x x Berkery XP1020 RWM Passive Stab.	1.0 x o McLean XP1021 Halo Currents w/LLD LLD	1.0 o o XP1022 Katsuro-Hopkins	1.0 x x Sabbagh XP1023 Opt. RWM fdbk	0.5 x o XP1031 Sabbagh LLD	0.5 x o Buttery XP1032 Error field H-modes			
1.5 x x Taylor XP1009 HHFW at low Te HHFW	1.0 x x Taylor XP1010 100% non-inductive HHFW	0.5 x x Fredrickson XP1011 H-mode Avalanches BES	1.0 x o LeBlanc XP1012 HHFW &NBI HHFW	0.5 x o Tritz XP1013 *AE electron transp.	0.5 x o V XP1014 Angels&RF BES,HHFW	0.5 x o Fu XP1015 M3D-k Validation	1.0 x o Hosea XP1016 HHFW w/ELMs HHFW	1.0 x o Hosea XP1017 Divertor/LLD heating HHFW		
0.5 x x Kaye XP936 Momentum BES	0.5 o o Maingi XP1029 LH threshold	0.5 o o Battaglia XP1030 ELM suppression	1.0 Kaye XP1028 LH Threshold	1.0 x o Battaglia XP1036 LH Threshold HHFW	1.0 x o Ren XP1037 High-k parametric BES	0.5 o o Smith XP1038 multi-scale turb. BES	0.5 o o Kubota XP1039 Ohmic H-mode	0.5 x o Yuh XP1040 ITBs HHFW	0.5 o o R Bell XP1041 Rotation	0.5 x o Solomon XP1042 Rotation
1.0 x x Kolemen XP1003 X-pt & OSP control	0.5 x x Menard XP1004 Early EFC	0.5 x x Menard XP1005 Impurity Control	1.0 x o Gerhardt XP1006 High Kappa	1.0 x o XP1007 Bell HHFW	1.0 o o Canik XP1025 ELMs/Jogs/3-D fields	0.5 x x Canik XP1027 RMP sub/ELM Thr	0.5 o o Gerhardt XP1052 Ip rampdown	0.5 o o XP1053 Kolemen	0.5 x o Canik XP1064 EP H-mode	
1.0 x x XP1009 Taylor HHFW	3.5 o o XP1034 Raman	<p>Boundary Physics, Lithium Research, Macroscopic Stability,  Wave-Particle Interactions, Turbulence &amp; Transport,  Solonoid-Free Startup, Advanced Scenarios and Control,  Cross-cutting &amp; Enabling, ITER</p>								