

Strawman start-up run plan and considerations (from Forum)

□ Strawman start-up run plan

- Pump-down
- Bake-out for 3 weeks at 350°C; cool-down
- Power testing ISTP vacuum shots, magnetics calibration shots, etc.
- First plasma operations right after ISTP, quickly transition into LRTSG experiments
 - Controlled lithium introduction and discharge development (Maingi)
 - Comparison of diverted plasmas on incident lithiated moly (Kugel)
- Enabling / commissioning XPs follow, start some JRM XPs if all is ready
 - (ASC) Vertical control improvements (SPG), snowflake control (Kolemen)
 - (WEP) t-FIDA commissioning (Bortolon) – if impurity levels sufficiently low
 - (BP) Start snowflake Xp (Vlad) OR d/Bt effect on pedestal ELM-y H (Diallo)
 - Follow with mix of higher performance enabling XP work, 1st priority mix of TSGs
- Piggyback testing of new control for 2nd SPA, checkout of new / expanded diagnostics whenever possible during this time

Draft Run Schedule for ISTP week + First Two Weeks

Draft v1.0

NSTX CY2011 - FY2012 XP Schedule

Week	Monday	Tuesday	Wednesday	Thursday	Friday
0	27-Jun ISTP	28-Jun ISTP	29-Jun ISTP	30-Jun ISTP XMP-71 Kugel Start-up	1-Jul Gerhardt Magnetic Calibrations XMP-71 Kugel Start-up
				2 hr He GDC + between shots	2 hr He GDC + between shots
1	4-Jul Holiday	5-Jul XP 1133 Maingi Li Introduction	6-Jul XP 1133 Maingi Li Introduction (IF NEEDED) XP 1134 Kugel Diverted plasma on Li moly (OR XP1106 Gerhardt)	7-Jul XP 1134 Kugel Diverted plasma on Li moly XP 1134 Kugel Diverted plasma on Li moly (IF NEEDED)	8-Jul XP 1106 Gerhardt Vertical Control Improvements XP1115 Diallo Kappa vs. pedestal ELMY H (if TS can support)
2	11-Jul XP1112 Diallo Delta & Bt vs. pedestal ELMY H (if TS can support)	12-Jul XP1128 J-K Park ELM triggering w/ n = 1, 2 XP1126 Ahn Density pumpout in L-mode	13-Jul XMP-## Jaworski Li Deconditioning (FULL DAY NEEDED?)	14-Jul XMP-76 Bortolon t-FIDA Commissioning	15-Jul Yuh MSE Calibration

Neon Glow for CHERS

Adv. Scenarios and Control	ITER and CC&E	Macroscopic Stability	Transport & Turbulence	No run
Boundary Physics	Lithium Research	Solenoid-free Start/Ramp-up	Waves and EPs	Calibrations, etc.

Questions / discussion regarding other XPs / Diagnostics

- ❑ How early can/should these XPs run?
 - ❑ XP1168, etc. – HHFW/NBI coupling (Hosea, Taylor)
 - Includes important development, supports other XPs
 - When if HHFW expected to be ready to run?
 - ❑ XP1104 Snowflake control (Kolemen)
 - One priority 1 run day in ASC – addresses R(11-3)
 - ❑ XP1101 Low density startup (Mueller)
 - FY12 milestone, however needs to start early / enables other XPs

- ❑ Considerations for these XPs, etc. ?
 - ❑ XP1153 Physics of early EFC in reduced-density adv. scenarios (Menard)
 - Wait until XP1101 Low density startup (Mueller) is completed?

- ❑ Further discussion of diagnostics
 - ❑ Thomson scattering – availability of additional channels?