

FY07 NSTX RUN LOG

FY 07 Run completed on June 22, 2007.

FY 2007 Joule Milestone: 12 weeks

Completed: 12.63 weeks, producing 1,879 plasmas.

<u>Date</u>	<u>Run Time (Daily hrs)</u>	<u>Accumulated FY Run Time (hrs)</u>	<u>Accumulated FY Run Weeks (40 hours / week)</u>	<u>Plasma Attempts</u>	<u>Plasma Achieved</u>	<u>Experimental Topics</u>	<u>XP/XMP #</u>
2/19/07	7.81	7.81	0.20	22	21	Higher q early plasma	XP-711
2/20/07	5.18	12.99	0.32	17	16	Radiative Divertor	XP-708
2/21/07	8.55	21.54	0.54	36	30	Locked mode at low-A	XP-703
2/22/07	8.6	30.14	0.75	35	27	SOL width scaling	XP-709
2/23/07	9.42	39.56	0.99	50	47	HHFW conditioning	XPM-26
<u>Week's End</u>		<u>39.56</u>	<u>0.99</u>				
2/26/07	8.71	48.27	1.21	33	26	Small ELM compairon	XP-721
2/27/07	8.17	56.44	1.41	29	26	NPA scan in H-mode	XP-707
						Locked mode at low-A /	XP-703 /
2/28/07	6.9	63.34	1.58	23	20	Higher q early plasma	XP-711
3/1/07	6.28	69.62	1.74	23	21	Confinement beta scaling	XP-713
						MSE calibrations / Radiative	XMP-33 /
3/2/07	4.7	74.32	1.86	15	15	Divertor	XP-708
<u>Week's End</u>		<u>74.32</u>	<u>1.86</u>				
3/27/07	7.1	81.42	2.04	30	28	HHFW conditionig/NBI	XMP-26 /
						conditioning	XMP-48
3/28/07	8.02	89.44	2.24	30	26	NBI Conditioning / TESPEL	XMP-48 /
						Injection	XMP-49
3/29/07	8.95	98.39	2.46	33	24	TESPEL Injection / High	XMP-49 /
3/30/07	8.55	106.94	2.67	30	25	Kappa	XP710
<u>Week's End</u>		<u>106.94</u>	<u>2.67</u>			Impurity transport scaling	XP-716
4/2/07	6.78	113.72	2.84	23	20	Hgih-k scattering in H-mode	XP-714 /
						/ Alfven Cascades	XP-706
4/3/07	9.2	122.92	3.07	36	36	Alfven Cascades / EBW in H-	XP-706 /
						mode	XP-720
4/4/07	9.19	132.11	3.30	40	35	EBW in H-mode/Lithium	XP-720 /
						pellets into H-mode	XP-718
4/5/07	8.4	140.51	3.51	29	25	Rotation effect on	
						confinement	XP-723
4/6/07	8.49	149	3.73	29	26	Hgih-k scattering in H-mode	XP-714
<u>Week's End</u>		<u>149</u>	<u>3.73</u>				
4/16/07	4.49	153.49	3.84	17	16	CHI Max Current	XP-725
4/17/07	0	153.49	3.84	0	0	Lab closure due to weather	
4/18/07	9.62	163.11	4.08	47	44	CHI Max Current / CHI-OH	XP-725 /
4/19/07	9.28	172.39	4.31	40	37	coupling	XP-726
4/20/07	7.23	179.62	4.49	27	23	HHFW heating at high field	XP-712
<u>Week's End</u>		<u>179.62</u>	<u>4.49</u>			Lithium coating with LITER 1	
4/23/07	5.97	185.59	4.64	16	15	d	XP-719
4/24/07	6.01	191.6	4.79	20	17	Lithium coating with LITER 1	
						d	XP-719
						Alfven cascades at high β /	XP-706 /
						High bt-f at high κ	XP-710
4/25/07	6.59	198.19	4.95	30	26	High-k scattering in HHFW	
4/26/07	8.46	206.65	5.17	34	31	heated plasmas	XP-735
						Te gradients RS Transport	XP-734
						Small ELM regime / B and q	
4/27/07	8.87	215.52	5.39	35	33	scaling of locked mode	XP-721 /
<u>Week's End</u>		<u>215.52</u>	<u>5.39</u>			threshold	XP-703
4/30/07	8.86	224.38	5.61	47	43	Non-solenoidal ramp-up	XP-731
5/1/07	9.11	233.49	5.84	47	44	HHFW CD at High BT	XP-717
5/2/07	7.95	241.44	6.04	38	33	Alfven cascades at high β /	XP-706 /
						Search for the BAAE	XP-741

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5/3/07	8.87	250.31	6.26	38	31	Rotation effects on NTM / A-scaling of NTM threshold	XP-740 / XP-739
5/4/07	6.4	256.71	6.42	21	19	A-scaling of NTM threshold / Breakdown optimization / RFA and RWM detection	XP-739 / XP-701 / XP-702
Week's End		<u>256.71</u>	<u>6.42</u>				
5/7/07	8.96	265.67	6.64	35	32	SGL fueling of H-mode Stability limits at high normalized current	XP-741 XP-727
5/8/07	8.75	274.42	6.86	34	32	RWM active stabilization	XP-728
5/9/07	7.88	282.3	7.06	31	31	High bt-f at high κ / Biased Electrodes Test	XP-710 / XMP-51
5/10/07	9.2	291.5	7.29	33	31	Ion transport with NB modulation	XP-737
5/11/07	8.5	300	7.50	32	28		
Week's End		<u>300</u>	<u>7.50</u>				
5/21/07	8.22	308.22	7.71	43	38	CHI Max Current	XP-725
5/22/07	7.25	315.47	7.89	35	33	CHI-OH coupling	XP-726
5/23/07	9.53	325	8.13	36	34	EBW in H-mode	XP-720
5/24/07	9.69	334.69	8.37	37	33	ELMs and RWPs	XP-730
5/25/07	9.1	343.79	8.59	34	31	Beta scaling in low kappa / lithium powder injection	XP-713 / XP-738
Week's End		<u>343.79</u>	<u>8.59</u>				
5/29/07	10.65	354.44	8.86	40	39	Breakdown optimization Optimization of RFA and RWM	XP-701 XP-702
5/30/07	8.28	362.72	9.07	31	29	Multi-mode fast ion loss	XP-705
5/31/07	10.22	372.94	9.32	54	48	High f-bt at high kappa	XP-710
6/1/07	8.9	381.84	9.55	33	30		
Week's End		<u>381.84</u>	<u>9.55</u>				
6/4/07	9.05	390.89	9.77	33	33	RWM Active Stabilization Small ELM Regimes / ELM characterization / Edge electrode biasing	XP-728 XP-721 / XP-746 / XP-744
6/5/07	11.24	402.13	10.05	49	46	RWM Active Stabilization	XP-728
6/6/07	4.32	406.45	10.16	15	14		
6/7/07	10.58	417.03	10.43	48	47	n=3 breaking with n=1 EFC / Fast ion loss by sea of TAEs	XP-729 / XP-705
6/8/07	7.01	424.04	10.60	27	22	Plasma response to 3-D mag. perturbations / Ion transport with NBI pulses	XP-704 / XP-737
Week's End		<u>424.04</u>	<u>10.60</u>				
6/11/07	7.63	431.67	10.79	31	31	Electron transport during ELMs	XP-745
6/12/07	8.39	440.06	11.00	39	35	Bt dependence on high-k / High-k during HHHFW	XP-714 / XP-735
6/13/07	7.23	447.29	11.18	39	33	Te vs. magnetic shear / HHHFW CD at High BT	XP-734 / XP-717
6/14/07	11.32	458.61	11.47	47	43	NICD limits with higher q and lower density	XP-724
6/15/07	11.36	469.97	11.75	48	46	Enhanced Pedestal H-mode / SOL width scaling / Edge turbulence in H-mode	XP-732 / XP-709 / XP-747
Week's End		<u>469.97</u>	<u>11.75</u>				
6/18/07	8.23	478.2	11.96	45	40	CHI Max Current / CHI-OH Coupling	XP-725 / XP-726
6/19/07	10.46	488.66	12.22	59	52	HHFW CD at High Bt / High-k in HHHFW / Bt dependence of High-k	XP-717 / XP-734 / XP-714
6/20/07	0	488.66	12.22	0	0	MSE calibration	XMP-33
6/21/07	11.03	499.69	12.49	46	41	RWM Active Stabilization / Electron transport during ELMs / Radiative Divertor / EBW in H-mode	XP-728 / XP-745 / XP-708 / XP-720

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6/22/07	5.63	505.32	12.63	24	21	Optimization of RFA and RWM / Ion transport with NB modulation / Te vs, magnetic shear	XP-702 / XP-737 / XP-734
<u>Week's End</u>		<u>505.32</u>	<u>12.63</u>				
<u>Totals</u>		<u>505.32</u>	<u>12.63</u>	<u>2078</u>	<u>1879</u>		
		Run Hours	Run Weeks	Attempts	Plasmas		