

2015/07/14

- Satellite region probe Studies.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R		
1			Date:	7/14/15																
2			Run description:	FRC/RMFO	between only for early & Charles															
3			Base pressures: Main IG (T)	6.3e-7																
4			ER IG (T)																	
5			Satellite IG (T)	6.8e-7																
6			Main chamber Baratron (T)	1.0070																
7			Expansion region Baratron (T)	.002																
8			Antennas/delay lines	2-turn, RG-217, 15" long																
9			RMF frequency & phase																	
10			Magnet configuration & PS	4x8 + 8x4 coils; RR PS; eight BN-covered FCs								Recentered 4-turn MC coil				Scope time	Scope time	Scope time		
11			RMF system	SRS-> duty factor limiter -> AR100LM9 -> 2KD -> four 8K Ultras																
12			Wall Time	1105	1:30	1:54	2:20					2:24	3:50	4:19	4:22	4:27	4:30	4:35		
13			Main magnets I (A)	92	92	92	92					92	92	92	92	92	92	92		
14			Nozzle coils I (A)	300	300	300	300					300	300	300	300	300	300	300		
15			MC IG (T)																	
16			MC Slow Baratron (T)		.0084	.0083	.083					.0083	.0083	.0082	.0082	.0082				
17			MC FB (T)																	
18			ER IG (T)																	
19			ER slow Baratron (T)		.572	.542	.536					.575	.535	.528	.527	.534				
20			ER FB (T)																	
21			Satellite IG (T)		7.0e-5	2.6e-5	2.5e-5					2.4e-5	2.4e-5	2.4e-5	2.5e-5	2.4e-5				
22			Satellite FB (T)																	
23			Bias voltage: paddle																	
24			Main valve																	
25			Navigator valve																	
26			End turbo valve																	
27			Gases/feed location/scm																	
28			PV-10 (V)																	
29			Pulse	A to/Δ																
30				B to/Δ																
31				C to/Δ																
32			Diagnostics	LeCroy time																
33			Spectr	PM Tube (V)																
34			Wavelength	Port/LOS																
35			170 GHz	dia (mV)/IM freq																
36			X-ray	Amptek																
37			RMFO system	main SRS																
38			Pulse width (ms)/ rep rate (Hz)																	
39			Frequency: Center(MHz)/Span(KHz)																	
40				Pa																
41			Pr/96 refl	Pr/96 refl	220	235	240					310 max	237	121	220	300	122	117		
42			PM	PM	8	12	17					75 max	7	10	10	12	10	9		
43			Satellite probe																	
44			ER Probe																	
45																				
46			Helicon (SRS/Power/%mod)		.150	.150	.150/0%							.147	.165	.105				
47			Comments/changes:	for Δφ = π/2, n _e = 2.1e12 cm ⁻³																
																		sheet 1 of 2		

2015/07/14: Tuesday

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
1			Date:															
2			Run description:	FRC/RMFO														
3			Base pressures: Main IG (T)															
4			ER IG (T)															
5			Satellite IG (T)															
6			Main chamber Baratron (T)															
7			Expansion region Baratron (T)															
8			Antennas/delay lines	2-turn, RG-217, 15" long														
9			RMF frequency & phase															
10			Magnet configuration & PS	4x8 + 8x4 coils; RR PS; eight BN-covered FCs	Recentered 4-turn MC coil													
11			RMF system	SRS-> duty factor limiter -> AR100LM9 -> 2KD -> four 8K Ultras														
12			Wall Time	4:37	4:44													
13			Main magnets I (A)	92	103													
14			Nozzle coils I (A)	300	300													
15			MC IG (T)															
16			MC Slow Baratron (T)	0082														
17			MC FB (T)															
18			ER IG (T)															
19			ER slow Baratron (T)	0.522	0.533													
20			ER FB (T)															
21			Satellite IG (T)	2.8e-5	2.7e-5													
22			Satellite FB (T)															
23			Bias voltage: paddle															
24			Main valve															
25			Navigator valve															
26			End turbo valve															
27			Gases/feed location/scdm															
28			PV-10 (V)															
29			Pulse	A to/Δ	27.04	27.04												
30				B to/Δ														
31				C to/Δ	1412	1412												
32			Diagnostics	LeCroy time														
33			Spectr	PM Tube (V)														
34			Wavelength	Port/LOS	110													
35			170 GHz	dia (mV)/IM freq														
36			X-ray	Amptek														
37			RMFO system	main SRS														
38			Pulse width (ms)/ rep rate (Hz)															
39			Frequency: Center(MHz)/Span(KHz)															
40				Pa														
41				10 P4/%refl	102	09												
42				PM	4	2												
43			Satellite probe															
44			ER Probe															
45																		
46			Helicon (SRS/Power/%mod)															
47			Comments/changes:	for $\Delta\phi = \pi/2$, $n_e = 2.1e12 \text{ cm}^{-3}$														

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
1			Date:	7-16-15														
2			Run description:	FRC/RMFO	helicon only	present												
3			Base pressures: Main IG (T)	5.7e-7														
4			ER IG (T)															
5			Satellite IG (T)	5e-7														
6			Main chamber Baratron (T)	.0071 (2)														
7			Expansion region Baratron (T)	.001														
8			Antennas/delay lines	2-turn, RG-217, 15" long														
9			RMF frequency & phase															
10			Magnet configuration & PS	4x8 + 8x4 coils; RR PS; eight BN-covered FCs	Recentered 4-turn MC coil													
11			RMF system	SRS-> duty factor limiter -> AR100LM9 -> 2KD -> four 8K Ultras														
12			Wall Time	9:44	10:04	11:14	11:29											
13			Main magnets I (A)	93		93	93											
14			Nozzle coils I (A)	308		308	308											
15			MC IG (T)															
16			MC Slow Baratron (T)	.0083	.0084													
17			MC FB (T)															
18			ER IG (T)															
19			ER slow Baratron (T)	.534	.538													
20			ER FB (T)															
21			Satellite IG (T)	2.6e-5	2.5e-5													
22			Satellite FB (T)															
23			Bias voltage: paddle															
24			Main valve															
25			Navigator valve															
26			End turbo valve															
27			Gases/feed location/scm															
28			PV-10 (V)															
29			Pulse	A to/Δt														
30				B to/Δt														
31				C to/Δt														
32			Diagnostics	LeCroy time														
33			Spectr	PM Tube (V)														
34			Wavelength	Port/LOS														
35			170 GHz	dia (mV)/IM freq														
36			X-ray	Amptek														
37			RMFO system	main SRS														
38			Pulse width (ms)/ rep rate (Hz)															
39			Frequency: Center(MHz)/Span(KHz)															
40			Pa															
41			Pr/% refl															
42			ΦM															
43			Satellite probe															
44			ER Probe															
45			2e/Pr	222/8	114/9													
46			Helicon (SRS/Power/%mod)	0.149/0	.149/0													
47			Comments/changes:	for Δφ = π/2, n _e = 2.1e12 cm-3														