Testing Results From PPU01

J. Mammosser -on behalf of the SCL Group

M. Doleans. H. Howell, R. Geng, B. Degraff, C. McMahan, Dave. Vandygriff, Dan Vandygriff, R. Afanador, D. Kraft, S. Gold, D. Barnhart, C. Pinion

Cold Measurements at 2.1K

Cavity A	date	03/21/22	11am
		2.1 K	
	f pi mode	805.09	MHz
	QL	7.25E+05	(S21 bandwidth)
	1/2 band	555	Hz
	tophat-FPport	-58.9	dB
	S21	-58.9	dB
	S21	1.29E-06	
	Qprobe	2.25E+12	

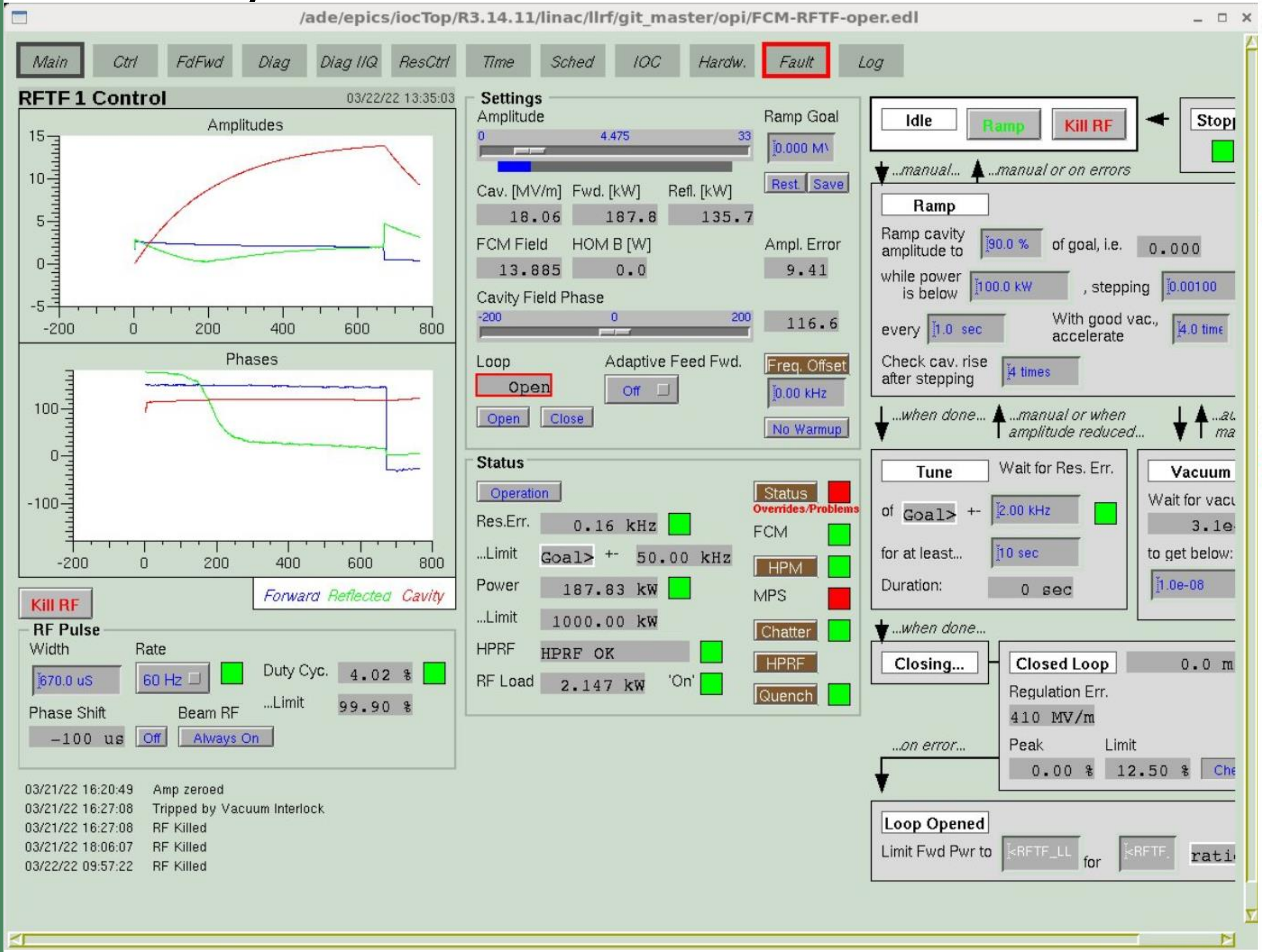
cavity C	date		
	f pi mode	805.11	MHz
	QL	7.45E+05	(S21 bandwidth)
	1/2 band	540	Hz
	tophat-FPport	-56.9	dB
	S21	-56.9	dB
	S21	2.04E-06	
	Qprobe	1.46E+12	

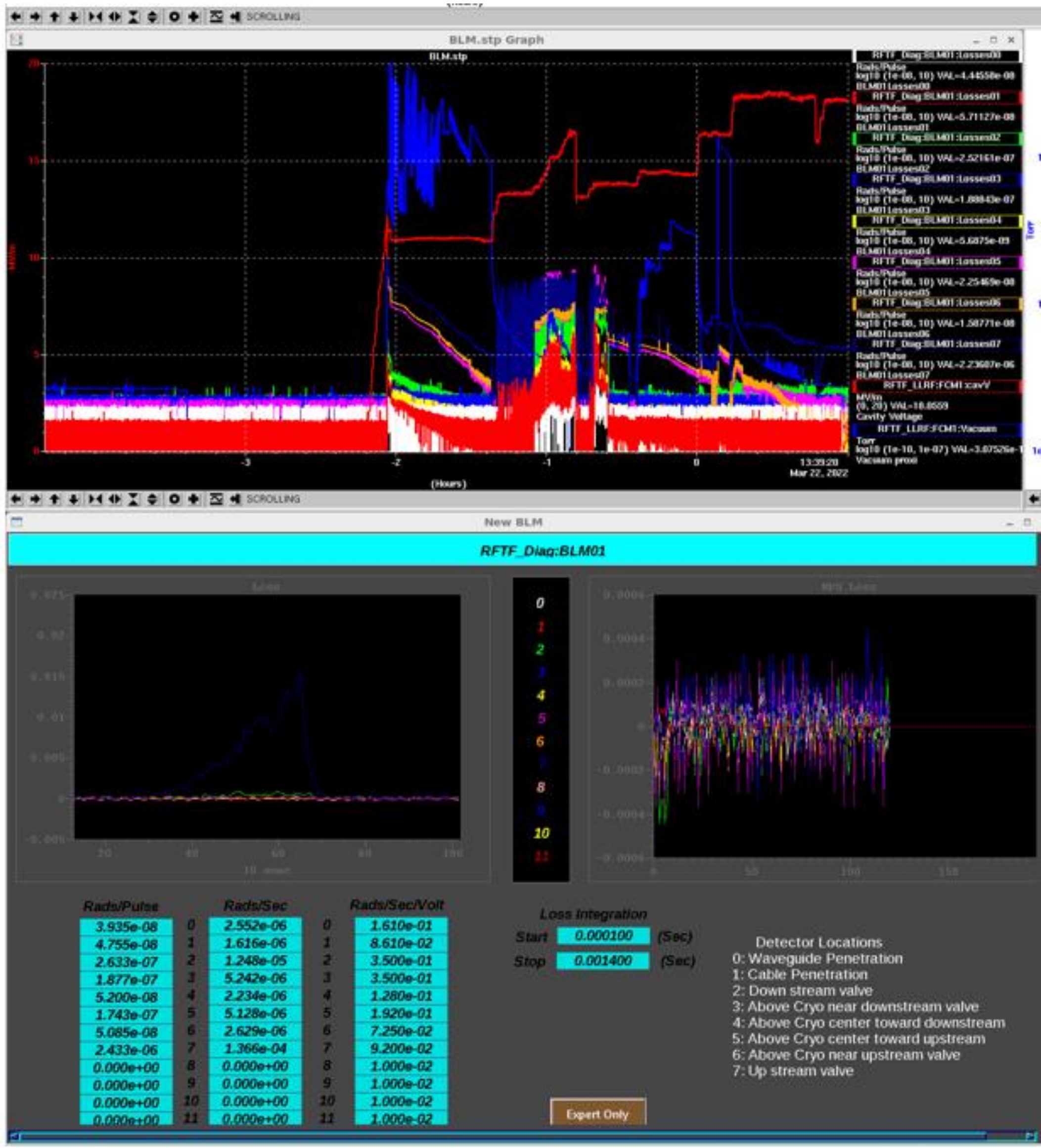
Cavity B	date		
	f pi mode	805.11	MHz
	QL	7.90E+05	(S21 bandwidth)
	1/2 band	510	Hz
	tophat-FPport	-56.8	dB
	S21	-56.8	dB
	S21	2.09E-06	
	Qprobe	1.51E+12	

cavity D	date		
	f pi mode	805.12	MHz
	QL	7.34E+05	(S21 bandwidth)
	1/2 band	548	Hz
	tophat-FPport	-56.61	dB
	S21	-56.61	dB
	S21	2.18E-06	
	Qprobe	1.35E+12	

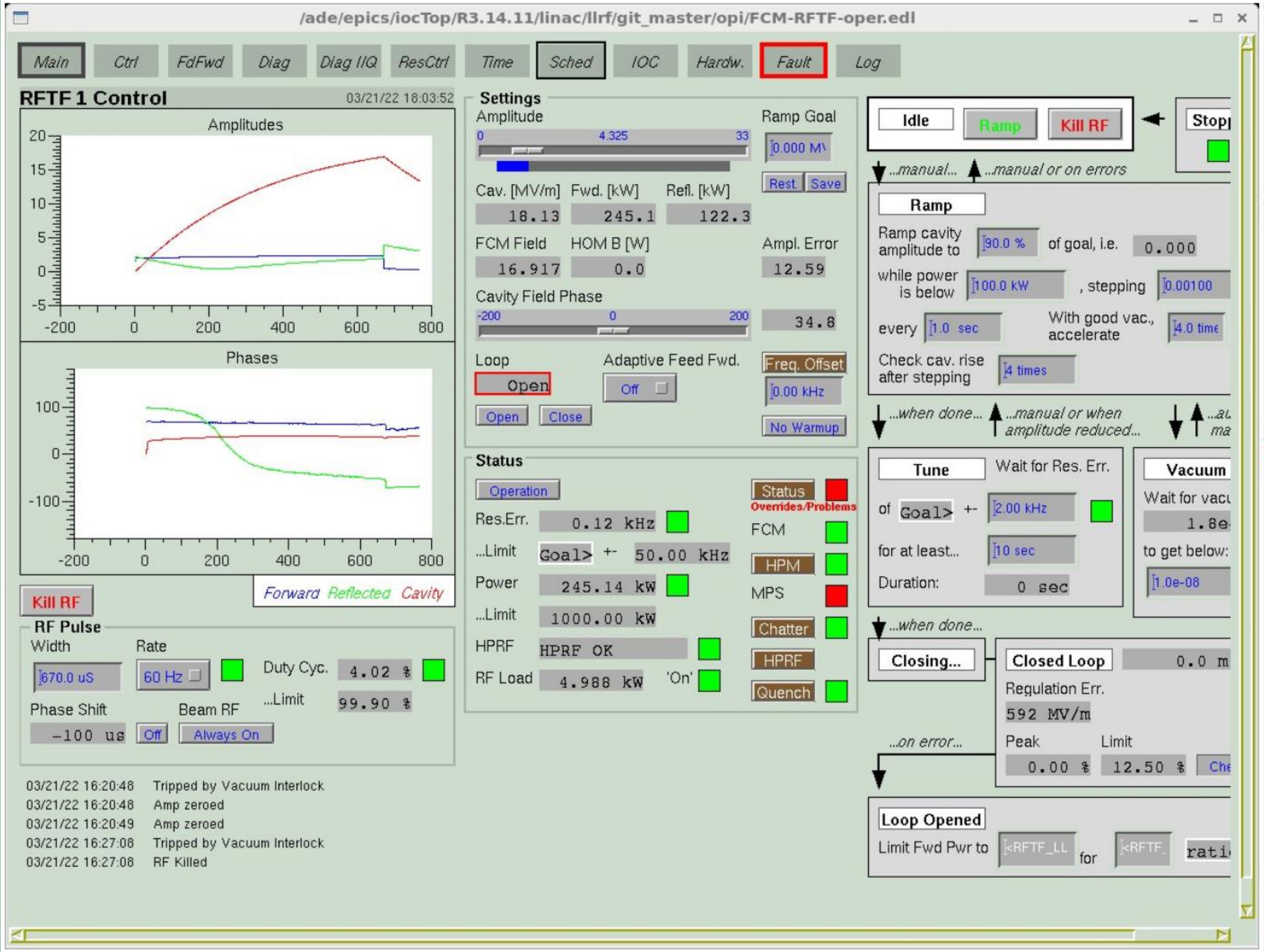
tuners at high limit						
2K	pi/6	pi/5	pi/4	pi/3	pi/2	pi
Cav A	793.53	795.757	798.936	802.081	804.284	805.096
Cav B	793.45	795.699	798.896	802.049	804.251	805.114
Cav C	793.336	795.738	798.905	802.009	804.332	805.114
Cav D	793.641	798.858	798.99	802.092	804.288	805.119

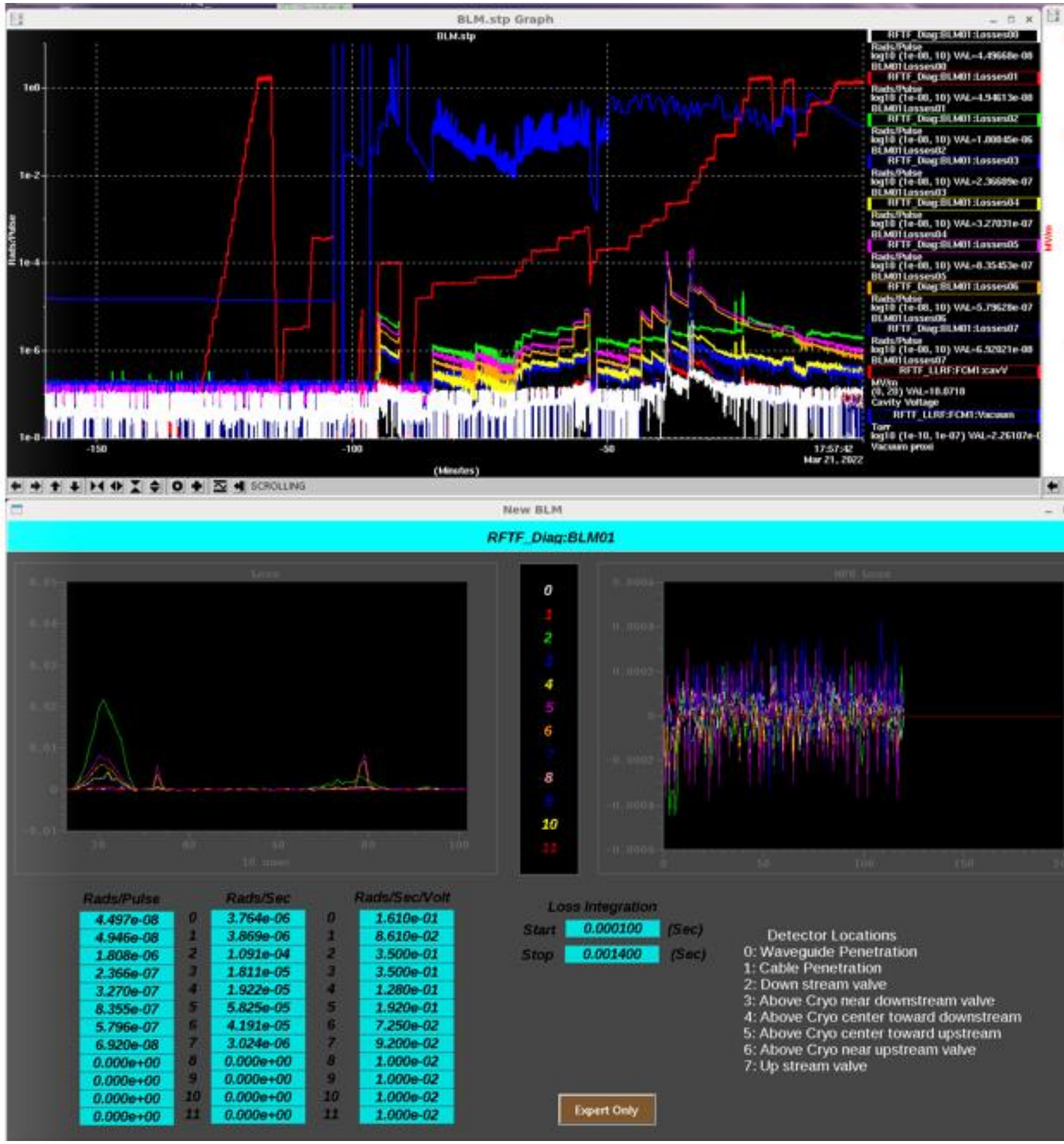
Cavity A – PPU04





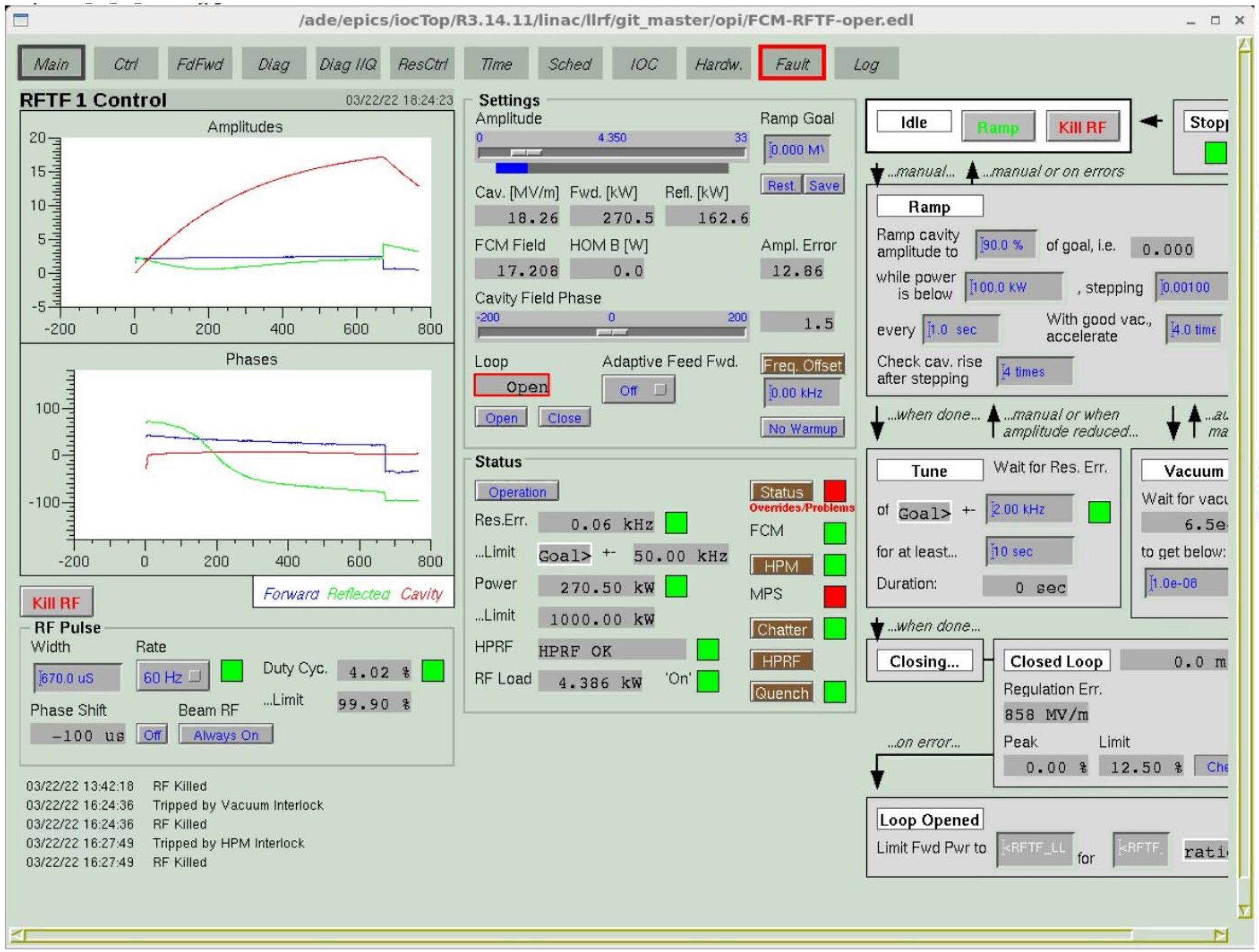
Cavity B – PPU03

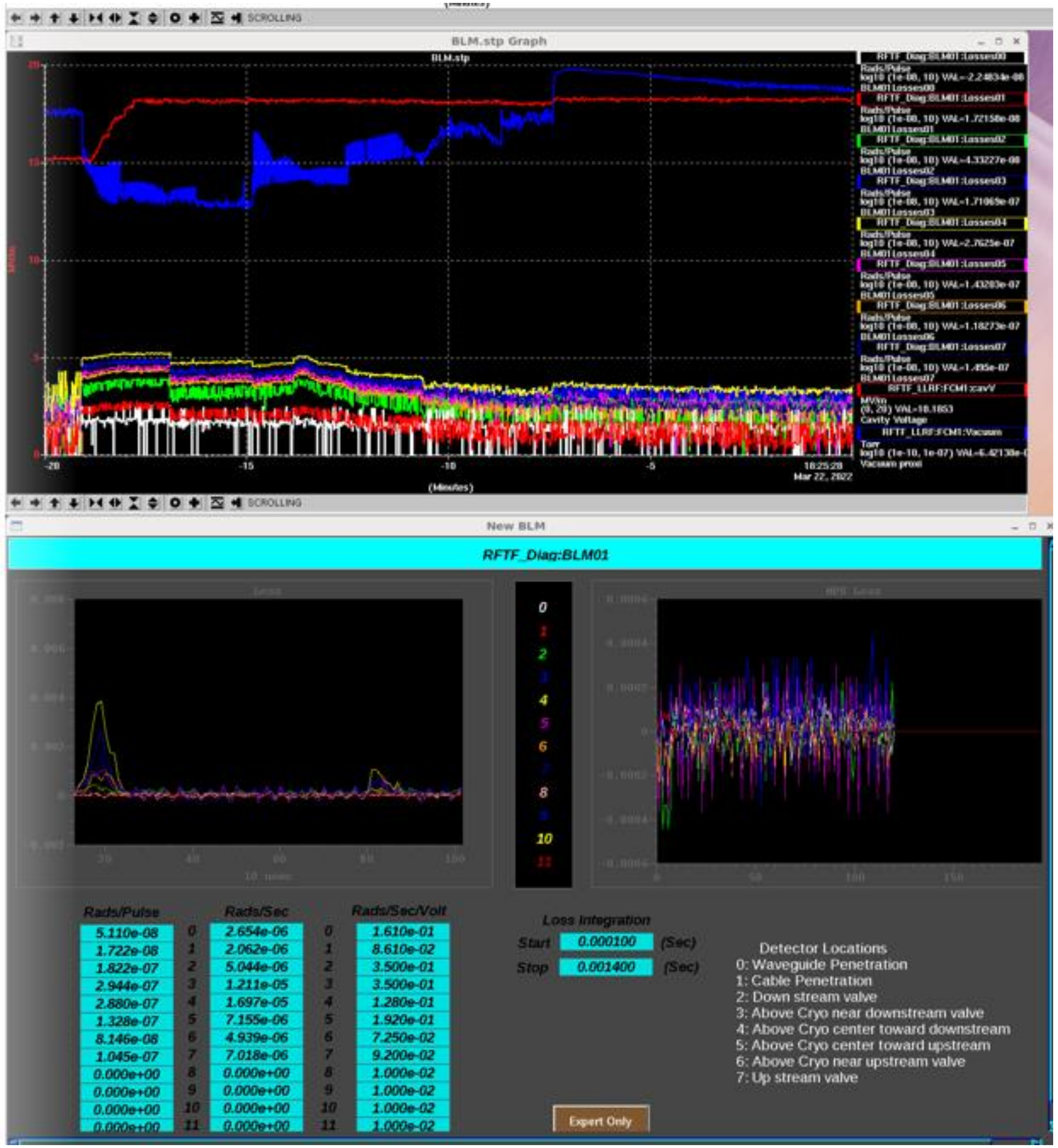




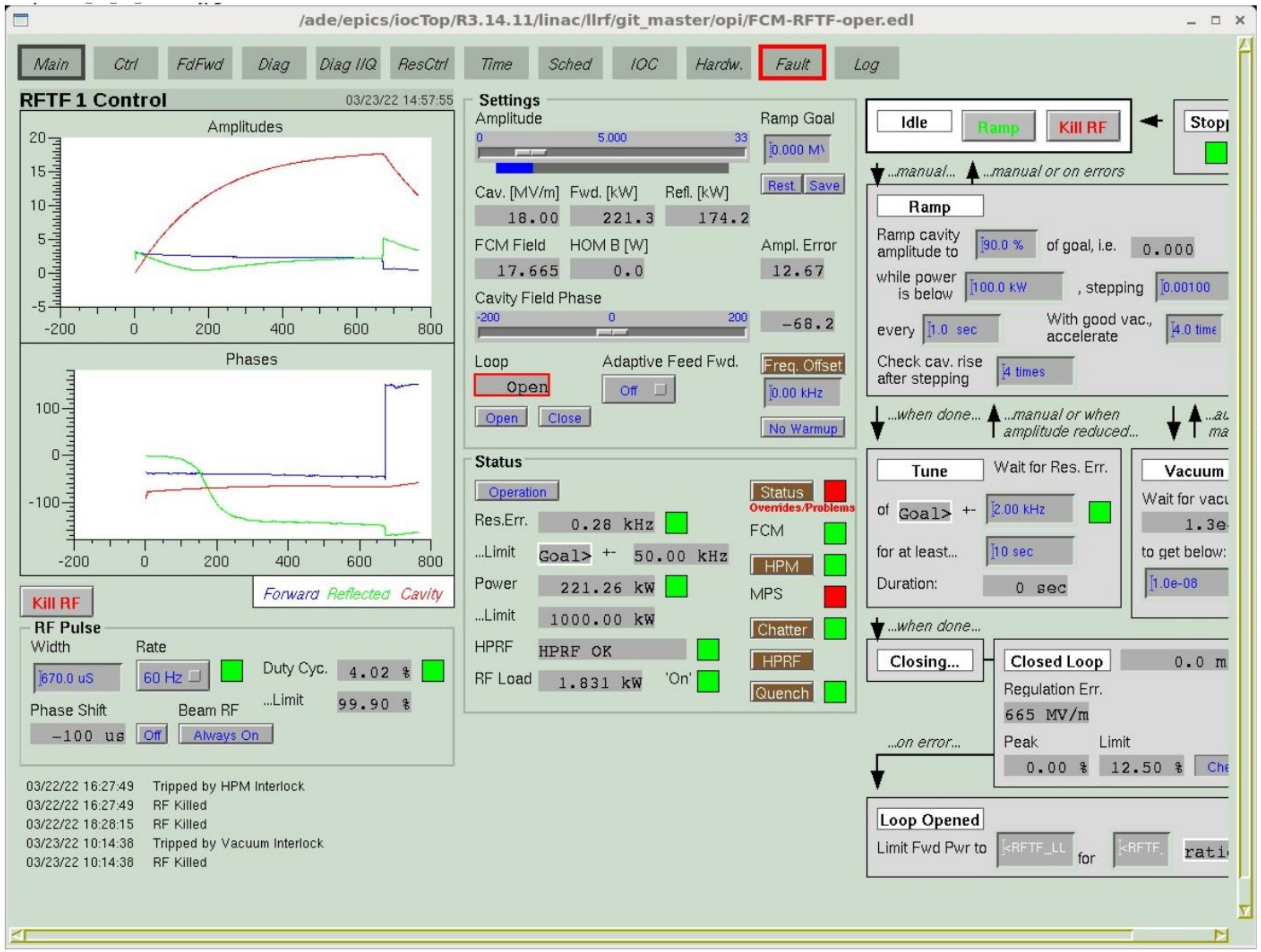
Rads/Pulse		Rads/Sec		Rads/Sec/Volt
4.497e-08	0	3.764e-06	0	1.610e-01
4.946e-08	1	3.869e-06	1	8.610e-02
1.808e-06	2	1.091e-04	2	3.500e-01
2.366e-07	3	1.811e-05	3	3.500e-01
3.270e-07	4	1.922e-05	4	1.280e-01
8.355e-07	5	5.825e-05	5	1.920e-01
5.796e-07	6	4.191e-05	6	7.250e-02
6.920e-08	7	3.024e-06	7	9.200e-02
0.000e+00	8	0.000e+00	8	1.000e-02
0.000e+00	9	0.000e+00	9	1.000e-02
0.000e+00	10	0.000e+00	10	1.000e-02
0.000e+00	11	0.000e+00	11	1.000e-02

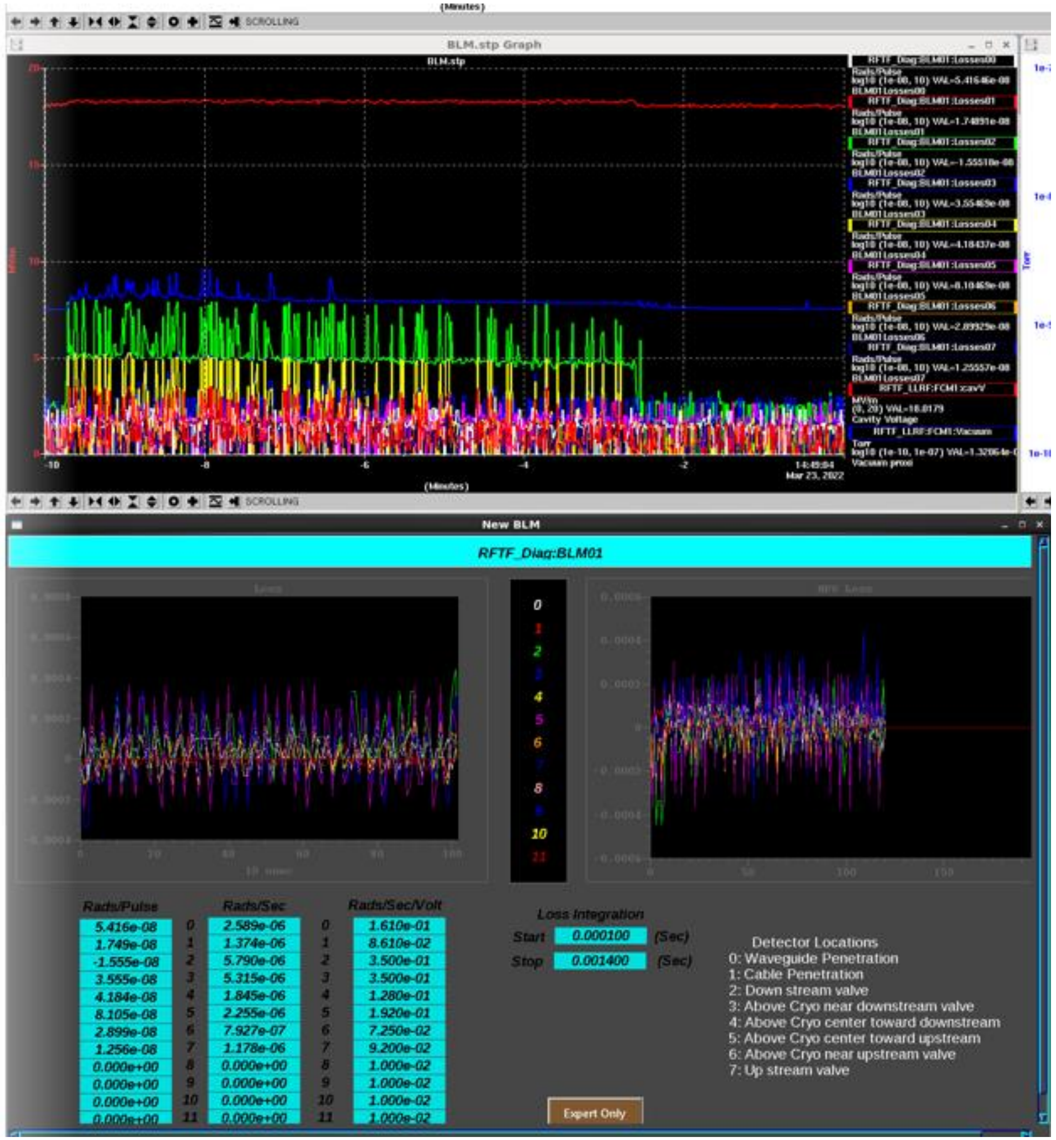
Cavity C – PPU02



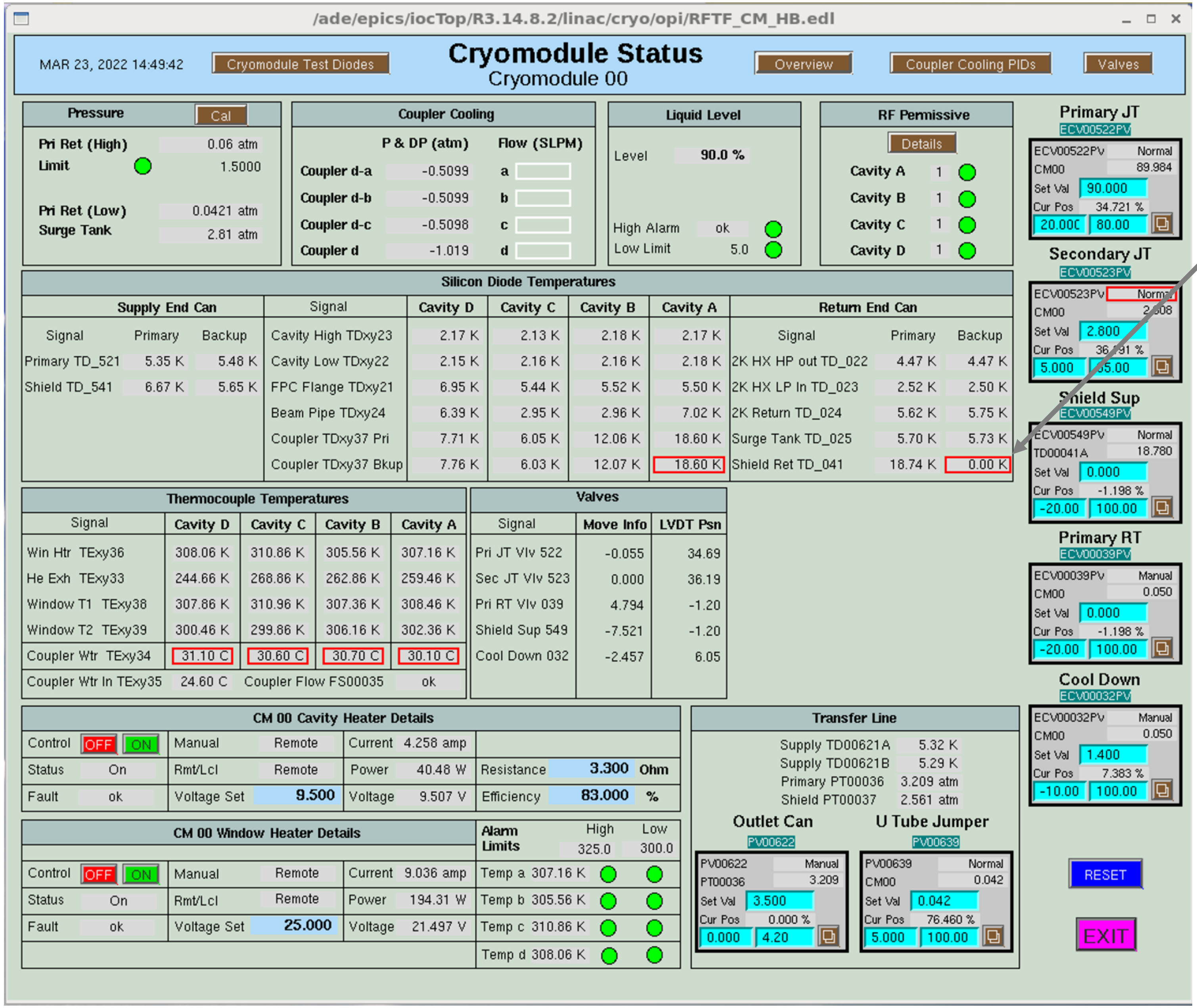


Cavity D – PPU01





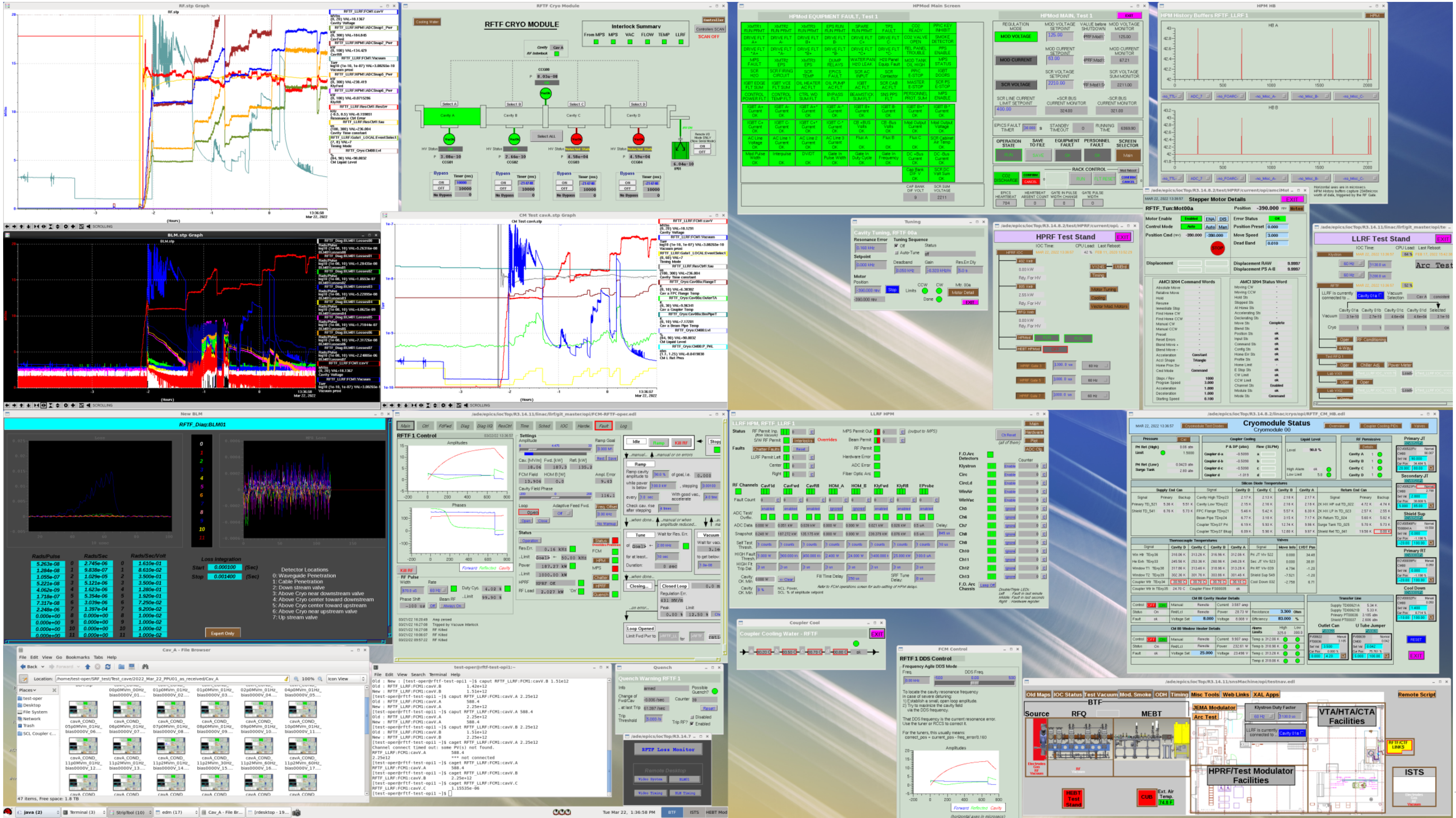
Cryomodule Instrumentation

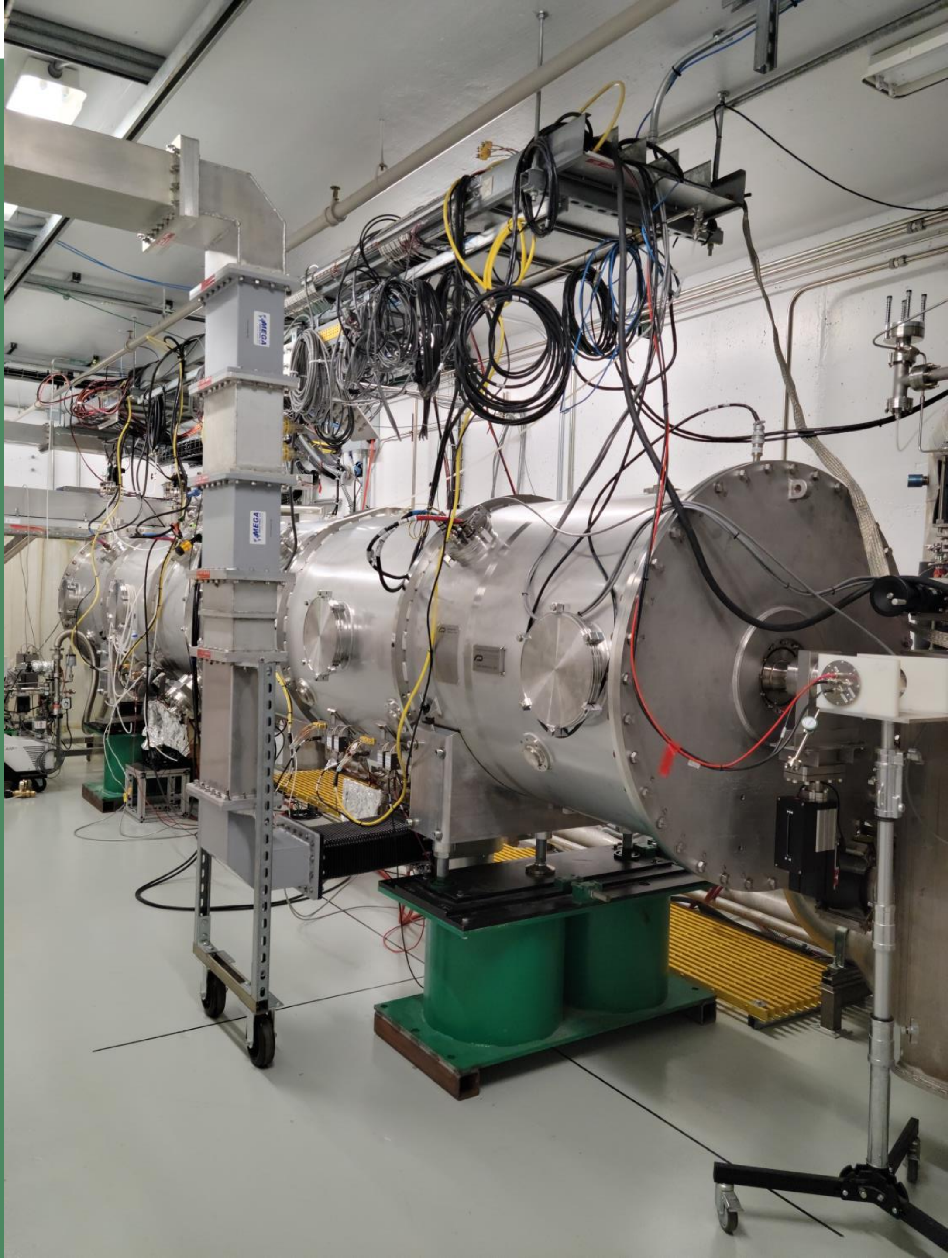


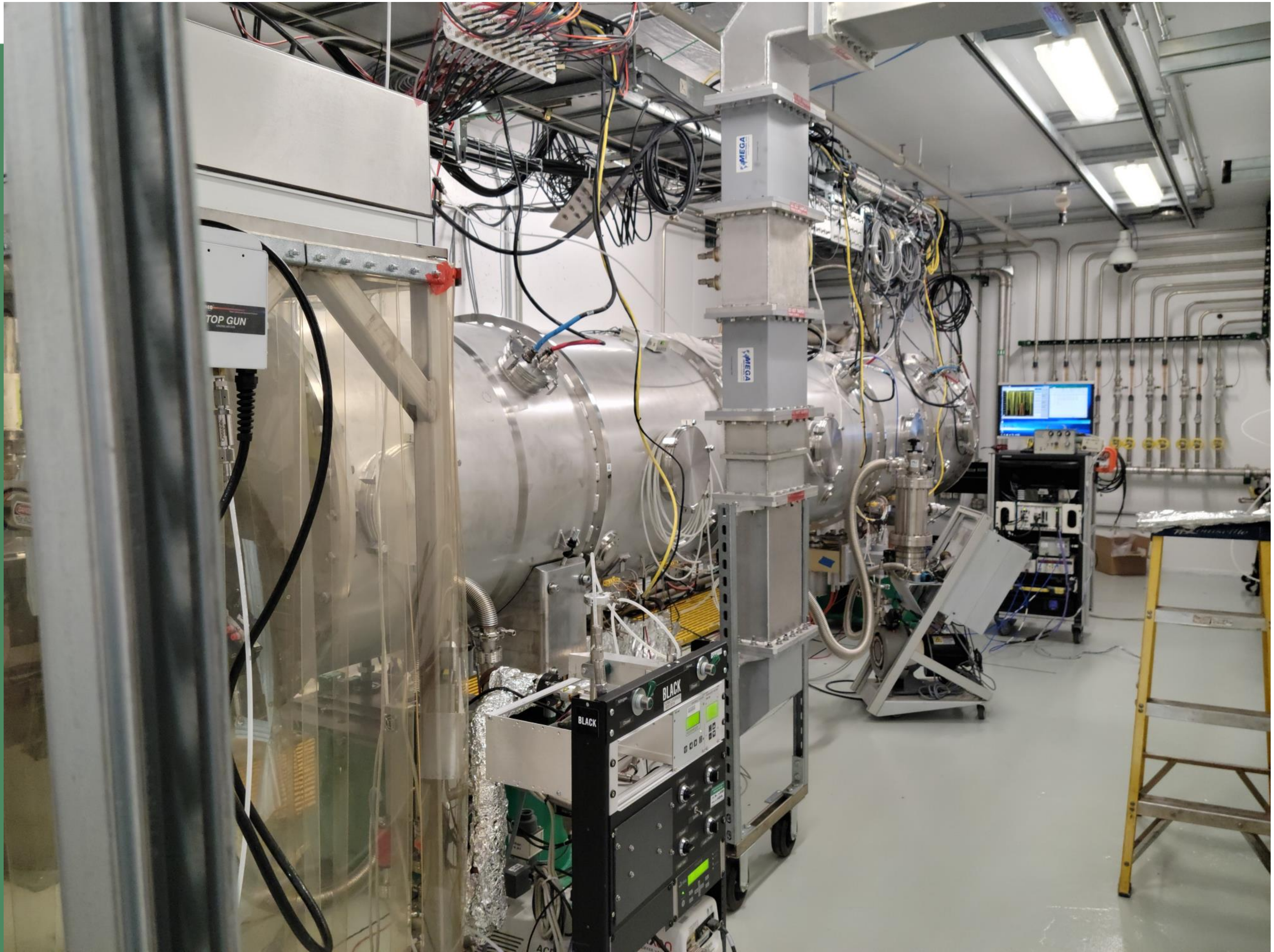
Only issue on instrumentation was Shield Ret TD_041 Backup

We will check this once warmup is complete

RF Screens Cav-A






TOP GUN
MEGA
MEGA
BLACK
BLACK