

2022/12/22.

\* Trying to not have pick up  
and check the X-ray counts for RMF pick up.  
(Using H<sub>2</sub> plasma)

- 01 - ~~CC~~ CC Radial Scan
  - 02 - CC NOZZLE
  - 03 - CC Midpoint
- } ST = 2%  
FT = 35  
FPT = 200
- All seed plasma

RMF 1: set up 2 to 3 kW MAG.P = 200 A, B.B ~ 201 A  
NOZZLE = 100 A.

Saved the histogram.

The SDD's were gated - with 6ms and 0 Delay RMF = 2

04 - CC ~~NOZZLE~~ Radial Scan 240  $\mu$ torr

05 - "

06

The PUR is  
OFF

→ Tried ~~to on~~ PUR-ON,

The CC Radial and CC Midpoint showed no counts.

→ Tried various PT = 1, 2, 5.6, 25.6  $\mu$ s.

All worked for Radial scan.

RMF 3 - 30-32 kW

07 - CC Radial Scan - 230  $\mu$ torr.

08 - CC Midpoint

09 - CC NOZZLE

The Midpoint  
showed noise  
large.

The Midpoint was shielded more with foils.

10 - CC Midpoint Ap4 - 230  $\mu$ torr with better shielding.

→ RMF-4 60 kW

11 - CC Radial Scan - 235  $\mu$ torr

12 - CC NOzzle -

13 - CC Midpoint -

RMF-5 ~ 84 kW

14 - CC Radial Scan - 239  $\mu$ torr showed low energy signal

15 - CC NOzzle

16 - CC Midpoint

→ ~~RMF-6~~ Helium added 0.5 but no Breakdown so added more the pressure is

1.12 m Torr but no much increase in line ratio the electron density. Sam added Argon to the plasma to achieve B.D. (0.09 m Torr)

17 - CC Radial Scan - 471  $\mu$ torr - small low energy signal.

18 - CC NOzzle

19 - CC Midpoint - has seen high low energy signal

→ Ar is ~~being~~ lowered (0.06 m Torr, but we lost the BBF). <sup>RMF5-01</sup> Power is being increased

20 - CC Radial Scan - 459  $\mu$ torr - has low energy spect

21 - CC NOzzle 459

22 - CC Midpoint - has more " " "

The Power was raised more .

23 -

24 -

25 -

Then the Midpoint Aperture was closed then we took the data .

26 -

Noise spectrum .

