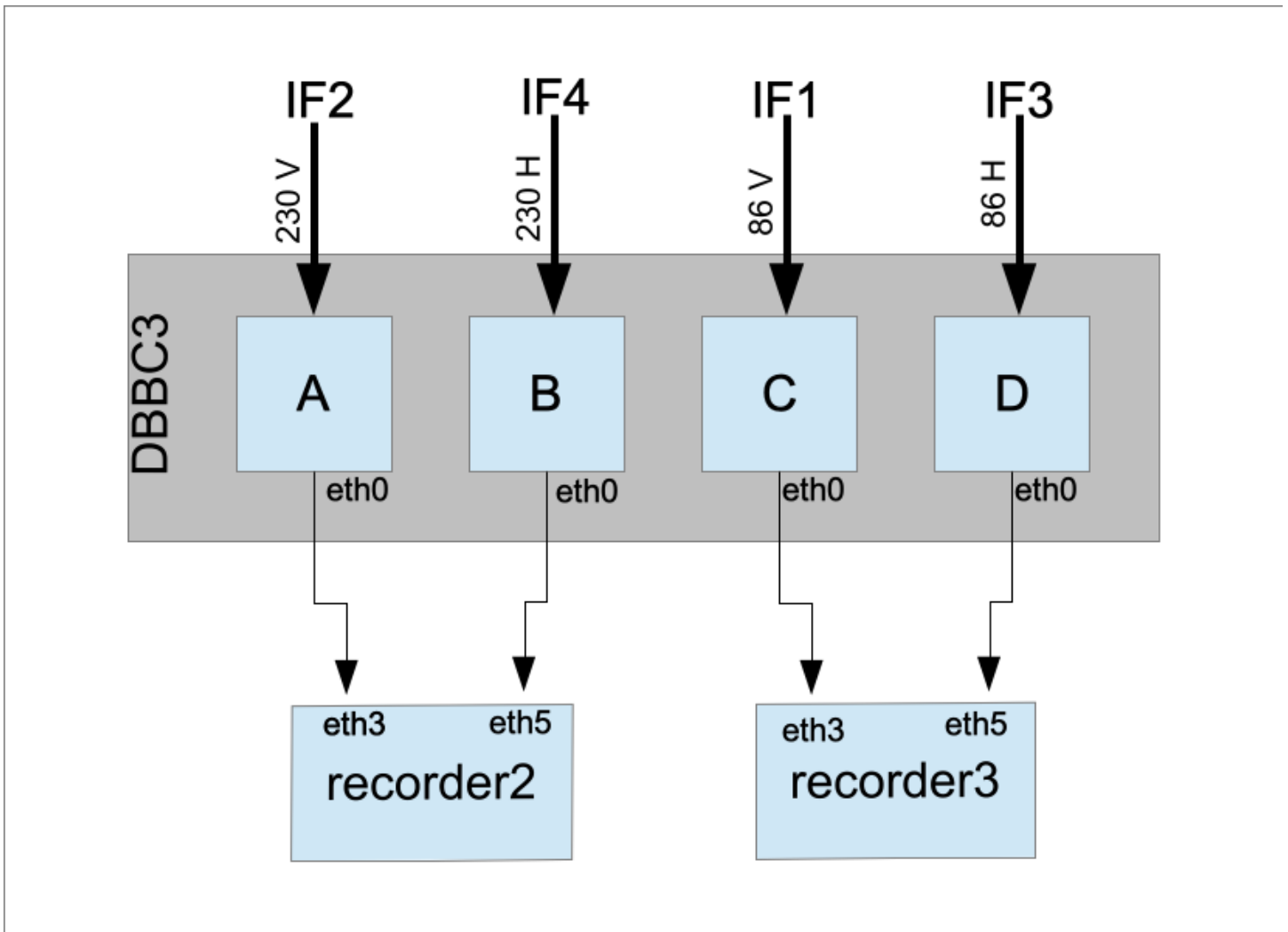


## System schematics



### Setup 86 GHz

Target band: 86.000 - 87.024

1st LO: 93.0 GHz

RF: LSB 5-9 GHz

2nd LO (DBBC3): 9.048 GHz

Sky freq: 83.952 - 88.048 GHz

sky	83952	85976	86000	87024
after 1st DC	9048	8024	7000	5976
after 2nd DC	0	1024	2048	3072

=> DBBC3 should use filter1= 2000-3000

## Setup 230 GHz

Target band: 215.000 - 216.024

1st LO: 221.010 GHz

RF: LSB 5-9 GHz

2nd LO (DBBC3): 8.058 GHz

Sky freq: 211.962 - 216.058 GHz

sky	212952	213976	215000	216024
after 1st DC	8058	7034	6010	4986
after 2nd DC	0	1024	2048	3072

=> DBBC3 should use filter1 = 2000-3000

## DBBC3 setup

- load normally the OCT\_120 firmware
- run `dbbc3ctl.py` and do `check system all`
- run `/home/oper/rothmann/dbbc3/utilities/setupFPT_Nov22.py dbbc3` (sets the 1GHz filters and the LO freqs)

## Modules & Recorders

### recorder2

slot 1: MPIH%028/48000

slot 2: MPIH%029/48000

### recorder3

slot 1: MPIH%034/48000

slot 2: EHT%0036/48000

## module setup (do on both recorders)

```
group=new:12
input_stream=add:stream1:vdif:8224:50:42:eth3:::1
input_stream=add:stream2:vdif:8224:50:42:eth5:::2
input_stream=commit
group=open:12
```

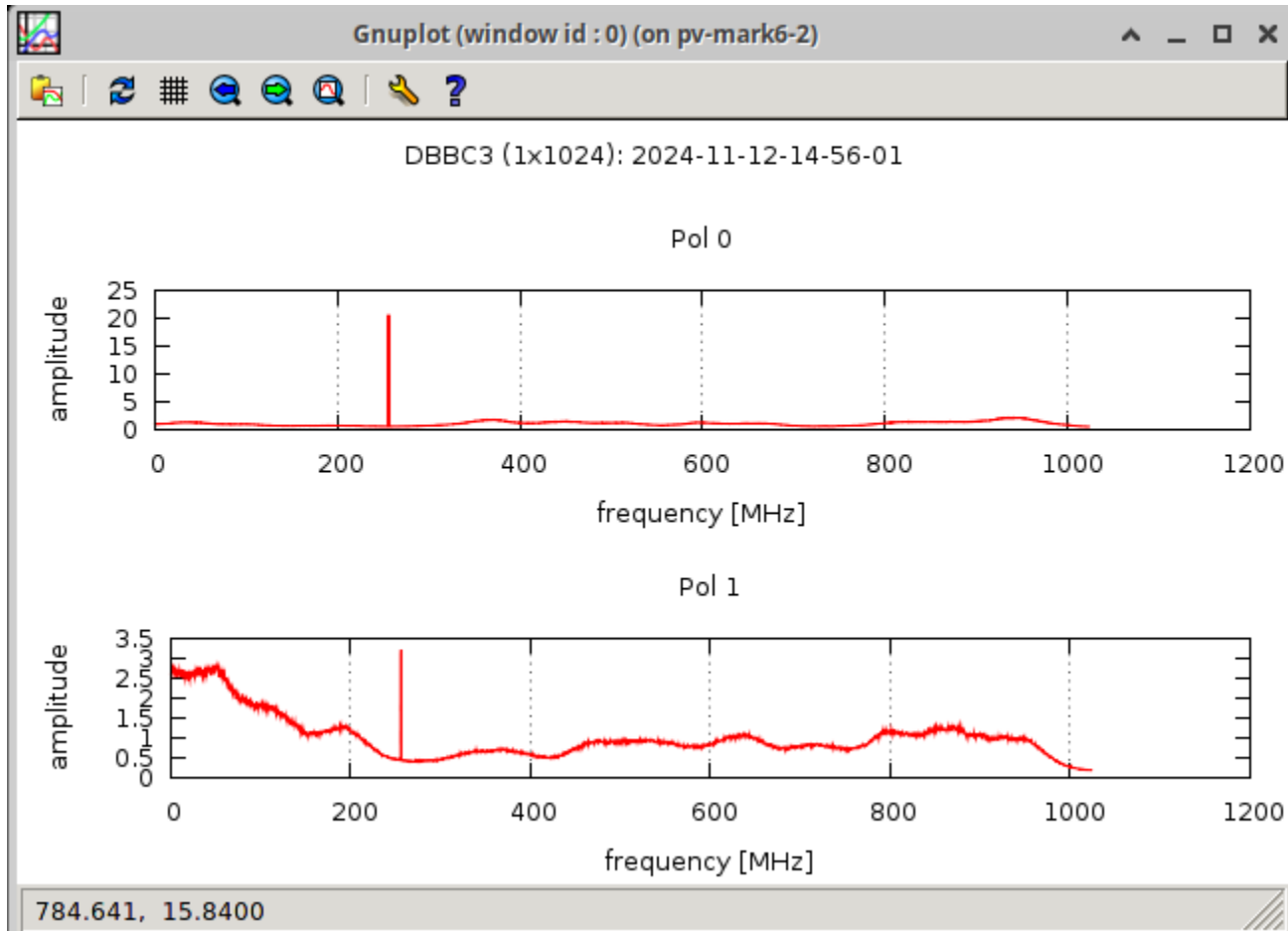
## Line injection test (2024 Nov 11th)

### 230 GHz signal chain

Line freq: 5754 MHz (corresponds to 215.256 GHz sky)

connected to boards A and B (corresponding to IF2 and IF4)

Line is expected to appear at 256 MHz in the filtered band. Difference in Pol. power comes from misleignment of tone-injection horn.

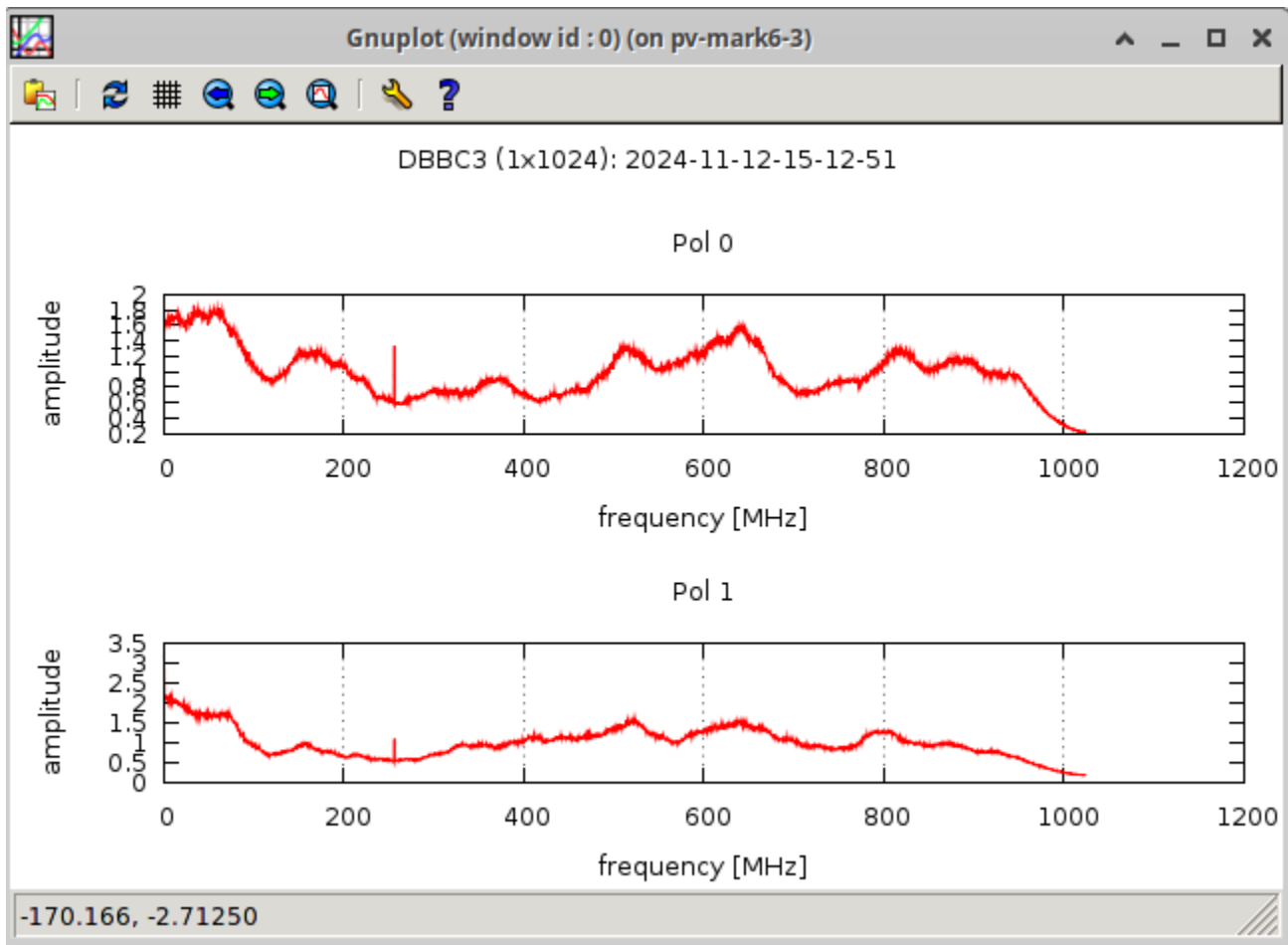


### 86 GHz signal chain

Line freq 6744 MHz (corresponds to 86.256 GHz sky)

connected to boards C and D (corresponding to IF1 and IF3)

Line is expected to appear at 256 MHz in the filtered band. Difference in Pol. power comes from misleignment of tone-injection horn.



**Action**

- Repeat phase test and tone injection if possible before observation