



# RPW first observations

## Solar Orbiter EMC Teleconf

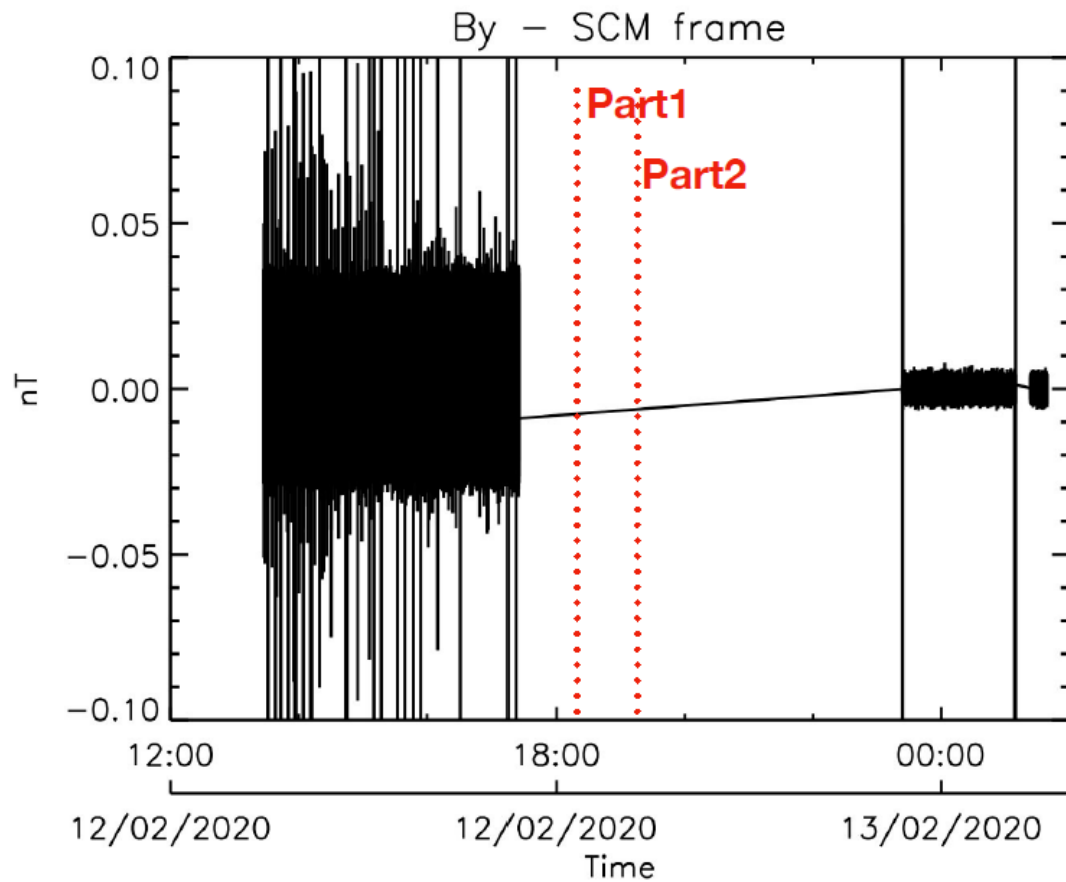
### 05/03/2020



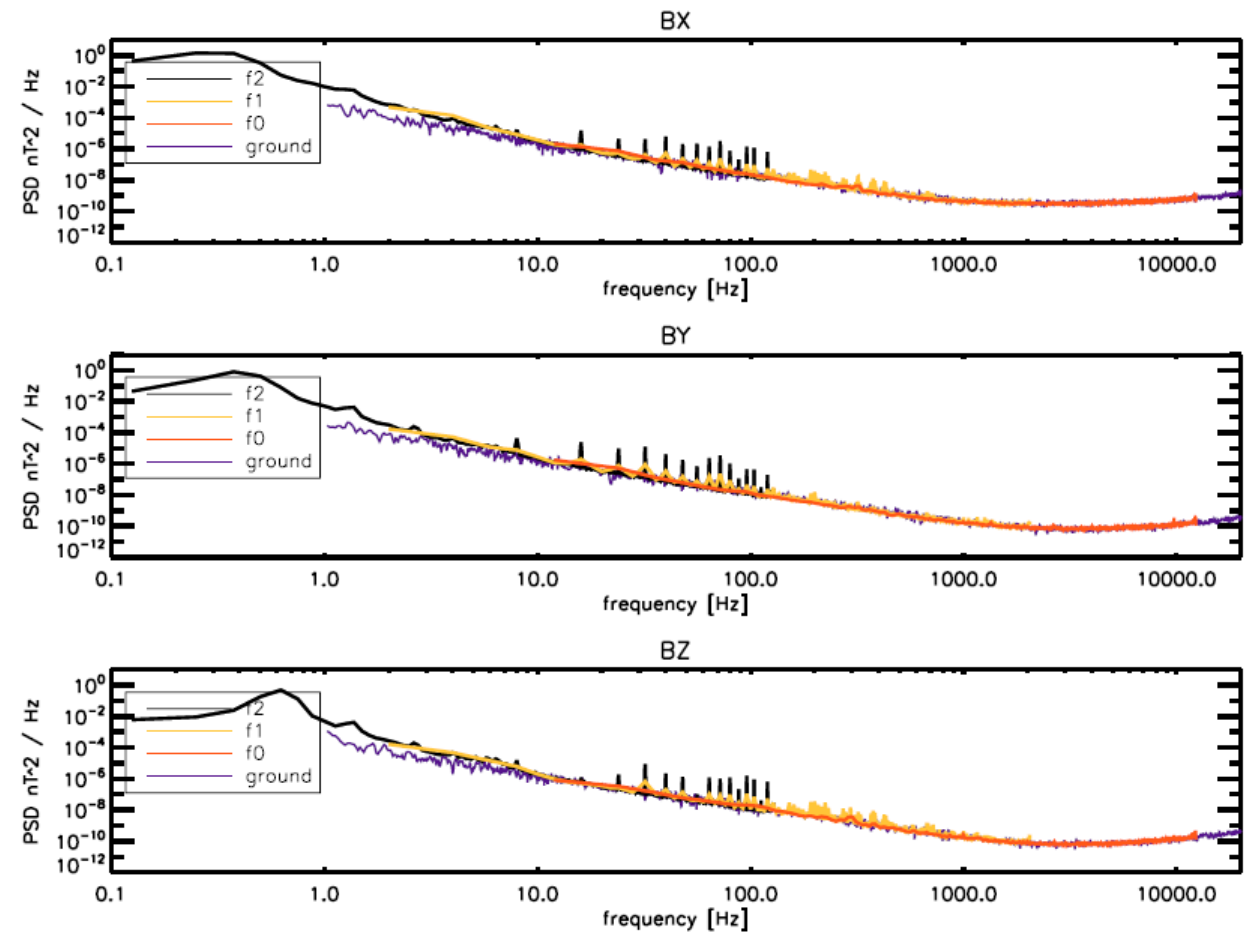
Laboratoire d'Études Spatiales et d'Instrumentation en Astrophysique



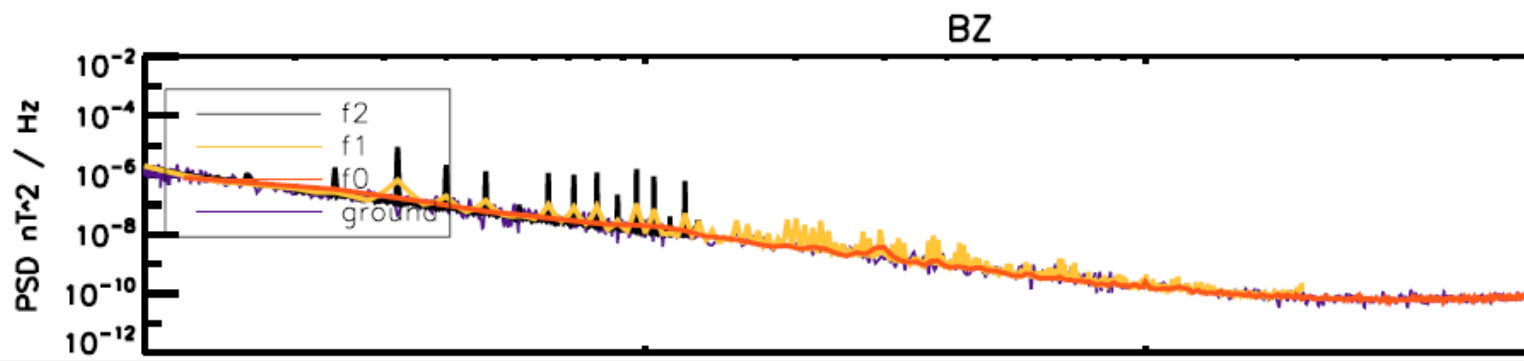
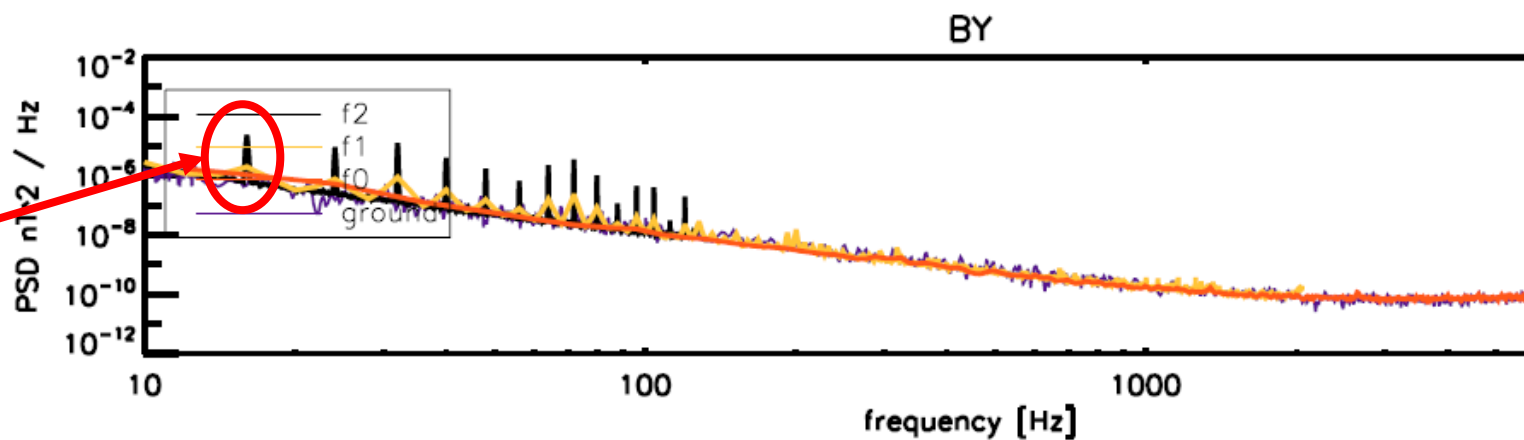
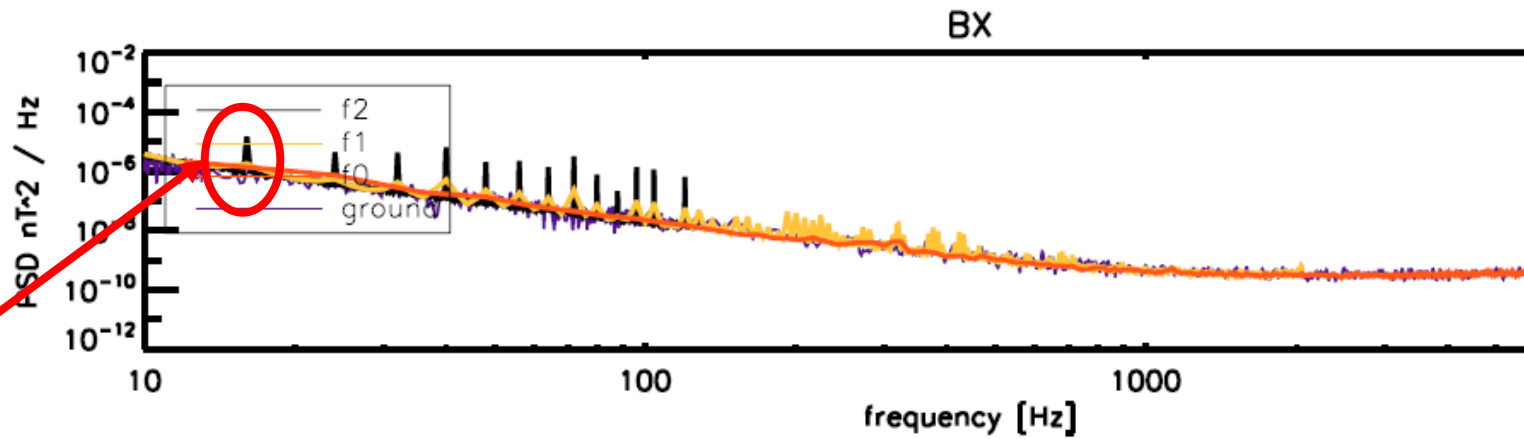
# SCM Boom deployment

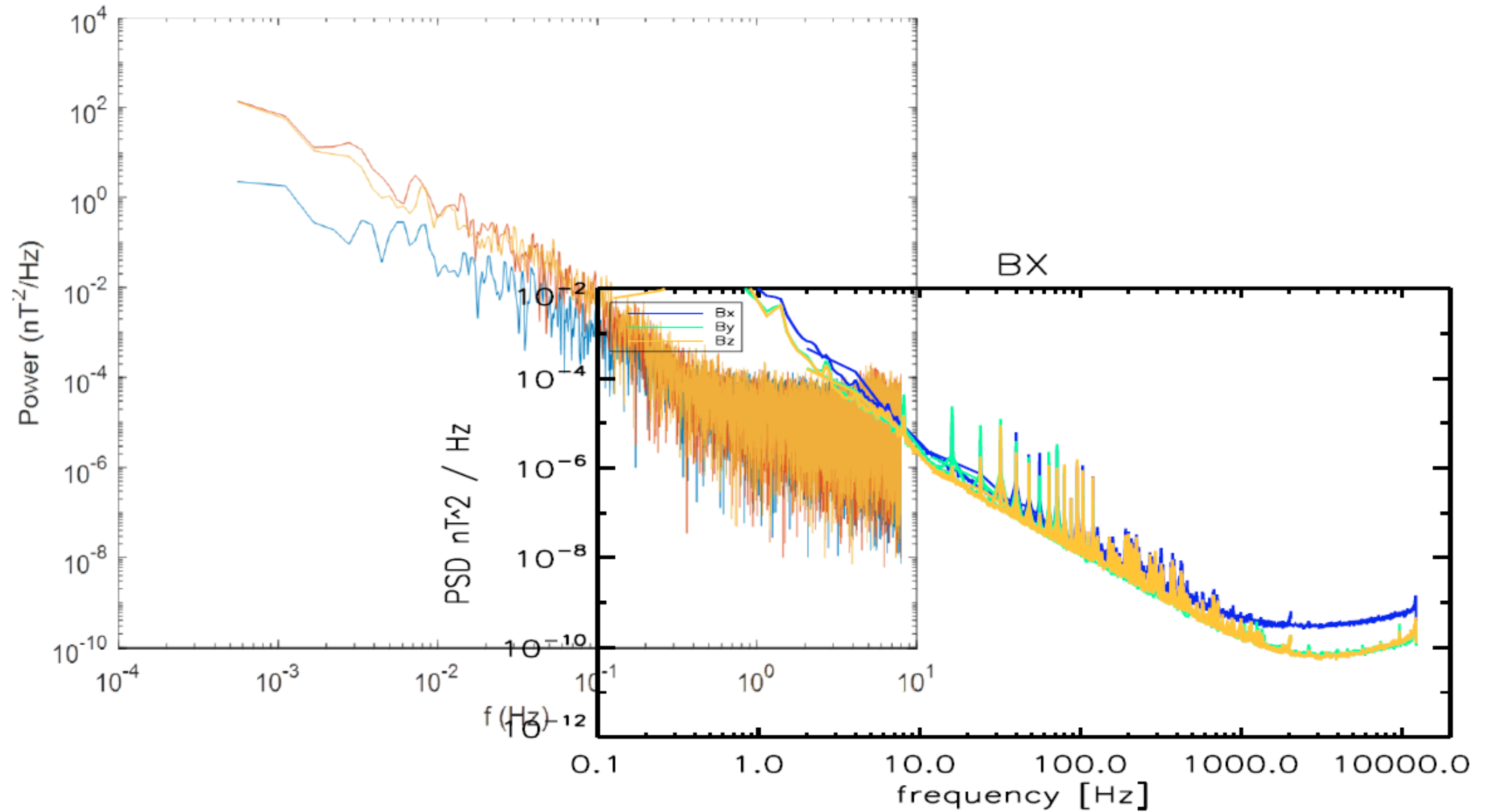


Average spectra with deployed boom (20200213), from LFR SWF

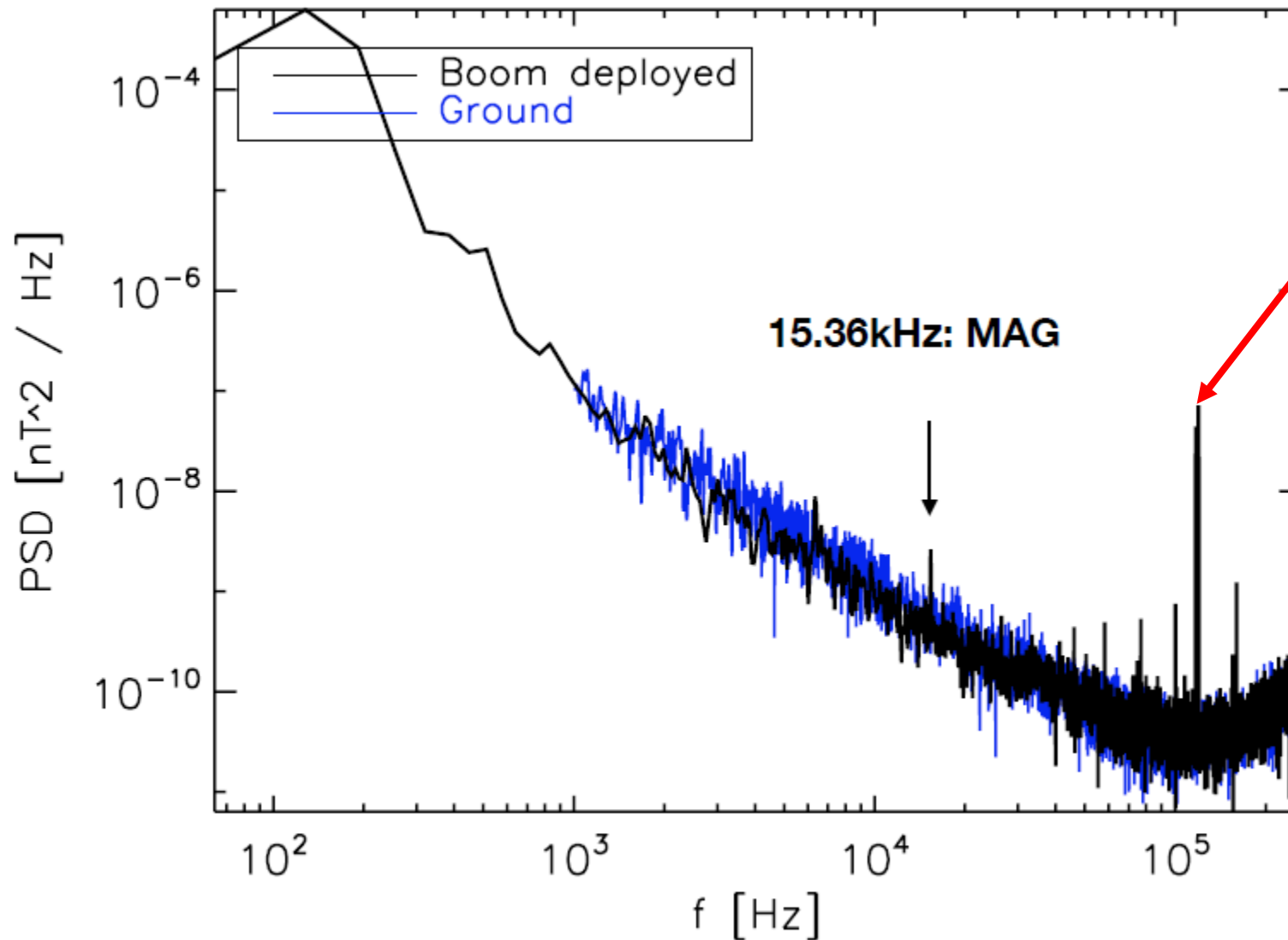


**8 Hz AOCS  
Synchronisation  
pulse (ASP)**





# Medium frequency band

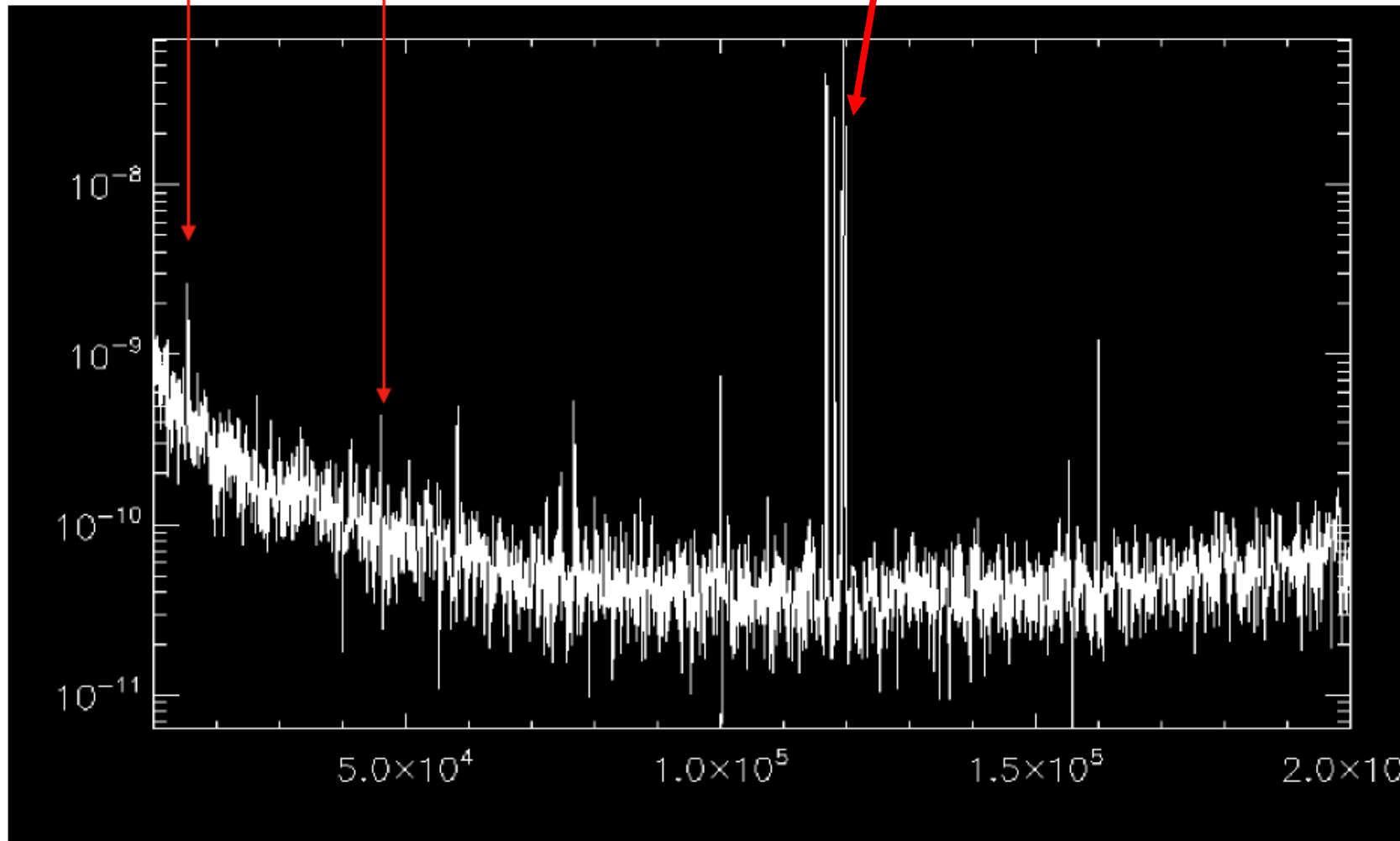


PCDU APR converters @ 120kHz

PCDU APR converters @ 120kHz  
Many lines

15.36kHz: MAG

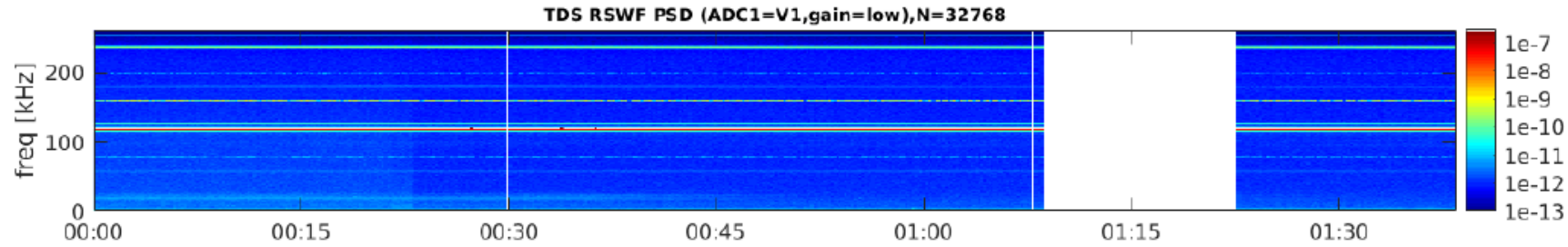
x3 MAG



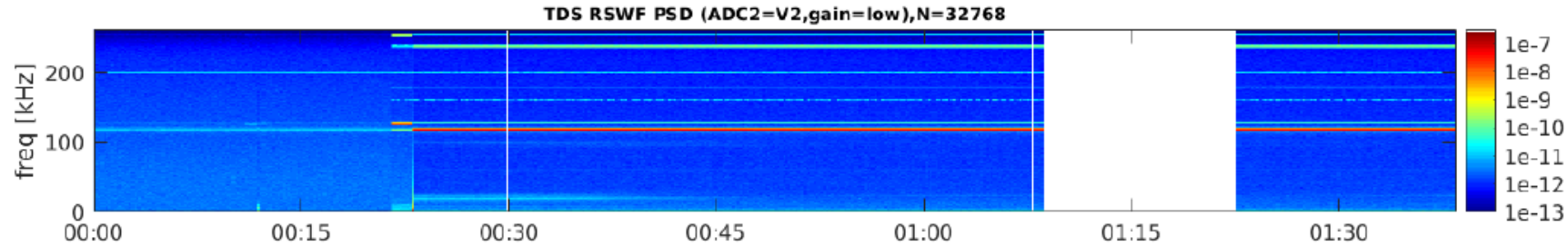
TDS

# Feb 13 spectrogram

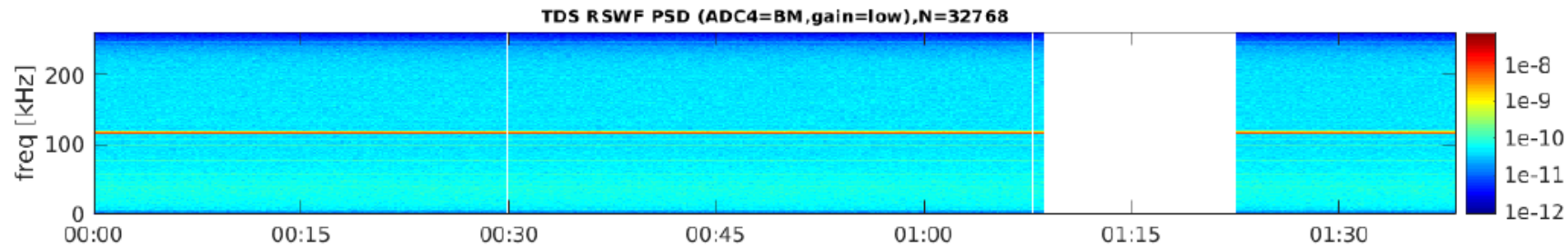
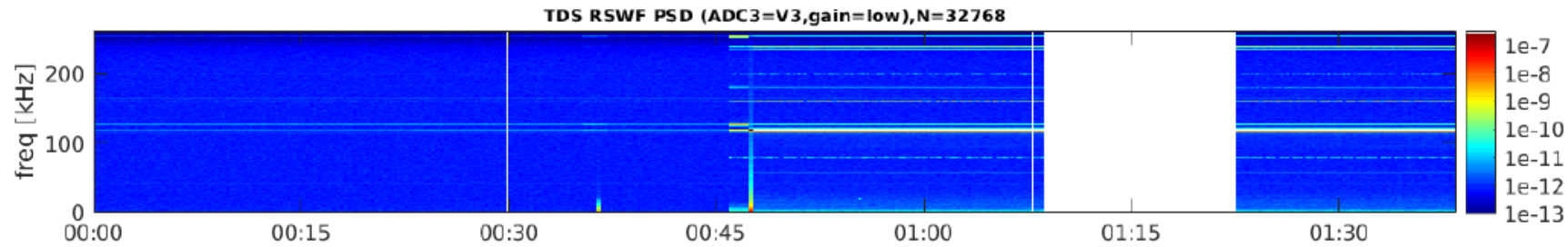
V1



V2

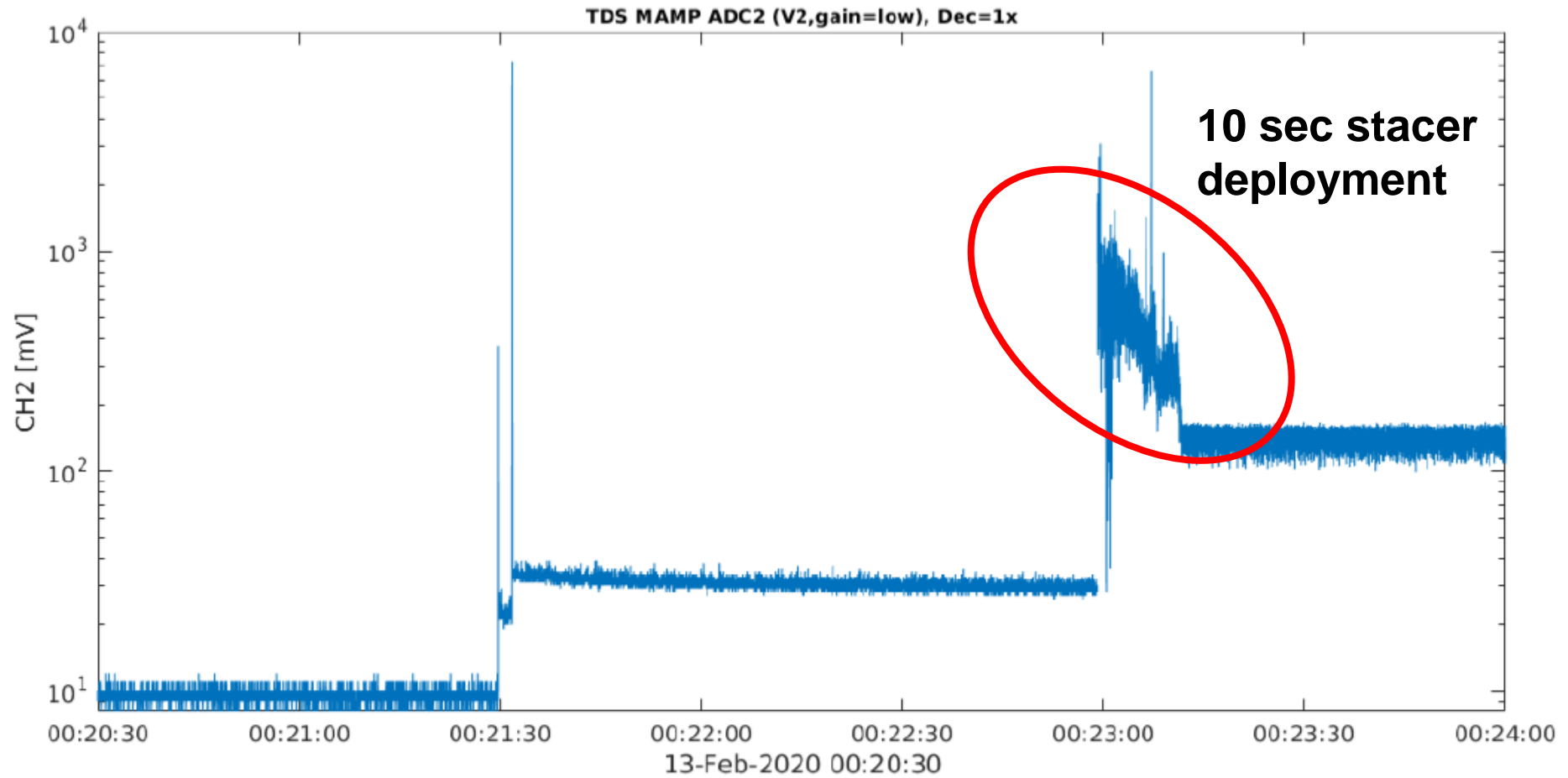


V3



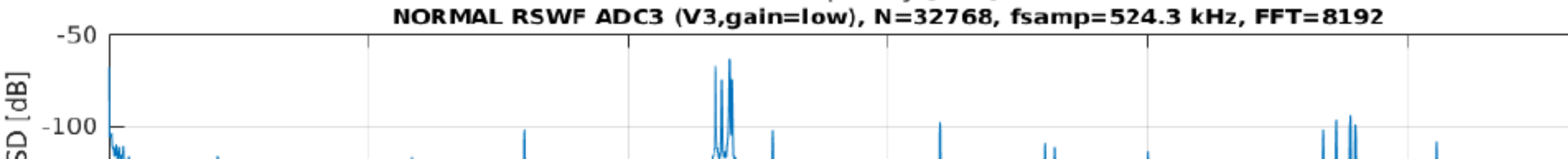
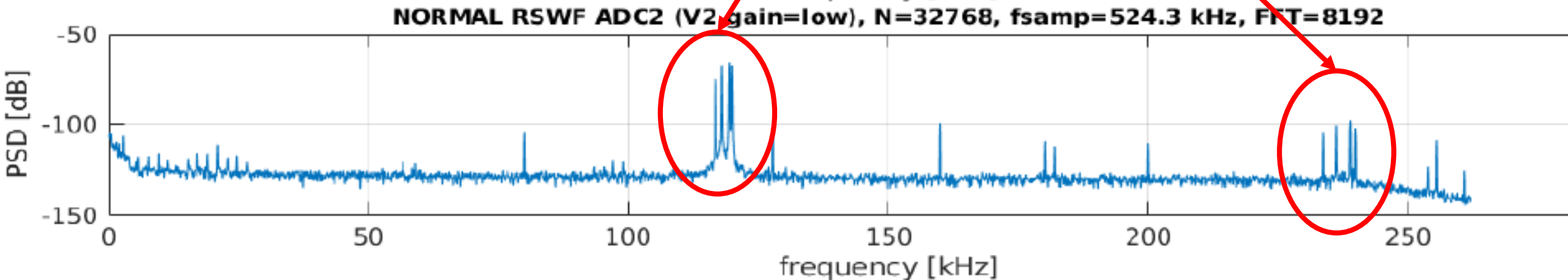
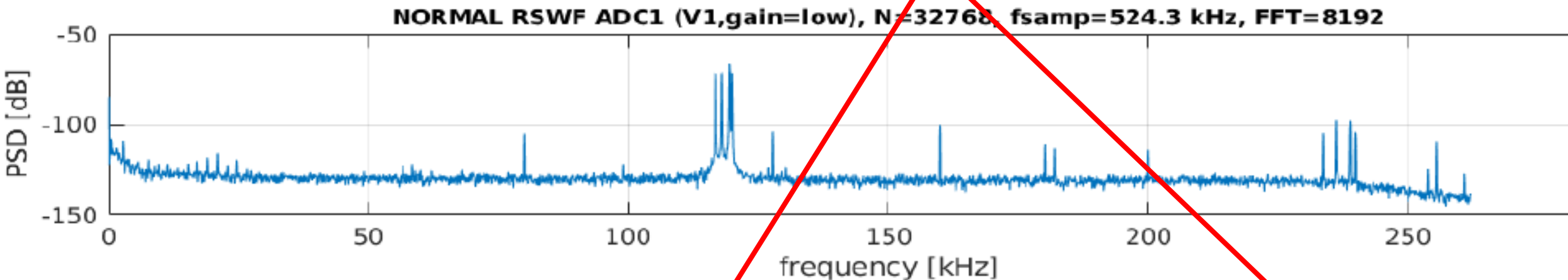
13-Feb-2020, 458 snapshots, dt = 11.0 sec

# MAMP (antenna 2)



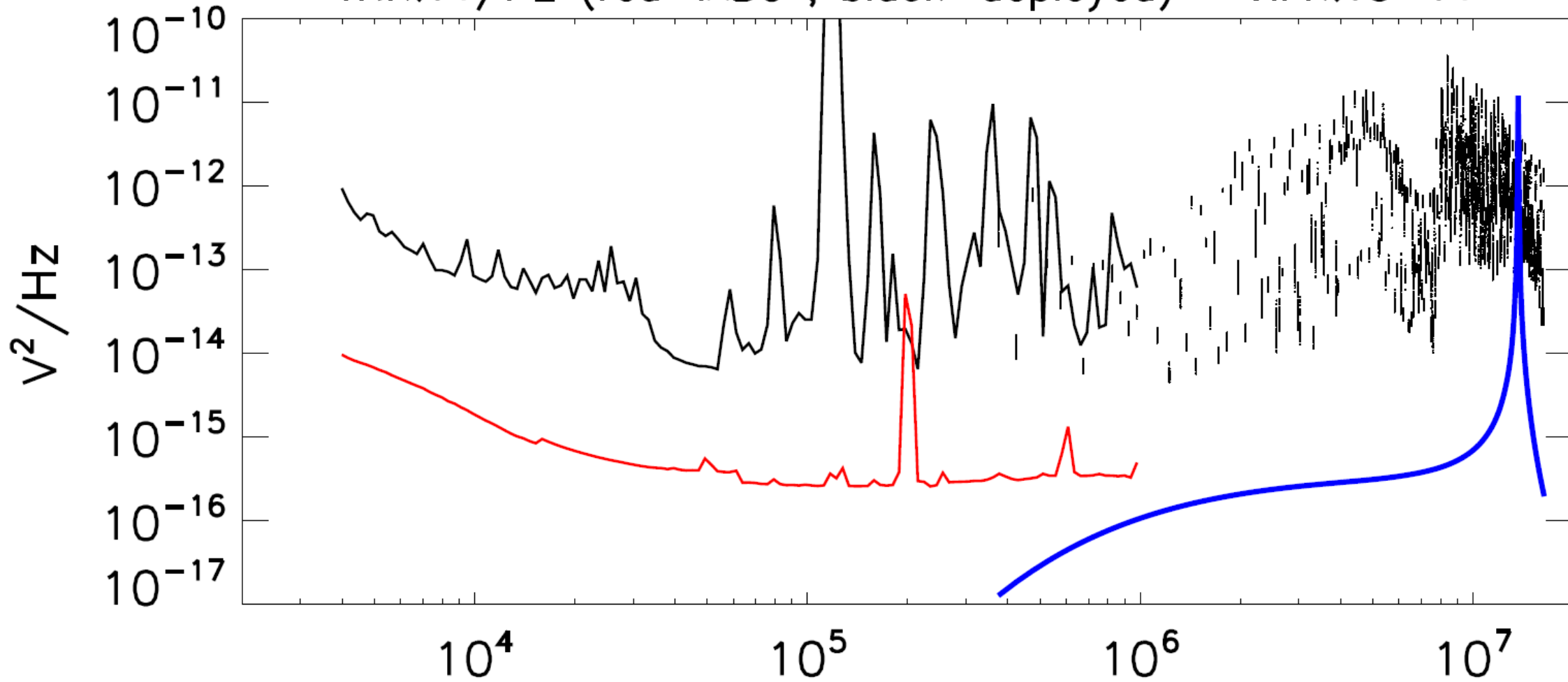


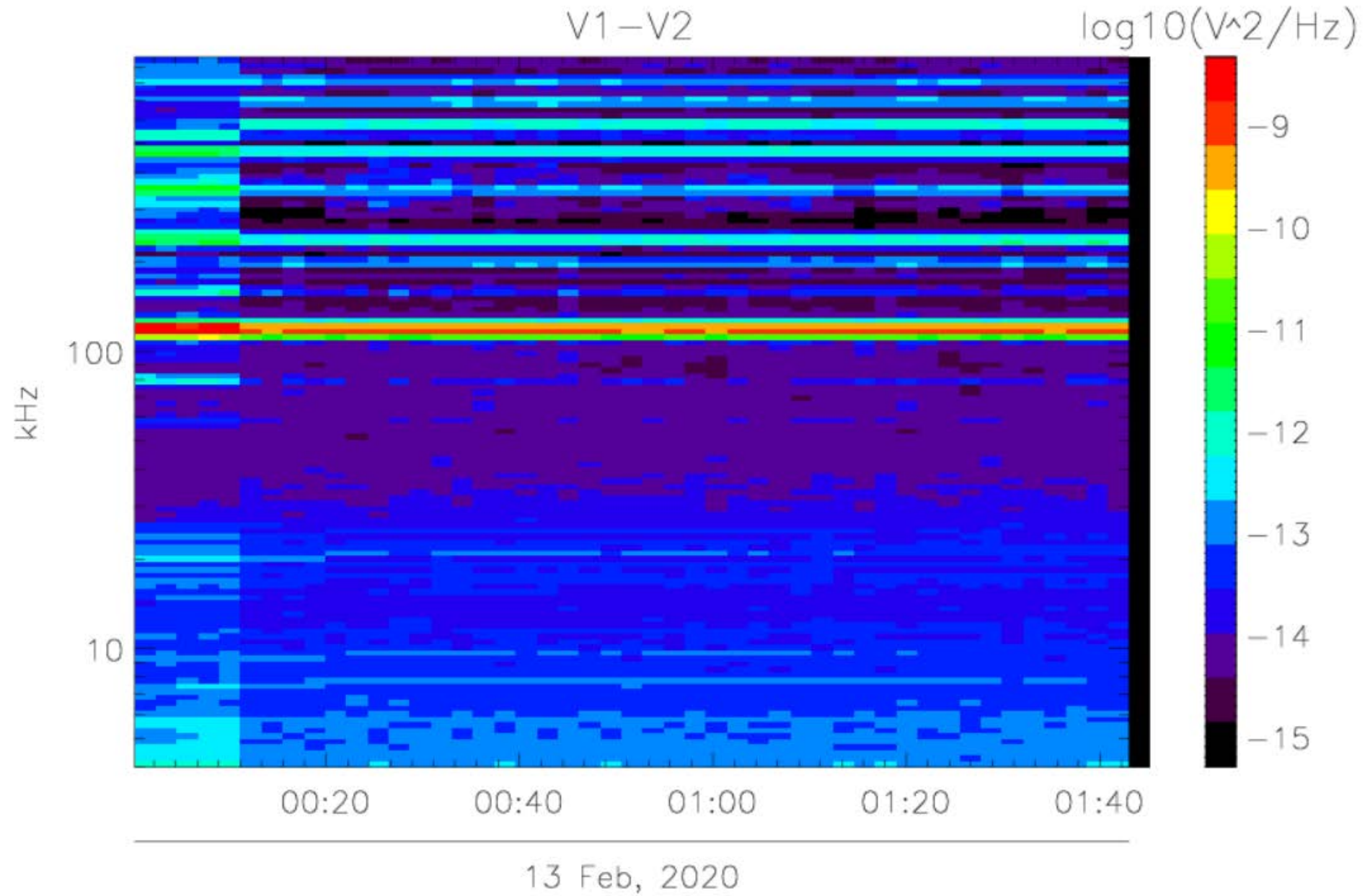
PCDU APR converters @ 120kHz

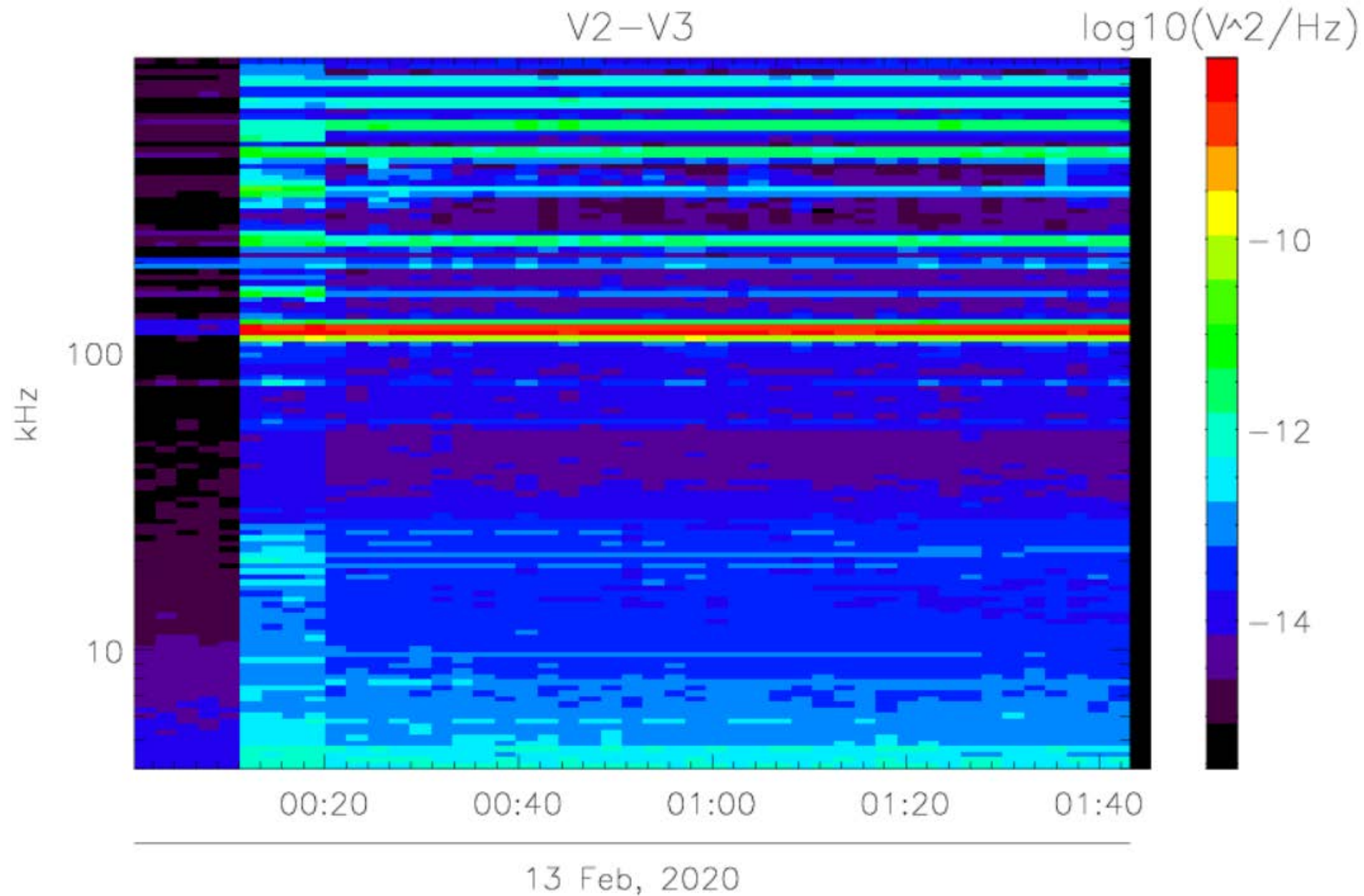


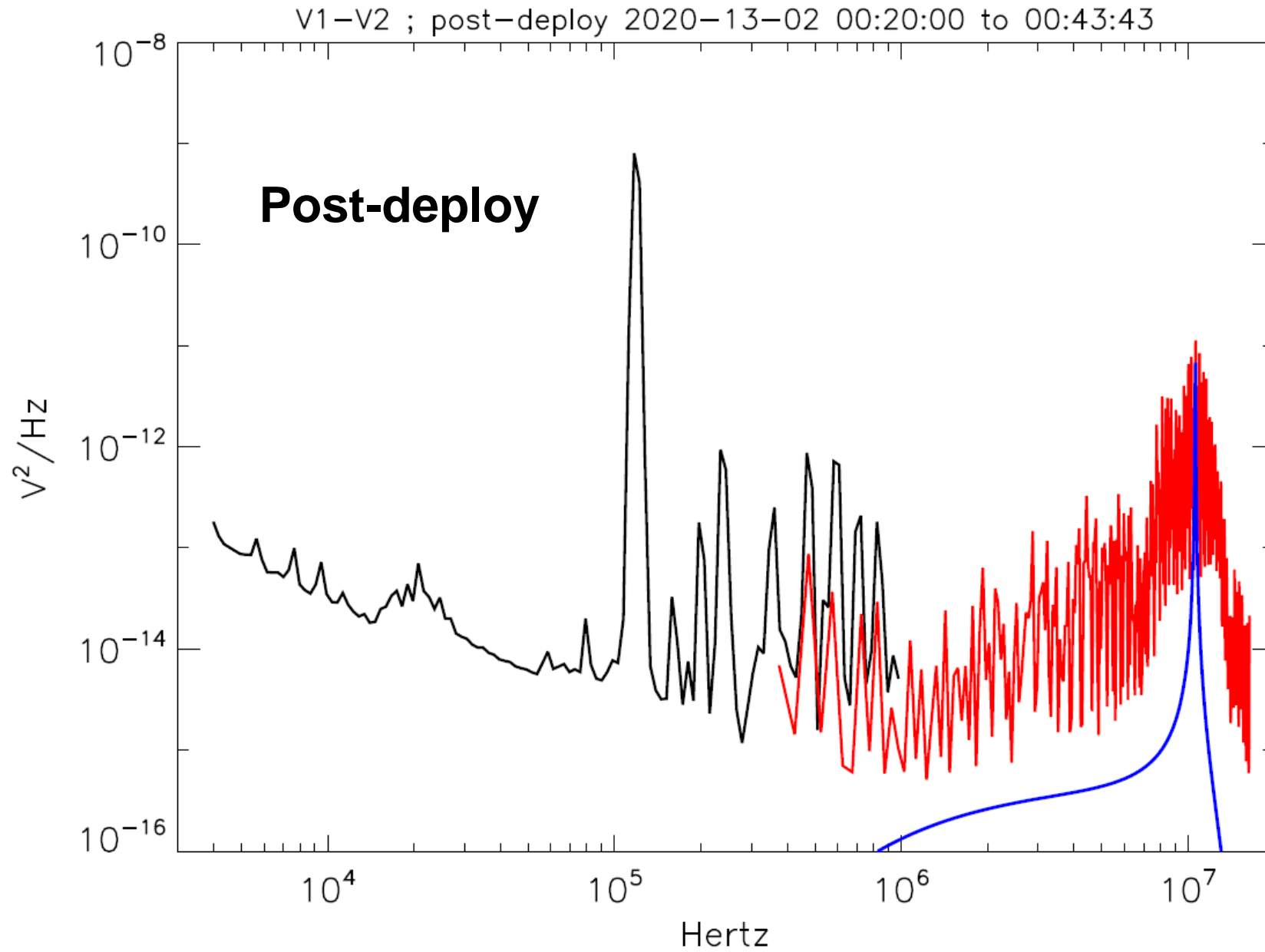
# PZ post deployment (about one hour of data)

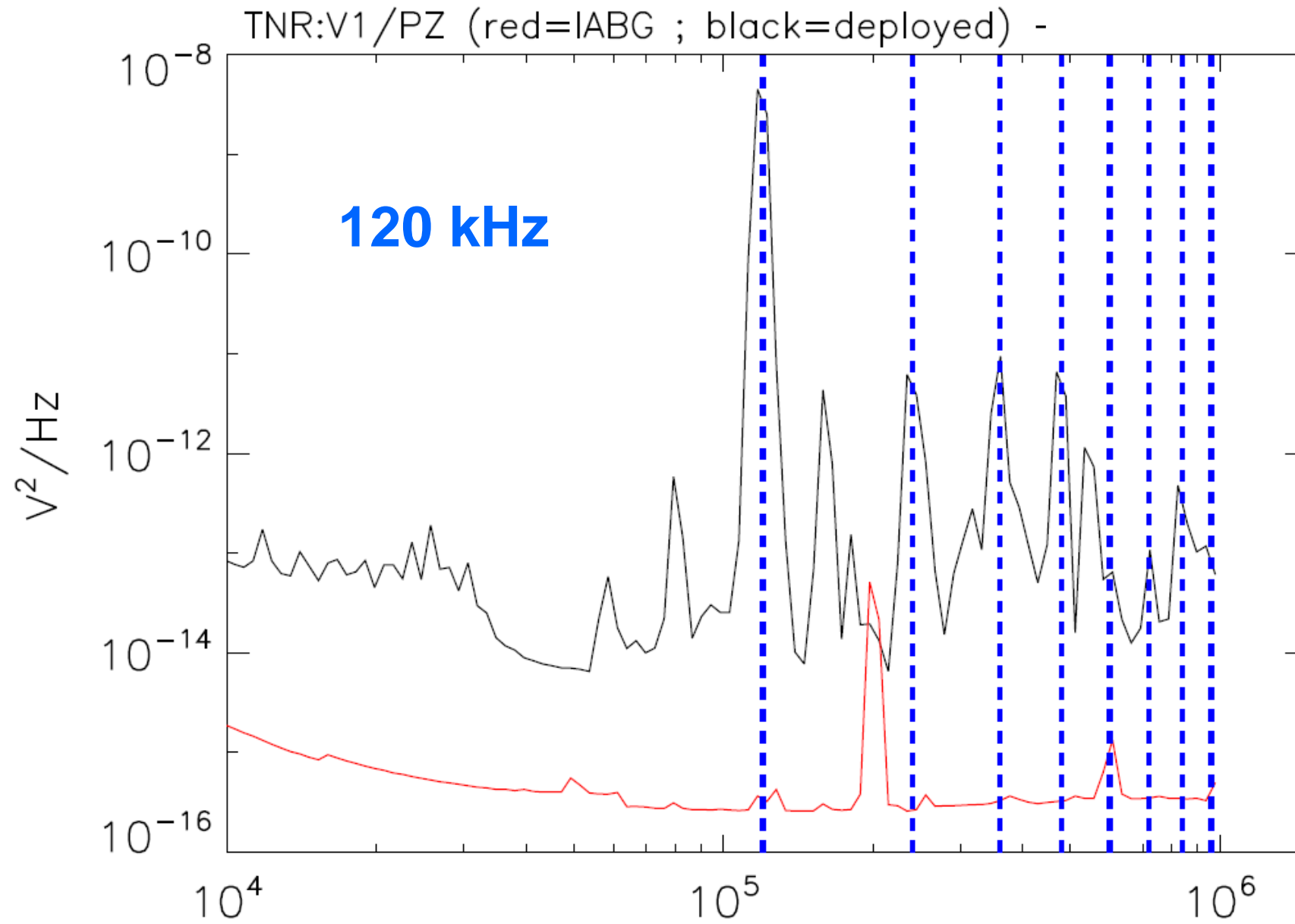
TNR:V1/PZ (red=IABG ; black=deployed) - HFR:V3-V1

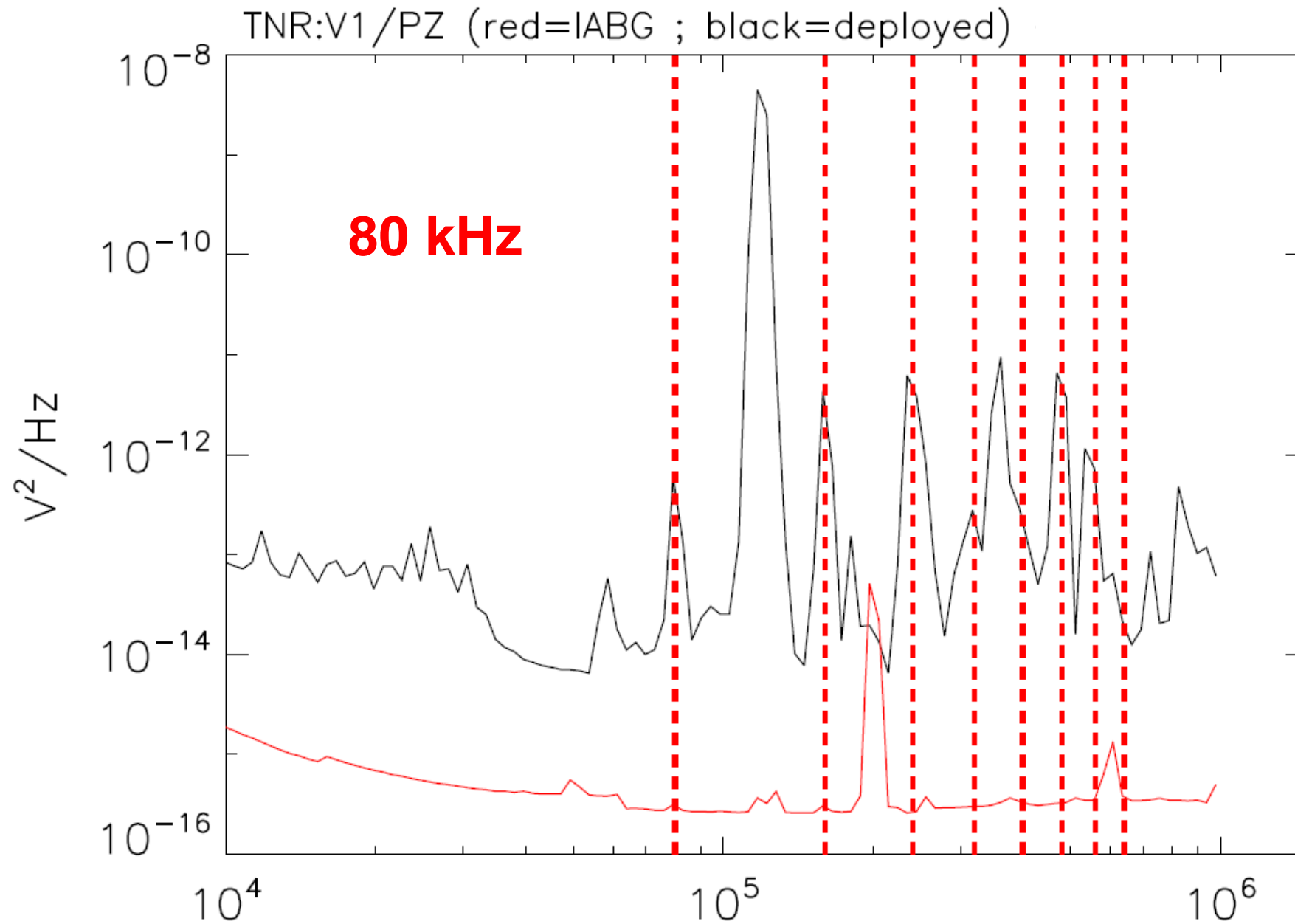






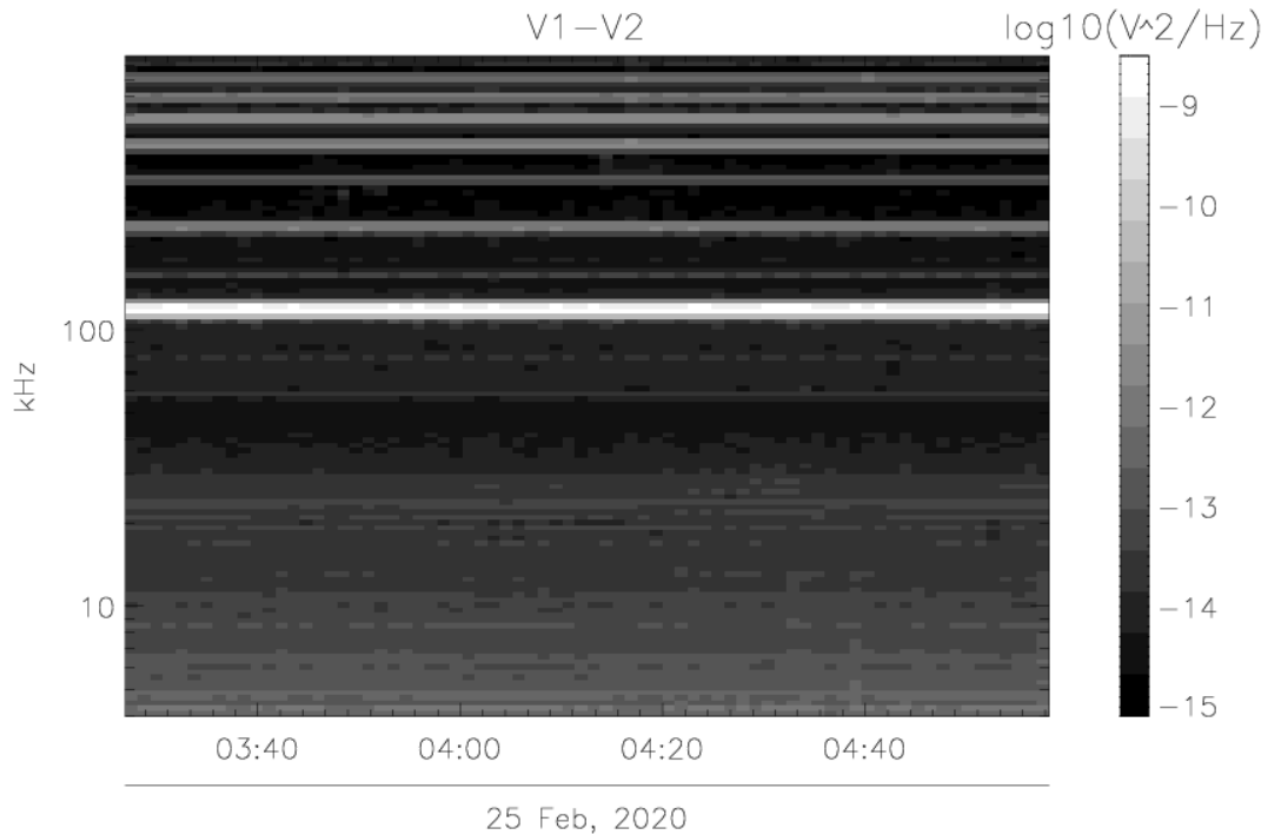




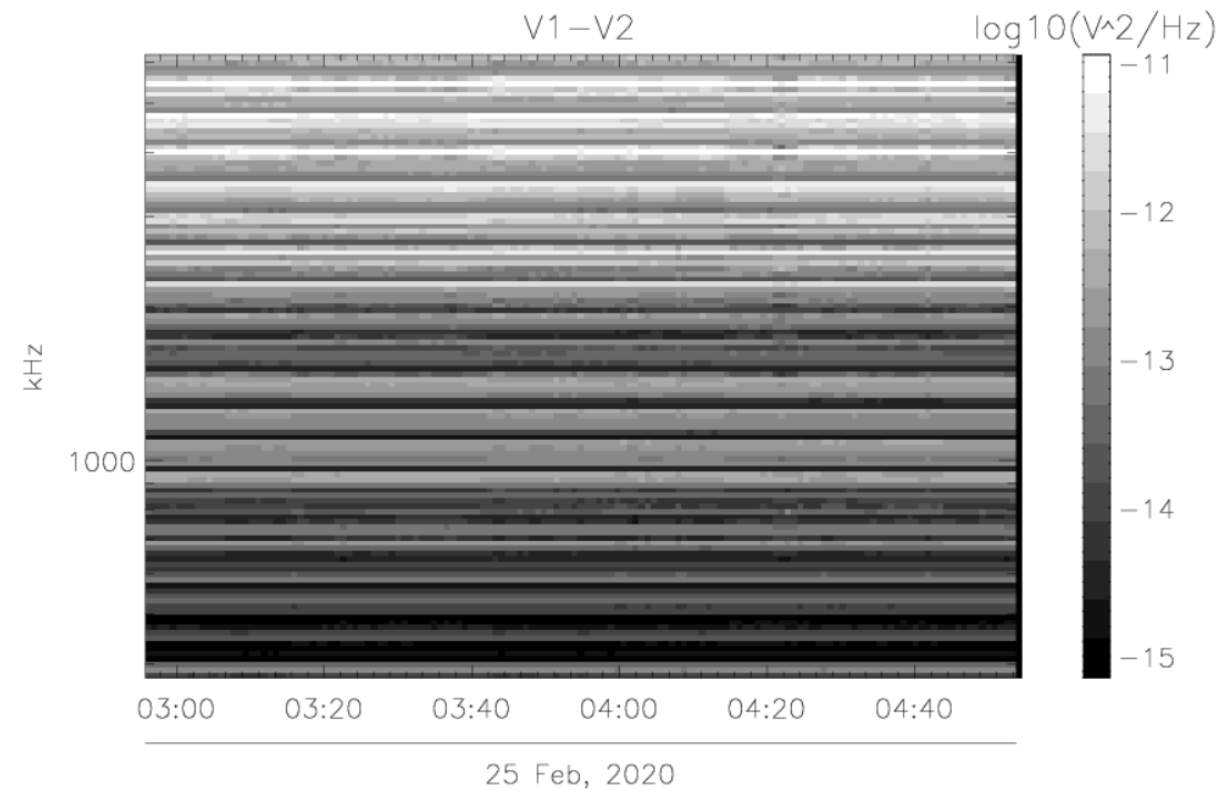


# Start of roll #1

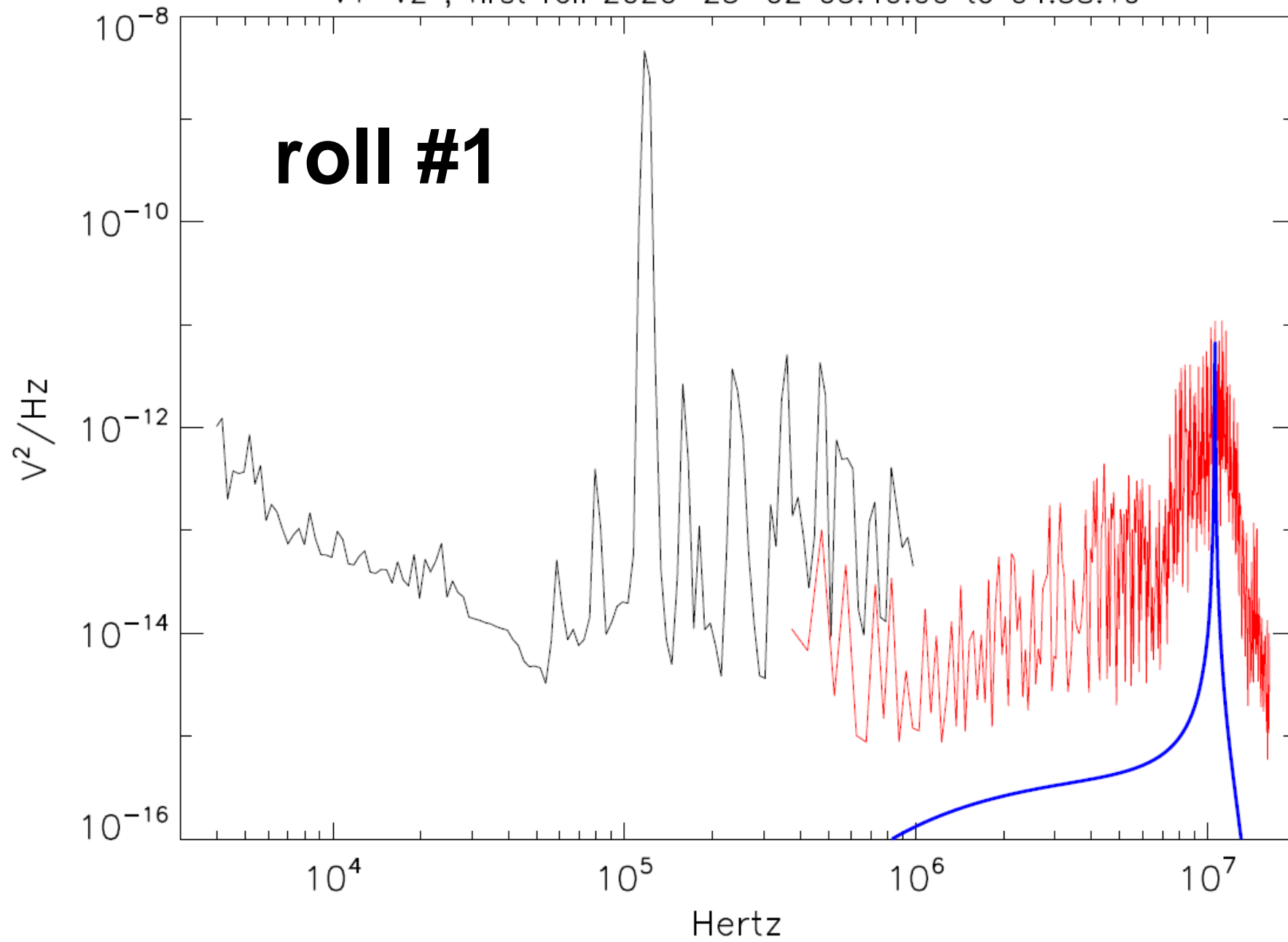
## TNR

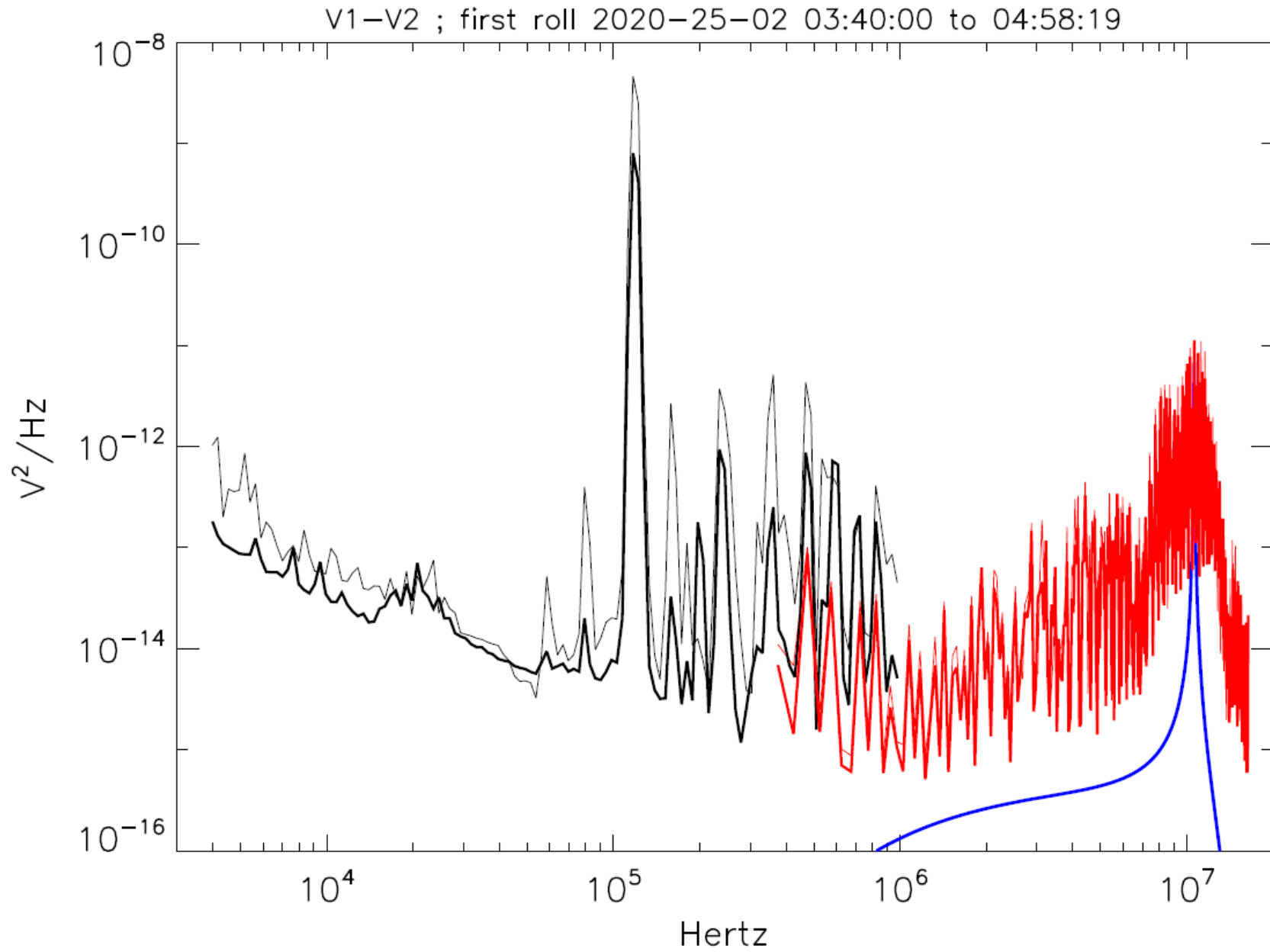


## HFR









# Summary

RPW sees three main disturbances from the S/C

- ❑ 120 kHz (PCDU & Solar Panels)
  - Major impact on TNR-HFR
  - Major impact on TDS but which could be mitigated (flight S/W update)
  - No impact on LFR
- ❑ 80 kHz (RW electronics)
  - Large impact on TNR-HFR
- ❑ 8 Hz AOCS
  - Impact on SCM which could be mitigated
- ❑ *LFR needs more investigations*