

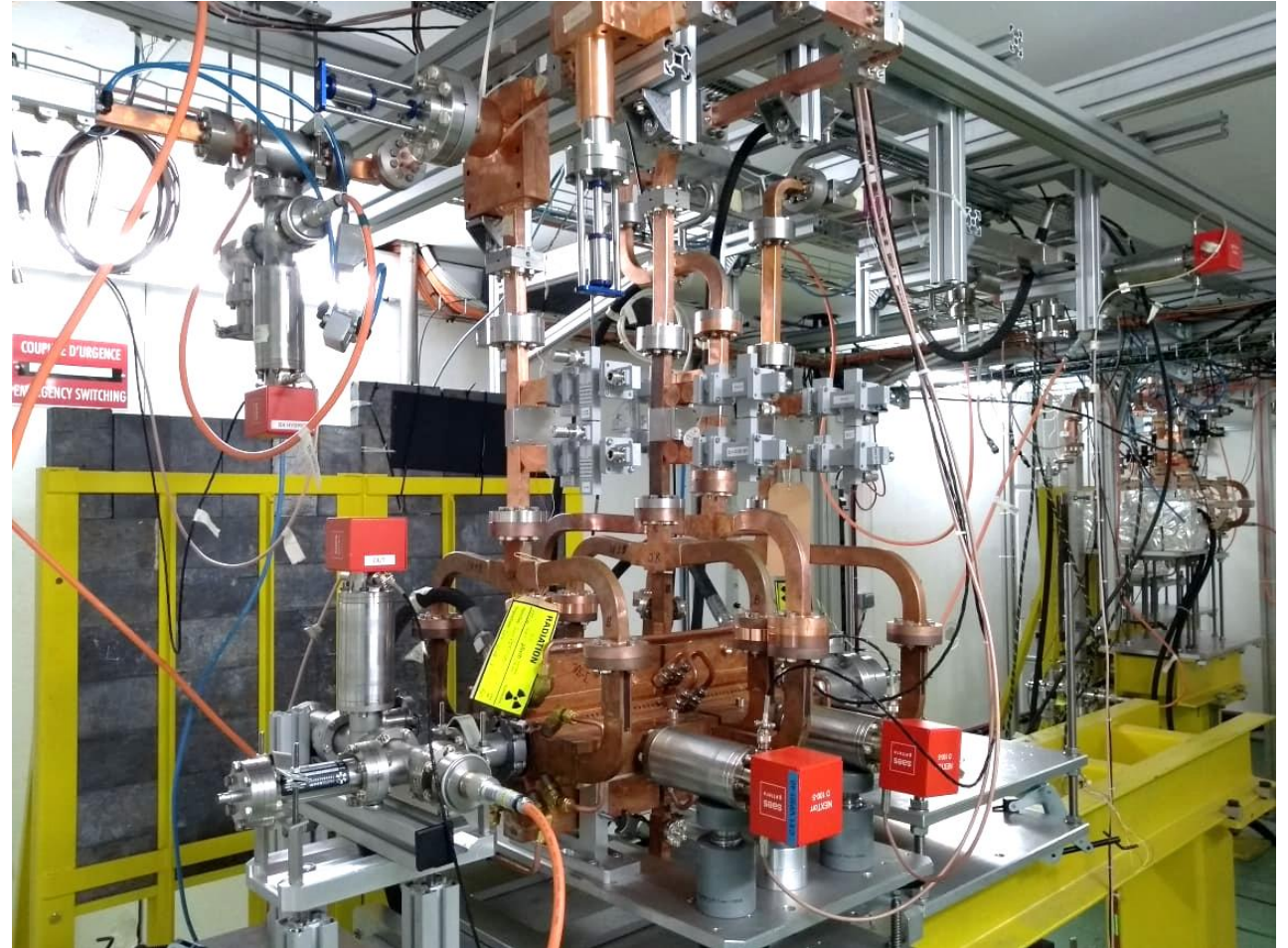
XBOXes Update

22/05/2019

XBOX team

Summary

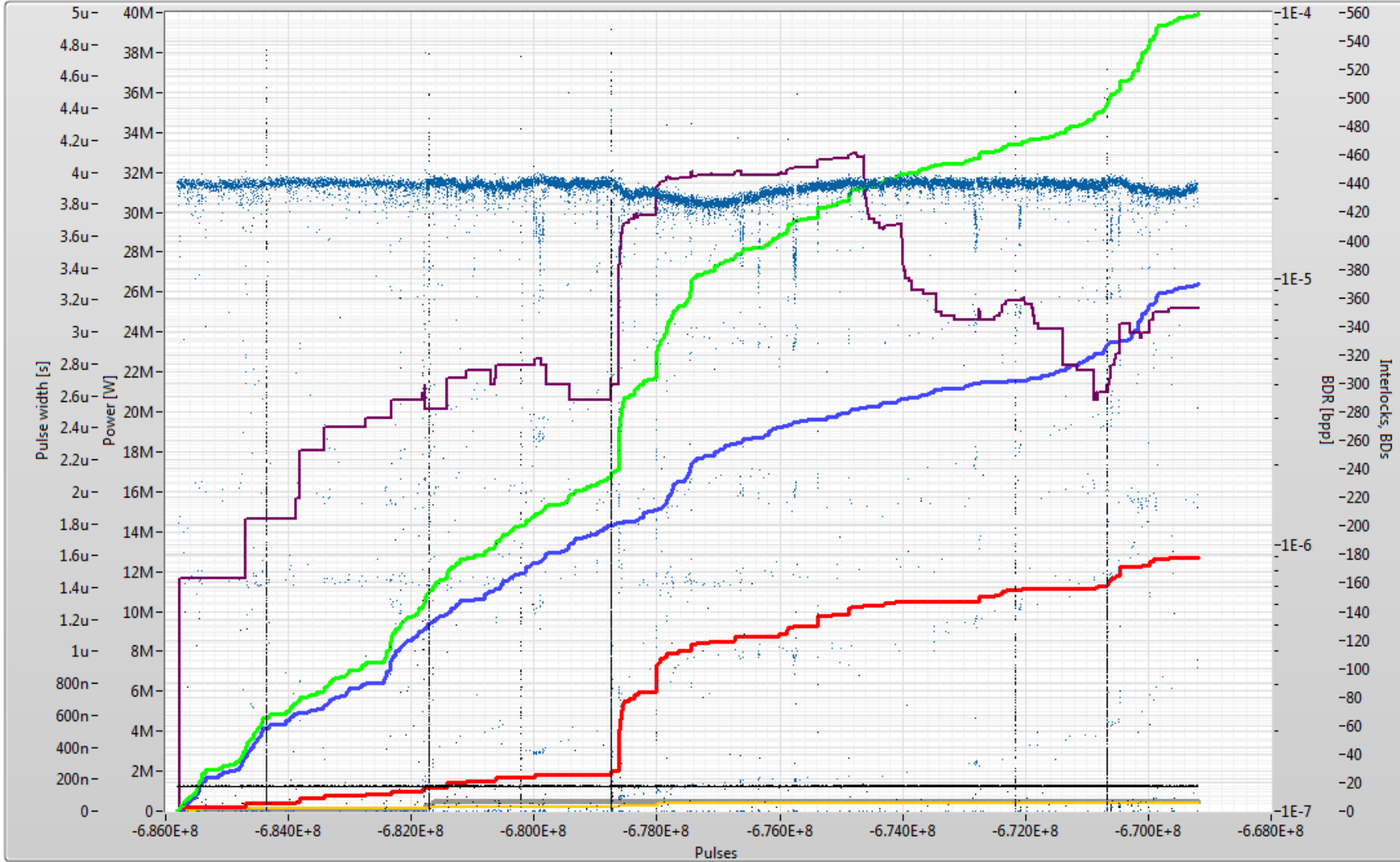
- XB3 lines 3 and 4 not pulsing due to modulator problem.
- XB2 superstructure installed and under vacuum with 10 ion pumps (E-8 to E-9 mbar range everywhere).
- XB2 Software upgrade in progress.
- IPAC this week...



13/05/19 to now

XBox 3 line 1 (T24 N5)

History Pulses

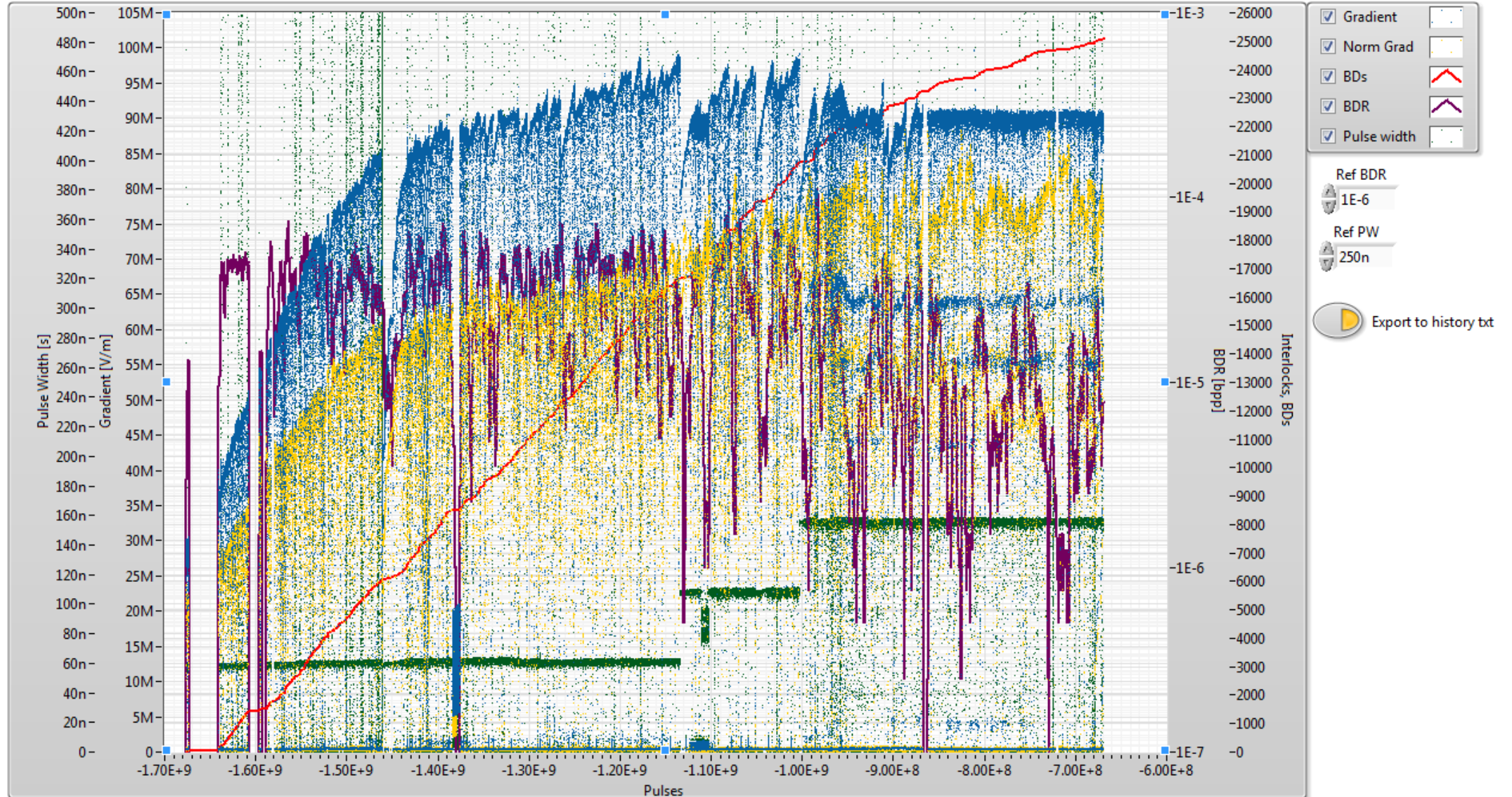


- INC avg
- Pulse width
- Interlocks
- BDs
- BDR
- TRA_OPT
- TRA_RF
- PC BDs
- PKR/Hybrid BDs
- Load BDs

Full History

XBox 3 line 1 (T24 N5)

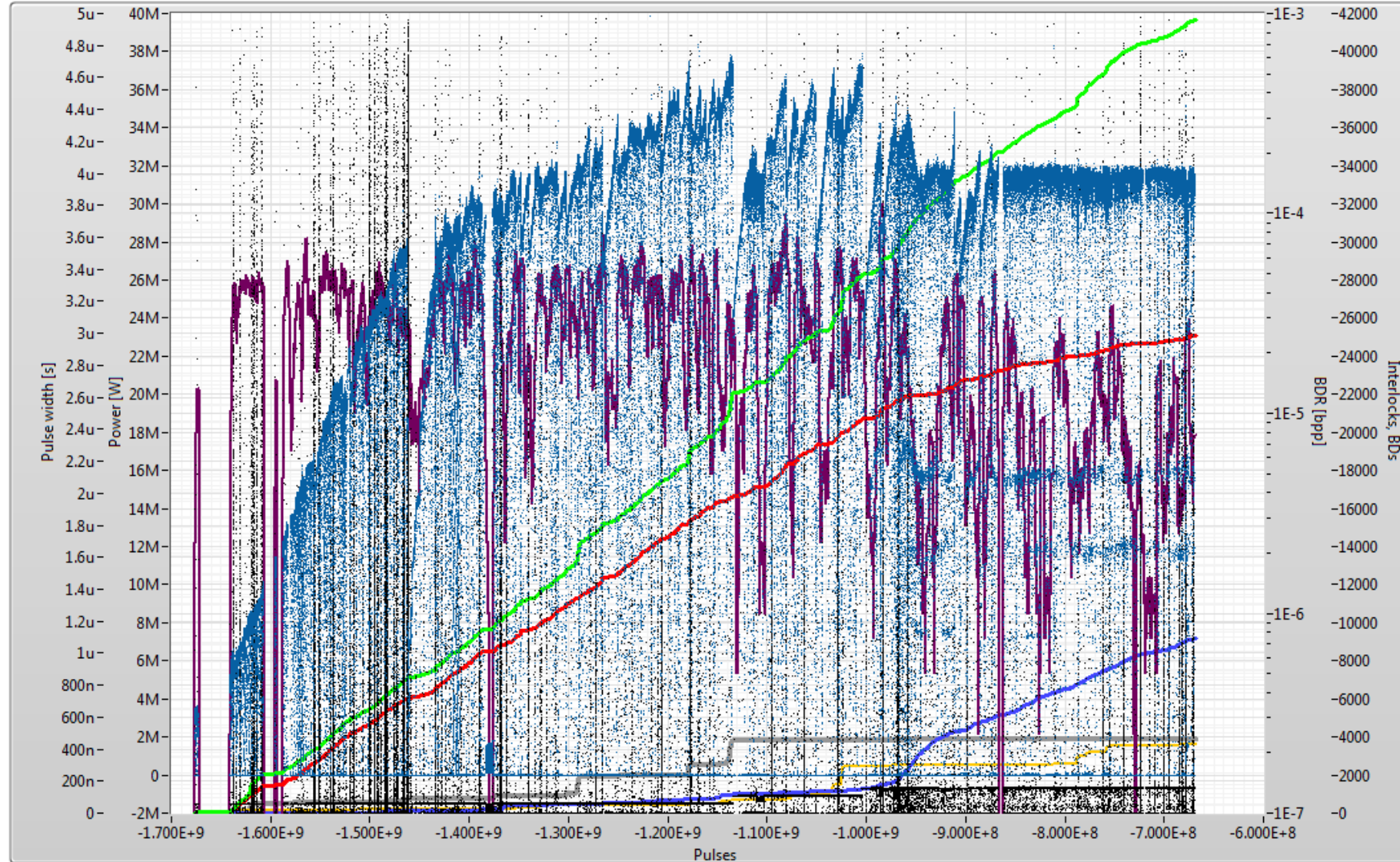
History Gradient



Full History

XBox 3 line 1 (T24 N5)

History Pulses

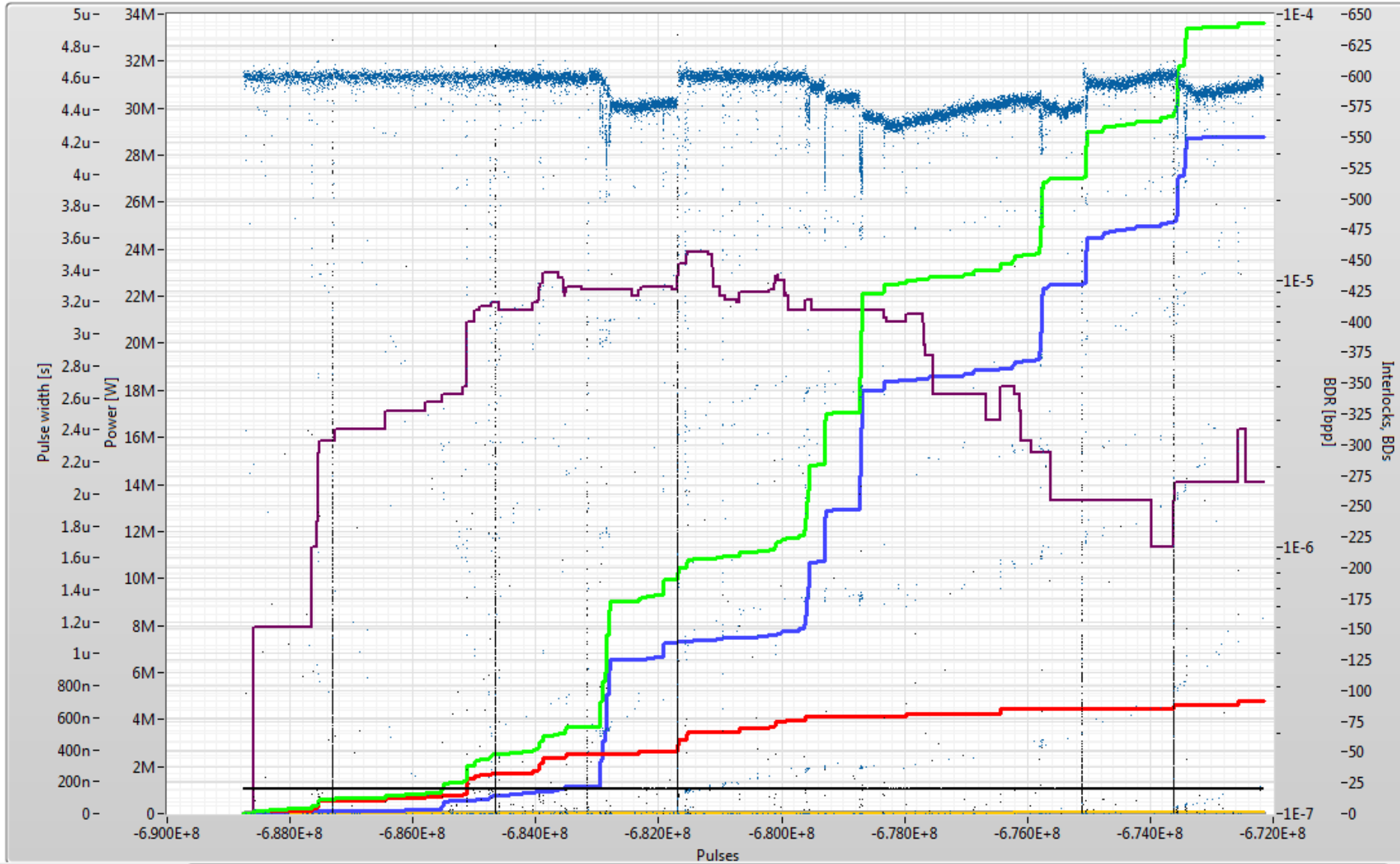


- INC avg
- Pulse width
- Interlocks
- BDRs
- BDR
- TRA_OPT
- TRA_RF
- PC BDRs
- PKR/Hybrid BDRs
- Load BDRs

13/05/19 to now

XBox 3 line 2 (T24 N4)

History Pulses

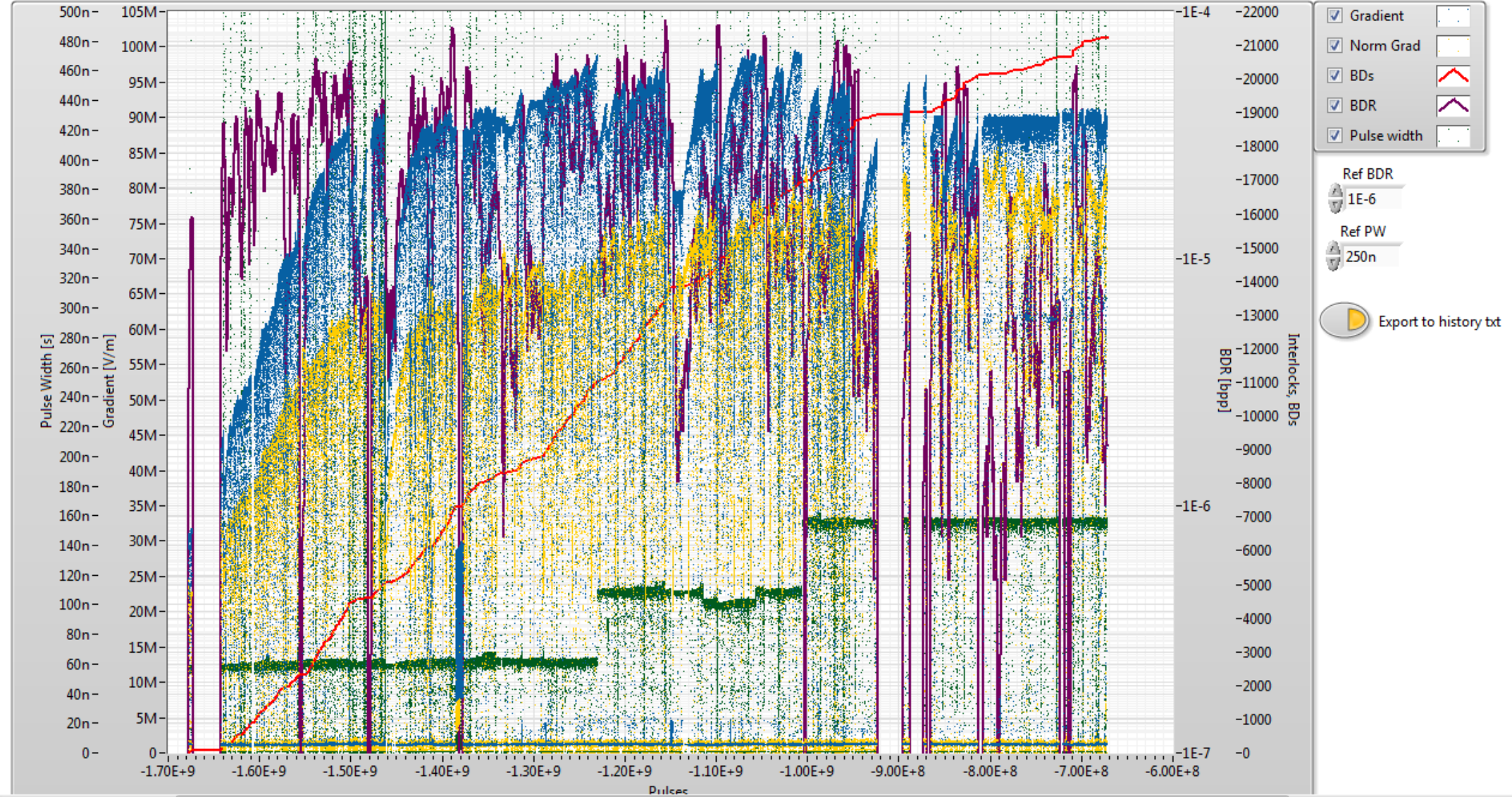


- INC avg
- Pulse width
- Interlocks
- BDs
- BDR
- TRA_OPT
- TRA_RF
- PC BDs
- PKR/Hybrid BDs
- Load BDs

Full History

XBox 3 line 2 (T24 N4)

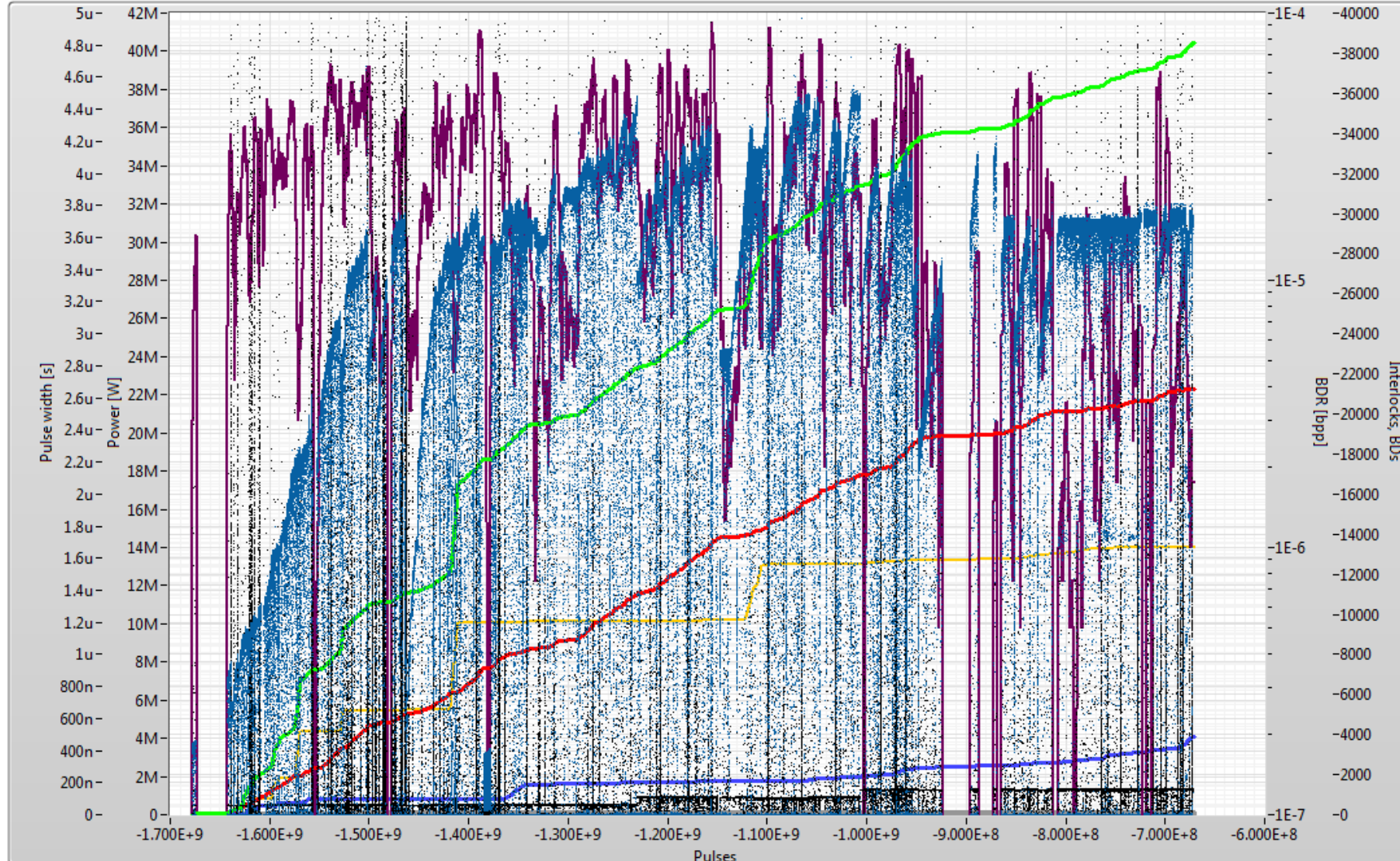
History Gradient



Full History

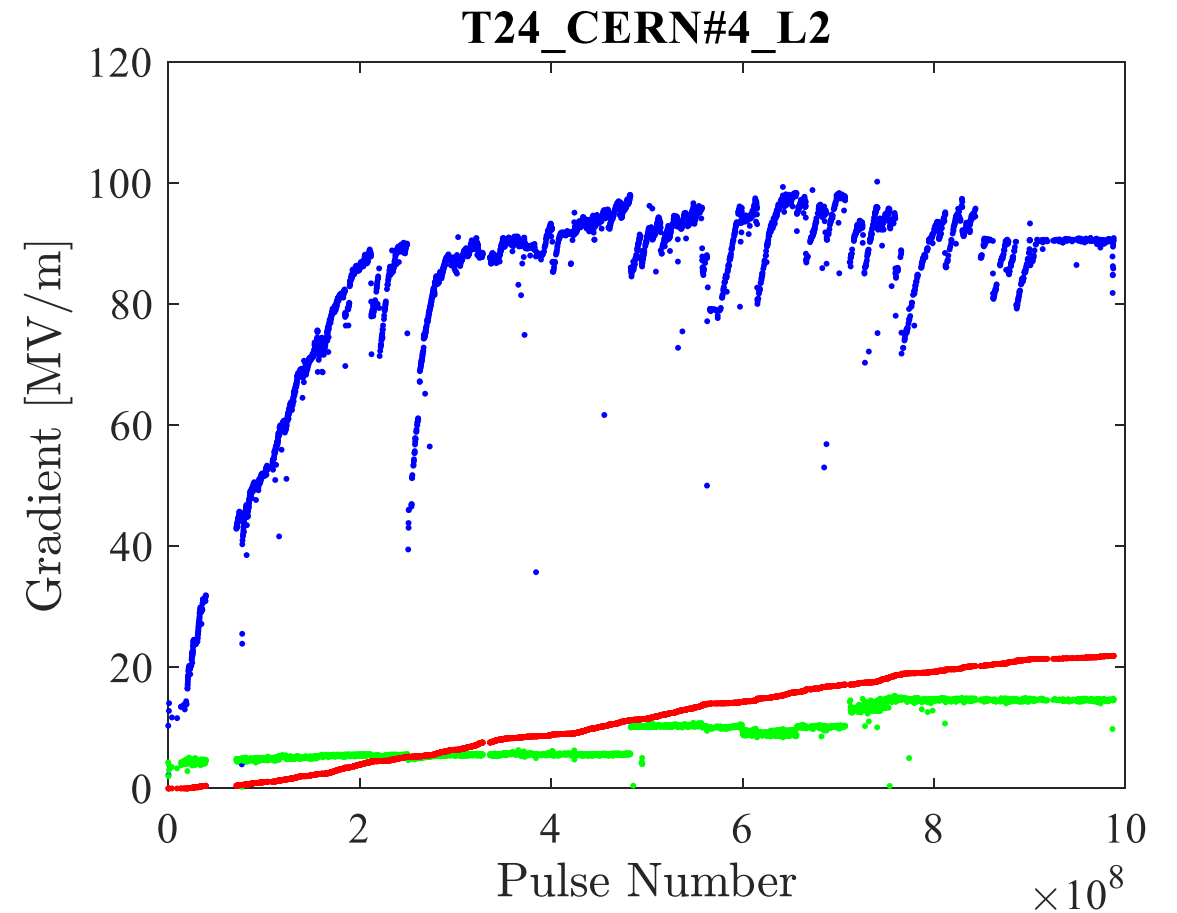
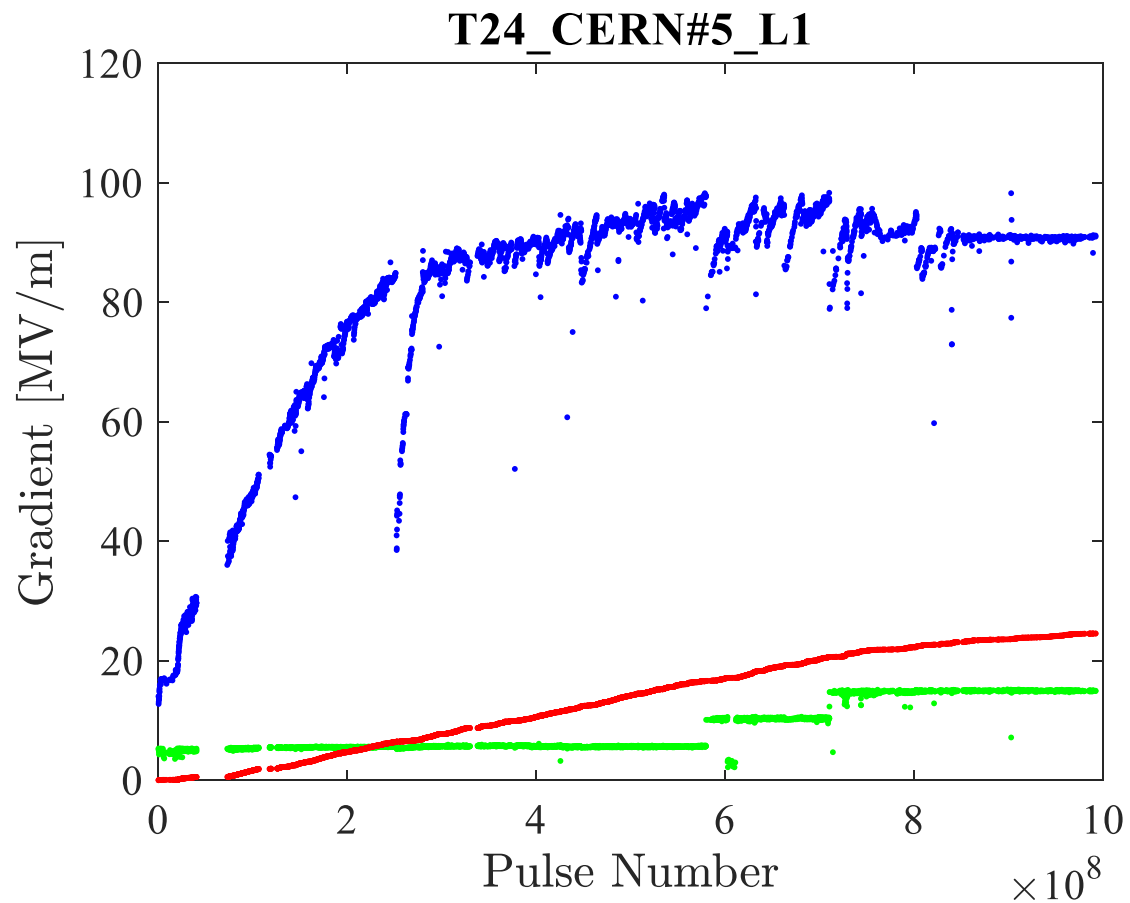
XBox 3 line 2 (T24 N4)

History Pulses



Current T24s in Xbox3 L1&L2

Data until 5/6/2019



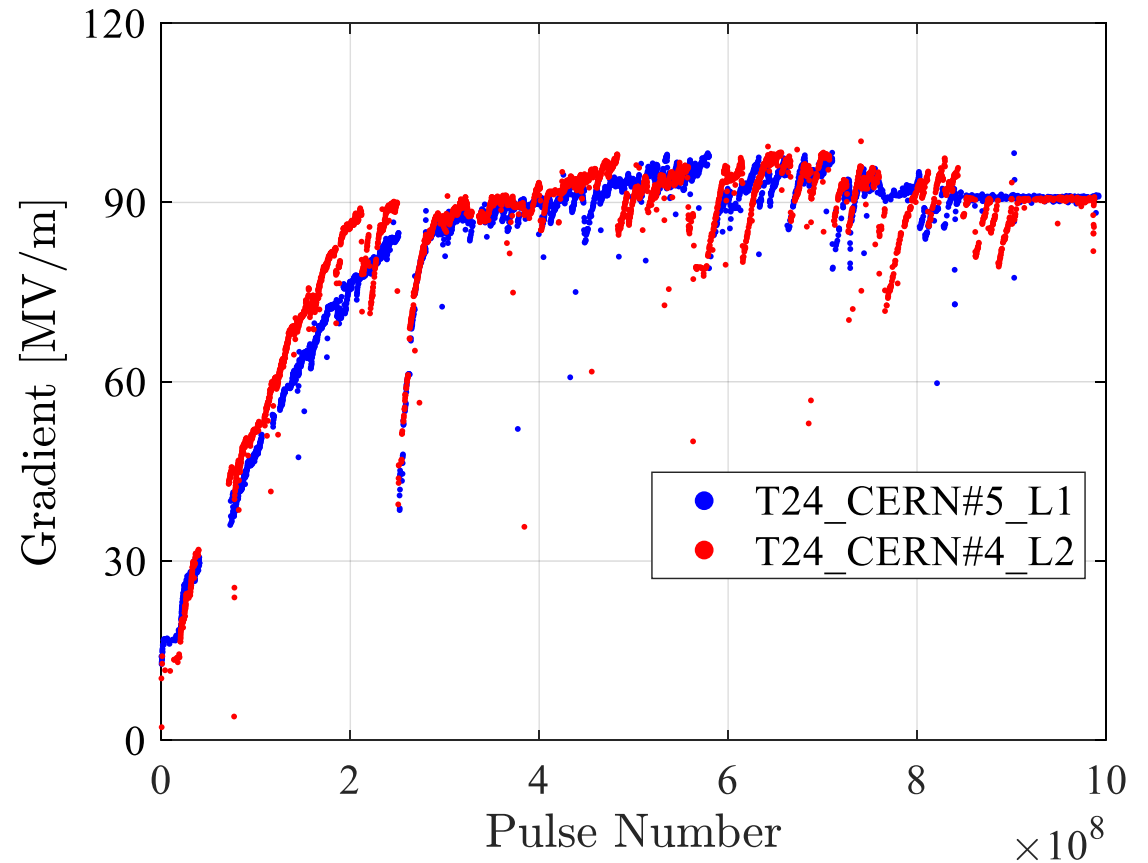
T24_CERN#5 & T24_CERN#4

Almost same ramping speed

T24_CERN#4 slightly better

Now constant operation at 150ns,

33MW which is 92.6 MV/m

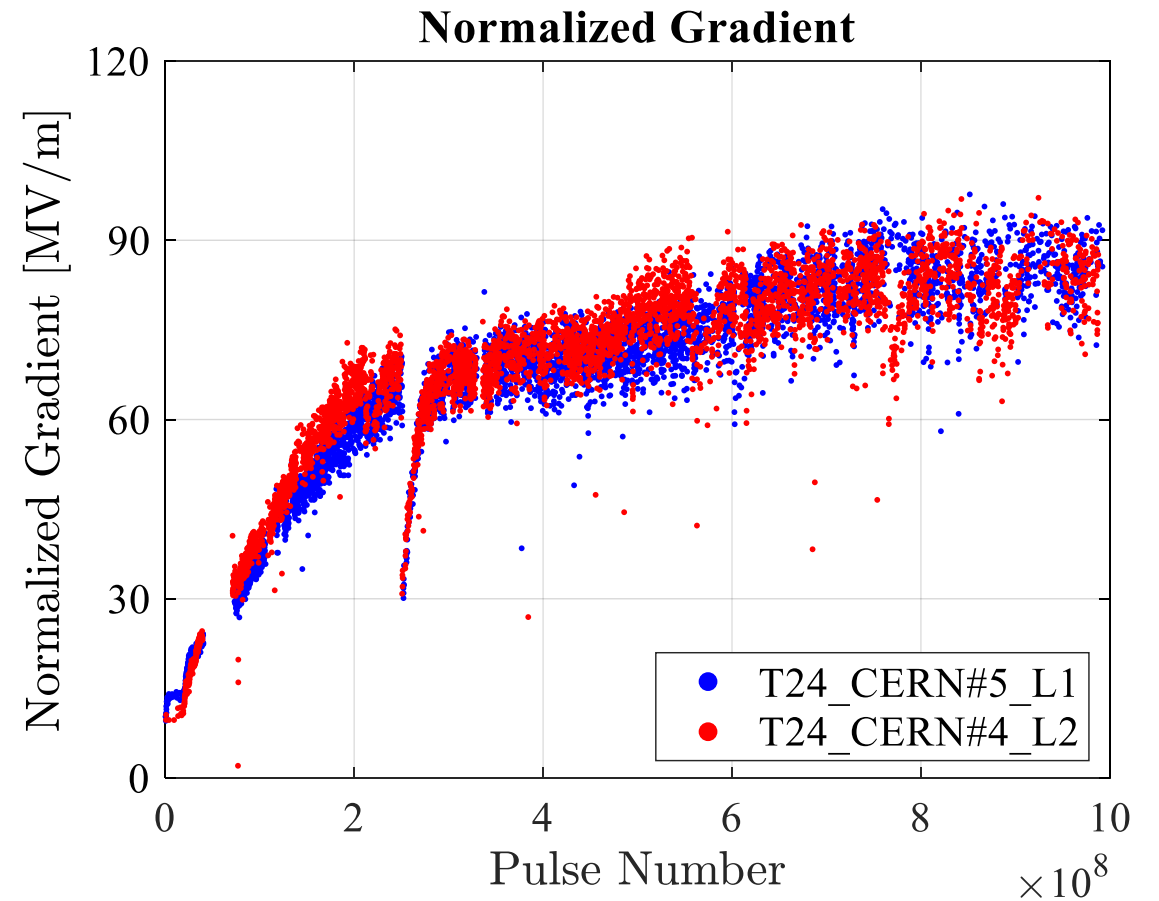


Normalized Gradient

Gradient Normalized to $2e-5$ bpp, 250 ns

Still ramp but very slow

Something happened at $2.5e8$ pulses?



T24 comparison

Ramping speed is slower than the previous T24s

Further investigations need to be carried out

