

X-Box Summary

21.02.2024



X-Box 2 TD31 N3 N4: Structure B

- Restarted 26.01.2024
- 100:1 ratio, all power to Structure B
- Starting power ~25 MW
- Pulse width 50ns
- Currently at 46MW

X-Box 2: Reminder on BD classification





X-Box 2: TD31 N3 N4 Structure B – Peak Power





X-Box 2: TD31 N3 N4 Structure B – Gradient





X-Box 2: 15 Feb 2024 Pulse 460216008





X-Box 2: 15 Feb 2024 Pulse 460297034





X-Box 2: 15 Feb 2024 Pulse 460397421





X-Box 2: 17 Feb 2024 Pulse 463099371





X-Box 2: future integration of BOC

- HPDC before CC not used
 - Not enough acquisition signals

• After BOC?





X-Box 3: High Efficiency Tubes Characterisation



- New campaign based on calorimetry
 - Flow meters have arrived!
 - Temperature sensors available too
- Installation of surface temperature sensors in collector to measure power of high voltage pulse
 - We need to insulate and ensure thermic contact lot of variations from room temperature
- Problem with signal analyser due to trigger
 - May have found a solution

X-Box 3 HEK: Collector calorimetry









ÉRN

X-Box 3 HEK: Collector calorimetry



Klytron A Temp= Collector input temp Klystron B Temp= Collector output temp

Flow is 50 l/min





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