ARES Operation Meeting

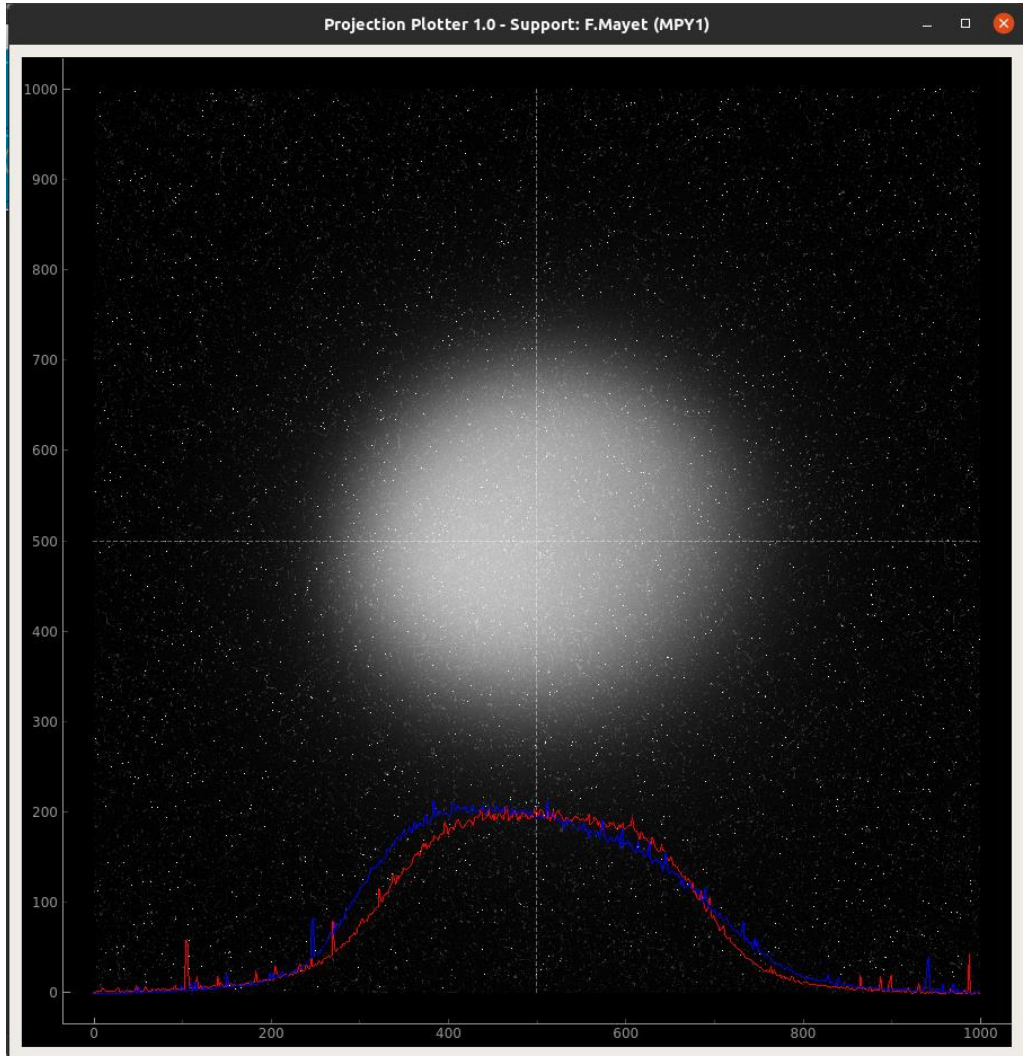
Summary of week 20 / 2023

Max Kellermeier, on behalf of the ARES crew

Summary of week 20

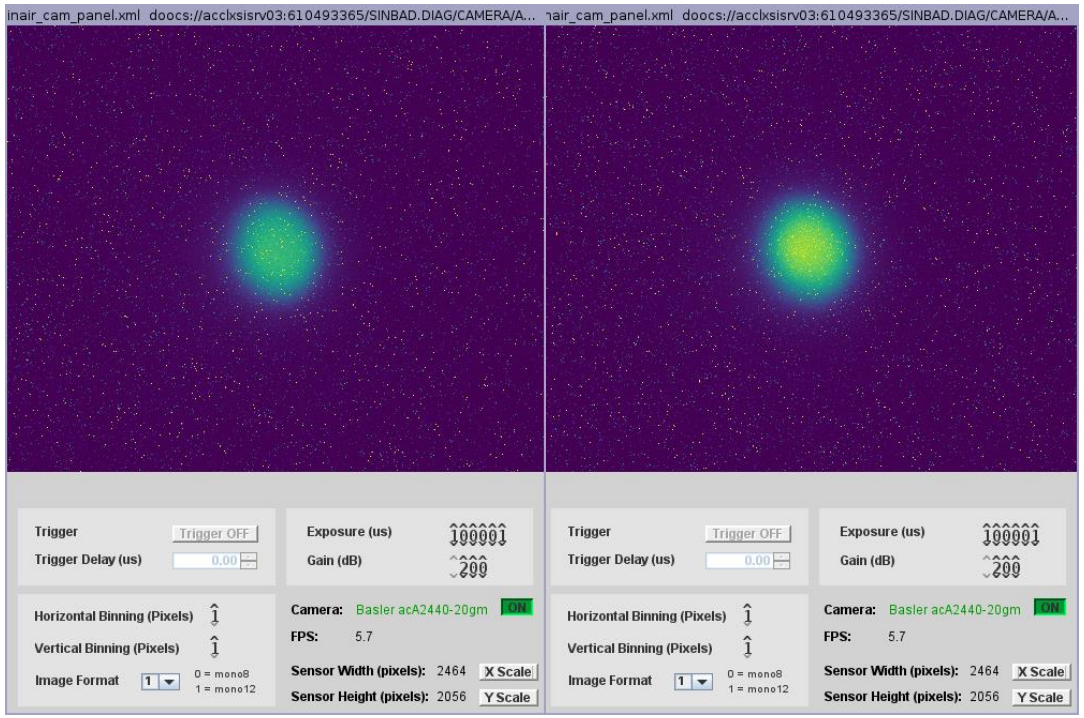
	Mon. 13th February	Tue.	Wed.	Thu.	Fri.
Achievements	• Collimator installed	• High charge, flattop beam set up (12% transmission)	• Tweaked beam shape slightly • Irradiation of UKE dosimetry films with uniform beam • Preliminary setup of WP for Hannah's cell irradiation • Further investigations of position oscillations		• FL Quads adjusted for desired beam size • dosimetry film irradiation with rectangular patch
Difficulties		• Position oscillations lead to intensity fluctuations after the collimator		• Water flow needs to be adjusted (during ZZ next day)	
Notes	• *Tunnel open*			• *Public holiday*	• *X-Band conditioning over the weekend*

Flattop beam via lead collimator

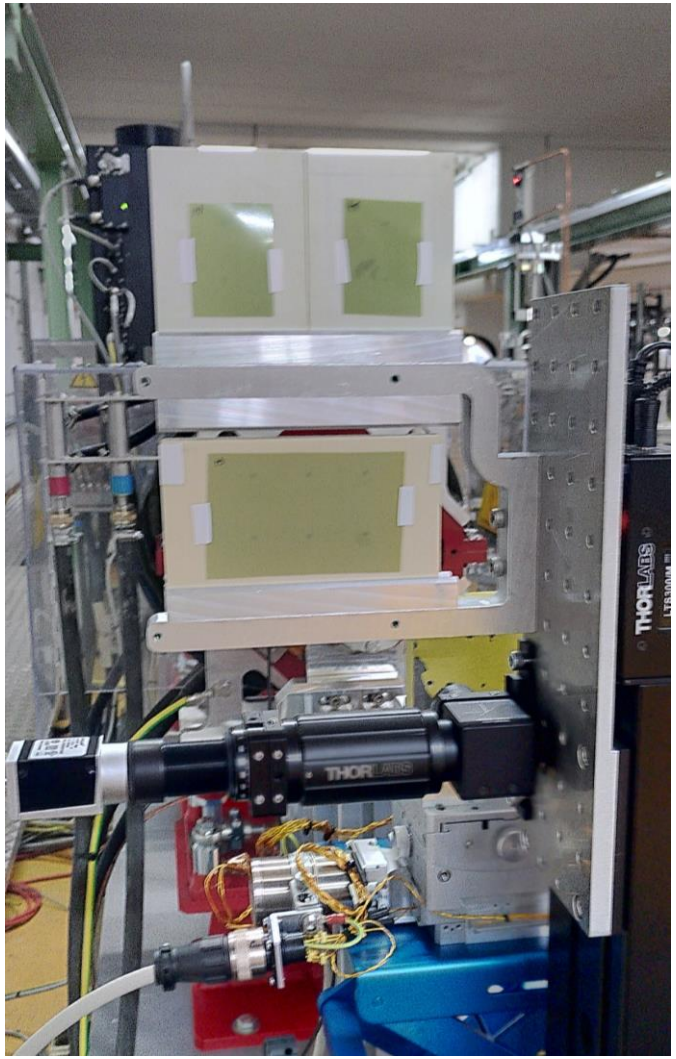


- Transmitted charge estimated from image intensity, calibrated with T-ICT → ~ 21 pC

Irradiation of dosimetry films for UKE



intensity fluctuations, probably due to the position oscillation of the beam

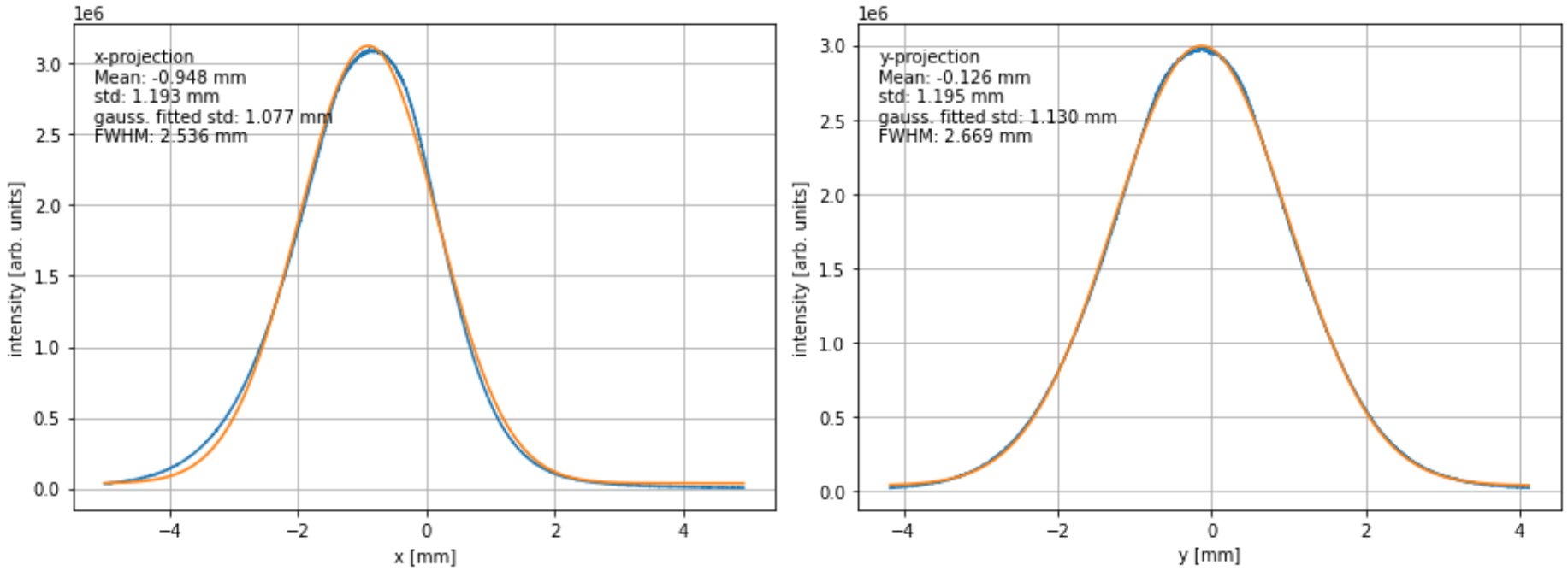


10 spots per run with varied number of pulse exposure

Correlation of Position Oscillations

- Visible on BPM MR.G2, but not so clear on BPM LI.G2
- Seems like MR.QZM1 shows a correlation with BPM signal, but is not the origin of those oscillations → potential leakage current in the machine?

Beam adjusted for snake patterns in dosimetry irradiation

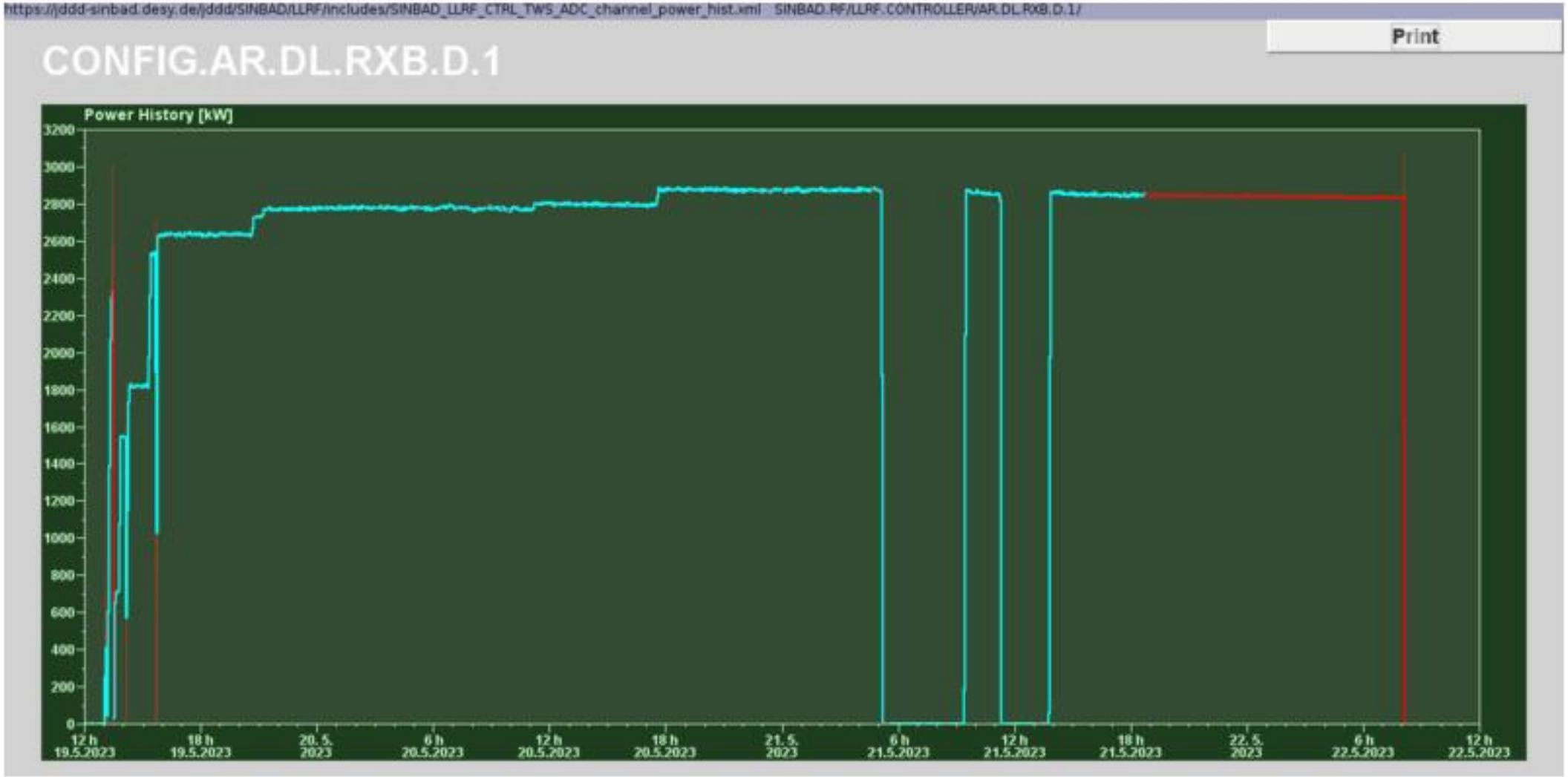


Plan for the week

- Irradiations of dosimetry films
  - Different pulse spacings
  - Orbit feedback tests

- Cell irradiation towards end of the week

Xband RF conditioning – stable at 2.9 MW



Schedule

Week 21

Date	Shift Leader
22.05.	-
23.05.	Hannes, Frank
24.05.	Hannes, Blae
25.05.	Max, Willi
26.05.	Thomas, Willi, Max

If you want to learn or join the shift: please give the shift leader a call (BKR 2840 / SINBAD Box 2454)