

ARES Operation Meeting

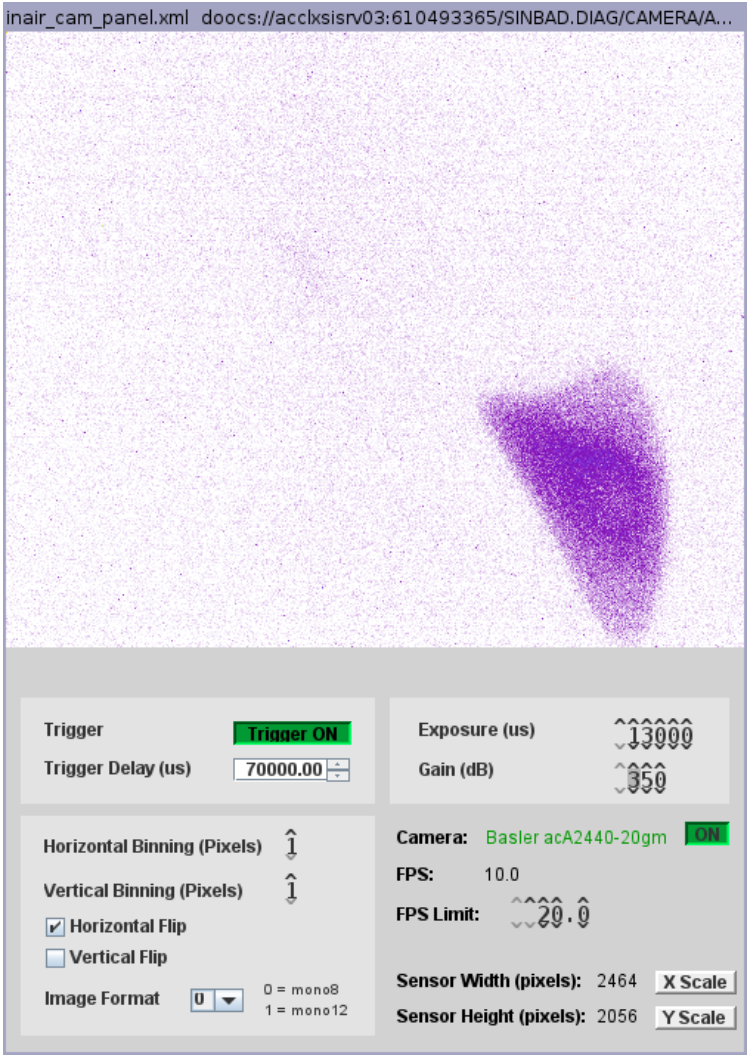
Summary of week 51 / 2023

Sonja Jaster-Merz, on behalf of the ARES team

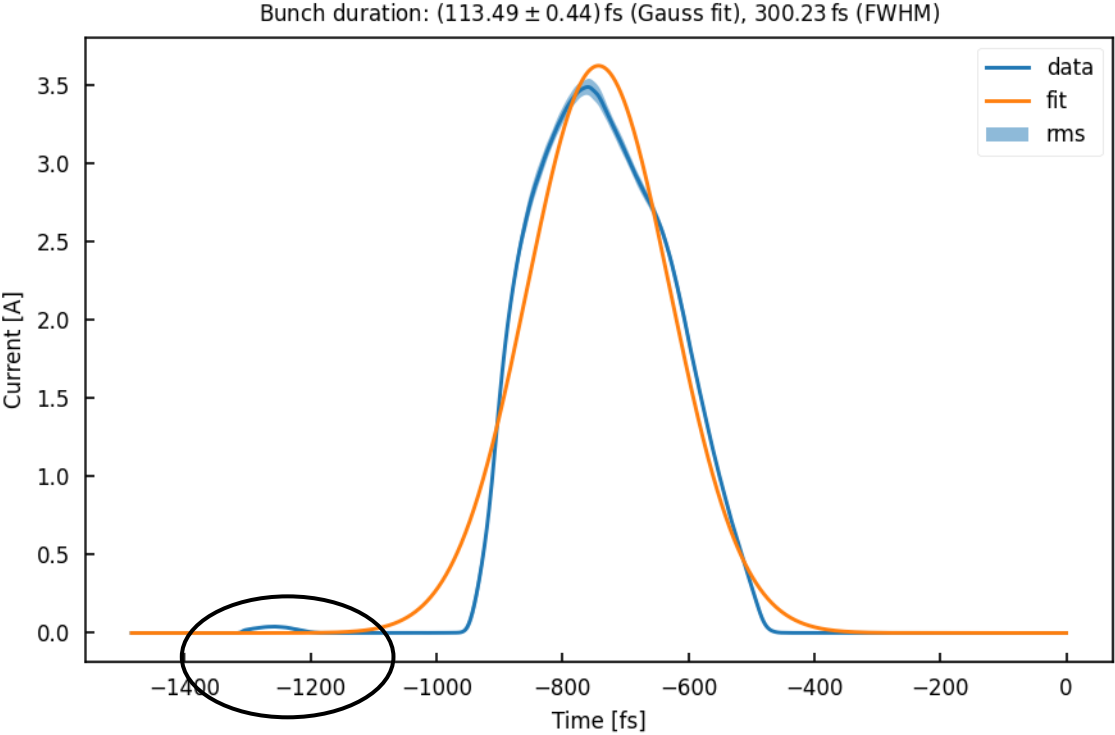
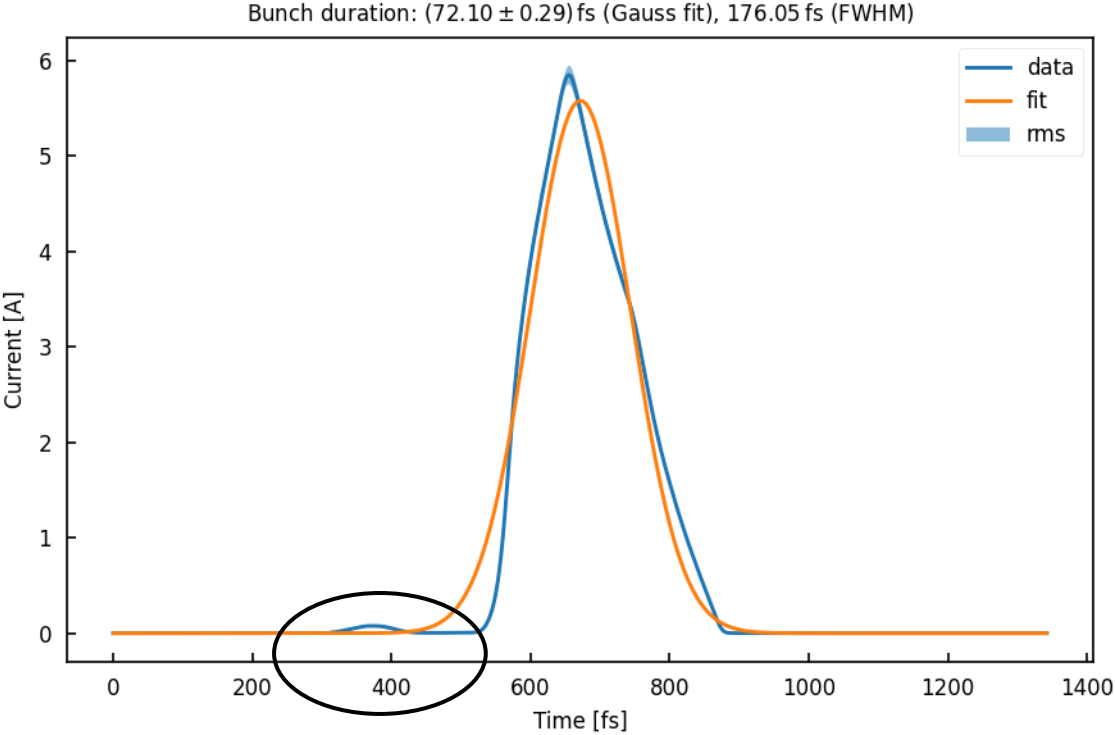
Summary of week 51

	Mon. 11 th Dec.	Tue. 12 th Dec.	Wed. 13 th Dec.	Thu. 14 th Dec.	Fri. 15 th Dec.
Achievements	<ul style="list-style-type: none"> Data acquisition for the straw detector (including two ZZ). School lab visit. 	<ul style="list-style-type: none"> Tunnel open for maintenance morning. Setup of low gun gradient working point for dosimetry tests, cycled working point saved. 	<ul style="list-style-type: none"> Velocity bunch working point for Spacechip. ZZ for PolariX X-Band TDS grounding check. Bunch duration measurements for various TWS1 phases. Satellite beam visible in reconstructed current profile. 	<ul style="list-style-type: none"> Re-loaded velocity bunch working point from PolariX week and reduced bunch length using PolariX. Minimum bunch duration ~5fs (RMS). PolariX phase shifter values changed. Vertical streaking with PolariX achieved. 	<ul style="list-style-type: none"> Emittance measurement on X1. UKE irradiation using a 30pC working point. Dosimetry film irradiation with rectangle patterns with different spot spacings and pulses per spot. 50 Hz operation tests together with MSK.
Difficulties		<ul style="list-style-type: none"> Slow horizontal movement of beam on the in-air screen. 	<ul style="list-style-type: none"> Hard to transport beam through the machine with weak solenoid focusing. Quads degaussed despite other values loaded with machine file – not reproducible. Scan tool could not be started from jddd panel (worked again after rebooting) Camera LI.X1 is not reachable (fixed) `sinbad` command not available on some machines, starting from the Applications menu worked (fixed by experts) 	<ul style="list-style-type: none"> Modulator switched off during the night to Friday. 	<ul style="list-style-type: none"> PolariX modulator off. Laser locking lost 3 times.
Notes	<ul style="list-style-type: none"> jddd panel with all charge monitors extended with charge vs. z (uncalibrated) 	<ul style="list-style-type: none"> Scandinova investigation of PolariX modulator. 		<ul style="list-style-type: none"> Conditioning of vertical streaking over night (until ~23:40) 	

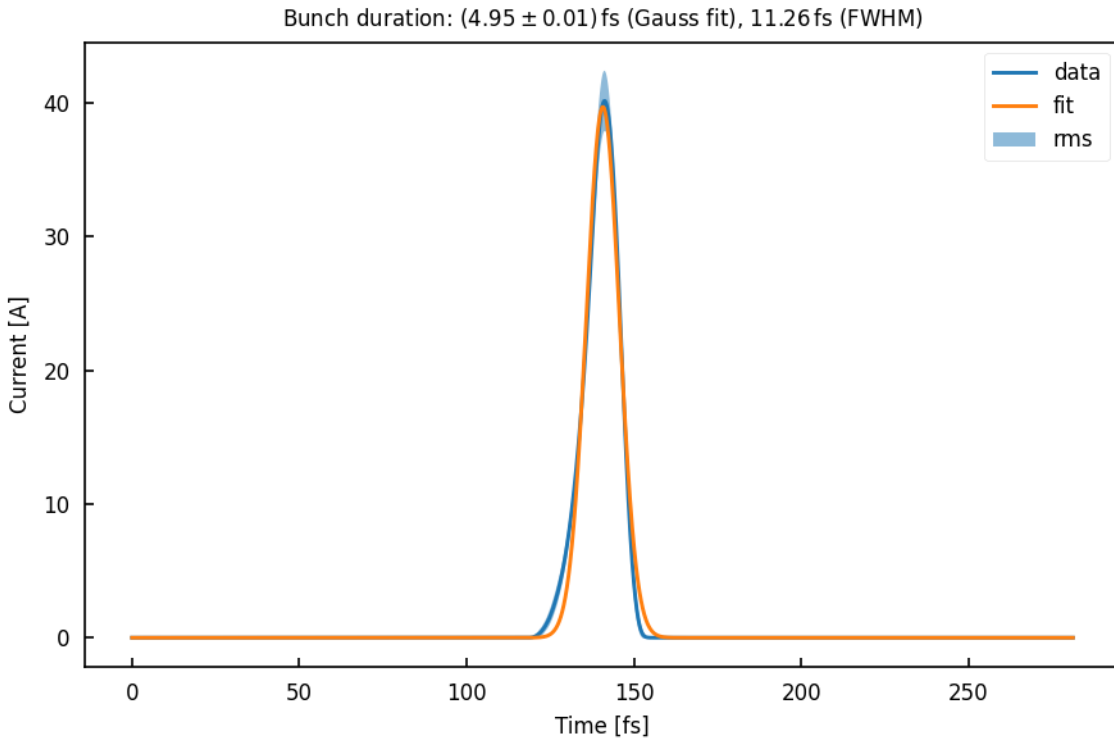
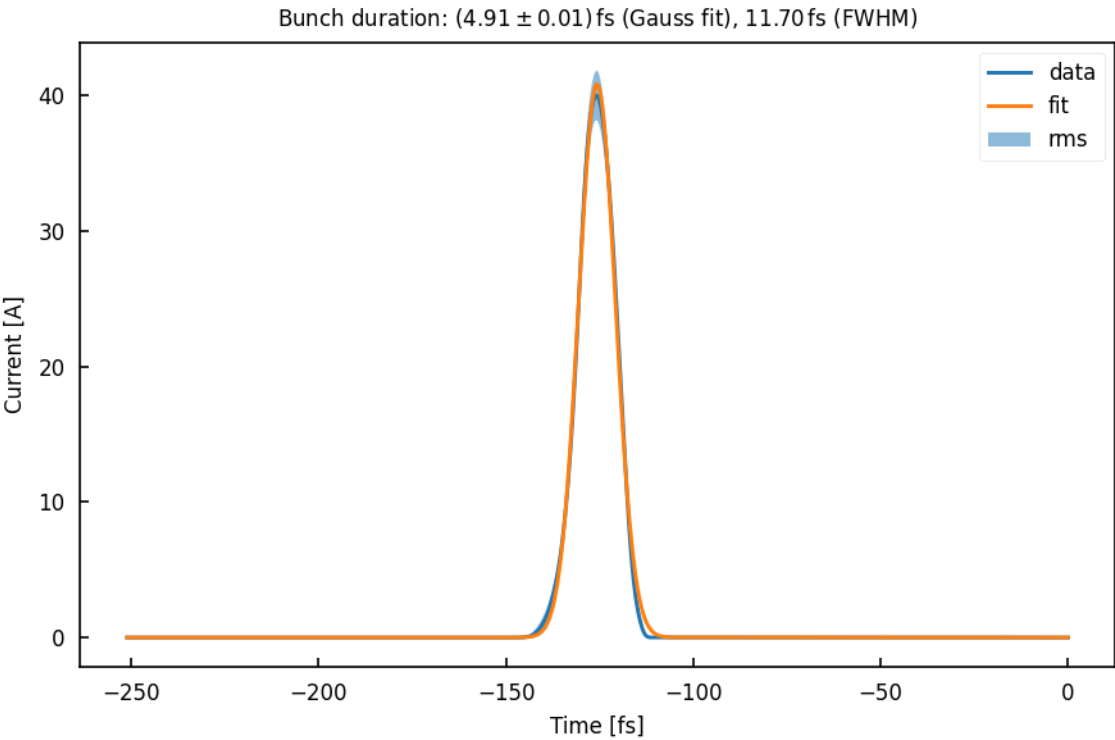
Streaked Spacechip beam



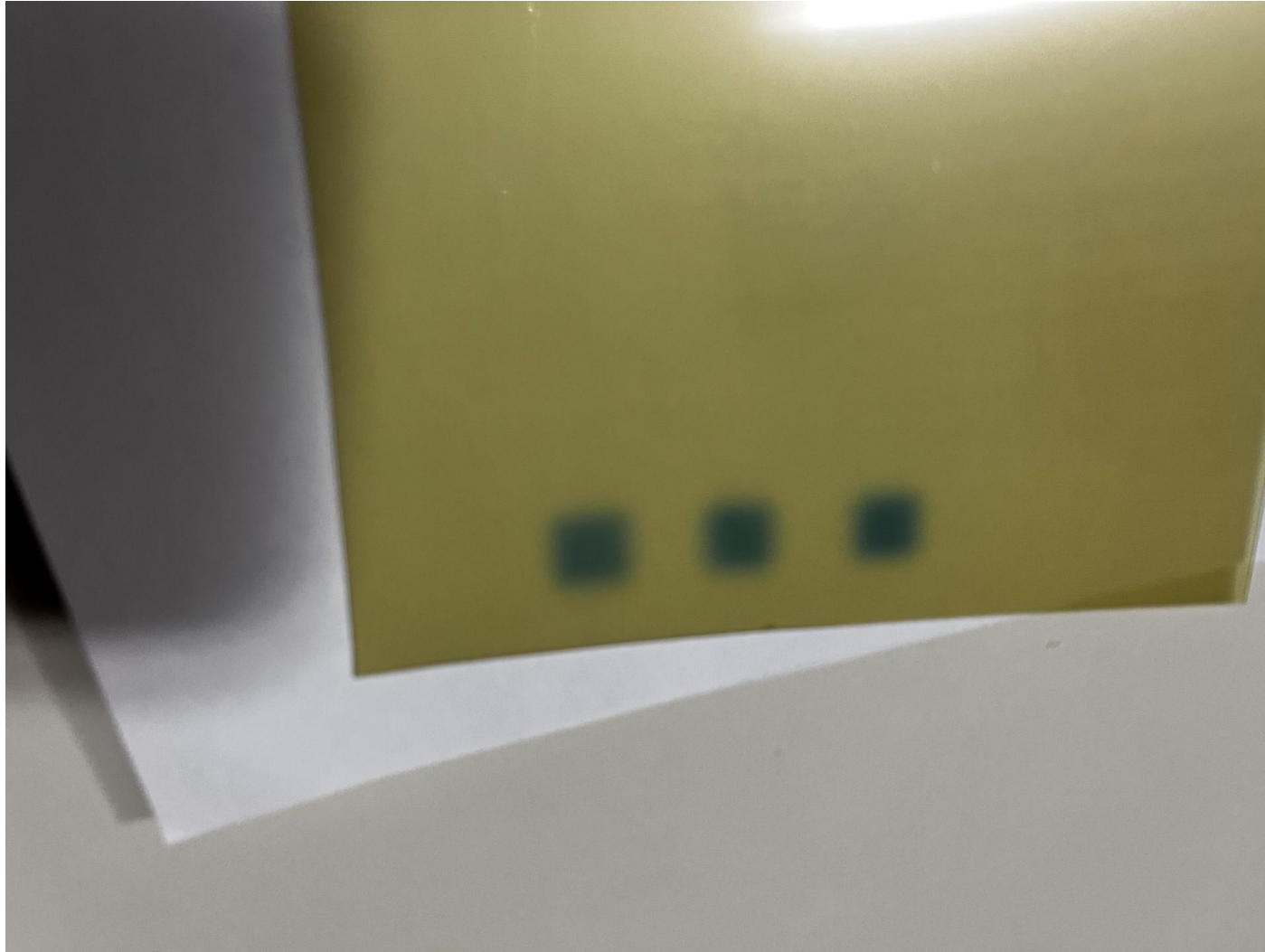
Measured current profile with satellite beam



Current profile short Spacechip beam



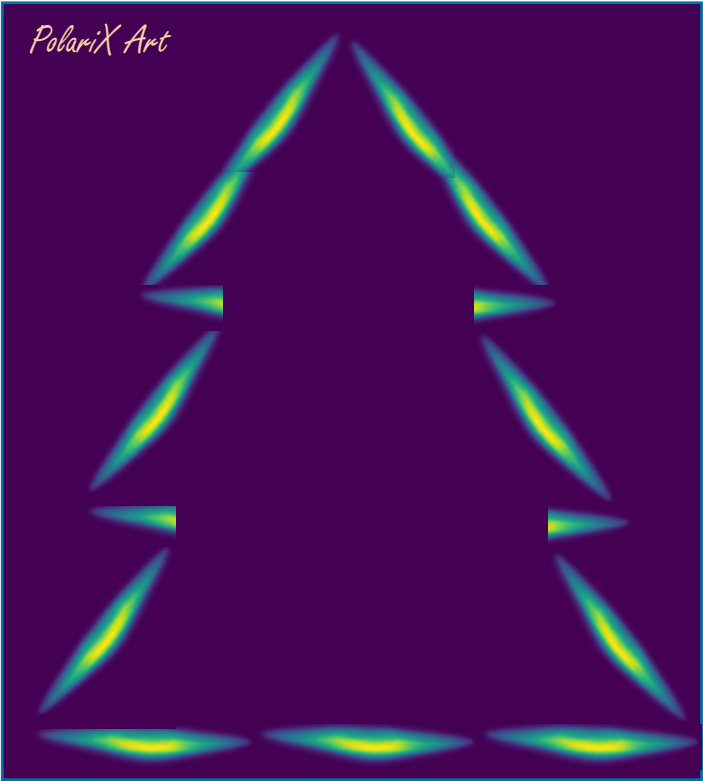
Irradiated dosimetry film



Schedule

Week 52

Date	Schedule
18.12.	Tunnel open for work on gun and TDS water system (completed), magnet server update
19.12.	Willi, Sonja
20.12.	Hannes, Sonja
21.12.	Hannes, (Sonja)
22.12.	ARES on holiday



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