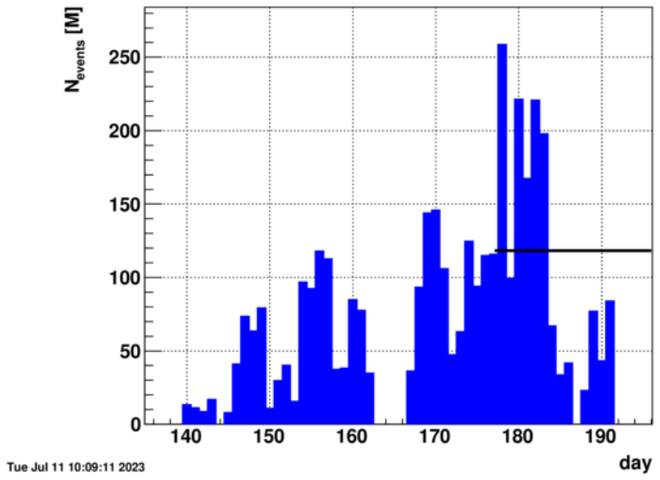
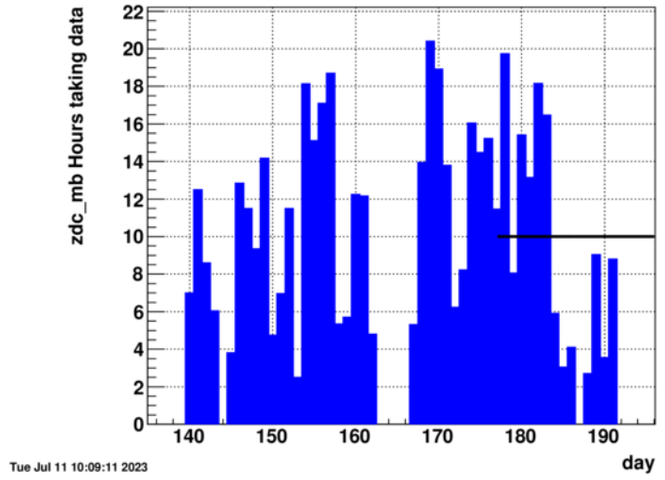
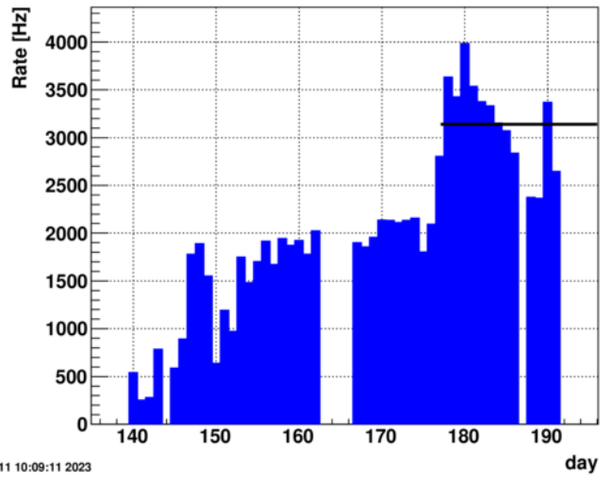
MB events / day



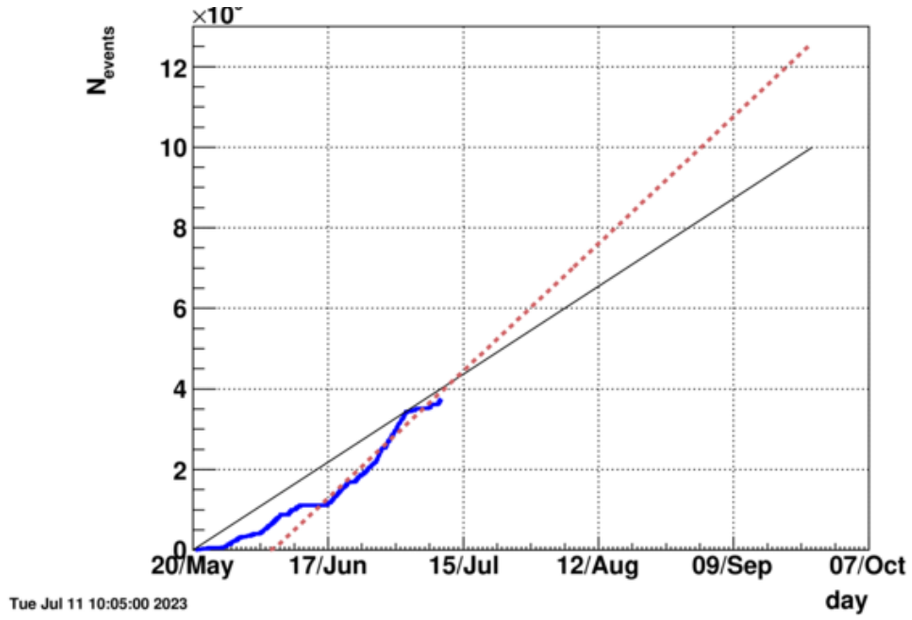
DAQ hours / day



<MB rate>



MB Goal vs projection



- MB Goal for Run23: 10B (/20B for Run23+25)
- High-pt (high-luminosity ZDC ~100kHz) Goal: 40nb^{-1} (all V_Z) for Run23+25
  - assumed luminosity reduction: 40% (vs x3) with 1mrad crossing-angle ($|V_Z|$±30cm)
  - This/next week: Commissioning High-pt program starting with no crossing-angle, no leveling to get high (> 50kHz) luminosity with current beam condition (1-2 stores)

Beam Use Request for Run23+(Run25)

$\sqrt{s_{\rm NN}}$ (GeV)	Species	Number Events/ Sampled Luminosity	Year
200	Au+Au	20B / 40 $\rm nb^{-1}$	2023+2025
200	p+p	235 $\rm pb^{-1}$	2024
200	p+Au	1.3 $\rm pb^{-1}$	2024

Assuming 24 physics weeks / year

year	minimum bias [$\times 10^9$ events]	high-p_T int. luminosity [$\rm nb^{-1}$] all vz	$\lvert vz\rvert<70$cm	$\lvert vz\rvert<30$cm
2014 2016	2	27	19	16
2023 2025	20	40	36	24

- Au+Au at 200 GeV
- High luminosity for rare probe/high-p_T physics + controlled low luminosity for minimum bias physics
  - high-p_T : ZDC ~ 100K Hz (29 weeks)
  - minimum bias : leveled ZDC rate at ~10K Hz (19 weeks)
  - Mix two modes depending on beam condition
  - crossing angle (optional)
- No new detectors to commission