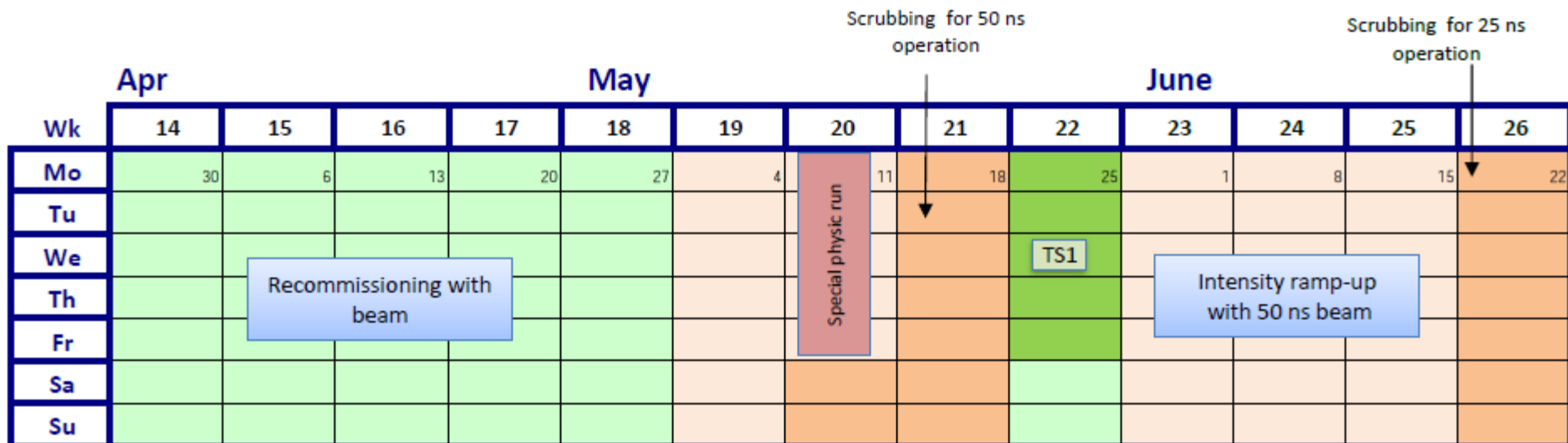


LHCf 2015

Following discussion with Hiroaki MENJO – 29th August 2014

- Questions from LMC:
 - LHCf run scheduled shortly after initial commissioning
 - can it be delayed?
 - Present plan below. LHCf to removed at first opportunity after run – i.e. TS1 in present planning



Requirements

- Pilot run to qualify DAQ sometime before main run (pile-up not an issue)
- 11 m is OK – unsqueeze not needed for LHCf
- $1.5e29 \text{ cm}^{-2}\text{s}^{-1}$, $\mu = 0.01$, $N_b < 40$, half crossing angle 140 microrad
- Integrated luminosity: 10 nb^{-1}
- Delivery rate about $0.5 \text{ nb}^{-1}/\text{hour}$ – need 20 hours Stable Beams – say 2 days plus set-up

Note

- If LHCf is exposed to the high radiation levels in the TAN associated with high luminosity – it will be damaged – 2 weeks maximum at high luminosity
- Installation time:
 - 1 working week
 - 1 to 2 days physical installation plus cabling and electronics tests
- Removal time:
 - 1 to 2 days for both sides

Delay run?

- If the run is not performed initially, the detector will have to be installed and tested during a later technical stop
- The run will have to take place reasonably soon after the technical stop to avoid damage
- 1 – 2 days within 2 weeks of the run will be required to removed the detectors
- Both installation and removal will have to take place in an irradiated area – this will not be the case if the run takes place during the initial period
- ALARA strongly favours doing the run as scheduled.