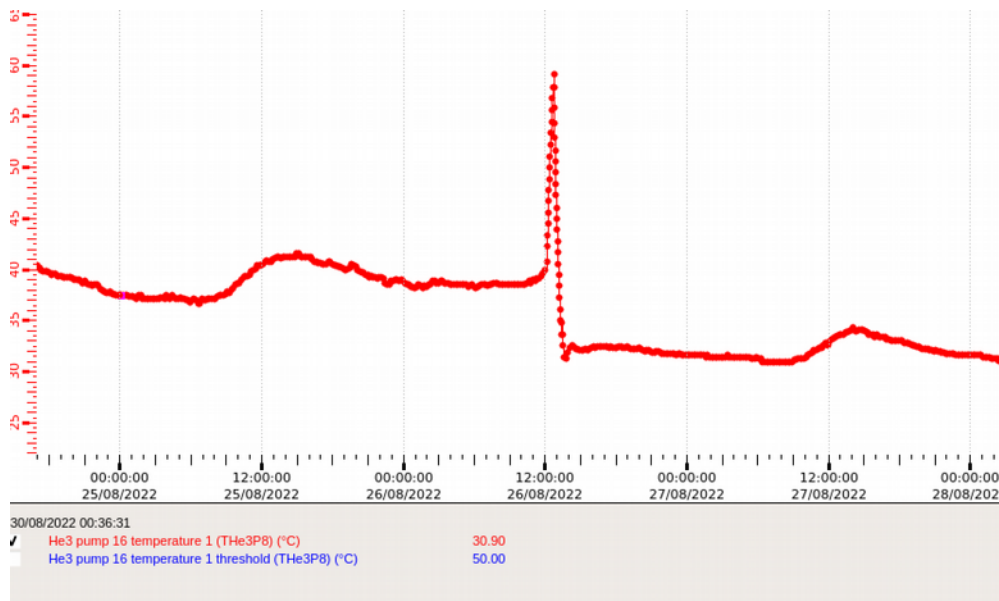# PT status & planning

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Outline

- Update since last TB

- Polarization build-ups

- Outlook for planning

Few problems since last TB

- Cooling fan of Roots pump #16 broken on August 26
- ^{3}He pumps stopped → polarization lost
- Fan exchanged, system restarted OK

Other issues

- Diffusion pump cooling switched from tap water to closed circulation from Straw/DC reservoir

- Liquid He distribution box vacuum under permanent pumping

- Variation in liquid He consumption

- Solenoid and dipole mode 1.3 g/s vs 0.5 g/s

- Few hiccups with magnet control system
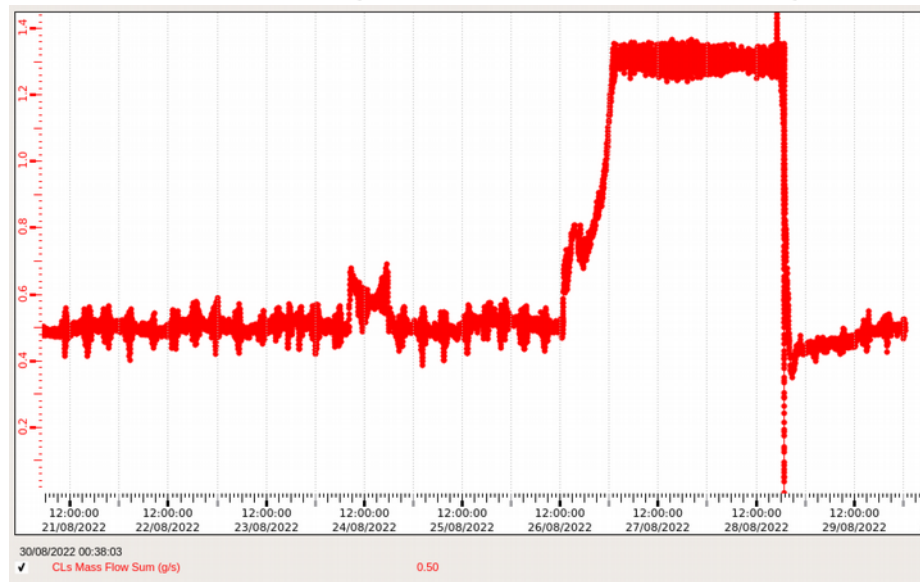
Polarization periods

- ~10 rounds of polarization build-up since beginning of the year

- SM1 effect important (field homogeneity - known)

- Frequency modulation important (known)

- Negative polarization more difficult (known)

- Usually >40 % average in ~2 days

- Shifts needed for polarizing → sharing between remote and local shifters (Yamagata, US, Prague, Bochum, Trieste), counted in the shift duty

Polarization build-ups

- NMR coil #7 – intermittent noise
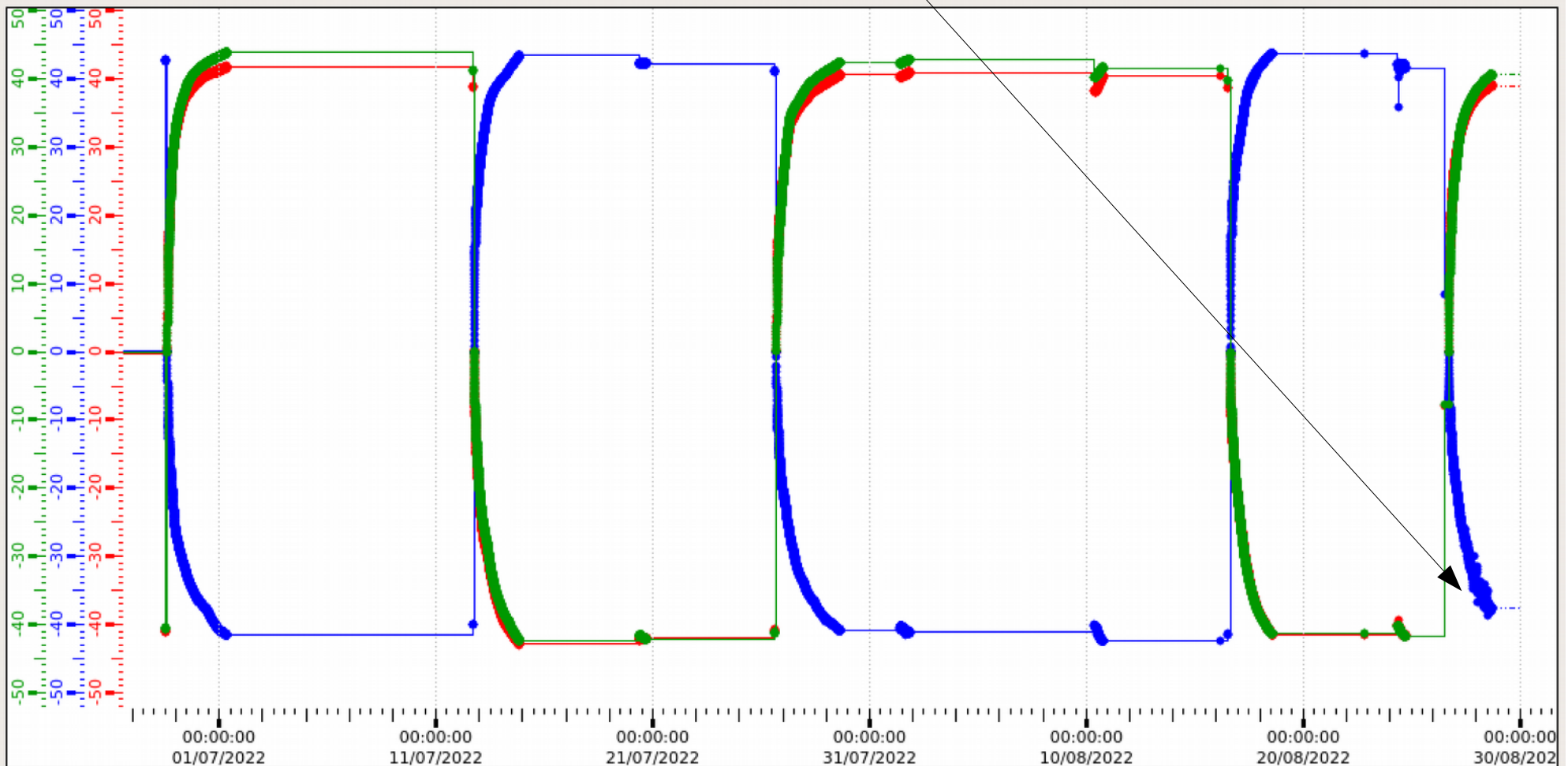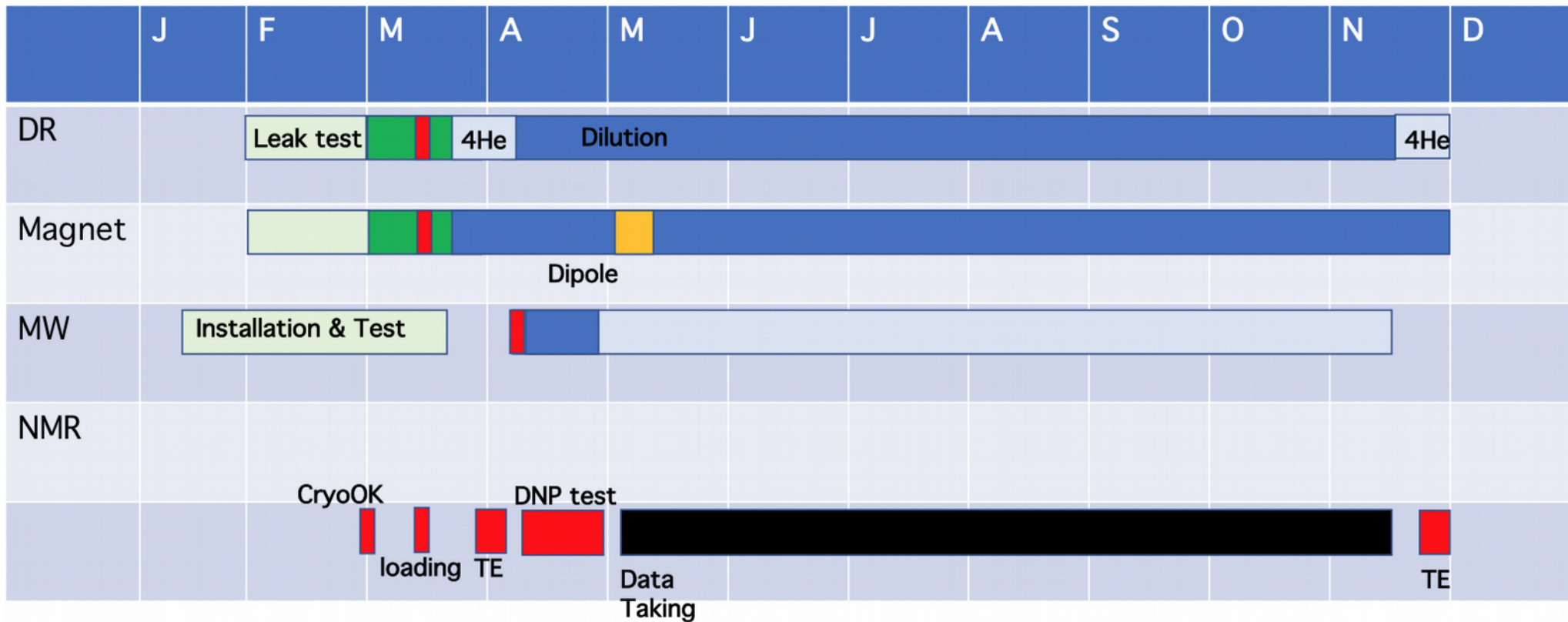
Polarization build-ups
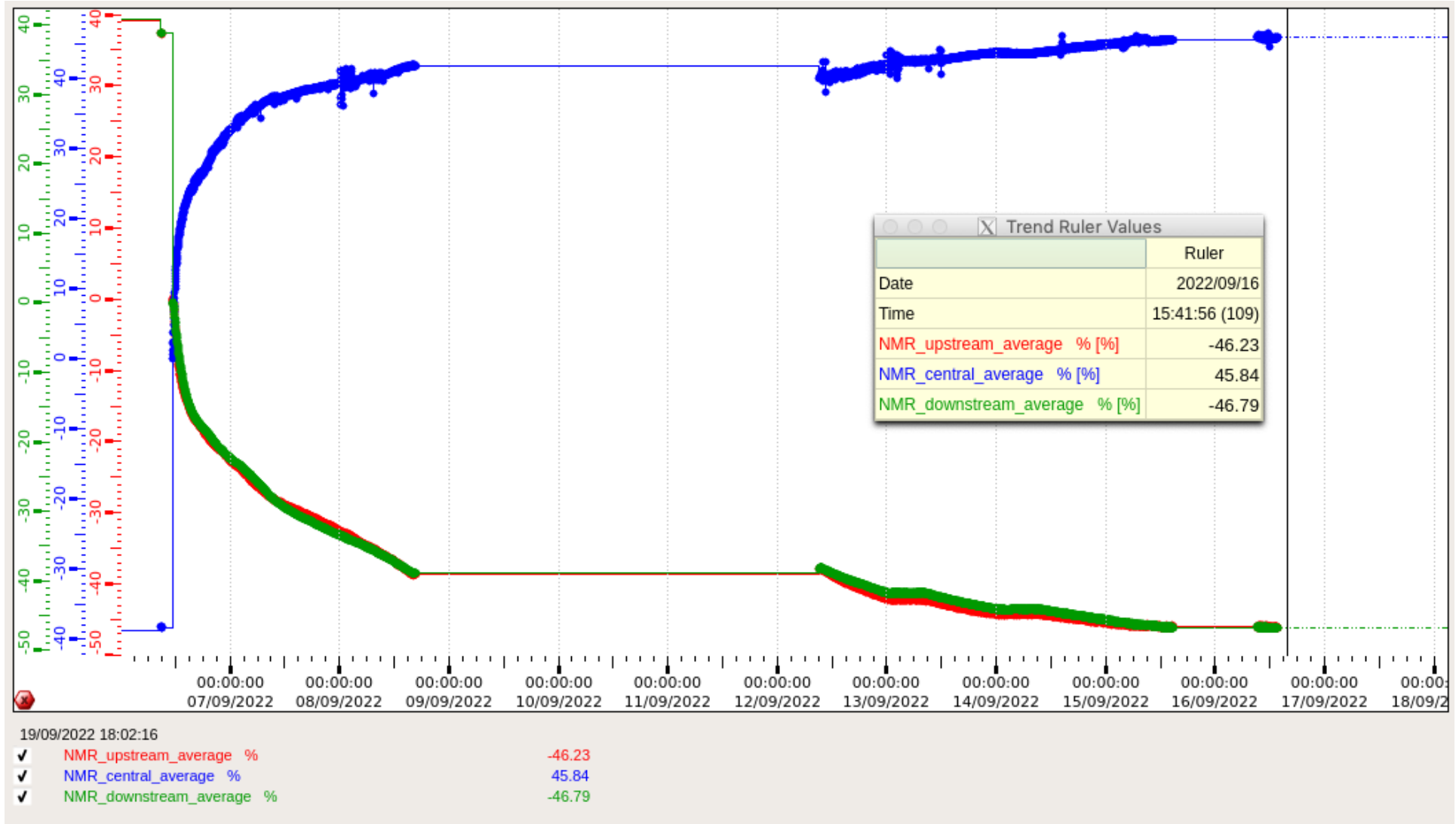
Schedule for 2022

Current working scenario:
Unloading after end of NA proton physics → 24/11

Schedule might change if change in beam-time

EoR planning

- End of beam → day 0
- 1 day recovery of ^{3}He gas
- 1 re-cooling
- 1 day condense ^{4}He
- 3 days TE @ 1K
- 1 day remove ^{4}He
- 2 days warm-up
- 1 day unloading

- Total ~10 days needed after beam stop

Services needed

- Liquid He – until unloading day

- Cooling water – until unloading day

- Power - all the time to monitor parameters

- Minimum requirements

Conclusion

- Target operates fine

- Things break sometimes

- Average polarization usually >40 % in ~2 days

- Plans for EoR ready

Thank you!

Spares