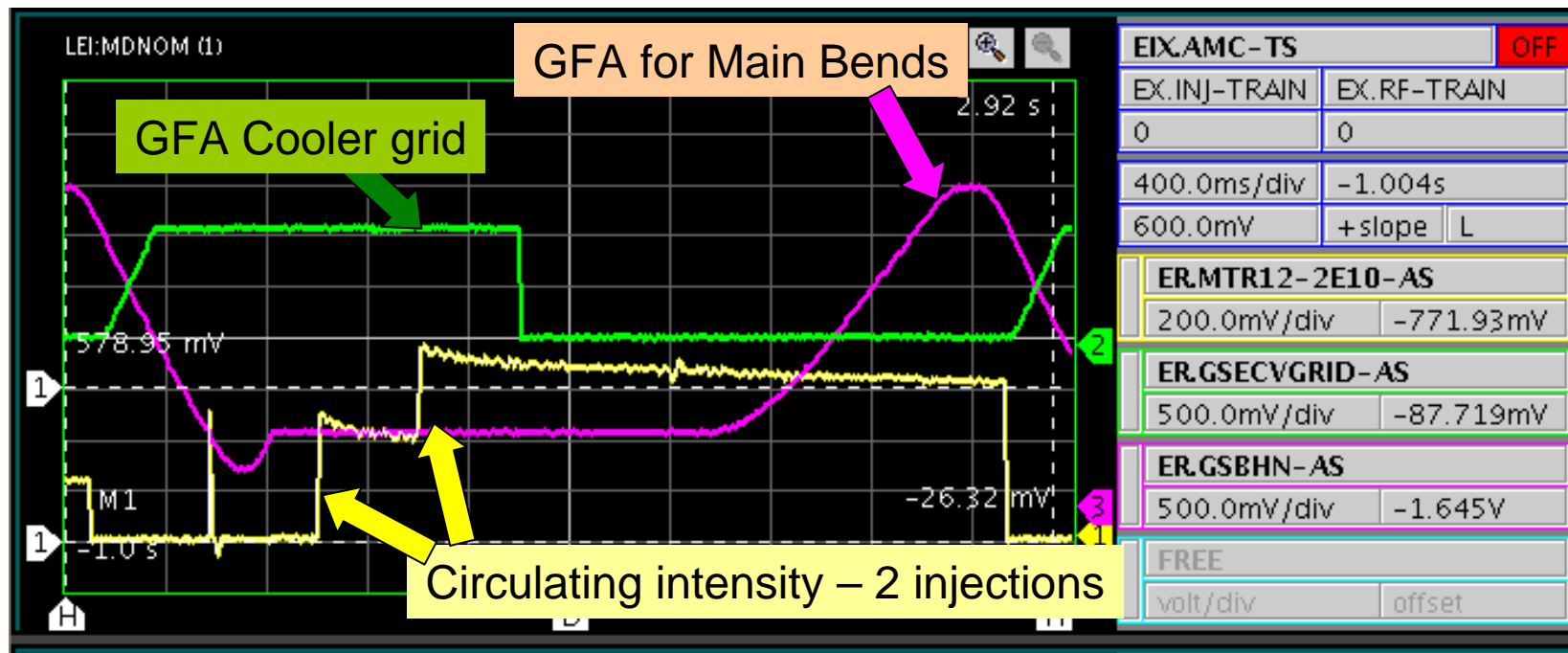




LEIR Commissioning Status



- Recent highlight of LEIR commissioning (giving a good impression of status)
- Intensity for “early LHC ion beam” on flattop of a 3.6 s cycle on March 29th :
 - * Accumulation plateau with two injections (only ~13μA from Linac 3)
 - * Long plateauorbit manipulations, measurements
 - * Few adjustments only to obtain close to 100% acceleration (gradient “seen” by the beam on ramp under control) !
 - Very little progress since – beam unavailable almost all the time.



LEIR Commissioning Status



- Status:
 - Injection line (unexpected difficulty), injection, ring optics, cooling, accumulation, bunching, acceleration o.k.
- Still to be done until completion (scheduled for April 21st !):
 - Synchronization,
 - Ejection (tricky bump due to limited strength of correctors),
 - Instrumentation,
 - Ejection line (+ rematching based on observations),
 - Vacuum investigations ("dynamic" pressure, collimators, scrubbing),
 - Overall performance (at present no absolute emittance measurements, electron beam shaking to adjust long emittance ?)
- Highly desirable (incomplete ?):
 - Orbit response measurements (along the whole cycle),
 - Un-understood vertical chromaticity,
 - Cooling studies (cooling down process, higher currents, hollow prof's),
 - Try to shorten the cycle to 2.4 s.
- Looks very difficult within two weeks (-> try to get an extension)