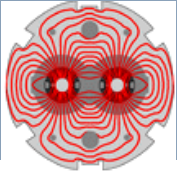
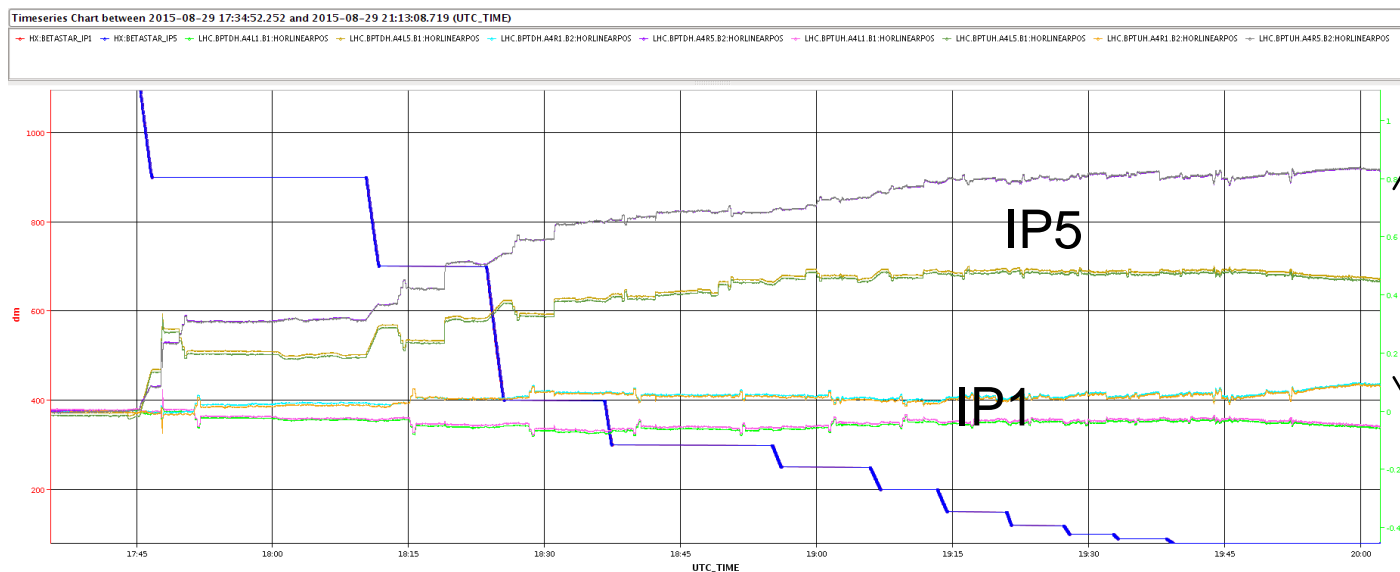


Collide and Squeeze during MD#3



Last MD:

- ✓ We prepared all settings & OFB references to cruise through a squeeze with collisions (and it worked well),
- ✓ Tested the circulator beam scans as means to reconstruct collision offsets (alternative to DOROS / BPMs).
- ✓ **Collimators were centred** after collapsing the separation bumps (at $b^*=11\text{m}$) **and kept not moved along the process.**
 - ✓ Monitoring of the orbit change in good agreement with MAD (offline discussion with Belen and Daniele)





3. CHANGES OF MACHINE PROTECTION SETTINGS DURING MD

No changes in BLM thresholds or monitoring factors are necessary.

3.1 CHANGES OF SIS INTERLOCKS

The SIS interlocks on orbit readings and orbit corrections have to be disabled for separation and lumi scans correctors for IR1, IR5 and IR8.

3.2 CHANGES OF TERTIARY COLLIMATOR INTERLOCKS

The TCTs in IR1, IR5 and IR8 will be moved manually at each squeeze step. The TCTs in IR2 do not have to be moved since there is neither an orbit nor an optics change.

No other changes of the collimator positions in the other IRs.

- ❑ Integrate TCTs into the process and determine level of scraping losses from tertiary halo.
 - ✓ We have to prepare TCT functions to be send together with PCs.
 - ✓ Predefinition in IP1 and IP5 can come from the MD#2
 - ✓ ! Can not re-use the IP8 setup – tilted collimator during MD#2 (Belen)
- ❑ At the end of the process perform further tests with circular beam scans (different scenarios with larger offsets, slower & faster scans).
 - ✓ At the IP, up to the 2σ beam offset (w.r.t. to 0.6σ during MD#2)
 - ✓ Rotation between 30s and 120s in total
- ❑ Intensity: stick to 2 nominal bunches and some probes.