

Accelerator complex status

End week 26 (Sunday 29th June 2014)

SPS closed on schedule.

TI (Jesper Nielsen)

Here's the summary of the week + a busy WE!

<https://wikis/display/TIOP/2014/06/30/TI+summary+week+25%2C+2016>

Booster (Jocelyn Tan)

During the week: On-going set-up of the reference beam NORMGPS (RF, MRP, beam instrumentation, YASP, timings...)

Tuesday

PSB access in the morning.

A piece of cotton was found in the water cooling pipe of QFO21.

The PIPO was called for the BI.DHZ20 which showed no acquisition. He has replaced a Pulse timing board.

It was found that all ring PUs in 4L3 were drifting towards negative values. The specialist has changed some hardware modules.

Wednesday

Work on LHCINDIV has started: the number of particles is controlled via longitudinal shaving (early beam blow-up with the C16 cavity).

Thursday

In the morning, the ejection kickers went off for 30mn.

Friday

Although LHCINDIV was based on NORMGPS, Alan found that the TRIM power supply for the rings 1-4 was not seen on OASIS. Another copy of the function from GPS solved the problem.

LHCINDIV : The LL RF team has set-up the RF functions of all 4 rings. In the late afternoon, the beam was sent to the PS.

Issues were found on LTB.BPM20 and BI3.BPM40. To be checked by the specialist.

Saturday

BTP.BPM10 and 20 are inverted on OASIS. To be checked by the specialist and OASIS team.

PS (Ana Guerrero Ollacarizqueta)

This first week of beam in PS was dedicated to:

- test and debug the instrumentation and in particular the orbit and tune measurement systems,
- perform orbit measurements at 10Gev to compute magnet displacements in view of the access foreseen on Tuesday for magnet re-alignment,
- tune diagram measurement before re-alignment
- RF tests

All beams requested for the fore mentioned tasks were provided. All injected beams except for the latest LHCINDIV originated from the same PSB beam (firstforps), one bunch injected from BR3.

One bunch on H8 with up to 130 1010ppb was accelerated and fast extracted to D3 at 26Gev for instrumentation tests. The orbit measurement shows a vertical orbit offset of approximately 1mm which compromises the measurements for magnet displacement calculations.

One bunch on H8 with a long 3.5 Gev flattop was prepared for tune diagram measurements on Monday and the tune measurement system for both long and short PUs was available on Thursday. The excited resonances appear to be the same as expected, especially the strong skew sextupolar line.

Several other beams were prepared as requested by RF, special LHCINDIV, SFTPRO, LHC_DB_50 and AD. In particular, the four bunch LHCINDIV (1 bunch per PSB ring) requested by RF for H16LI setup was delivered on Friday.

On Tuesday, after PSB stop several shots were sent to the beam stoppers.

There were three beam stops originated from the access system. Somebody doing maintenance forced a door communicating TT10 and TT2. The other two stops were provoked by system faults but no patrols were lost.

ISOLDE (Miguel Lozano Benito)

GPS

Nicely running during the week for different RILIS (lasers) setup.

Li, Cr Ba and Ba 2+ schemes prepared.

One logic card on the target line heating interlock system has been replaced.

GLM and GHM deflectors are now working fine although they have to be controlled from the FESA navigator.

HRS

Lots of BI interventions on different scanners

Still working on the Isolde Mass Control . The frontend has to be restated every 12 hours .Martino Colciago working on the problem.

Some controls problems with scanners and overloaded frontend. By the moment we can only use them though the expert application until Stephane Bart is back from his holiday and finds a solution.

Also some problems with INCA that have been solved.

LEIR (Django Manglunki)

- cycle creation for Ar, a lot of debugging from Greg. Eventually possible to generate cycle using "beta" version.

- RF HW tests for first time with functions. BTG (B-train Generator) debugged by Jean-Michel Nonglaton from home & on holidays.

- Many problems with Samplers; issues generated.

- passerelle door 403 closed, padlocked, Beam Permit about to be signed.

RP measurements after accumulation and acceleration successful.

- New release de LASER pour RDA3

- Injection bumpers (DFH): problem with remote on/off. J.Schipers working on it