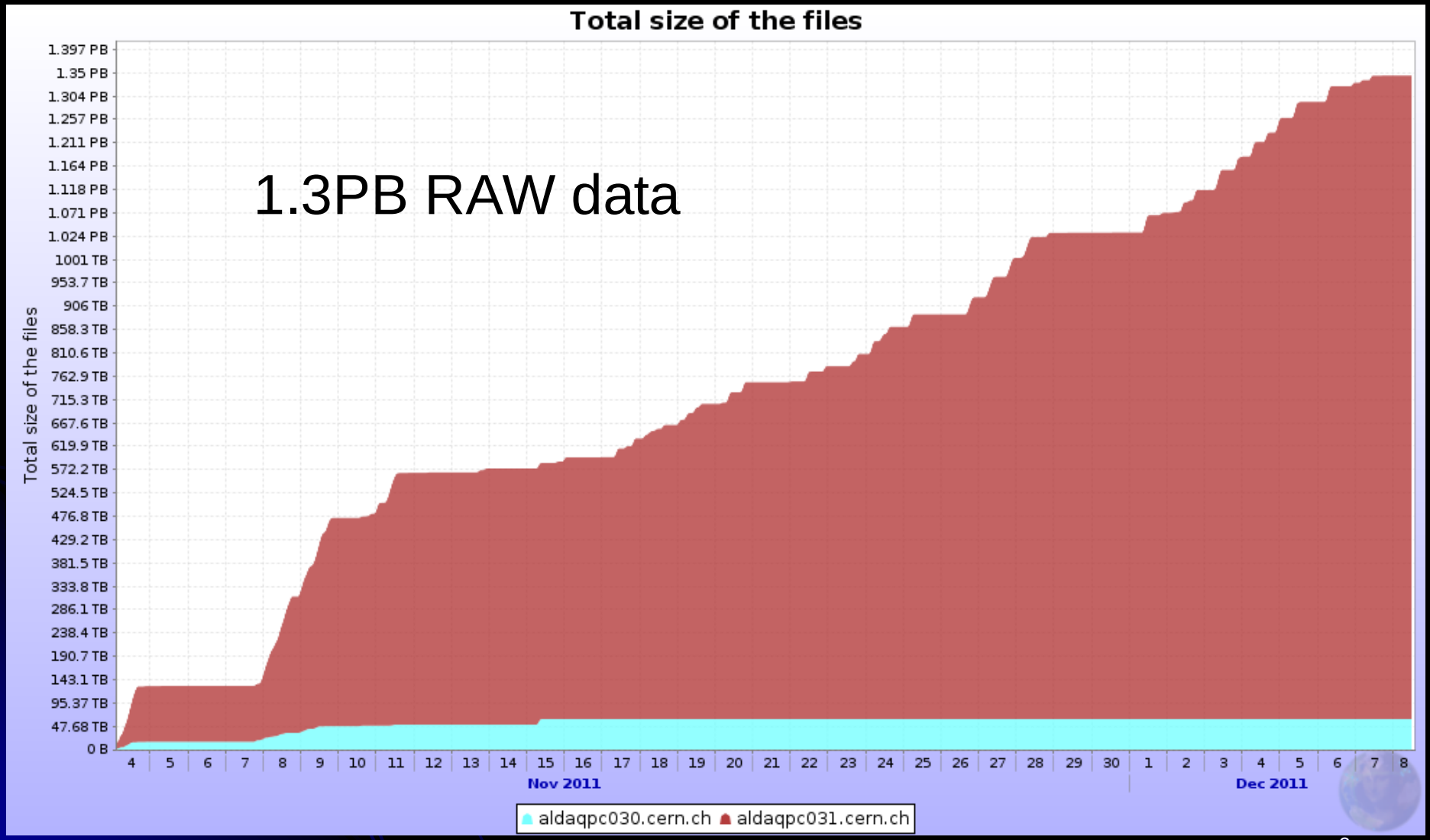
ALICE Operations short summary

Grid Deployment Board

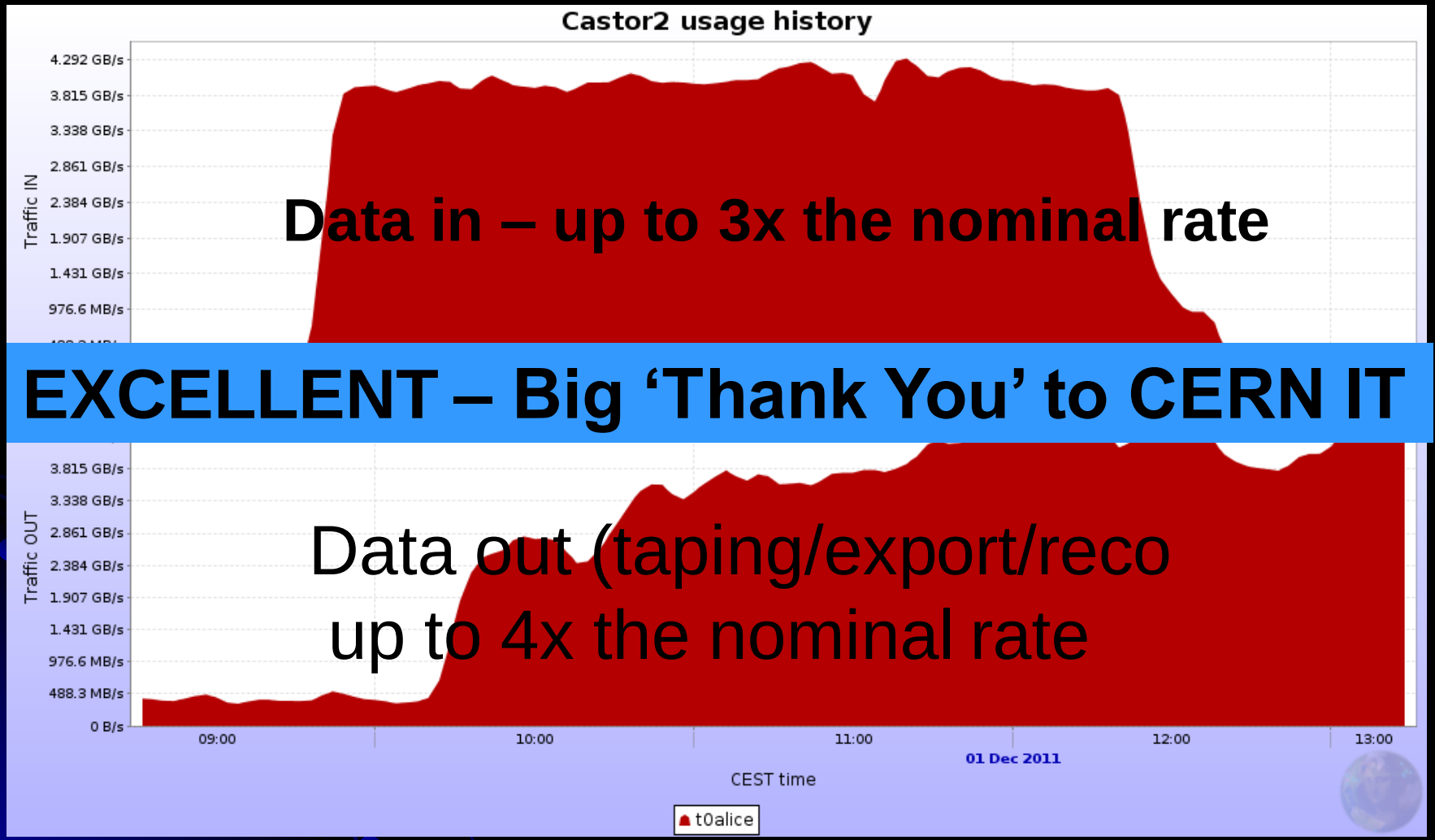
Dec 14, 2011

2011 HI run

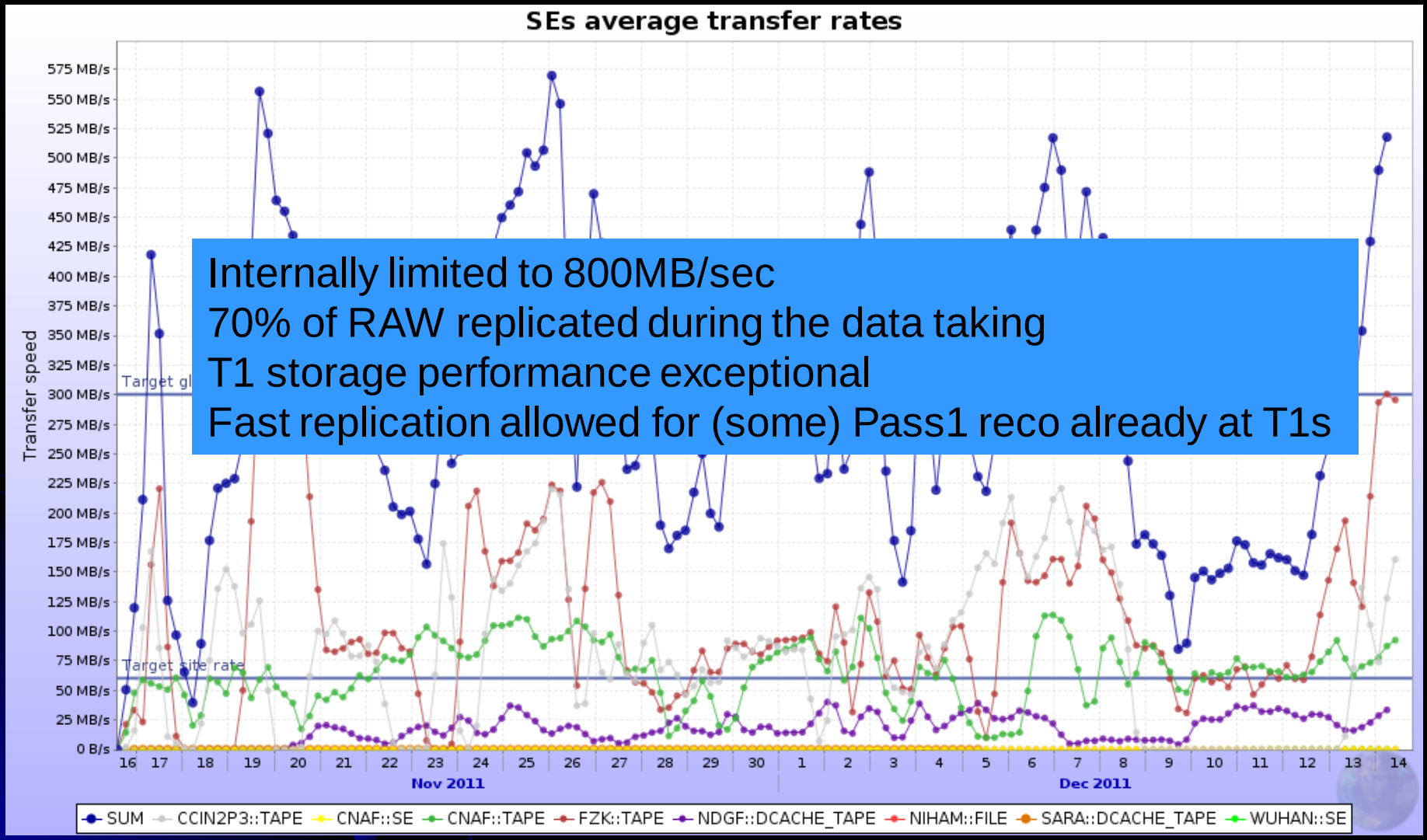


1.3PB RAW data

CASTO2 performance

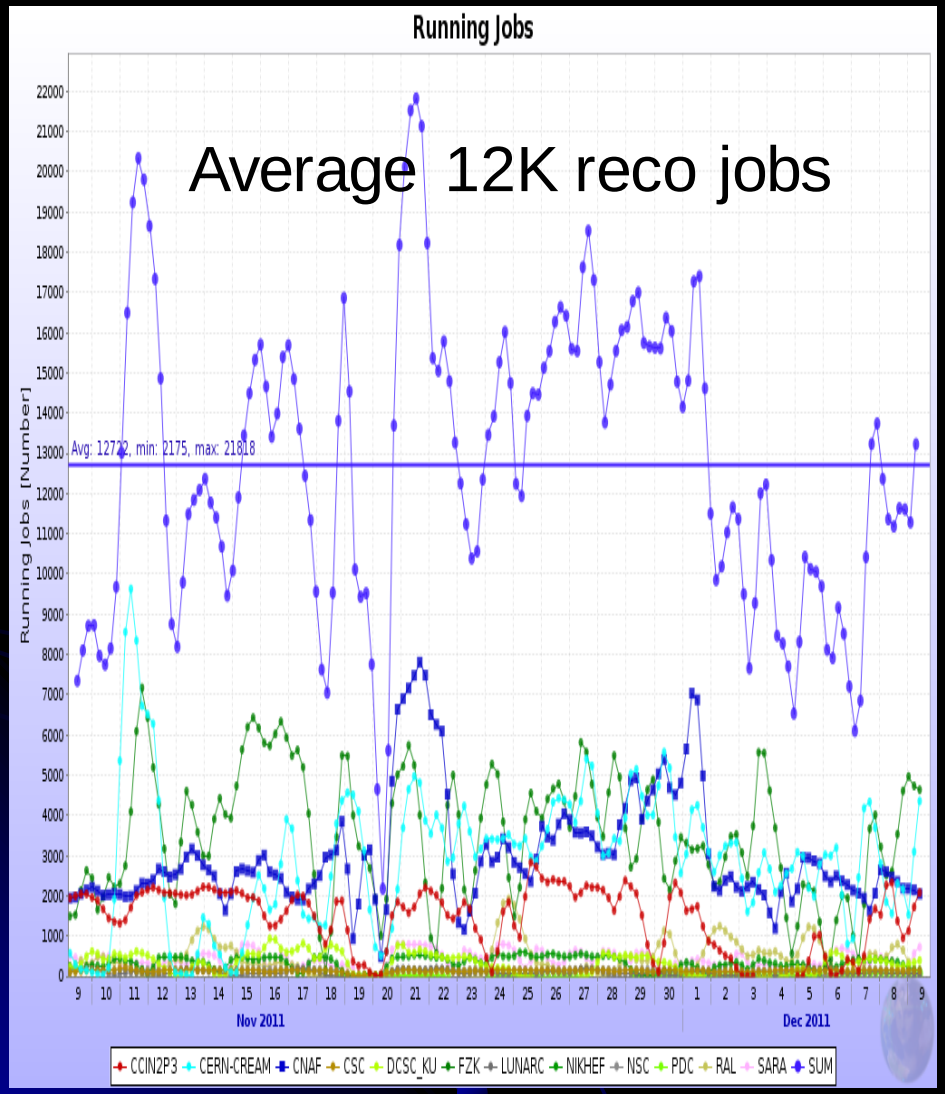


RAW replication

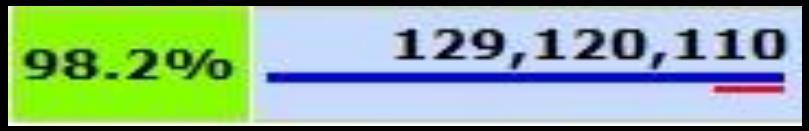


Internally limited to 800MB/sec
70% of RAW replicated during the data taking
T1 storage performance exceptional
Fast replication allowed for (some) Pass1 reco already at T1s

Pass 1 reconstruction



Exceptional performance of T0/T1 centres, allowing for good quasi-online data processing, QA, calibration



All di-muon spectrometer data processed and analyzed, ¼ of barrel spectrometer data processed

Services summary

- **NTR** (as per daily operations meetings)
- Minor hicups, very good support at all centres
- Running out of disk
  - Added large disk SE at RAL (working)
  - Cleanup of replicas (of older productions) at all centres
- The Grid infrastructure is mature and stable

2011 HI processing

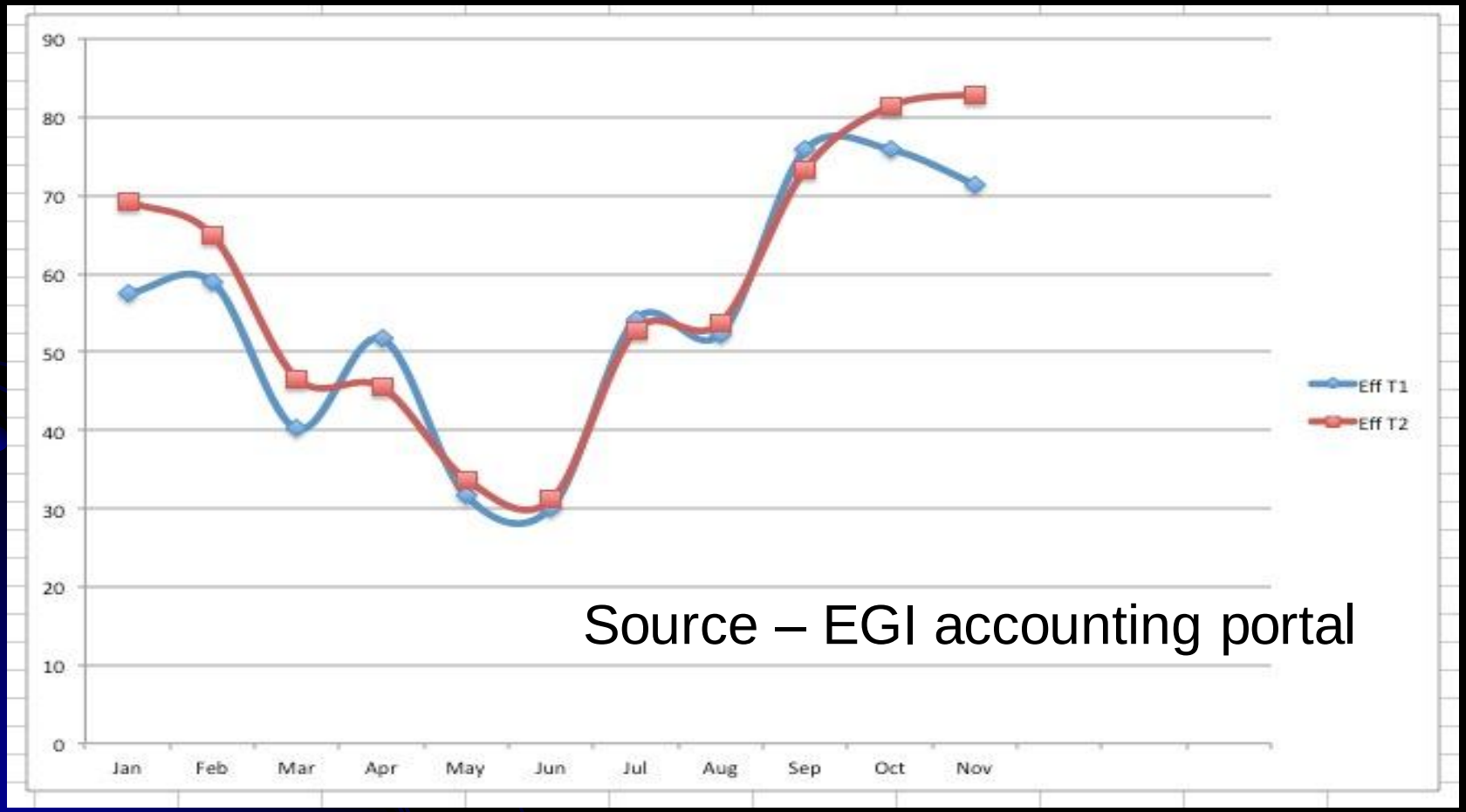
- Memory overruns
  - Higher luminosity (fantastic LHC delivery) – more pileup than expected/simulated
- Full HLT compression - allowed to collect 3x more events for the same output data size
  - This however required major reworking of the code to gain processing speed
- Pass2 over full data sample (after calibration) – starts in few days

Efficiency update

- Contributing factors
  - Conditions data system overload
  - High number of end-user analysis jobs with varying efficiency
  - Some storage elements overload
- Remedies
  - Strengthen cond. data infrastructure, Including query cache and per job OCDB snapshots
  - Include more of the user analysis in groups (analysis trains)
  - Work with every site individually to optimize SE configuration and access patterns

Effect

- The CPU/Wall efficiency has risen steadily, at T2s above the WLCG threshold

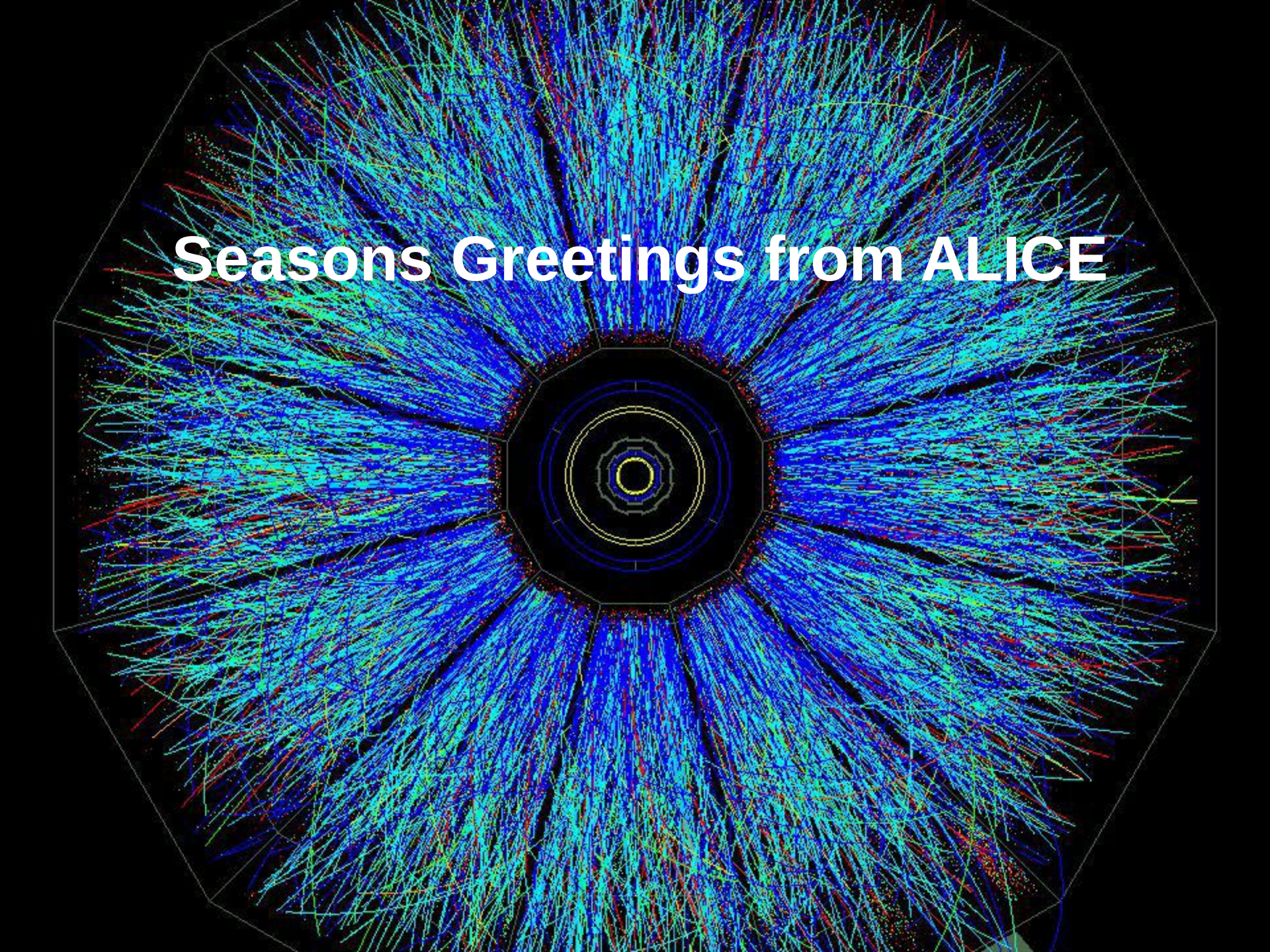


SLC6

- We support the migration as soon as possible at all centres
  - No issues or delays
- Already seen centres using SL6
  - For example SE servers
- We are also OK with a more aggressive move to latest Ubuntu

Summary

- The 2011 HI period was exiting and very rewarding time for ALICE
- Many thanks to the T0/T1/T2 centres for the excellent performance and support
- The processing of HI data is ongoing (Pass2 about to start), MC and user analysis at stable levels
- ALICE is happy ☺


Seasons Greetings from ALICE