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Report LHCb

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LHCb status

LHCb is in data taking until beginning of December.

The End-of-year-technical-stop (EYTS) will be very short this year!

Intense data processing campaign planned in early December and to continue during Christmas break.

What to expect @CNAF:

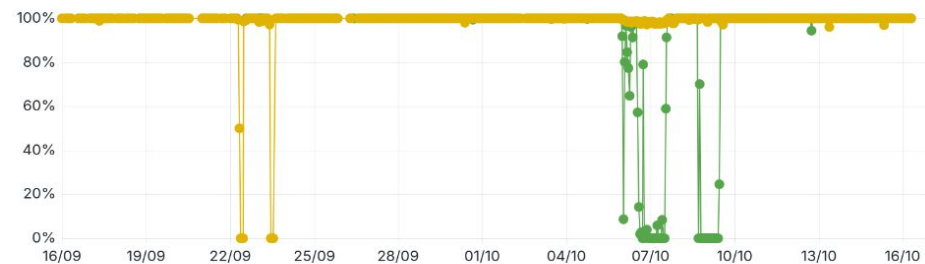
present-Dec: FTS CERN -> disk -> tape

Dec-Feb: recall from tape -> disk (*with very intense POSIX & WebDAV IO*)

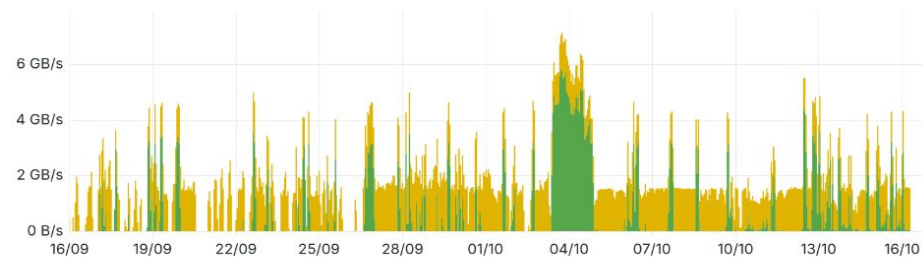
Data taking should restart earlier than usual (half March!)

Trasferimenti FTS

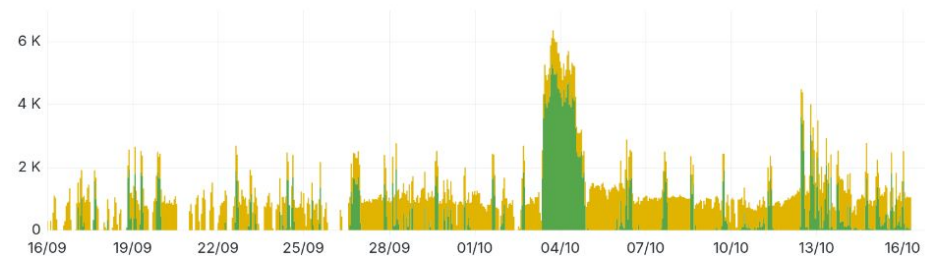
Efficiency



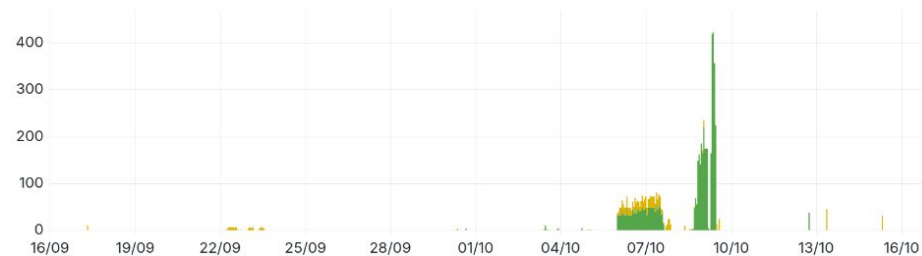
Transfer Throughput



Transfer Successes



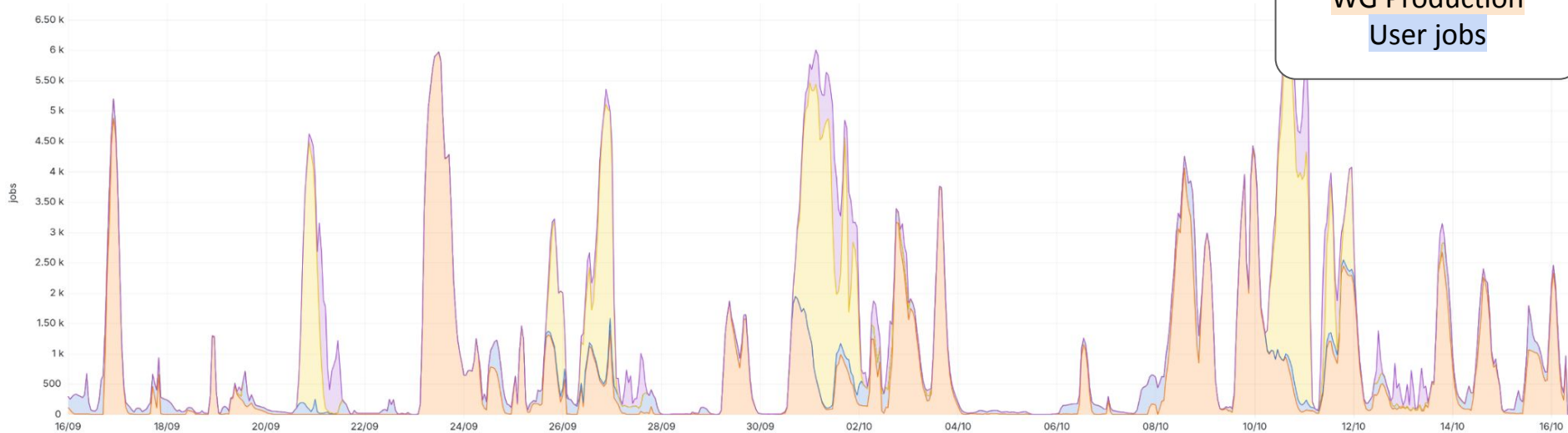
Transfer Failures



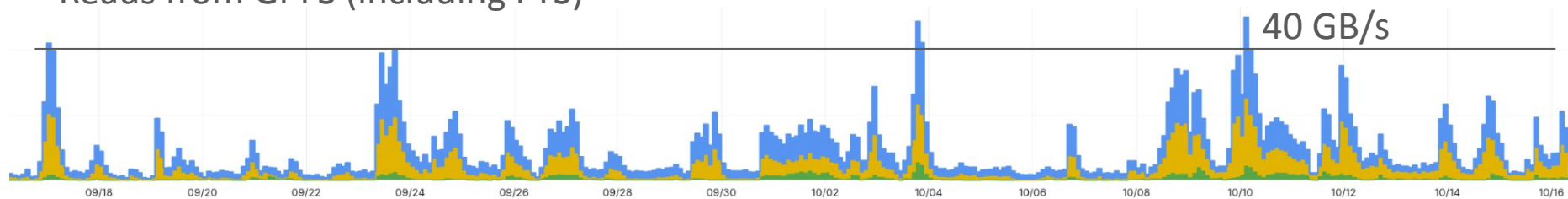
— xfer-lhcb.cr.cnaf.infn.it
— xfer-tape-lhcb.cr.cnaf.infn.it

Data processing activity at CNAF

Sprucing
Merge
WG Production
User jobs

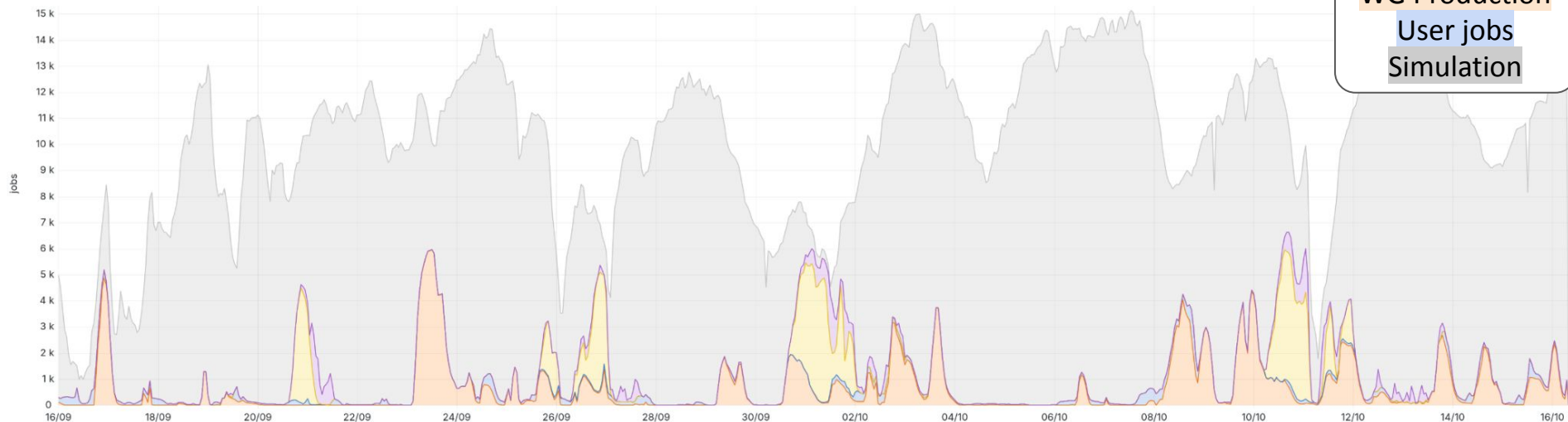


Reads from GPFS (including FTS)



Data processing activity at CNAF

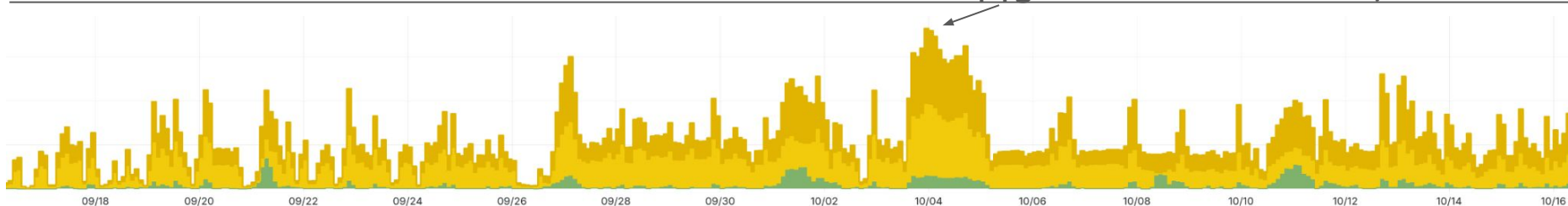
Sprucing
Merge
WG Production
User jobs
Simulation



Writes to GPFS (including FTS)

FTS

10 GB/s

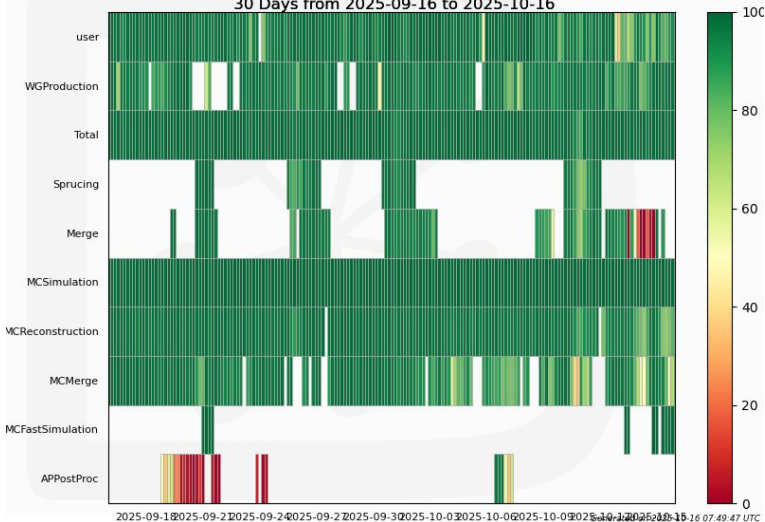


CPU usage

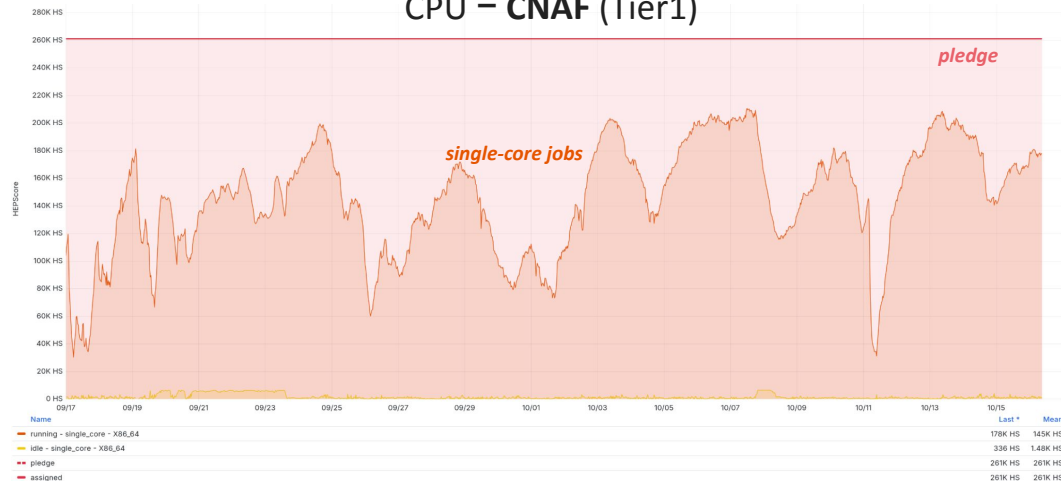
The use of CPU resources is below **nominal values** for lack of pressure from the experiment

Job CPU efficiency by JobType (CNAF)

30 Days from 2025-09-16 to 2025-10-16



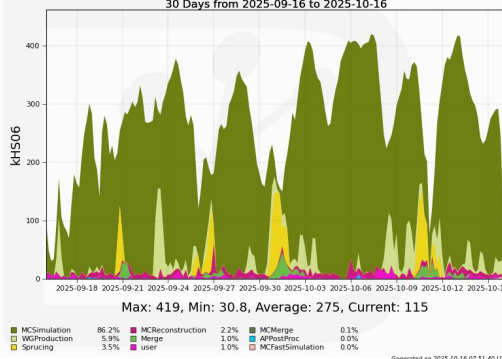
CPU – CNAF (Tier1)



from DIRAC: CNAF (Tier1 + Tier2)

Job CPU usage by JobType (CNAF)

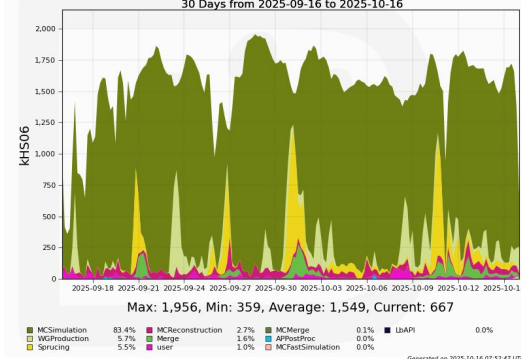
30 Days from 2025-09-16 to 2025-10-16



from DIRAC: all Tier1 sites

Job CPU usage by JobType (T1 sites)

30 Days from 2025-09-16 to 2025-10-16



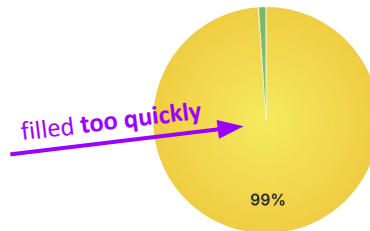
Backup

Hot-storage region

The scope of the **hot-region** is to (temporary) store files produced by Sprucing jobs which, processed by Merge jobs, are combined into a single merged file, then deleting all the input files used.

To pursue this goal, GPFS has been configured with a dedicated **placement policy**:

- `/gpfs_lhcb/disk/lhcb/**/*.*.dst` → NVMe (but this is the whole disk)
- `/gpfs_lhcb/disk/lhcb/buffer/**/*.*.dst` → NVMe (correct path)



buffer/ isn't a fileset hence
no policy can be set in GPFS

