

March, 21st 2025

Report LHCb

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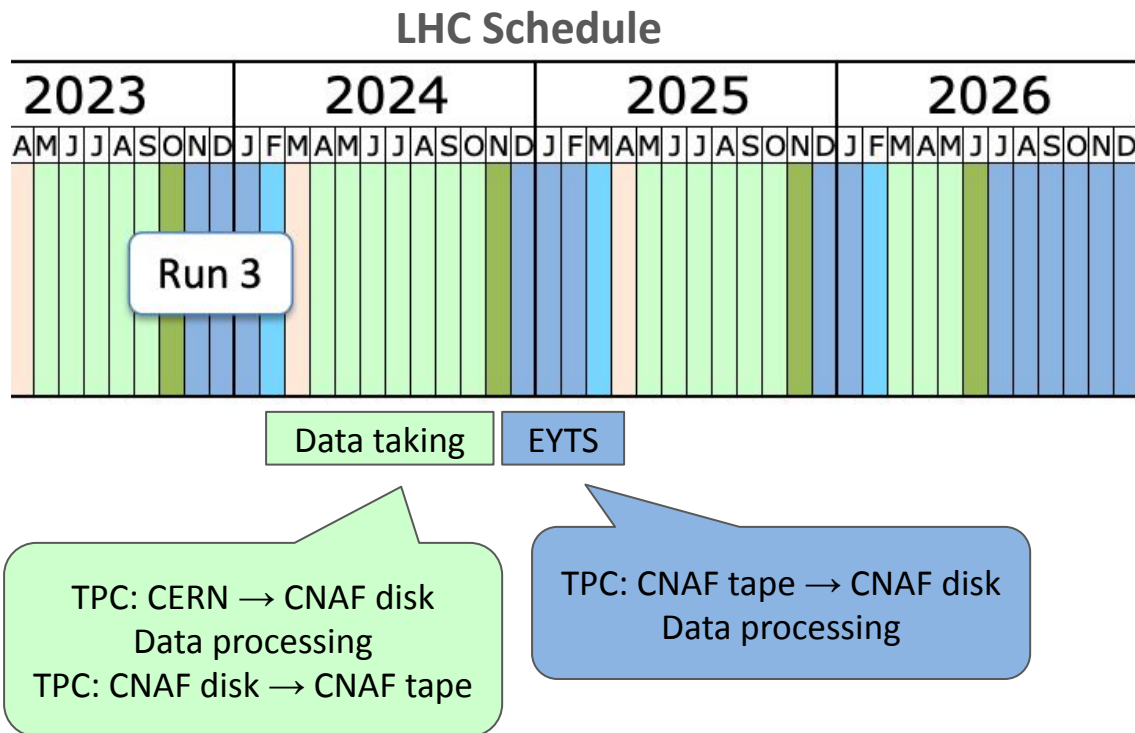


LHCb Status

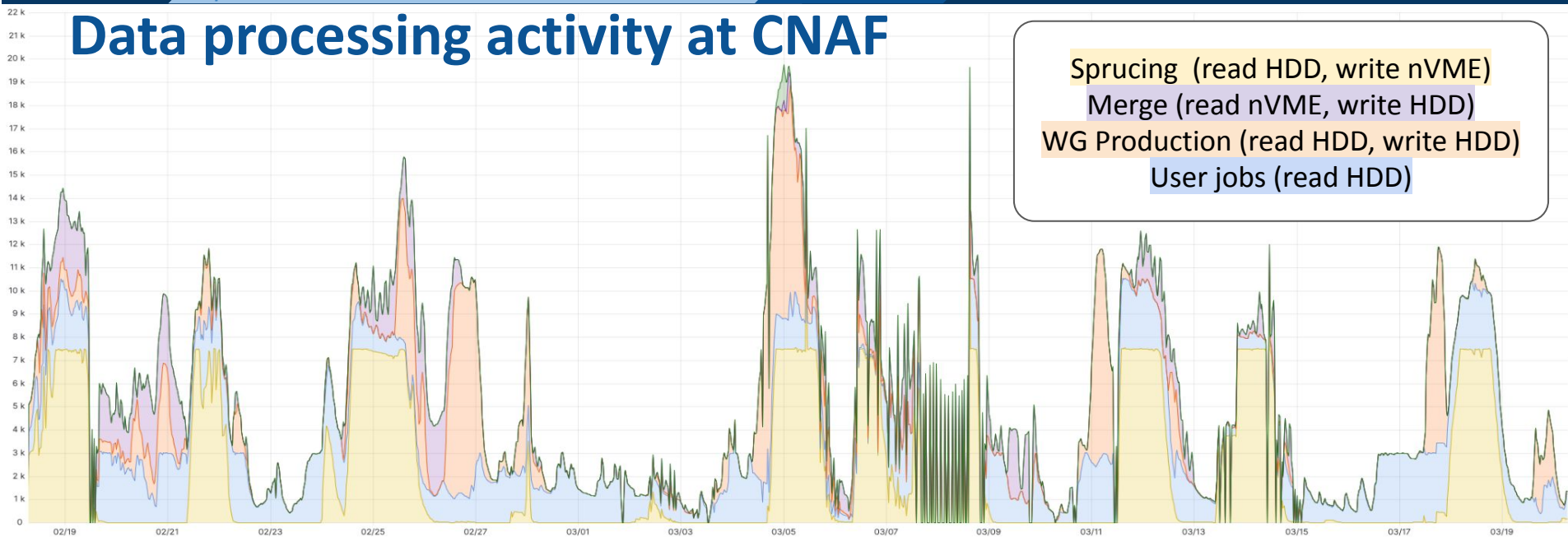
Since early December, LHCb is in its *“Reprocessing phase”*.

Due to serious problems discovered, reprocessing (now completed) needs to be repeated.

2024 data have been staged at Tier-0 and CERN agreed to not delete data from disk to accelerate reprocessing.

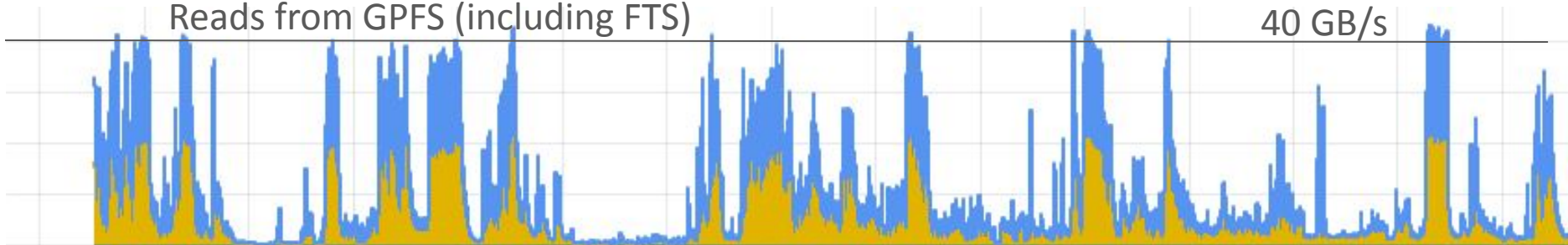


Data processing activity at CNAF

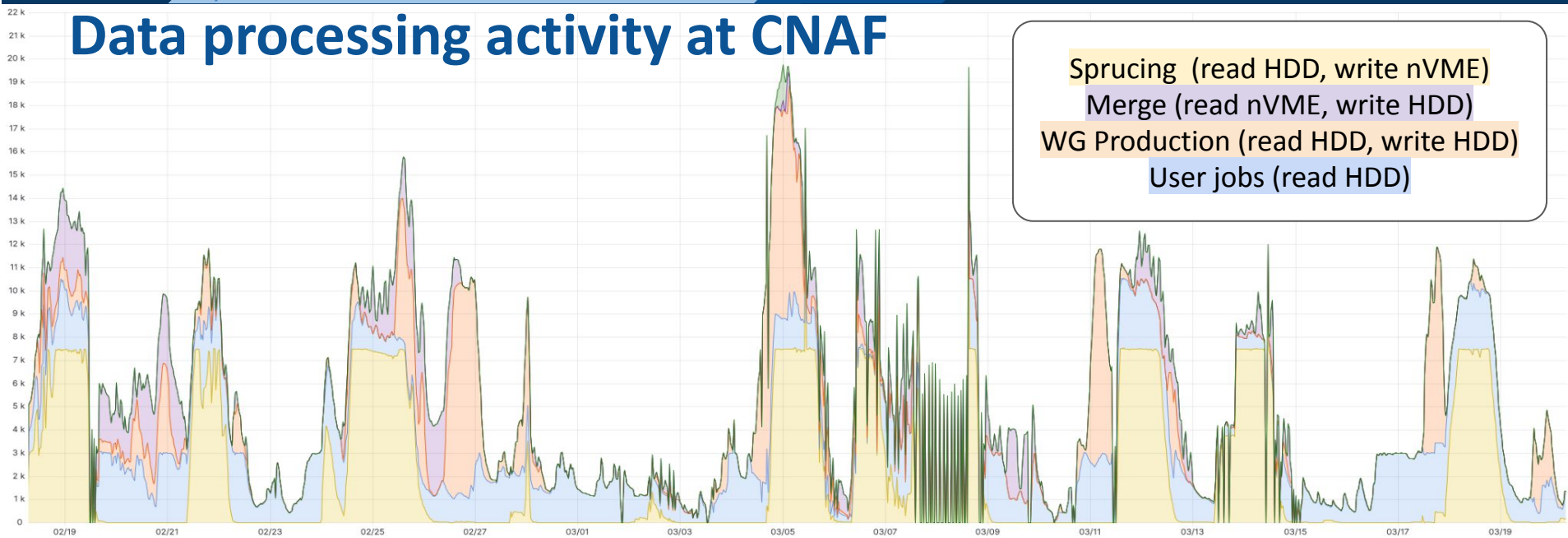


Reads from GPFS (including FTS)

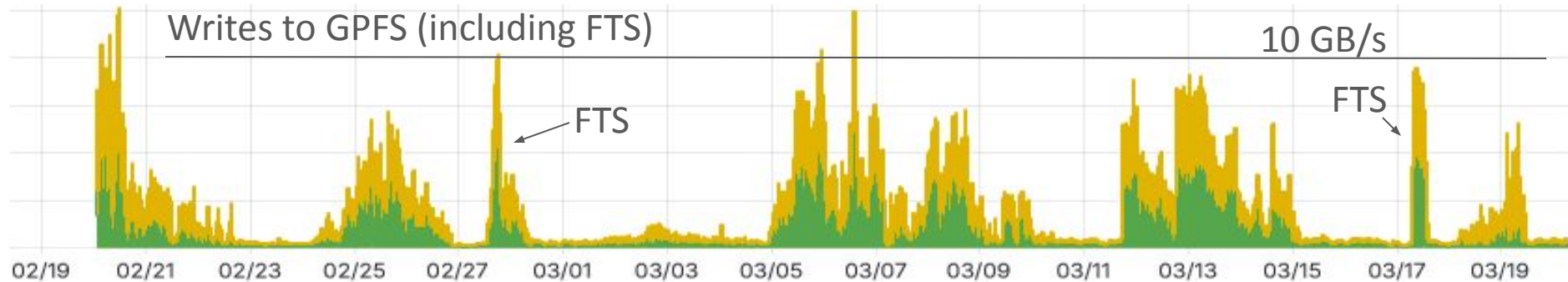
40 GB/s



Data processing activity at CNAF

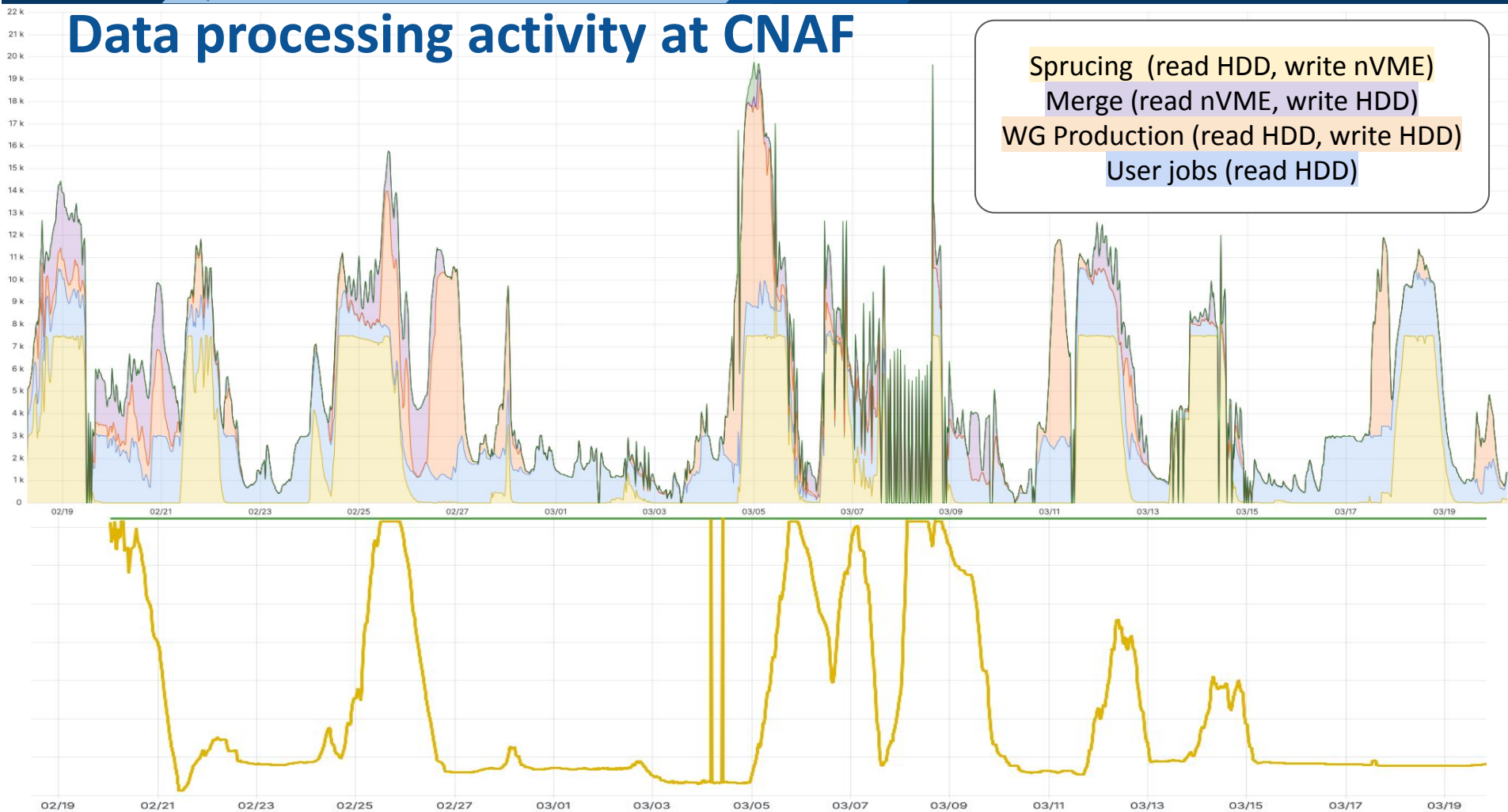


Writes to GPFS (including FTS)



Data processing activity at CNAF

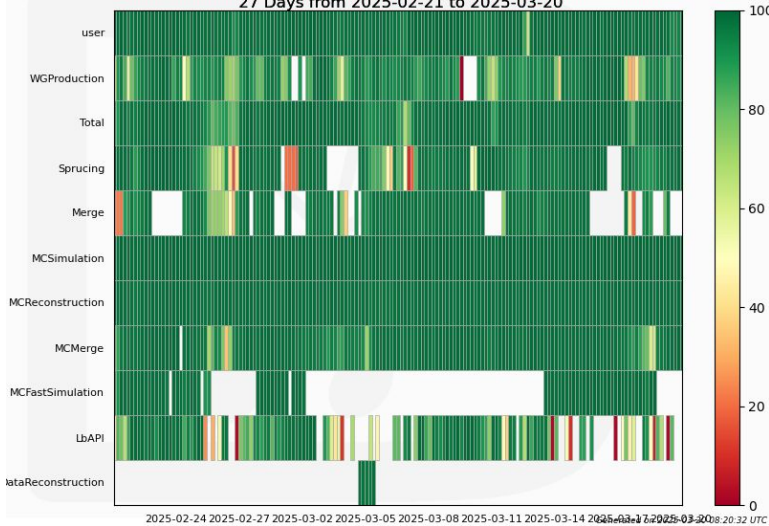
Sprucing (read HDD, write nVME)
 Merge (read nVME, write HDD)
 WG Production (read HDD, write HDD)
 User jobs (read HDD)



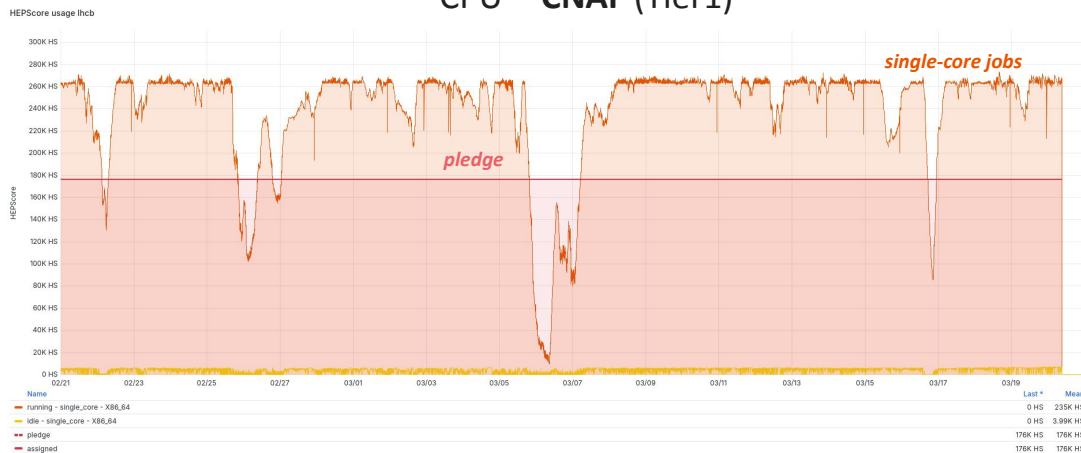
CPU usage

The use of CPU resources is at **nominal values**

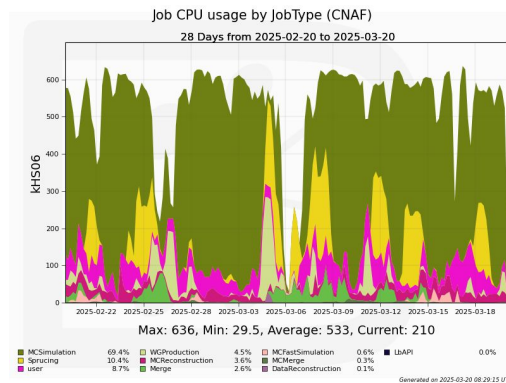
Job CPU efficiency by JobType (CNAF)
27 Days from 2025-02-21 to 2025-03-20



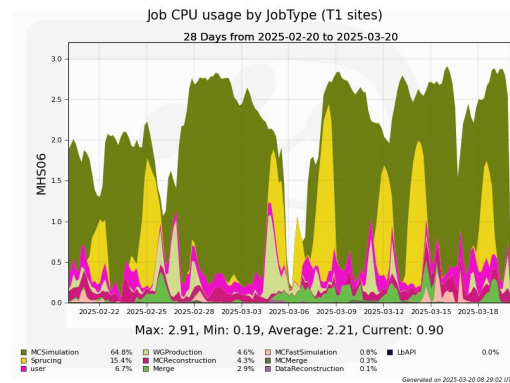
CPU – CNAF (Tier1)



from DIRAC: CNAF (Tier1 + Tier2)



from DIRAC: all Tier1 sites



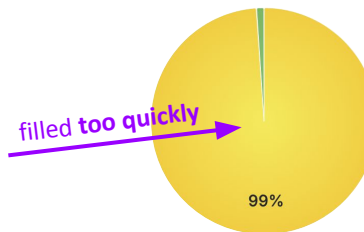
Backup

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

