Update on ATLAS resource needs for 2025

WLCG MB

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On behalf of the ATLAS S&C community

Update on ATLAS resource needs for 2025 - Preliminary

The ever changing Run 3 schedule has presented challenges determining the resource requirements

- Often changing *after* our resource request has been submitted to the C-RSG
- This essentially only affects TAPE; disk and CPU can be dynamically adjusted during the year
- The approximate conversion is 2.5PB tape per 1 week of running with our total trigger rate, RAW event size

This is our understanding of the changes

- We took less data in 2023 than originally planned, and therefore reduced our total tape requirements by 10PB
- Then Tier 1 sites were asked to bring forward 10 PB of pledge from 2025 (same at Tier-0) to account for shift of 4 weeks of running from 2025 to 2024 (with later start in 2025, as the YETS length is fixed)
  - *We did have a few sites complaining about tape in 2024 — with two T1s essentially running out*
- The run starts later in 2025, but will also be around 3 weeks longer, so we now need that tape back
  - *We would like a little contingency, for example to cover the case of a faster luminosity ramp up*

Therefore we will need a total of an additional 20PB tape, 10PB for the Tier-0 and 10PB for the Tier-1s, to cover this extra data. This will be added to the 2026 request

(Not for today) the extra running in 2026 starts early, so 2026 tape will also need to come earlier than usual