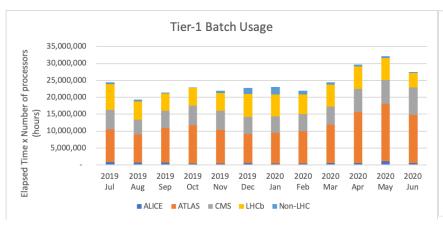
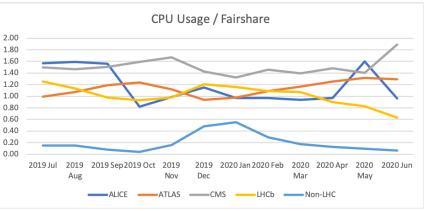
# Experiment Resource Usage

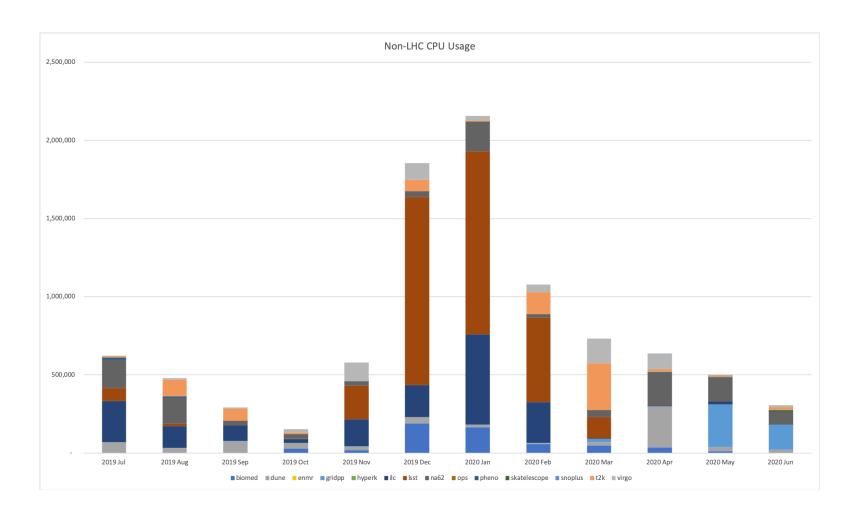
## CPU usage



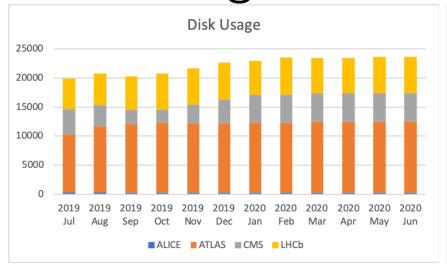


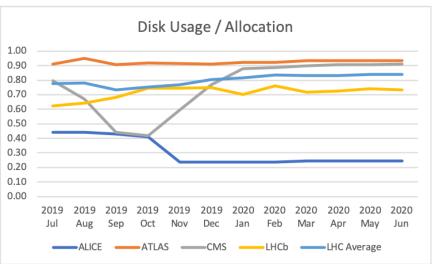
|         | 2019 Jul   | 2019 Aug   | 2019 Sep   | 2019 Oct   | 2019 Nov   | 2019 Dec   | 2020 Jan   | 2020 Feb   | 2020 Mar   | 2020 Apr   | 2020 May   | 2020 Jun   |
|---------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| ALICE   | 849,747    | 678,849    | 740,635    | 417,637    | 476,932    | 577,619    | 495,849    | 470,636    | 507,078    | 638,351    | 1,132,630  | 585,478    |
| ATLAS   | 9,698,040  | 8,278,950  | 10,194,617 | 11,389,927 | 9,820,257  | 8,511,746  | 9,045,135  | 9,504,706  | 11,405,682 | 14,925,560 | 16,888,304 | 14,149,728 |
| CMS     | 5,762,546  | 4,439,334  | 5,063,490  | 5,745,714  | 5,745,714  | 5,098,194  | 4,801,756  | 5,010,961  | 5,340,933  | 6,925,978  | 7,057,414  | 8,138,658  |
| LHCb    | 7,548,786  | 5,383,885  | 5,168,849  | 5,260,817  | 5,260,817  | 6,733,941  | 6,561,059  | 5,858,582  | 6,453,564  | 6,598,097  | 6,529,994  | 4,262,488  |
| Non-LHC | 621,407    | 479,541    | 290,891    | 152,487    | 579,032    | 1,854,256  | 2,155,979  | 1,078,407  | 731,979    | 637,311    | 499,846    | 304,850    |
| Total   | 24,480,527 | 19,260,558 | 21,458,483 | 22,966,582 | 21,882,752 | 22,775,755 | 23,059,778 | 21,923,292 | 24,439,236 | 29,725,297 | 32,108,188 | 27,441,202 |

# Non-LHC CPU Usage



#### Disk usage

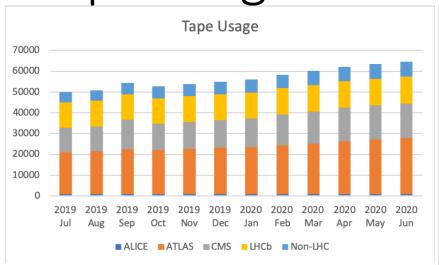


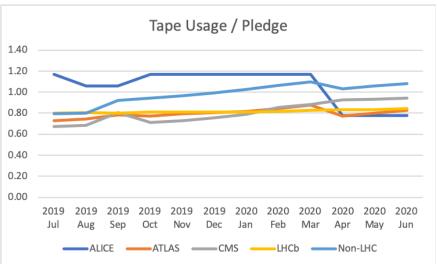


| Usage | 2019 Jul | 2019 Aug | 2019 Sep | 2019 Oct | 2019 Nov | 2019 Dec | 2020 Jan | 2020 Feb | 2020 Mar | 2020 Apr | 2020 May | 2020 Jun |
|-------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| ALICE | 336      | 336      | 327      | 311      | 314      | 314      | 314      | 314      | 322      | 322      | 322      | 322      |
| ATLAS | 10000    | 11390    | 11800    | 11940    | 11900    | 11877    | 12,000   | 12,000   | 12,170   | 12,150   | 12,161   | 12,170   |
| CMS   | 4327     | 3641     | 2400     | 2270     | 3229     | 4178     | 4,774    | 4,814    | 4,890    | 4,930    | 4,929    | 4,960    |
| LHCb  | 5213     | 5375     | 5700     | 6250     | 6237     | 6281     | 5,859    | 6,351    | 6,020    | 6,060    | 6,200    | 6,140    |
| Total | 19876    | 20742    | 20227    | 20771    | 21680    | 22650    | 22947    | 23479    | 23402    | 23462    | 23612    | 23592    |

- ALICE usage stayed low as they couldn't effectively write to Echo due to bug in xrdcp -f.
- Dune only non-LHC VO using storage so far (929TB).

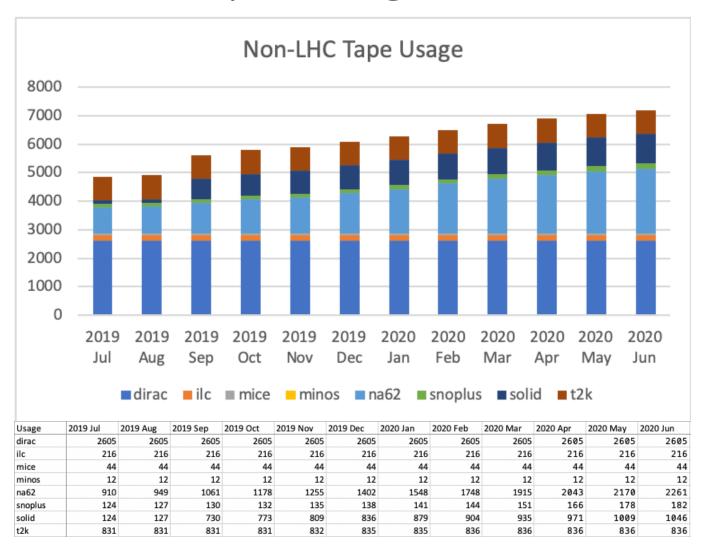
### Tape usage





| Usage   | 2019 Jul | 2019 Aug | 2019 Sep | 2019 Oct | 2019 Nov | 2019 Dec | 2020 Jan | 2020 Feb | 2020 Mar | 2020 Apr | 2020 May | 2020 Jun |
|---------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| ALICE   | 882      | 798      | 798      | 882      | 882      | 882      | 882      | 882      | 882      | 882      | 882      | 882      |
| ATLAS   | 20,046   | 20,634   | 21,638   | 21,361   | 21,899   | 22,257   | 22,550   | 23,347   | 24,235   | 25315    | 26194    | 27027    |
| CMS     | 11,860   | 12,008   | 14,181   | 12,477   | 12,779   | 13,258   | 13,911   | 15,066   | 15,537   | 16335    | 16435    | 16598    |
| LHCb    | 12,226   | 12,310   | 12,232   | 12,340   | 12,365   | 12,383   | 12,391   | 12,499   | 12,669   | 12740    | 12756    | 12861    |
| Non-LHC | 4,866    | 4,911    | 5,629    | 5,791    | 5,908    | 6,088    | 6,280    | 6,509    | 6,714    | 6,893    | 7,070    | 7,202    |
| Total   | 49880    | 50661    | 54478    | 52851    | 53833    | 54868    | 56014    | 58303    | 60037    | 62165    | 63337    | 64570    |

#### Non-LHC Tape usage



## Tape packing efficiency

| Experiment  | Space Used | Tapes used | Ratio |
|-------------|------------|------------|-------|
| atlasTape   | 24816      | 25778      | 0.963 |
| cmsTape     | 15923      | 17987      | 0.885 |
| IhcbRawRdst | 12709      | 12661      | 1.004 |
| diracTape   | 2605       | 2362       | 1.103 |
| na62Tape    | 1915       | 1872       | 1.023 |
| solidTape   | 935        | 601        | 1.556 |
| aliceTape   | 882        | 798        | 1.105 |
| t2kTape     | 836        | 944        | 0.886 |
| ilcTape     | 216        | 326        | 0.663 |
| snoplusTape | 151        | 163        | 0.926 |
| miceTape    | 44         | 146        | 0.301 |
| minosTape   | 12         | 17         | 0.706 |
| Total       | 61044      | 63655      | 0.959 |