Experiment Resource Usage
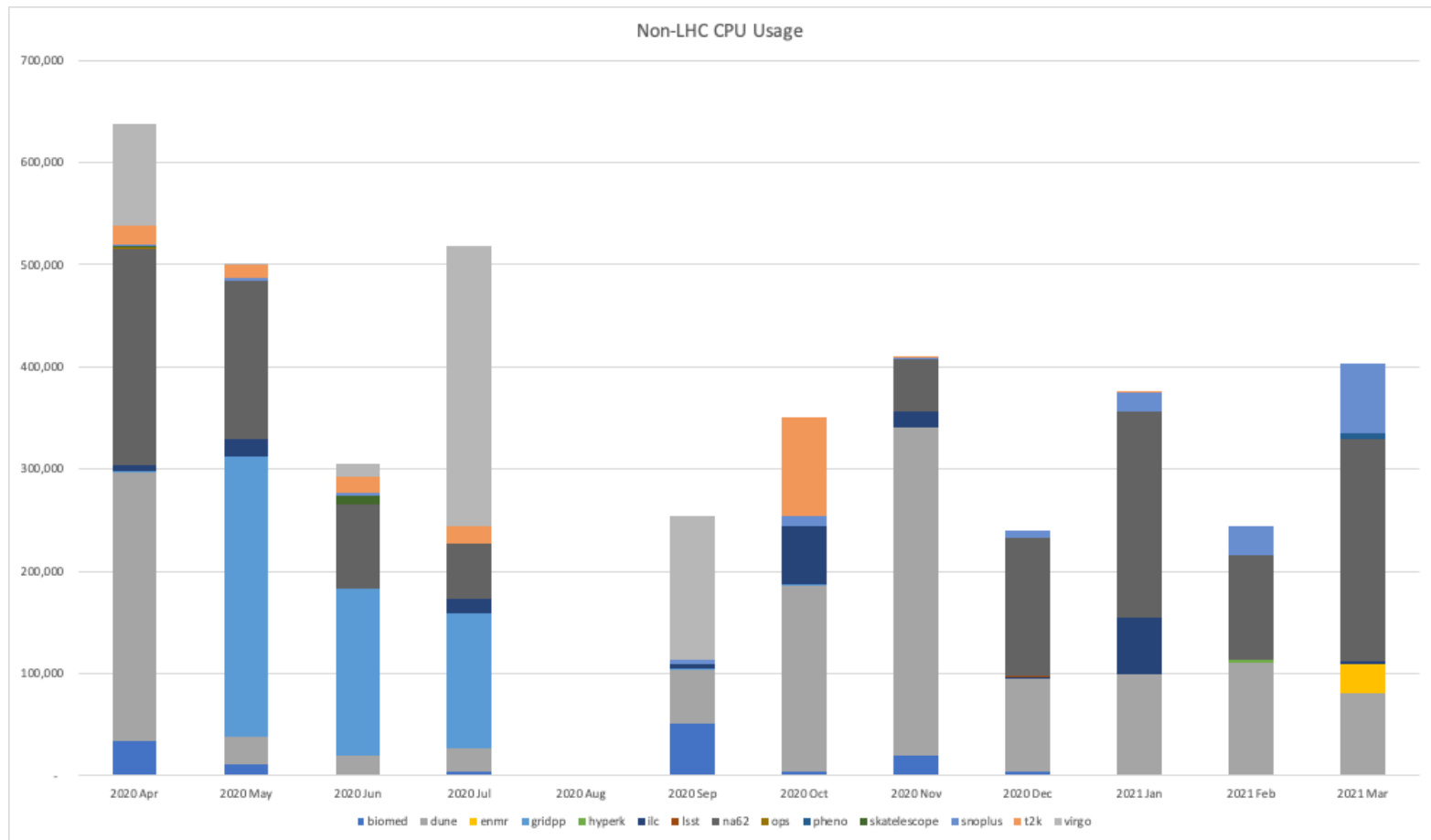
CPU usage
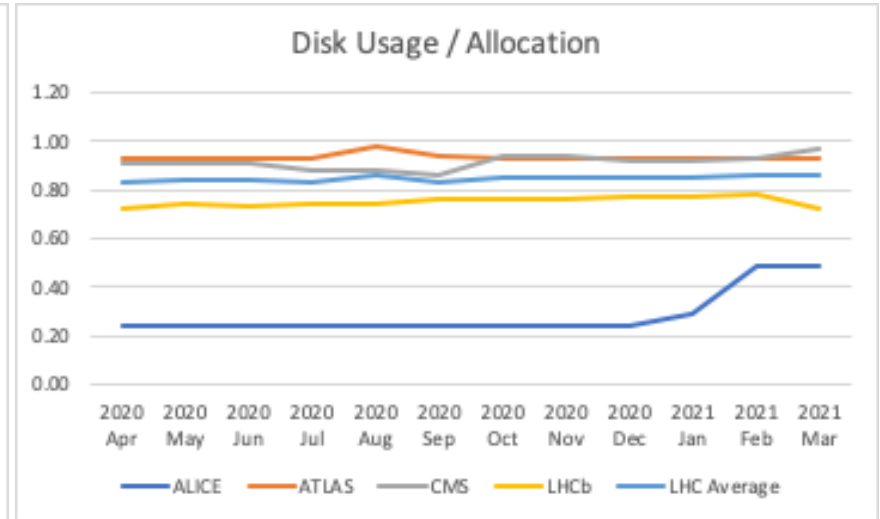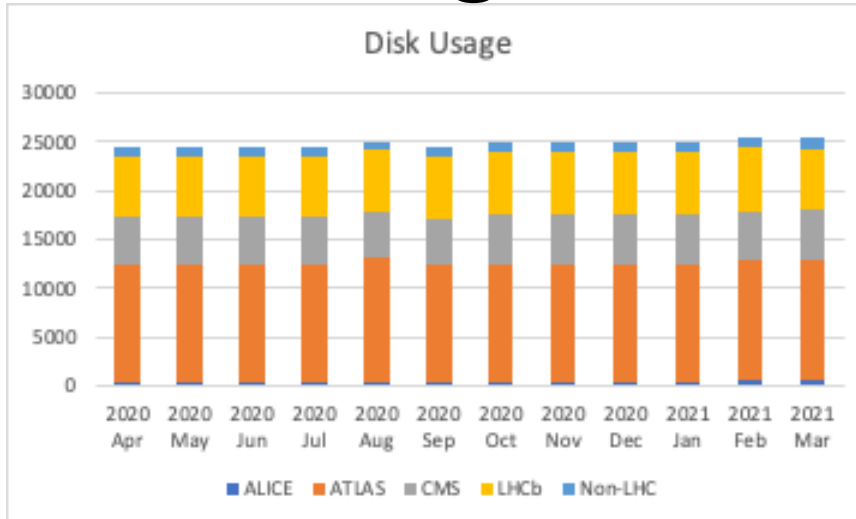
Tier-1 Batch Usage | **CPU Usage / Fairshare**
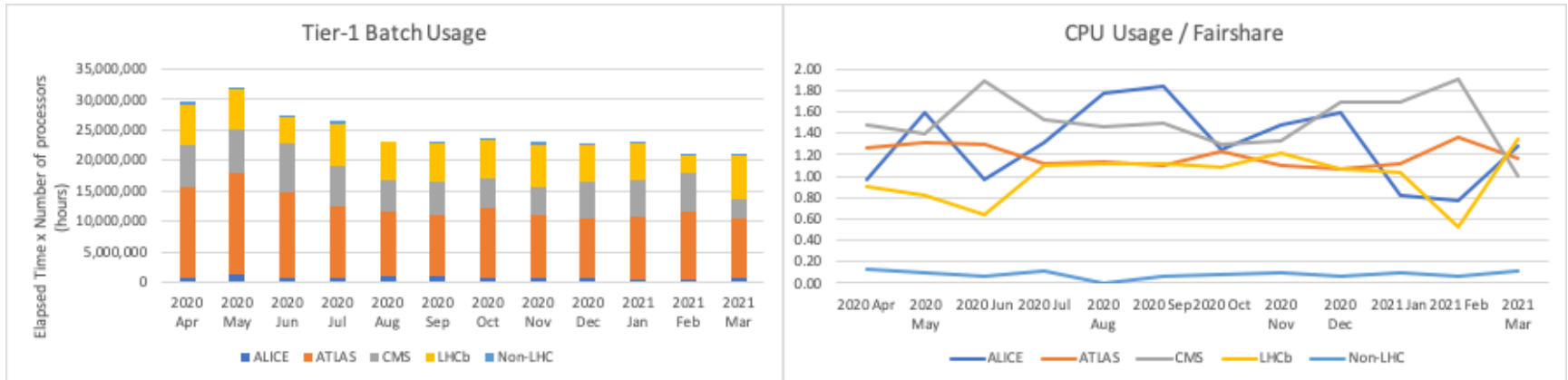
	2020 Mar	2020 Apr	2020 May	2020 Jun	2020 Jul	2020 Aug	2020 Sep	2020 Oct	2020 Nov	2020 Dec	2021 Jan	2021 Feb	2021 Mar
ALICE	507,078	638,351	1,132,630	585,478	773,662	906,080	937,213	653,402	753,433	801,061	418,765	355,201	596,475
ATLAS	11,405,682	14,925,560	16,888,304	14,149,728	11,794,164	10,573,028	10,150,352	11,589,360	10,180,360	9,720,238	10,294,108	11,366,012	9,767,779
CMS	5,340,933	6,925,978	7,057,414	8,138,658	6,379,019	5,316,907	5,386,818	4,810,743	4,781,326	6,079,343	6,131,607	6,255,308	3,338,753
LHCb	6,453,564	6,598,097	6,529,994	4,262,488	7,170,628	6,413,105	6,343,609	6,296,588	6,913,018	5,971,874	5,885,074	2,721,835	6,985,137
Non-LHC	731,979	637,311	499,846	304,850	518,937	-	254,775	351,252	409,019	240,043	375,530	243,648	403,049
Total	24,439,236	29,725,297	32,108,188	27,441,202	26,636,410	23,209,120	23,072,767	23,701,344	23,037,157	22,812,558	23,105,083	20,942,005	21,091,192

- Accounting problem meant non-LHC data was lost in August 2020.
- Issue with LHCb job starts led to lower usage in February 2021.
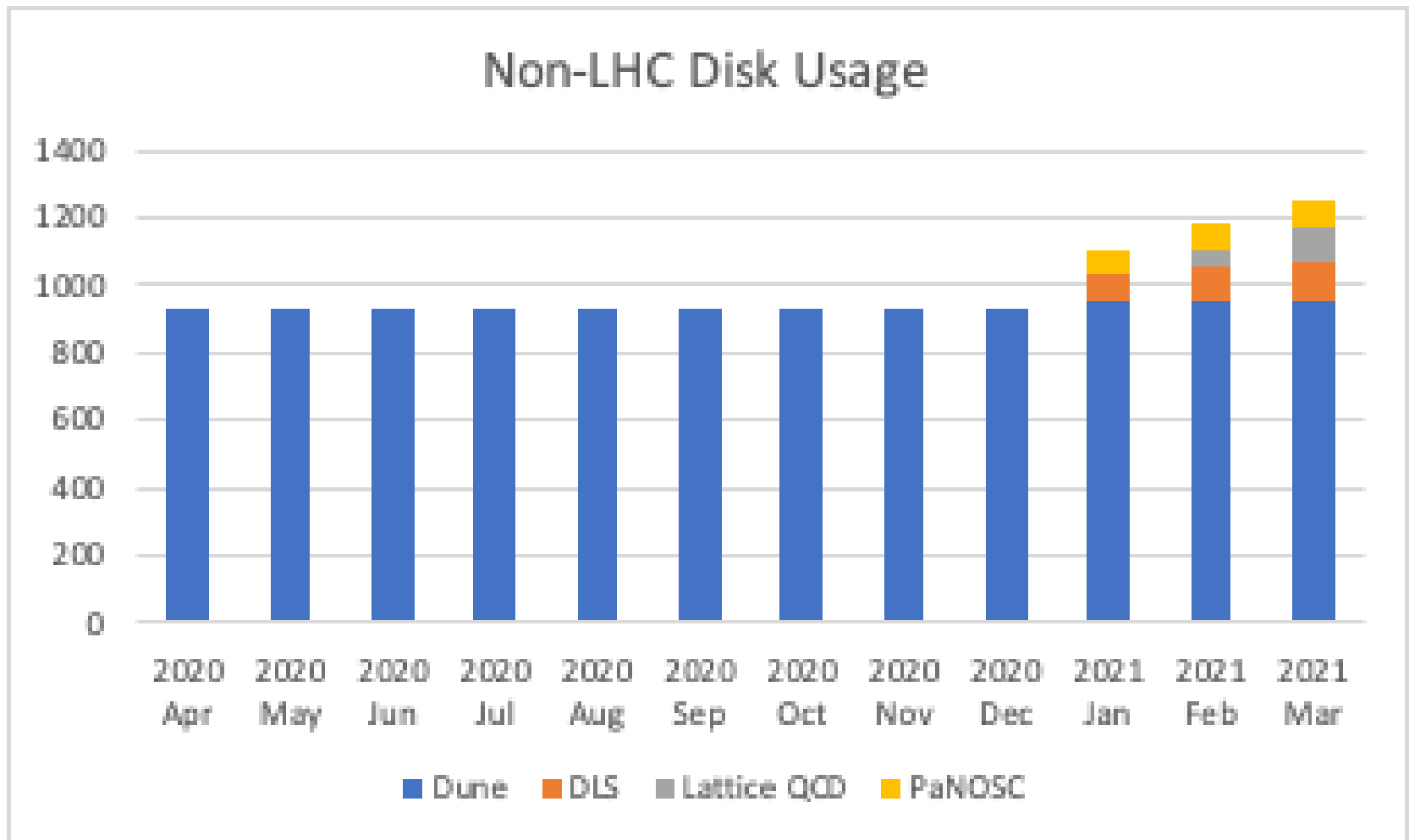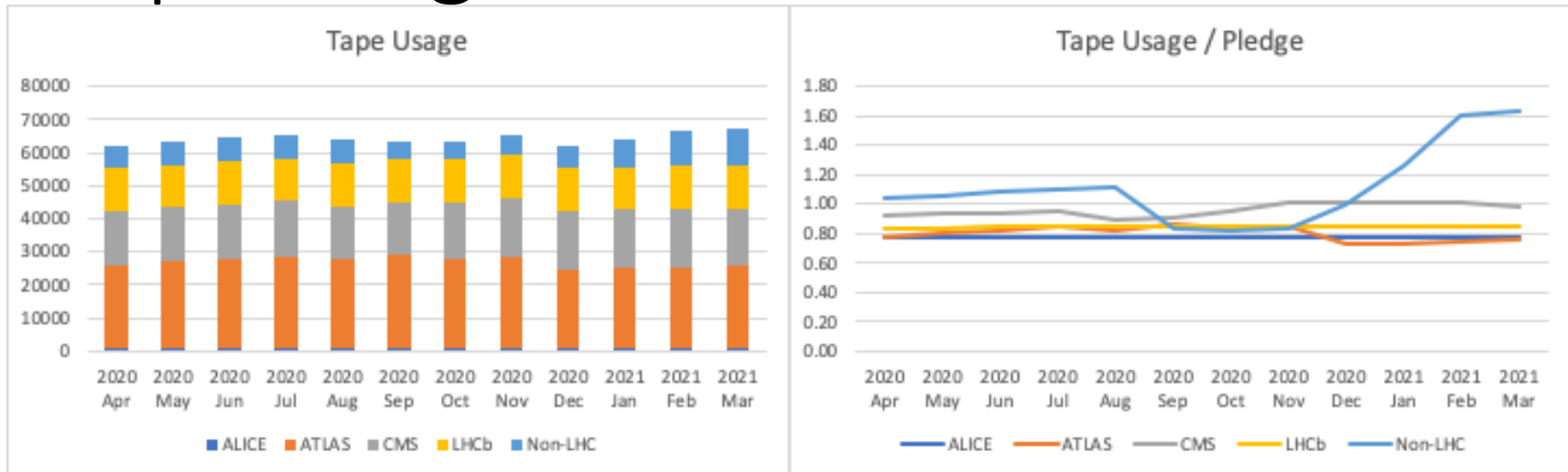
Non-LHC CPU Usage

Disk usage

Usage	2020 Apr	2020 May	2020 Jun	2020 Jul	2020 Aug	2020 Sep	2020 Oct	2020 Nov	2020 Dec	2021 Jan	2021 Feb	2021 Mar
ALICE	322	322	322	322	322	323	323	322	323	387	643	640
ATLAS	12,150	12,161	12,170	12,167	12,812	12,180	12,140	12,137	12,143	12,104	12,154	12,160
CMS	4,930	4,929	4,960	4,806	4,800	4,690	5,090	5,116	5,006	5,014	5,066	5,268
LHCb	6,060	6,200	6,140	6,211	6,210	6,350	6,410	6,396	6,470	6,477	6,511	6,065
Total	23462	23612	23592	23506	24144	23543	23963	23971	23942	23982	24374	24133

Since January 2021 have had S3 accounting
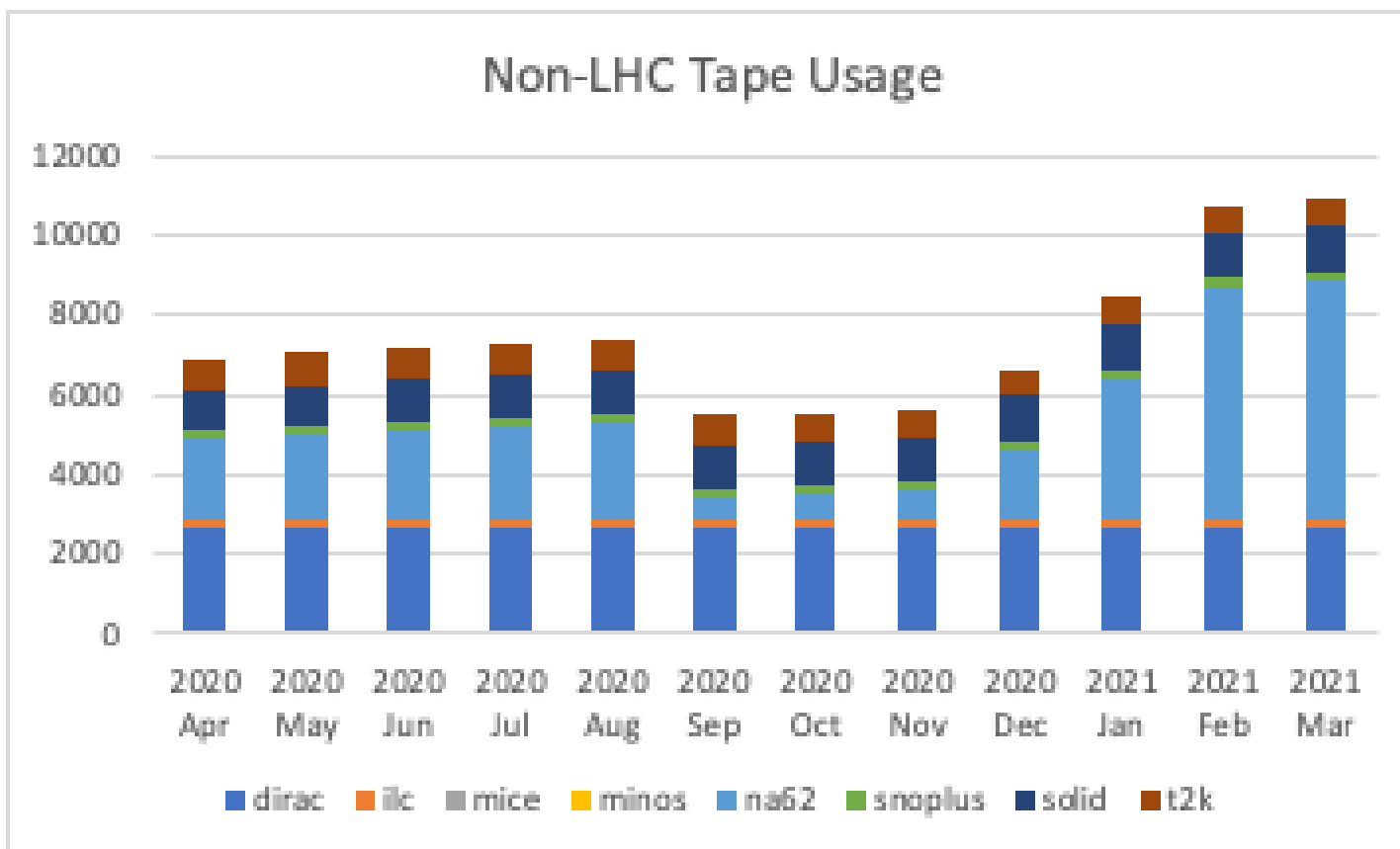
Non-LHC Disk Usage

Tape usage

Usage	2020 Apr	2020 May	2020 Jun	2020 Jul	2020 Aug	2020 Sep	2020 Oct	2020 Nov	2020 Dec	2021 Jan	2021 Feb	2021 Mar
ALICE	882	882	882	882	882	882	882	882	882	882	882	882
ATLAS	25315	26194	27027	27658	26832	28065	27285	27815	23868	24069	24452	25039
CMS	16335	16435	16598	16816	15837	16088	16770	17723	17718	17718	17718	17362
LHCb	12740	12756	12861	12877	12904	12920	12973	12990	12999	13019	13034	13054
Non-LHC	6893	7070	7202	7292	7412	5522	5492	5596	6611	8431	10728	10895
Total	62165	63337	64570	65525	63867	63477	63402	65006	62078	64119	66814	67232

- Na62 usage now at 6PB, should they be considered a separate line item?

Non-LHC Tape usage

Non-LHC Tape Usage

Usage	2020 Apr	2020 May	2020 Jun	2020 Jul	2020 Aug	2020 Sep	2020 Oct	2020 Nov	2020 Dec	2021 Jan	2021 Feb	2021 Mar
dirac	2605	2605	2605	2605	2605	2605	2605	2605	2605	2605	2605	2605
ilc	216	216	216	216	216	216	216	216	216	216	216	216
mice	44	44	44	44	44	44	44	44	44	44	44	44
minos	12	12	12	12	12	12	12	12	12	12	12	12
na62	2043	2170	2261	2350	2463	599	701	766	1723	3516	5763	5947
snoplus	166	178	182	175	182	184	194	205	230	238	272	242
solid	971	1009	1046	1054	1054	1054	1066	1094	1127	1146	1162	1175
t2k	836	836	836	836	836	808	654	654	654	654	654	654

Tape packing efficiency

- Tape packing efficiency is not calculated correctly during migration from T10KD to IMB JE Media.
  - Empty tapes contribute to poor packing efficiency.