Rapporto delle attività del Tier1 CNAF Maggio 2019

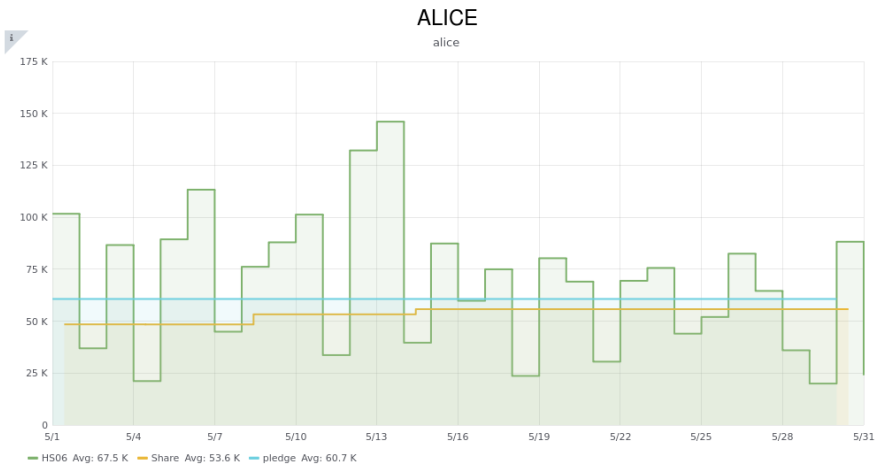
Run Coordinator: Marcelo Soares

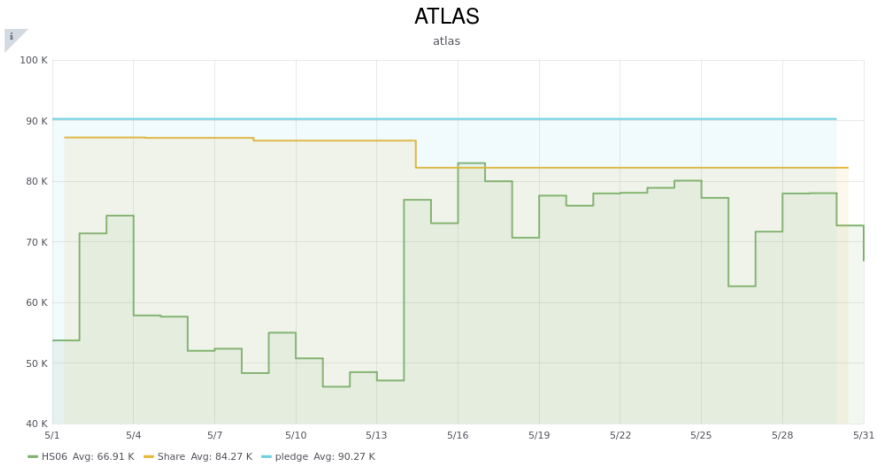
14 giugno 2019

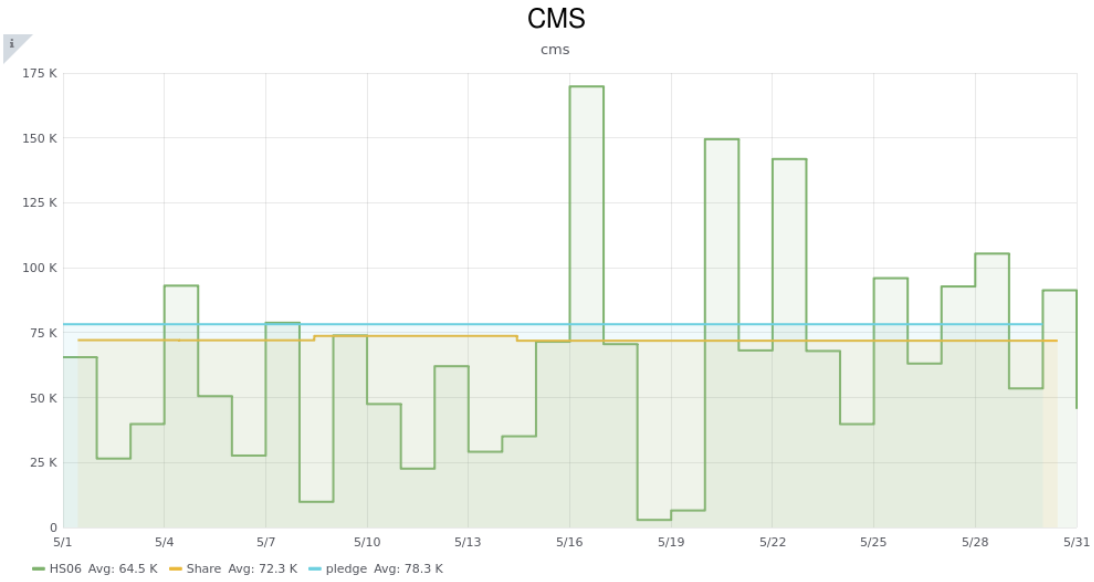
Indice

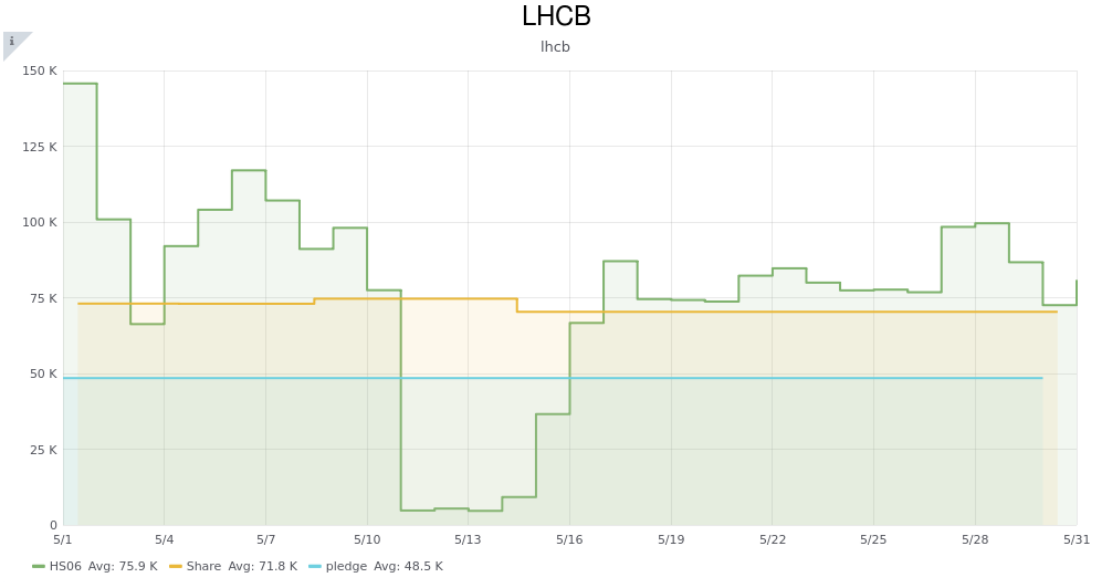
1 Utilizzo delle risorse - Farming

1.1 LHC usage

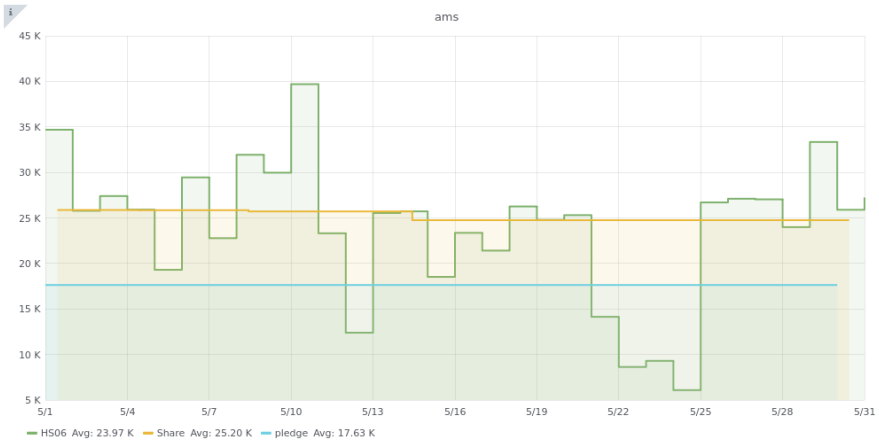


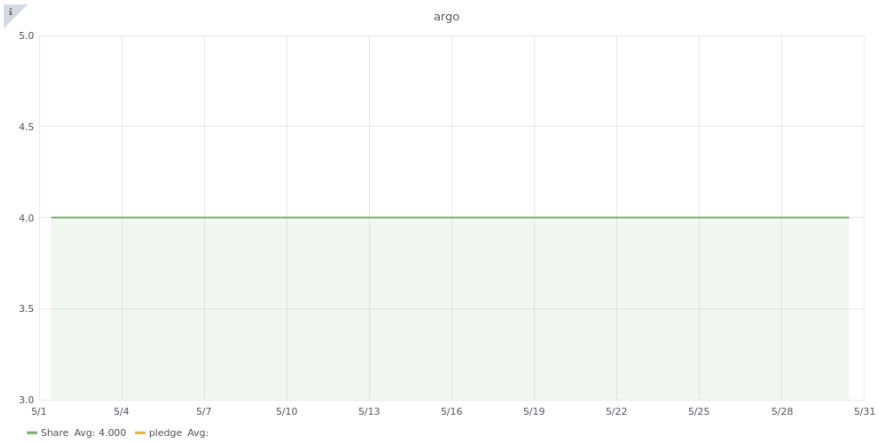


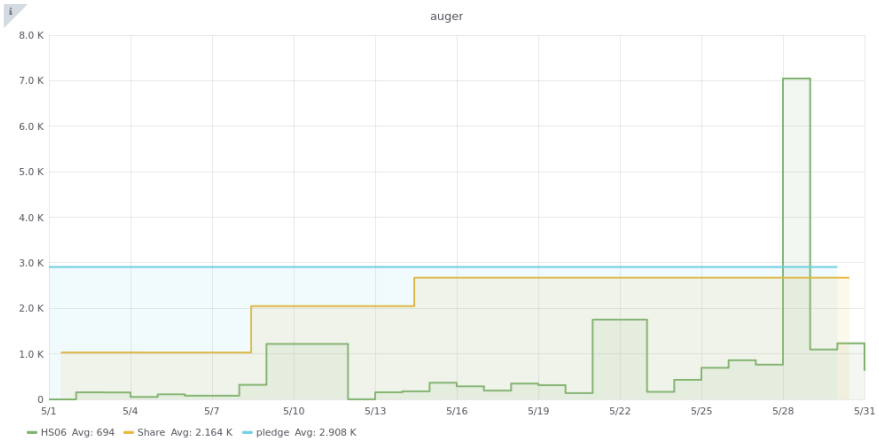

CMS
cms
175 K
150 K
125 K
100 K
75 K
50 K
25 K
0
5/1
5/4
5/7
5/10
5/13
5/16
5/19
5/22
5/25
5/28
5/31
HS06 Avg: 64.5 K
Share Avg: 72.3 K
pledge Avg: 78.3 K

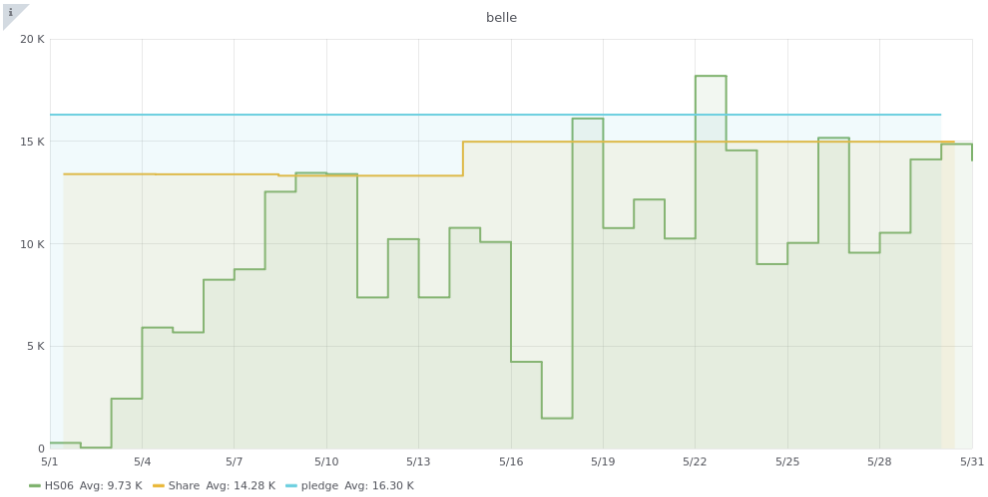

LHCB
lhcb
150 K
125 K
100 K
75 K
50 K
25 K
0
5/1
5/4
5/7
5/10
5/13
5/16
5/19
5/22
5/25
5/28
5/31
HS06 Avg: 75.9 K
Share Avg: 71.8 K
pledge Avg: 48.5 K

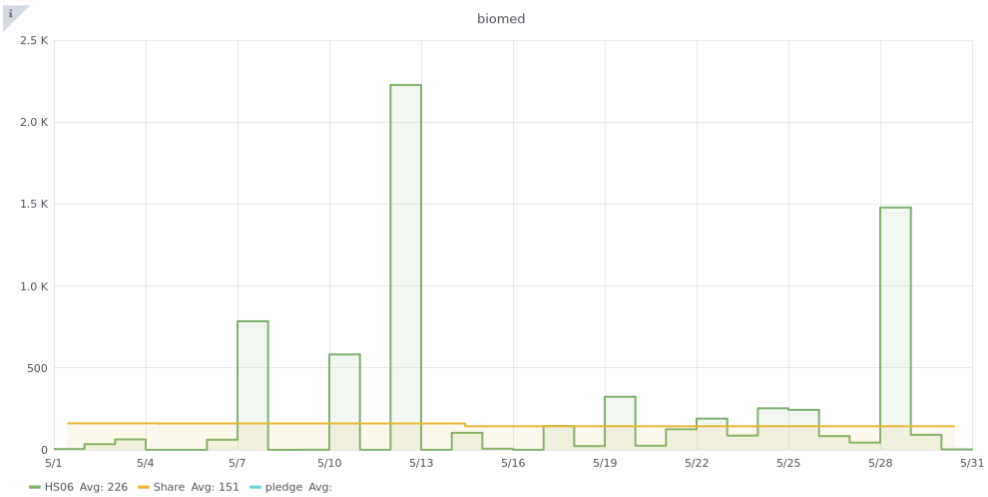
1.2 NO LHC usage

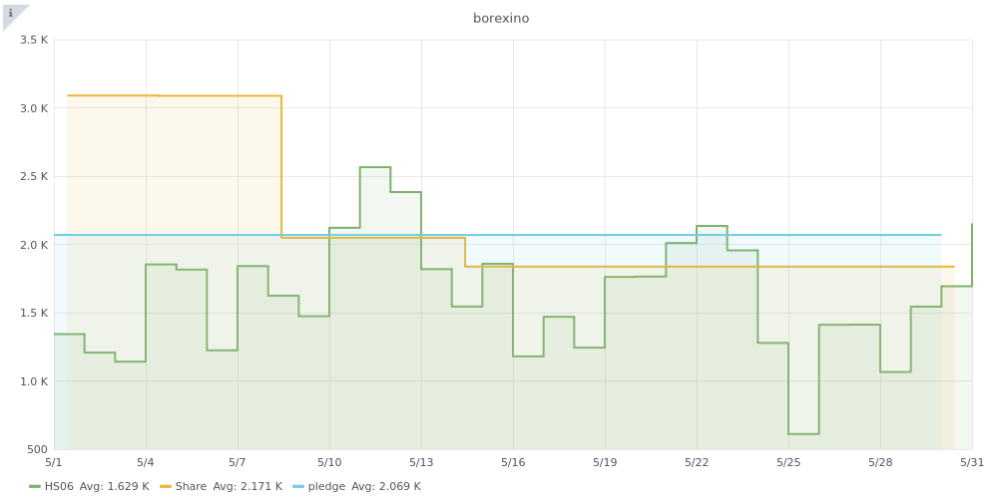


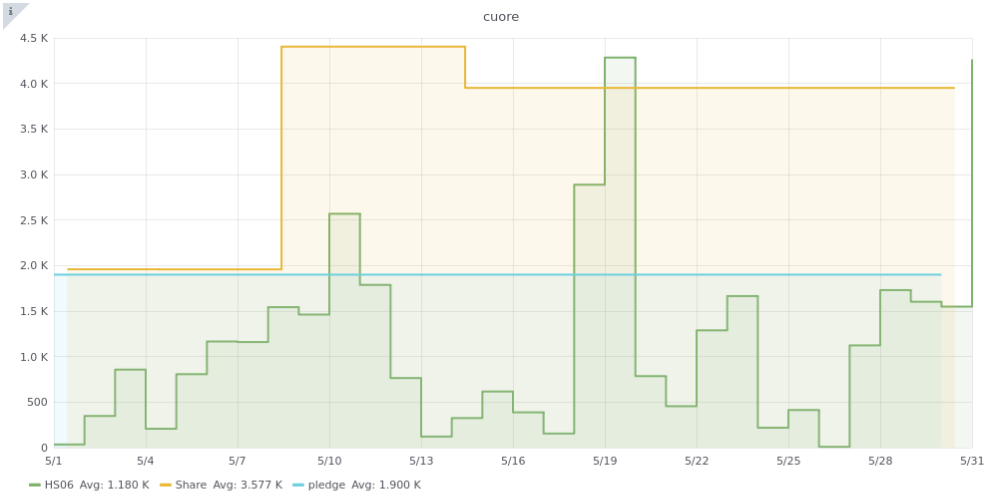


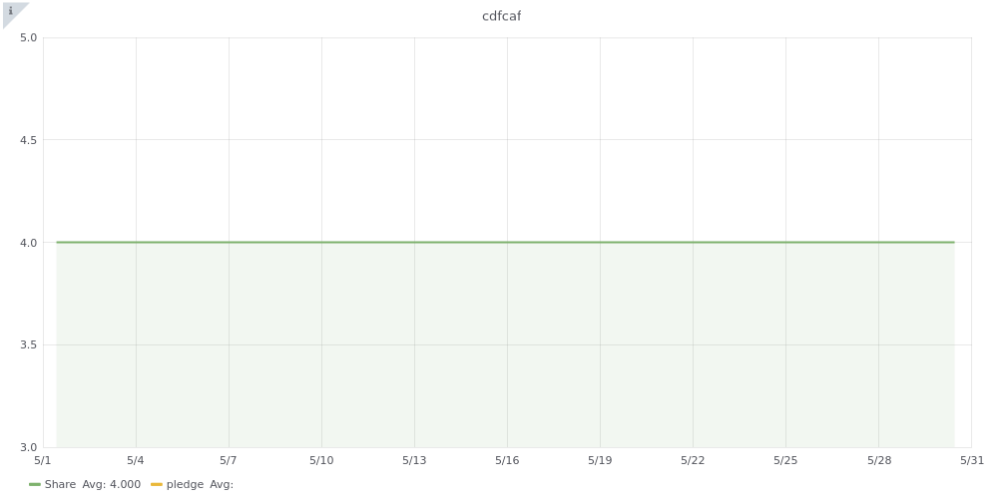


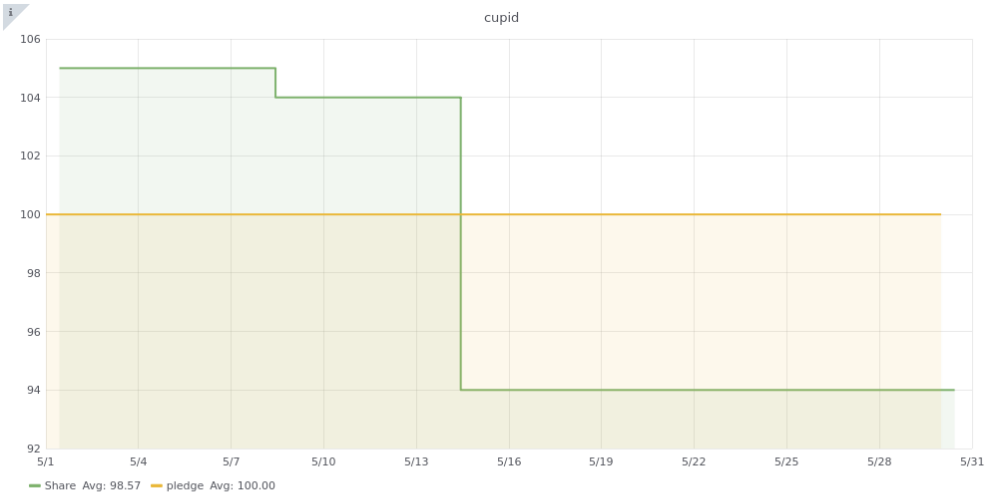

belle
20 K
15 K
10 K
5 K
0
5/1
5/4
5/7
5/10
5/13
5/16
5/19
5/22
5/25
5/28
5/31
HS06 Avg: 9.73 K
Share Avg: 14.28 K
pledge Avg: 16.30 K

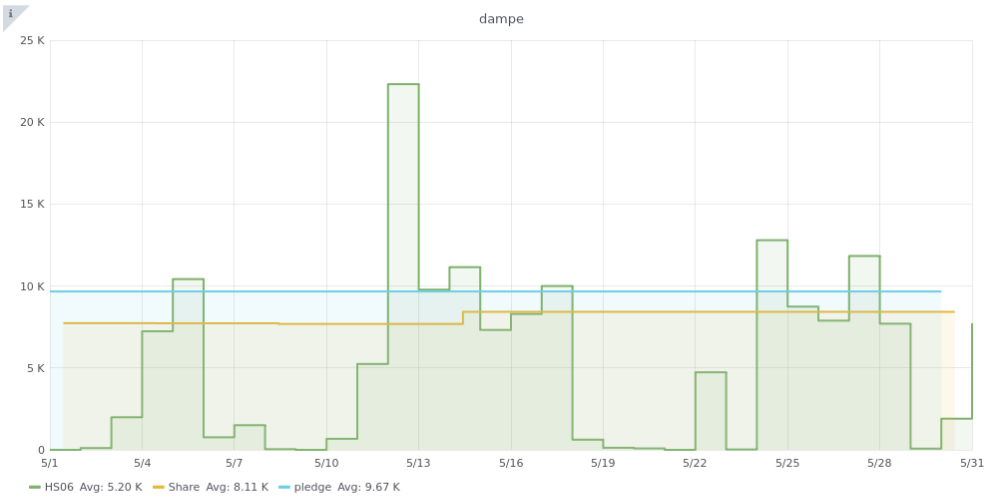

biomed
2.5 K
2.0 K
1.5 K
1.0 K
500
0
5/1
5/4
5/7
5/10
5/13
5/16
5/19
5/22
5/25
5/28
5/31
HS06 Avg: 226
Share Avg: 151
pledge Avg:

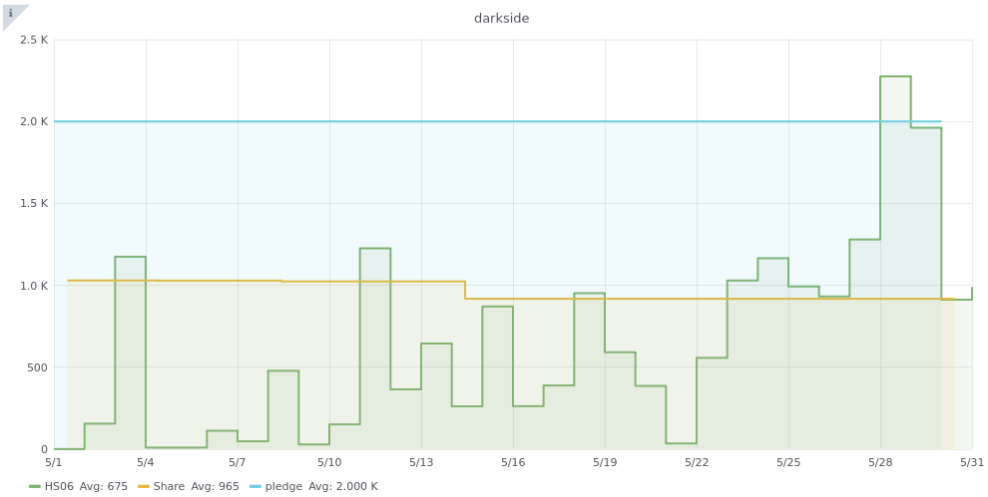

borexino
3.5 K
3.0 K
2.5 K
2.0 K
1.5 K
1.0 K
500
5/1
5/4
5/7
5/10
5/13
5/16
5/19
5/22
5/25
5/28
5/31
HS06 Avg: 1.629 K
Share Avg: 2.171 K
pledge Avg: 2.069 K

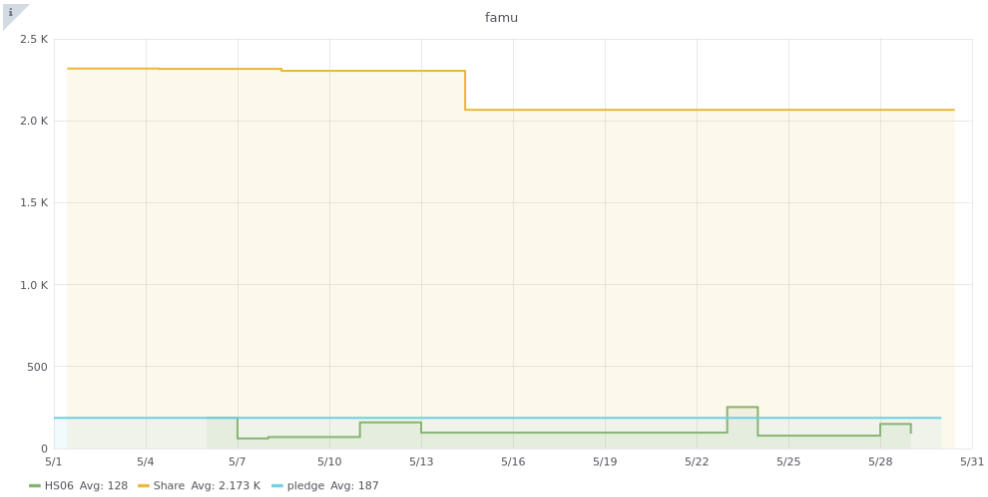

cuore
4.5 K
4.0 K
3.5 K
3.0 K
2.5 K
2.0 K
1.5 K
1.0 K
500
0
5/1
5/4
5/7
5/10
5/13
5/16
5/19
5/22
5/25
5/28
5/31
HS06 Avg: 1.180 K
Share Avg: 3.577 K
pledge Avg: 1.900 K

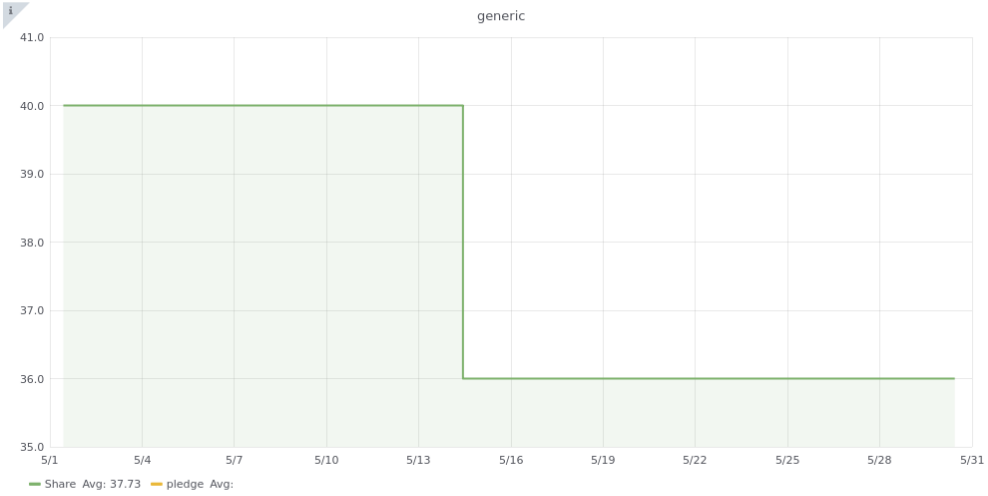

cdfcaf
5.0
4.5
4.0
3.5
3.0
5/1
5/4
5/7
5/10
5/13
5/16
5/19
5/22
5/25
5/28
5/31
Share Avg: 4.000
pledge Avg:

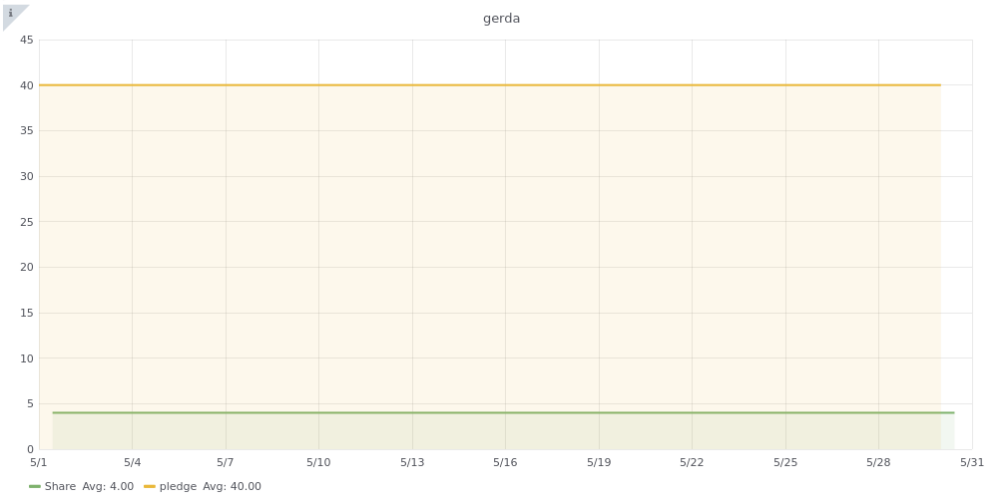

cupid
106
104
102
100
98
96
94
92
5/1
5/4
5/7
5/10
5/13
5/16
5/19
5/22
5/25
5/28
5/31
Share Avg: 98.57
pledge Avg: 100.00

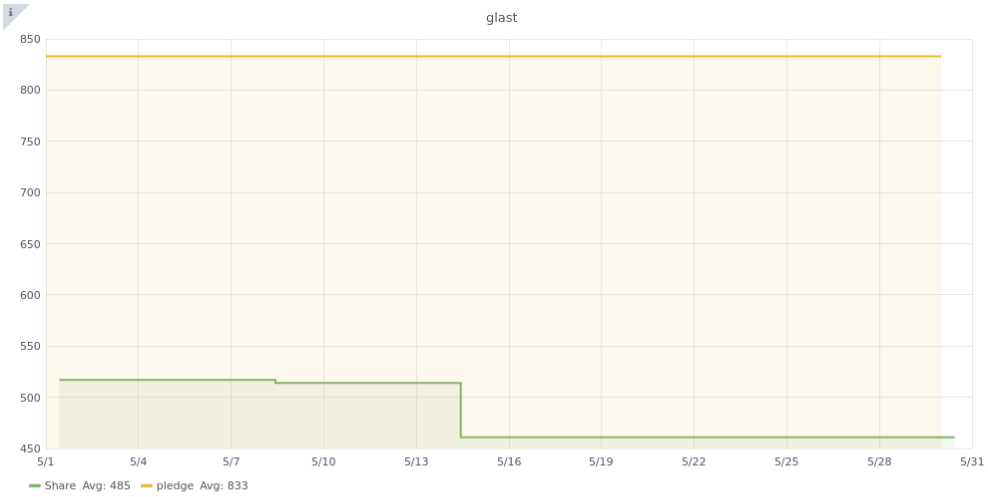

dampe
25 K
20 K
15 K
10 K
5 K
0
5/1
5/4
5/7
5/10
5/13
5/16
5/19
5/22
5/25
5/28
5/31
HS06 Avg: 5.20 K
Share Avg: 8.11 K
pledge Avg: 9.67 K

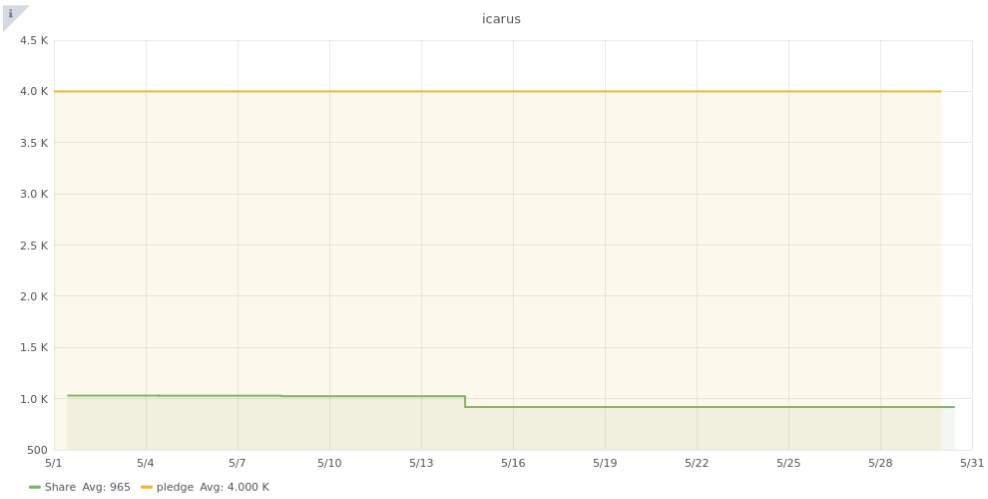

darkside
2.5 K
2.0 K
1.5 K
1.0 K
500
0
5/1
5/4
5/7
5/10
5/13
5/16
5/19
5/22
5/25
5/28
5/31
HS06 Avg: 675
Share Avg: 965
pledge Avg: 2.000 K

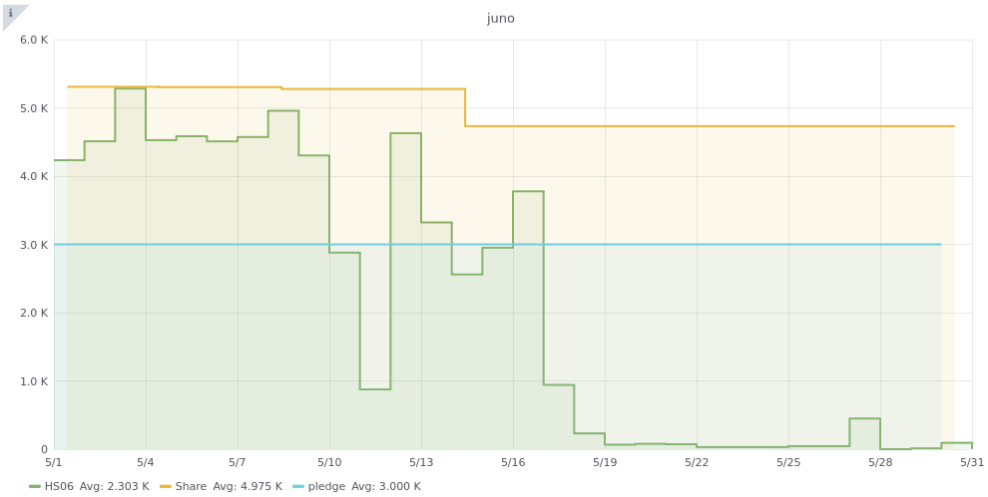

famu
2.5 K
2.0 K
1.5 K
1.0 K
500
0
5/1
5/4
5/7
5/10
5/13
5/16
5/19
5/22
5/25
5/28
5/31
HS06 Avg: 128
Share Avg: 2.173 K
pledge Avg: 187

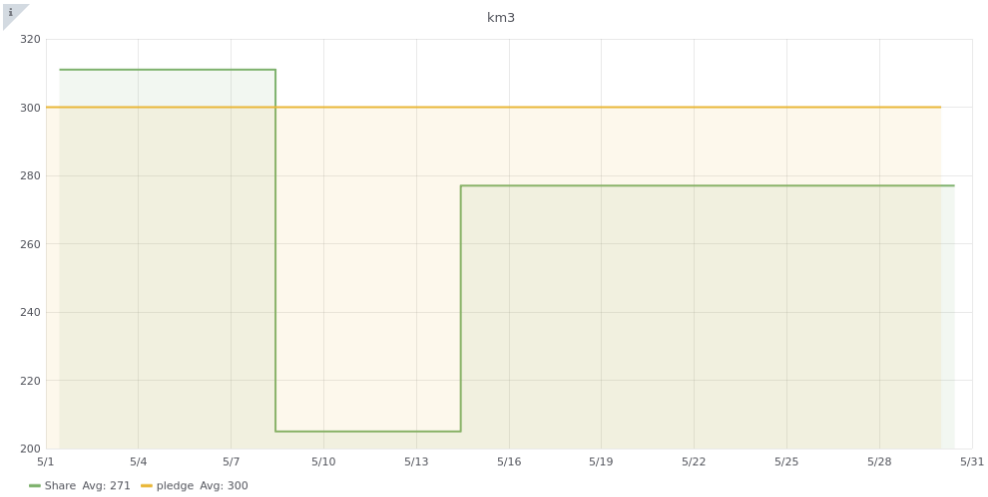

generic
41.0
40.0
39.0
38.0
37.0
36.0
35.0
5/1
5/4
5/7
5/10
5/13
5/16
5/19
5/22
5/25
5/28
5/31
Share Avg: 37.73
pledge Avg:

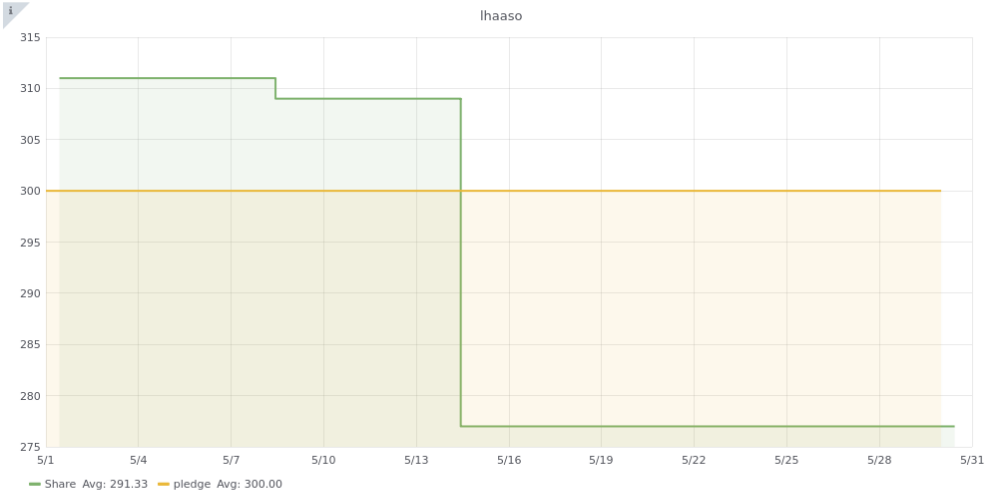

gerda
45
40
35
30
25
20
15
10
5
0
5/1
5/4
5/7
5/10
5/13
5/16
5/19
5/22
5/25
5/28
5/31
Share Avg: 4.00
pledge Avg: 40.00

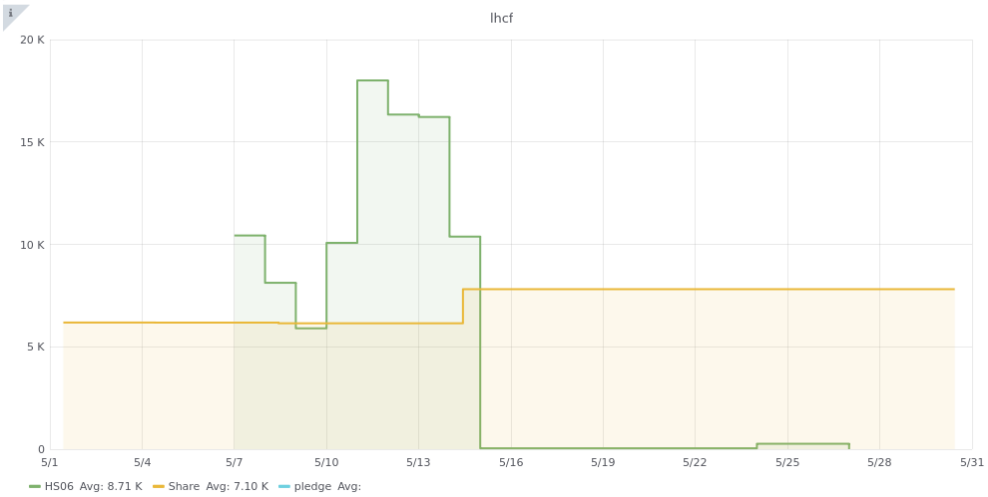

glast
850
800
750
700
650
600
550
500
450
5/1
5/4
5/7
5/10
5/13
5/16
5/19
5/22
5/25
5/28
5/31
Share Avg: 485
pledge Avg: 833

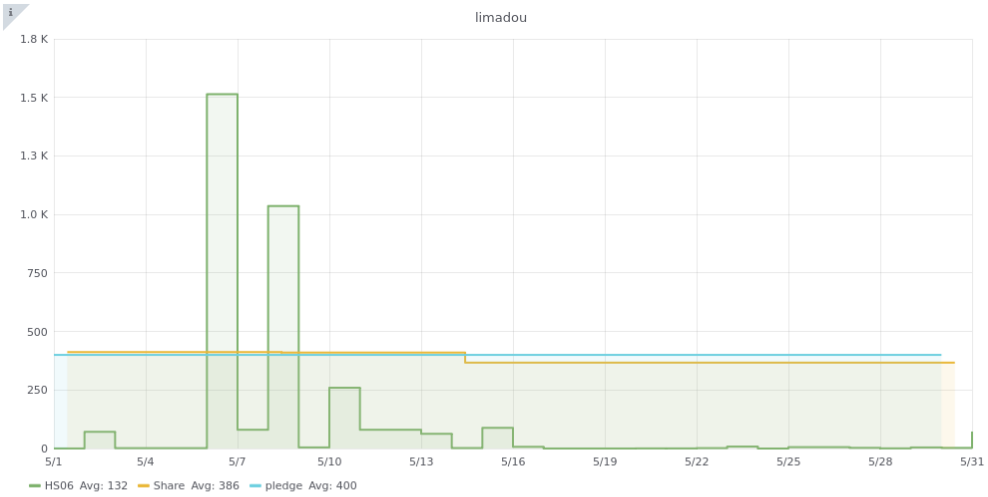

icarus
4.5 K
4.0 K
3.5 K
3.0 K
2.5 K
2.0 K
1.5 K
1.0 K
500
5/1
5/4
5/7
5/10
5/13
5/16
5/19
5/22
5/25
5/28
5/31
Share Avg: 965
pledge Avg: 4.000 K

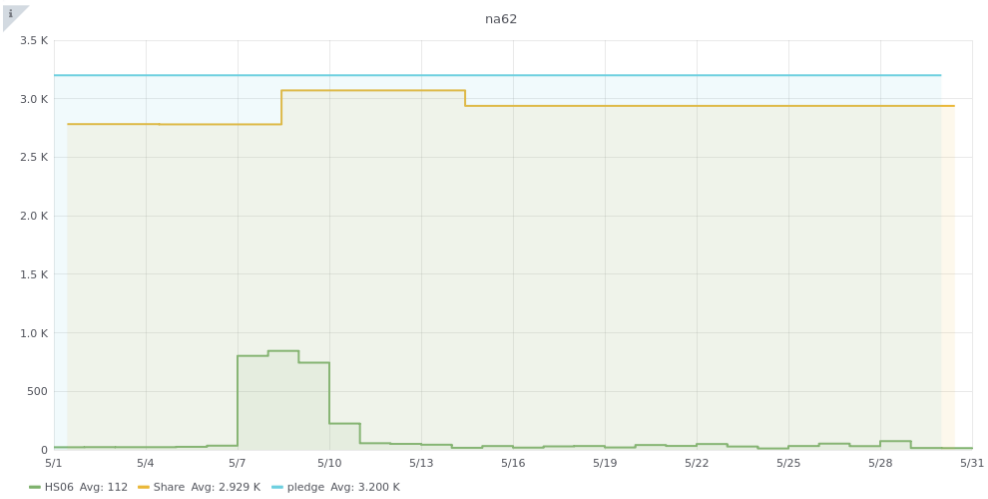

juno
6.0 K
5.0 K
4.0 K
3.0 K
2.0 K
1.0 K
0
5/1
5/4
5/7
5/10
5/13
5/16
5/19
5/22
5/25
5/28
5/31
HS06 Avg: 2.303 K
Share Avg: 4.975 K
pledge Avg: 3.000 K

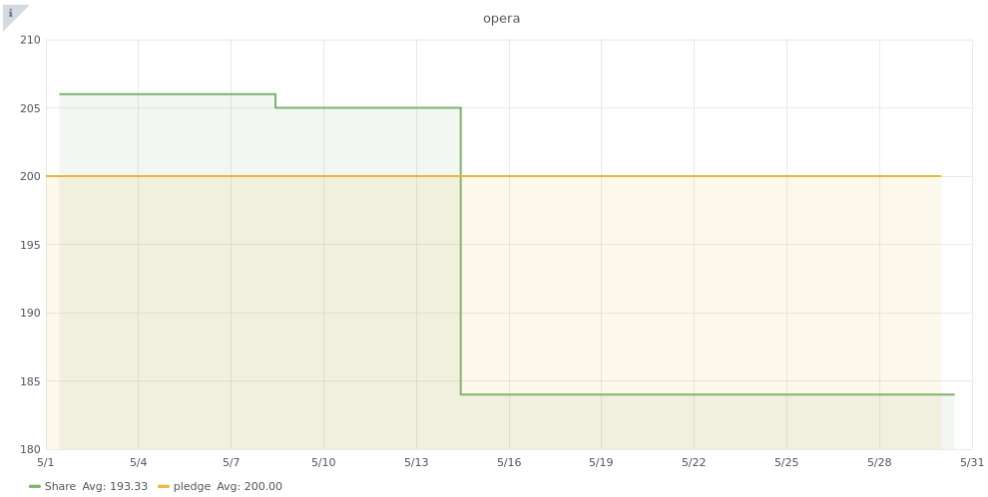

km3
320
300
280
260
240
220
200
5/1
5/4
5/7
5/10
5/13
5/16
5/19
5/22
5/25
5/28
5/31
Share Avg: 271
pledge Avg: 300

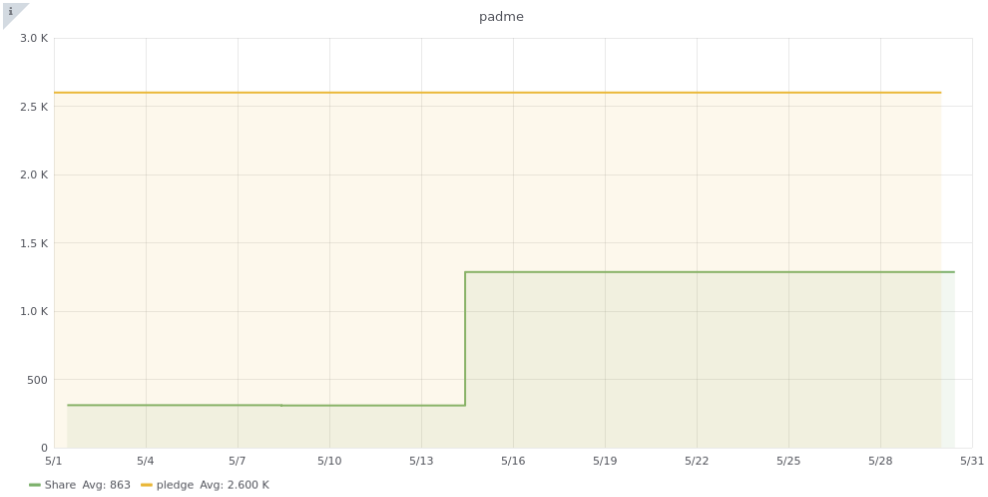

lhaaso
315
310
305
300
295
290
285
280
275
5/1
5/4
5/7
5/10
5/13
5/16
5/19
5/22
5/25
5/28
5/31
Share Avg: 291.33
pledge Avg: 300.00

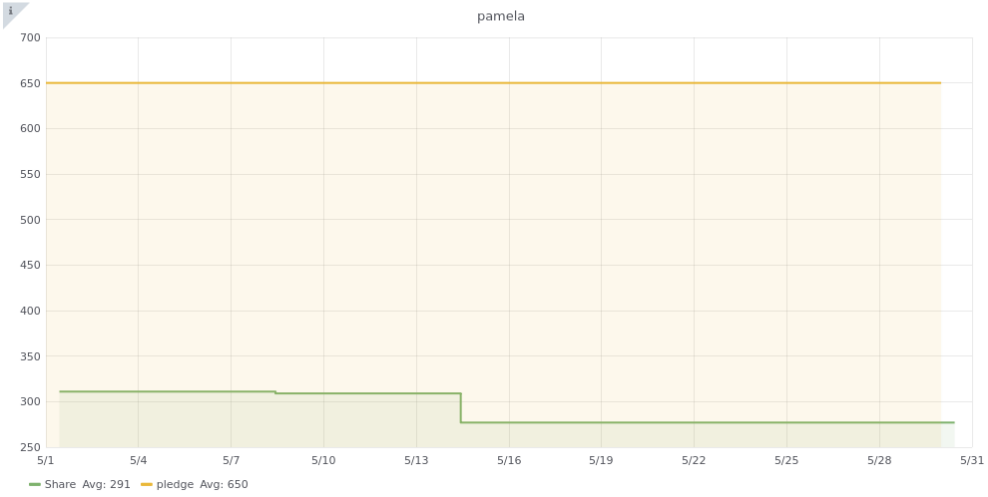

lhcf
20 K
15 K
10 K
5 K
0
5/1
5/4
5/7
5/10
5/13
5/16
5/19
5/22
5/25
5/28
5/31
HS06 Avg: 8.71 K
Share Avg: 7.10 K
pledge Avg:

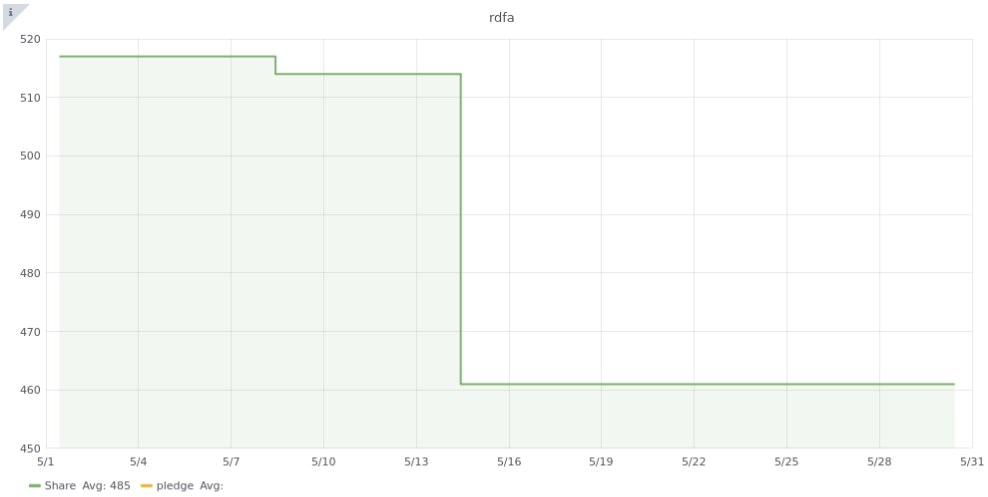

limadou
1.8 K
1.5 K
1.3 K
1.0 K
750
500
250
0
5/1
5/4
5/7
5/10
5/13
5/16
5/19
5/22
5/25
5/28
5/31
HS06 Avg: 132
Share Avg: 386
pledge Avg: 400

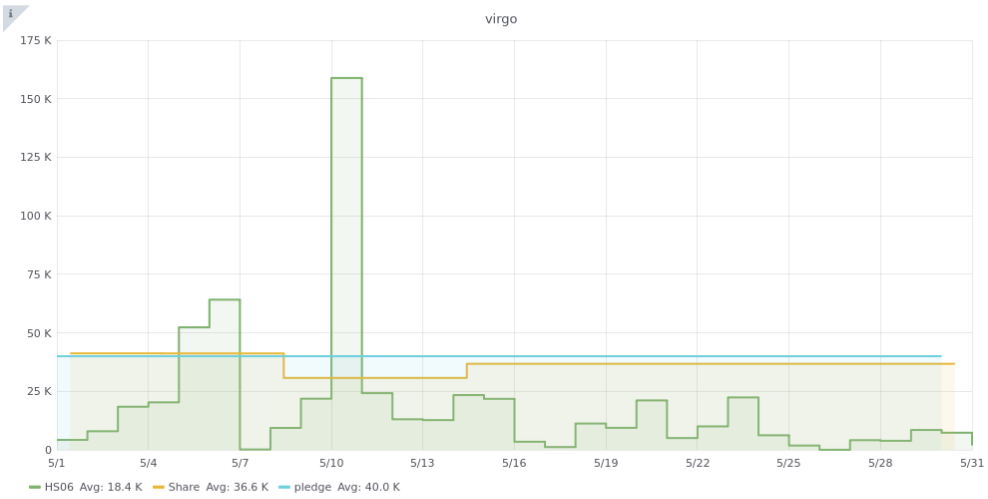

na62
3.5 K
3.0 K
2.5 K
2.0 K
1.5 K
1.0 K
500
0
5/1
5/4
5/7
5/10
5/13
5/16
5/19
5/22
5/25
5/28
5/31
HS06 Avg: 112
Share Avg: 2.929 K
pledge Avg: 3.200 K

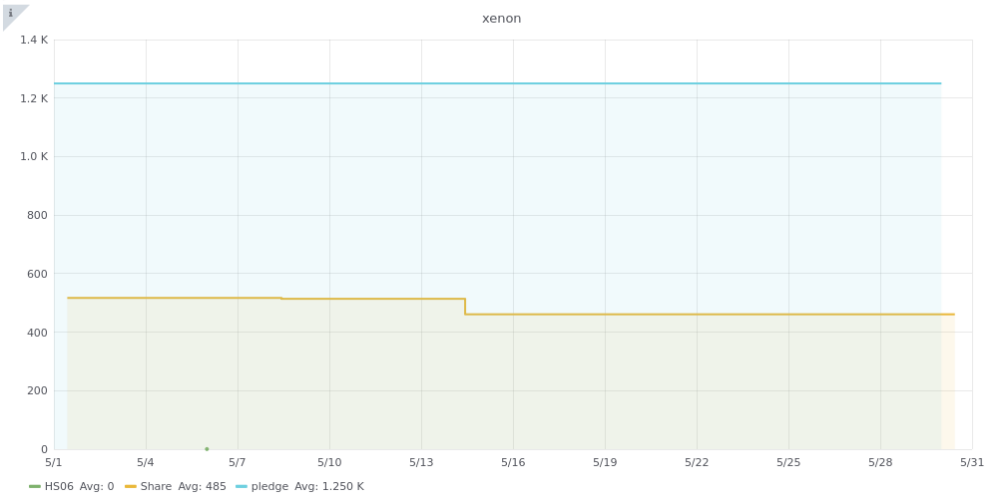

opera
210
205
200
195
190
185
180
5/1
5/4
5/7
5/10
5/13
5/16
5/19
5/22
5/25
5/28
5/31
Share Avg: 193.33
pledge Avg: 200.00


padme
3.0 K
2.5 K
2.0 K
1.5 K
1.0 K
500
0
5/1
5/4
5/7
5/10
5/13
5/16
5/19
5/22
5/25
5/28
5/31
Share Avg: 863
pledge Avg: 2.600 K


pamela
700
650
600
550
500
450
400
350
300
250
5/1
5/4
5/7
5/10
5/13
5/16
5/19
5/22
5/25
5/28
5/31
Share Avg: 291
pledge Avg: 650

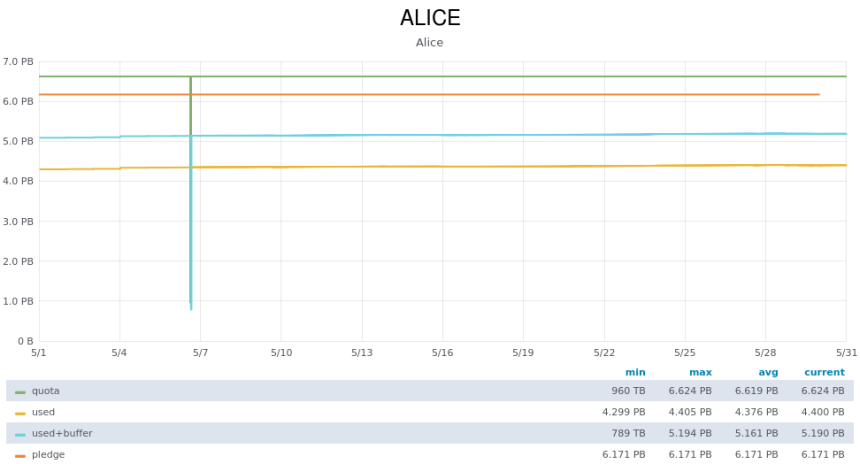

rdfa
520
510
500
490
480
470
460
450
5/1
5/4
5/7
5/10
5/13
5/16
5/19
5/22
5/25
5/28
5/31
Share Avg: 485
pledge Avg:

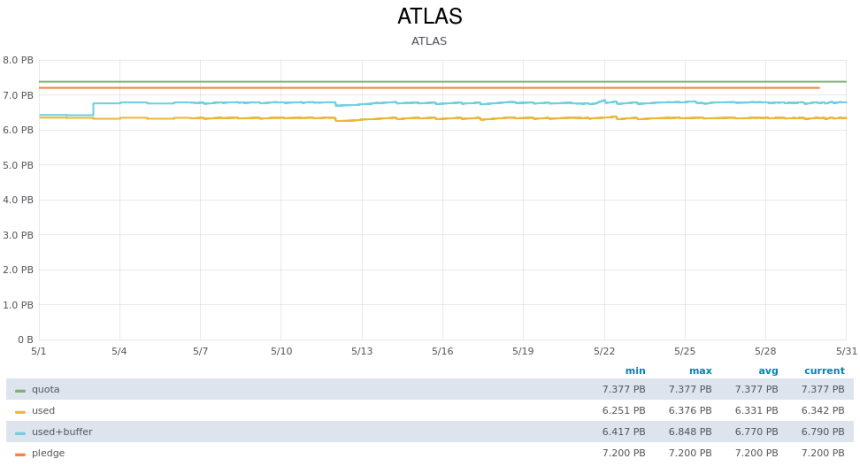

virgo
175 K
150 K
125 K
100 K
75 K
50 K
25 K
0
5/1
5/4
5/7
5/10
5/13
5/16
5/19
5/22
5/25
5/28
5/31
HS06 Avg: 18.4 K
Share Avg: 36.6 K
pledge Avg: 40.0 K


xenon
1.4 K
1.2 K
1.0 K
800
600
400
200
0
5/1
5/4
5/7
5/10
5/13
5/16
5/19
5/22
5/25
5/28
5/31
HS06 Avg: 0
Share Avg: 485
pledge Avg: 1.250 K

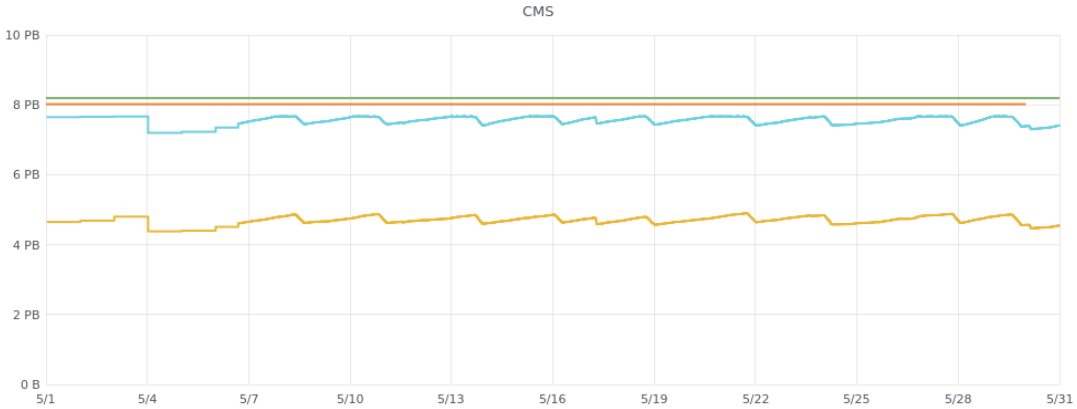
2 Utilizzo delle risorse - Storage

2.1 Disk usage - LHC



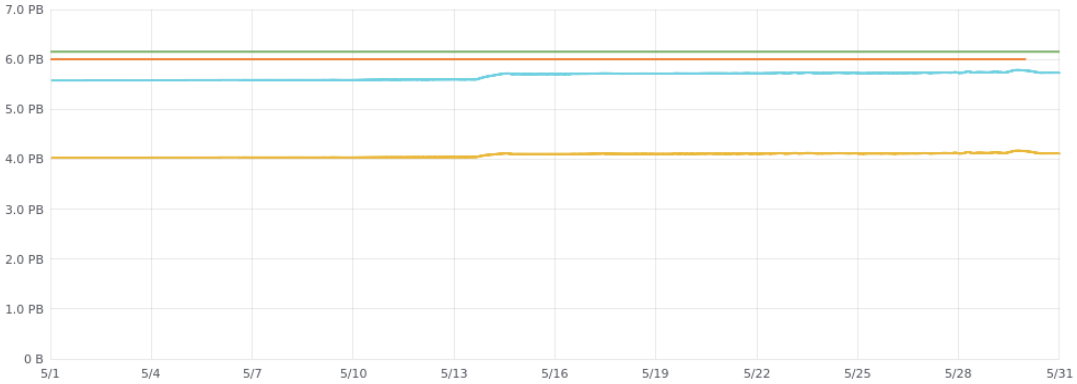


CMS



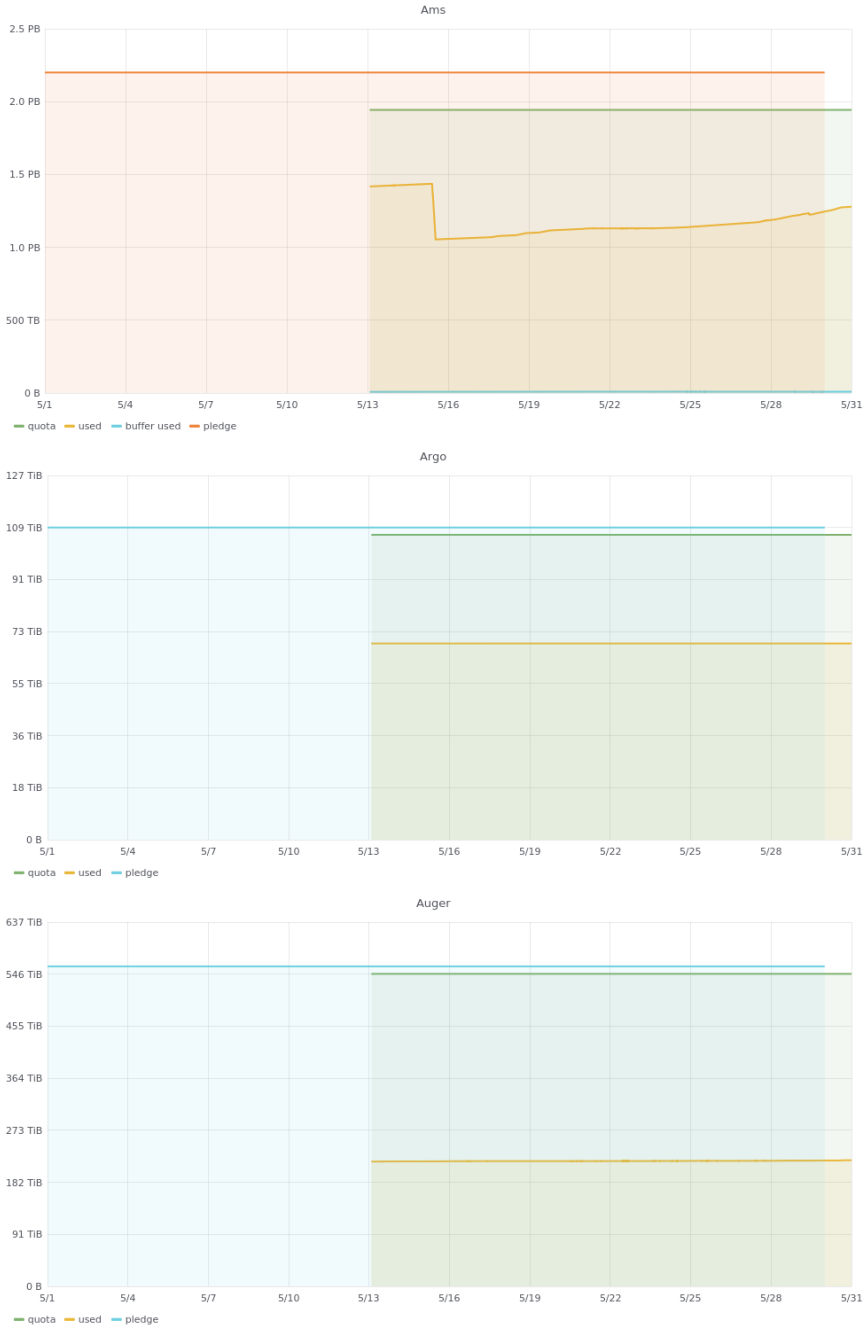
	min	max	avg	current
quota	8.193 PB	8.193 PB	8.193 PB	8.193 PB
used	4.380 PB	4.900 PB	4.716 PB	4.551 PB
used+buffer	7.200 PB	7.681 PB	7.565 PB	7.416 PB
pledge	8.020 PB	8.020 PB	8.020 PB	8.020 PB

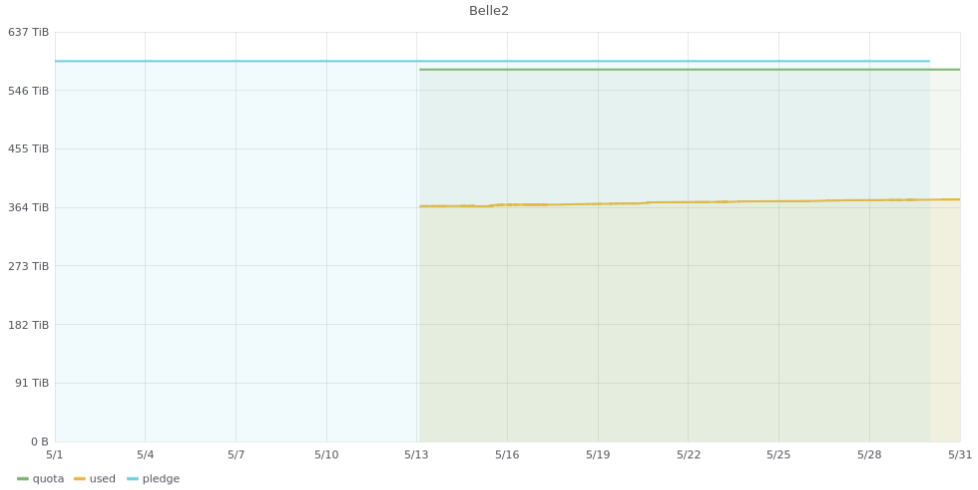
LHCB

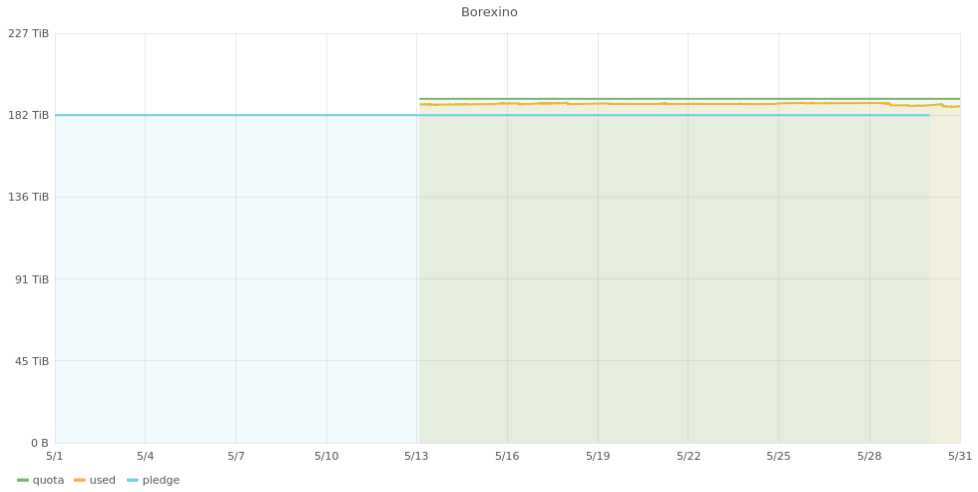


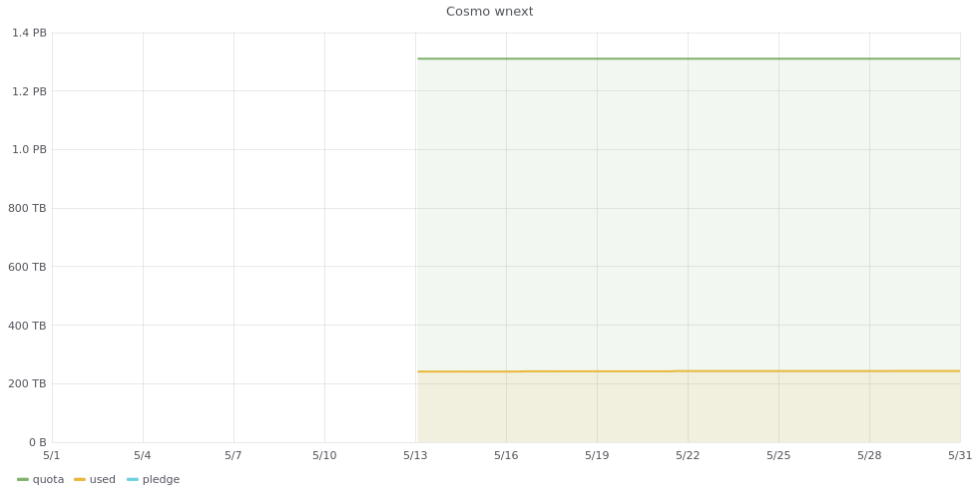
	min	max	avg	current
quota	6.154 PB	6.154 PB	6.154 PB	6.154 PB
used	4.031 PB	4.172 PB	4.092 PB	4.119 PB
used+buffer	5.580 PB	5.788 PB	5.685 PB	5.735 PB
pledge	6.004 PB	6.004 PB	6.004 PB	6.004 PB

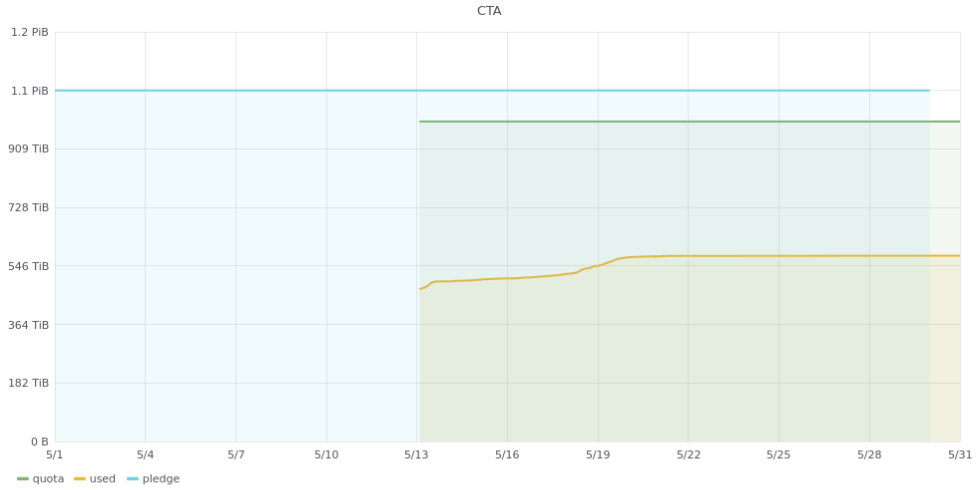
2.2 Disk usage - No LHC

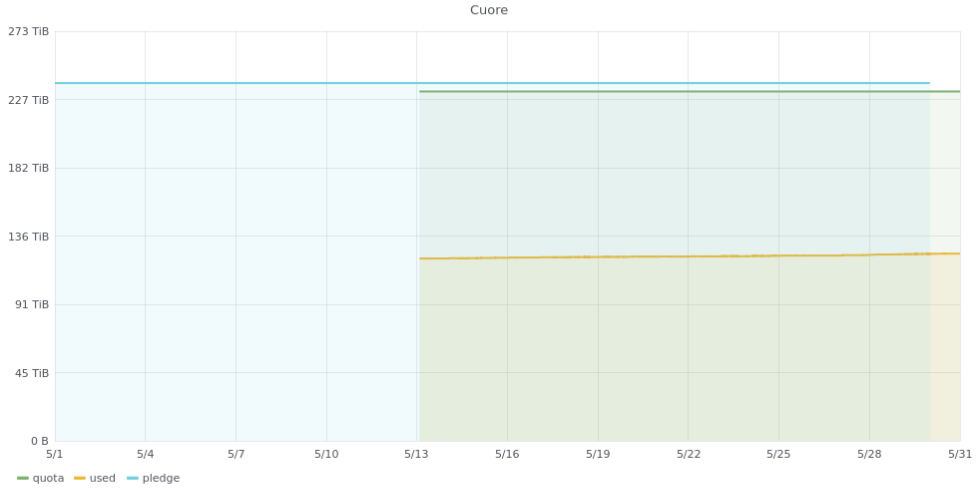


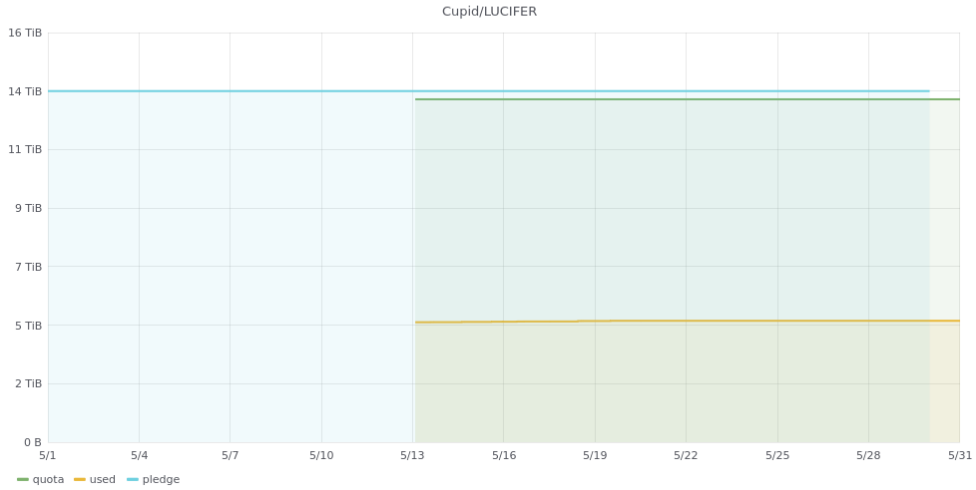

Belle2
637 TiB
546 TiB
455 TiB
364 TiB
273 TiB
182 TiB
91 TiB
0 B
5/1
5/4
5/7
5/10
5/13
5/16
5/19
5/22
5/25
5/28
5/31
quota
used
pledge

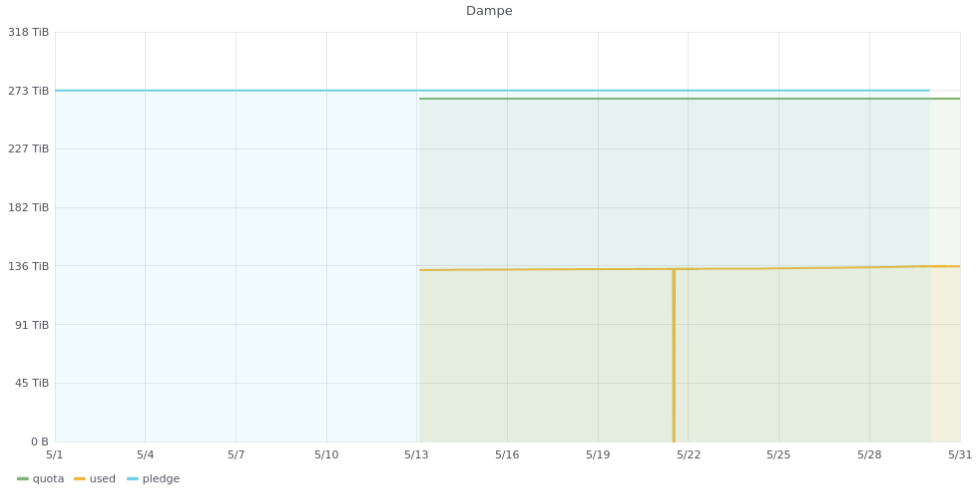

Borexino
227 TiB
182 TiB
136 TiB
91 TiB
45 TiB
0 B
5/1
5/4
5/7
5/10
5/13
5/16
5/19
5/22
5/25
5/28
5/31
quota
used
pledge

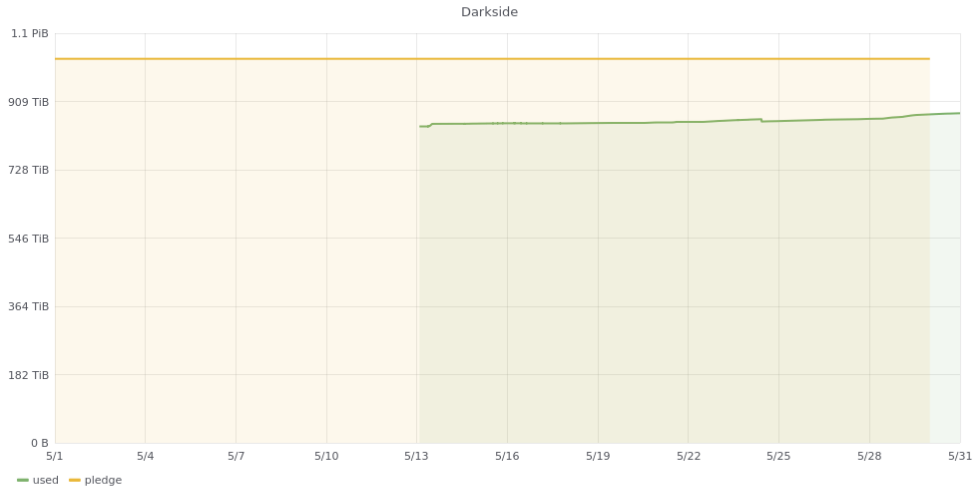

Cosmo wnext
1.4 PB
1.2 PB
1.0 PB
800 TB
600 TB
400 TB
200 TB
0 B
5/1
5/4
5/7
5/10
5/13
5/16
5/19
5/22
5/25
5/28
5/31
quota
used
pledge

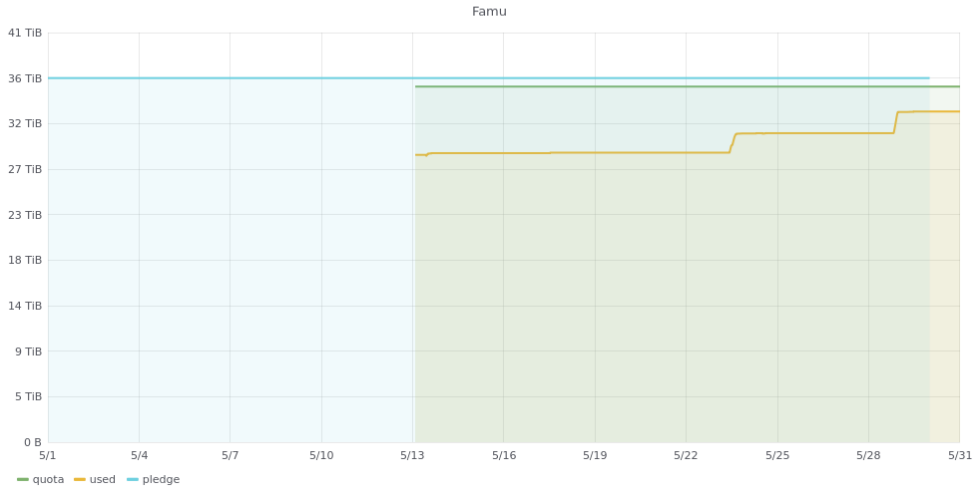

CTA
1.2 PiB
1.1 PiB
909 TiB
728 TiB
546 TiB
364 TiB
182 TiB
0 B
5/1
5/4
5/7
5/10
5/13
5/16
5/19
5/22
5/25
5/28
5/31
quota
used
pledge

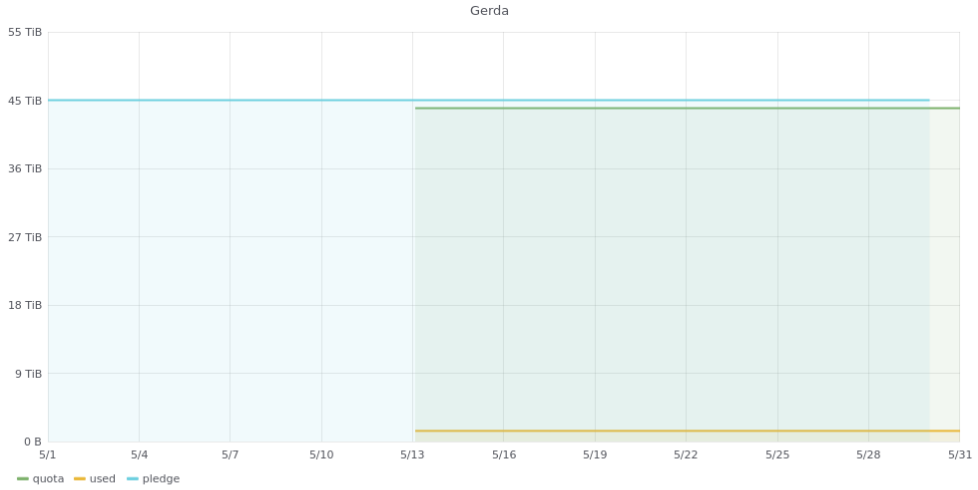

Cuore
273 TiB
227 TiB
182 TiB
136 TiB
91 TiB
45 TiB
0 B
5/1
5/4
5/7
5/10
5/13
5/16
5/19
5/22
5/25
5/28
5/31
quota
used
pledge

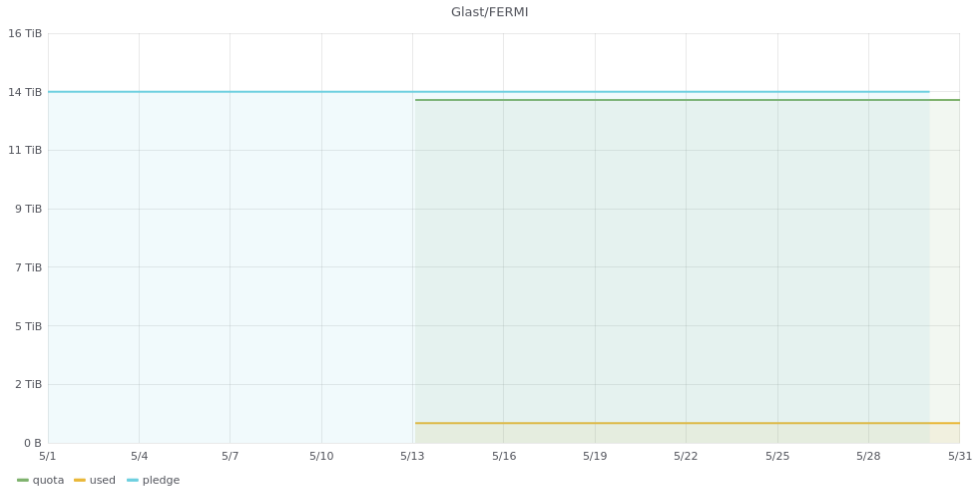

Cupid/LUCIFER
16 TiB
14 TiB
11 TiB
9 TiB
7 TiB
5 TiB
2 TiB
0 B
5/1
5/4
5/7
5/10
5/13
5/16
5/19
5/22
5/25
5/28
5/31
quota
used
pledge

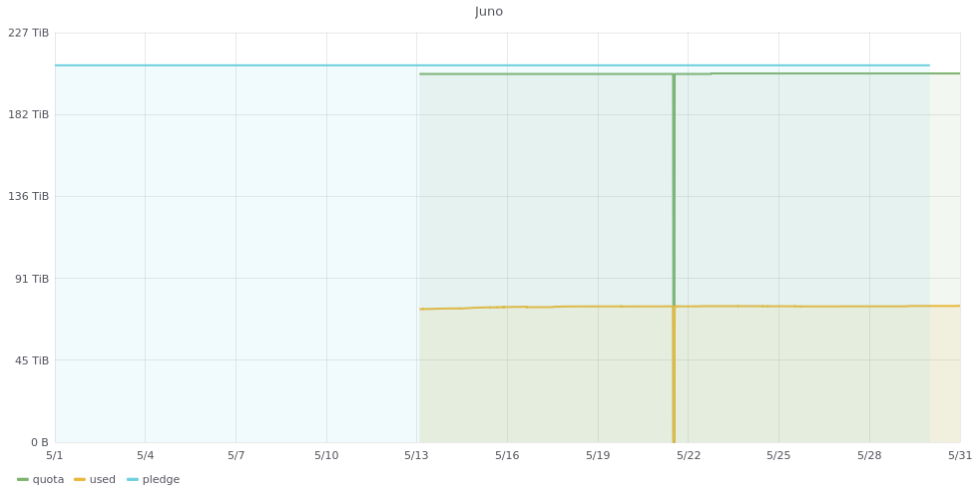

Dampe
318 TiB
273 TiB
227 TiB
182 TiB
136 TiB
91 TiB
45 TiB
0 B
5/1
5/4
5/7
5/10
5/13
5/16
5/19
5/22
5/25
5/28
5/31
quota
used
pledge

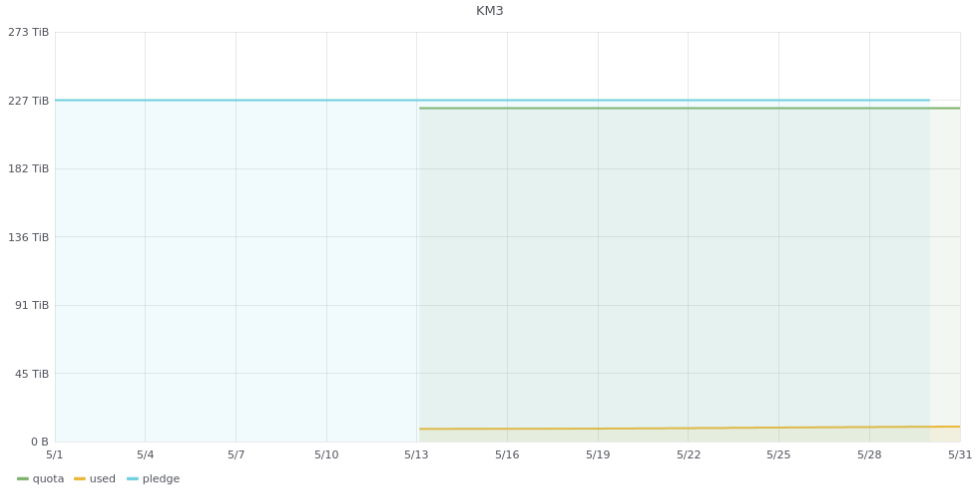

Darkside
1.1 PiB
909 TiB
728 TiB
546 TiB
364 TiB
182 TiB
0 B
5/1
5/4
5/7
5/10
5/13
5/16
5/19
5/22
5/25
5/28
5/31
used
pledge

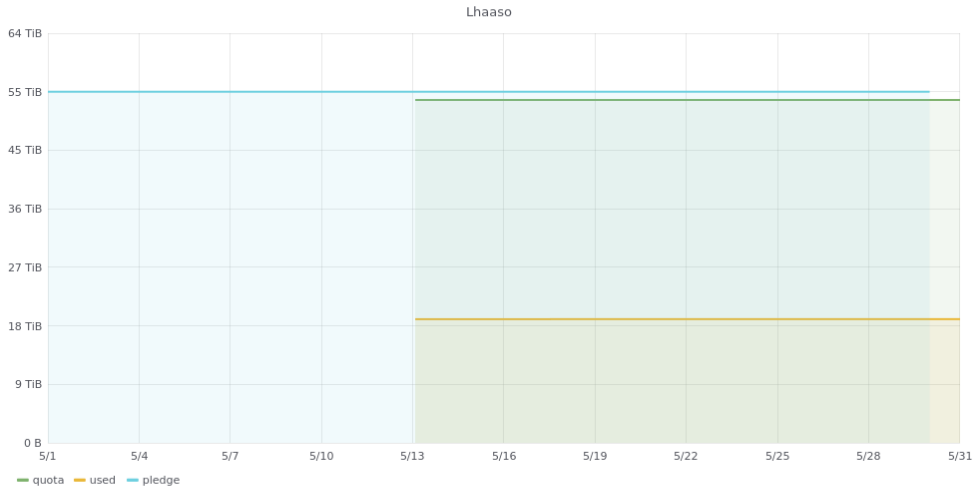

Famu
41 TiB
36 TiB
32 TiB
27 TiB
23 TiB
18 TiB
14 TiB
9 TiB
5 TiB
0 B
5/1
5/4
5/7
5/10
5/13
5/16
5/19
5/22
5/25
5/28
5/31
quota
used
pledge

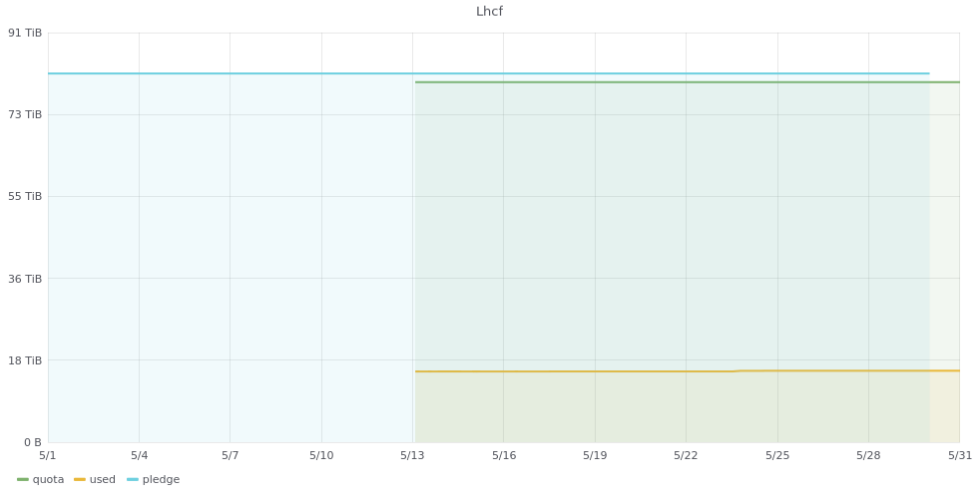

Gerda
55 TiB
45 TiB
36 TiB
27 TiB
18 TiB
9 TiB
0 B
5/1
5/4
5/7
5/10
5/13
5/16
5/19
5/22
5/25
5/28
5/31
quota
used
pledge

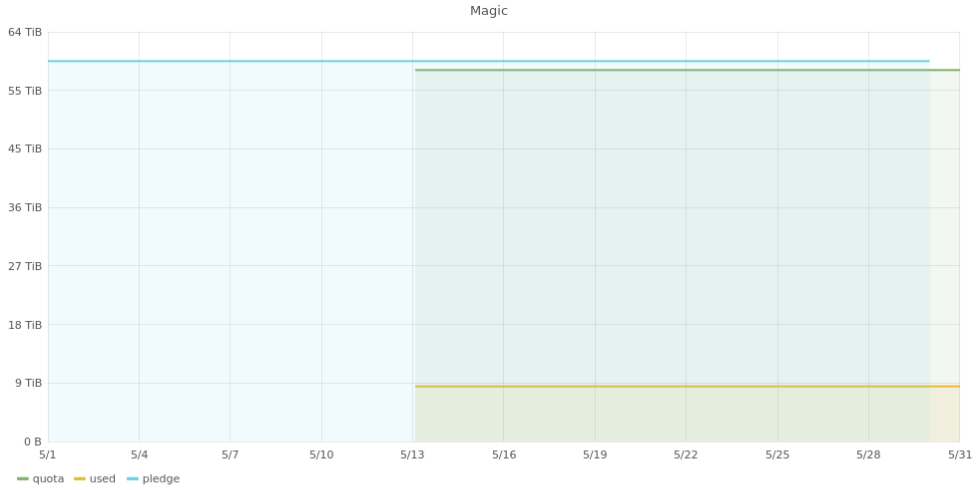

Glast/FERMI
16 TiB
14 TiB
11 TiB
9 TiB
7 TiB
5 TiB
2 TiB
0 B
5/1
5/4
5/7
5/10
5/13
5/16
5/19
5/22
5/25
5/28
5/31
quota
used
pledge

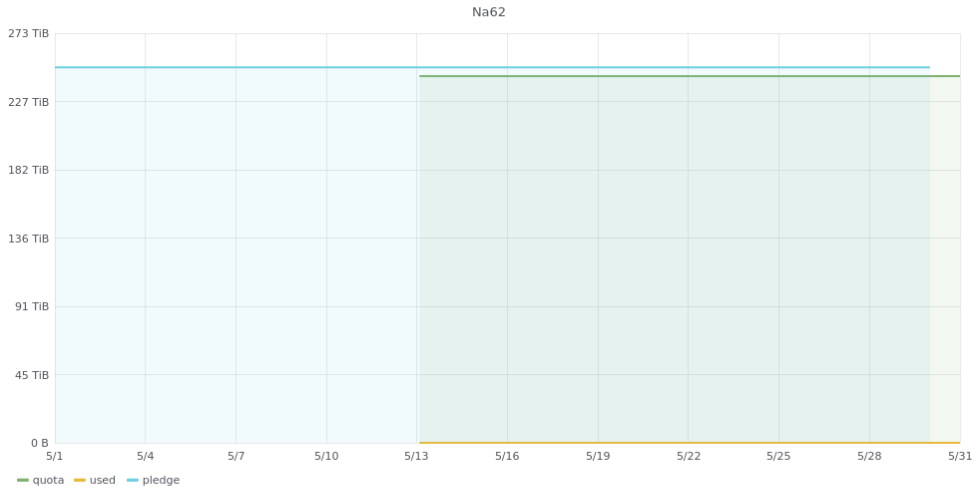

Juno
227 TiB
182 TiB
136 TiB
91 TiB
45 TiB
0 B
5/1
5/4
5/7
5/10
5/13
5/16
5/19
5/22
5/25
5/28
5/31
quota
used
pledge

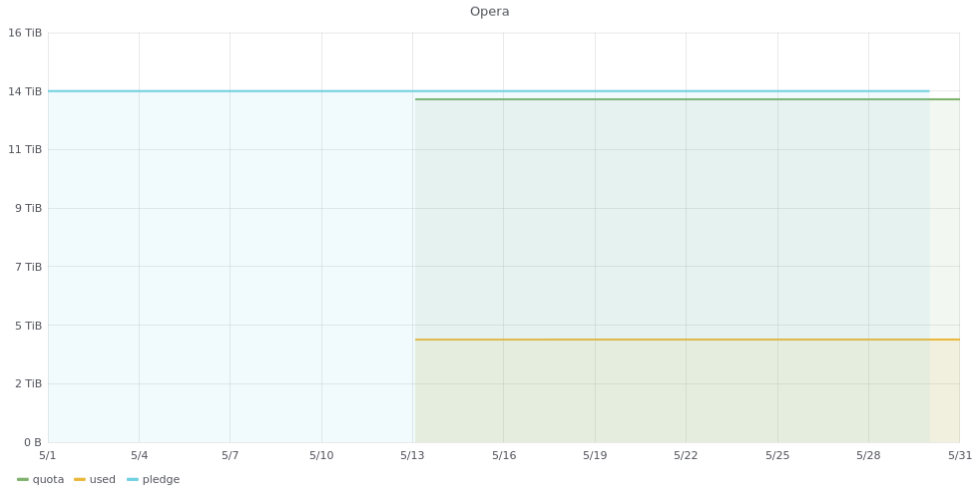

KM3
273 TiB
227 TiB
182 TiB
136 TiB
91 TiB
45 TiB
0 B
5/1
5/4
5/7
5/10
5/13
5/16
5/19
5/22
5/25
5/28
5/31
quota
used
pledge

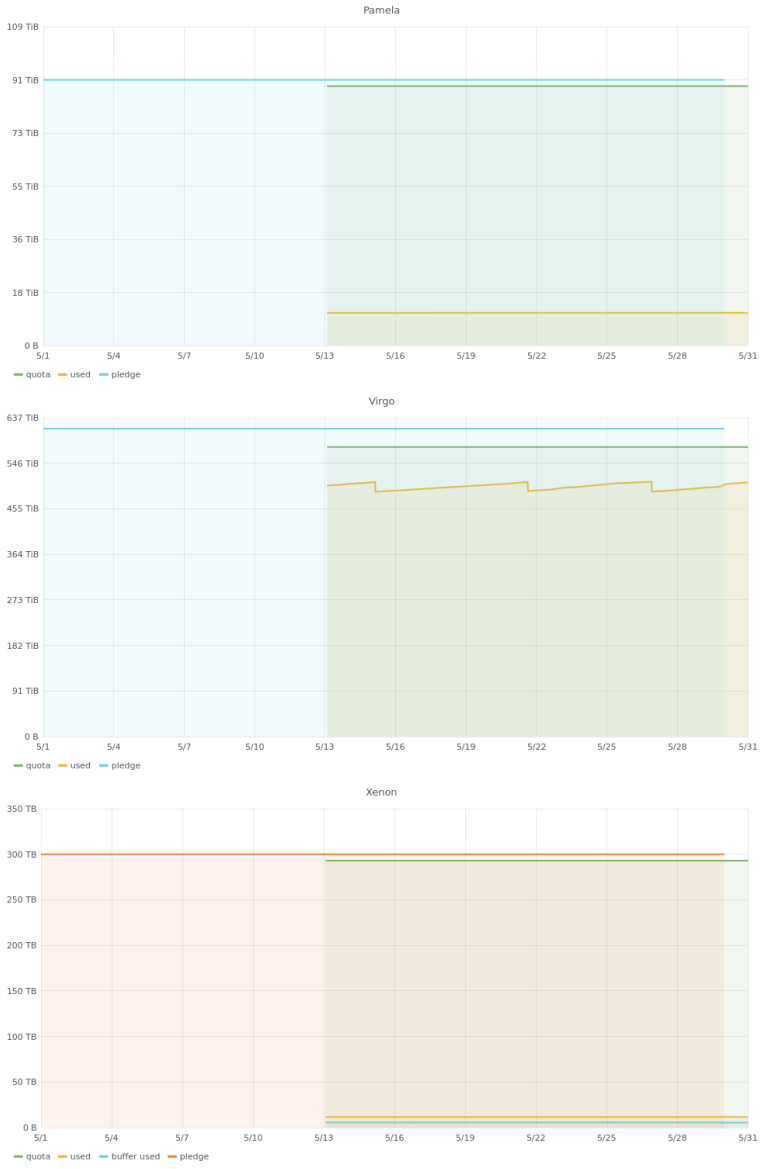

Lhaaso
64 TiB
55 TiB
45 TiB
36 TiB
27 TiB
18 TiB
9 TiB
0 B
5/1
5/4
5/7
5/10
5/13
5/16
5/19
5/22
5/25
5/28
5/31
quota
used
pledge


Lhcf
91 TiB
73 TiB
55 TiB
36 TiB
18 TiB
0 B
5/1
5/4
5/7
5/10
5/13
5/16
5/19
5/22
5/25
5/28
5/31
quota
used
pledge


Magic
64 TiB
55 TiB
45 TiB
36 TiB
27 TiB
18 TiB
9 TiB
0 B
5/1
5/4
5/7
5/10
5/13
5/16
5/19
5/22
5/25
5/28
5/31
quota
used
pledge


Na62
273 TiB
227 TiB
182 TiB
136 TiB
91 TiB
45 TiB
0 B
5/1
5/4
5/7
5/10
5/13
5/16
5/19
5/22
5/25
5/28
5/31
quota
used
pledge


Opera
16 TiB
14 TiB
11 TiB
9 TiB
7 TiB
5 TiB
2 TiB
0 B
5/1
5/4
5/7
5/10
5/13
5/16
5/19
5/22
5/25
5/28
5/31
quota
used
pledge


Pamela
109 TiB
91 TiB
73 TiB
55 TiB
36 TiB
18 TiB
0 B
5/1
5/4
5/7
5/10
5/13
5/16
5/19
5/22
5/25
5/28
5/31
quota
used
pledge
Virgo
637 TiB
546 TiB
455 TiB
364 TiB
273 TiB
182 TiB
91 TiB
0 B
5/1
5/4
5/7
5/10
5/13
5/16
5/19
5/22
5/25
5/28
5/31
quota
used
pledge
Xenon
350 TB
300 TB
250 TB
200 TB
150 TB
100 TB
50 TB
0 B
5/1
5/4
5/7
5/10
5/13
5/16
5/19
5/22
5/25
5/28
5/31
quota
used
buffer used
pledge

2.3 Consistenza fra accounting CNAF e cataloghi di esperimento nell'uso dello storage

ALICE		
	Catalogo	Accounting CNAF
Disco + Buffer (PB)	5.402	5.403
ATLAS		
	Catalogo	Accounting CNAF
Disco(PB)	6.334	6.32
Nastro (PB)	14.88	14.3
CMS		
	Catalogo	Accounting CNAF
Disco(PB)	4.59	4.81
Nastro (PB)	17.24	17.69
LHCb		
	Catalogo	Accounting CNAF
Disco(TB)	5802	6.154
Nastro + Buffer (TB)	11.415	11.890

3 Availability e reliability

3.1 Availability e reliability WLCG - Aprile

Tabella 1: **ALICE**

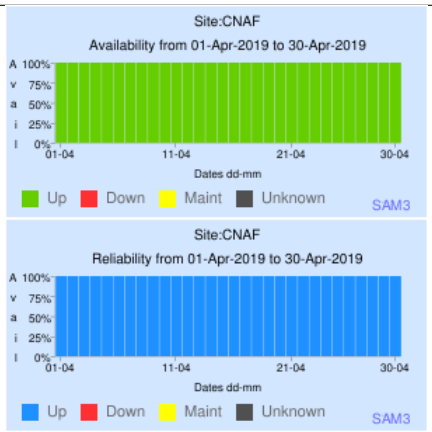
	**Availability e Reliability** ntr

Tabella 2: **ATLAS**

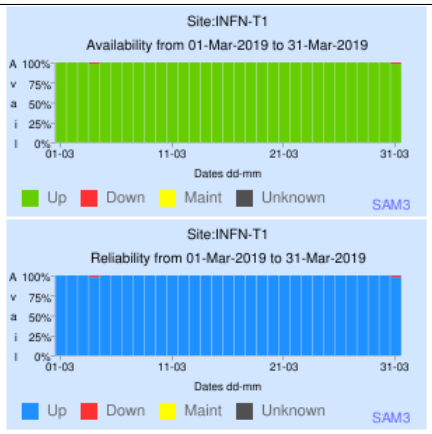
	**Availability e Reliability** ntr

Tabella 3: **CMS**

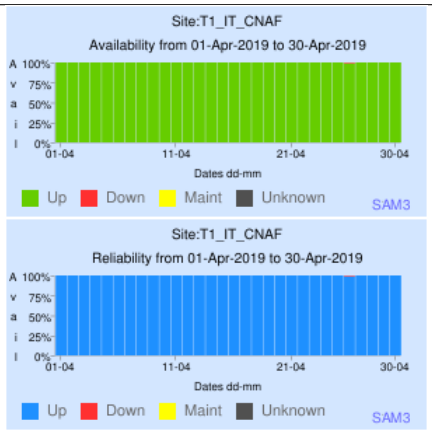
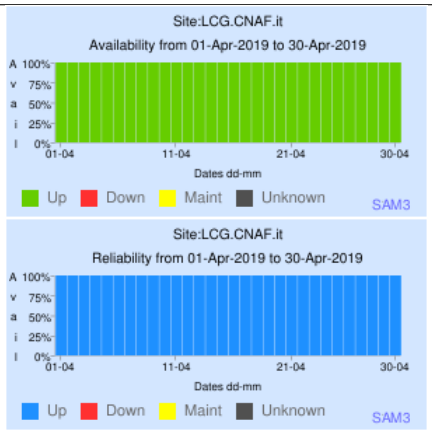
	**Availability e Reliability** ntr

Tabella 4: **LHCb**

	**Availability e Reliability** HEP_OSlibs missing, they were not able to submit jobs.

3.2 Availability e reliability WLCG storico

Figura 1: **Availability e Reliability ALICE - storico**

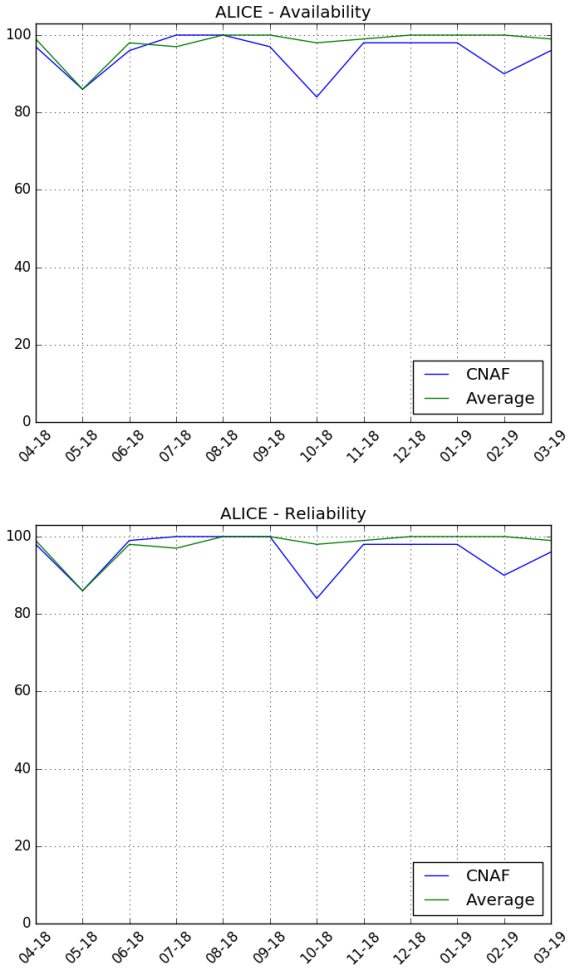


Figura 2: **Availability e Reliability CMS - storico**

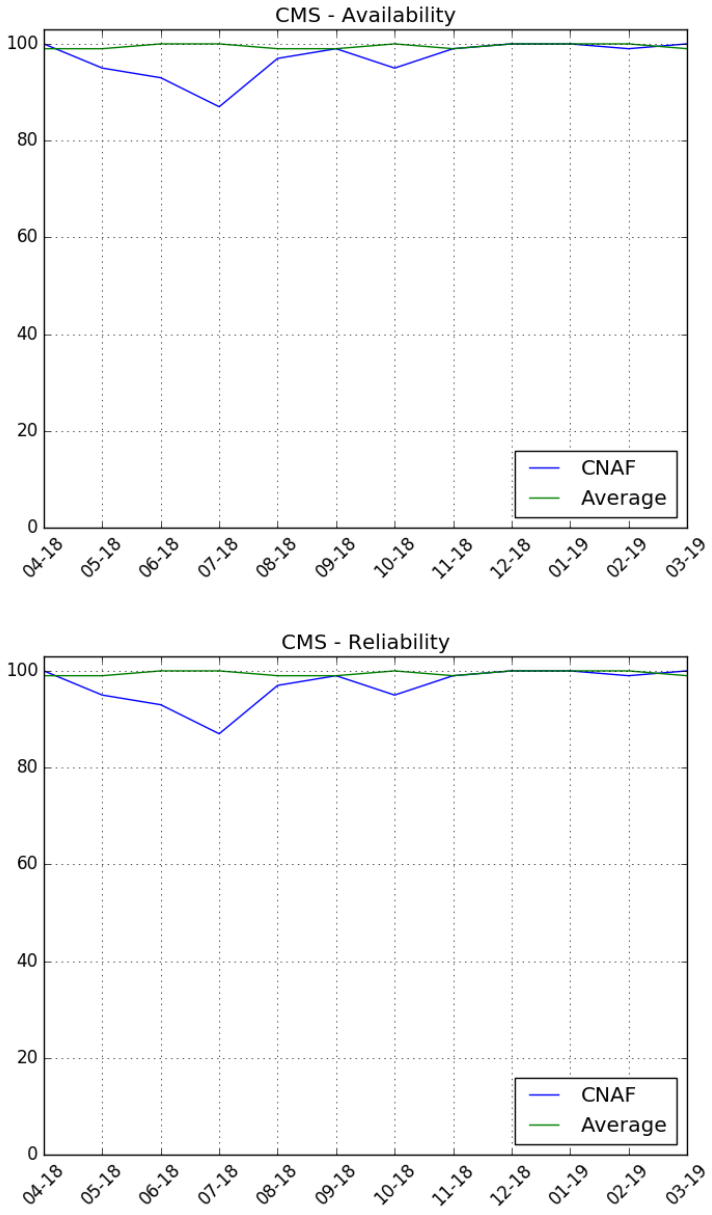
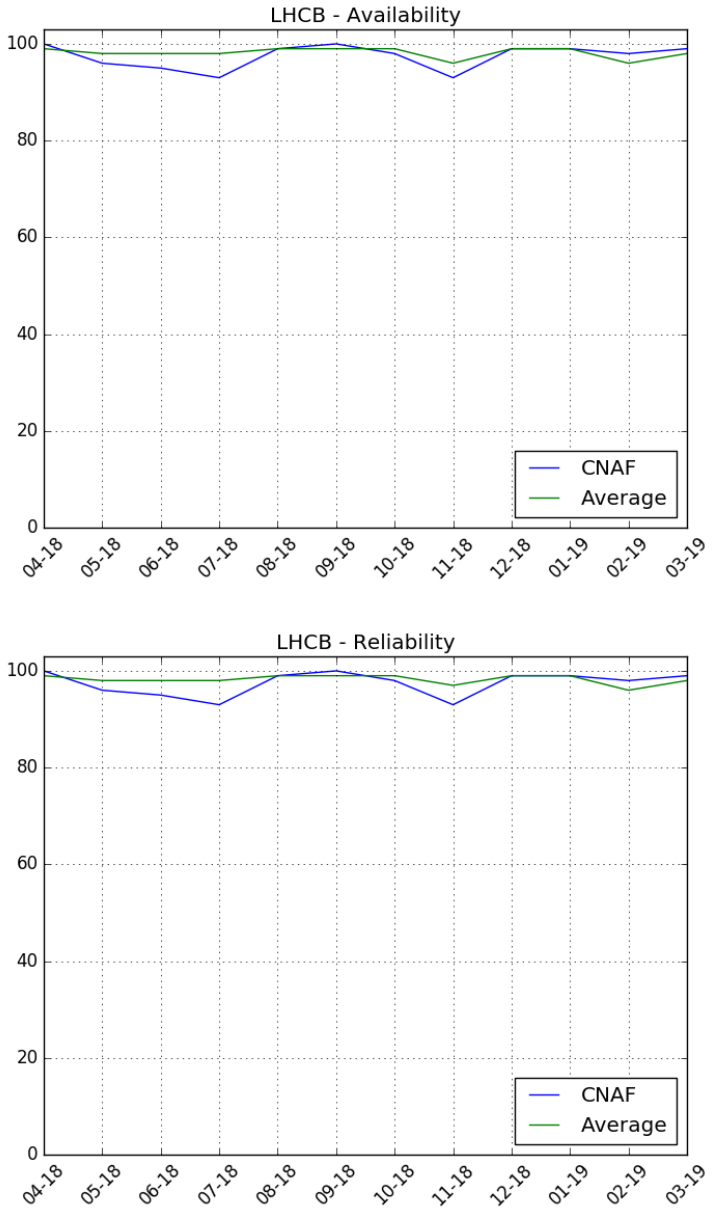


Figura 3: **Availability e Reliability LHCb - storico**



4 Tickets

4.1 Aperti

Ticket-ID	VO	Subject

4.2 Chiusi nell'ultimo mese

Ticket-ID	VO	Subject
140616	atlas	
140737	atlas	
140813	atlas	
140991	atlas	
141140	atlas	
140642	cms	
141205	cms	
141446	cms	
141324	none	

5 Uso Tape @ CNAF 2019

Tabella 5: Tape: previsioni per il 2019

Esperimento	Utilizzo e throughput previsto
ALICE	
ATLAS	stress test, per misurare il throughput del tape sistem del T1, utiizzando però delle metriche basate sul sistema di trasferimento dati di atlas (rucio). Il test dura una settimana, va bene utilizzare il sistema di produzione. Si pensava settimana del 16 luglio.
CMS	
LHCb	In 2019, re-stripping campaign for the entire RUN 2, recalling all data from 2015 to 2018.
BELLE II	No tape; qualcosa nel 2020 e utilizzo significativo nel 2021
BOREXINO	46TB nel 2019, 51TB nel 2020
CTA	invariato, sempre 120TB
DAMPE	150TB in cui spostare in $3-4$ volte decine di TB
DARKSIDE	invariato, trasferiranno altri dati nei 300TB di adesso
FAMU	una decina di TB
FERMI	massimo 15TB
JUNO	No tape
LIMADOU	1TB per dati raw
NEWCHIM	Nel 2018 dovrebbero occupare 150TB dei 300 previsti. Nel 2019 stimano una crescita fino a 500TB.
PADME	La presa dati inizia ora, $10MB/s$ a regime. Per il 2019, flusso dati analogo.
PAMELA	Invariato.
VIRGO	Throughput minimo continuo Cascina-CNAF di $100MB/s$ (picchi di $200MB/s$), rate di scrittura $50MB/s$)
XENON	No aggiunte al PB del 2018

6 Prossimi Downtime

NTR

7 ALICE

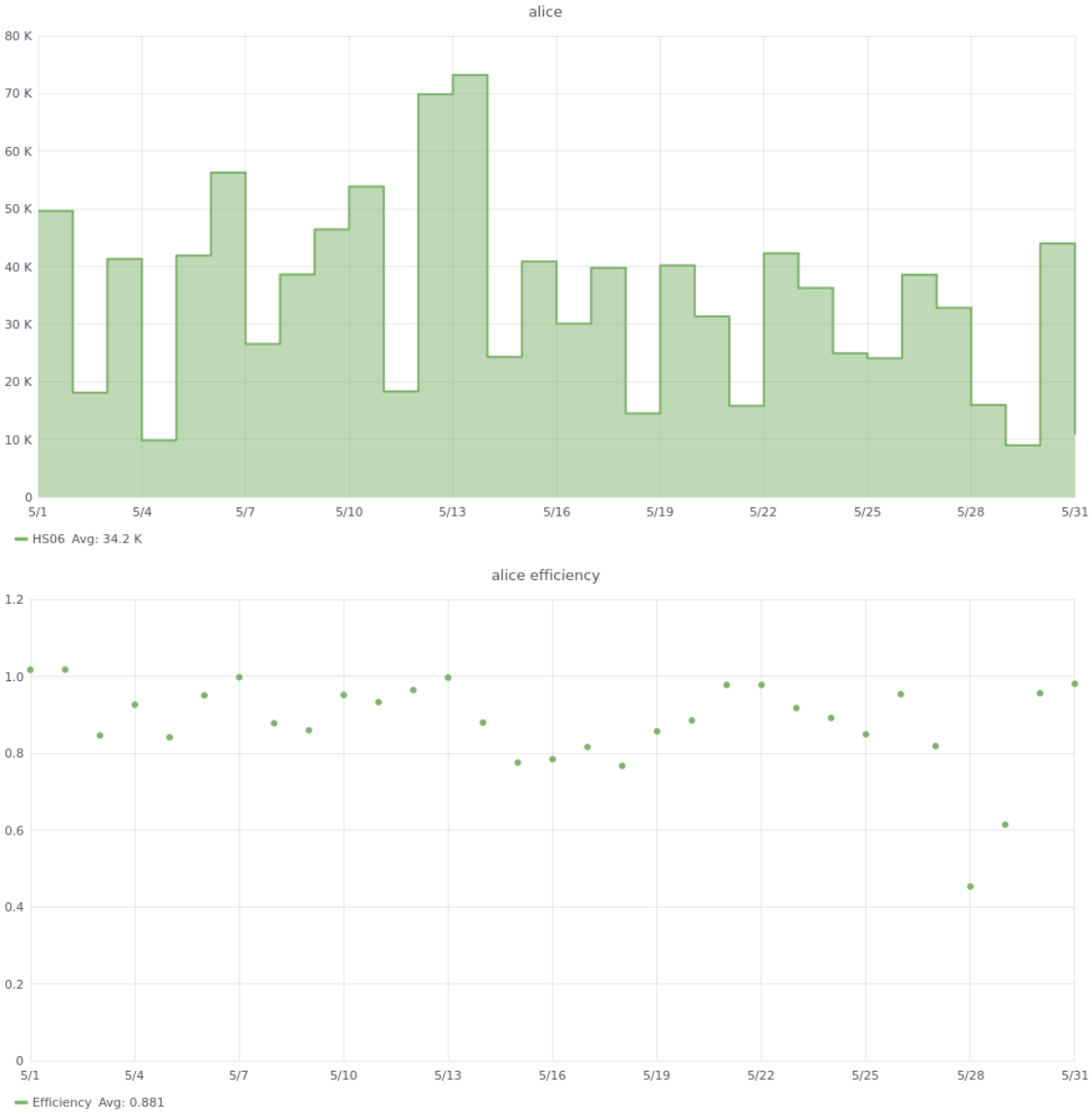


Figura 1: Number of jobs and CPU efficiency - **Alice** (pledge 60600 HS06)

- **Site Availability using ALICE_CRITCAL**

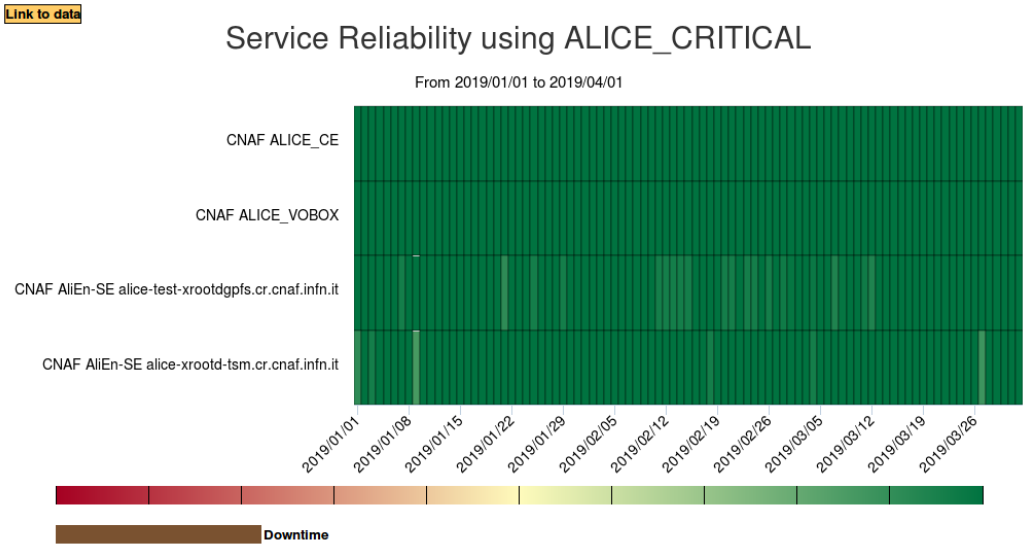


Figura 2: Availability

8 ATLAS

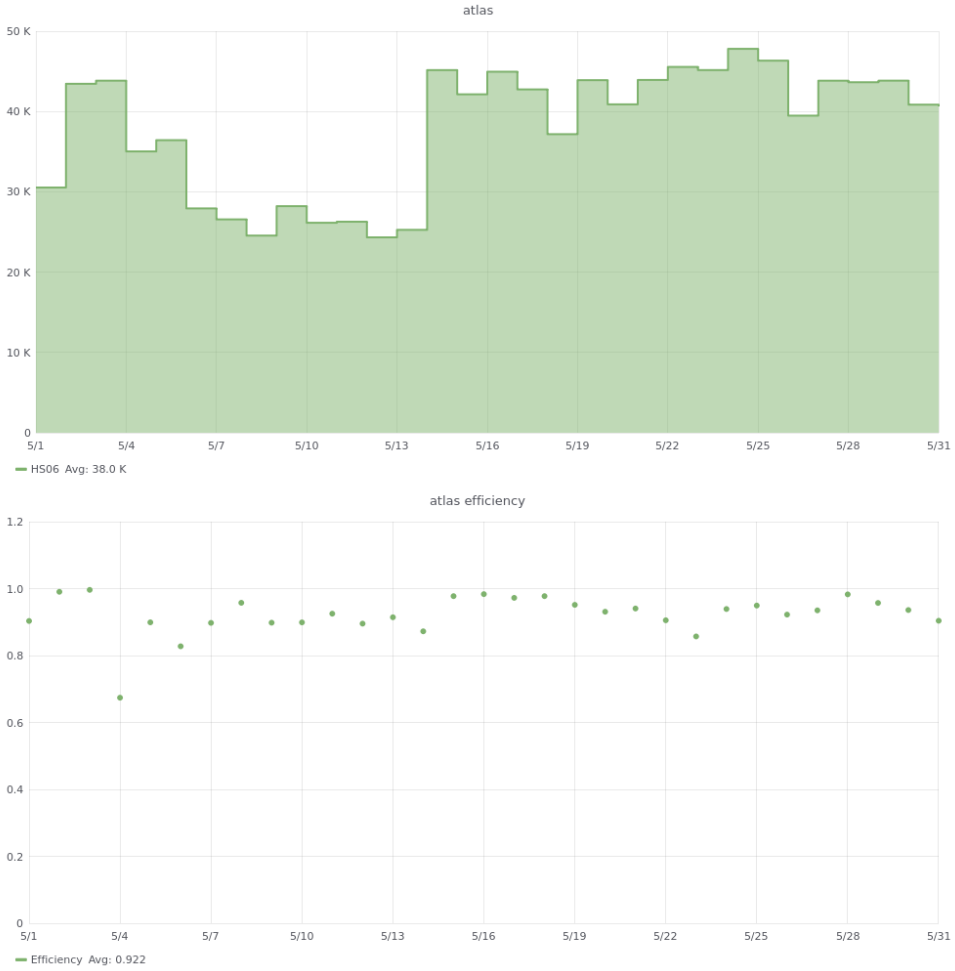


Figura 1: Number of jobs and CPU efficiency - **Atlas** (pledge 90270 HS06)

9 CMS

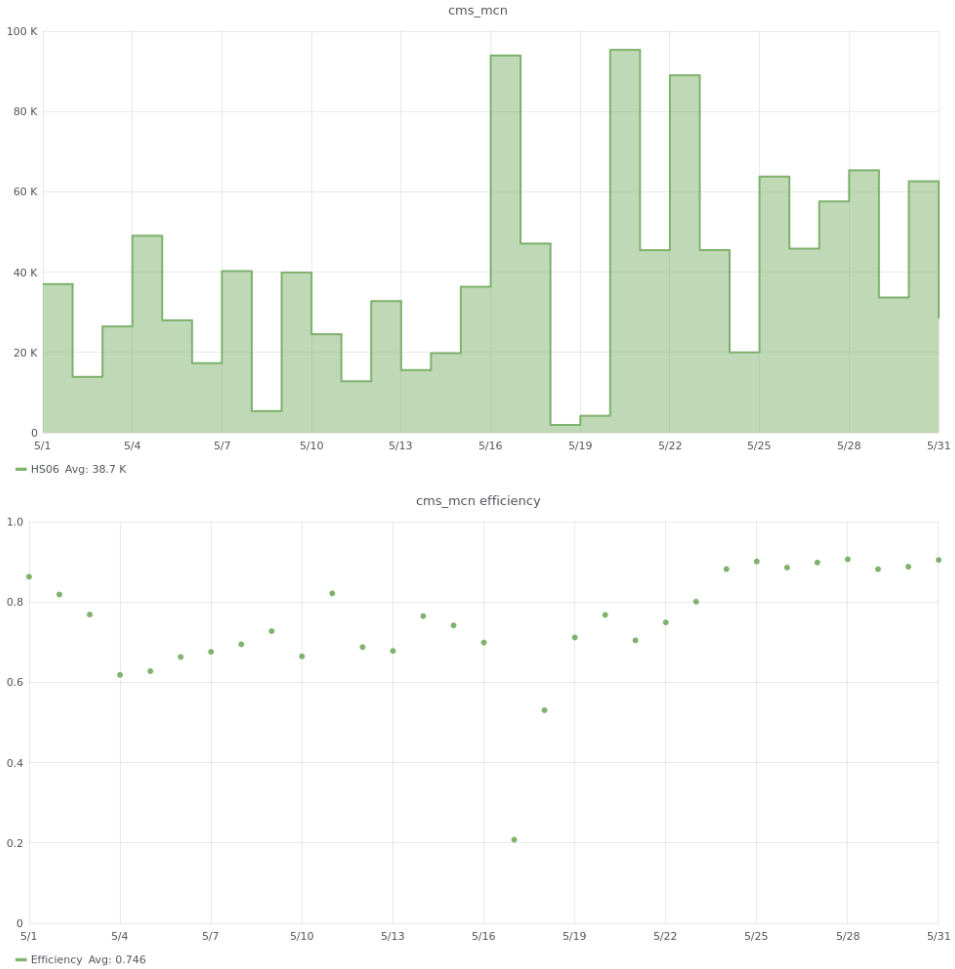
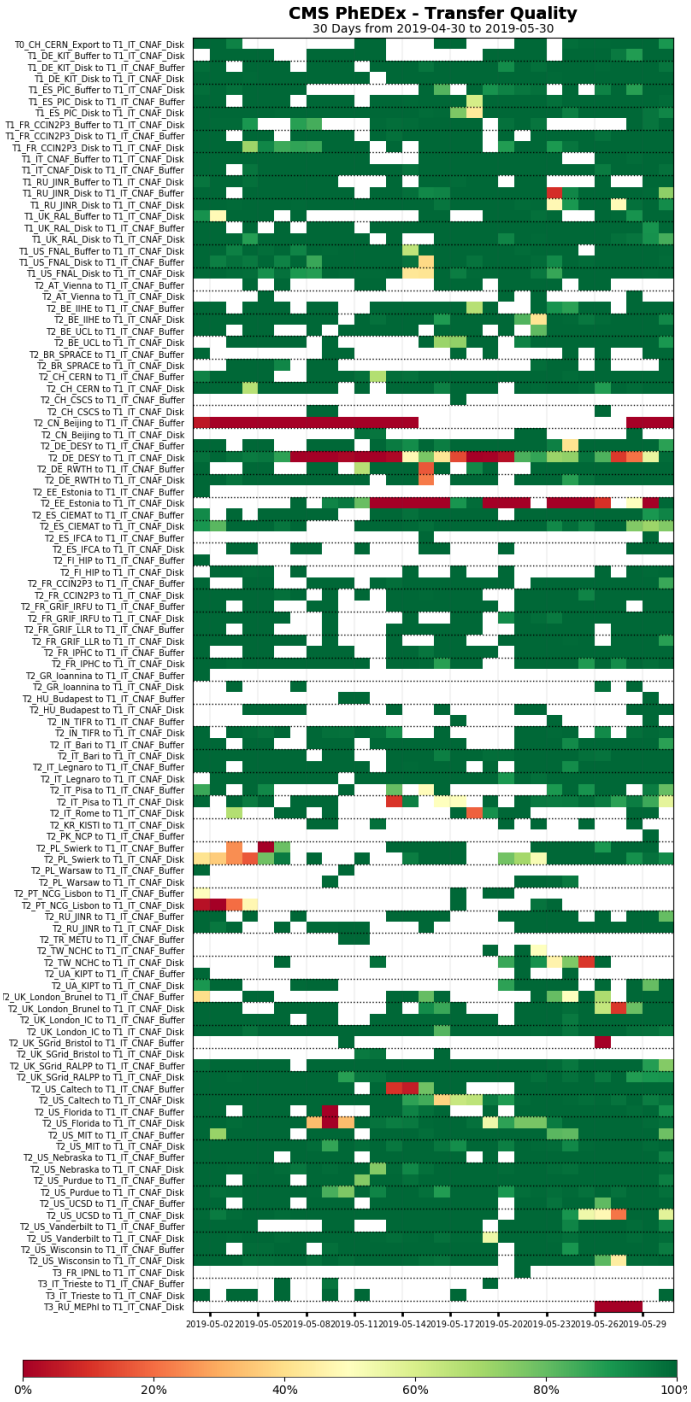


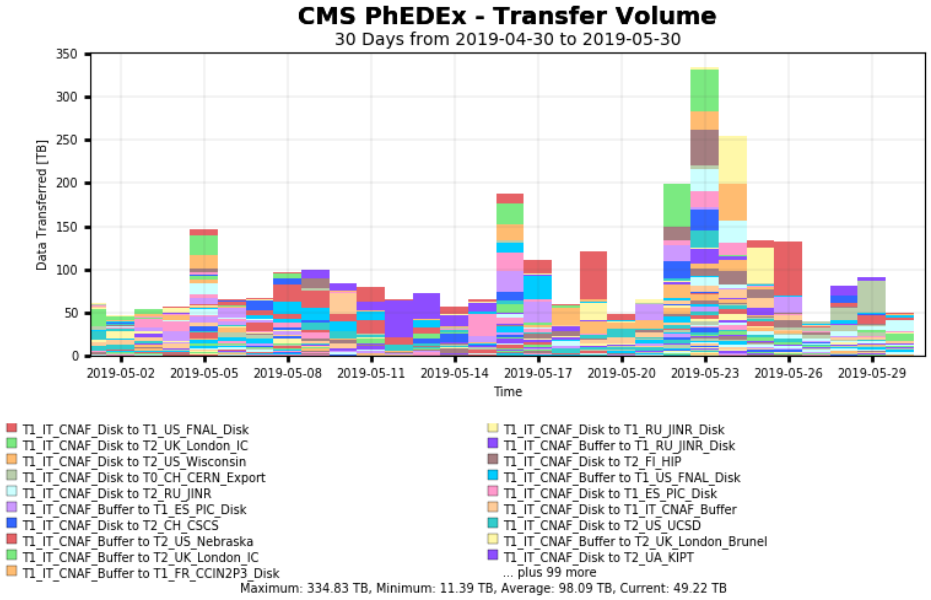
Figura 1: Number of jobs and CPU efficiency - CMS **Multi Core** (pledge 78251 HS06)

Phedex Transfers Quality (CNAF → All)

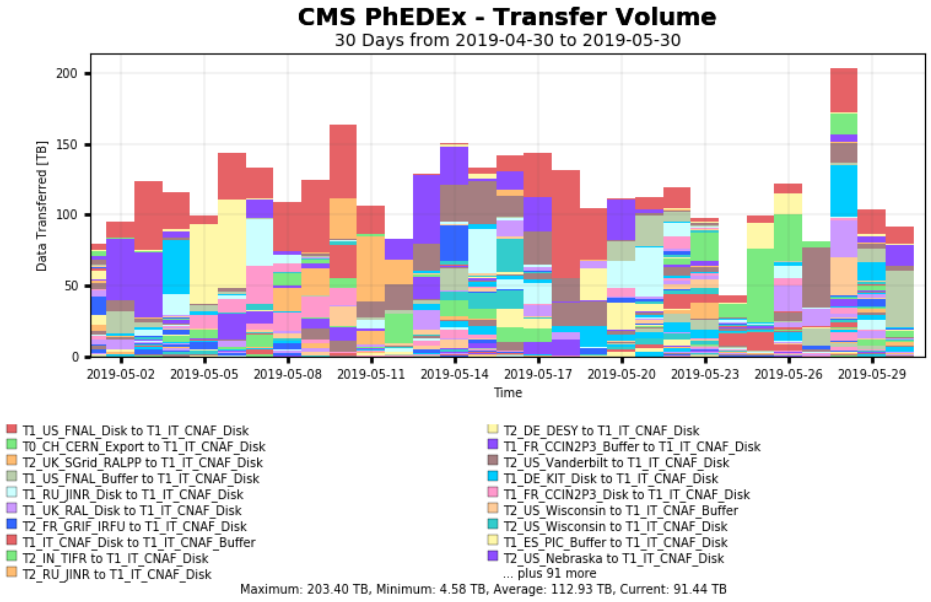
Phedex Transfers Quality (All → CNAF)



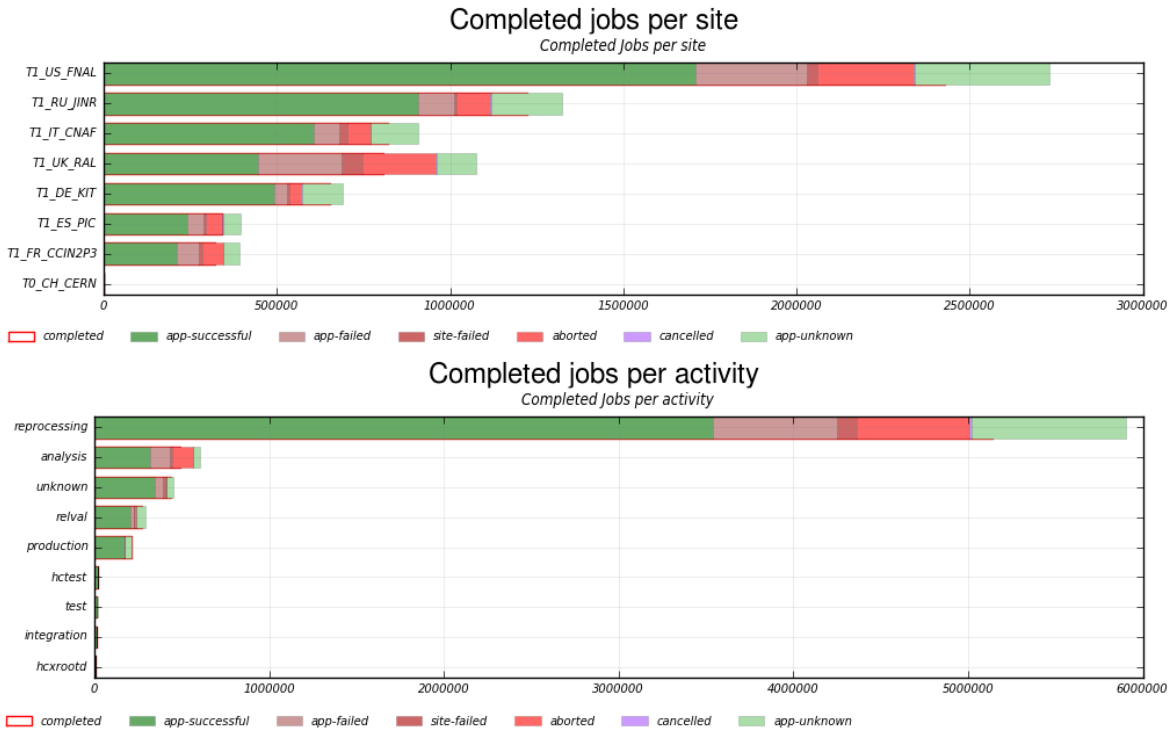
Phedex Transfers Volume(CNAF → All)



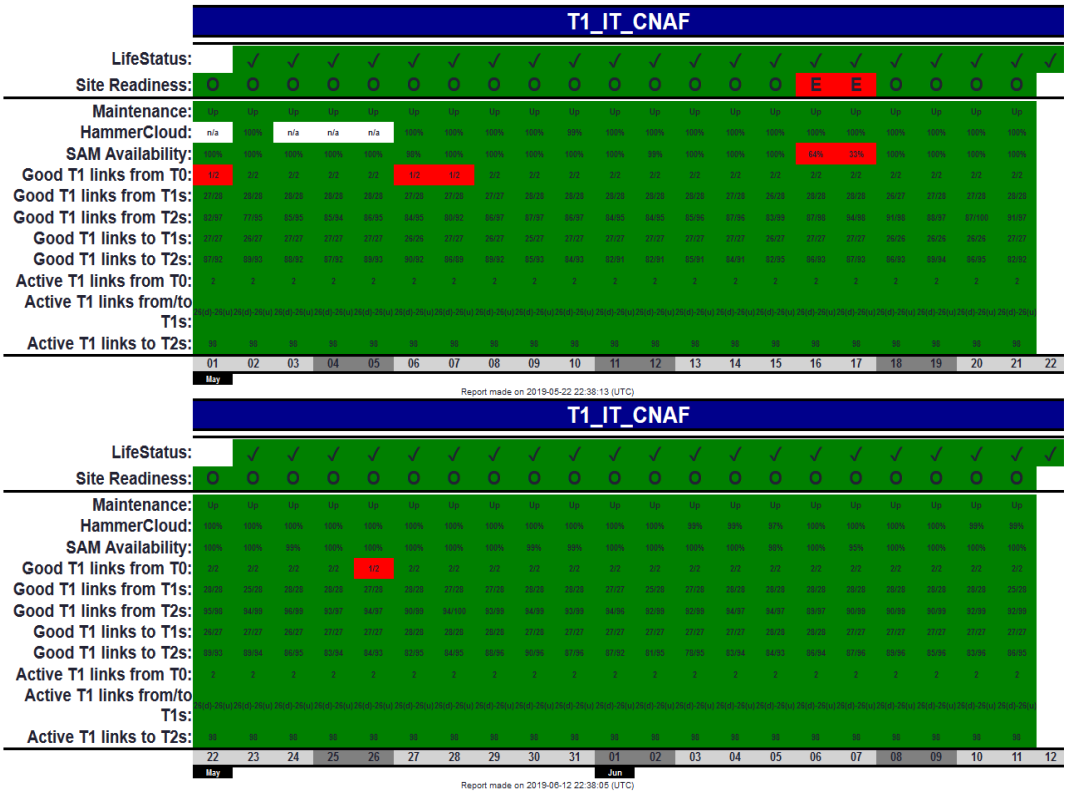
Phedex Transfers Volume (All → CNAF)



Completed jobs status @ T1



Site Readiness



Report:

- 16-17/05: Errors for significant singularity failures due to an error in the singularity config file, solved after modification

10 LHCb

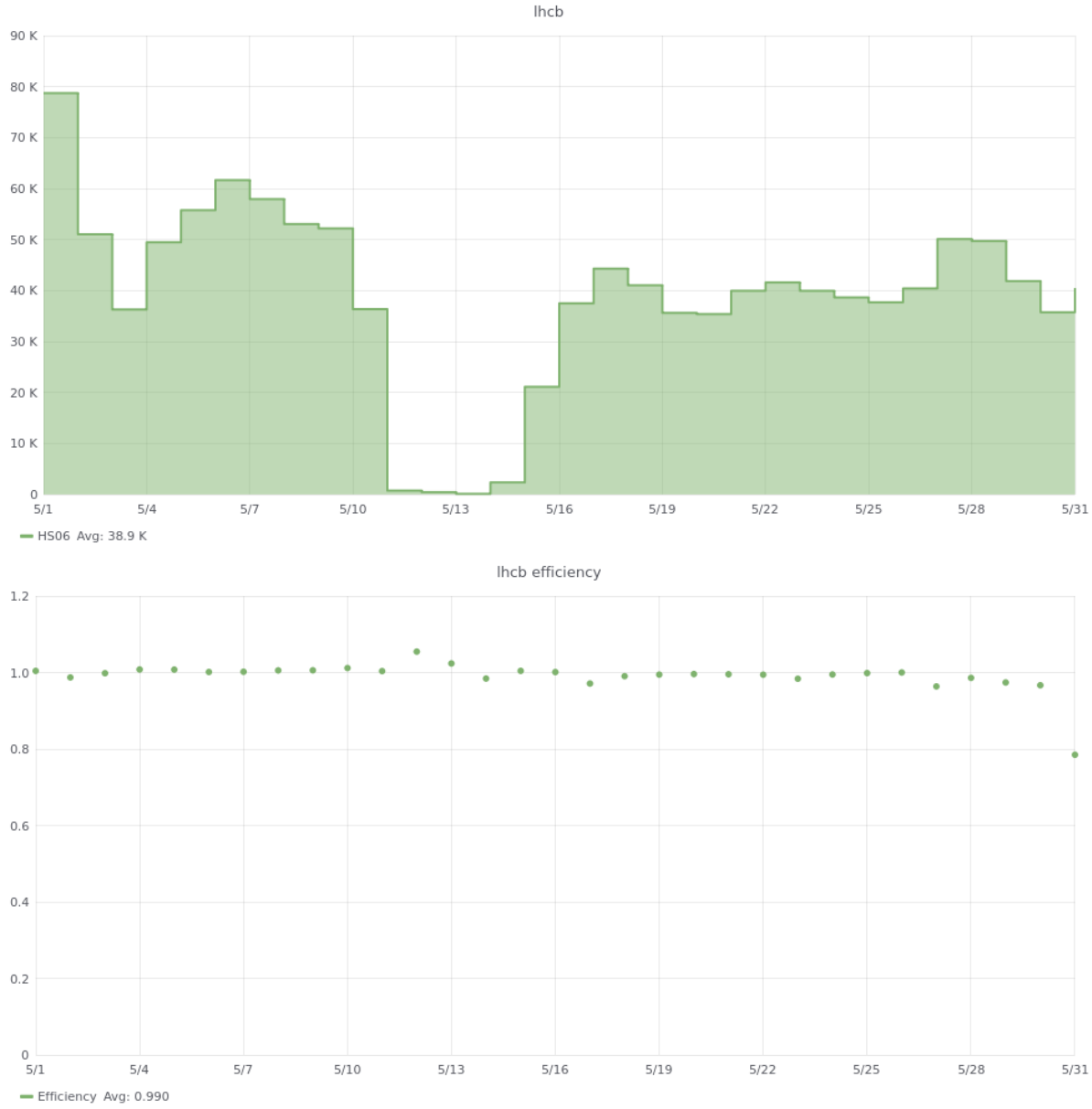
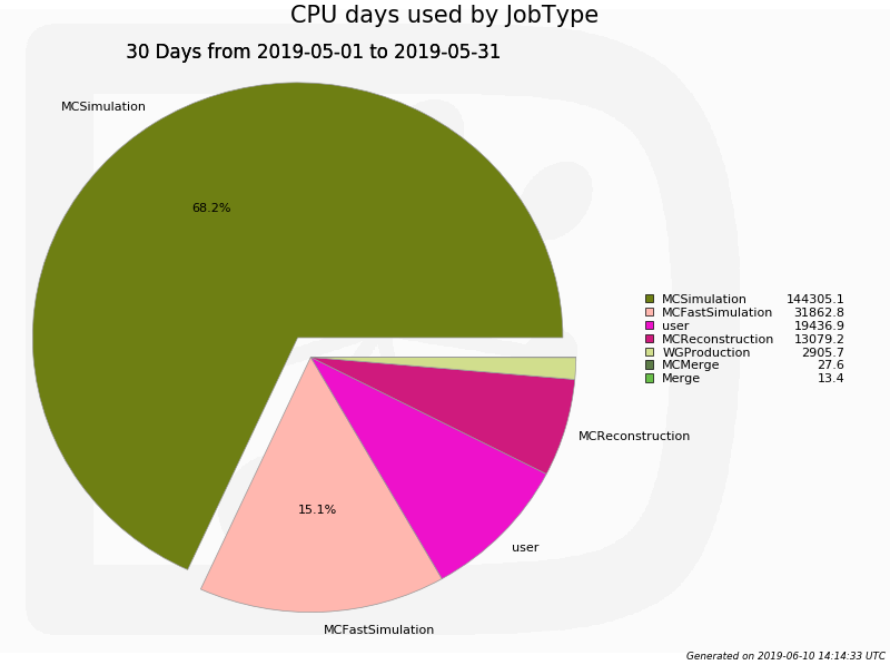
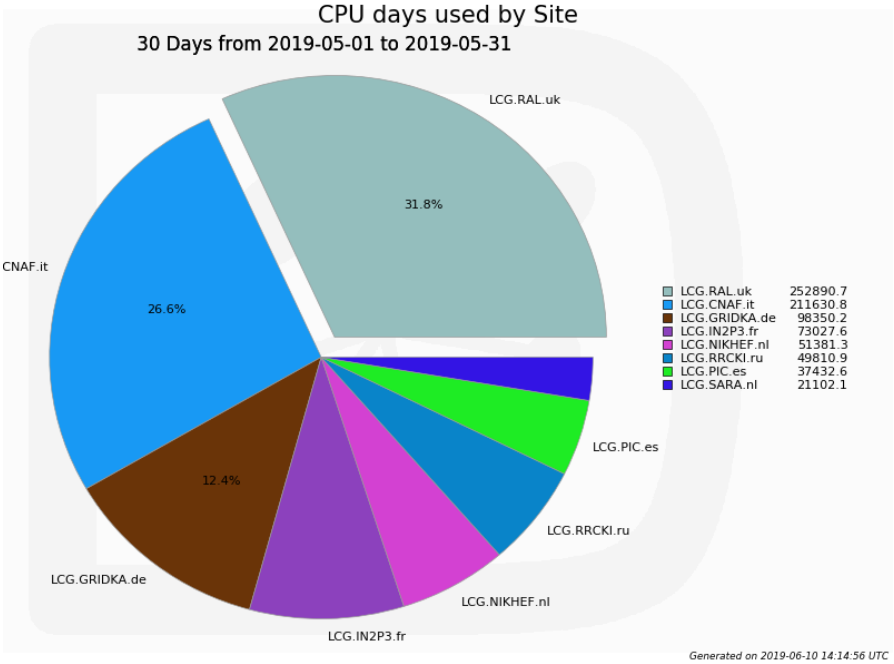
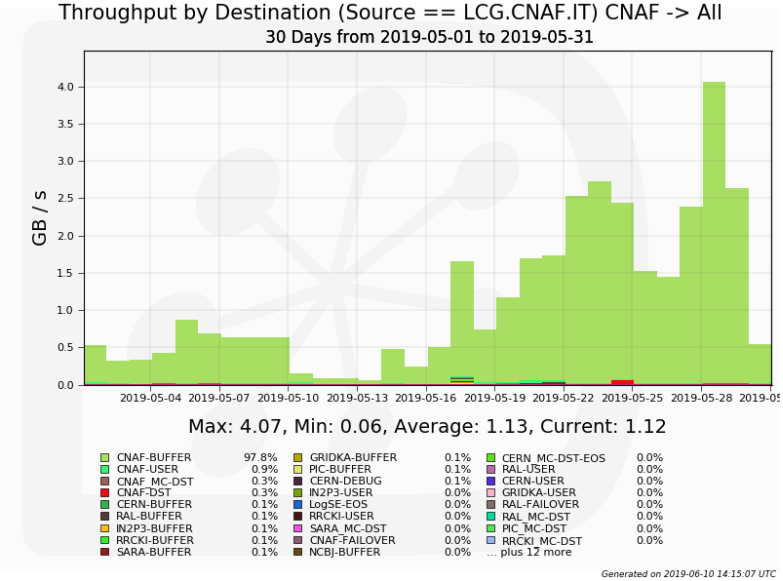
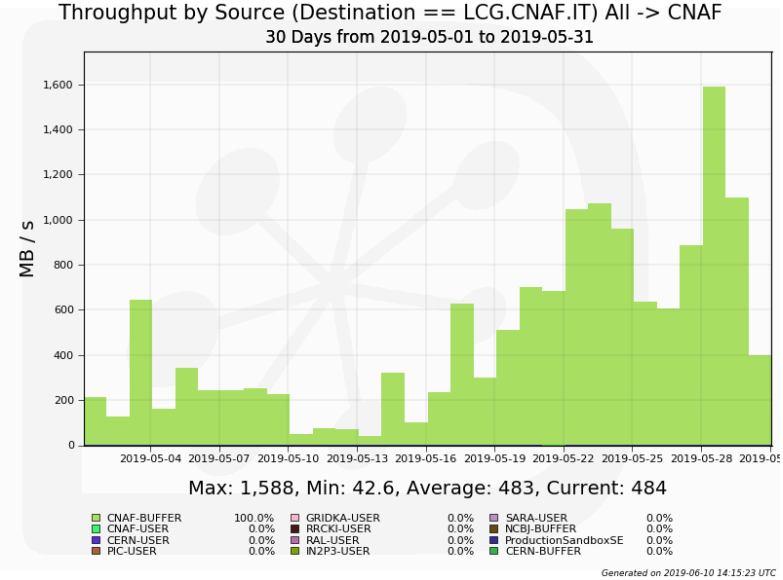


Figura 3: Number of jobs and CPU efficiency - LHCb + LHCb TIER2 (pledge 75564 HS06)


CPU days used by JobType
30 Days from 2019-05-01 to 2019-05-31
MCSimulation
68.2%
15.1%
MCReconstruction
user
MCFastSimulation
MCSimulation 144305.1
MCFastSimulation 31862.8
user 19436.9
MCReconstruction 13079.2
WGProduction 2905.7
MCMerge 27.6
Merge 13.4
Generated on 2019-06-10 14:14:33 UTC


CPU days used by Site
30 Days from 2019-05-01 to 2019-05-31
LCG.RAL.uk
31.8%
CNAF.it
26.6%
12.4%
LCG.GRIDKA.de
LCG.IN2P3.fr
LCG.NIKHEF.nl
LCG.RRCKI.ru
LCG.PIC.es
LCG.RAL.uk 252890.7
LCG.CNAF.it 211630.8
LCG.GRIDKA.de 98350.2
LCG.IN2P3.fr 73027.6
LCG.NIKHEF.nl 51381.3
LCG.RRCKI.ru 49810.9
LCG.PIC.es 37432.6
LCG.SARA.nl 21102.1
Generated on 2019-06-10 14:14:56 UTC





11 Esperimenti di Gruppo 2

- **AMS-O2 - Number of jobs and CPU efficiency (pledge 18000** HS06)
  Open Actions:

  - NTR.

  Report:

- Configurazione di server xrootd e redirector per AMS al CNAF. Problemi risolti, feedback positivi.

- Problemi di visualizzazione spazio tape su Graphana, errore in una query al DB, corretto.

- Problemi di rallentamento e alto carico su macchina ui02-ams, apparentemente dovuti a processo in lettura/scrittura su gpfs in stallo, risolti.

- Problemi di allocazione memoria nel lancio di alcuni script su ui02-ams, problema dovuto a processi in running con alto consumo di memoria, risolto.

- Chiesta conferma di necessità di overpledge CPU a +10000 HS06, ancora presente, in attesa di avviso di fine necessità.

- Problema di accesso all'istanza MongoDB dal Cern dovuto a intervento di rete, risolto.

- **ARGO-YBJ - Number of jobs and CPU efficiency (pledge 0 HS06)**
  Report:

  - NTR.

  Open Actions:

  - DB postgres di Argo su ui-tier1 non acceduto dal 2014, proposta di spostarlo in una qualche area gpfs fino a che non ci rispondono.

- **Auger - Number of jobs and CPU efficiency (pledge 2000 HS06)**
  Report:

  - Errori di esecuzione di alcuni job per un problema di permessi legato al disallineamento del gruppo di appartenenza degli utenti tra DB e nodi, risolto.

- **Borexino - Number of jobs and CPU efficiency (pledge 2083 HS06)**
  Report:

- Problemi di esecuzione di job per spazio disco esaurito, liberato spazio, risolto.

- Copia di file raw su tape, abilitate ACL, in corso trasferimento via gridftp.

- Richiesto overpledge CPU a 3000 HS06, fornito.

- **COSMO_WNEXT - Number of jobs and CPU efficiency (pledge 1000 HS06)**
  Open Actions:

  - Richiesta di trasferimento dati da BSC (Barcellona) al CNAF via Cineca. Doppio salto via gridftp, trasferimento diretto BSC =¿ CNAF non possibile.

- **CTA - Number of jobs and CPU efficiency (pledge 5000 HS06)**
  Report:

  - Fornita lista utenti MAGIC a Di Pierro per invitarli alla richiesta di nuovi account CTA.

  Open Actions:

  - Richiesta di fondere le risorse CTA e MAGIC al CNAF sotto l'unica sigla CTA. Elaborato piano di azione:

    - eliminare coda MAGIC e aumentare pledge CPU CTA della quota attribuita a MAGIC;
    - aumentare il pledge disco di CTA della quota attribuita a MAGIC e spostare i dati di MAGIC nell'area di CTA;
    - aumentare il pledge tape di CTA della quota attribuita a MAGIC e richiamare i file MAGIC da tape e spostarli sotto CTA mantenendo accesso via storm per CTA;
    - creare home CTA per gli utenti MAGIC, che dovranno richiedere un nuovo account; gli verrà fornito accesso alle home MAGIC così da poter trasferire i dati verso le home CTA.

- **CUORE - Pledge 1900 HS06**
  Open Actions:

- In corso indagini più approfondite su job di analisi che falliscono su nodi Cineca, occasionalmente succede anche per job MonteCarlo.

Report:

- Fornito overpledge CPU da 1900 a 4300 HS06 (in corso).

- **CUPID-0 - Number of jobs and CPU efficiency (pledge 100 HS06)**
  Open Actions:

  - In corso aggiornamento dei databases di Cuore/Cupid e di server relativi. Necessari coordinazione con utenti per interruzione sottomissione job interessati e controlli più approfonditi per problemi di sincronizzazione con db di LNGS.

  Report:

  - NTR.

- **DarkSide-50 - Pledge 2000 HS06**
  Open Actions:

  - Database di integrazione per DarkSide 20K conterrà dati per qualche centinaio di GB e dovrà essere accessibile al mondo sia durante l'integrazione del rivelatore che per l'analisi. Preventivata la necessità, tra repliche e backup, di avere $\sim$ 30 core e $\sim$ 60 GB di RAM. Da valutare possibilità di ospitare servizio su Cloud@CNAF.

  Report:

  - NTR.

- **Fermi-LAT - Number of jobs and CPU efficiency (pledge 500 HS06)**
  Report:

  - NTR

- **Gerda - Pledge 40 HS06**
  Report:

- NTR

- **ICARUS - Pledge 4000 HS06**
  Open Actions:

  - Configurazione di DIRAC per sottomissione di job e data management al CNAF in corso, per ora preferito LSF a glite.

  Report:

  - NTR.

- **Juno - Pledge 3000 HS06**
  Open Actions:

  - Discussione con G. Andronico per capire supporto da fornire a juno su vari aspetti (CPU, storage, rete, servizi). Proposta di utilizzo DIRAC per job submission/data management e FTS per Data Movement, in corso test di configurazione.

  Report:

  - Configurato PerfSonar per monitoring performance di rete tra CNAF e altri siti juno, supporto in corso.

  - Problemi di spazio disco su /opt/exp_software/juno per compilazione nuovo software, aumentata la quota.

  - Problemi di sottomissione job via glite, sistemata configurazione dei nodi con creazione di pool account per i pilot job.

  - Problemi di compatibilità del software di juno con CentOS 7, risolti con uso di Singularity.

  - Cominciata nuova produzione juno; problemi di memoria disponibile per job e di CPU complessiva, aumentata memoria e fornito overpledge CPU per 2 settimane (terminato).

  - Data limite per teste di workflow - 15 Setembre

- **LHAASO - Number of jobs and CPU efficiency (pledge 0 HS06)**
  Open Actions:

- NTR.

Report:

- NTR.

- **MAGIC - Number of jobs and CPU efficiency (pledge 296 HS06)**
  Report:

  - Ricevuto assenso alla compressione e archiviazione di vecchi dati MAGIC.
  - Fornita lista utenti MAGIC a Di Pierro per invitarli alla richiesta di nuovi account CTA.

  Open Actions:

  - Richiesta di fondere le risorse CTA e MAGIC al CNAF sotto l'unica sigla CTA. Elaborato piano di azione:
    - eliminare coda MAGIC e aumentare pledge CPU CTA della quota attribuita a MAGIC;
    - aumentare il pledge disco di CTA della quota attribuita a MAGIC e spostare i dati di MAGIC nell'area di CTA;
    - aumentare il pledge tape di CTA della quota attribuita a MAGIC e richiamare i file MAGIC da tape e spostarli sotto CTA mantenendo accesso via storm per CTA;
    - creare home CTA per gli utenti MAGIC, che dovranno richiedere un nuovo account; gli verrà fornito accesso alle home MAGIC così da poter trasferire i dati verso le home CTA.

- **OPERA - Number of jobs and CPU efficiency (pledge 200 HS06)**
  Report:

  - NTR

- **PAMELA - Number of jobs and CPU efficiency (pledge 650 HS06)**
  Report:

- NTR

- **Virgo - Number of jobs and CPU efficiency (pledge 40000 HS06)**
  Open Actions:

  - Fornito quadro relativo ad occupazione del filesystem gpfs al CNAF ed istruzioni per eseguire trasferimento dati tra CNAF e Lione via FTS (previa mappatura DN su gridFTP server di Lione). In attesa di eventuali feedback.

  - Da valutare modalità utilizzo di cache da $\sim$ 10 TB (richiesta di stash-cache) per trasferimento dati LIGO.

  Report:

  - Effettuato training per sottomissione job via grid a cluster HTCondor del CNAF (per utilizzo di GPU in prospettiva) con Luca Rei.

  - Problemi di esecuzione job e utilizzo di tool glite per sottomissione a Cream CE, risolti.

  - Overpledge CPU terminato.

- **XENON - Number of jobs and CPU efficiency (pledge 1300 HS06)**
  Report:

  - NTR.

  Open Actions:

  - Possibili problemi di gestione recall/migration dati da/verso tape a causa di struttura dati frammentaria, risoluzione in corso di valutazione.

12 Altri esperimenti

- **AGATA - Pledge 0 HS06**
  Report:

  - NTR.

- **BELLEII - Number of jobs and CPU efficiency (pledge 13000 HS06)**
  Report:

  - Il software di Belle II funziona solo su SL6. Dopo migrazione a SL7 sui nodi CNAF, necessario utilizzare Singularity con SL6 configurato in maniera automatica su una coda specifica.

  - Richiesta da Belle II di attivazione automatica di Singularity al lancio dei job in modo da evitare modifiche ai pilot di DIRAC.

  - Richiesta da Belle II per utilizzare immagine Singularity con SL6 già preparata da noi per altri esperimenti, fornite istruzioni necessarie.

  - Network Data challenge effettuato con esiti positivi.

  Open Actions:

  - NTR.

- **CDF - Number of jobs and CPU efficiency (pledge 0 HS06)**
  Report:

  - SAM station che si interfacci con Tape Storage Management del CNAF installata con successo, effettuati test positivi di sottomissione job analisi di CDF in interattivo.

  Open Actions:

  - Ultimare installazione di una seconda SAM station al CNAF che si interfacci con lo storage management (tape/disk) del FNAL. Al momento non in grado di comunicare con i server FNAL, probabilmente a causa di firewall.

- Effettuare test di sottomissione job in interattivo fornendo accesso ad utente CDF su nodo CNAF.

- **COMPASS - Pledge 0 HS06**
  Report:

  - NTR

- **COSINUS - Number of jobs and CPU efficiency (pledge 0 HS06)**
  Report:

  - NTR

  Open Action:

  - NTR

- **CSES-Limadou - Pledge 400 HS06**
  Report:

  - NTR

  Open Action:

  - NTR

- **DAMPE - Pledge 10000 HS06**
  Report:

  - NTR

  Open Action:

  - Richiesta di installazione di DB mysql su ui-dampe.

- **FAMU - Pledge 5250 HS06**
  Report:

  - NTR

- **FAZIA - Pledge 0 HS06**
  Report:

  - Le macchine sono nuovamente usate dall'esperimento

- **Gruppi Fisica Teorica - Number of jobs and CPU efficiency**
  Report:

  - NTR

- **KLOE - Pledge 0 HS06**
  Report:

  - NTR

  Open Action:

  - NTR.

- **KM3Net - Pledge 300 HS06**
  Open Actions:

  - Fornire supporto per sottomissione job tramite DIRAC (Marcelo).
  - Trovare un sistema per trasferimento dati/sincronizzazione storage tra CNAF e Lione (Lucia).

  Report:

  - Installazione software su "/opt/exp_software/km3".
  - Fornire macchina per servizio a supporto dell'integrazione del detector (a.k.a. KM3DIA).
  - Installazione e messa in opera di "dataclient" presso i siti di acquisizione dati (Tolone e Capo Passero) per trasferimento dati raw verso storage CNAF.

- **LHCf - Number of jobs and CPU efficiency (pledge 9000 HS06)**
  Report:

- NTR

- **NEWS - Pledge 300 HS06**
  Report:

  - NTR.

- **NEWCHIM - Pledge 0 HS06**
  Report:

  - NTR.

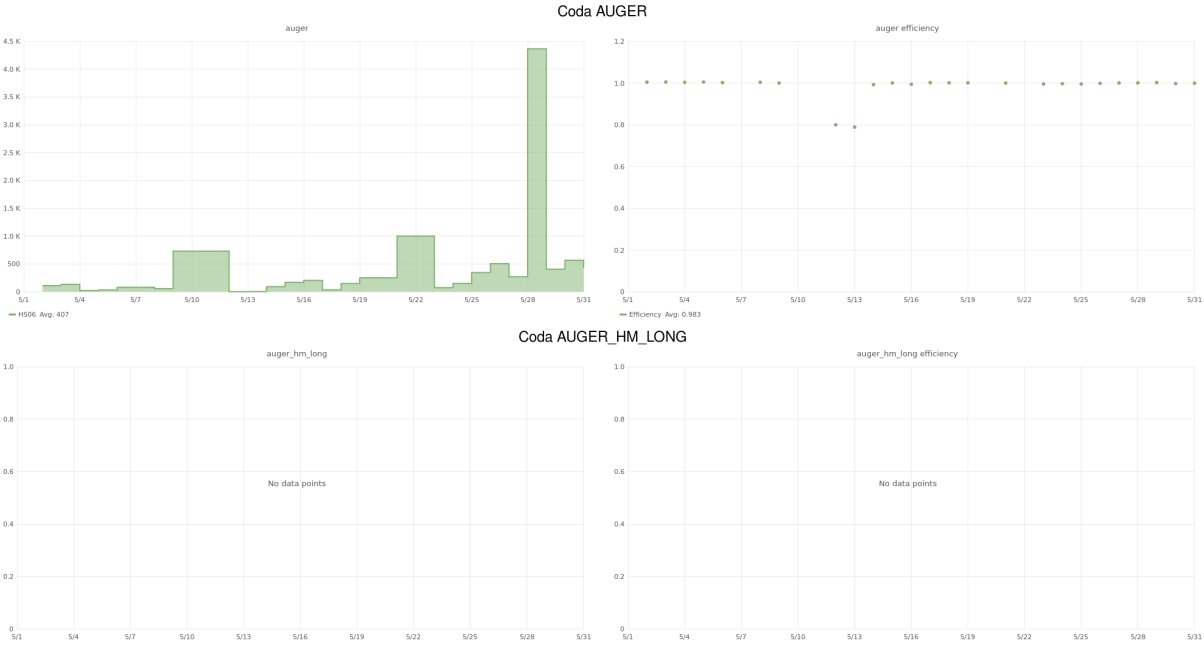
- **NTOF - Pledge 0 HS06**
  Report:

  - .

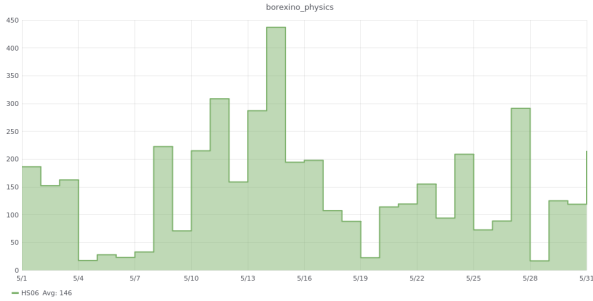
- **PADME - Pledge 6000 HS06**
  Report:

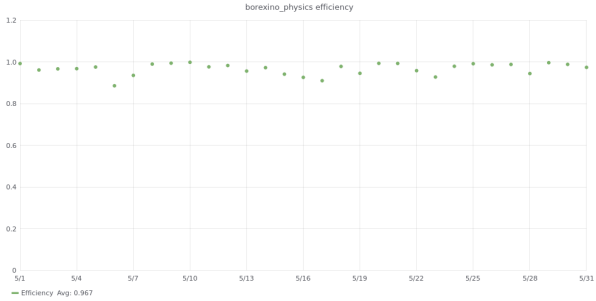
  - NTR


Coda AMS
ams
ams efficiency
HS06 Avg: 5.75 K
Efficiency Avg: 0.812
Coda AMS_PROD
ams_prod
ams_prod efficiency
HS06 Avg: 11.00 K
Efficiency Avg: 0.812
Coda AMS_SHORT
ams_short
ams_short efficiency
HS06 Avg: 49
Efficiency Avg: 0.476

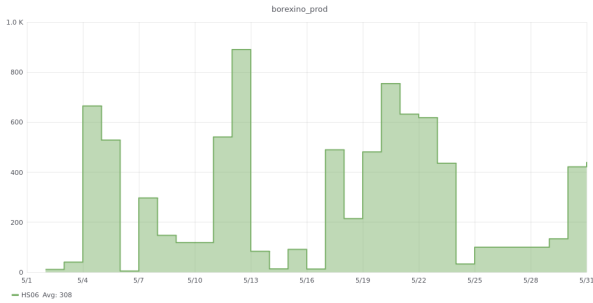

Coda AUGER
auger
4.5 K
4.0 K
3.5 K
3.0 K
2.5 K
2.0 K
1.5 K
1.0 K
500
0
5/1
5/4
5/7
5/10
5/13
5/16
5/19
5/22
5/25
5/28
5/31
HS06 Avg: 407
auger efficiency
1.2
1.0
0.8
0.6
0.4
0.2
0
Efficiency Avg: 0.983
Coda AUGER_HM_LONG
auger_hm_long
No data points
auger_hm_long efficiency
No data points

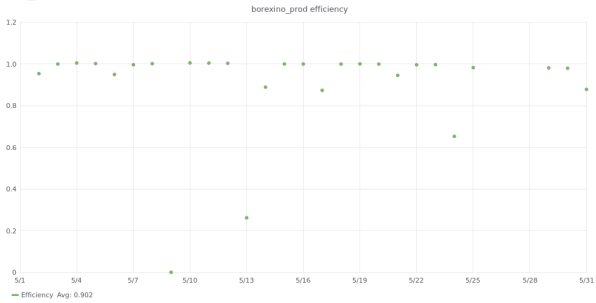
Coda BOREXINO_PHYSICS



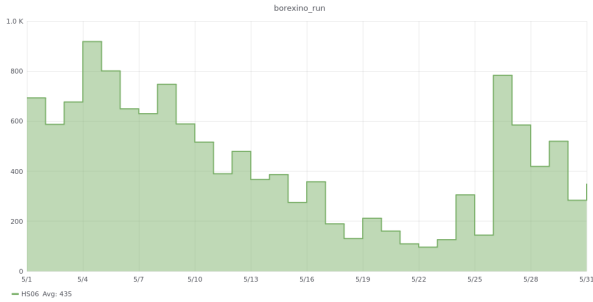


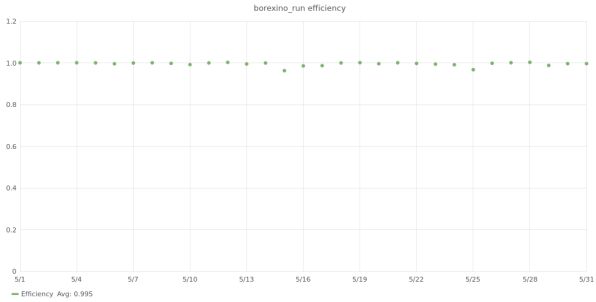
Coda BOREXINO_PROD





Coda BOREXINO_RUN





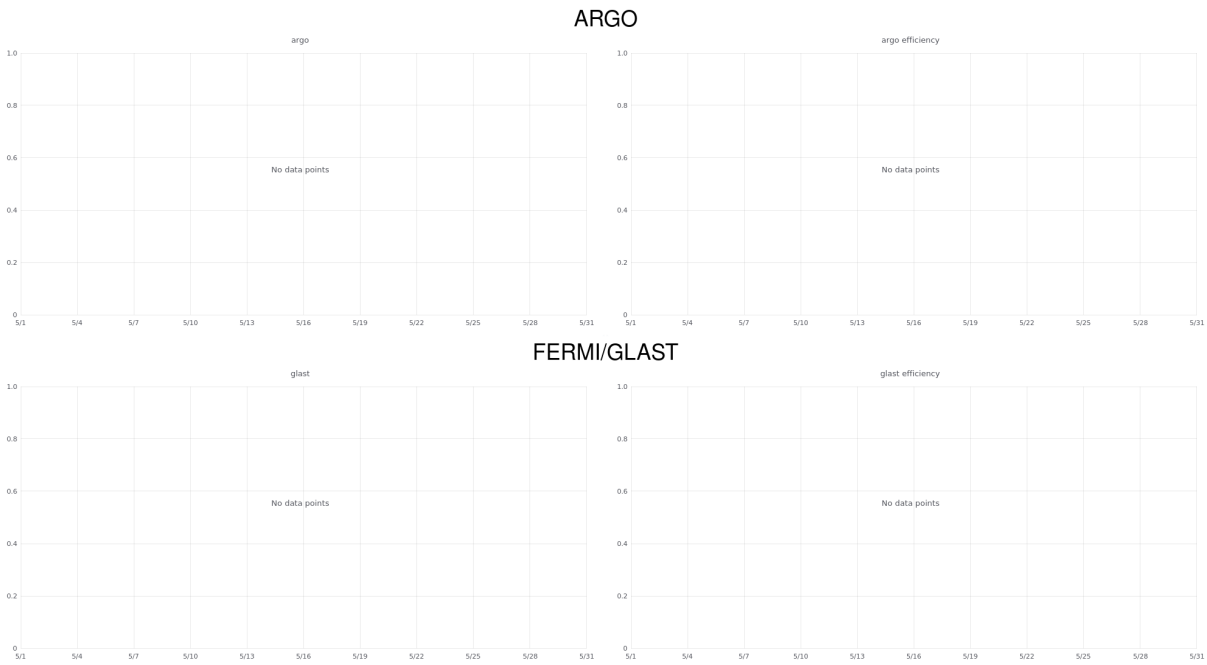


Figura 1

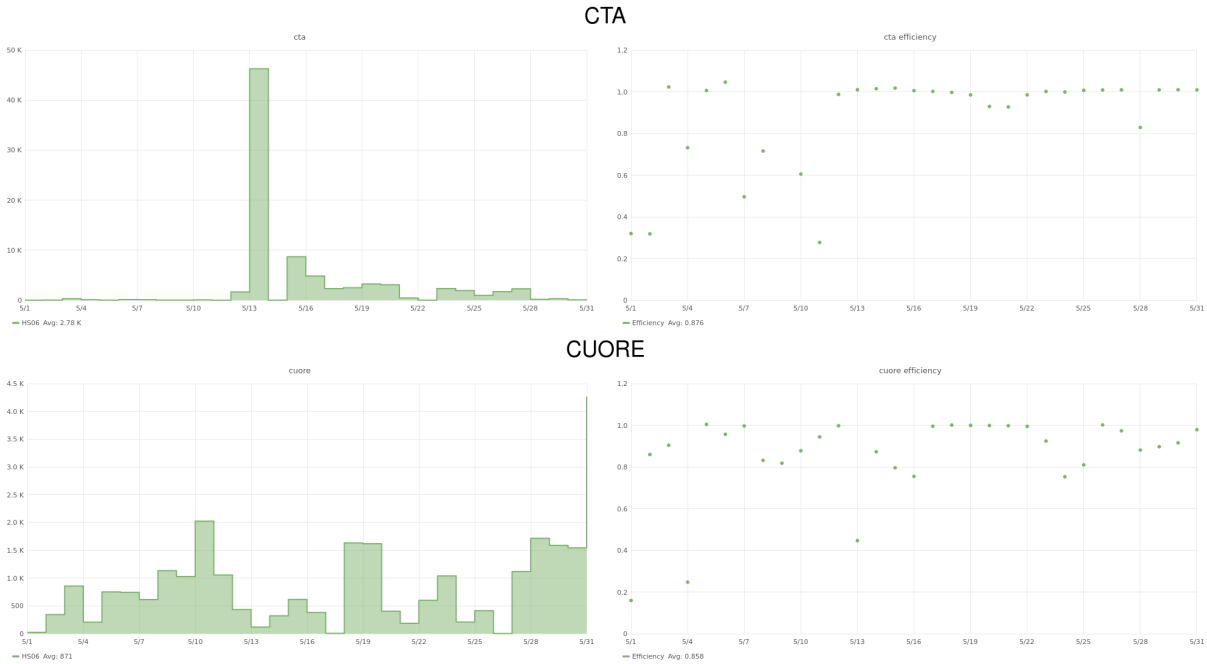


Figura 2

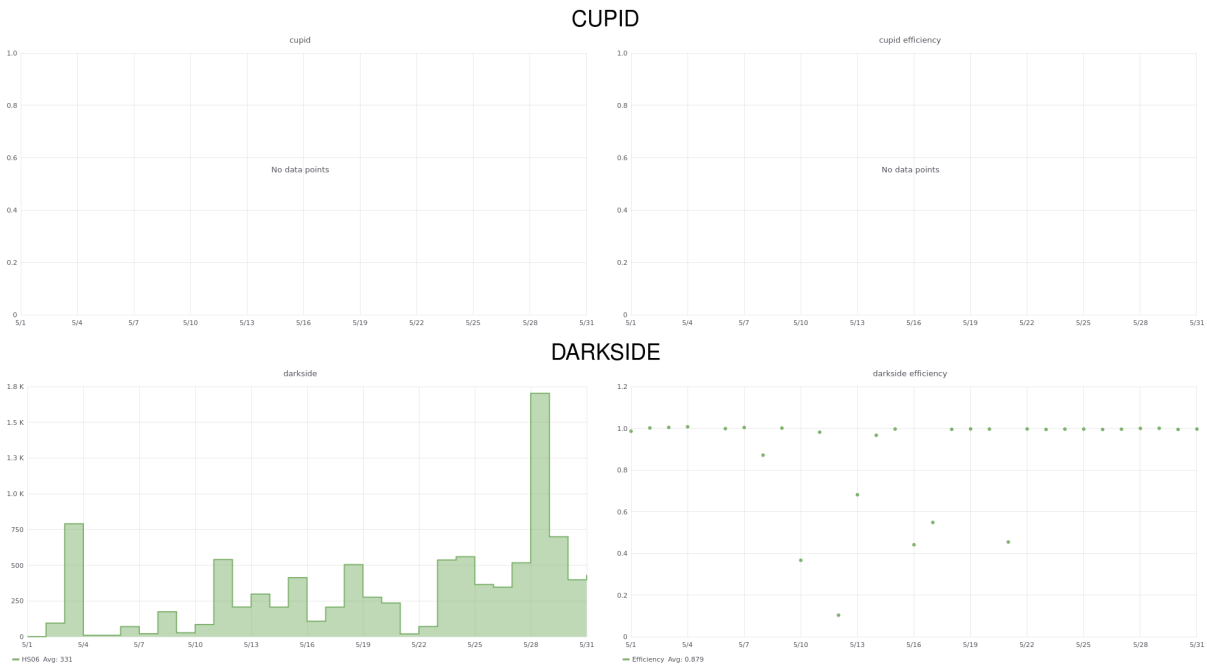


Figura 3

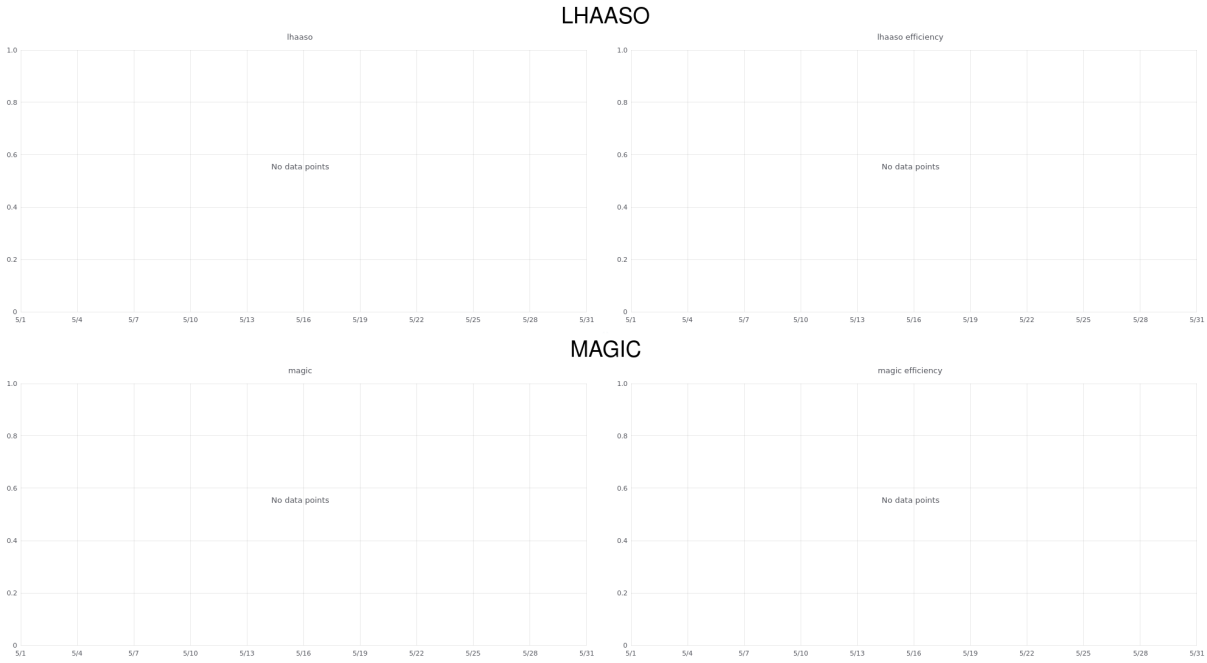


Figura 4

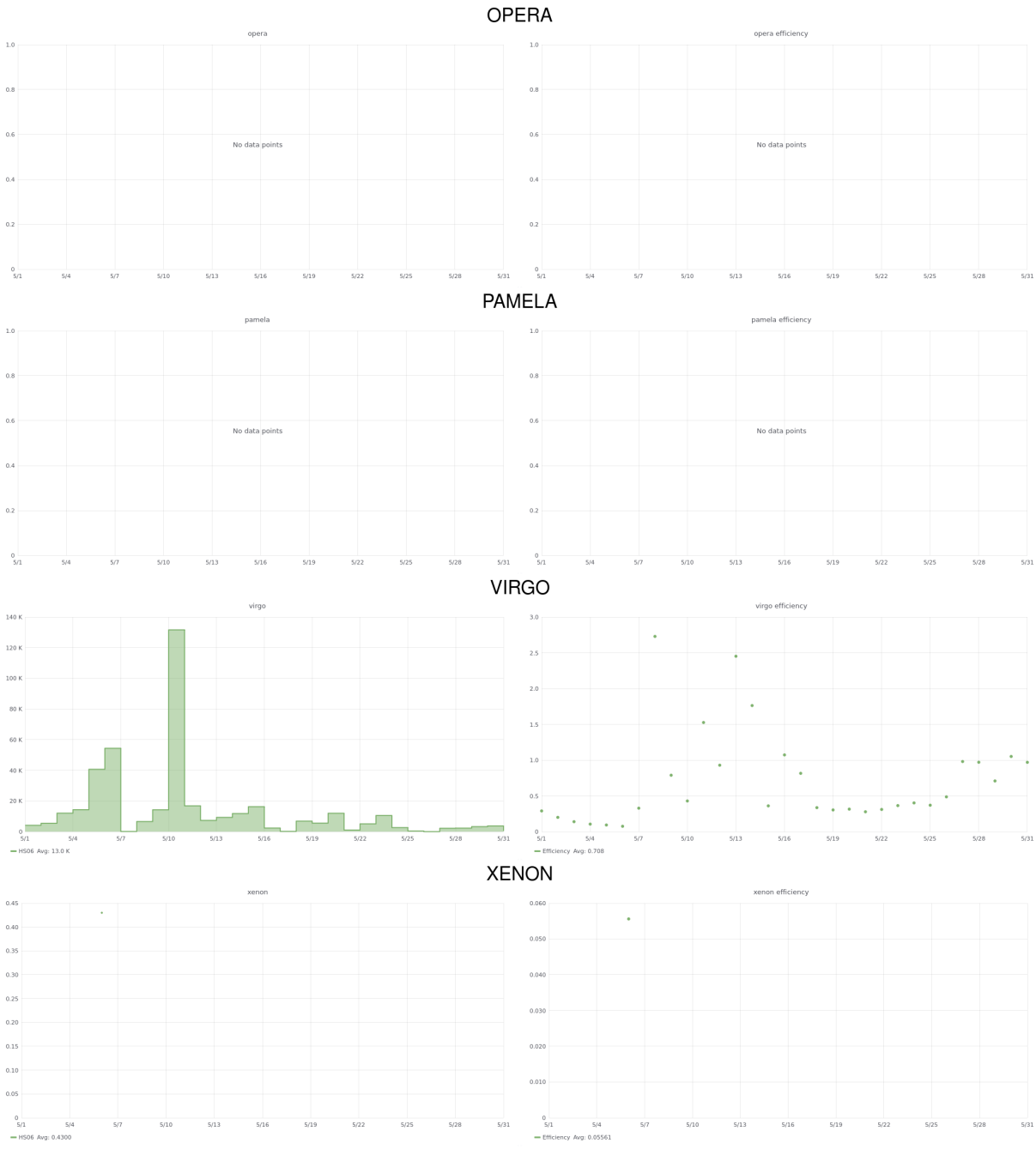

OPERA
opera
No data points
opera efficiency
No data points
PAMELA
pamela
No data points
pamela efficiency
No data points
VIRGO
virgo
HS06 Avg: 13.0 K
virgo efficiency
Efficiency Avg: 0.708
XENON
xenon
HS06 Avg: 0.4300
xenon efficiency
Efficiency Avg: 0.05561

Figura 5

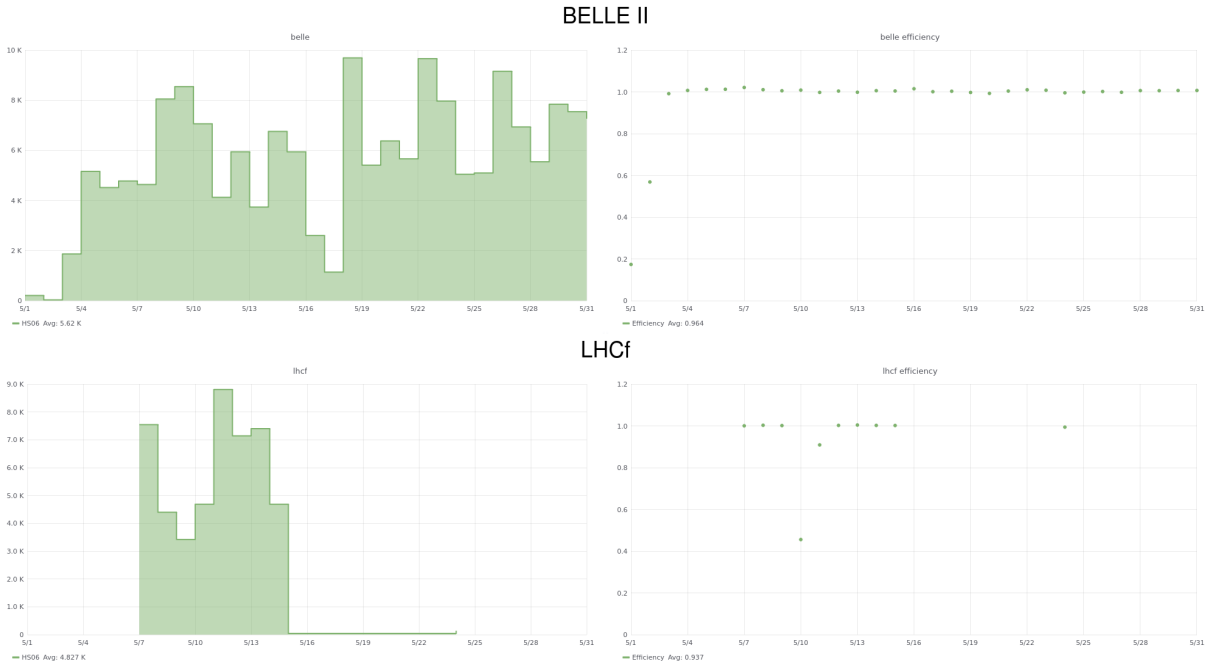

BELLE II
belle
belle efficiency
HS06 Avg: 5.62 K
Efficiency Avg: 0.964
LHCf
lhcf
lhcf efficiency
HS06 Avg: 4.827 K
Efficiency Avg: 0.937

Figura 6