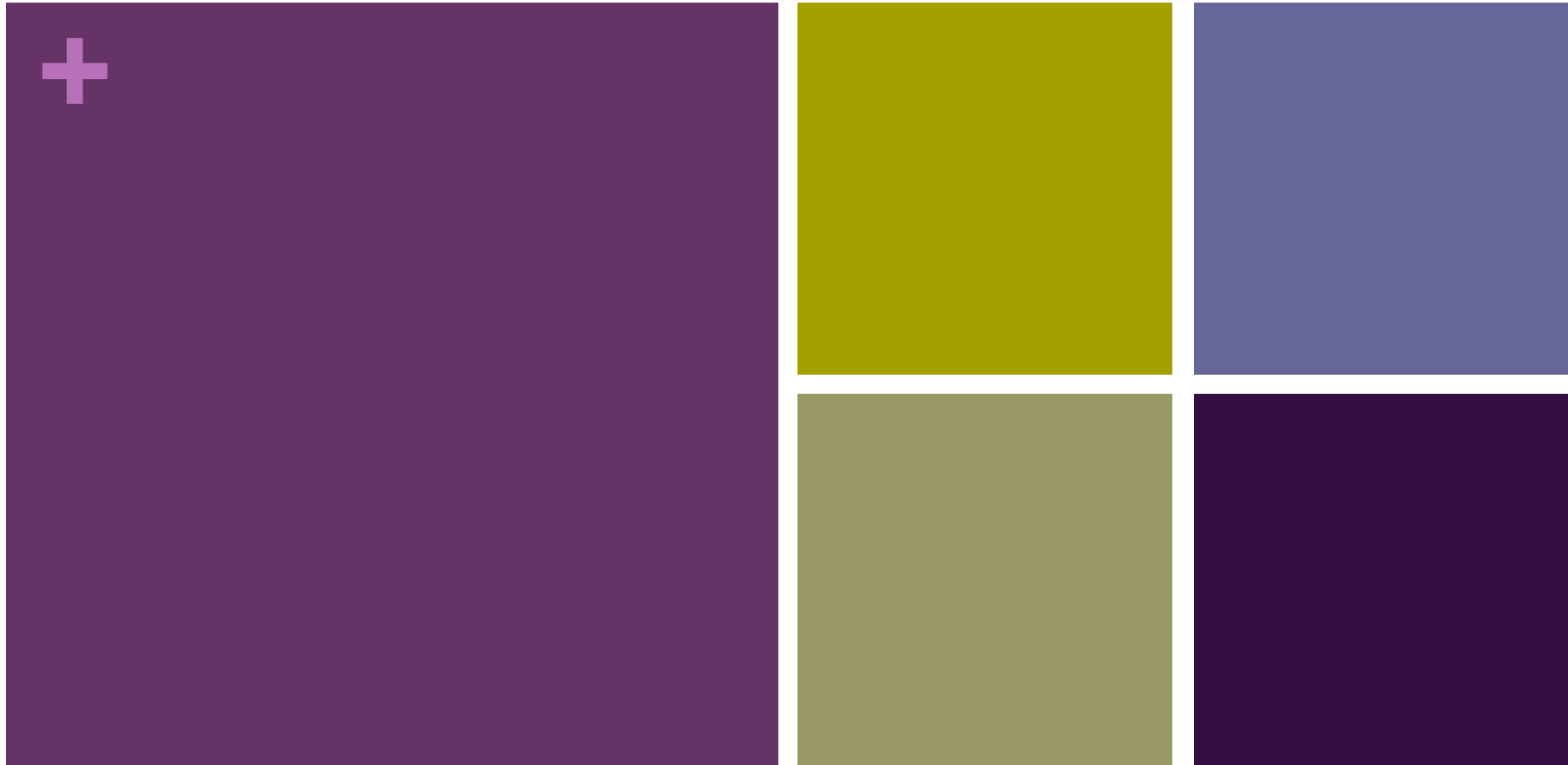




Esperimenti Gruppi 2/3

- User Support - INFN-CNAF
- CdG@CNAF - 19/07/2019

+ Utilizzo Cluster HTCondor

- Il reparto farming sta lavorando alla migrazione del batch system utilizzato al CNAF da LSF/glite a HTCondor.
- Un cluster di produzione è stato già configurato con 16 Worker Nodes e alcuni VO ed esperimenti sono già stati abilitati per la sottomissione.
- La sottomissione locale, prima gestita tramite LSF, diventerà disponibile tramite comando *condor_submit* verso il submit node *sn-01.cr.cnaf.infn.it*. Gli esperimenti già abilitati a fare test di sottomissione locale sono: **Virgo**, **AMS-02** e **Borexino**.
- La sottomissione via Grid, prima effettuata tramite comandi GLite verso CREAM CE, diventerà disponibile tramite sottomissione a HTCondor-CE. Le VO già abilitate a sottomettere job in produzione sono: **Virgo**, **ATLAS**, **ALICE**, **LHCb**, **CDF**, **dteam**.
- Al momento **non** è ancora stato implementato un sistema di integrazione dell'accounting con quello relativo a LSF, pertanto Grafana non tiene conto dell'utilizzo delle risorse CPU gestite da HTCondor. **È in corso l'implementazione di un sistema di accounting appositamente sviluppato per HTCondor.**

+ ICARUS - Sottomissione job/trasferimento dati

- ICARUS@FNAL vorrebbe sottomettere job in produzione e backuppare i dati raw utilizzando risorse CNAF.
- *Richieste*: trasferire eventi di produzione da FNAL al CNAF per sottomettere job di analisi al CNAF via Grid e trasferire copia di backup dei *raw data* (1-2 PB/anno) al CNAF.
- Servono quindi sistema di sottomissione job verso il CNAF e tool per trasferimento dati da FNAL al CNAF.
- Suggerito in passato alla collaborazione italiana utilizzo di DIRAC per fare processing massivo al CNAF. FNAL deve valutare uso di RUCIO. Al momento in corso predisposizione di un sistema trasferimento dati verso il CNAF per CDF che integri *public dCache* del FNAL con server GridFTP. Da valutare performance di rete, richiesta *bandwidth* non inferiore a 40 MB/s.
- Fornito alla collaborazione italiana supporto per sottomissione job al CNAF via GLite/LSF. Per ora sistema adottato preferibilmente è LSF poiché non vi sono altri siti di processing oltre al CNAF.
- Soluzione preferibile per il FNAL per sottomissione job al CNAF sarebbe via Grid verso cluster HTCondor. Perché la sottomissione abbia successo, è necessario inserire l'endpoint degli HTCondor-CE nel glidein-WMS dell'Università di San Diego. Aperto un ticket su OpenScienceGrid con la stessa finalità per CDF, da valutare fattibilità.

+ JUNO

Open Actions:

- partecipazione general collaboration meeting- giornata su computing:

<https://indico.ihep.ac.cn/event/10348/>

- - richiesta overpledge per montecarlo a 1000 core

Report:

- - Configurato PerfSonar per monitoring performance di rete tra CNAF e altri siti juno, supporto in corso.
- Problemi di compatibilit`a del software di juno con CentOS 7, risolti con uso di Singularity.
- Data limite per teste di workflow - 15 Settembre



+ VIRGO

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.
- Richiesto utilizzo di cache da ~10 TB per trasferimento dati LIGO.
- In corso installazione e configurazione di xcache.
- Fornite istruzioni agli utenti per migrazione dati Rucio a cartella configurata in modo da non migrare verso tape.

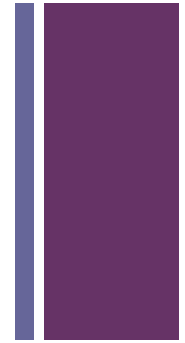


+ ASFIN

Open Actions:

- Configurato spazio disco – in corso migrazione dati da cluster HPC – non useranno CPU al CNAF

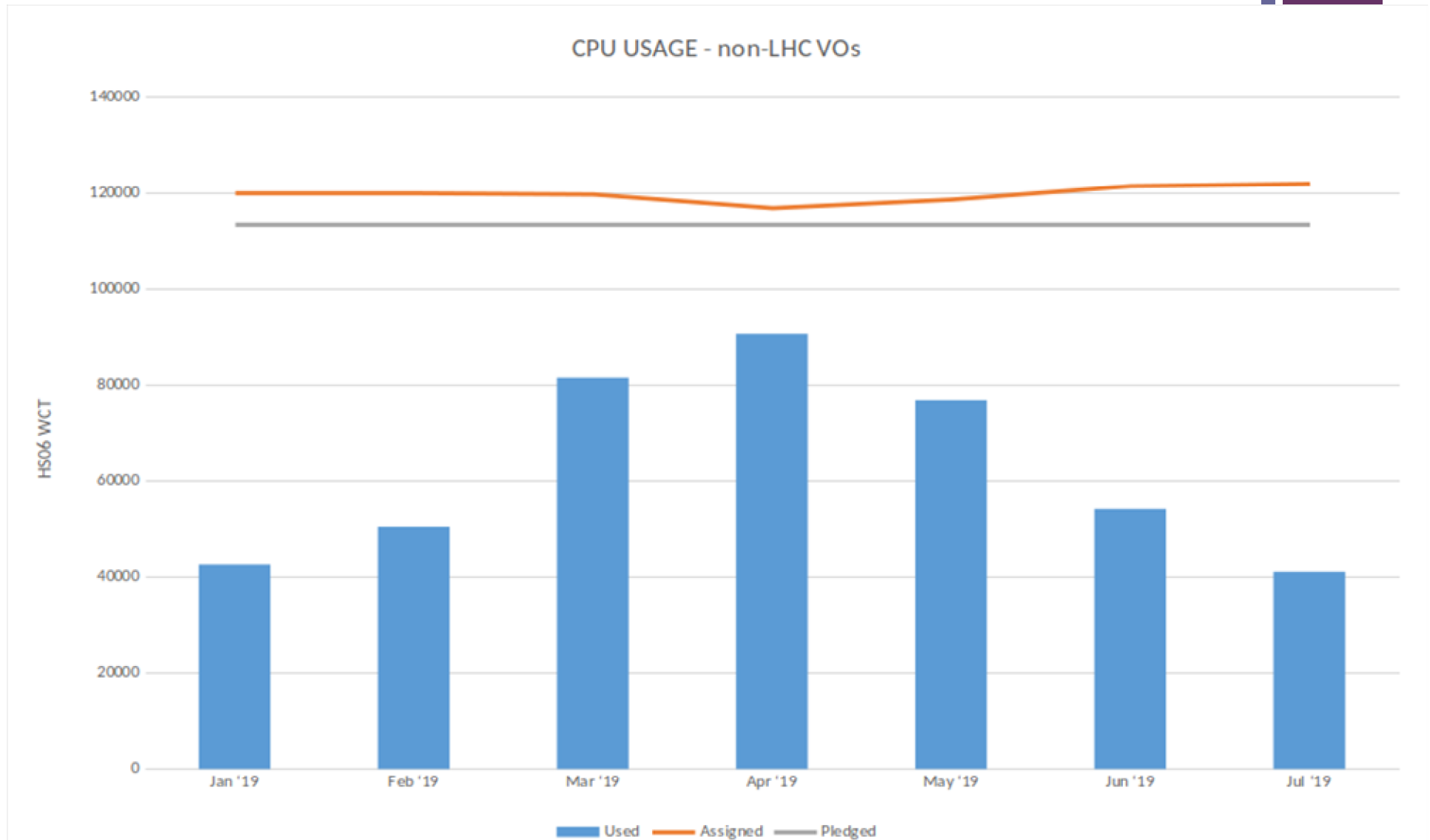




Accounting Exp no LHC CPU & Disk Usage

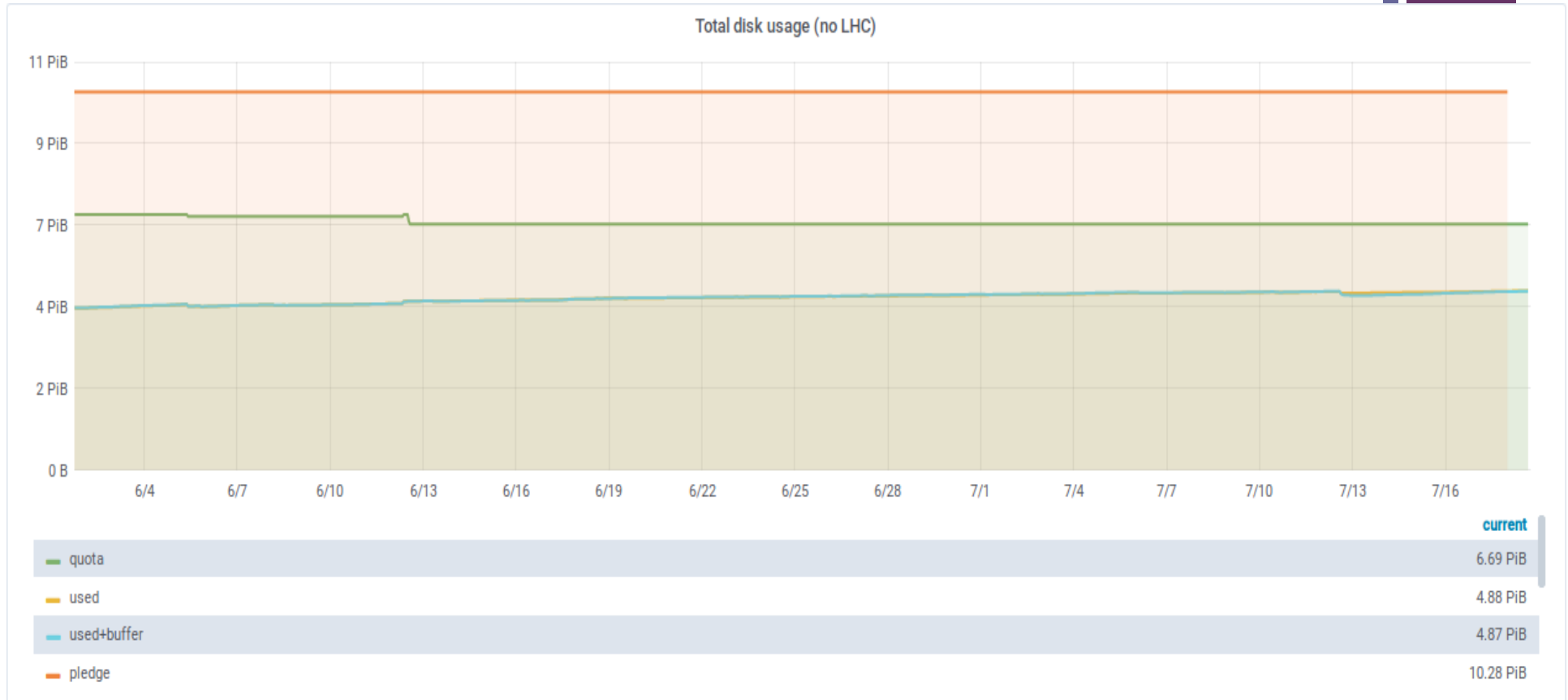


Accounting non-LHC VOs – CPU



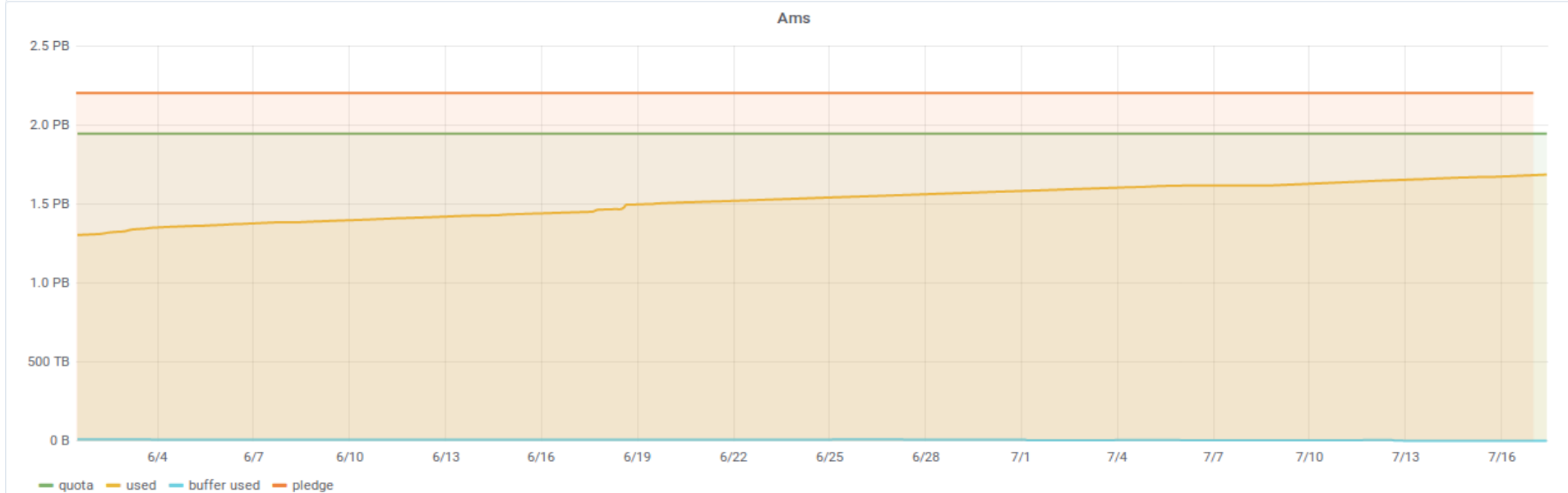
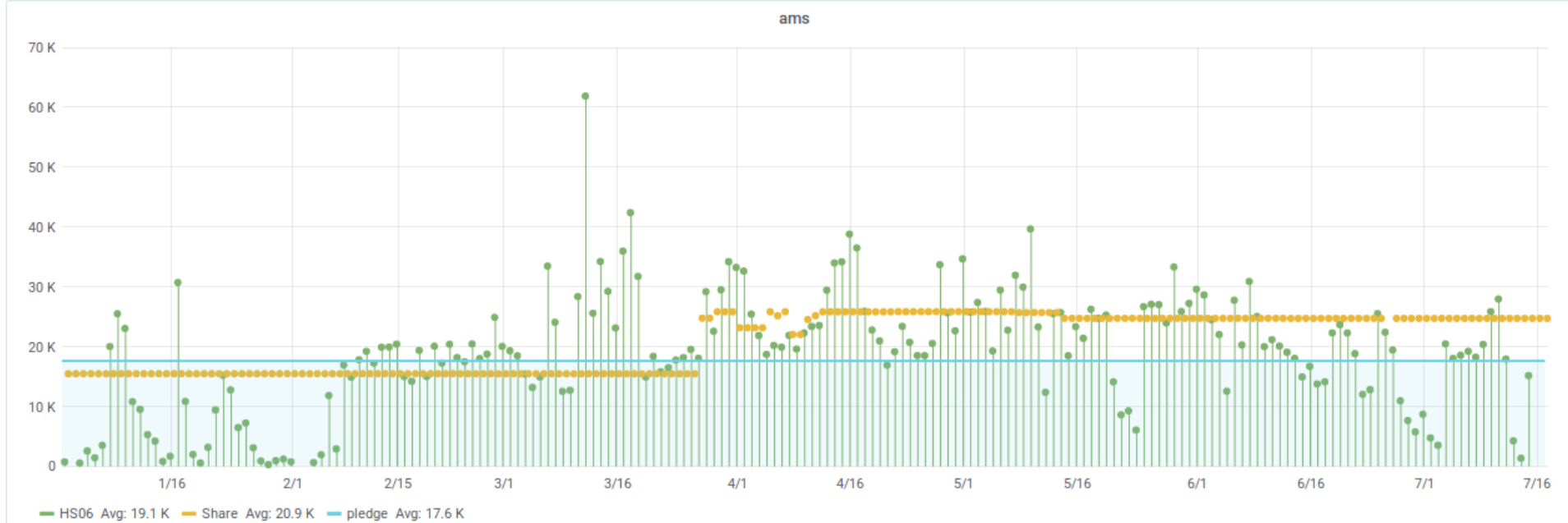


Accounting non-LHC VOs – disk



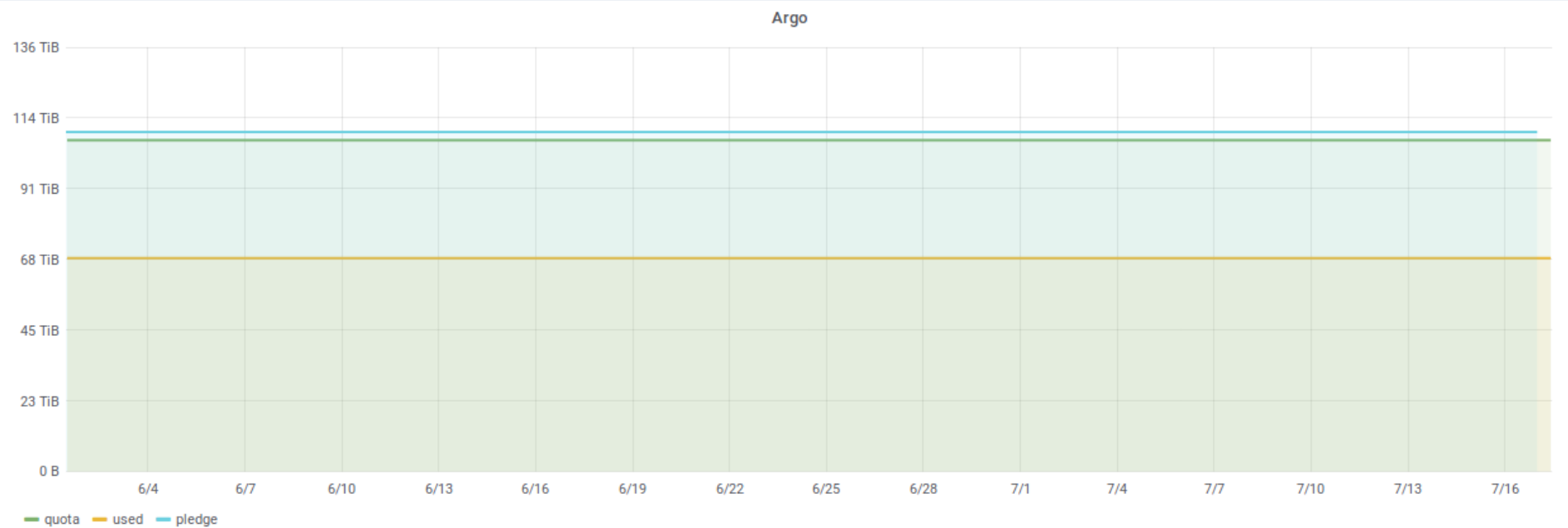
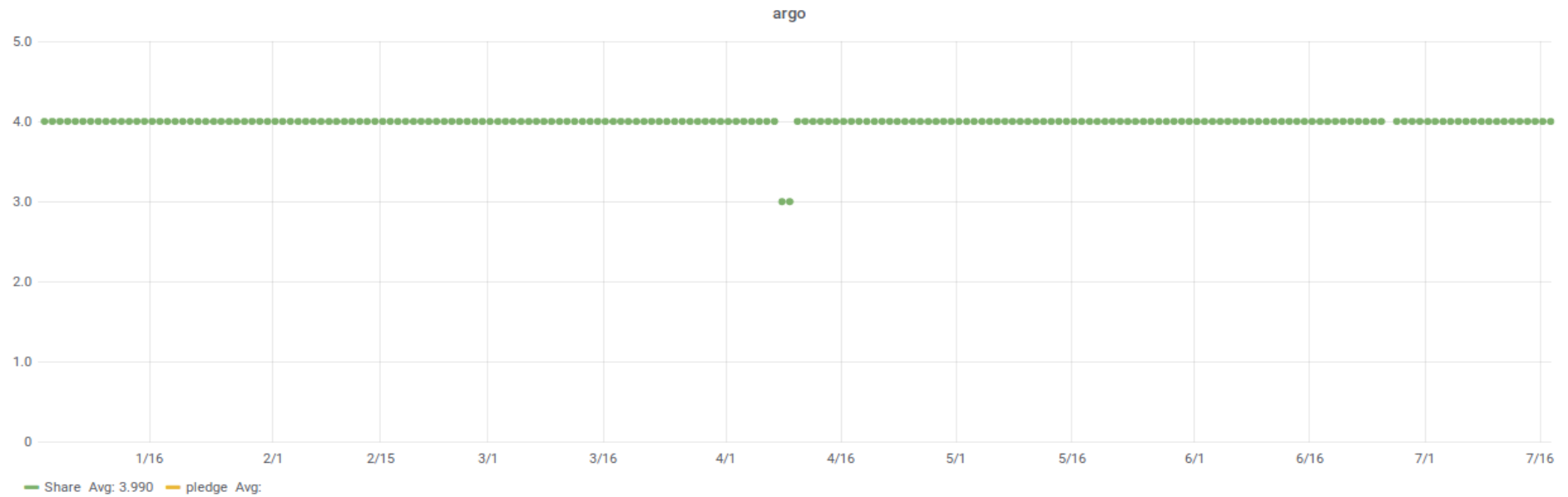


Accounting AMS - CPU & disk



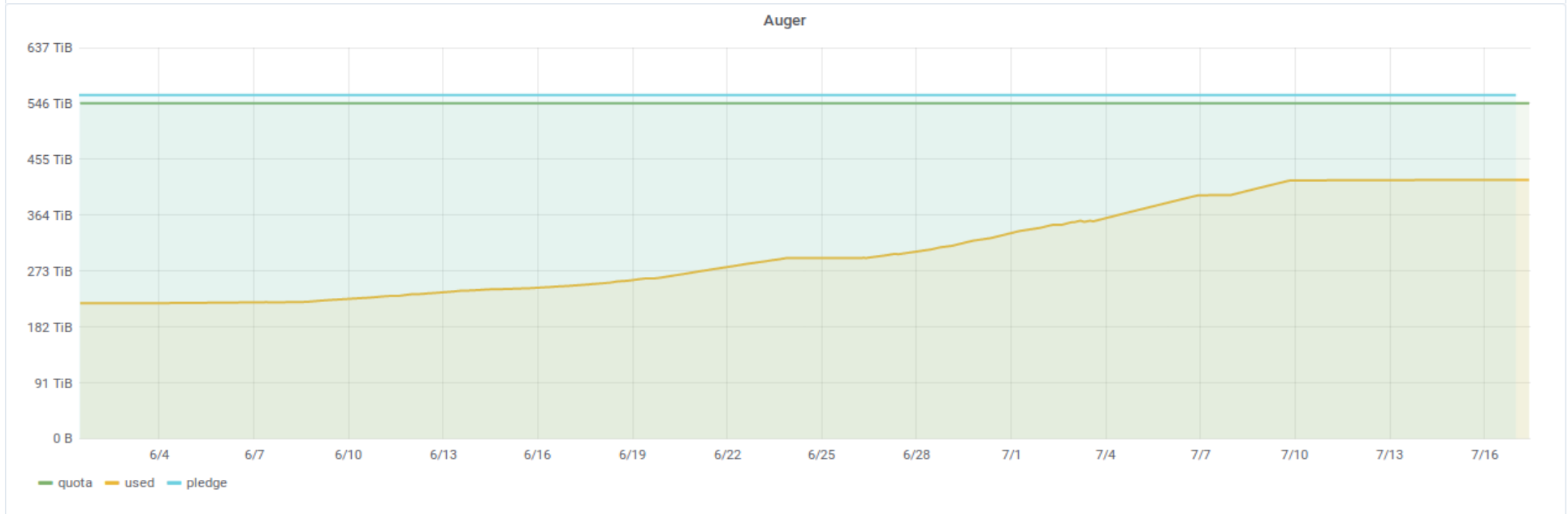
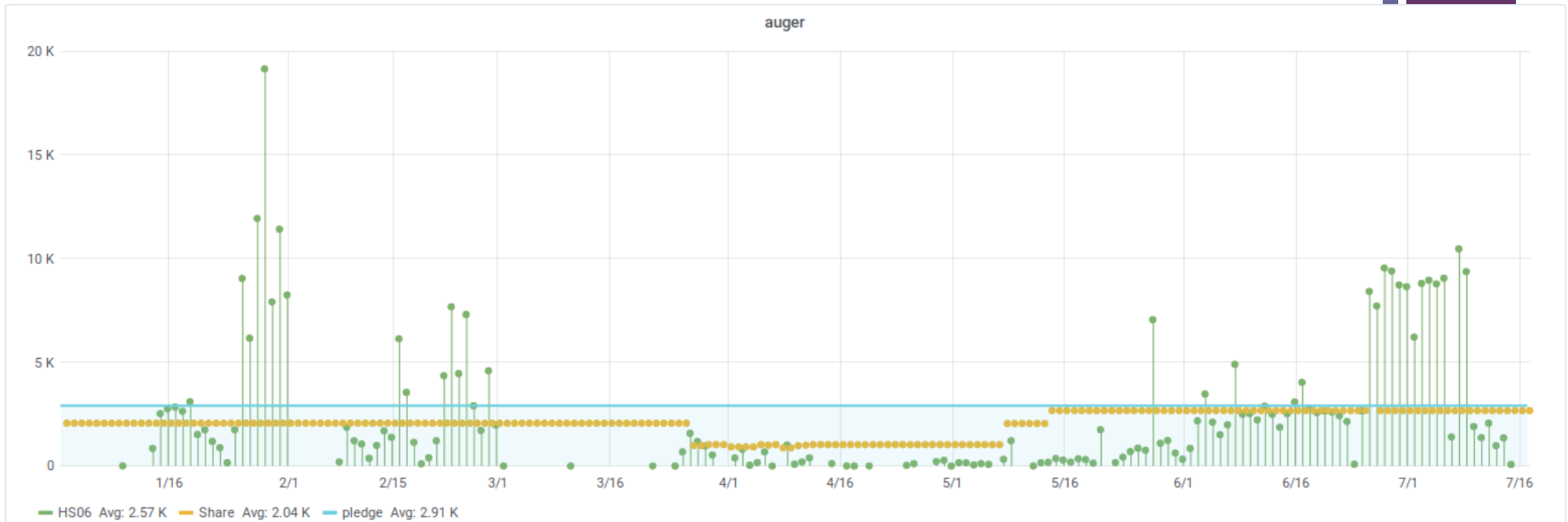


Accounting ARGO - CPU & disk

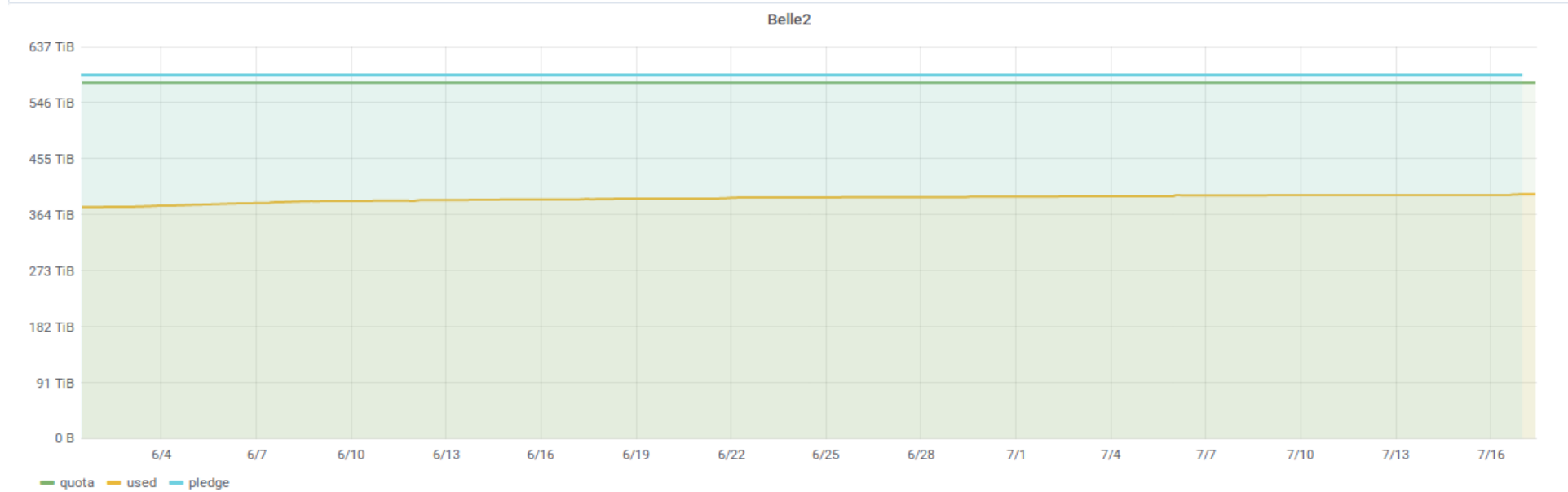
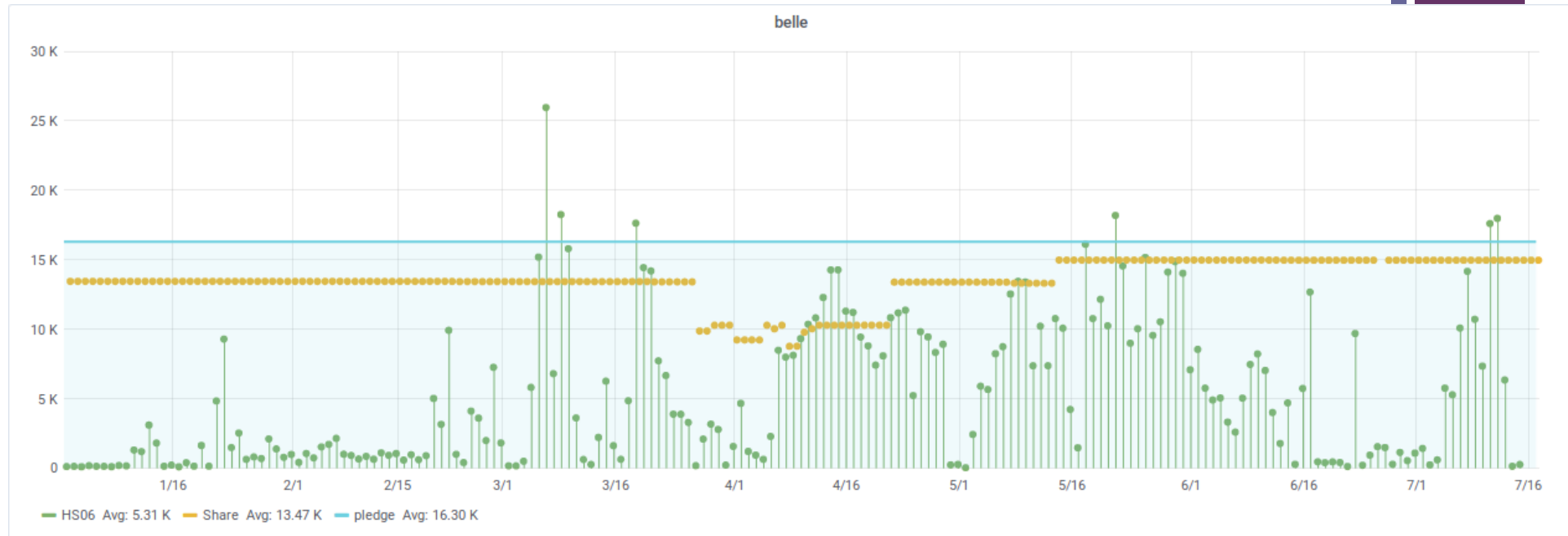




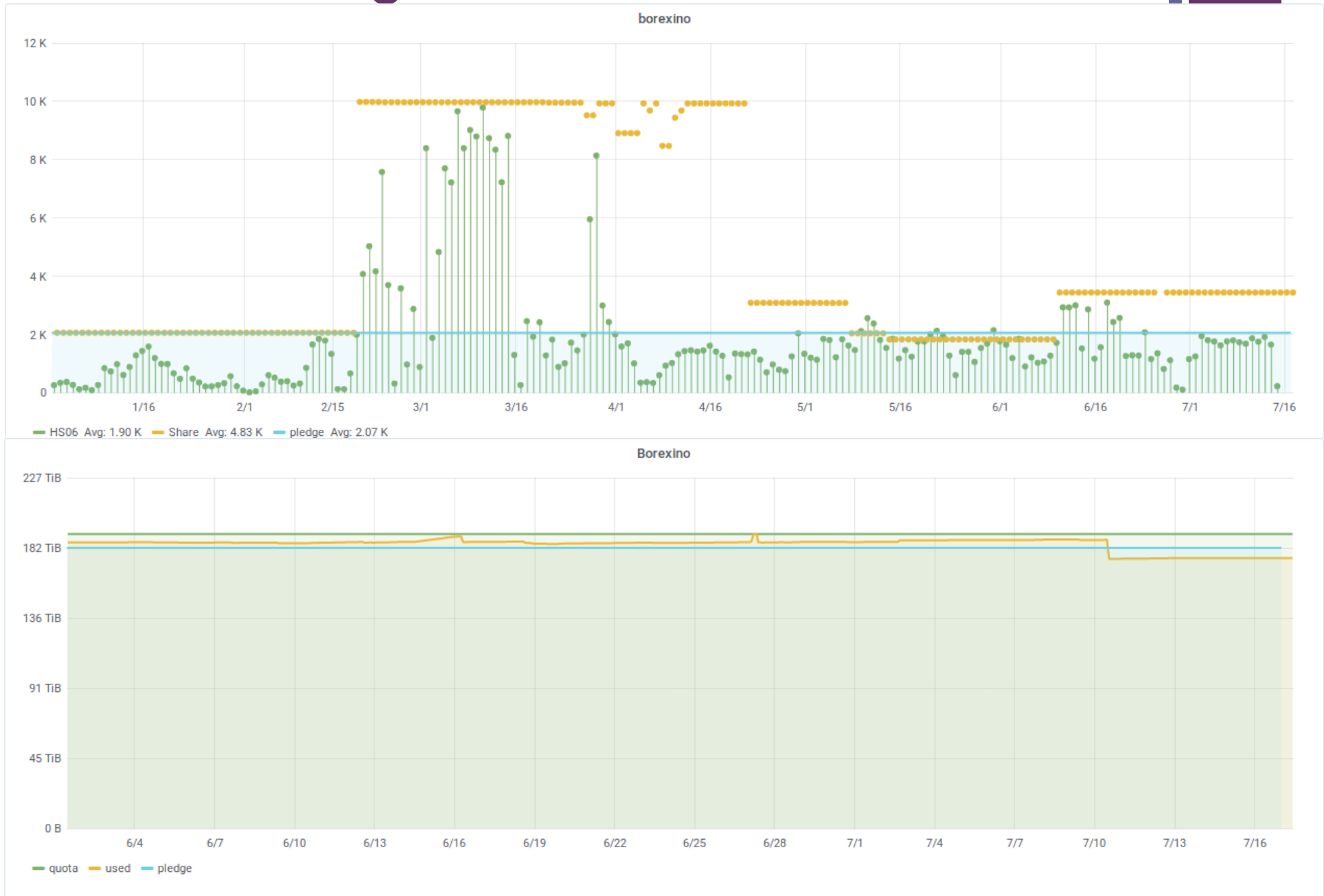
Accounting Auger - CPU & disk



+ Accounting Belle II - CPU & disk

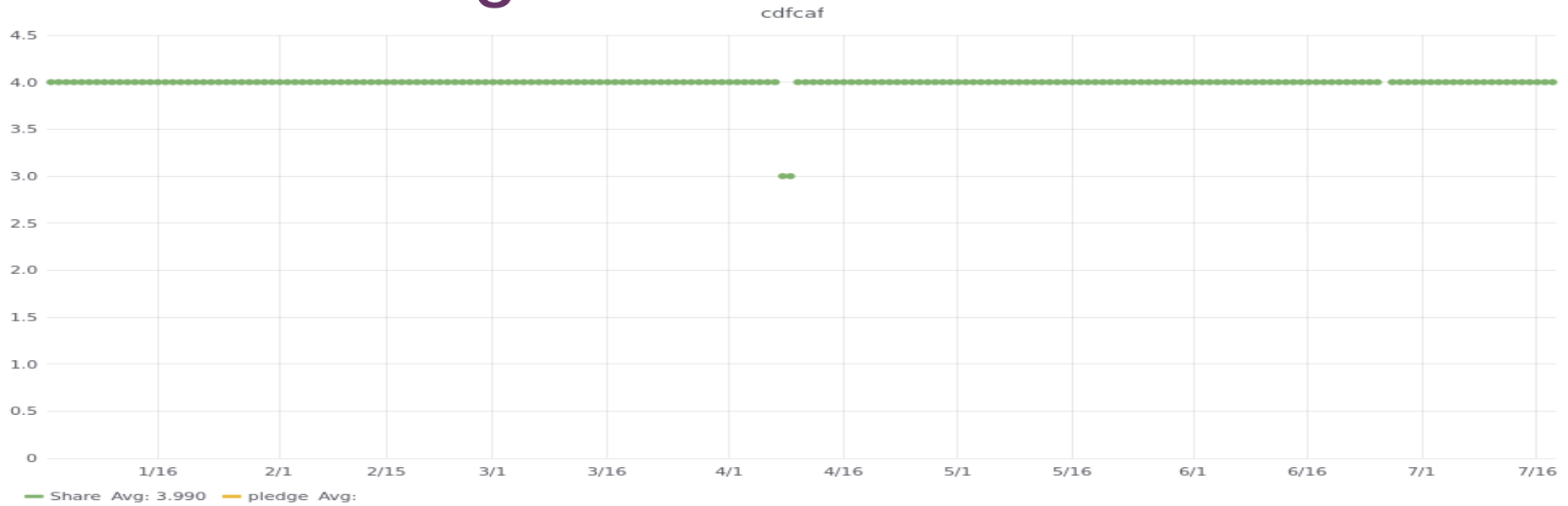


+ Accounting Borexino - CPU & disk





Accounting CDF - CPU

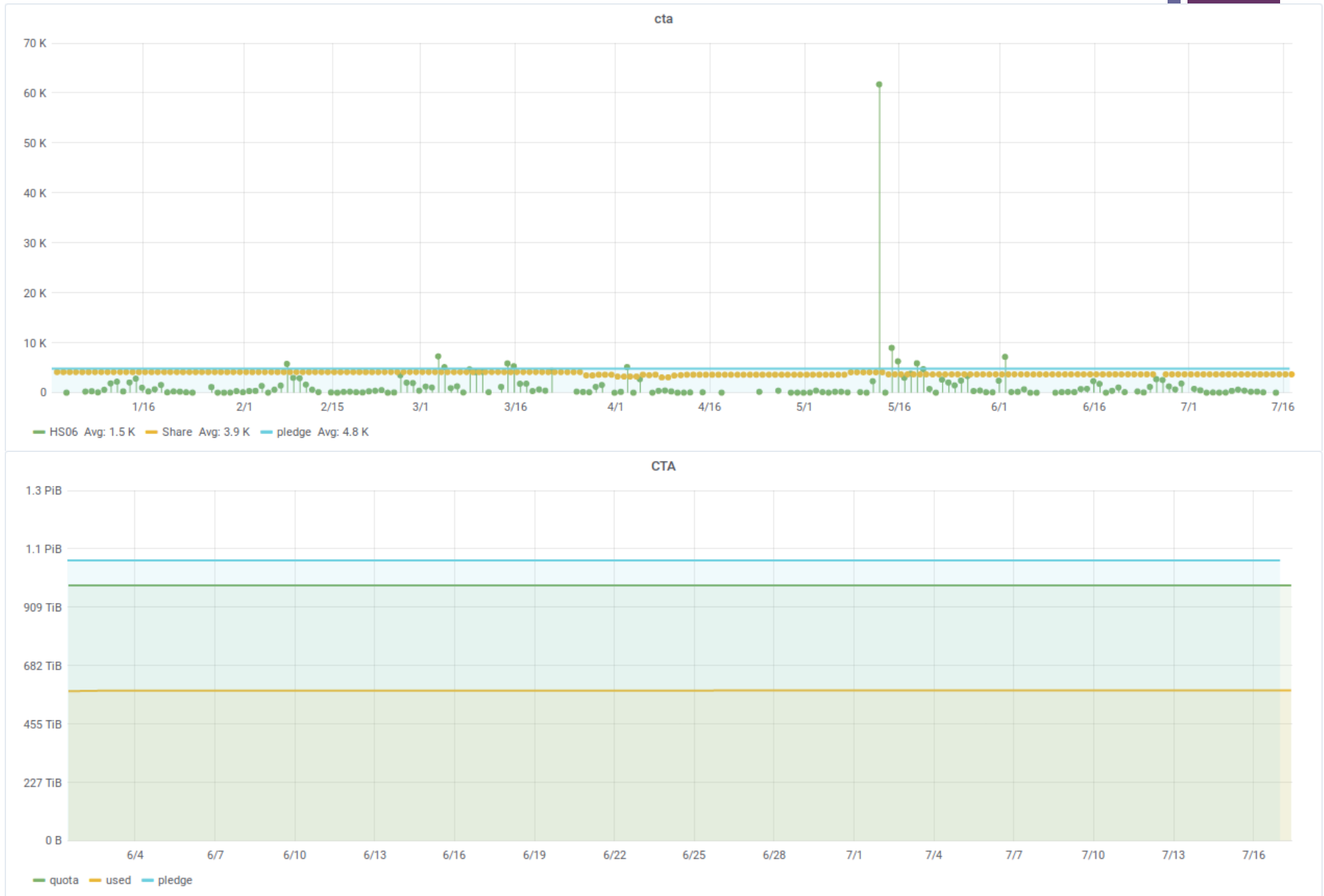


Accounting Generic - CPU



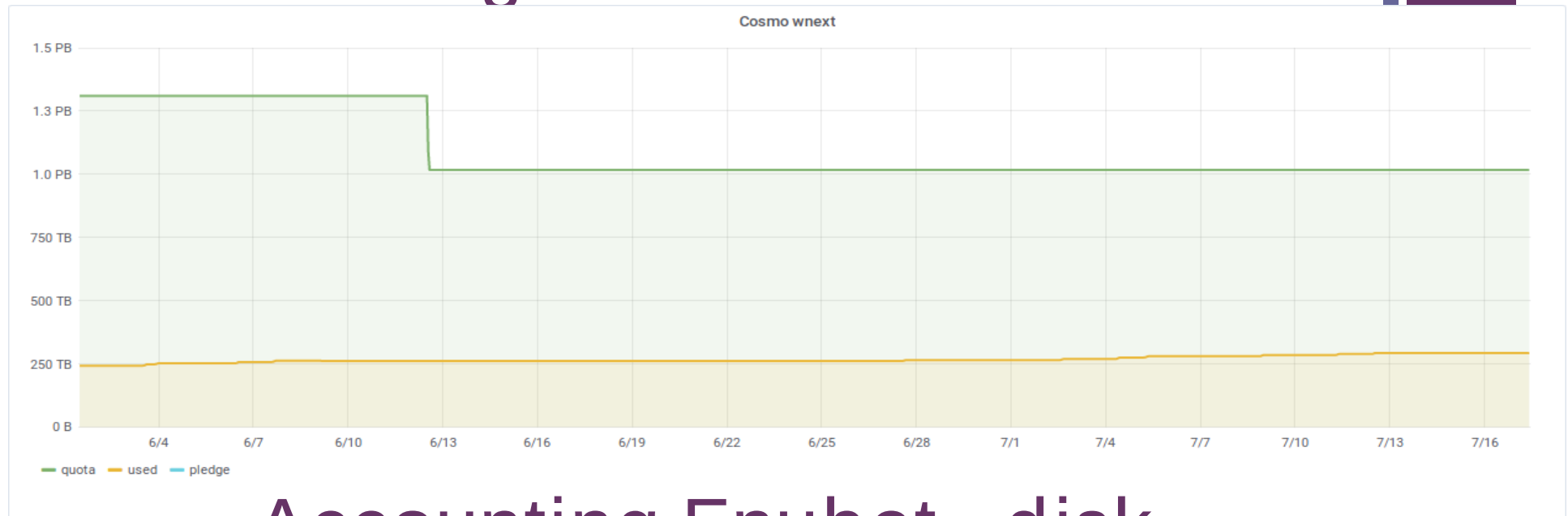


Accounting CTA - CPU & disk

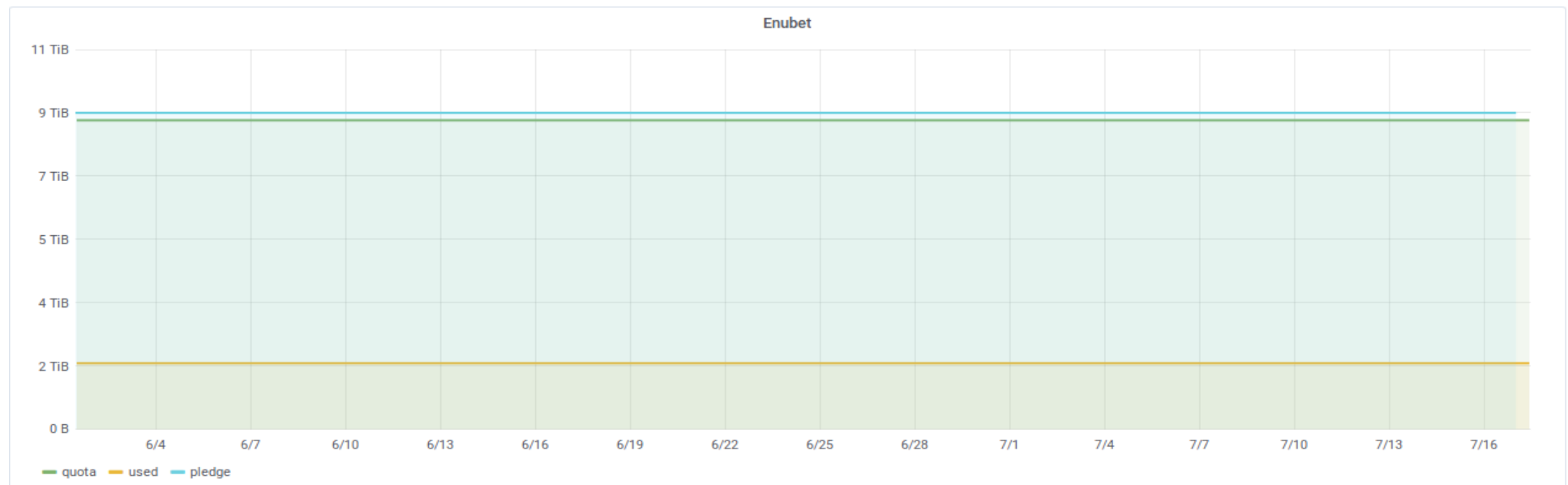




Accounting Cosmo-WNext - disk

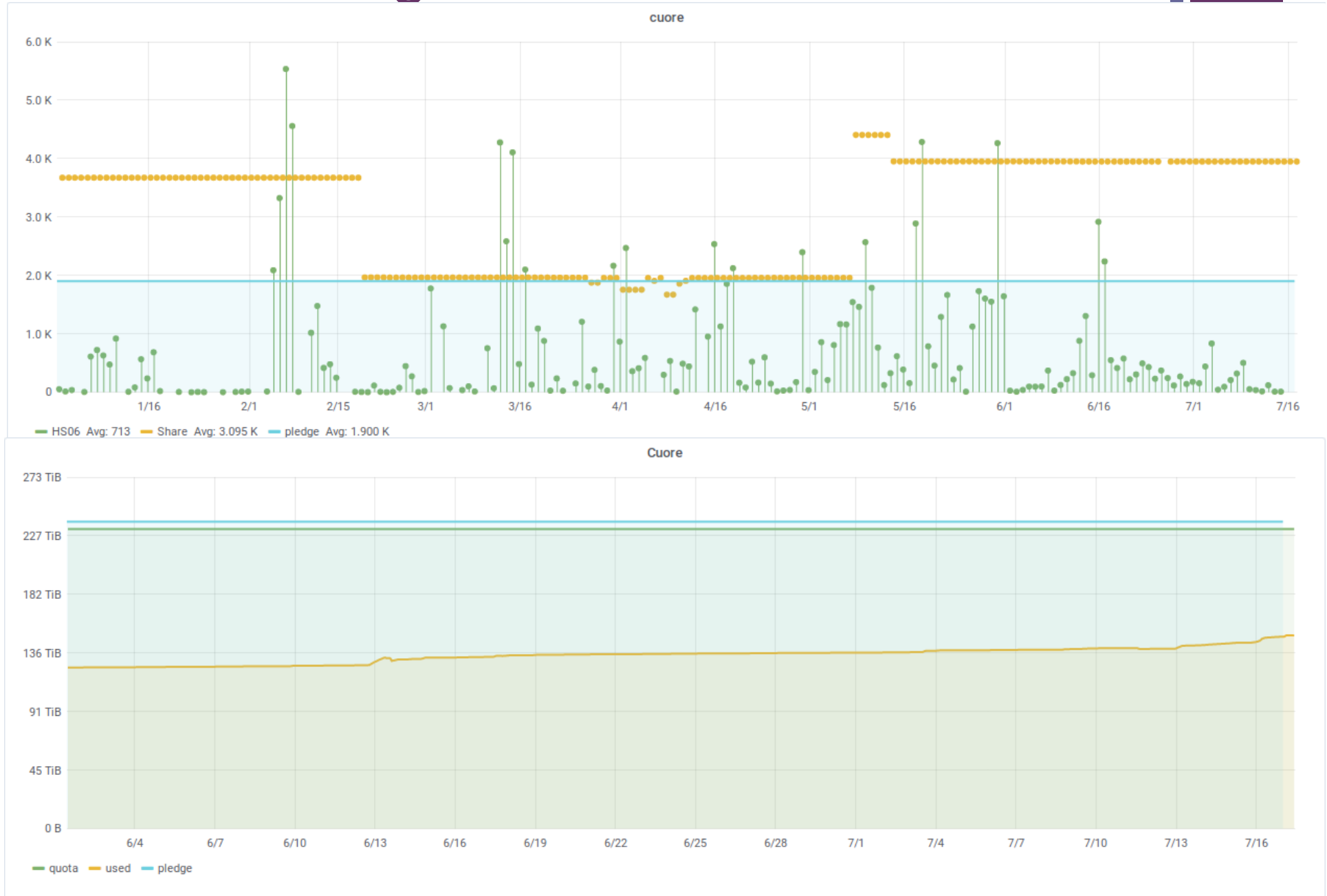


Accounting Enubet - disk

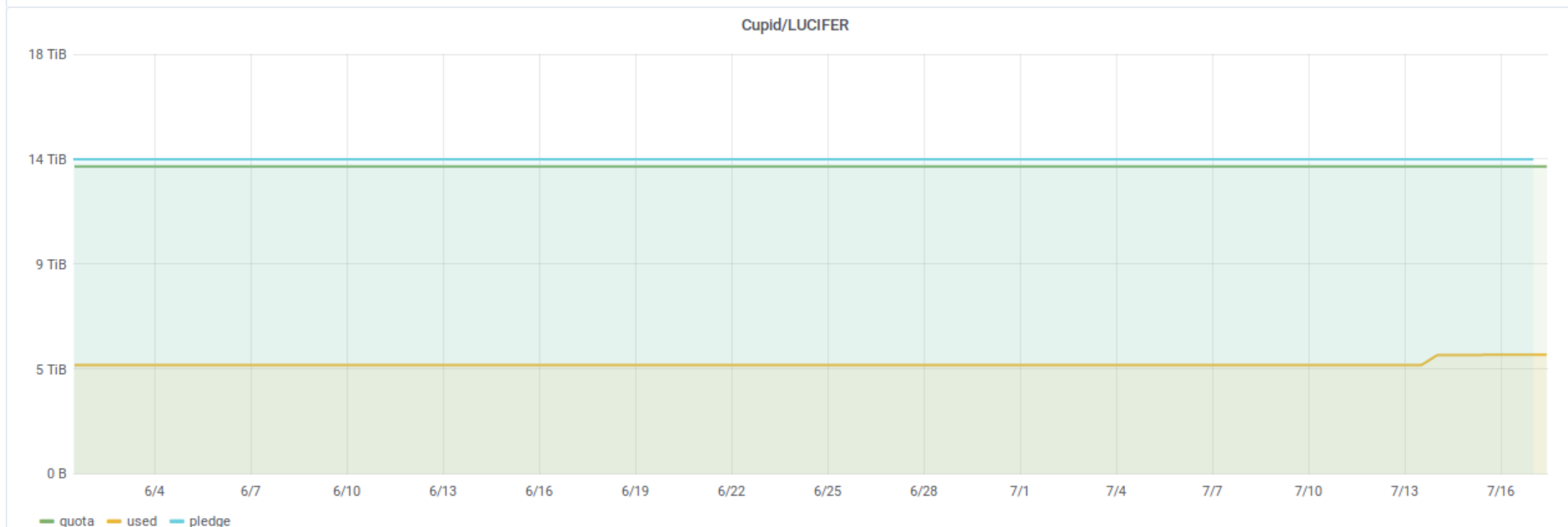
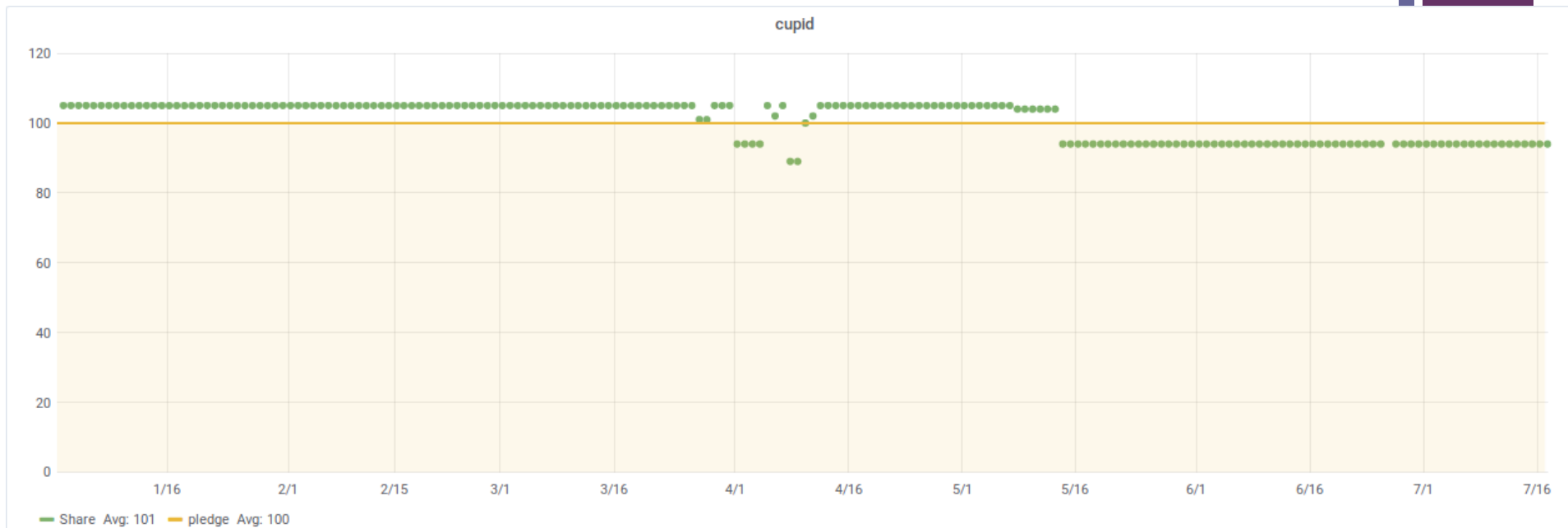




Accounting CUORE - CPU & disk

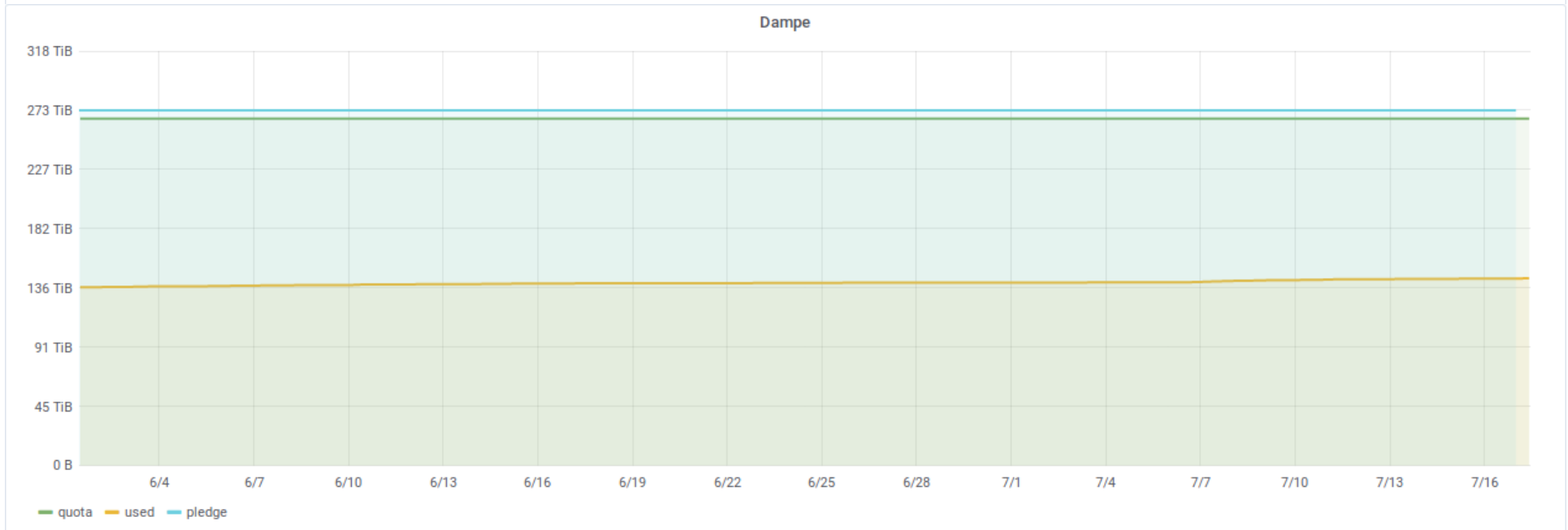
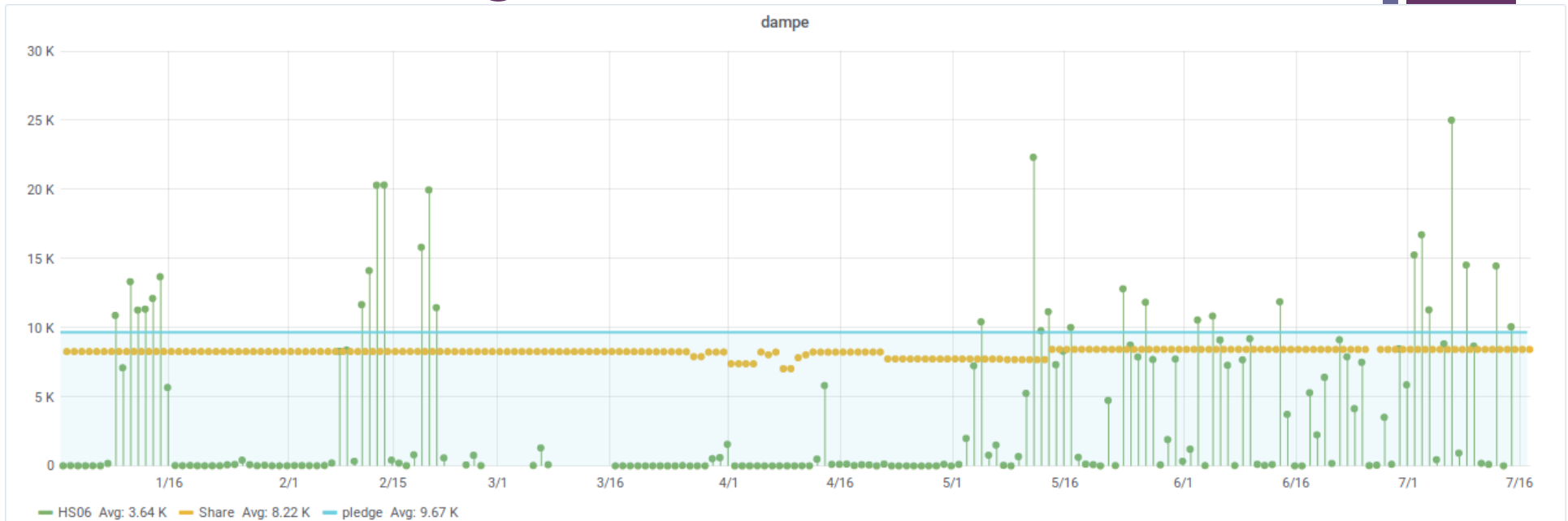


+ Accounting CUPID - CPU & disk

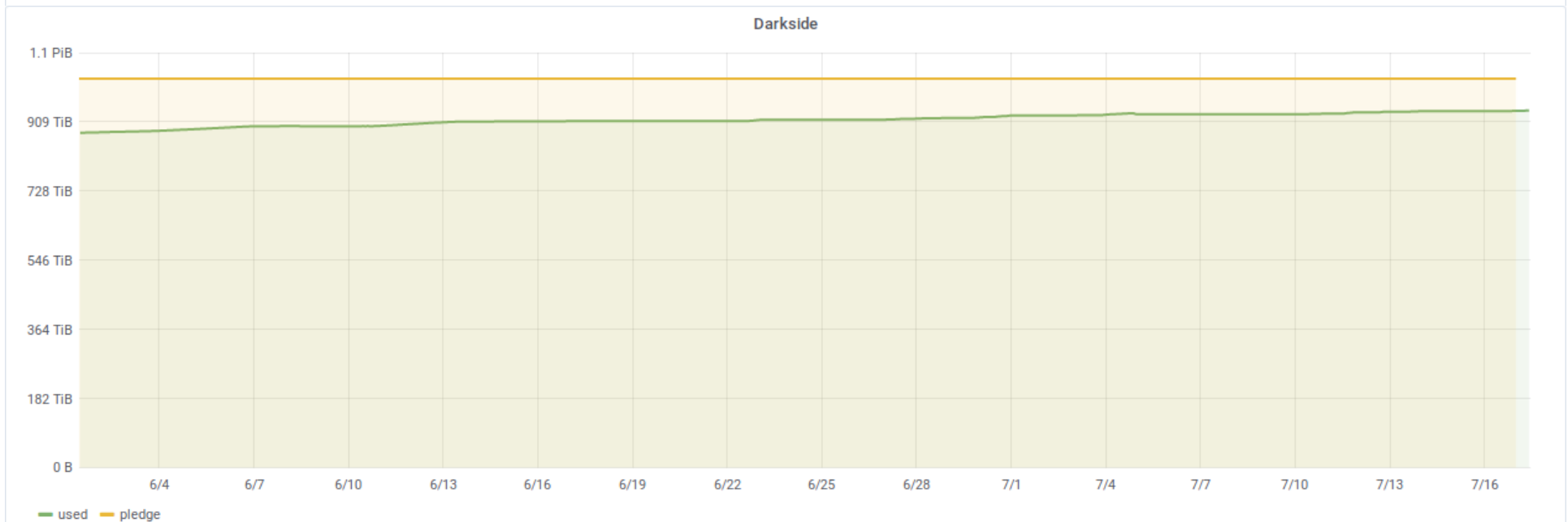
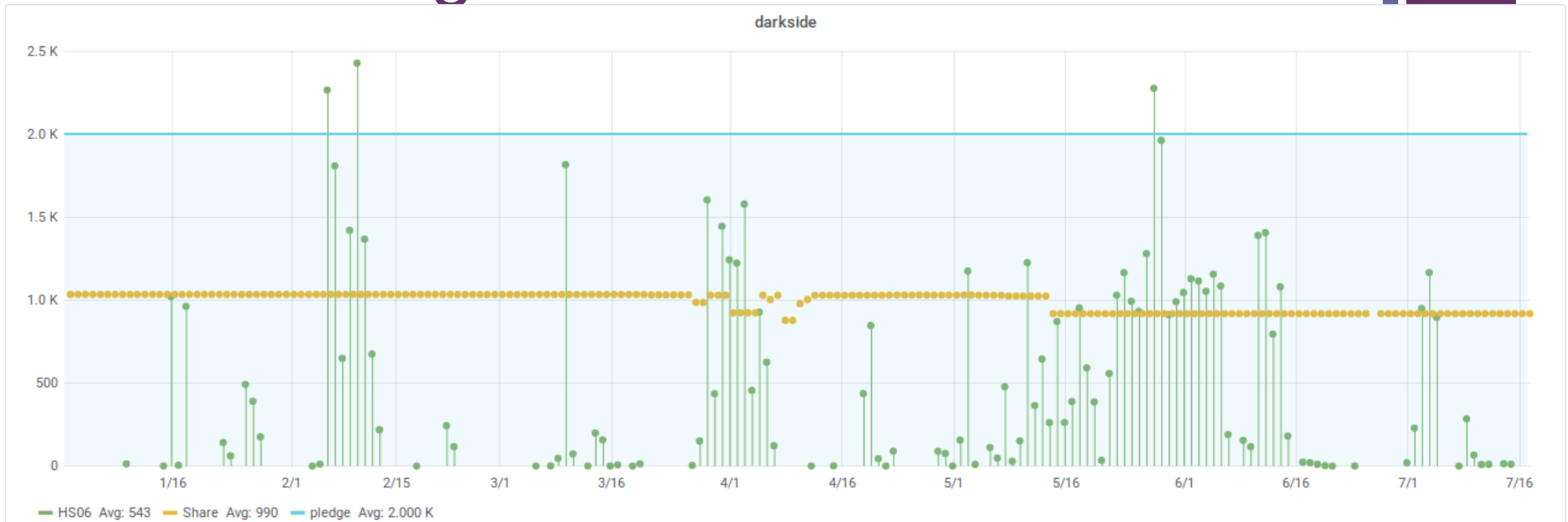




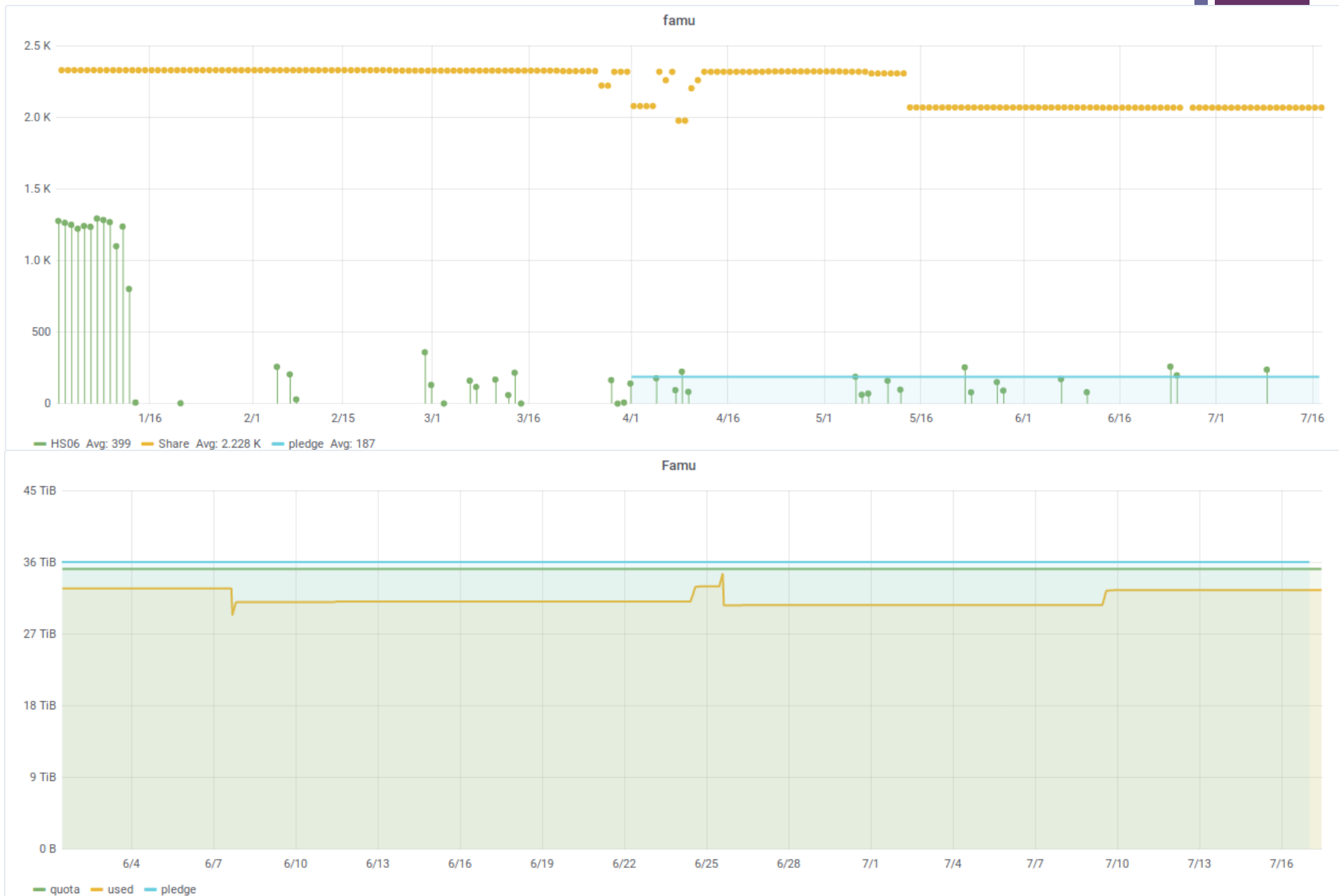
Accounting DAMPE - CPU & disk



+Accounting Darkside - CPU & disk

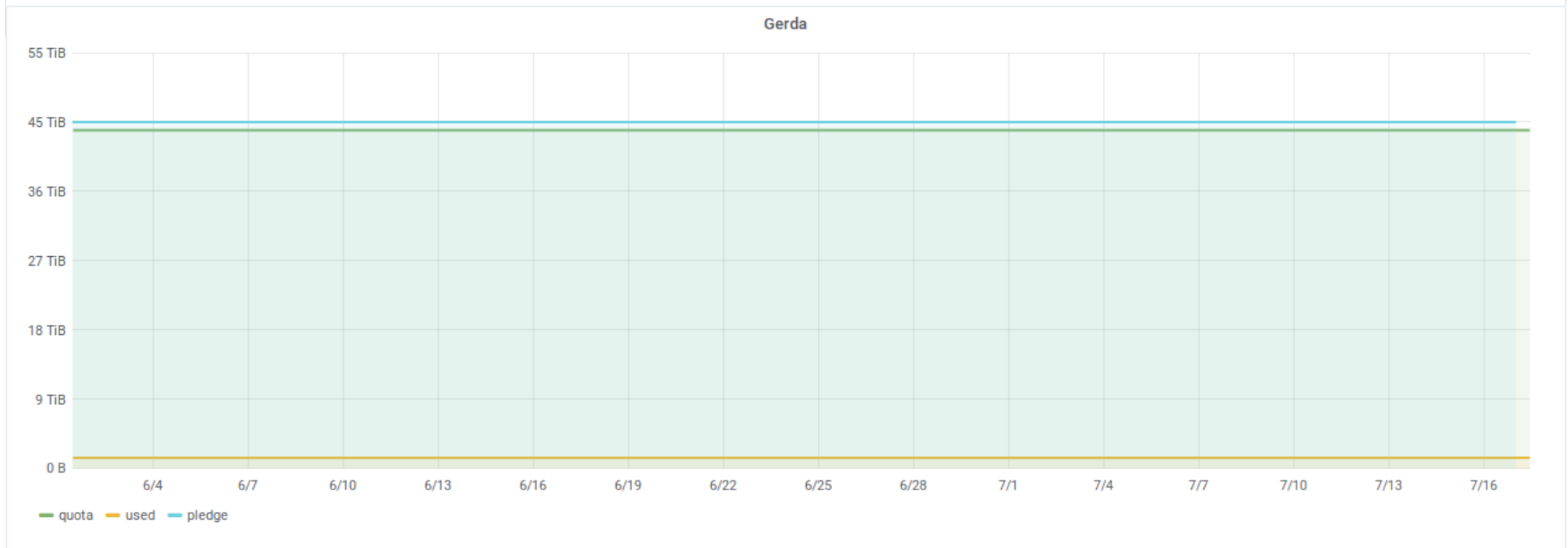
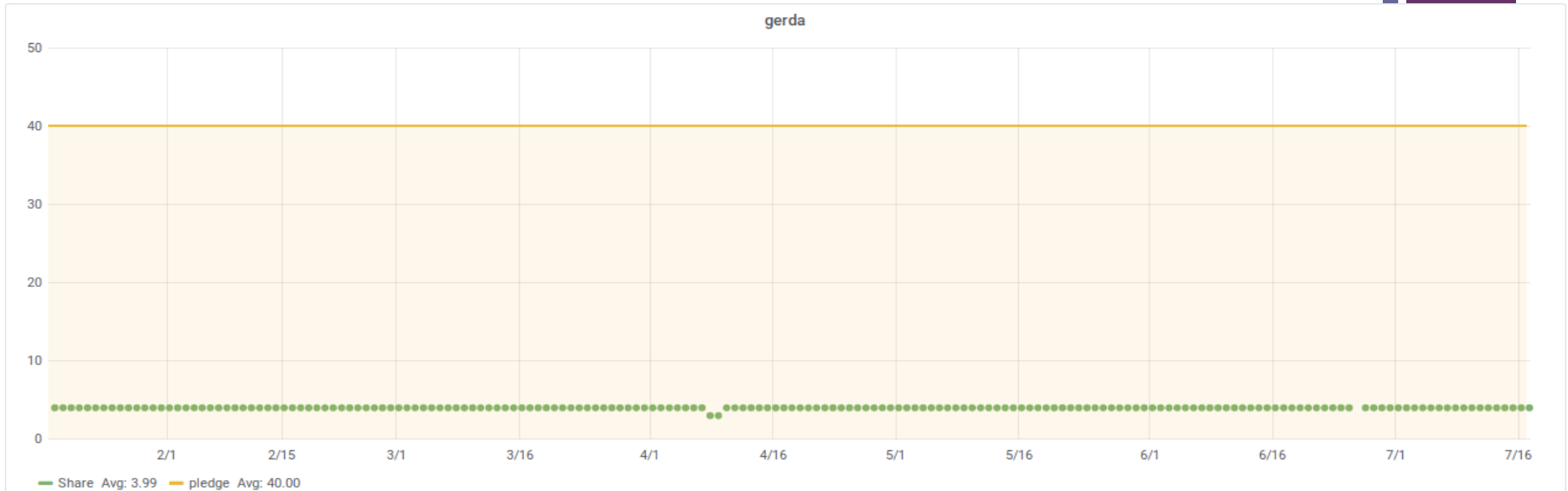


+ Accounting FAMU - CPU & disk

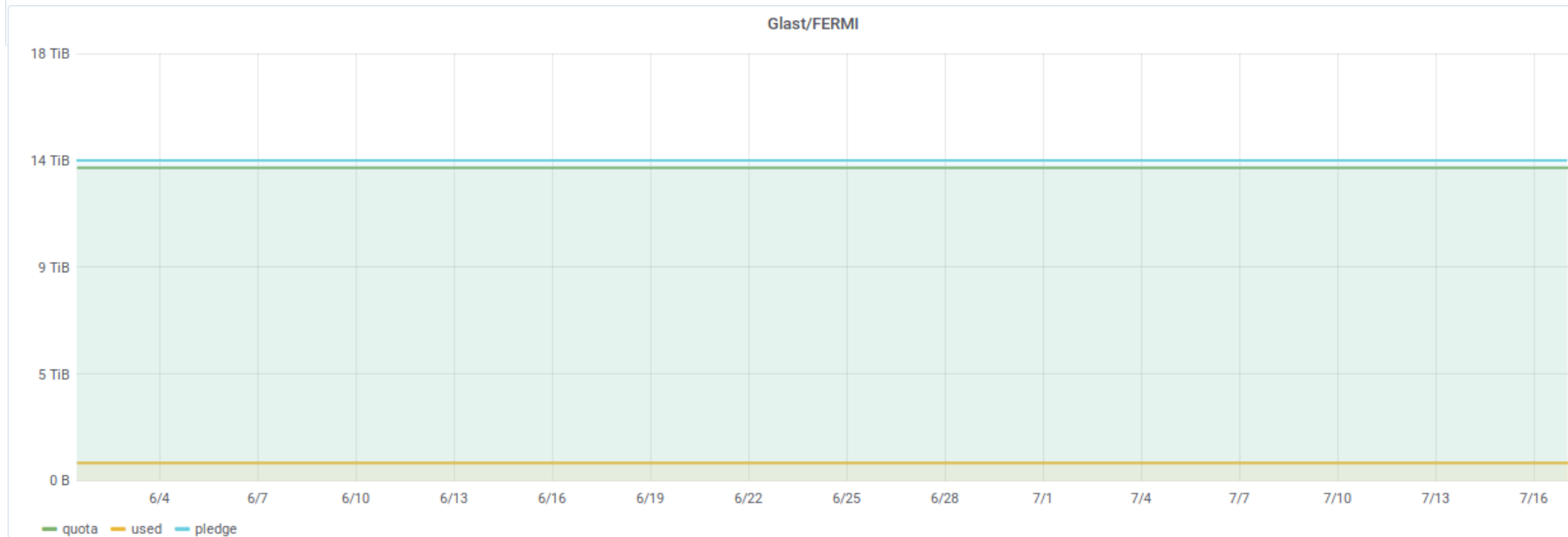
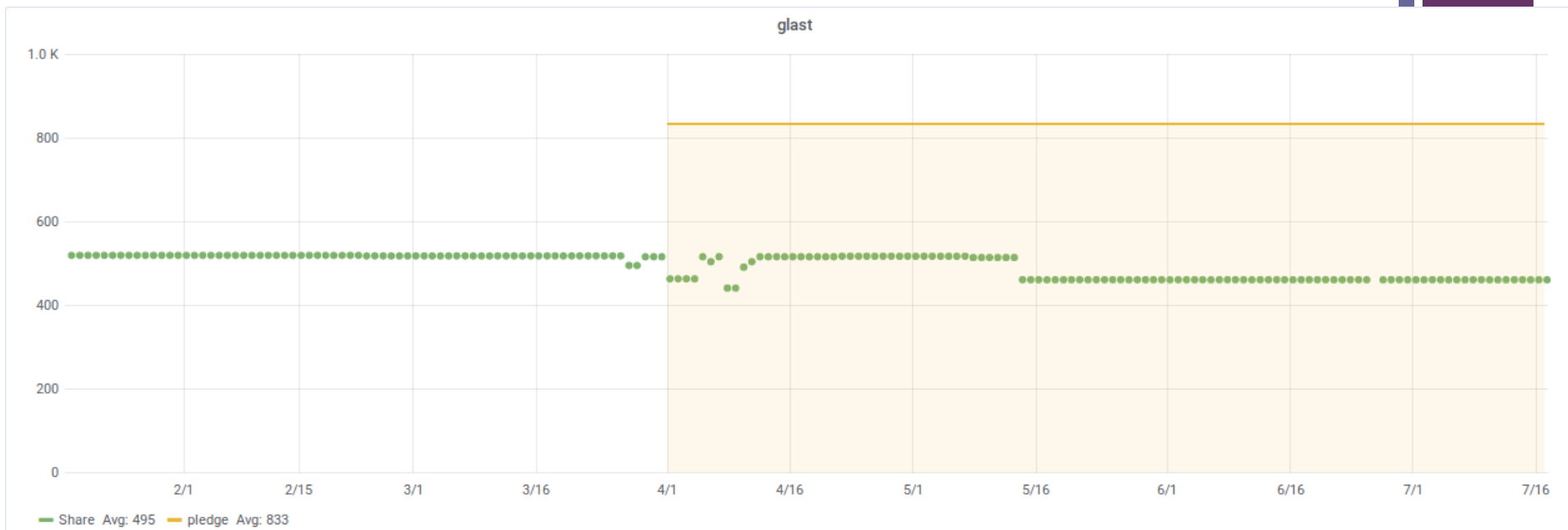




Accounting Gerda - CPU & disk

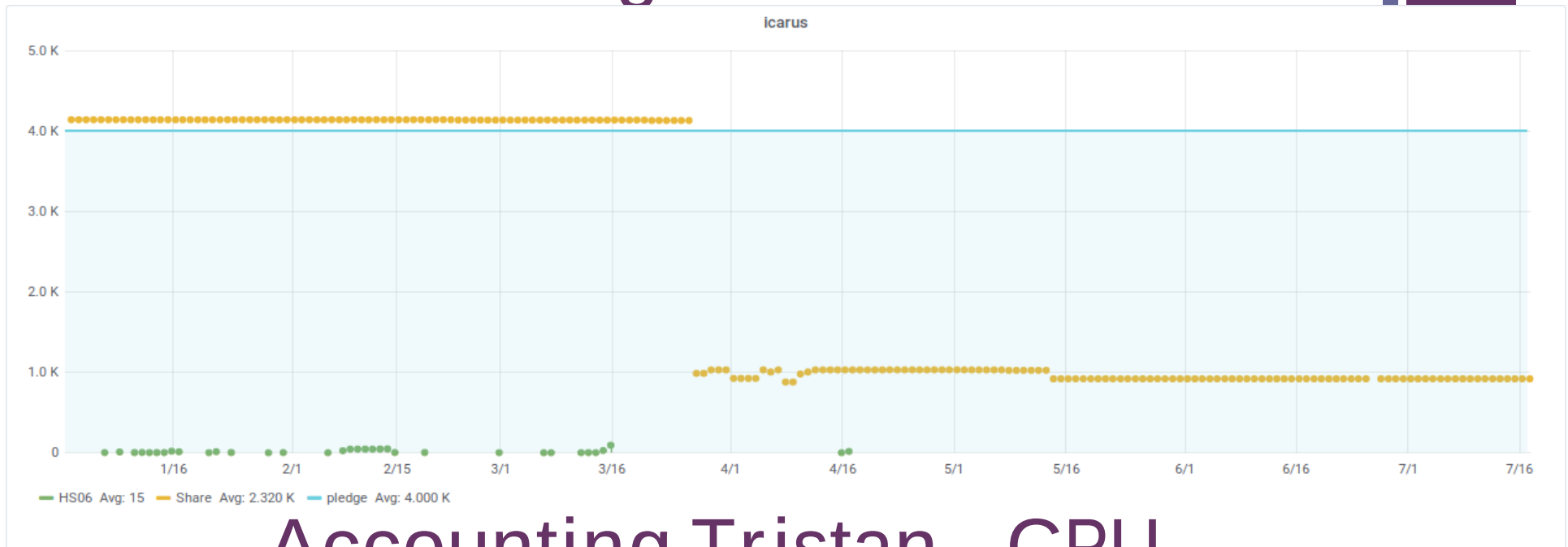


+ Accounting GLAST - CPU & disk

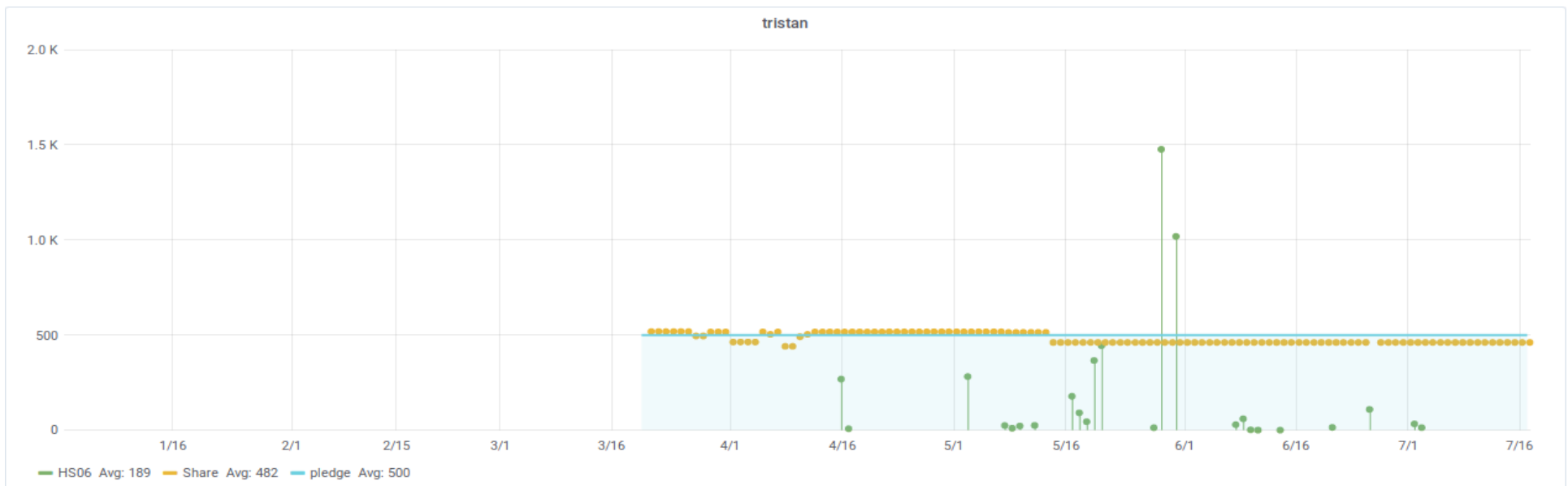




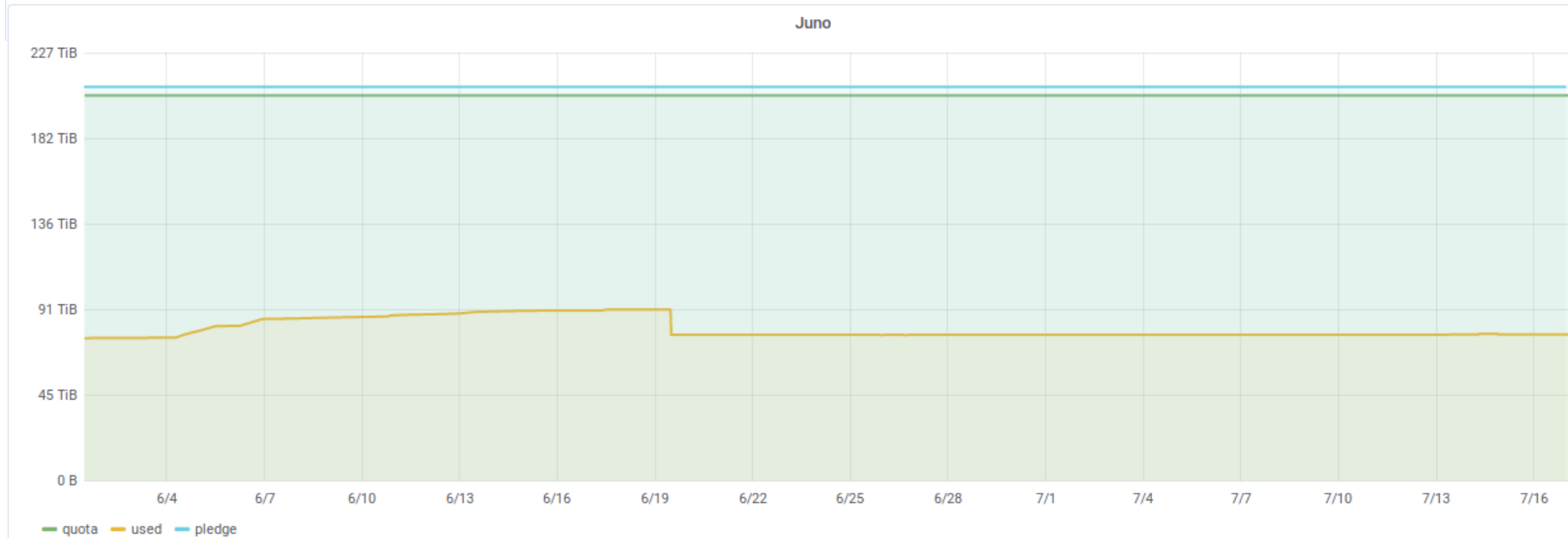
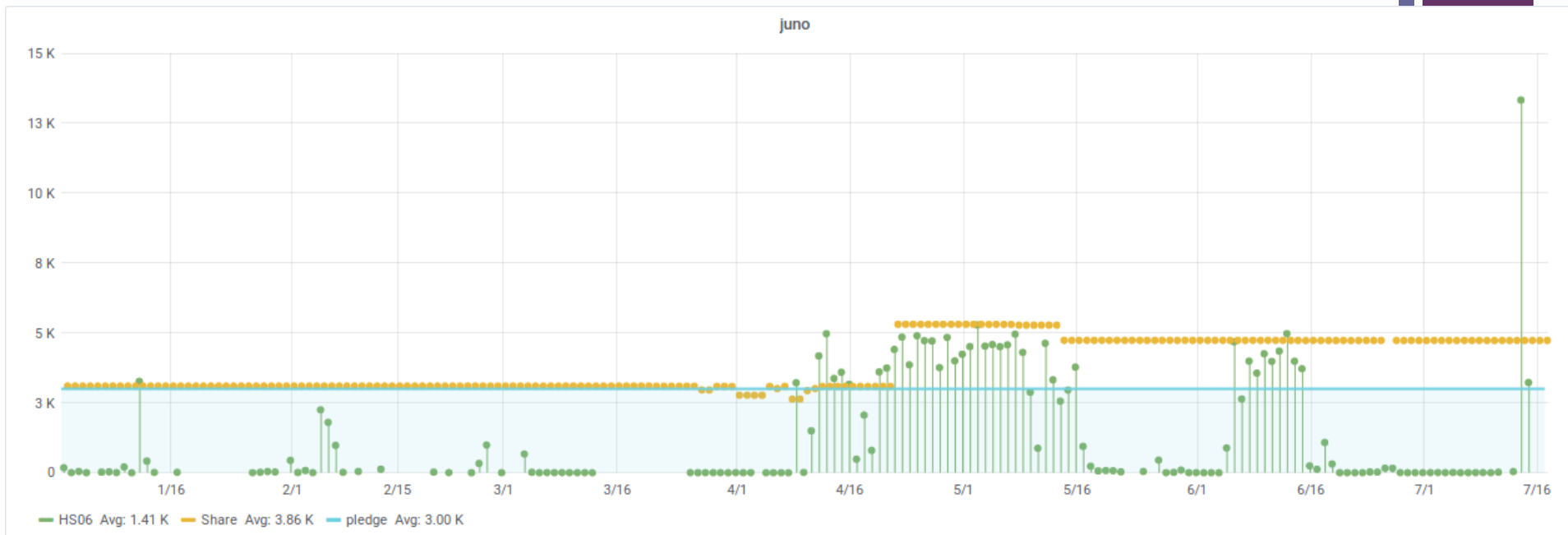
Accounting ICARUS - CPU



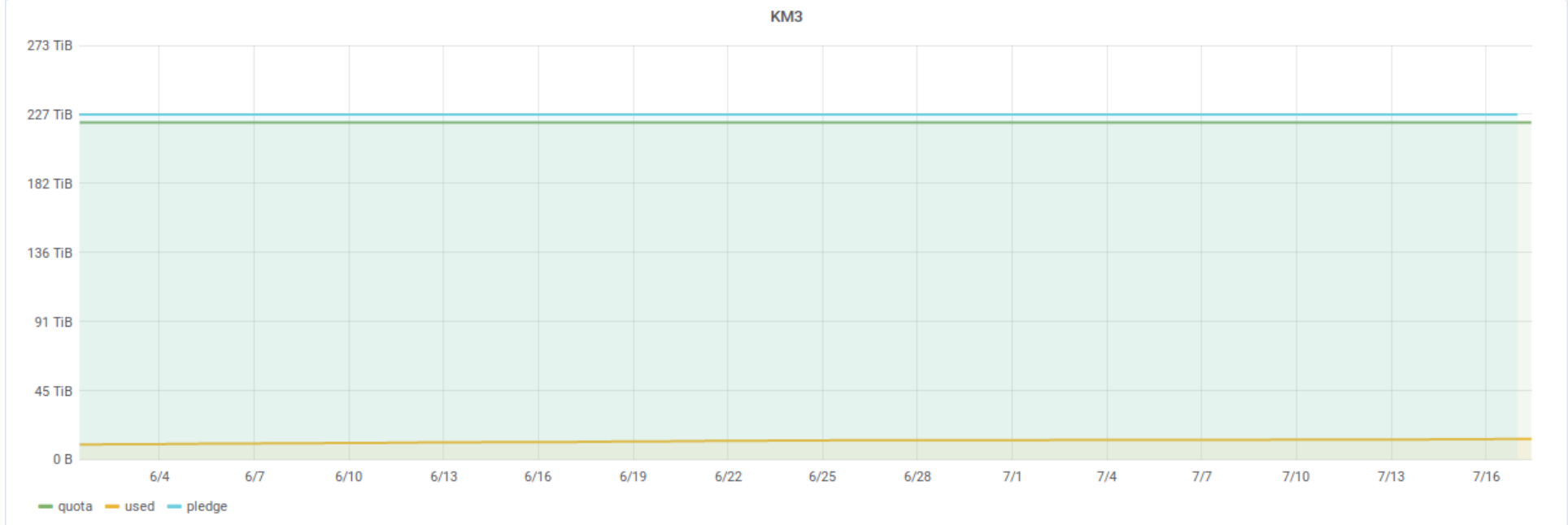
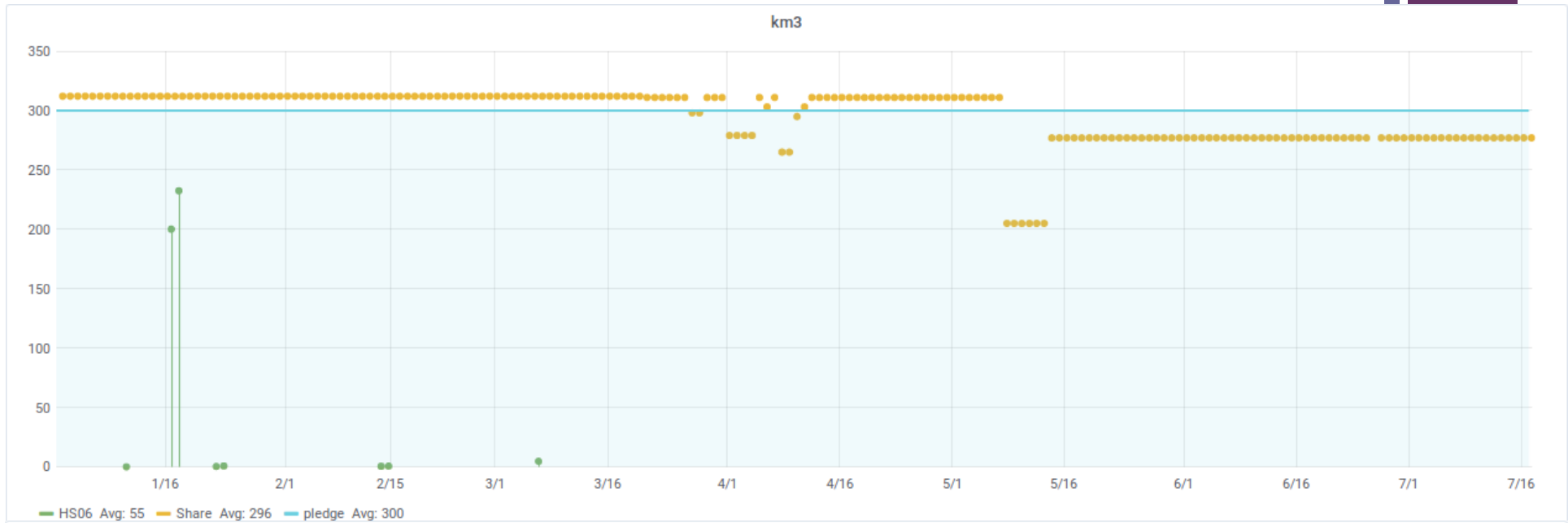
Accounting Tristan - CPU



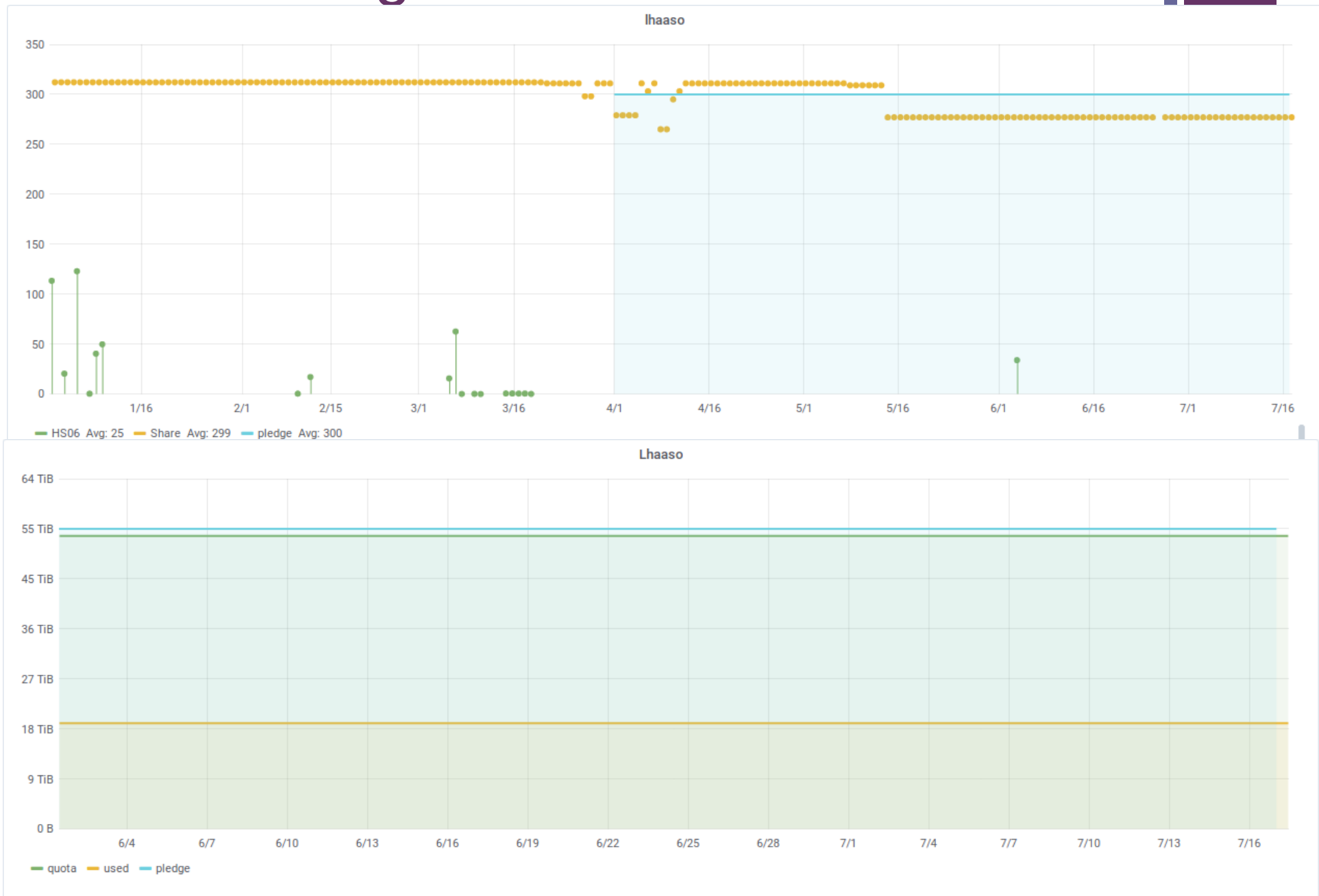
+ Accounting JUNO - CPU & disk



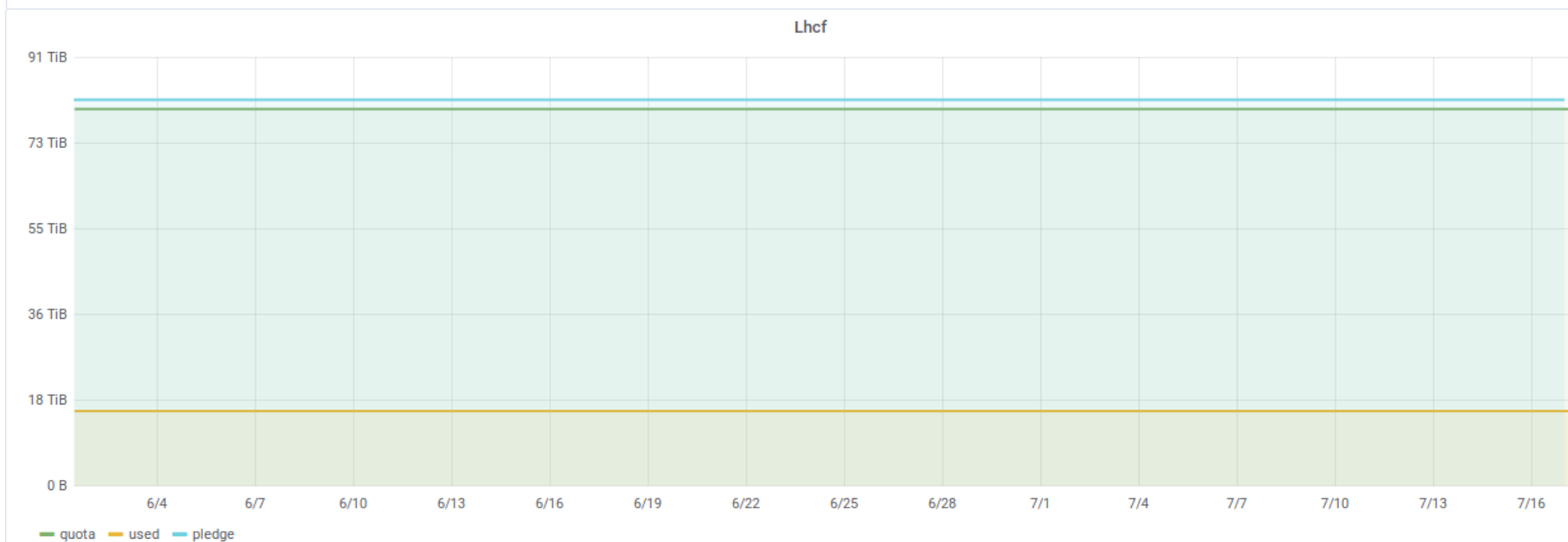
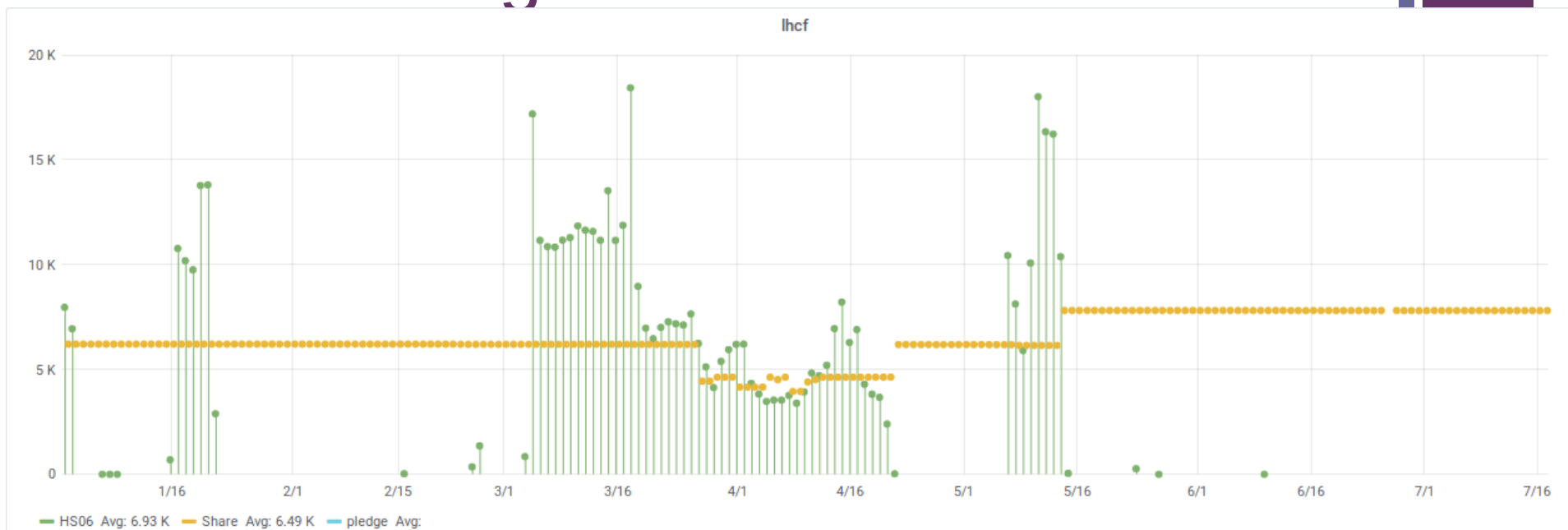
+ Accounting Km3NeT - CPU & disk



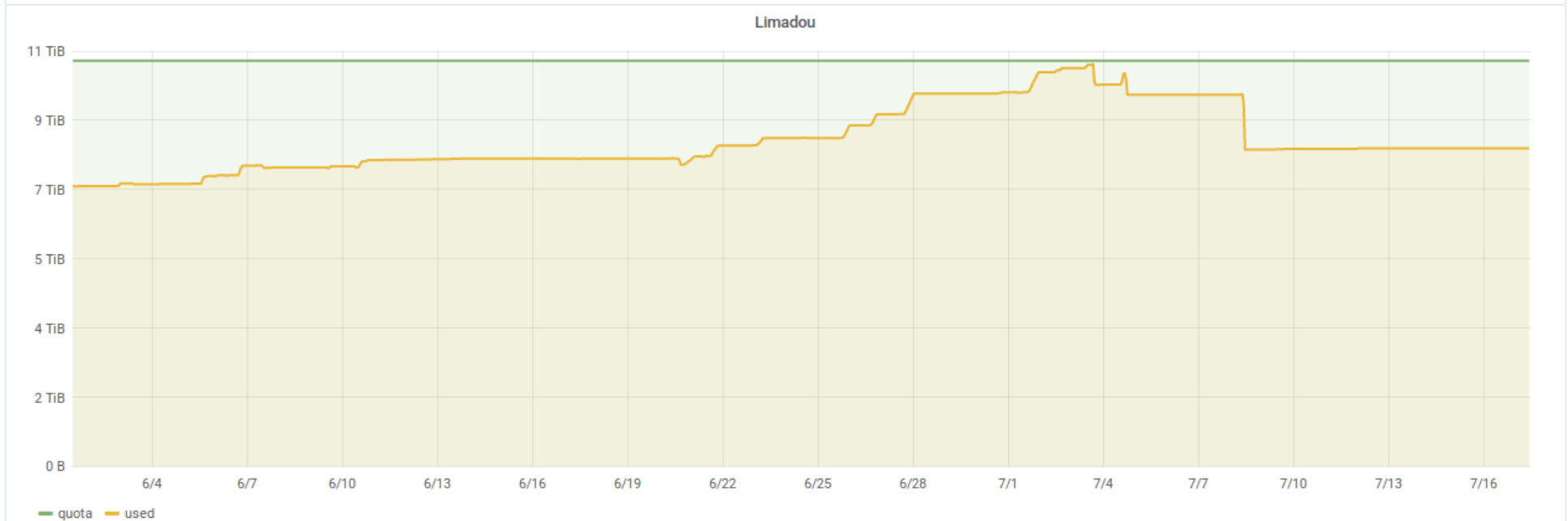
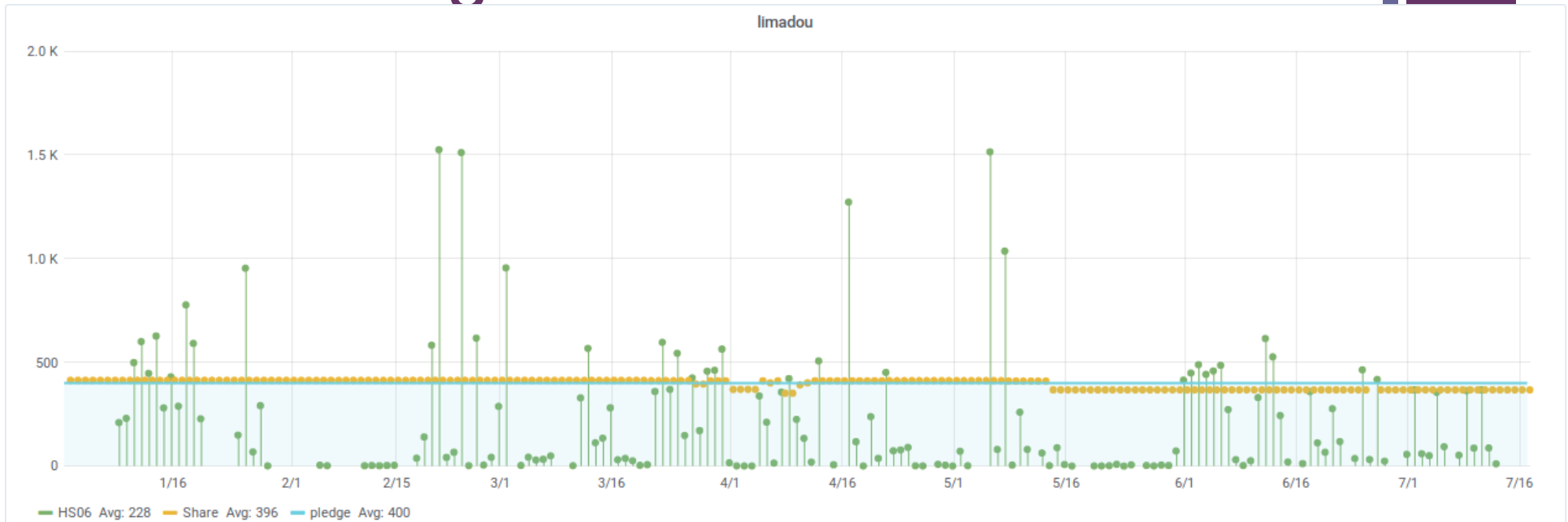
+ Accounting LHAASO - CPU & disk



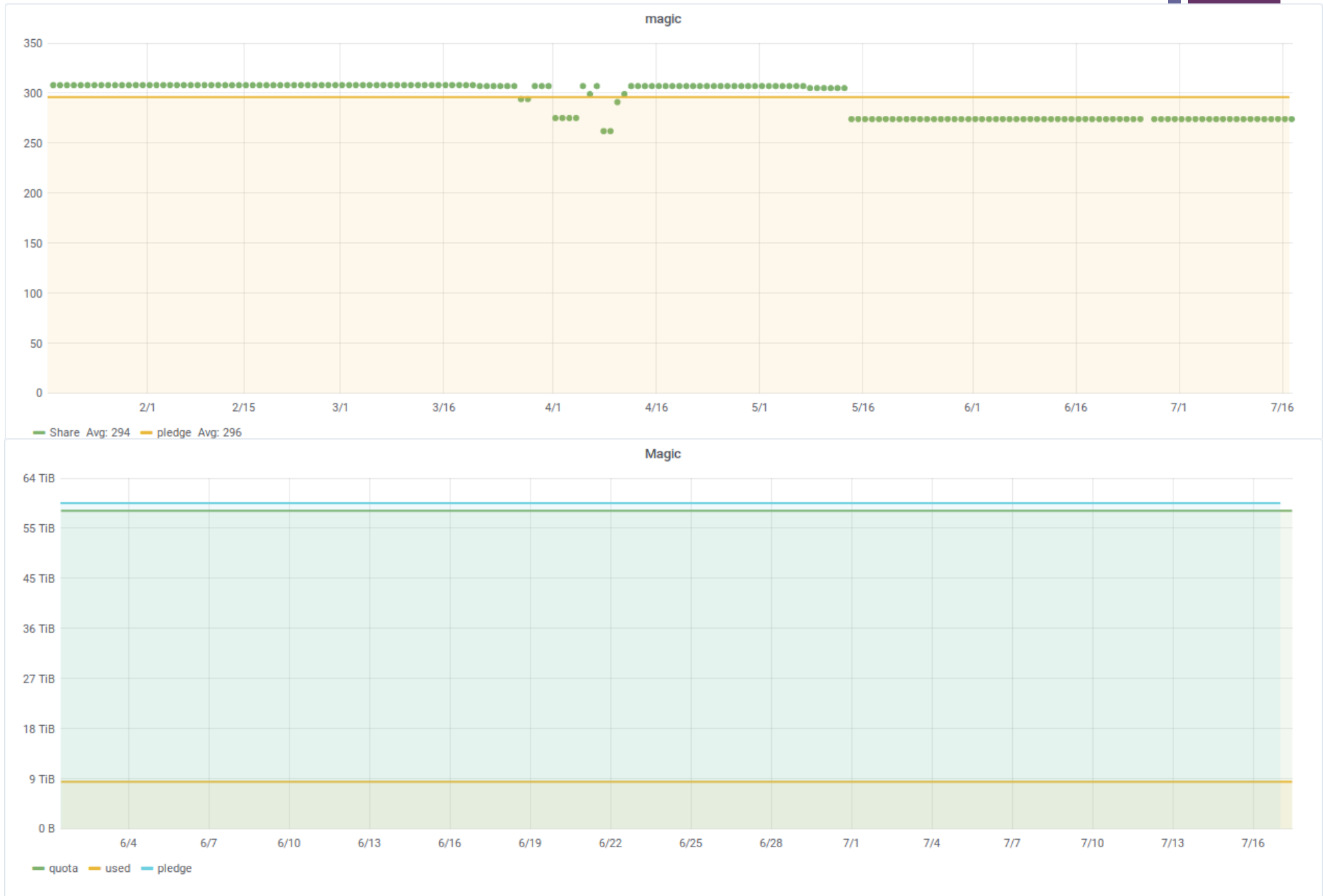
+ Accounting LHCf - CPU & disk



+ Accounting Limadou - CPU & disk

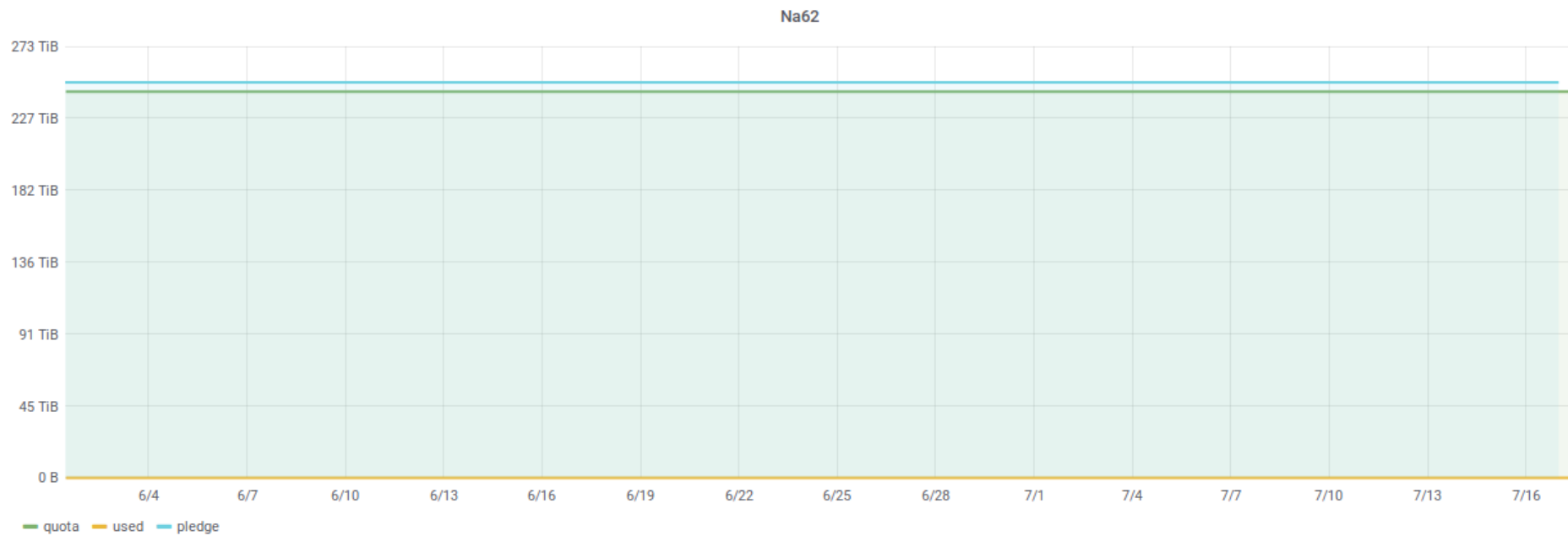
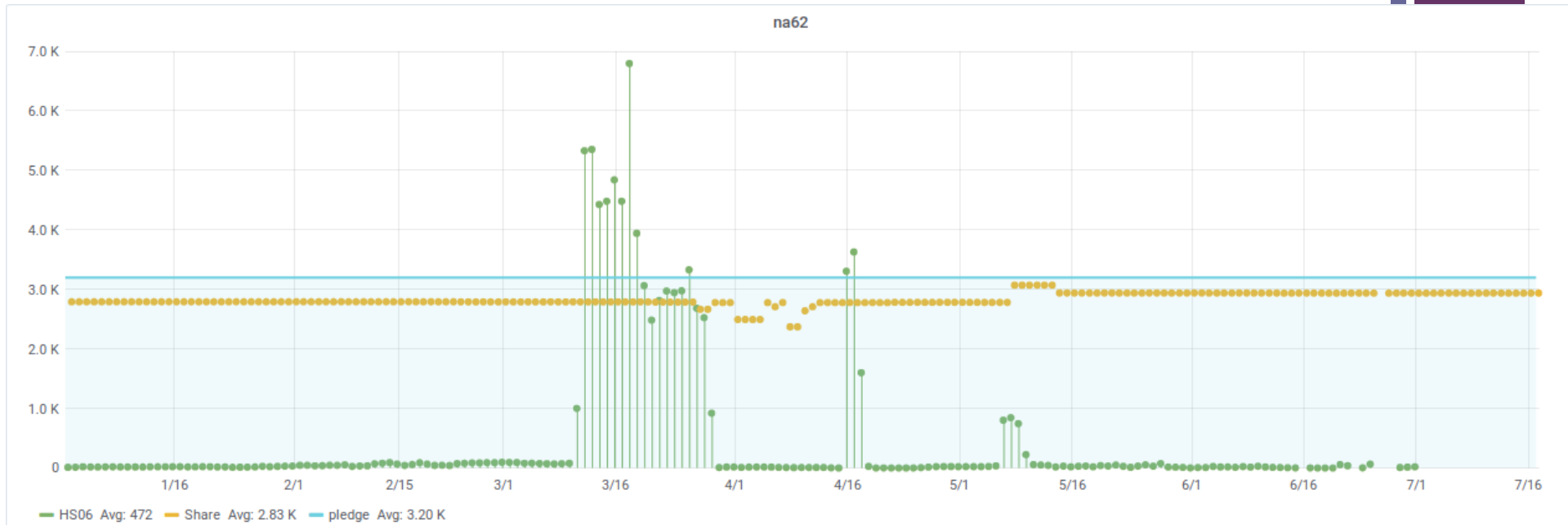


+ Accounting MAGIC - CPU & disk

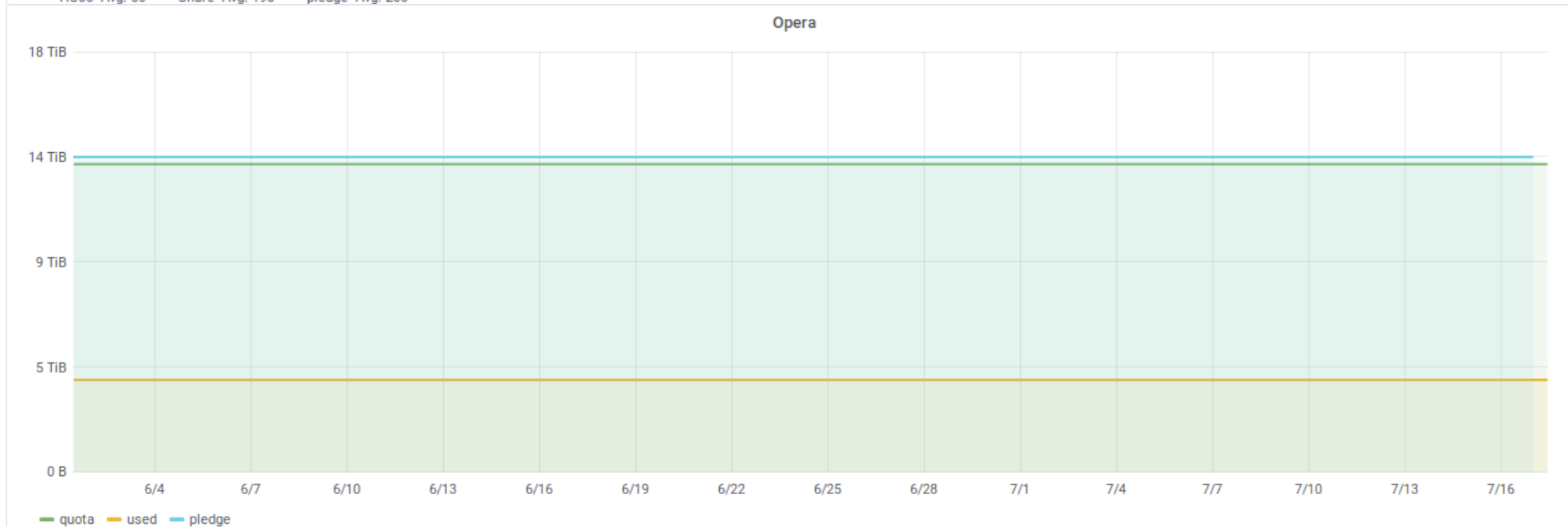
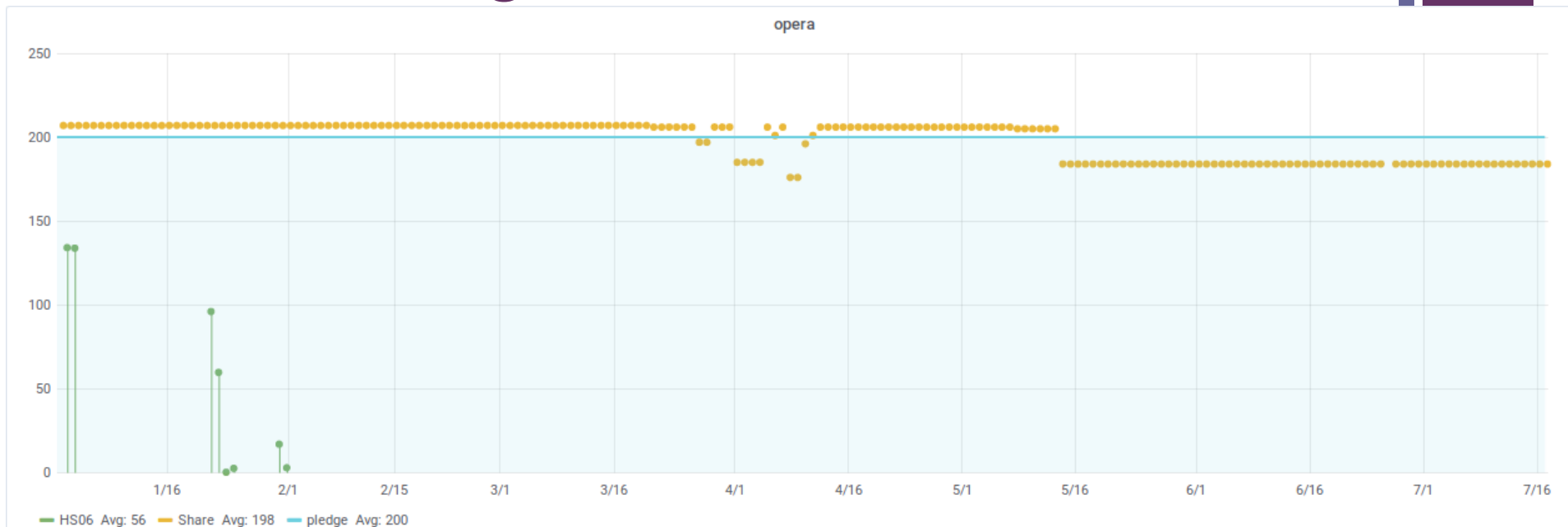




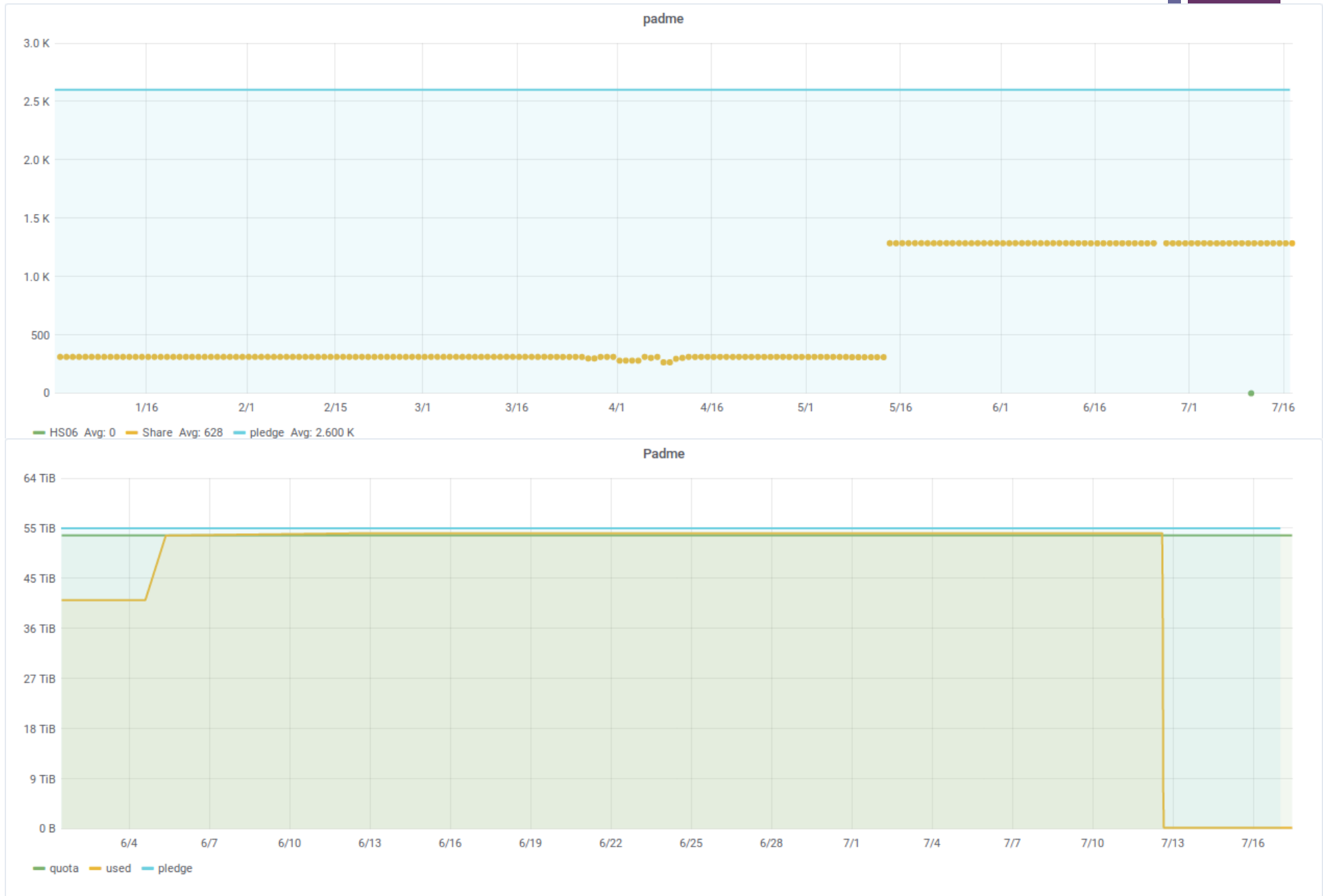
Accounting NA62 - CPU & disk



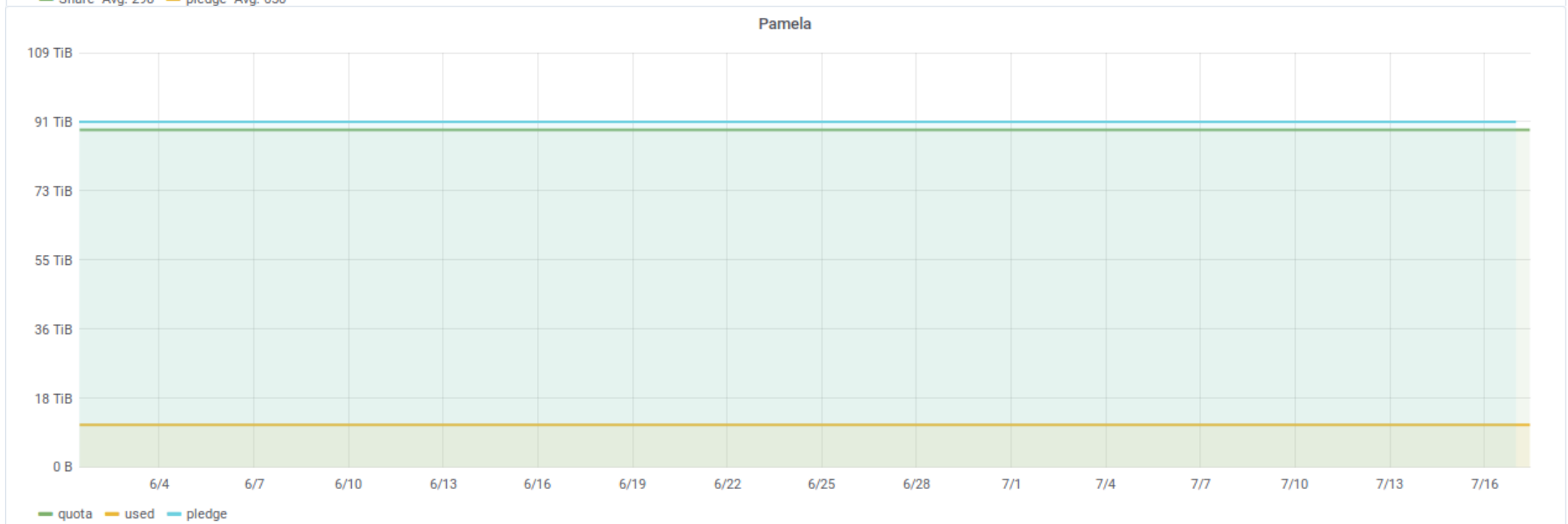
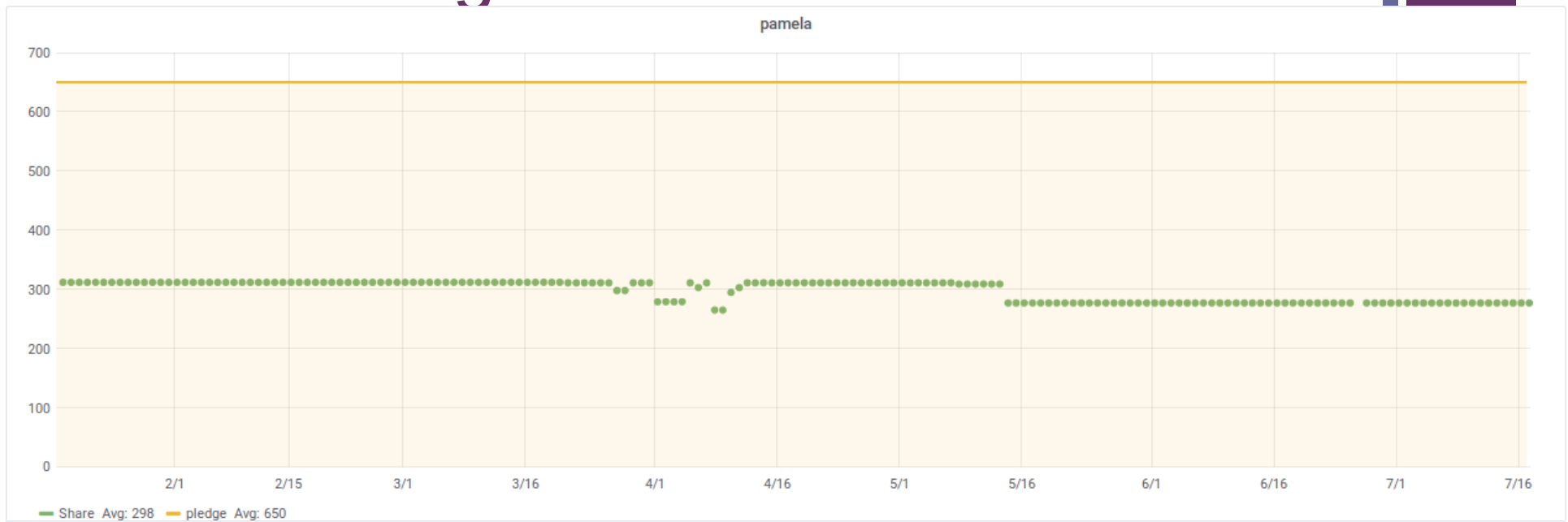
+ Accounting OPERA - CPU & disk



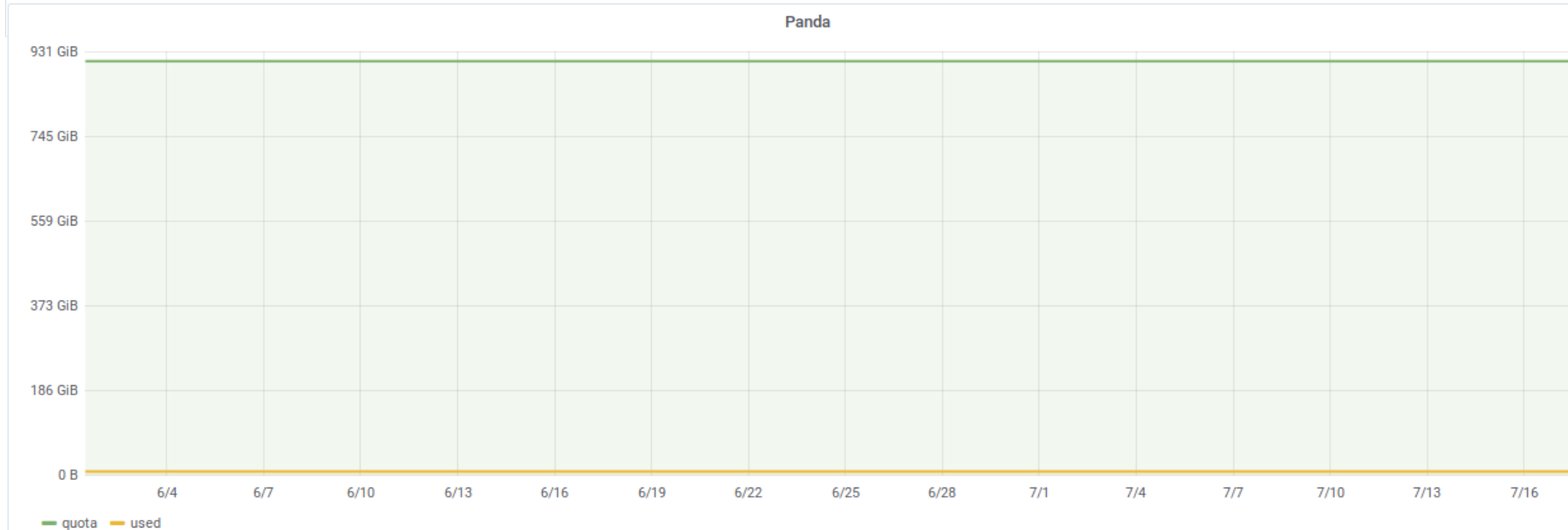
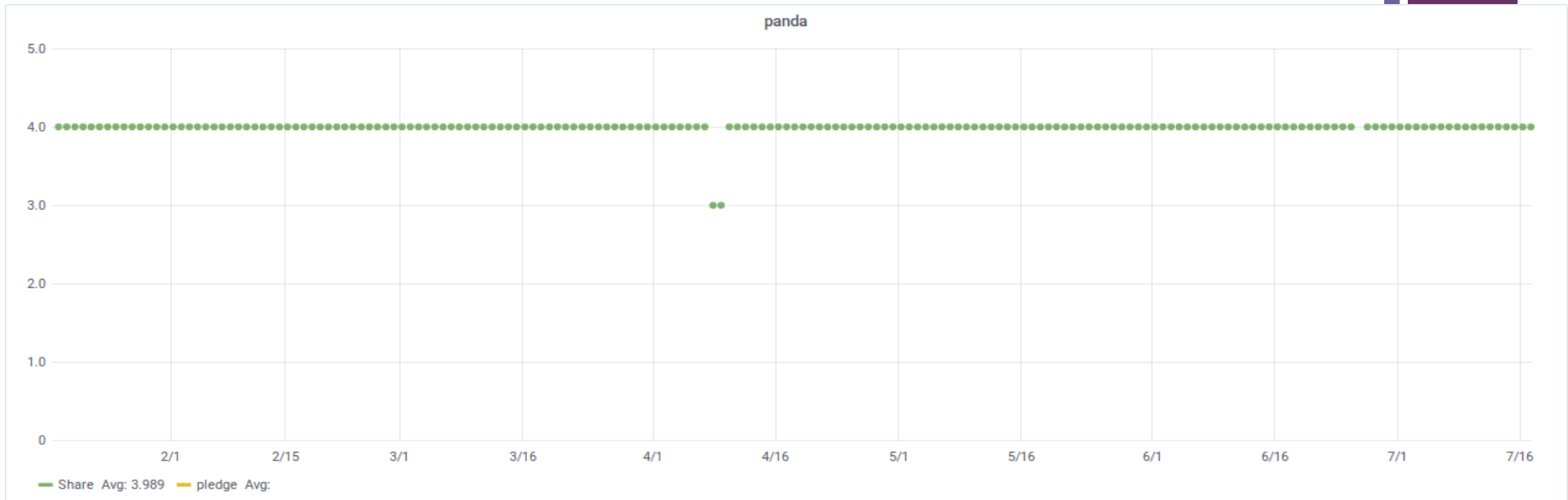
+ Accounting PADME - CPU & disk



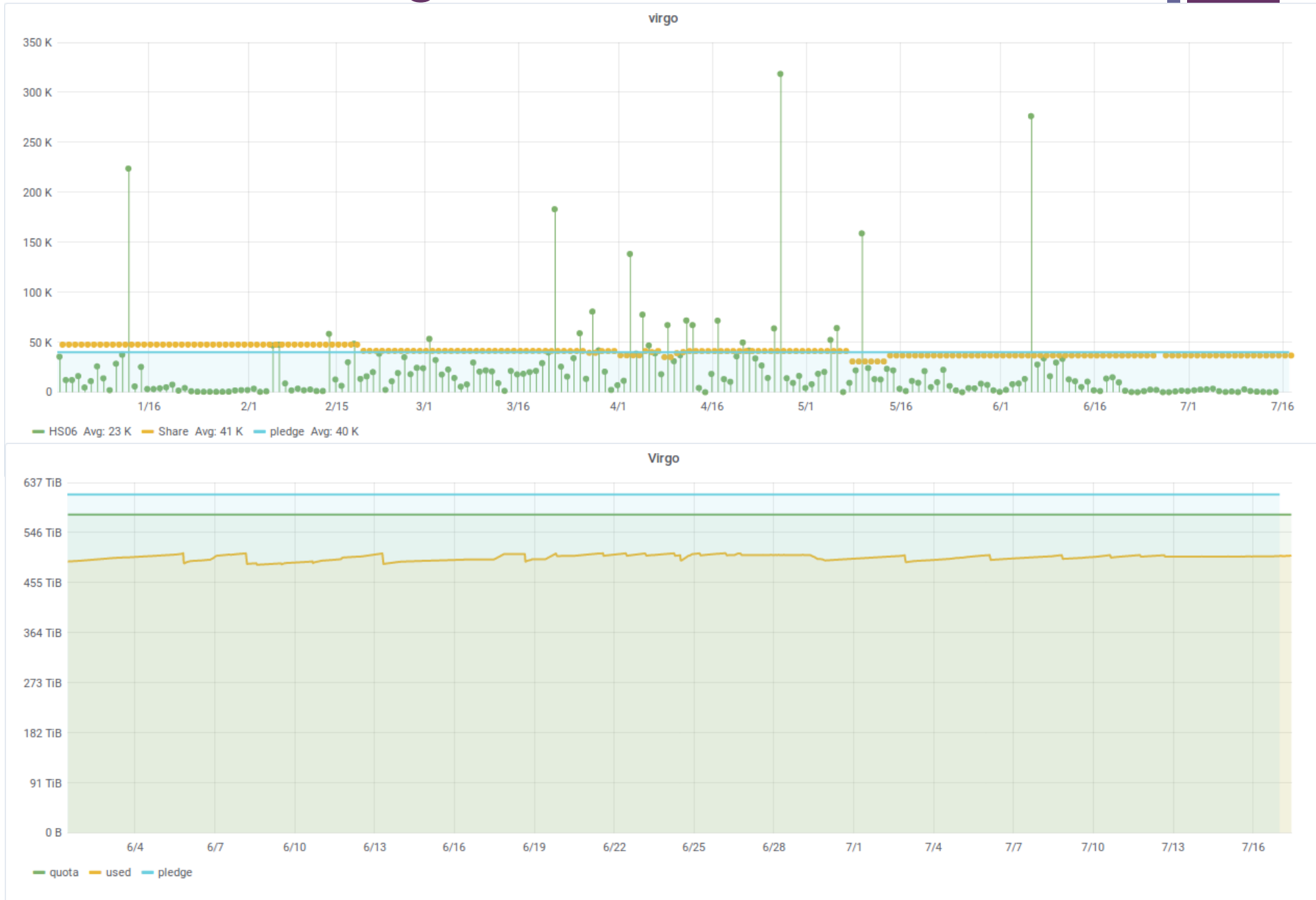
+ Accounting PAMELA - CPU & disk



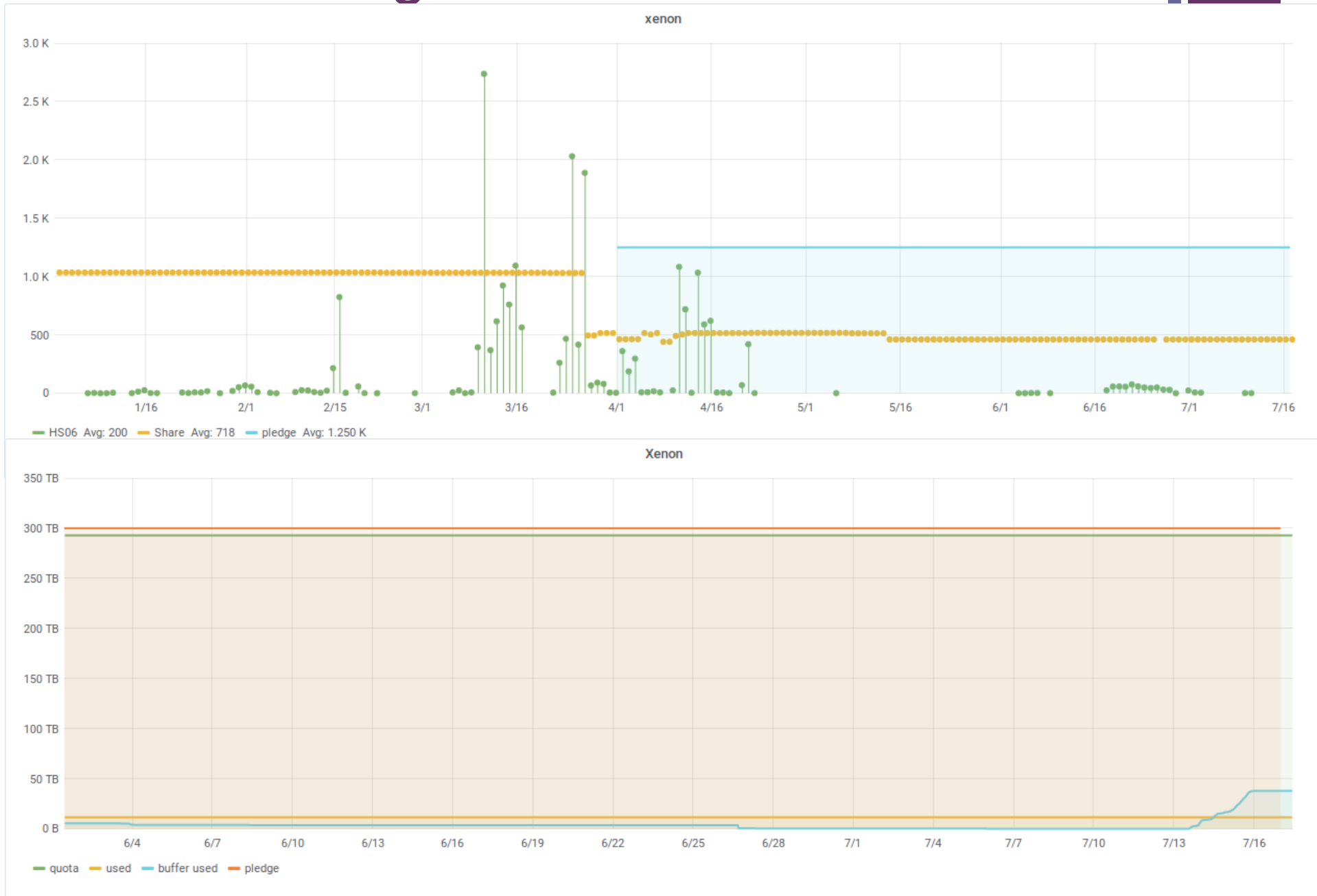
+ Accounting PANDA - CPU & disk



+ Accounting VIRGO - CPU & disk



+ Accounting XENON - CPU & disk



+ Accounting Compass - disk

