

Site monitoring

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Jan 31, 2017



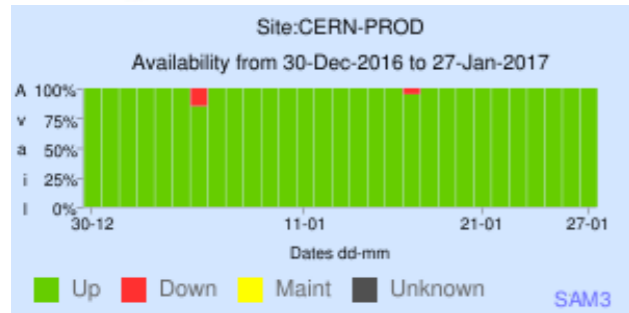
Availability of WLCG Tier-0 + Tier-1 Sites

ATLAS

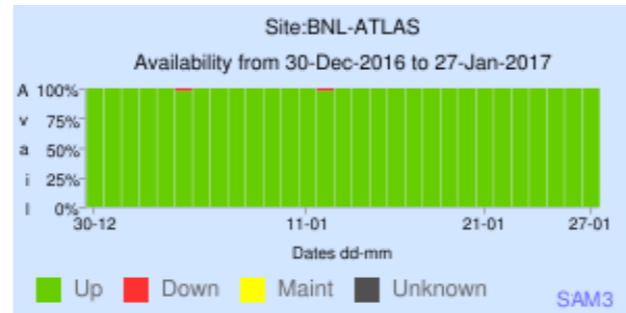
January 2017

Target Availability for each site is 97.0%. Target for 8 best sites is 98.0%

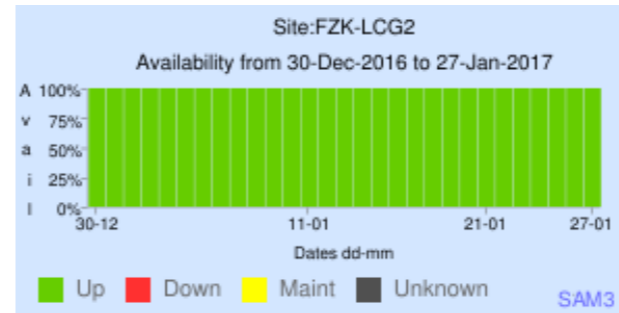
Availability Algorithm: (OSG-CE + CREAM-CE + ARC-CE + HTCONDOR-CE) * (all SRMv2 + all OSG-SRMv2)



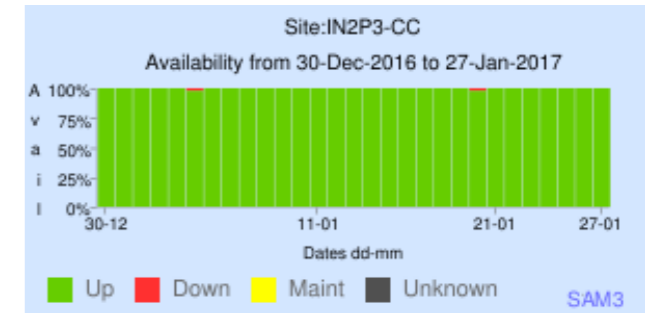
CERN-PROD Avail: 99% Unkn: 0%



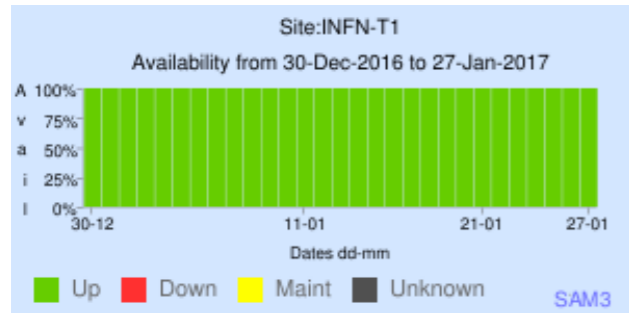
BNL-ATLAS Avail: 100% Unkn: 0%



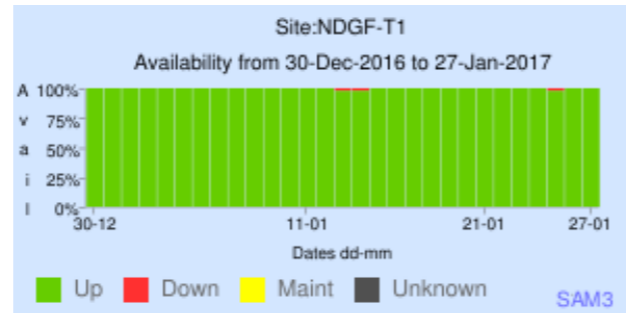
FZK-LCG2 Avail: 100% Unkn: 0%



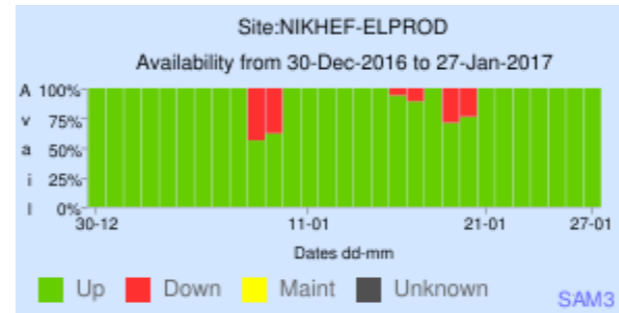
IN2P3-CC Avail: 100% Unkn: 0%



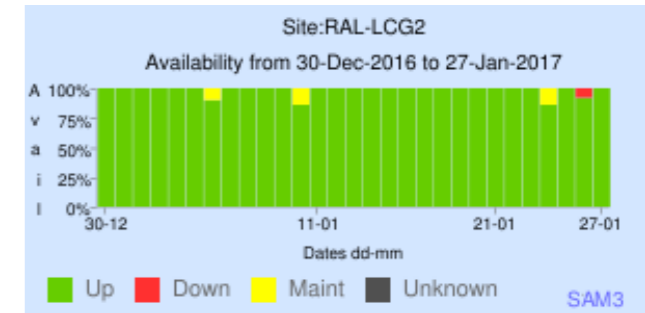
INFN-T1 Avail: 100% Unkn: 0%



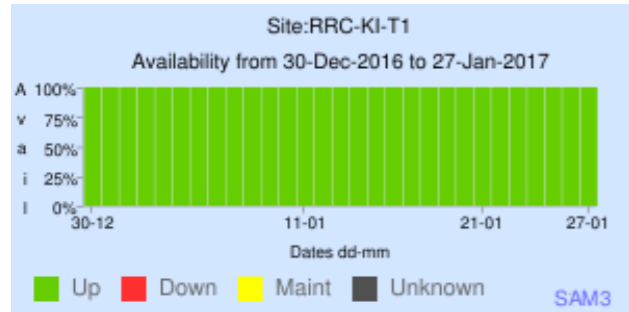
NDGF-T1 Avail: 100% Unkn: 0%



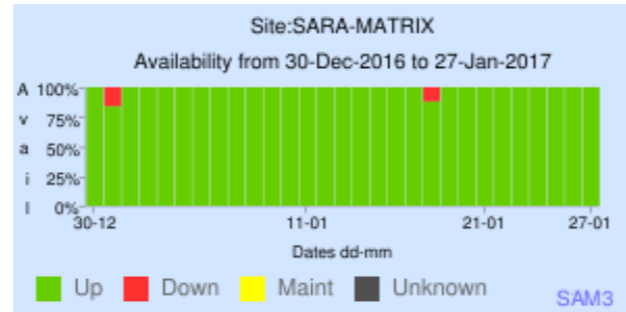
NIKHEF-ELPROD Avail: 95% Unkn: 0%



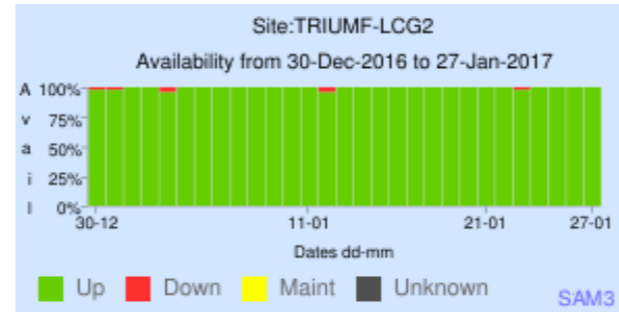
RAL-LCG2 Avail: 98% Unkn: 0%



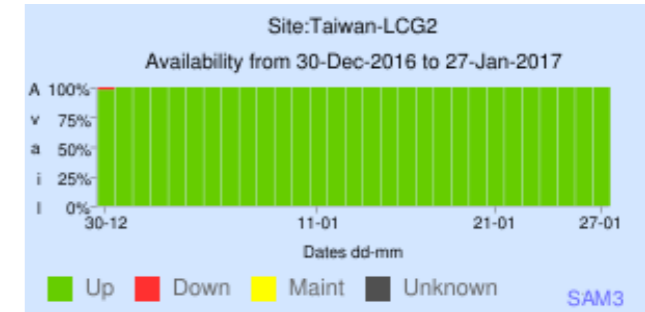
RRC-KI-T1 Avail: 100% Unkn: 0%



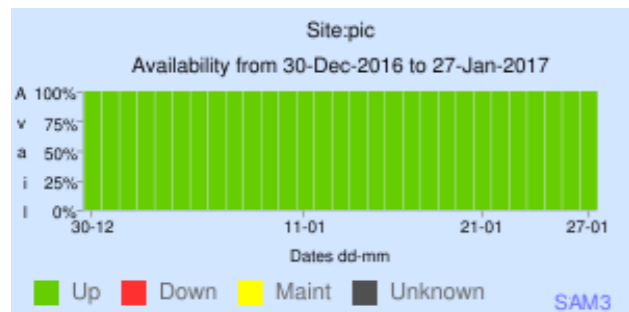
SARA-MATRIX Avail: 99% Unkn: 0%



TRIUMF-LCG2 Avail: 100% Unkn: 0%



Taiwan-LCG2 Avail: 100% Unkn: 0%



pic Avail: 100% Unkn: 0%



Tier-2 Availability and Reliability Report

ATLAS

January 2017

Federation Summary - Sorted by Availability

Color coding:

N/A <30% <60% <90% >=90%

Availability Algorithm: (OSG-CE + CREAM-CE + ARC-CE + HTCONDOR-CE) * (all SRMv2 + all OSG-SRMv2)

Federation	Availability	Reliability	Federation	Availability	Reliability
AU-ATLAS	100%	100%	UK-NorthGrid	98%	99%
CH-CHIPP-CSCS	100%	100%	PL-TIER2-WLCG	97%	97%
FR-IN2P3-CPPM	100%	100%	SI-SiGNET	97%	97%
FR-IN2P3-LPC	100%	100%	US-SWT2	97%	97%
JP-Tokyo-ATLAS-T2	100%	100%	DE-DESY-RWTH-CMS-T2	96%	99%
PT-LIP-LCG-Tier2	100%	100%	US-MWT2	96%	96%
T2-LATINAMERICA	100%	100%	DE-FREIBURGWUPPERTAL	95%	95%
TW-FTT-T2	100%	100%	UK-SouthGrid	95%	95%
US-AGLT2	100%	100%	IT-INFN-T2	93%	94%
CA-WEST-T2	99%	99%	UK-London-Tier2	93%	93%
DE-DESY-GOE-ATLAS-T2	99%	99%	US-NET2	91%	91%
ES-ATLAS-T2	99%	100%	CA-EAST-T2	88%	90%
FR-GRIF	99%	99%	CZ-Prague-T2	85%	86%
FR-IN2P3-LAPP	99%	99%	RO-LCG	83%	83%
FR-IN2P3-LPSC	99%	100%	RU-RDIG	80%	80%
UK-ScotGrid	99%	100%	TR-Tier2-federation	76%	76%
CN-IHEP	98%	100%	SE-SNIC-T2	72%	75%
IL-HEPTier-2	98%	98%	DE-MCAT	50%	50%
SK-Tier2-Federation	98%	100%	AT-HEPHY-VIENNA-UIBK	46%	58%

DE-MCAT : No compatible resource found in BDII
 HEPHY-VIENNA : No compatible resource found in BDII (already recovered)

Status of SAM development

- **Selection of queues for SAM test**

- In a WLCG meeting, we agreed to add a new flag “ETF_default” to select a queue for SAM.
 - I am waiting for it is implemented in AGIS
- pg_default=1 and score queues will be ETF_default=1.
 - There are some CE services which do not have corresponding queue.
 - ETF_default will be manually set (the list of those queues is prepared)
- Once it is done, SAM can be independent of BDII

- **ASAP**

- New profile is added in SAM visualization for ASAP_prod.
 - Still don't see data, I am asking Pablo how to enable it.

- **Support of multiple DDM protocols**

- The idea is to test all protocols
- Select a protocol each for PUT/GET/DEL and use them for ATLAS_CRITICAL
- A flag is needed to know which protocol should be used for ATLAS_CRITICAL
 - A new flag in AGIS ?

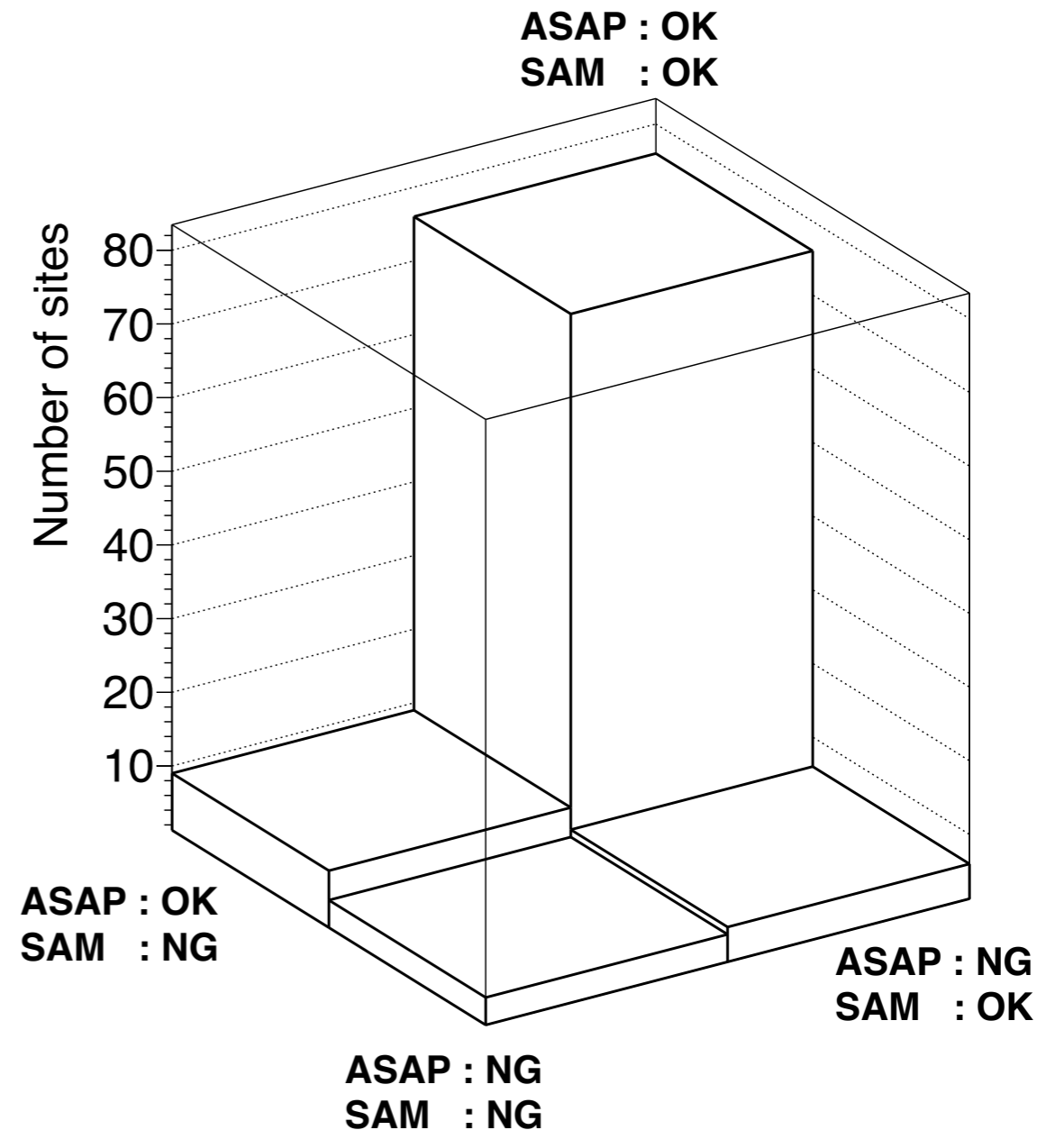
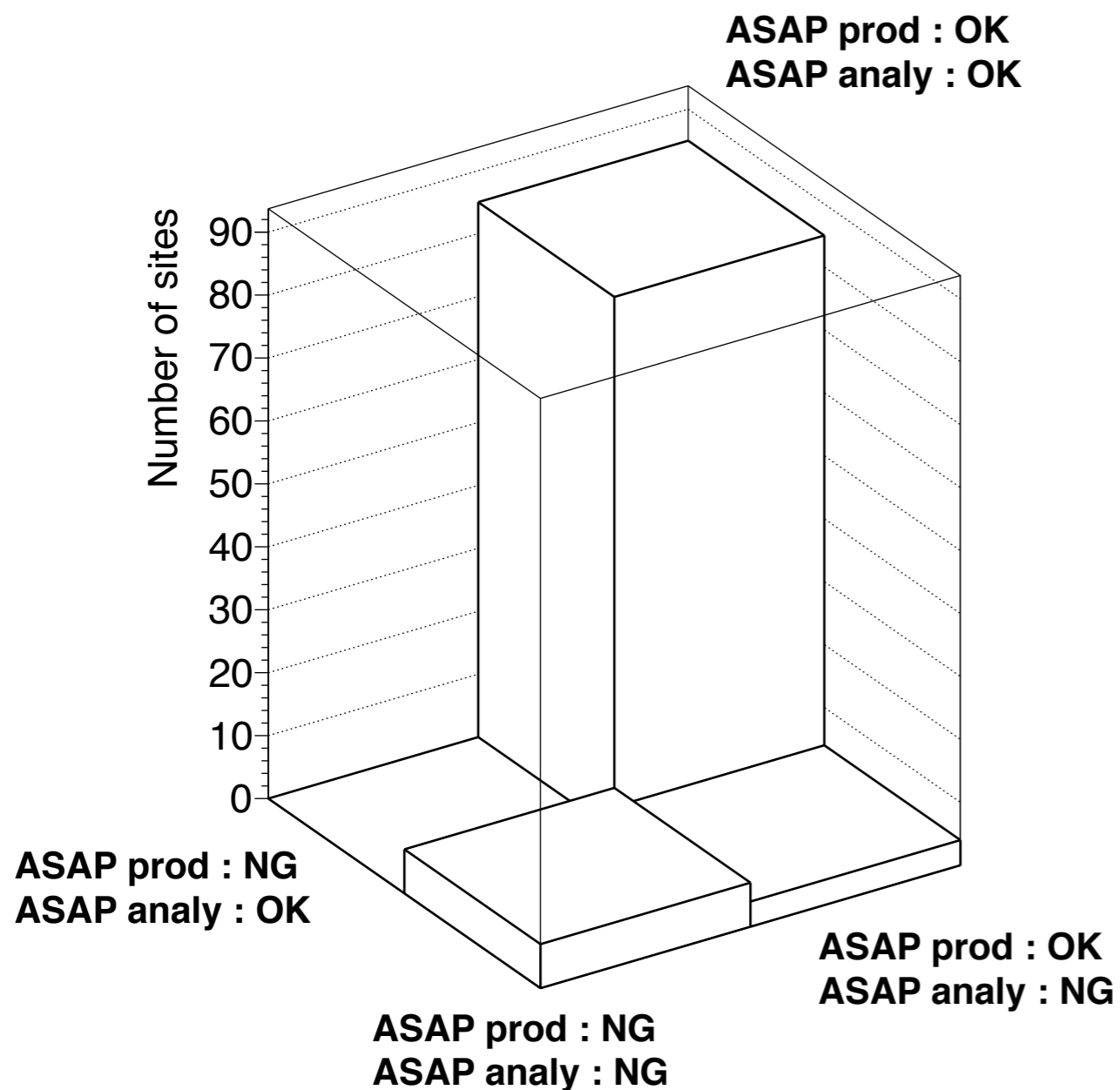
SAM : ASAP prod : ASAP analy comparison

The figure shows the correlation of ASAP prod vs ASAP analy, and ASAP vs SAM.

All the tests are OK in most of the sites.

The result of three tests don't always the same.

→ It is worth to do all the tests.



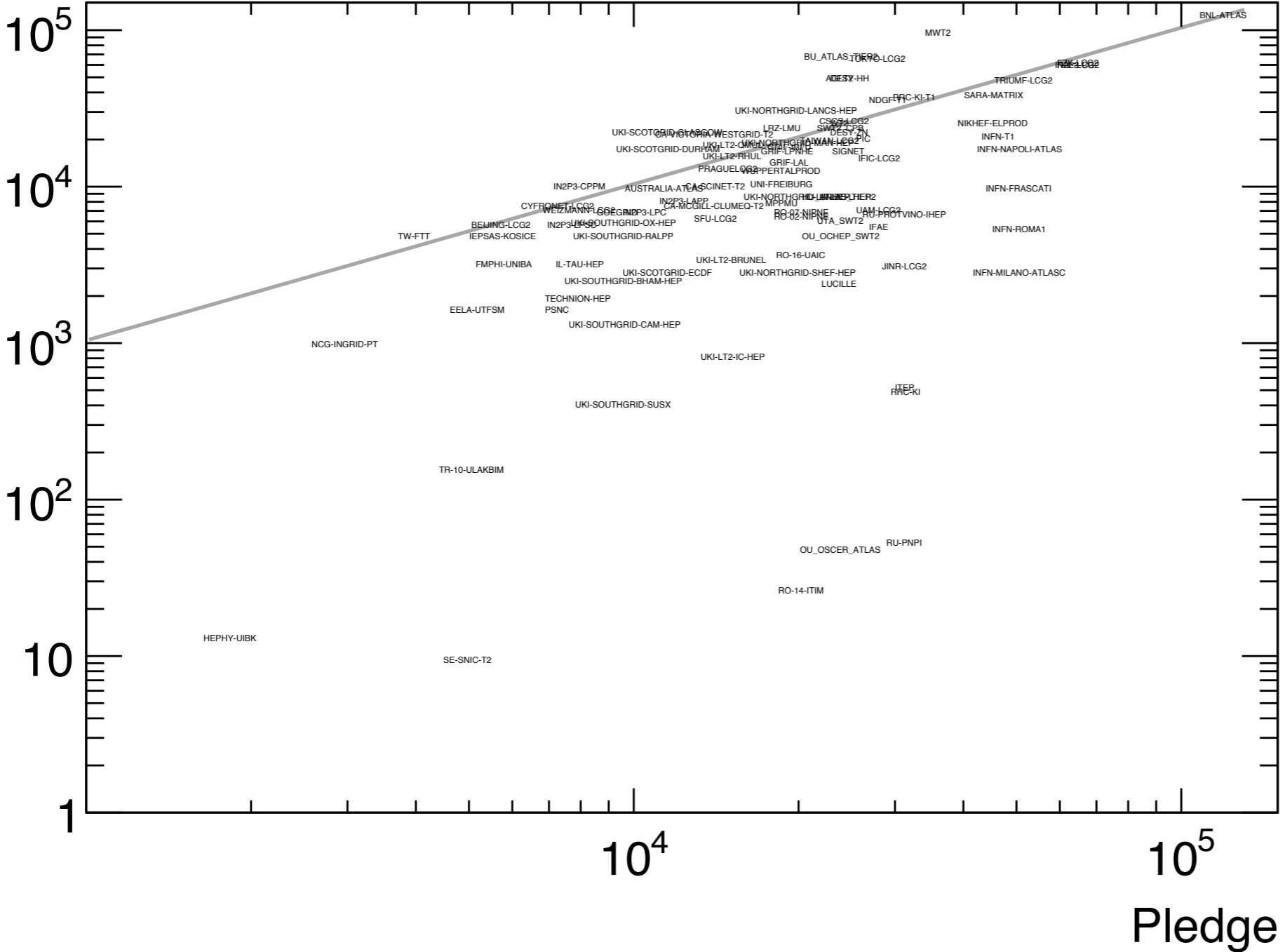
SAM OK = availability > 50%

Pledge and efficiency

- In the following pages, I put a comparison of the delivered CPU and pledge.
 - Delivered CPU : average Wallclock HEPSPEC06 in the last month
 - Efficiency : successful / all accomplished jobs
- In the plots, site names are written with small characters; you can magnify the PDF file to see the names.

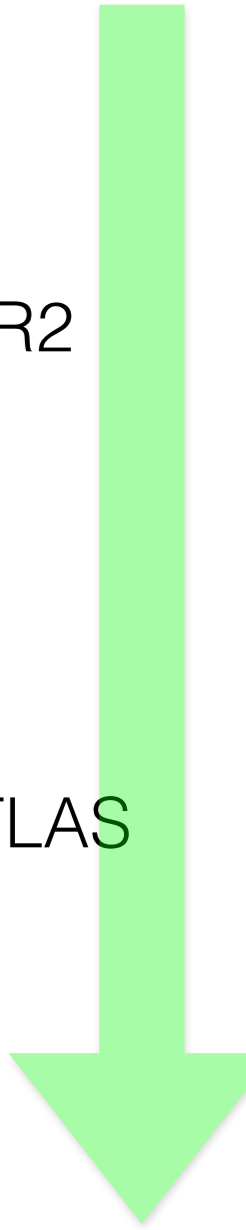
Wallclock HEPSPROC06 vs pledge

Delivered CPU HEPSPROC06 Wairtime



Best

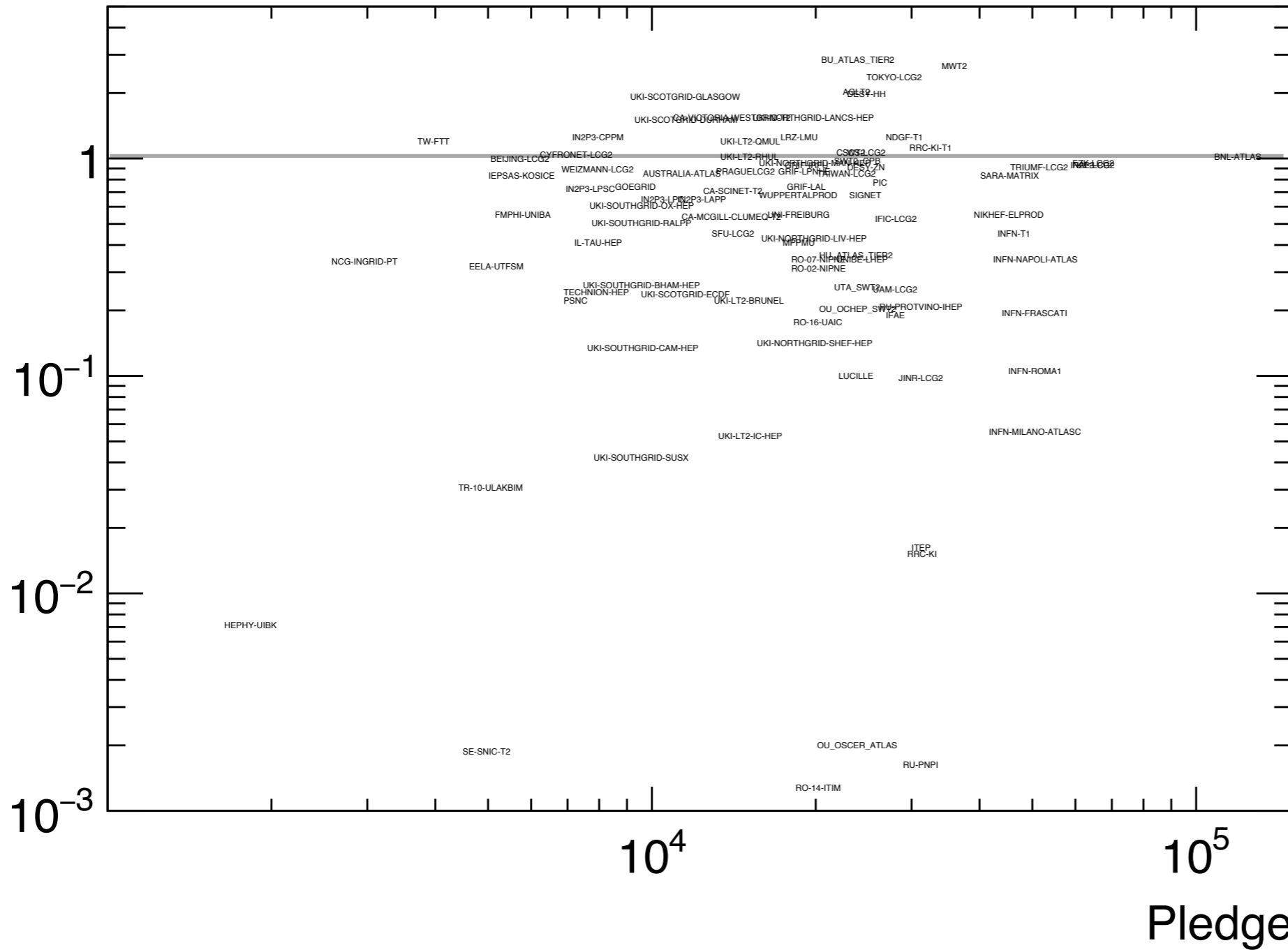
- CERN-PROD
- BNL-ATLAS
- MWT2
- BU_ATLAS_TIER2
- TOKYO_LCG2
- .
- .
- .
- RU-PNPI
- OU_OSCER_ATLAS
- RO-14-ITIM
- HEPHY-UIBK
- SE-SNIC-T2



Worst

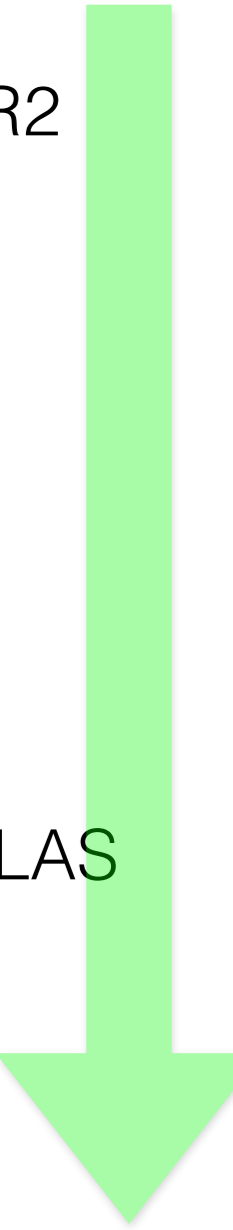
Wallclock HEPSPROC06/pledge vs pledge

Delivered CPU HEPSPROC06 Wvertime / pledge



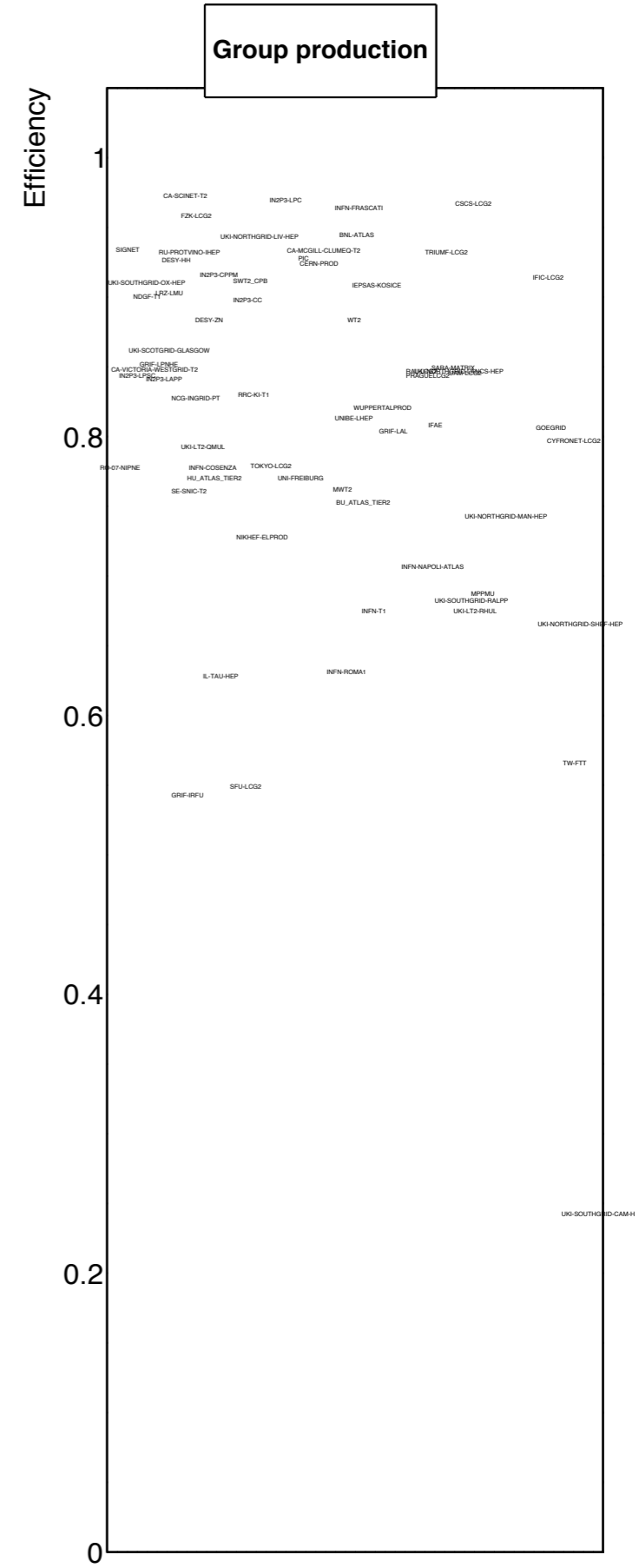
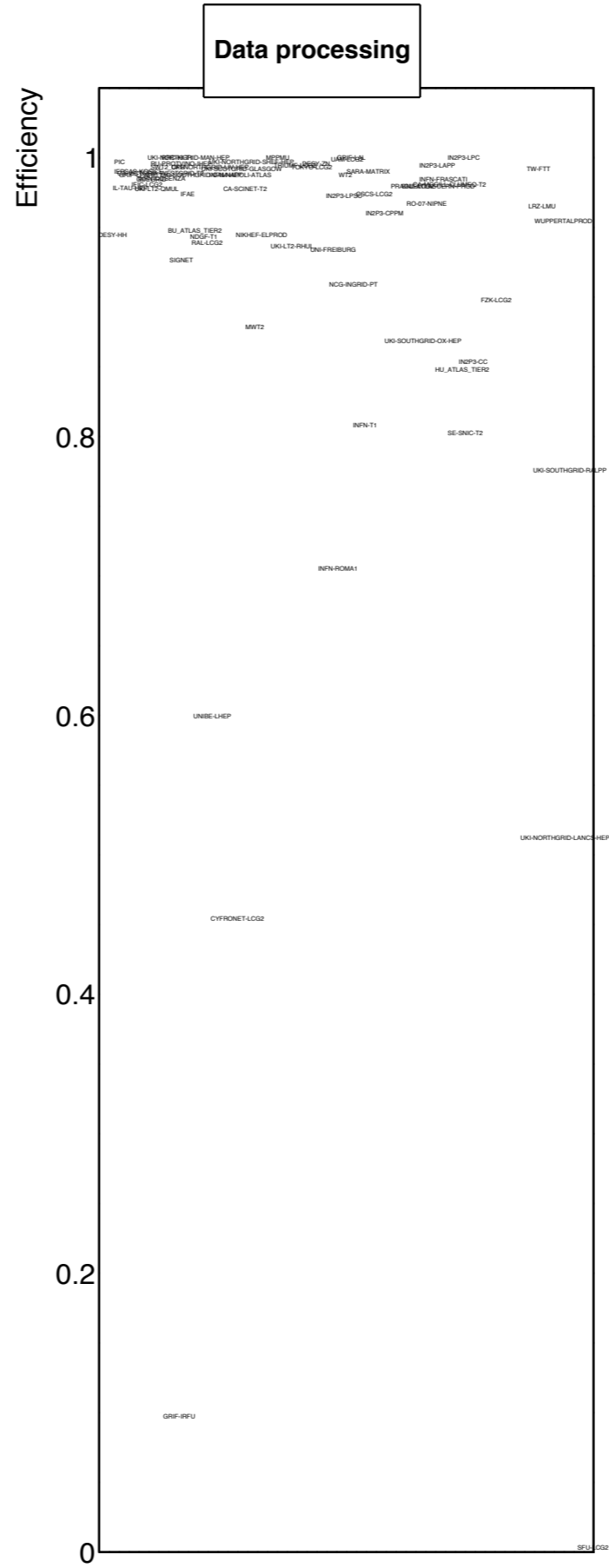
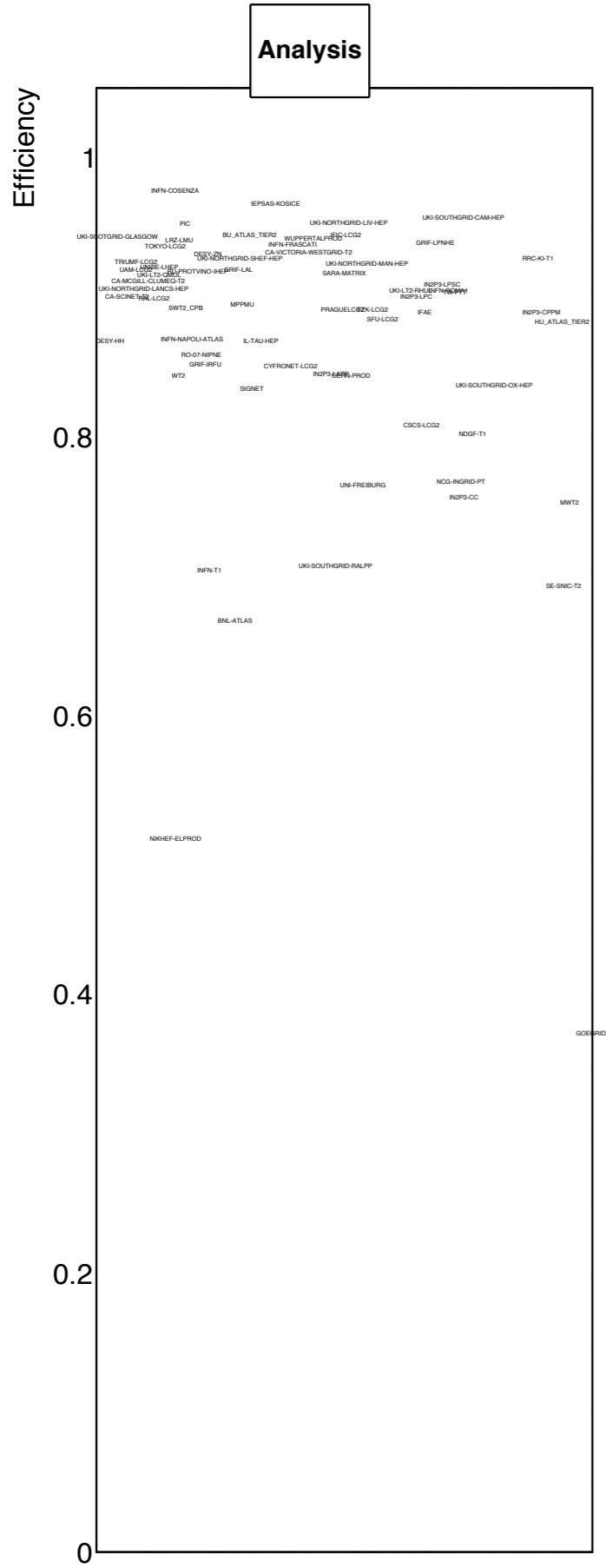
Best

- BU_ATLAS_TIER2
- MWT2
- TOKYO-LCG2
- AGLT2
- DESY-HH
- .
- .
- .
- HEPHY-UIBK
- OU_OSCER_ATLAS
- SE-SNIC-T2
- RU-PNPI
- RO-14-ITIM

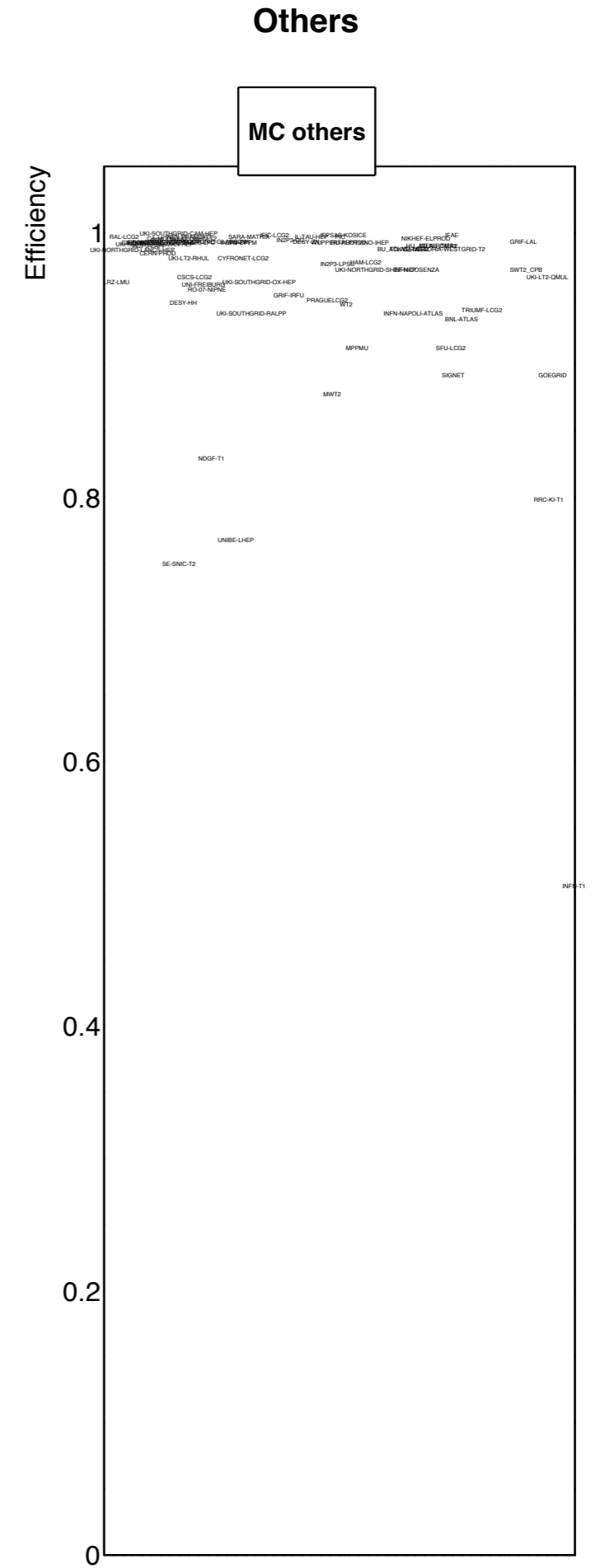
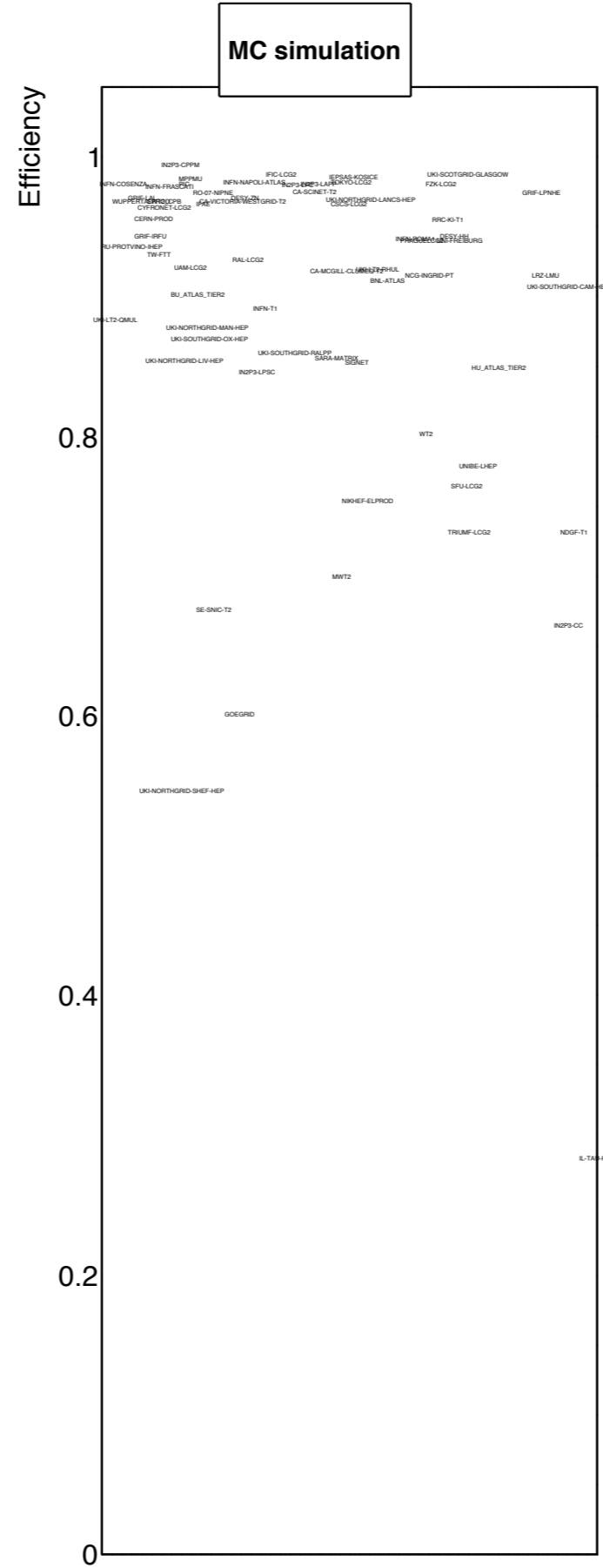
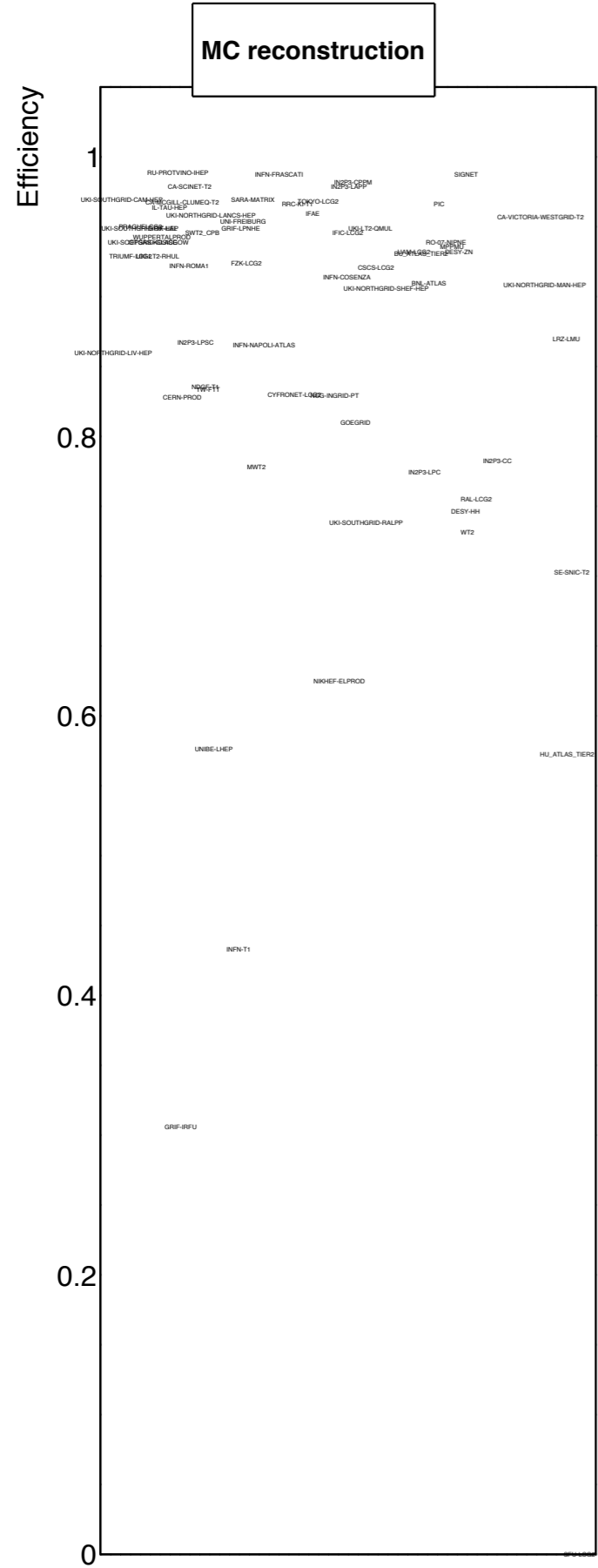


Worst

Job Efficiency



Job Efficiency



Summary

- I checked correlations of several metrics.
- There are several metrics which can be used to categorize sites
 - SAM site A/R
 - ASAP analy/prod
 - Delivered CPU vs pledge
 - Job efficiency