Performance survey of US ATLAS computing facilities

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US ATLAS Facilities

Feb 20, 2013

Outline

- Capacities
- Production
- Availability and reliability
- Storage usage
- Throughput
- FAX throughput

CAPACITIES

From v26-v1 (1/9/13)

Site	CPU Installed (HS)	Disk Installed (TB)
T1	118,832	11000
NET2	25,621	1200
SWT2	39,880	2189
MWT2	53,008	2732
AGLT2	36,937	3510
WT2	29,376	3454
USATLAS FACILITY	303,653	24,085
USATLAS TIER2	184,821	13,085

Are these capacities correct? Probably not.

https://www.usatlas.bnl.gov/twiki/bin/view/Admins/CapacitySummary

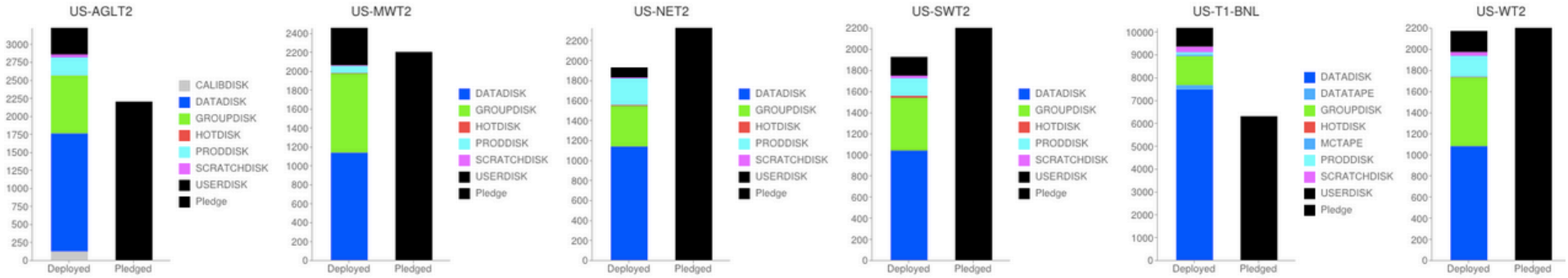
Please update v27-v1 in the Google docs linked from the above for the current Integration Phase 24

Compare our self-reported capacities against official ATLAS monitors

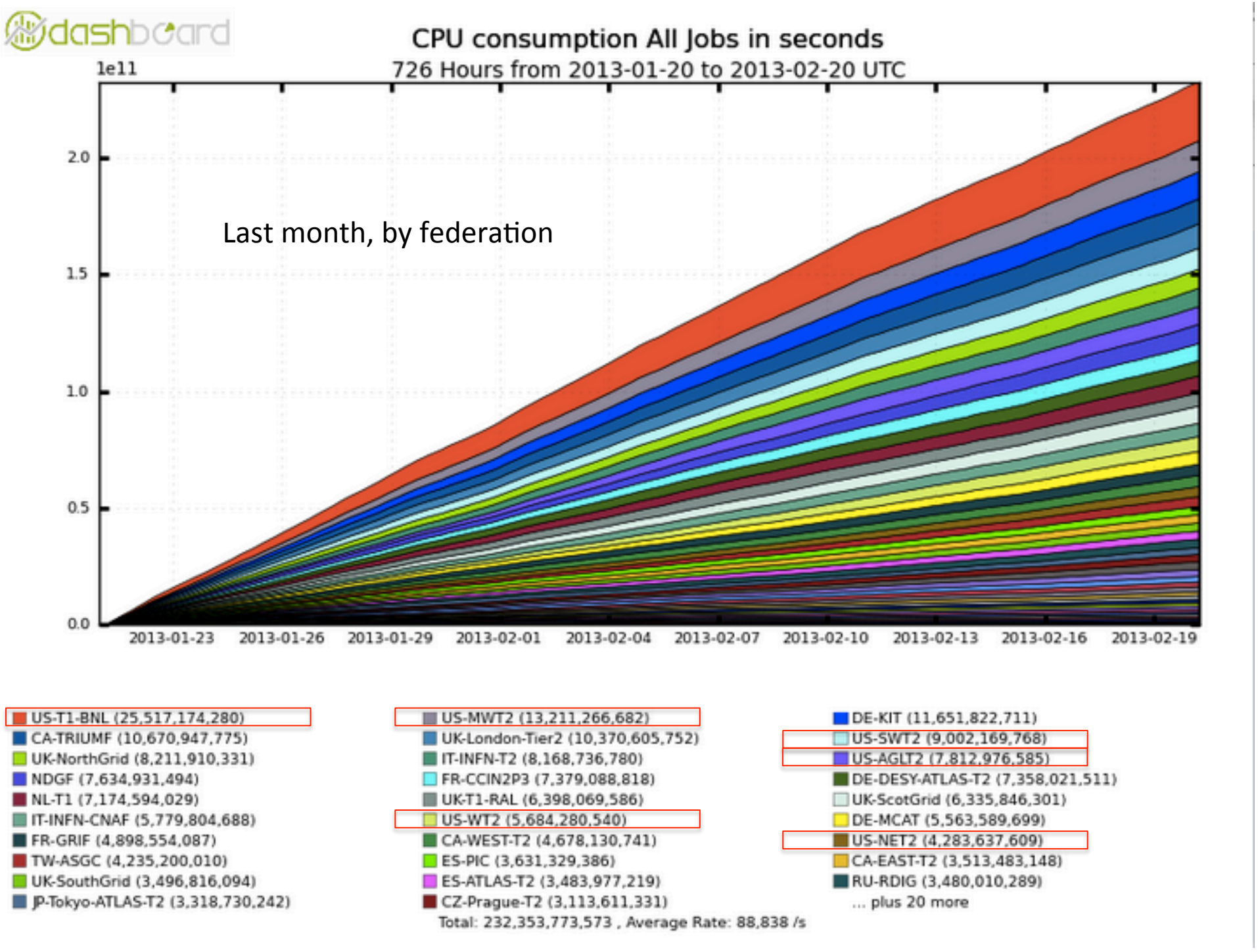
http://bourricot.cern.ch/dq2/accounting/federation_reports/USASITES/

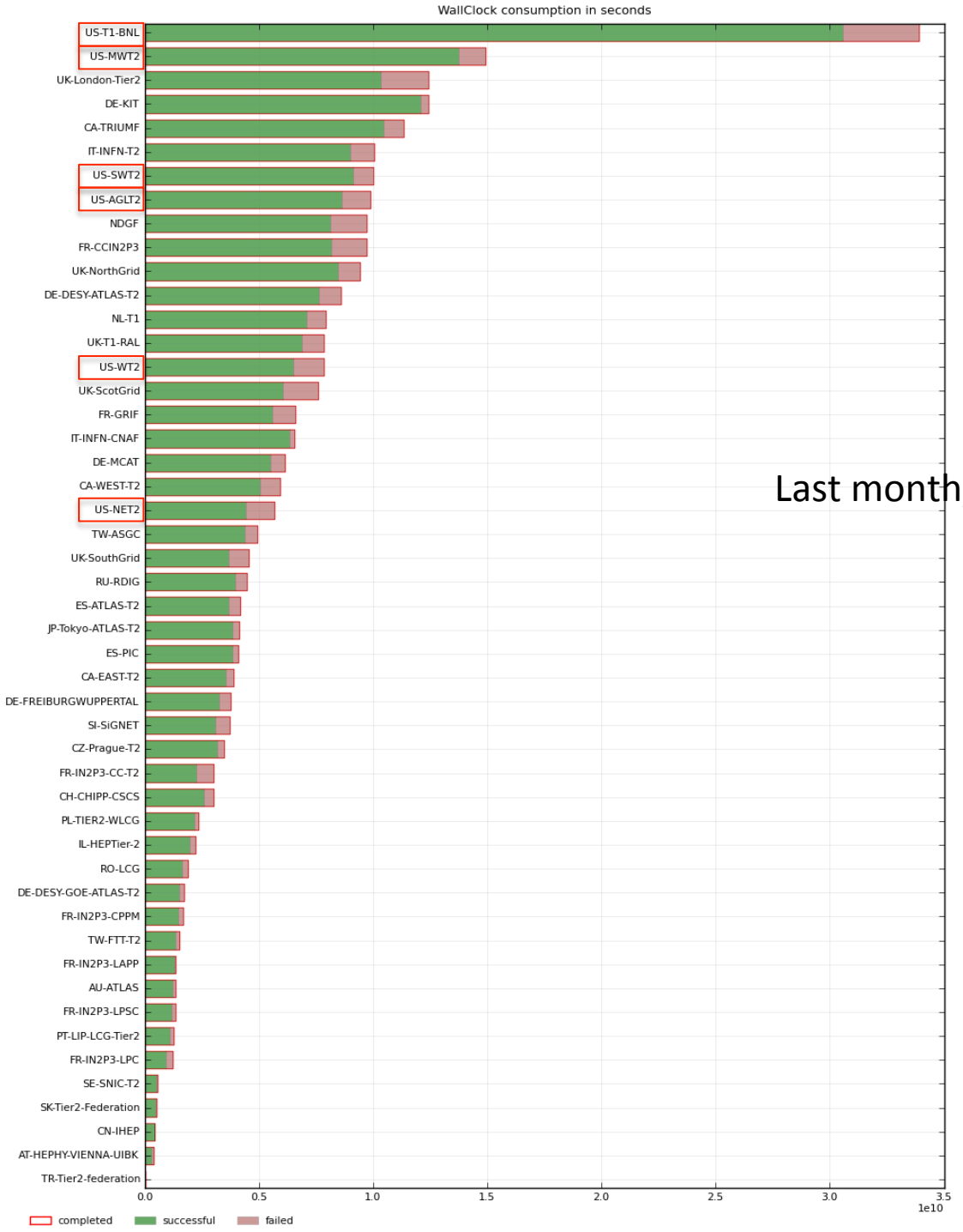
Federations exceeding their pledge

Federation	Site	CALIBDISK		DATADISK		DATATAPE		GROUPDISK		HOTDISK		MCTAPE		PRODDISK		SCRATCHDISK		USERDISK		Total	Pledge
US-AGLT2	AGLT2	120.0	120.0 (3%)	1640.0	1640.0 (50%)	-	- (-%)	800.0	800.0 (24%)	3.0	3.0 (0%)	-	- (-%)	250.0	250.0 (7%)	40.8	40.8 (1%)	370.0	370.0 (11%)	3223.8	2200.0
US-MWT2	MWT2	-	- (-%)	1136.9	1136.9 (46%)	-	- (-%)	-	836.7 (34%)	-	5.0 (0%)	-	- (-%)	-	72.6 (2%)	-	9.3 (0%)	-	395.3 (16%)	2455.8	2200.0
	MWT2_UC	-		-		-		836.7		5.0		-		72.6		9.3		395.3			
US-NET2	NET2	-	- (-%)	1137.6	1137.6 (48%)	-	- (-%)	406.6	406.6 (17%)	10.0	10.0 (0%)	-	- (-%)	262.6	262.6 (11%)	10.0	10.0 (0%)	100.7	100.7 (4%)	1927.6	2324.0
US-SWT2	OU_OCHEP_SWT2	-	- (-%)	233.7	1037.7 (47%)	-	- (-%)	-	500.0 (22%)	14.3	18.3 (0%)	-	- (-%)	53.7	166.7 (7%)	14.0	24.0 (1%)	17.6	177.6 (8%)	1924.3	2200.0
	SWT2_CPB	-		800.0		-		500.0		2.0		-		80.0		10.0		160.0			
	UTA_SWT2	-		4.0		-		-		2.0		-		33.0		-		-			
US-T1-BNL	BNL-OSG2	-	- (-%)	7476.7	7476.7 (73%)	184.7	184.7 (1%)	1264.4	1264.4 (12%)	5.6	5.6 (0%)	62.7	62.7 (0%)	110.0	110.0 (1%)	241.9	241.9 (2%)	824.6	824.6 (8%)	10170.6	6300.0
US-WT2	SLACXRD	-	- (-%)	1080.0	1080.0 (49%)	-	- (-%)	650.0	650.0 (29%)	5.0	5.0 (0%)	-	- (-%)	200.0	200.0 (9%)	35.0	35.0 (1%)	200.0	200.0 (9%)	2170.0	2200.0



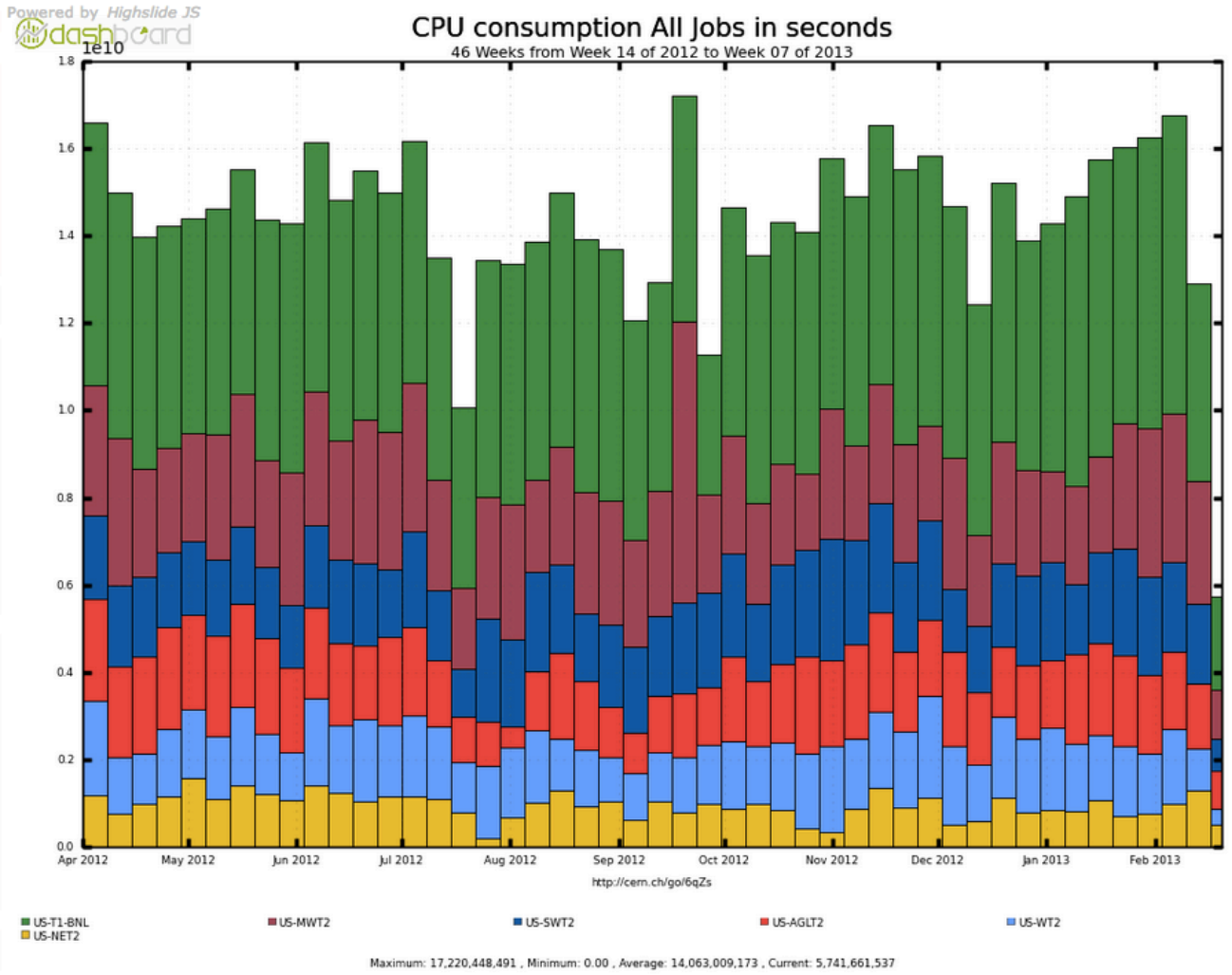
PRODUCTION


dashboard
CPU consumption All Jobs in seconds
726 Hours from 2013-01-20 to 2013-02-20 UTC
1e11
2.0
1.5
1.0
0.5
0.0
2013-01-23
2013-01-26
2013-01-29
2013-02-01
2013-02-04
2013-02-07
2013-02-10
2013-02-13
2013-02-16
2013-02-19
Last month, by federation
US-T1-BNL (25,517,174,280)
CA-TRIUMF (10,670,947,775)
UK-NorthGrid (8,211,910,331)
NDGF (7,634,931,494)
NL-T1 (7,174,594,029)
IT-INFN-CNAF (5,779,804,688)
FR-GRIF (4,898,554,087)
TW-ASGC (4,235,200,010)
UK-SouthGrid (3,496,816,094)
JP-Tokyo-ATLAS-T2 (3,318,730,242)
US-MWT2 (13,211,266,682)
UK-London-Tier2 (10,370,605,752)
IT-INFN-T2 (8,168,736,780)
FR-CCIN2P3 (7,379,088,818)
UK-T1-RAL (6,398,069,586)
US-WT2 (5,684,280,540)
CA-WEST-T2 (4,678,130,741)
ES-PIC (3,631,329,386)
ES-ATLAS-T2 (3,483,977,219)
CZ-Prague-T2 (3,113,611,331)
DE-KIT (11,651,822,711)
US-SWT2 (9,002,169,768)
US-AGLT2 (7,812,976,585)
DE-DESY-ATLAS-T2 (7,358,021,511)
UK-ScotGrid (6,335,846,301)
DE-MCAT (5,563,589,699)
US-NET2 (4,283,637,609)
CA-EAST-T2 (3,513,483,148)
RU-RDIG (3,480,010,289)
... plus 20 more
Total: 232,353,773,573 , Average Rate: 88,838 /s

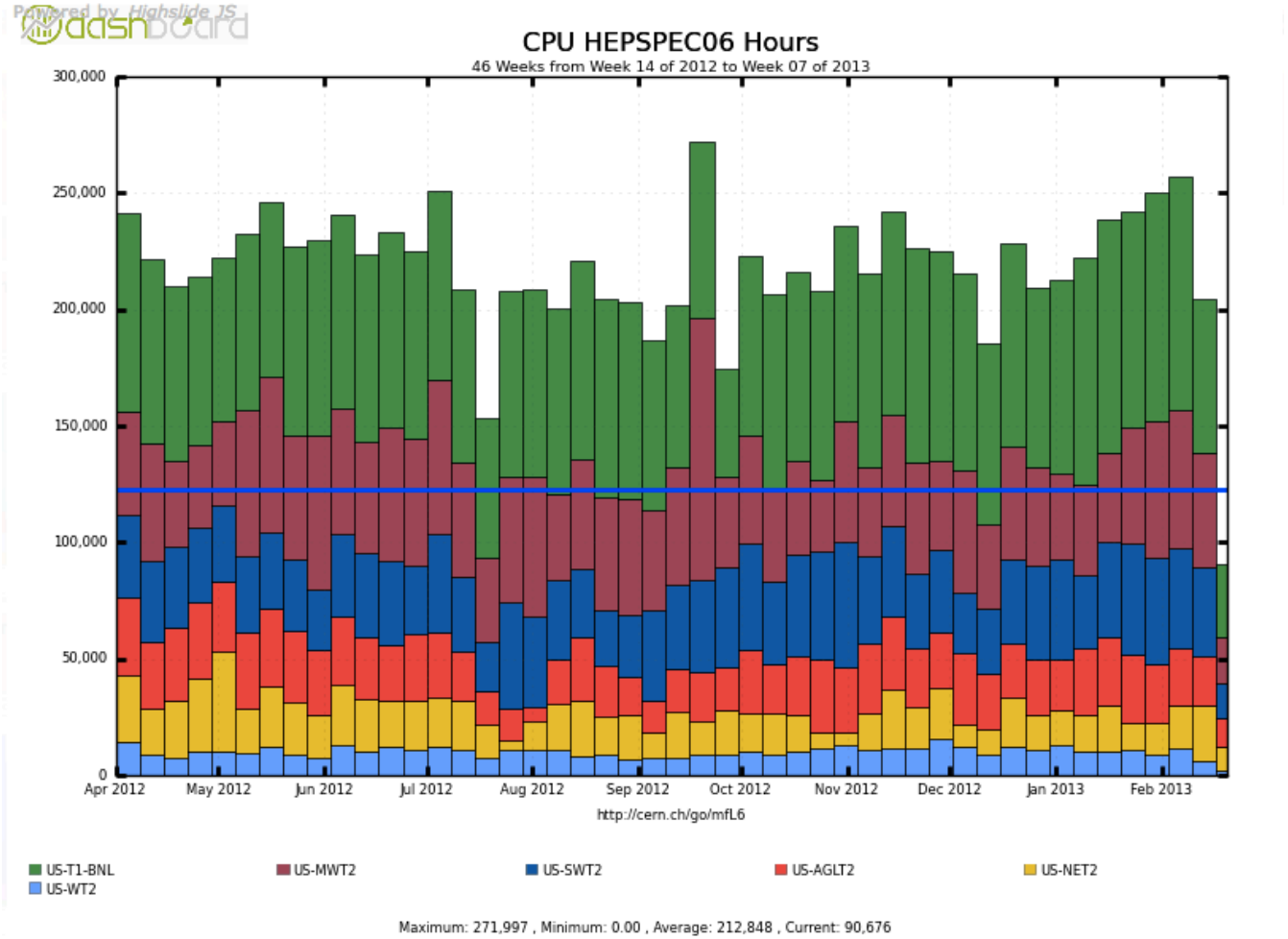


Last month, by federation

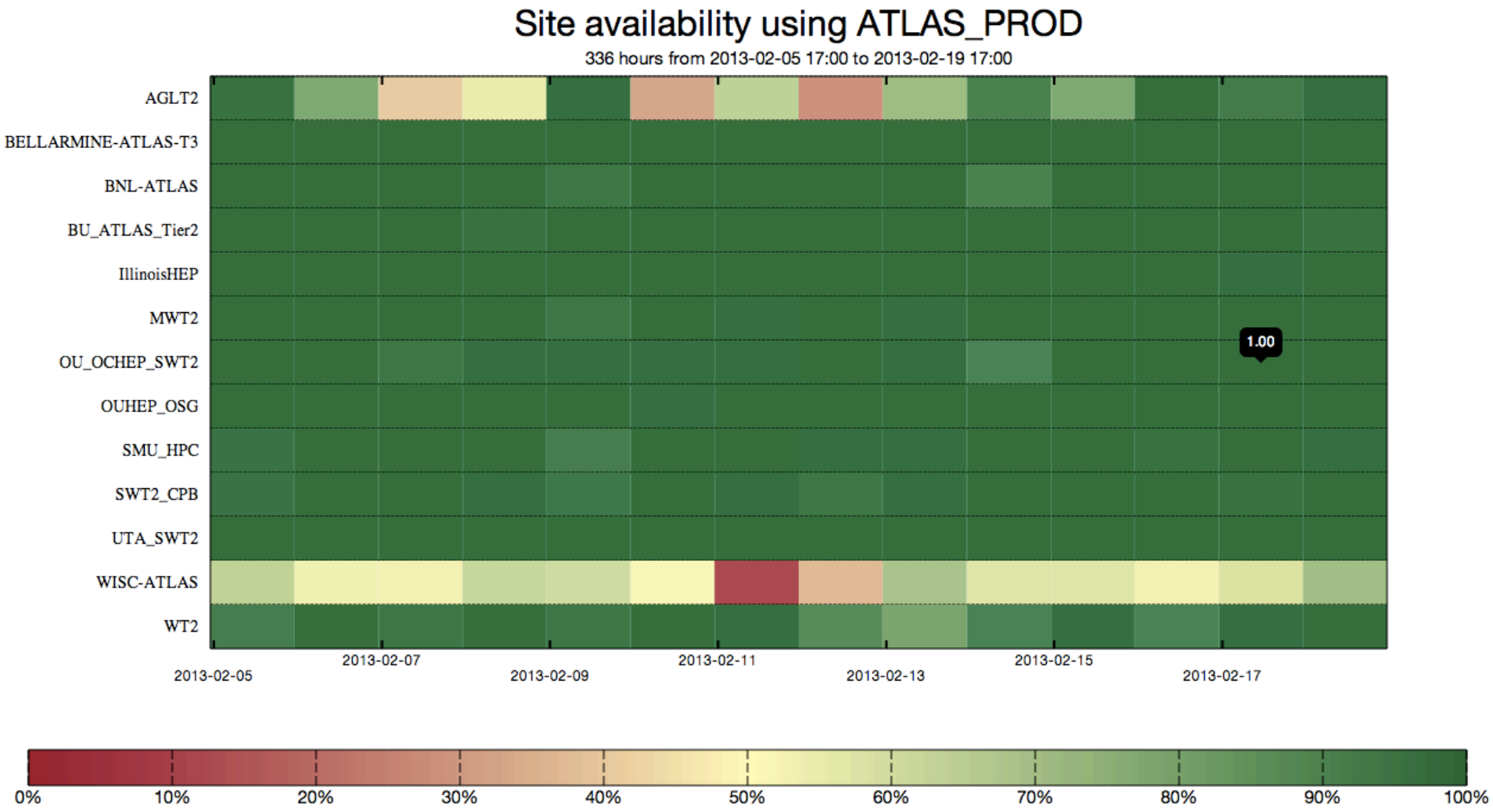
CPU consumption, all jobs, unnormalized



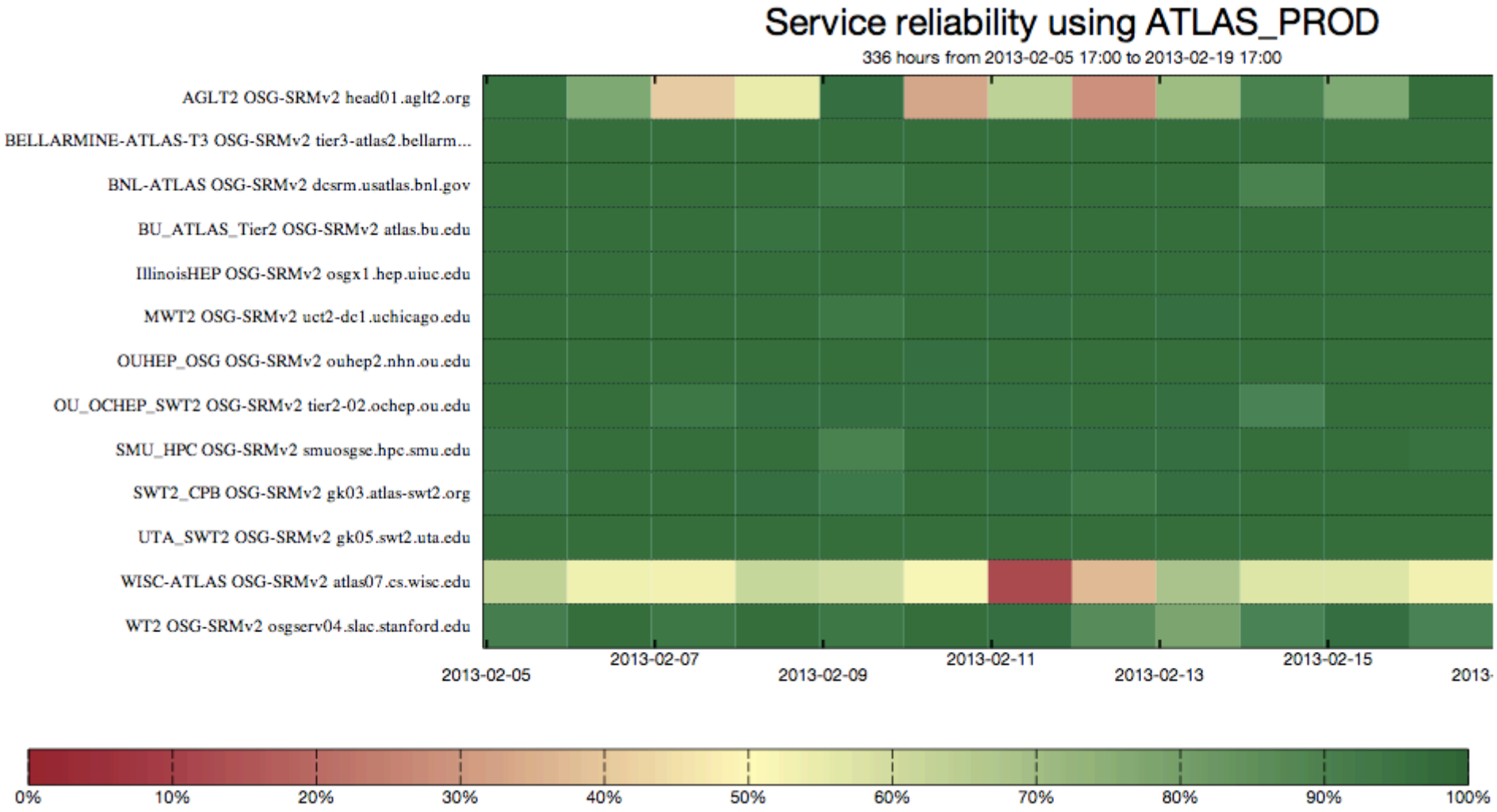
Normalization problem with WT2?



AVAILABILITY & RELIABILITY


Site availability using ATLAS_PROD
336 hours from 2013-02-05 17:00 to 2013-02-19 17:00
AGLT2
BELLARMINE-ATLAS-T3
BNL-ATLAS
BU_ATLAS_Tier2
IllinoisHEP
MWT2
OU_OCHEP_SWT2
OUHEP_OSG
SMU_HPC
SWT2_CPB
UTA_SWT2
WISC-ATLAS
WT2
1.00
2013-02-05
2013-02-07
2013-02-09
2013-02-11
2013-02-13
2013-02-15
2013-02-17
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%

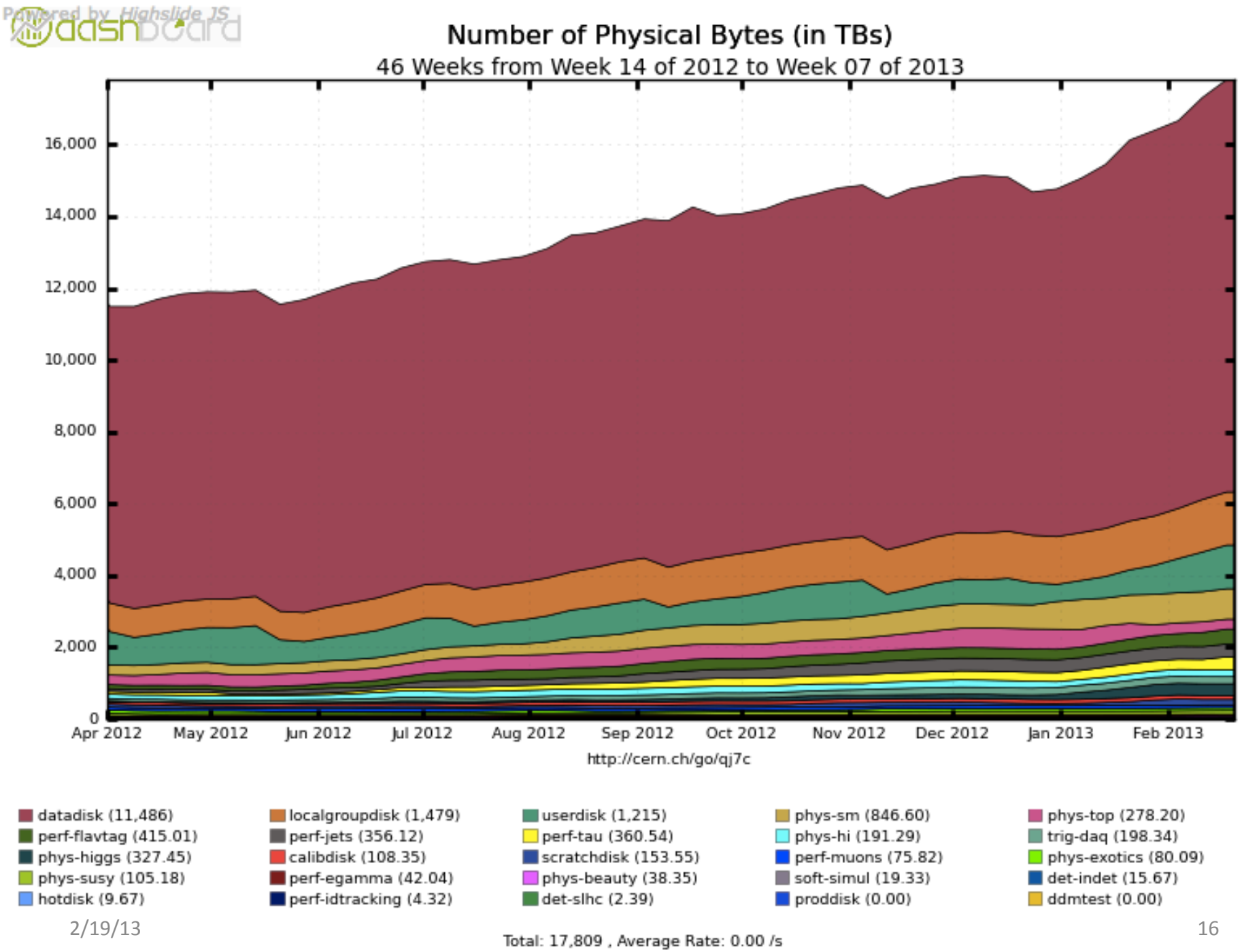
Storage endpoint reliability

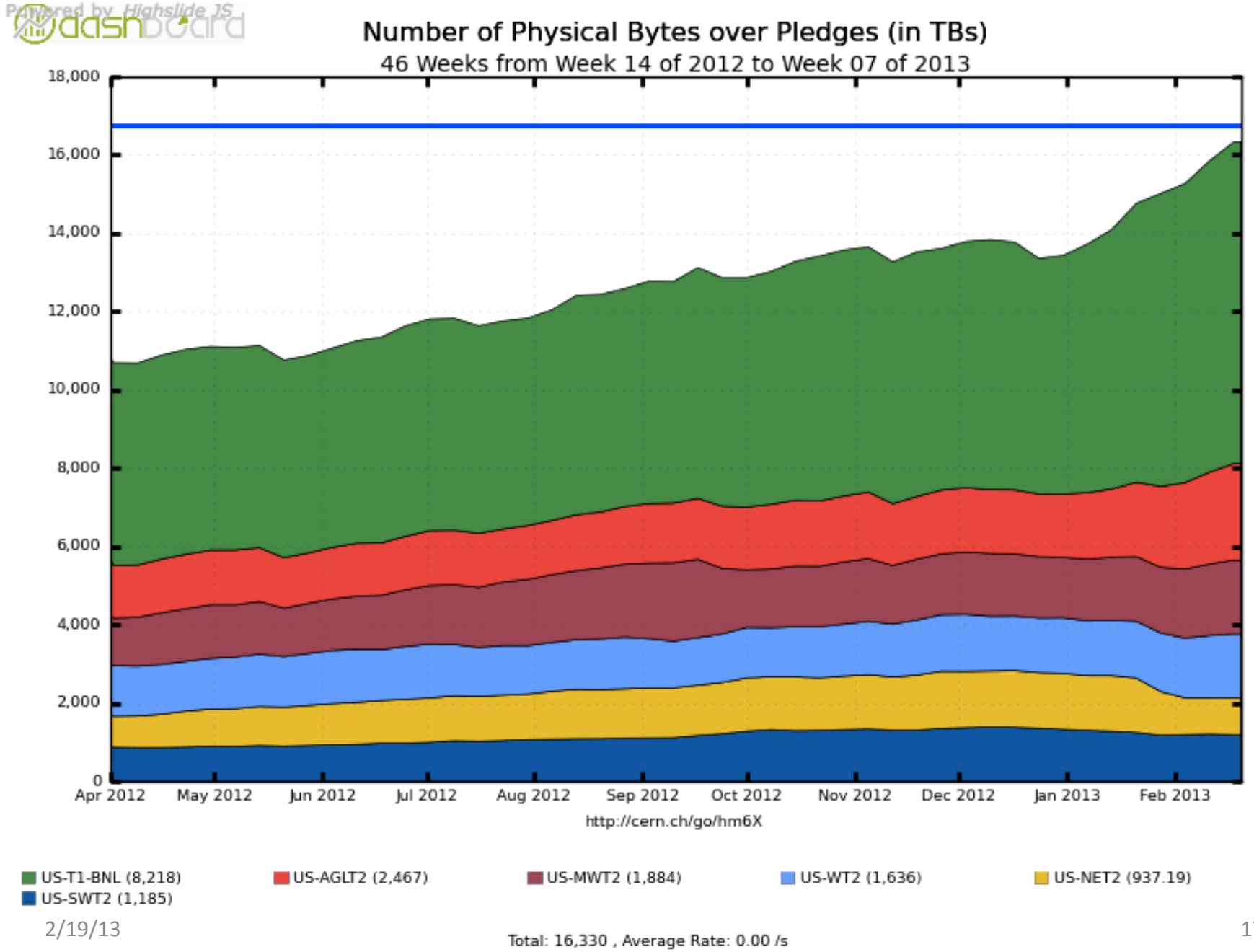


FAX functionality

Site Name	FAXMON_1	FAXMON_2	FAXMON_3	
AGLT2	OK	OK	OK	r
BNL-ATLAS	OK	OK	OK	r
BU_ATLAS_TIER2	OK	OK	NoFirstLevelRedirection	r
CERN-PROD	OK	OK	OK	T
DESY-HH	OK	OK	NoFirstLevelRedirection	r
GRIF	noDirect	NoUpstreamRedirection	NoFirstLevelRedirection	r
INFN-FRASCATI	OK	OK	OK	r
INFN-NAPOLI-ATLAS	OK	OK	OK	r
INFN-ROMA1	OK	OK	OK	r
JINR-LCG2	OK	OK	NoFirstLevelRedirection	r
LRZ-LMU	OK	OK	OK	r
MPPMU	OK	OK	OK	r
MWT2	OK	OK	OK	r
OU_OCHEP_SWT2	OK	OK	OK	r
PRAGUELCG2	OK	OK	OK	r
RAL-LCG2	OK	OK	OK	r
RU-PROTVINO-IHEP	OK	OK	OK	r
SWT2_CPB	noDirect	NoUpstreamRedirection	NoFirstLevelRedirection	r
UKI-LT2-QMUL	OK	OK	OK	r
UKI-NORTHGRID-LANCS-HEP	OK	OK	OK	r
UKI-NORTHGRID-LIV-HEP	OK	OK	OK	r
UKI-NORTHGRID-MAN-HEP	OK	OK	OK	r
UKI-SCOTGRID-ECDF	OK	OK	OK	r
UKI-SCOTGRID-GLASGOW	OK	OK	OK	r
UKI-SOUTHGRID-CAM-HEP	OK	OK	OK	r
UKI-SOUTHGRID-OX-HEP	OK	OK	OK	r
WT2	OK	OK	OK	r
WUPPERTALPROD	noDirect	NoUpstreamRedirection	NoFirstLevelRedirection	r

STORAGE USAGE


Powered by Highslide JS
dashboard
Number of Physical Bytes (in TBs)
46 Weeks from Week 14 of 2012 to Week 07 of 2013
16,000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
Apr 2012
May 2012
Jun 2012
Jul 2012
Aug 2012
Sep 2012
Oct 2012
Nov 2012
Dec 2012
Jan 2013
Feb 2013
http://cern.ch/go/qj7c
datadisk (11,486)
localgroupdisk (1,479)
userdisk (1,215)
phys-sm (846.60)
phys-top (278.20)
perf-flavtag (415.01)
perf-jets (356.12)
perf-tau (360.54)
phys-hi (191.29)
trig-daq (198.34)
phys-higgs (327.45)
calibdisk (108.35)
scratchdisk (153.55)
perf-muons (75.82)
phys-exotics (80.09)
phys-susy (105.18)
perf-egamma (42.04)
phys-beauty (38.35)
soft-simul (19.33)
det-indet (15.67)
hotdisk (9.67)
perf-idtracking (4.32)
det-slhc (2.39)
proddisk (0.00)
ddmtest (0.00)
Total: 17,809 , Average Rate: 0.00 /s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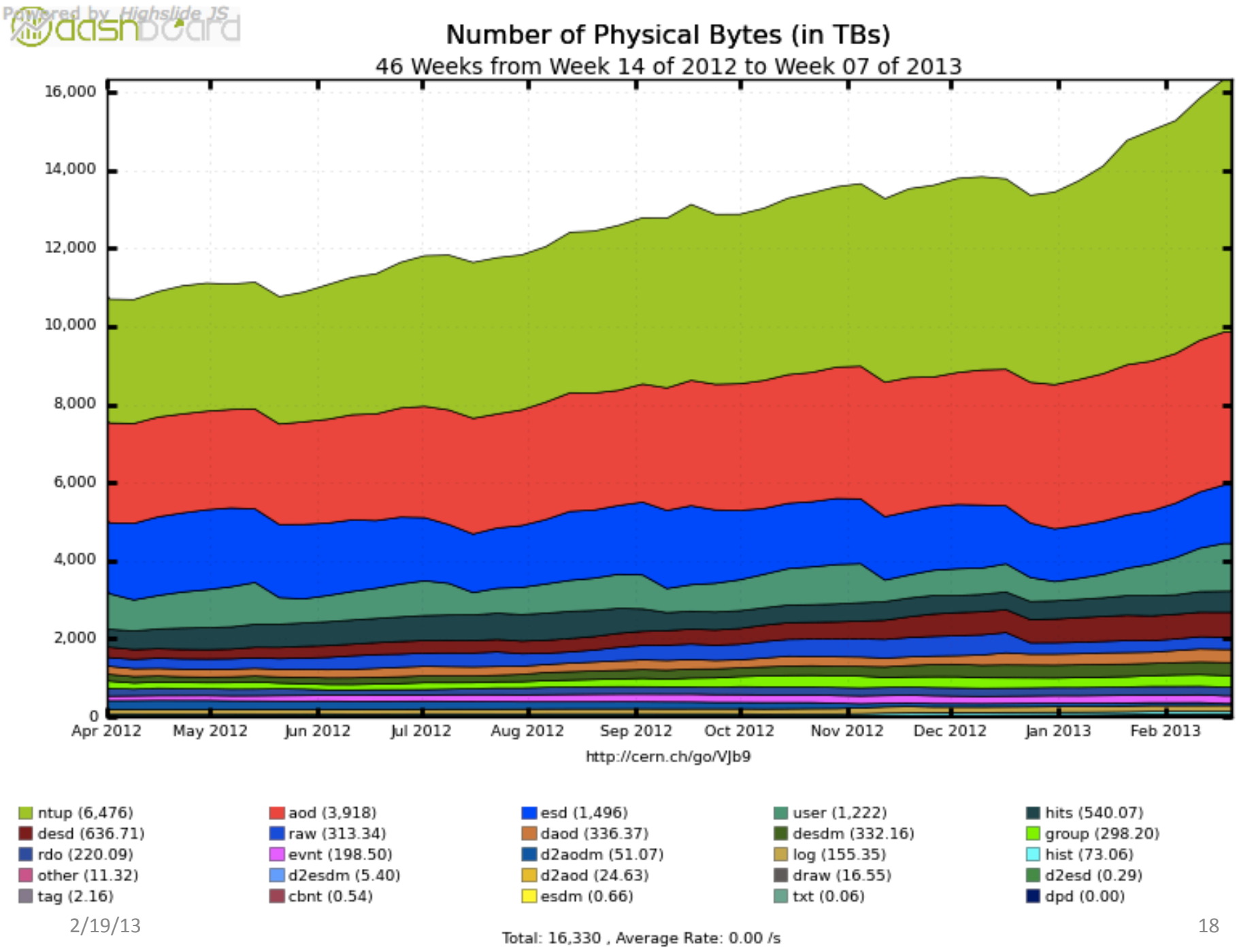
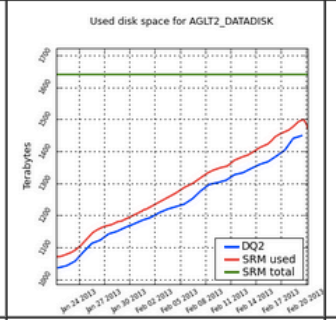
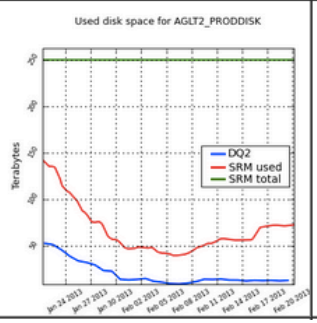
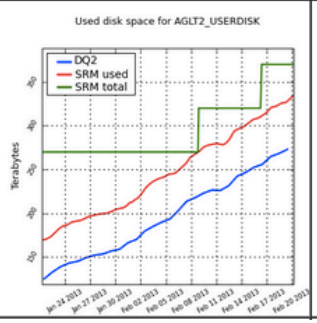
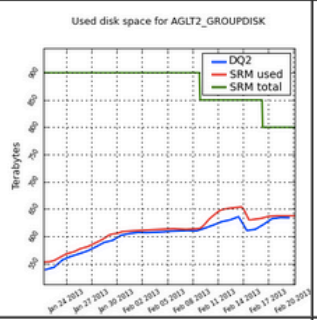
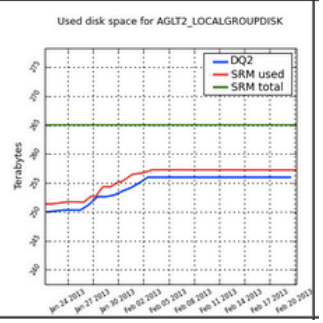
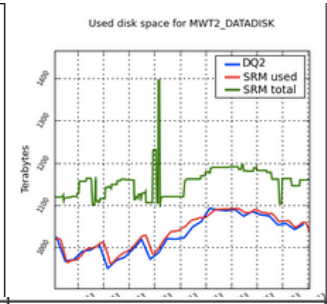
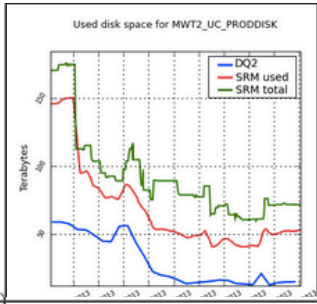
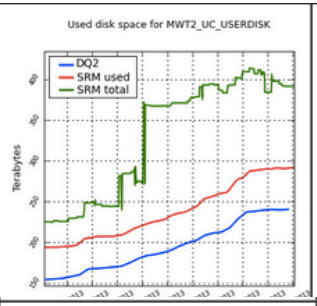
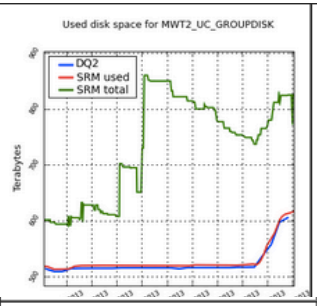
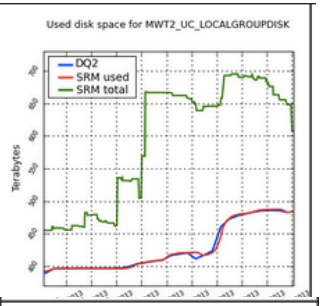
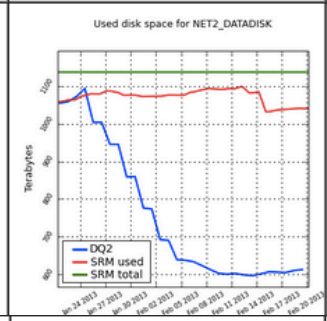
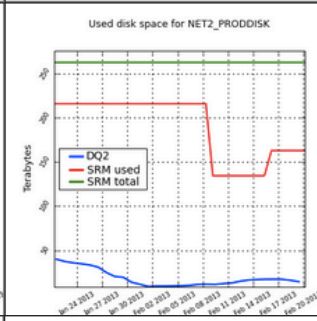
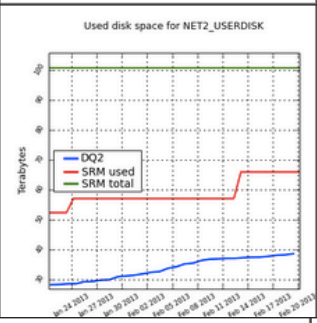
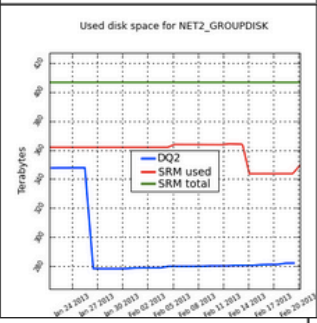
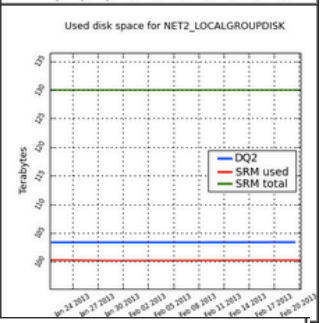
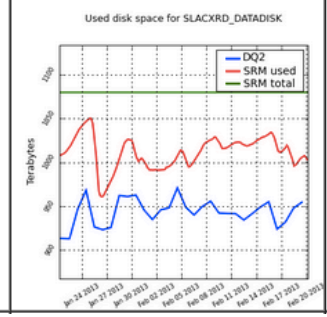
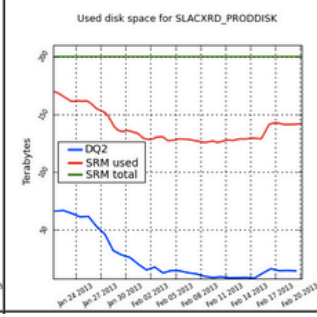
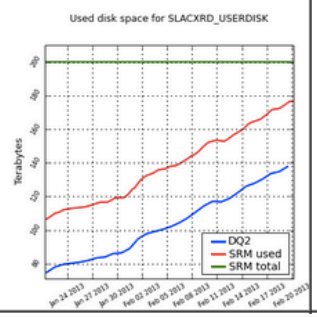
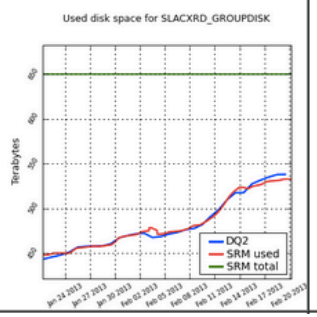
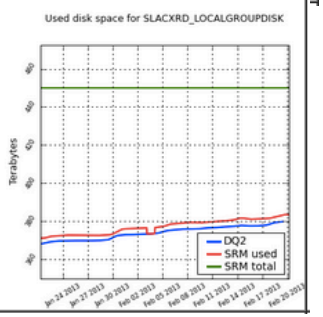
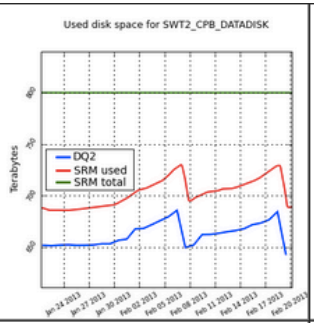
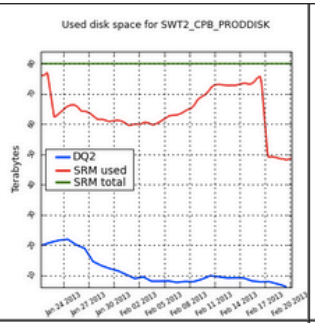
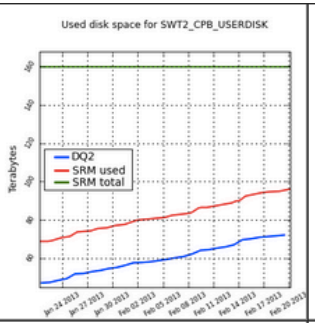
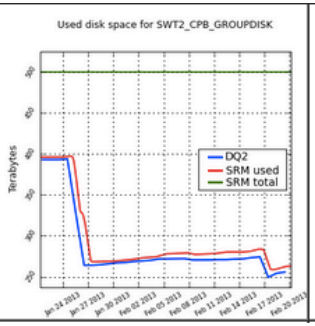
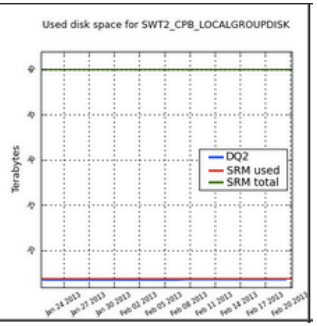
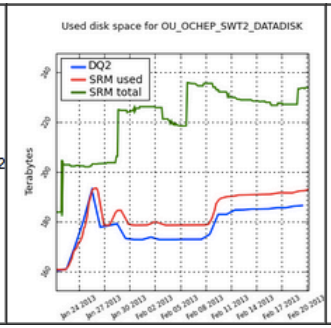
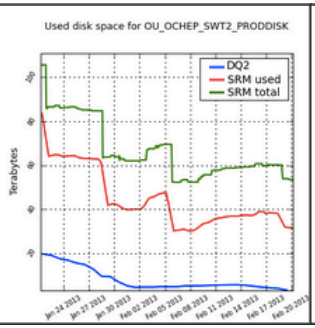
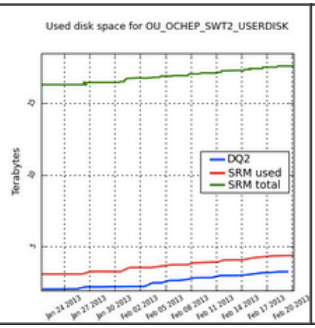
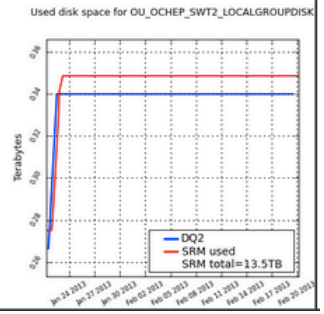
dashboard
Number of Physical Bytes over Pledges (in TBs)
46 Weeks from Week 14 of 2012 to Week 07 of 2013
18,000
16,000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
Apr 2012
May 2012
Jun 2012
Jul 2012
Aug 2012
Sep 2012
Oct 2012
Nov 2012
Dec 2012
Jan 2013
Feb 2013
http://cern.ch/go/hm6X
US-T1-BNL (8,218)
US-AGLT2 (2,467)
US-MWT2 (1,884)
US-WT2 (1,636)
US-NET2 (937.19)
US-SWT2 (1,185)
Total: 16,330 , Average Rate: 0.00 /s


Powered by Highslide JS
dashboard
Number of Physical Bytes (in TBs)
46 Weeks from Week 14 of 2012 to Week 07 of 2013
16,000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
Apr 2012
May 2012
Jun 2012
Jul 2012
Aug 2012
Sep 2012
Oct 2012
Nov 2012
Dec 2012
Jan 2013
Feb 2013
http://cern.ch/go/VJb9
ntup (6,476)
aod (3,918)
esd (1,496)
user (1,222)
hits (540.07)
desd (636.71)
raw (313.34)
daod (336.37)
desdm (332.16)
group (298.20)
rdo (220.09)
evnt (198.50)
d2aodm (51.07)
log (155.35)
hist (73.06)
other (11.32)
d2esdm (5.40)
d2aod (24.63)
draw (16.55)
d2esd (0.29)
tag (2.16)
cbnt (0.54)
esdm (0.66)
txt (0.06)
dpd (0.00)
Total: 16,330 , Average Rate: 0.00 /s

SITE	DATADISK	PRODDISK	USERDISK	GROUPDISK	LOCALGROUPDISK
AGLT2					
MWT2_UC					
NET2					
SLACXRD					

Red and blue lines should line up

SWT2_CPB					
OU_OCHEP_SWT2				No information available	

What can be done to correct the reporting?

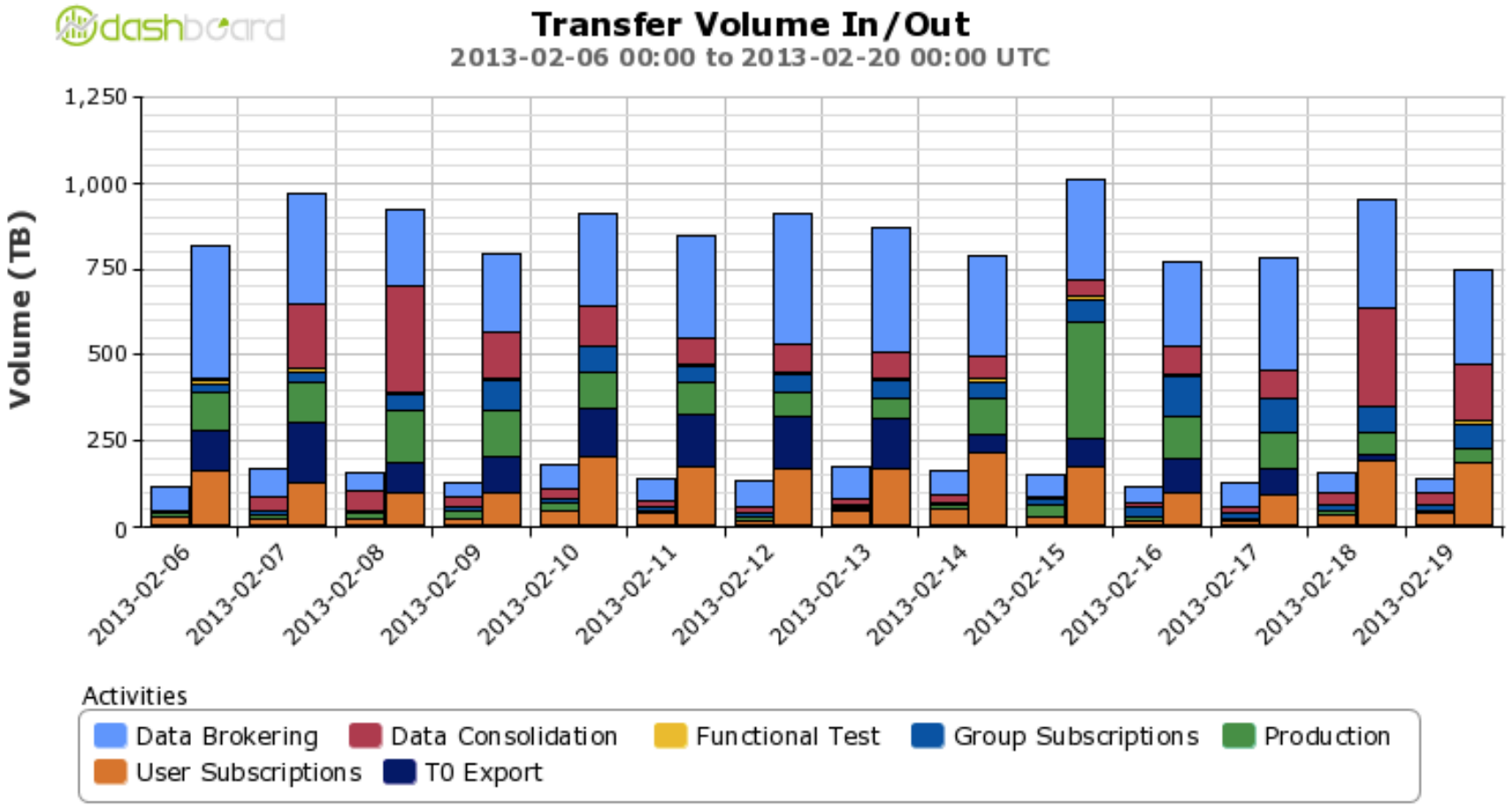
Last two weeks of …

THROUGHPUT

Throughput to the US (last two weeks)

	TOTAL-	AGLT2+	BNL-OSG2+	ILLINOISHEP+	MWT2+	MWT2_UC+	NERSC+	NET2+	OUHEP_OSG+	OU_OCHEP_SWT2+	SLACXRD+	SMU+	SWT2_CPB+	UPENN+	UTA_SWT2+	WISC+
TRANSFER- REGISTRATION- STAGING-	95 % 2 GB/s 100 % 100 %	89 % 224 MB/s 100 % 100 %	97 % 806 MB/s 100 % 100 %	80 % 149 kB/s 100 % 100 %	97 % 104 MB/s 100 % 100 %	98 % 167 MB/s 100 % 100 %	97 % 1 MB/s 100 % 100 %	77 % 34 MB/s 100 % 100 %	82 % 2 kB/s 100 % 100 %	84 % 12 MB/s 100 % 100 %	93 % 200 MB/s 100 % 100 %	78 % 9 MB/s 100 % 100 %	93 % 50 MB/s 100 % 100 %	84 % 5 MB/s 100 % 100 %	96 % 2 kB/s 100 % 100 %	56 % 2 kB/s 100 % 100 %
CA+	96 % 113 MB/s	91 % 14 MB/s	98 % 56 MB/s	89 % 13 kB/s	99 % 14 MB/s	100 % 14 MB/s	99 % 29 kB/s	41 % 172 kB/s		88 % 54 kB/s	90 % 13 MB/s	37 % 180 kB/s	58 % 237 kB/s	79 % 411 kB/s		
CERN+	98 % 226 MB/s	91 % 19 MB/s	99 % 197 MB/s	100 % 2 kB/s	100 % 4 MB/s	100 % 1 MB/s		88 % 1 MB/s		100 % 2 kB/s	99 % 4 MB/s		100 % 0 kB/s			
DE+	91 % 122 MB/s	87 % 8 MB/s	94 % 67 MB/s	100 % 25 kB/s	80 % 8 MB/s	95 % 24 MB/s	91 % 220 kB/s	78 % 570 kB/s		92 % 184 kB/s	74 % 11 MB/s	80 % 284 kB/s	84 % 2 MB/s	88 % 619 kB/s		
ES+	92 % 81 MB/s	91 % 11 MB/s	96 % 45 MB/s	77 % 11 kB/s	93 % 5 MB/s	97 % 13 MB/s	86 % 57 kB/s	42 % 92 kB/s		81 % 36 kB/s	93 % 6 MB/s	67 % 13 kB/s	96 % 565 kB/s	57 % 134 kB/s		
FR+	92 % 115 MB/s	86 % 15 MB/s	94 % 59 MB/s	100 % 21 kB/s	94 % 8 MB/s	97 % 15 MB/s	99 % 21 kB/s	47 % 251 kB/s		96 % 113 kB/s	90 % 14 MB/s	48 % 362 kB/s	90 % 3 MB/s	82 % 399 kB/s		
IT+	96 % 81 MB/s	94 % 8 MB/s	98 % 45 MB/s	97 % 9 kB/s	99 % 8 MB/s	100 % 11 MB/s	43 % 13 kB/s	41 % 173 kB/s		82 % 18 kB/s	93 % 7 MB/s	63 % 237 kB/s	98 % 773 kB/s	85 % 109 kB/s		
ND+	96 % 58 MB/s	94 % 9 MB/s	99 % 33 MB/s	29 % 3 kB/s	98 % 4 MB/s	100 % 5 MB/s	100 % 13 kB/s	23 % 76 kB/s		69 % 5 kB/s	87 % 5 MB/s	21 % 13 kB/s	96 % 1 MB/s	97 % 188 kB/s		
NL+	96 % 80 MB/s	88 % 17 MB/s	98 % 29 MB/s	100 % 22 kB/s	99 % 6 MB/s	100 % 15 MB/s	99 % 13 kB/s	73 % 1 MB/s		98 % 22 kB/s	89 % 11 MB/s	80 % 77 kB/s	85 % 485 kB/s	92 % 174 kB/s		
TW+	97 % 36 MB/s	92 % 6 MB/s	99 % 11 MB/s	100 % 2 kB/s	99 % 7 MB/s	93 % 3 MB/s		79 % 40 kB/s		99 % 125 kB/s	100 % 8 MB/s	67 % 13 kB/s	86 % 245 kB/s			
UK+	93 % 123 MB/s	82 % 26 MB/s	98 % 38 MB/s	28 % 25 kB/s	78 % 7 MB/s	99 % 19 MB/s	100 % 18 kB/s	34 % 158 kB/s		28 % 25 kB/s	94 % 30 MB/s	59 % 44 kB/s	85 % 696 kB/s	96 % 480 kB/s		
US+	96 % 576 MB/s	89 % 91 MB/s	97 % 224 MB/s	100 % 16 kB/s	99 % 32 MB/s	98 % 46 MB/s	99 % 630 kB/s	82 % 30 MB/s	82 % 2 kB/s	89 % 11 MB/s	95 % 90 MB/s	81 % 8 MB/s	95 % 42 MB/s	84 % 2 MB/s	96 % 2 kB/s	56 % 2 kB/s

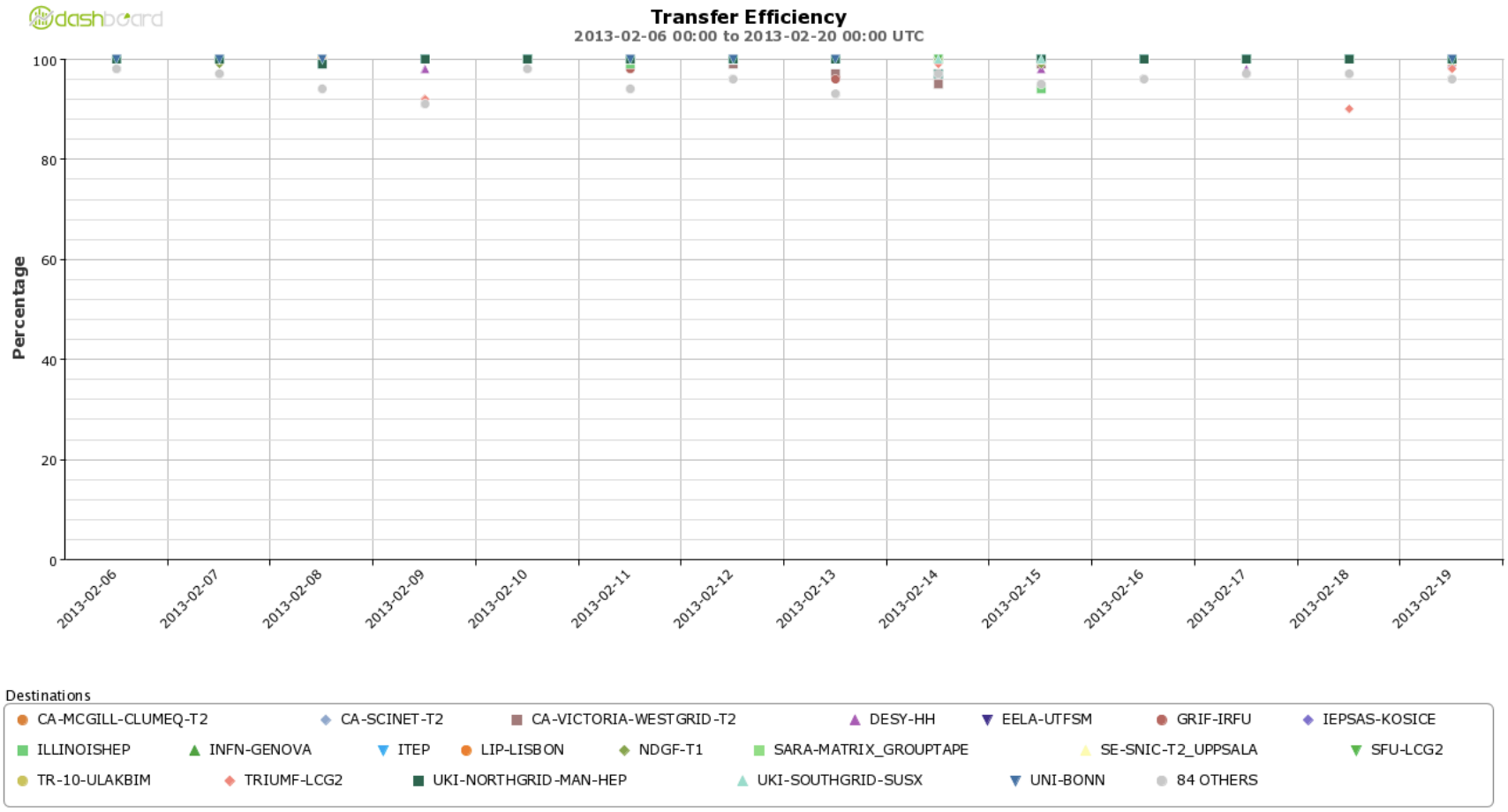
Volume to US by activity



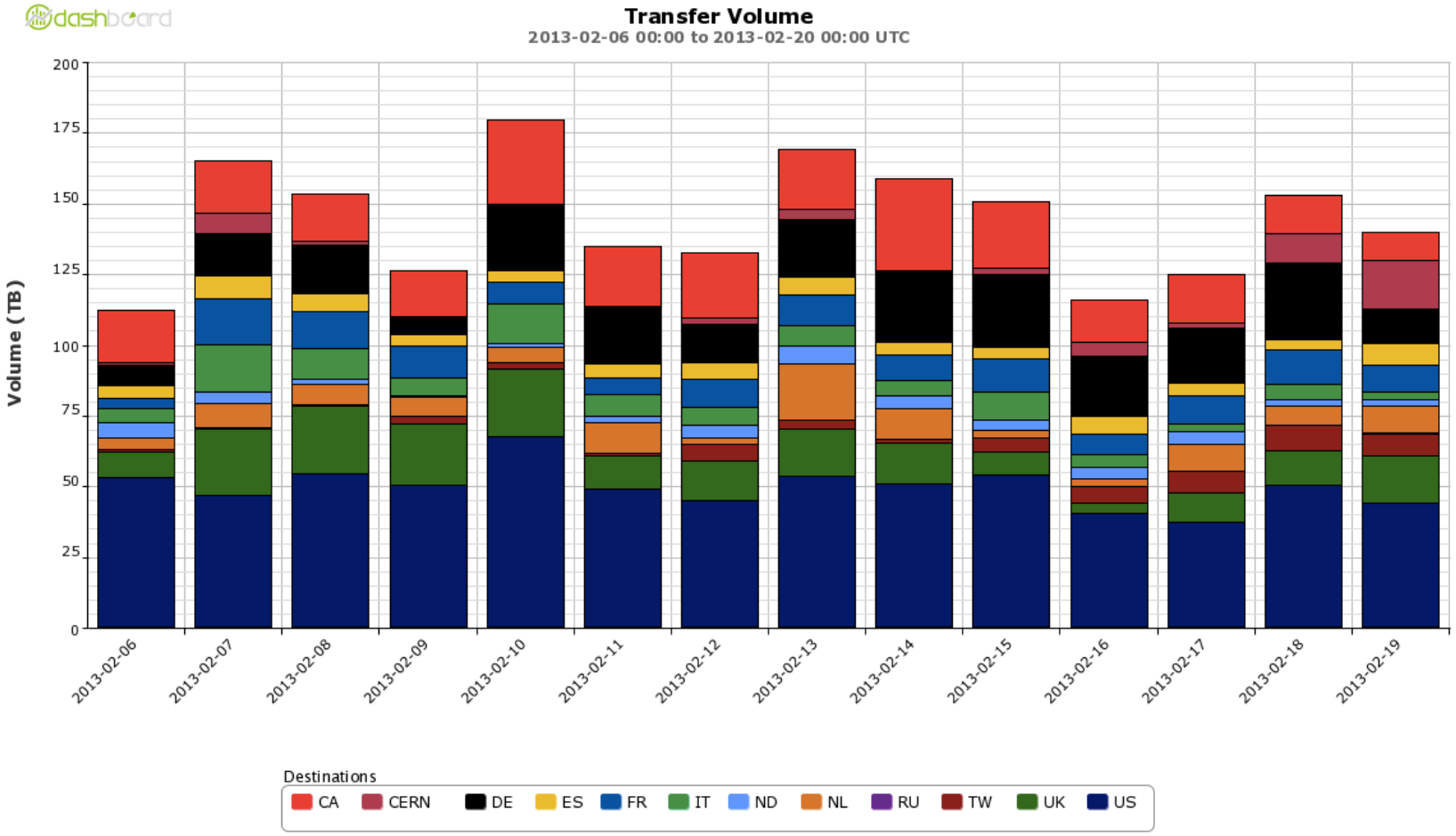
Throughput from the US

	TRANSFER-	REGISTRATION-	STAGING-	US AGLT2+	US BNL-OSG2+	US ILLINOISHEP+	US MWT2+	US MWT2_UC+	US NERSC+	US NET2+	US OUHEP_OSG+	US OU_OCHEP_SWT2	US SLACXRD+	US SMU+	US SWT2_CPB+	US UPENN+	US UTA_SWT2+
TOTAL-	96 % 2 GB/s	100 %	99 % 2 GB/s	91 % 137 MB/s	96 % 1 GB/s	99 % 2 MB/s	93 % 46 MB/s	99 % 59 MB/s	99 % 23 kB/s	97 % 32 MB/s	43 % 0 kB/s	98 % 20 MB/s	97 % 100 MB/s	94 % 2 MB/s	99 % 41 MB/s	82 % 168 kB/s	100 % 1 MB/s
CA+	99 % 229 MB/s	100 %	100 % 28 MB/s	99 % 4 MB/s	100 % 210 MB/s	96 % 14 kB/s	100 % 7 MB/s	100 % 3 MB/s		73 % 2 MB/s		100 % 12 kB/s	99 % 3 MB/s	0 % 0 kB/s	100 % 511 kB/s		
CERN+	97 % 44 MB/s	100 %	100 % 1 GB/s	93 % 18 MB/s	100 % 20 MB/s	100 % 2 kB/s	98 % 43 kB/s	99 % 1 MB/s		100 % 298 kB/s		100 % 2 kB/s	98 % 4 MB/s		100 % 18 kB/s		
DE+	97 % 209 MB/s	100 %	92 % 46 MB/s	89 % 18 MB/s	97 % 162 MB/s	79 % 23 kB/s	98 % 4 MB/s	98 % 9 MB/s		99 % 2 MB/s		87 % 144 kB/s	97 % 12 MB/s	88 % 18 kB/s	98 % 1 MB/s		
ES+	94 % 62 MB/s	100 %	98 % 18 MB/s	88 % 2 MB/s	92 % 53 MB/s	100 % 11 kB/s	99 % 359 kB/s	100 % 617 kB/s		100 % 481 kB/s		100 % 9 kB/s	100 % 5 MB/s		100 % 243 kB/s		
FR+	96 % 114 MB/s	100 %	100 % 39 MB/s	93 % 8 MB/s	97 % 95 MB/s	93 % 21 kB/s	98 % 907 kB/s	100 % 2 MB/s		96 % 1 MB/s		96 % 21 kB/s	96 % 7 MB/s	0 % 0 kB/s	98 % 405 kB/s		
IT+	97 % 87 MB/s	100 %	100 % 19 MB/s	84 % 3 MB/s	96 % 73 MB/s	100 % 9 kB/s	99 % 2 MB/s	100 % 2 MB/s		100 % 484 kB/s		100 % 9 kB/s	99 % 6 MB/s	100 % 1 kB/s	84 % 152 kB/s		
ND+	98 % 39 MB/s	100 %	100 % 12 MB/s	70 % 4 MB/s	100 % 32 MB/s	100 % 3 kB/s	100 % 300 kB/s	100 % 2 MB/s		99 % 157 kB/s		100 % 22 kB/s	98 % 1 MB/s		64 % 128 kB/s		
NL+	93 % 89 MB/s	100 %	98 % 98 MB/s	86 % 3 MB/s	95 % 79 MB/s	98 % 22 kB/s	89 % 2 MB/s	100 % 3 MB/s		78 % 159 kB/s		97 % 22 kB/s	88 % 2 MB/s	39 % 17 kB/s	97 % 233 kB/s		
RU+	42 % 189 kB/s	100 %	100 % 0 kB/s	44 % 9 kB/s	50 % 150 kB/s	18 % 1 kB/s	21 % 9 kB/s			26 % 9 kB/s		14 % 1 kB/s	20 % 1 kB/s		19 % 9 kB/s		
TW+	99 % 45 MB/s	100 %	99 % 10 MB/s	97 % 9 MB/s	99 % 28 MB/s	100 % 1 kB/s	99 % 2 MB/s	99 % 3 MB/s		100 % 618 kB/s		91 % 1 kB/s	97 % 3 MB/s		100 % 9 kB/s		
UK+	95 % 172 MB/s	100 %	100 % 50 MB/s	91 % 7 MB/s	94 % 156 MB/s	100 % 25 kB/s	99 % 966 kB/s	99 % 752 kB/s		96 % 588 kB/s		98 % 28 kB/s	96 % 6 MB/s	0 % 0 kB/s	57 % 394 kB/s		
US+	96 % 576 MB/s	100 %	100 % 23 MB/s	90 % 59 MB/s	94 % 318 MB/s	100 % 2 MB/s	90 % 27 MB/s	99 % 33 MB/s	99 % 23 kB/s	99 % 23 MB/s	43 % 0 kB/s	98 % 20 MB/s	96 % 51 MB/s	96 % 2 MB/s	100 % 37 MB/s	82 % 168 kB/s	100 % 1 MB/s

Efficiency of US sites as source to given destinations

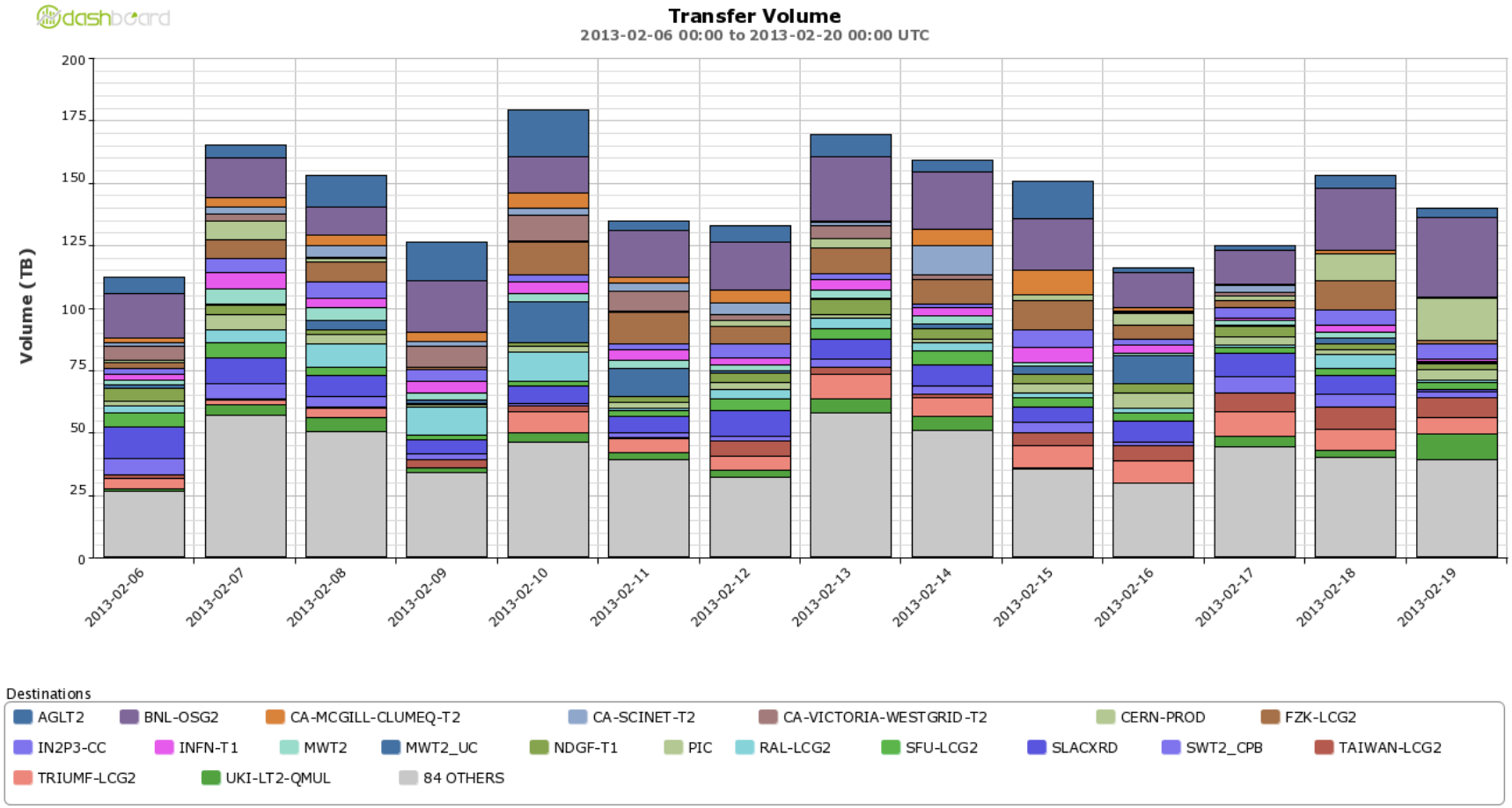


Throughput volume from US to Clouds

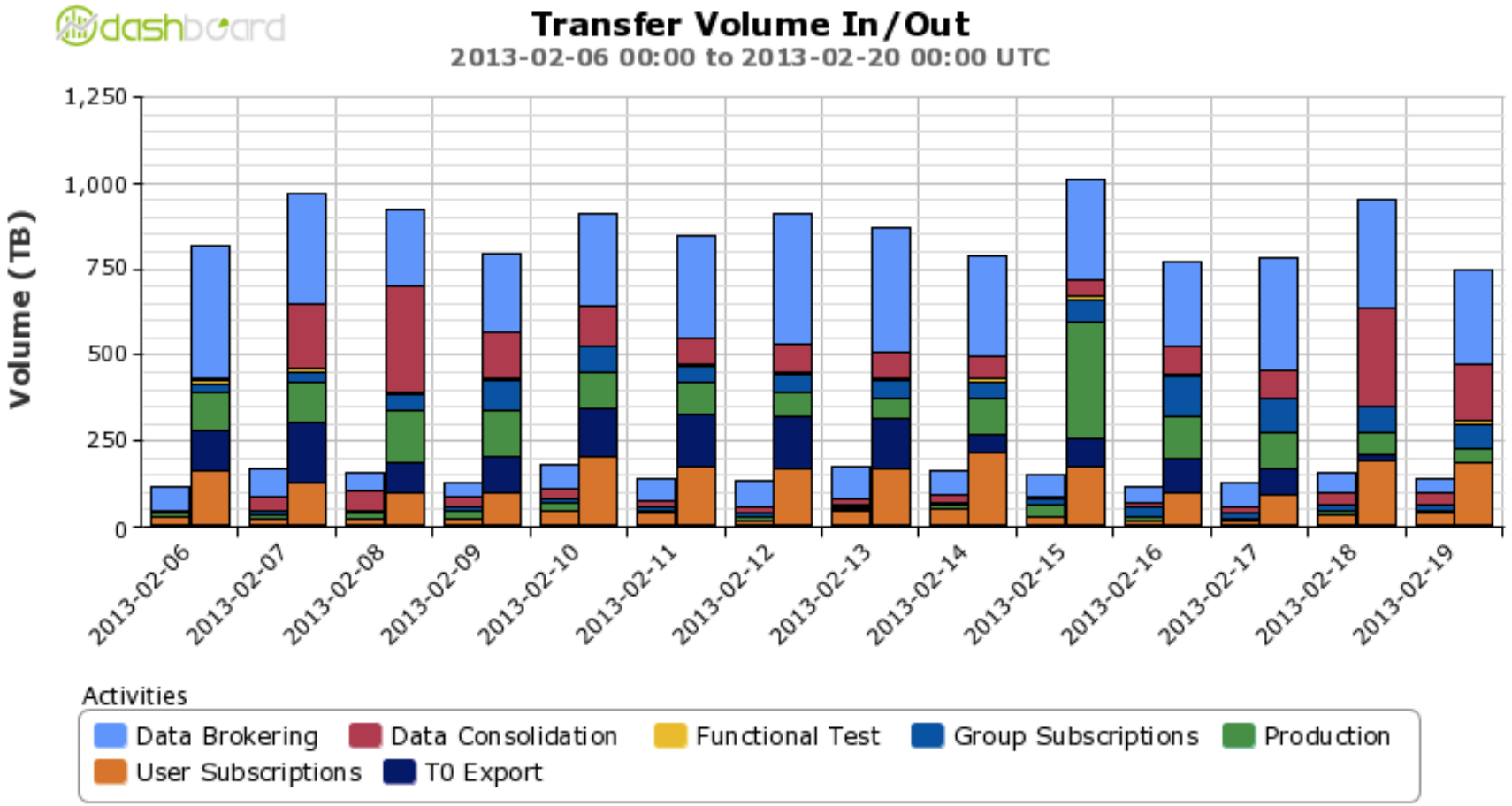


About 2/3 of data transferred off US sites goes abroad

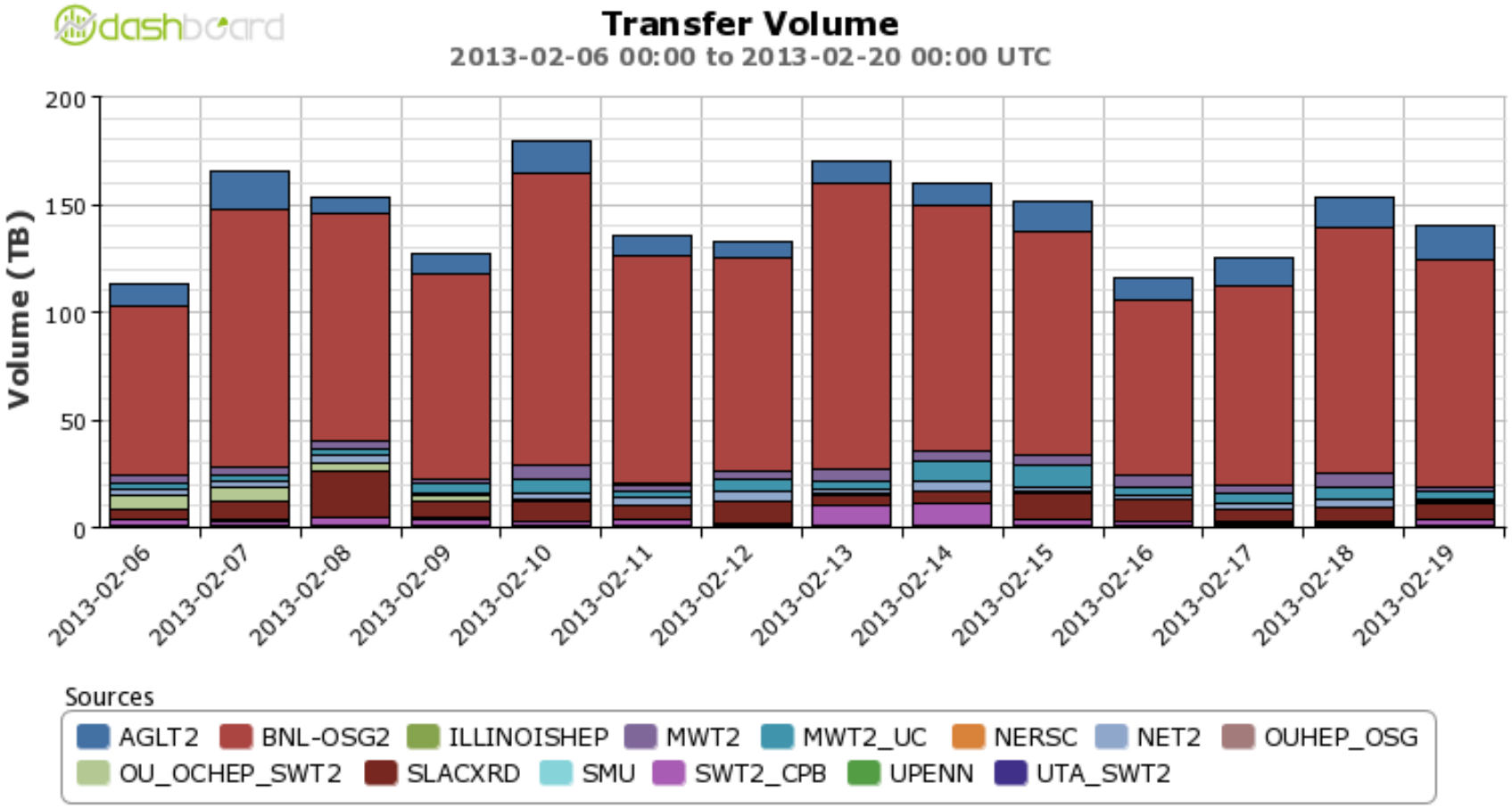
Throughput volume from the US to sites



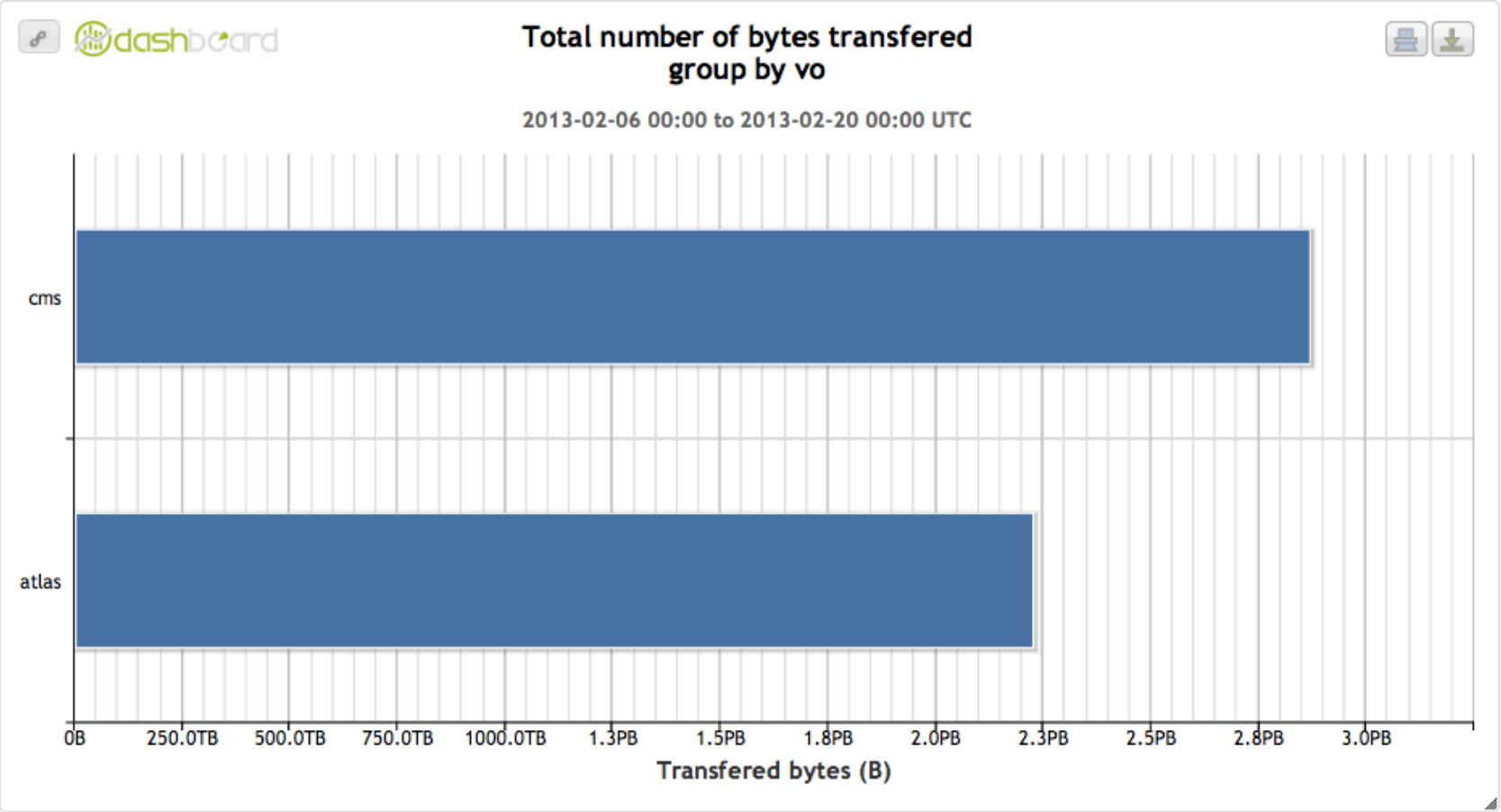
US as source by activity



..from US sites

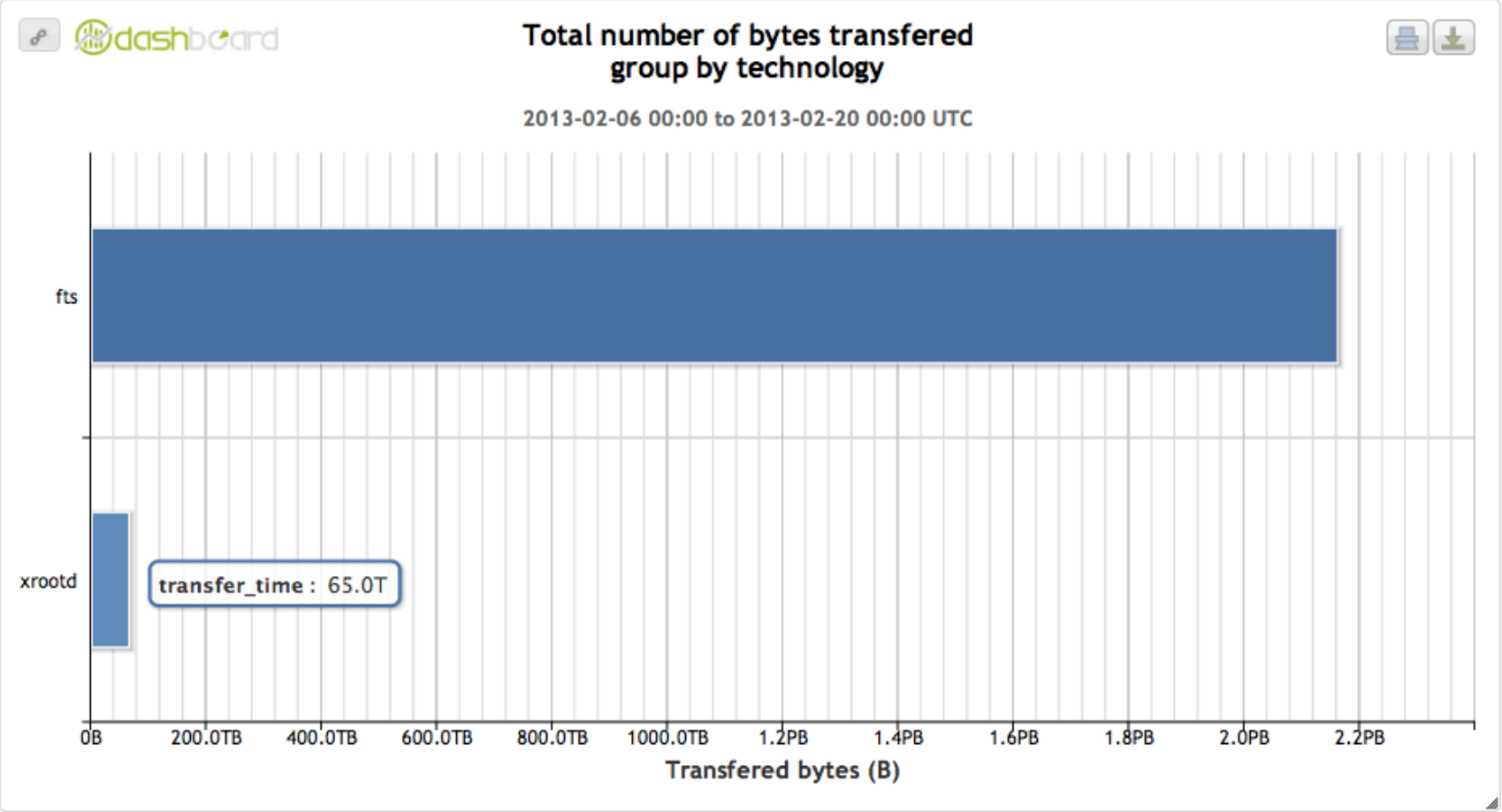


VO comparison

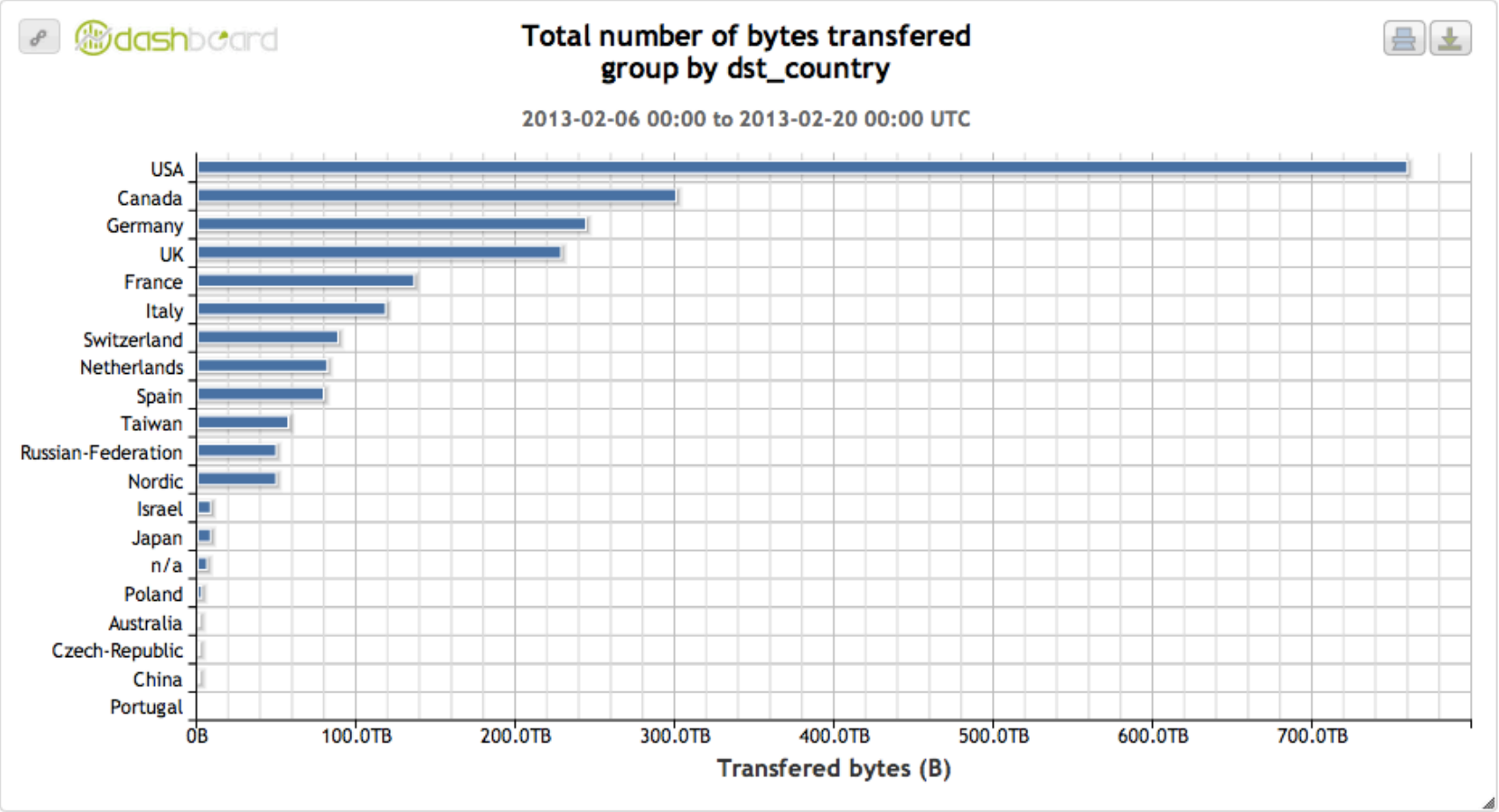


FAX THROUGHPUT

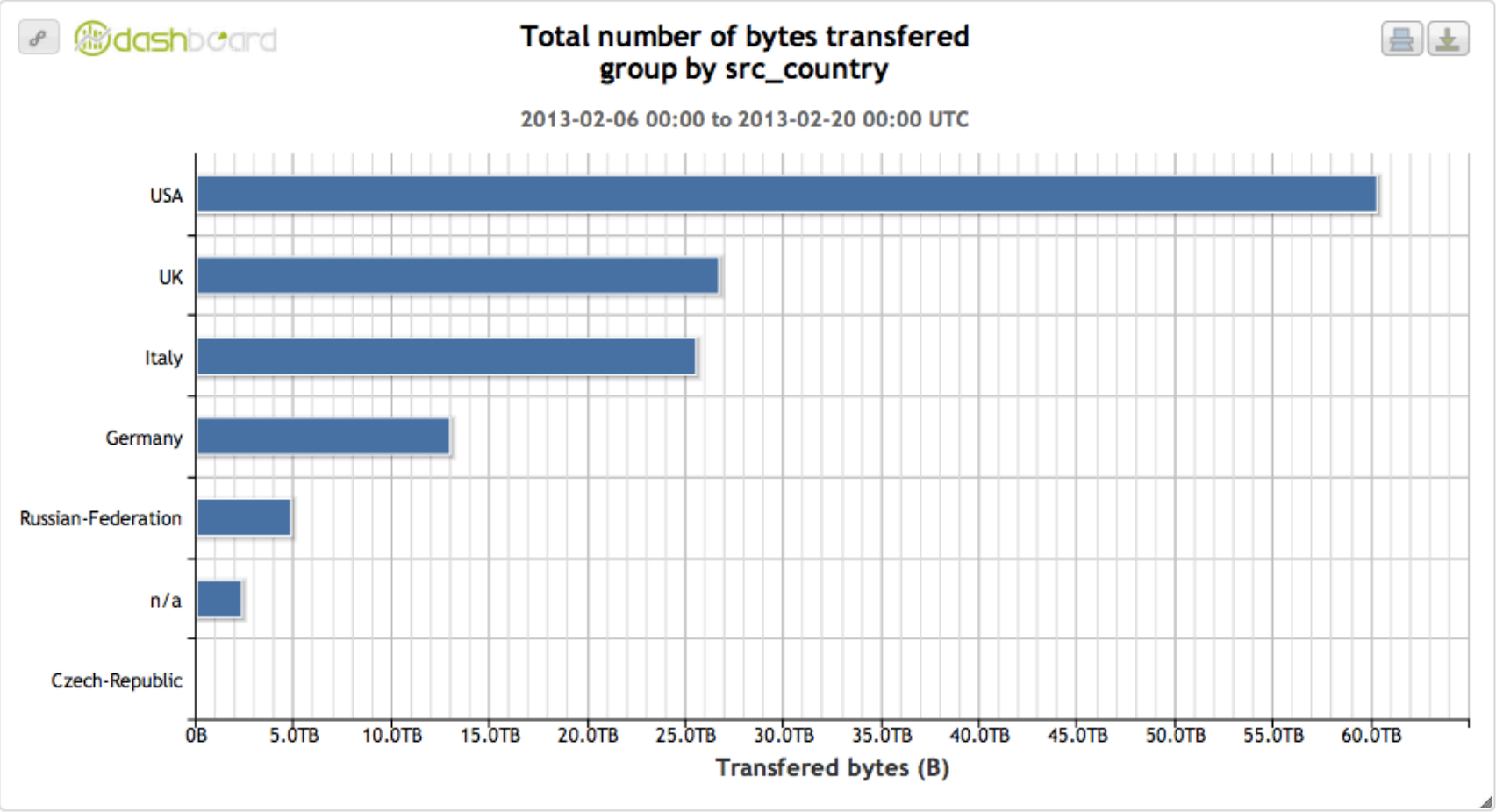
ATLAS only, US as source



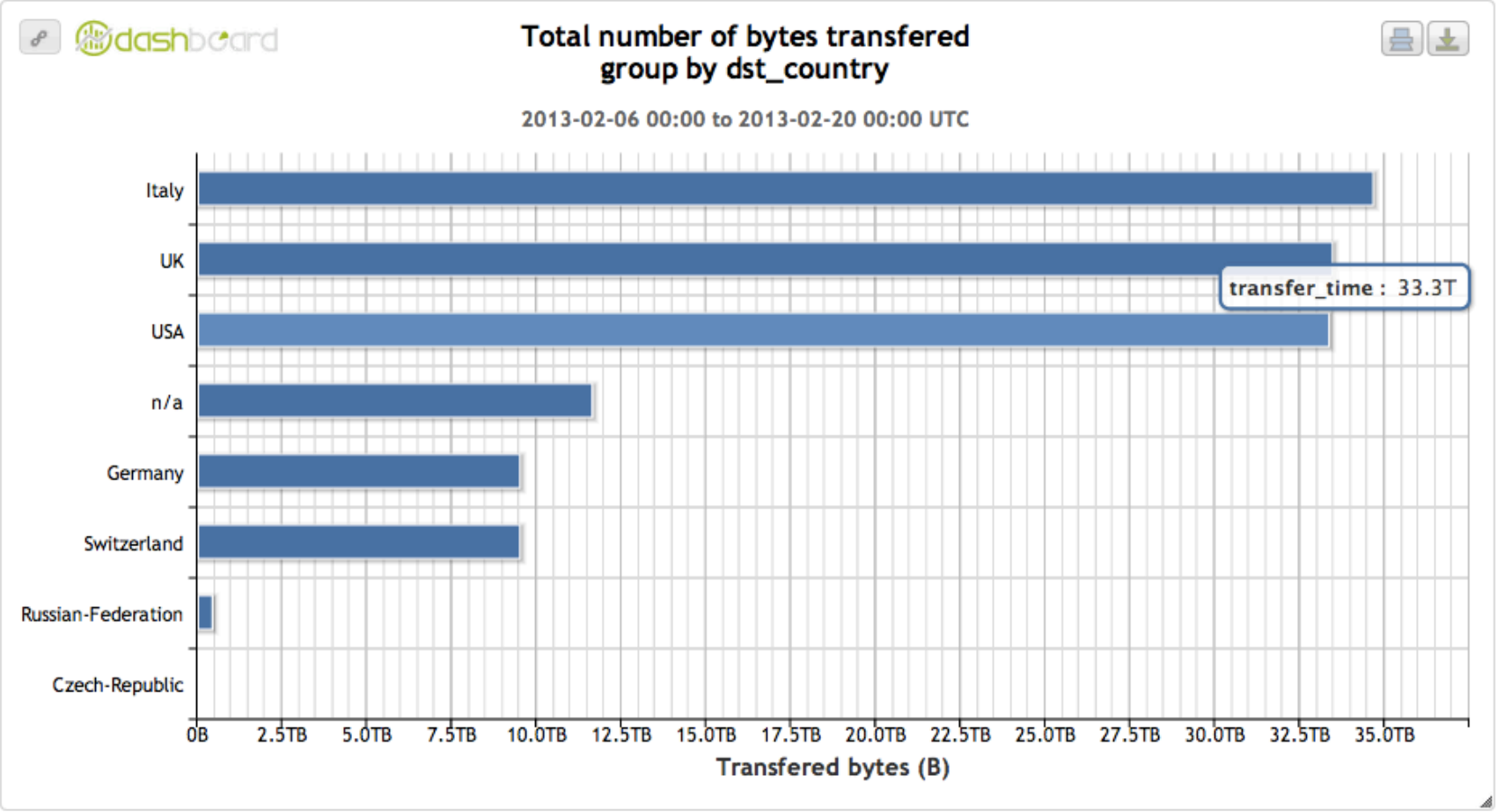
US as source (FTS + FAX)



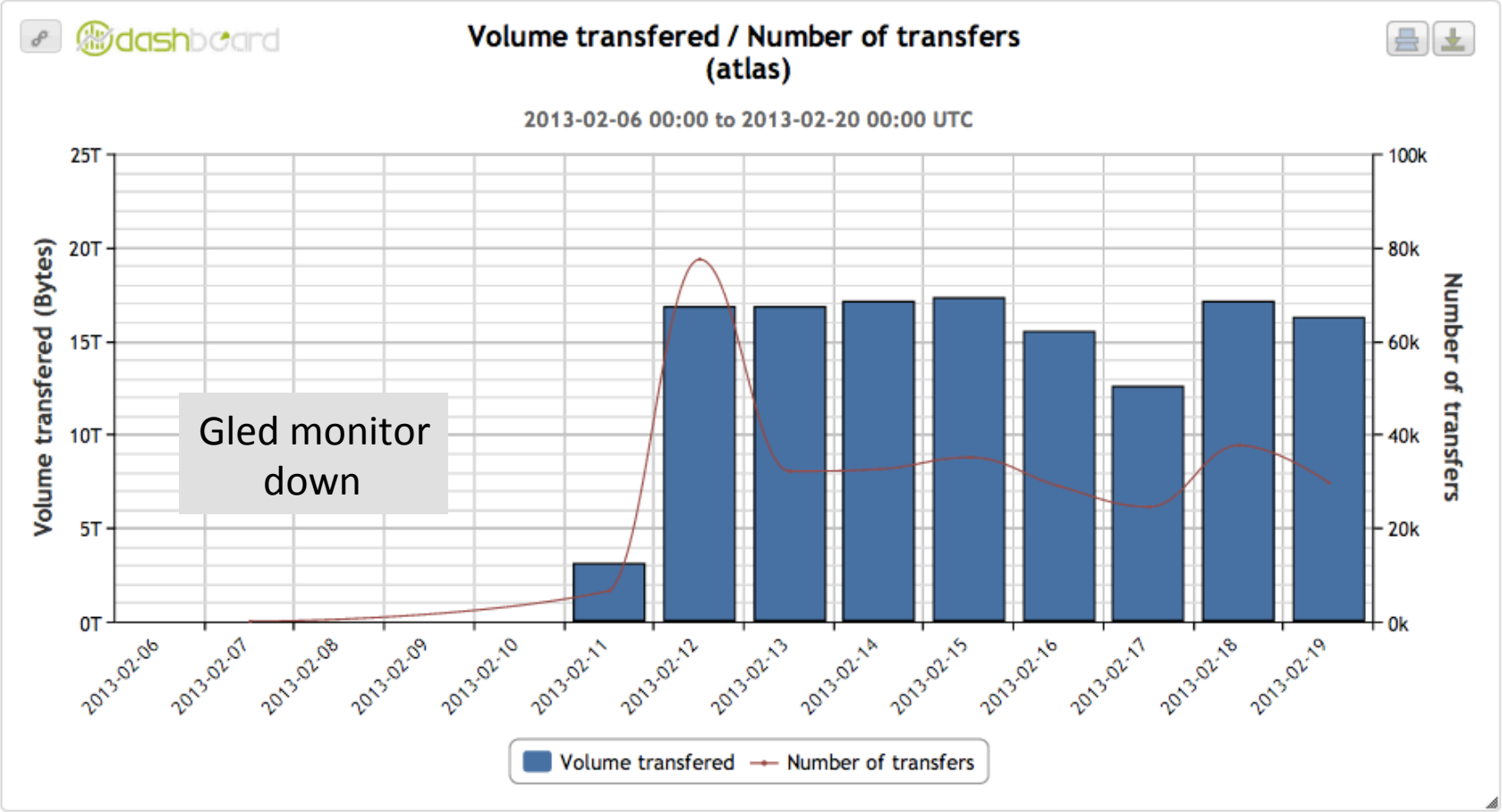
FAX by source cloud



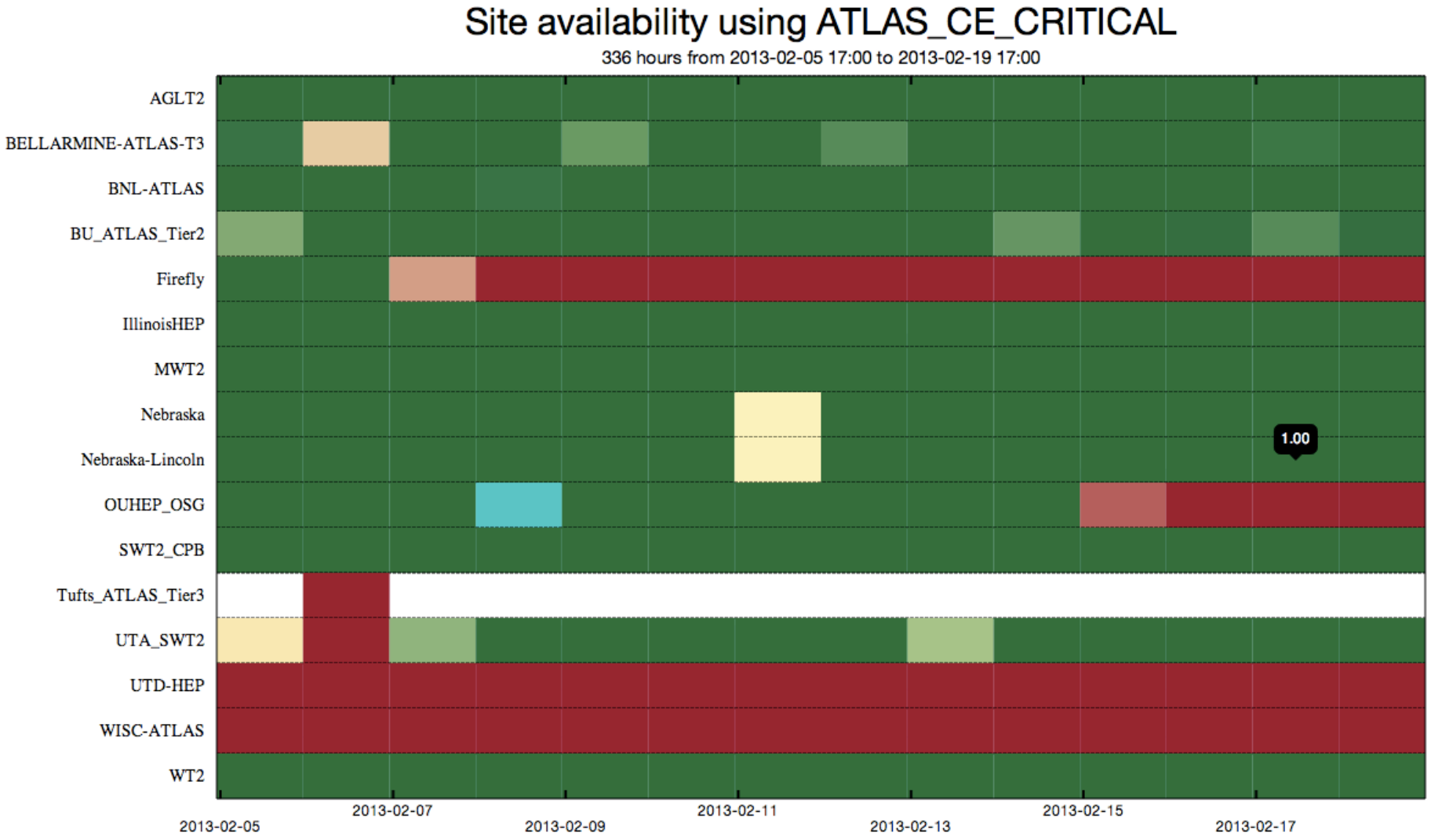
FAX by destination cloud

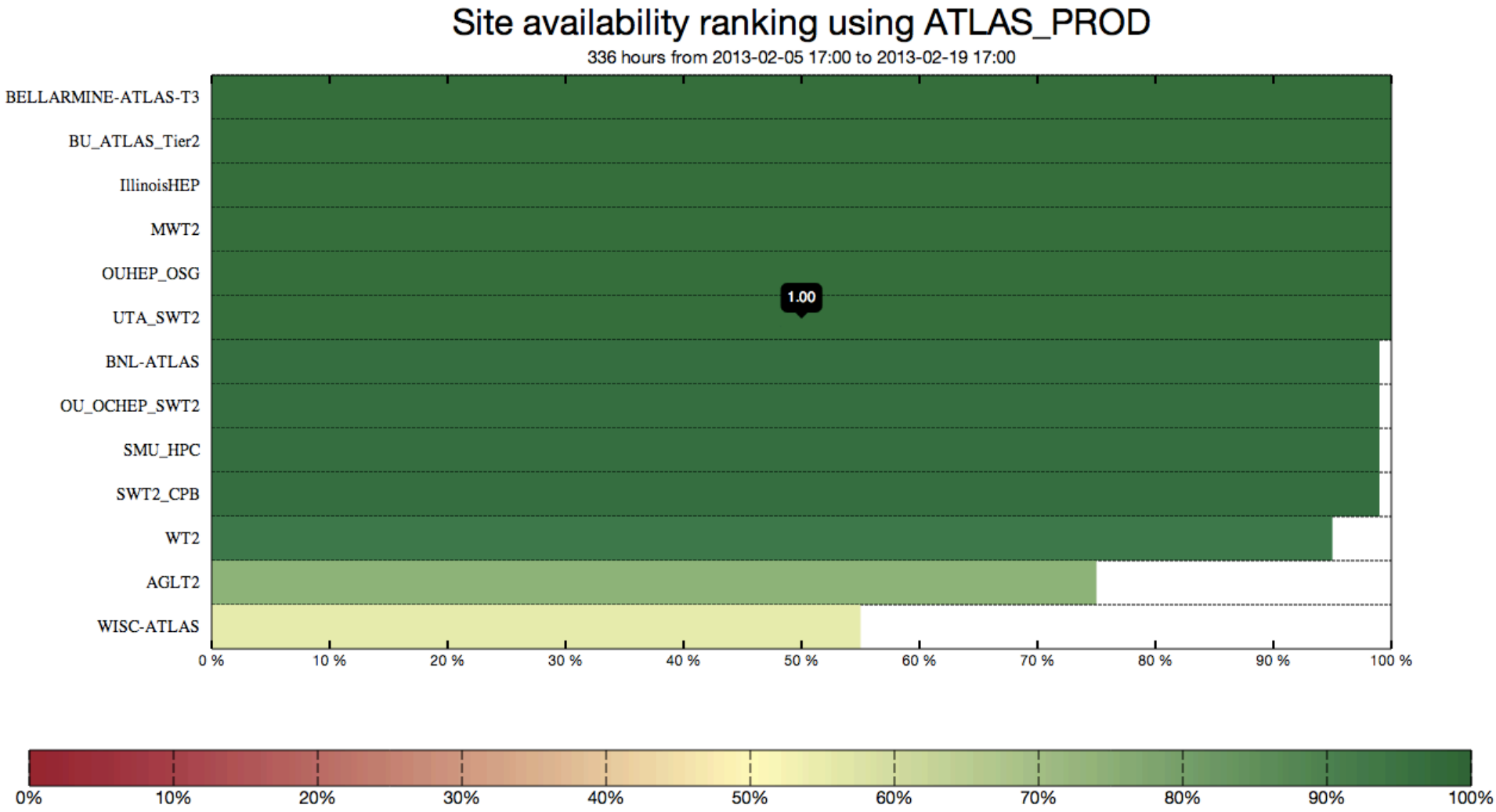


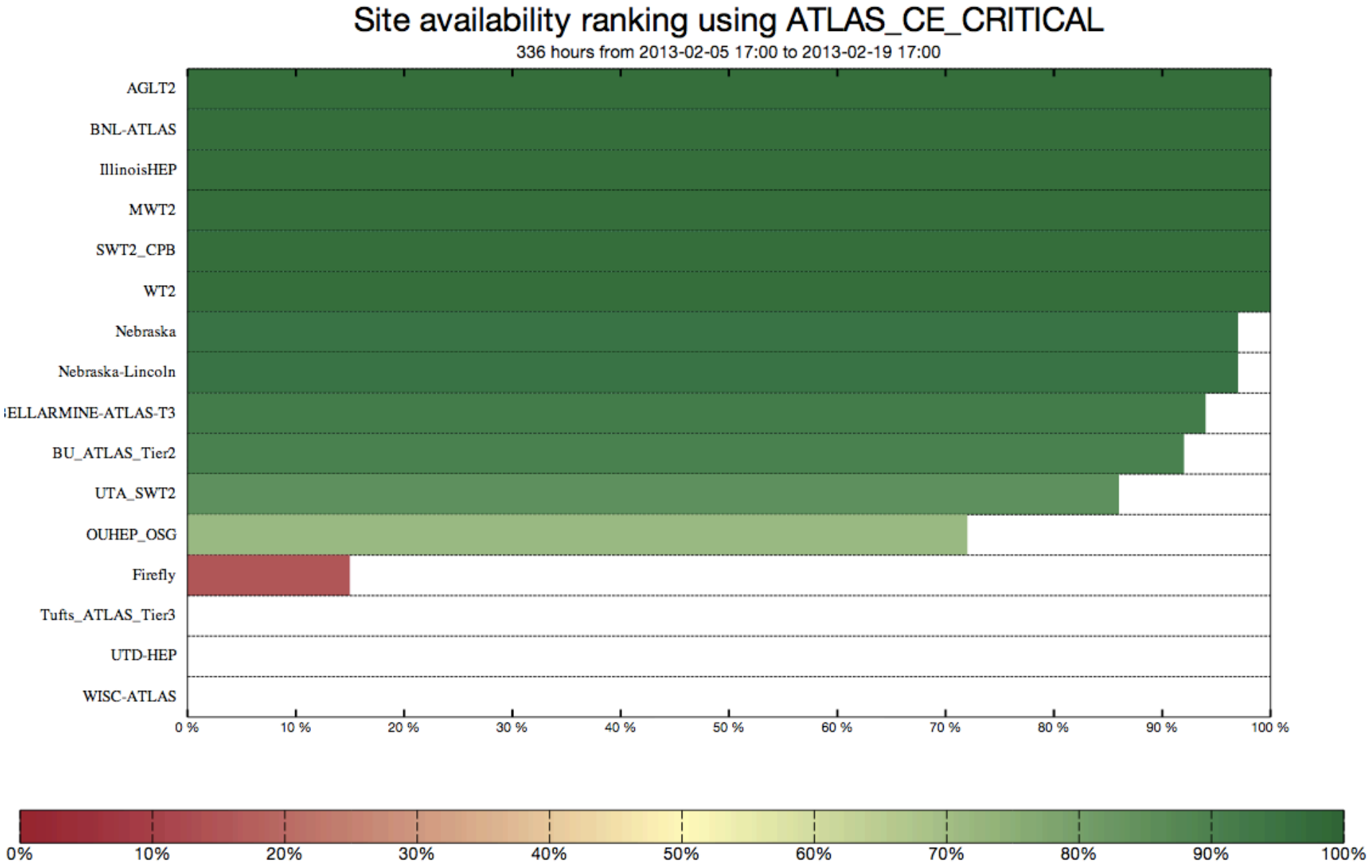
Daily FAX transfer

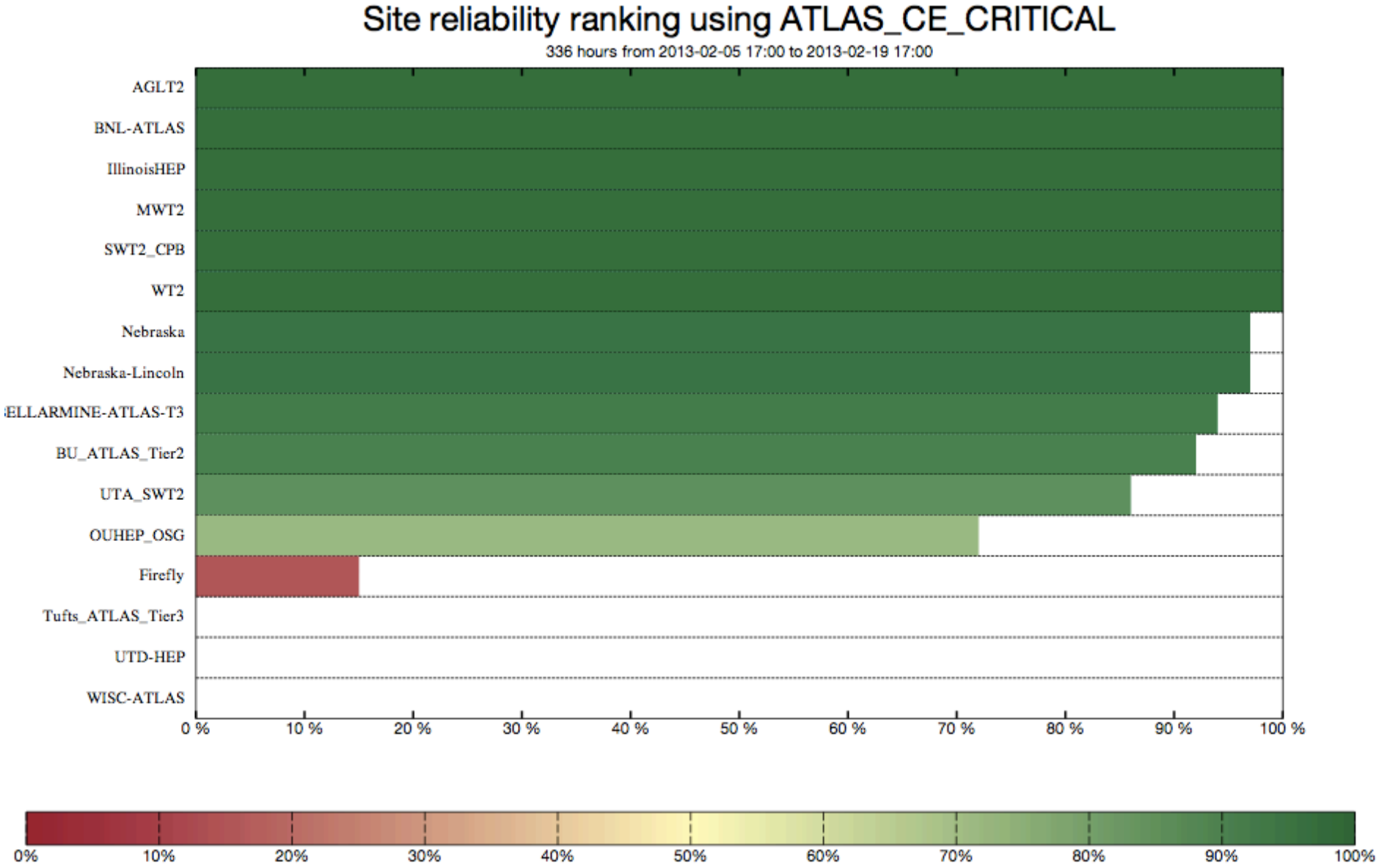


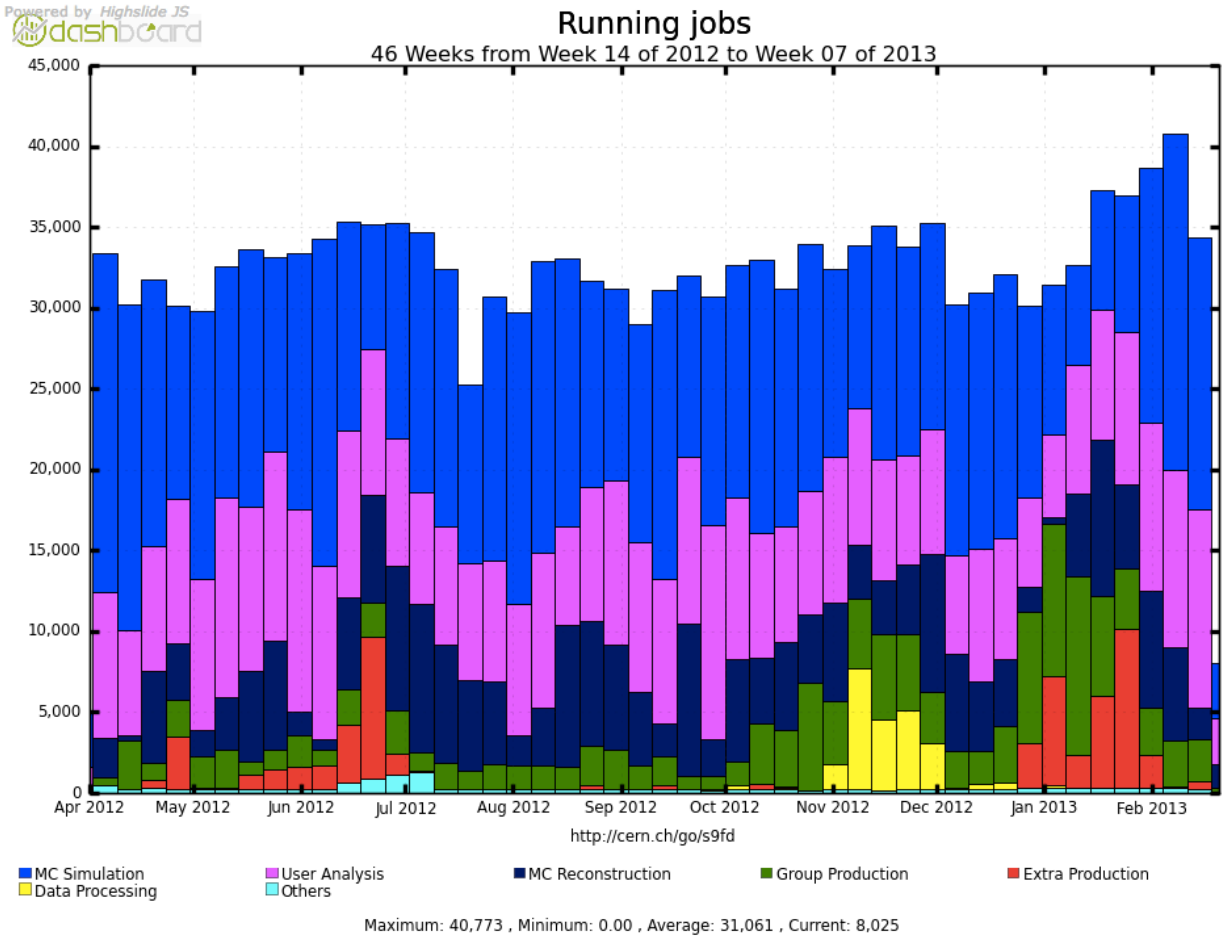
ADDITIONAL SLIDES

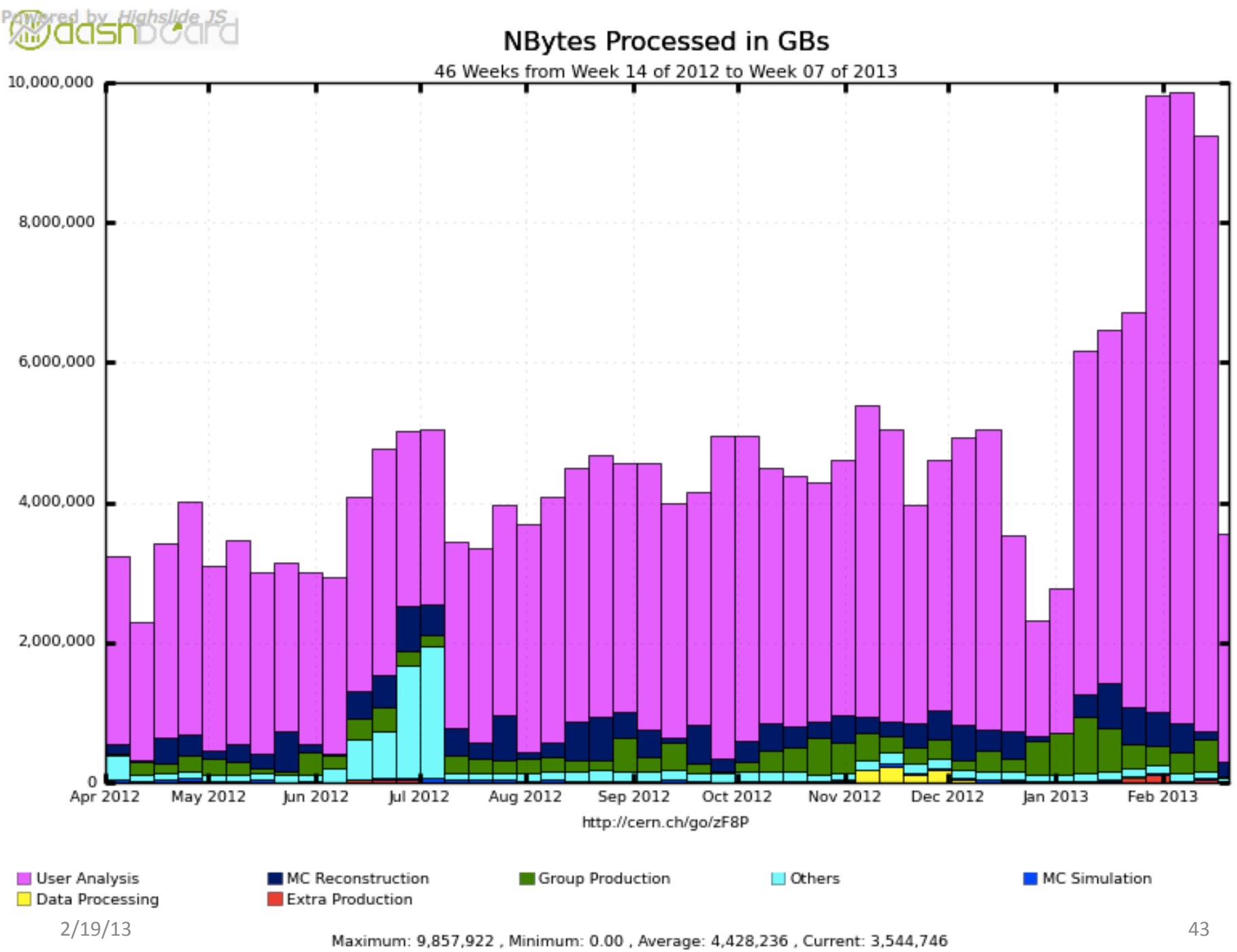

Site availability using ATLAS_CE_CRITICAL
336 hours from 2013-02-05 17:00 to 2013-02-19 17:00
AGLT2
BELLARMINE-ATLAS-T3
BNL-ATLAS
BU_ATLAS_Tier2
Firefly
IllinoisHEP
MWT2
Nebraska
Nebraska-Lincoln
OUHEP_OSG
SWT2_CPB
Tufts_ATLAS_Tier3
UTA_SWT2
UTD-HEP
WISC-ATLAS
WT2
1.00
2013-02-05
2013-02-07
2013-02-09
2013-02-11
2013-02-13
2013-02-15
2013-02-17

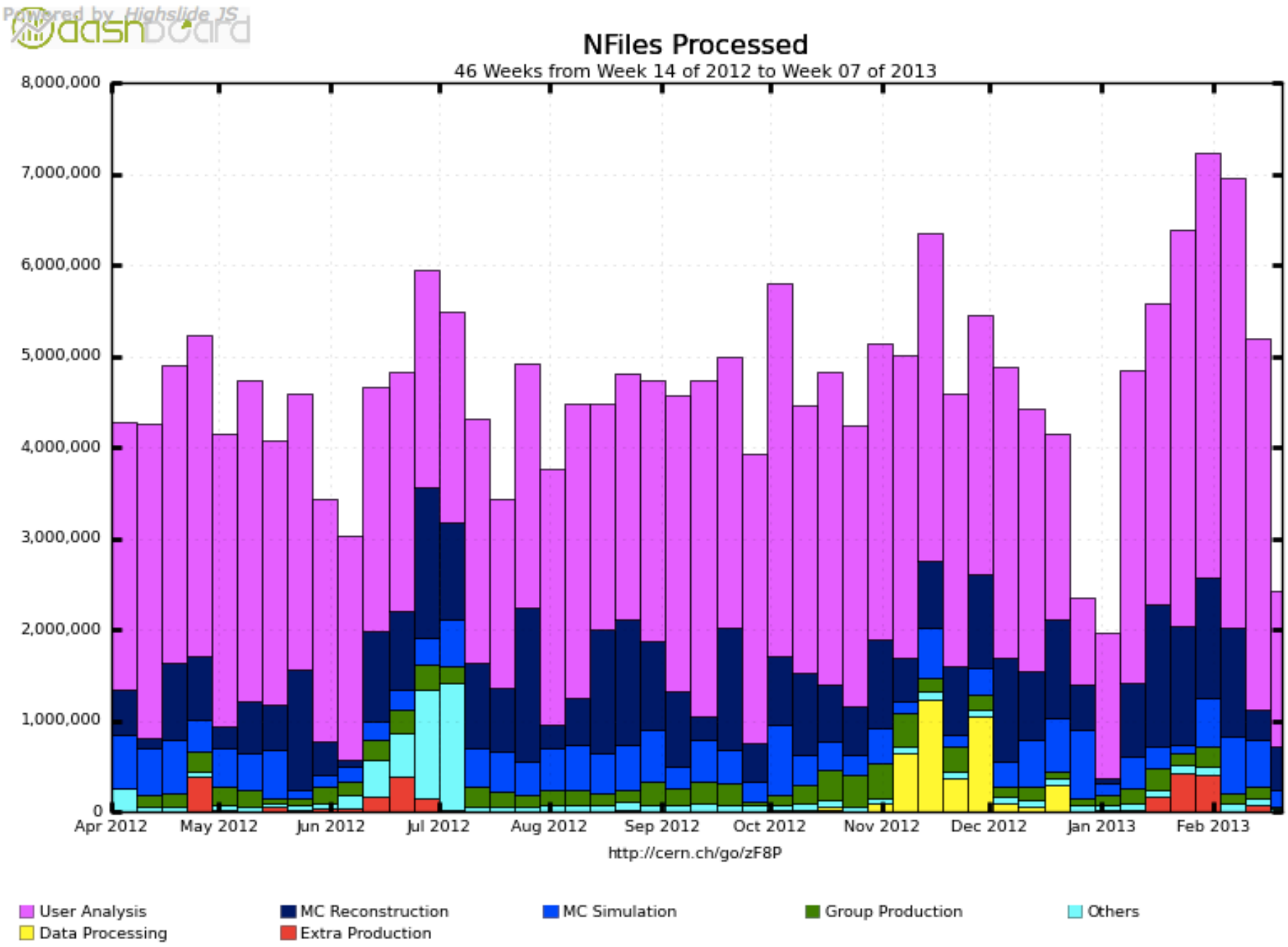

Site availability ranking using ATLAS_PROD
336 hours from 2013-02-05 17:00 to 2013-02-19 17:00
BELLARMINE-ATLAS-T3
BU_ATLAS_Tier2
IllinoisHEP
MWT2
OUHEP_OSG
UTA_SWT2
BNL-ATLAS
OU_OCHEP_SWT2
SMU_HPC
SWT2_CPB
WT2
AGLT2
WISC-ATLAS
1.00
0 %
10 %
20 %
30 %
40 %
50 %
60 %
70 %
80 %
90 %
100 %
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%


Site availability ranking using ATLAS_CE_CRITICAL
336 hours from 2013-02-05 17:00 to 2013-02-19 17:00
AGLT2
BNL-ATLAS
IllinoisHEP
MWT2
SWT2_CPB
WT2
Nebraska
Nebraska-Lincoln
ELLARMINE-ATLAS-T3
BU_ATLAS_Tier2
UTA_SWT2
OUHEP_OSG
Firefly
Tufts_ATLAS_Tier3
UTD-HEP
WISC-ATLAS
0 %
10 %
20 %
30 %
40 %
50 %
60 %
70 %
80 %
90 %
100 %
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%


Site reliability ranking using ATLAS_CE_CRITICAL
336 hours from 2013-02-05 17:00 to 2013-02-19 17:00
AGLT2
BNL-ATLAS
IllinoisHEP
MWT2
SWT2_CPB
WT2
Nebraska
Nebraska-Lincoln
ELLARMINE-ATLAS-T3
BU_ATLAS_Tier2
UTA_SWT2
OUHEP_OSG
Firefly
Tufts_ATLAS_Tier3
UTD-HEP
WISC-ATLAS
0 %
10 %
20 %
30 %
40 %
50 %
60 %
70 %
80 %
90 %
100 %
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%


Powered by Highslide JS
dashboard
Running jobs
46 Weeks from Week 14 of 2012 to Week 07 of 2013
45,000
40,000
35,000
30,000
25,000
20,000
15,000
10,000
5,000
0
Apr 2012
May 2012
Jun 2012
Jul 2012
Aug 2012
Sep 2012
Oct 2012
Nov 2012
Dec 2012
Jan 2013
Feb 2013
http://cern.ch/go/s9fd
MC Simulation
User Analysis
MC Reconstruction
Group Production
Extra Production
Data Processing
Others
Maximum: 40,773 , Minimum: 0.00 , Average: 31,061 , Current: 8,025


Powered by Highslide JS
dashboard
NBytes Processed in GBs
46 Weeks from Week 14 of 2012 to Week 07 of 2013
10,000,000
8,000,000
6,000,000
4,000,000
2,000,000
0
Apr 2012
May 2012
Jun 2012
Jul 2012
Aug 2012
Sep 2012
Oct 2012
Nov 2012
Dec 2012
Jan 2013
Feb 2013
http://cern.ch/go/zF8P
User Analysis
MC Reconstruction
Group Production
Others
MC Simulation
Data Processing
Extra Production
Maximum: 9,857,922 , Minimum: 0.00 , Average: 4,428,236 , Current: 3,544,746


Powered by Highslide JS
dashboard
NFiles Processed
46 Weeks from Week 14 of 2012 to Week 07 of 2013
8,000,000
7,000,000
6,000,000
5,000,000
4,000,000
3,000,000
2,000,000
1,000,000
0
Apr 2012
May 2012
Jun 2012
Jul 2012
Aug 2012
Sep 2012
Oct 2012
Nov 2012
Dec 2012
Jan 2013
Feb 2013
http://cern.ch/go/zF8P
User Analysis
MC Reconstruction
MC Simulation
Group Production
Others
Data Processing
Extra Production
Maximum: 7,230,097 , Minimum: 0.00 , Average: 4,560,218 , Current: 2,417,145