

CSCS ↔ CMS

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2016

01.01 - 12.05

GGUS

467	119845	cms	CSCS-LCG2	less urgent	CSCS-LCG2	assigned	2016-05-10	Add ARC test facility for CSCS-LCG2
466	121232	cms	CSCS-LCG2	less urgent	CSCS-LCG2	waiting for reply	2016-05-10	T2_CH_CSCS PhEDEx FileDownload agent dow...
465	121212	cms	CSCS-LCG2	less urgent	VOSupport	solved	2016-05-10	T2_CH_CSCS arc01 and arc02 queue name ch...
461	120921	cms	CSCS-LCG2	urgent	CSCS-LCG2	waiting for reply	2016-05-10	ask for eos quota
459	120865	cms	CSCS-LCG2	urgent	VOSupport	closed	2016-05-03	what's the story with T2_CH_CSCS
456	120489	cms	CSCS-LCG2	urgent	CSCS-LCG2	closed	2016-04-15	arc03 CE
454	120505	cms	CSCS-LCG2	urgent	CSCS-LCG2	closed	2016-05-06	Large amount of GLEXEC ERRORS on T2_CH_C...
446	119790	cms	CSCS-LCG2	less urgent	CSCS-LCG2	verified	2016-02-29	One CMS Frontier squid at T2_CH_CSCS
445		cms	CSCS-LCG2	less urgent	SWING helpdesk	solved	2016-03-01	Add ARC test facility for CSCS-LCG2
444	119762	cms	CSCS-LCG2	urgent	CSCS-LCG2	closed	2016-03-14	file download phedex service down at T2_...
442	119612	cms	CSCS-LCG2	urgent	VOSupport	closed	2016-03-21	Moving T2_CH_CSCS to multicore
440		cms		less urgent	NGI_CH First Level Support	assigned	2016-02-02	Be informed about all the CMS Tickets ad...
439	119171	cms	CSCS-LCG2	urgent	CSCS-LCG2	waiting for reply	2016-05-10	Workflow failures at T2_CH_CSCS
431	117769	cms	CSCS-LCG2	very urgent	CSCS-LCG2	closed	2015-12-16	Failing transfer from T2_CH_CSCS to T1_U...
427	117068	cms	CSCS-LCG2	less urgent	CSCS-LCG2	closed	2016-01-25	Add new CE for T2_CH_CSCS

#454 (urgent): two weeks without input, CMS banned in #459

#439 (urgent): first reported in January, problem found only after direct intervention from CMS central ops

Main concerns

- Need to find a way for CSCS admins to forward GGUS tickets to CMS contacts **automatically** to prevent multi-week delay in discovering a problem as in #454: Derek setting up a list?
- Need a way for CMS contacts to debug issues locally, to prevent issues being forgotten/shelved like #439

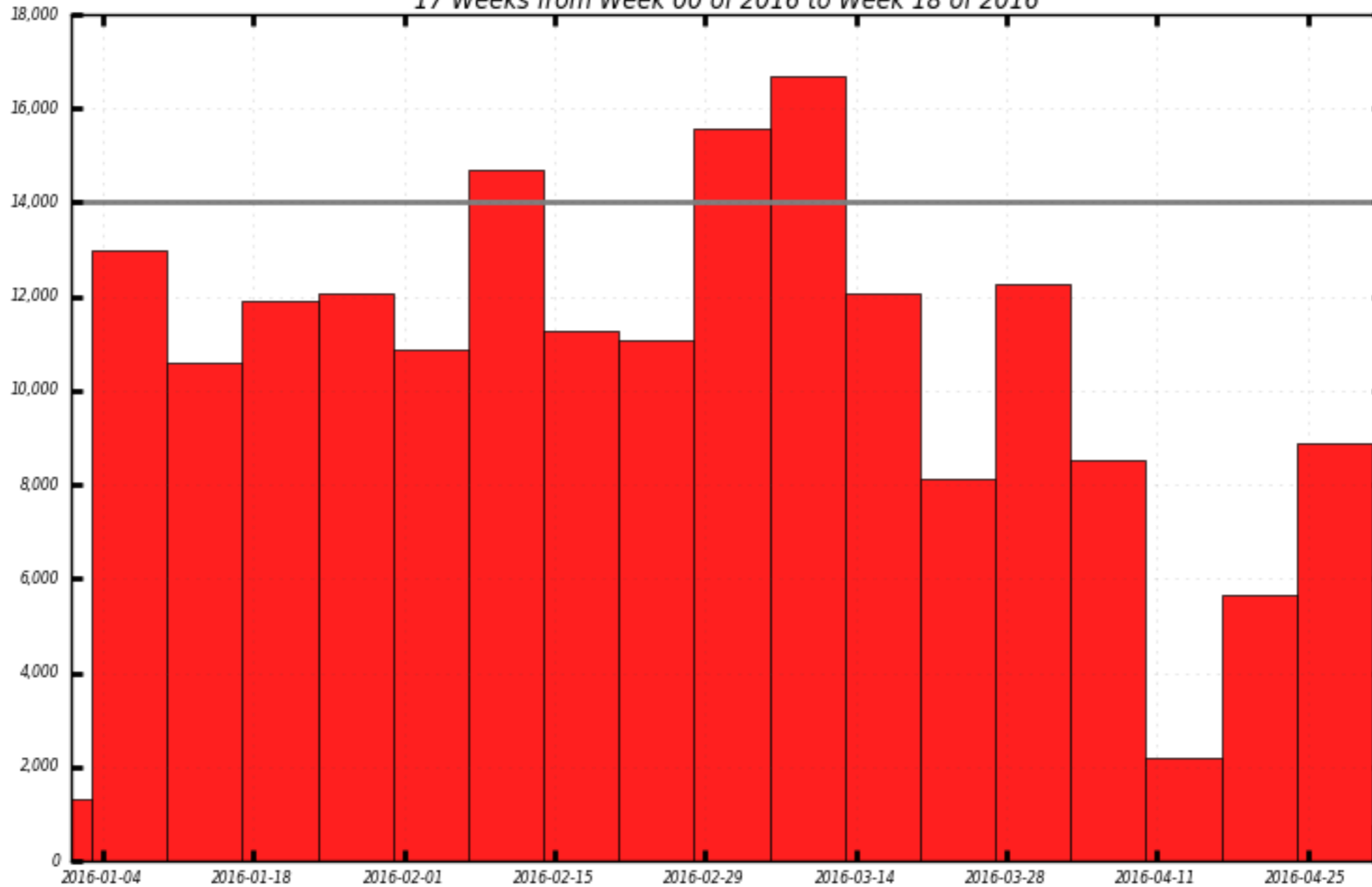
From CMS Central ops

Unfortunately, there is no formal way for the site contacts to debug issues centrally. They are expected to have access through the site administration itself.

HEPSPEC



WallClock HEPSP06 Hours compared to pledges where available
17 Weeks from Week 00 of 2016 to Week 18 of 2016



■ T2_CH_CSCS

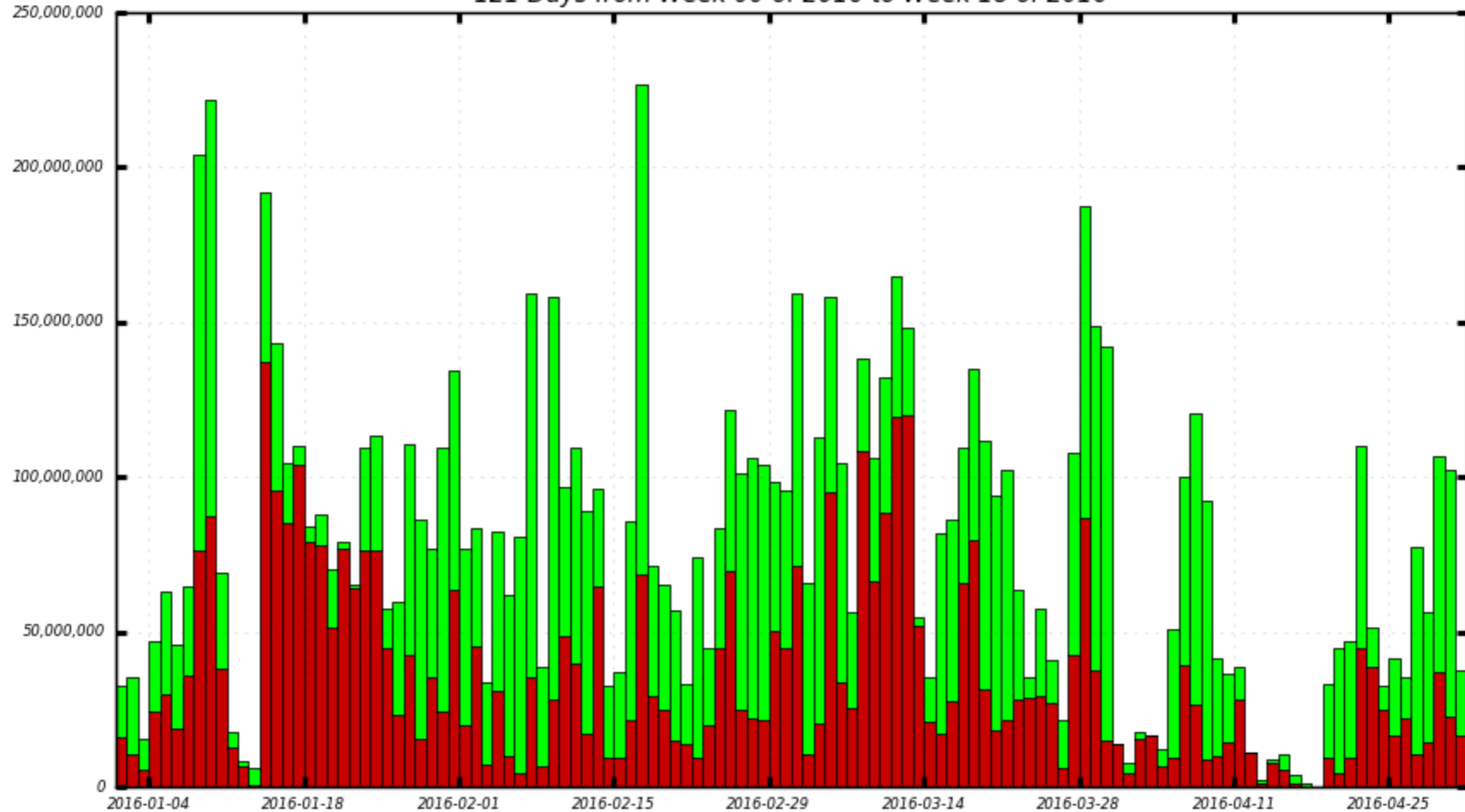
Maximum: 16,675 , Minimum: 0.00 , Average: 9,371 , Current: 740.15

bonus slides

Overall WallClock



WallClock Consumption for Successful, Failed and/or Aborted Jobs
121 Days from Week 00 of 2016 to Week 18 of 2016



WallClock Consumption of Successful Jobs

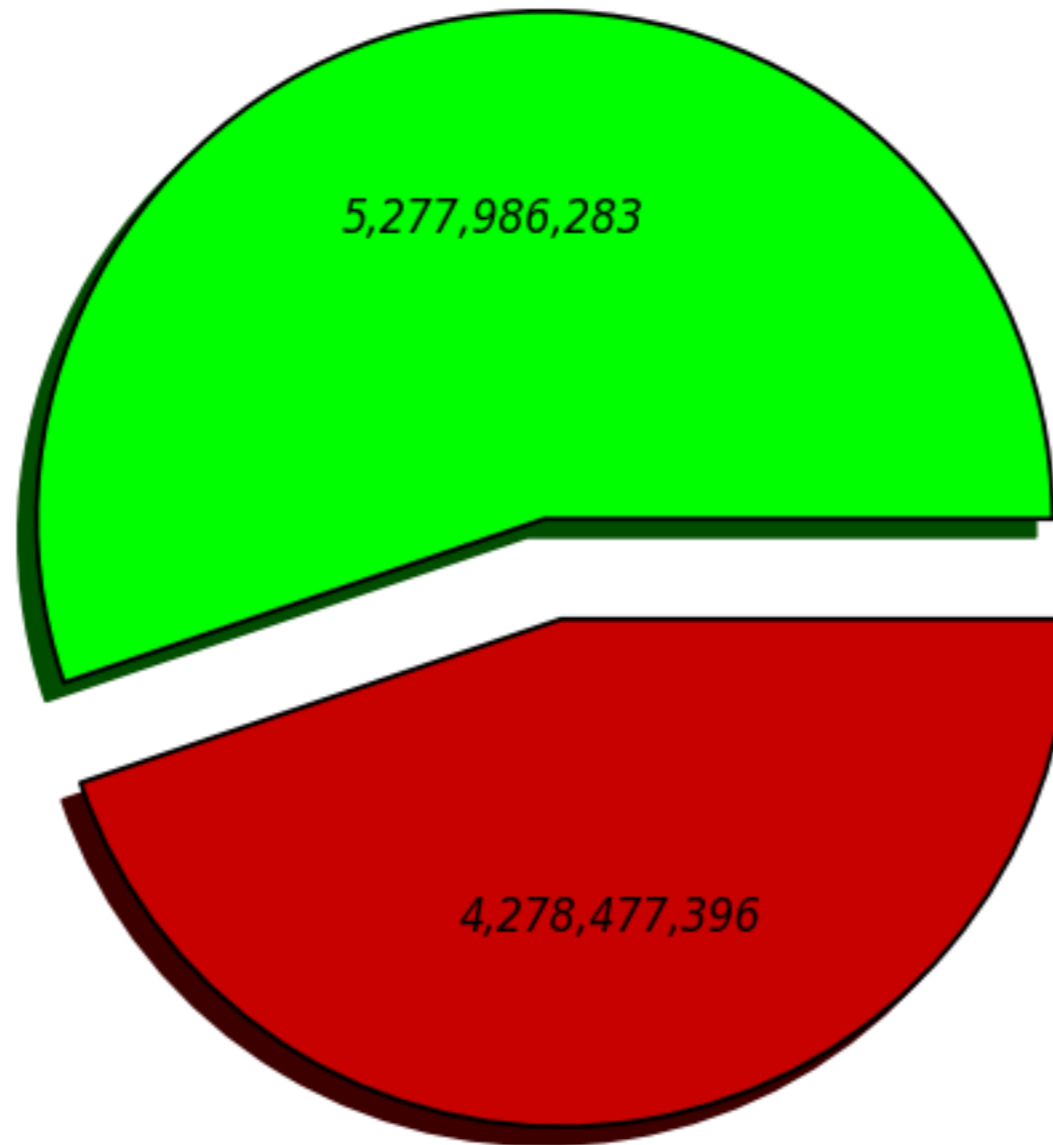
WallClock Consumption of Failed and/or Aborted Jobs

Maximum: 226,939,992 , Minimum: 0.00 , Average: 78,331,669 , Current: 37,738,071

WallClock efficiency



WC Consumption for Successful, Failed and/or Aborted Jobs (Sum: 9,556,463,679)
WC of Successful Jobs - 55.23%



WC of Failed and/or Aborted Jobs - 44.77%

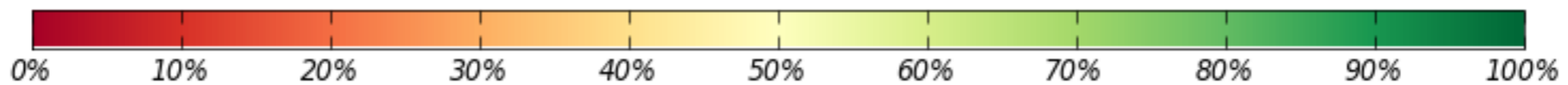
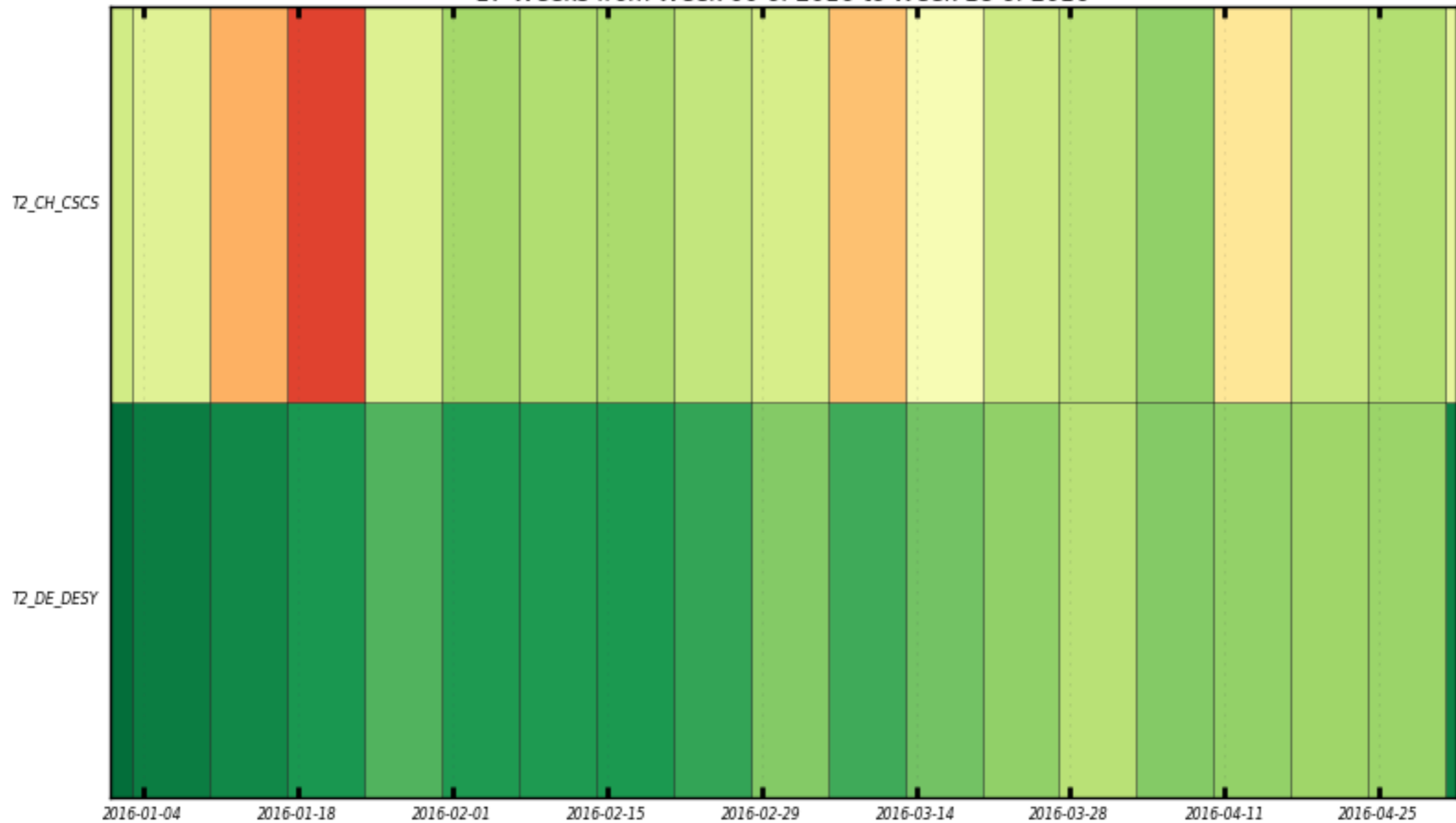
■ WC of Successful Jobs - 55.23% (5,277,986,283)

■ WC of Failed and/or Aborted Jobs - 44.77% (4,278,477,396)

efficiency over time



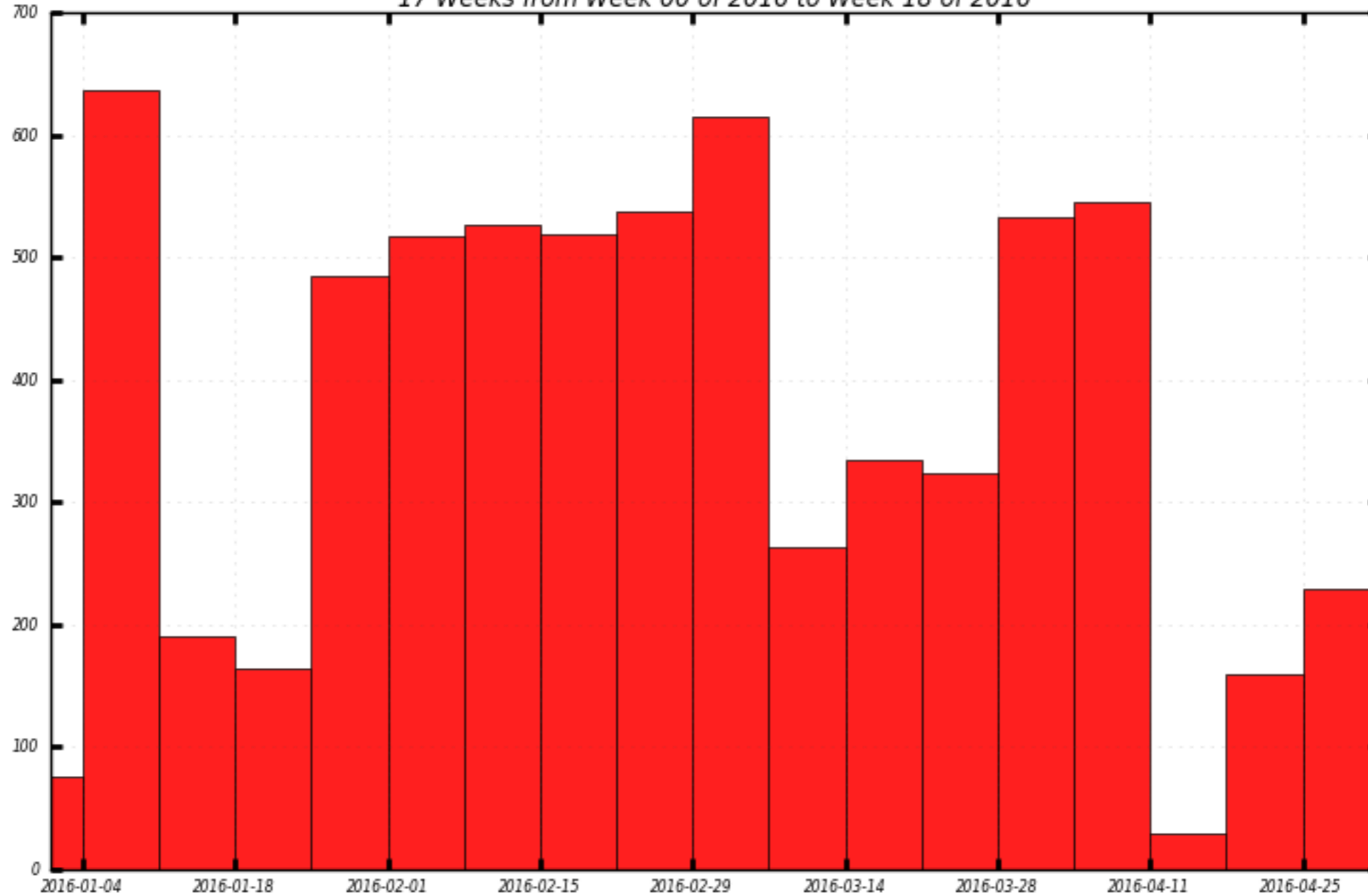
WallClock Efficiency based on success/all accomplished jobs
17 Weeks from Week 00 of 2016 to Week 18 of 2016



Good job CPU consumption



weeks/week: CPU consumption Good Jobs
17 Weeks from Week 00 of 2016 to Week 18 of 2016



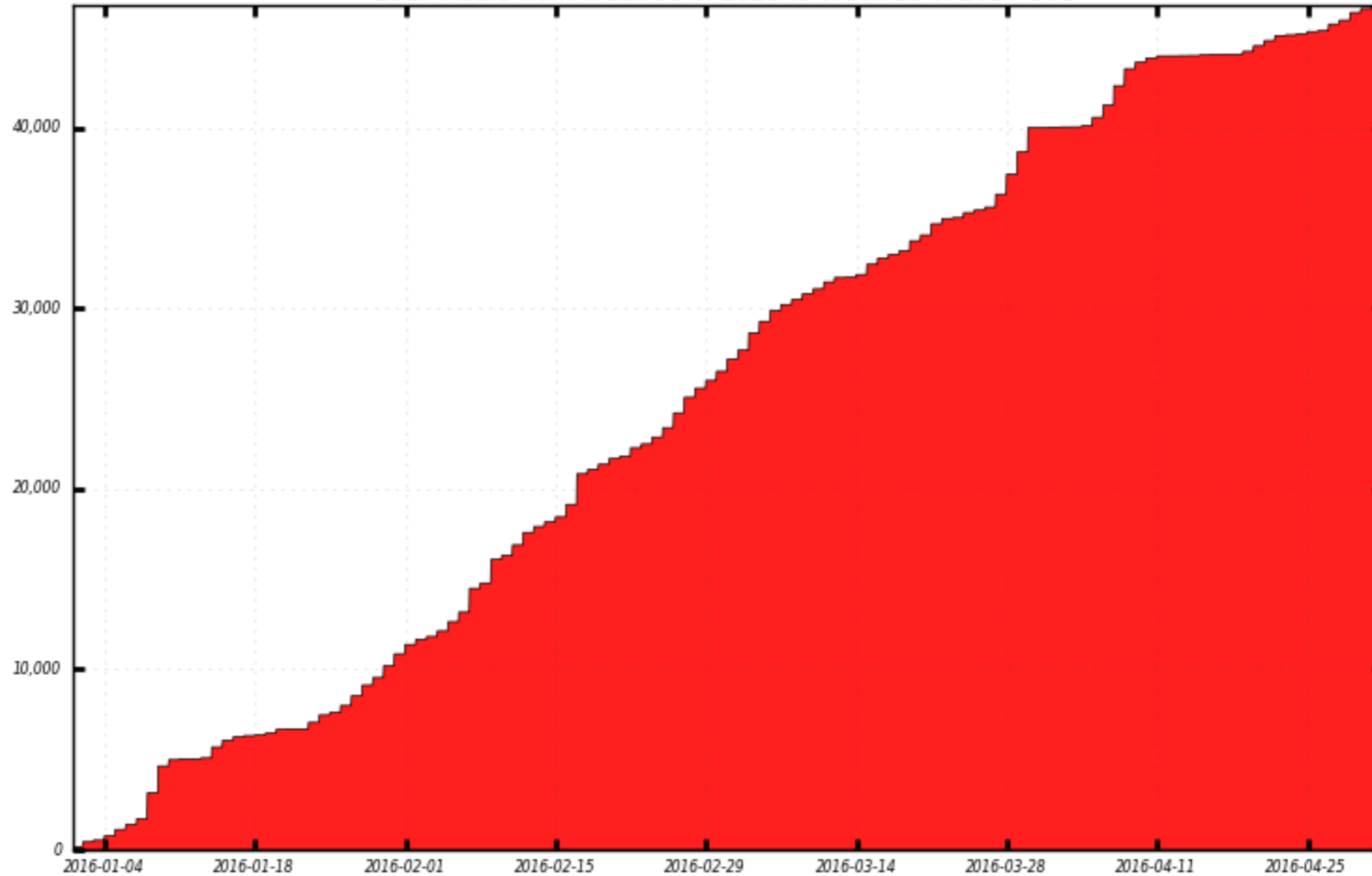
T2_CH_CSCS

Maximum: 636.00 , Minimum: 0.00 , Average: 351.74 , Current: 229.00

total CPU consumption



days/day: CPU consumption Good Jobs
2927 Hours from Week 00 of 2016 to Week 18 of 2016 UTC



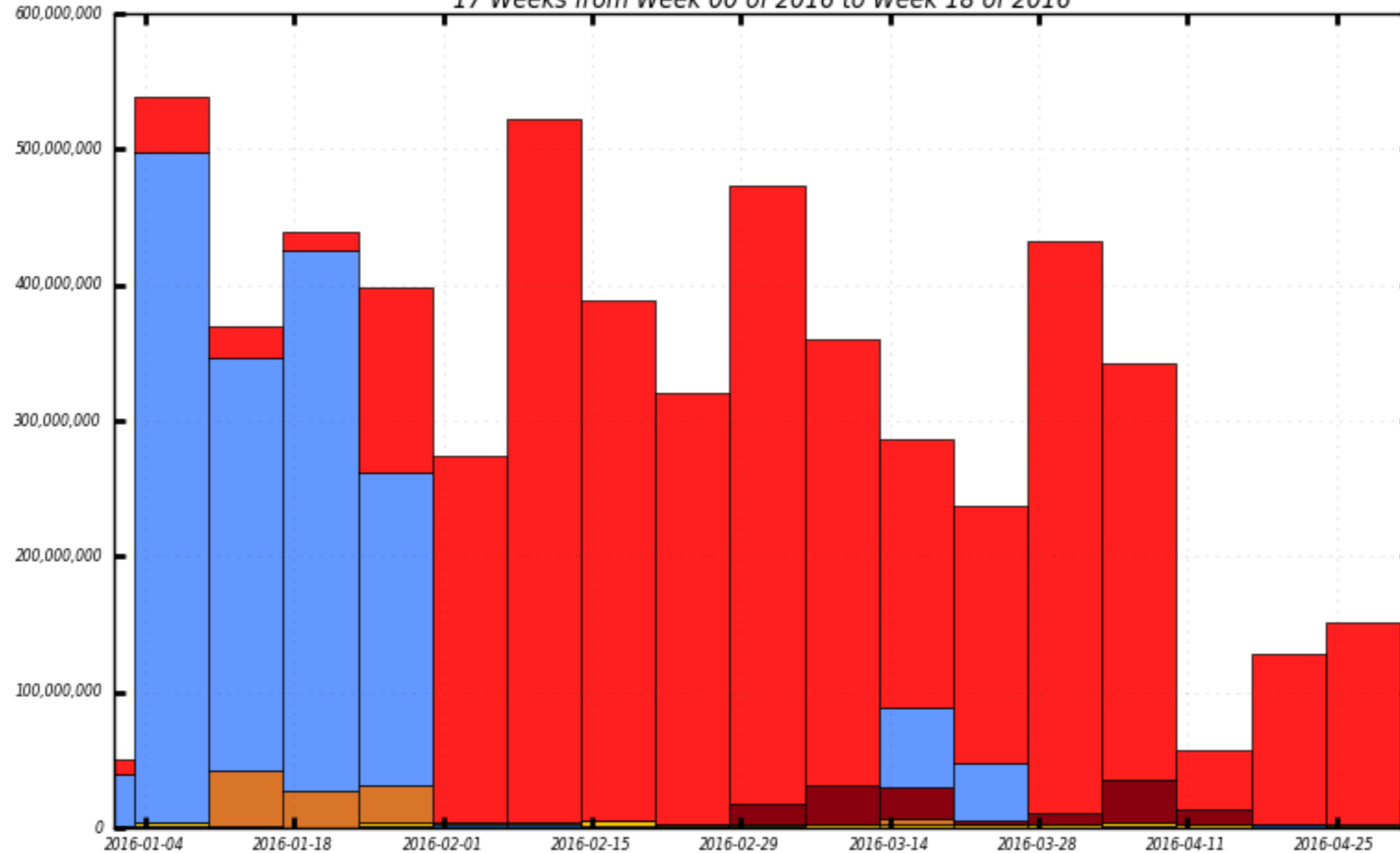
■ T2_CH_CSCS (46,782)

Total: 46,782 , Average Rate: 0.00 /s

Job types



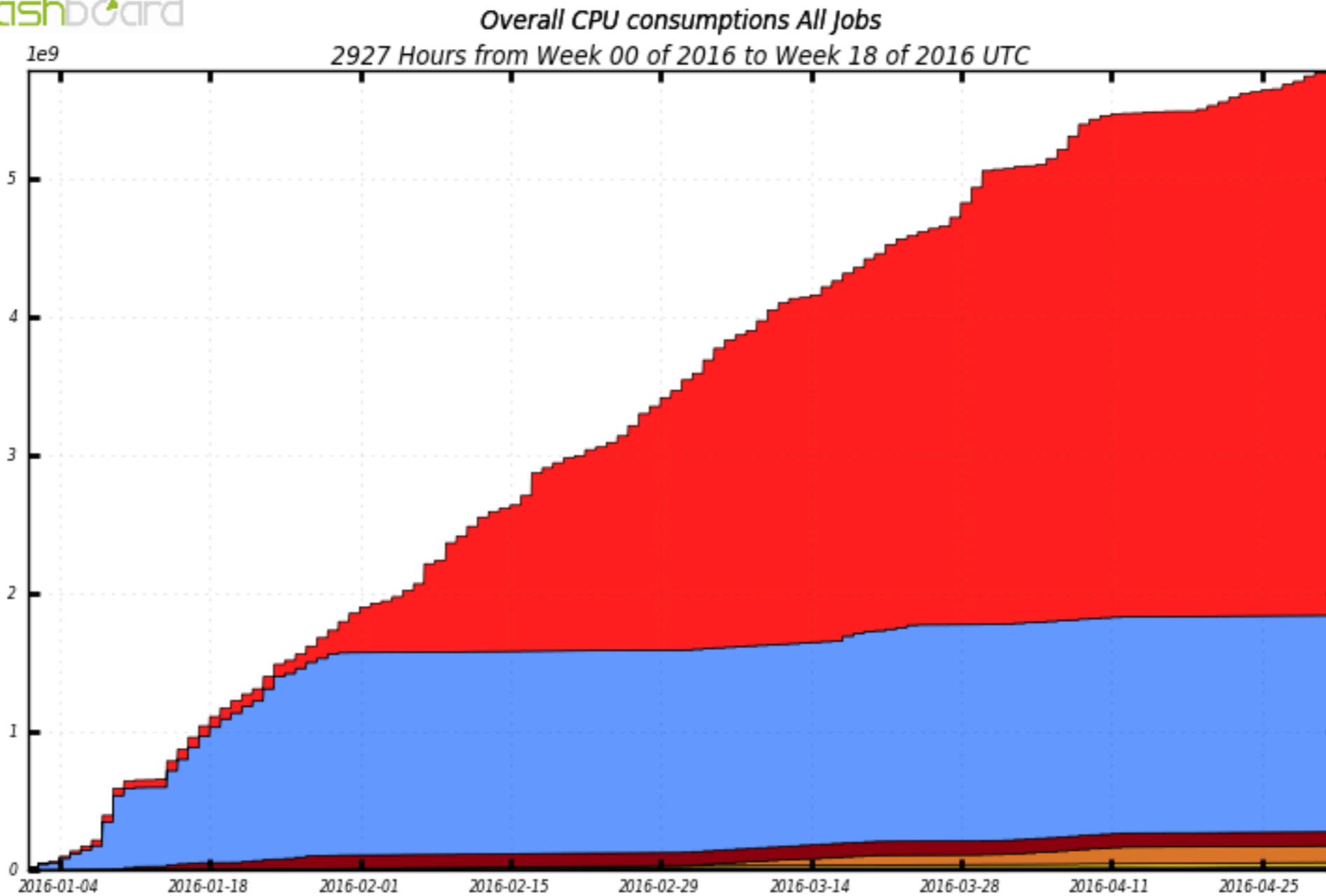
Overall CPU consumptions All Jobs
17 Weeks from Week 00 of 2016 to Week 18 of 2016



analysis production test reprocessing hctest
hcxrootd analysistest integration unknown

Maximum: 538,412,684 , Minimum: 0.00 , Average: 289,216,592 , Current: 18,476,642

Job types



analysis (3,944,614,982)
hctest (33,481,287)
unknown (0.00)

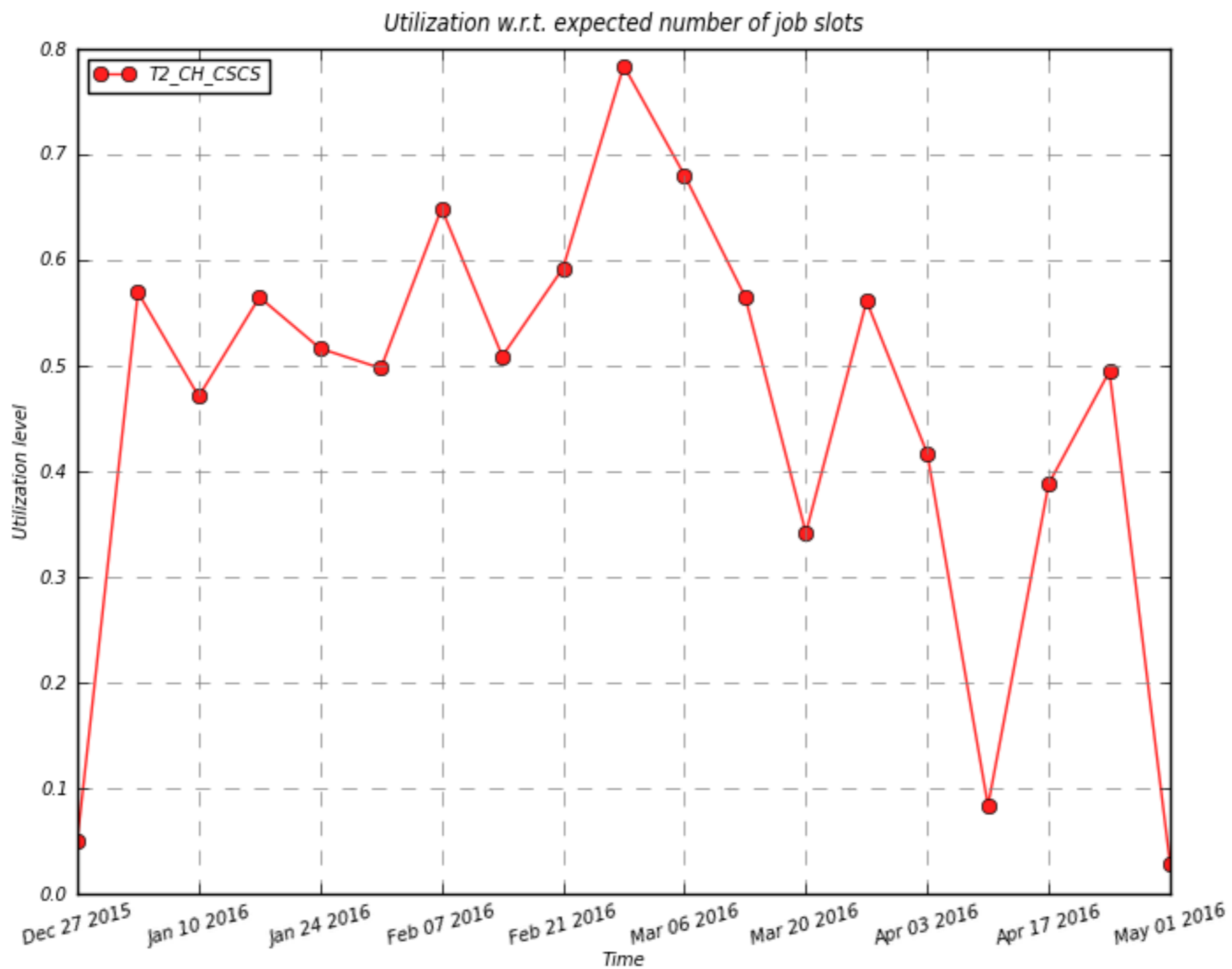
production (1,565,287,196)
hcxrootd (15,248,520)

test (120,524,817)
analysisitest (4,063,303)

reprocessing (101,107,289)
integration (4,447)

Total: 5,784,331,841 , Average Rate: 548.76 /s

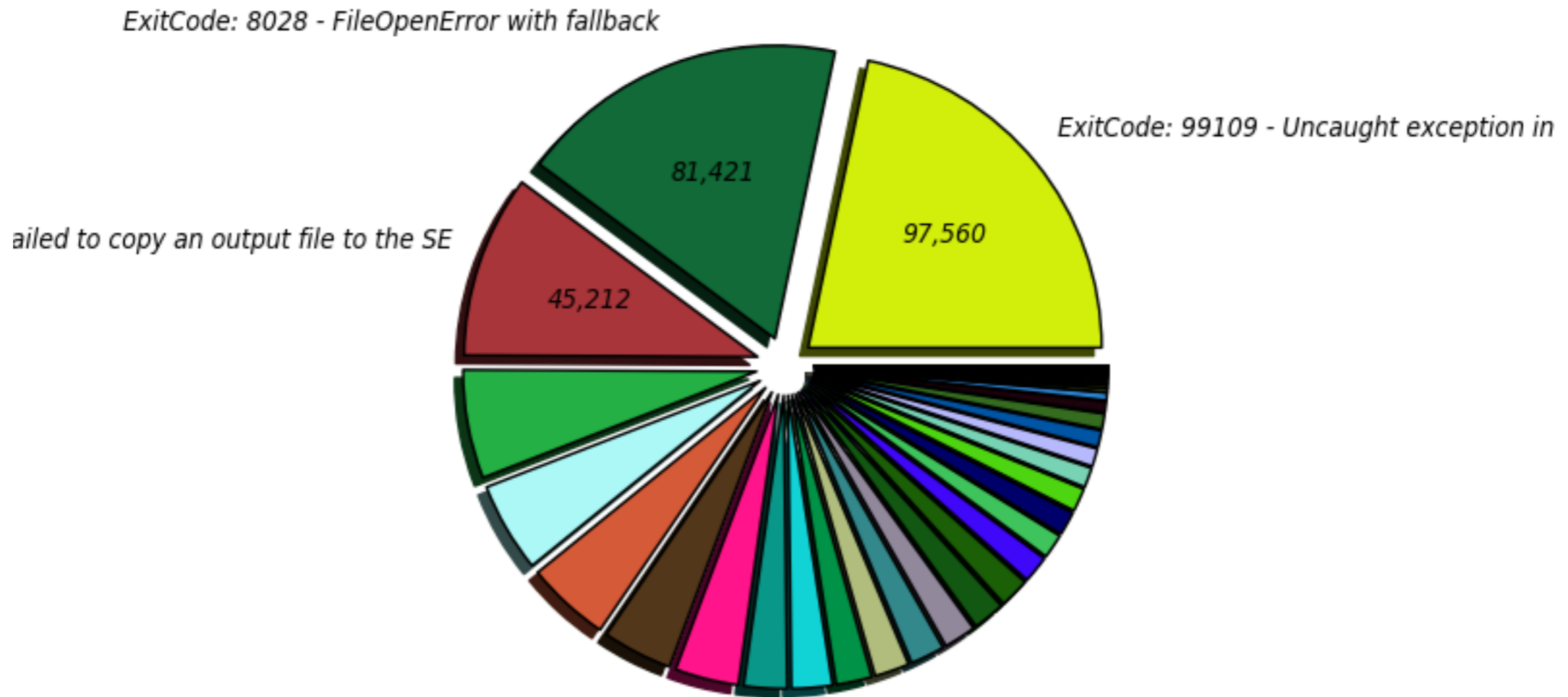
Utilization



App failure codes

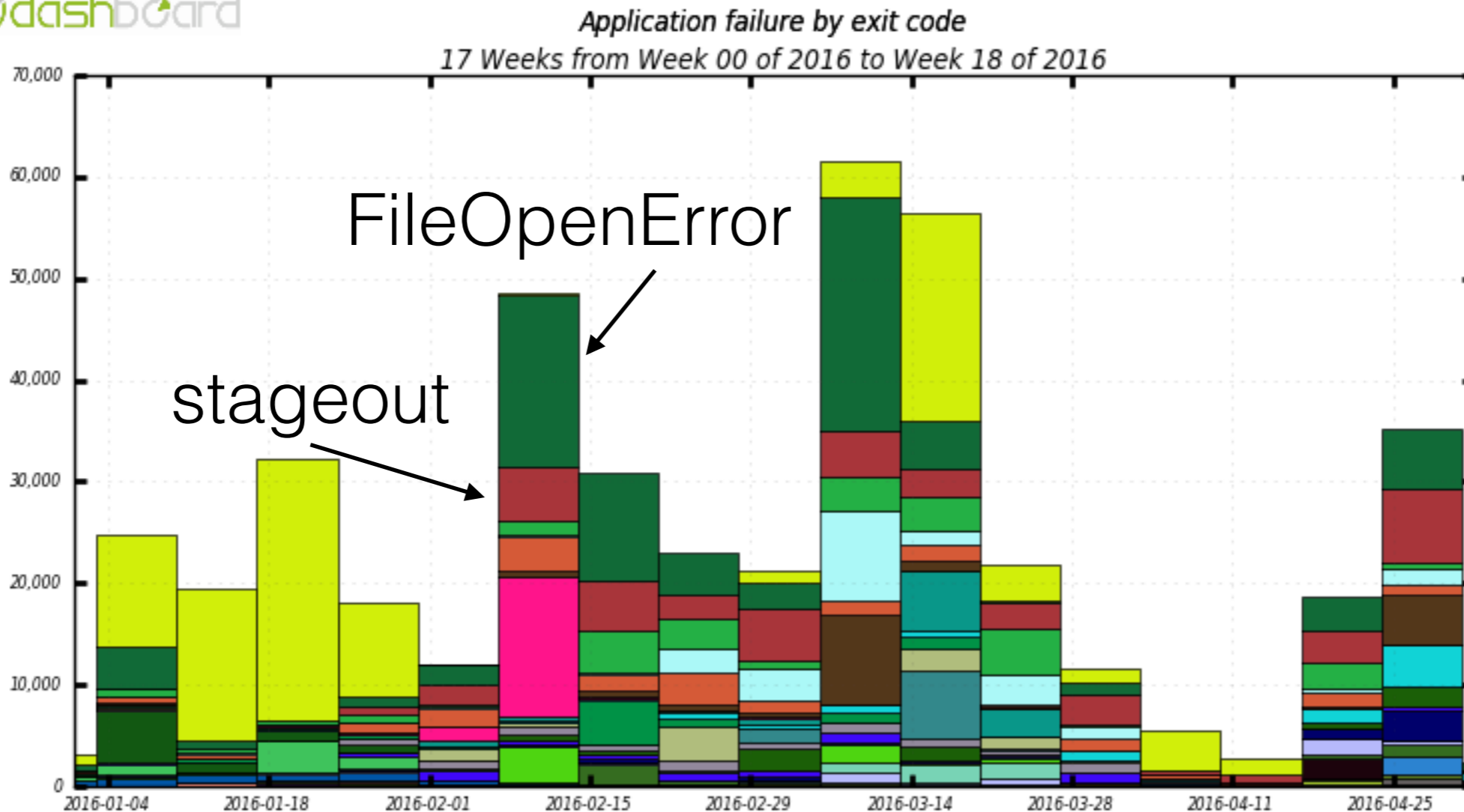


Application failure by exit code (Sum: 449,194)



- ExitCode: 99109 - Uncaught exception in WMAgent step executor (often staging out problem) (97,560)
- ExitCode: 60307 - Failed to copy an output file to the SE (45,212)
- ExitCode: 139 - Segmentation violation (ANSI) (22,218)
- ExitCode: 8021 - FileReadError (17,297)
- ExitCode: 60311 - Stage Out Failure in ProdAgent job (10,654)
- ExitCode: 1 - Hangup (POSIX) (8,836)
- ExitCode: 70500 - Warning: problem with ModifyJobReport (8,481)
- ExitCode: 8003 - Unknown Exception (7,933)
- ExitCode: 50664 - Application terminated by wrapper because using too much Wall Clock time (7,400)
- ExitCode: 10040 - failed to generate cmsRun rfn file at runtime (5,884)
- ExitCode: 8001 - CMS exception (CMSSW) (26,920)
- ExitCode: 50669 - Application terminated by wrapper for not defined reason (20,746)
- ExitCode: 8022 - FatalRootError (15,745)
- ExitCode: 50660 - Application terminated by wrapper because using too much RAM (RSS) (15,745)
- ExitCode: 8002 - StdLib? Exception (8,613)
- ExitCode: 137 - killed, unblockable (POSIX) kill -9 (7,970)
- ExitCode: 50115 - cmsRun did not produce a valid/readable job report at runtime (7,400)
- ExitCode: 92 - unknown (6,024)

Failure codes over time



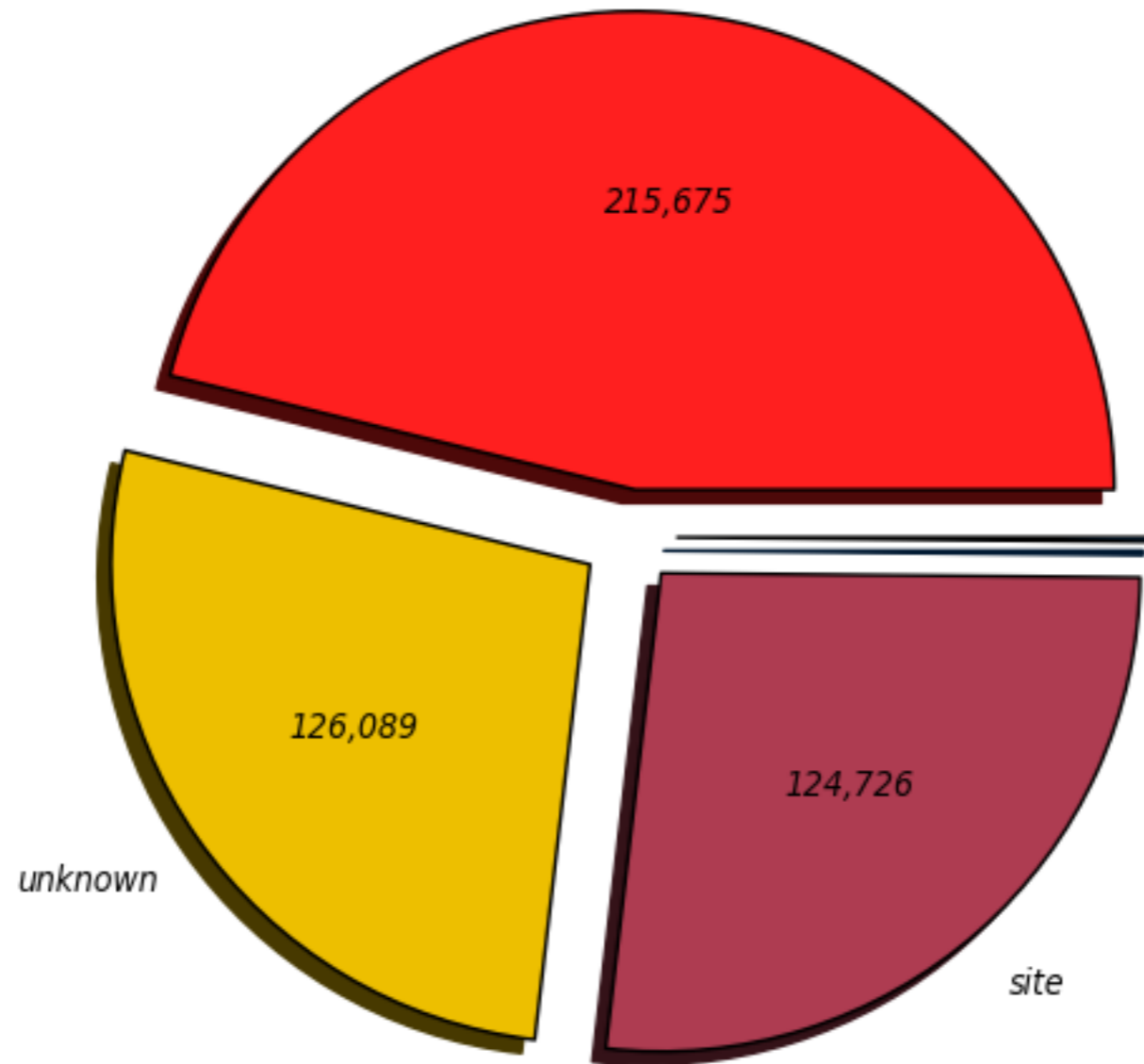
- ExitCode: 99109 - Uncaught exception in WMAgent step executor (often staging out problems)
- ExitCode: 60307 - Failed to copy an output file to the SE
- ExitCode: 139 - Segmentation violation (ANSI)
- ExitCode: 8021 - FileReadError
- ExitCode: 60311 - Stage Out Failure in ProdAgent job
- ExitCode: 1 - Hangup (POSIX)
- ExitCode: 70500 - Warning: problem with ModifyJobReport
- ExitCode: 8003 - Unknown Exception
- ExitCode: 50664 - Application terminated by wrapper because using too much Wall Clock time
- ExitCode: 10040 - failed to generate cmsRun cfg file at runtime
- ExitCode: 8028 - FileOpenError with fallback
- ExitCode: 8001 - CMS exception (CMSSW)
- ExitCode: 50669 - Application terminated by wrapper for not defined reason
- ExitCode: 8022 - FatalRootError
- ExitCode: 50660 - Application terminated by wrapper because using too much RAM (RSS)
- ExitCode: 8002 - StdLib? Exception
- ExitCode: 137 - killed, unblockable (POSIX) kill -9
- ExitCode: 50115 - cmsRun did not produce a valid/readable job report at runtime
- ExitCode: 92 - unknown
- ... plus 215 more

Maximum: 61,566 , Minimum: 0.00 , Average: 22,459 , Current: 2,334

Overall efficiency



Failed jobs by component (Sum: 467,178)
application



■ application (215,675)

■ unknown (126,090)

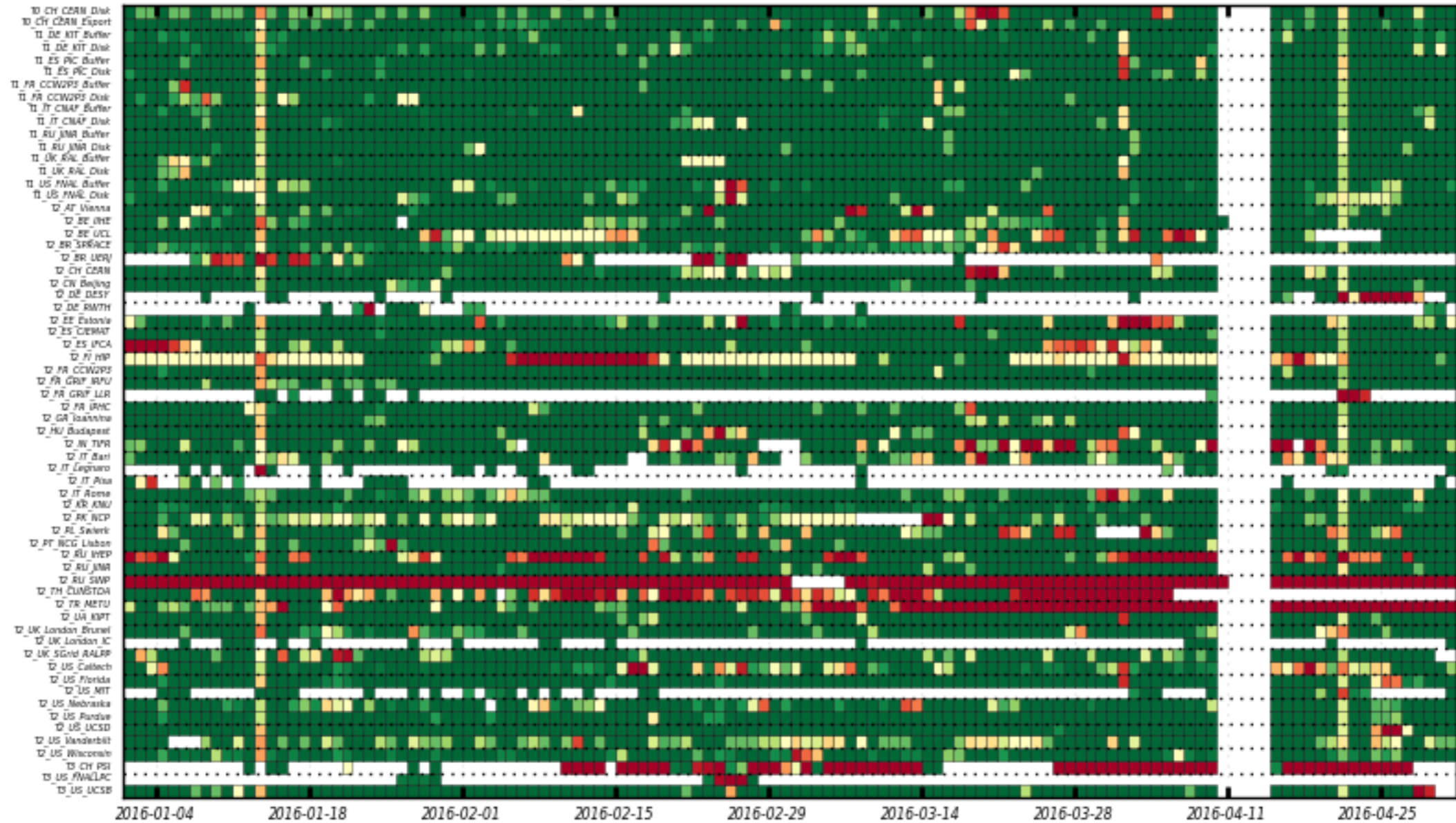
■ site (124,726)

■ user (687.00)

transfers out



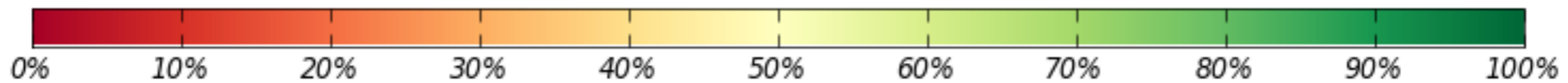
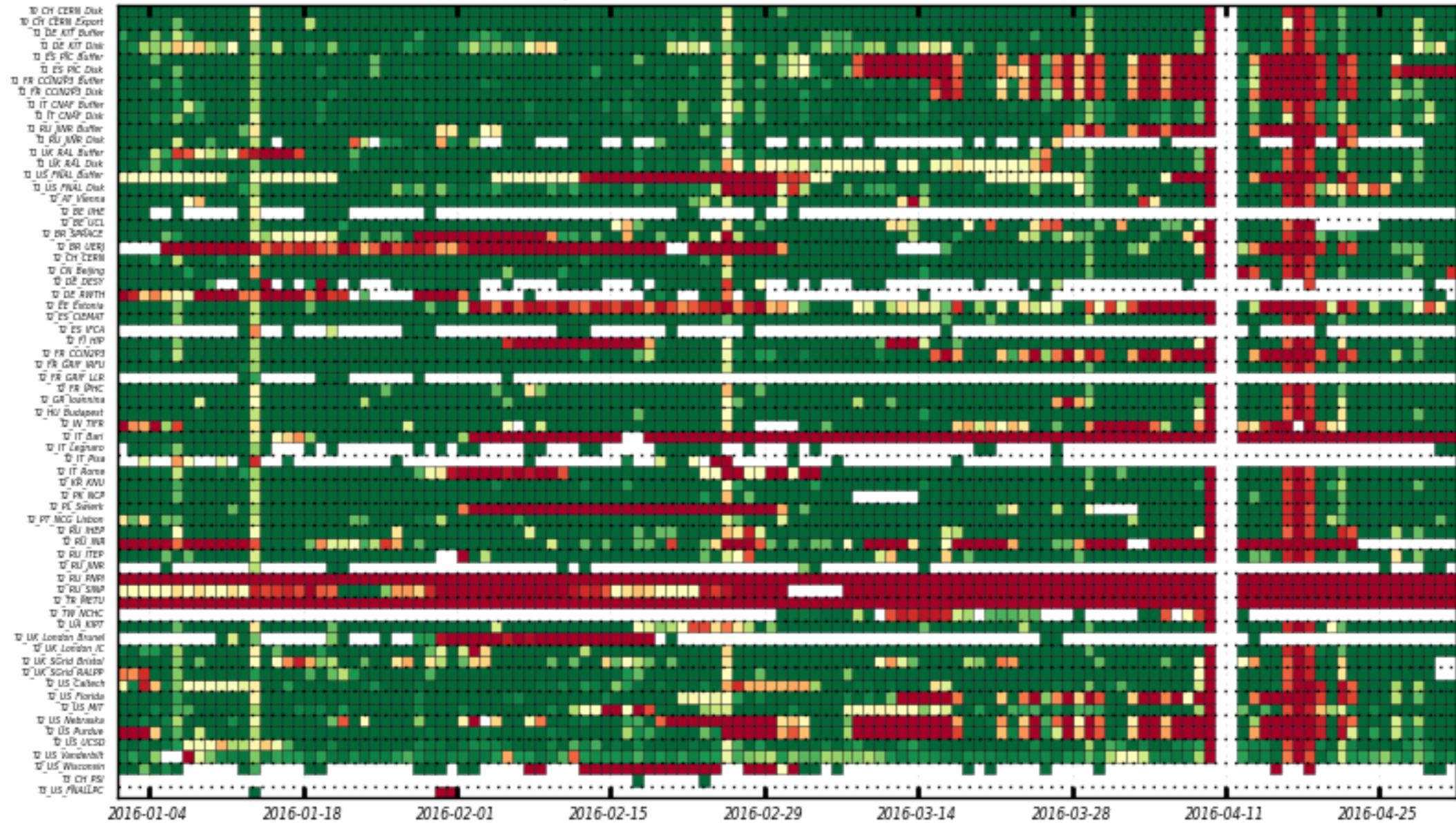
Transfer quality for outgoing transfer, production and debug instances
121 Days from Week 00 of 2016 to Week 18 of 2016



transfers in



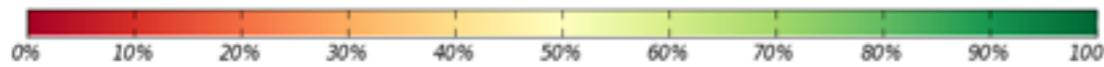
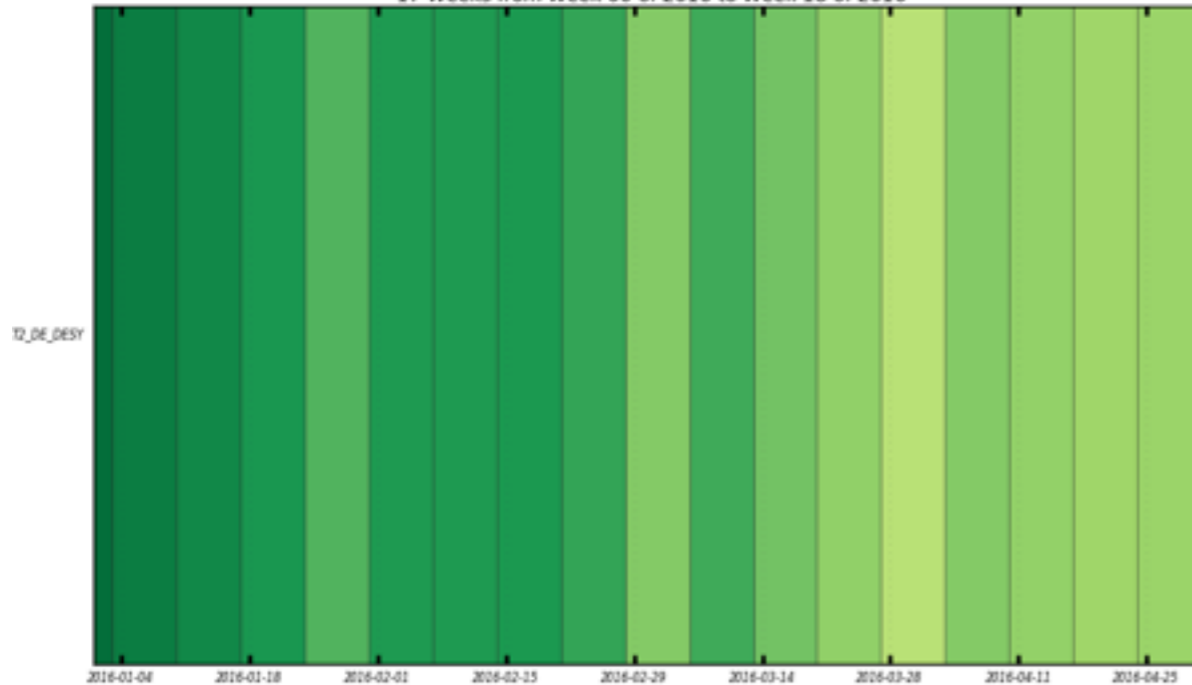
Transfer quality for incoming transfer, production and debug instances
121 Days from Week 00 of 2016 to Week 18 of 2016



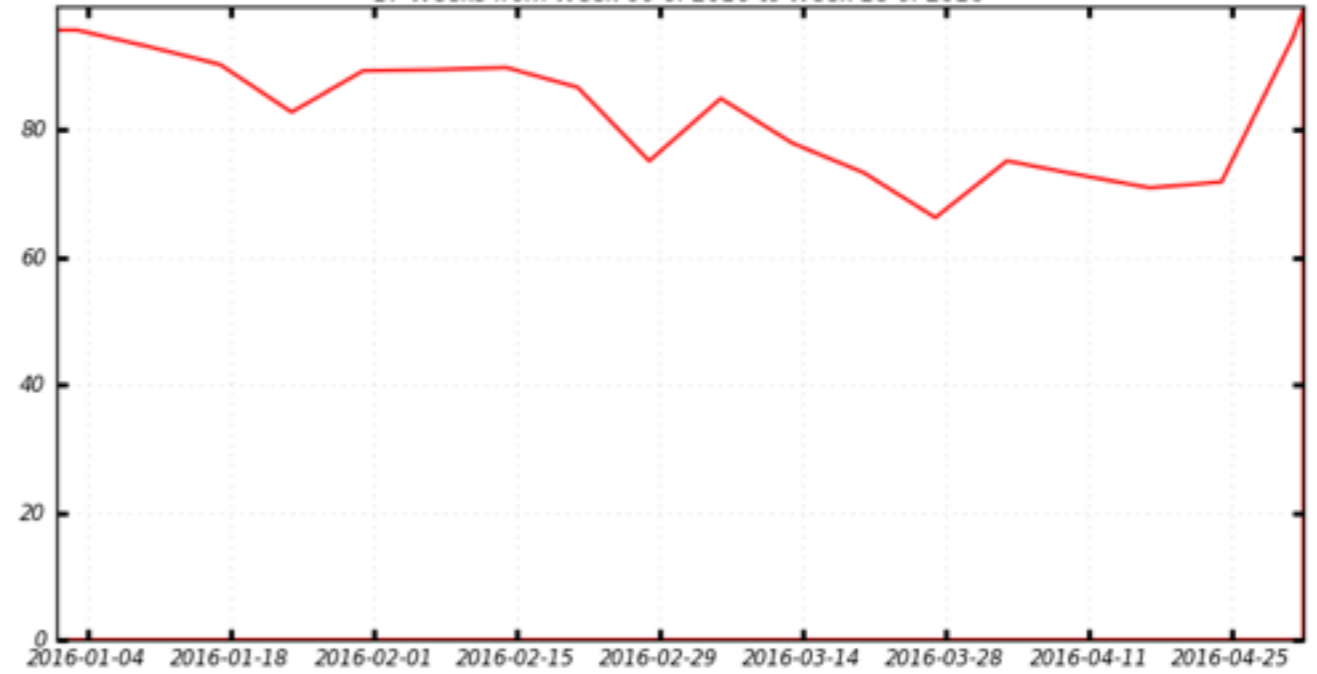
T2_DE_DESY



WallClock Efficiency based on success/all accomplished jobs
17 Weeks from Week 00 of 2016 to Week 18 of 2016



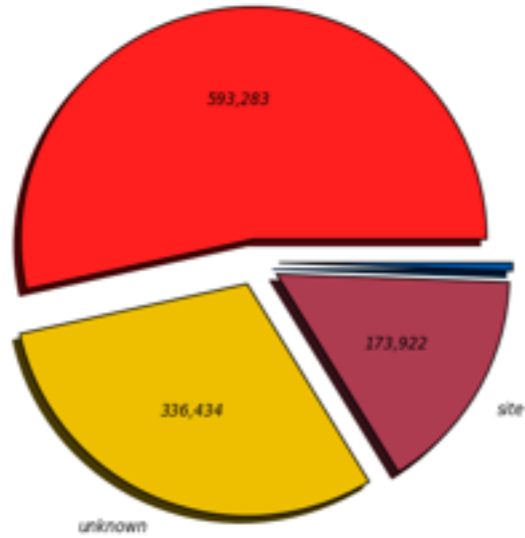
WallClock Efficiency over time based on success/all accomplished jobs
17 Weeks from Week 00 of 2016 to Week 18 of 2016



T2_DE_DESY (83.00)



Failed jobs by component (Sum: 1,109,802)
application



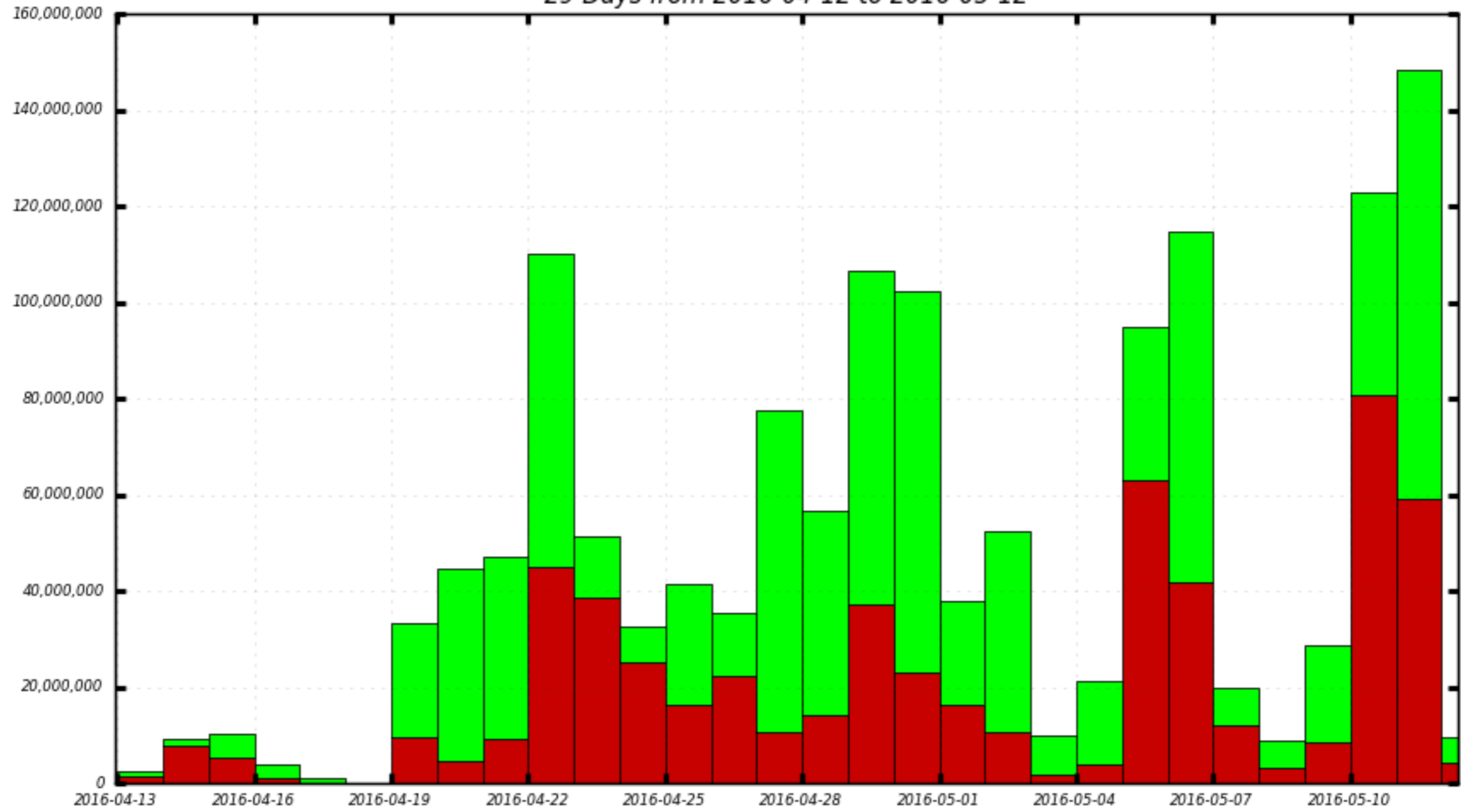
application (593,283) unknown (336,434) site (173,922) user (6,263)

Total: 94.37 , Average Rate: 0.00 /s
Utilization w.r.t. expected number of job slots



Last month

WallClock Consumption for Successful, Failed and/or Aborted Jobs 29 Days from 2016-04-12 to 2016-05-12

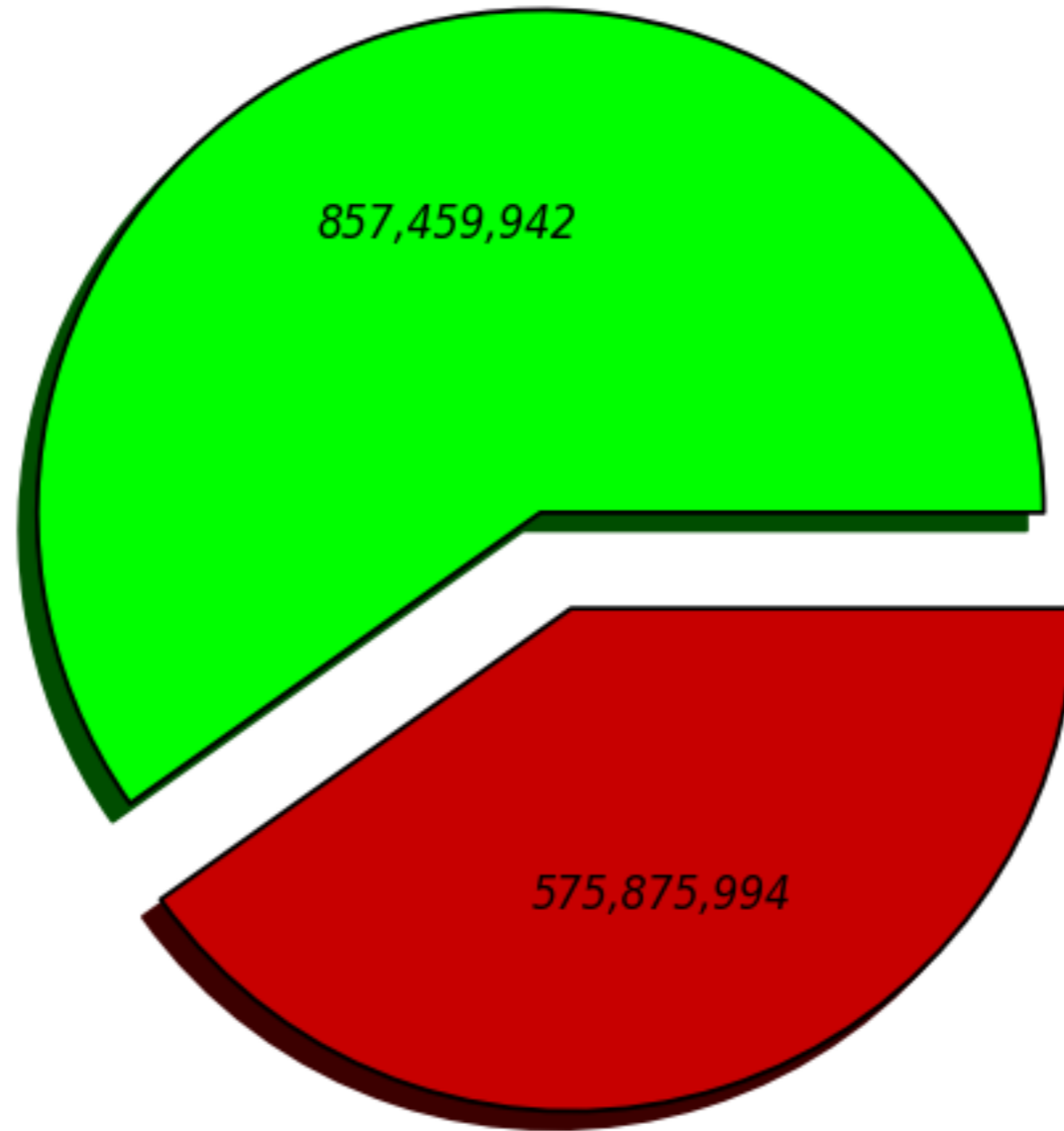


WallClock Consumption of Successful Jobs

WallClock Consumption of Failed and/or Aborted Jobs

Maximum: 148,228,572 , Minimum: 0.00 , Average: 46,236,643 , Current: 9,415,927

WC Consumption for Successful, Failed and/or Aborted Jobs (Sum: 1,433,335,937)
WC of Successful Jobs - 59.82%

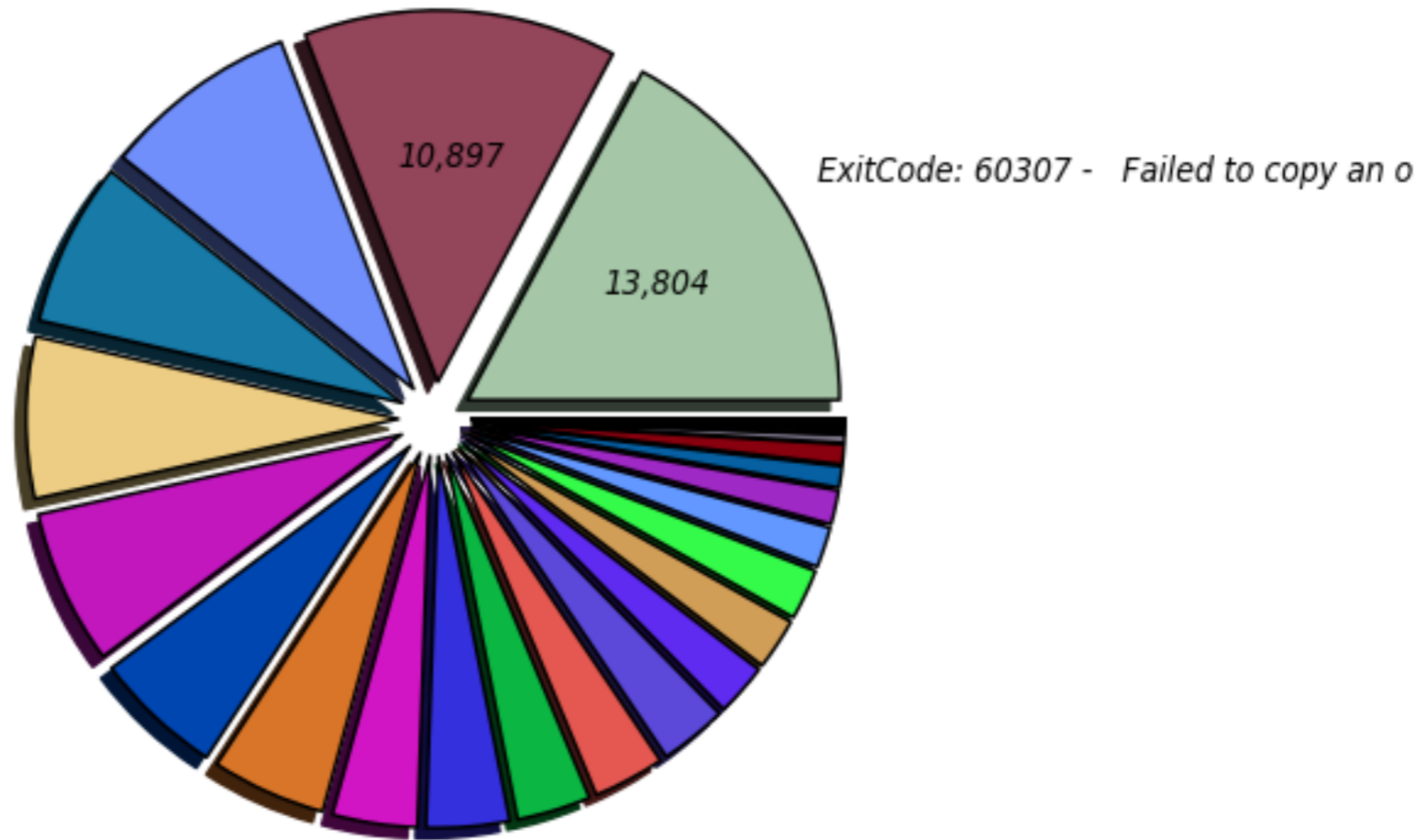


WC of Failed and/or Aborted Jobs - 40.18%

■ WC of Successful Jobs - 59.82% (857,459,942)

■ WC of Failed and/or Aborted Jobs - 40.18% (575,875,995)

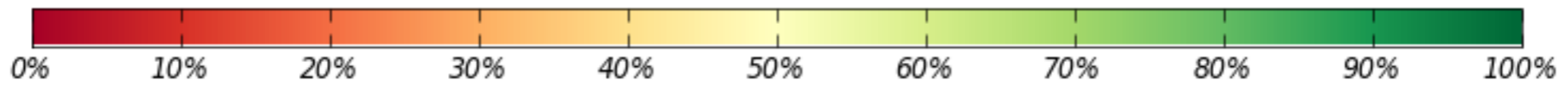
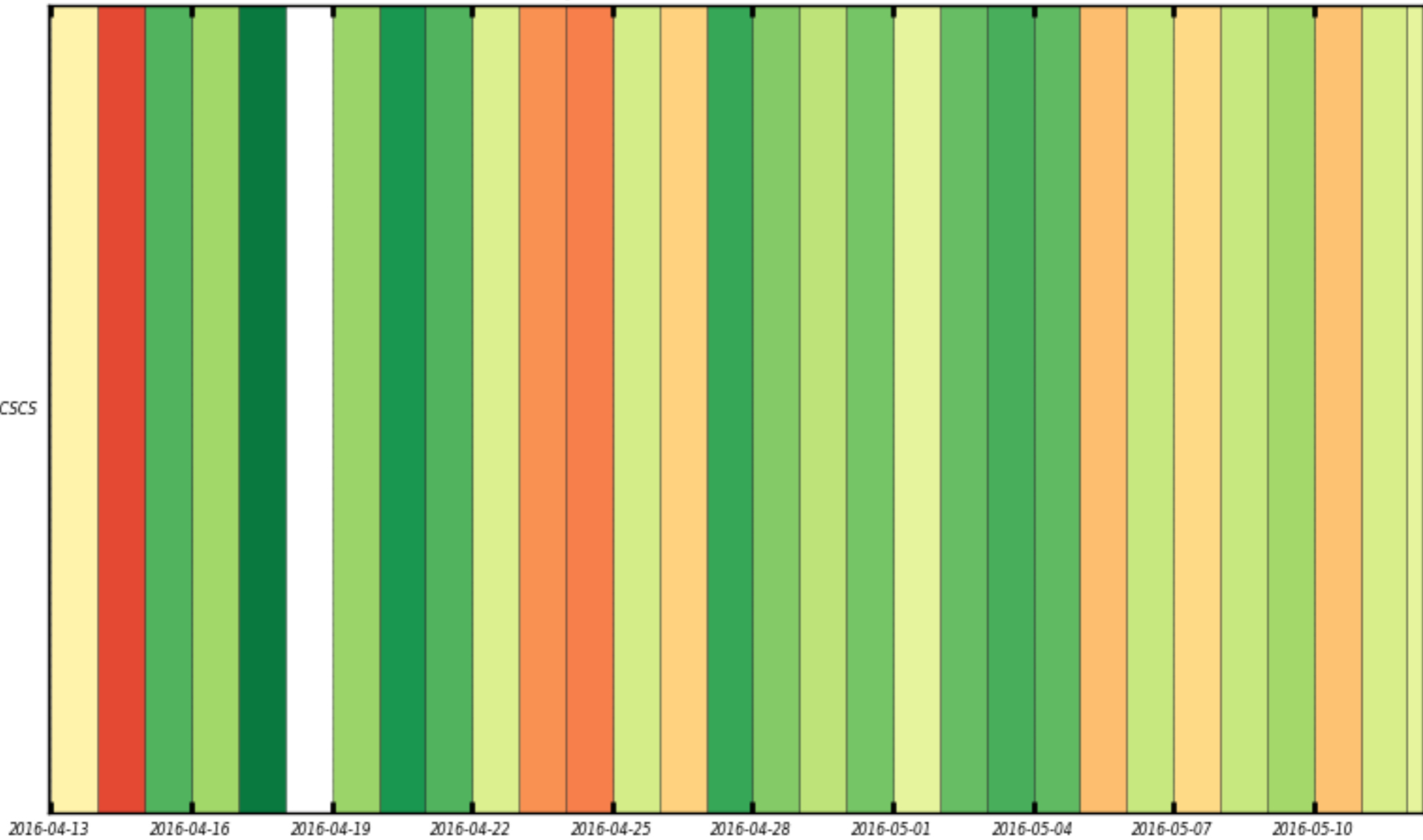
Application failure by exit code (Sum: 80,199)
 ExitCode: 8028 - FileOpenError with fallback



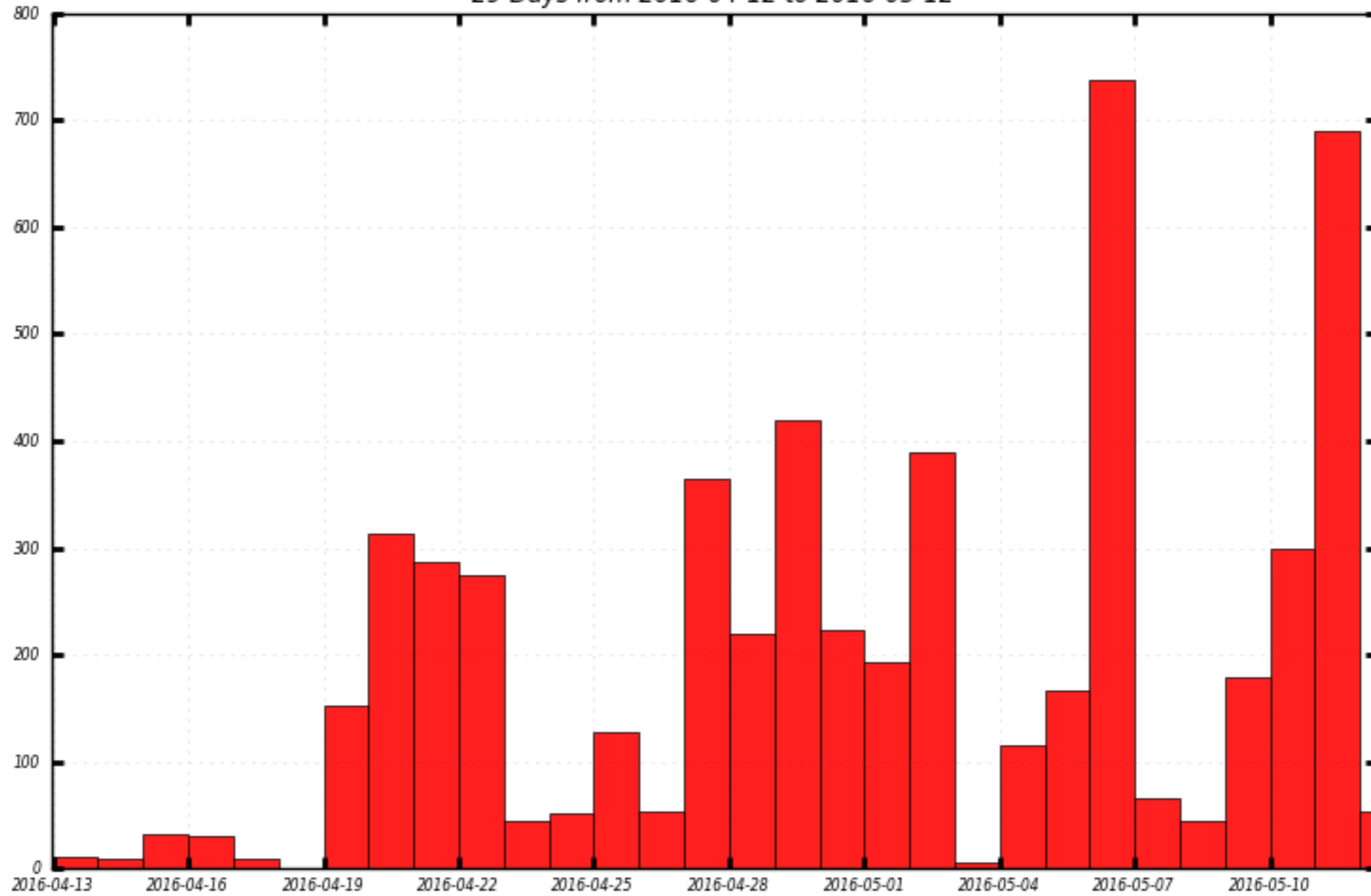
- ExitCode: 60307 - Failed to copy an output file to the SE (13,804)
 - ExitCode: 50660 - Application terminated by wrapper because using too much RAM (RSS) (6,800)
 - ExitCode: 8001 - CMS exception (CMSSW) (5,623)
 - ExitCode: 8002 - StdLib? Exception (4,499)
 - ExitCode: 50669 - Application terminated by wrapper for not defined reason (2,962)
 - ExitCode: 50115 - cmsRun did not produce a valid/readable job report at runtime (2,579)
 - ExitCode: 60302 - Output file(s) not found (2,348)
 - ExitCode: 8027 - FormatIncompatibility (1,795)
 - ExitCode: 10034 - Required application version is not found at the site (1,409)
 - ExitCode: 80000 - unknown (739 00)
 - ExitCode: 8028 - FileOpenError with fallback (10,898)
 - ExitCode: 99109 - Uncaught exception in WMAgent step executor (often staging out problem) (6,800)
 - ExitCode: 8021 - FileReadError (5,400)
 - ExitCode: 10040 - failed to generate cmsRun cfg file at runtime (3,993)
 - ExitCode: 139 - Segmentation violation (ANSI) (2,889)
 - ExitCode: 8009 - ConfigurationProblem (2,500)
 - ExitCode: 8020 - FileOpenError (1,821)
 - ExitCode: 74 - unknown (1,763)
 - ExitCode: 50664 - Application terminated by wrapper because using too much Wall Clock time (1,763)
- plus 70 more

WallClock Efficiency based on success/all accomplished jobs
29 Days from 2016-04-12 to 2016-05-12

T2_CH_CSCS



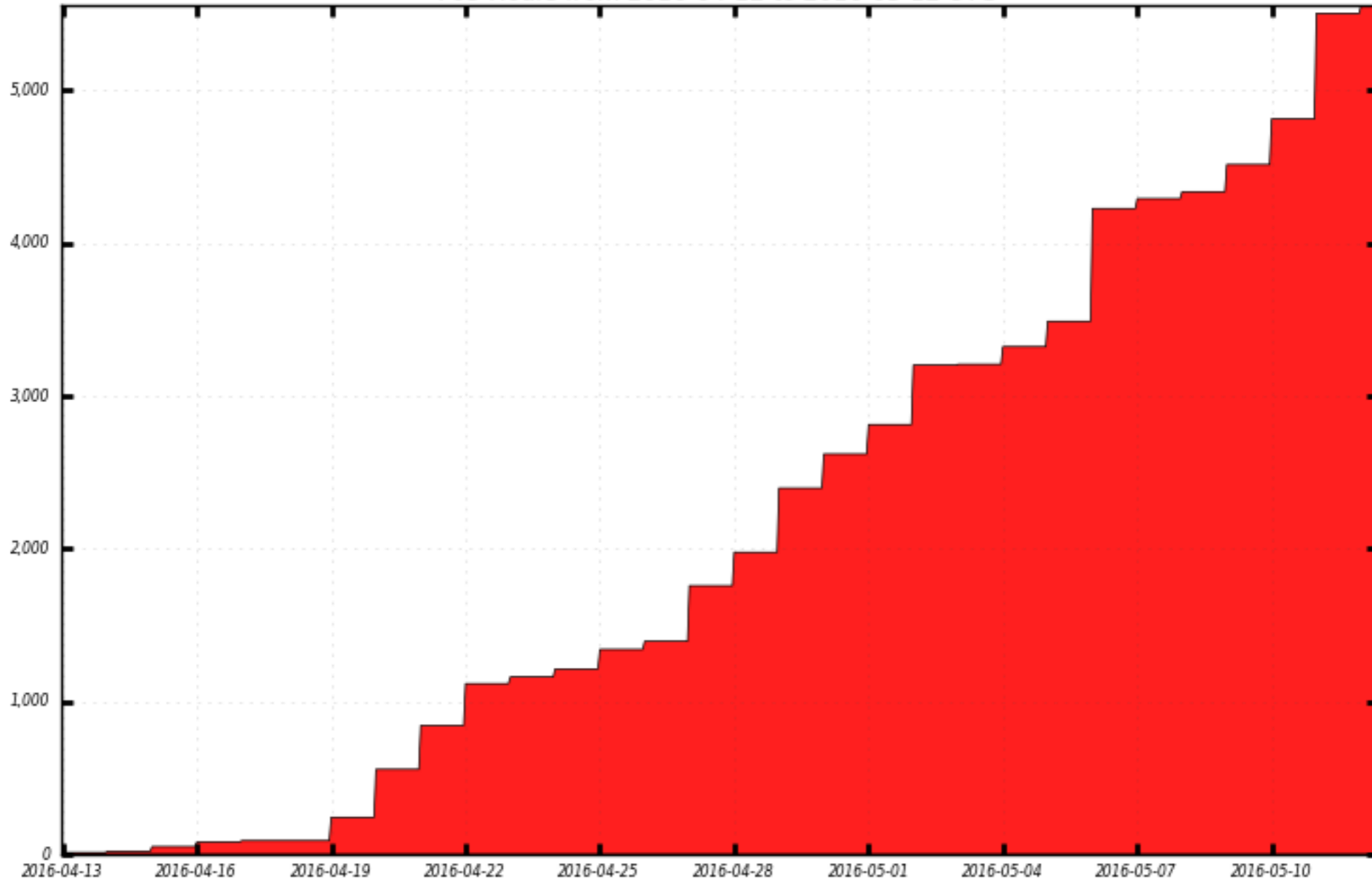
days/day: CPU consumption Good Jobs
29 Days from 2016-04-12 to 2016-05-12



T2_CH_CSCS

Maximum: 738.00 , Minimum: 0.00 , Average: 179.29 , Current: 53.00

days/day: CPU consumption Good Jobs
705 Hours from 2016-04-12 to 2016-05-12 UTC



T2_CH_CSCS (5,558)

Total: 5,558 , Average Rate: 0.00 /s