# Analysis job distribution and queue capacity

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US ATLAS Facilities Workshop at SMU

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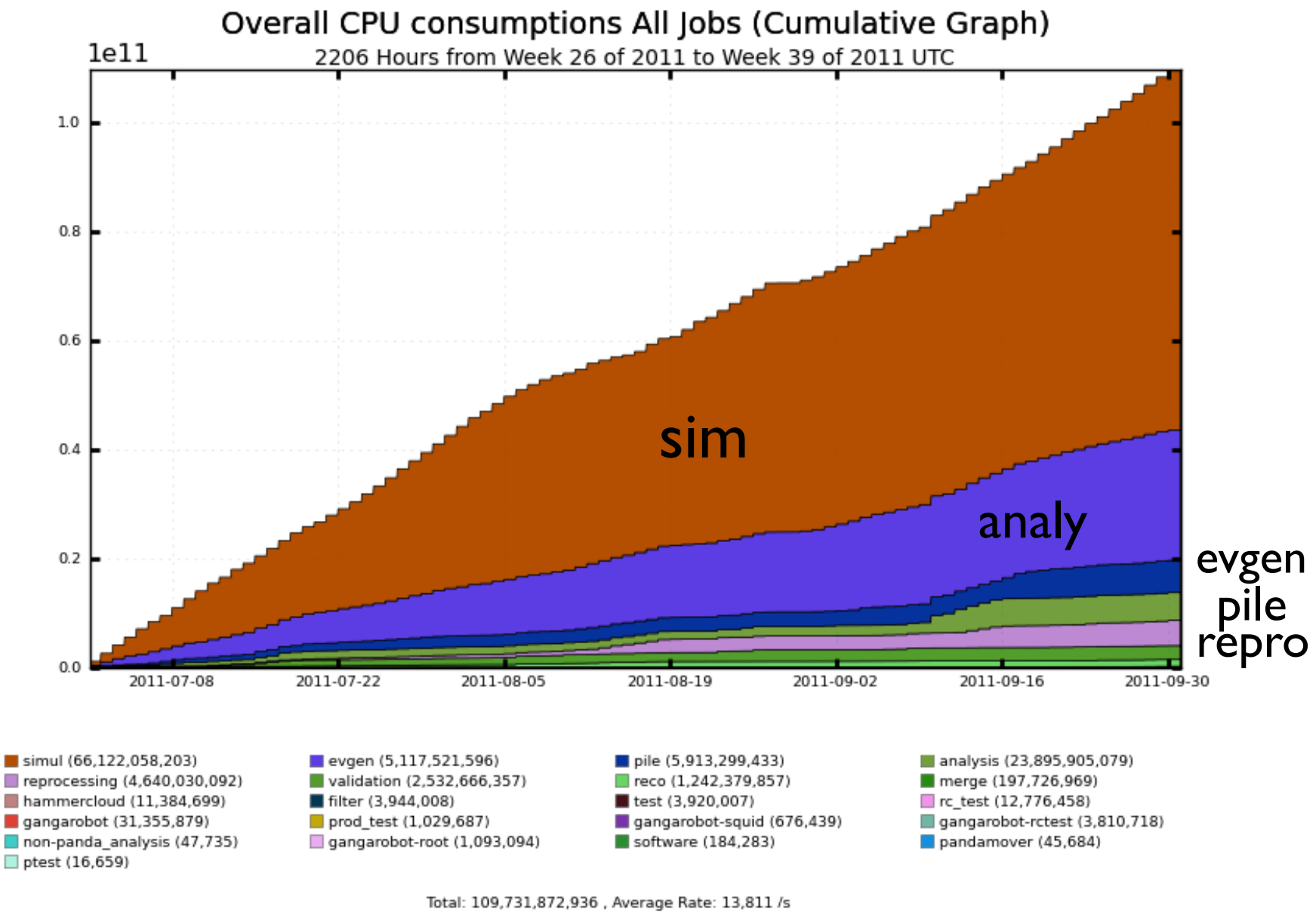
# Outline

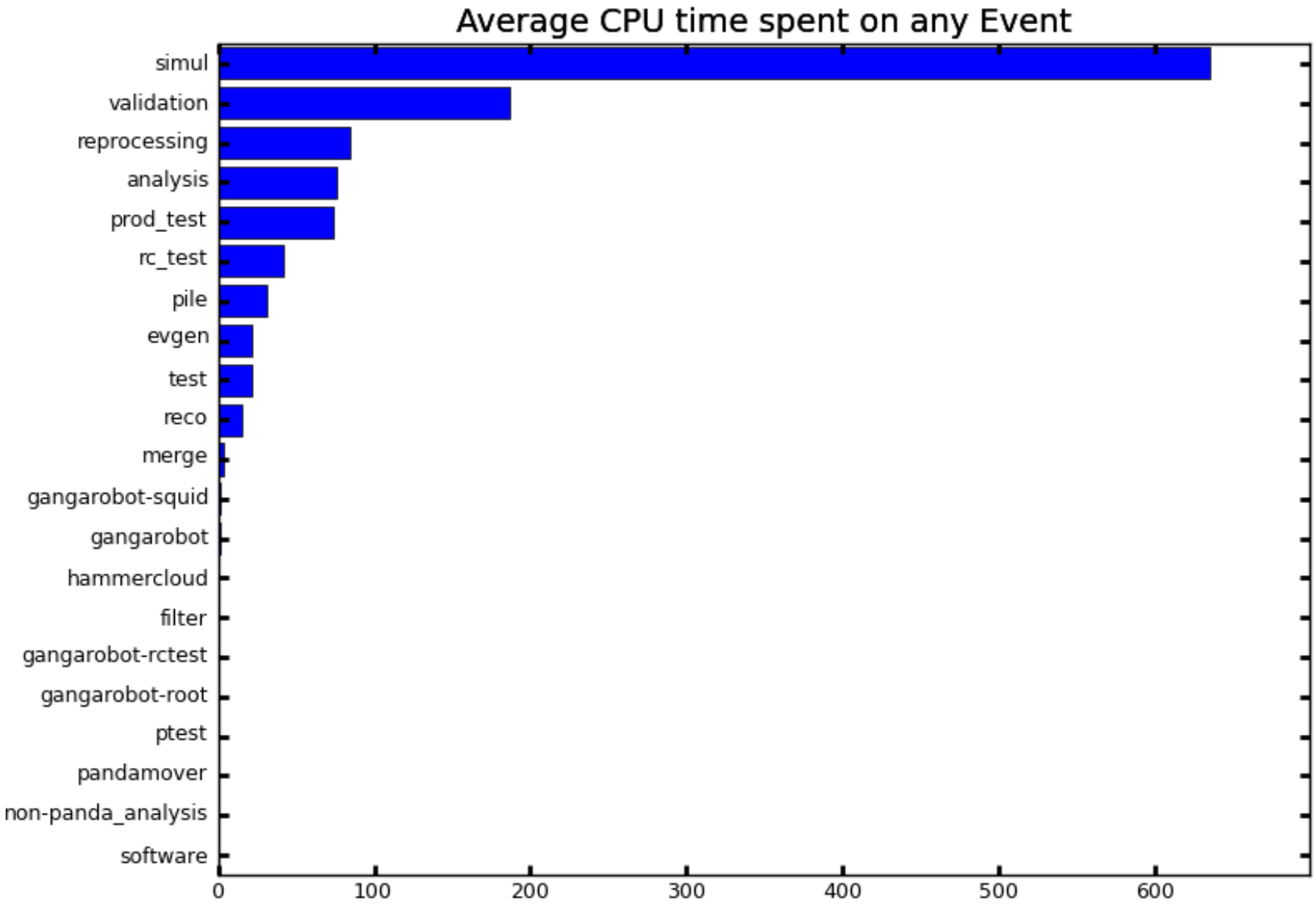
- Yesterday we heard about DA performance
- Follow up here with a few more points looking at statistics in the historical dashboard: http://dashb-atlas-job-prototype.cern.ch/dashboard/request.py/dailysummary

# US ATLAS - last quarter



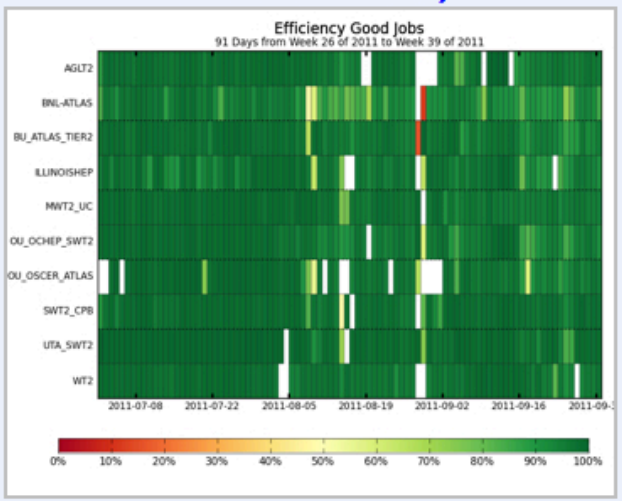

nb: some legend codes are wrong - check numbers http://savannah.cern.ch/bugs/?87572

# US ATLAS - last quarter

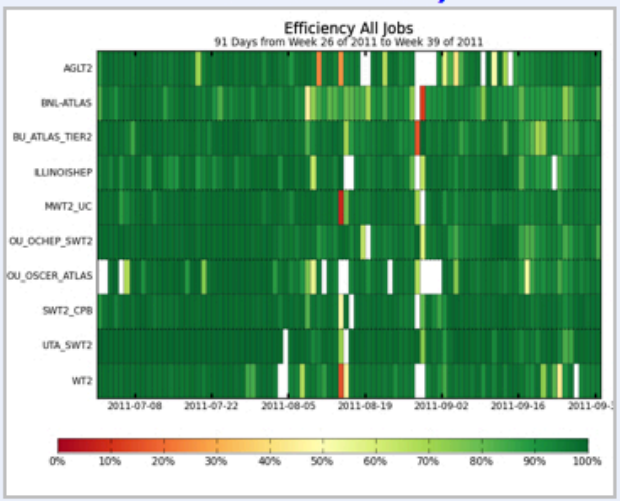


# production efficiency remains high

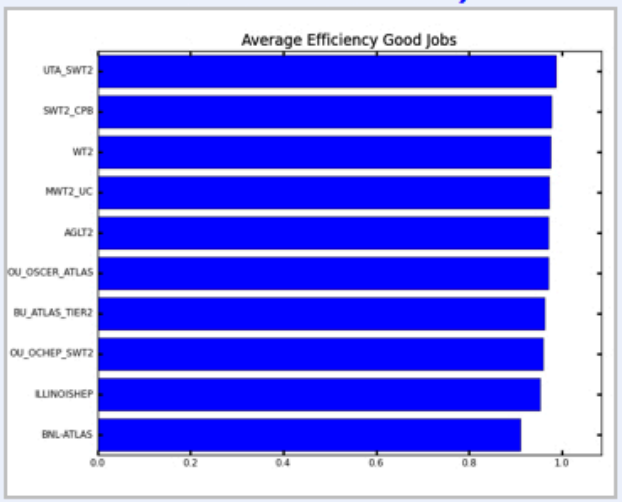
Efficiency Good Jobs (links to data in different formats)



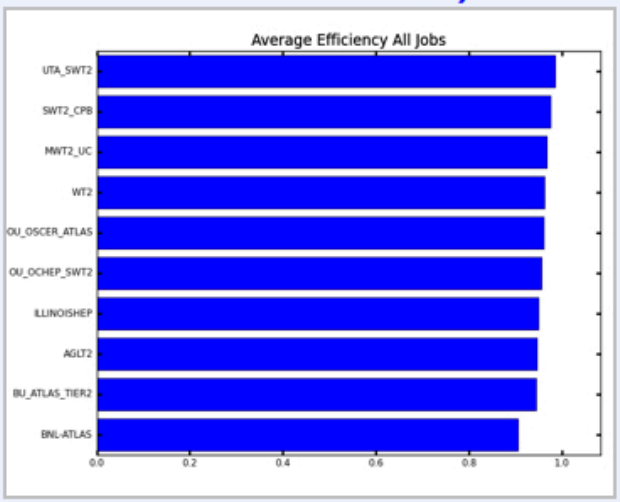

Efficiency All Jobs (links to data in different formats)




Average Efficiency Good Jobs (links to data in different formats)



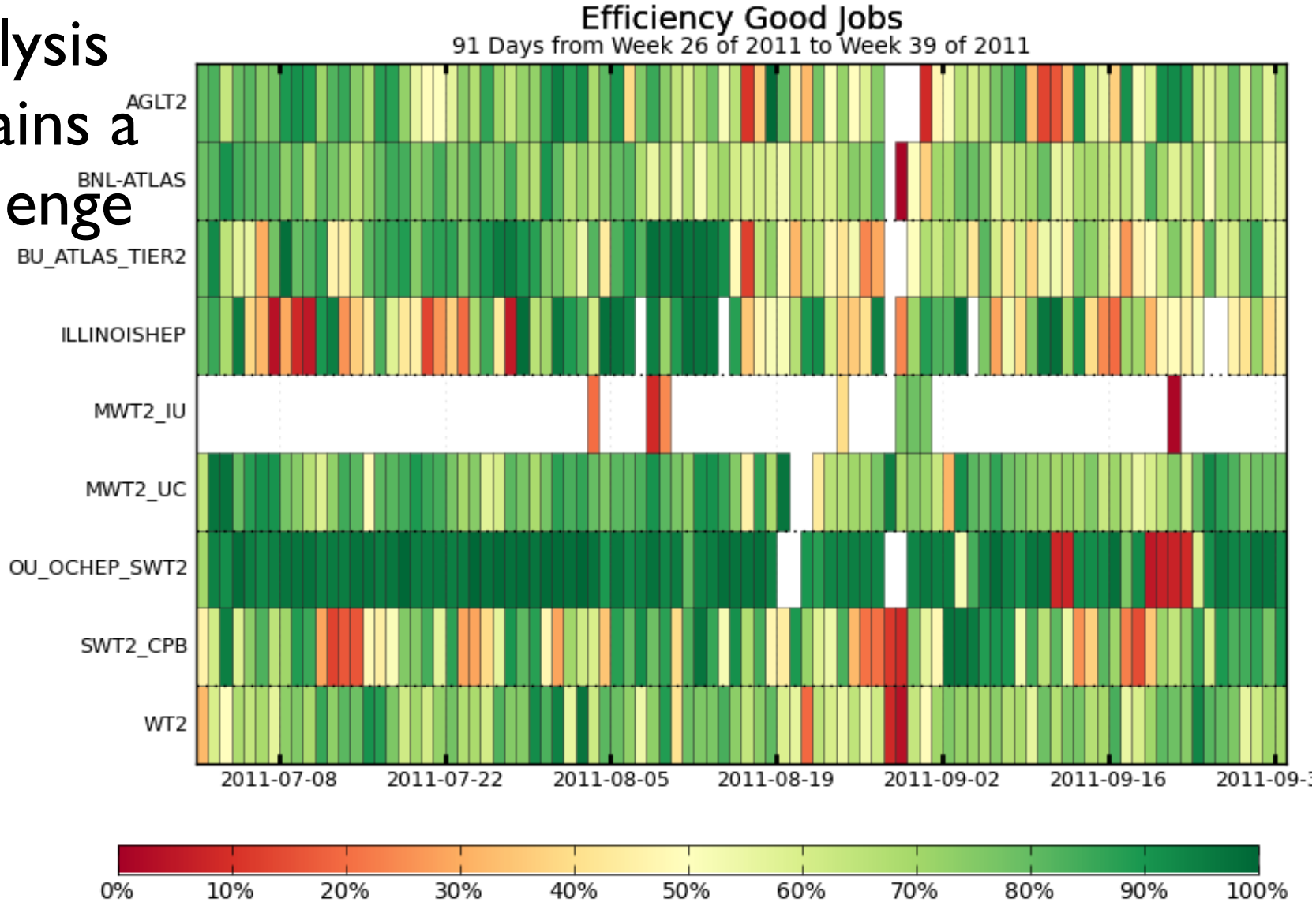

Average Efficiency All Jobs (links to data in different formats)




efficiencies are 95-98%

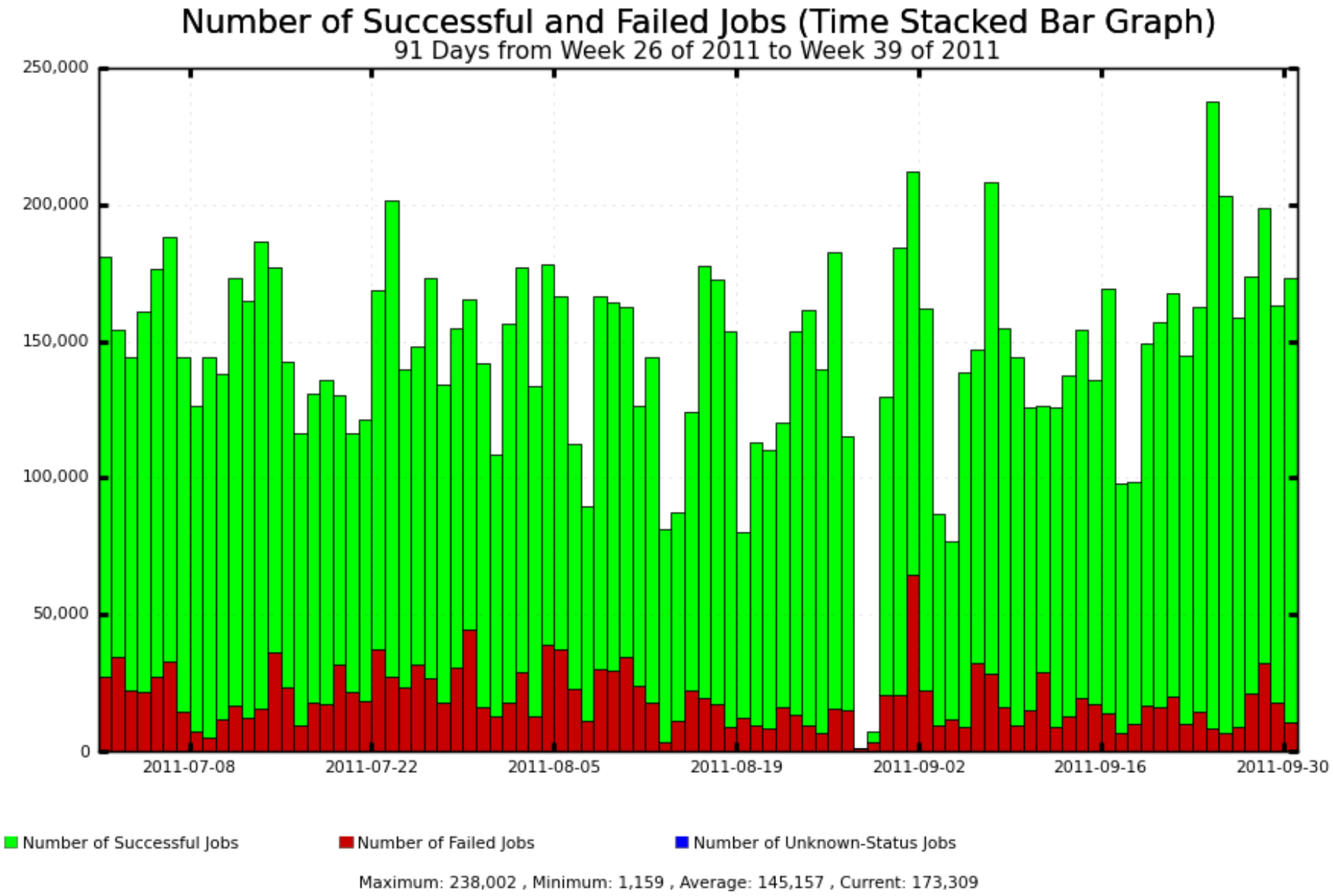
# US ATLAS - last quarter

analysis remains a challenge

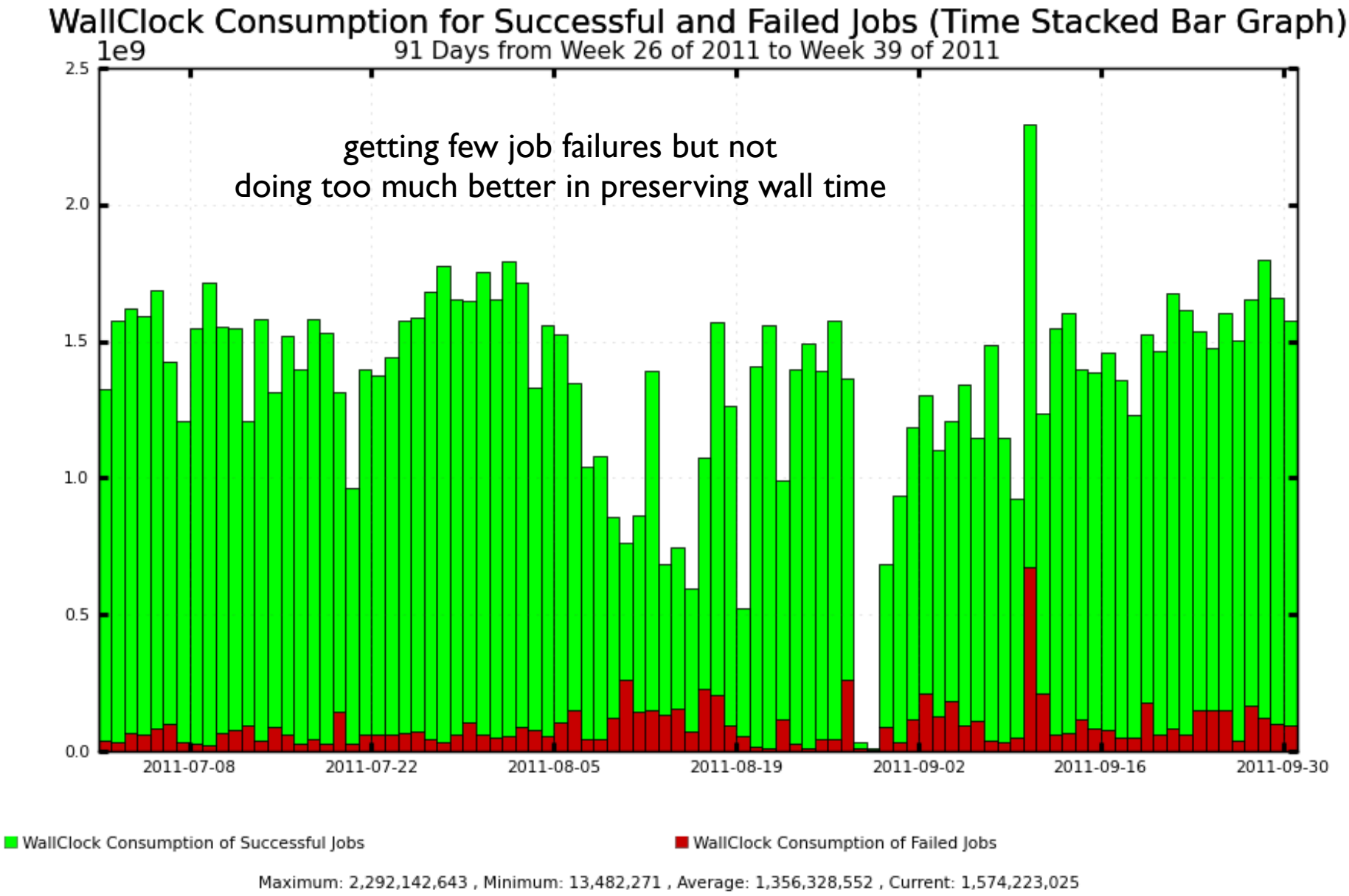



avg site eff is ~ 85% for analyisis jobs

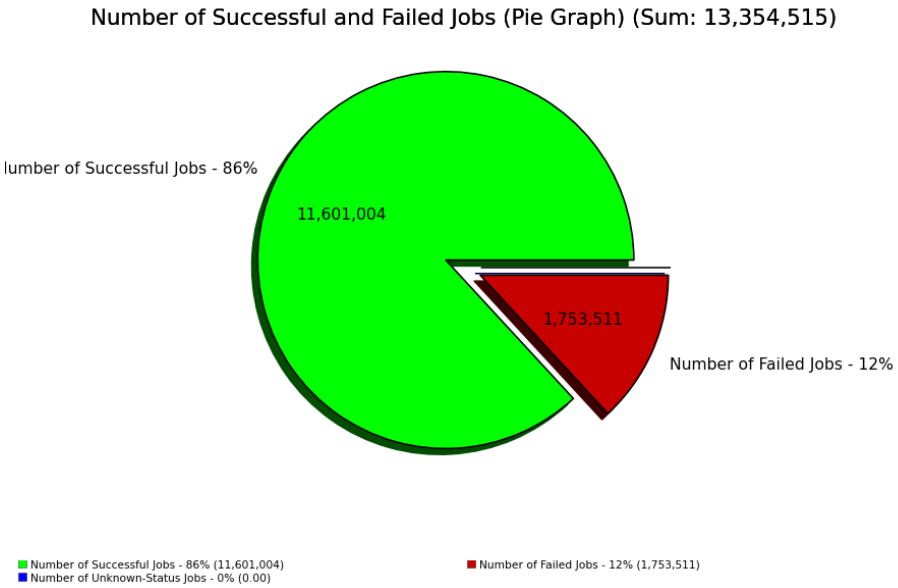
# US ATLAS - last quarter



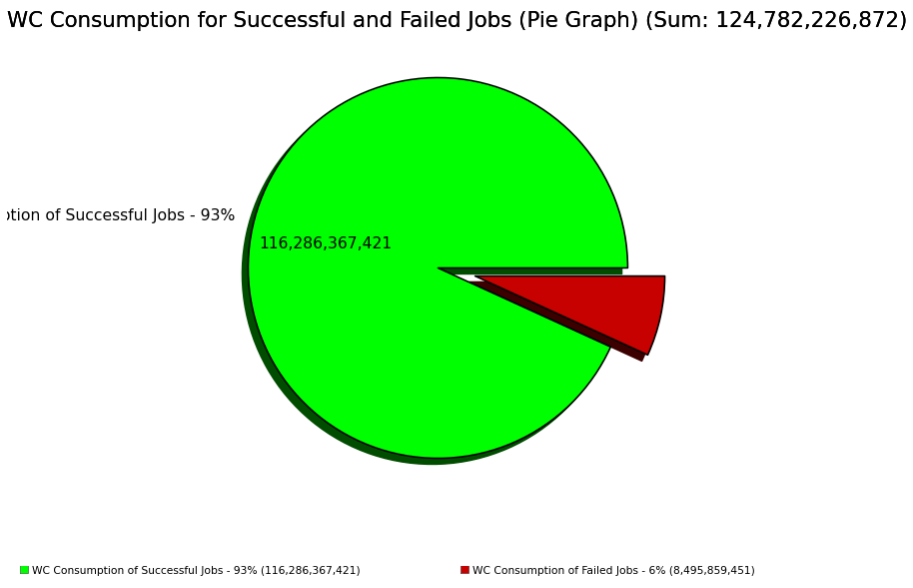
# US ATLAS - last quarter



# US ATLAS - last quarter

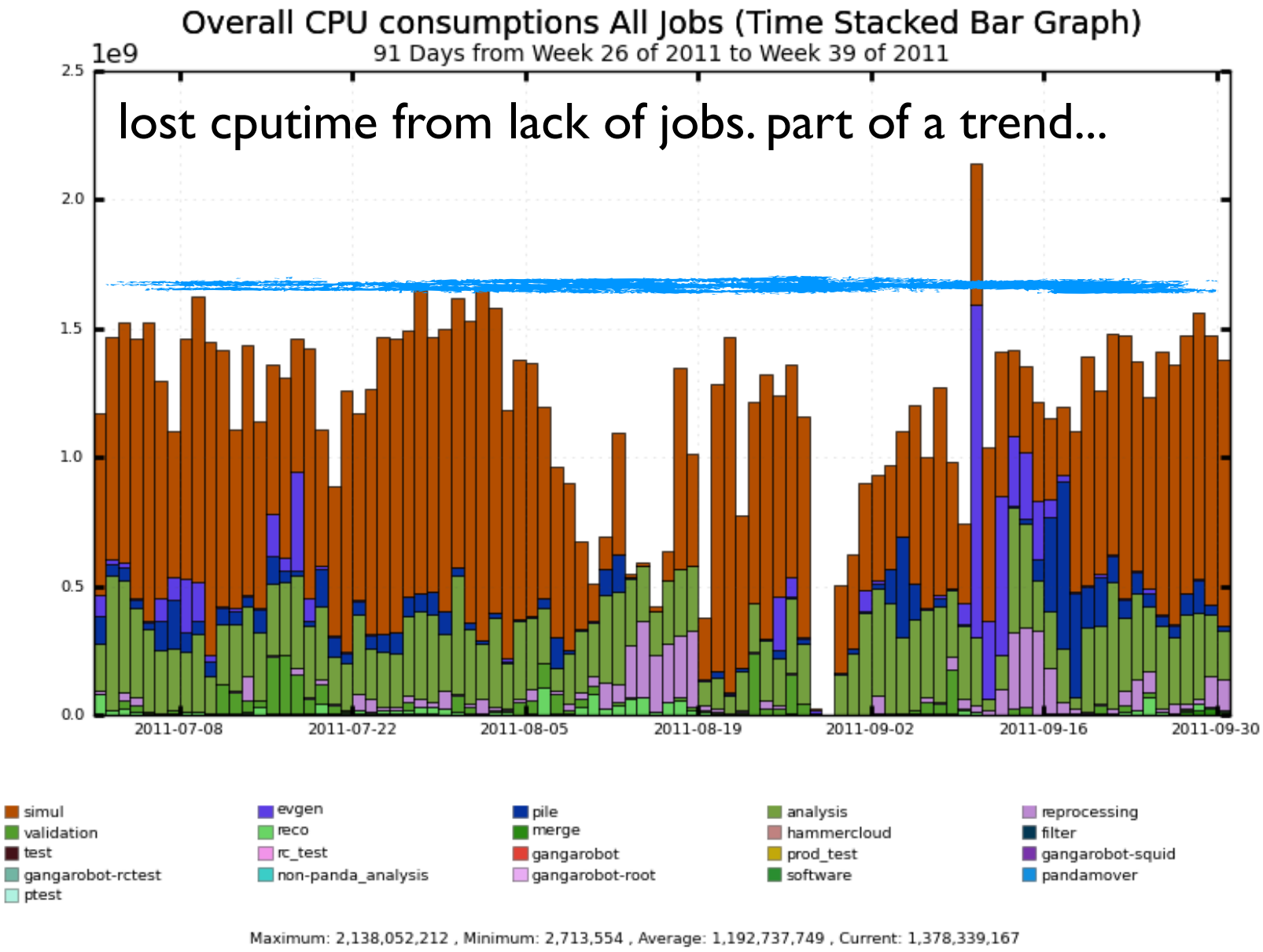



# jobs

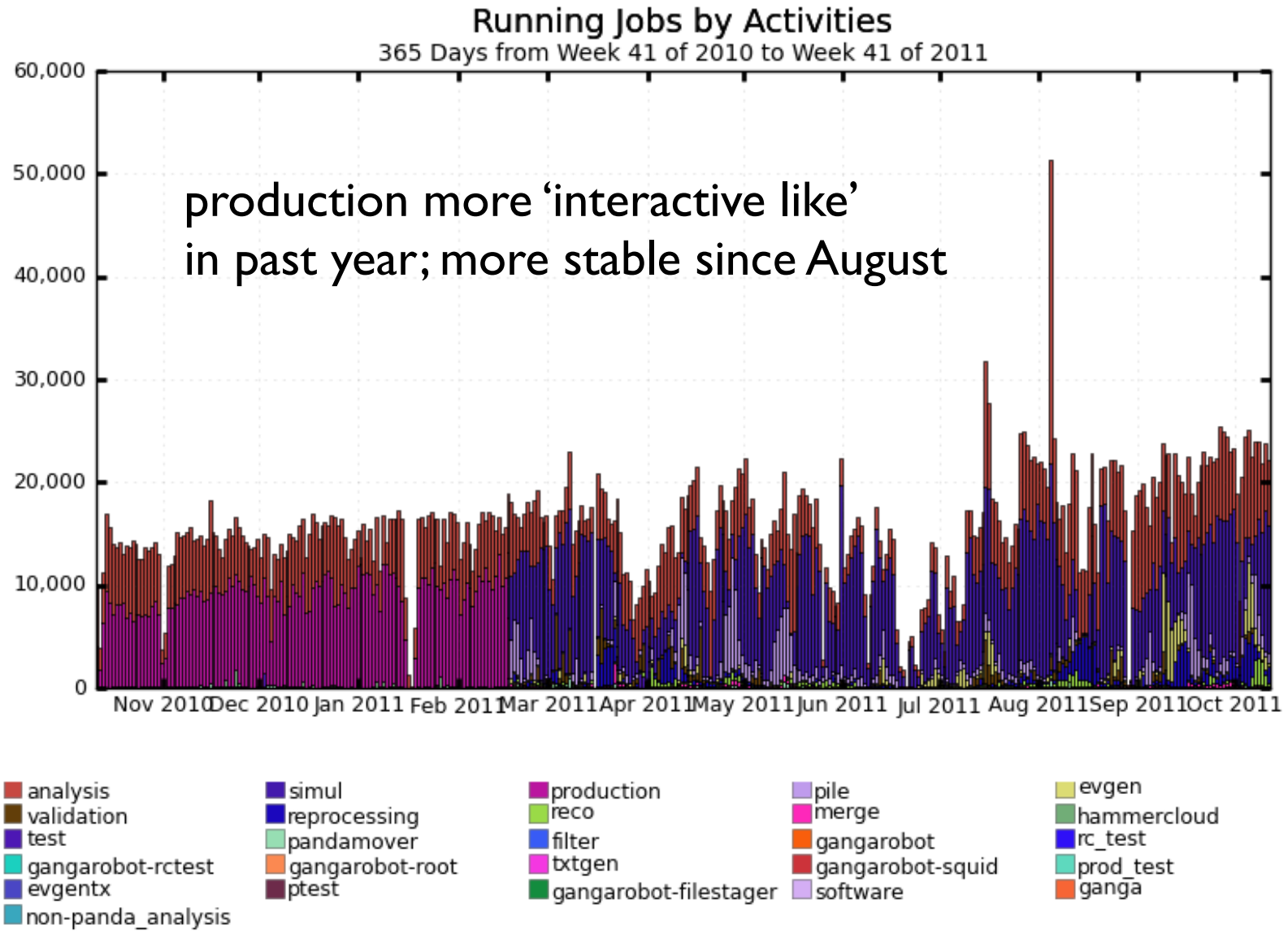



wall time loss

# US ATLAS - last quarter - by task

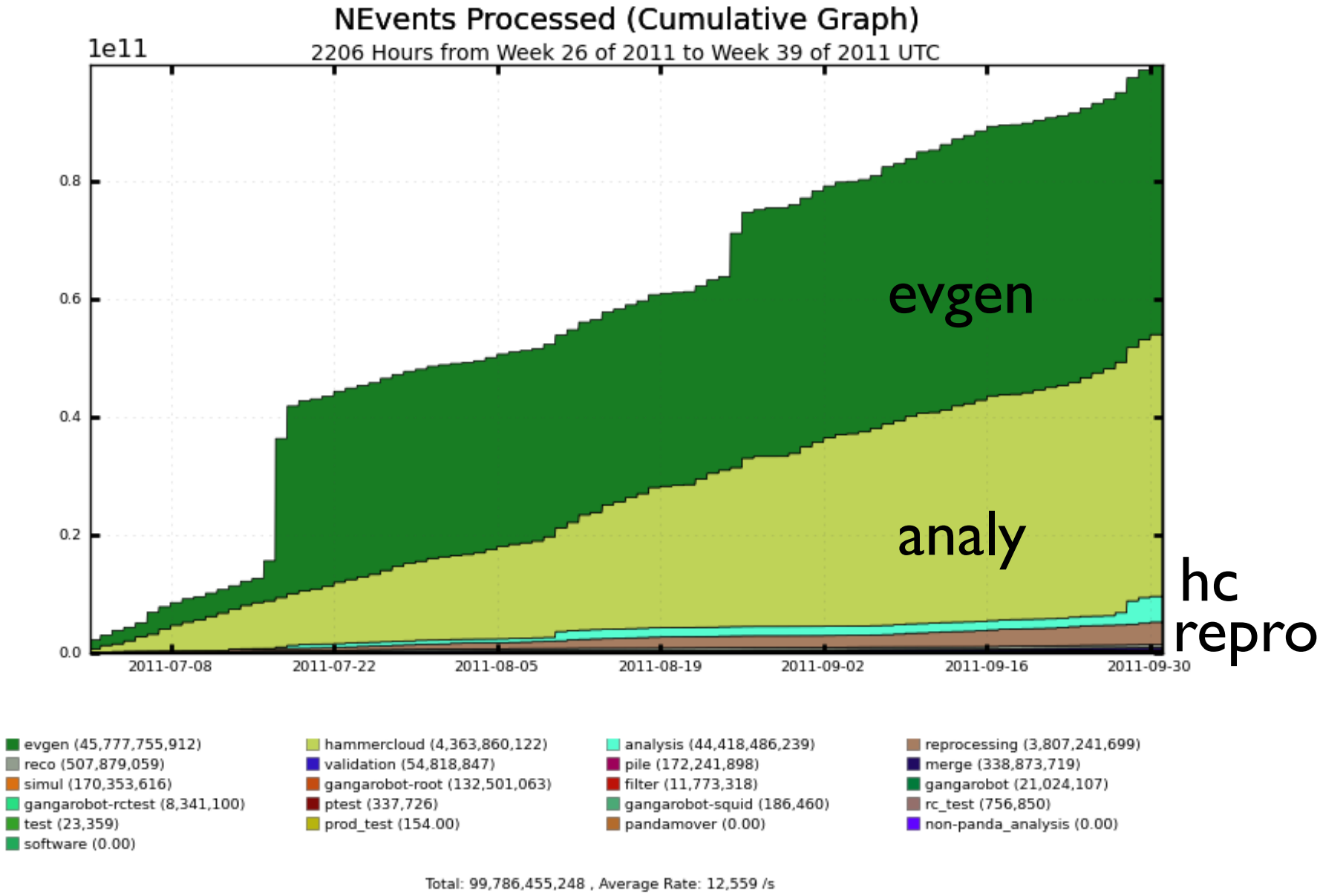


# US ATLAS - year - by task



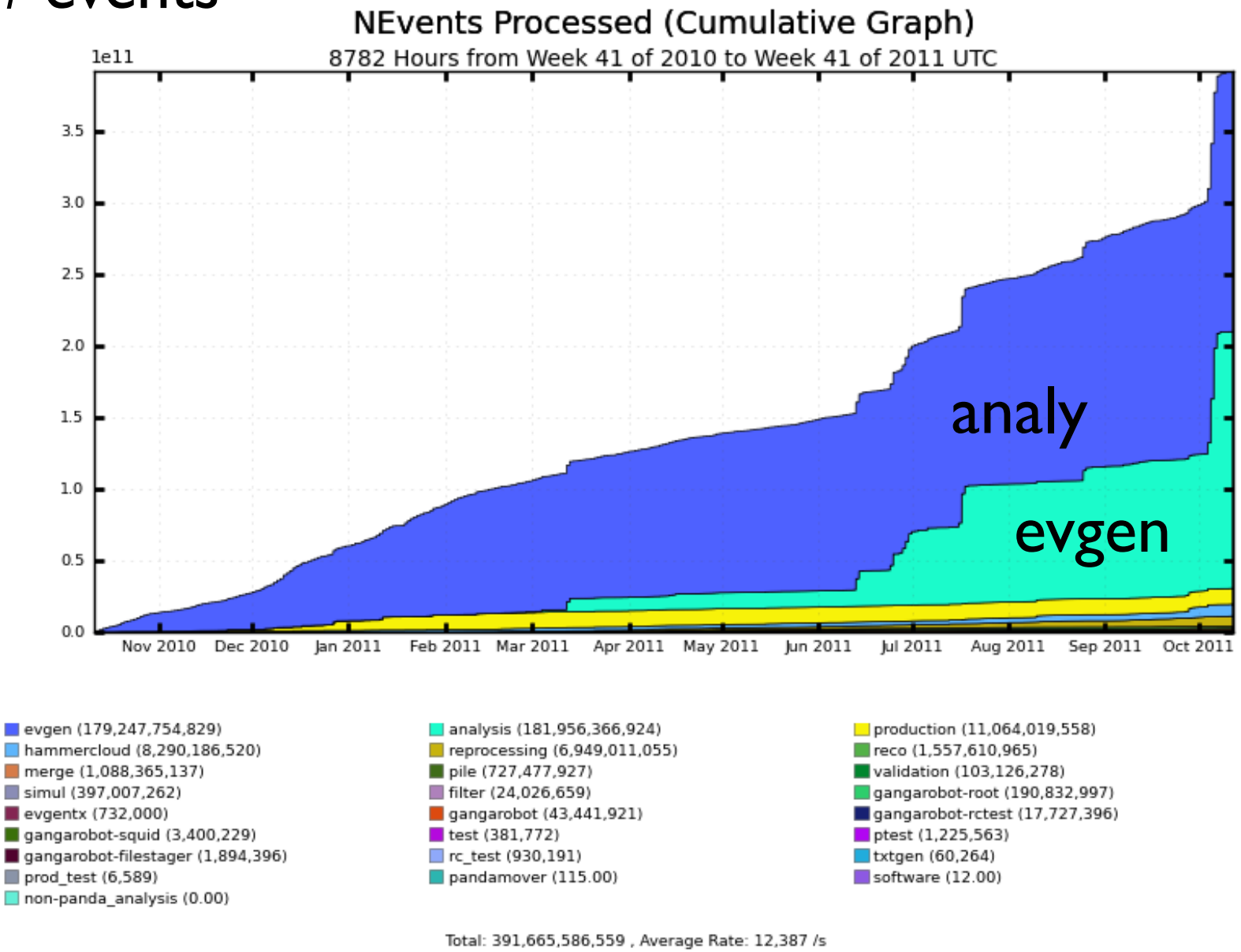
# US ATLAS - last quarter

## - # events



# US ATLAS - year

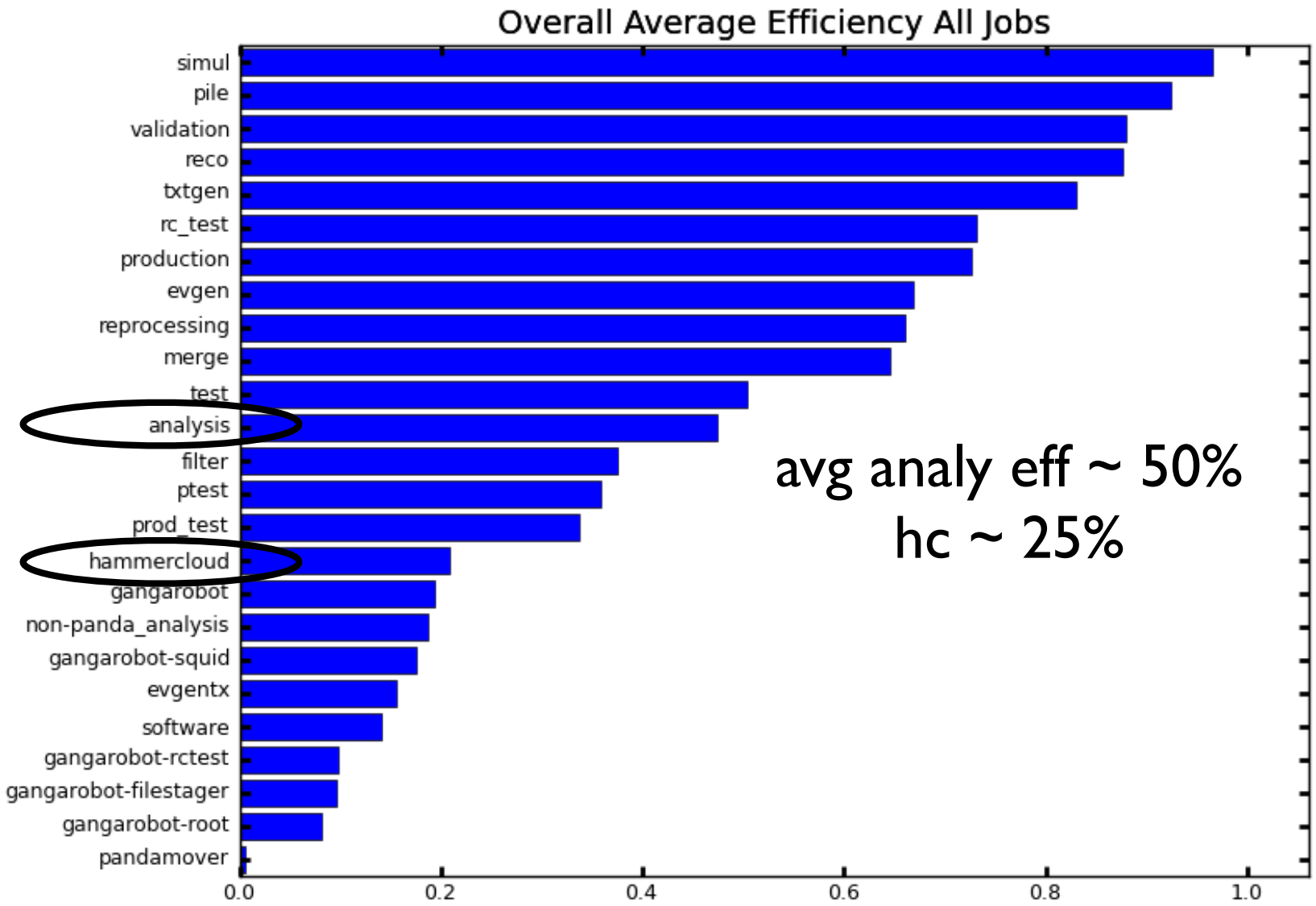
## # events




prod

...

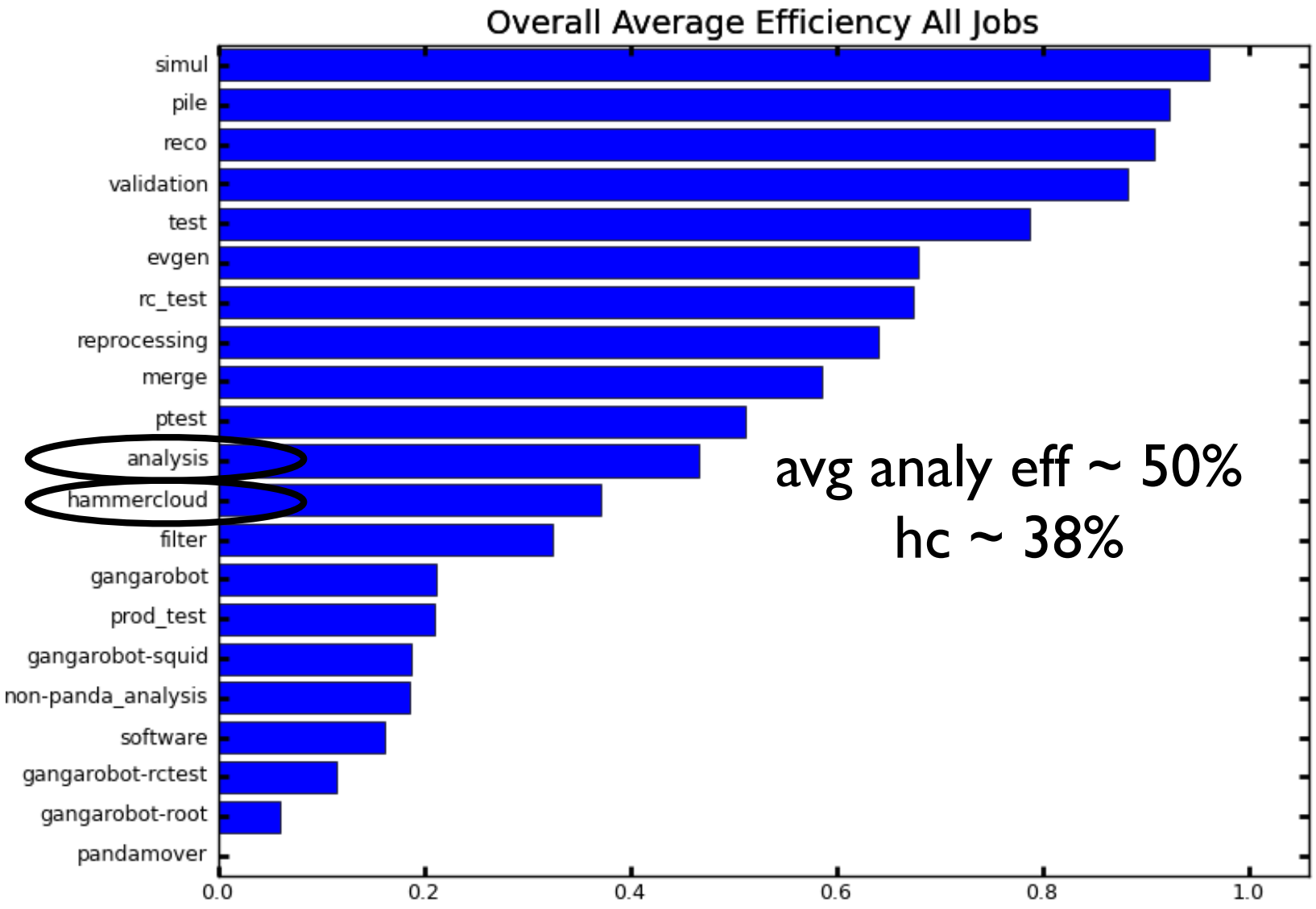
# US ATLAS - year



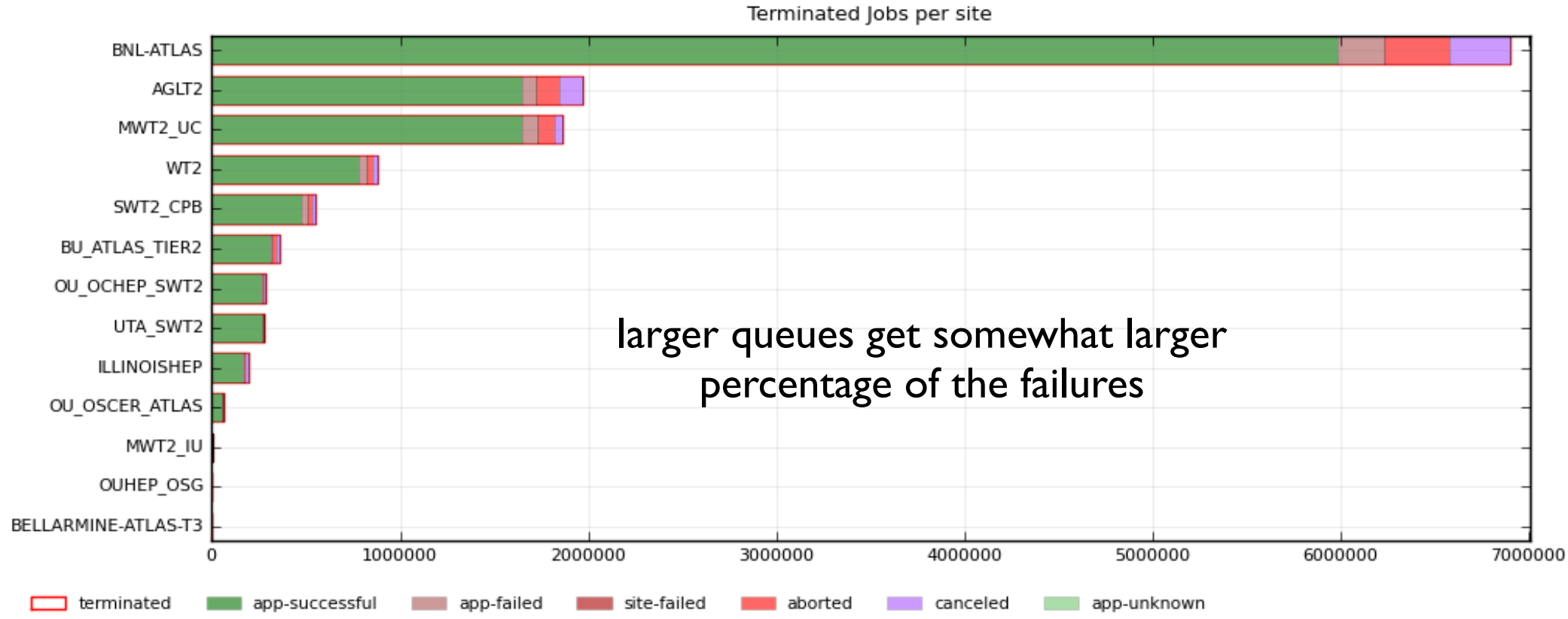

avg analy eff ~ 50%
hc ~ 25%

reflect's HC team's efforts to get more realistic jobs into HC

# US ATLAS - last quarter

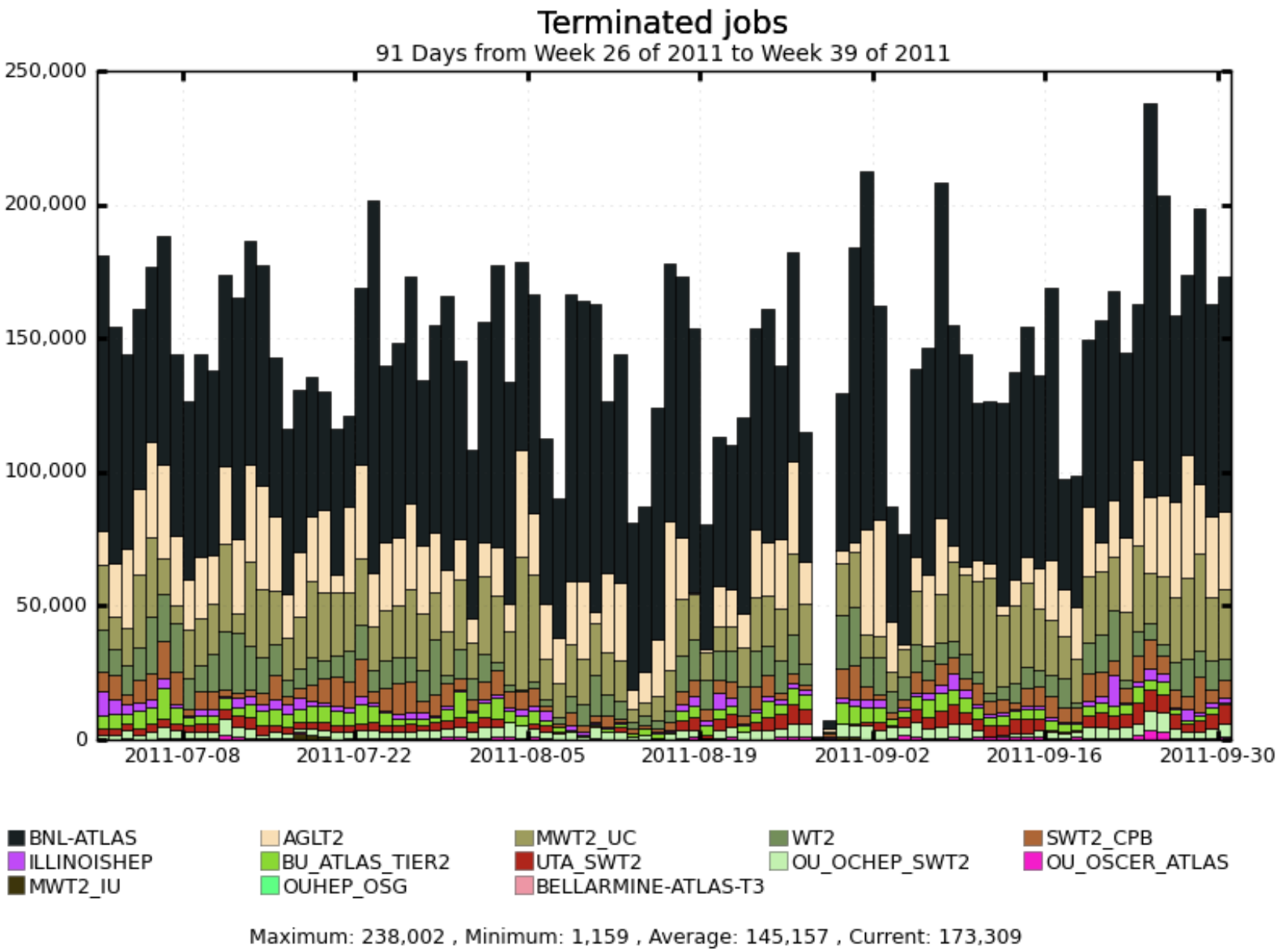


# US ATLAS - last quarter - # jobs



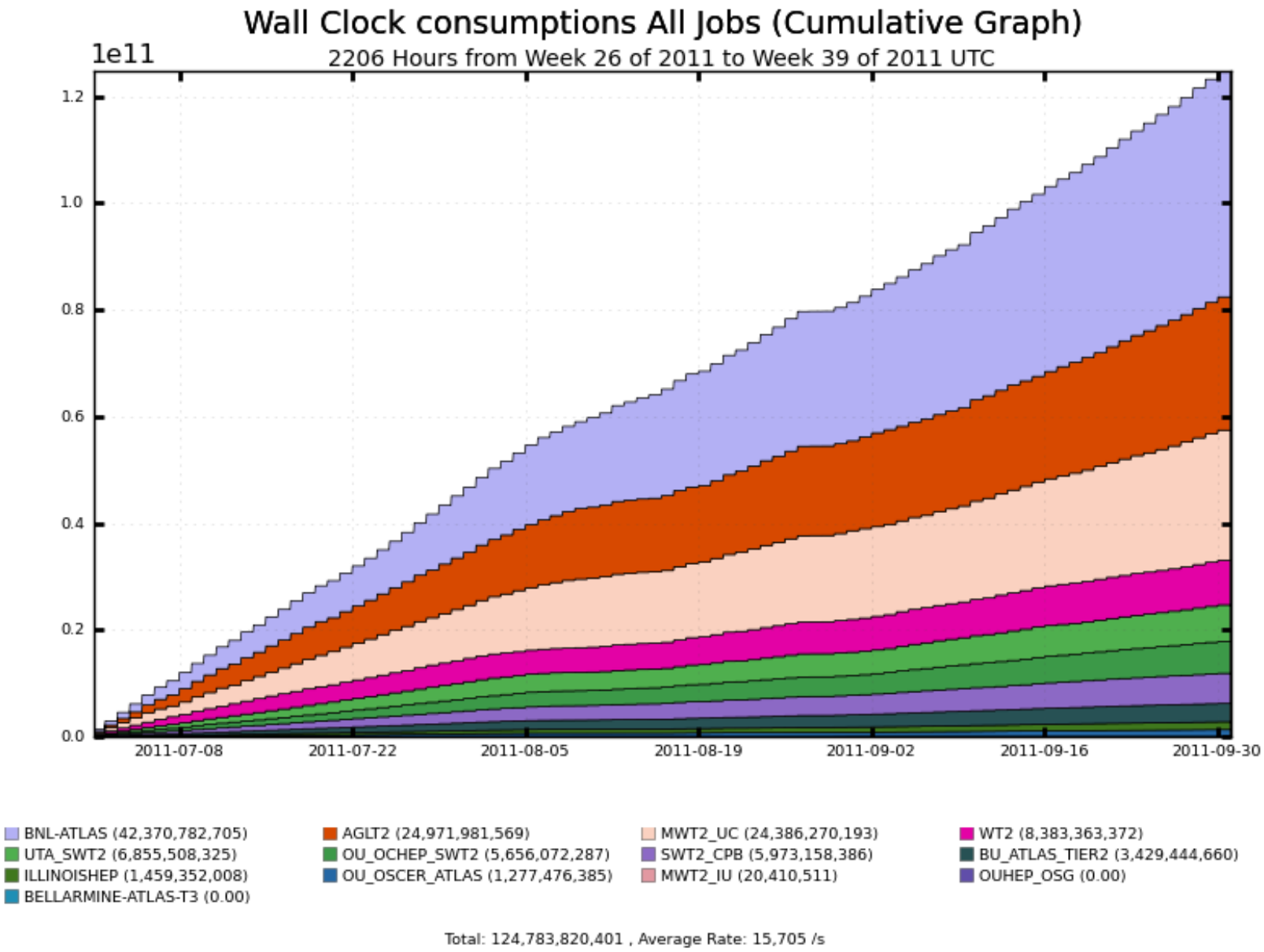

larger queues get somewhat larger percentage of the failures

# US ATLAS - last quarter - by site - by day



# Comparing T1 T2 job distro

# US ATLAS - last quarter



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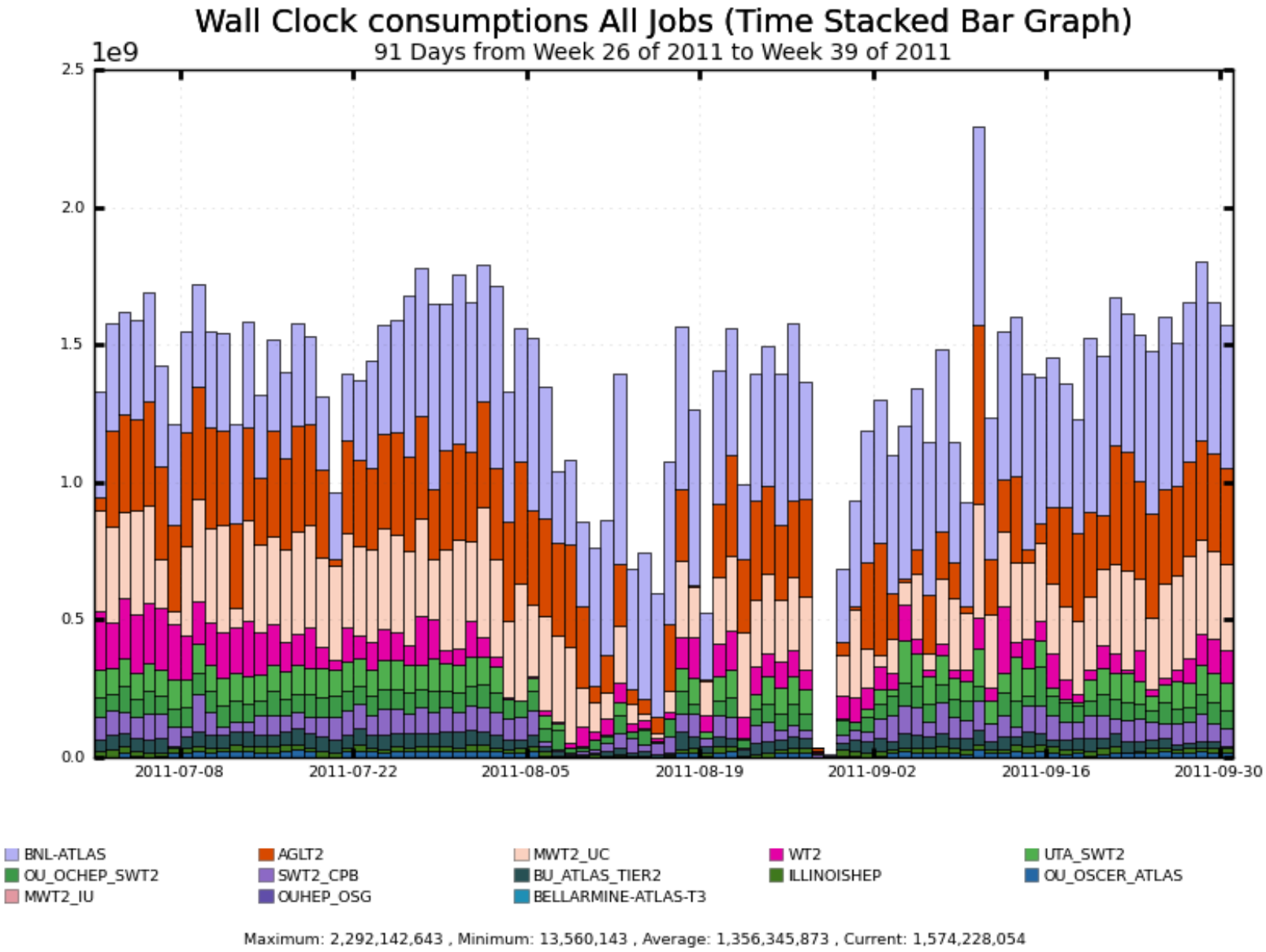

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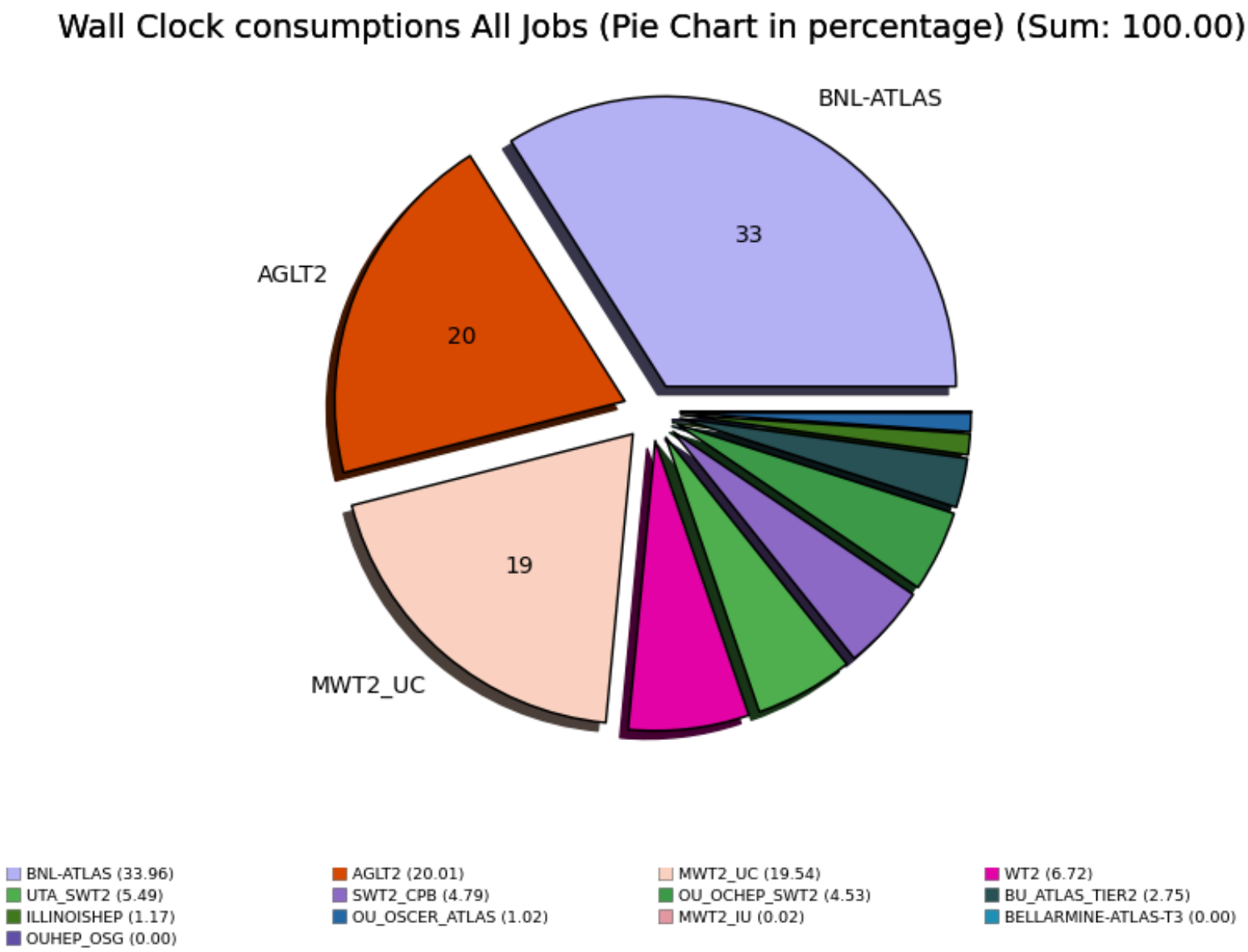
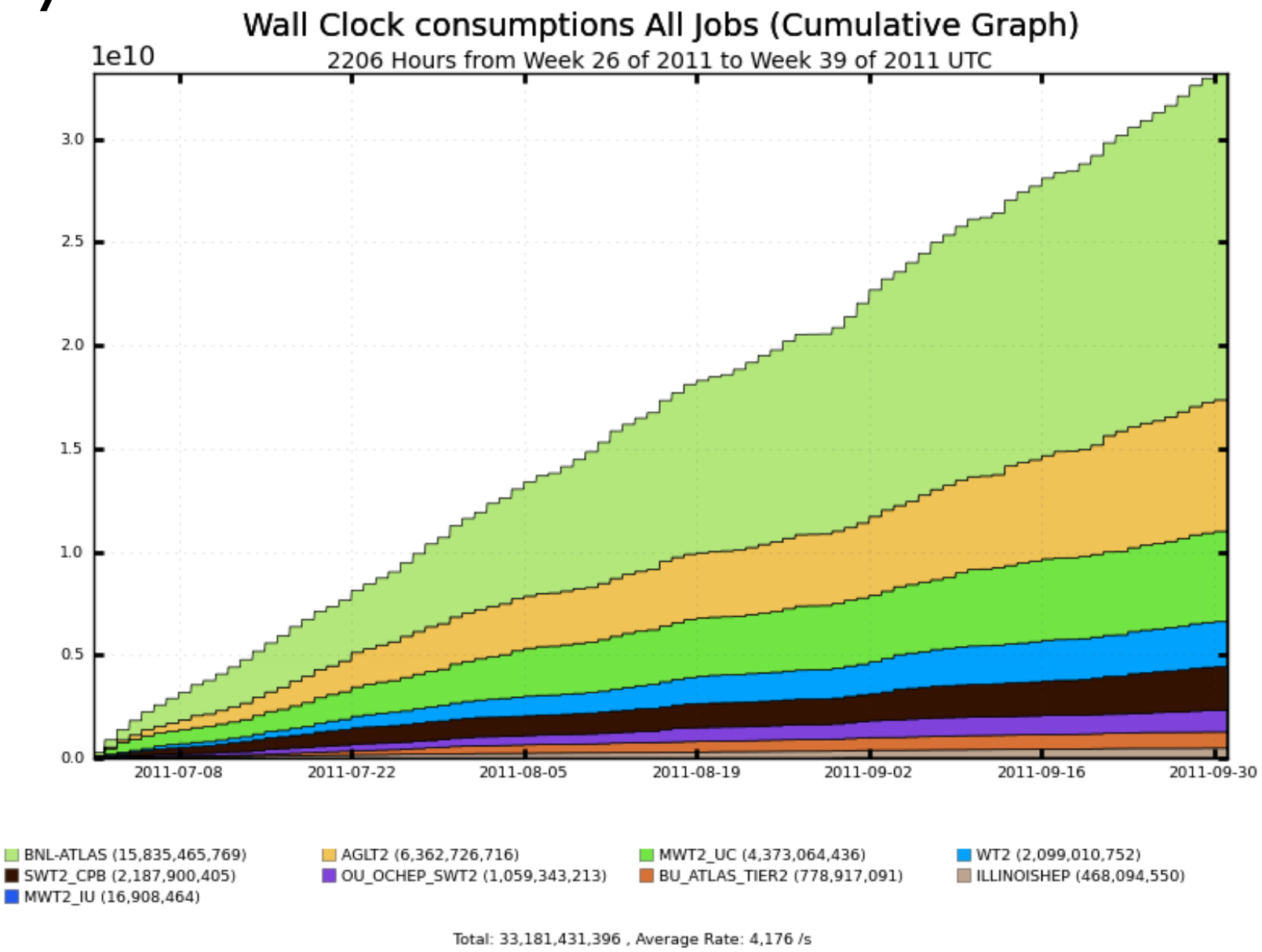
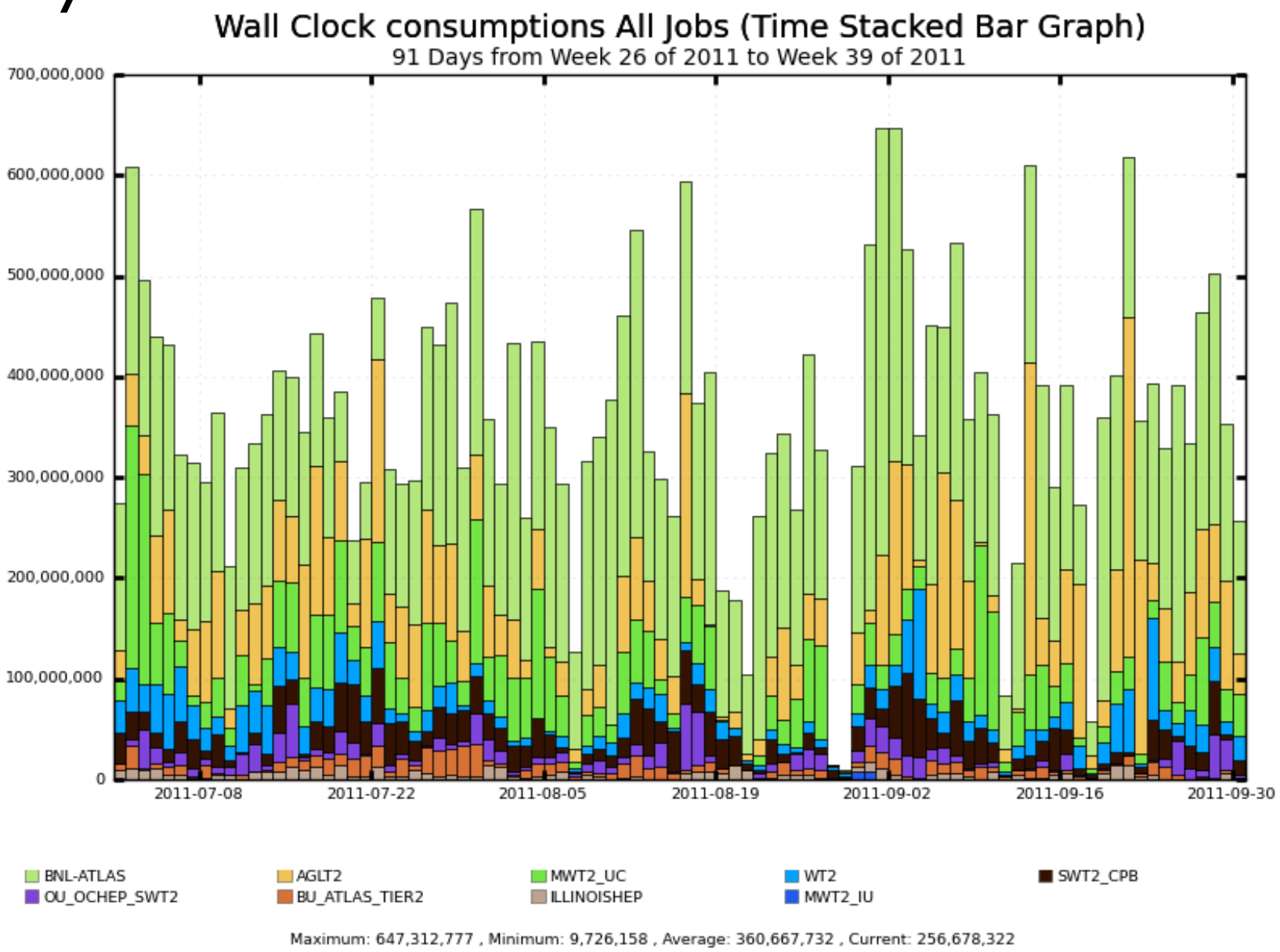


# US ATLAS - last quarter analysis

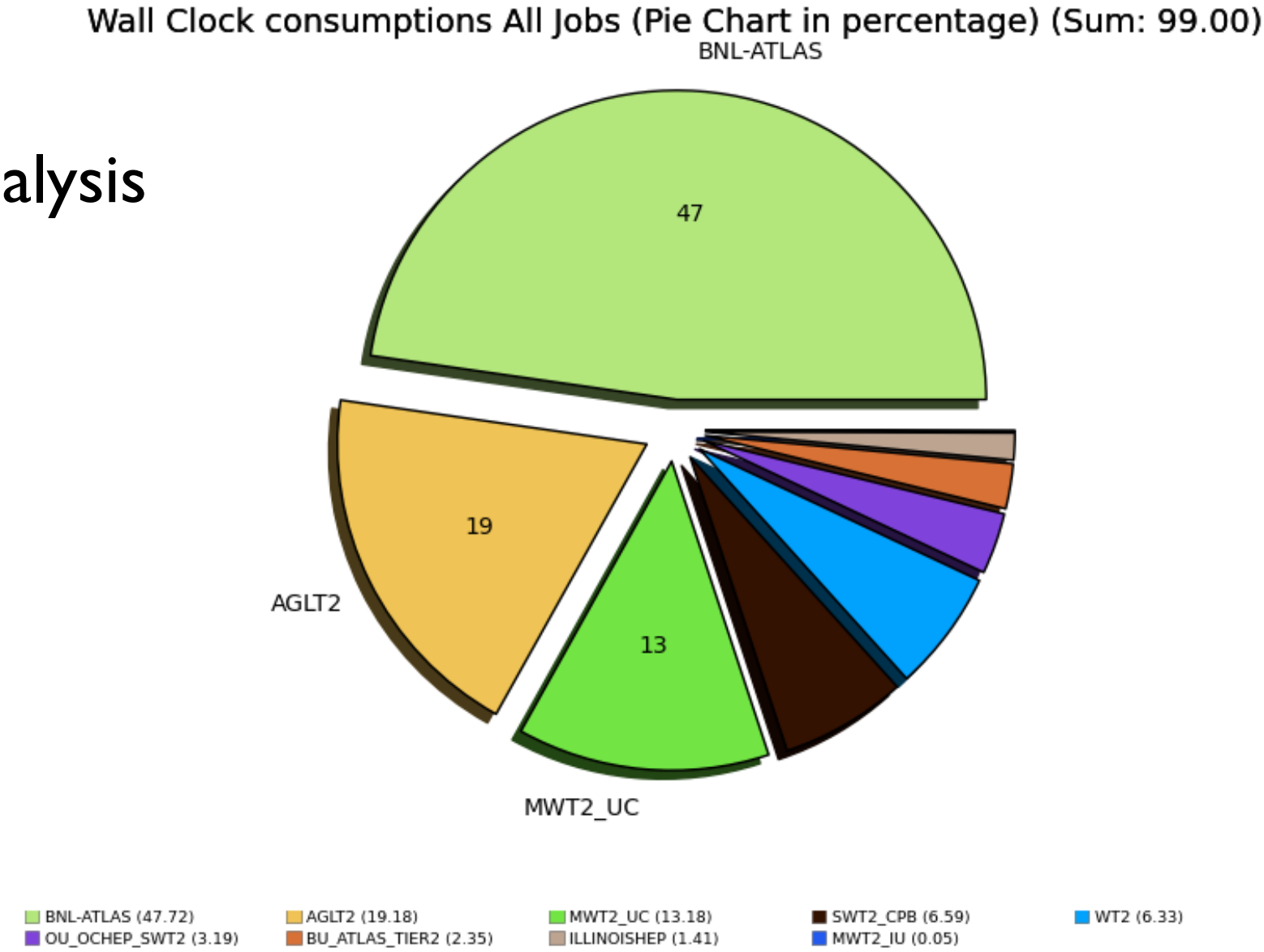


# US ATLAS - last quarter analysis



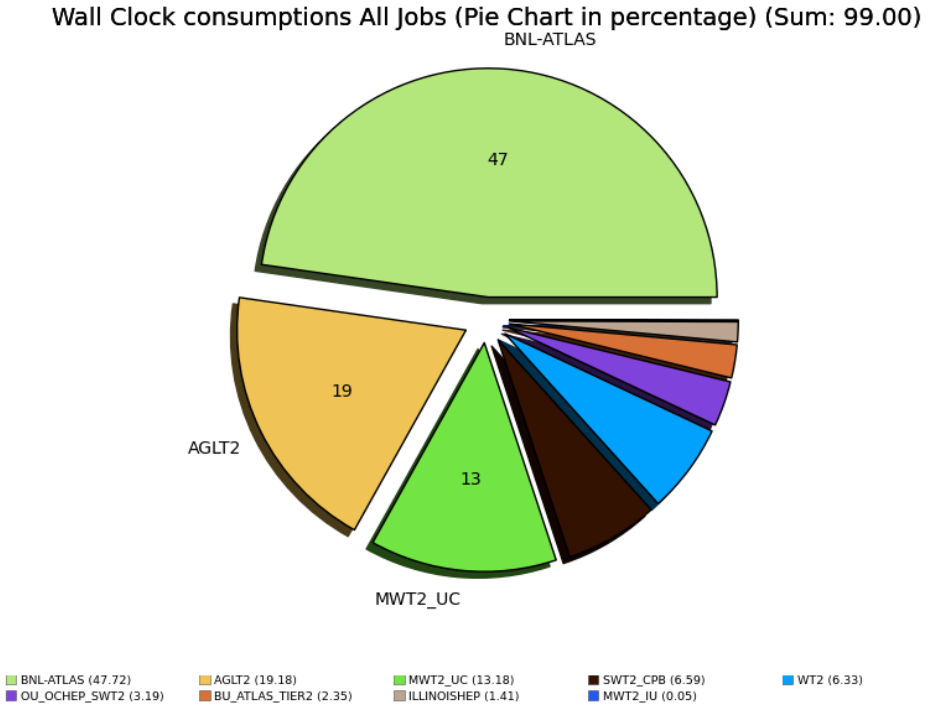
# US ATLAS - last quarter

analysis

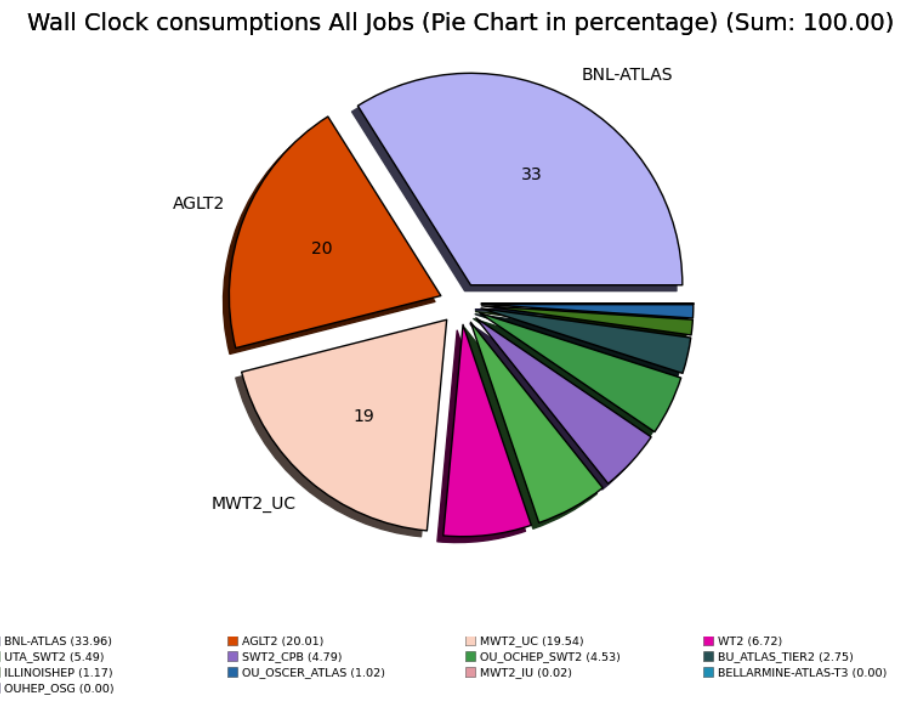


# US ATLAS - last quarter

## analysis



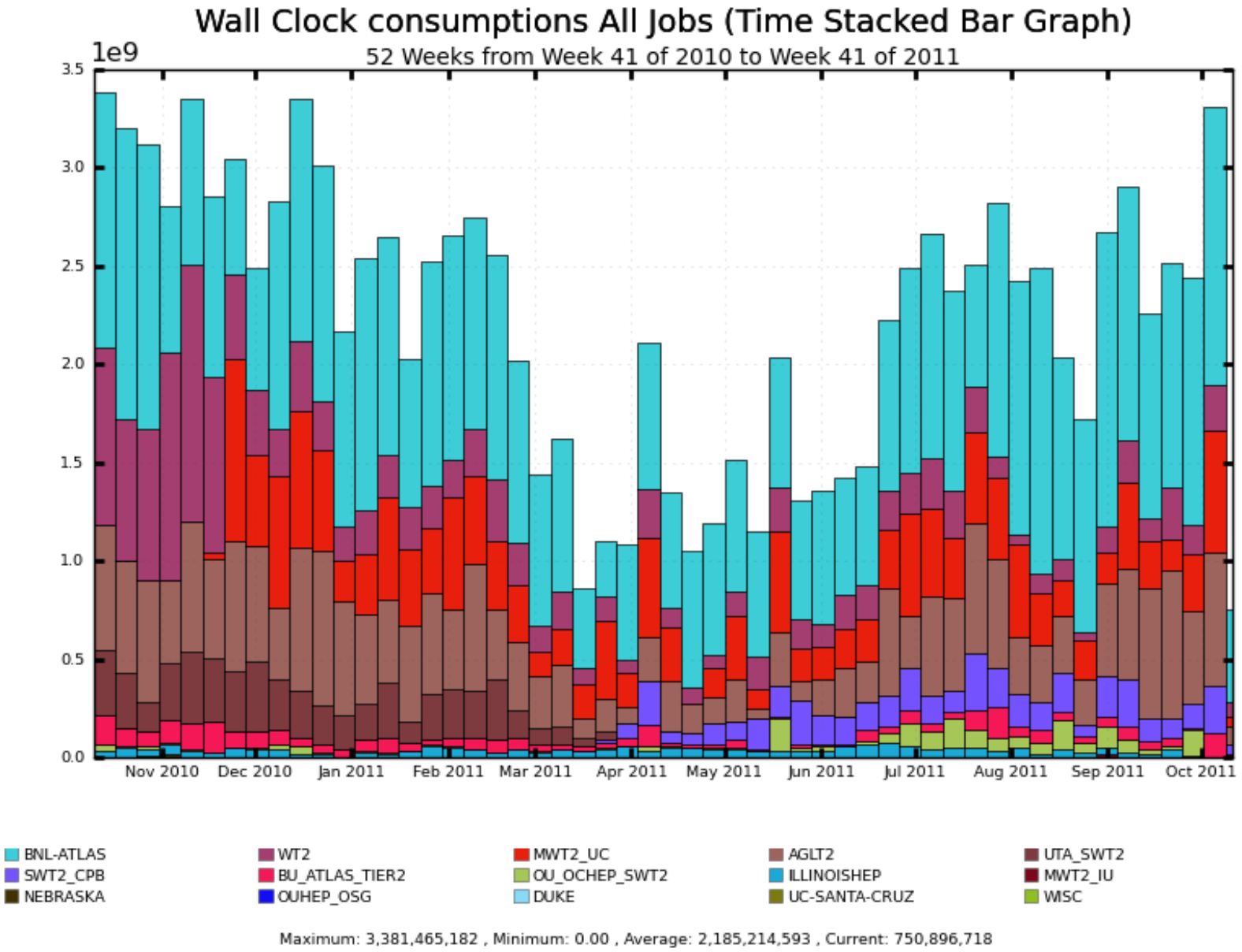

## all



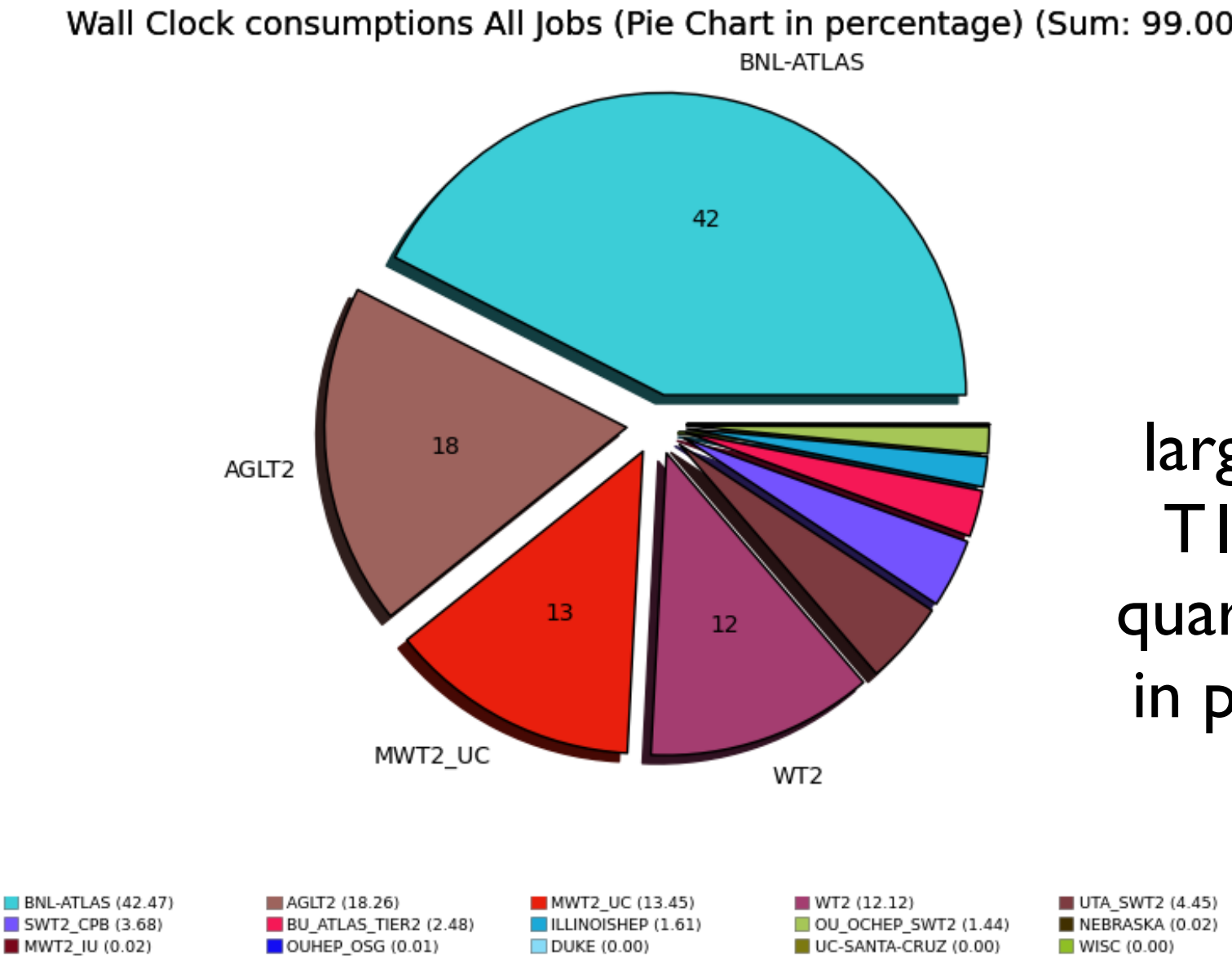

More analysis share at T1

AGLT2 alone seems to maintain a consisetnt analysis:prod fraction

# US ATLAS analysis - year



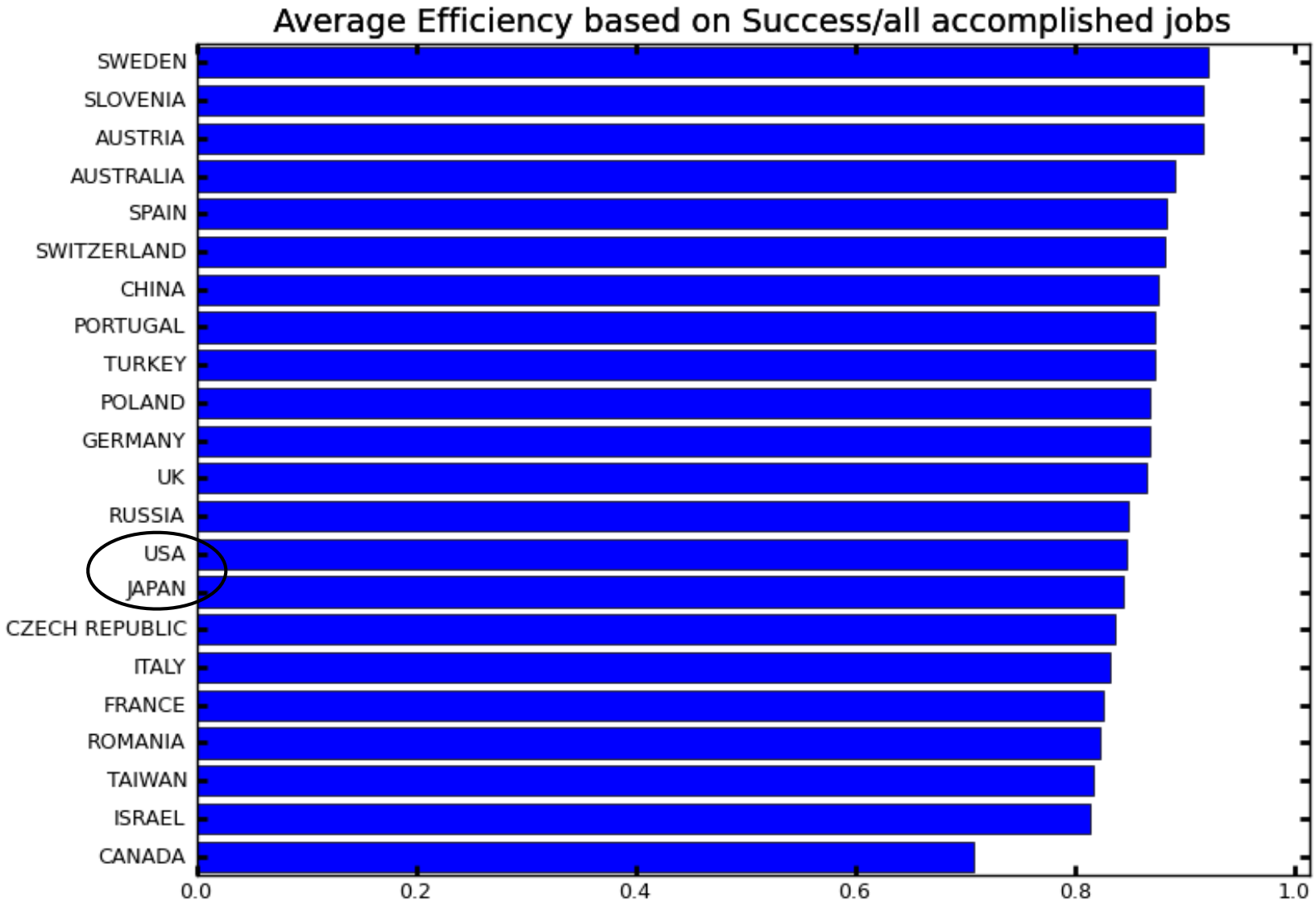
# US ATLAS analysis - year



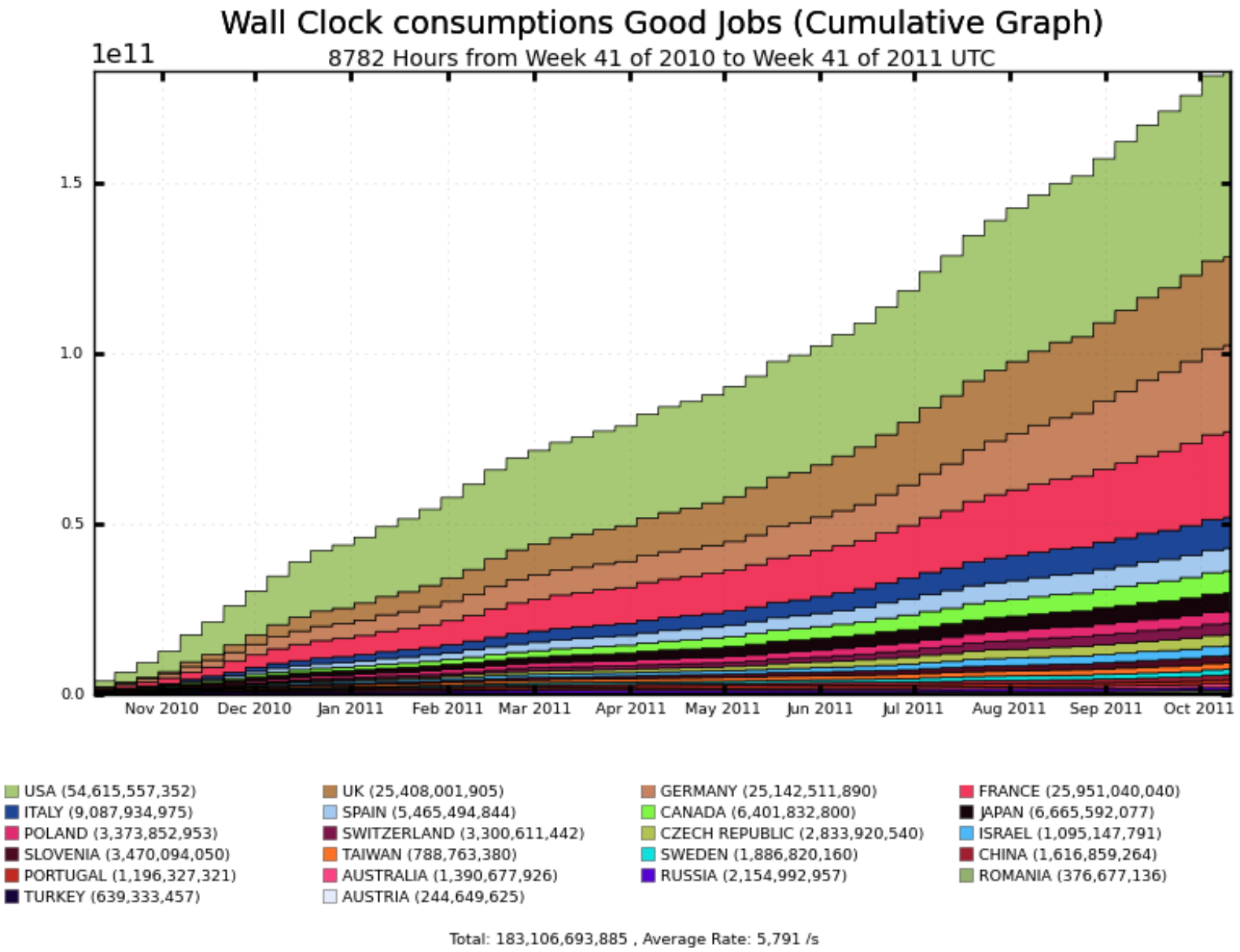

larger % at T1 in last quarter than in past year

# Comparing T2 clouds

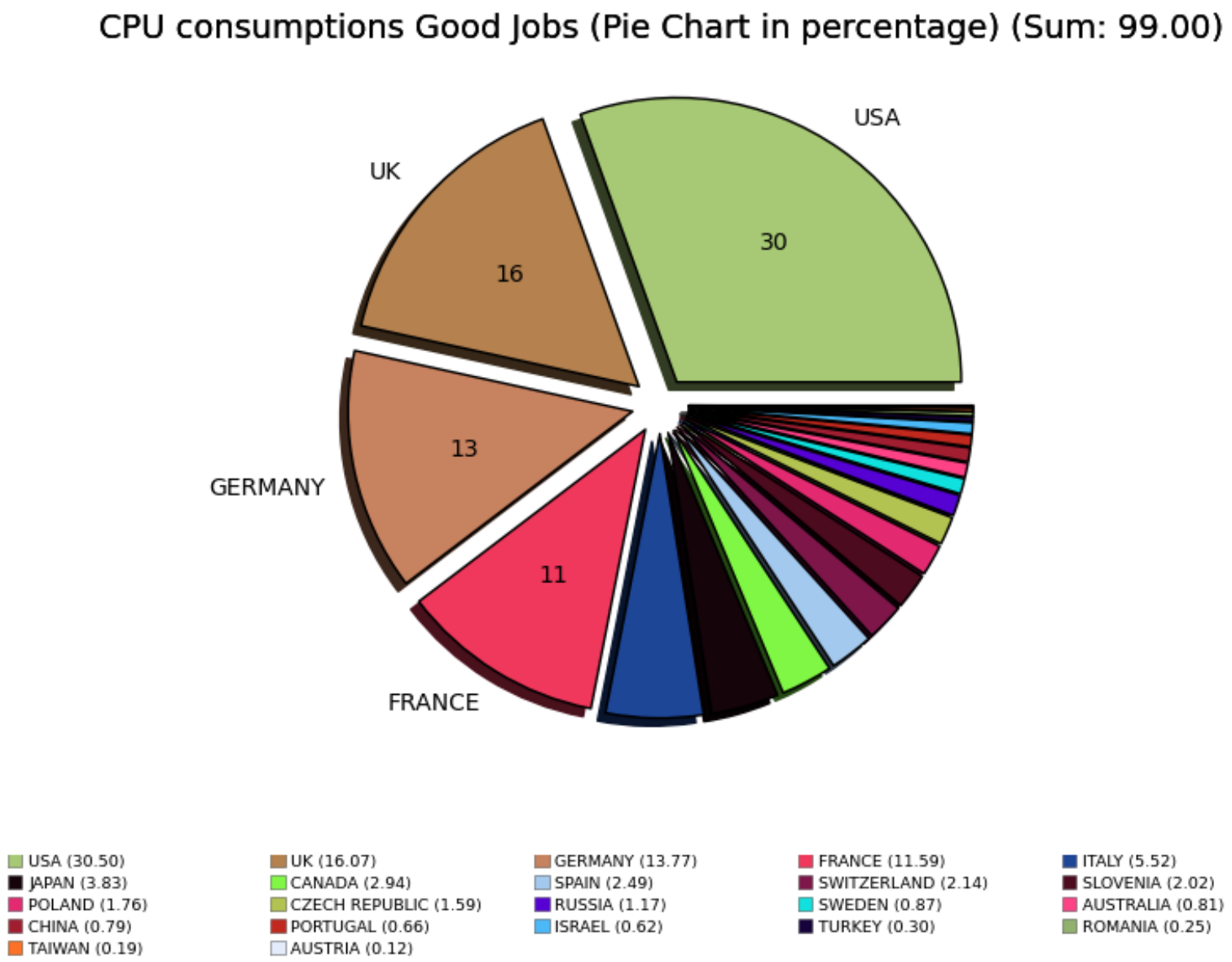
# analysis at all Tier 2's - year



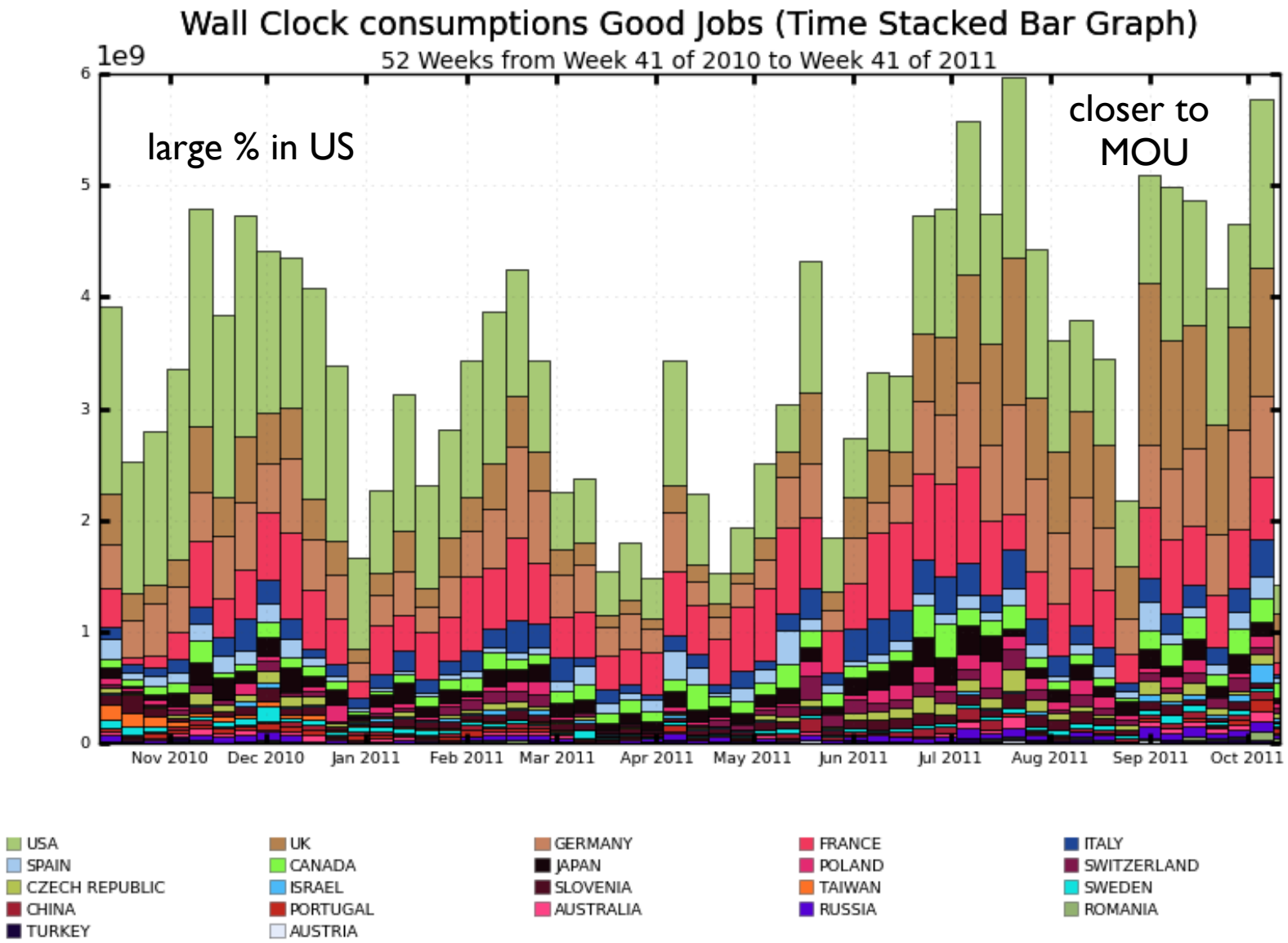
# analysis at Tier 2 - year



# analysis at Tier 2 - year



# analysis at Tier 2 - year



# Summary

- See more even distribution of analy jobs among clouds in recent months
- However T1:T2 analysis split in US is about 47:53 (wall time) while for all jobs it is 33:67
  - increased in last quarter
- US T2's analysis success rate avg (~85%) compared to other clouds though contributes 30% of CPU time
- Improvement in HC resembling analysis in terms of efficiency