

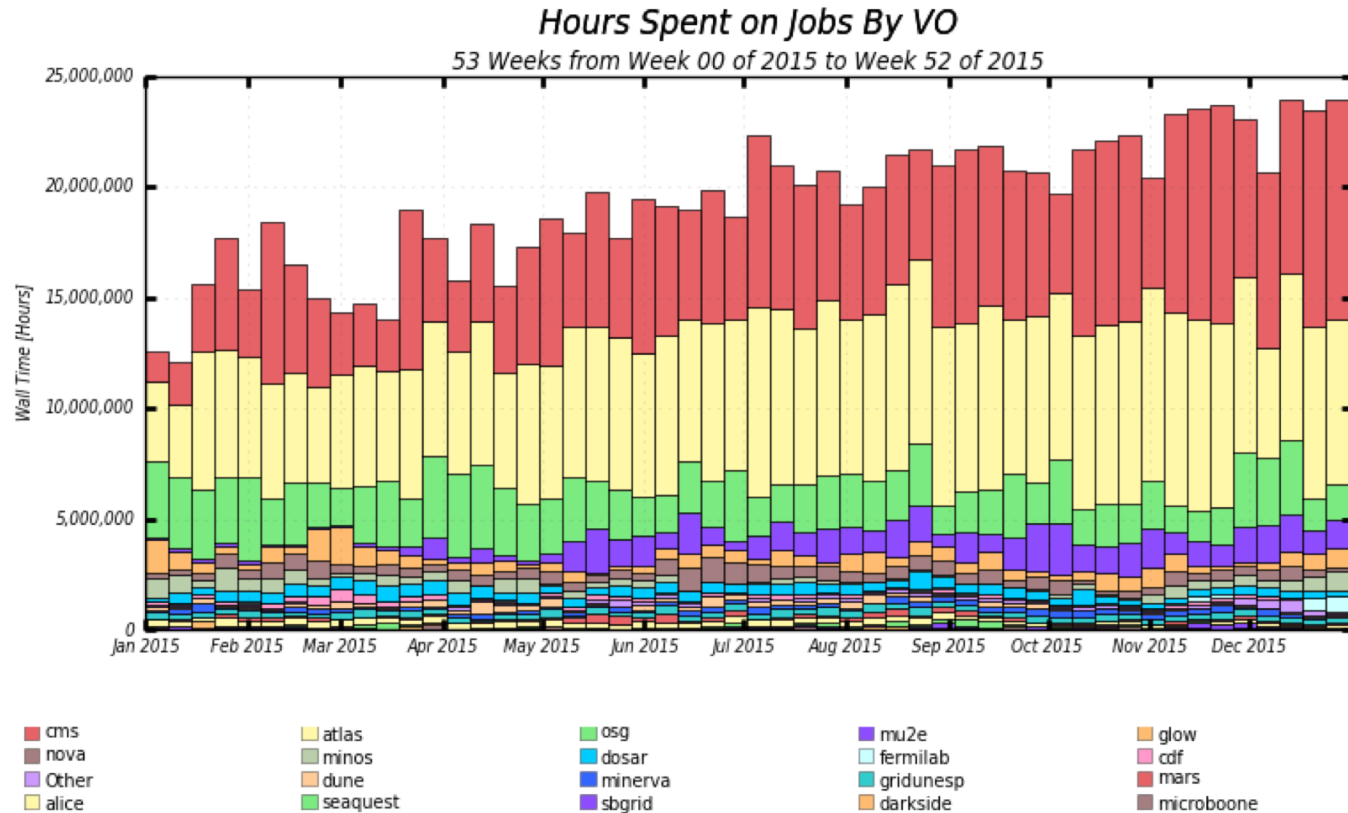
OSG Production Support

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Fermilab

OSG Area Coordinators Call
February 3, 2016



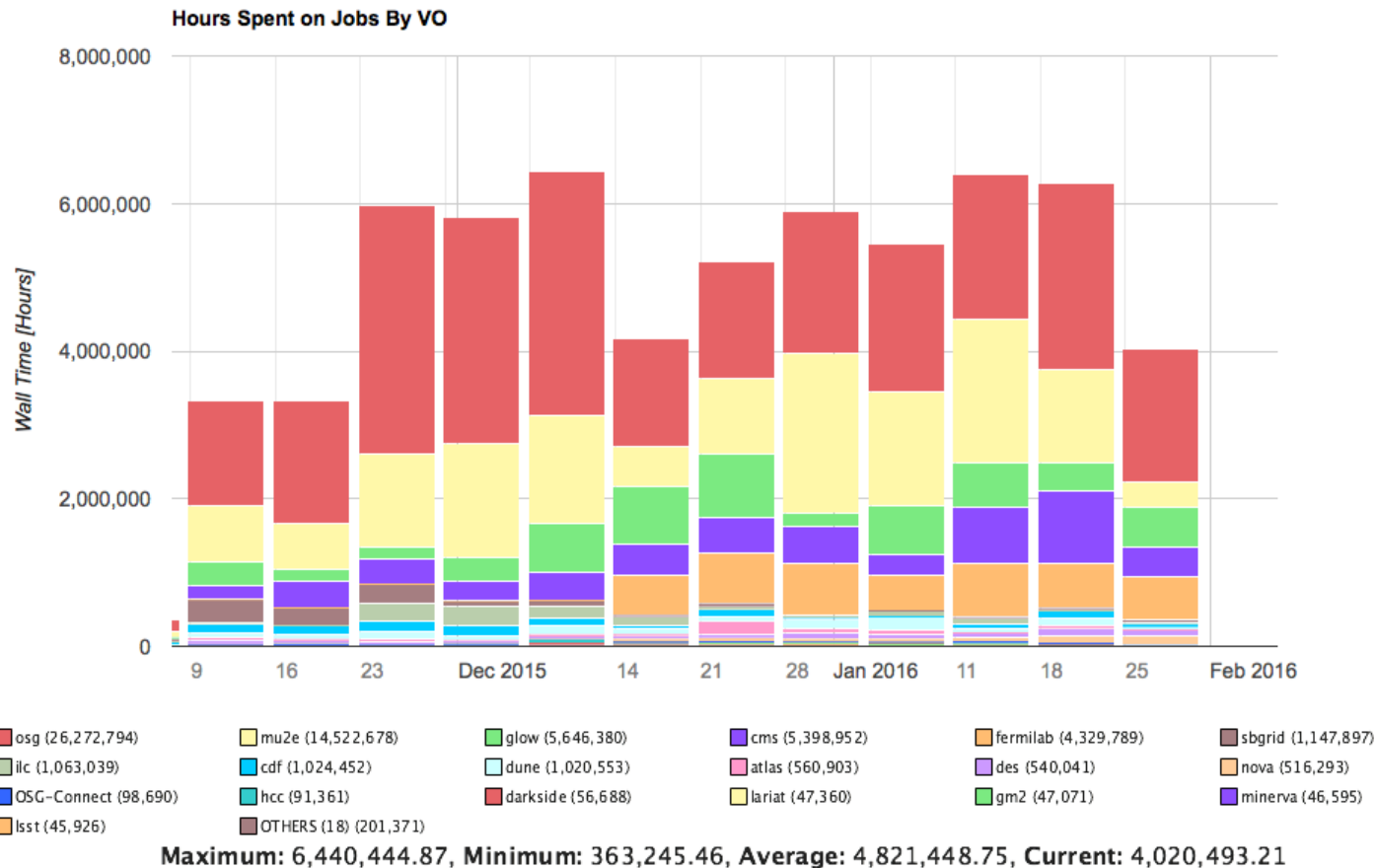
2015 and Opportunistic Computing



- First 1B hour year
 - 3 out of top 5 VOs were primarily opportunistic (one a new VO)
 - Those 3 alone over had **200M** opportunistic hours



Opportunistic: past 3 months

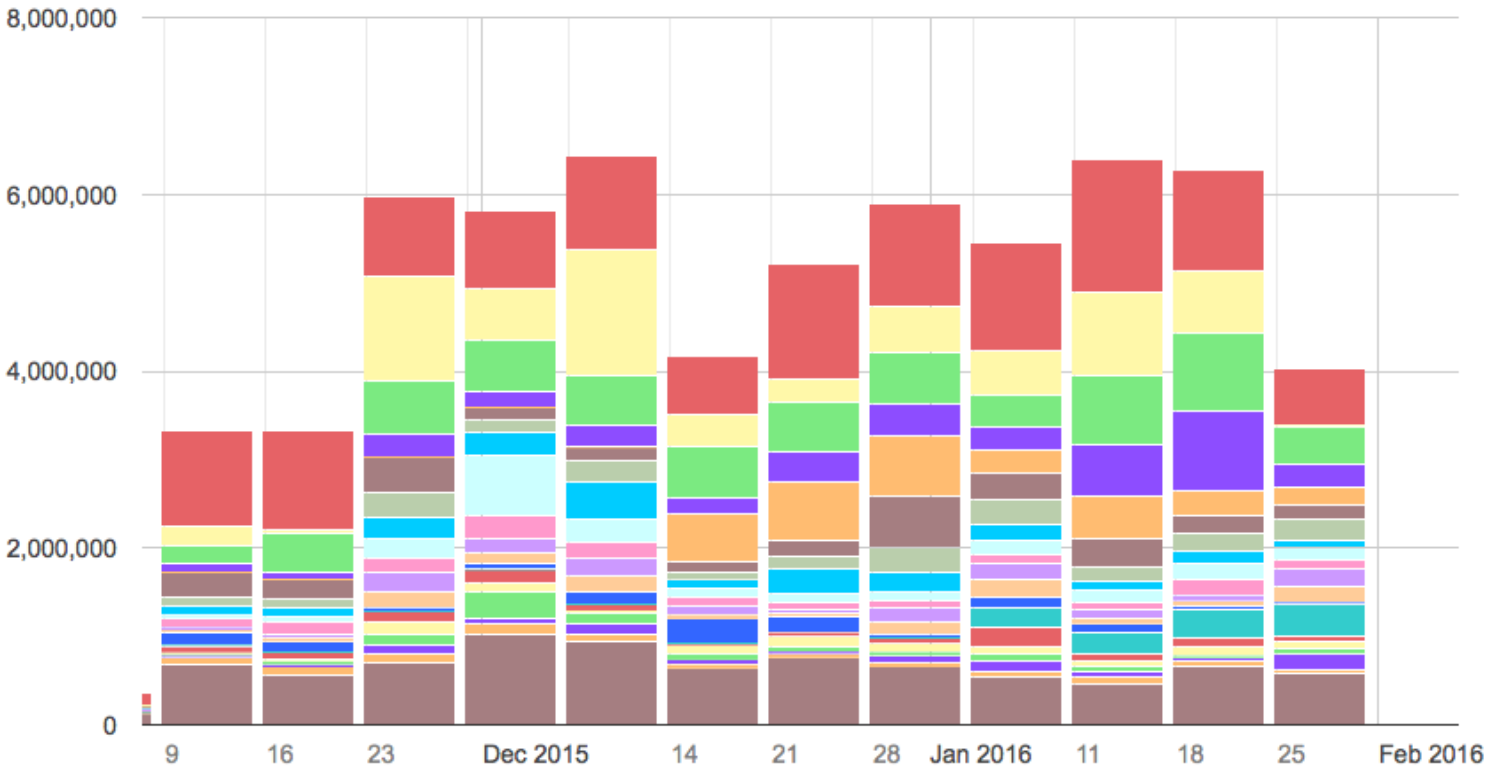


- ~60M hours (up from ~50M previous quarter)
- mu2e campaign is ramping down



Top opportunistic sites

Hours Spent on Jobs By Facility

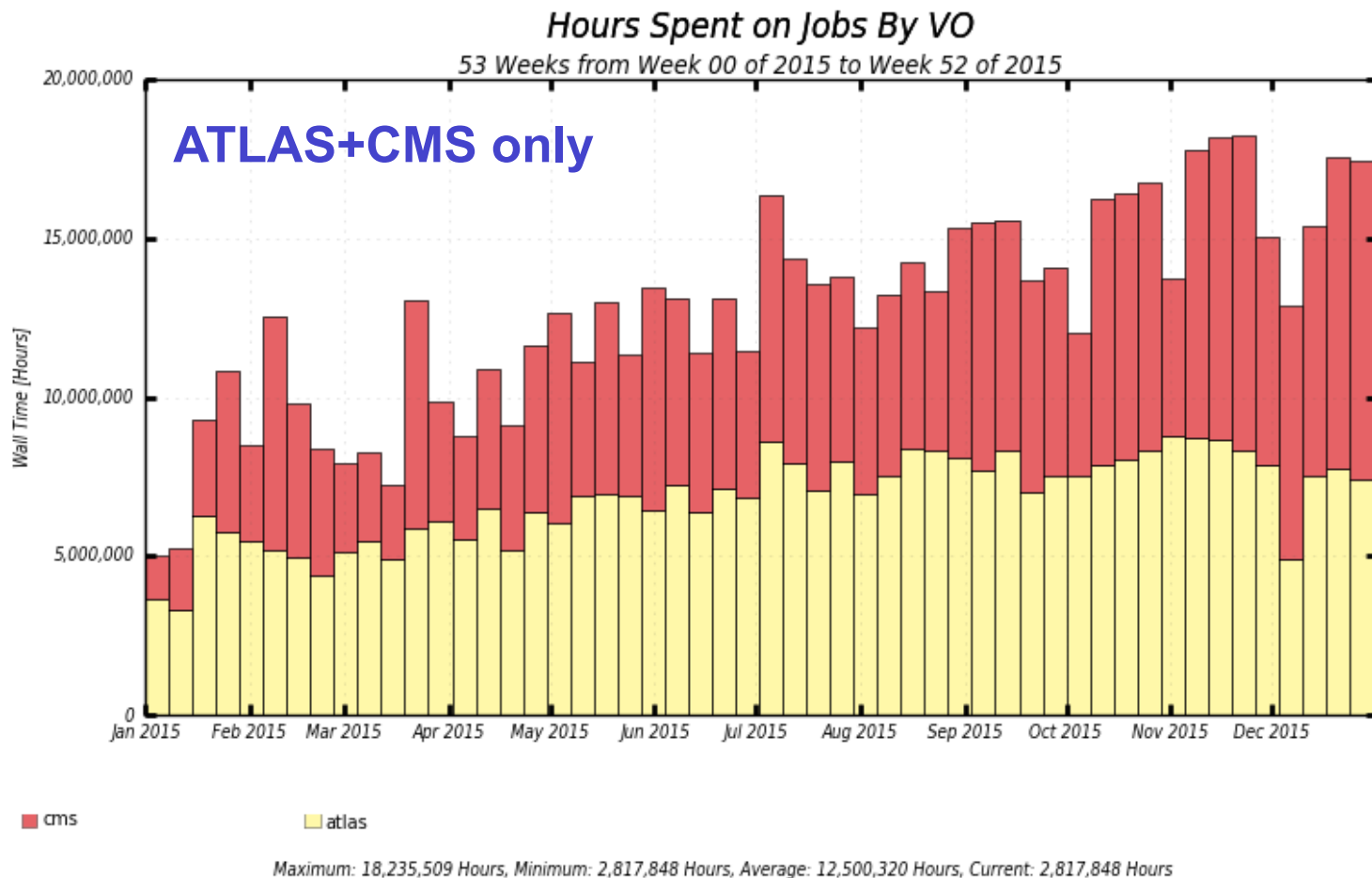


- SU-OG-CE (12,834,480)
- USCMS-FNAL-WC1-CE3 (6,751,620)
- UCSDT2 (6,547,298)
- Nebraska-HCC (3,767,938)
- gpce01.fnal.gov (3,128,775)
- GLOW-OSG (3,062,387)
- CIT_CMS_T2B (2,277,579)
- CIT_CMS_T2 (2,211,786)
- MWT2_CE_UIUC (2,179,551)
- MWT2 (1,568,337)
- red-gateway1 (1,492,586)
- red-gateway2 (1,305,513)
- Purdue-Hadoop-CE (1,240,438)
- gpce02.fnal.gov (1,164,141)
- UCSDT2-C (1,085,526)
- FNAL_GPGRID_1 (1,013,584)
- AGLT2_CE_2 (950,685)
- Nebraska (913,131)
- BNL_ATLAS_2 (872,650)
- OTHERS (52) (8,310,954)

Maximum: 6,440,444.87, Minimum: 363,245.46, Average: 4,821,458.42, Current: 4,020,618.89



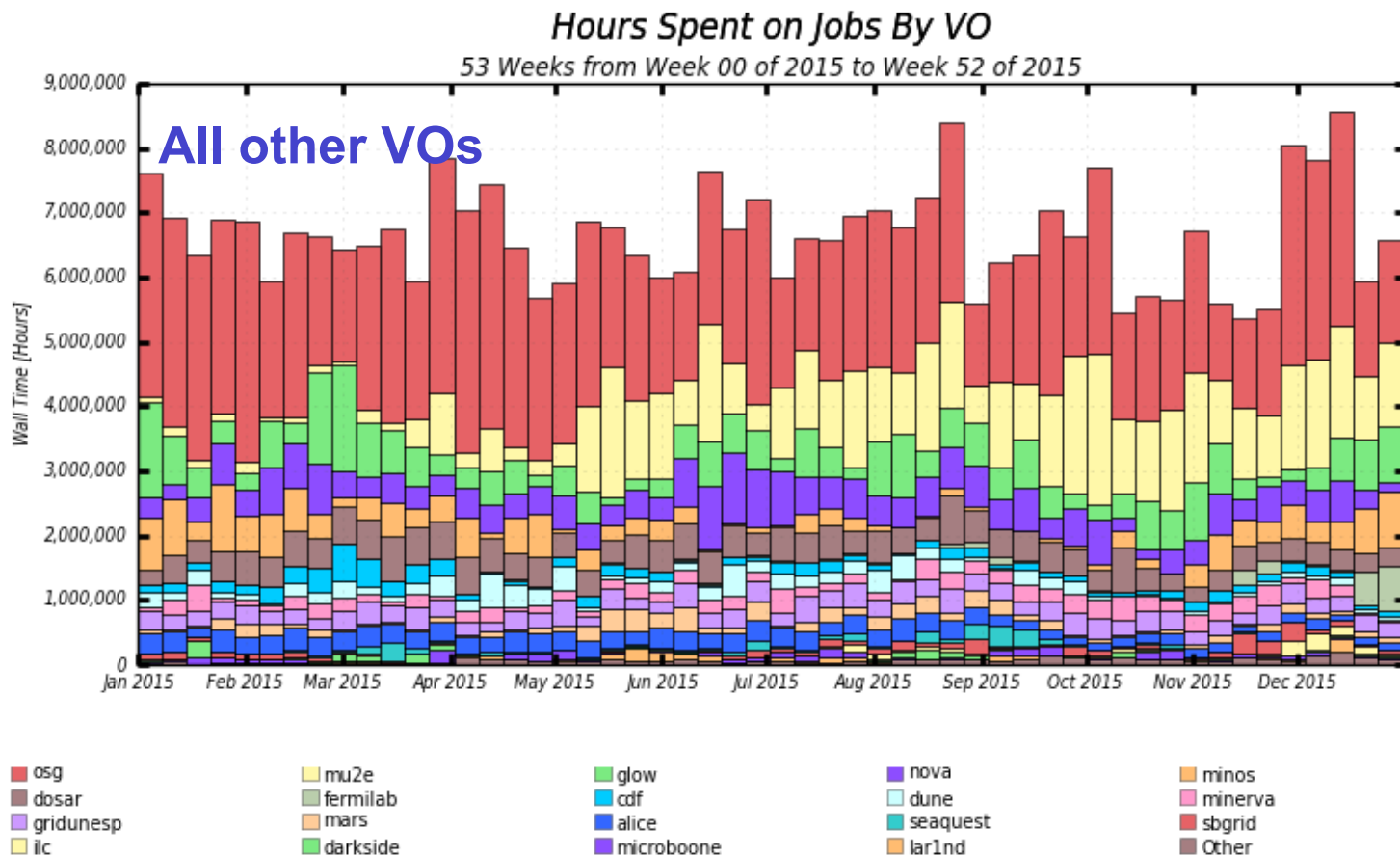
Question from Council



- Is increased OSG production [in 2015] due to LHC Run 2?
 - In large part...



Question from Council

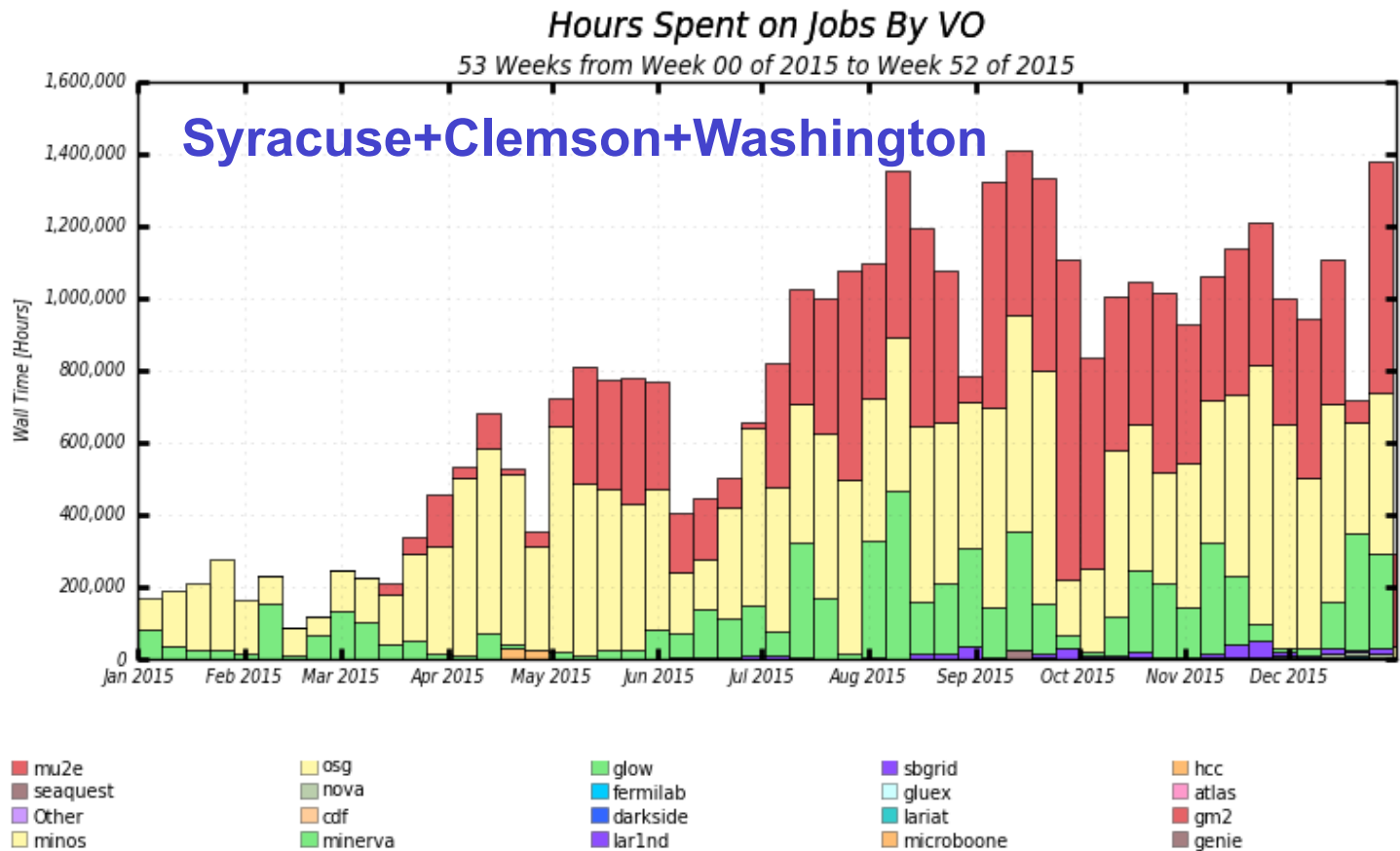


Maximum: 8,567,589 Hours, Minimum: 1,016,563 Hours, Average: 6,542,117 Hours, Current: 1,016,563 Hours

- Is increased OSG production [in 2015] due to LHC Run 2?
 - But not at anyone's expense...



Question from Council

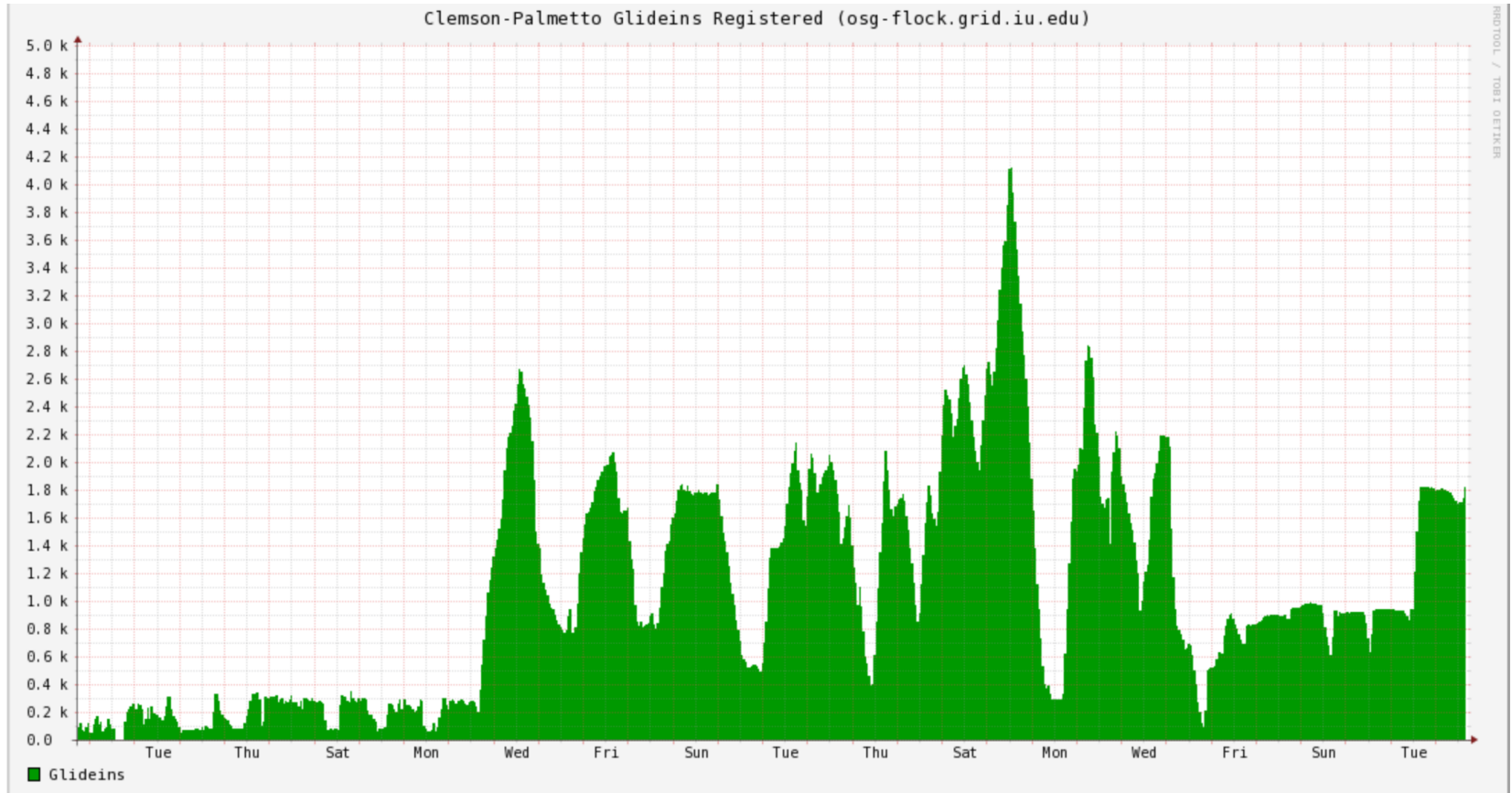


Maximum: 1,412,380 Hours, Minimum: 89,355 Hours, Average: 739,387 Hours, Current: 291,944 Hours

- Is increased OSG production [in 2015] due to LHC Run 2?
 - In part thanks to increased university (non-LHC) site participation



Resources: site integration



- Clemson contributing heavily now
- Early discussions with Pitt, Utah, and Tufts

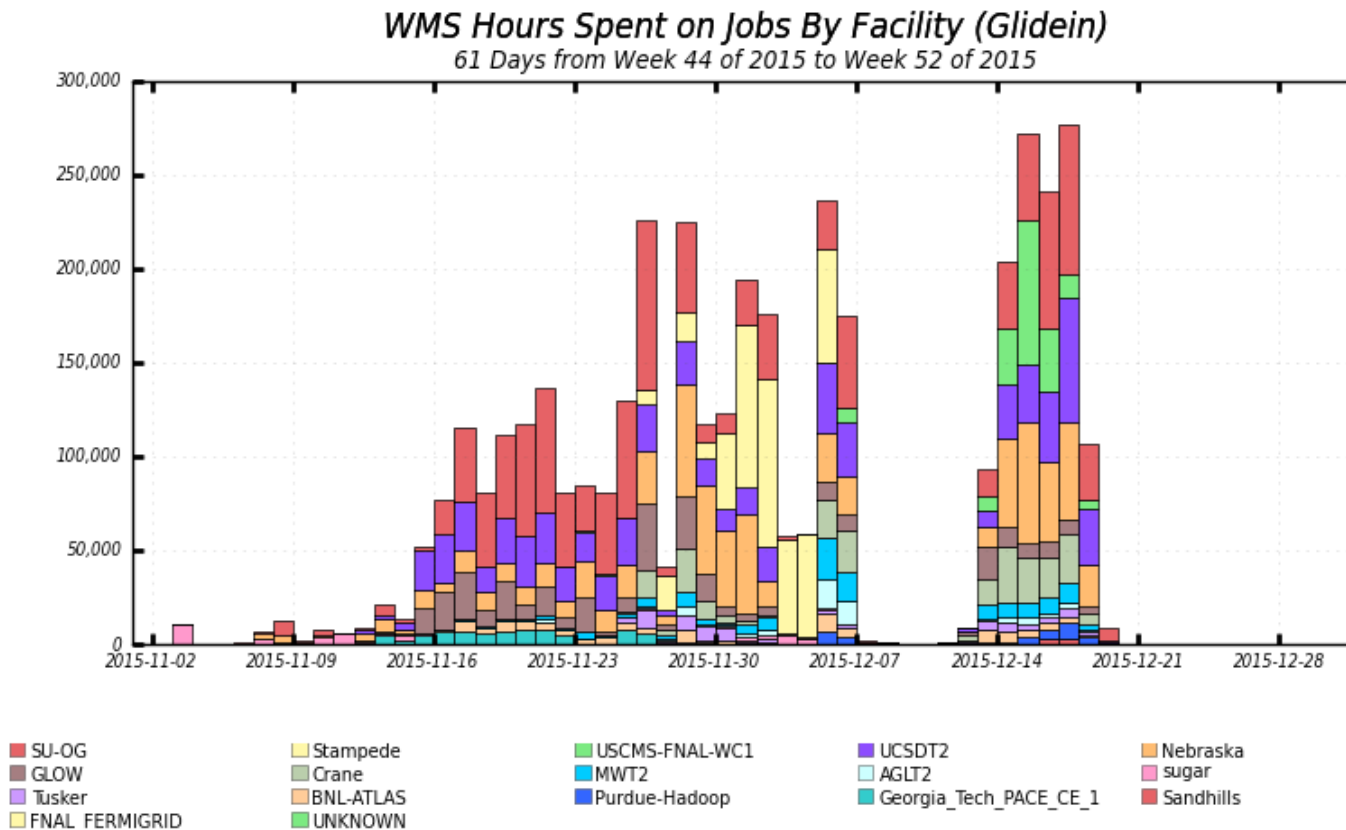
Resources: dedicated sites

- MicroBooNE site from University of Bern integrated and in production
 - Incidentally one of the fastest site integrations we've had
- JINR site for NOvA effectively complete but not yet used in production
 - May also have GPU/Phi resources available there



Resources: HPC

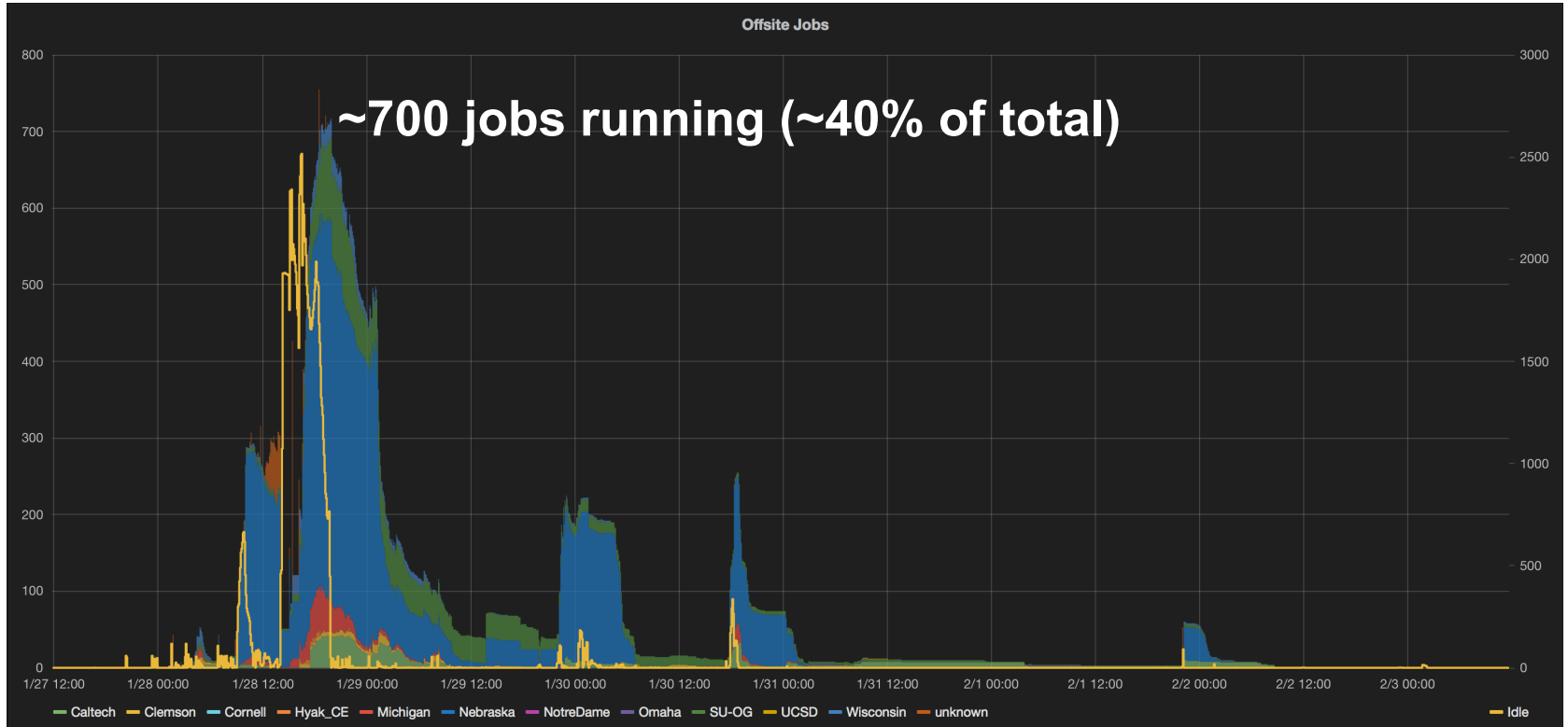
- SDSC Comet continues to be available opportunistically via UCSD T2 CEs
 - ~1.2M hours used by OSG VO users since November
- Next step is allowing allocation-based access via OSG infrastructure
 - Necessary gWMS changes (tracking allocations) pushed through and available in March update
 - Effectively already used for LIGO jobs running at Stampede
 - Will test with Comet as well



- Made considerable use of OSG resources towards the end of the year
- 4.5M CPU hours (mostly opportunistic)
 - Expect more use starting in the coming days



DES[-GW]



- Optical followup of any potential LIGO signal using DES data
 - Requires short turnaround processing
- Demonstrated feasibility on OSG (might have been real processing??)

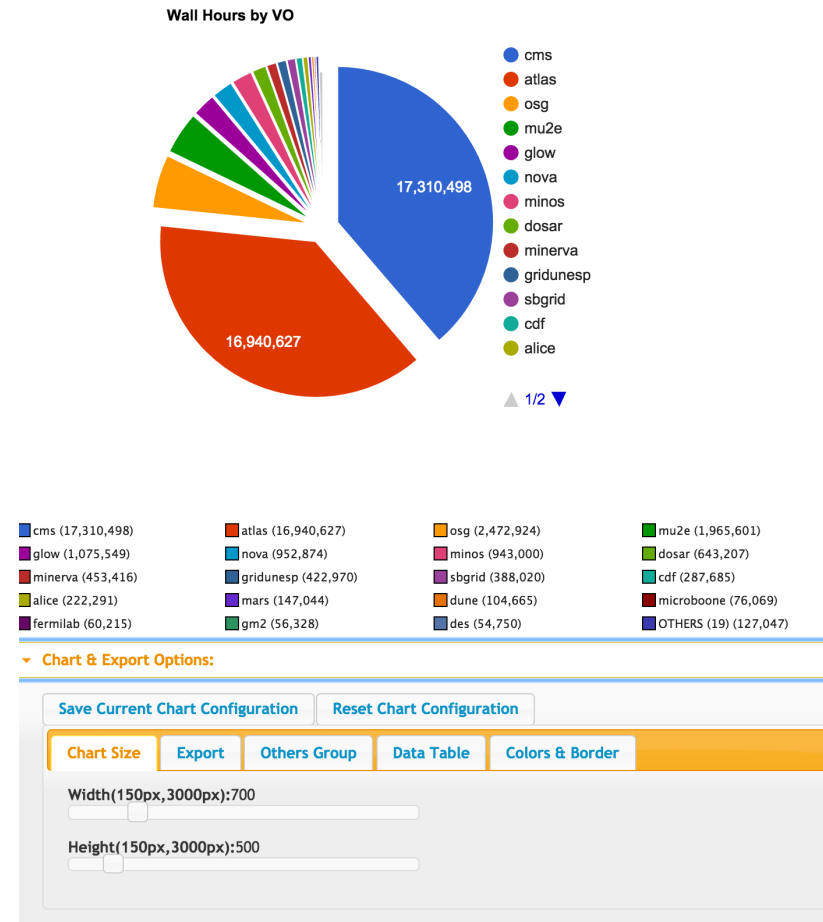
Community engagements

- IceCube
 - Currently running via GLOW both on-campus at Wisconsin and opportunistically on OSG sites
 - Would like to also run on dedicated European resources
 - Working with Miron et al to implement a solution
- SNO+
 - Arranging meeting
- Harvard Medical School
 - Interest in OSG being part of their standard computing toolkit
 - Frank, Rob G. and myself will be there Friday to make the appropriate pitch



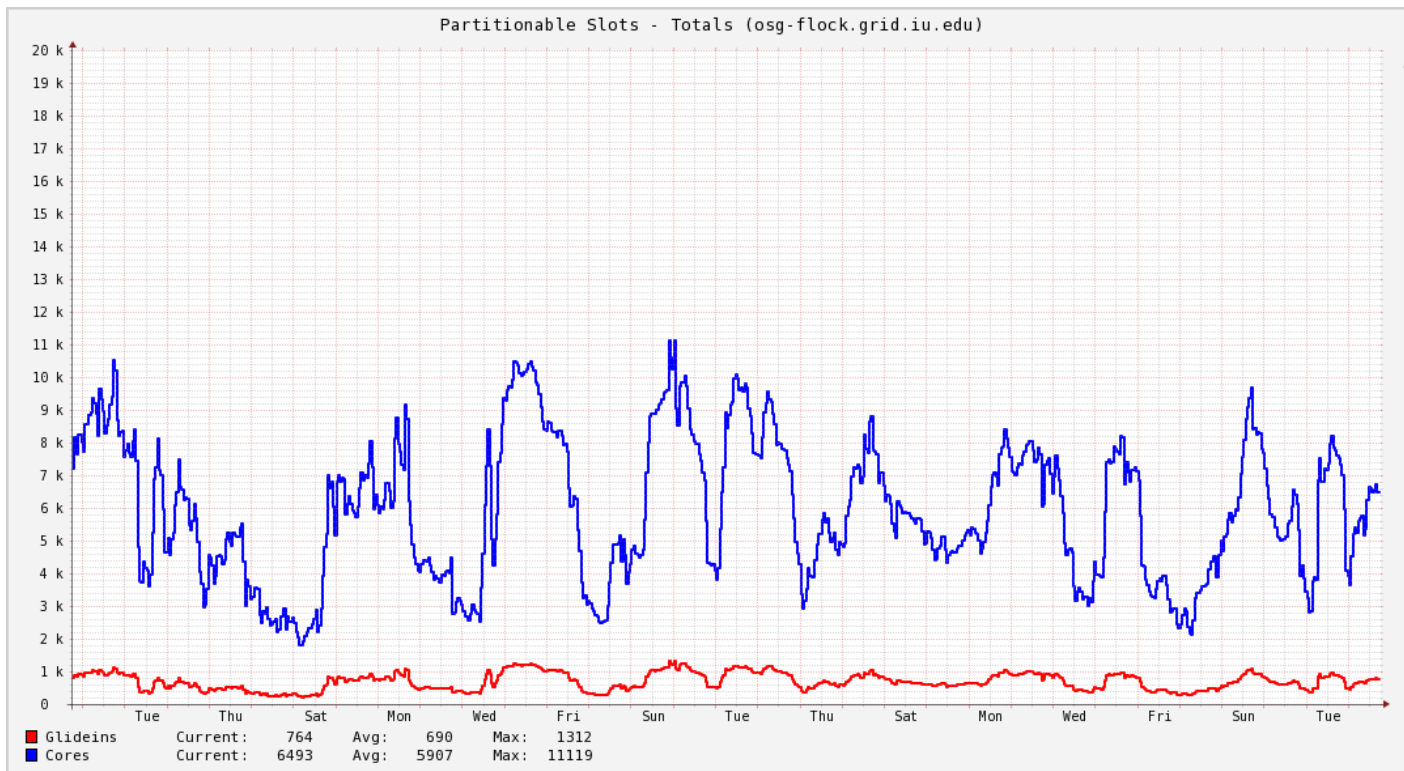
Accounting

- A version of gratiaweb with google charts available
 - Feedback is still welcome
 - In particular: should these be pushed to production and, if so, should old versions of these plots be retained?
- Accessible at gratiaweb ITB instance
 - <http://gratiaweb-itb.grid.iu.edu>
- Accounting **blueprint meeting** scheduled for February 23 at Fermilab
 - Please attend if you can





Multicore



- OSG VO multicore jobs now going to a variety of sites
 - ~6k cores on average for the past month
- Monitoring setup by Mats shows most are 8 core glideins



Other items

- Next NOvA campaign scheduled to start in ~1 week
 - Massive push towards Neutrino 2016
 - OSG resources should help them cover shortfall in resources
 - Working with NOvA physicists on this
- Keeping an eye on OSG VO flock
 - Accomplished peak of 51533 running jobs in December including two sleeper pools (~40k real jobs)
 - Would like to demonstrate 60k running jobs (with sleep pools) next.

