

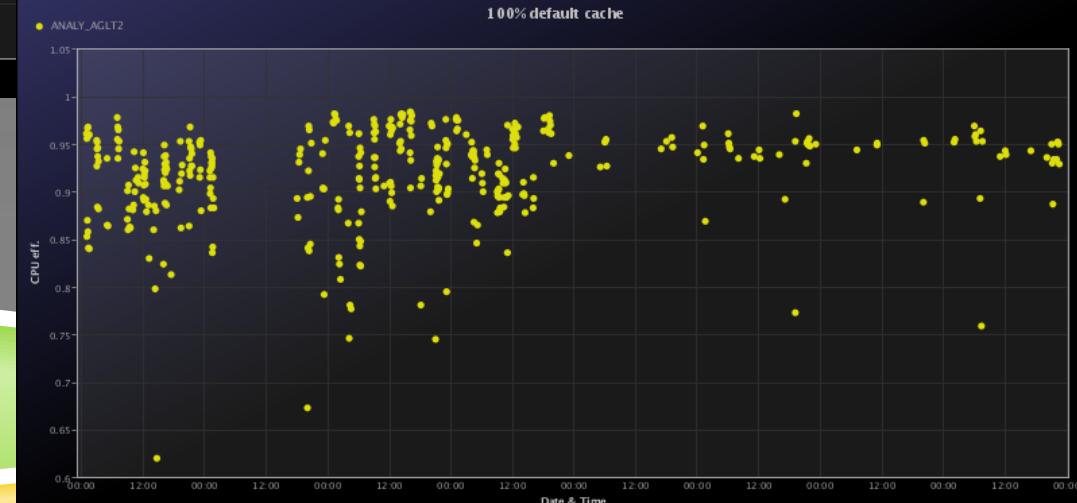
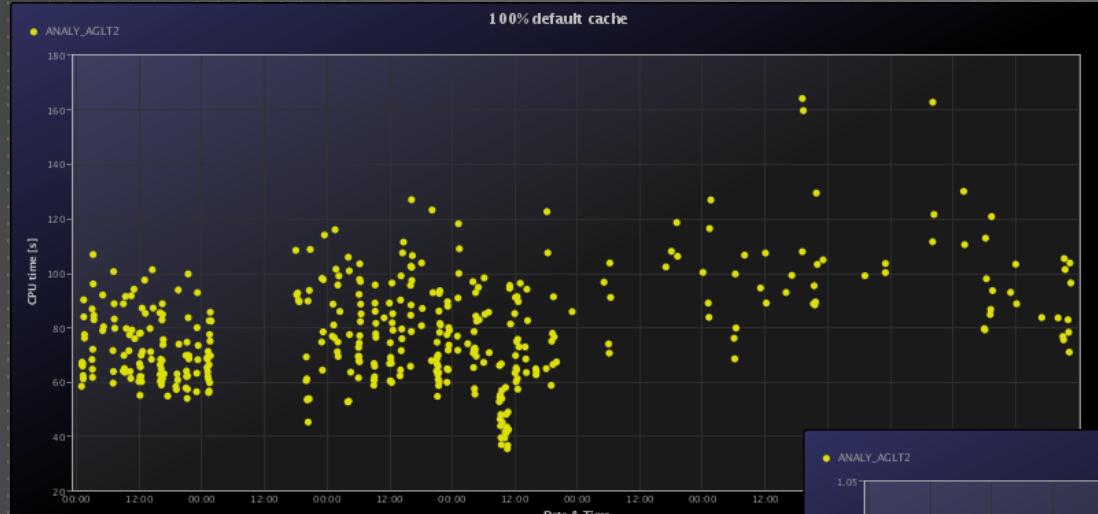
ATLAS ANALYSIS PERFORMANCE ON THE GRID monitoring and improving

Third meeting

AGLT2

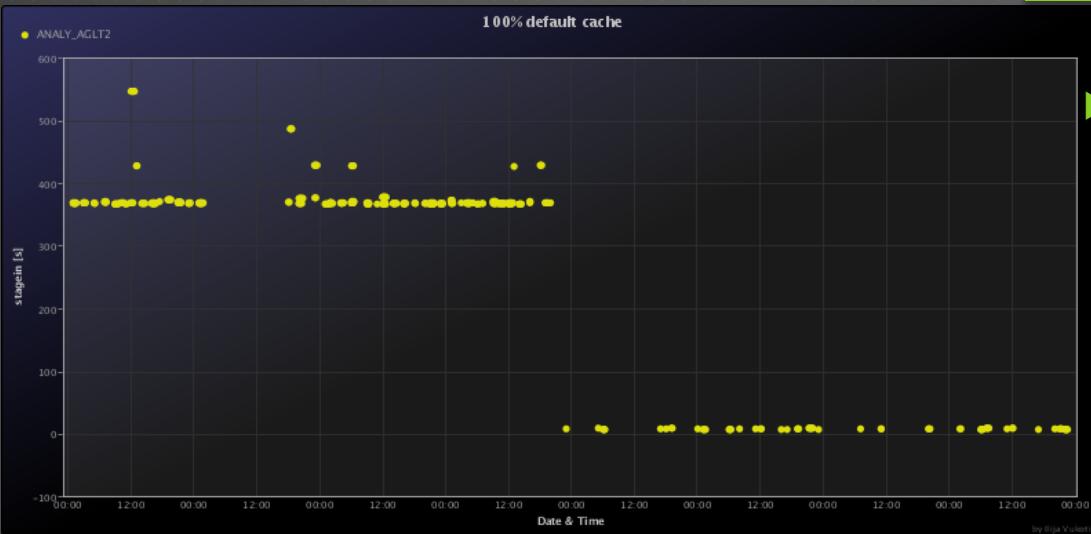
From our first meeting

- ▶ Something happened at 1st Jun.
- ▶ CPU time went up ?! Eff. Remained good

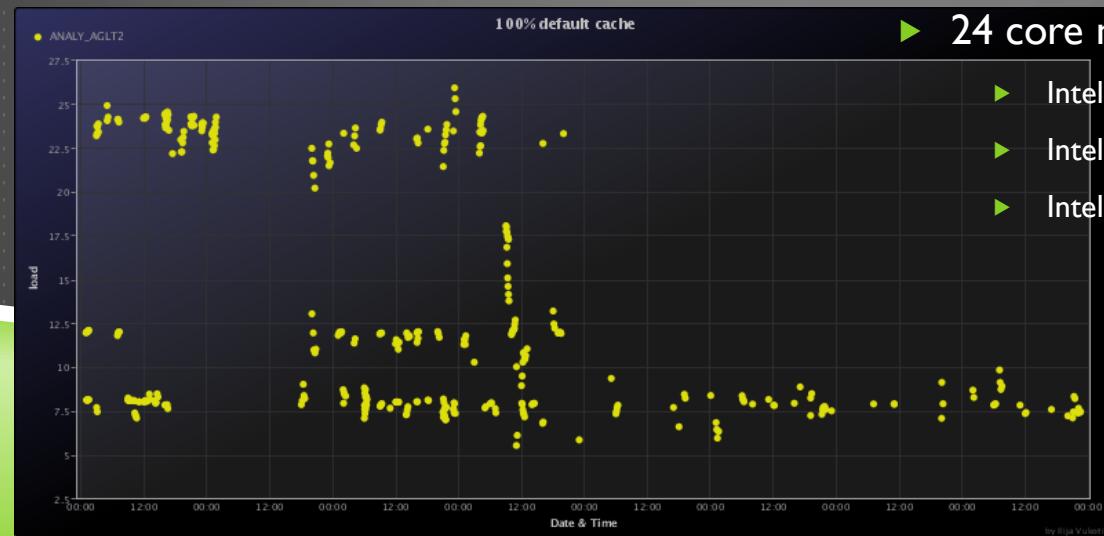


AGLT2

From our first meeting



- ▶ Stage in time decreased!
Practically vanished.



- ▶ 24 core machines not used

- ▶ Intel(R) Xeon(R) CPU X5650 @ 2.67GHz, 24 cores HT
- ▶ Intel(R) Xeon(R) CPU X5670 @ 2.93GHz, 24 cores HT
- ▶ Intel(R) Xeon(R) CPU X5660 @ 2.80GHz, 24 cores HT

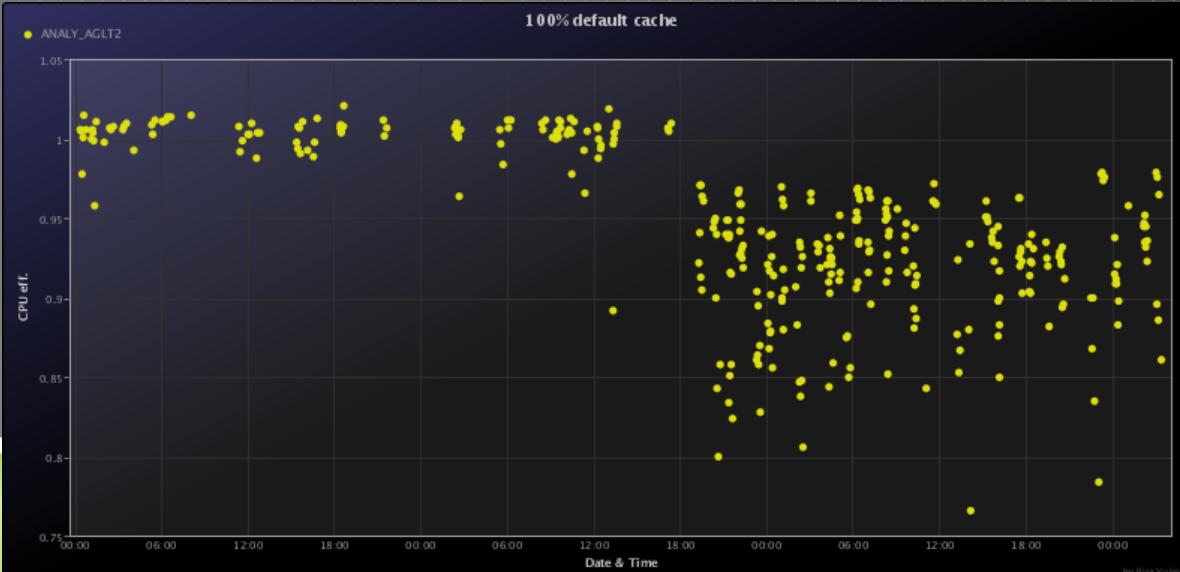
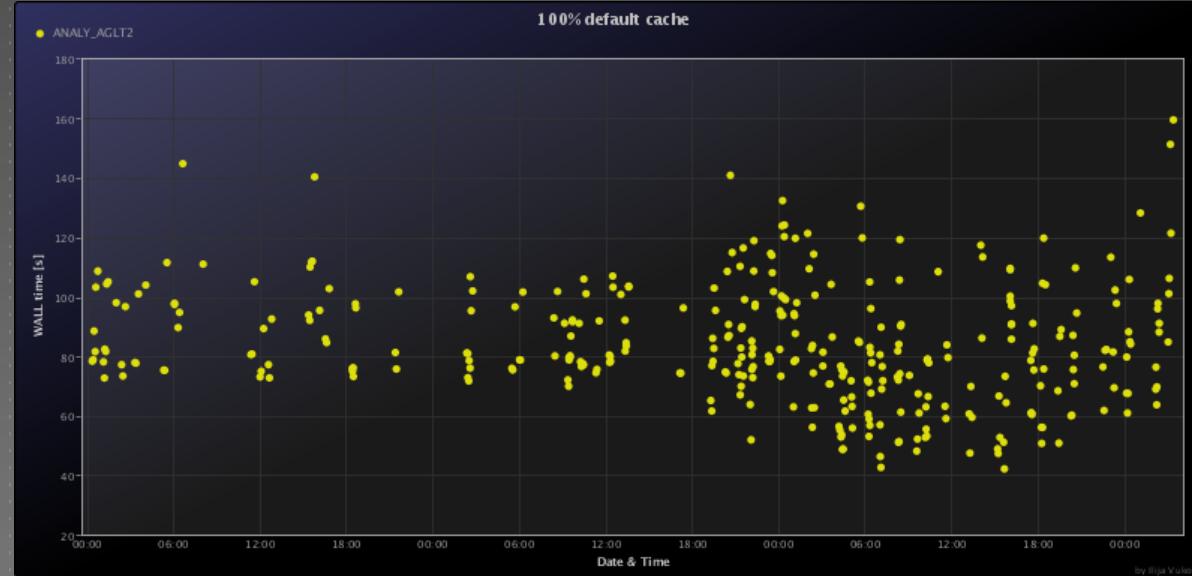
AGLT2

At 18:00 27/07 moved
all the sites to copy-
to-scratch mode

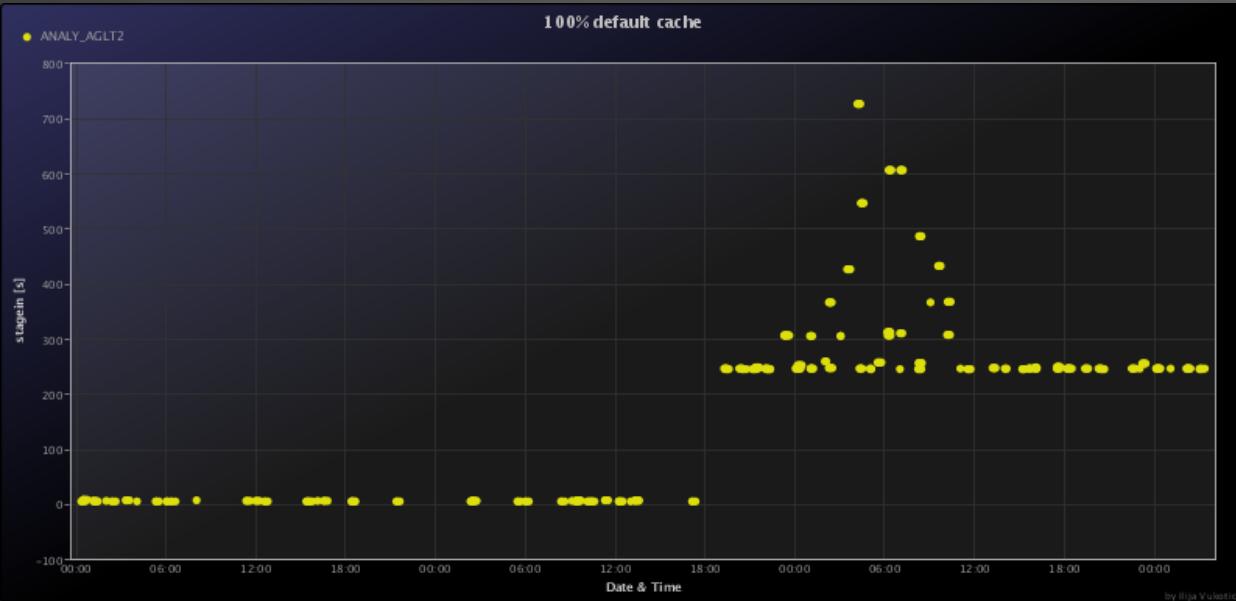
Event loop wall time
decreased from 88 s to 80
seconds.

Event loop CPU time
decreased even more: 88.5
to 73 S.

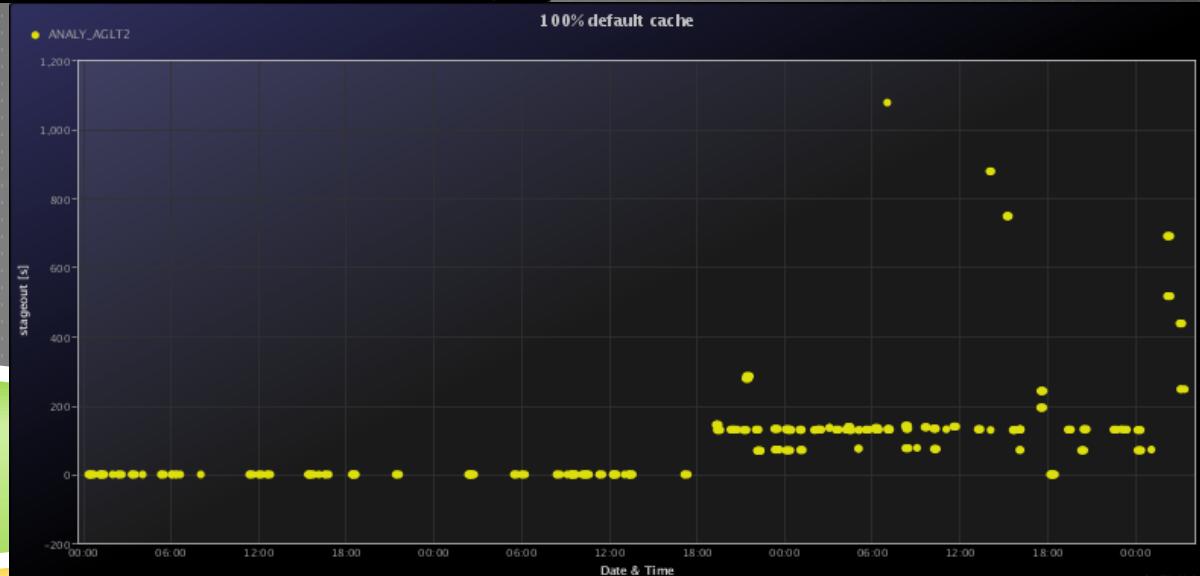
This makes CPU efficiency
smaller.



AGLT2



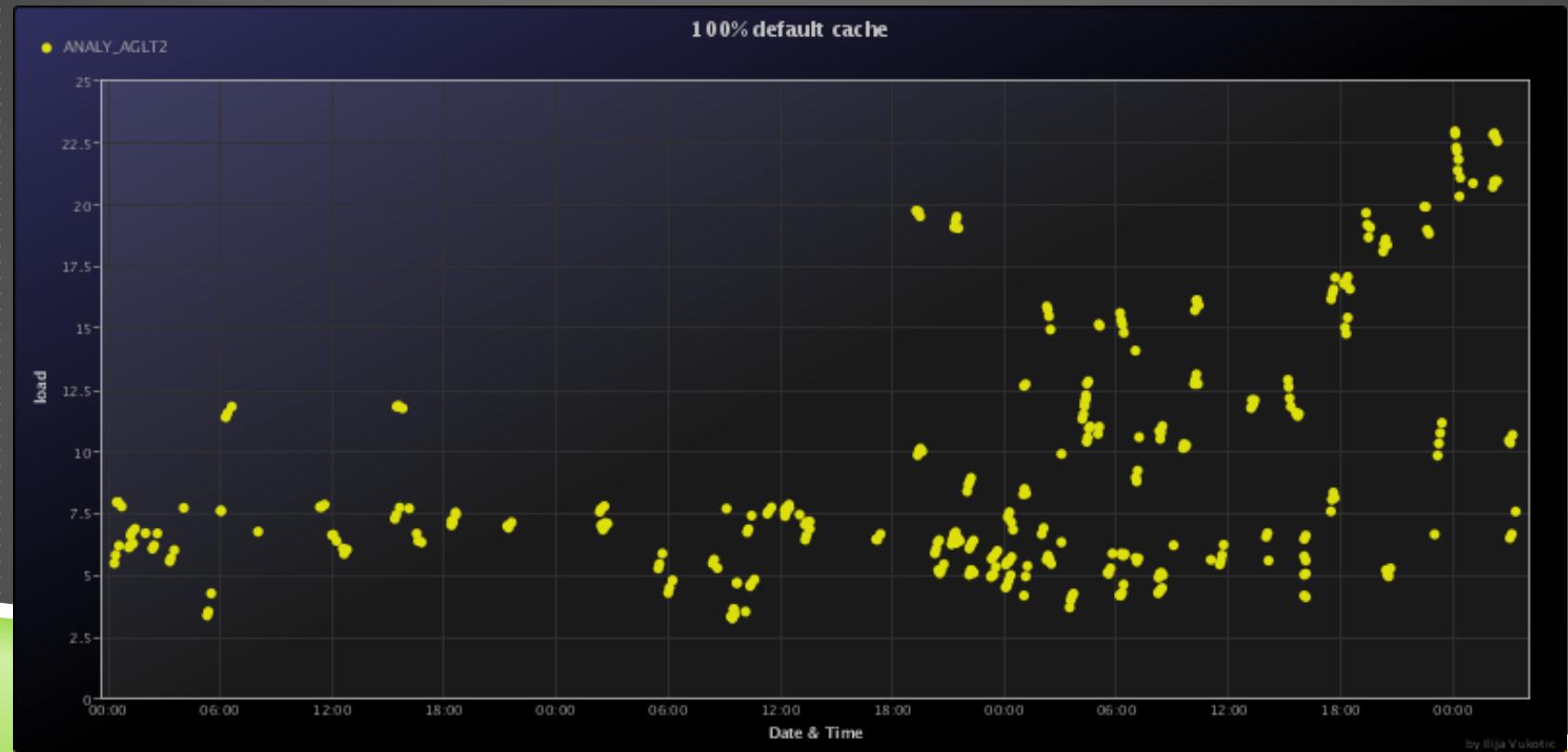
► Large stage-in time



► Large stage-out time!

AGLT2

- ▶ 24 core machines ARE back!
 - ▶ Intel(R) Xeon(R) CPU X5650 @ 2.67GHz, 24 cores HT
 - ▶ Intel(R) Xeon(R) CPU X5670 @ 2.93GHz, 24 cores HT
 - ▶ Intel(R) Xeon(R) CPU X5660 @ 2.80GHz, 24 cores HT

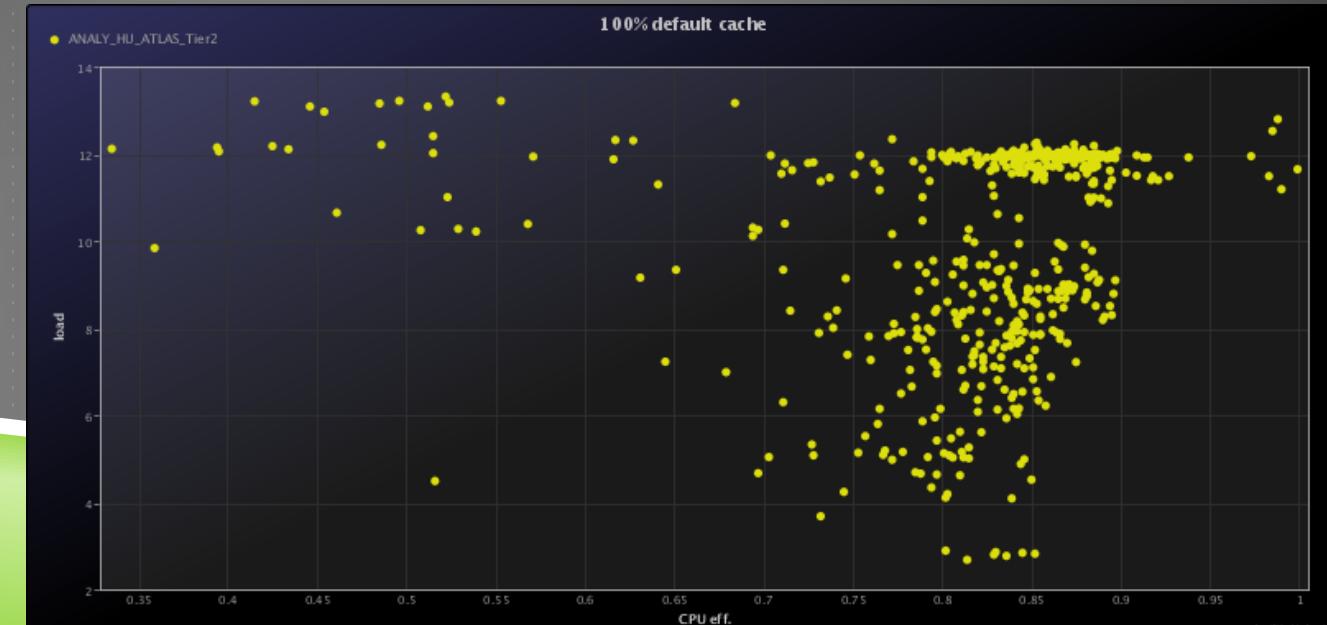
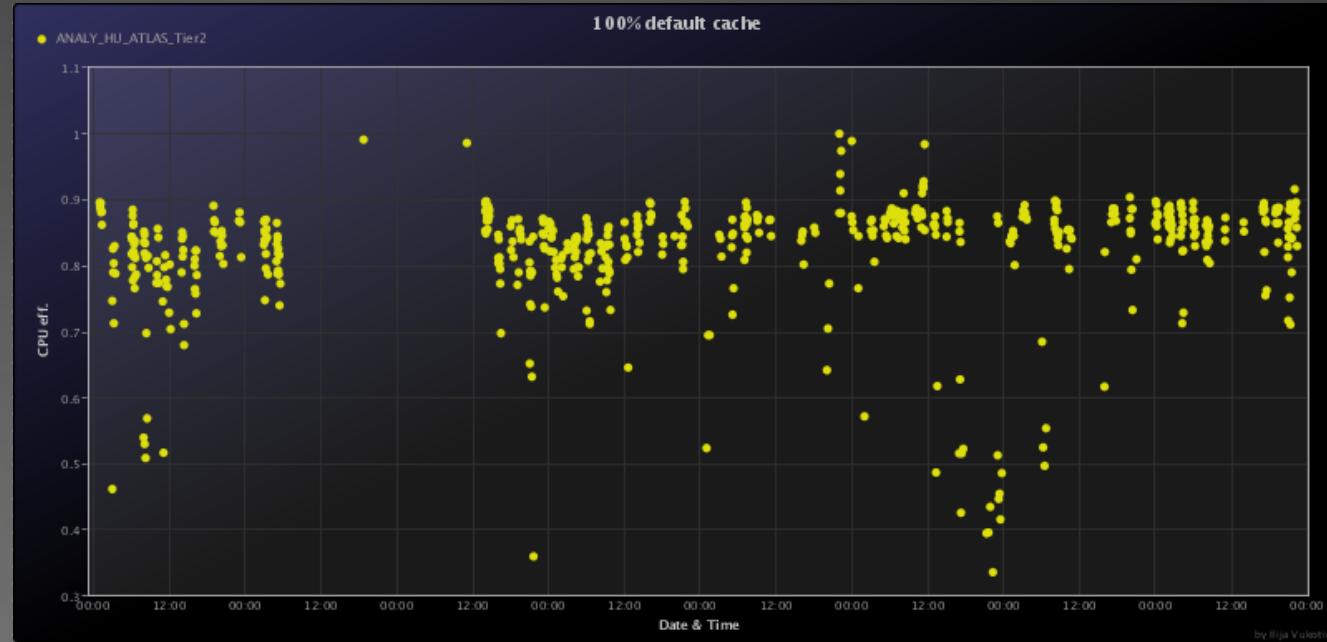


BNL & HU

- ▶ Change made no difference to BNL or HU
 - ▶ Currently they are at 330 sec stage-in time and 130 seconds stage-out time.
- ▶ They anyhow do copy-to-scratch
- ▶ Have spotty efficiency (~90% for BNL and ~80% for HU)
- ▶ Will see the change next week

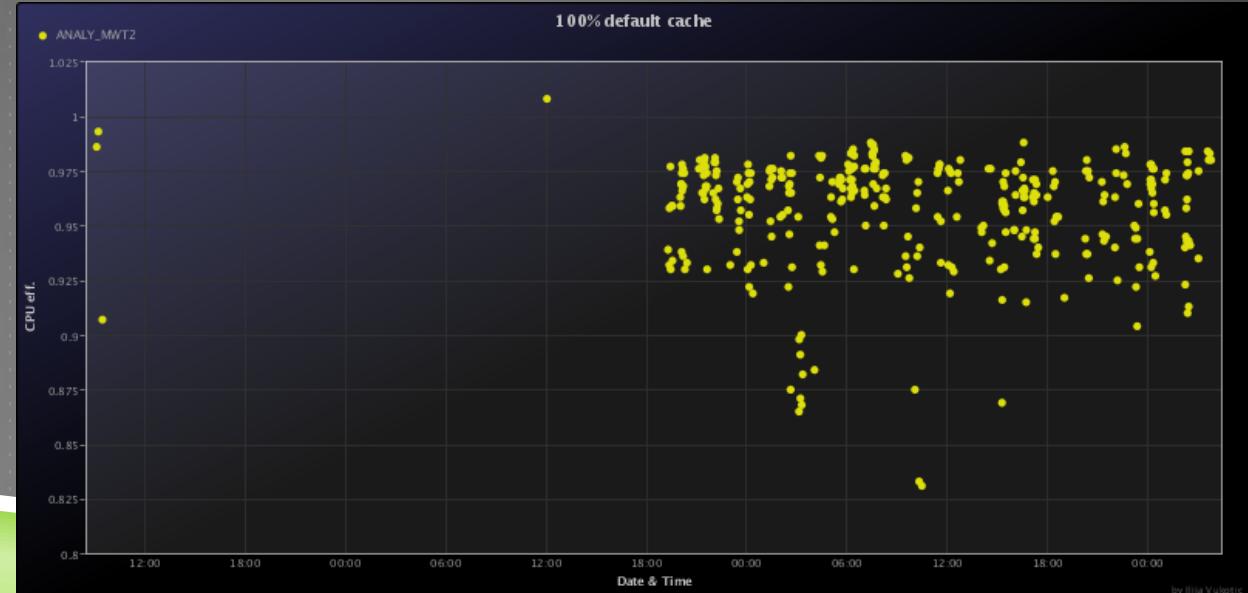
HU

- ▶ Spotty efficiency
- ▶ Stage in ~500s
- ▶ Stage out ~ 130s ?
- ▶ Setup ~100s ?



MWT2

- ▶ Much more jobs went through after switch ?!
- ▶ Needs explanation
- ▶ Stage-in times went to 250+ s
- ▶ Stage-out times ~ 120 s



NET2

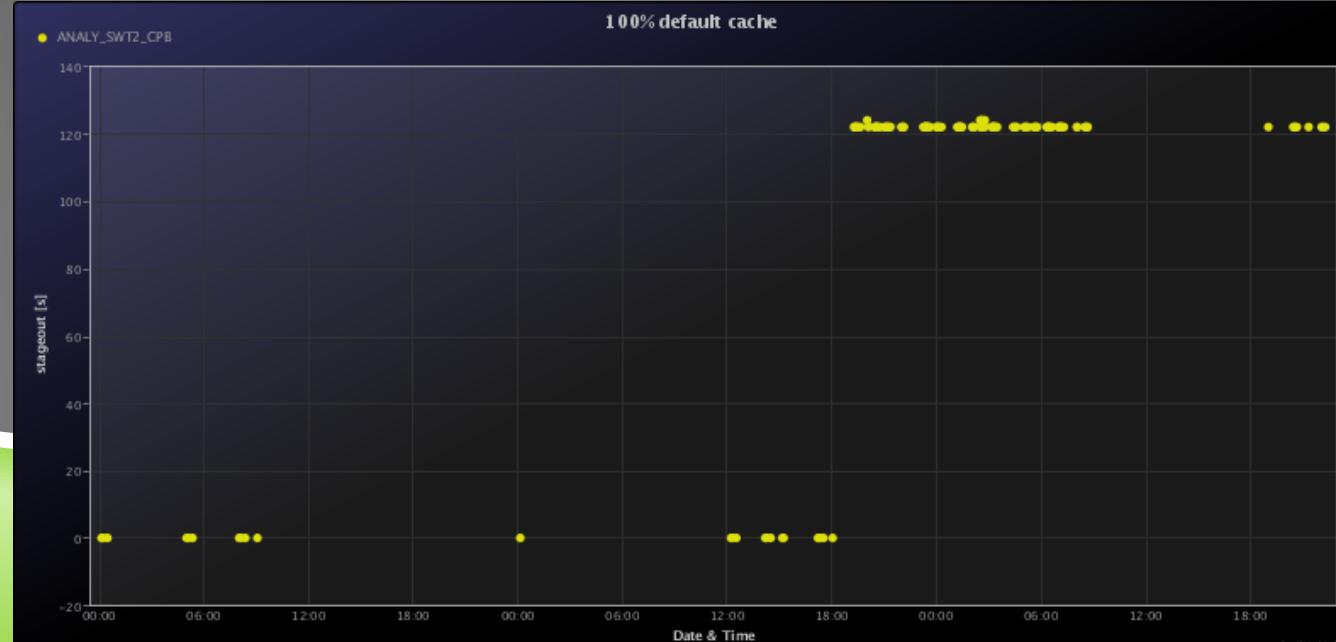
- ▶ Default is stage-to-local
- ▶ No real change:
 - ▶ Good CPU eff. ~0.9
 - ▶ Stage-in ~ 340 s
 - ▶ Stage-out ~ 123 s
 - ▶ Good setup: 56 s

OU_OCHEP_SWT2

- ▶ Added to test system after first meeting
- ▶ CPU efficiency 84%
- ▶ Stage-in ~ 260 sec
- ▶ Stage-out ~ 121 -122 sec
- ▶ Setup at 112 sec. Could be much better

SWT2_CPB

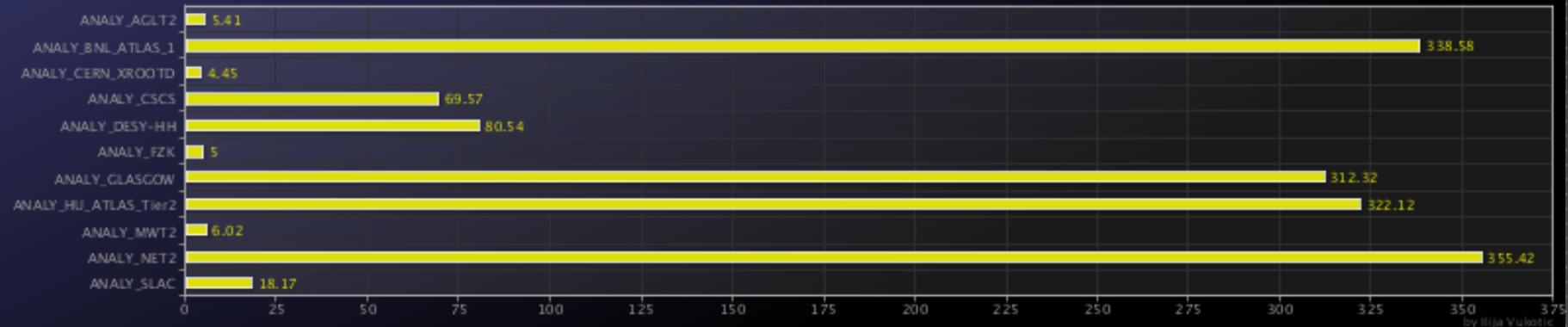
- ▶ By default direct access queue
- ▶ CPU efficiency: before 1.01 now ~90%
 - ▶ The same behavior as observed at AGLT2
- ▶ Stage-in : before 7 seconds after: 250+ sec
- ▶ Stage-out : before 0 seconds after: ~ 121 - 122 sec
- ▶ Setup at 59 sec. reasonable



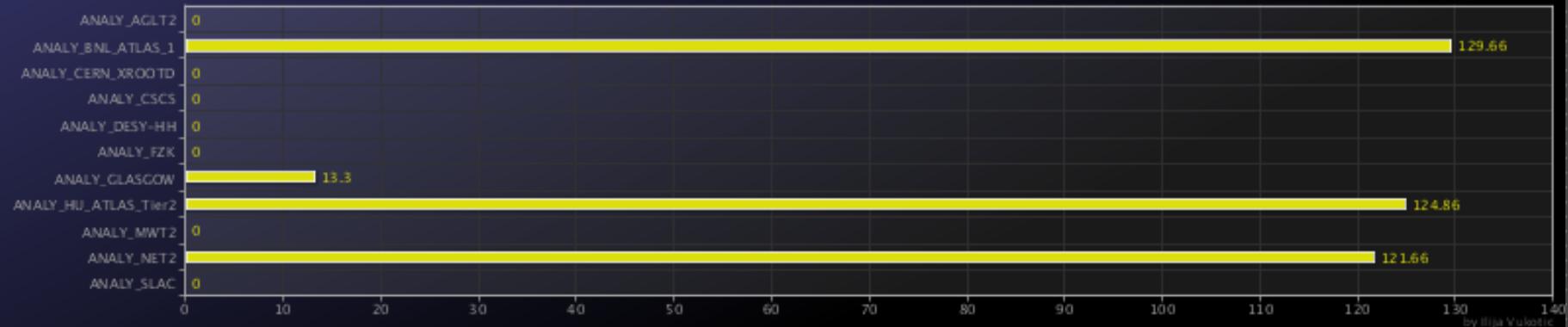
COMPARISONS

► Default

stagein [s] for 100% default cache



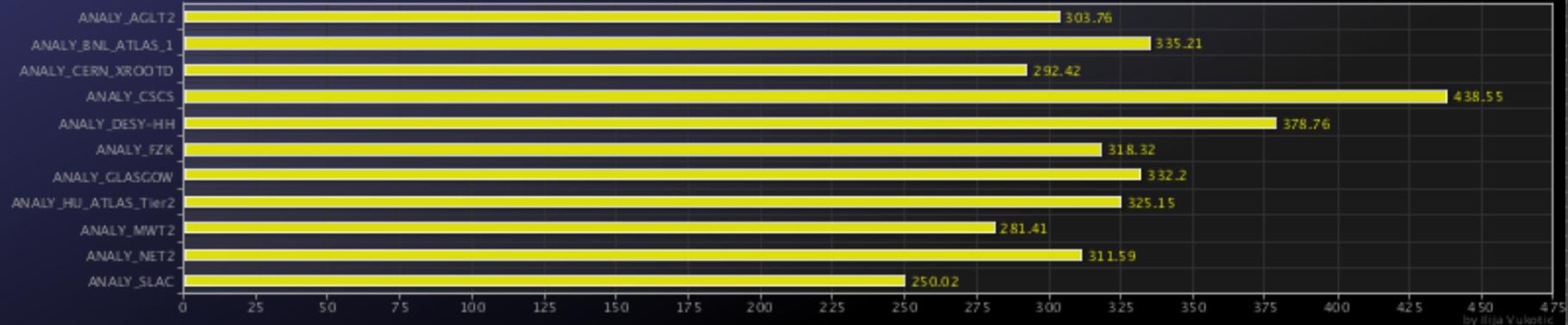
stageout [s] for 100% default cache



COMPARISONS

► ALL copy-to-scratch

stagein [s] for 100% default cache



stageout [s] for 100% default cache

