

# DMP Implementation Status of IPP

2025-02-11

# Started digging into dmp.eufus.eu

- Would be useful to filter by shot number
  - Currently have to page through until we find the shot
- Ip data for pedestal database seems to be wrong (at least for AUG)
  - Main database (Shot: 32277 Run: 0 Machine: ASDEX Upgrade Date: 2025-12-04)
    - global\_quantities/ip/value
    - Value: 998.59E3 Time: 5.4540
    - Value: 999.957E3 Time: 5.5540
  - Pedestal database (Shot: 32277 Run: 1 Machine: pedestalDB\_AUG Date: 2025-12-15)
    - Value: 998.6E-9 Time: 5.5
- Should have the option to sort the displayed data (by, e.g., shot)
- JET pedestal database seems to have the wrong time (115)
  - Main database (Shot: 104623 Run: 999 Machine: JET Date: 2025-12-11) – only 3 points
    - global\_quantities/ip/value
    - Value: -2.966E6 Time: 48.571
    - Value: -2.975E6 Time: 53.415
    - Value: -1.249E6 Time: 56.382
  - Pedestal database (Shot: 104623 Run: 0 Machine: pedestal\_JET Date: 2025-11-28)
    - global\_quantities/ip/value
    - Value: -2.979E6 Time: 115

# Started digging into dmp.eufus.eu

Shot: 32277

Run: 0

Machine: ASDEX Upgrade

Date: 2025-12-04



Select...



Search

Source: [imas://uda.ipp.mpg.de:56565/uda?path=/root/public/imasdb/aug-dmp/3/32277/0&backend=hdf5](https://imas://uda.ipp.mpg.de:56565/uda?path=/root/public/imasdb/aug-dmp/3/32277/0&backend=hdf5)

Show empty values

Fair data

Access data

Non-empty IDss

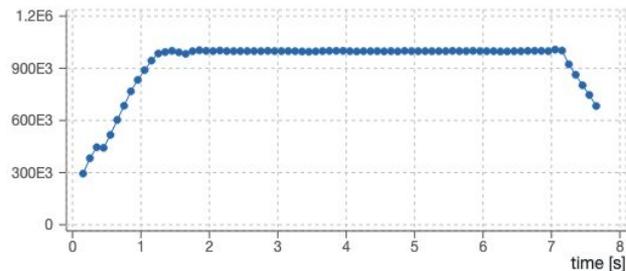
[]

[global\\_quantities/ip/value](#)

Value: 998.716E3	Time: 5.1540
Value: 998.027E3	Time: 5.2540
Value: 998.37E3	Time: 5.3540
Value: 998.59E3	Time: 5.4540
Value: 999.957E3	Time: 5.5540
Value: 999.621E3	Time: 5.6540
Value: 999.208E3	Time: 5.7540
Value: 1.001E6	Time: 5.8540
Value: 999.234E3	Time: 5.9540
Value: 998.343E3	Time: 6.0540
Value: 999.201E3	Time: 6.1540



Plasma Current [A]



# Started digging into dmp.eufus.eu

Shot: 32277

Run: 1

Machine: pedestalDB\_AUG

Date: 2025-12-15



Select...



Search

Source: imas://uda:56565/uda?path=/root/public/imasdb/pedestalDB\_AUG/3/32277/1&backend=hdf5

Show empty values

Fair data

Access data

Non-empty IDss

[]

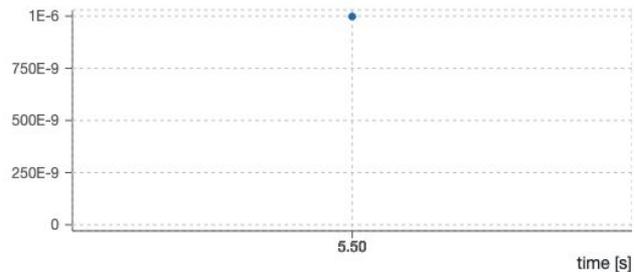
[global\\_quantities/ip/value](#)

Value: 998.6E-9

Time: 5.5



Plasma Current [A]



# Started digging into dmp.eufus.eu

Shot: 104623

Run: 999

Machine: JET

Date: 2025-12-11



Select...



Search

Source: [imas://uda.jetdata.eu:56565/uda?mapping=JET&shot=104623&batch\\_size=40](https://imas.jetdata.eu:56565/uda?mapping=JET&shot=104623&batch_size=40)

Show empty values

Fair data

Access data

Non-empty IDss

[]

global\_quantities/ip/value

Value: -2.966E6

Time: 48.571

Value: -2.975E6

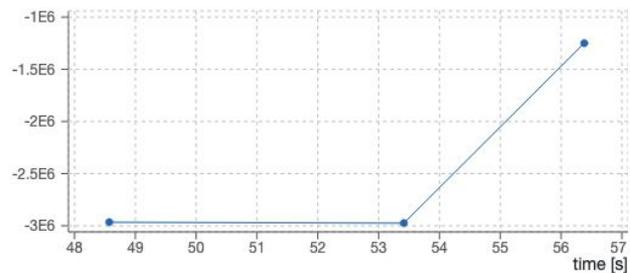
Time: 53.415

Value: -1.249E6

Time: 56.382



Plasma Current [A]



# Started digging into dmp.eufus.eu

Shot: 104623

Run: 0

Machine: petestal\_JET

Date: 2025-11-28



Select...



Search

Source: [imas://uda:56565/uda?path=/root/public/imasdb/pedestalDB\\_JET\\_2025/3/104623/0&backend=hdf5](https://imas://uda:56565/uda?path=/root/public/imasdb/pedestalDB_JET_2025/3/104623/0&backend=hdf5)

Show empty values

Fair data

Access data

Non-empty IDss

[core\_profiles/0, dataset\_description/0, equilibrium/0, summary/0]

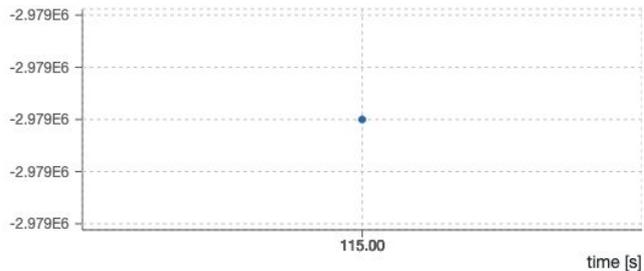
global\_quantities/ip/value

Value: -2.979E6

Time: 115



Plasma Current [A]



# Started digging into dmp.eufus.eu

<input type="checkbox"/>	Shot: 104623	Run: 0	Machine: petestal_JET	Date: 2025-11-28	<a href="#">→</a>	<a href="#">✎</a>	<a href="#">+</a>
<input type="checkbox"/>	Shot: 82649	Run: 0	Machine: petestal_JET	Date: 2025-11-28	<a href="#">→</a>	<a href="#">✎</a>	<a href="#">+</a>
<input type="checkbox"/>	Shot: 79754	Run: 0	Machine: petestal_JET	Date: 2025-11-28	<a href="#">→</a>	<a href="#">✎</a>	<a href="#">+</a>
<input type="checkbox"/>	Shot: 82283	Run: 0	Machine: petestal_JET	Date: 2025-11-28	<a href="#">→</a>	<a href="#">✎</a>	<a href="#">+</a>
<input type="checkbox"/>	Shot: 79214	Run: 1	Machine: petestal_JET	Date: 2025-11-28	<a href="#">→</a>	<a href="#">✎</a>	<a href="#">+</a>
<input type="checkbox"/>	Shot: 79214	Run: 0	Machine: petestal_JET	Date: 2025-11-28	<a href="#">→</a>	<a href="#">✎</a>	<a href="#">+</a>
<input type="checkbox"/>	Shot: 100864	Run: 0	Machine: petestal_JET	Date: 2025-11-28	<a href="#">→</a>	<a href="#">✎</a>	<a href="#">+</a>
<input type="checkbox"/>	Shot: 84641	Run: 1	Machine: petestal_JET	Date: 2025-11-28	<a href="#">→</a>	<a href="#">✎</a>	<a href="#">+</a>
<input type="checkbox"/>	Shot: 84641	Run: 0	Machine: petestal_JET	Date: 2025-11-28	<a href="#">→</a>	<a href="#">✎</a>	<a href="#">+</a>
<input type="checkbox"/>	Shot: 76686	Run: 0	Machine: petestal_JET	Date: 2025-11-28	<a href="#">→</a>	<a href="#">✎</a>	<a href="#">+</a>

# Started digging into dmp.eufus.eu

Shot: 65325      Run: 0      Machine: pedestalDB\_TCV      Date: 2025-12-08

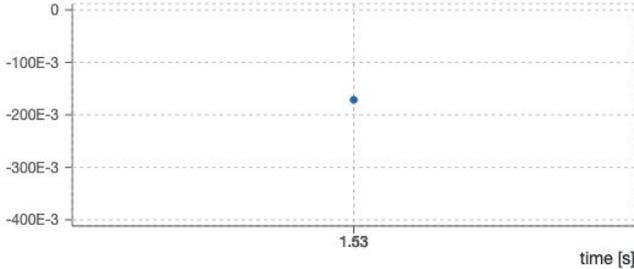
Source: [imas://uda:56565/uda?path=/root/public/imasdb/pedestalDB\\_TCV/3/65325/0&backend=hdf5](https://imas://uda:56565/uda?path=/root/public/imasdb/pedestalDB_TCV/3/65325/0&backend=hdf5)       Show empty values      [Fair data](#)      [Access data](#)

Non-empty IDss  
[]

---

global\_quantities/ip/value            Plasma Current [A]

Value: -171.387E-3      Time: 1.535



time [s]	Plasma Current [A]
1.535	-171.387E-3

# Started digging into dmp.eufus.eu

- AUG pedestal database also has wrong values for
  - global\_quantities/r0/value: instead of 1.65
  - global\_quantities/b0/value: has the wrong sign (Value: 2.483 @ Time: 5.5)
  - global\_quantities/power\_steady/value: Value: 13.204E-6 @ Time: 5.5
    - instead of:
      - Value: 3.442E6 @Time: 5.4540
      - Value: 3.416E6 @ Time: 5.5540
- Why are we seeing multiple pages with
  - Source:  
imas://uda:56565/uda?path=/root/public/imasdb/pedestalDB\_AUG/3/32277/1&backend=hdf5
  - Show empty values
  - Non-empty IDSs
  - []
- Plot value using uncertainty intervals if value\_error\_upper is available (and also treat the asymmetric case if value\_error\_lower is available)
- It doesn't make sense to show the output data over 166 pages!

# Started digging into dmp.eufus.eu

Shot: 32277      Run: 0      Machine: ASDEX Upgrade      Date: 2025-12-04           

Source: [imas://uda.ipp.mpg.de:56565/uda?path=/root/public/imasdb/aug-dmp/3/32277/0&backend=hdf5](https://imas.ipp.mpg.de/uda.ipp.mpg.de:56565/uda?path=/root/public/imasdb/aug-dmp/3/32277/0&backend=hdf5)       Show empty values           

Non-empty IDss  
[]

---

code/commit

Value:  
0.0.0-1-gbbd6c8d-dirty

---

code/version

Value:  
0.0.0-1-gbbd6c8d-dirty

---

code/repository

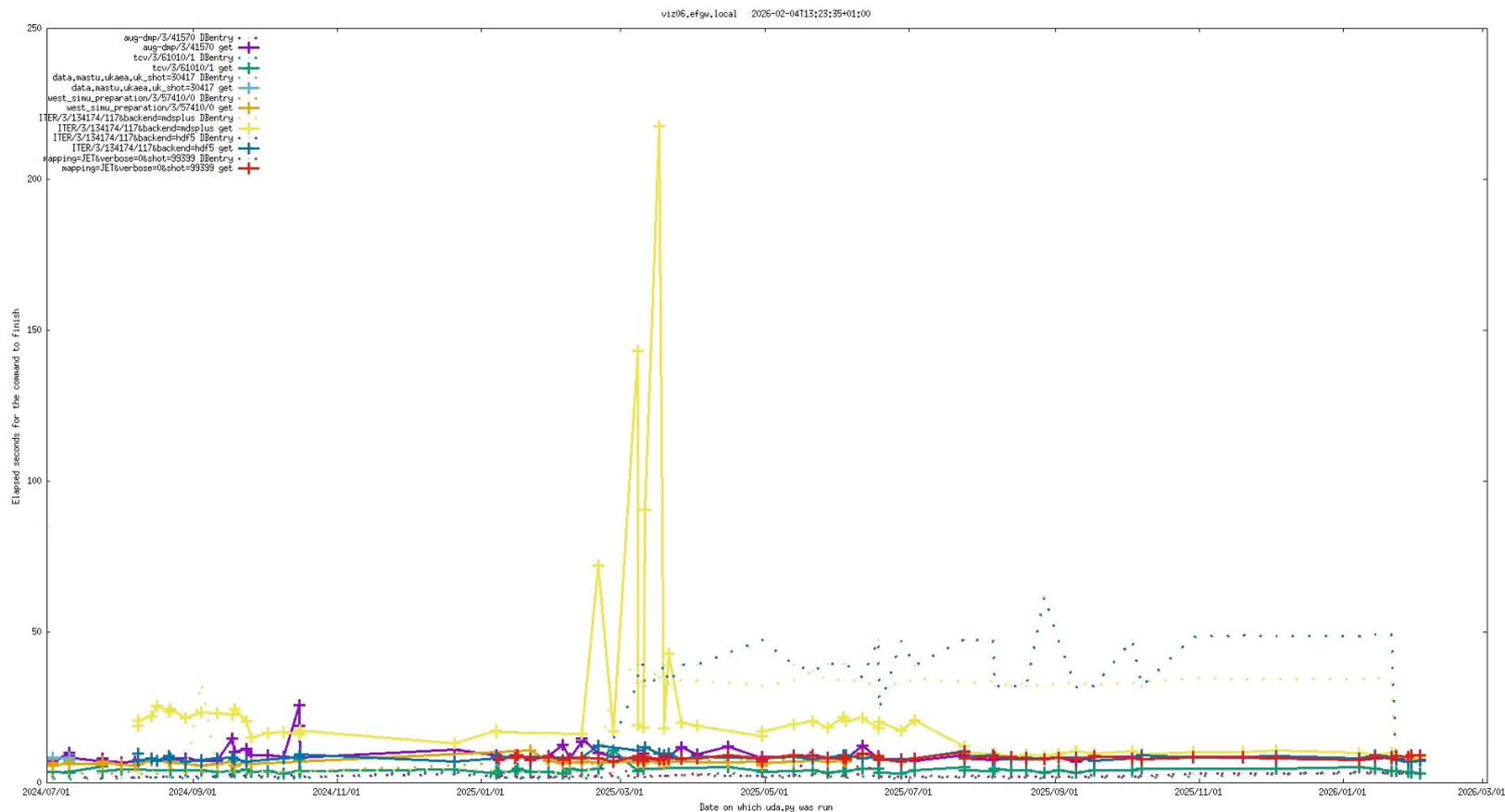
Value:  
git@itlab.com:fair-for-fusion/aug-summary-ingestion.git

# IMAS versions updated on the TOK and Citrix systems

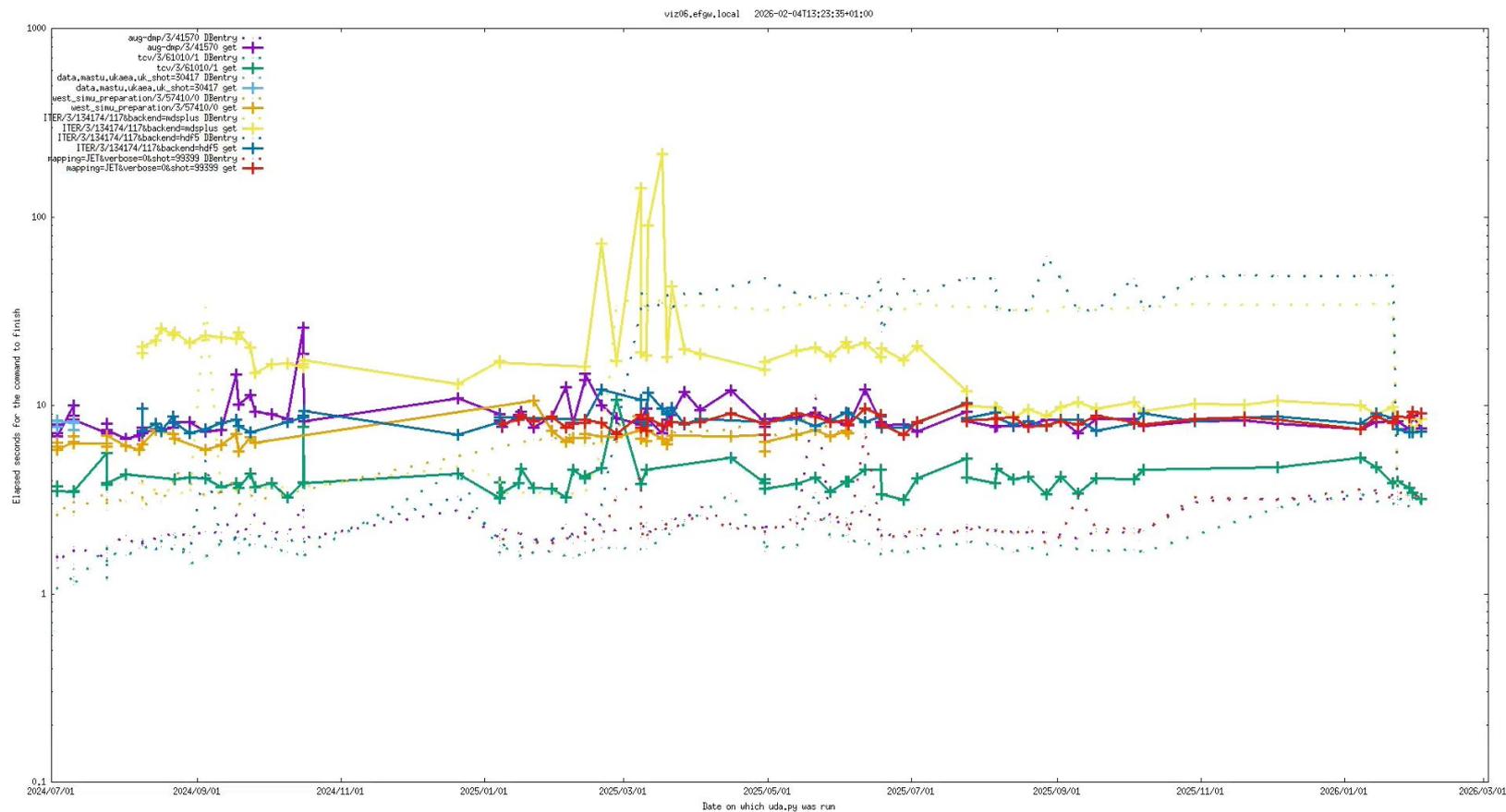
DD	AL	TOK cluster	Horizon system
3.38.1	4.11.4		2023-06-08
3.39.0	4.11.5	2023-07-26	2023-07-31
3.39.0	5.0.0	2023-10-10	
3.41.0	4.11.10	2024-04-17	
3.41.0	2024.07-foss-2023b		2024-08-11
3.42.0	2024.08-foss-2023b		2024-08-13
3.42.0	2024.08.1-foss-2023b	2024-08-23	2024-08-22
3.42.0	2024.08.1-intel-2023b	2024-08-23	2024-08-22
3.42.0	4.11.10		2024-10-09
3.42.0	2024.09-foss-2023b	2024-10-21	2024-10-21
3.42.0	2024.09-intel-2023b	2024-10-21	2024-10-21
4.0.0	2024.12-foss-2023b	2025-01-22	2025-01-22
4.0.0	2024.12-intel-2023b	2025-01-22	2025-01-22

- Entries in red have a problem after the cluster upgrade
  - Underlying python changed, together with numpy
    - Remove?

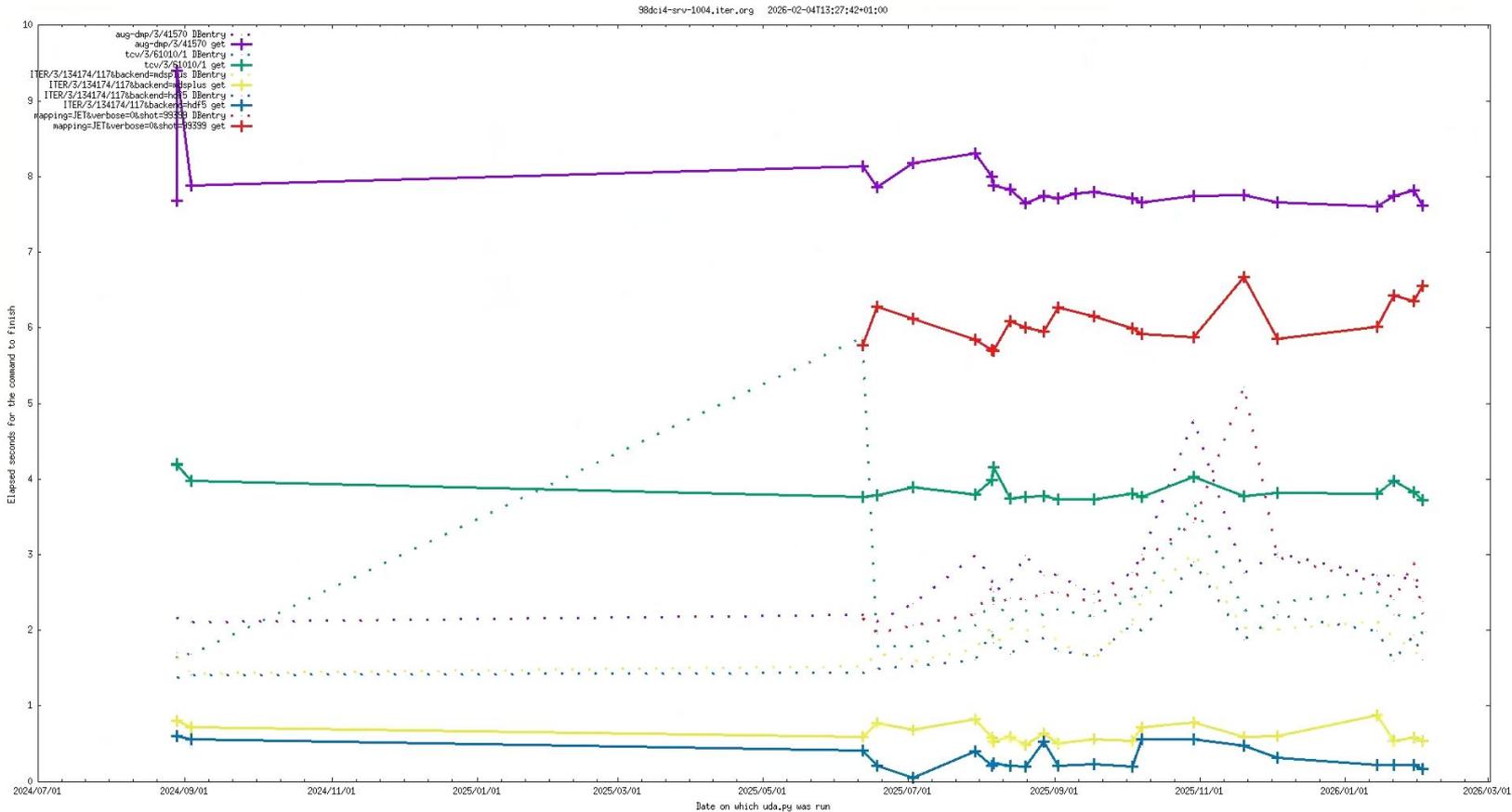
# Data access times: run on Gateway



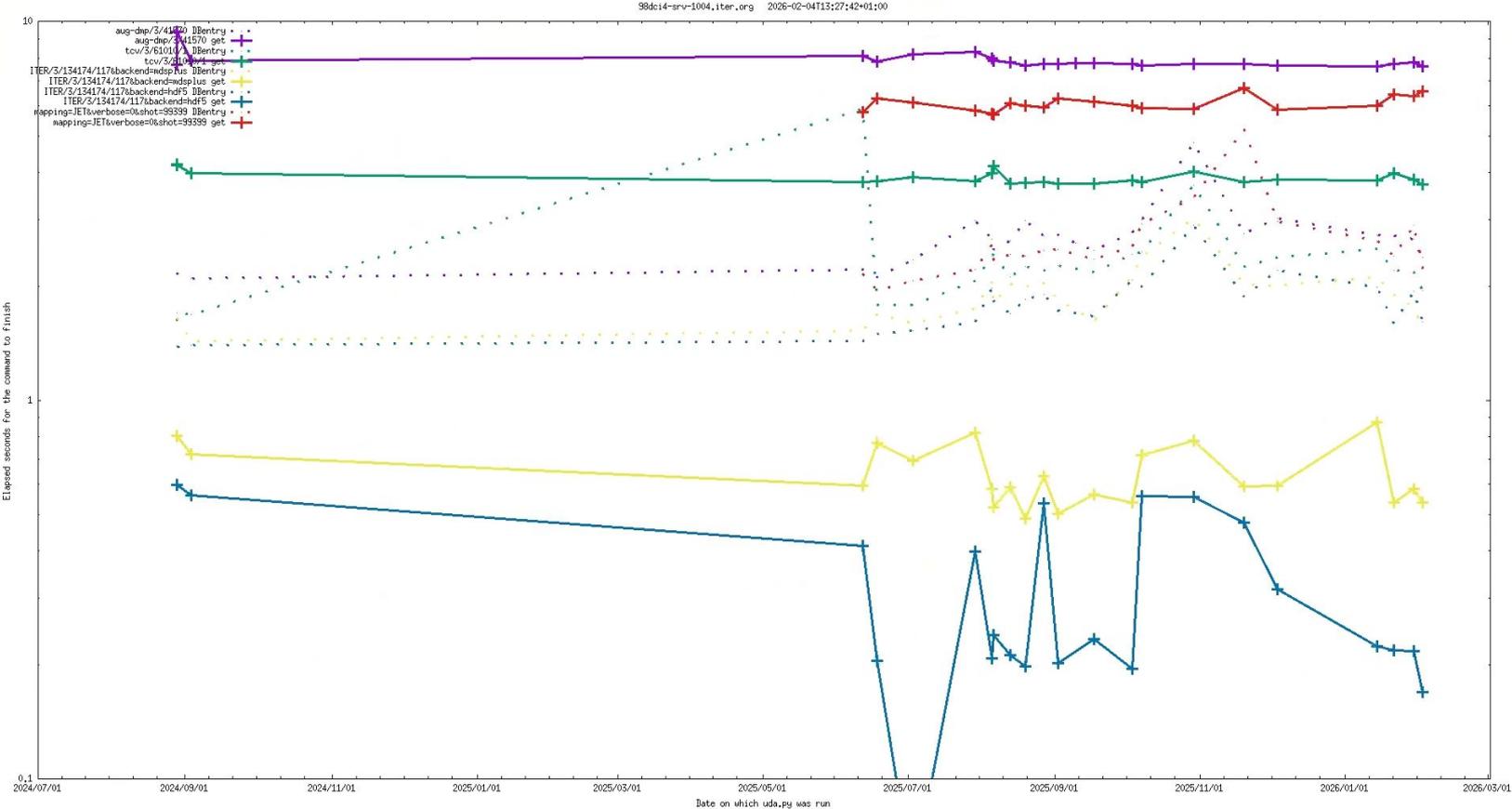
# Data access times: run on Gateway



# Data access times: run at ITER



# Data access times: run at ITER

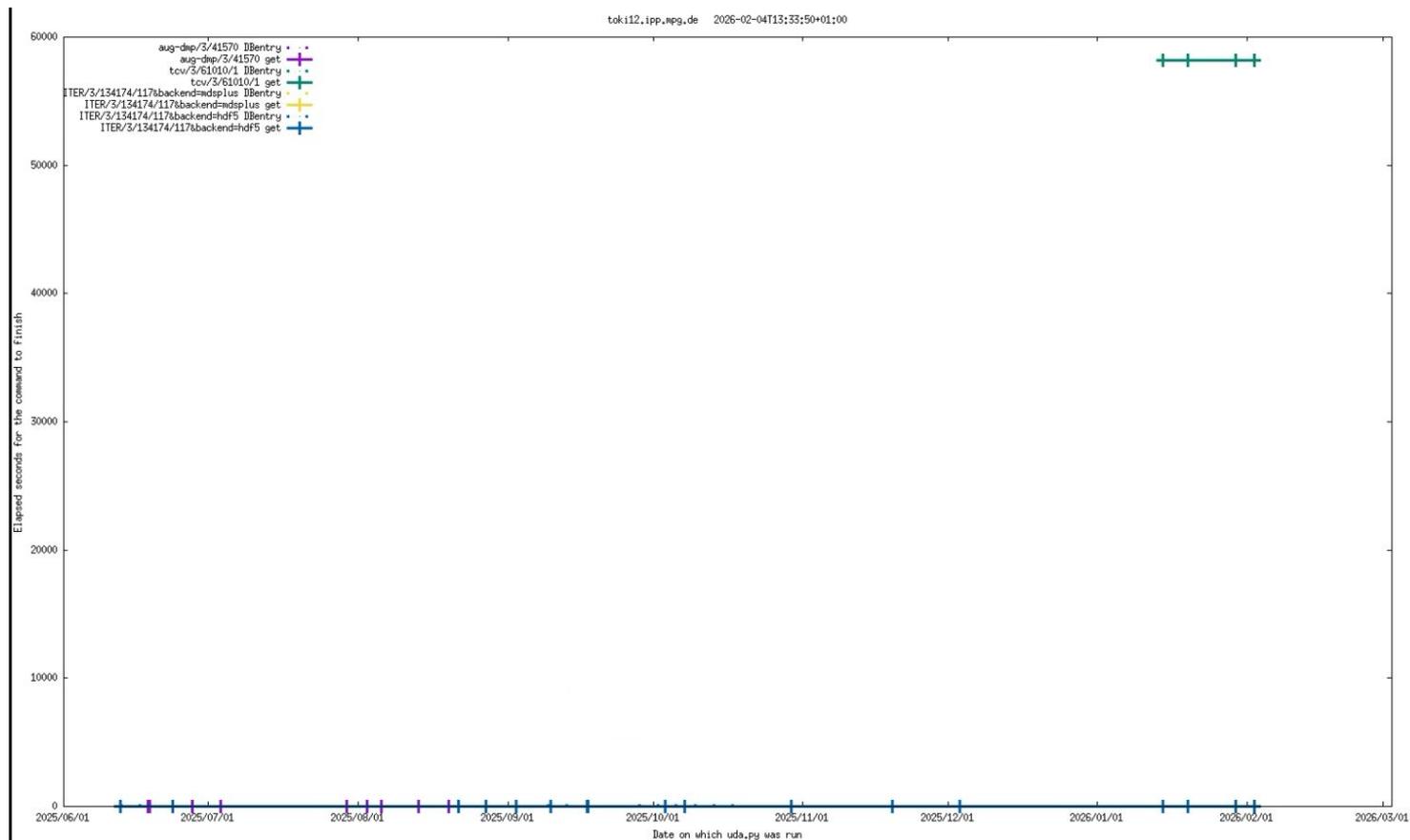


# Data access times: run at IPP (horizon)

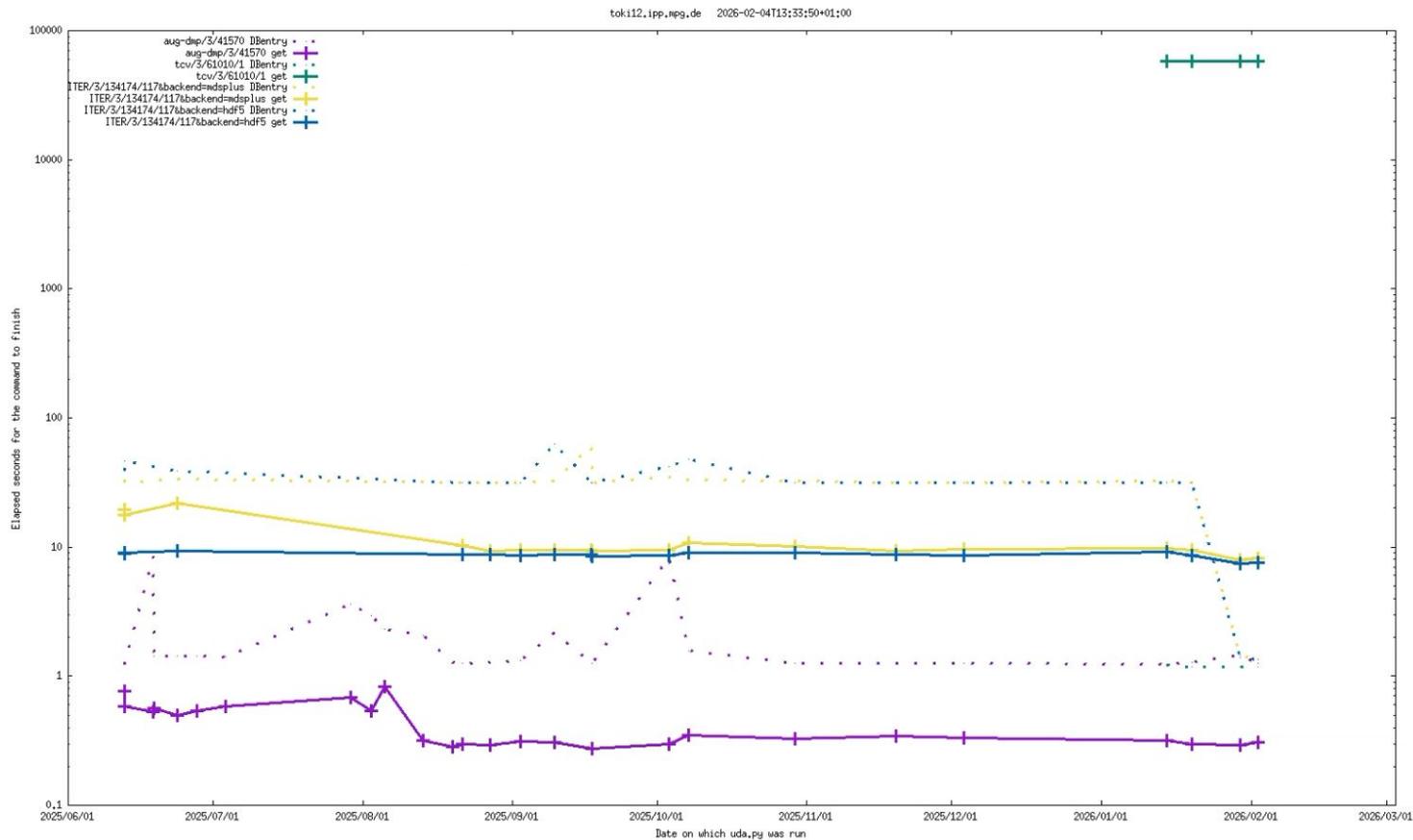




# Data access times: run at IPP (TOK cluster)



# Data access times: run at IPP (TOK cluster)



# Access log from IPP (Horizon system)

Accessing data from  
imas://spcimasdata.epfl.ch:443/uda?path=/data/imas/public/imasdb/tcv/3/61010/1/&back  
end=mdsplus  
Available IDSes are: ['summary']

Timing information  
DBEntry = 1.841  
get = 58964.679  
close = 0.019

Accessing data from  
imas://spcimasdata.epfl.ch:443/uda?path=/data/imas/public/imasdb/tcv/3/68340/2/&back  
end=mdsplus  
Available IDSes are: ['core\_profiles', 'dataset\_description', 'equilibrium', 'summary', 'tf']

Timing information  
DBEntry = 1.781  
get = 58965.656  
close = 0.019

Accessing data from  
imas://irfm-uda.partenaires.cea.fr:8083/uda?path=/lmas\_public/imas\_simulation/public/  
imasdb/west\_simu\_preparation/3/57410/0&backend=hdf5  
Available IDSes are: ['core\_profiles', 'dataset\_description', 'equilibrium', 'summary',  
'temporary']

Timing information  
DBEntry = 4.399  
get = 59738.187  
close = 0.030

Accessing data from  
imas://spcimasdata.epfl.ch:443/uda?path=/data/imas/public/imasdb/tcv/3/61010/1/&b  
ackend=mdsplus  
Available IDSes are: ['summary']

Timing information  
DBEntry = 3.024  
get = 3.200  
close = 0.016

Accessing data from  
imas://spcimasdata.epfl.ch:443/uda?path=/data/imas/public/imasdb/tcv/3/68340/2/&b  
ackend=mdsplus  
Available IDSes are: ['core\_profiles', 'dataset\_description', 'equilibrium', 'nbi',  
'pf\_active', 'summary', 'thomson\_scattering', 'tf', 'wall']

Timing information  
DBEntry = 3.045  
get = 4.782  
close = 0.020

Accessing data from  
imas://irfm-uda.partenaires.cea.fr:8083/uda?path=/lmas\_public/imas\_simulation/publi  
c/imasdb/west\_simu\_preparation/3/57410/0&backend=hdf5  
Timeout expired for  
imas://irfm-uda.partenaires.cea.fr:8083/uda?path=/lmas\_public/imas\_simulation/publi  
c/imasdb/west\_simu\_preparation/3/57410/0&backend=hdf5 after 60.094 seconds