

# bhtom2

## visual manual

### 2025 September 19



///AkondLab.



UNIVERSITY OF  
CAMBRIDGE



OPTICON  
RadioNet  
Pilot



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Warsaw University Astronomical Observatory

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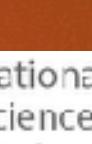
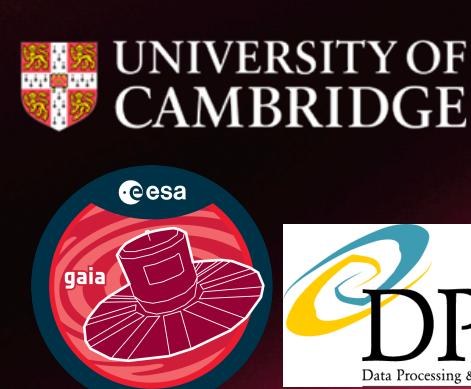
Andreja Gomboc  
and her group



Paweł Zieliński  
(staff)

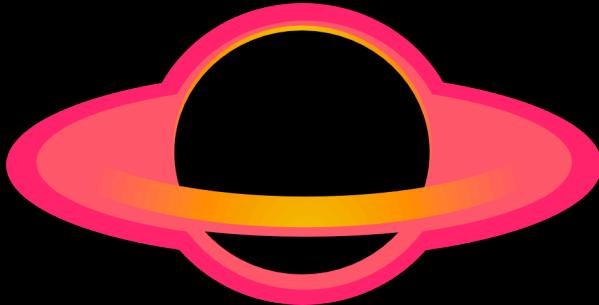
Former contributors: Maja Jabłońska, Piotr Trzcionkowski, Kacper Raciborski, Algita Stankevičiute, Kornel Howil

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Funding:





# registration

 BHTOM About Us Targets ▾ Target Grouping Data Observatory

Register

Login

## Sign up

Username

wyrzykow

Required. 150 characters or fewer. Letters, digits and @/./-/\_. only.

First name

Lukasz

Last name

Wyrzykowski

Email\*

wyrzykow@gmail.com

Groups

Password

.....

- Your password can't be too similar to your other personal information.
- Your password must contain at least 8 characters.
- Your password can't be a commonly used password.
- Your password can't be entirely numeric.

Password confirmation

\*\*\*\*\*

Enter the same password as before, for verification.

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Terms & Conditions

Checks if you are a human

Latex Name\*

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Affiliation\*

Warsaw University Astronomical Observatory

Your affiliation as you want it to appear correctly in potential publications

Address

Al. Ujazdowskie 4, 00-478 Warszawa, Poland

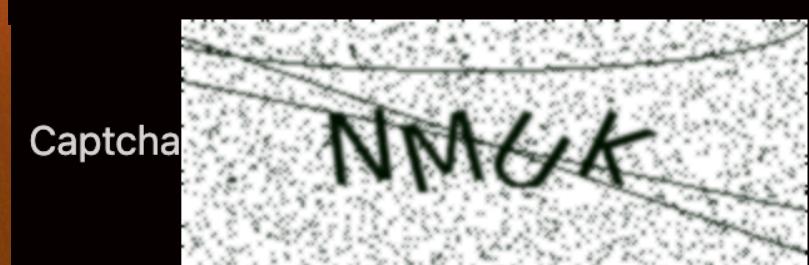
About me\*

Professor of Astronomy, Inventor and coordinator of BHTOM

ORCID ID, [more details](#)

0000-0002-9658-6151

I accept the terms and conditions\* [Read Terms and Conditions](#)

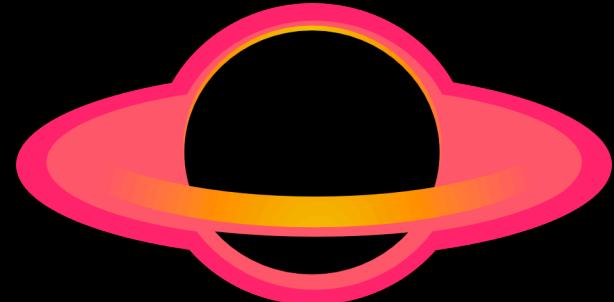


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every registration needs approval by a human who will read the About me field  
Wait for a confirmation email before continuing

All these details can be updated later by clicking your name in the top-right corner.



# registration

BHTOM About Us Targets Target Group

## Sign up

Username

wyrzykow

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First name

Lukasz

Last name

Wyrzykowski

Email\*

wyrzykow@gmail.com

Groups

Password

\*\*\*\*\*

- Your password can't be too similar to your other personal information.
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- Your password can't be entirely numeric.

Password confirmation

\*\*\*\*\*

Enter the same password as before, for verification.

every registration needs  
who will read the paper

Wait for a confirmation email before continuing

Astronomy & Astrophysics manuscript no. pap16aye  
October 30, 2019

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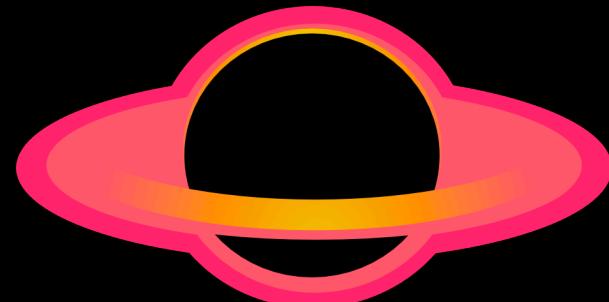
## Full orbital solution for the binary system in the northern Galactic disc microlensing event Gaia16aye\*

Łukasz Wyrzykowski<sup>1,2\*\*</sup>, P. Mróz<sup>1</sup>, K. A. Rybicki<sup>1</sup>, M. Gromadzki<sup>1</sup>, Z. Kołaczkowski<sup>45, 79, 2\*\*</sup>, M. Zieliński<sup>1</sup>, P. Zieliński<sup>1</sup>, N. Britavskiy<sup>4, 5</sup>, A. Gomboc<sup>35</sup>, K. Sokolovsky<sup>19, 3, 66</sup>, S.T. Hodgkin<sup>6</sup>, L. Abe<sup>89</sup>, G.F. Aldi<sup>20, 80</sup>, A. AlMannaei<sup>62, 100</sup>, G. Altavilla<sup>72, 7</sup>, A. Al Qasim<sup>62, 100</sup>, G.C. Anupama<sup>8</sup>, S. Awiphan<sup>9</sup>, E. Bachelet<sup>63</sup>, V. Bakış<sup>10</sup>, S. Baker<sup>100</sup>, S. Bartlett<sup>50</sup>, P. Bendjoya<sup>11</sup>, K. Benson<sup>100</sup>, I.F. Bikmaev<sup>76, 87</sup>, G. Birenbaum<sup>12</sup>, N. Blagorodnova<sup>24</sup>, S. Blanco-Cuaresma<sup>15, 74</sup>, S. Boeva<sup>16</sup>, A.Z. Bonanos<sup>19</sup>, V. Bozza<sup>20, 80</sup>, D.M. Bramich<sup>62</sup>, I. Bruni<sup>25</sup>, R.A. Burenin<sup>84, 85</sup>, U. Burgaz<sup>21</sup>, T. Butterley<sup>22</sup>, H. 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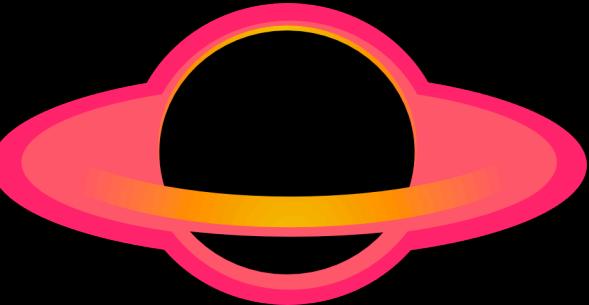
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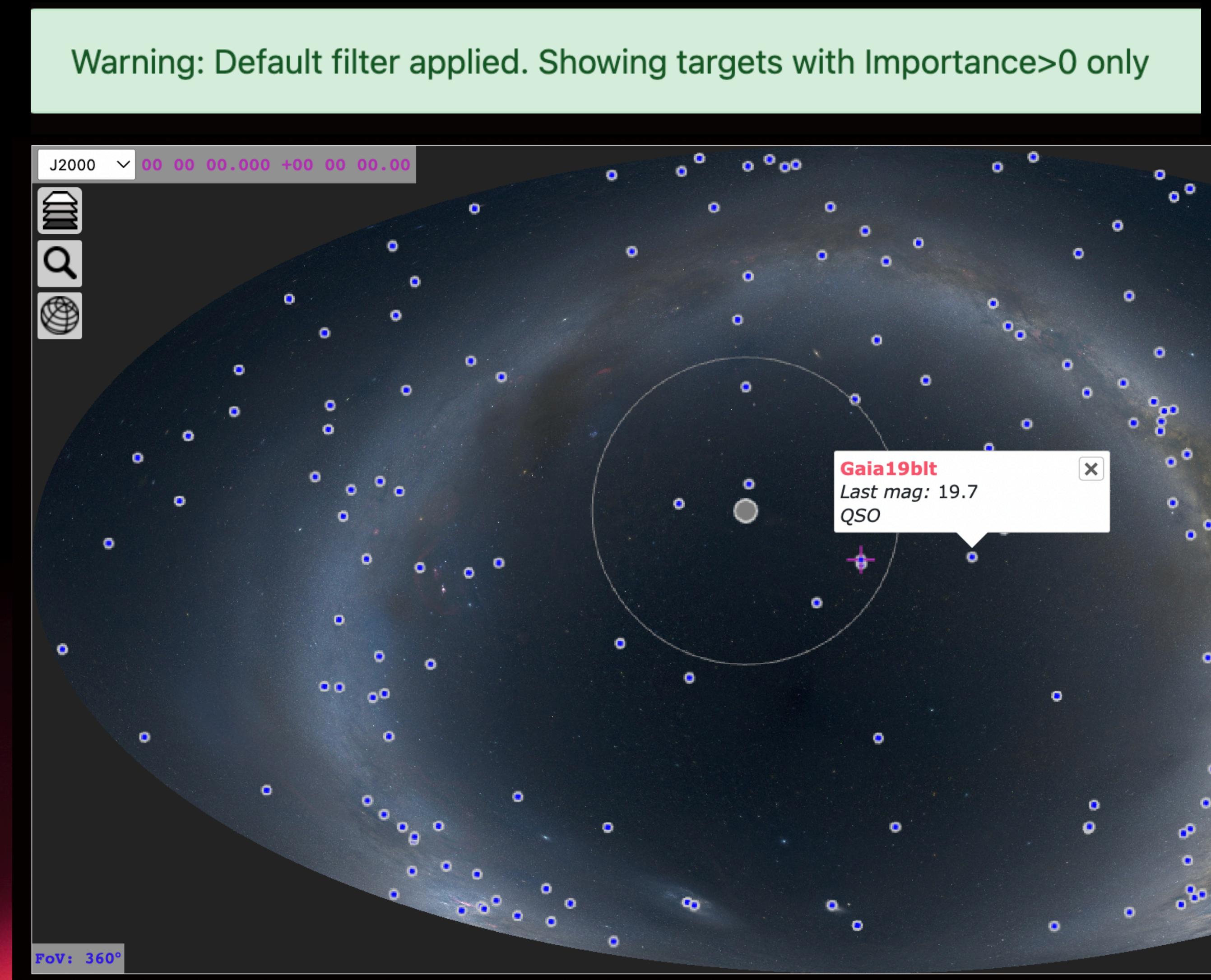
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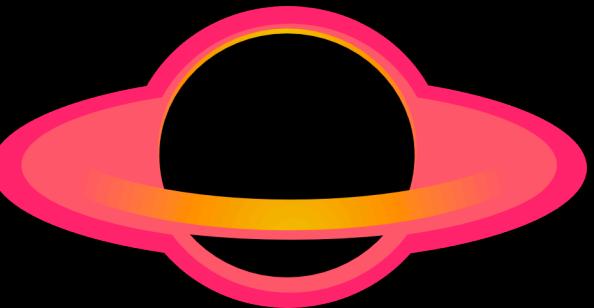
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# target lists

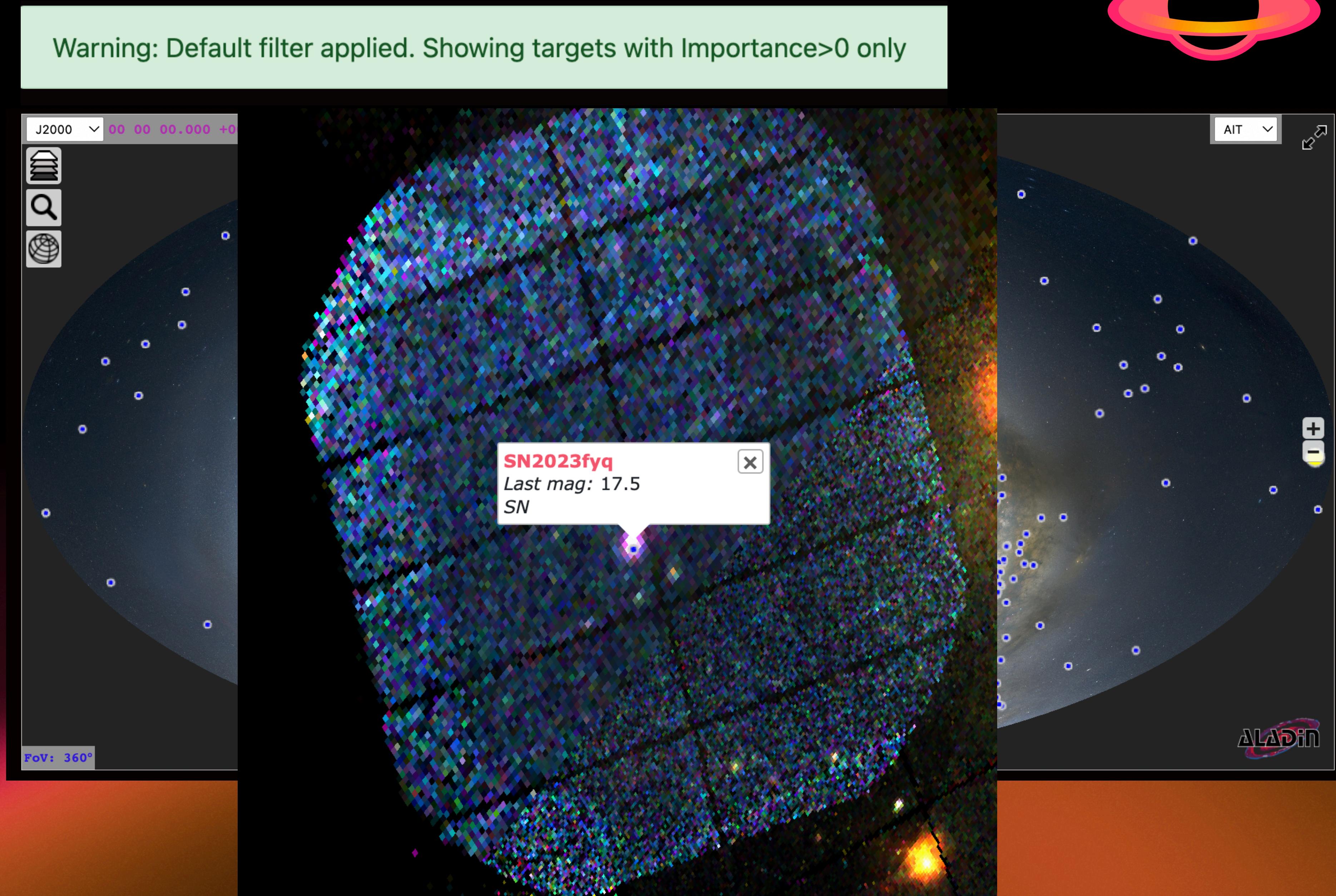
- Aladin map
- default: Mellinger
- equatorial-galactic
- interactive
- Moon
- Sun
- other wavelengths
- grid

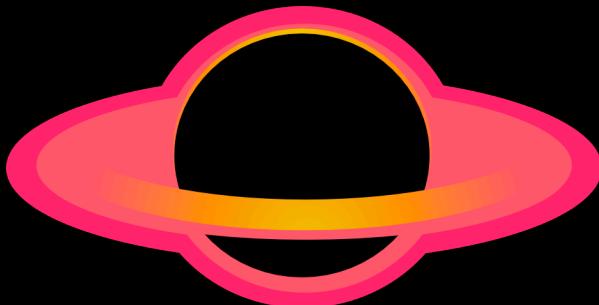




# target lists

- Aladin map
- default: Mellinger
- equatorial-galactic
- interactive
- Moon
- Sun
- other wavelengths
- grid





# target lists

Add/Remove from grouping

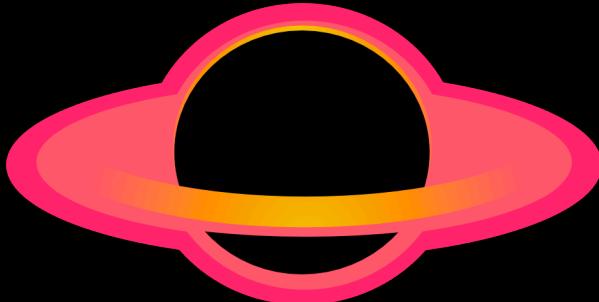
[Add](#) [Move](#) [Remove](#)

Show [10](#) entries

	Names	RA	Dec	Nobs	Last Gmag	Last Filter	Importance	Created	Priority	Sun	Class
■	Gaia22bpl	10:38:42.425	-61:15:49.680	903	12.7	Gaia/r	9.99	2023-10-01 06:10:13	336.7	62	Microlensing Event
■	Gaia23cpd	19:10:08.822	-04:43:14.736	1810	15.1	Gaia/r	9.99	2023-10-01 18:10:29	91.6	100	Unknown
■	Gaia23bay	19:49:42.996	+10:43:41.448	1953	13.8	Gaia/r	9.99	2023-10-01 19:10:47	46.8	110	Unknown
■	Gaia22bra	19:50:00.876	+26:29:07.908	2150	15.7	Gaia/r	9.99	2023-10-01 17:10:22	23.6	109	Unknown
■	Gaia23cnu	18:56:25.440	-18:04:50.880	1364	15.4	Gaia/r	9.99	2023-10-01 18:10:28	121.6	95	Unknown
■	Gaia21fkl	07:46:28.378	-21:52:32.016	1380	15.8	Gaia/r	9.99	2023-10-01 08:10:18	32.6	71	Unknown
■	Gaia22dkv	10:07:04.555	-66:10:51.204	1304	13.2	Gaia/r	9.99	2023-10-01 09:10:52	335.3	68	Unknown
■	Gaia23cnw	18:29:59.232	-14:02:27.564	265	17.7	Gaia/r	9.99	2023-10-01 18:10:28	126.6	89	Unknown
■	Gaia23cqh	19:08:36.578	+11:08:30.552	1406	17.0	Gaia/r	9.99	2023-10-01 18:10:29	66.5	100	Unknown

Showing 1 to 9 of 9 entries

Previous [1](#) Next



# target lists

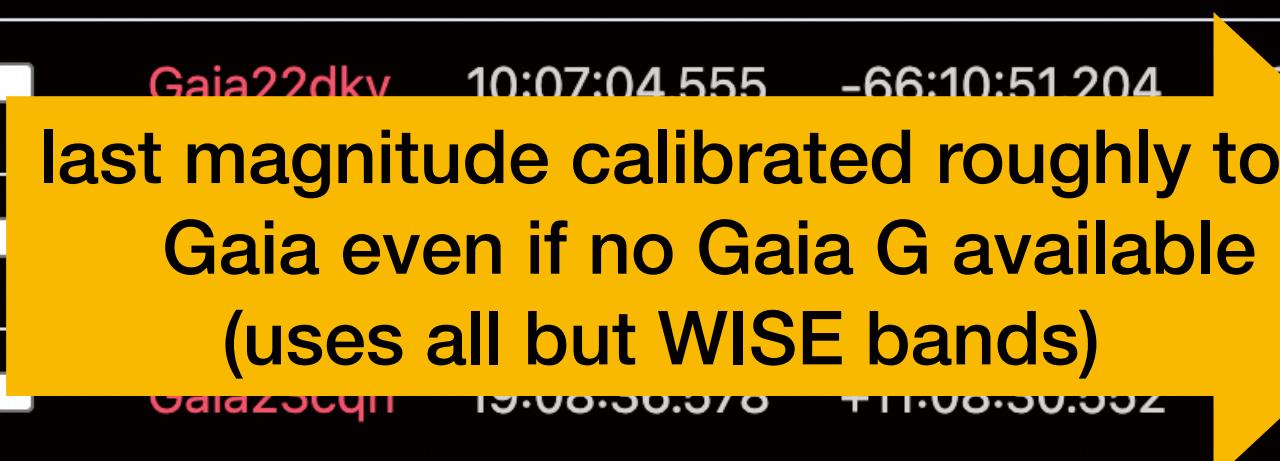
**target groupings** 

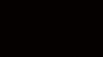
Add/Remove from grouping  Add Move Remove

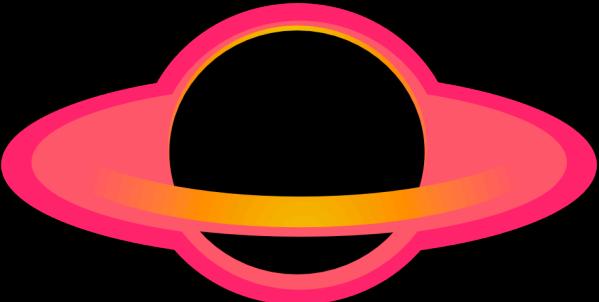
Show 10 entries 

**sortable columns**

	Names	RA	Dec	Nobs	Last Gmag	Last Filter	Importance	Created	Priority	Sun	Class
	Gaia22bpl	10:38:42.425	-61:15:49.680	903	12.7	Gaia/r	9.99		Microlensing Event		
	Gaia23cpd	19:10:08.822	-04:43:14.736	1810	15.1	Gaia/r	9.99	2023-10-01 18:10:29	91.6	100	Unknown
	Gaia23bay	19:49:42.996	+10:43:41.448	1953	13.8	Gaia/r	9.99	2023-10-01 19:10:47	46.8	110	Unknown
	Gaia22bra	19:50:00.876	+26:29:07.908	2150	15.7	Gaia/r	9.99	2023-10-01 17:10:22	23.6	109	Unknown
	Gaia23cnu	18:56:25.440	-18:04:50.880	1364	15.4	Gaia/r	9.99	2023-10-01 18:10:28	121.6	95	Unknown
	Gaia21fkl	07:46:28.378	-21:52:32.016	1380	15.8	Gaia/r	9.99	2023-10-01 08:10:18	32.6	71	Unknown
	Gaia22dkv	10:07:04.555	-66:10:51.204	1204	13.2	Gaia/r	9.99	2023-10-01 09:10:52	335.3	68	Unknown
	last magnitude calibrated roughly to Gaia even if no Gaia G available (uses all but WISE bands)			17.7	Gaia/r	9.99	2023-10-01 18:10:28	126.6	89	Unknown	
	Gaia23eqn	19:08:30.378	+11:08:30.552	106	17.0	Gaia/r	9.99	2023-10-01 18:10:29	66.5	100	Unknown

Showing 1 to 9 of 9 entries 

Previous  Next 



# target lists - filtering example

RA (0,360)

min	RA (0,360)
max	RA (0,360)

Dec (-90,90)

min	0
max	Dec (-90,90)

Importance (0,10)

min	4
max	Importance (0,10)

Sun separation (0,360)

min	60
max	Sun separation (0,360)

Last G magnitude

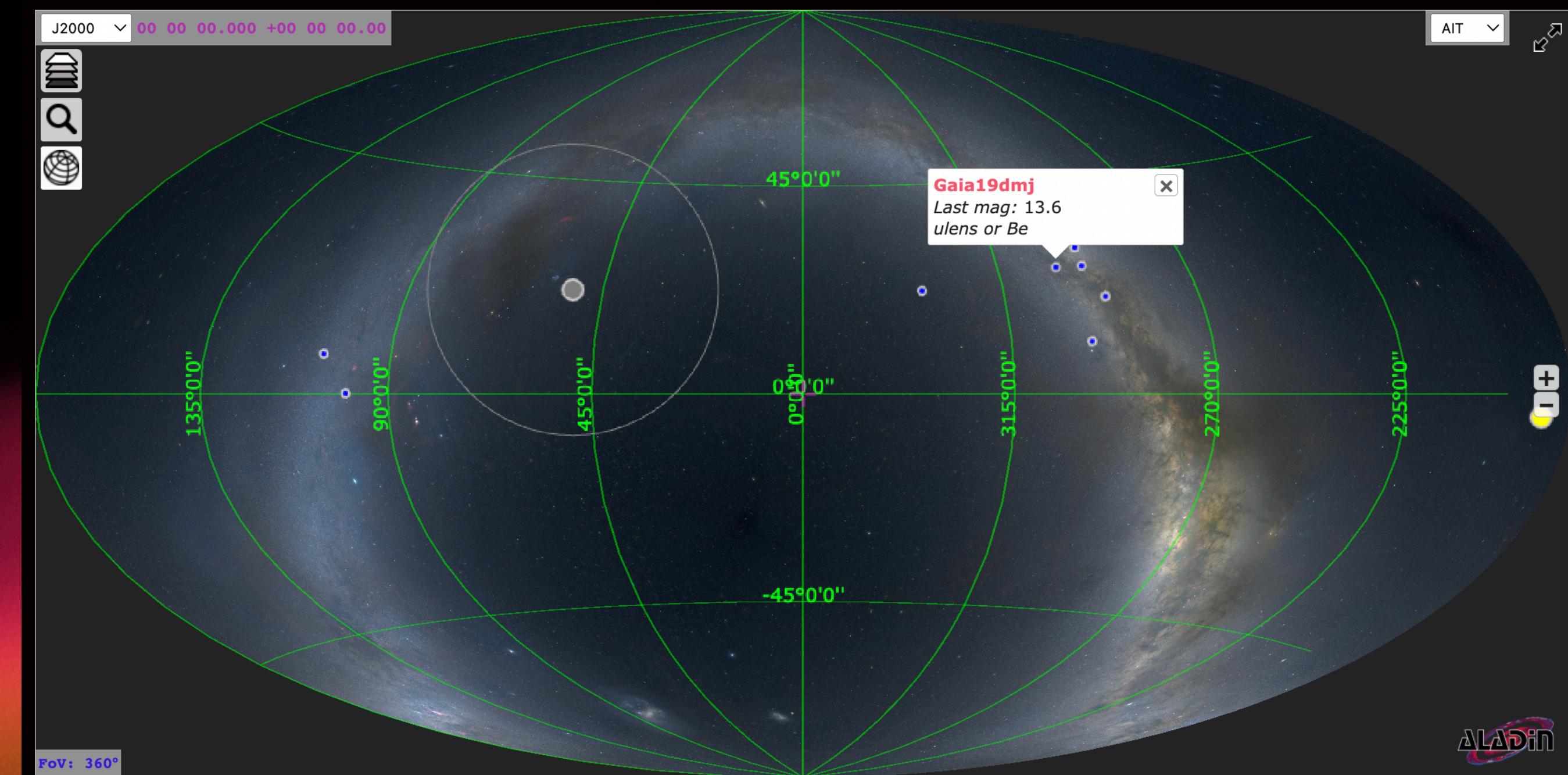
min	Last G magnitude
max	18

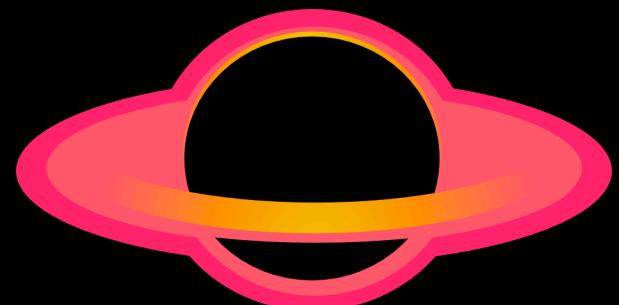
North only

Importance>4

visible now

not fainter than 18 mag





# target visual list

define your filter first

BHTOM About Us Targets ▾ Target Gro

- [List](#)
- [Visual list](#)
- [Create](#)
- [Import](#)
- [Catalog Search](#)

Cone Search

RA, Dec, Search Radius (degrees)

Target Grouping

Cone Search (Target)

Target Name, Search Radius (degrees)

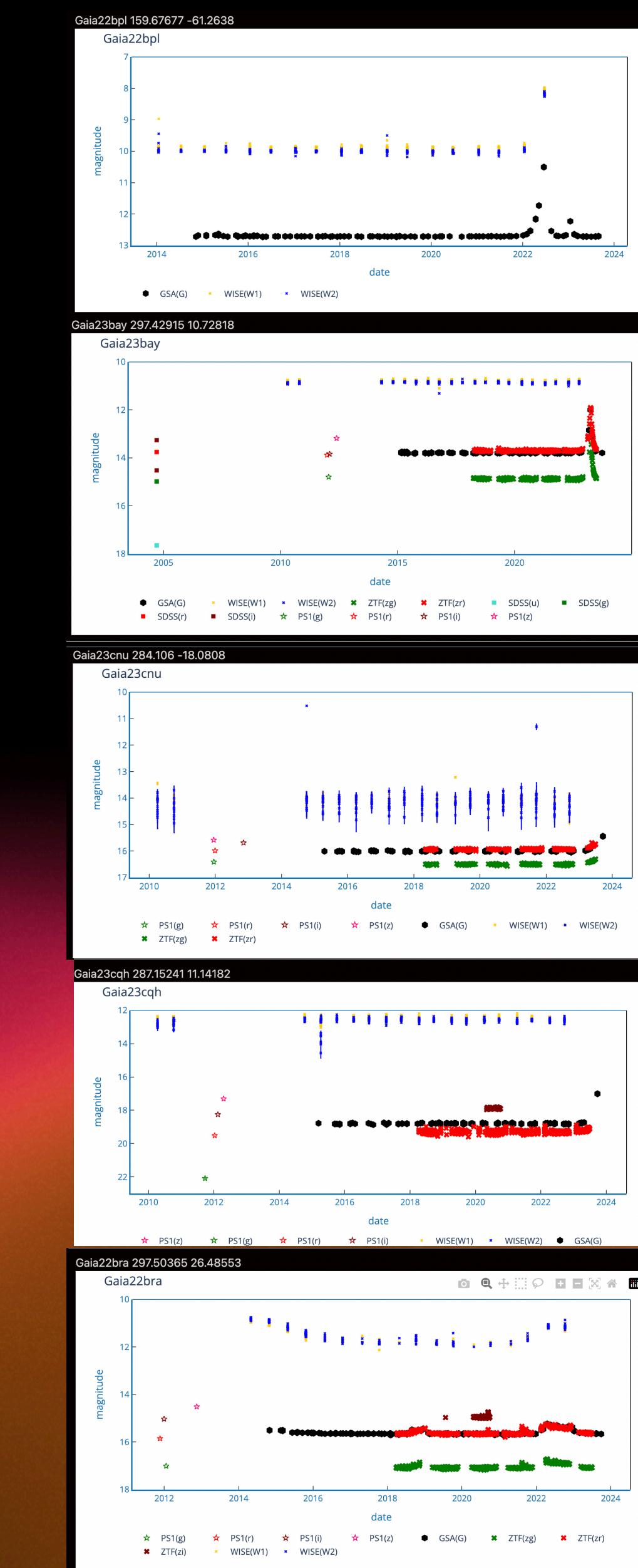
RA

min	RA
max	RA

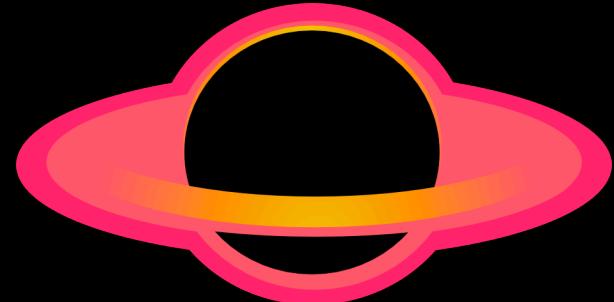
Dec

min	Dec
max	Dec

[Filter](#) [Reset](#)

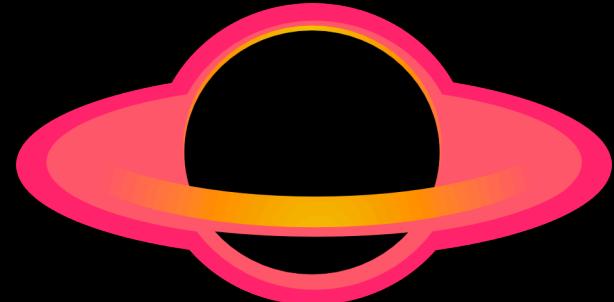


interactive plots  
click links to detail



# target create

- Create manually
- Import
- Catalog search



# target create

- Create manually
- Import
- Catalog search

**Create a Target**

Sidereal   Non-sidereal

Name

Name  
The name of this target e.g. Barnard's star.

Right Ascension

Right Ascension  
Right Ascension, in decimal degrees or sexagesimal hours. See <https://docs.astropy.org/en/stable/api/astropy.coordinates.Angle.html> for supported sexagesimal inputs.

Declination

Declination  
Declination, in decimal or sexagesimal degrees. See <https://docs.astropy.org/en/stable/api/astropy.coordinates.Angle.html> for supported sexagesimal inputs.

Epoch

2000,0  
Julian Years. Max 2100.

Classification

Unknown

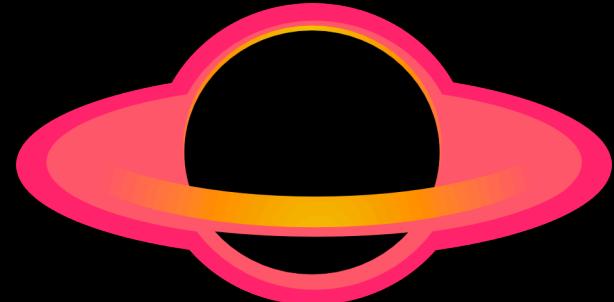
Description

Description

**Write human-readable comment what this target is**

**classification types**

- Unknown
  - Be-star outburst
  - Active Galactic Nucleus(AGN)
  - BL Lac
  - Cataclysmic Variable(CV)
  - Cepheid Variable(CEPH)
  - Eclipsing Binary(EB)
  - Galaxy
  - Long Period Variable(LPV)
  - Luminous Blue Variable(LBV)
  - M-dwarf flare
  - Microlensing Event
  - Nova
  - Peculiar Supernova
  - Quasar(QSO)
  - R CrB Variable
  - RR Lyrae Variable
  - Solar System Object(SSO)
  - Star
  - Supernova(SN)
  - Supernova imposter
  - Symbiotic star
  - Tidal Disruption Event(TDE)
  - Variable star-other
  - X-Ray Binary(XRB)
  - Young Stellar Object(YSO)



# target create

- Create manually
- Import
- Catalog search

-----

GAIA\_ALERTS name  
CPCS name  
ASASSN name  
OGLE\_EWS name  
ZTF name  
ATLAS name  
AAVSO name  
TNS name  
ANTARES name  
ZTF\_DR8 name  
SDSS name  
NEOWISE name  
ALLWISE name  
CRTS name  
LINEAR name  
FIRST name  
PS1 name  
DECAPS name  
GAIA\_DR3 name  
GAIA\_DR2 name  
KMT\_NET name

**Discovery date**

Discovery date

Date of the discovery, YYYY-MM-DDTHH:MM:SS, or leave blank

**Importance**

0

Target importance as an integer 0-10 (10 is the highest)

**Cadence**

0

Requested cadence (0-100 days)

**Groups**

Public

**Aliases**

Source Name

-----

Add new alias

Submit

Alias

Alias

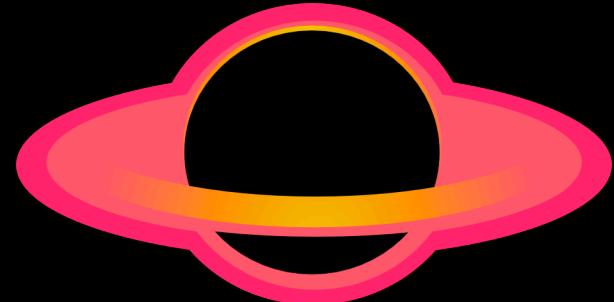
**relative importance to other targets (0-10)**

**optimal observing cadence in days**

**names of the target in various surveys  
(photometry data will be collected if available)**

**will be checked automatically for Ra,Dec  
so leave it blank first and see what we find**

**you can also provide an url to the data**



# target create – import

- powerful tool!
- use with caution!
- important:  
correct headers  
in CSV files  
(case sensitive!)
- special case for  
Gaia Alerts

all targets from this import  
will be added to this group

## Import Targets

If you want to add all imported targets to a new group, please fill in the "Group name" field (optional).

Upload a .csv to import targets in bulk.

**Allowed field names:**

name, ra, dec, epoch, parallax, pm\_ra, pm\_dec, distance, distance\_err, classification, description, discovery\_date, importance, cadence, phot\_class, description, epoch\_of\_elements, mean\_anomaly, arg\_of\_perihelion, eccentricity, lng\_asc\_node, inclination, mean\_daily\_motion, semimajor\_axis, epoch\_of\_perihelion, ephemeris\_period, ephemeris\_period\_err, ephemeris\_epoch, ephemeris\_epoch\_err, perihdist

**List of available classifications:**

Be-star outburst, AGN, BL Lac, CV, CEPH, EB, Galaxy, LPV, LBV, M-dwarf flare, Microlensing Event, Nova, Peculiar Supernova, QSO, RCrB, RR Lyrae Variable, SSO, Star, SN, Supernova imposter, Symbiotic star, TDE, Variable star-other, XRB, YSO

### CSV file format examples:

name,	type,	ra,	dec,	redshift,	distance,	classification,	description
mytarget,	SIDERAL,	123.12,	-12.34,	2.35,	1.0	Star	nice supernova

name,	ra,	dec,	importance,	cadence
mytarget,	123.12,	-12.34,	5,	1

name,	GAIA_ALERTS_name
mytarget,	Gaia20dup

name,	GAIA_ALERTS_name,	cadence
mytarget,	Gaia20dup,	3

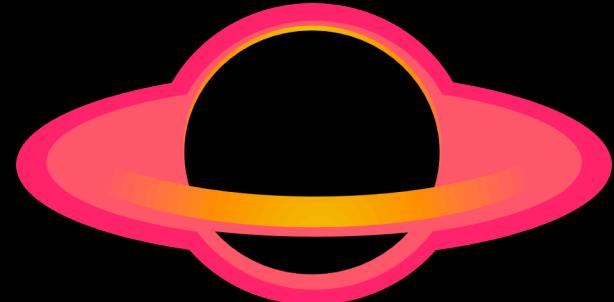
In these special cases, the Gaia Alerts harvester will gather all information from Gaia Alerts, but any extra columns in the CSV file with corresponding fields will replace those read from Gaia Alerts.

You can upload max 500 targets.

Group Name (optional):

Choose file No file chosen

Upload



# target create – catalog search

## Search Catalogs for a Target

Term

Gaia19axp

Service

Gaia Alerts

ANTARES

OGLE EWS

TNS

NED

Simbad

## Search Catalogs for a Target

Term

SN2023ixf

Service

TNS

search

## Create a Target

Sidereal

Non-sidereal

Name

Gaia19axp

The name of this target e.g. Barnard's star.

Right Ascension

216.94333

Right Ascension, in decimal degrees or sexagesimal hours. See <https://docs.astropy.org/en/stable/api/astropy.coordinates.Angle.html> for supported sexagesimal inputs.

Declination

29.51063

Declination, in decimal or sexagesimal degrees. See <https://docs.astropy.org/en/stable/api/astropy.coordinates.Angle.html> for supported sexagesimal inputs.

Epoch

2000

Julian Years. Max 2100.

Classification

Quasar(QSO)

Description

QSO with little prior variability in Gaia brightens by 1 mag. SDSS spectrum.

Discovery date

2019-03-10 14:27:41

Date of the discovery, YYYY-MM-DDTHH:MM:SS, or leave blank

Importance

9,99

Target importance as an integer 0-10 (10 is the highest)

Cadence

1,0

Requested cadence (0-100 days)

pre-filled fields

pre-filled fields

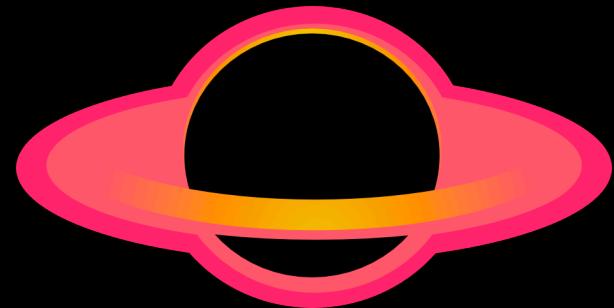
pre-filled fields

pre-filled fields

pre-filled fields

importance set to 9.99, but should be edited

cadence set to 1, but should be edited



# target create

Target created, grabbing all the data for it. Please wait and refresh in about a minute...

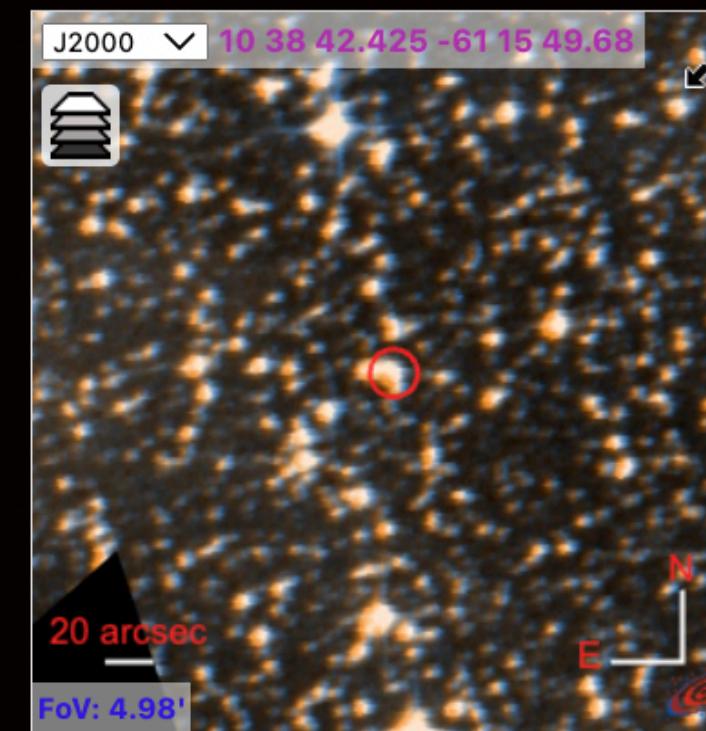
X

## Gaia22bpl

[Update Target](#) [Delete Target](#)

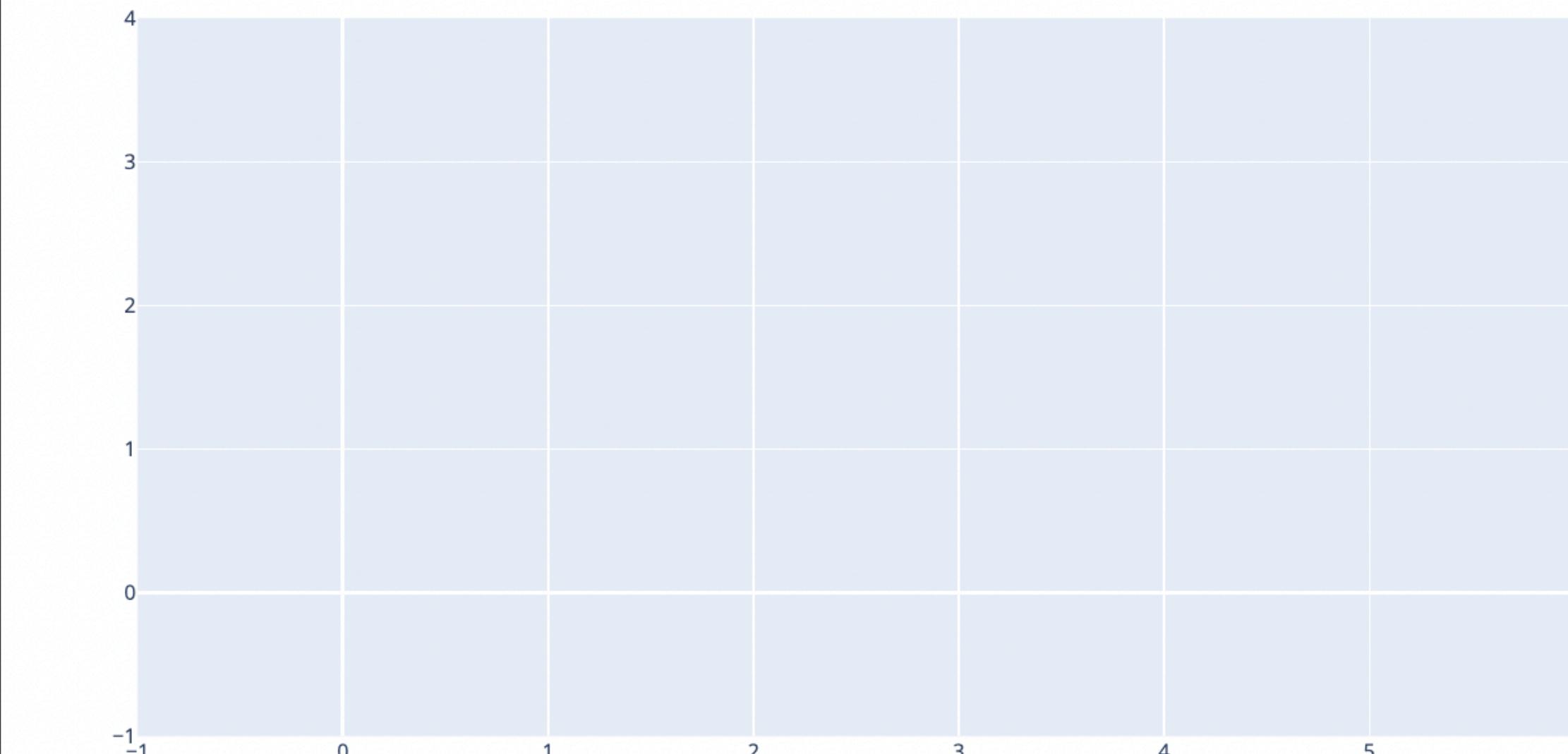
**Name** Gaia22bpl  
**Right Ascension** 159.67677  
10:38:42.425  
**Declination** -61.2638  
-61:15:49.680  
**Epoch** 2000.0  
**Discovered** 2022-04-14  
01:04:50  
**Class** Unknown  
**Target importance** 9.99  
(0-10)  
**Cadence requested** 1.0  
(d)

Other names:



Photometry Models Spectroscopy Observe Observations Publication Manage Data Manage Groups

### Photometry



[Download photometry data](#)

[Download radio data](#)

Recent Photometry

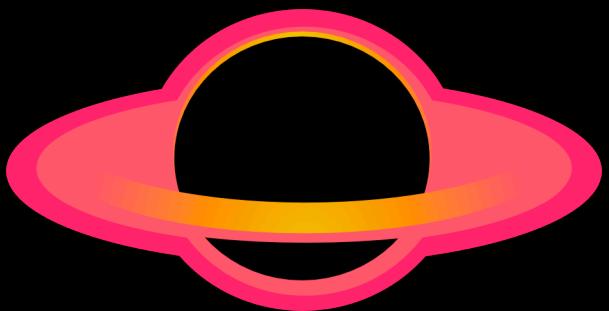
Timestamp

Magnitude

Filter

Facility

No recent photometry



DIRECT ACCESS via name: <https://bh-tom2.astrolabs.pl/targets/Gaia22bpl/>

# target page

## Gaia22bpl

[Update Target](#)
[Delete Target](#)

Name	Gaia22bpl
Right Ascension	159.67677
	10:38:42.425
Declination	-61.2638
	-61:15:49.680
Epoch	2000.0
Galactic Longitude	287.662164
Galactic Latitude	-2.390806
Constellation	Carina
Discovered	2022-04-14 01:04:50
Class	Microlensing Event
Phot.Class	Ulens Candidate 100.0%
Last MJD	60184.56631
Last G Mag	12.7
Target importance (0-10)	9.99
Cadence requested (d)	1.0
Observing priority	330.0
Sun Separation (deg)	62.0

### Other names:

**GAIA\_ALERTS**

Gaia22bpl

**GAIA\_DR3**

5254100872645875968

**NEOWISE**

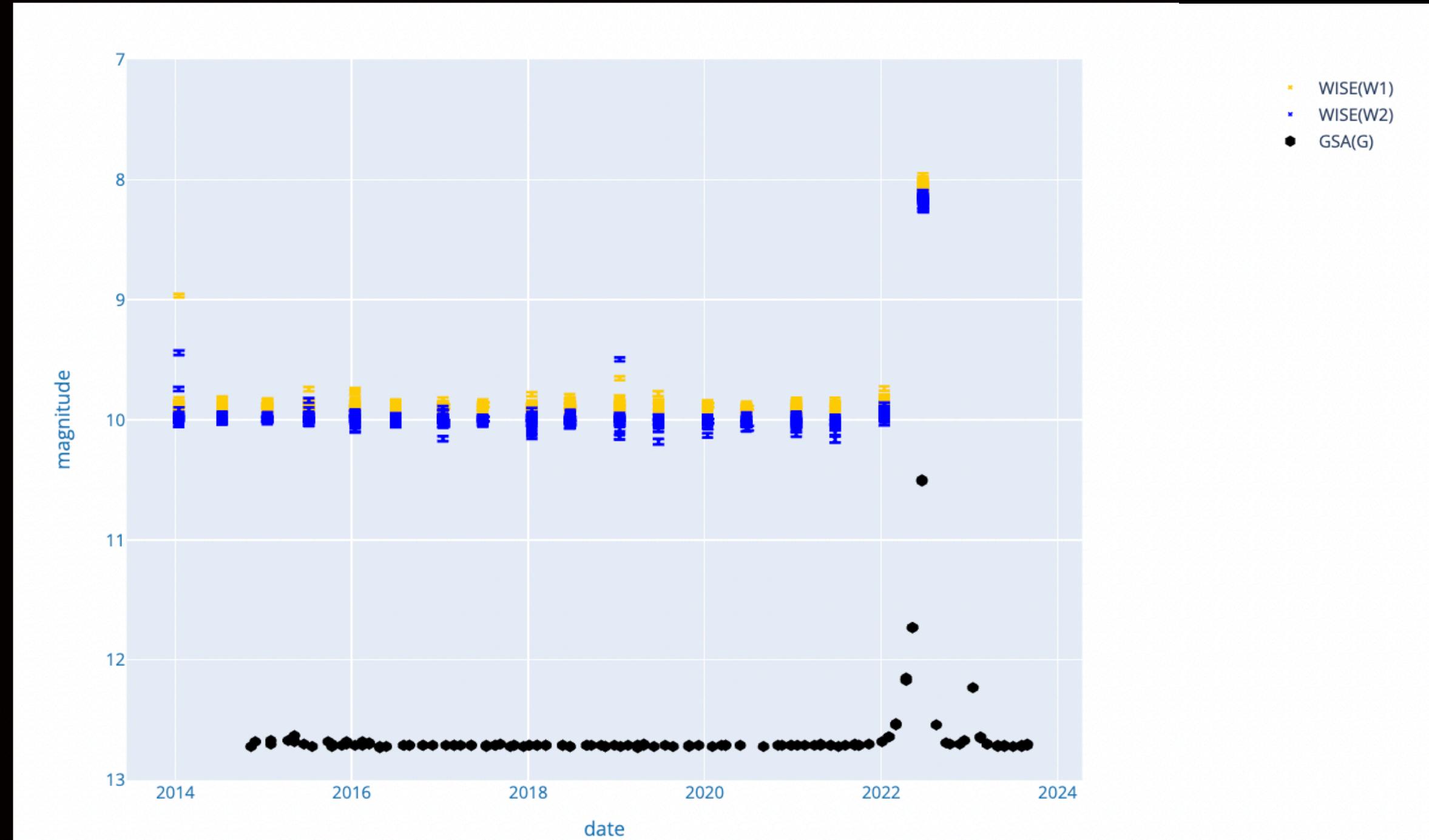
NEOWISE+J159.67677\_-61.2638

**CRTS**

CRTS+J159.67677\_-61.2638

[Photometry](#)
[Models](#)
[Spectroscopy](#)
[Observe](#)
[Observations](#)
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[Manage Data](#)
[Manage Groups](#)

## Photometry


[Download photometry data](#)
[Download radio data](#)

### Recent Photometry

Timestamp	Magnitude	Filter	Facility
2023-08-28 13:08:29	12.7100	GSA(G)	Gaia Alerts
2023-08-28 11:08:54	12.7000	GSA(G)	Gaia Alerts
2023-08-05 13:08:59	12.7200	GSA(G)	Gaia Alerts
2023-08-05 11:08:24	12.7100	GSA(G)	Gaia Alerts
2023-07-01 00:07:48	12.7200	GSA(G)	Gaia Alerts



**target page  
no login  
required**

PUBLIC LINK: <https://bhtom.space/public/targets/Gaia22bpl/>

### Gaia22bpl

Update Target
Delete Target

Name	Gaia22bpl
Right Ascension	159.67677
	10:38:42.425
Declination	-61.2638
	-61:15:49.680
Epoch	2000.0
Galactic Longitude	287.662164
Galactic Latitude	-2.390806
Constellation	Carina
Discovered	2022-04-14 01:04:50
Class	Microlensing Event
Phot.Class	Ulens Candidate 100.0%
Last MJD	60184.56631
Last G Mag	12.7
Target importance (0-10)	9.99
Cadence requested (d)	1.0
Observing priority	330.0
Sun Separation (deg)	62.0
Other names:	
GAIA_ALERTS	
Gaia22bpl	
GAIA_DR3	

Photometry
Publication

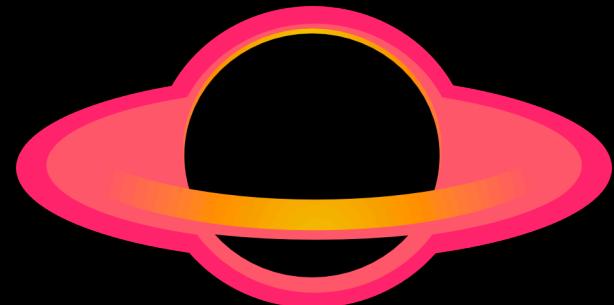
### Photometry

**no download**

### Recent Photometry

Timestamp	Magnitude	Filter	Facility
2023-08-28 13:08:29	12.7100	GSA(G)	Gaia Alerts
2023-08-28 11:08:54	12.7000	GSA(G)	Gaia Alerts

**Always use the public link when sharing or publishing**



# target detail

## Gaia22bpl

[Update Target](#) [Delete Target](#)

Name	Gaia22bpl
Right Ascension	159.67677
	10:38:42.425
Declination	-61.2638
	-61:15:49.680
Epoch	2000.0
Galactic Longitude	287.662164
Galactic Latitude	-2.390806

constellation

Constellation	Carina
Discovered	2022-04-14 01:04:50
Class	Microlensing Event
Phot.Class	Ulens Candidate 100.0%
Last MJD	60184.56631
Last G Mag	12.7
Target importance (0-10)	9.99
Cadence requested (d)	1.0
Observing priority	330.0
Sun Separation (deg)	62.0

automatic classification

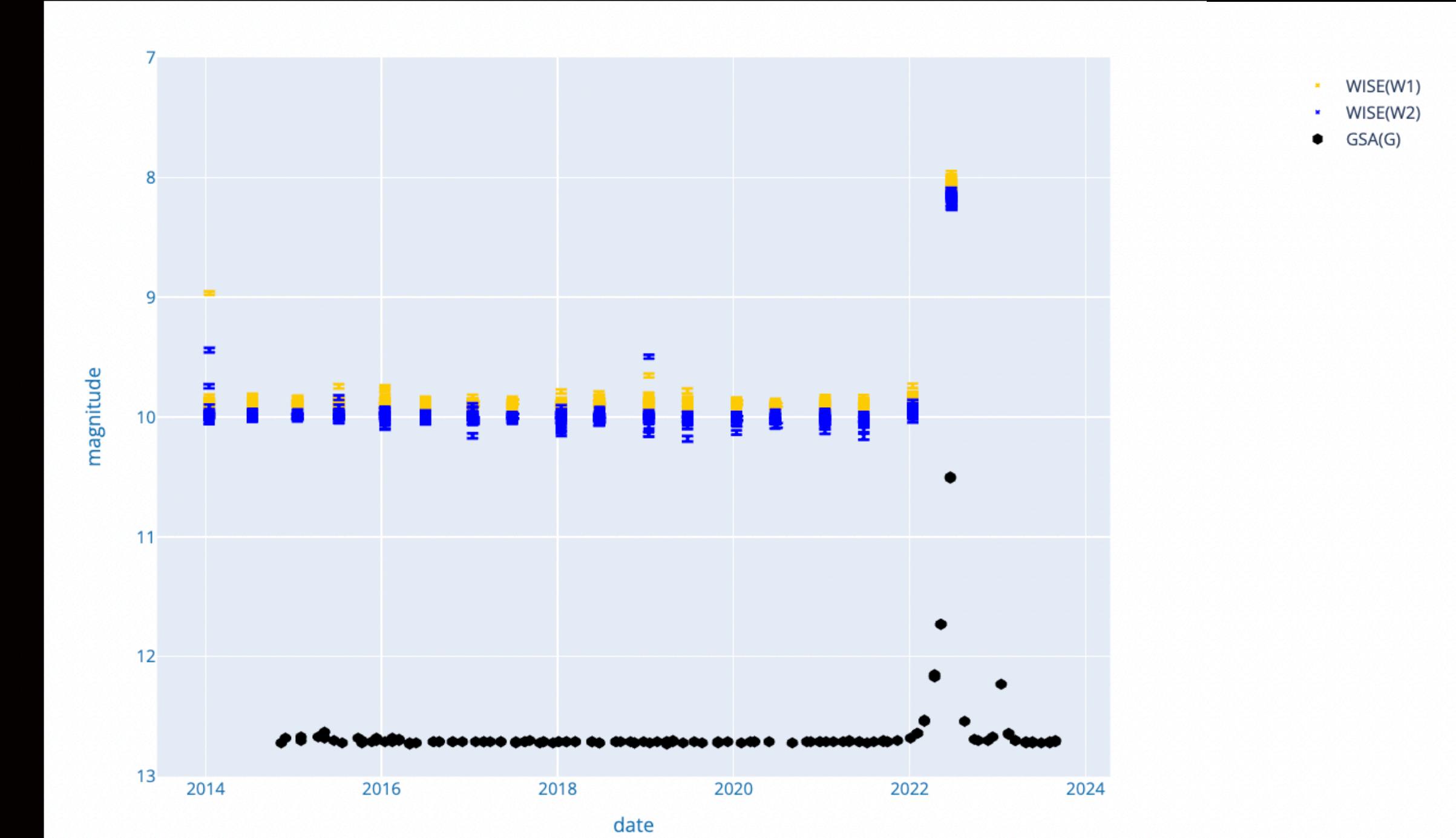
GAIA_ALERTS	
Gaia22bpl	
GAIA_DR3	
5254100872645875968	
NEOWISE	
NEOWISE+J159.67677_-61.2638	
CRTS	
CRTS+J159.67677_-61.2638	

external links

external links

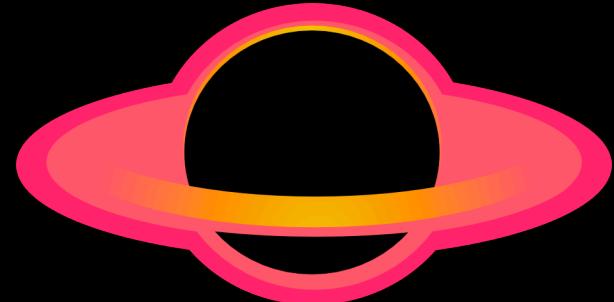
Photometry Models Spectroscopy Observe Observations Publication Manage Data Manage Groups

## Photometry



### Recent Photometry

Timestamp	Magnitude	Filter	Facility
2023-08-28 13:08:29	12.7100	GSA(G)	Gaia Alerts
2023-08-28 11:08:54	12.7000	GSA(G)	Gaia Alerts
2023-08-05 13:08:59	12.7200	GSA(G)	Gaia Alerts
2023-08-05 11:08:24	12.7100	GSA(G)	Gaia Alerts
2023-07-01 00:07:48	12.7200	GSA(G)	Gaia Alerts



# target detail

**Gaia22bpl**

Update Target
Delete Target

Name	Gaia22bpl
Right Ascension	159.67677 10:38:42.425
Declination	-61.2638 -61:15:49.680
Epoch	2000.0
Galactic Longitude	287.662164
Galactic Latitude	-2.390806
Constellation	Carina
Discovered	2022-04-14 01:04:50
Class	Microlensing Event
Phot.Class	Ulens Candidate 100.0%
Last MJD	60184.56631
Last G Mag	12.7
Target importance (0-10)	9.99
Cadence requested	1.0

**data download**

Sun Separation (deg)	62.0
Other names:	
GAIA_ALERTS	
Gaia22bpl	
GAIA_DR3	
5254100872645875968	
NEOWISE	
NEOWISE+J159.67677_-61.2638	
CRTS	
CRTS+J159.67677_-61.2638	

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**Photometry**

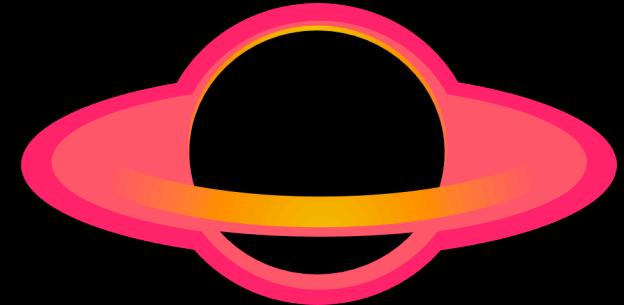
interactive plot

Download photometry data   radio data download(if exists)   Download radio data

**Recent Photometry**

Timestamp	Magnitude	Filter	Facility
2023-08-28 13:08:29	12.7100	GSA(G)	Gaia Alerts
2023-08-28 11:08:54	12.7000	GSA(G)	Gaia Alerts
2023-08-05 13:08:59	12.7200	GSA(G)	Gaia Alerts
2023-08-05 11:08:24	12.7100	GSA(G)	Gaia Alerts
2023-07-01 00:07:48	12.7200	GSA(G)	Gaia Alerts

**most recent photometry**



# target detail - comments

## Comments

created automatically

this is the first person  
to contact for  
details on the target  
and how to observe it

Lukasz Wyrzykowski on 2024-03-20

Target created by Lukasz Wyrzykowski(wyrzykow) on 2024-03-20 11:01:11.914539+00:00

x

Lukasz Wyrzykowski on 2024-03-20

It seems the increase in WISE (NIR) happens way before the one in the optical (Gaia). Weird! It might be a sign this is not microlensing, as in microlensing we would expect all bands rising simultaneously (unless there is strong blending in the optical and not so severe in NIR). Curious! Let's observe this one and we will see.

x

siegfried Vanaverbeke on 2024-03-25

it is therefore still worth observing.

x

Lukasz Wyrzykowski on 2024-05-06

A spectrum from the North would be useful. LT/INT?

x

Lukasz Wyrzykowski on 2024-11-15

LT/SPRAT submitted for window 15/11/2024 - 15/12/2024, blue grating, 1x20s.

x

## Comment

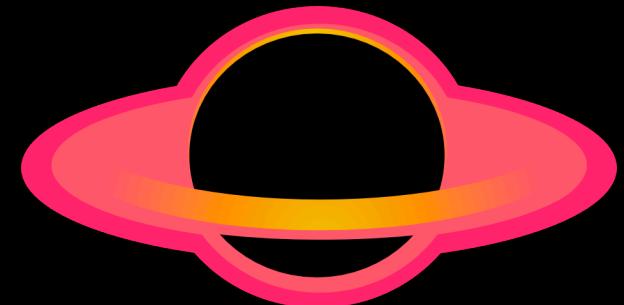
Comment

add info how do you want your target to be observed

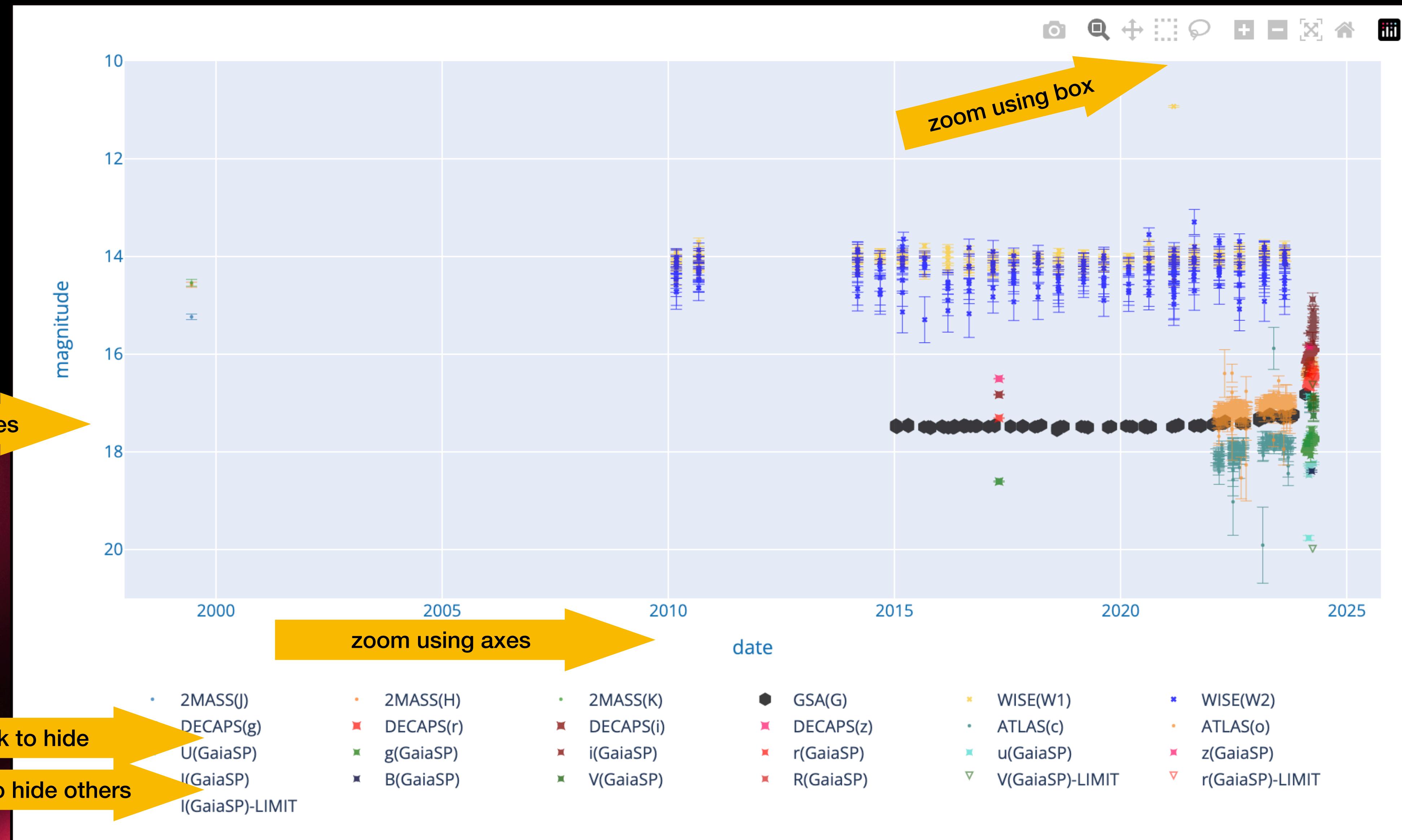
add any references to existing data or papers

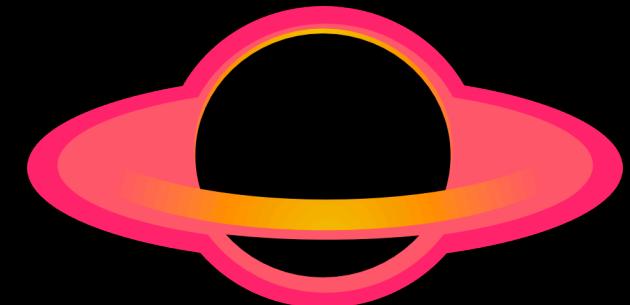
discuss with others, request spectra, etc.

Post



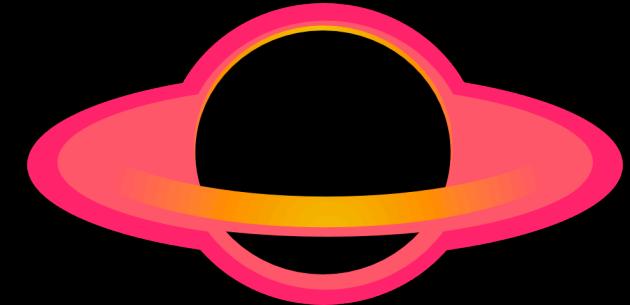
# target light curve - per filter



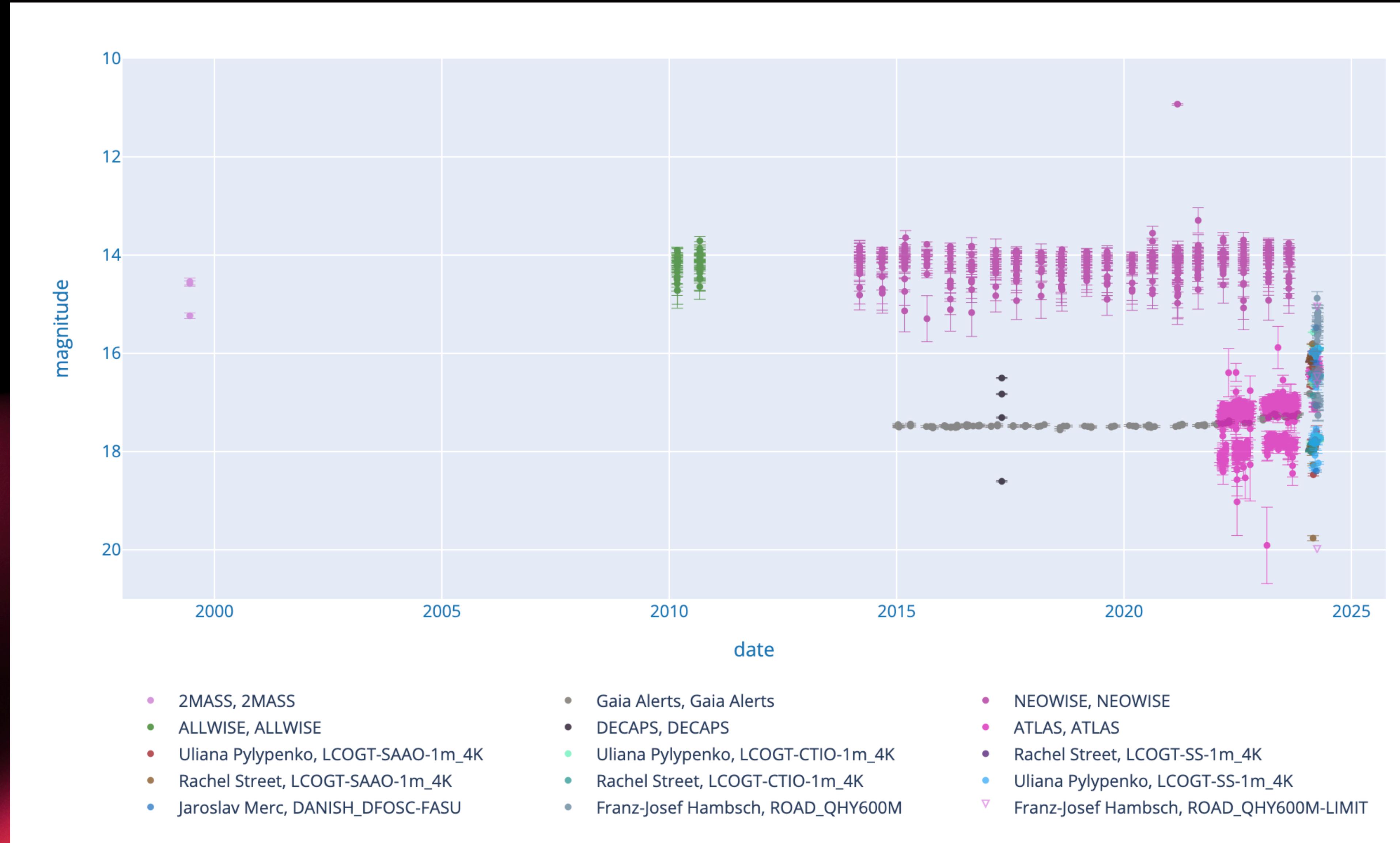


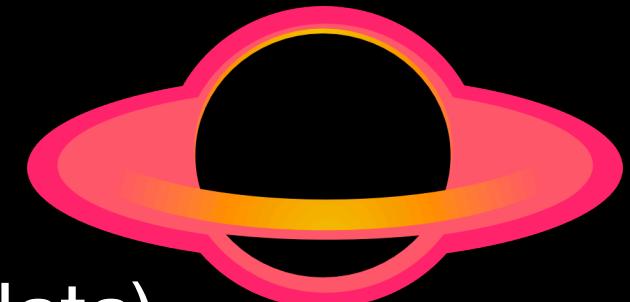
# target light curve - per filter





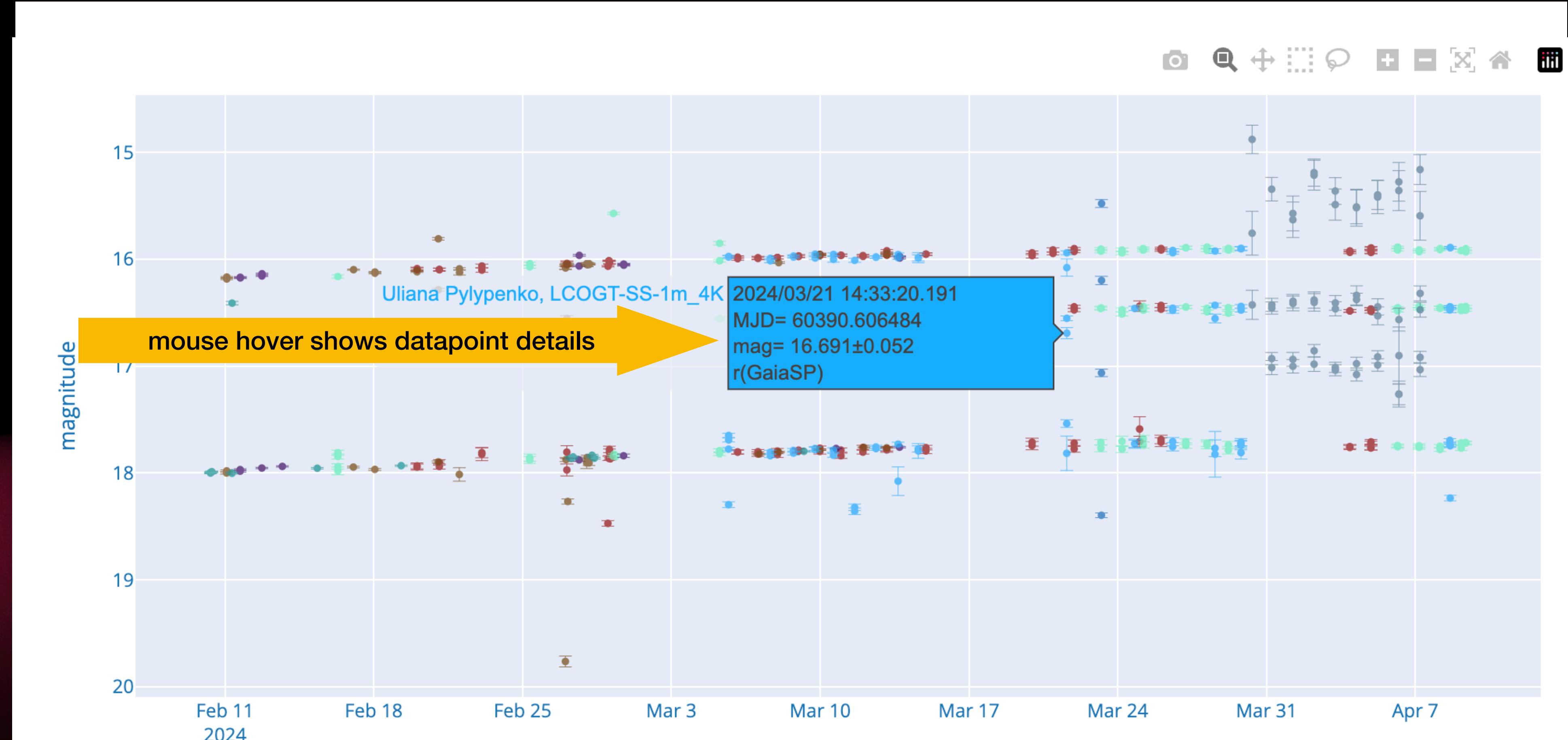
# target light curve - per facility





# target light curve - per facility

random colours per facility - they change everytime there is a need to re-generate the plot (new data)

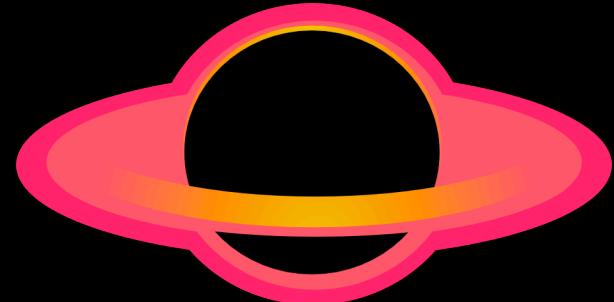


- 2MASS, 2MASS
- ALLWISE, ALLWISE
- Uliana Pylypenko, LCOGT-SAAO-1m\_4K
- Rachel Street, LCOGT-SAAO-1m\_4K
- Jaroslav Merc, DANISH\_DFOSC-FASU

- Gaia Alerts, Gaia Alerts
- DECAPS, DECAPS
- Uliana Pylypenko, LCOGT-CTIO-1m\_4K
- Rachel Street, LCOGT-CTIO-1m\_4K
- Franz-Josef Hambach, ROAD\_QHY600M

- NEOWISE, NEOWISE
- ATLAS, ATLAS
- Rachel Street, LCOGT-SS-1m\_4K
- Uliana Pylypenko, LCOGT-SS-1m\_4K
- ▼ Franz-Josef Hambach, ROAD\_QHY600M-LIMIT

Gaia24amo



# data product (DP) page

Calibration tab

Calibration CCD Phot

photometry file (in Extractor format)

All observers attached to this DP

time when the photometry was completed

Modified Julian Date of the observation

Best filter matched

Zero Point for the best filter

Astrometric scatter (auto)

**Target: Gaia22bpl**

Photometry	627703.dat
Owner	Lukasz Wyrzykowski
Observers	Lukasz Wyrzykowski
Observatory prefix	UZPW50_Chile_QHY268PRO
Time Uploaded	2025-09-25 14:06:35
Time Photometry	2025-09-26 12:31:24
Status	Calibration successful
MJD	60609.052846366074
Calib Survey/Filter	GaiaSP/any
Standardised to	GaiaSP/g
Magnitude	11.210 +/- 0.002 mag
ZP	-1.973 mag
Scatter	0.033 mag
Number of datapoints used for calibration	121
Outlier fraction	0.0
Matching radius[arcsec]	0.5091168824543144
Dry Run (no data will be stored in the database)	False
Comment	
Calibration log	627703.log

owner (uploader)

observatory ONAME

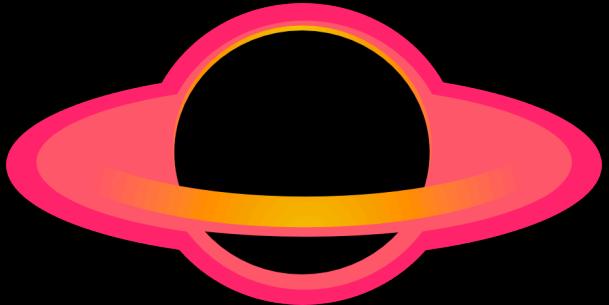
status: IN PROGRESS, etc.

Filter requested

Mag in the best filter

ZP scatter

Calibration log



# data product (DP) page

Calibration CCD Phot

**Target: Gaia22bpl**

Photometry

Owner

Observers

Observatory prefix

Time Uploaded

Time Photometry

Status

MJD

Calib Survey/Filter

Standardised to

Magnitude

UZPW50\_Chile\_QHY268PRO

2025-09-25 14:06:35

2025-09-26 12:31:24

For GaiaSP/any, we match your data to  
Gaia Synthetic Photometry in Johnson-  
Cousins (UBVRI) and Sloan (ugriz) filters.  
  
Each plot shows the ZP search for each  
filter. The best one is marked with red.  
Lowest scatter is selected.

11.210 +/- 0.002 mag

-1.973 mag

0.033 mag

Number of datapoints used for calibration

121

Outlier fraction

0.0

Matching radius[arcsec]

0.5091168824543144

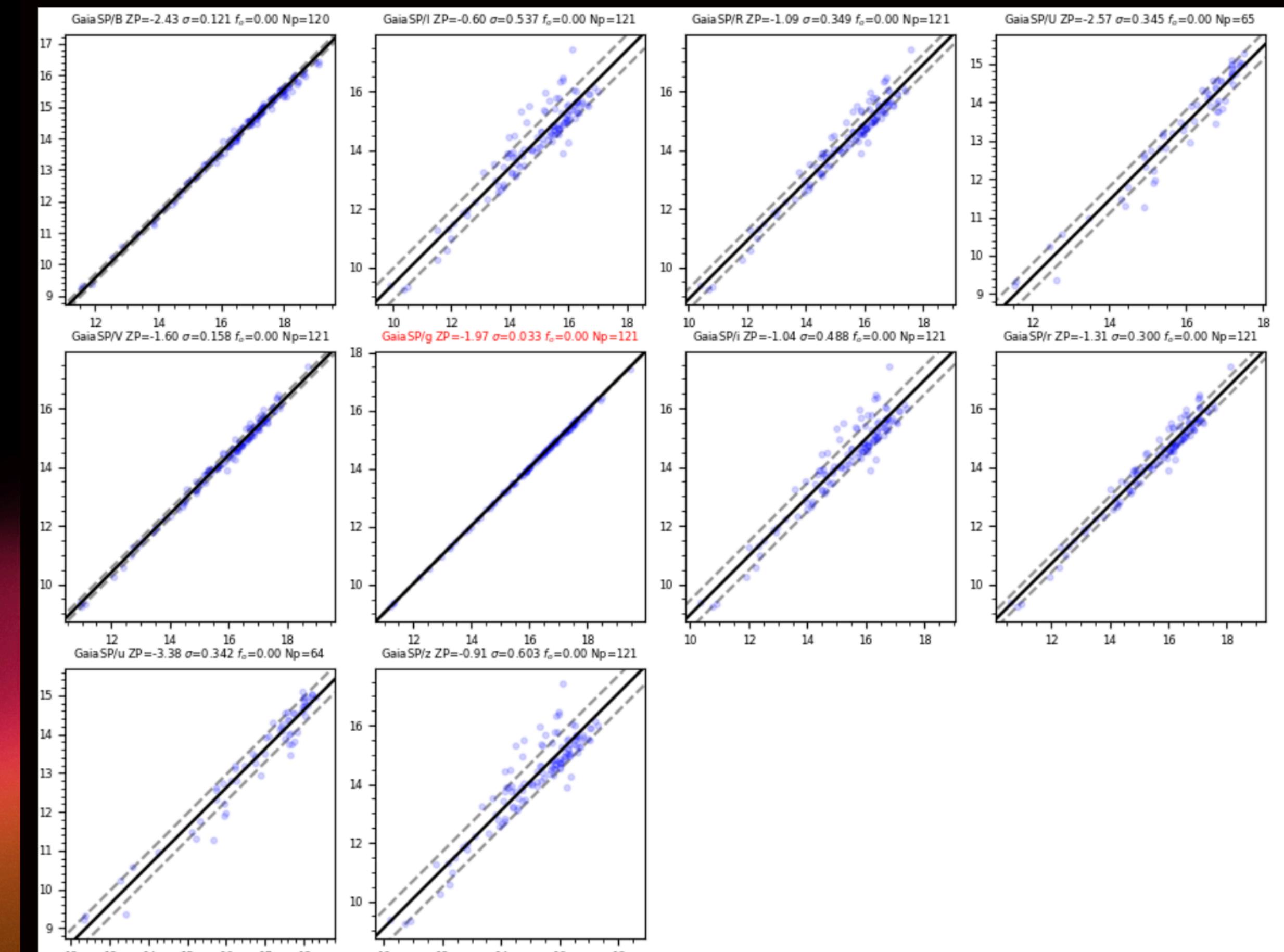
Dry Run (no data will be stored in the database)

False

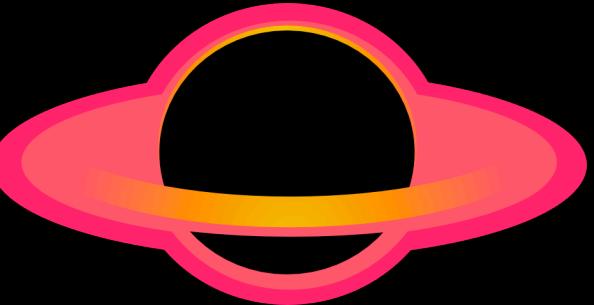
Comment

Calibration log

627703.log



Download Calibration Plot



# data product (DP) page - for FITS

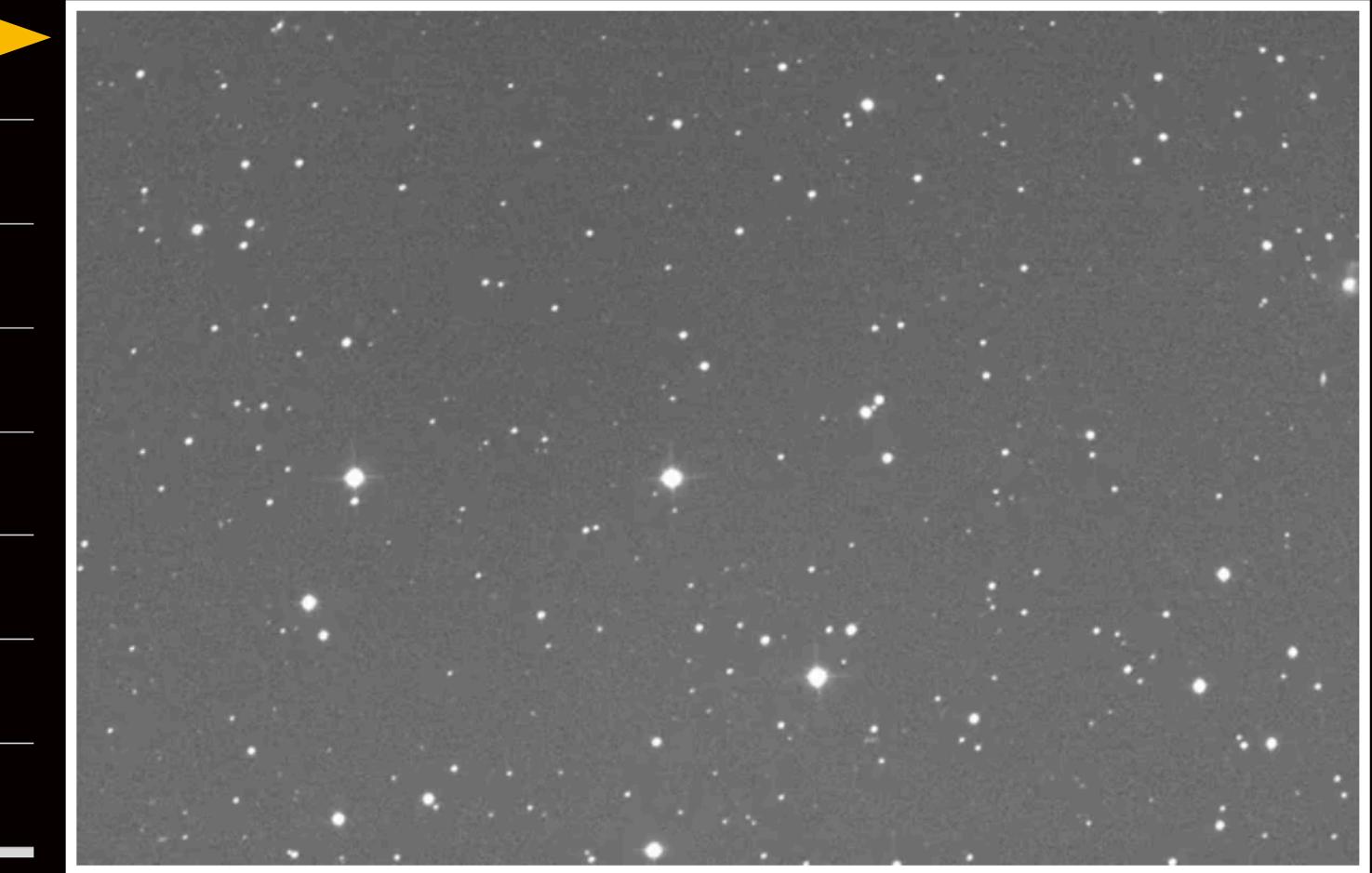
CCDPhot tab

Calibration 

**Target: Gaia22bpl**

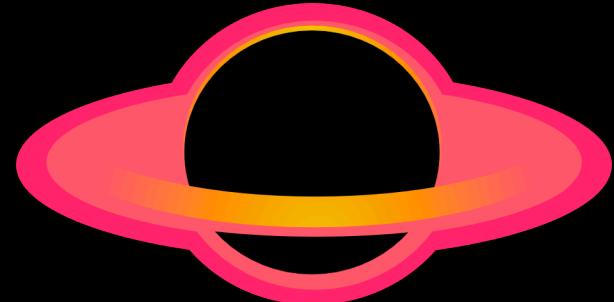
thumbnail image

ONAME



internal priority

Fits	2_2024_10_26_04_23_16_411_Xanthe_R_180_00s_1x1_0...
Instrument	QHY268PRO
Instrument Prefix	UZPW50_Chile_QHY268PRO
Target RA	323.1629166666666
Target DEC	-29.395138888888887
Dry Run	False
Priority	4
Start Time	2025-09-26 19:47:29
Status Time	2025-09-26 19:52:29
Status Message	Photometry result
Progress	N/A
Original filename	N/A
Object name	411/Xanthe
Origin of the data	UZPW
Name of the observatory site	UZO 50-cm Telescope
Telescope name or type	CDK_50cm
Fits Instrument	QHY268PRO

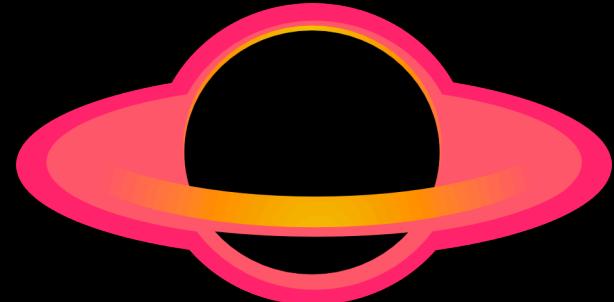


# data product (DP) page - for FITS

many useful parameters!

Right Ascension of the center of FoV [deg]	323.183542832791
Declination of the center of FoV [deg]	-29.4045584303659
Is Target-Of-Interest present in the frame?	N/A
Binning	2
Pixel scale [arcsec/px]	0.22
Filter in the header	R
Date & Time of observation (at start)	2024-10-26T04:23:16.297
Exposure time [s]	180.0
Modified Julian Date	60609.1828275118
Heliocentric Julian Date	2460609.684094598
Barycentric Julian Date	2460609.684888091
Object elevation above horizon [deg]	N/A
Object azimuth [deg]	N/A
Airmass	1.84759212677573
Moon elevation above horizon [deg]	N/A
Moon azimuth [deg]	N/A
Moon angular distance [deg]	N/A
Moon fractional phase	N/A
Sun elevation above horizon [deg]	N/A
Sun azimuth [deg]	N/A
Sun angular distance [deg]	N/A

Full-Width-at-Half-Maximum along X axis (median) [px]	N/A
Full-Width-at-Half-Maximum along Y axis (median) [px]	N/A
Average Full-Width-at-Half-Maximum [px]	N/A
Average calculated seeing [arcsec]	N/A
Number of stars detected in the image	N/A
Calculated limiting magnitude in the frame in Gaia G [mag]	N/A
Photometric flag	N/A
Processing Node ID	N/A
Pipeline Version	N/A



# models

## Gaia22bpl

[Update Target](#) [Delete Target](#)

Name	Gaia22bpl
Right Ascension	159.67677
	10:38:42.425
Declination	-61.2638
	-61:15:49.680
Epoch	2000.0
Galactic Longitude	287.662164
Galactic Latitude	-2.390806
Constellation	Carina
Discovered	2022-04-14 01:04:50
Class	Microlensing Event
Phot.Class	Ulens Candidate 100.0%
Last MJD	60184.56631
Last G Mag	12.7
Target importance (0-10)	9.99
Cadence requested (d)	1.0
Observing priority	336.7
Sun Separation (deg)	62.0

Other names:

Photometry Models [Spectroscopy](#) [Classification](#) [Manage Data](#) [Manage Groups](#)

**models**

[Microlensing model standard](#) The simplest microlensing model, single lens, single source, no parallax

[Microlensing model parallax](#) Microlensing model, single lens, single source, with parallax

your model can be added here!

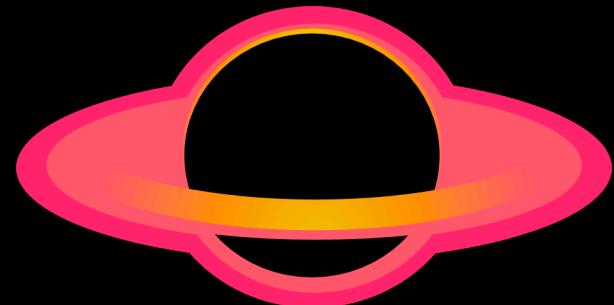
**Comments**

No comments yet.

Comment

Comment

[Post](#)



# models – separate interactive window

## Microlensing model for Gaia22bpl

Gravitational microlensing model using MulensModel (Poleski&Yee 2018)

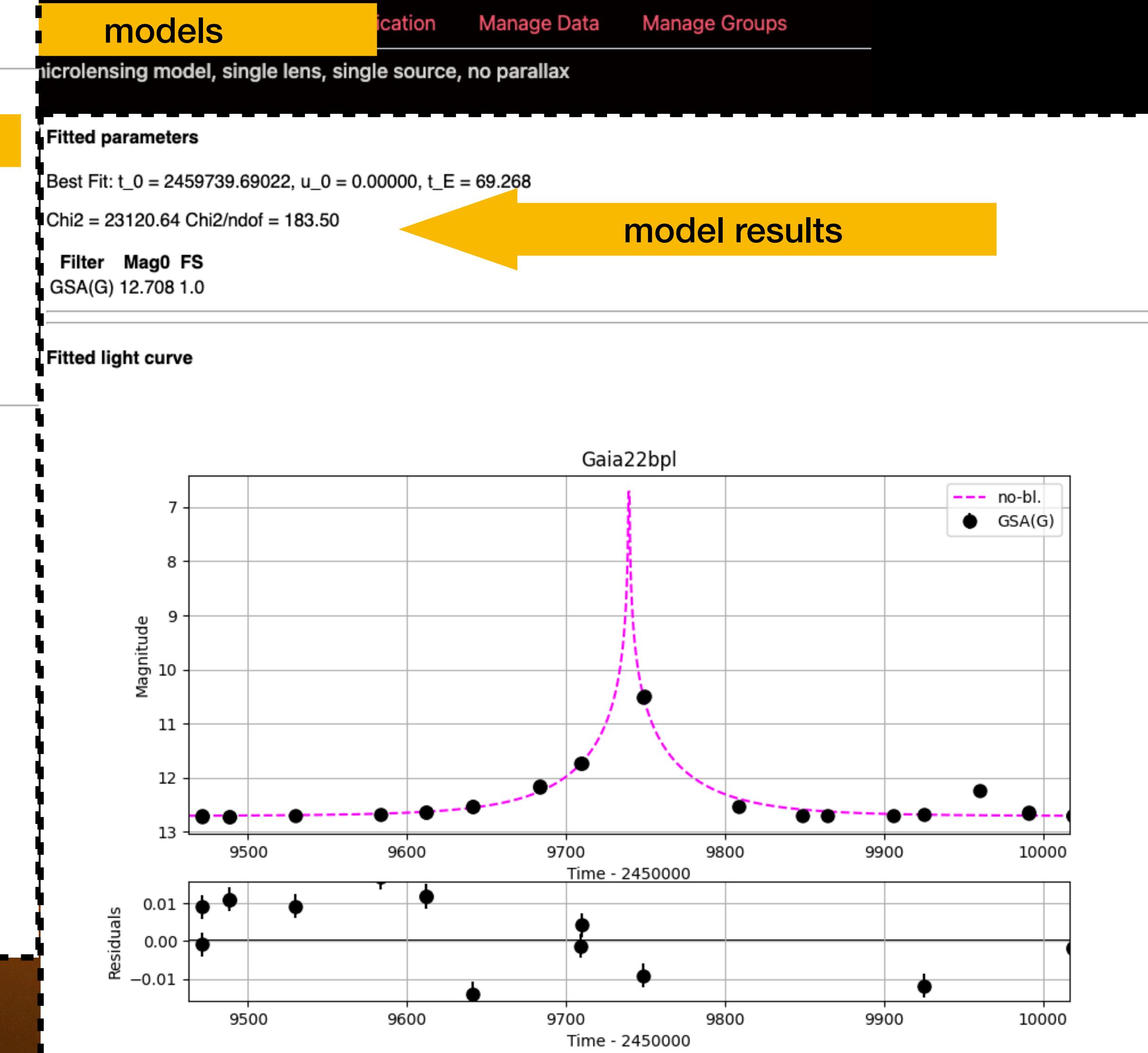
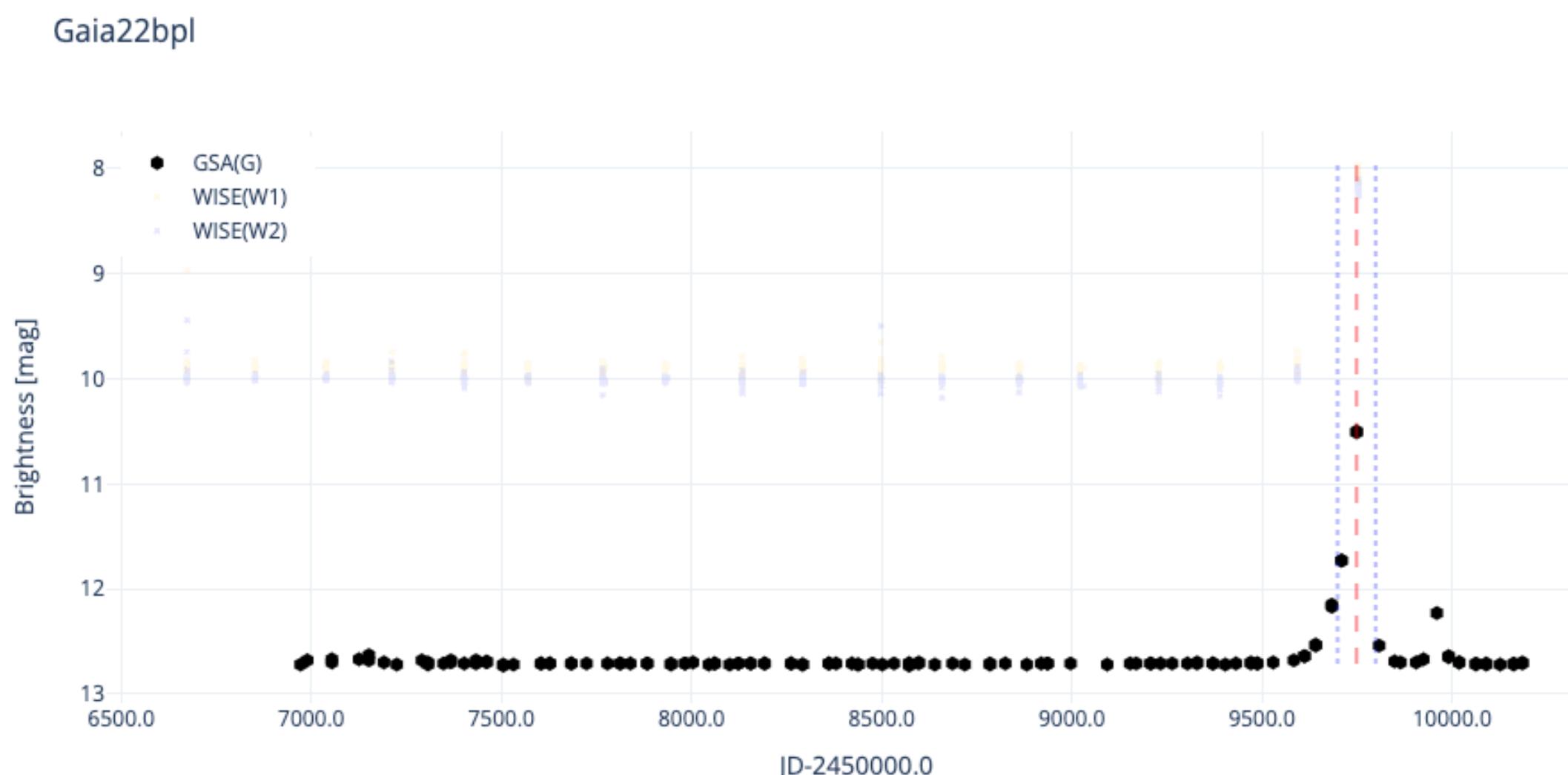
Fit initial values:

t0: 2459749.048410 u0: 0.129032 tE: 50.00000 logu0:  fixblending:   
auto\_init:

Available filters and number of datapoints:

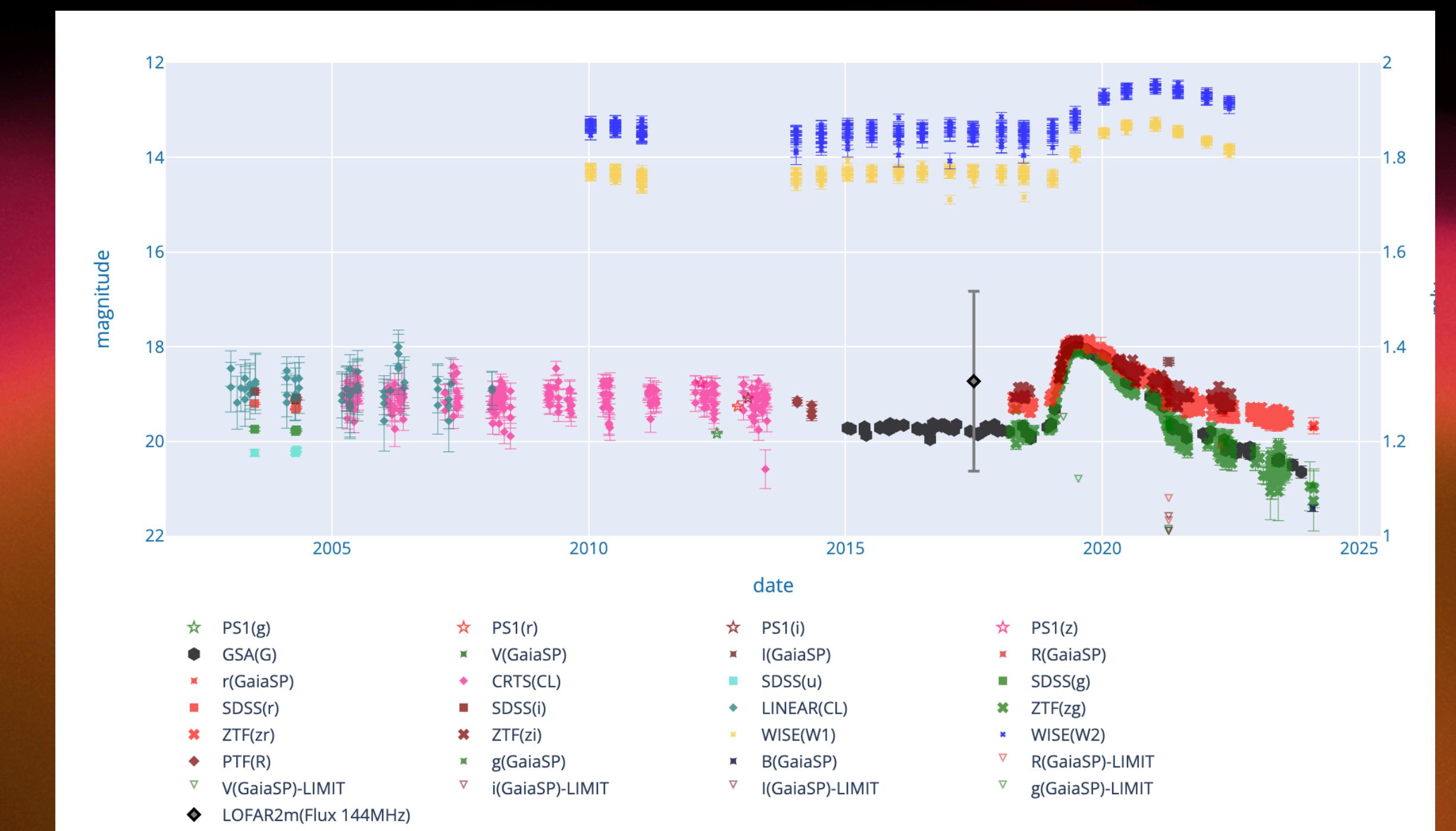
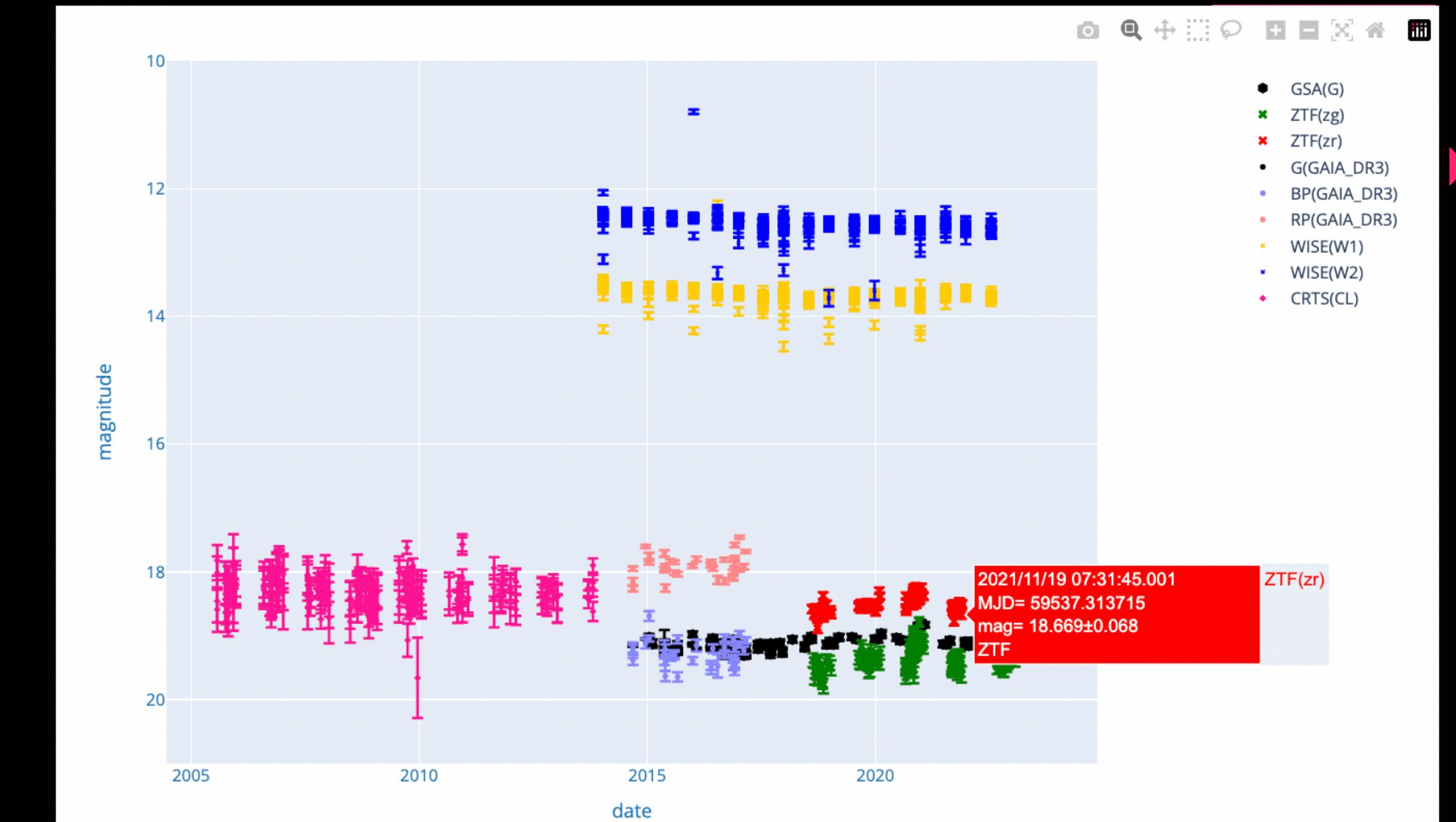
Select All Deselect All  
 GSA(G) 129  
 WISE(W1) 387  
 WISE(W2) 387

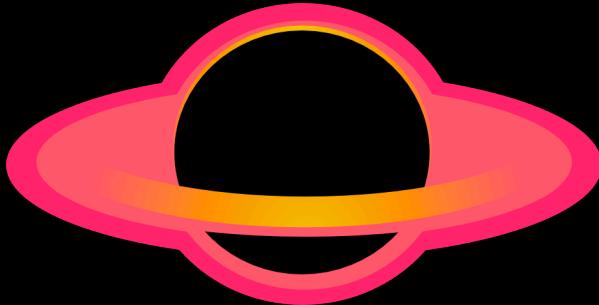
MODEL



# archives (via brokers)

- Gaia Science Alerts (2014-2025)
- Gaia DR3 variables (2014-2017)
- ZTF Data Release and alerts (2018+) through ANTARES and Alerce
- Catalina Real-Time Survey, CRTS (2005-2014)
- LINEAR (2003-2008)
- SDSS + Stripe82
- PS1, DECAPS (single epochs)
- IR: 2MASS, ALLWISE + NEOWISE (2010-2024)
- FIRST and LOFAR (radio)
- ATLAS (South+North)
- OGLE EWS (microlensing events)
- OGLE OCVS (variable stars)
- ASAS-SN
- will be added:
  - + DASH Harvard photographic plates (<1900)





# publication

## Gaia19axp

[Update Target](#)
[Delete Target](#)

**Name** Gaia19axp

**Right Ascension** 216.94333

14:27:46.399

**Declination** 29.51063  
+29:30:38.268

**Epoch** 2000.0

**Galactic Longitude** 45.028655

**Galactic Latitude** 68.703383

**Constellation** Boötes

**Discovered** 2019-03-10

14:03:41

**Class** Quasar(QSO)

**Phot.Class** Not Ulens 78.0%

**Last MJD** -10000.0

**Last G Mag** 100.0

[Photometry](#)
[Models](#)
[Spectroscopy](#)
[Observe](#)
[Observations](#)
[Publication](#)
[Manage Data](#)
[Manage Groups](#)
[Generate LaTeX target description](#)

### Photometry Stats

Facility	Filters	Number	Min MJD	Max MJD
ALLWISE	WISE(W1), WISE(W2)	177	55210.69	55574.43
CRTS	CRTS(CL)	235	53470.35	56464.28
Gaia Alerts	GSA(G)	139	57037.46	60202.07
NEOWISE	WISE(W1), WISE(W2)	591	56670.95	59752.75
SDSS	SDSS(u), SDSS(g), SDSS(r), SDSS(i), SDSS(z)	37	52821.22	53117.36
ZTF	ZTF(zg), ZTF(zr), ZTF(zi)	1134	58202.38	60124.24

[Download photometry stats as LaTeX table](#)



# upload

|

Photometry

Models

Spectroscopy

Observe

Observations

Publication

Manage Data

Manage Groups

## Upload a data product

Here you can upload your photometric and spectroscopic observations for this target. Please refer to the BHTOM manual for details.

Example CSV formats for [photometry](#) and [spectroscopy](#). Note, we require MJD (Modified Julian Date = JD-240000.5) in the photometry file!

SExtractor format is required for instrumental photometry. FITS is not supported for spectra yet.

Non-detections are marked with error >= 99.0 (e.g. 99.0, 99.9 etc.)

For photometric FITS processing choose the observatory from the list. You can add a new observatory [here](#).

**You can upload up to 5 files at once.**

You can also use a python script for external fits upload, [see the BHTOM's API documentation](#)

Choose a Files

No file chosen

Data product type

Photometry - SExtractor format

Photometry - CSV

FITS File

Spectroscopy

Dry Run (no data will be stored in the database)

MJD OBS \*

MJD OBS \*

Dry Run (no data will be stored in the database)

Observer's Name \*

Lukasz Wyrzykowski

Observatory

-----

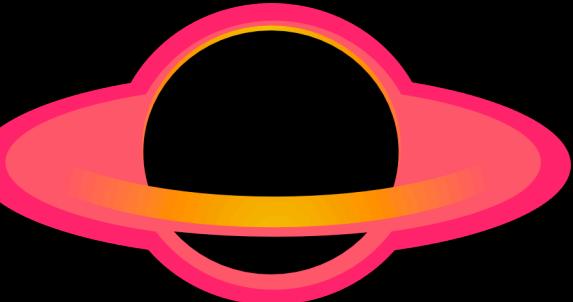
Force filter

GaiaSP/any

Comment

Comment

Upload



# observatory – adding existing observatory to your list

## List of observatories

List of your registered observatories/instruments you can use for uploading the data for processing. You should register an observatory in your account if you want a datapoint to be included in your list. Here you can add a new observatory to your list if you are planning to upload images or instrumental photometry for it. You can choose one from the list of already registered observatories. Note that different instrument (e.g. CCD) on the same telescope counts as a different observatory.

[Favorite Observatories](#)
[Observatories](#)
[Add new observatory](#)

**click to add to your list**

Observatory Name	Lon	Lat	Prefix	Comment	Only Instrumental photometry file	Details
Adiyaman 60 / Andor iKon-M 934	321.77459	37.751703	Adyu60_Andor-934	PlaneWave 24" CDK on ASA DM16...	False	<a href="#">Details</a>
Adonis observatory / Moravian G2 1600 camera	357.074618	50.91524	Adonis_G2-1600	Sky-watcher quattro F4 250 mm...	False	<a href="#">Details</a>
Aristarchos telescope / TEK2K camera	337.803889	37.984444	ARISTARCHOS_TEK2K	Aristarchos 2.3 m telescope, ...	False	<a href="#">Details</a>
Astrolab IRIS Observatory / SBIG camera	357.087333	50.817222	Astrolab-IRIS_SBIG	68-cm NMPT telescope. Public ...	False	<a href="#">Details</a>
ASV 1.4 m Milankovic Telescope / Andor iKon-L CCD camera	338.45	43.15	ASV1.4_Andor	The Astronomical Station Vido...	False	<a href="#">Details</a>
ATA50 with Apogee Alta U230	318.75611111	39.904752	ATA50_AltaU230	51 cm RC telescope on ASA Dir...	False	<a href="#">Details</a>

## Add a new Observatory to your list.

Here you can add a new observatory to your list in two ways. You can choose an observatory from the list of already registered ones. If your observatory is not yet registered you can create a new entry.

Observatory

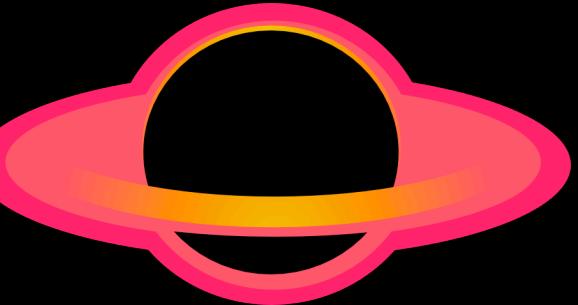
-----

Comment

Comment

[Add to my list](#)

[Create new Observatory](#)



# observatory – creating observation no yet in our db

## Create a new Observatory.

Please fill the form below, check BHTOM manual for details. Your entry has to be then activated by the Administrator.

The sample fits file is necessary for new observatories for verification of the automatic photometric processing. Please refer to the BHTOM Manual or get in touch.

Observatory name

Observatory name

Longitude (West is positive) [deg]

Longitude (West is positive) [deg]

Latitude (North is positive) [deg]

Latitude (North is positive) [deg]

Only instrumental photometry file

Create Observatory

only SExtractor instrumental data will be uploaded

longer table if fits will be processed

Only instrumental photometry file

Sample fits\*

Choose files No file chosen

Provide one sample fits per filter, clearly labelled.

Gain\* [electrons/ADU]

2.0

Readout noise\* [electrons]

2

Binning\*

1

Saturation level\* [ADU]

63000

Pixel scale\* [arcsec/pixel]

0.8

Readout speed [ms/pixel] (if not known, pass 9999)\*

3

Pixel size [um]

13.5

Approx. limit magnitude in V band\* [mag]

18.0

Filters\*

V,R,I

Altitude [m]\*

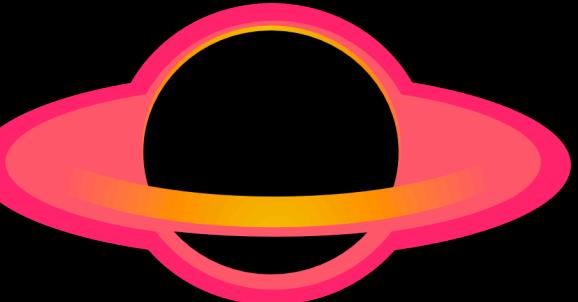
0.0

Comments (e.g. hyperlink to the observatory website, camera specifications, telescope info)

Comments (e.g. hyperlink to the observatory website, camera specifications, telescope info)

this will require human acceptance

Create Observatory



# observatory - adding new camera

- Observatory has to be activated
- Go to Observatory/List all observatories
- Find your observatory
- Click Edit
- At the very bottom:  
Click Add New Camera
- Fill all the details, attach example fits files
- Wait for the approval
- Your new camera will have new ONAME  
(for API use)

## List of observatories

List of your registered observatories/instrument  
Here you can add a new observatory to your list  
different instrument (e.g. CCD) on the same tele

		Favorite Observatories		Observatories		
				Add new observatory		
Auger FRAM 30-cm	61.449755	-35.496138	FRAM_G4	FRAM (F/Photometric Robotic A...	False	<button>Details</button> <button>Edit</button> <button>Delete</button>
Białyk 60-cm Cassegrain Telescope	16.657822	51.47425	BIAŁKOW_ANDOR-DW432	Białyk station, Wrocław Univ...	False	<button>Details</button> <button>Edit</button> <button>Delete</button>
CAHA 1.23-m Telescope	-2.5468	37.2208	CAHA1.23_ASI461MM	Observatory website: https://...	False	<button>Details</button> <button>Edit</button> <button>Delete</button>
CASLEO HSH 60-cm	-69.306638	-31.7873	HSH_SBIG-STL1001E	Complejo Astronomico El Leonc...	False	<button>Details</button> <button>Edit</button> <button>Delete</button>

Readout Speed [microseconds/pixel]

9999,0

Add new camera

Add Camera

Update

## Cameras

### Observatory(ONAME): REM\_ROS2

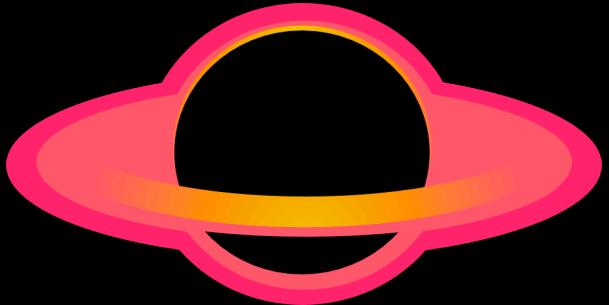
Camera Name: ROS2 instrument  
Gain: 1.0  
Pixel Scale: 0.581

Example File: IMG20190101\_123456.fits  
Readout Noise: 4.5  
Pixel Size: 13.5

### Observatory(ONAME): REM\_REMIR

Camera Name: REMIR instrument  
Gain: 5.0  
Pixel Scale: 1.221

Example File: Gaia2  
Readout Noise: 100  
Pixel Size: 18.5



# upload – uploading fits images

## pre-requisites:

- bias/dark/flat corrected fits only
- your observatory registered and activated

in target page, find Manage Data

Name	Gaia24ayd
Name	Gaia24ayd
Ra,Dec	300.82509 30.65126 20:03:18.022 +30:39:04.536
Galactic (l,b)	68.012377 -0.211674
Constellation	Cygnus
Discovered	2024-03-12 13:39:39
Class	Unknown

**Upload a data product**

Here you can upload your photometric and spectroscopic observations for this target. Please refer to the BHTOM manual for details. Example CSV formats for [photometry](#) and [spectroscopy](#). Note, we require MJD (Modified Julian Date = JD-2400000.5) in the photometry file!

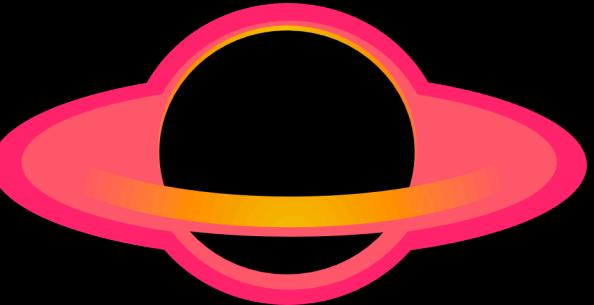
SExtractor format is required for instrumental photometry. FITS is not supported for spectra yet.

Non-detections are marked with error >= 99.0 (e.g. 99.0, 99.9 etc.)

For photometric FITS processing choose the observatory from the list. You can add a new observatory [here](#).

**You can upload up to 5 files at once.**

You can also use a python script for external fits upload, [see the BHTOM's API documentation](#)



# upload – uploading fits images

- in GUI only 5 files can be uploaded at once
- use scripts for more files!

Choose a Files

No file chosen

Data product type

Photometry - SExtractor format  
 Photometry - CSV  
 FITS File  
 Spectroscopy

Dry Run (no data will be stored in the database)

Observers \*

Observatory\*

LCOGT Teide Obs. 40-cm (file code: tfn)

Camera\*

QHY268PRO

Force filter

GaiaSP/any

Comment

Comment

select FITS File

default: you; add more if needed  
(need to be registered)

select a telescope from your list

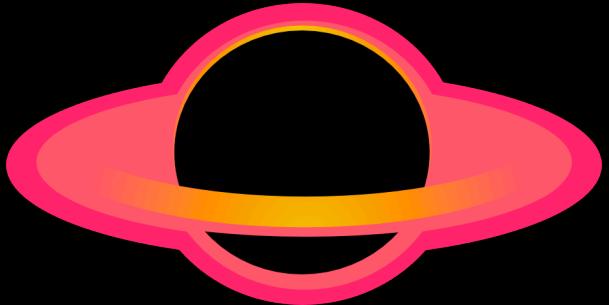
select your camera

leave GaiaSP/any\*

any additional comments,  
e.g. on the conditions, weather,  
etc.

## Note on filters for standardisation:

- \* GaiaSP/any is best for most filters, either Johnson-Cousins or Sloan
- \* if you use only Sloan, select GaiaSP/ugriz
- \* if you use only J-C, select GaiaSP/UBVRI
- \* if you use Gaia filters, select GaiaDR3/any
- \* if you observe in IR, select 2MASS/any
- \* if you are not sure, select Auto



# upload – uploading SExtractor photometry

- in GUI only 5 files can be uploaded at once
- use scripts for more files!

select SExtractor

MJD=JD-2400000.5

default: you; add more if needed  
(need to be registered)

select a telescope from your list

select your camera

leave GaiaSP/any\*

any additional comments,  
e.g. on the conditions, weather,  
etc.

## Note on filters for standardisation:

- \* GaiaSP/any is best for most filters, either Johnson-Cousins or Sloan
- \* if you use only Sloan, select GaiaSP/ugriz
- \* if you use only J-C, select GaiaSP/UBVRI
- \* if you use Gaia filters, select GaiaDR3/any
- \* if you observe in IR, select 2MASS/any
- \* if you are not sure, select Auto

Choose a Files  No file chosen

Data product type

Photometry - SExtractor format

Photometry - CSV

FITS File

Spectroscopy

Dry Run (no data will be stored in the database)

MJD OBS \*

MJD OBS \*

Observers \*

Observatory\*

LCOGT Teide Obs. 40-cm (file code: tfn)

Camera\*

QHY268PRO

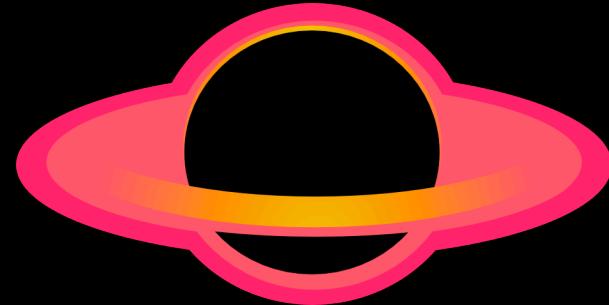
Force filter

GaiaSP/any

Comment

Comment

Upload



# API

[docs.bhtom.space](https://docs.bhtom.space)

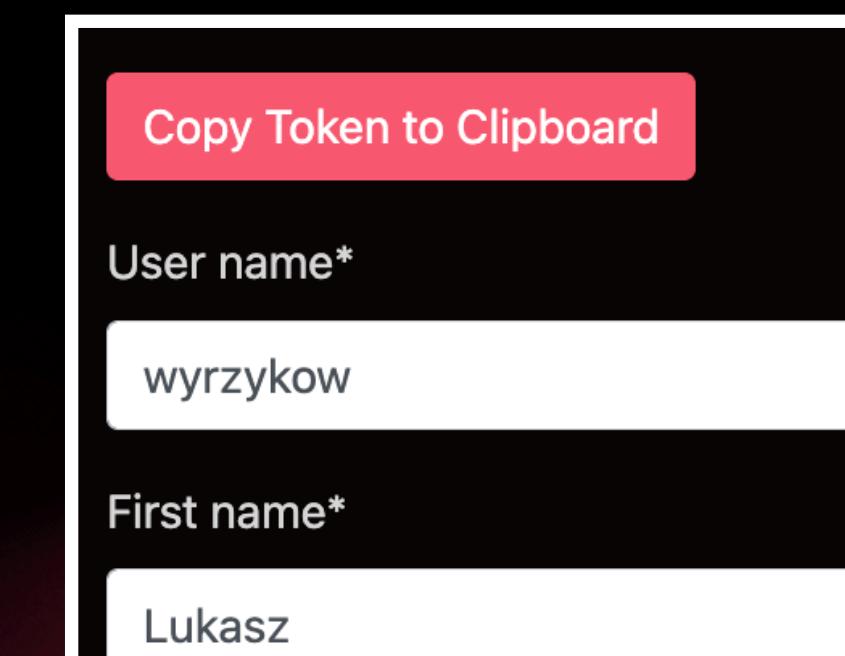
- all functionalities of BHTOM available programmatically!
- upload (fits, dat, spec)
- target list and filtering
- data download
- standardisation results

## BHTOM2 API Documentation

### Introduction

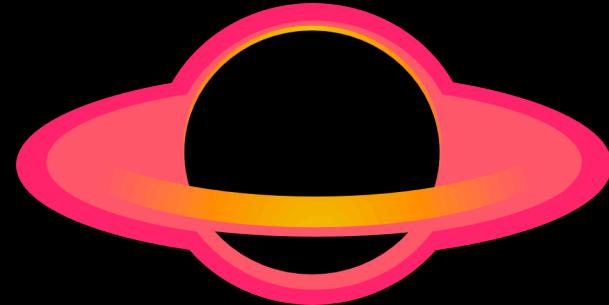
This is a simple guide for BHTOM's REST API. It lets you use BHTOM webpage features in your own programs. You can get a list of targets, add observations, download data and more. Let's get started!

Remember! To use API you should get your own TOKEN first!



A screenshot of a web form for user profile information. It includes fields for 'User name\*' containing 'wyrzykow', 'First name\*' containing 'Lukasz', and a 'Copy Token to Clipboard' button.

Token now can be copied from your profile page



# API

[docs.bhtom.space](https://docs.bhtom.space)

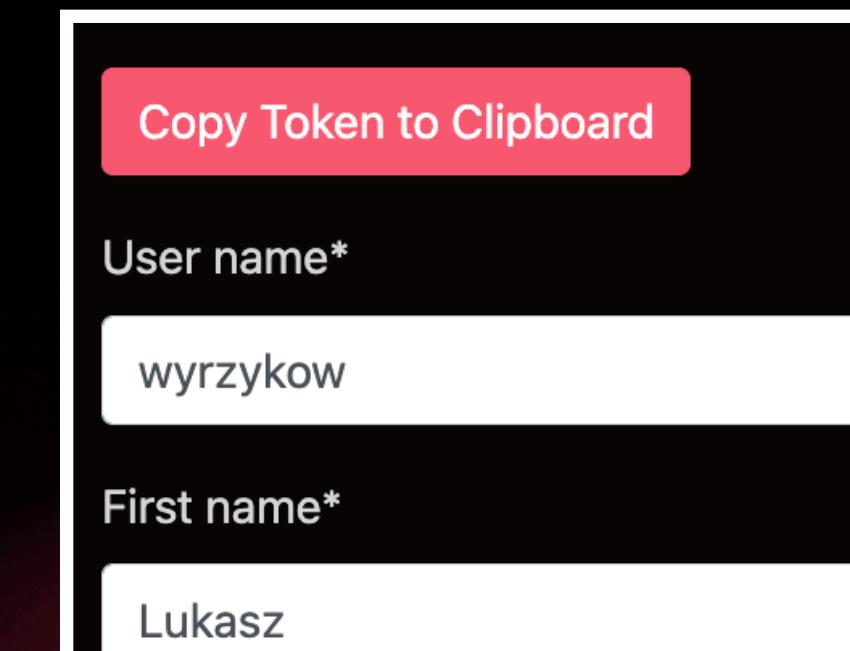
- all functionalities of BHTOM available programmatically!
- upload (fits, dat, spec)
- target list and filtering
- data download
- standardisation results

## BHTOM2 API Documentation

### Introduction

This is a simple guide for BHTOM's REST API. It lets you use BHTOM webpage features in your own programs. You can get a list of targets, add observations, download data and more. Let's get started!

Remember! To use API you should get your own TOKEN first!



Copy Token to Clipboard

User name\*

wyrzykow

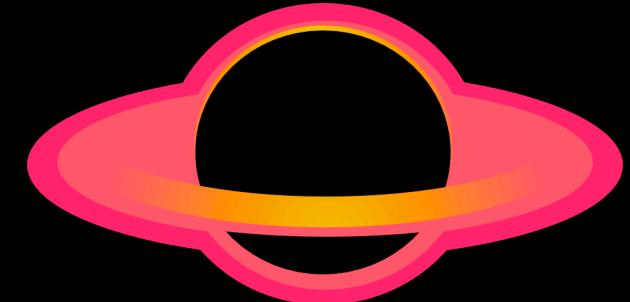
First name\*

Lukasz

Token now can be copied from your profile page

BHTOM API Example Notebooks:

[https://drive.google.com/drive/folders/1A9Oe1rApyl7\\_ orazo\\_1oUNVqdzhE-w4M?usp=sharing](https://drive.google.com/drive/folders/1A9Oe1rApyl7_ orazo_1oUNVqdzhE-w4M?usp=sharing)



# BHTOM Newsletter

<https://groups.google.com/g/bhtomtargets>

## BHTOM Targets for 08 April, 2024 0 views



Lukasz Wyrzykowski <wyrzykow@gmail.com>

to bhtomtargets@googlegroups.com

8 Apr 2024, 16:12:21 (5 days ago)



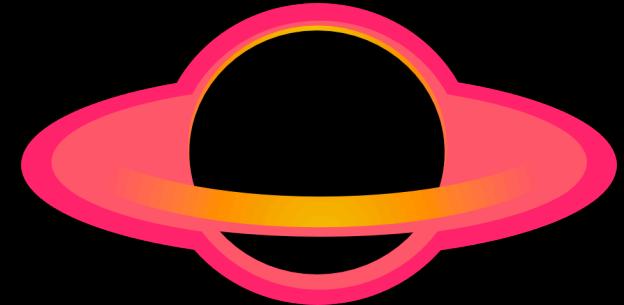
Hello,

Greetings from the BHTOM Automated Newsletter!

As of 2024-04-08 14:09:01.478552+00:00, these are the new targets added in the last week with importance greater than 1, sorted by magnitude:

name	ra	dec	mag	last	sun_separation	classification	description
Gaia24bbw	81.371630	39.506760	14.2	65.0	Unknown	candidate microlensing event	
Gaia24bbs	270.968180	-28.183980	16.2	108.0	Unknown	bulge candidate microlensing event	
Gaia24bau	266.011980	-25.859980	16.7	112.0	Unknown	candidate microlensing event	
Gaia24bay	262.530760	-27.944750	17.0	115.0	Unknown	candidate microlensing event	
Gaia24adu	205.400100	43.413980	17.3	129.0	Unknown	~1 mag rise in Gaia source coincident with galaxy	
Gaia24bbt	264.611000	-33.329870	17.5	113.0	Unknown	bulge candidate microlensing event	
Gaia23dkq	183.716870	-19.030480	17.8	162.0	Unknown	Brightening in Gaia source coincident with galaxy 6dFGS gJ121452.1-190150	
Gaia23dgk	228.359390	27.081950	18.1	134.0	Unknown	Brightening in Gaia source coincident with galaxy	
Gaia23bat	242.658540	-35.559640	18.2	130.0	Unknown	candidate microlensing event	
Gaia24bcm	253.619790	-50.373170	18.9	NaN	Unknown	candidate microlensing event	
AT 2024fkm	208.285587	35.720493	20.2	136.0	Unknown	Astro-COLIBRI target	

In addition, here are some older targets that are currently visible and requested for observations. These targets have an importance greater than 4, a sun separation greater than 70, and a magnitude less than 18. They are also sorted by magnitude.



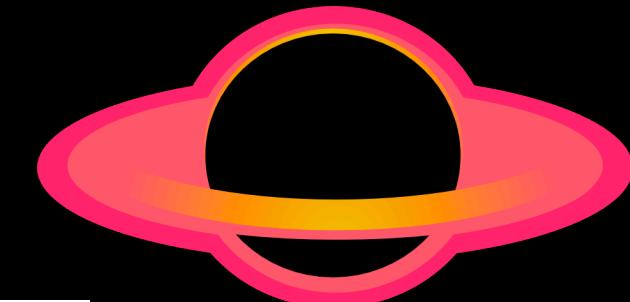
# BHTOM Newsletter

<https://groups.google.com/g/bhtomtargets>

In addition, here are some older targets that are currently visible and requested for observations. These targets have an importance greater than 4, a sun separation greater than 70, and a magnitude less than 18. They are also sorted by magnitude.

## North (dec>0):

	<b>name</b>	<b>ra</b>	<b>dec</b>	<b>mag</b>	<b>last sun_separation</b>	<b>classification</b>	<b>description</b>
TCrB		239.875676	25.920170	12.3	127.0	Nova	recurrent nova predicted to explode 2024/2025
8C0716_714		110.472701	71.343434	14.0	84.0	QSO	high cadence variability suspected
Gaia24ayd		300.825090	30.651260	14.7	74.0	Unknown	bright candidate for microlensing event
Gaia18bwz		174.611270	3.368310	15.3	155.0	CV	Known dwarf nova QZ Vir in outburst
Gaia24azc		296.202220	23.630800	15.4	79.0	Unknown	bright gal.plane source candidate microlensing event or Be-type outburst
NGC5683-Seyfert		218.718578	48.661870	15.5	121.0	AGN	active nucleus of a nearby galaxy for frequent monitoring
SN2024gy		183.963708	13.115589	15.7	156.0	SN	classified SN Ia at 5Mpc
ZTF18aarippg		217.566838	23.062372	16.1	144.0	QSO	Tick-Tok possibly merging Super Massive Black Hole binary
SN2023ixf		210.910654	54.311674	16.8	117.0	SN	Bright supernova in M101
Gaia23dfy		281.922640	9.043970	16.8	94.0	Unknown	red gal.plane source candidate microlensing event rises by 0.7 mag
SN 2024elf		264.113343	39.965370	16.8	102.0	SN	Astro-COLIBRI target
SN 2024eib		200.350801	23.861445	17.0	149.0	SN	Astro-COLIBRI target
Gaia23dgt		204.096070	25.538710	17.1	147.0	QSO	Brightening in Gaia source coincident with Seyfert I galaxy
Gaia24acn		298.644780	30.361130	17.2	76.0	Unknown	Candidate microlensing event
SDSSJ094533.99+100950.1		146.391622	10.163917	17.8	127.0	QSO	Long term variable quasar for monitoring

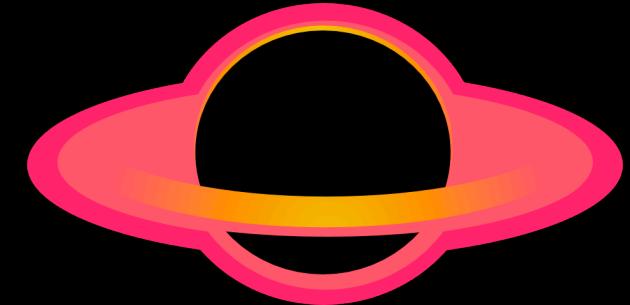


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## South (dec<0):

name	ra	dec	mag_last	sun_separation	classification	description
Gaia23ckh	266.770410	-35.991370	13.0	111.0	Symbiotic star	Mira brightens by 0.8 mag, previous event seen
Gaia23cpd	287.536760	-4.720760	13.8	90.0	Microlensing Event	potential long and bright microlensing event
Gaia19dbf	178.699417	-64.491850	14.2	121.0	Unknown	Possibly a YSO
Gaia23dpn	220.154710	-57.762400	14.4	126.0	Microlensing Event	bright red gal.plane source candidate microlensing event rises by 0.8 mag
V4370 Oph	264.987833	-26.461647	15.1	113.0	Nova	Astro-COLIBRI target
Gaia23cyl	266.467690	-42.760060	15.5	110.0	Microlensing Event	microlensing event in the bulge
Gaia23bsf	276.583080	-14.036970	15.8	102.0	Unknown	unknown
AT2024eff	87.924542	-19.218400	16.1	75.0	Unknown	possible nuclear transient, TDE candidate
Gaia23bzg	195.332390	-14.415280	16.3	173.0	QSO	Brightening in known QSO
Gaia24amo	249.148921	-53.749919	16.4	118.0	Unknown	candidate microlensing event, possibly now on the rise
PMNJ0730-6602	112.706495	-66.038578	16.5	99.0	AGN	IAUZ Target
CTS_C30.10	71.833281	-45.627319	16.8	72.0	QSO	Long term variable quasar for monitoring
Gaia23bsd	273.561870	-22.319870	17.0	105.0	Unknown	very slowly rising object, candidate microlensing or Be or YSO
Gaia23cmf	266.551870	-21.014000	17.1	112.0	Microlensing Event	candidate microlensing event
Gaia23cxu	235.890310	-55.429890	17.1	123.0	Microlensing Event	candidate disk microlensing event
AT2024bgz	146.019850	-4.201358	17.1	129.0	TDE	New TDE, now is approaching the LC peak
SN2013bw	161.718208	-1.390811	17.3	144.0	SN	close to SN2024hw
Gaia24ata	188.027640	-48.157800	17.4	138.0	Unknown	candidate long microlensing event far from the Gal Plane
Gaia23dpi	222.600550	-66.066000	17.6	119.0	Microlensing Event	candidate long microlensing event or Be star
Gaia21cbi	122.889030	-80.519340	17.6	100.0	Unknown	~0.5 mag rise in Gaia, WISE and GALEX source
Gaia23cnm	285.322920	-18.717130	17.6	94.0	Unknown	slow and long rise, possible microlensing or YSO
Gaia23dgf	120.642180	-2.372900	17.8	104.0	TDE	~0.3 mag rise in Gaia source

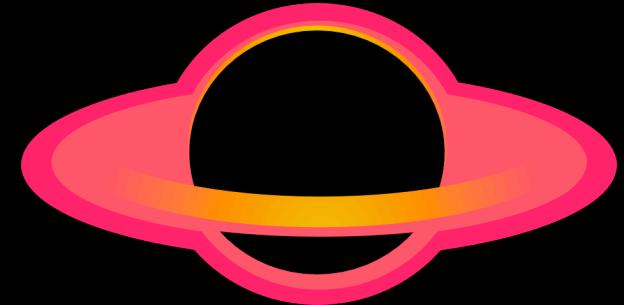


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## Last week's targets observed:

camera	target_names
ASV60_FLI	3C454.3
AsiagoAO-0.67_G4-16000	AT2023zgo, Gaia19bzp
Flarestar-MPC171_G2-1600	Gaia24ayd, TCrB, Gaia23cpd
GeoNAO_SXVR-H36	Gaia23dpn, Gaia23dqt, SN2024gy, Gaia23dau, Gaia24alm
HAO68_G2-1600	Gaia24ayd, SN 2024eib, NGC5683-Seyfert, 8C0716_714, TCrB, Gaia24acn, ZTF18aarippg, Gaia24aup, Gaia23dau, SN2023ixf
Kryoneri-1.2_Andor-Zyla	TCrB, SN2024gy, Gaia18bwz, SN2023ixf
LCOGT-CTIO-1m_4K	Gaia24ata, Gaia24alk, Gaia23cbf, Gaia23cvm, Gaia24ams, Gaia23cvq, Gaia24amf, Gaia23cme, Gaia23cnu, SN2023utm, Gaia23cuq, Gaia23cpd, Gaia18dif, Gaia23dpi, Gaia23cwl, Gaia23dpd, Gaia23dpn, Gaia23cvx, Gaia24aom, Gaia23dta, Gaia23cxu, Gaia24amo, Gaia24asr, Gaia24amk
LCOGT-MCD-1m_4K	Gaia23cua, Gaia23cri, Gaia23dau, Gaia23dgt
LCOGT-MCD-40cm_SBIG6303	SN2024gy
LCOGT-SAAO-1m_4K	Gaia23dpd, Gaia24ata, Gaia23cuq, Gaia23dpn, Gaia23dta, Gaia23cnu, Gaia24amo, Gaia23cbf, Gaia23cxu, Gaia23dfy, Gaia23dpi, Gaia24asr, Gaia24amk
LCOGT-SS-1m_4K	Gaia23cuq, Gaia23dpn, Gaia23cvx, Gaia23dta, Gaia23cvm, Gaia24asr
LCOGT-Teide-1m_4K	Gaia23cvq, Gaia23dgt, Gaia23cnu, Gaia23cua, Gaia23cri, Gaia23dau, Gaia23dfy
LCOGT-Teide-40cm_SBIG6303	SN2024gy
OAUJ-CDK500_U47	TCrB
ROAD_QHY600M	Gaia22bpl, Gaia23dpn, Gaia23dnm, Gaia23cpd, Gaia20fnr, Gaia23dit, Gaia24aeh, Gaia24amo, Gaia21ccu, Gaia24ach
RRRT_SBIG-STX16803	TCrB
ZAO_G2-1600	TCrB, Gaia24ayd, SN2024gy, 8C0716_714



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## Last week's fits uploads score (sorted by count)

observatory-user count
Franz-Josef Hamsch (ROAD_QHY600M) 879
Charles Galdies (ZAO_G2-1600) 168
Uliana Pylypenko (LCOGT-SAAO-1m_4K) 103
Nada Ihaneč (LCOGT-CTIO-1m_4K) 89
Uliana Pylypenko (LCOGT-CTIO-1m_4K) 87
Nada Ihaneč (LCOGT-SAAO-1m_4K) 58
Staszek Zola (OAUJ-CDK500_U47) 47
Alexios Liakos (Kryoneri-1.2_Andor-Zyla) 40
Jan Kåre Trandem Qvam (HA068_G2-1600) 37
Nada Ihaneč (LCOGT-Teide-1m_4K) 35
Nada Ihaneč (LCOGT-SS-1m_4K) 32
Teimuraz Kvernadze (GeoNAO_SXVR-H36) 28
Uliana Pylypenko (LCOGT-Teide-1m_4K) 26
Stephen M. Brincat (Flarestar-MPC171_G2-1600) 22
Staszek Zola (RRRT_SBIG-STX16803) 15
Tom Killestein (LCOGT-Teide-40cm_SBIG6303) 15
Uliana Pylypenko (LCOGT-MCD-1m_4K) 13
Nada Ihaneč (LCOGT-MCD-1m_4K) 6
Rachel Street (LCOGT-SAAO-1m_4K) 6
Rachel Street (LCOGT-Teide-1m_4K) 5
Rachel Street (LCOGT-CTIO-1m_4K) 5
Tom Killestein (LCOGT-MCD-40cm_SBIG6303) 3
Andrea Reguitti (AsiagoAO-0.67_G4-16000) 2
Uliana Pylypenko (LCOGT-SS-1m_4K) 2
Rachel Street (LCOGT-MCD-1m_4K) 1
Przemysław J. Mikolajczyk (ASV60_FLI) 1



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