



Archiving and Community Use of Microlensing Data

Rachel Akeson

IPAC/Caltech

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Outline

- Current microlensing content in NASA Exoplanet Archive
 - Goals
 - Planets
 - UKIRT Survey data
 - ExoFOP
- Tips for archiving data
 - Papers
 - Large data sets



NASA Exoplanet Archive

- The NASA Exoplanet Archive is an online astronomical exoplanet and stellar catalog and data service that collates and cross-correlates astronomical data and information on exoplanets and their host stars, and provides tools to work with these data.
 - Includes data from published literature, selected NASA mission (e.g. Kepler) and high-level data sets from community

<https://exoplanetarchive.ipac.caltech.edu>

Archive goals

- Confirmed planet table
 - Allow comparisons across discovery types
- Microlensing table
 - Focus on observation and modeling parameters
 - Multiple papers and/or solutions per object
- Data sets and light curves
 - Allow multiple groups to fit the same event
 - Searches for additional events
 - Additional science: variable stars, etc.
- Tools to work tables and data
 - Ongoing discussions on tools for microlensing, including pyLIMA



Confirmed planet table

- Contains basic parameters for planets discovered by any method
- Parameters gathered from peer-reviewed literature
- Only one reference listed for each planet
 - Either the discovery reference or a later publication with more complete or precise parameters
- Overview page for each object
 - Includes parameters from all papers in archive
 - Links to associated data files, including light curves, images, spectra

Confirmed planets (1)

NASA EXOPLANET ARCHIVE

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Column Controls

Update Selection Reset

- Stellar Luminosity [log(Solar)]
- Stellar Density [g/cm**3]
- Stellar Metallicity [dex]
- Metallicity Ratio
- Stellar Age [Gyr]
- Rot. Velocity V*sin(i) [km/s]
- Stellar Activity S-index
- Stellar Activity log(R'HK)
- X-ray Activity log(L_x)
- SWASP Identifier
- Number of Time Series
- Number of Planet Transit Light Curv
- Number of General Light Curves
- Number of Radial Velocity Time Ser
- Number of Amateur Light Curves
- Number of Images
- Number of Spectra

Planet Letter	Discovery Method	Number of Planets in System	Orbital Period [days]	Orbit Semi-Major Axis [AU]	Eccentricity	Inclination [deg]	Planet Mass or M*sin(i)[Jupiter mass]
	Micro	1		0.62 ^{+0.22} _{-0.16}			0.010 ^{+0.015} _{-0.005}
	Micro	1		0.72 ^{+0.38} _{-0.16}			0.83 ^{+0.49} _{-0.31}
	Micro	1		1.61±0.98			0.0736±0.0535
	Micro	1		3.3 ^{+1.7} _{-1.2}			4.1 ^{+1.7} _{-1.9}
	Micro	1	2774.0 ^{+2810.5} _{-547.5}	3.2 ^{+1.9} _{-0.5}			0.033±0.005
	Micro	1		2.4 ^{+1.2} _{-0.6}			0.16 ^{+0.14} _{-0.08}
	Micro	1	1982 ⁺⁷⁸⁵ ₋₆₈₈	1.82 ^{+0.84} _{-0.73}		52 ⁺²⁰ ₋₁₂	2.56 ^{+4.15} _{-1.68}
	Micro	1		1.21±0.16			11.0±2.0
	Micro	1		0.920±0.160			0.0289±0.0069
	Micro	1		1.72 ^{+0.56} _{-0.48}			0.27 ^{+0.48} _{-0.16}
	Micro	1		2 ⁺³ ₋₁			1.5 ^{+0.8} _{-0.3}
	Micro	1		4.14±0.64			0.094 ^{+0.050} _{-0.038}
	Micro	1		0.840 ^{+0.250} _{-0.140}			0.057 ^{+0.088} _{-0.031}
	Micro	1		1.1±0.1			4.8±0.3
	Micro	1		4.3 ^{+1.5} _{-1.2}			11.6 ^{+13.4} _{-6.6}
	Micro	1		10.2 ^{+1.8} _{-2.4}			8.40 ^{+4.60} _{-3.90}
	Micro	1		0.900 ^{+0.250} _{-0.210}			0.02108 ^{+0.03338} _{-0.01104}
	Micro	1		0.940 ^{+0.670} _{-0.020}			0.010 ^{+0.002} _{-0.001}
	Micro	1		1.67 ^{+0.94} _{-0.35}			2.8 ^{+2.2} _{-1.5}
	Micro	1		8.3 ^{+4.5} _{-2.7}			3.7±2.1
	Micro	1		4.3 ^{+2.5} _{-0.8}			2.6 ^{+0.8} _{-0.6}
	Micro	1		3.6±0.2			3.8±0.4
	Micro	1		3.5±0.3			0.0444±0.0028
	Micro	1	3285 ⁺³²⁸⁵ ₋₁₀₉₅	2.6 ^{+1.5} _{-0.6}			0.017 ^{+0.017} _{-0.008}
	Micro	2	1788.5 ^{+584.0} _{-547.5}	2.3±0.5			0.73±0.06



Confirmed planets (2)

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Confirmed Planets

Eccentricity	Inclination [deg]	Planet Mass or M* ^{sin(i)} [Jupiter mass]	Planet Mass or M* ^{sin(i)} Provenance	Planet Radius [Jupiter radii]	Planet Density [g/cm ³]	TTV Flag	Kepler Field Flag	K2 Mission Flag	Number of Notes	RA [sexagesimal]	Dec [sexagesimal]	Distance [pc]	Optical Magnitude [mag]	Optical Magnitude Band	G-band (Gaia) [mag]	Effective Temperature [K]	Stellar Mass [Solar mass]	Stellar Radius [Solar radii]	Date of Update	Last Update	Number of Time Series
		0.010 ^{+0.015} _{-0.005}	Mass			0	0	0	0	18h08m03.80s	-27d09m00.3s	1000±400					0.060 ^{+0.028} _{-0.021}		2014-10-29	2	
		0.83 ^{+0.49} _{-0.31}	Mass			0	0	0	0	18h09m41.98s	-29d13m27.0s	5600 ⁺⁸⁰⁰ ₋₉₂₀					0.30 ^{+0.19} _{-0.12}		2014-10-29	7	
		0.0735±0.0535	Mass			0	0	0	0	17h54m14.53s	-34d46m41.0s	7700±1100					0.21±0.14		2017-08-03	7	
		4.1 ^{+1.7} _{-1.9}	Mass			0	0	0	0	17h58m49.44s	-30d11m49.0s	3300 ⁺¹³⁰⁰ ₋₁₂₀₀					0.56 ^{+0.24} _{-0.27}		2014-10-29	3	
		0.033±0.005	Mass			0	0	0	0	17h48m01.95s	-35d00m19.5s	3040±330					0.56±0.09		2014-10-29	18	
		0.16 ^{+0.14} _{-0.08}	Mass			0	0	0	0	18h06m58.13s	-26d49m10.9s	6100 ⁺¹¹⁰⁰ ₋₁₂₀₀					0.38 ^{+0.34} _{-0.18}		2014-10-29	25	
	52 ⁺²⁰ ₋₁₂	2.56 ^{+4.15} _{-1.89}	Mass			0	0	0	0	17h53m50.79s	-33d59m25.2s	5690 ⁺²¹⁸⁰ ₋₂₁₉₀					0.19 ^{+0.30} _{-0.12}		2015-06-04	13	
		11.0±2.0	Mass			0	0	0	0	18h10m11.34s	-26d31m22.6s	2800±400					0.16±0.03		2014-05-14	22	
		0.0289±0.0069	Mass			0	0	0	0	17h57m59.12s	-30d42m54.6s	810±100					0.11±0.01		2015-06-04	0	
		0.27 ^{+0.48} _{-0.18}	Mass			0	0	0	0	18h05m12.94s	-27d17m35.6s	6430 ⁺¹⁰⁹⁰ ₋₁₁₉₀					0.18 ^{+0.32} _{-0.11}		2016-06-09	0	
		1.5 ^{+0.8} _{-0.3}	Mass			0	0	0	0	18h06m07.44s	-31d27m16.1s	2300±600				5950±150	0.67±0.33		2014-10-29	19	
		0.094 ^{+0.020} _{-0.038}	Mass			0	0	0	0	18h03m24.96s	-29d12m48.3s	7380 ⁺⁹²⁰ ₋₉₂₀					0.750 ^{+0.350} _{-0.380}		2016-03-24	5	
		0.057 ^{+0.089} _{-0.031}	Mass			0	0	0	0	18h00m23.48s	-31d14m42.9s	7000 ⁺⁹⁰⁰ ₋₁₀₀₀					0.12 ^{+0.19} _{-0.06}		2015-06-04	9	
		4.8±0.3	Mass			0	0	0	0	17h55m39.35s	-26d28m36.6s	7720±440					0.86±0.06		2014-05-14	5	
		11.6 ^{+12.4} _{-8.2}	Mass			0	0	0	0	18h04m53.60s	-27d13m15.4s	7560±910					0.39 ^{+0.45} _{-0.19}		2014-05-14	3	
		8.40 ^{+4.60} _{-3.90}	Mass			0	0	0	0	18h01m46.31s	-29d06m31.6s	5300 ⁺⁸⁰⁰ ₋₁₃₀₀					0.49 ^{+0.27} _{-0.23}		2017-09-15	0	
		0.02108 ^{+0.03338} _{-0.01104}	Mass			0	0	0	0	17h52m34.34s	-32d02m24.3s	7210 ⁺¹¹⁴⁰ ₋₁₁₁₀					0.10 ^{+0.16} _{-0.06}		2017-06-22	0	
		0.010 ^{+0.002} _{-0.001}	Mass			0	0	0	0	17h58m42.85s	-29d23m53.7s						0.025 ^{+0.009} _{-0.004}		2016-05-19	0	
		2.8 ^{+2.2} _{-1.5}	Mass			0	0	1	1	18h05m53.70s	-27d42m51.4s	6500±1000					0.29 ^{+0.23} _{-0.15}		2017-05-18	0	
		3.7±2.1	Mass			0	0	0	0	17h27m10.20s	-29d47m38.3s	5100 ⁺¹²⁰⁰ ₋₁₈₀₀					0.75 ^{+0.33} _{-0.41}		2014-05-14	1	
		2.6 ^{+0.8} _{-0.6}	Mass			0	0	0	0	18h05m16.35s	-28d53m42.0s	5800 ⁺⁸⁰⁰ ₋₇₀₀					0.63 ^{+0.07} _{-0.08}		2016-02-25	2	
		3.8±0.4	Mass			0	0	0	0	17h50m09.77s	-34d40m23.5s	3200±400					0.46±0.04		2014-10-29	0	
		0.0444±0.0028	Mass			0	0	2	2	18h06m05.32s	-30d43m57.5s	4100±400					0.69±0.02		2015-11-19	4	
		0.017 ^{+0.017} _{-0.008}	Mass			0	0	0	0	17h54m19.19s	-30d22m38.3s	6600±1000					0.22 ^{+0.21} _{-0.11}		2014-10-29	6	
		0.73±0.06	Mass			0	0	0	0	17h52m34.51s	-30d05m16.0s	1510 ⁺¹¹⁰ ₋₁₂₀					0.51 ^{+0.05} _{-0.04}		2014-11-05	11	
	0.15 ^{+0.17} _{-0.10}	64 ⁺⁴ ₋₇	0.27±0.02	Mass		0	0	0	0	17h52m34.51s	-30d05m16.0s	1510 ⁺¹¹⁰ ₋₁₂₀					0.51 ^{+0.05} _{-0.04}		2014-11-05	11	
		0.25±0.04	Mass			0	0	1	1	18h05m24.43s	-26d25m19.0s	2780±380					0.41±0.07		2016-09-29	0	
		0.06 ^{+0.02} _{-0.03}	Mass			0	0	0	0	17h56m25.96s	-32d14m14.7s	5900 ⁺⁹⁰⁰ ₋₁₄₀₀	17.71±0.18	V (Johnson)			0.64 ^{+0.21} _{-0.28}		2014-11-05	6	
		0.18 ^{+0.17} _{-0.10}	Mass			0	0	0	0	17h47m29.42s	-34d43m35.6s	8100					0.71		2014-10-29	2	
										17h59m08.81s	-30d45m34.1s	5800±1100					0.37 ^{+0.30} _{-0.17}		2014-05-11	2	
										17h38m14.18s	-27d08m10.1s	2570±610					0.26±0.11		2014-05-11	0	
										17h57m47.72s	-27d23m40.3s	4380 ⁺⁵¹⁰ ₋₄₆₀					0.211 ^{+0.068} _{-0.045}		2015-03-05	8	

32 of 53 microlensing planets currently in the archive have light curves

Confirmed planet (3)

CONFIRMED PLANET OVERVIEW PAGE										
										 
Object and Aliases										
Default Alias										MOA-2007-BLG-400L b
NASA Exoplanet Archive Links										
Planet	Related Overviews				Transit Service					
MOA-2007-BLG-400L b	Confirmed Planet	Host	Kepler Pipeline			MOA-2007-BLG-400L b Transits				
Planet Orbital Properties										
Planet	Period (days)	Semi-Major Axis (AU)	Inclination (deg)	Eccentricity	Time of Periastron Passage (days)	Longitude of Periastron (deg)	Date of Orbital Solution	Reference		
b	null	$0.6^{+1.2}_{-0.4}$	null	null	null	null	null	Dong et al. 2009		
b	null	$0.72^{+1.6}_{-0.5}$	null	null	null	null	null	Dong et al. 2009		
Planet Parameters										
Planet	M sin(i)		Mass		Radius			Density	Equilibrium Temperature	Reference
	(Jupiter Mass)	(Earth Mass)	(Jupiter Mass)	(Earth Mass)	(Solar Radii)	(Jupiter Radii)	(Earth Radii)	(g/cm ³)	(K)	
b	null	null	$0.83^{+0.46}_{-0.33}$	$263.79^{+185.71}_{-86.32}$	null	null	null	null	34±9	Dong et al. 2009
b	null	null	$0.83^{+0.46}_{-0.33}$	$263.79^{+185.71}_{-86.32}$	null	null	null	null	103^{+26}_{-2}	Dong et al. 2009
Planet Transit Properties										
Planet	Depth (ppm)	Duration (days)	Duration (hours)	Mid-Point (days)	Impact Parameter	Occultation Depth (ppm)	Ratio of Distance to Stellar Radius	Ratio of Planet to Stellar Radius	Reference	
b	null	null	null	null	null	null	null	null	Dong et al. 2009	
b	null	null	null	null	null	null	null	null	Dong et al. 2009	
General Information										
Planet	Discovery			System Information			Kepler Flag	TTV Flag	Exoplanet Encyclopaedia Link	Exoplanets Data Explorer Link
	Method	Year	Reference	Number of Stars	Number of Planets	Circumbinary Flag			http://exoplanet.eu/catalog/moa-2007-blg-400l_b/	http://exoplanets.org/details/MOA-2007-BLG-400L_b
b	Micro-lensing	2008	Dong et al. 2009	1	1	0	0	0		
Notes										
Planet	Note								Reference	
No Data Available										
Summary of Stellar Information										
Right Ascension	18h09m41.50s				Declination			-29d13m27.0s		
Galactic Longitude (deg)	2.38127				Galactic Latitude (deg)			-4.70074		
Parallax (mas)	null				Distance (pc)			9800^{+900}_{-800}		
RA Proper Motion (mas/yr)	null				Dec Proper Motion (mas/yr)			null		
Total Proper Motion (mas/yr)	null				Radial Velocity (km/s)			null		
B-band (mag)	null				K-band (mag)			null		
Spectral Type	null				Effective Temperature (K)			null		
Surface Gravity (log(g/cm/s ²))	null				Luminosity (log(L _{sun}))			null		
Radius (R _{Jup})	null				Mass (M _{Jup})			$0.30^{+0.19}_{-0.12}$		
Density (g/cm ³)	null				Age (Gyr)			null		
Metallicity (dex)	null				Metallicity Ratio			null		
Y sin(i) (km/s)	null				S-index			null		
log R' _{HK}	null				X-ray activity, log(L _X)			null		
Number of Hipparcos Light Curves	0				Number of Photometric non-Hipparcos Light Curves			7		
Number of Radial Velocity Time Series	0				Number of Amateur Light Curves			0		
Number of Spectra	0				Number of Images			3		
Literature Time Series										
Type	Start Time	End Time	Number of Data Points	Wavelength	Method	Instrument/Telescope	Link	File	Reference	
PLC	2454351.536970	2454362.521940	94	H (Generic)	Micro-lensing	ANDICAM - 1.3m SMARTS/CTIO	Time Series Viewer	Download	Dong et al. 2009	
PLC	2454351.536740	2454362.522700	97	H (Generic)	Micro-lensing	ANDICAM - 1.3m SMARTS/CTIO	Time Series Viewer	Download	Dong et al. 2009	
PLC	2454351.537500	2454362.523470	93	H (Generic)	Micro-lensing	ANDICAM - 1.3m SMARTS/CTIO	Time Series Viewer	Download	Dong et al. 2009	
PLC	2453659.866400	2454413.896900	235	I (Generic)	Micro-lensing	Unknown - Unknown	Time Series Viewer	Download	Dong et al. 2009	
PLC	2454351.539030	2454362.525000	94	H (Generic)	Micro-lensing	ANDICAM - 1.3m SMARTS/CTIO	Time Series Viewer	Download	Dong et al. 2009	
PLC	2454351.537450	2454524.865020	74	I (Generic)	Micro-lensing	ANDICAM - 1.3m SMARTS/CTIO	Time Series Viewer	Download	Dong et al. 2009	
PLC	2454351.536270	2454362.524230	96	H (Generic)	Micro-lensing	ANDICAM - 1.3m SMARTS/CTIO	Time Series Viewer	Download	Dong et al. 2009	

Confirmed planet (3)

CONFIRMED PLANET OVERVIEW PAGE

Object and Aliases	
Default Alias	MOA-2007-BLG-400L b

NASA Exoplanet Archive Links			
Planet	Confirmed	Kepler Pipeline	Transit Service
MOA-2007-BLG-400L b	Planet	Host	MOA-2007-BLG-400L b Transits

Planet Orbital Properties								
Planet	Period (days)	Semi-Major Axis (AU)	Inclination (deg)	Eccentricity	Time of Periastron Passage (days)	Longitude of Periastron (deg)	Date of Orbital Solution	Reference
b	null	6.5 ^{+1.1} _{-1.1}	null	null	null	null	null	Dong et al. 2009
b	null	0.72 ^{+0.16} _{-0.16}	null	null	null	null	null	Dong et al. 2009

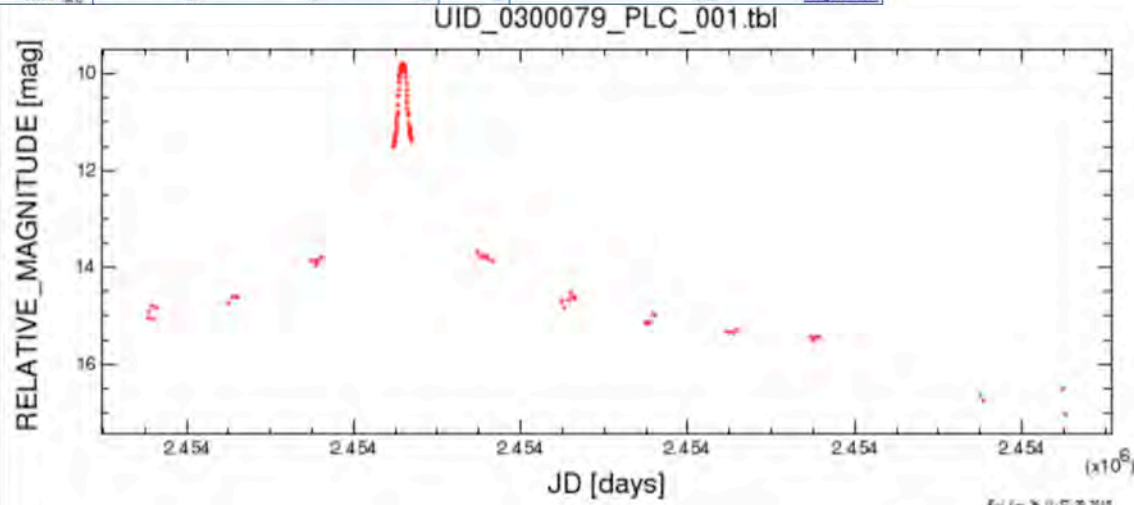
Planet Parameters										
Planet	M sin(i)		Mass		Radius			Density	Equilibrium Temperature	Reference
	(Jupiter Mass)	(Earth Mass)	(Jupiter Mass)	(Earth Mass)	(Solar Radi)	(Jupiter Radi)	(Earth Radi)	(g/cm ³)	(K)	
b	null	null	0.83 ^{+0.40} _{-0.33}	263.79 ^{+185.97} _{-8.31}	null	null	null	null	34±9	Dong et al. 2009
b	null	null	0.93 ^{+0.20} _{-0.21}							

Planet	Depth (ppm)	Duration (days)	Duration (hours)	Mid-Point (days)
b	null	null	null	null
b	null	null	null	null

Planet	Discovery			Number of Stars	System Information
	Method	Year	Reference		
b	Microensing	2008	Dong et al. 2009	1	

Planet

Right Ascension
Galactic Longitude (deg)
Parallax (mas)
RA Proper Motion (mas/yr)
Total Proper Motion (mas/yr)
B-band (mag)
Spectral Type
Surface Gravity (log(g/cm/s ²))
Radius (R _{Jup})
Density (g/cm ³)
Metallicity (dex)
Y sin(i) (km/s)
log R' _{HK}
Number of Hipparcos Light Curves
Number of Radial Velocity Time Series
Number of Spectra



Literature Time Series								
Type	Start Time	End Time	Number of Data Points	Wavelength	Method	Instrument/Telescope	Link	Reference
PLC	2454351.535970	2454362.521940	94	H (Generic)	Microensing	ANDICAM - 1.3m SMARTS/CTIO	Time Series Viewer	Dong et al. 2009
PLC	2454351.536740	2454362.522700	97	H (Generic)	Microensing	ANDICAM - 1.3m SMARTS/CTIO	Time Series Viewer	Dong et al. 2009
PLC	2454351.537500	2454362.523470	93	H (Generic)	Microensing	ANDICAM - 1.3m SMARTS/CTIO	Time Series Viewer	Dong et al. 2009
PLC	2453659.866400	2454413.896900	235	I (Generic)	Microensing	Unknown - Unknown	Time Series Viewer	Dong et al. 2009
PLC	2454351.539030	2454362.525000	94	H (Generic)	Microensing	ANDICAM - 1.3m SMARTS/CTIO	Time Series Viewer	Dong et al. 2009
PLC	2454351.537450	2454524.865020	74	I (Generic)	Microensing	ANDICAM - 1.3m SMARTS/CTIO	Time Series Viewer	Dong et al. 2009
PLC	2454351.536270	2454362.524230	96	H (Generic)	Microensing	ANDICAM - 1.3m SMARTS/CTIO	Time Series Viewer	Dong et al. 2009



Microlensing table

- Contains all solutions from a reference (confirmed planet table has only 1)
- Includes microlensing specific parameters
- Currently undergoing an update for additional parameters and papers

Microlensing table

- Contains all solutions (confirmed planet table)
- Includes microlensing parameters and paper
- Currently undergoing

Table Label	Description
Planet Name	Planet name
Reference	ADS reference link
RA [decimal]	Right ascension (decimal)
RA [sexagesimal]	Right ascension sexagesimal
Dec [decimal]	Declination (decimal)
Dec [sexagesimal]	Declination (sexagesimal)
Galactic Longitude	Galactic longitude
Galactic Latitude	Galactic latitude
Source Crossing Time [day]	Source angular radius crossing time
Einstein Crossing Time [day]	Einstein radius crossing time
Time of Closest Projected Separation [days]	Time of closest projected separation between lens and source
Angular Einstein Radius [mas]	Angular Einstein radius
Angular Projected Separation	Angular projected separation between lens and source
Source-Lens Relative Proper Motion [mas/year]	Source-lens relative proper motion
Source Angular Radius [microas]	Source angular radius
Source Physical Radius [Solar radii]	Source physical radius
Source/Einstein Angular Radius Ratio (10^{*-3})	Ratio of source angular radius and the Einstein angular radius ($\times 10^{-3}$)
Source-Lens Relative Angle [radians]	Angle of source relative to lens
Binary Lens Mass Ratio (10^{*-4})	Ratio of binary lens mass, M_2/M_1 ($\times 10^{-4}$)
Binary Lens Separation Ratio	Ratio of binary lens separation
Lens Separation Ratio Rate of Change [1/year]	Rate of change of the binary lens separation ratio due to binary orbital motion
Relative angle rate of change [deg/year]	Rate of change of the source-lens relative angle due to binary orbital motion
Lens Mass [Solar mas]	Host mass
Planet Mass [Earth mass]	Planet mass

Microlensing Table (2)

Row ID	Planet Name	ADS Reference link	RA [decimal]	RA [sexagesimal]	Dec [decimal]	Dec [sexagesimal]	Galactic longitude	Galactic latitude	Source crossing time [day]	Einstein crossing time [day]	Time of closest projected separation [day]	Angular Einstein radii [mas]	
1	MOA 2011-BLG-028L b	Skowron et al. 2016	270.854000	18h03m24.96s	-29.213417	-29d12m48.3s	1.725752	-3.495602		34.20±0.74	2455673.81±0.18	0.337±0.053	
2	MOA 2011-BLG-028L b	Skowron et al. 2016	270.854000	18h03m24.96s	-29.213417	-29d12m48.3s	1.725752	-3.495602		34.26±0.67	2455673.788±0.01	0.337±0.053	
3	MOA 2011-BLG-028L b	Skowron et al. 2016	270.854000	18h03m24.96s	-29.213417	-29d12m48.3s	1.725752	-3.495602		34.2±1.3	2455673.74±0.33	0.337±0.053	
4	MOA 2011-BLG-028L b	Skowron et al. 2016	270.854000	18h03m24.96s	-29.213417	-29d12m48.3s	1.725752	-3.495602		34.45±0.55	2455673.687±0.01	0.337±0.053	
5	MOA 2011-BLG-028L b	Skowron et al. 2016	270.854000	18h03m24.96s	-29.213417	-29d12m48.3s	1.725752	-3.495602		33.91±0.26	2455673.707±0.01	0.337±0.053	
6	MOA 2011-BLG-028L b	Skowron et al. 2016	270.854000	18h03m24.96s	-29.213417	-29d12m48.3s	1.725752	-3.495602		34.19±0.45	2455673.694±0.01	0.337±0.053	
7	MOA 2011-BLG-028L b	Skowron et al. 2016	270.854000	18h03m24.96s	-29.213417	-29d12m48.3s	1.725752	-3.495602		34.07±0.68	2455673.82±0.17	0.337±0.053	
8	MOA 2011-BLG-028L b	Skowron et al. 2016	270.854000	18h03m24.96s	-29.213417	-29d12m48.3s	1.725752	-3.495602		34.20±0.74	2455673.81±0.18	0.337±0.053	
9	MOA 2010-BLG-353L b	Rattenbury et al. 2011	271.303917	18h05m12.94s	-27.293233	-27d17m35.6s	3.597801	-2.903537			2455381.24±0.06	0.187±0.089	
10	MOA 2010-BLG-353L b	Rattenbury et al. 2011	271.303917	18h05m12.94s	-27.293233	-27d17m35.6s	3.597801	-2.903537			2455381.24±0.06	0.187±0.089	
11	OGLE 2005-BLG-169L b	Gould et al. 2006	271.522167	18h06m05.32s	-30.732639	-30d43m57.5s	0.676832	-4.739985		43±4		1.00±0.22	
12	OGLE 2003-BLG-235L b	Bennett et al. 2006	271.318125	18h05m16.35s	-28.895000	-28d53m42.0s	2.202553	-3.694478	0.059±0.007			0.55±0.07	
13	OGLE 2012-BLG-0724L b	Hirao et al. 2016	268.968292	17h55m52.39s	-29.818528	-29d49m06.7s	0.385001	-2.370432		13.3556±0.8479	2456071.0381±0.1	0.239±0.028	
14	OGLE 2012-BLG-0724L b	Hirao et al. 2016	268.968292	17h55m52.39s	-29.818528	-29d49m06.7s	0.385001	-2.370432		13.3556±0.8479	2456071.0381±0.1	0.239±0.028	
15	OGLE 2015-BLG-0954L b	Shin et al. 2016	270.184333	18h00m44.24s	-28.660889	-28d39m39.2s	1.918903	-2.713585	0.0111±0.0003		37.53±0.87	2457165.220±0.01	1.89
16	OGLE 2015-BLG-0954L b	Shin et al. 2016	270.184333	18h00m44.24s	-28.660889	-28d39m39.2s	1.918903	-2.713585	0.0111±0.0003		36.96±1.10	2457165.223±0.01	1.89
17	OGLE 2012-BLG-0563L b	Fukui et al. 2015	271.490500	18h05m57.72s	-27.712000	-27d42m43.2s	3.312164	-3.251965		77.5±2.2	2456069.02790±0.1	1.36 ^{+0.14} _{-0.12}	
18	OGLE 2012-BLG-0563L b	Fukui et al. 2015	271.490500	18h05m57.72s	-27.712000	-27d42m43.2s	3.312164	-3.251965		77.7±2.1	2456069.02811±0.1	1.36 ^{+0.14} _{-0.12}	
19	MOA 2010-BLG-328L b	Furusawa et al. 2013	269.496333	17h57m59.12s	-30.715175	-30d42m54.6s	359.835949	-3.213775		62.9±0.3	2455378.723±0.0		
20	MOA 2010-BLG-328L b	Furusawa et al. 2013	269.496333	17h57m59.12s	-30.715175	-30d42m54.6s	359.835949	-3.213775		57.2±0.3	2455378.641±0.0		
21	MOA 2010-BLG-328L b	Furusawa et al. 2013	269.496333	17h57m59.12s	-30.715175	-30d42m54.6s	359.835949	-3.213775		70.3±0.7	2455378.717±0.0		
22	MOA 2010-BLG-328L b	Furusawa et al. 2013	269.496333	17h57m59.12s	-30.715175	-30d42m54.6s	359.835949	-3.213775		62.6±0.6	2455378.683±0.0	0.98±0.12	
23	MOA 2010-BLG-328L b	Furusawa et al. 2013	269.496333	17h57m59.12s	-30.715175	-30d42m54.6s	359.835949	-3.213775		64.2±0.6	2455378.694±0.0	0.83±0.14	
24	MOA 2010-BLG-328L b	Furusawa et al. 2013	269.496333	17h57m59.12s	-30.715175	-30d42m54.6s	359.835949	-3.213775		75.1±0.9	2455378.776±0.0		
25	MOA 2010-BLG-328L b	Furusawa et al. 2013	269.496333	17h57m59.12s	-30.715175	-30d42m54.6s	359.835949	-3.213775		61.8±0.3	2455378.706±0.0	0.68±0.04	
26	OGLE 2012-BLG-26L b	Beaulieu et al. 2016	263.577917	17h34m18.70s	-27.142750	-27d08m33.9s	0.194880	3.066576		94.12±0.92		0.98±0.04	
27	OGLE 2012-BLG-26L b	Beaulieu et al. 2016	263.577917	17h34m18.70s	-27.142750	-27d08m33.9s	0.194880	3.066576		94.12±0.92		0.98±0.04	
28	OGLE 2015-BLG-0051L b	Han et al. 2016	269.662537	17h58m39.01s	-28.031694	-28d01m54.1s	2.237480	-2.002630		10.81±0.07	2457083.081±0.01	0.093±0.008	
29	MOA 2011-BLG-262L b	Bennett et al. 2014	270.097833	18h00m23.48s	-31.245258	-31d14m42.9s	359.630583	-3.924346		3.846±0.013	2455739.1311±0.1	0.205±0.015	
30	MOA 2011-BLG-262L b	Bennett et al. 2014	270.097833	18h00m23.48s	-31.245258	-31d14m42.9s	359.630583	-3.924346		3.827±0.013	2455739.1312±0.1	0.205±0.015	
31	MOA 2011-BLG-262L b	Bennett et al. 2014	270.097833	18h00m23.48s	-31.245258	-31d14m42.9s	359.630583	-3.924346		3.855±0.013	2455739.1310±0.1	0.122±0.009	
32	MOA 2011-BLG-262L b	Bennett et al. 2014	270.097833	18h00m23.48s	-31.245258	-31d14m42.9s	359.630583	-3.924346		3.858±0.013	2455739.1309±0.1	0.122±0.009	



UKIRT Survey Data

- See Shvartzvald et al 2017 and Geoff Bryden's talk for details of surveys and data reduction
- 18 million light curves from 2015 and 2016 UKIRT campaigns made available to the community via the Exoplanet Archive
- 2017 campaign data ($H+K$ -band, CASU data products) will be released in spring 2018 (i.e., in time for the ROSES-18 ADAP proposal submission deadline).

UKIRT Search Interface

Introduction

This Interactive Visualizer Search allows you to specify sub-set(s) of UKIRT data to view in an interactive table. To search, select the appropriate operation from the Op column, enter the constraint value in the field provided, and click Submit. Use the Field Selector panel to add or remove search parameters. For additional UKIRT documentation:

- [Column Descriptions](#)
- [UKIRT Information](#)

For best results:

Column Selection

Update Constraint Columns Reset

Select All Visible Select None

Stellar Columns

- Source ID
- Survey Year
- Galactic Bulge Region
- Field ID
- CCD ID
- RA [decimal degrees]
- Dec [decimal degrees]
- Start HJD [days]
- End HJD [days]
- Reference HJD [days]
- H-band [mag]
- Points in Light Curve

Microensing Survey Catalogs

- K2 Campaign 9 Field Overlap Flag
- UKIRT Event Flag
- UKIRT Event ID
- OGLE Event Flag
- OGLE Event ID
- MOA Event Flag
- MOA Event ID

Magnitude Statistics

- Points in Statistics Calculation
- Minimum Value of Light Curve [mag]
- Maximum Value of Light Curve [mag]
- Mean Value of Light Curve [mag]
- Std Dev of Light Curve wrt Mean [mag]
- Median of Light Curve [mag]
- Std Dev of Light Curve wrt Median [mag]
- Number of Points > 5 Sigma from Med
- Fraction of Points > 5 Sigma from Med
- Median Absolute Deviation of Light Curve [mag]
- Reduced Chi-squared of Light Curve

This release of the 2015–2016 UKIRT microlensing survey data contains roughly 18 million targets, all observed exclusively in H-band. To visually estimate the number of targets returned by a search, see the UKIRT Microlensing Survey Figures page. Use the **Count Only** button above to determine the exact number of targets that meet the search criteria.

Up to 100,000 results will display in the web browser. Results between 100,000 and 5 million must be downloaded by wget script; >5 million requires a bulk download.

Many thanks to the UKIRT facility and the UKIRT Microlensing Team for making these data available.

Time Series Lookup

Enter a UKIRT source ID to view its time series, or to generate a download script for all related time series files.

(Sample ID: ukirt_c_2016_e_33_f_0065104)

Source ID:

Include location search around coordinates / object names

Single Location Radius (arcsec):

List Upload: No file selected.

Include column value / range constraints

Description	Column	Op	Column Constraint
Source ID	sourceid	Substring	<input type="text"/>
Survey Year	obs_year	=	<input type="text"/>
Field ID	field	=	<input type="text"/>
CCD ID	ccdcd	=	<input type="text"/>
RA [decimal degrees]	ra	=	<input type="text"/>
Dec [decimal degrees]	dec	=	<input type="text"/>
Start HJD [days]	hjdstart	=	<input type="text"/>
End HJD [days]	hjdstop	=	<input type="text"/>
H-band [mag]	h_mag	=	<input type="text"/>
Points in Light Curve	nppts	=	<input type="text"/>
K2 Campaign 9 Field Overlap Flag	k2c9_flag	=	<input type="text"/>
UKIRT Event Flag	ukirt_evt_flag	=	<input type="text"/>
OGLE Event Flag	ogle_evt_flag	=	<input type="text"/>
MOA Event Flag	moa_evt_flag	=	<input type="text"/>
Points in Statistics Calculation	statpts	=	<input type="text"/>
Minimum Value of Light Curve [mag]	minvalue	=	<input type="text"/>
Maximum Value of Light Curve [mag]	maxvalue	=	<input type="text"/>

Includes flags for K2C9 overlap, UKIRT, OGLE and MOA events

Example search

- Bright (<11.5 H mag) stars in K2C9 overlap
 - 34484 matches
- Small (<100,000) queries return in interactive table

Select Columns Download Table Plot Table Download Data Products View Documentation User Preferences

UKIRT Time Series

Row ID	Source ID	Survey Year	Field ID	CCD ID	RA [decimal degrees]	Dec [decimal degrees]	Start HJD [days]	End HJD [days]
1	ukirt_c_2016_s_11_2_0084268	2016	11	2	271.285229	-28.556313	7487.069880	7577.898610
2	ukirt_c_2016_s_11_1_0076550				270.781866	-28.569811	7487.069880	7577.898610
3	ukirt_c_2016_s_11_2_0044184				271.189301	-28.652193	7487.069880	7577.898610
4	ukirt_c_2016_s_11_2_0047352				271.207909	-28.644129	7487.069880	7577.898610
5	ukirt_c_2016_s_12_1_0015181				270.994225	-28.725291	7487.071190	7577.899930
6	ukirt_c_2016_s_12_1_0017073				270.902323	-28.720720	7487.071190	7577.899930
7	ukirt_c_2016_s_11_1_0064934				270.813176	-28.598545	7487.069880	7577.898610
8	ukirt_c_2016_s_12_1_0029569				270.952020	-28.689731	7487.071190	7577.899930
9	ukirt_c_2016_s_11_3_0037740				271.205119	-28.235459	7487.069880	7577.898610
10	ukirt_c_2016_s_11_3_0049576				271.278612	-28.207310	7487.069880	7577.898610
11	ukirt_c_2016_s_12_1_0049765				271.074881	-28.640457	7487.071190	7577.899930
12	ukirt_c_2016_s_11_4_0088070				270.814588	-28.107932	7487.069880	7577.898610
13	ukirt_c_2016_s_12_1_0062349	2016	12	1	270.921393	-28.610488	7487.071190	7577.899930
14	ukirt_c_2016_s_11_4_0087278	2016	11	4	270.791893	-28.109756	7487.069880	7577.898610

ukirt_c_2016_s_11_2_0084268

- Time Series and Periodogram
- Time Series Download (a WGET-based shell script)

Example search

- Bright (<11.5 H mag) stars in K2C9 overlap
 - 34484 matches
- Small (<100,000) queries return in interactive table

Select Columns Download Table Plot Table Download Data Products View Documentation User Preferences

UKIRT Time Series

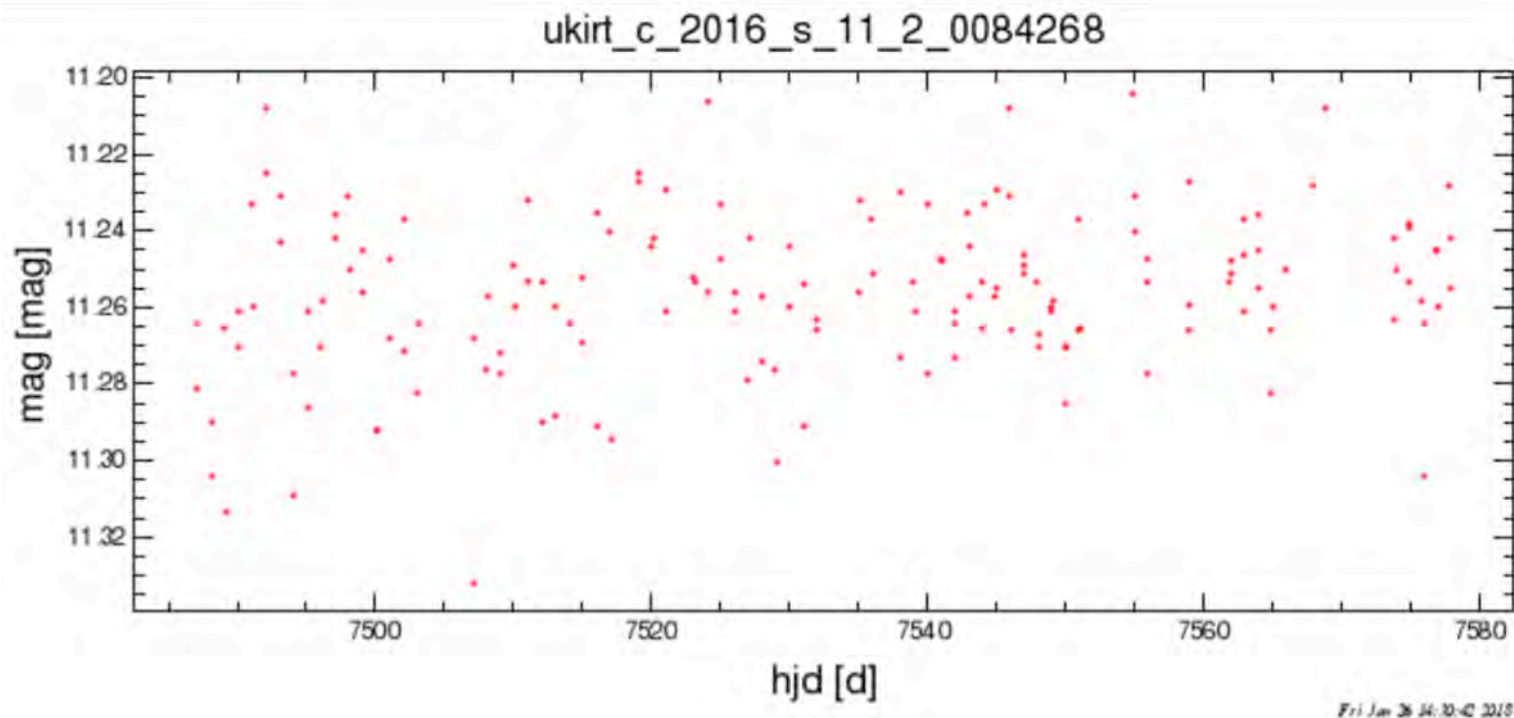
Row ID	Source ID	Survey Year	Field ID	CCD ID	RA [decimal degrees]	Dec [decimal degrees]	Start HJD [days]	End HJD [days]
1	ukirt_c_2016_s_11_2_0084268	2016	11	2	271.285229	-28.556313	7487.069880	7577.898610
2	ukirt_c_2016_s_11_1_0076550				270.781866	-28.569811	7487.069880	7577.898610
3	ukirt_c_2016_s_11_2_0044184				271.189301	-28.652193	7487.069880	7577.898610
4	ukirt_c_2016_s_11_2_0047352				271.207909	-28.644129	7487.069880	7577.898610
5	ukirt_c_2016_s_12_1_0015181				270.994225	-28.725291	7487.071190	7577.899930
6	ukirt_c_2016_s_12_1_0017073				270.902323	-28.720720	7487.071190	7577.899930
7	ukirt_c_2016_s_11_1_0064934				270.813176	-28.598545	7487.069880	7577.898610
8	ukirt_c_2016_s_12_1_0029569				270.952020	-28.689731	7487.071190	7577.899930
9	ukirt_c_2016_s_11_3_0037740				271.205119	-28.235459	7487.069880	7577.898610
10	ukirt_c_2016_s_11_3_0049576				271.278612	-28.207310	7487.069880	7577.898610
11	ukirt_c_2016_s_12_1_0049765				271.074881	-28.640457	7487.071190	7577.899930
12	ukirt_c_2016_s_11_4_0088070				270.814588	-28.107932	7487.069880	7577.898610
13	ukirt_c_2016_s_12_1_0062349	2016	12	1	270.921393	-28.610488	7487.071190	7577.899930
14	ukirt_c_2016_s_11_4_0087278	2016	11	4	270.791893	-28.109756	7487.069880	7577.898610

ukirt_c_2016_s_11_2_0084268

Time Series and Periodogram

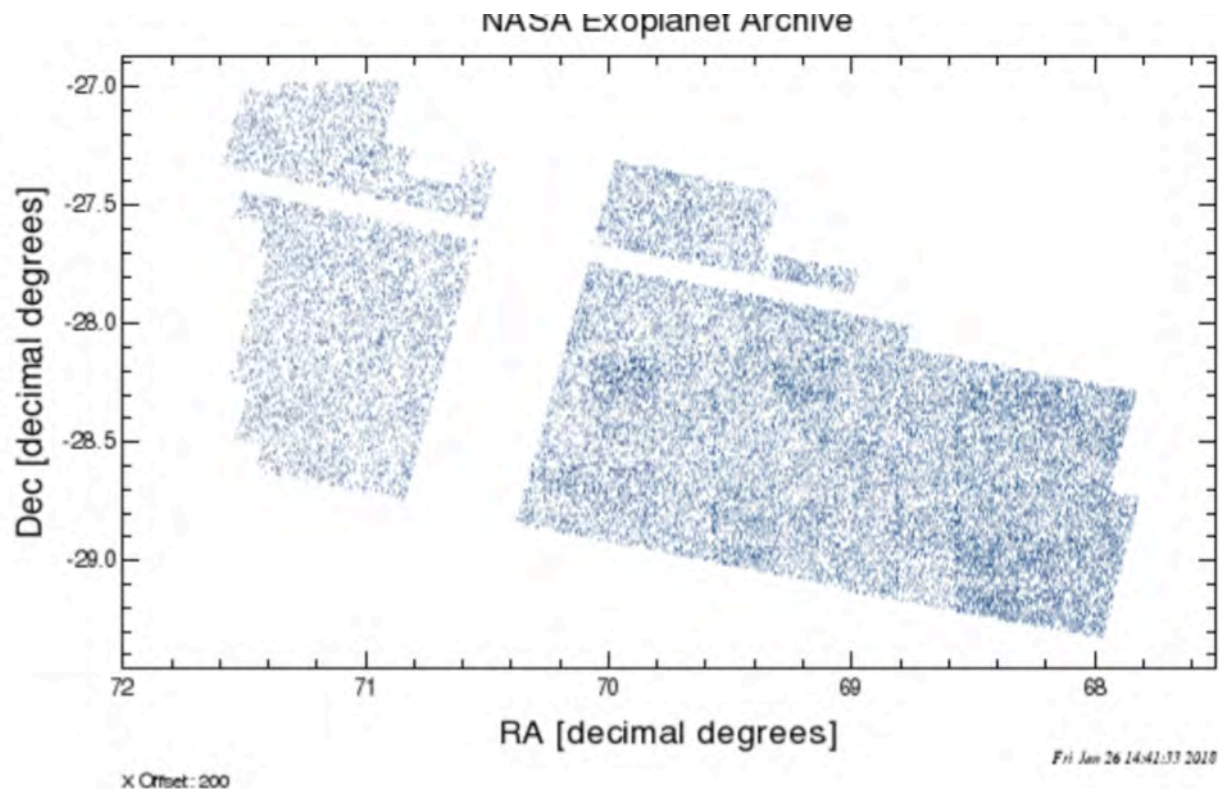
Time Series Download (a WGET-based shell script)

View light curves



Plotting metadata

- Can also make scatter plots or histograms from search results





UKIRT data download

- Scripts to download data
 - Light curves and metadata

Download UKIRT Data

The time series are available via wget scripts, while the other products, such as the survey metadata, can be downloaded directly.

Data Set	Size	Description
UKIRT Bulk Time Series wget scripts (by field and ccd id)	125 MB	All time series
UKIRT Time Series metadata (by field and ccd id)	1.1 GB	IPAC ASCII files in tar.gz format
UKIRT Field and CCD list	4 KB	IPAC ASCII format
UKIRT ID list	40 MB	IPAC ASCII files in tar.gz format
UKIRT Source ID/Tile-CCD cross-reference	40 MB	IPAC ASCII files in tar.gz format

Dedicated documentation


- Brief description of survey
- Description of columns, including matching to other surveys
- Links to relevant papers and requested acknowledgments

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UKIRT Microlensing Survey Figures

Here we include figures created by the UKIRT Microlensing Team that describe various aspects of the UKIRT microlensing survey, which are intended for public consumption and dissemination. We simply request that appropriate citations and credit are given if these are used in talks and presentations.



Click an image to download as PDF.

Observational Coverage Maps

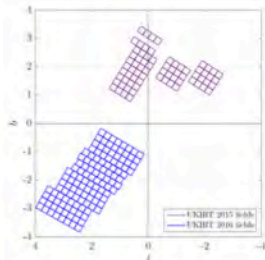


Figure 1a - Distribution of target fields for the 2015 (purple; northern Galactic bulge) and 2016 (blue; southern Galactic bulge) UKIRT microlensing surveys.

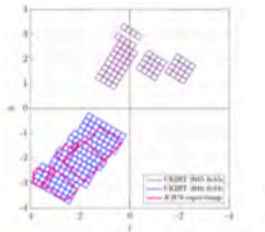


Figure 1b - Distribution of target fields for the 2015 (purple; northern Galactic bulge) and 2016 (blue; southern Galactic bulge) UKIRT microlensing surveys. Also included is the survey superstamp area (pink) for K2's Campaign 9 (K2C9), which can be found in the K2C9 white paper (cf. Figure 7; [Henderson, C. B., et al. \(2016\) PASP, 128, 124401](#)).



ExoFOP

- Website is designed to optimize resources and facilitate collaboration in follow-up studies of exoplanet candidates
 - Supported by Exoplanet Archive infrastructure
 - Most content upload by users, does not have to be published
 - Sand-box for early observations and exchange of information
- Currently supports Kepler, K2, K2C9 and TESS

<https://exofop.ipac.caltech.edu>



ExoFOP K2C9

ExoFOP **K2 C9**

Home Search Help Login

Welcome to ExoFOP-K2 Campaign 9

K2 Campaign 9 will be executed from April 7 to July 1 2016 and will be dedicated to a study of gravitational microlensing events. The Campaign 9 microlensing experiment involves the Kepler spacecraft observing in the +VV direction at fields toward the Galactic bulge. The aim of this program is to simultaneously observe gravitational microlensing events with K2 and from Earth in order to see a parallax effect in the shape and time of the lensing event.

All data on ExoFOP-K2 Campaign 9 is public. There is no option of making data private or proprietary. There is no restriction on the downloading of data, although users are expected to follow the [CFOP/ExoFOP Professional Conduct Policy](#) in acknowledging use of others' data. In order to upload your own data, you must have an account.

[Request an account](#)

Events	Other Links	Bulk Uploads	External Links
Event List 627	Changelog 145	Files	Campaign 9 of the K2 Mission (C. Henderson et. al)
Calendars	Imaging Observations 0	Parameters	2016 CTIO Follow-up (C. Henderson)
Telescope Resources	Contributed Files 0	Observing Notes	Superstamp Variable Star Catalog
Galactic Bulge Availability (between 20160407 and 20161031)	Directory 541	Imaging Observations	K2 Guest Observer program
UTC Date: <input type="text"/> <input type="button" value="Go"/>	Help		

Event List

ExoFOP K2 C9 Home Search Help Login

K2 Microlensing Events (627) [Event Selection Criteria](#) Download as: [Text](#) [CSV](#) Current JD = 2458145.45 24 hrs within last

Ogle Name	MOA Name	RA	Dec	t_{alert} (HJD)	t_0 (HJD)	t_E (d)	u_0 (θ_E)
	MOA-2016-BLG-596	18:07:25.96	-26:38:27.37	2457662.592	2457956.008	3275.02	0
	MOA-2016-BLG-587	17:53:42.67	-29:00:14.67	2457655.435	2457641.633	42.99	32.076
	MOA-2016-BLG-582	17:55:51.69	-28:50:16.36	2457654.447	2457858.985	1350030.79	0
	MOA-2016-BLG-575	17:51:36.76	-28:26:10.57	2457654.413	2457654.332	52765.2	0
OGLE-2016-BLG-1849		18:19:14.52	-27:07:11.8	2457654.161	2457647.652	44.03	0.118
OGLE-2016-BLG-1829	MOA-2016-BLG-579	18:17:27.8	-23:54:09.9	2457653.234	2457668.603	128.2	0.161
	MOA-2016-BLG-562	18:13:15.35	-27:51:41.66	2457652.483	2457649.804	103904.53	0
OGLE-2016-BLG-1801		18:02:34.88	-27:51:04.8	2457651.4	2457653.266	52.76	0.292
OGLE-2016-BLG-1787		18:09:17.2	-25:05:59.4	2457650.026	2457635.501	50.85	0.503
OGLE-2016-BLG-1770		17:57:12.88	-28:04:15.4	2457646.047	2457649.923	38.4	0.208
OGLE-2016-BLG-1886	MOA-2016-BLG-550	17:54:18.73	-29:07:21	2457641.727	2457818.52	74	0
	MOA-2016-BLG-545	18:18:37.64	-21:43:42.48	2457641.724	2457645.494	56.98	0.024

Individual Object page

ExoFOP **K2 C9**

Home Search Help Login

OGLE-2016-BLG-1829/MOA-2016-BLG-579

Current JD = 2458145.45

Open Observing Notes (0)

Last modified 2016-10-31 14:57:47 by swain

Download: [Text file of this page](#) [All files \(tar\)](#) [All files \(zip\)](#)
 External Links: [SIMBAD \(if exists\)](#) [IRSA Finder Chart](#)



OGLE finding chart



light curve

Event Summary	
t_{alert} (HJD)	2457653.234
t_{current} time (HJD), mag	
ARTEMIS Status	pspl
User-supplied Event Status	View
# Observations	0

Event Location	
During campaign?	Y
In footprint?	Y
In superstamp?	

Coordinates (J2000)		
RA/Dec (hms)	18:17:27.8	-23:54:09.9
RA/Dec (deg)	274.365833333	-23.90275
Gal Lat/Long (deg)	-4.308613	8.252195

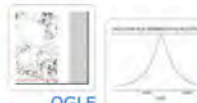
Survey Parameters									
Event Name	RA	Dec	t_0 (HJD)	t_E (d)	u_0 (θ_E)	A_0	I_0 (mag)	Ndata	URL
OGLE-2016-BLG-1829	274.365833333	-23.90275	2457668.603	128.2	0.161	6.278	20.509		http://ogle.astrouw.edu.pl/ogle4/ews/2016/blg-1829.html
MOA-2016-BLG-579	274.365791667	-23.902775	2457670.10526	76.82	0.305		19.14		http://www.massey.ac.nz/~iabond/moa/alert2016/alert.php2016/display.php?id=gb20-R-3-2281

Individual Object page

OGLE-2016-BLG-1829/MOA-2016-BLG-579

Current JD = 2458145.45

Open Observing Notes (0)



Last modified 2016-10-31 14:57:47 by swain

Download: [Text file of this page](#) [All files \(tz\)](#)
 External Links: [SIMBAD](#) (if exists) [IRSA](#) [FIR](#)

Event Summary

t_{alert} (HJD)	2457653.234
t_{current} time (HJD), mag	
ARTEMIS Status	pspl
User-supplied Event Status	
# Observations	0

Event Name RA Dec

Event Name	RA	Dec
OGLE-2016-BLG-1829	274.365833333	-23.9027
MOA-2016-BLG-579	274.365791667	-23.9027

Model Parameters (0) + Add new

Model	a_0	s (θ_E)	q	u_0 (θ_E)	θ	ρ_*	t_E (d)	t_0 (HJD)	π_{\perp}	π_{\parallel}	URL / notes	Date	User
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Photometry (0) + Add new

Band	Value	Object type	Observation Date	Notes	Date	User
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Stellar Parameters (0) + Add new

Teff (K)	$\log(g)$	Radius (R_{Sun})	Spectral Type	Dist (pc)	Mass (M_{Sun})	Luminosity (L_{Sun})	Object type
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Imaging Observations (0) + Add new

Telescope	Instrument	Filter	Pixel scale (arcsec)	Estimated PSF (arcsec)	Estimated Contrast	Observation date (UT)	Observation type	Notes	Date	User
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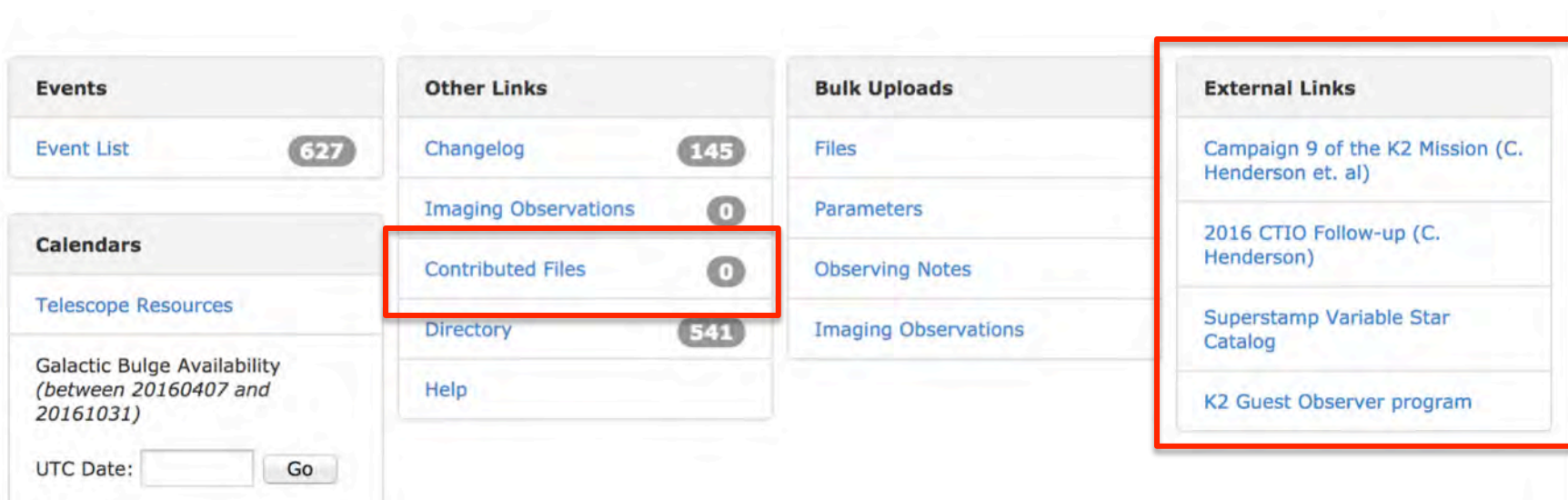
Files (3) + Add new

Type	File Name	Description	Date	User
Finding_Chart	OGLE-2016-BLG-1829.fchart.png	OGLE finding chart	2016-09-21 10:13:14	swain
Light_Curve	K2C9-R-0619_artemis.model.png	light curve	2016-09-22 13:15:10	swain
Light_Curve	K2C9-R-0619_artemis.model	light curve model	2016-09-22 13:15:09	swain

Users can directly upload parameters, observations and files

ExoFOP: Contributed files

- Can also upload data files not directly tied to individual events or link to external files



The screenshot displays the ExoFOP interface with several navigation sections:

- Events**: Event List (627)
- Calendars**: Telescope Resources, Galactic Bulge Availability (between 20160407 and 20161031), UTC Date: Go
- Other Links**: Changelog (145), Imaging Observations (0), **Contributed Files (0)**, Directory (541), Help
- Bulk Uploads**: Files, Parameters, Observing Notes, Imaging Observations
- External Links**: Campaign 9 of the K2 Mission (C. Henderson et. al), 2016 CTIO Follow-up (C. Henderson), Superstamp Variable Star Catalog, K2 Guest Observer program

Tips for presenting data in paper

Consistency will help both the archive and the rest of the exoplanet field

1. Present data in tables (including magnitudes and colors)
2. Include uncertainties for all measured or derived parameters
3. Specify the coordinate system/geometry of the angle of the source trajectory relative to the binary lens axis
 - a. How is the zero point defined?!
 - b. In what direction (e.g., clockwise) does the angle increase?
4. Explicitly specify reference frame --- geocentric or heliocentric --- for all proper motion values.

Tips for papers (2)

5. Explicitly indicate how the source and blend flux parameters are defined (e.g., does $F_b = 1.0$ mean 0% blend flux or 100%)
6. Consistent parameter notation
 - a. Use mass ratio q , not mass fraction epsilon
 - b. Denote the source trajectory-binary lens axis angle as alpha, not theta
 - c. Potential guides
 - Gaudi 2012 ARAA
 - Appendix A of Skowron, Udlaski, Gould et al, 2011, ApJ
 - Glossary at <http://microlensing-source.org/glossary/>

Tips for data sets

- The Exoplanet Archive can host high level (not raw) data if there is some association with exoplanets
 - Microlensing surveys are a good example
- The Archive makes these data available to the community at no charge to the team
 - But this means we have to prioritize our limited resources

Tips for data sets (2)

- Preparation of the data set by the team is key
 - Consistent formats, units and labeling
 - Including handling of nulls
 - Consistent source naming and approach for dealing with overlaps (either across fields or across seasons)
 - Selection of metadata fields
 - Used for searching
 - Calculation or identification of appropriate statistics
 - Used for searching
 - See UKIRT survey data for example

Summary

Ask not what the archives can do for you but what you can do for the archives...

- If not published in the journal, send us the light curve data for published planets (the data file, NOT the plot)
 - Thanks to those who have done this already!
- Consider using standard parameter names/symbols and pay attention to uncertainties in papers
- If interested having the Exoplanet Archive host larger high-level data sets, talk to Rachel A or Calen
 - Can also cross-link to existing archives