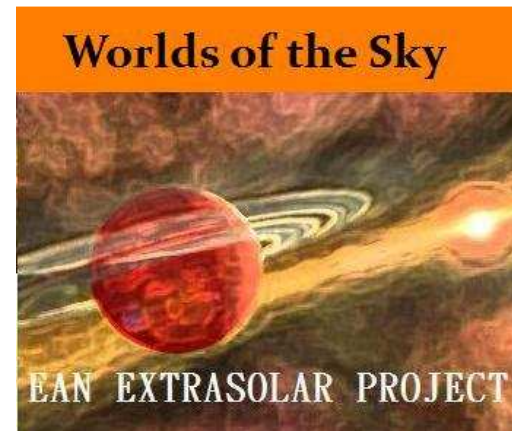


EAN 2010, a cura di Rodolfo Calanca e Angelo Angeletti – 10 agosto 2010

Rodolfo Calanca, Angelo Angeletti



**TERRE DEL CIELO
WORLDS OF THE SKY
Project**








**EXTRASOLAR PLANET TRANSITS OBSERVATION
OSSERVAZIONE TRANSITI PIANETI EXTRASOLARI**




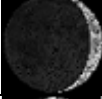
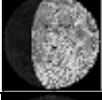
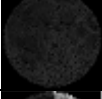
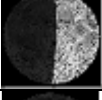

Agosto – Dicembre 2010

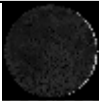
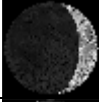
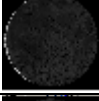

TERRE DEL CIELO – WORLDS OF THE SKY PROJECT
OSSERVAZIONE TRANSITI PIANETI EXTRASOLARI
EXTRASOLAR PLANET TRANSITS Project
AGOSTO – DICEMBRE 2010

Web site data: <http://var2.astro.cz/ETD/index.php> (Czech Astronomical Society)

Geographical coord: Long.: 13° E; lat.: 43° N

N.	DATE (GG/MM/AA)	Begin INIZIO (UT/h,A)	FASE CENTRALE Center (UT/h,A)	End FINE (DATE/UT/h,A)	Fraction Moon illumi- nated FRAZ. ILLUMINA TA LUNA	Moon elon- gation ELONG. LUNA	Moon Phase	Planet OGGETTO
1	12.08.2010	21:38 (66°,W)	23:26 (47°,W)	13.08 1:14 (29°,NW)	7%			TrES-4b
2	15.08.2010	21:52 (44°,E)	23:45 (64°,E)	16.08 1:38 (78°,S)	40%			WASP-1b
3	16.08.2010	22:58 (49°,W)	23:37 (42°,W)	17.08 0:16 (36°,W)	50%			TrES-3b
4	17.08.2010	21:37 (69°,S)	22:31 (65°,SW)	17.08 23:26 (57°,SW)	61%			HD189733b
5	18.08.2010	20:28 (79°,SW)	21:37 (68°,W)	18.08 22:45 (56°,W)	71%			WASP-3b
6	20.08.2010	22:49 (57°,E)	0:42 (75°,SE)	21.08 2:36 (73°,SW)	87%			WASP-1b
7	03.09.2010	20:36(53°,E)	21:39(65°,E)	03.09 22:43(75°,SE)	27%	94°		WASP-10b

N.0	DATE (GG/MM/AA)	Begin INIZIO (UT/h,A)	FASE CENTRALE Center (UT/h,A)	End FINE (DATE/UT/h,A)	Fraction Moon illumi- nated FRAZ. ILLUMINA TA LUNA	Moon elon- gation ELONG. LUNA	Moon Phase	Planet OGGETTO
8	06.09.2010	22:49 (77°,SE)	23:53 (78°,SW)	07.09 00:57 (69°,SW)	4%	132°		WASP-10b
9	07.09.2010	21:20 (68°,NW)	22:05 (60°,NW)	07.09 22:50 (53°,NW)	1%	111°		TrES-2b
10	10.09.2010	20:04 (82°,NW)	22:06 (62°,NW)	11.09 0:07 (43°,NW)	9%	103°		HAT-P-7b
11	11.09.2010	20:41 (63°,W)	21:49 (51°,W)	11.09 22:58 (38°,W)	17%	83°		WASP-3b
12	17.09.2010	20:31 (63°,E)	22:12 (81°,E)	17.09 23:53 (81°,W)	75%	82°		HAT-P-6b
13	07.10.2010	19:55 (59°,E)	21:49 (77°,SE)	07.10 23:42 (72°,SW)	0%	159°		WASP-1b
14	14.10.2010	19:49 (74°,E)	21:30 (88°,W)	14.10 23:11 (70°,W)	50%	85°		HAT-P-6b
15	06.11.2010	22:38 (59°,W)	0:20 (42°,NW)	07.11 02:01 (26°,NW)	0%	130°		HAT-P-6b

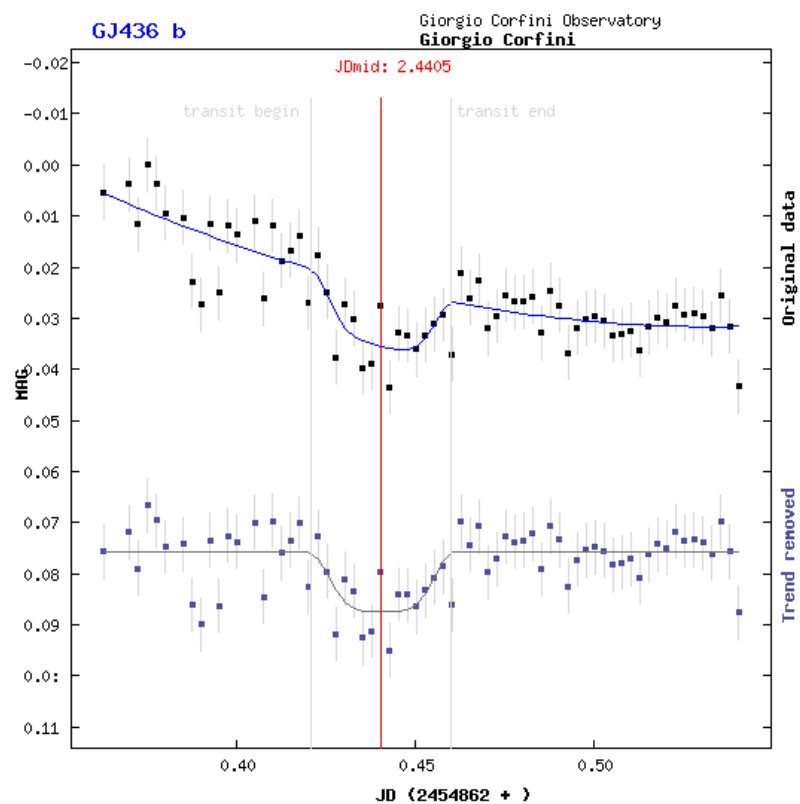
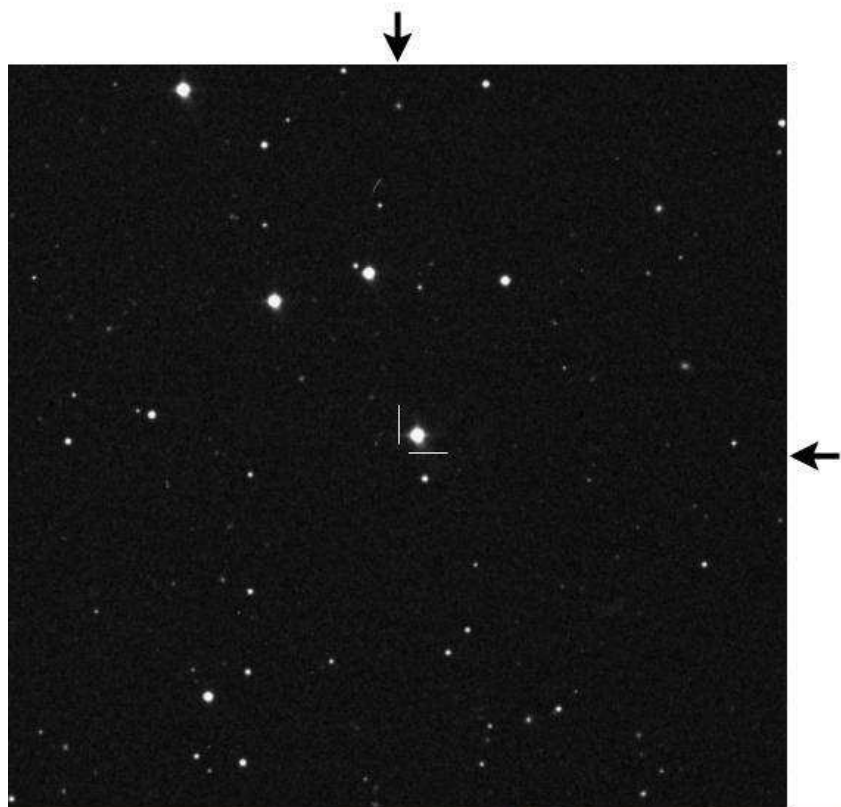
N.	DATE (GG/MM/AA)	Begin INIZIO (UT/h,A)	FASE CENTRALE Center (UT/h,A)	End FINE (DATE/UT/h,A)	Fraction Moon illumi- nated FRAZ. ILLUMINA TA LUNA	Moon elon- gation ELONG. LUNA	Moon Phase	Planet OGGETTO
16	07.11.2010	19:19(79°,S)	20:23(74°,SW)	07.11 21:27(63°,W)	4%	114°		WASP-10b
17	10.11.2010	19:07(86°,E)	20:48(76°,W)	10.11 22:30(58°,W)	24%	89°		HAT-P-6b
18	04.12.2010	18:56(79°,S)	20:50(62°,W)	04.12 22:43(42°,W)	1%	132°		WASP-1b
19	07.12.2010	18:25(83°,W)	20:06(65°,W)	07.12 21:48(47°,W)	5%	93°		HAT-P-6b

GJ436b

<http://var2.astro.cz/EN/tresca/transit-detail.php?id=1261494774>

GJ436 b (Leo)

RA (J2000): 11 42 10.01, DE (J2000): +26 42 37,
V = 10.68 mag, dV = 0.009 mag, duration = 62 minutes
Per = d, T0(HJD) =

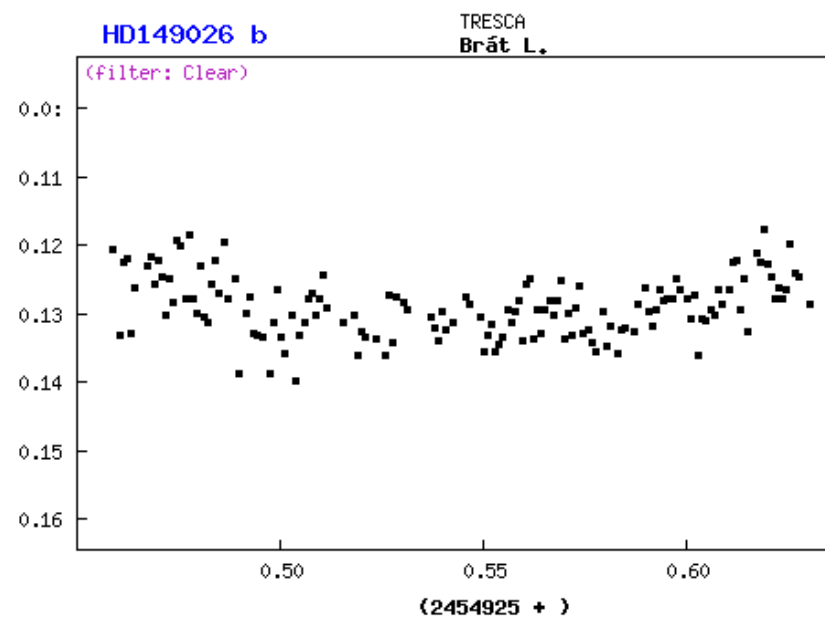
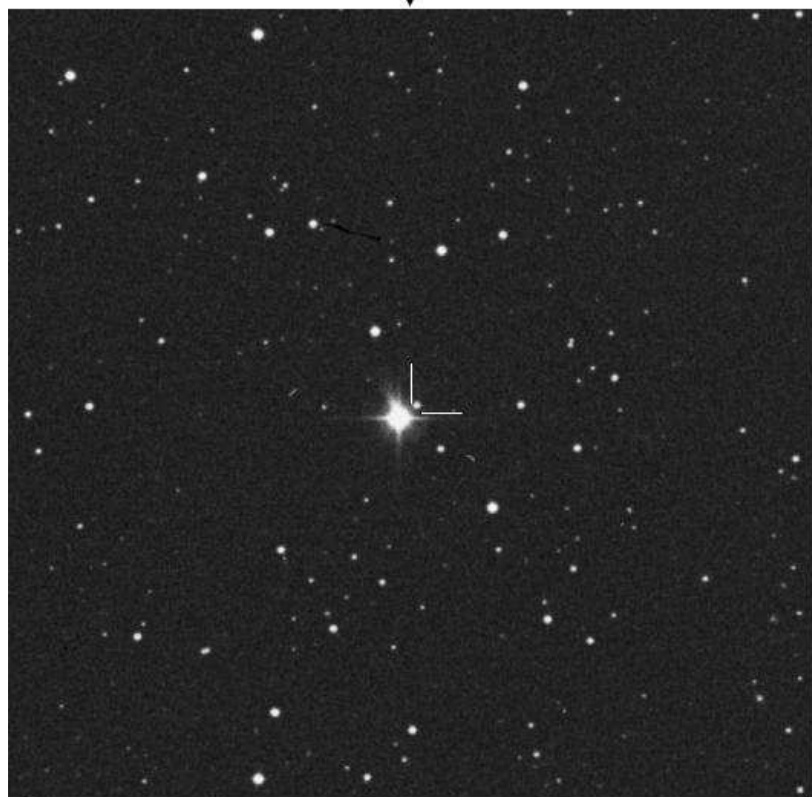


HD149026b

<http://var2.astro.cz/EN/tresca/transit-detail.php?id=1238972537>

HD149026 b (Her)

RA (J2000): 16 30 29, DE (J2000): +38 20 50,
V = 8.15 mag, dV = 0.003 mag, duration = 194.4 minutes
Per = d, T0(HJD) =

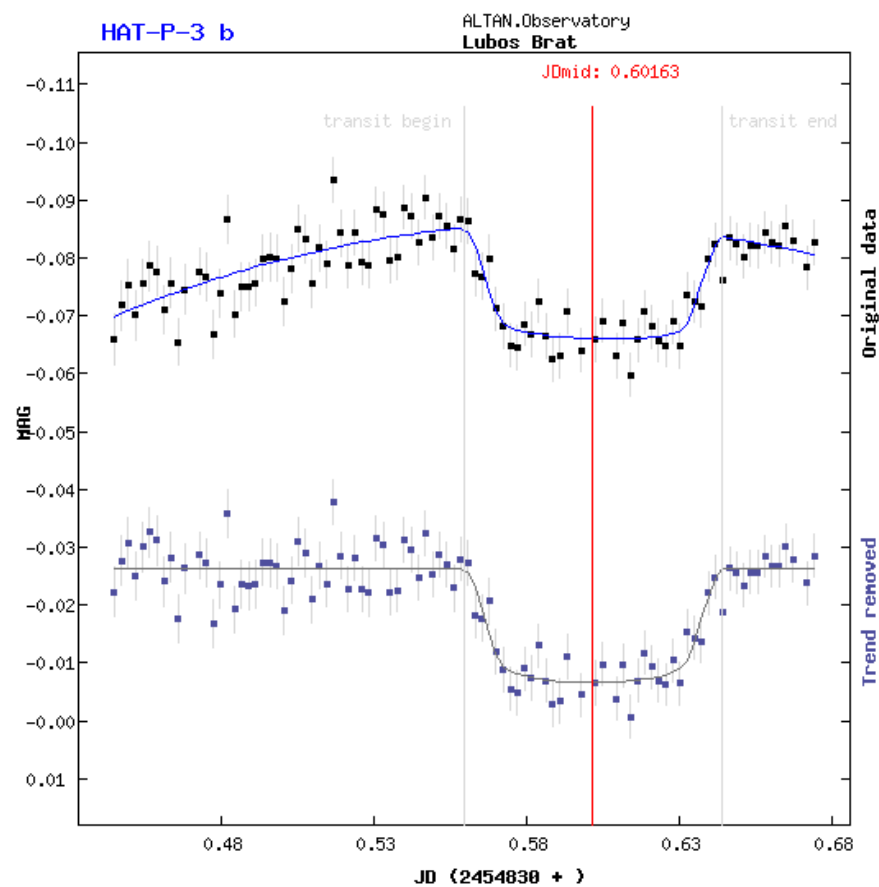
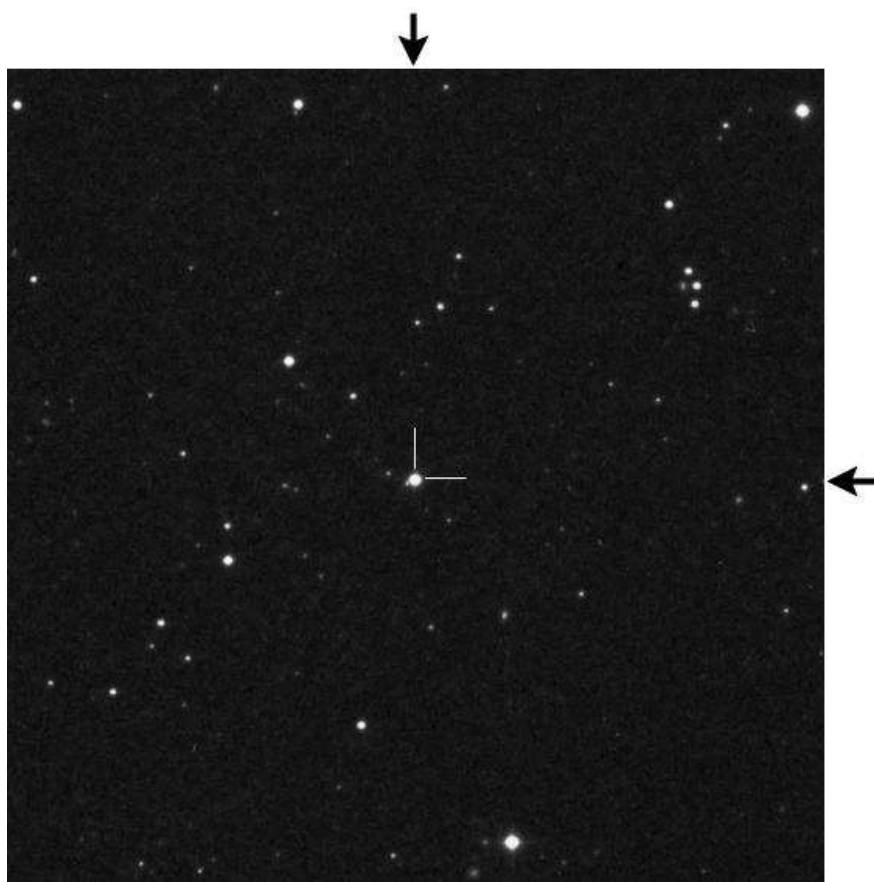


HAT-P-3b

<http://var2.astro.cz/EN/tresca/transit-detail.php?id=1230610896>

HAT-P-3 b (UMa)

RA (J2000): 13 44 23, DE (J2000): +48 01 43,
V = 11.86 mag, dV = 0.014 mag, duration = 123.5 minutes
Per = d, T0(HJD) =



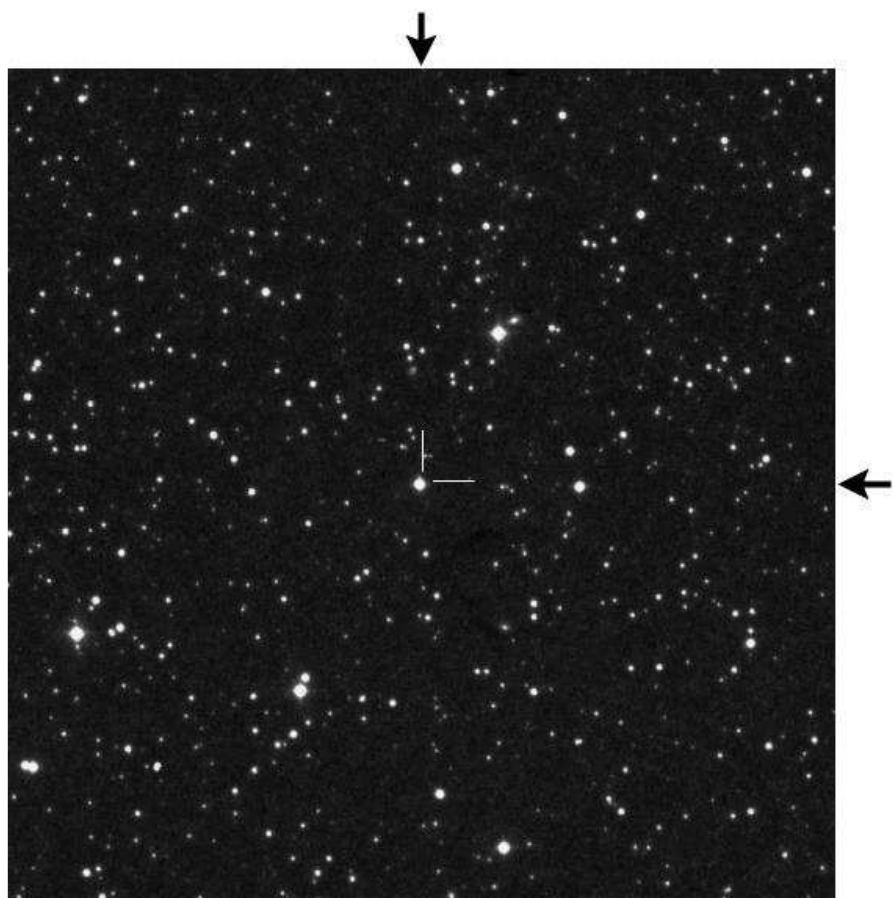
HAT-P-5b

<http://var2.astro.cz/ETD/etd.php?STARNAME=HAT-P-5&PLANET=b>

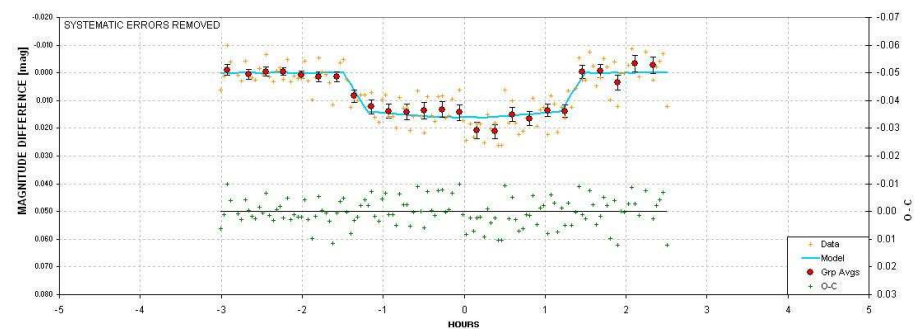
HAT-P-5 b (Lyr)

RA (J2000): 18 17 37.30, DE (J2000): +36 37 16.6,
 V = 12 mag, dV = 0.014 mag, duration = 175 minutes
 Per = d, T0(HJD) =

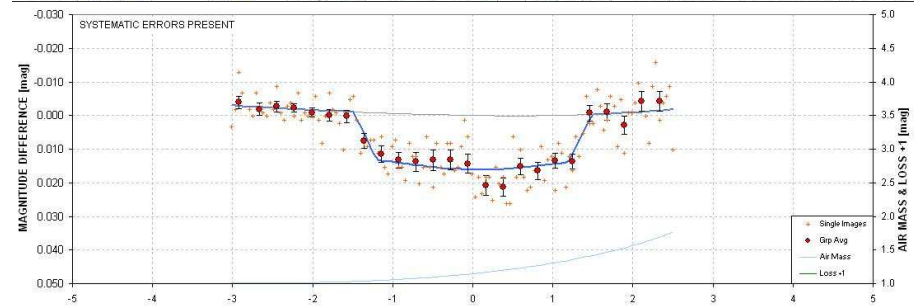
<http://brucegary.net/AXA/HATP5/hatp5.htm>



15x15 images from the Digitized Sky Survey at the STScI Archive



Object:	HATP5	HJD mid:	2455036.4912	UT mid:	23.725	L [hr]:	2.98	Depth:	16.1	Fp:	0.20	F2:	0.86	Aperture:	12-inch	Trend:	1.34	Early:	0.7 min	
TransitDate:	23-Jul-2009	±:	0.0015	±:	0.037	±:	0.08	±:	1.5	±:	0.06	±:	0.21	Exposure:	120 seconds	AMC:	-8.4	±:	2.2 min	
Band:	R	Prior Info:	2455036.4917		23.736		2.92		15.3		0.25		0.86	HJDc:	4715.9172				Object #:	19
Observer:	SRDOC (SG2)	CROATIA	V-mag:	12.03	±:	0.16	±:	2.0	±:	0.10	±:	0.20	Period:	2.7884741	ObsrStartDate:	2009			7	23

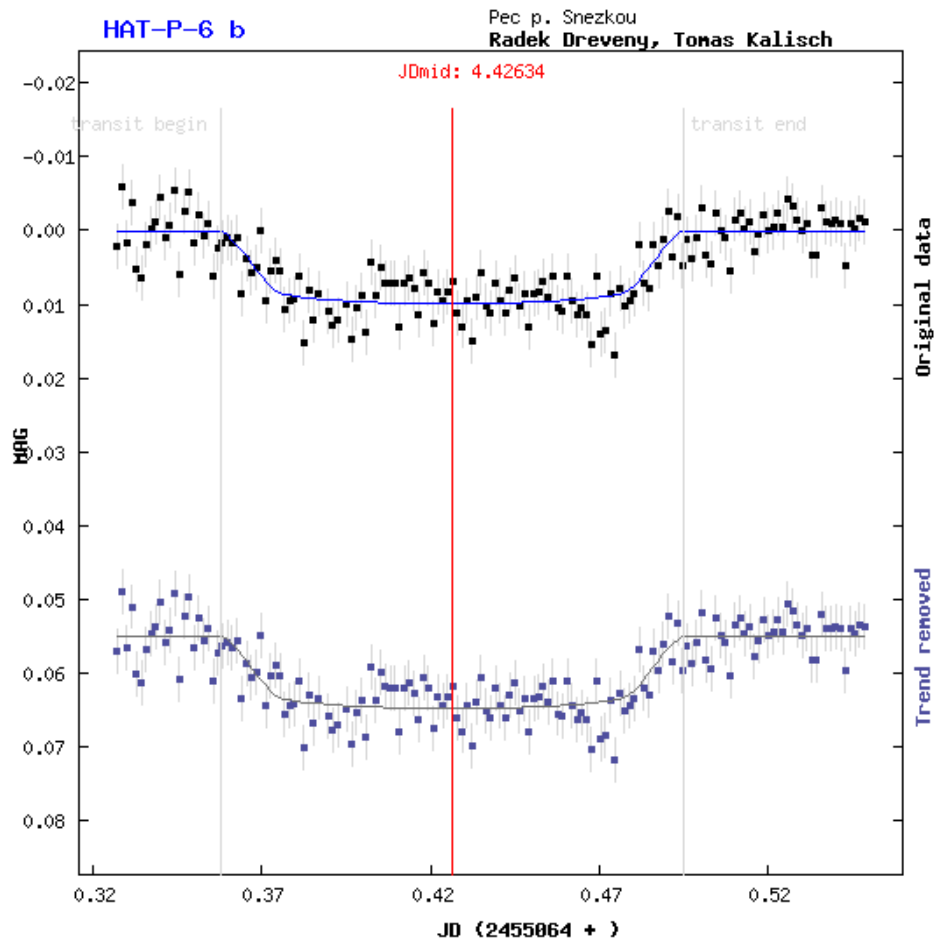
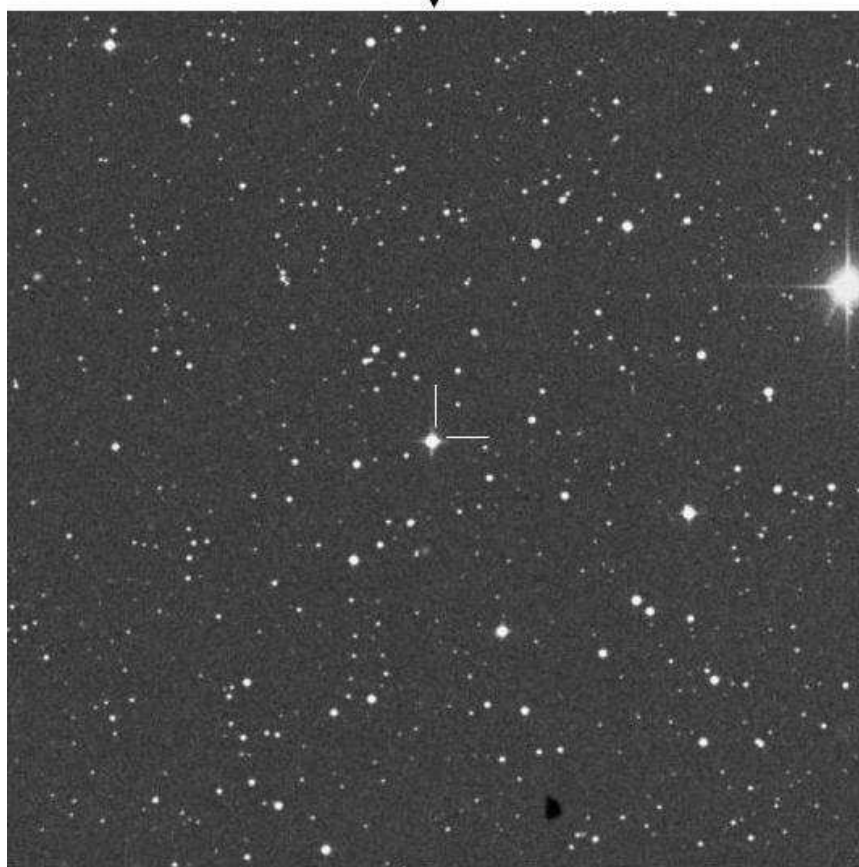


HAT-P-6b

<http://var2.astro.cz/EN/tresca/transit-detail.php?id=1251027413>

HAT-P-6 b (And)

RA (J2000): 23 39 05.85, DE (J2000): +42 27 57.5,
V = 10.5 mag, dV = 0.010 mag, duration = 202.8 minutes
Per = d, T0(HJD) =

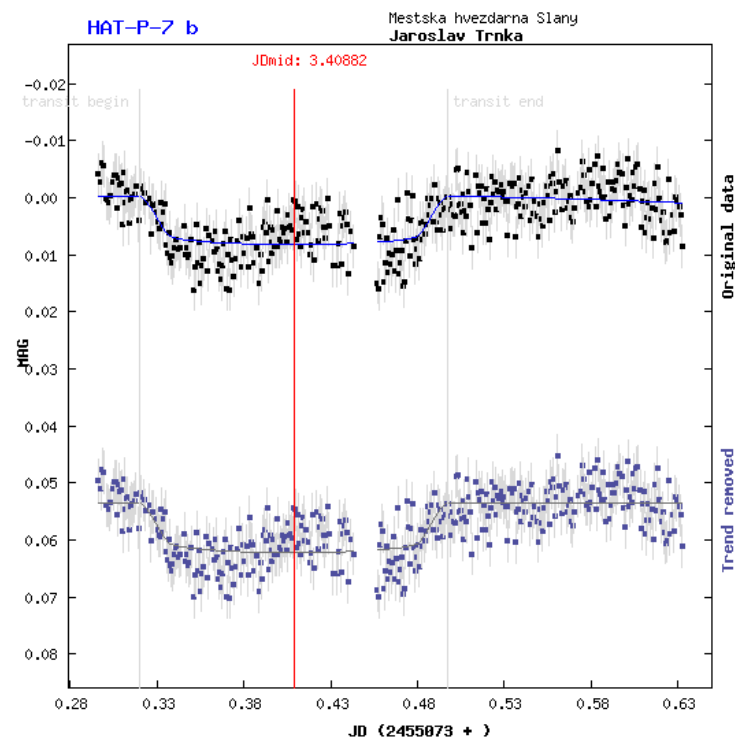
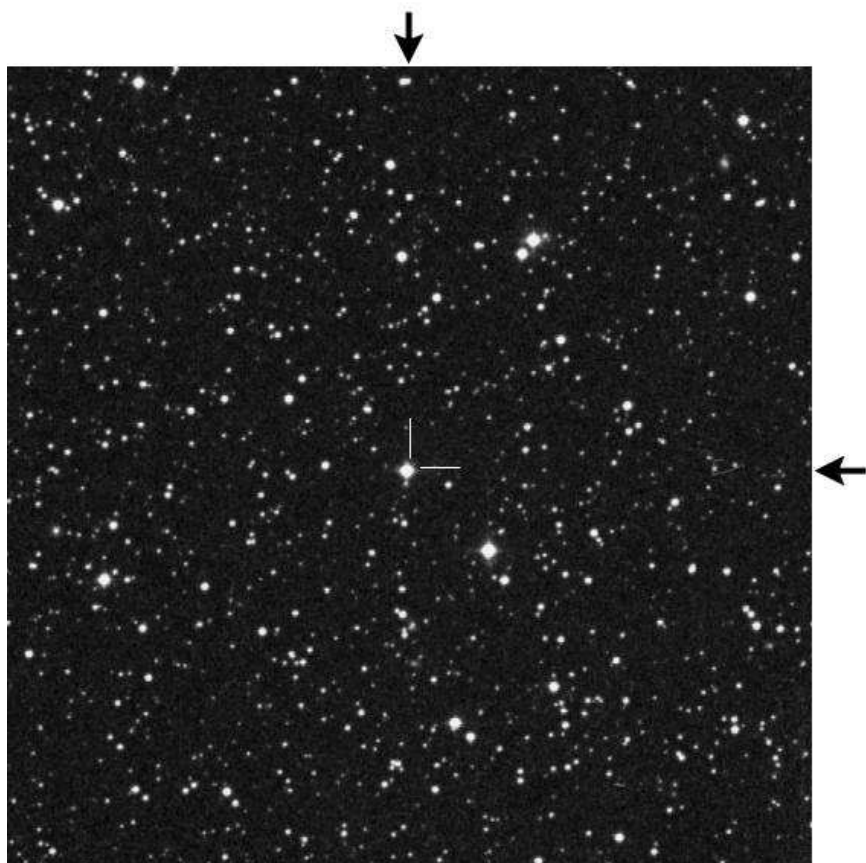


HAT-P-7b

<http://brucegary.net/AXA/HATP7/hatp7.htm>

HAT-P-7 b (Cyg)

RA (J2000): 19 28 59.37, DE (J2000): +47 58 10.5,
V = 10.5 mag, dV = 0.007 mag, duration = 243 minutes
Per = d, T0(HJD) =

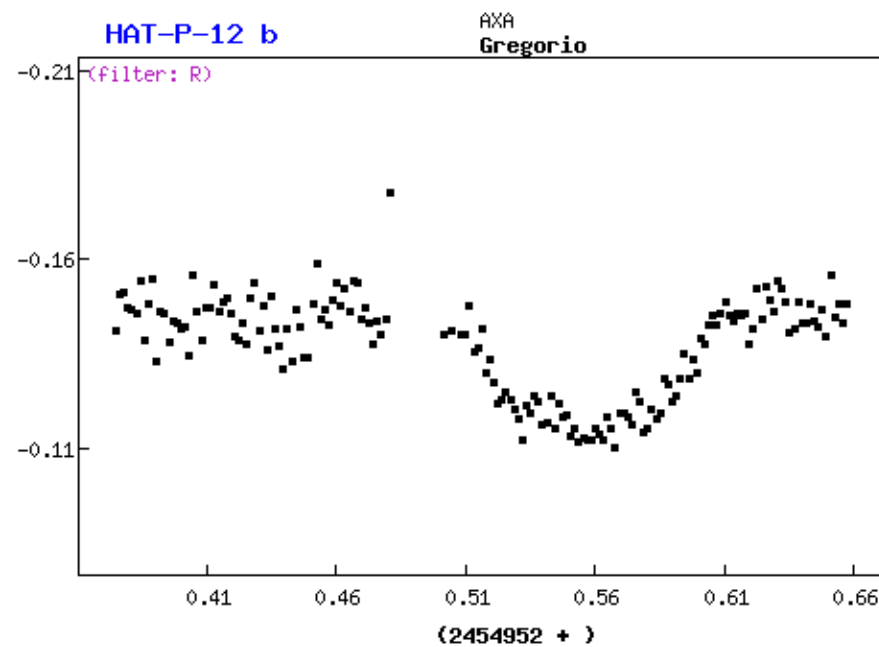
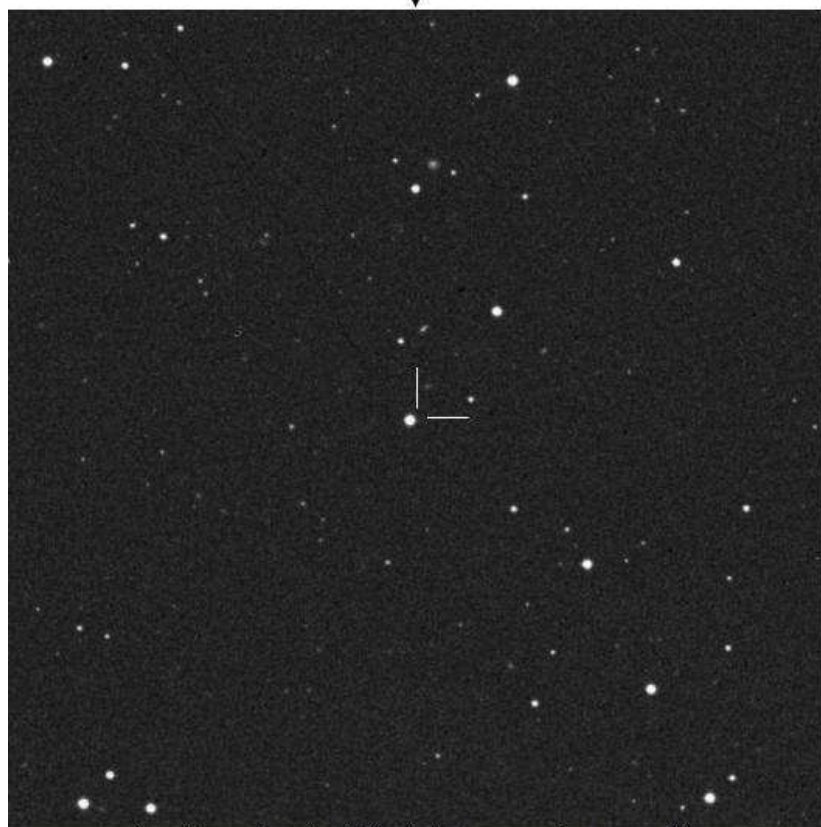


HAT-P-12b

<http://var2.astro.cz/EN/tresca/transit-detail.php?id=1251749265>

HAT-P-12 b (CVn)

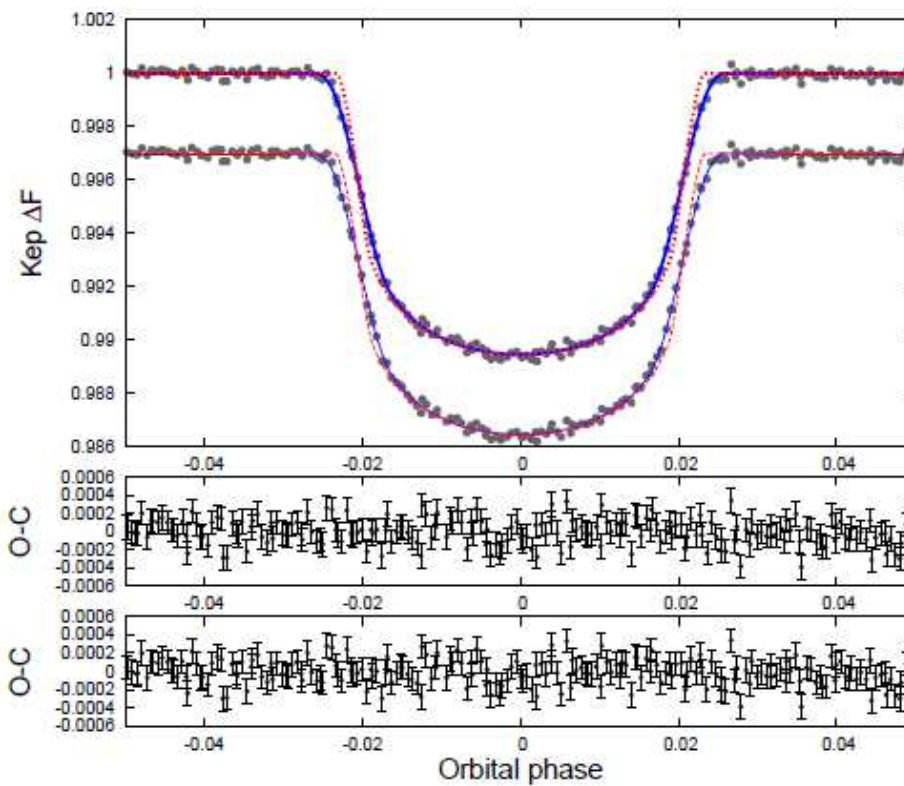
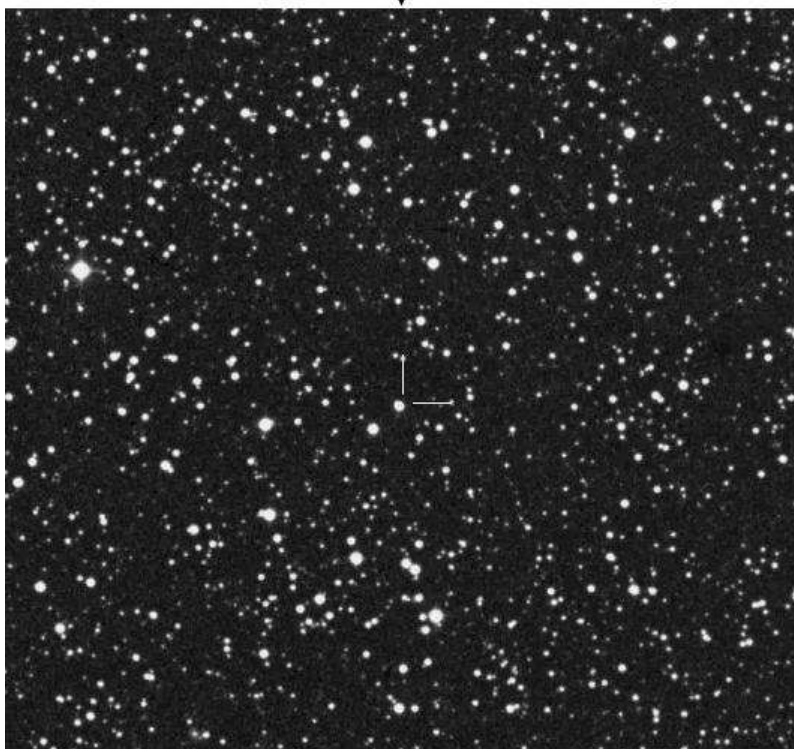
RA (J2000): 13 57 33.684, DE (J2000): +43 29 37.35,
V = 12.8 mag, dV = 0.020 mag, duration = 140.3 minutes
Per = d, T0(HJD) =



KEPLER-6b

Kepler-6 b (Cyg)

RA (J2000): 19 47 20.9, DE (J2000): +48 14 23.8,
V = 13.8 mag, dV = 0.011 mag, duration = 240 minutes
Per = d, T0(HJD) =

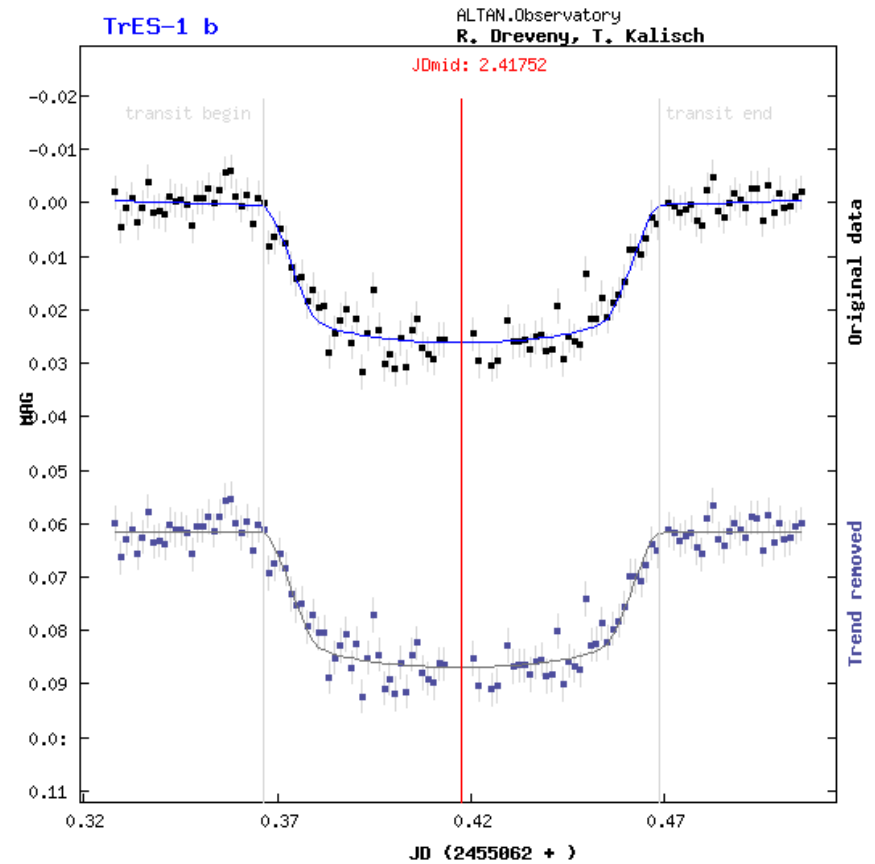
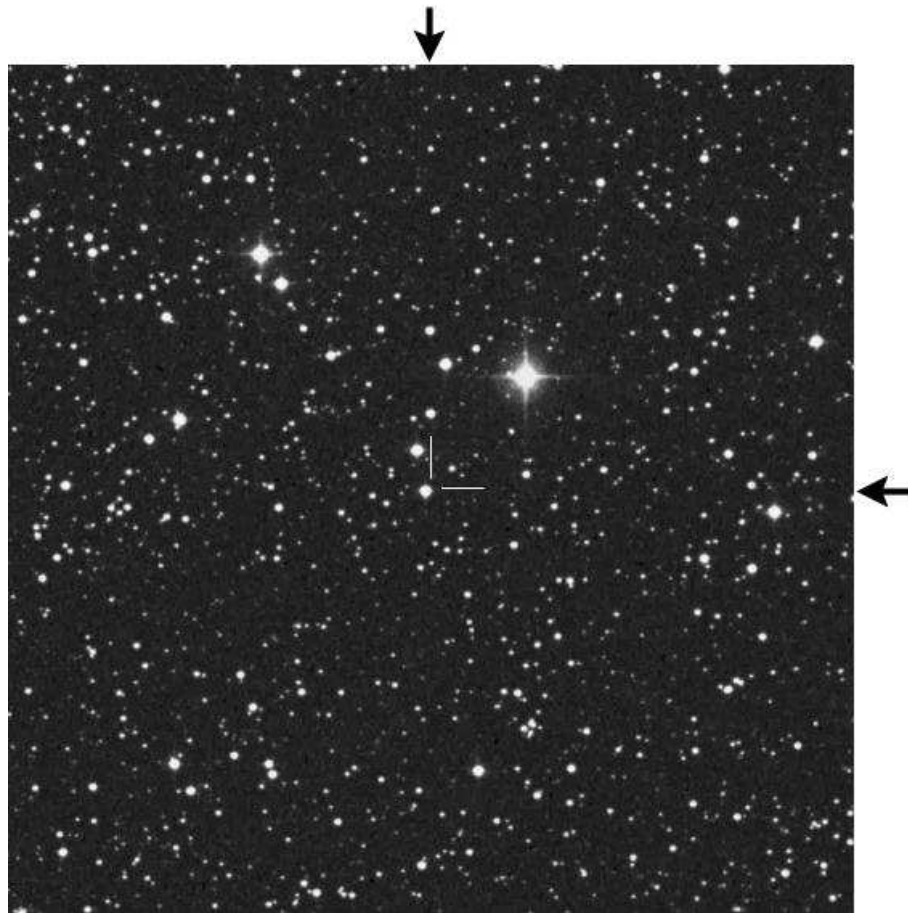


TrES-1b

<http://var2.astro.cz/EN/tresca/transit-detail.php?id=1250847262>

TrES-1 b (Lyr)

RA (J2000): 19 04 09.844, DE (J2000): +36 37 57.54,
V = 11.79 mag, dV = 0.021 mag, duration = 149.8 minutes
Per = d, T0(HJD) =

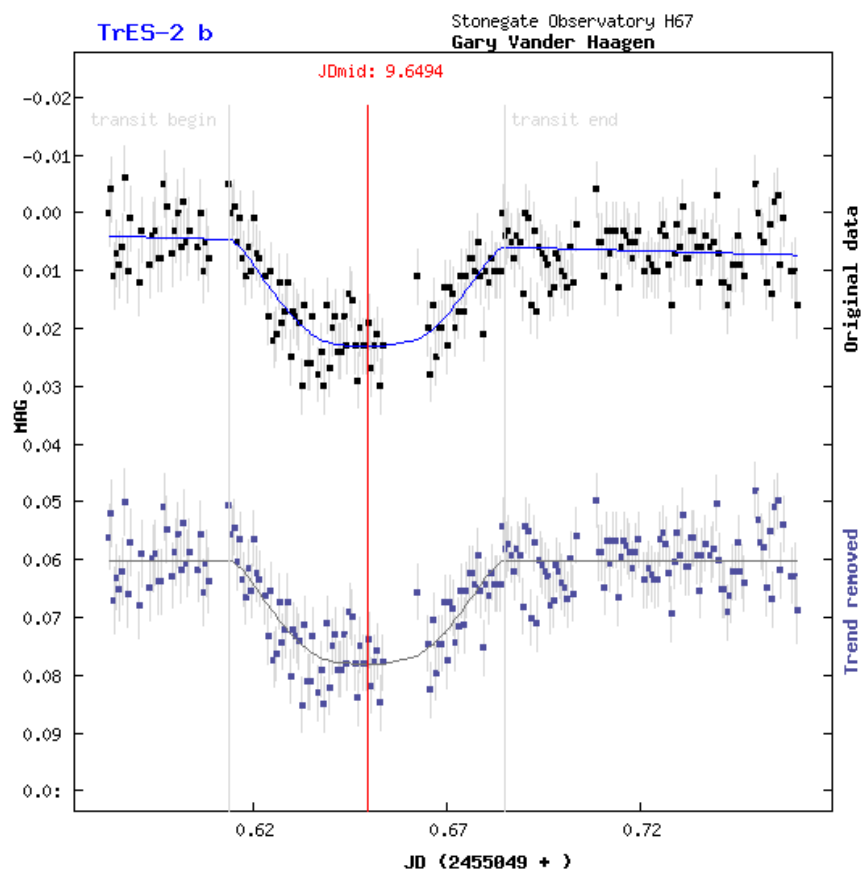
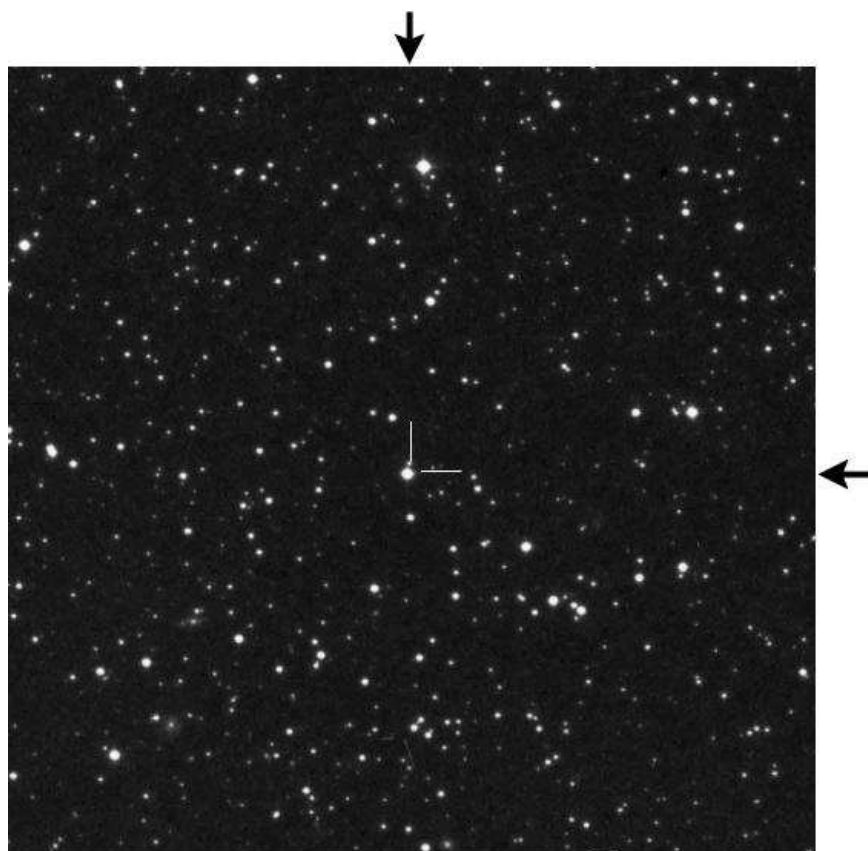


TrES-2b

<http://var2.astro.cz/EN/tresca/transit-detail.php?id=1249554171>

TrES-2 b (Dra)

RA (J2000): 19 07 14, DE (J2000): +49 18 59,
V = 11.41 mag, dV = 0.018 mag, duration = 90 minutes
Per = d, T0(HJD) =

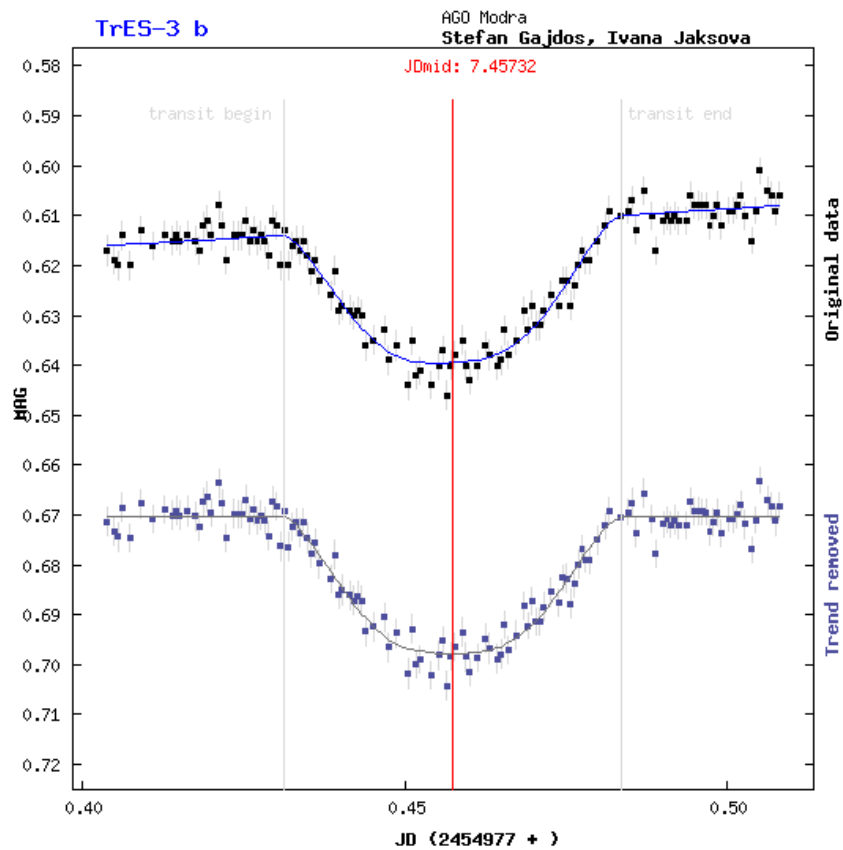
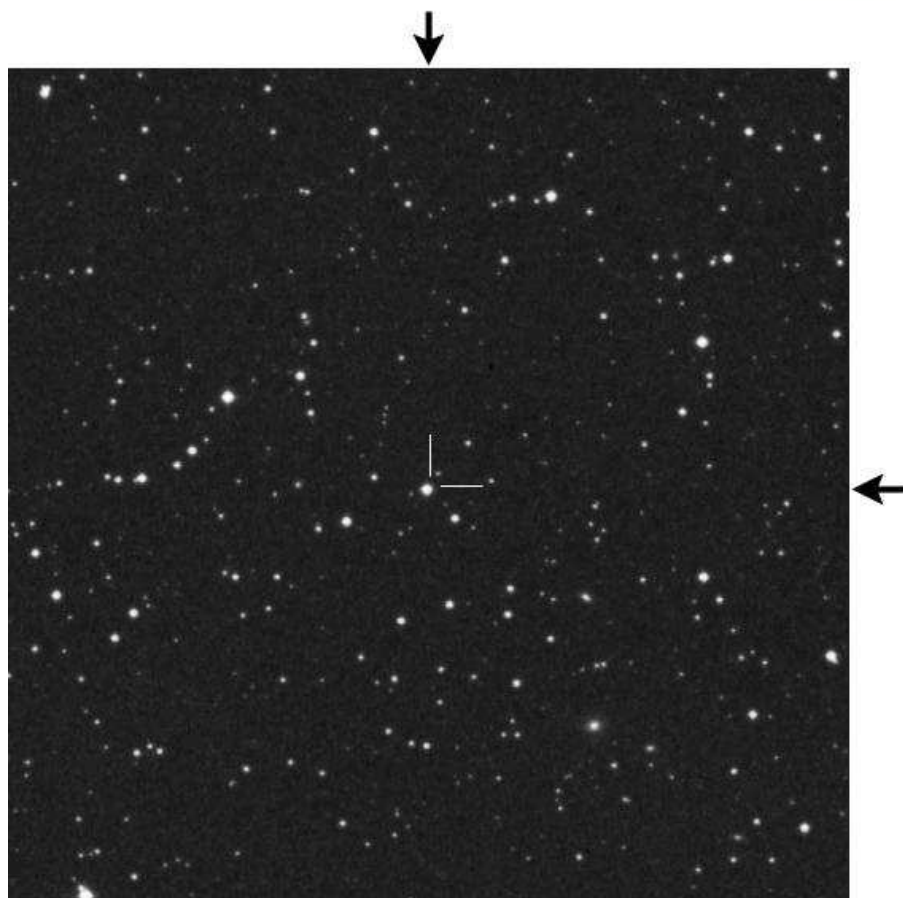


TrES-3b

<http://var2.astro.cz/EN/tresca/transit-detail.php?id=1269648158>

TrES-3 b (Her)

RA (J2000): 17 52 07, DE (J2000): +37 32 46,
V = 12.4 mag, dV = 0.029 mag, duration = 77.4 minutes
Per = d, T0(HJD) =

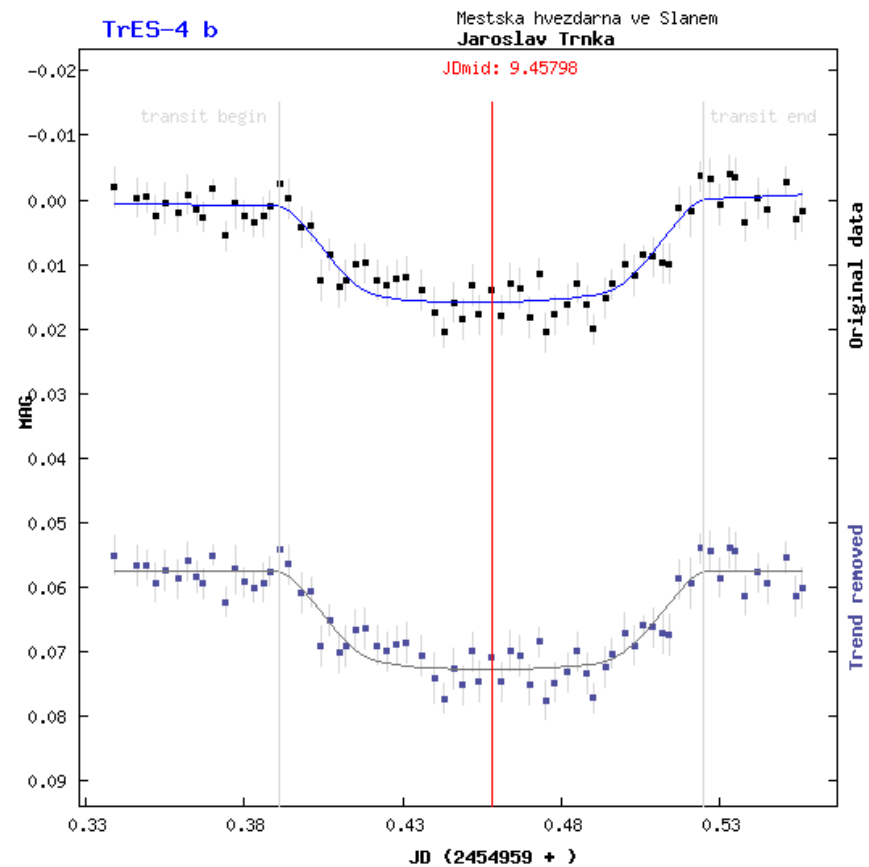
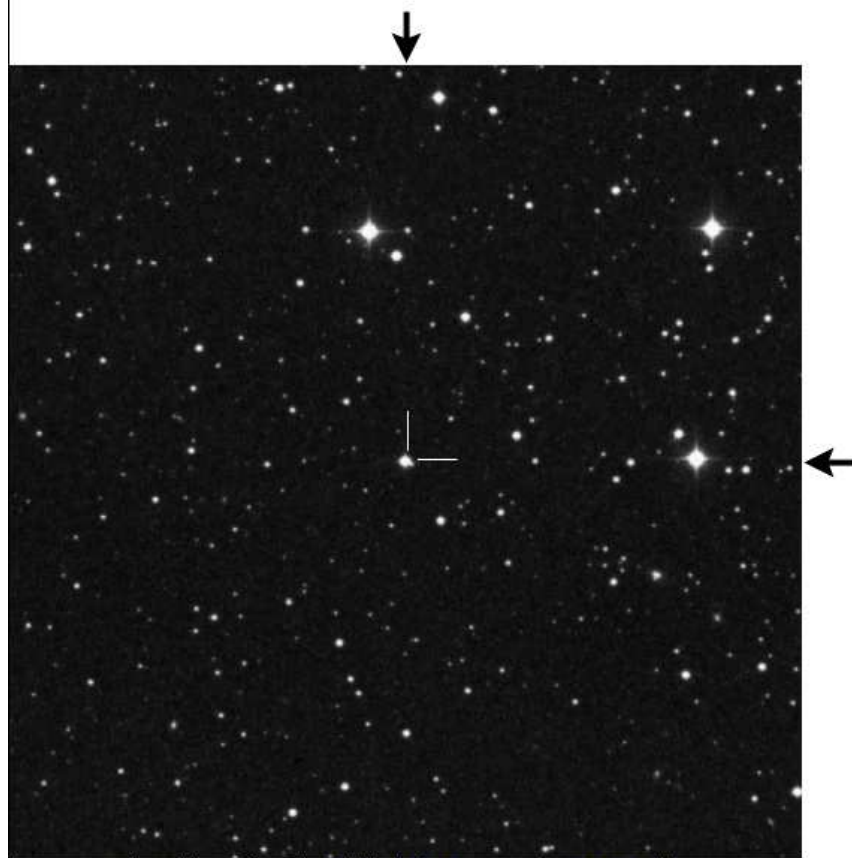


TrES-4b

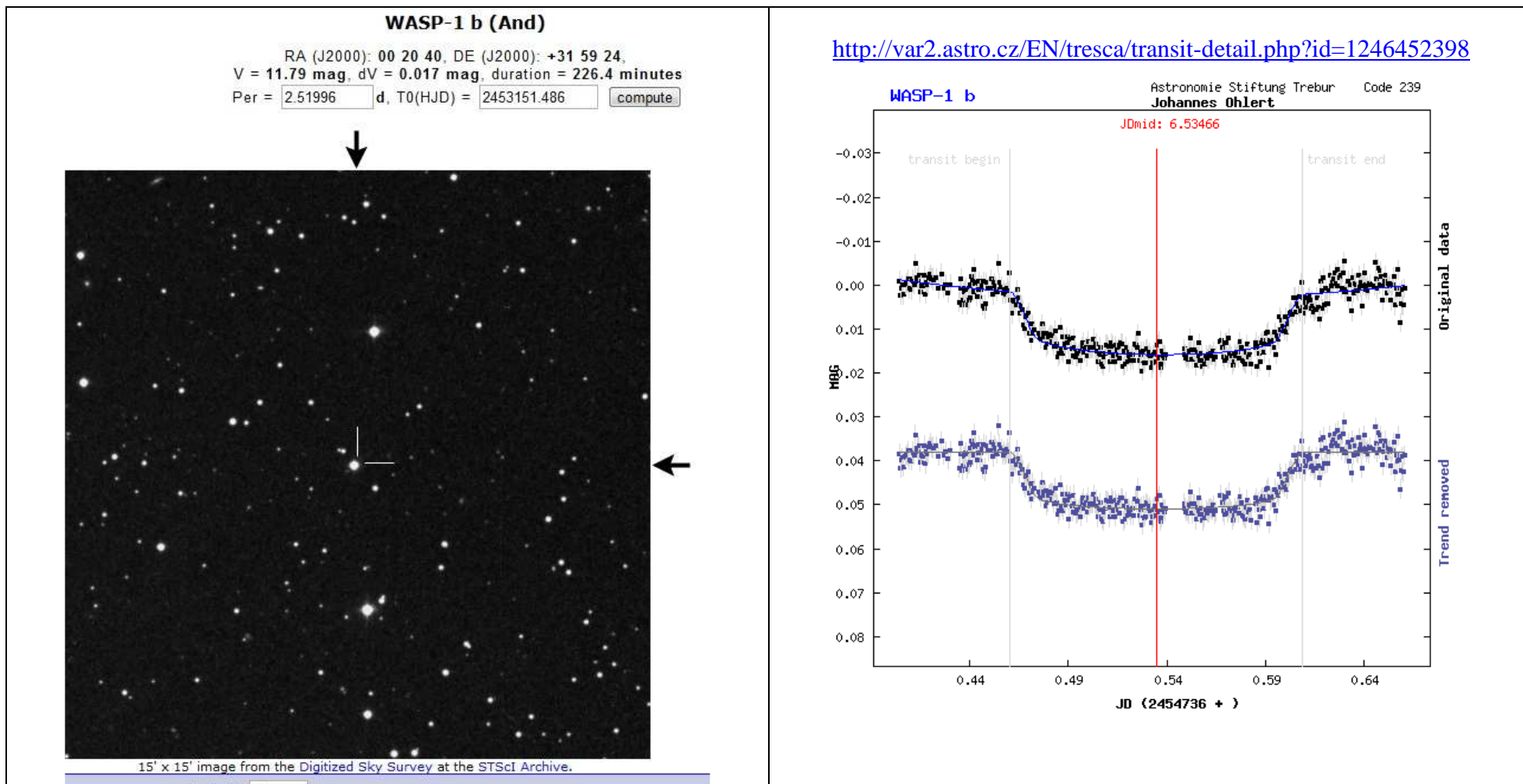
TrES-4 b (Her)

RA (J2000): 17 53 13.05, DE (J2000): +37 12 42.8,
V = 11.3 mag, dV = 0.011 mag, duration = 216 minutes
Per = d, T0(HJD) =

<http://var2.astro.cz/EN/tresca/transit-detail.php?id=1241750888>



WASP-1b

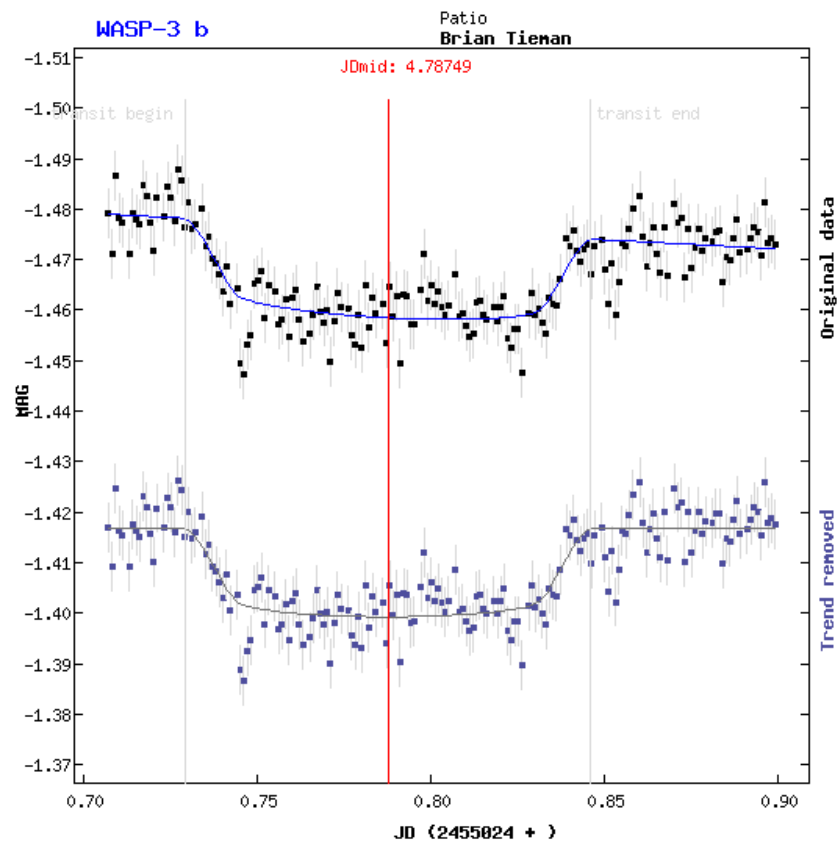
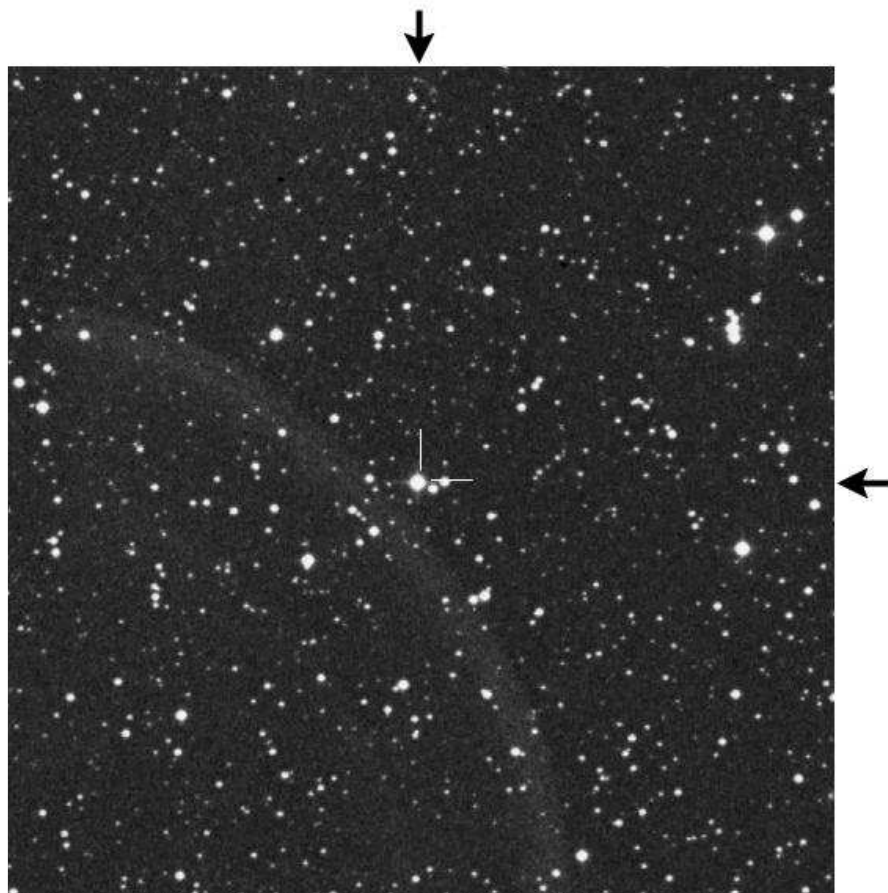


WASP-3b

<http://var2.astro.cz/EN/tresca/transit-detail.php?id=1247435420>

WASP-3 b (Lyr)

RA (J2000): 18 34 31.67, DE (J2000): +35 39 41.9,
V = 10.64 mag, dV = 0.012 mag, duration = 137 minutes
Per = d, T0(HJD) =

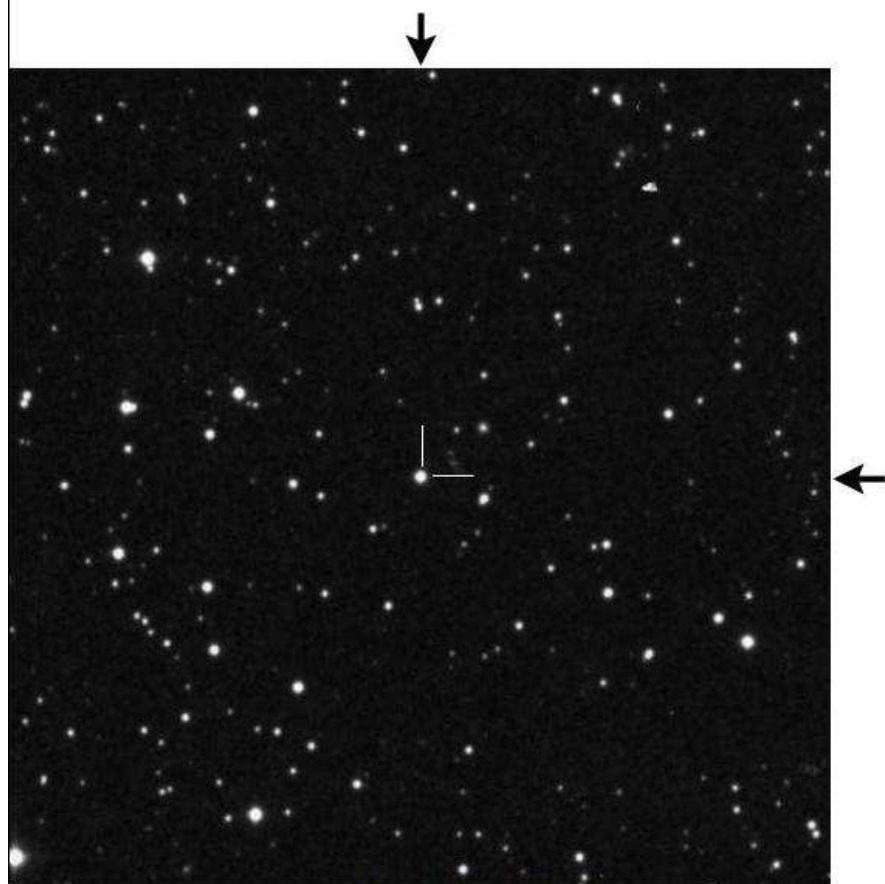


WASP-10b

<http://var2.astro.cz/EN/tresca/transit-detail.php?id=1251761114>

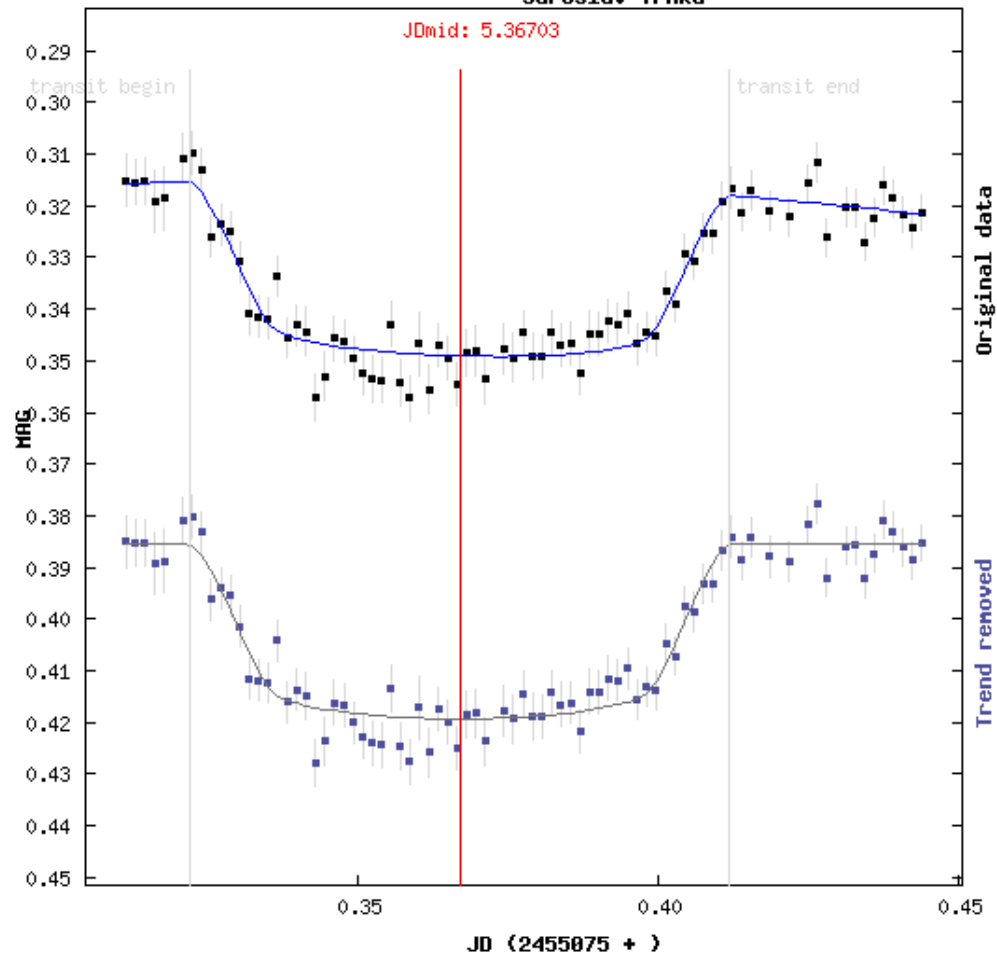
WASP-10 b (PEG)

RA (J2000) 23 15 58.23, DE (J2000): 31 27 47,1
V = 12,7 MAG, dV = 0,039 MAG, durata = 127,8 minuti
Per = d, T0 (HJD) =



WASP-10 b

Mestska hviezdarna Slany
Jaroslav Trnka

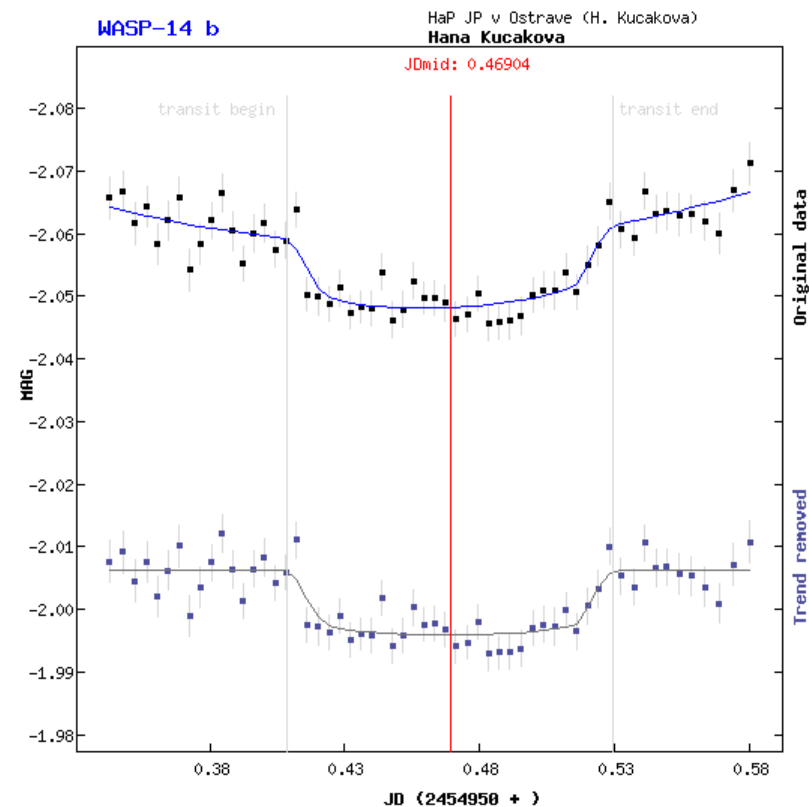
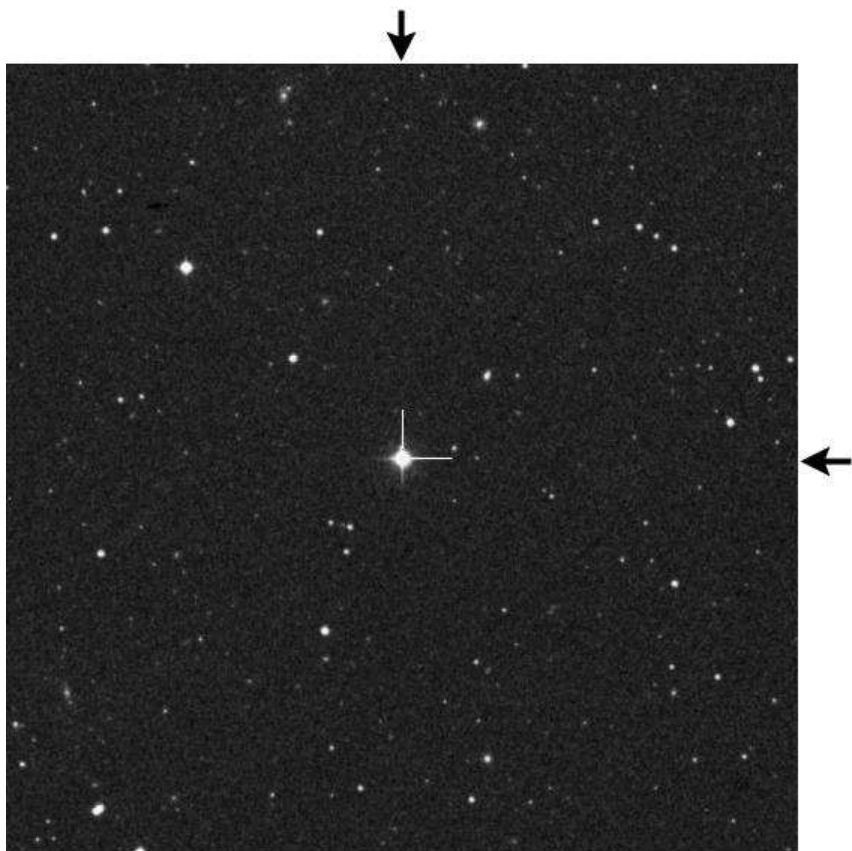


WASP-14b

<http://var2.astro.cz/EN/tresca/transit-detail.php?id=1241109937>

WASP-14 b (Boo)

RA (J2000): 14 33 06.35, DE (J2000): +21 53 40.98,
V = 9.75 mag, dV = 0.011 mag, duration = 183.6 minutes
Per = d, T0(HJD) =



Worlds of the Sky
EAN EXTRASOLAR PROJECT

Worlds of the Sky

THE TRANSIT OF THE EXTRA-SOLAR PLANET GJ436b ON THE WEB
2010 FEBRUARY 20

You are in: [OAB homepage](#) -> Worlds of the Sky Project

Informations about the project "Worlds of the Sky" to the italian web site
<http://www.crabnebula.it/web/>

»Insert a new record

Edit	Fits	Data	Time	Name	e-mail	notes
			2010-02-16 21:16:27			

Project promoters

ARCHIVIO CURVE DI LUCE DEI TRANSITI EXTRASOLARI

L'Osservatorio di Brera ha preparato un archivio per la raccolta dei dati e delle immagini riguardanti i transiti dei pianeti extrasolari:

<http://www.brera.inaf.it/interroga/dbServer?cmd=xo3b>

Il dr Stefano Covino dell'Osservatorio di Brera così annuncia la creazione di questa archivio che sarà a disposizione di tutti, professionisti ed amatori:

Abbiamo messo a punto un database dove si possono memorizzare le informazioni (dati e risultati) riguardanti le osservazioni del transito del pianeta extra-solare che vogliamo seguire. E' possibile memorizzare file FITS o insiemi di file FITS compressi (zip), come anche file di testo o insiemi di file di testo compressi. I risultati della fotometria possono essere comunicati con qualunque formato desideriate ma incoraggiamo l'uso del formato esteso dell'AVVSO (<http://www.aavso.org/observing/submit/extended.shtml>). I dati raccolti saranno disponibili a chiunque ne faccia richiesta e la gestione sarà dell'organizzazione dell'evento "Terre del Cielo". Contattate l'organizzazione per ogni possibile uso di questi dati. Per accedere al database è necessario registrarsi mandando un e-mail a Angelo Angeletti (angelo.angeletti@virgilio.it), Stefano Covino (stefano.covino@brera.inaf.it), Rodolfo Calanca (rodolfo.calanca@gmail.com) e Paolo D'Avanzo (paolo.davanzo@brera.inaf.it).

Worlds of the Sky
THE TRANSIT OF THE EXTRA-SOLAR PLANET GJ436b ON THE WEB
2010 FEBRUARY 20

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»Insert a new record

Edit	Fits	Data	Time	Name	e-mail	notes
			2010-02-16 21:16:27			

Project promoters

VERY IMPORTANT: DATABASE EXTRASOLAR TRANSIT LIGHT CURVE

Brera Astronomical Observatory have prepared a database to collect all the available information (data and results) about the extra-solar planet transit. You can upload FITS files, set of zipped FITS files, text files and set of zipped text files:

<http://www.brera.inaf.it/interroga/dbServer?cmd=xo3b>

Results of your photometry can be communicated following any format you like. We anyway encourage you to follow the AVVSO extended format (<http://www.aavso.org/observing/submit/extended.shtml>).

The finally collected data will be available to everybody and managed by the "TERRE DEL CIELO - WORLDS OF THE SKY" organization. You can freely refer to them for any possible use.

In order to access the database you need to register sending an e-mail to Angelo Angeletti (angelo.angeletti@virgilio.it), Stefano Covino (stefano.covino@brera.inaf.it), Rodolfo Calanca (rodolfo.calanca@gmail.com) and Paolo D'Avanzo (paolo.davanzo@brera.inaf.it).

An initiative promoted by: BRERA and PALERMO INAF ASTRONOMICAL OBSERVATORIES - ITALY
EAN web community
CRAB NEBULA Astronomical Association
webzine L'ASTROFILO
SKYLIVE no-profit Association
Bareket Observatory - Israel



LINK UTILI PER IL PROGETTO "TERRE DEL CIELO"

- Il sito dell'Osservatorio INAF di Brera: www.mi.astro.it
- Il sito dell'Osservatorio INAF di Palermo: www.astropa.unipa.it
- Il sito dell'Associazione Crab Nebula: www.crabnebula.it
- Il sito SKYLIVE: www.skylive.it
- Il sito dell'Osservatorio di Monte Agliale (Lucca): www.oama.it
- Il sito della webzine L'ASTROFILO: www.astropublishing.com
- I risultati dell'ultimo ns. progetto sugli extrasolari www.crabnebula.it/rc/Coelum_articoli/Coelum_n_116_pp_44-45.pdf
- Angelo Angeletti parla dei transiti negli Atti del 1° Convegno EAN, da p. 36: www.crabnebula.it/rc/ATTI_CONVEGNO_CERVAREZZA.pdf
- Procedure per la ricerca dei pianeti extrasolare, articolo su Coelum di R. Calanca: www.crabnebula.it/rc/Coelum_articoli/Coelum_n_113_pp_32-37.pdf
- Un manuale utile, scritto a molte mani: www.crabnebula.it/web/XO-2b/ita/03ita_TUTORIAL.pdf
- Un documento sintetico sui metodi di ripresa dei transiti di R. Calanca: http://astrofilicatanesi.it/ricerca/esopianeti/n_05-calanca.pdf
- Un sito di notevole interesse (Associazione Astrofili Catanesi), nel quale troviamo numerose curve di luce di transiti: <http://astrofilicatanesi.it/esopianeti.php>
- Moltissime ed utilissime informazioni sui pianeti in transito nel sito della Czech Astronomical society: <http://var2.astro.cz/ETD/index.php>
- Da consultare anche la pagina dell'AAVSO sugli extrasolari: www.aavso.org/observing/programs/ccd/transitsearch.shtml
- Assolutamente da consultare il tutorial di Bruce Gary: http://brucegary.net/tutorial_exoplanet/
- L'articolo di R. Calanca sul numero di aprile 2010 di L'ASTROFILO: "Osservare pianeti extrasolari col 114": www.astropublishing.com/