

KIC 006118145

Q1-17 DR25 TCE Parameters

TCE	Run Type	KOI?	Period (Days)	Epoch (BKJD)	Depth (ppm)	Duration (Hours)	MES	SNR	R_{\star} (R_{\odot})	T_{\star} (K)	R_p (R_{\oplus})	S_p (S_{\oplus})
006118145-01	OBS	No	1.813380	131.695848	16.9	5.394	8.1	7.8	1.24	6571	0.65	2812.43
006118145-02	OBS	No	277.459704	403.654226	140.8	29.670	14.4	3.7	1.24	6571	1.55	3.44
006118145-03	OBS	No	488.865839	390.293295	424.1	4.253	12.7	10.0	1.24	6571	2.79	1.61

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006118145-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—MOD_NONUNIQ_DV
006118145-02	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_MARSHALL—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—HALO_GHOST
006118145-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES_MARSHALL_SKYE_TRACKER—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS

Notes: OBS = Observed. INJ = Injected. INV = Inverted. SCR = Scrambled.

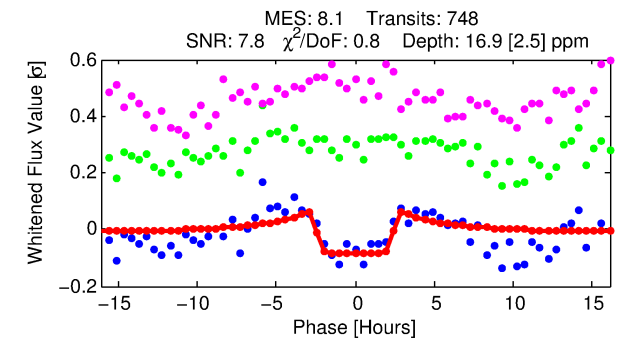
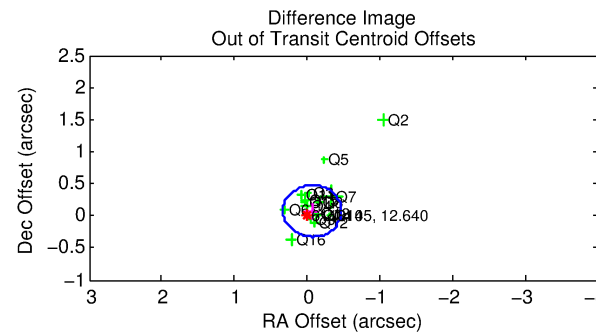
N = Not Transit-Like. S = Stellar Eclipse. C = Centroid Offset. E = Ephemeris Match.

See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006118145-01

No Significant Match Found

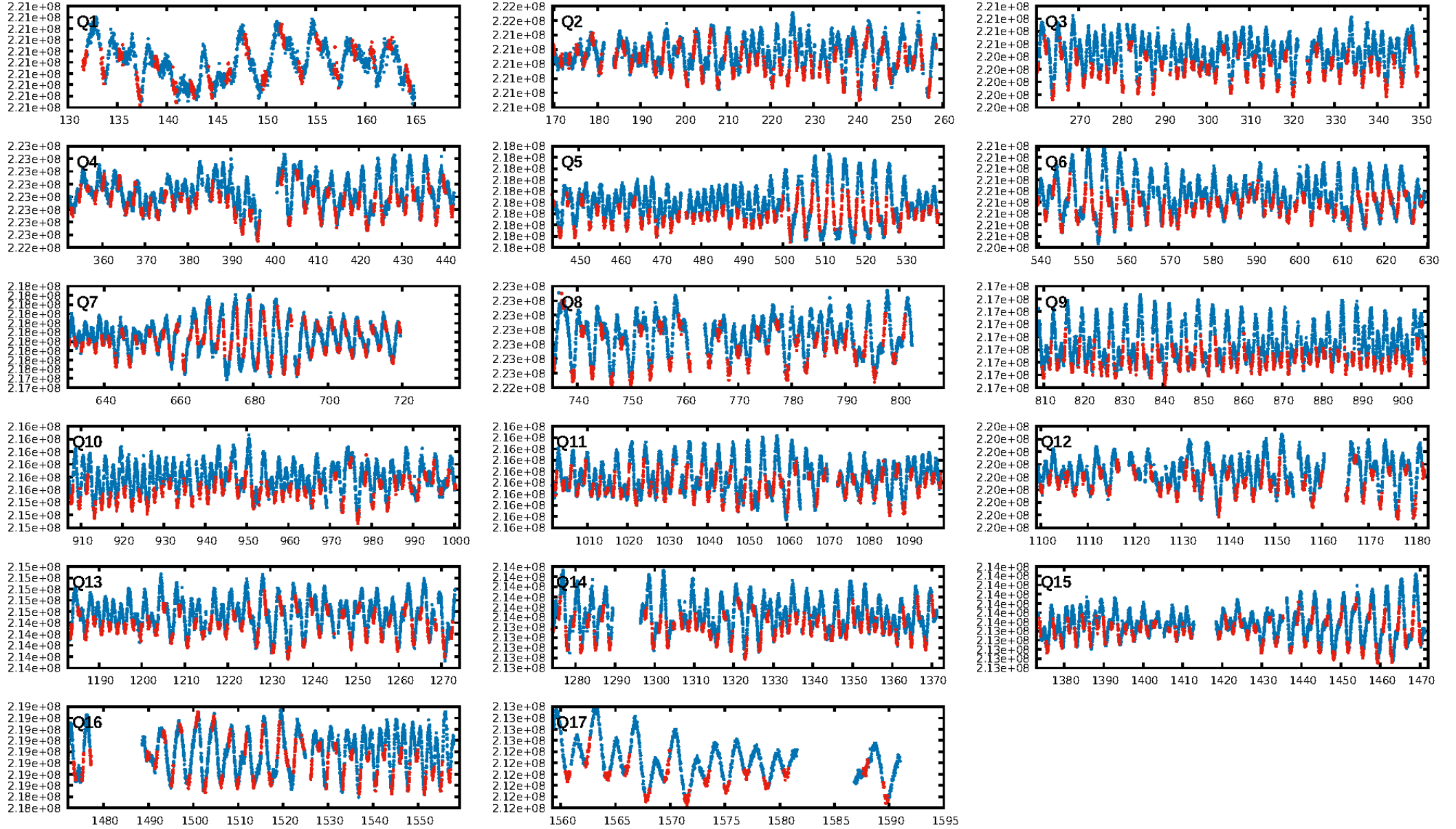
KIC: 6118145 Candidate: 1 of 3 Period: 1.813 d



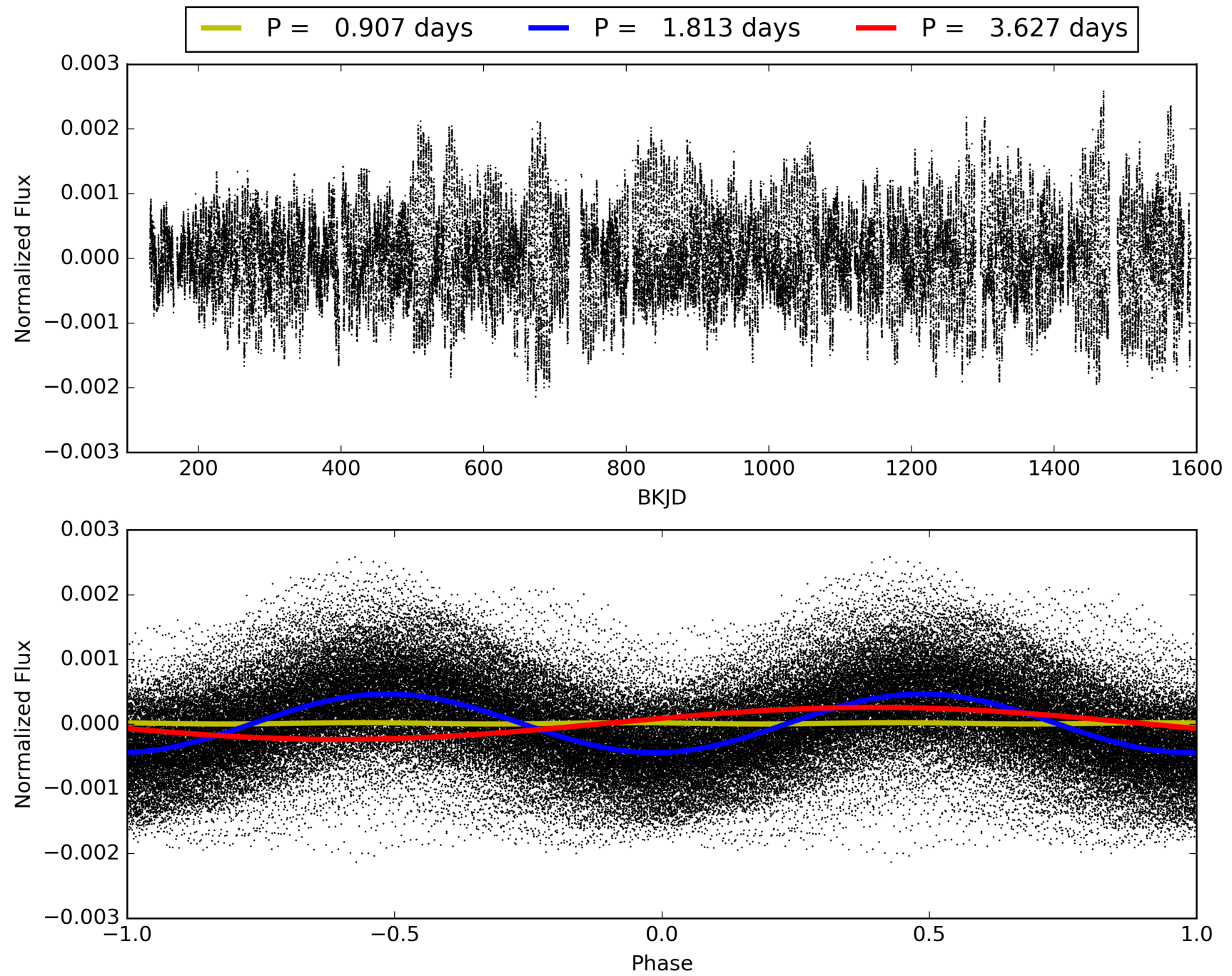
ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [219.38σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.31e-13
RollingBand-fgt: 0.97 [697/715]
GhostDiagnostic-chr: 1.512

Centroid-sig: 3.2%
Centroid-so: 1.051 arcsec [1.28σ]
OotOffset-rm: 0.099 arcsec [0.74σ]
KicOffset-rm: 0.051 arcsec [0.48σ]
OotOffset-st: 4/4/4/4 [16]
KicOffset-st: 4/4/4/4 [16]
DiffImageQuality-fgm: 1.00 [16/16]
DiffImageOverlap-fno: 1.00 [17/17]

TCE 006118145-01, PDC Light Curves

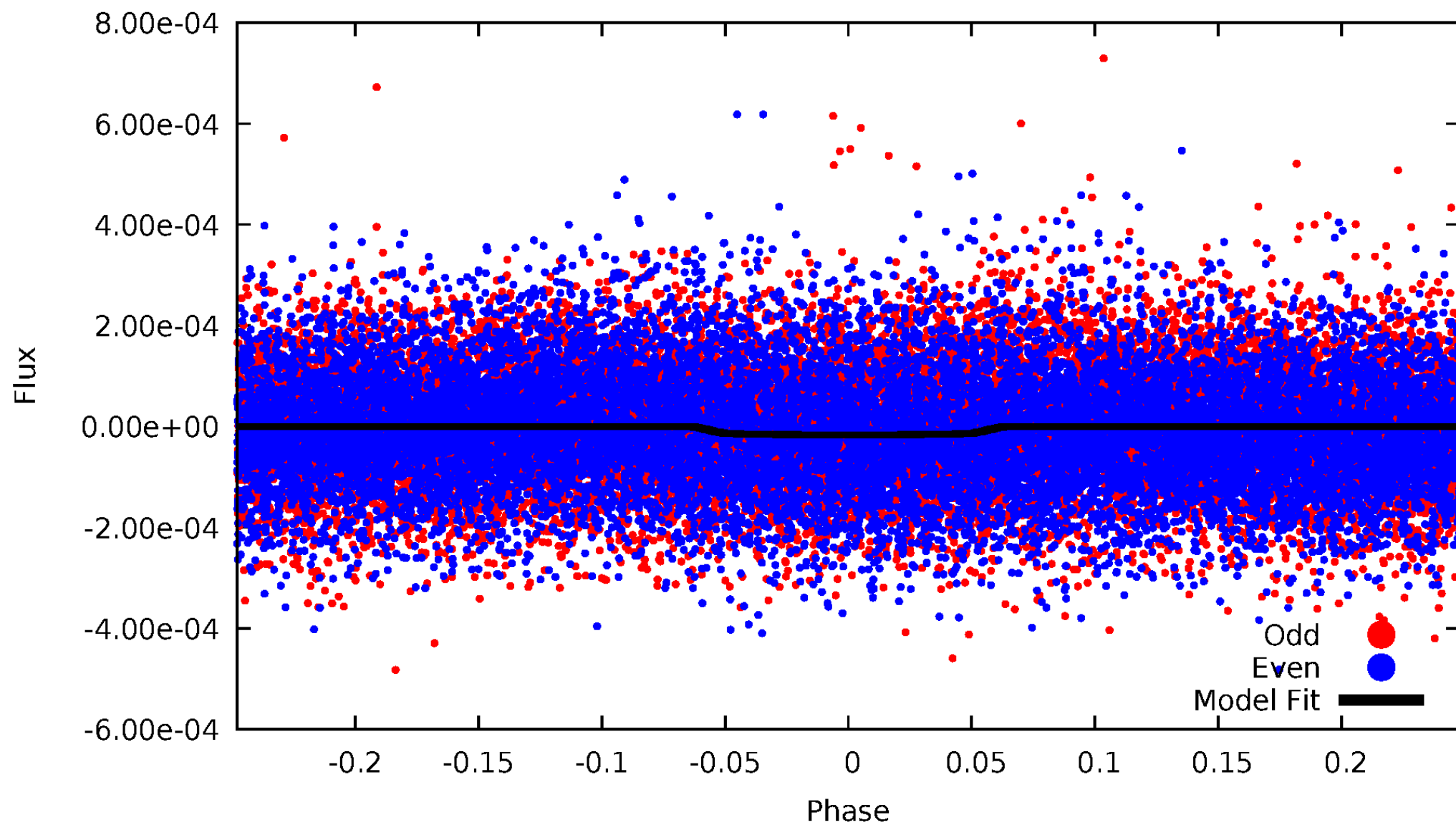


TCE 006118145-01



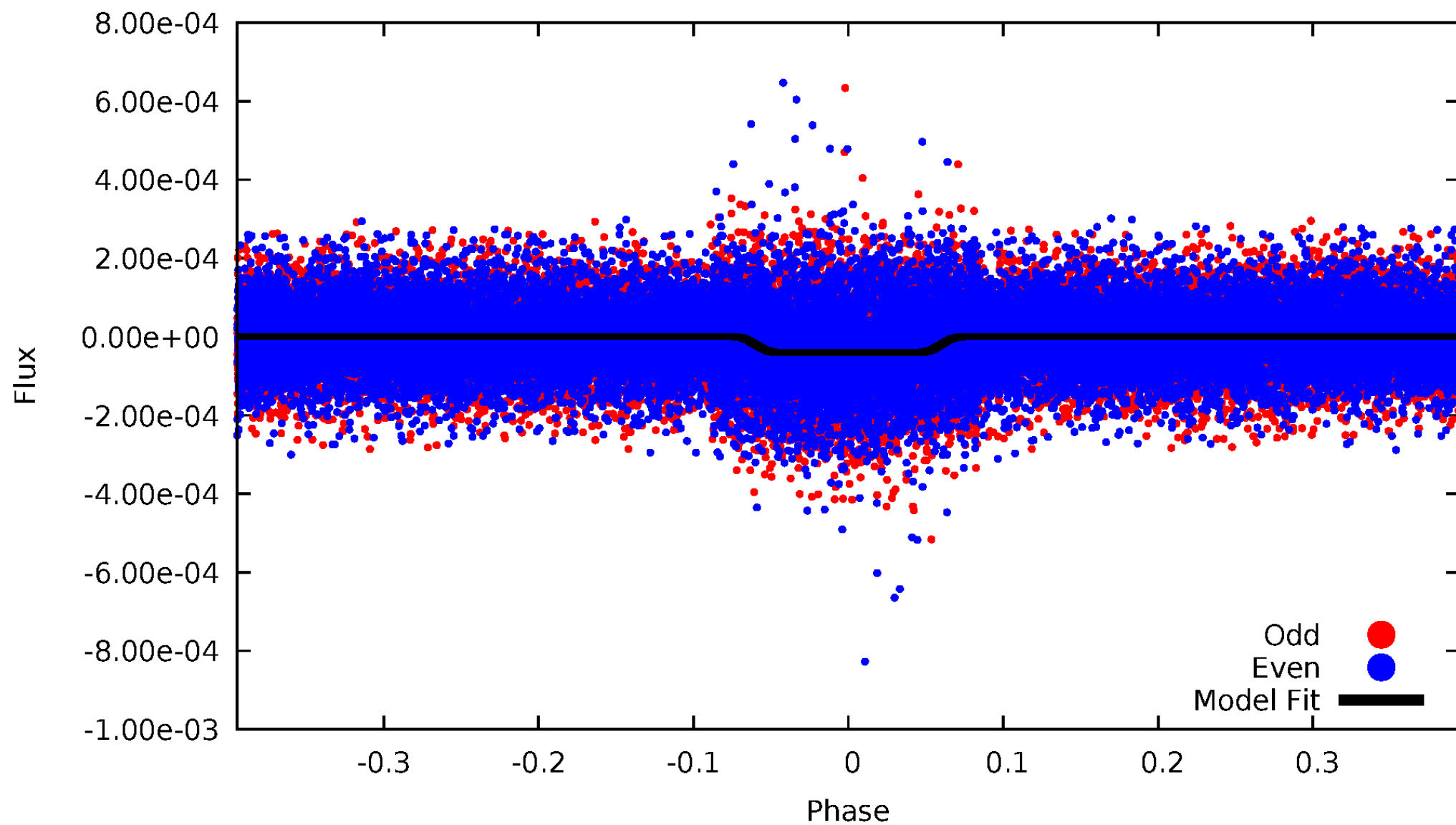
DV Odd/Even

TCE 006118145-01



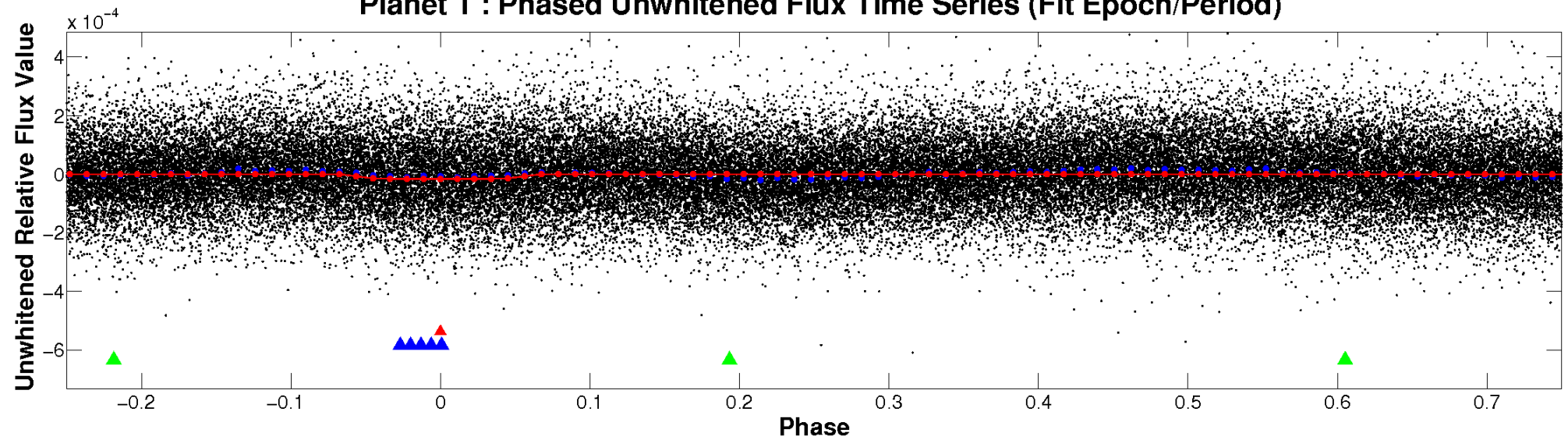
ALT Odd/Even

TCE 006118145-01

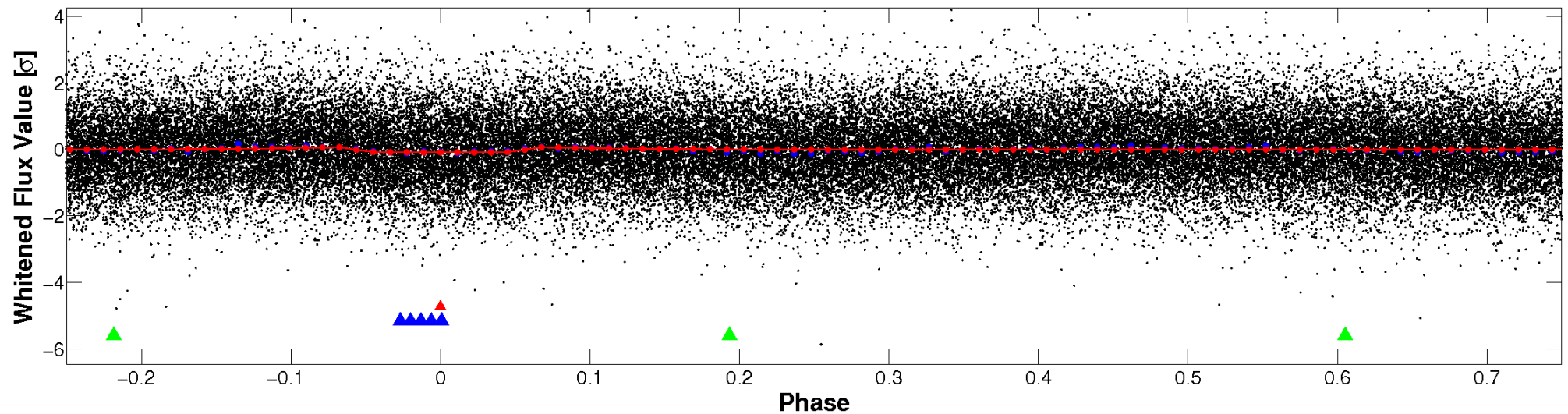


Non-Whitened Vs. Whitened Light Curve

Planet 1 : Phased Unwhitened Flux Time Series (Fit Epoch/Period)

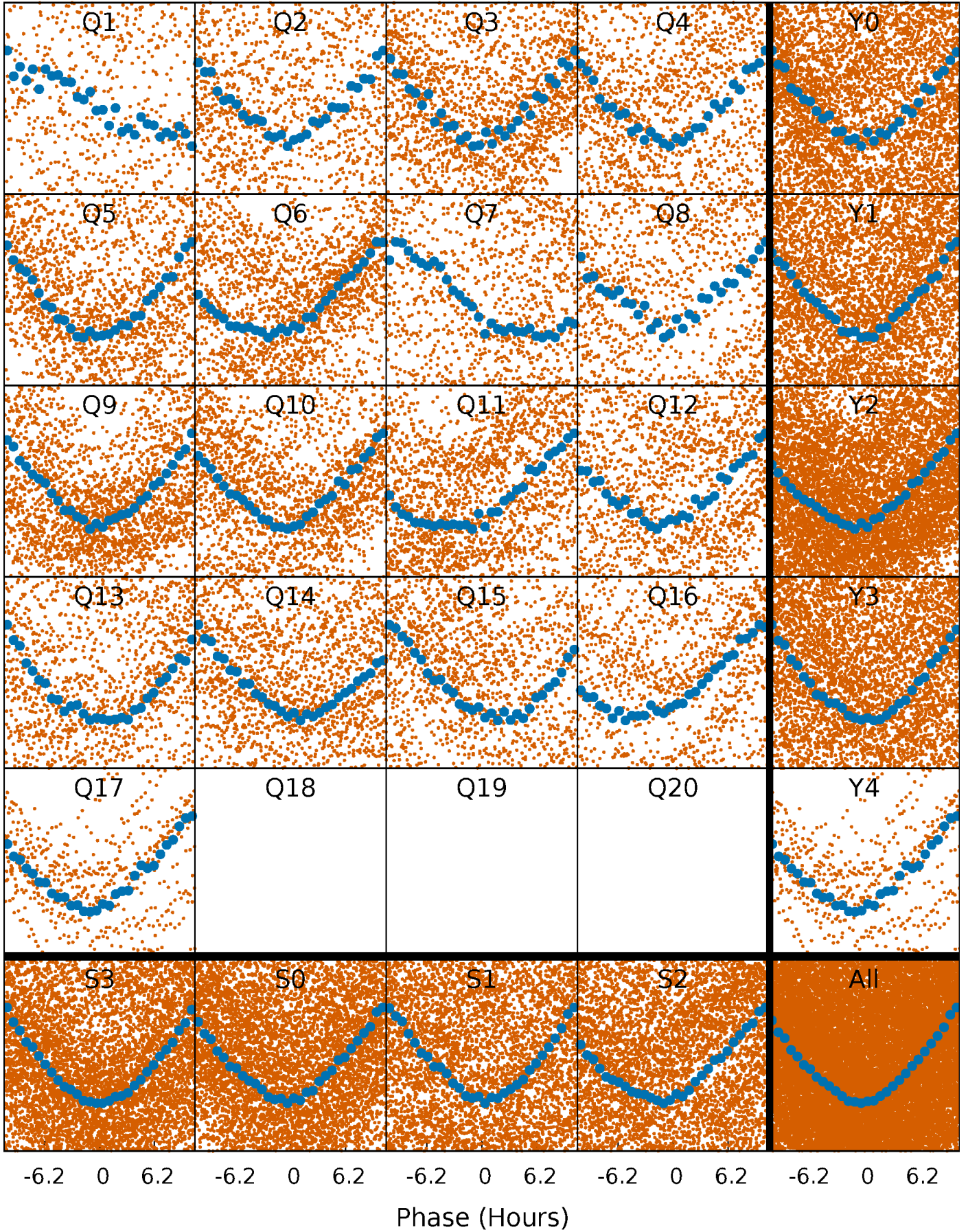


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



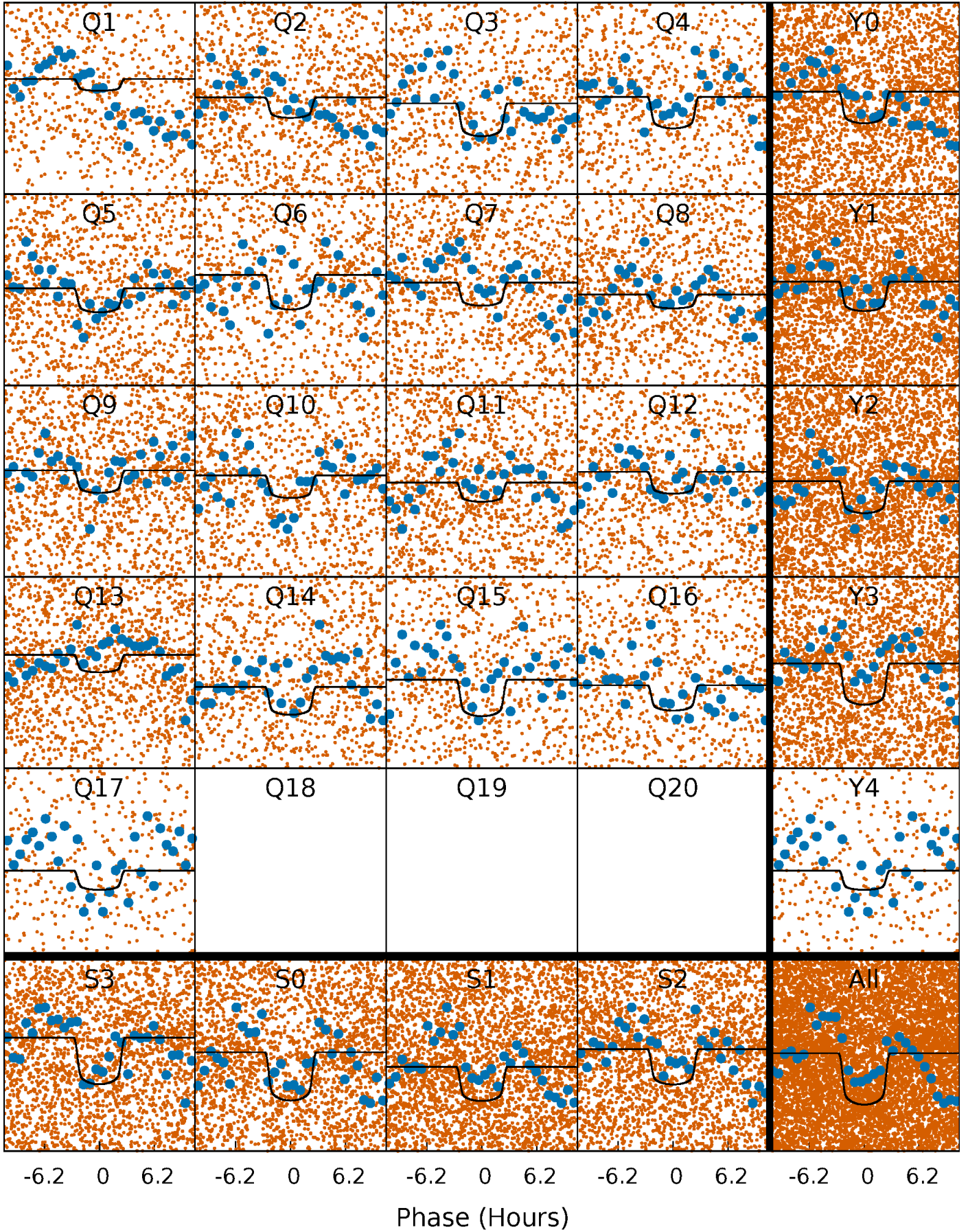
PDC Quarter-Phased Transit Curves

TCE 006118145-01 P= 1.813380 Days $T_0=131.695848$ (BKJD)



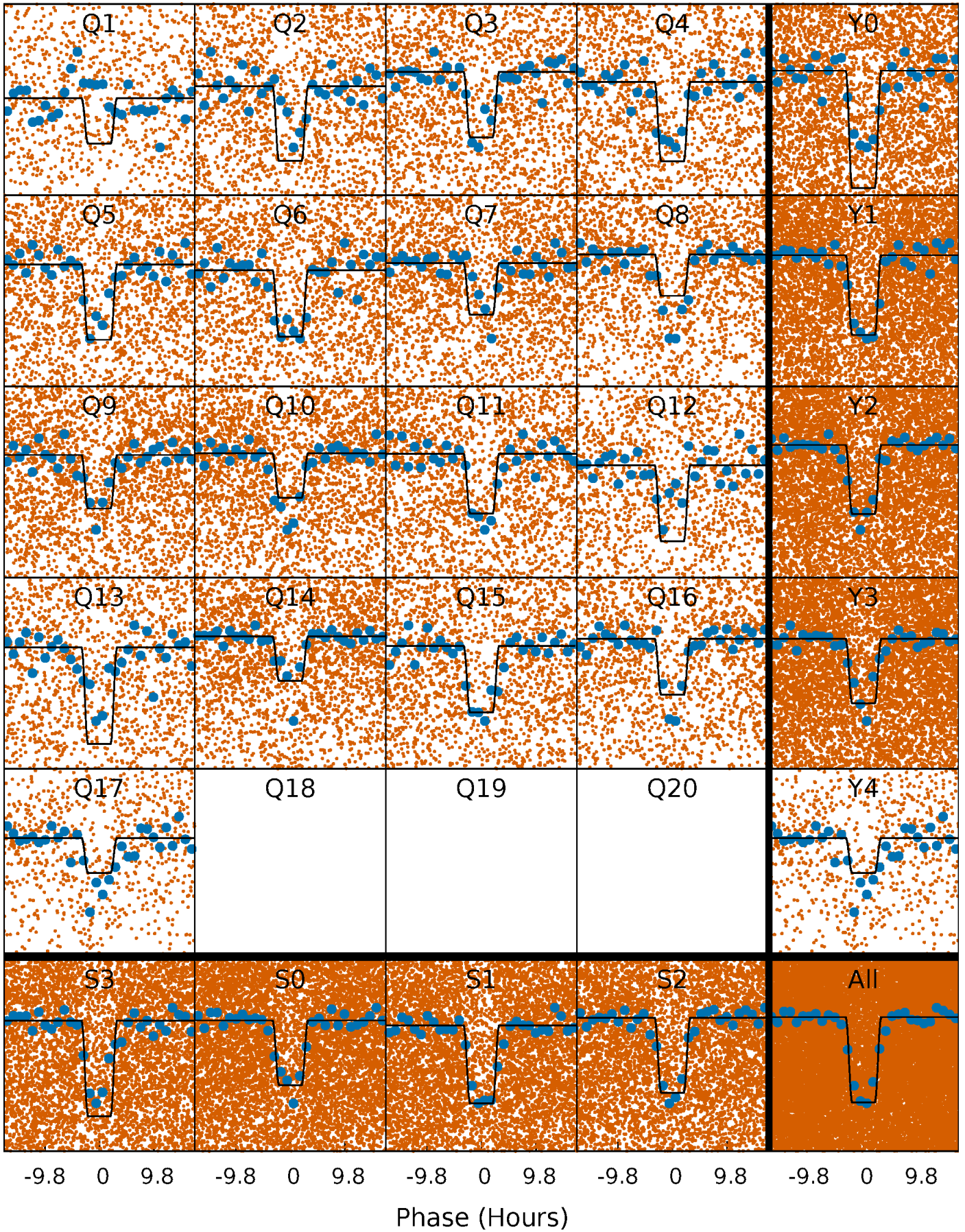
DV Quarter-Phased Transit Curves

TCE 006118145-01 P= 1.813380 Days $T_0=131.695848$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

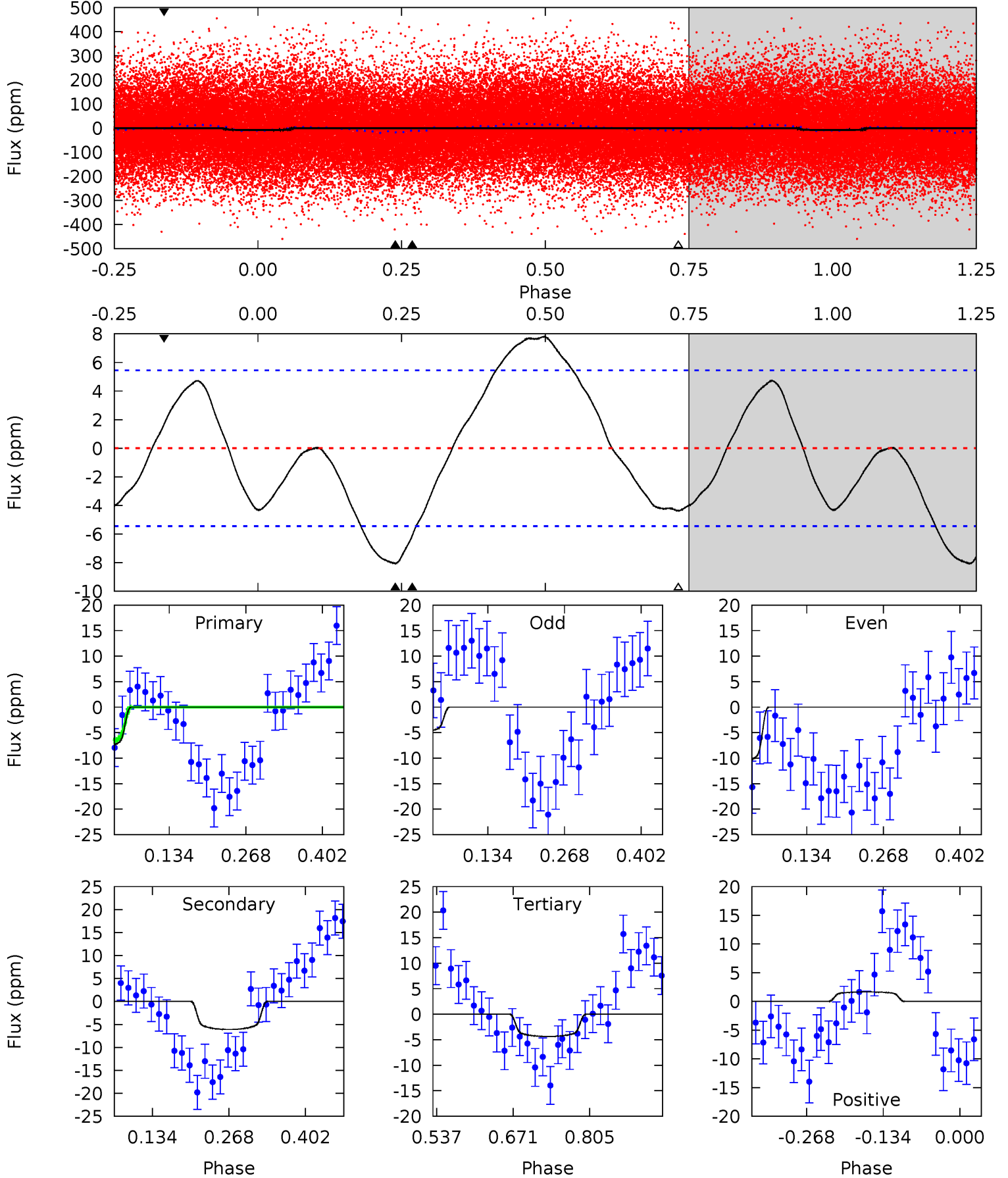
TCE 006118145-01 P= 1.813402 Days $T_0=131.679772$ (BKJD)



DV Model-Shift Uniqueness Test

006118145-01, P = 1.813380 Days, E = 129.882468 Days

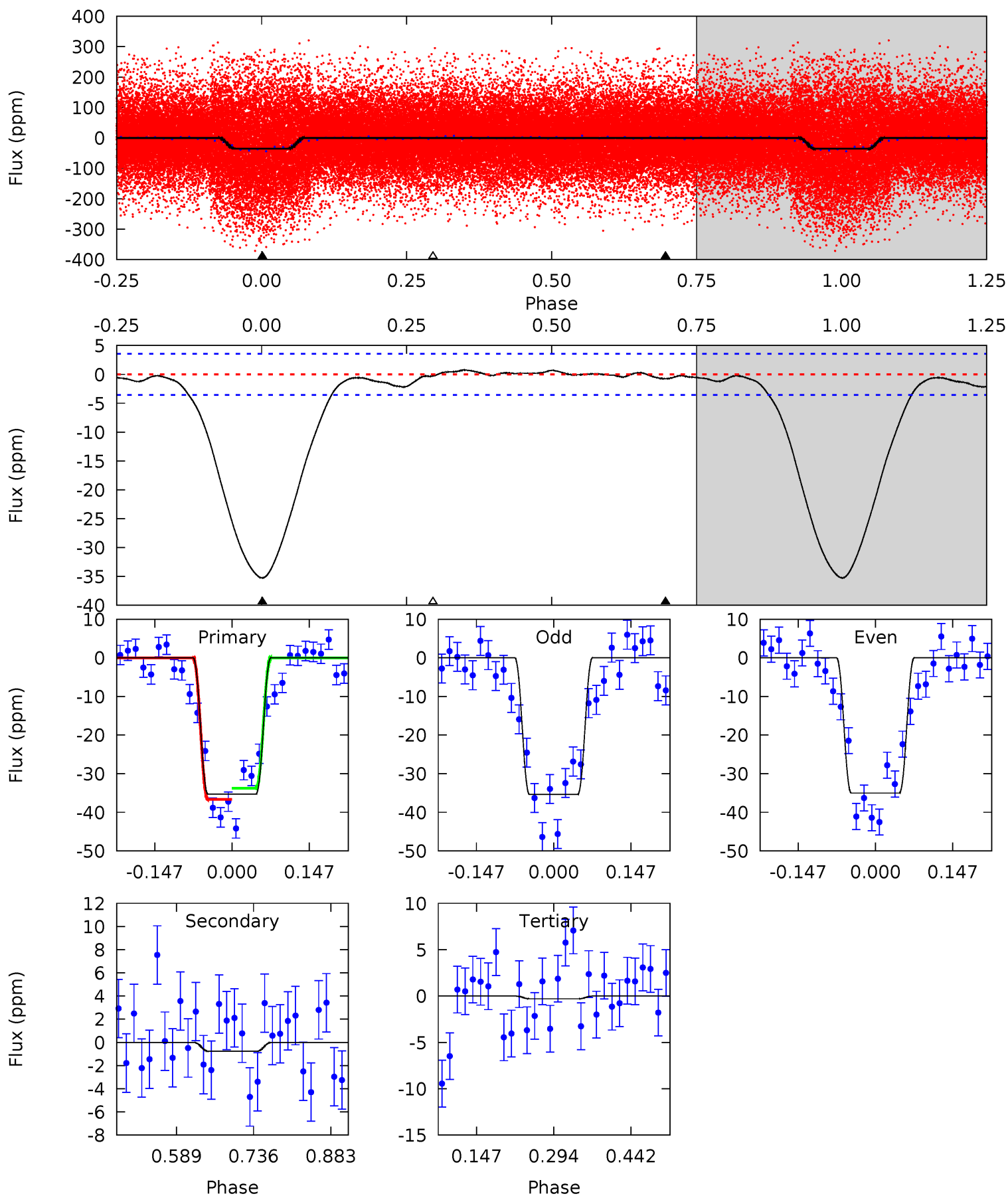
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.66	5.05	3.61	1.38	4.50	1.50	3.31	3.05	5.28	1.44	3.67	2.60	0.56	0.49	0.66



Alt Model-Shift Uniqueness Test

006118145-01, P = 1.813402 Days, E = 129.866370 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
44.4	0.97	0.38	0	4.48	1.45	1.01	44.0	44.4	0.59	0.97	0.24	1.02	0.02	1.83



Stellar Parameters For KIC 006118145

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6571^{+148}_{-198}	$4.301^{+0.096}_{-0.144}$	$-0.320^{+0.250}_{-0.300}$	$1.243^{+0.271}_{-0.181}$	$1.129^{+0.153}_{-0.139}$	$0.828^{+0.407}_{-0.318}$
	+2%/-3%	+2%/-3%	+78%/-94%	+22%/-15%	+14%/-12%	+49%/-38%
Source	PHO1	FLK73	KIC0	DSEP		

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

Secondary Eclipse Parameters for KIC 006118145-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-6 ± 1	$0.66^{+0.12}_{-0.11}$	2597^{+145}_{-127}	4749^{+430}_{-375}	$6.932^{+3.485}_{-2.295}$
Alt.	-1 ± 1	$0.86^{+0.13}_{-0.12}$	2603^{+146}_{-129}	2723^{+559}_{-5644}	$0.506^{+0.577}_{-0.555}$

T_{max} = Theoretical Maximum Planetary Temperature

T_{obs} = Observed Planetary Temperature (Assuming A=0.3)

A_{obs} = Observed Albedo (Assuming T=0)

If a secondary eclipse is present, the system is likely an EB if $T_{\text{obs}} \gg T_{\text{max}}$ AND $A_{\text{obs}} \gg 1.0$

DV Centroid Data

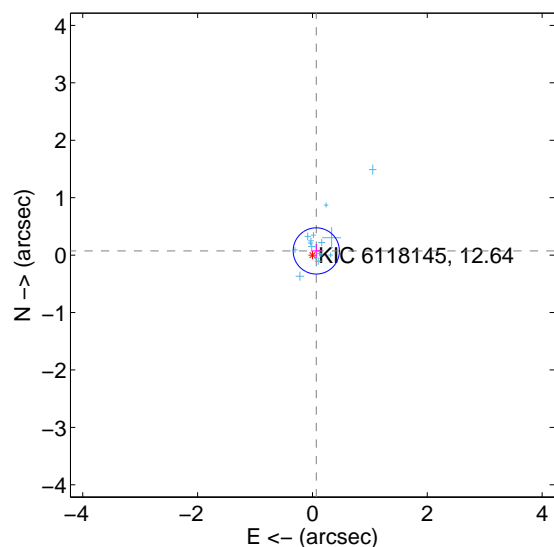
Supplemental centroid analysis for 006118145-01. Kepler magnitude: 12.64. Transit SNR 7.76

There are 16 quarters with good PRF difference image offsets

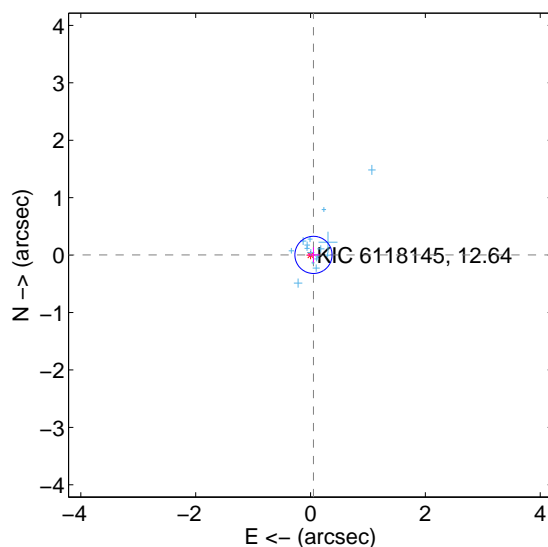
The direct PRF centroid is offset from the target star catalog position by about 0.10 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.099 ± 0.134	0.74	-0.067 ± 0.098	0.073 ± 0.122
PRF-fit source offset from KIC position	0.051 ± 0.108	0.48	-0.051 ± 0.103	0.004 ± 0.134
photometric centroid source offset	1.05 ± 0.82	1.28	-0.06 ± 0.89	1.05 ± 0.82

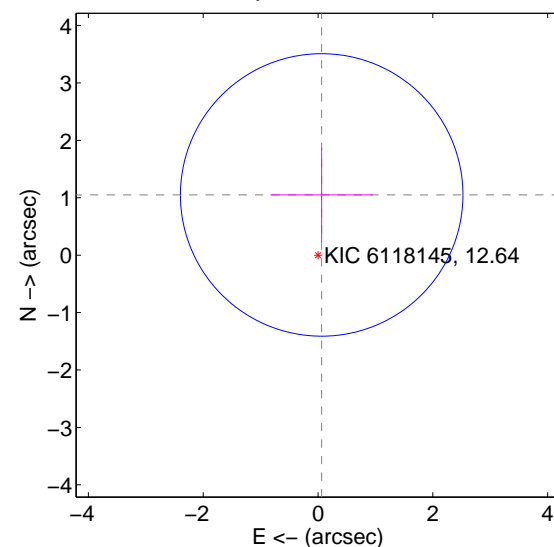
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

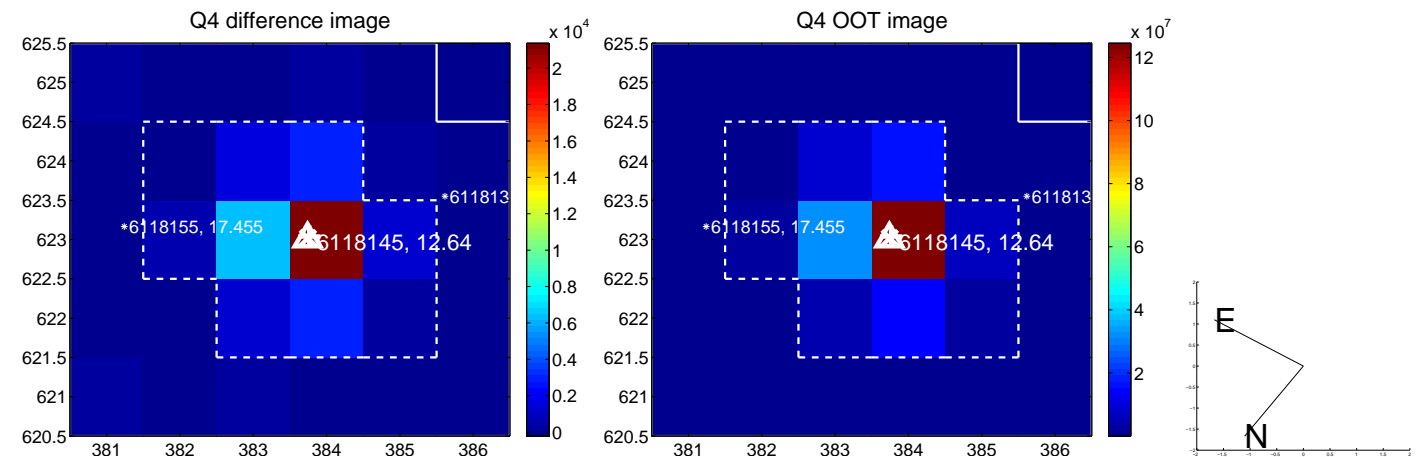
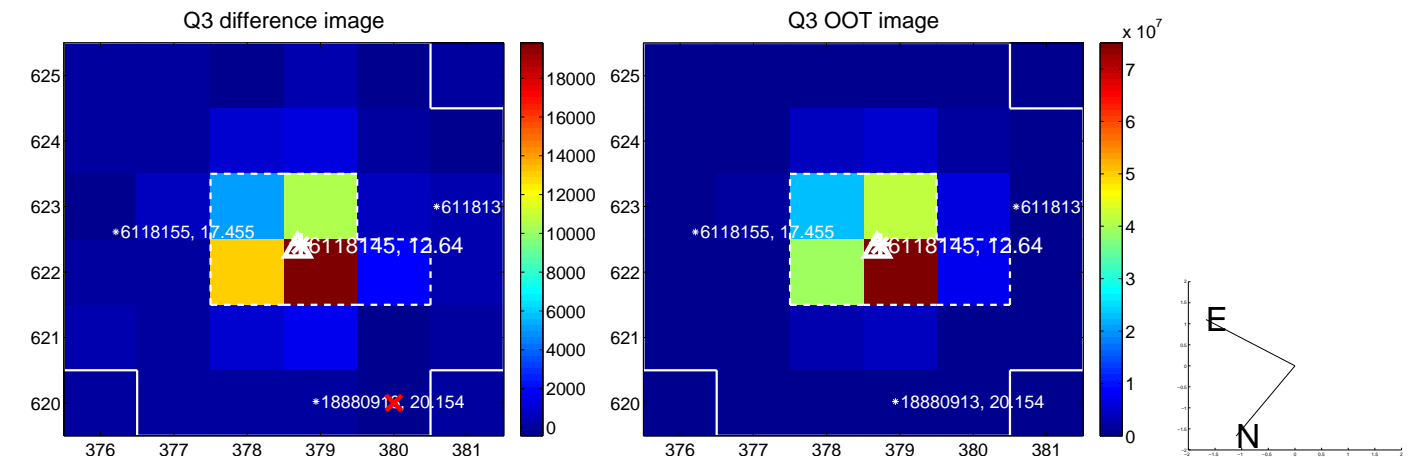
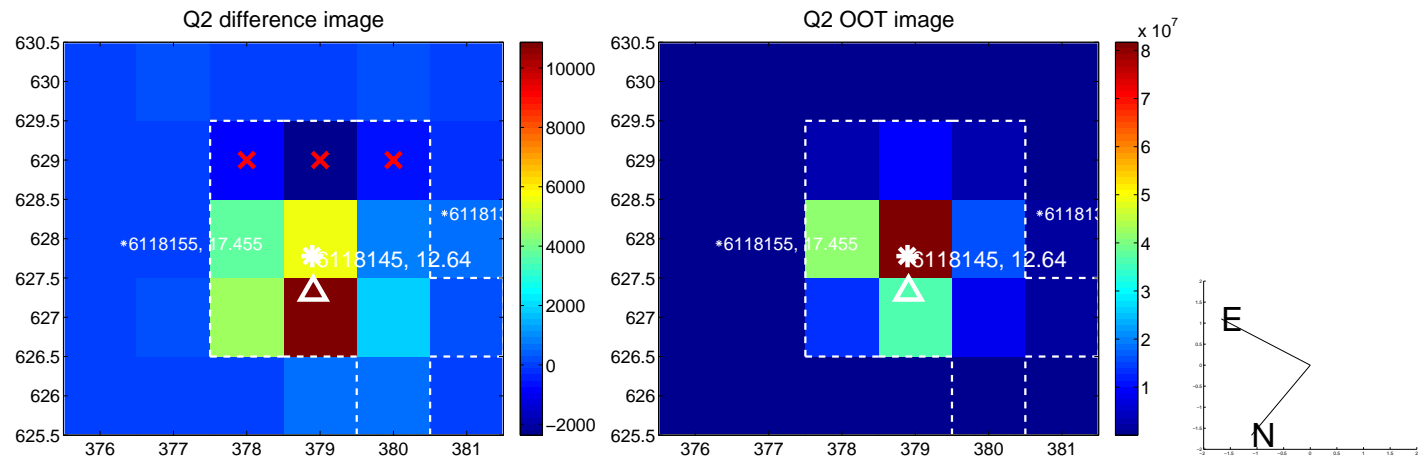
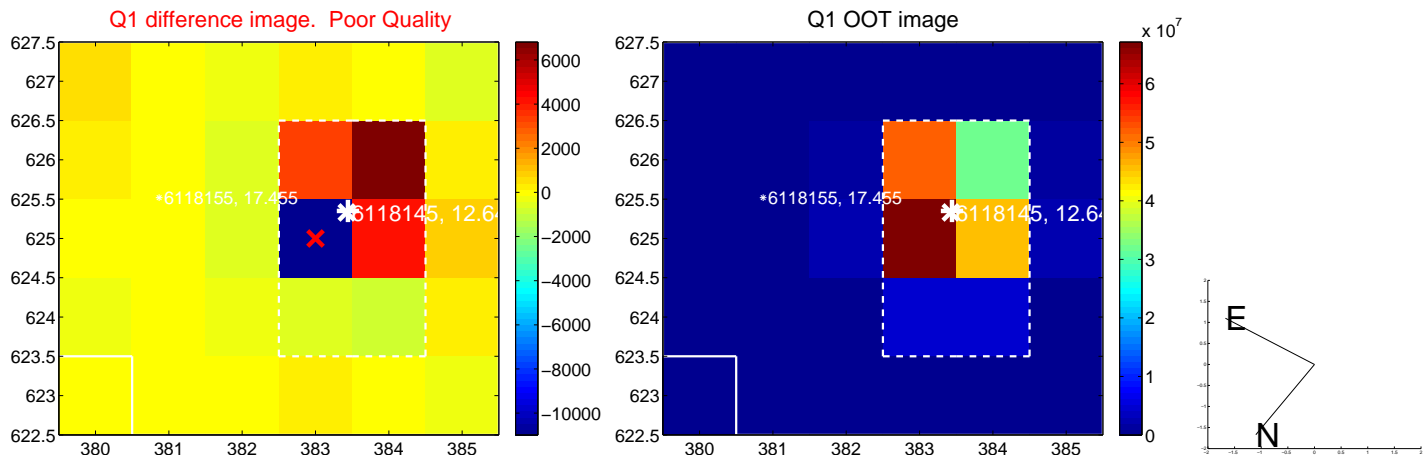


offset from photometric centroids

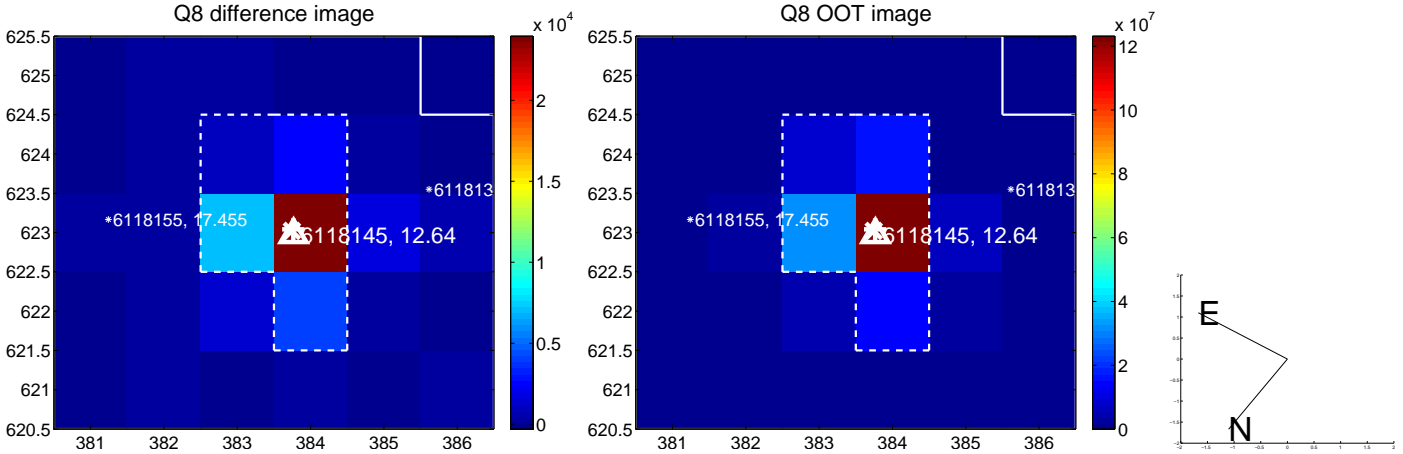
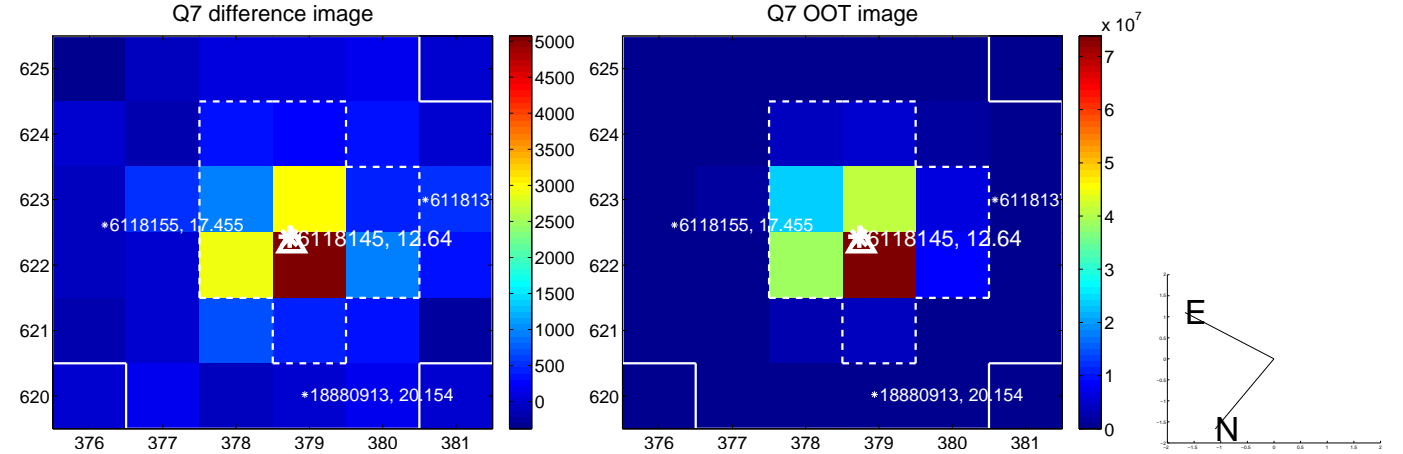
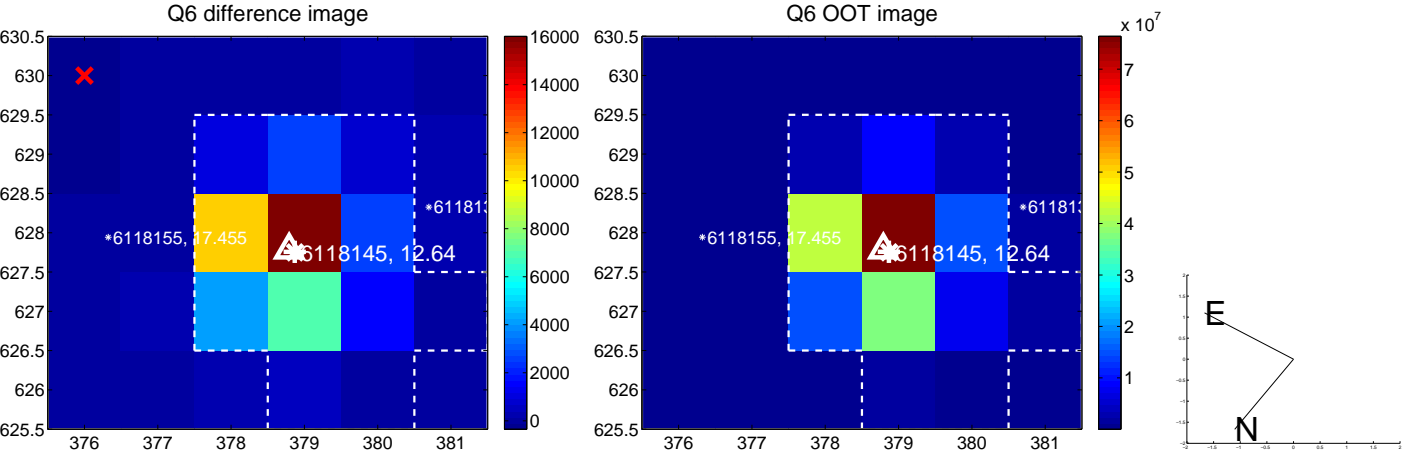
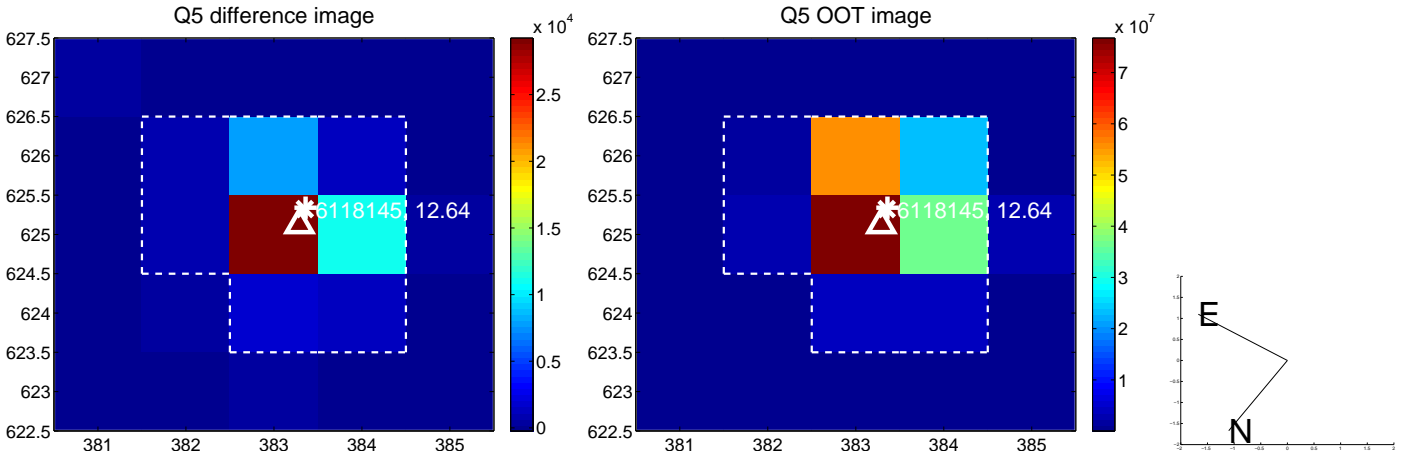


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets**; **Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ . Red *: target star. Blue *: Other stars. Text next to a star gives its KIC ID and kepmag. KIC IDs > 15,000,000 are from the UKIRT catalog.

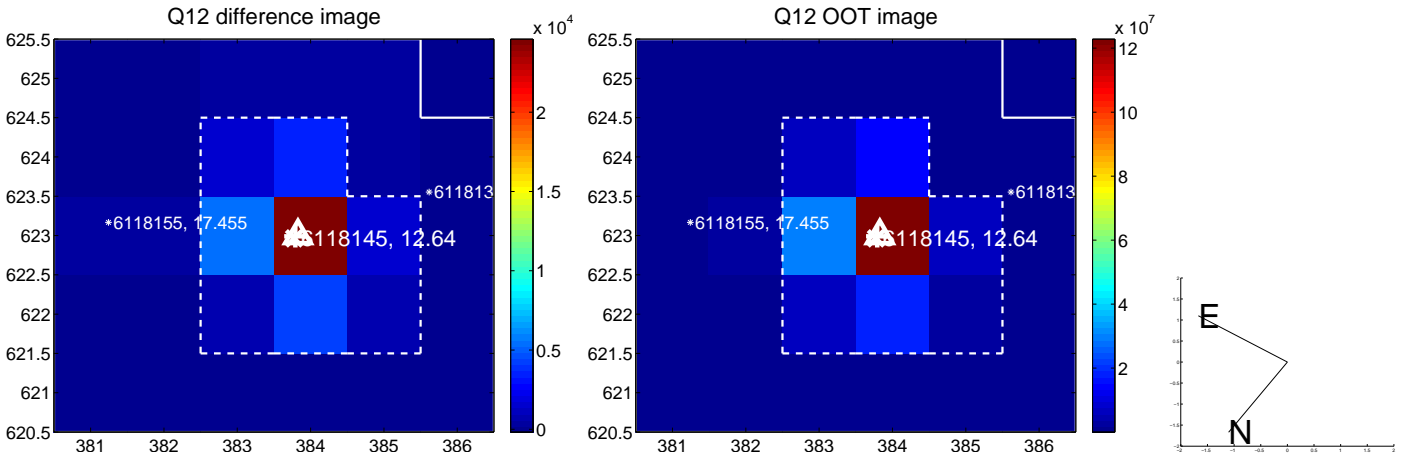
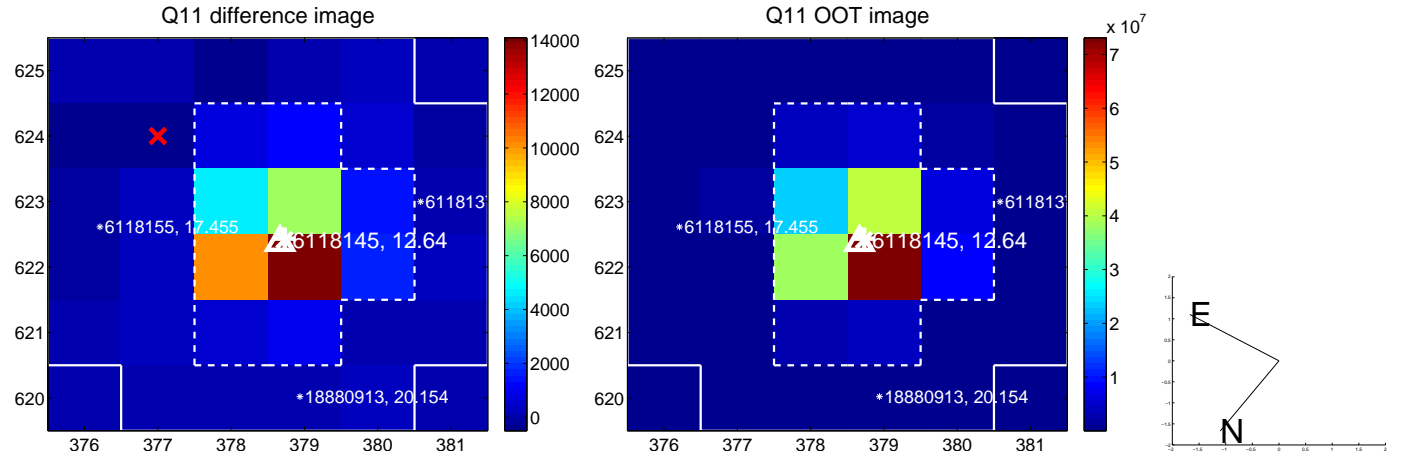
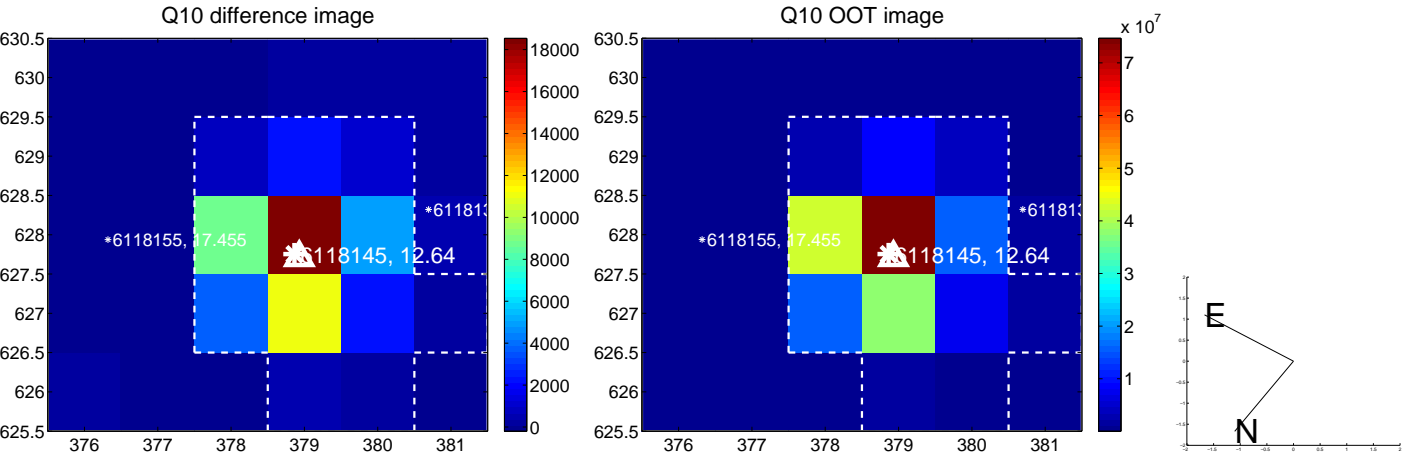
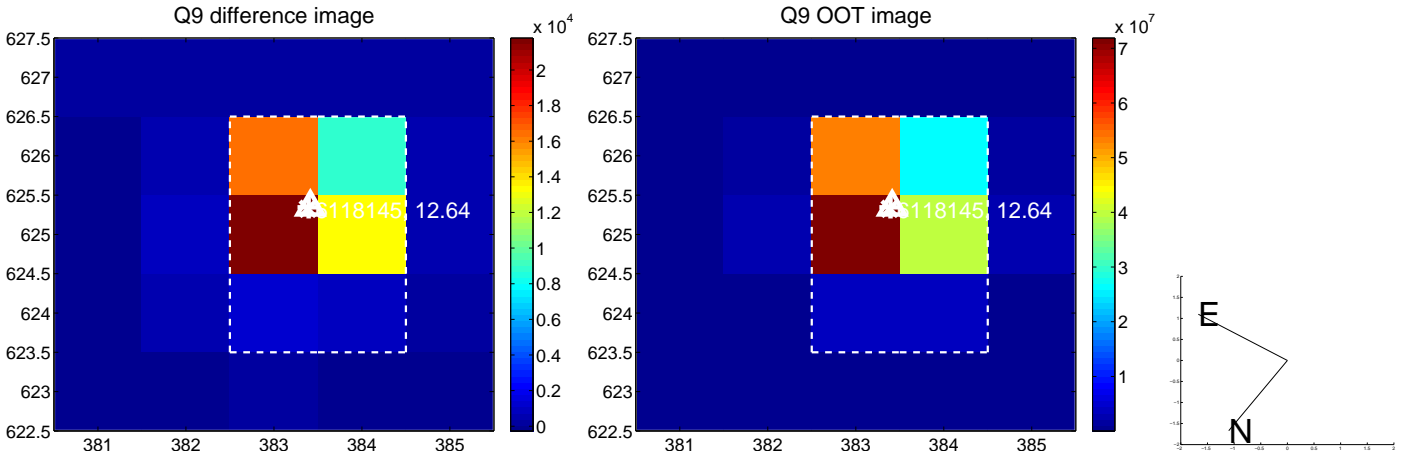
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



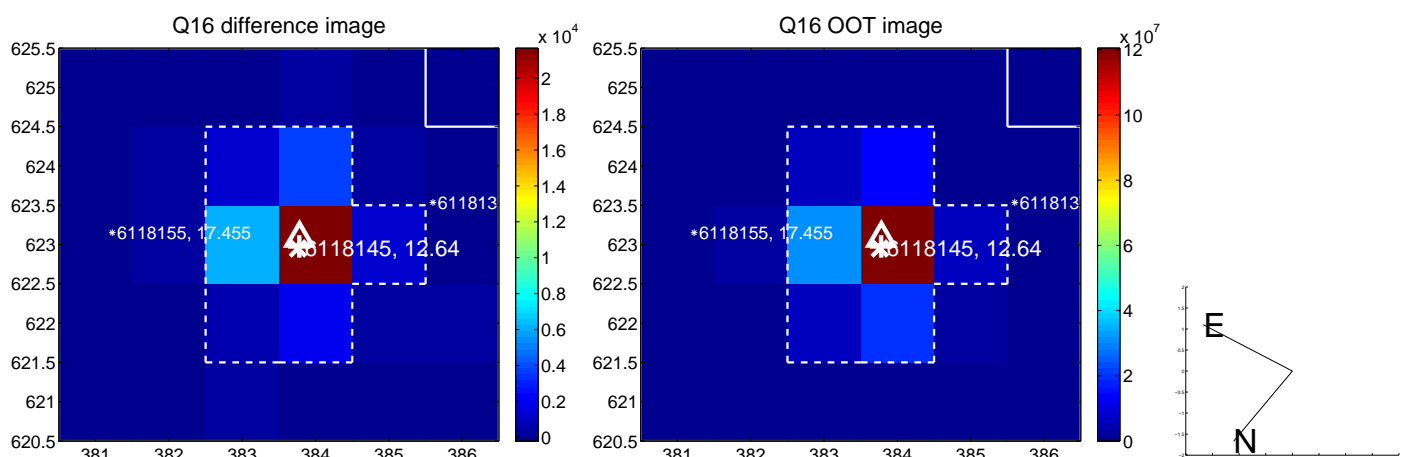
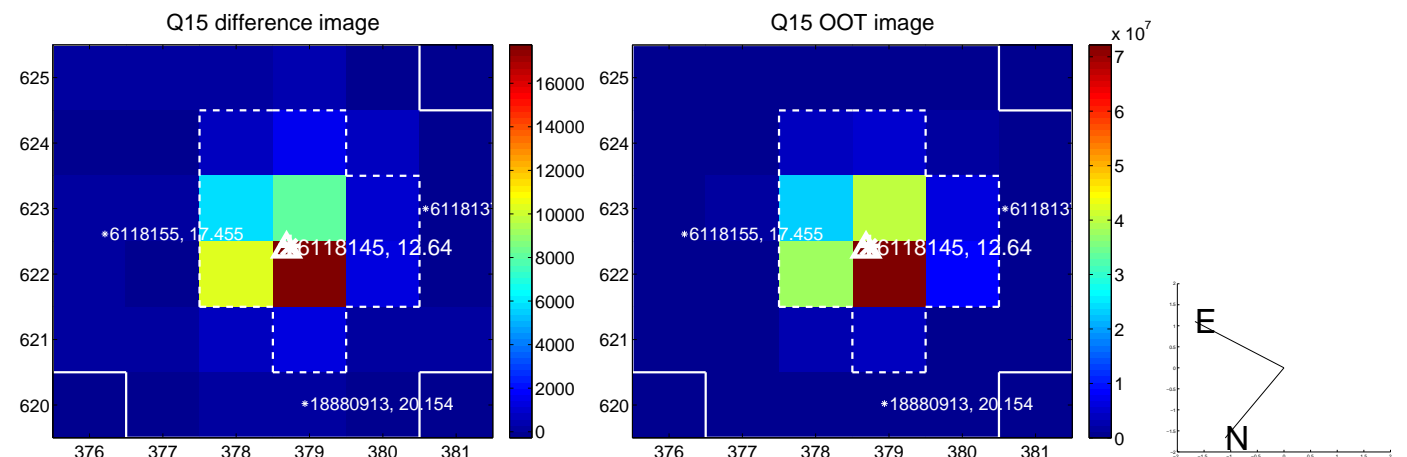
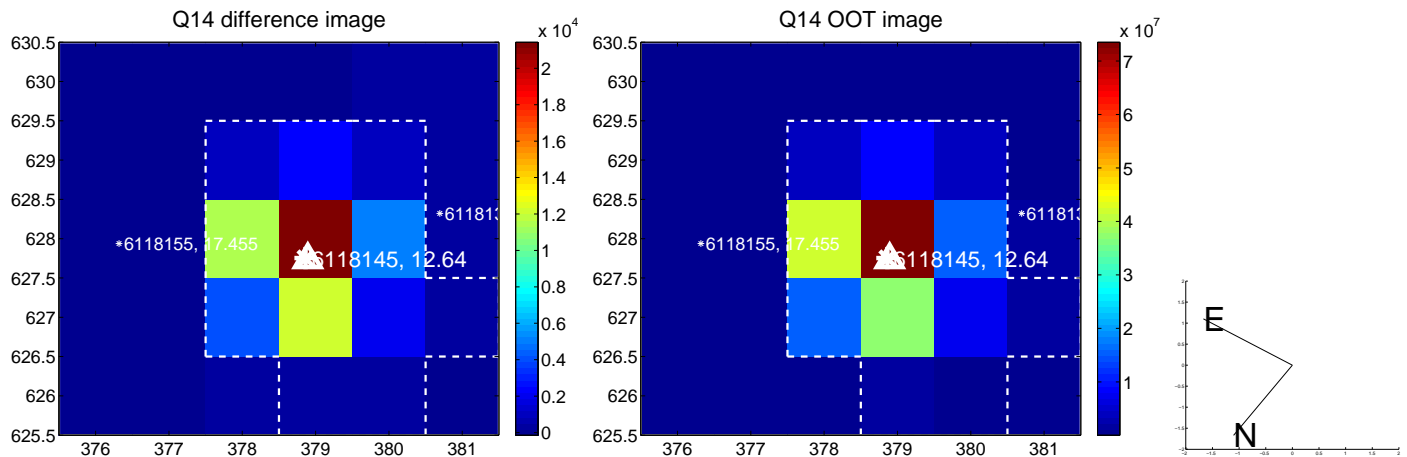
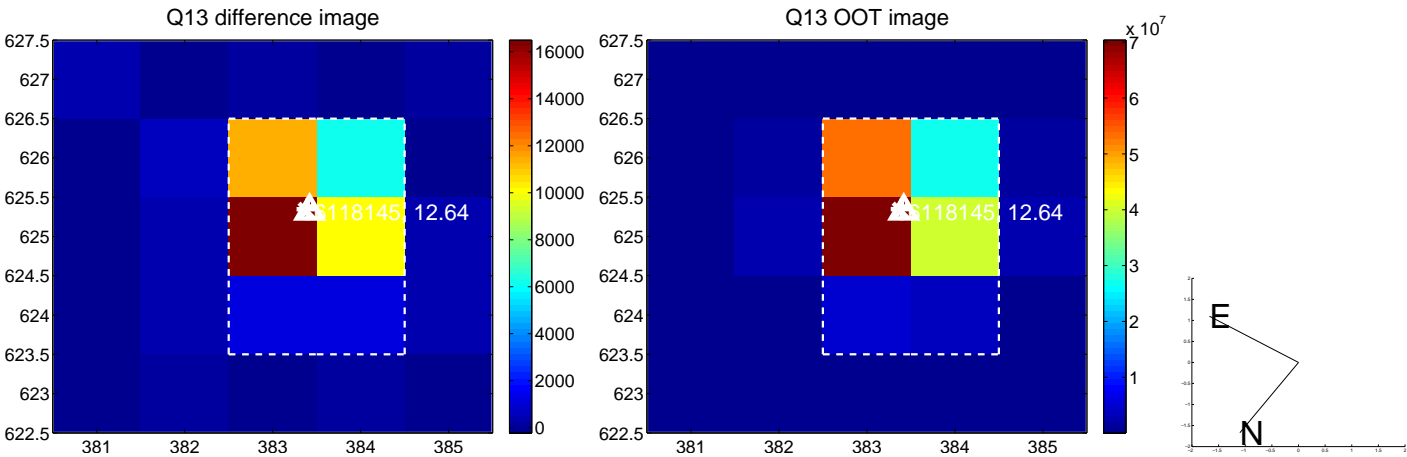
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



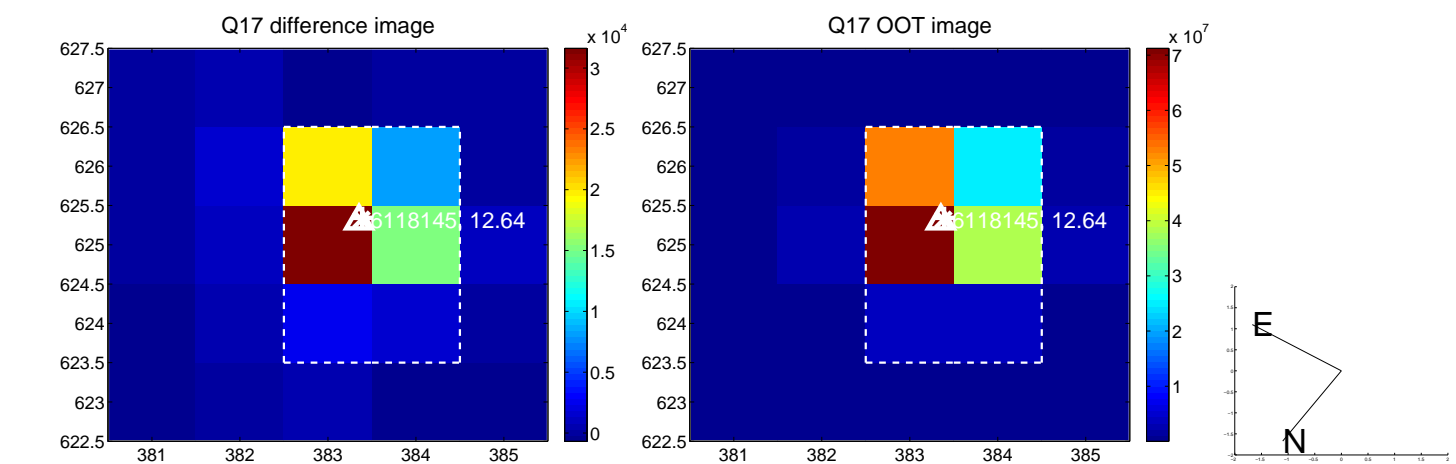
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



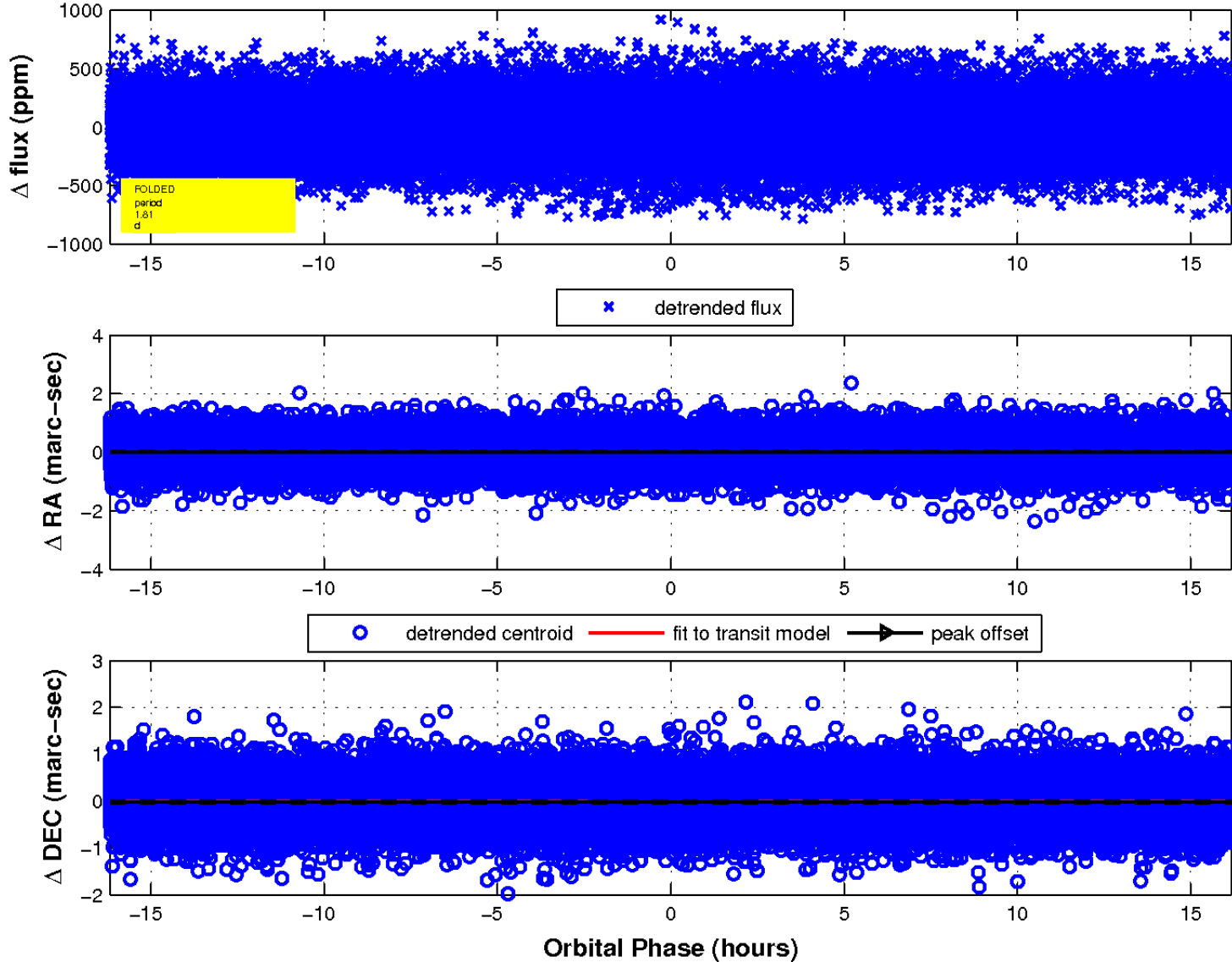
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.

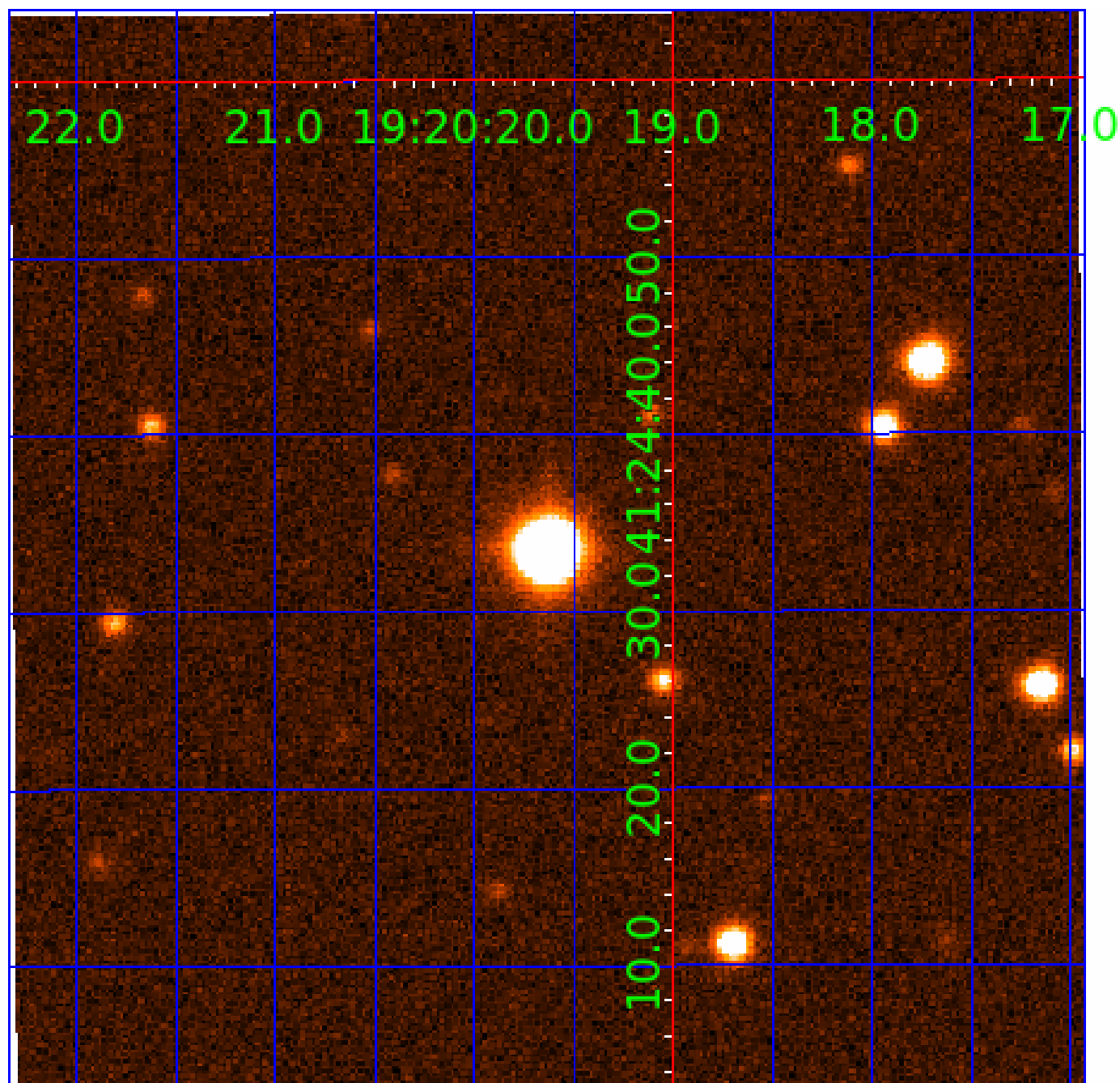


fluxWeightedCentroids, Planet 1 of 3



UKIRT Image

Declination



KIC 006118145

Q1-17 DR25 TCE Parameters

TCE	Run Type	KOI?	Period (Days)	Epoch (BKJD)	Depth (ppm)	Duration (Hours)	MES	SNR	R_{\star} (R_{\odot})	T_{\star} (K)	R_p (R_{\oplus})	S_p (S_{\oplus})
006118145-01	OBS	No	1.813380	131.695848	16.9	5.394	8.1	7.8	1.24	6571	0.65	2812.43
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006118145-03	OBS	No	488.865839	390.293295	424.1	4.253	12.7	10.0	1.24	6571	2.79	1.61

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006118145-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—MOD_NONUNIQ_DV
006118145-02	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_MARSHALL—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—HALO_GHOST
006118145-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES_MARSHALL_SKYE_TRACKER—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS

Notes: OBS = Observed. INJ = Injected. INV = Inverted. SCR = Scrambled.

N = Not Transit-Like. S = Stellar Eclipse. C = Centroid Offset. E = Ephemeris Match.

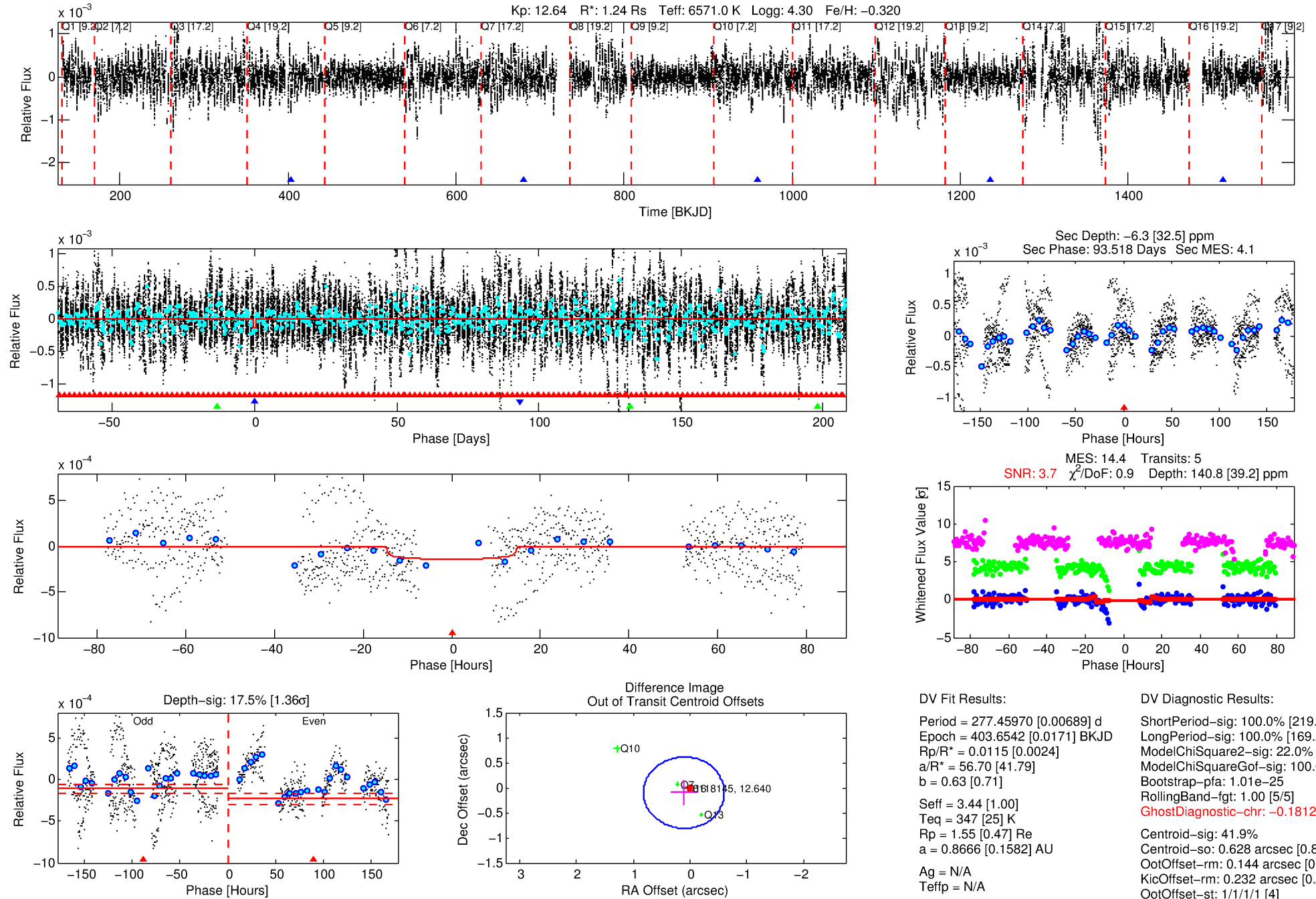
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006118145-02

No Significant Match Found

DV One-Page Summary

KIC: 6118145 Candidate: 2 of 3 Period: 277.460 d



DV Fit Results:

Period = 277.45970 [0.00689] d
Epoch = 403.6542 [0.0171] BKJD
Rp/R* = 0.0115 [0.0024]
a/R* = 56.70 [41.79]
b = 0.63 [0.71]
Seff = 3.44 [1.00]
Teq = 347 [25] K
Rp = 1.55 [0.47] Re
a = 0.8666 [0.1582] AU
Ag = N/A
Teffp = N/A

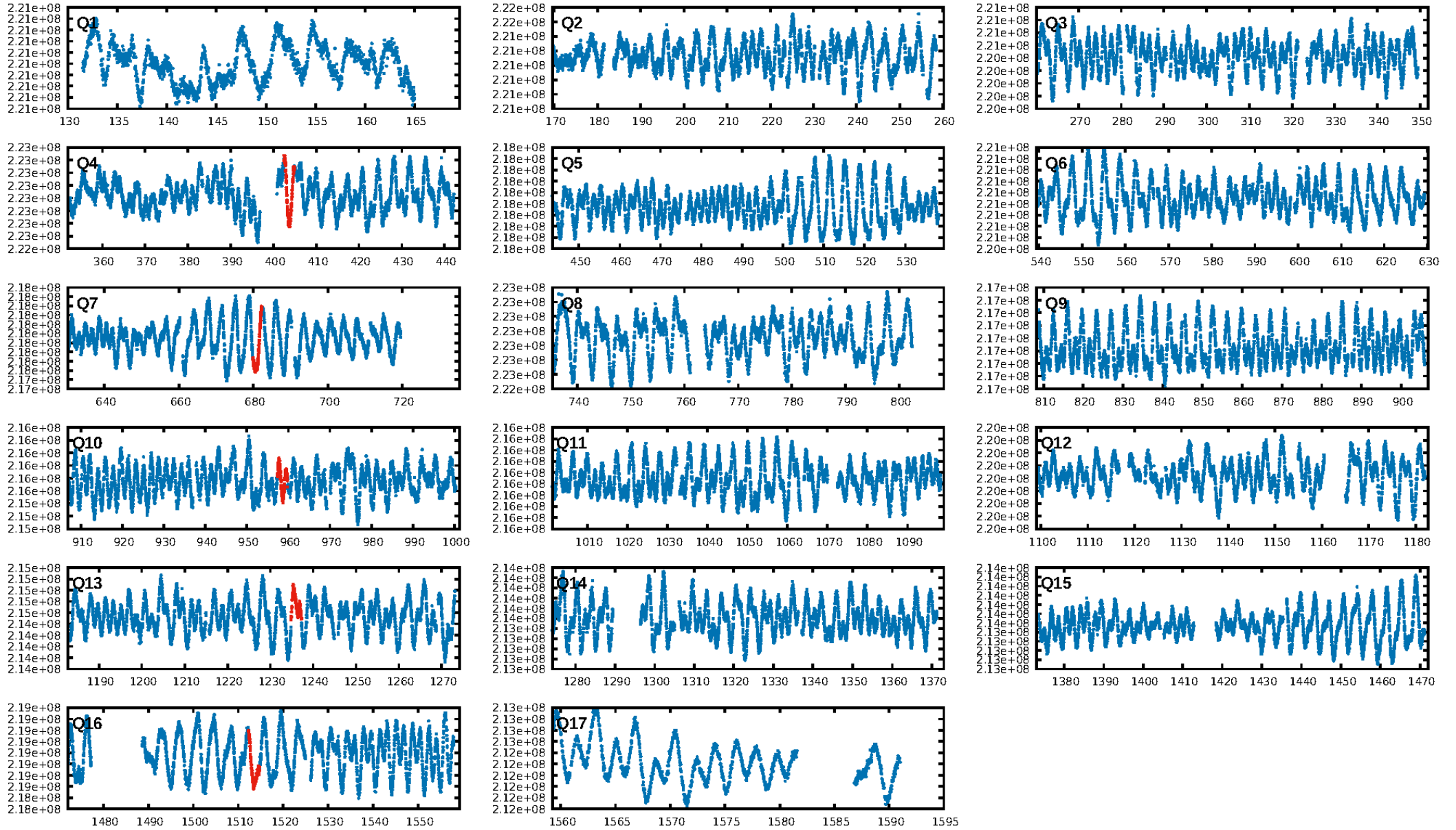
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [219.38 σ]
LongPeriod-sig: 100.0% [169.28 σ]
ModelChiSquare2-sig: 22.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 1.01e-25
RollingBand-fgt: 1.00 [5/5]
GhostDiagnostic-chr: -0.1812
Centroid-sig: 41.9%
Centroid-so: 0.628 arcsec [0.83 σ]
OotOffset-rm: 0.144 arcsec [0.61 σ]
KicOffset-rm: 0.232 arcsec [0.94 σ]
OotOffset-st: 1/1/1/1 [4]
KicOffset-st: 1/1/1/1 [4]
DiffImageQuality-fgm: 0.75 [3/4]
DiffImageOverlap-fno: 0.00 [0/4]

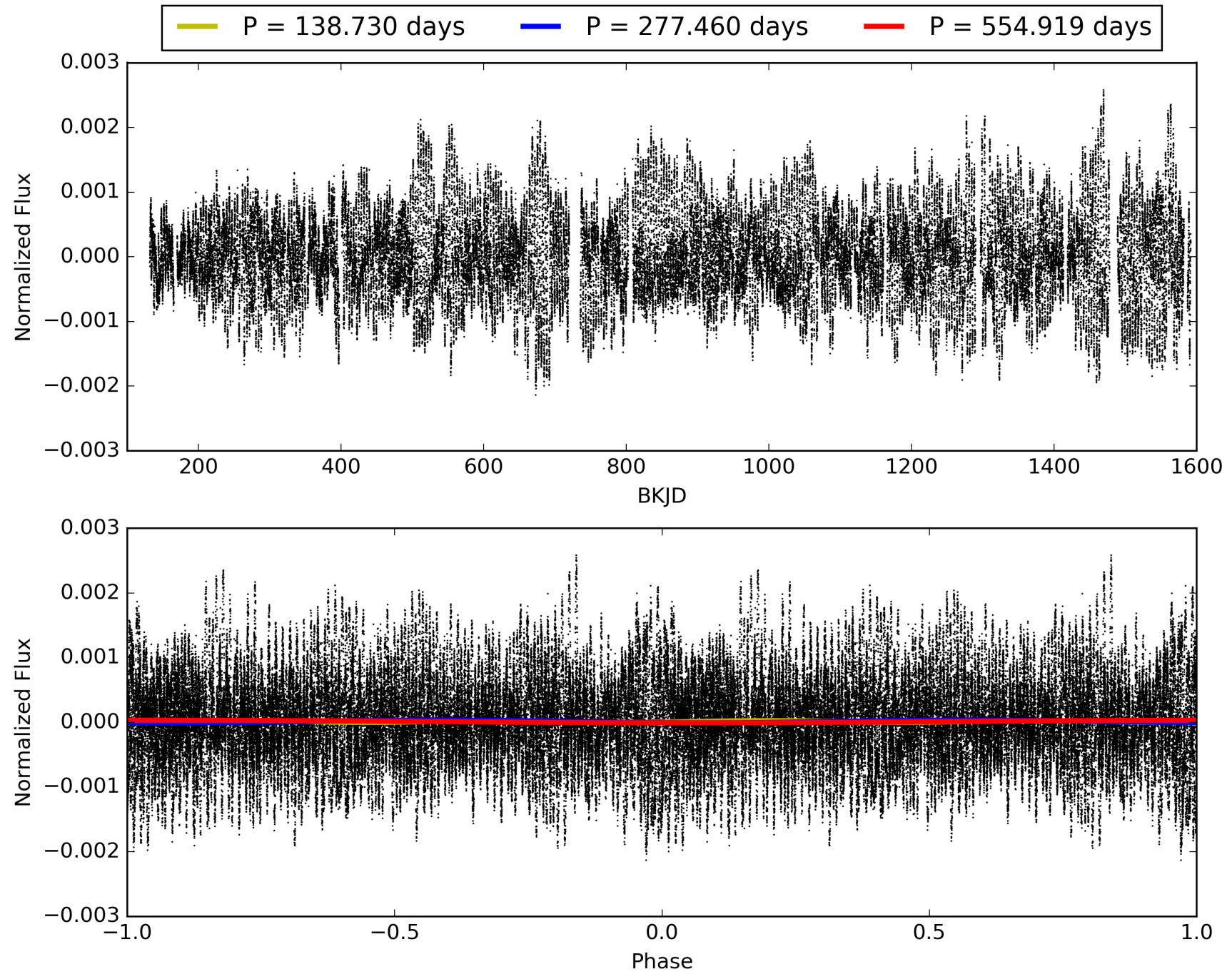
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 09:05:29 Z

This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

TCE 006118145-02, PDC Light Curves

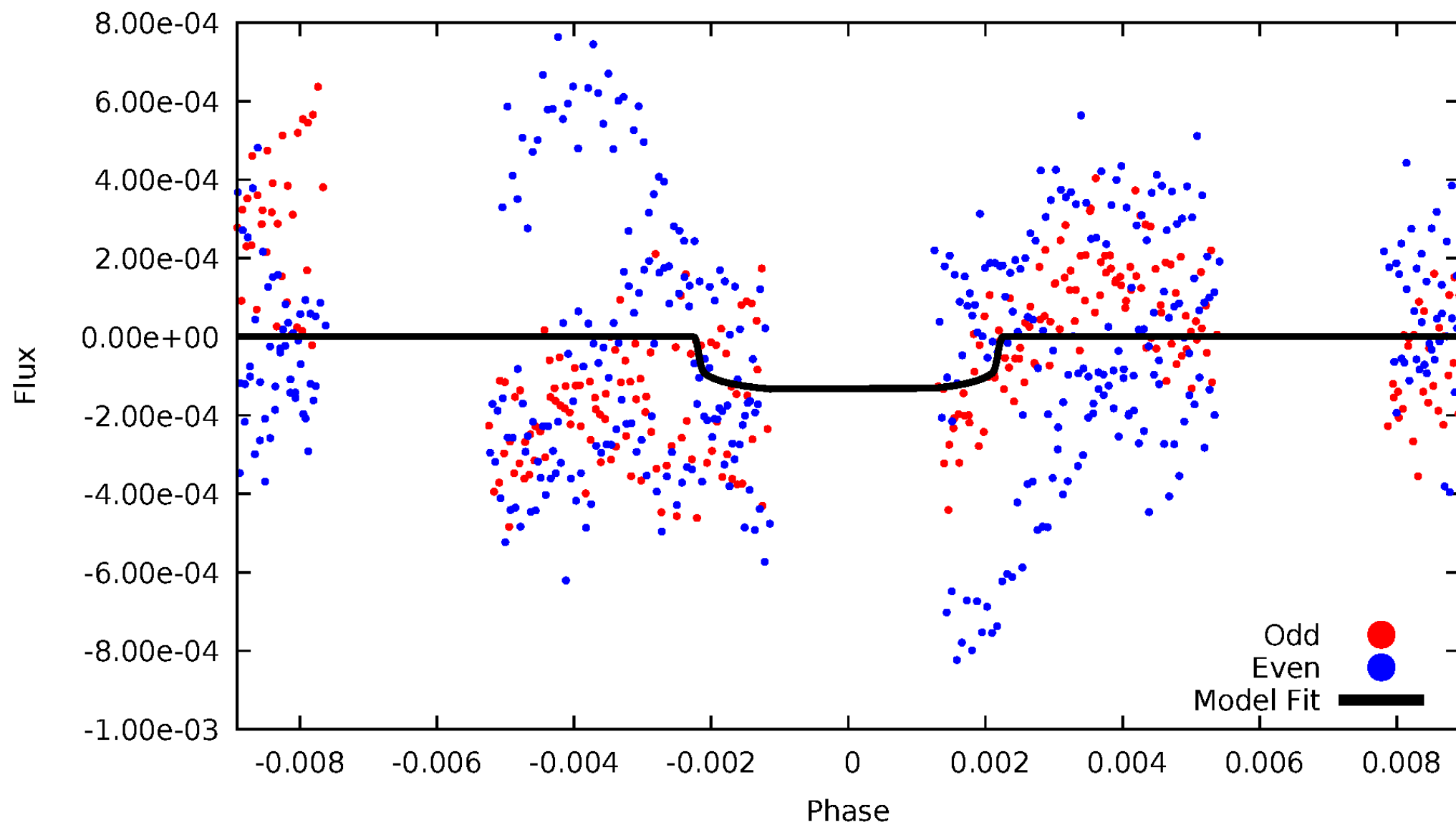


TCE 006118145-02



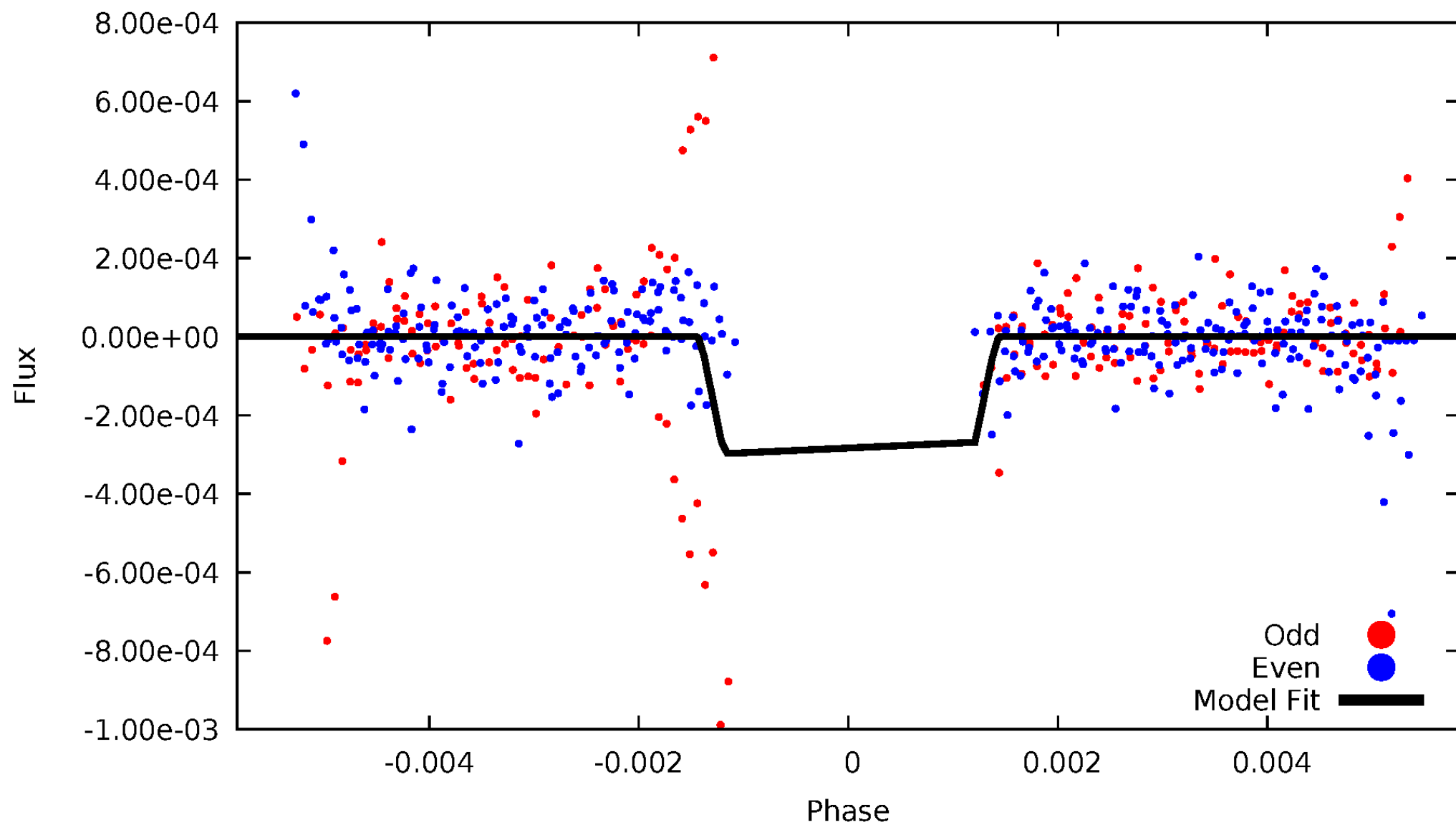
DV Odd/Even

TCE 006118145-02



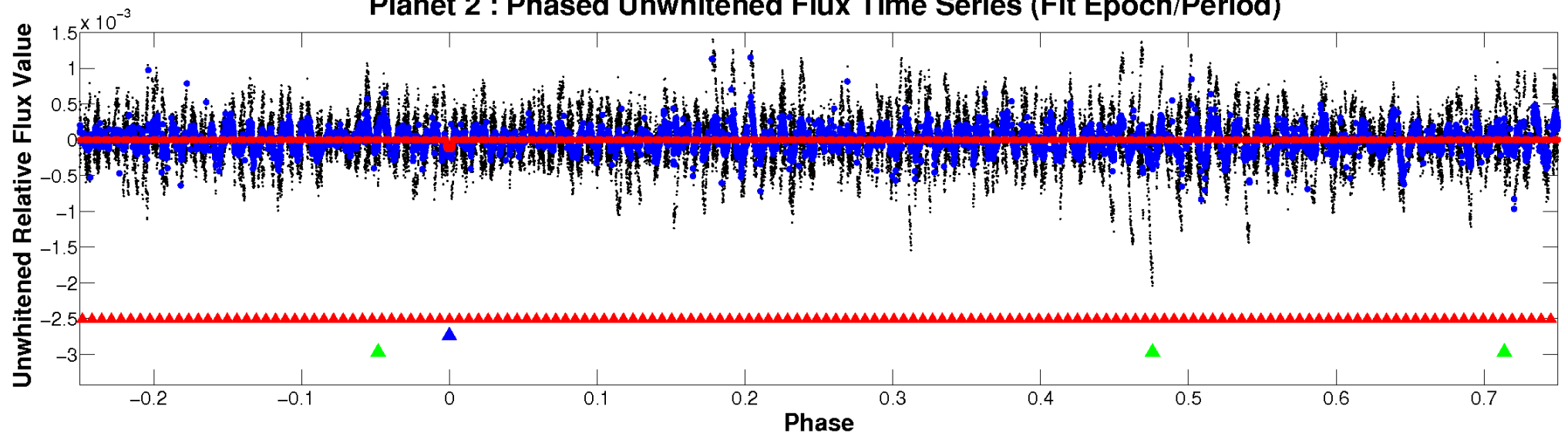
ALT Odd/Even

TCE 006118145-02

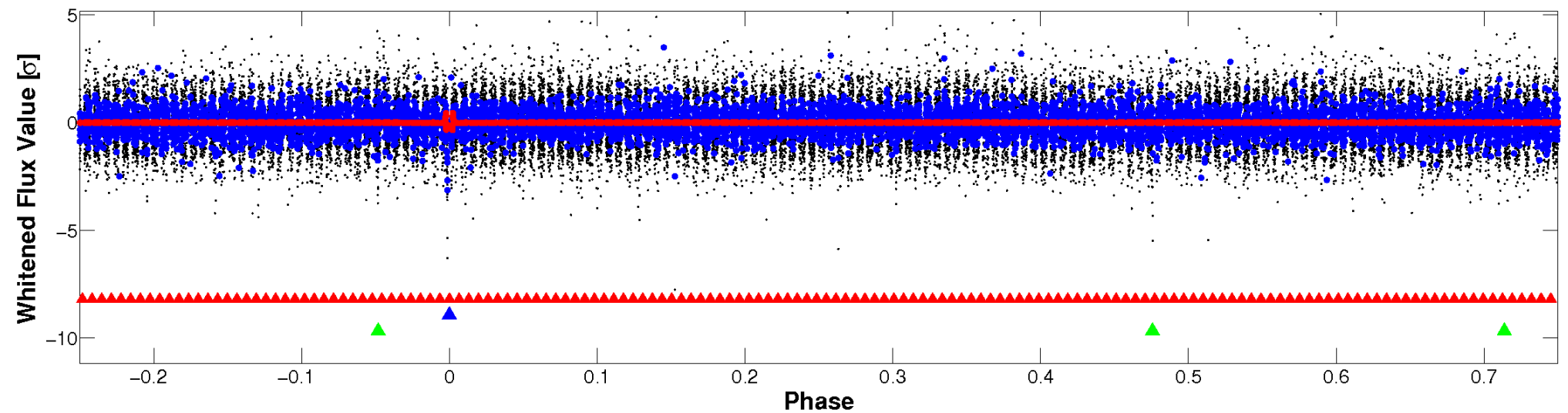


Non-Whitened Vs. Whitened Light Curve

Planet 2 : Phased Unwhitened Flux Time Series (Fit Epoch/Period)

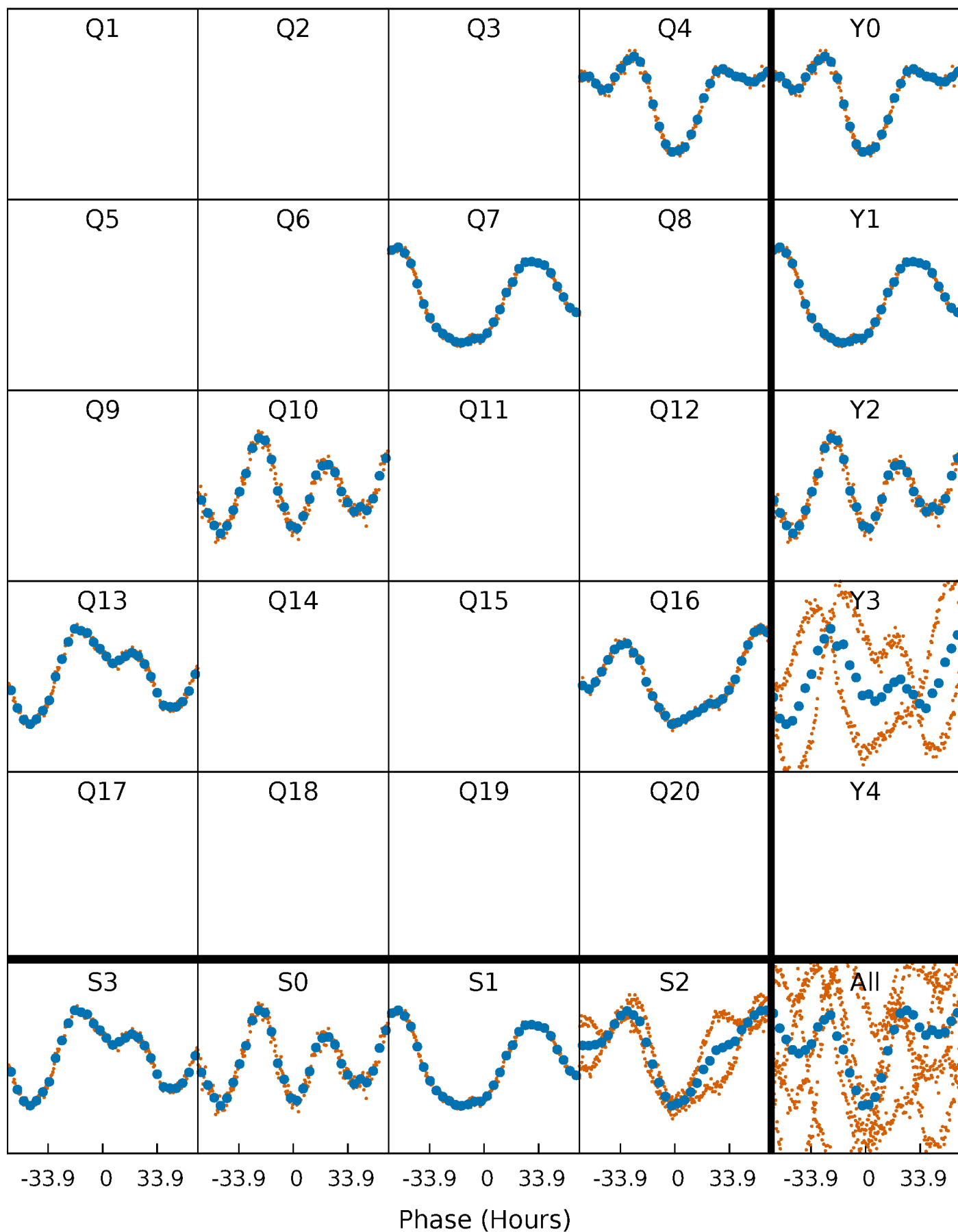


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



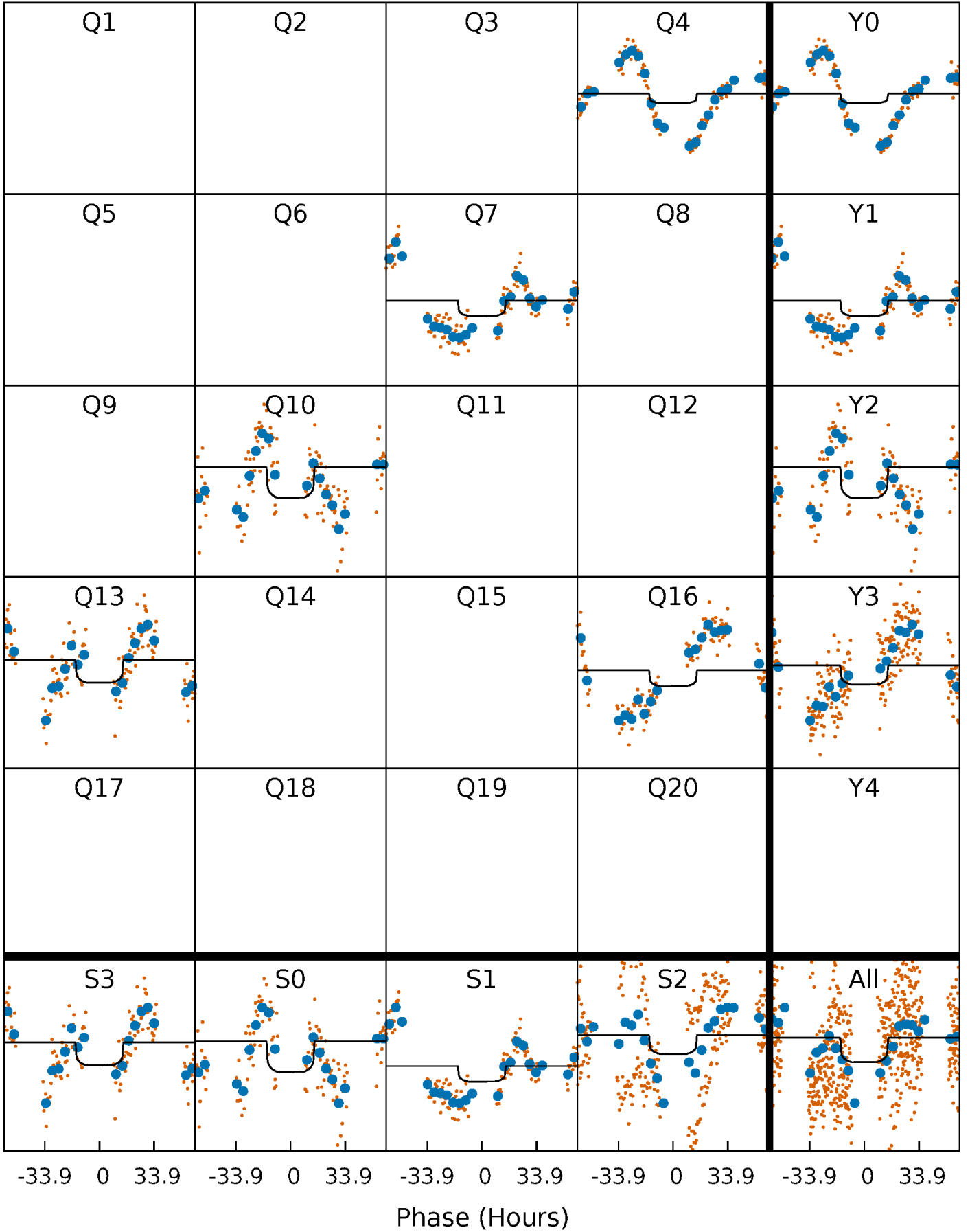
PDC Quarter-Phased Transit Curves

TCE 006118145-02 $P=277.459704$ Days $T_0=403.654226$ (BKJD)



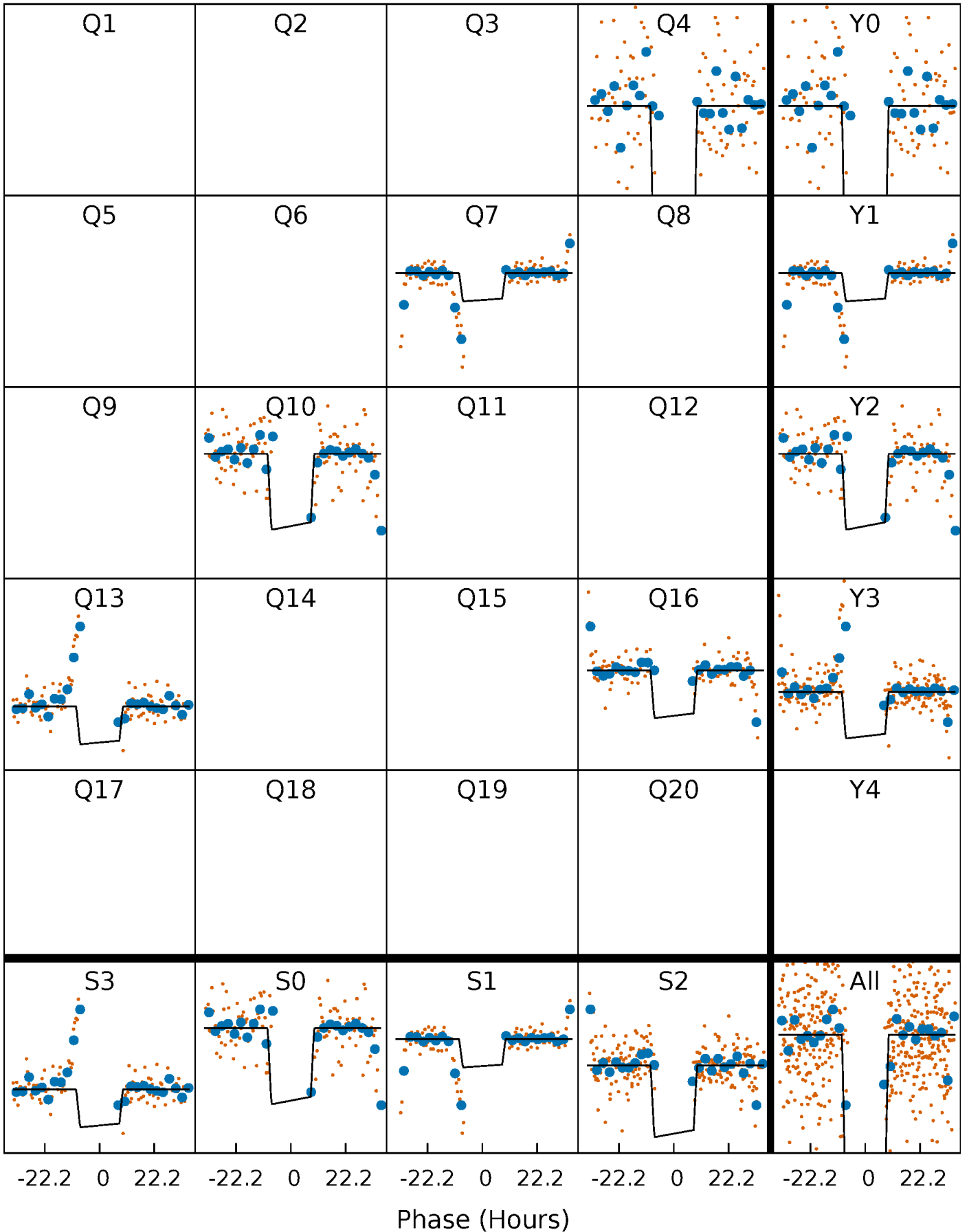
DV Quarter-Phased Transit Curves

TCE 006118145-02 $P=277.459704$ Days $T_0=403.654226$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

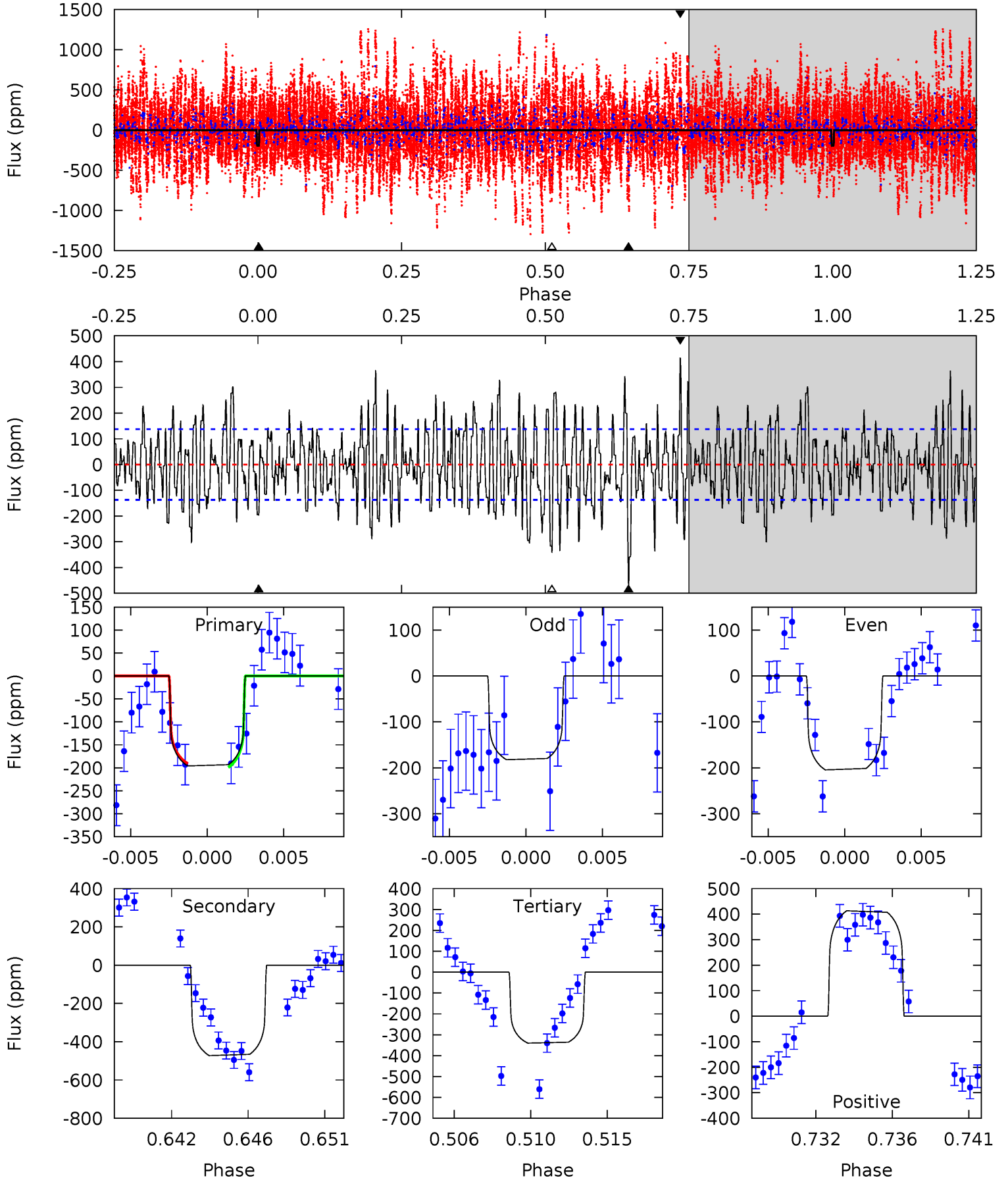
TCE 006118145-02 P=277.467311 Days $T_0=403.637574$ (BKJD)



DV Model-Shift Uniqueness Test

006118145-02, P = 277.459704 Days, E = 126.194522 Days

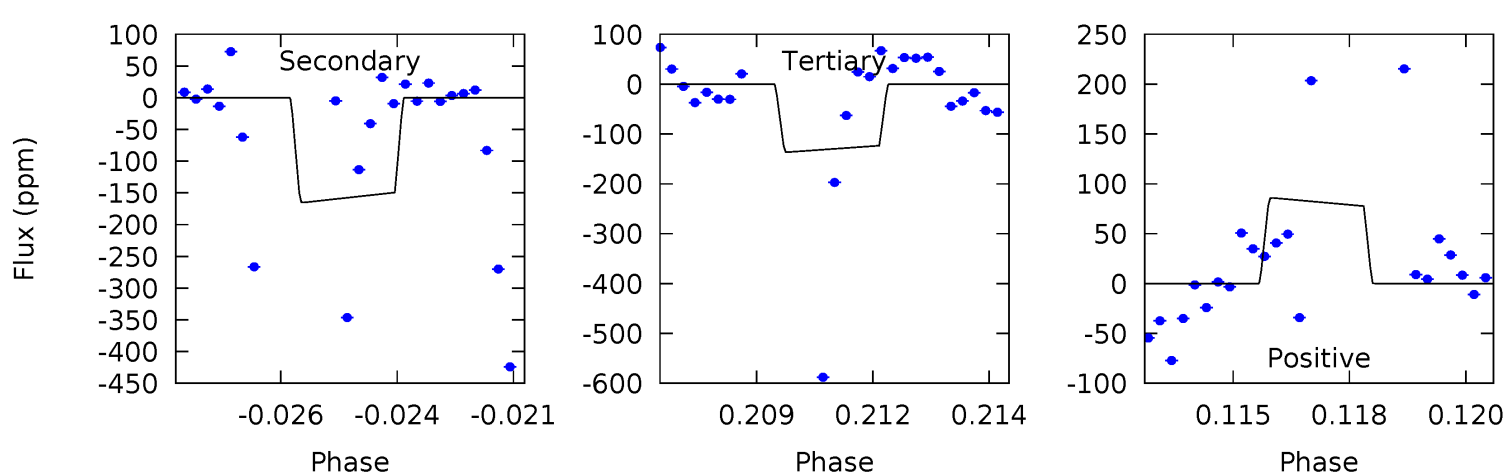
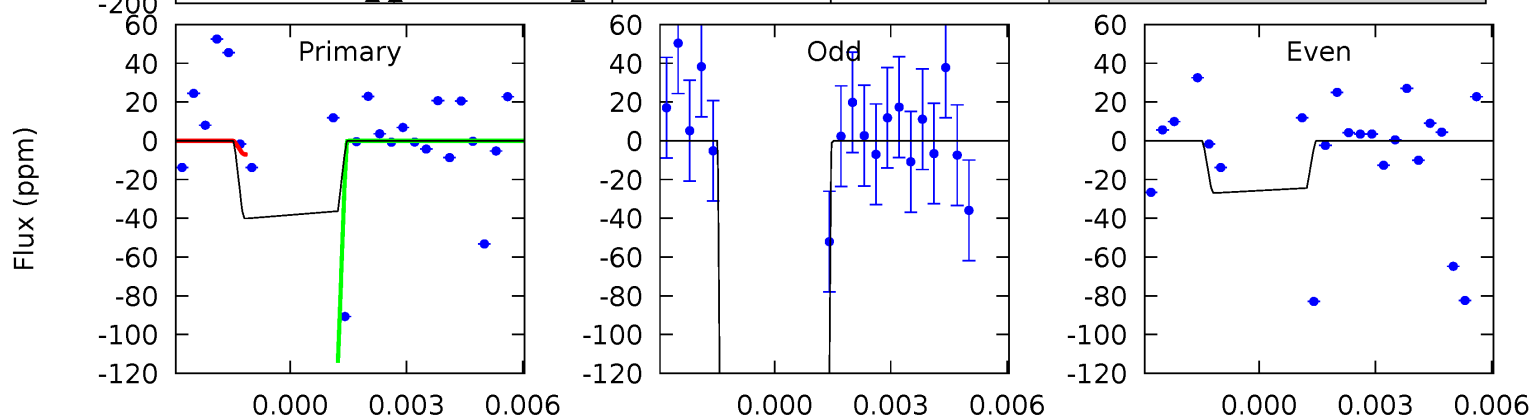
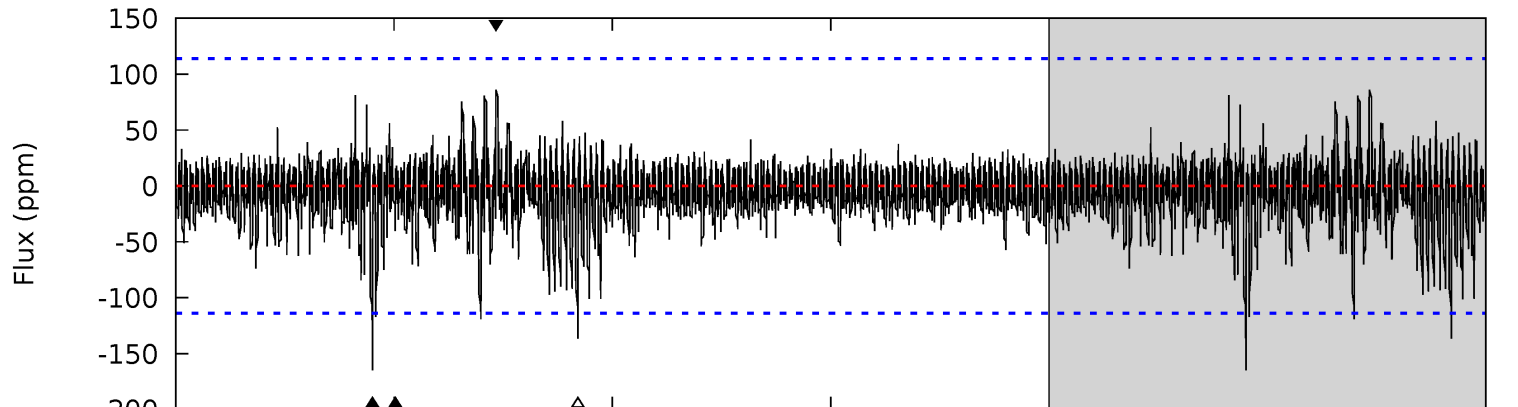
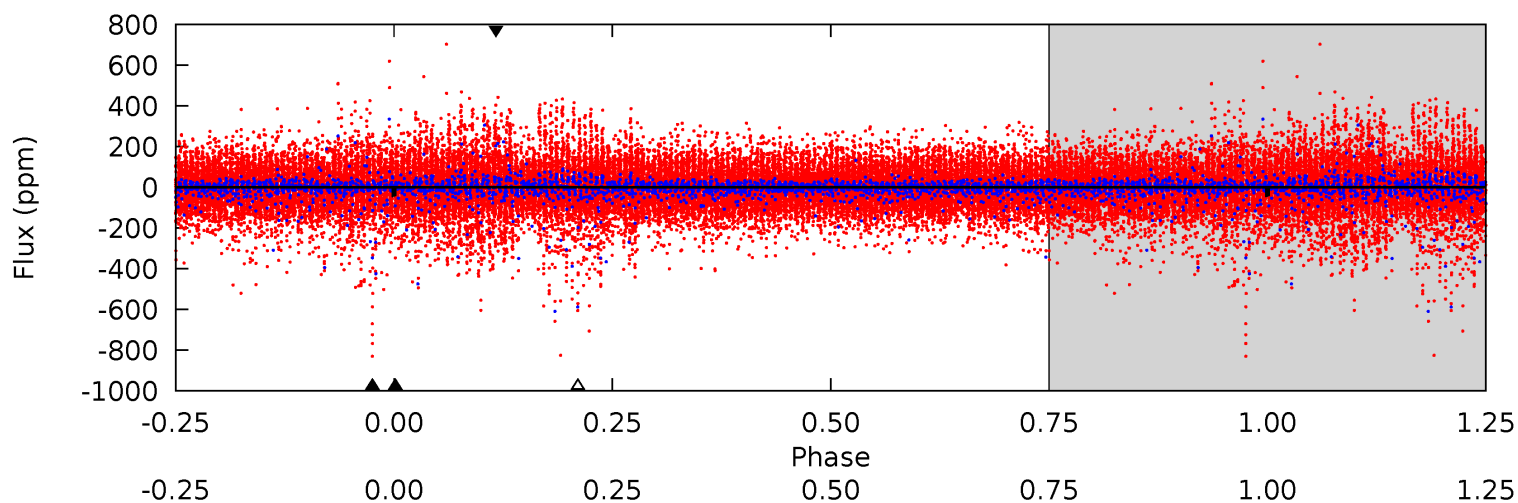
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.39	17.8	12.8	15.6	5.18	2.84	4.89	-5.43	-8.19	4.99	2.24	0.40	2.01	0.47	0.15



Alt Model-Shift Uniqueness Test

006118145-02, P = 277.467311 Days, E = 126.170263 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
1.85	7.62	6.30	3.96	5.26	2.97	0.69	-4.45	-2.11	1.32	3.66	20.3	4.64	0.34	2.50



Stellar Parameters For KIC 006118145

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6571^{+148}_{-198}	$4.301^{+0.096}_{-0.144}$	$-0.320^{+0.250}_{-0.300}$	$1.243^{+0.271}_{-0.181}$	$1.129^{+0.153}_{-0.139}$	$0.828^{+0.407}_{-0.318}$
	+2%/-3%	+2%/-3%	+78%/-94%	+22%/-15%	+14%/-12%	+49%/-38%
Source	PHO1	FLK73	KIC0	DSEP		

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

Secondary Eclipse Parameters for KIC 006118145-02 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-472 ± 27	$1.57^{+0.39}_{-0.35}$	489^{+27}_{-23}	9868^{+1925}_{-1388}	79192^{+52000}_{-28200}
Alt.	-165 ± 22	$2.36^{+0.40}_{-0.38}$	488^{+28}_{-23}	5672^{+475}_{-357}	12093^{+5051}_{-3391}

T_{max} = Theoretical Maximum Planetary Temperature

T_{obs} = Observed Planetary Temperature (Assuming $A=0.3$)

A_{obs} = Observed Albedo (Assuming $T=0$)

If a secondary eclipse is present, the system is likely an EB if $T_{obs} \gg T_{max}$ AND $A_{obs} \gg 1.0$

DV Centroid Data

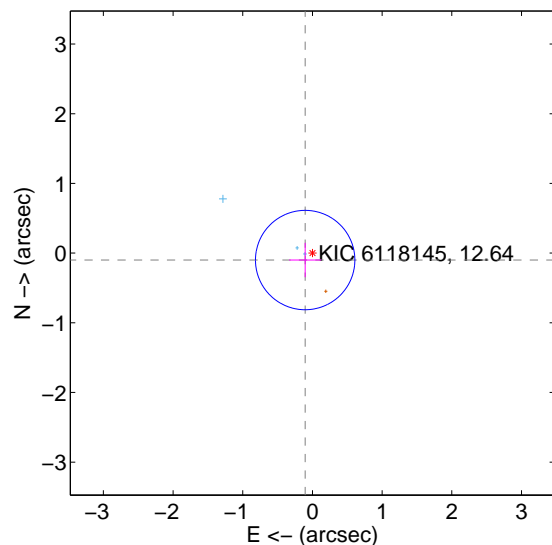
Supplemental centroid analysis for 006118145-02. Kepler magnitude: 12.64. Transit SNR 3.68

There are 3 quarters with good PRF difference image offsets

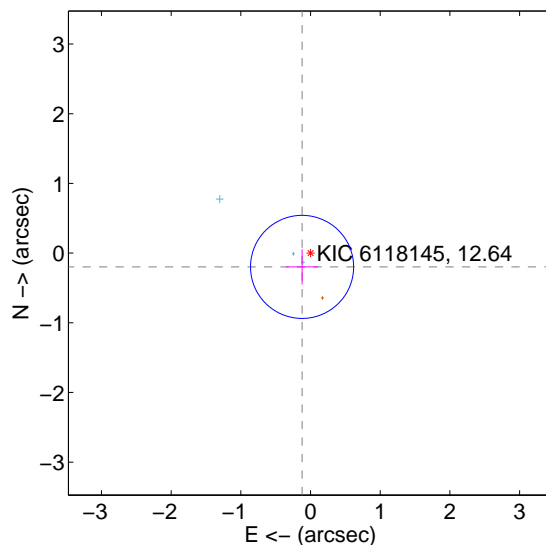
The direct PRF centroid is offset from the target star catalog position by about 0.12 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.144 ± 0.238	0.61	0.104 ± 0.229	-0.100 ± 0.246
PRF-fit source offset from KIC position	0.232 ± 0.247	0.94	0.121 ± 0.229	-0.198 ± 0.253
photometric centroid source offset	0.63 ± 0.76	0.83	-0.02 ± 0.87	-0.63 ± 0.76

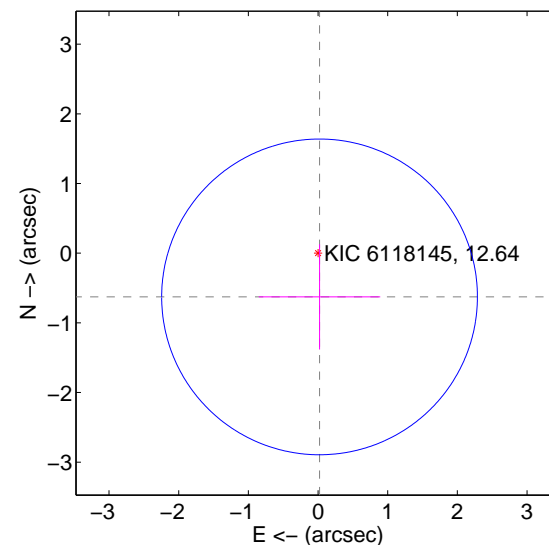
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position



offset from photometric centroids

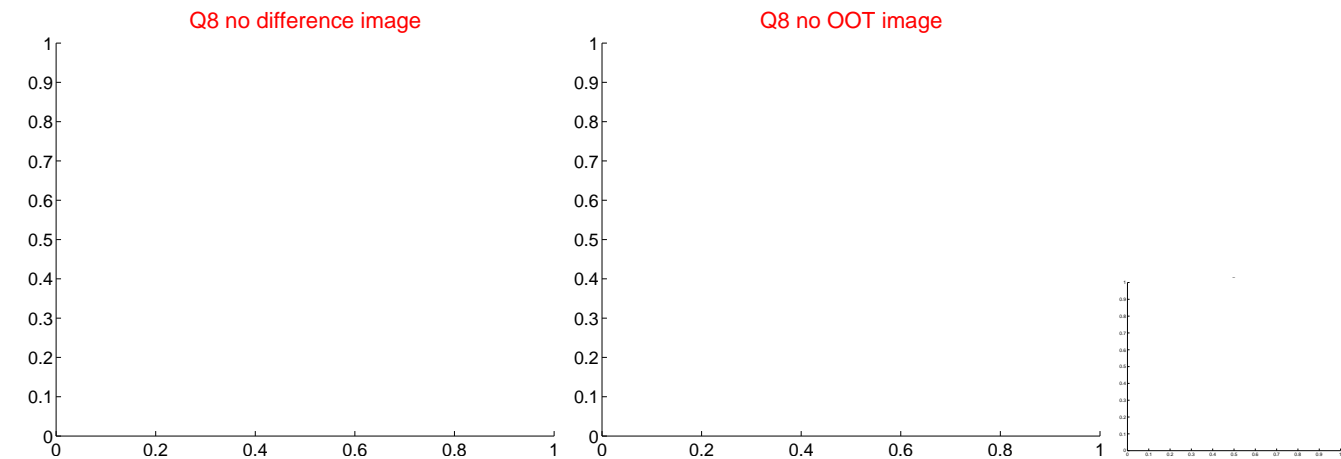
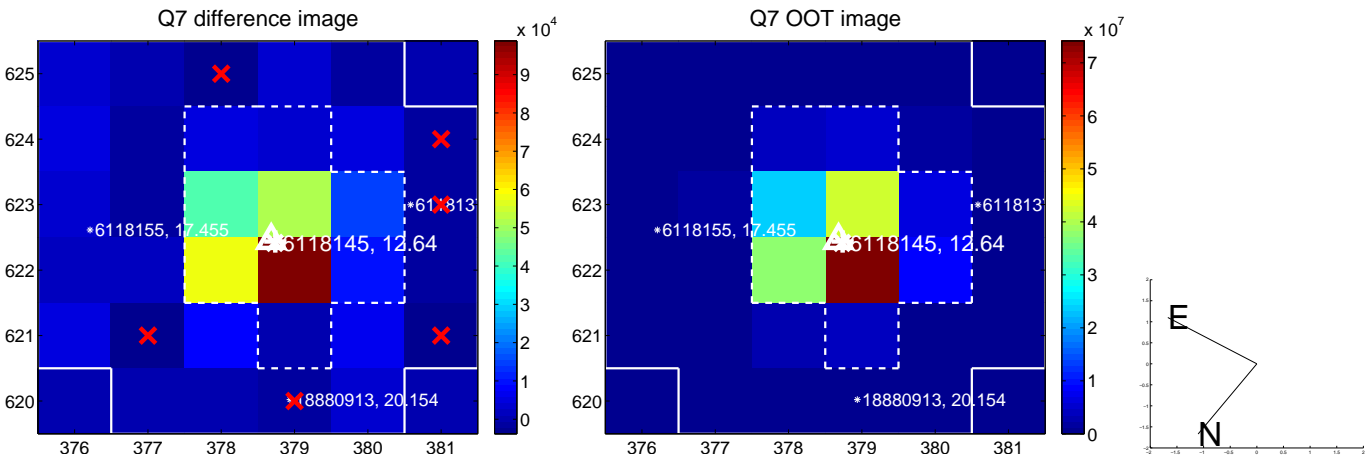


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ . Red *: target star. Blue *: Other stars. Text next to a star gives its KIC ID and kepmag. KIC IDs > 15,000,000 are from the UKIRT catalog.

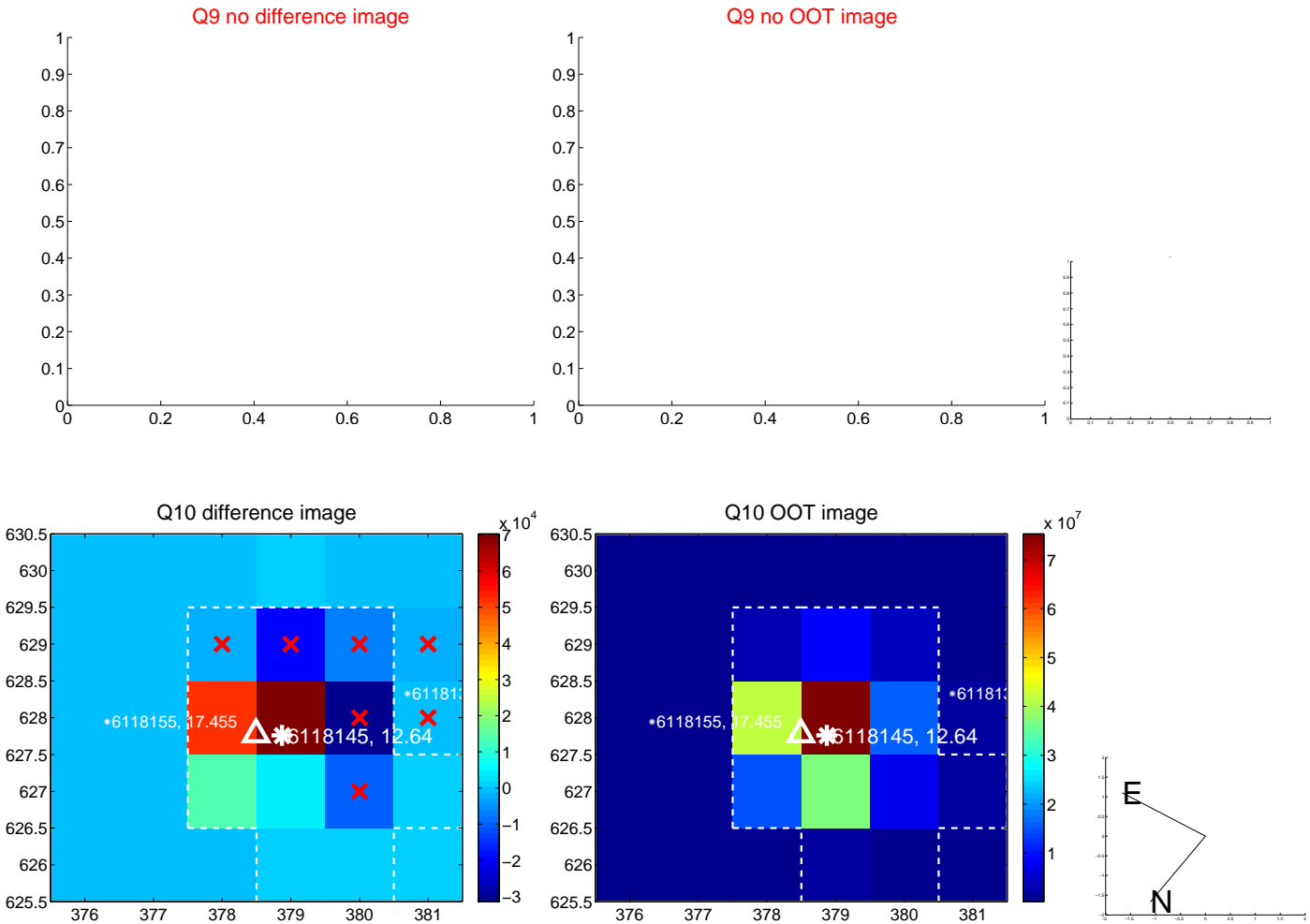
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



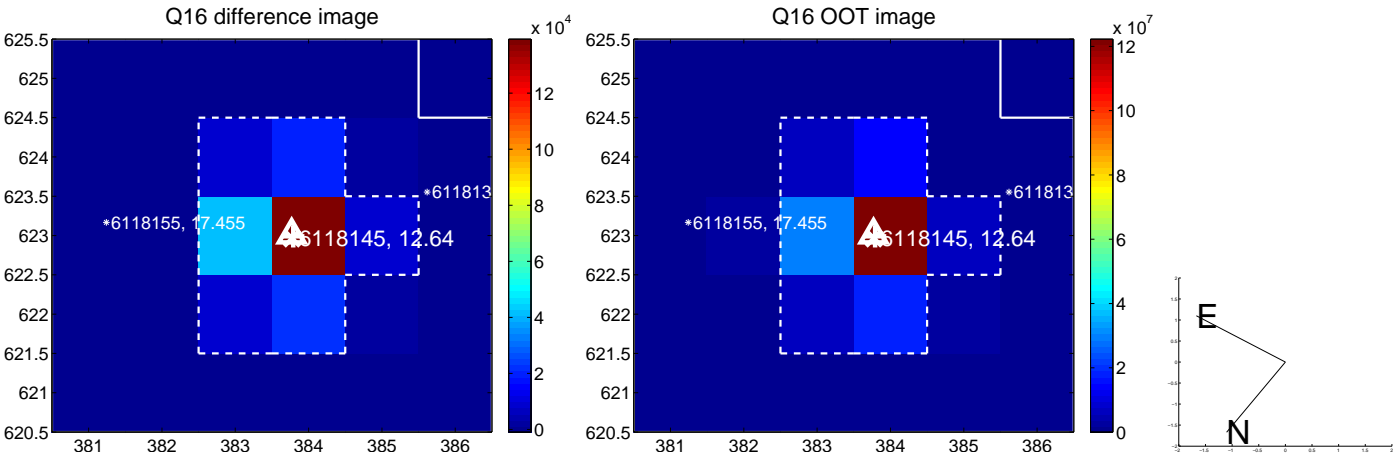
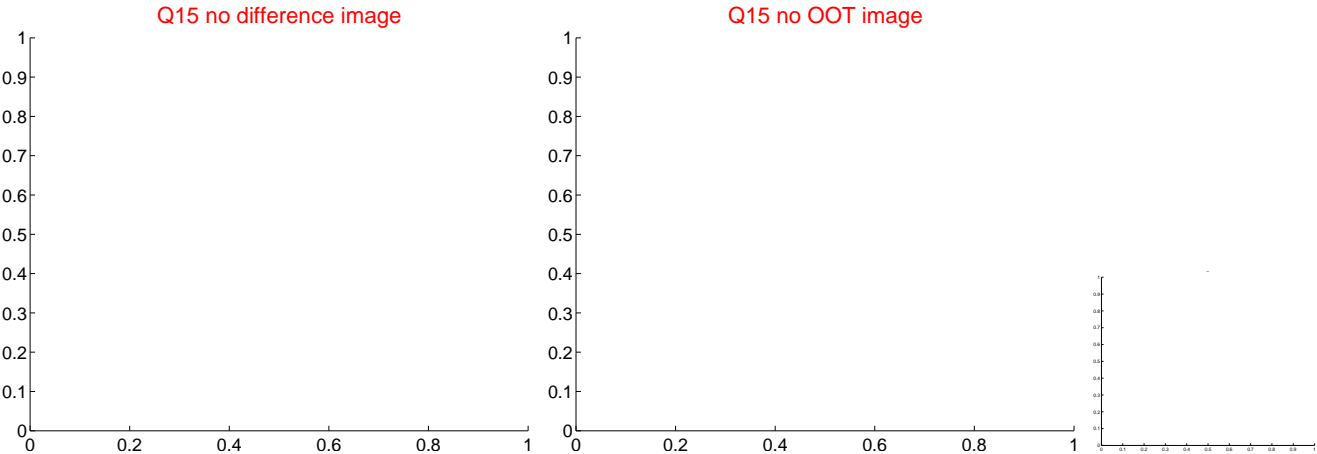
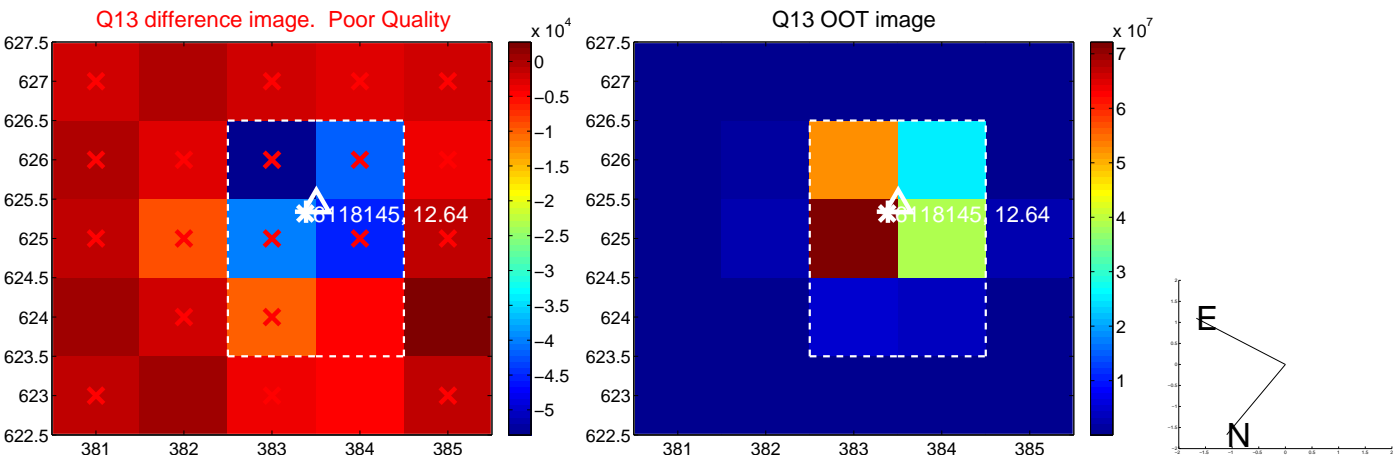
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



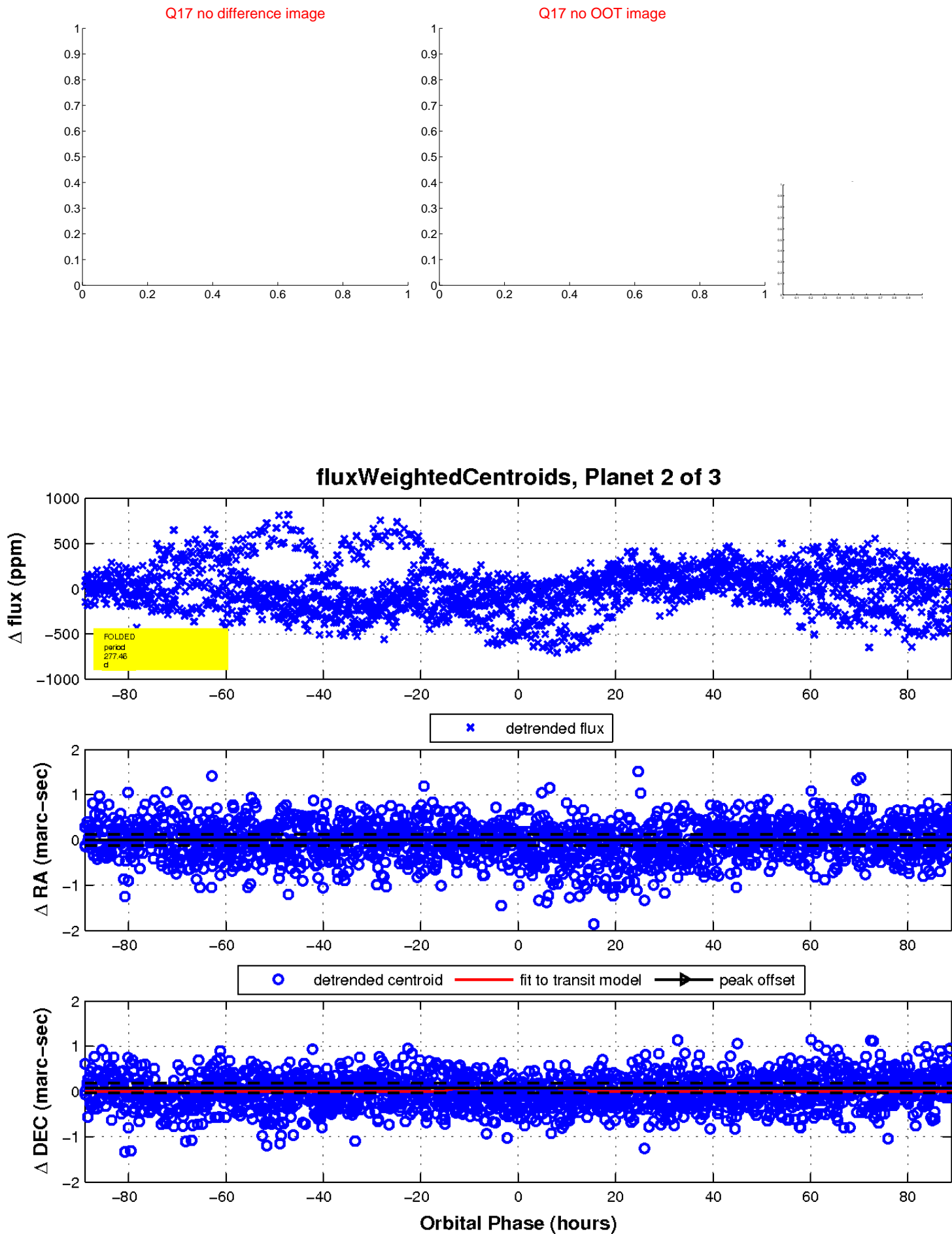
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.

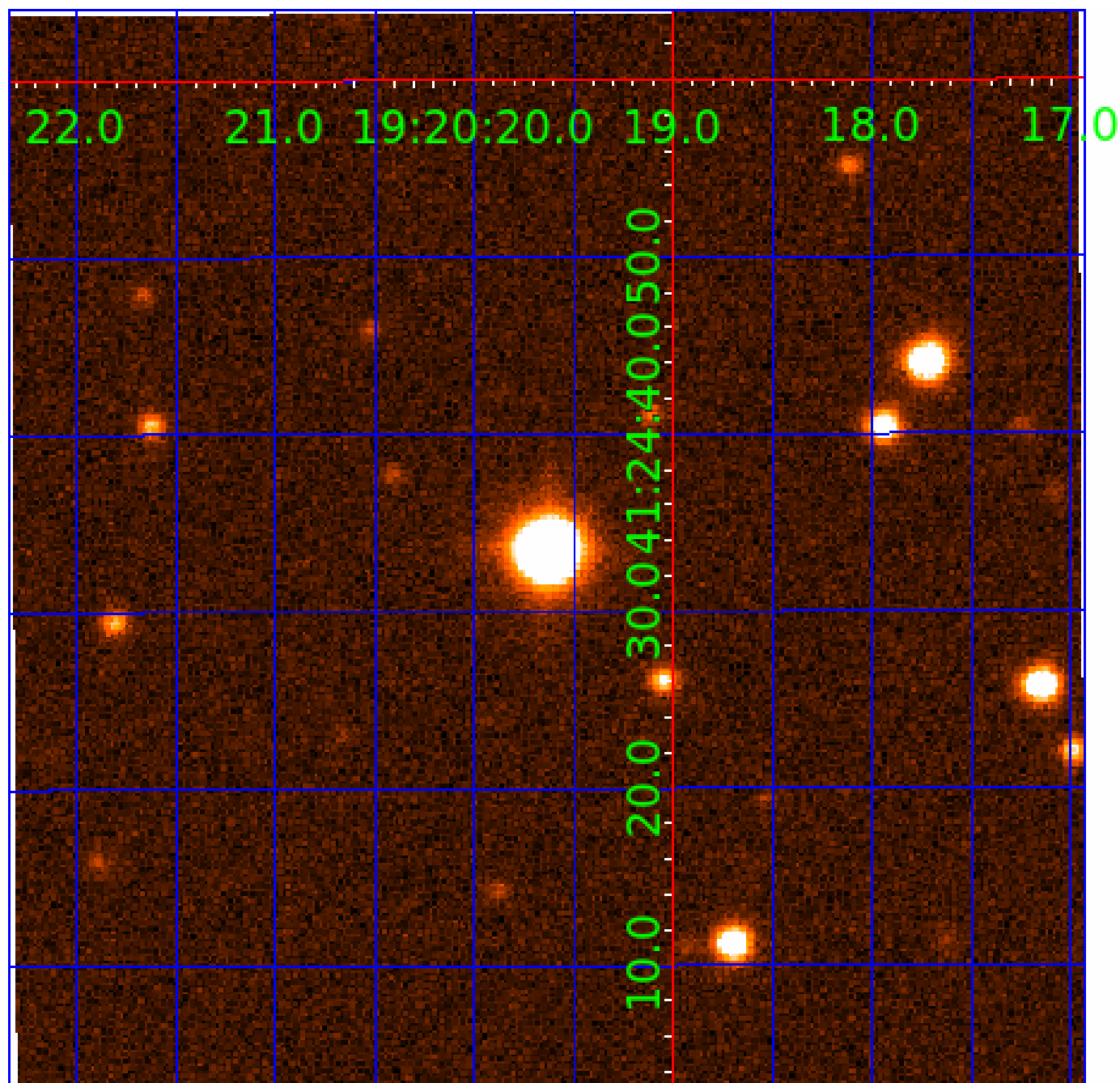


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 006118145

Q1-17 DR25 TCE Parameters

TCE	Run Type	KOI?	Period (Days)	Epoch (BKJD)	Depth (ppm)	Duration (Hours)	MES	SNR	R_{\star} (R_{\odot})	T_{\star} (K)	R_p (R_{\oplus})	S_p (S_{\oplus})
006118145-01	OBS	No	1.813380	131.695848	16.9	5.394	8.1	7.8	1.24	6571	0.65	2812.43
006118145-02	OBS	No	277.459704	403.654226	140.8	29.670	14.4	3.7	1.24	6571	1.55	3.44
006118145-03	OBS	No	488.865839	390.293295	424.1	4.253	12.7	10.0	1.24	6571	2.79	1.61

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006118145-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—MOD_NONUNIQ_DV
006118145-02	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_MARSHALL—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—HALO_GHOST
006118145-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES_MARSHALL_SKYE_TRACKER—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS

Notes: OBS = Observed. INJ = Injected. INV = Inverted. SCR = Scrambled.

N = Not Transit-Like. S = Stellar Eclipse. C = Centroid Offset. E = Ephemeris Match.

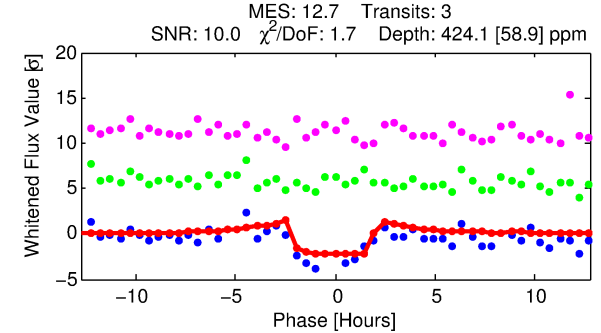
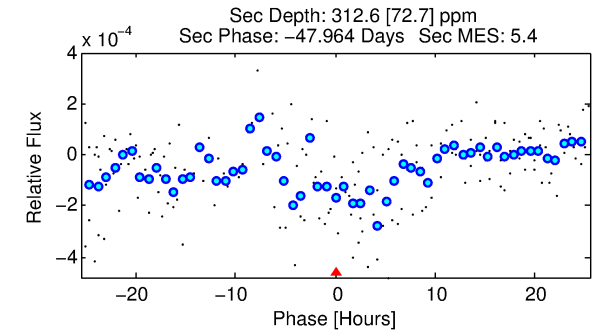
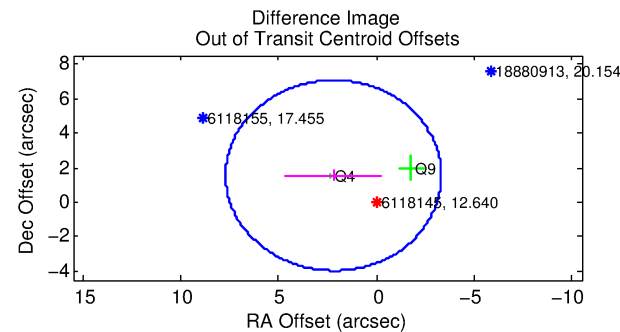
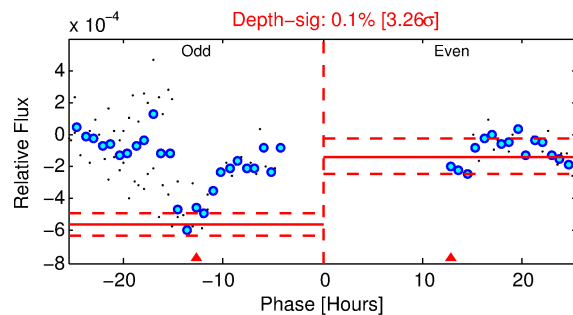
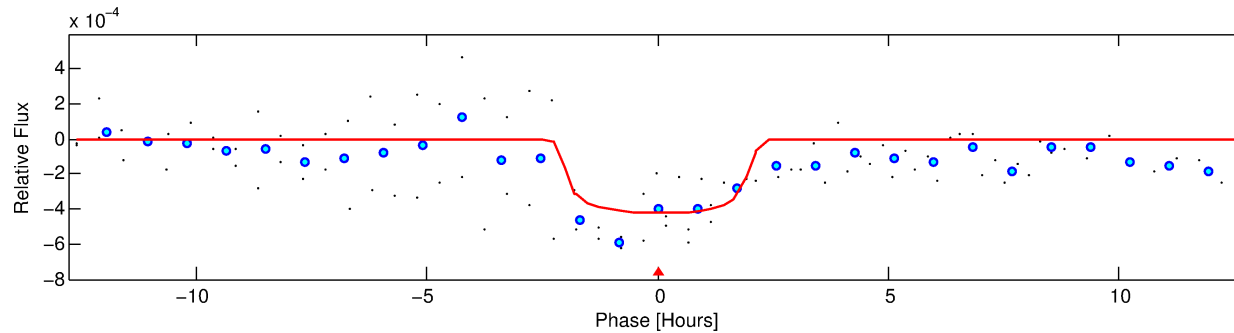
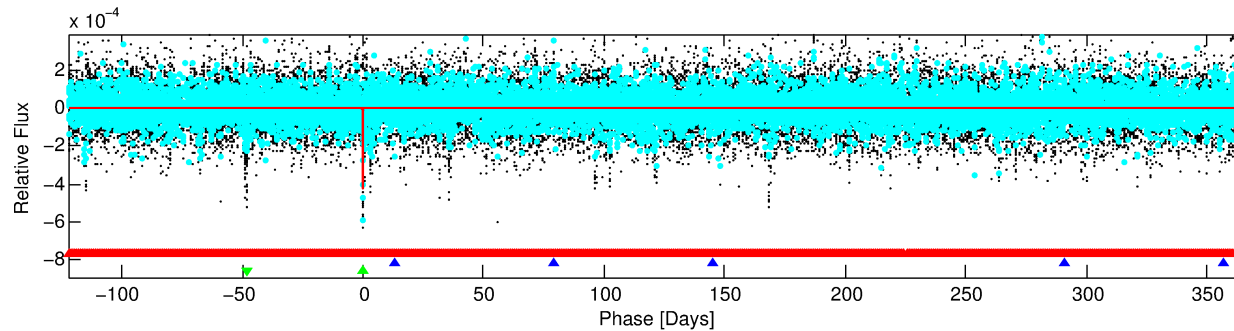
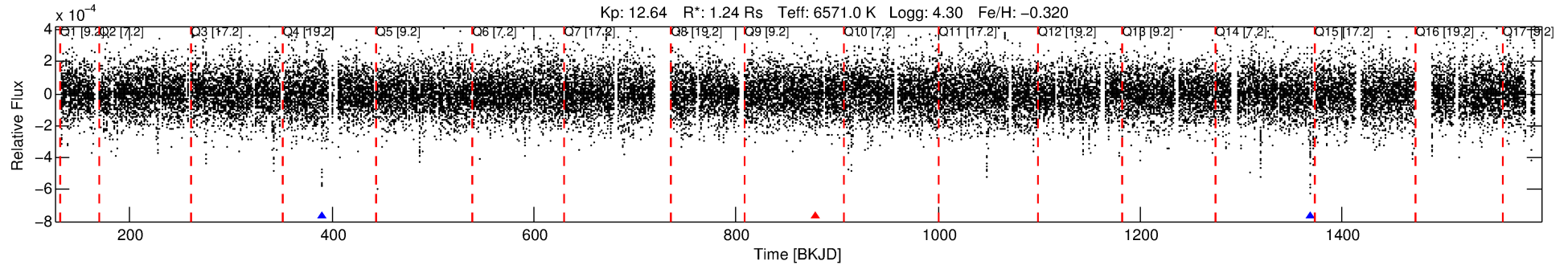
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006118145-03

No Significant Match Found

DV One-Page Summary

KIC: 6118145 Candidate: 3 of 3 Period: 488.866 d



DV Fit Results:

Period = 488.86584 [0.00659] d
Epoch = 390.2933 [0.0074] BKJD
Rp/R* = 0.0206 [0.0113]
a/R* = 596.03 [1798.31]
b = 0.76 [1.66]
Seff = 1.61 [0.47]
Teq = 287 [21] K
Rp = 2.79 [1.64] Re
a = 1.2642 [0.2308] AU
Ag = 35324.72 [40643.42] [0.87 σ]
Teffp = 6093 [1715] K [3.38 σ]

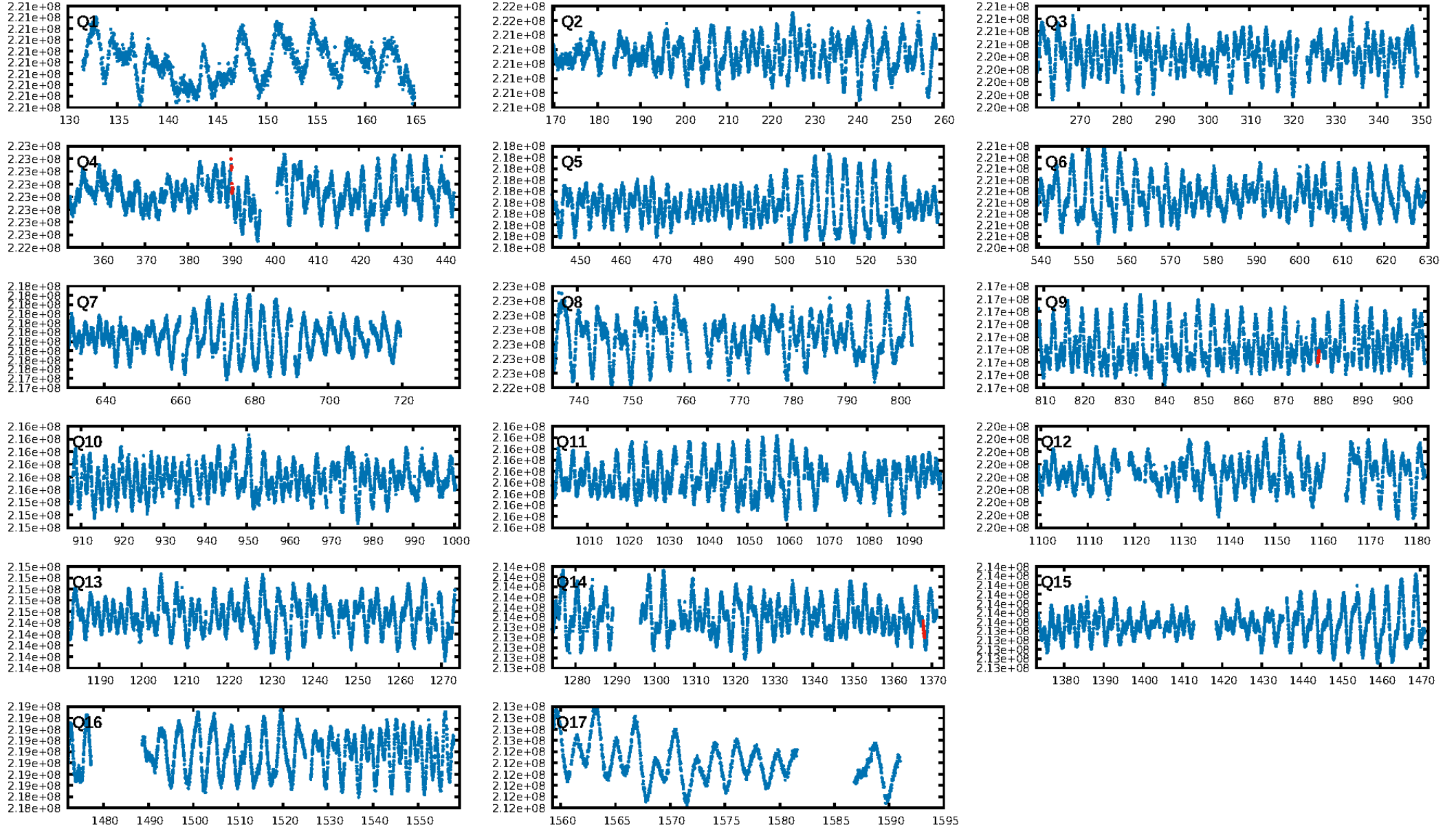
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [169.28 σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 40.0%
Bootstrap-pfa: 3.20e-18
RollingBand-fgt: 0.67 [2/3]
GhostDiagnostic-chr: 1.335
Centroid-sig: 26.7%
Centroid-so: 0.608 arcsec [1.01 σ]
OotOffset-rm: 2.686 arcsec [1.46 σ]
OotOffset-st: 0/0/1/1 [2]
KicOffset-rm: 2.615 arcsec [3.06 σ]
KicOffset-st: 0/0/1/1 [2]
DiffImageQuality-fgm: 1.00 [2/2]
DiffImageOverlap-fno: 0.33 [1/3]

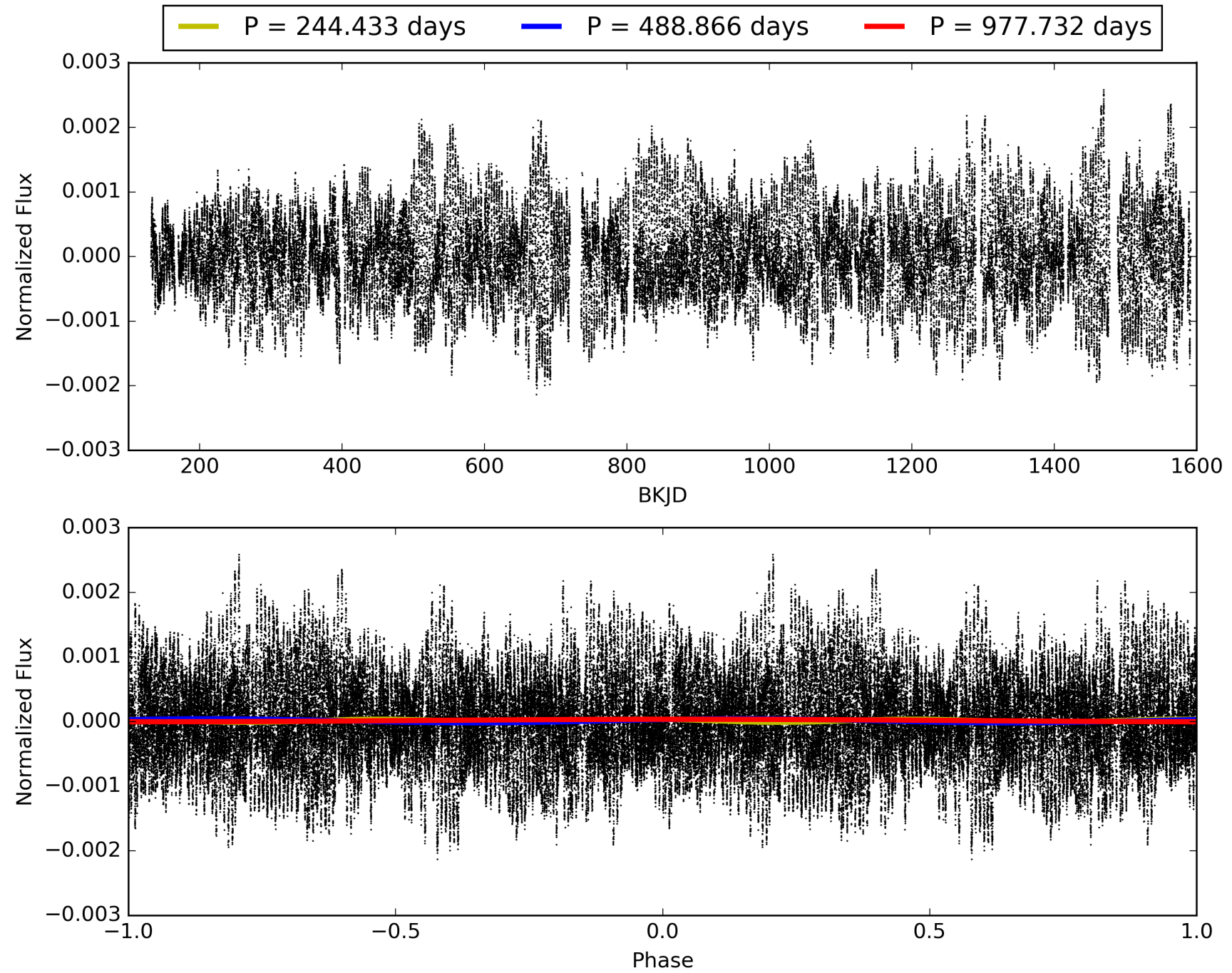
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 09:05:40 Z

This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

TCE 006118145-03, PDC Light Curves

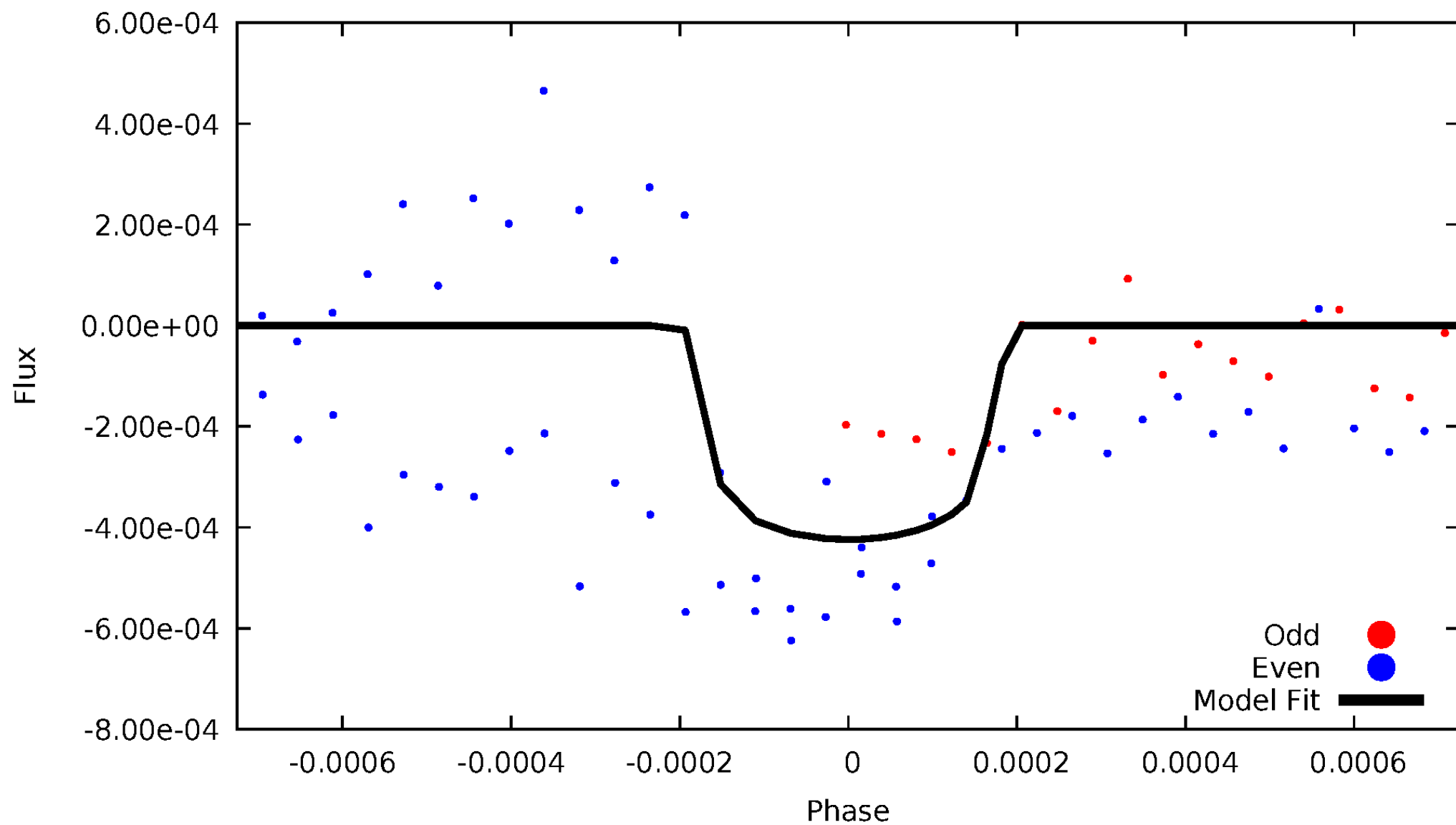


TCE 006118145-03



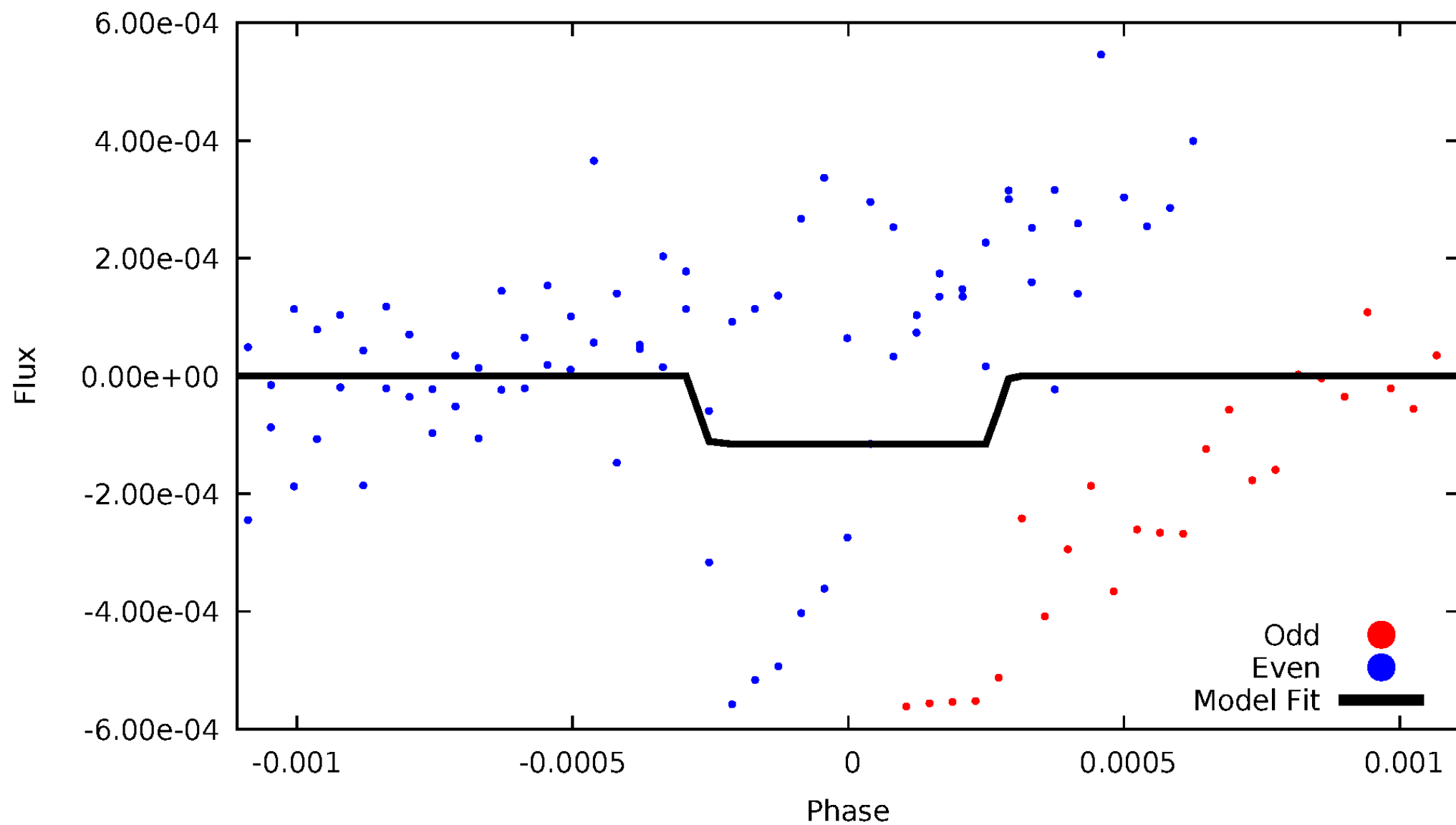
DV Odd/Even

TCE 006118145-03

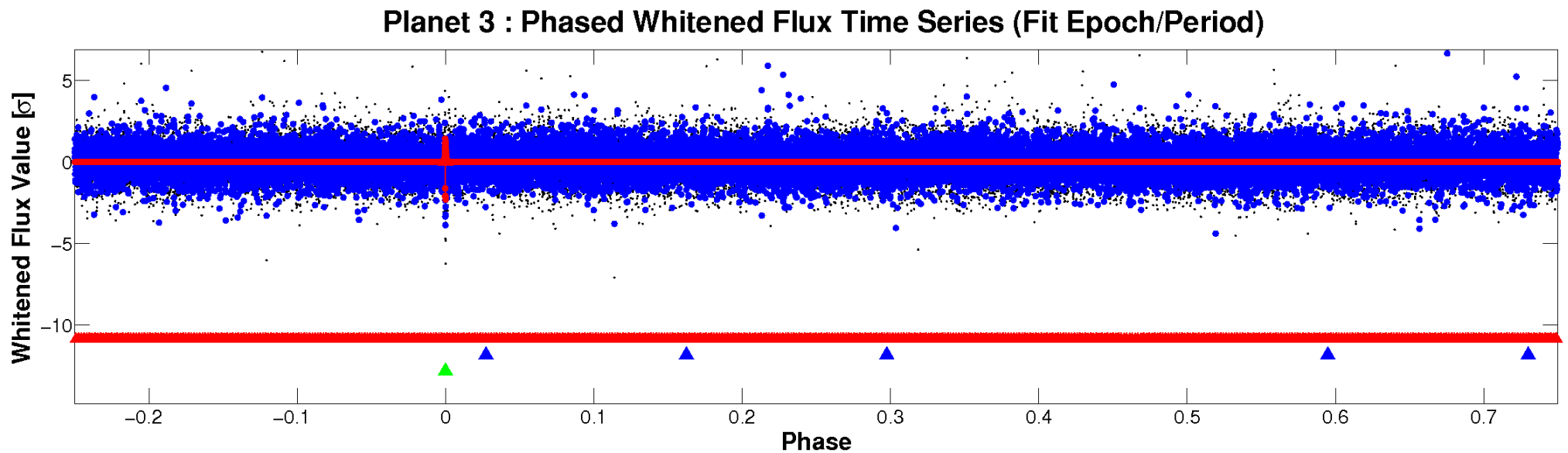
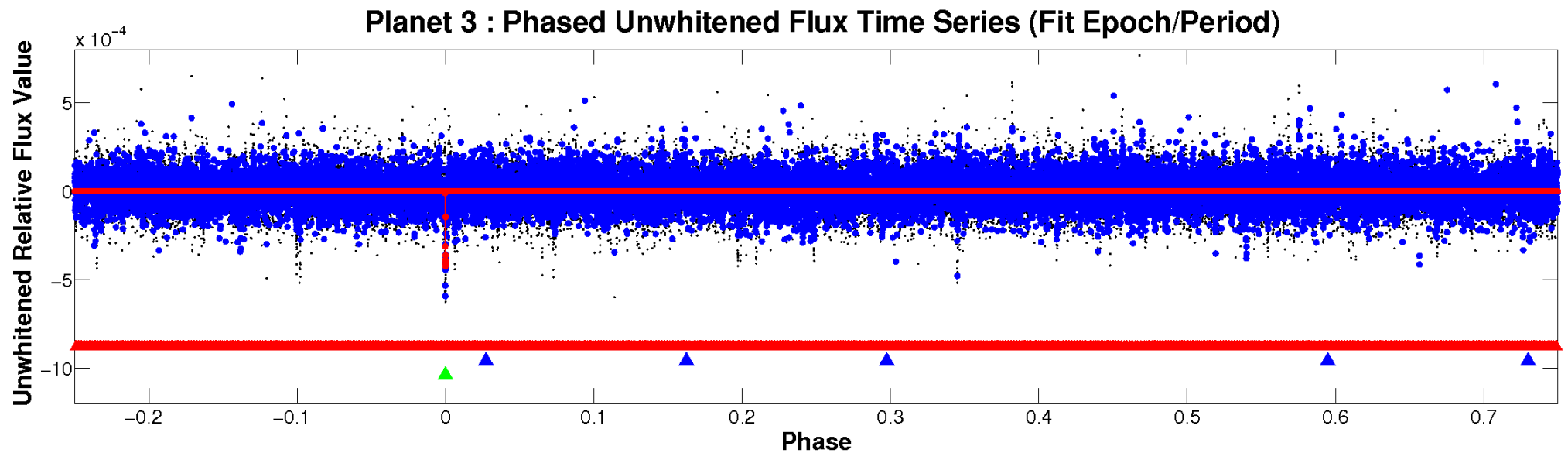


ALT Odd/Even

TCE 006118145-03

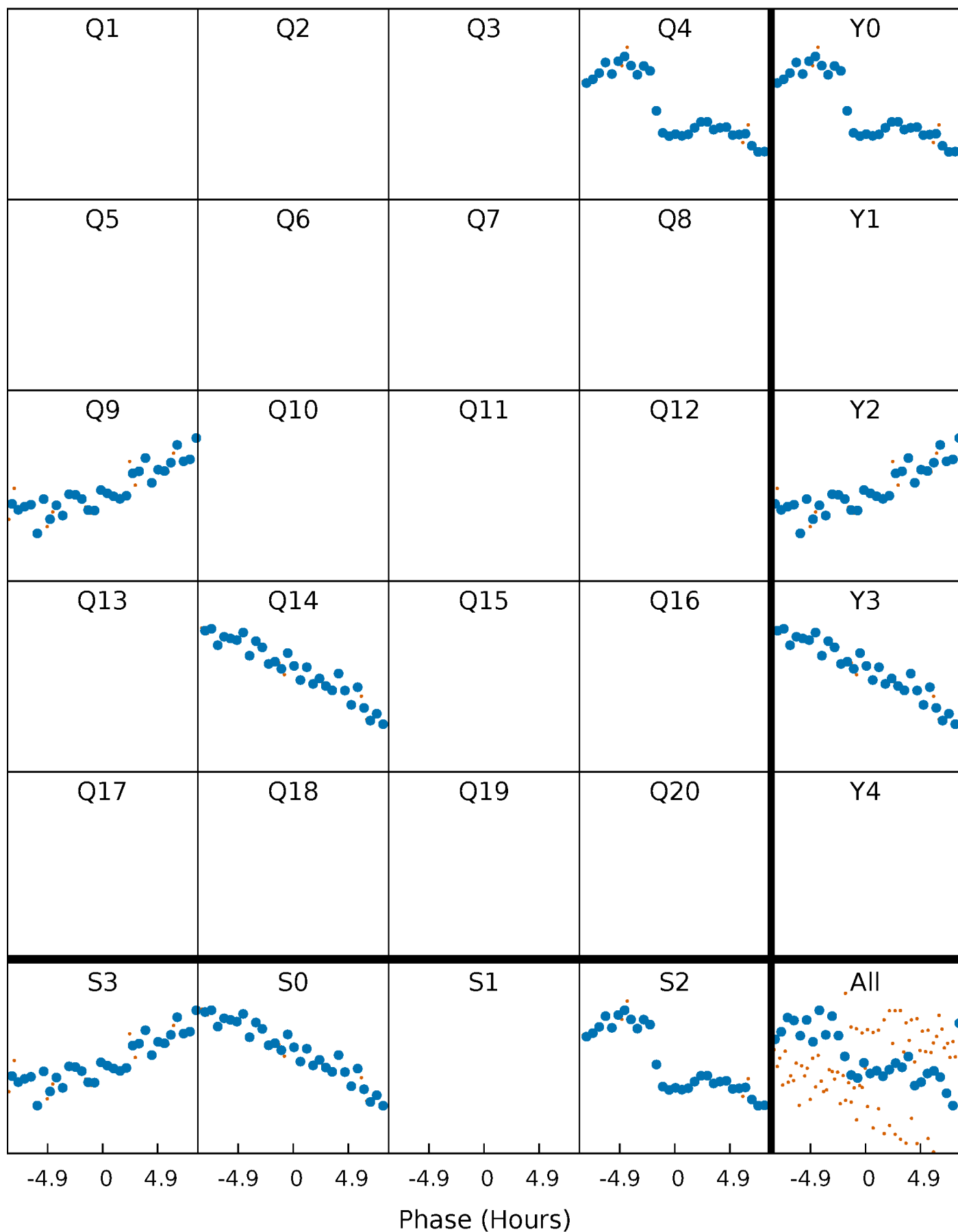


Non-Whitened Vs. Whitened Light Curve



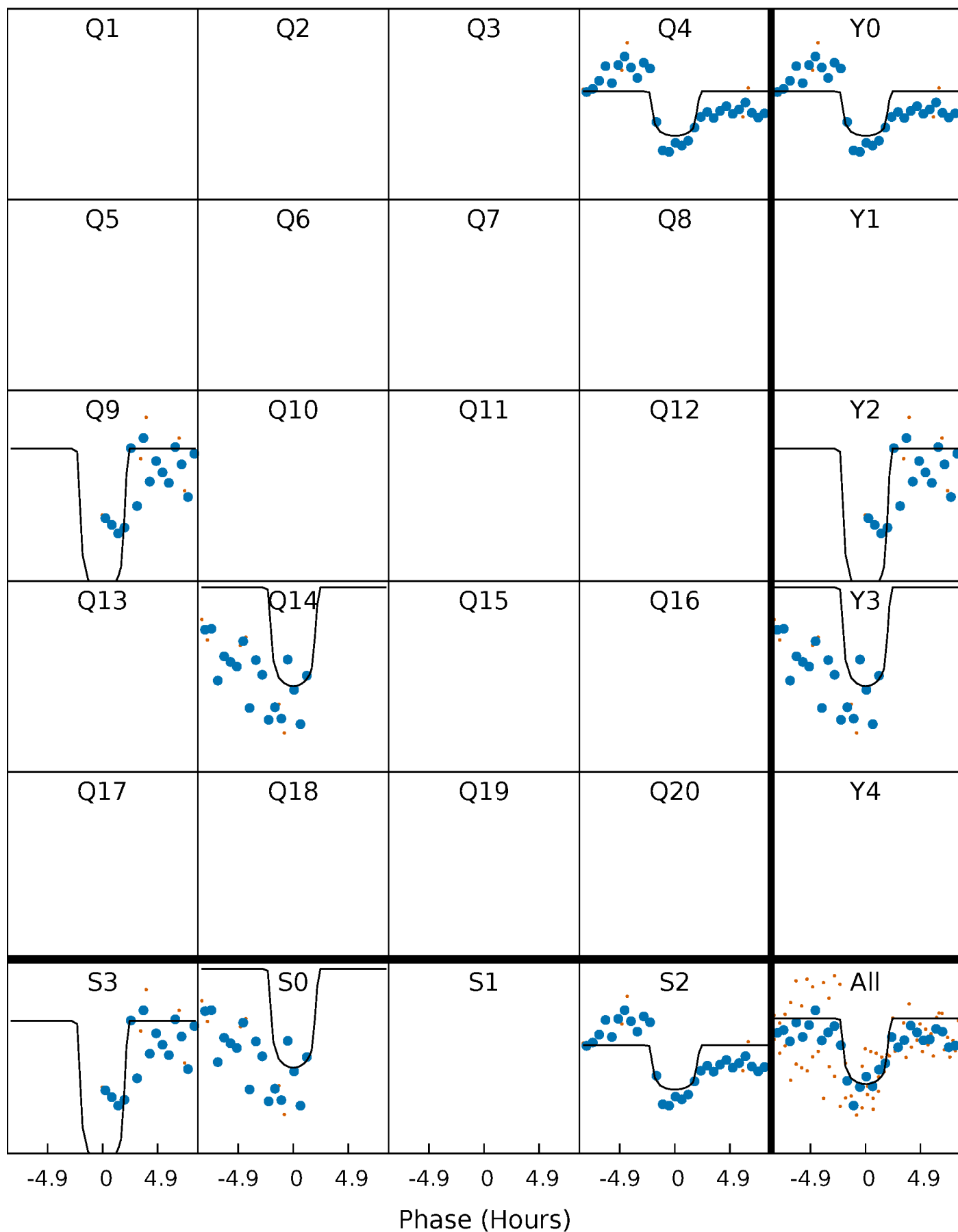
PDC Quarter-Phased Transit Curves

TCE 006118145-03 P=488.865839 Days $T_0=390.293295$ (BKJD)



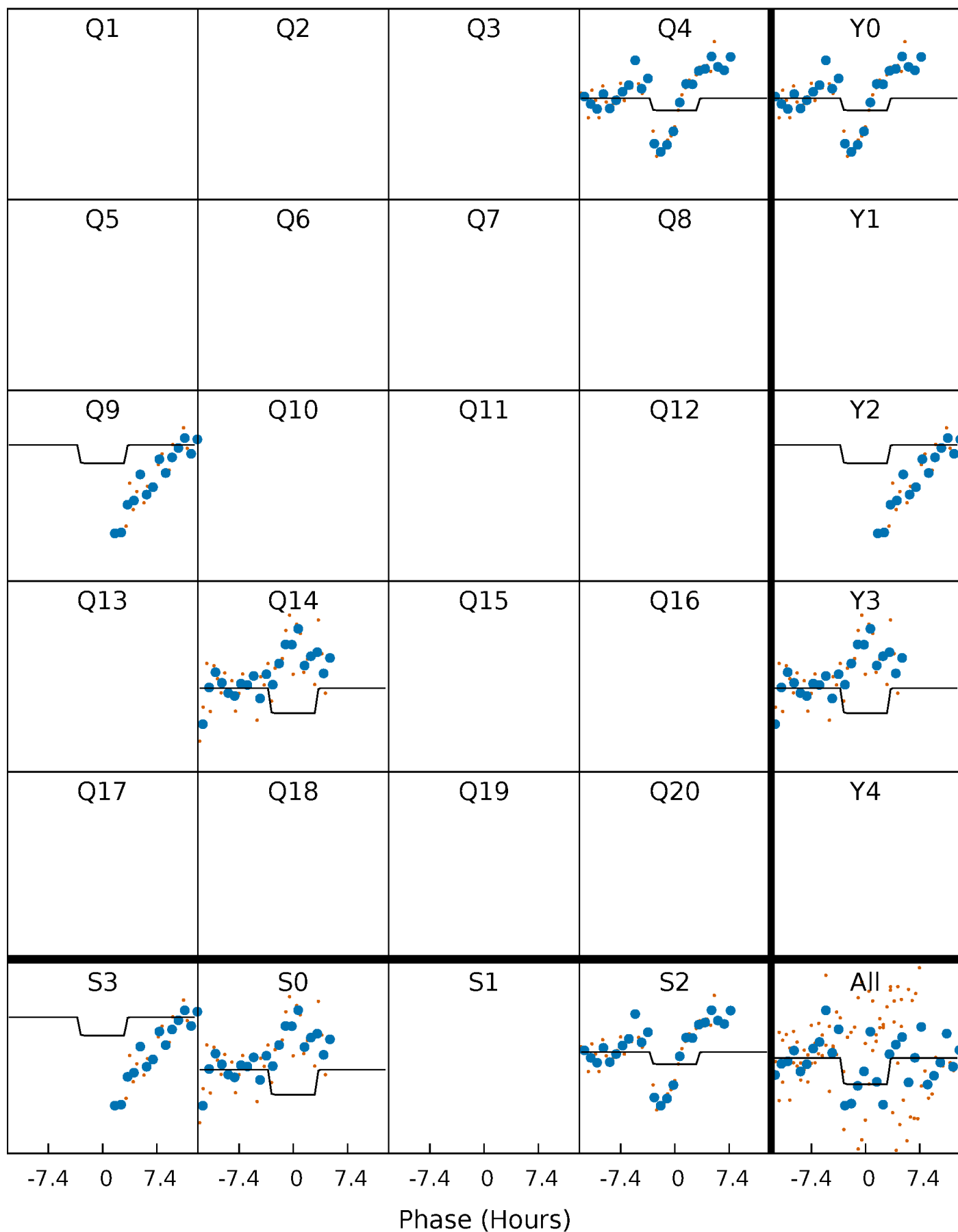
DV Quarter-Phased Transit Curves

TCE 006118145-03 P=488.865839 Days $T_0=390.293295$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

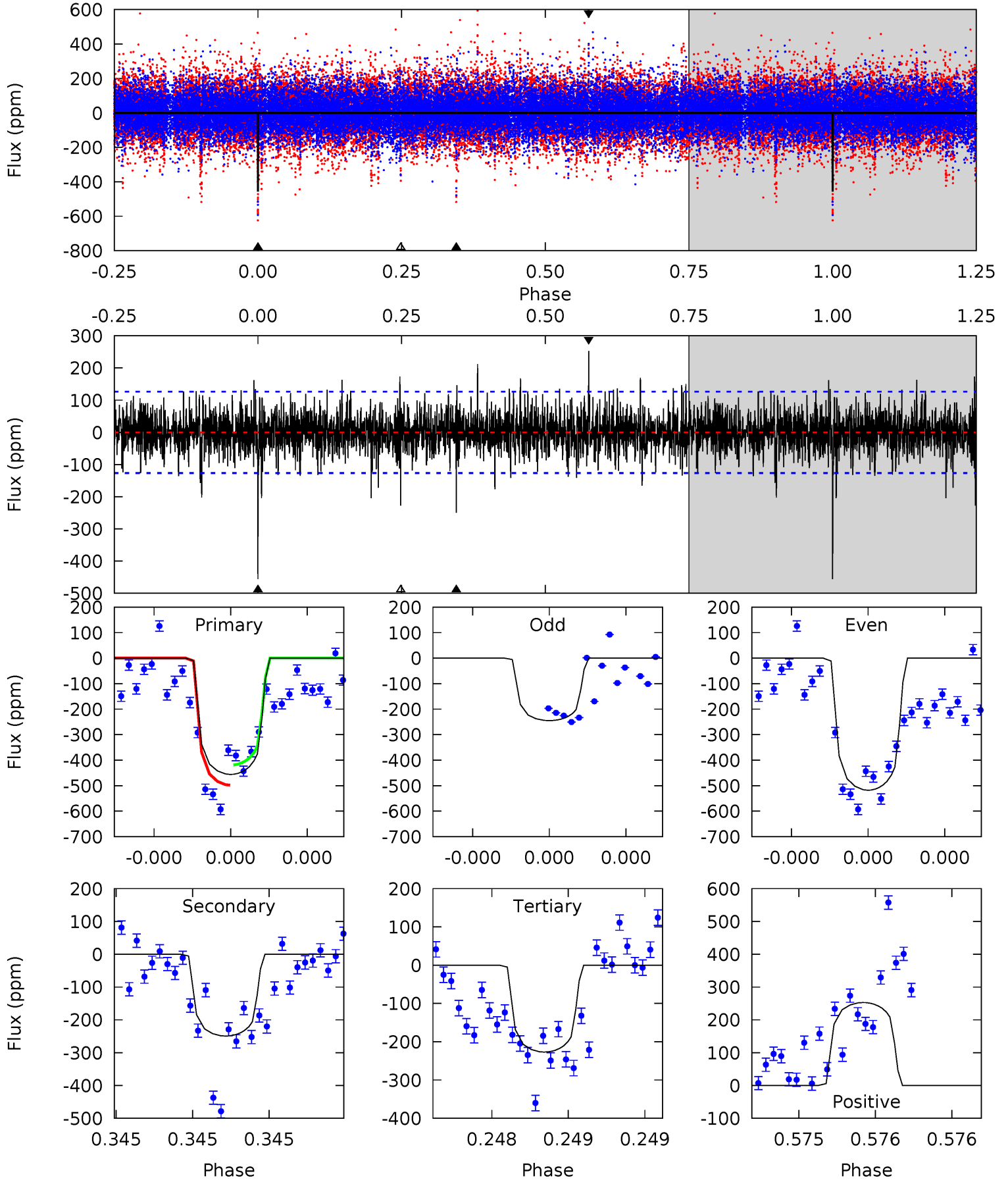
TCE 006118145-03 P=488.763944 Days $T_0=390.342270$ (BKJD)



DV Model-Shift Uniqueness Test

006118145-03, P = 488.865839 Days, E = 390.293295 Days

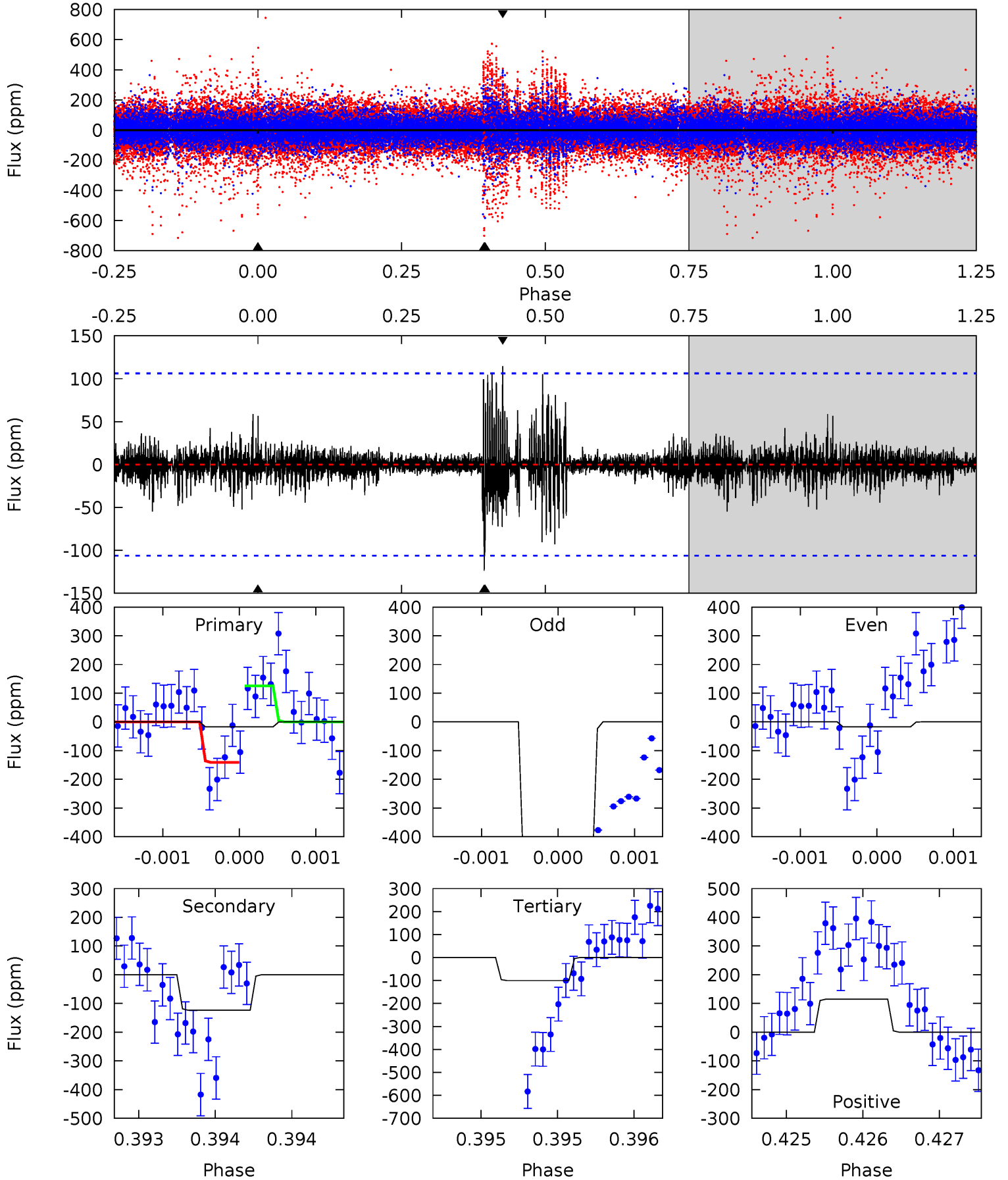
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
20.2	11.0	10.1	11.2	5.61	3.54	1.96	10.1	8.99	0.99	-0.16	5.02	0.84	0.36	1.70



Alt Model-Shift Uniqueness Test

006118145-03, P = 488.763944 Days, E = 390.342270 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0.92	6.46	5.24	5.99	5.55	3.45	0.81	-4.33	-5.07	1.22	0.47	11.8	1.14	0.48	0.42



Stellar Parameters For KIC 006118145

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6571^{+148}_{-198}	$4.301^{+0.096}_{-0.144}$	$-0.320^{+0.250}_{-0.300}$	$1.243^{+0.271}_{-0.181}$	$1.129^{+0.153}_{-0.139}$	$0.828^{+0.407}_{-0.318}$
	+2%/-3%	+2%/-3%	+78%/-94%	+22%/-15%	+14%/-12%	+49%/-38%
Source	PHO1	FLK73	KIC0	DSEP		

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

Secondary Eclipse Parameters for KIC 006118145-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-249 ± 23	$2.77^{+1.60}_{-1.32}$	405^{+20}_{-20}	5812^{+2564}_{-1052}	29289^{+74929}_{-18090}
Alt.	-124 ± 19	$1.88^{+1.47}_{-1.25}$	403^{+22}_{-20}	5968^{+5577}_{-1401}	$31341^{+229707}_{-22030}$

T_{max} = Theoretical Maximum Planetary Temperature

T_{obs} = Observed Planetary Temperature (Assuming $A=0.3$)

A_{obs} = Observed Albedo (Assuming $T=0$)

If a secondary eclipse is present, the system is likely an EB if $T_{\text{obs}} \gg T_{\text{max}}$ AND $A_{\text{obs}} \gg 1.0$

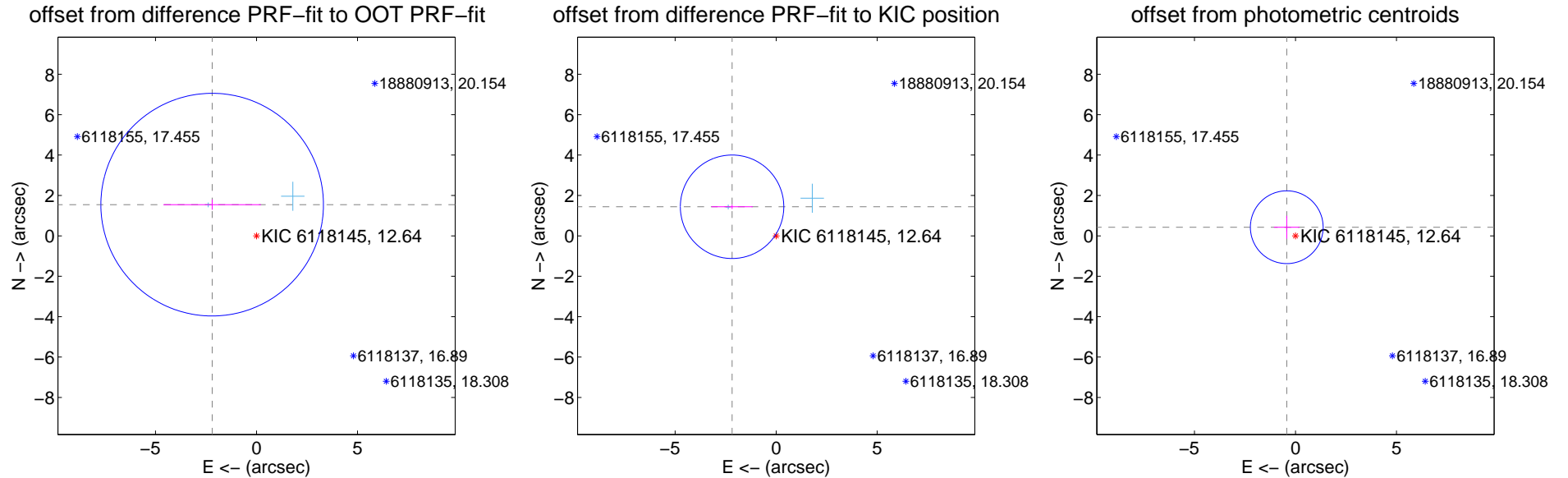
DV Centroid Data

Supplemental centroid analysis for 006118145-03. Kepler magnitude: 12.64. Transit SNR 9.96

There are 2 quarters with good PRF difference image offsets

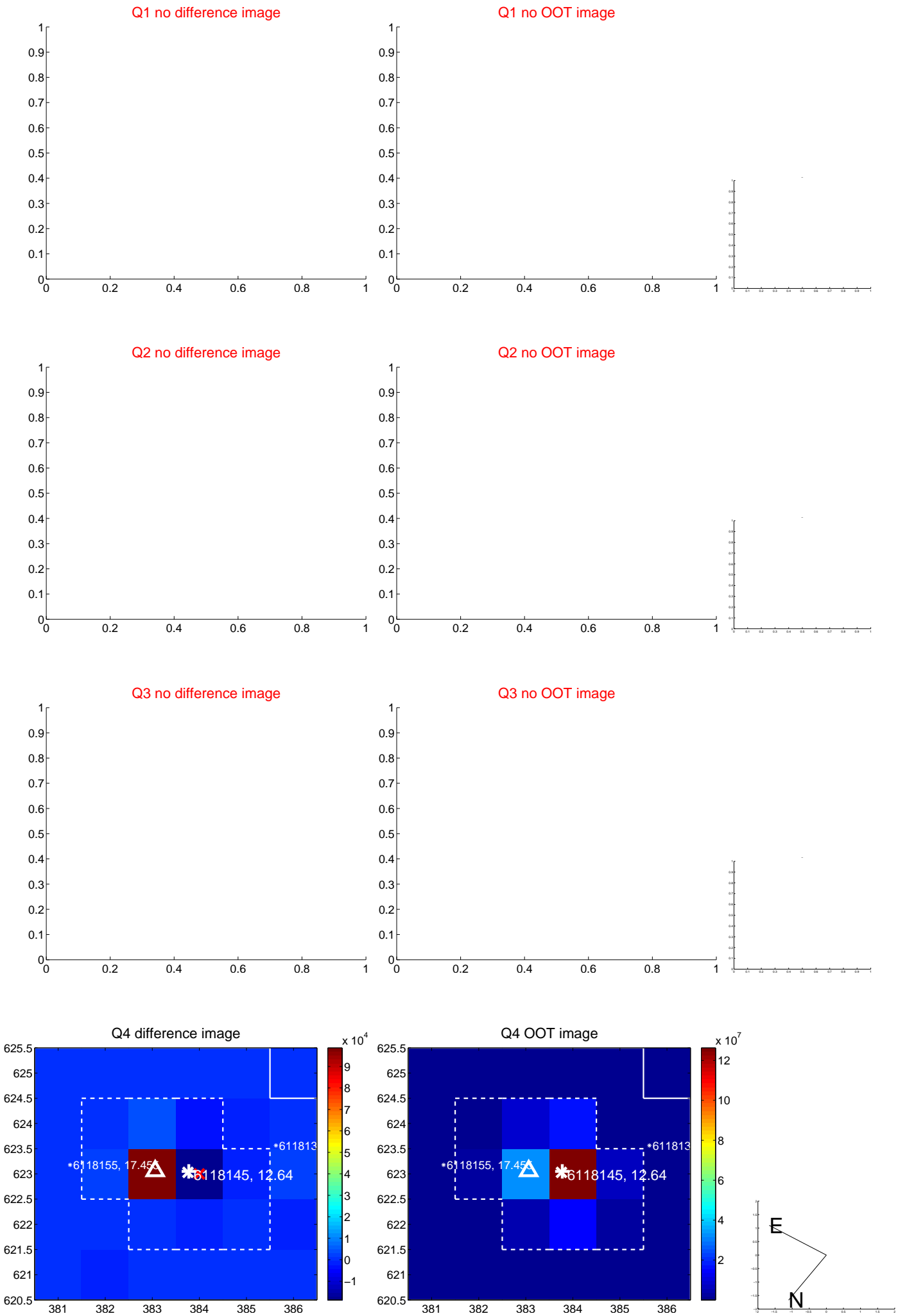
The direct PRF centroid is offset from the target star catalog position by about 0.10 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.686 ± 1.837	1.46	2.197 ± 2.418	1.545 ± 0.255
PRF-fit source offset from KIC position	2.615 ± 0.854	3.06	2.183 ± 1.021	1.440 ± 0.105
photometric centroid source offset	0.61 ± 0.60	1.01	0.43 ± 0.63	0.43 ± 0.57



Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ . Red *: target star. Blue *: Other stars. Text next to a star gives its KIC ID and kepmag. KIC IDs > 15,000,000 are from the UKIRT catalog.

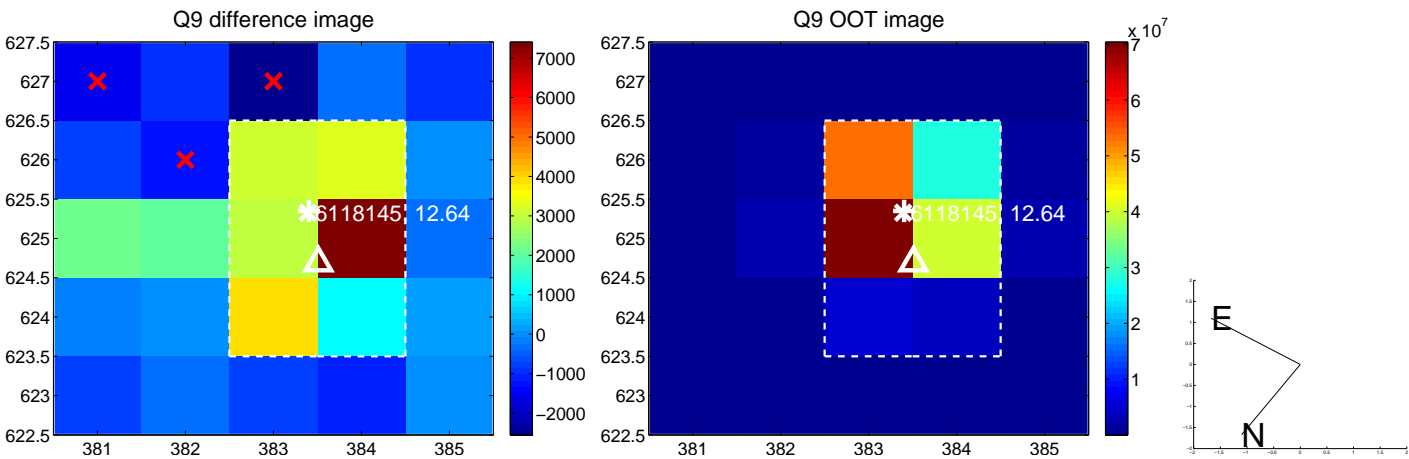
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



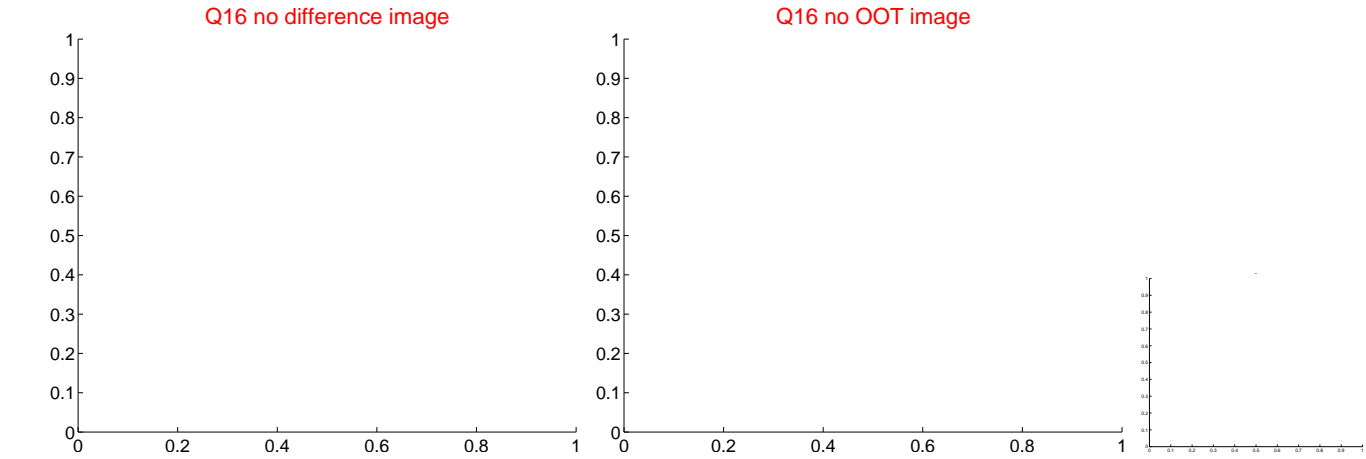
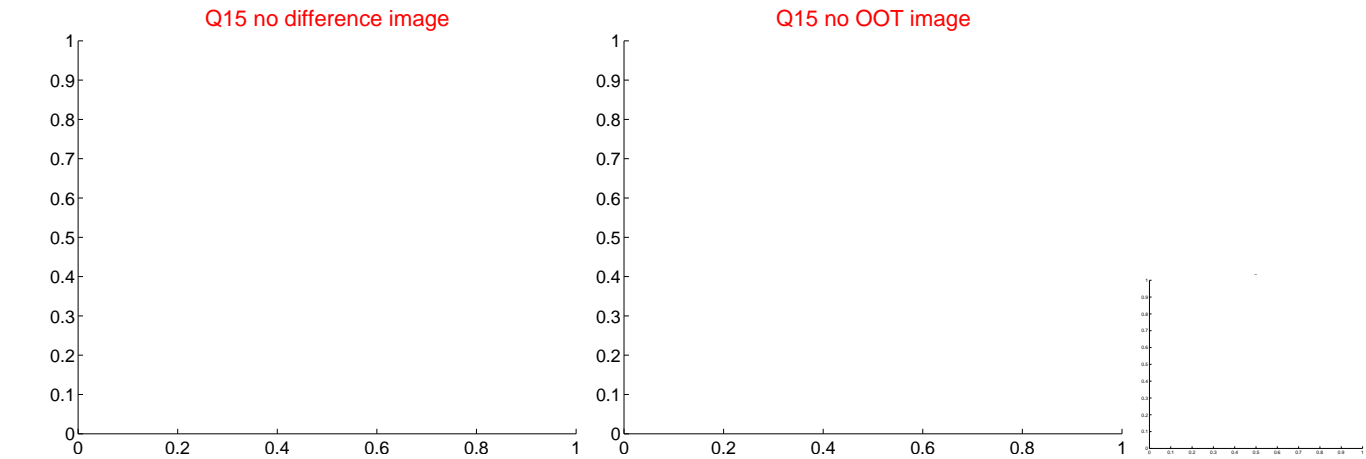
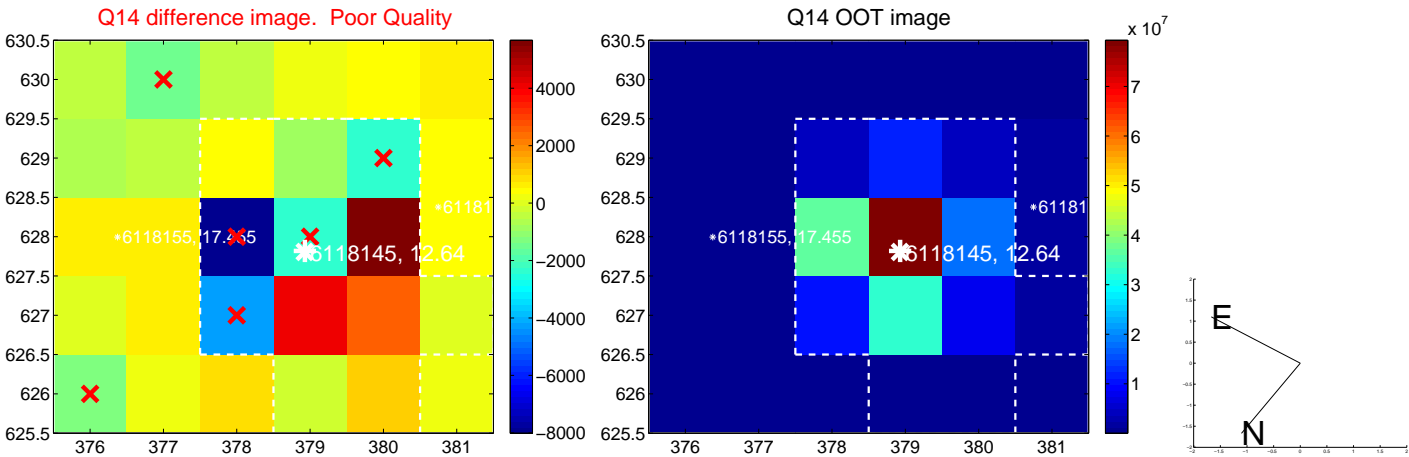
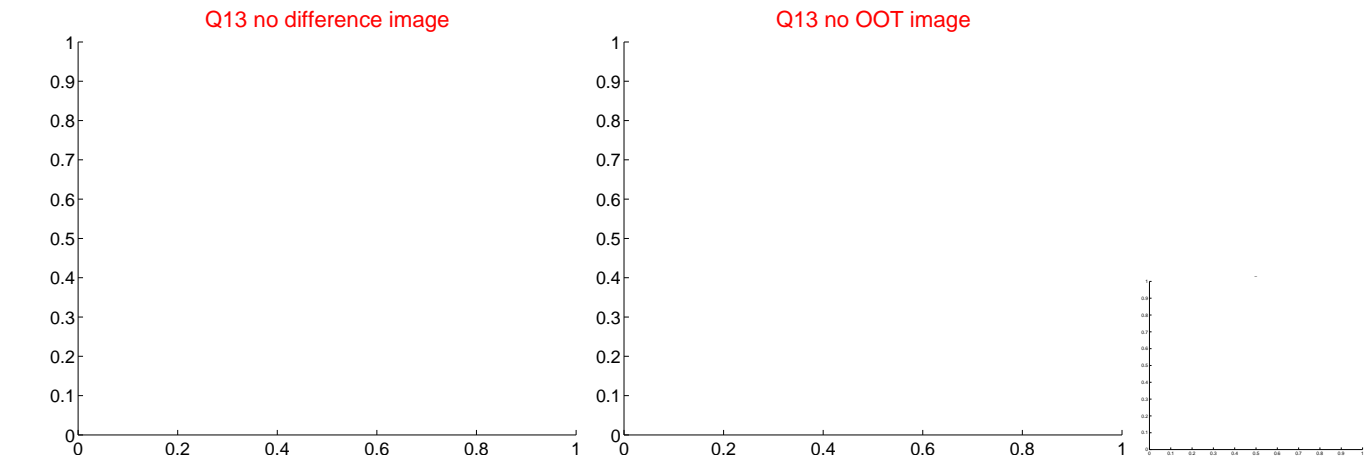
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



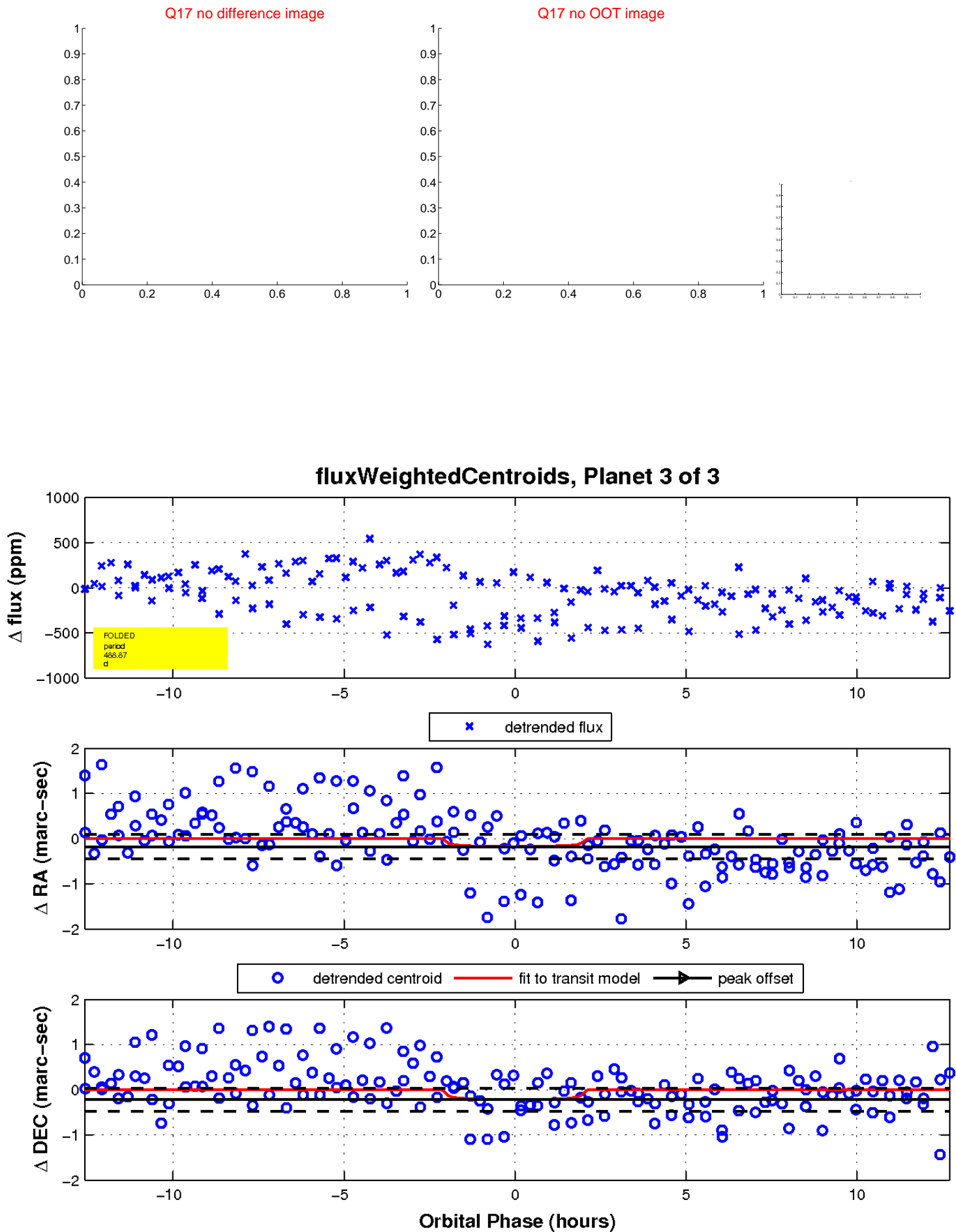
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination

