

KIC 010711551

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})
010711551-01	OBS	3359.01	10.692182	139.956865	378412.1	3.500	9157.4	-1.0	0.94	6022	51.34	115.74
010711551-02	OBS	No	10.692228	134.956298	228493.1	7.121	5789.8	4074.3	0.94	6022	58.06	115.74
010711551-03	OBS	No	4.276988	133.520833	1875.5	32.008	368.7	35.8	0.94	6022	5.25	392.70

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010711551-01	OBS	FP	0.00	1	0	0	0	LPP_DV—CENT_NOFITS
010711551-02	OBS	FP	0.00	1	0	0	0	SAME_NTL_PERIOD
010711551-03	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—CENT_NOFITS

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.

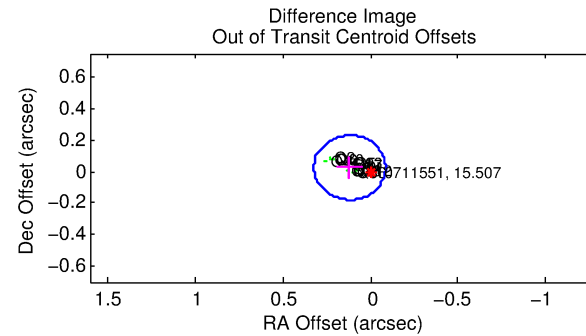
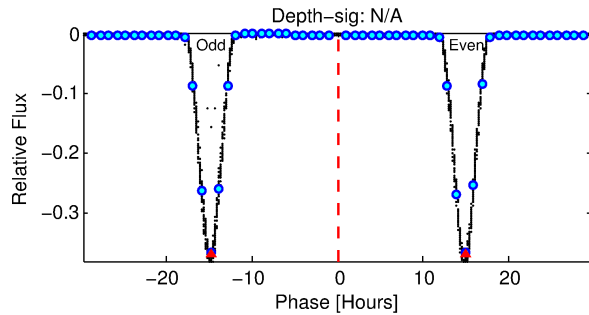
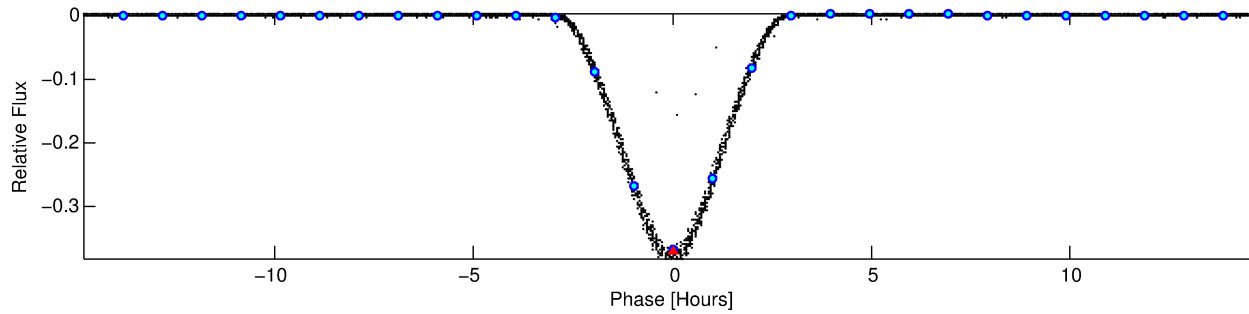
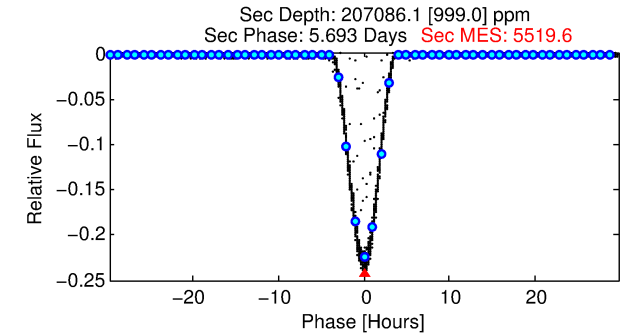
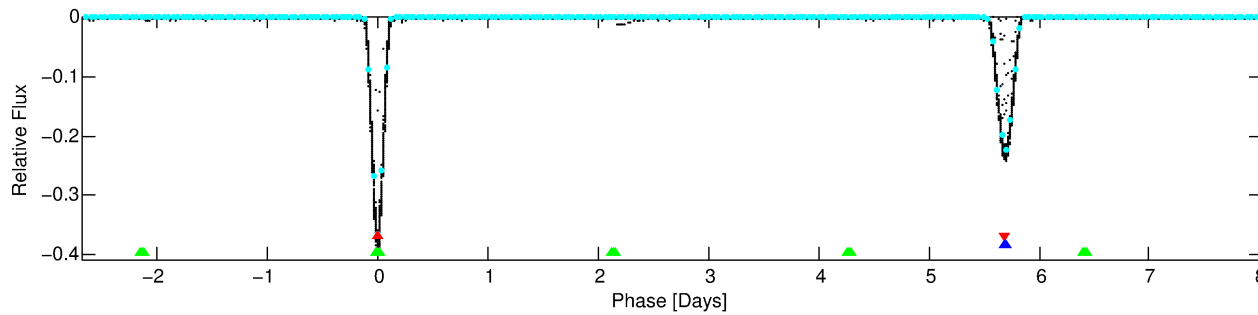
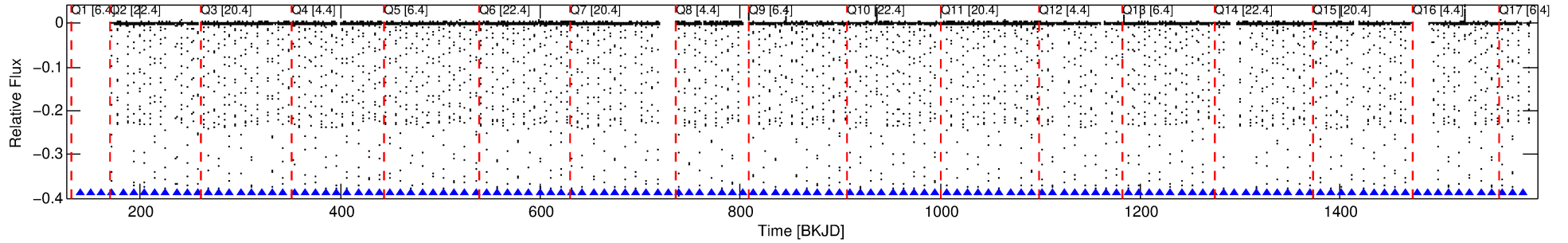
Ephemeris Match Information For 010711551-01

No Significant Match Found

DV One-Page Summary

KIC: 10711551 Candidate: 1 of 3 Period: 10.692 d
KOI: K03359.01 Corr: 0.798

Kp: 15.51 R*: 0.94 Rs Teff: 6022.0 K Logg: 4.49 Fe/H: -0.200



TPS TCE Results:

Period = 10.69218 d
Epoch = 139.9569 BKJD

DV fit results are unavailable

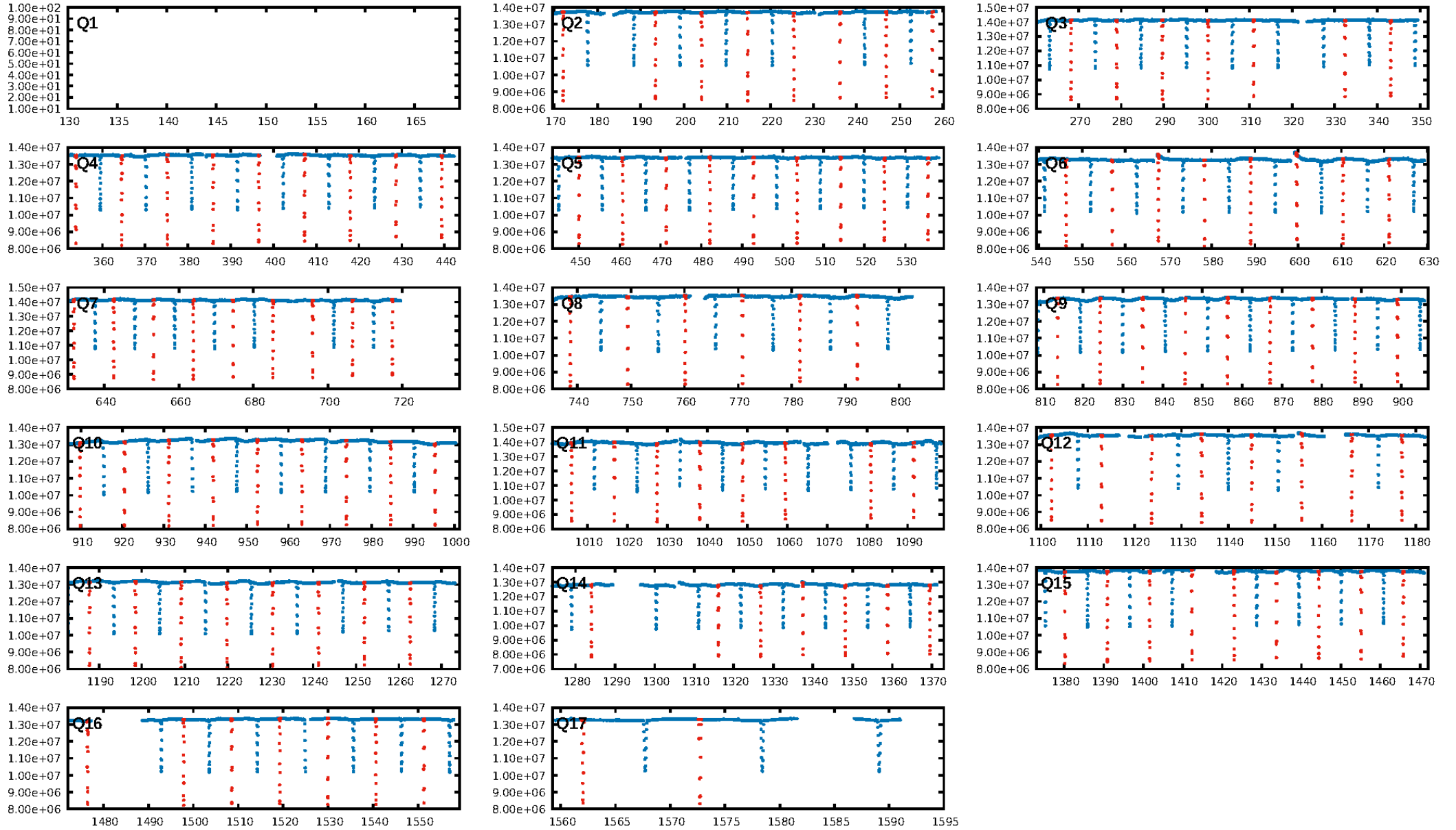
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [4.78 σ]
LongPeriod-sig: 0.0% [0.00 σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [120/120]
GhostDiagnostic-chr: 2.242
Centroid-sig: N/A
Centroid-so: 0.349 arcsec [340.26 σ]
OotOffset-rm: 0.121 arcsec [1.78 σ]
KicOffset-rm: 0.076 arcsec [1.13 σ]
OotOffset-st: 4/4/4/4 [16]
KicOffset-st: 4/4/4/4 [16]
DiffImageQuality-fgm: 1.00 [16/16]
DiffImageOverlap-fno: 1.00 [16/16]

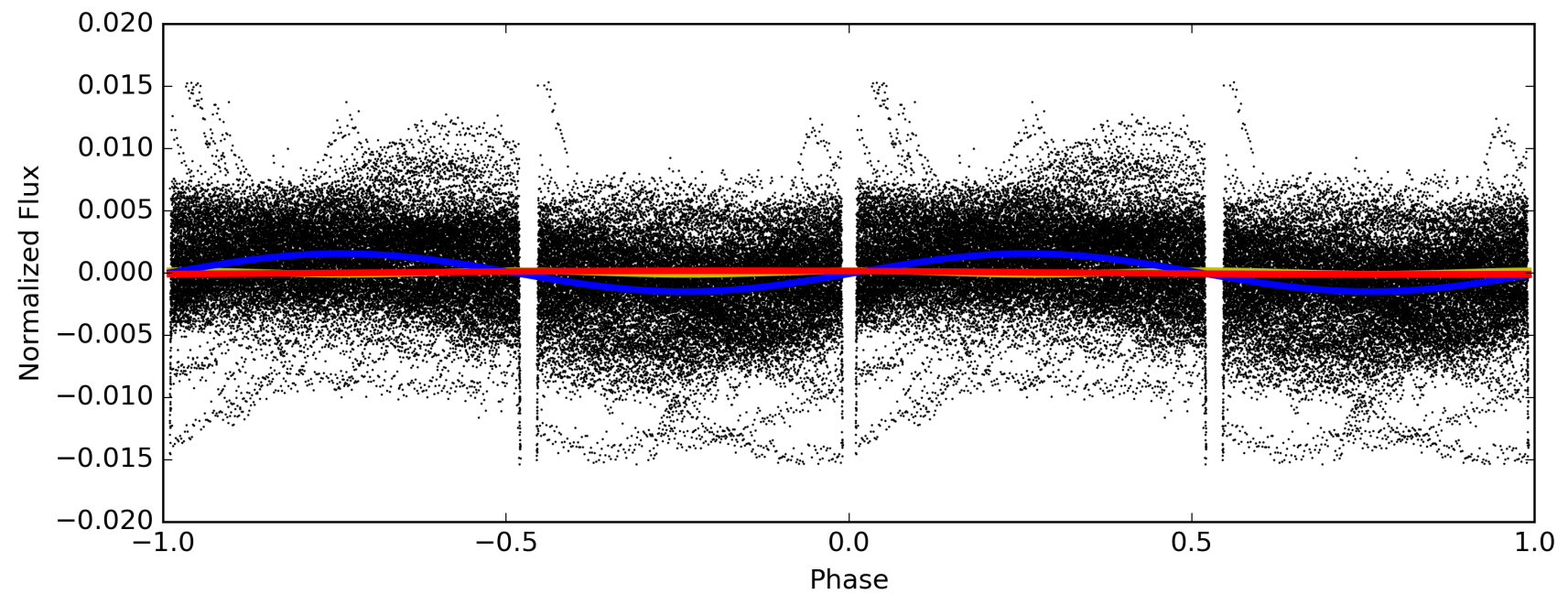
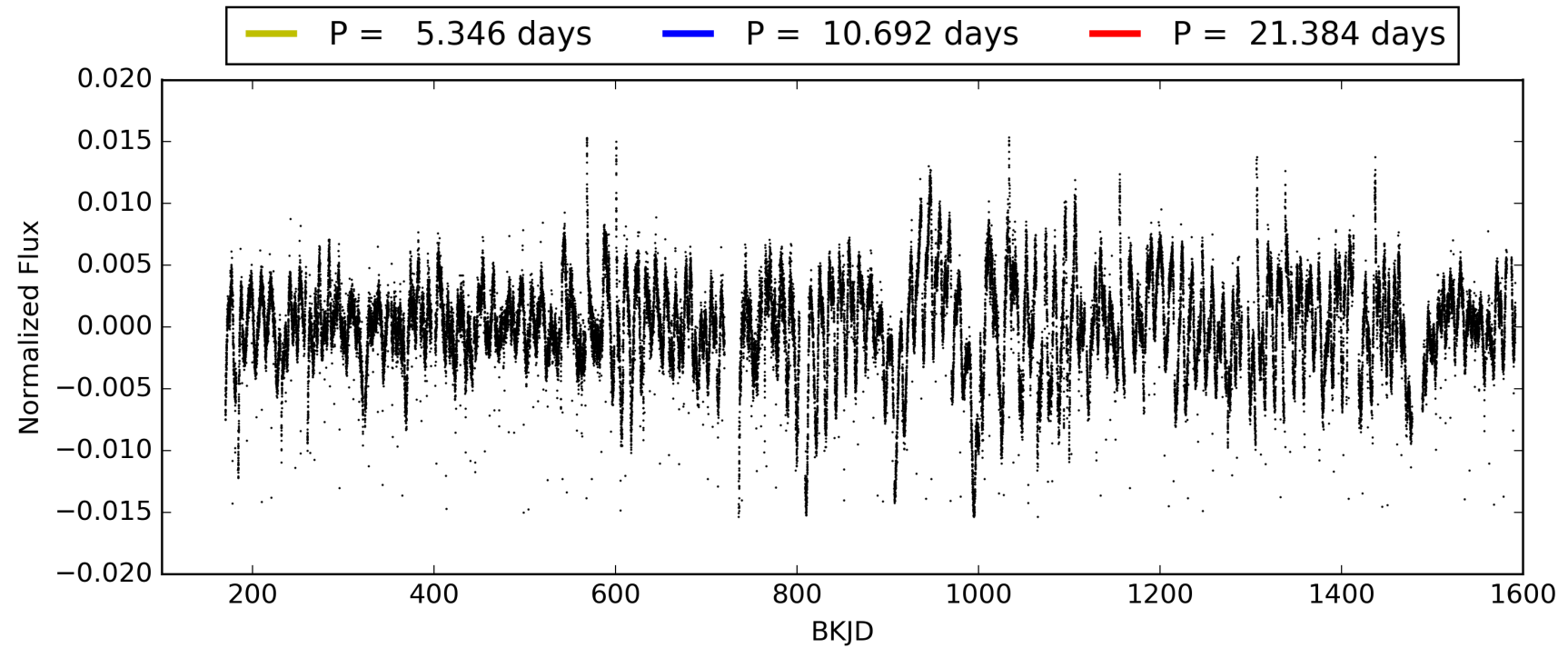
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 02-Feb-2016 10:07:30 Z

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

TCE 010711551-01, PDC Light Curves

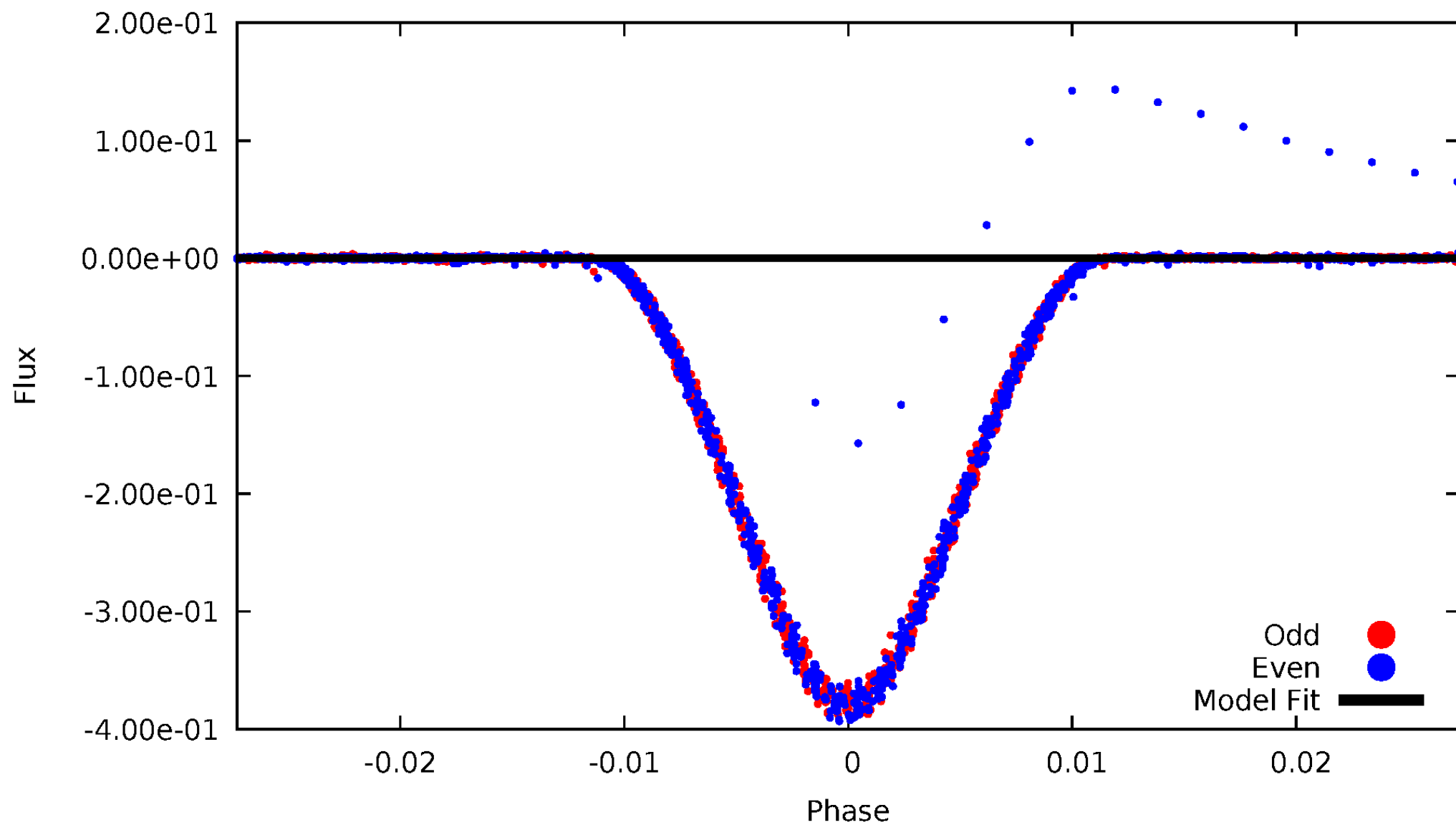


TCE 010711551-01



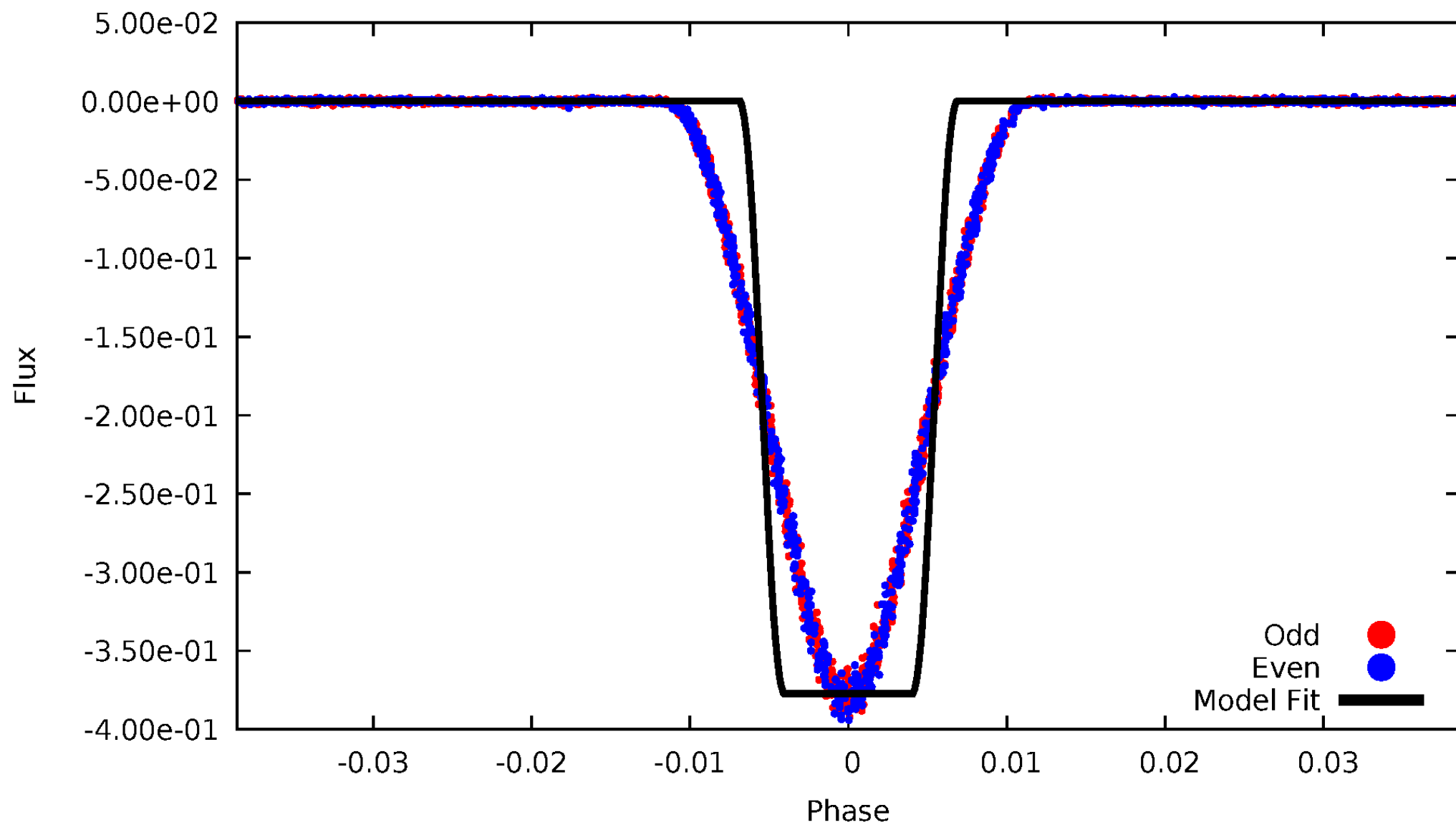
DV Odd/Even

TCE 010711551-01



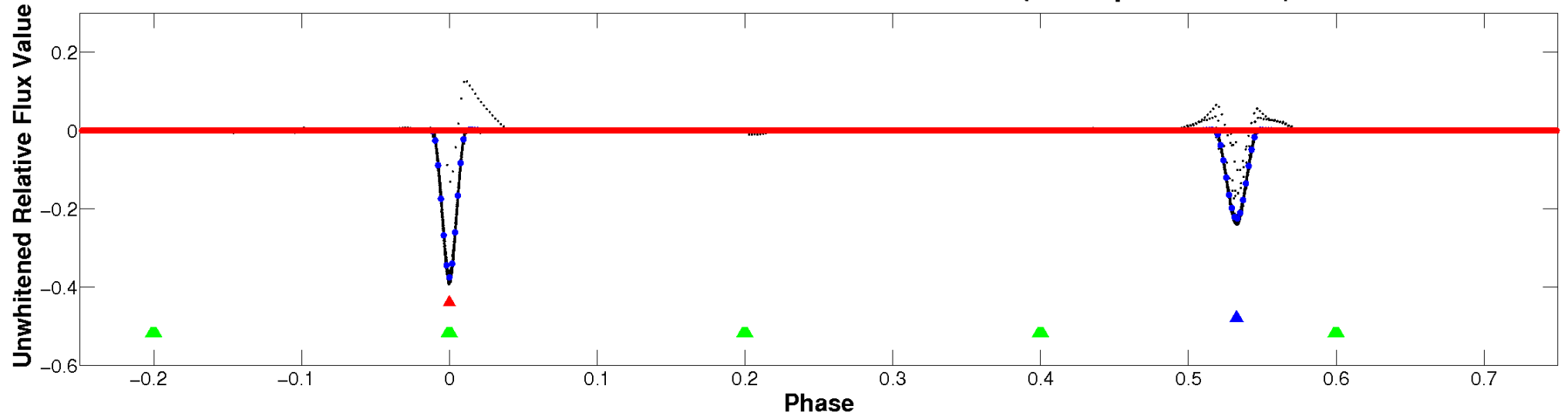
ALT Odd/Even

TCE 010711551-01



Non-Whitened Vs. Whitened Light Curve

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

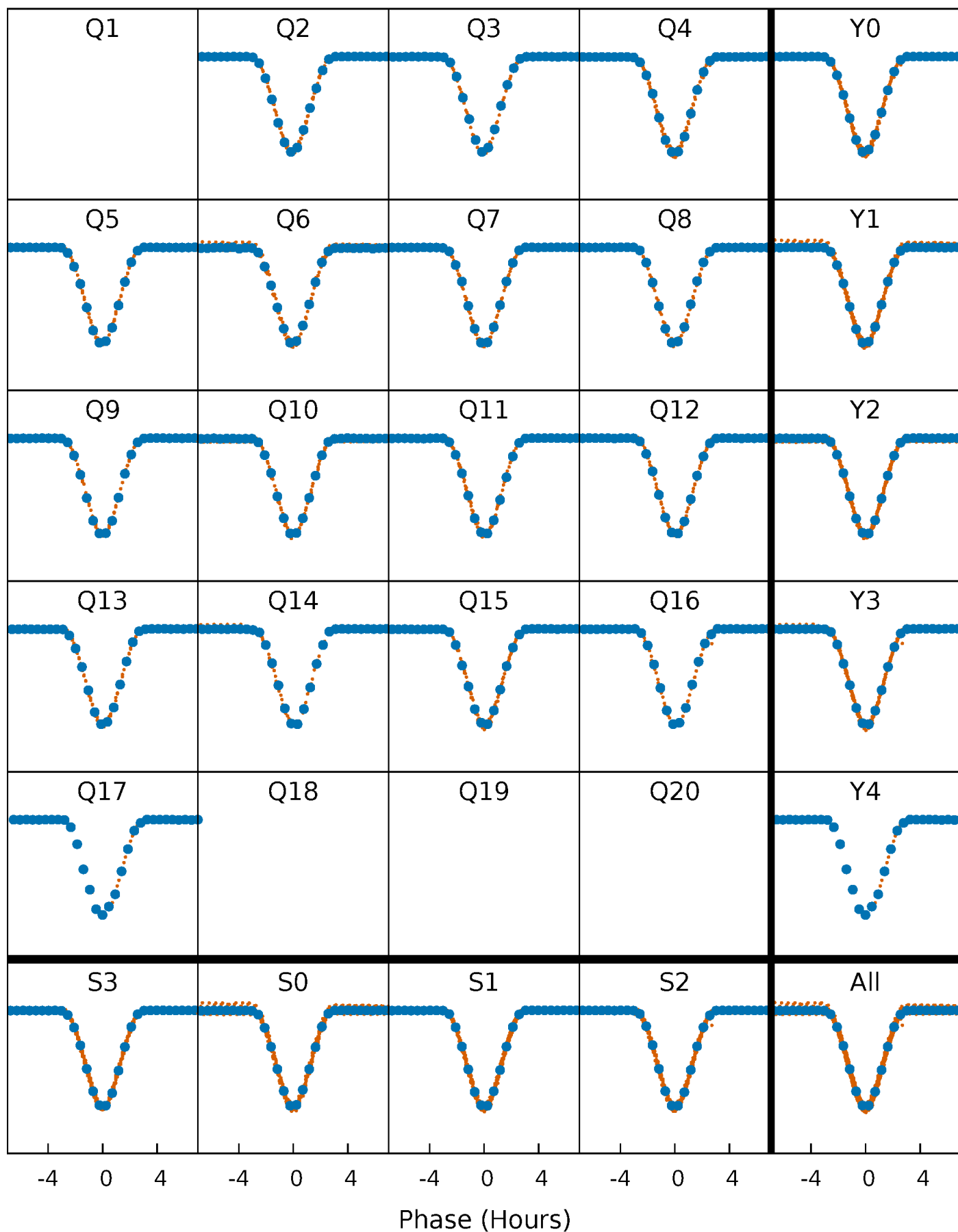


Planet 1 : Phased Whitened Flux Time Series (TPS Epoch/Period)



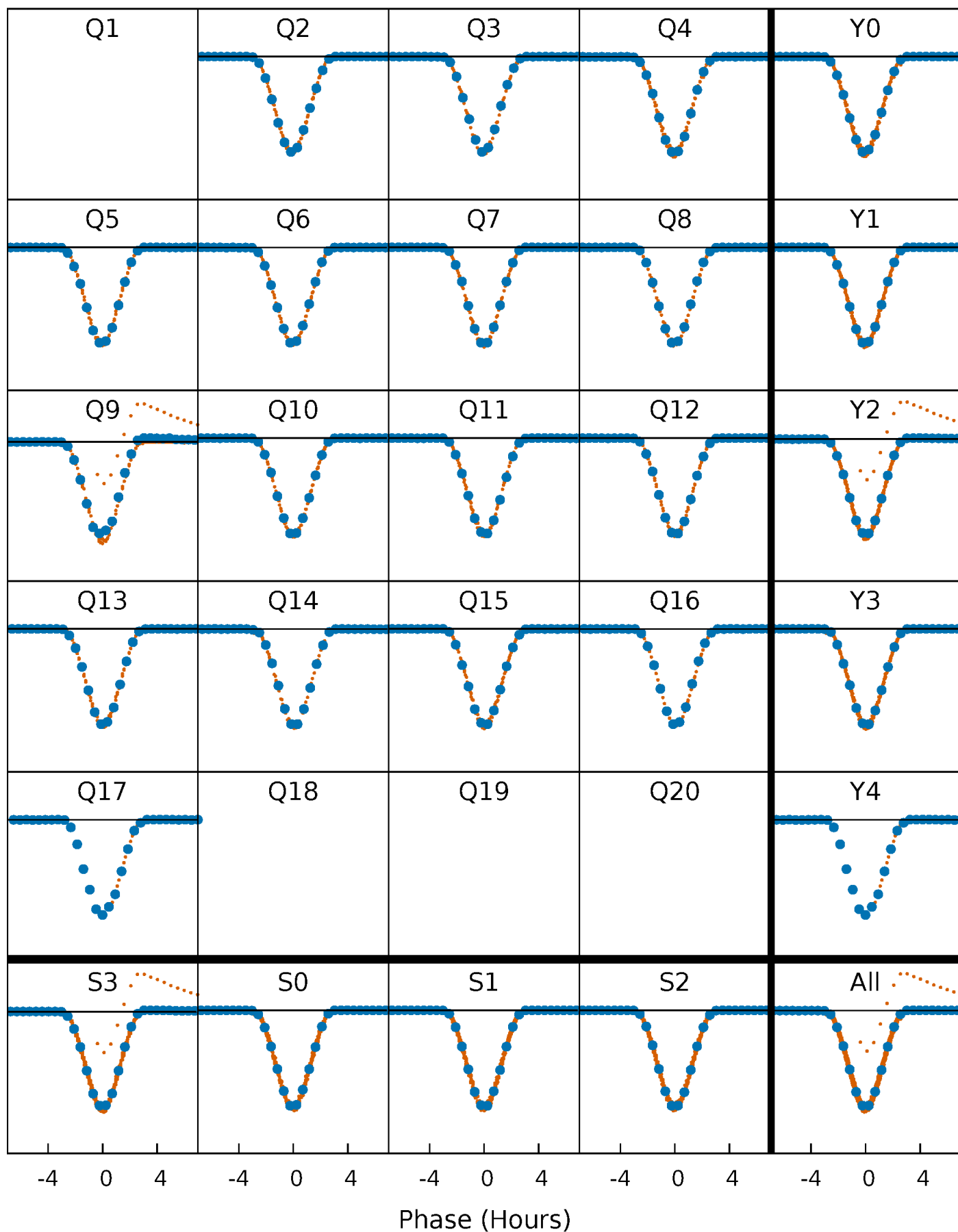
PDC Quarter-Phased Transit Curves

TCE 010711551-01 P= 10.692182 Days $T_0=139.956865$ (BKJD)



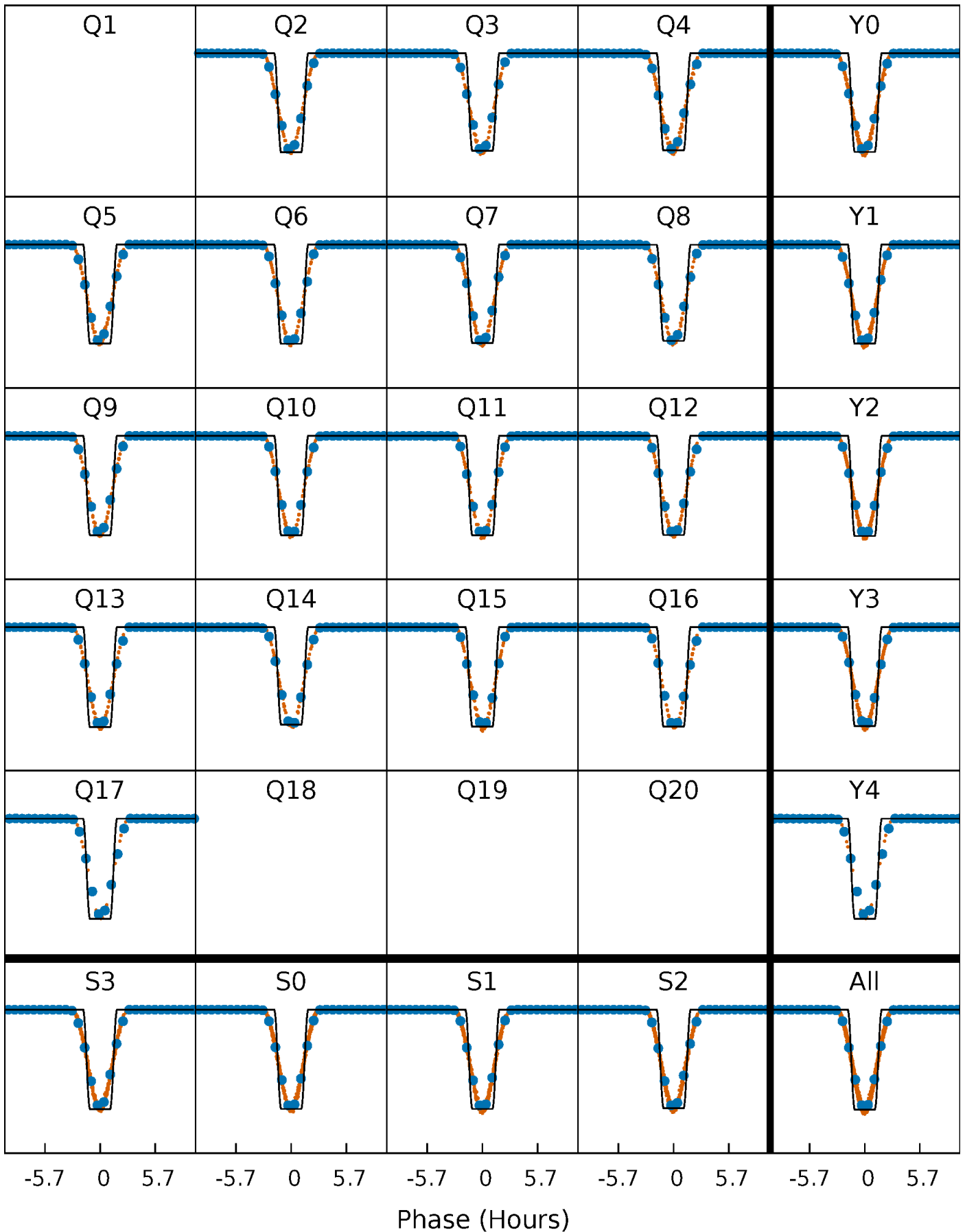
DV Quarter-Phased Transit Curves

TCE 010711551-01 P= 10.692182 Days $T_0=139.956865$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

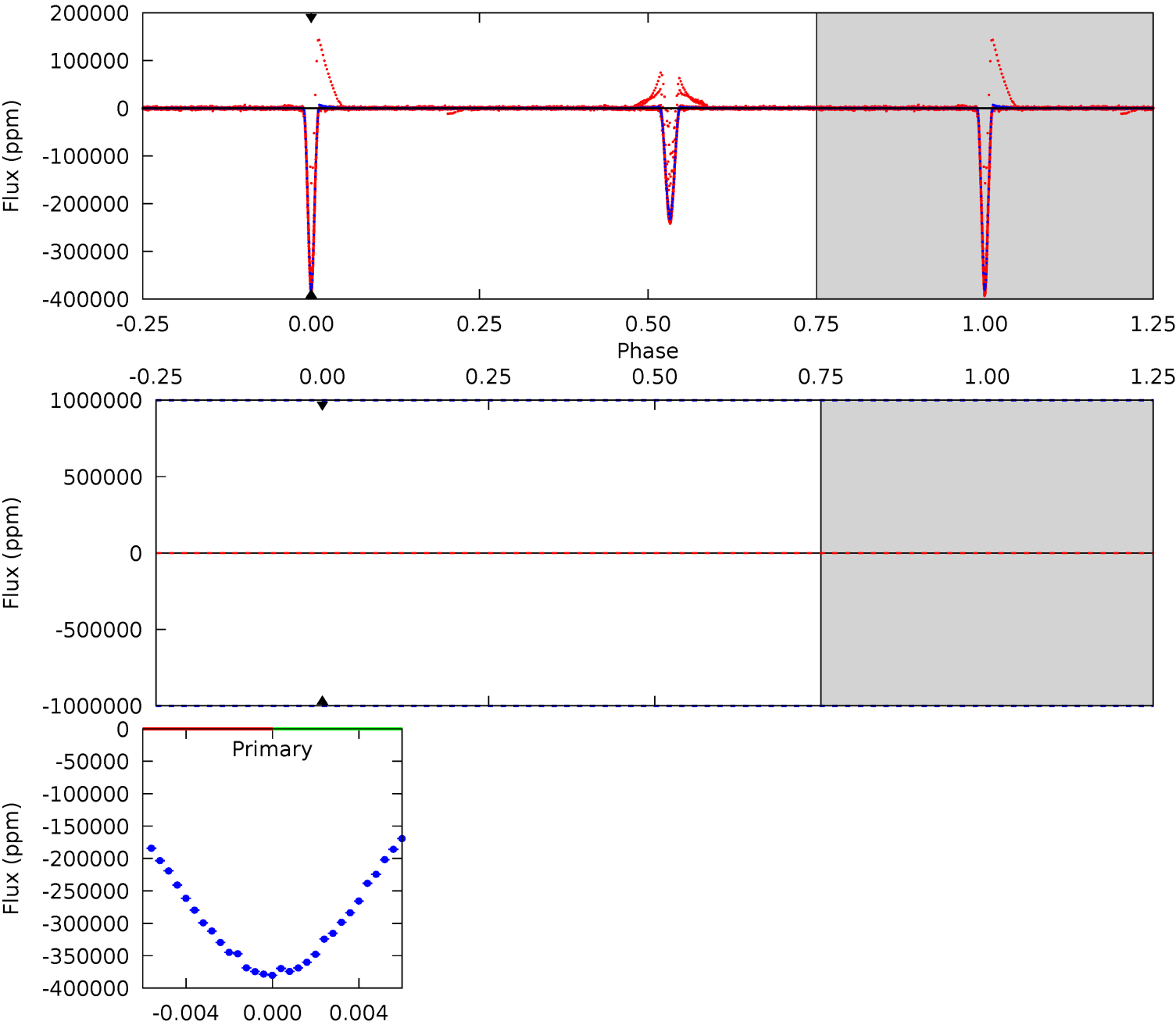
TCE 010711551-01 P= 10.692182 Days $T_0=139.957256$ (BKJD)



DV Model-Shift Uniqueness Test

010711551-01, P = 10.692182 Days, E = 139.956865 Days

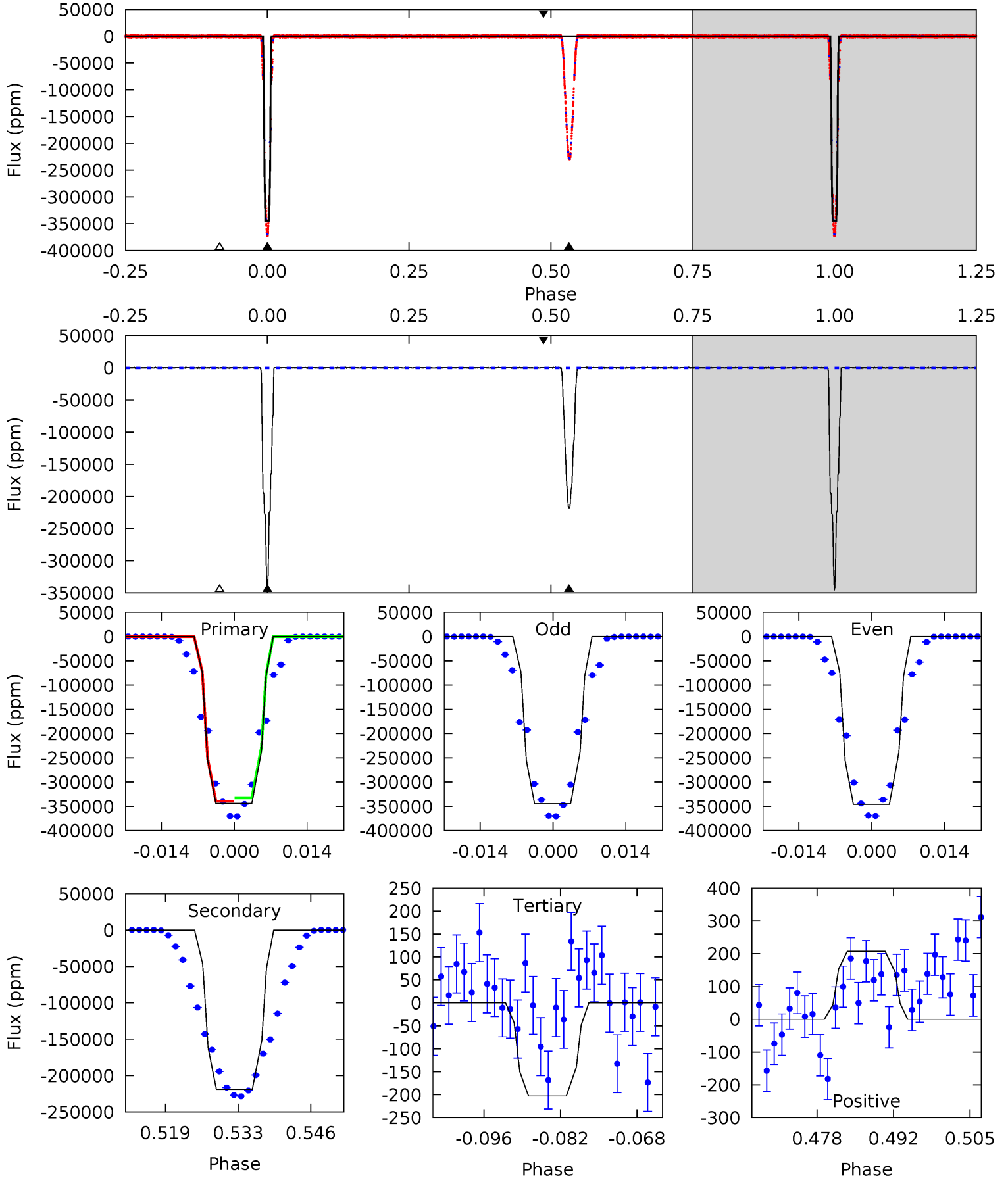
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

010711551-01, P = 10.692182 Days, E = 139.957256 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5584	3549	3.29	3.36	4.97	2.47	3.43	5581	5581	3545	3545	9.52	1.00	0.00	0



Stellar Parameters For KIC 010711551

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6022^{+162}_{-180}	$4.490^{+0.054}_{-0.216}$	$-0.200^{+0.300}_{-0.300}$	$0.941^{+0.292}_{-0.097}$	$0.997^{+0.131}_{-0.131}$	$1.685^{+0.483}_{-0.941}$
	+3%/-3%	+1%/-5%	+150%/-150%	+31%/-10%	+13%/-13%	+29%/-56%
Source	PHO1	KIC0	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 010711551-01 / KOI 3359.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	0 ± 1000000	$53.64^{+13.84}_{-11.03}$	1199^{+87}_{-56}	-2777^{+7733}_{-2064}	$-4.646^{+189.888}_{-154.688}$
Alt.	-218676 ± 62	$65.29^{+15.73}_{-11.65}$	1192^{+86}_{-58}	5593^{+549}_{-382}	315^{+157}_{-105}

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 $A_{obs} \gg 1.0$

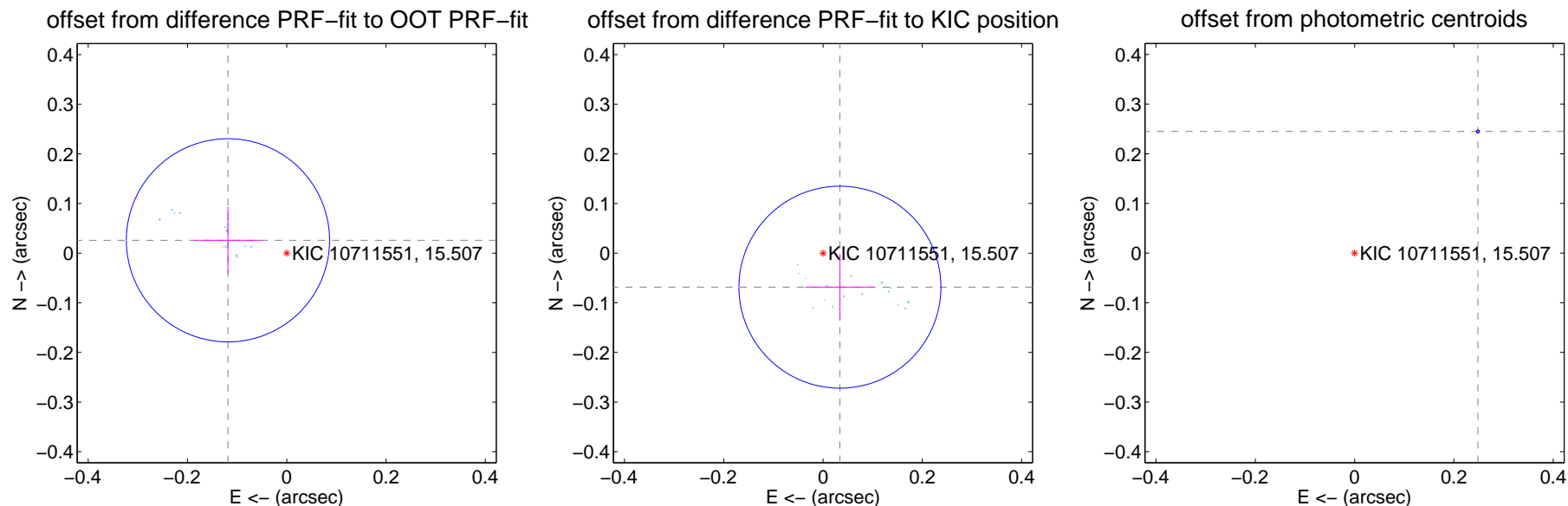
DV Centroid Data

Supplemental centroid analysis for 010711551-01. Kepler magnitude: 15.51. Transit SNR -1.00

There are 16 quarters with good PRF difference image offsets

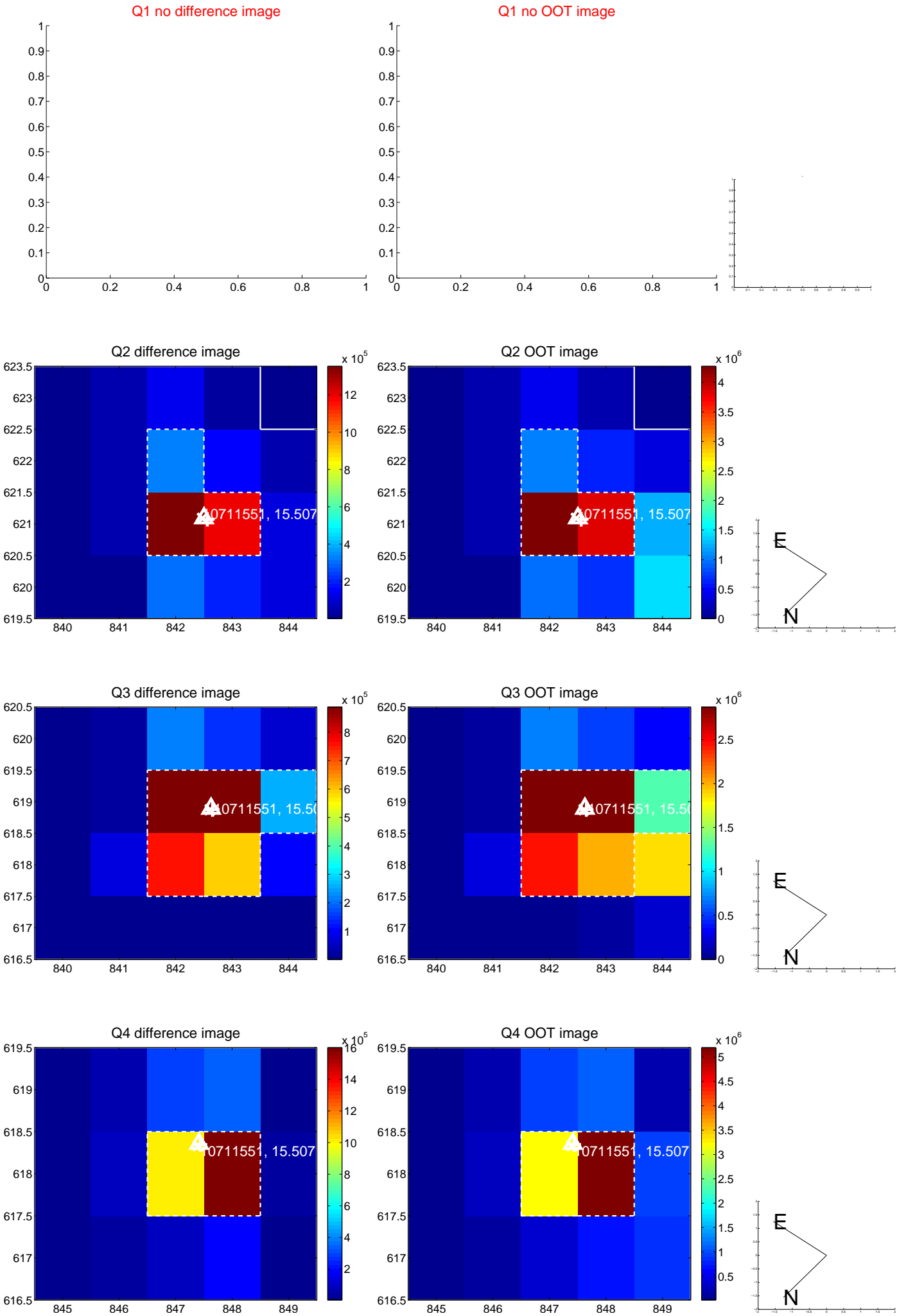
The direct PRF centroid is offset from the target star catalog position by about 0.33 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.121 ± 0.068	1.78	0.118 ± 0.068	0.026 ± 0.067
PRF-fit source offset from KIC position	0.076 ± 0.068	1.13	-0.034 ± 0.070	-0.069 ± 0.067
photometric centroid source offset	0.35 ± 0.00	340.26	-0.25 ± 0.00	0.24 ± 0.00

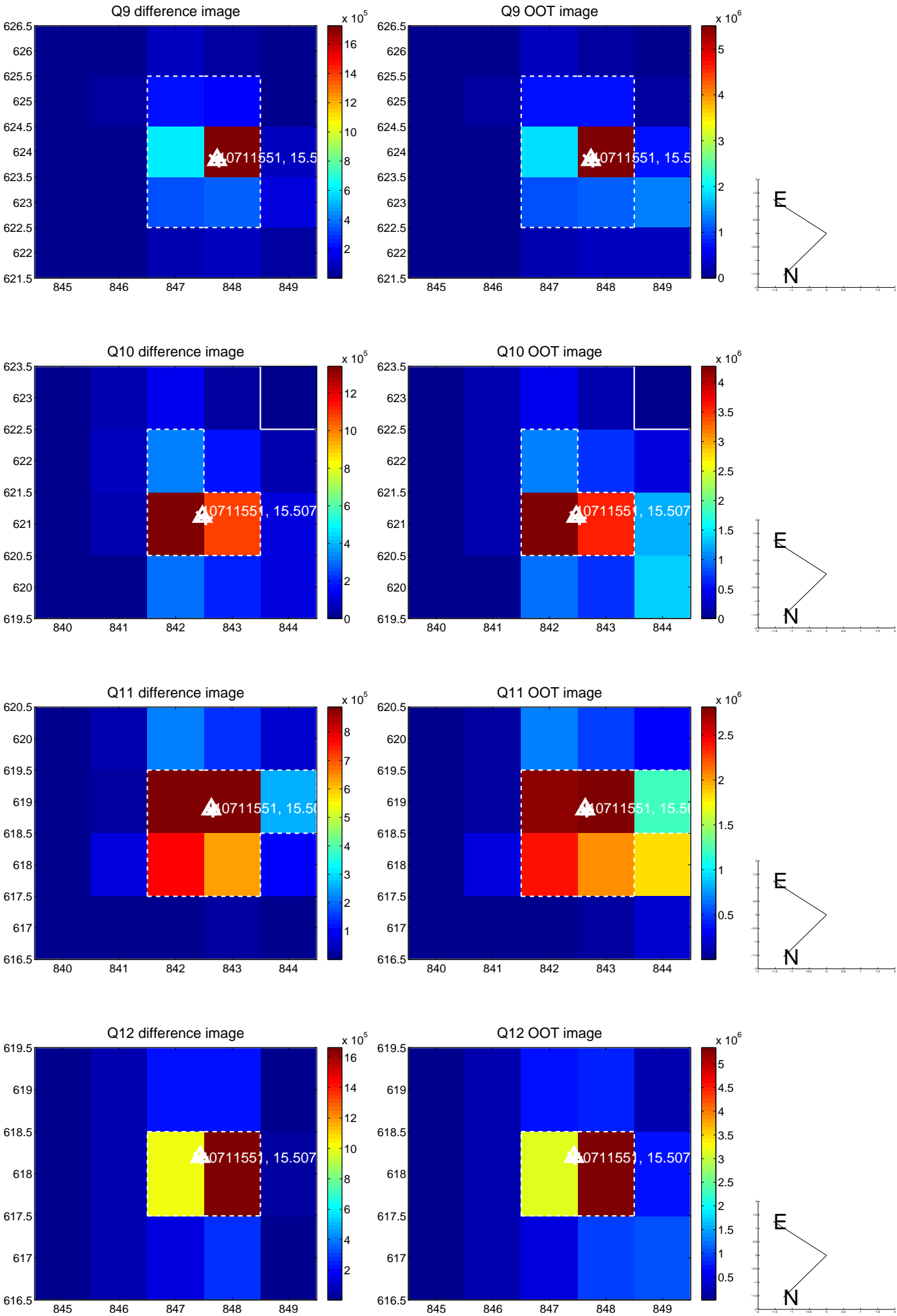


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- 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.

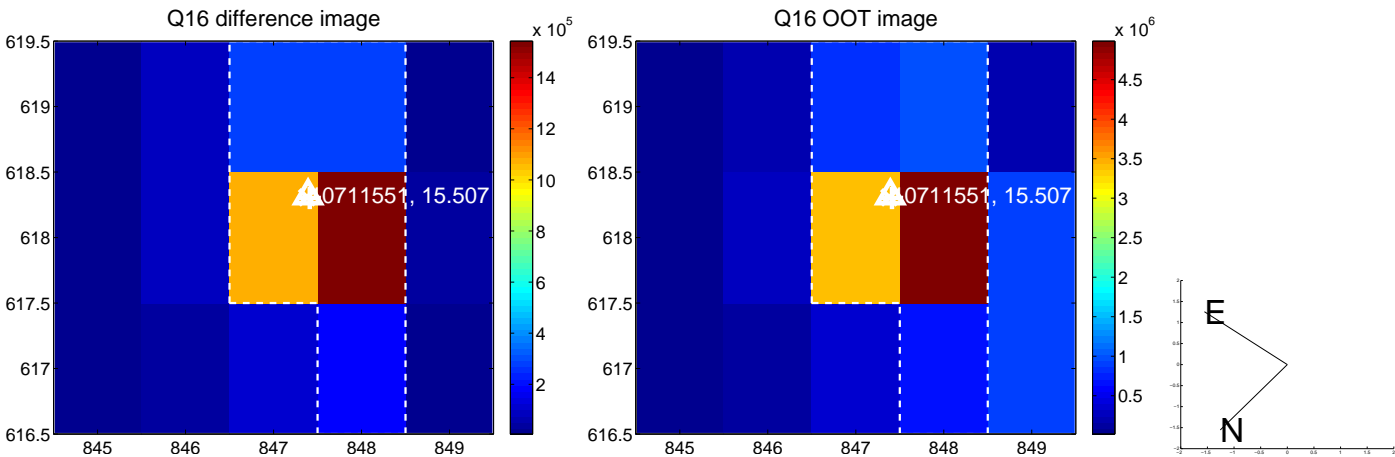
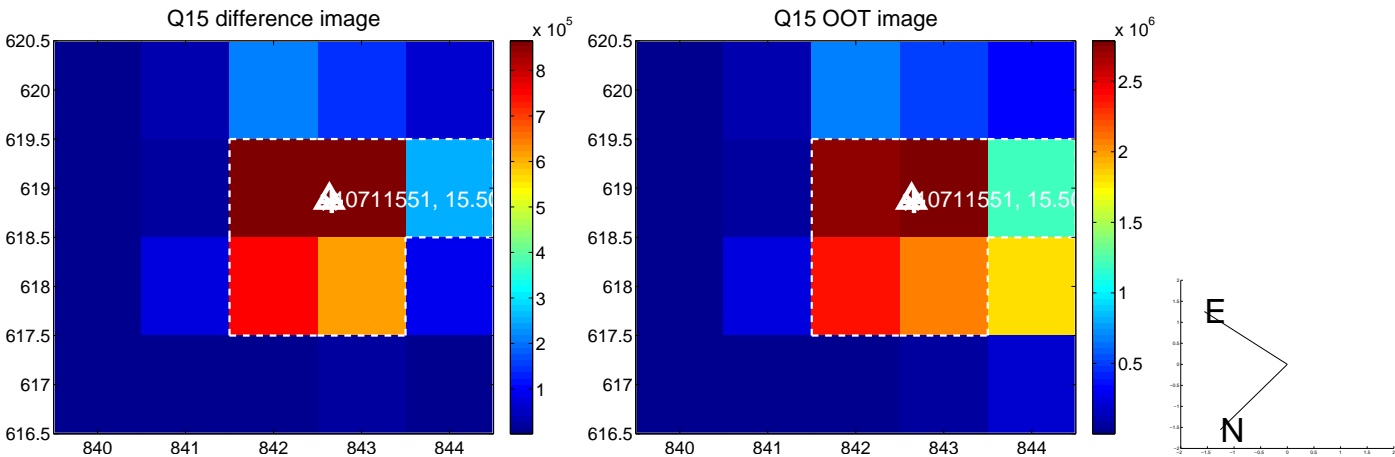
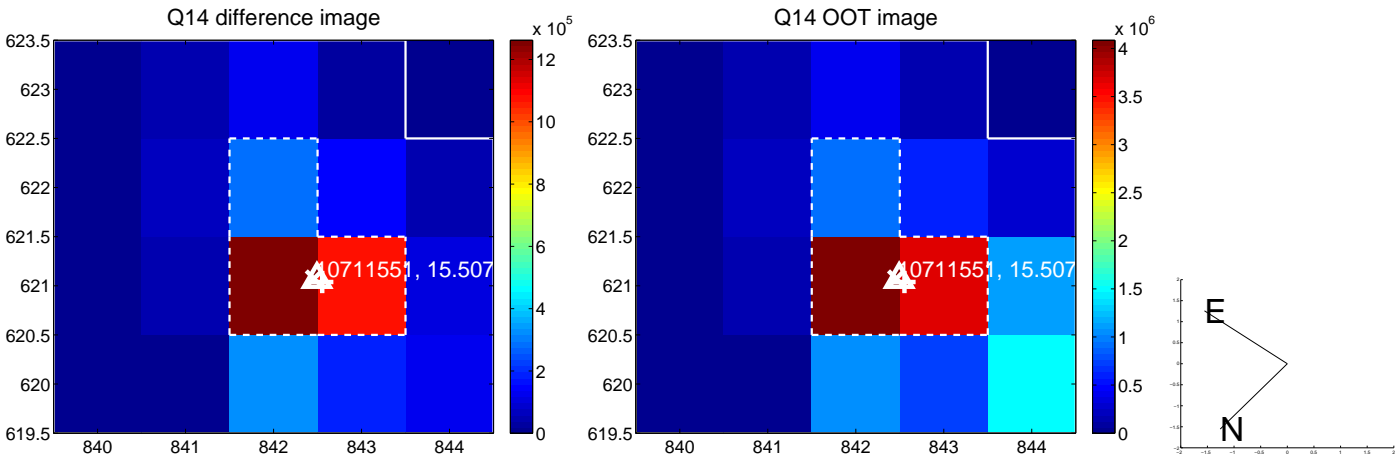
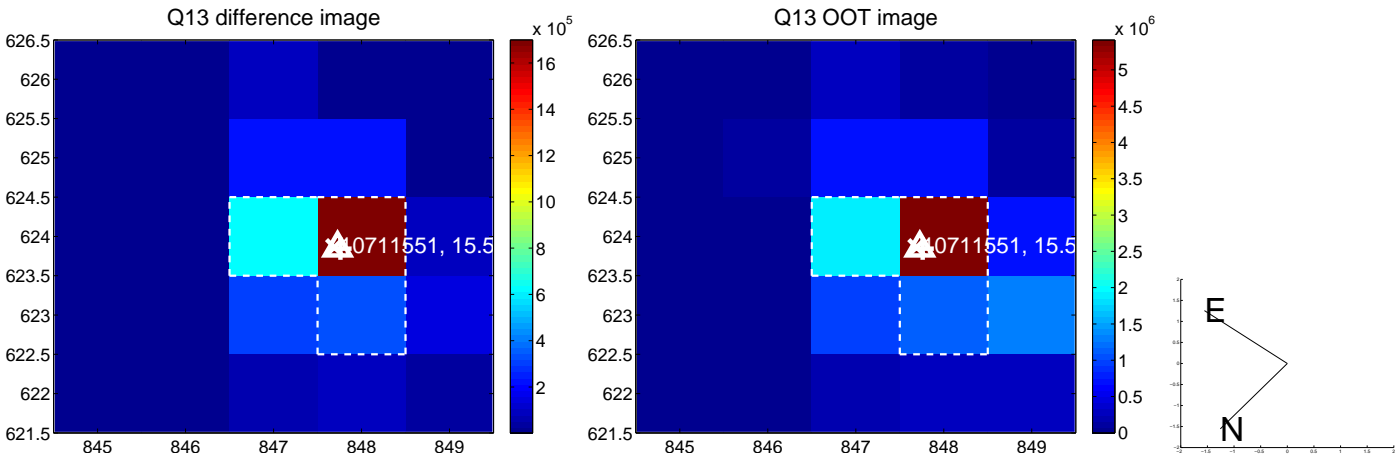
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



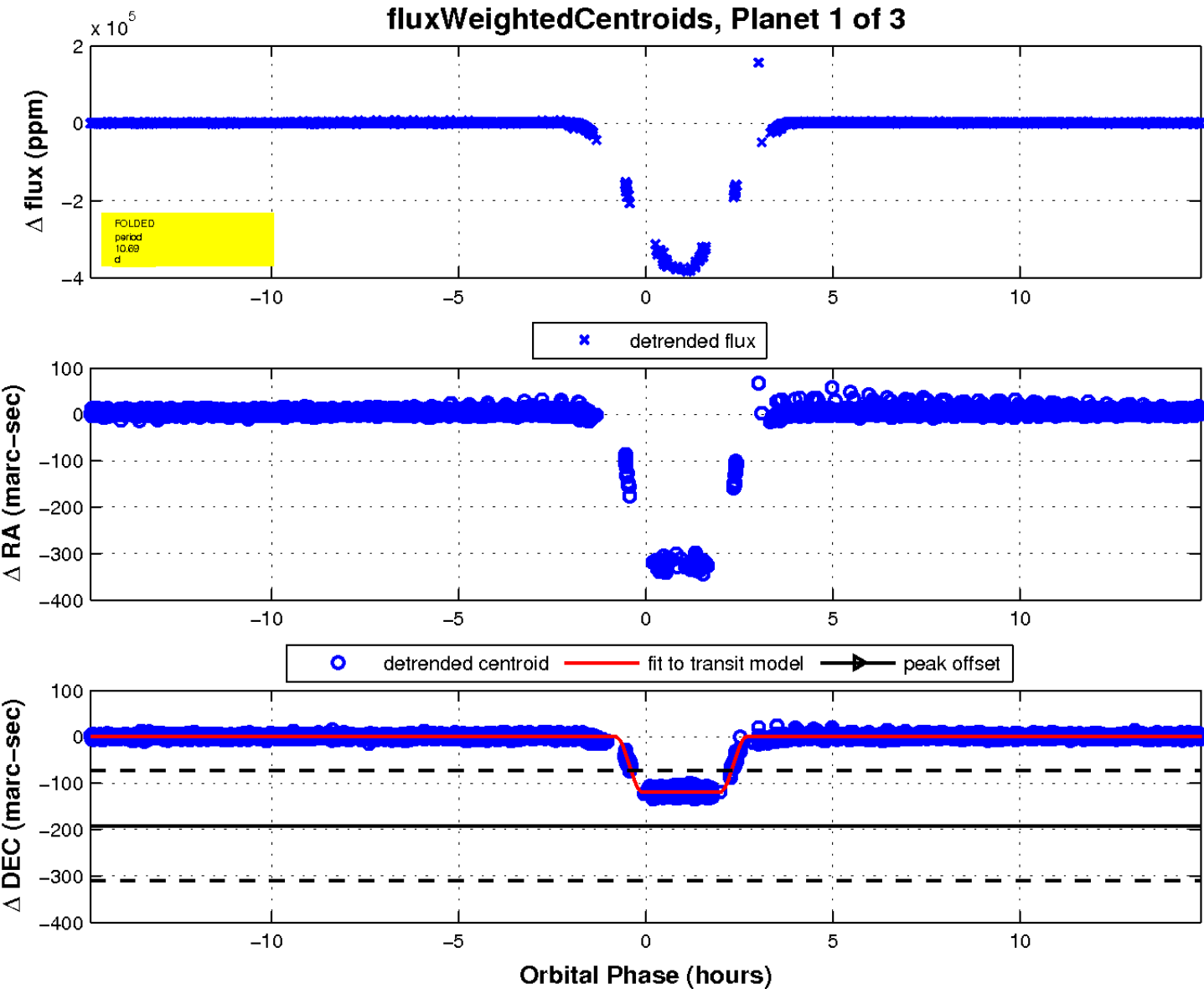
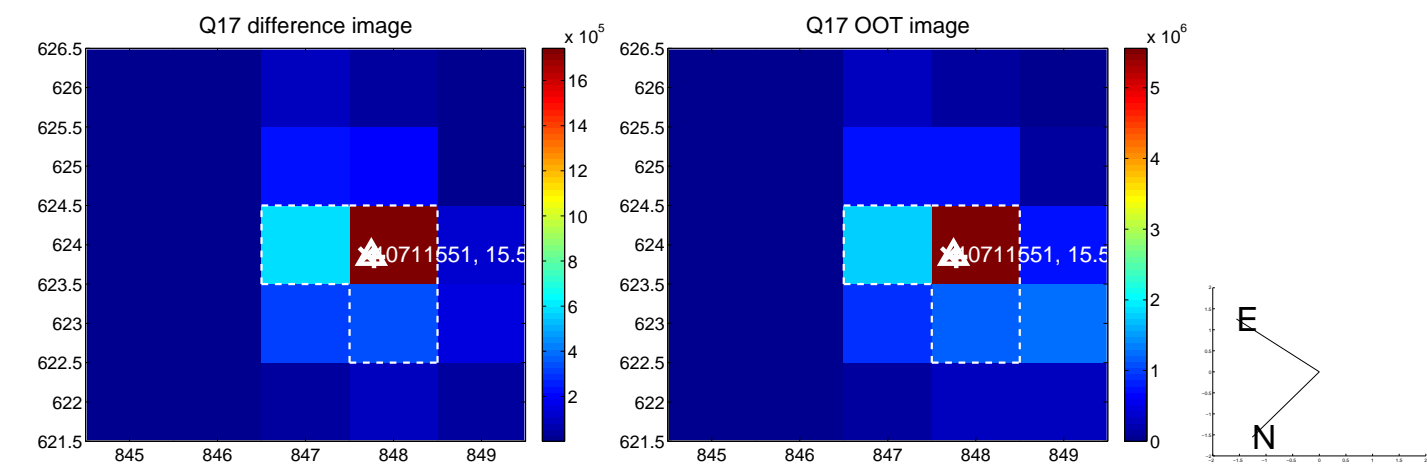
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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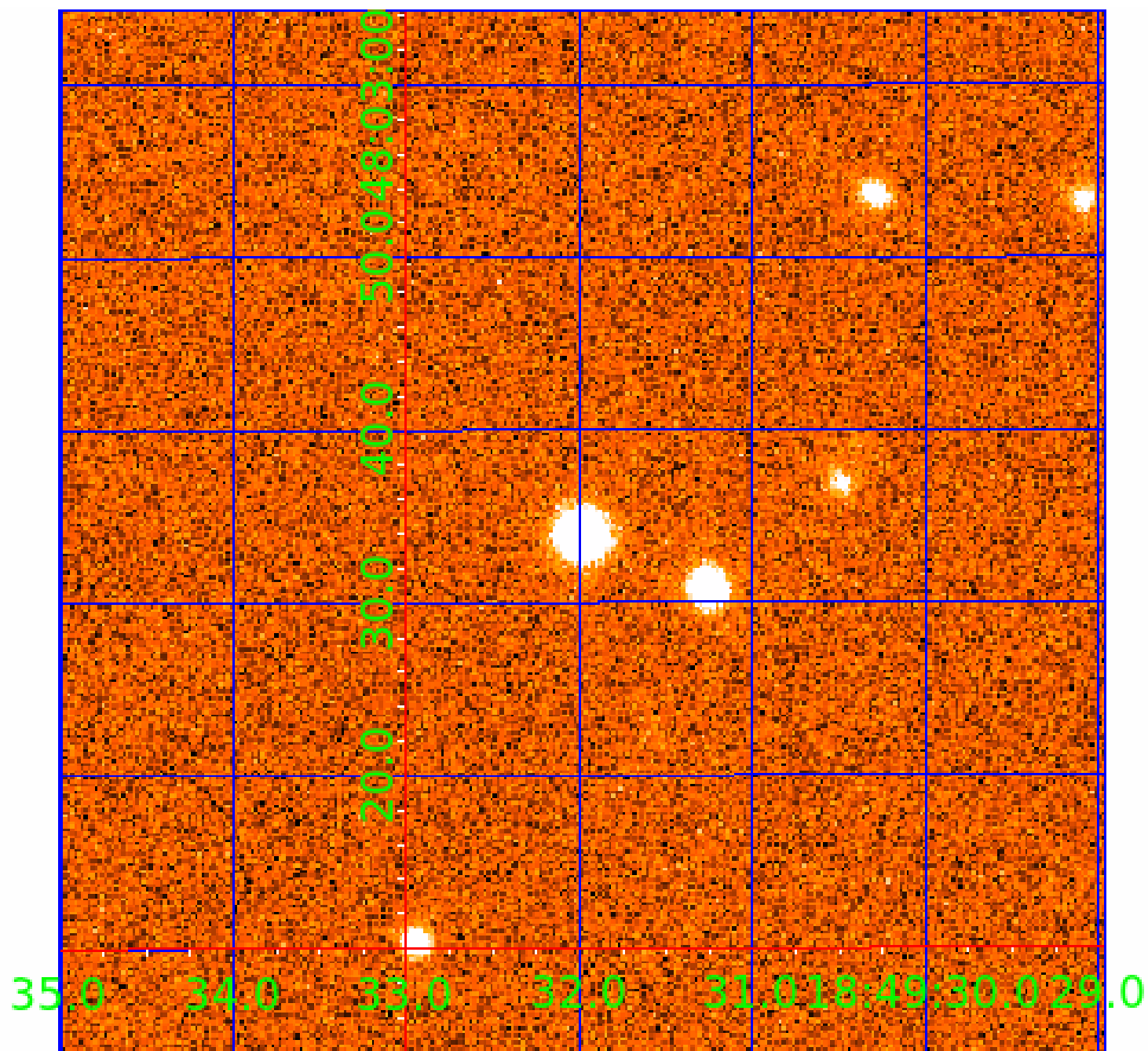


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 010711551

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})
010711551-01	OBS	3359.01	10.692182	139.956865	378412.1	3.500	9157.4	-1.0	0.94	6022	51.34	115.74
010711551-02	OBS	No	10.692228	134.956298	228493.1	7.121	5789.8	4074.3	0.94	6022	58.06	115.74
010711551-03	OBS	No	4.276988	133.520833	1875.5	32.008	368.7	35.8	0.94	6022	5.25	392.70

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010711551-01	OBS	FP	0.00	1	0	0	0	LPP_DV—CENT_NOFITS
010711551-02	OBS	FP	0.00	1	0	0	0	SAME_NTL_PERIOD
010711551-03	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—CENT_NOFITS

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.

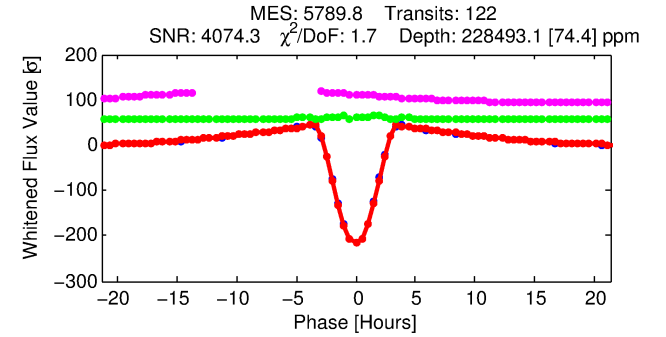
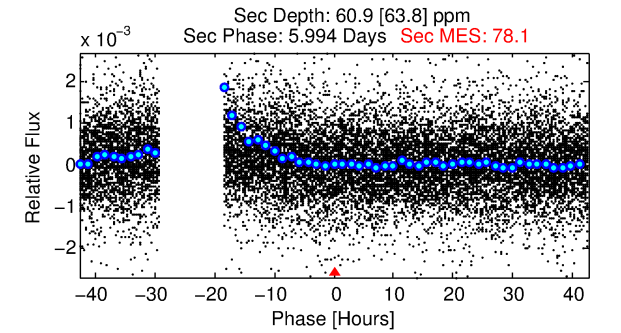
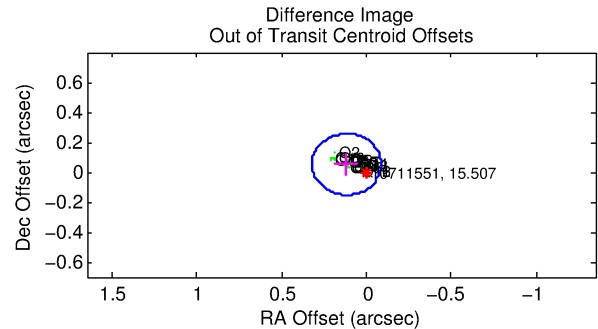
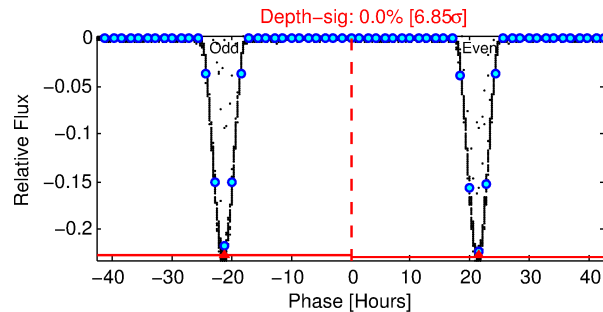
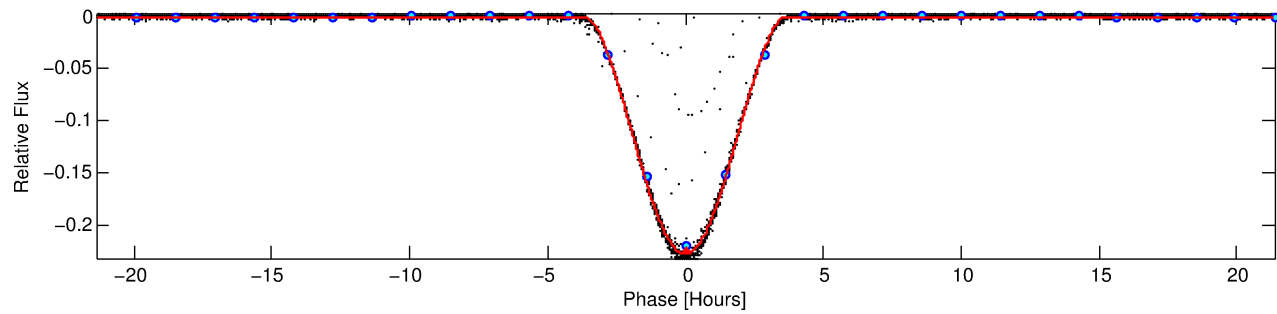
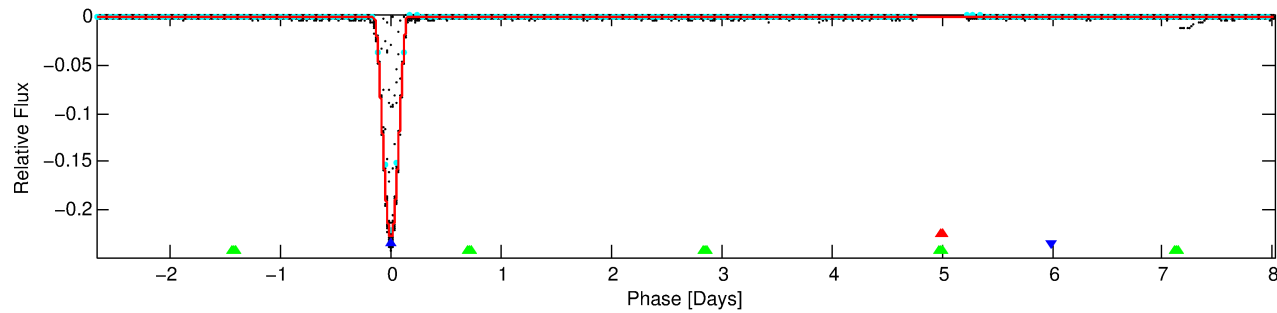
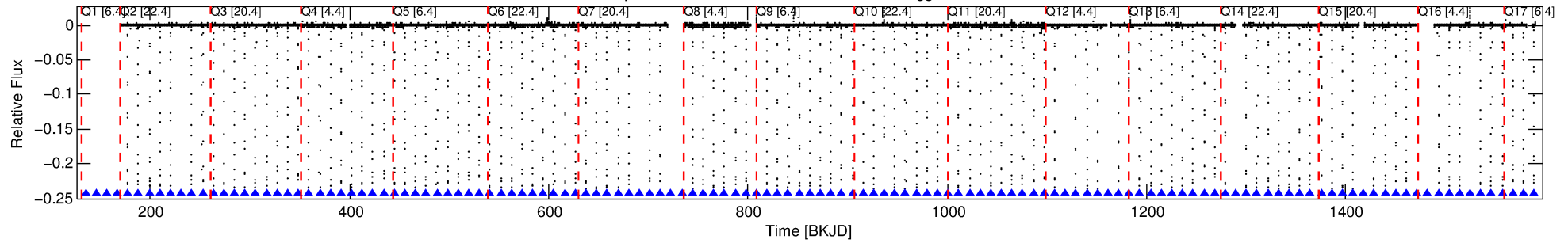
Ephemeris Match Information For 010711551-02

No Significant Match Found

DV One-Page Summary

KIC: 10711551 Candidate: 2 of 3 Period: 10.692 d
KOI: K03359 Corr: No Ephemeris Match

Kp: 15.51 R*: 0.94 Rs Teff: 6022.0 K Logg: 4.49 Fe/H: -0.200



DV Fit Results:

Period = 10.69223 [0.00000] d
Epoch = 134.9563 [0.0000] BKJD
Rp/R* = 0.5654 [0.0296]
a/R* = 15.78 [0.10]
b = 0.75 [0.05]
Seff = 115.74 [47.30]
Teq = 836 [85] K
Rp = 58.06 [18.27] Re
a = 0.0949 [0.0252] AU
Ag = 0.09 [0.10] [-9.05σ]
Teffp = 708 [187] K [-0.63σ]

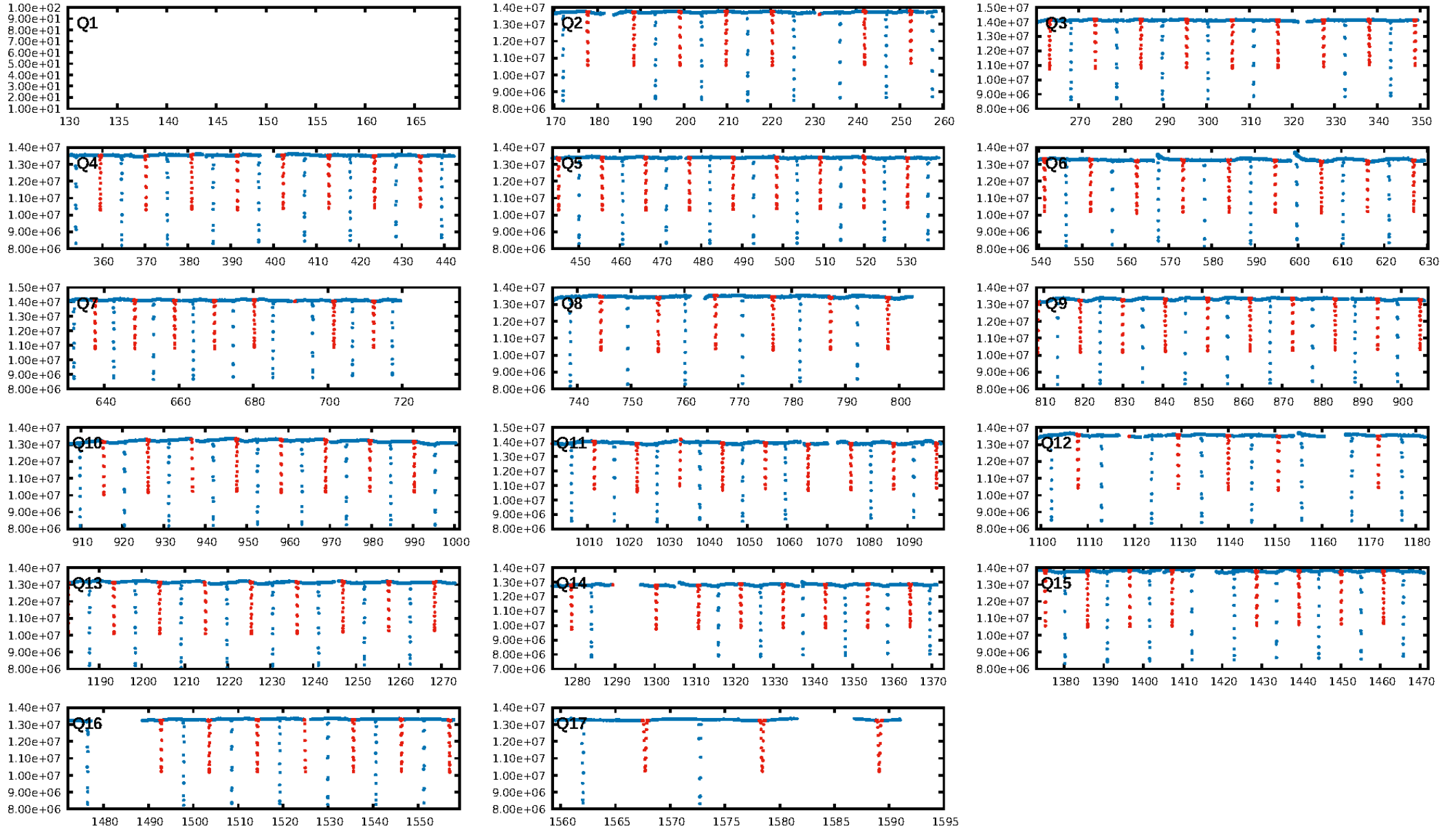
DV Diagnostic Results:

ShortPeriod-sig: 0.0% [0.00σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 0.0%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [119/119]
GhostDiagnostic-chr: 2.677
Centroid-sig: N/A
Centroid-so: 0.422 arcsec [255.96σ]
OotOffset-rm: 0.131 arcsec [1.92σ]
KicOffset-rm: 0.089 arcsec [1.29σ]
OotOffset-st: 4/4/4/4 [16]
KicOffset-st: 4/4/4/4 [16]
DiffImageQuality-fgm: 1.00 [16/16]
DiffImageOverlap-fno: 1.00 [16/16]

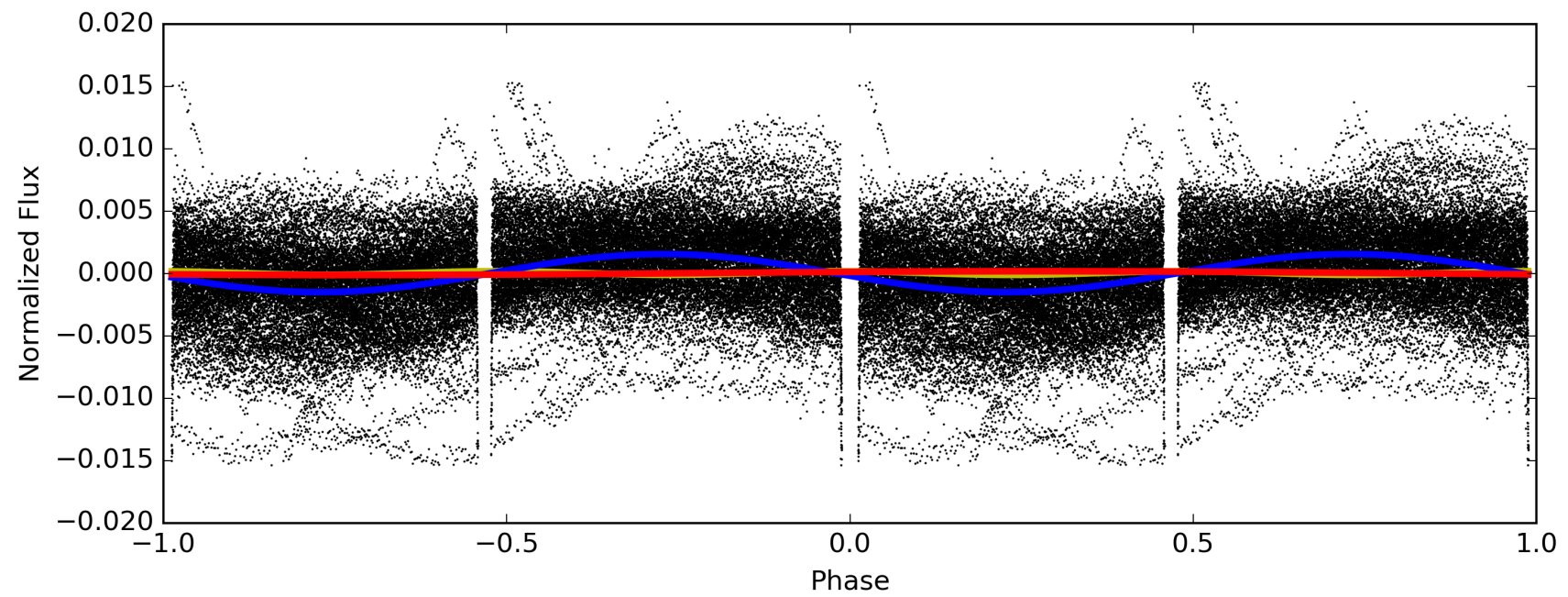
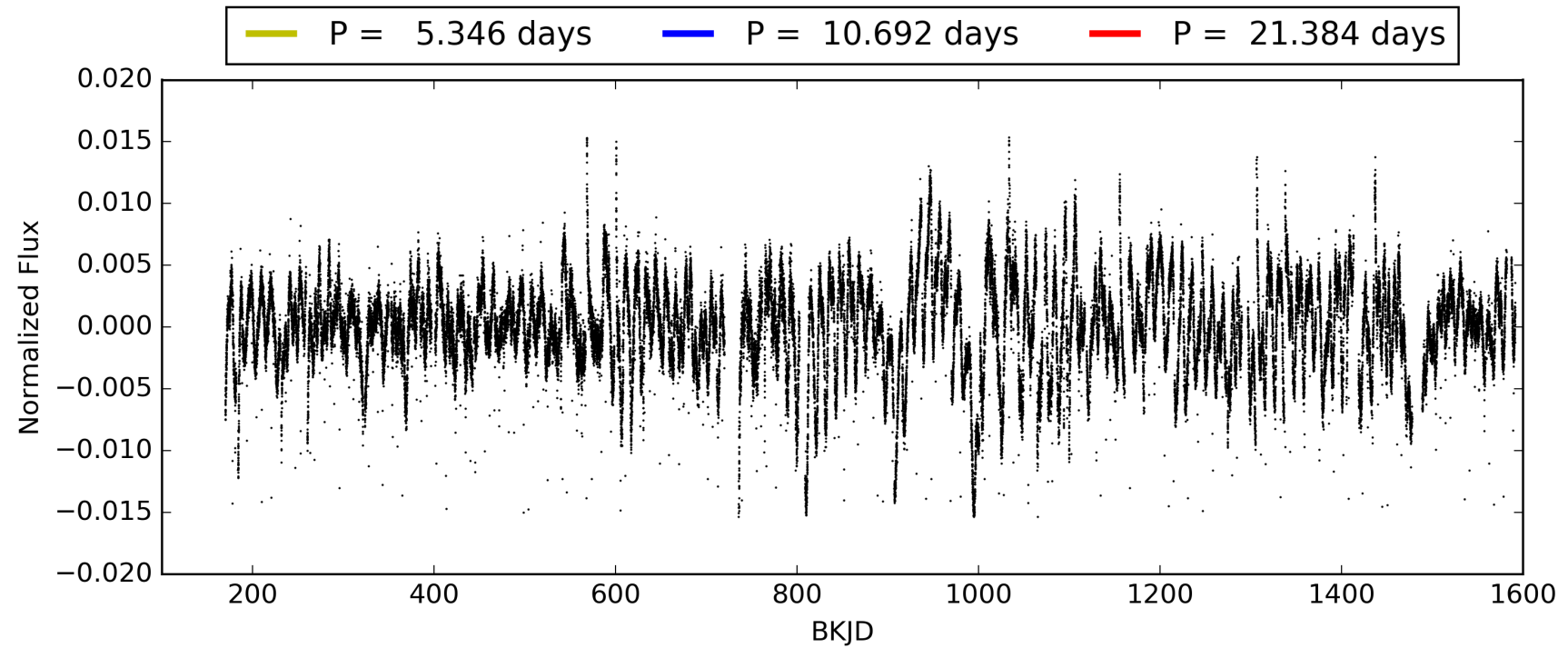
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 02-Feb-2016 10:07:34 Z

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

TCE 010711551-02, PDC Light Curves

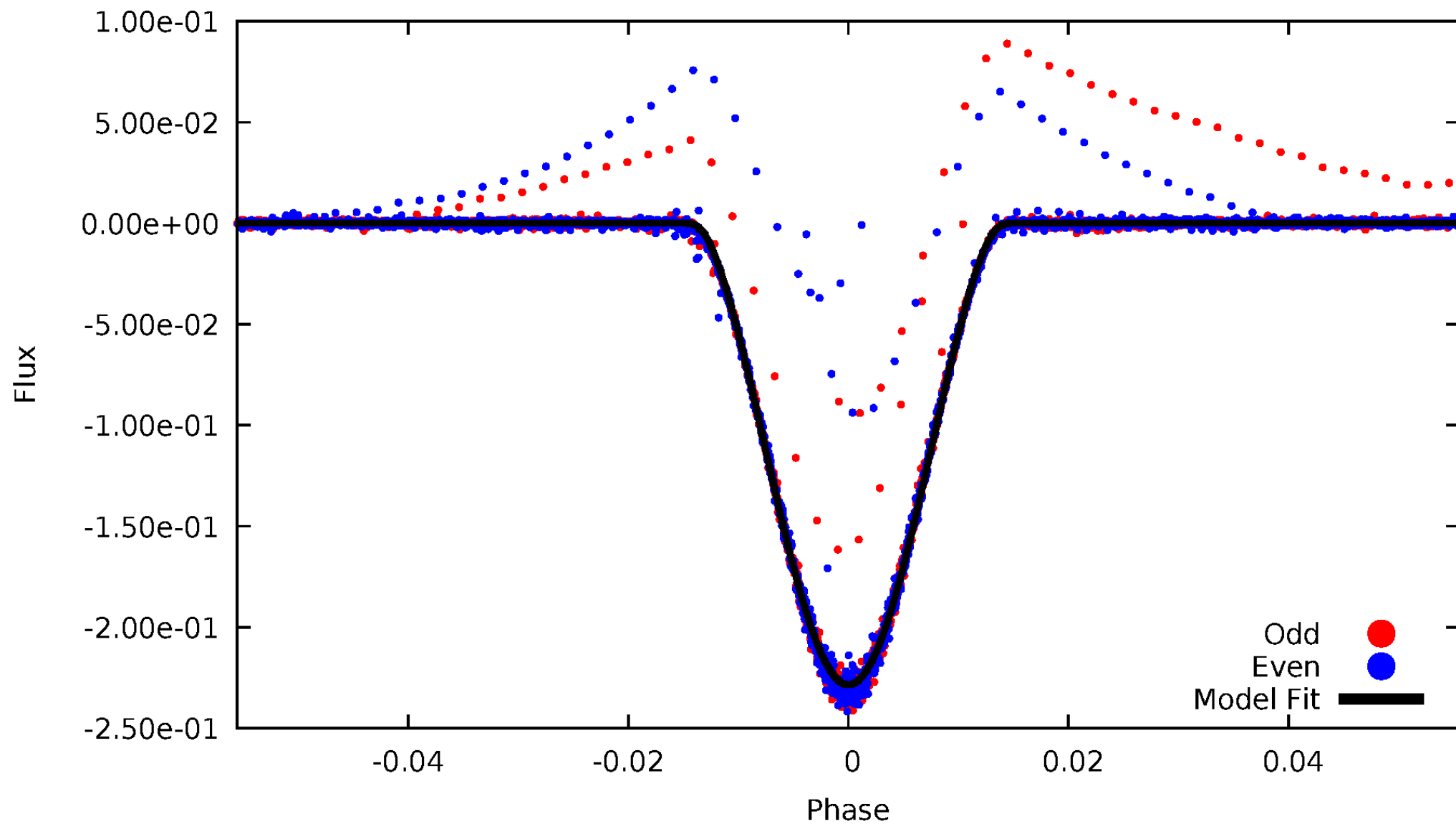


TCE 010711551-02



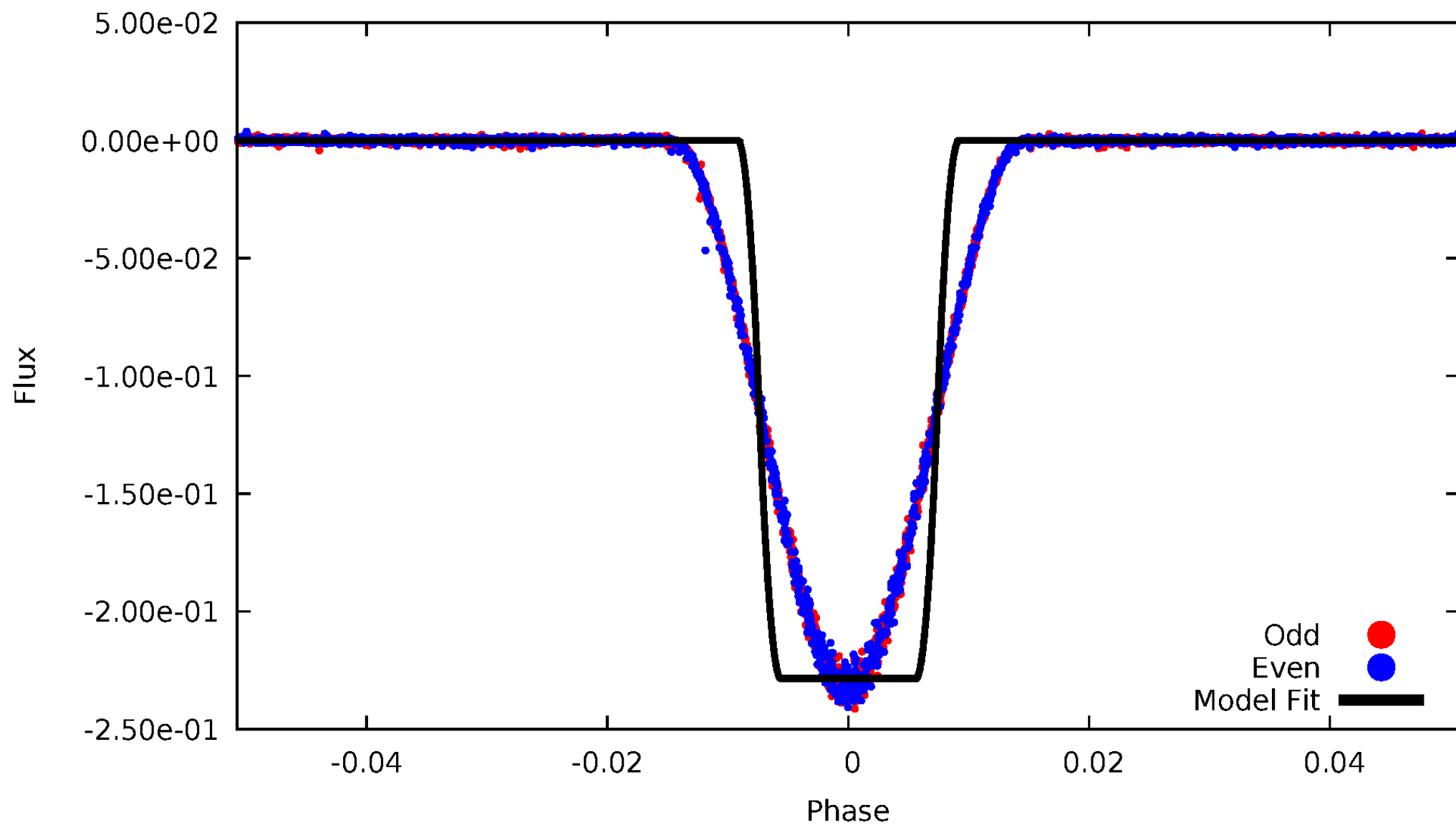
DV Odd/Even

TCE 010711551-02



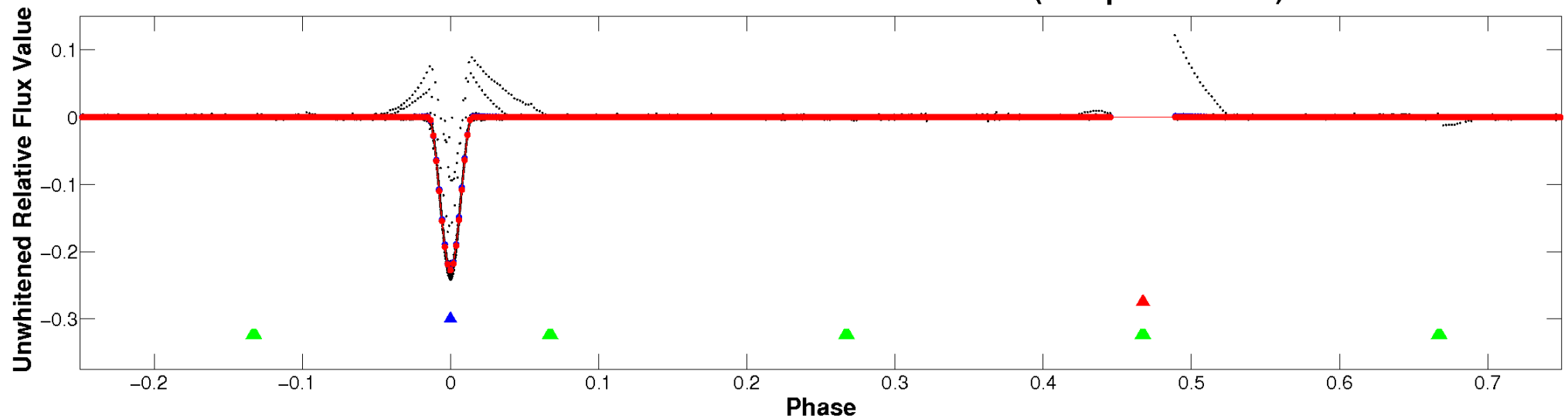
ALT Odd/Even

TCE 010711551-02

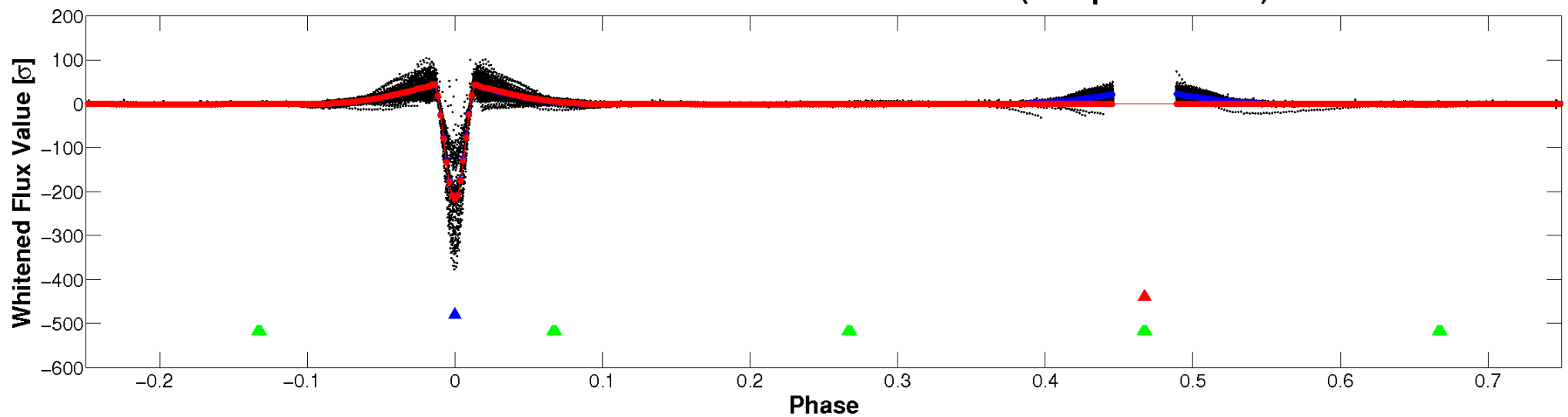


Non-Whitened Vs. Whitened Light Curve

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

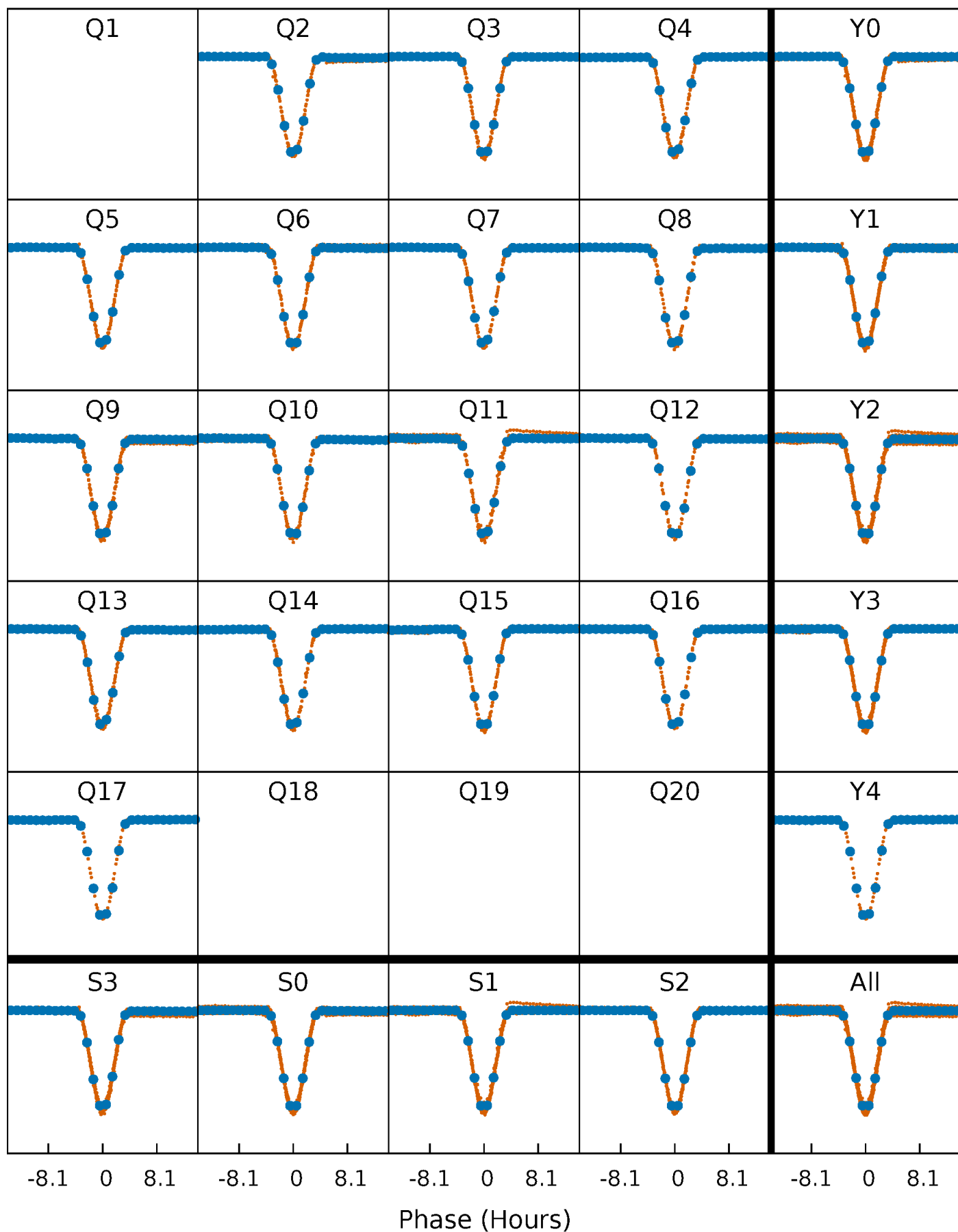


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



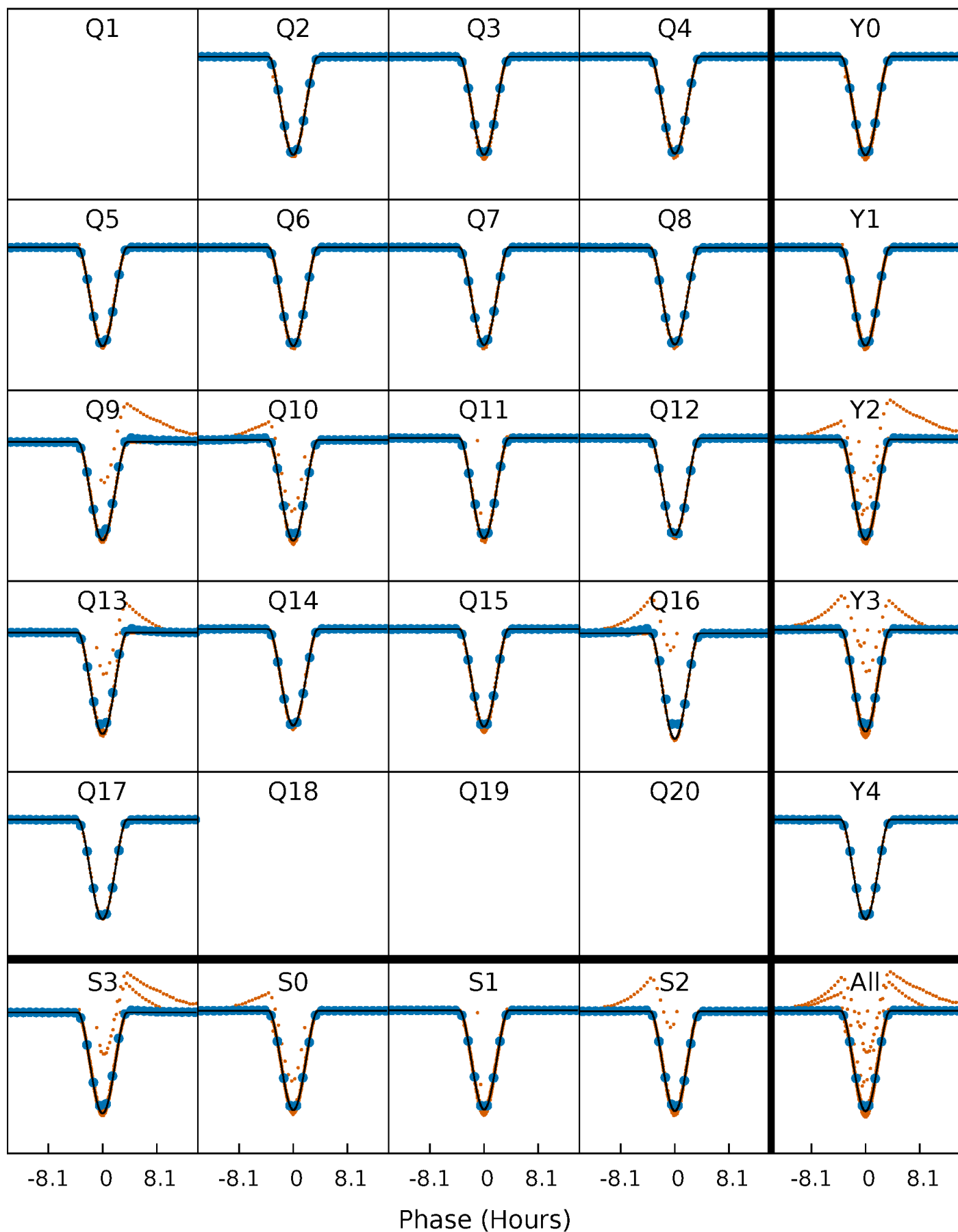
PDC Quarter-Phased Transit Curves

TCE 010711551-02 P= 10.692228 Days $T_0=134.956298$ (BKJD)



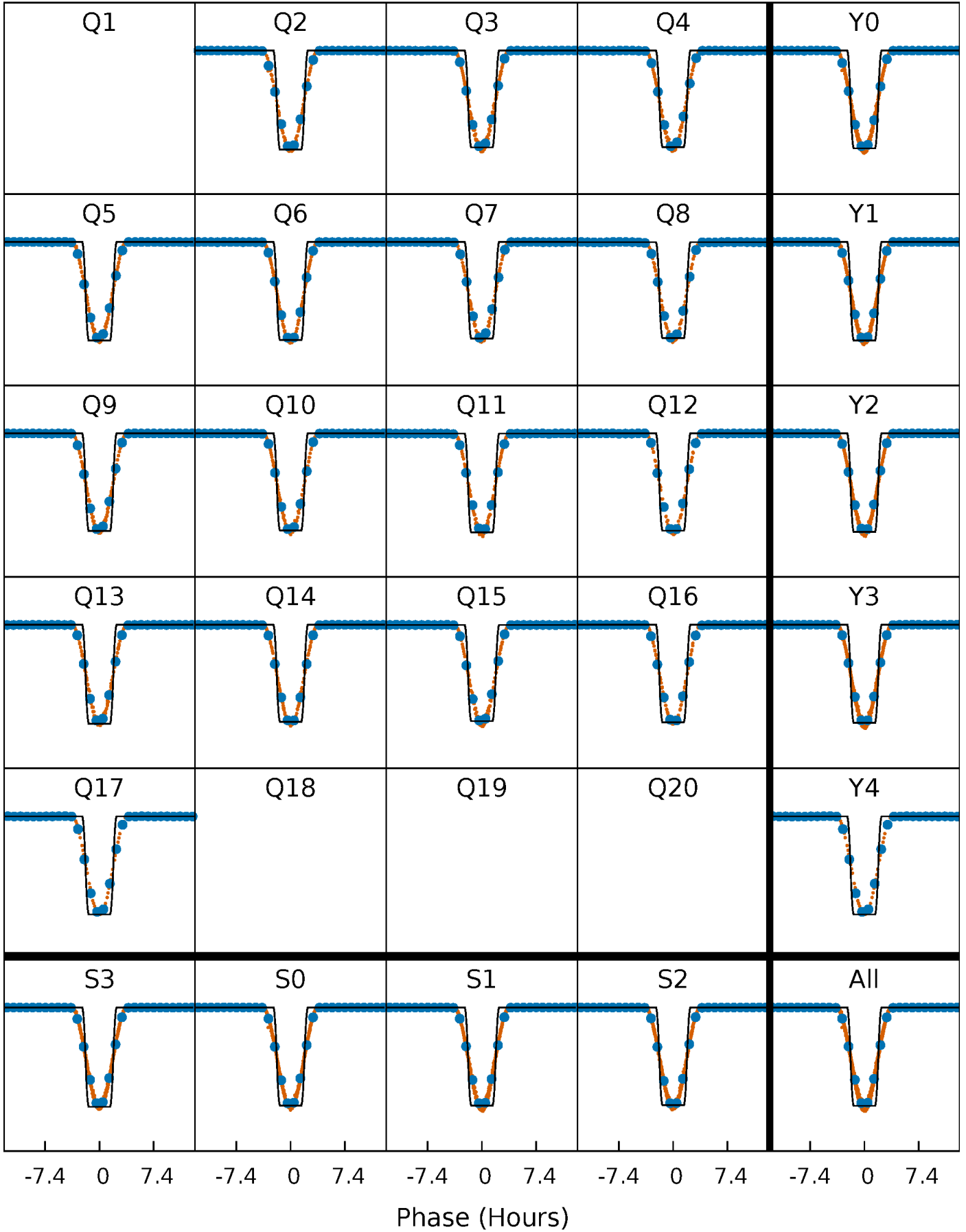
DV Quarter-Phased Transit Curves

TCE 010711551-02 P= 10.692228 Days $T_0=134.956298$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

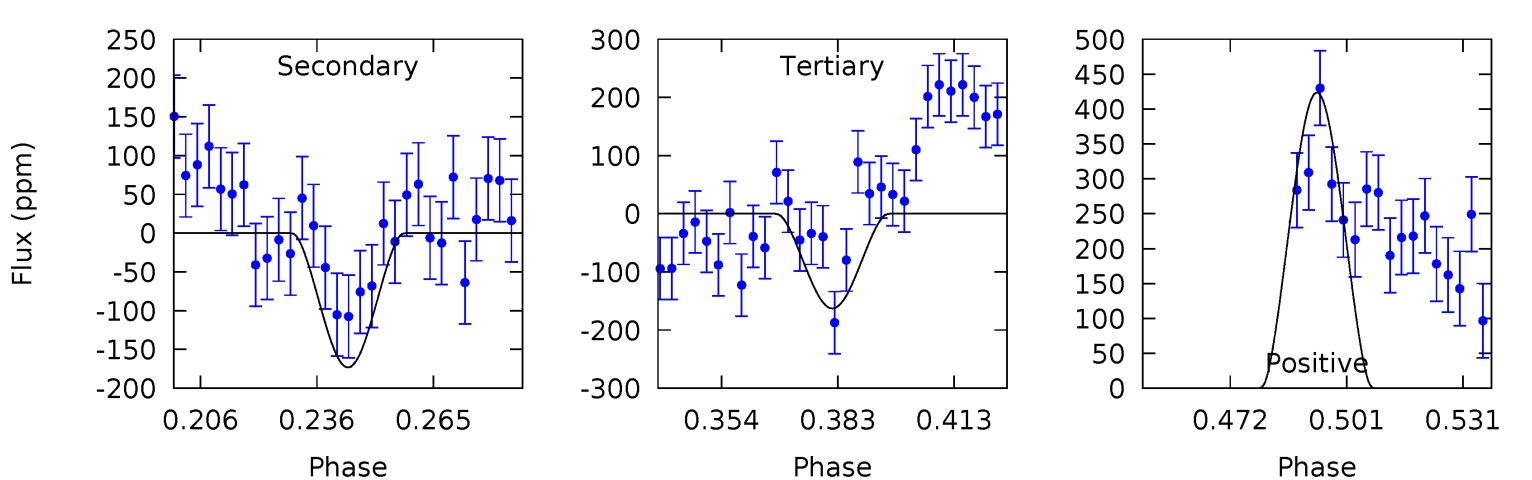
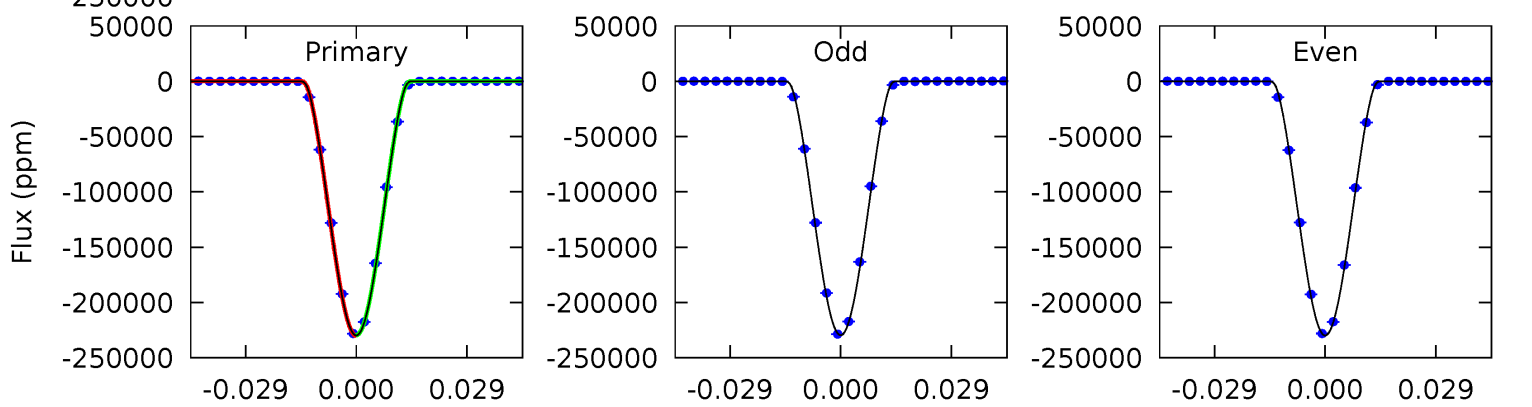
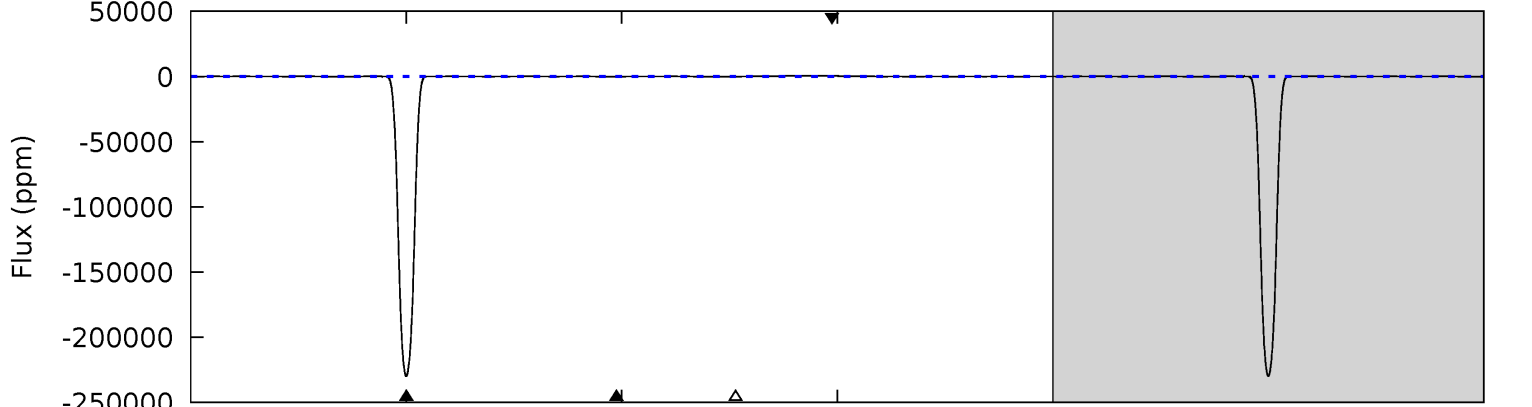
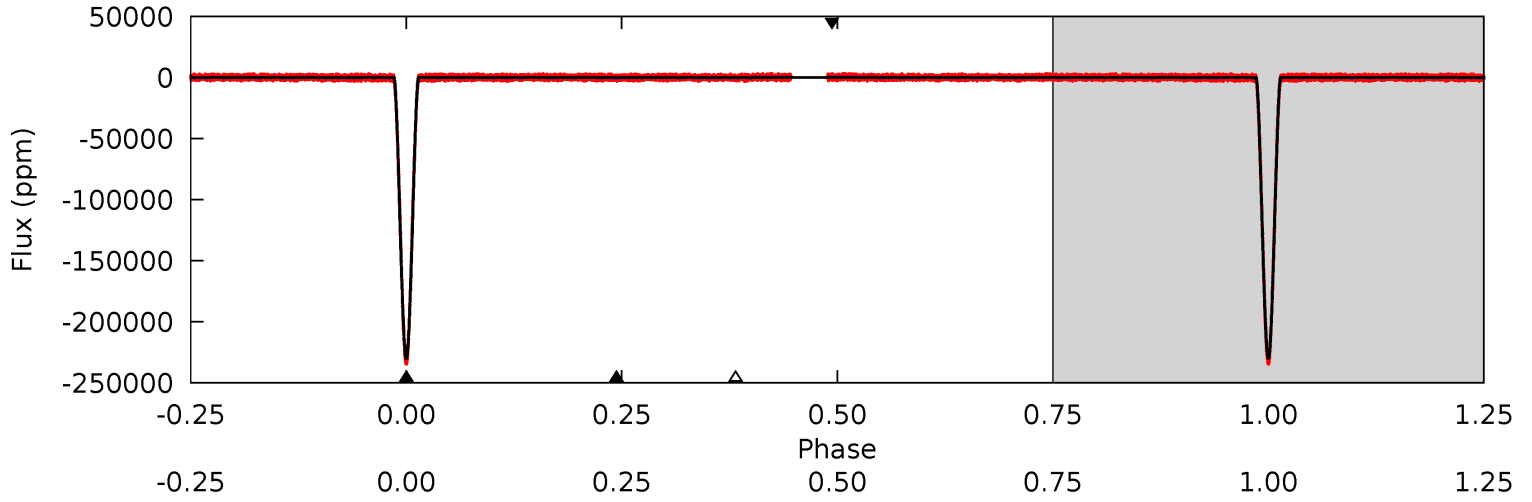
TCE 010711551-02 P= 10.692209 Days $T_0=134.957596$ (BKJD)



DV Model-Shift Uniqueness Test

010711551-02, P = 10.692228 Days, E = 134.956298 Days

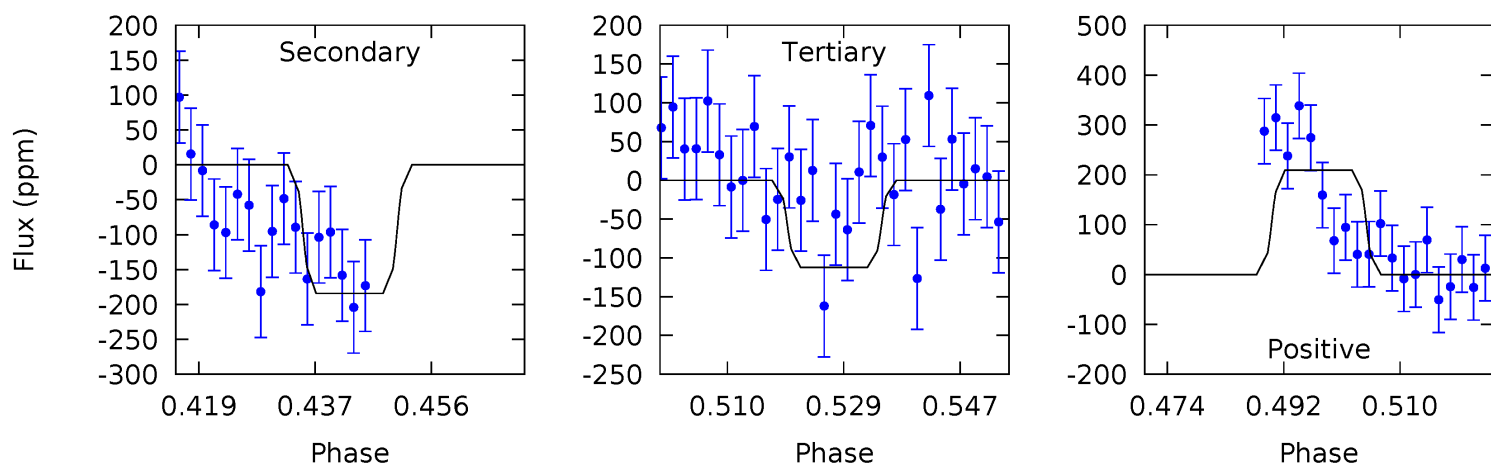
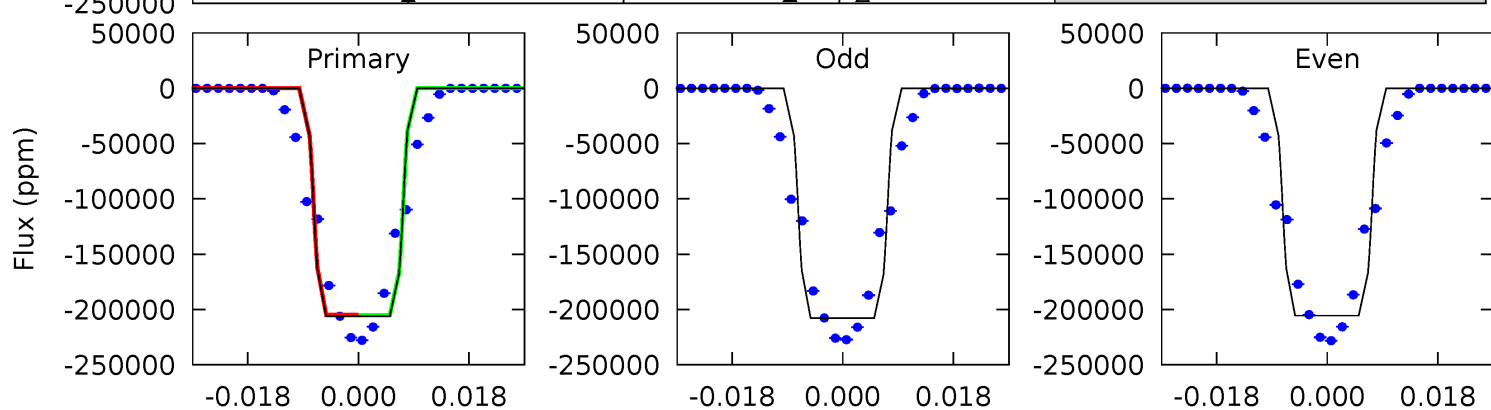
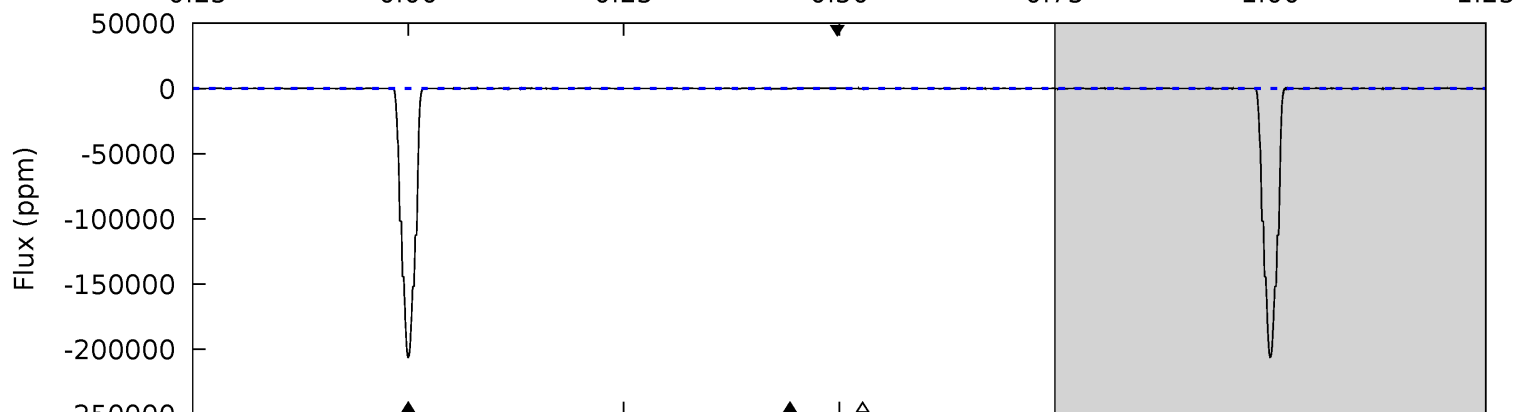
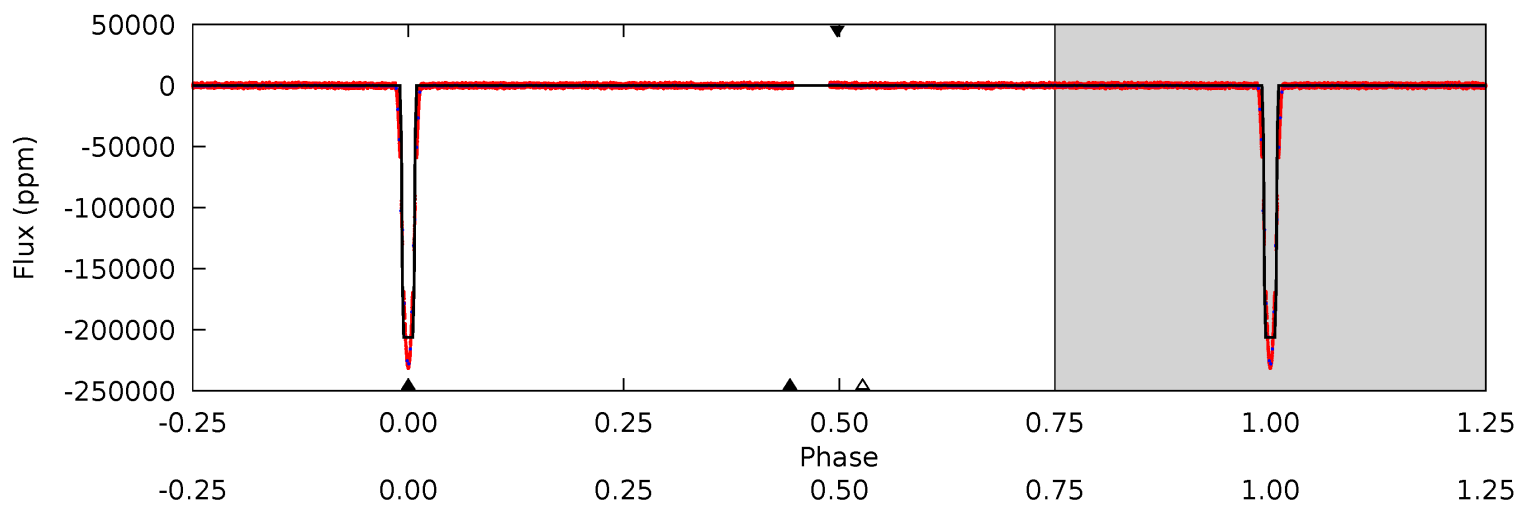
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11033	8.31	7.82	20.3	4.81	2.18	5.15	11025	11012	0.50	-12.0	6.52	0.98	0.00	0



Alt Model-Shift Uniqueness Test

010711551-02, P = 10.692209 Days, E = 134.957596 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6226	5.56	3.39	6.32	4.91	2.36	1.48	6223	6220	2.18	-0.76	31.9	1.00	0.00	0



Stellar Parameters For KIC 010711551

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6022^{+162}_{-180}	$4.490^{+0.054}_{-0.216}$	$-0.200^{+0.300}_{-0.300}$	$0.941^{+0.292}_{-0.097}$	$0.997^{+0.131}_{-0.131}$	$1.685^{+0.483}_{-0.941}$
	+3%/-3%	+1%/-5%	+150%/-150%	+31%/-10%	+13%/-13%	+29%/-56%
Source	PHO1	KIC0	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 010711551-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-173 ± 21	$60.39^{+9.36}_{-6.59}$	1193^{+85}_{-55}	-1720^{+251}_{-148}	$0.230^{+0.058}_{-0.059}$
Alt.	-184 ± 33	$51.12^{+8.28}_{-5.65}$	1194^{+85}_{-54}	1621^{+213}_{-3362}	$0.334^{+0.116}_{-0.094}$

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 $A_{obs} \gg 1.0$

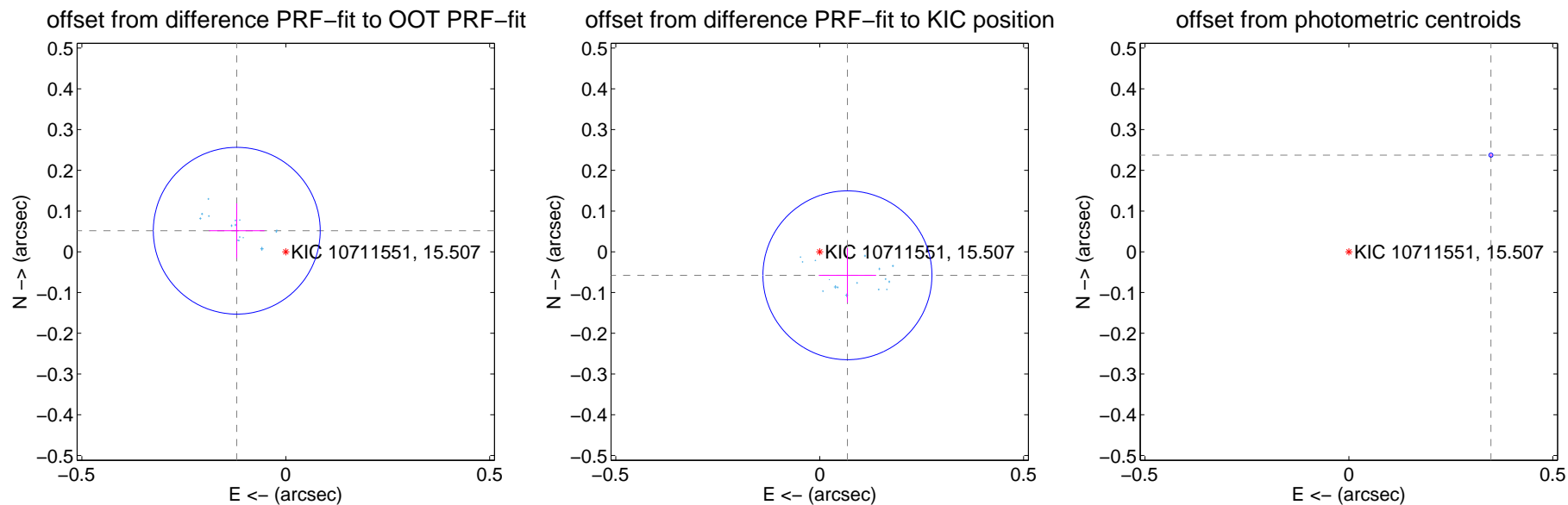
DV Centroid Data

Supplemental centroid analysis for 010711551-02. Kepler magnitude: 15.51. Transit SNR 4074.29

There are 16 quarters with good PRF difference image offsets

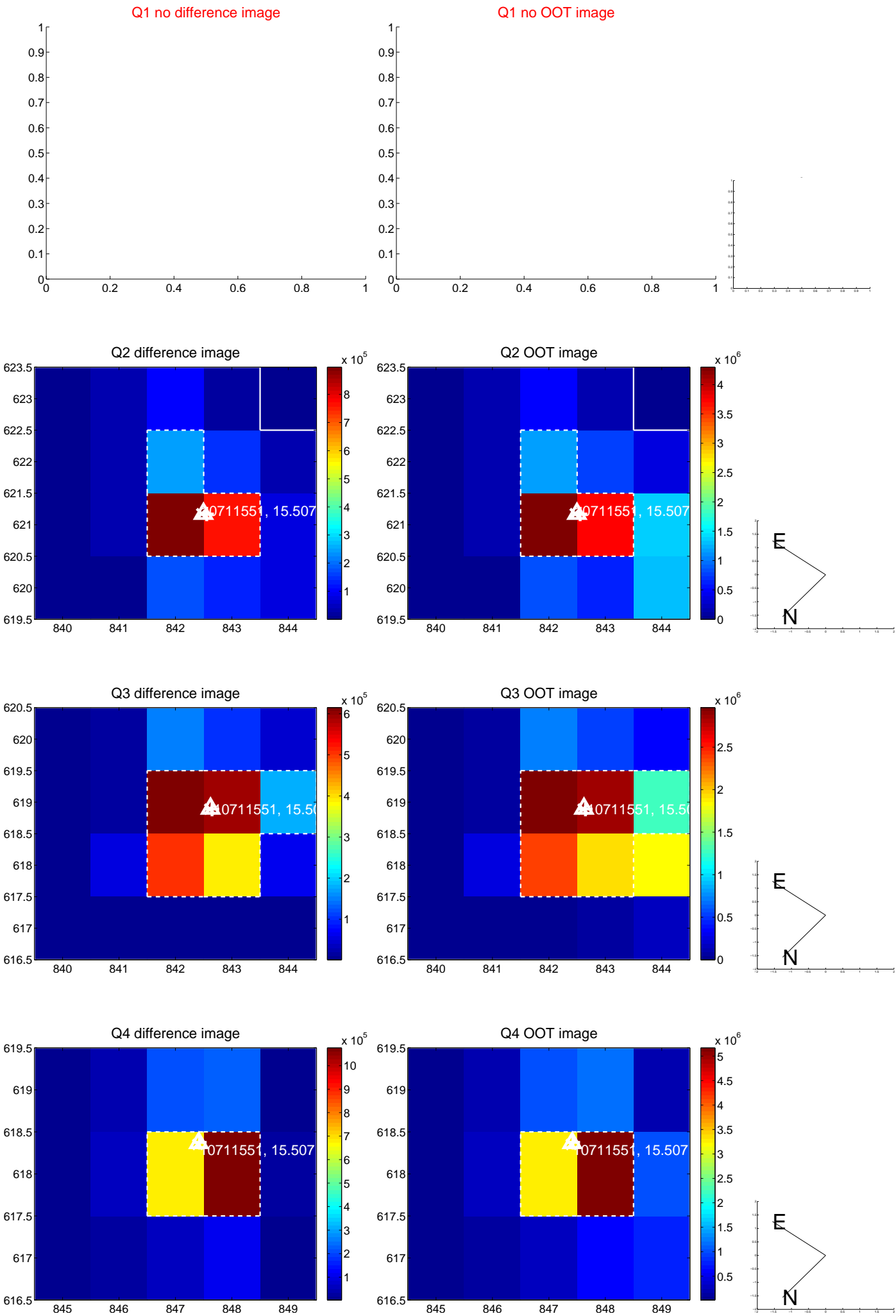
The direct PRF centroid is offset from the target star catalog position by about 0.33 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.131 ± 0.068	1.92	0.120 ± 0.068	0.052 ± 0.067
PRF-fit source offset from KIC position	0.089 ± 0.069	1.29	-0.068 ± 0.070	-0.058 ± 0.067
photometric centroid source offset	0.42 ± 0.00	255.96	-0.35 ± 0.00	0.24 ± 0.00

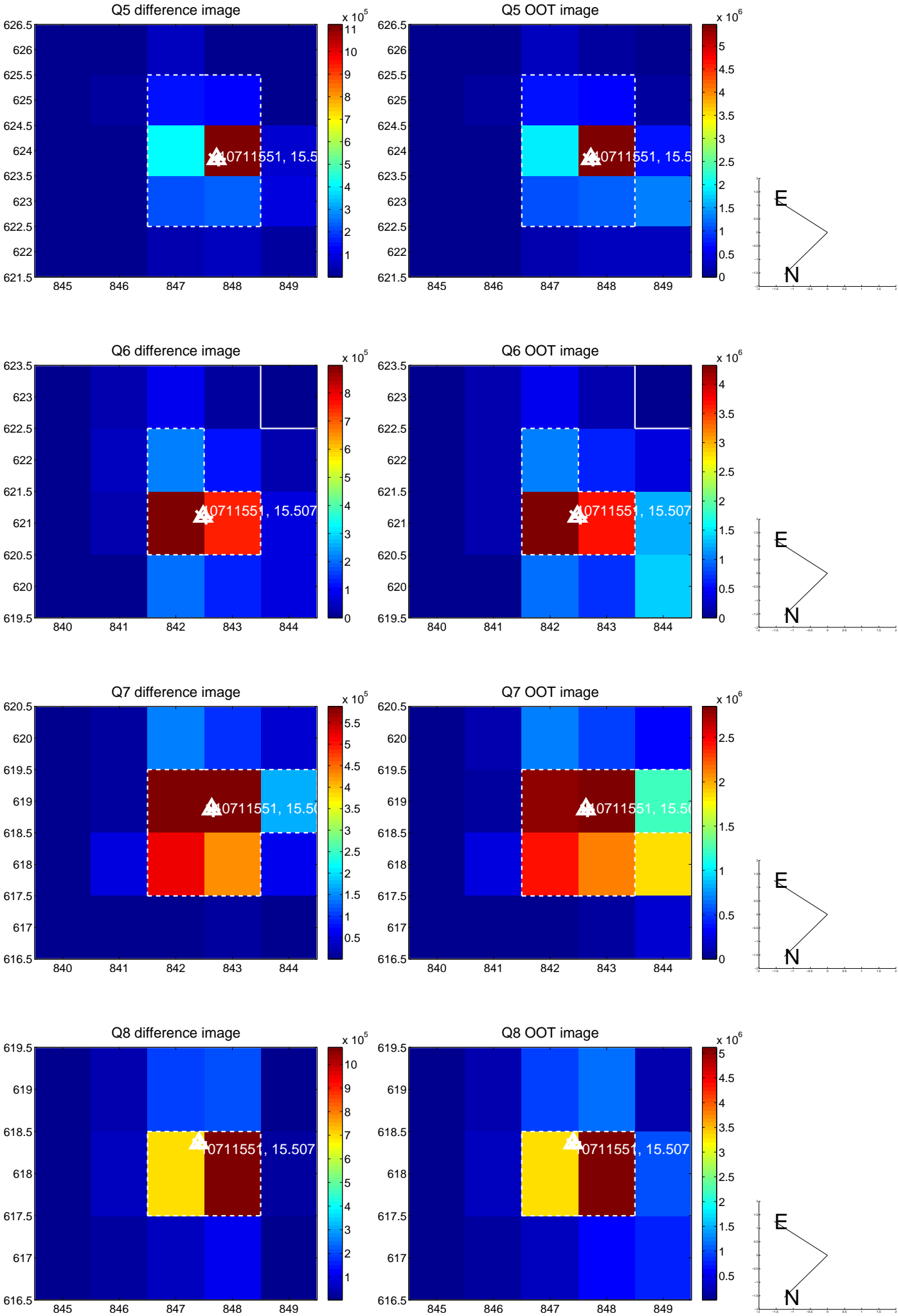


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- 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.

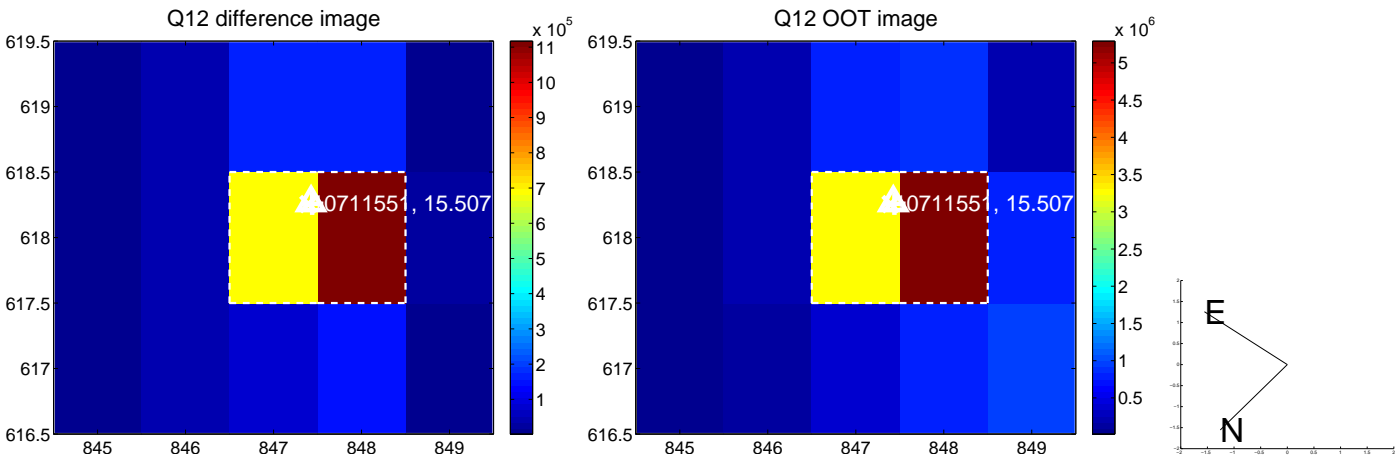
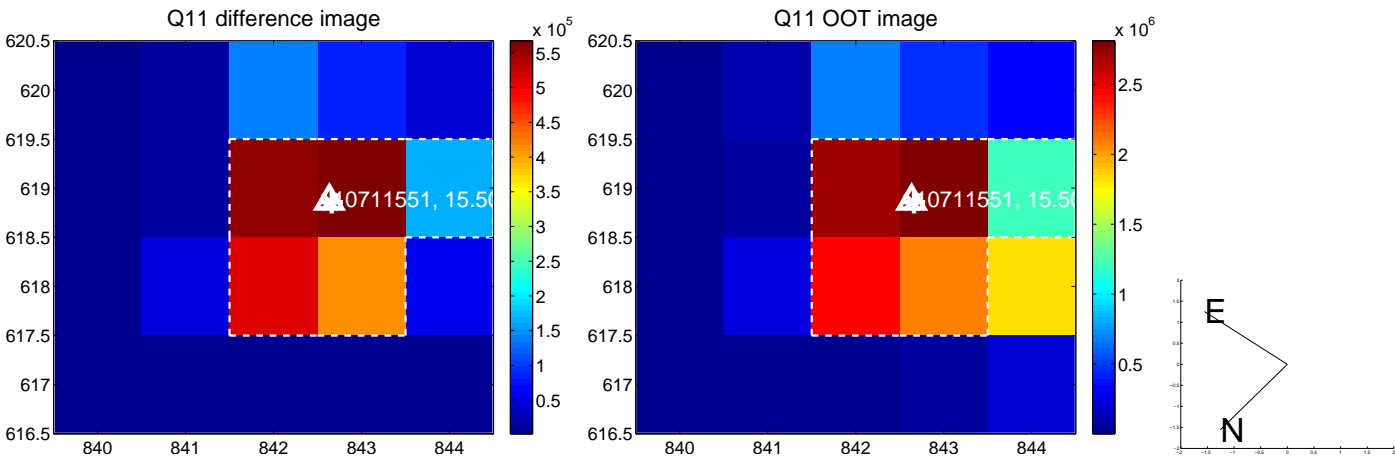
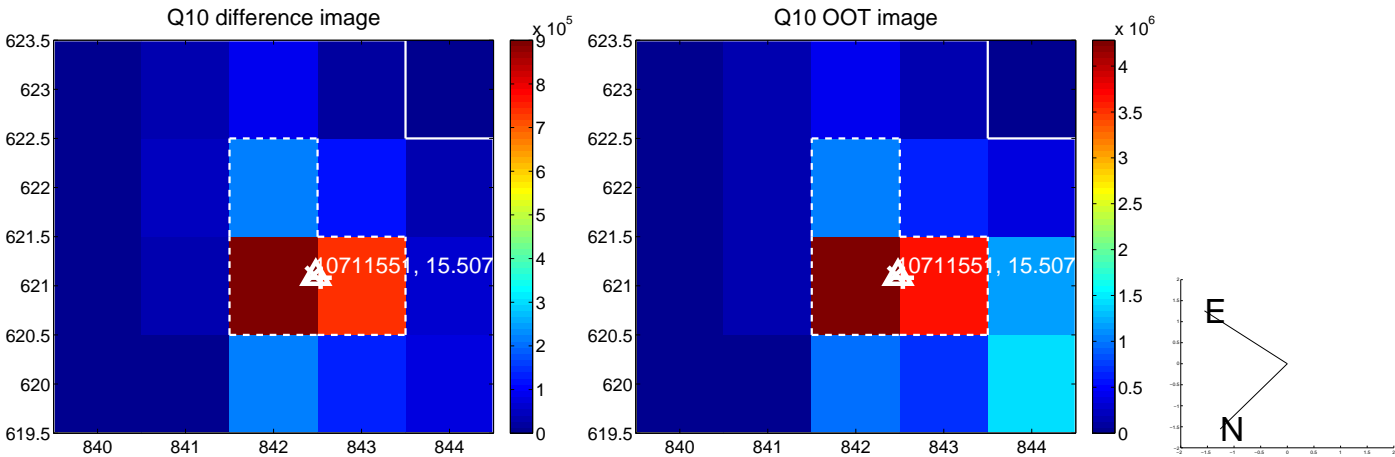
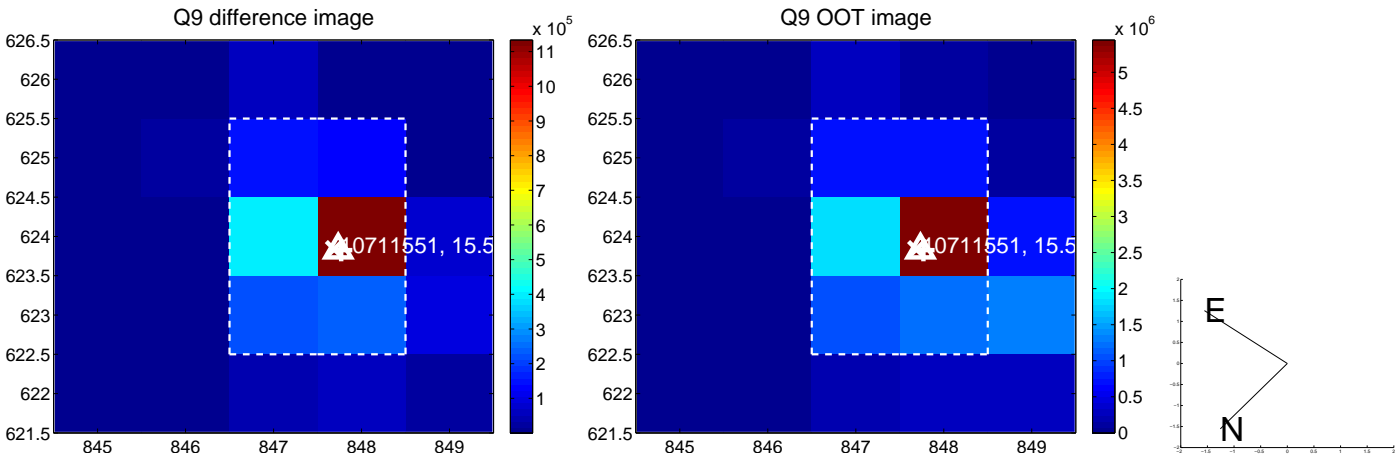
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



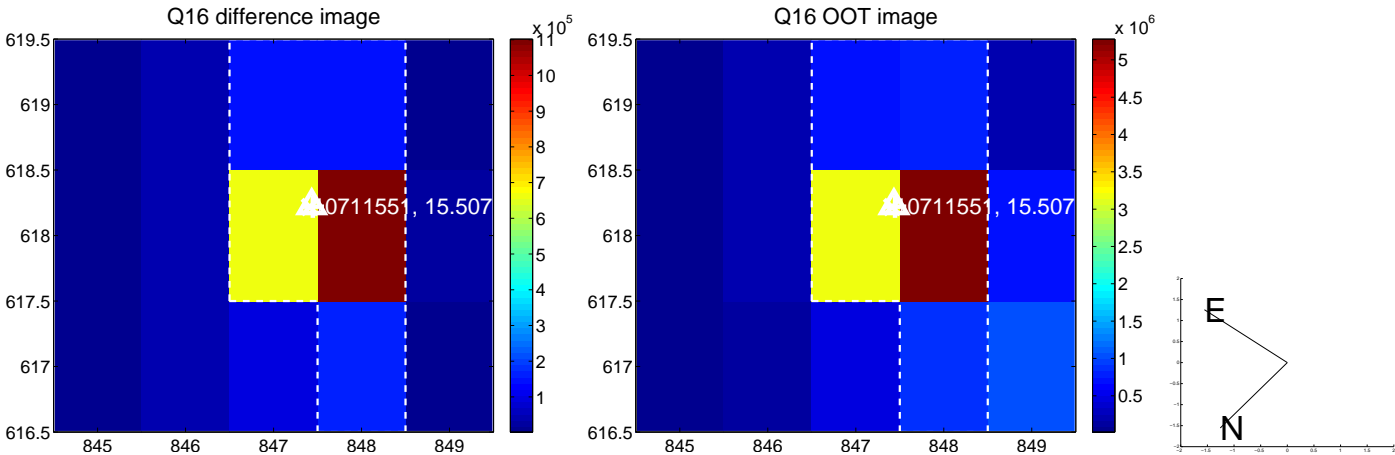
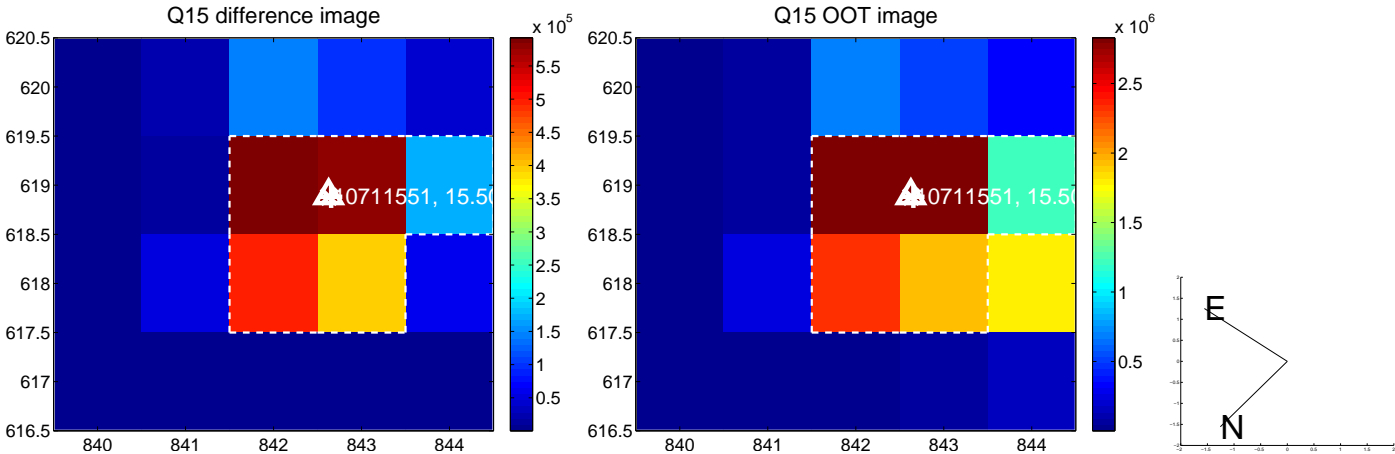
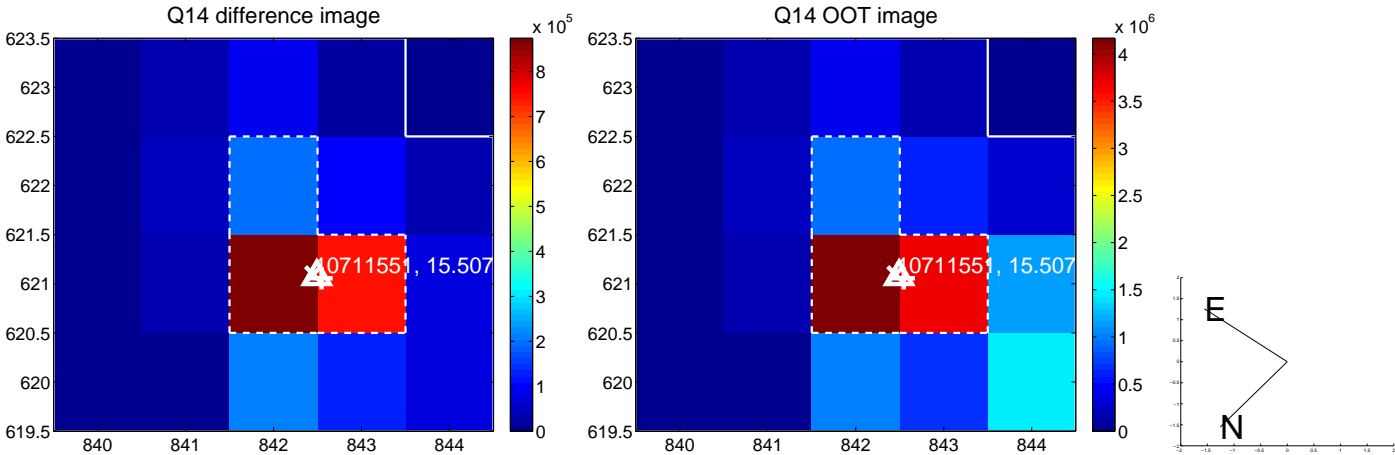
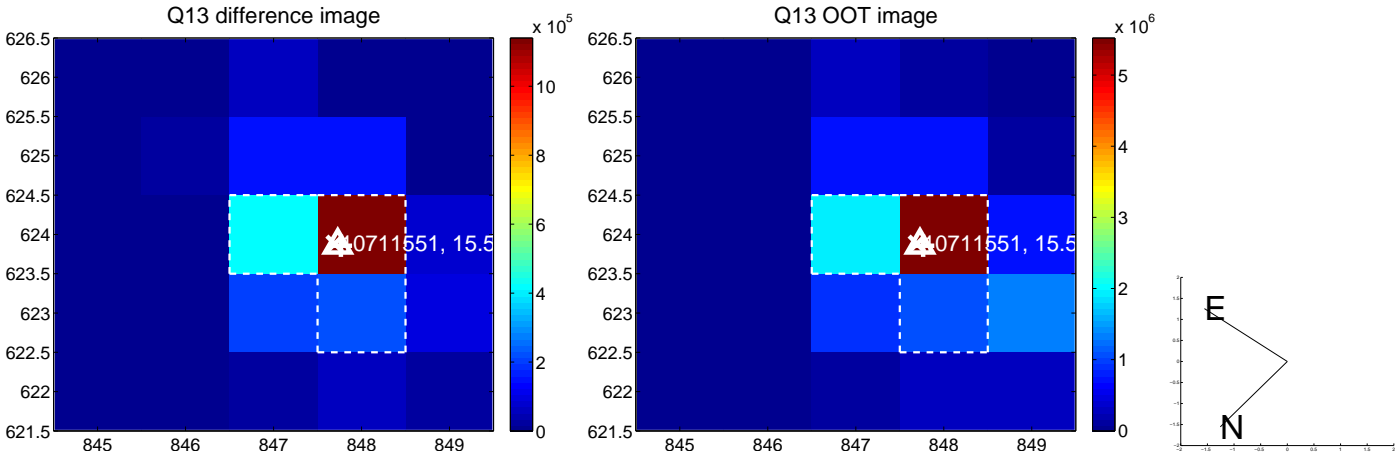
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



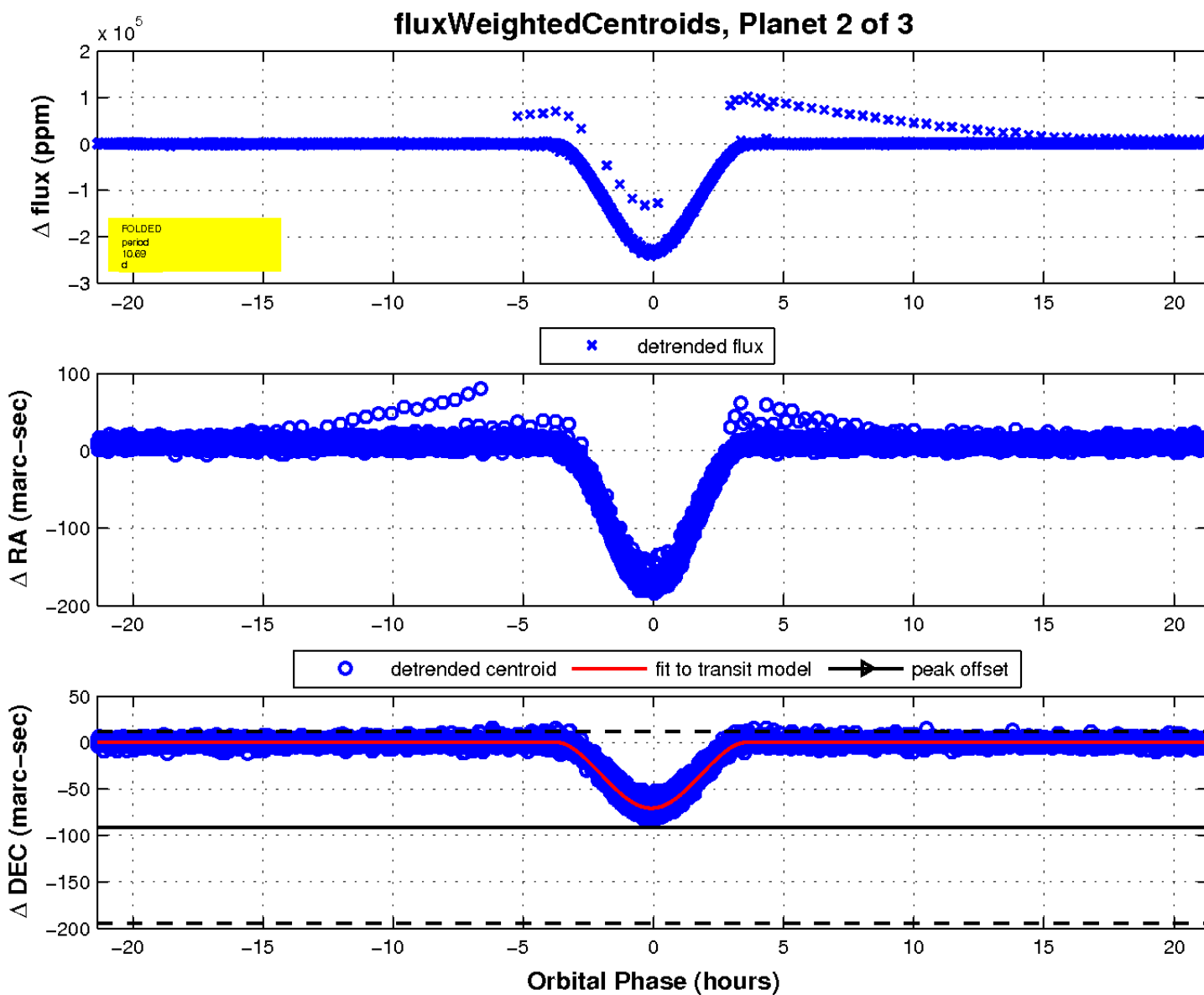
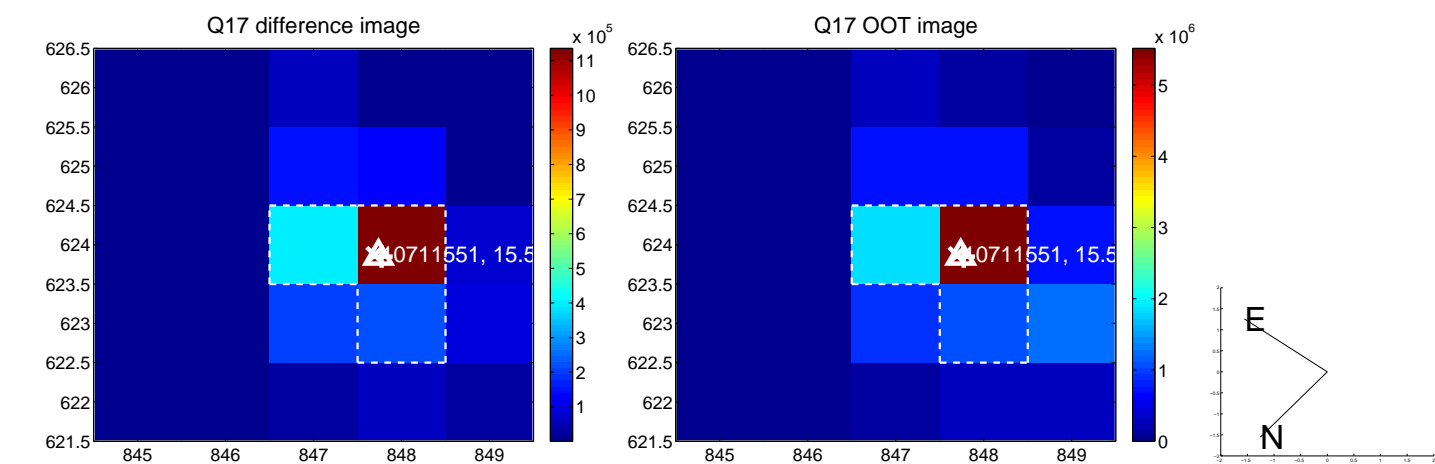
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

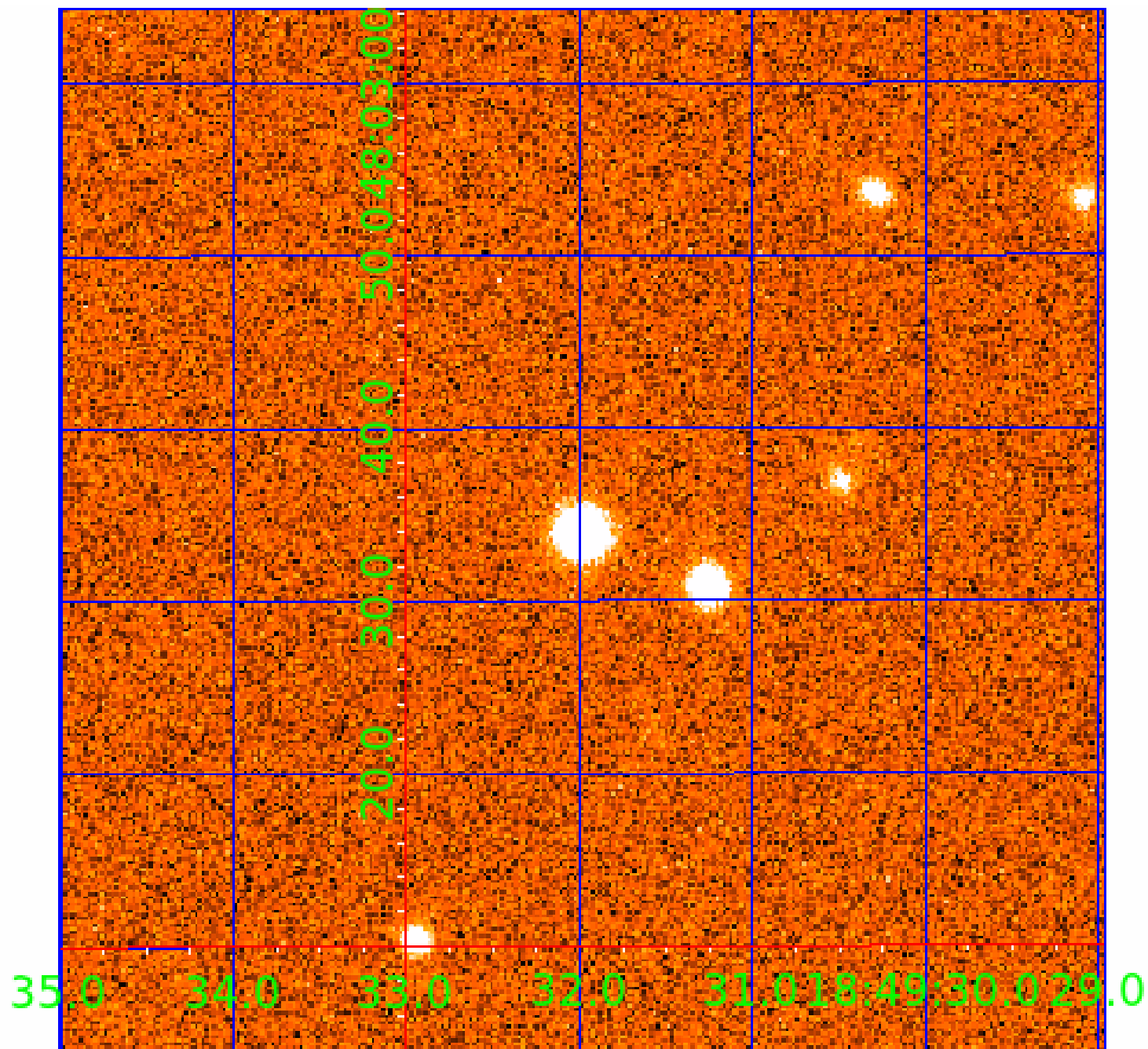


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 010711551

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})
010711551-01	OBS	3359.01	10.692182	139.956865	378412.1	3.500	9157.4	-1.0	0.94	6022	51.34	115.74
010711551-02	OBS	No	10.692228	134.956298	228493.1	7.121	5789.8	4074.3	0.94	6022	58.06	115.74
010711551-03	OBS	No	4.276988	133.520833	1875.5	32.008	368.7	35.8	0.94	6022	5.25	392.70

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010711551-01	OBS	FP	0.00	1	0	0	0	LPP_DV—CENT_NOFITS
010711551-02	OBS	FP	0.00	1	0	0	0	SAME_NTL_PERIOD
010711551-03	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—CENT_NOFITS

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.

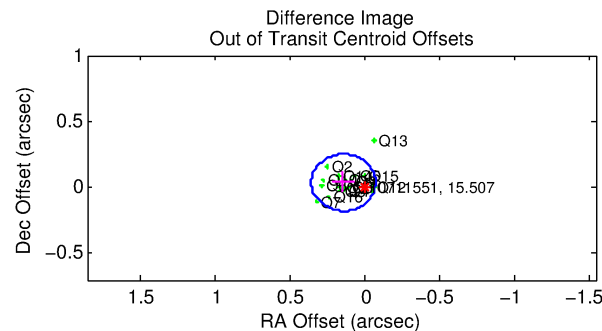
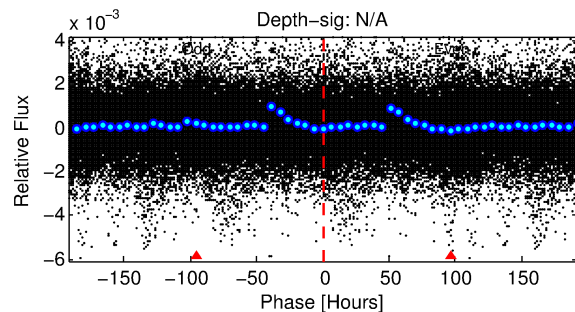
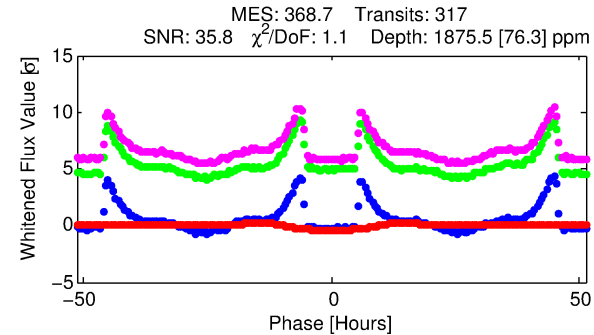
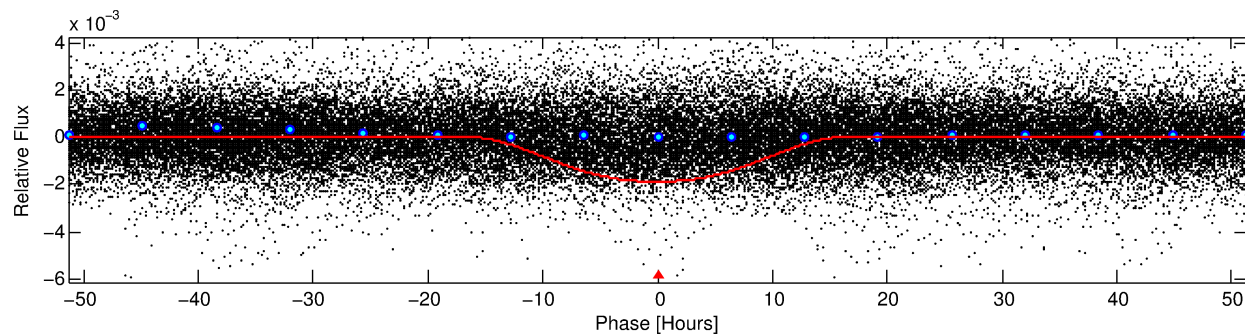
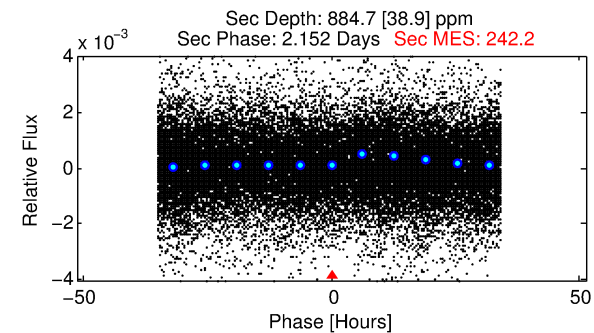
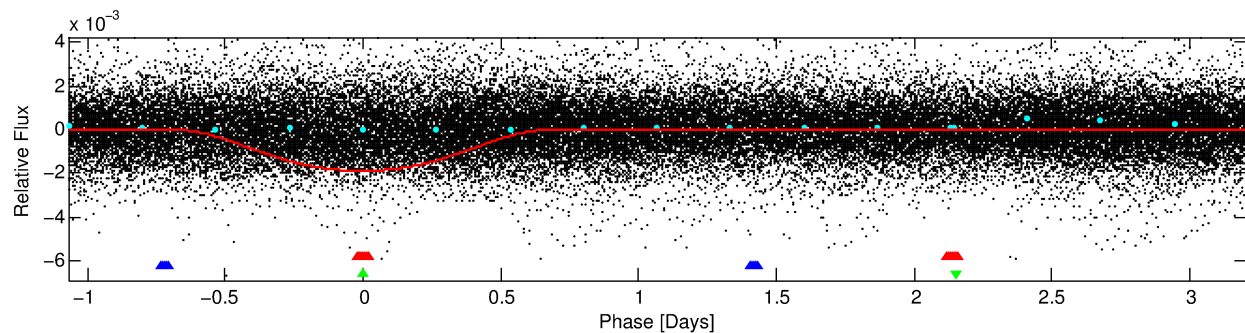
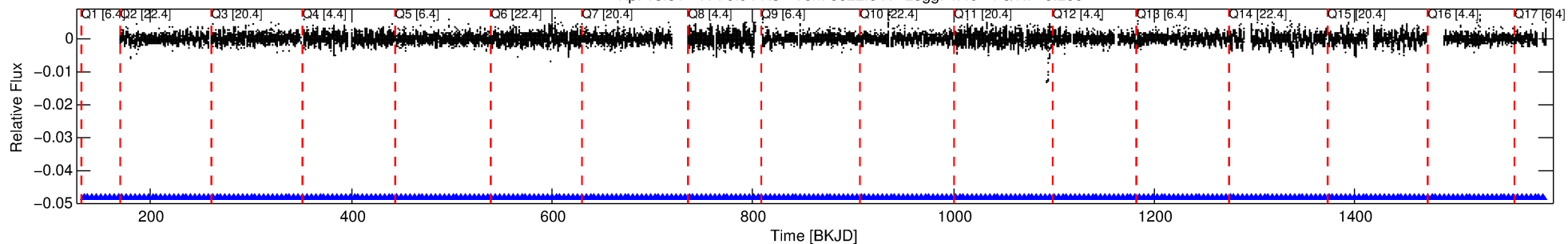
Ephemeris Match Information For 010711551-03

No Significant Match Found

DV One-Page Summary

KIC: 10711551 Candidate: 3 of 3 Period: 4.277 d
KOI: K03359 Corr: No Ephemeris Match

Kp: 15.51 R*: 0.94 Rs Teff: 6022.0 K Logg: 4.49 Fe/H: -0.200



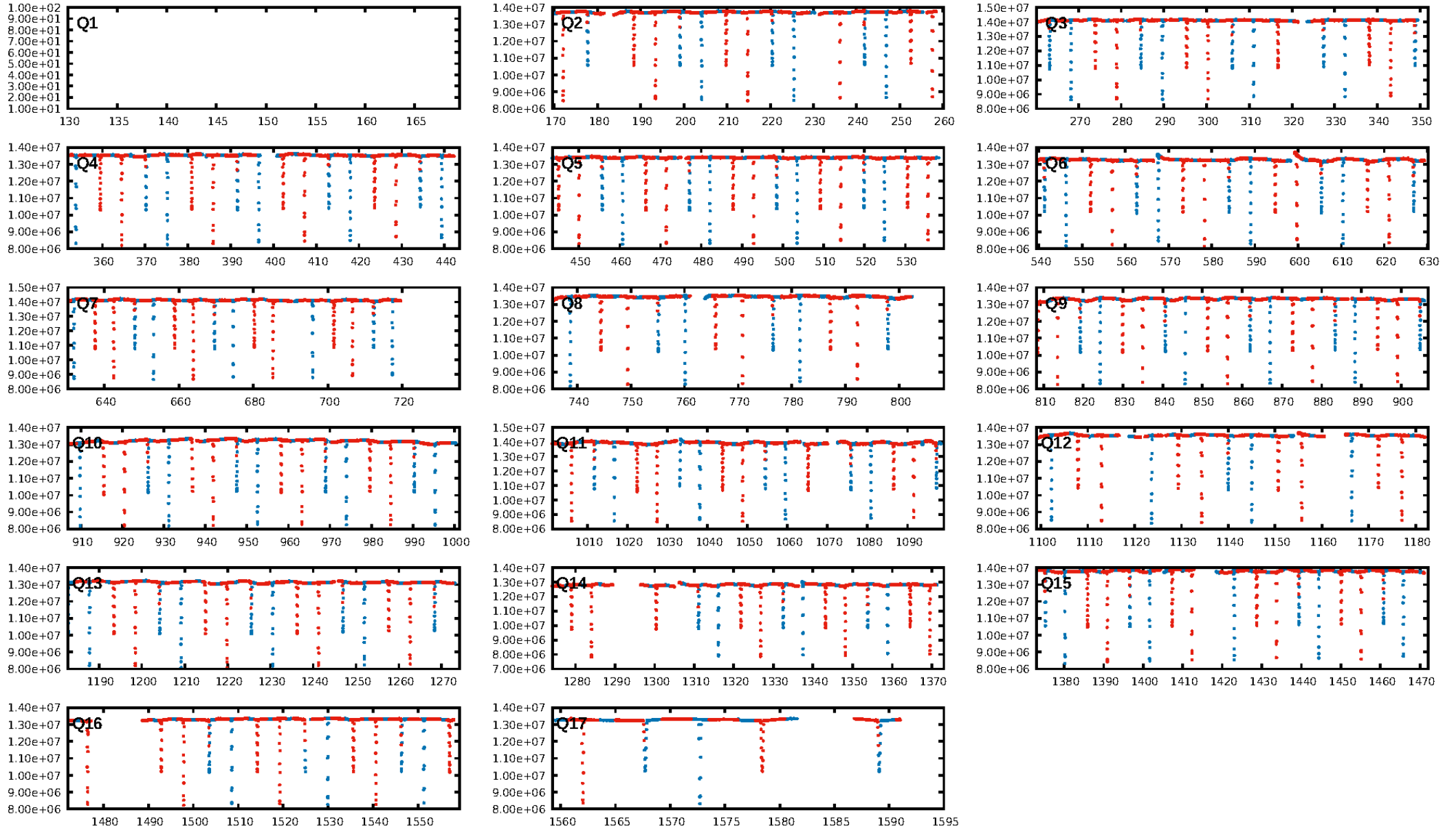
DV Fit Results:

Period = 4.27699 [0.00006] d
Epoch = 133.5208 [0.0125] BKJD
Rp/R* = 0.0511 [0.0017]
a/R* = 1.09 [0.00]
b = 0.95 [0.00]
Seff = 392.70 [160.50]
Teff = 1135 [116] K
Rp = 5.24 [1.64] Re
a = 0.0515 [0.0137] AU
Ag = 47.01 [18.74] [2.46σ]
Teffp = 4595 [164] K [17.20σ]

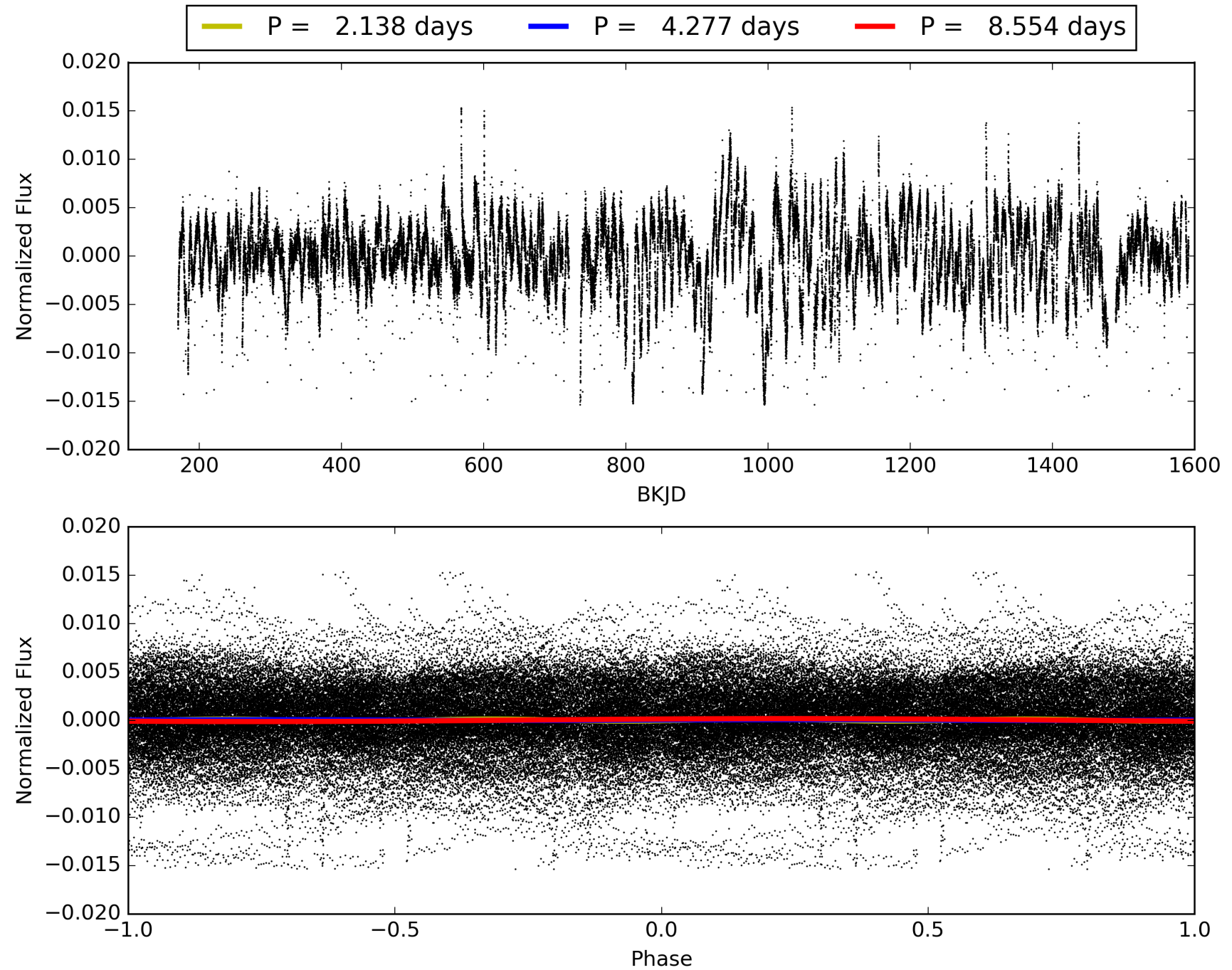
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [4.78σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [311/311]
GhostDiagnostic-chr: -0.4448
Centroid-sig: N/A
Centroid-so: 1.232 arcsec [14.23σ]
OotOffset-rm: 0.143 arcsec [1.99σ]
KicOffset-rm: 0.097 arcsec [1.38σ]
OotOffset-st: 4/4/4 [16]
KicOffset-st: 4/4/4 [16]
DiffImageQuality-fgm: 0.88 [14/16]
DiffImageOverlap-fno: 0.00 [0/16]

TCE 010711551-03, PDC Light Curves

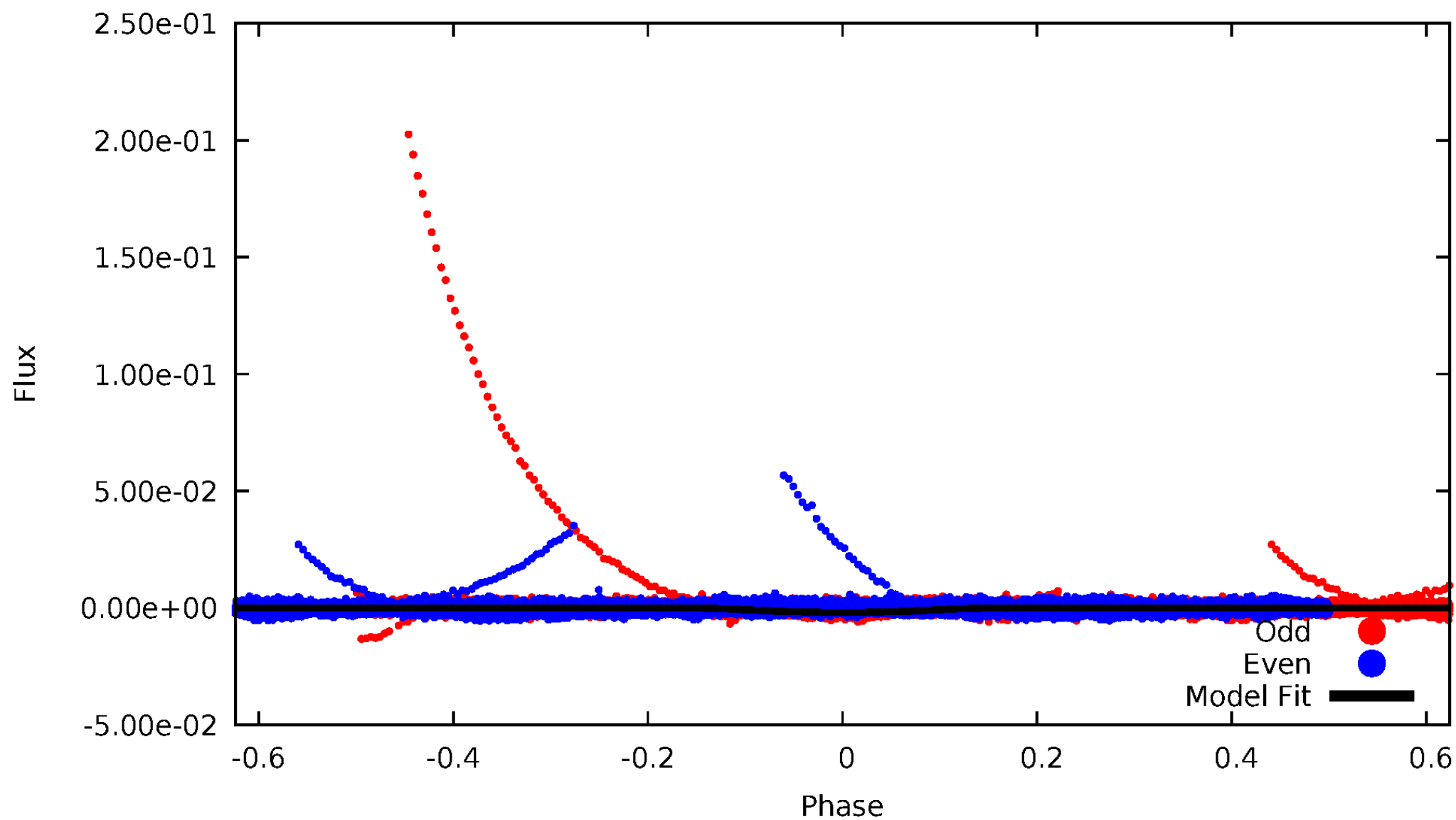


TCE 010711551-03



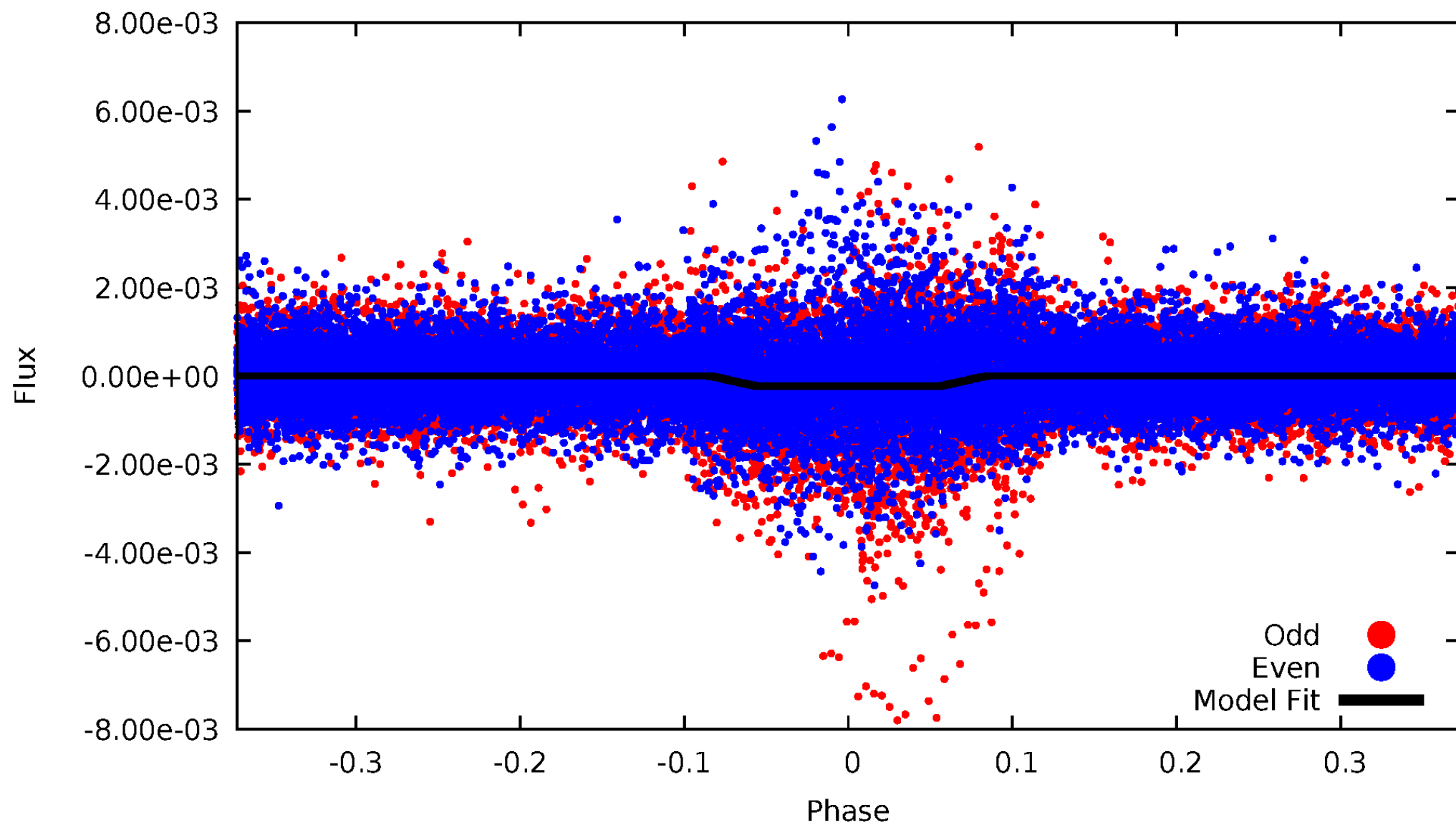
DV Odd/Even

TCE 010711551-03



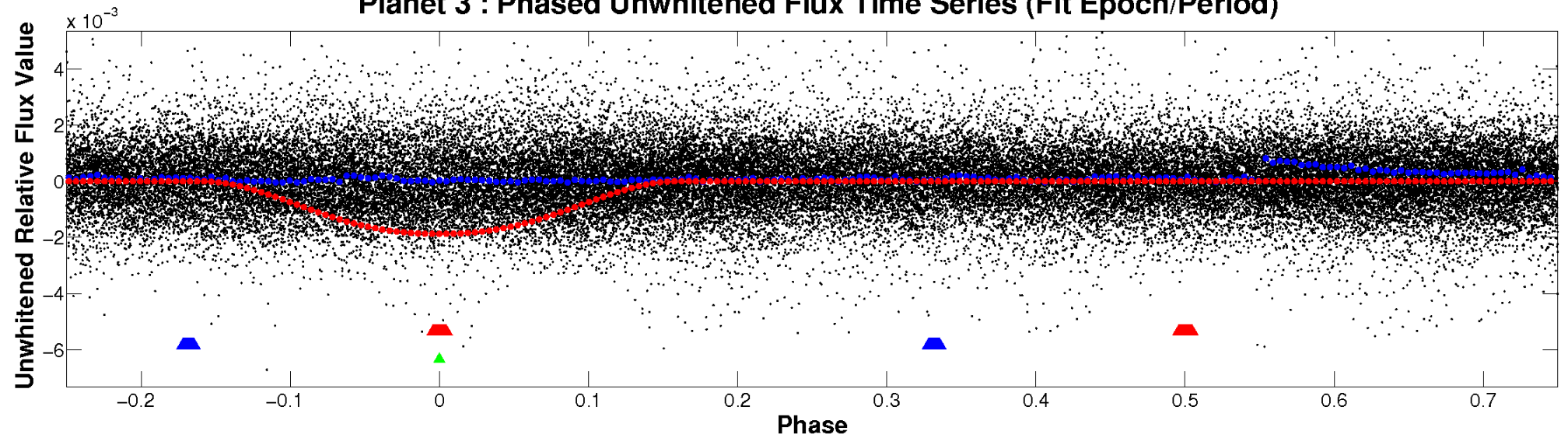
ALT Odd/Even

TCE 010711551-03

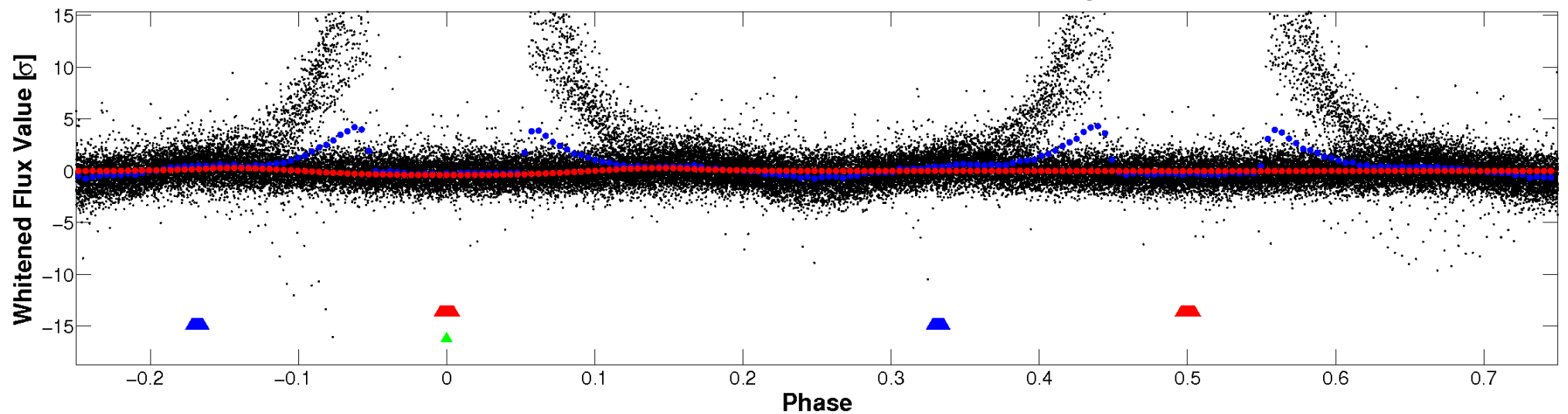


Non-Whitened Vs. Whitened Light Curve

Planet 3 : Phased Unwhitened Flux Time Series (Fit Epoch/Period)

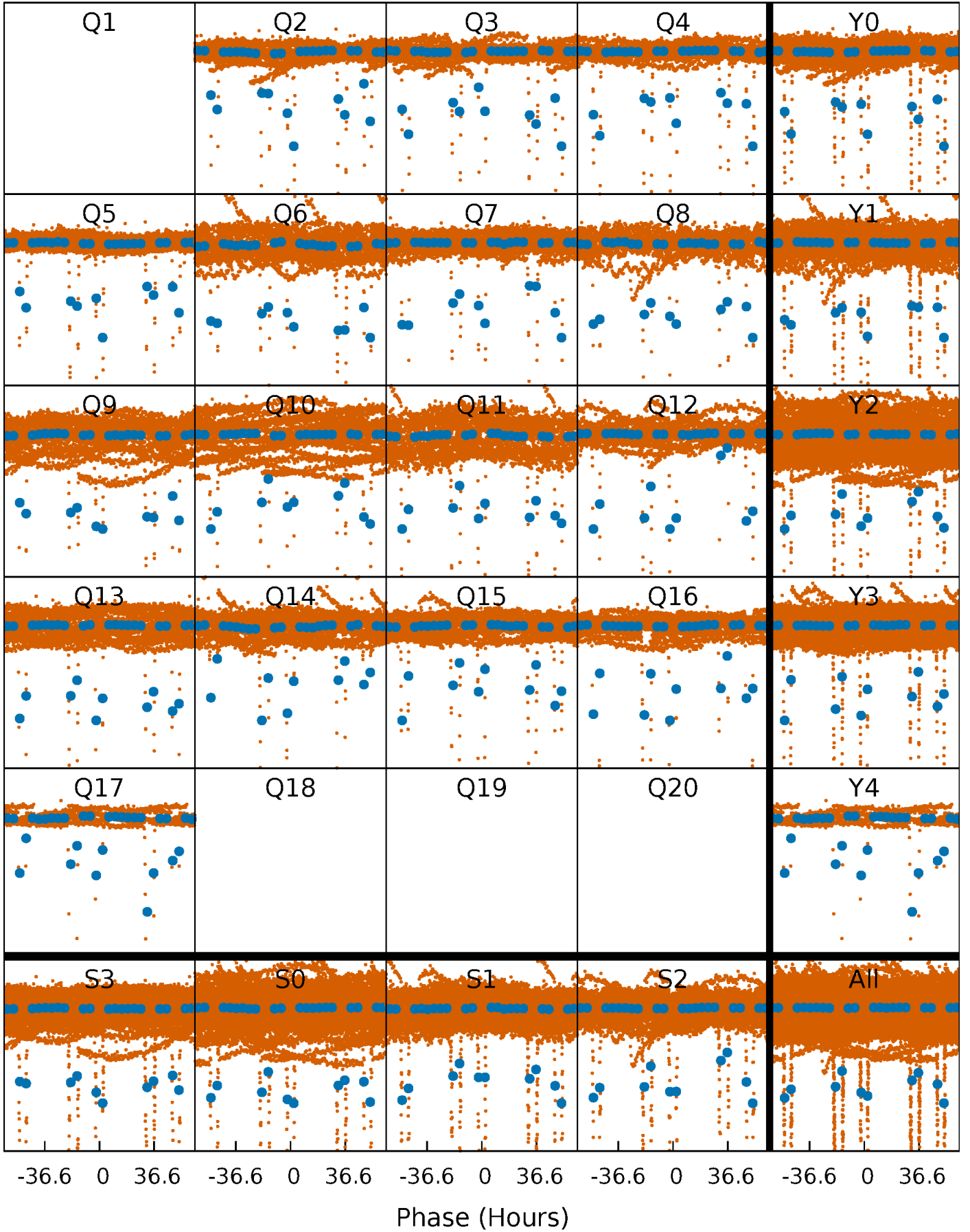


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



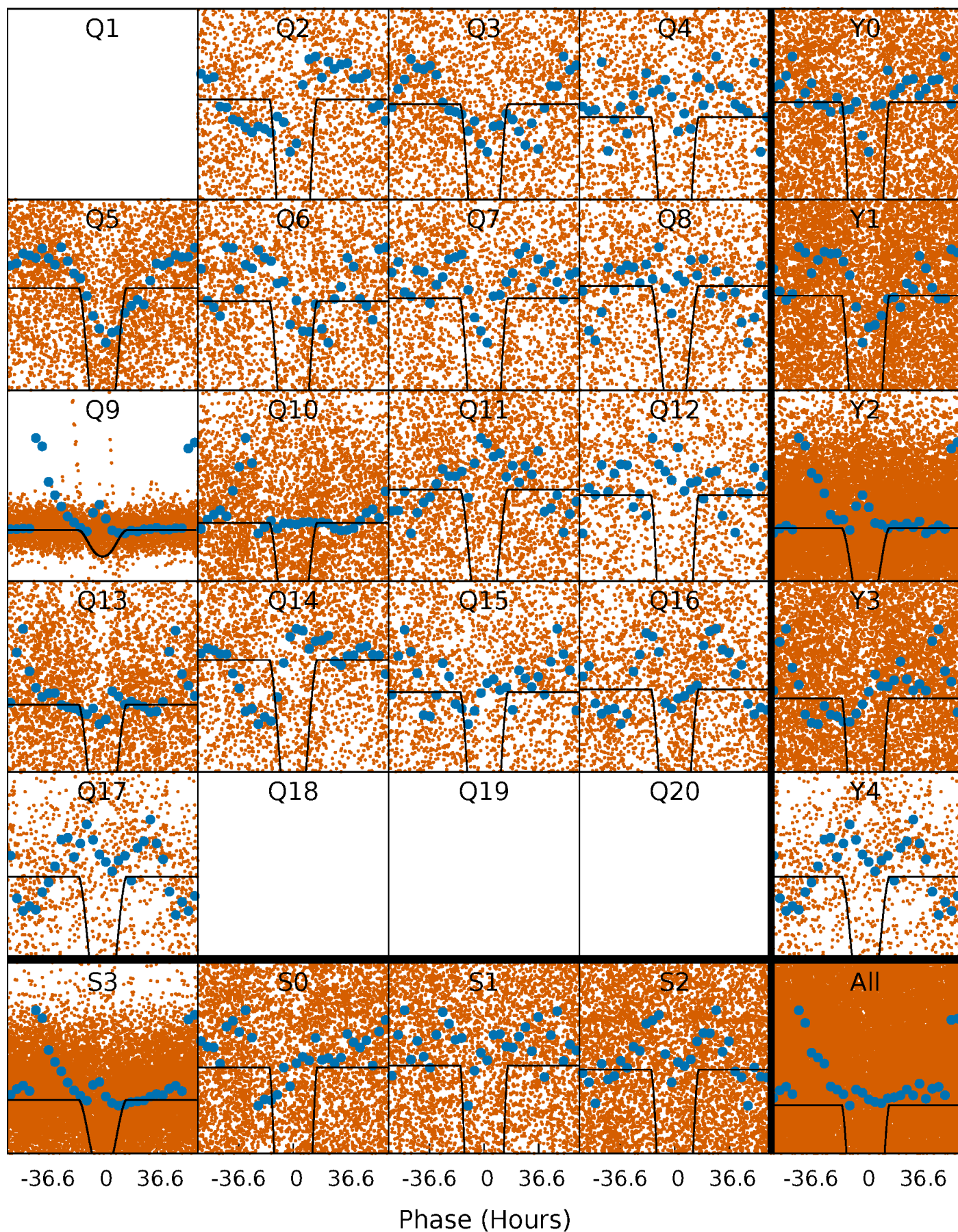
PDC Quarter-Phased Transit Curves

TCE 010711551-03 P= 4.276988 Days $T_0=133.520833$ (BKJD)



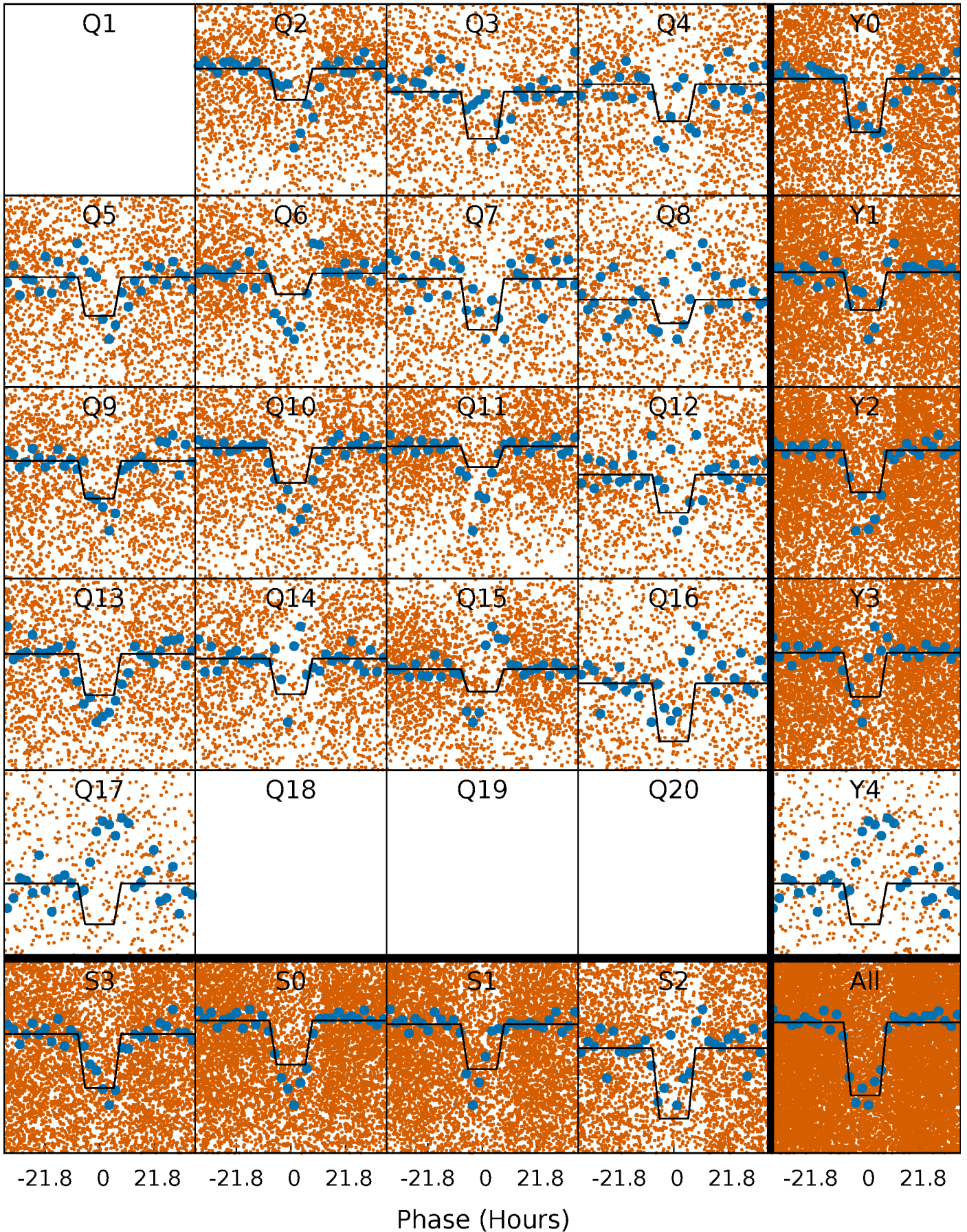
DV Quarter-Phased Transit Curves

TCE 010711551-03 P= 4.276988 Days $T_0=133.520833$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

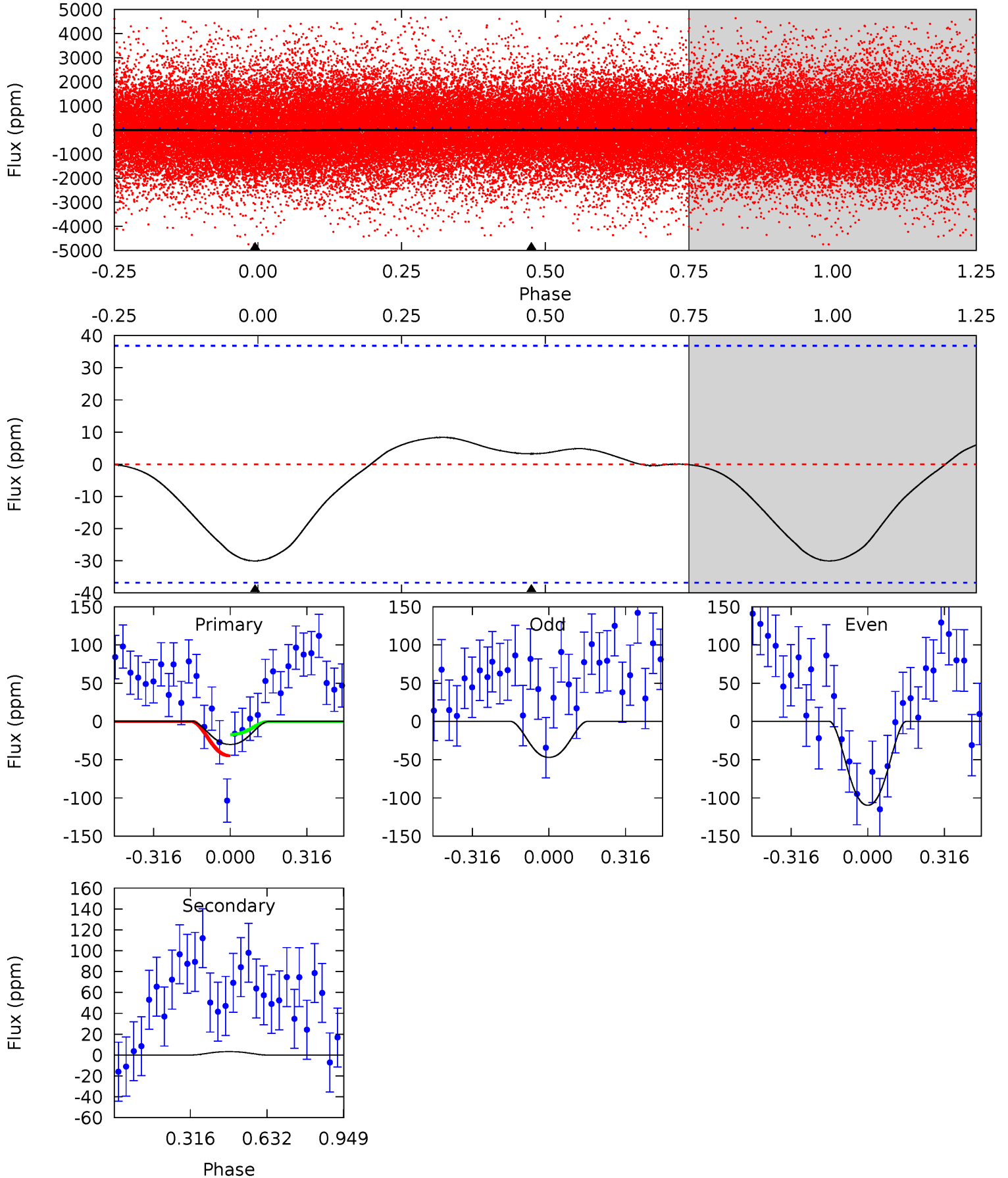
TCE 010711551-03 P= 4.276909 Days $T_0=133.249525$ (BKJD)



DV Model-Shift Uniqueness Test

010711551-03, P = 4.276988 Days, E = 133.520833 Days

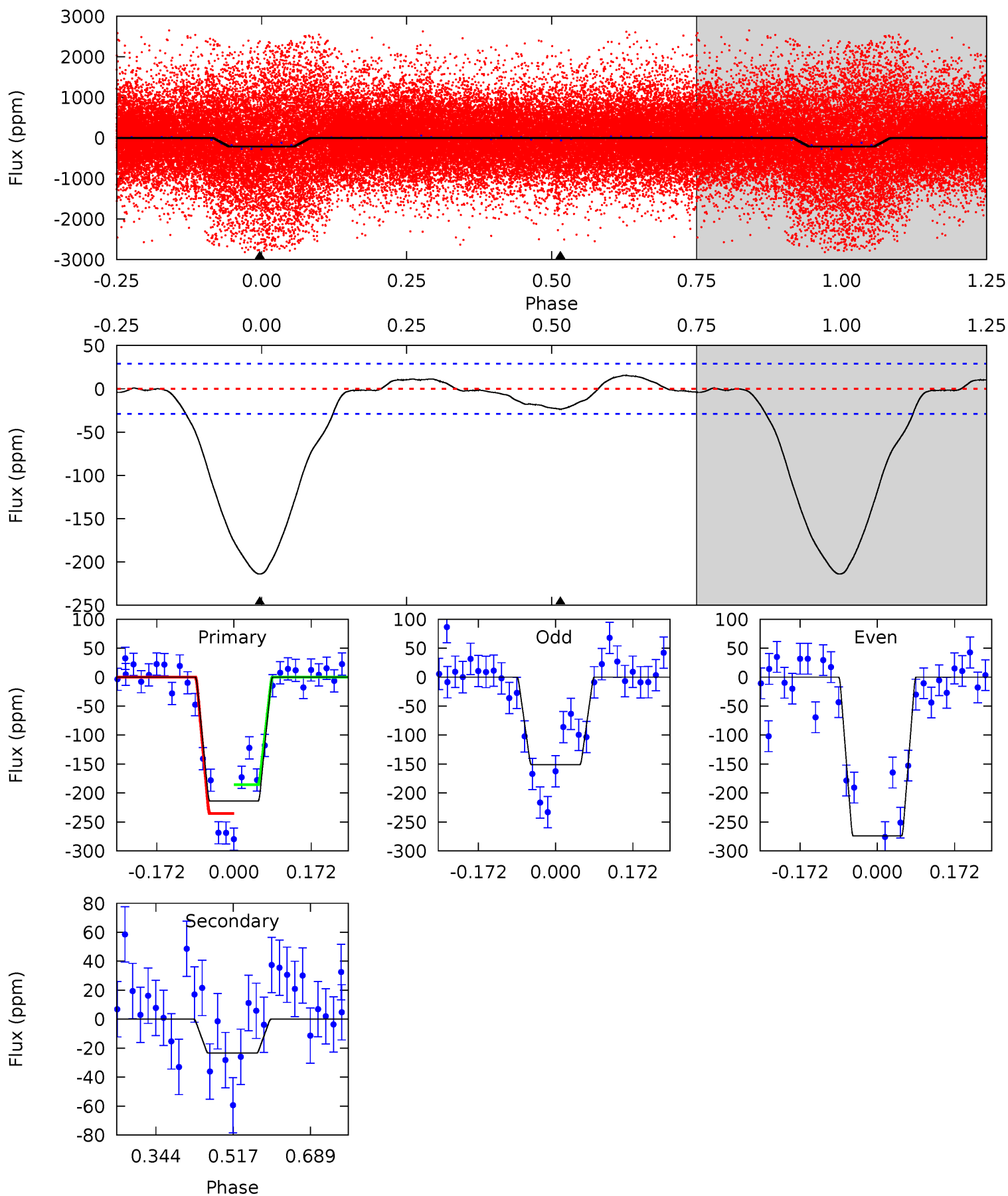
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.52	-0.38	0	0	4.32	1.00	0.27	3.52	3.52	-0.38	-0.38	3.66	-0.05	0.22	1.63



Alt Model-Shift Uniqueness Test

010711551-03, P = 4.276909 Days, E = 133.249525 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
32.8	3.59	0	0	4.45	1.37	0.83	32.8	32.8	3.59	3.59	9.45	1.72	0.07	3.83



Stellar Parameters For KIC 010711551

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6022^{+162}_{-180}	$4.490^{+0.054}_{-0.216}$	$-0.200^{+0.300}_{-0.300}$	$0.941^{+0.292}_{-0.097}$	$0.997^{+0.131}_{-0.131}$	$1.685^{+0.483}_{-0.941}$
	+3%/-3%	+1%/-5%	+150%/-150%	+31%/-10%	+13%/-13%	+29%/-56%
Source	PHO1	KIC0	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 010711551-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	3 ± 9	$5.39^{+0.93}_{-0.45}$	1616^{+121}_{-75}	-2385^{+520}_{-193}	$-0.154^{+0.406}_{-0.407}$
Alt.	-23 ± 7	$1.64^{+0.32}_{-0.24}$	1625^{+111}_{-81}	3768^{+243}_{-271}	12^{+6}_{-5}

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 $A_{obs} \gg 1.0$

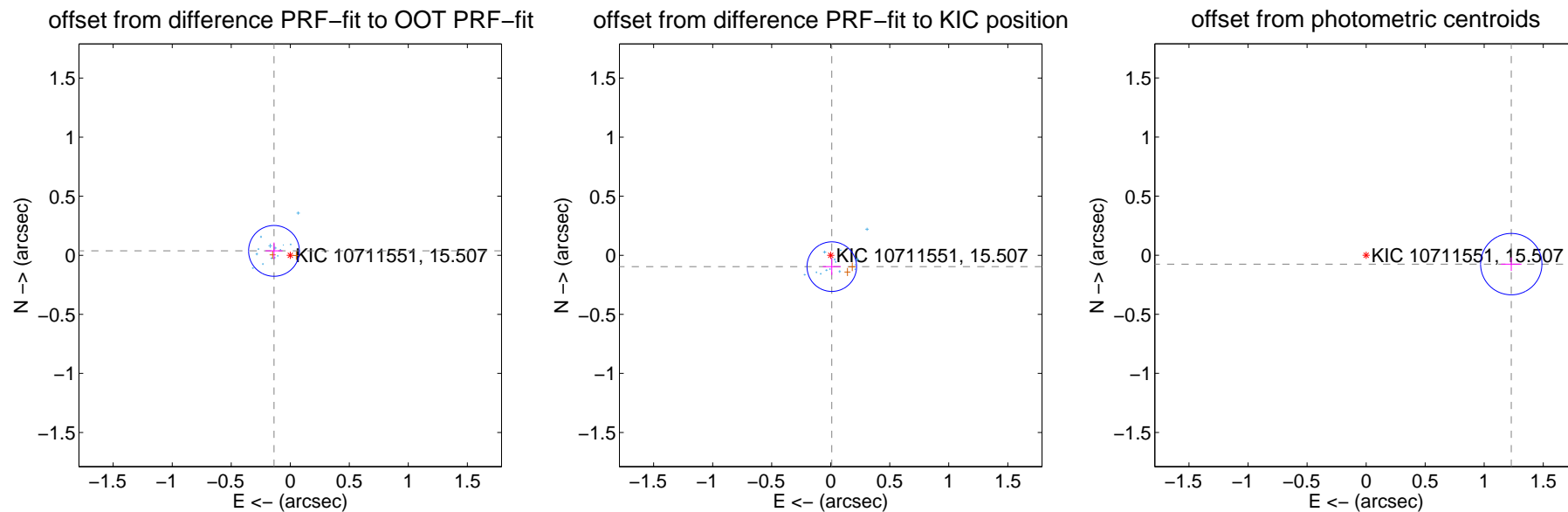
DV Centroid Data

Supplemental centroid analysis for 010711551-03. Kepler magnitude: 15.51. Transit SNR 35.84

There are 14 quarters with good PRF difference image offsets

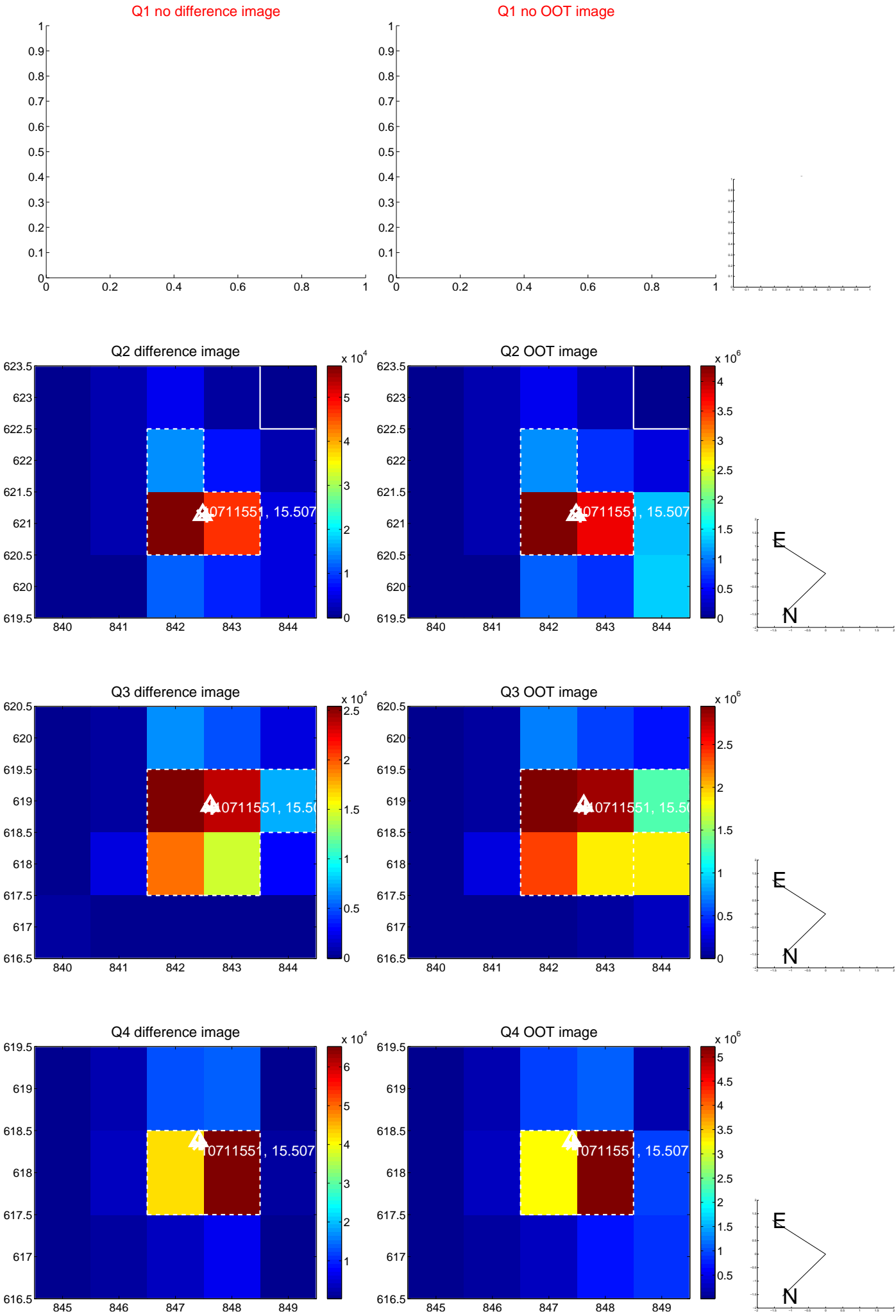
The direct PRF centroid is offset from the target star catalog position by about 0.33 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.143 ± 0.072	1.99	0.138 ± 0.072	0.037 ± 0.070
PRF-fit source offset from KIC position	0.097 ± 0.070	1.38	-0.009 ± 0.075	-0.096 ± 0.071
photometric centroid source offset	1.23 ± 0.09	14.23	-1.23 ± 0.09	-0.08 ± 0.06

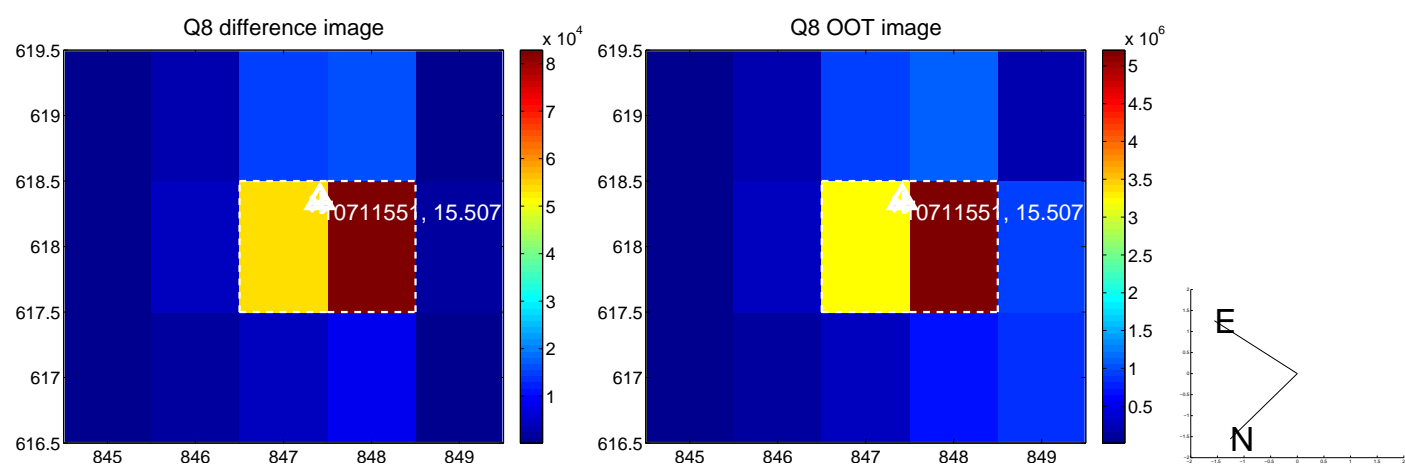
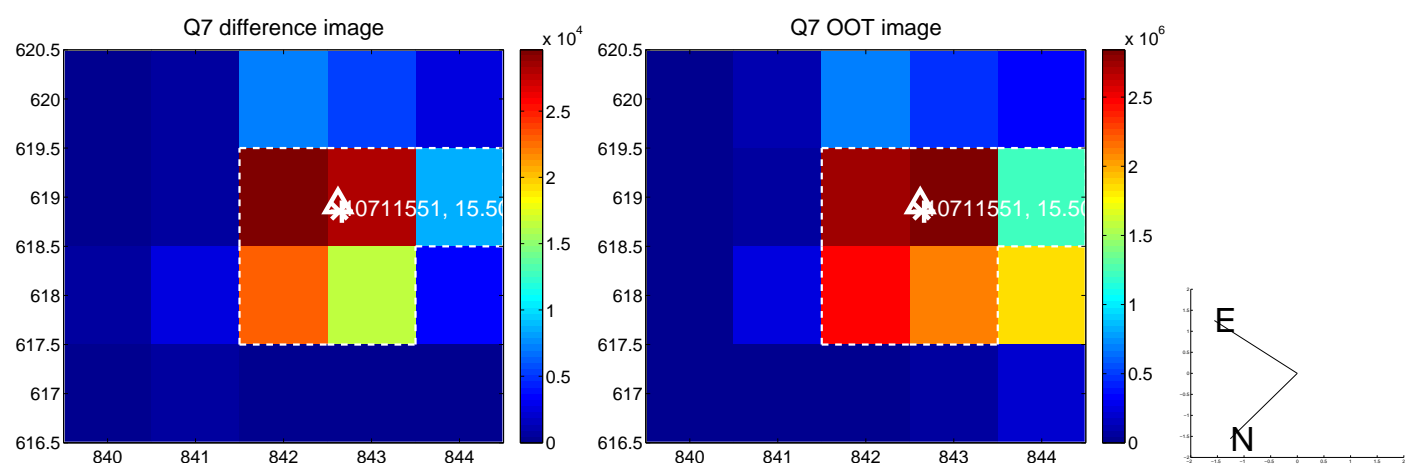
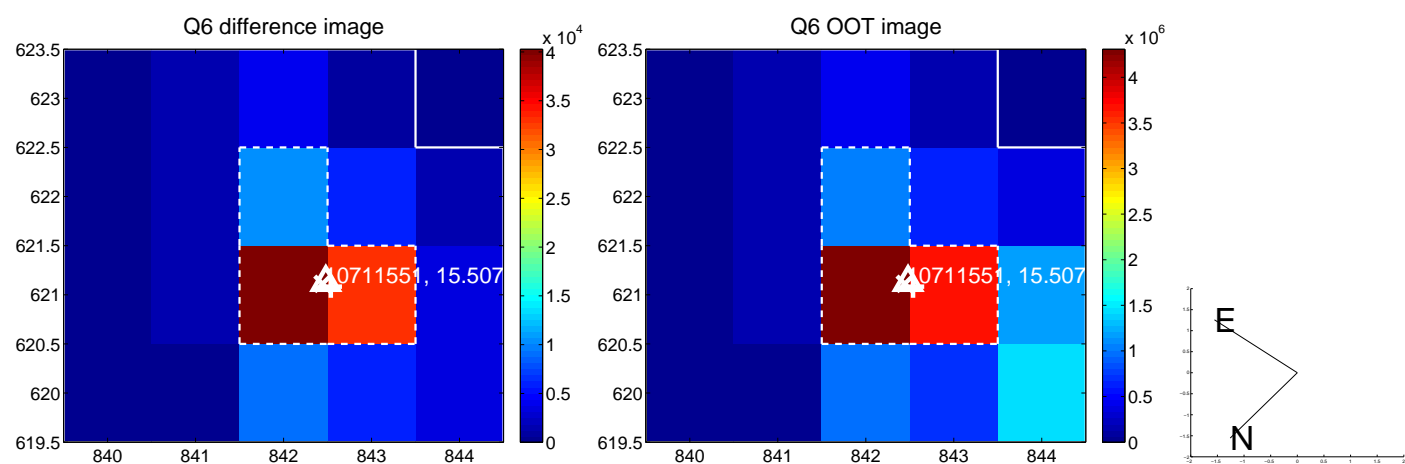
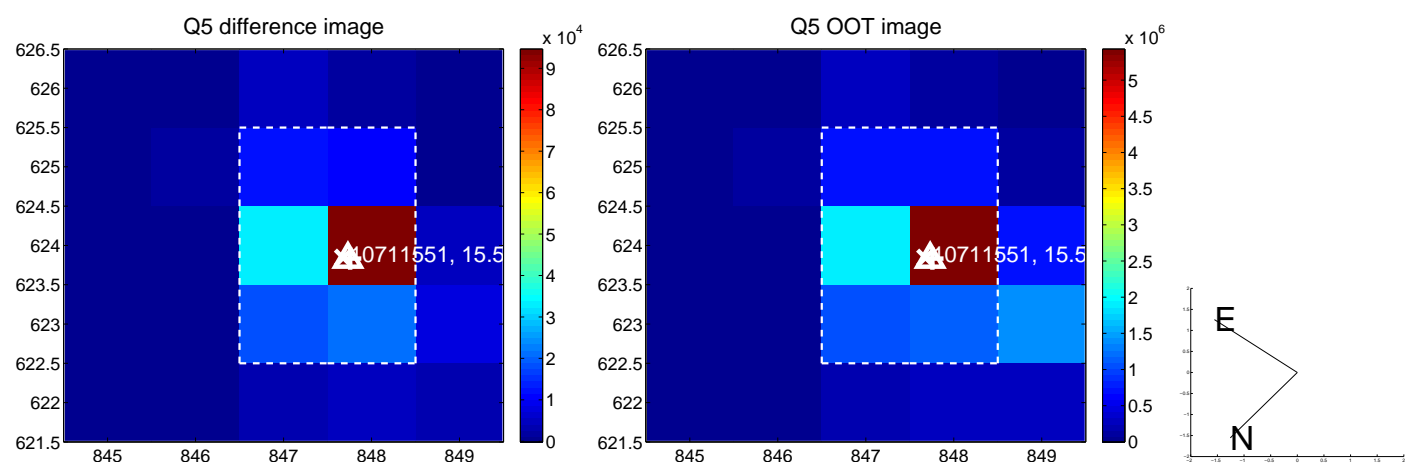


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- 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.

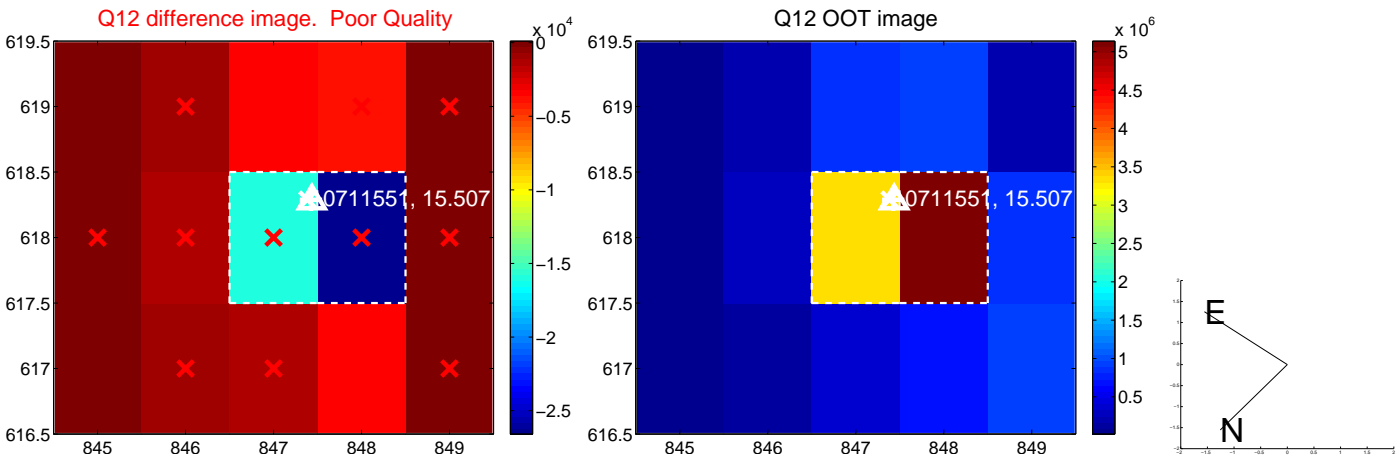
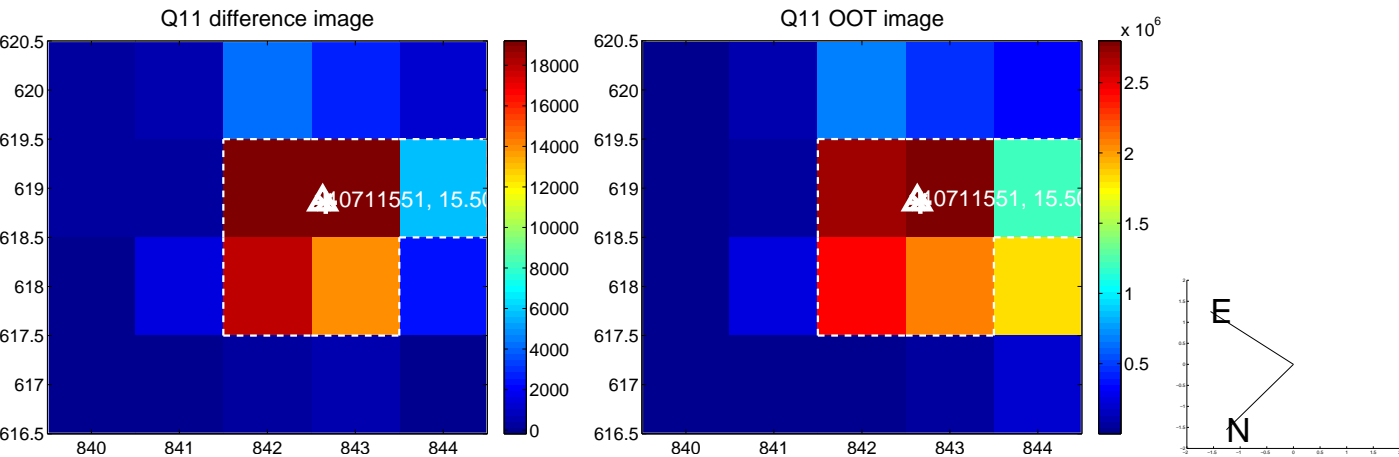
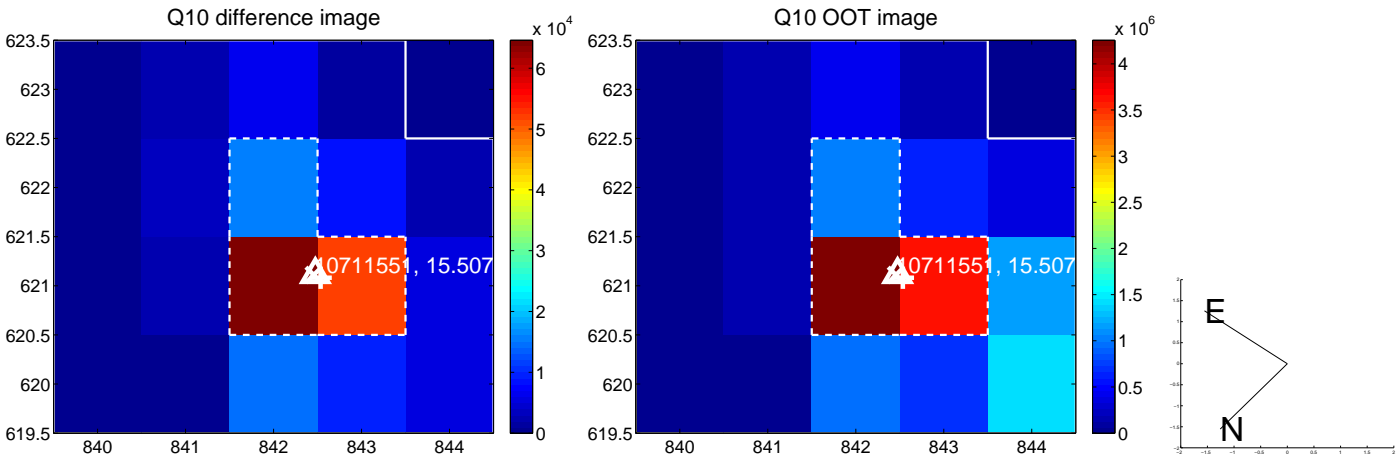
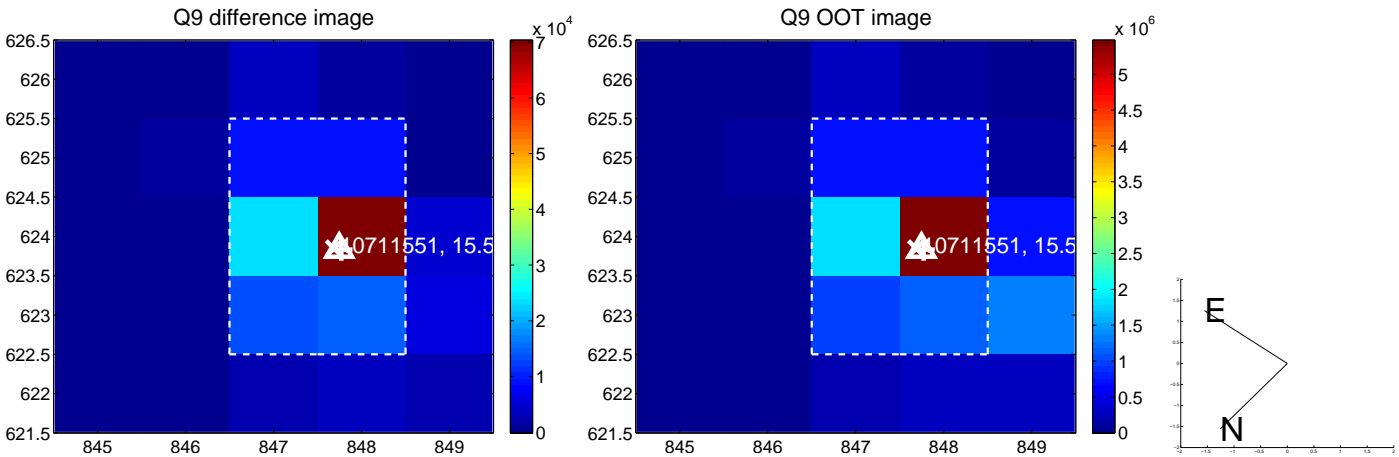
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



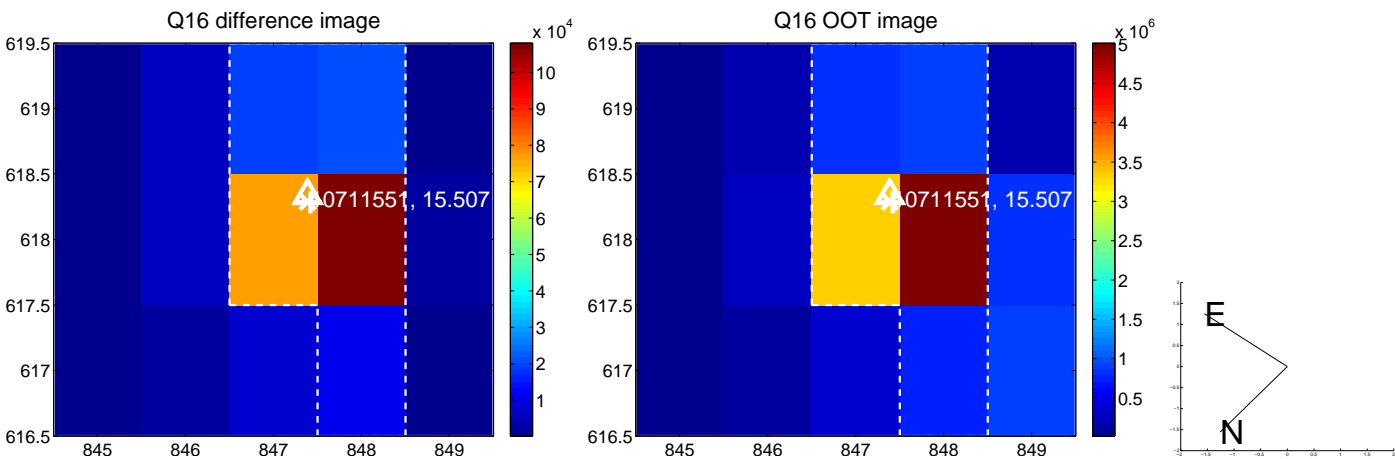
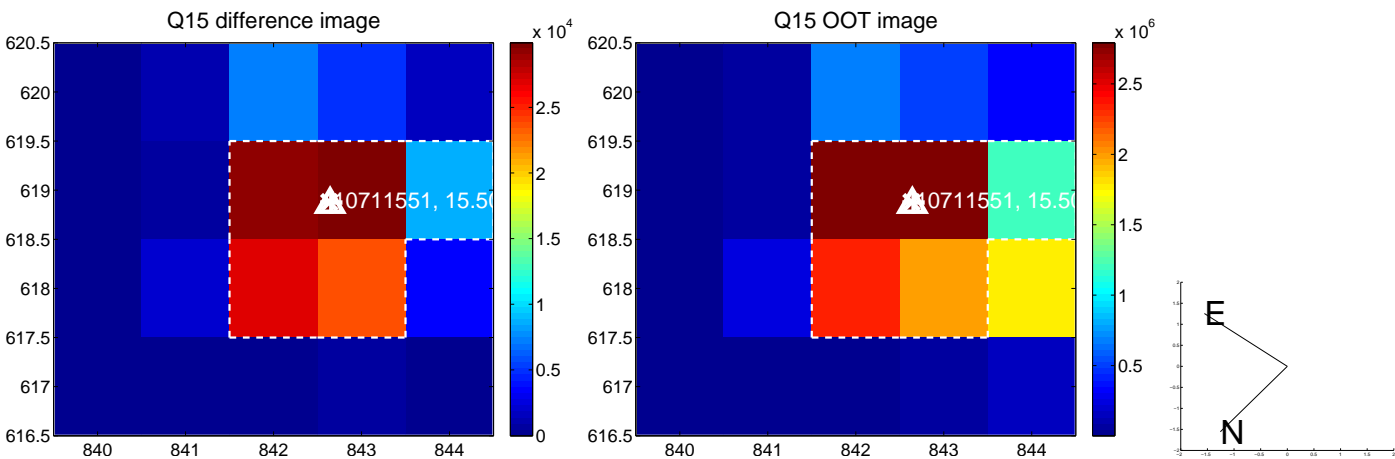
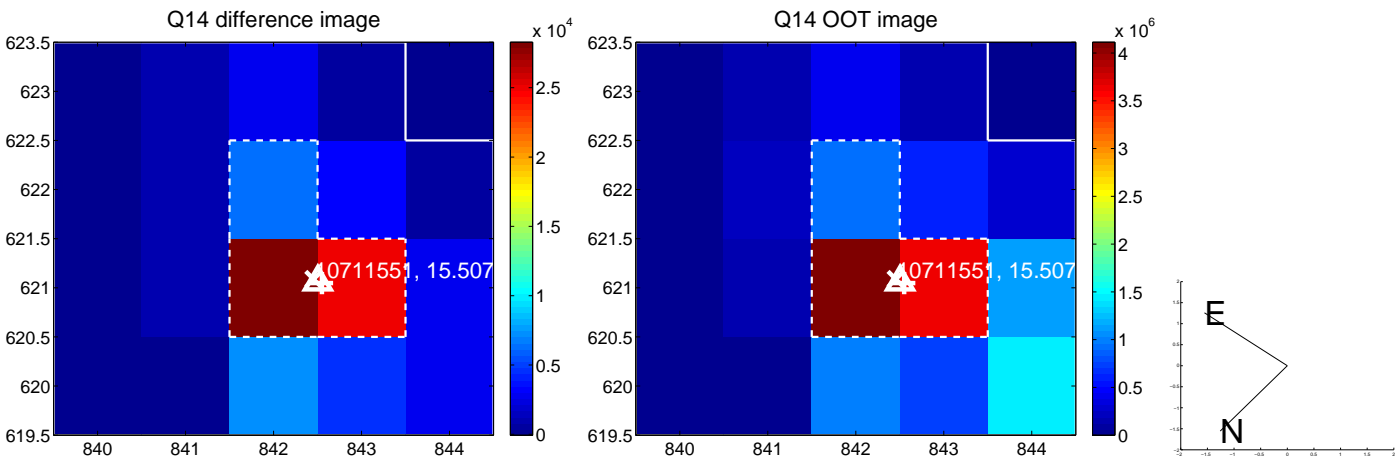
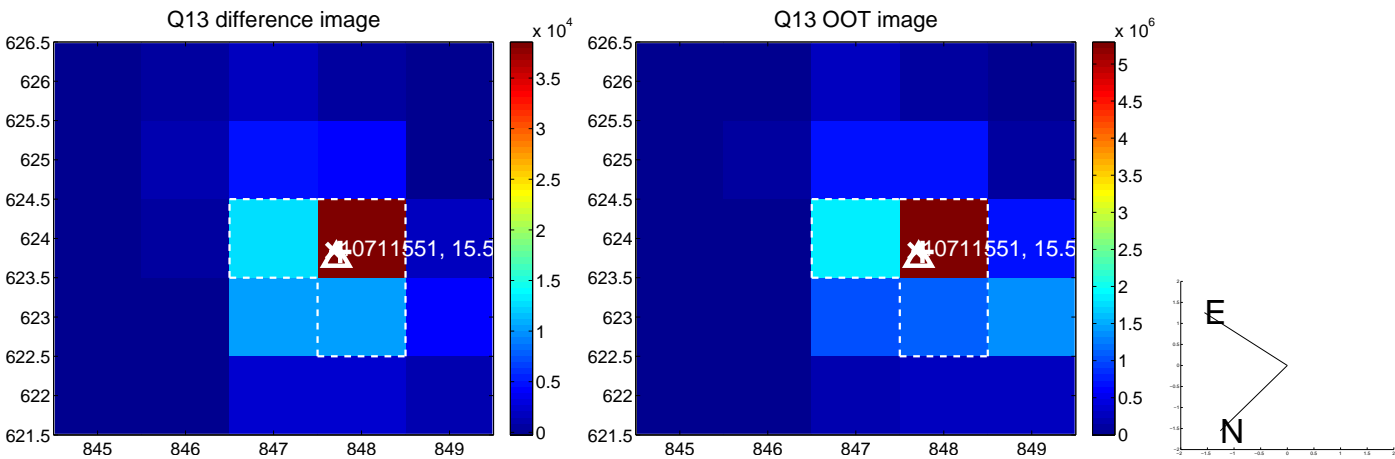
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



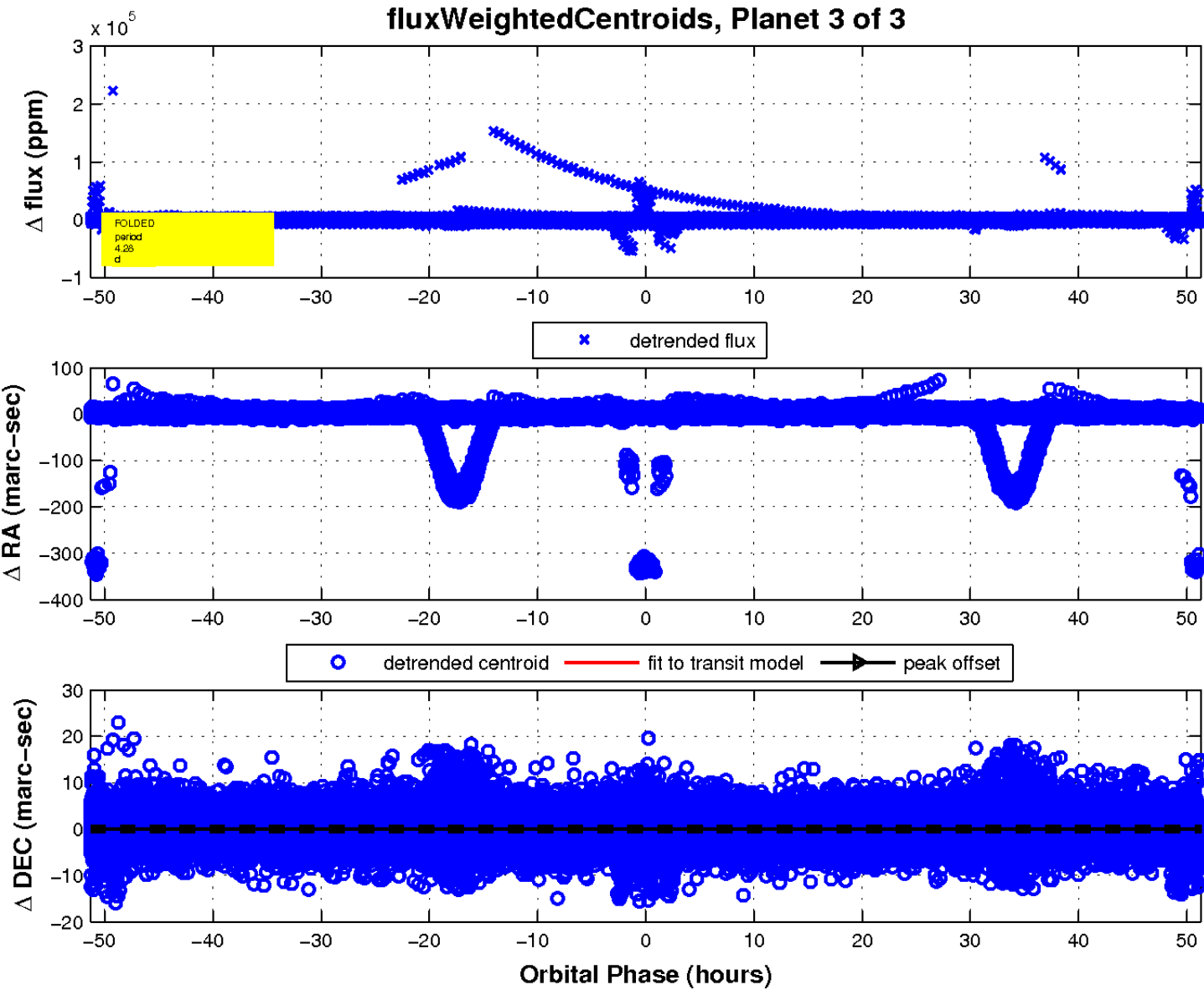
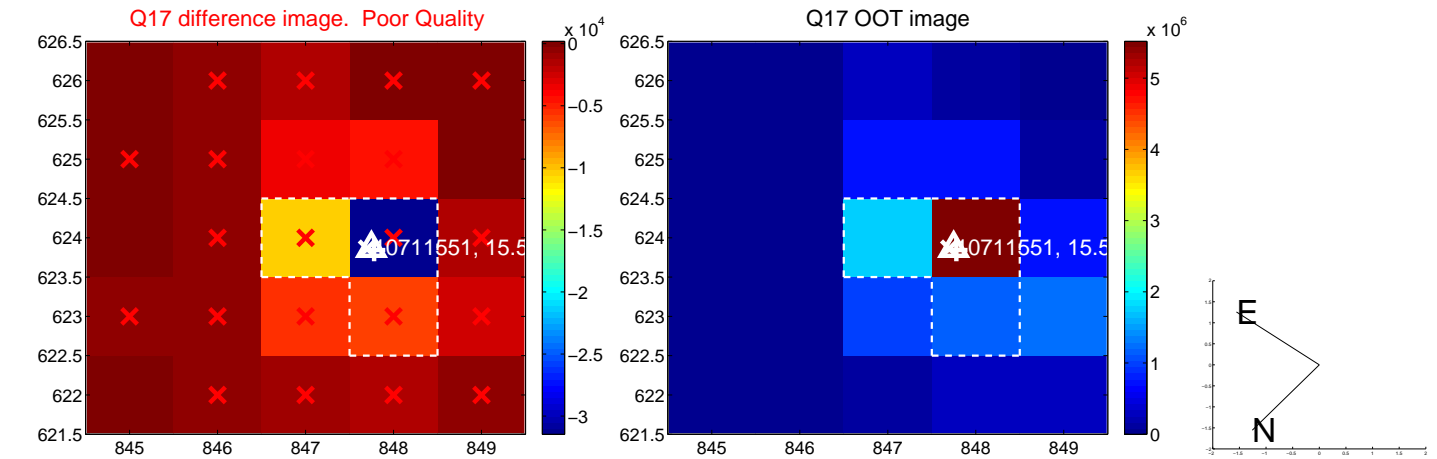
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

