

KIC 006595662

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})
006595662-01	OBS	6738.01	2.680516	132.598079	196645.8	3.212	7732.1	6993.6	1.08	6038	49.01	993.99
006595662-02	OBS	No	2.680508	133.938278	8223.6	2.000	572.8	-1.0	1.08	6038	9.78	994.00

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006595662-01	OBS	FP	0.00	0	1	0	0	MOD_SEC_DV—MOD_SEC_ALT—HAS_SEC_TCE
006595662-02	OBS	FP	0.00	1	1	0	0	IS_SEC_TCE—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.

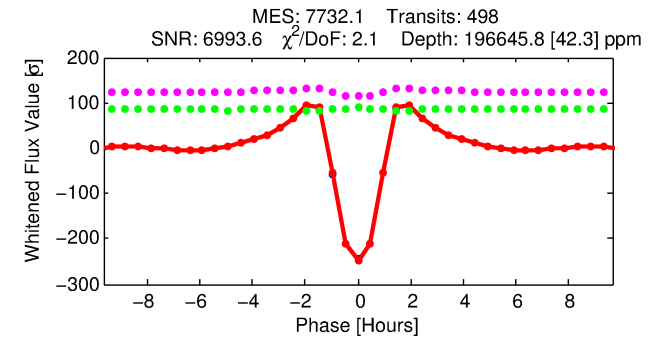
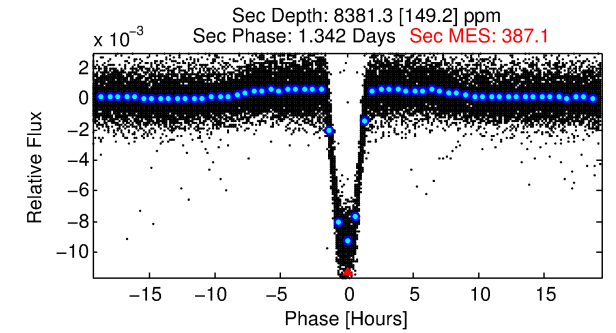
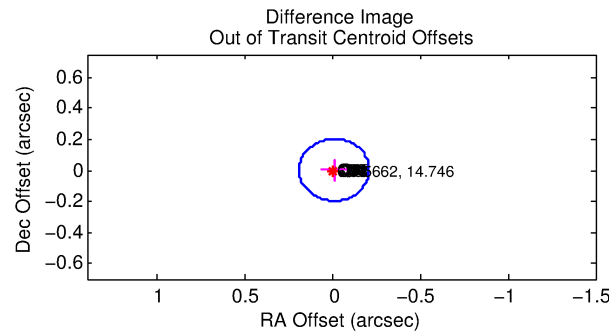
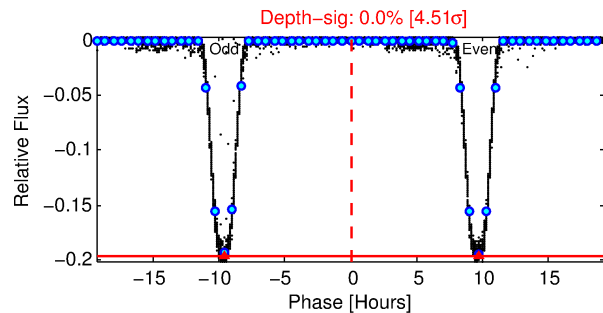
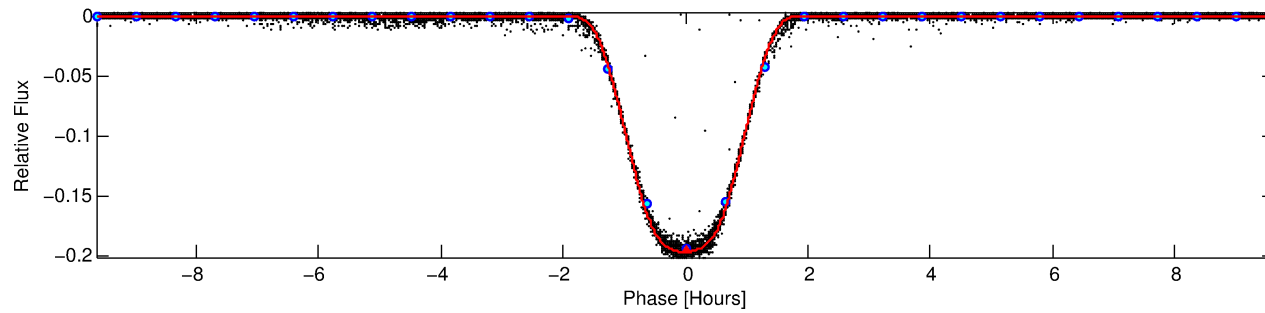
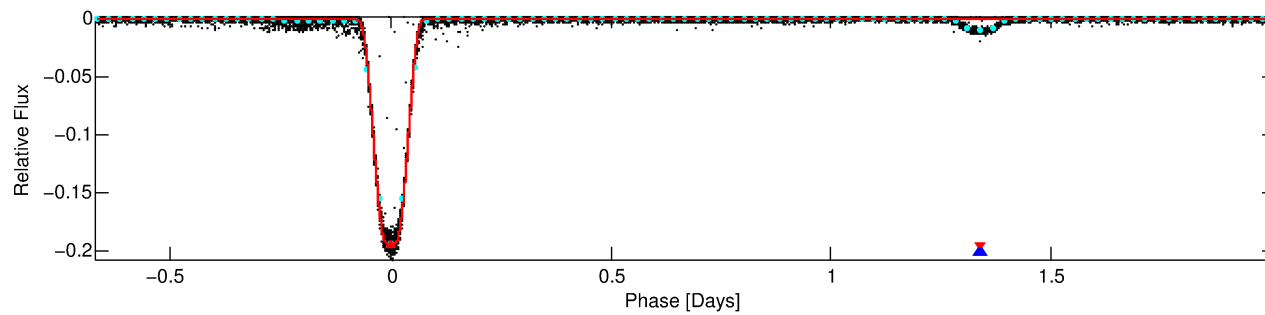
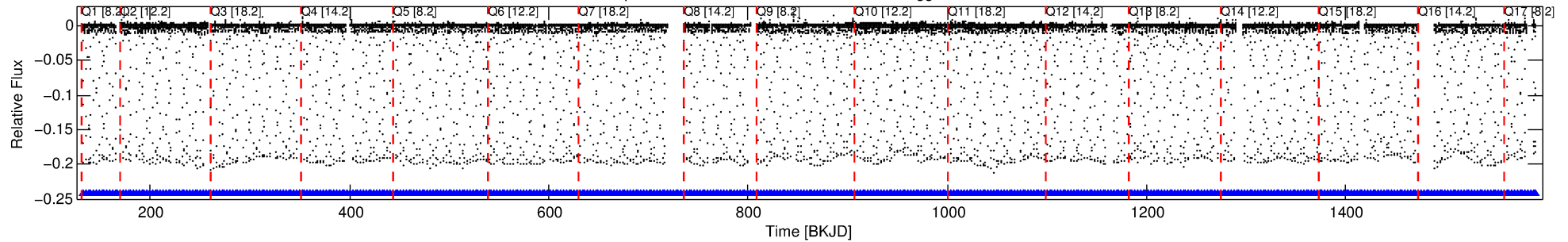
Ephemeris Match Information For 006595662-01

No Significant Match Found

DV One-Page Summary

KIC: 6595662 Candidate: 1 of 2 Period: 2.681 d
KOI: K06738.01 Corr: 0.995

Kp: 14.75 R*: 1.08 Rs Teff: 6038.0 K Logg: 4.36 Fe/H: -0.260



DV Fit Results:

Period = 2.68052 [0.00000] d
Epoch = 132.5981 [0.0000] BKJD
Rp/R* = 0.4174 [0.0001]
a/R* = 8.78 [0.00]
b = 0.36 [0.00]
Seff = 993.99 [373.63]
Teff = 1432 [135] K
Rp = 49.01 [14.71] Re
a = 0.0372 [0.0093] AU
Ag = 2.66 [0.95] [1.75σ]
Teffp = 2828 [86] K [8.75σ]

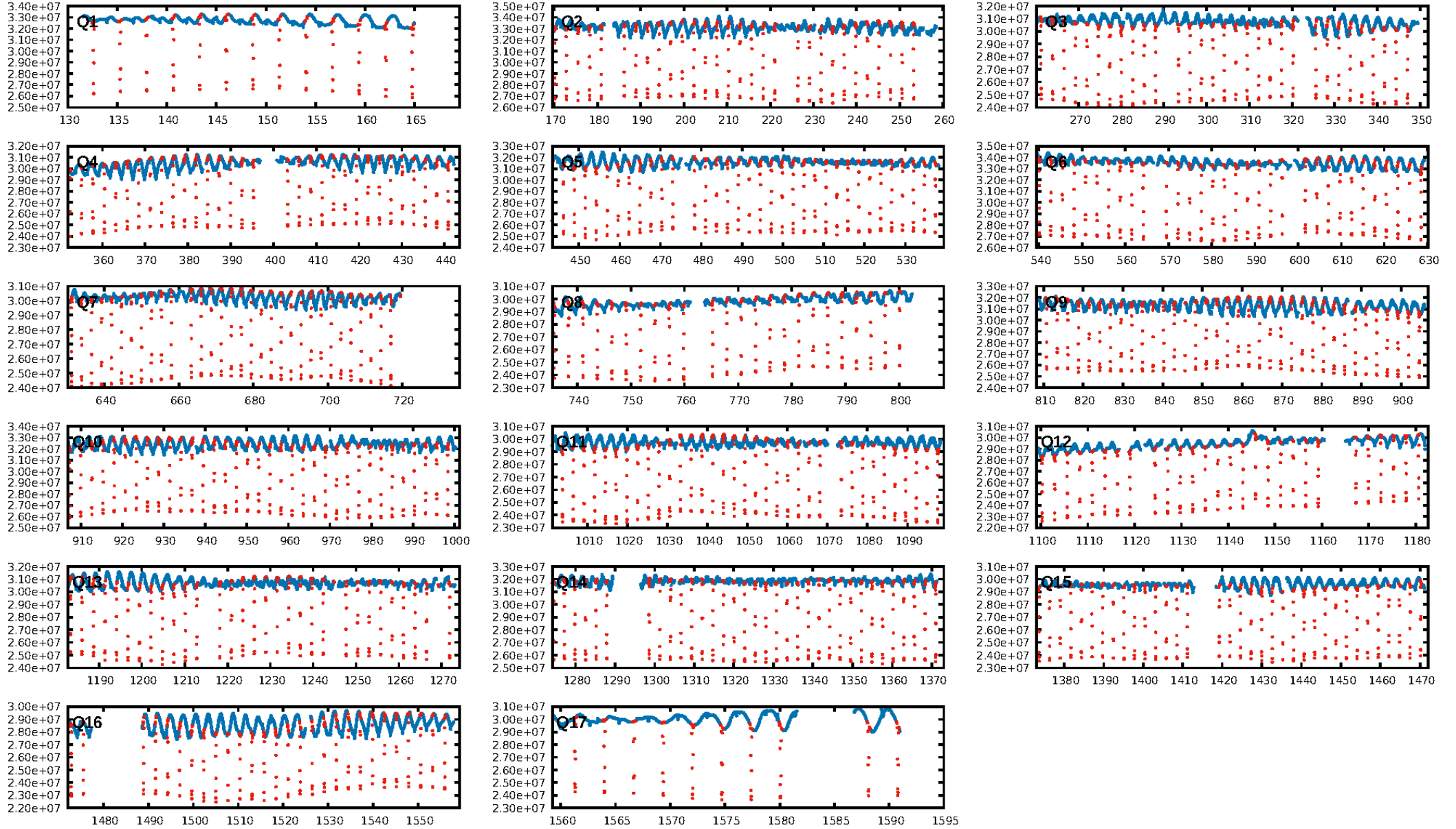
DV Diagnostic Results:

ShortPeriod-sig: 0.0% [0.00σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [475/475]
GhostDiagnostic-chr: 1.802
Centroid-sig: N/A
Centroid-so: 0.089 arcsec [125.23σ]
OotOffset-rm: 0.009 arcsec [0.14σ]
KicOffset-rm: 0.204 arcsec [2.88σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 1.00 [17/17]
DiffImageOverlap-fno: 1.00 [17/17]

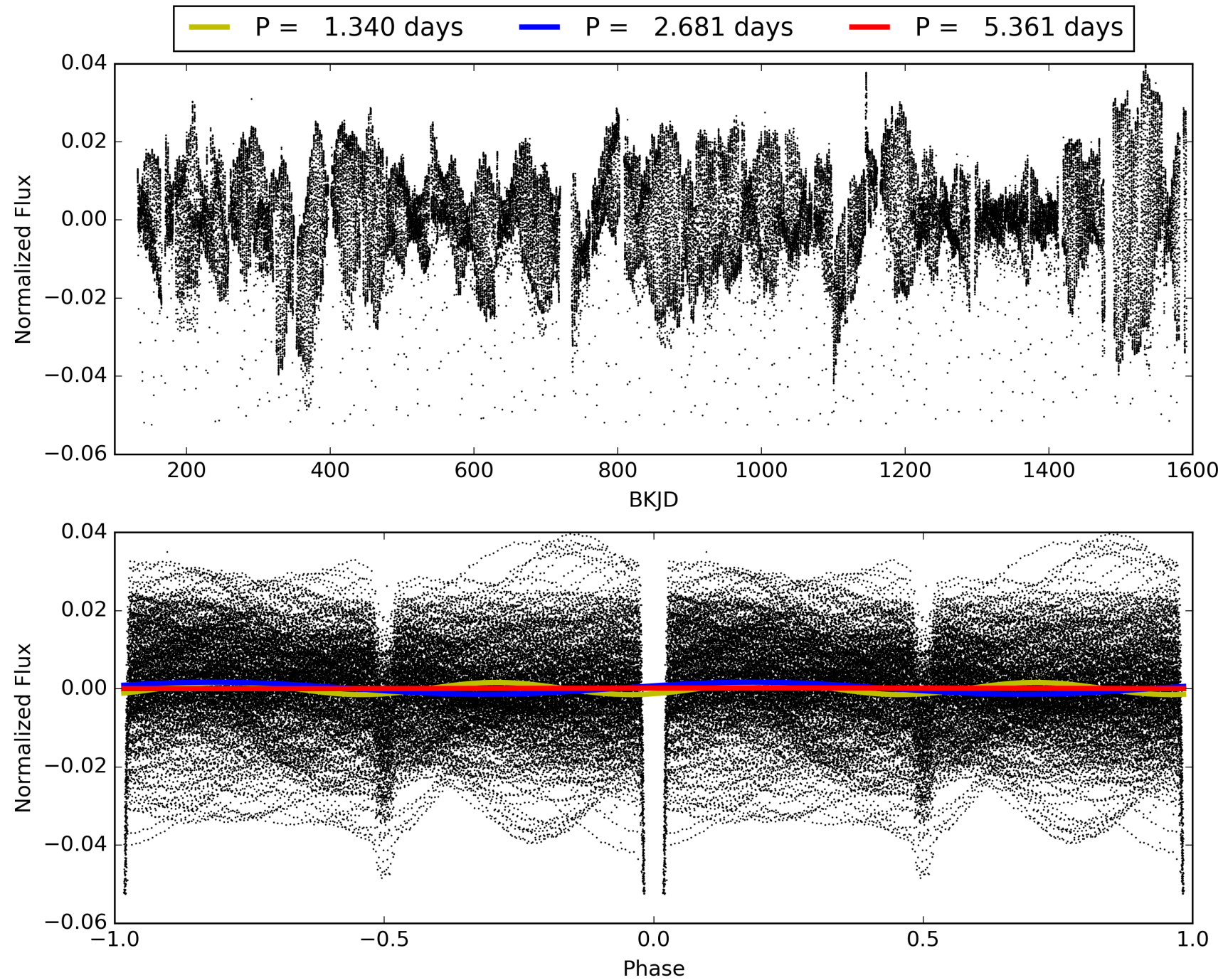
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 02-Feb-2016 00:49:29 Z

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

TCE 006595662-01, PDC Light Curves

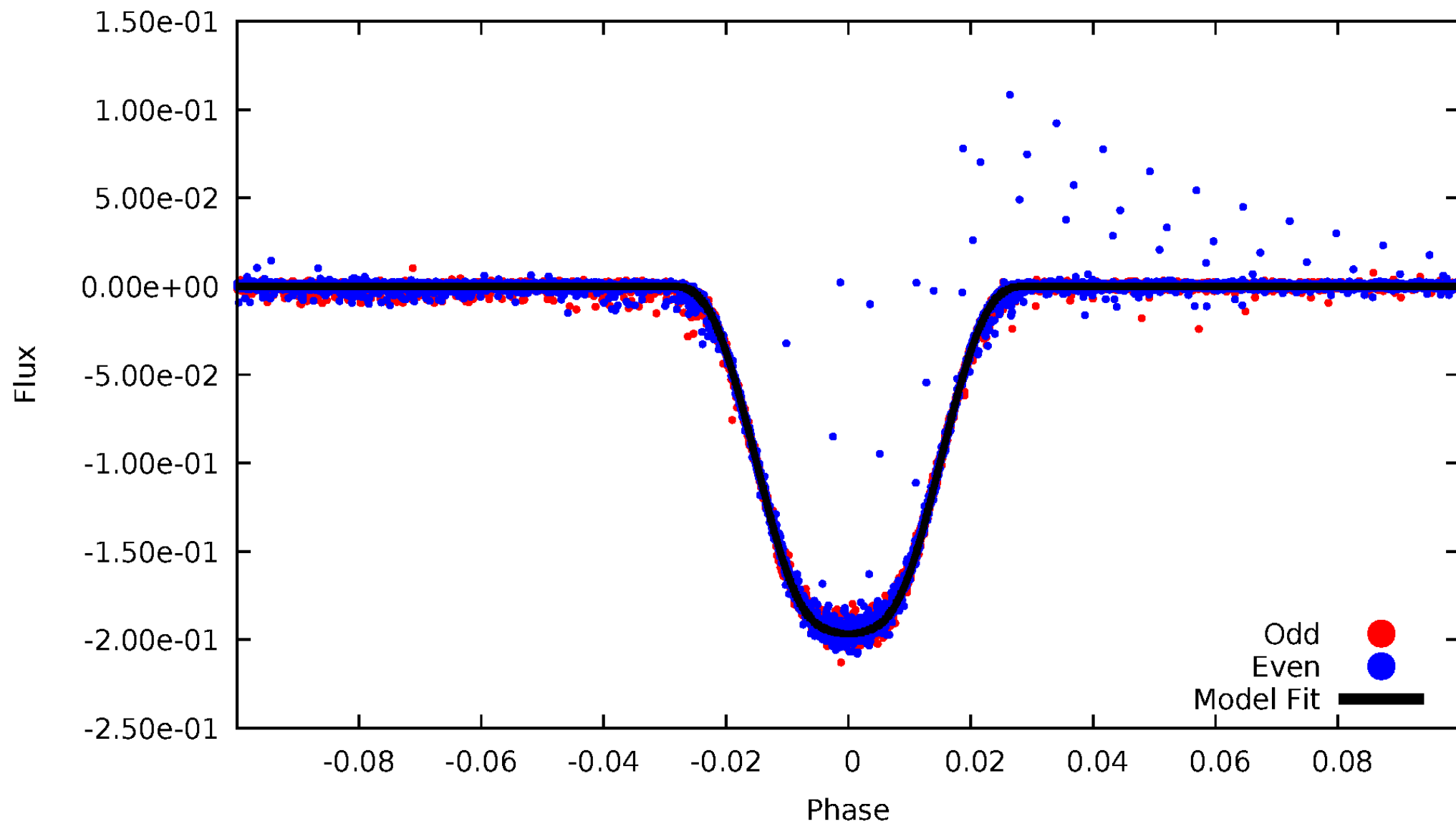


TCE 006595662-01



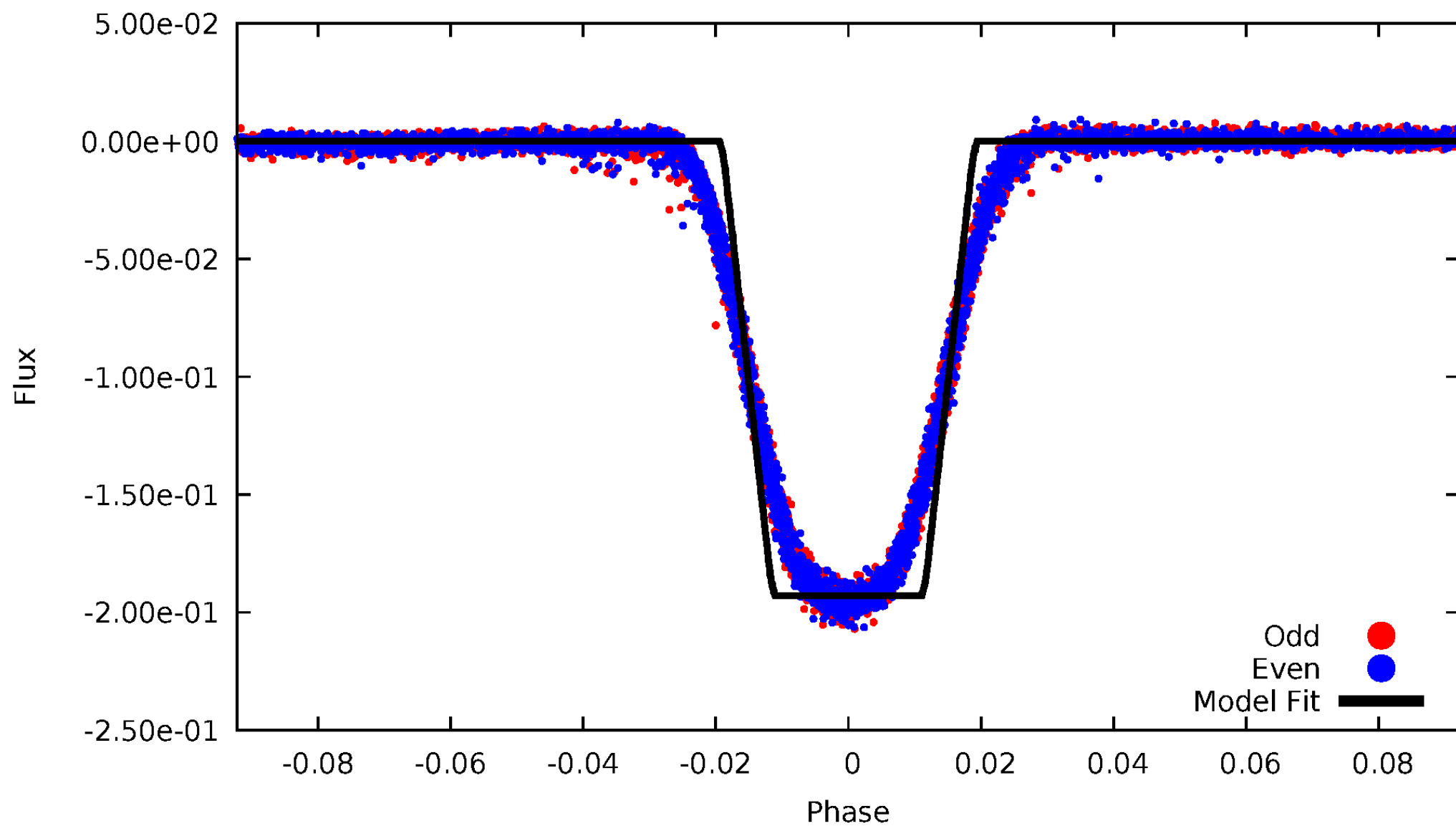
DV Odd/Even

TCE 006595662-01



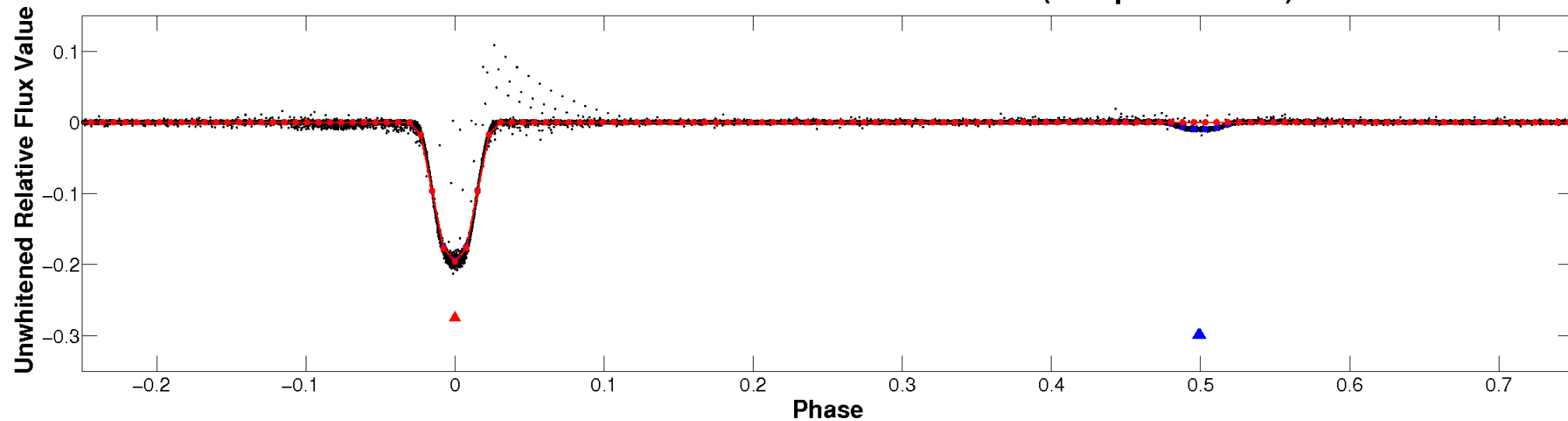
ALT Odd/Even

TCE 006595662-01

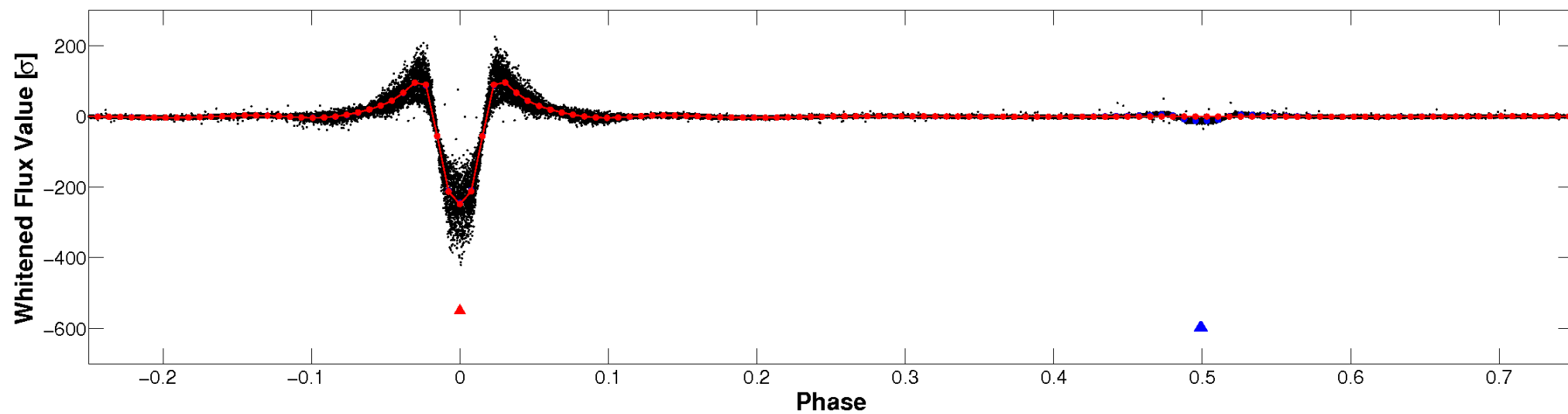


Non-Whitened Vs. Whitened Light Curve

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

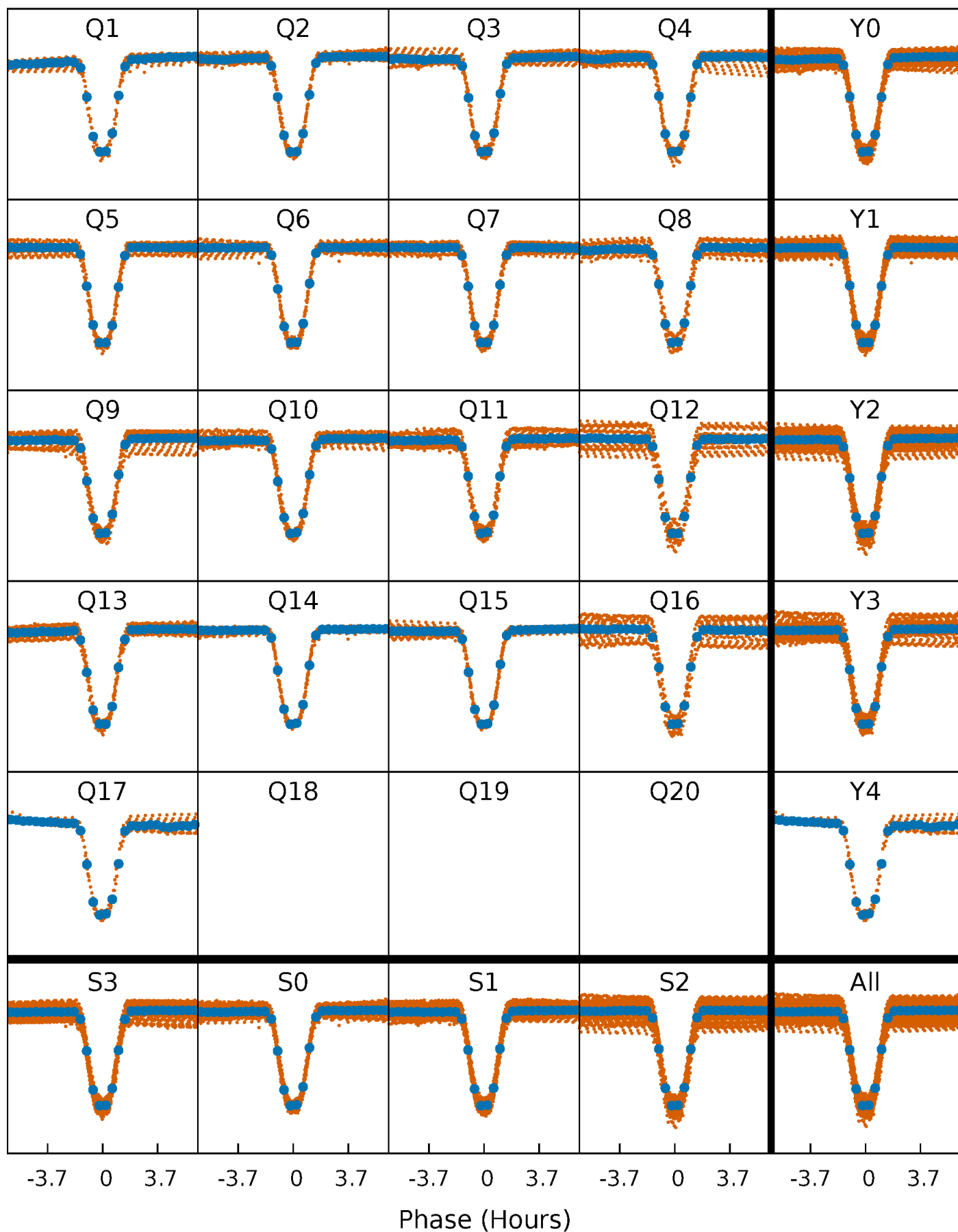


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



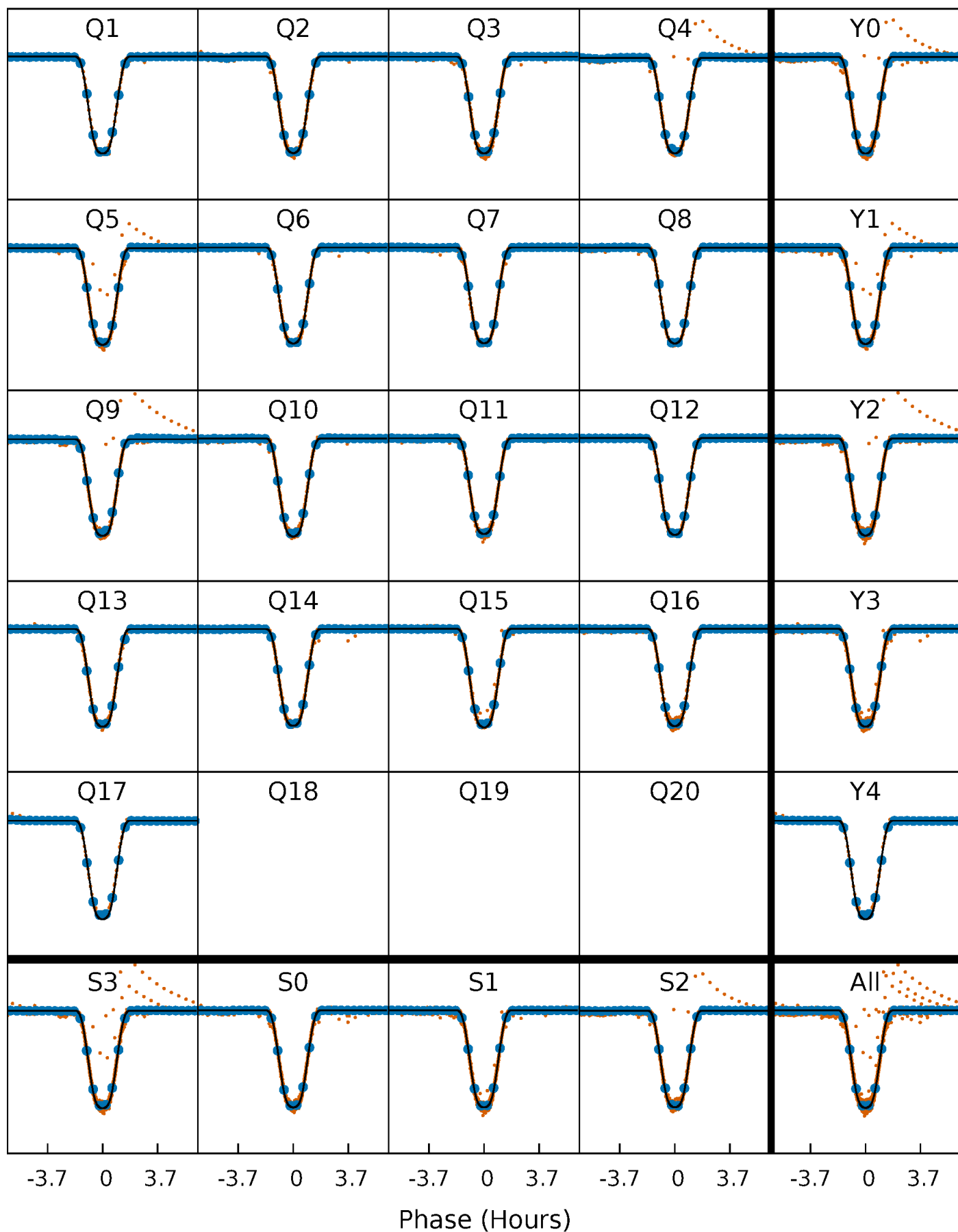
PDC Quarter-Phased Transit Curves

TCE 006595662-01 P= 2.680516 Days $T_0=132.598080$ (BKJD)



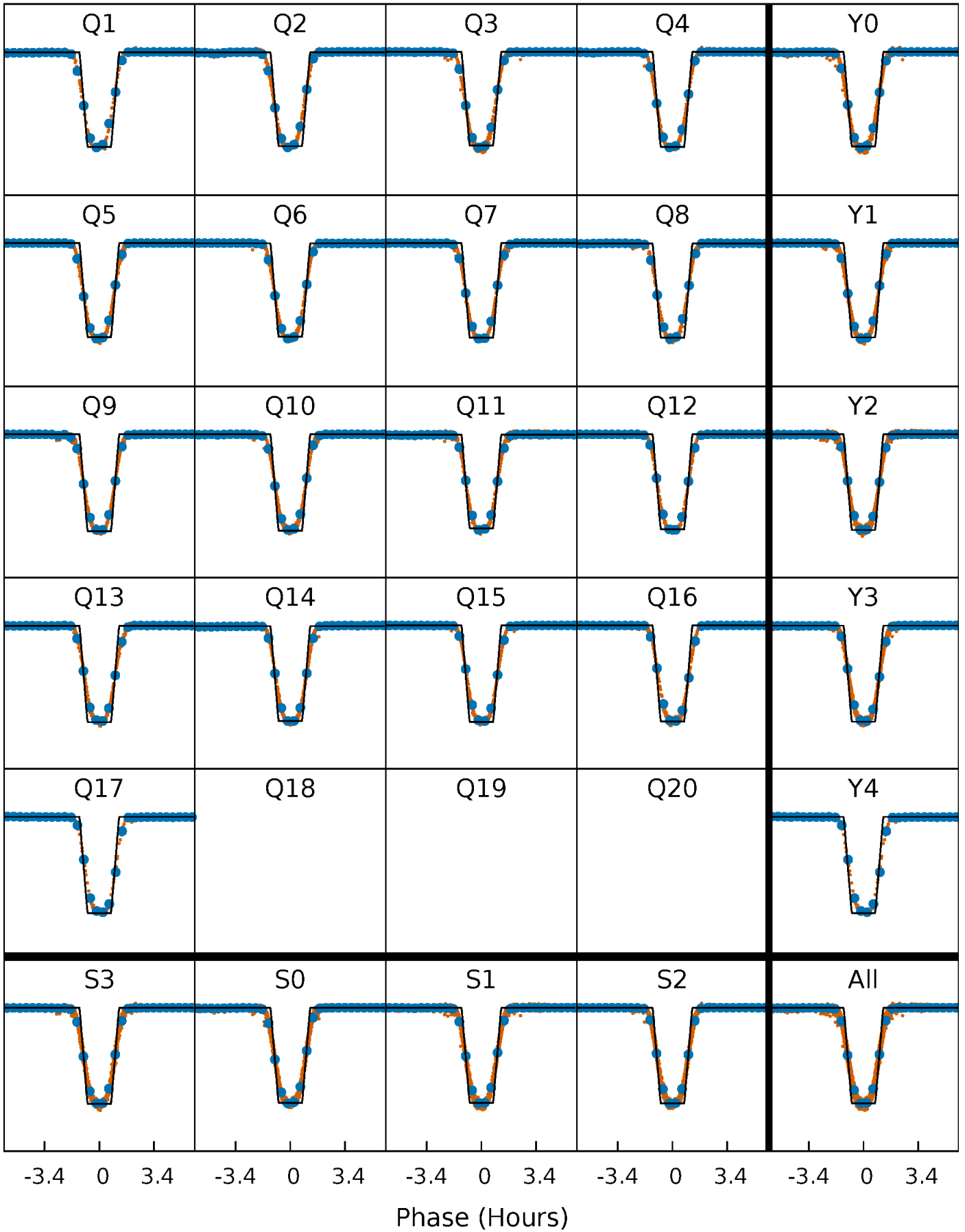
DV Quarter-Phased Transit Curves

TCE 006595662-01 P= 2.680516 Days $T_0=132.598080$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

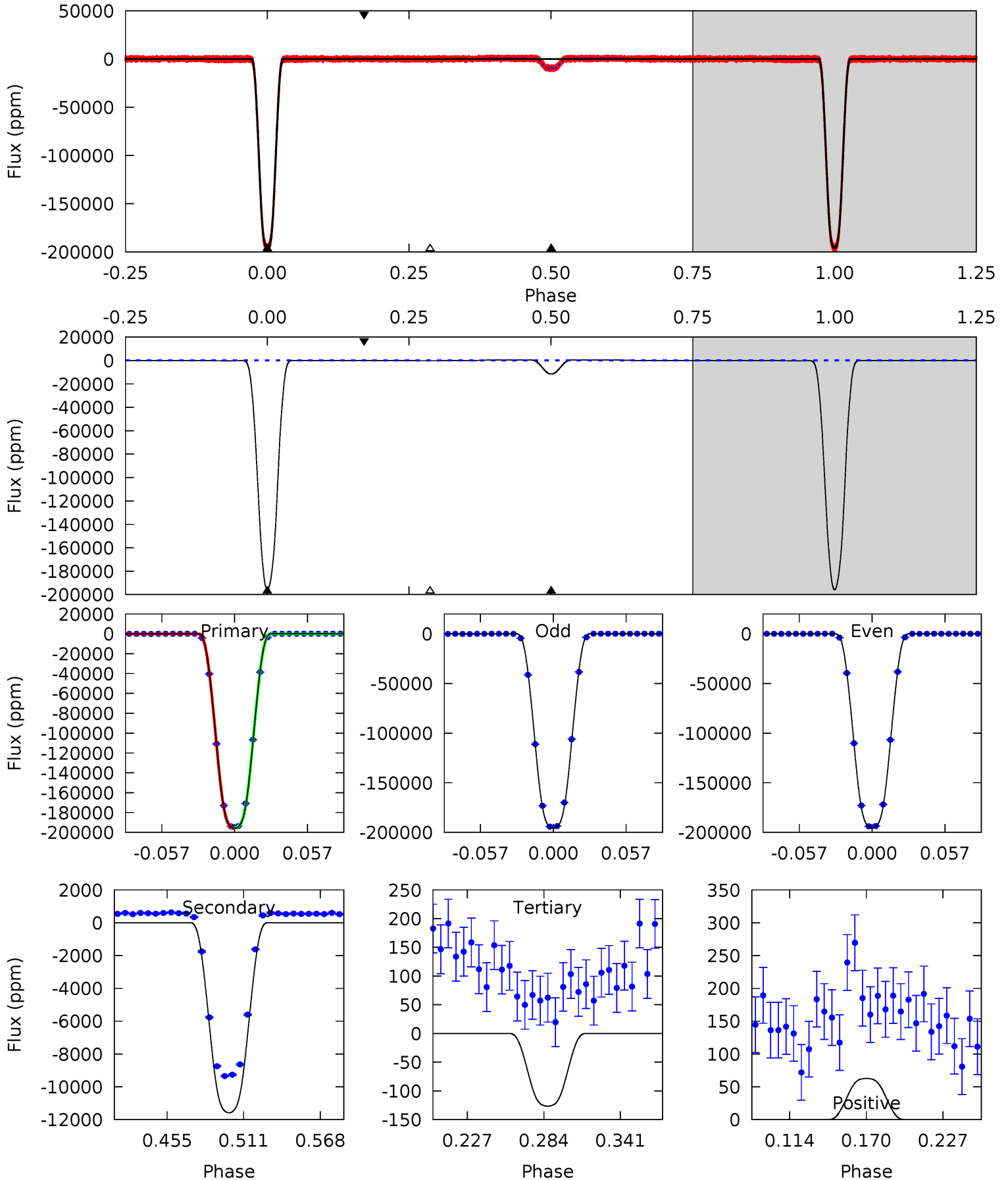
TCE 006595662-01 P= 2.680504 Days $T_0=132.601479$ (BKJD)



DV Model-Shift Uniqueness Test

006595662-01, P = 2.680516 Days, E = 129.917564 Days

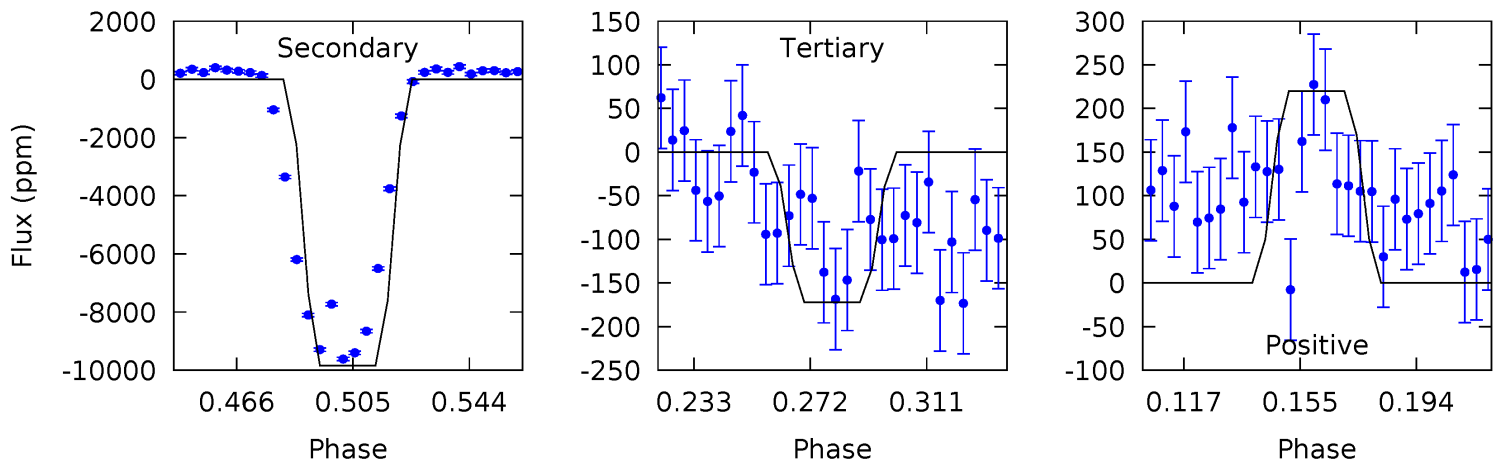
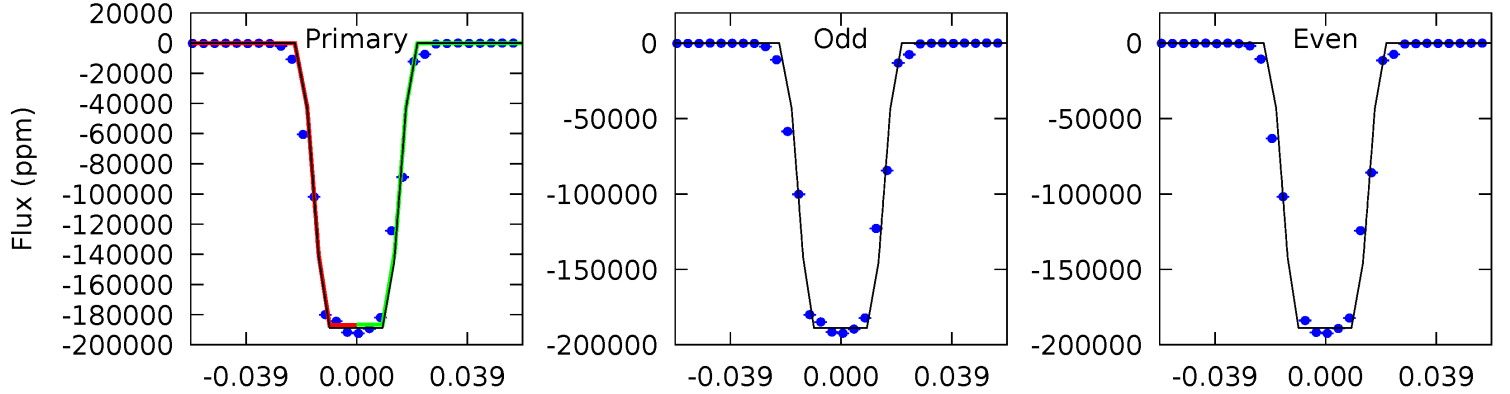
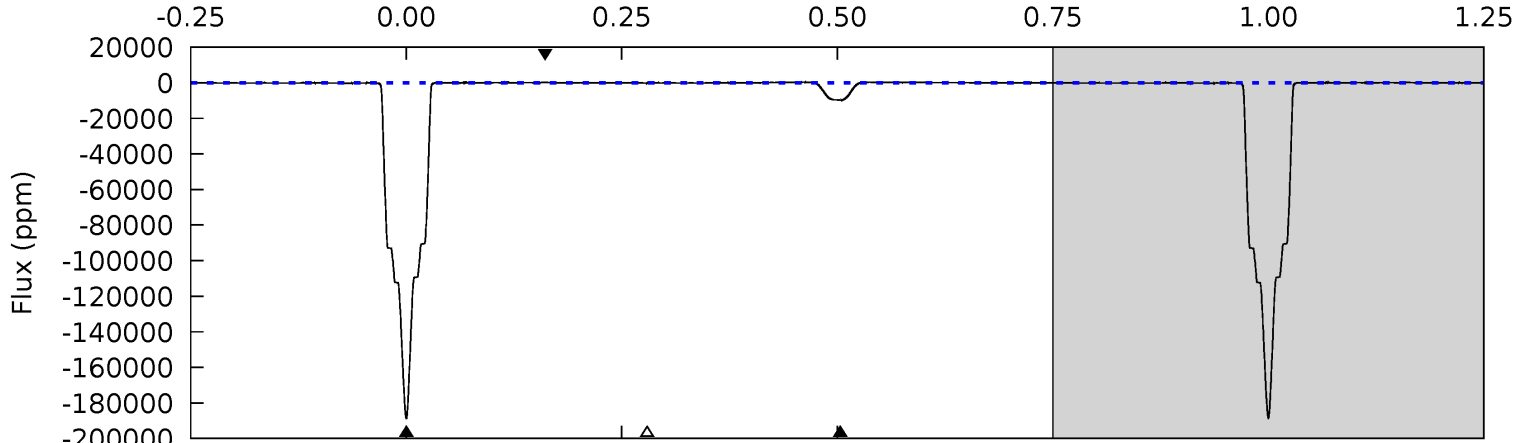
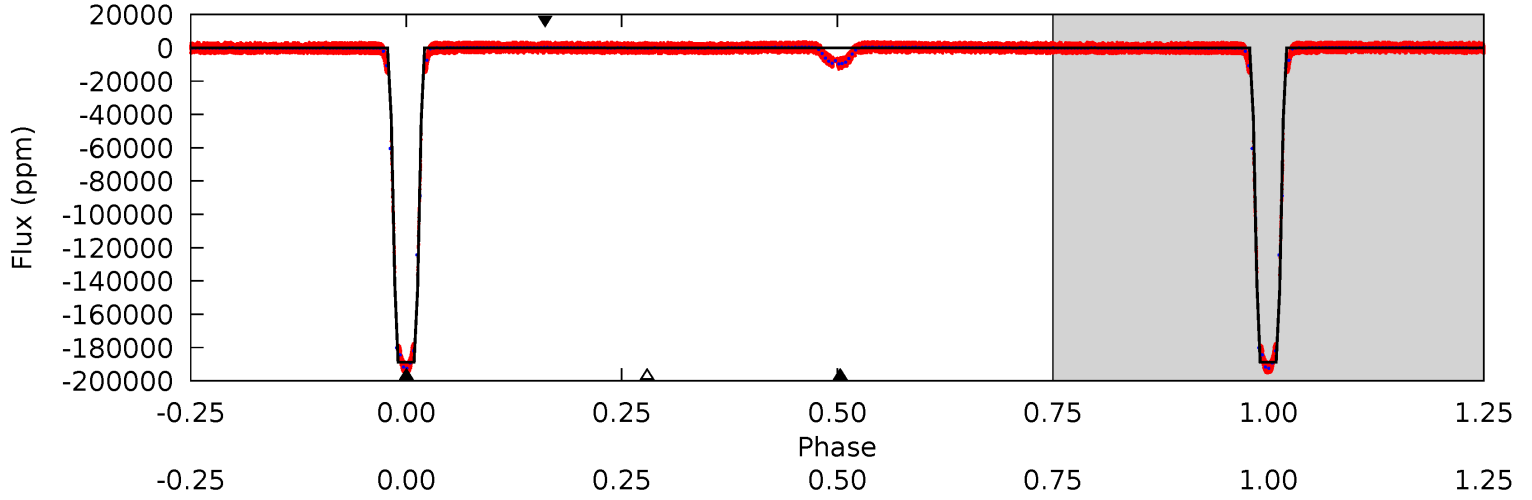
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11823	699.2	7.64	3.79	4.68	1.90	12.7	11815	11819	691.5	695.4	7.81	0.99	0.00	17.7



Alt Model-Shift Uniqueness Test

006595662-01, P = 2.680504 Days, E = 129.920975 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5105	266.1	4.65	5.94	4.76	2.07	3.51	5100	5099	261.5	260.2	0.45	1.00	0.00	0



Stellar Parameters For KIC 006595662

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6038^{+181}_{-181}	$4.356^{+0.128}_{-0.192}$	$-0.260^{+0.300}_{-0.300}$	$1.076^{+0.323}_{-0.174}$	$0.958^{+0.143}_{-0.104}$	$1.083^{+0.758}_{-0.512}$
	+3%/-3%	+3%/-4%	+115%/-115%	+30%/-16%	+15%/-11%	+70%/-47%
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 006595662-01 / KOI 6738.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-11586 ± 17	$49.04^{+8.39}_{-4.20}$	2021^{+152}_{-117}	3498^{+70}_{-65}	$3.642^{+0.815}_{-0.897}$
Alt.	-9846 ± 37	$51.49^{+9.09}_{-4.82}$	2012^{+155}_{-116}	3340^{+62}_{-72}	$2.804^{+0.610}_{-0.671}$

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 $A_{obs} \gg 1.0$

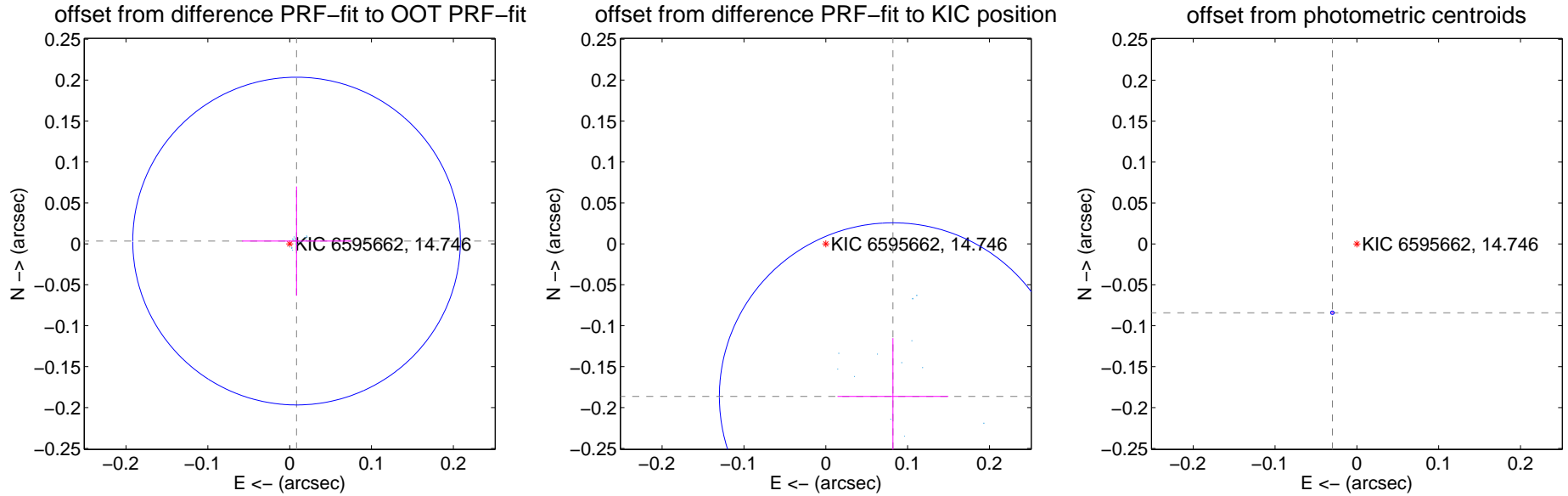
DV Centroid Data

Supplemental centroid analysis for 006595662-01. Kepler magnitude: 14.75. Transit SNR 6993.59

There are 17 quarters with good PRF difference image offsets

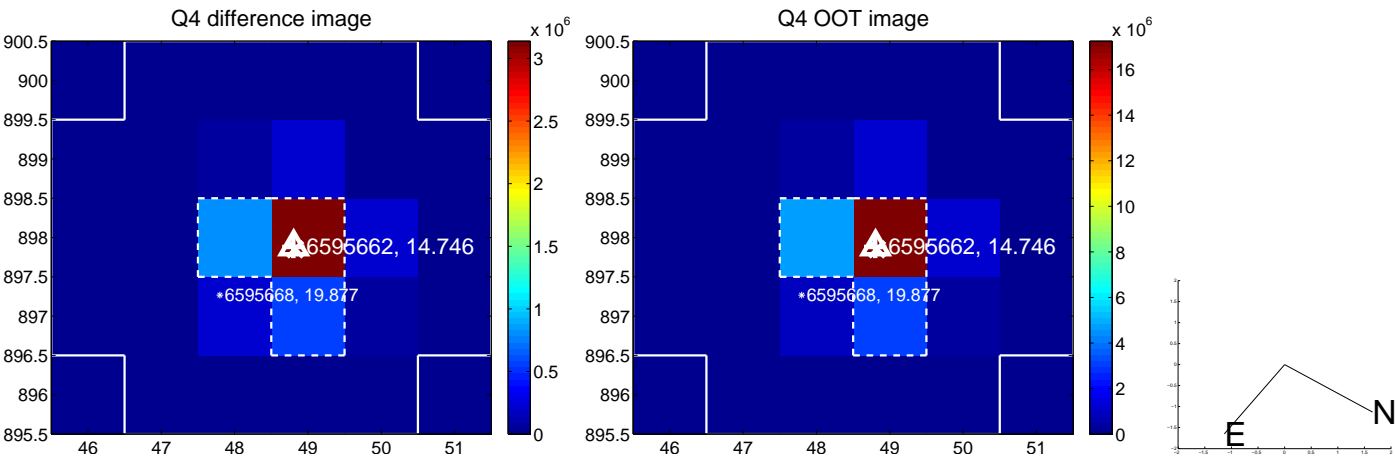
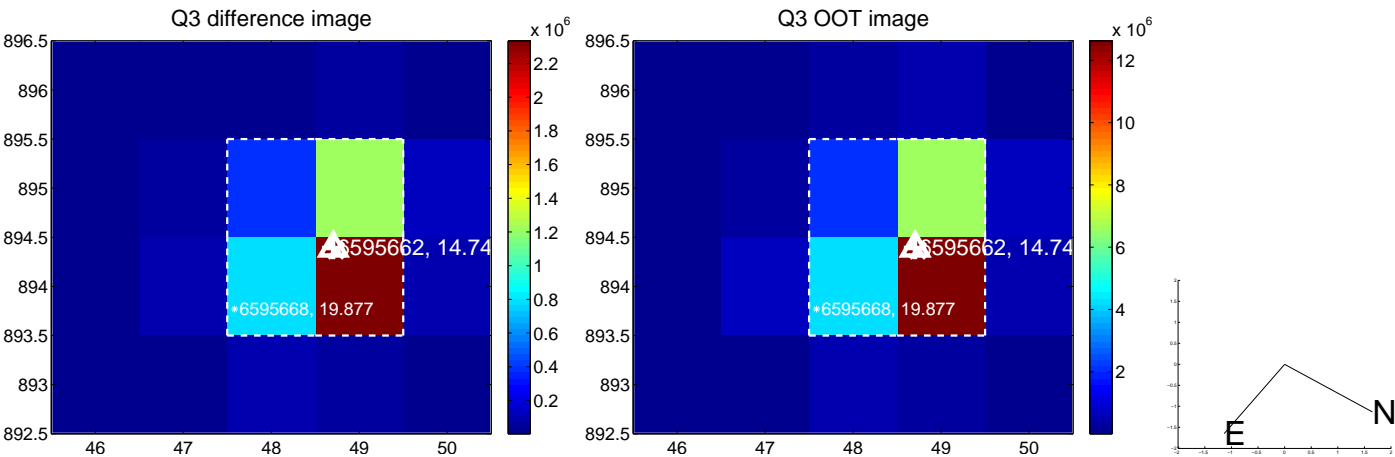
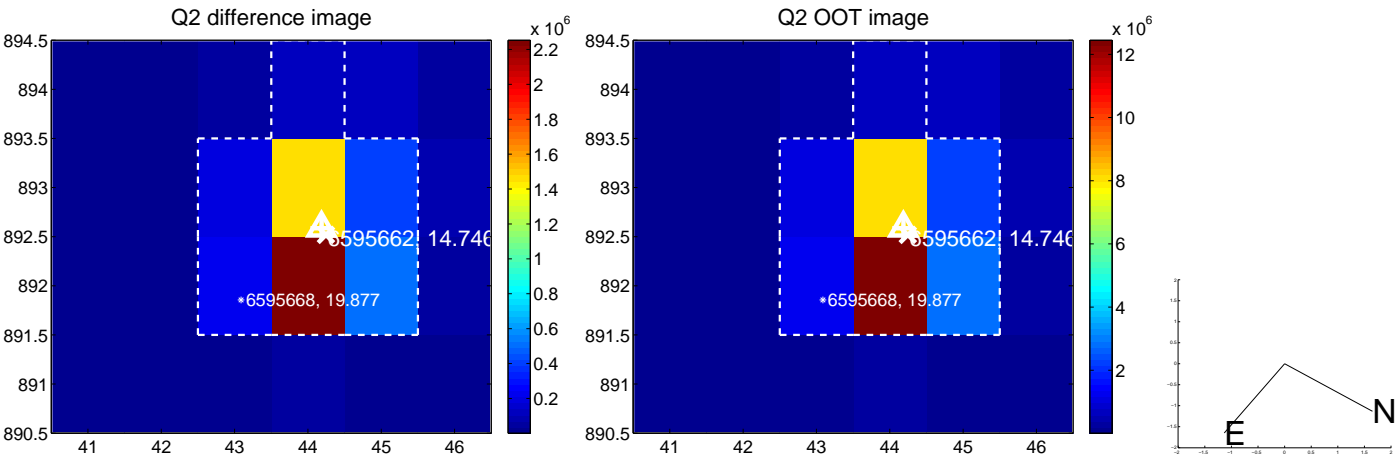
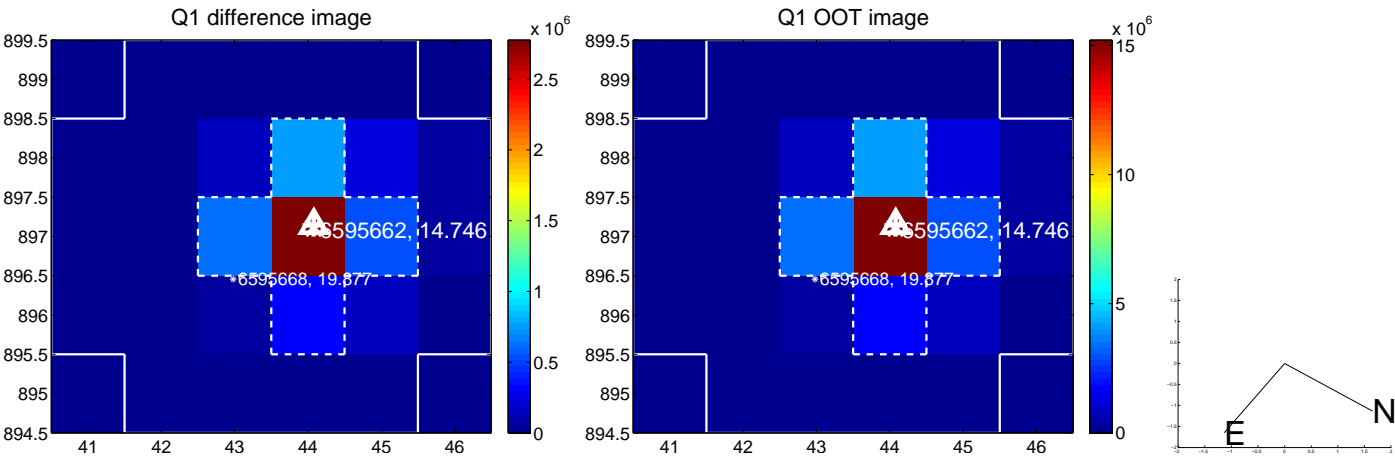
The direct PRF centroid is offset from the target star catalog position by about 0.12 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.009 ± 0.067	0.14	-0.008 ± 0.067	0.003 ± 0.067
PRF-fit source offset from KIC position	0.204 ± 0.071	2.88	-0.082 ± 0.068	-0.186 ± 0.071
photometric centroid source offset	0.09 ± 0.00	125.23	0.03 ± 0.00	-0.08 ± 0.00

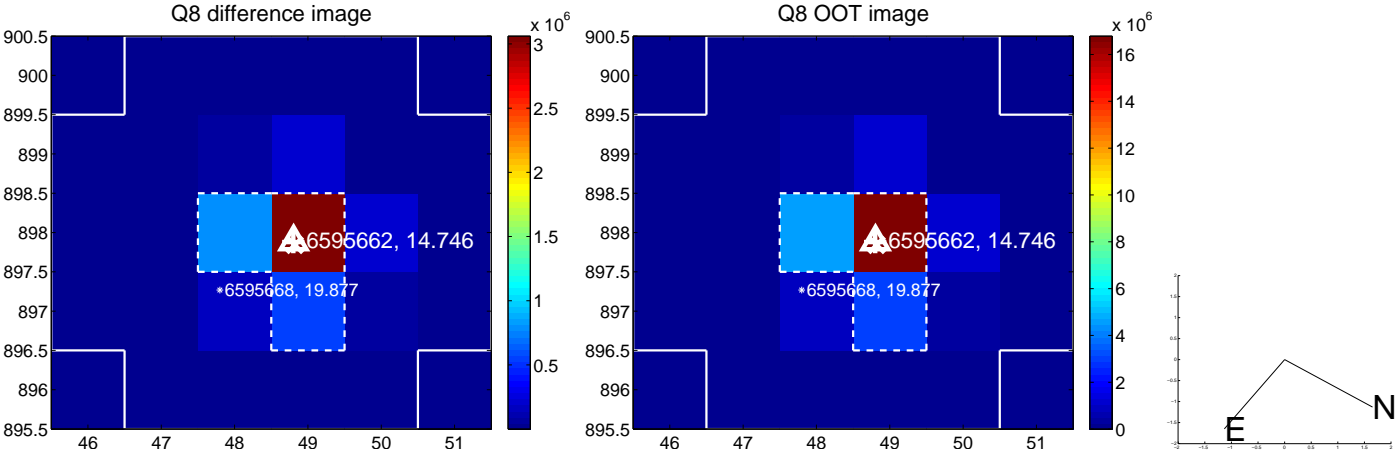
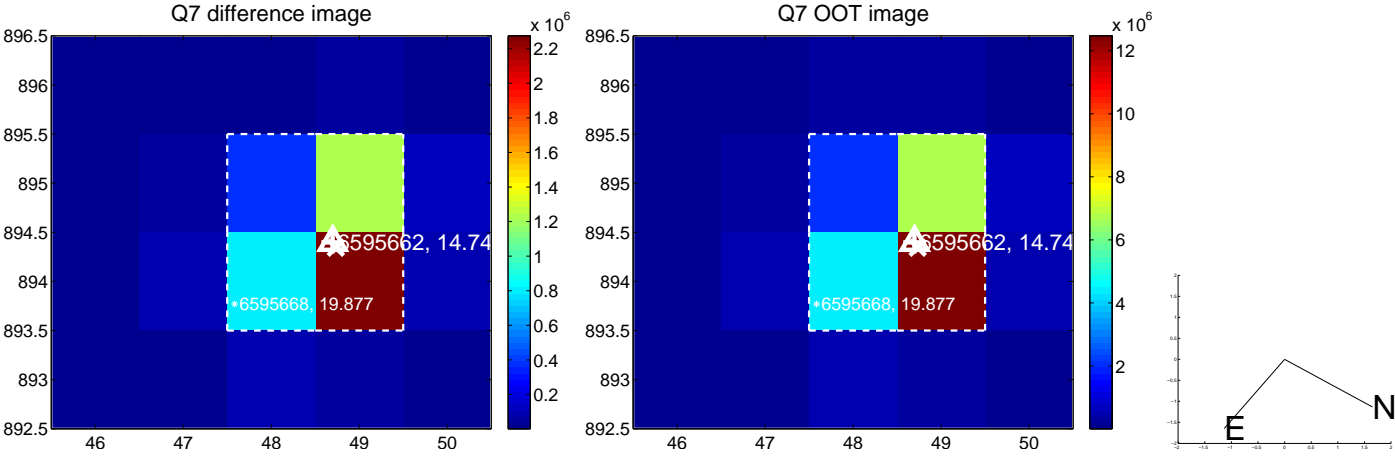
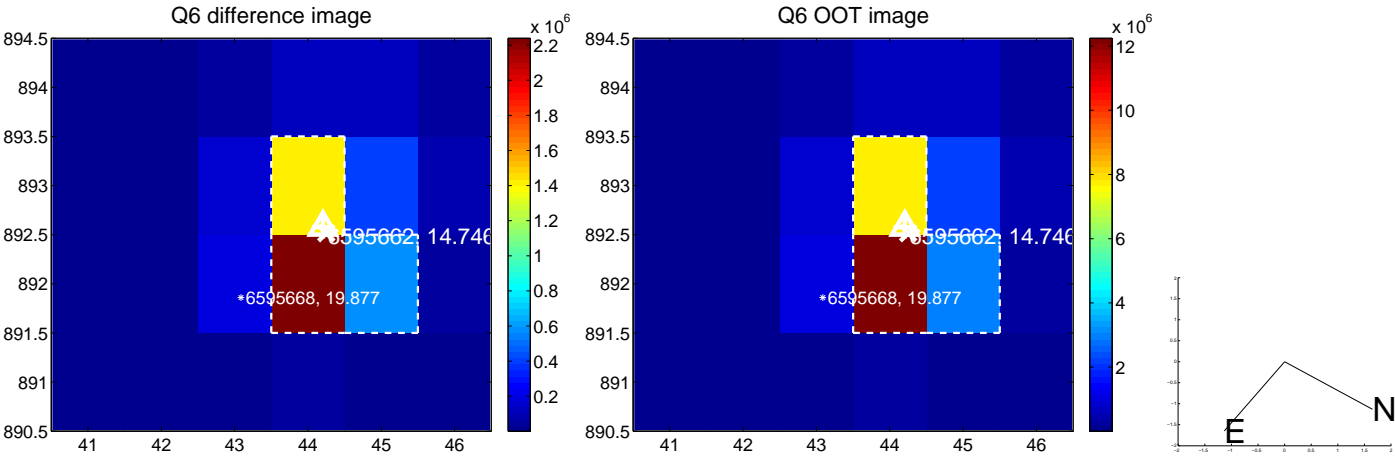
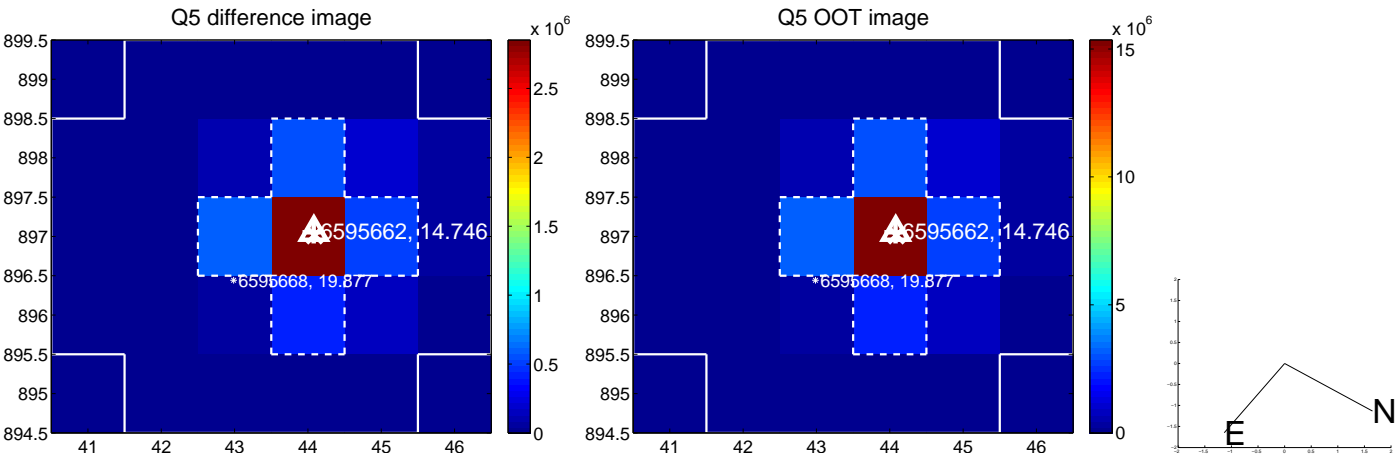


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

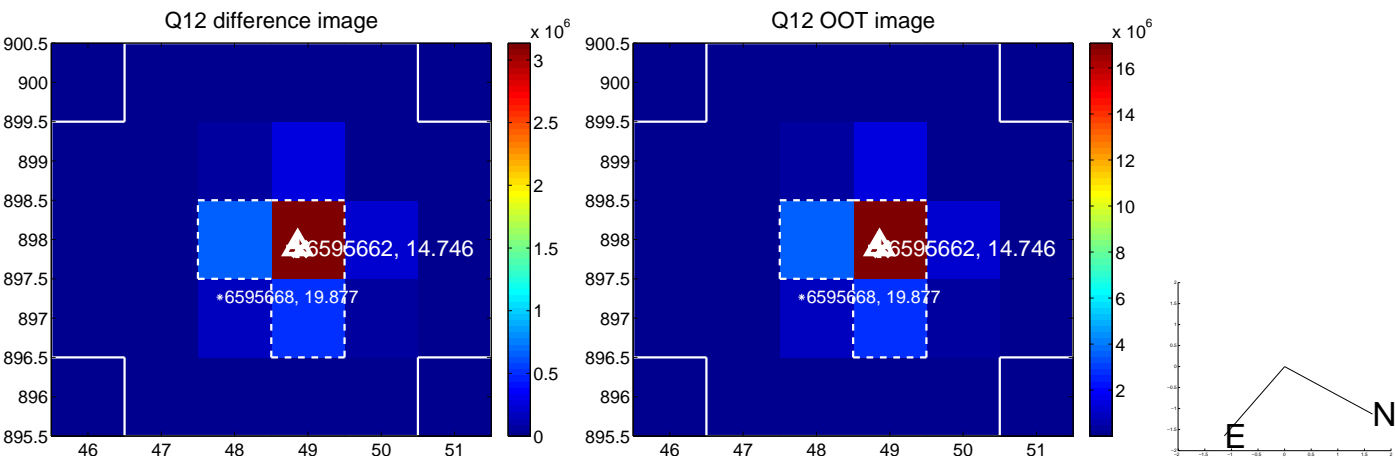
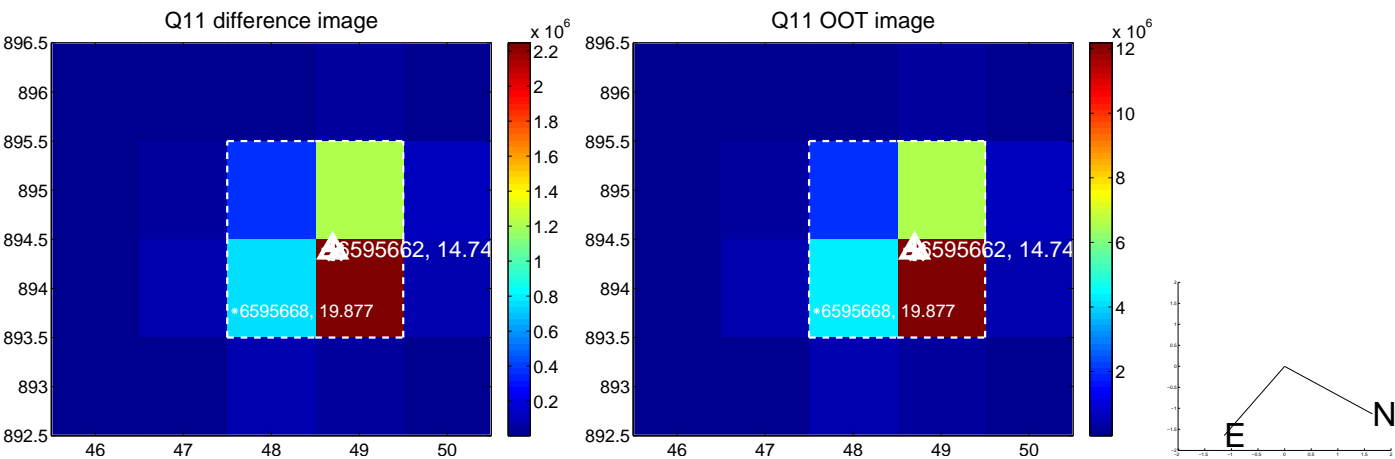
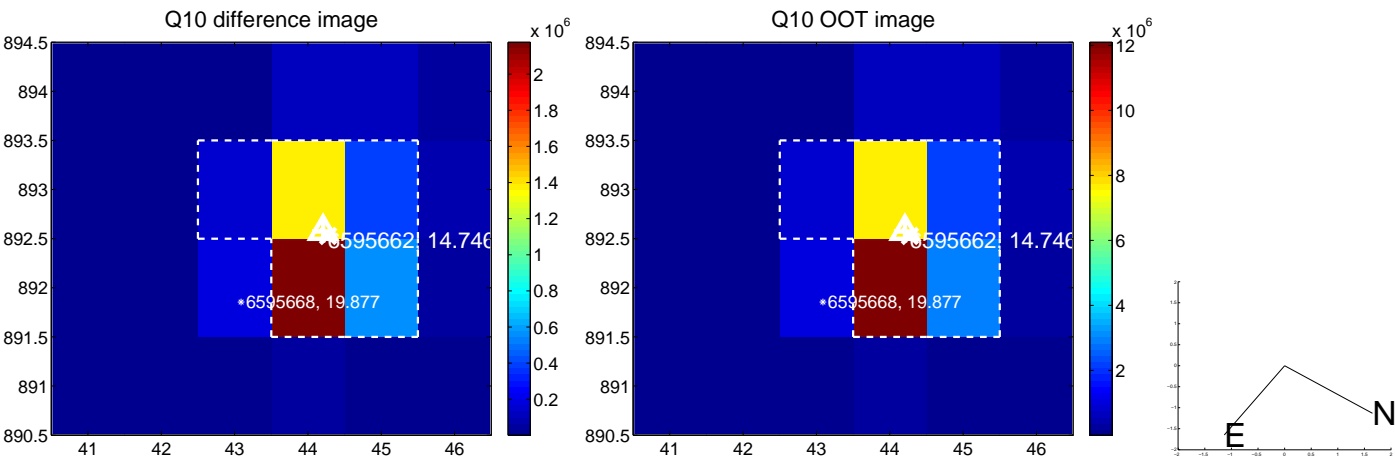
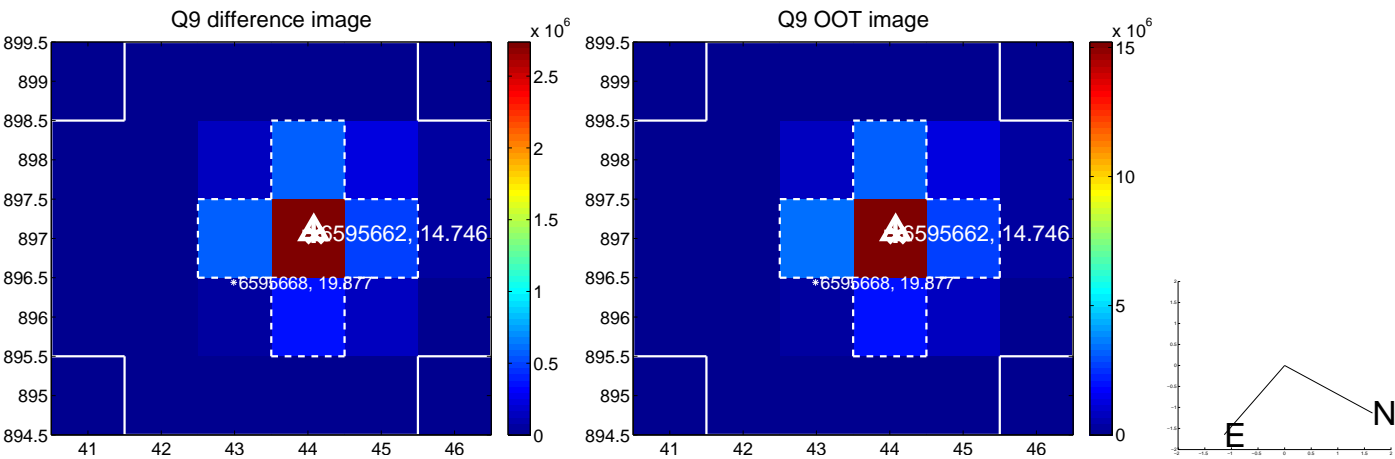
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



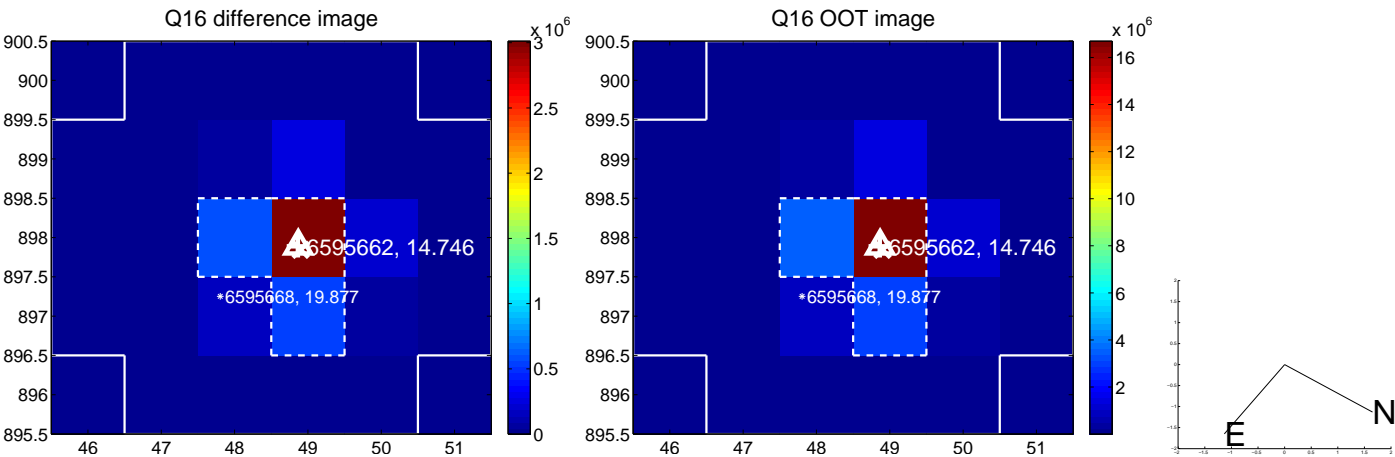
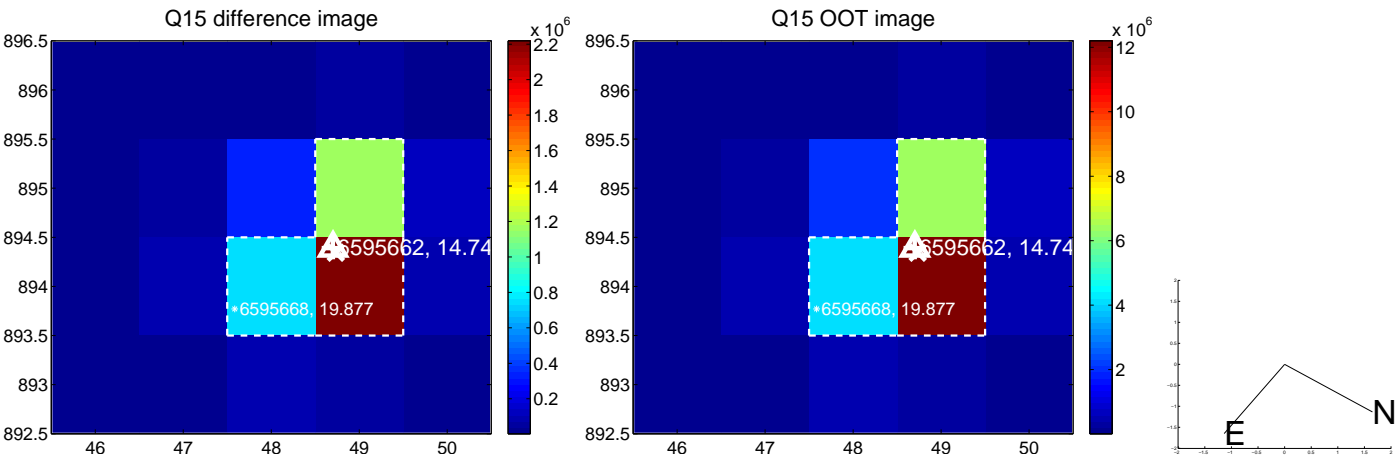
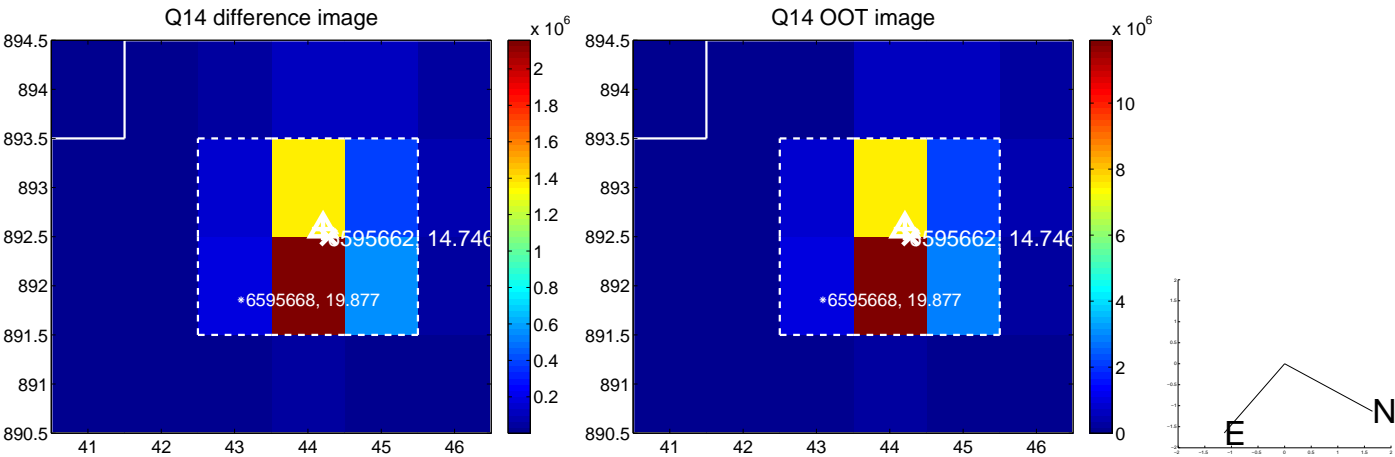
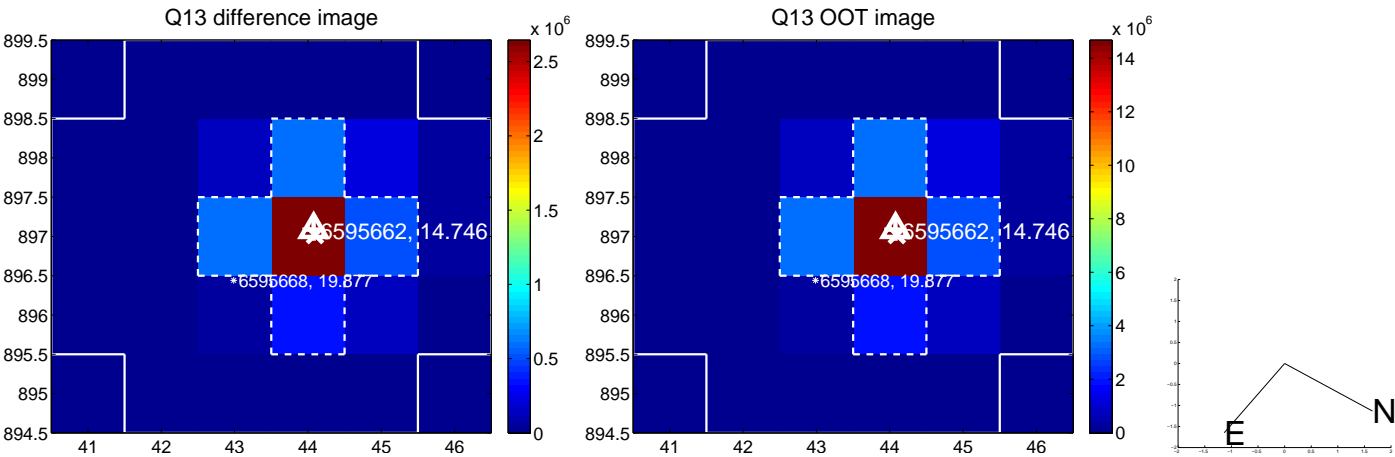
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

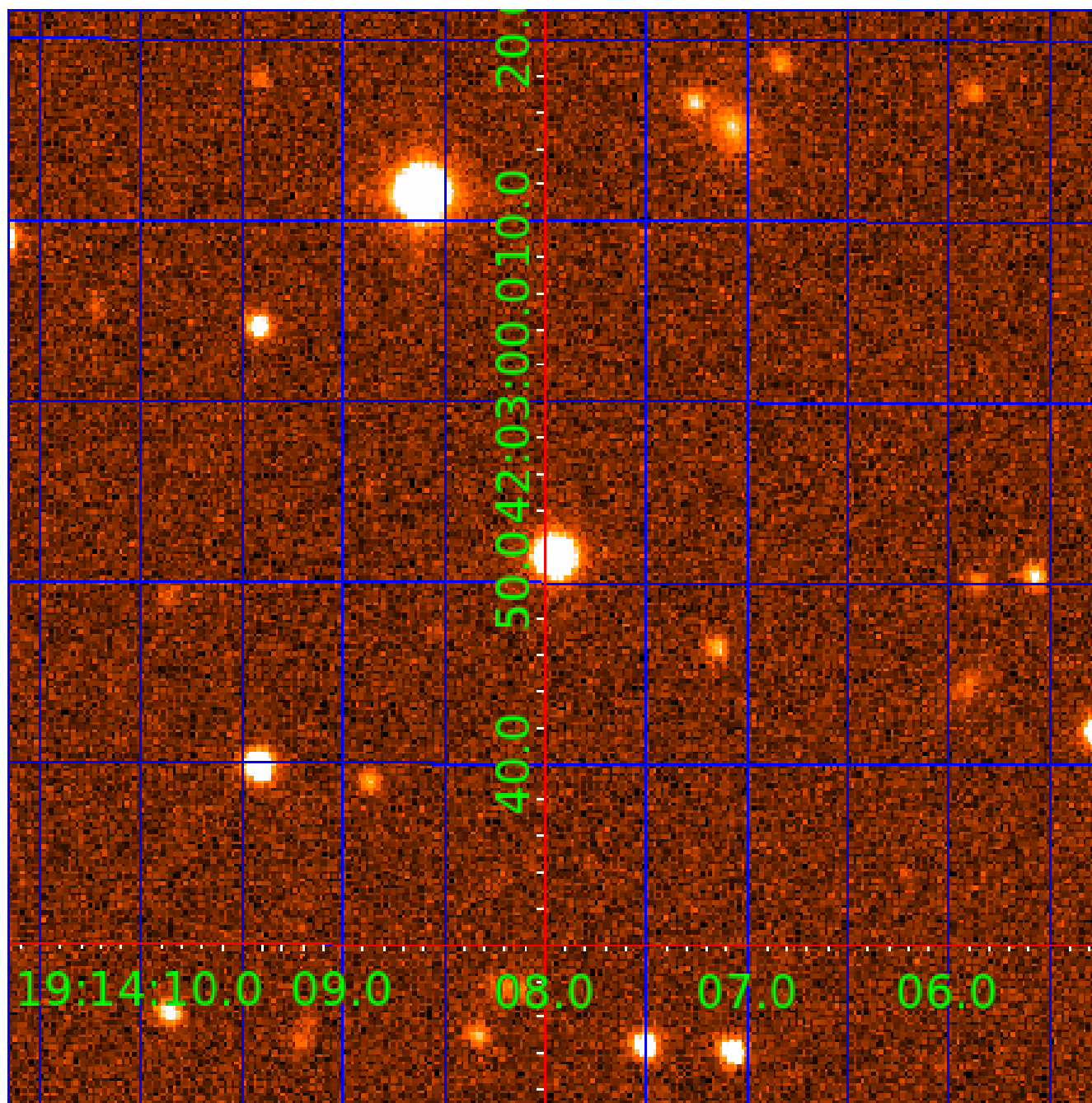


white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 006595662

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})
006595662-01	OBS	6738.01	2.680516	132.598079	196645.8	3.212	7732.1	6993.6	1.08	6038	49.01	993.99
006595662-02	OBS	No	2.680508	133.938278	8223.6	2.000	572.8	-1.0	1.08	6038	9.78	994.00

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006595662-01	OBS	FP	0.00	0	1	0	0	MOD_SEC_DV—MOD_SEC_ALT—HAS_SEC_TCE
006595662-02	OBS	FP	0.00	1	1	0	0	IS_SEC_TCE—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 006595662-02

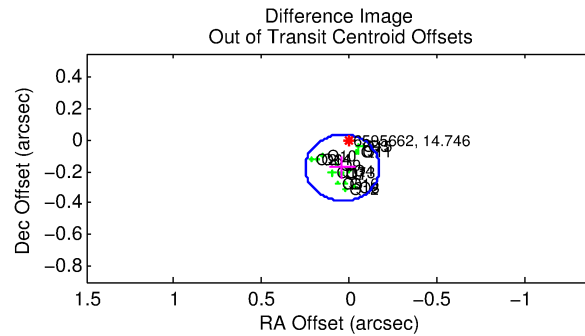
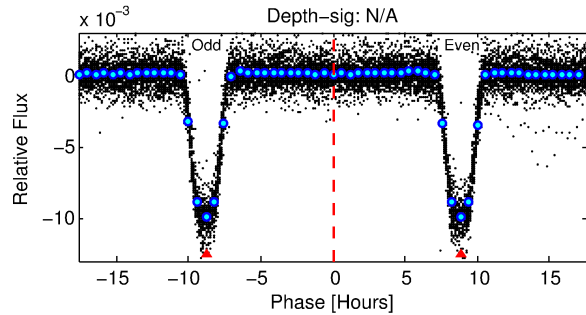
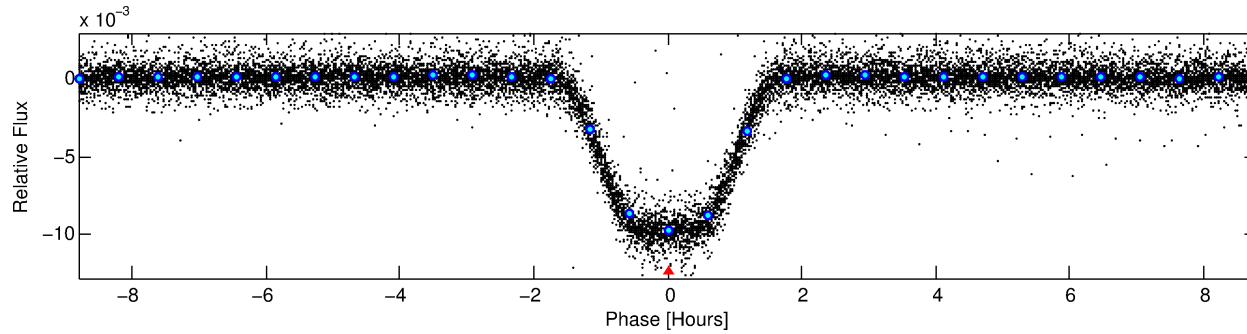
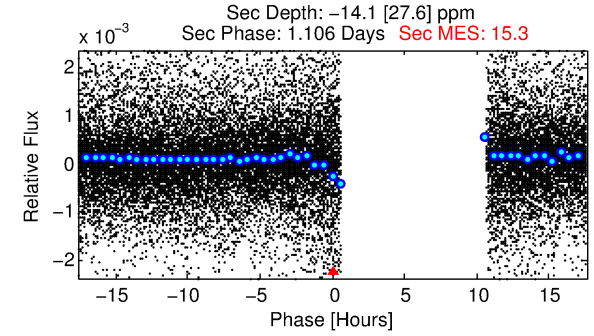
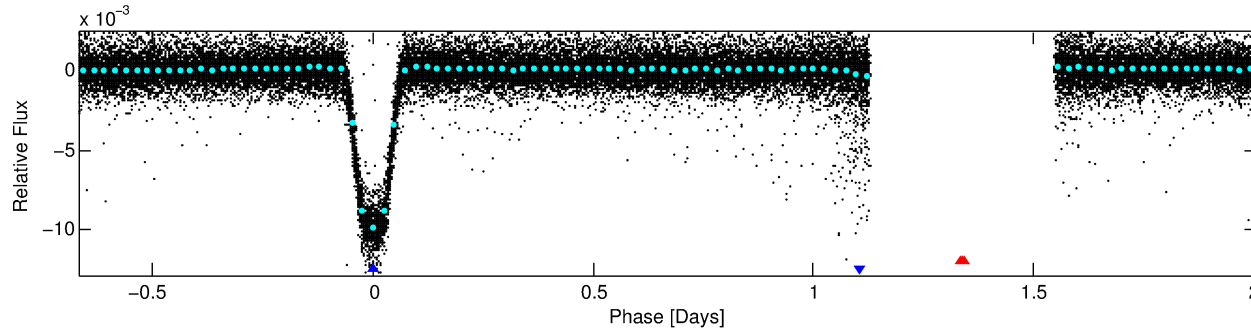
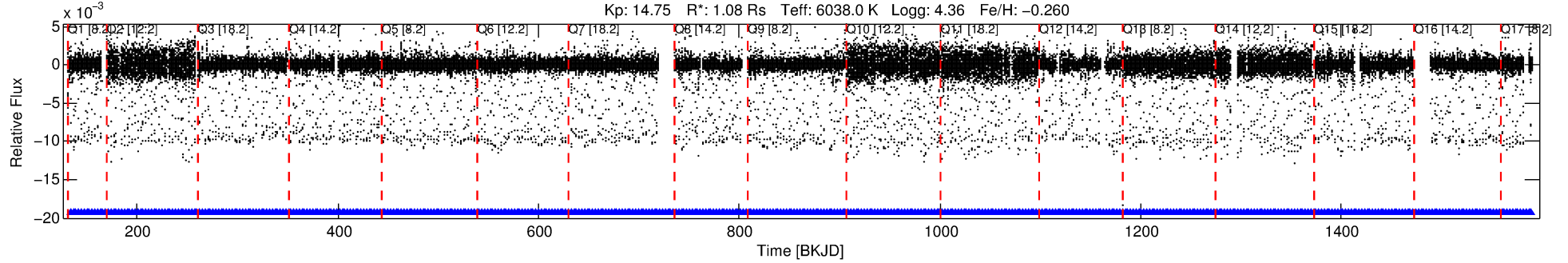
No Significant Match Found

DV One-Page Summary

KIC: 6595662 Candidate: 2 of 2 Period: 2.681 d

KOI: K06738 Corr: No Ephemeris Match

Kp: 14.75 R*: 1.08 Rs Teff: 6038.0 K Logg: 4.36 Fe/H: -0.260



TPS TCE Results:

Period = 2.68051 d
Epoch = 133.9383 BKJD

DV fit results are unavailable

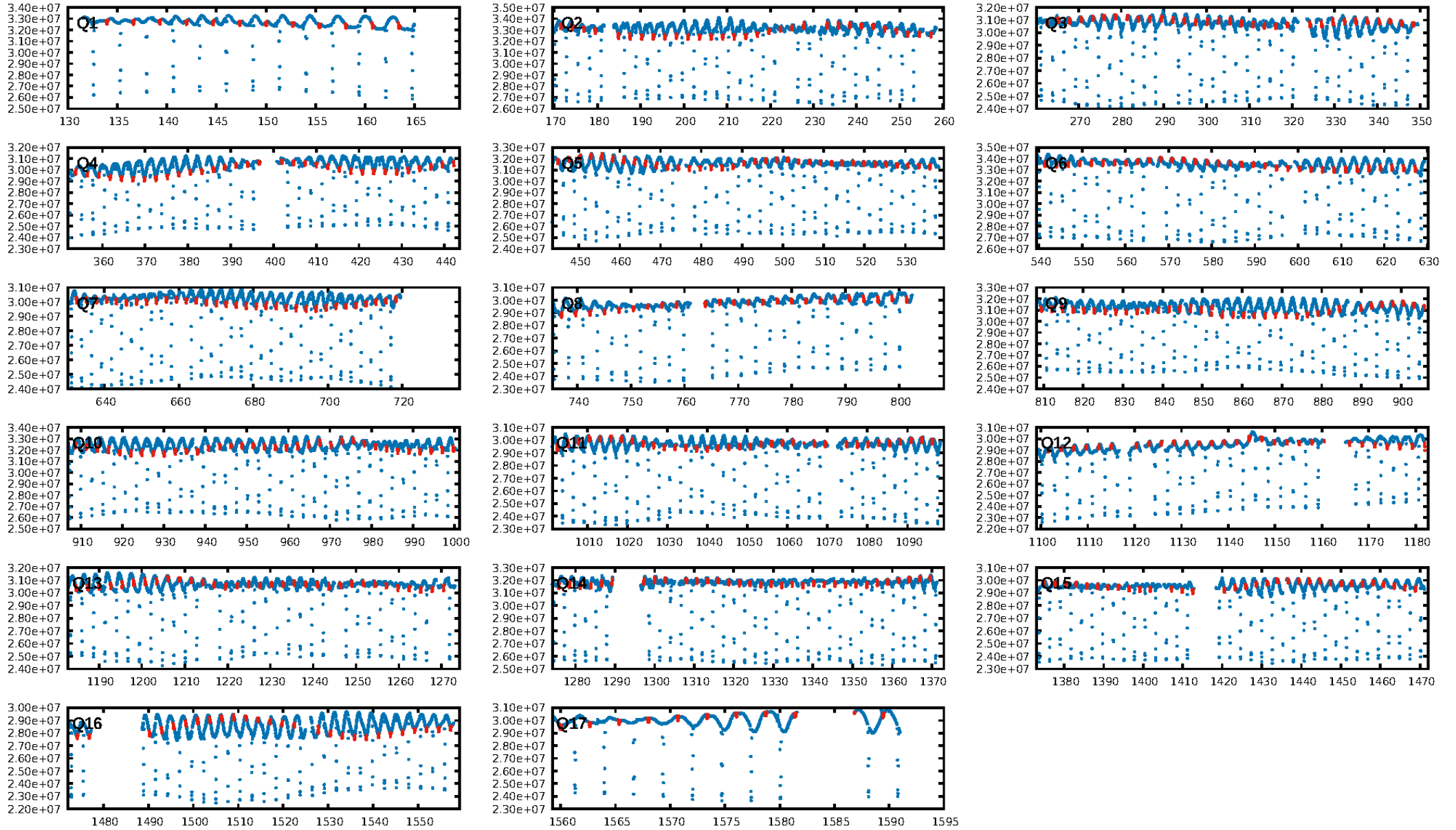
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 0.0% [0.00 σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [479/479]
GhostDiagnostic-chr: 1.743
Centroid-sig: N/A
Centroid-so: 0.211 arcsec [18.75 σ]
OotOffset-rm: 0.179 arcsec [2.54 σ]
KicOffset-rm: 0.381 arcsec [5.31 σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 1.00 [17/17]
DiffImageOverlap-fno: 1.00 [17/17]

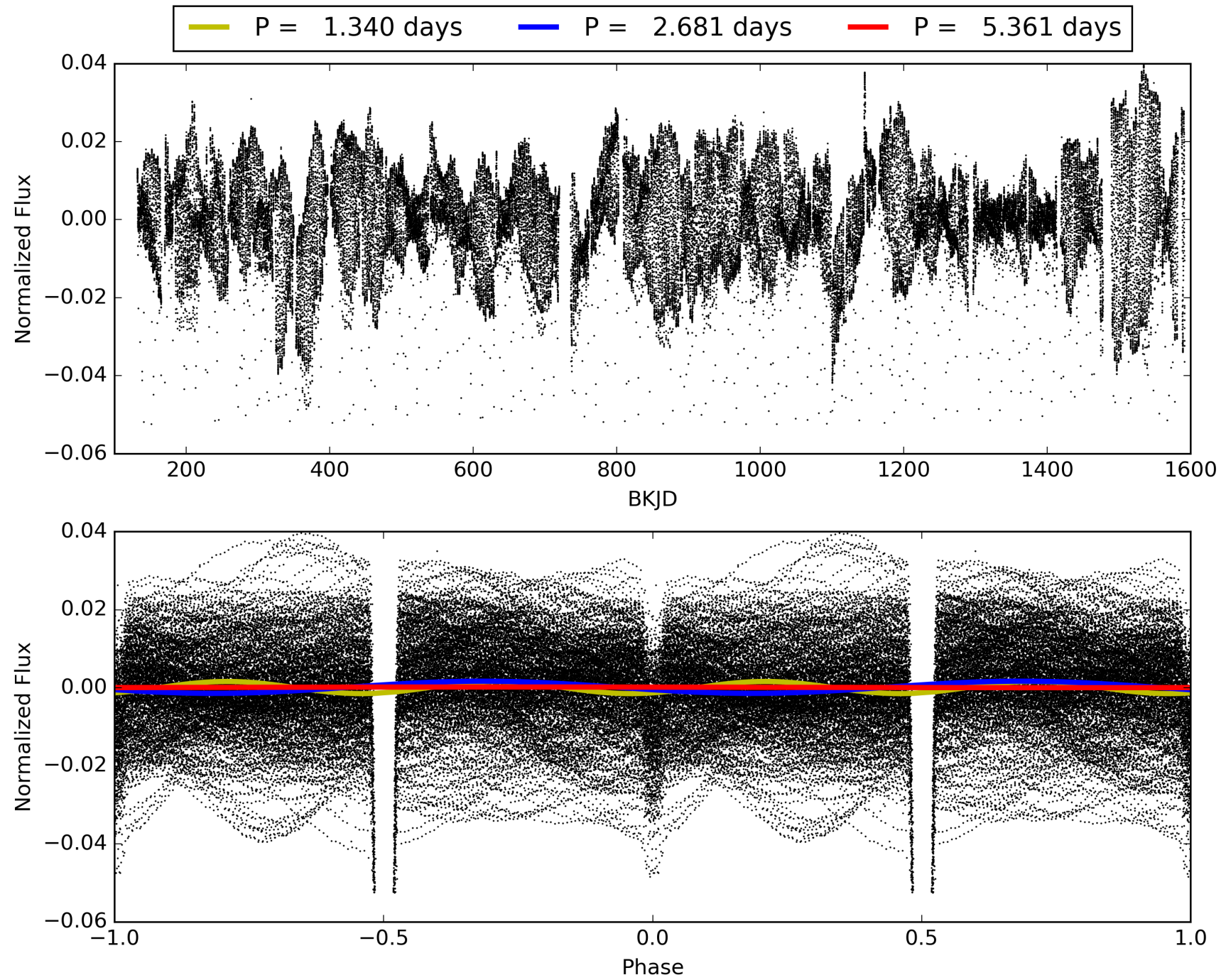
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 02-Feb-2016 00:49:35 Z

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

TCE 006595662-02, PDC Light Curves

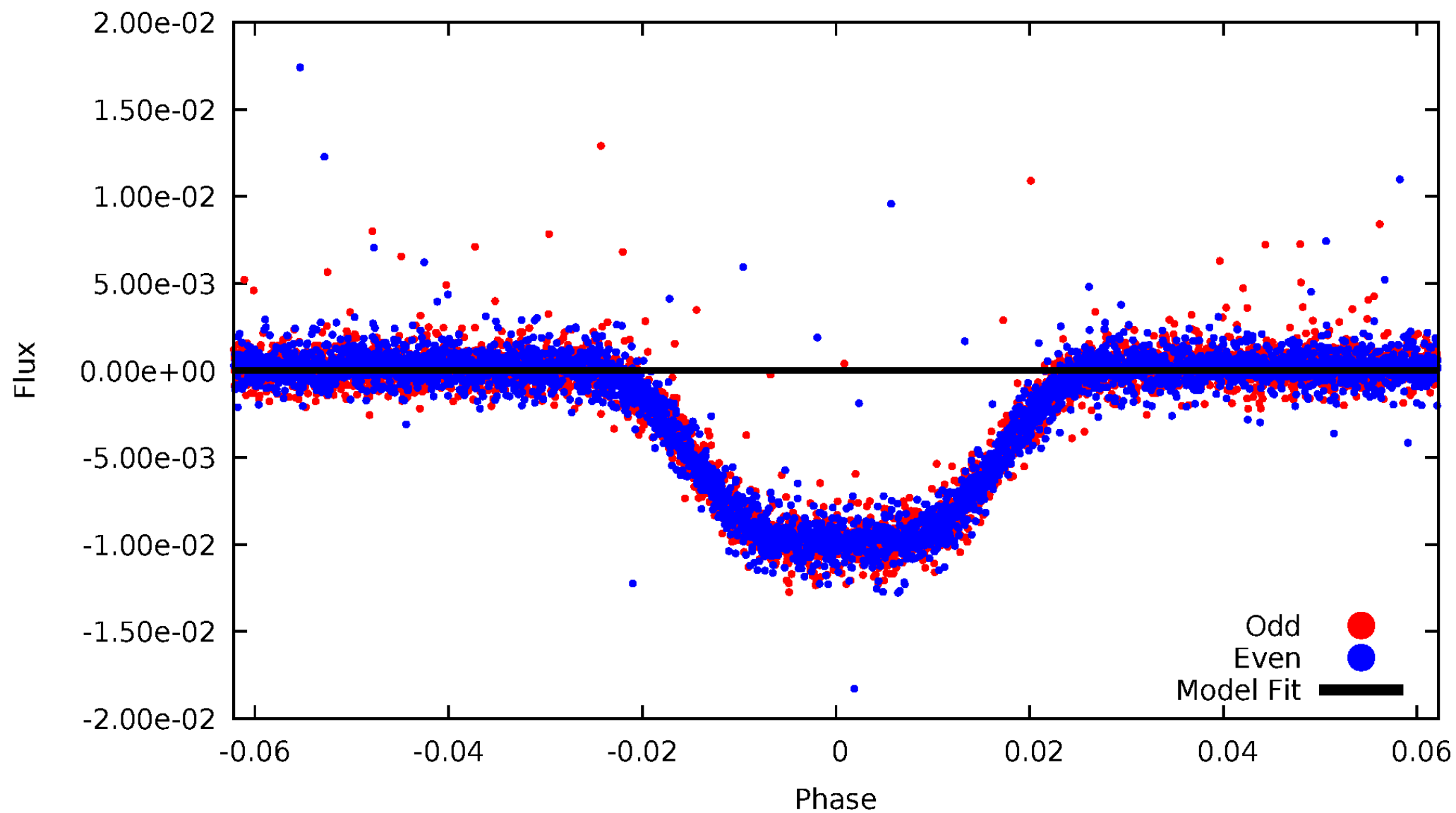


TCE 006595662-02



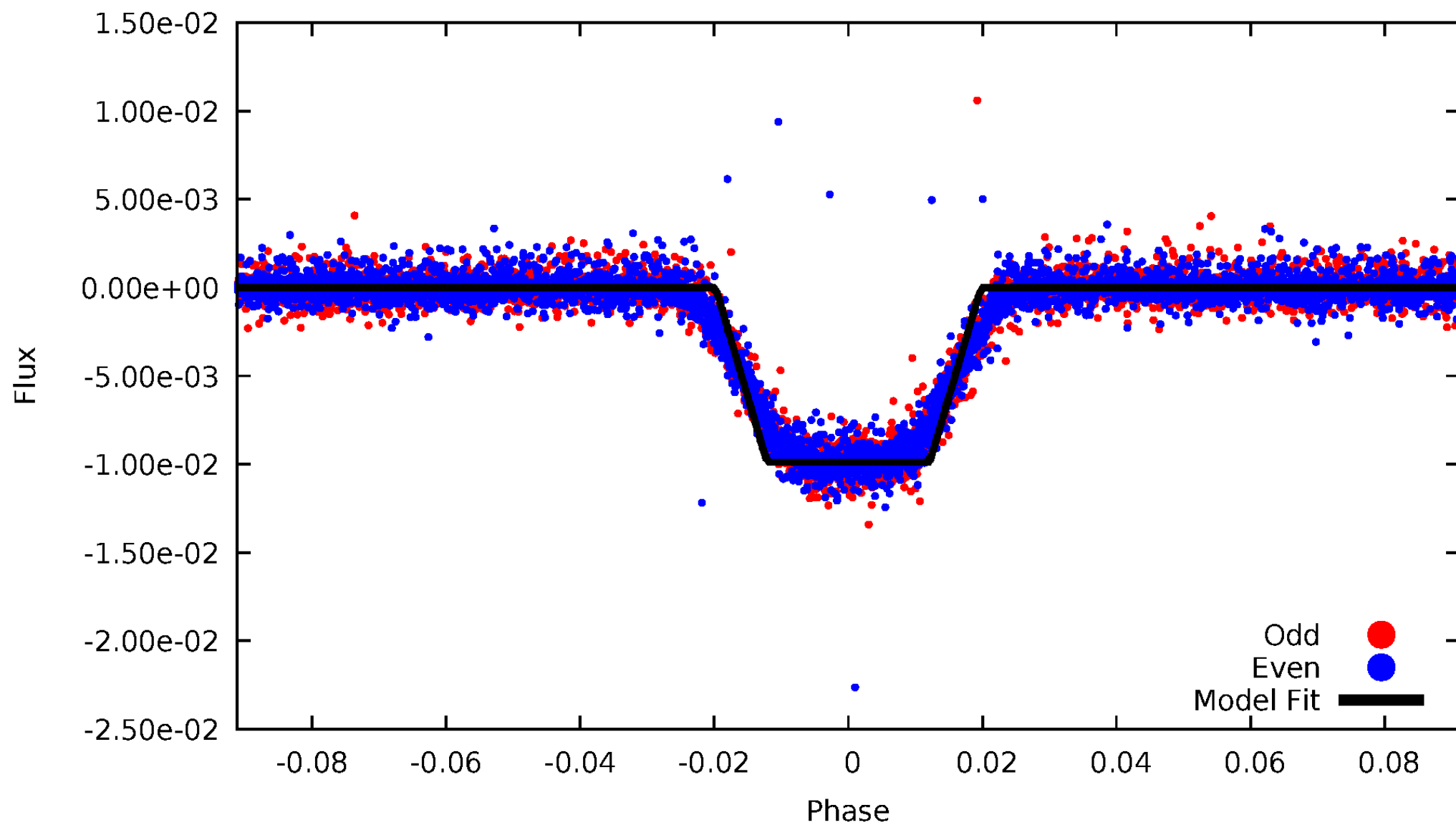
DV Odd/Even

TCE 006595662-02



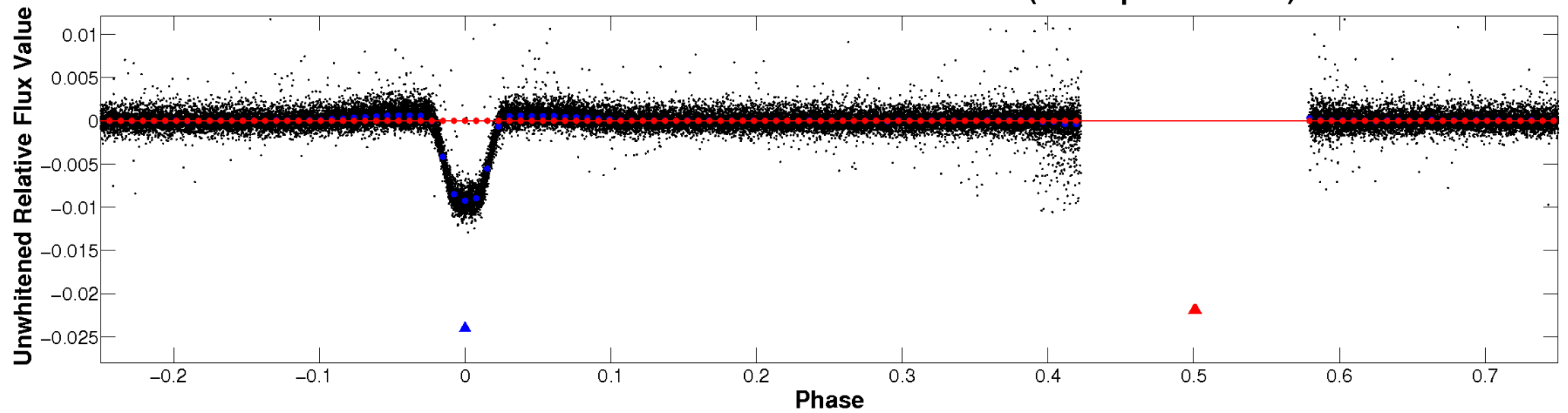
ALT Odd/Even

TCE 006595662-02

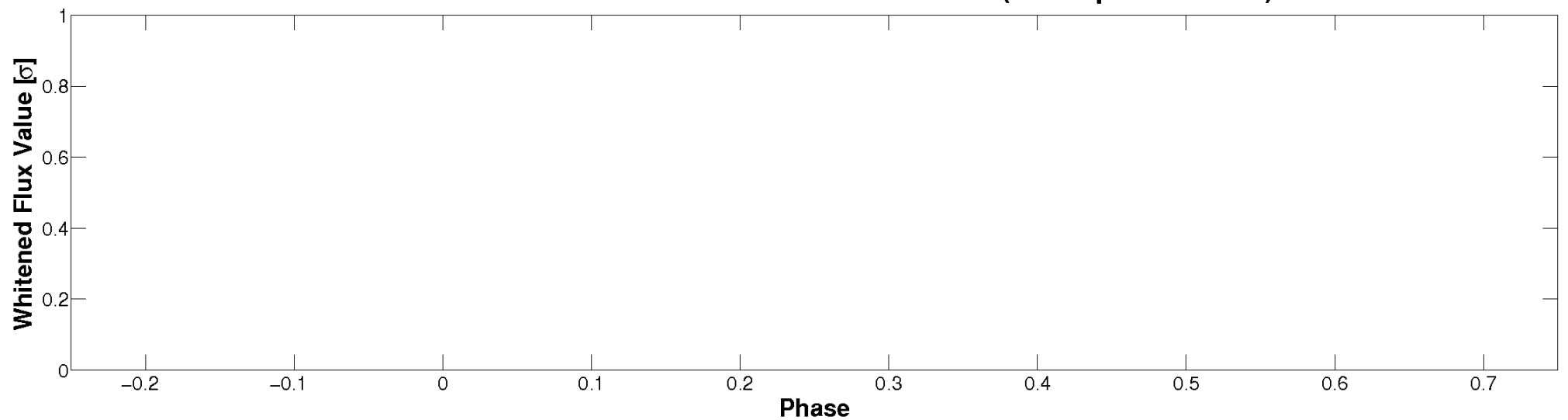


Non-Whitened Vs. Whitened Light Curve

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

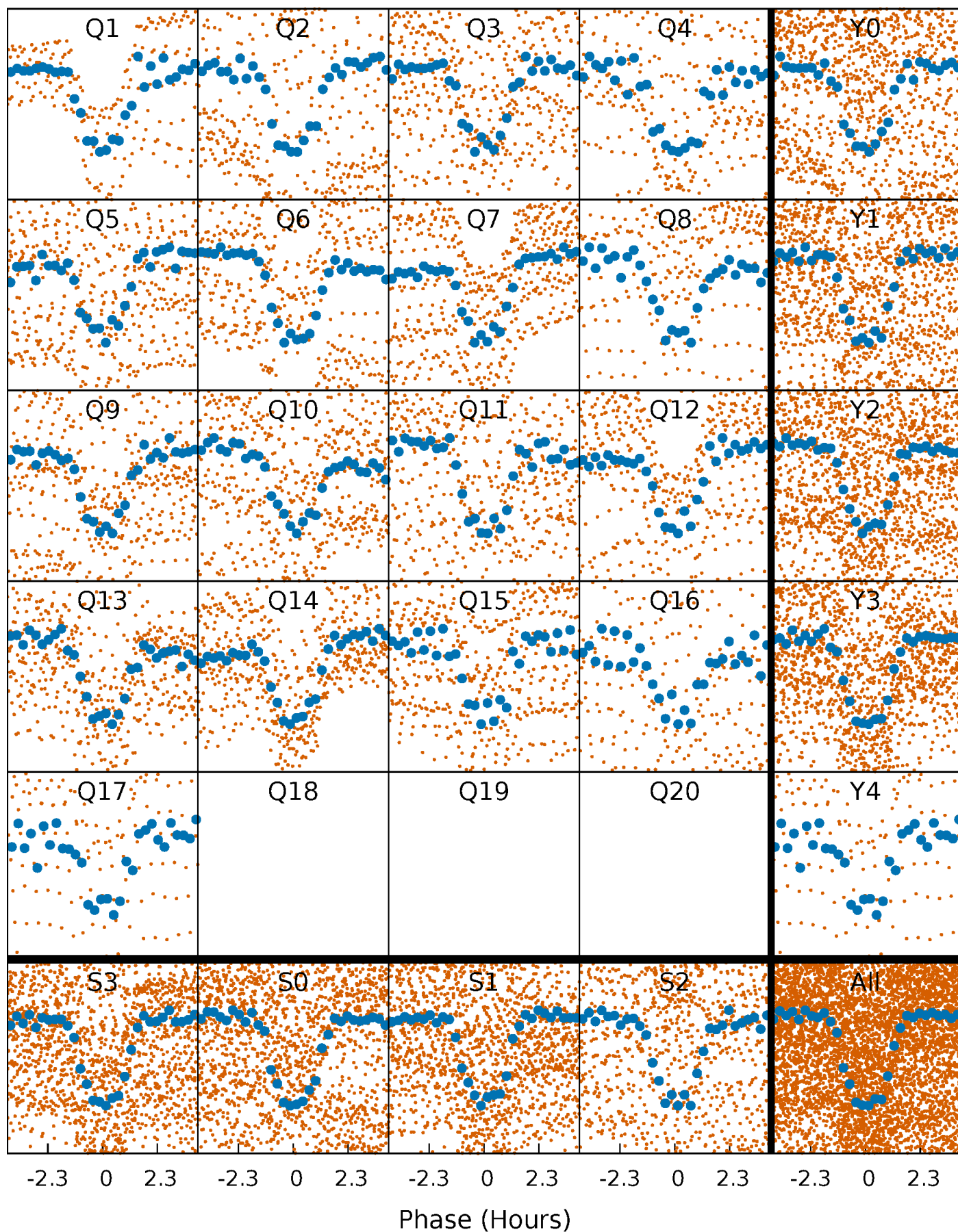


Planet 2 : Phased Whitened Flux Time Series (TPS Epoch/Period)



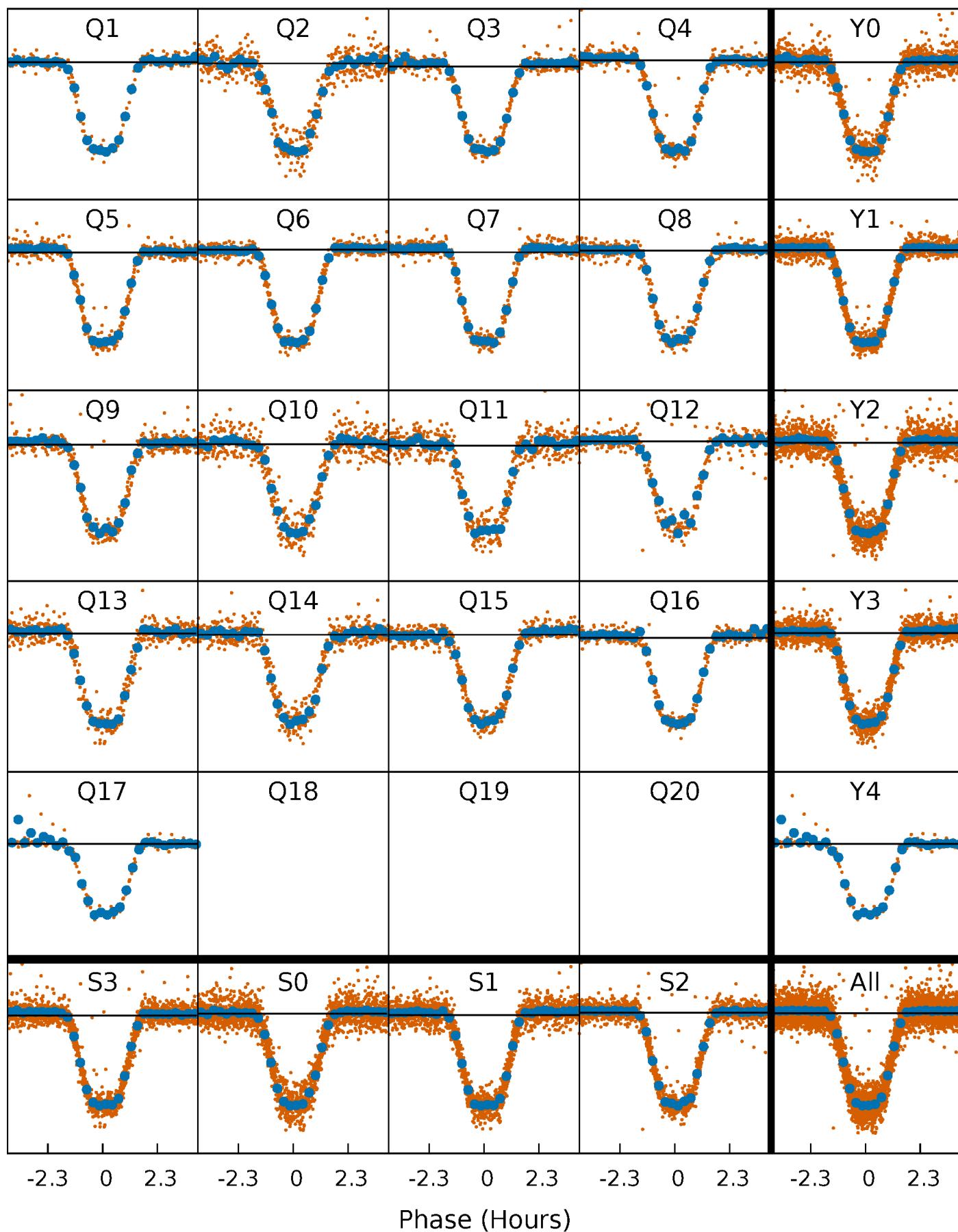
PDC Quarter-Phased Transit Curves

TCE 006595662-02 P= 2.680508 Days $T_0=133.938278$ (BKJD)



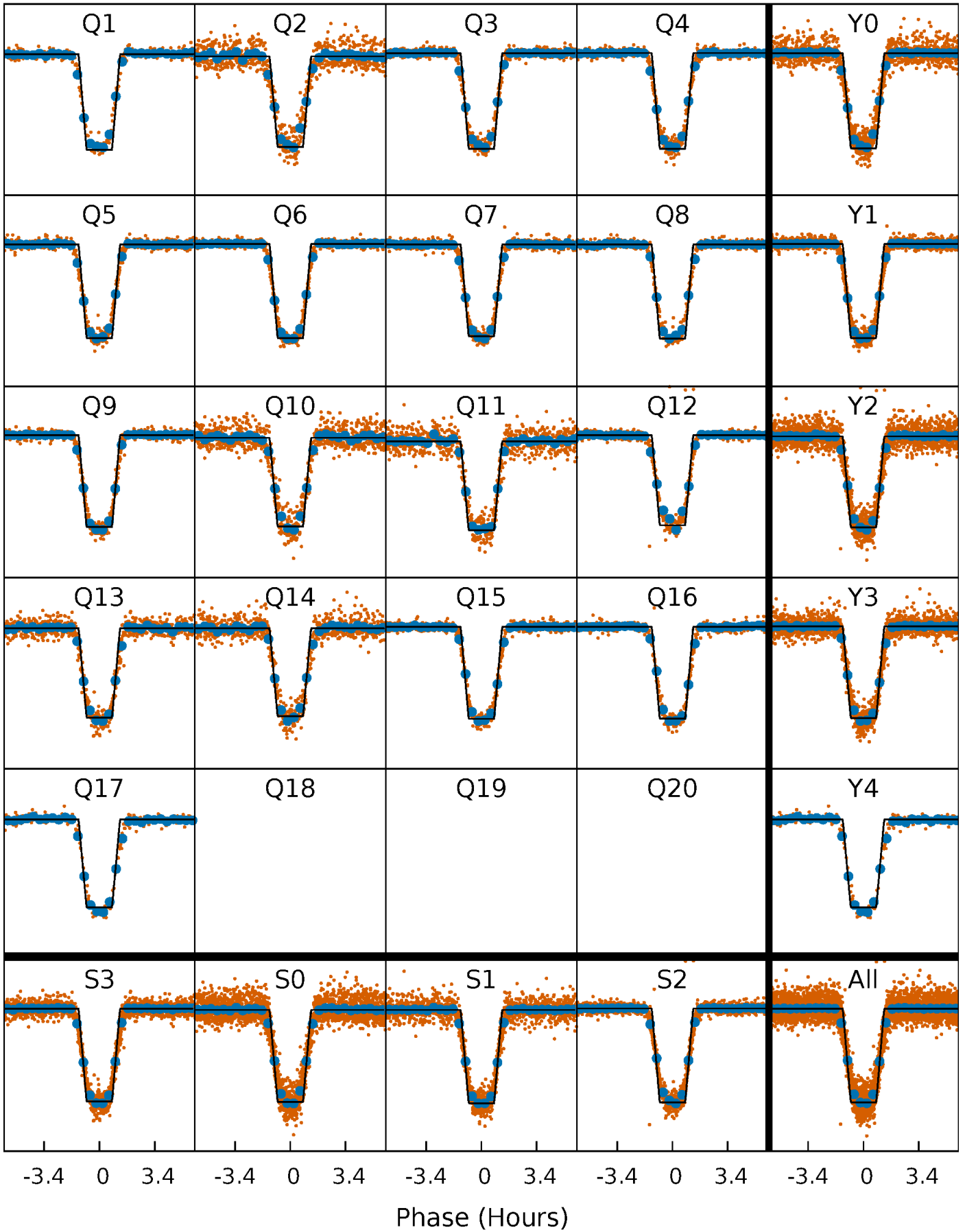
DV Quarter-Phased Transit Curves

TCE 006595662-02 P= 2.680508 Days $T_0=133.938278$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

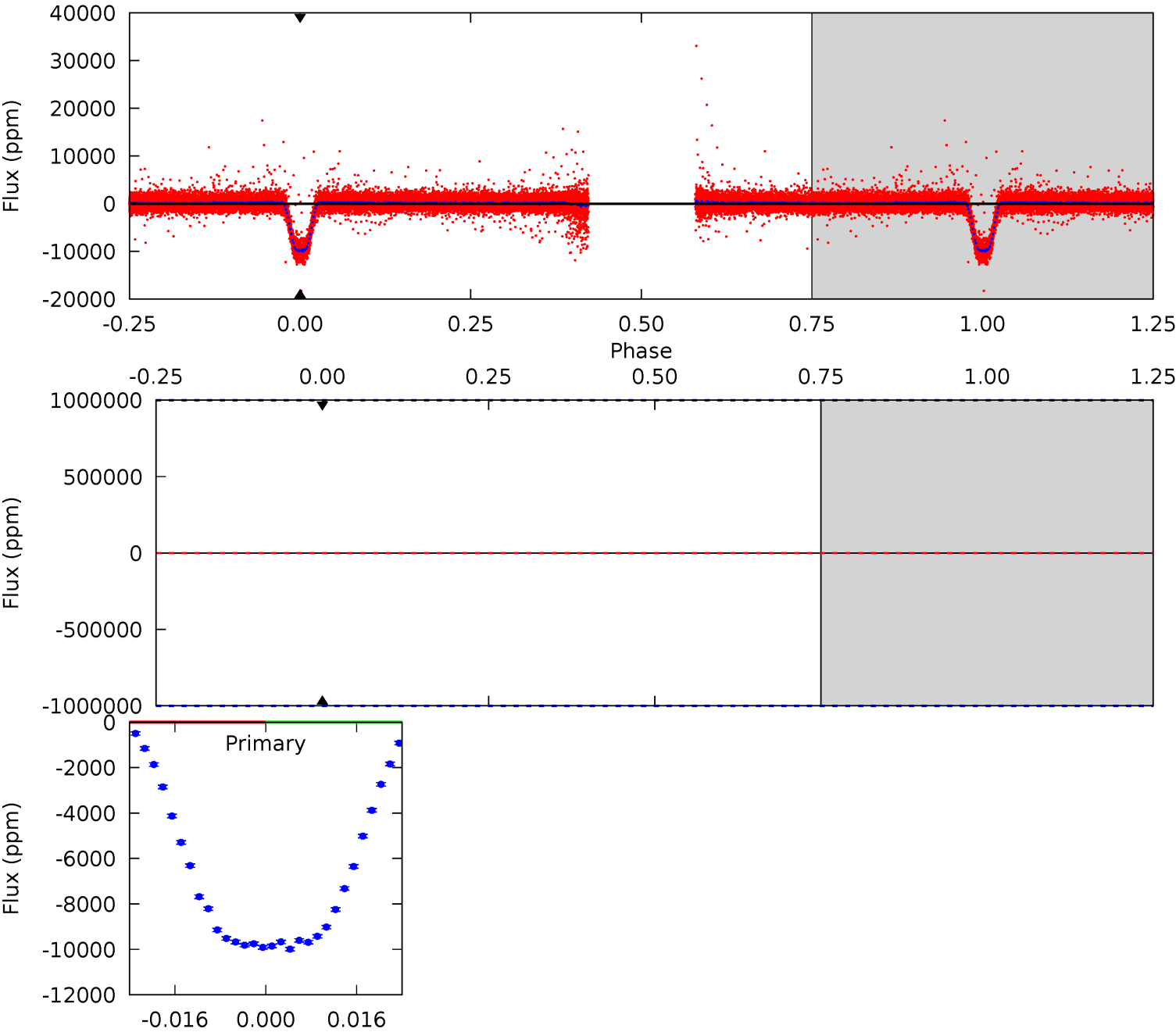
TCE 006595662-02 $P = 2.680508$ Days $T_0 = 133.940614$ (BKJD)



DV Model-Shift Uniqueness Test

006595662-02, P = 2.680508 Days, E = 131.257770 Days

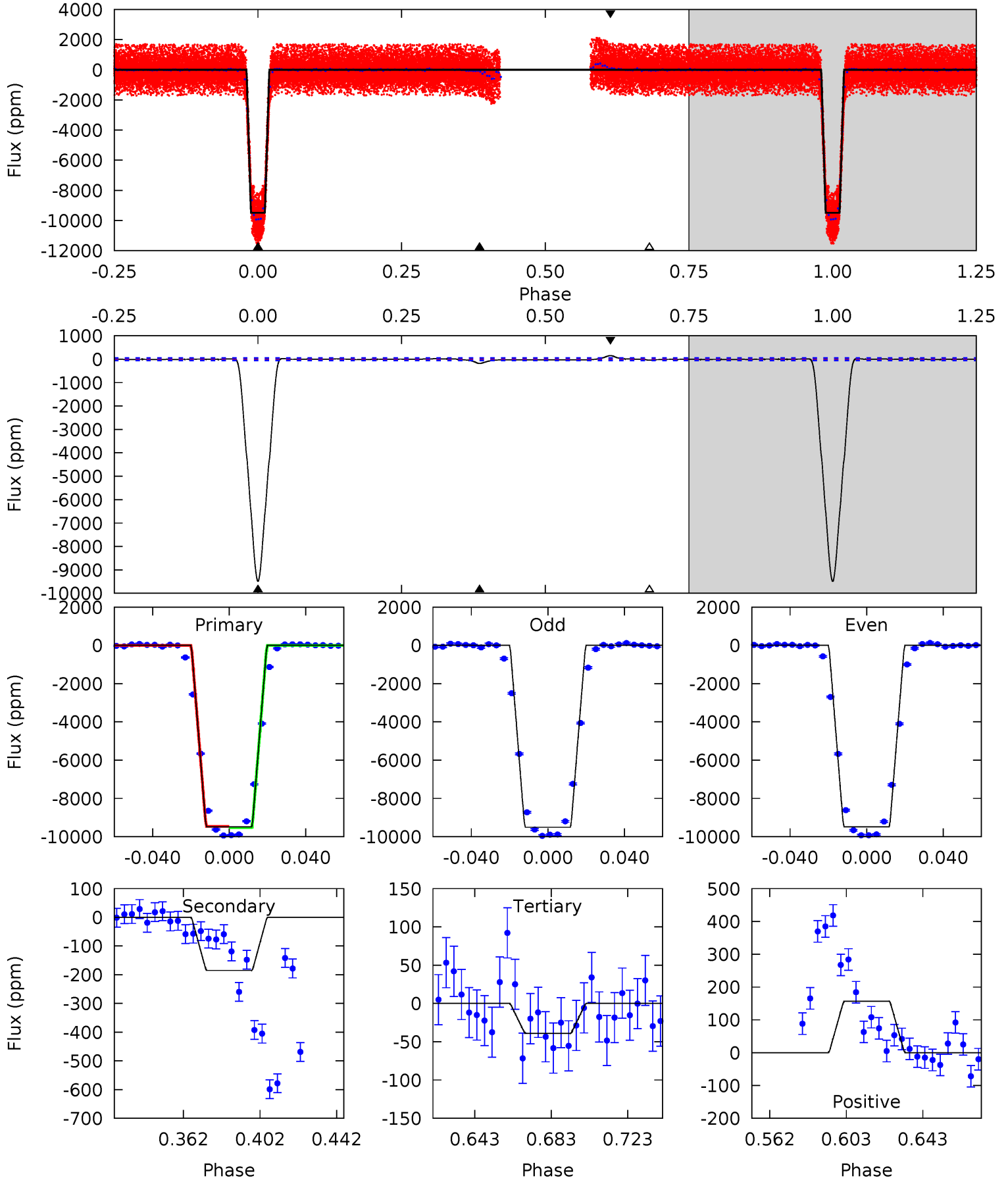
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

006595662-02, P = 2.680508 Days, E = 131.260106 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
878.6	17.1	3.62	14.5	4.75	2.05	2.15	875.0	864.1	13.5	2.63	0.77	1.00	0.02	2.81



Stellar Parameters For KIC 006595662

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6038^{+181}_{-181}	$4.356^{+0.128}_{-0.192}$	$-0.260^{+0.300}_{-0.300}$	$1.076^{+0.323}_{-0.174}$	$0.958^{+0.143}_{-0.104}$	$1.083^{+0.758}_{-0.512}$
	+3%/-3%	+3%/-4%	+115%/-115%	+30%/-16%	+15%/-11%	+70%/-47%
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 006595662-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	0 ± 1000000	$12.57^{+11.33}_{-8.30}$	2011^{+157}_{-117}	4603^{+12147}_{-18651}	15^{+933}_{-728}
Alt.	-185 ± 11	$14.60^{+10.86}_{-9.13}$	2015^{+148}_{-125}	2581^{+1096}_{-4735}	$0.674^{+4.189}_{-0.452}$

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 $A_{obs} \gg 1.0$

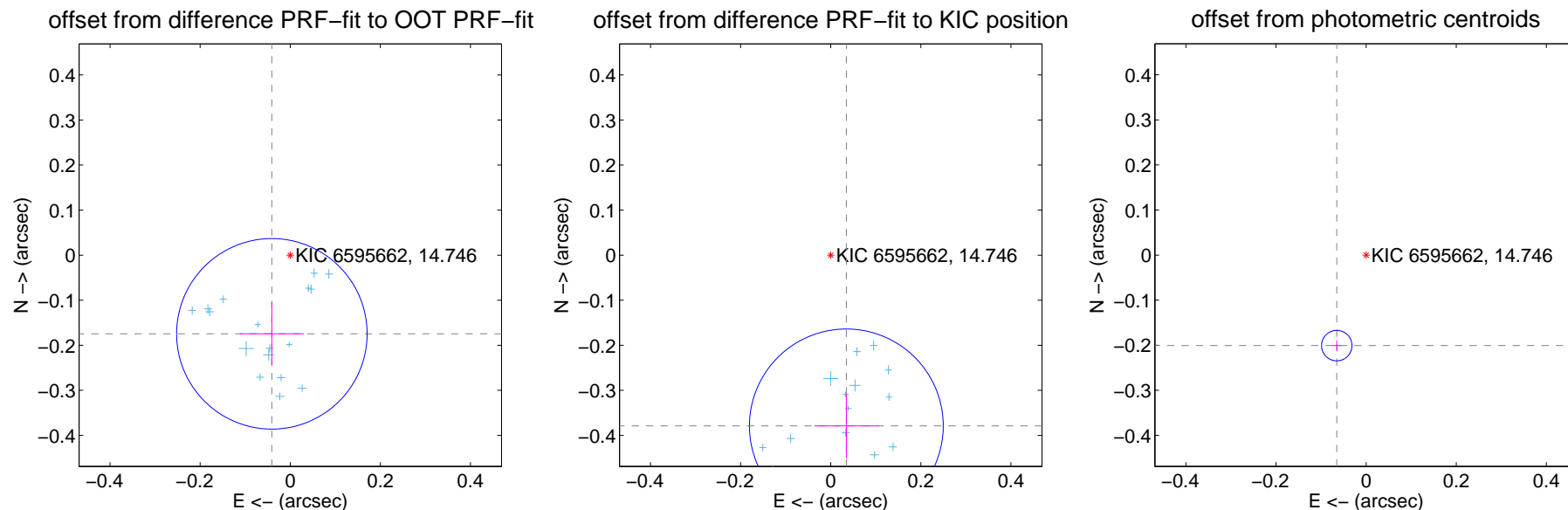
DV Centroid Data

Supplemental centroid analysis for 006595662-02. Kepler magnitude: 14.75. Transit SNR -1.00

There are 17 quarters with good PRF difference image offsets

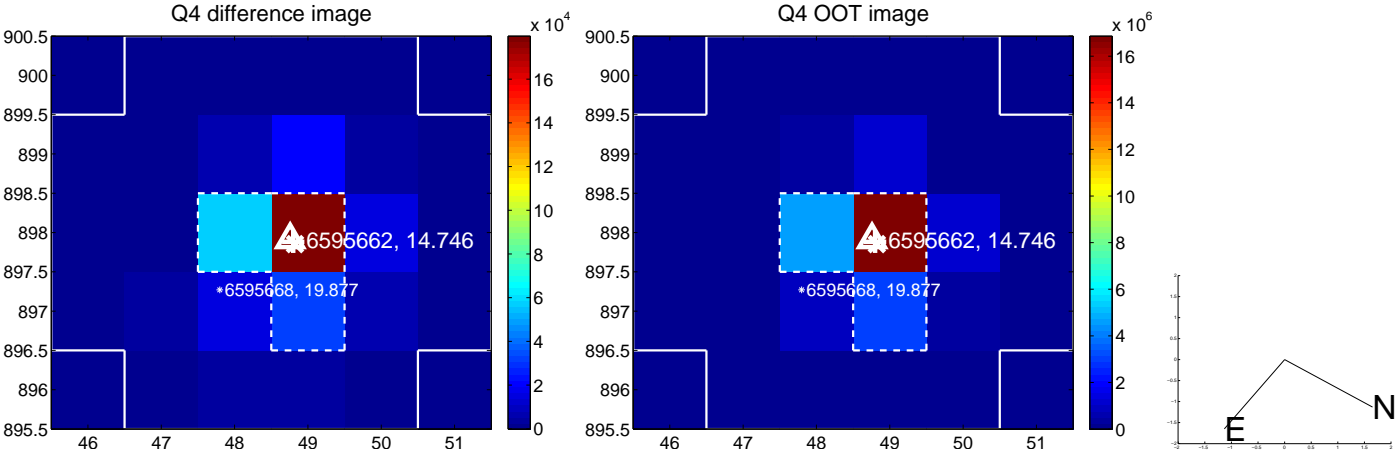
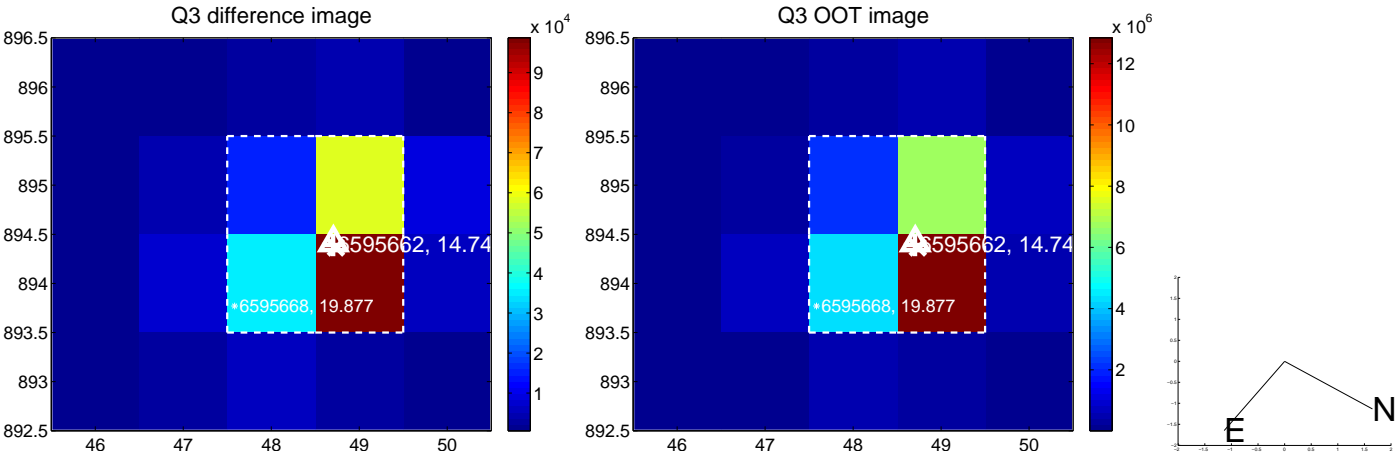
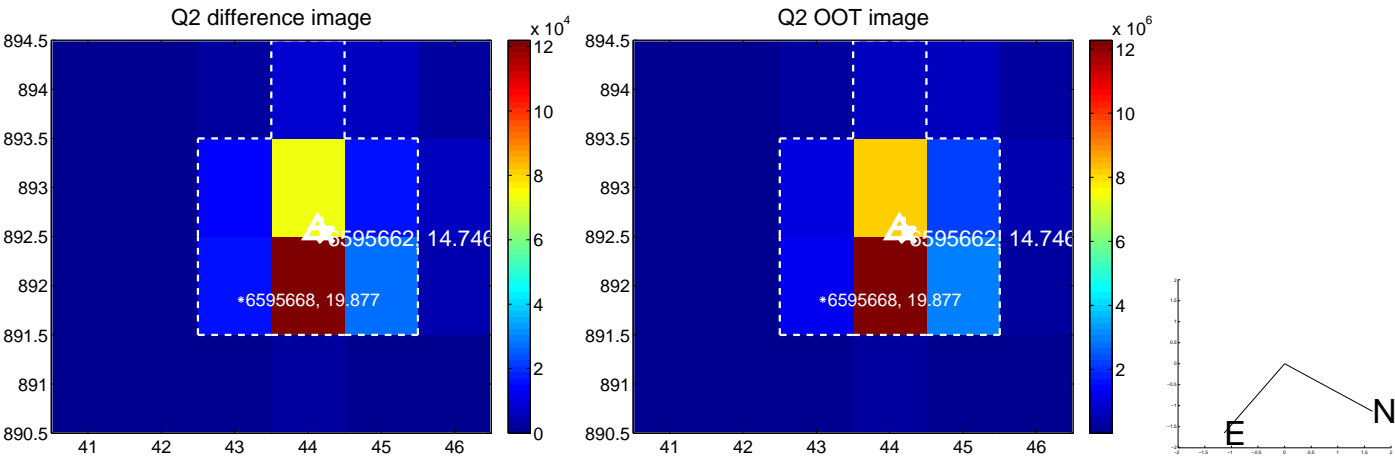
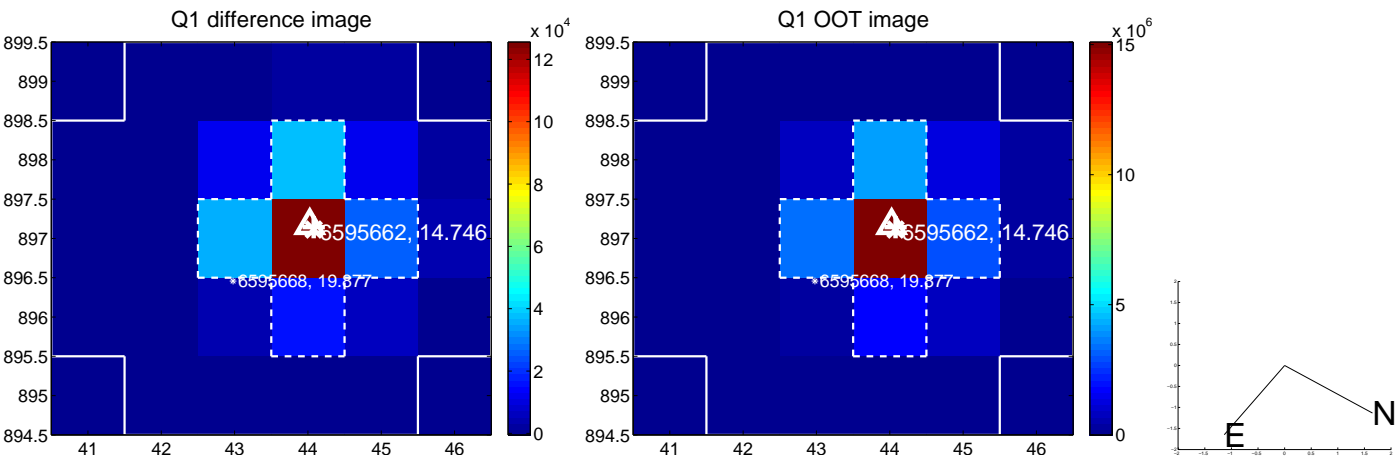
The direct PRF centroid is offset from the target star catalog position by about 0.12 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.179 ± 0.070	2.54	0.041 ± 0.071	-0.175 ± 0.070
PRF-fit source offset from KIC position	0.381 ± 0.072	5.31	-0.035 ± 0.071	-0.379 ± 0.072
photometric centroid source offset	0.21 ± 0.01	18.75	0.07 ± 0.01	-0.20 ± 0.01

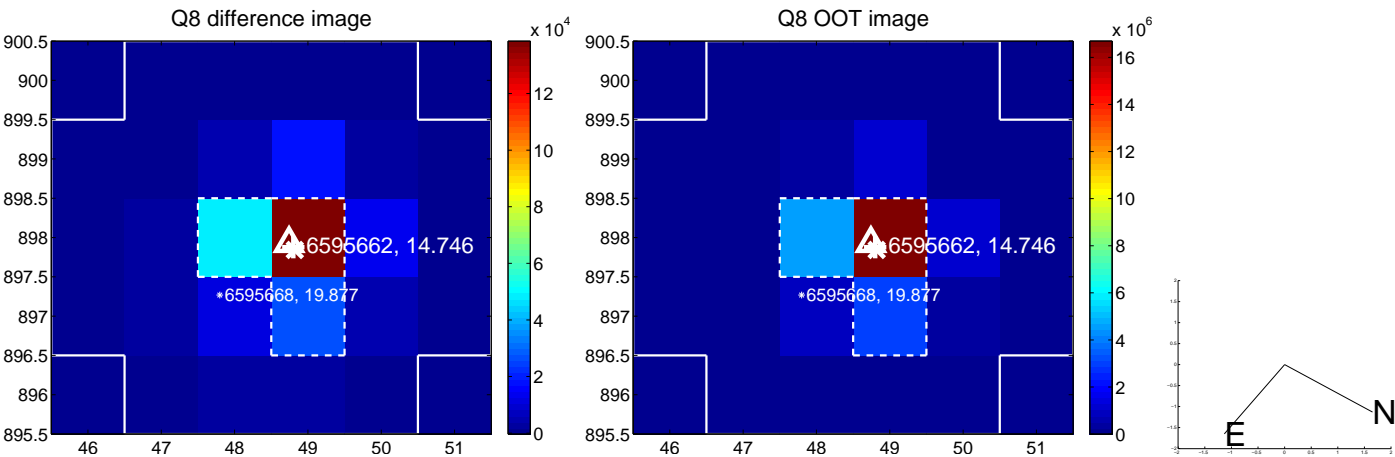
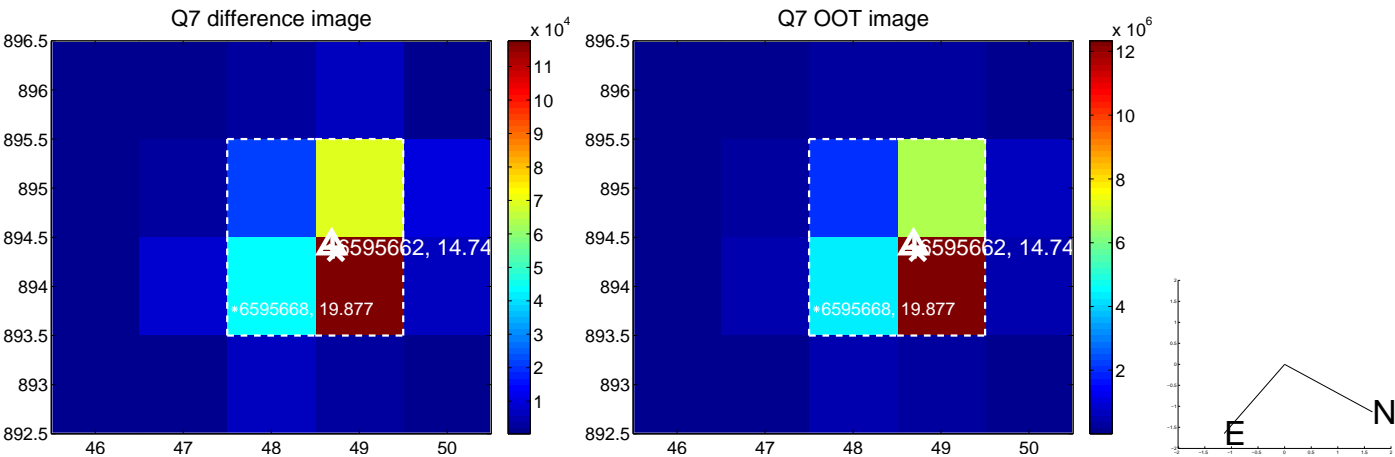
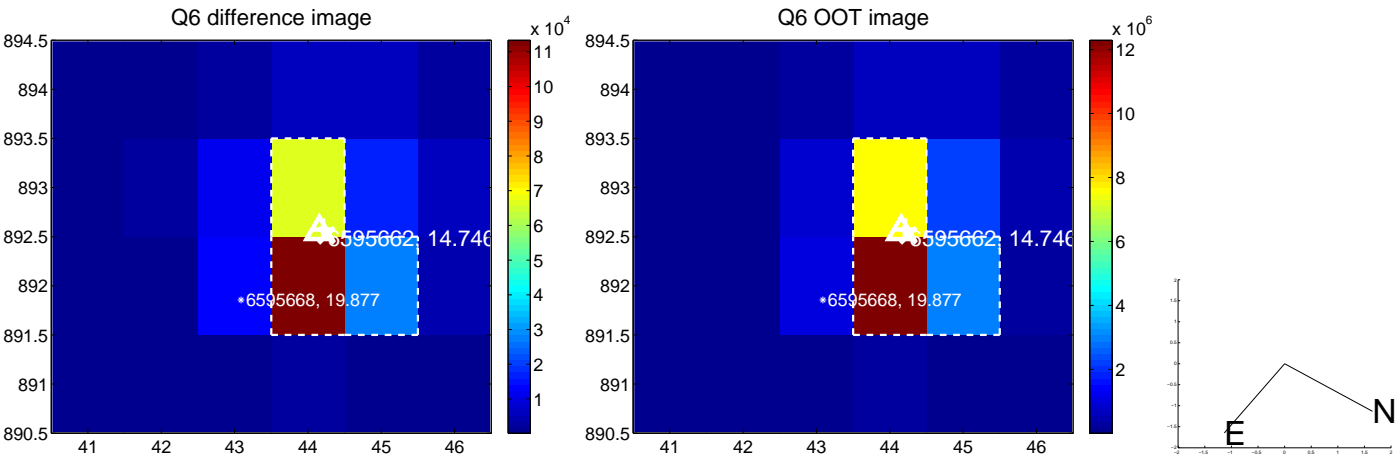
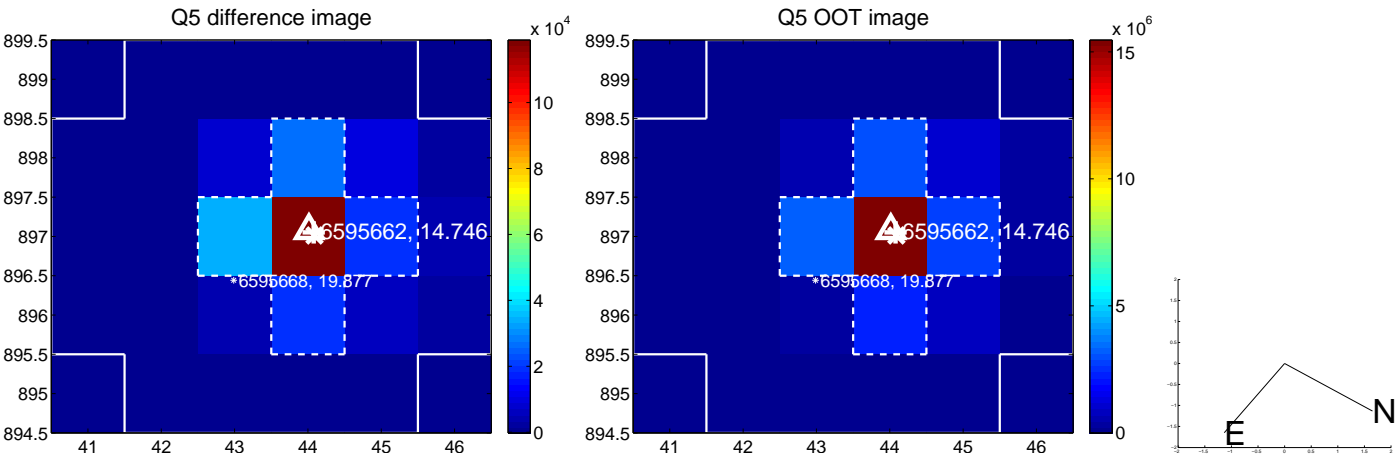


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

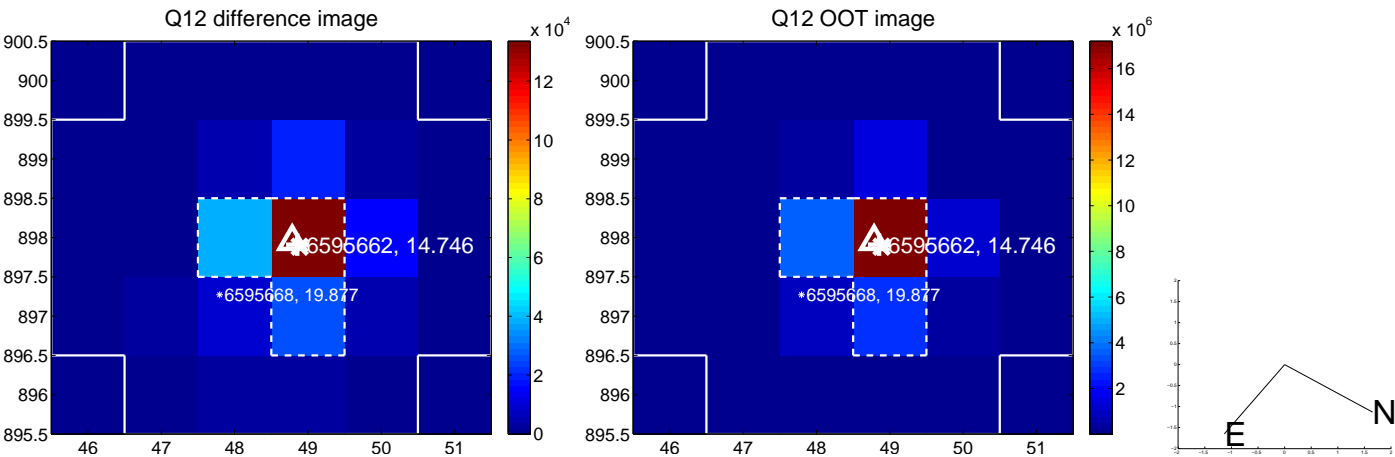
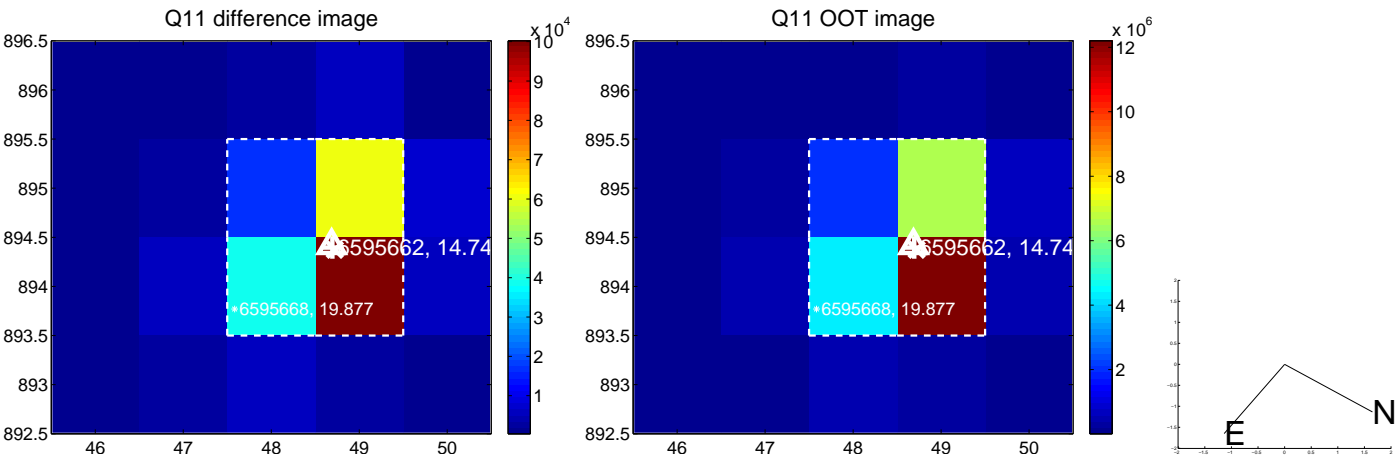
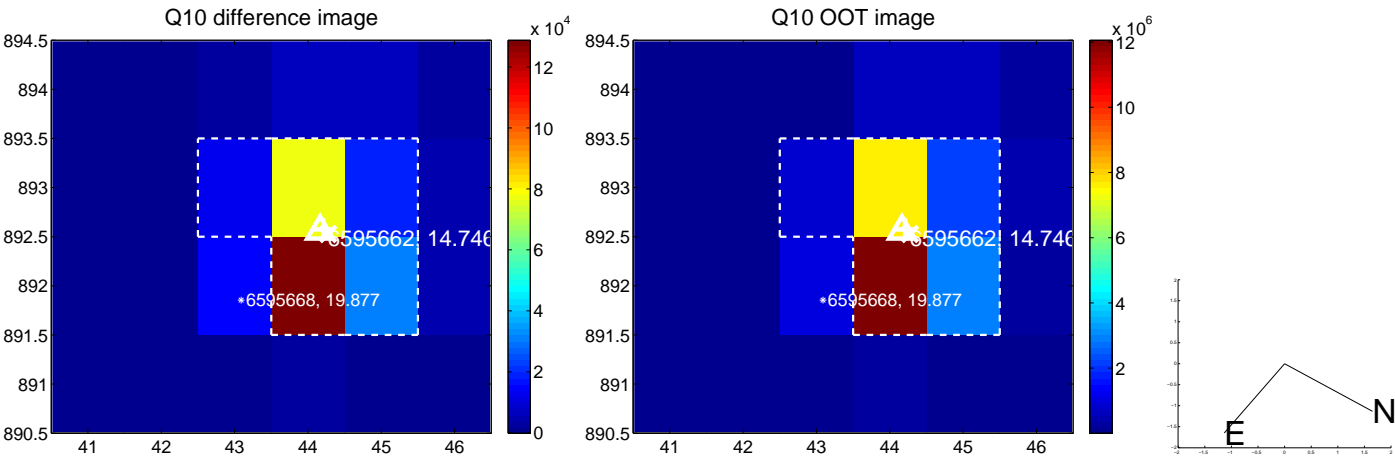
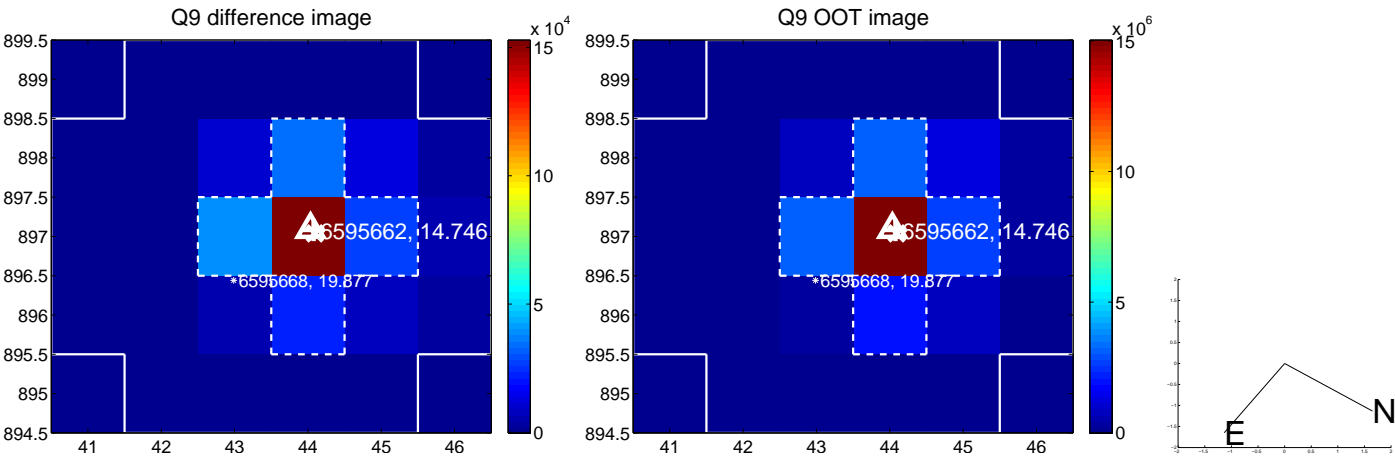
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



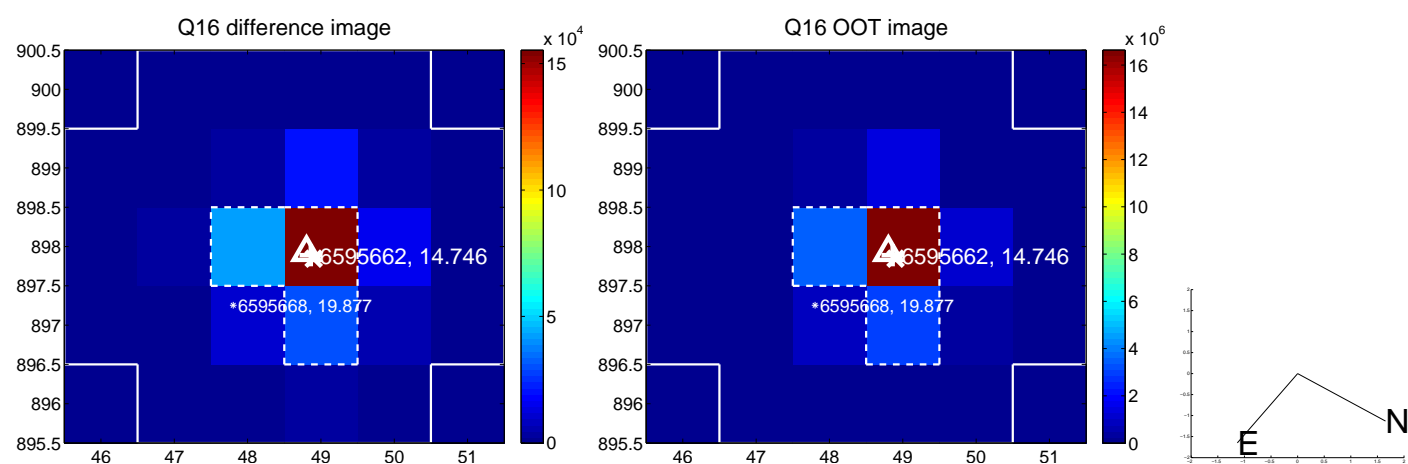
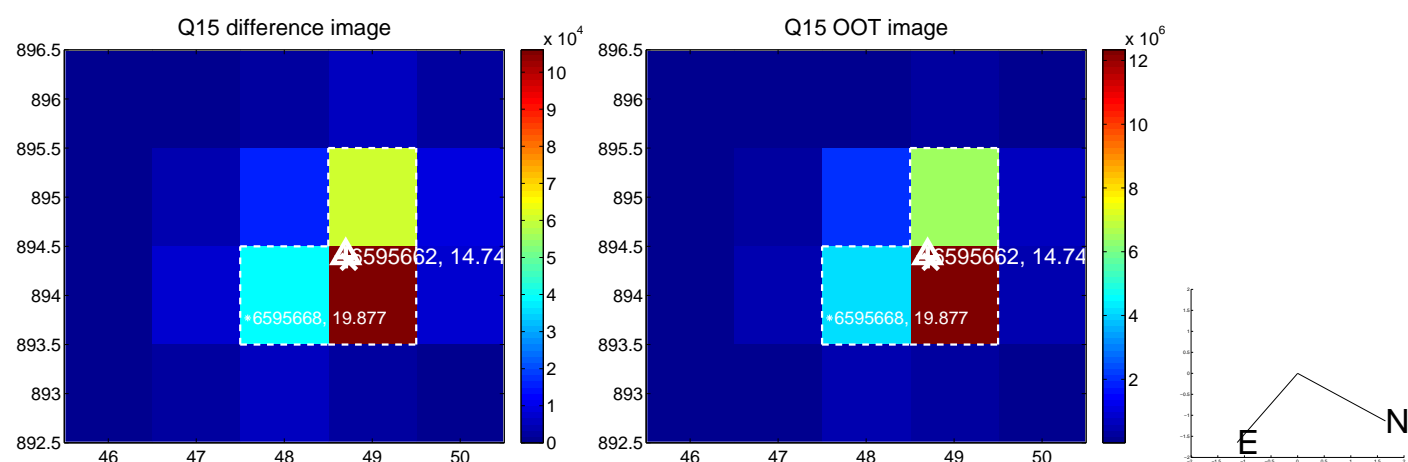
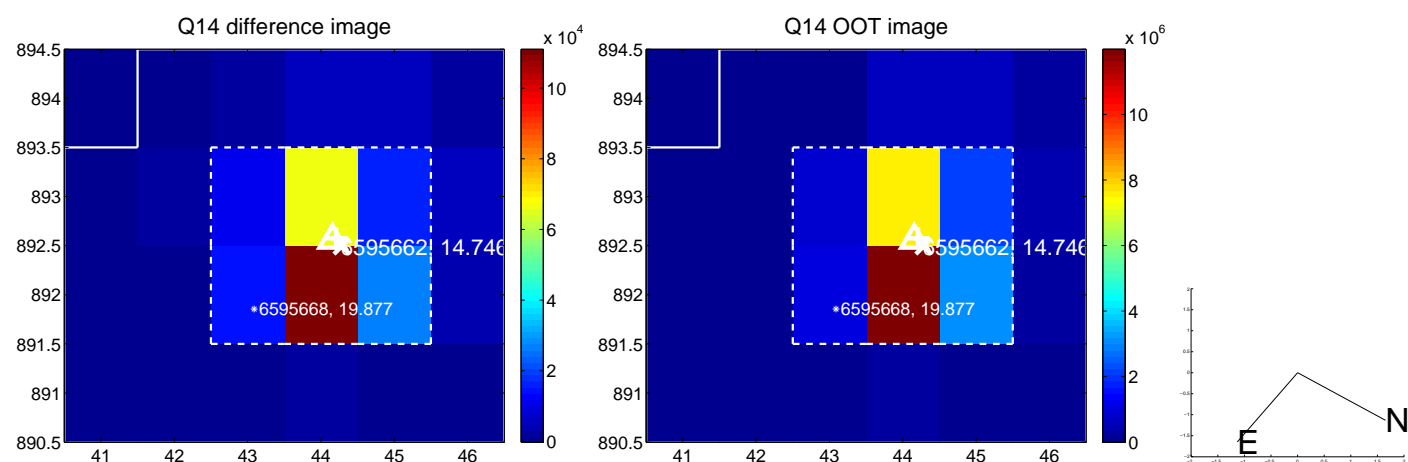
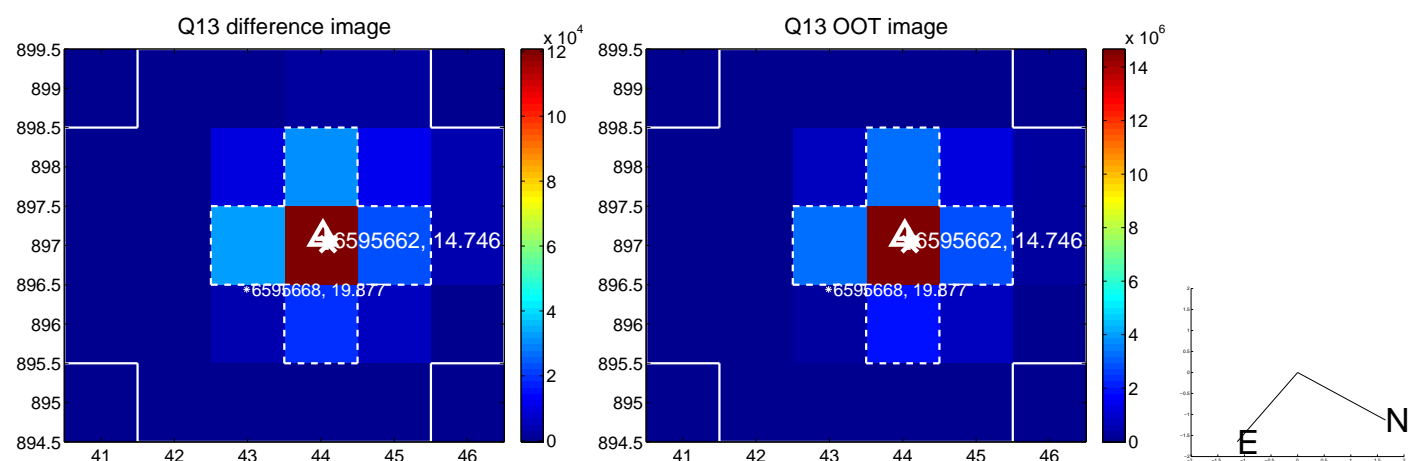
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



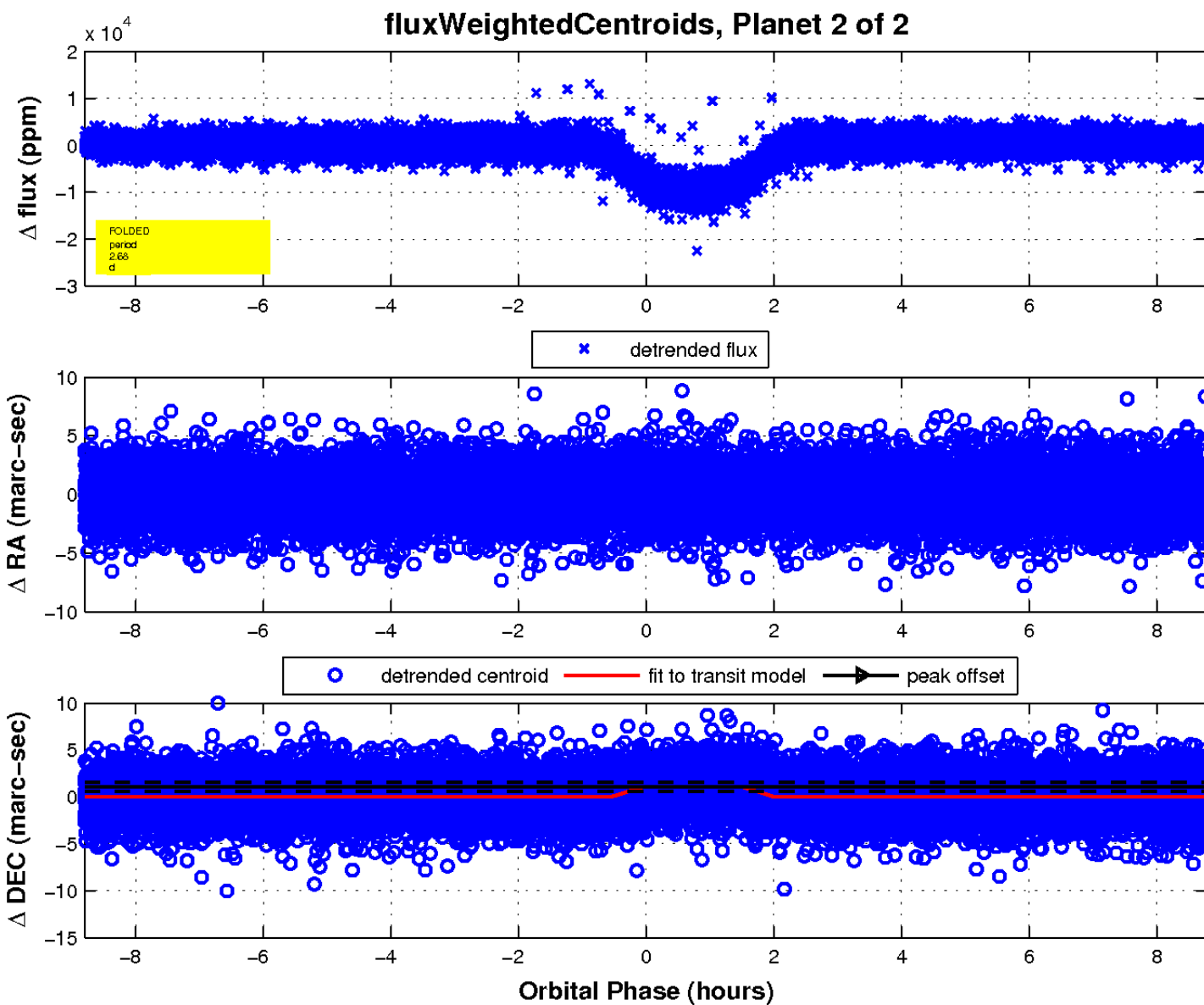
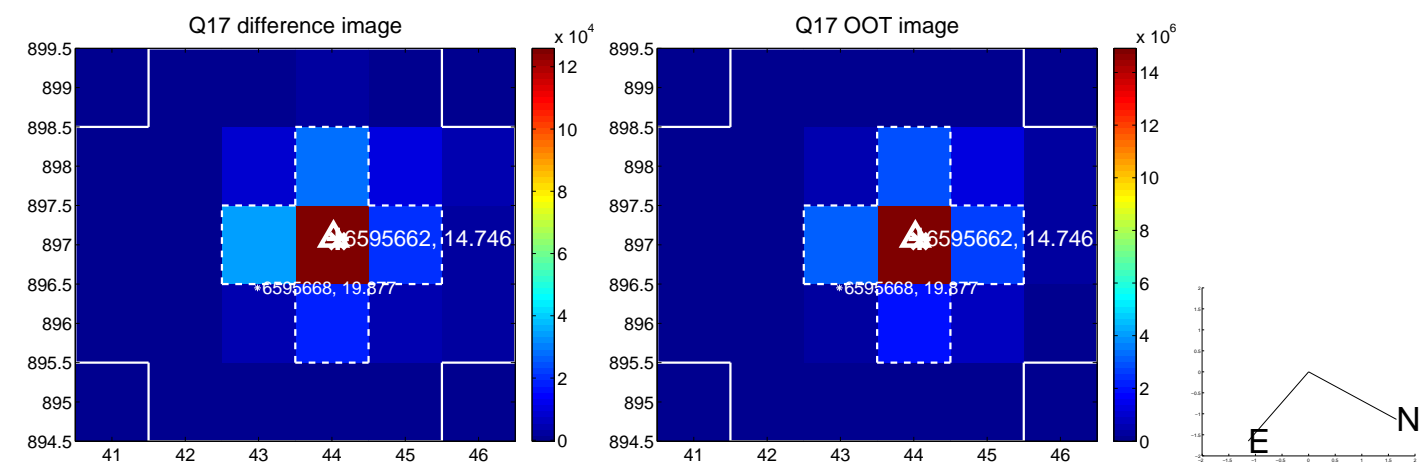
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

