

KIC 011444952

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})
011444952-01	OBS	4040.01	0.678357	132.167913	153.2	1.955	16.6	28.3	0.83	5569	1.24	2735.87
011444952-02	OBS	No	546.742957	366.547252	1503.7	11.325	13.3	6.9	0.83	5569	3.49	0.36

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011444952-01	OBS	FP	0.00	0	1	1	0	MOD_SEC_ALT—CENT_RESOLVED_OFFSET
011444952-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES_MARSHALL_SKYE—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV— 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.

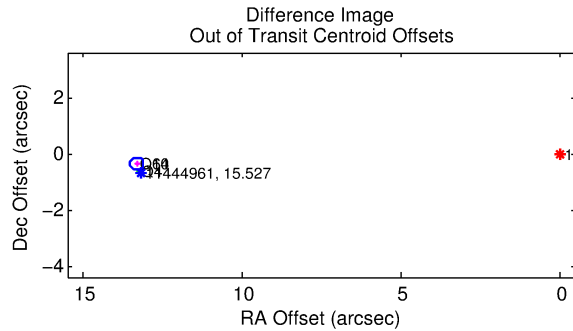
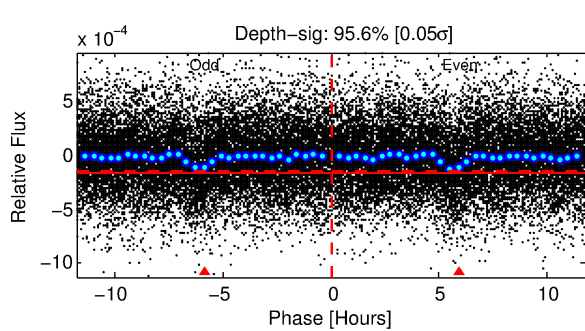
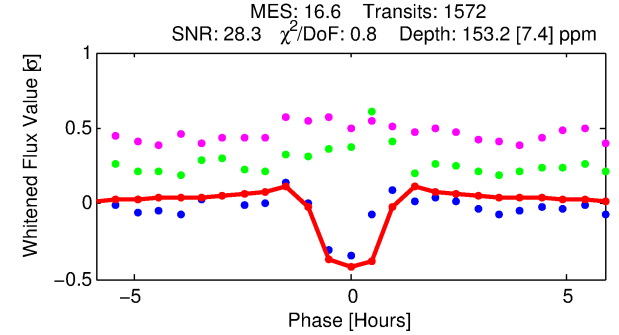
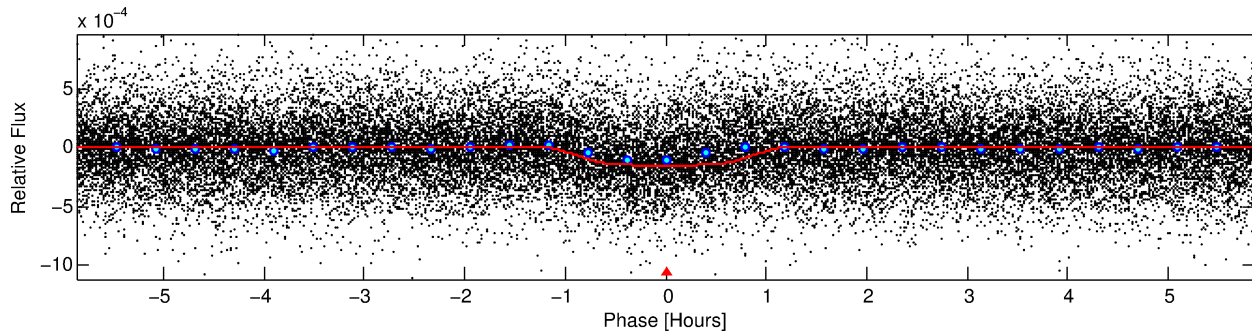
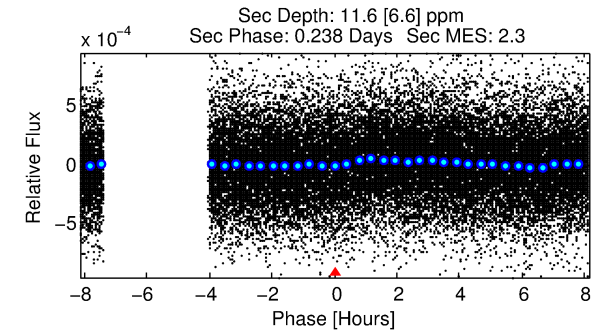
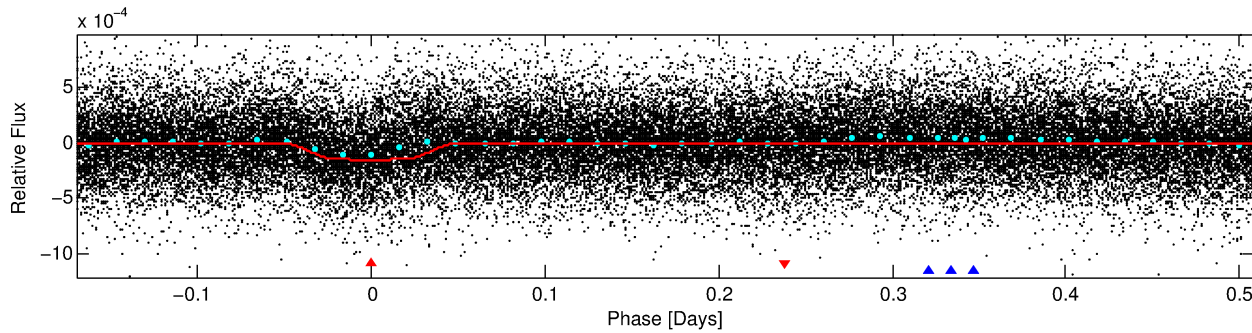
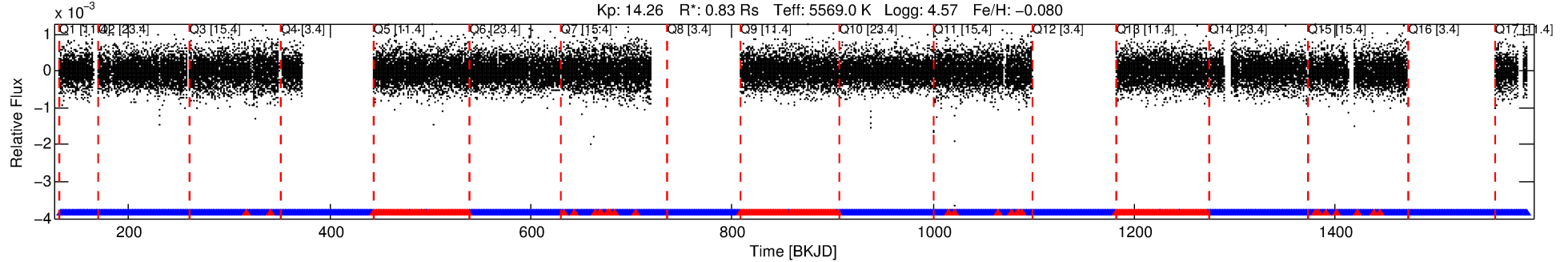
Ephemeris Match Information For 011444952-01

No Significant Match Found

DV One-Page Summary

KIC: 11444952 Candidate: 1 of 2 Period: 0.678 d
KOI: K04040.01 Corr: 0.815

Kp: 14.26 R*: 0.83 Rs Teff: 5569.0 K Logg: 4.57 Fe/H: -0.080



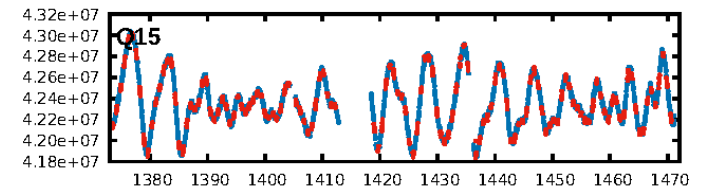
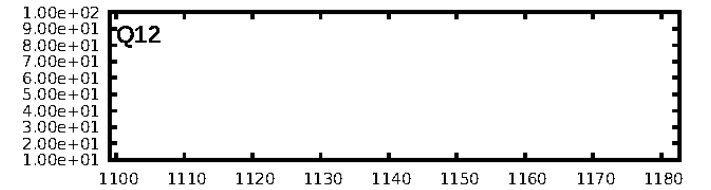
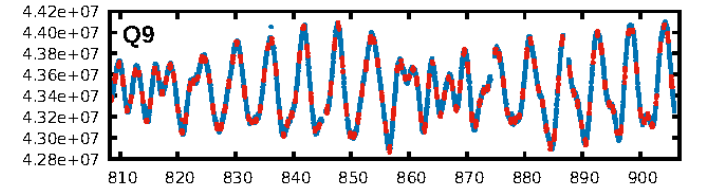
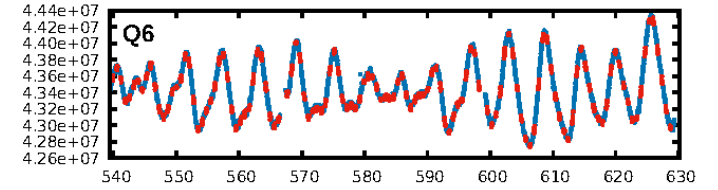
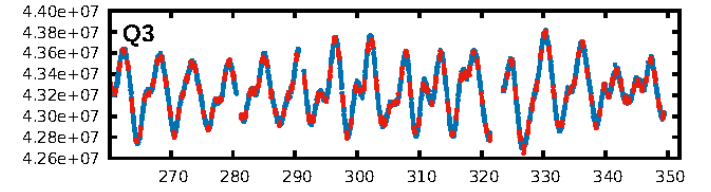
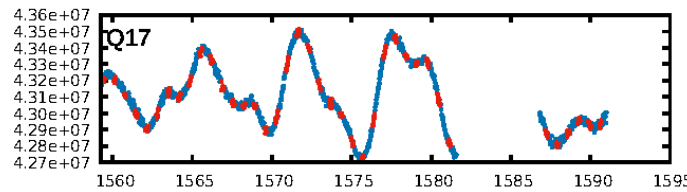
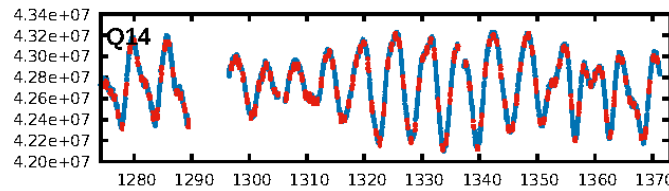
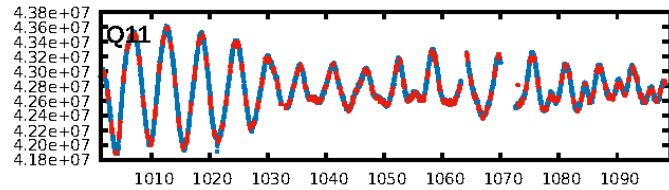
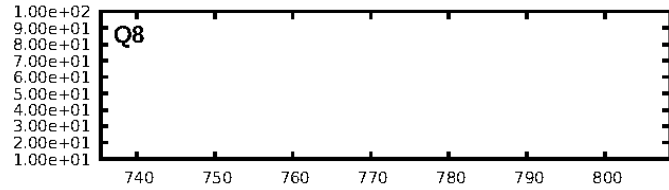
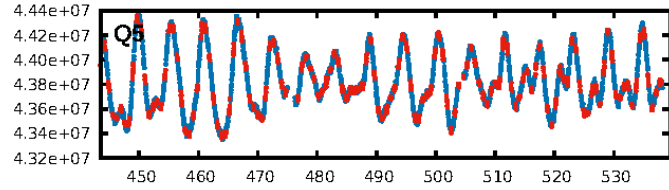
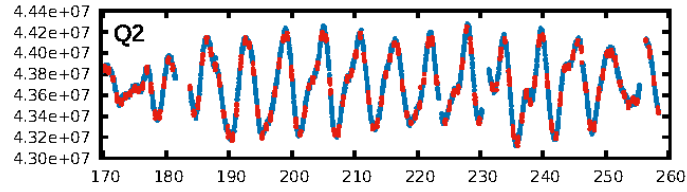
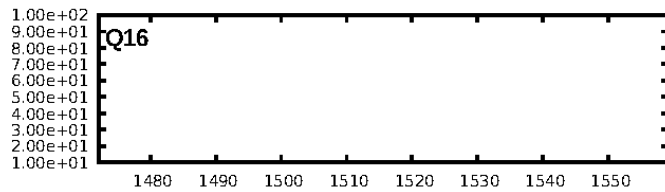
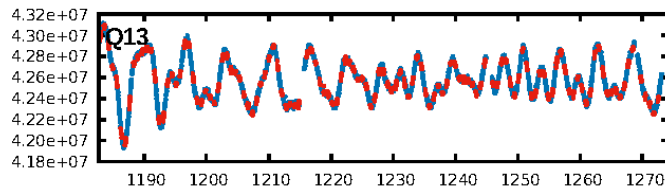
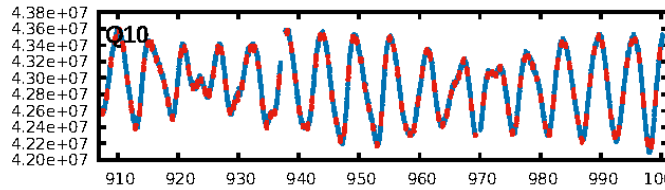
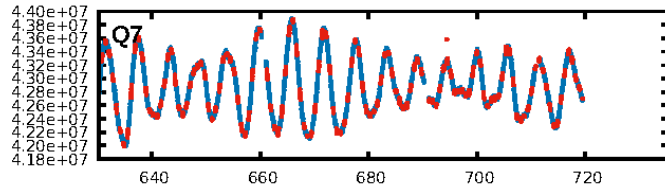
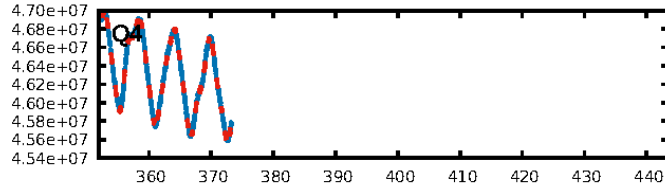
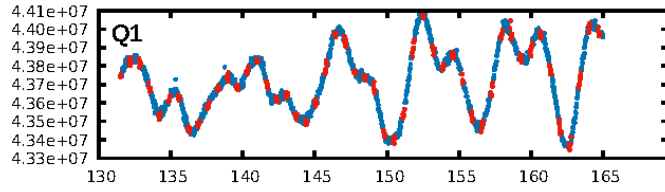
DV Fit Results:

Period = 0.67836 [0.00000] d
Epoch = 132.1679 [0.0008] BKJD
Rp/R* = 0.0136 [0.0031]
a/R* = 1.54 [0.92]
b = 0.90 [0.21]
Seff = 2735.87 [900.94]
Teq = 1844 [152] K
Rp = 1.23 [0.41] Re
a = 0.0147 [0.0031] AU
Ag = 0.91 [0.71] [-0.13σ]
Teff = 2781 [512] K [1.75σ]

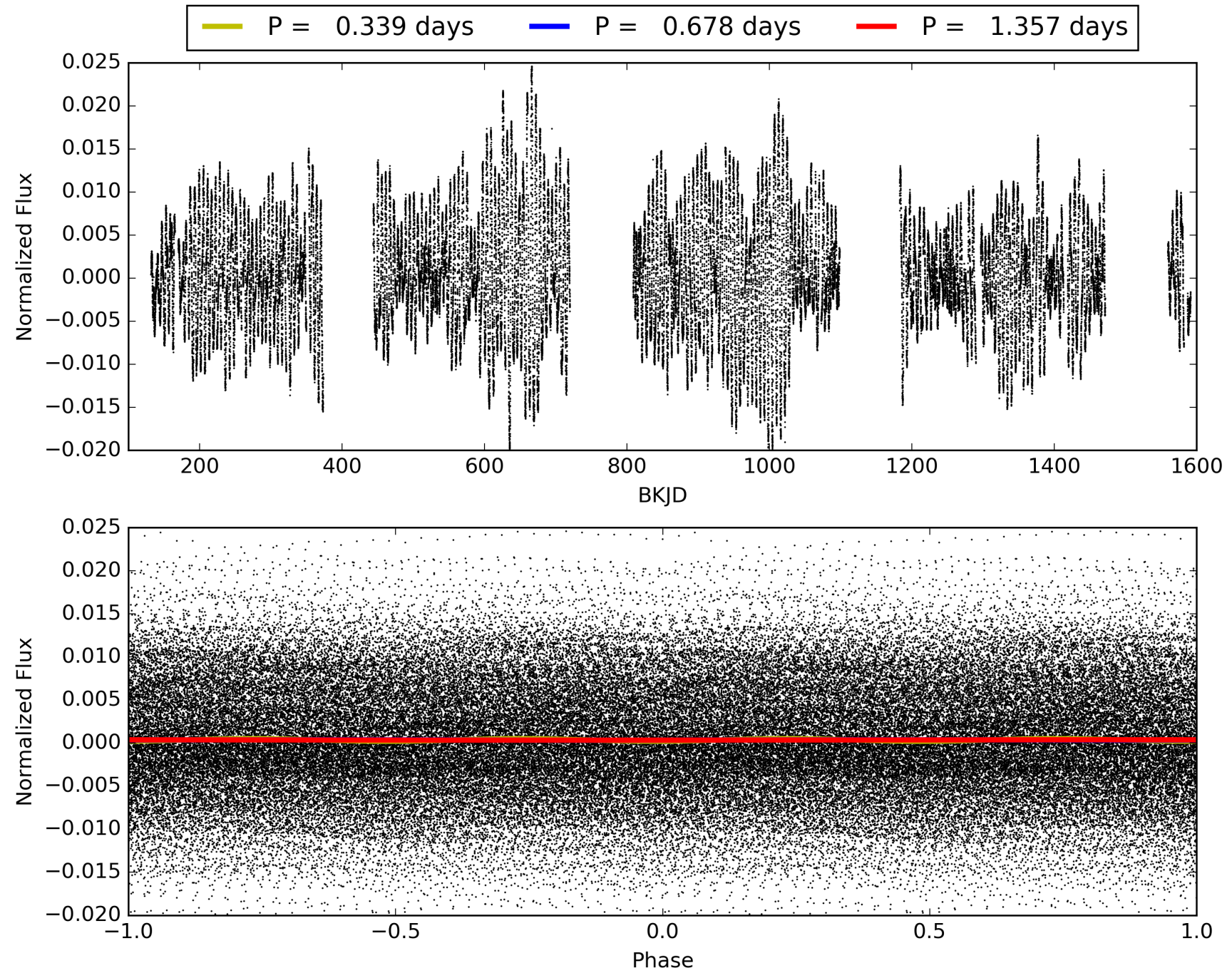
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [1140.35σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.45e-56
RollingBand-fgt: 0.77 [1113/1452]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 13.311 arcsec [184.08σ]
KicOffset-rm: 13.261 arcsec [187.66σ]
OotOffset-st: 3/0/1/0 [4]
KicOffset-st: 3/0/1/0 [4]
DiffImageQuality-fgm: 1.00 [4/4]
DiffImageOverlap-fno: 1.00 [14/14]

TCE 011444952-01, PDC Light Curves

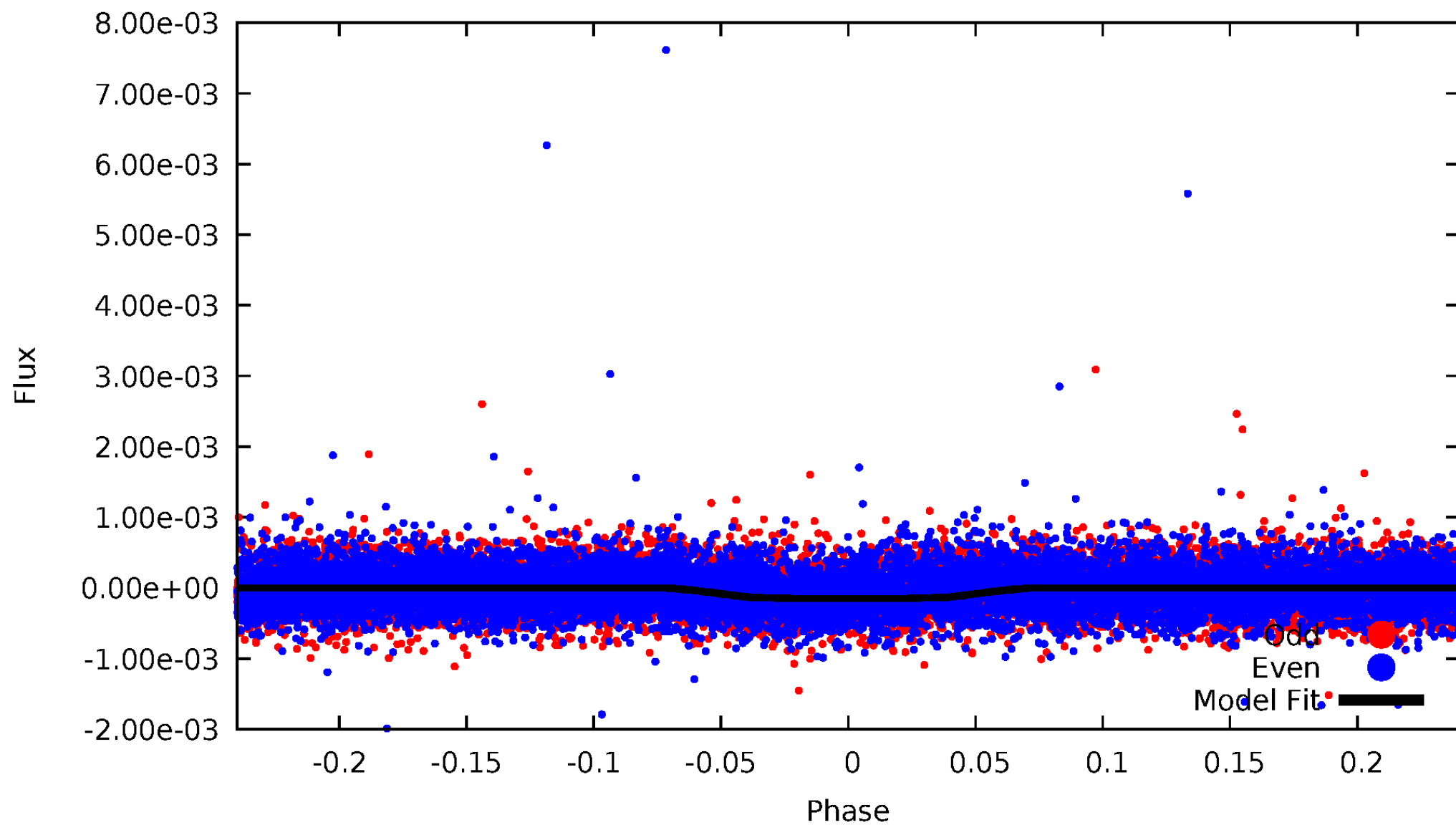


TCE 011444952-01



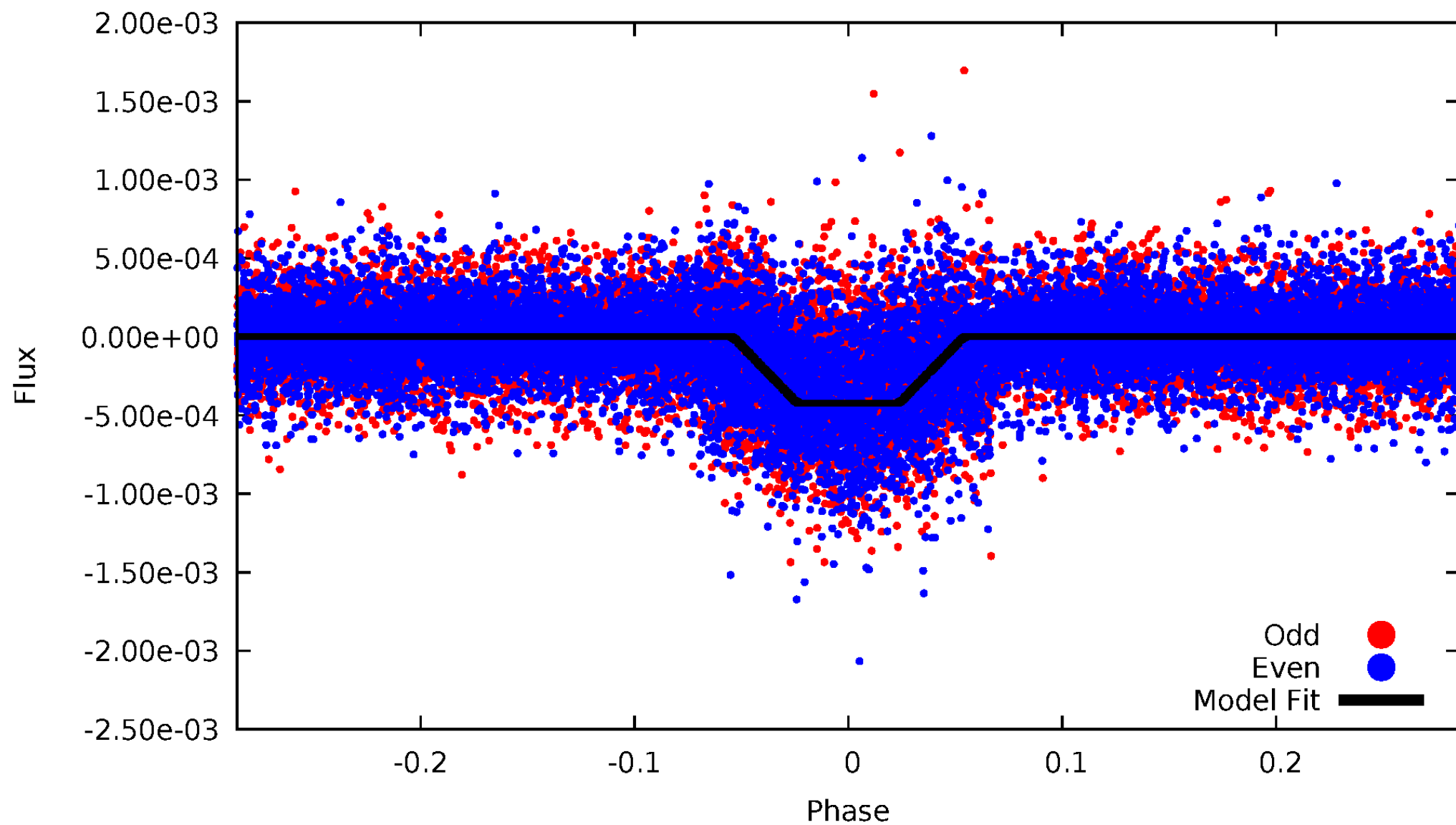
DV Odd/Even

TCE 011444952-01

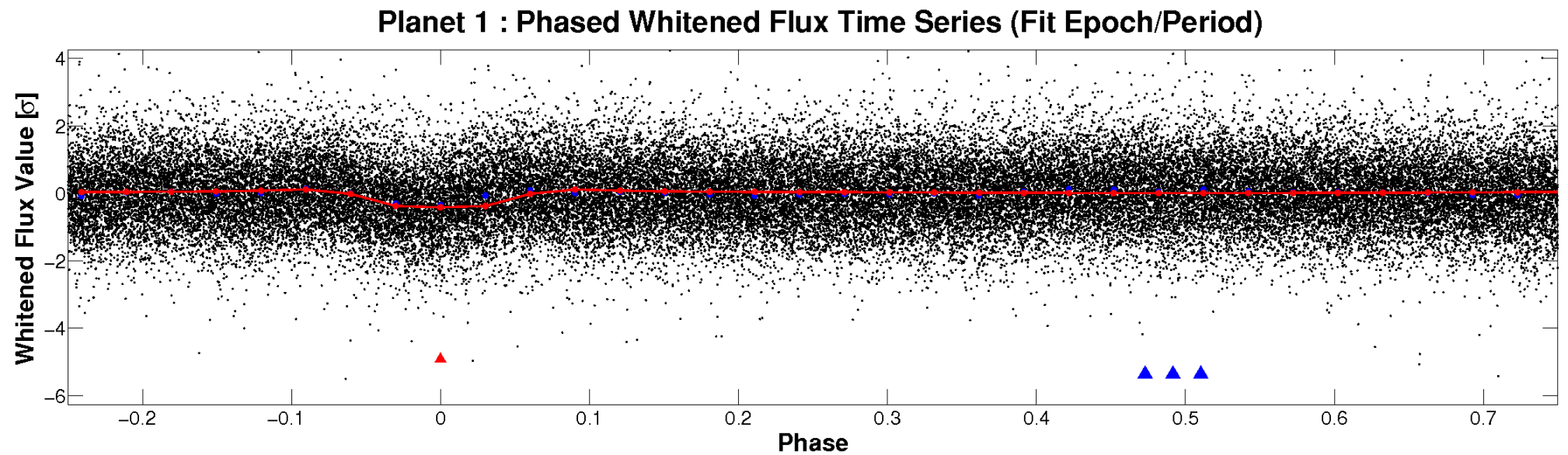
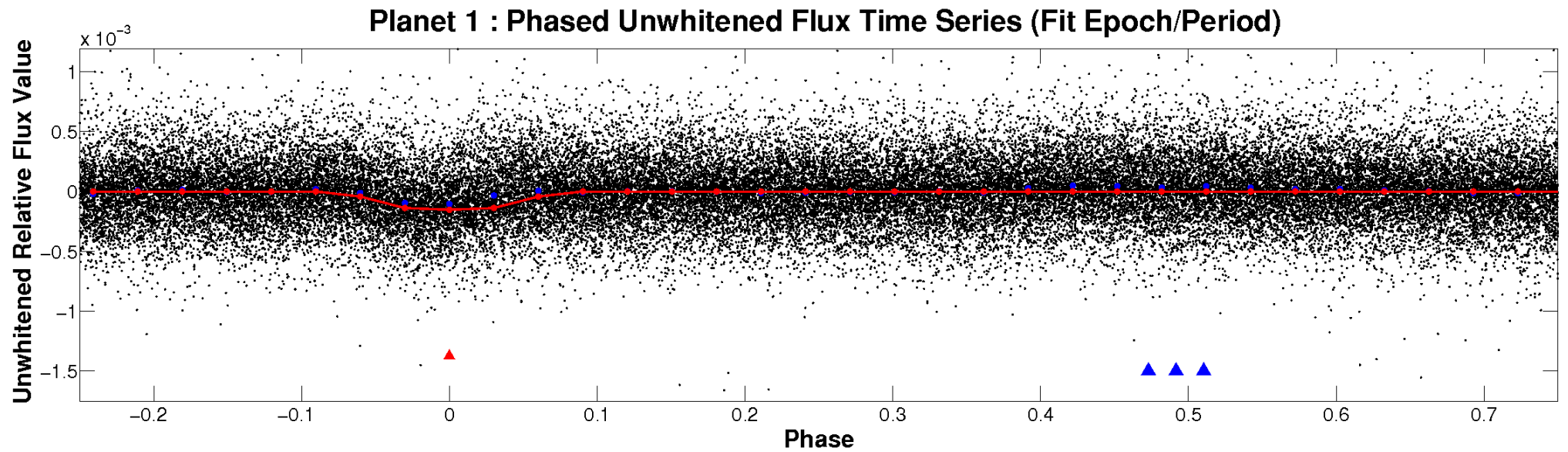


ALT Odd/Even

TCE 011444952-01

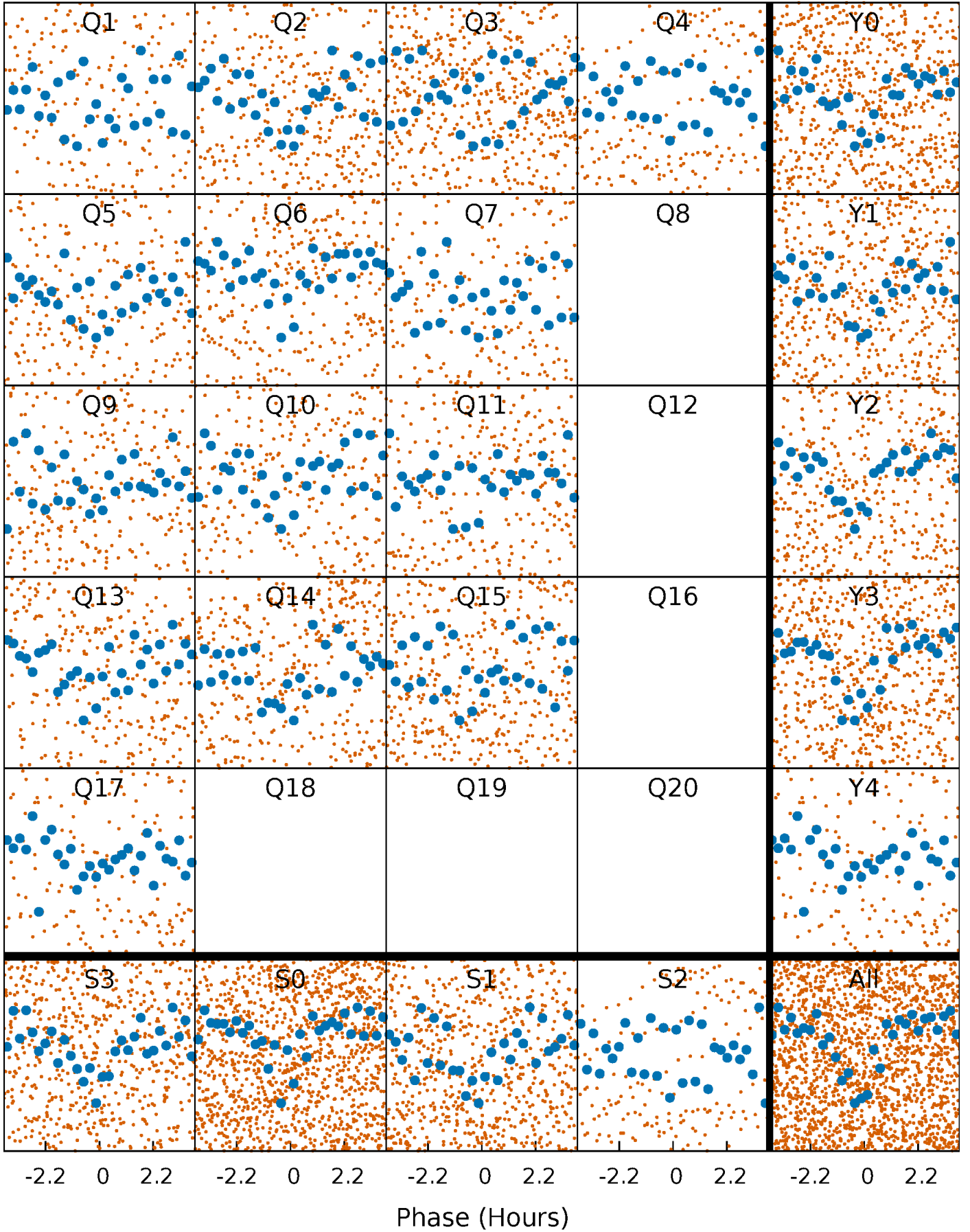


Non-Whitened Vs. Whitened Light Curve



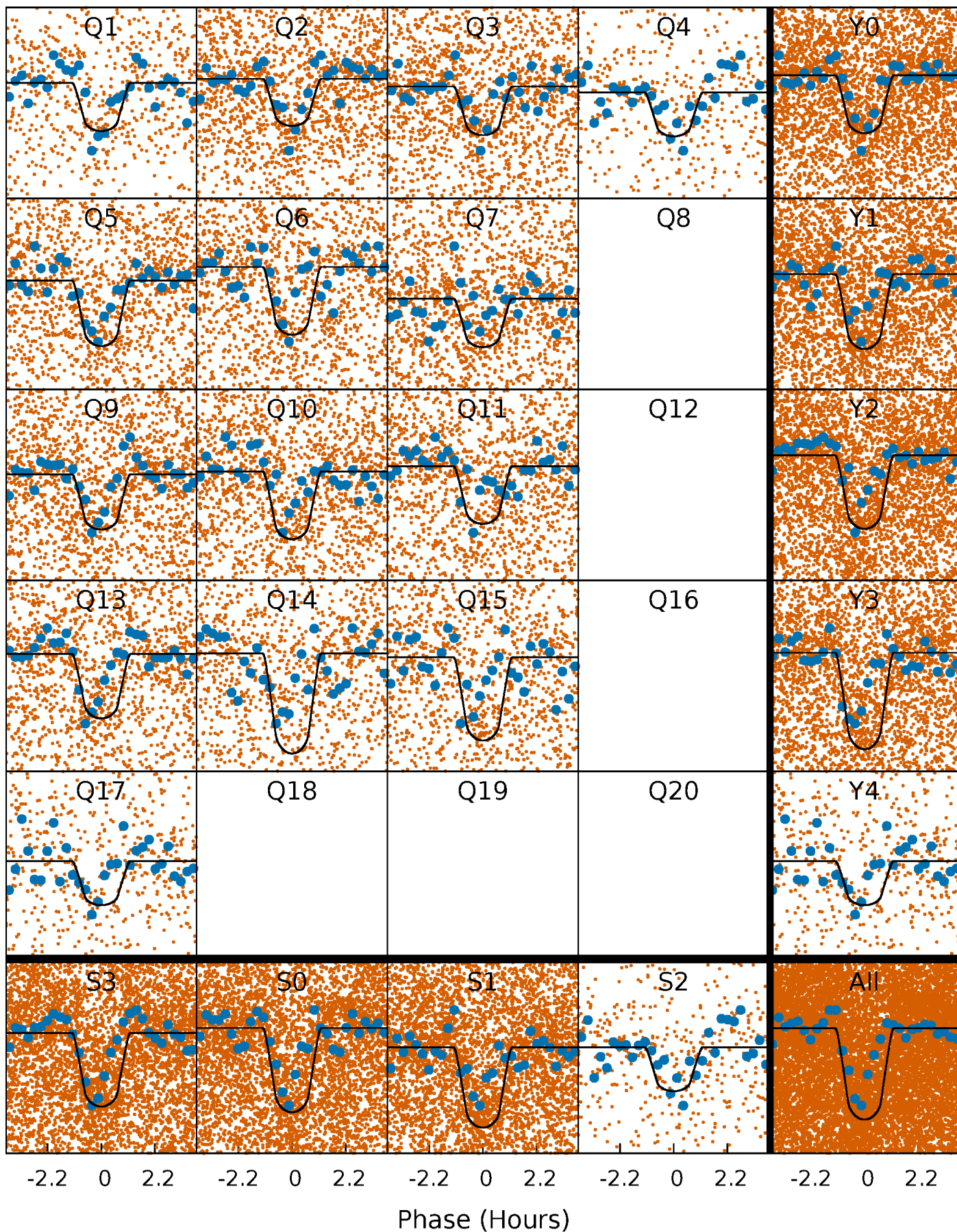
PDC Quarter-Phased Transit Curves

TCE 011444952-01 P= 0.678357 Days $T_0=132.167913$ (BKJD)



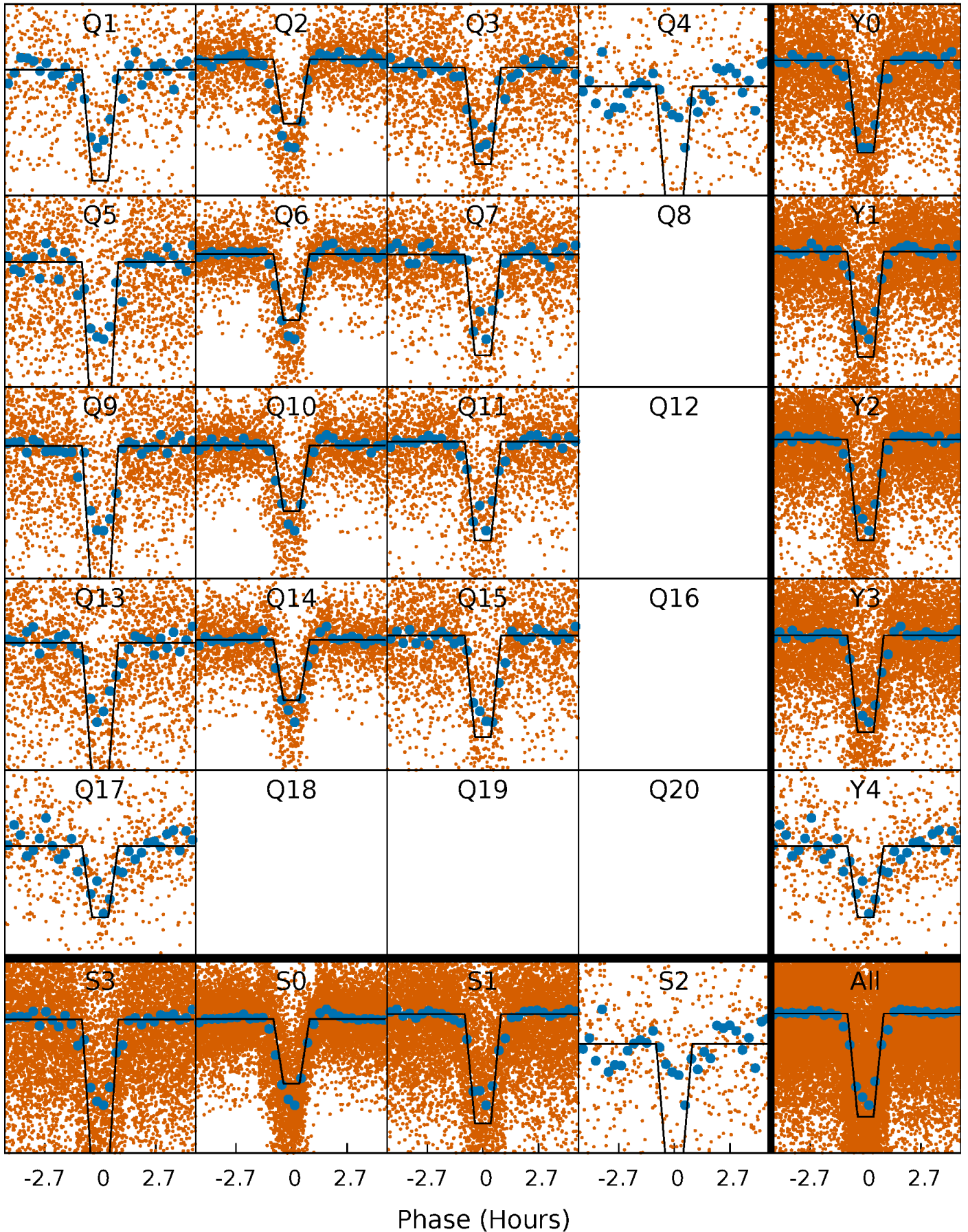
DV Quarter-Phased Transit Curves

TCE 011444952-01 P= 0.678357 Days $T_0=132.167913$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

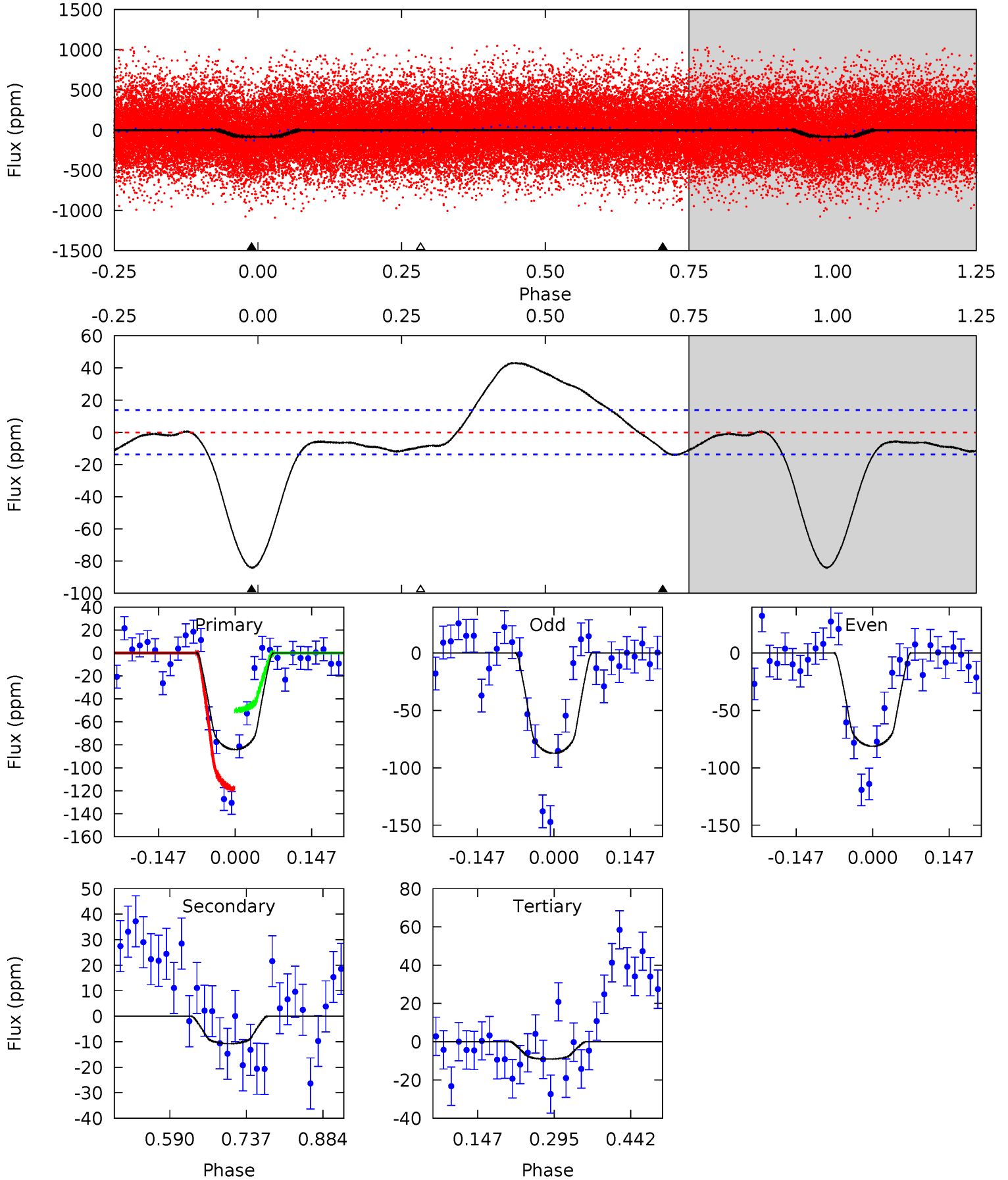
TCE 011444952-01 P= 0.678346 Days $T_0=132.167390$ (BKJD)



DV Model-Shift Uniqueness Test

011444952-01, P = 0.678357 Days, E = 131.489556 Days

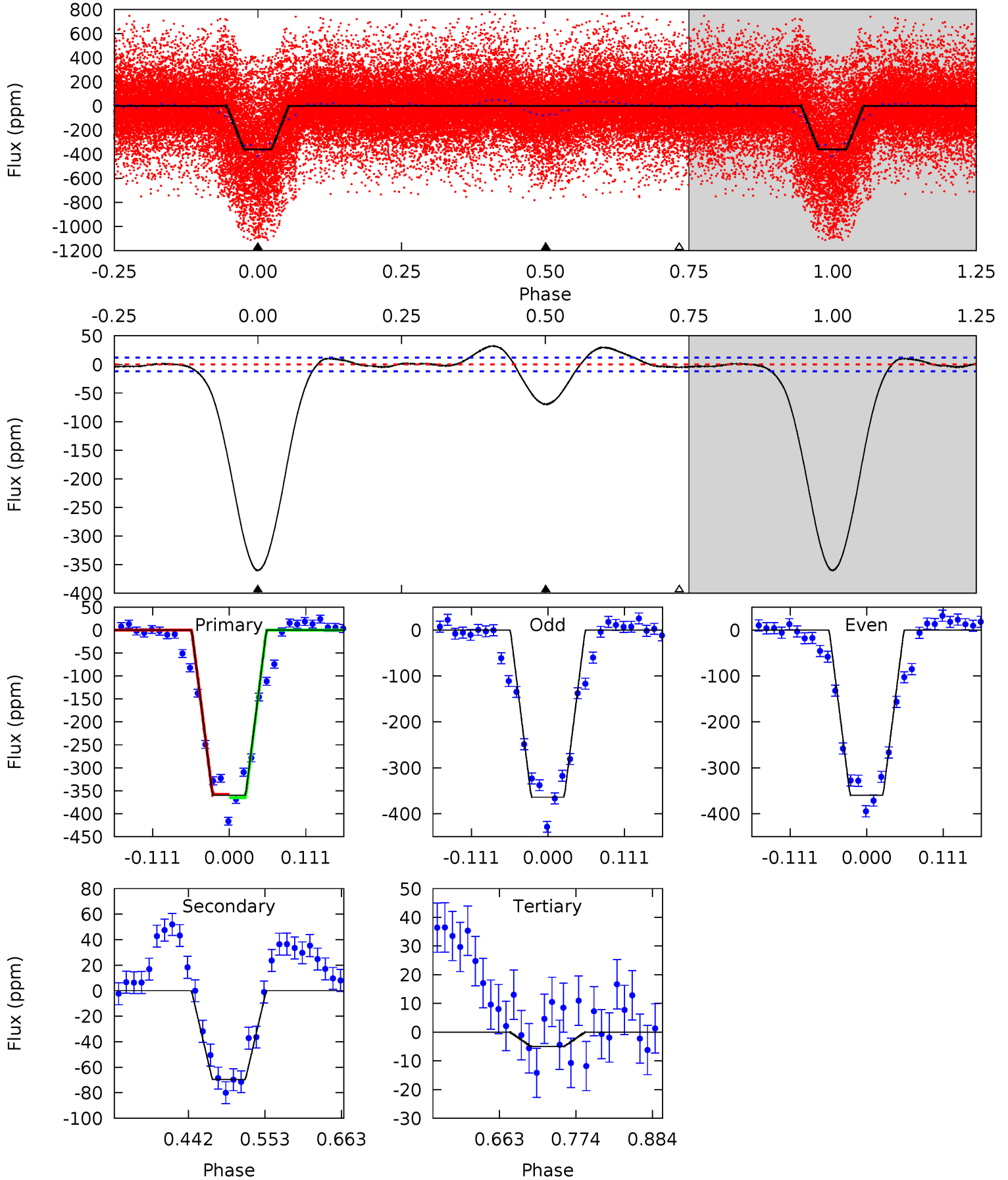
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
27.3	3.49	2.95	0	4.48	1.45	6.93	24.4	27.3	0.54	3.49	0.99	0.93	0.34	11.2



Alt Model-Shift Uniqueness Test

011444952-01, P = 0.678346 Days, E = 131.489044 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
136.2	26.4	1.89	0	4.54	1.60	2.92	134.3	136.2	24.5	26.4	0.80	1.03	0.08	1.35



Stellar Parameters For KIC 011444952

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5569^{+149}_{-166}	$4.566^{+0.030}_{-0.170}$	$-0.080^{+0.300}_{-0.300}$	$0.829^{+0.201}_{-0.067}$	$0.928^{+0.081}_{-0.102}$	$2.295^{+0.382}_{-1.061}$
	+3%/-3%	+1%/-4%	+375%/-375%	+24%/-8%	+9%/-11%	+17%/-46%
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 011444952-01 / KOI 4040.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-11 ± 3	$1.29^{+0.32}_{-0.30}$	2639^{+148}_{-117}	3019^{+422}_{-451}	$0.732^{+0.620}_{-0.307}$
Alt.	-70 ± 3	$1.92^{+0.39}_{-0.31}$	2625^{+161}_{-104}	3780^{+268}_{-210}	$2.182^{+0.958}_{-0.638}$

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 $A_{\text{obs}} \gg 1.0$

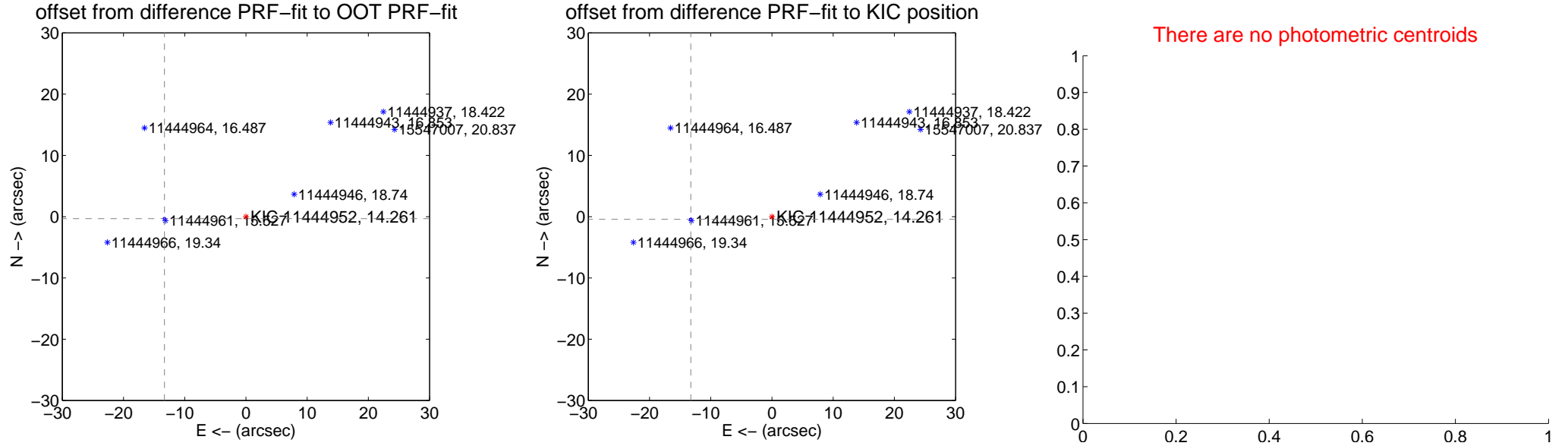
DV Centroid Data

Supplemental centroid analysis for 011444952-01. Kepler magnitude: 14.26. Transit SNR 28.34

There are 4 quarters with good PRF difference image offsets

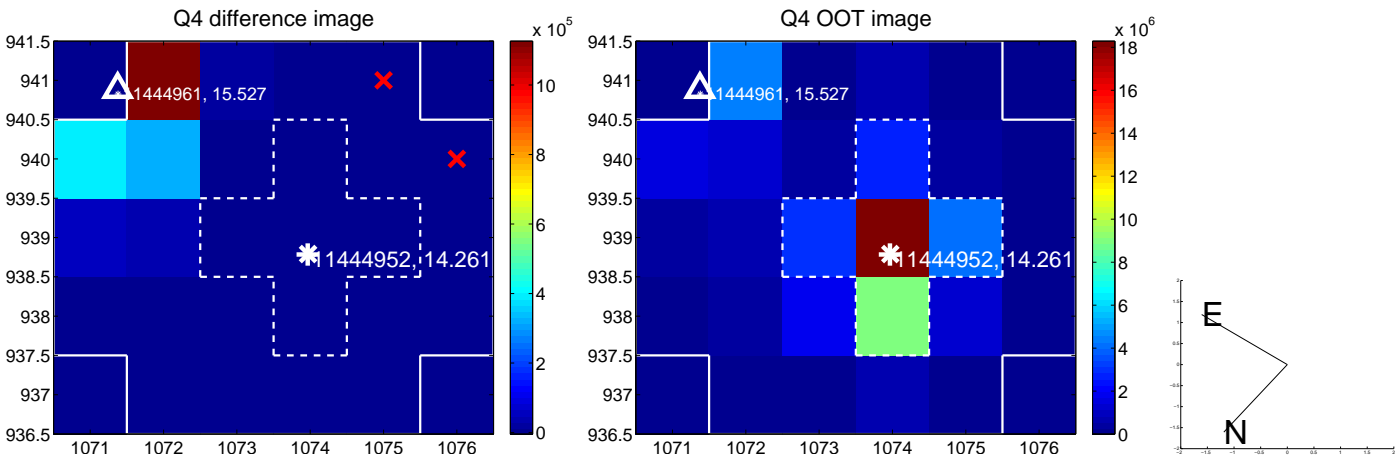
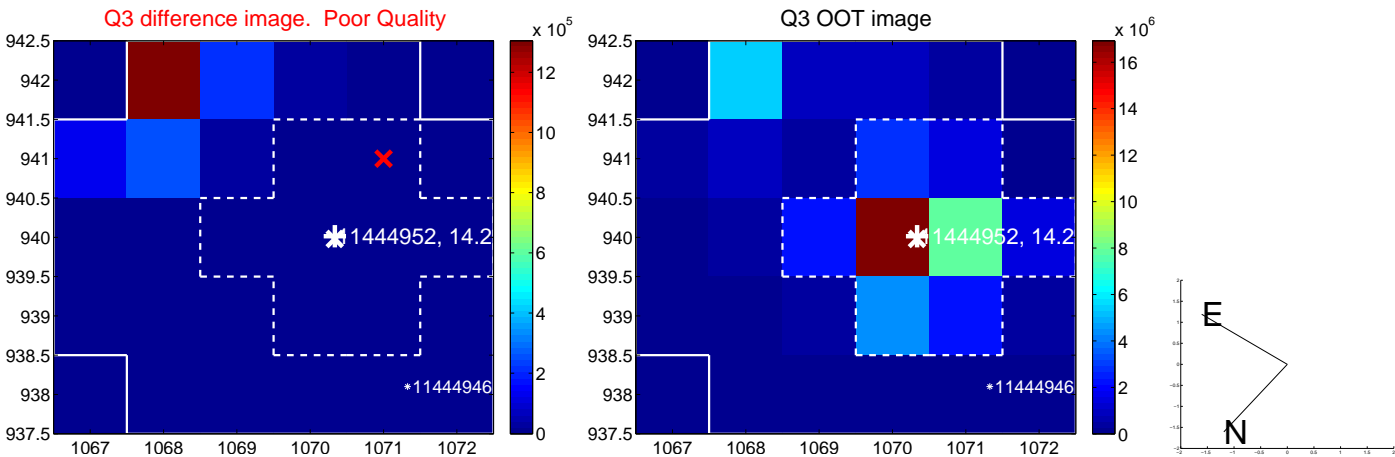
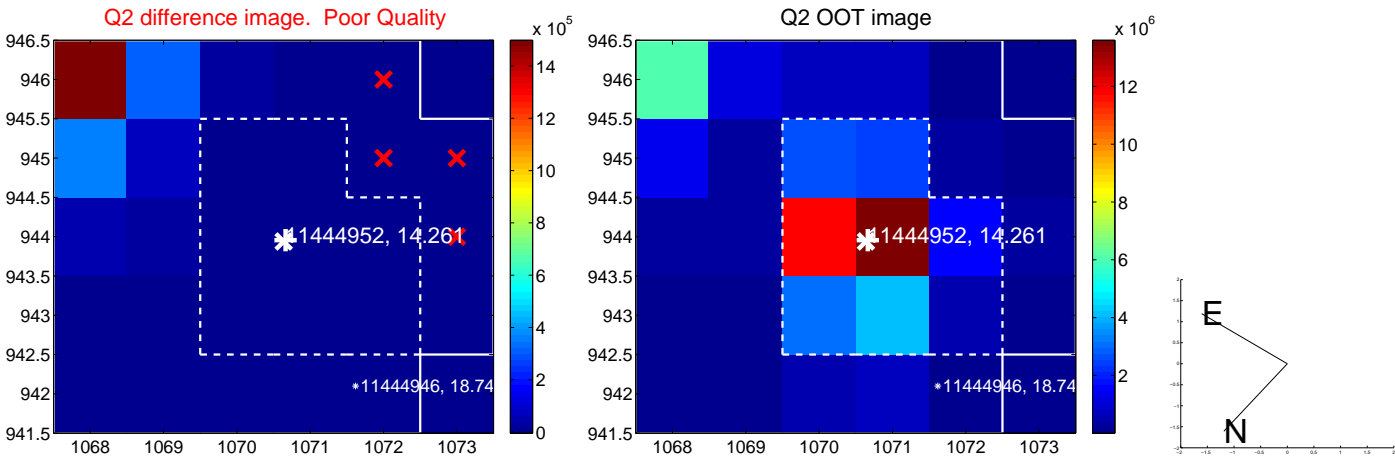
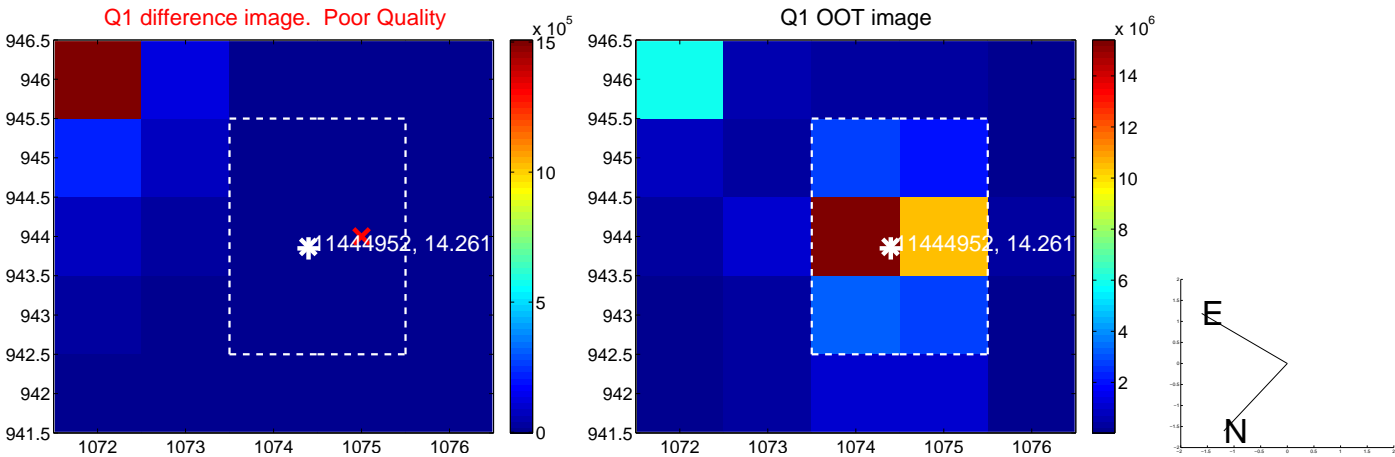
The direct PRF centroid is offset from the target star catalog position by about 0.12 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	13.311 \pm 0.072	184.08	13.308 \pm 0.072	-0.319 \pm 0.072
PRF-fit source offset from KIC position	13.261 \pm 0.071	187.66	13.254 \pm 0.071	-0.434 \pm 0.081
photometric centroid source offset	—	—	—	—

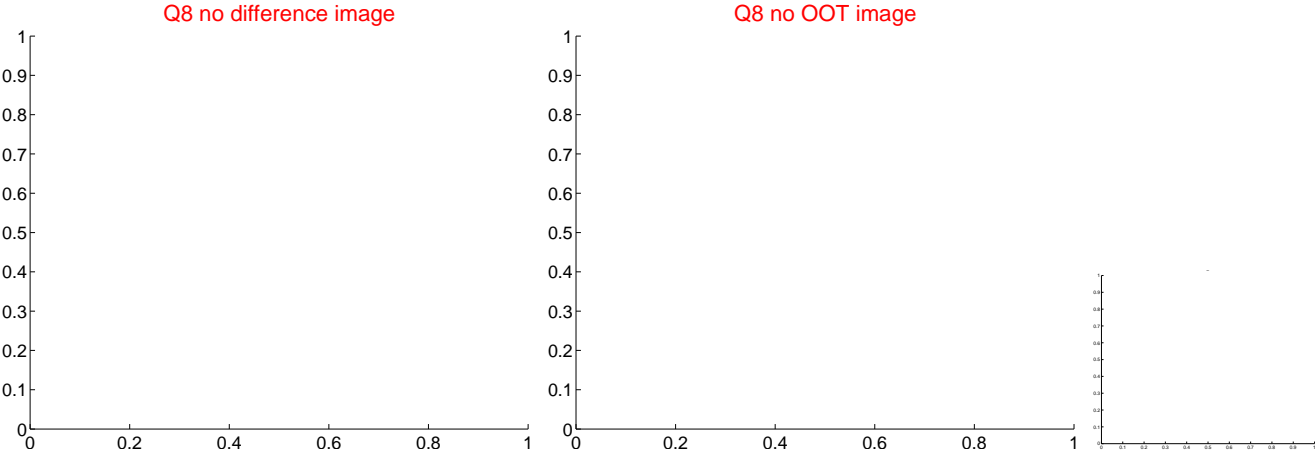
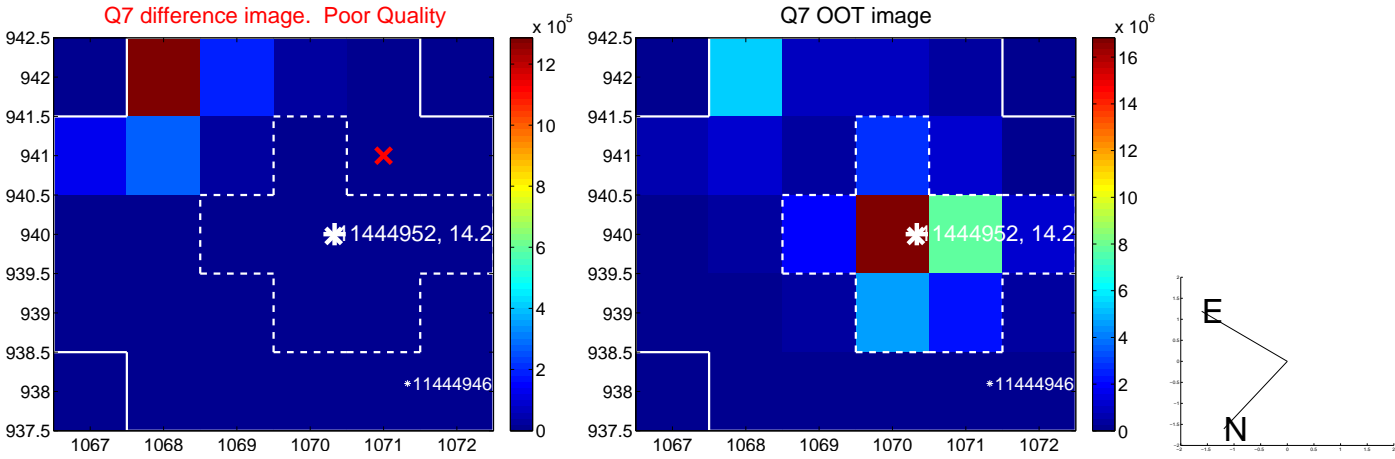
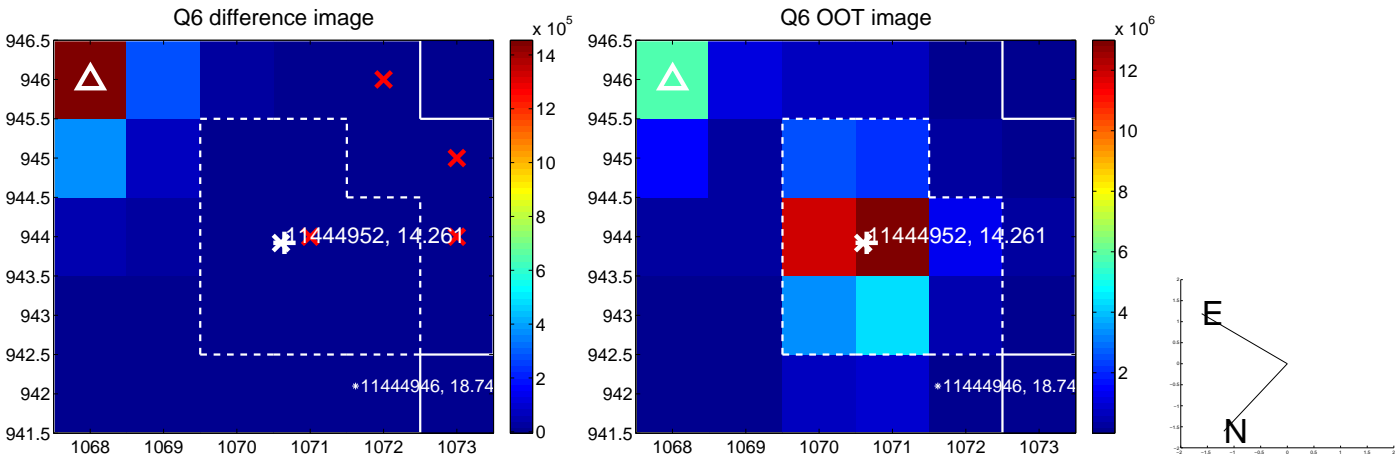
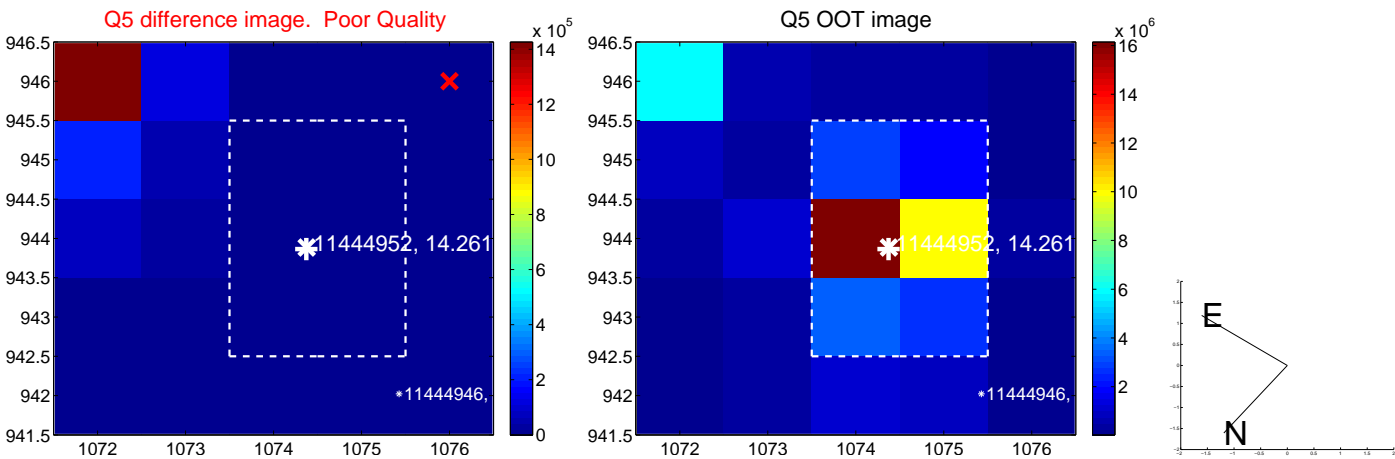


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

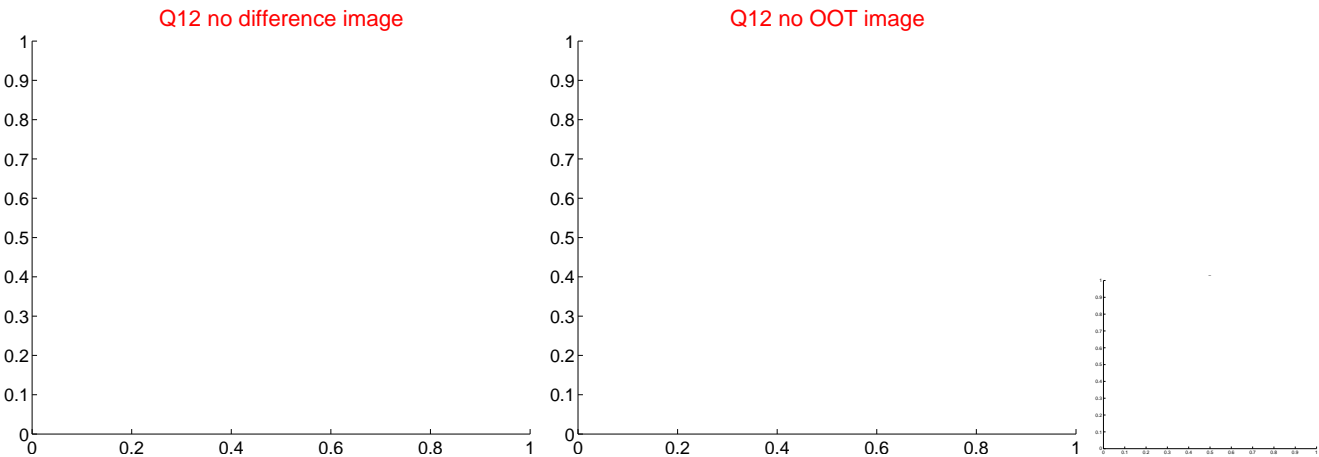
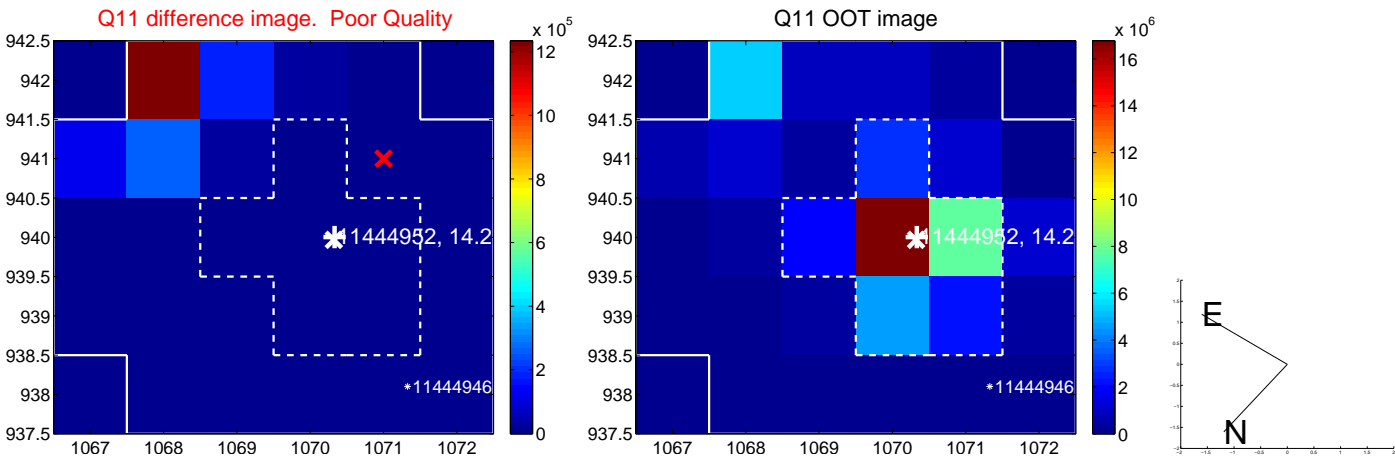
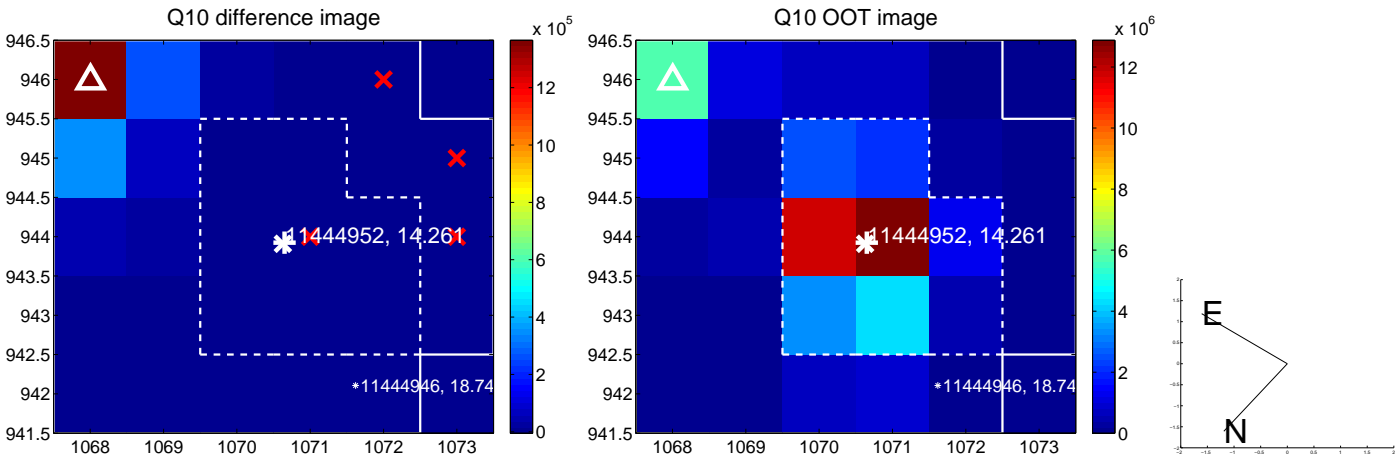
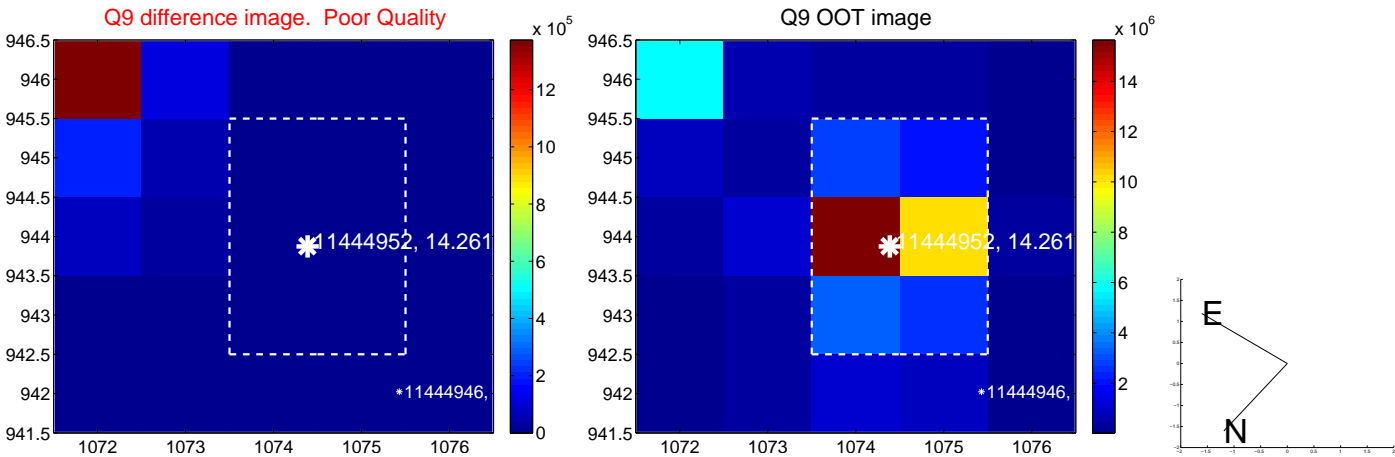
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



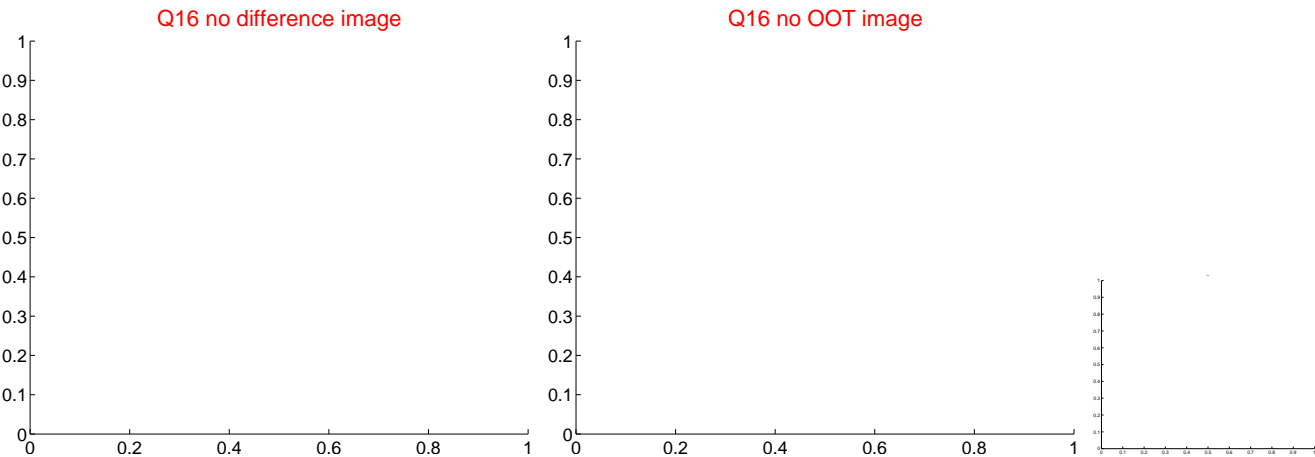
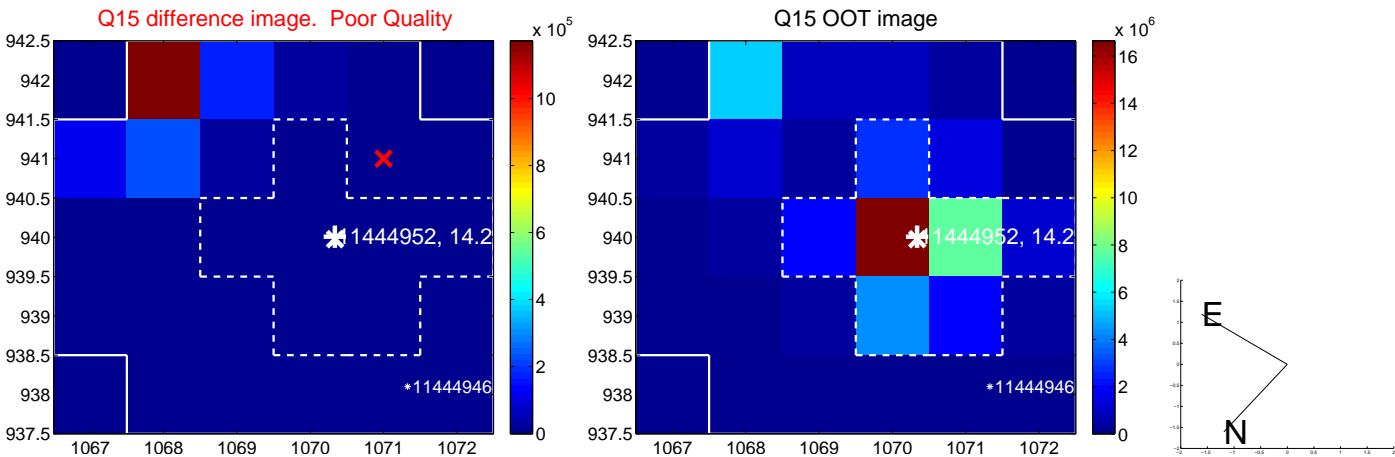
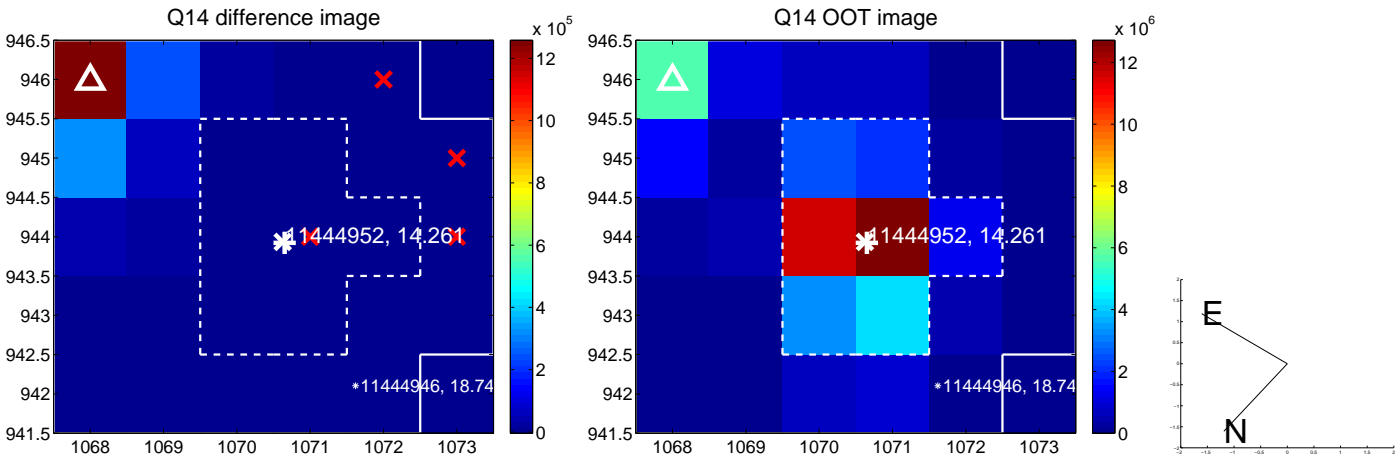
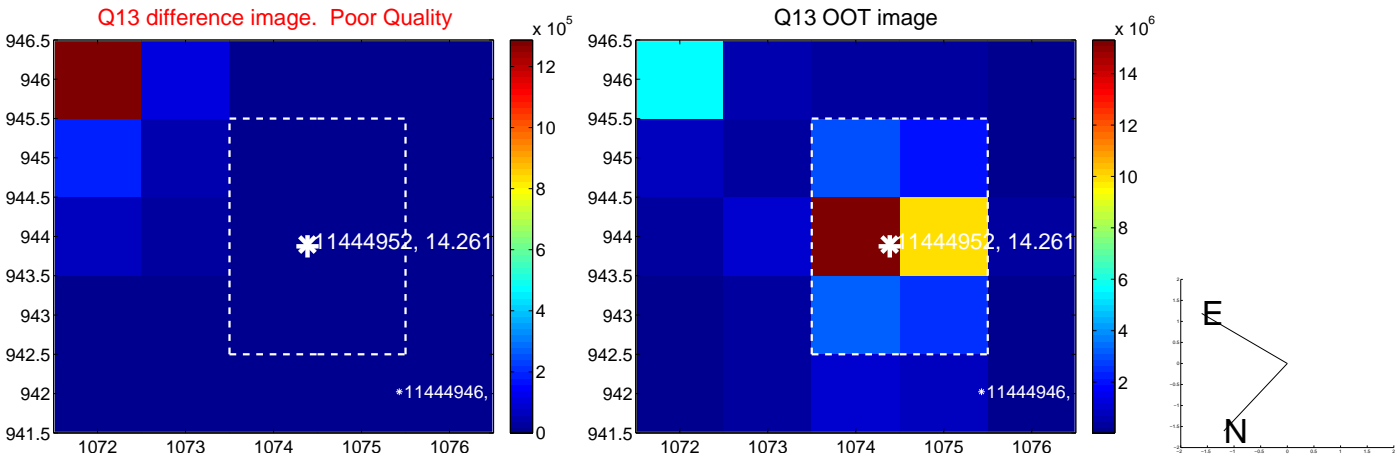
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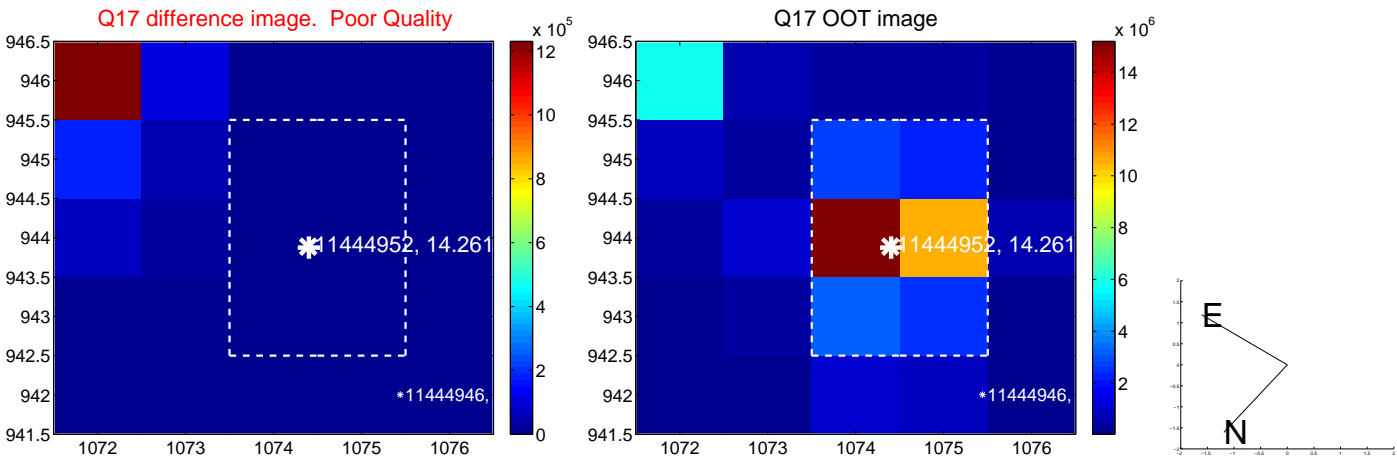
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



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



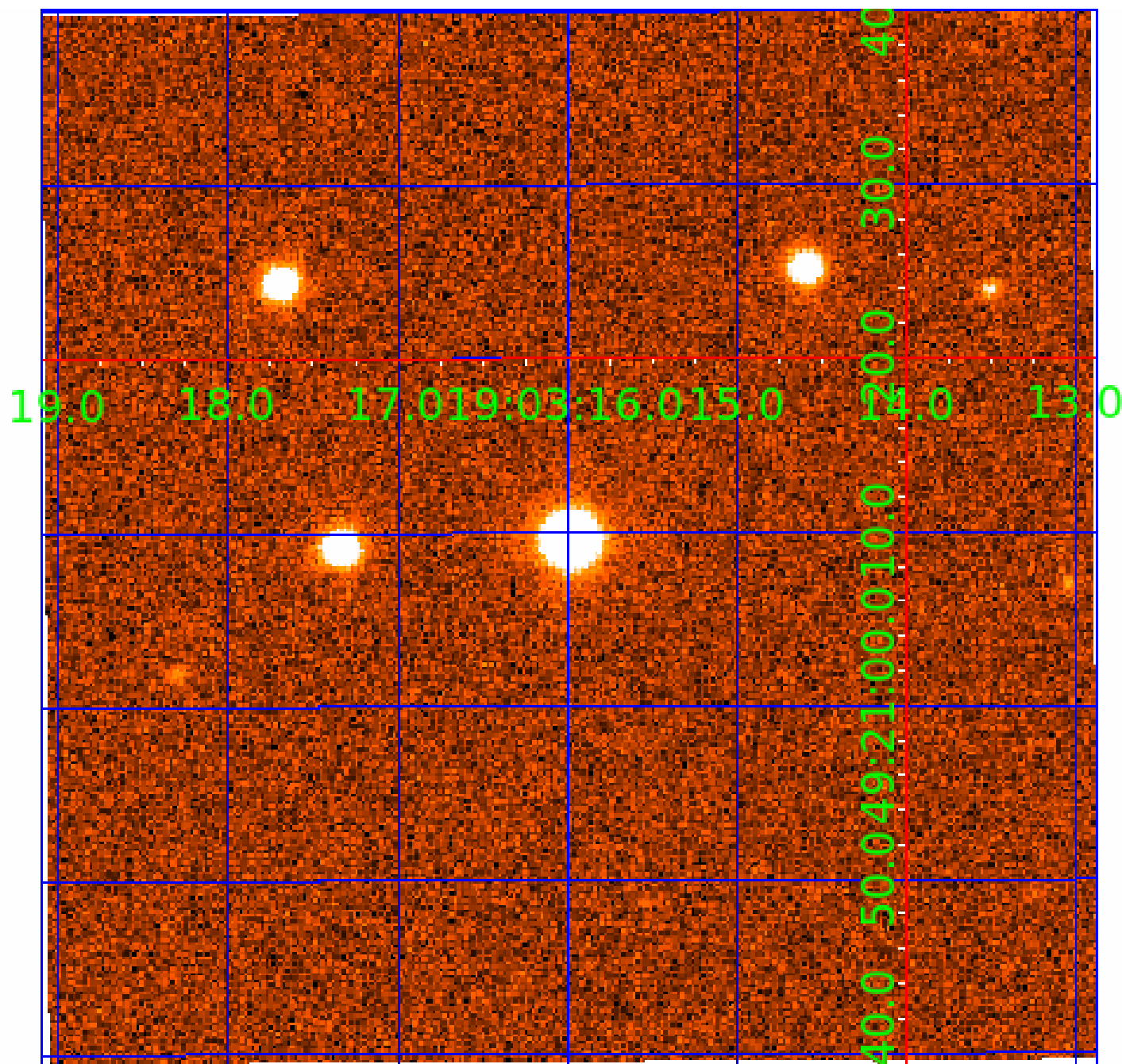
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



folded centroid time series figure for this object.

UKIRT Image

Declination



KIC 011444952

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})
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Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
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011444952-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES_MARSHALL_SKYE—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV— 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.

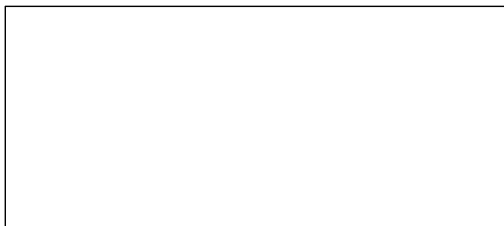
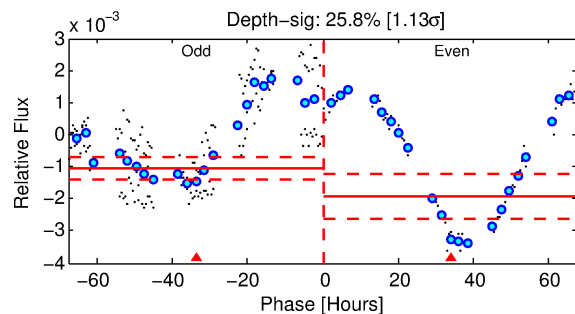
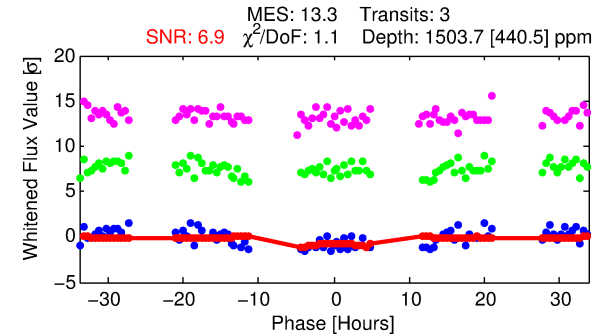
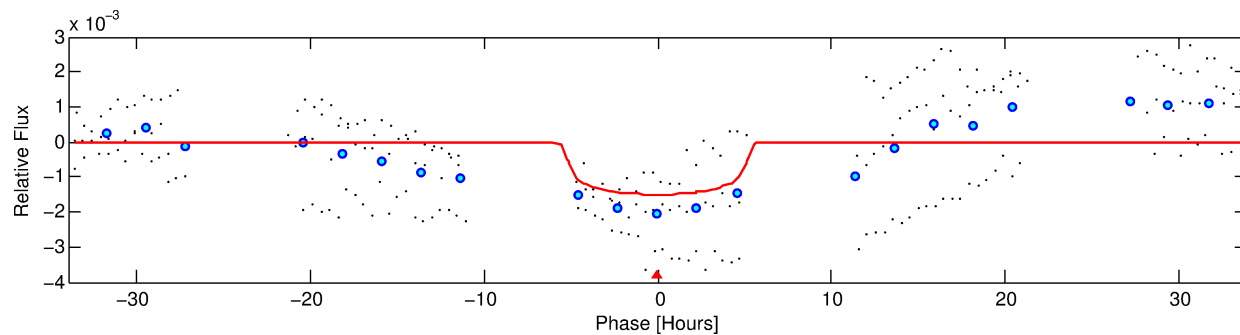
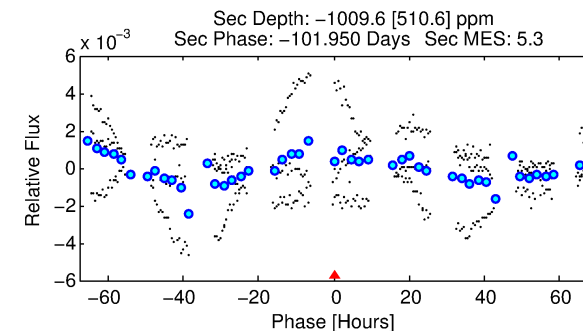
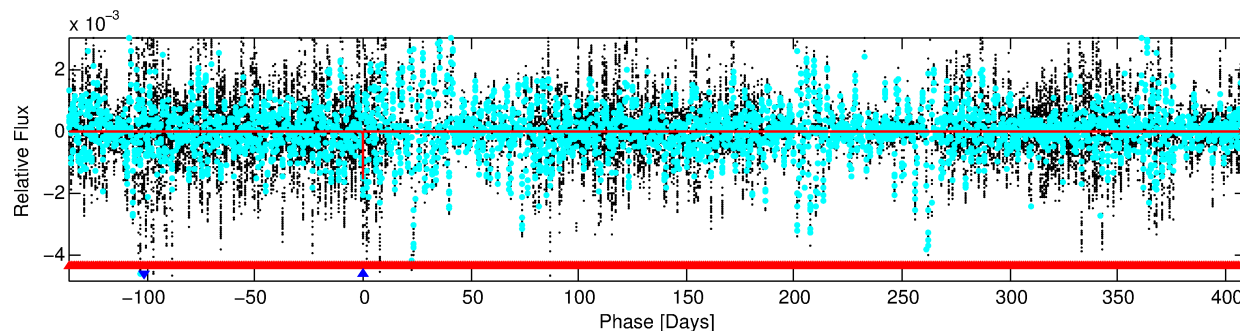
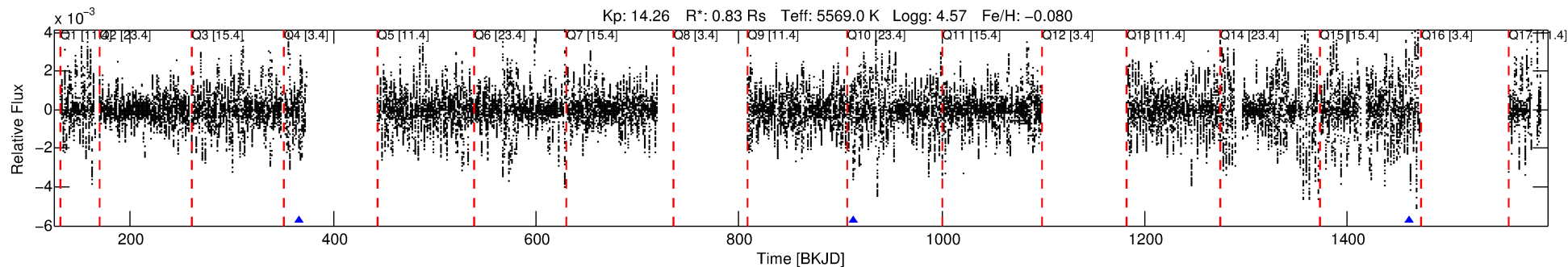
Ephemeris Match Information For 011444952-02

No Significant Match Found

DV One-Page Summary

KIC: 11444952 Candidate: 2 of 2 Period: 546.743 d
KOI: K04040 Corr: No Ephemeris Match

Kp: 14.26 R*: 0.83 Rs Teff: 5569.0 K Logg: 4.57 Fe/H: -0.080



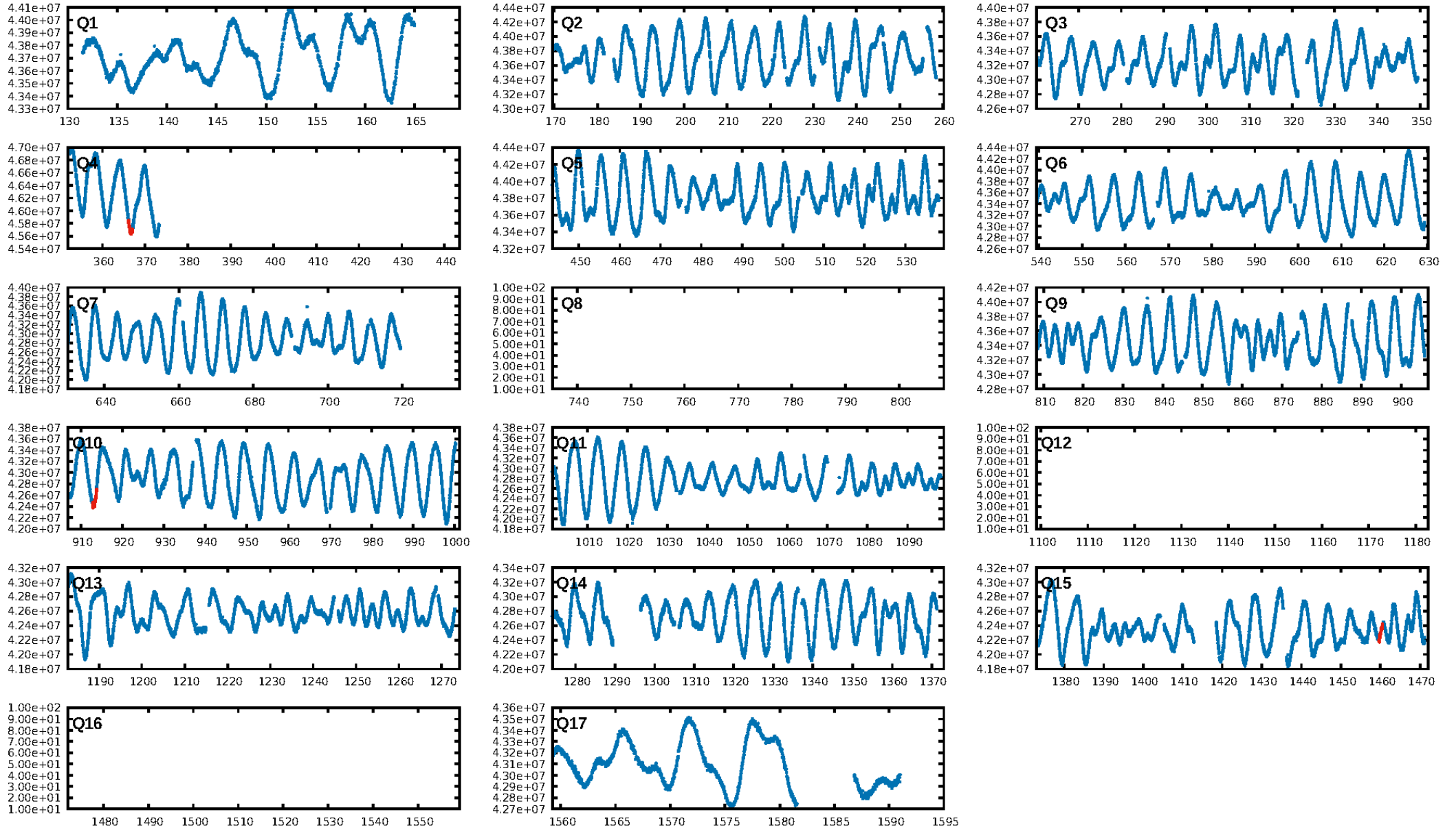
DV Fit Results:

Period = 546.74296 [0.02707] d
Epoch = 366.5473 [0.0315] BKJD
Rp/R* = 0.0385 [0.0170]
a/R* = 267.17 [405.74]
b = 0.74 [0.82]
Seff = 0.36 [0.12]
Teq = 198 [16] K
Rp = 3.49 [1.75] Re
a = 1.2743 [0.2647] AU
Ag = N/A
Teffp = N/A

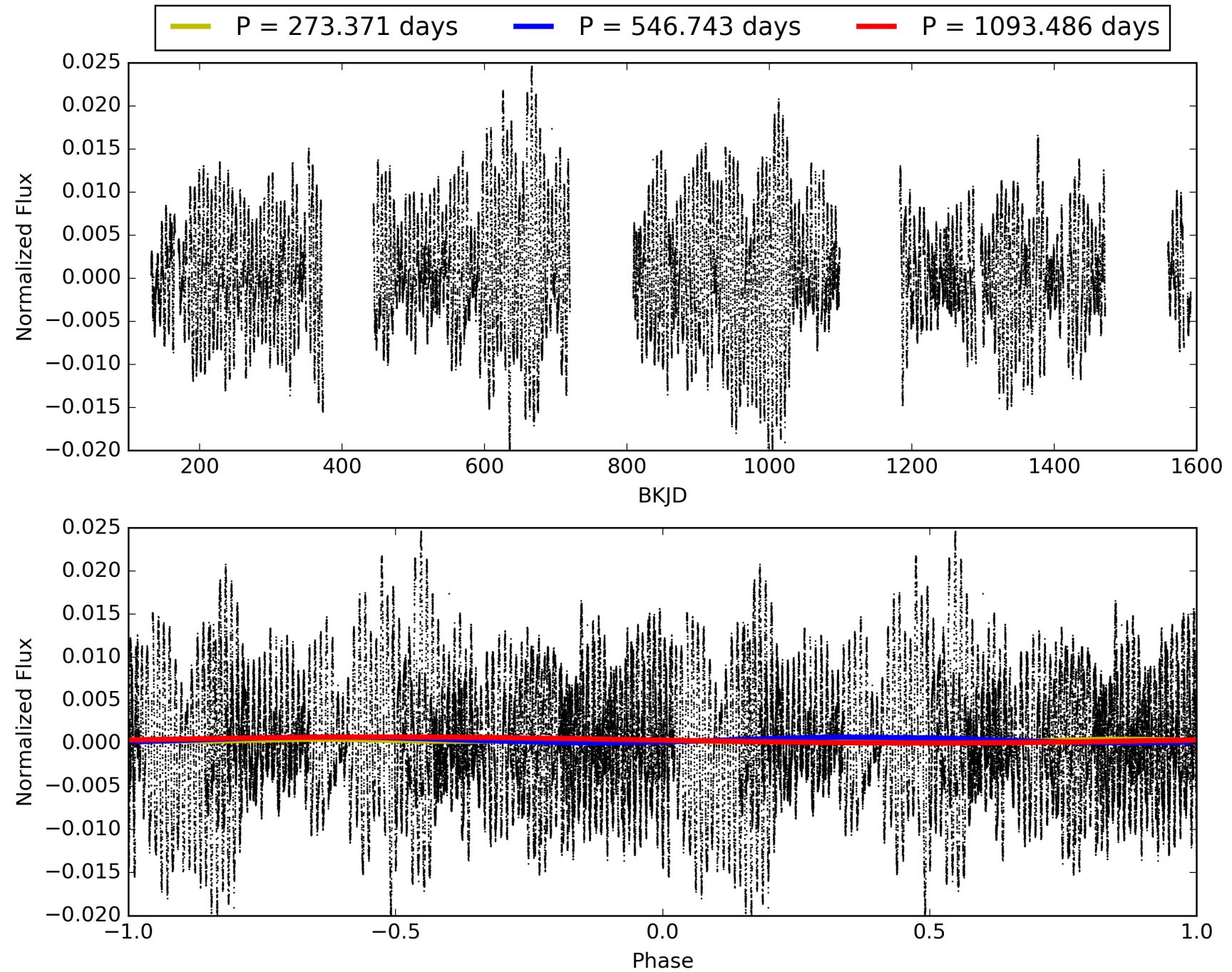
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [1140.35 sigma]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.8%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 3.92e-14
RollingBand-fgt: 1.00 [2/2]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: N/A
KicOffset-rm: N/A
OotOffset-st: 0/0/0/0 [0]
KicOffset-st: 0/0/0/0 [0]
DiffImageQuality-fgm: N/A
DiffImageOverlap-fno: 0.00 [0/3]

TCE 011444952-02, PDC Light Curves

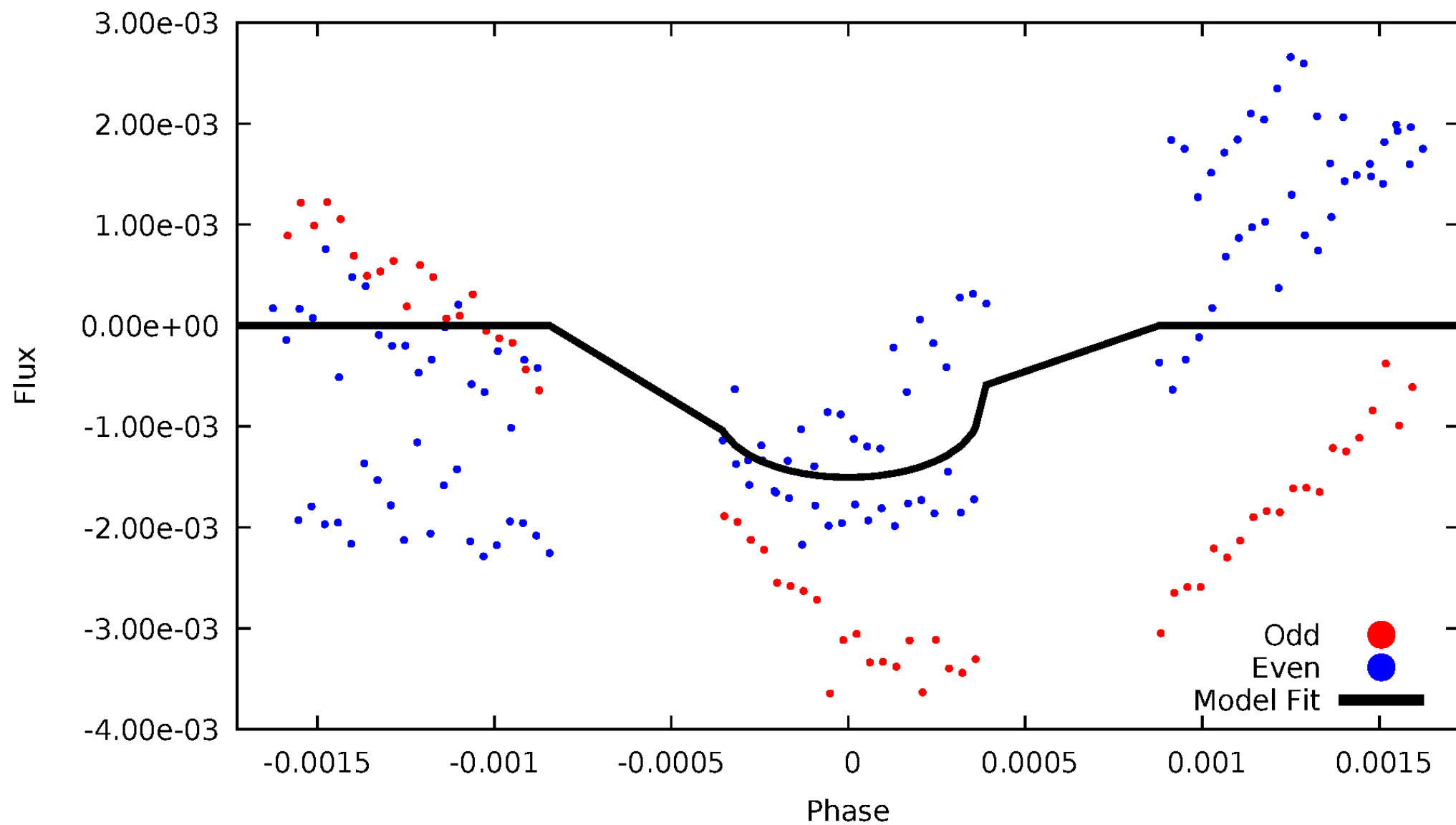


TCE 011444952-02



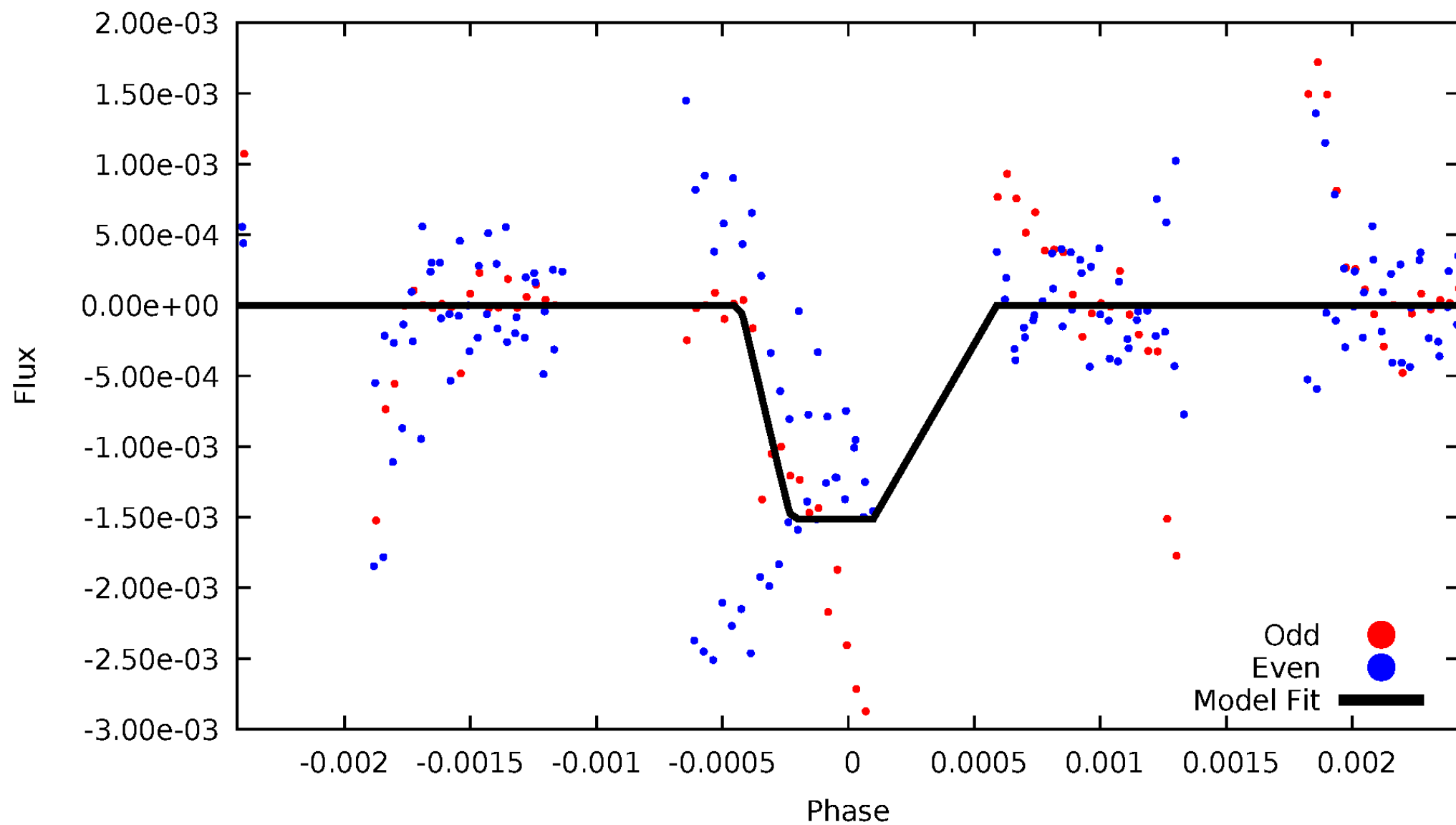
DV Odd/Even

TCE 011444952-02



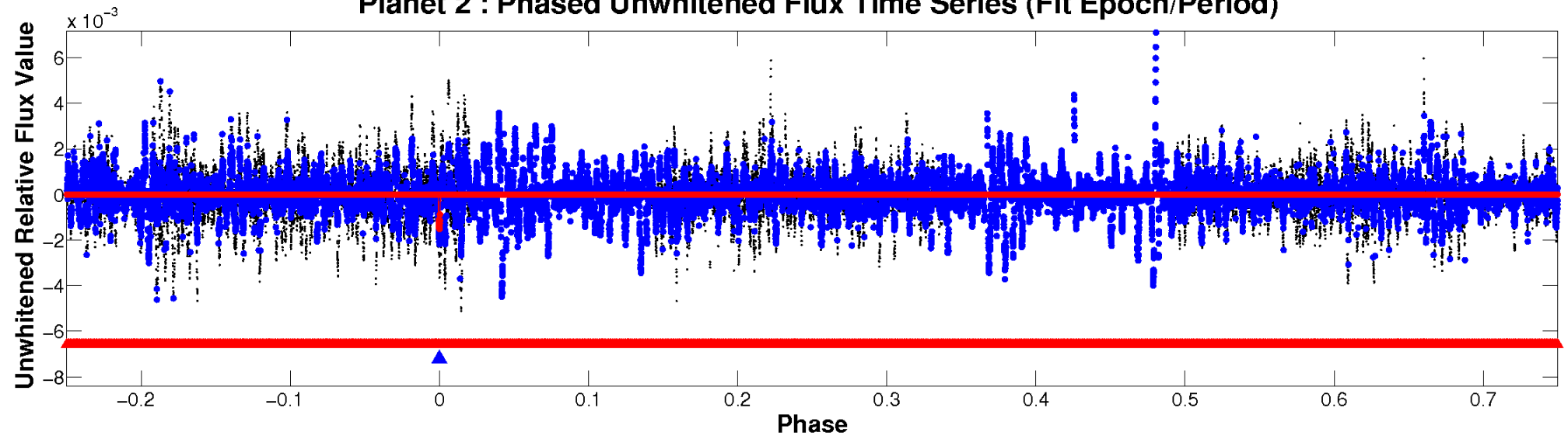
ALT Odd/Even

TCE 011444952-02

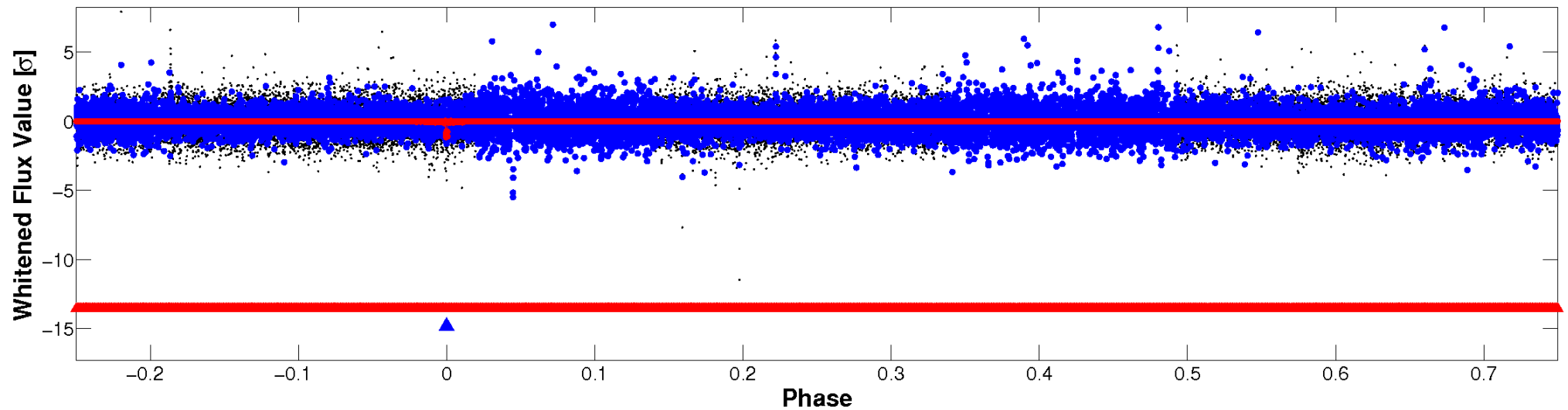


Non-Whitened Vs. Whitened Light Curve

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

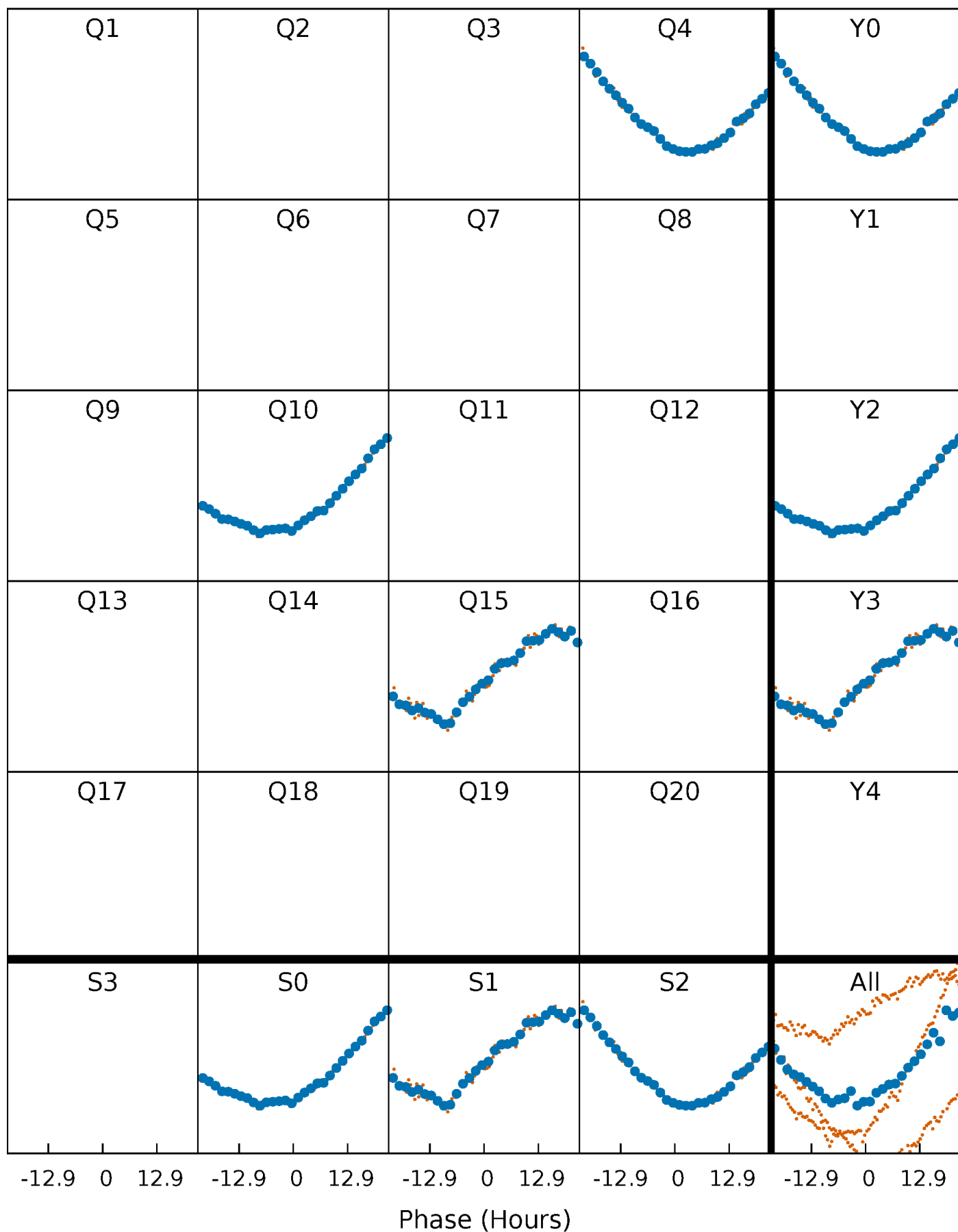


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



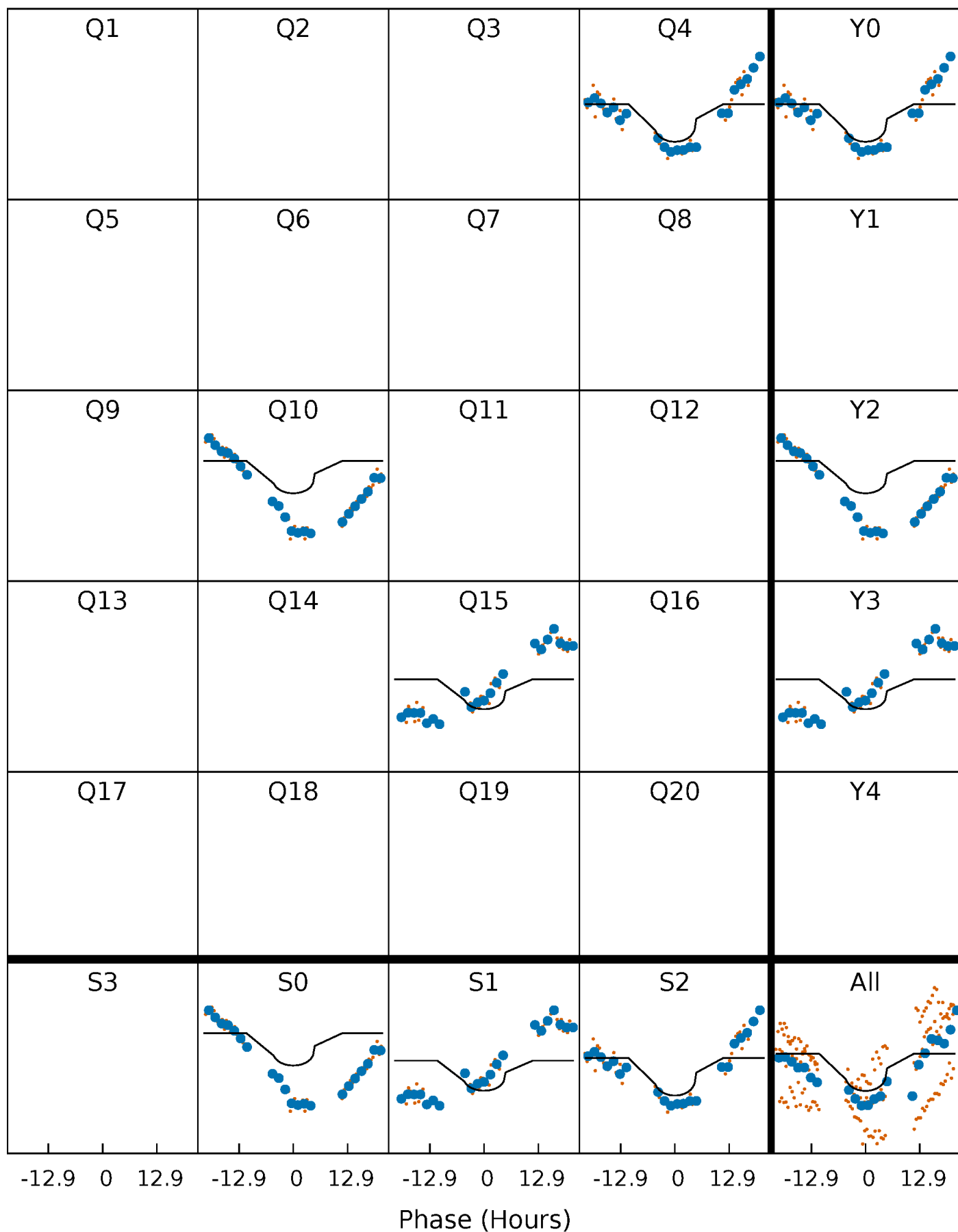
PDC Quarter-Phased Transit Curves

TCE 011444952-02 $P=546.742957$ Days $T_0=366.547252$ (BKJD)



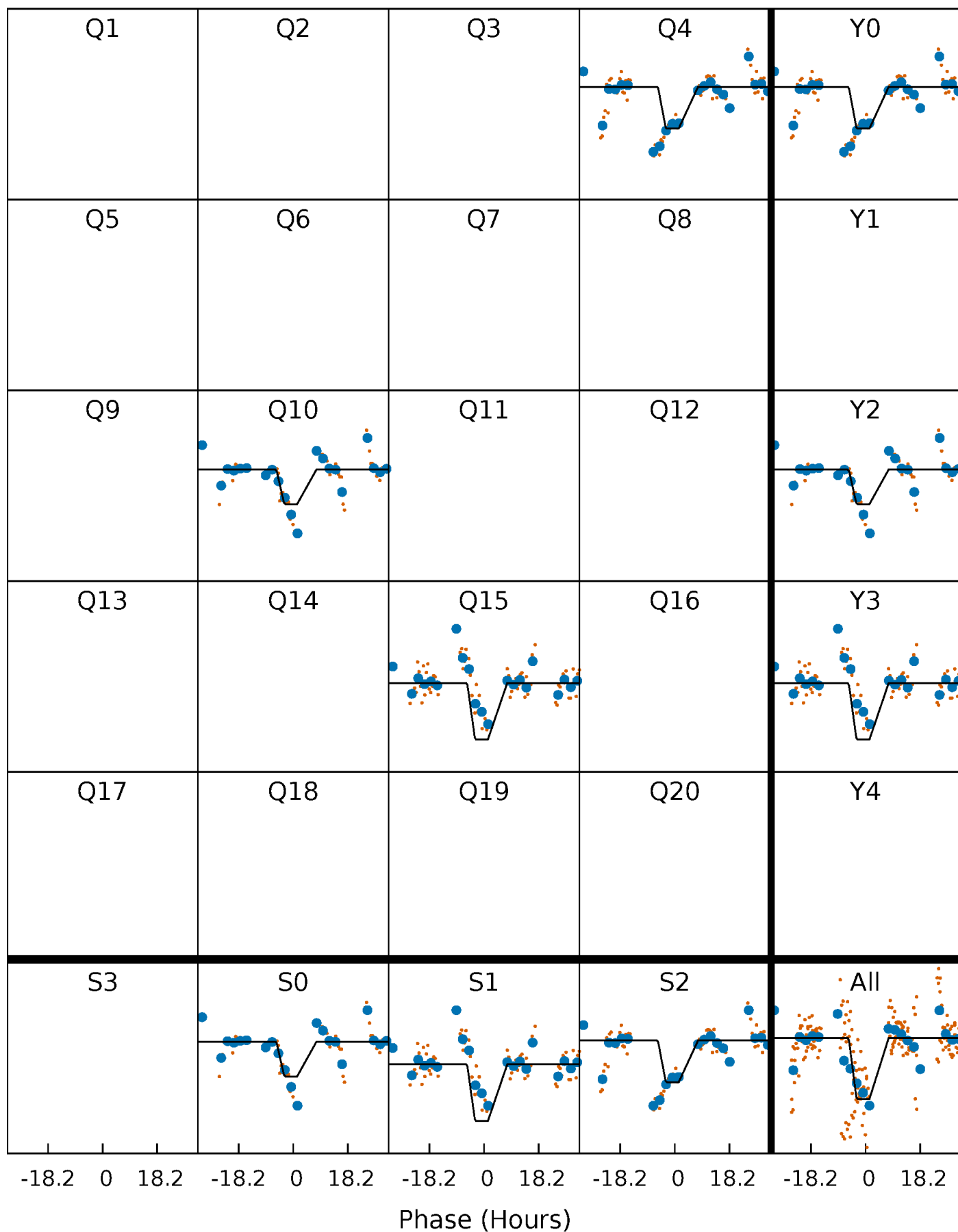
DV Quarter-Phased Transit Curves

TCE 011444952-02 $P=546.742957$ Days $T_0=366.547252$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

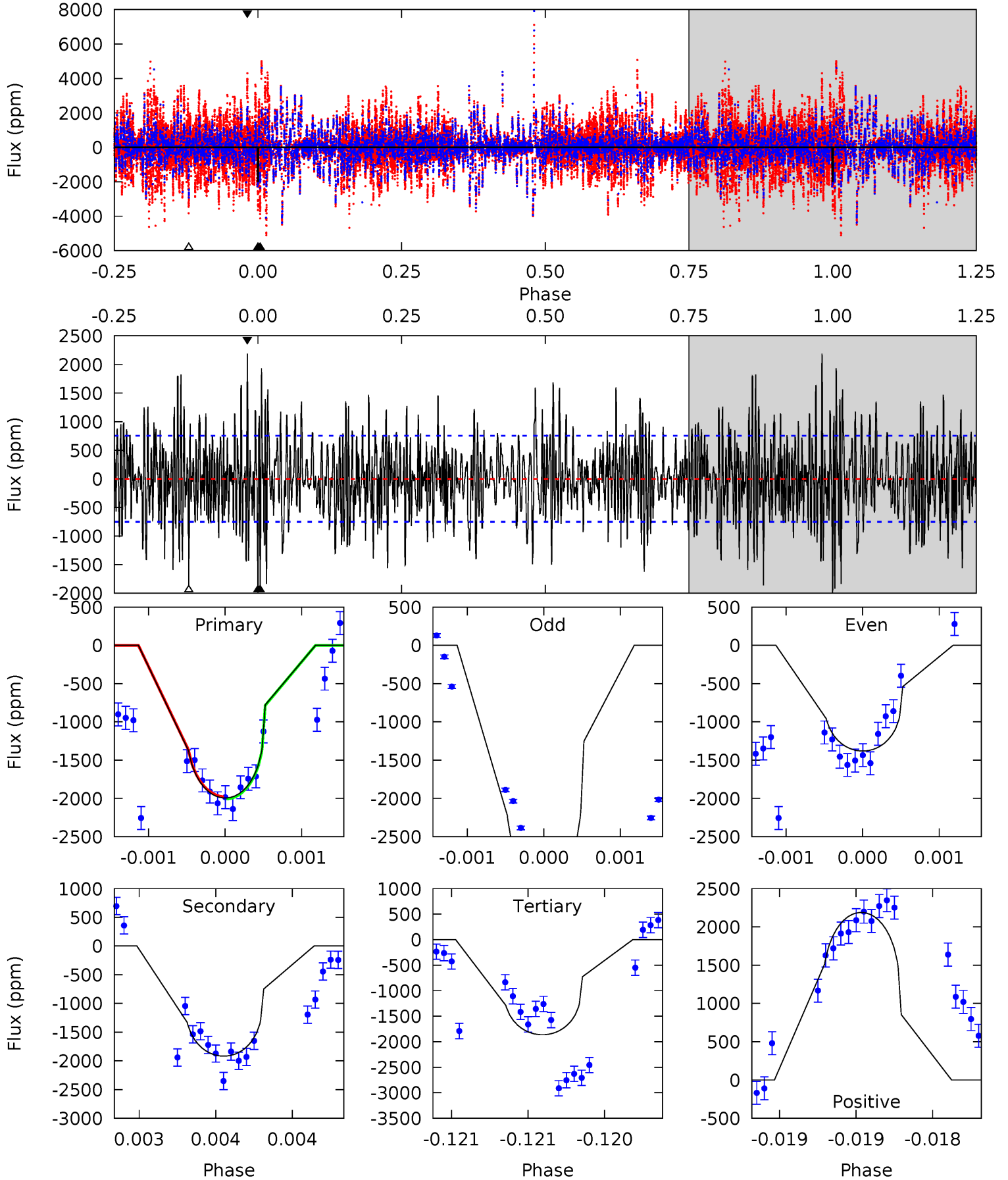
TCE 011444952-02 P=546.761198 Days $T_0=366.687764$ (BKJD)



DV Model-Shift Uniqueness Test

011444952-02, P = 546.742957 Days, E = 366.547252 Days

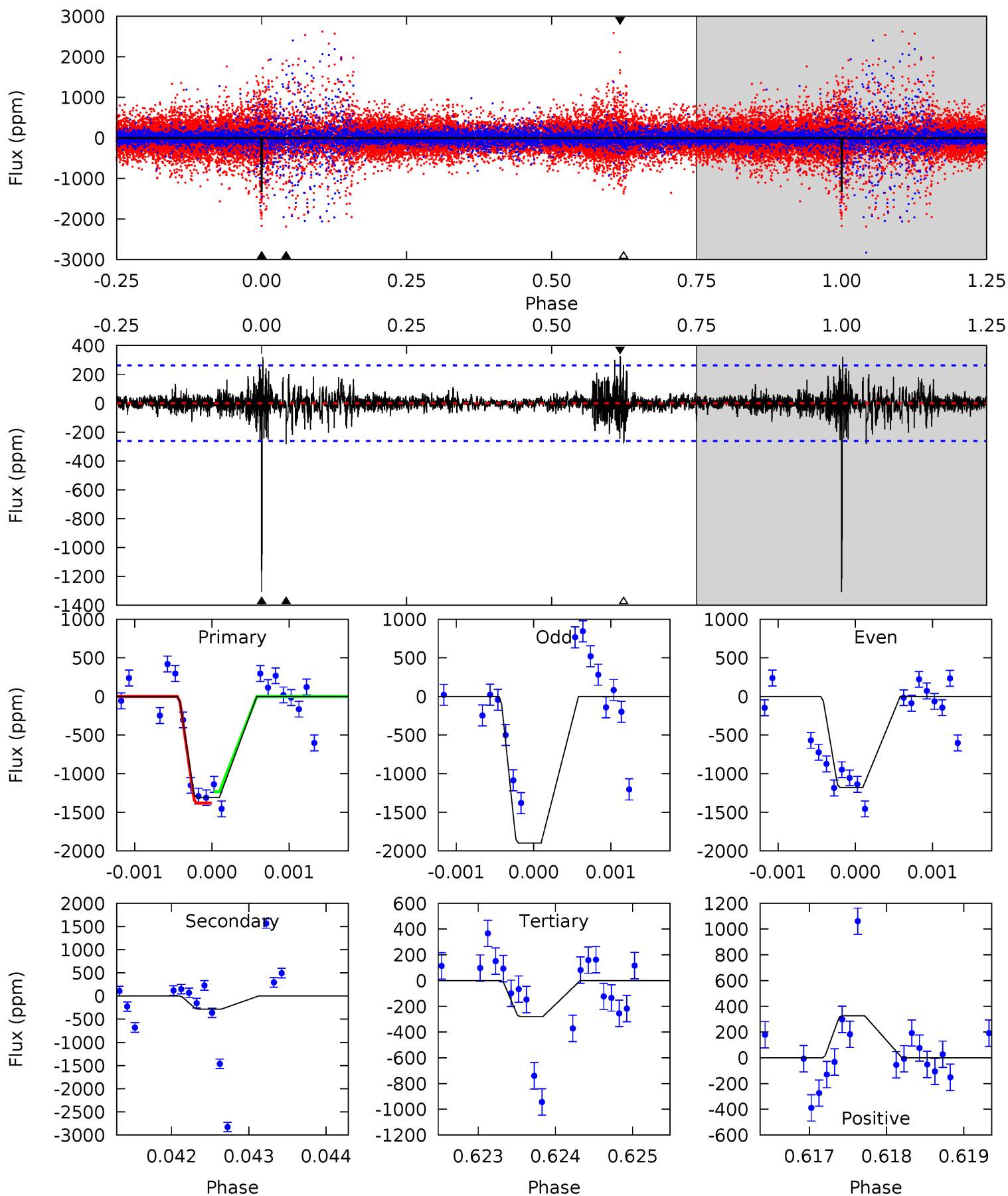
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14.6	14.0	13.6	16.0	5.50	3.37	4.10	0.96	-1.42	0.40	-1.97	6.66	1.04	0.52	0.11



Alt Model-Shift Uniqueness Test

011444952-02, P = 546.761198 Days, E = 366.687764 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
27.2	5.91	5.81	6.80	5.45	3.29	0.95	21.4	20.4	0.10	-0.89	7.07	0.88	0.20	0.99



Stellar Parameters For KIC 011444952

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5569^{+149}_{-166}	$4.566^{+0.030}_{-0.170}$	$-0.080^{+0.300}_{-0.300}$	$0.829^{+0.201}_{-0.067}$	$0.928^{+0.081}_{-0.102}$	$2.295^{+0.382}_{-1.061}$
	+3%/-3%	+1%/-4%	+375%/-375%	+24%/-8%	+9%/-11%	+17%/-46%
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 011444952-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-1917 ± 137	$3.73^{+1.74}_{-1.73}$	284^{+16}_{-12}	5908^{+2244}_{-936}	$121563^{+292652}_{-65017}$
Alt.	-284 ± 48	$3.69^{+1.82}_{-1.58}$	283^{+16}_{-12}	3955^{+905}_{-471}	17737^{+35885}_{-9548}

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 $A_{\text{obs}} \gg 1.0$

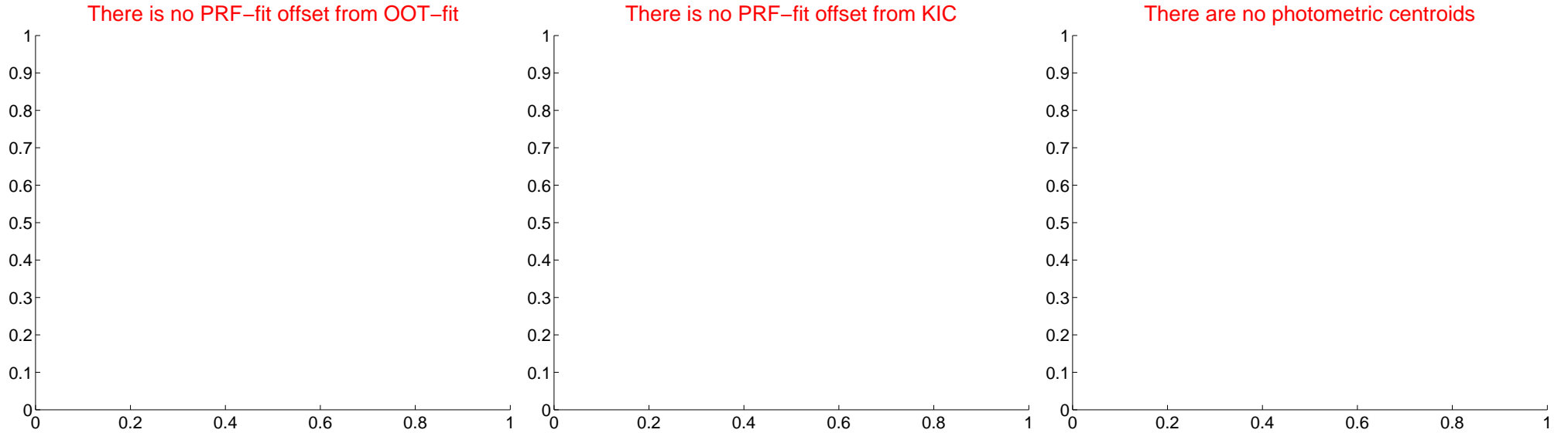
DV Centroid Data

Supplemental centroid analysis for 011444952-02. Kepler magnitude: 14.26. Transit SNR 6.89

There are 0 quarters with good PRF difference image offsets

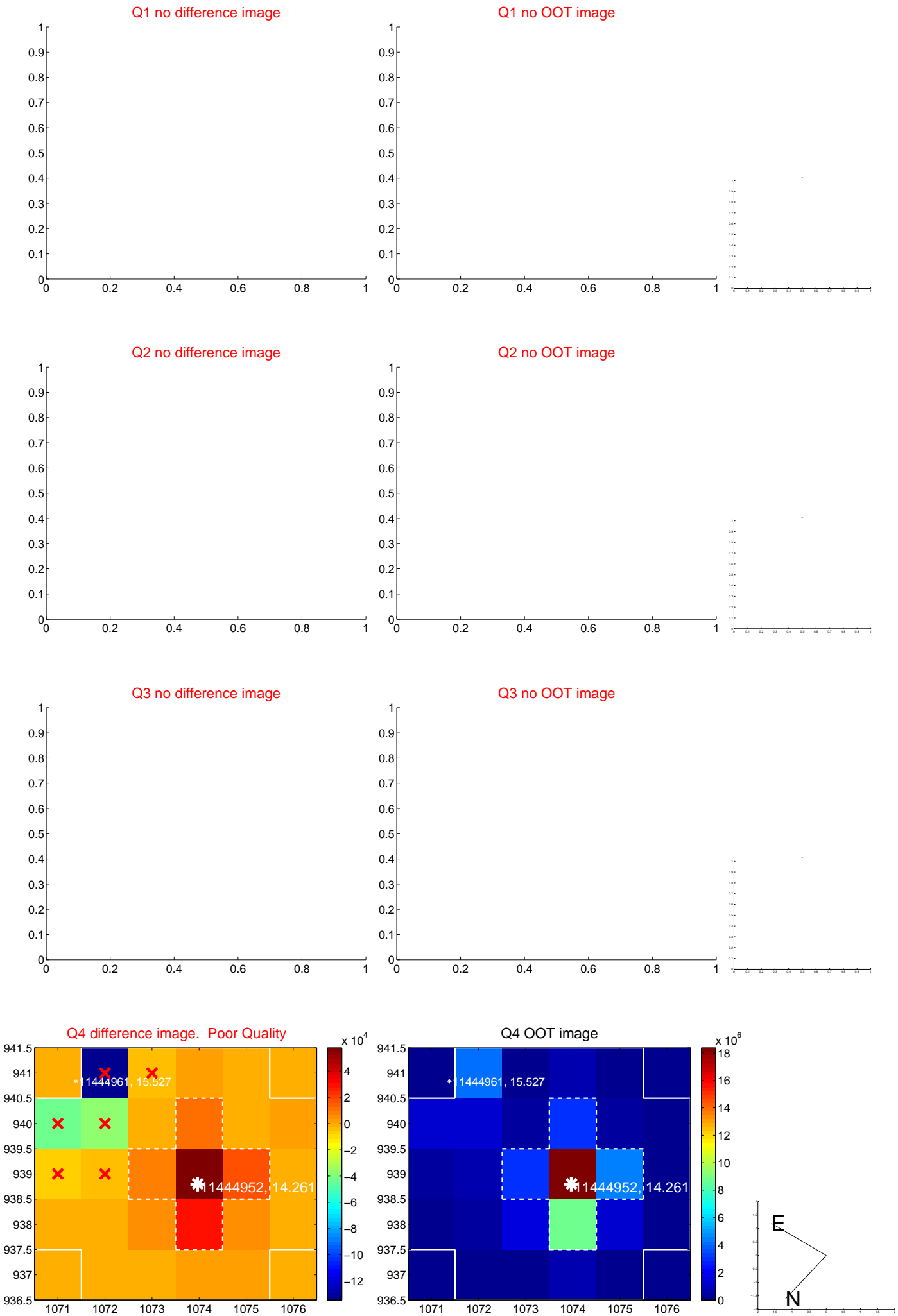
The direct PRF centroid is offset from the target star catalog position by about NaN arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	—	—	—	—
PRF-fit source offset from KIC position	—	—	—	—
photometric centroid source offset	—	—	—	—

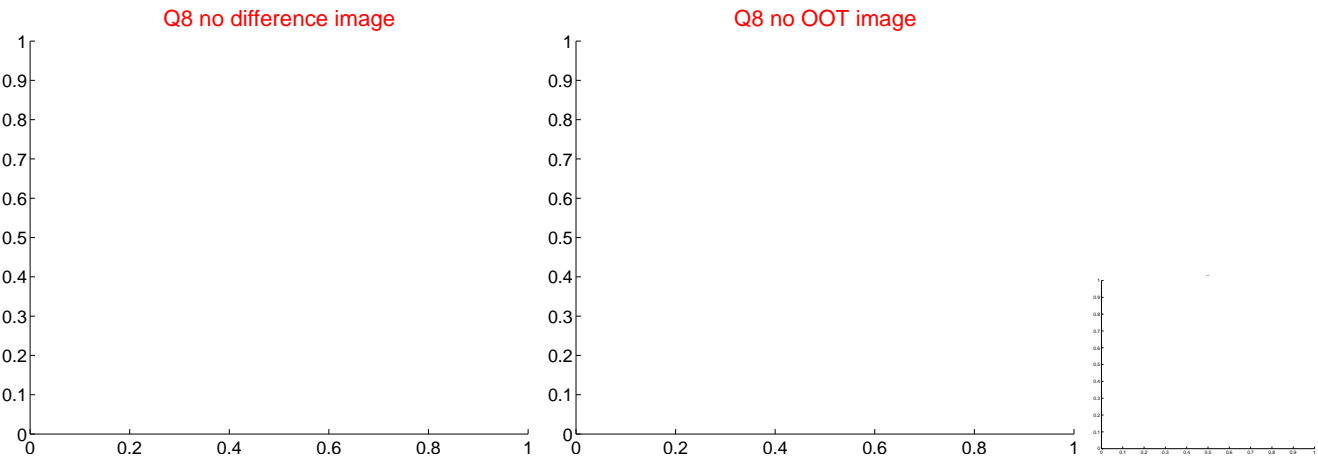
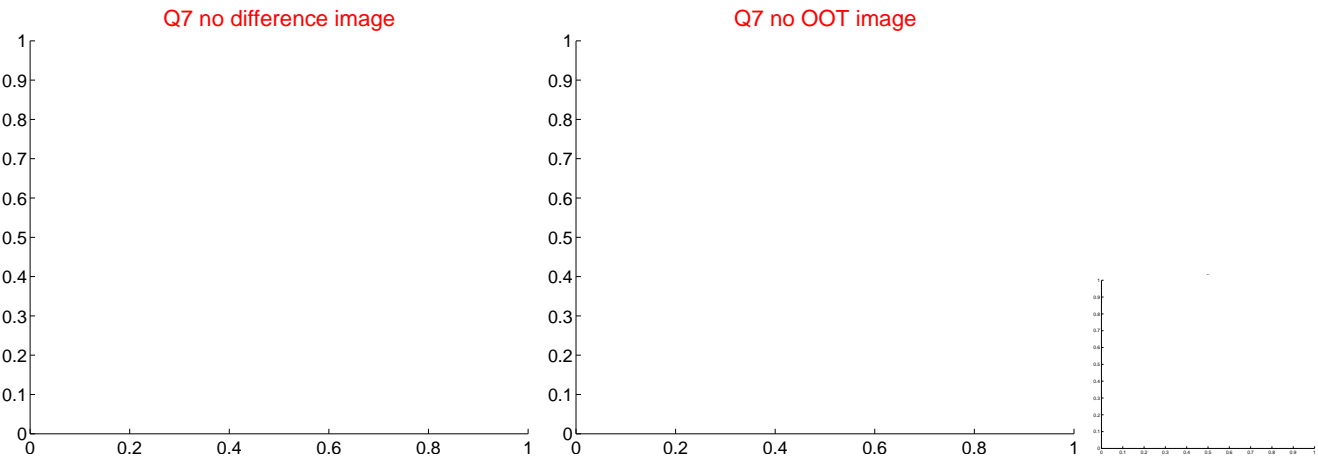
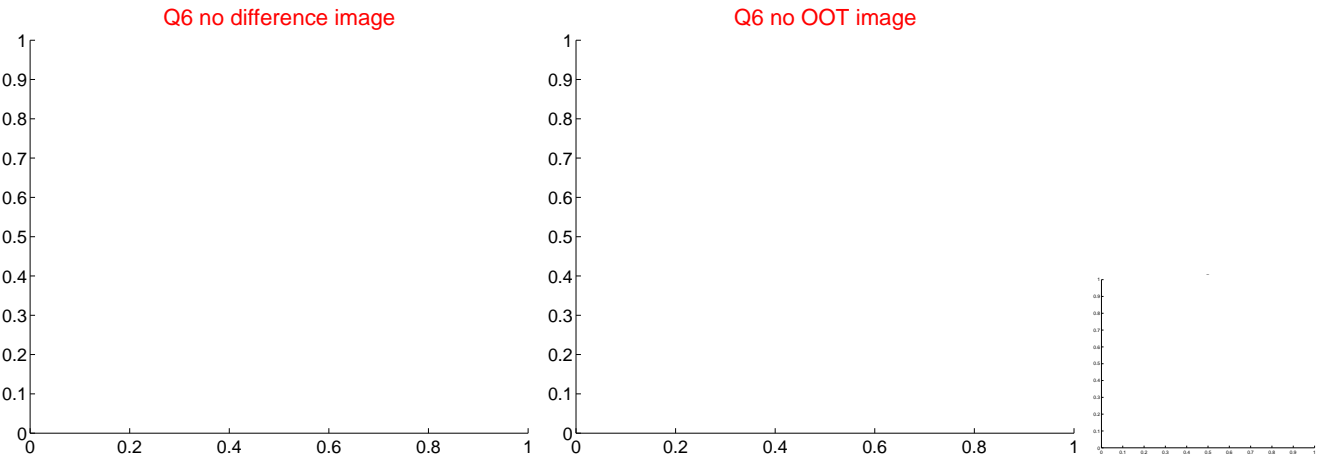
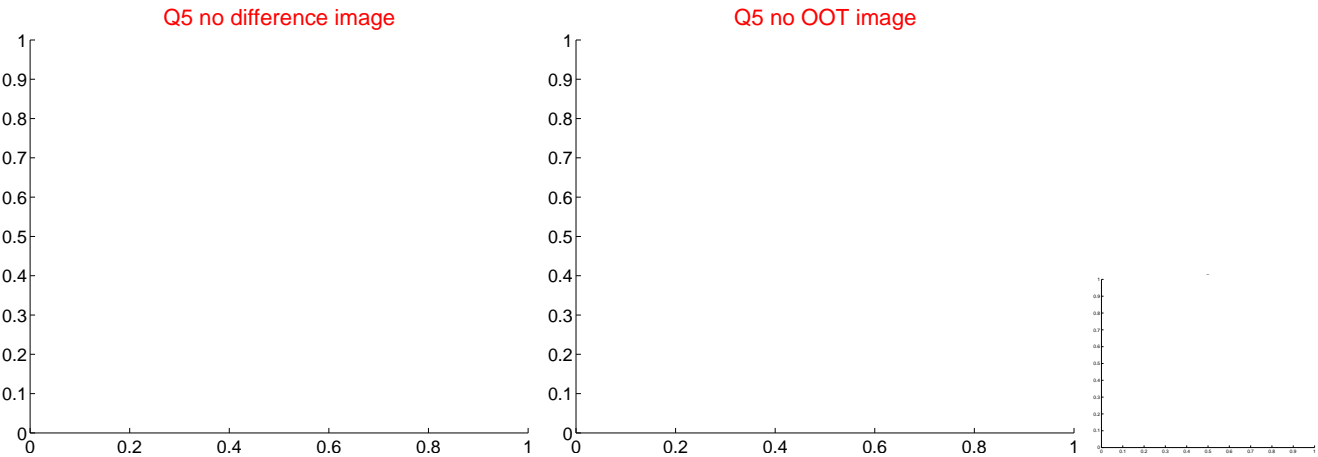


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

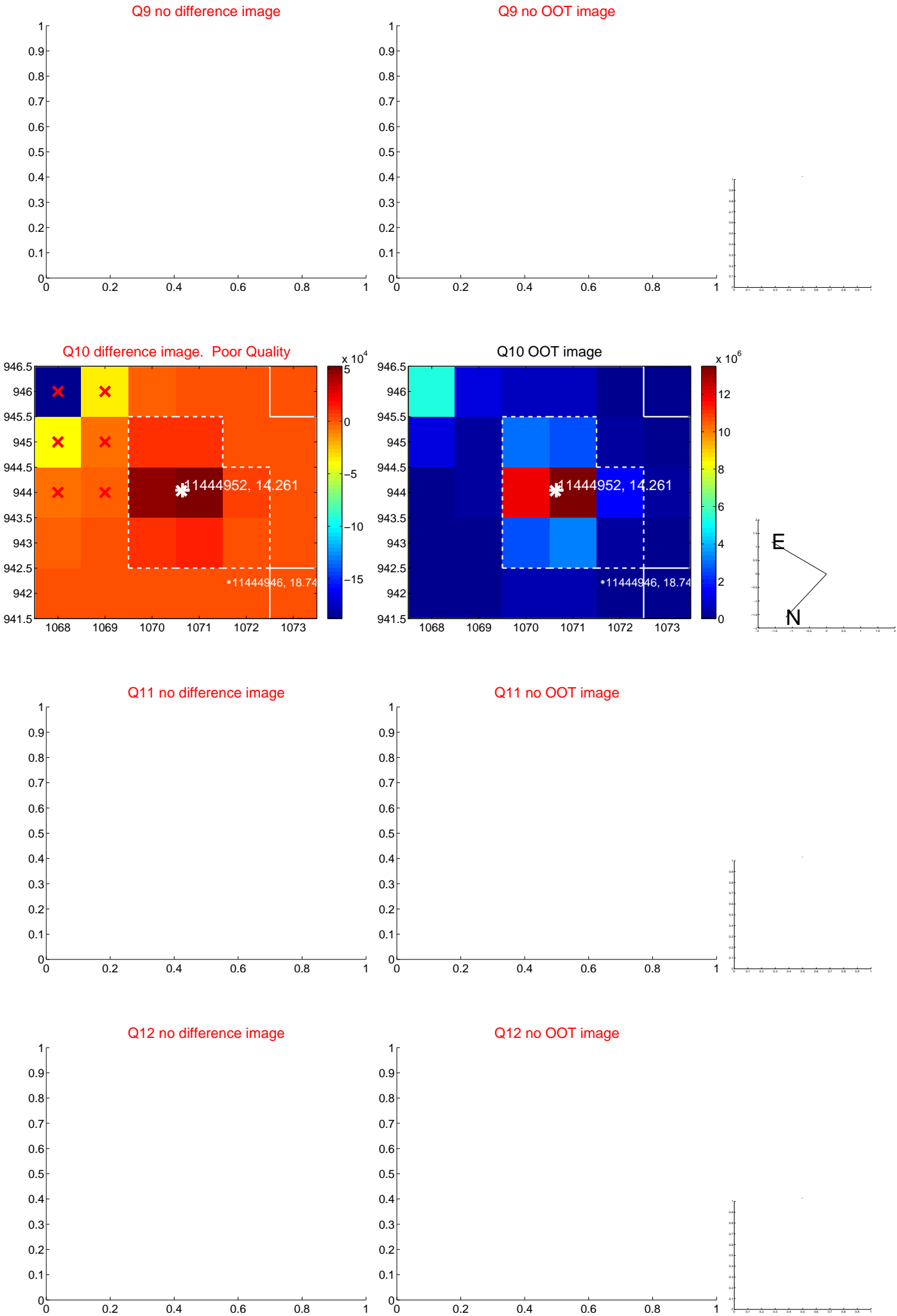
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



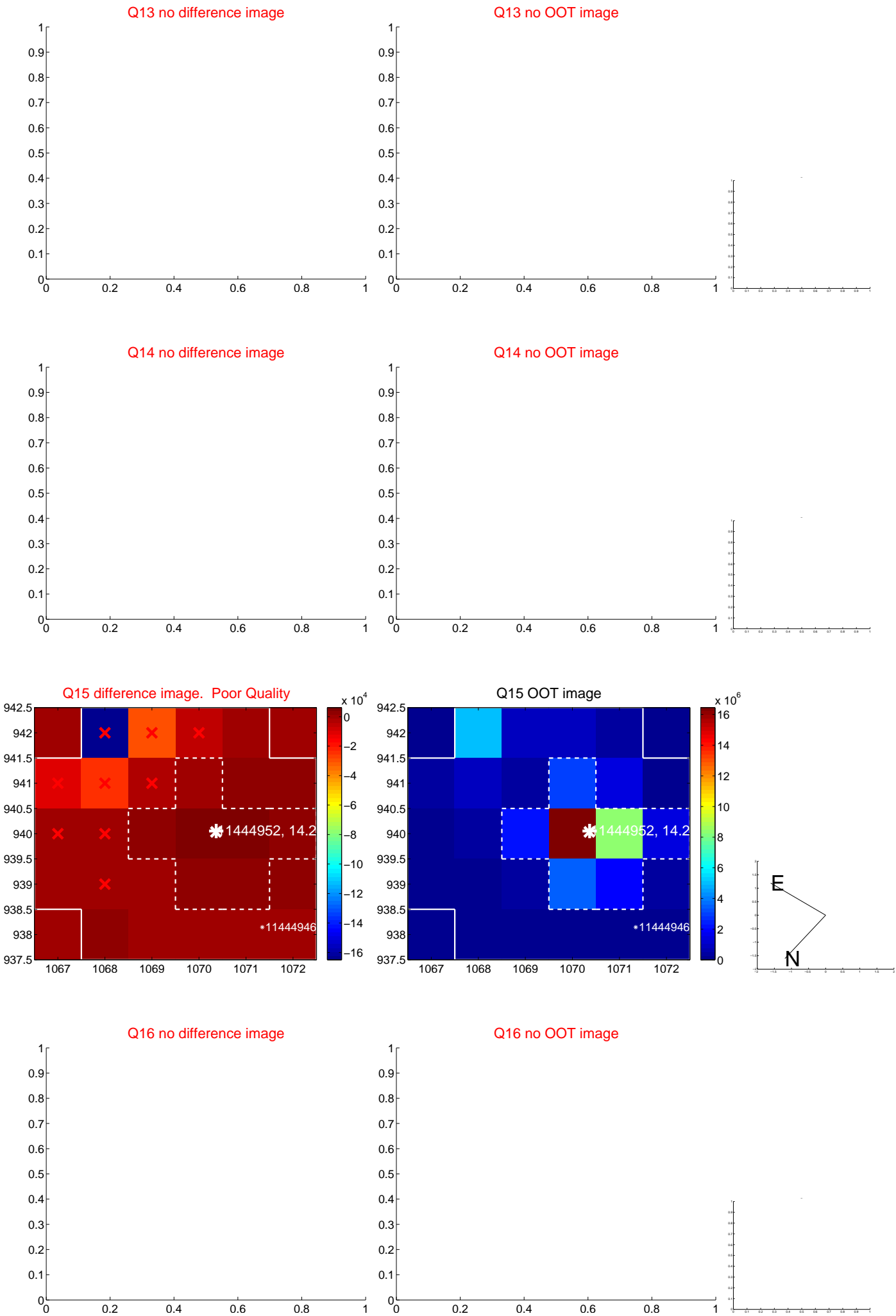
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



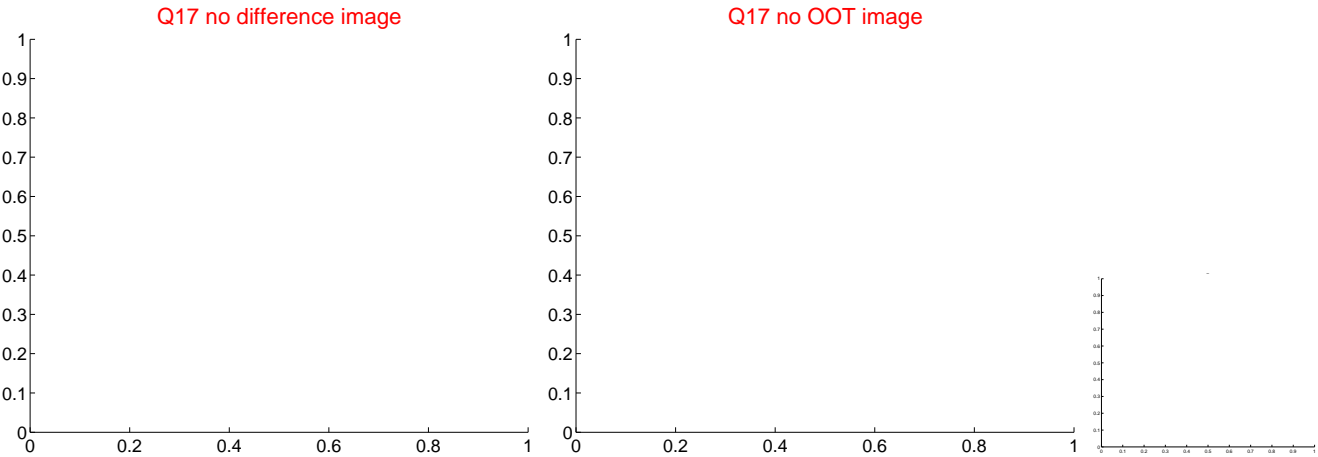
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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.



folded centroid time series figure for this object.

UKIRT Image

Declination

