

# KIC 007336754

## 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)	$R_p$ ( $R_{\oplus}$ )	$S_p$ ( $S_{\oplus}$ )
007336754-01	OBS	6861.01	12.155242	133.767142	85847.3	6.846	3651.5	3121.1	0.93	5761	35.59	91.37
007336754-02	OBS	No	12.155245	139.941446	31629.9	6.861	1378.8	1355.0	0.93	5761	23.09	91.37
007336754-03	OBS	No	441.221861	462.422281	1809.3	6.000	21.6	-1.0	0.93	5761	3.95	0.76

## Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007336754-01	OBS	FP	0.00	0	1	0	0	MOD_SEC_DV—MOD_SEC_ALT—DEEP_V_SHAPED—HAS_SEC_TCE
007336754-02	OBS	FP	0.00	1	1	0	0	IS_SEC_TCE
007336754-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—INCONSISTENT_TRANS—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](http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col) for comment definitions.

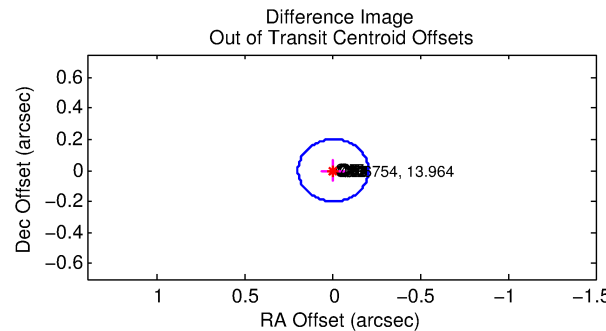
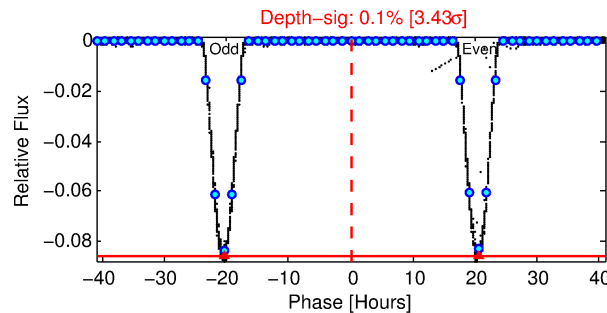
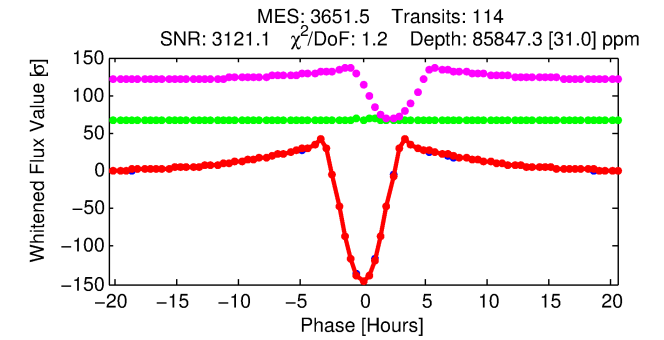
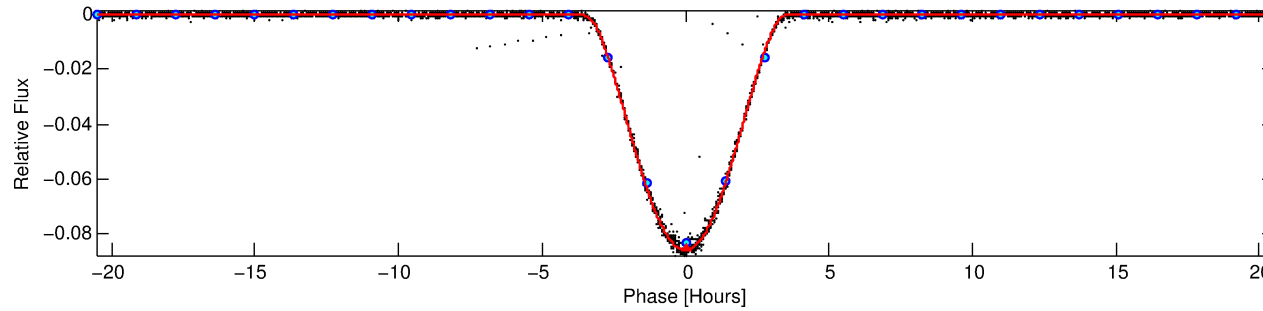
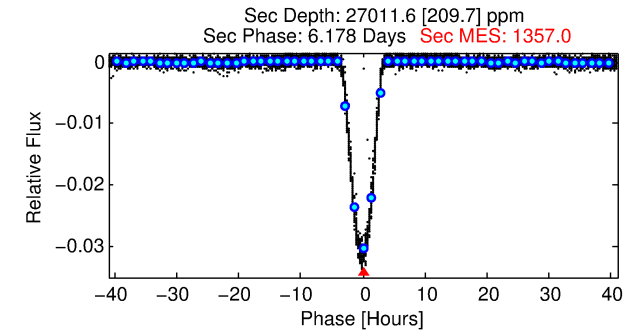
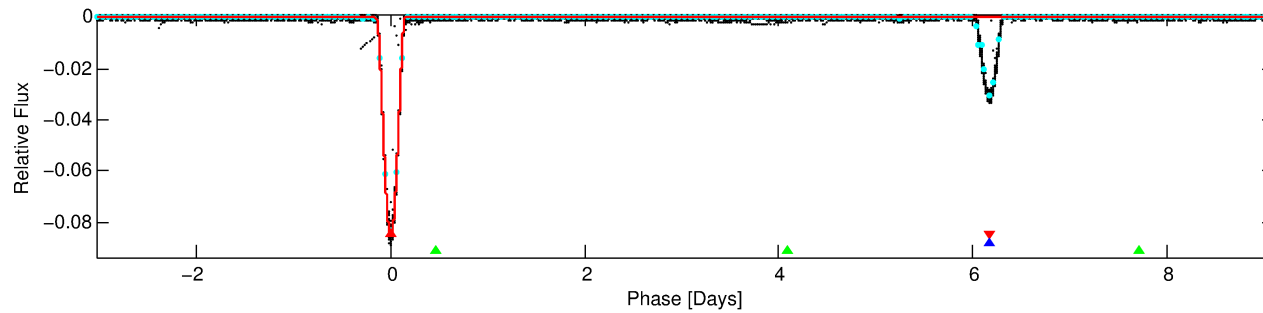
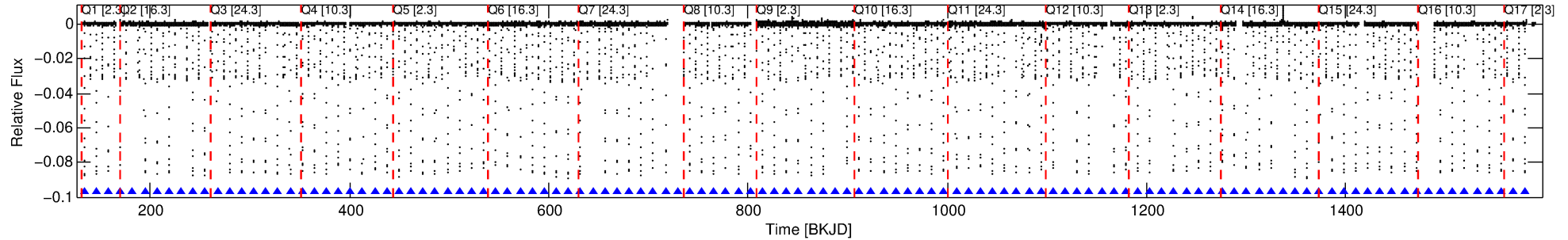
Ephemeris Match Information For 007336754-01

No Significant Match Found

# DV One-Page Summary

KIC: 7336754 Candidate: 1 of 3 Period: 12.155 d  
KOI: K06861.01 Corr: 1.000

Kp: 13.96 R\*: 0.93 Rs Teff: 5761.0 K Logg: 4.41 Fe/H: -0.400



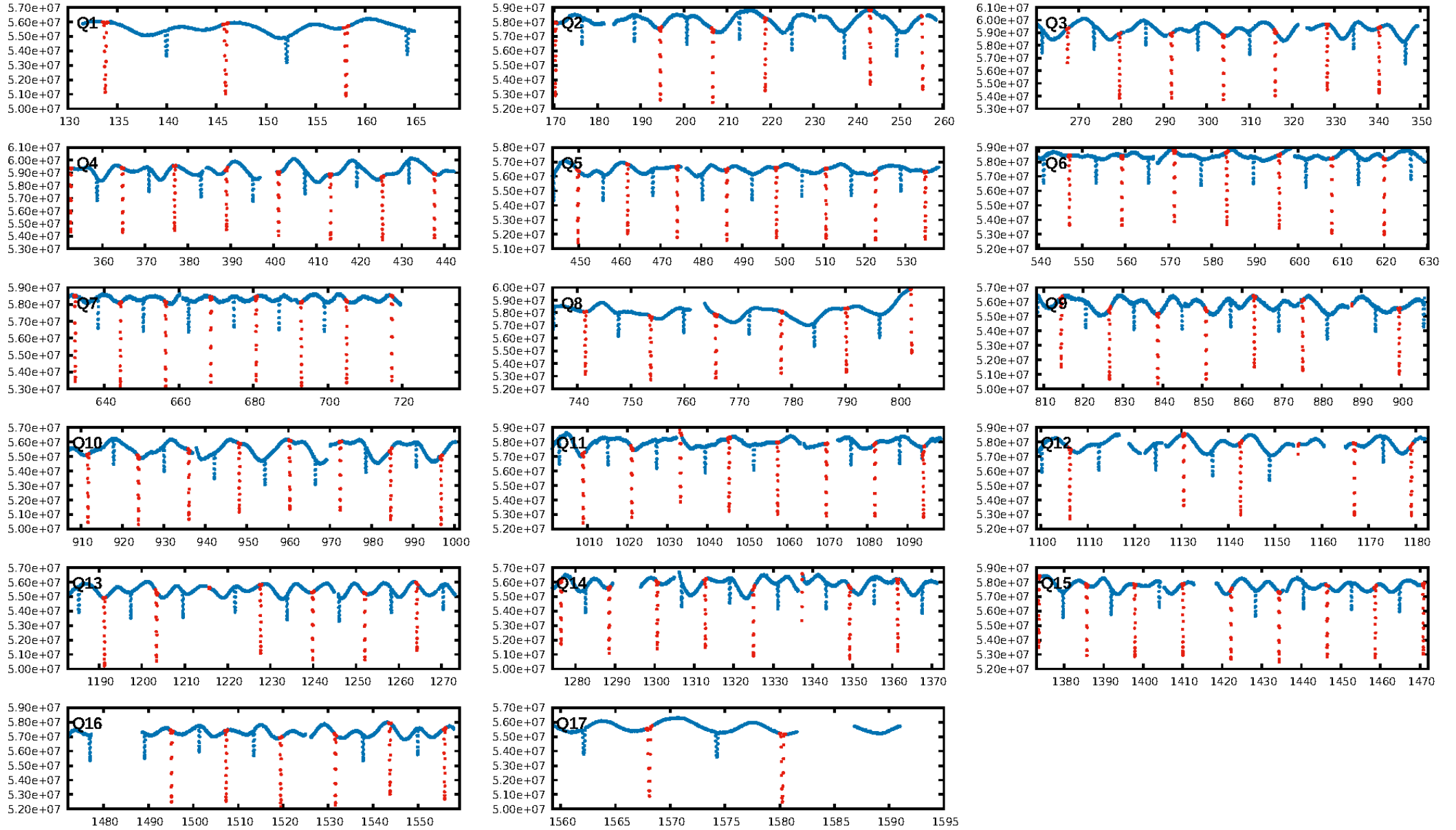
## DV Fit Results:

Period = 12.15524 [0.00000] d  
Epoch = 133.7671 [0.0000] BKJD  
Rp/R\* = 0.3500 [0.0019]  
a/R\* = 14.35 [0.01]  
b = 0.84 [0.00]  
Seff = 91.37 [31.19]  
Teff = 788 [67] K  
Rp = 35.59 [9.55] Re  
a = 0.0969 [0.0217] AU  
Ag = 110.04 [35.68] [3.06σ]  
Teffp = 3948 [107] K [24.99σ]

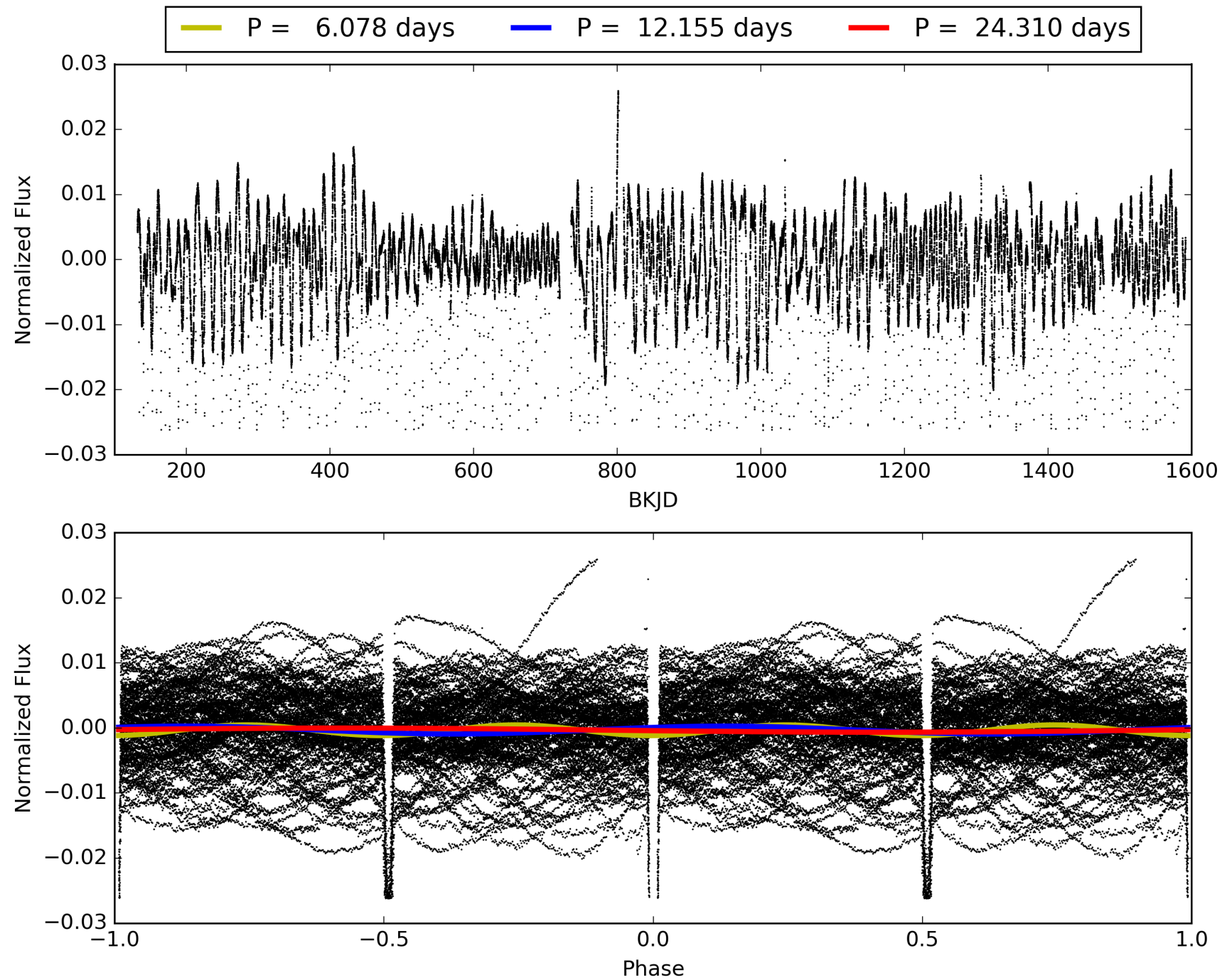
## DV Diagnostic Results:

ShortPeriod-sig: N/A  
LongPeriod-sig: 0.0% [0.00σ]  
ModelChiSquare2-sig: 0.0%  
ModelChiSquareGof-sig: 0.0%  
Bootstrap-pfa: N/A  
RollingBand-fgt: 1.00 [109/109]  
GhostDiagnostic-chr: 1.747  
Centroid-sig: N/A  
Centroid-so: 0.470 arcsec [270.96σ]  
OotOffset-rm: 0.003 arcsec [0.05σ]  
KicOffset-rm: 0.022 arcsec [0.32σ]  
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]

# TCE 007336754-01, PDC Light Curves

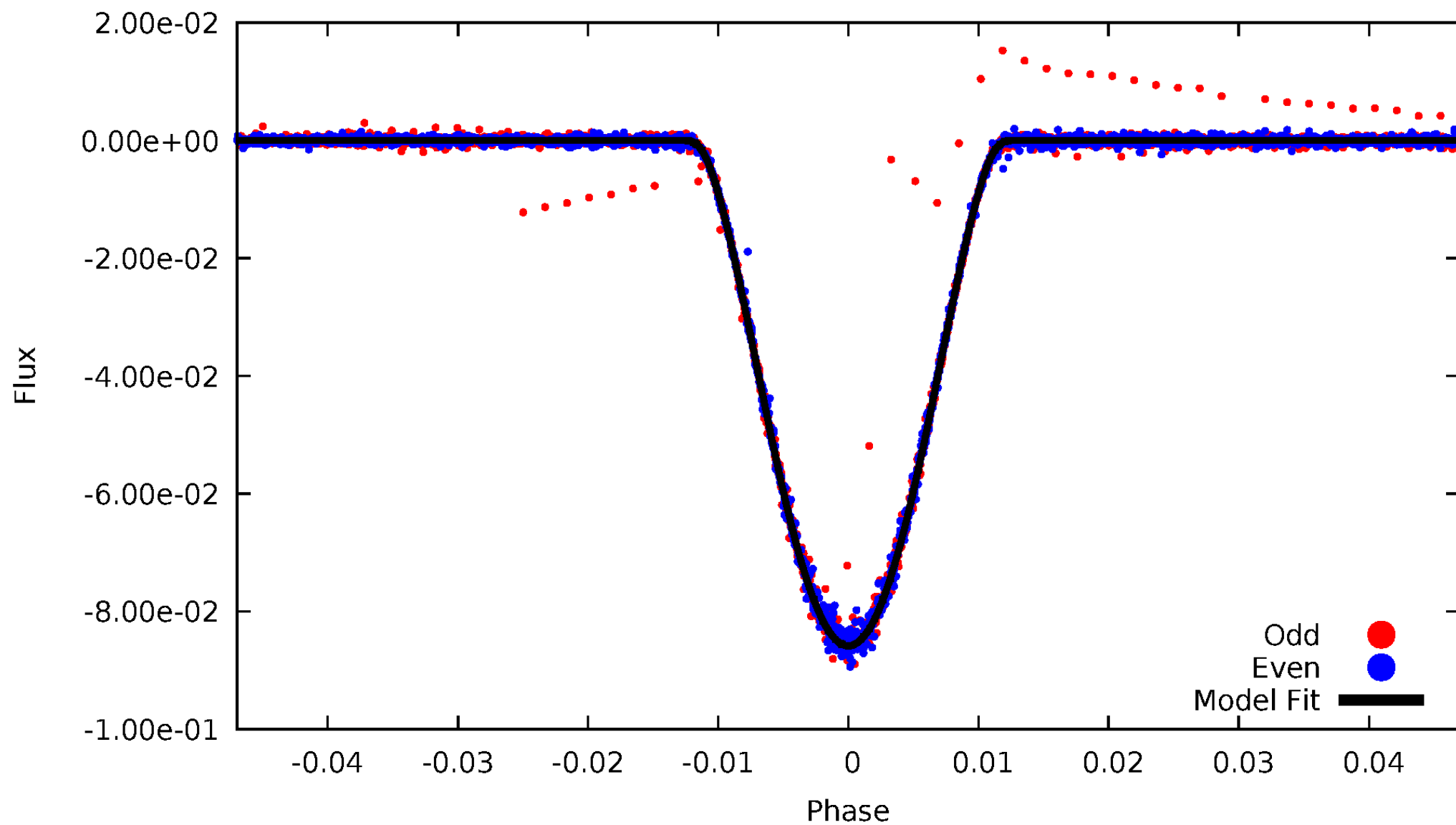


TCE 007336754-01



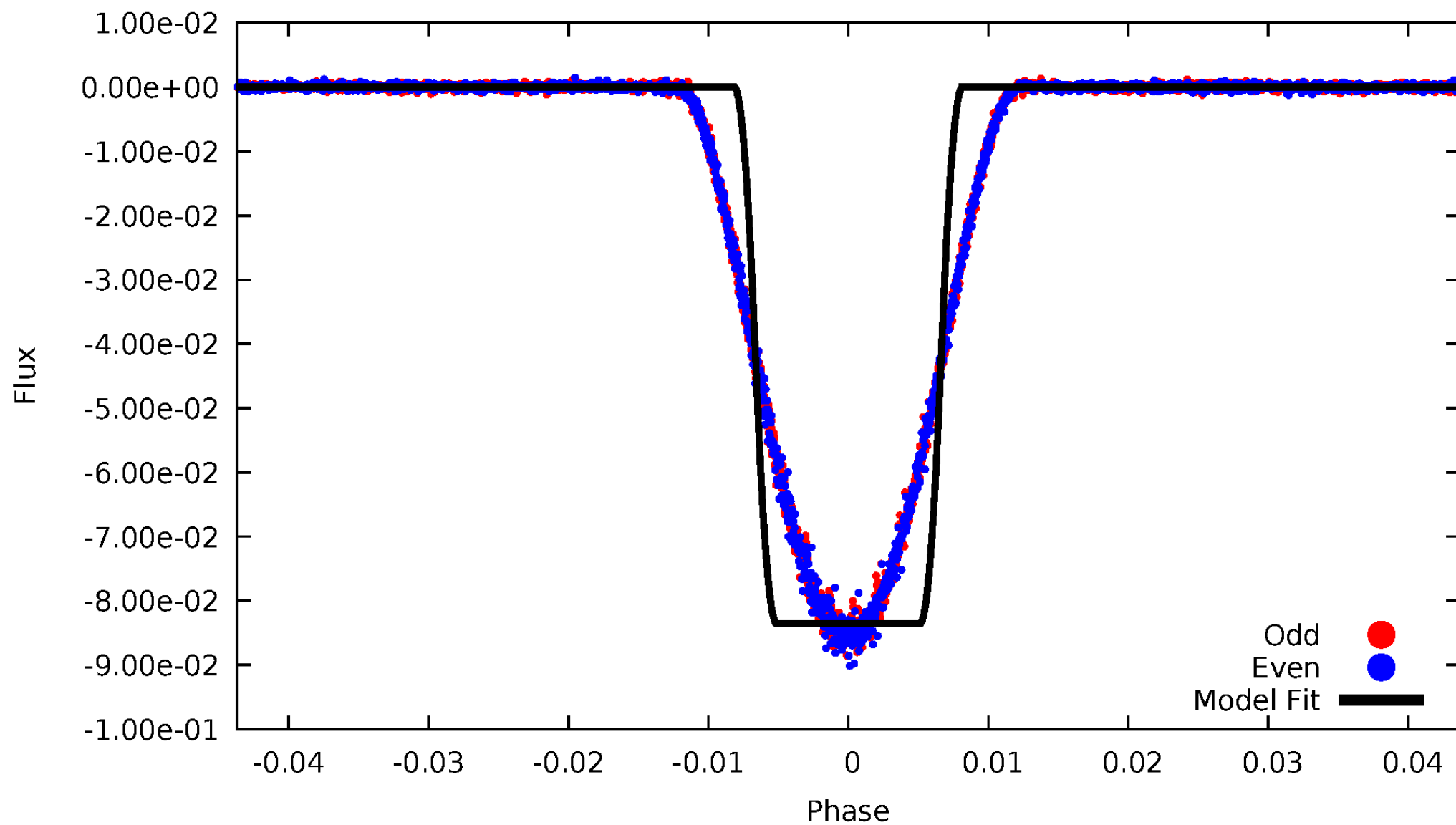
# DV Odd/Even

TCE 007336754-01



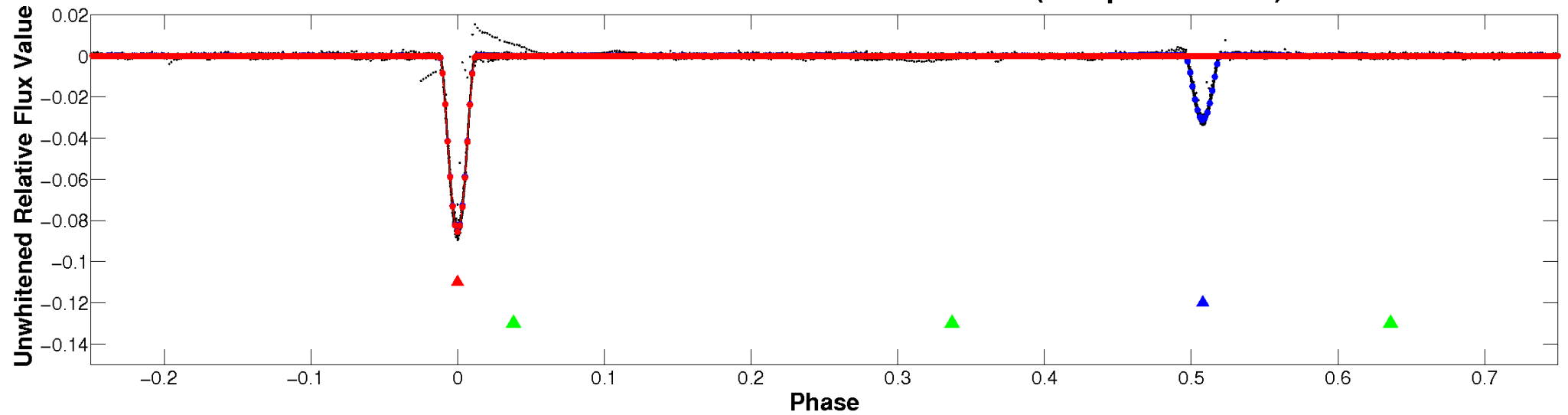
# ALT Odd/Even

TCE 007336754-01

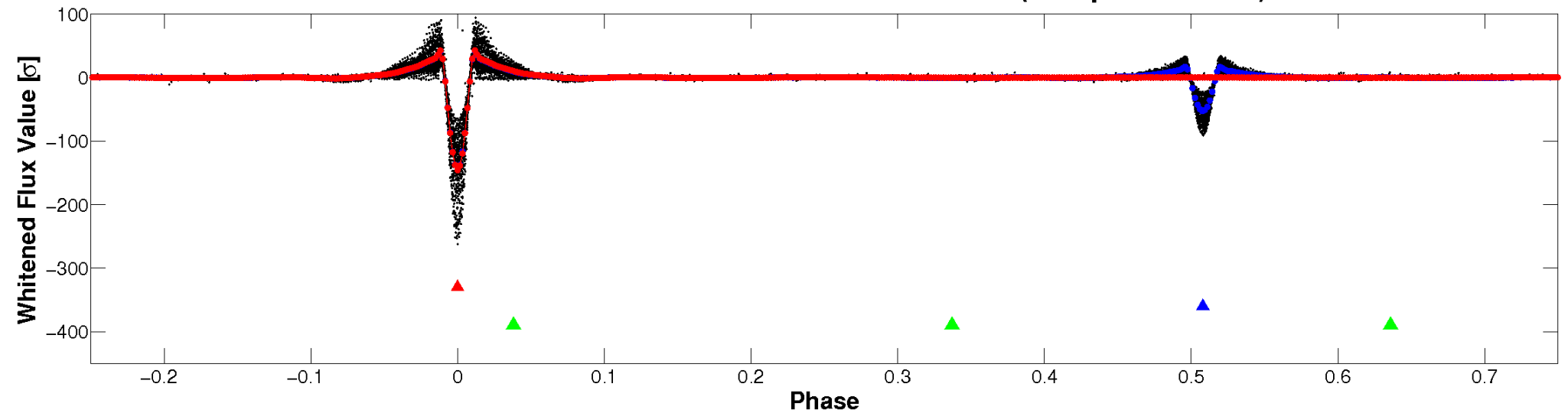


# Non-Whitened Vs. Whitened Light Curve

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

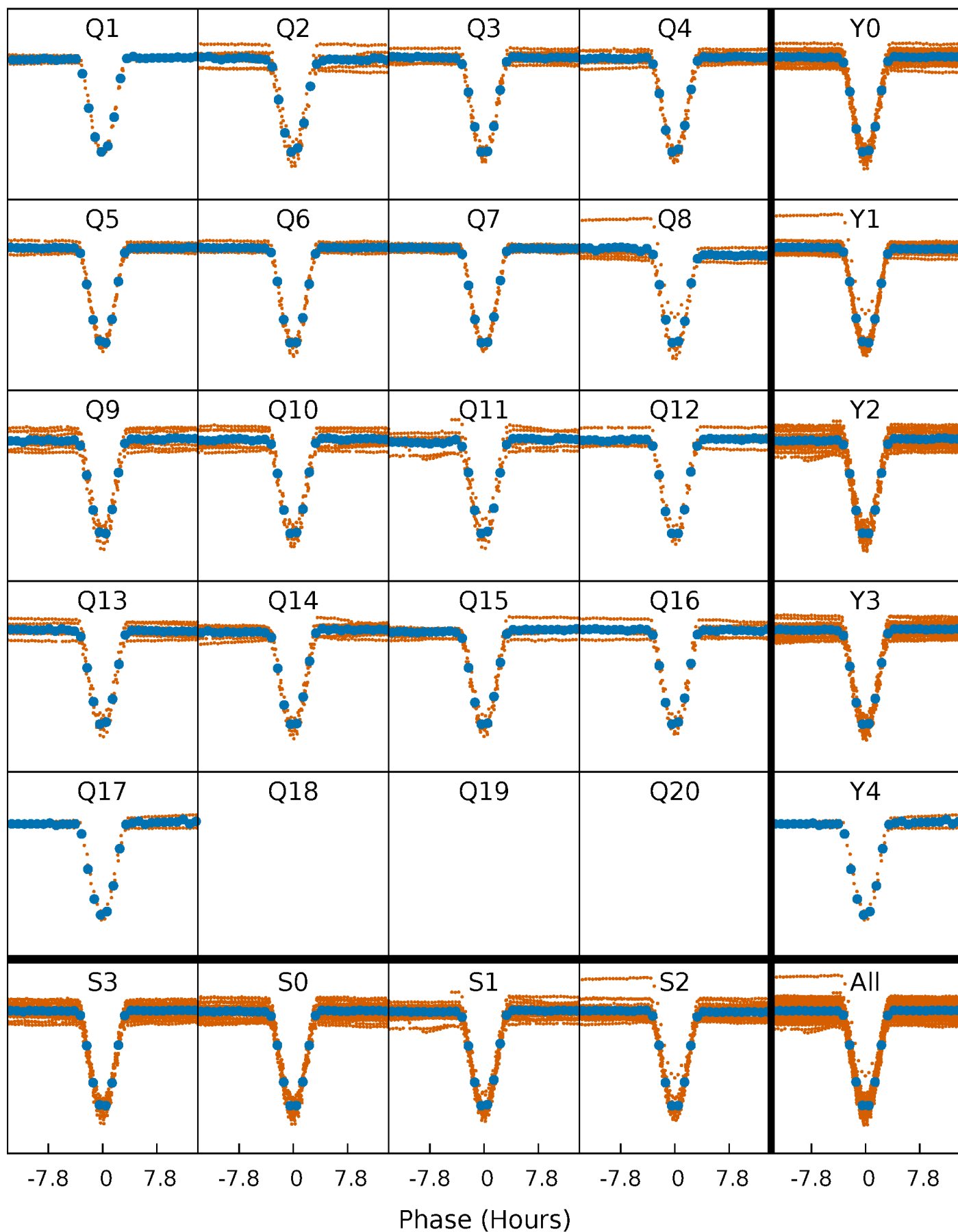


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



# PDC Quarter-Phased Transit Curves

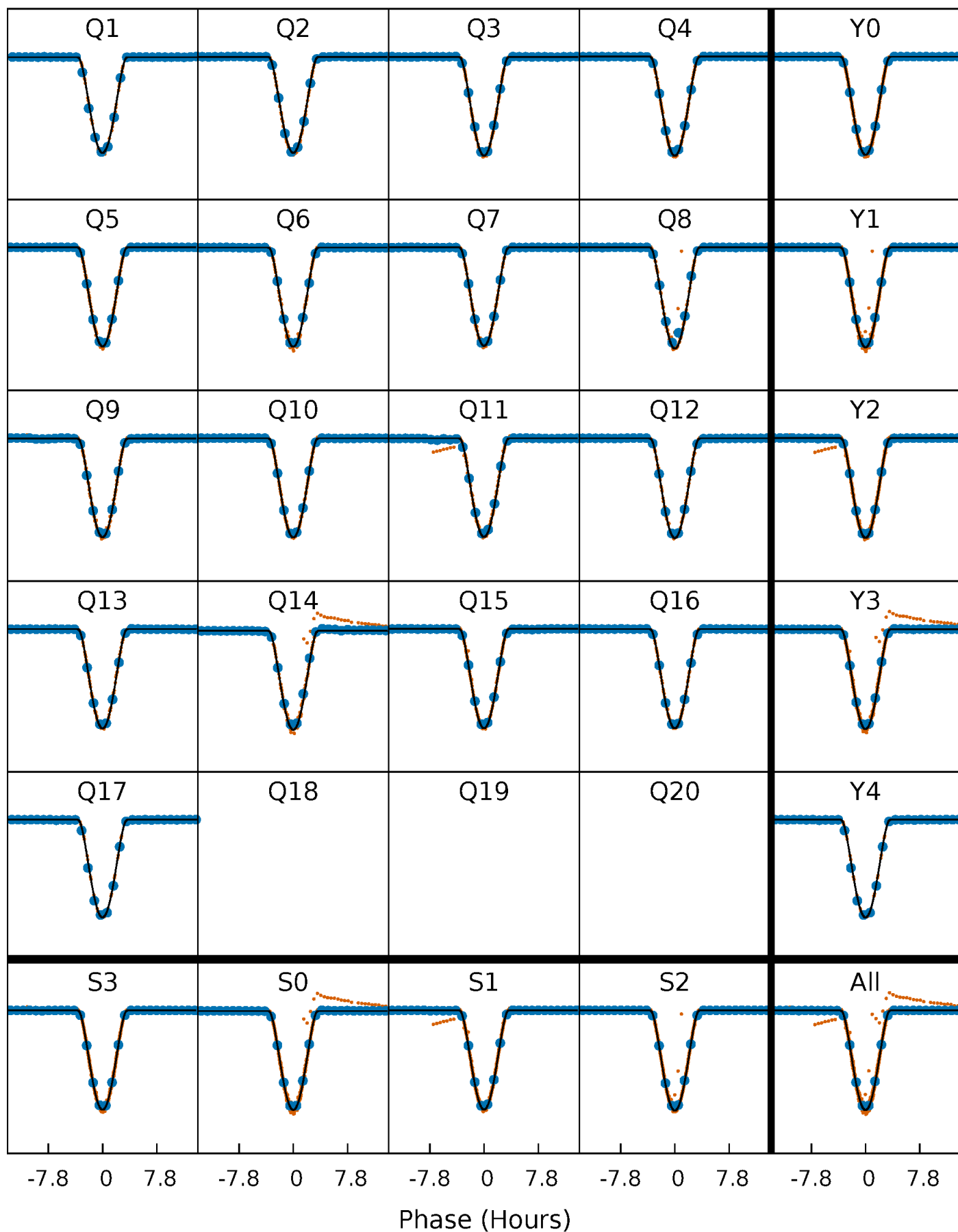
TCE 007336754-01 P= 12.155242 Days  $T_0=133.767142$  (BKJD)





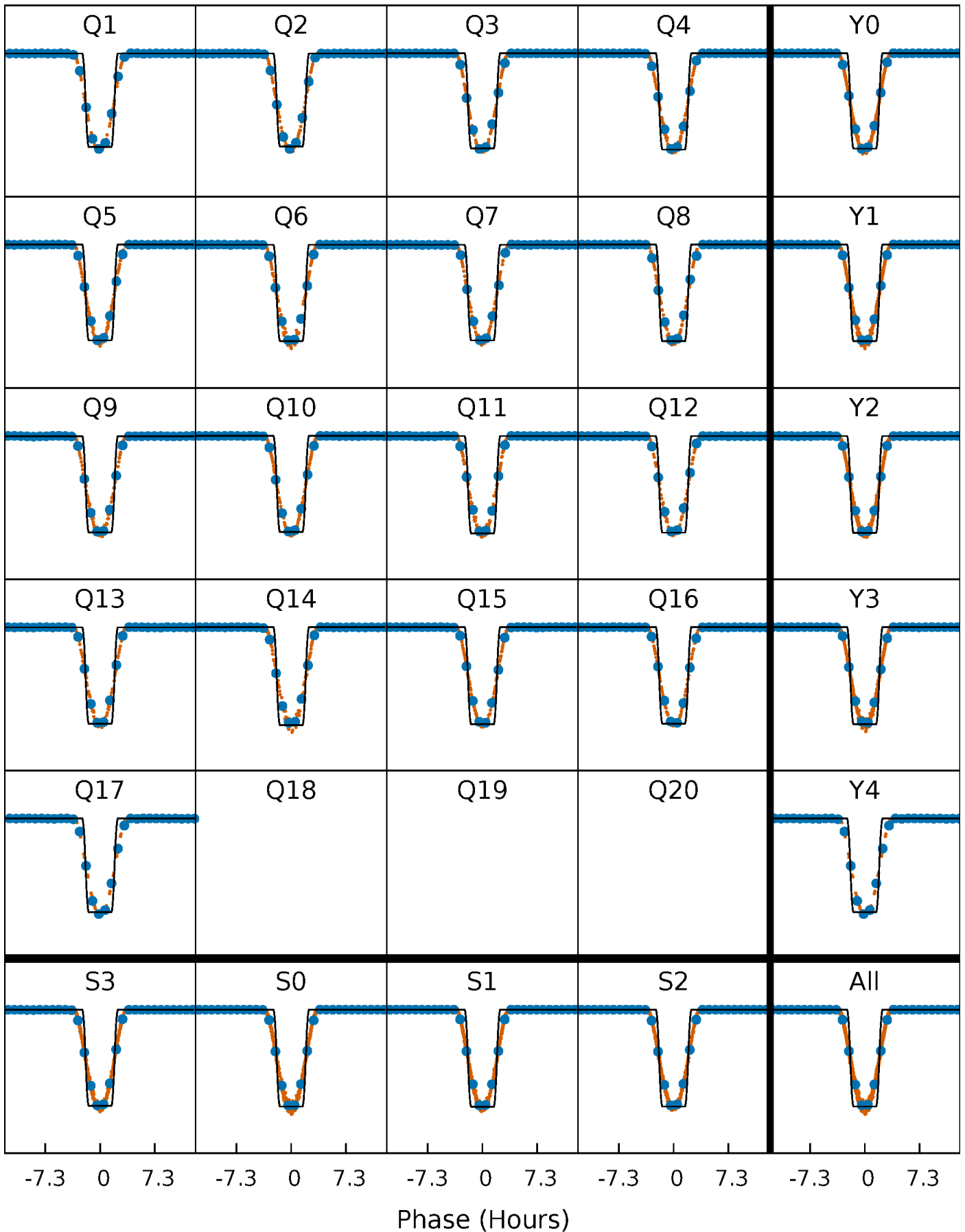
# DV Quarter-Phased Transit Curves

TCE 007336754-01 P= 12.155242 Days  $T_0=133.767142$  (BKJD)



# Alt. Detrend Quarter-Phased Transit Curves

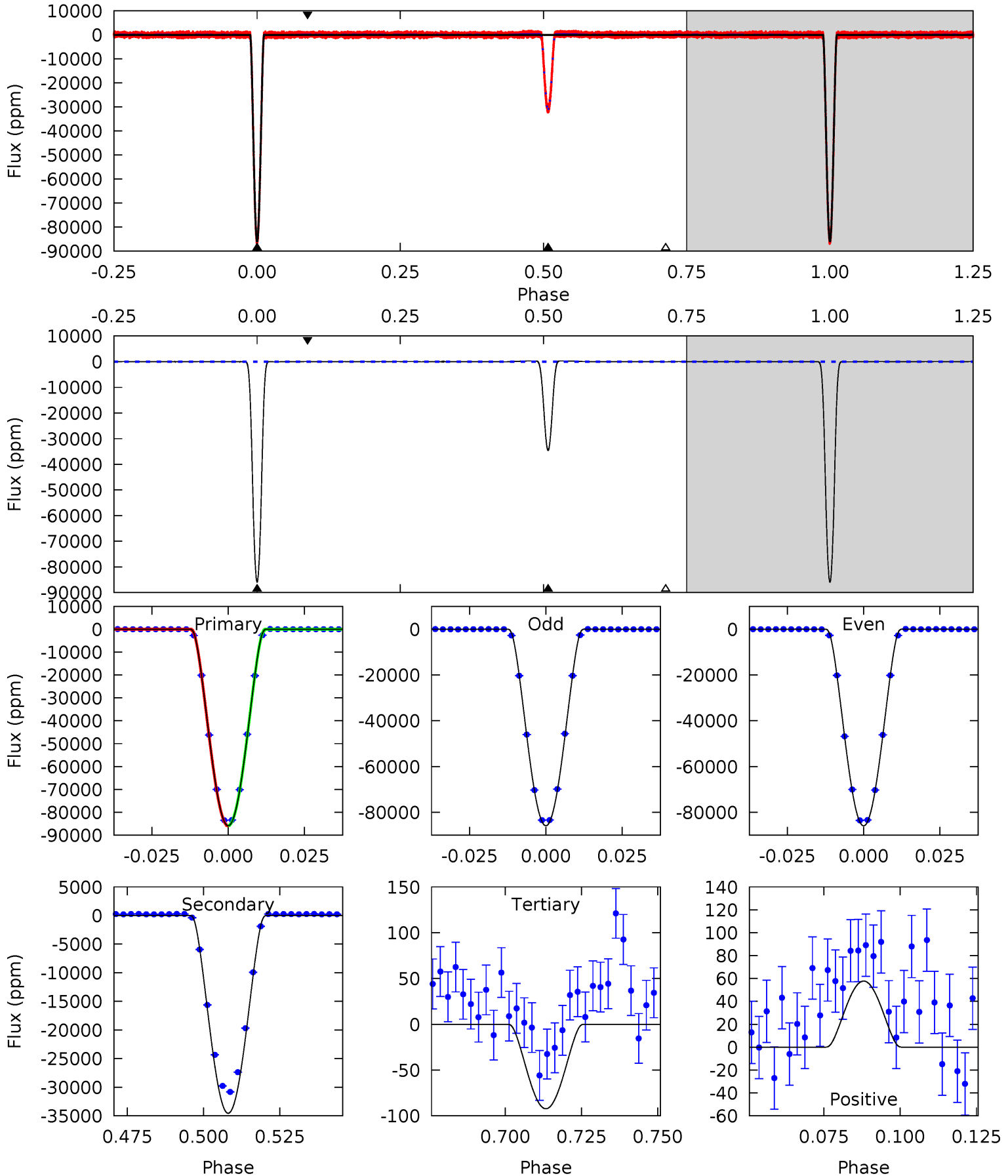
TCE 007336754-01 P= 12.155206 Days  $T_0=133.769270$  (BKJD)



# DV Model-Shift Uniqueness Test

007336754-01, P = 12.155242 Days, E = 121.611900 Days

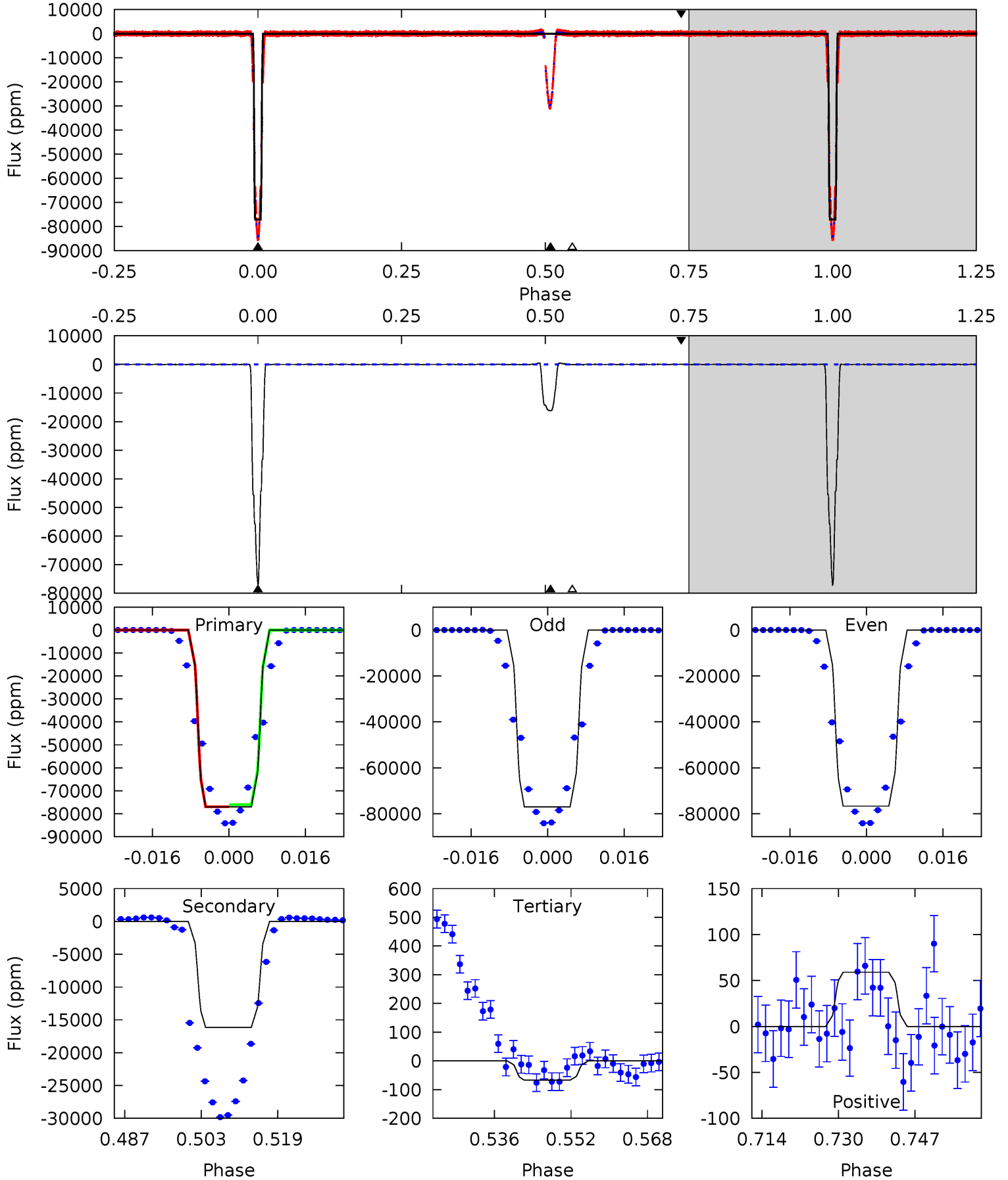
Pri	Sec	Ter	Pos	FA <sub>1</sub>	FA <sub>2</sub>	F <sub>Red</sub>	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8437	3395	9.07	5.67	4.85	2.24	6.56	8428	8431	3386	3389	2.65	0.99	0.00	6.64



# Alt Model-Shift Uniqueness Test

007336754-01, P = 12.155206 Days, E = 121.614064 Days

Pri	Sec	Ter	Pos	FA <sub>1</sub>	FA <sub>2</sub>	F <sub>Red</sub>	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5304	1113	4.62	4.06	4.93	2.40	4.39	5299	5299	1108	1109	10.4	1.00	0.01	27.6



### Stellar Parameters For KIC 007336754

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	$5761^{+155}_{-155}$	$4.413^{+0.144}_{-0.176}$	$-0.400^{+0.300}_{-0.250}$	$0.932^{+0.250}_{-0.154}$	$0.821^{+0.114}_{-0.061}$	$1.427^{+0.959}_{-0.663}$
	+3%/-3%	+3%/-4%	+75%/-62%	+27%/-17%	+14%/-7%	+67%/-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 007336754-01 / KOI 6861.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	$A_{obs}$
DV	$-34560 \pm 10$	$35.79^{+5.57}_{-3.45}$	$1104^{+74}_{-63}$	$4429^{+99}_{-95}$	$145^{+33}_{-32}$
Alt.	$-16161 \pm 15$	$29.62^{+4.33}_{-2.90}$	$1102^{+79}_{-61}$	$4116^{+83}_{-91}$	$98^{+22}_{-21}$

$T_{max}$  = 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  $A_{obs} \gg 1.0$

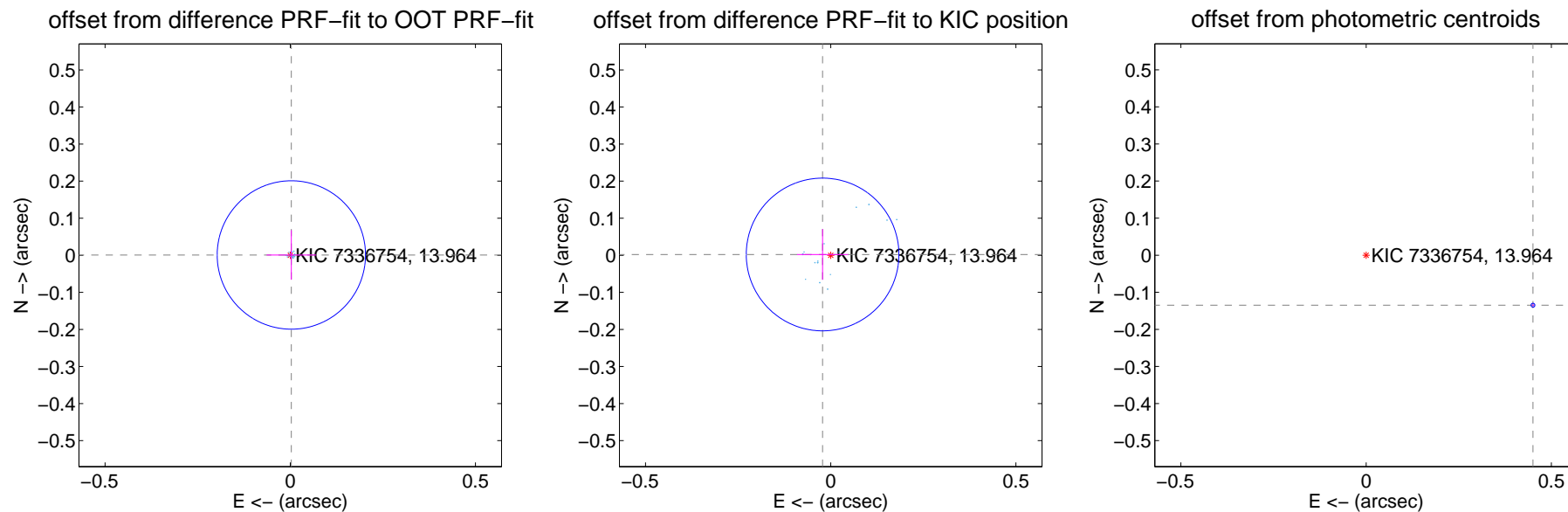
## DV Centroid Data

Supplemental centroid analysis for 007336754-01. Kepler magnitude: 13.96. Transit SNR 3121.07

There are 17 quarters with good PRF difference image offsets

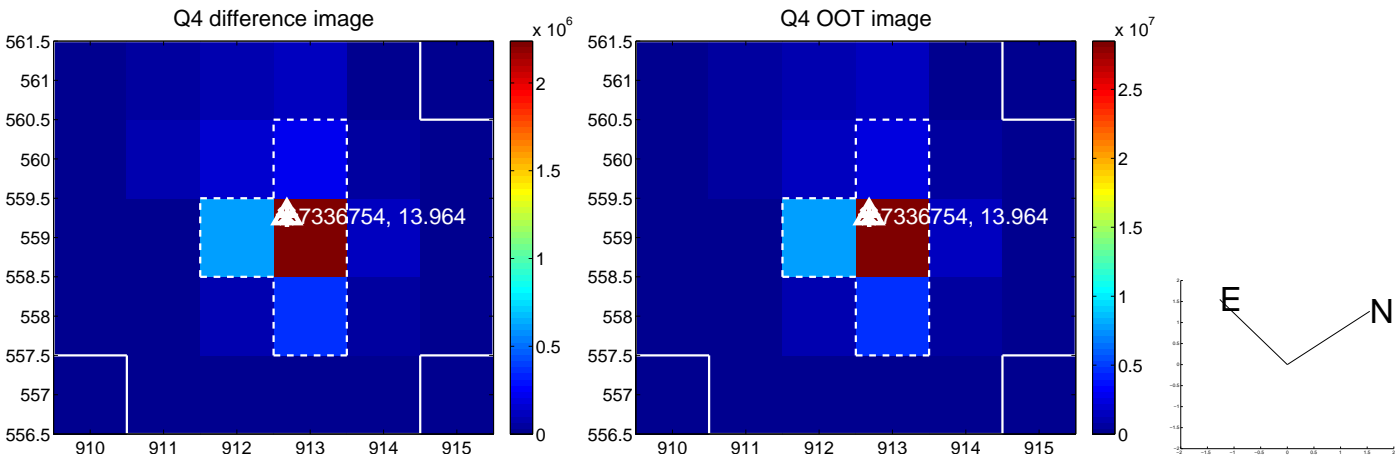
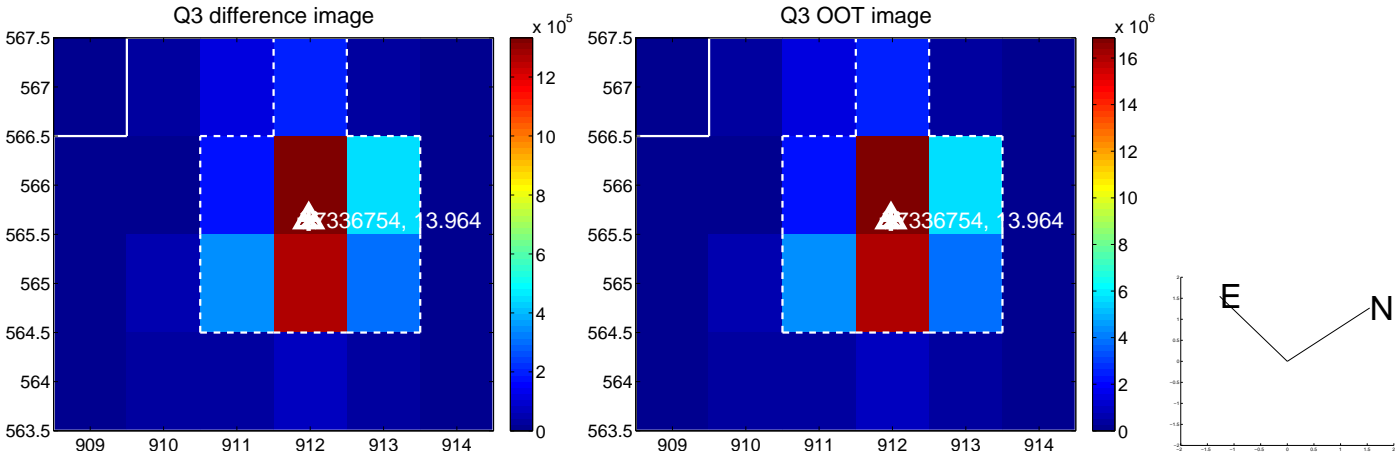
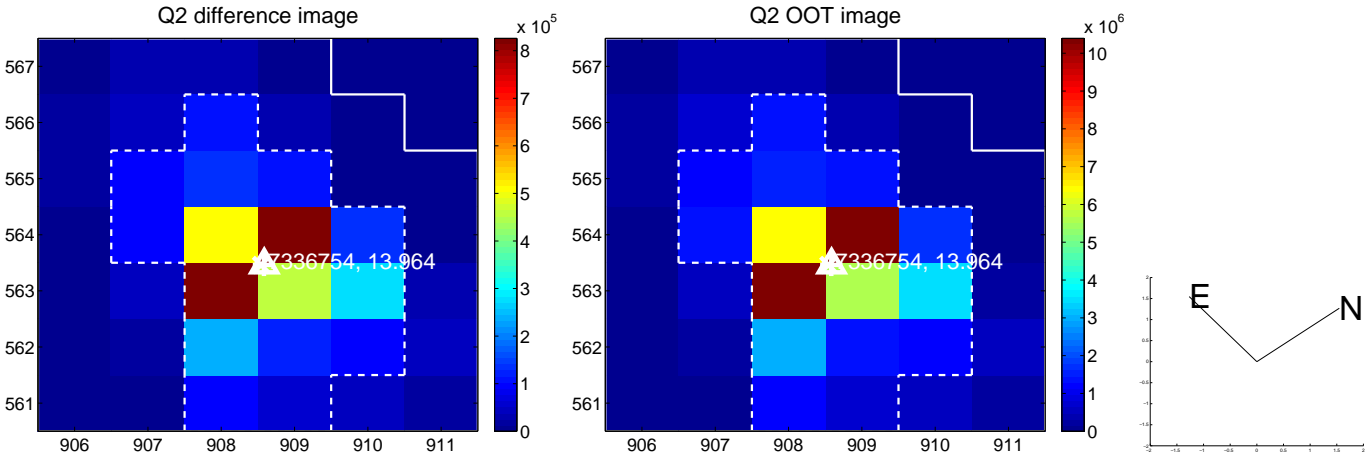
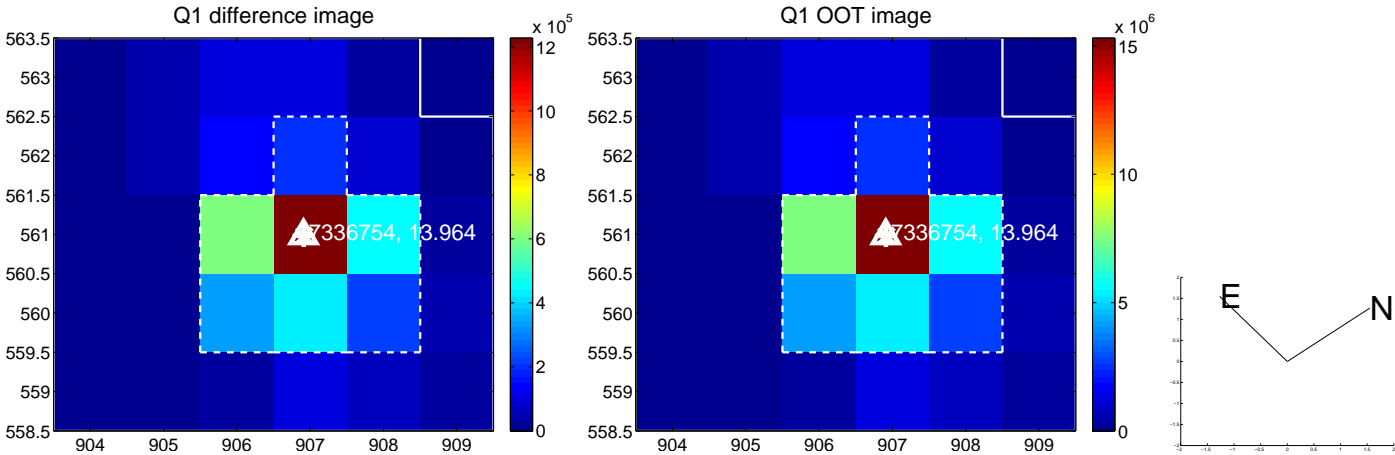
The direct PRF centroid is offset from the target star catalog position by about 0.09 arcsec

	Distance in arcsec	Distance / $\sigma$	$\Delta$ RA	$\Delta$ Dec
PRF-fit source offset from OOT	$0.003 \pm 0.067$	0.05	$-0.003 \pm 0.067$	$0.001 \pm 0.067$
PRF-fit source offset from KIC position	$0.022 \pm 0.069$	0.32	$0.022 \pm 0.069$	$0.002 \pm 0.068$
photometric centroid source offset	$0.47 \pm 0.00$	270.96	$-0.45 \pm 0.00$	$-0.13 \pm 0.00$

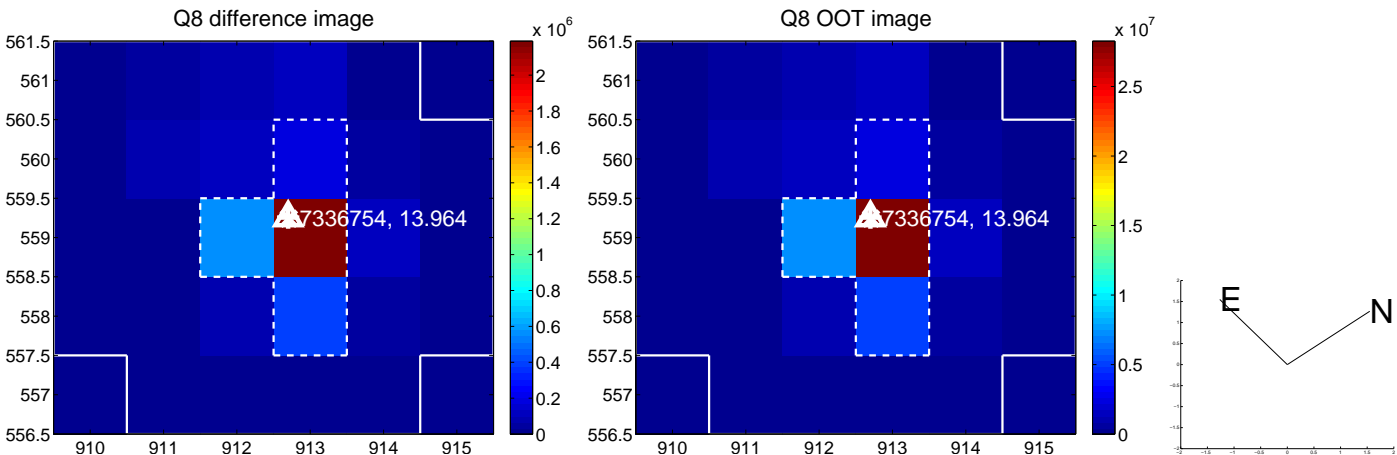
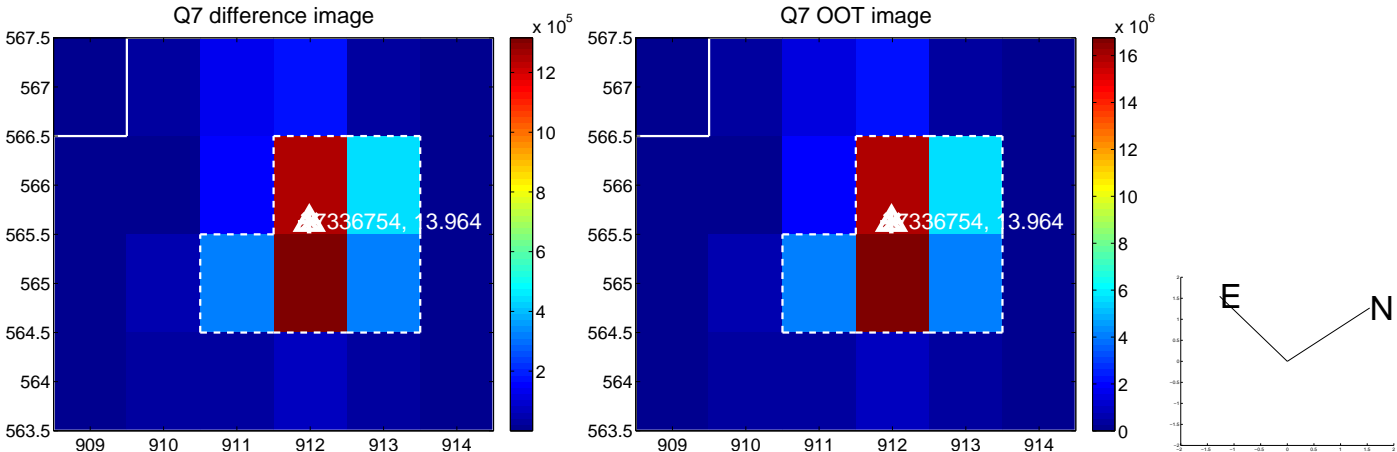
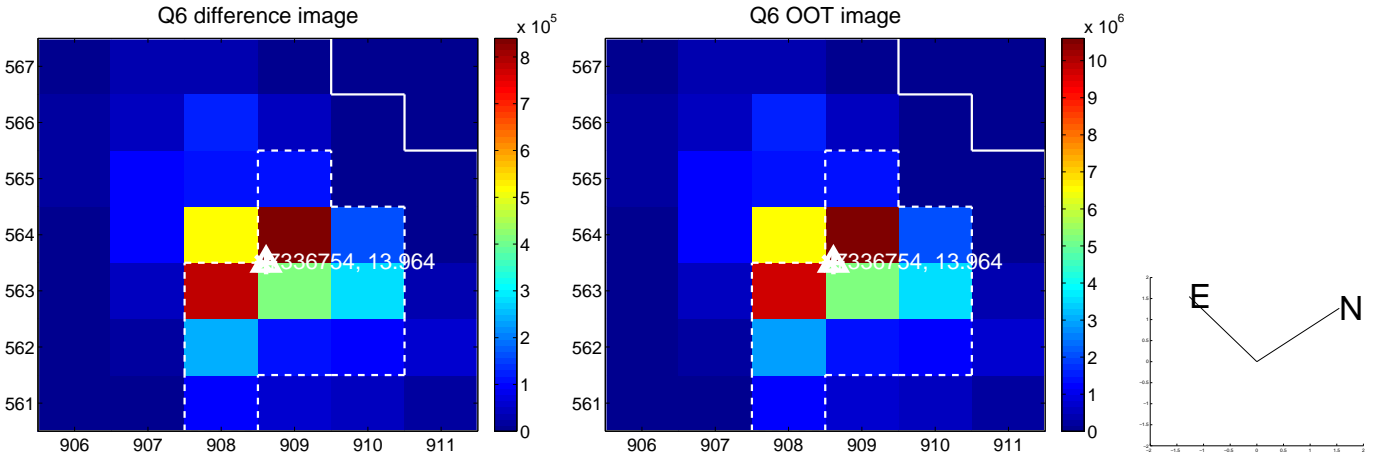
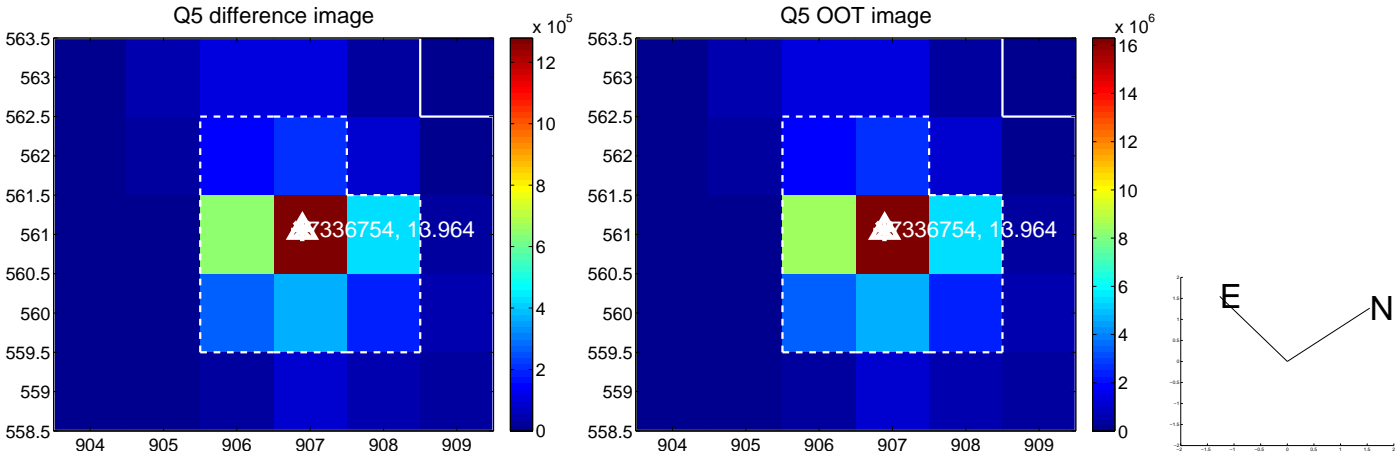


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- $\sigma$  uncertainty. Blue circle: three-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

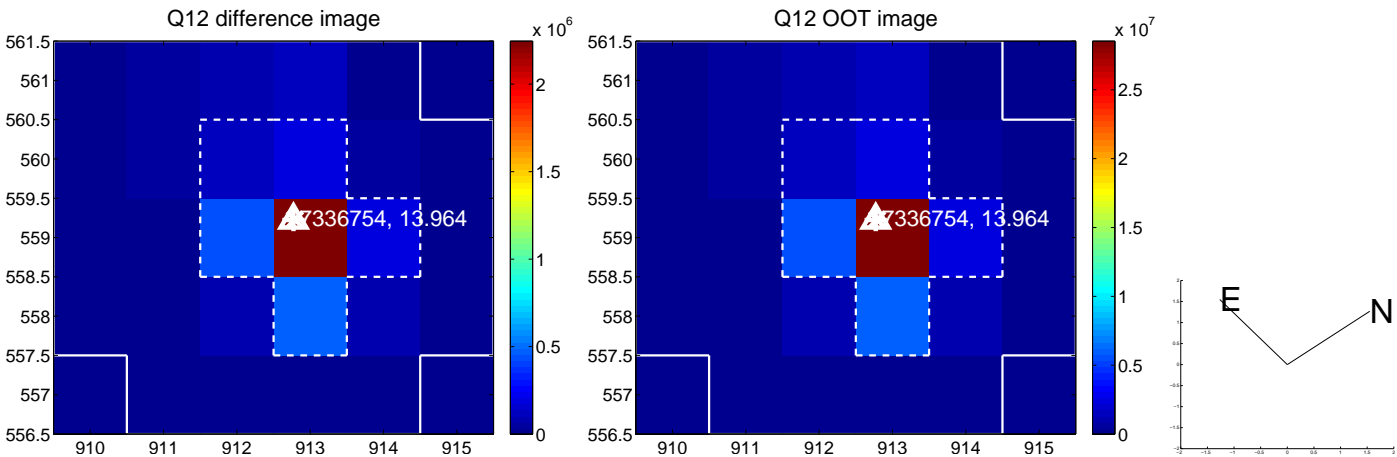
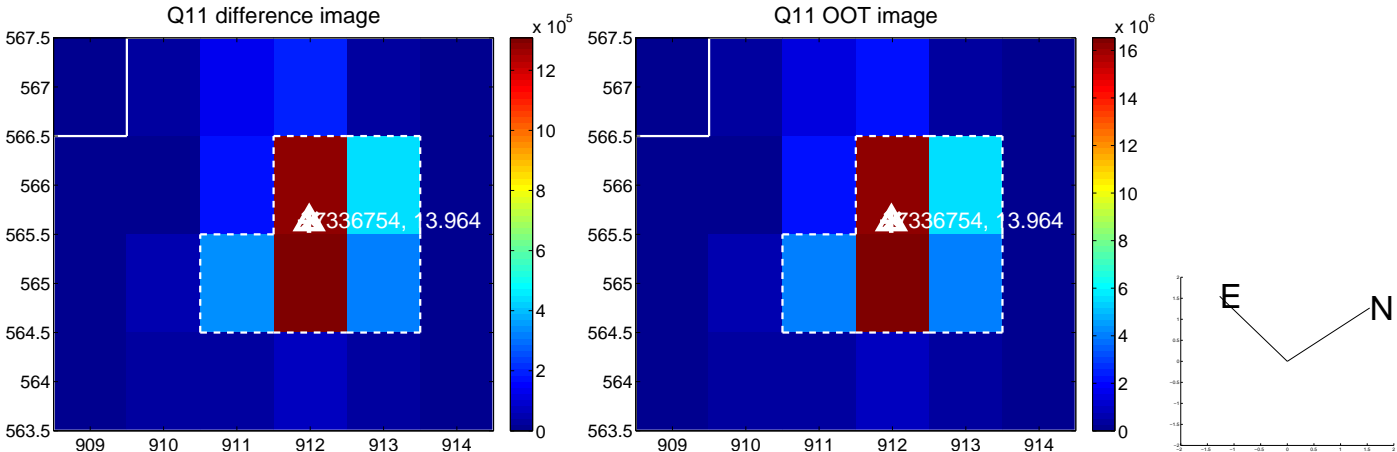
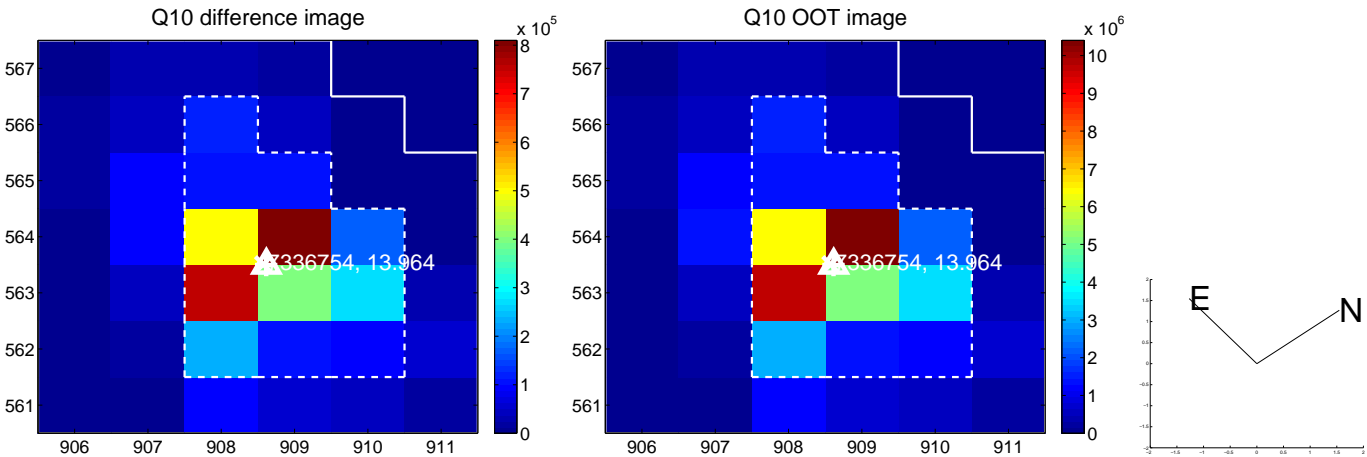
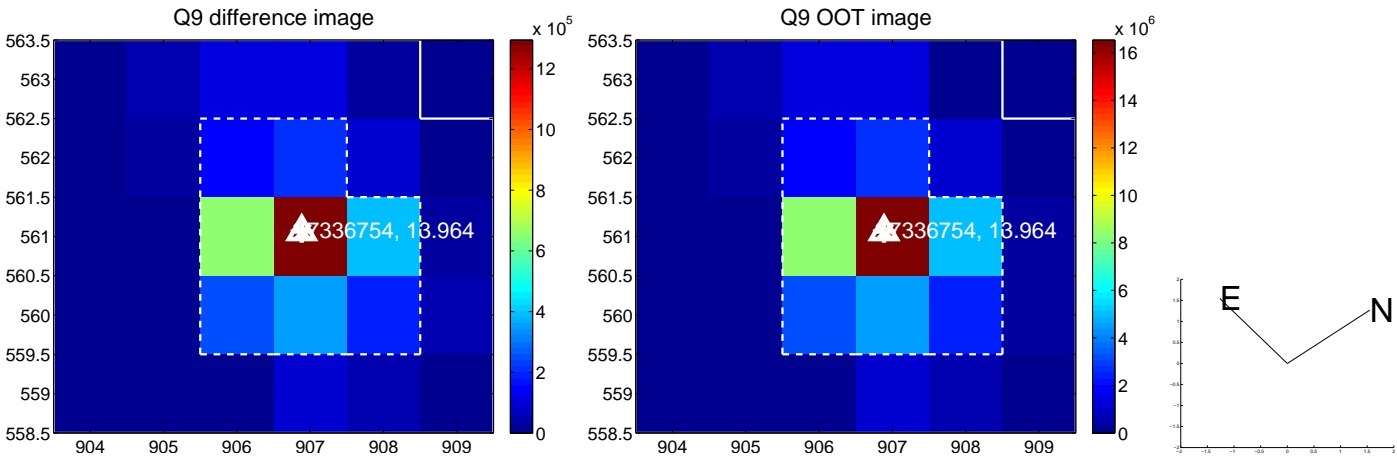


white  $\times$ : KIC target position; +: OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.

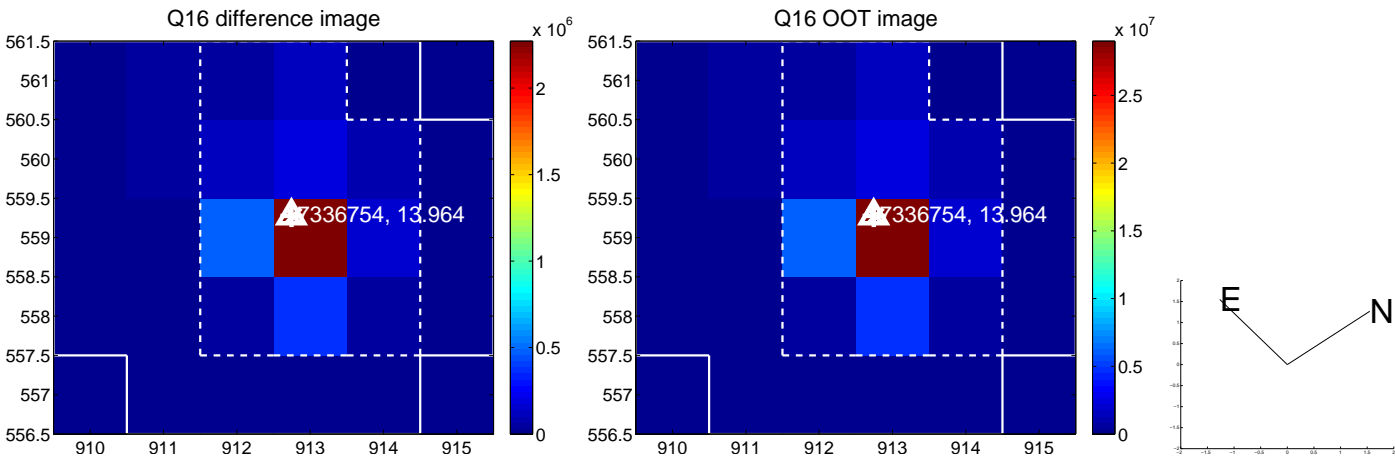
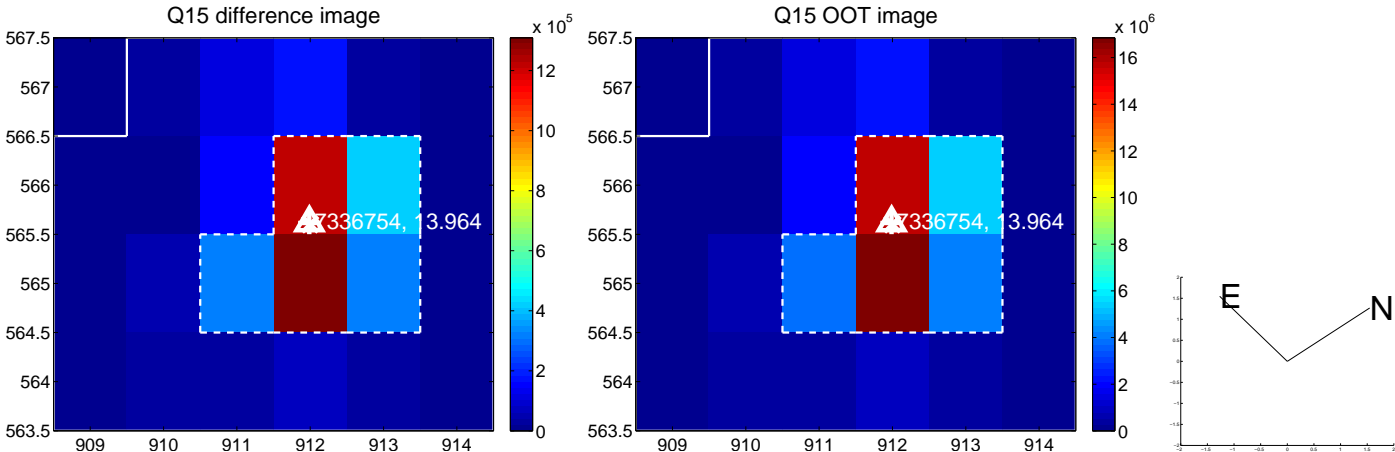
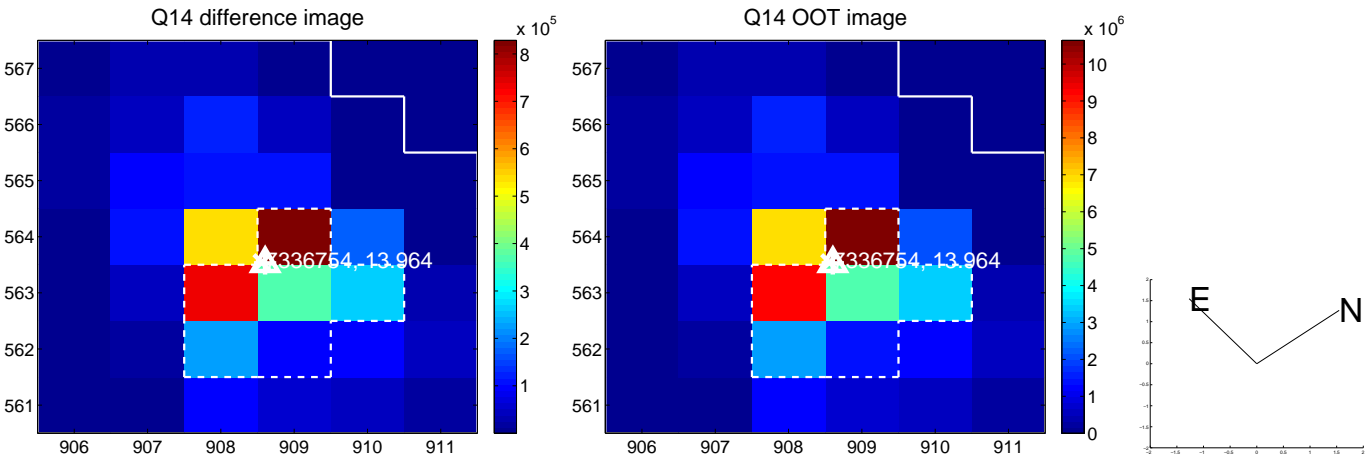
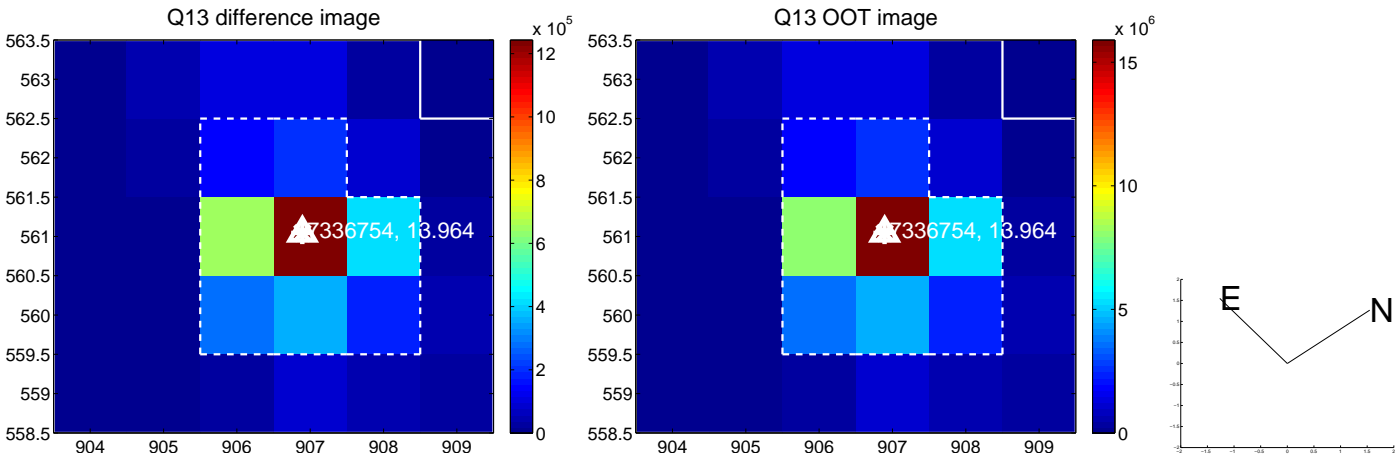




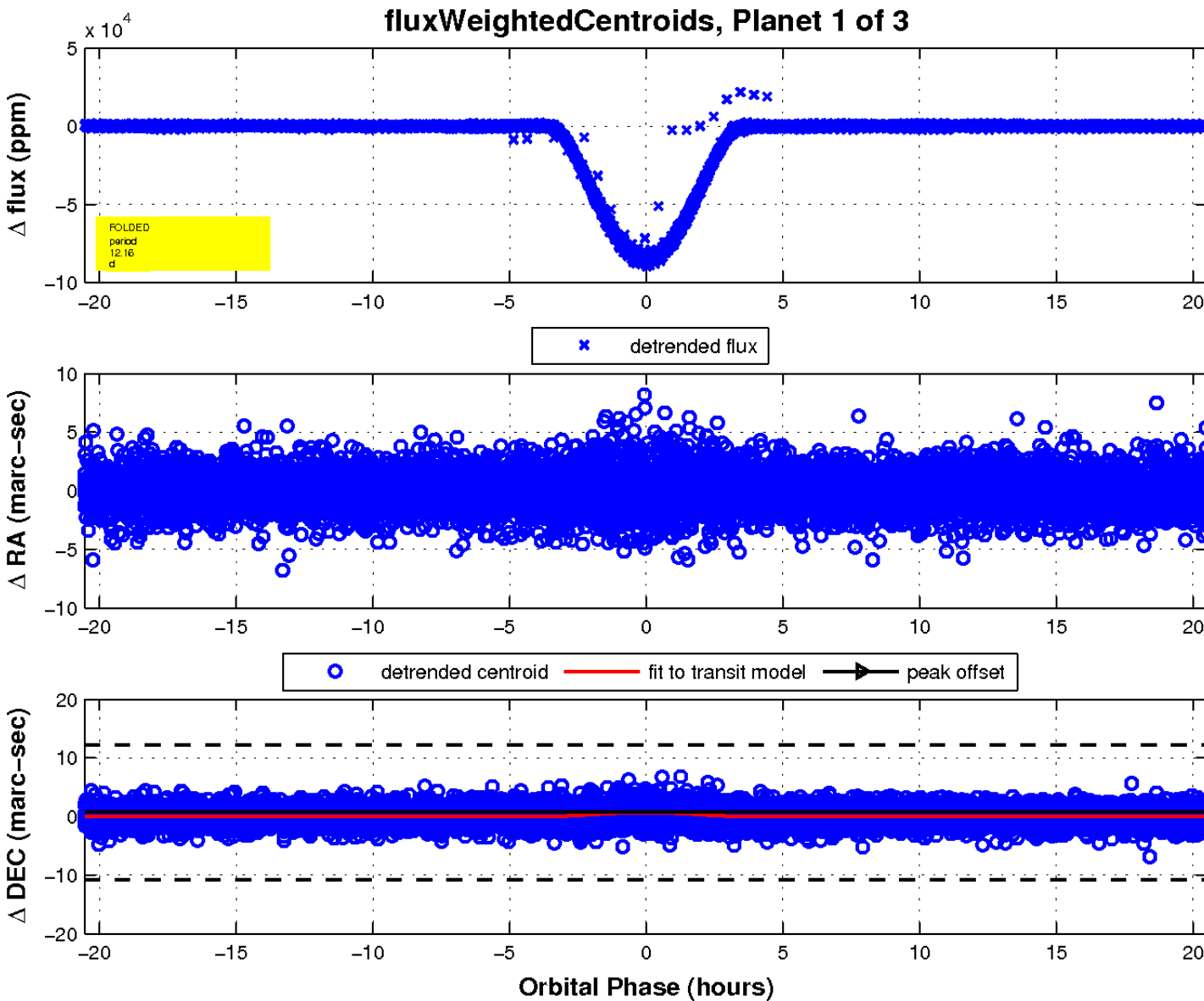
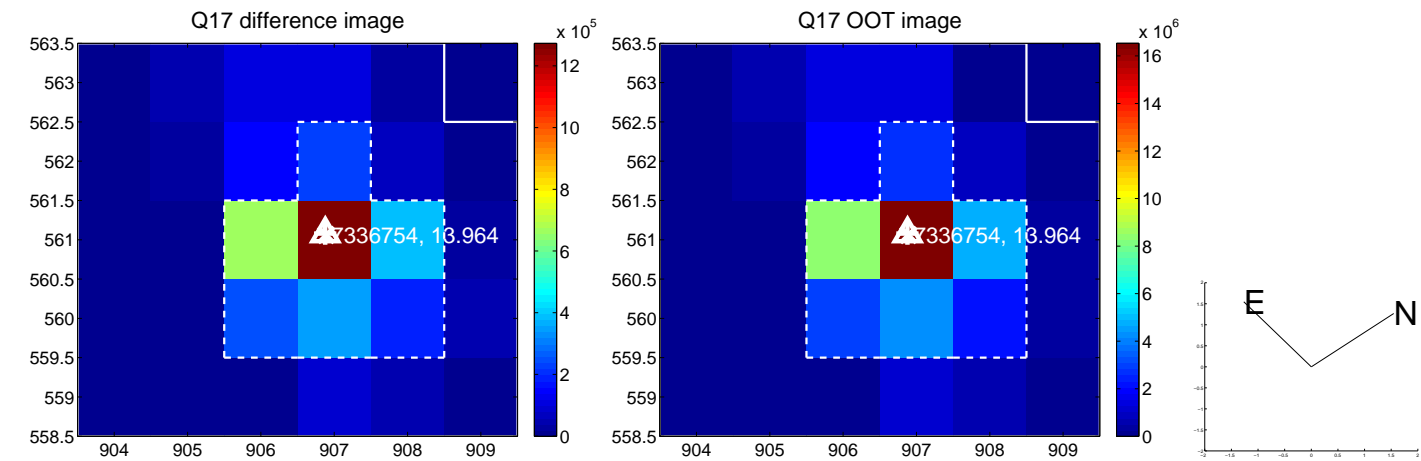
white  $\times$ : KIC target position;  $+$ : OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.



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

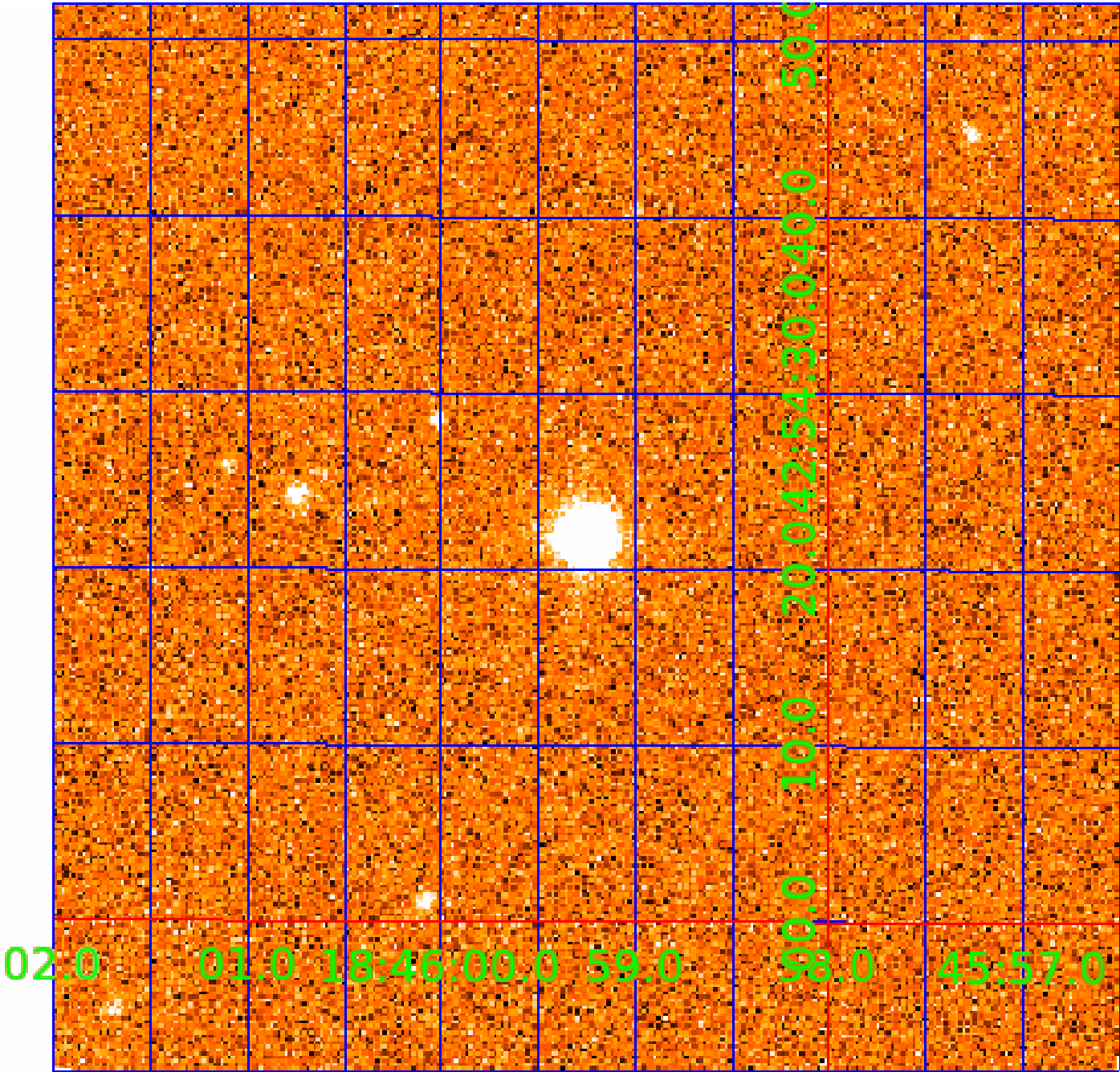


white  $\times$ : KIC target position;  $+$ : OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.



UKIRT Image

Declination



# KIC 007336754

## 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)	$R_p$ ( $R_{\oplus}$ )	$S_p$ ( $S_{\oplus}$ )
007336754-01	OBS	6861.01	12.155242	133.767142	85847.3	6.846	3651.5	3121.1	0.93	5761	35.59	91.37
007336754-02	OBS	No	12.155245	139.941446	31629.9	6.861	1378.8	1355.0	0.93	5761	23.09	91.37
007336754-03	OBS	No	441.221861	462.422281	1809.3	6.000	21.6	-1.0	0.93	5761	3.95	0.76

## Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007336754-01	OBS	FP	0.00	0	1	0	0	MOD_SEC_DV—MOD_SEC_ALT—DEEP_V_SHAPED—HAS_SEC_TCE
007336754-02	OBS	FP	0.00	1	1	0	0	IS_SEC_TCE
007336754-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—INCONSISTENT_TRANS—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](http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col) for comment definitions.

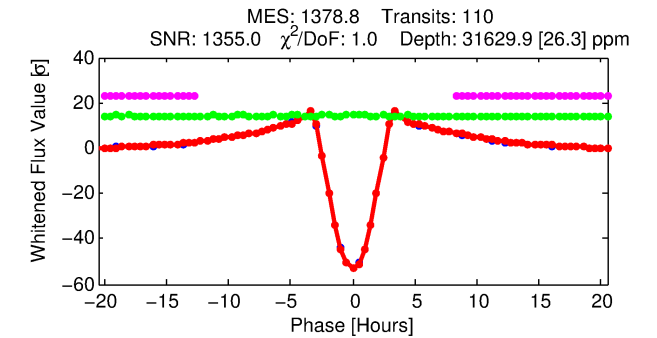
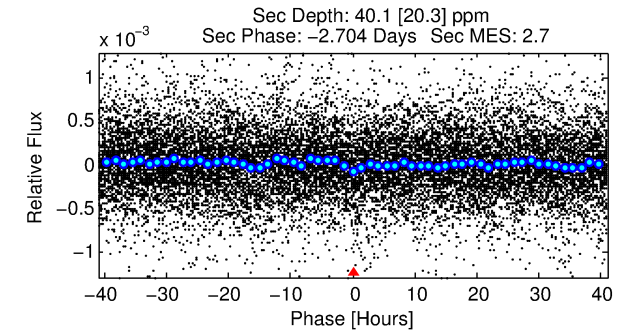
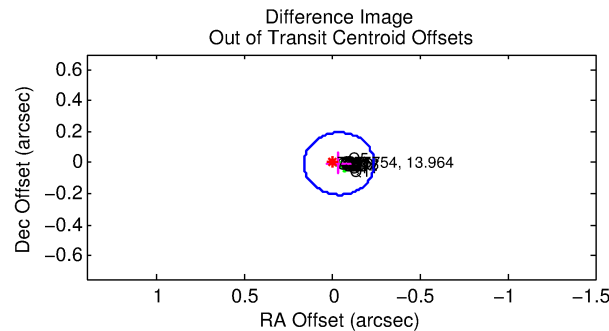
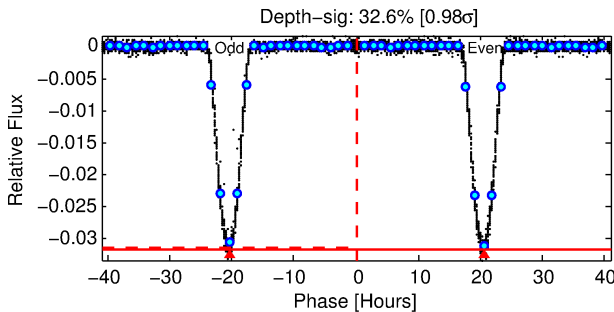
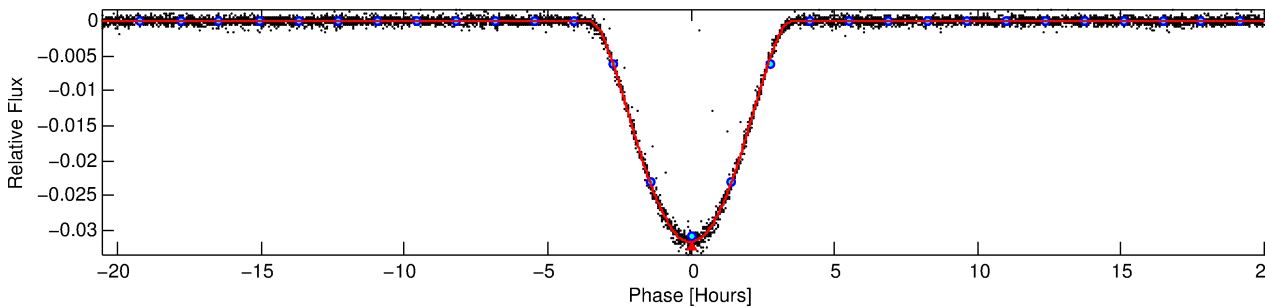
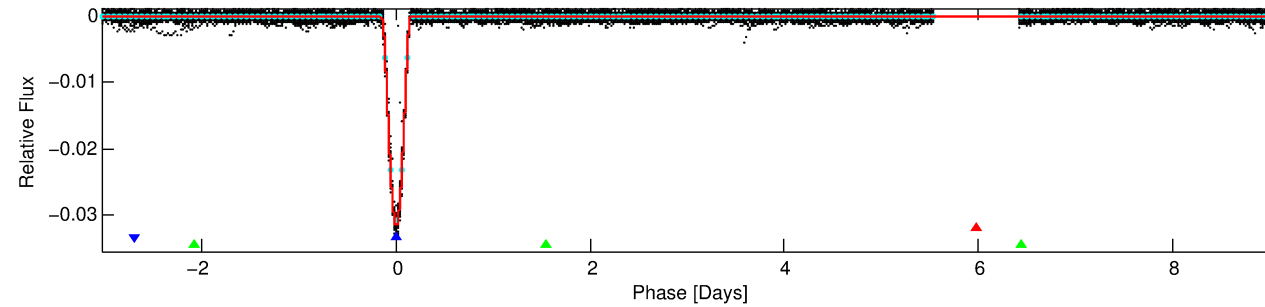
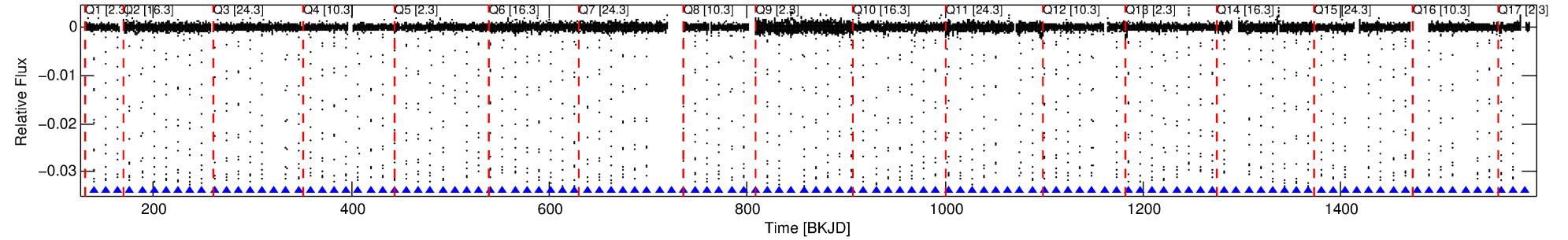
## Ephemeris Match Information For 007336754-02

No Significant Match Found

# DV One-Page Summary

KIC: 7336754 Candidate: 2 of 3 Period: 12.155 d  
KOI: K06861 Corr: No Ephemeris Match

Kp: 13.96 R\*: 0.93 Rs Teff: 5761.0 K Logg: 4.41 Fe/H: -0.400



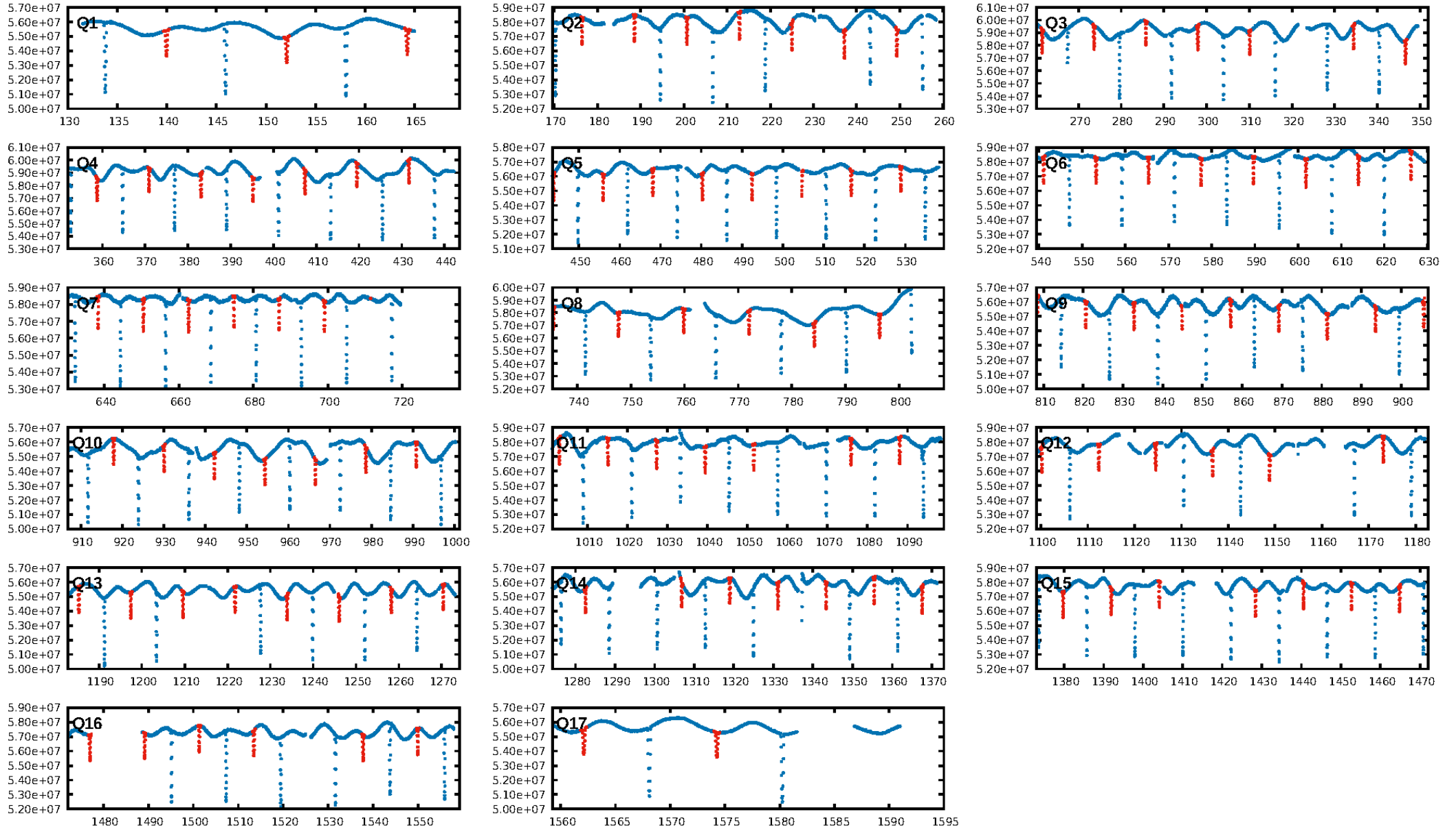
## DV Fit Results:

Period = 12.15524 [0.00000] d  
Epoch = 139.9414 [0.0001] BKJD  
Rp/R\* = 0.2271 [0.0024]  
a/R\* = 11.11 [0.02]  
b = 0.92 [0.00]  
Seff = 91.37 [31.19]  
Teq = 788 [67] K  
Rp = 23.09 [6.20] Re  
a = 0.0969 [0.0217] AU  
Ag = 0.39 [0.23] [-2.62σ]  
Teffp = 962 [125] K [1.23σ]

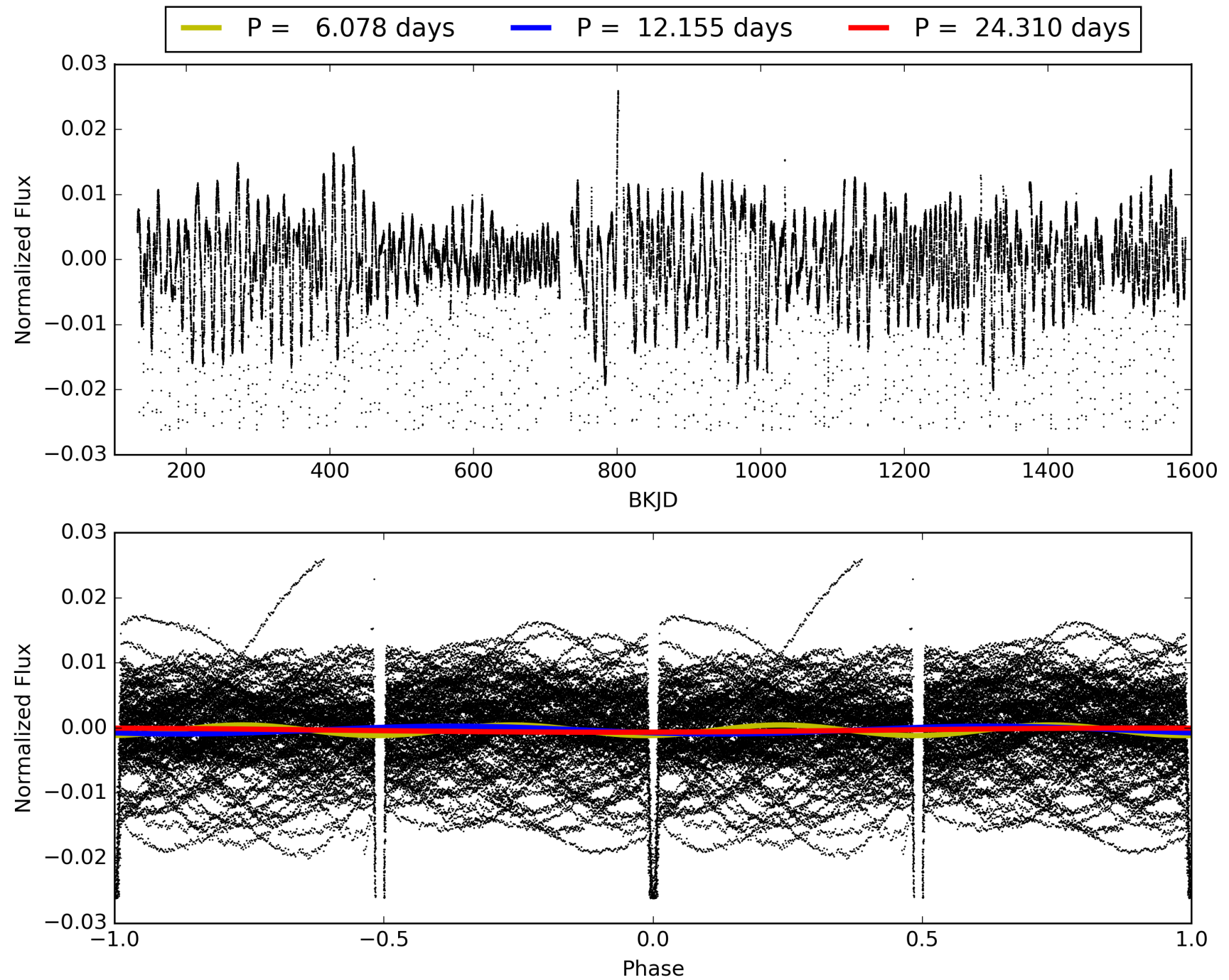
## DV Diagnostic Results:

ShortPeriod-sig: 0.0% [0.00σ]  
LongPeriod-sig: 100.0% [1129.78σ]  
ModelChiSquare2-sig: 0.0%  
ModelChiSquareGof-sig: 0.0%  
Bootstrap-pfa: N/A  
RollingBand-fgt: 1.00 [105/105]  
GhostDiagnostic-chr: 1.819  
Centroid-sig: N/A  
Centroid-so: 0.475 arcsec [102.44σ]  
OotOffset-rm: 0.039 arcsec [0.58σ]  
KicOffset-rm: 0.039 arcsec [0.56σ]  
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]

# TCE 007336754-02, PDC Light Curves



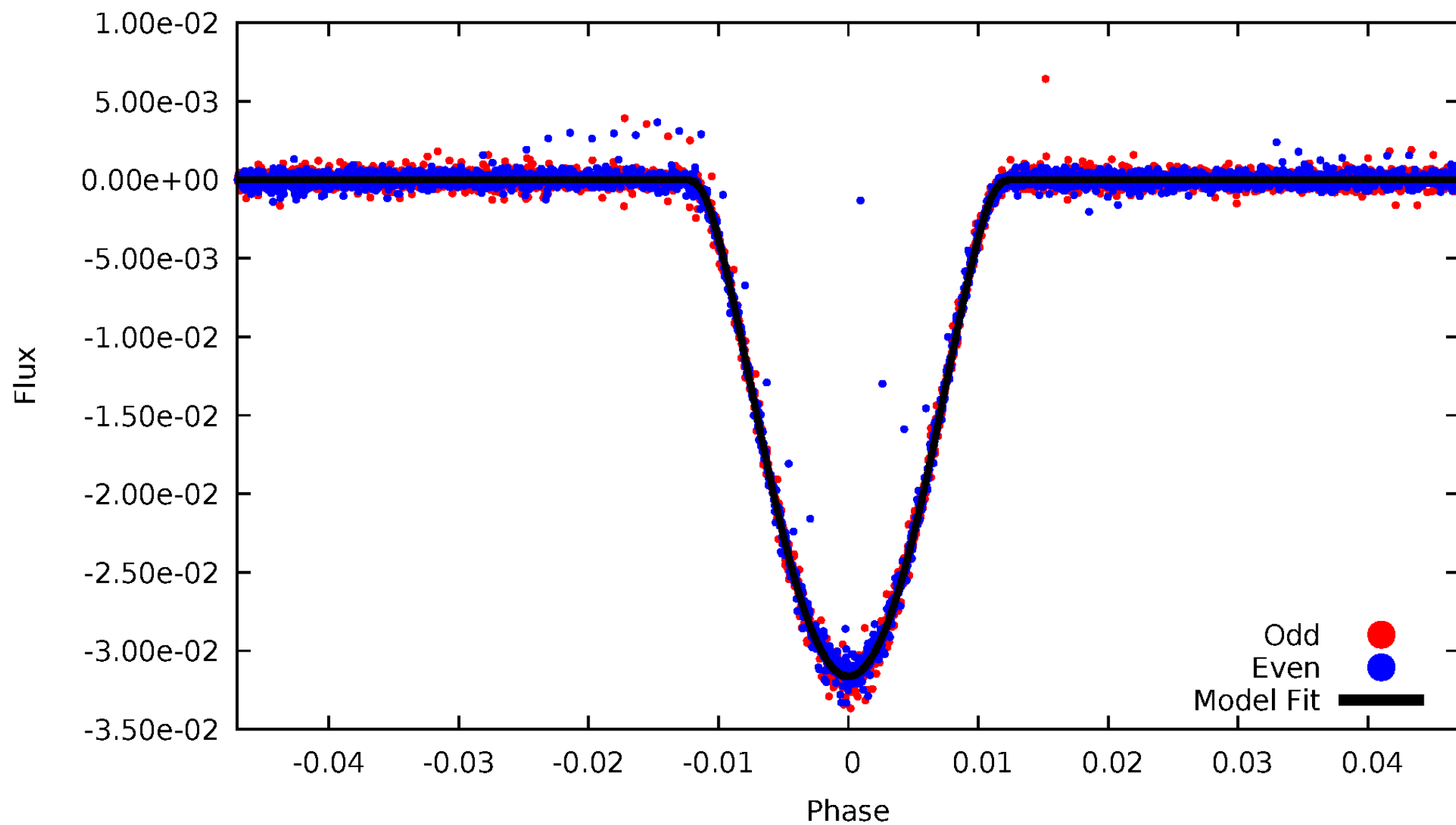
# TCE 007336754-02





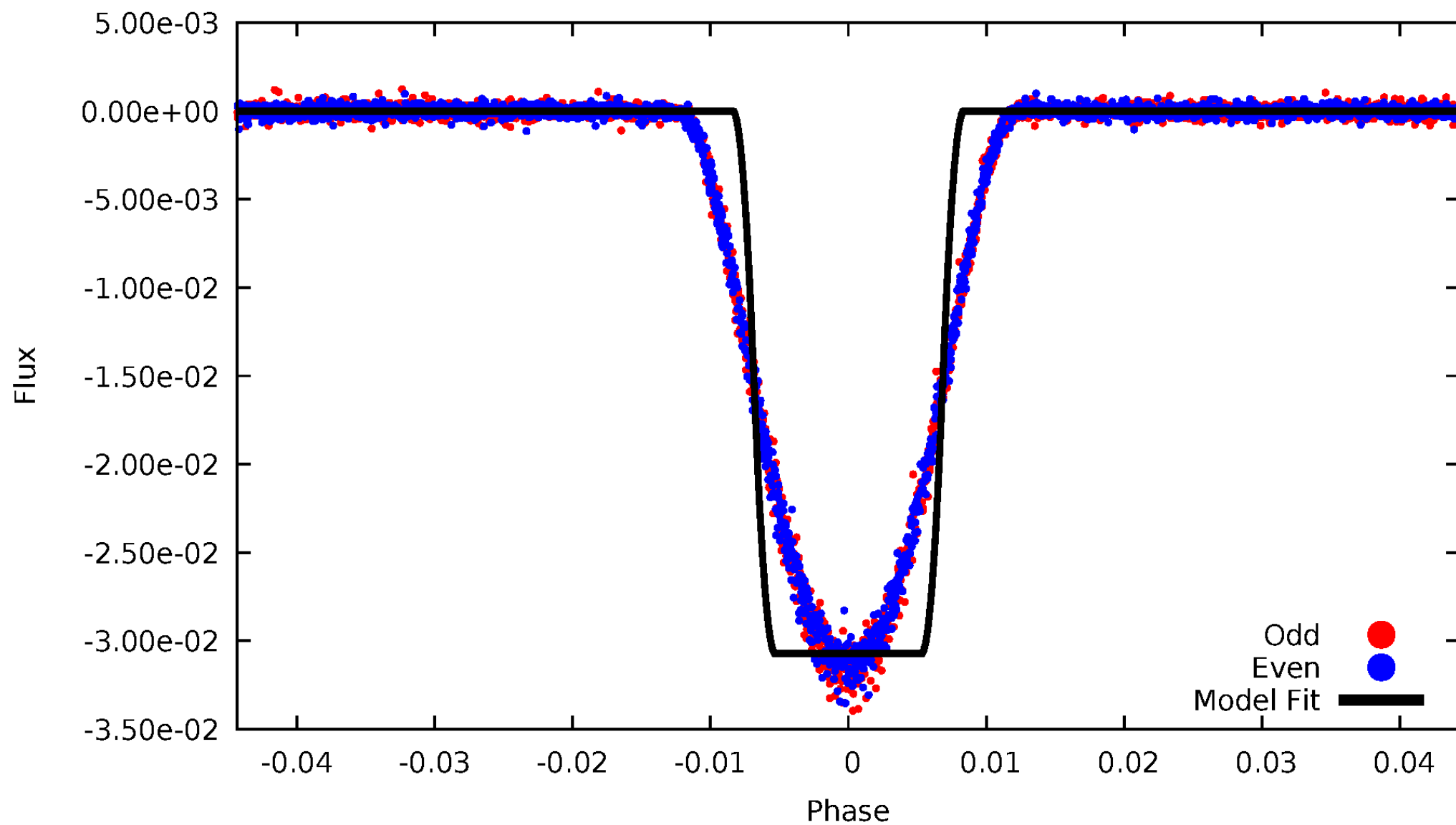
# DV Odd/Even

TCE 007336754-02



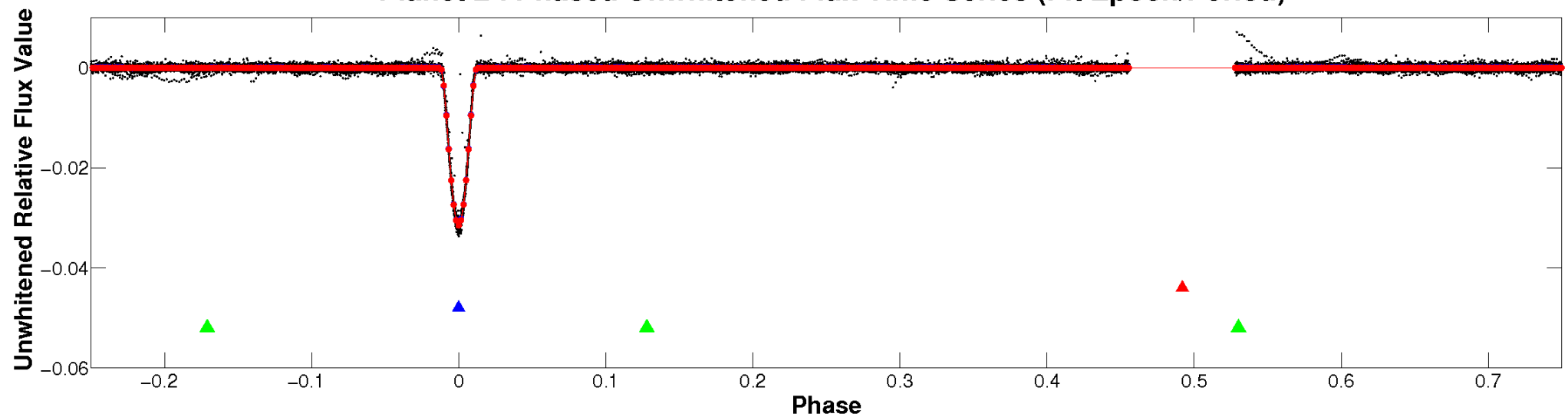
# ALT Odd/Even

TCE 007336754-02

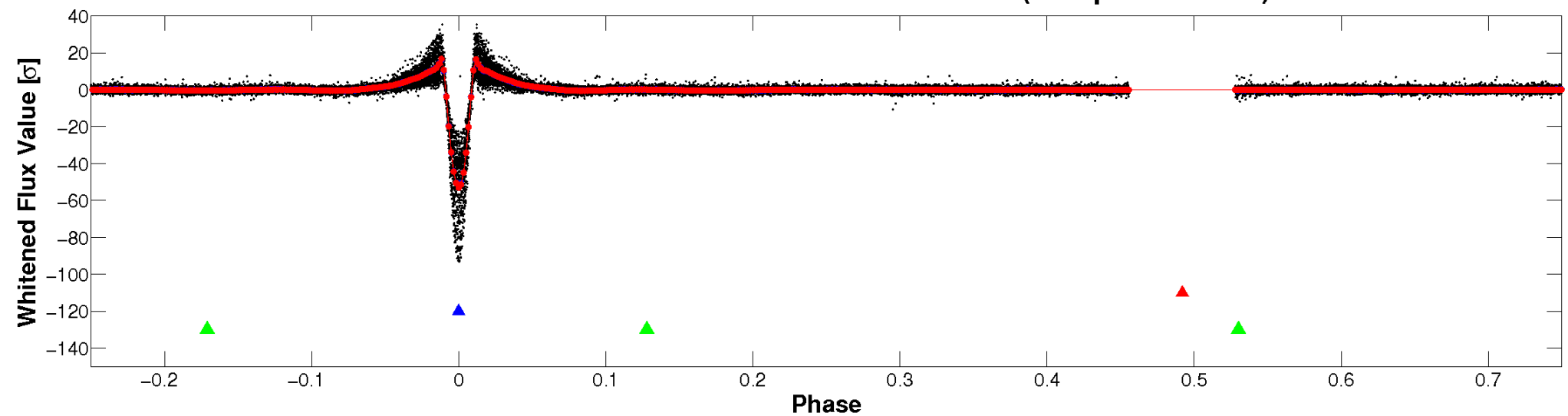


# Non-Whitened Vs. Whitened Light Curve

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

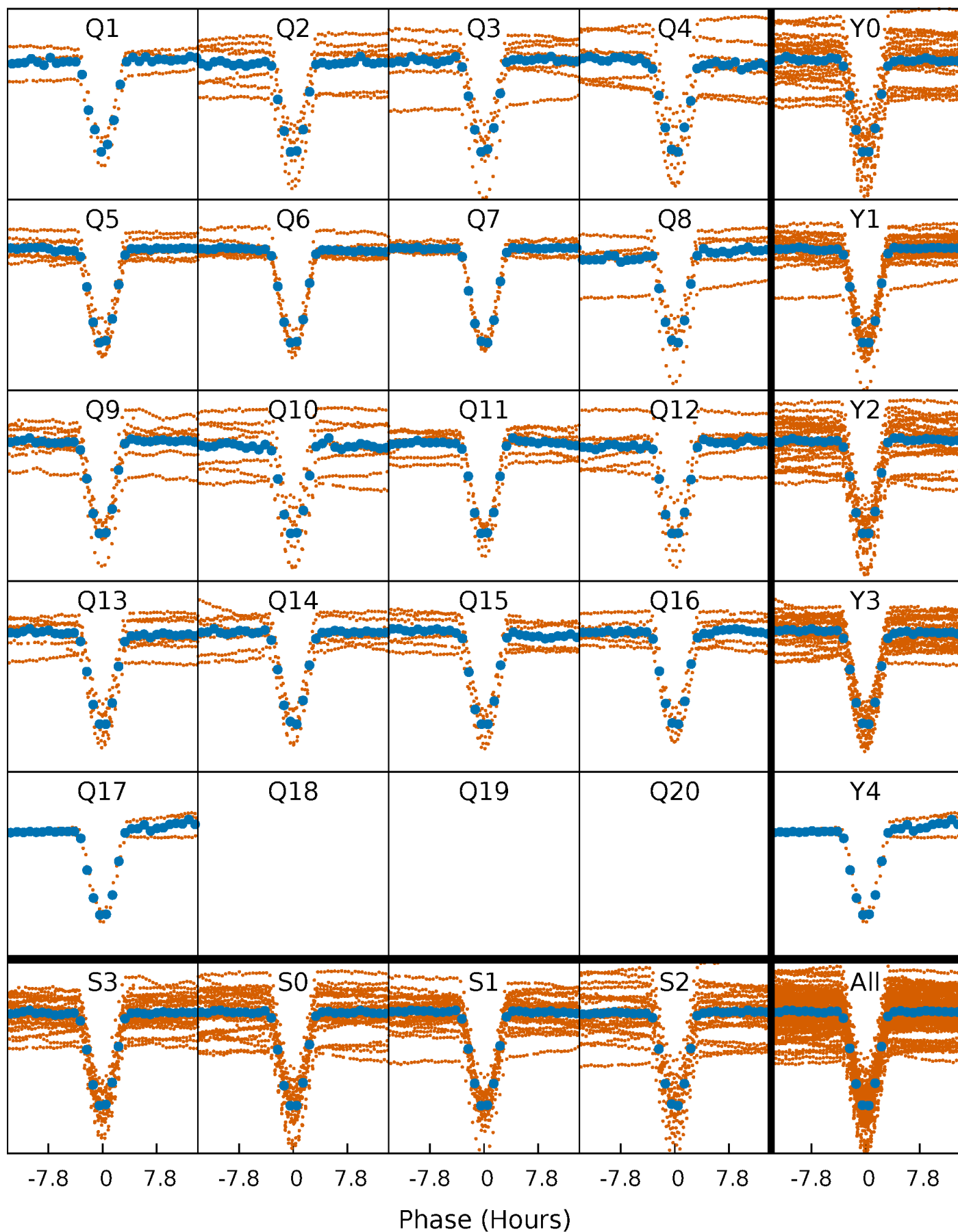


## Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



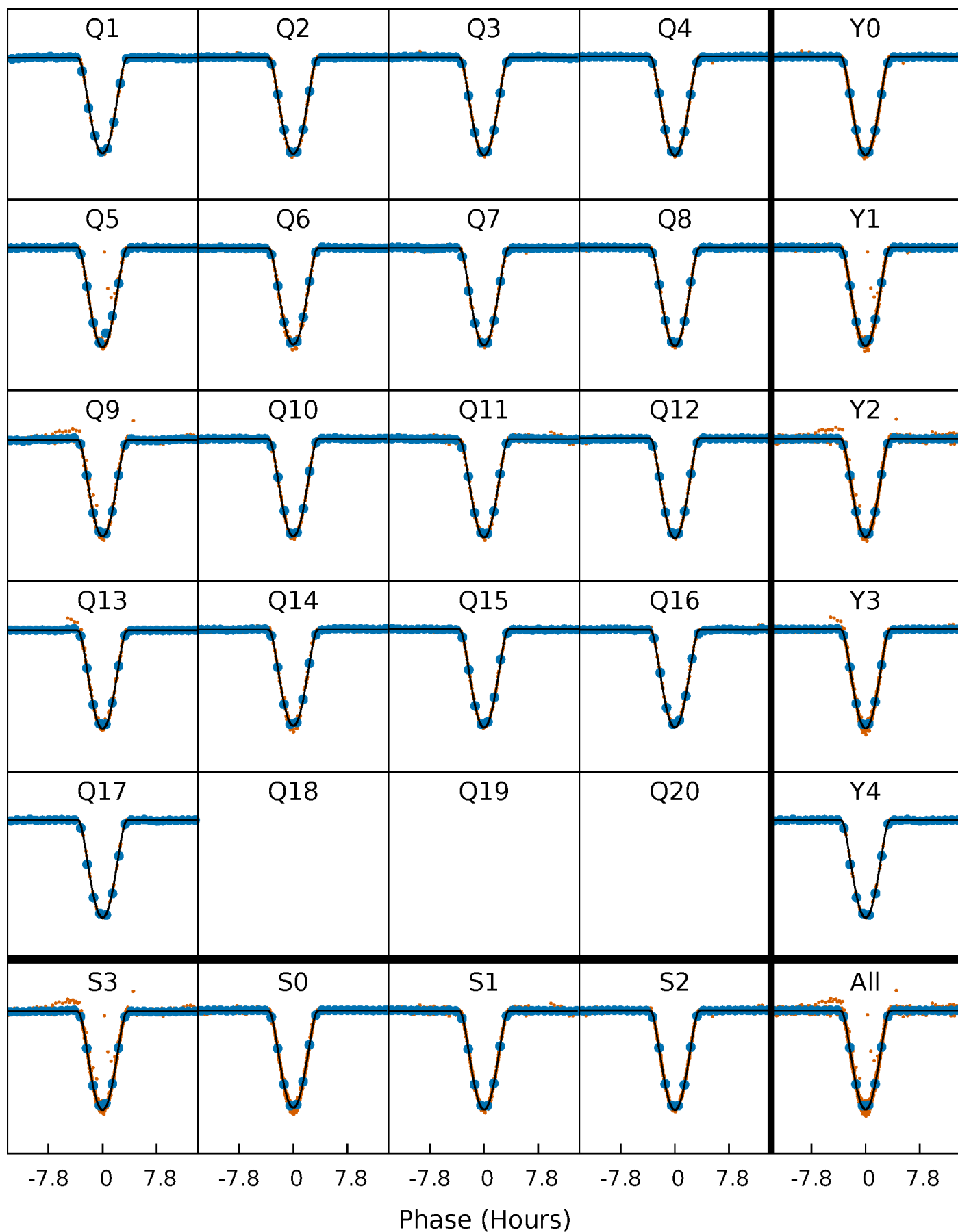
# PDC Quarter-Phased Transit Curves

TCE 007336754-02 P= 12.155245 Days  $T_0=139.941446$  (BKJD)



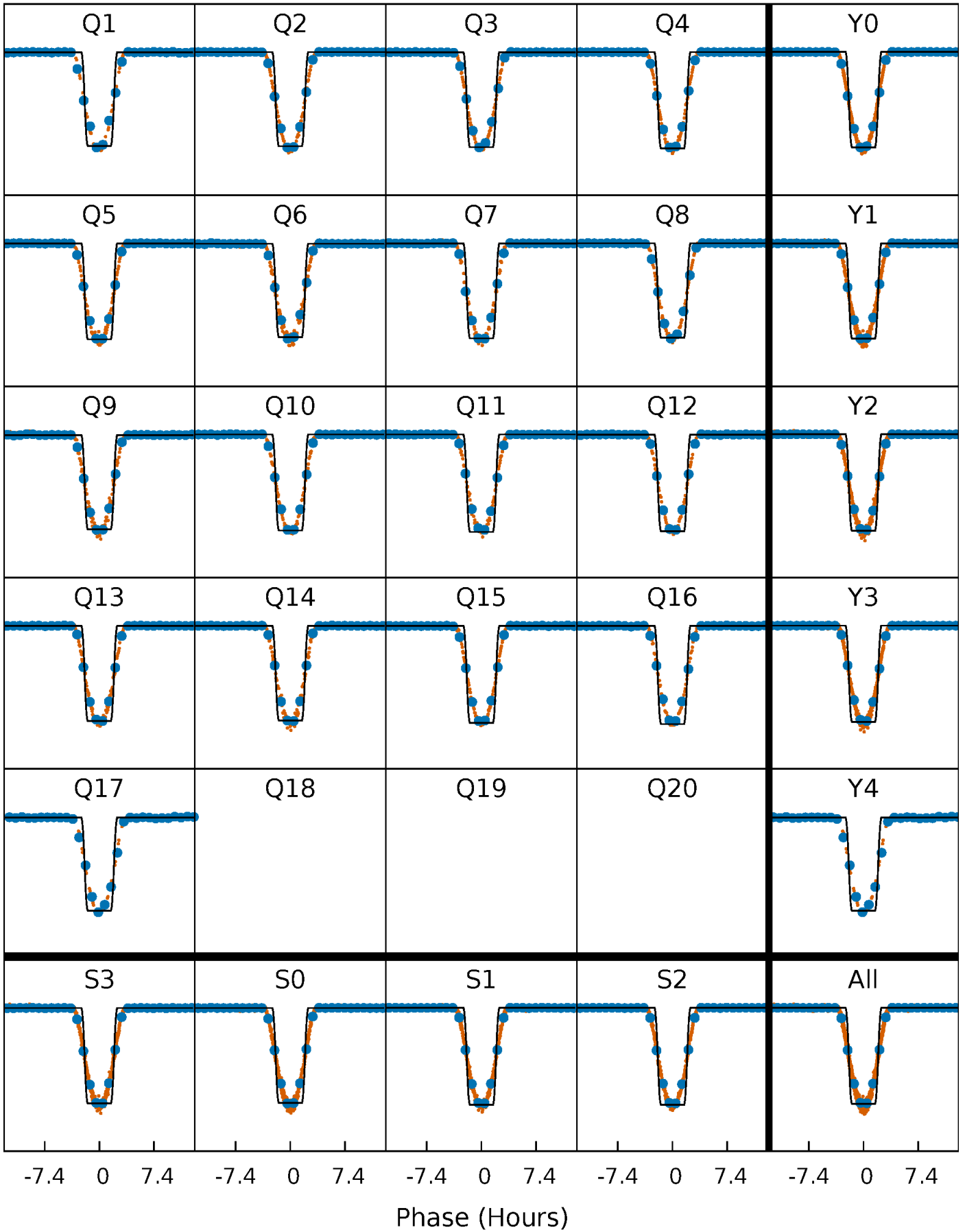
# DV Quarter-Phased Transit Curves

TCE 007336754-02 P= 12.155245 Days  $T_0=139.941446$  (BKJD)



# Alt. Detrend Quarter-Phased Transit Curves

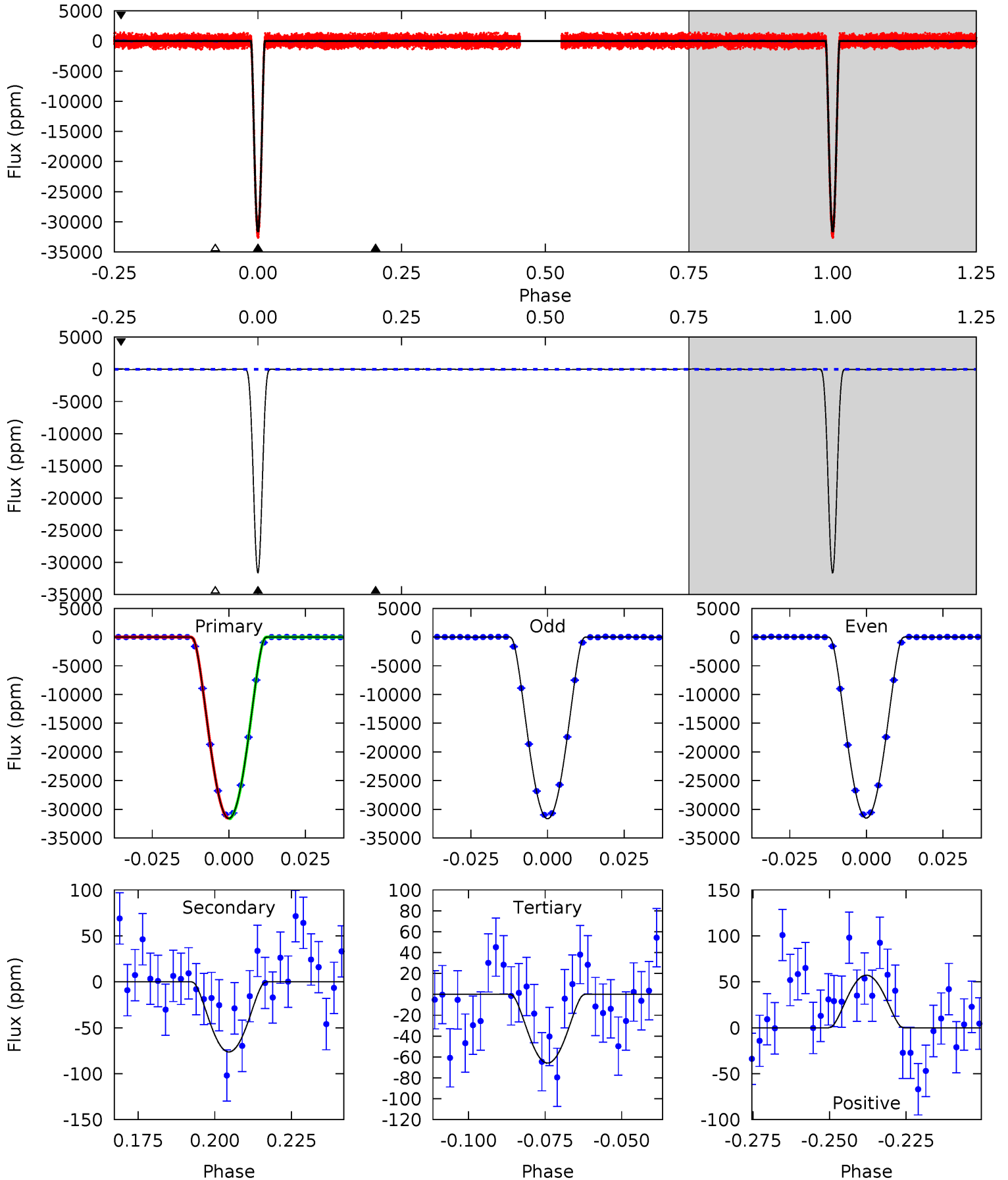
TCE 007336754-02 P= 12.155206 Days  $T_0=139.943585$  (BKJD)



# DV Model-Shift Uniqueness Test

007336754-02, P = 12.155245 Days, E = 127.786201 Days

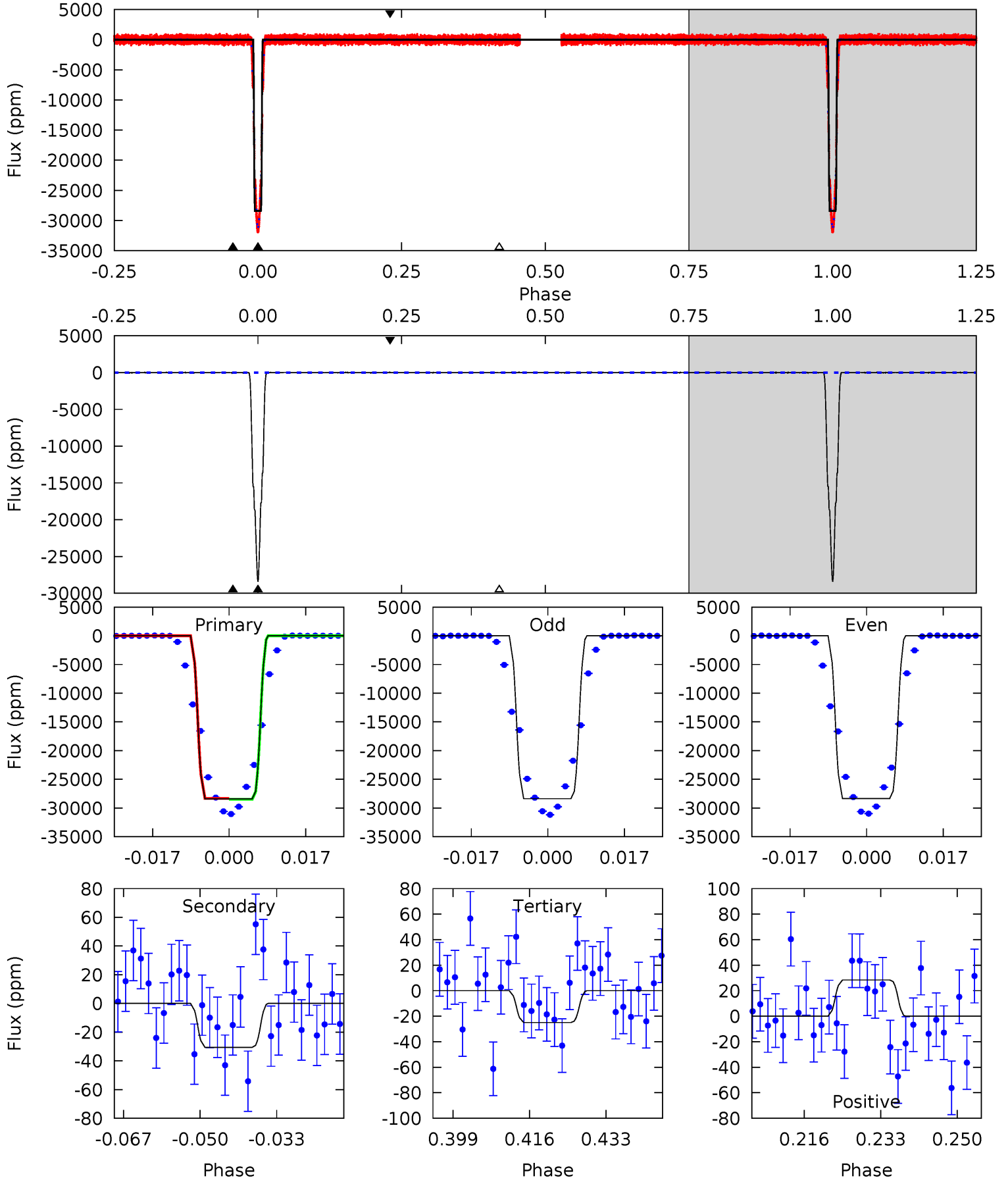
Pri	Sec	Ter	Pos	FA <sub>1</sub>	FA <sub>2</sub>	F <sub>Red</sub>	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3422	8.27	7.13	6.20	4.85	2.24	2.96	3415	3415	1.13	2.07	6.18	0.99	0.00	3.89



# Alt Model-Shift Uniqueness Test

007336754-02, P = 12.155206 Days, E = 127.788379 Days

Pri	Sec	Ter	Pos	FA <sub>1</sub>	FA <sub>2</sub>	F <sub>Red</sub>	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2880	3.10	2.53	2.88	4.93	2.39	0.95	2877	2877	0.57	0.22	1.79	1.00	0.00	8.73





### Stellar Parameters For KIC 007336754

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R$ ( $R_{\odot}$ )	$M(M_{\odot})$	$p_{\star}$ ( $\text{g}\cdot\text{cm}^{-3}$ )
	$5761^{+155}_{-155}$	$4.413^{+0.144}_{-0.176}$	$-0.400^{+0.300}_{-0.250}$	$0.932^{+0.250}_{-0.154}$	$0.821^{+0.114}_{-0.061}$	$1.427^{+0.959}_{-0.663}$
	+3%/-3%	+3%/-4%	+75%/-62%	+27%/-17%	+14%/-7%	+67%/-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 007336754-02 / KOI

Detrend	Depth (ppm)	$R_p$ ( $R_{\oplus}$ )	$T_{\text{max}}$ (K)	$T_{\text{obs}}$ (K)	$A_{\text{obs}}$
DV	$-76 \pm 9$	$23.31^{+3.30}_{-2.31}$	$1108^{+72}_{-64}$	$1988^{+54}_{-65}$	$0.718^{+0.197}_{-0.170}$
Alt.	$-31 \pm 10$	$18.16^{+2.71}_{-1.84}$	$1108^{+81}_{-64}$	$1818^{+135}_{-3184}$	$0.468^{+0.209}_{-0.173}$

$T_{\text{max}}$  = Theoretical Maximum Planetary Temperature

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

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

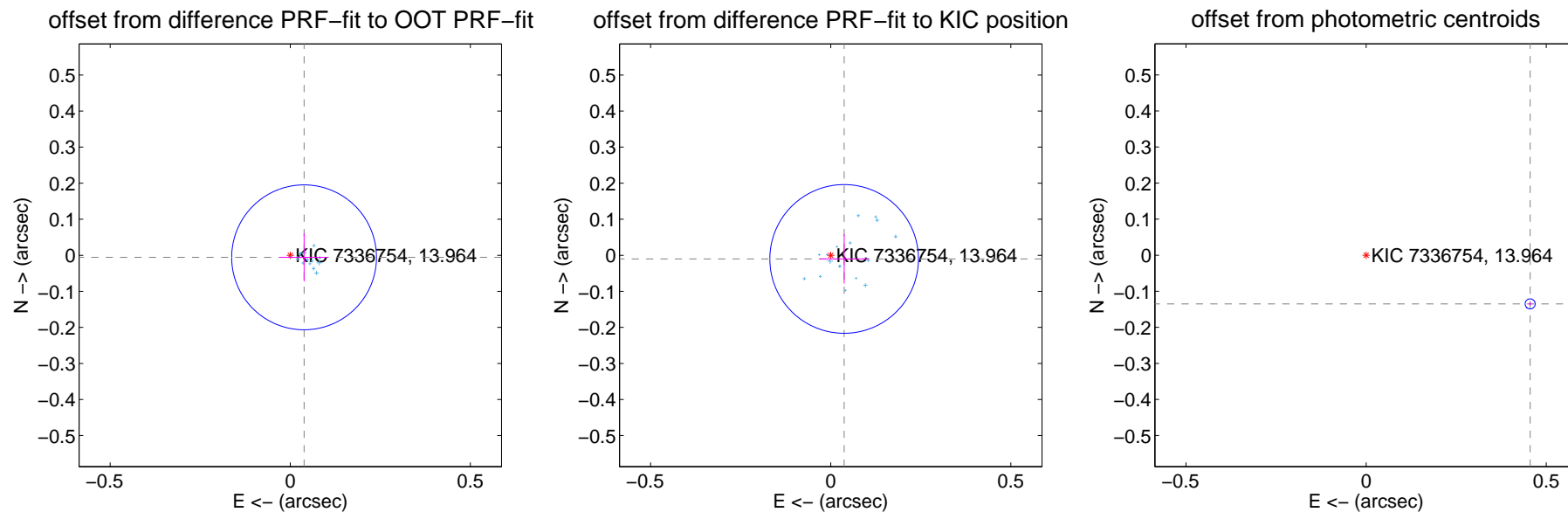
## DV Centroid Data

Supplemental centroid analysis for 007336754-02. Kepler magnitude: 13.96. Transit SNR 1355.00

There are 17 quarters with good PRF difference image offsets

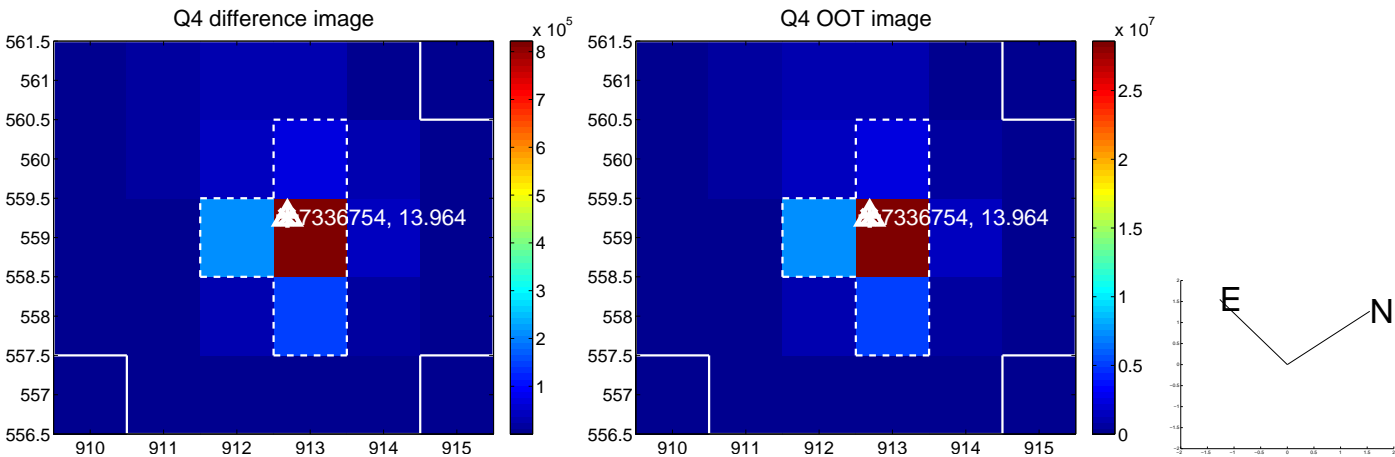
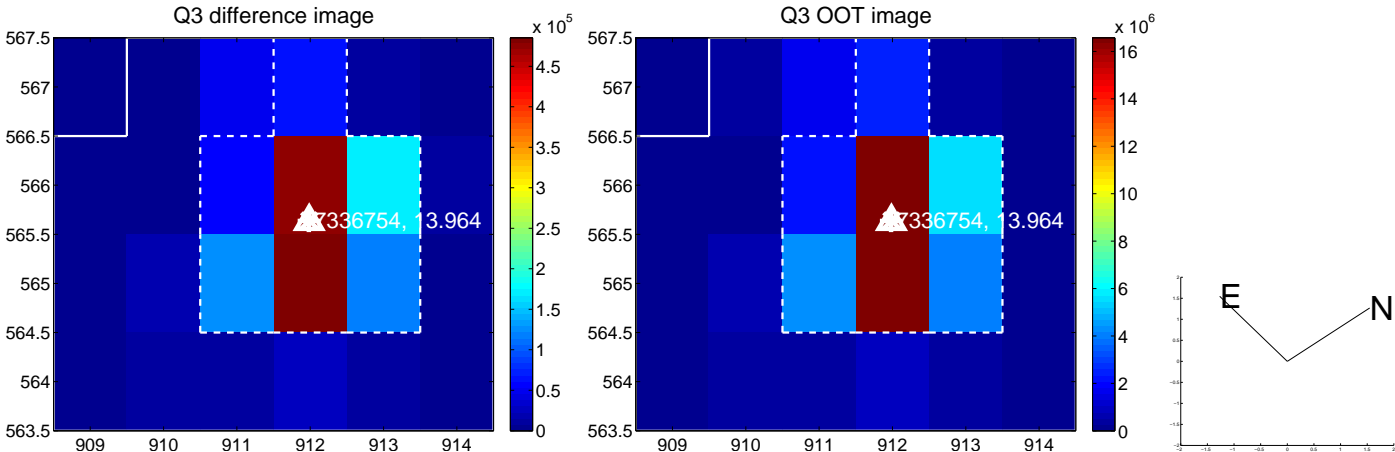
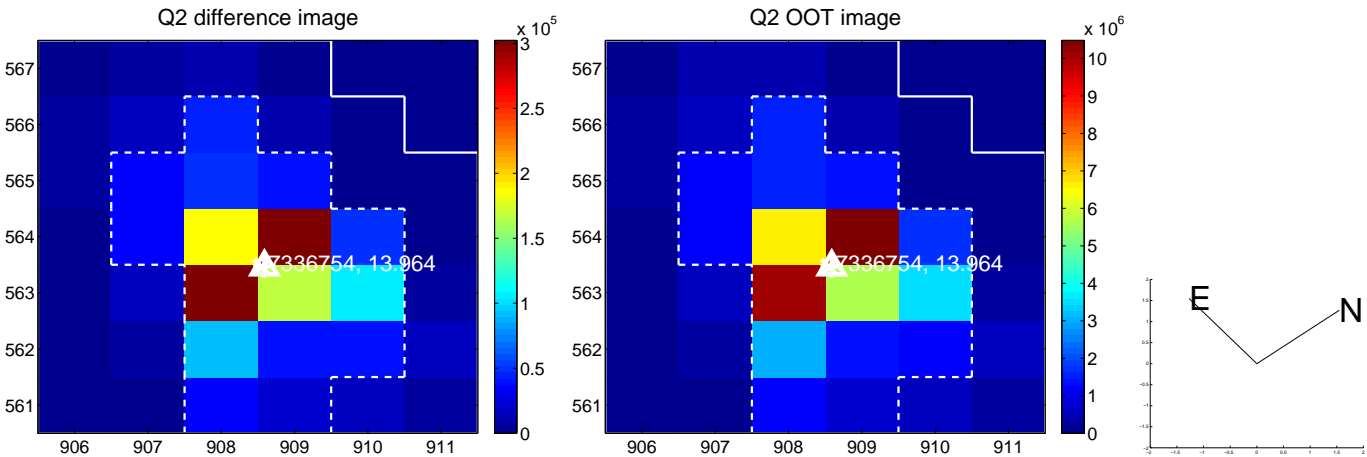
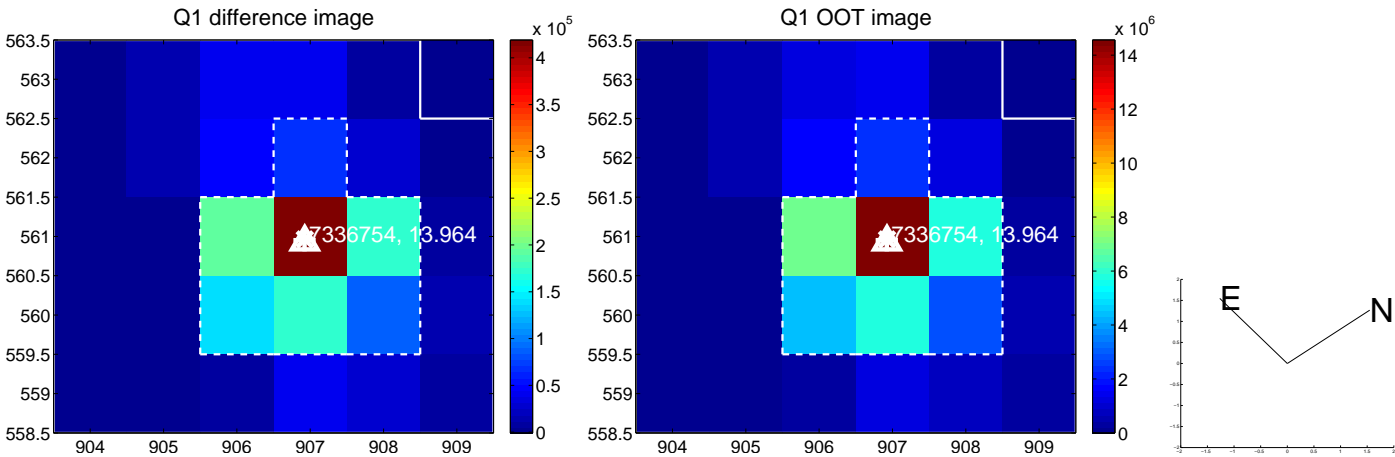
The direct PRF centroid is offset from the target star catalog position by about 0.08 arcsec

	Distance in arcsec	Distance / $\sigma$	$\Delta$ RA	$\Delta$ Dec
PRF-fit source offset from OOT	$0.039 \pm 0.067$	0.58	$-0.038 \pm 0.067$	$-0.006 \pm 0.067$
PRF-fit source offset from KIC position	$0.039 \pm 0.069$	0.56	$-0.037 \pm 0.069$	$-0.010 \pm 0.069$
photometric centroid source offset	$0.47 \pm 0.00$	102.44	$-0.46 \pm 0.00$	$-0.13 \pm 0.00$

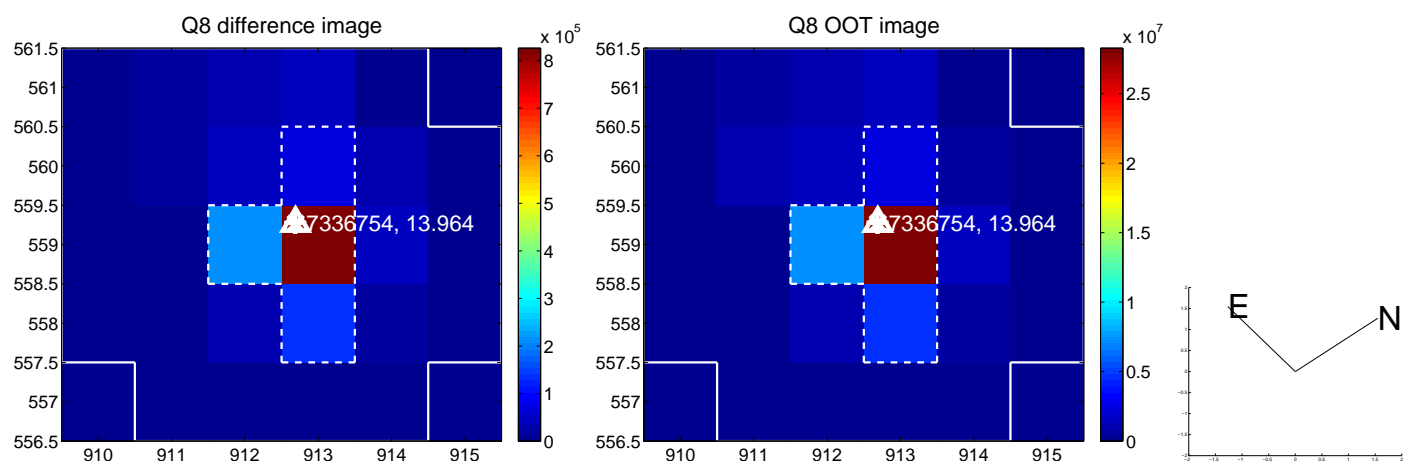
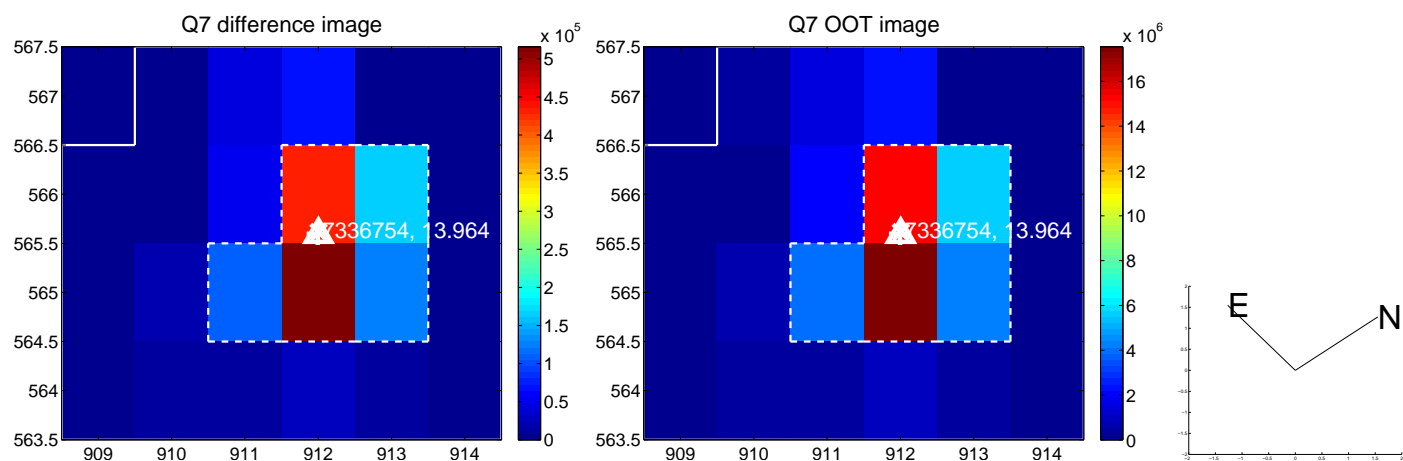
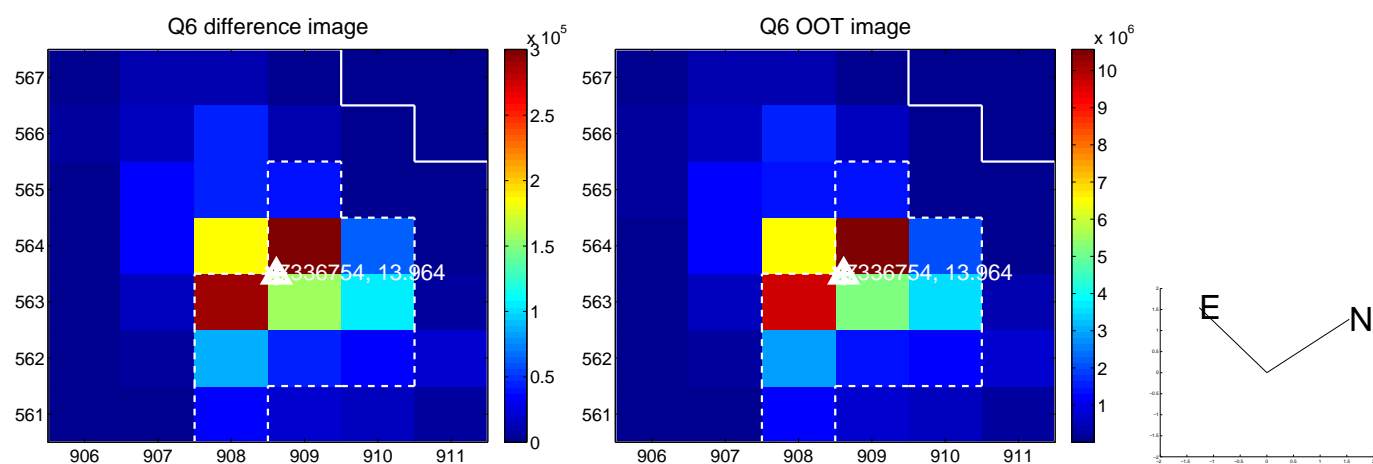
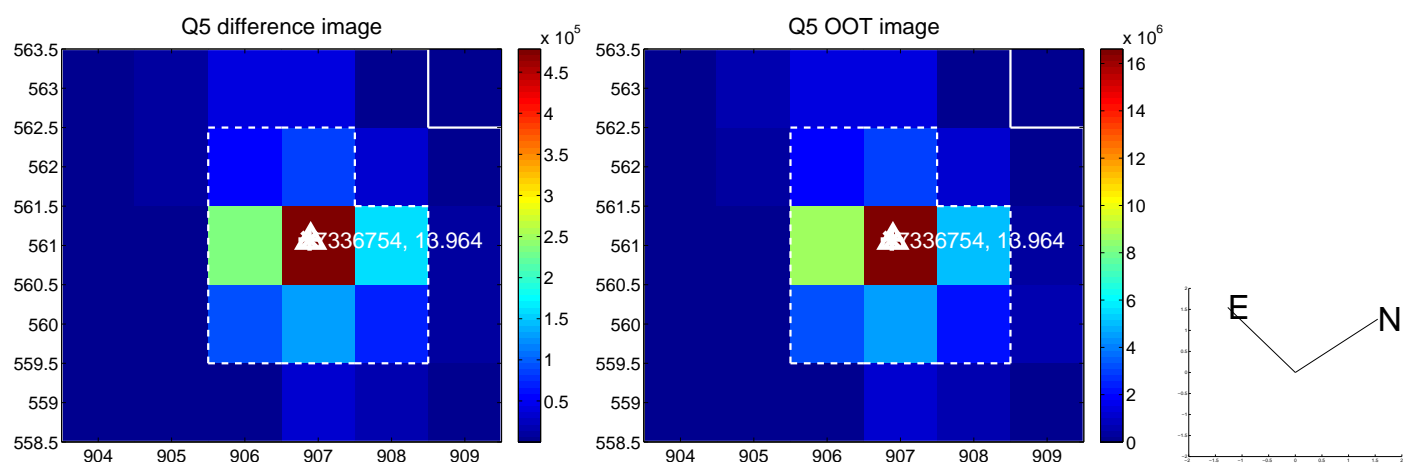


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- $\sigma$  uncertainty. Blue circle: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

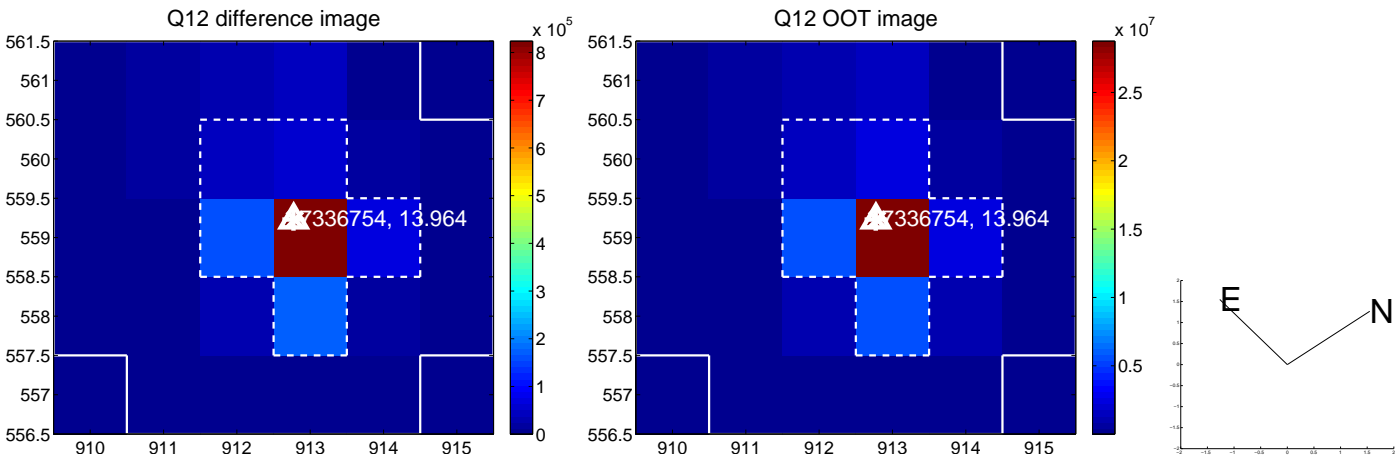
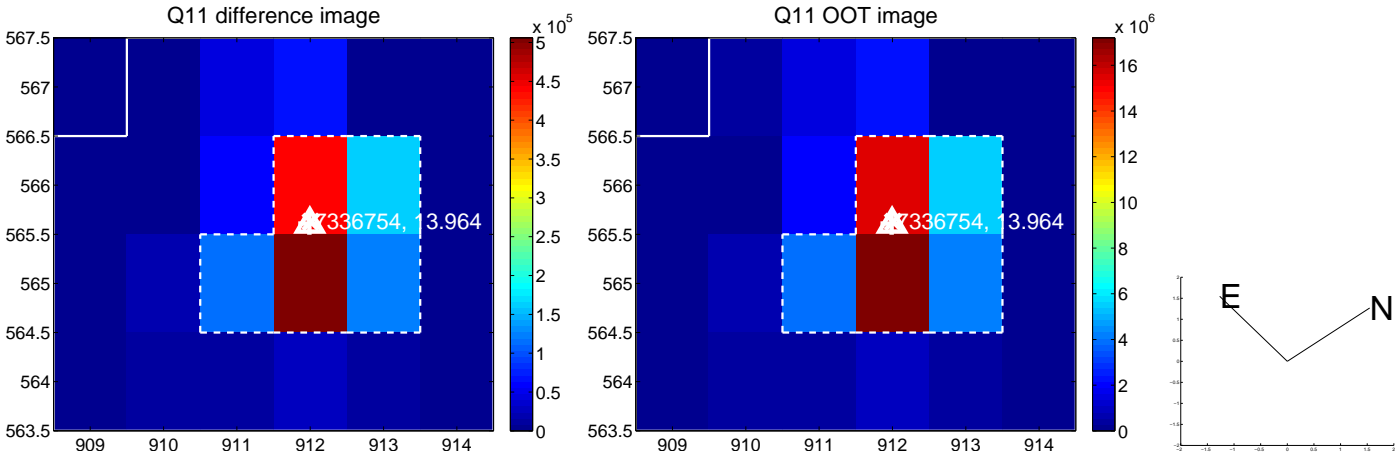
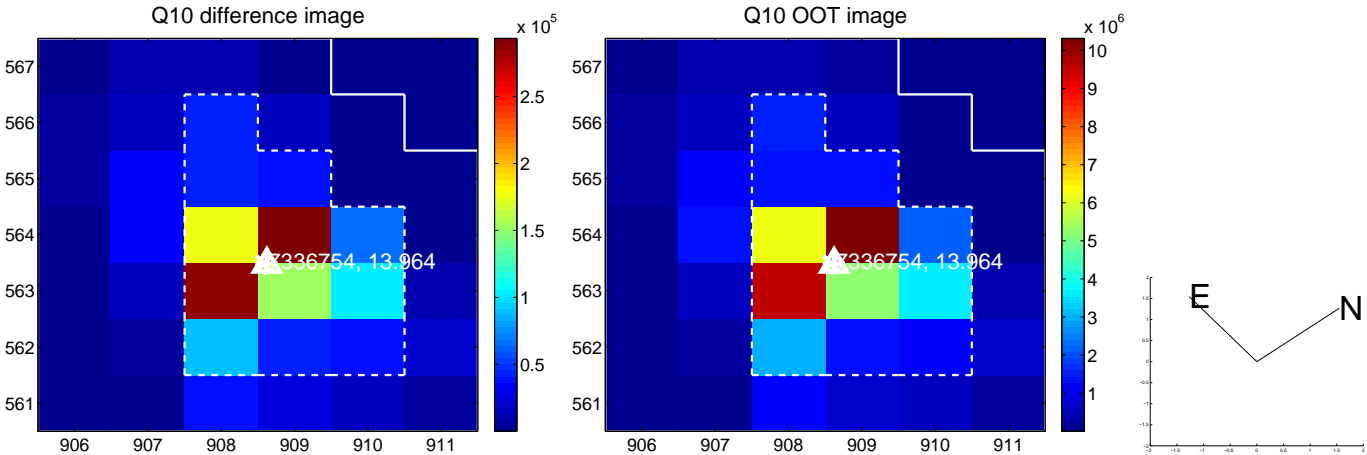
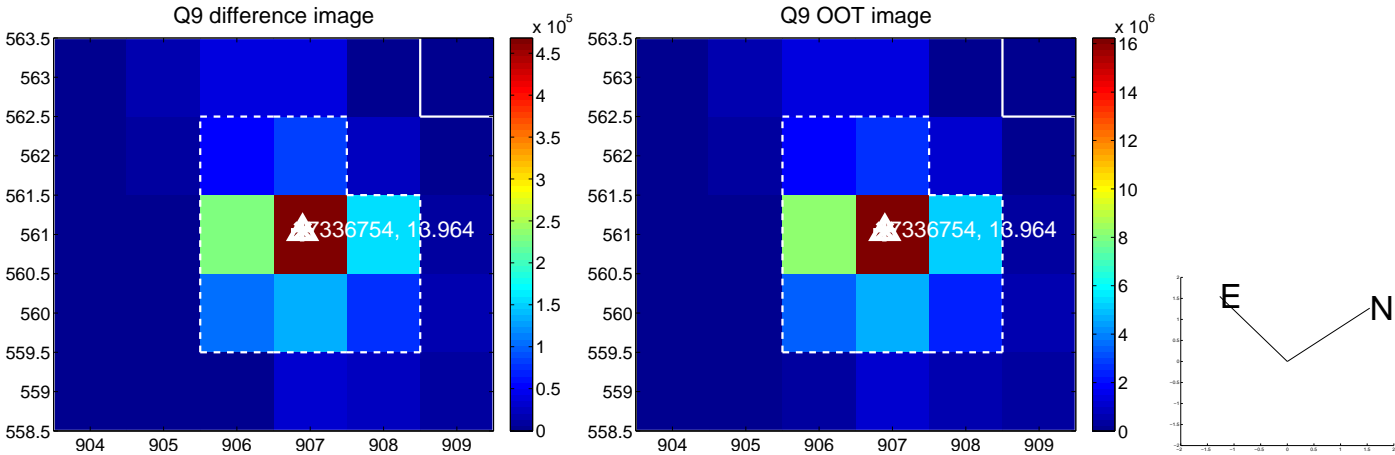
white  $\times$ : KIC target position; +: OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.



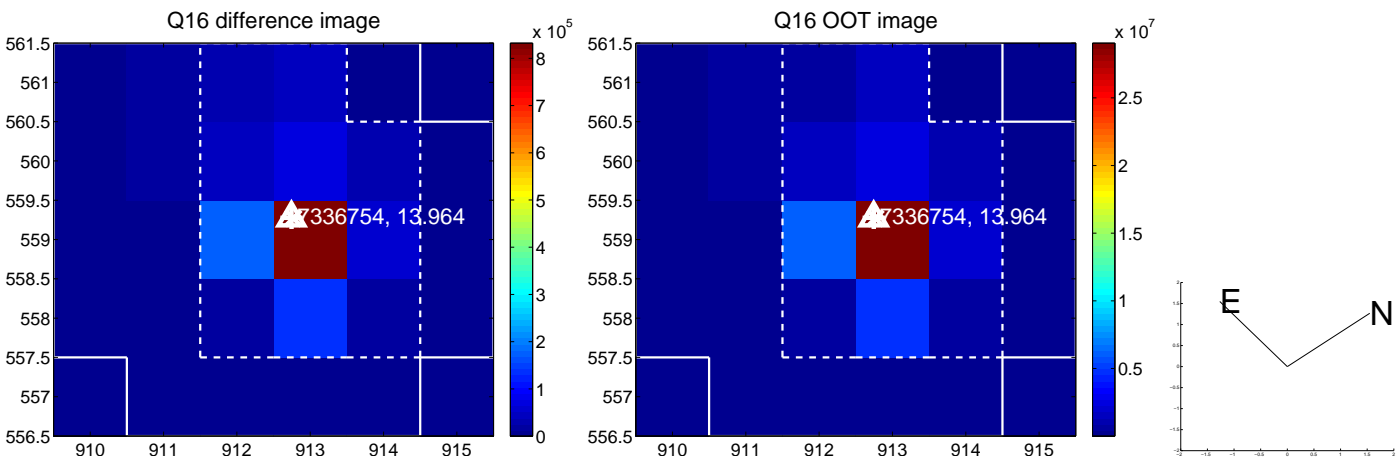
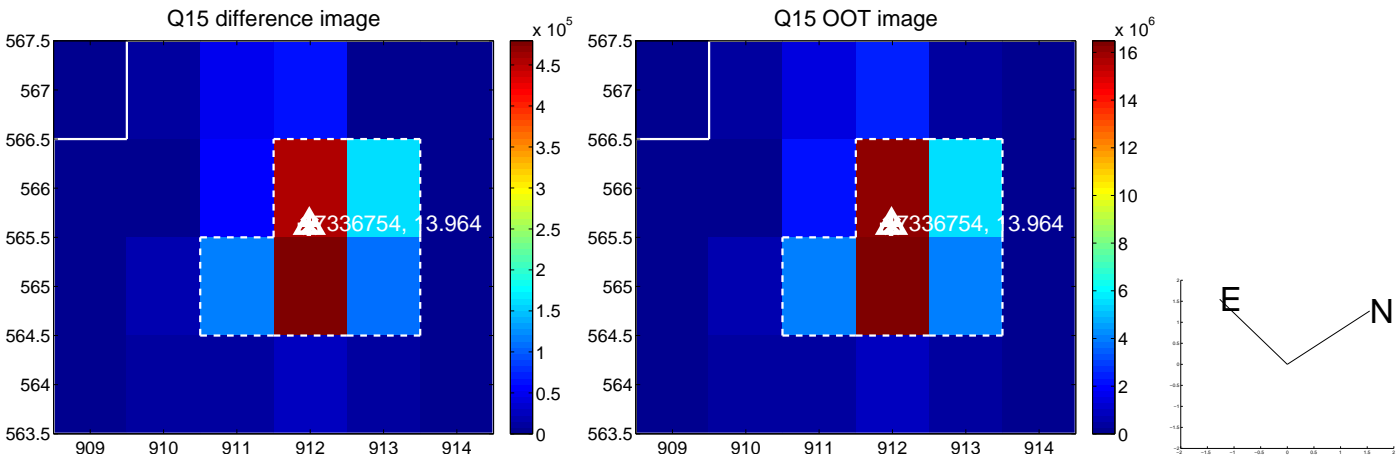
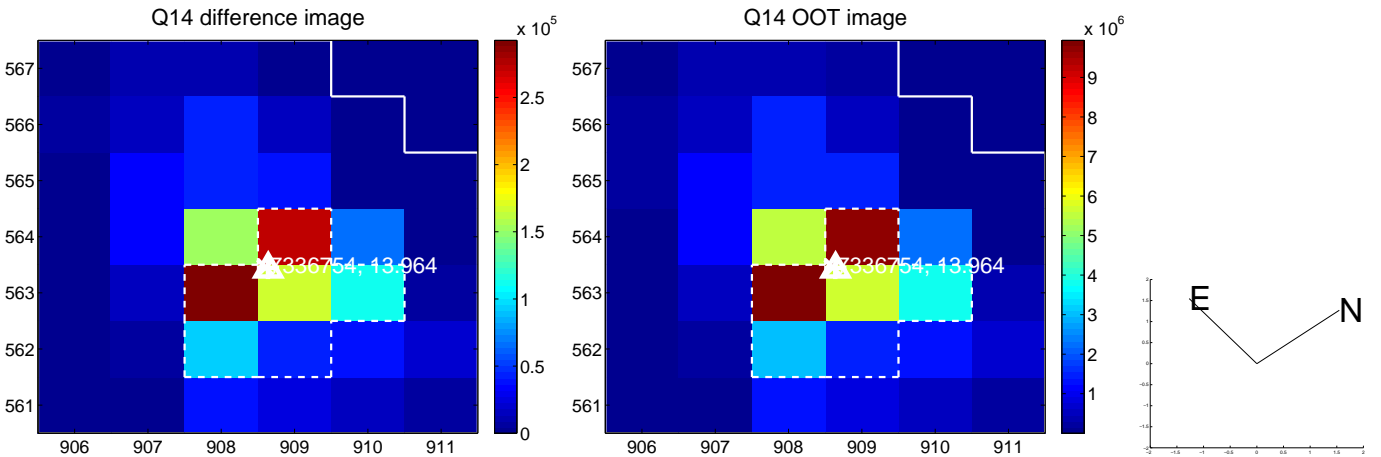
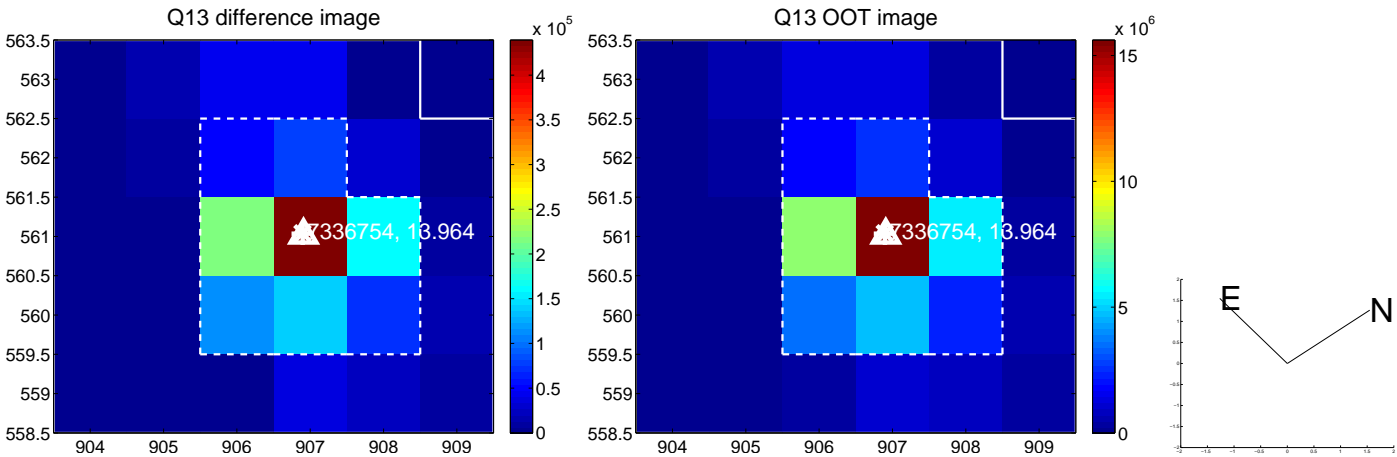
white  $\times$ : KIC target position;  $+$ : OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.



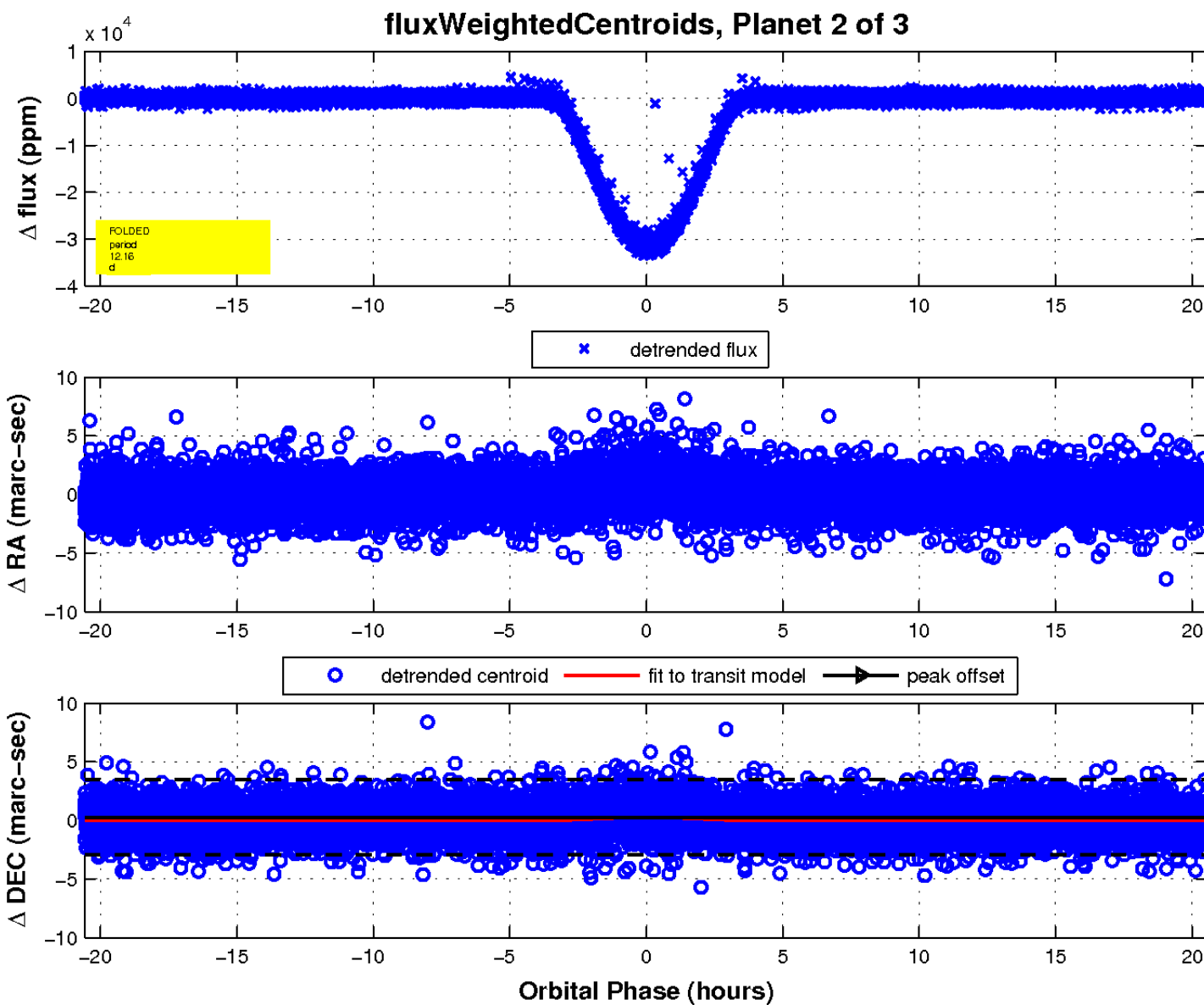
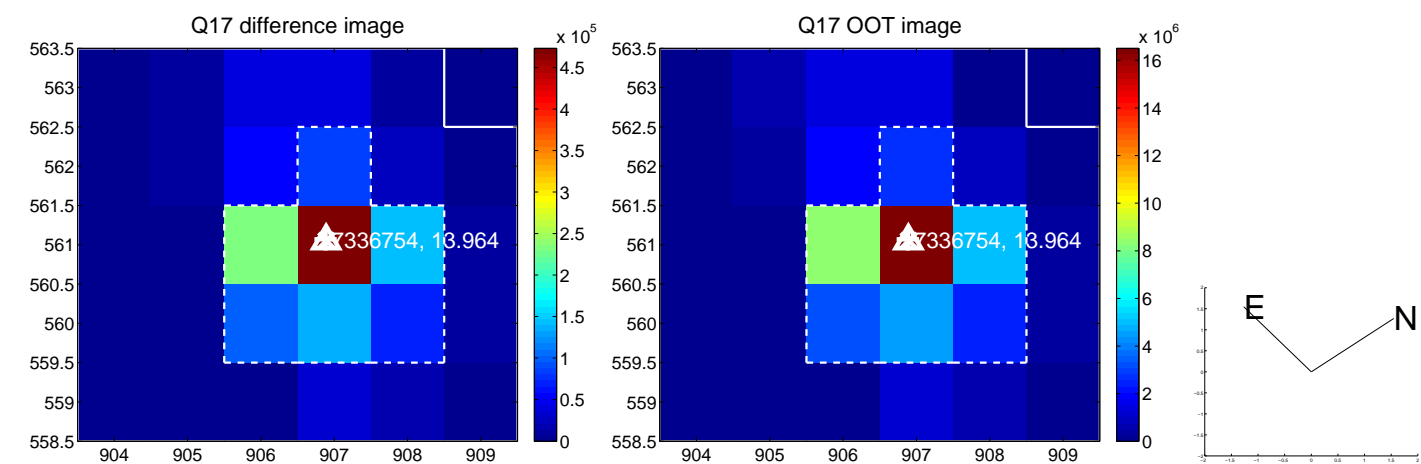
white  $\times$ : KIC target position; +: OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.



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

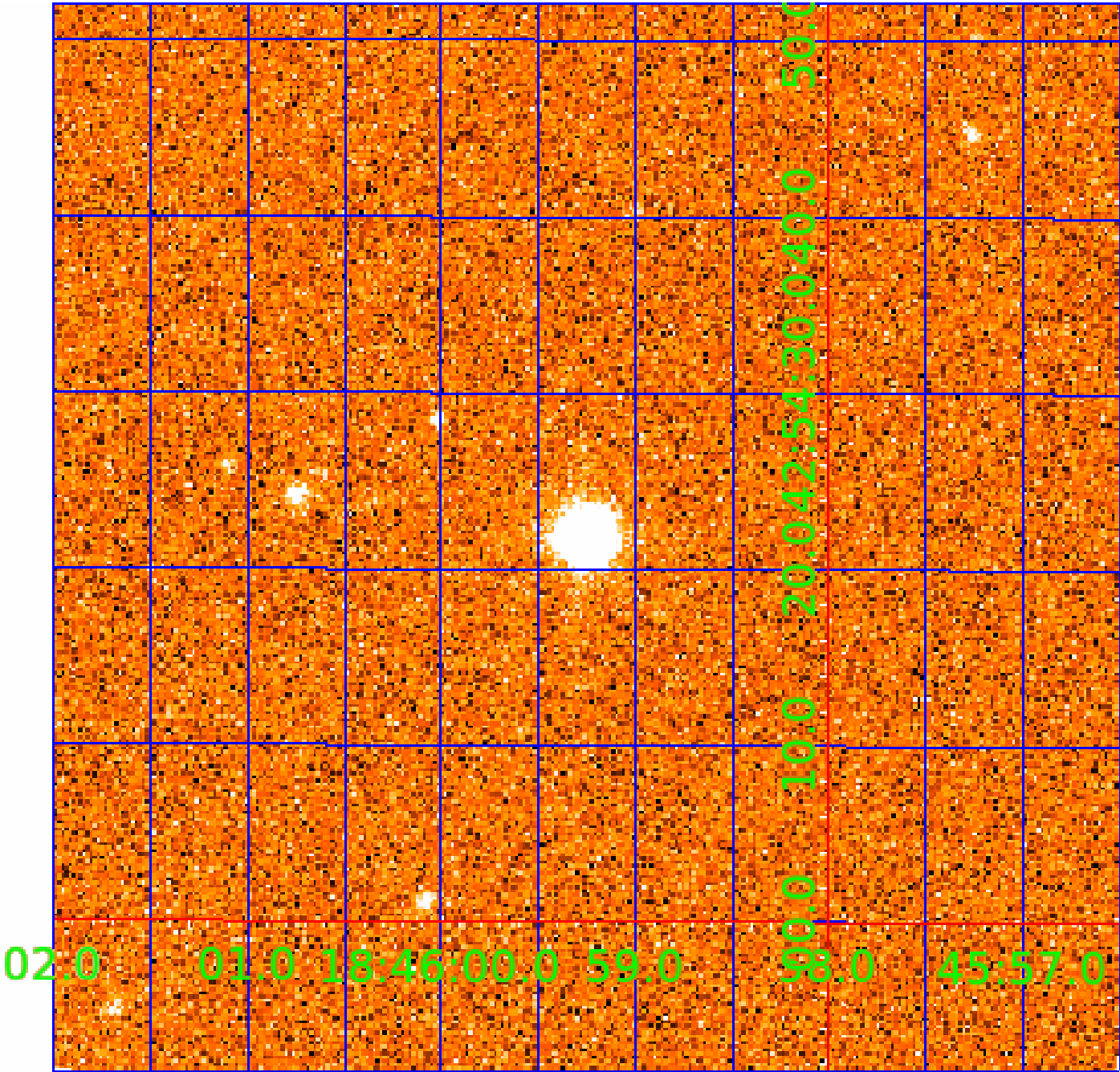


white  $\times$ : KIC target position;  $+$ : OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.



UKIRT Image

Declination





# KIC 007336754

## 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)	$R_p$ ( $R_{\oplus}$ )	$S_p$ ( $S_{\oplus}$ )
007336754-01	OBS	6861.01	12.155242	133.767142	85847.3	6.846	3651.5	3121.1	0.93	5761	35.59	91.37
007336754-02	OBS	No	12.155245	139.941446	31629.9	6.861	1378.8	1355.0	0.93	5761	23.09	91.37
007336754-03	OBS	No	441.221861	462.422281	1809.3	6.000	21.6	-1.0	0.93	5761	3.95	0.76

## Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007336754-01	OBS	FP	0.00	0	1	0	0	MOD_SEC_DV—MOD_SEC_ALT—DEEP_V_SHAPED—HAS_SEC_TCE
007336754-02	OBS	FP	0.00	1	1	0	0	IS_SEC_TCE
007336754-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—INCONSISTENT_TRANS—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](http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col) for comment definitions.

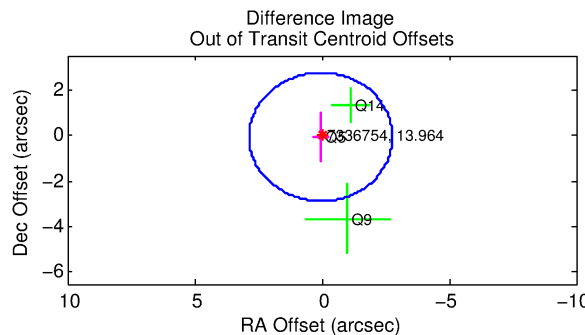
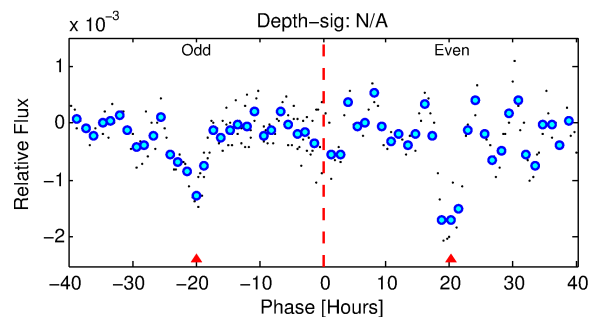
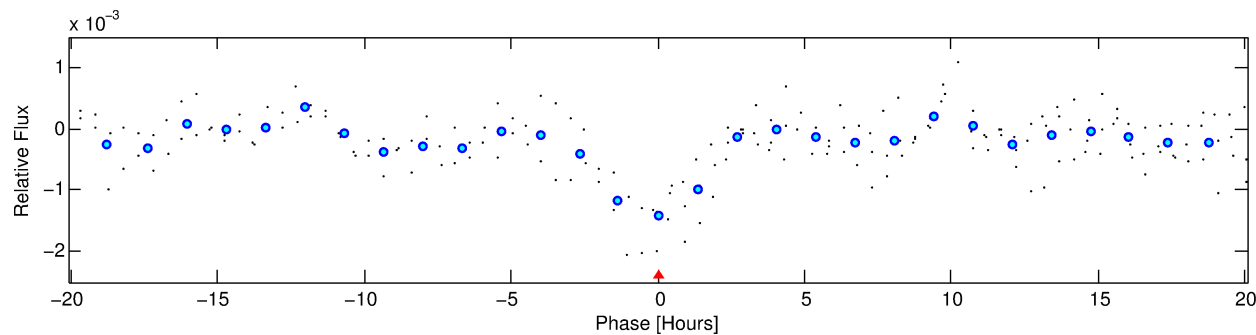
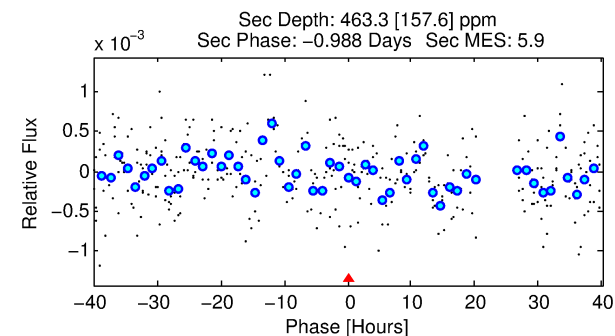
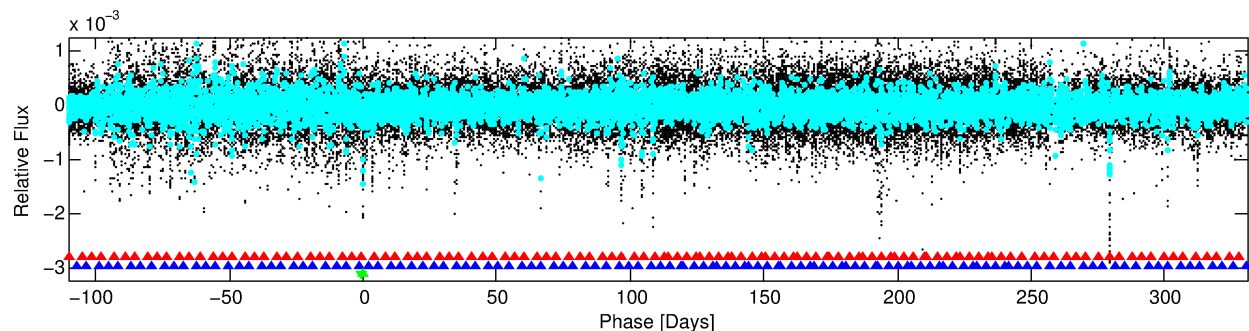
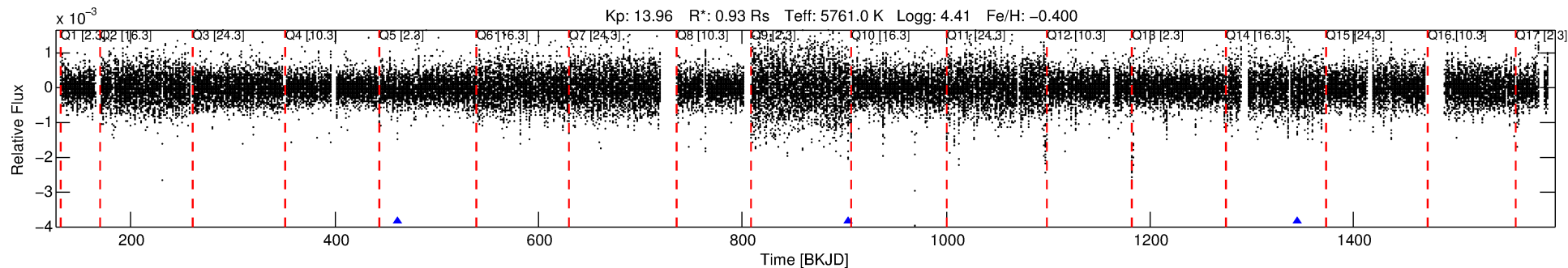
## Ephemeris Match Information For 007336754-03

No Significant Match Found

# DV One-Page Summary

KIC: 7336754 Candidate: 3 of 3 Period: 441.222 d  
KOI: K06861 Corr: No Ephemeris Match

Kp: 13.96 R\*: 0.93 Rs Teff: 5761.0 K Logg: 4.41 Fe/H: -0.400



## TPS TCE Results:

Period = 441.22186 d  
Epoch = 462.4223 BKJD

DV fit results are unavailable

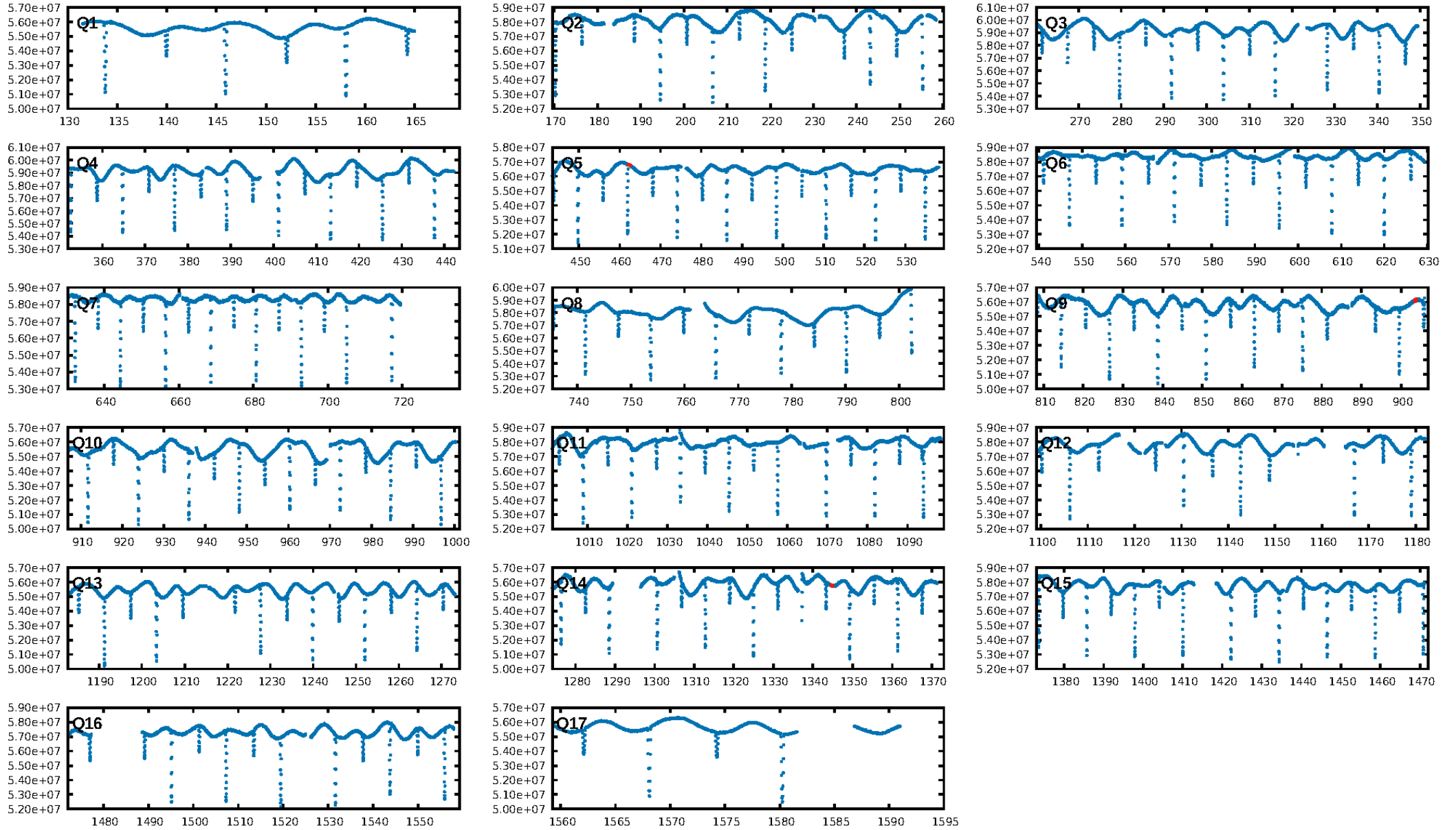
## DV Diagnostic Results:

ShortPeriod-sig: 100.0% [1129.78 $\sigma$ ]  
LongPeriod-sig: N/A  
ModelChiSquare2-sig: N/A  
ModelChiSquareGof-sig: N/A  
Bootstrap-pfa: N/A  
RollingBand-fgt: 1.00 [3/3]  
GhostDiagnostic-chr: -2.154  
Centroid-sig: N/A  
Centroid-so: 0.543 arcsec [1.13 $\sigma$ ]  
OotOffset-rm: 0.077 arcsec [0.08 $\sigma$ ]  
KicOffset-rm: 0.114 arcsec [0.16 $\sigma$ ]  
OotOffset-st: 1/0/0/2 [3]  
KicOffset-st: 1/0/0/2 [3]  
DiffImageQuality-fgm: 0.00 [0/3]  
DiffImageOverlap-fno: 0.67 [2/3]

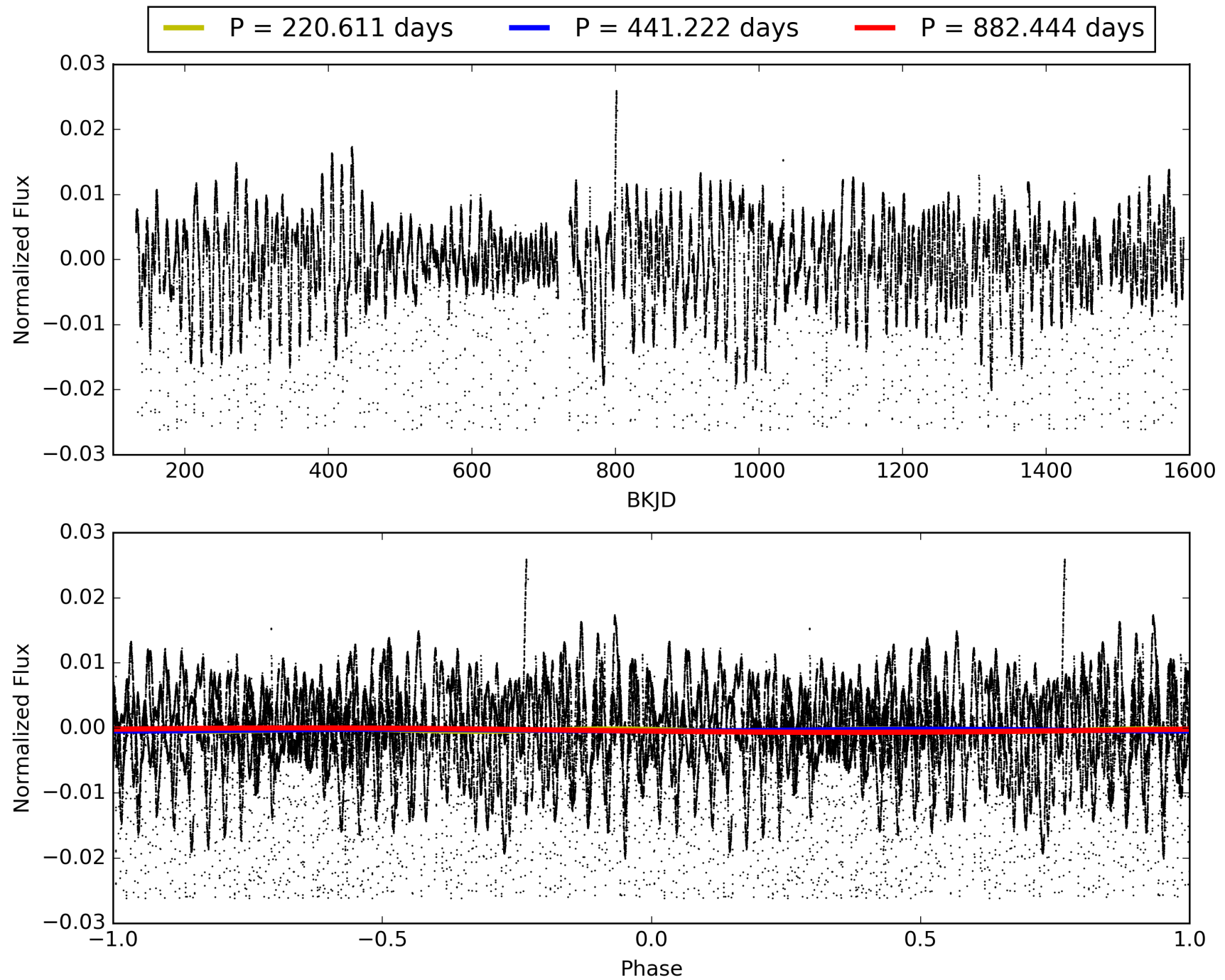
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 02-Feb-2016 07:33:00 Z

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

# TCE 007336754-03, PDC Light Curves

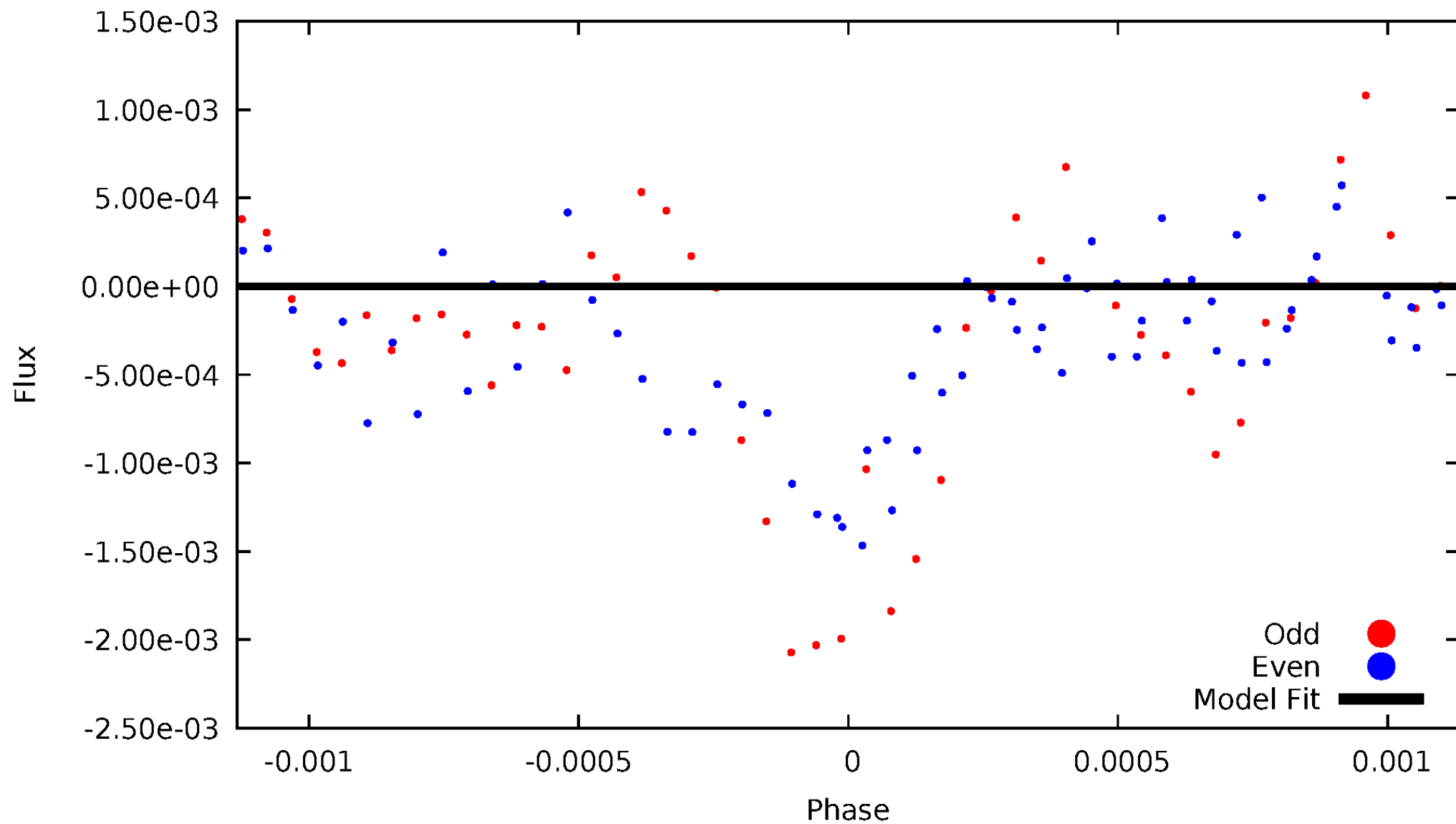


TCE 007336754-03



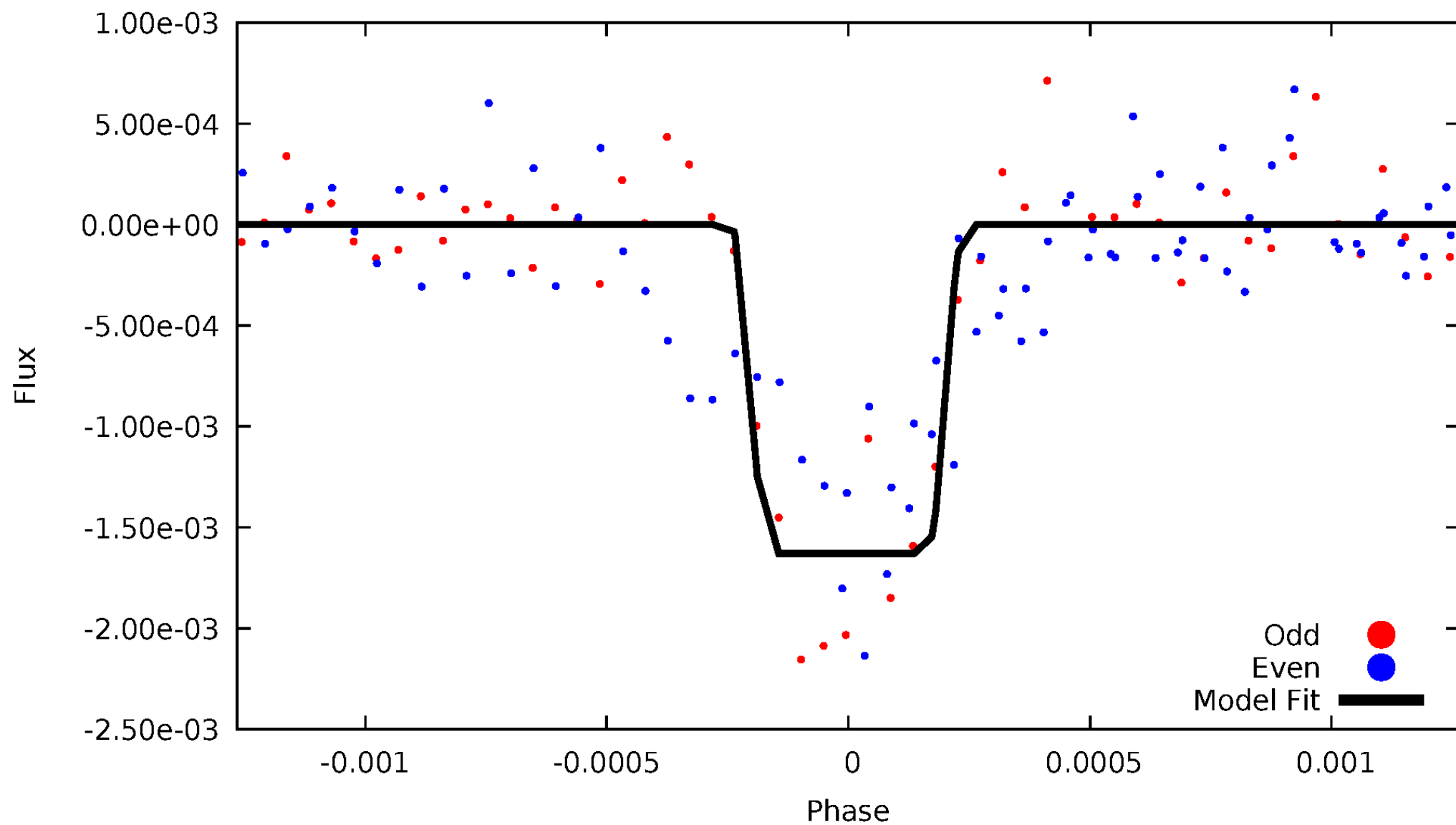
# DV Odd/Even

TCE 007336754-03

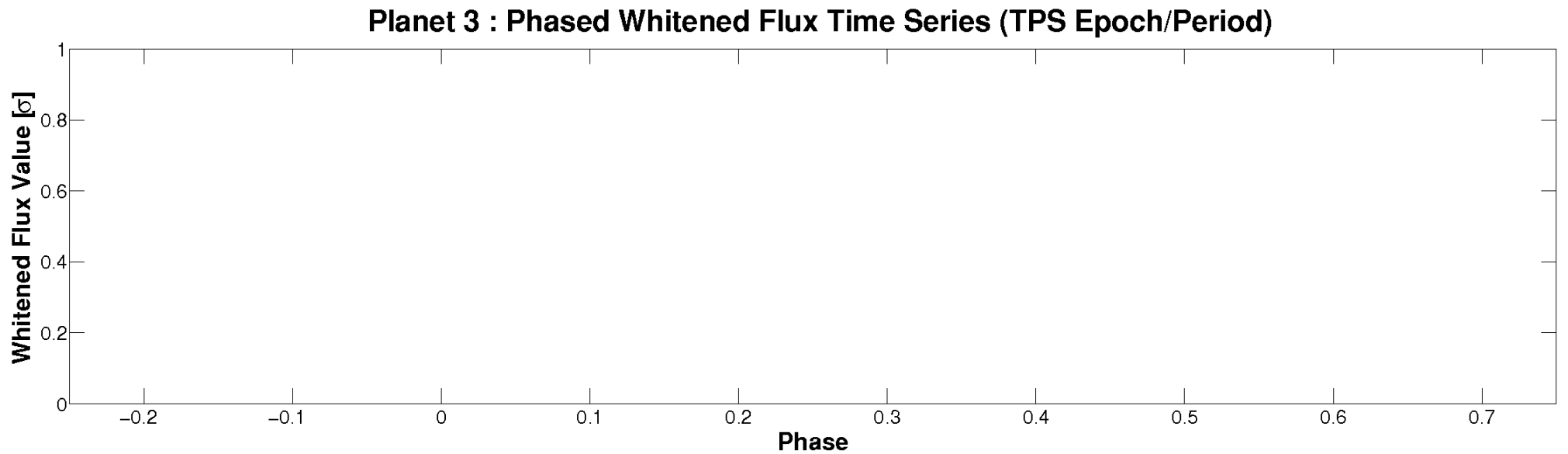
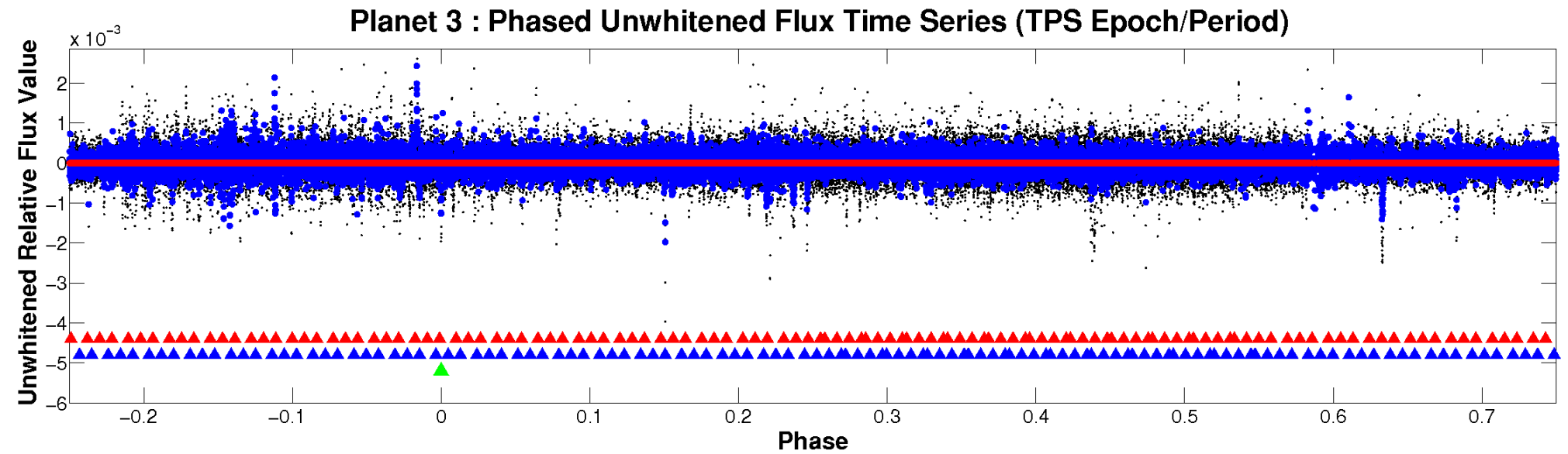


# ALT Odd/Even

TCE 007336754-03

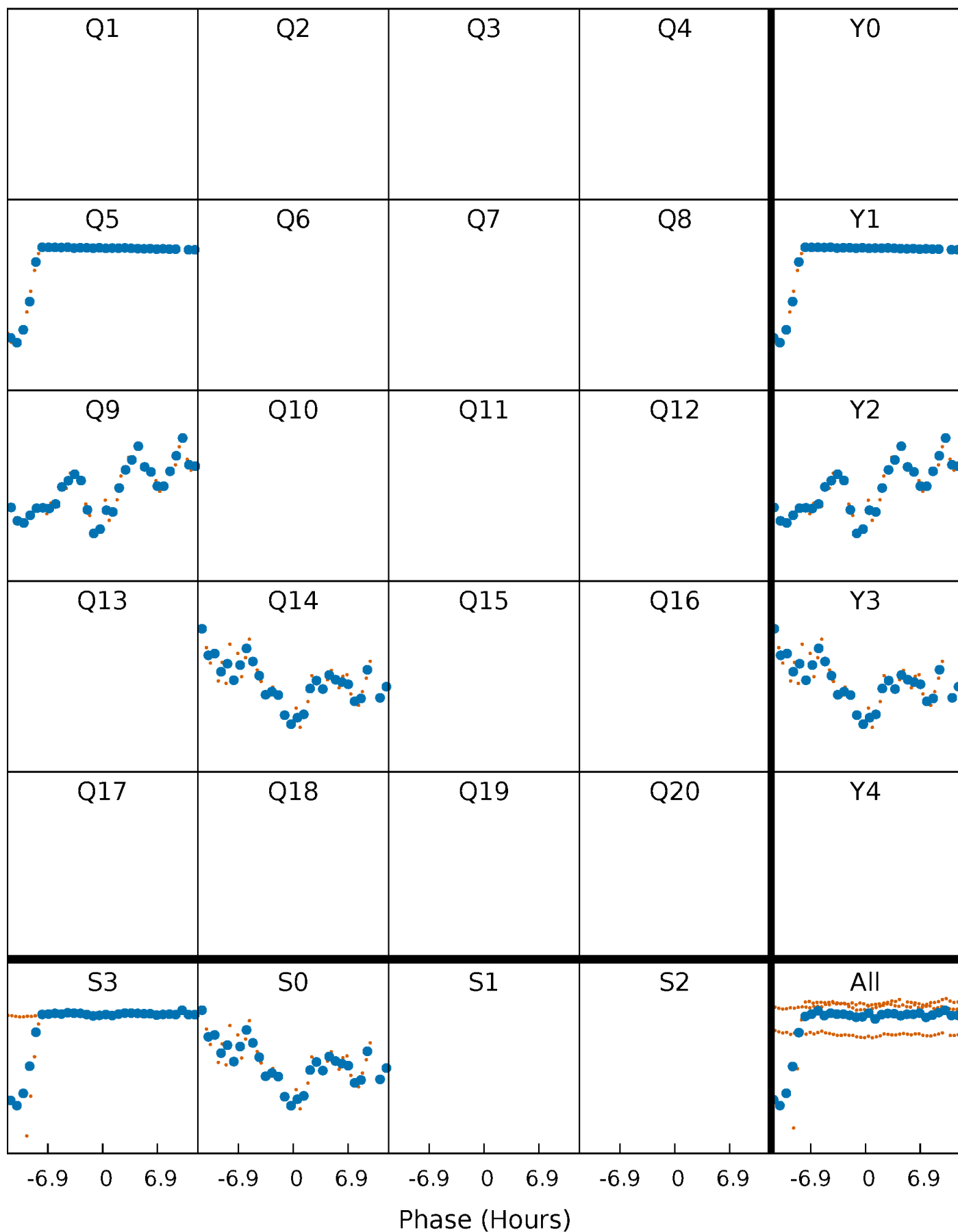


# Non-Whitened Vs. Whitened Light Curve



# PDC Quarter-Phased Transit Curves

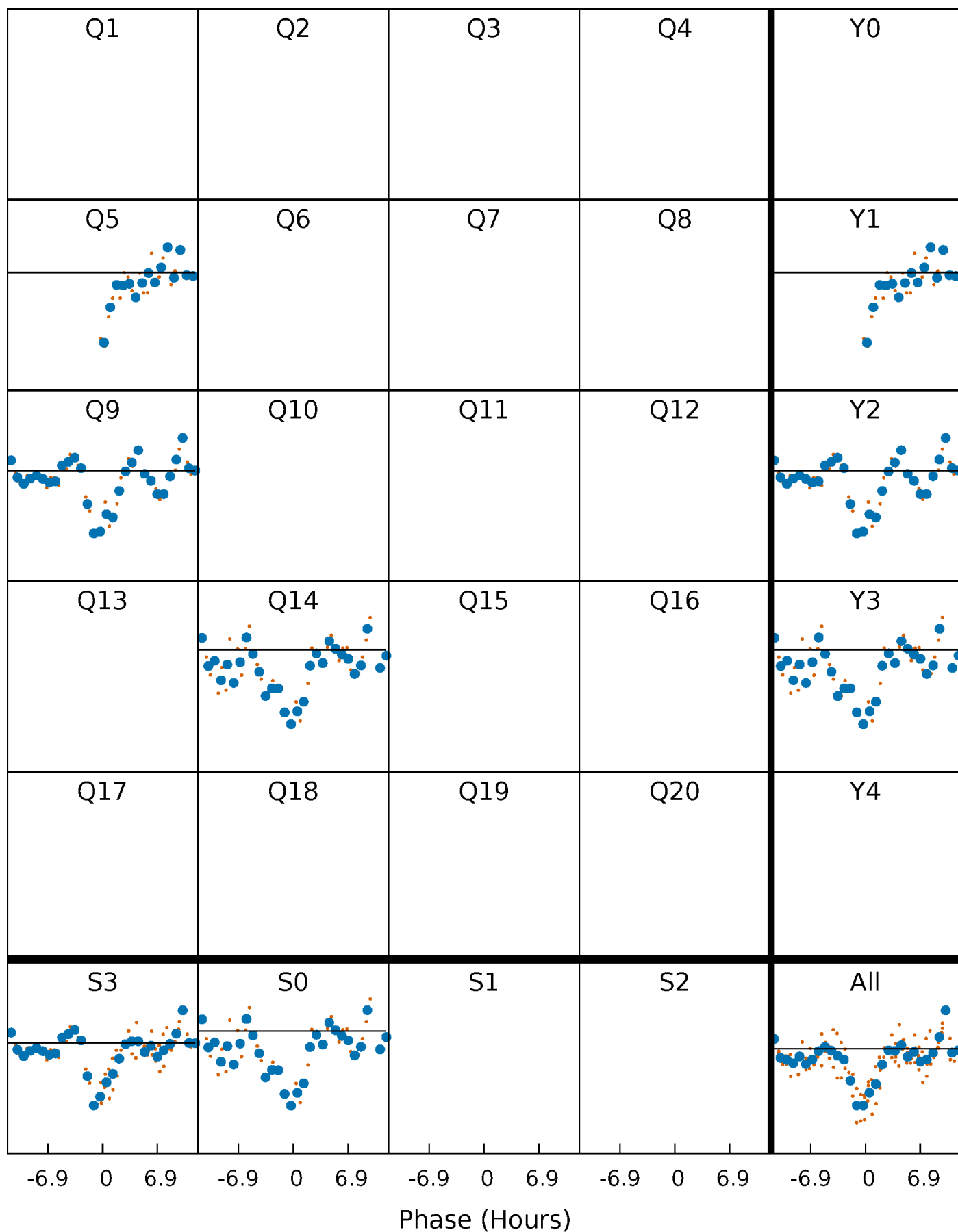
TCE 007336754-03     $P=441.221861$  Days     $T_0=462.422281$  (BKJD)





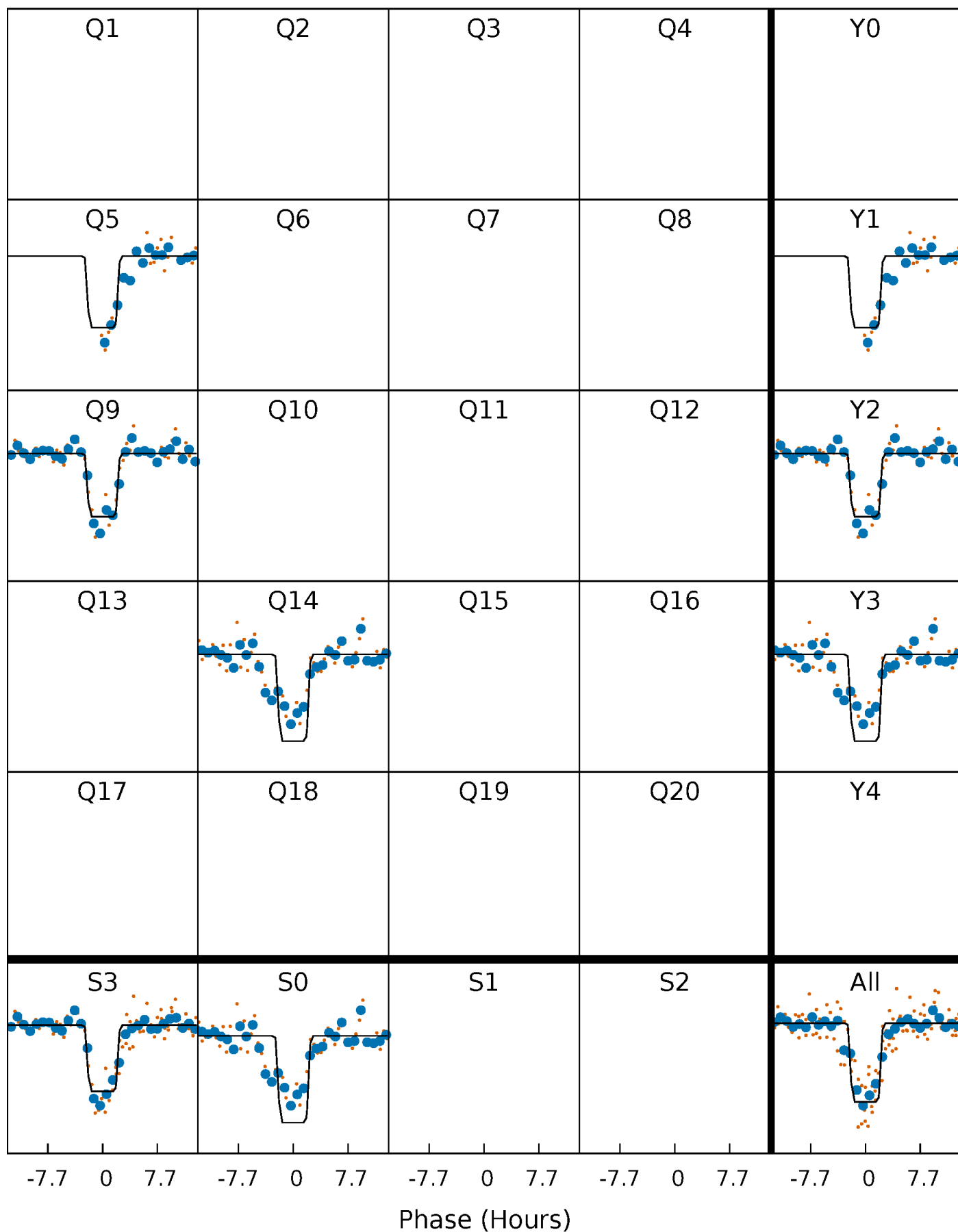
# DV Quarter-Phased Transit Curves

TCE 007336754-03 P=441.221861 Days  $T_0=462.422281$  (BKJD)



# Alt. Detrend Quarter-Phased Transit Curves

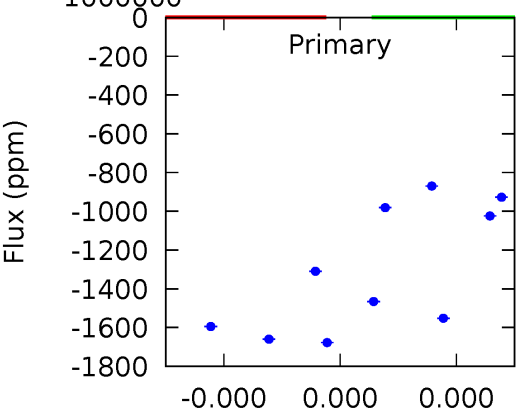
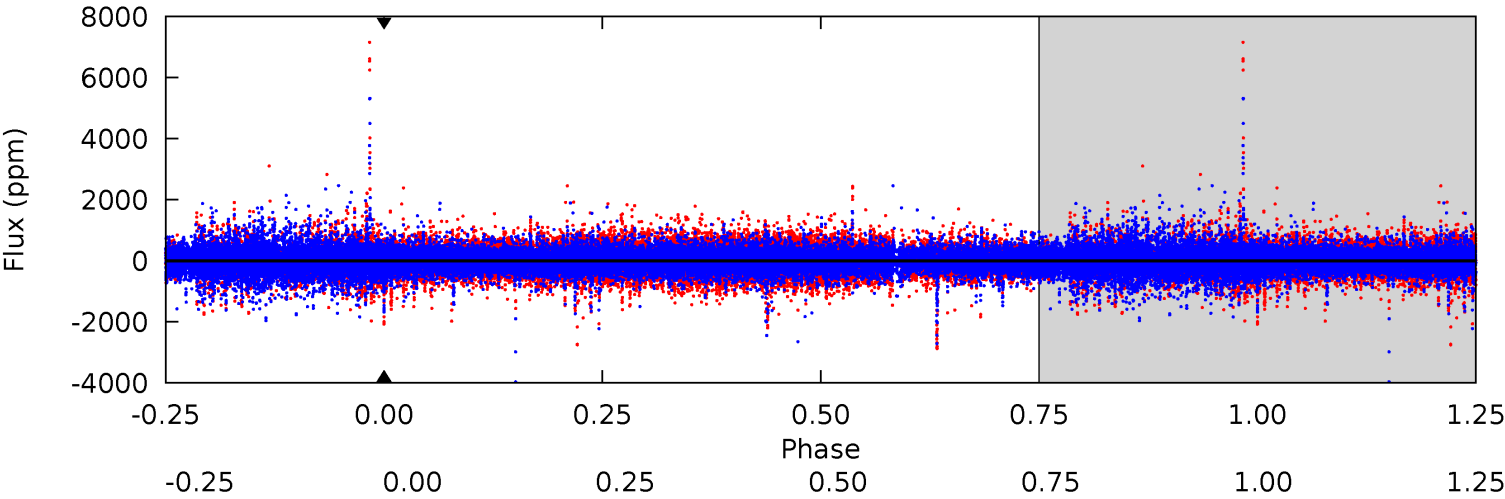
TCE 007336754-03 P=441.221861 Days  $T_0=462.418698$  (BKJD)



# DV Model-Shift Uniqueness Test

007336754-03, P = 441.221861 Days, E = 21.200420 Days

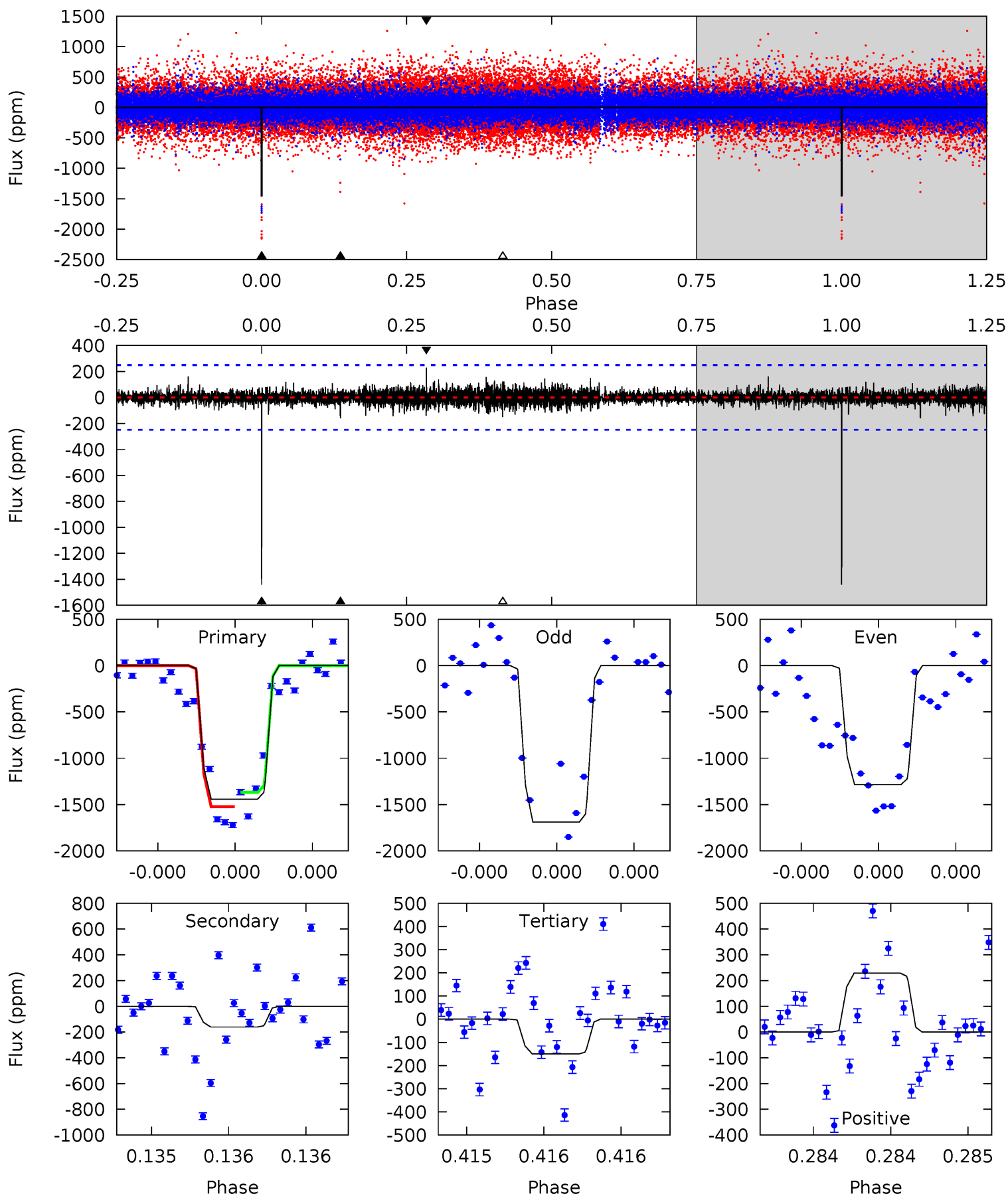
Pri	Sec	Ter	Pos	FA <sub>1</sub>	FA <sub>2</sub>	F <sub>Red</sub>	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



# Alt Model-Shift Uniqueness Test

007336754-03, P = 441.221861 Days, E = 21.196837 Days

Pri	Sec	Ter	Pos	FA <sub>1</sub>	FA <sub>2</sub>	F <sub>Red</sub>	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
32.4	3.61	3.37	5.13	5.59	3.50	0.71	29.0	27.2	0.24	-1.52	4.40	0.88	0.14	1.77



### Stellar Parameters For KIC 007336754

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R$ ( $R_{\odot}$ )	$M(M_{\odot})$	$p_{\star}$ ( $\text{g}\cdot\text{cm}^{-3}$ )
	$5761^{+155}_{-155}$	$4.413^{+0.144}_{-0.176}$	$-0.400^{+0.300}_{-0.250}$	$0.932^{+0.250}_{-0.154}$	$0.821^{+0.114}_{-0.061}$	$1.427^{+0.959}_{-0.663}$
	+3%/-3%	+3%/-4%	+75%/-62%	+27%/-17%	+14%/-7%	+67%/-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 007336754-03 / KOI

Detrend	Depth (ppm)	$R_p$ ( $R_{\oplus}$ )	$T_{max}$ (K)	$T_{obs}$ (K)	$A_{obs}$
DV	$0 \pm 1000000$	$8.38^{+8.35}_{-5.52}$	$333^{+23}_{-18}$	$3743^{+13680}_{-21538}$	$7907^{+1384799}_{-1417115}$
Alt.	$-161 \pm 45$	$8.66^{+8.40}_{-5.74}$	$333^{+23}_{-19}$	$2916^{+1144}_{-468}$	$1270^{+10224}_{-956}$

$T_{max}$  = 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  $A_{obs} \gg 1.0$

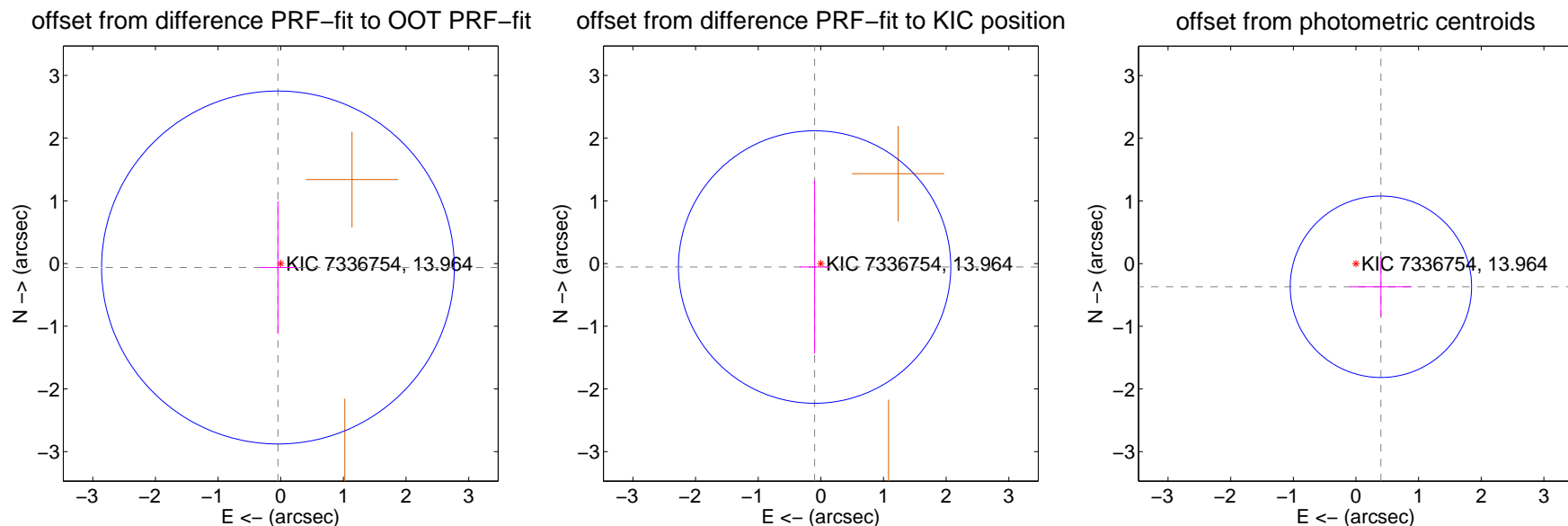
## DV Centroid Data

Supplemental centroid analysis for 007336754-03. Kepler magnitude: 13.96. Transit SNR -1.00

There are 0 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.13 arcsec

	Distance in arcsec	Distance / $\sigma$	$\Delta$ RA	$\Delta$ Dec
PRF-fit source offset from OOT	$0.077 \pm 0.938$	0.08	$0.045 \pm 0.288$	$-0.063 \pm 1.057$
PRF-fit source offset from KIC position	$0.114 \pm 0.724$	0.16	$0.100 \pm 0.237$	$-0.056 \pm 1.379$
photometric centroid source offset	$0.54 \pm 0.48$	1.13	$-0.40 \pm 0.49$	$-0.37 \pm 0.47$

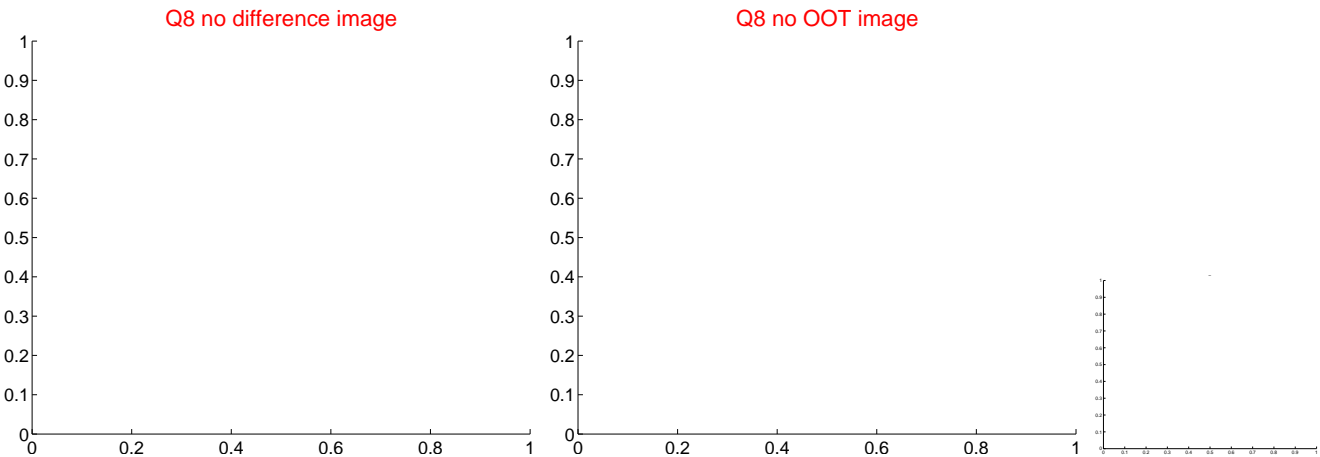
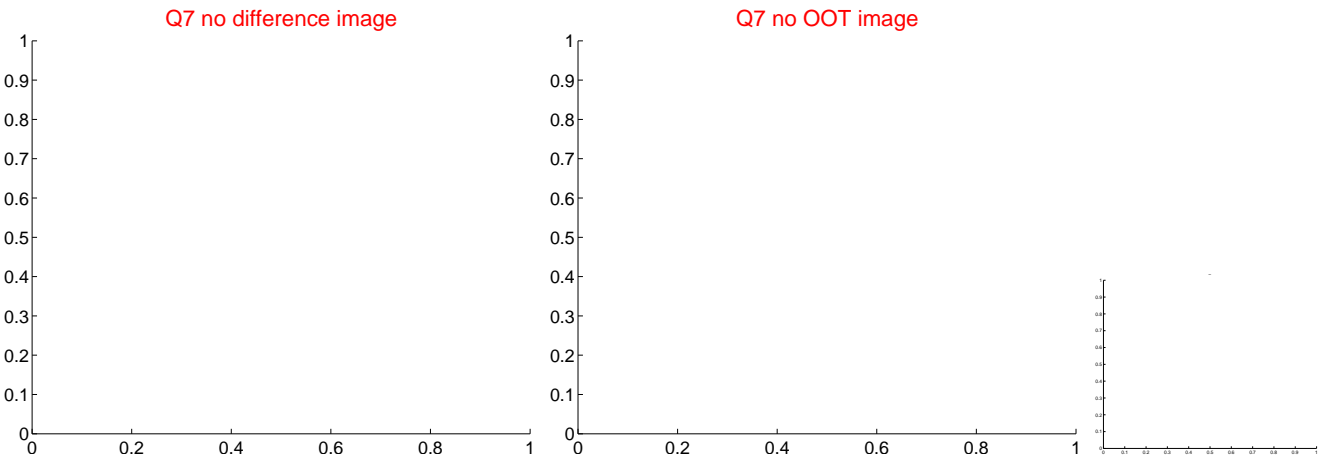
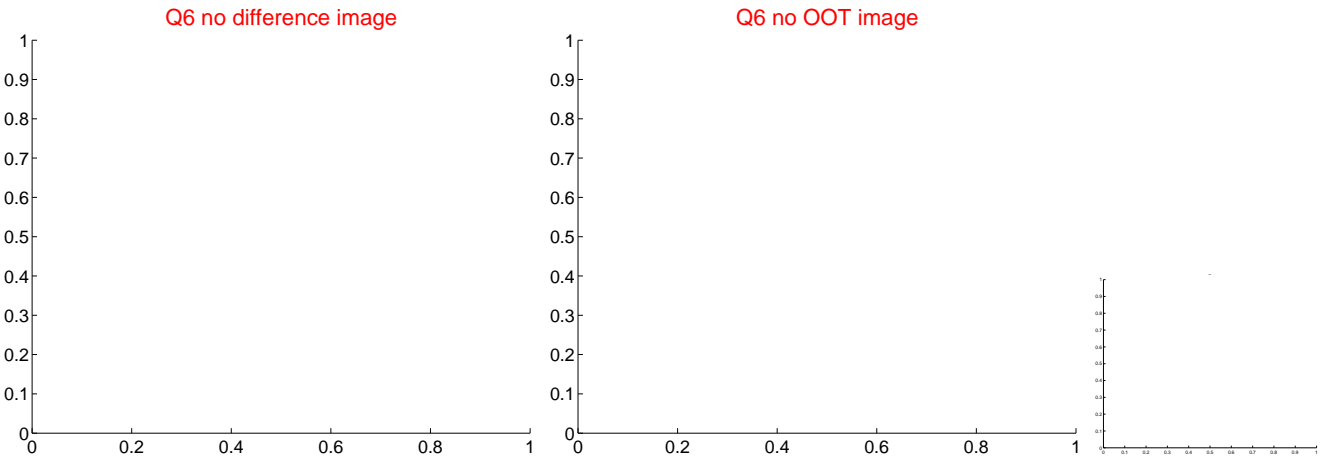
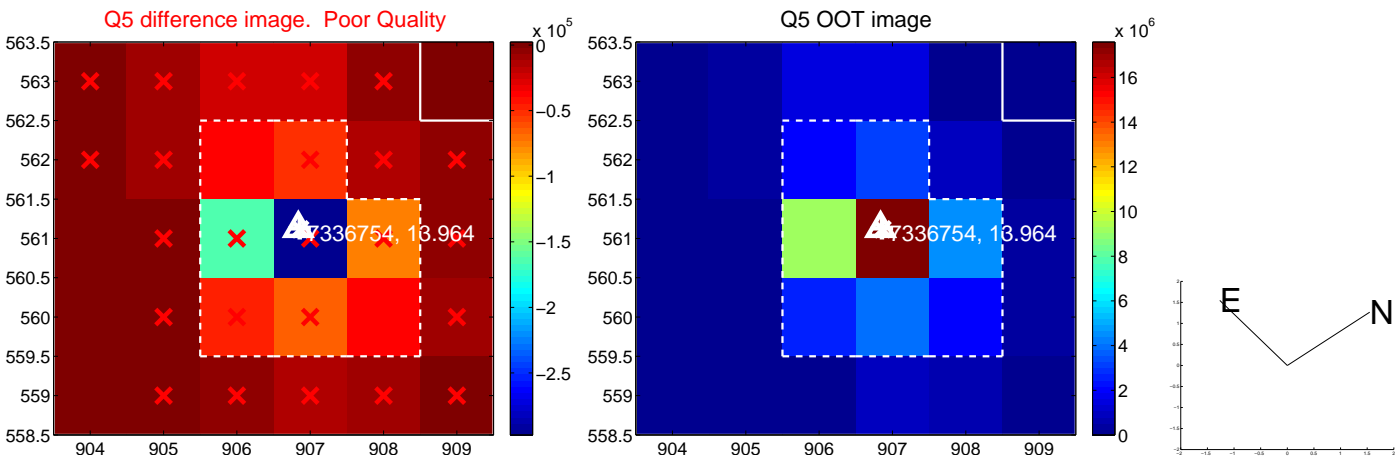


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- $\sigma$  uncertainty. Blue circle: three-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

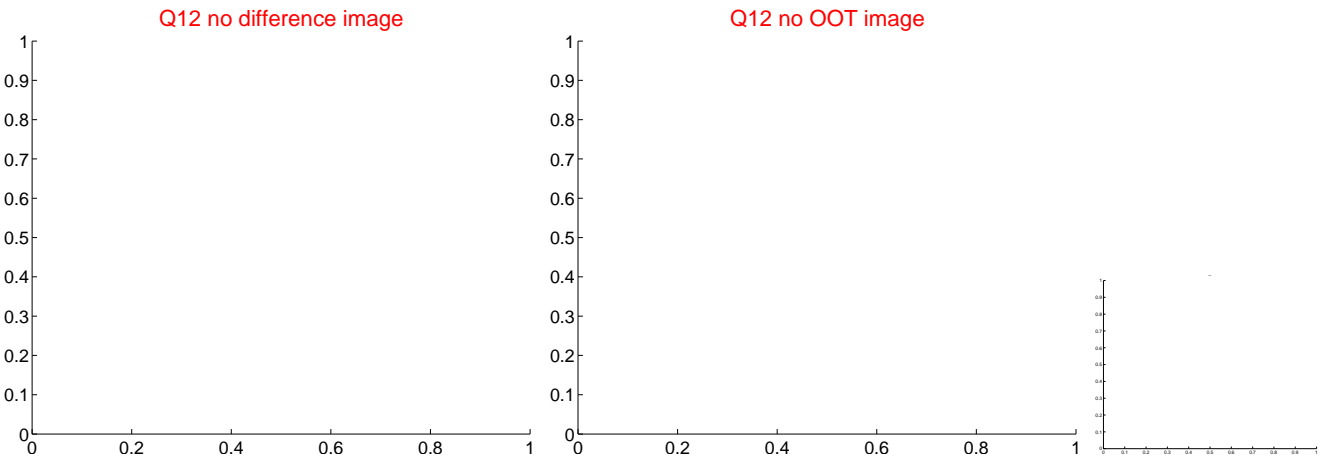
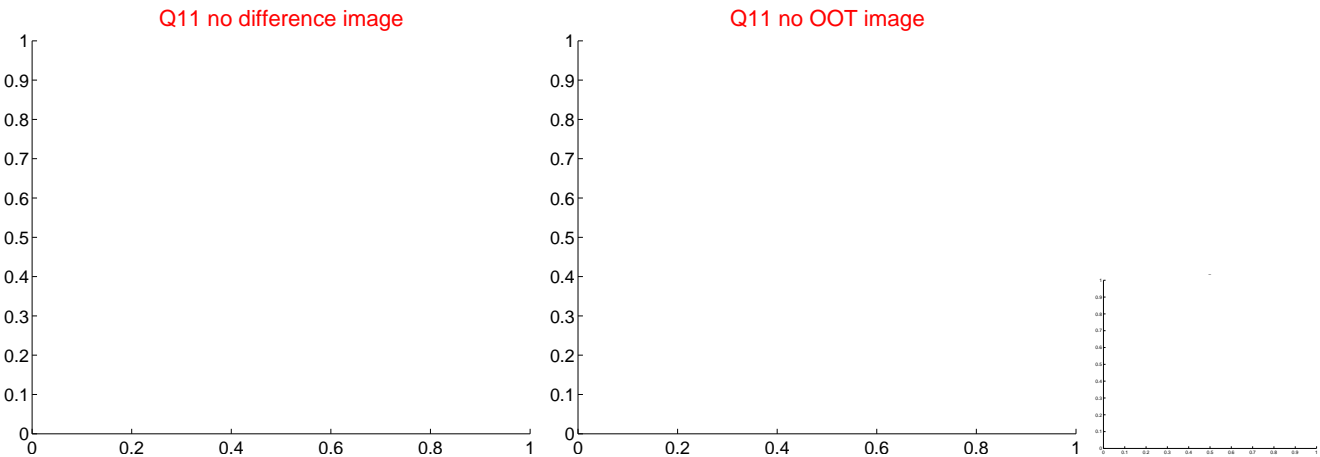
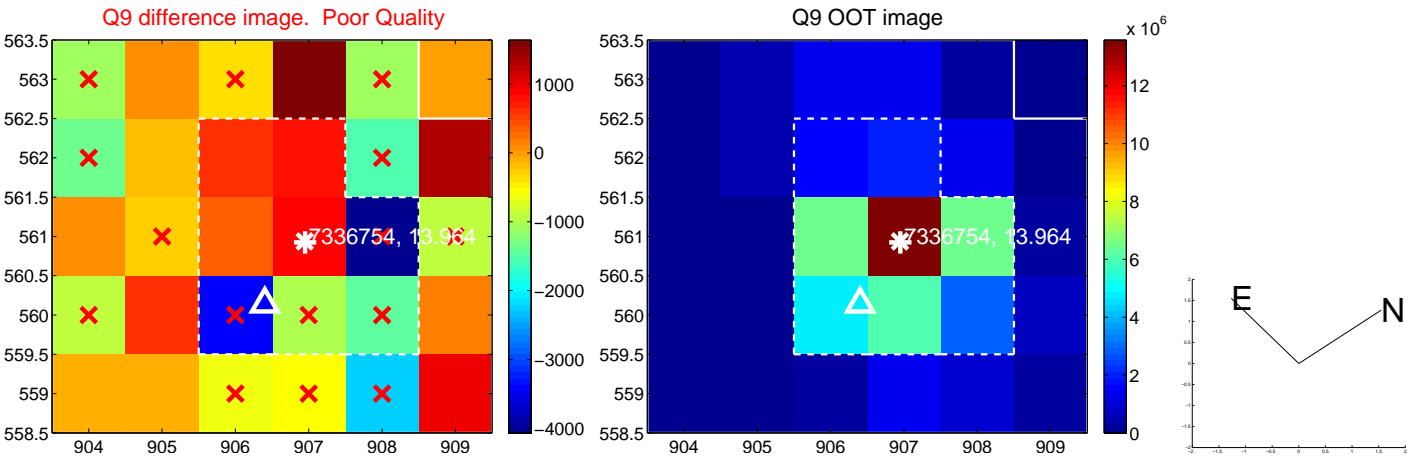


white  $\times$ : KIC target position;  $+$ : OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.

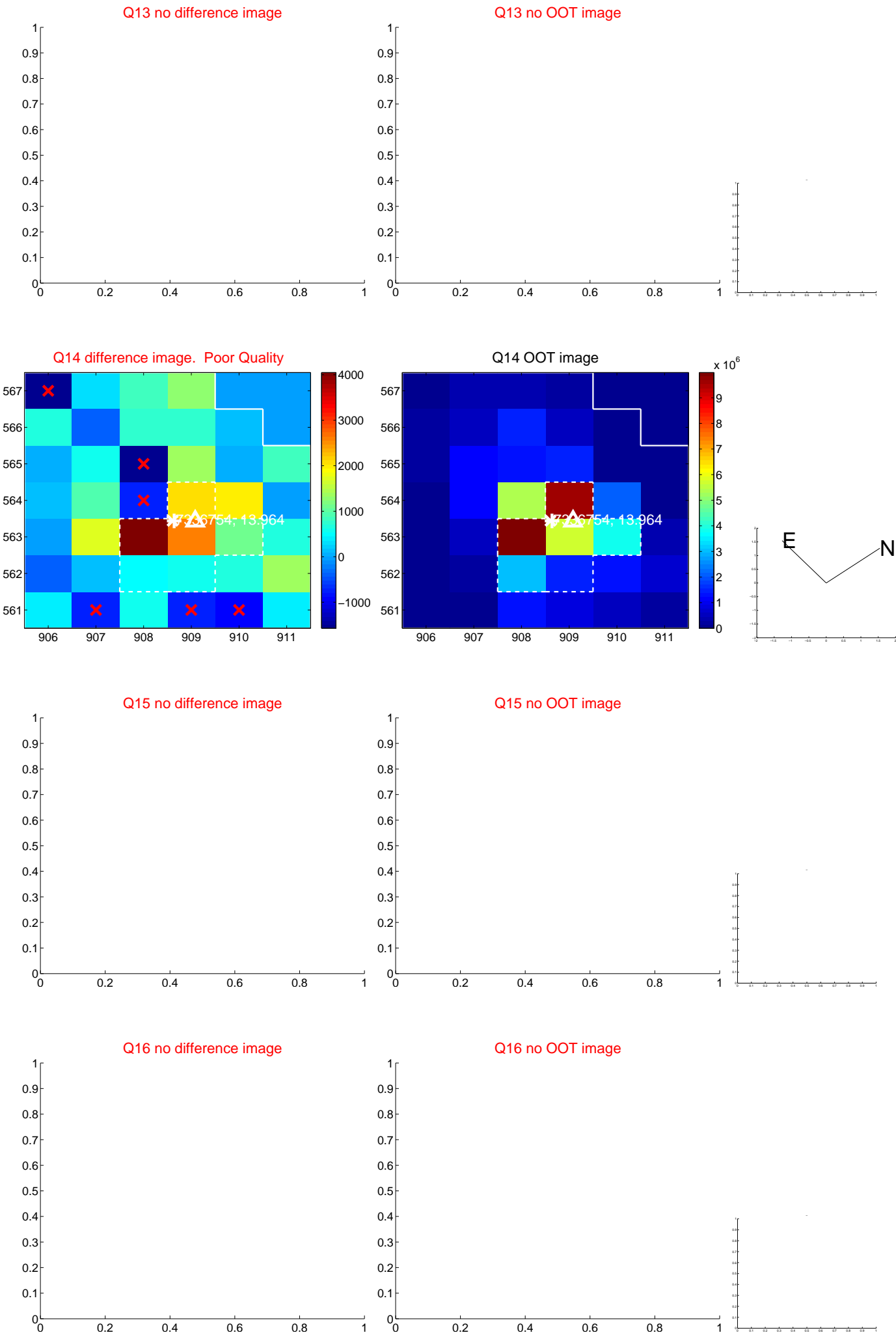




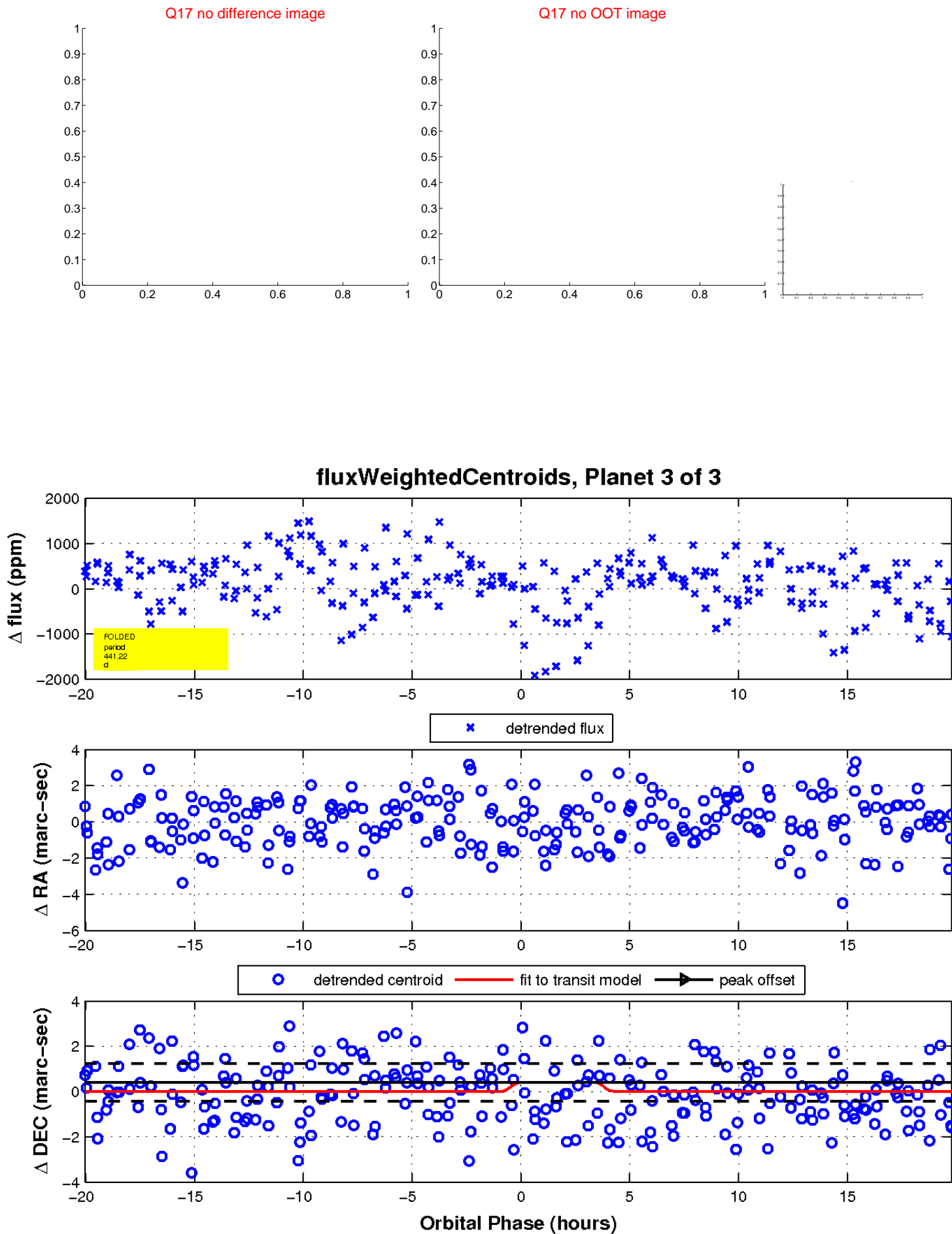
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



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.



UKIRT Image

Declination

