

# KIC 006717417

## 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)	$R_p$ ( $R_{\oplus}$ )	$S_p$ ( $S_{\oplus}$ )
006717417-01	OBS	No	0.697764	132.008079	37.6	3.295	9.8	5.4	7.65	5145	4.75	0.00

## Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006717417-01	OBS	FP	0.00	1	0	0	0	LPP_DV

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

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

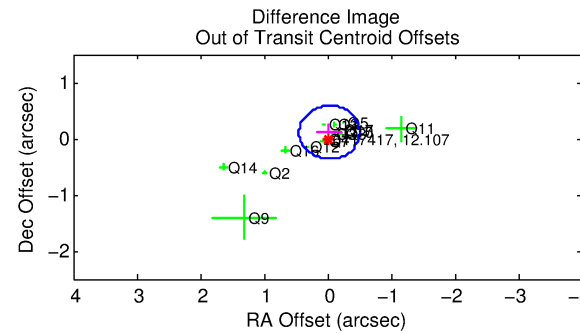
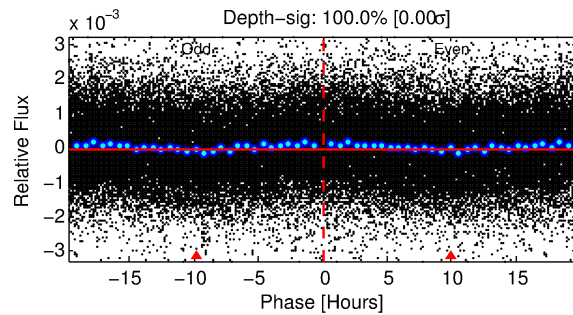
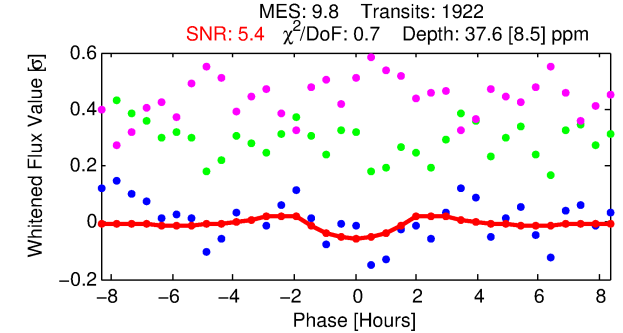
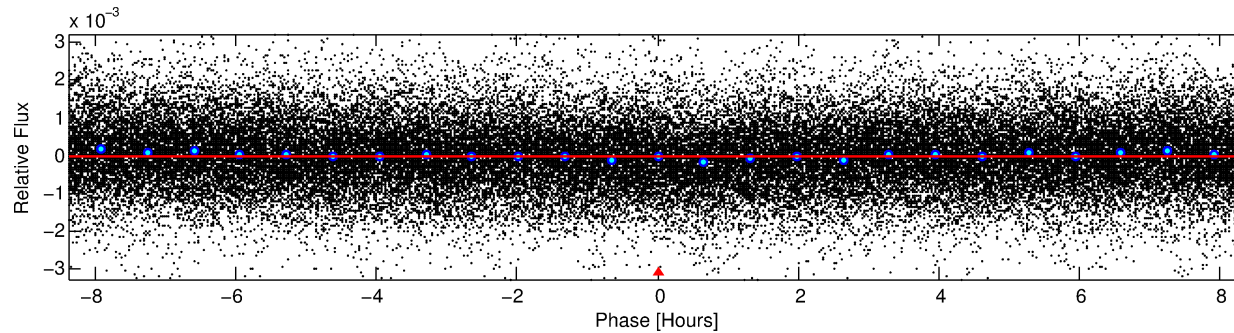
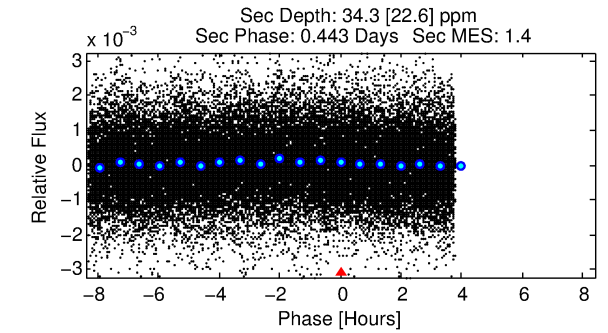
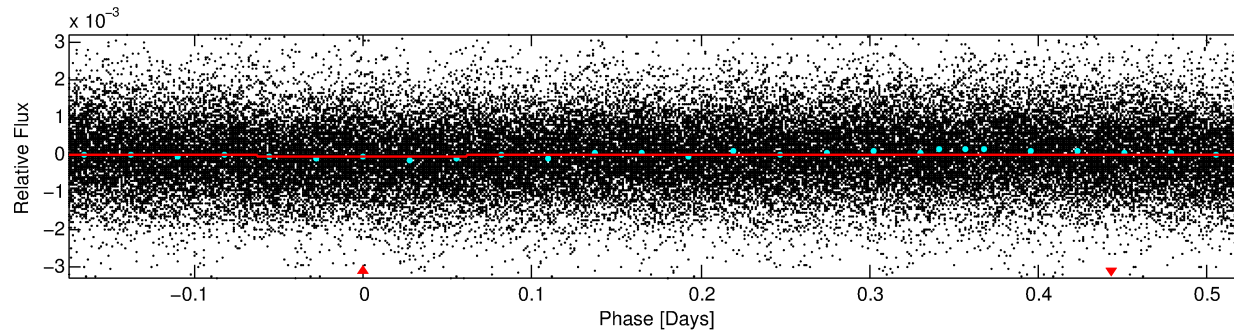
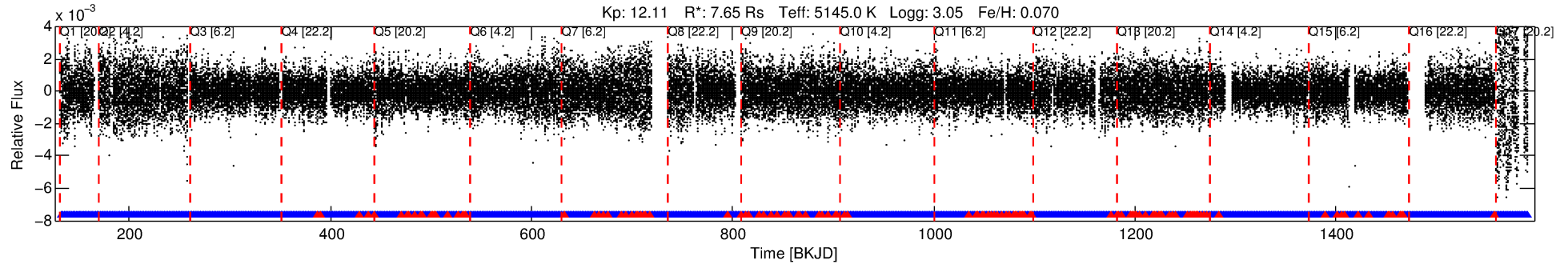
See [http://exoplanetarchive.ipac.caltech.edu/docs/API\\_kepcandidate\\_columns.html#proj\\_disp\\_col](http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col) for comment definitions.

## Ephemeris Match Information For 006717417-01

No Significant Match Found

# DV One-Page Summary

KIC: 6717417 Candidate: 1 of 1 Period: 0.698 d



## DV Fit Results:

Period = 0.69776 [0.00002] d  
Epoch = 132.0081 [0.0056] BKJD  
Rp/R\* = 0.0057 [0.0074]  
a/R\* = 1.59 [4.42]  
b = 0.50 [7.09]  
Seff = N/A  
Teq = N/A  
Rp = 4.75 [6.50] Re  
a = N/A  
Ag = N/A  
Teffp = N/A

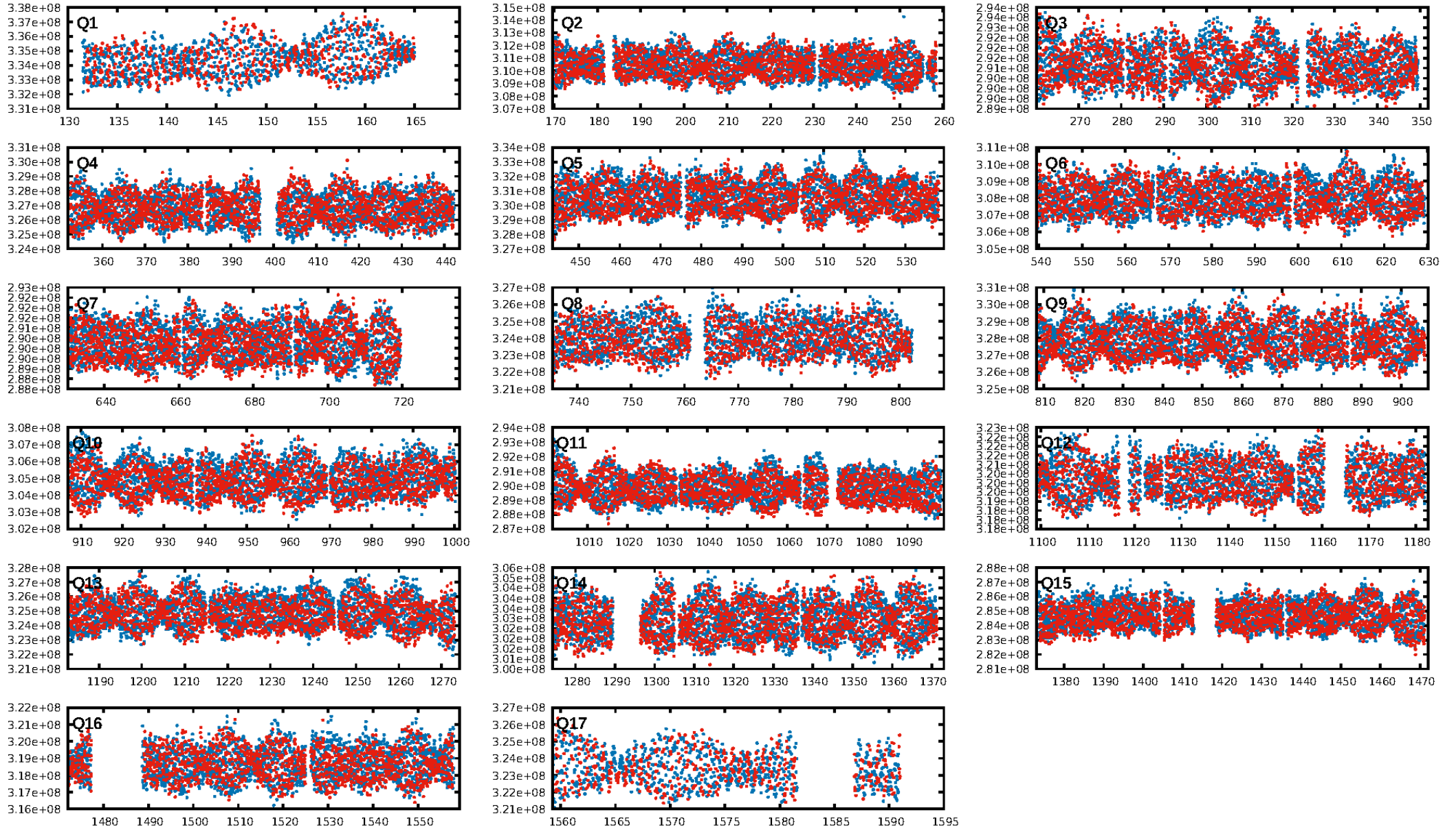
## DV Diagnostic Results:

ShortPeriod-sig: N/A  
LongPeriod-sig: N/A  
ModelChiSquare2-sig: N/A  
ModelChiSquareGof-sig: N/A  
Bootstrap-pfa: 1.55e-23  
RollingBand-fgt: 0.93 [1704/1835]  
GhostDiagnostic-chr: 0.9445  
Centroid-sig: 0.0%  
Centroid-so: 0.809 arcsec [2.24σ]  
OotOffset-rm: 0.114 arcsec [0.72σ]  
KicOffset-rm: 0.164 arcsec [0.92σ]  
OotOffset-st: 3/4/4/5 [16]  
KicOffset-st: 3/4/4/5 [16]  
DiffImageQuality-fgm: 0.75 [12/16]  
DiffImageOverlap-fno: 1.00 [17/17]

Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 02:51:10 Z

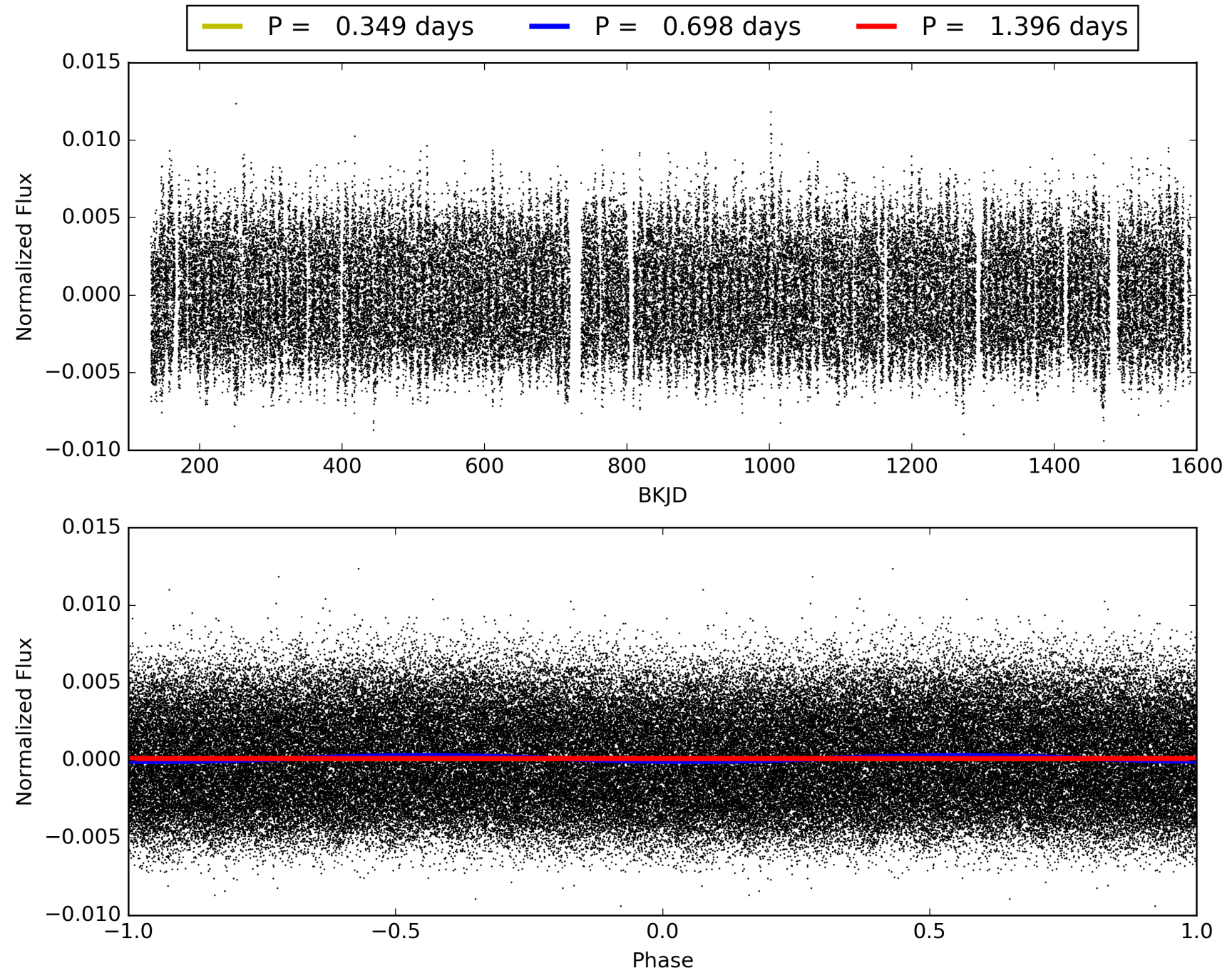
This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

# TCE 006717417-01, PDC Light Curves



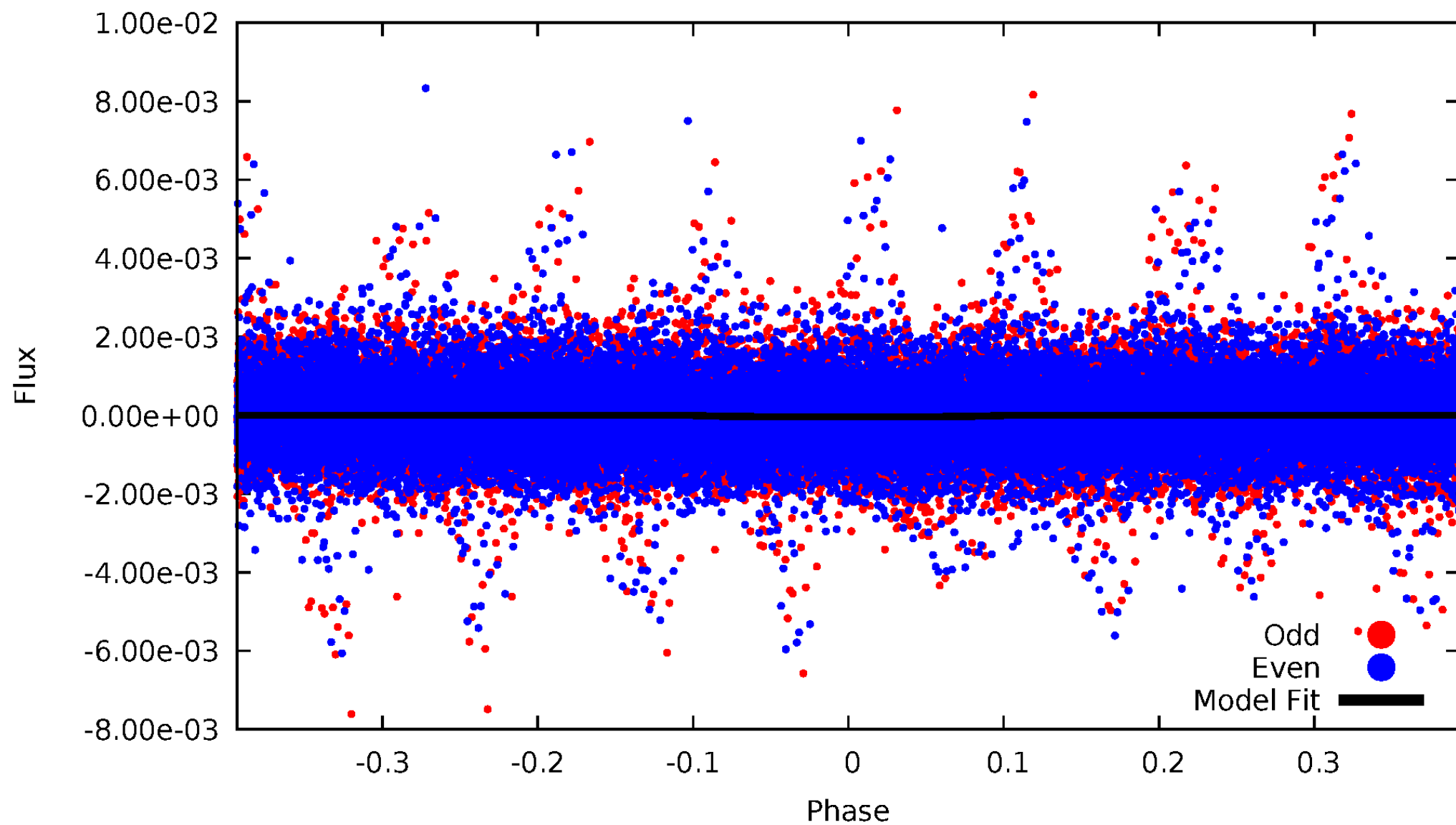


TCE 006717417-01



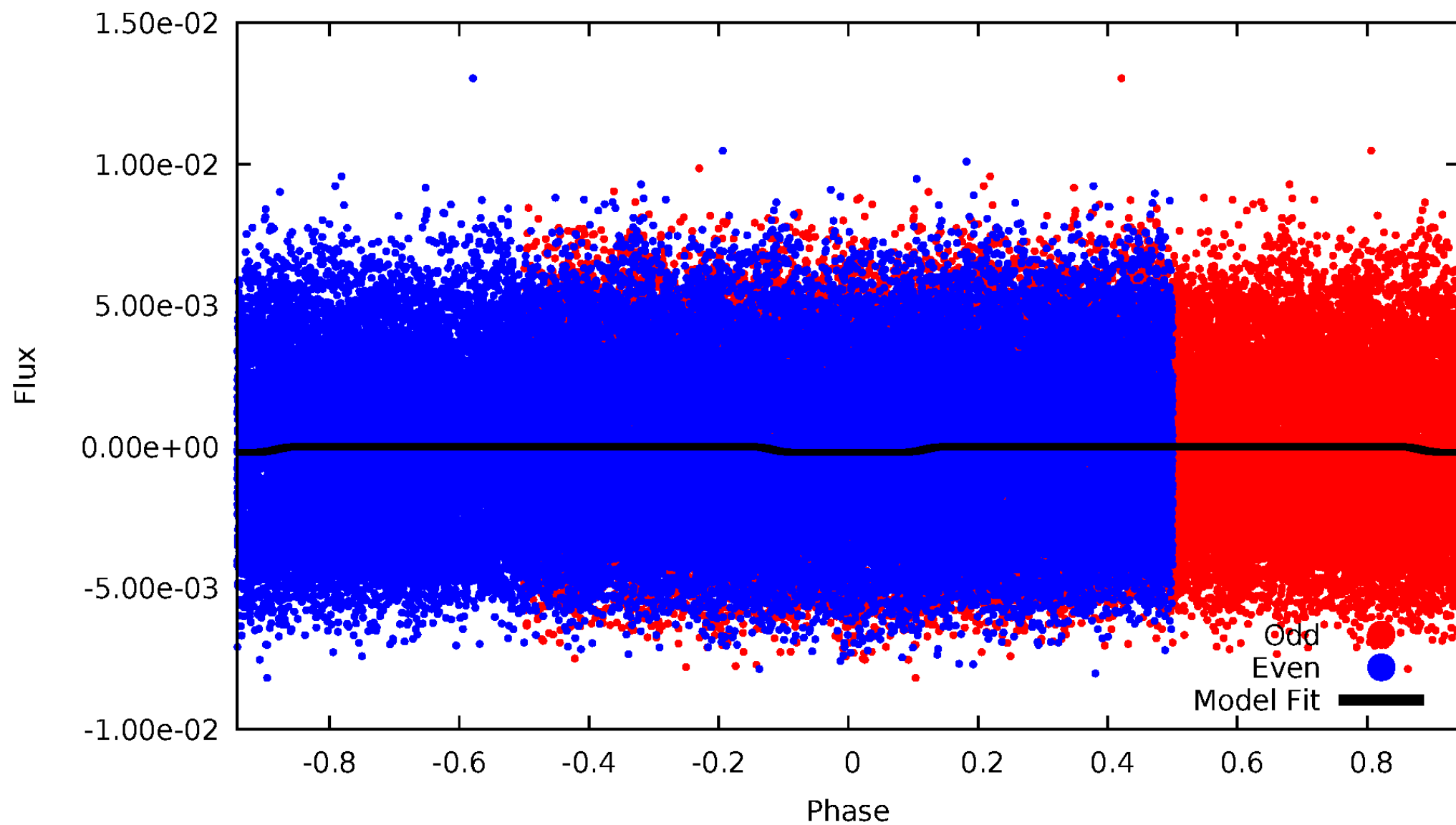
# DV Odd/Even

TCE 006717417-01



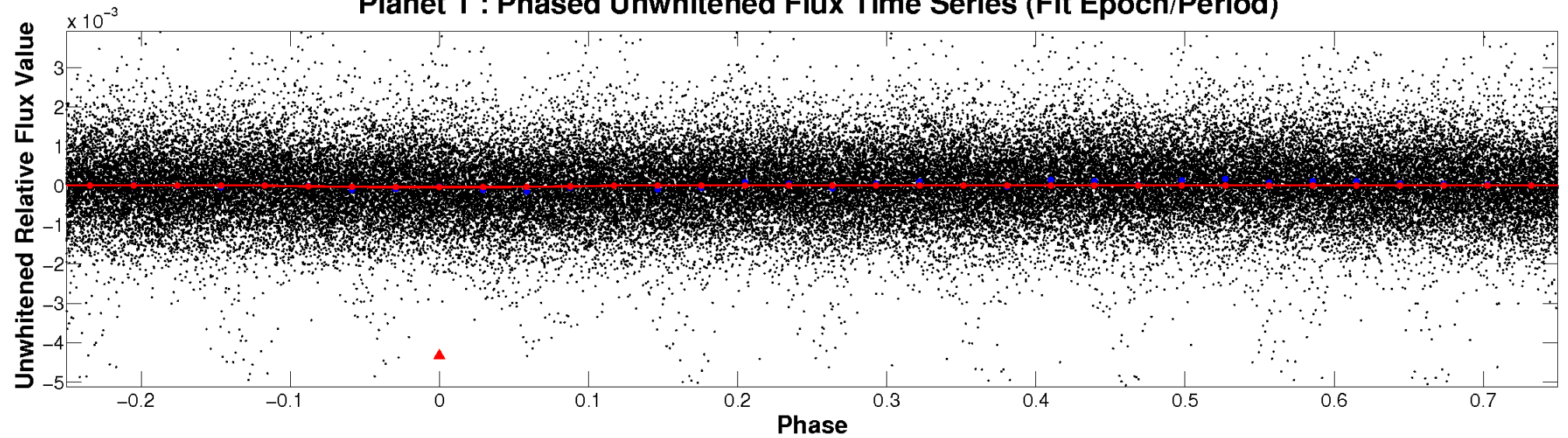
# ALT Odd/Even

TCE 006717417-01

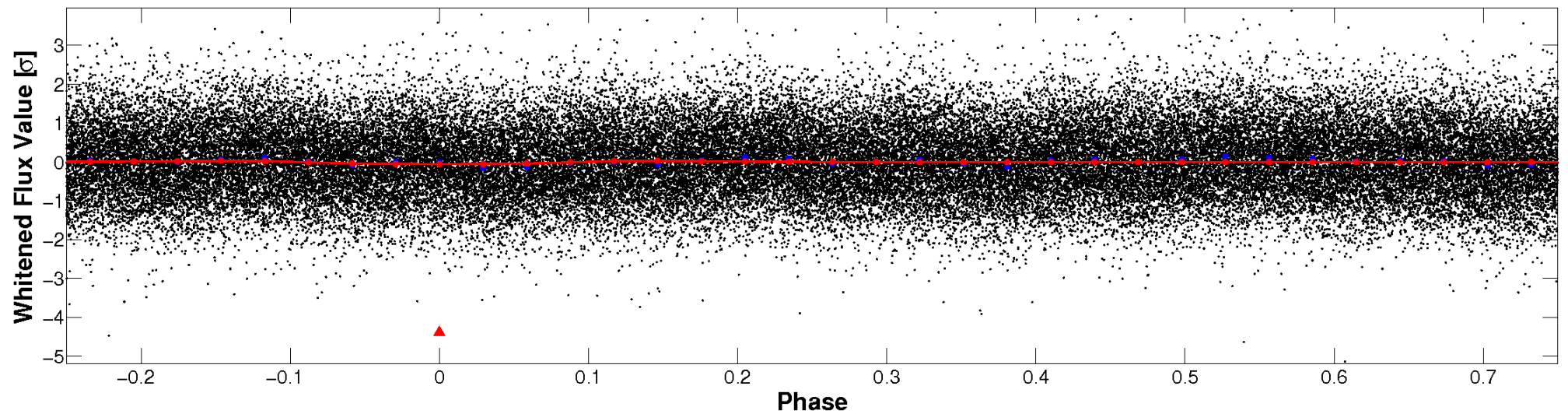


# Non-Whitened Vs. Whitened Light Curve

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



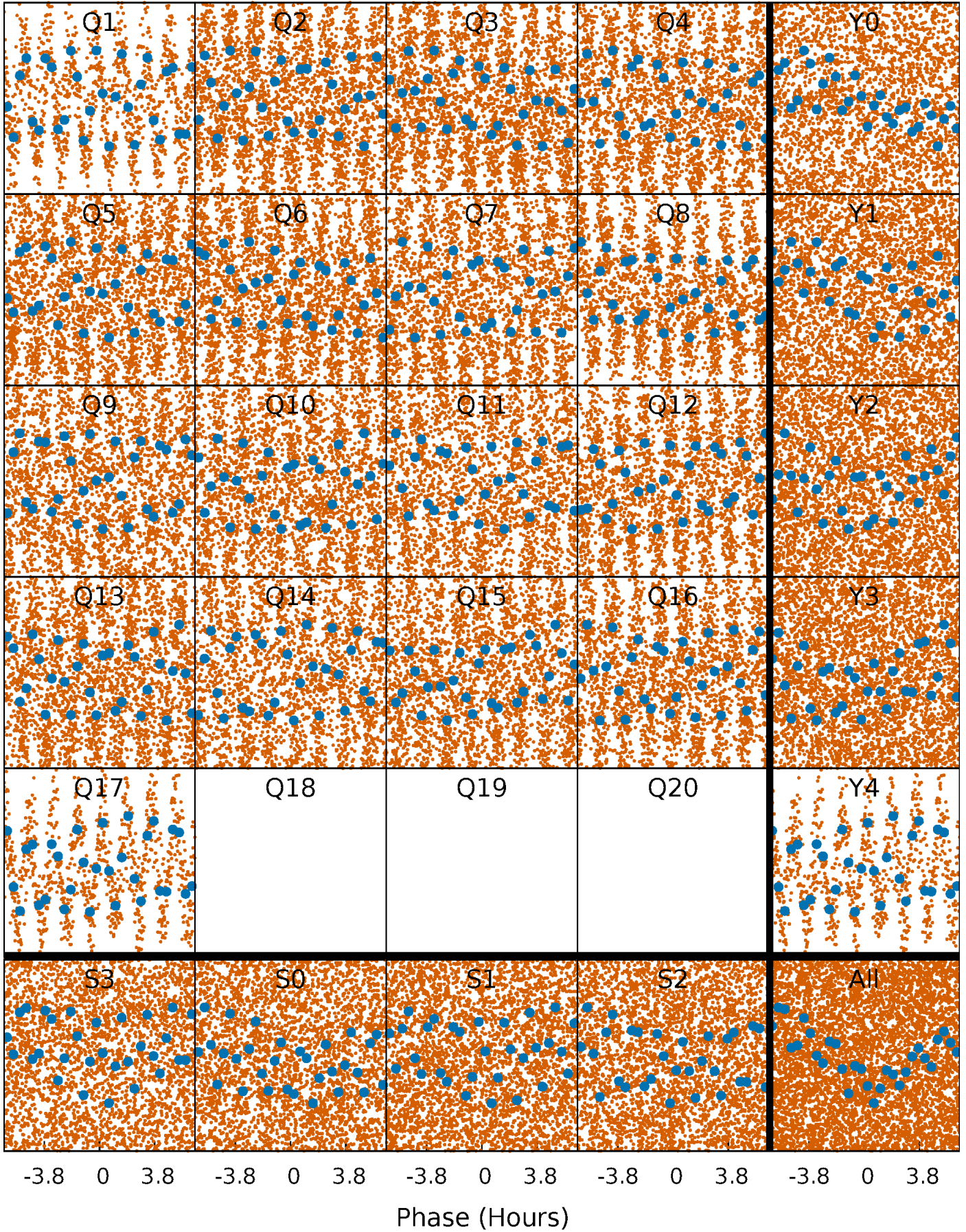
**Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)**





# PDC Quarter-Phased Transit Curves

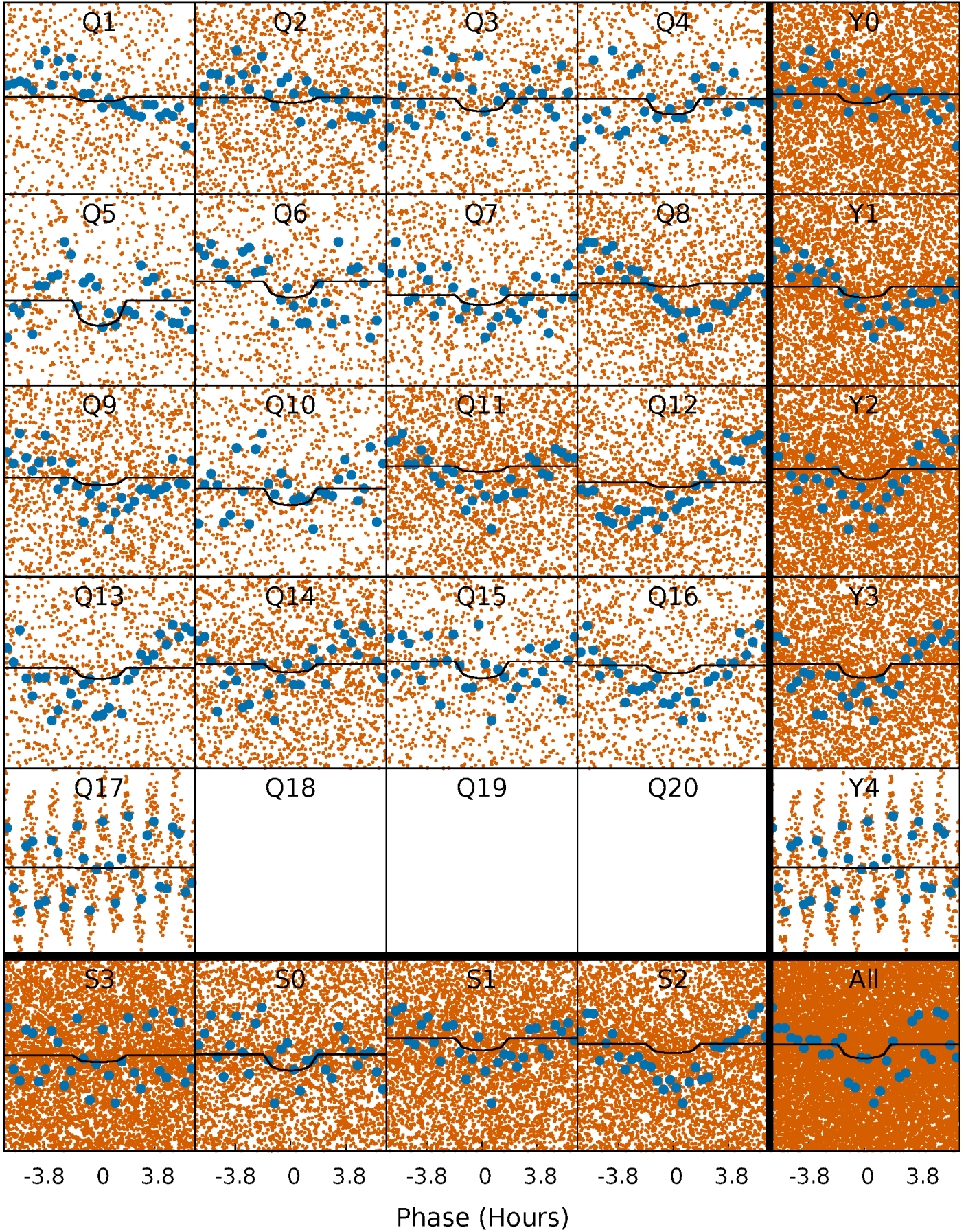
TCE 006717417-01 P= 0.697764 Days  $T_0=132.008079$  (BKJD)





# DV Quarter-Phased Transit Curves

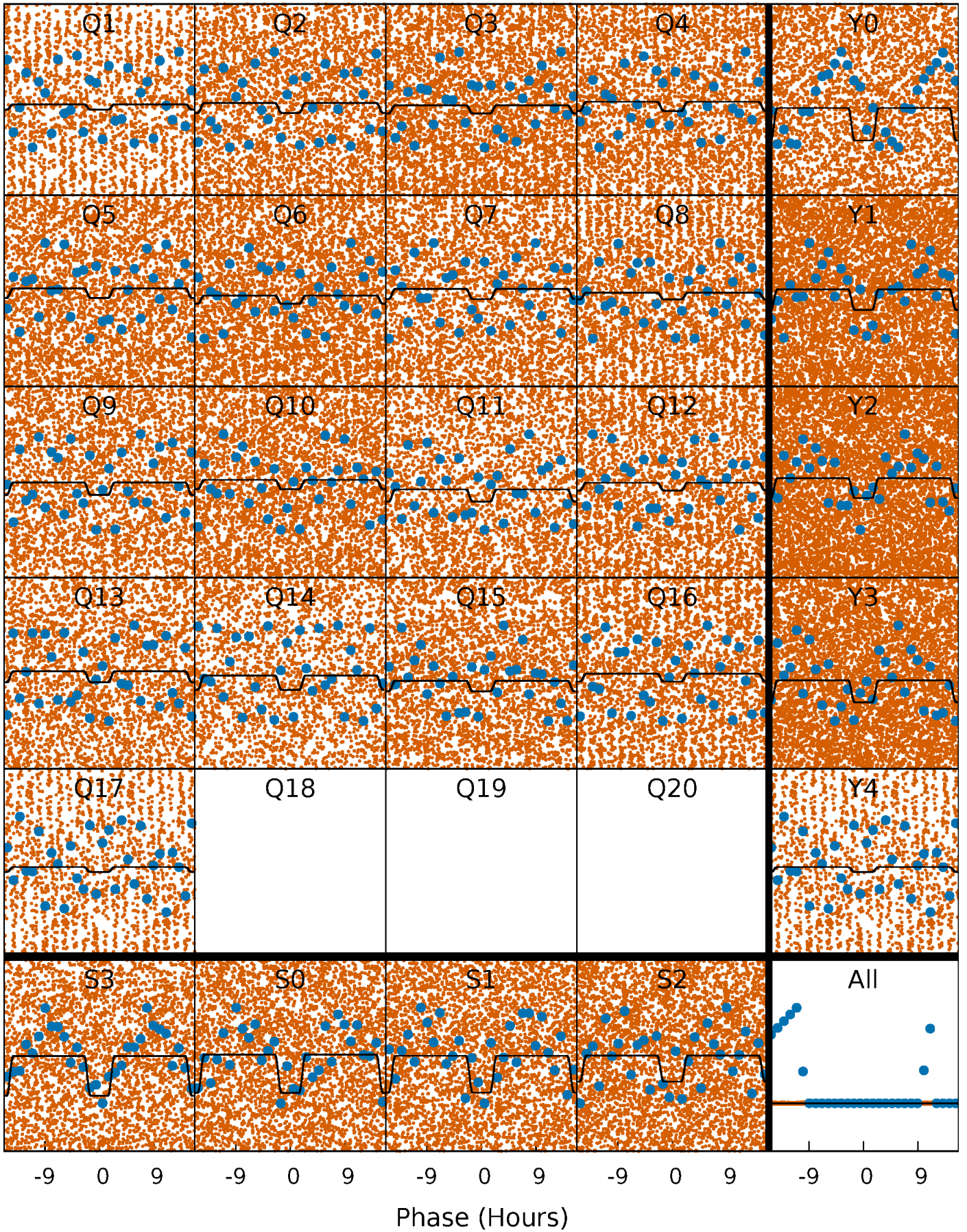
TCE 006717417-01 P= 0.697764 Days  $T_0=132.008079$  (BKJD)





# Alt. Detrend Quarter-Phased Transit Curves

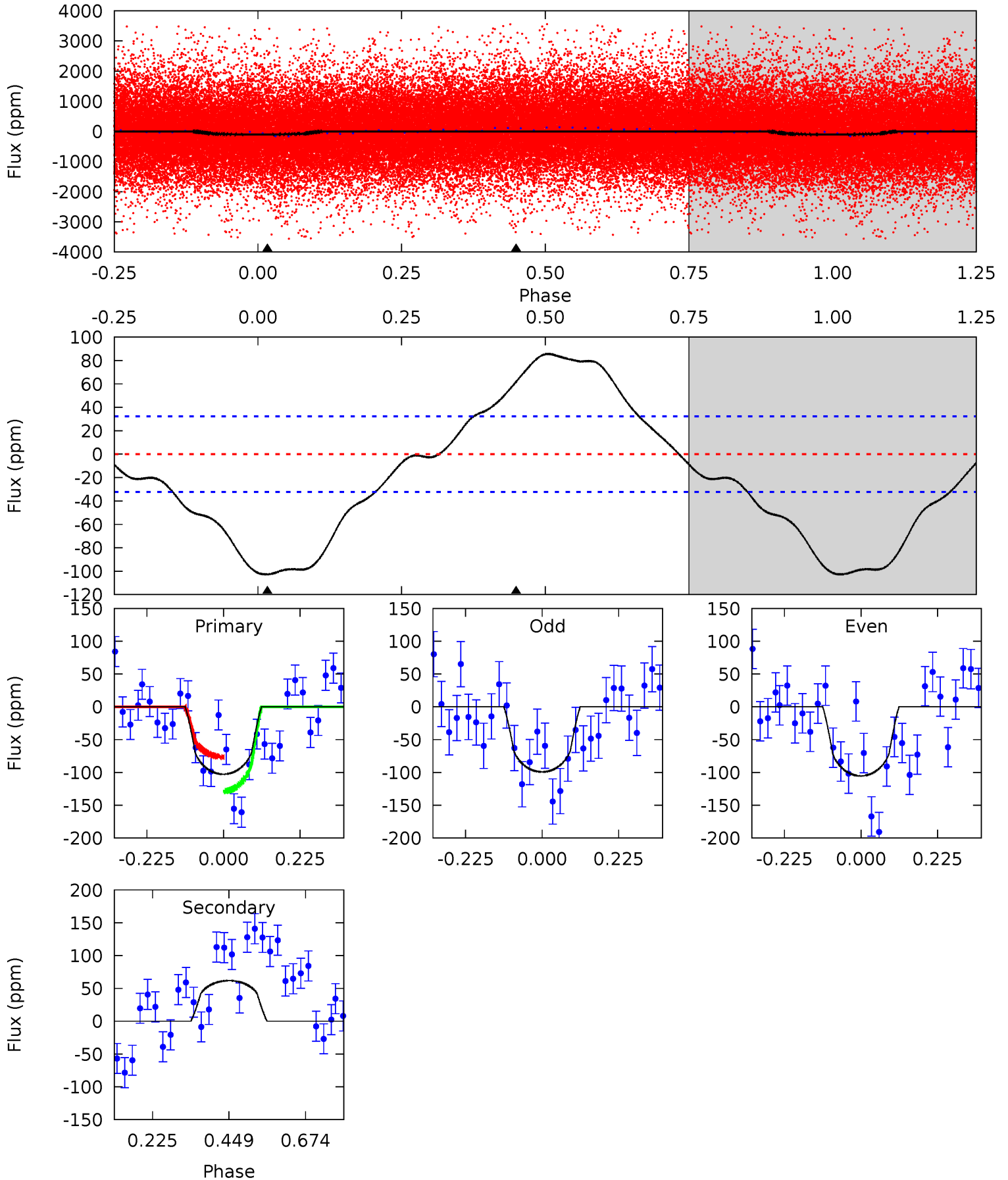
TCE 006717417-01 P= 0.697798 Days  $T_0=132.008611$  (BKJD)



# DV Model-Shift Uniqueness Test

006717417-01, P = 0.697764 Days, E = 131.310315 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
14.0	-8.40	0	0	4.39	1.21	2.09	14.0	14.0	-8.40	-8.40	0.41	1.06	0.45	3.59

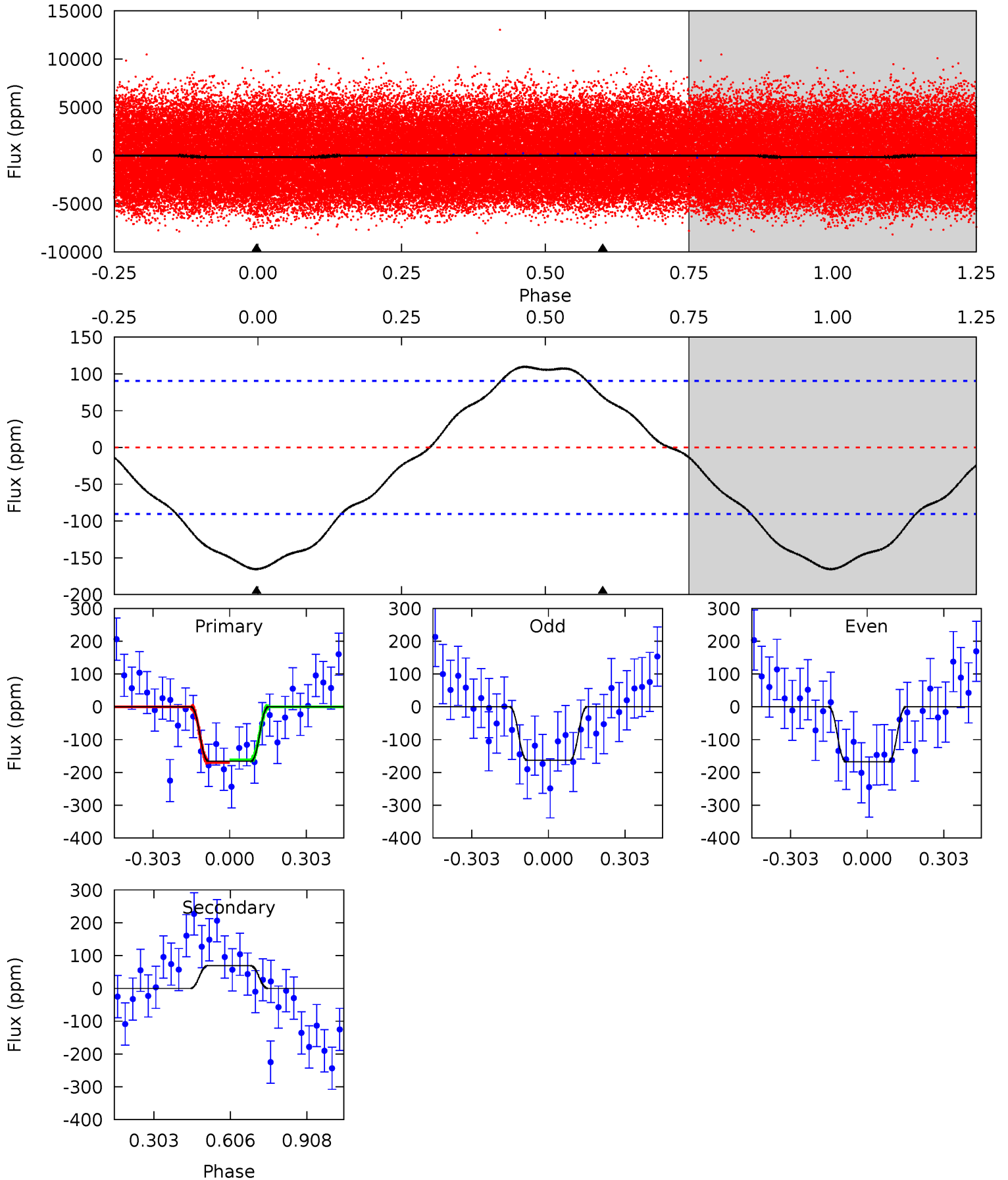




# Alt Model-Shift Uniqueness Test

006717417-01, P = 0.697798 Days, E = 131.310813 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
7.92	-3.30	0	0	4.33	1.03	1.04	7.92	7.92	-3.30	-3.30	0.10	0.97	0.40	0.19



### Stellar Parameters For KIC 006717417

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	$5145^{+61}_{-143}$	$3.050^{+0.245}_{-0.105}$	$0.070^{+0.100}_{-0.250}$	$7.653^{+3.059}_{-3.365}$	$2.394^{+0.324}_{-0.973}$	$0.008^{+0.015}_{-0.003}$
	+1%/-3%	+8%/-3%	+143%/-357%	+40%/-44%	+14%/-41%	+201%/-40%
Source	SPE74	SPE74	SPE74	DSEP		

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

### Secondary Eclipse Parameters for KIC 006717417-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	$A_{\text{obs}}$
DV	$62 \pm 7$	$6.19^{+5.77}_{-3.97}$	$5958^{+362}_{-505}$	$-5848^{+622}_{-2961}$	$-0.380^{+0.281}_{-2.378}$
Alt.	$69 \pm 21$	$10.52^{+6.34}_{-4.99}$	$5919^{+388}_{-502}$	$-5330^{+364}_{-706}$	$-0.132^{+0.084}_{-0.340}$

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

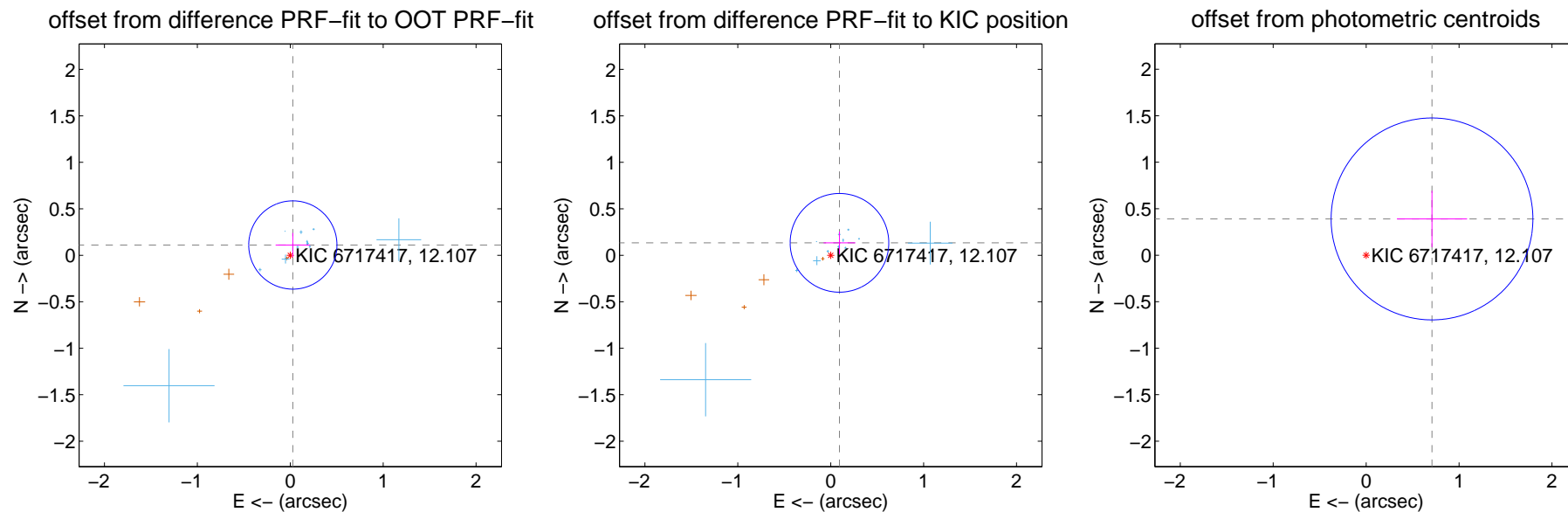
## DV Centroid Data

Supplemental centroid analysis for 006717417-01. Kepler magnitude: 12.11. Transit SNR 5.41

There are 12 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.05 arcsec

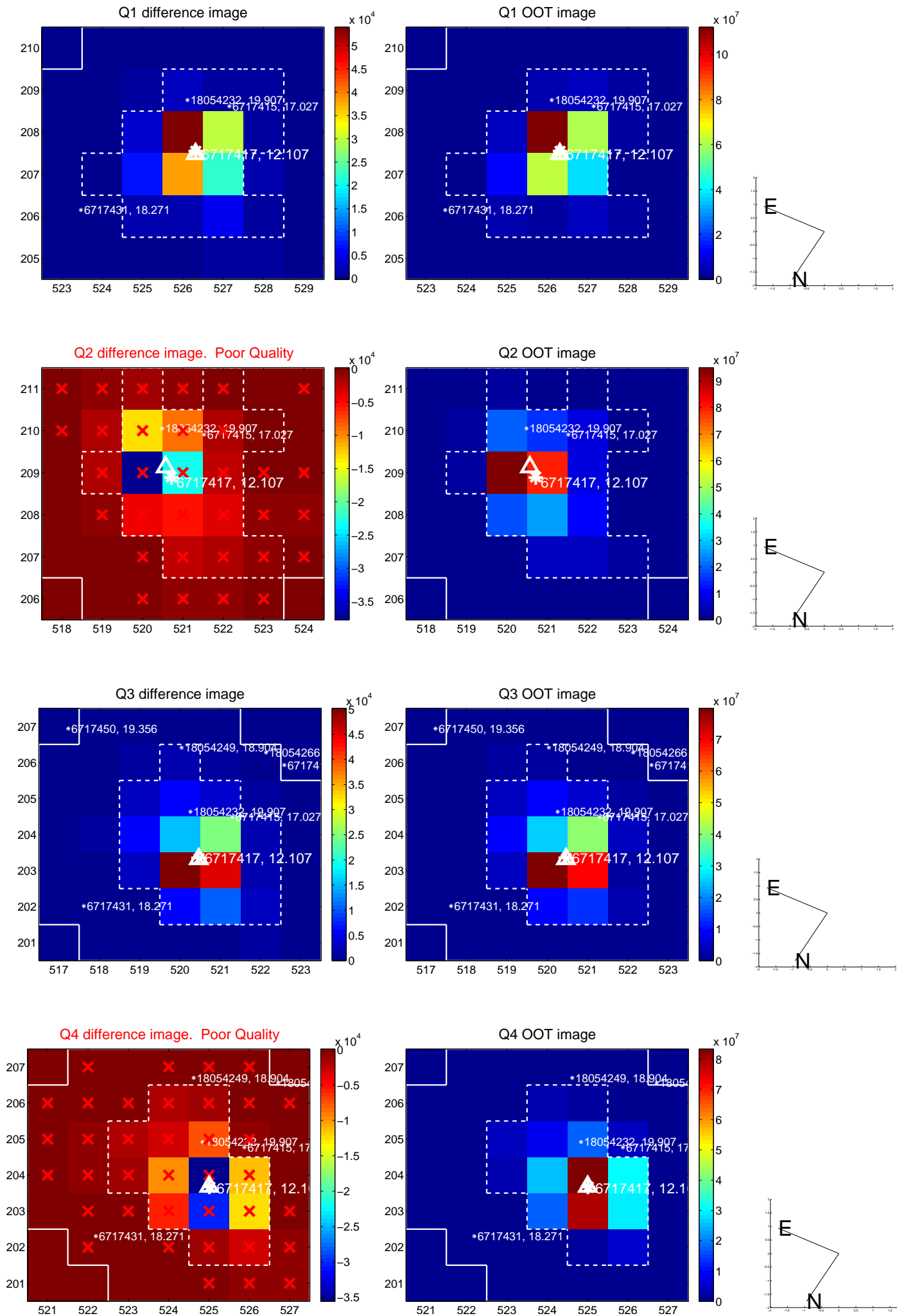
	Distance in arcsec	Distance / $\sigma$	$\Delta$ RA	$\Delta$ Dec
PRF-fit source offset from OOT	$0.114 \pm 0.158$	0.72	$-0.028 \pm 0.185$	$0.111 \pm 0.129$
PRF-fit source offset from KIC position	$0.164 \pm 0.177$	0.92	$-0.094 \pm 0.171$	$0.134 \pm 0.120$
photometric centroid source offset	$0.81 \pm 0.36$	2.24	$-0.71 \pm 0.38$	$0.39 \pm 0.30$



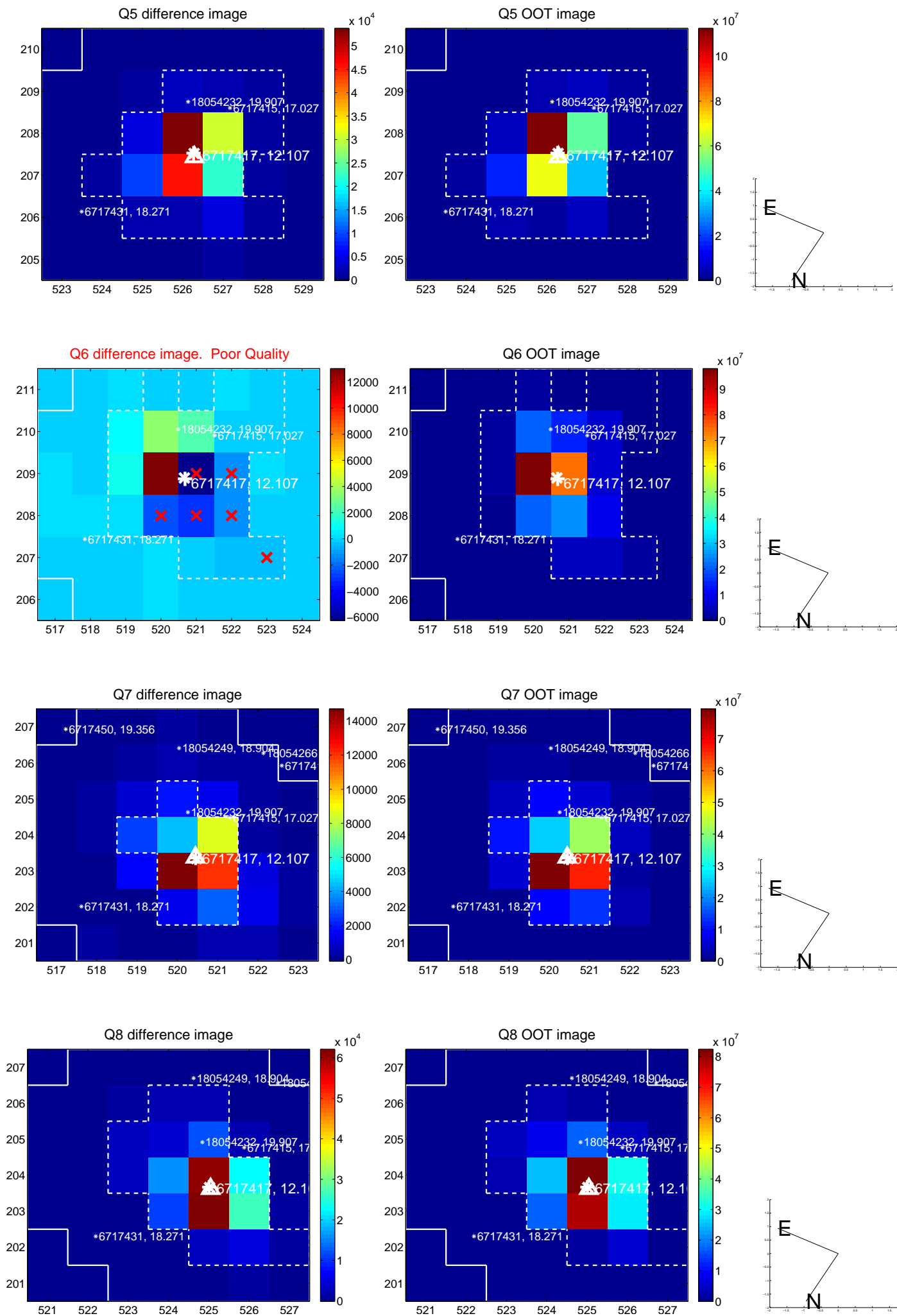
Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- $\sigma$  uncertainty. Blue circle: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



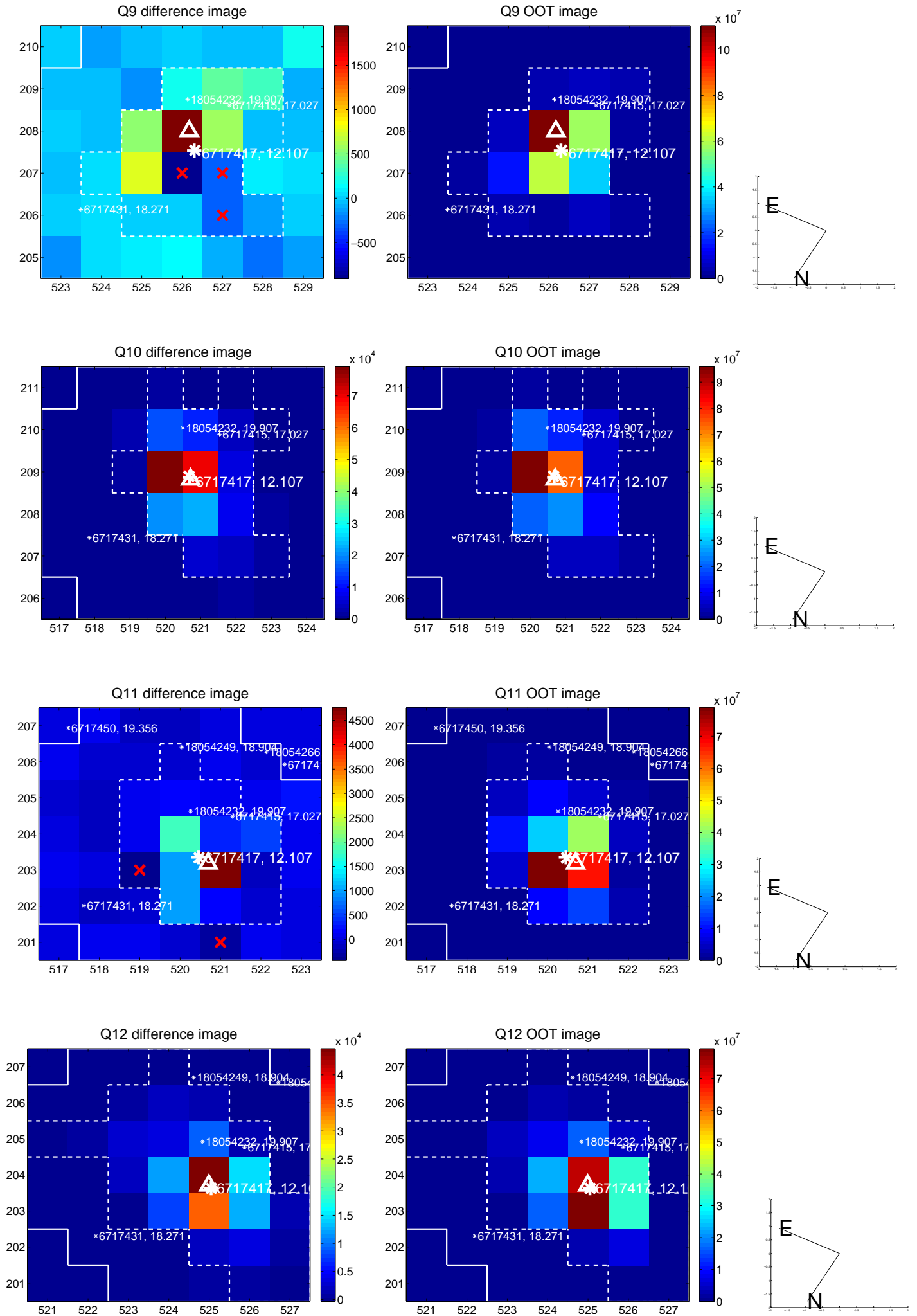
white  $\times$ : KIC target position; +: OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.



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

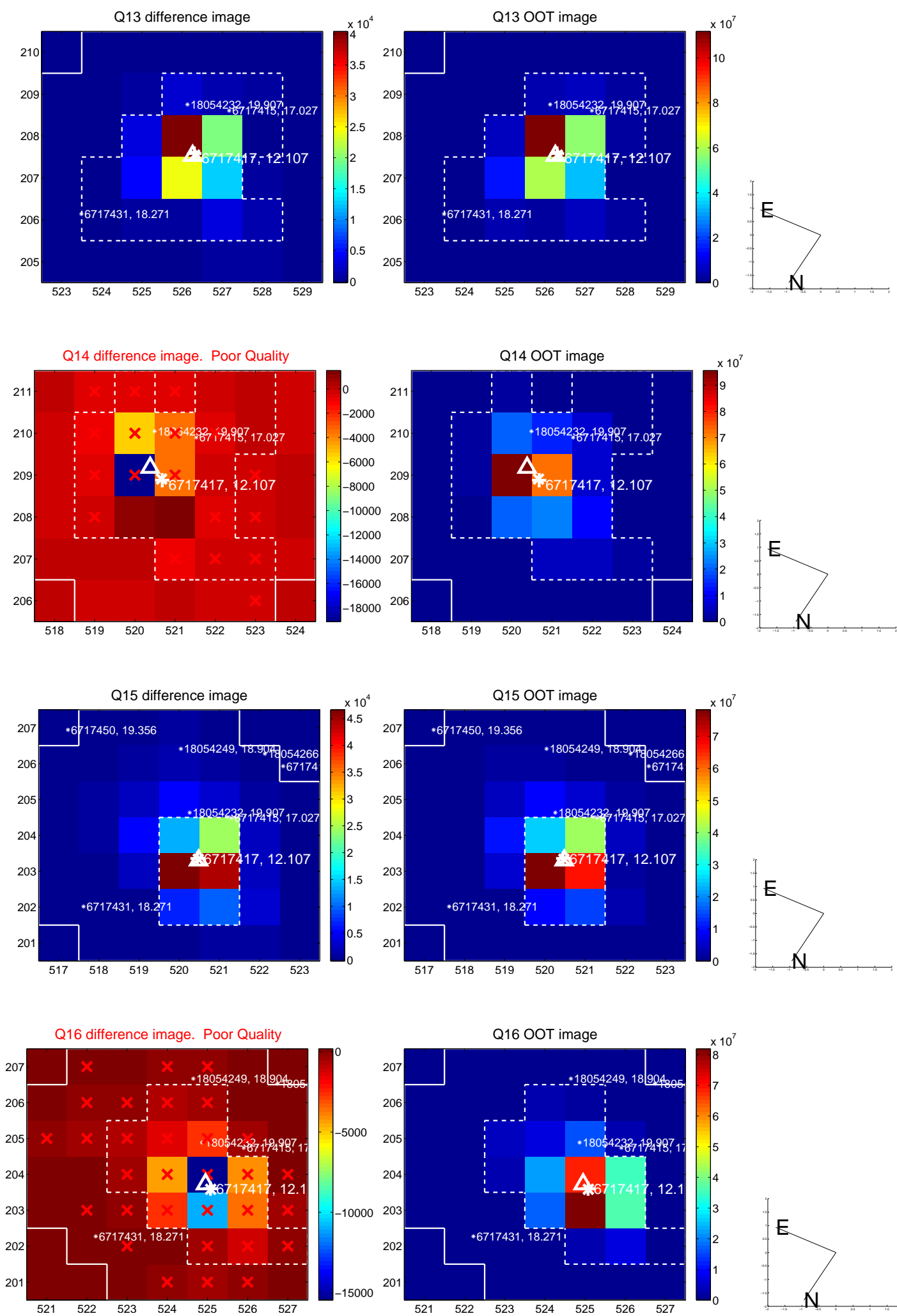


white  $\times$ : KIC target position; +: OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.

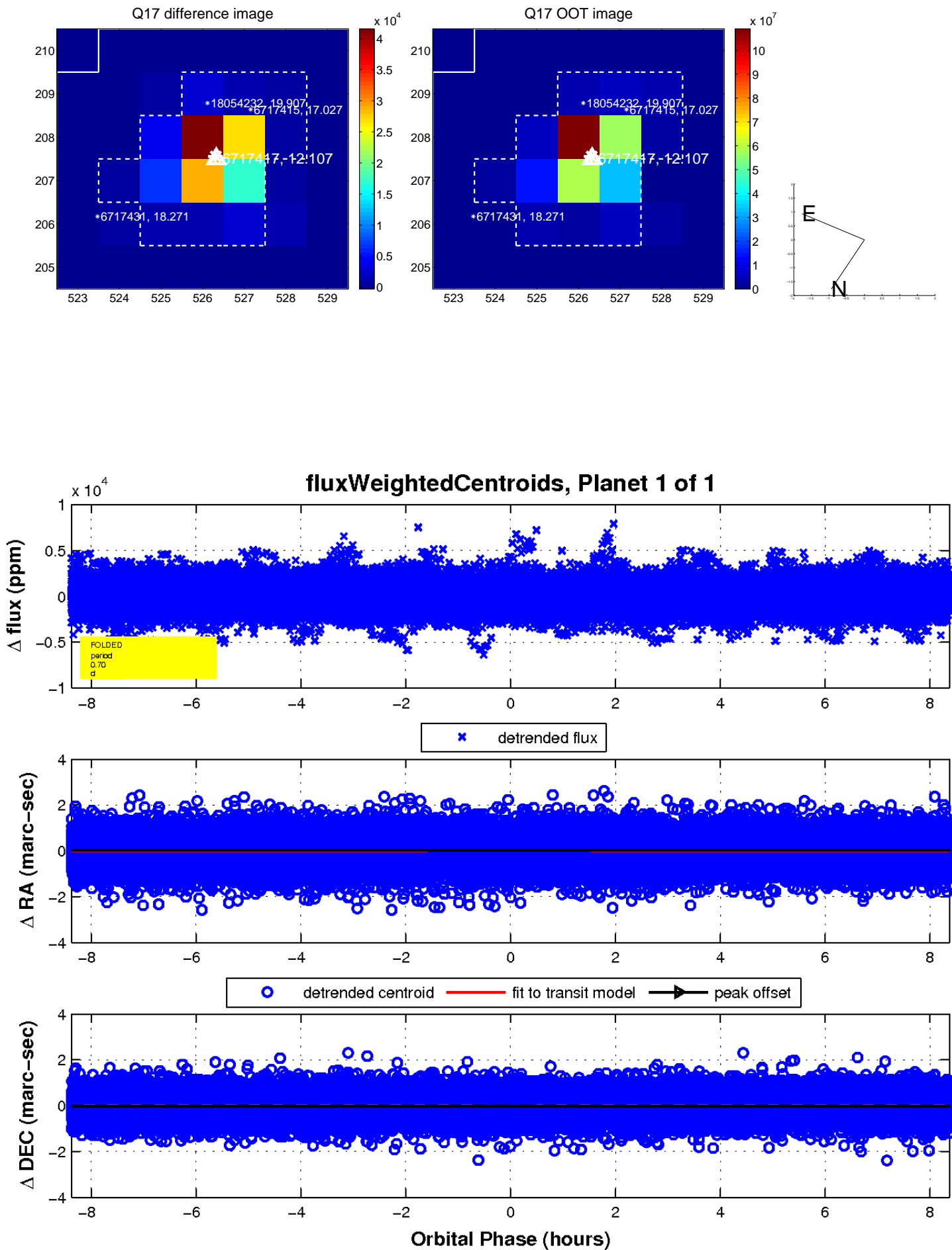




white  $\times$ : KIC target position; +: OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.



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



UKIRT Image

Declination

