

# KIC 007692932

## 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)	$R_p$ ( $R_{\oplus}$ )	$S_p$ ( $S_{\oplus}$ )
007692932-01	OBS	No	368.133072	236.173086	783.8	14.827	8.5	8.0	1.00	5875	2.79	0.99

## Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007692932-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—LPP_DV—ALL_TRANS_CHASES—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.

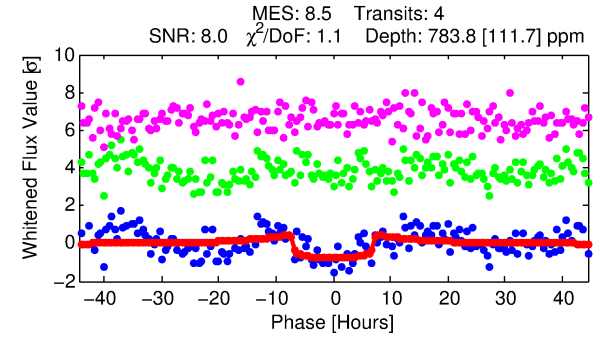
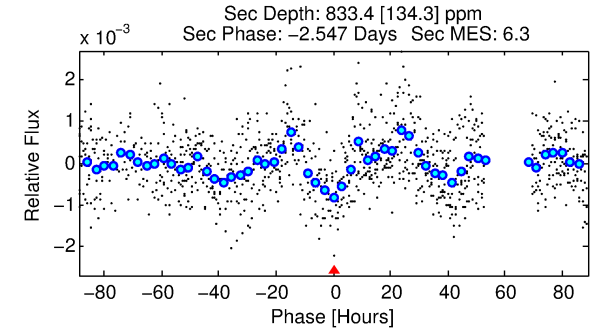
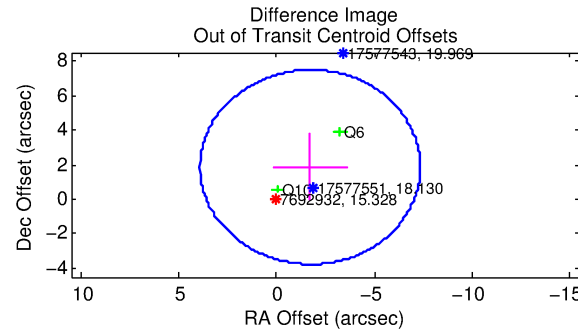
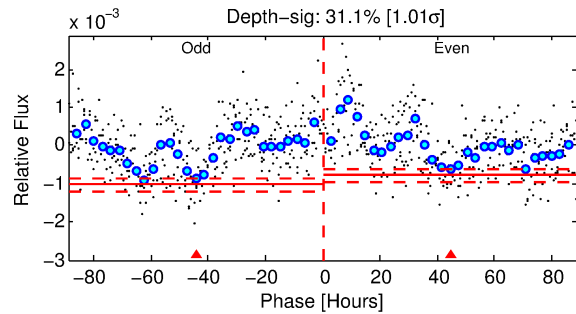
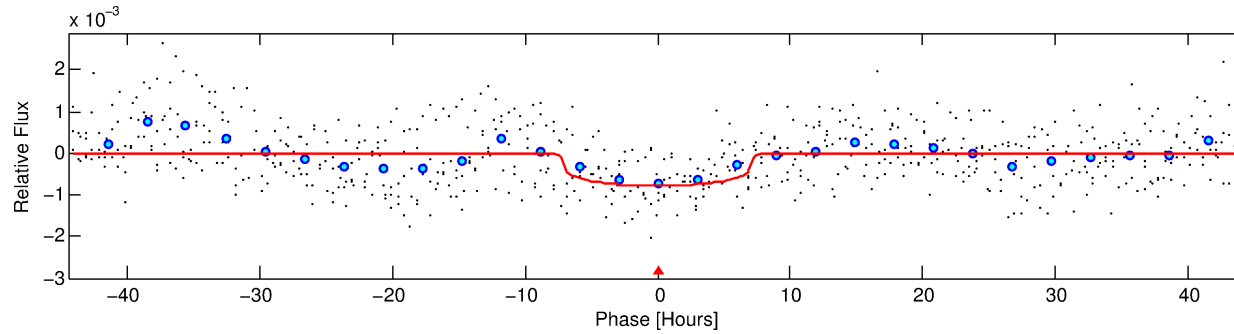
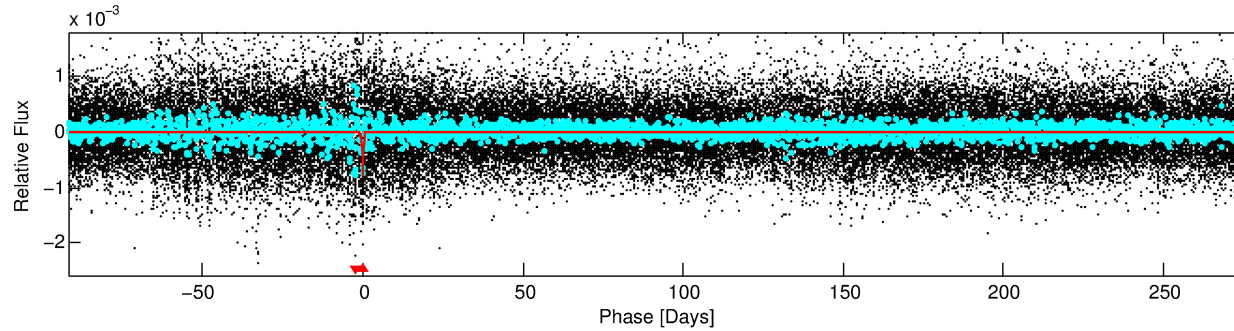
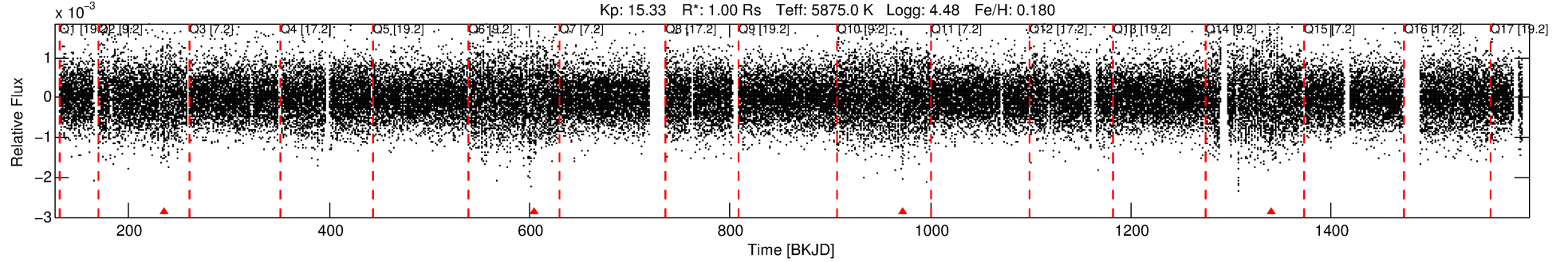
See [http://exoplanetarchive.ipac.caltech.edu/docs/API\\_kepcandidate\\_columns.html#proj\\_disp\\_col](http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col) for comment definitions.

## Ephemeris Match Information For 007692932-01

No Significant Match Found

# DV One-Page Summary

KIC: 7692932 Candidate: 1 of 1 Period: 368.133 d



## DV Fit Results:

Period = 368.13307 [0.01046] d  
Epoch = 236.1731 [0.0201] BKJD  
Rp/R\* = 0.0257 [0.0185]  
a/R\* = 185.69 [577.15]  
b = 0.31 [9.30]  
Seff = 0.99 [0.40]  
Teq = 255 [25] K  
Rp = 2.79 [2.19] Re  
a = 1.0338 [0.2676] AU  
Ag = 62770.65 [94339.05] [0.67 $\sigma$ ]  
Teffp = 6232 [2274] K [2.63 $\sigma$ ]

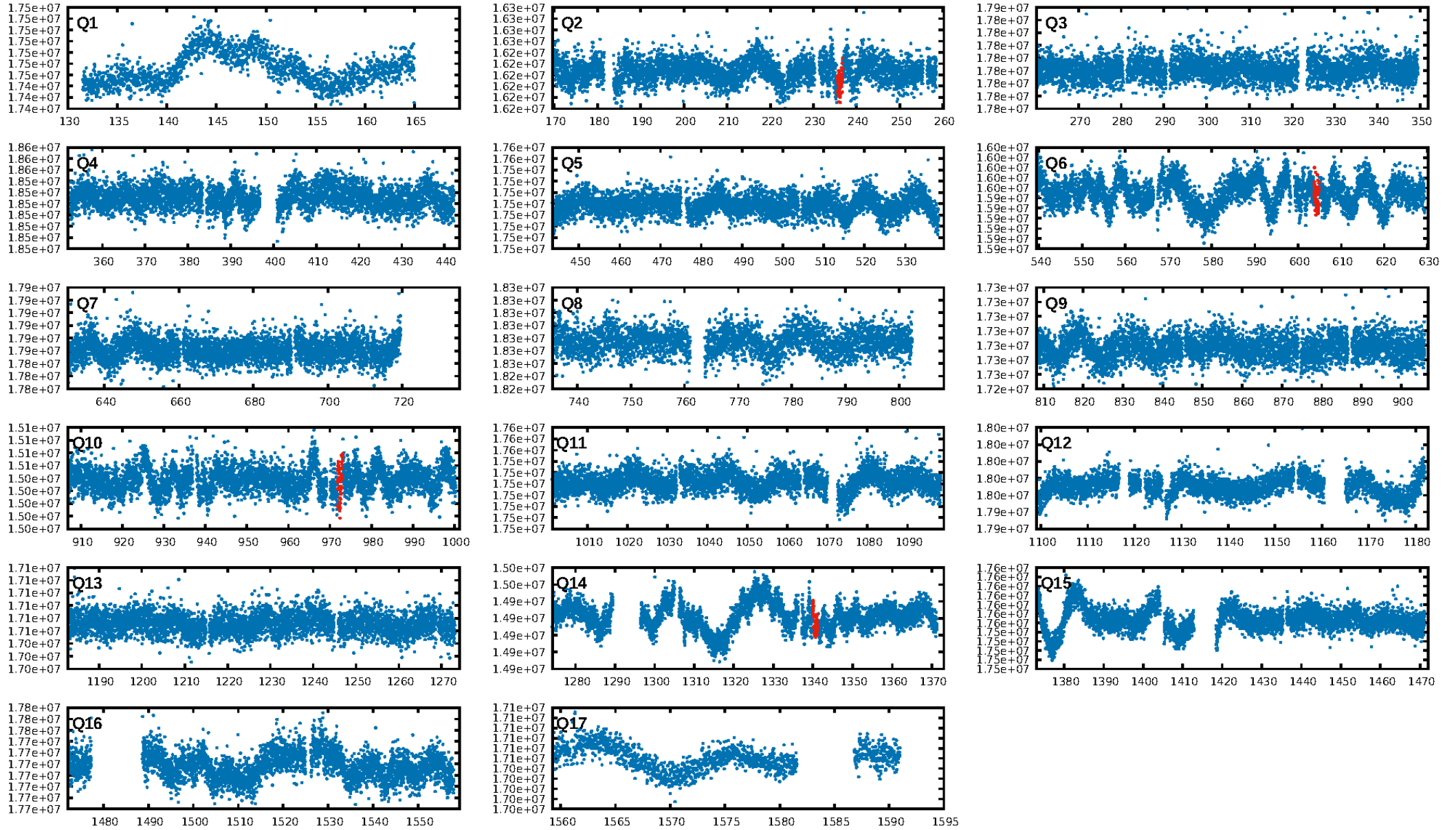
## DV Diagnostic Results:

ShortPeriod-sig: N/A  
LongPeriod-sig: N/A  
ModelChiSquare2-sig: 31.3%  
ModelChiSquareGof-sig: 98.5%  
**Bootstrap-pfa: 2.80e-11**  
**RollingBand-fgt: 0.00 [0/4]**  
GhostDiagnostic-chr: 34.97  
Centroid-sig: 24.5%  
Centroid-so: 2.475 arcsec [1.57 $\sigma$ ]  
OotOffset-rm: 2.532 arcsec [1.35 $\sigma$ ]  
KicOffset-rm: 2.842 arcsec [1.53 $\sigma$ ]  
OotOffset-st: 2/0/0/0 [2]  
KicOffset-st: 2/0/0/0 [2]  
DiffImageQuality-fgm: 0.50 [1/2]  
DiffImageOverlap-fno: 1.00 [4/4]

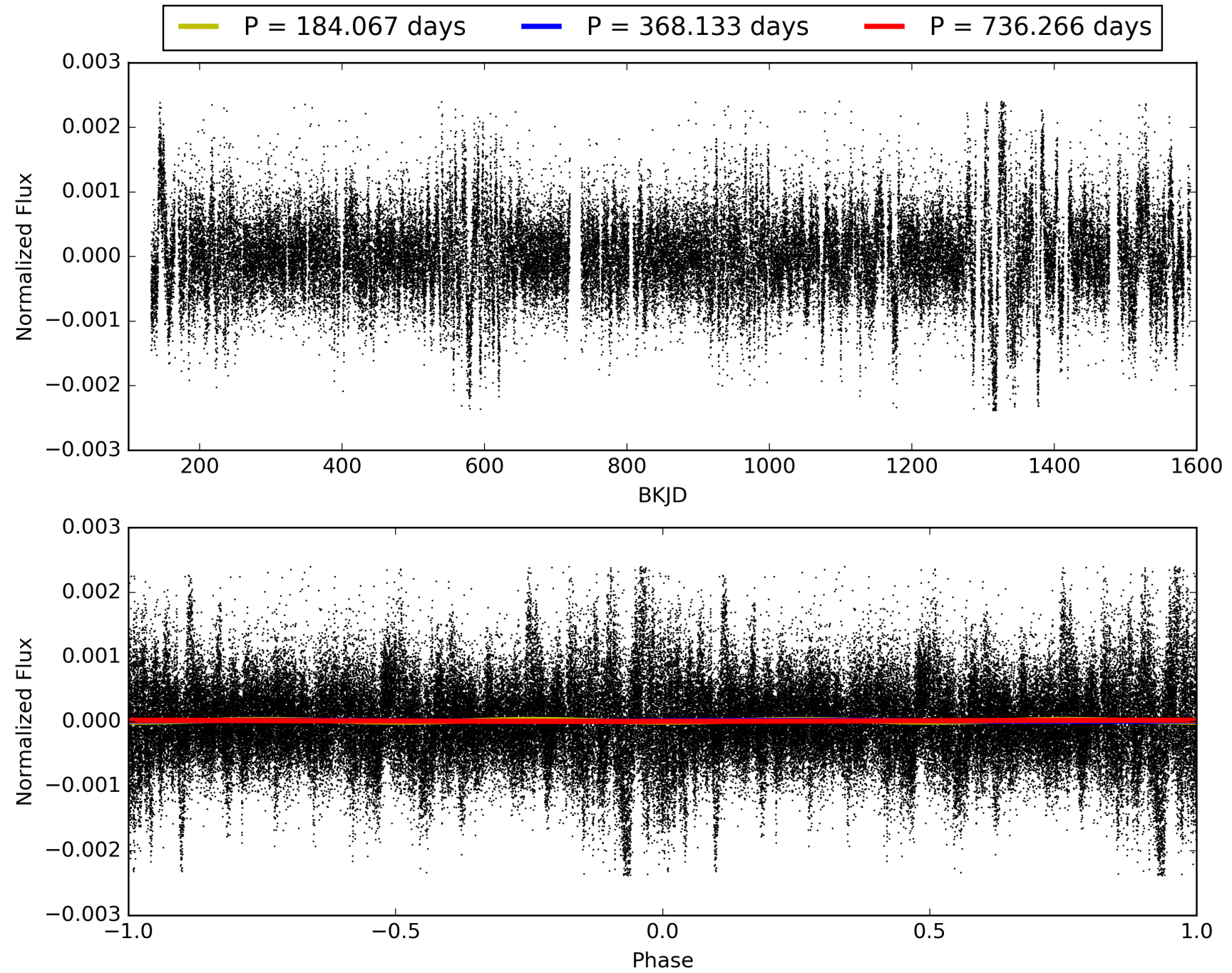
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 00:47:09 Z

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

# TCE 007692932-01, PDC Light Curves

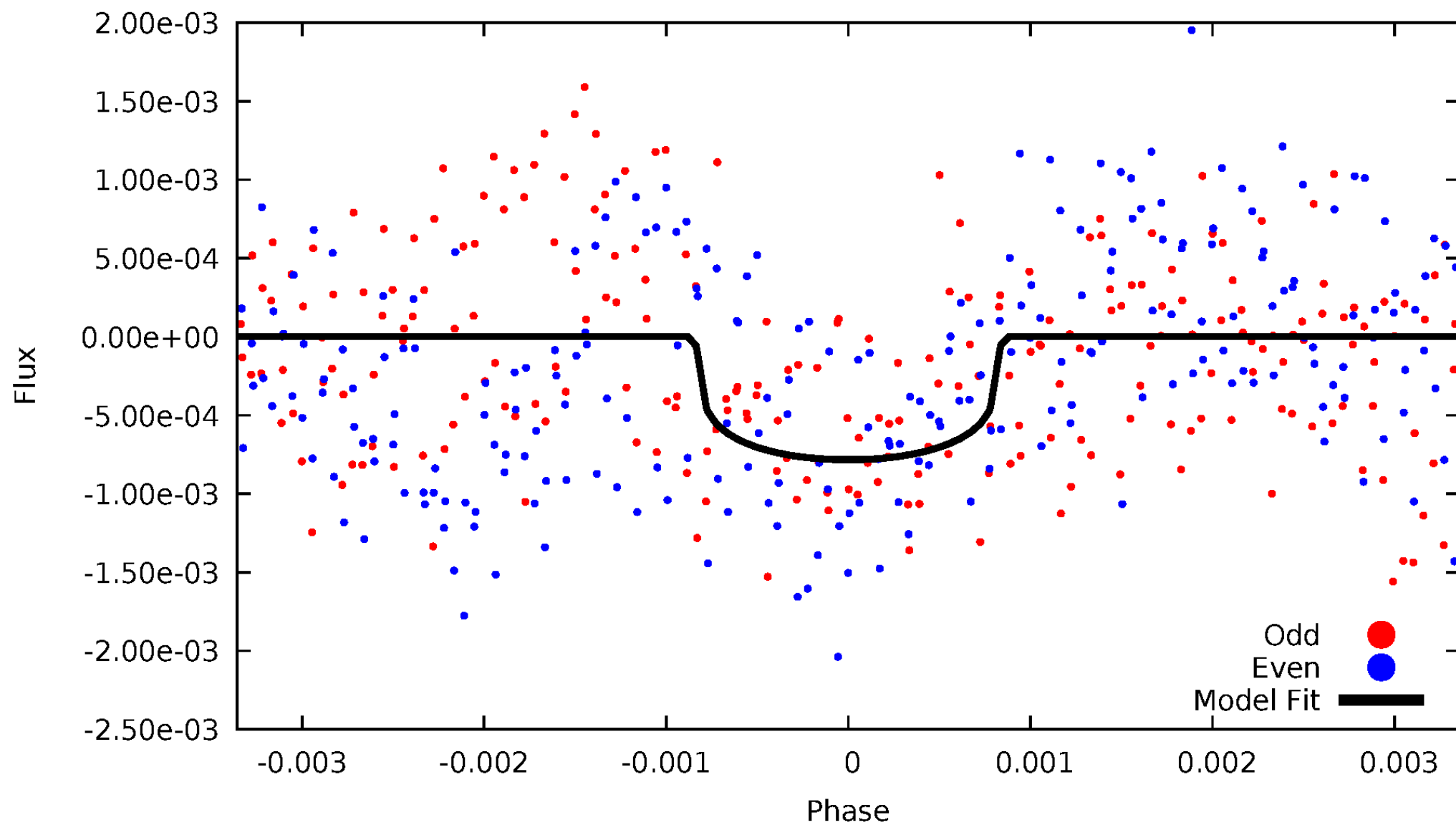


TCE 007692932-01



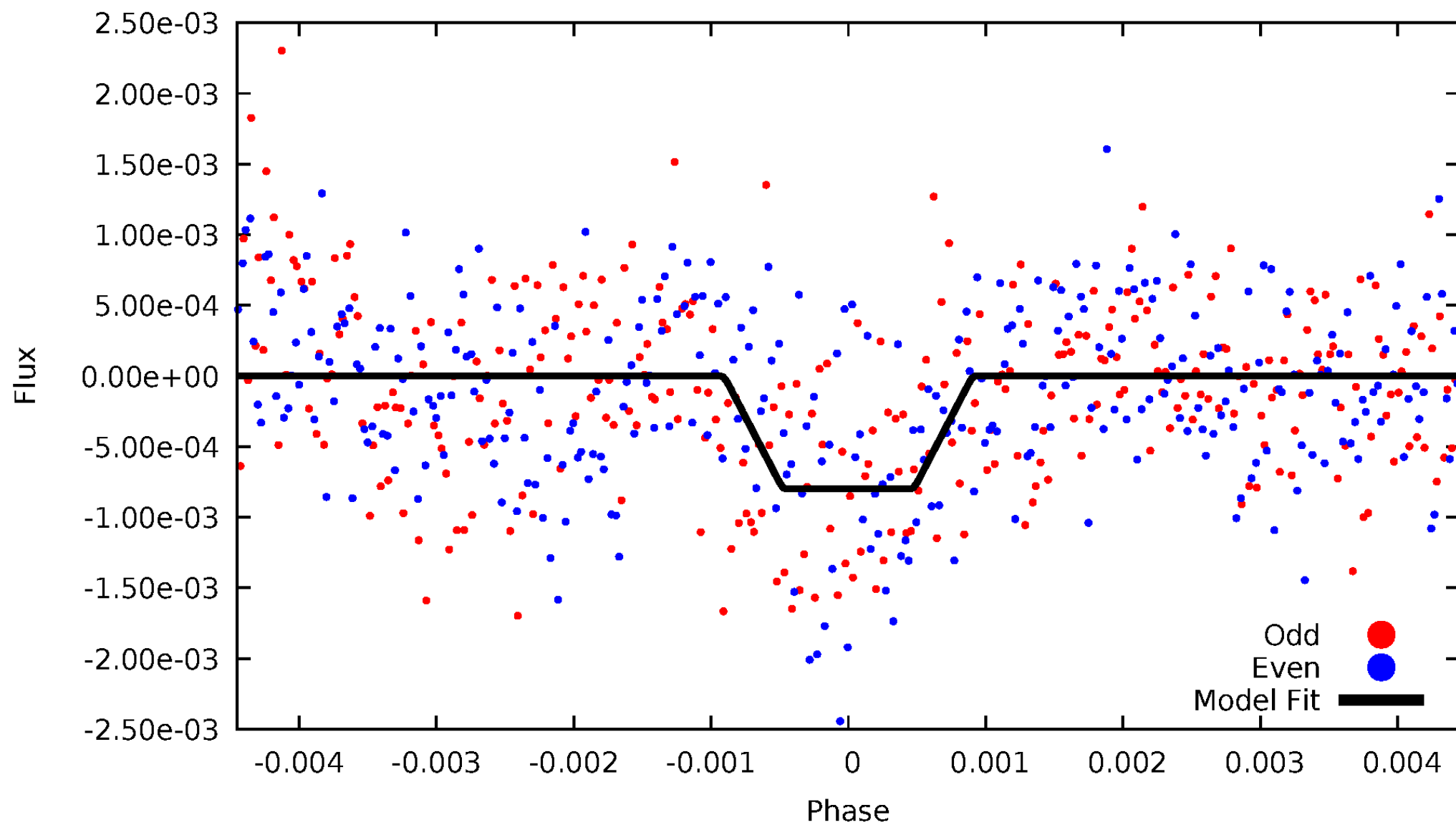
# DV Odd/Even

TCE 007692932-01



# ALT Odd/Even

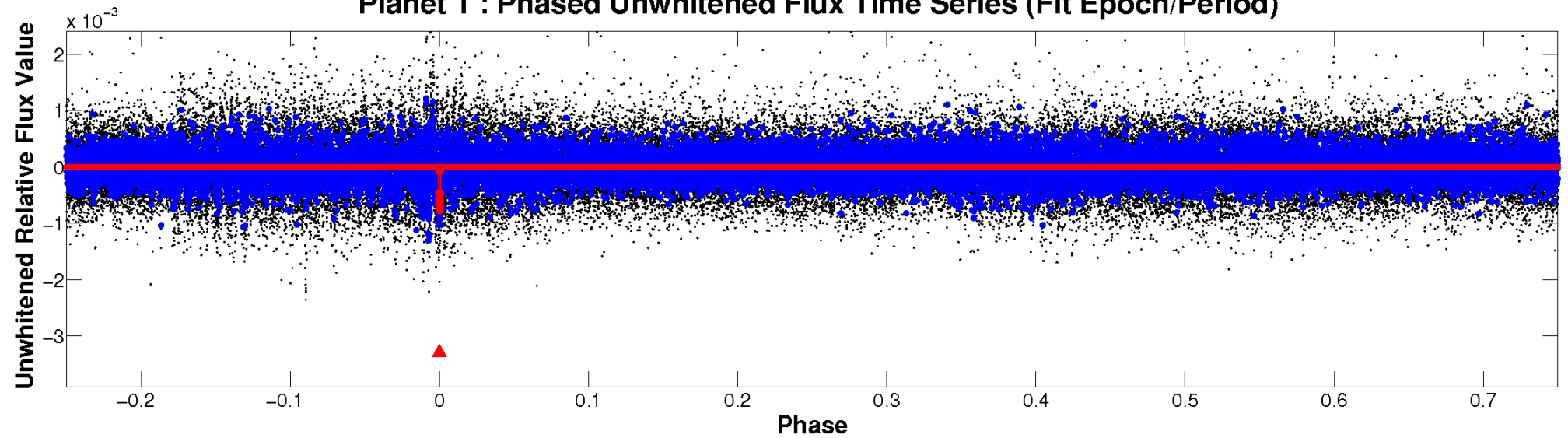
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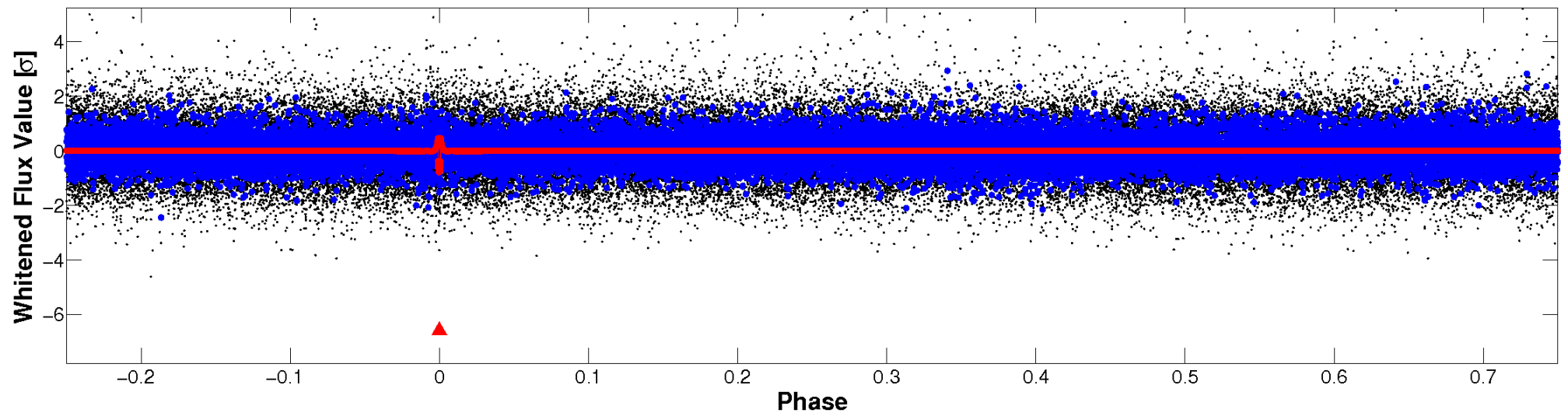


# Non-Whitened Vs. Whitened Light Curve

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

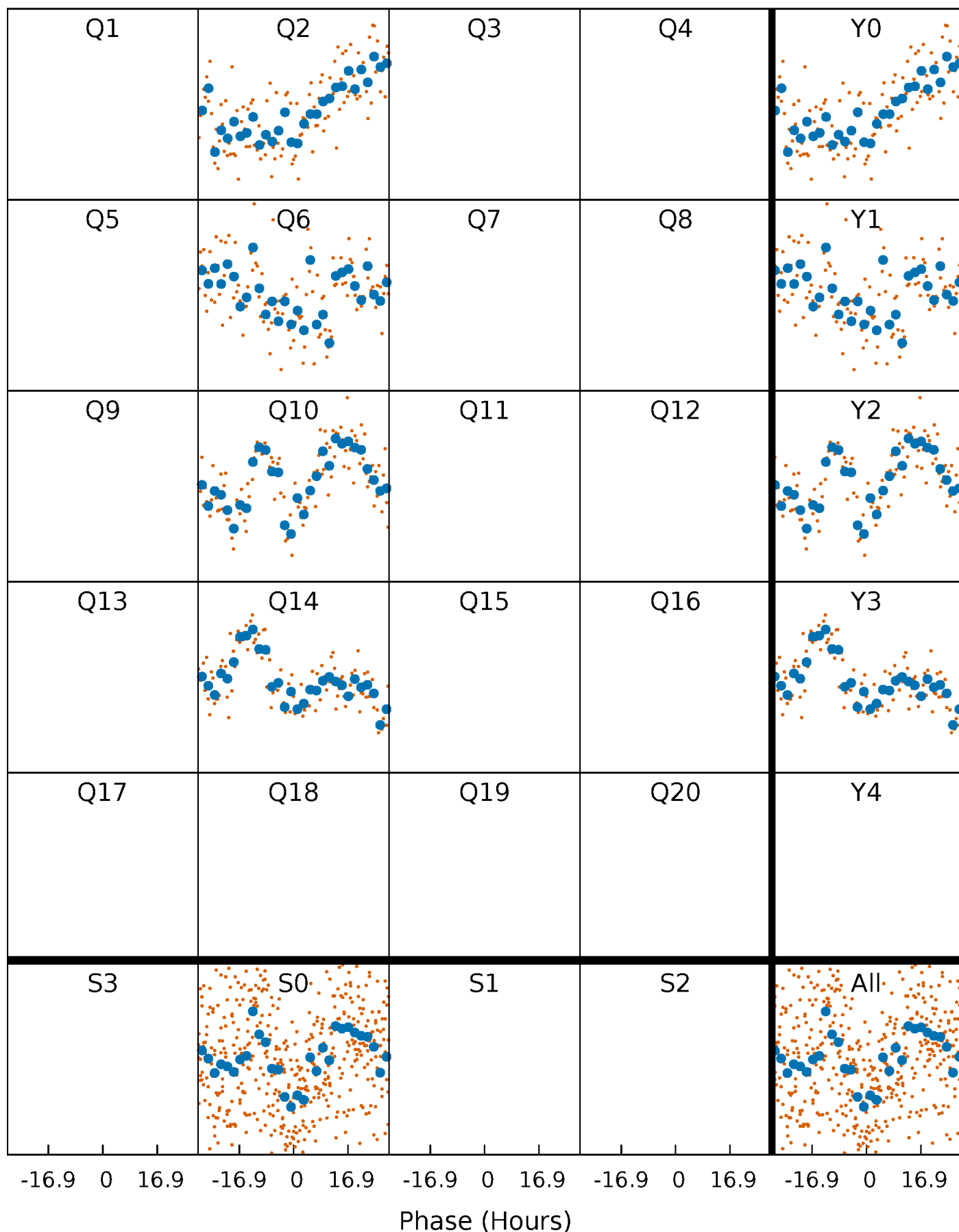


**Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)**



# PDC Quarter-Phased Transit Curves

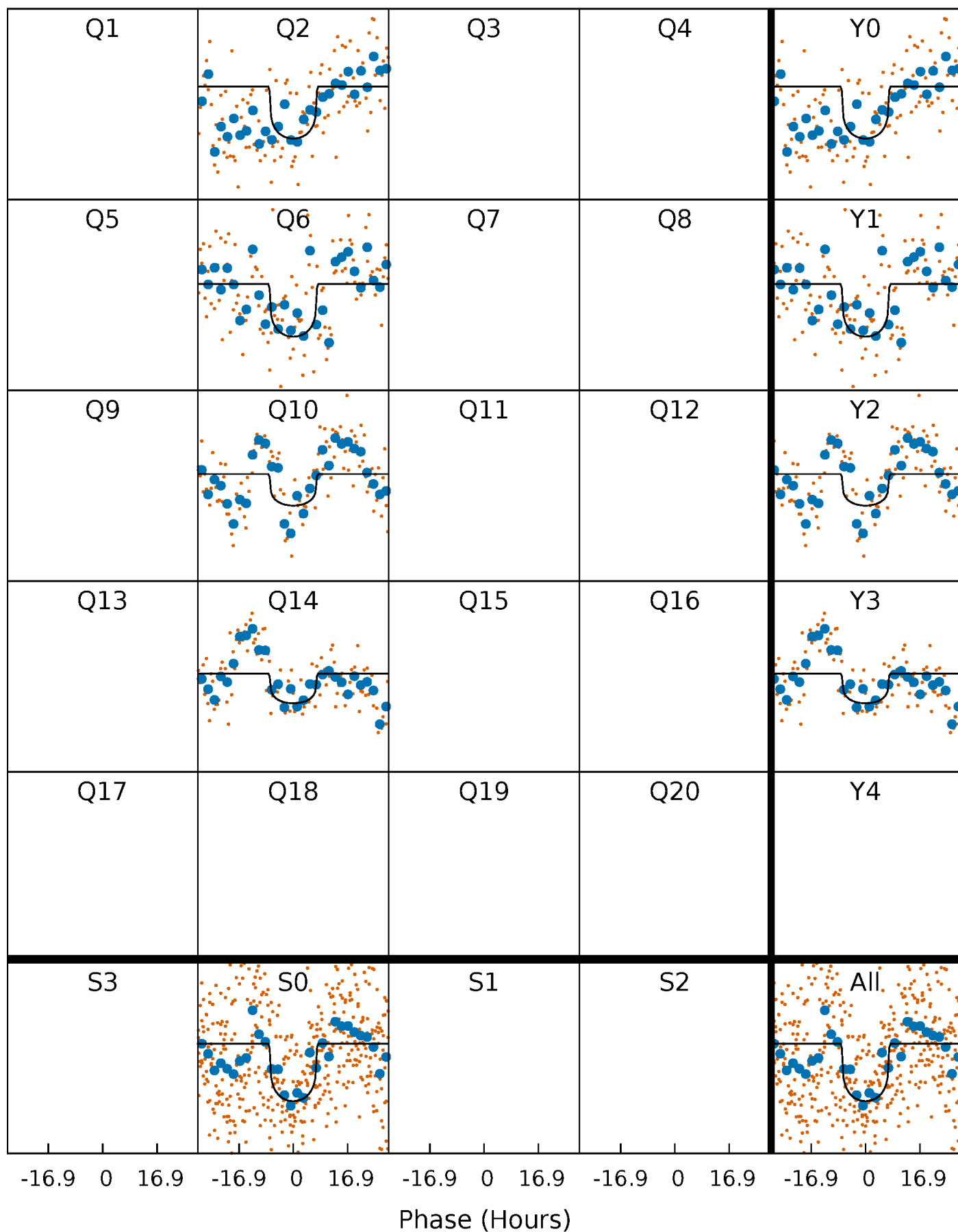
TCE 007692932-01 P=368.133072 Days  $T_0=236.173086$  (BKJD)





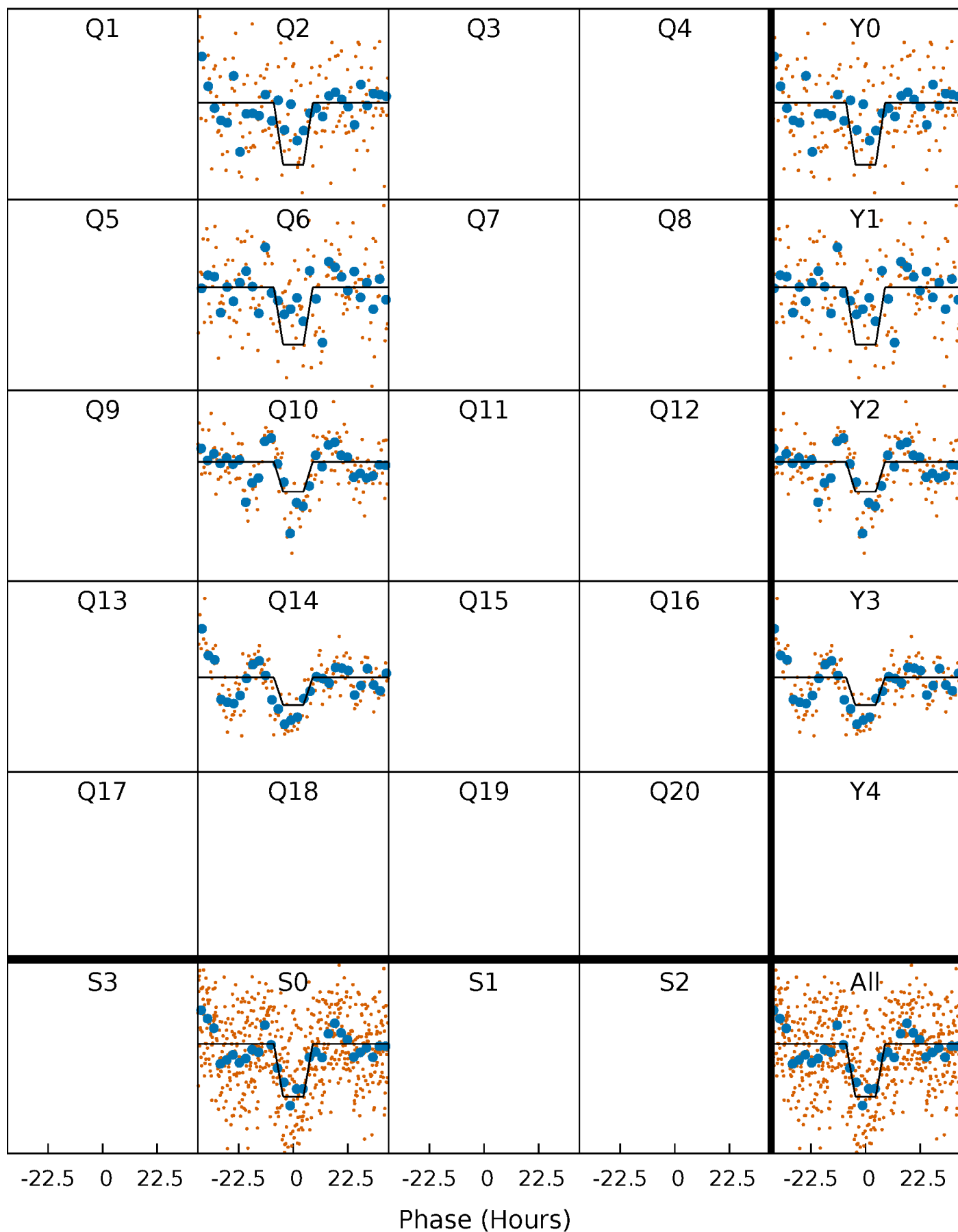
# DV Quarter-Phased Transit Curves

TCE 007692932-01 P=368.133072 Days  $T_0=236.173086$  (BKJD)



# Alt. Detrend Quarter-Phased Transit Curves

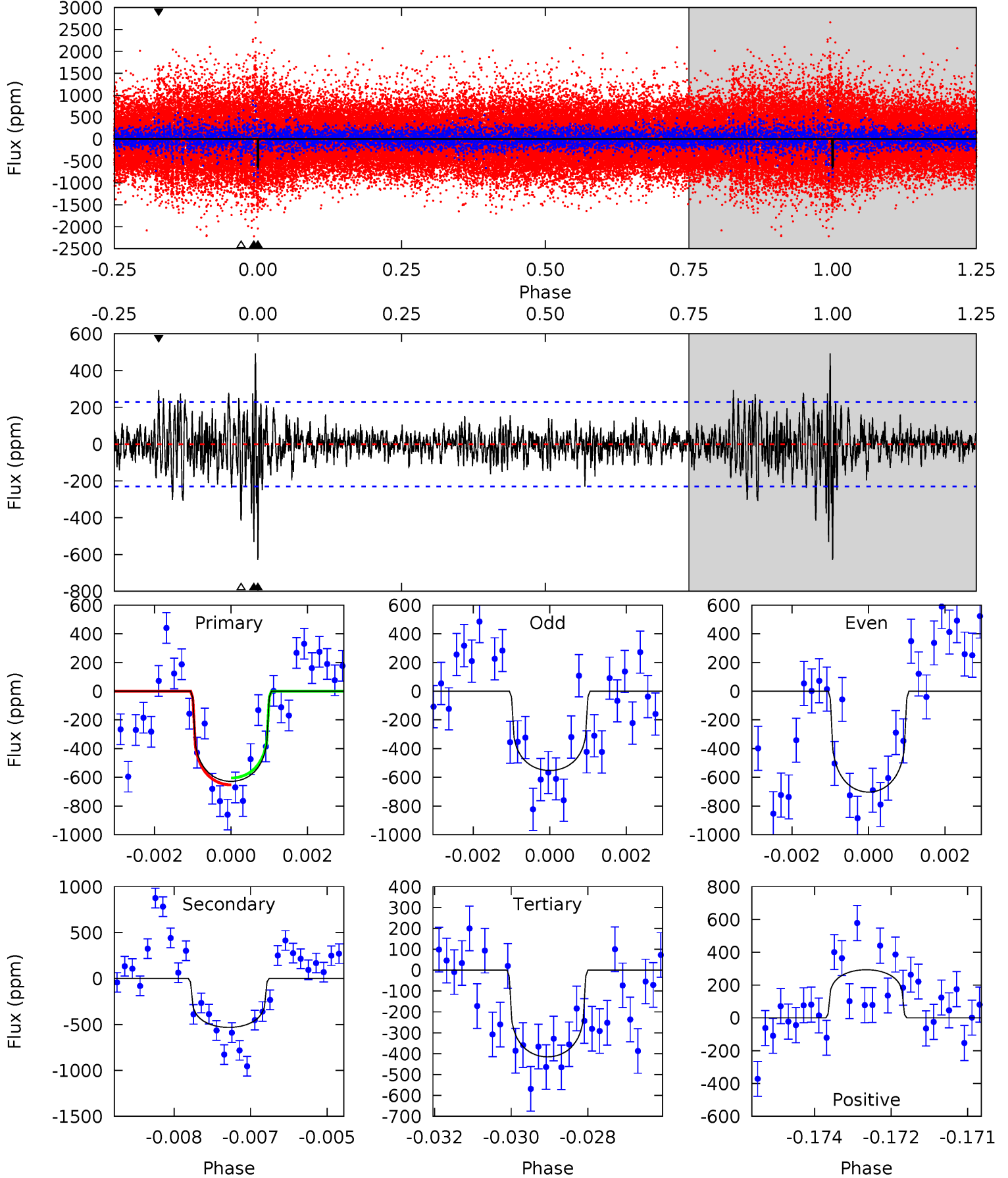
TCE 007692932-01 P=368.178695 Days  $T_0=236.083072$  (BKJD)



# DV Model-Shift Uniqueness Test

007692932-01, P = 368.133072 Days, E = 236.173086 Days

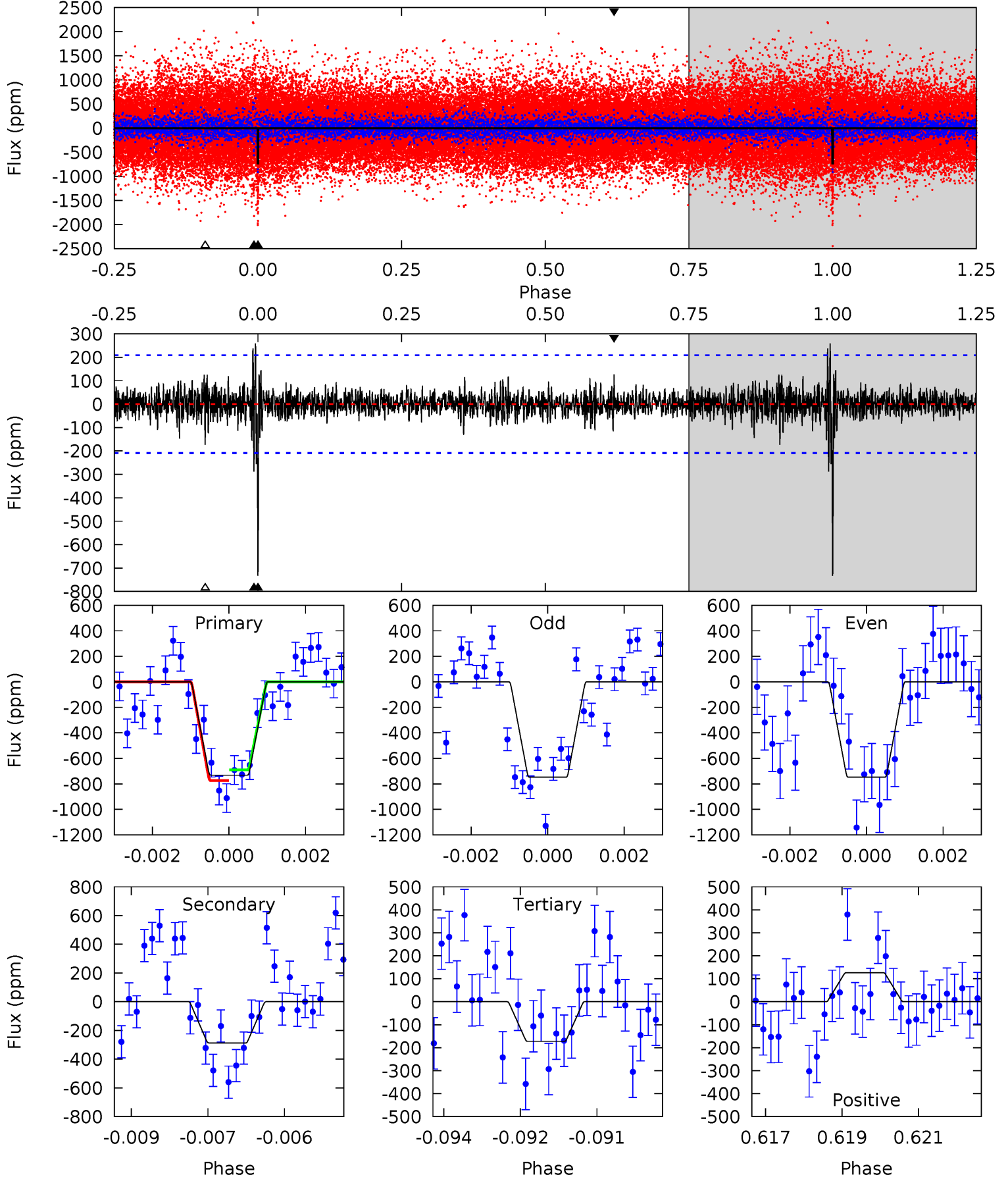
Pri	Sec	Ter	Pos	FA <sub>1</sub>	FA <sub>2</sub>	F <sub>Red</sub>	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14.7	12.4	9.70	6.85	5.36	3.14	1.81	4.98	7.83	2.73	5.58	1.75	0.96	0.44	0.56



# Alt Model-Shift Uniqueness Test

007692932-01, P = 368.178695 Days, E = 236.083072 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
18.7	7.34	4.41	3.24	5.34	3.11	0.99	14.3	15.5	2.93	4.10	0.00	1.02	0.26	1.06



### Stellar Parameters For KIC 007692932

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	$5875^{+162}_{-182}$	$4.476^{+0.052}_{-0.208}$	$0.180^{+0.200}_{-0.300}$	$0.998^{+0.305}_{-0.102}$	$1.088^{+0.125}_{-0.137}$	$1.540^{+0.415}_{-0.818}$
	+3%/-3%	+1%/-5%	+111%/-167%	+31%/-10%	+11%/-13%	+27%/-53%
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 007692932-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	$A_{obs}$
DV	$-532 \pm 43$	$3.19^{+1.85}_{-1.94}$	$364^{+26}_{-17}$	$5407^{+3510}_{-974}$	$31773^{+157511}_{-19830}$
Alt.	$-287 \pm 39$	$3.36^{+2.16}_{-1.79}$	$362^{+25}_{-17}$	$4602^{+1812}_{-775}$	$14477^{+51555}_{-8956}$

$T_{max}$  = 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

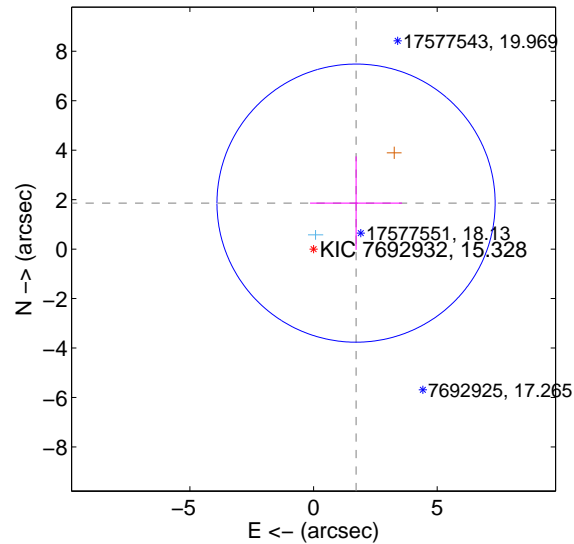
Supplemental centroid analysis for 007692932-01. Kepler magnitude: 15.33. Transit SNR 7.99

There are 1 quarters with good PRF difference image offsets

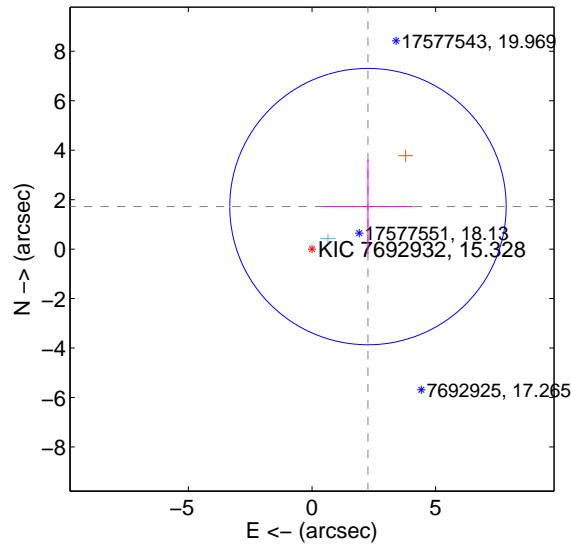
The direct PRF centroid is offset from the target star catalog position by about 0.58 arcsec

	Distance in arcsec	Distance / $\sigma$	$\Delta$ RA	$\Delta$ Dec
PRF-fit source offset from OOT	$2.532 \pm 1.875$	1.35	$-1.719 \pm 1.858$	$1.859 \pm 1.889$
PRF-fit source offset from KIC position	$2.842 \pm 1.863$	1.53	$-2.263 \pm 1.835$	$1.720 \pm 1.909$
photometric centroid source offset	$2.48 \pm 1.58$	1.57	$-2.29 \pm 1.50$	$-0.94 \pm 1.95$

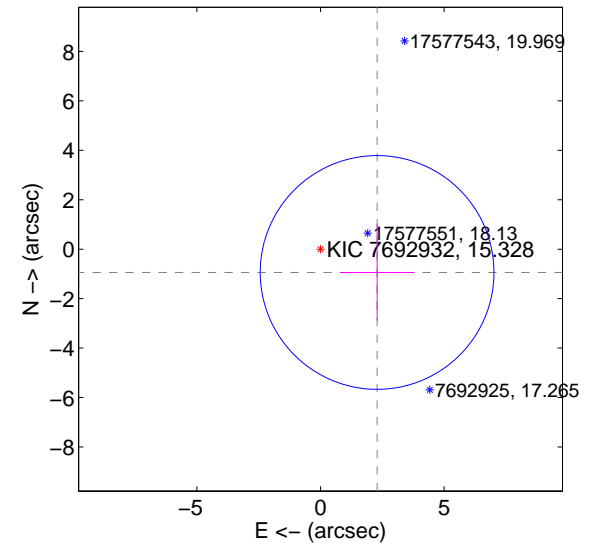
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position



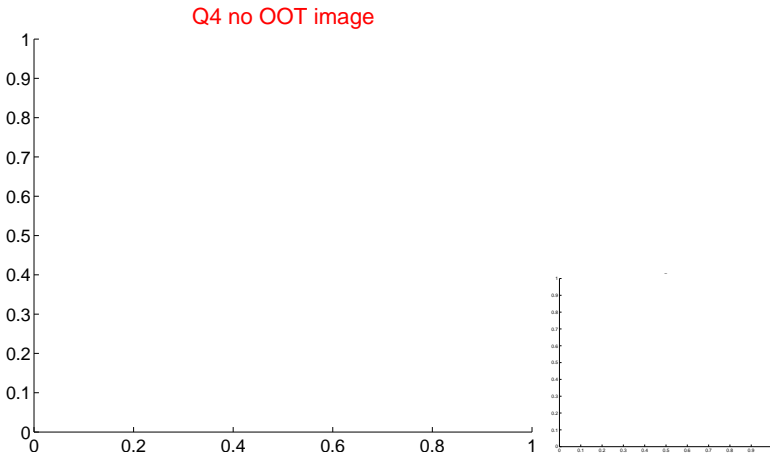
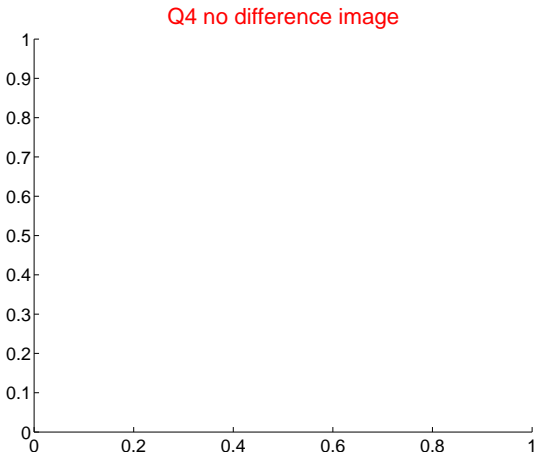
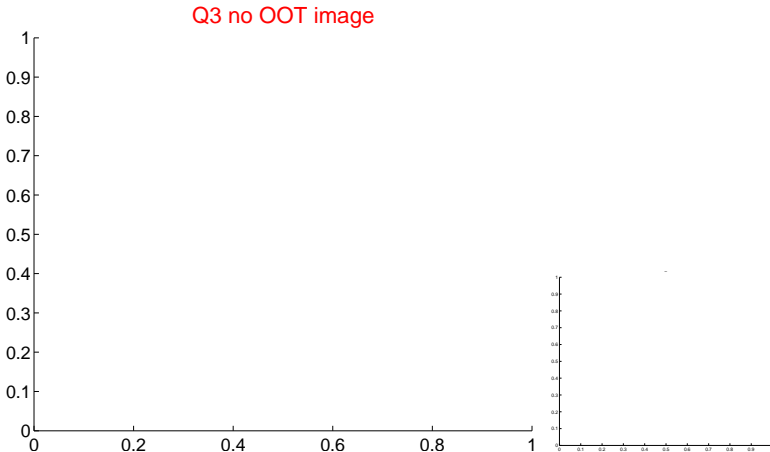
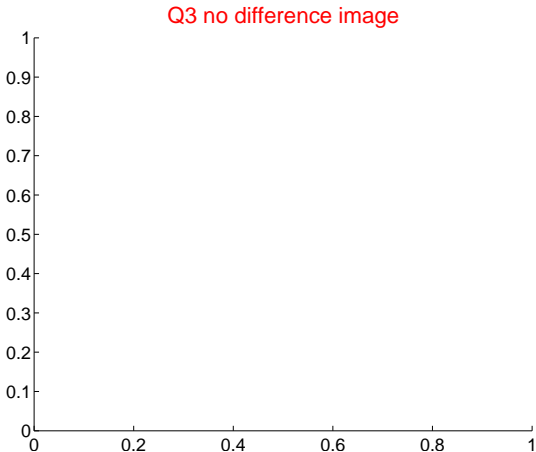
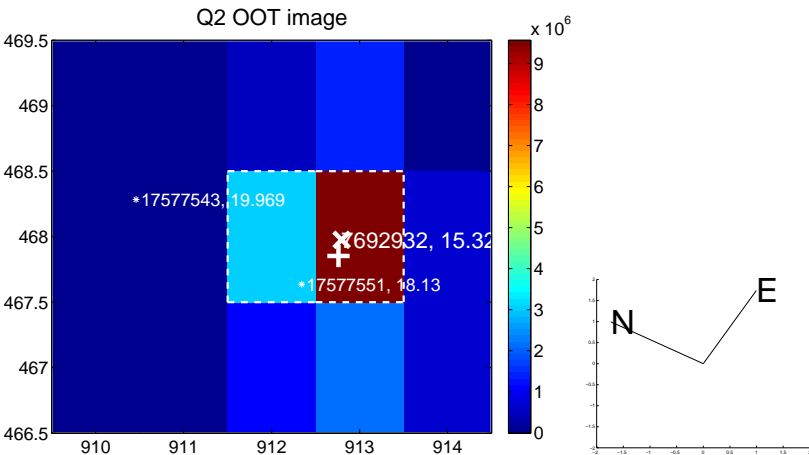
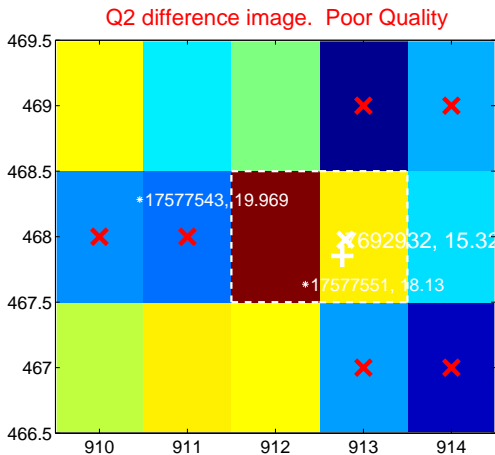
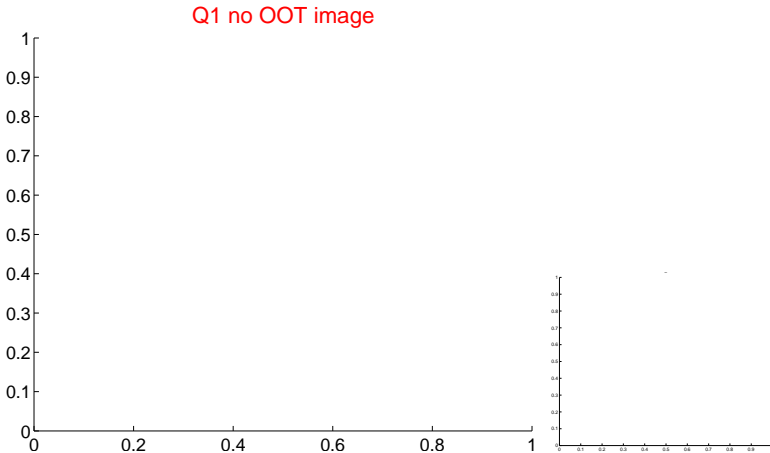
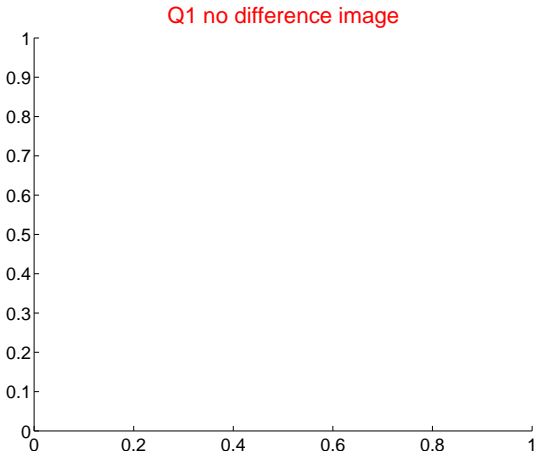
offset from photometric centroids



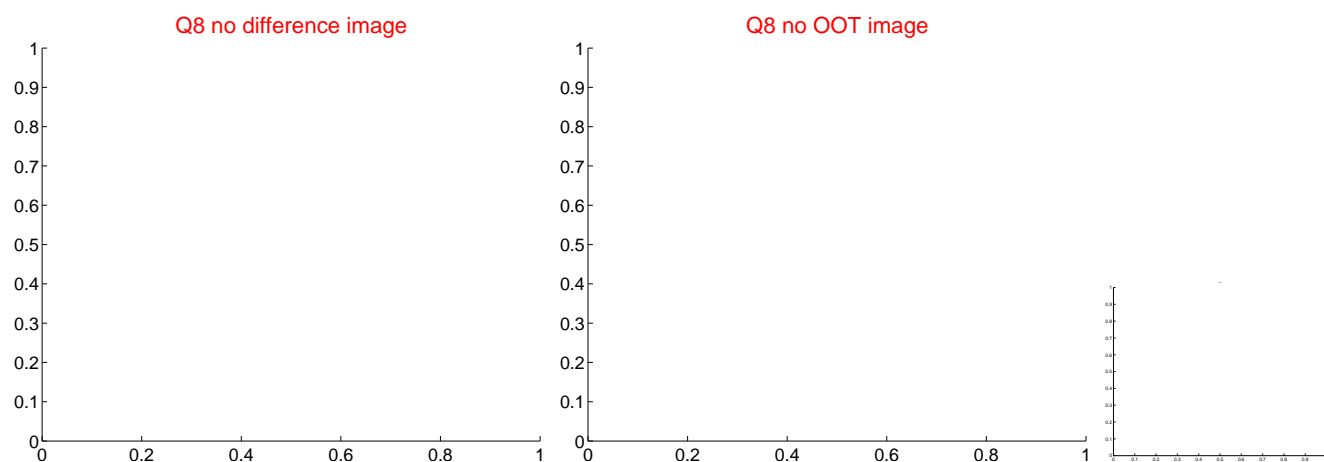
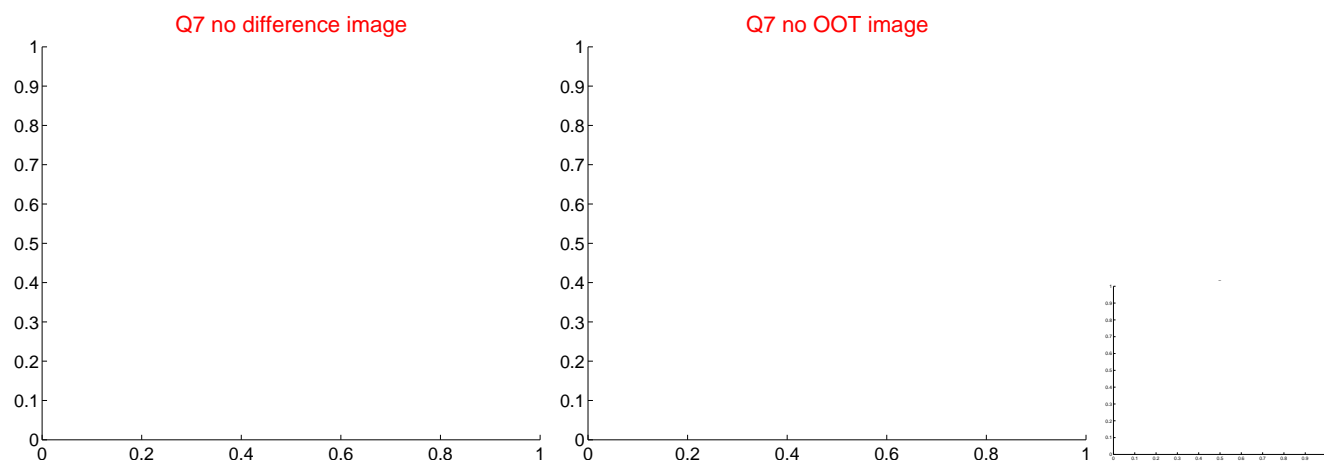
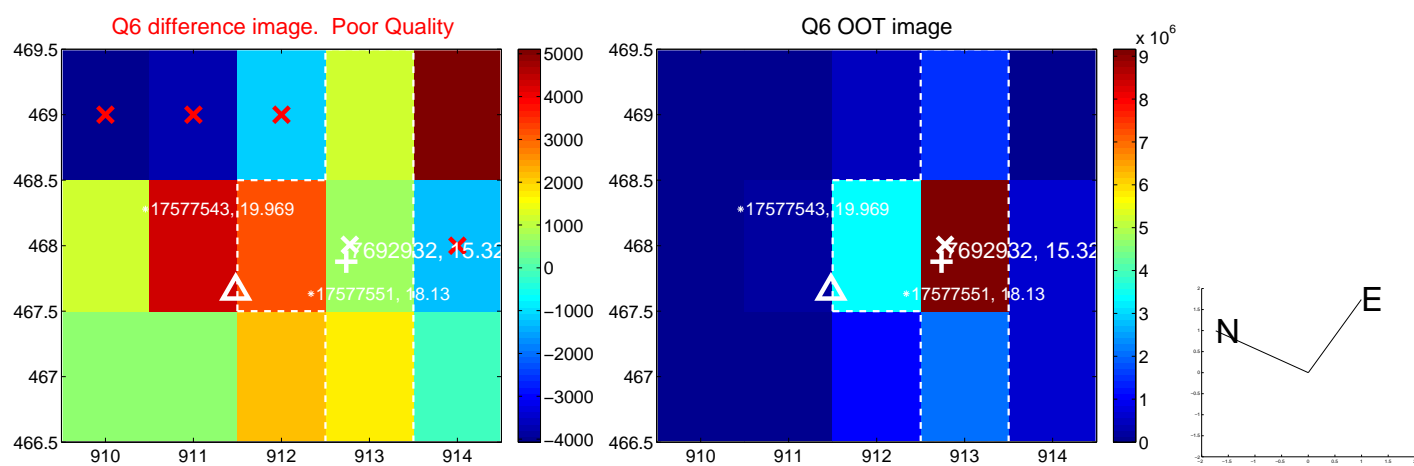
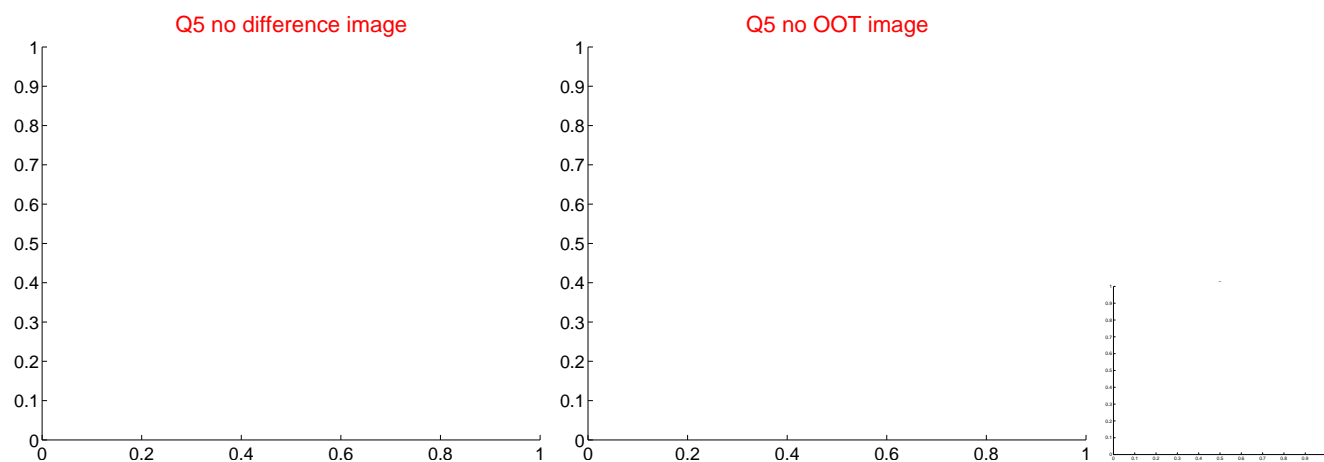
Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- $\sigma$  uncertainty. Blue circle: three-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



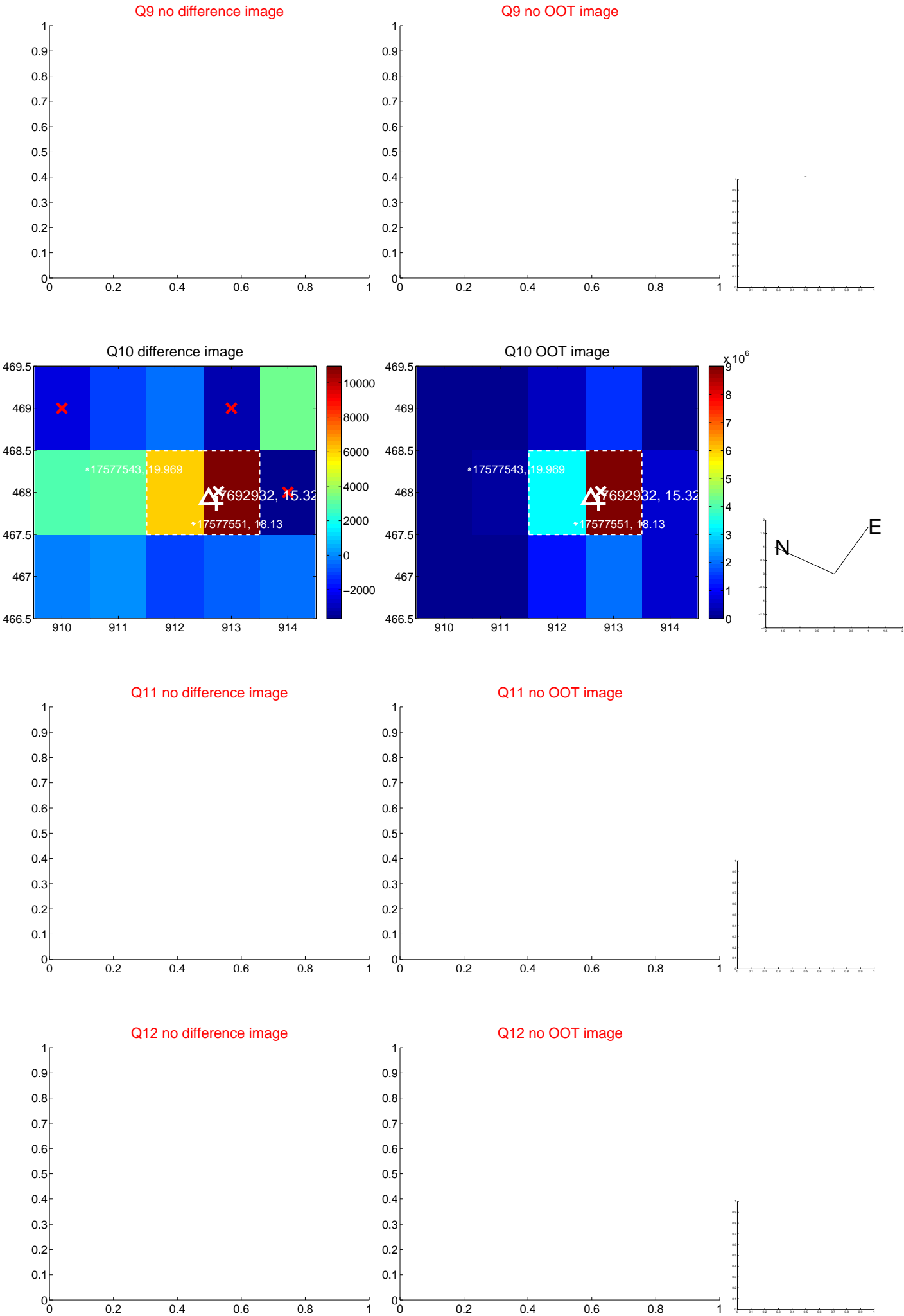
white  $\times$ : KIC target position;  $+$ : OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value



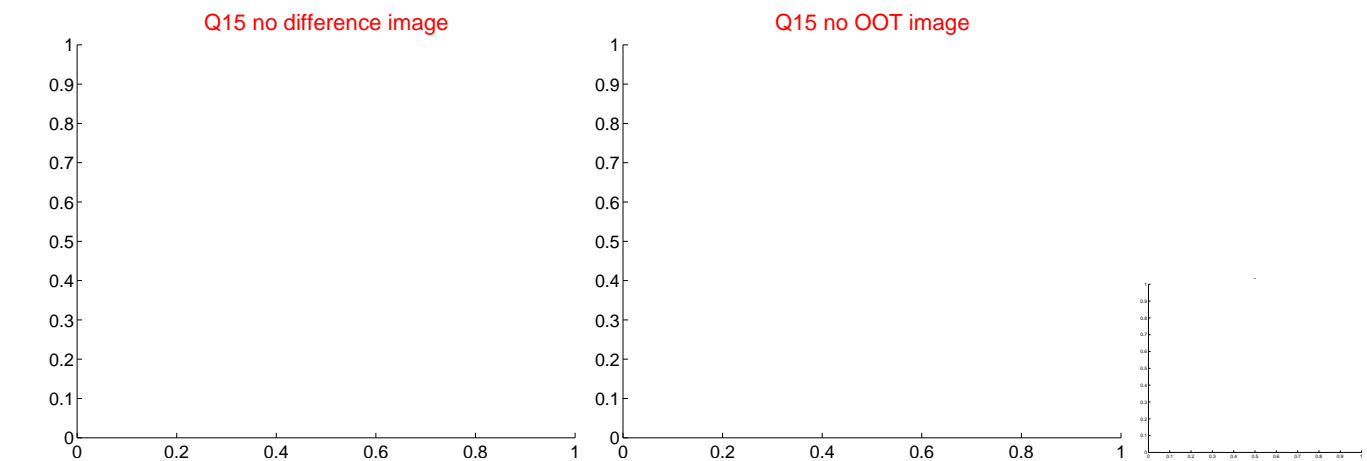
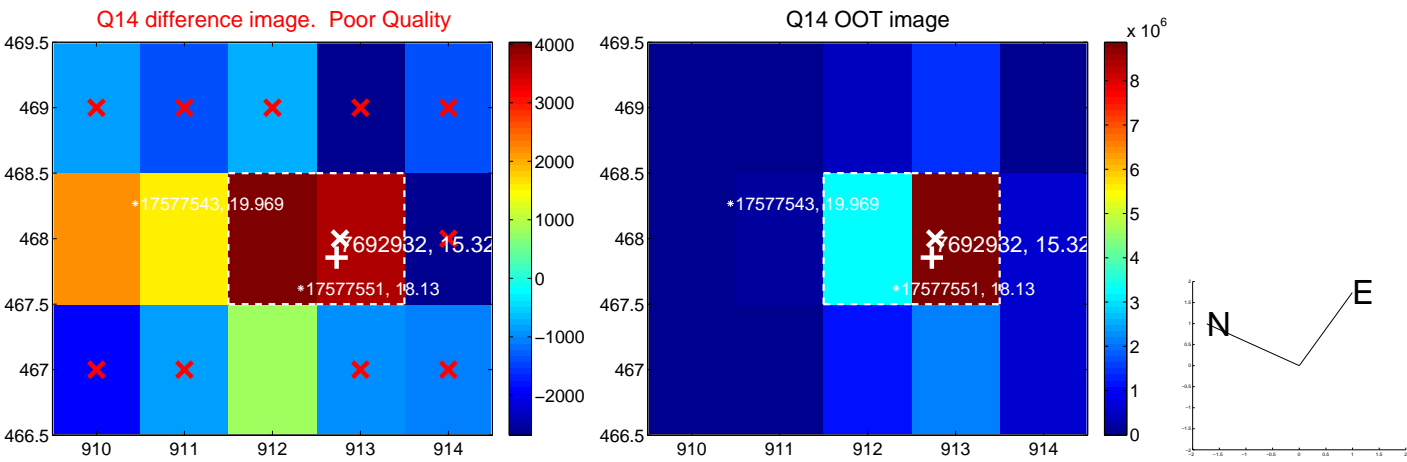
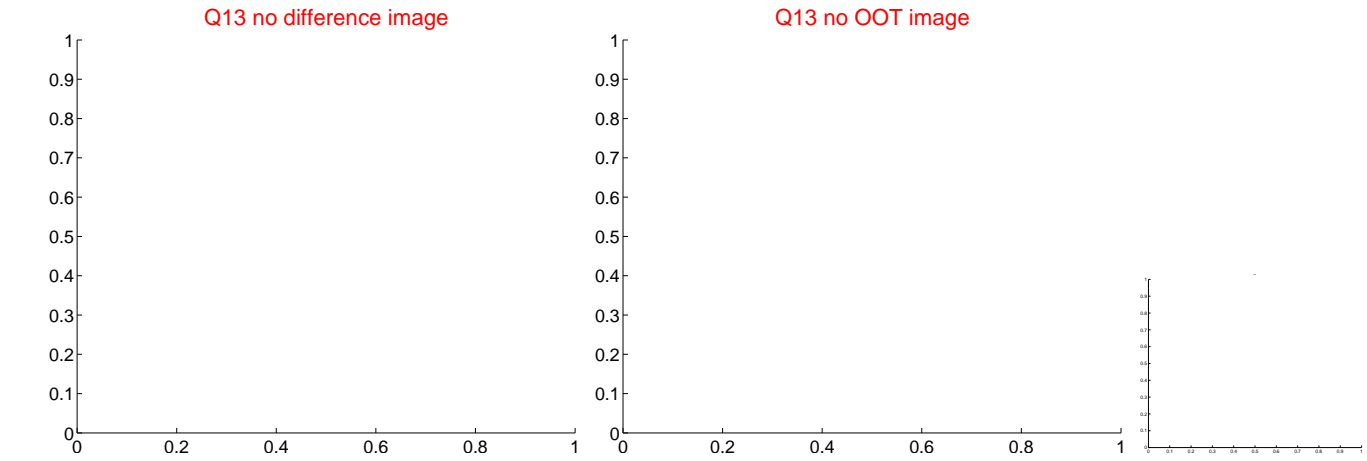
white  $\times$ : KIC target position;  $+$ : OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value



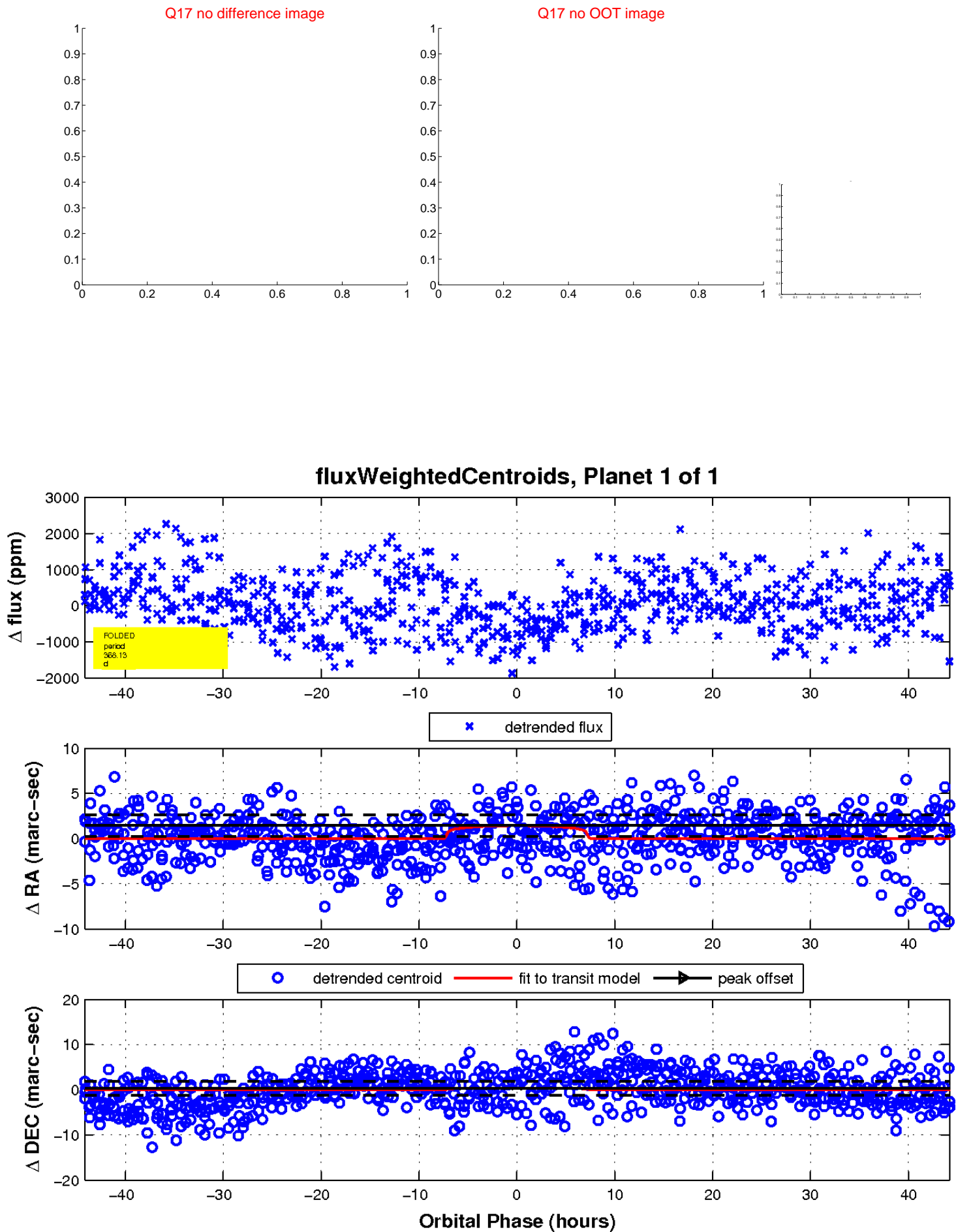
white  $\times$ : KIC target position;  $+$ : OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.



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



UKIRT Image

Declination

