

# KIC 008260667

## 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)	$R_p$ ( $R_{\oplus}$ )	$S_p$ ( $S_{\oplus}$ )
008260667-01	OBS	No	408.442244	357.666918	382.7	10.009	7.5	8.5	2.08	5800	4.11	3.17

## Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008260667-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—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.

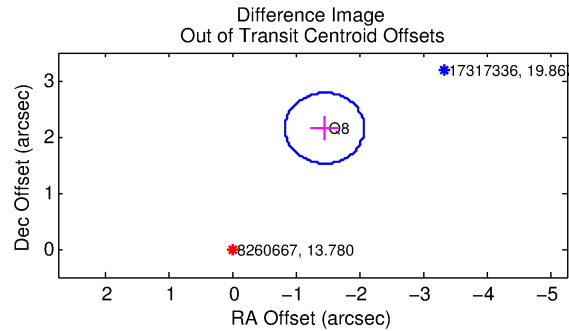
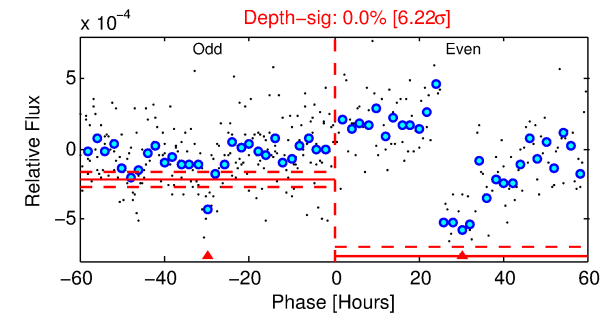
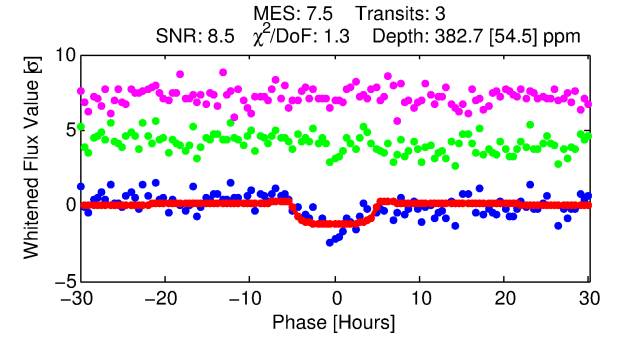
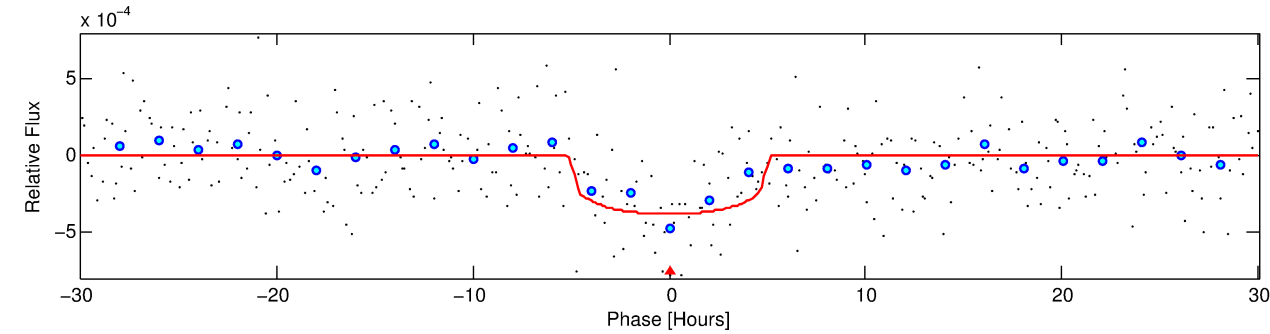
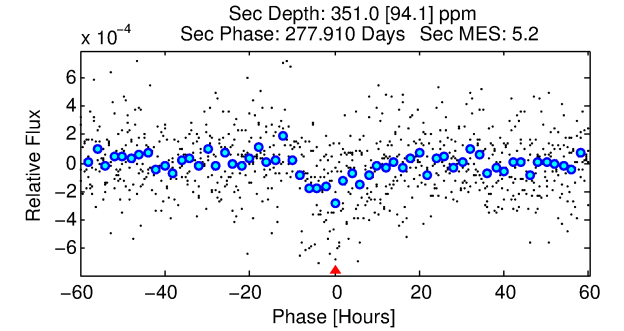
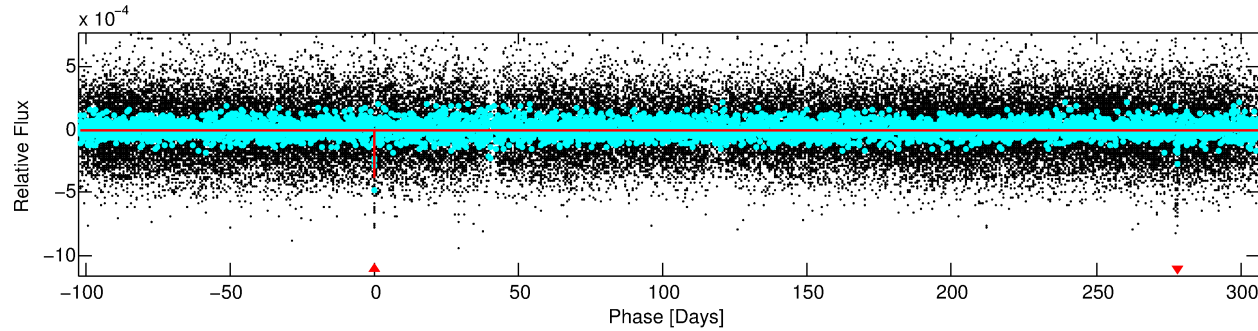
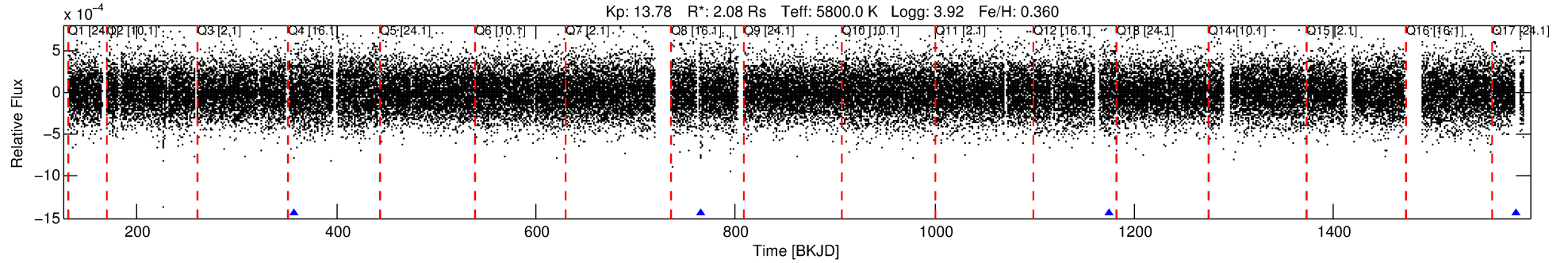
See [http://exoplanetarchive.ipac.caltech.edu/docs/API\\_kepcandidate\\_columns.html#proj\\_disp\\_col](http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col) for comment definitions.

## Ephemeris Match Information For 008260667-01

No Significant Match Found

# DV One-Page Summary

KIC: 8260667 Candidate: 1 of 1 Period: 408.442 d



## DV Fit Results:

Period = 408.44224 [0.01197] d  
Epoch = 357.6669 [0.0154] BKJD  
Rp/R\* = 0.0181 [0.0291]  
a/R\* = 285.49 [1927.83]  
b = 0.44 [12.28]  
Seff = 3.17 [2.38]  
Teq = 340 [64] K  
Rp = 4.11 [6.85] Re  
a = 1.1747 [0.5308] AU  
Ag = 15788.40 [52220.08] [0.30σ]  
Teffp = 5895 [4755] K [1.1σ]

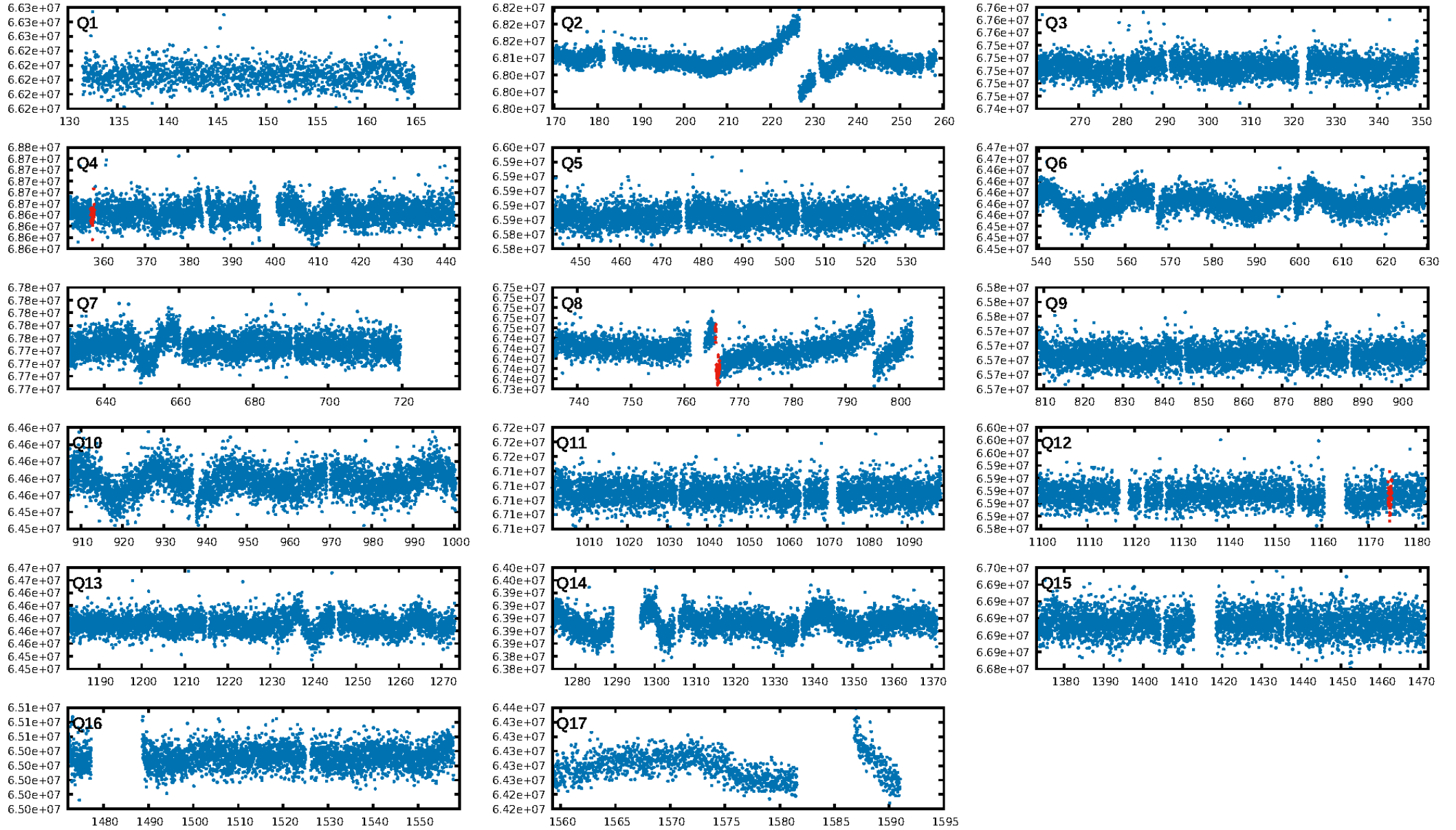
## DV Diagnostic Results:

ShortPeriod-sig: N/A  
LongPeriod-sig: N/A  
ModelChiSquare2-sig: 0.0%  
ModelChiSquareGof-sig: 76.2%  
Bootstrap-pfa: 1.54e-12  
RollingBand-fgt: 1.00 [3/3]  
GhostDiagnostic-chr: 0.5872  
Centroid-sig: 1.1%  
Centroid-so: 7.856 arcsec [2.90σ]  
OotOffset-rm: 2.588 arcsec [12.39σ]  
KicOffset-rm: 2.781 arcsec [13.26σ]  
OotOffset-st: 0/0/1/0 [1]  
KicOffset-st: 0/0/1/0 [1]  
DiffImageQuality-fgm: 1.00 [1/1]  
DiffImageOverlap-fno: 1.00 [3/3]

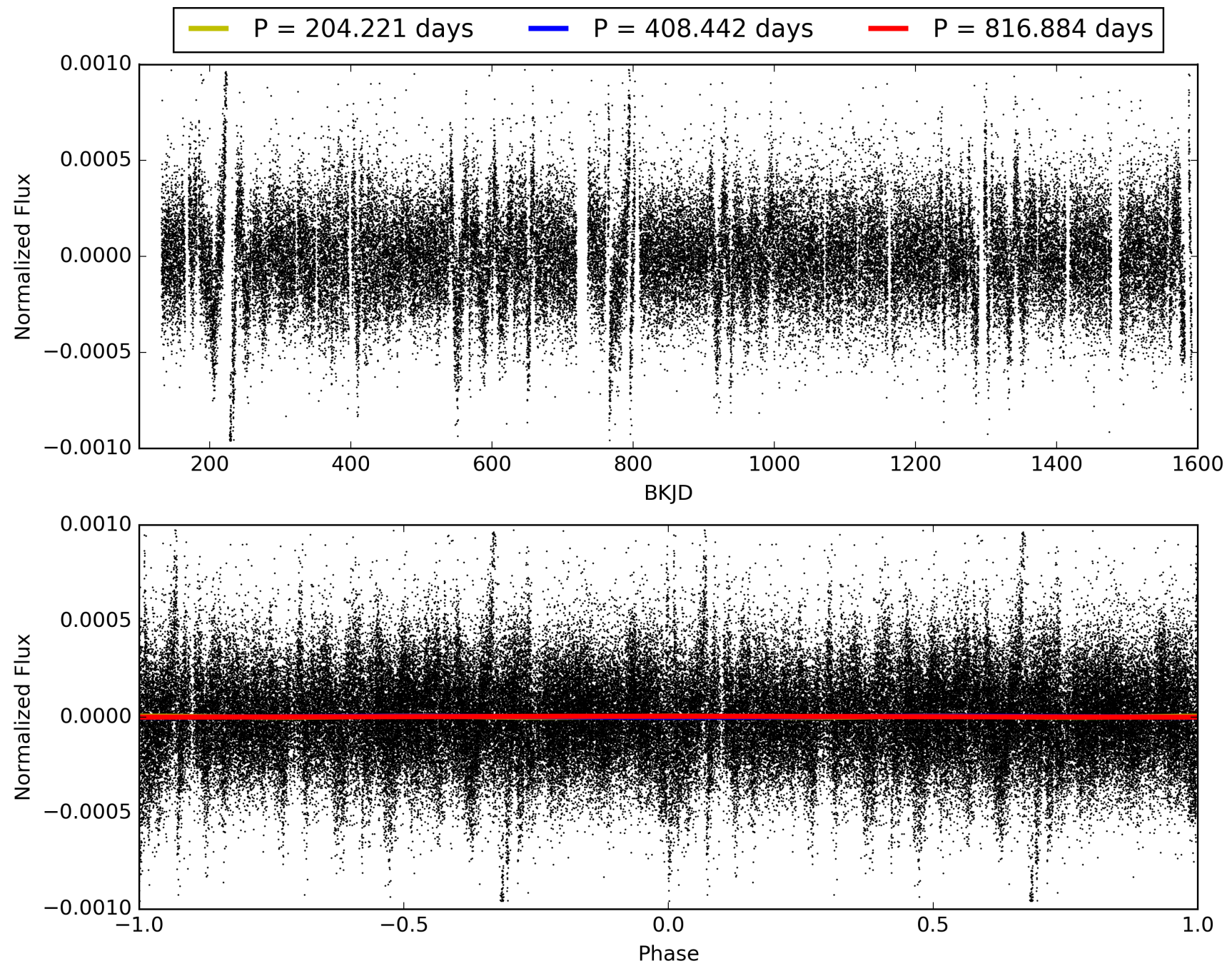
Software Revision: svn-ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 18:05:39 Z

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

# TCE 008260667-01, PDC Light Curves

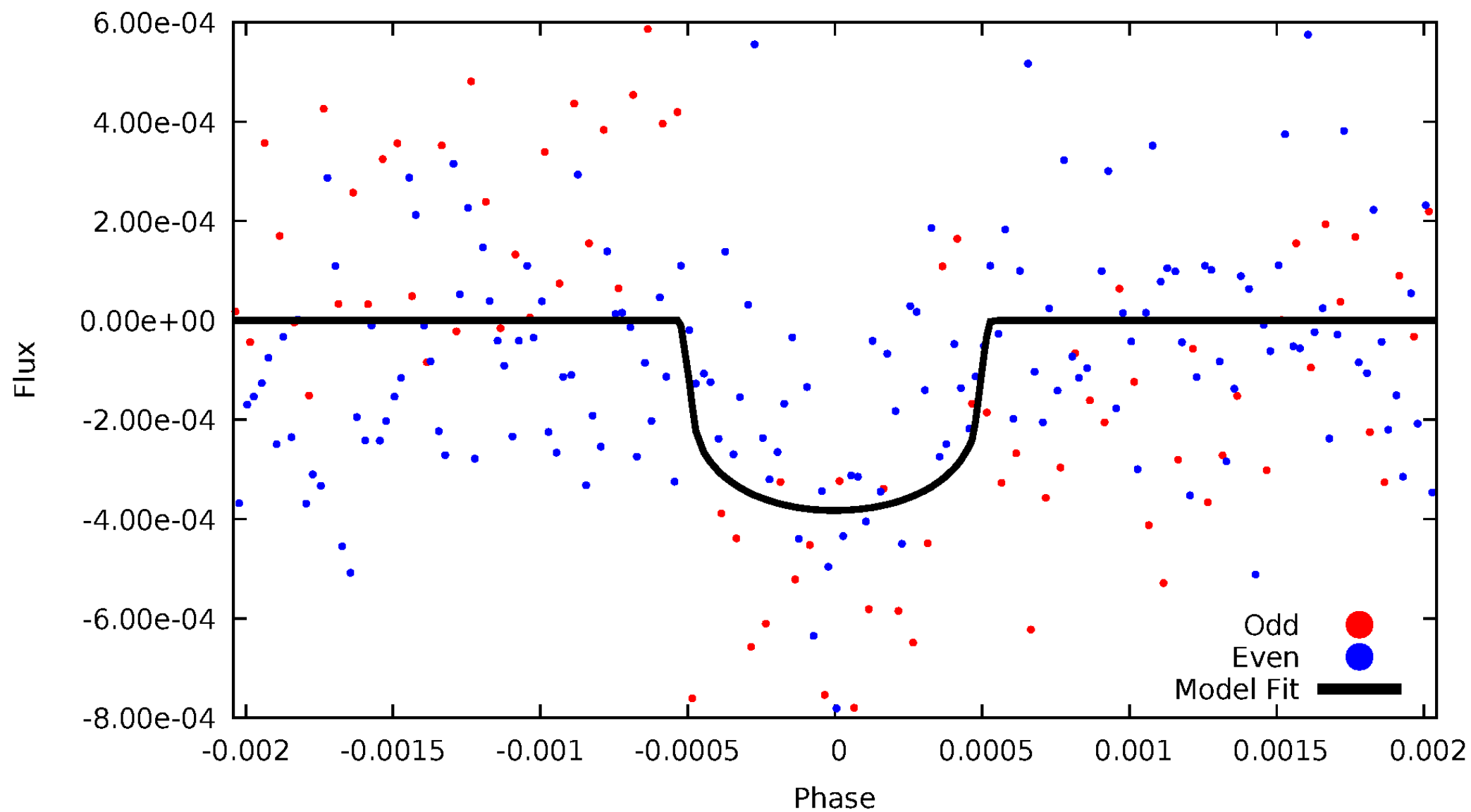


TCE 008260667-01



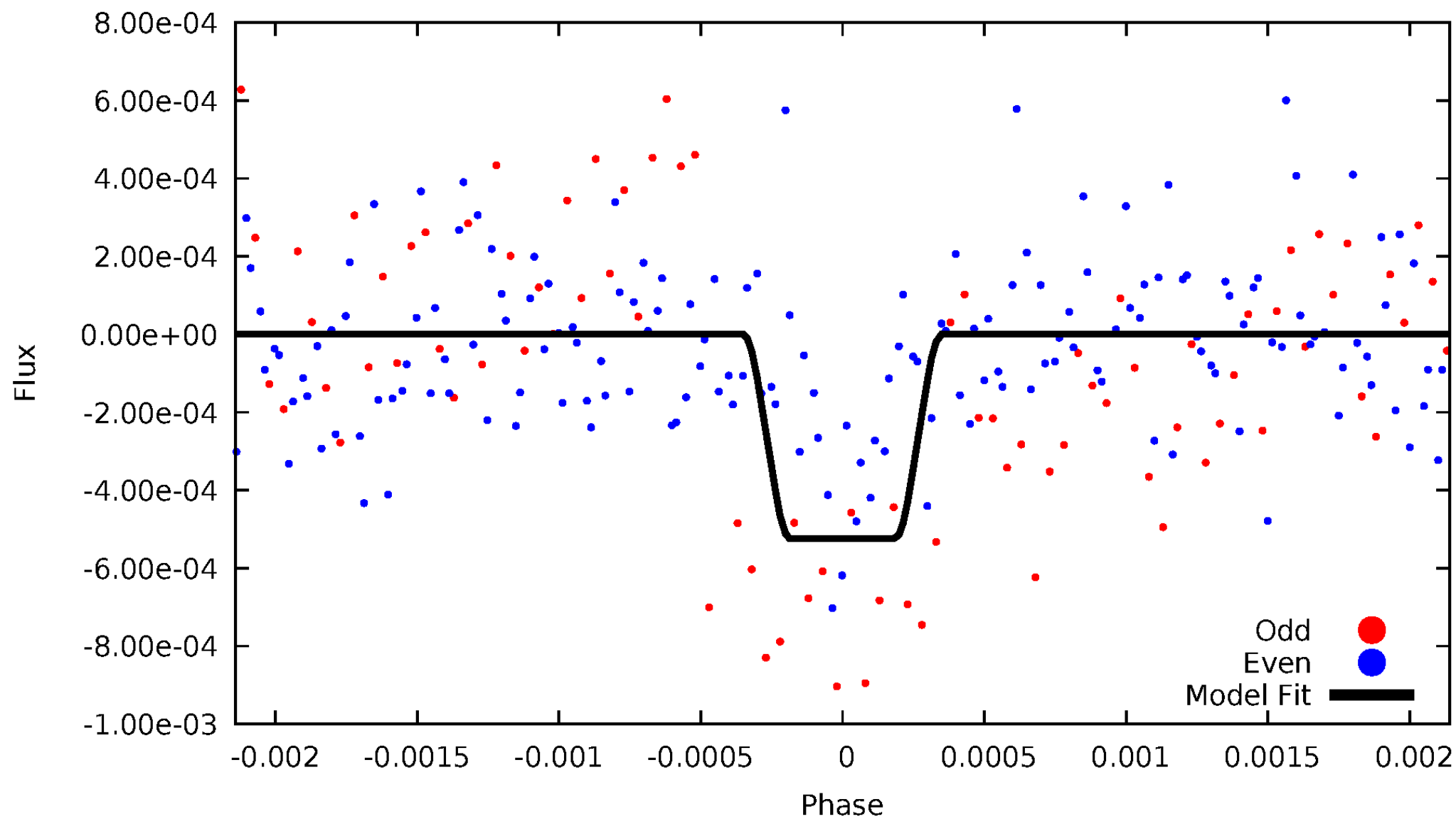
# DV Odd/Even

TCE 008260667-01



# ALT Odd/Even

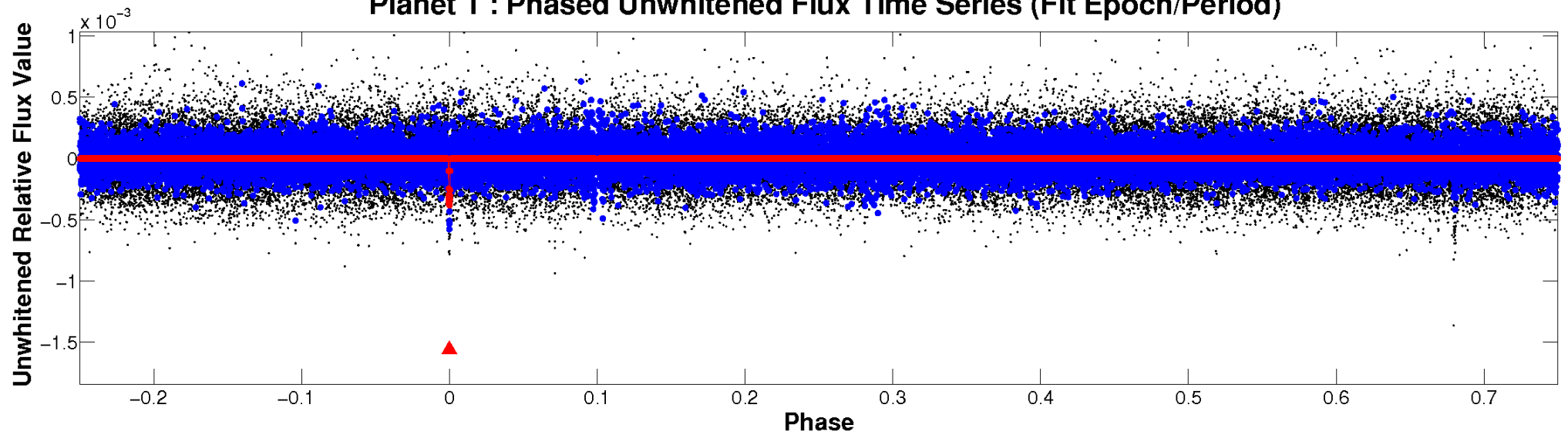
TCE 008260667-01



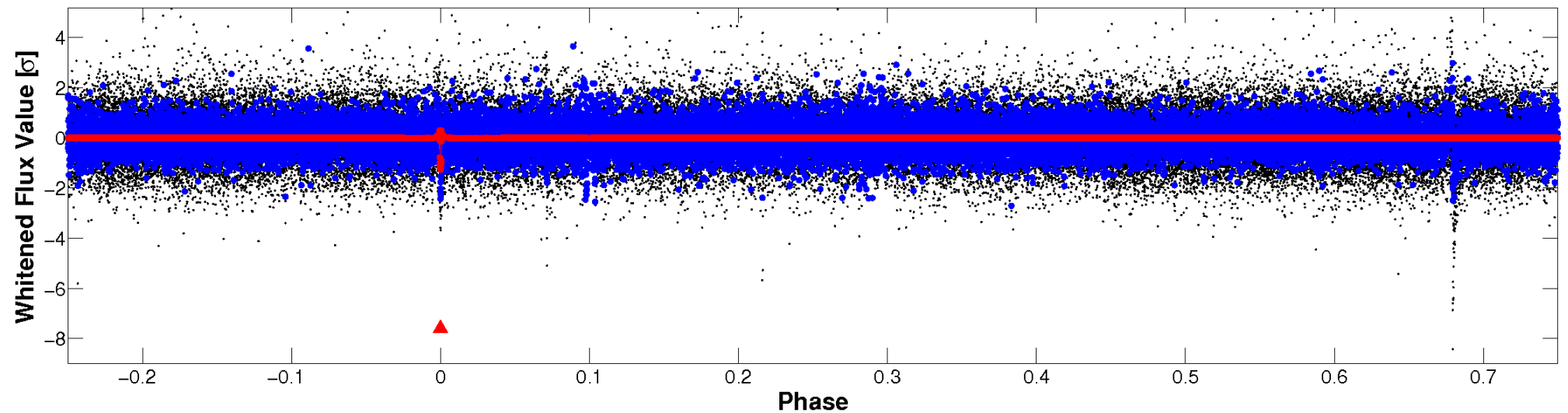


# Non-Whitened Vs. Whitened Light Curve

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

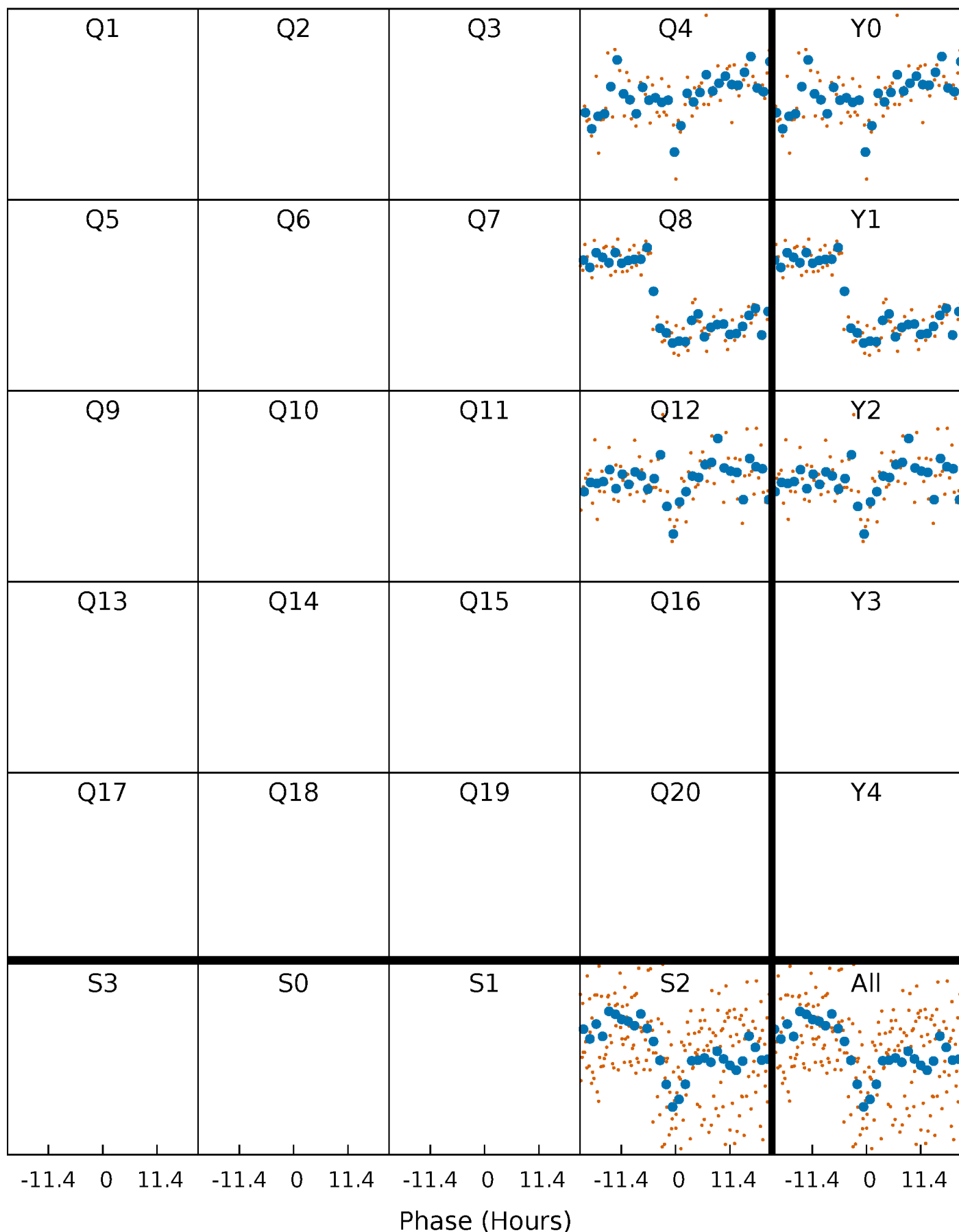


**Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)**



# PDC Quarter-Phased Transit Curves

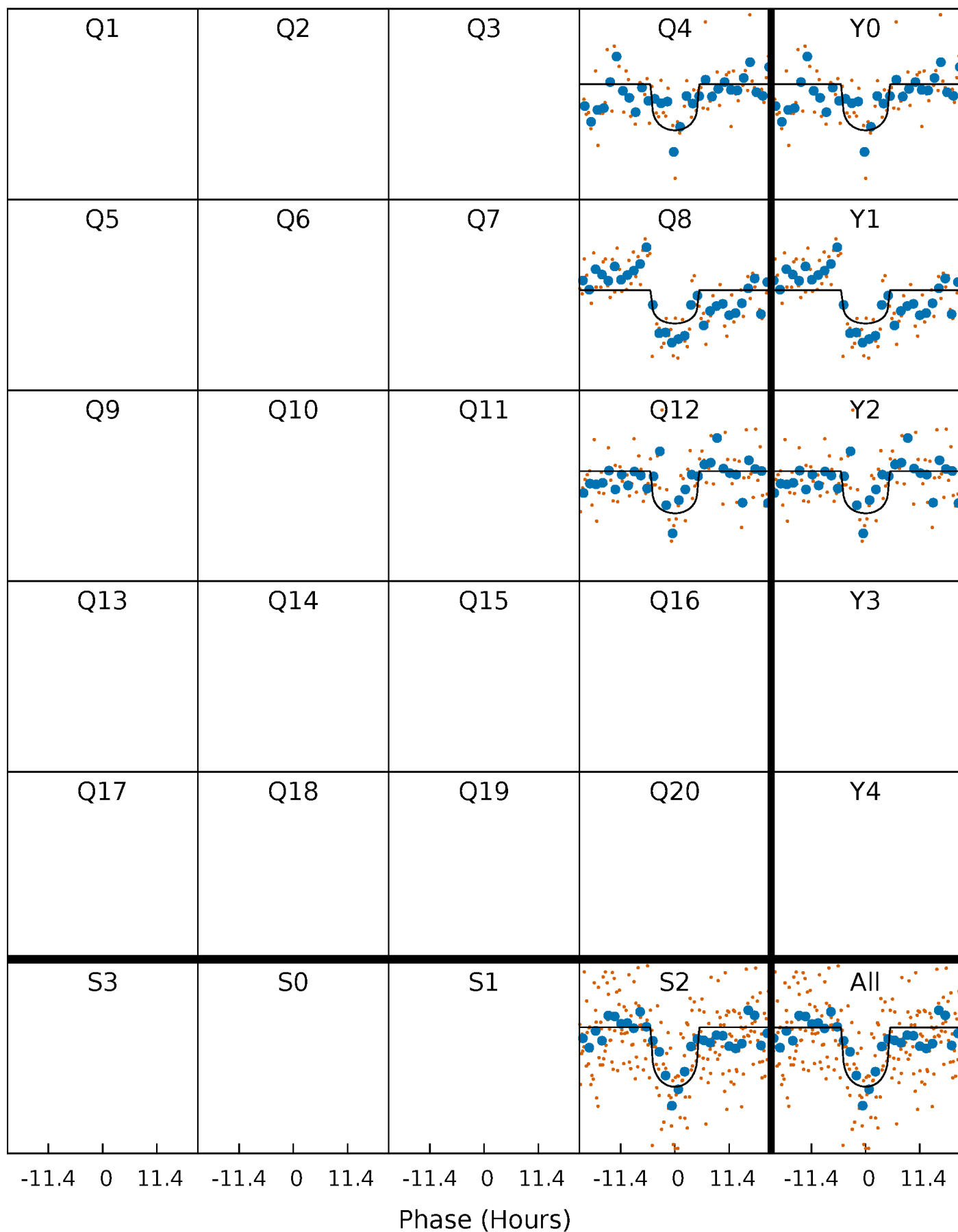
TCE 008260667-01 P=408.442244 Days  $T_0=357.666918$  (BKJD)





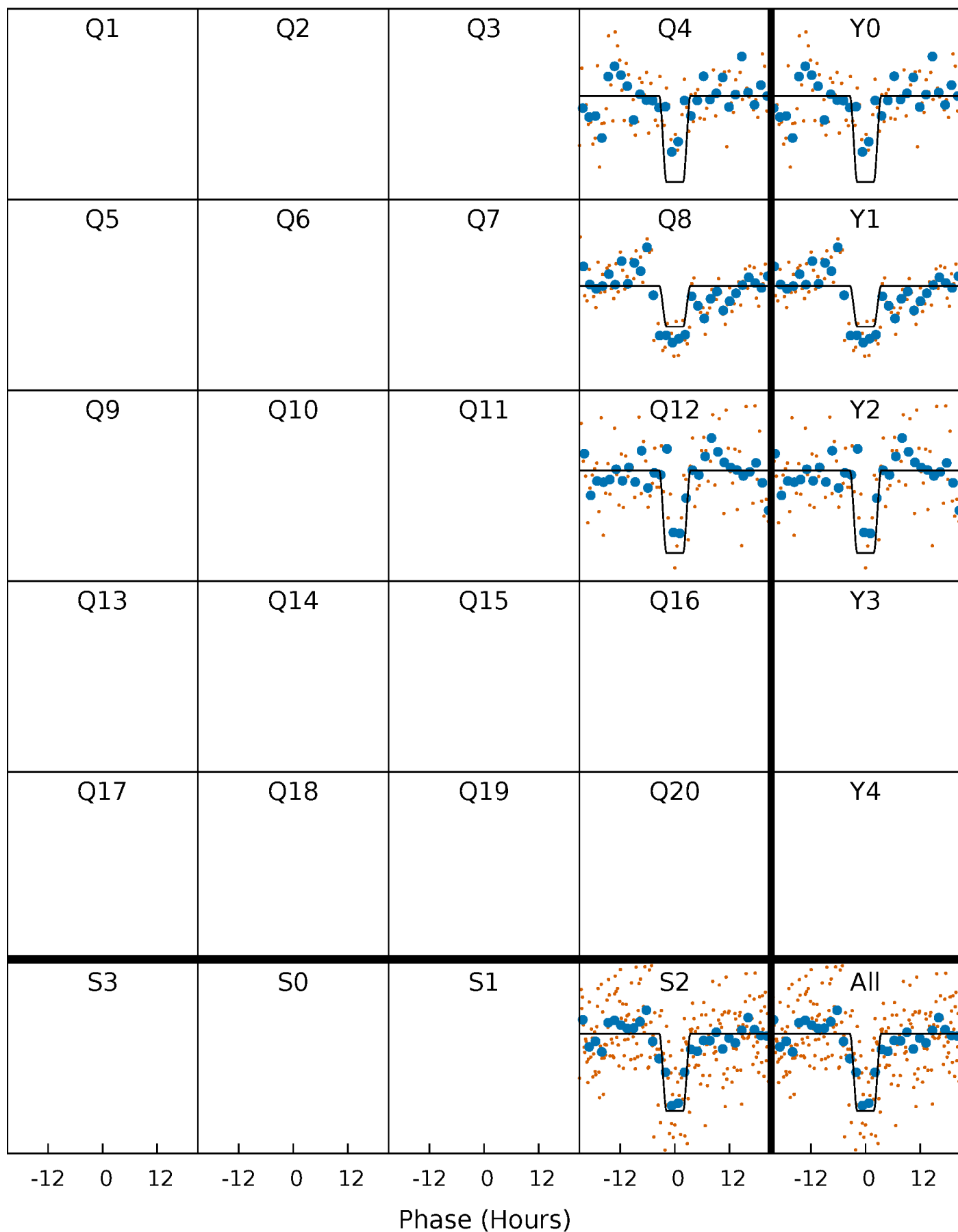
# DV Quarter-Phased Transit Curves

TCE 008260667-01 P=408.442244 Days  $T_0=357.666918$  (BKJD)



# Alt. Detrend Quarter-Phased Transit Curves

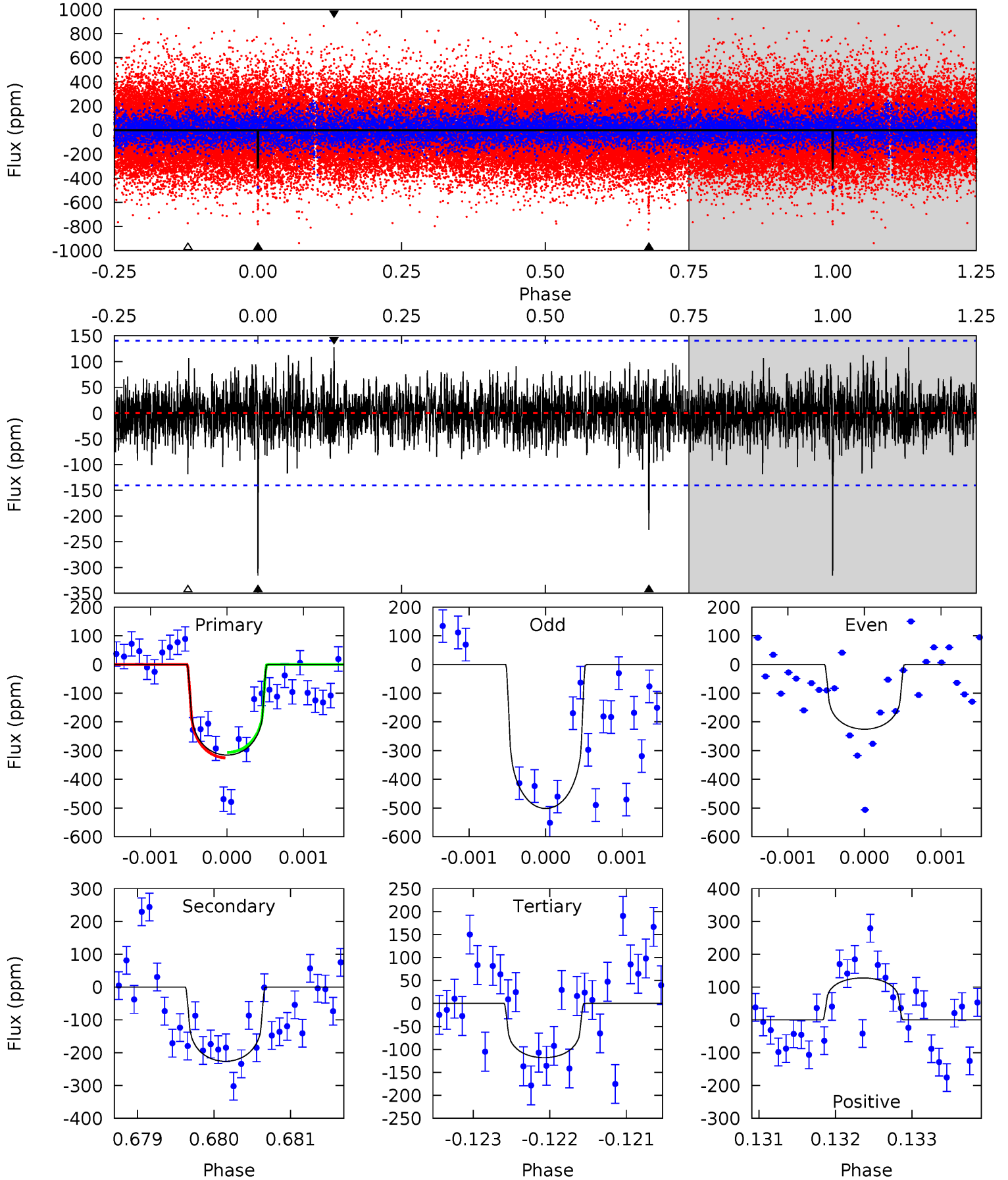
TCE 008260667-01 P=408.419186 Days  $T_0=357.683988$  (BKJD)



# DV Model-Shift Uniqueness Test

008260667-01, P = 408.442244 Days, E = 357.666918 Days

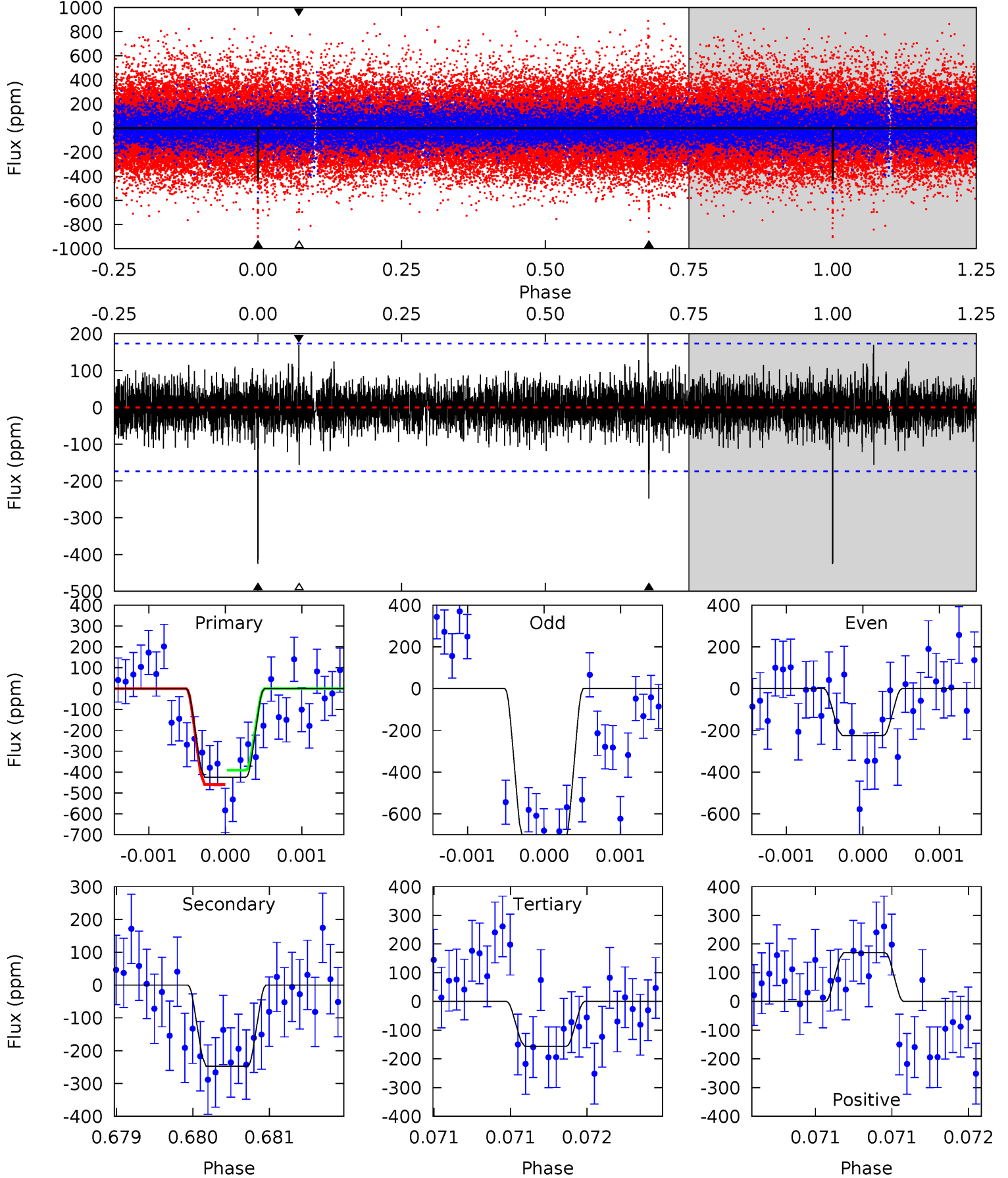
Pri	Sec	Ter	Pos	FA <sub>1</sub>	FA <sub>2</sub>	F <sub>Red</sub>	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.2	8.78	4.58	4.96	5.45	3.28	1.26	7.67	7.29	4.20	3.83	5.08	1.26	0.29	0.37



# Alt Model-Shift Uniqueness Test

008260667-01, P = 408.419186 Days, E = 357.683988 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
13.5	7.86	4.97	5.40	5.52	3.40	1.16	8.55	8.12	2.89	2.46	7.80	1.65	0.32	1.08



### Stellar Parameters For KIC 008260667

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R$ ( $R_{\odot}$ )	$M$ ( $M_{\odot}$ )	$p_{\star}$ ( $\text{g}\cdot\text{cm}^{-3}$ )
	$5800^{+175}_{-193}$	$3.916^{+0.440}_{-0.110}$	$0.360^{+0.100}_{-0.300}$	$2.076^{+0.401}_{-0.935}$	$1.293^{+0.155}_{-0.287}$	$0.204^{+0.786}_{-0.072}$
	+3%/-3%	+11%/-3%	+28%/-83%	+19%/-45%	+12%/-22%	+386%/-35%
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 008260667-01 / KOI

Detrend	Depth (ppm)	$R_p$ ( $R_{\oplus}$ )	$T_{max}$ (K)	$T_{obs}$ (K)	$A_{obs}$
DV	$-226 \pm 26$	$5.97^{+5.32}_{-4.00}$	$463^{+37}_{-55}$	$4365^{+2950}_{-861}$	$4867^{+40507}_{-3539}$
Alt.	$-247 \pm 31$	$6.17^{+5.78}_{-4.14}$	$459^{+38}_{-53}$	$4347^{+3230}_{-868}$	$4850^{+42326}_{-3566}$

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

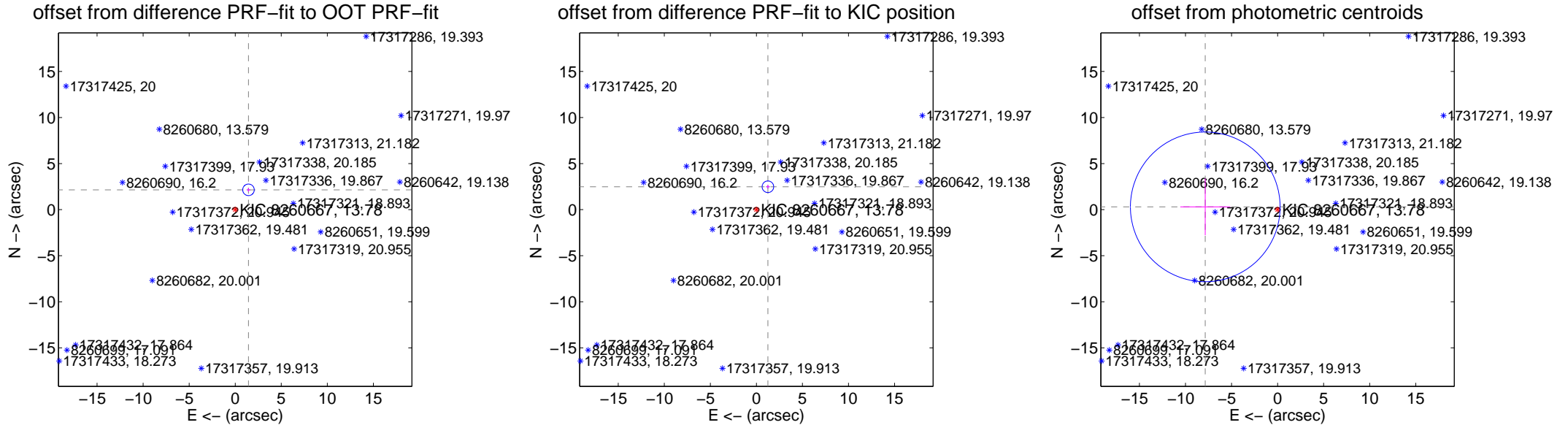
## DV Centroid Data

Supplemental centroid analysis for 008260667-01. Kepler magnitude: 13.78. Transit SNR 8.45

There are 1 quarters with good PRF difference image offsets

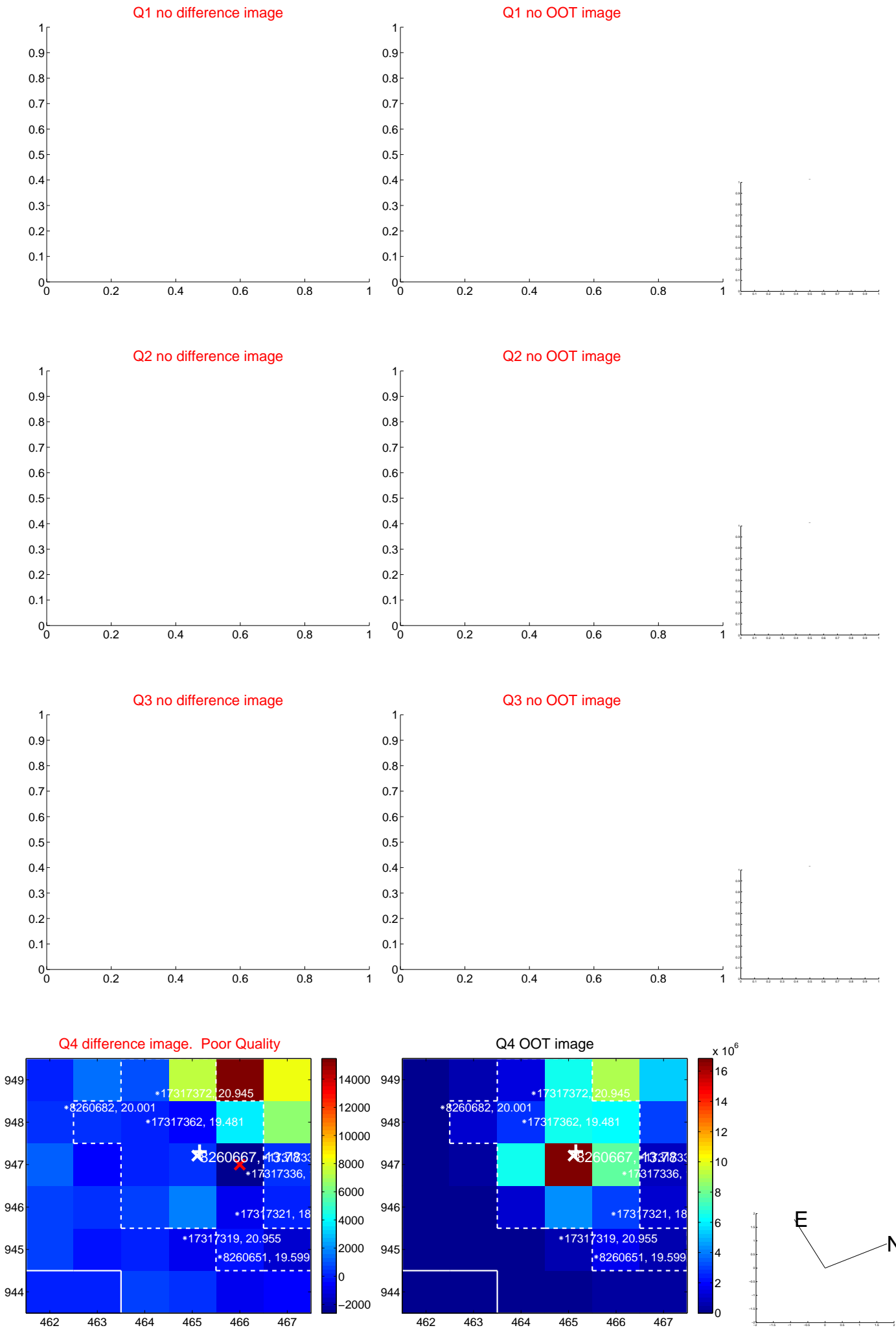
The direct PRF centroid is offset from the target star catalog position by about 0.39 arcsec

	Distance in arcsec	Distance / $\sigma$	$\Delta$ RA	$\Delta$ Dec
PRF-fit source offset from OOT	$2.588 \pm 0.209$	12.39	$-1.439 \pm 0.204$	$2.151 \pm 0.211$
PRF-fit source offset from KIC position	$2.781 \pm 0.210$	13.26	$-1.248 \pm 0.204$	$2.485 \pm 0.211$
photometric centroid source offset	$7.86 \pm 2.71$	2.90	$7.85 \pm 2.71$	$0.30 \pm 3.08$



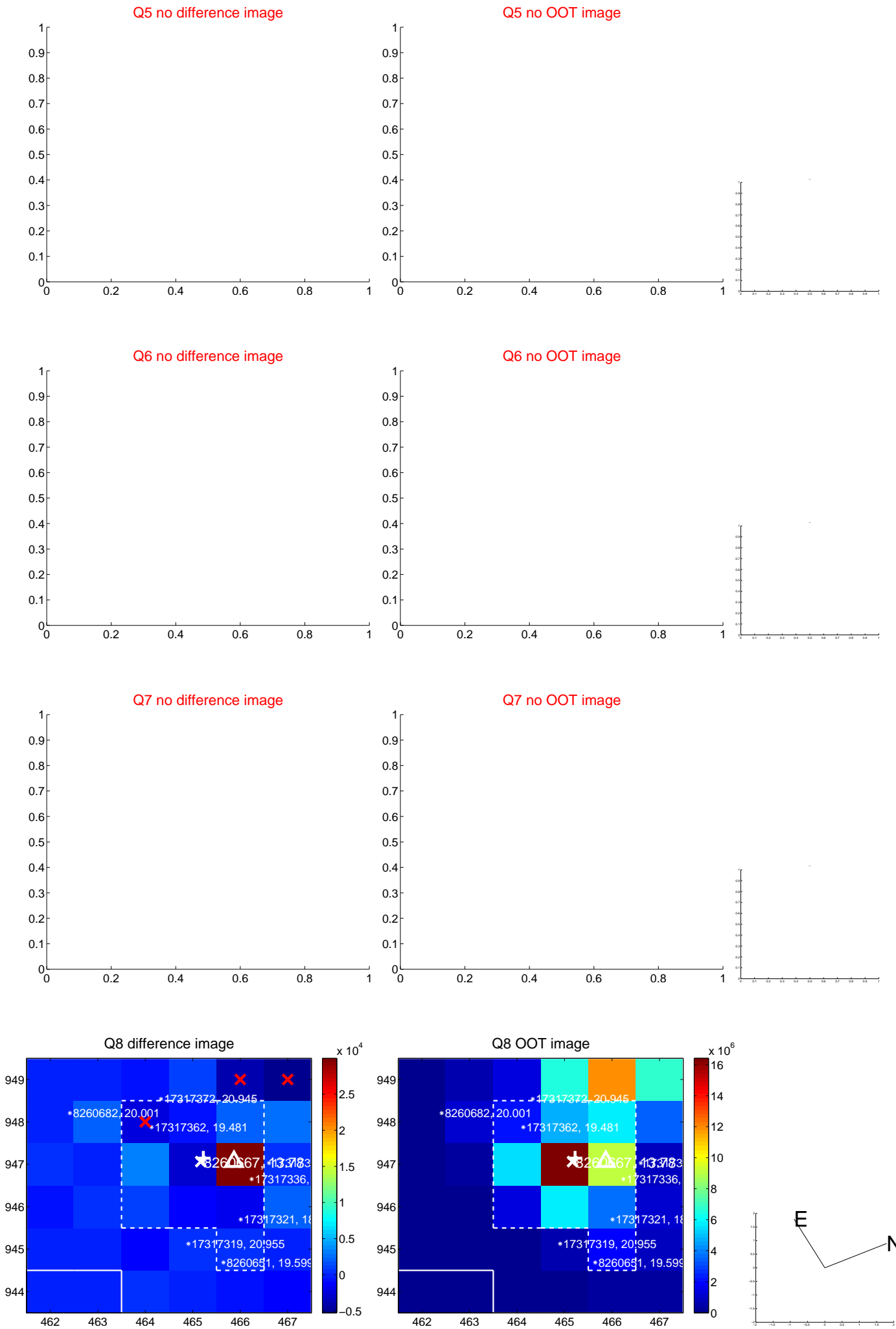
Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- $\sigma$  uncertainty. Blue circle: three-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

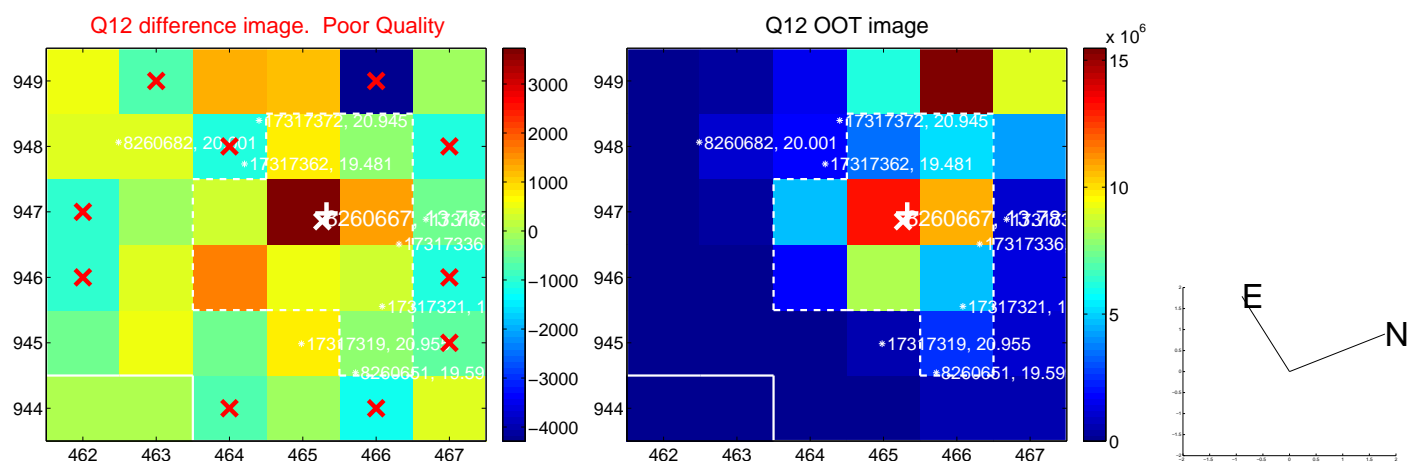
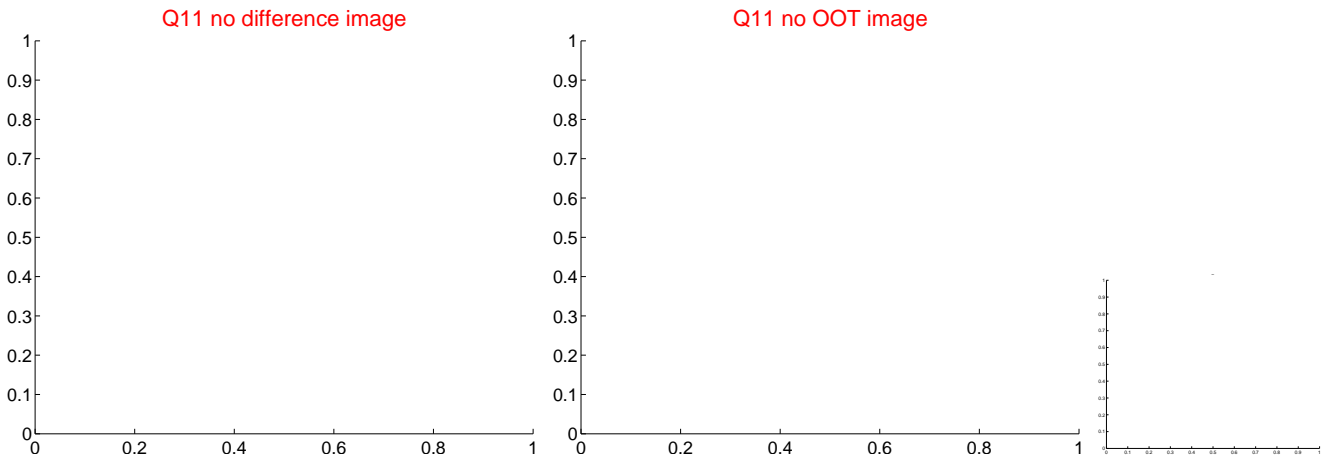
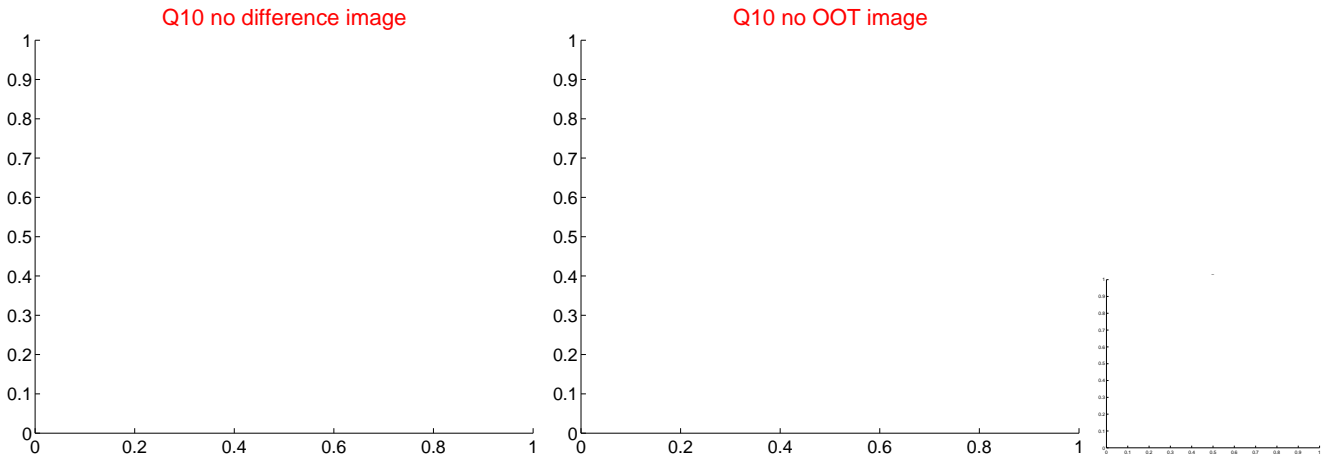
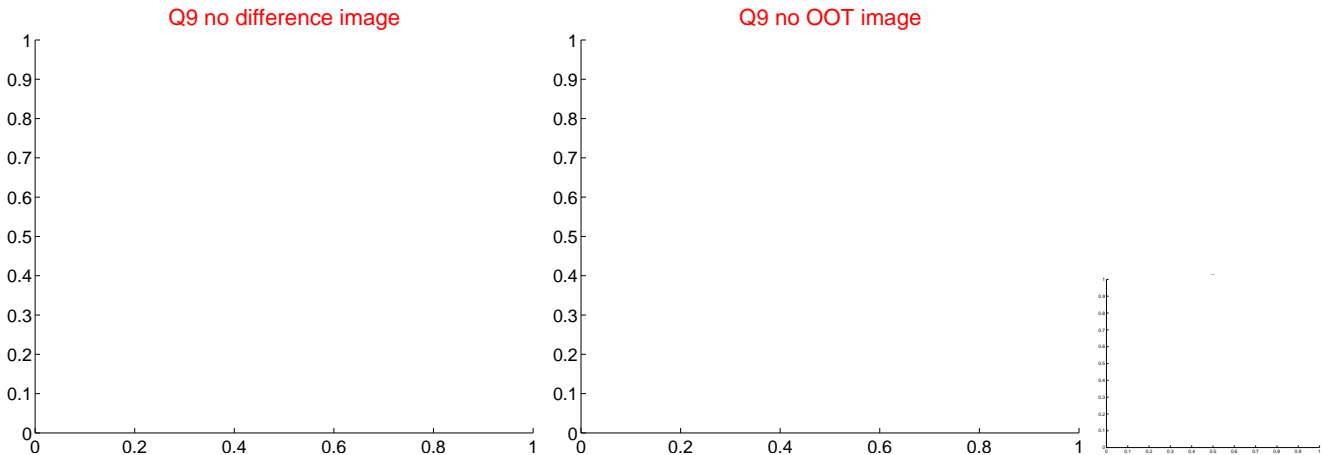




white  $\times$ : KIC target position;  $+$ : OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.



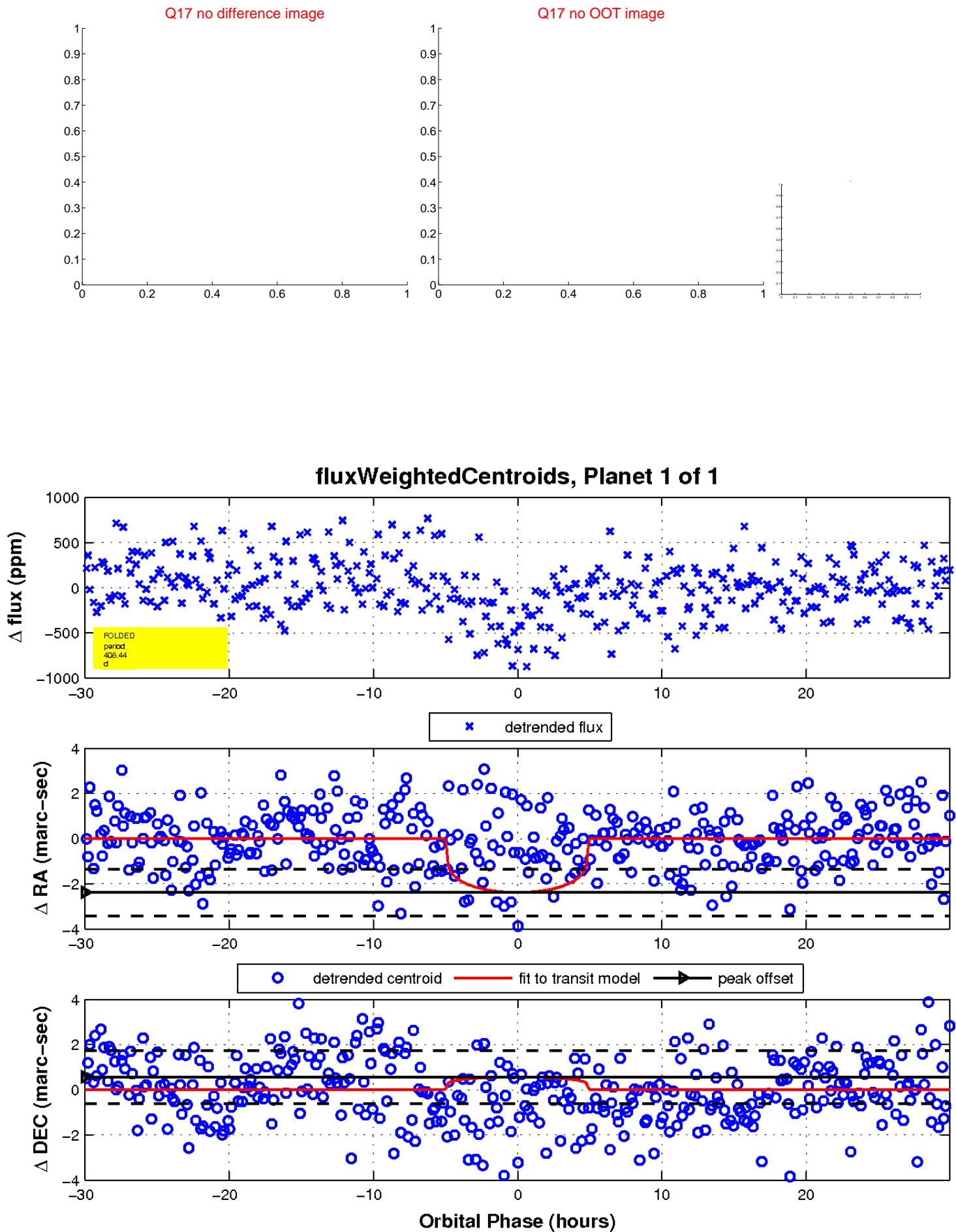
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white  $\times$ : KIC target position;  $+$ : OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.



UKIRT Image

Declination

