

# KIC 011759262

## 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)	$R_p$ ( $R_{\oplus}$ )	$S_p$ ( $S_{\oplus}$ )
011759262-01	OBS	No	264.049776	144.966521	129.9	6.327	15.4	5.3	151.13	3280	164.43	3238.75

## Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011759262-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_ZUMA—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_SATURATED

**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.

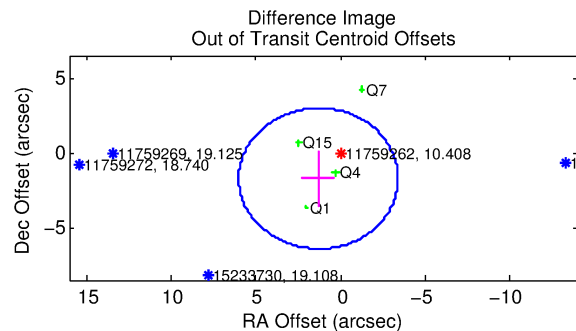
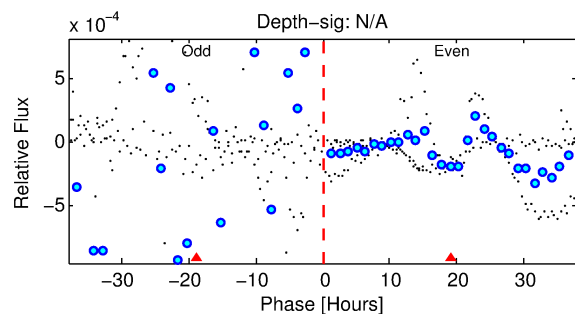
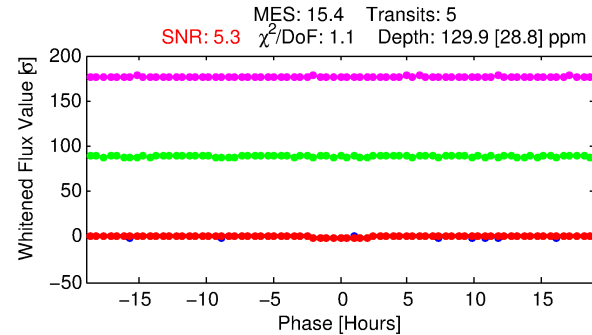
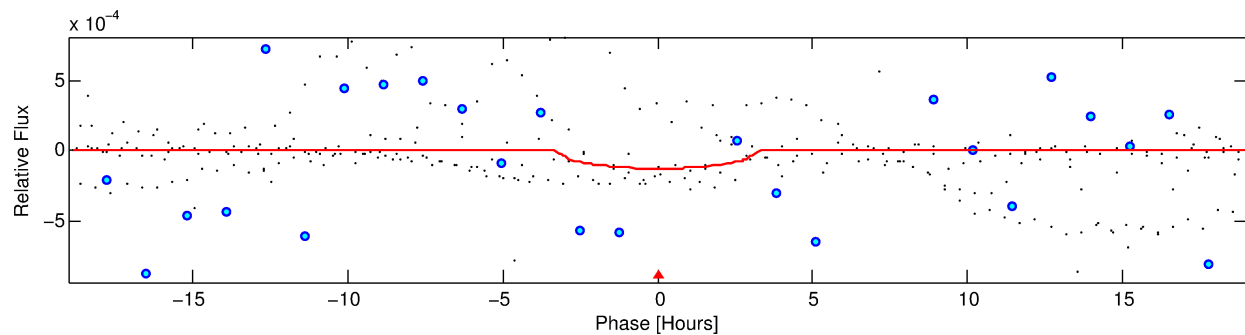
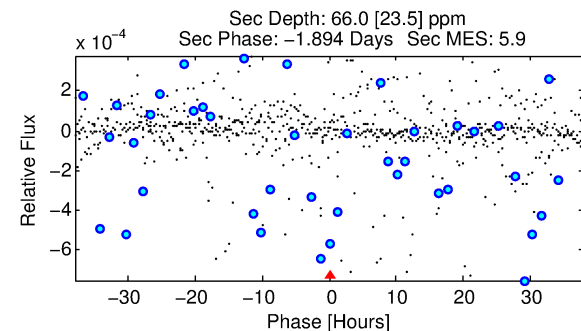
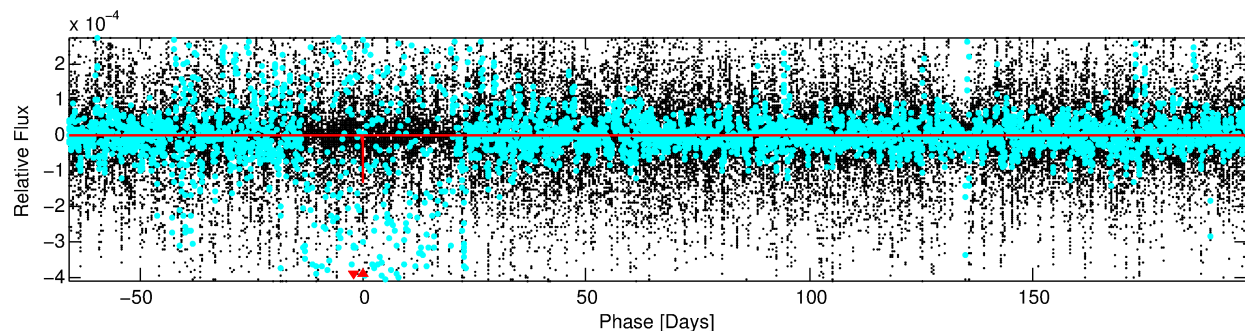
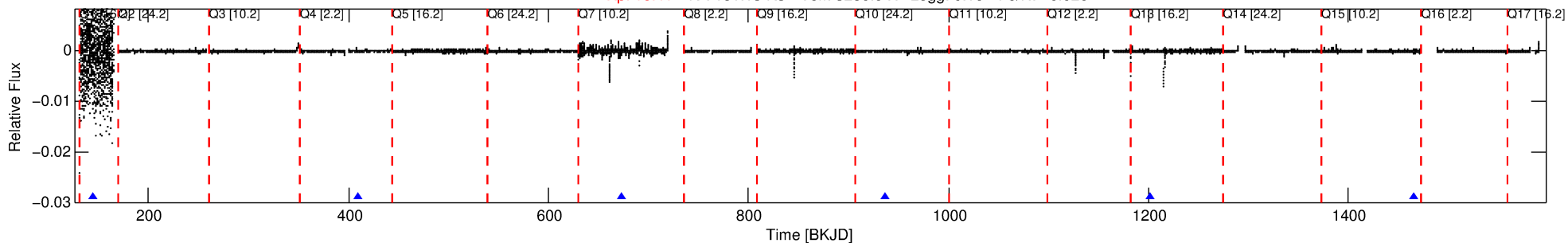
## Ephemeris Match Information For 011759262-01

No Significant Match Found

# DV One-Page Summary

KIC: 11759262 Candidate: 1 of 1 Period: 264.050 d

Kp: 10.41 R\*: 151.13 Rs Teff: 3280.0 K Logg: 0.16 Fe/H: -0.020



## DV Fit Results:

Period = 264.04978 [0.00347] d  
Epoch = 144.9665 [0.0113] BKJD  
Rp/R\* = 0.0100 [0.0059]  
a/R\* = 296.44 [366.58]  
b = 0.39 [2.78]  
Seff = 3238.75 [1176.61]  
Teq = 1924 [175] K  
Rp = 164.43 [102.42] Re  
a = 0.8552 [0.1730] AU  
Ag = 0.98 [1.26] [-0.01σ]  
Teffp = 2961 [919] K [1.11σ]

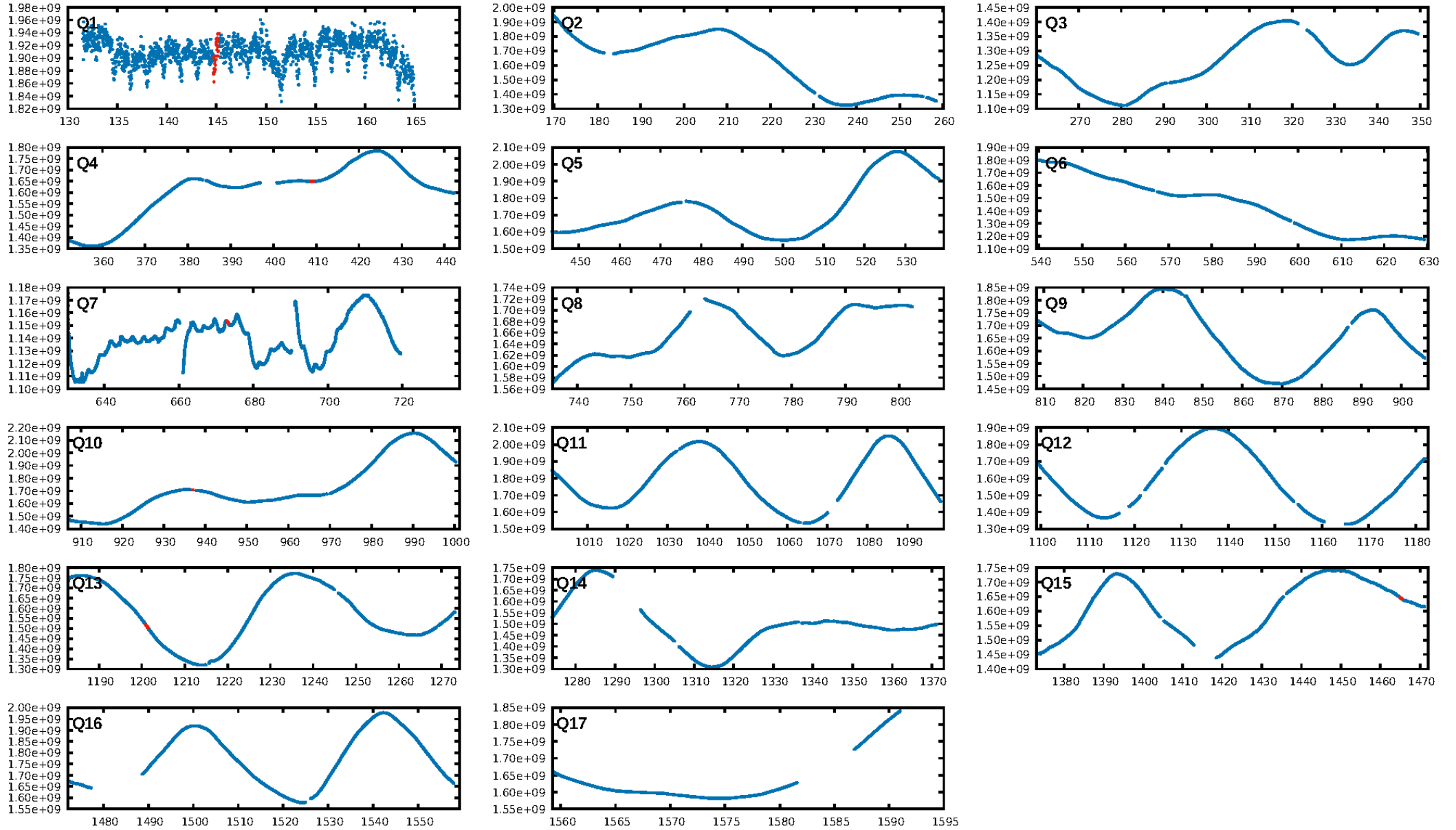
## DV Diagnostic Results:

ShortPeriod-sig: N/A  
LongPeriod-sig: N/A  
ModelChiSquare2-sig: 19.9%  
ModelChiSquareGof-sig: 93.0%  
Bootstrap-pfa: 2.02e-04  
RollingBand-fgt: 1.00 [4/4]  
GhostDiagnostic-chr: N/A  
Centroid-sig: 14.4%  
Centroid-so: 5.145 arcsec [1.35σ]  
OotOffset-rm: 2.161 arcsec [1.38σ]  
KicOffset-rm: 2.269 arcsec [1.59σ]  
OotOffset-st: 0/2/1/1 [4]  
KicOffset-st: 0/2/1/1 [4]  
DiffImageQuality-fgm: 0.50 [2/4]  
DiffImageOverlap-fno: 1.00 [4/4]

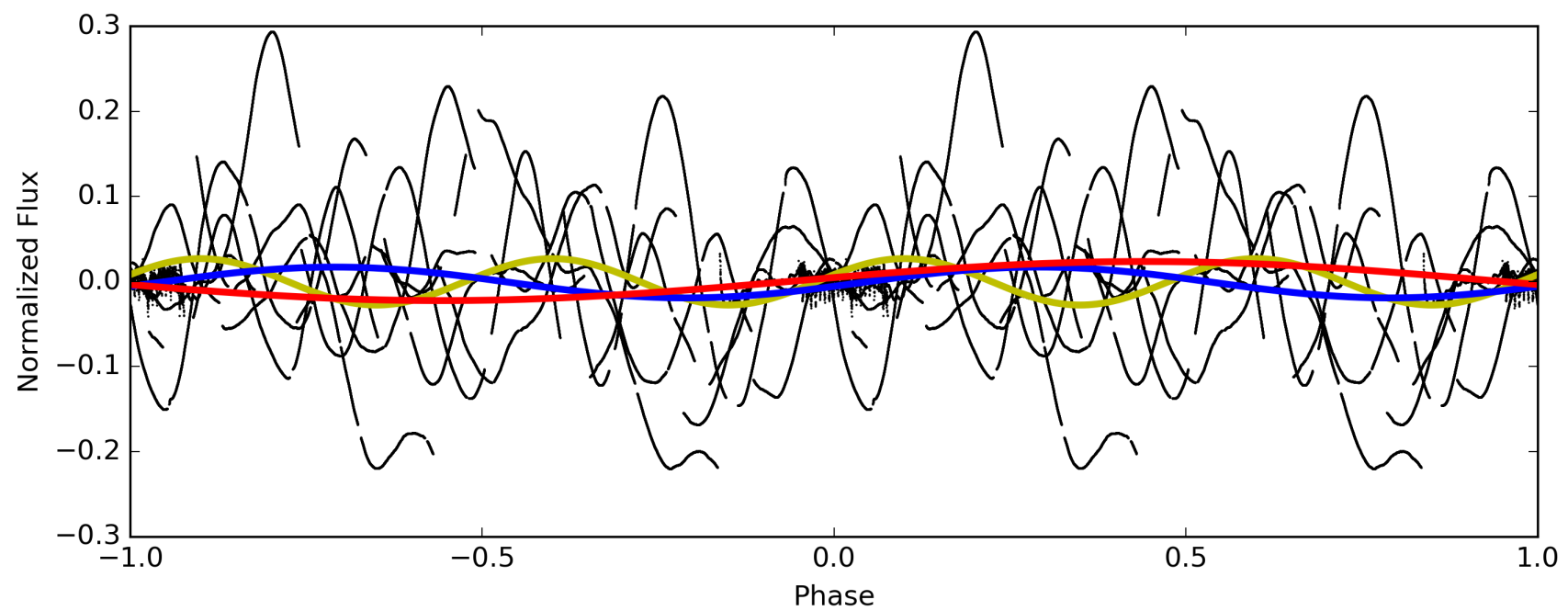
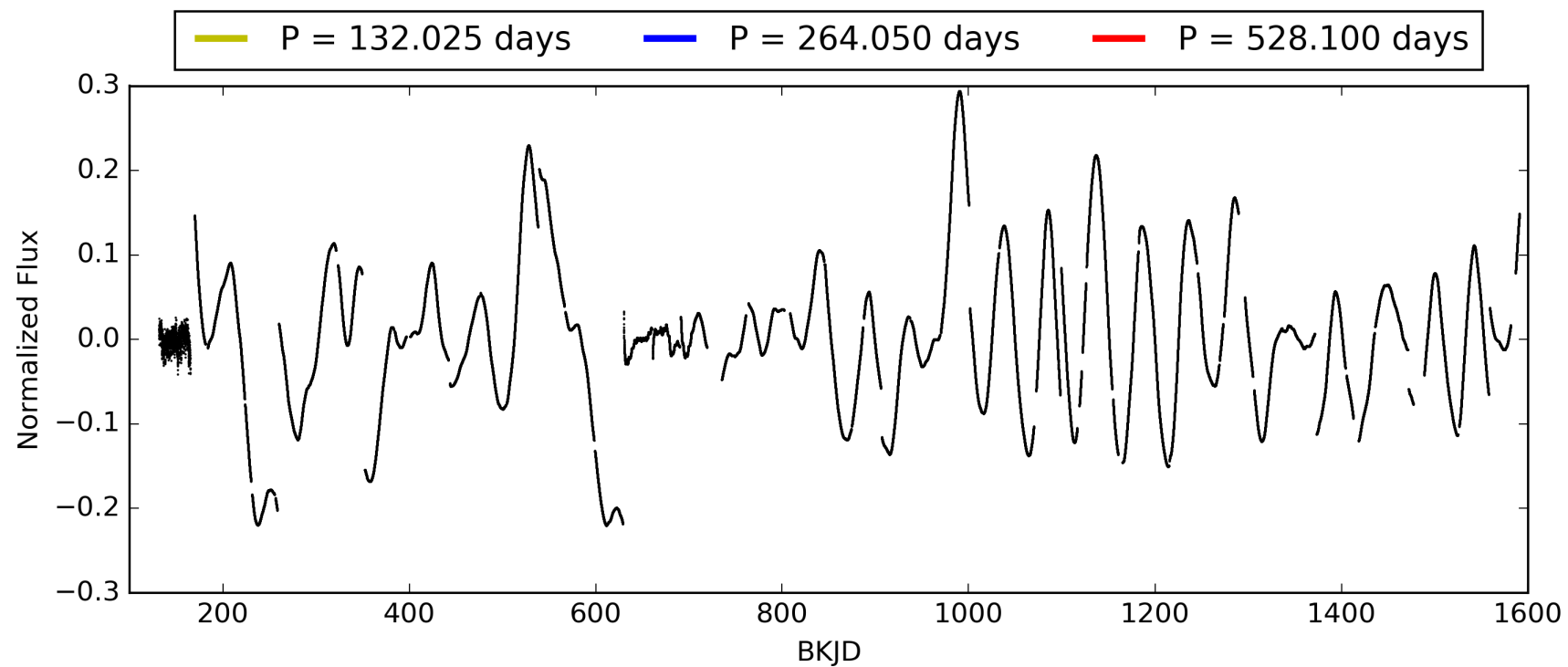
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 22:44:11 Z

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

# TCE 011759262-01, PDC Light Curves

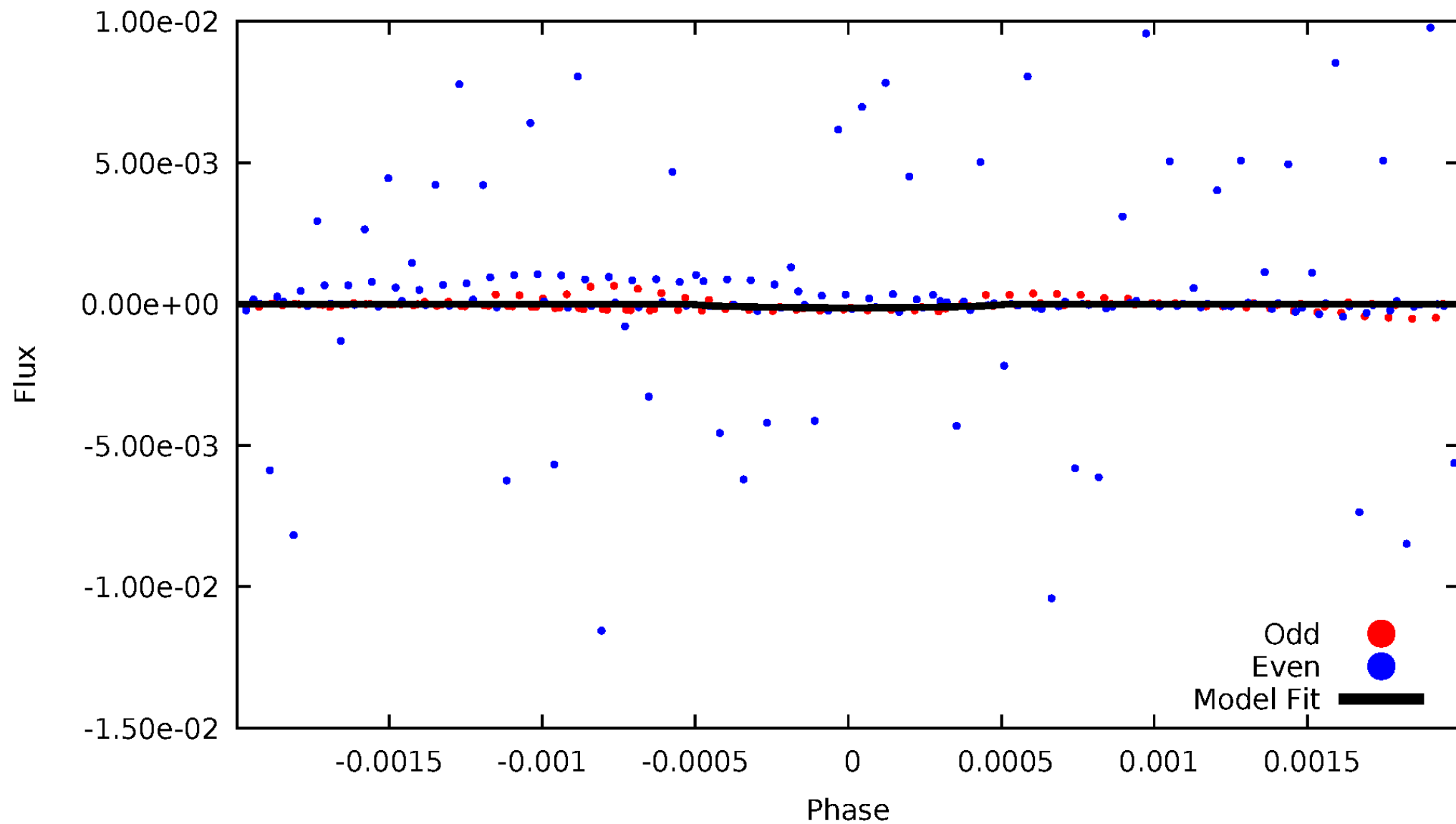


TCE 011759262-01



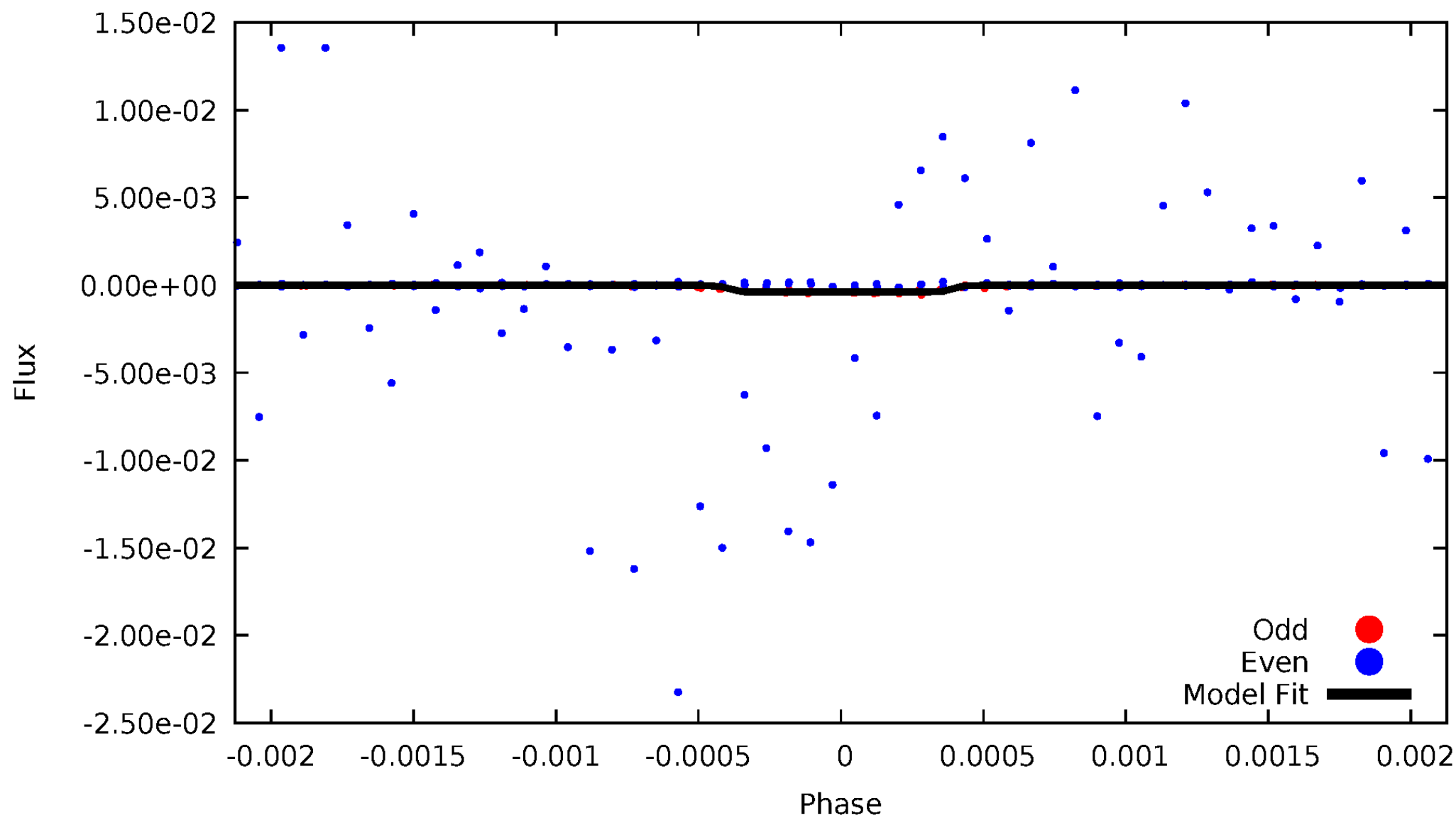
# DV Odd/Even

TCE 011759262-01



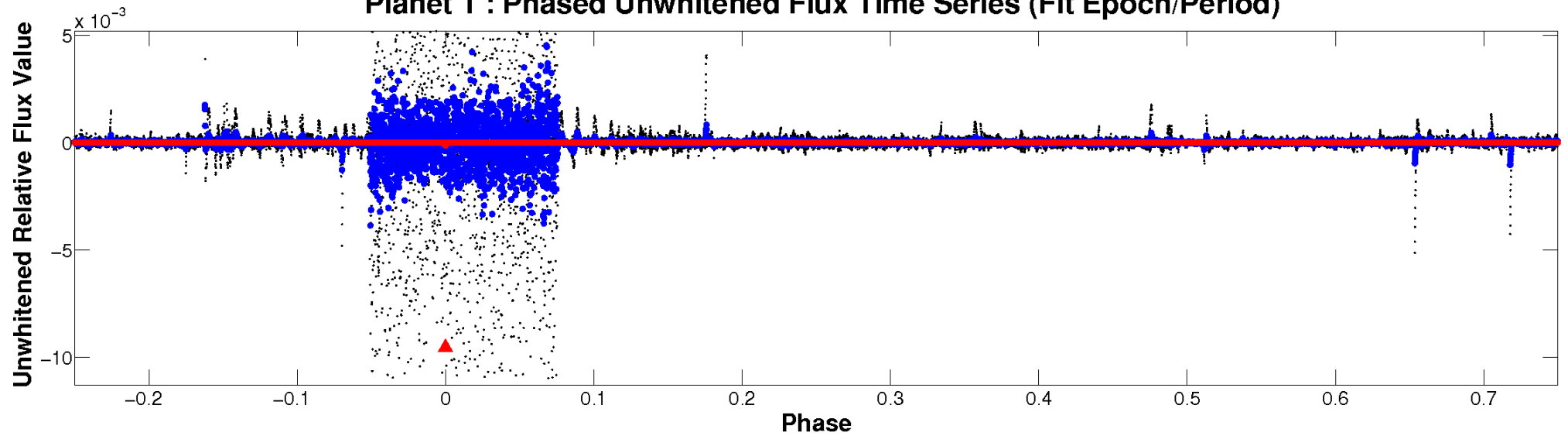
# ALT Odd/Even

TCE 011759262-01

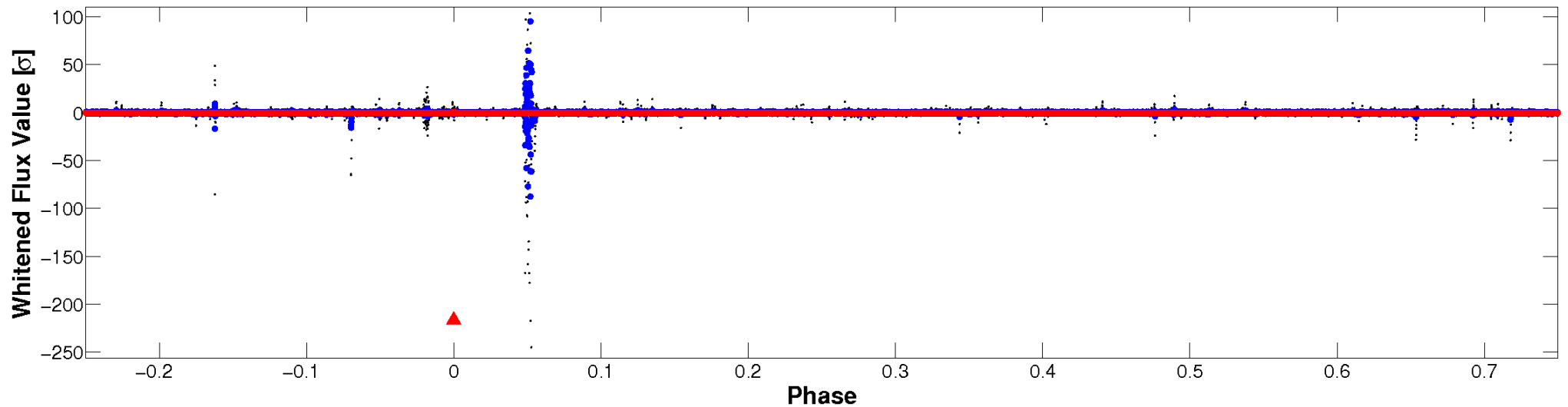


# Non-Whitened Vs. Whitened Light Curve

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

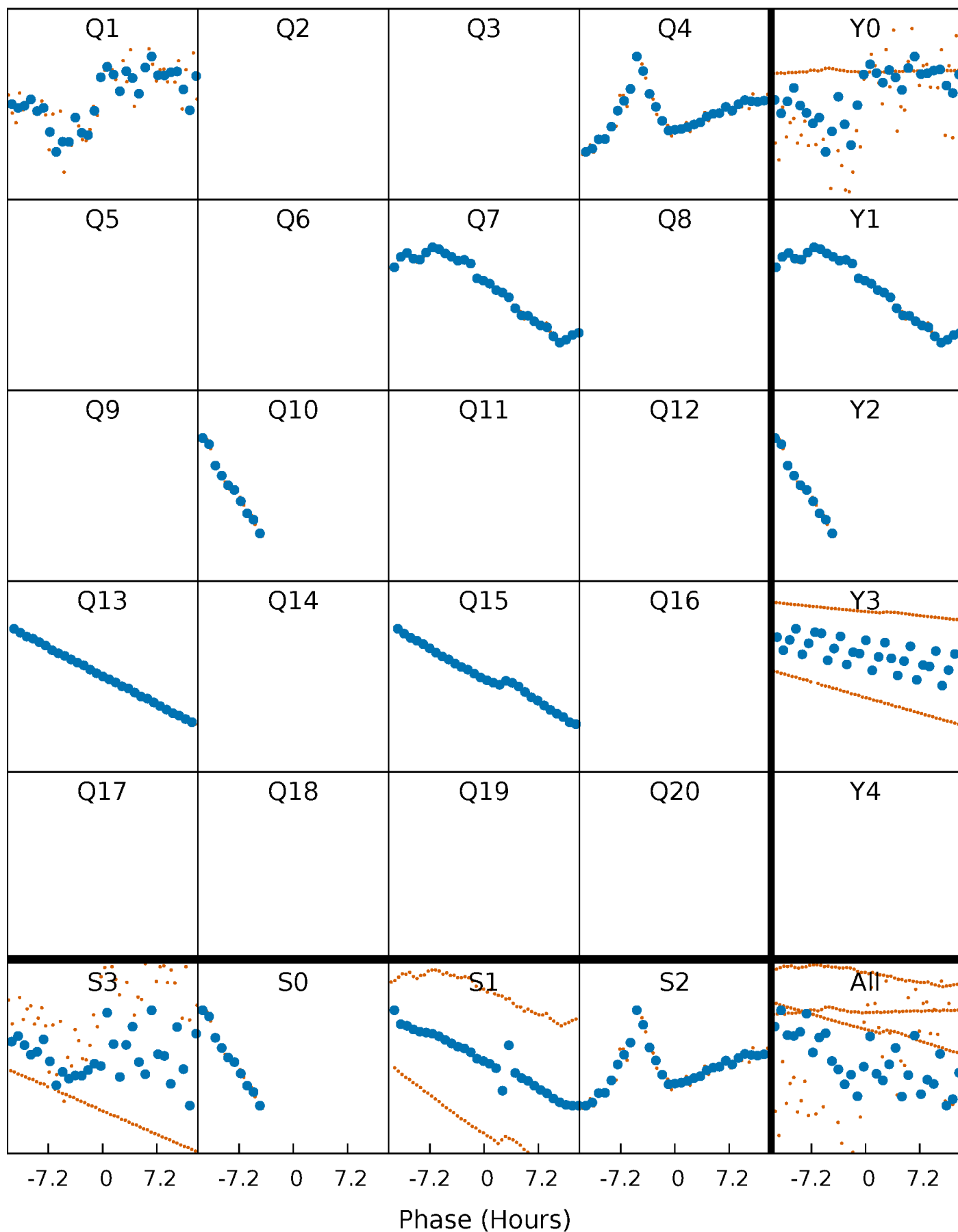


**Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)**



# PDC Quarter-Phased Transit Curves

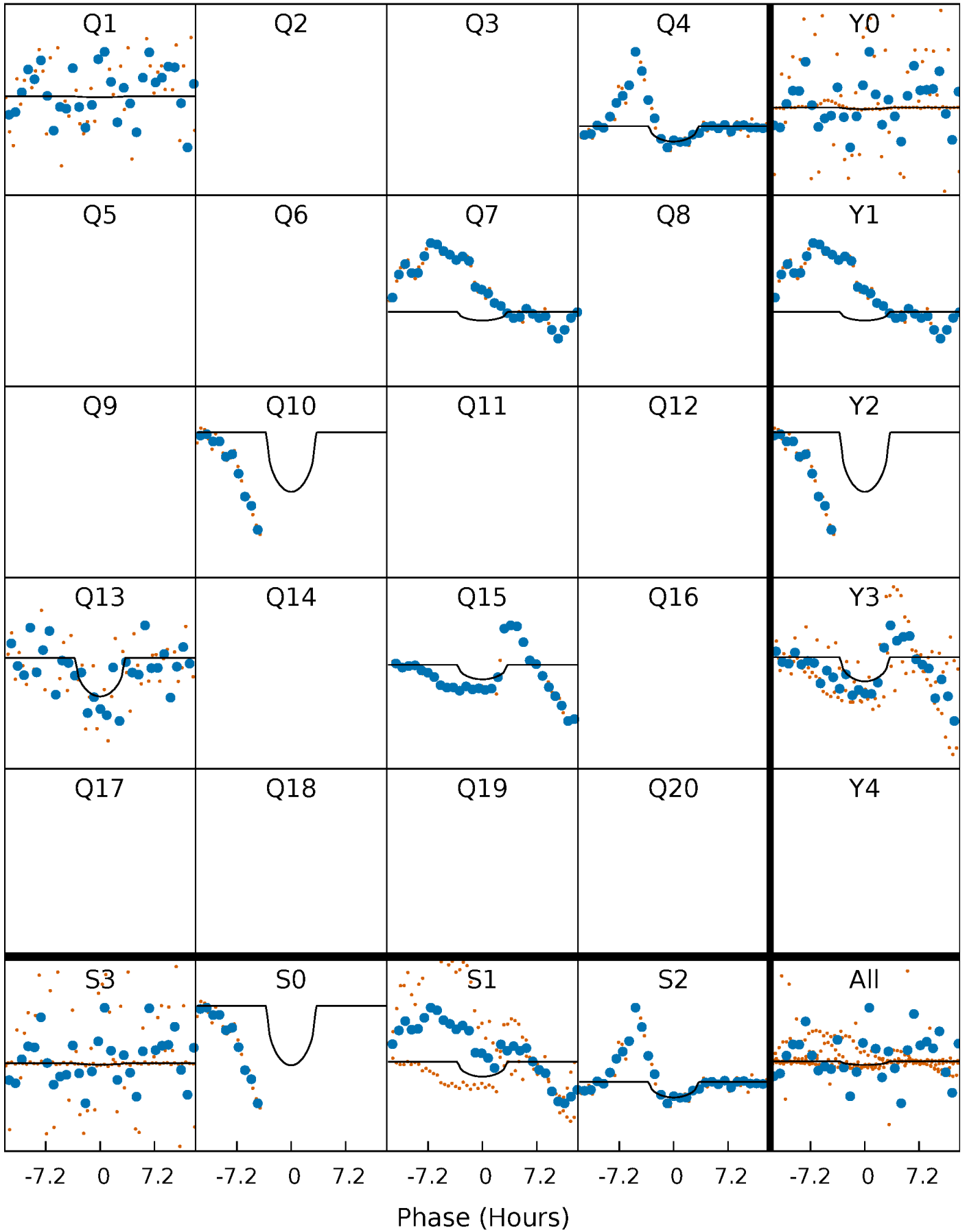
TCE 011759262-01 P=264.049776 Days  $T_0=144.966521$  (BKJD)





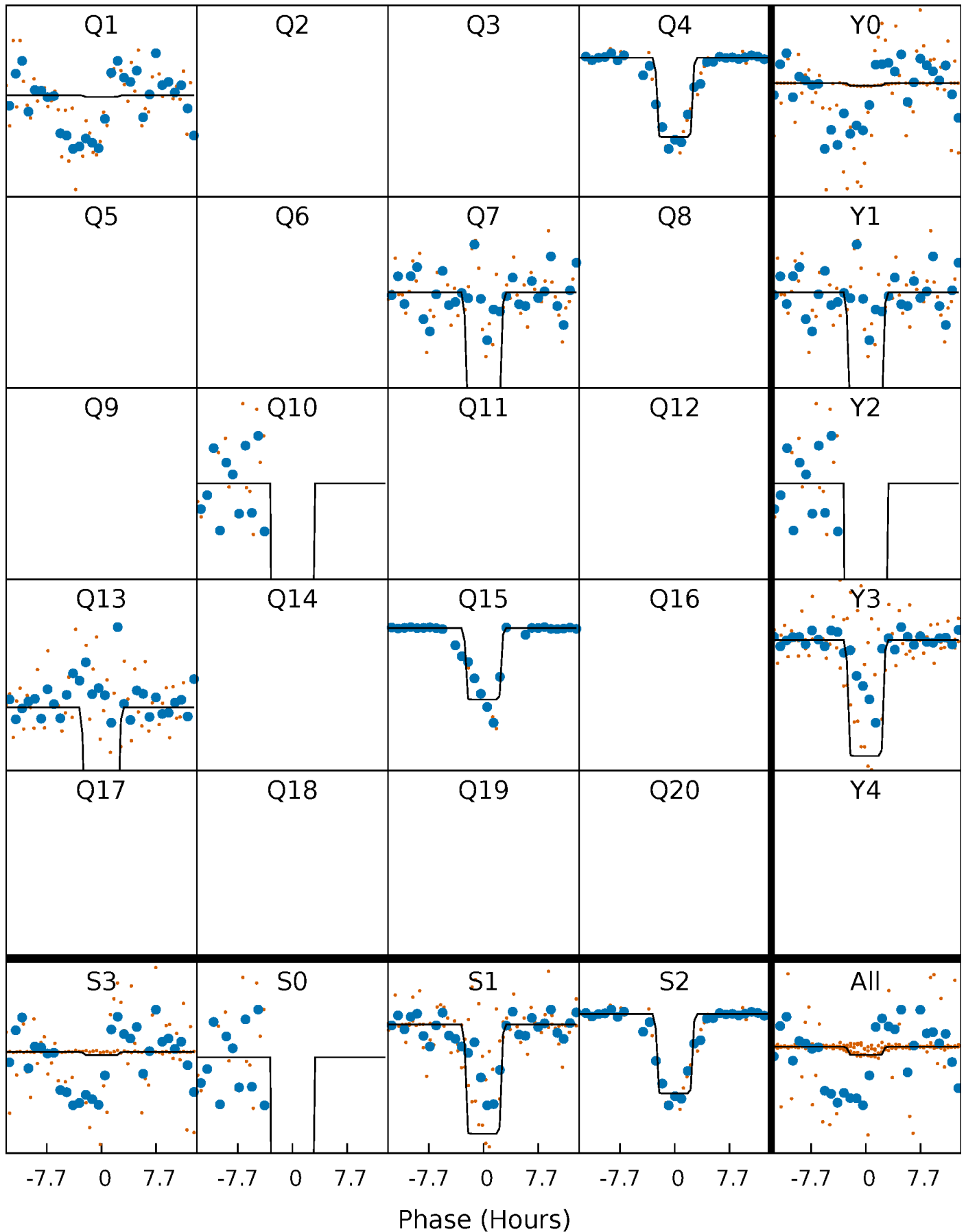
# DV Quarter-Phased Transit Curves

TCE 011759262-01     $P=264.049776$  Days     $T_0=144.966521$  (BKJD)



# Alt. Detrend Quarter-Phased Transit Curves

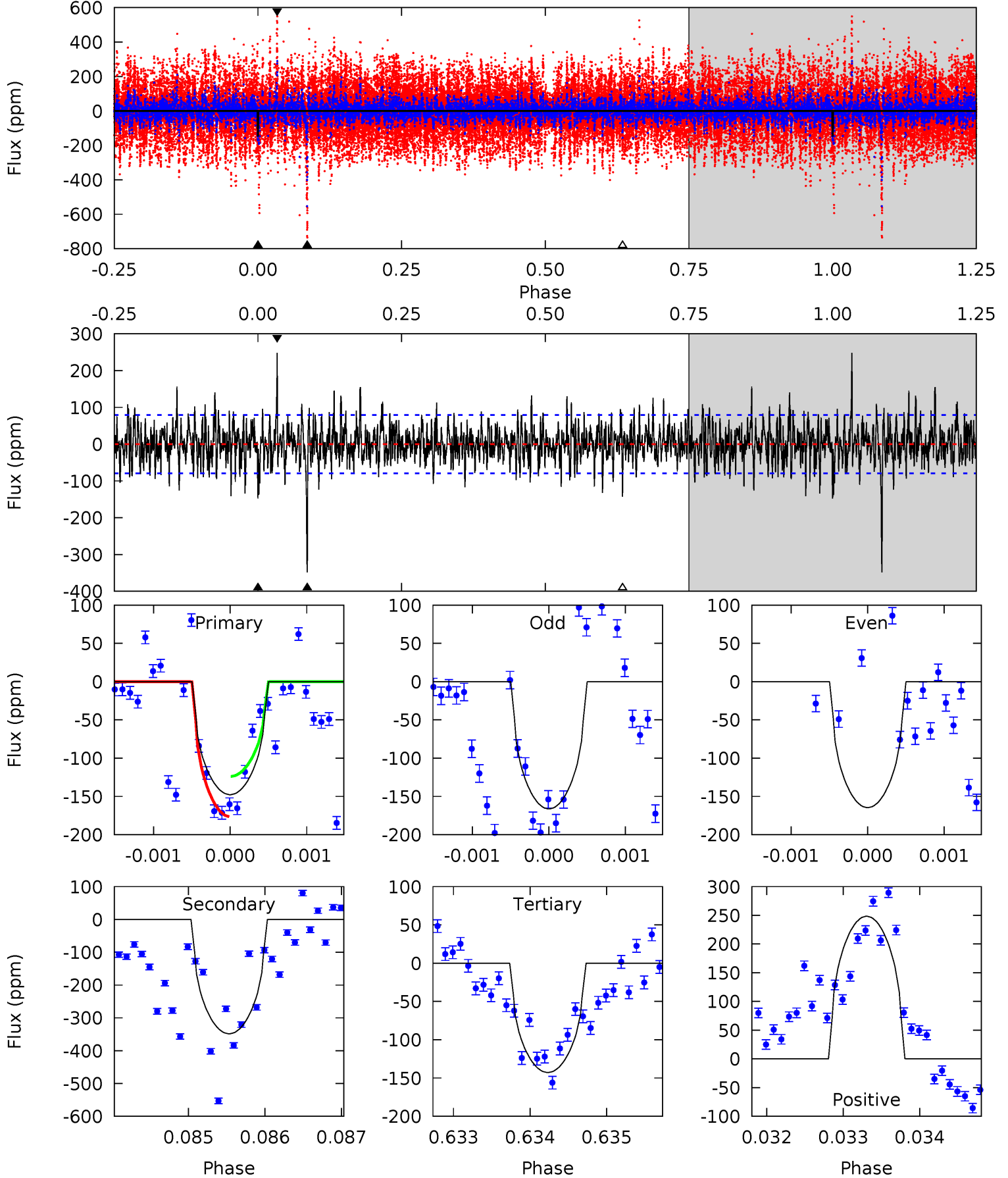
TCE 011759262-01 P=264.062896 Days  $T_0=144.904270$  (BKJD)



# DV Model-Shift Uniqueness Test

011759262-01, P = 264.049776 Days, E = 144.966521 Days

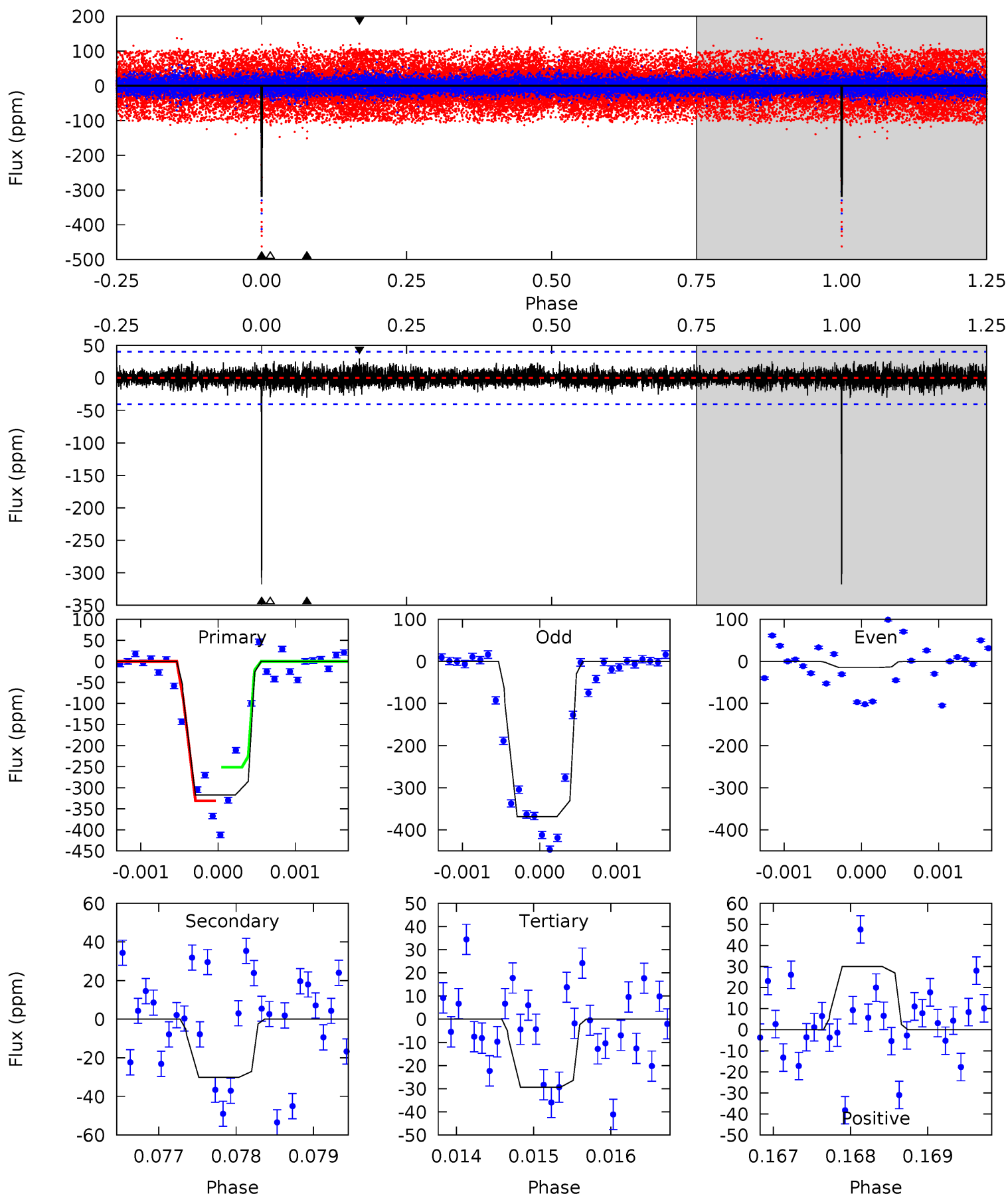
Pri	Sec	Ter	Pos	FA <sub>1</sub>	FA <sub>2</sub>	F <sub>Red</sub>	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.1	23.9	9.80	17.1	5.44	3.27	2.77	0.34	-6.91	14.1	6.87	0.04	-1.89	0.42	0



# Alt Model-Shift Uniqueness Test

011759262-01, P = 264.062896 Days, E = 144.904270 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
42.9	4.08	3.98	4.06	5.47	3.31	0.90	38.9	38.9	0.10	0.02	16.2	3.24	0.09	0



### Stellar Parameters For KIC 011759262

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R$ ( $R_{\odot}$ )	$M(M_{\odot})$	$p_{\star}$ ( $\text{g}\cdot\text{cm}^{-3}$ )
	$3280^{+117}_{-78}$	$0.157^{+0.200}_{-0.050}$	$-0.020^{+0.250}_{-0.150}$	$151.131^{+9.958}_{-29.874}$	$1.193^{+0.172}_{-0.172}$	$0.000^{+0.000}_{-0.000}$
	+4%/-2%	+127%/-32%	+1250%/-750%	+7%/-20%	+14%/-14%	+99%/-16%
Source	KIC0	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 011759262-01 / KOI

Detrend	Depth (ppm)	$R_p$ ( $R_{\oplus}$ )	$T_{max}$ (K)	$T_{obs}$ (K)	$A_{obs}$
DV	$-348 \pm 15$	$158.06^{+95.64}_{-86.34}$	$2655^{+123}_{-148}$	$4023^{+1503}_{-633}$	$5.637^{+22.621}_{-3.354}$
Alt.	$-30 \pm 7$	$310.15^{+101.16}_{-96.64}$	$2654^{+115}_{-150}$	$-2418^{+538}_{-138}$	$0.130^{+0.150}_{-0.061}$

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

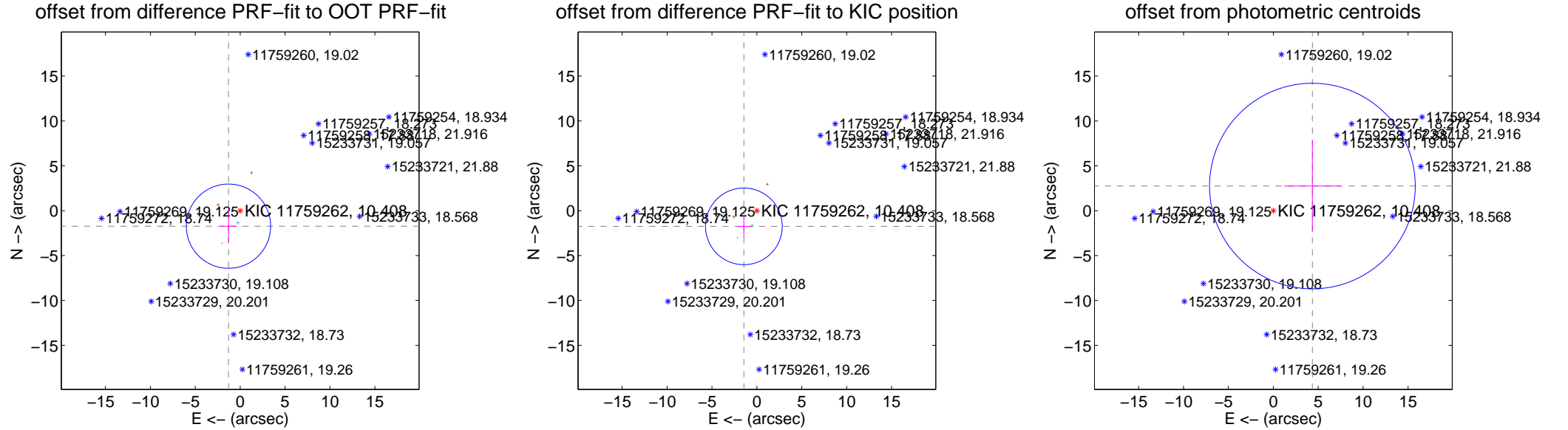
## DV Centroid Data

Supplemental centroid analysis for 011759262-01. **Kepler magnitude: 10.41.** Transit SNR 5.30

**There are 2 quarters with good PRF difference image offsets**

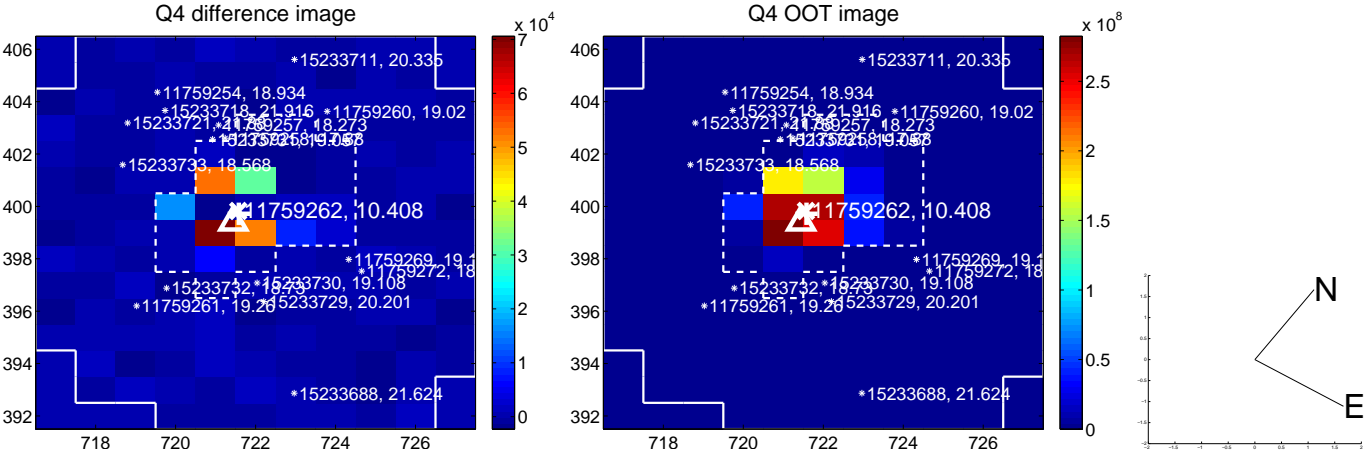
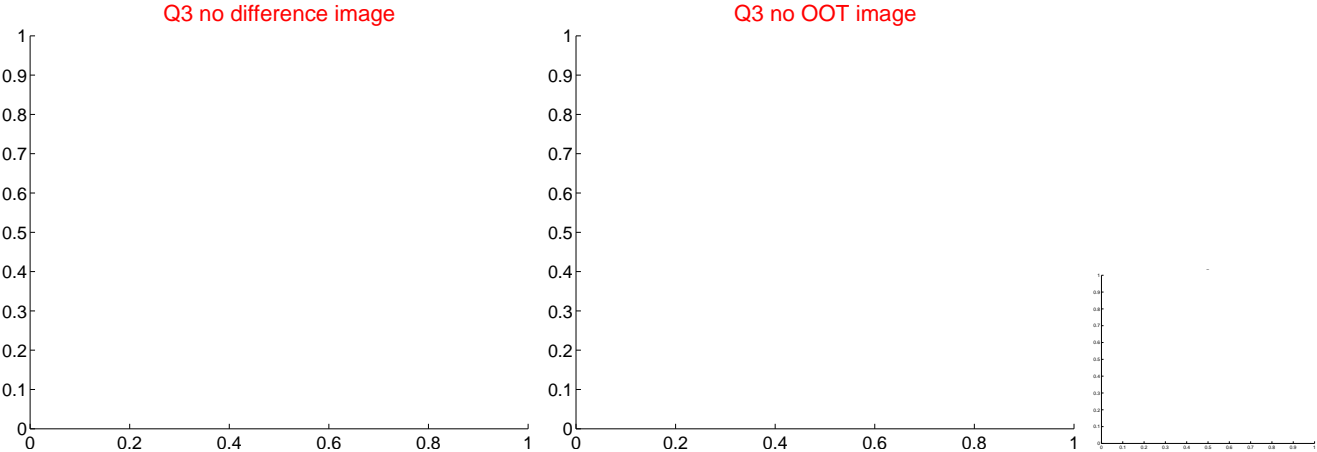
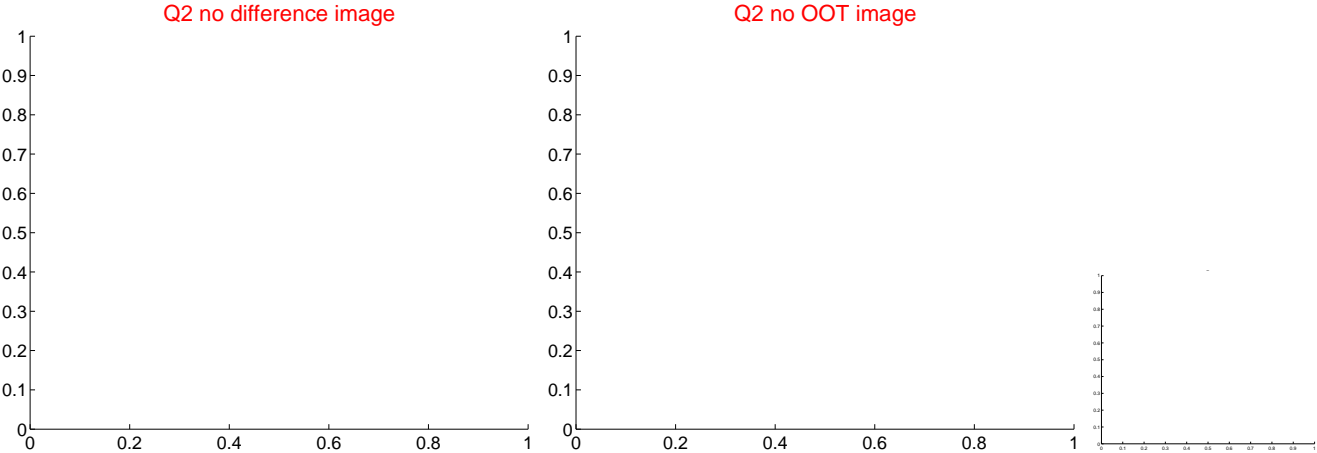
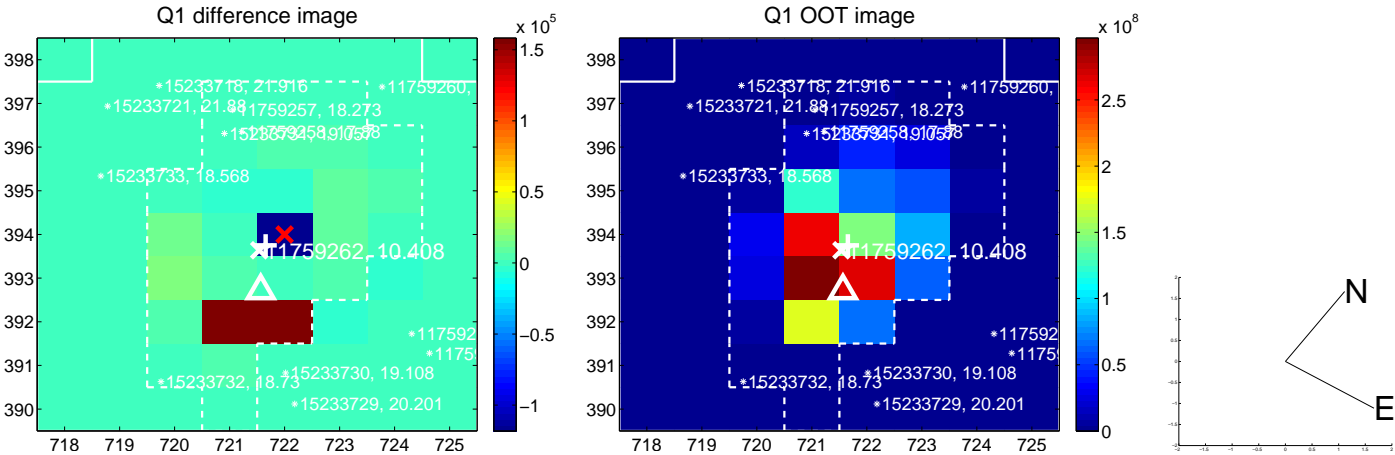
The direct PRF centroid is offset from the target star catalog position by about 1.33 arcsec

	Distance in arcsec	Distance / $\sigma$	$\Delta$ RA	$\Delta$ Dec
PRF-fit source offset from OOT	$2.161 \pm 1.564$	1.38	$1.301 \pm 0.927$	$-1.726 \pm 1.830$
PRF-fit source offset from KIC position	$2.269 \pm 1.424$	1.59	$1.450 \pm 0.714$	$-1.746 \pm 1.289$
photometric centroid source offset	$5.15 \pm 3.82$	1.35	$-4.35 \pm 3.17$	$2.75 \pm 5.09$

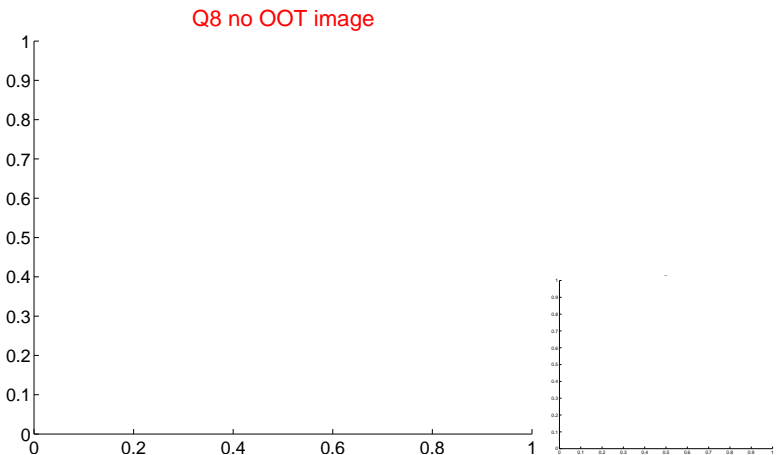
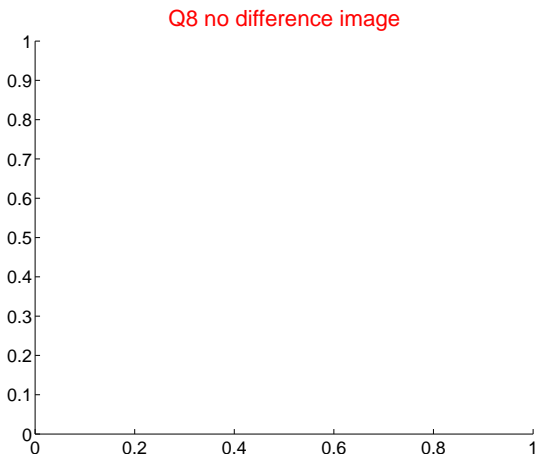
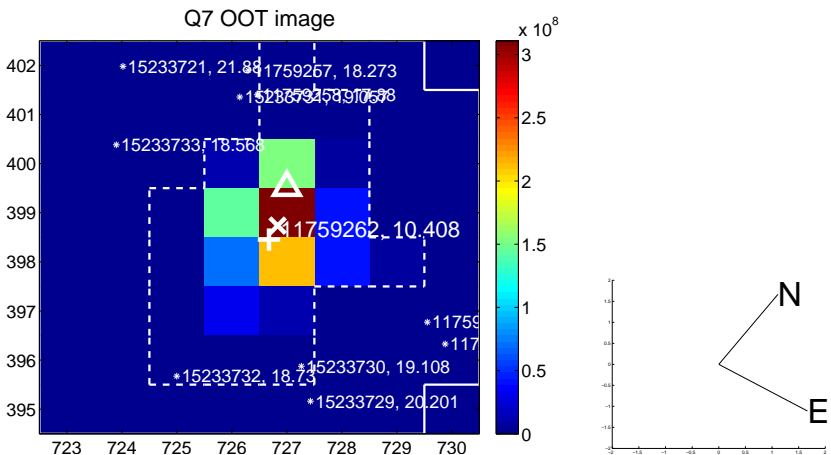
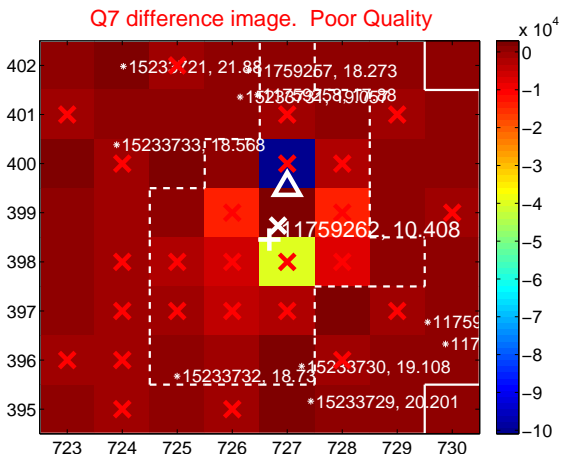
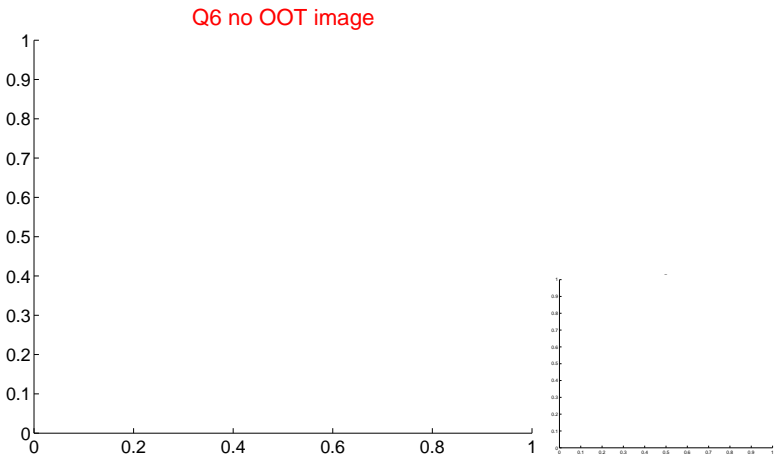
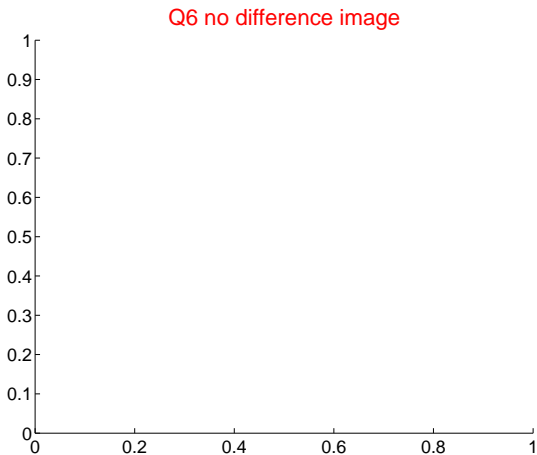
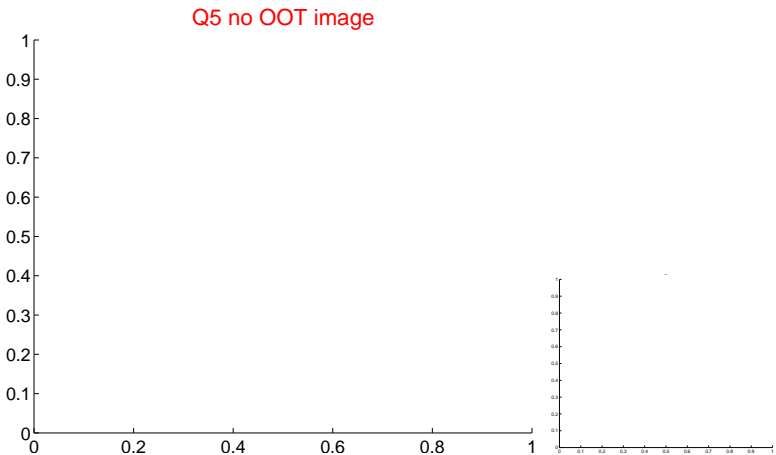
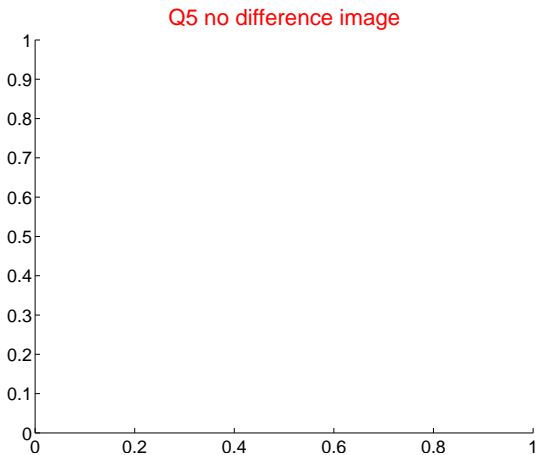


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- $\sigma$  uncertainty. Blue circle: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

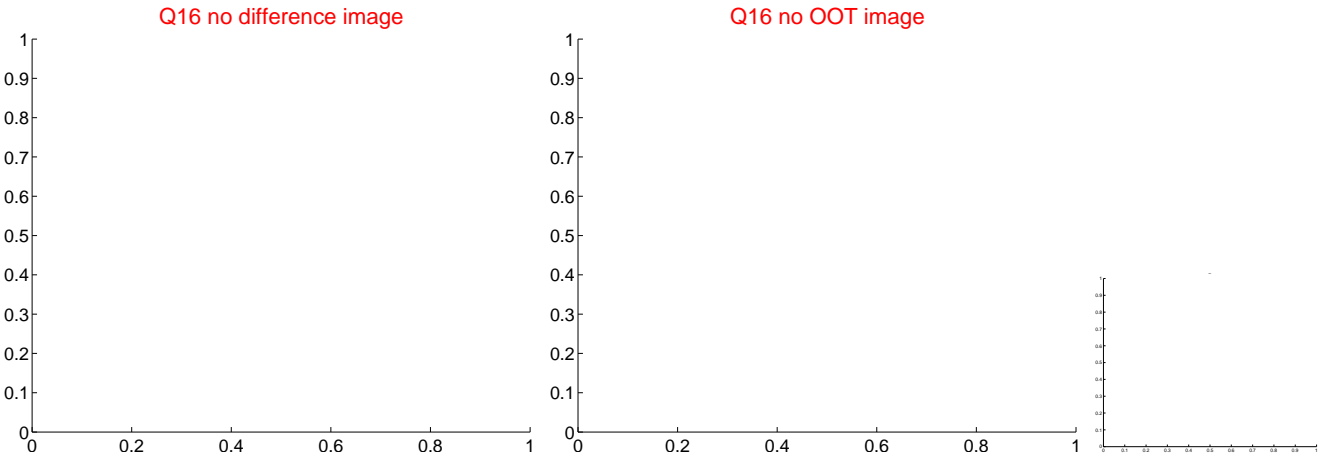
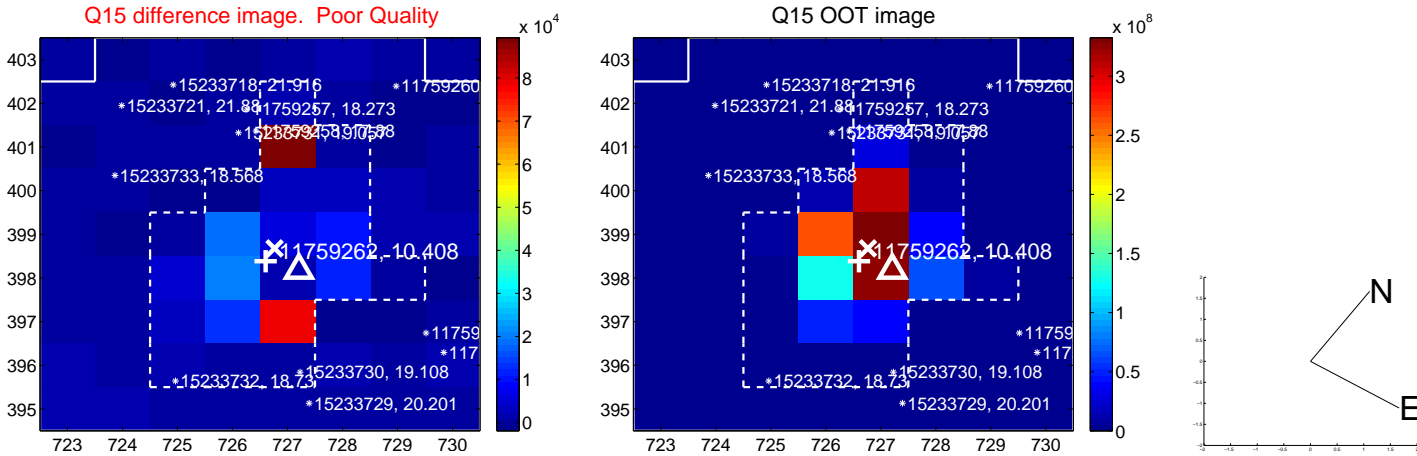
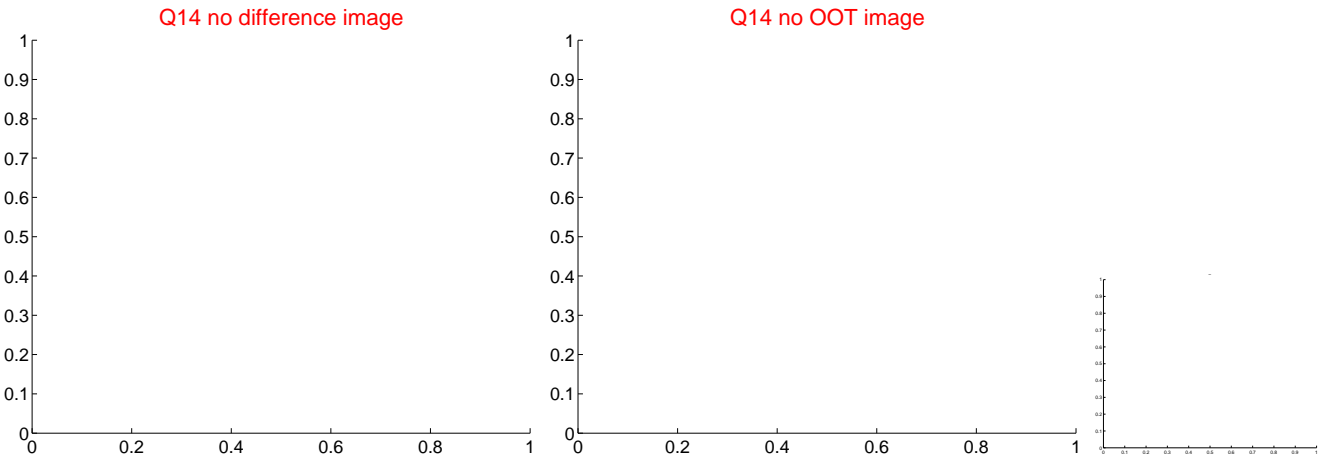
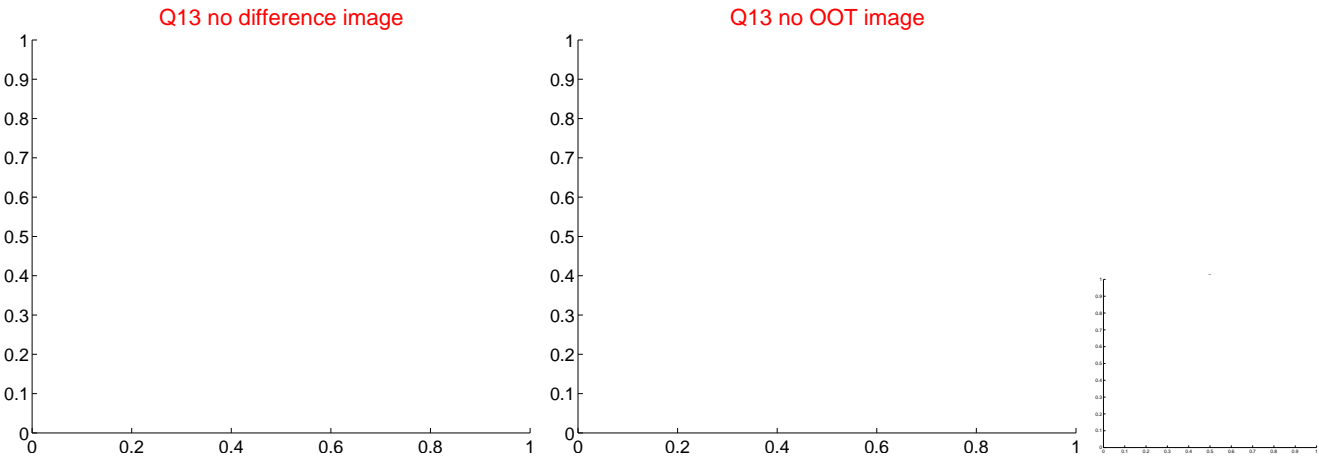




white  $\times$ : KIC target position;  $+$ : OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.



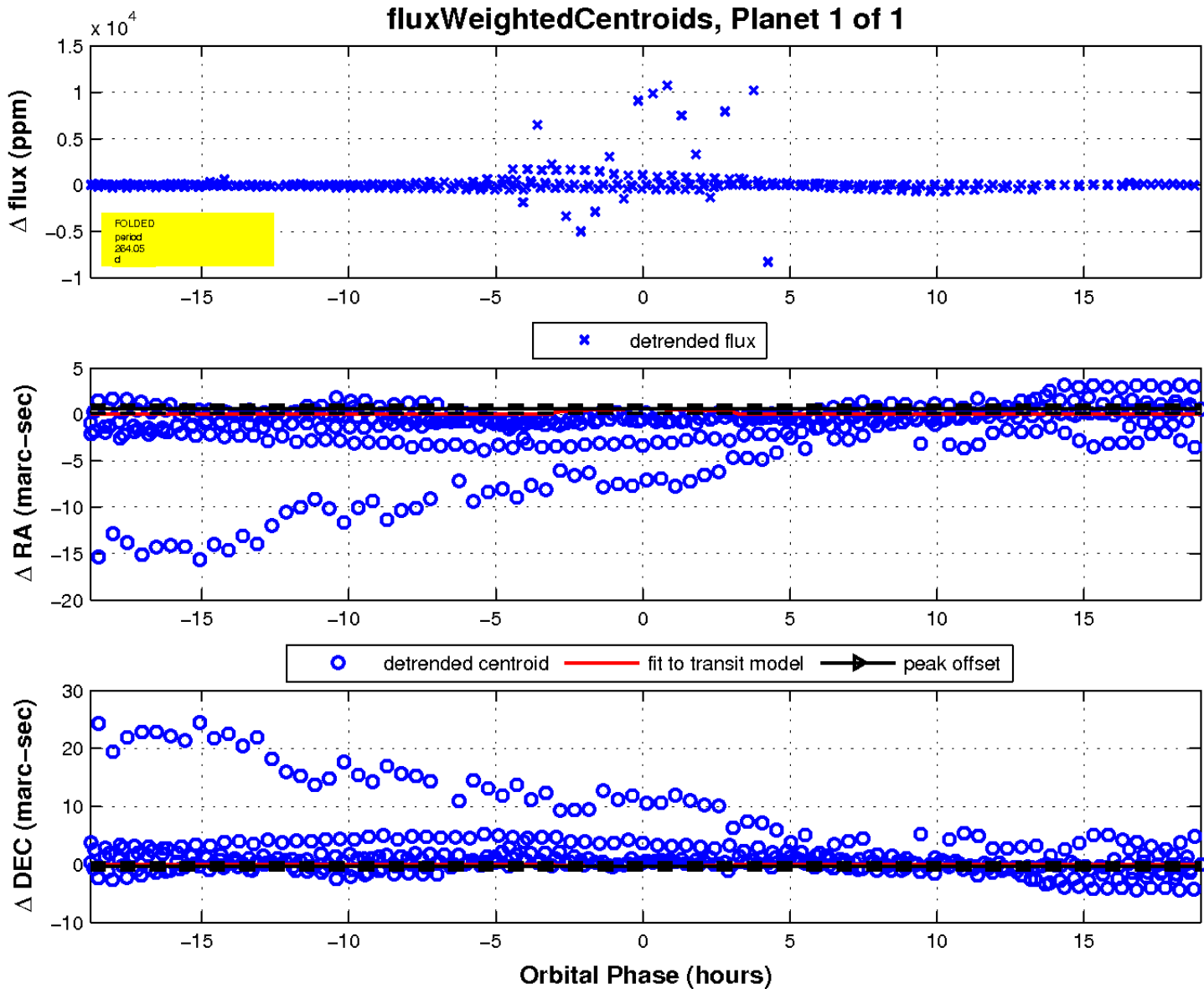
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



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

Q17 no difference image

Q17 no OOT image



UKIRT Image

Declination

