

# KIC 006752730

## 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)	$R_p$ ( $R_{\oplus}$ )	$S_p$ ( $S_{\oplus}$ )
006752730-01	OBS	No	0.603600	131.926344	0.0	6.259	7.9	0.0	0.51	4678	0.00	838.07

## Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006752730-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—LPP_ALT

**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.

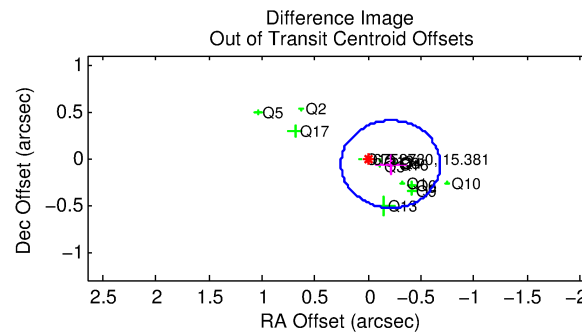
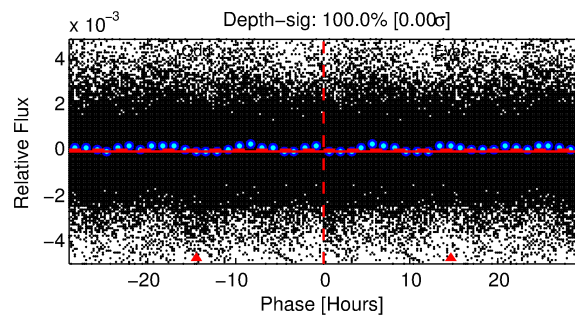
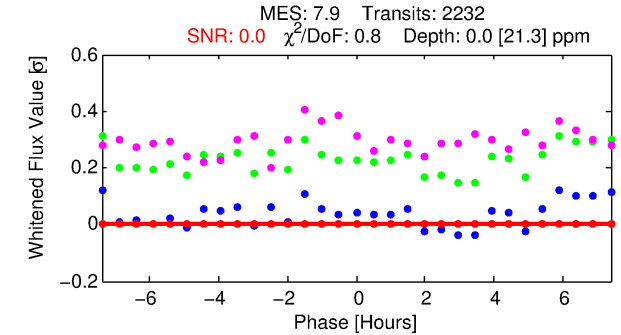
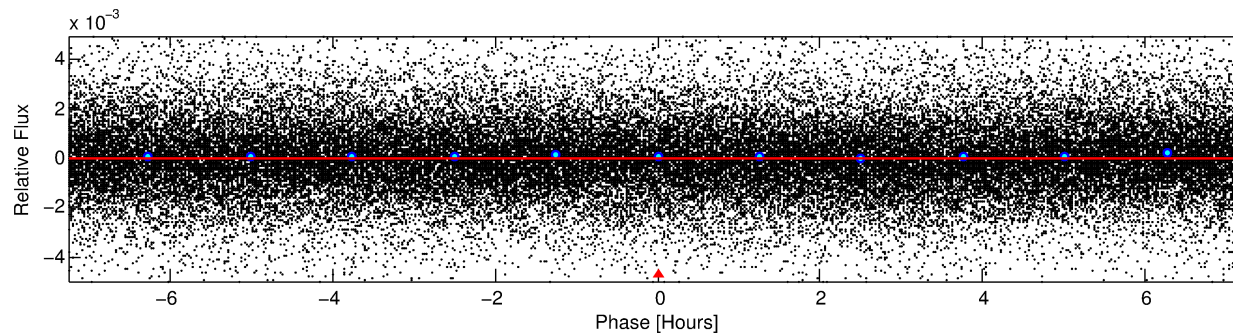
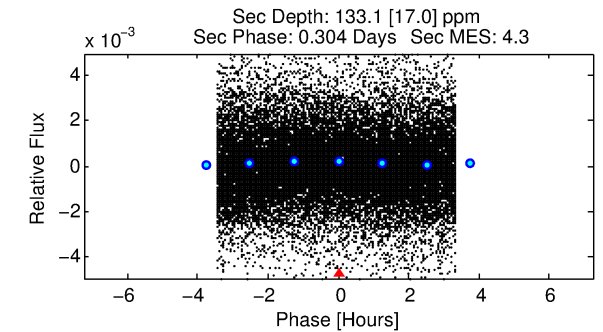
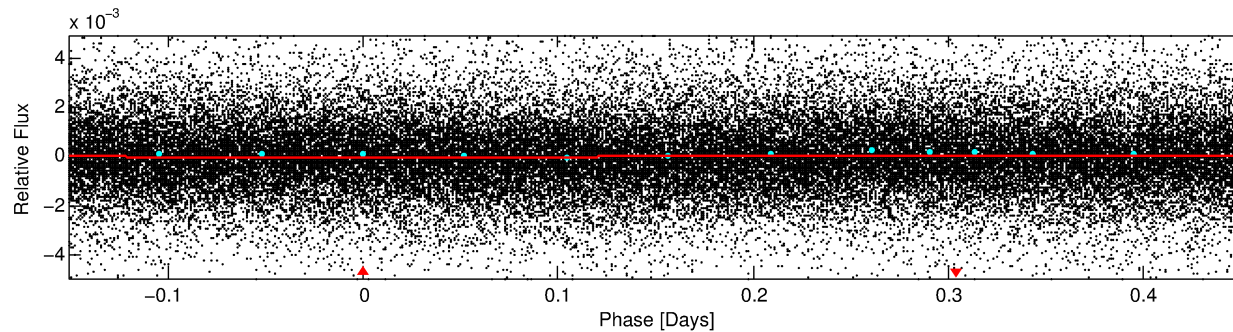
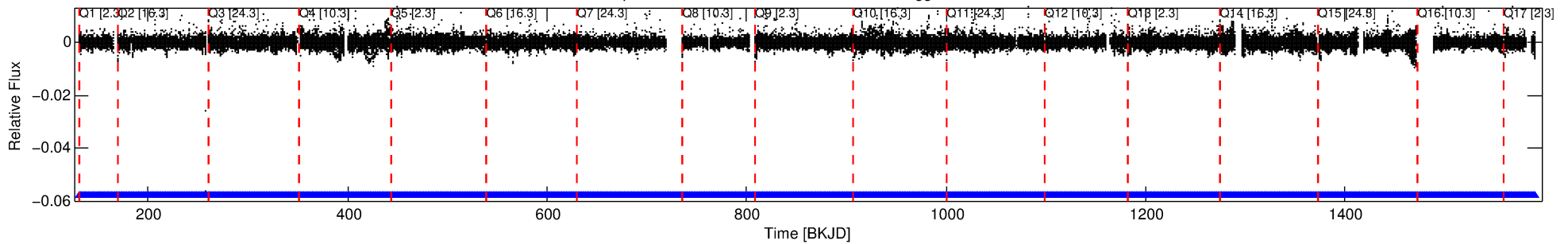
## Ephemeris Match Information For 006752730-01

No Significant Match Found

# DV One-Page Summary

KIC: 6752730 Candidate: 1 of 1 Period: 0.604 d

Kp: 15.38 R\*: 0.51 Rs Teff: 4678.0 K Logg: 4.77 Fe/H: -1.300

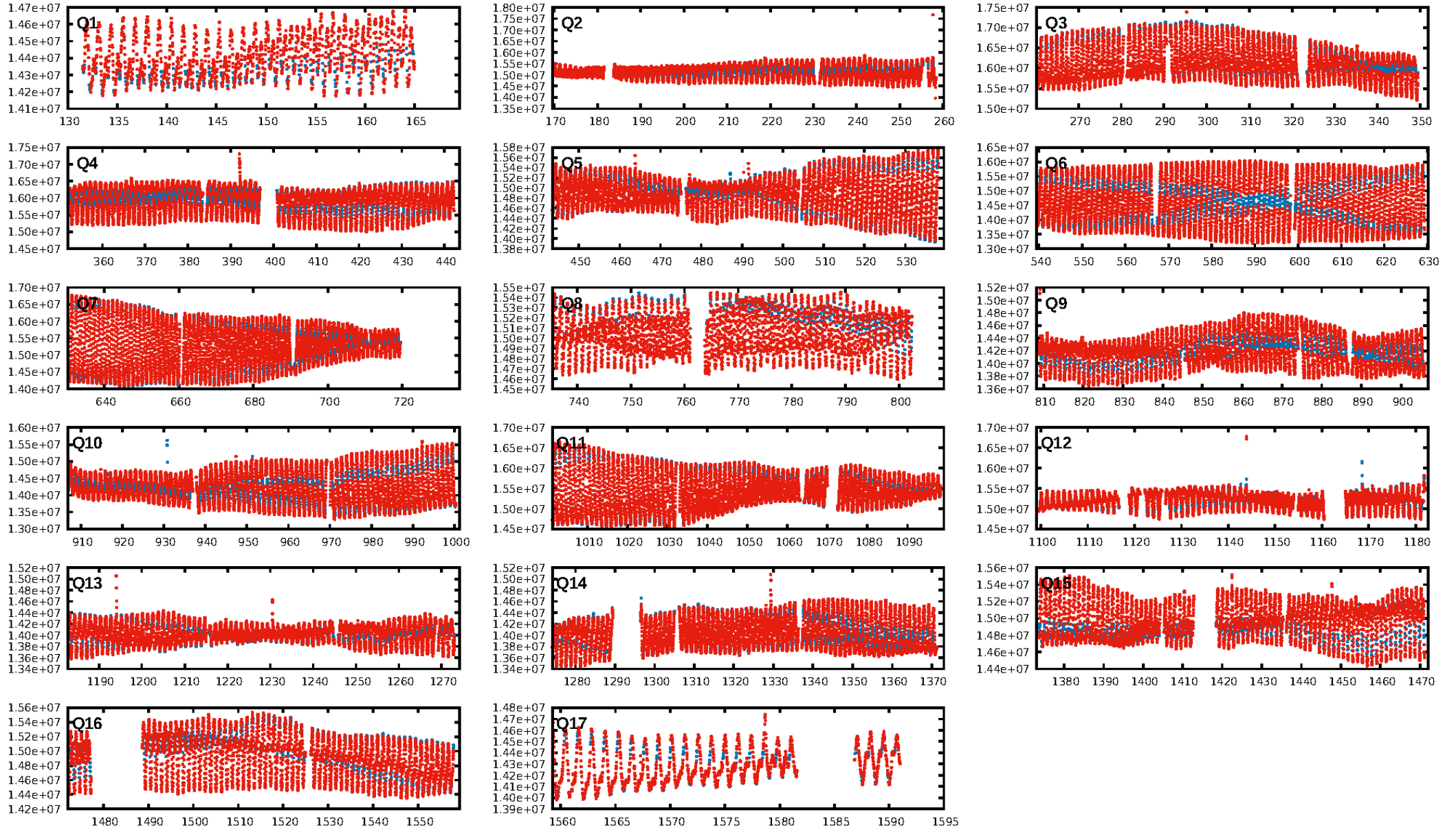


DV Fit Results:	DV Diagnostic Results:
Period = 0.60360 [45207.32274] d	ShortPeriod-sig: N/A
Epoch = 131.9263 [11287804.1626] BKJD	LongPeriod-sig: N/A
Rp/R* = 0.0000 [46.0316]	ModelChiSquare2-sig: N/A
a/R* = 1.02 [2932379.61]	ModelChiSquareGof-sig: N/A
b = 0.34 [140156441.96]	Bootstrap-pfa: N/A
Seff = 838.07 [83691217.86]	RollingBand-fgt: 1.00 [2132/2132]
Teq = 1372 [34251920] K	GhostDiagnostic-chr: N/A
Rp = 0.00 [2556.76] Re	Centroid-sig: N/A
a = 0.0115 [575.0560] AU	Centroid-so: N/A
Ag = 83488786778.74 [395833196014.59625984.001.0000]	OutOffset-rm: 0.221 arcsec [1.42σ]
Teffp = 1140234 [135166345276458] K [10.00σ]	KicOffset-rm: 0.240 arcsec [1.61σ]
	OutOffset-st: 3/2/4/5 [14]
	KicOffset-st: 3/2/4/5 [14]
	DiffImageQuality-fgm: 0.50 [7/14]
	DiffImageOverlap-fno: 1.00 [17/17]

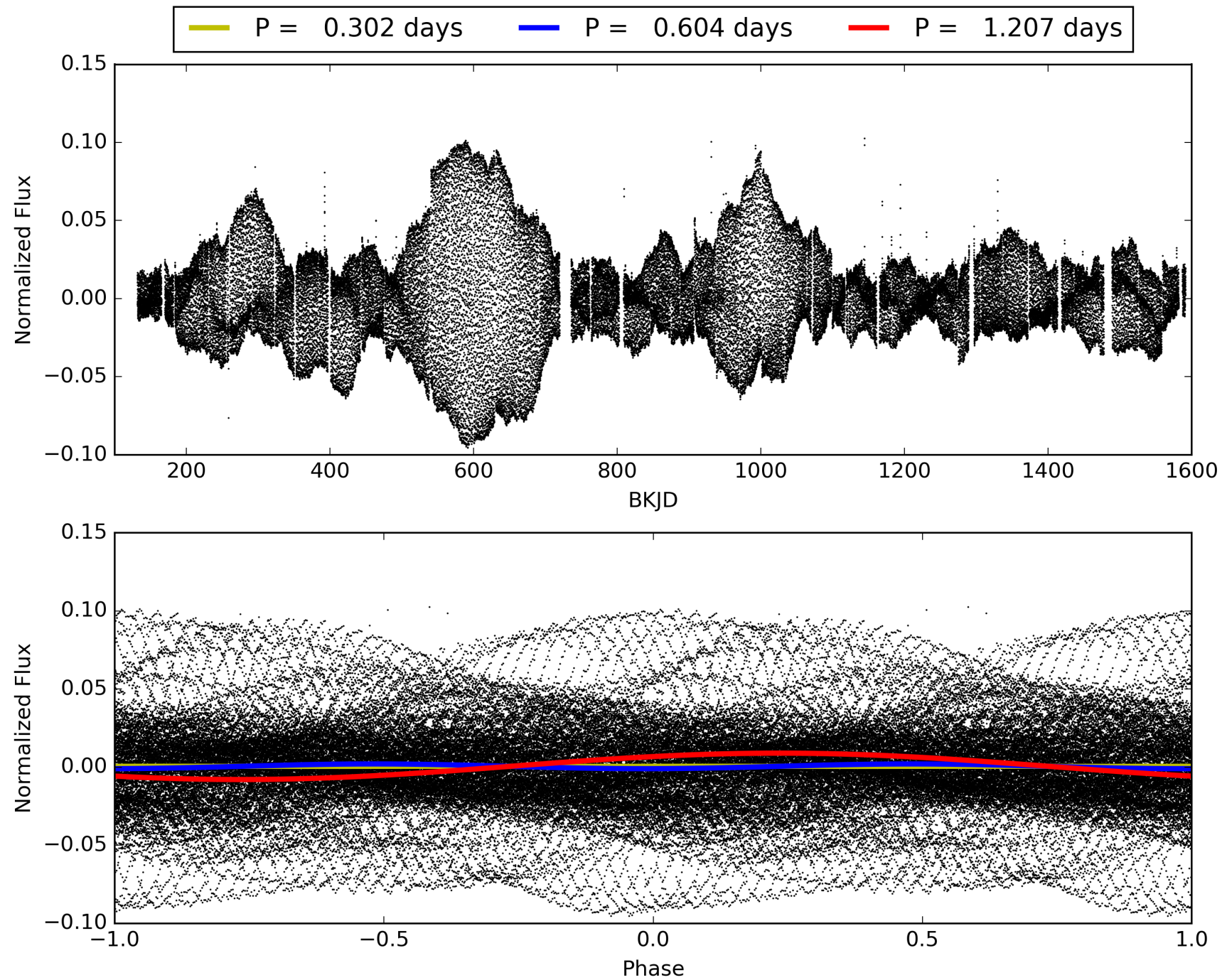
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 01:37:59 Z

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

# TCE 006752730-01, PDC Light Curves

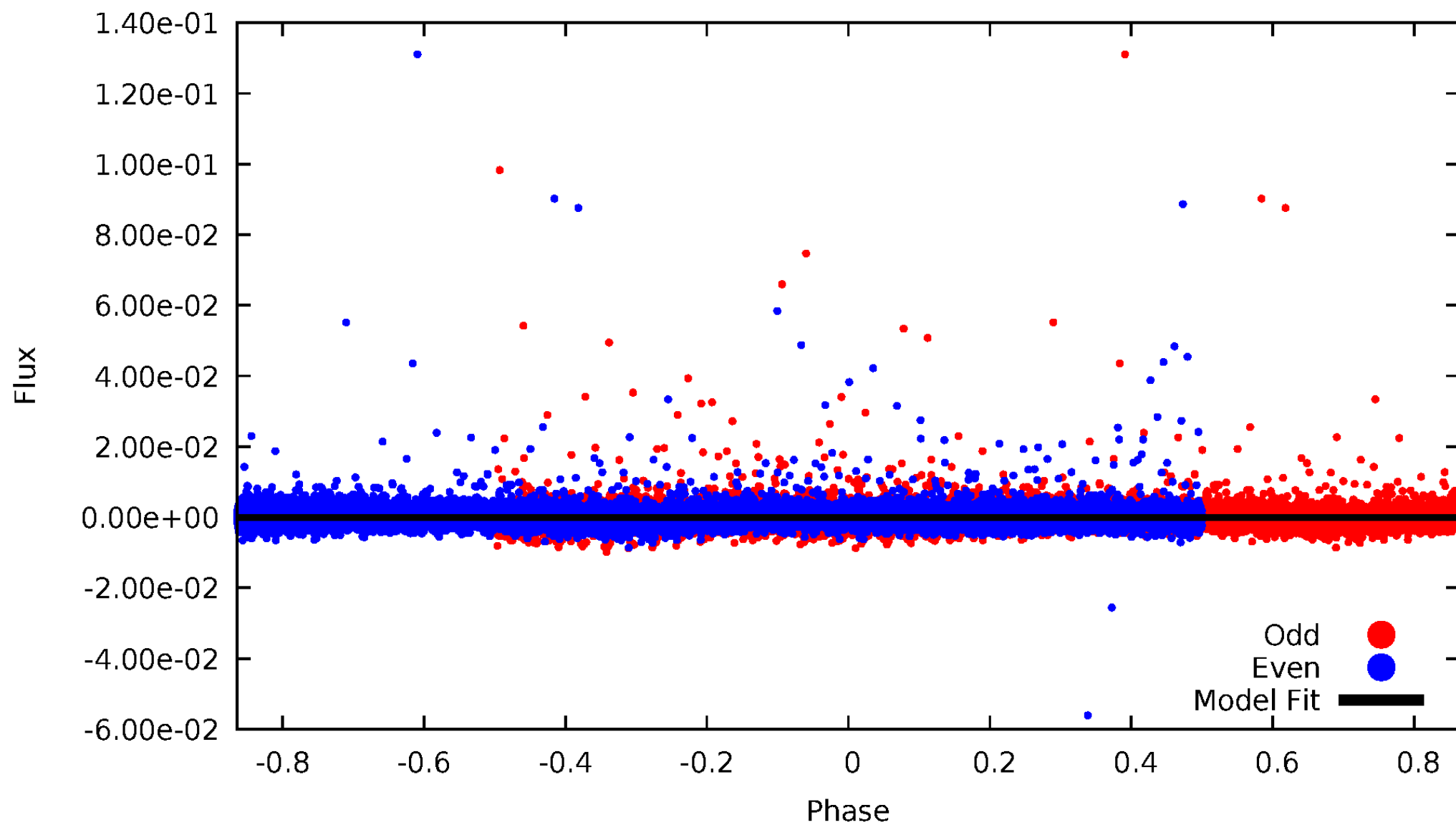


TCE 006752730-01



# DV Odd/Even

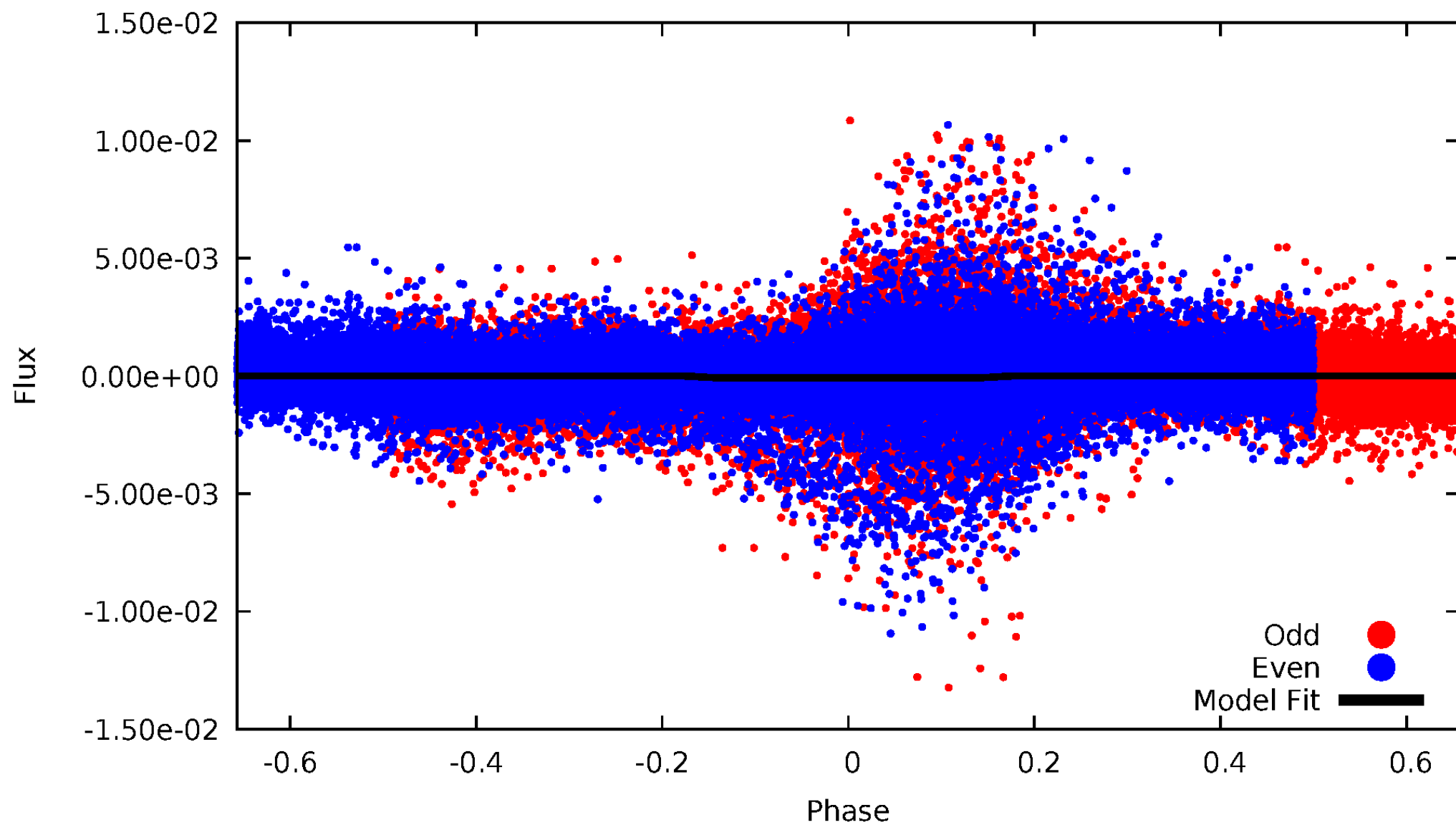
TCE 006752730-01





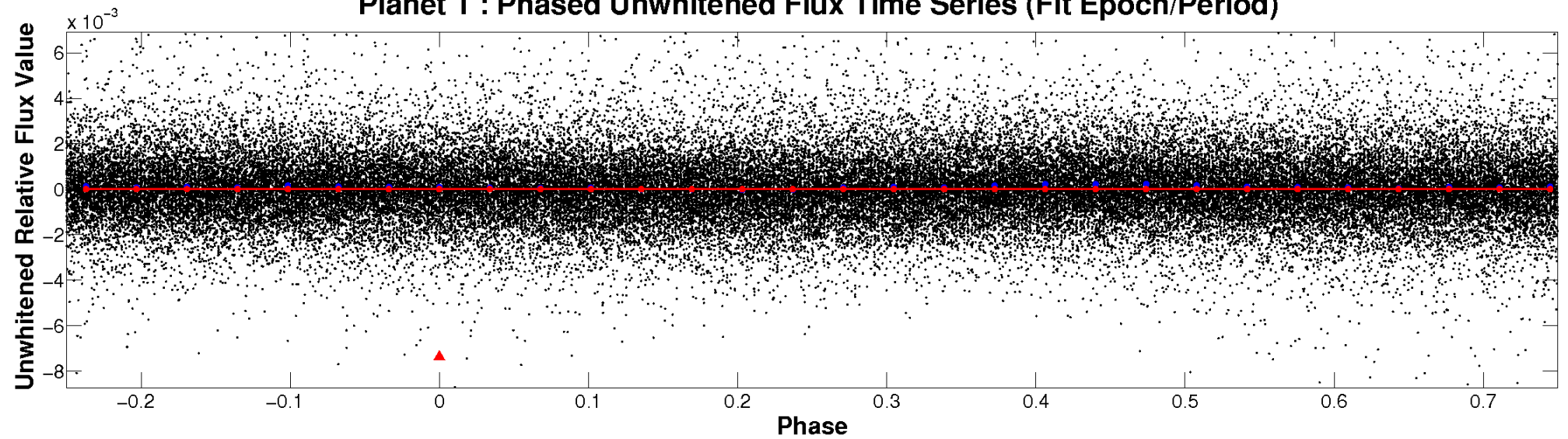
# ALT Odd/Even

TCE 006752730-01

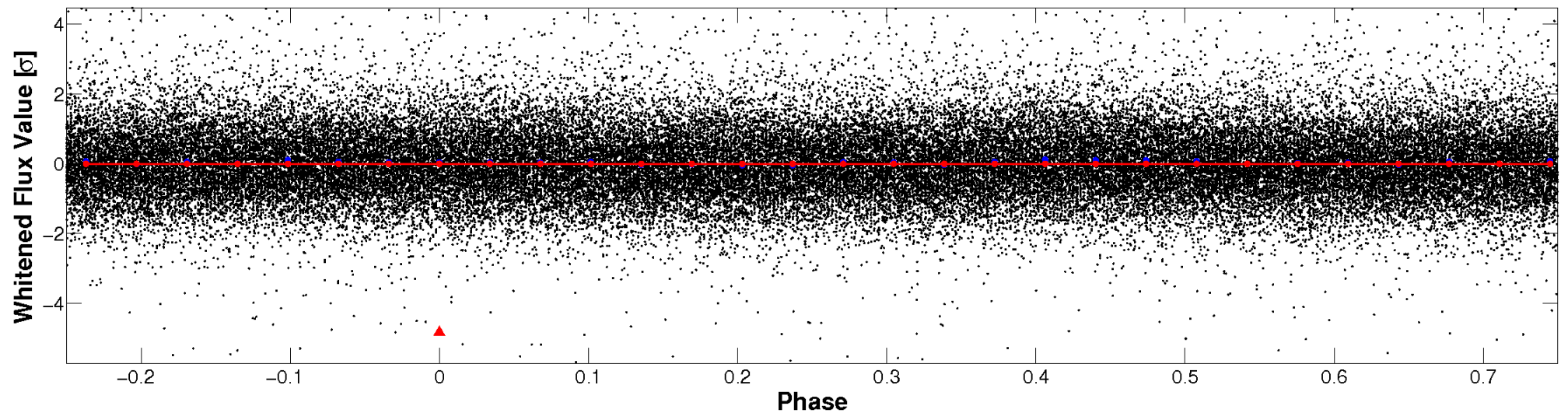


# Non-Whitened Vs. Whitened Light Curve

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

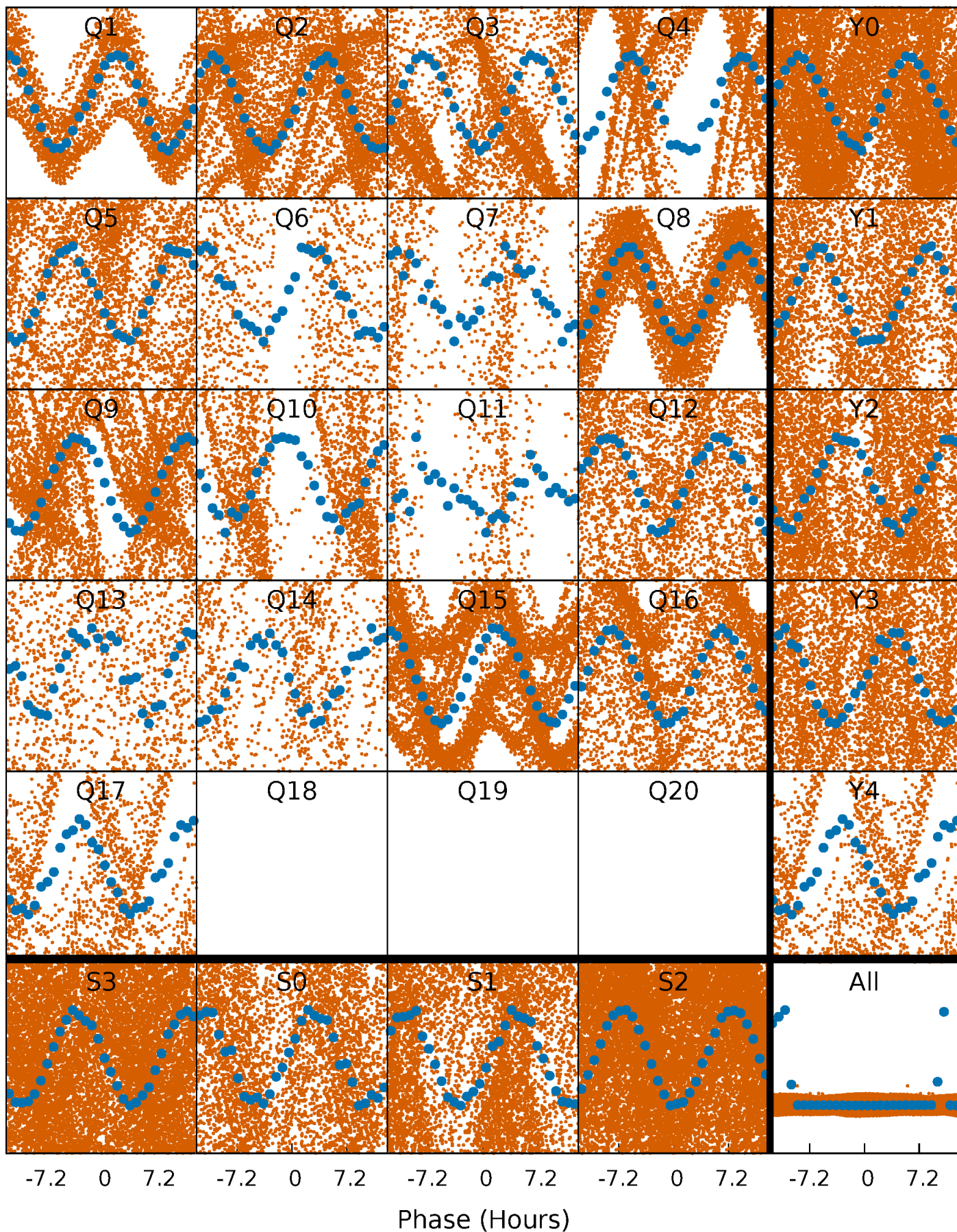


**Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)**



# PDC Quarter-Phased Transit Curves

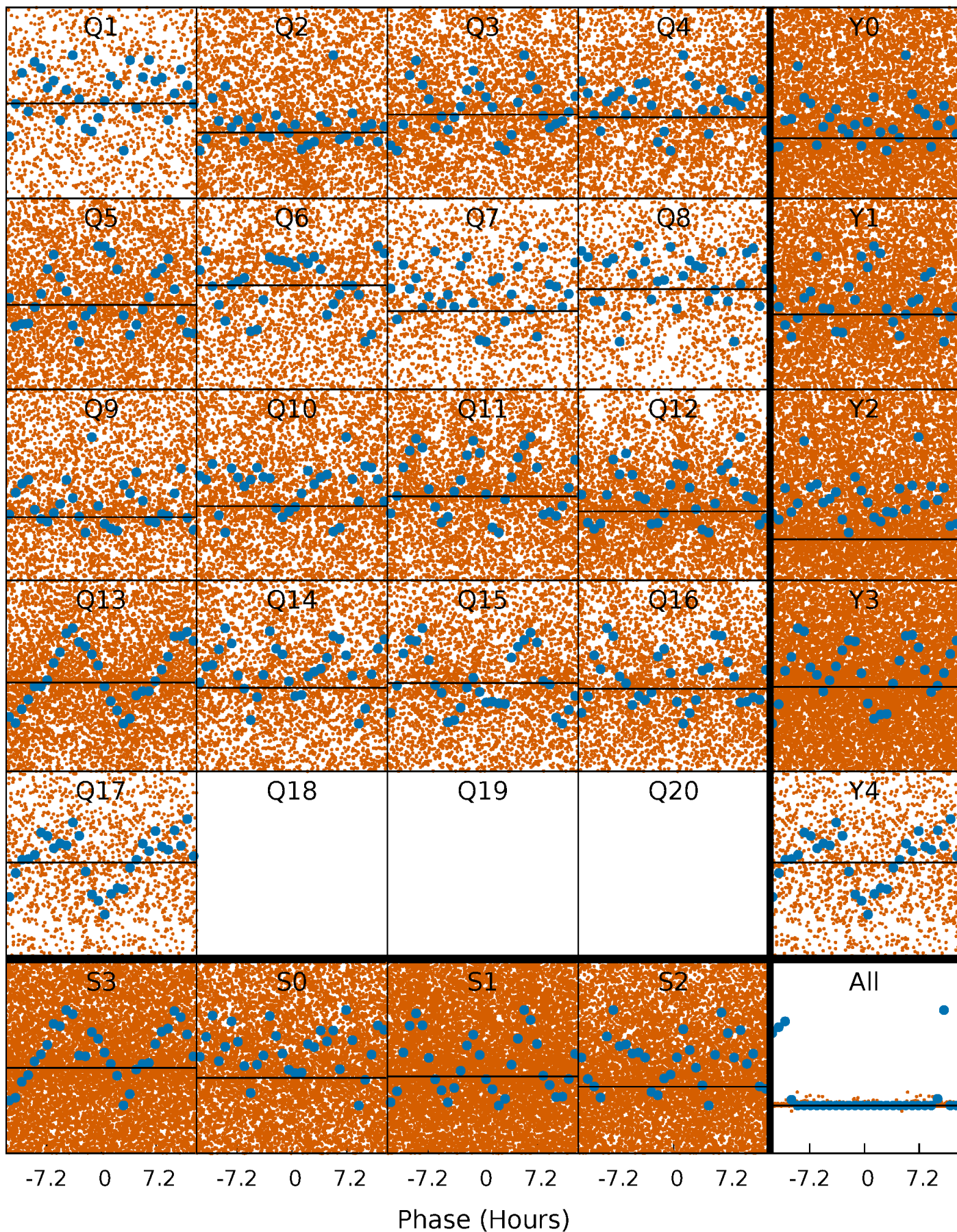
TCE 006752730-01 P= 0.603600 Days  $T_0=131.926344$  (BKJD)





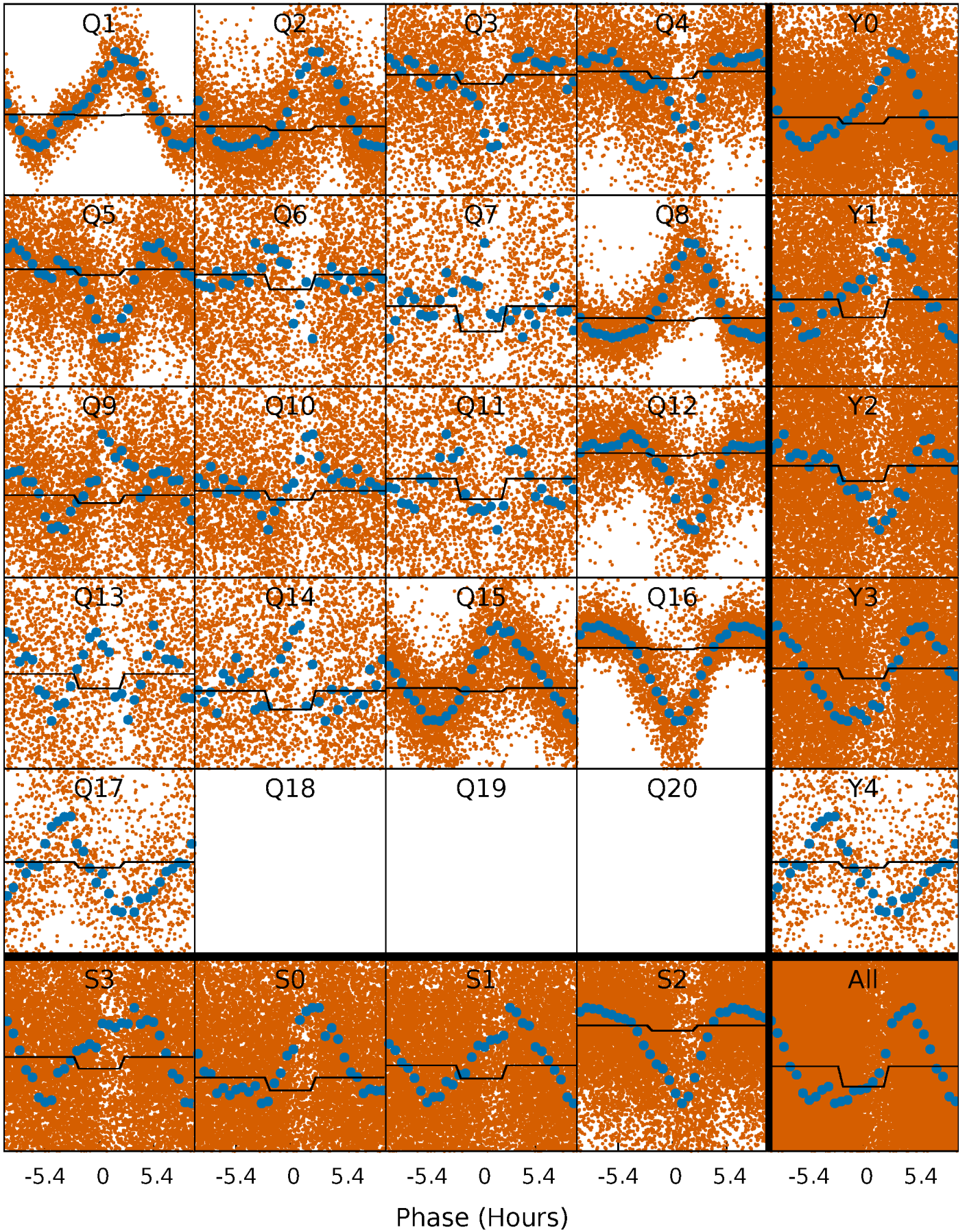
# DV Quarter-Phased Transit Curves

TCE 006752730-01 P= 0.603600 Days  $T_0=131.926344$  (BKJD)



# Alt. Detrend Quarter-Phased Transit Curves

TCE 006752730-01 P= 0.603858 Days  $T_0=131.924575$  (BKJD)

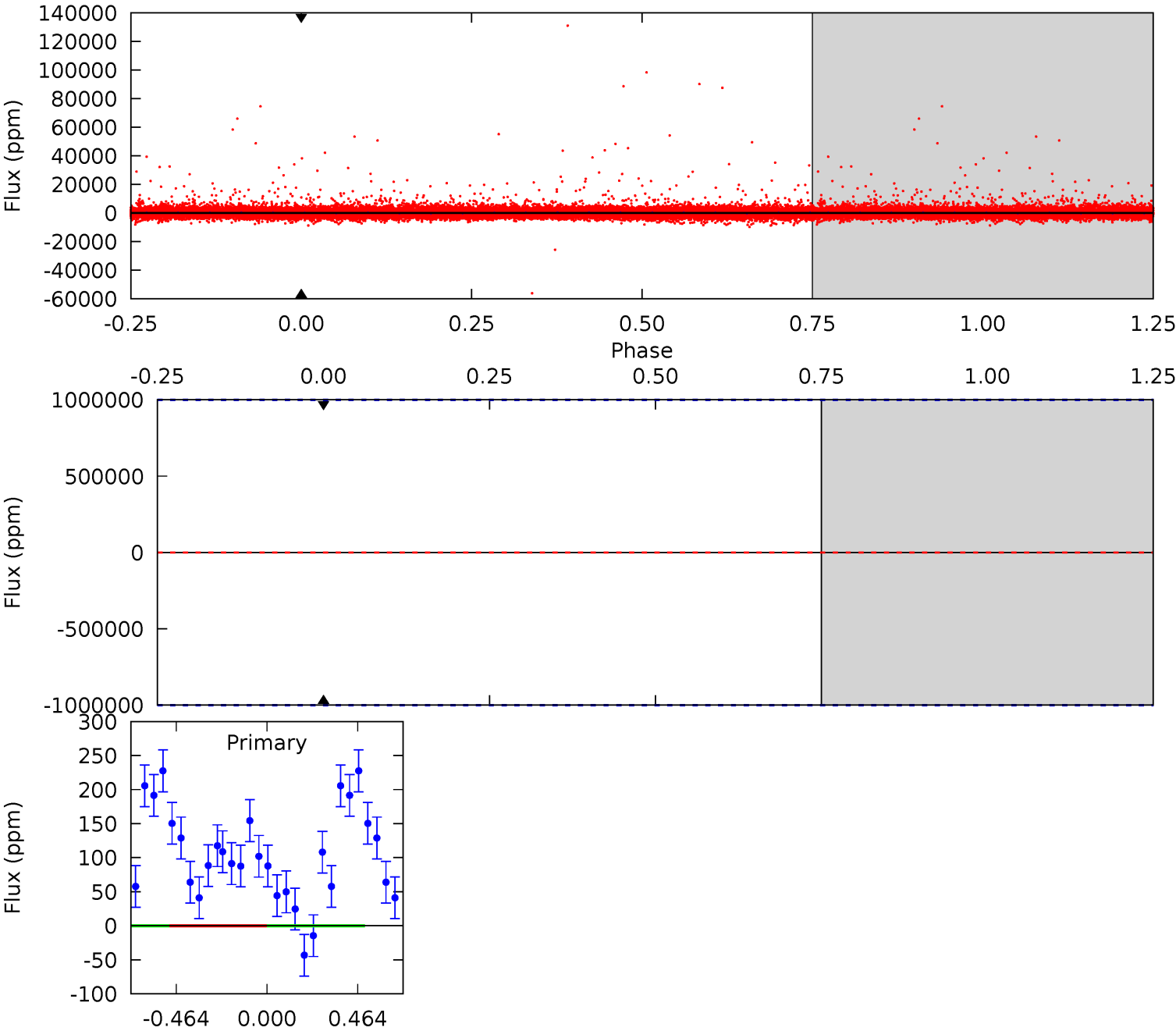




# DV Model-Shift Uniqueness Test

006752730-01, P = 0.603600 Days, E = 131.322744 Days

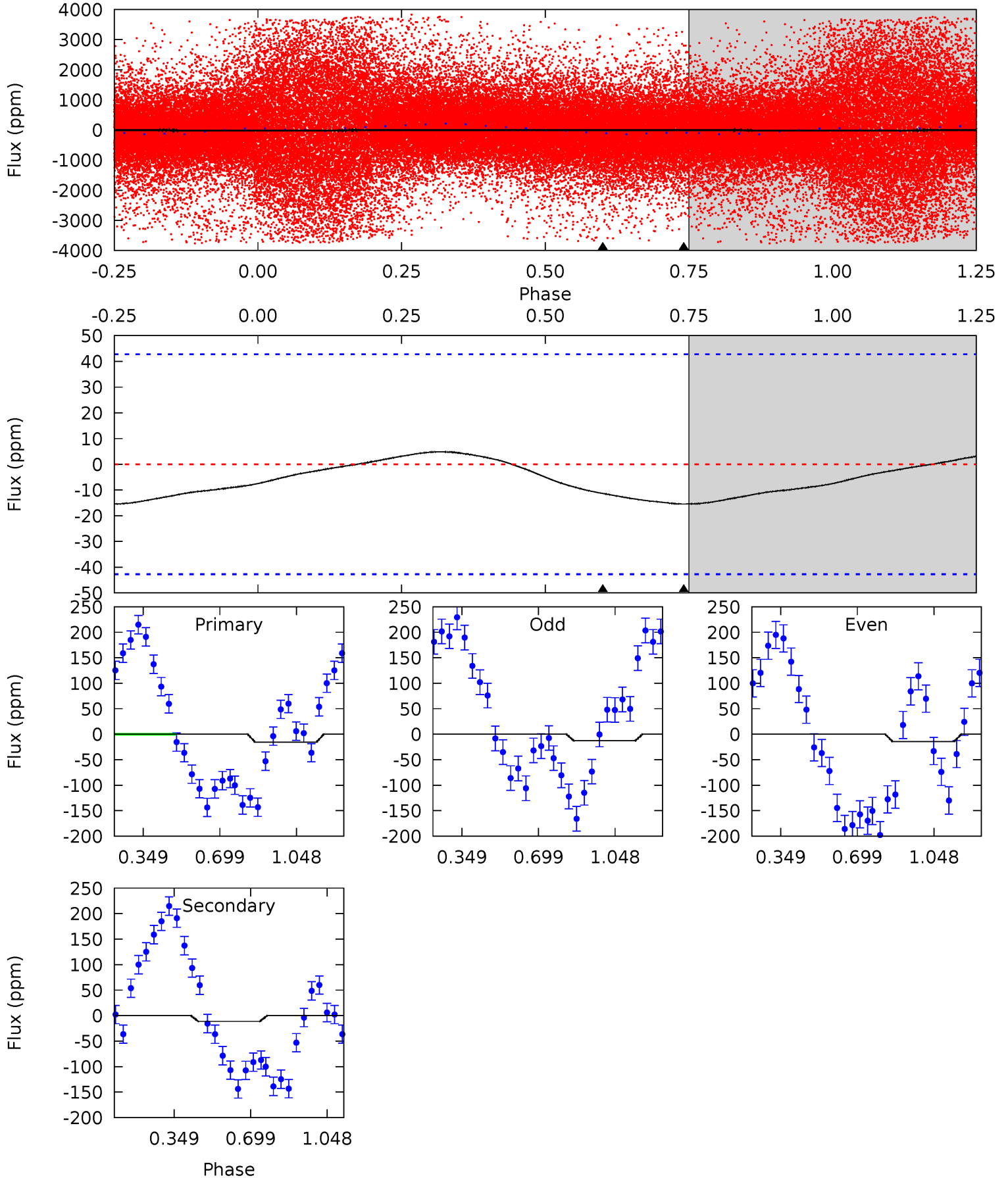
Pri	Sec	Ter	Pos	FA <sub>1</sub>	FA <sub>2</sub>	F <sub>Red</sub>	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



# Alt Model-Shift Uniqueness Test

006752730-01, P = 0.603858 Days, E = 131.320717 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
1.55	1.14	0	0	4.29	0.94	0.18	1.55	1.55	1.14	1.14	0.09	7.34	0.24	1.15





### Stellar Parameters For KIC 006752730

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R$ ( $R_{\odot}$ )	$M(M_{\odot})$	$p_{\star}$ ( $\text{g}\cdot\text{cm}^{-3}$ )
	$4678^{+125}_{-139}$	$4.772^{+0.024}_{-0.048}$	$-1.300^{+0.300}_{-0.300}$	$0.509^{+0.038}_{-0.025}$	$0.558^{+0.025}_{-0.033}$	$5.971^{+0.655}_{-0.975}$
	+3%/-3%	+1%/-1%	+23%/-23%	+7%/-5%	+4%/-6%	+11%/-16%
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 006752730-01 / KOI

Detrend	Depth (ppm)	$R_p$ ( $R_{\oplus}$ )	$T_{max}$ (K)	$T_{obs}$ (K)	$A_{obs}$
DV	$0 \pm 1000000$	$1718.21^{+2018.17}_{-1225.35}$	$52^{+24}_{-12}$	$-1167^{+2742}_{-442}$	$-13.009^{+8640.964}_{-8757.261}$
Alt.	$-11 \pm 10$	$1784.11^{+1942.40}_{-1219.85}$	$52^{+22}_{-12}$	$-628^{+1566}_{-260}$	$0.298^{+3.926}_{-0.295}$

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

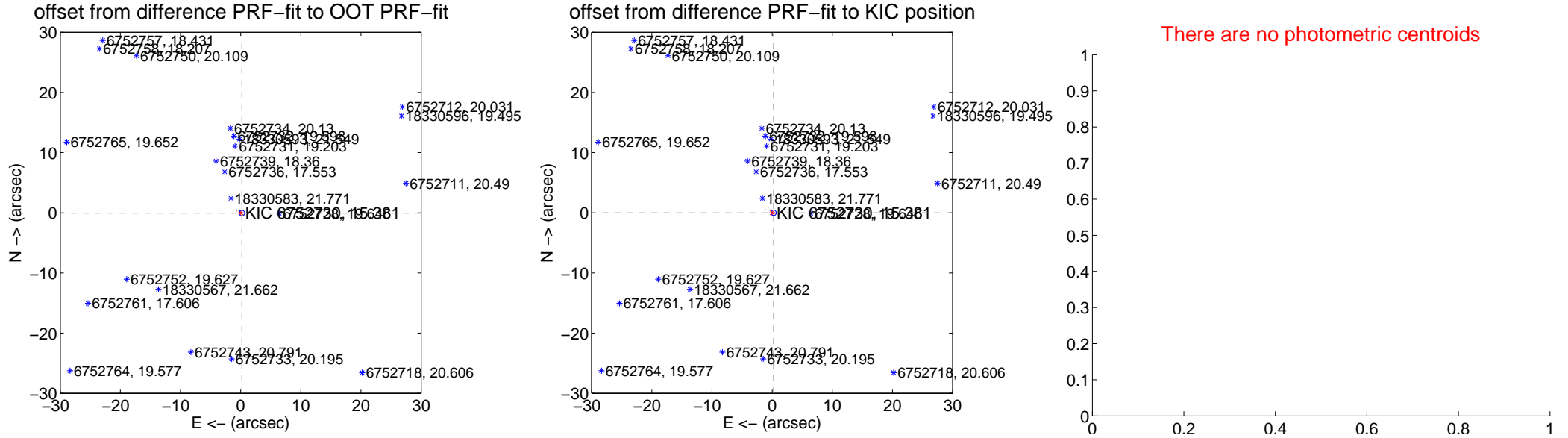
## DV Centroid Data

Supplemental centroid analysis for 006752730-01. Kepler magnitude: 15.38. Transit SNR 0.00

There are 7 quarters with good PRF difference image offsets

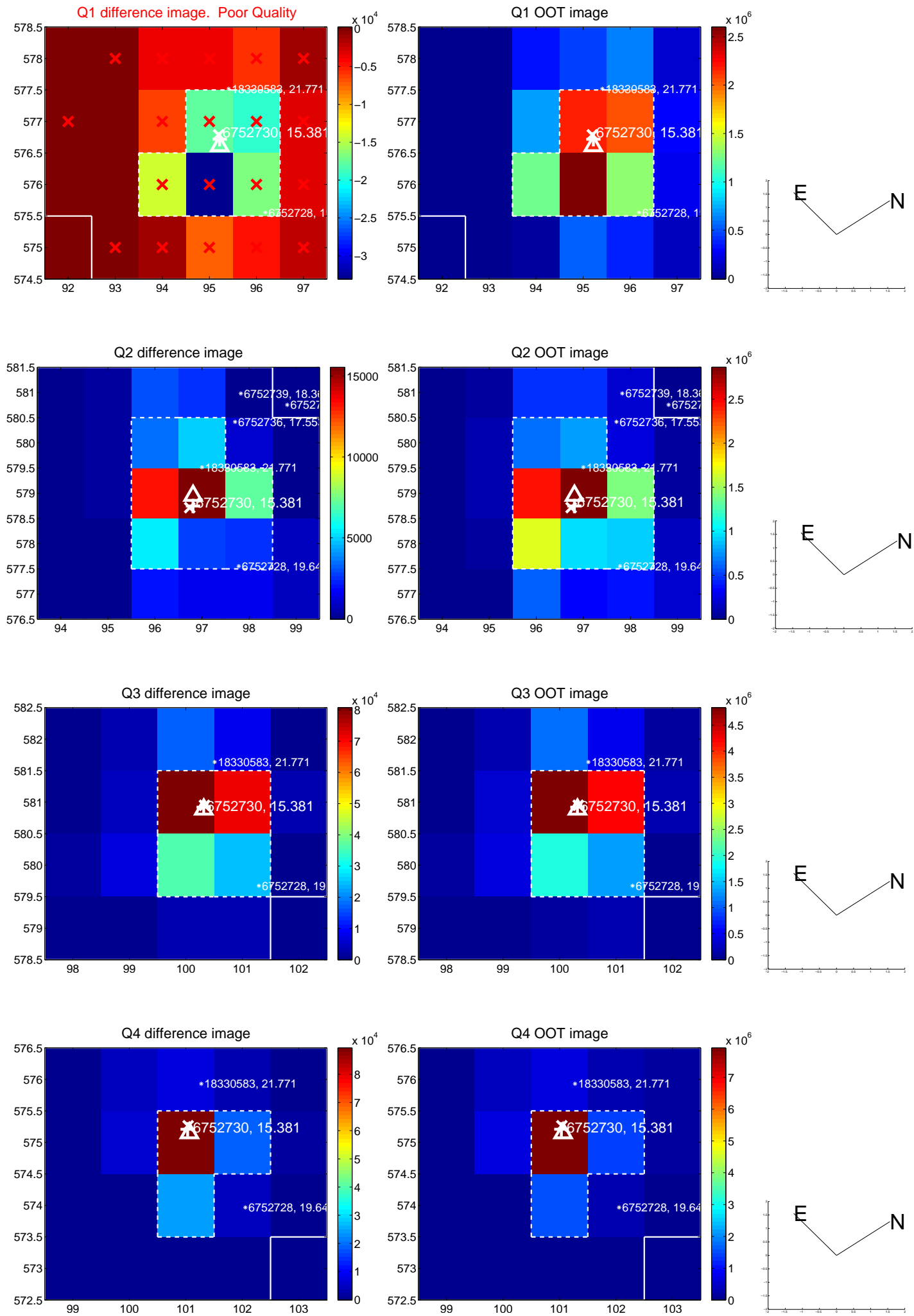
The direct PRF centroid is offset from the target star catalog position by about 0.16 arcsec

	Distance in arcsec	Distance / $\sigma$	$\Delta$ RA	$\Delta$ Dec
PRF-fit source offset from OOT	$0.221 \pm 0.156$	1.42	$-0.212 \pm 0.143$	$-0.063 \pm 0.101$
PRF-fit source offset from KIC position	$0.240 \pm 0.149$	1.61	$-0.240 \pm 0.148$	$-0.006 \pm 0.116$
photometric centroid source offset	—	—	—	—

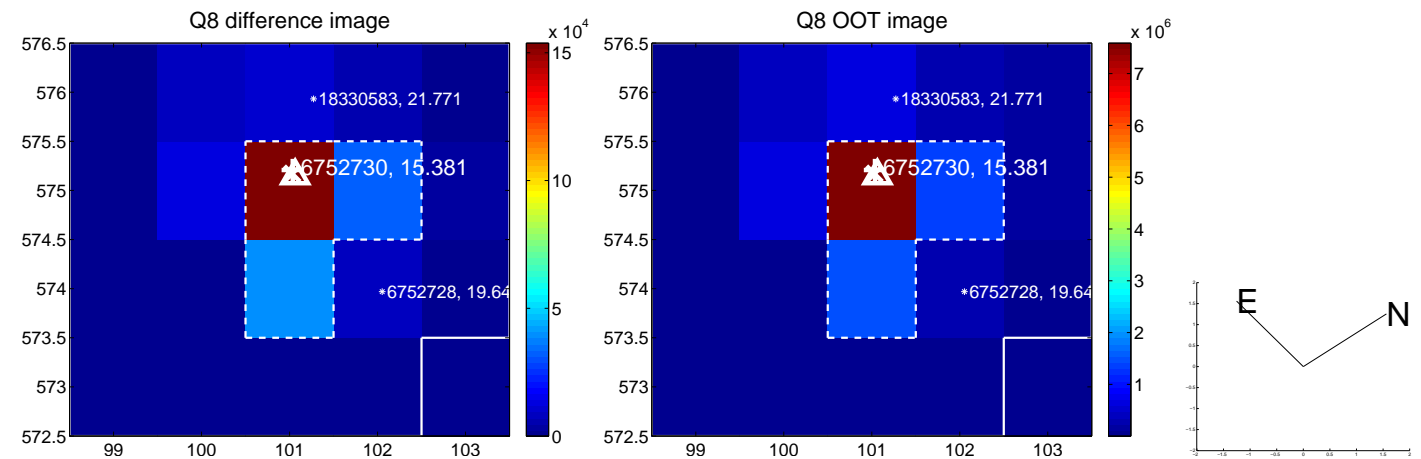
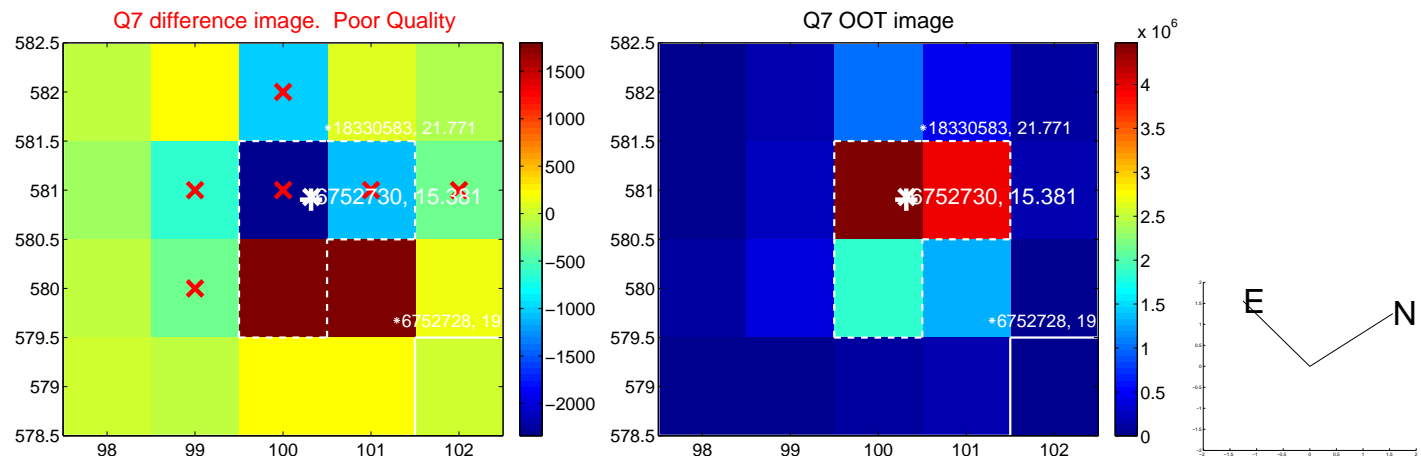
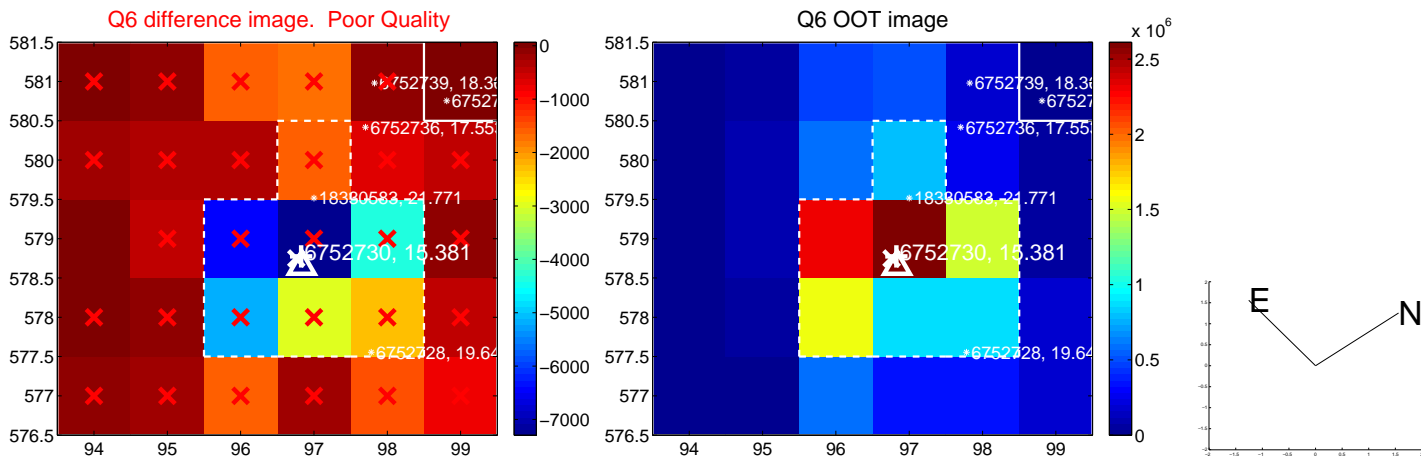
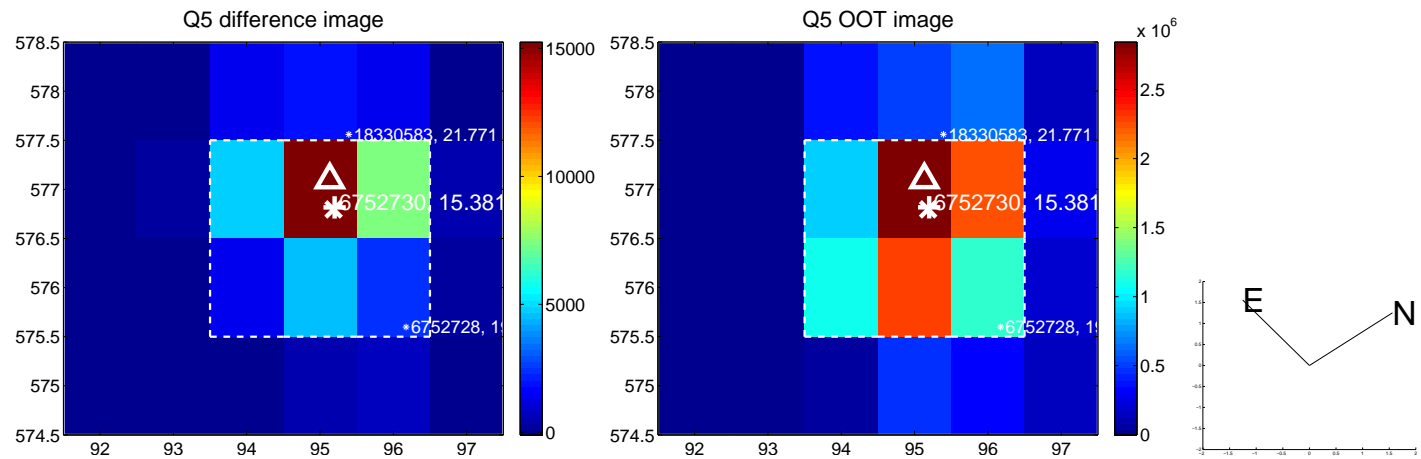


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- $\sigma$  uncertainty. Blue circle: three-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

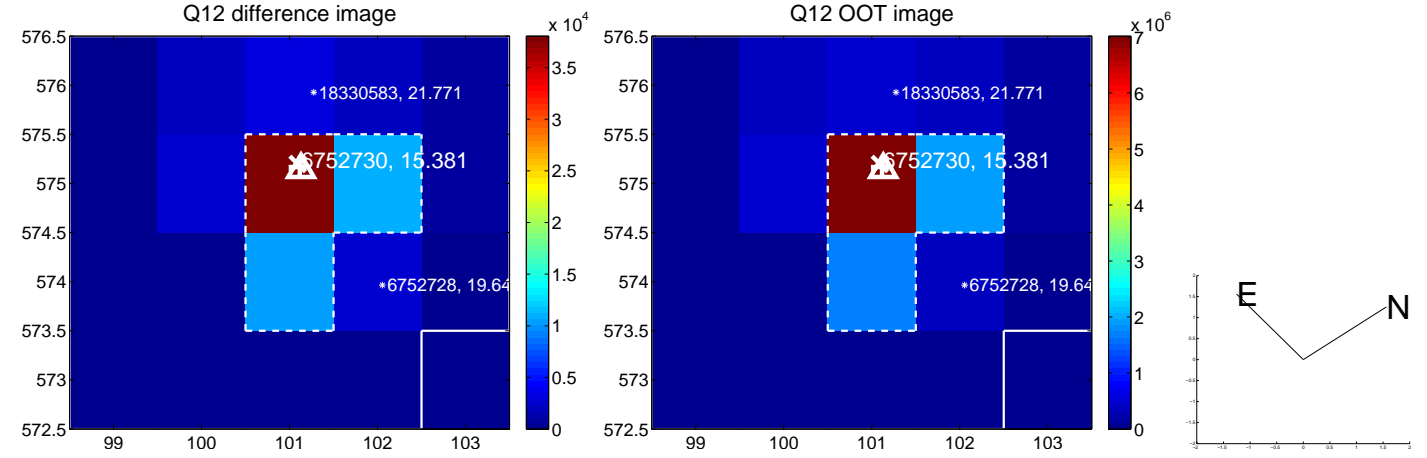
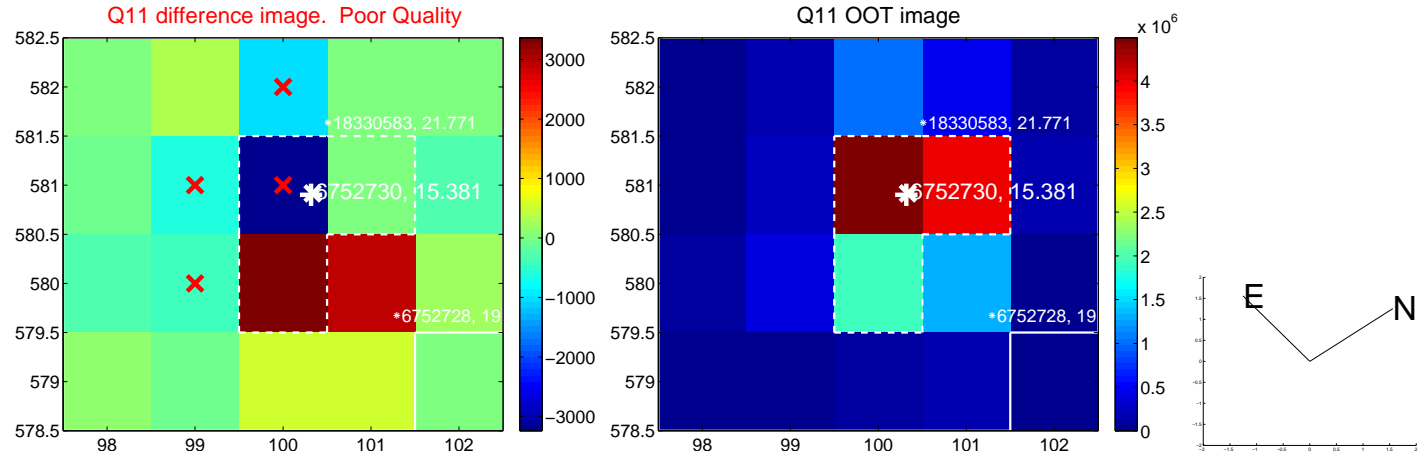
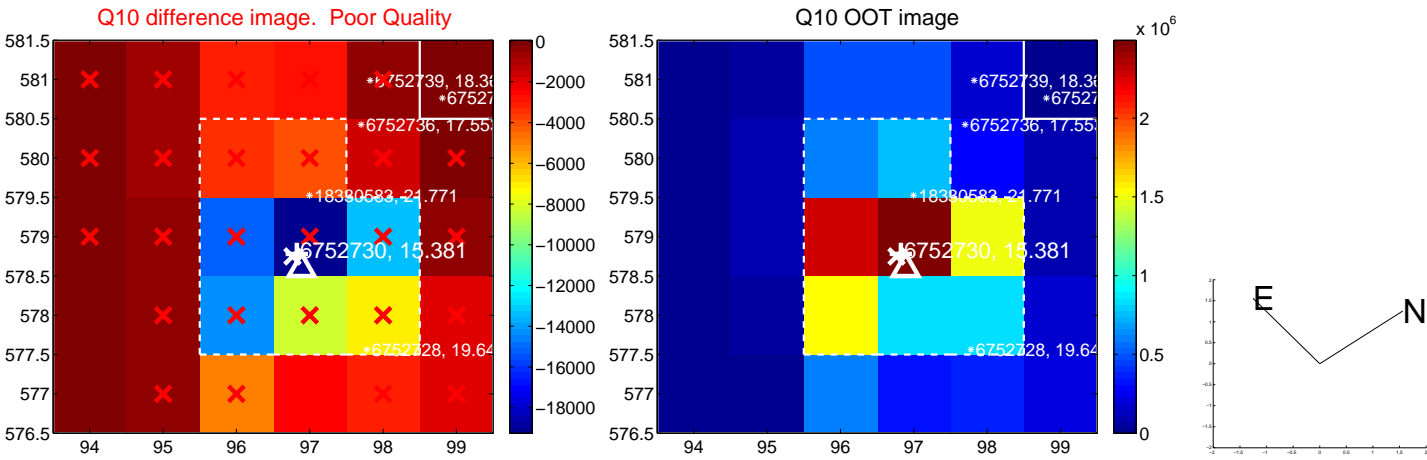
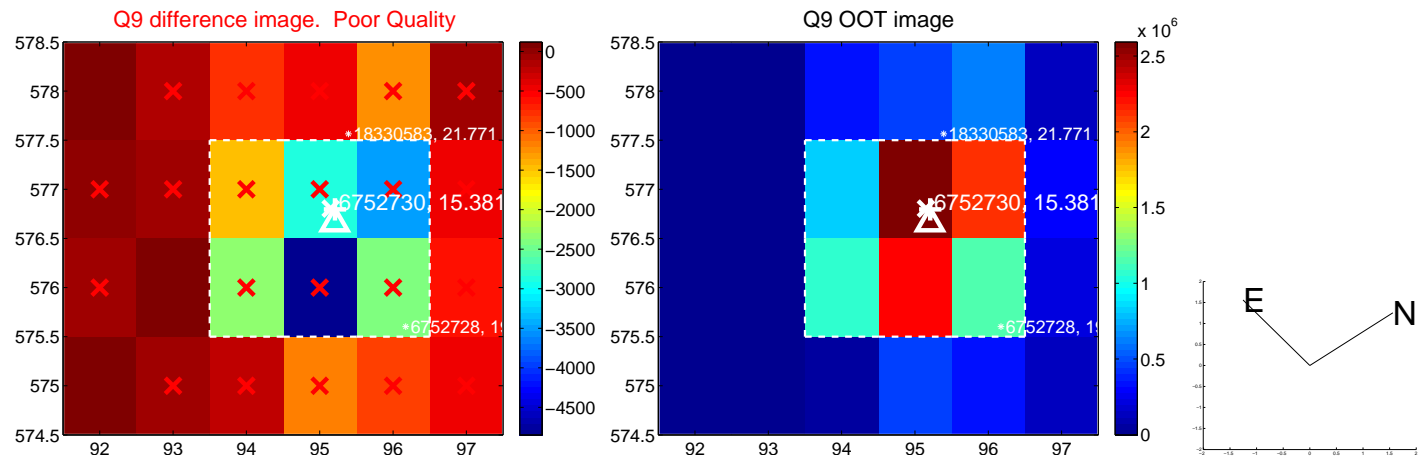


white  $\times$ : KIC target position; +: OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.

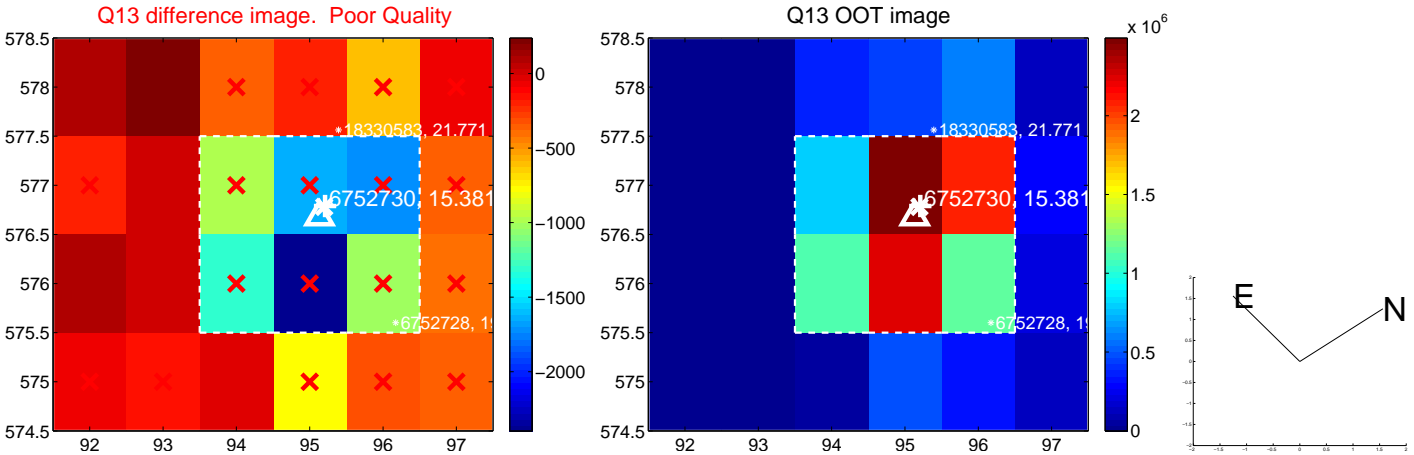




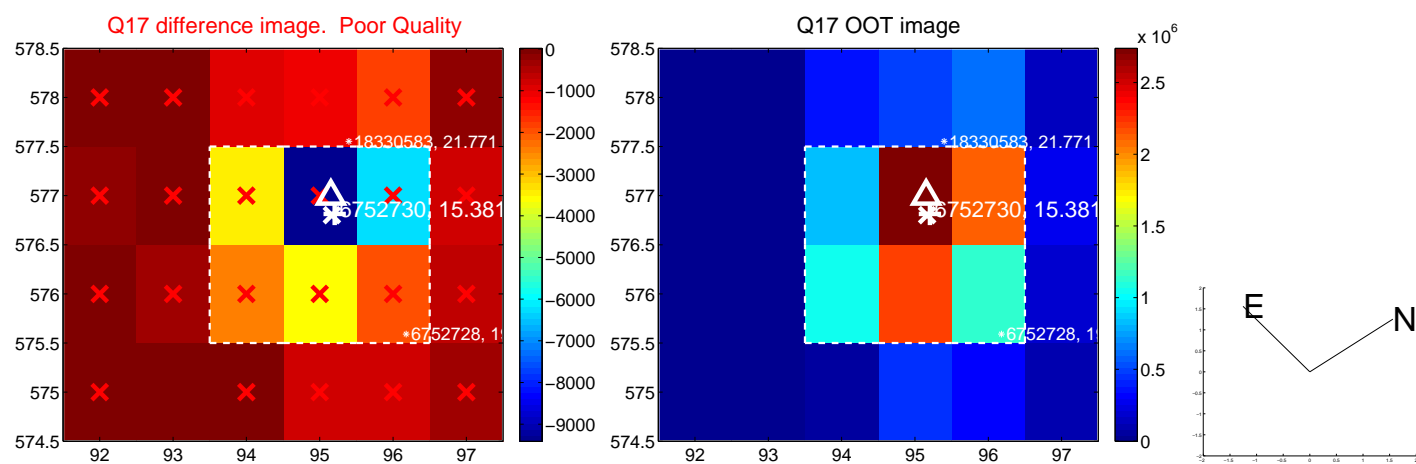
white  $\times$ : KIC target position; +: OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.



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



folded centroid time series figure for this object.



# UKIRT Image

Declination

