

# KIC 010264744

## 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)	$R_p$ ( $R_{\oplus}$ )	$S_p$ ( $S_{\oplus}$ )
010264744-01	OBS	No	0.635250	131.554944	914.8	2.000	24.1	-1.0	1.34	6518	4.08	12498.17

## Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010264744-01	OBS	FP	0.00	1	0	0	0	LPP_DV—CENT_NOFITS

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

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

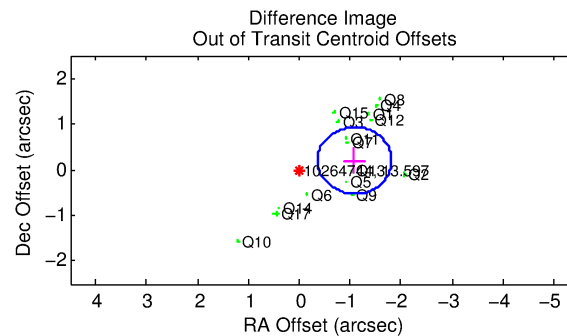
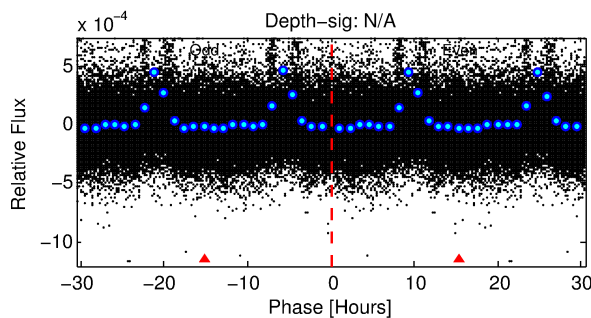
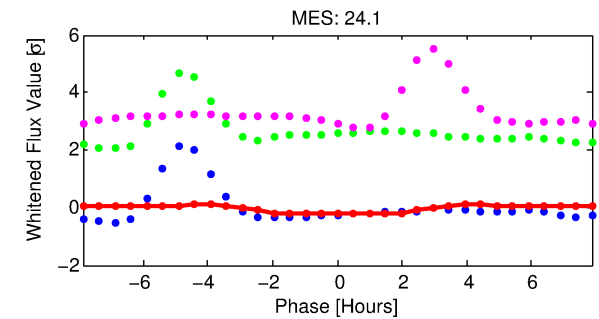
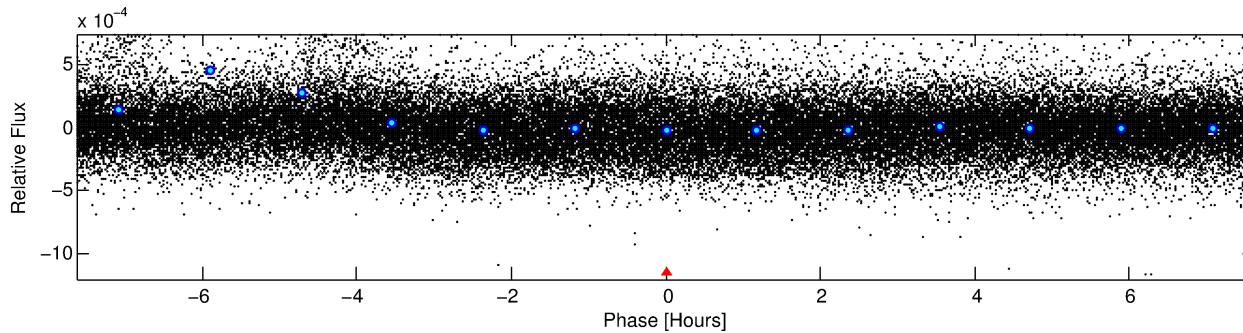
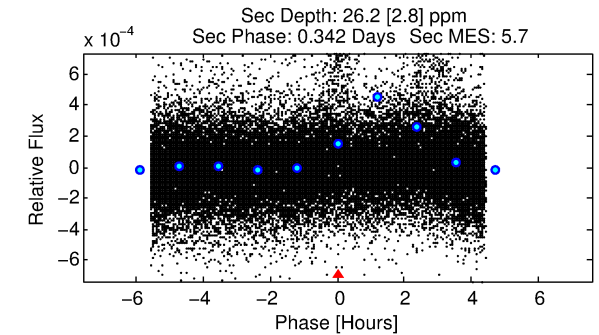
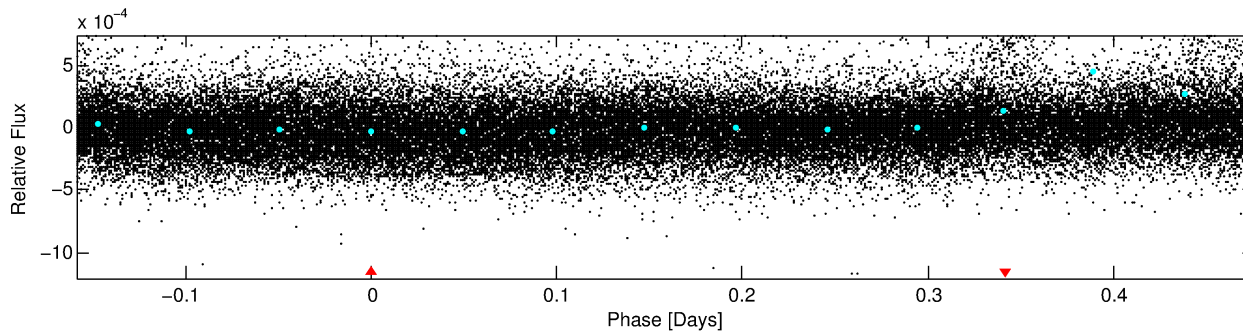
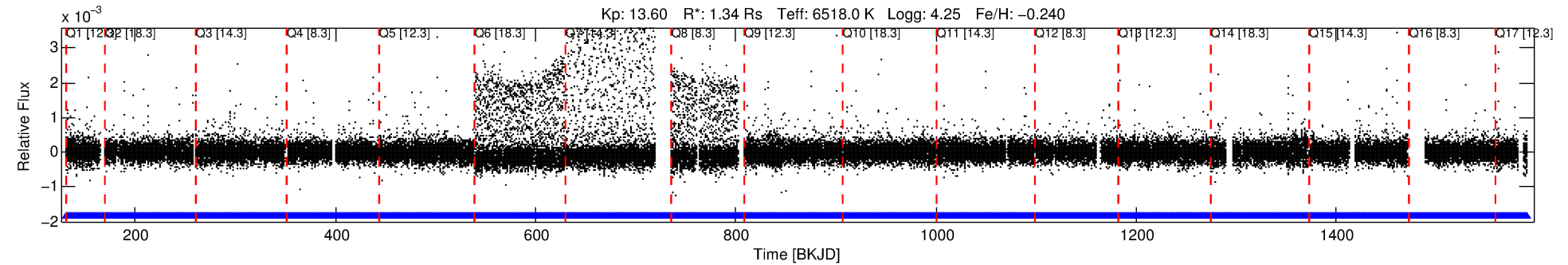
See [http://exoplanetarchive.ipac.caltech.edu/docs/API\\_kepcandidate\\_columns.html#proj\\_disp\\_col](http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col) for comment definitions.

## Ephemeris Match Information For 010264744-01

No Significant Match Found

# DV One-Page Summary

KIC: 10264744 Candidate: 1 of 1 Period: 0.635 d



## TPS TCE Results:

Period = 0.63525 d  
Epoch = 131.5549 BKJD

DV fit results are unavailable

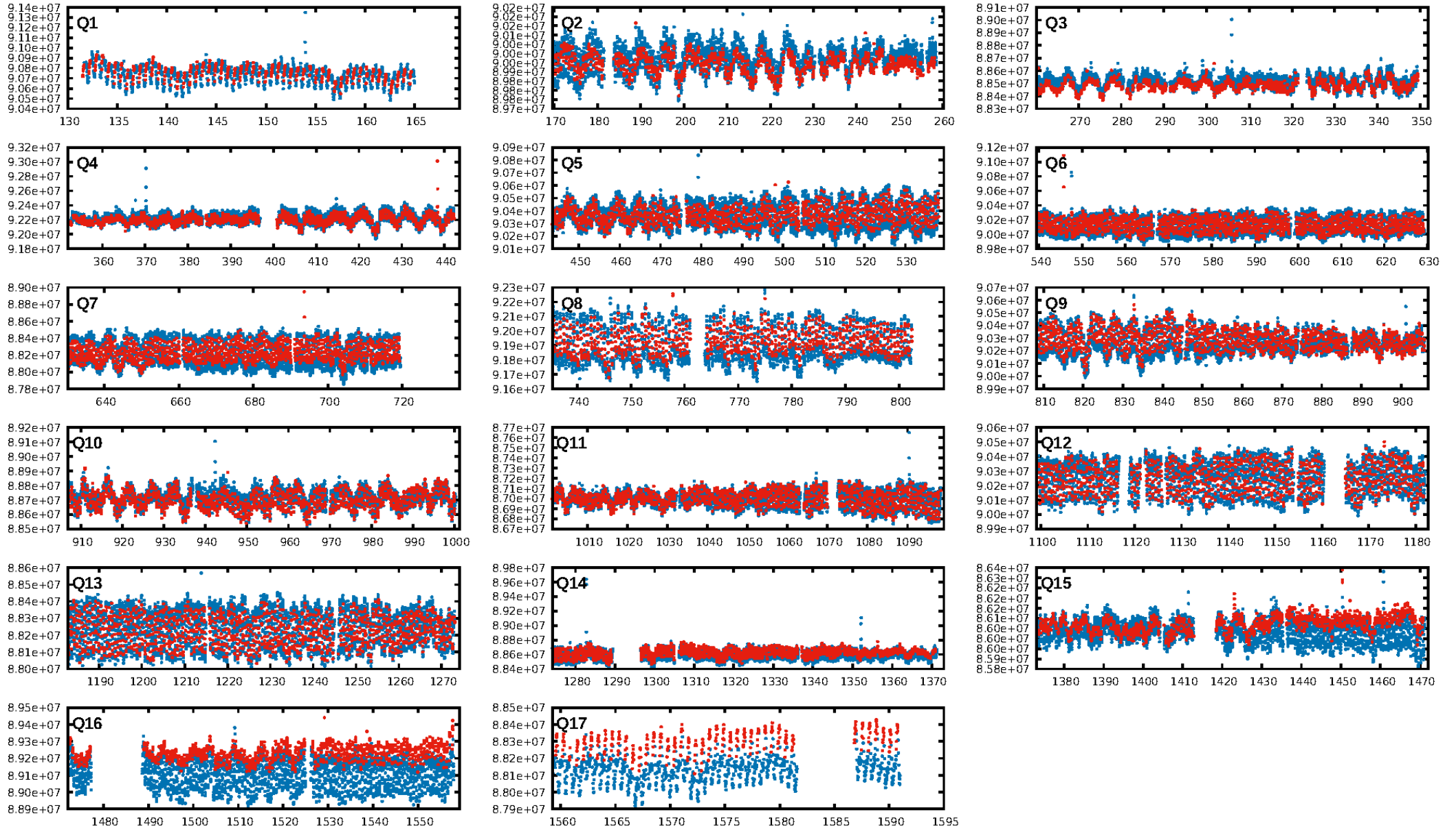
## DV Diagnostic Results:

ShortPeriod-sig: N/A  
LongPeriod-sig: N/A  
ModelChiSquare2-sig: N/A  
ModelChiSquareGof-sig: N/A  
Bootstrap-pfa: N/A  
RollingBand-fgt: 1.00 [2026/2026]  
GhostDiagnostic-chr: 2.011  
Centroid-sig: 1.1%  
Centroid-so: 0.088 arcsec [2.55 $\sigma$ ]  
OotOffset-rm: 1.104 arcsec [4.55 $\sigma$ ]  
KicOffset-rm: 0.983 arcsec [4.45 $\sigma$ ]  
OotOffset-st: 4/4/3/5 [16]  
KicOffset-st: 4/4/3/5 [16]  
DiffImageQuality-fgm: 0.81 [13/16]  
DiffImageOverlap-fno: 1.00 [17/17]

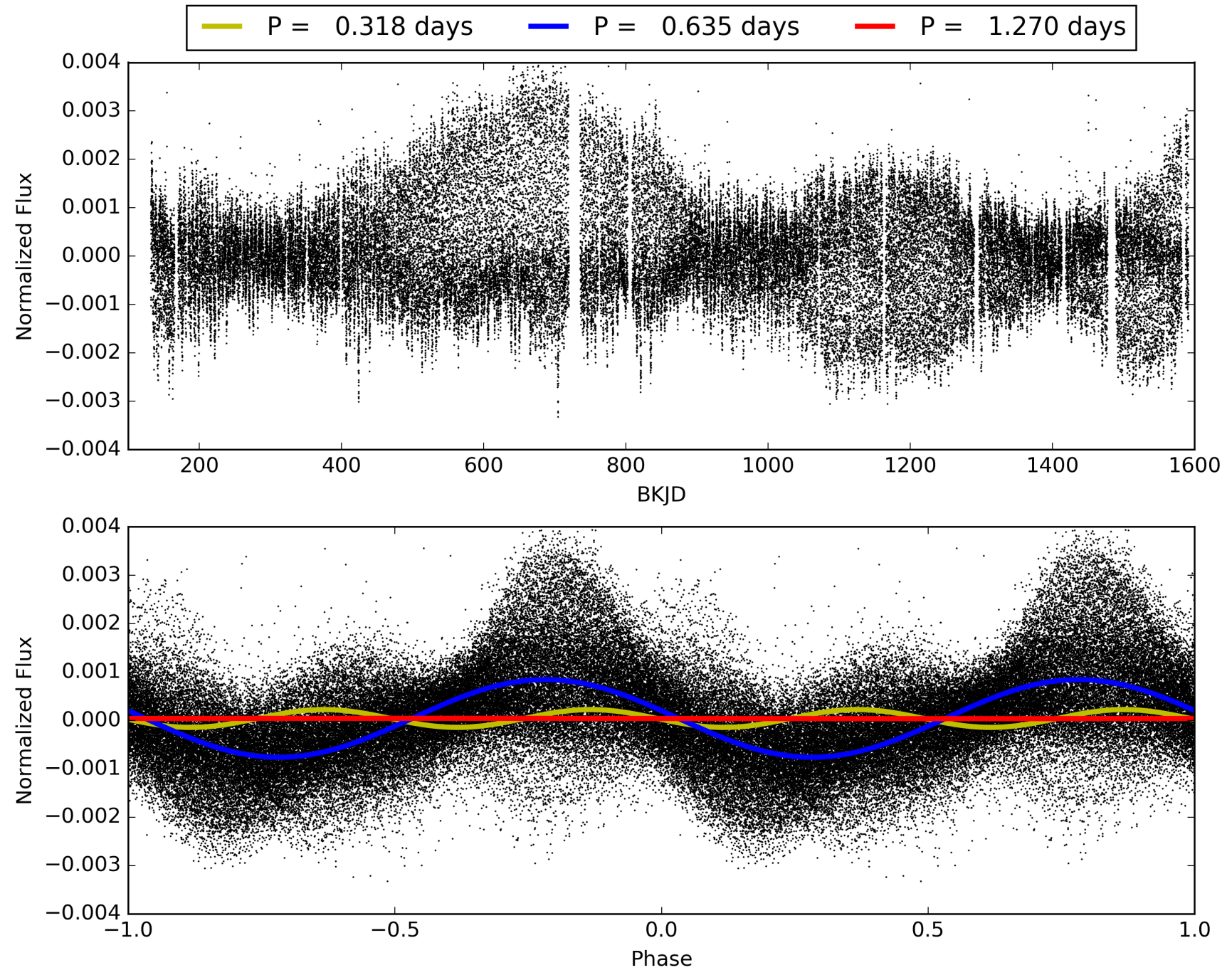
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 06:39:36 Z

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

# TCE 010264744-01, PDC Light Curves

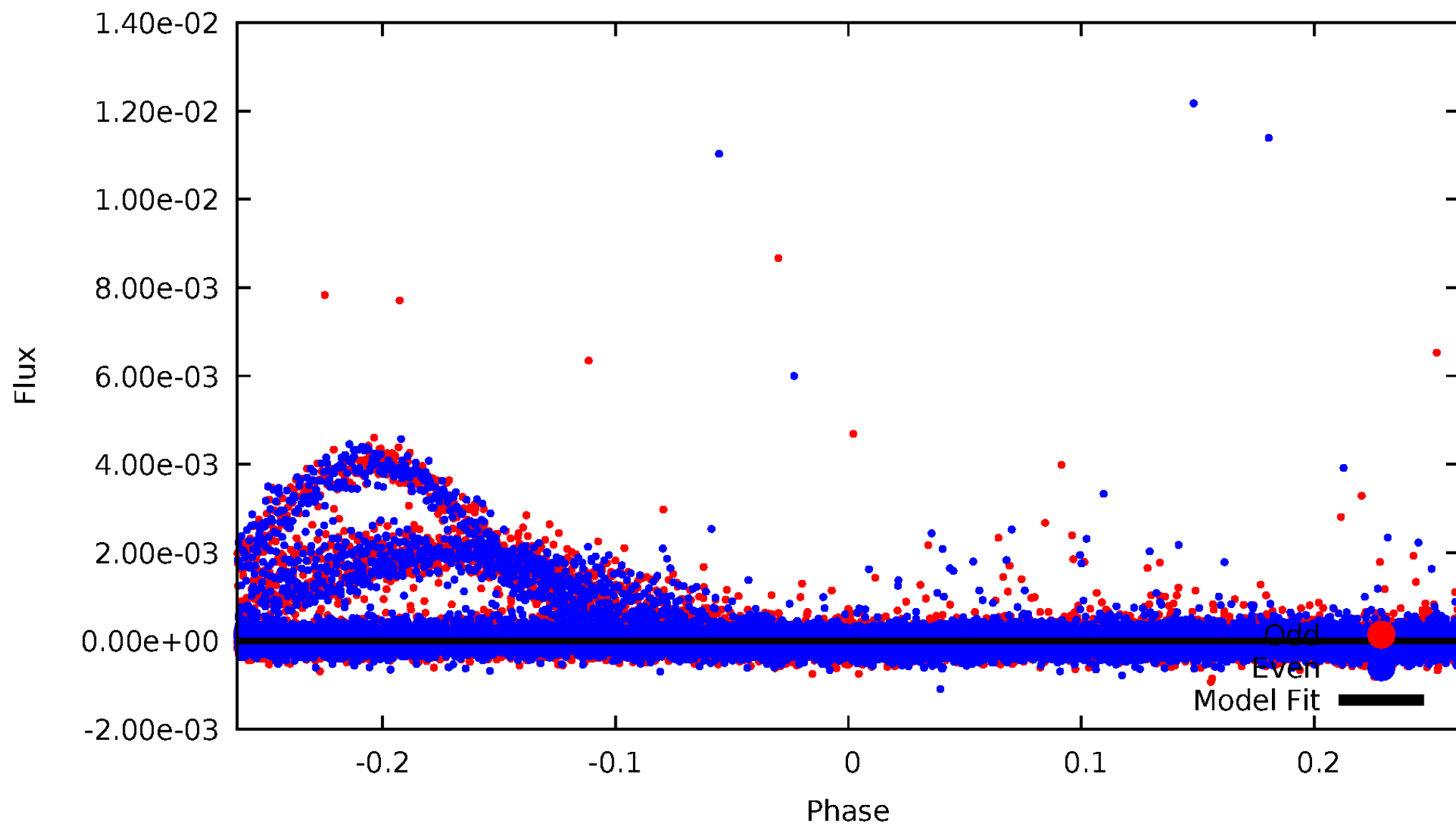


# TCE 010264744-01



# DV Odd/Even

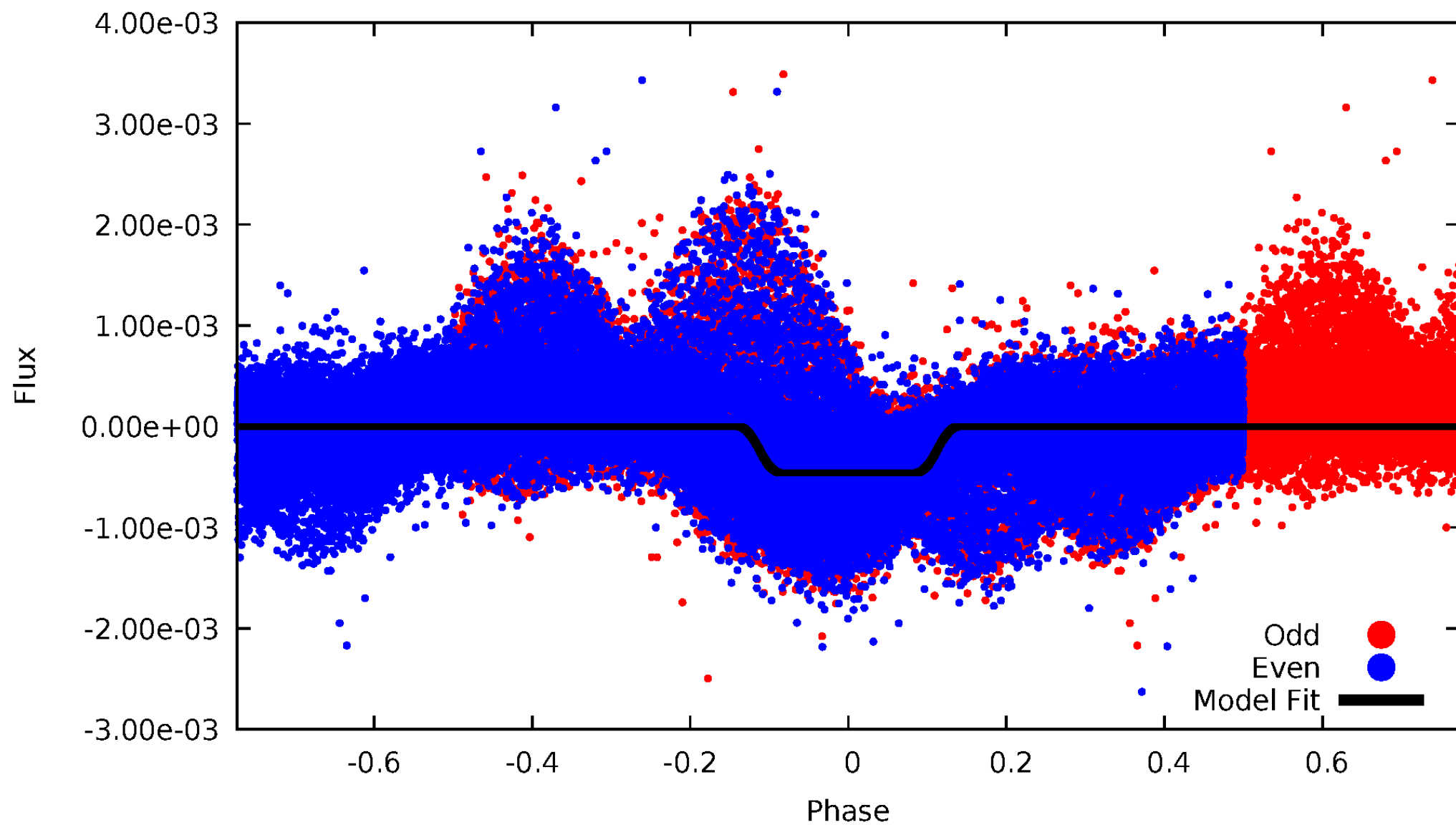
TCE 010264744-01





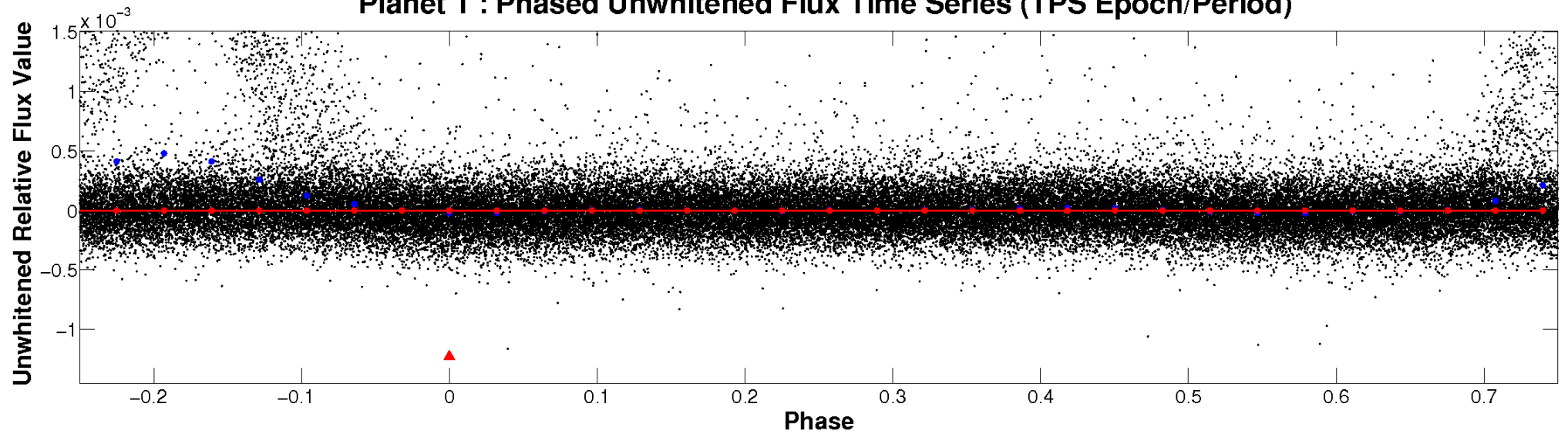
# ALT Odd/Even

TCE 010264744-01

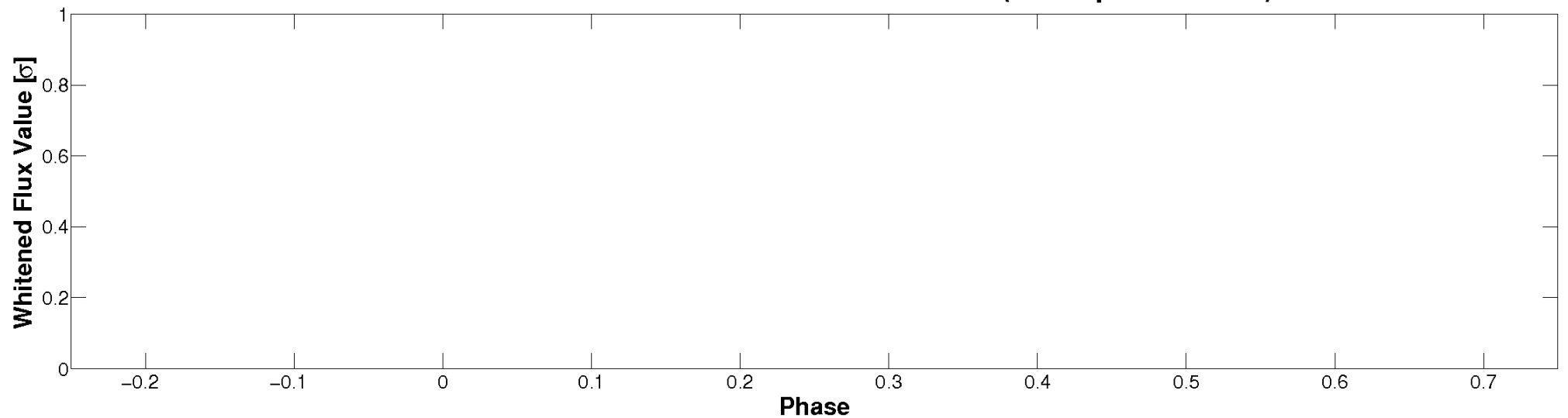


# Non-Whitened Vs. Whitened Light Curve

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

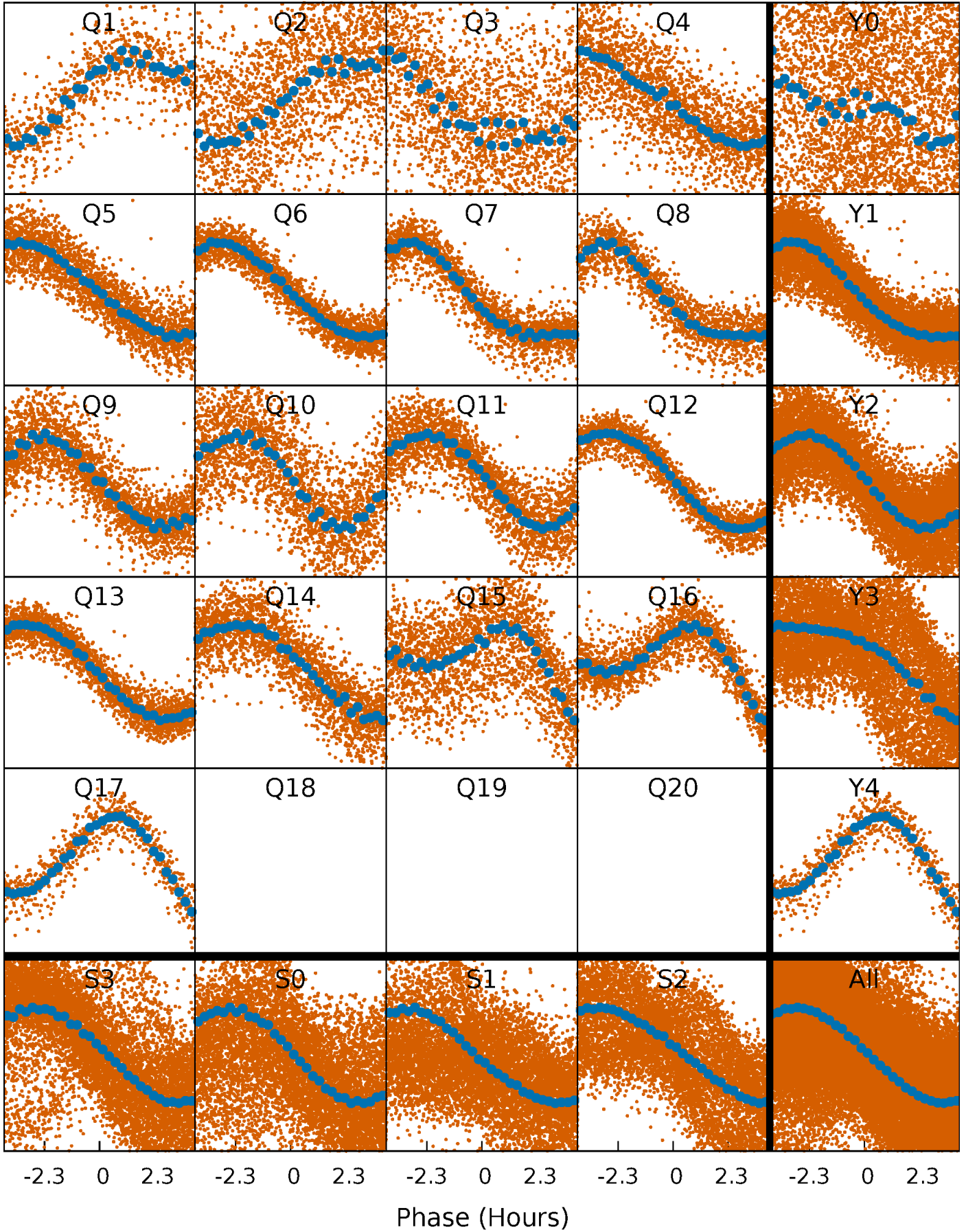


**Planet 1 : Phased Whitened Flux Time Series (TPS Epoch/Period)**



# PDC Quarter-Phased Transit Curves

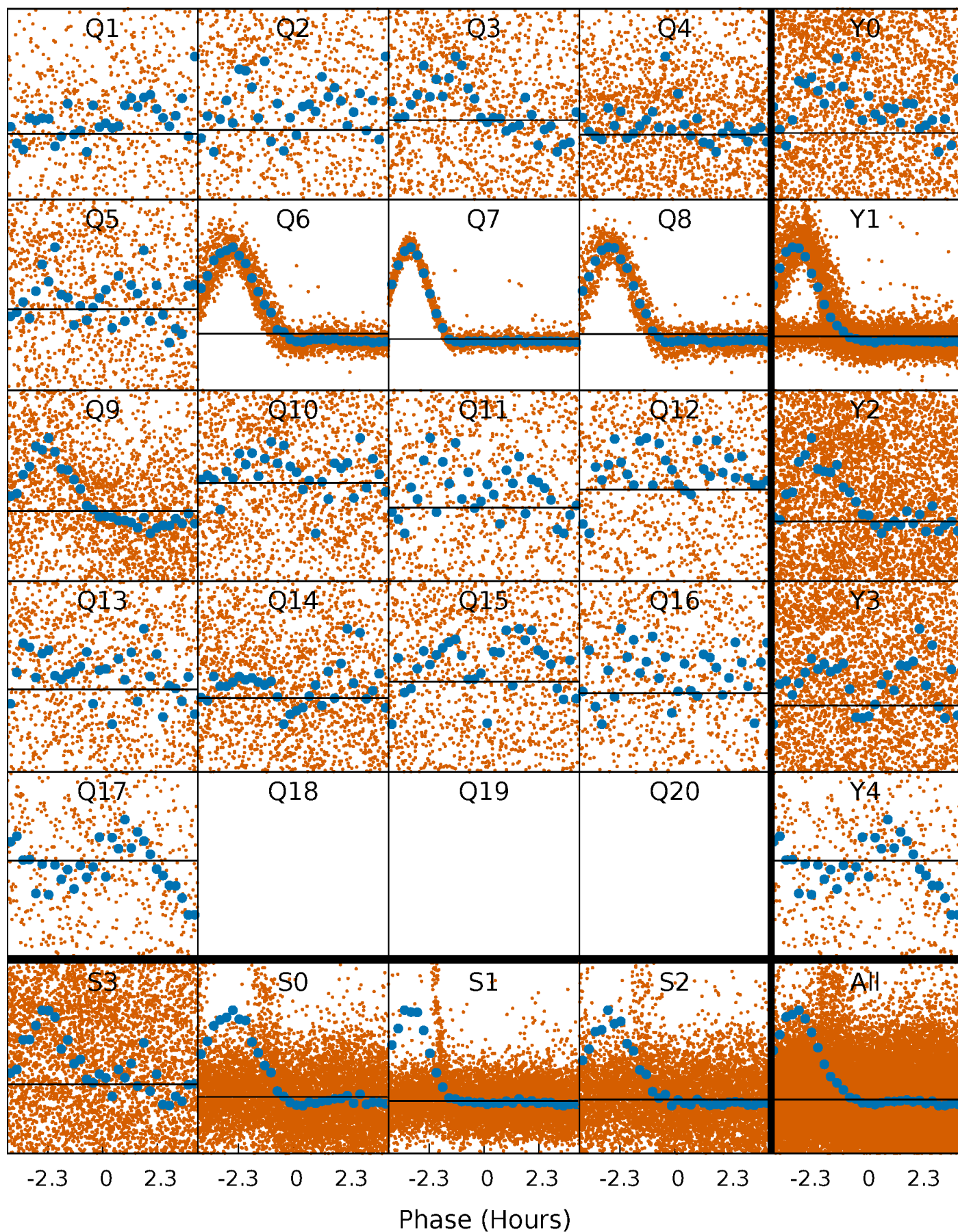
TCE 010264744-01     $P = 0.635250$  Days     $T_0 = 131.554944$  (BKJD)





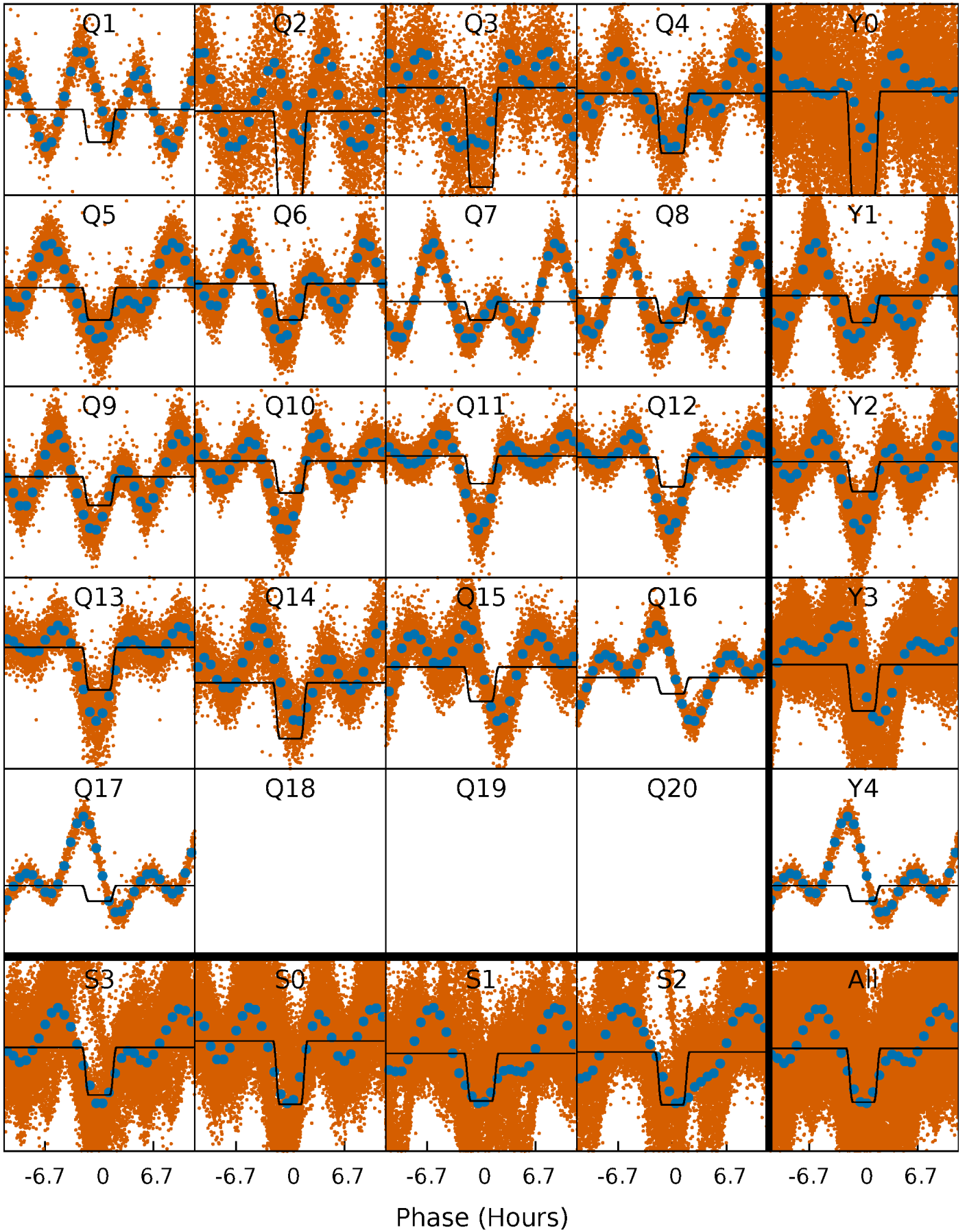
# DV Quarter-Phased Transit Curves

TCE 010264744-01 P= 0.635250 Days  $T_0=131.554944$  (BKJD)



# Alt. Detrend Quarter-Phased Transit Curves

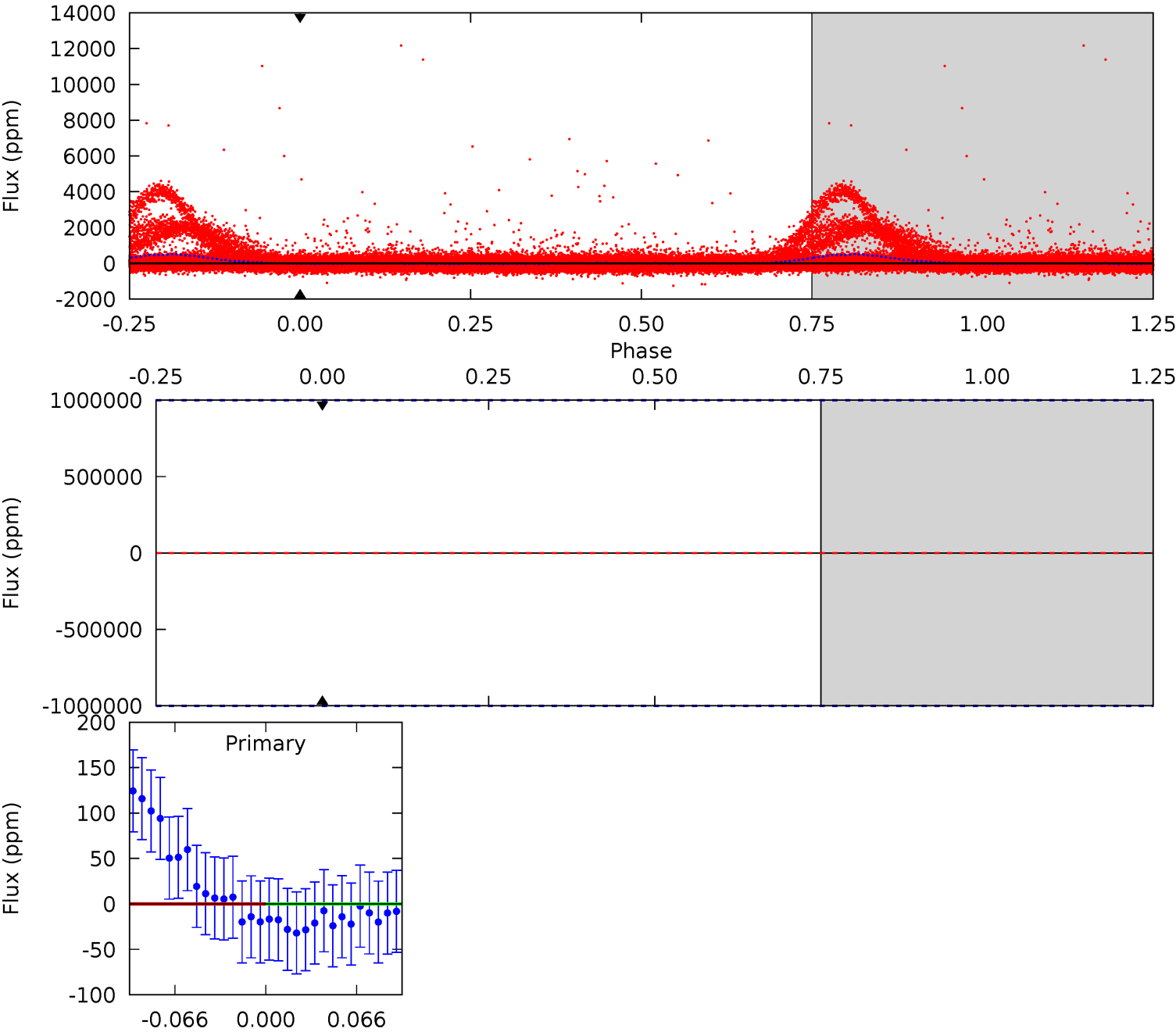
TCE 010264744-01 P= 0.635250 Days  $T_0=131.670318$  (BKJD)



DV Model-Shift Uniqueness Test

010264744-01, P = 0.635250 Days, E = 130.919694 Days

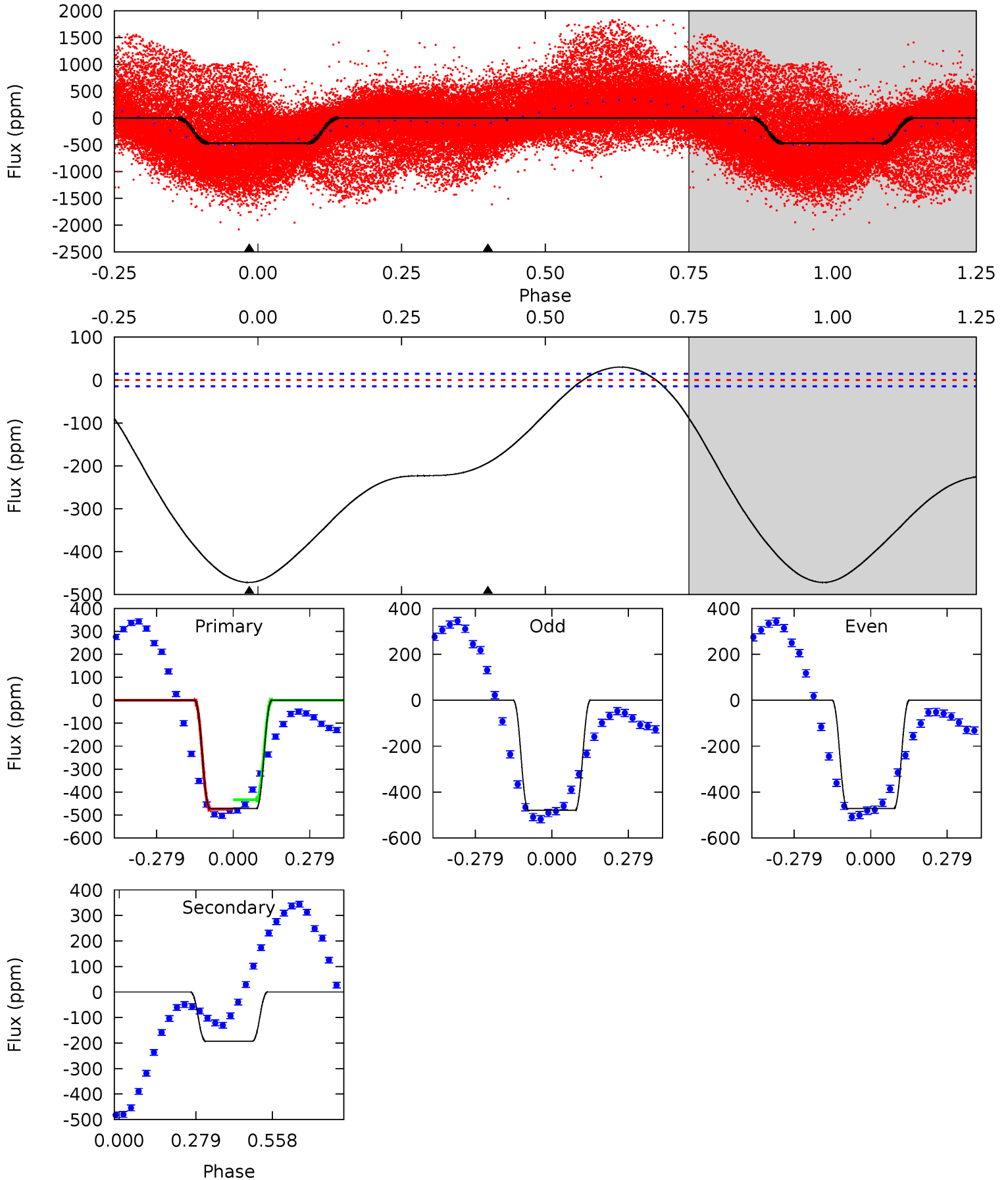
Pri	Sec	Ter	Pos	FA <sub>1</sub>	FA <sub>2</sub>	F <sub>Red</sub>	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



# Alt Model-Shift Uniqueness Test

010264744-01, P = 0.635250 Days, E = 131.035068 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
140.1	57.3	0	0	4.34	1.08	9.01	140.1	140.1	57.3	57.3	1.31	0.92	0.06	7.44



### Stellar Parameters For KIC 010264744

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	$6518^{+146}_{-194}$	$4.251^{+0.132}_{-0.182}$	$-0.240^{+0.250}_{-0.300}$	$1.337^{+0.395}_{-0.230}$	$1.165^{+0.174}_{-0.157}$	$0.687^{+0.492}_{-0.329}$
	+2%/-3%	+3%/-4%	+104%/-125%	+30%/-17%	+15%/-13%	+72%/-48%
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 010264744-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	$A_{obs}$
DV	$0 \pm 1000000$	$11.69^{+11.02}_{-8.20}$	$3783^{+270}_{-214}$	$-5259^{+31073}_{-18675}$	$-1.914^{+170.052}_{-145.670}$
Alt.	$-193 \pm 3$	$10.66^{+12.85}_{-7.29}$	$3773^{+273}_{-231}$	$-2935^{+7907}_{-547}$	$0.217^{+1.914}_{-0.170}$

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



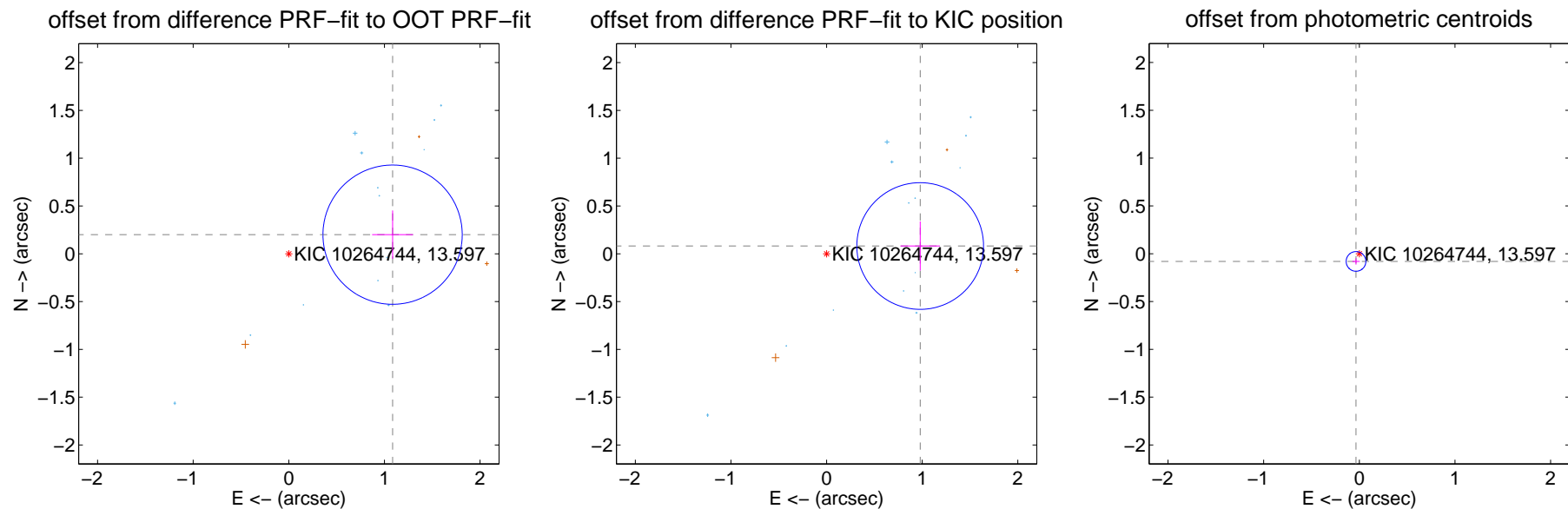
## DV Centroid Data

Supplemental centroid analysis for 010264744-01. Kepler magnitude: 13.60. Transit SNR -1.00

There are 13 quarters with good PRF difference image offsets

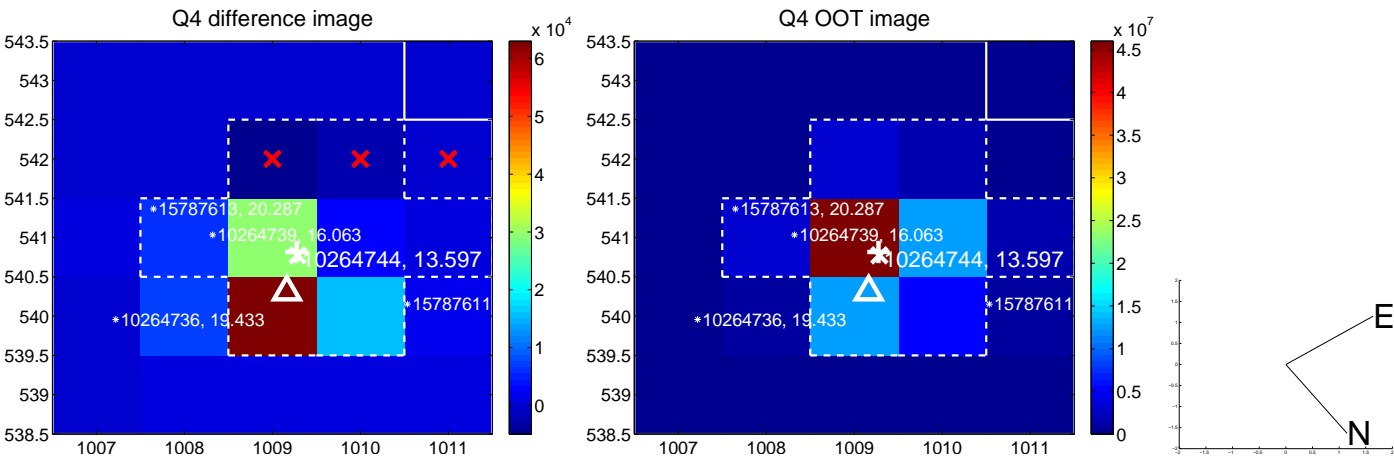
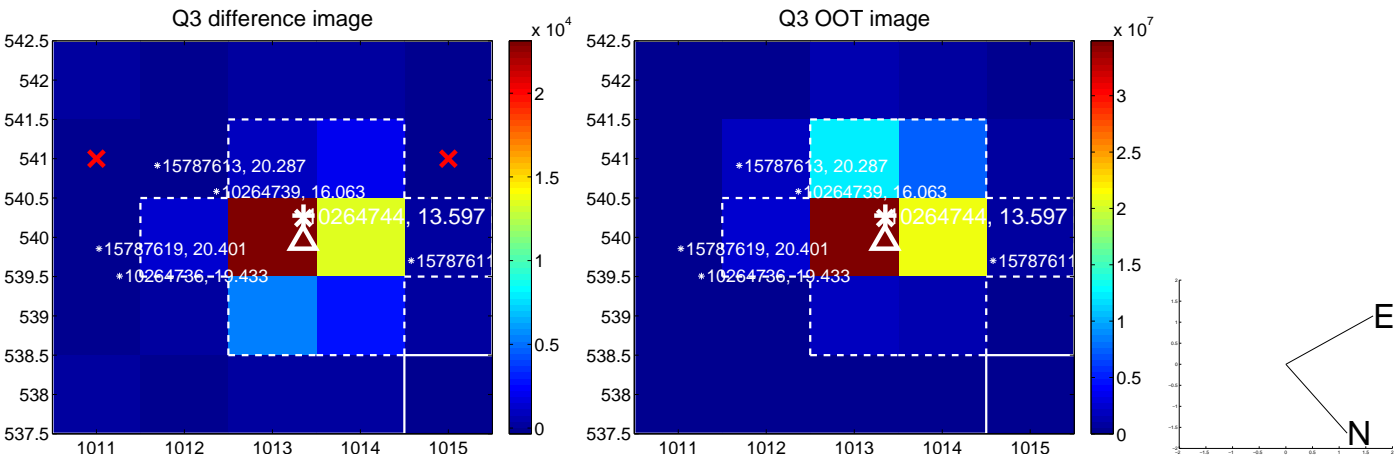
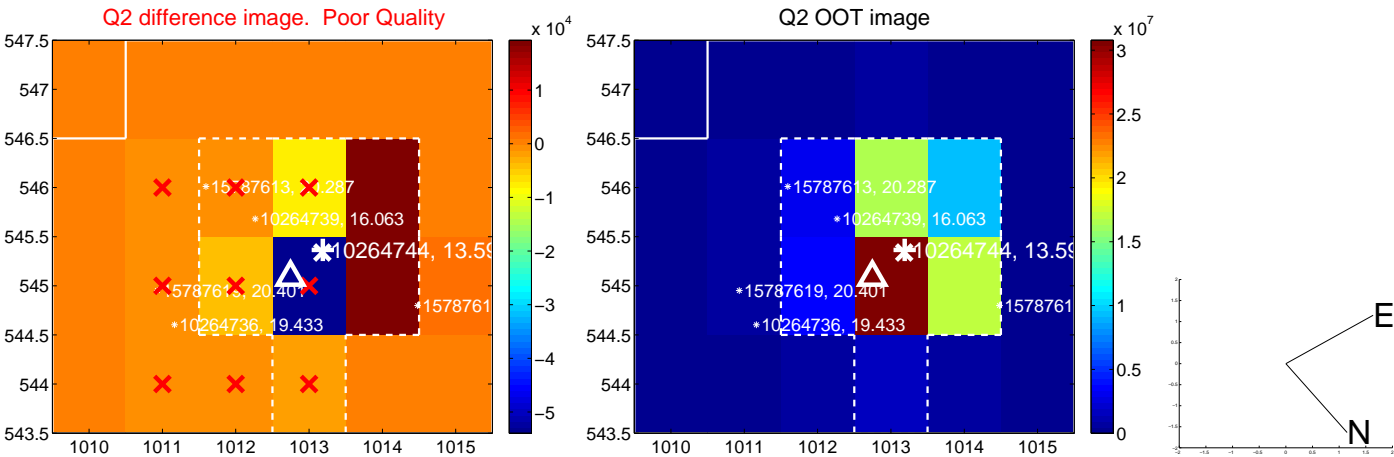
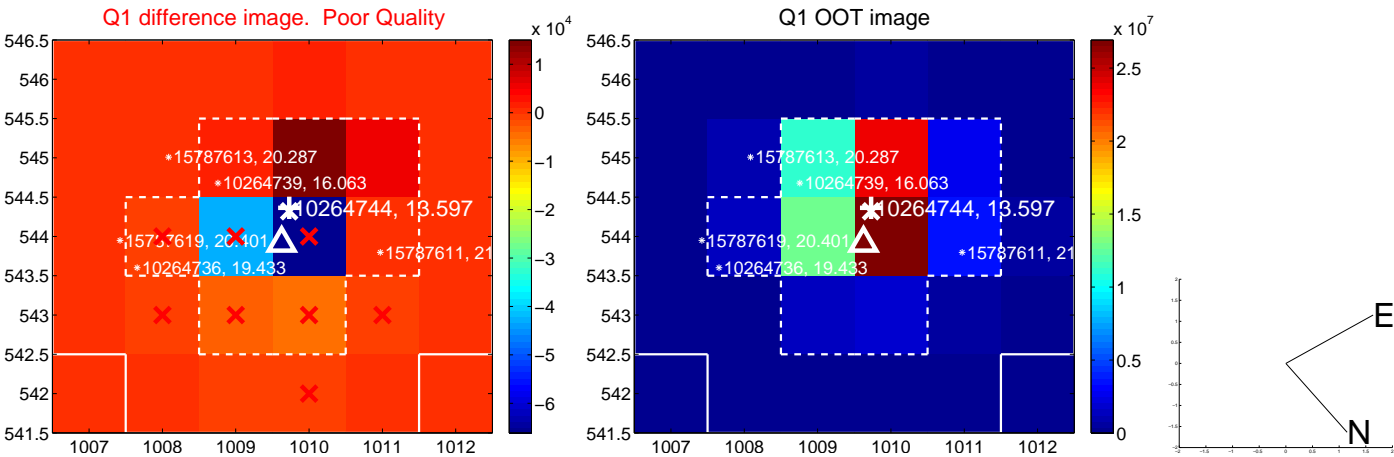
The direct PRF centroid is offset from the target star catalog position by about 0.16 arcsec

	Distance in arcsec	Distance / $\sigma$	$\Delta$ RA	$\Delta$ Dec
PRF-fit source offset from OOT	$1.104 \pm 0.243$	4.55	$-1.085 \pm 0.214$	$0.200 \pm 0.253$
PRF-fit source offset from KIC position	$0.983 \pm 0.221$	4.45	$-0.979 \pm 0.207$	$0.081 \pm 0.257$
photometric centroid source offset	$0.09 \pm 0.03$	2.55	$0.03 \pm 0.04$	$-0.08 \pm 0.03$

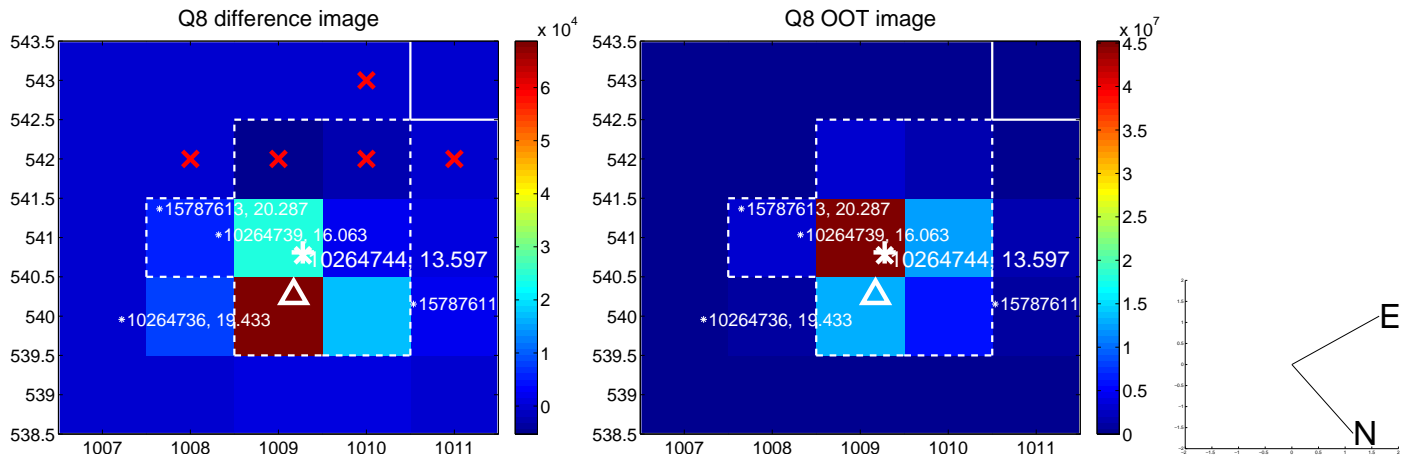
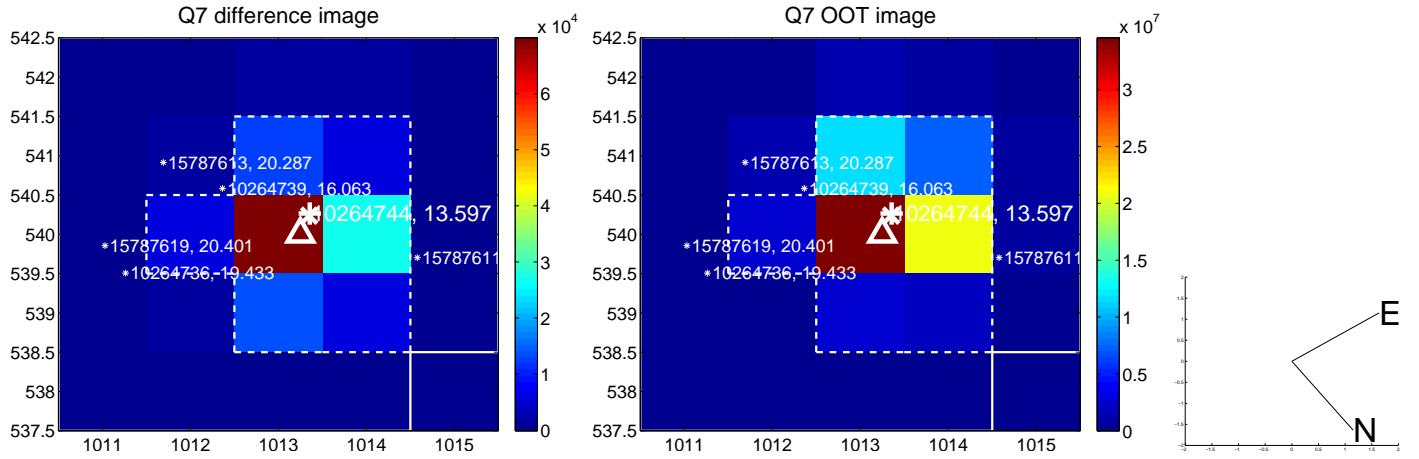
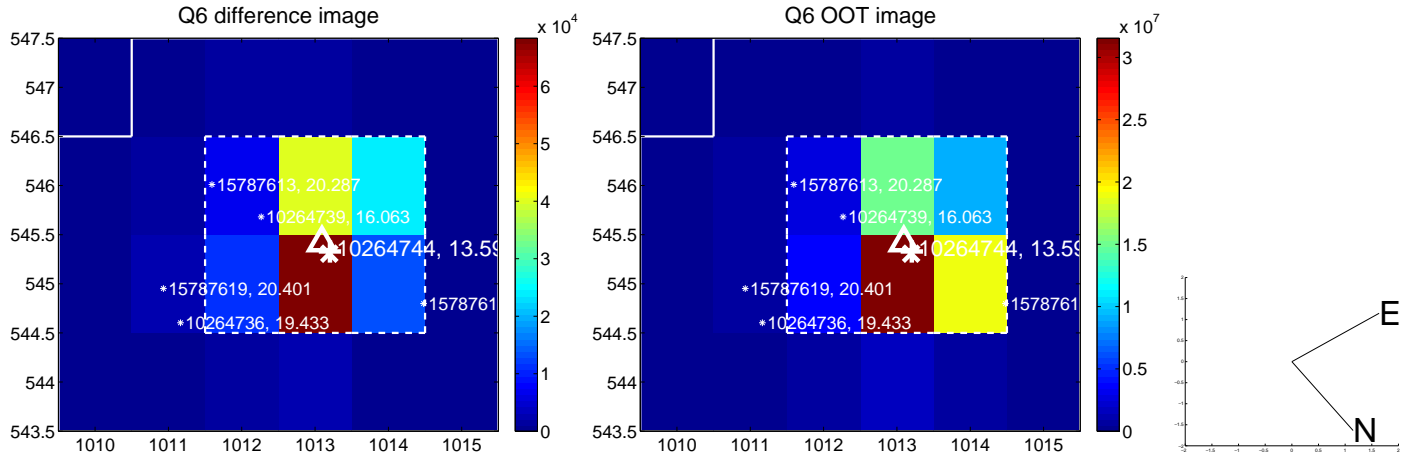
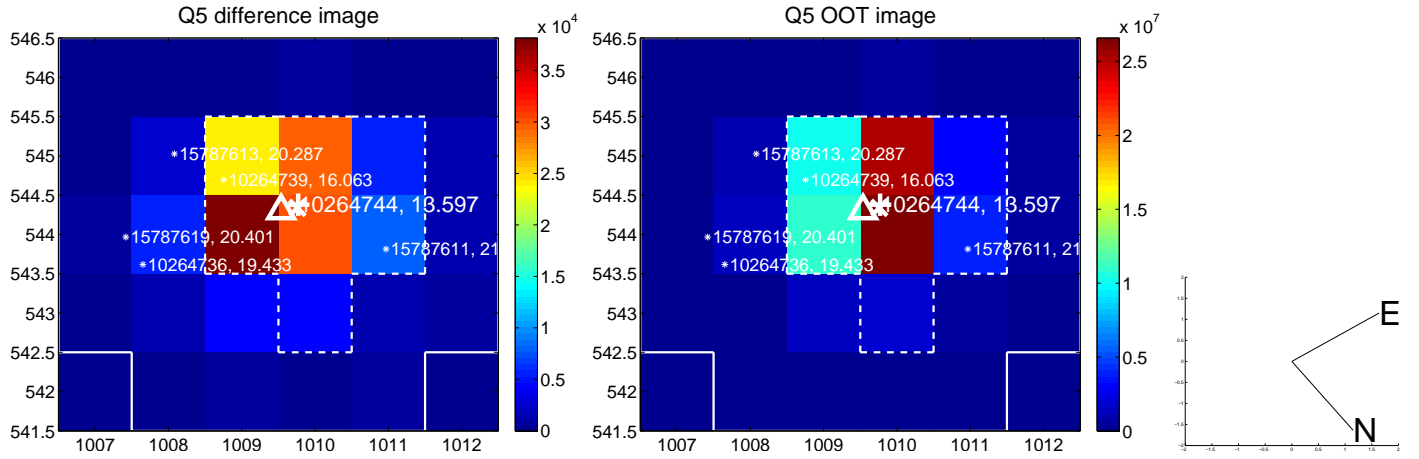


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- $\sigma$  uncertainty. Blue circle: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

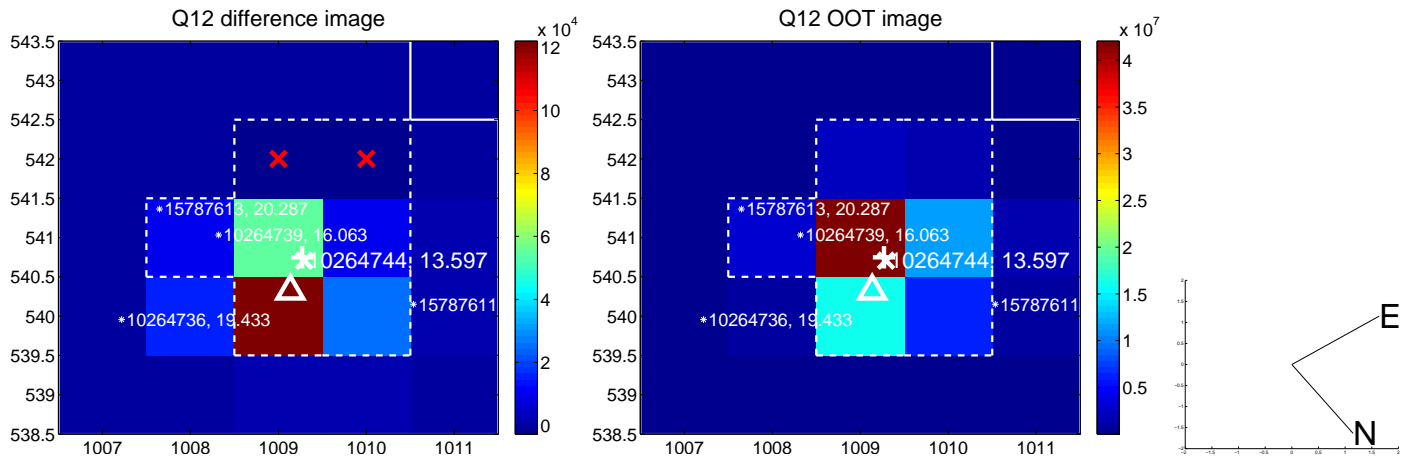
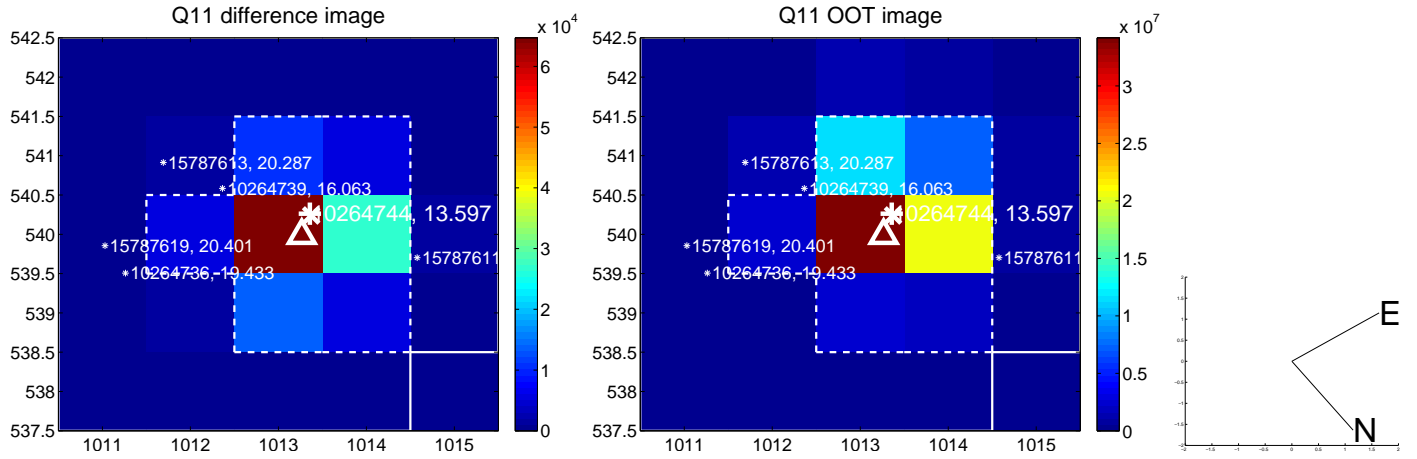
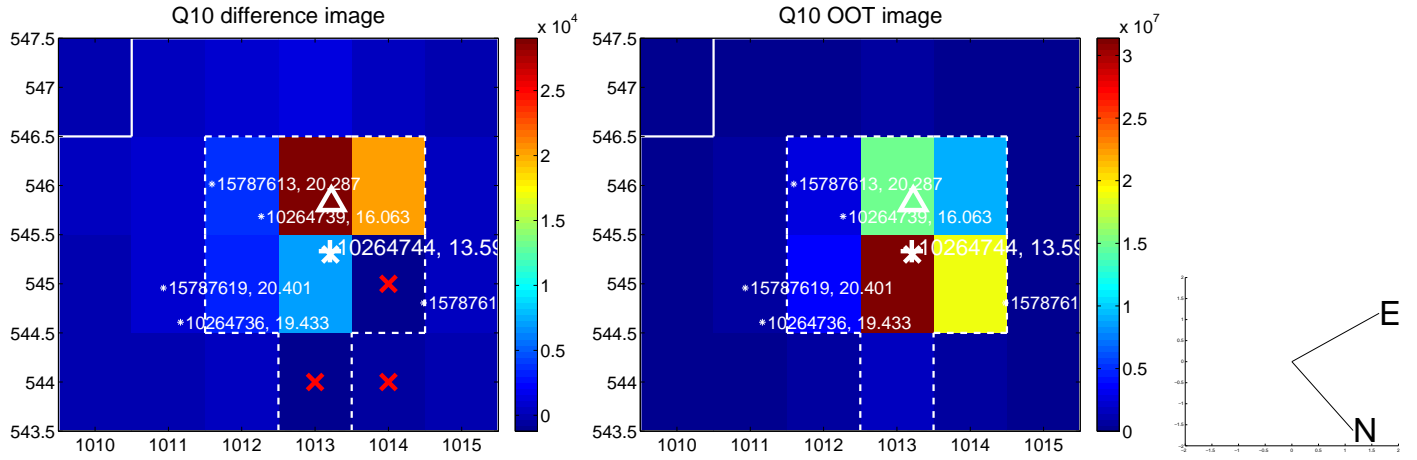
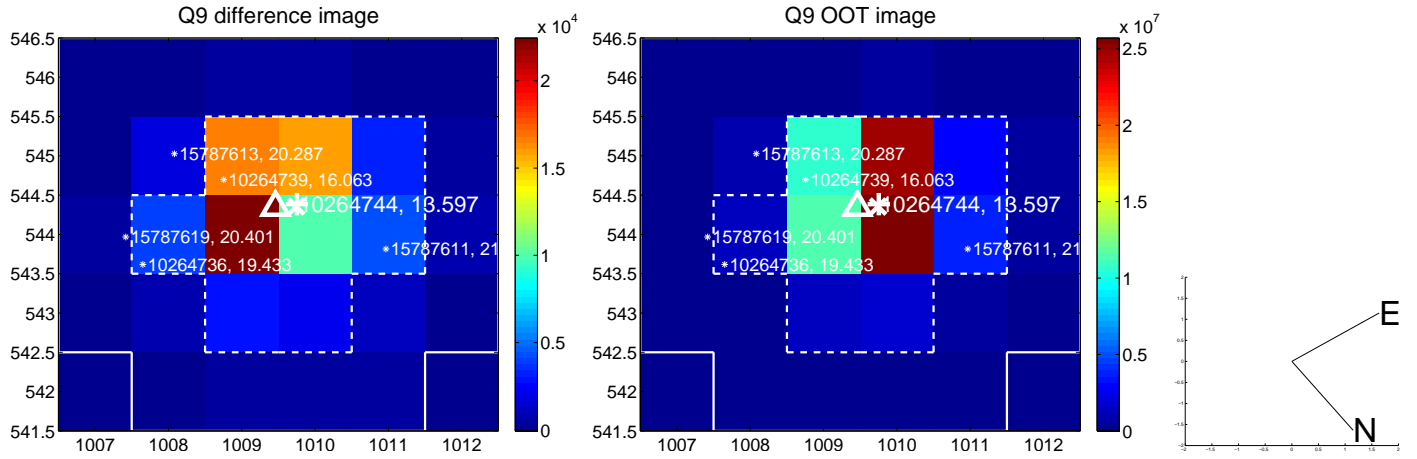
white  $\times$ : KIC target position; +: OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.



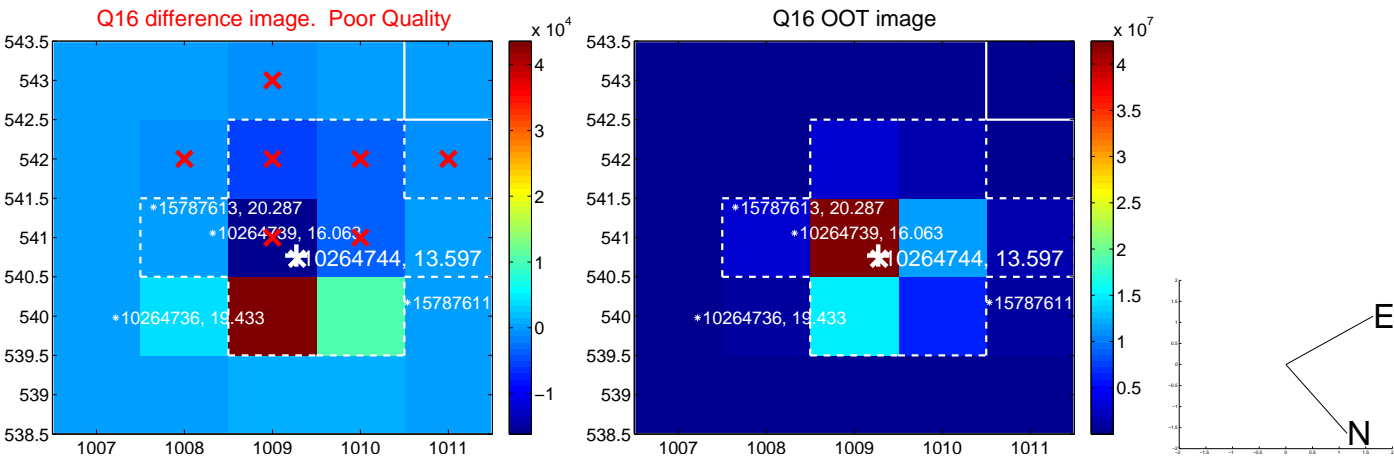
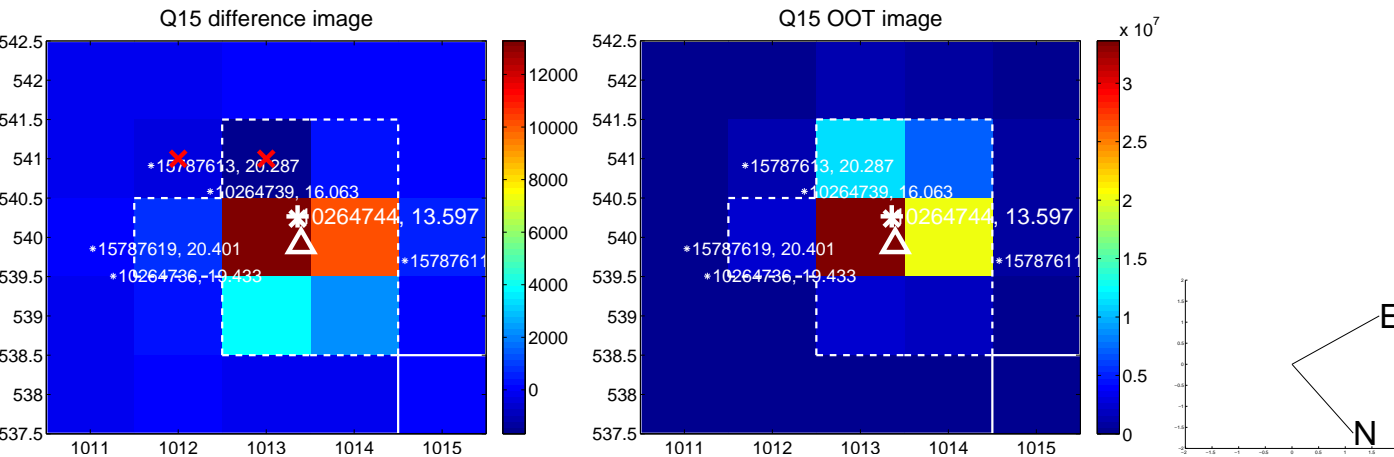
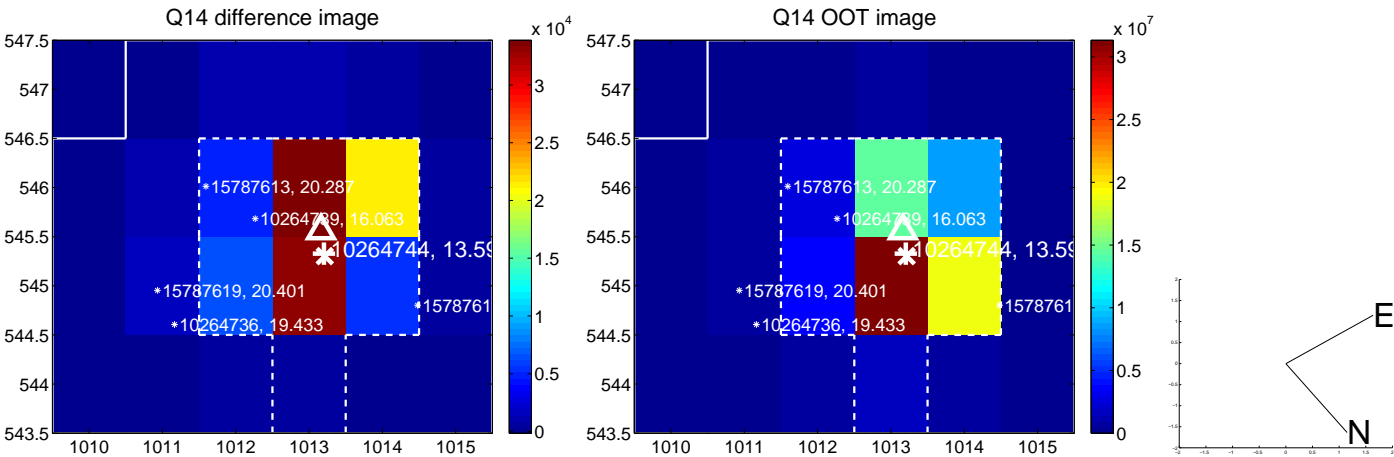
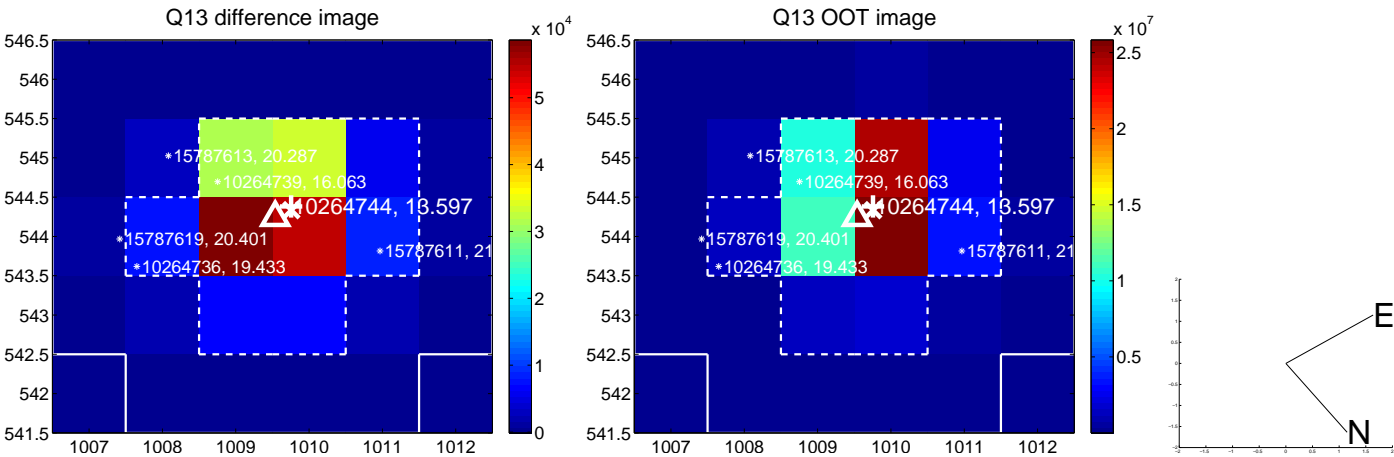
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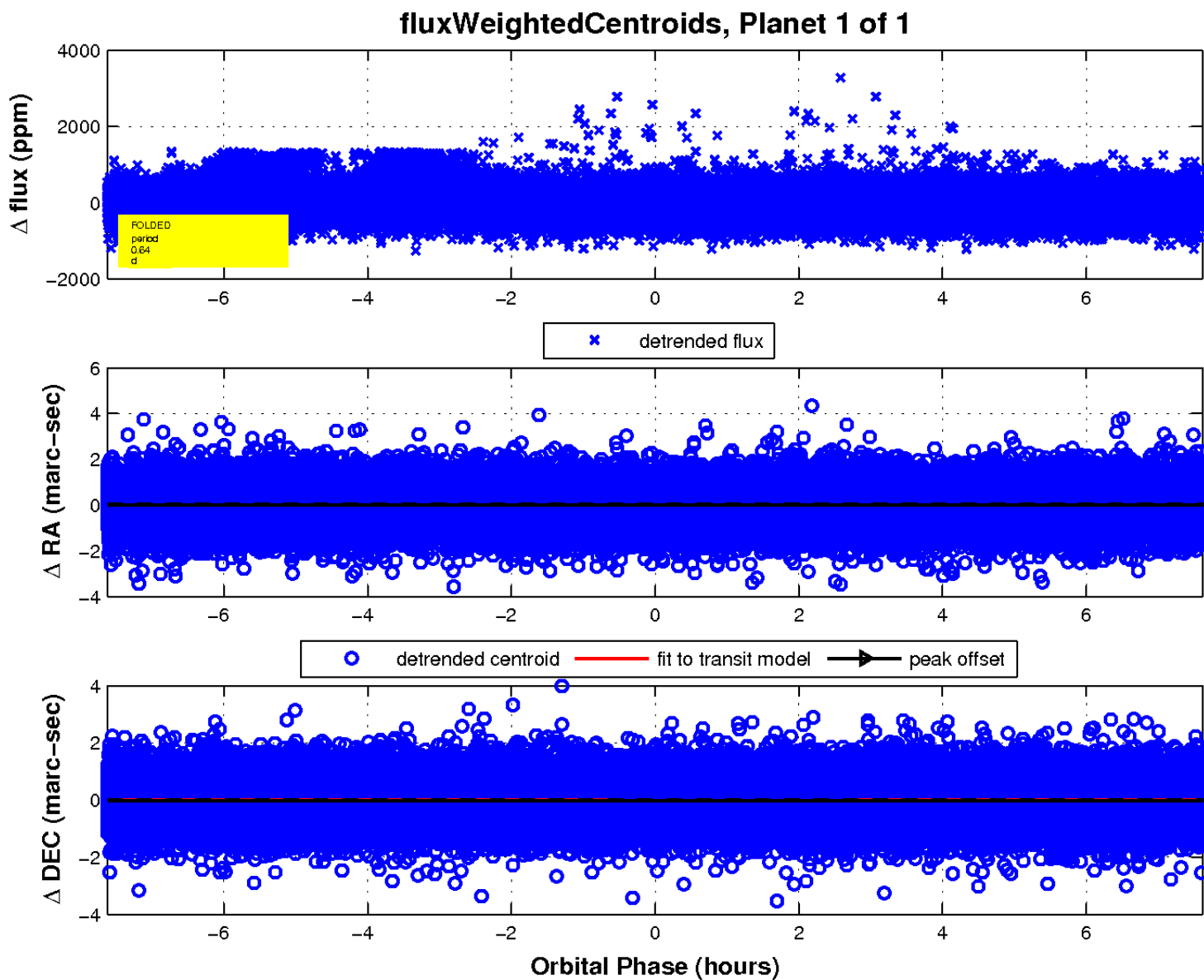
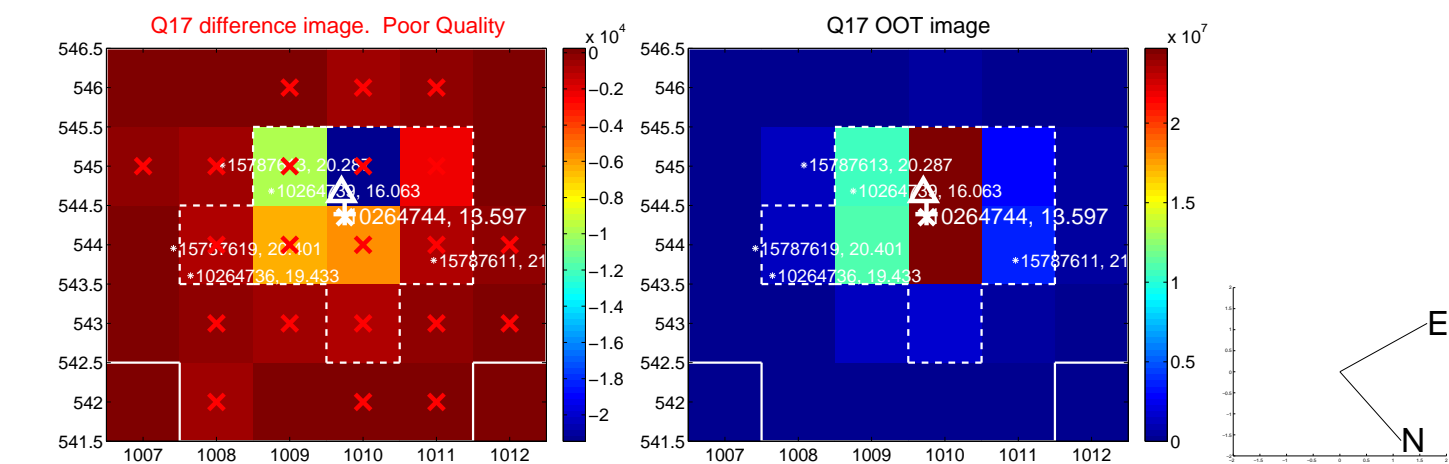


white  $\times$ : KIC target position; +: OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.





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



UKIRT Image

Declination

