

# KIC 011392362

## 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)	$R_p$ ( $R_{\oplus}$ )	$S_p$ ( $S_{\oplus}$ )
011392362-01	OBS	8053.01	9.910613	135.919848	91.5	5.862	7.3	7.9	1.08	6214	1.16	170.92

## Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011392362-01	OBS	PC	1.00	0	0	0	0	NO_COMMENT

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

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

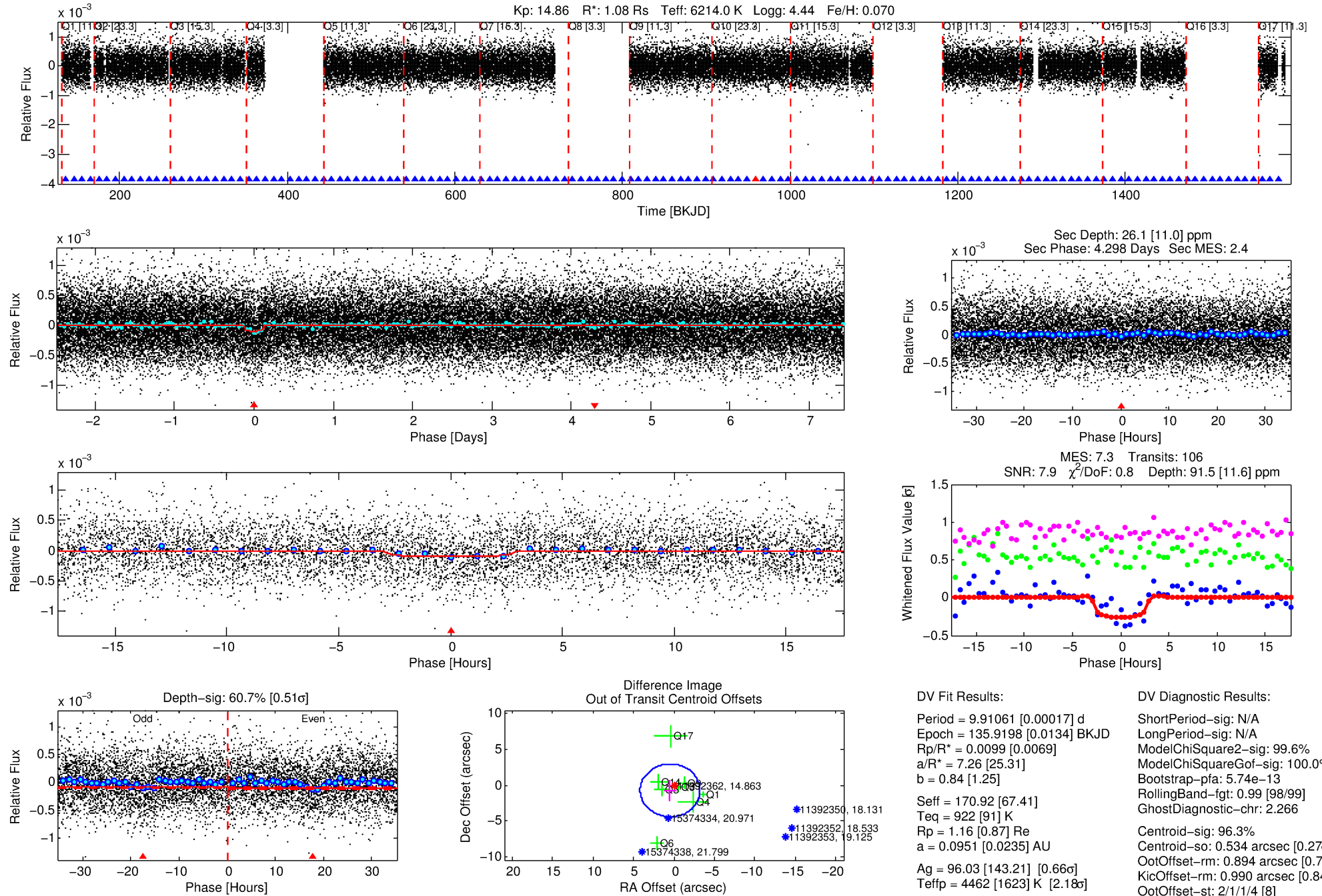
See [http://exoplanetarchive.ipac.caltech.edu/docs/API\\_kepcandidate\\_columns.html#proj\\_disp\\_col](http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col) for comment definitions.

## Ephemeris Match Information For 011392362-01

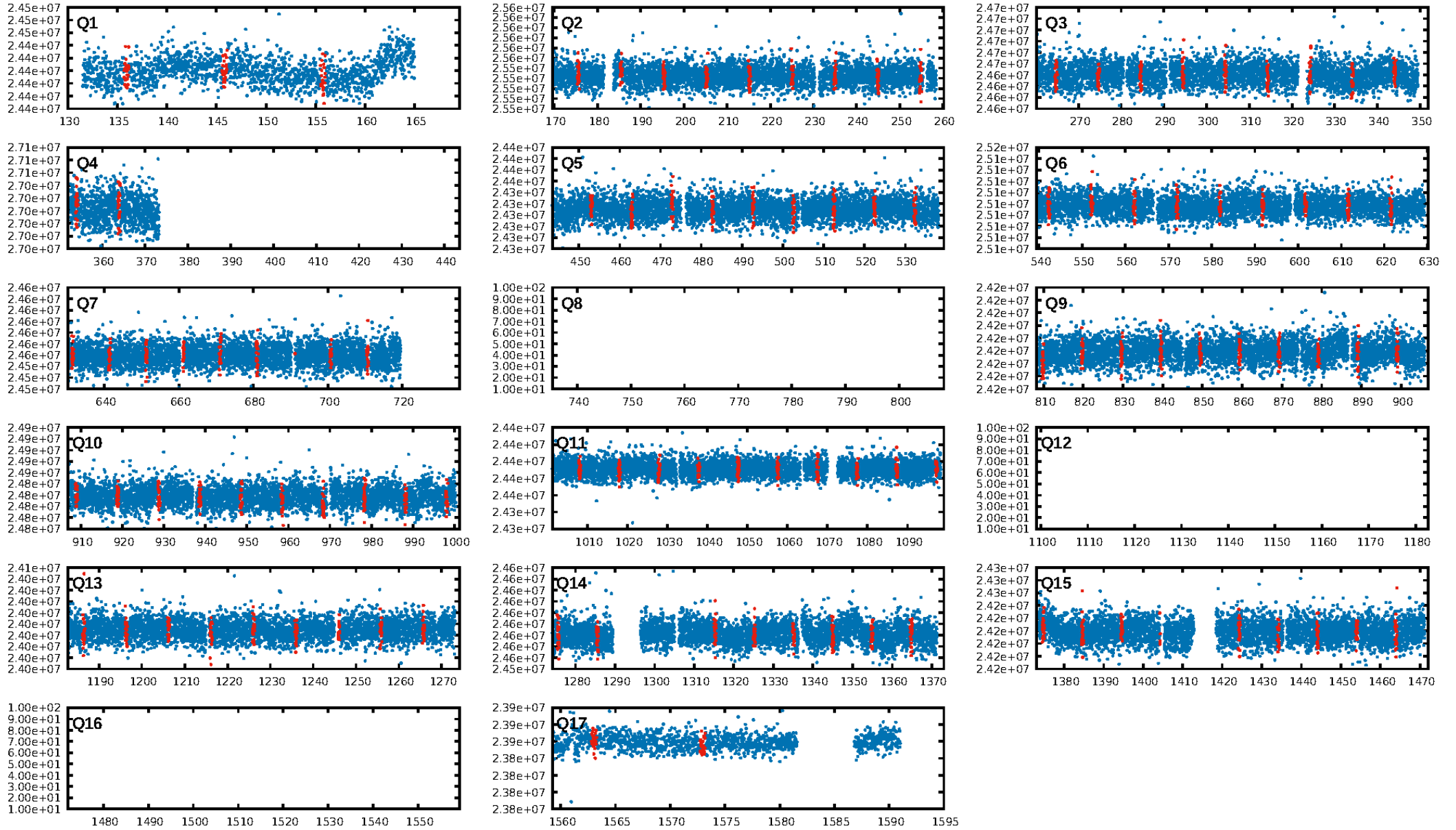
No Significant Match Found

# DV One-Page Summary

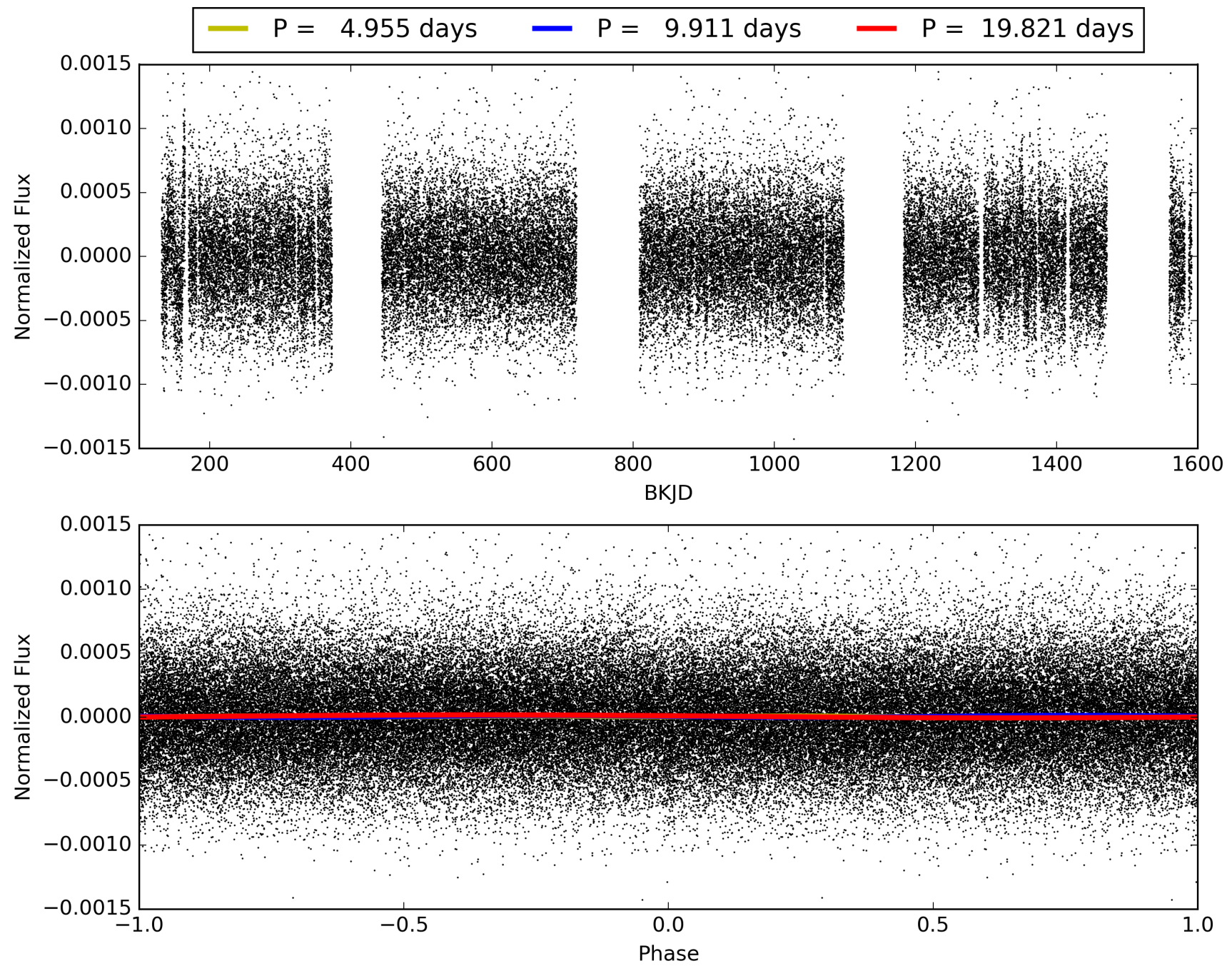
KIC: 11392362 Candidate: 1 of 1 Period: 9.911 d



# TCE 011392362-01, PDC Light Curves



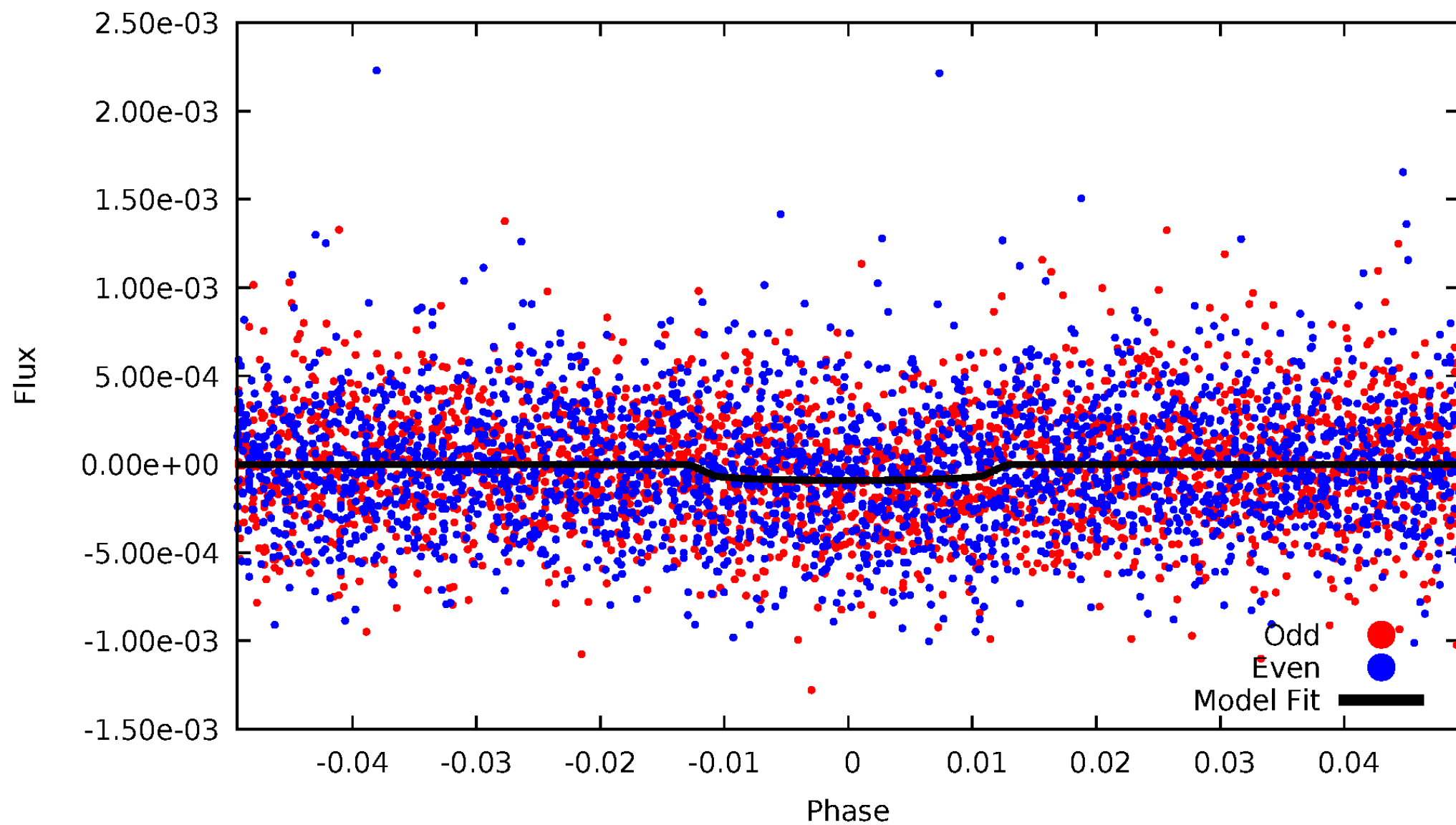
# TCE 011392362-01





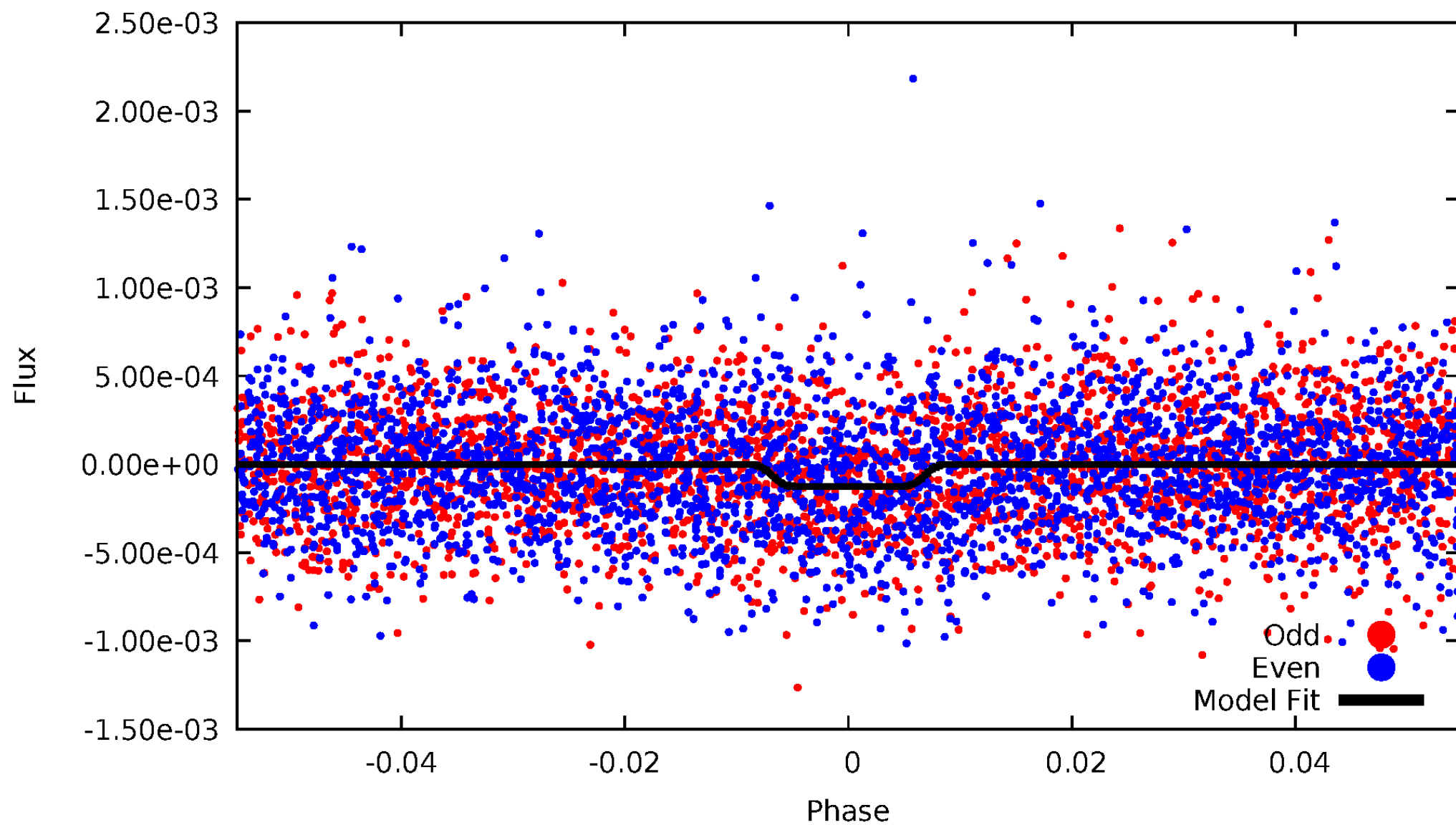
# DV Odd/Even

TCE 011392362-01

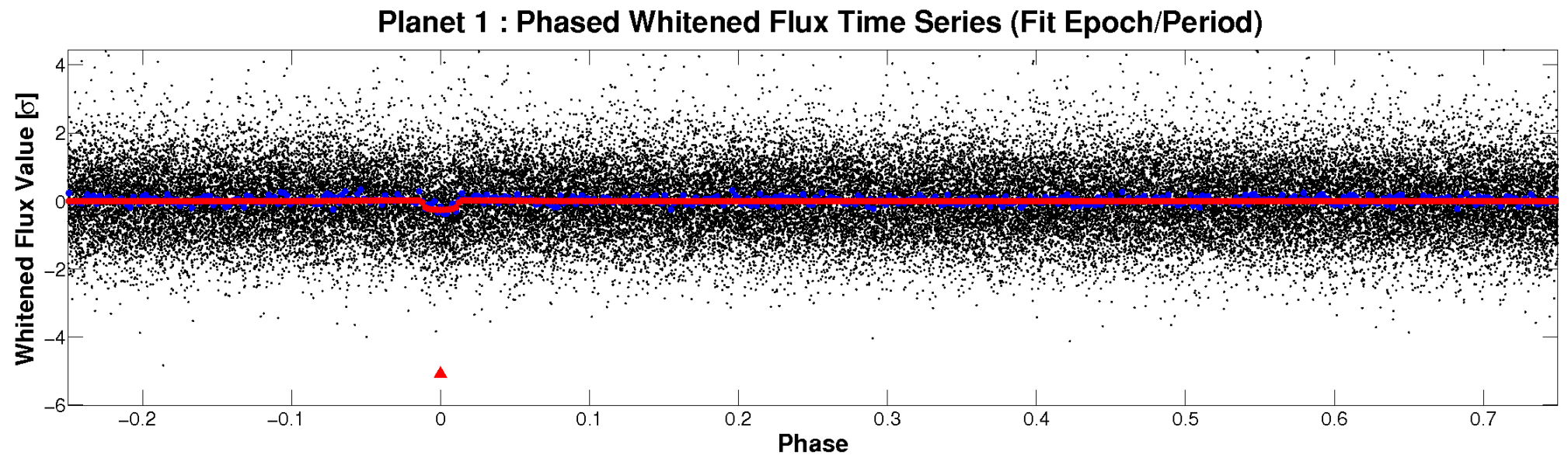
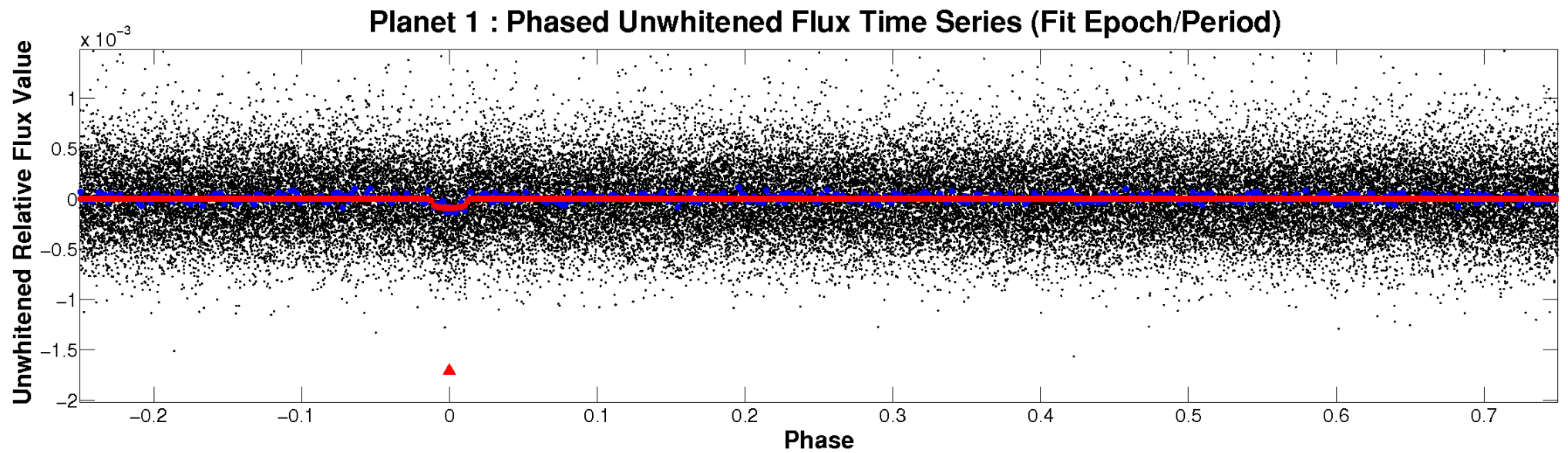


# ALT Odd/Even

TCE 011392362-01

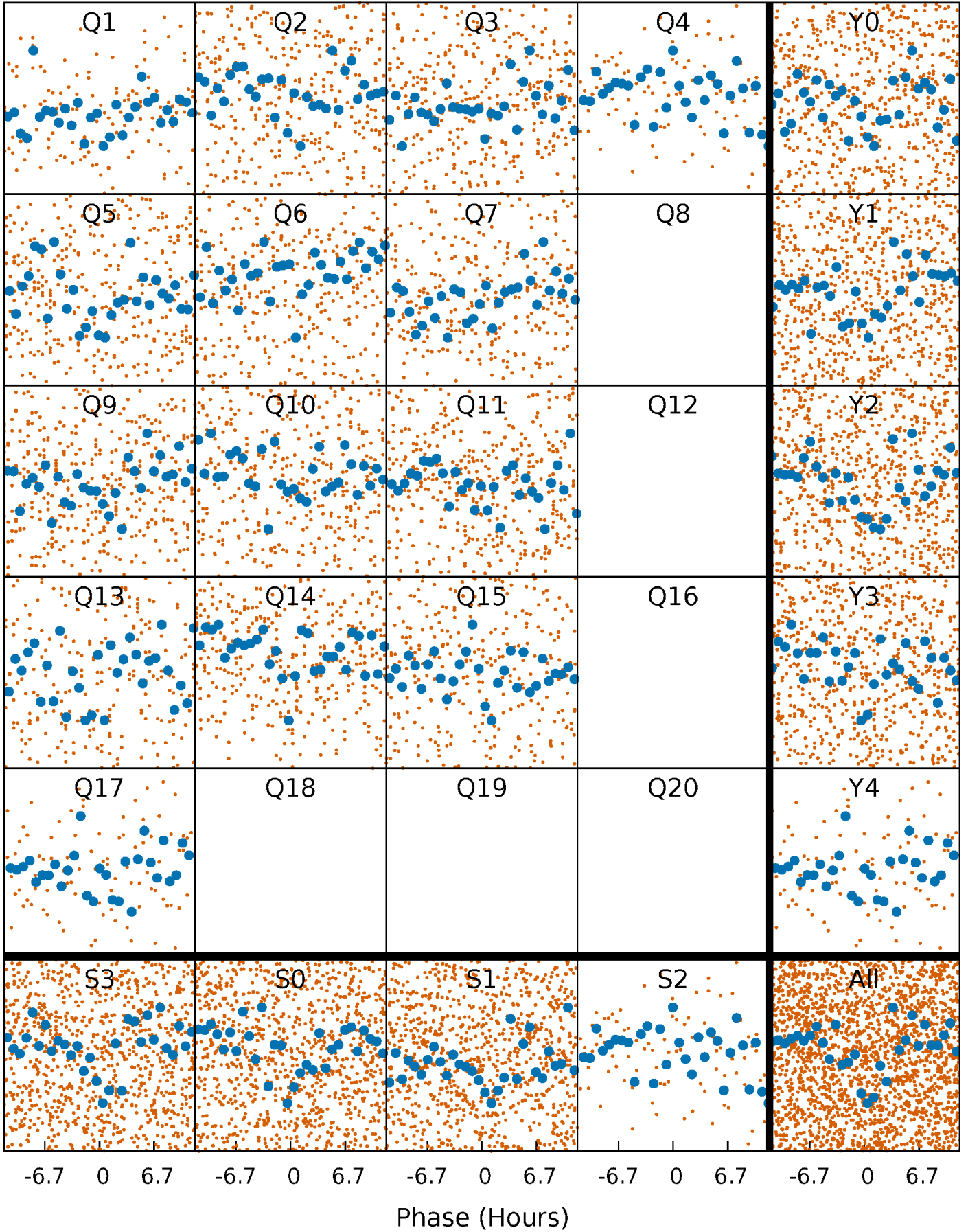


# Non-Whitened Vs. Whitened Light Curve



# PDC Quarter-Phased Transit Curves

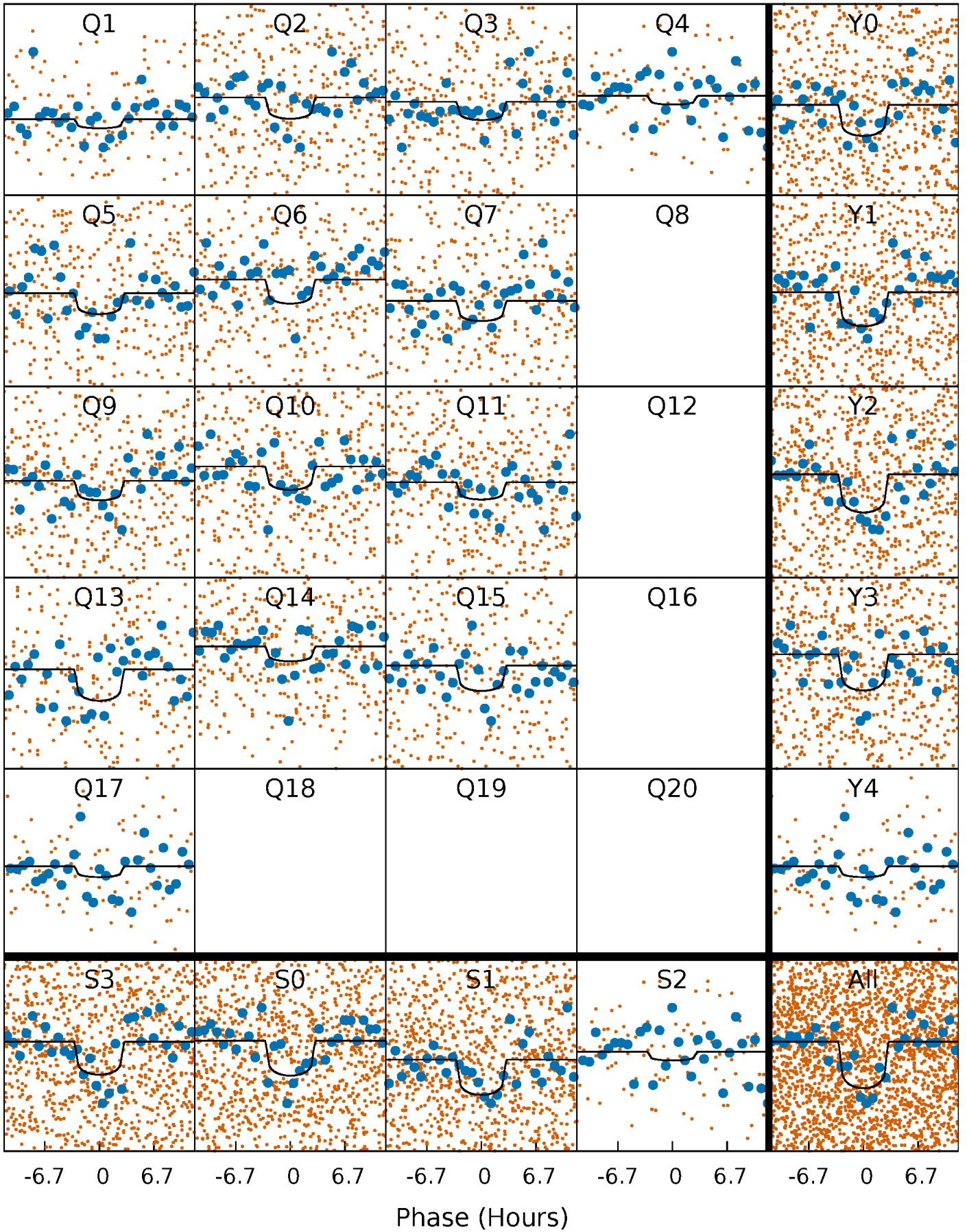
TCE 011392362-01   P= 9.910613 Days    $T_0=135.919848$  (BKJD)





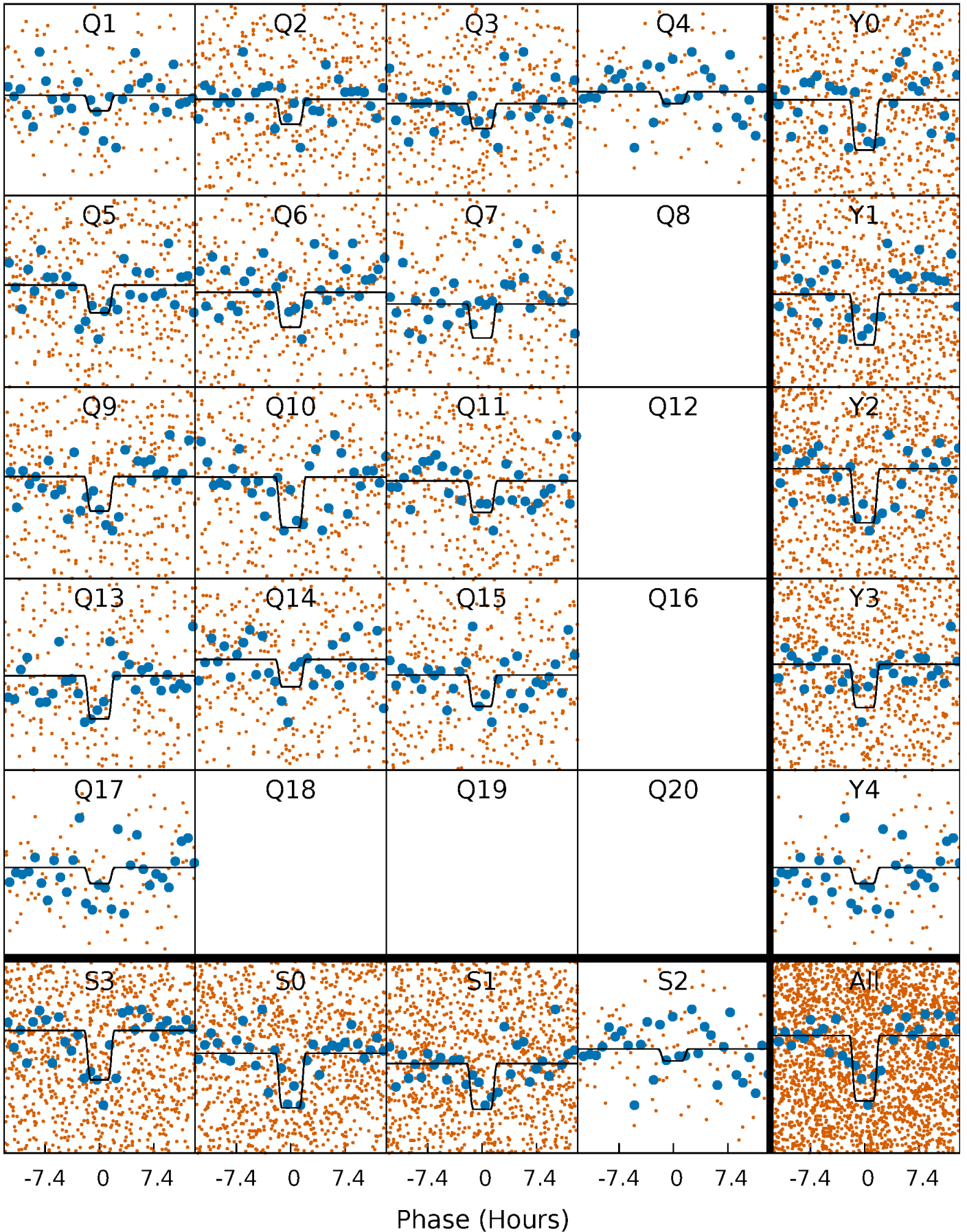
# DV Quarter-Phased Transit Curves

TCE 011392362-01 P= 9.910613 Days  $T_0=135.919848$  (BKJD)



# Alt. Detrend Quarter-Phased Transit Curves

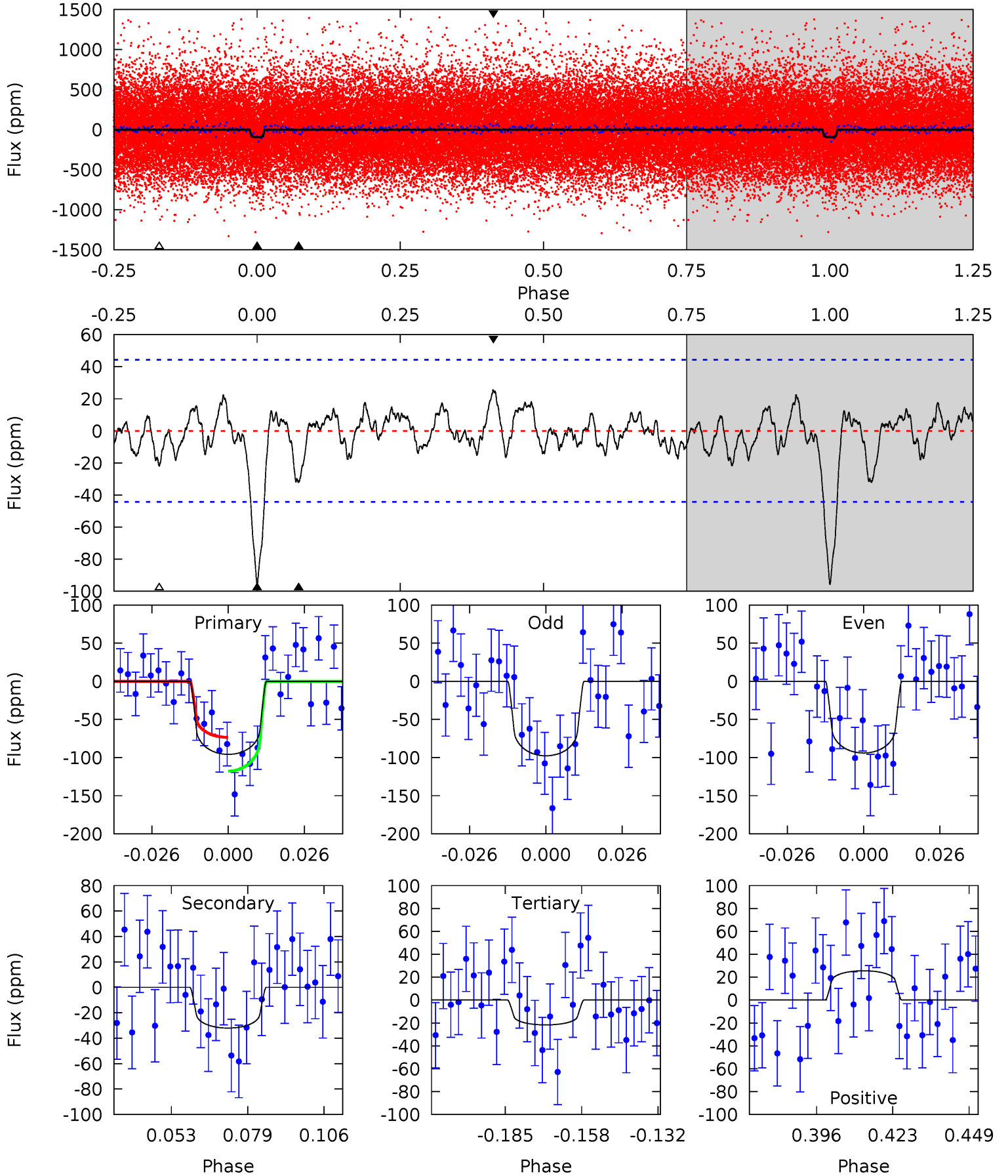
TCE 011392362-01   P= 9.910640 Days    $T_0=135.932394$  (BKJD)



# DV Model-Shift Uniqueness Test

011392362-01, P = 9.910613 Days, E = 126.009235 Days

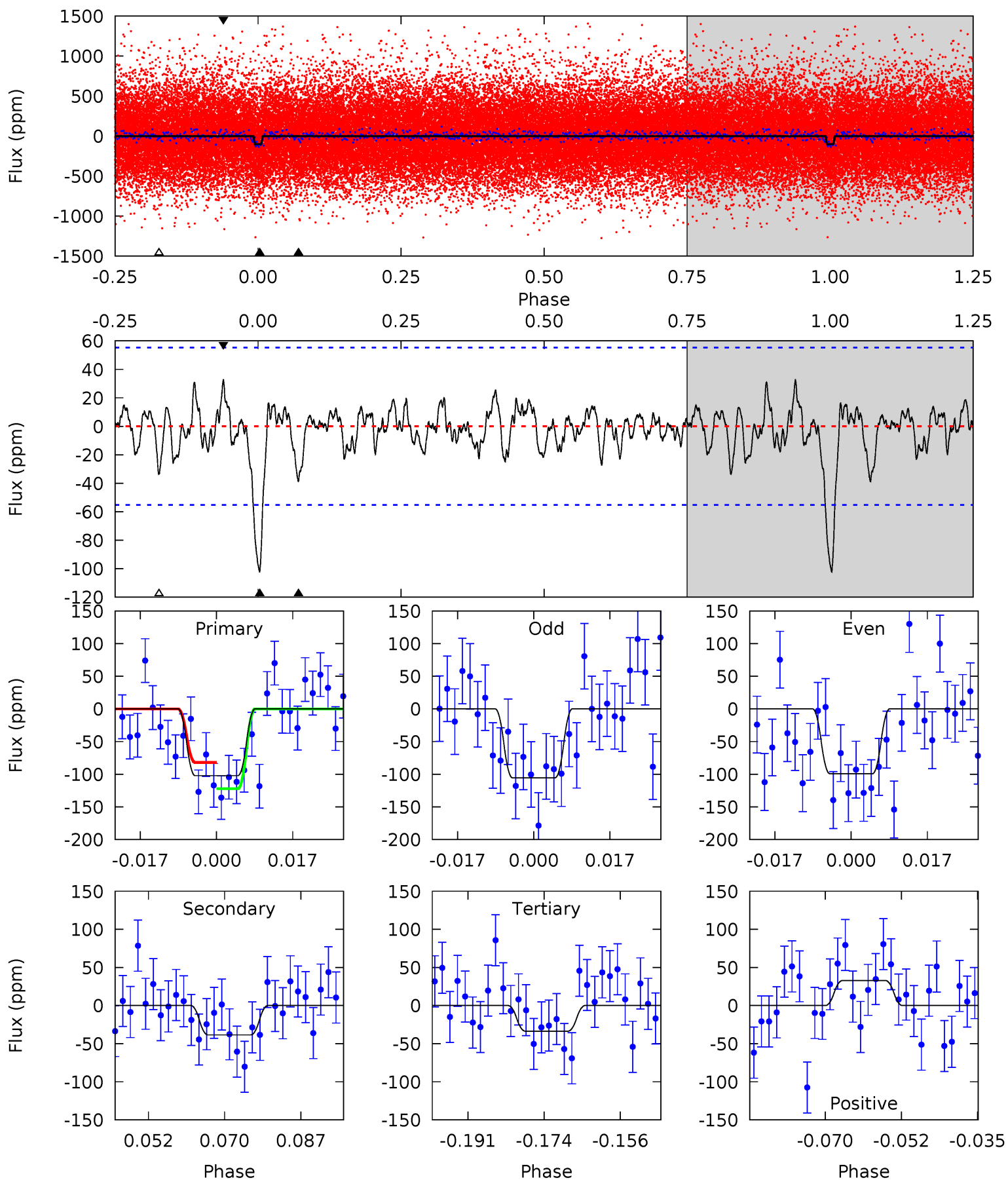
Pri	Sec	Ter	Pos	FA <sub>1</sub>	FA <sub>2</sub>	F <sub>Red</sub>	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.5	3.50	2.37	2.79	4.84	2.22	1.00	8.08	7.66	1.13	0.71	0.20	1.00	0.21	2.42



# Alt Model-Shift Uniqueness Test

011392362-01, P = 9.910640 Days, E = 126.021754 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
9.10	3.43	2.99	2.93	4.92	2.38	0.97	6.12	6.17	0.45	0.51	0.28	0.88	0.24	1.79



### Stellar Parameters For KIC 011392362

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	$6214^{+152}_{-239}$	$4.442^{+0.050}_{-0.200}$	$0.070^{+0.250}_{-0.300}$	$1.076^{+0.313}_{-0.112}$	$1.169^{+0.141}_{-0.157}$	$1.321^{+0.354}_{-0.674}$
	+2%/-4%	+1%/-5%	+357%/-429%	+29%/-10%	+12%/-13%	+27%/-51%
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 011392362-01 / KOI 8053.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	$A_{\text{obs}}$
DV	$-32 \pm 9$	$1.27^{+0.76}_{-0.67}$	$1314^{+86}_{-63}$	$4660^{+1823}_{-782}$	$91^{+300}_{-56}$
Alt.	$-39 \pm 11$	$1.46^{+0.78}_{-0.78}$	$1309^{+88}_{-64}$	$4637^{+1818}_{-772}$	$90^{+299}_{-57}$

$T_{\text{max}}$  = Theoretical Maximum Planetary Temperature

$T_{\text{obs}}$  = Observed Planetary Temperature (Assuming A=0.3)

$A_{\text{obs}}$  = Observed Albedo (Assuming T=0)

If a secondary eclipse is present, the system is likely an EB if  $T_{\text{obs}} \gg T_{\text{max}}$  AND  $A_{\text{obs}} \gg 1.0$



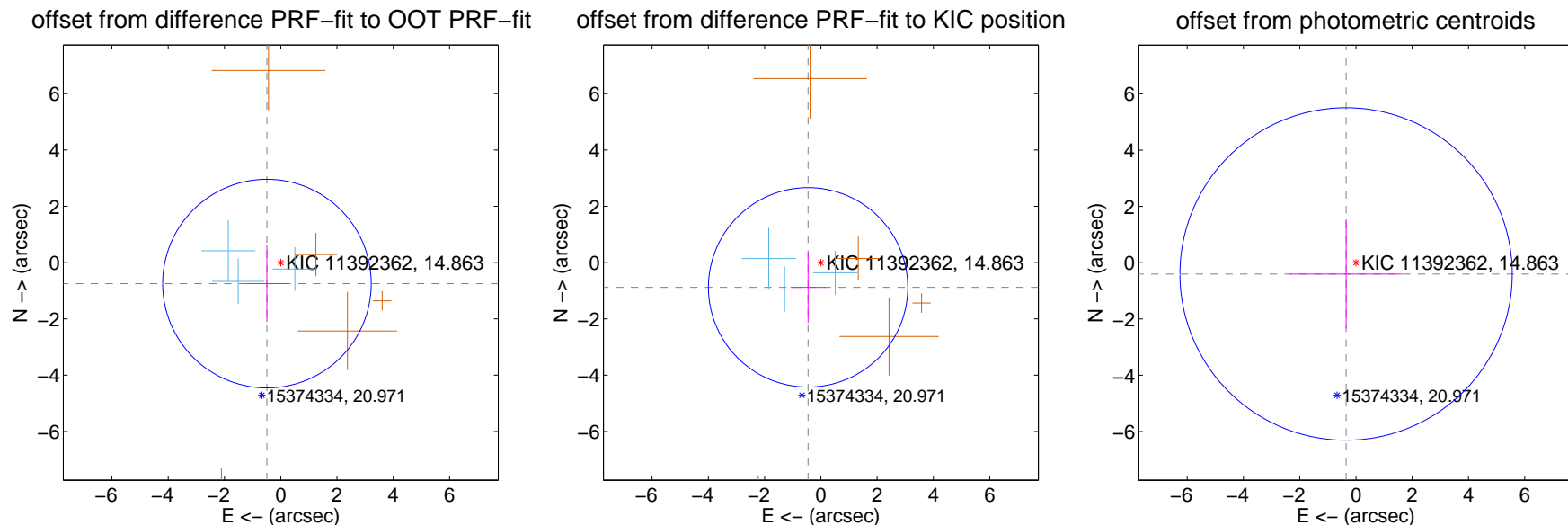
## DV Centroid Data

Supplemental centroid analysis for 011392362-01. Kepler magnitude: 14.86. Transit SNR 7.86

There are 3 quarters with good PRF difference image offsets

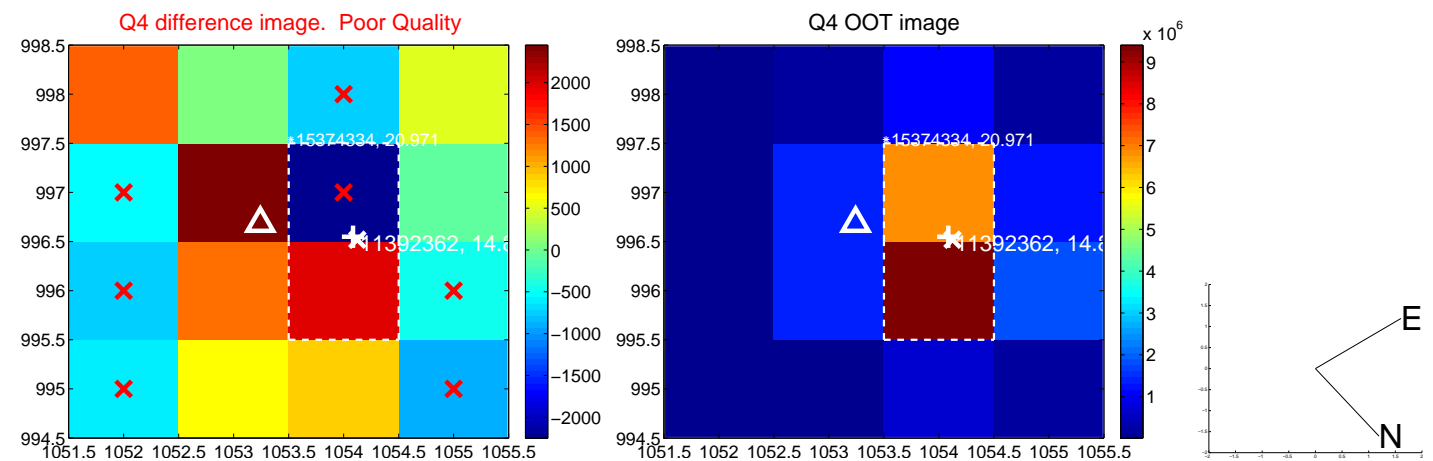
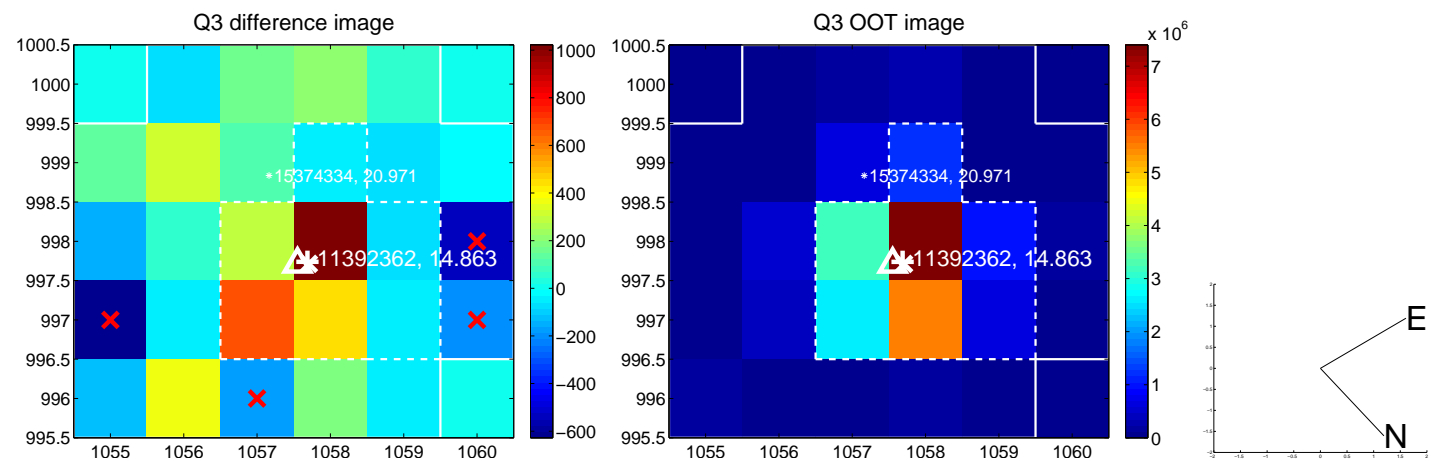
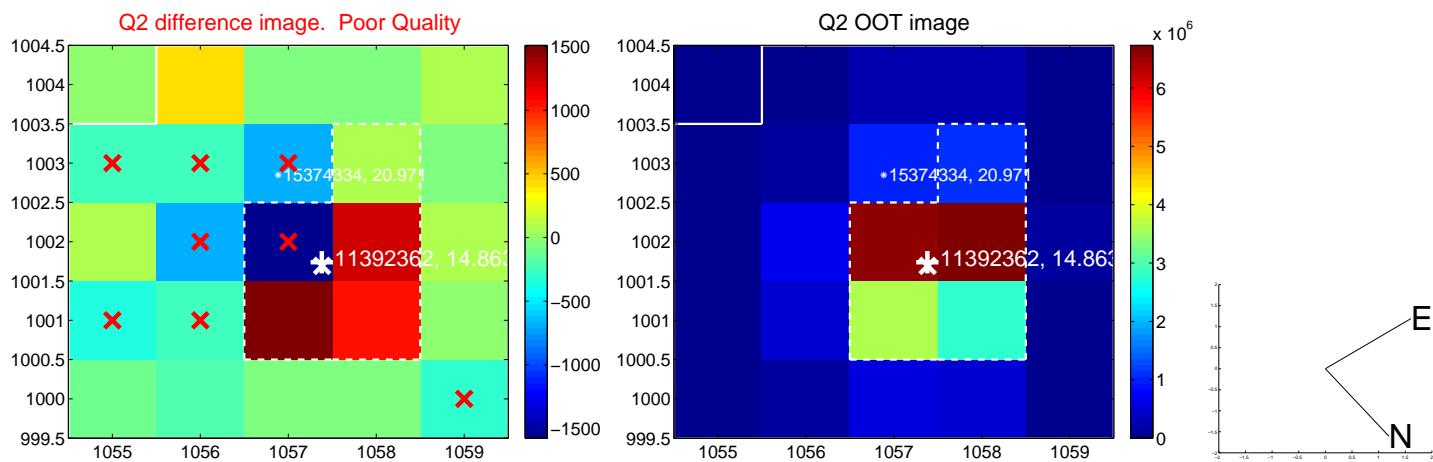
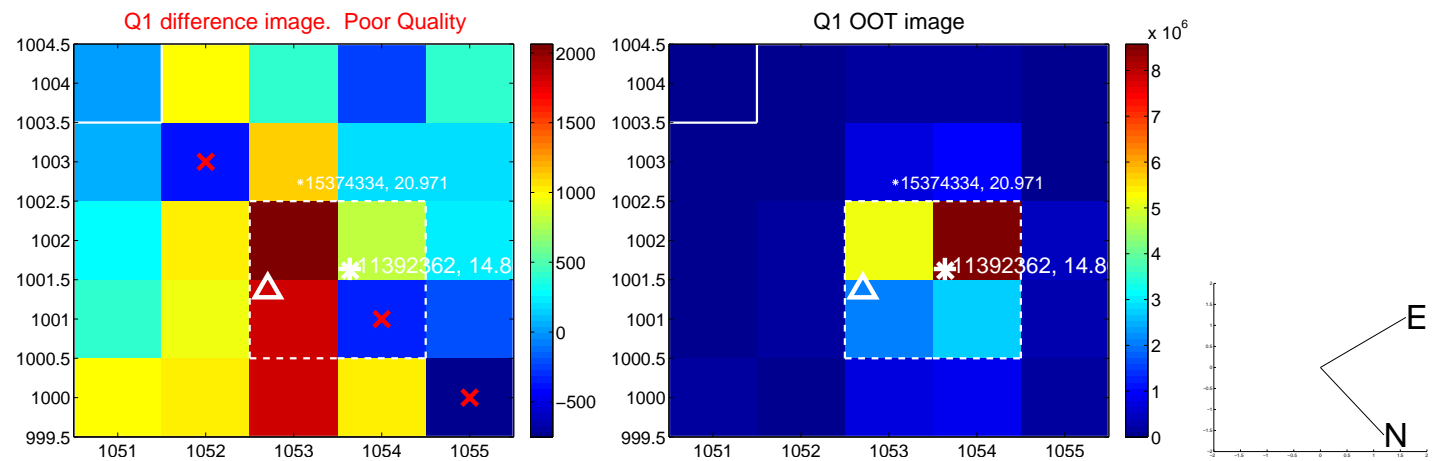
The direct PRF centroid is offset from the target star catalog position by about 0.29 arcsec

	Distance in arcsec	Distance / $\sigma$	$\Delta$ RA	$\Delta$ Dec
PRF-fit source offset from OOT	$0.894 \pm 1.235$	0.72	$0.491 \pm 0.735$	$-0.747 \pm 1.362$
PRF-fit source offset from KIC position	$0.990 \pm 1.181$	0.84	$0.454 \pm 0.629$	$-0.880 \pm 1.260$
photometric centroid source offset	$0.53 \pm 1.97$	0.27	$0.35 \pm 2.00$	$-0.40 \pm 1.94$

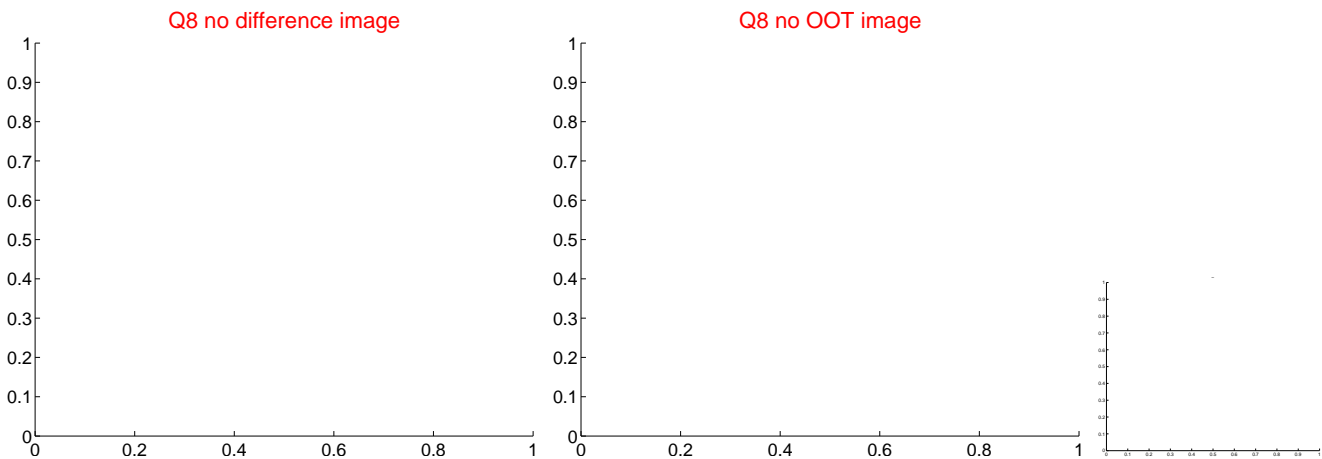
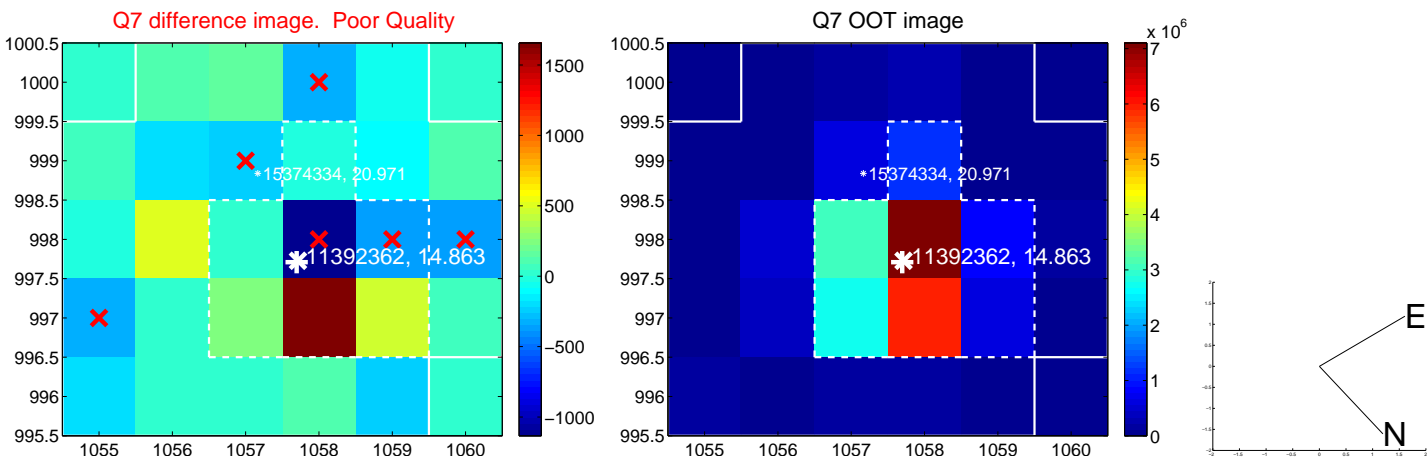
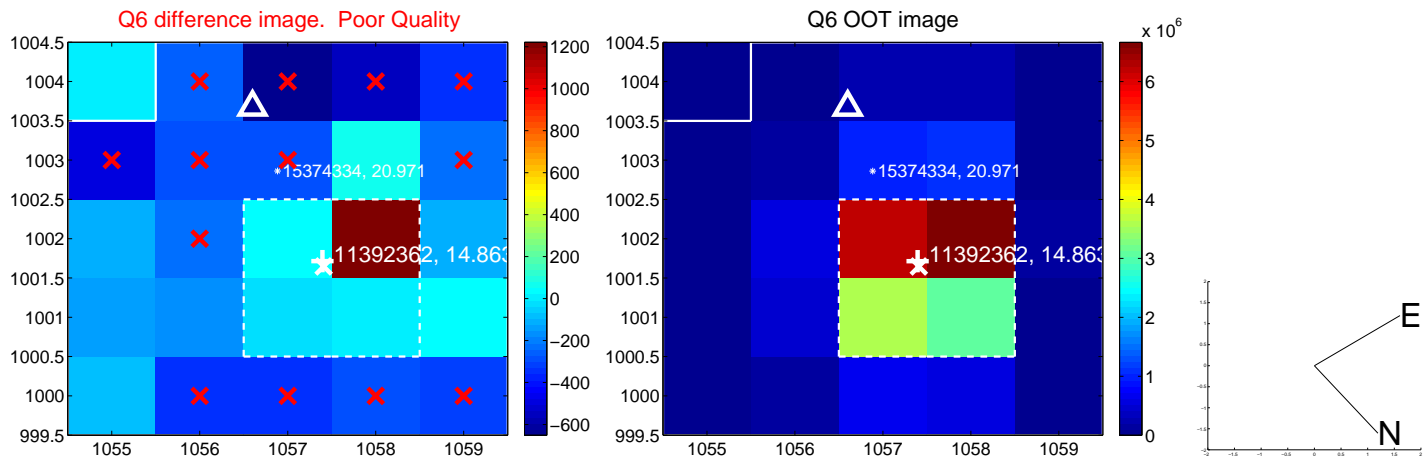
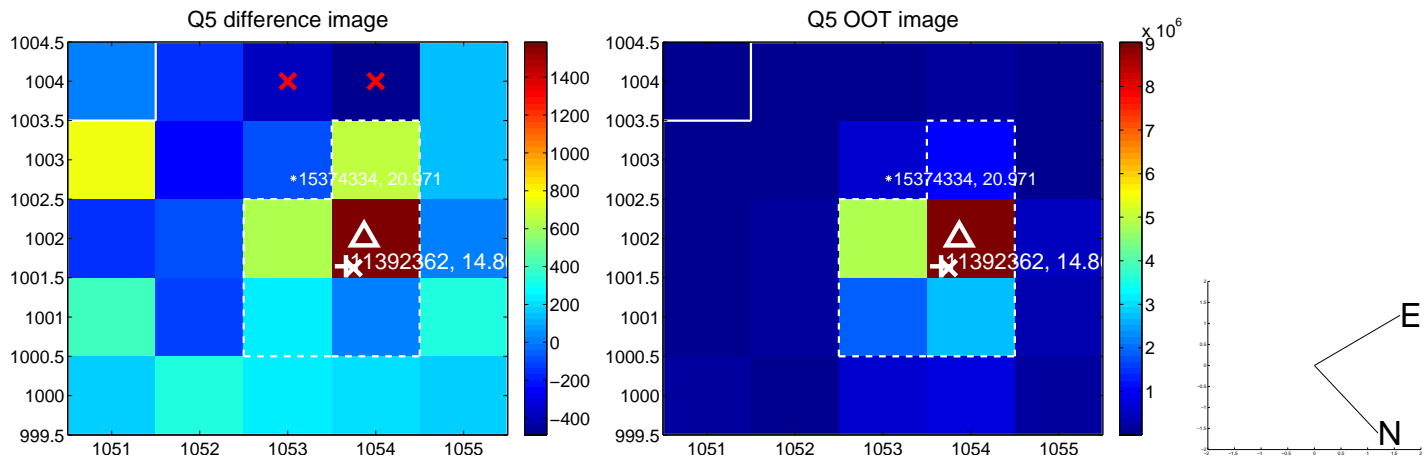


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- $\sigma$  uncertainty. Blue circle: three-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

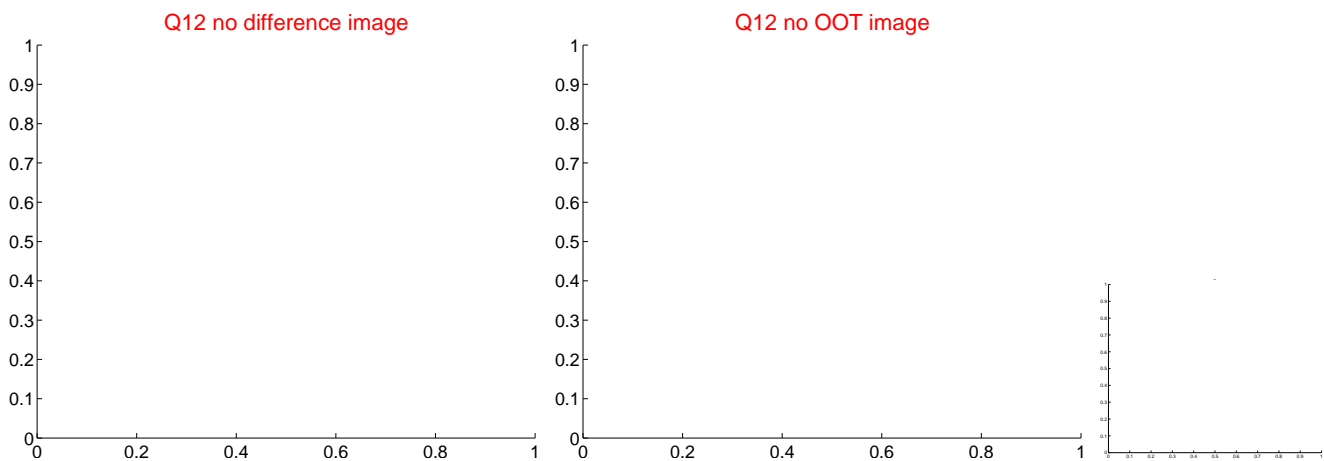
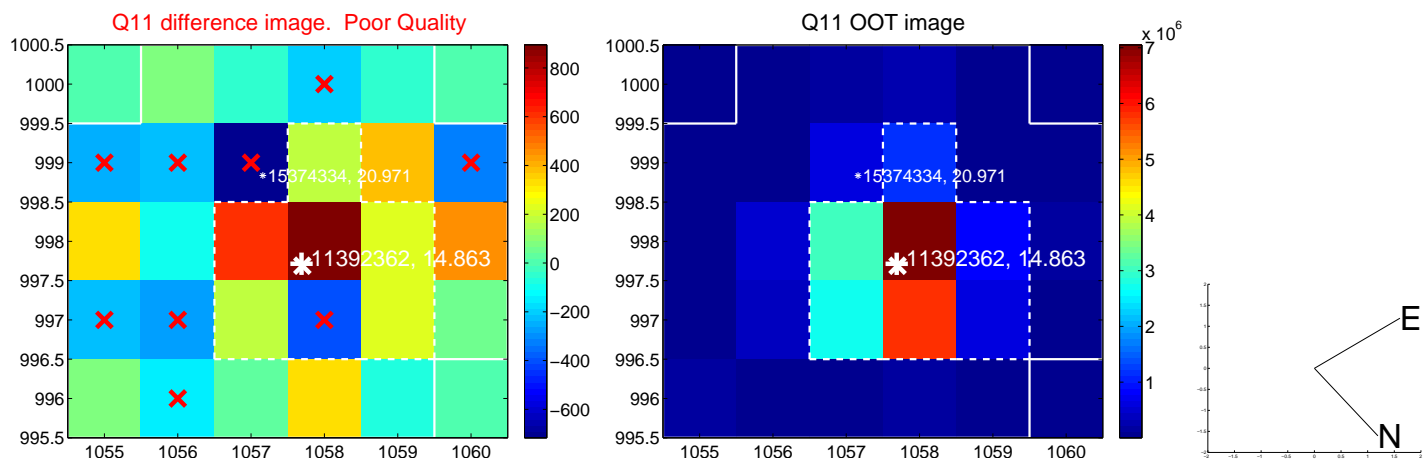
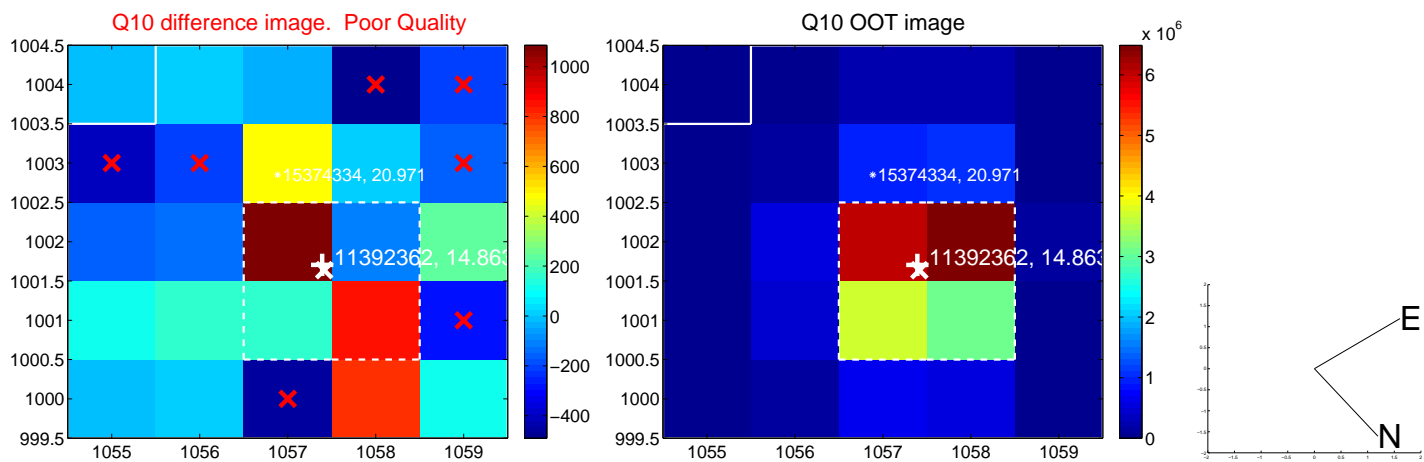
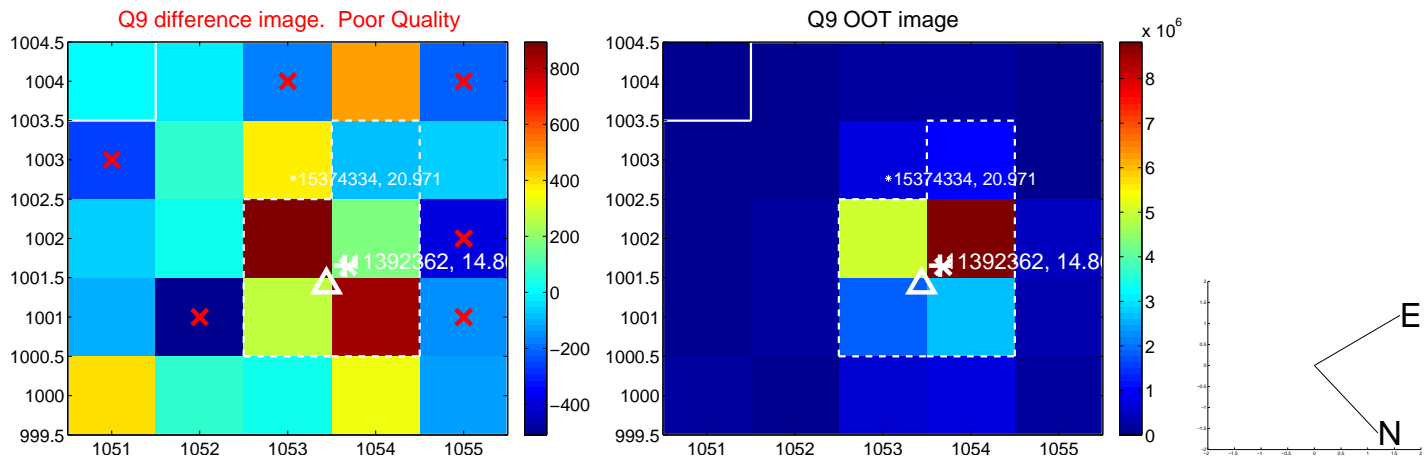
white  $\times$ : KIC target position; +: OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.



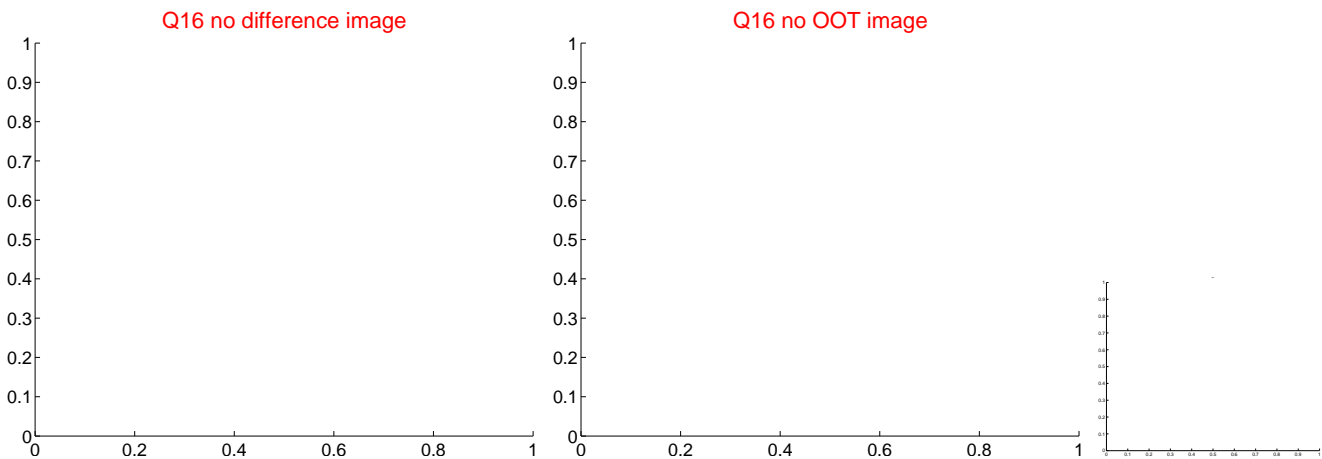
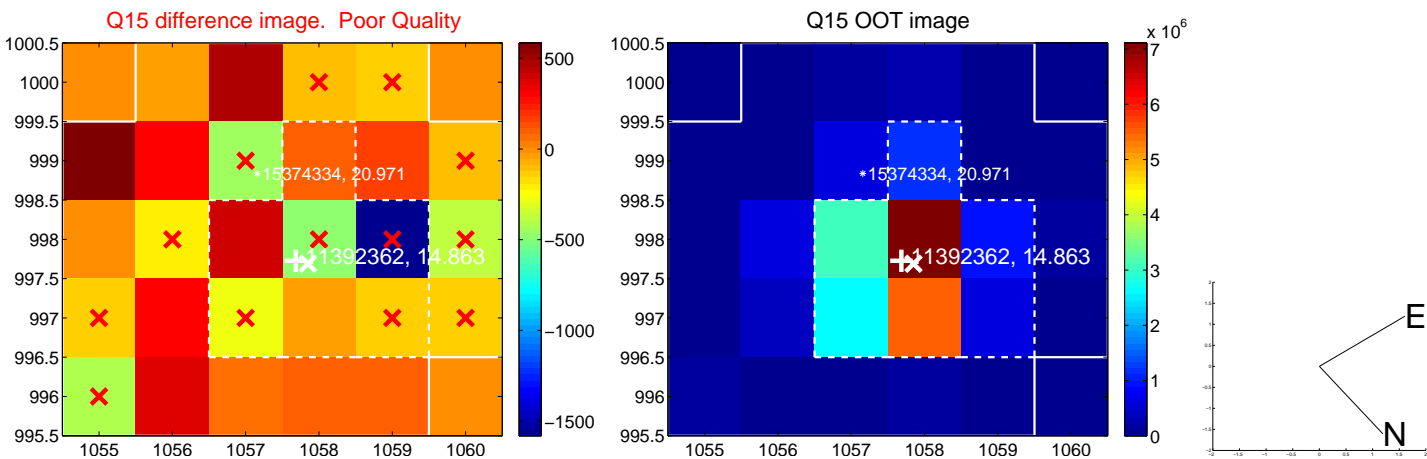
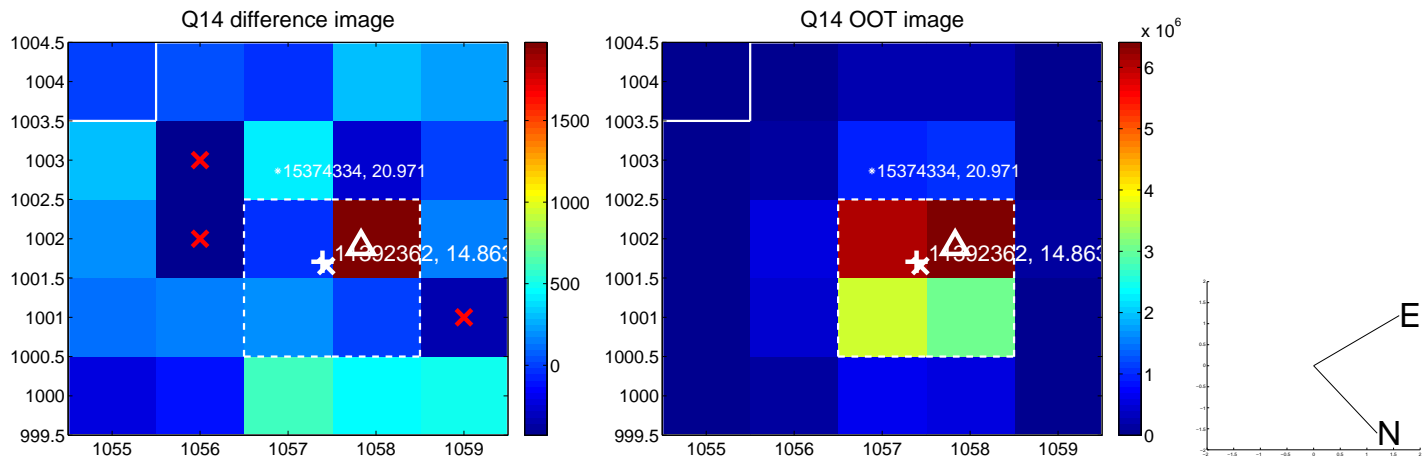
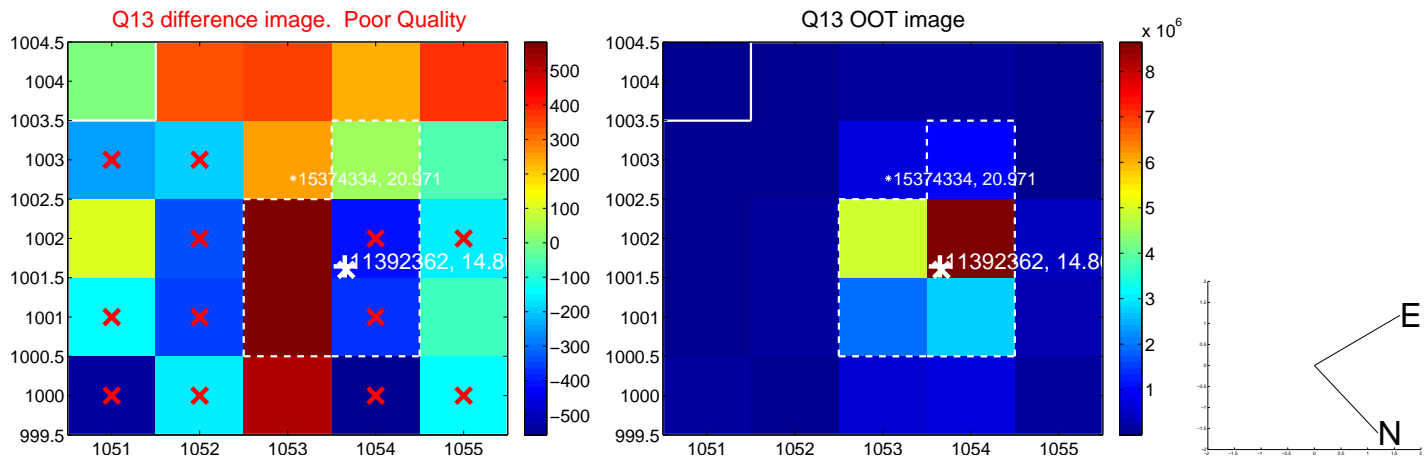
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UKIRT Image

Declination

