

# KIC 011713924

## 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)	$R_p$ ( $R_{\oplus}$ )	$S_p$ ( $S_{\oplus}$ )
011713924-01	OBS	No	3.345252	134.311520	8.0	28.561	9.0	9.8	3.71	7550	1.15	12481.93

## Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011713924-01	OBS	FP	0.00	1	0	0	0	LPP_DV—CENT_FEW_MEAS

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

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

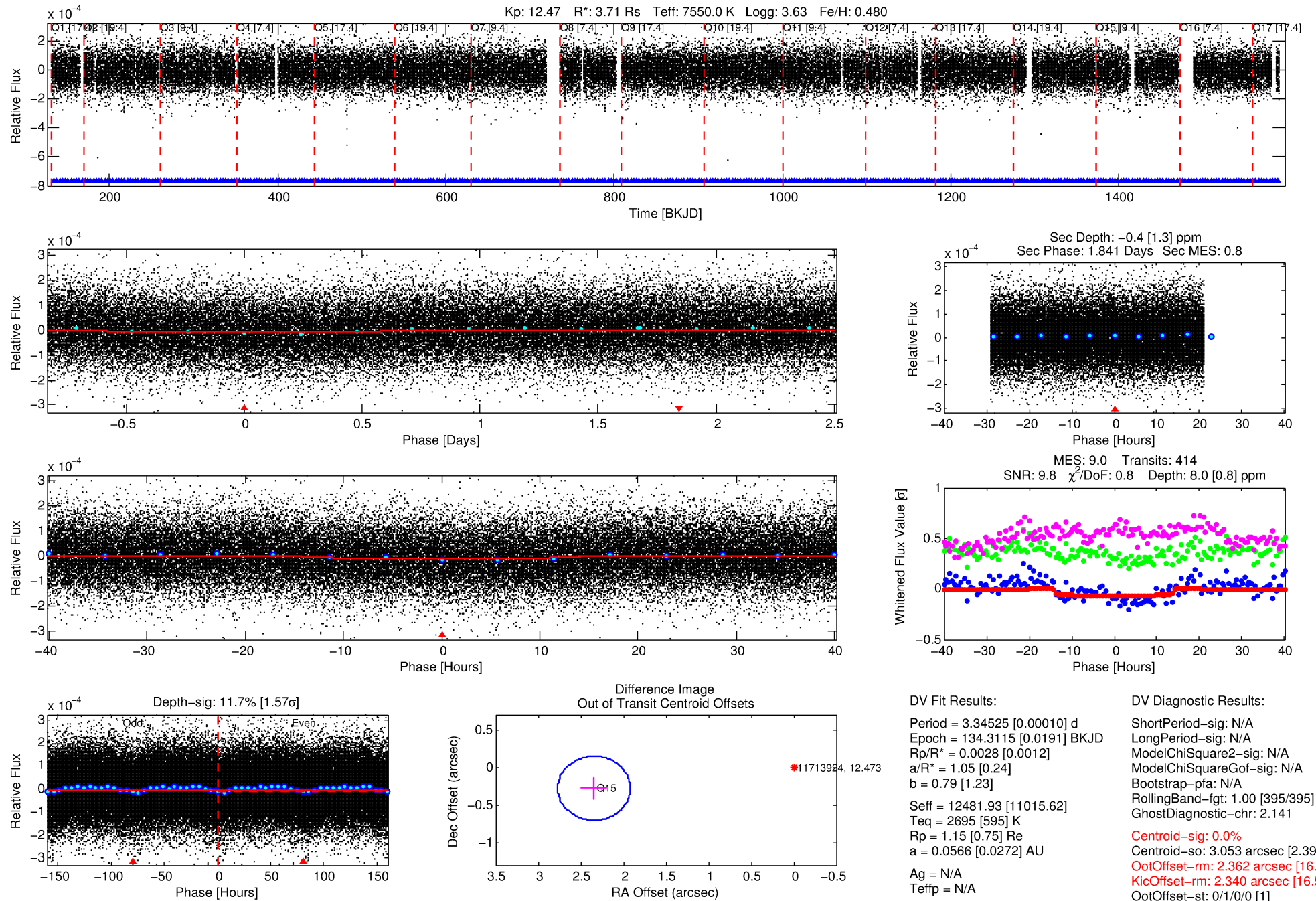
See [http://exoplanetarchive.ipac.caltech.edu/docs/API\\_kepcandidate\\_columns.html#proj\\_disp\\_col](http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col) for comment definitions.

## Ephemeris Match Information For 011713924-01

No Significant Match Found

# DV One-Page Summary

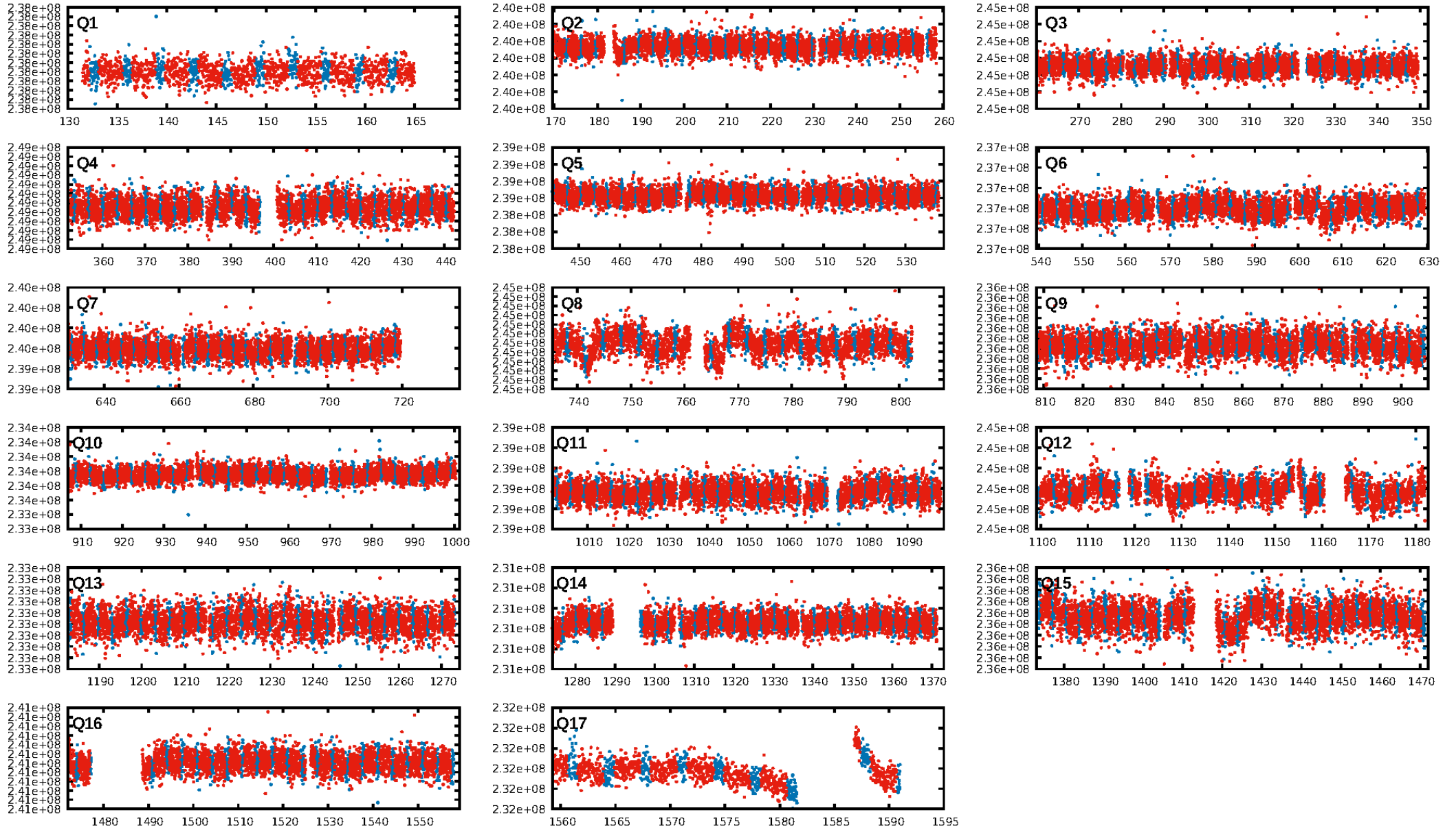
KIC: 11713924 Candidate: 1 of 1 Period: 3.345 d



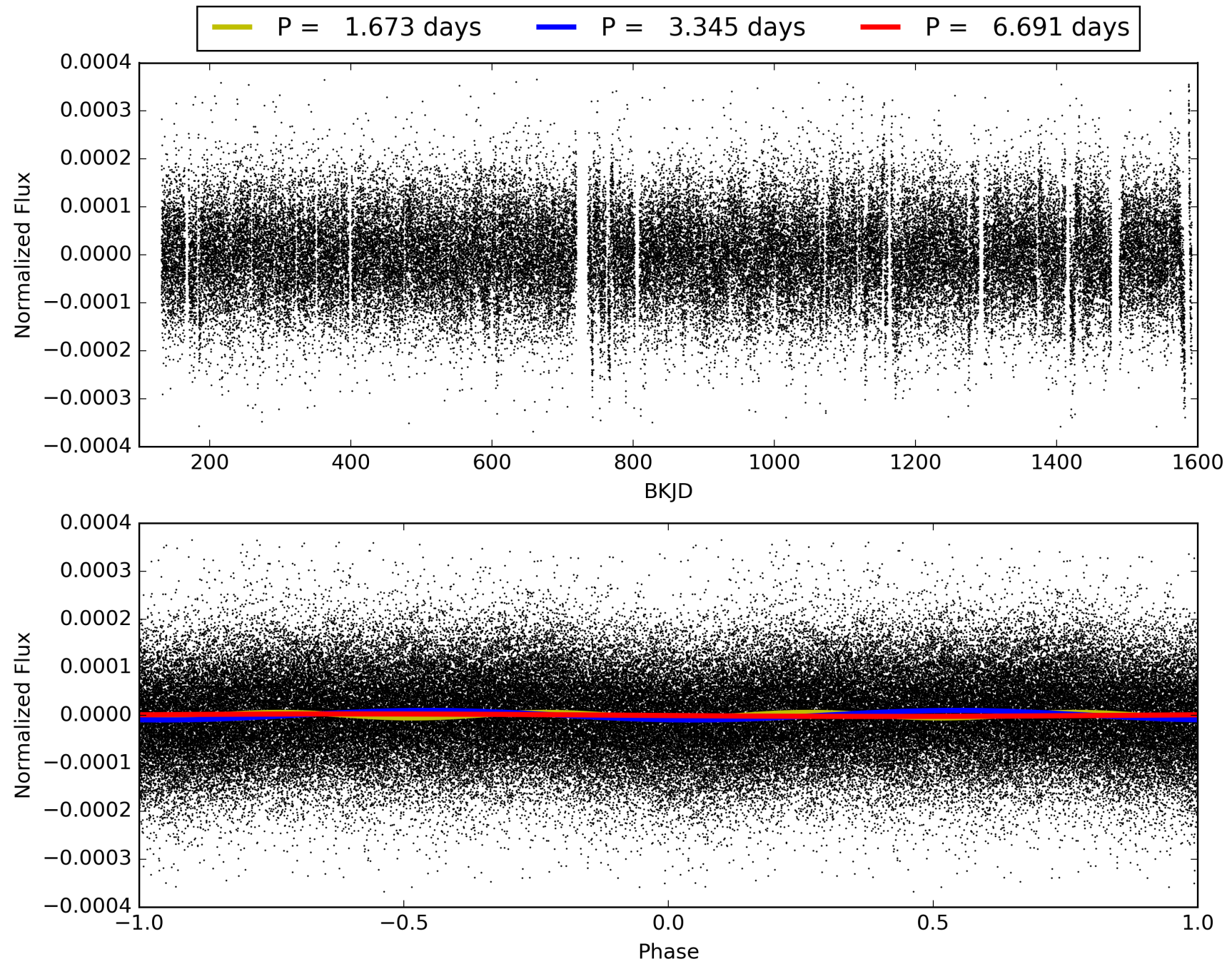
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 20:50:42 Z

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

# TCE 011713924-01, PDC Light Curves



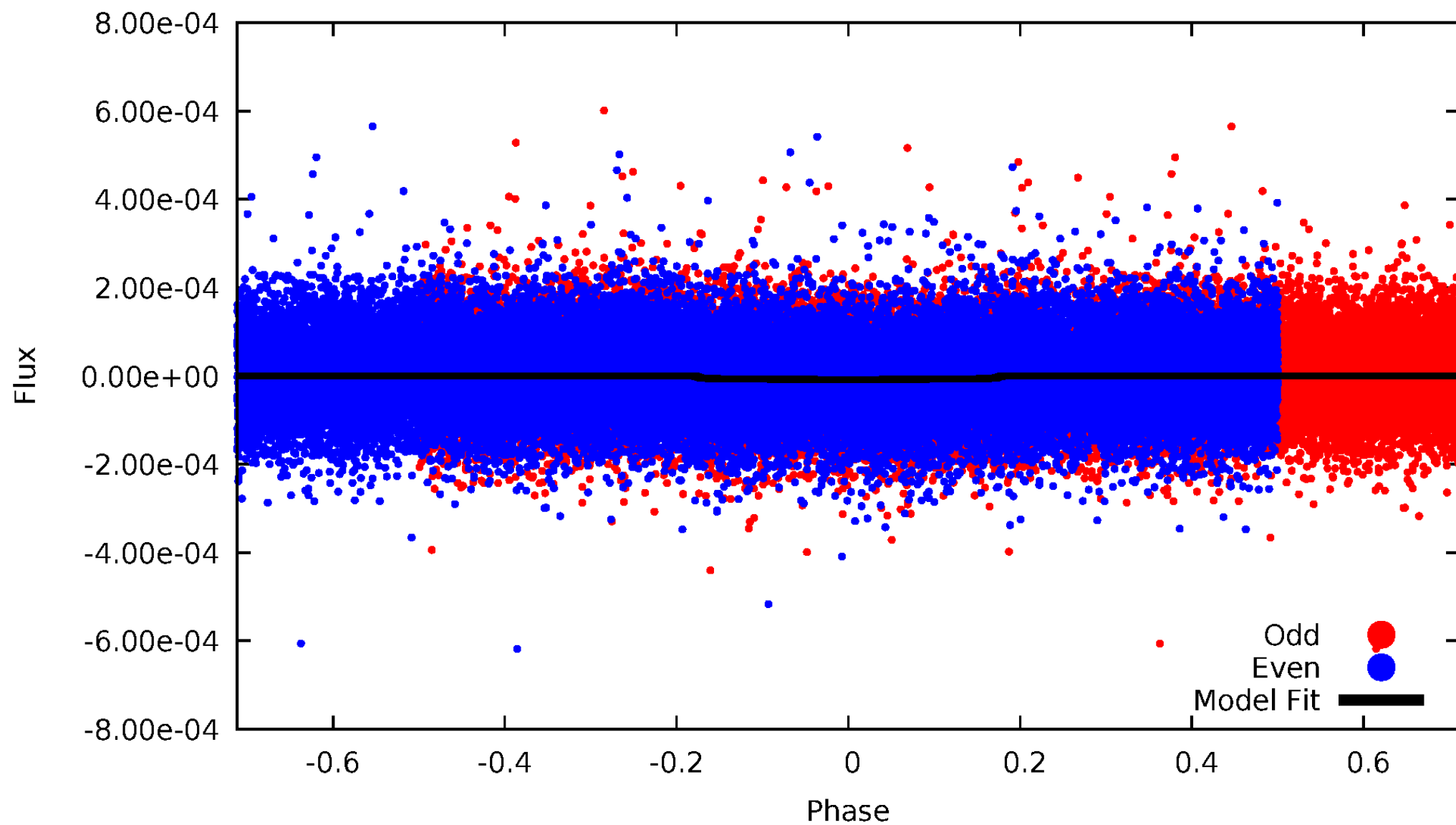
TCE 011713924-01





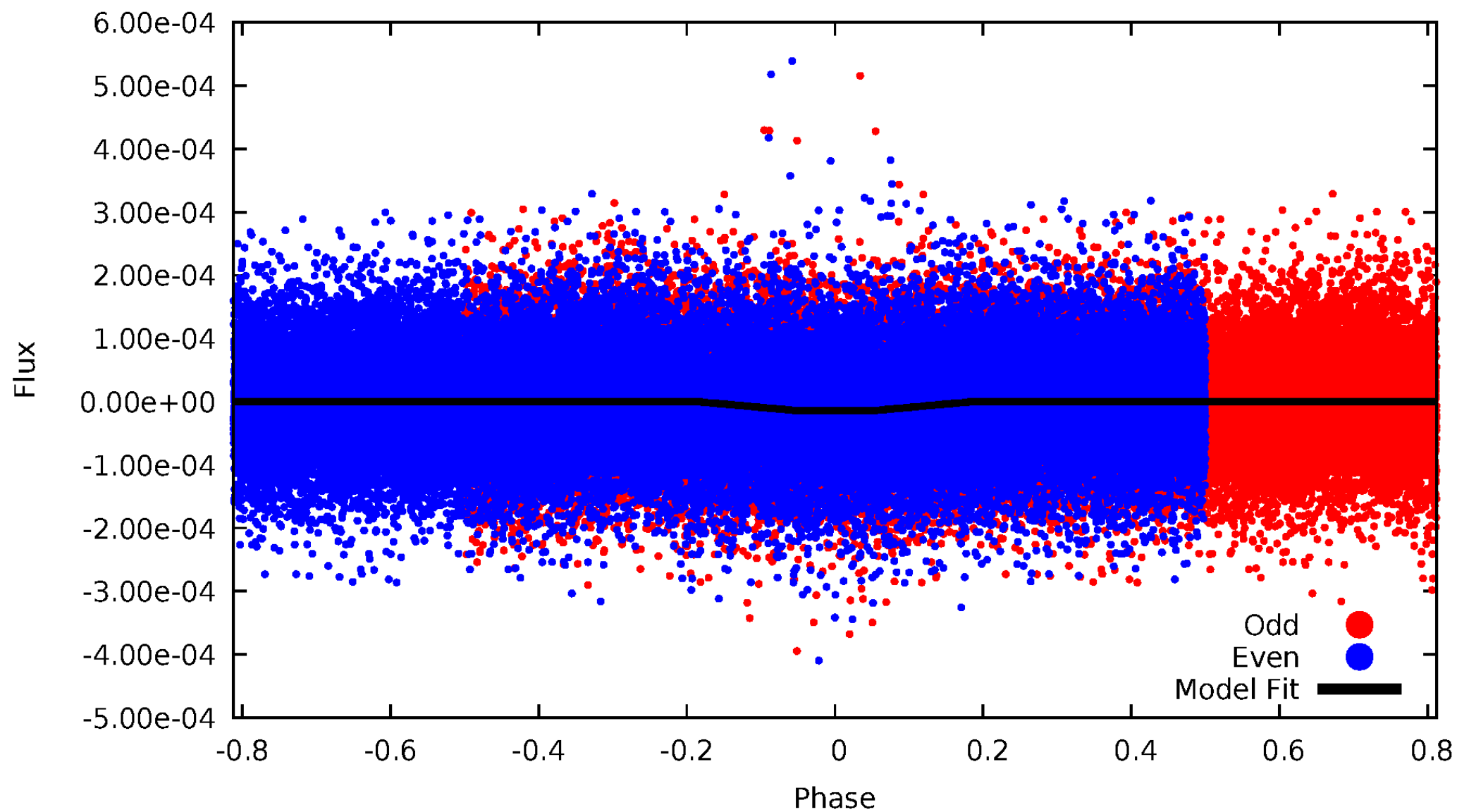
# DV Odd/Even

TCE 011713924-01



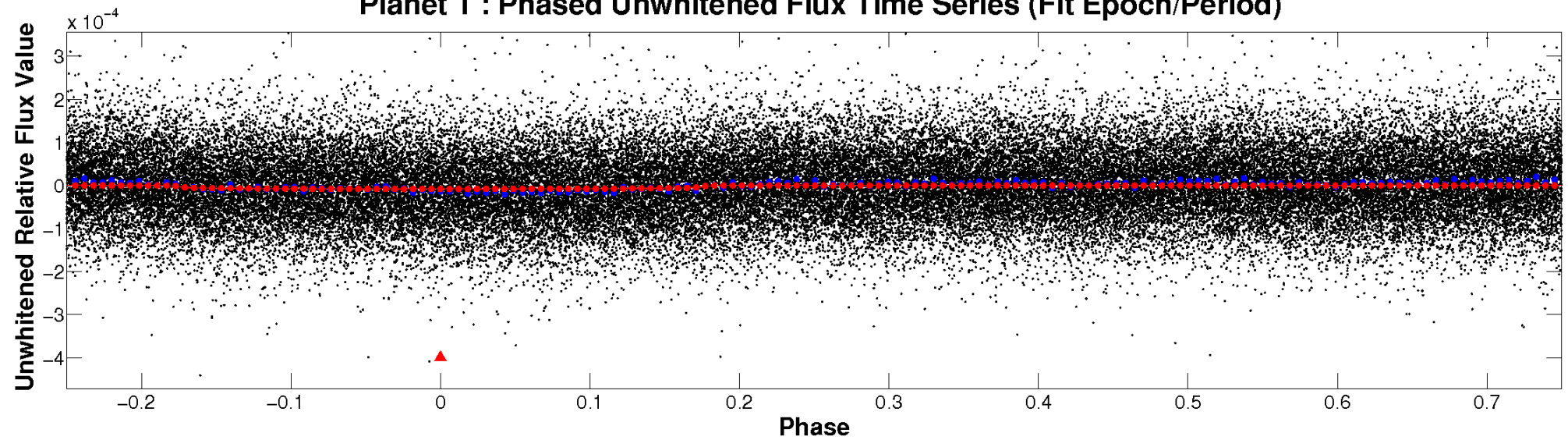
# ALT Odd/Even

TCE 011713924-01

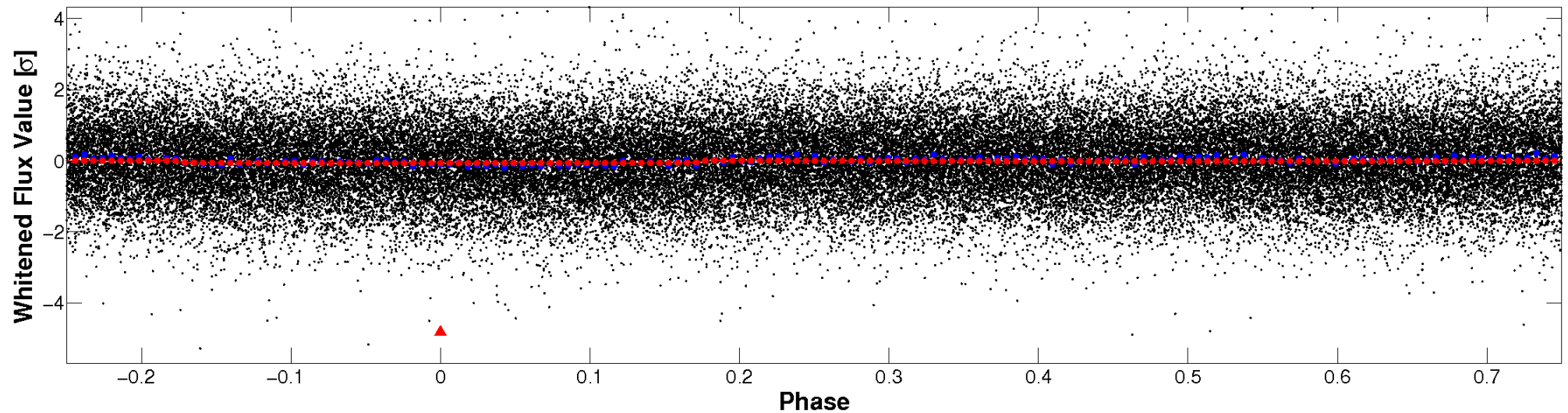


# Non-Whitened Vs. Whitened Light Curve

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

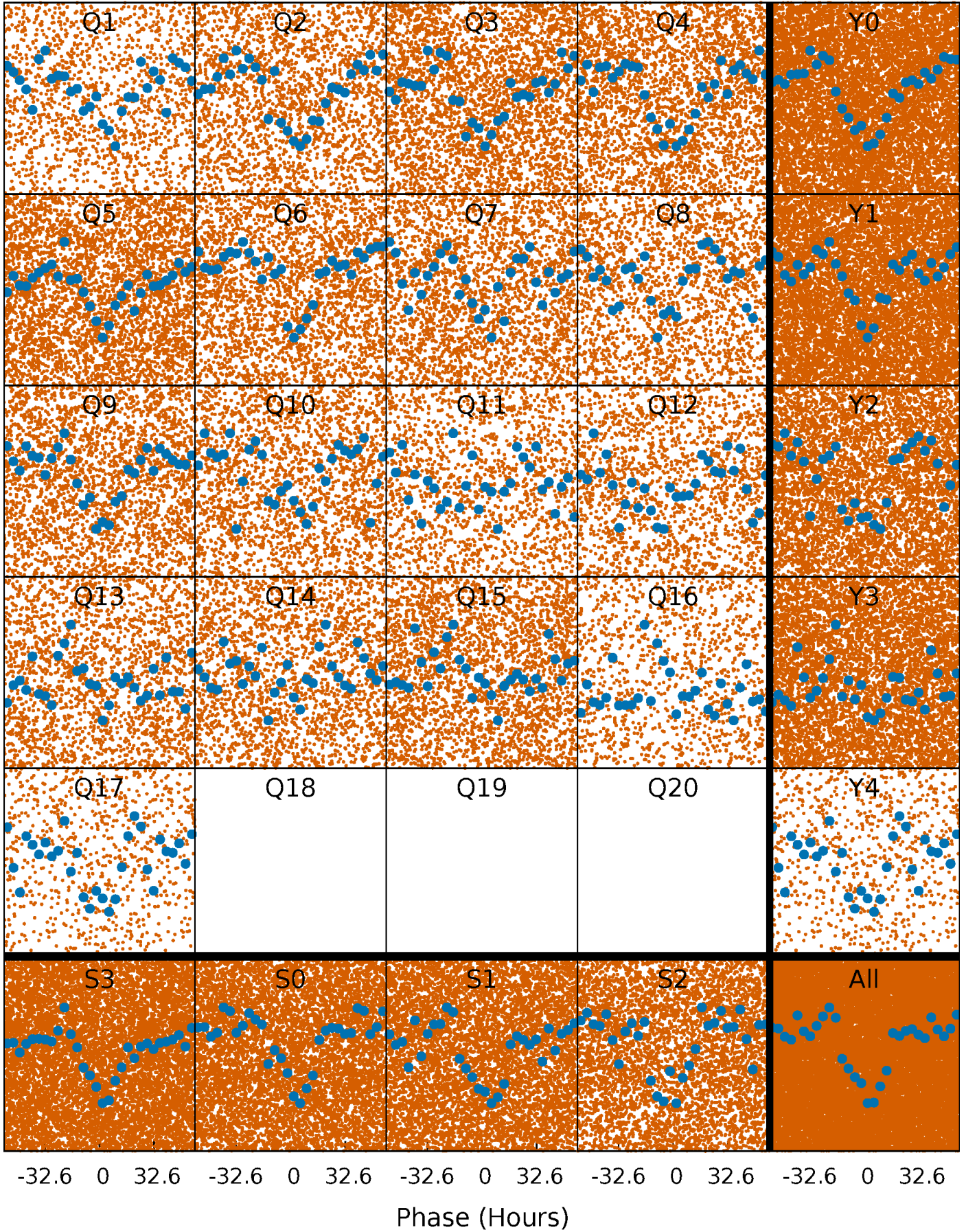


**Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)**



# PDC Quarter-Phased Transit Curves

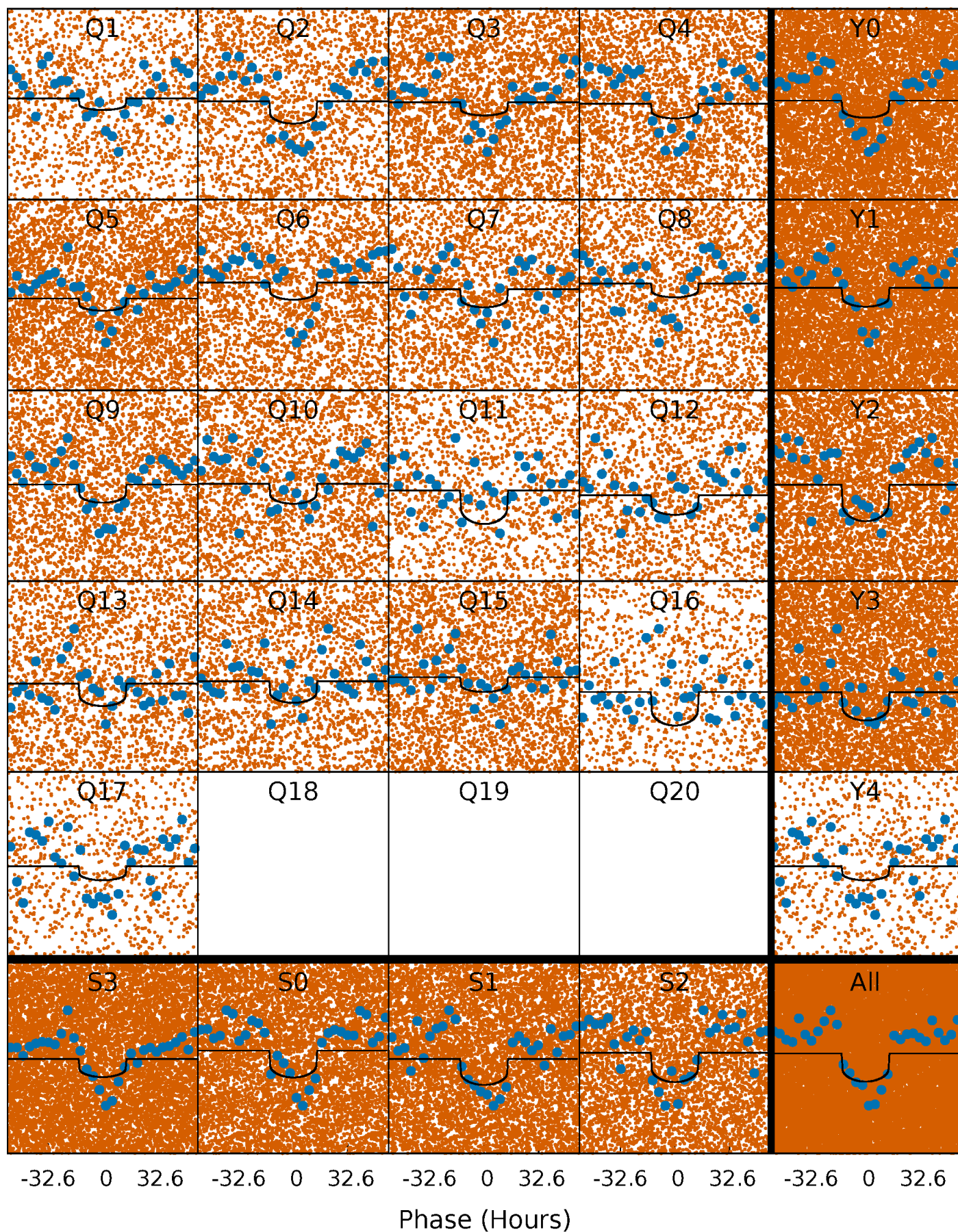
TCE 011713924-01 P= 3.345252 Days  $T_0=134.311520$  (BKJD)





# DV Quarter-Phased Transit Curves

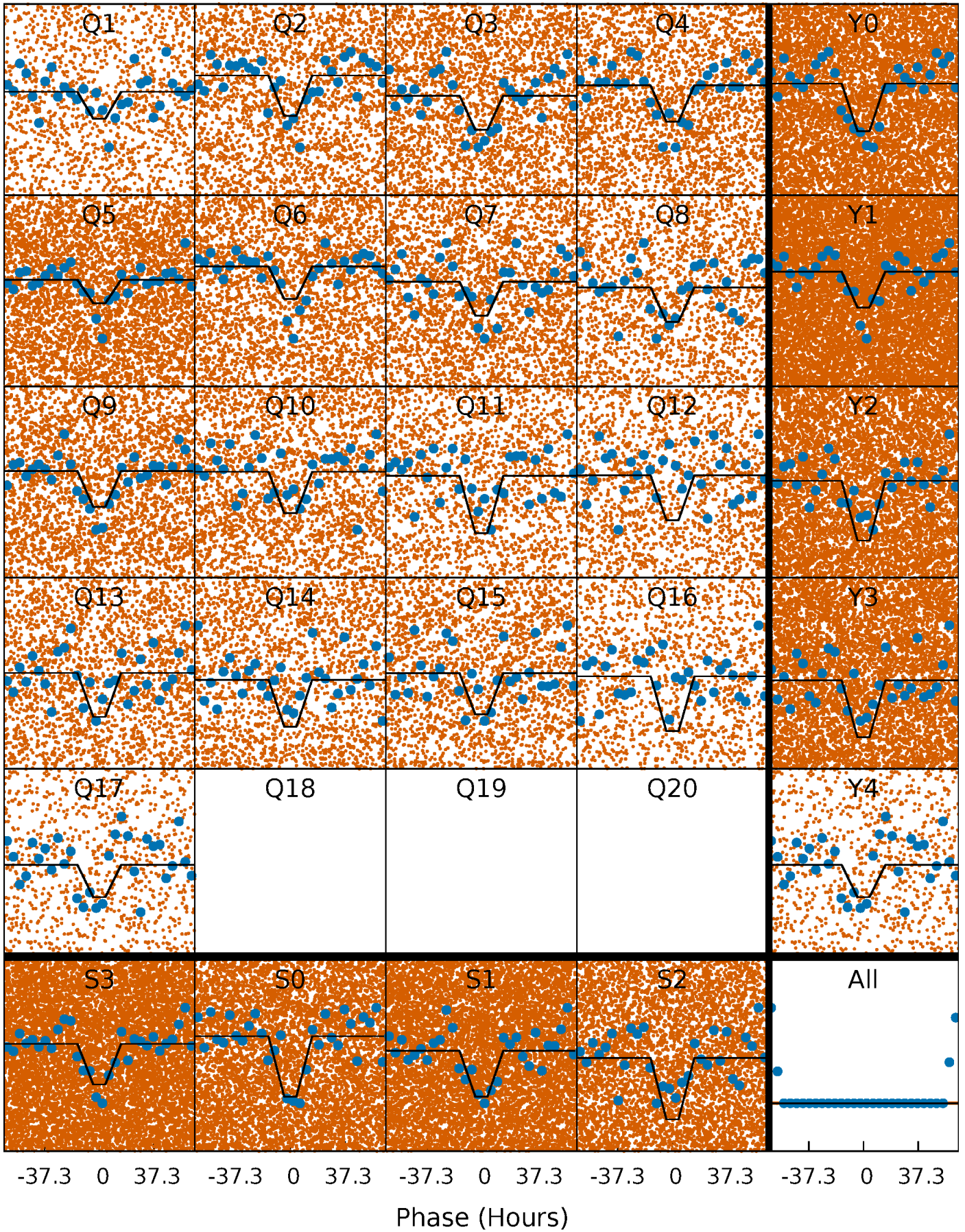
TCE 011713924-01 P= 3.345252 Days  $T_0=134.311520$  (BKJD)





# Alt. Detrend Quarter-Phased Transit Curves

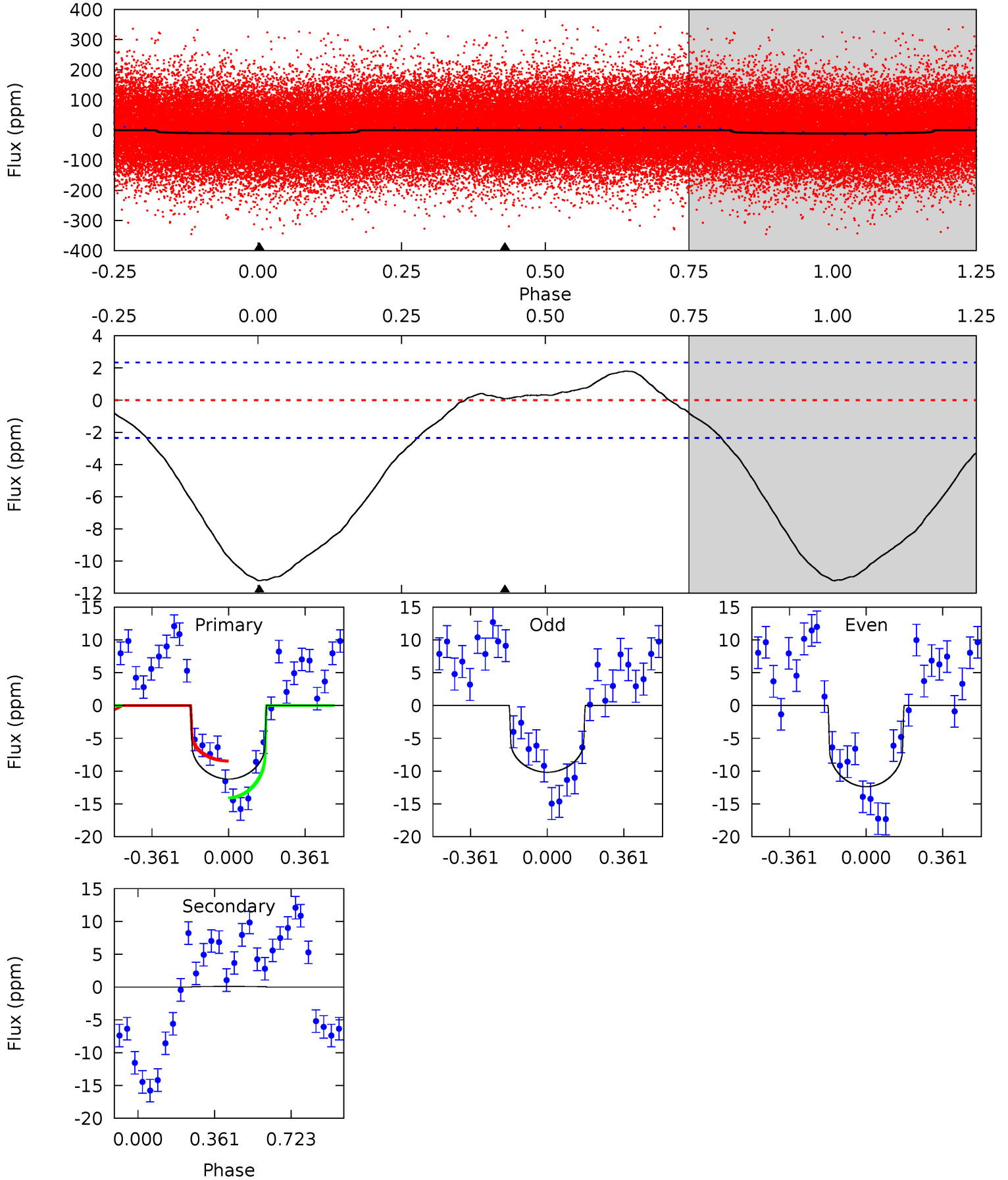
TCE 011713924-01 P= 3.345787 Days  $T_0=134.303685$  (BKJD)



# DV Model-Shift Uniqueness Test

011713924-01, P = 3.345252 Days, E = 130.966268 Days

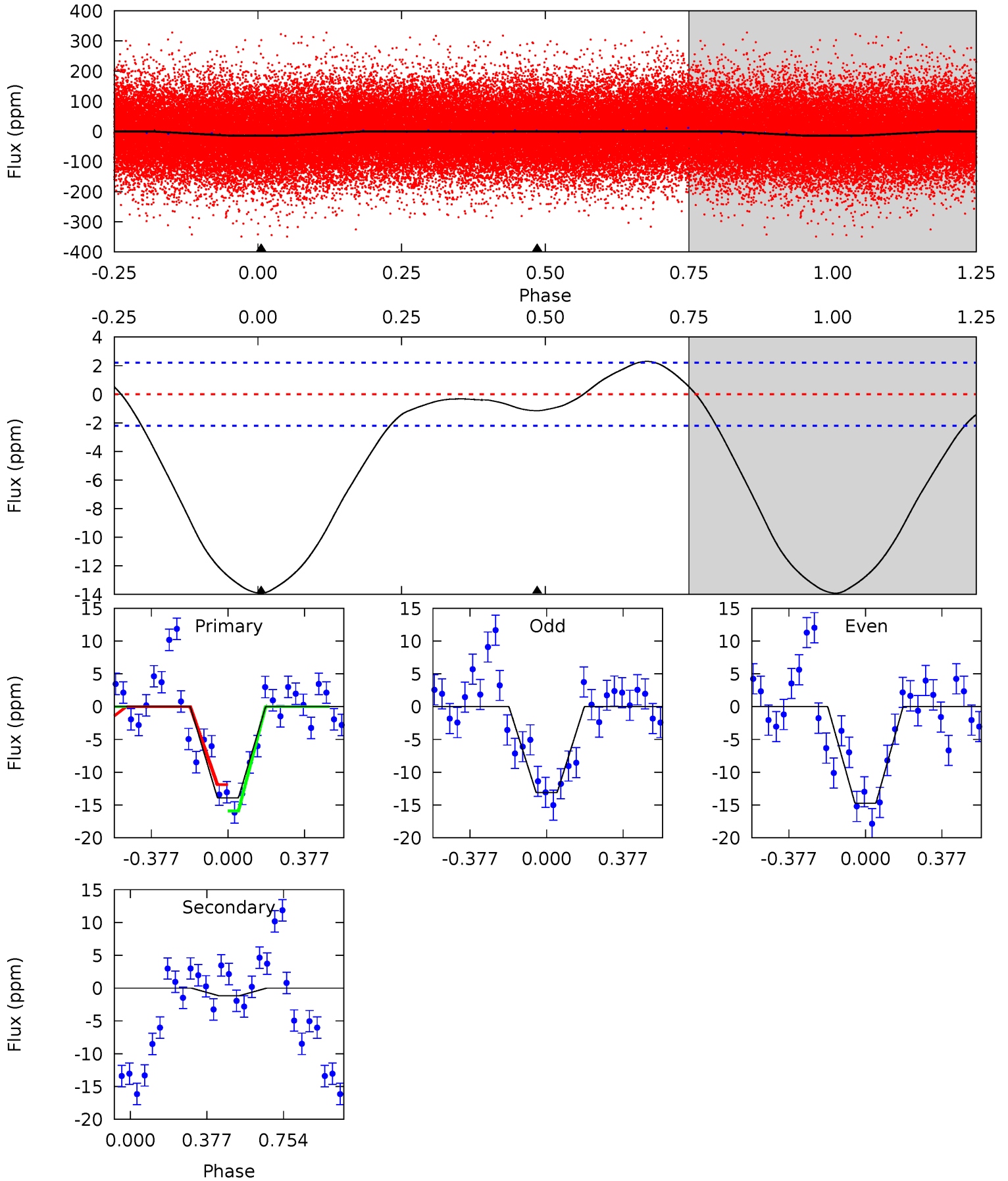
Pri	Sec	Ter	Pos	FA <sub>1</sub>	FA <sub>2</sub>	F <sub>Red</sub>	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
20.5	-0.17	0	0	4.29	0.91	1.46	20.5	20.5	-0.17	-0.17	2.03	1.01	0.14	5.27



# Alt Model-Shift Uniqueness Test

011713924-01, P = 3.345787 Days, E = 130.957898 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
27.0	2.24	0	0	4.28	0.88	2.40	27.0	27.0	2.24	2.24	1.57	1.13	0.14	3.86





### Stellar Parameters For KIC 011713924

	$T_{\text{eff}}(K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	$7550^{+417}_{-775}$	$3.635^{+0.464}_{-0.116}$	$0.480^{+0.050}_{-0.150}$	$3.709^{+0.765}_{-1.785}$	$2.164^{+0.285}_{-0.488}$	$0.060^{+0.272}_{-0.021}$
	+6%/-10%	+13%/-3%	+10%/-31%	+21%/-48%	+13%/-23%	+456%/-34%
Source	SPE68	SPE68	SPE68	DSEP		

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology  
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

### Secondary Eclipse Parameters for KIC 011713924-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	$A_{\text{obs}}$
DV	$0 \pm 1$	$1.06^{+0.56}_{-0.51}$	$3599^{+383}_{-520}$	$-3491^{+7114}_{-1052}$	$-0.080^{+0.867}_{-1.382}$
Alt.	$-1 \pm 1$	$1.36^{+0.56}_{-0.52}$	$3564^{+408}_{-517}$	$3865^{+908}_{-891}$	$1.022^{+1.851}_{-0.601}$

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

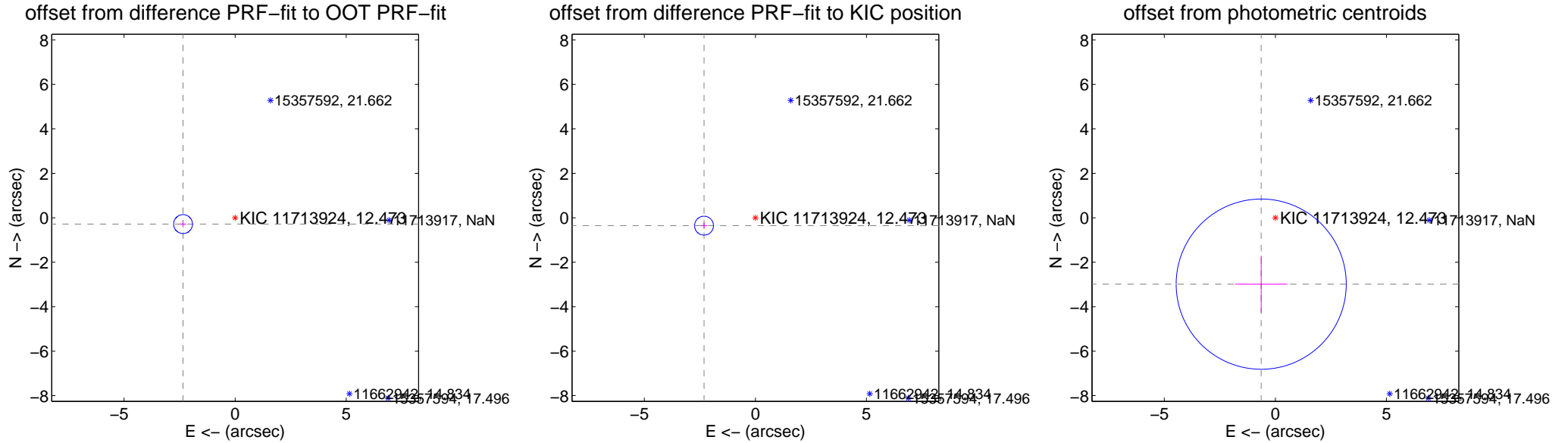
## DV Centroid Data

Supplemental centroid analysis for 011713924-01. Kepler magnitude: 12.47. Transit SNR 9.83

There are 1 quarters with good PRF difference image offsets

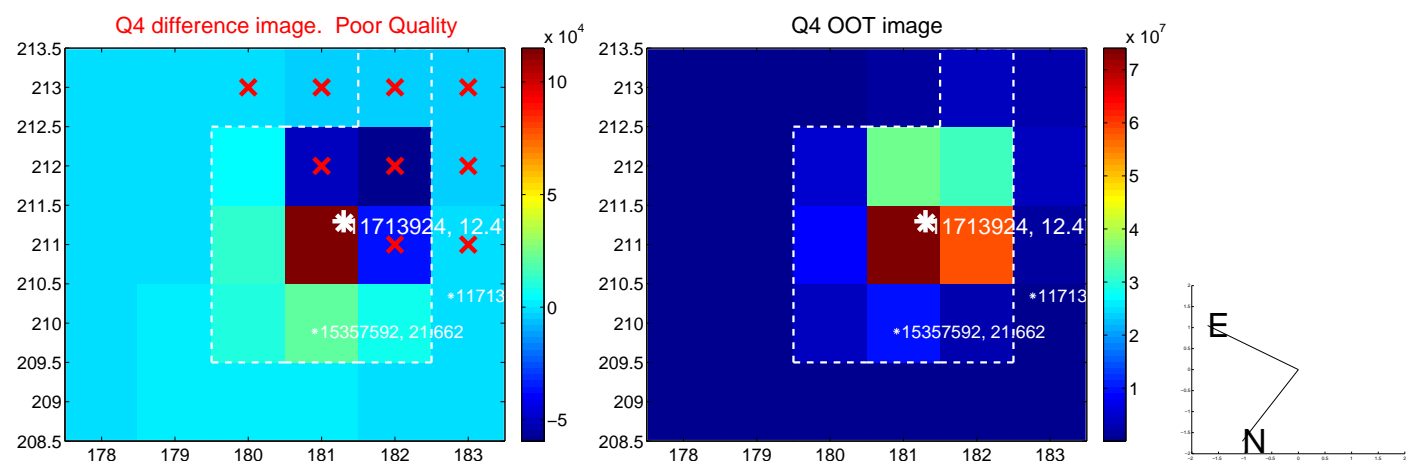
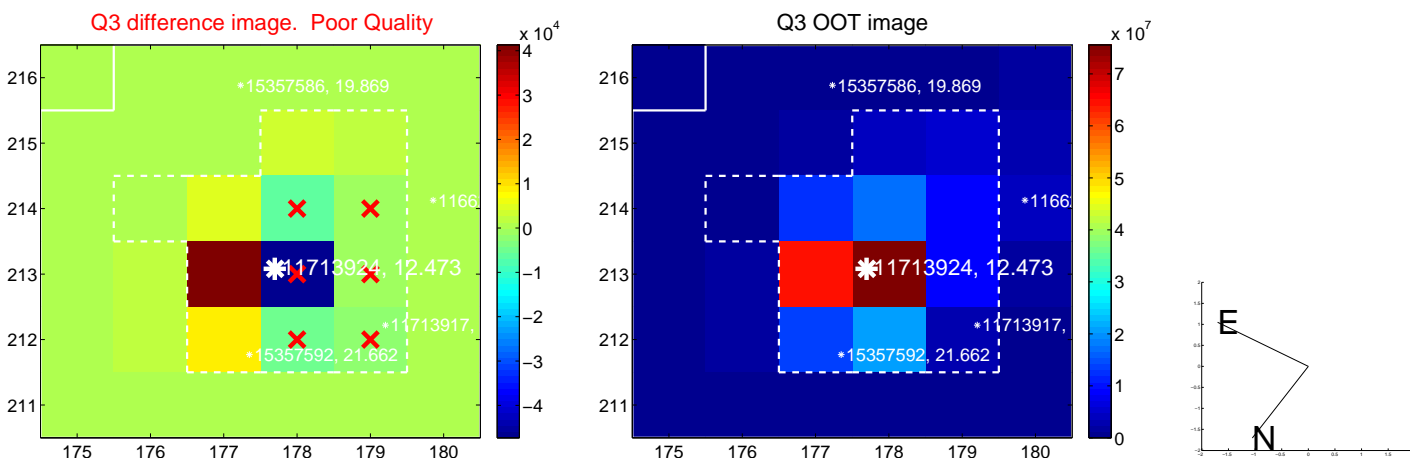
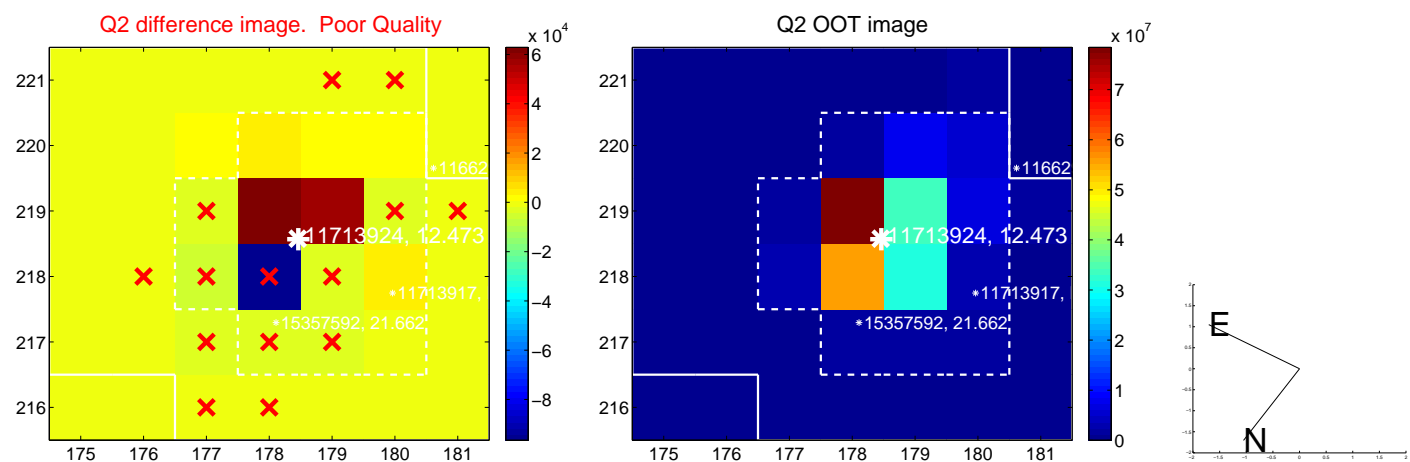
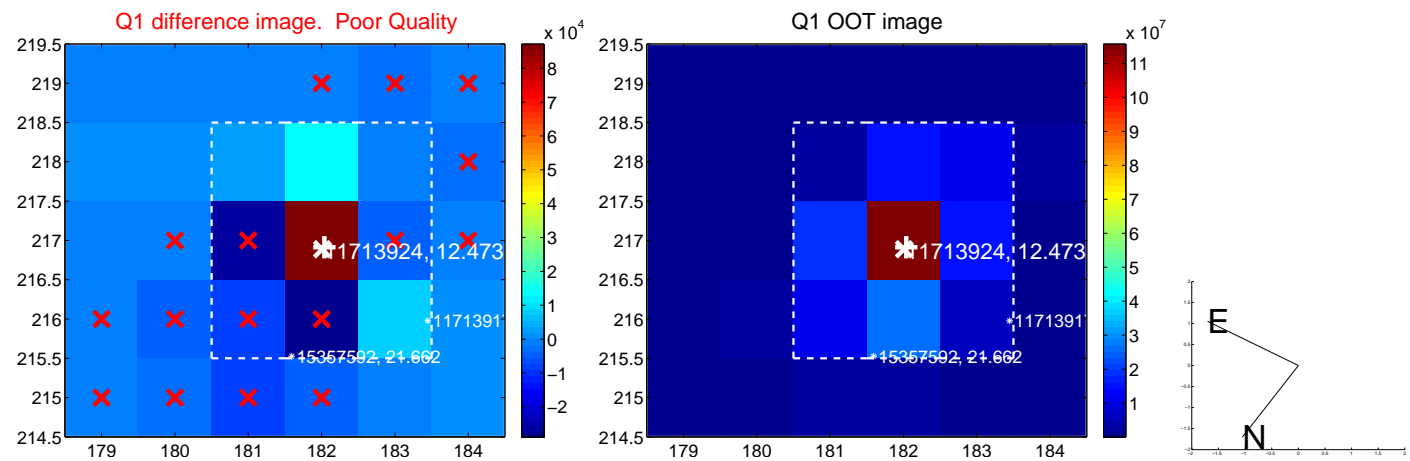
The direct PRF centroid is offset from the target star catalog position by about 0.08 arcsec

	Distance in arcsec	Distance / $\sigma$	$\Delta$ RA	$\Delta$ Dec
PRF-fit source offset from OOT	$2.362 \pm 0.142$	16.66	$2.345 \pm 0.142$	$-0.283 \pm 0.144$
PRF-fit source offset from KIC position	$2.340 \pm 0.142$	16.50	$2.313 \pm 0.142$	$-0.355 \pm 0.144$
photometric centroid source offset	$3.05 \pm 1.28$	2.39	$0.64 \pm 1.17$	$-2.99 \pm 1.28$

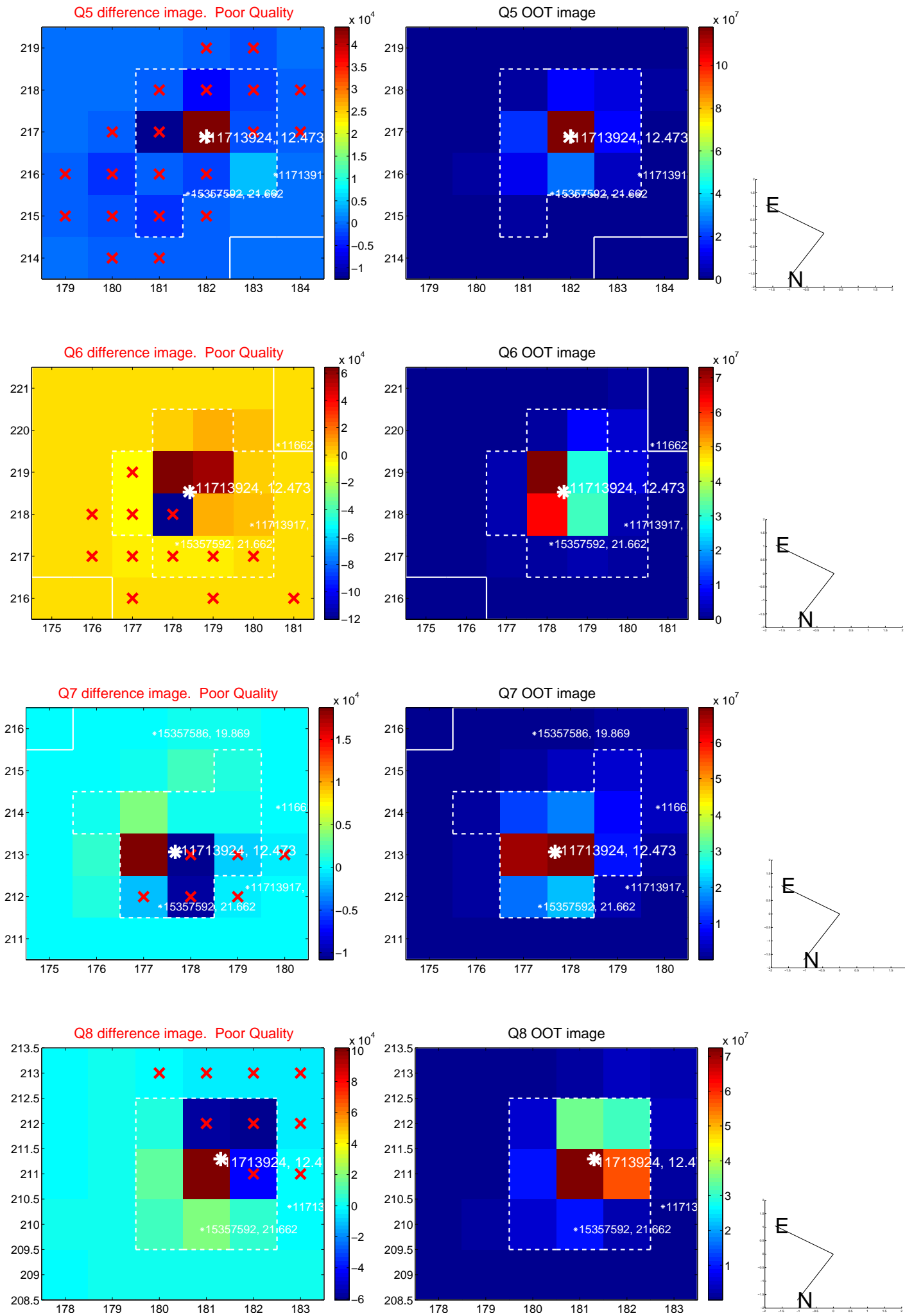


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- $\sigma$  uncertainty. Blue circle: three-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

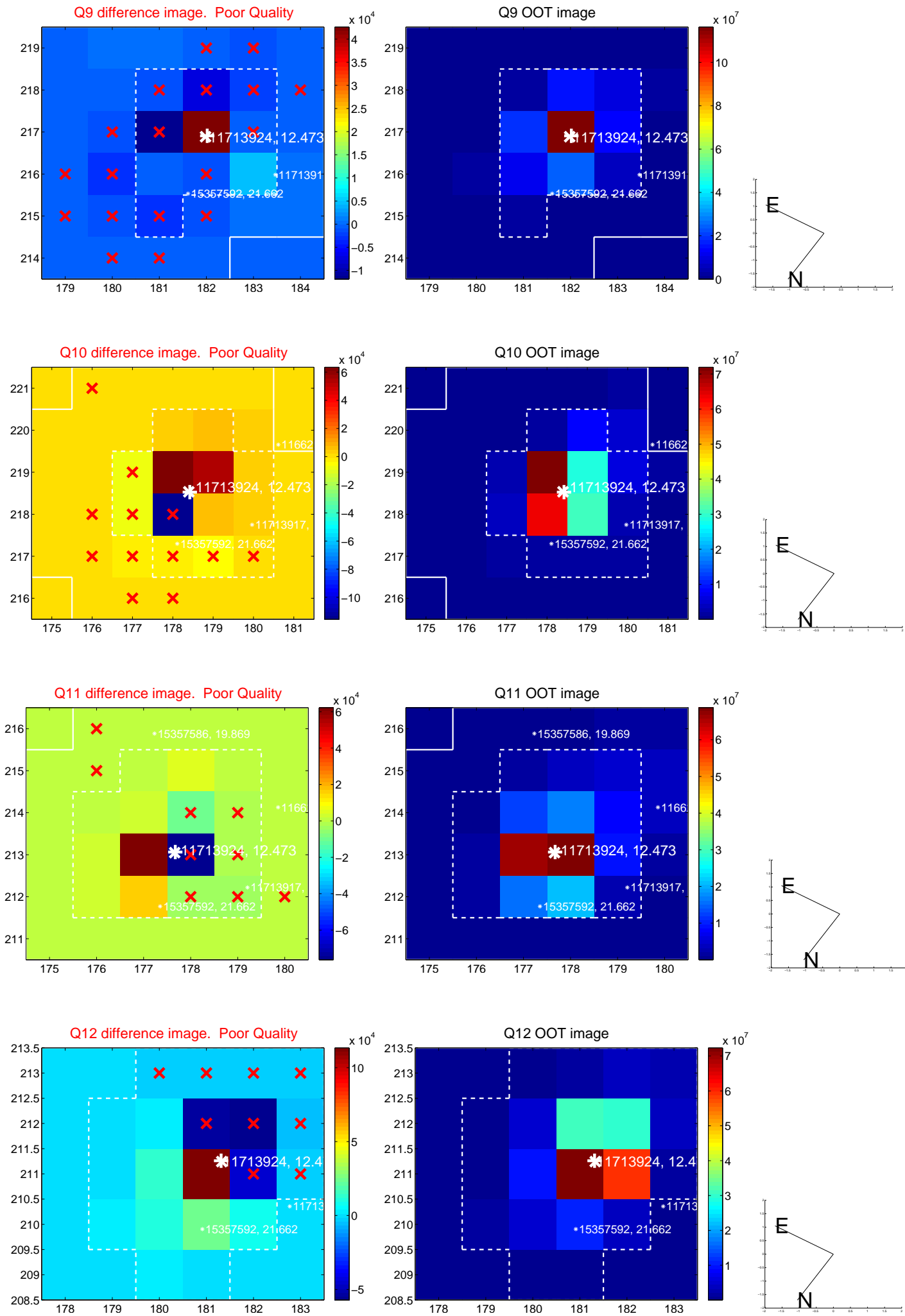


white  $\times$ : KIC target position; +: OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.

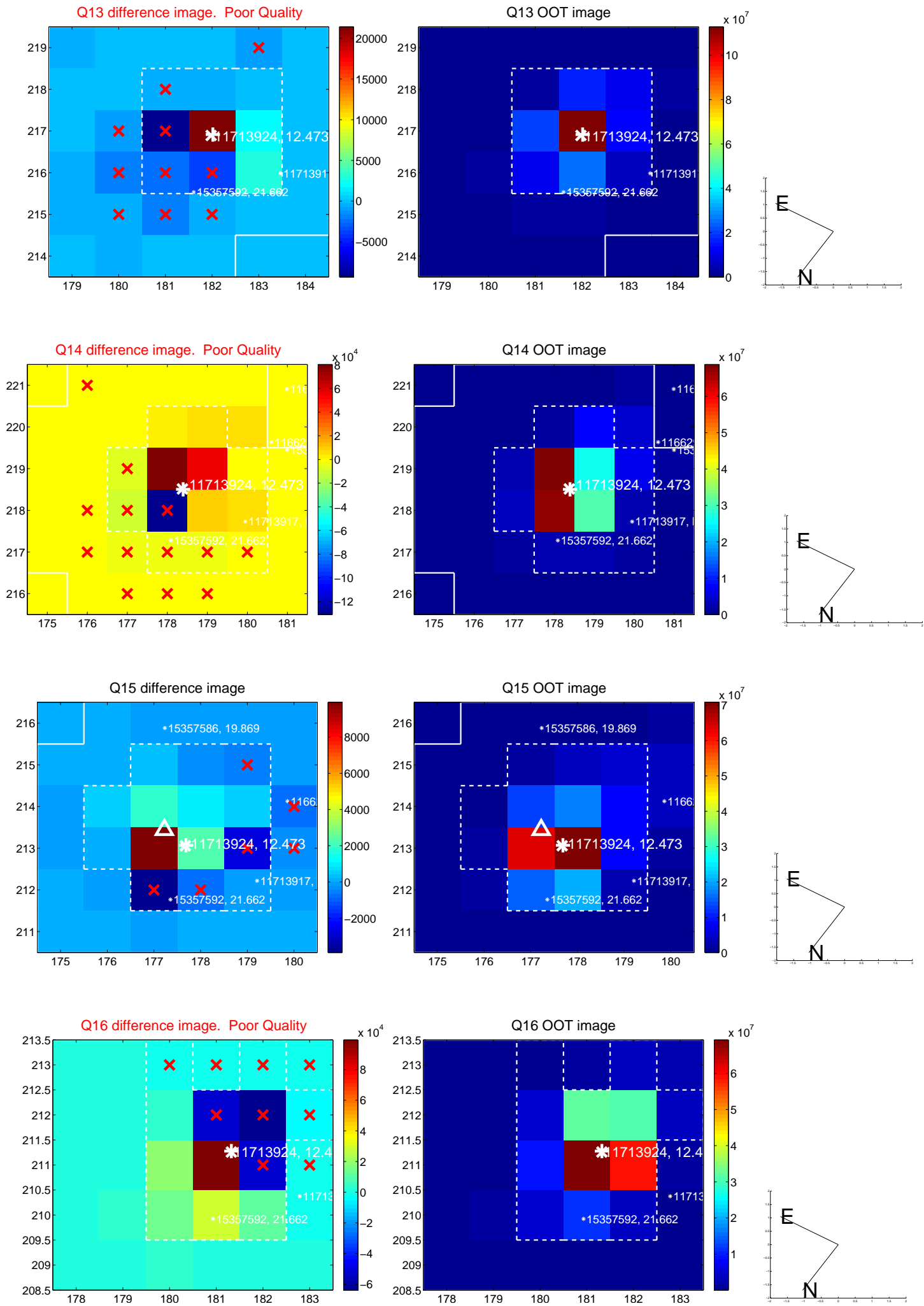




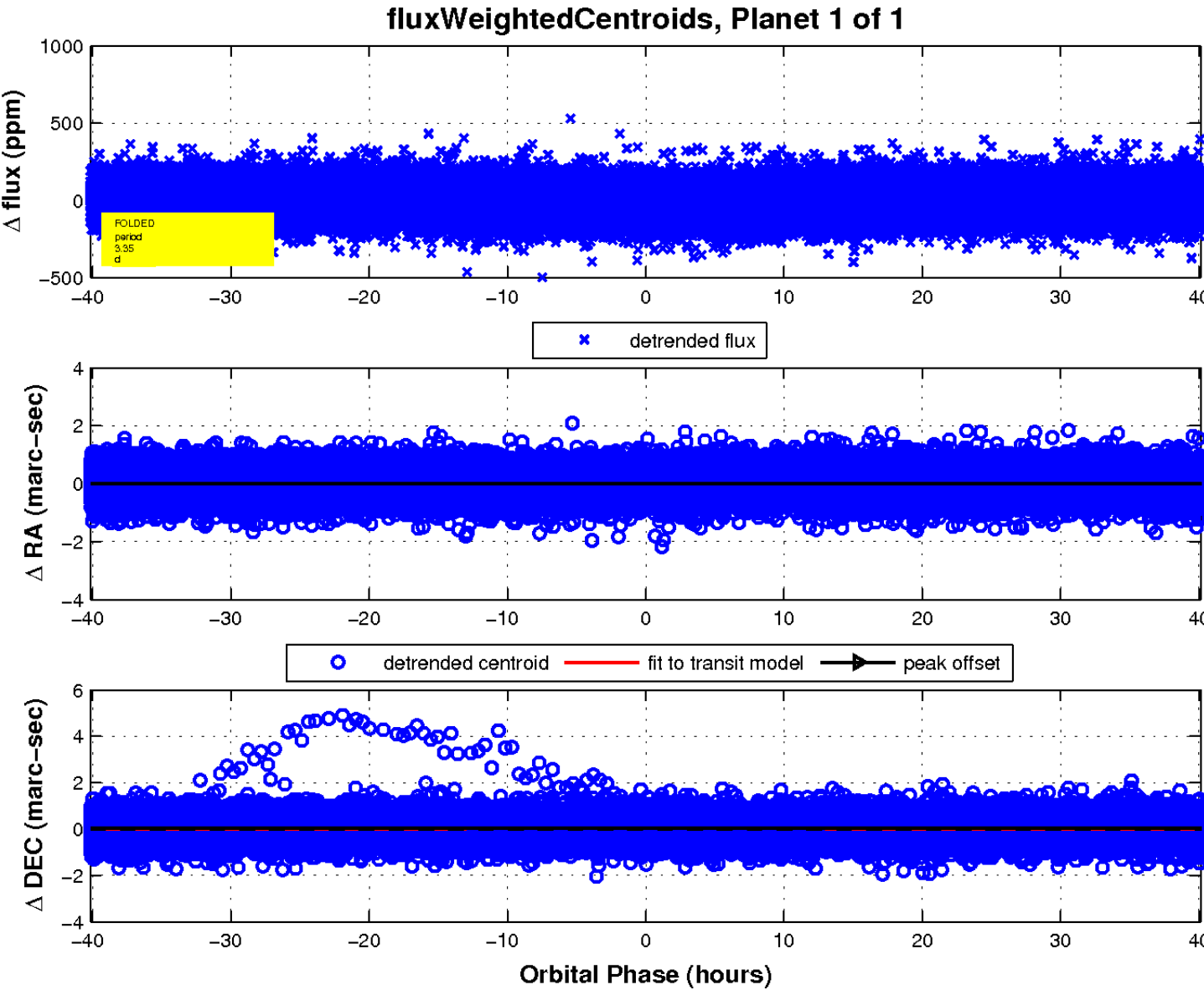
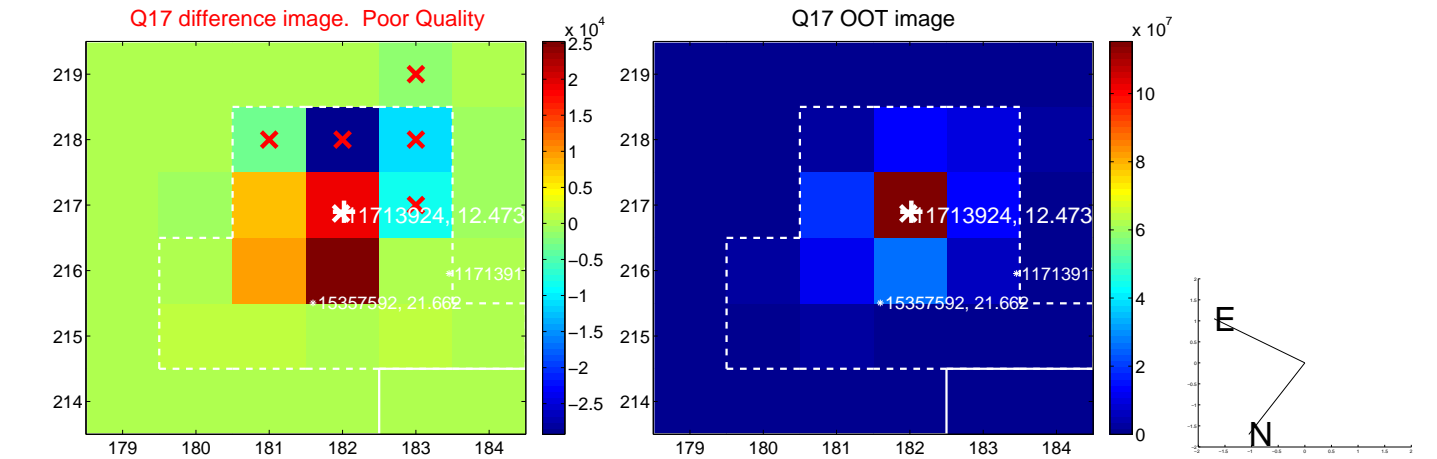
white  $\times$ : KIC target position; +: OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.



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



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



UKIRT Image

Declination

