

# KIC 011192141

## 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)	$R_p$ ( $R_{\oplus}$ )	$S_p$ ( $S_{\oplus}$ )
011192141-01	OBS	0977.01	1.353781	132.823465	142.5	3.704	37.9	39.1	15.76	4283	23.46	0.00

## Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011192141-01	OBS	PC	1.00	0	0	0	0	PLANET_IN_STAR—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 011192141-01

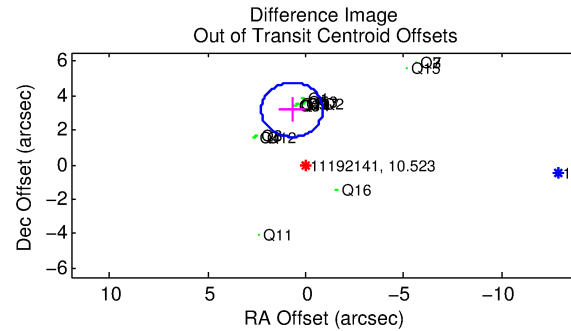
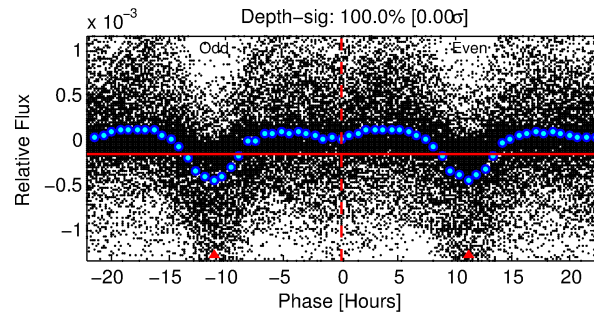
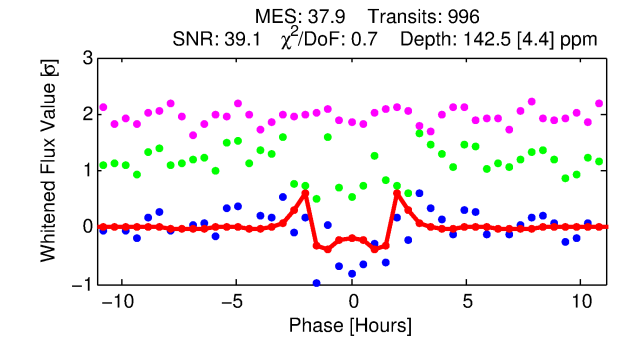
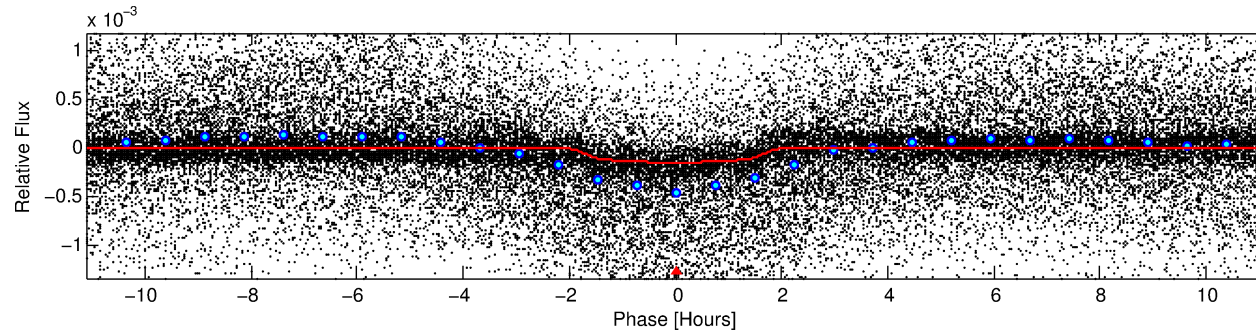
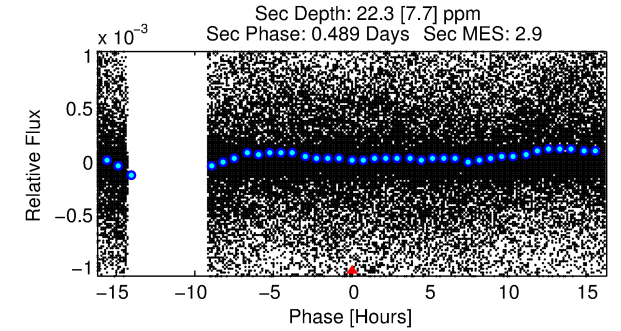
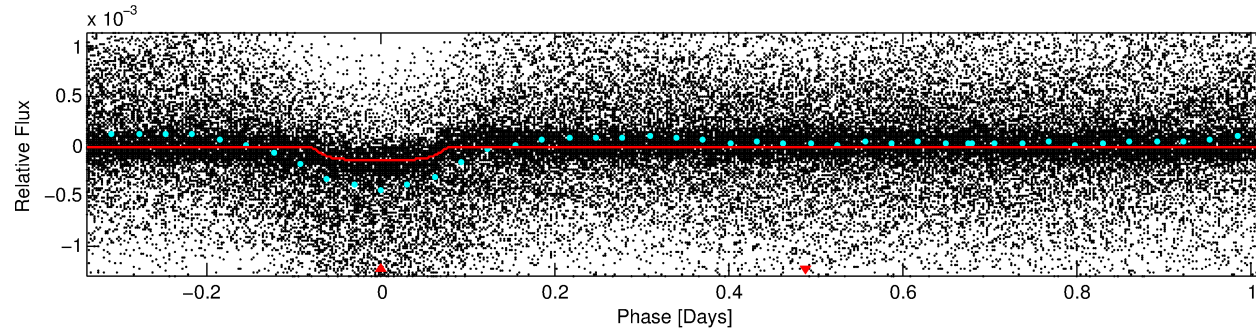
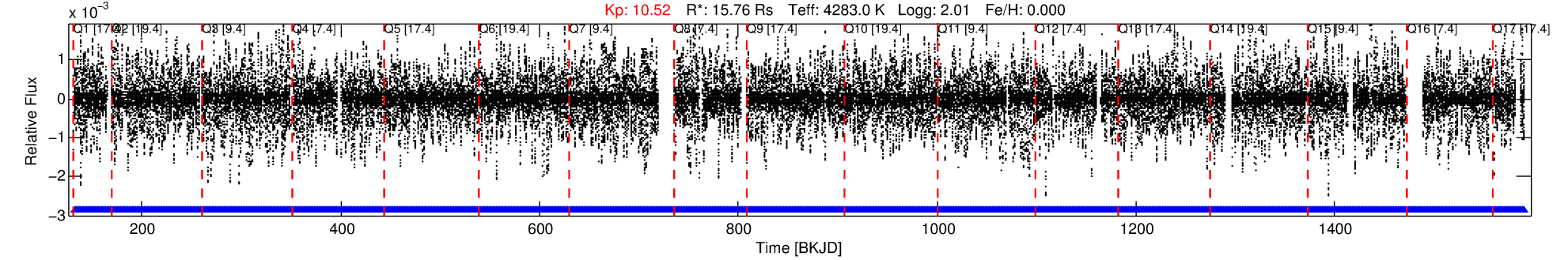
No Significant Match Found

# DV One-Page Summary

KIC: 11192141 Candidate: 1 of 1 Period: 1.354 d

KOI: K00977 Corr: No Ephemeris Match

Kp: 10.52 R\*: 15.76 Rs Teff: 4283.0 K Logg: 2.01 Fe/H: 0.000



## DV Fit Results:

Period = 1.35378 [0.00000] d  
Epoch = 132.8235 [0.0003] BKJD  
Rp/R\* = 0.0136 [0.0006]  
a/R\* = 1.61 [0.14]  
b = 0.90 [0.03]  
Seff = N/A  
Teq = N/A  
Rp = 23.46 [7.48] Re  
a = N/A  
Ag = N/A  
Teffp = N/A

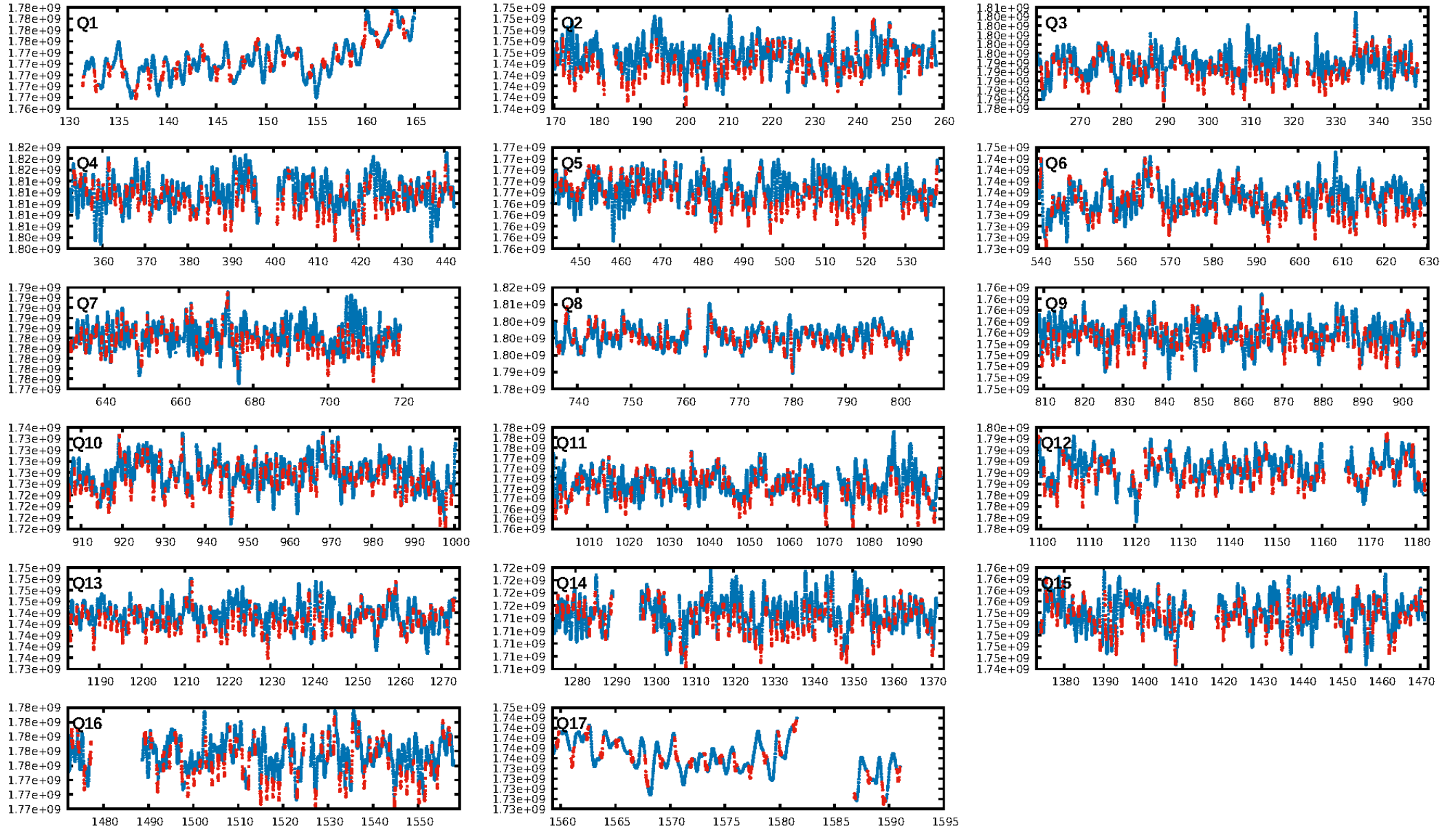
## DV Diagnostic Results:

ShortPeriod-sig: N/A  
LongPeriod-sig: N/A  
ModelChiSquare2-sig: N/A  
ModelChiSquareGof-sig: N/A  
Bootstrap-pfa: 7.74e-268  
RollingBand-fgt: 1.00 [950/950]  
GhostDiagnostic-chr: 0.8515  
Centroid-sig: 0.0%  
Centroid-so: 1.100 arcsec [12.08σ]  
OotOffset-rm: 3.258 arcsec [6.21σ]  
KicOffset-rm: 2.868 arcsec [6.03σ]  
OotOffset-st: 4/4/4/5 [17]  
KicOffset-st: 4/4/4/5 [17]  
DiffImageQuality-fgm: 0.00 [0/17]  
DiffImageOverlap-fno: 1.00 [17/17]

Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 12:55:41 Z

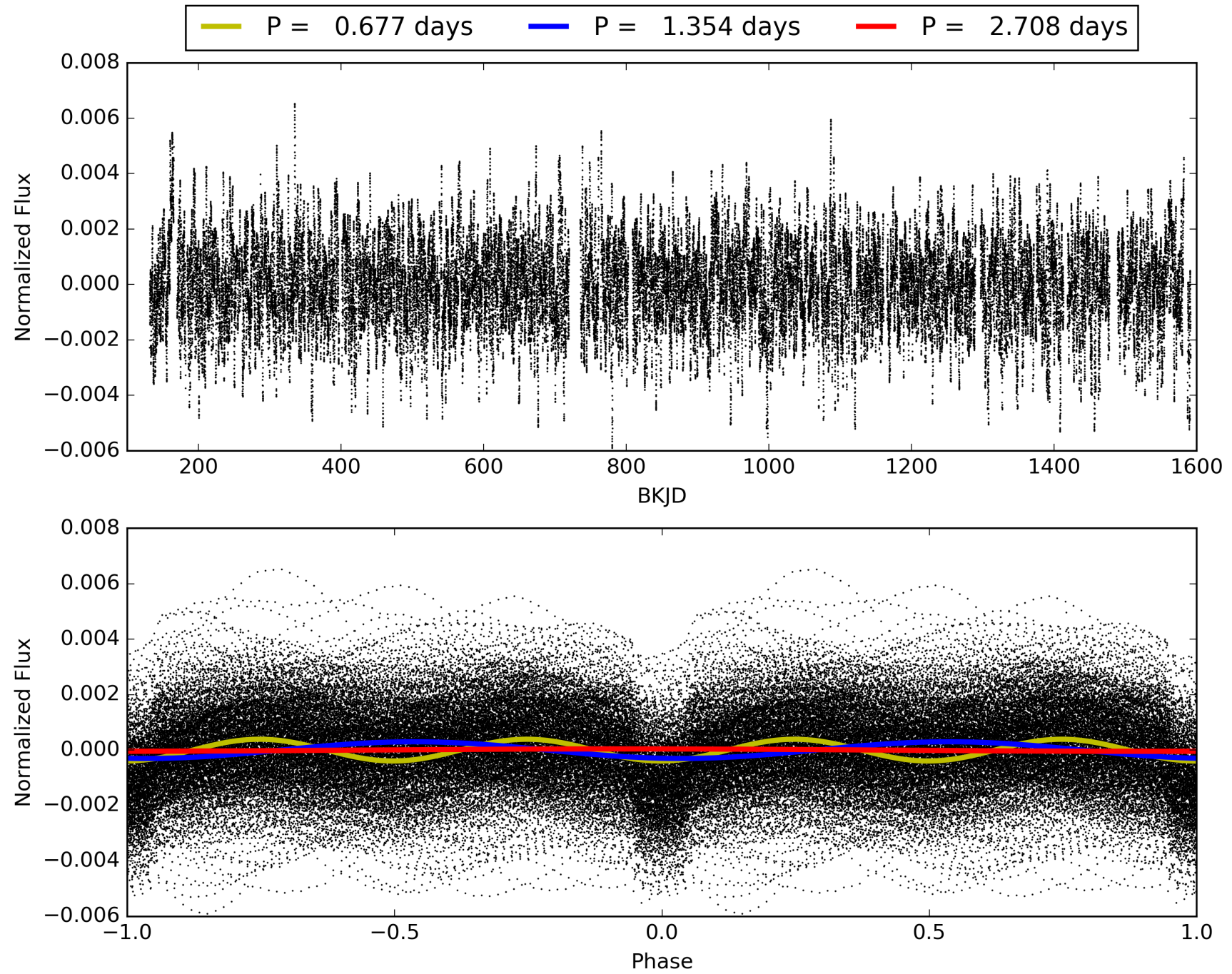
This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

# TCE 011192141-01, PDC Light Curves



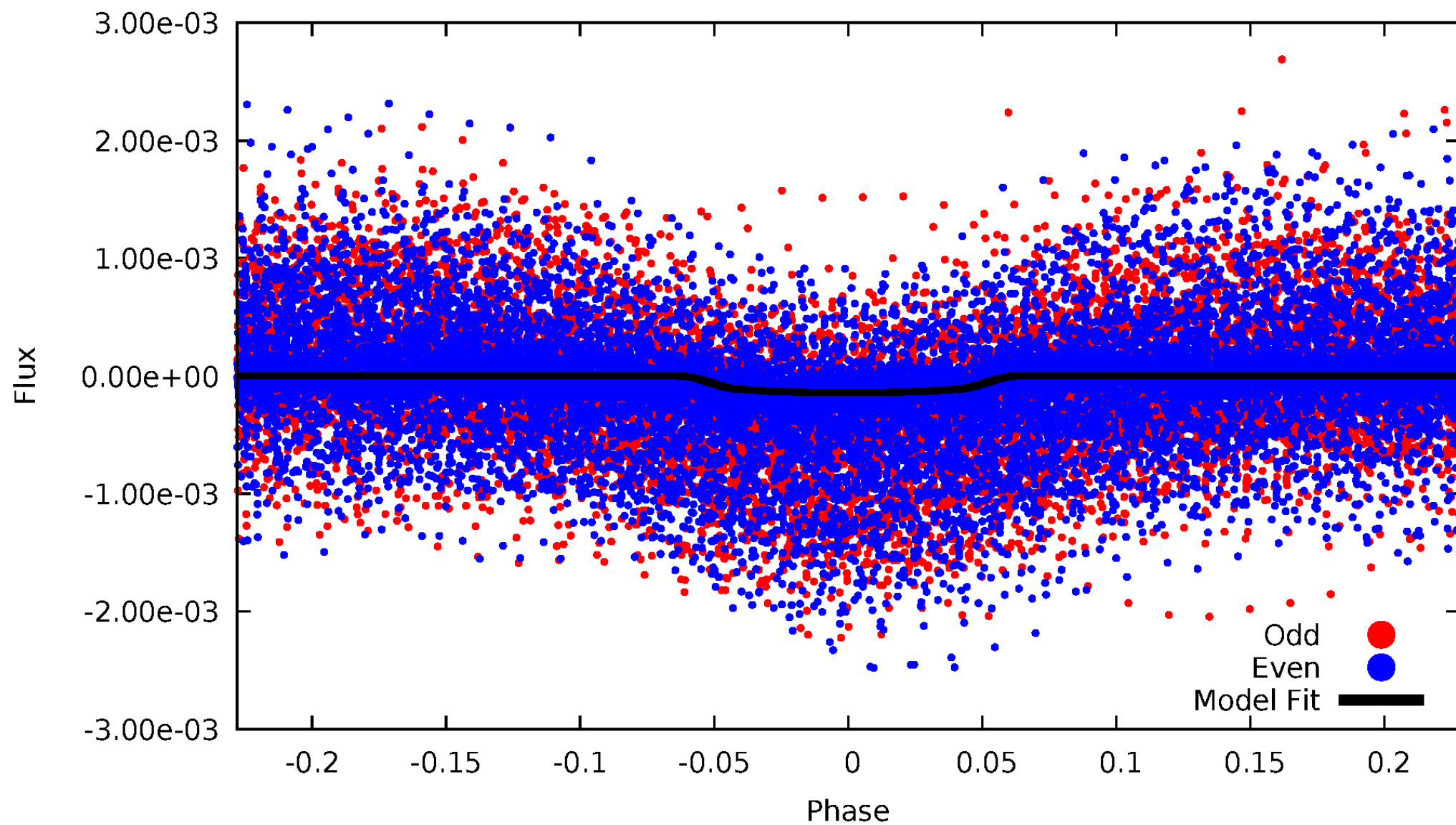


TCE 011192141-01



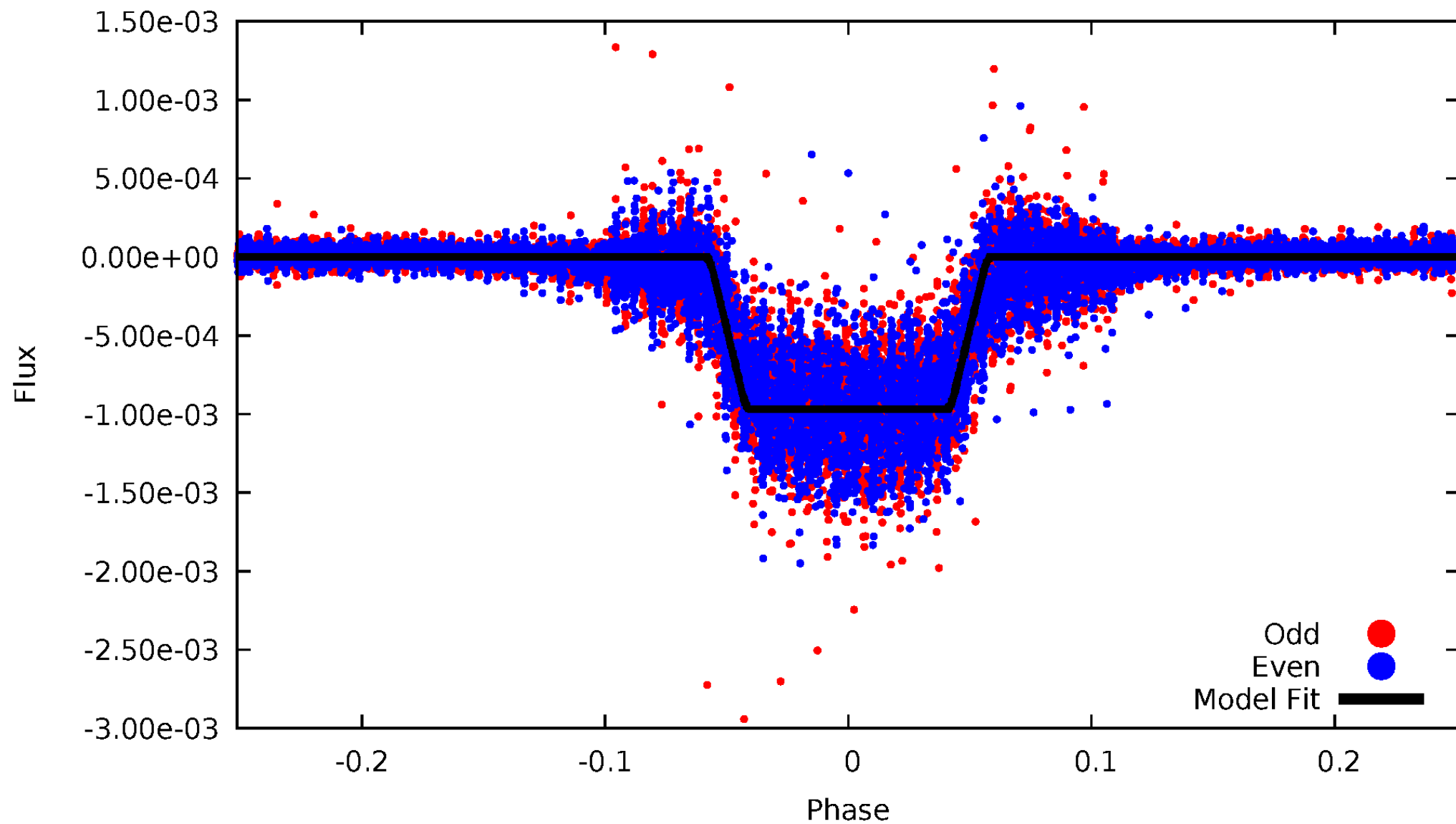
# DV Odd/Even

TCE 011192141-01



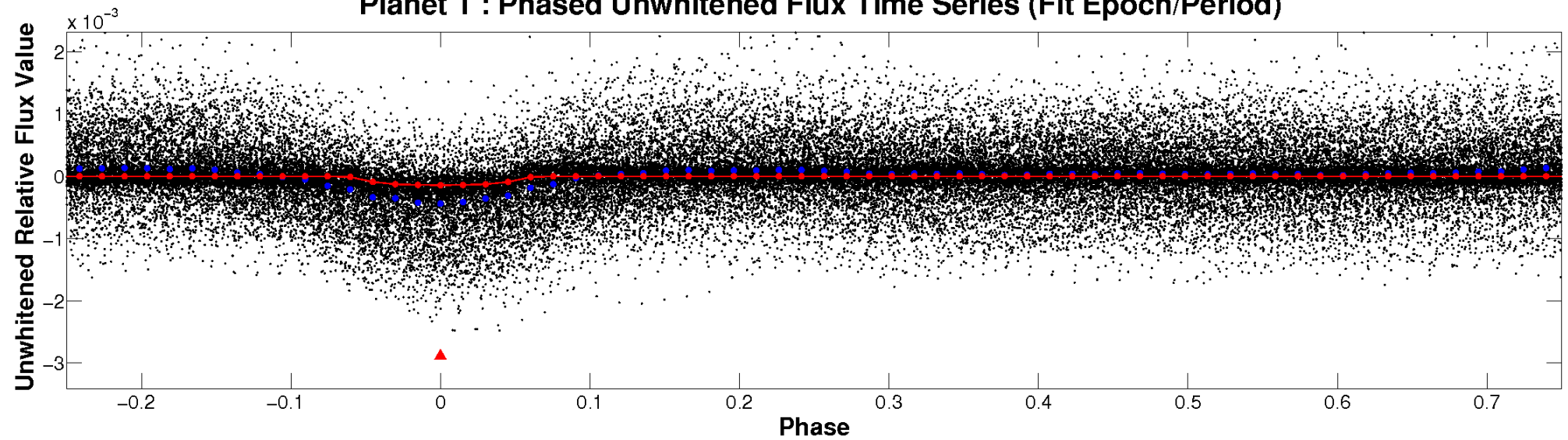
# ALT Odd/Even

TCE 011192141-01

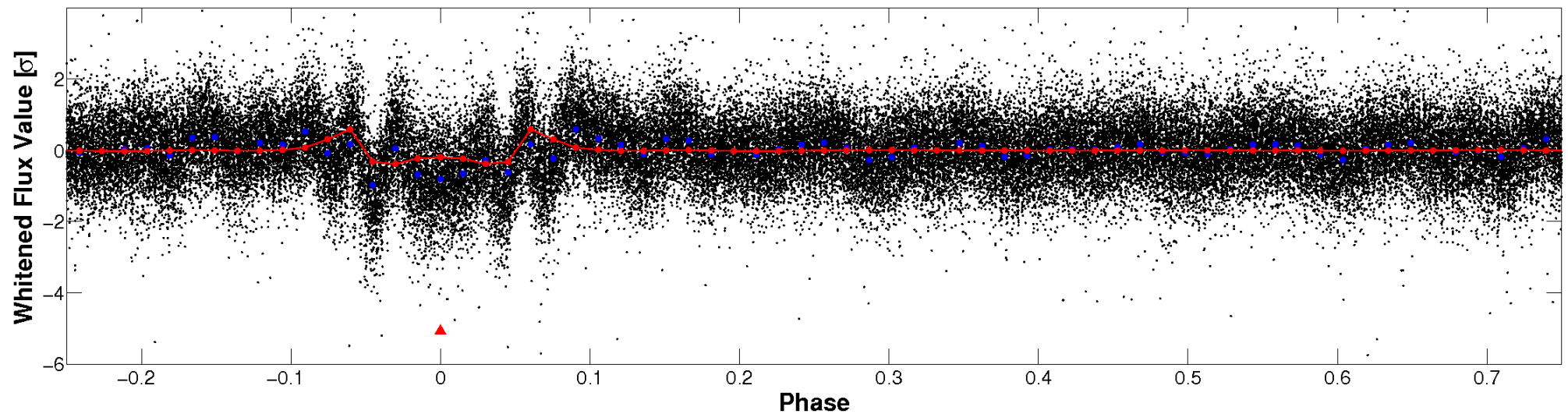


# Non-Whitened Vs. Whitened Light Curve

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



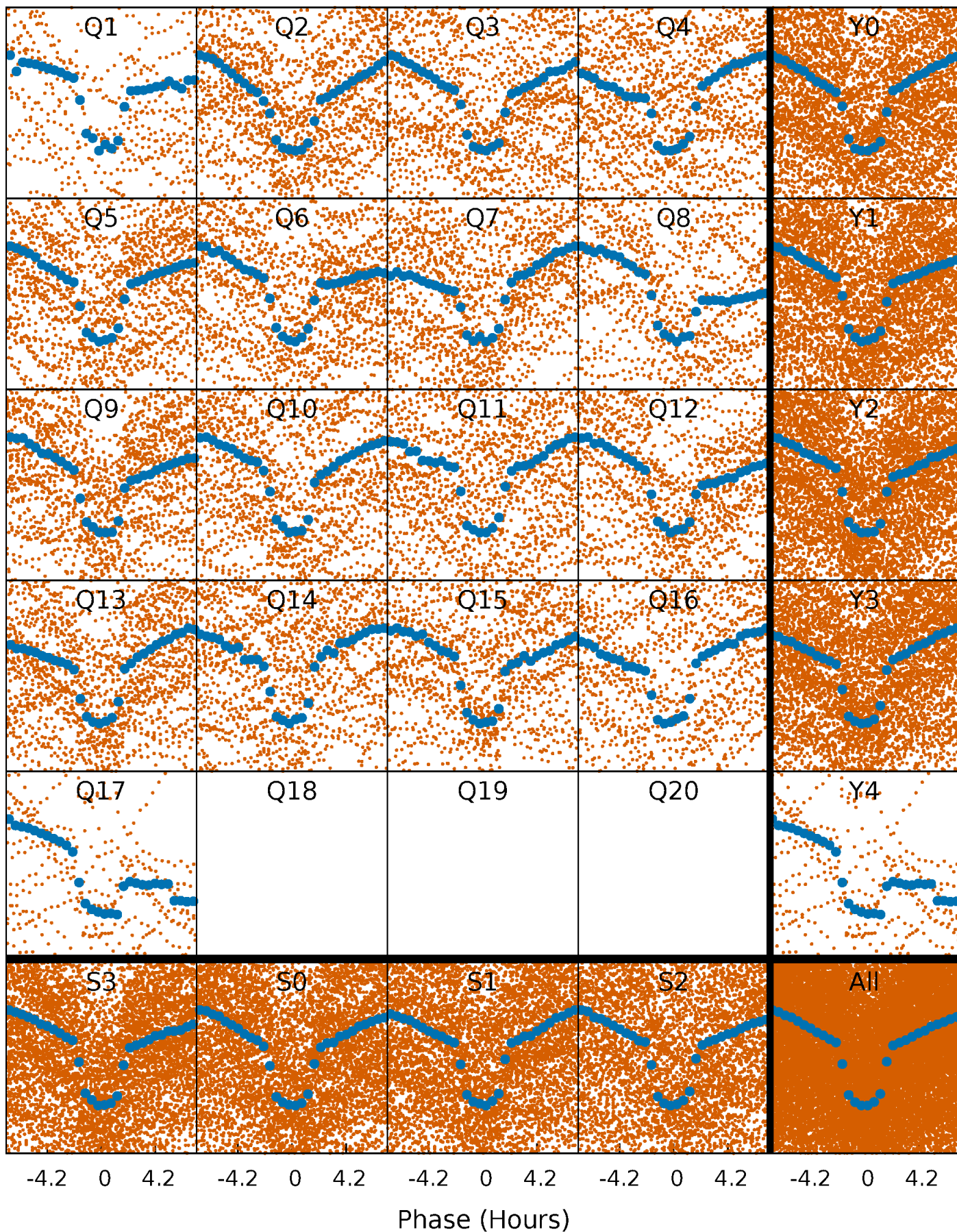
**Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)**





# PDC Quarter-Phased Transit Curves

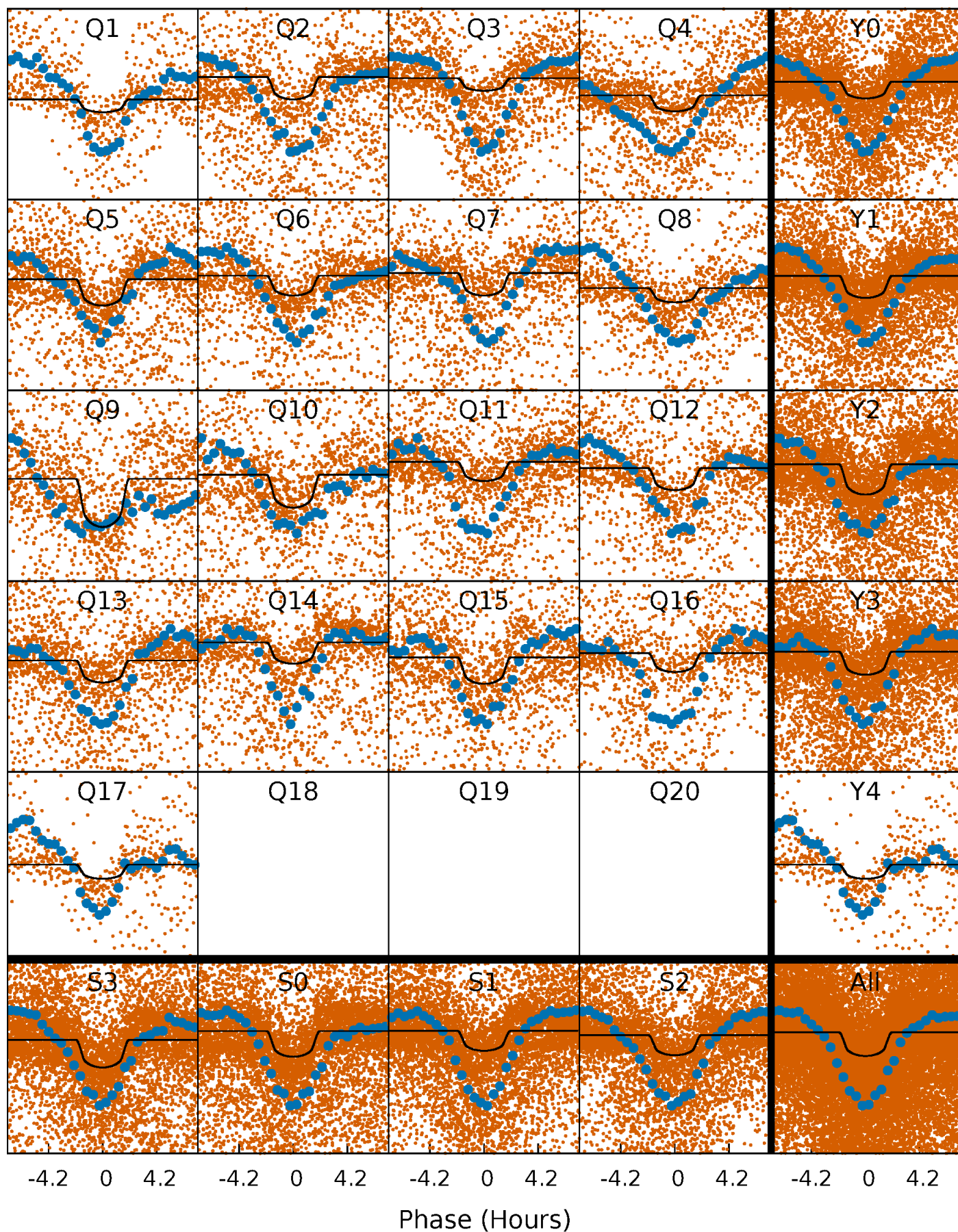
TCE 011192141-01 P= 1.353781 Days  $T_0=132.823465$  (BKJD)





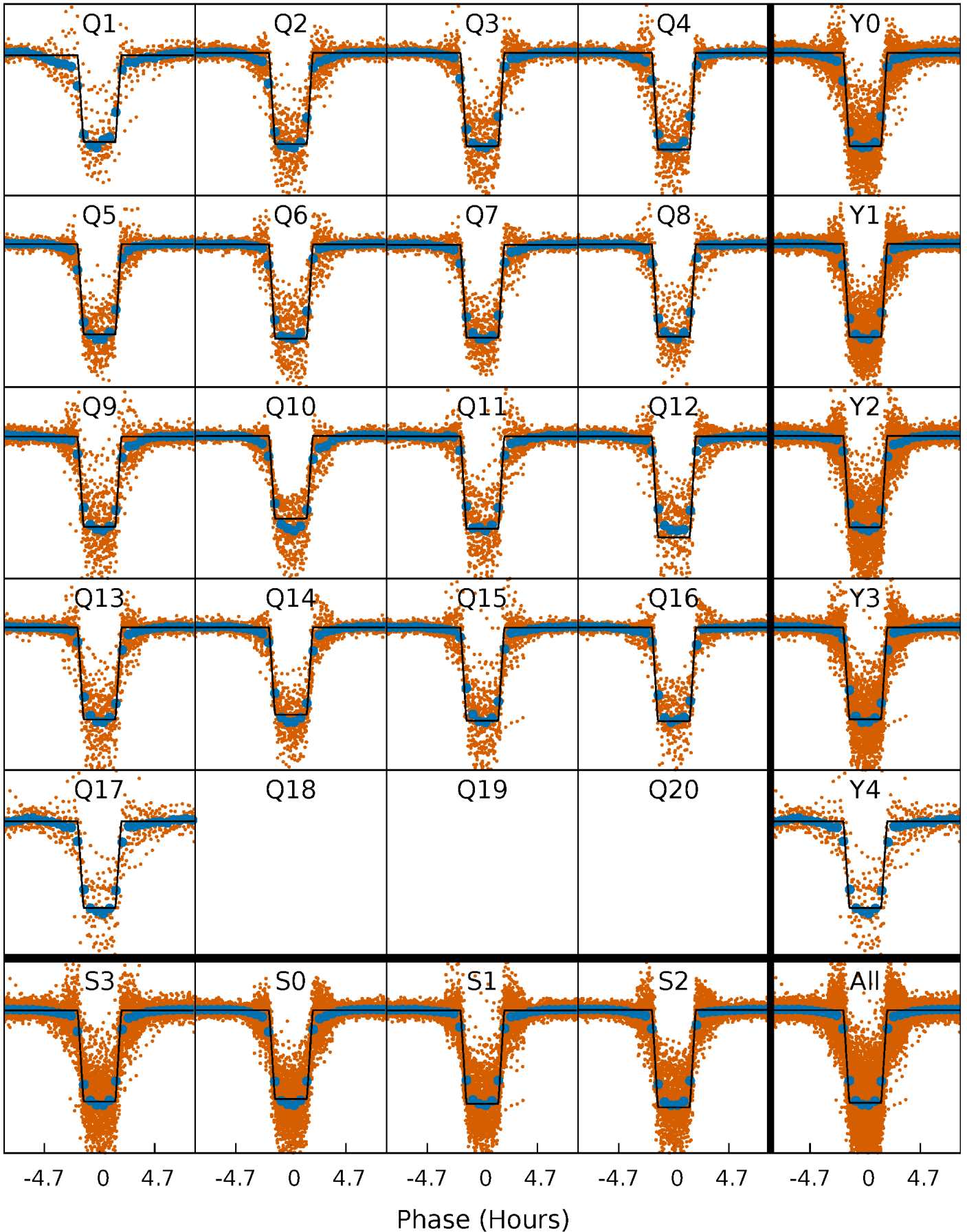
# DV Quarter-Phased Transit Curves

TCE 011192141-01 P= 1.353781 Days  $T_0=132.823465$  (BKJD)



# Alt. Detrend Quarter-Phased Transit Curves

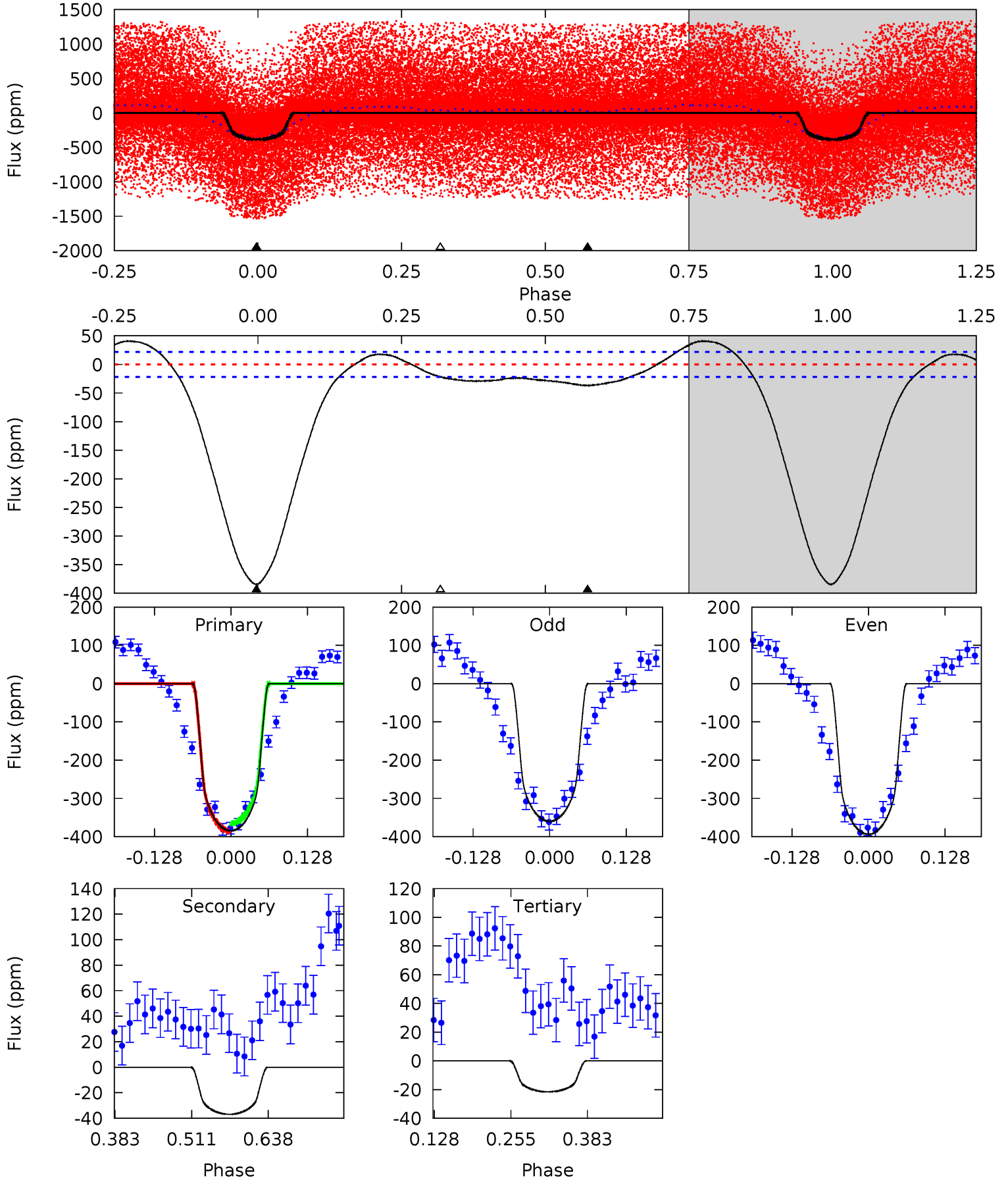
TCE 011192141-01 P= 1.353762 Days  $T_0=132.831926$  (BKJD)



# DV Model-Shift Uniqueness Test

011192141-01, P = 1.353781 Days, E = 131.469684 Days

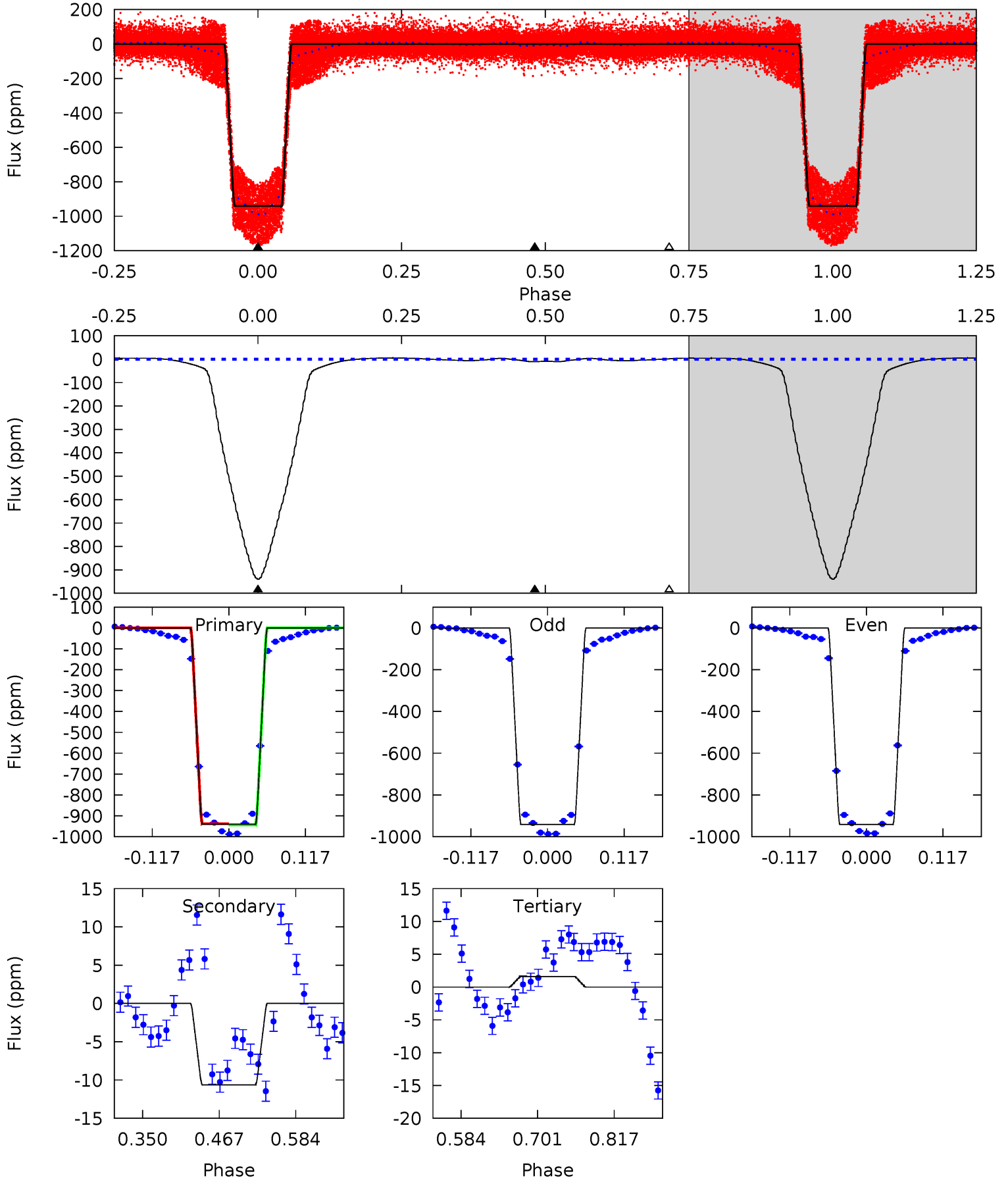
Pri	Sec	Ter	Pos	FA <sub>1</sub>	FA <sub>2</sub>	F <sub>Red</sub>	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
79.7	7.65	4.47	0	4.51	1.52	4.90	75.3	79.7	3.18	7.65	3.57	1.61	0.10	2.26



# Alt Model-Shift Uniqueness Test

011192141-01, P = 1.353762 Days, E = 131.478164 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
1608	18.2	-2.75	0	4.53	1.57	10.6	1611	1608	20.9	18.2	0.41	1.00	0.01	4.83





### Stellar Parameters For KIC 011192141

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R$ ( $R_{\odot}$ )	$M(M_{\odot})$	$p_{\star}$ ( $\text{g}\cdot\text{cm}^{-3}$ )
	$4283^{+77}_{-60}$	$2.012^{+0.112}_{-0.137}$	$0.000^{+0.150}_{-0.150}$	$15.760^{+4.978}_{-1.778}$	$0.931^{+0.409}_{-0.022}$	$0.000^{+0.000}_{-0.000}$
	+2%/-1%	+6%/-7%	+inf%/-inf%	+32%/-11%	+44%/-2%	+45%/-43%
Source	SPE18	SPE18	SPE18	DSEP		

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

### Secondary Eclipse Parameters for KIC 011192141-01 / KOI 0977.01

Detrend	Depth (ppm)	$R_p$ ( $R_{\oplus}$ )	$T_{max}$ (K)	$T_{obs}$ (K)	$A_{obs}$
DV	$-37 \pm 5$	$23.95^{+4.27}_{-2.19}$	$6872^{+404}_{-282}$	$-5270^{+209}_{-312}$	$0.020^{+0.005}_{-0.005}$
Alt.	$-11 \pm 1$	$53.90^{+8.89}_{-4.04}$	$6850^{+397}_{-291}$	$-5340^{+221}_{-288}$	$0.001^{+0.000}_{-0.000}$

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

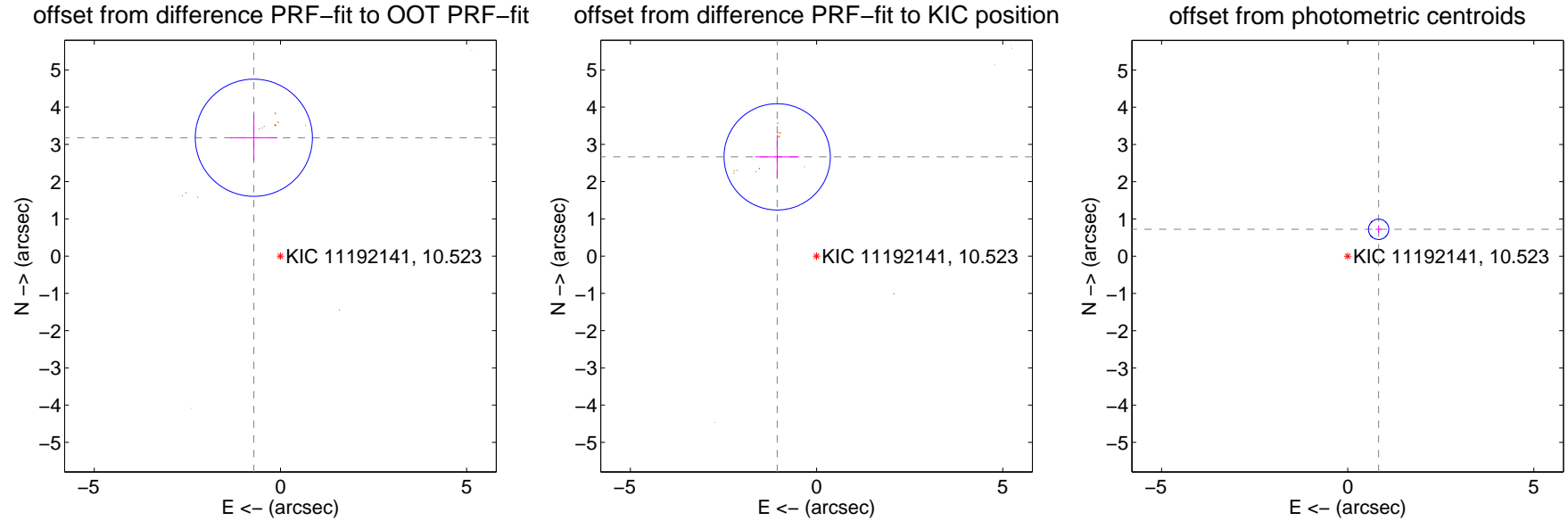
## DV Centroid Data

Supplemental centroid analysis for 011192141-01. **Kepler magnitude: 10.52.** Transit SNR 39.14

**There are 0 quarters with good PRF difference image offsets**

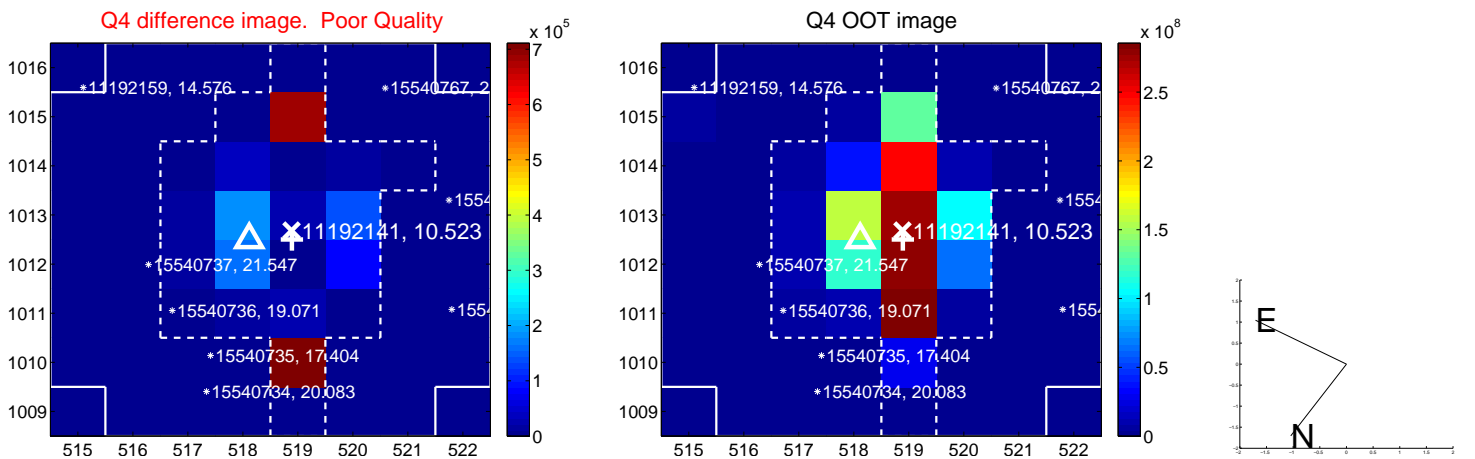
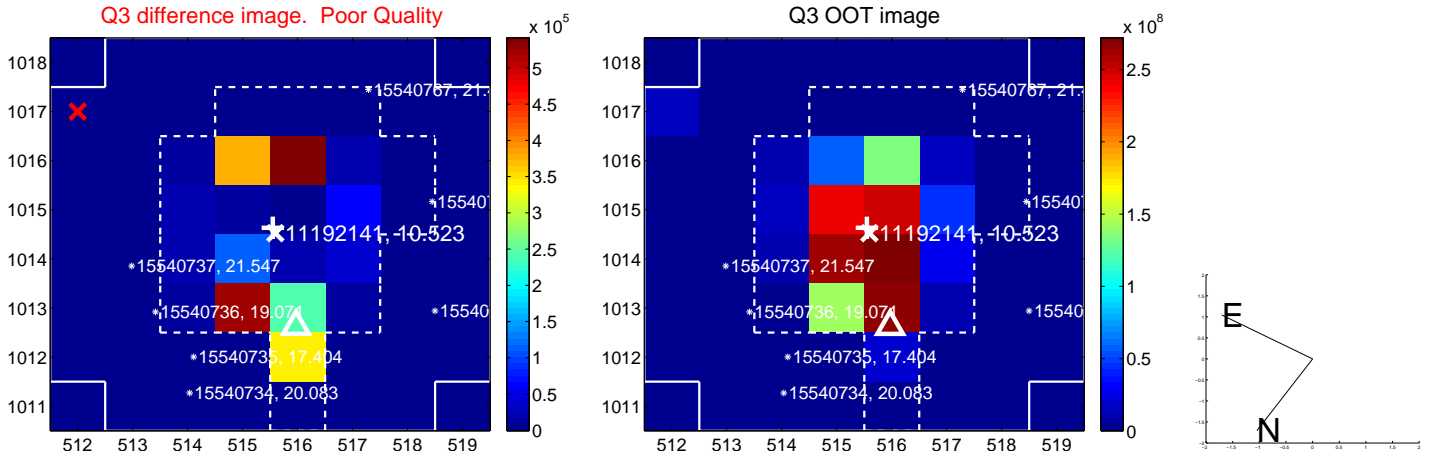
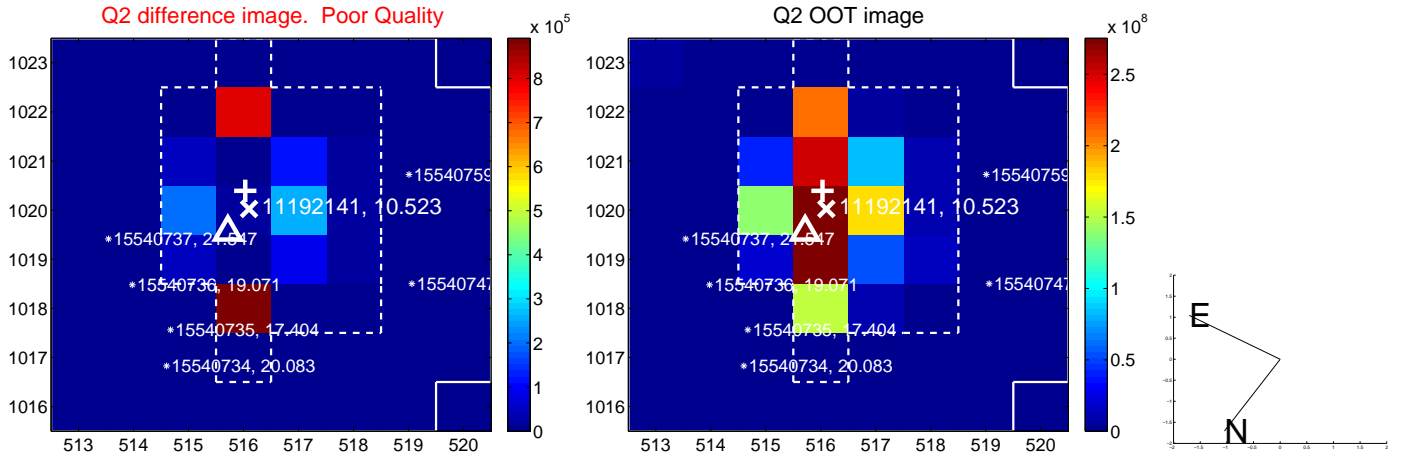
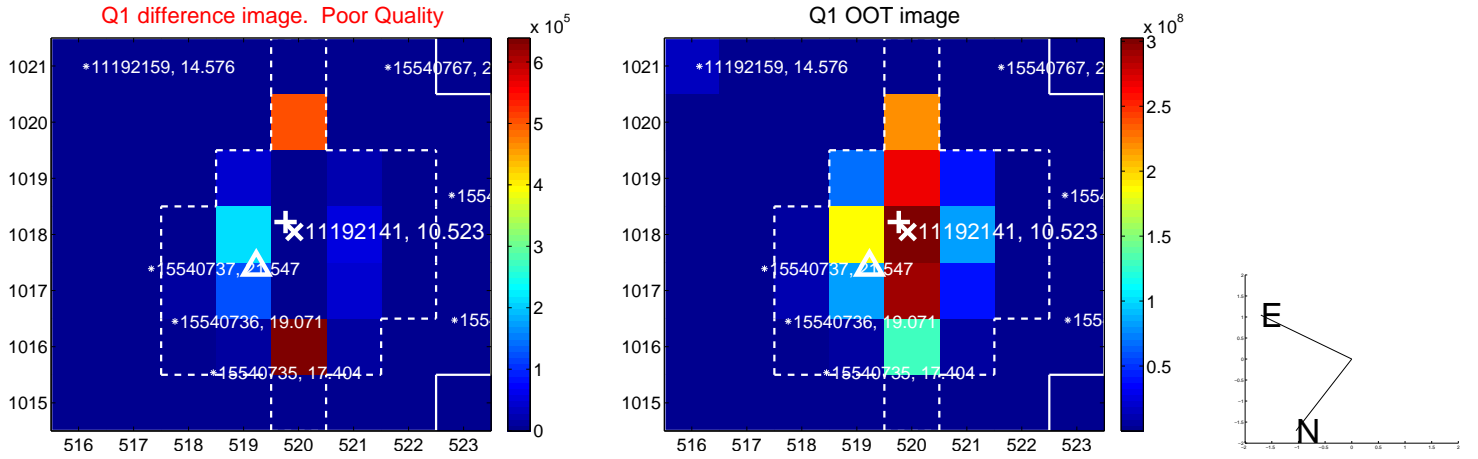
The direct PRF centroid is offset from the target star catalog position by about 0.92 arcsec

	Distance in arcsec	Distance / $\sigma$	$\Delta$ RA	$\Delta$ Dec
PRF-fit source offset from OOT	<b><math>3.258 \pm 0.524</math></b>	<b>6.21</b>	$0.715 \pm 0.635$	$3.179 \pm 0.620$
PRF-fit source offset from KIC position	<b><math>2.868 \pm 0.476</math></b>	<b>6.03</b>	$1.058 \pm 0.591$	$2.665 \pm 0.588$
photometric centroid source offset	<b><math>1.10 \pm 0.09</math></b>	<b>12.08</b>	$-0.83 \pm 0.08$	$0.72 \pm 0.10$

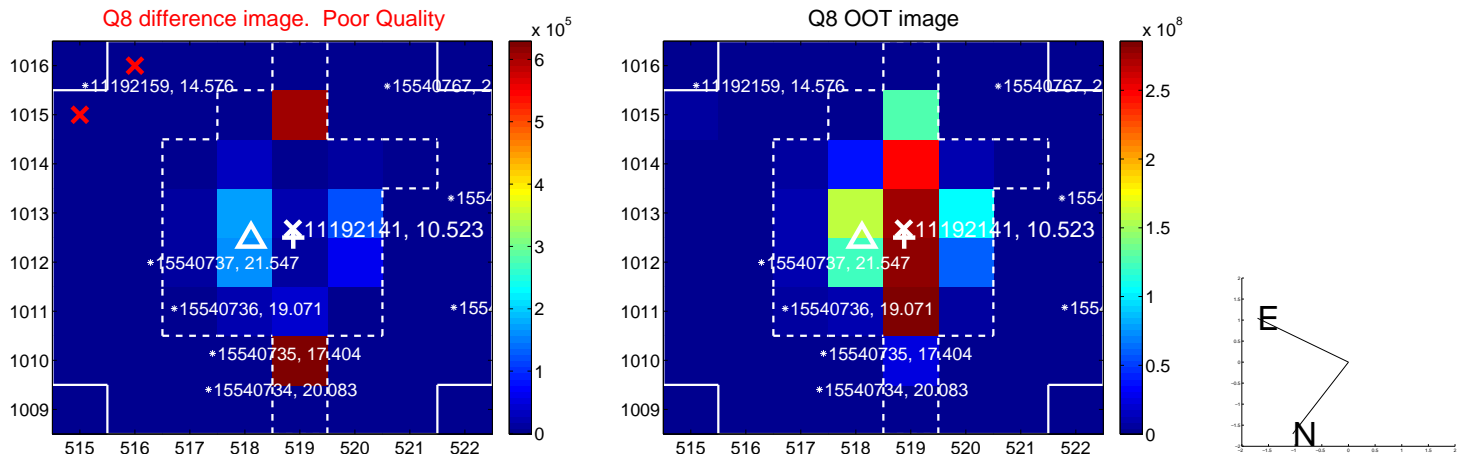
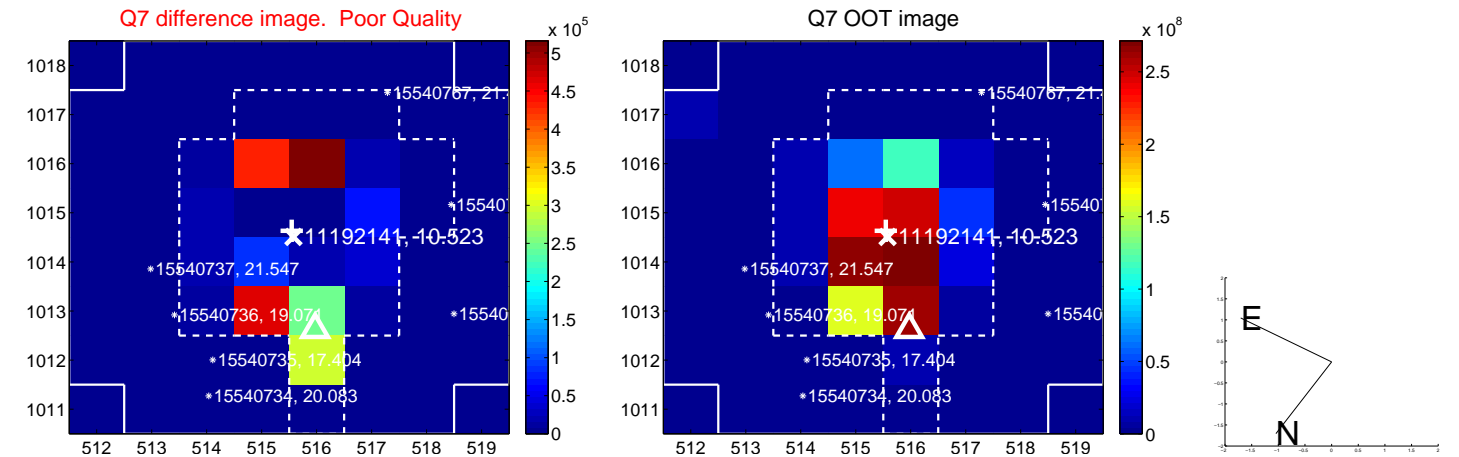
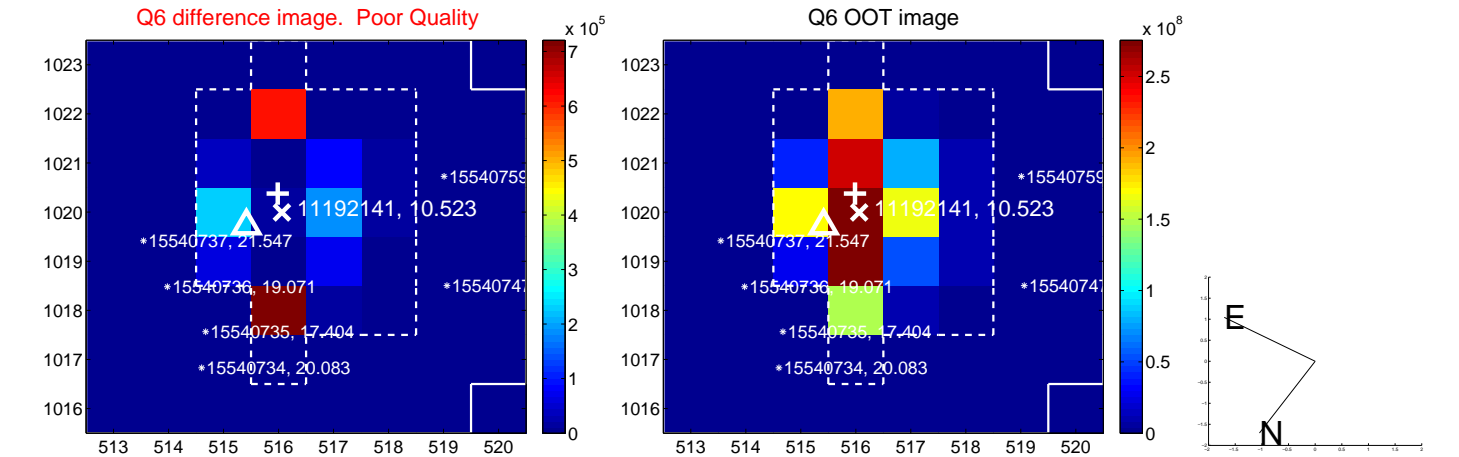
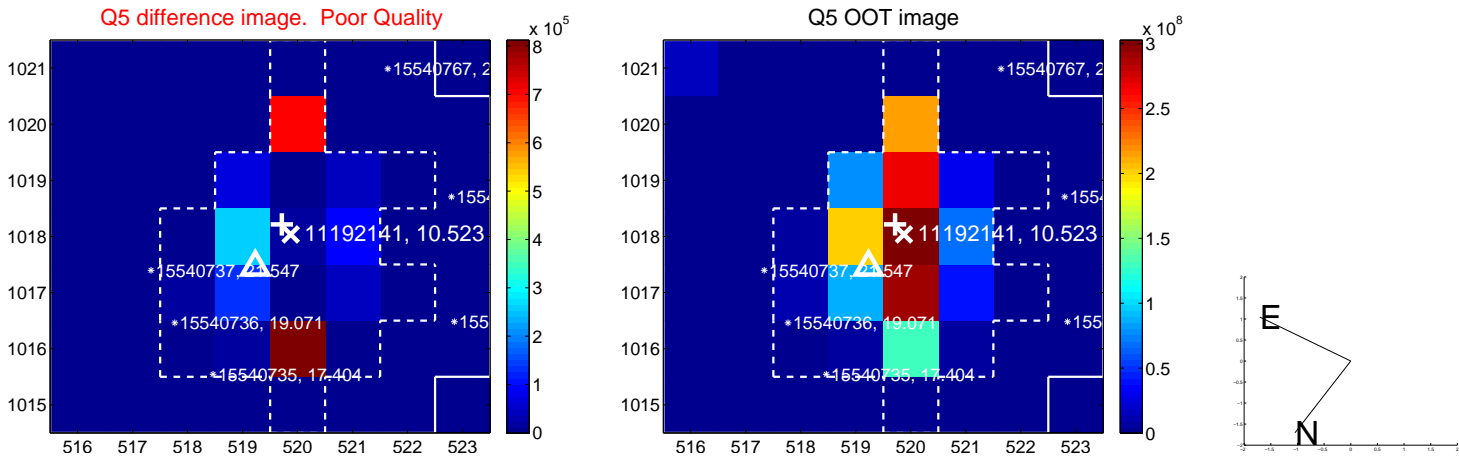


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- $\sigma$  uncertainty. Blue circle: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

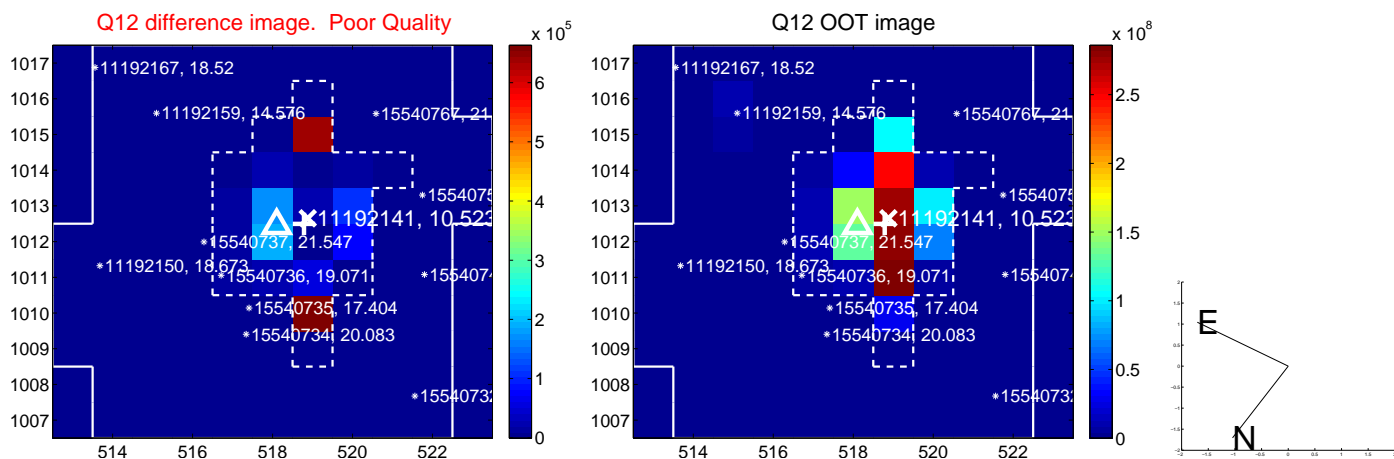
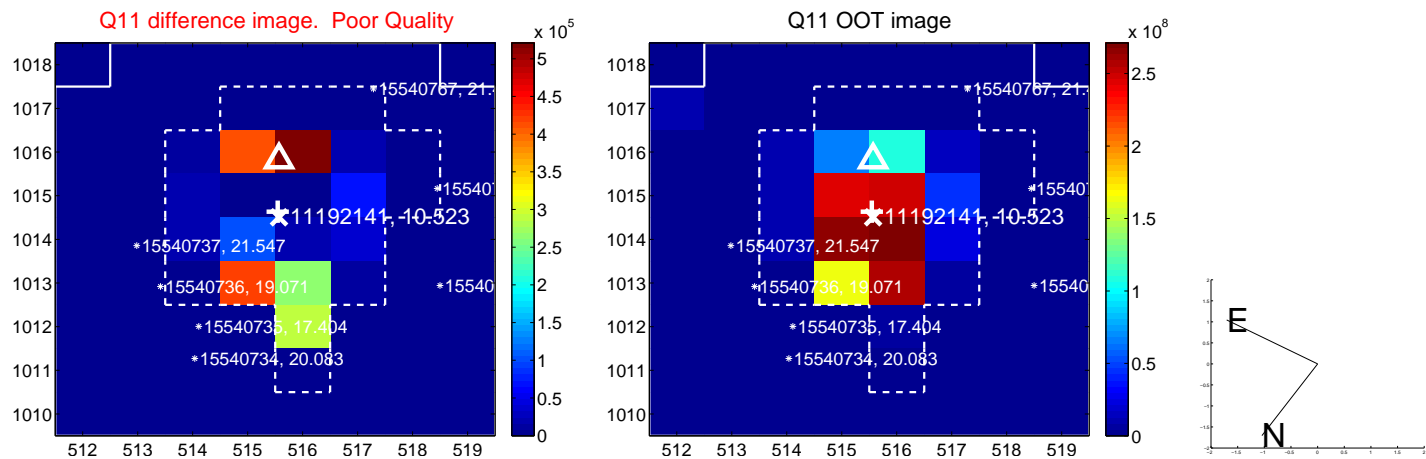
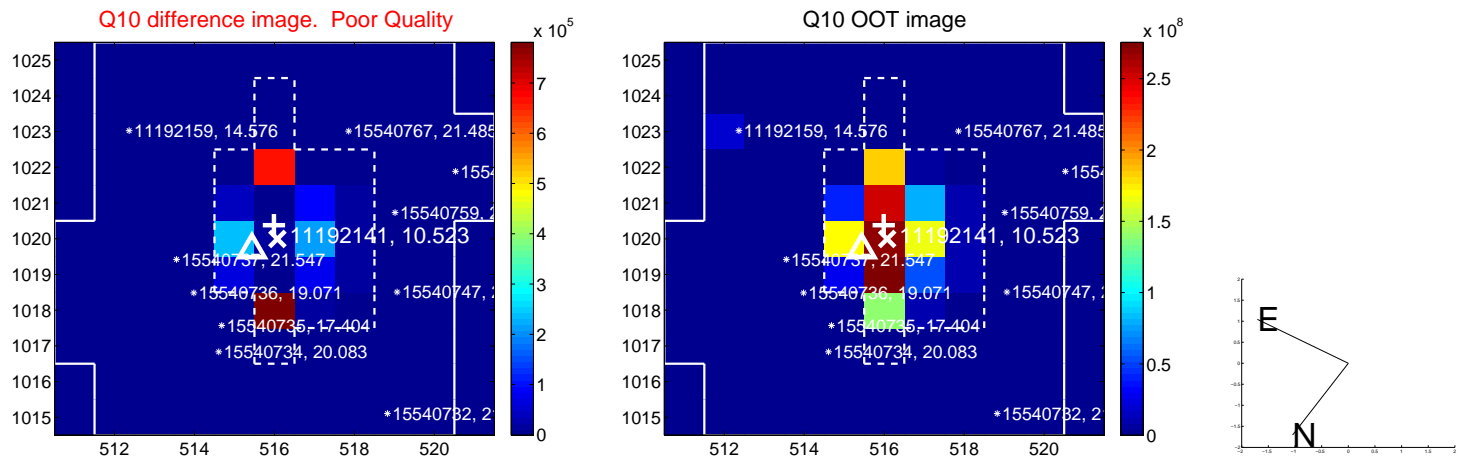
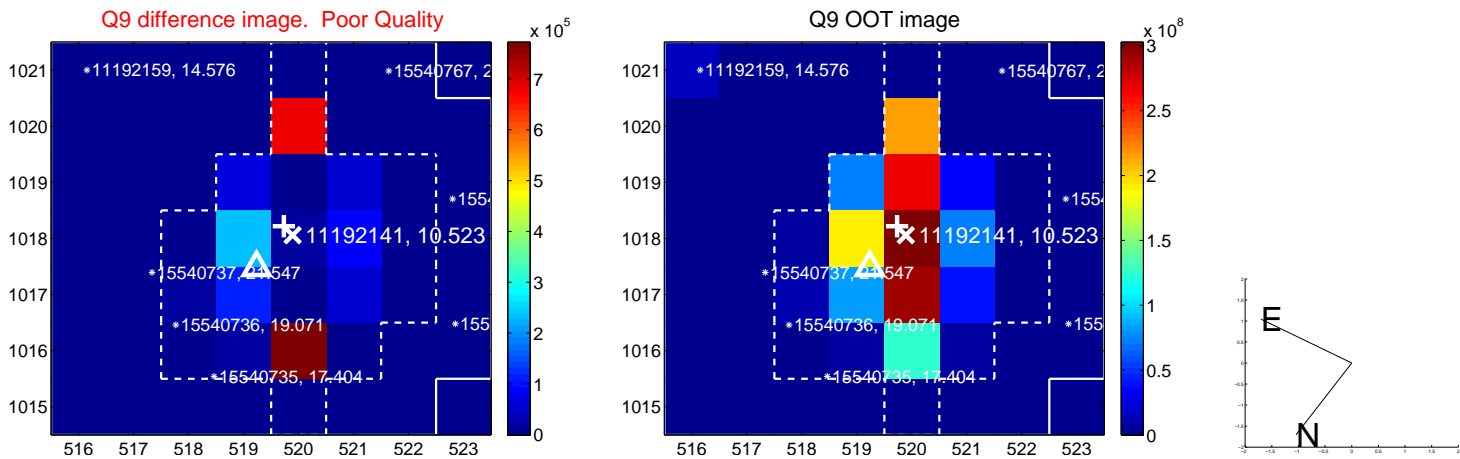


white  $\times$ : KIC target position;  $+$ : OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.

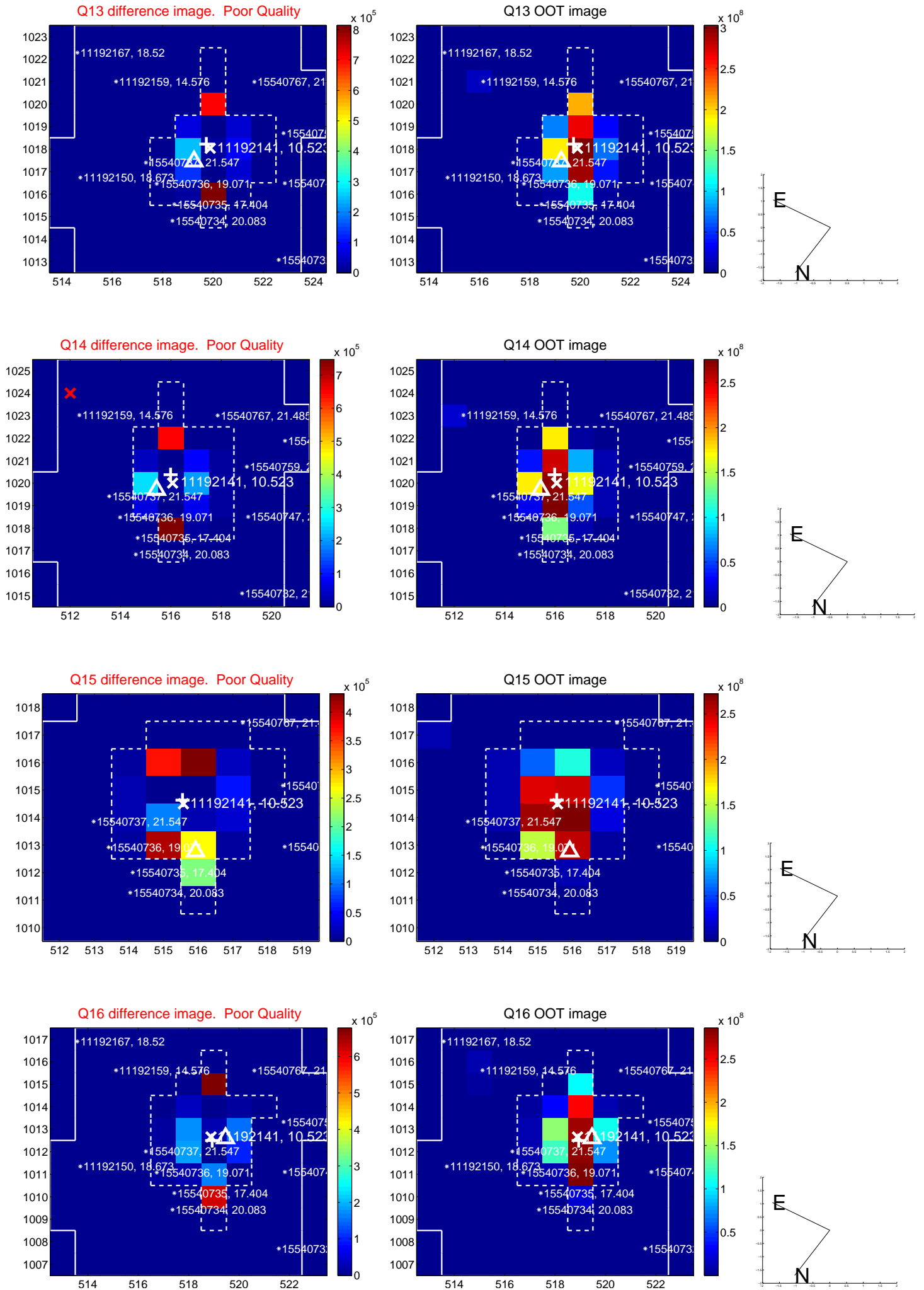




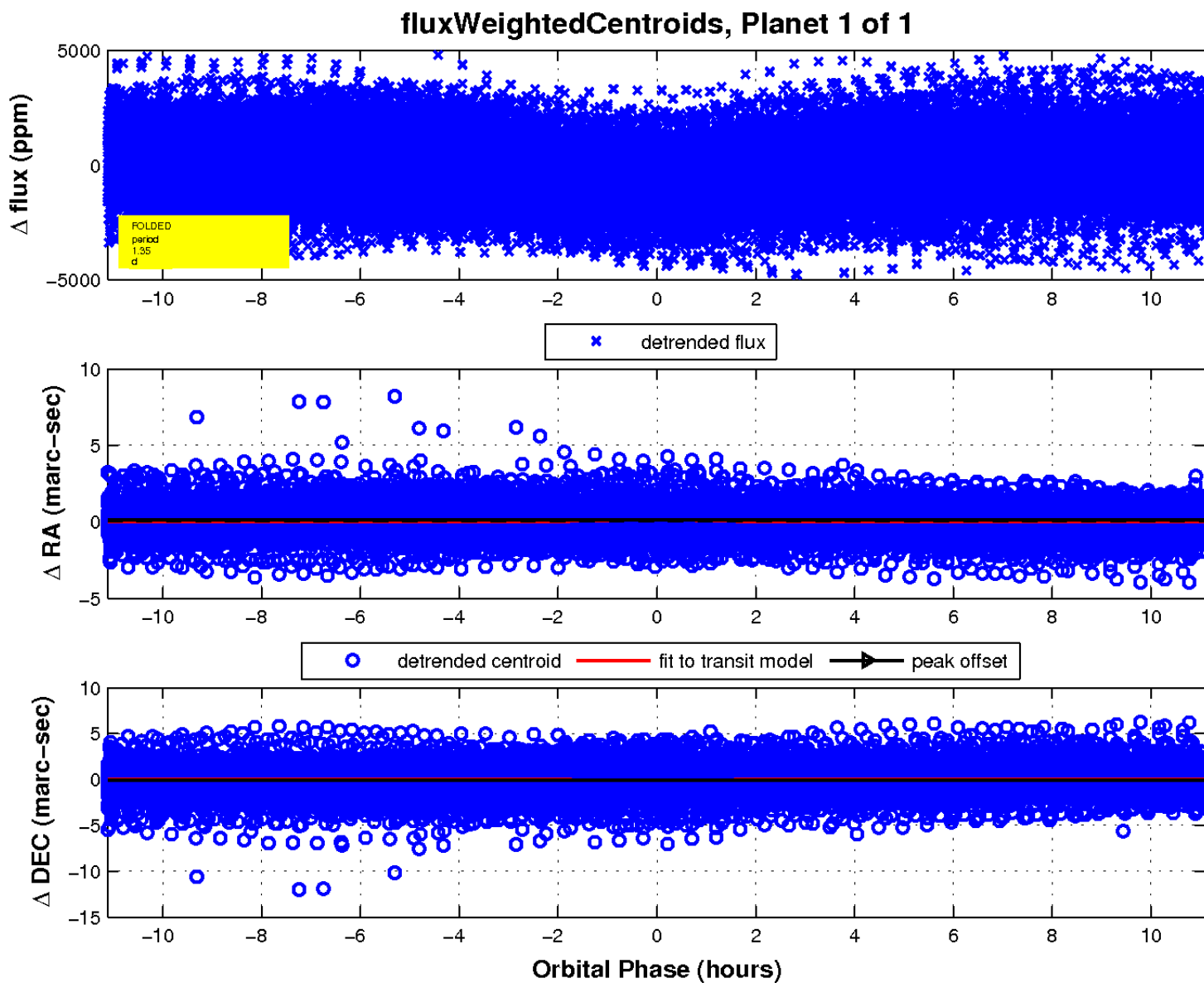
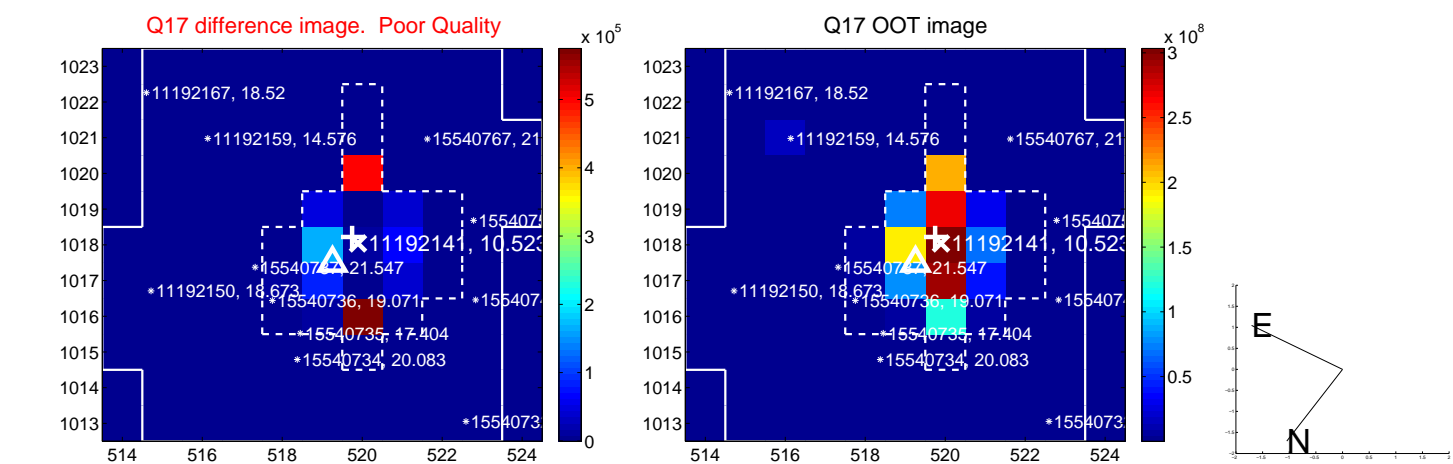
white  $\times$ : KIC target position;  $+$ : OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.



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



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



UKIRT Image

