

# KIC 011469049

## 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)	$R_p$ ( $R_{\oplus}$ )	$S_p$ ( $S_{\oplus}$ )
011469049-01	OBS	No	1.317732	132.455629	10.7	15.813	8.9	12.7	2.24	8016	1.13	22356.30

## Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011469049-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—CENT_FEW_DIFFS

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

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

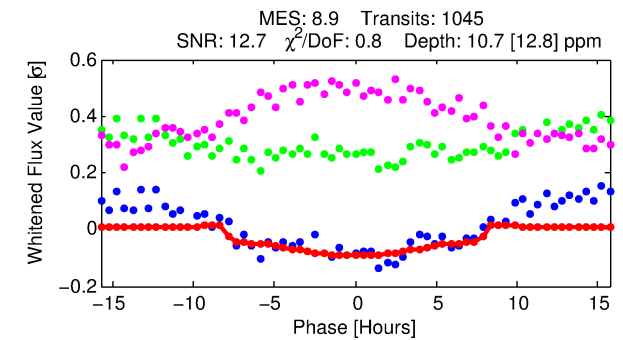
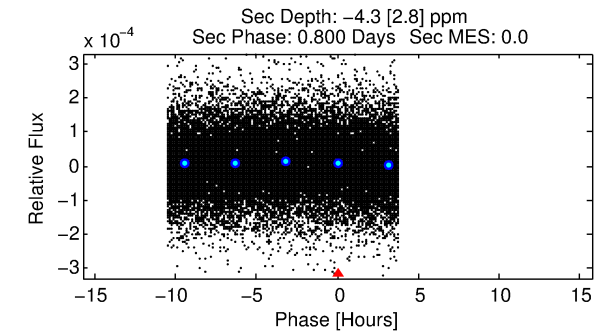
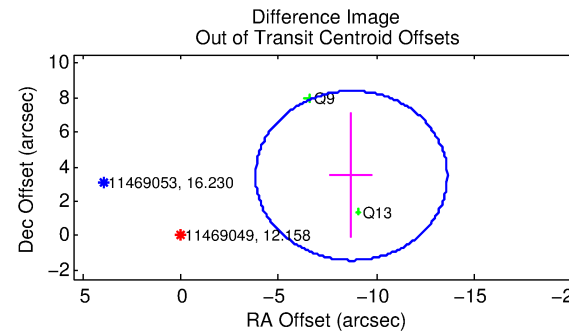
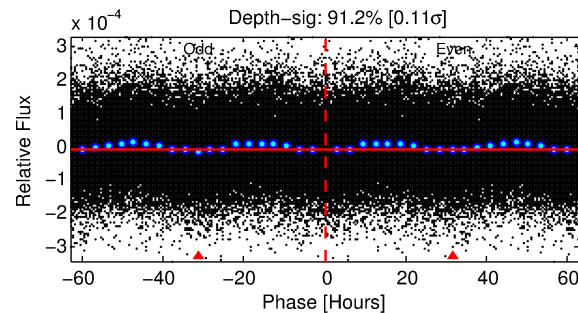
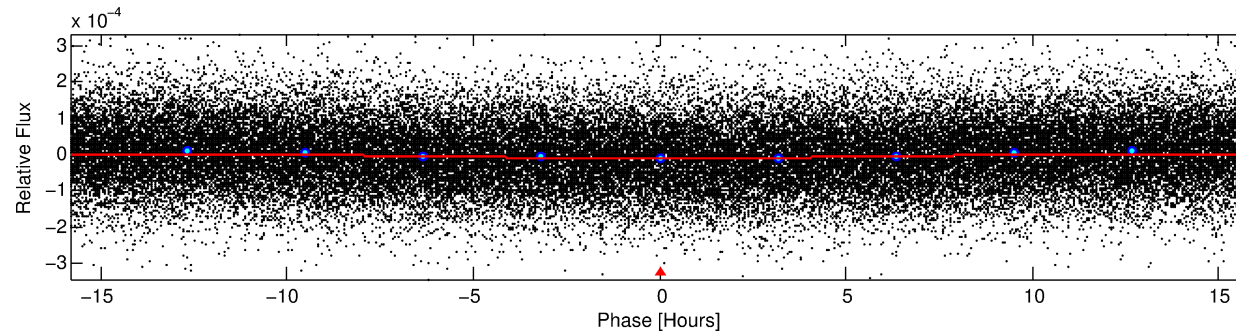
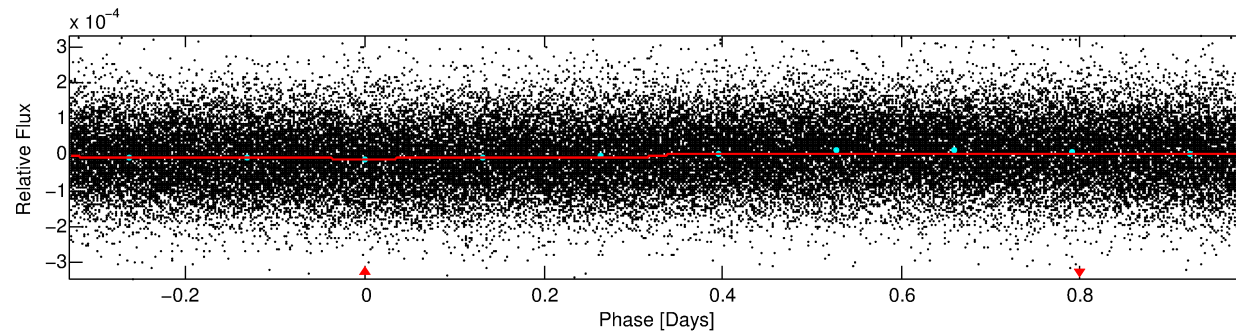
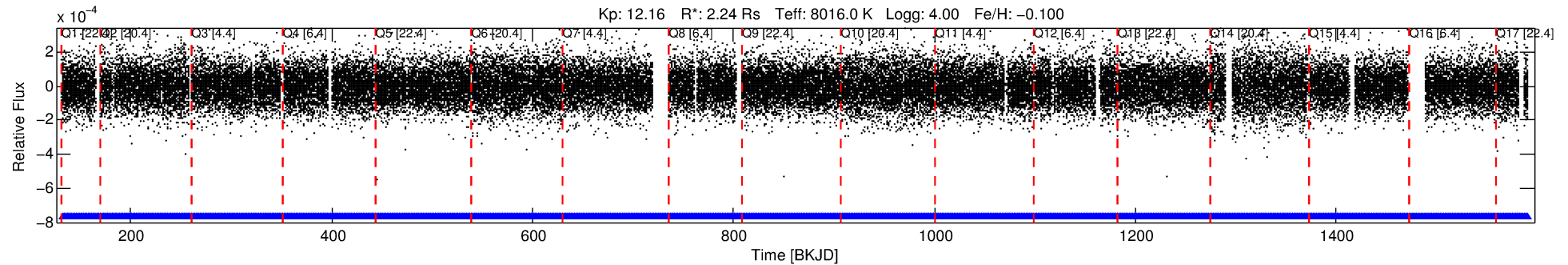
See [http://exoplanetarchive.ipac.caltech.edu/docs/API\\_kepcandidate\\_columns.html#proj\\_disp\\_col](http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col) for comment definitions.

## Ephemeris Match Information For 011469049-01

No Significant Match Found

# DV One-Page Summary

KIC: 11469049 Candidate: 1 of 1 Period: 1.318 d



## DV Fit Results:

Period = 1.31773 [0.00003] d  
Epoch = 132.4556 [0.0078] BKJD  
Rp/R\* = 0.0046 [0.0043]  
a/R\* = 1.00 [0.01]  
b = 1.00 [0.01]  
Seff = 22356.30 [8705.74]  
Teq = 3118 [304] K  
Rp = 1.13 [1.09] Re  
a = 0.0288 [0.0067] AU  
Ag = N/A  
Teffp = N/A

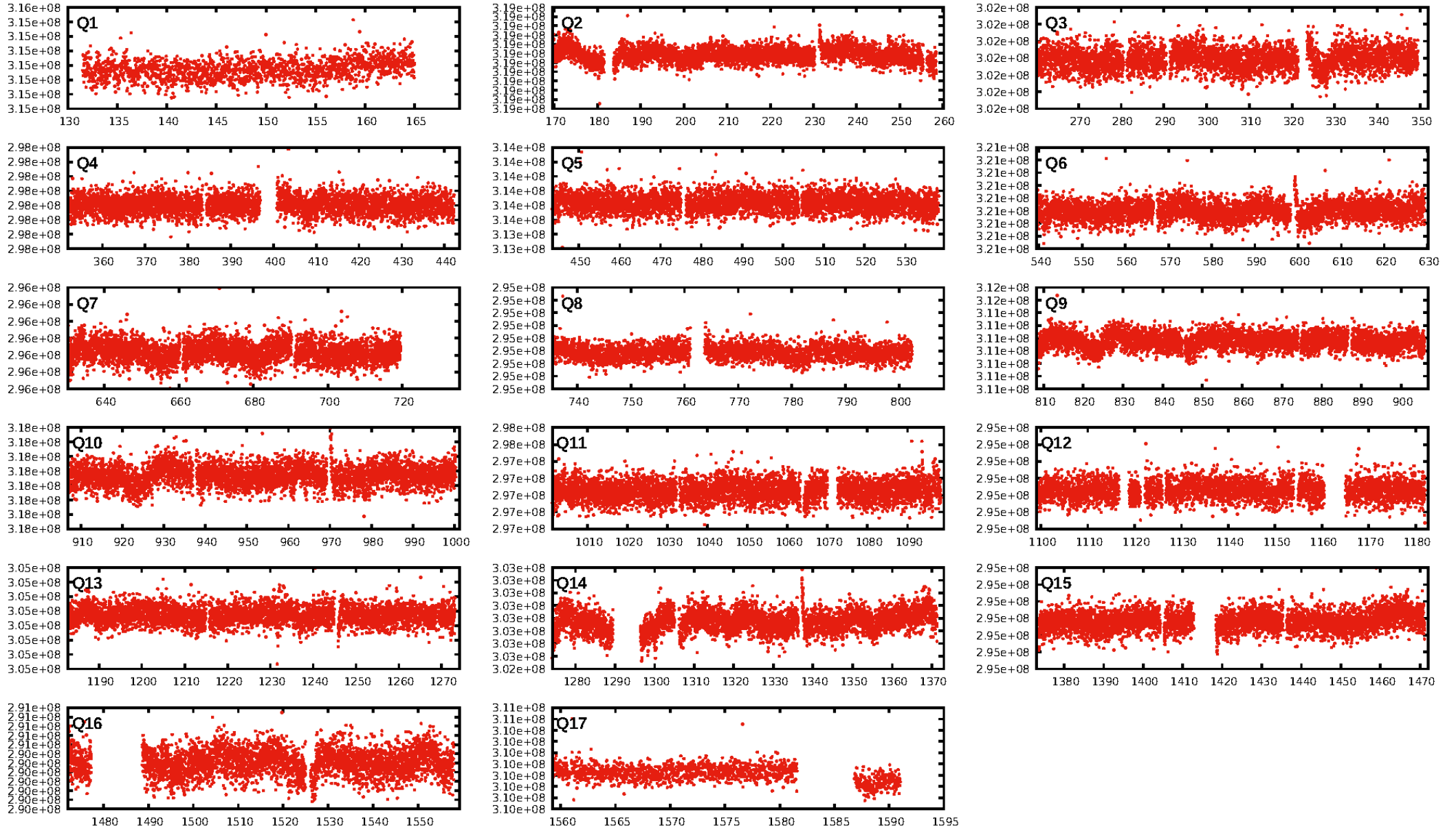
## DV Diagnostic Results:

ShortPeriod-sig: N/A  
LongPeriod-sig: N/A  
ModelChiSquare2-sig: N/A  
ModelChiSquareGof-sig: N/A  
Bootstrap-pfa: N/A  
RollingBand-fgt: 1.00 [999/999]  
GhostDiagnostic-chr: 2.867  
Centroid-sig: 0.0%  
Centroid-so: 2.148 arcsec [2.31 $\sigma$ ]  
OotOffset-rm: 9.387 arcsec [5.75 $\sigma$ ]  
KicOffset-rm: 9.483 arcsec [5.82 $\sigma$ ]  
OotOffset-st: 0/0/0/2 [2]  
KicOffset-st: 0/0/0/2 [2]  
DiffImageQuality-fgm: 0.00 [0/2]  
DiffImageOverlap-fno: 1.00 [17/17]

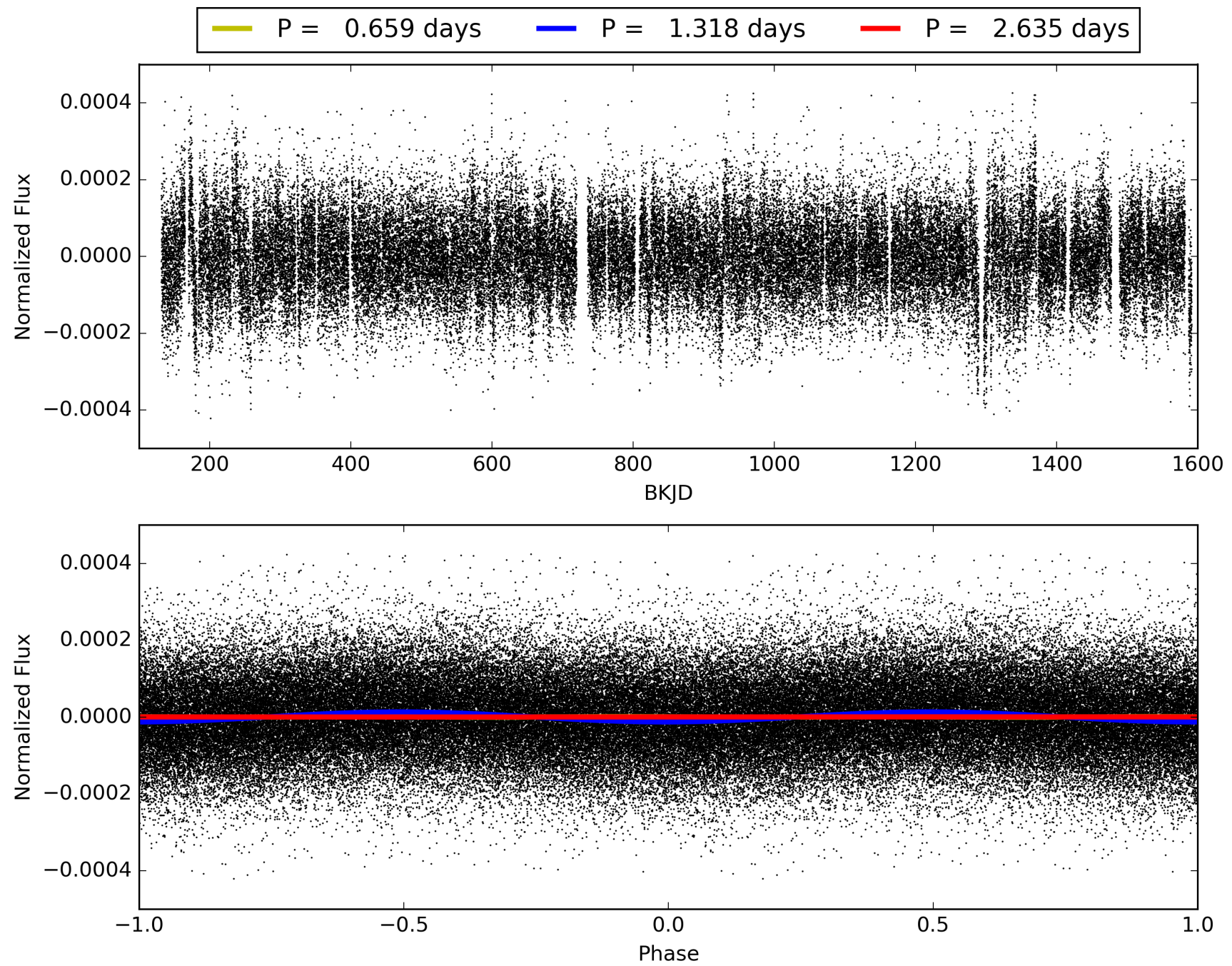
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 00:05:20 Z

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

# TCE 011469049-01, PDC Light Curves

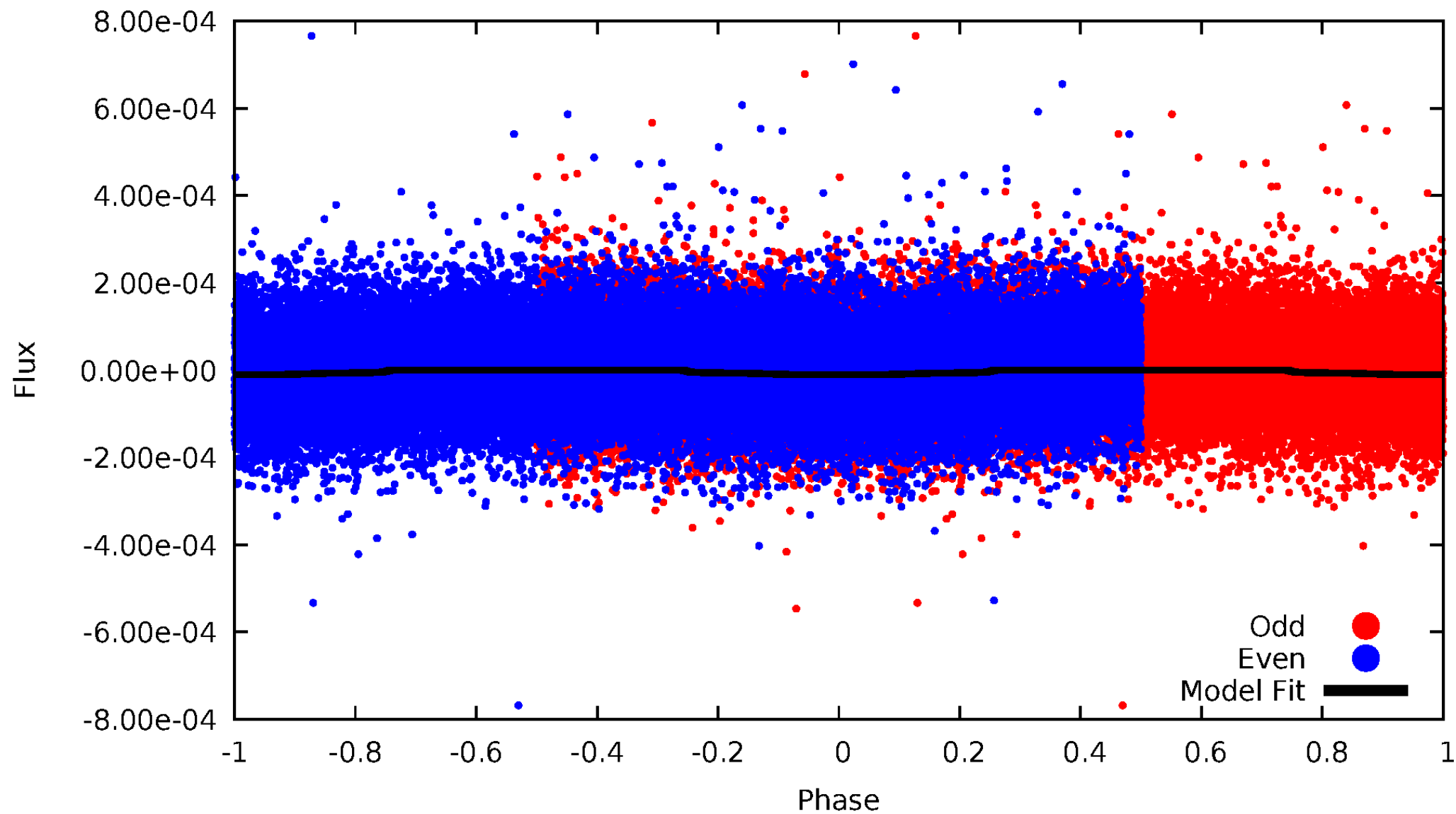


TCE 011469049-01



# DV Odd/Even

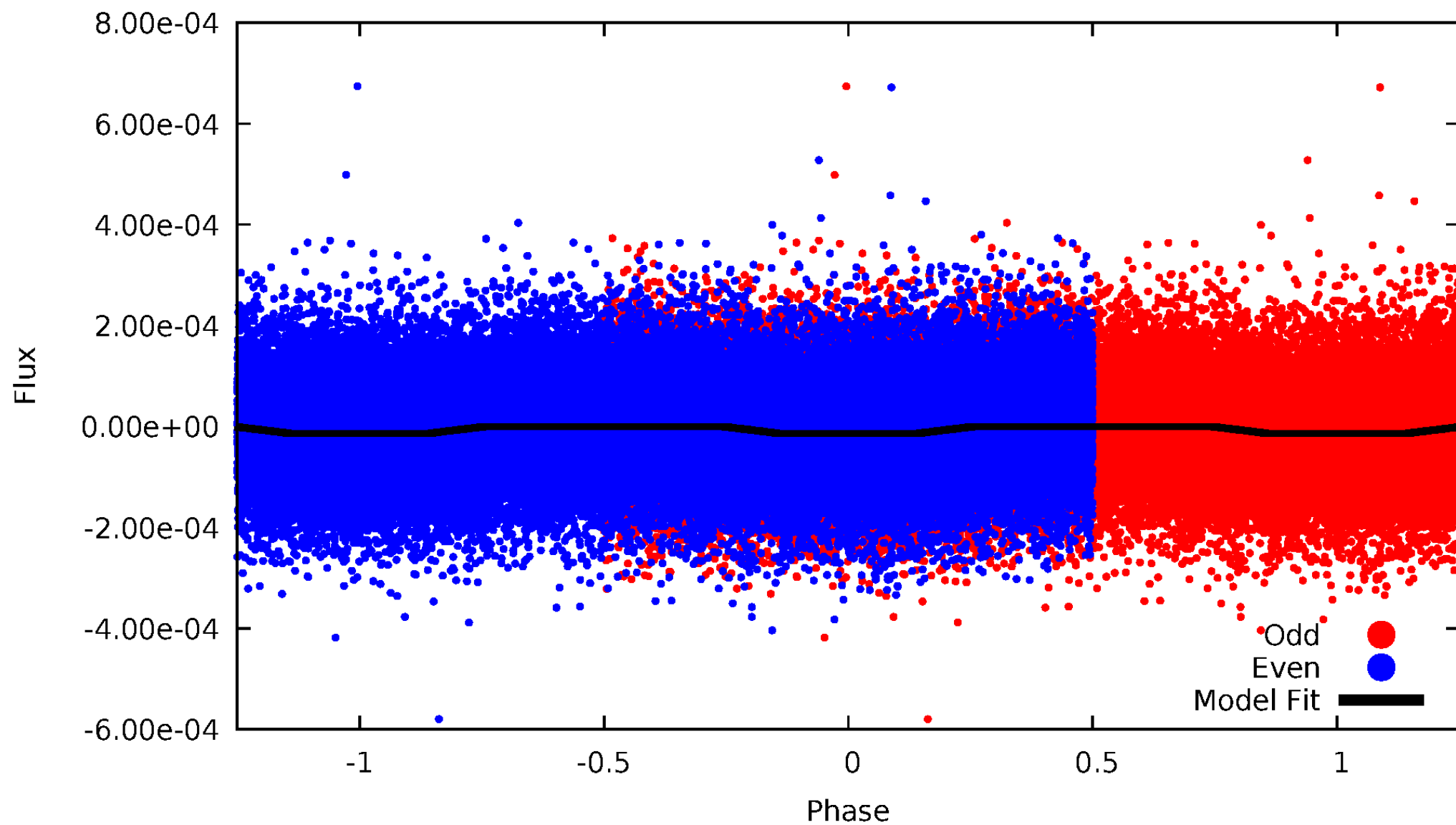
TCE 011469049-01





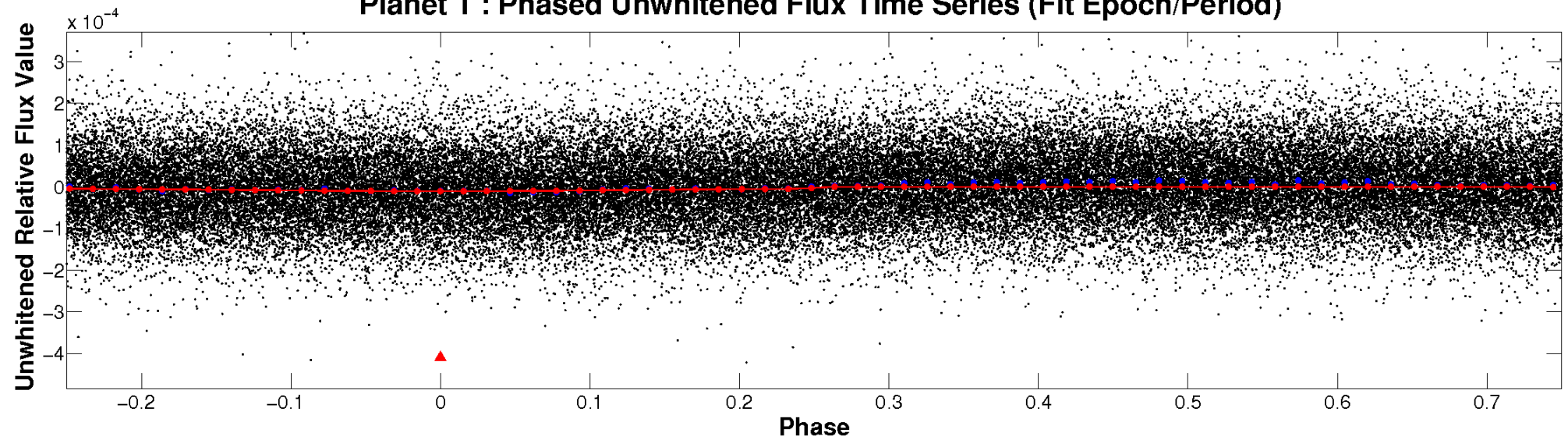
# ALT Odd/Even

TCE 011469049-01

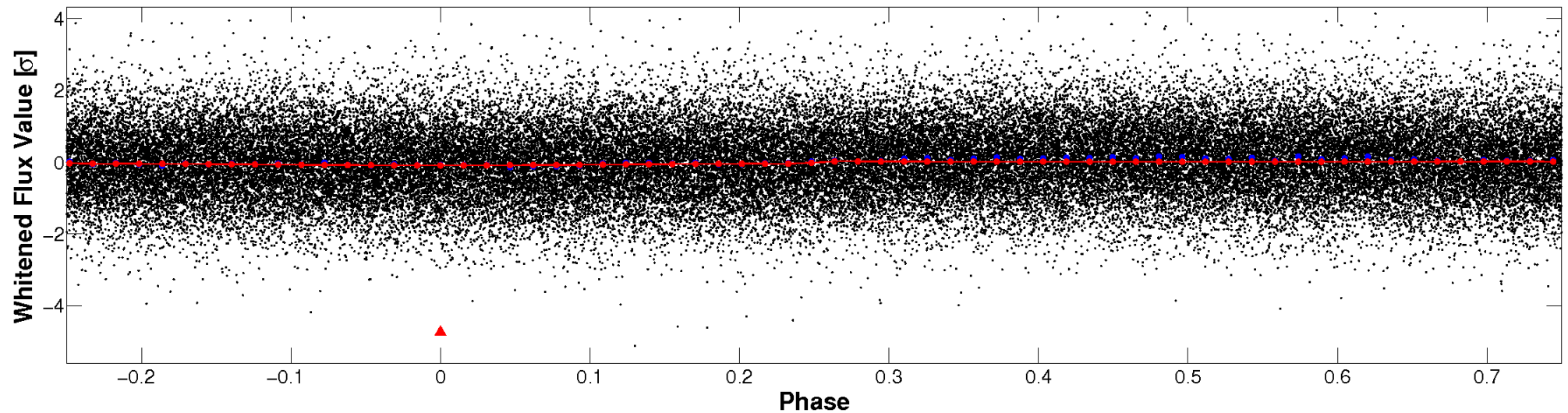


# Non-Whitened Vs. Whitened Light Curve

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

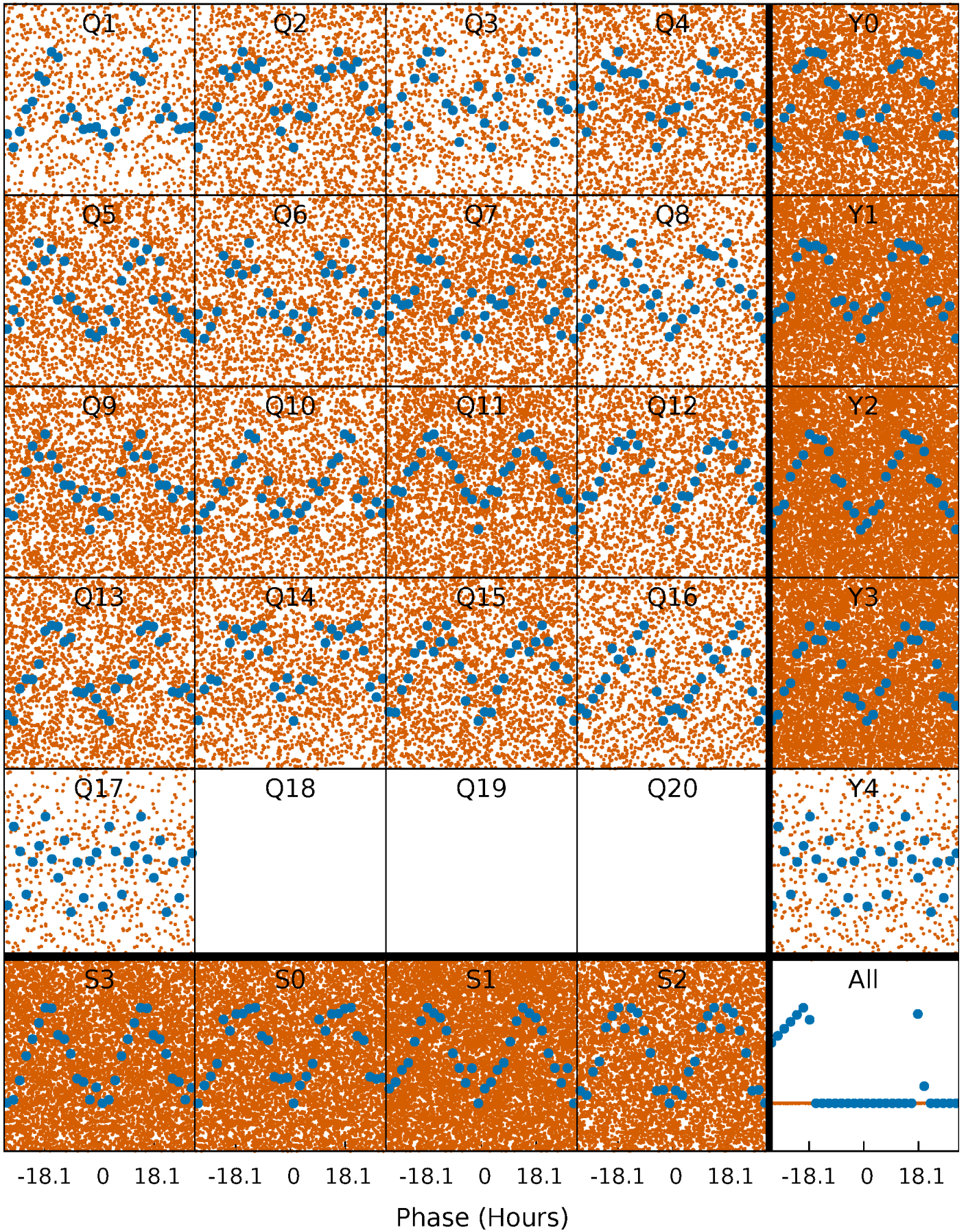


**Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)**



# PDC Quarter-Phased Transit Curves

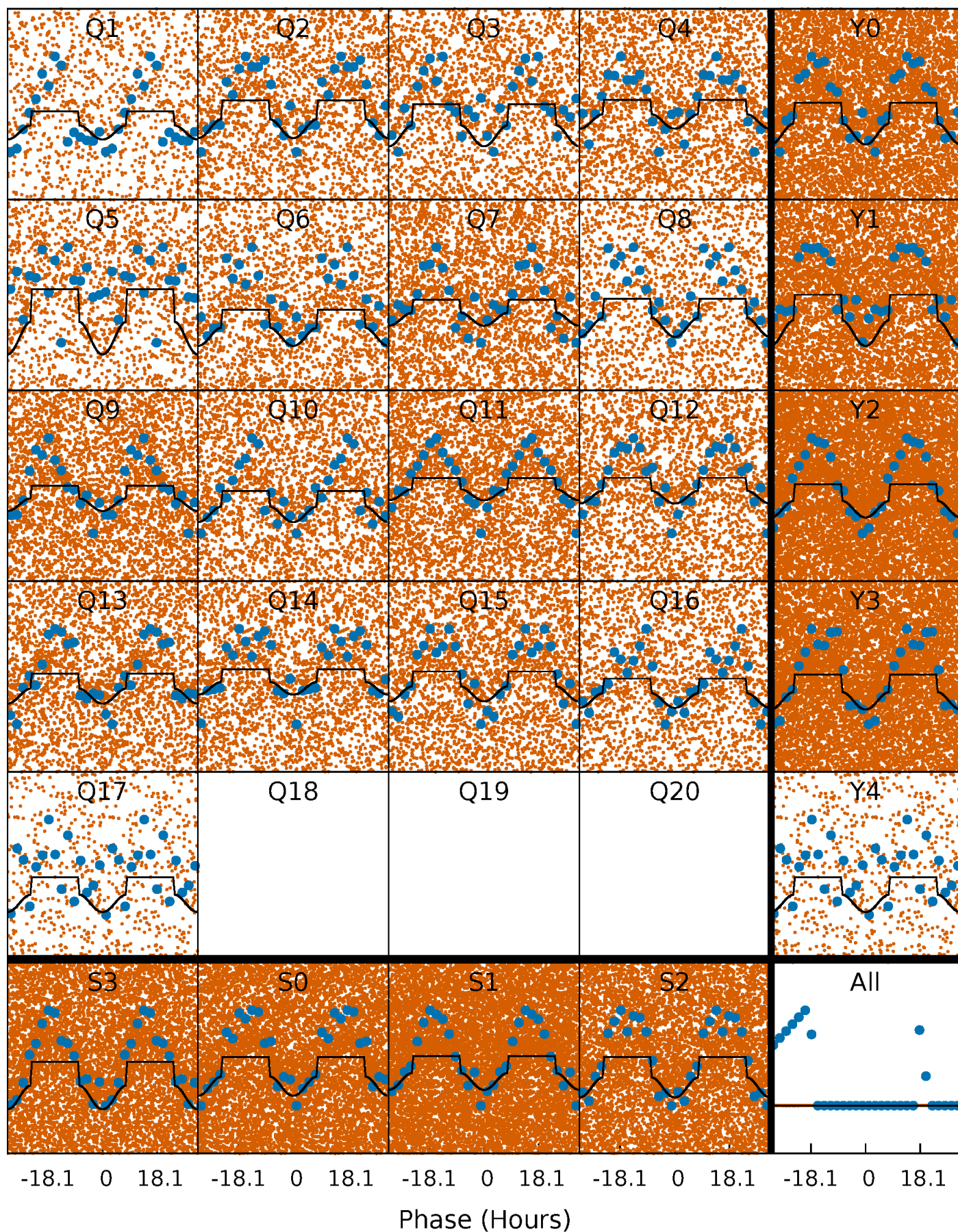
TCE 011469049-01 P= 1.317732 Days  $T_0=132.455629$  (BKJD)





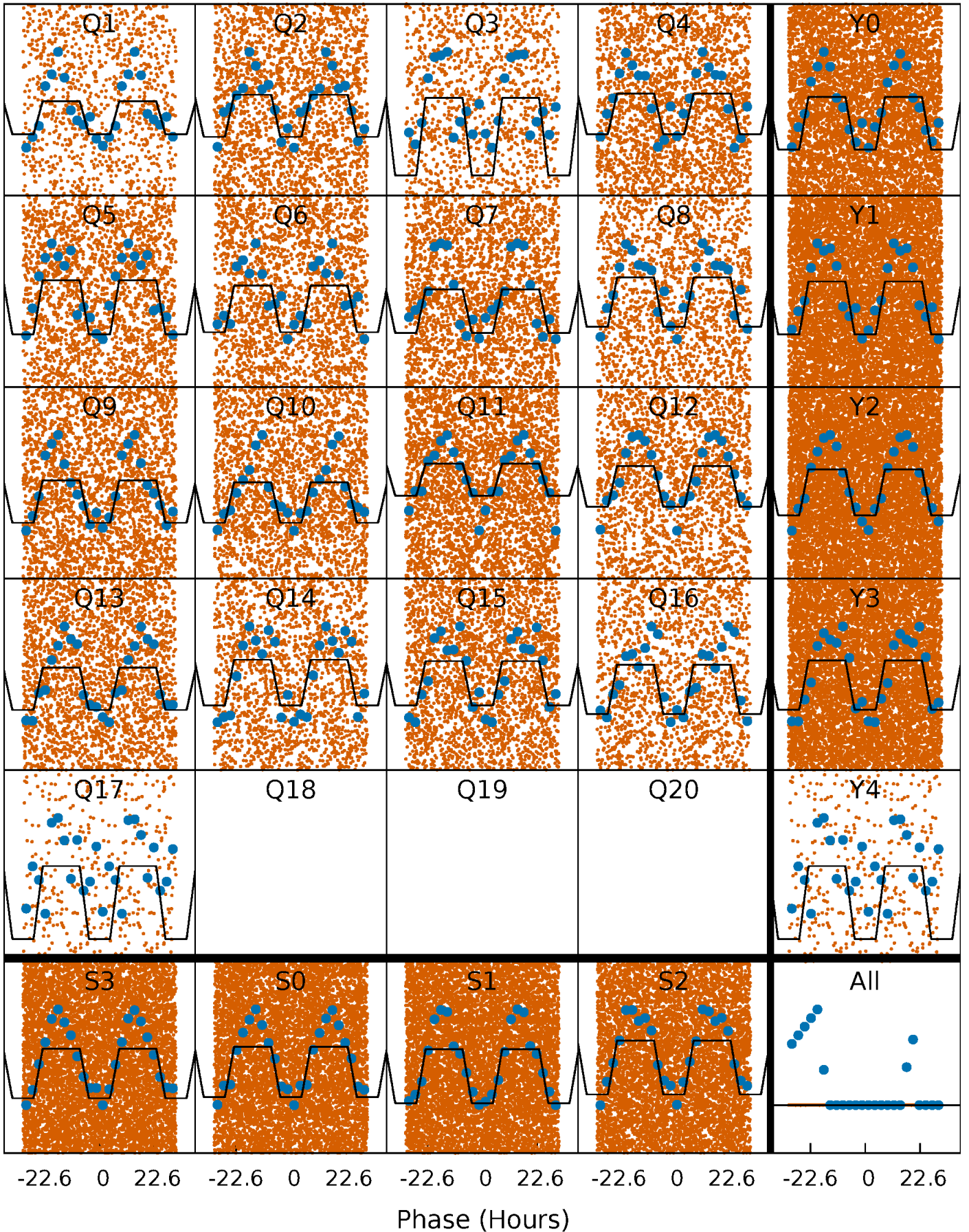
# DV Quarter-Phased Transit Curves

TCE 011469049-01 P= 1.317732 Days  $T_0=132.455629$  (BKJD)



# Alt. Detrend Quarter-Phased Transit Curves

TCE 011469049-01 P= 1.317632 Days  $T_0=132.496007$  (BKJD)

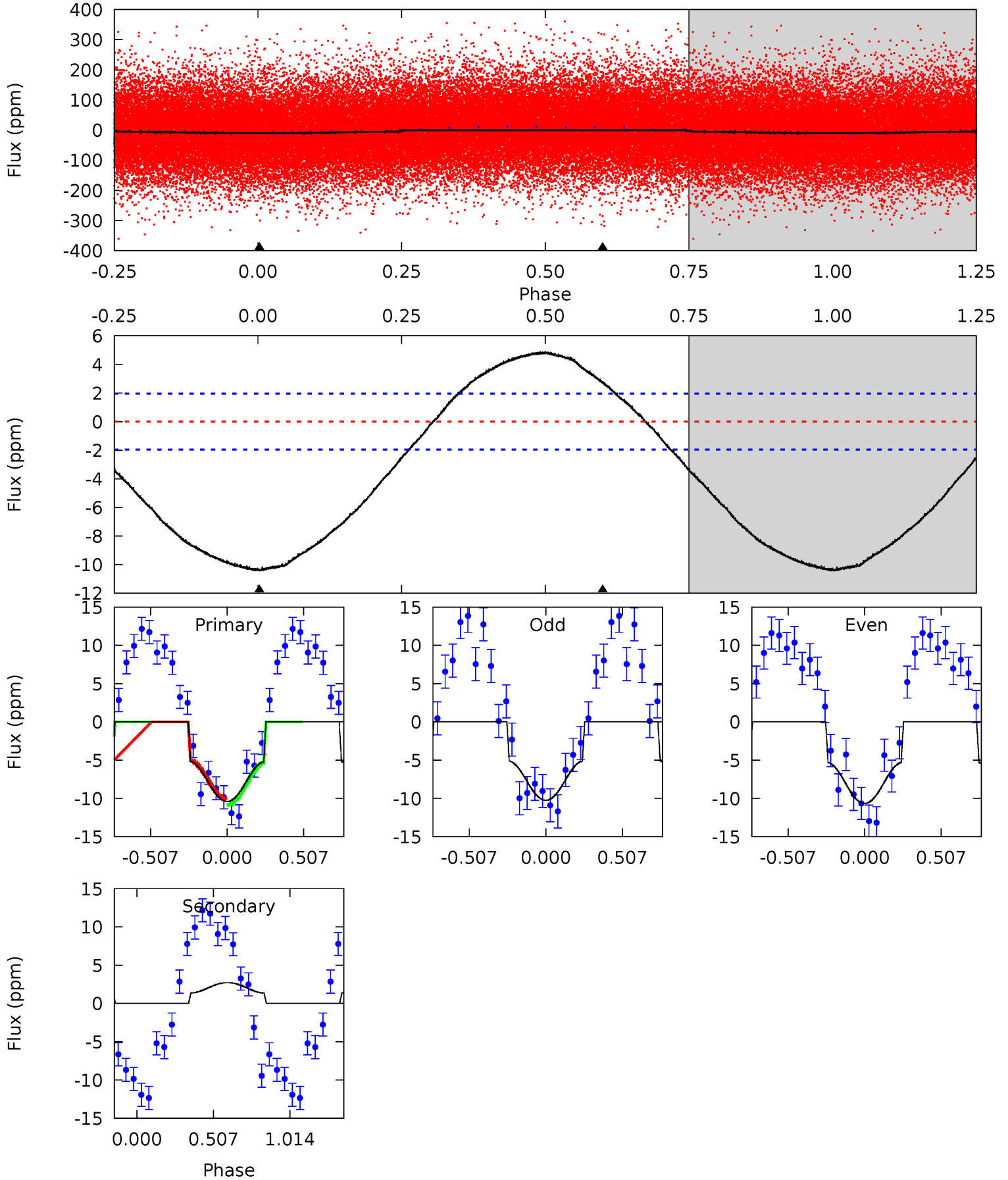




# DV Model-Shift Uniqueness Test

011469049-01, P = 1.317732 Days, E = 131.137897 Days

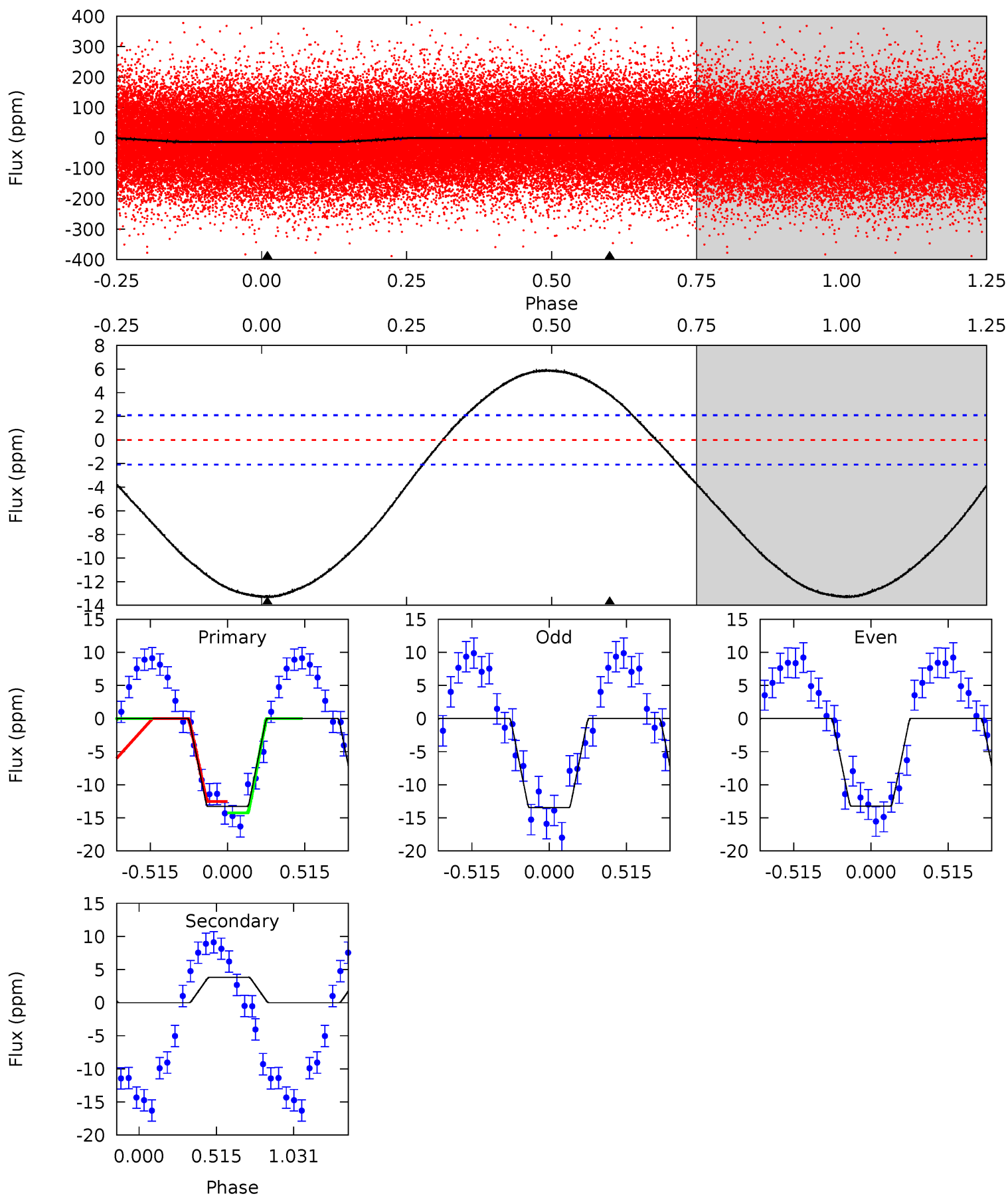
Pri	Sec	Ter	Pos	FA <sub>1</sub>	FA <sub>2</sub>	F <sub>Red</sub>	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
22.4	-5.87	0	0	4.21	0.66	2.87	22.4	22.4	-5.87	-5.87	0.44	1.03	0.32	0.83



# Alt Model-Shift Uniqueness Test

011469049-01, P = 1.317632 Days, E = 131.178375 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
26.8	-7.69	0	0	4.21	0.65	3.33	26.8	26.8	-7.69	-7.69	0.23	0.88	0.31	1.68





### Stellar Parameters For KIC 011469049

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R$ ( $R_{\odot}$ )	$M(M_{\odot})$	$p_{\star}$ ( $\text{g}\cdot\text{cm}^{-3}$ )
	$8016^{+225}_{-338}$	$4.001^{+0.198}_{-0.132}$	$-0.100^{+0.200}_{-0.350}$	$2.237^{+0.482}_{-0.589}$	$1.831^{+0.142}_{-0.332}$	$0.230^{+0.266}_{-0.092}$
	+3%/-4%	+5%/-3%	+200%/-350%	+22%/-26%	+8%/-18%	+115%/-40%
Source	KIC0	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 011469049-01 / KOI

Detrend	Depth (ppm)	$R_p$ ( $R_{\oplus}$ )	$T_{max}$ (K)	$T_{obs}$ (K)	$A_{obs}$
DV	$3\pm 0$	$1.29^{+1.00}_{-0.78}$	$4307^{+293}_{-318}$	$-4799^{+574}_{-2055}$	$-0.740^{+0.520}_{-3.999}$
Alt.	$4\pm 0$	$1.21^{+0.88}_{-0.78}$	$4331^{+268}_{-298}$	$-5222^{+777}_{-3317}$	$-1.171^{+0.787}_{-7.434}$

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

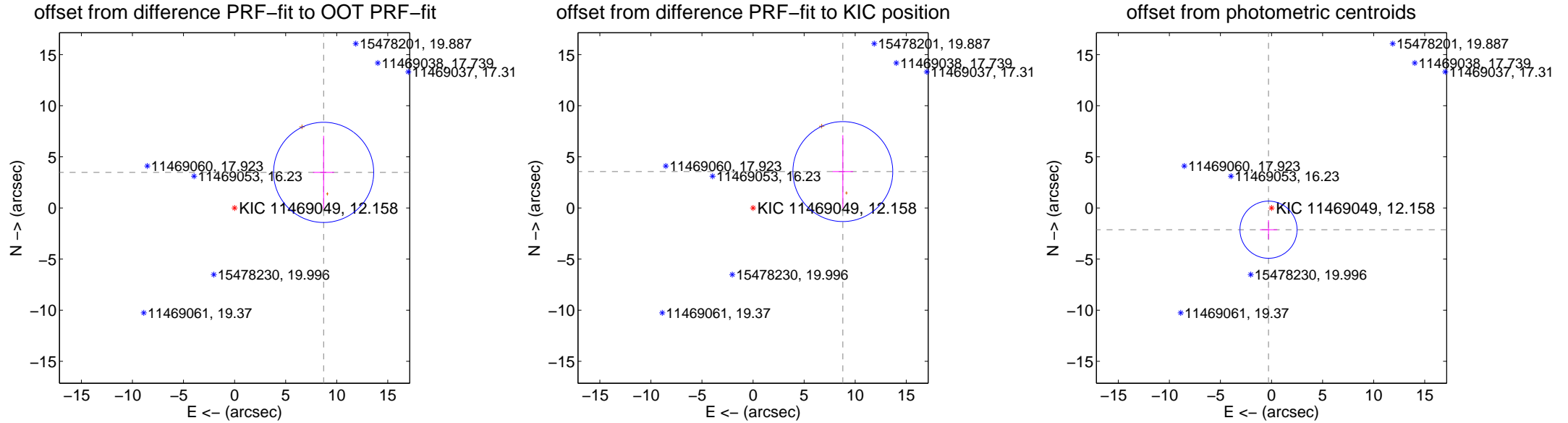
## DV Centroid Data

Supplemental centroid analysis for 011469049-01. Kepler magnitude: 12.16. Transit SNR 12.67

There are 0 quarters with good PRF difference image offsets

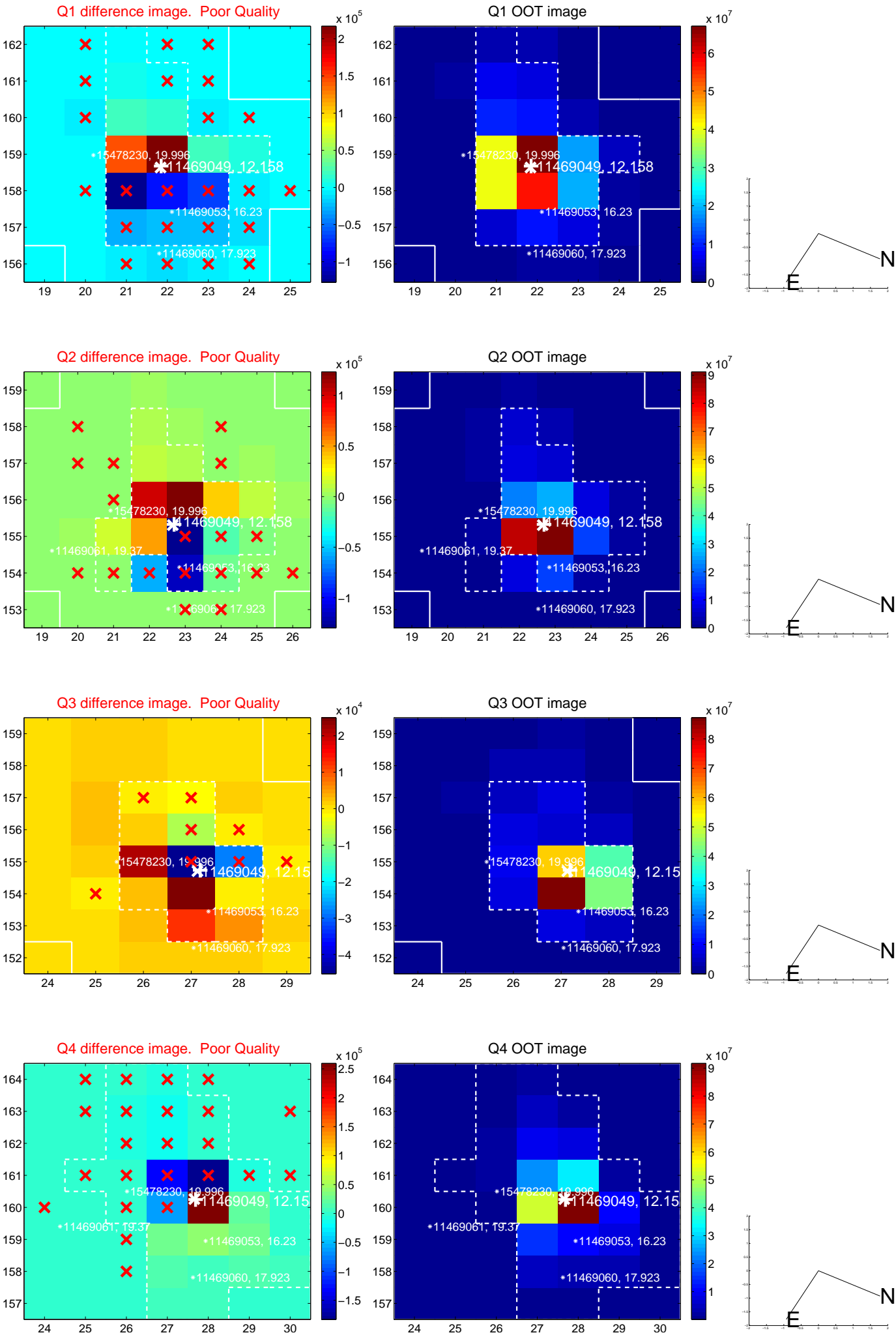
The direct PRF centroid is offset from the target star catalog position by about 0.11 arcsec

	Distance in arcsec	Distance / $\sigma$	$\Delta$ RA	$\Delta$ Dec
PRF-fit source offset from OOT	$9.387 \pm 1.633$	5.75	$-8.718 \pm 1.028$	$3.480 \pm 3.575$
PRF-fit source offset from KIC position	$9.483 \pm 1.629$	5.82	$-8.791 \pm 1.003$	$3.558 \pm 3.566$
photometric centroid source offset	$2.15 \pm 0.93$	2.31	$0.29 \pm 0.84$	$-2.13 \pm 0.93$

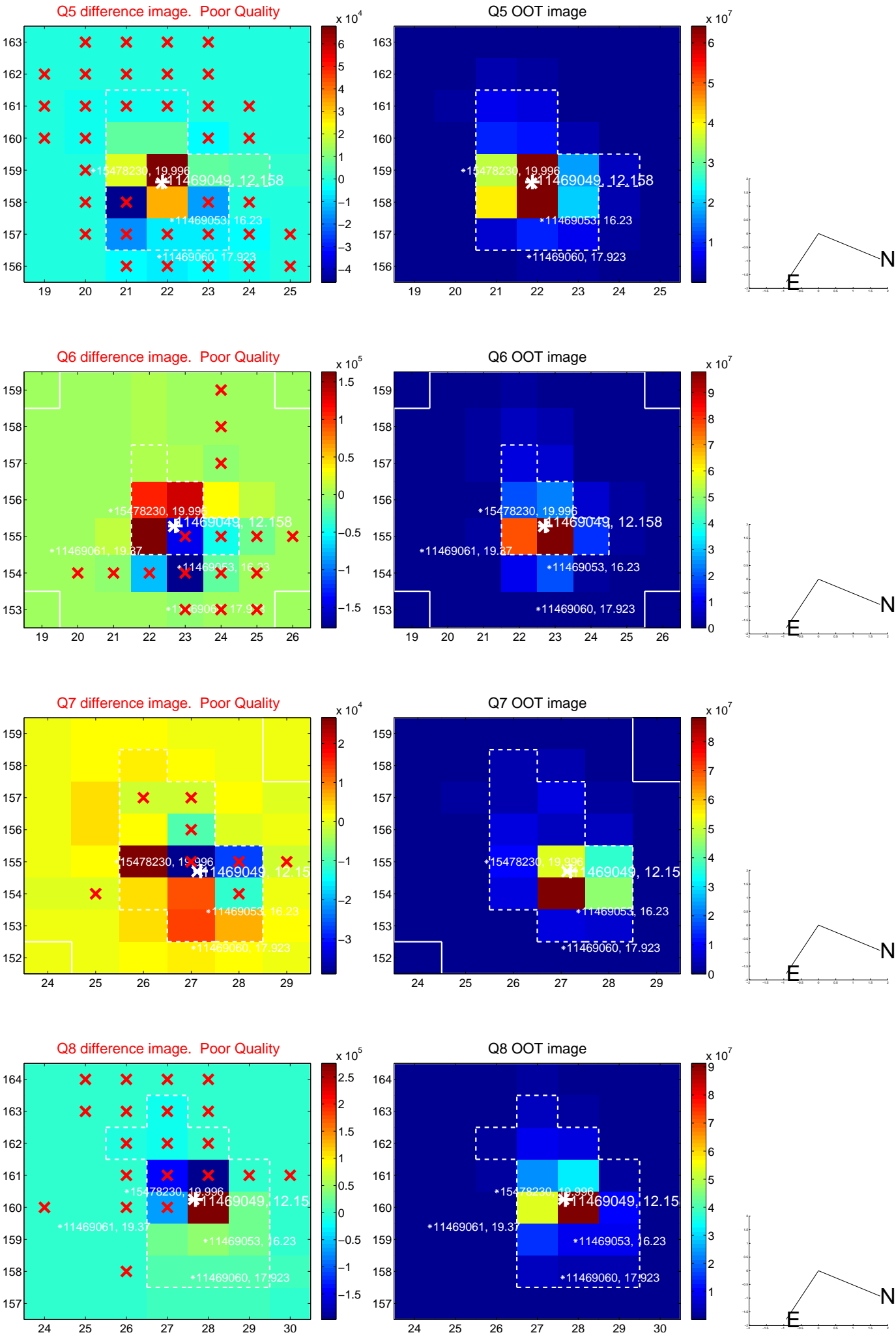


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- $\sigma$  uncertainty. Blue circle: three-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

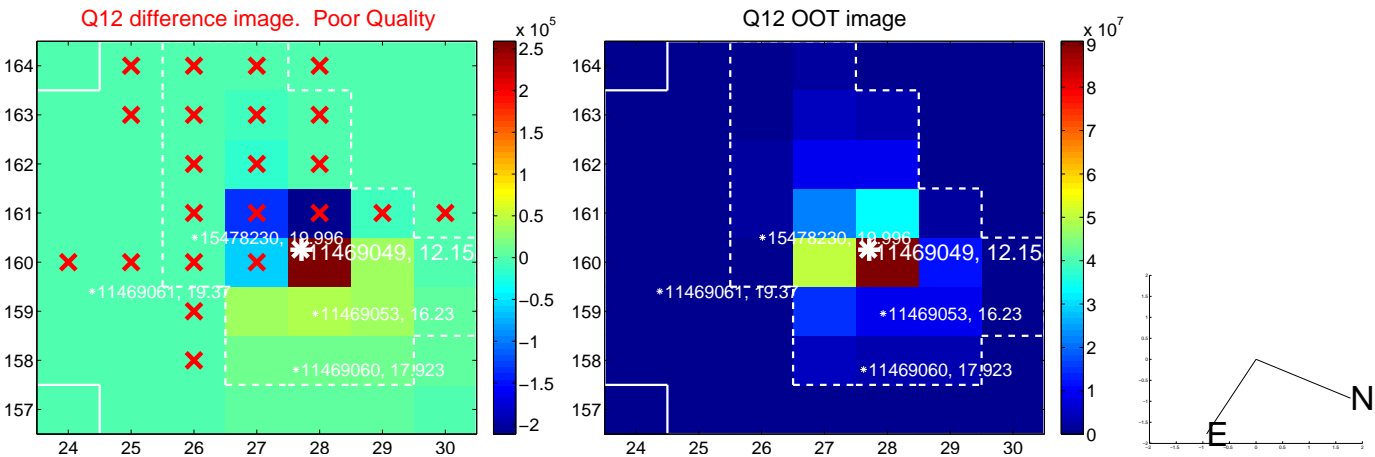
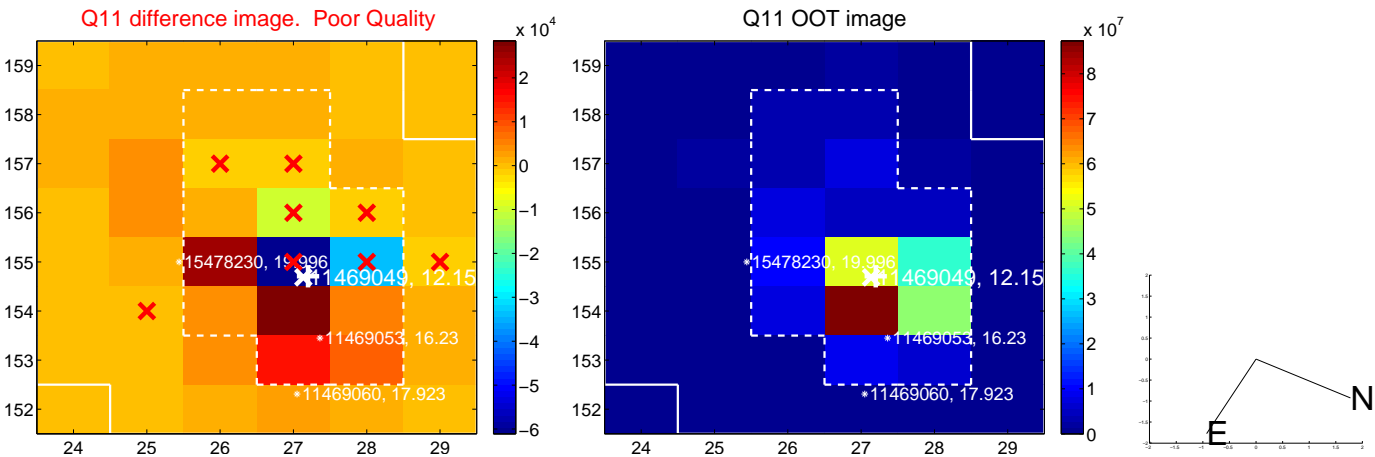
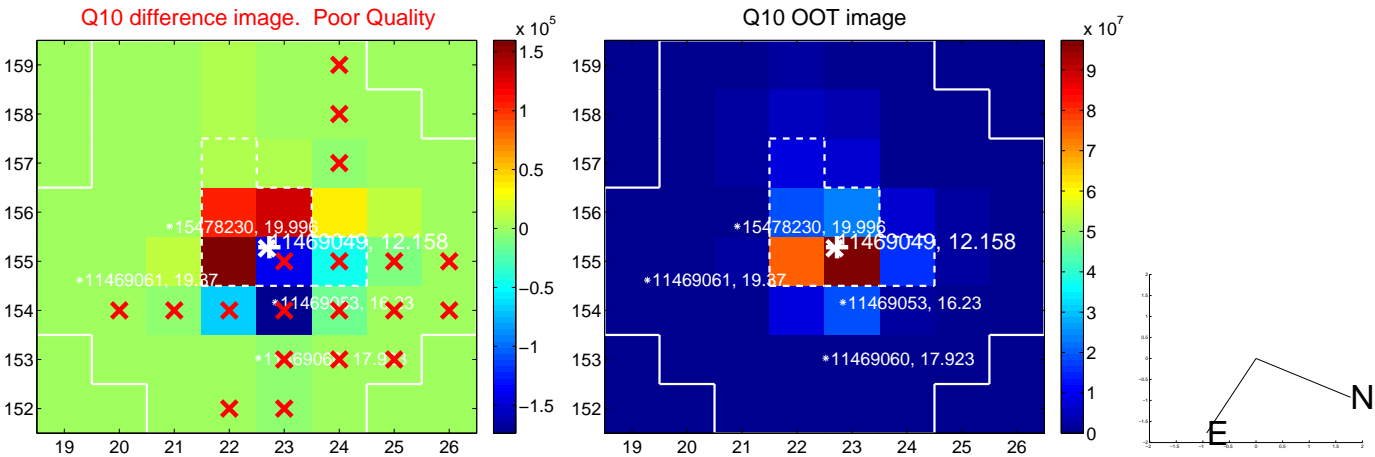
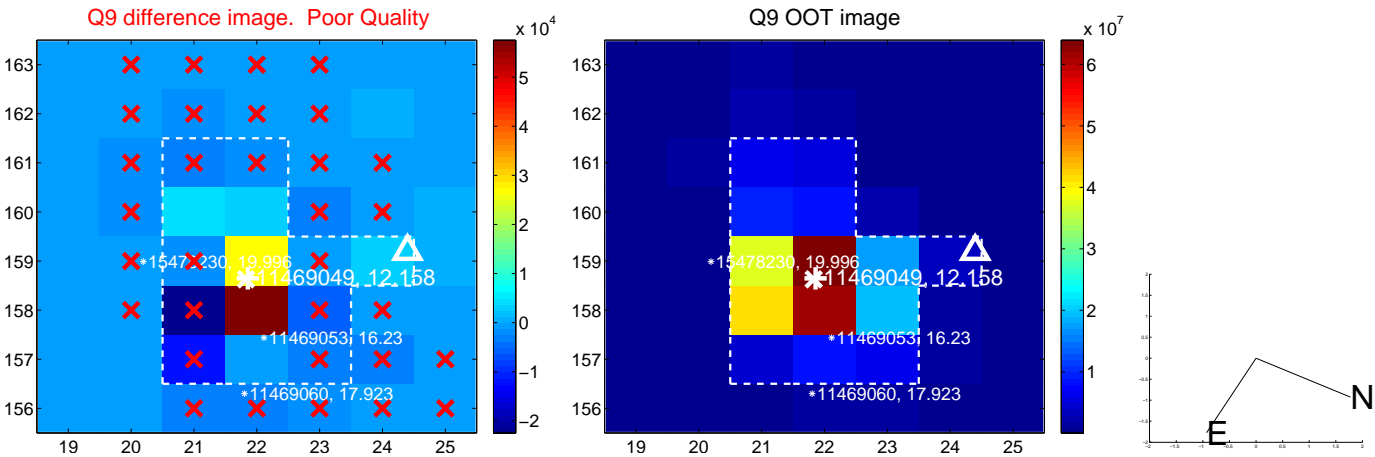


white  $\times$ : KIC target position; +: OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.

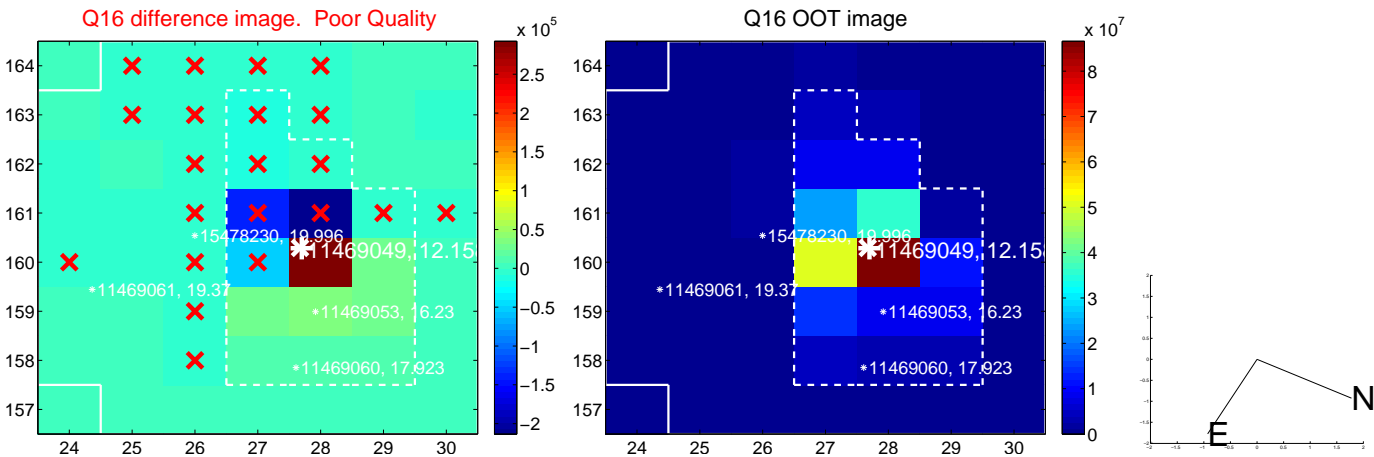
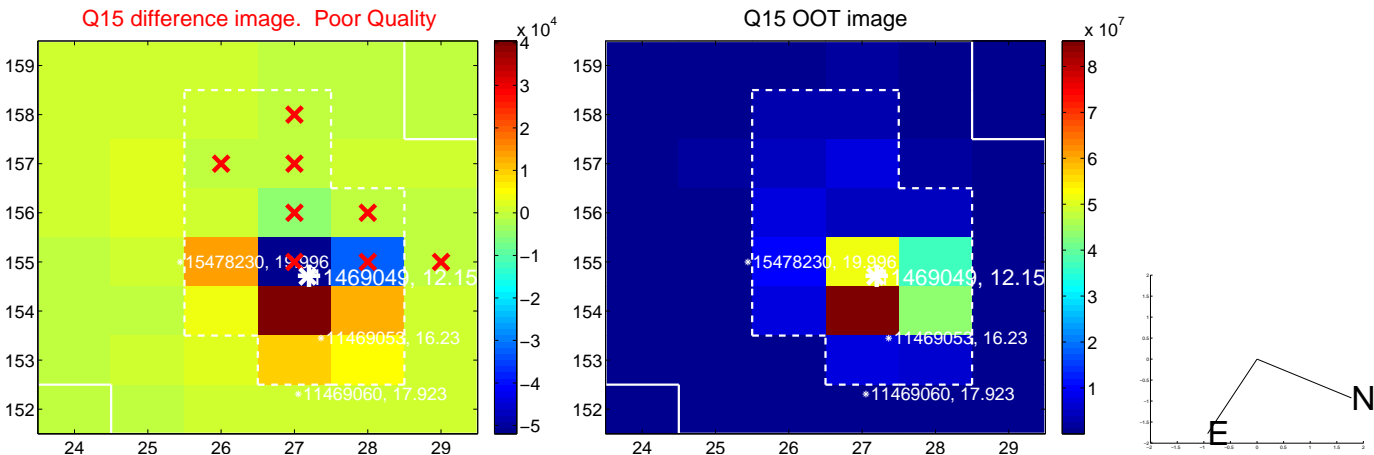
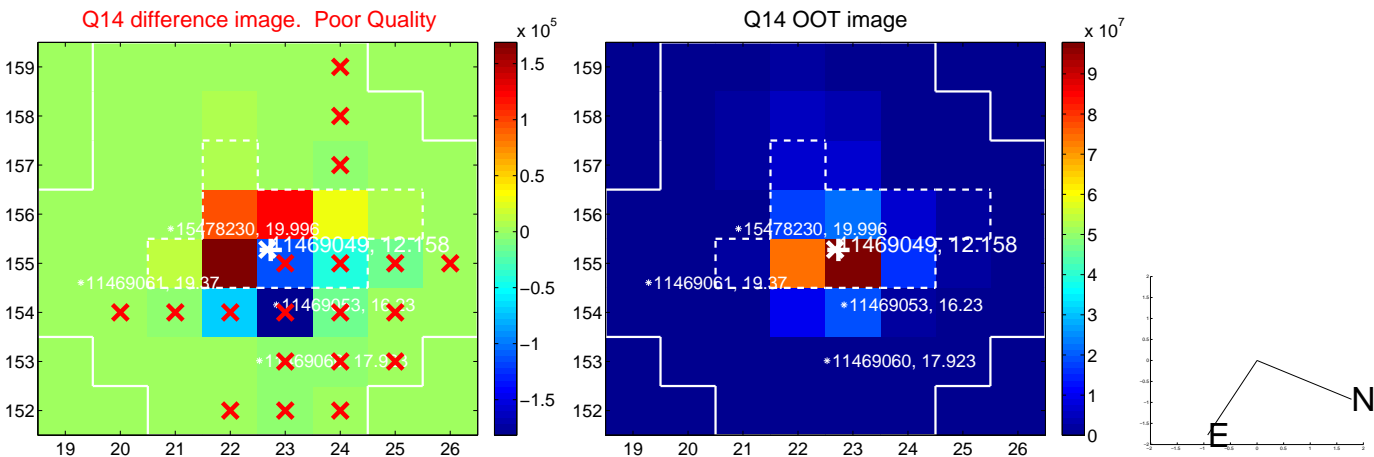
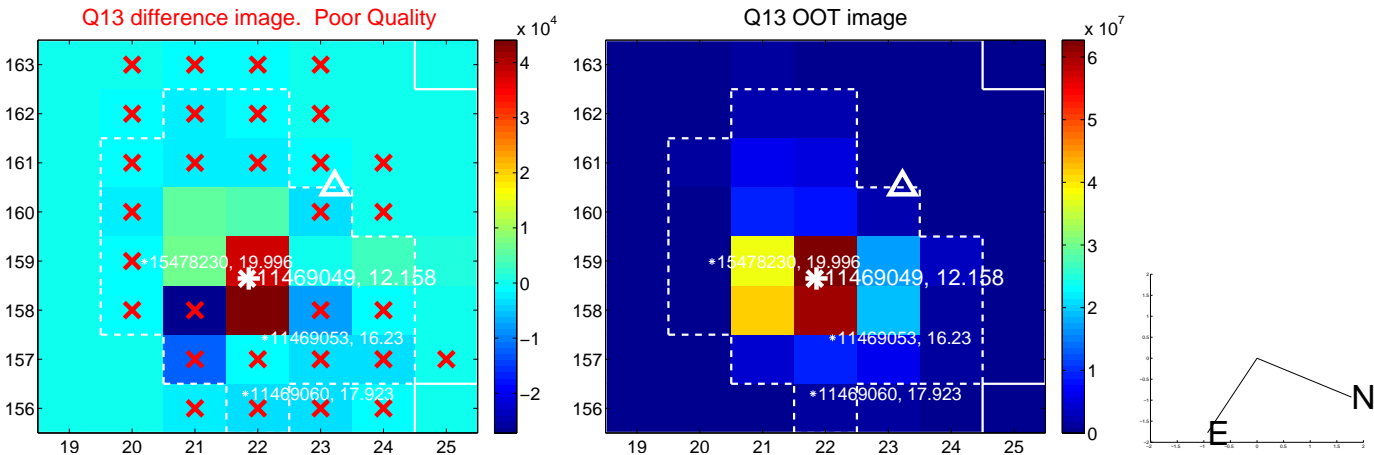




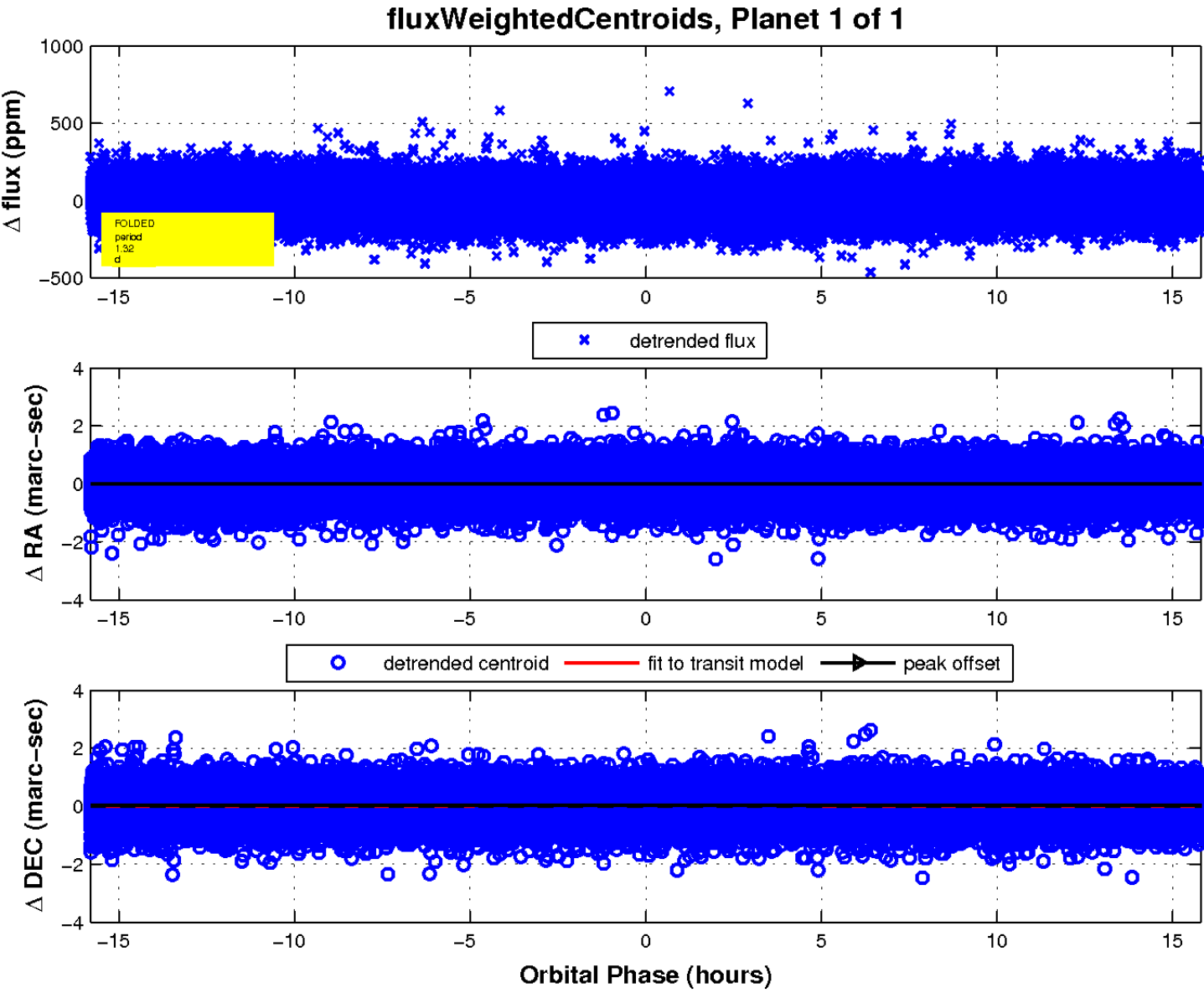
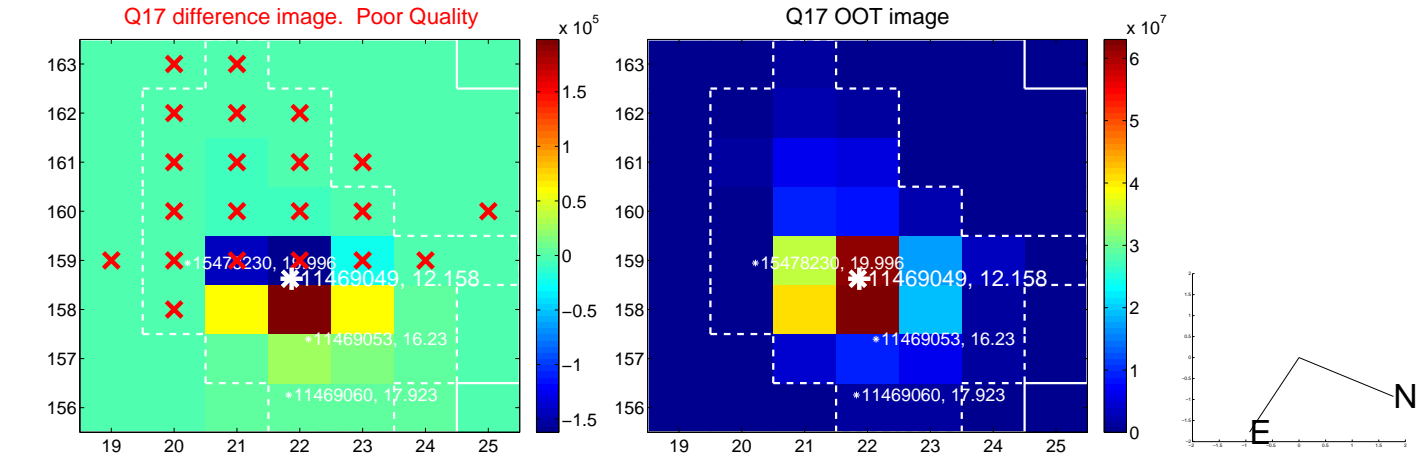
white  $\times$ : KIC target position;  $+$ : OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.



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

