

# KIC 007119522

## 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)	$R_p$ ( $R_{\oplus}$ )	$S_p$ ( $S_{\oplus}$ )
007119522-01	OBS	No	0.618183	131.536514	33.2	2.150	7.6	7.5	2.07	5585	1.35	17669.74

## Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007119522-01	OBS	FP	0.00	1	0	1	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_RESOLVED_OFFSET

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

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

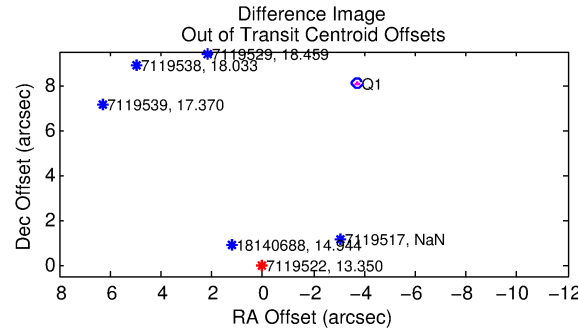
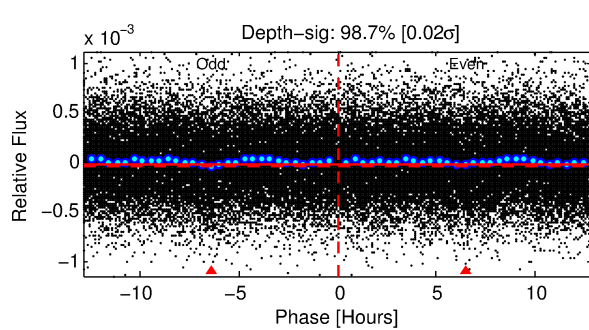
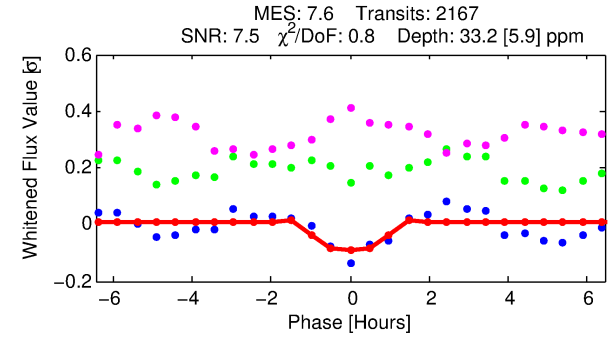
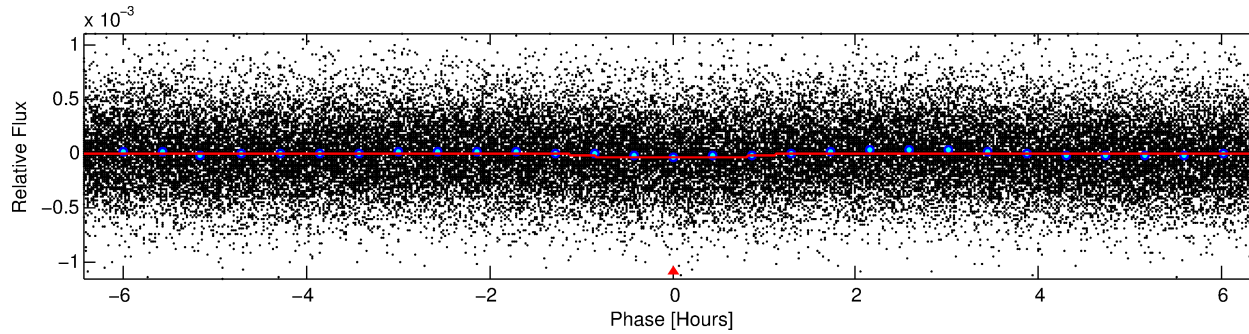
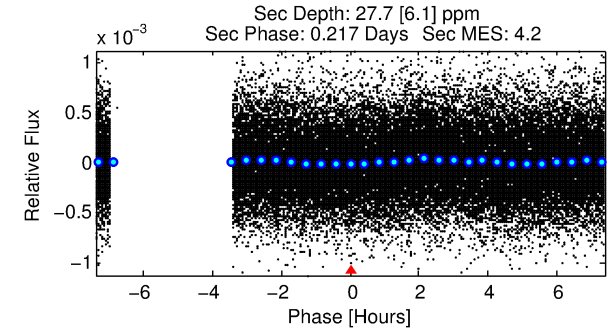
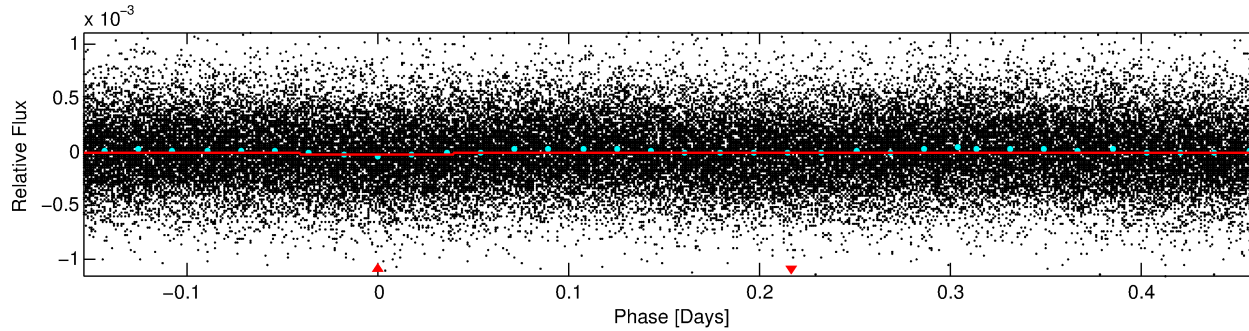
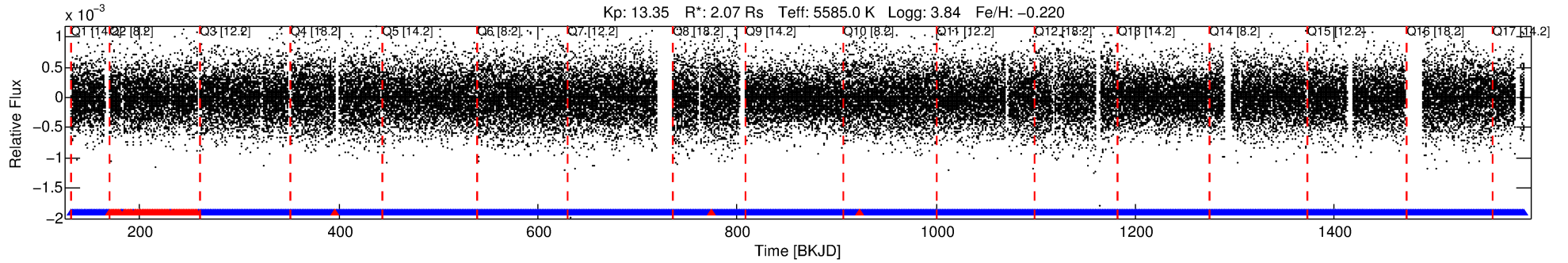
See [http://exoplanetarchive.ipac.caltech.edu/docs/API\\_kepcandidate\\_columns.html#proj\\_disp\\_col](http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col) for comment definitions.

## Ephemeris Match Information For 007119522-01

No Significant Match Found

# DV One-Page Summary

KIC: 7119522 Candidate: 1 of 1 Period: 0.618 d



## DV Fit Results:

Period = 0.61818 [0.00001] d  
Epoch = 131.5365 [0.0033] BKJD  
Rp/R\* = 0.0060 [0.0027]  
a/R\* = 1.53 [1.77]  
b = 0.83 [0.76]  
Seff = 17669.74 [18156.94]  
Teq = 2940 [755] K  
Rp = 1.35 [0.98] Re  
a = 0.0146 [0.0088] AU  
Ag = 1.77 [2.44] [0.31 $\sigma$ ]  
Teff = 5240 [1239] K [1.59 $\sigma$ ]

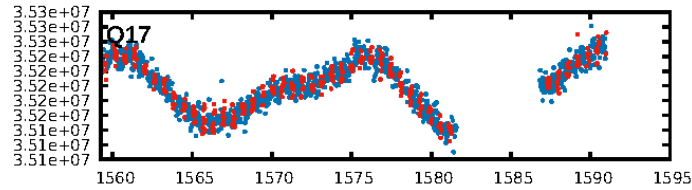
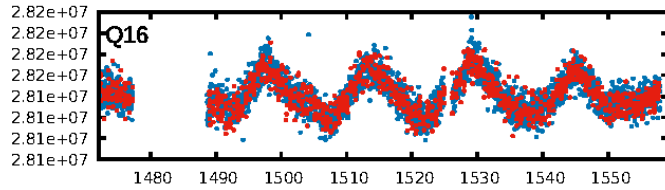
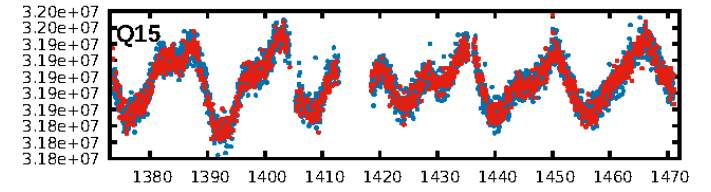
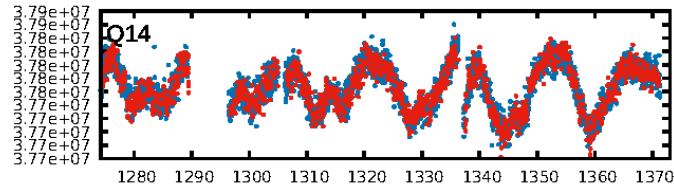
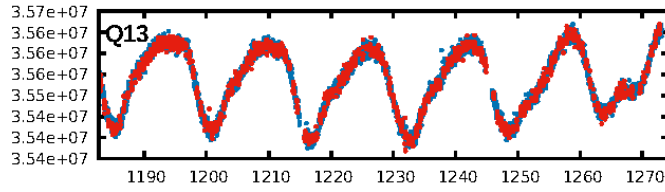
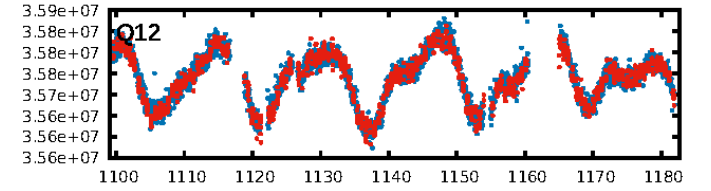
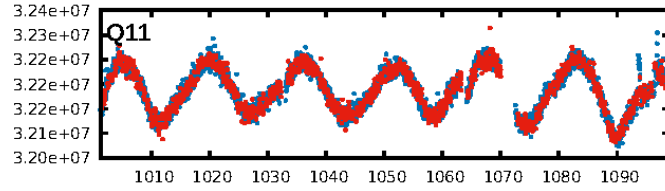
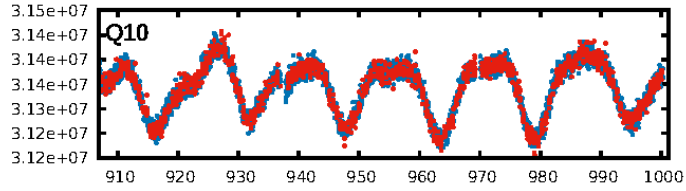
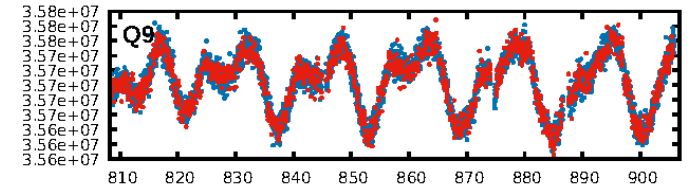
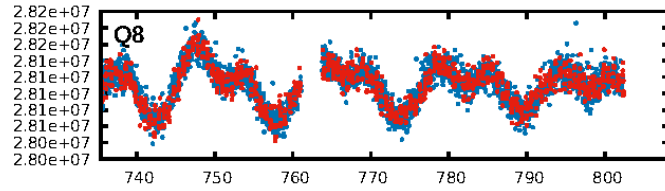
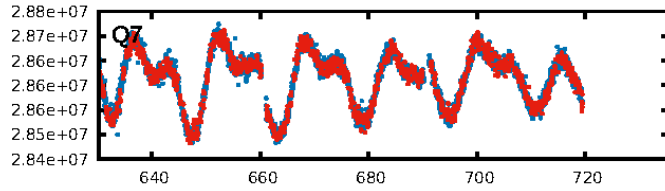
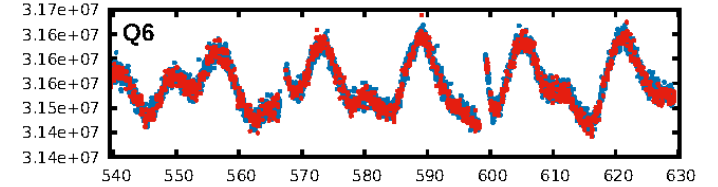
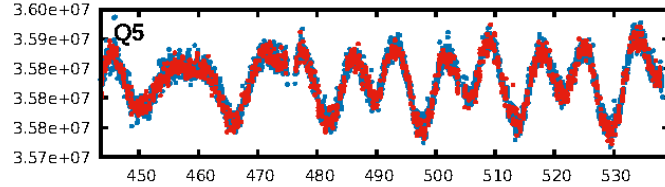
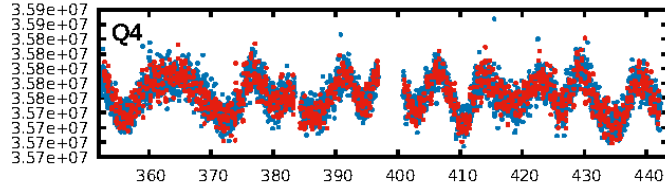
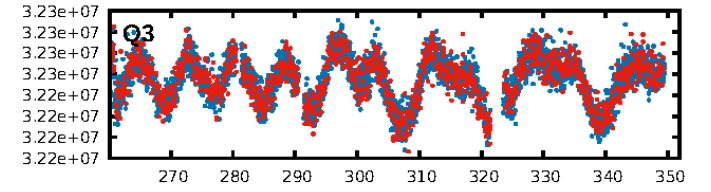
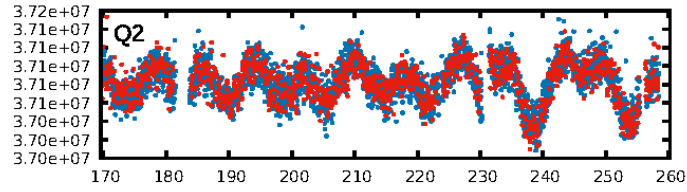
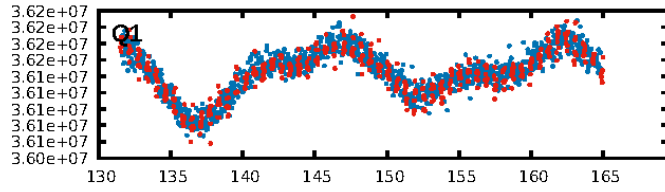
## DV Diagnostic Results:

ShortPeriod-sig: N/A  
LongPeriod-sig: N/A  
ModelChiSquare2-sig: N/A  
ModelChiSquareGof-sig: N/A  
Bootstrap-pfa: 7.20e-14  
RollingBand-fgt: 0.95 [1959/2070]  
GhostDiagnostic-chr: 0.5928  
Centroid-sig: 0.2%  
Centroid-so: 6.825 arcsec [43.10 $\sigma$ ]  
OotOffset-rm: 8.895 arcsec [133.33 $\sigma$ ]  
KicOffset-rm: 12.608 arcsec [189.01 $\sigma$ ]  
OotOffset-st: 0/0/0/1 [1]  
KicOffset-st: 0/0/0/1 [1]  
DiffImageQuality-fgm: 1.00 [1/1]  
DiffImageOverlap-fno: 1.00 [17/17]

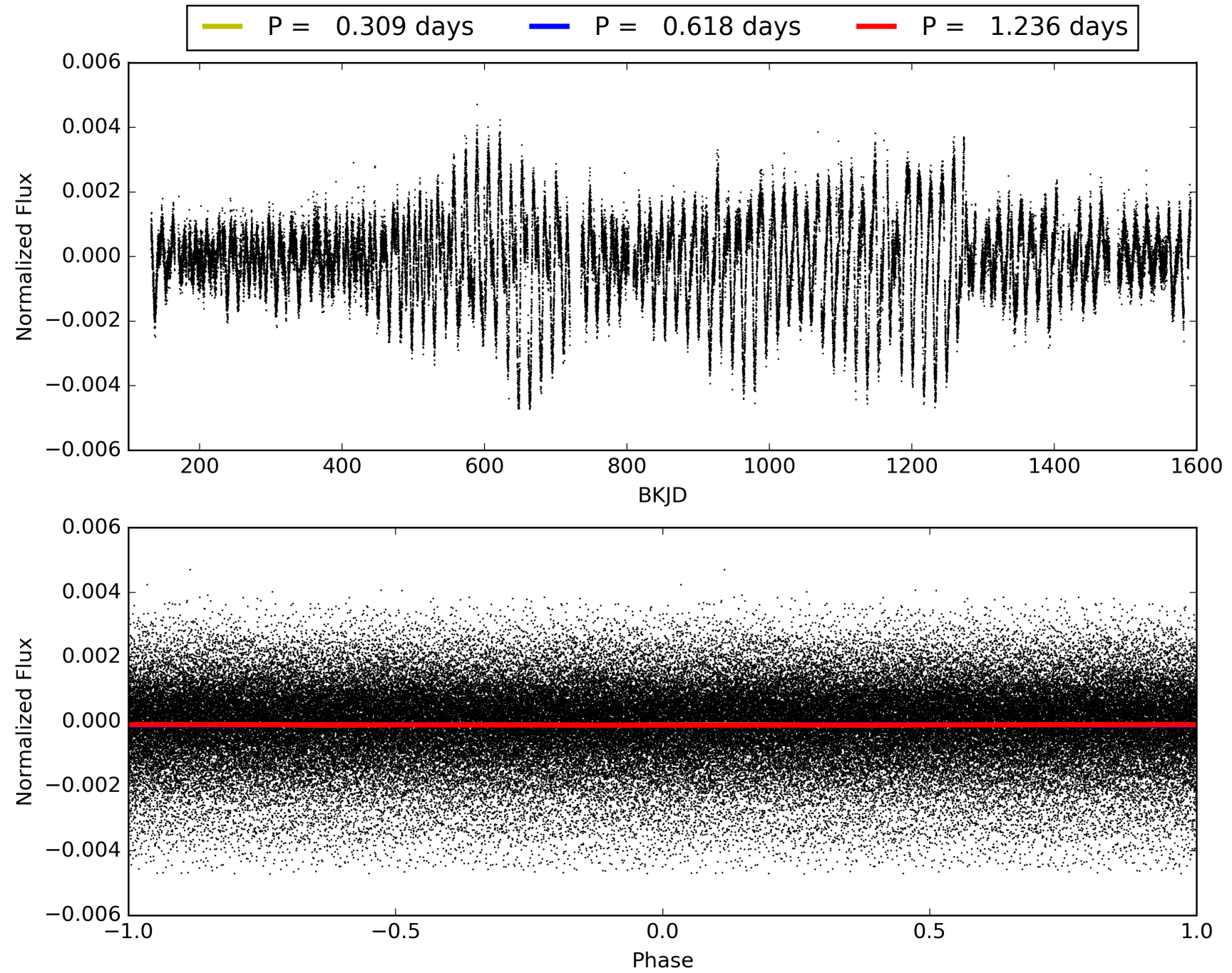
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 11:57:31 Z

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

# TCE 007119522-01, PDC Light Curves

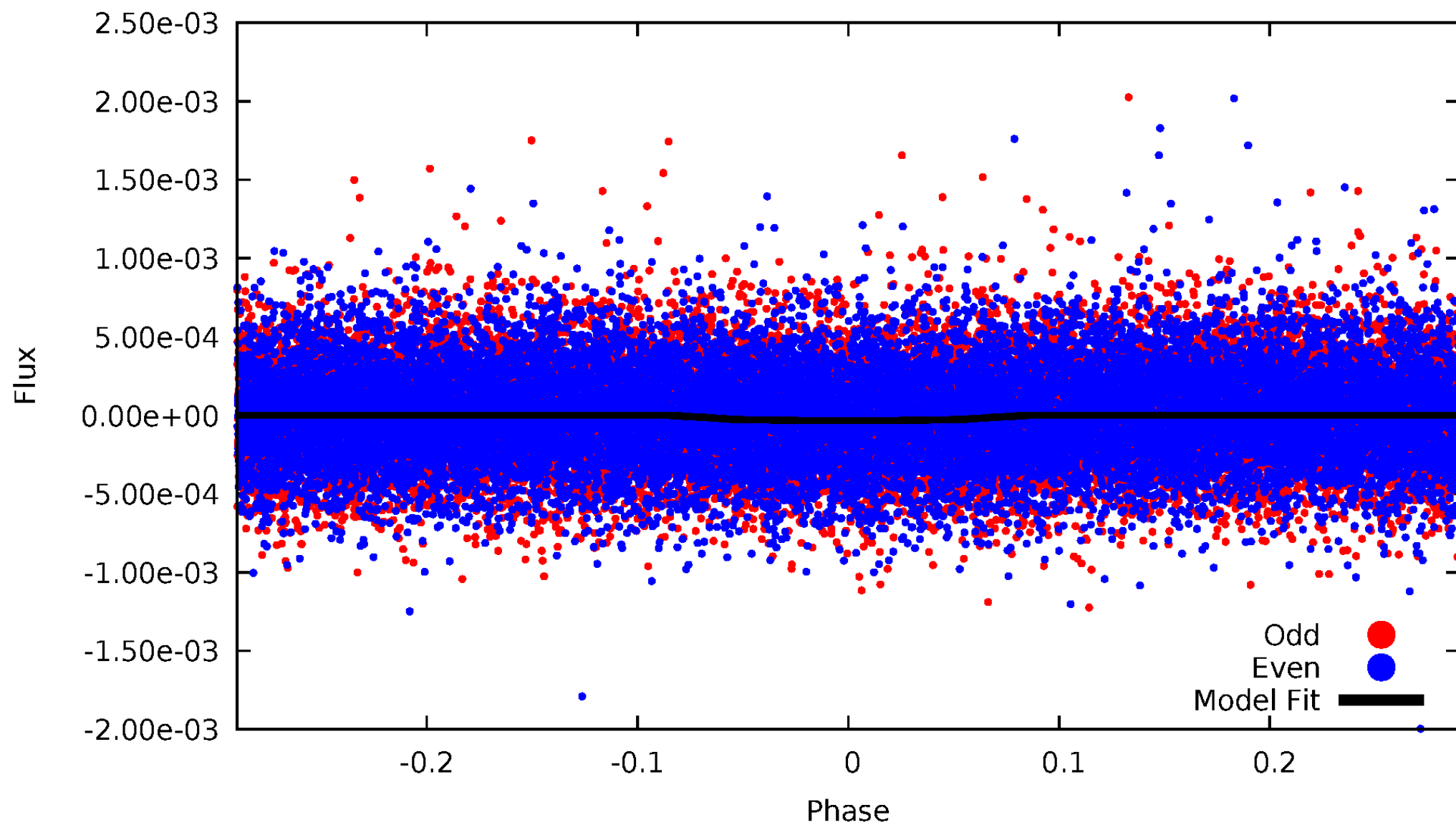


TCE 007119522-01



# DV Odd/Even

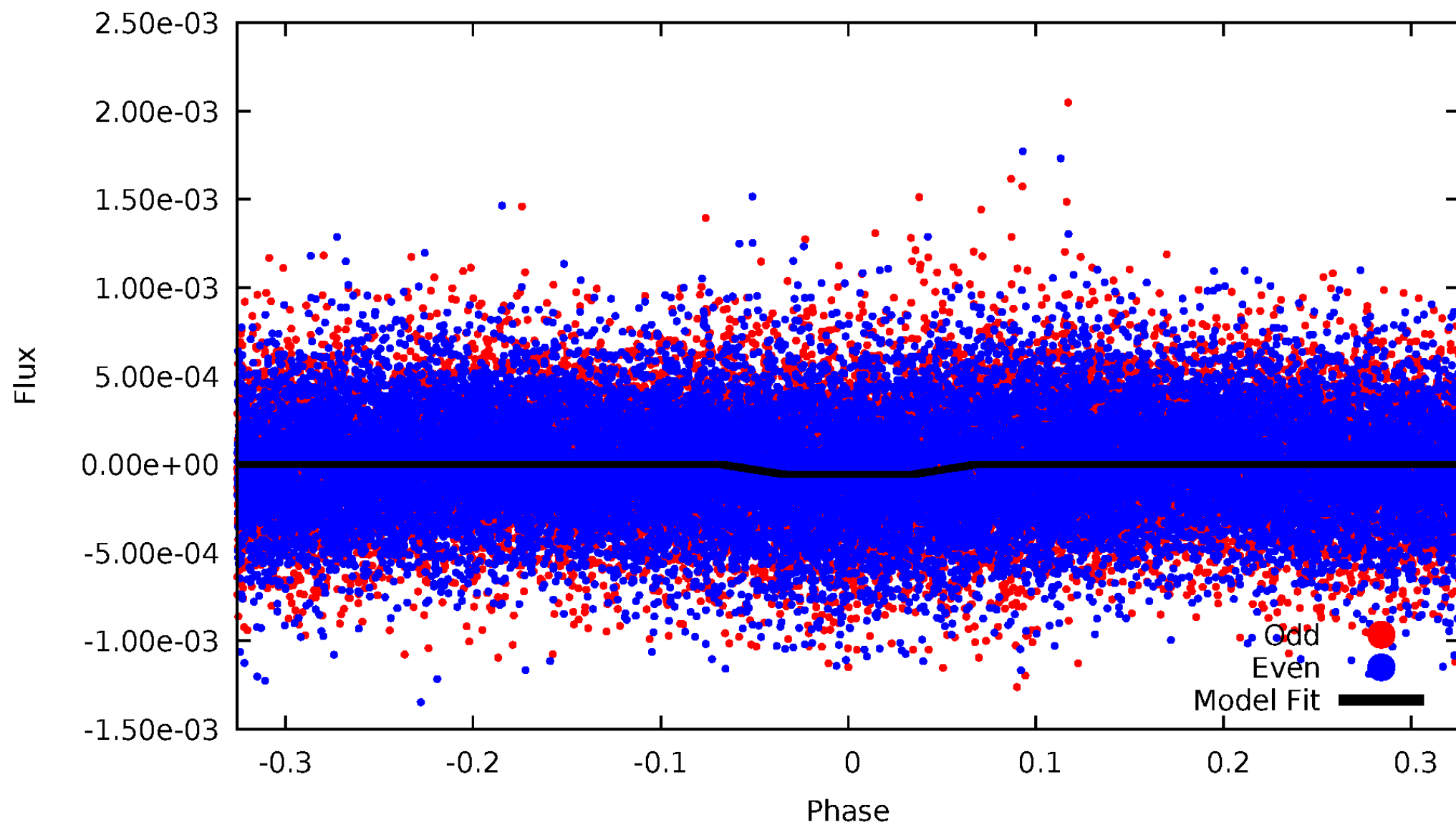
TCE 007119522-01





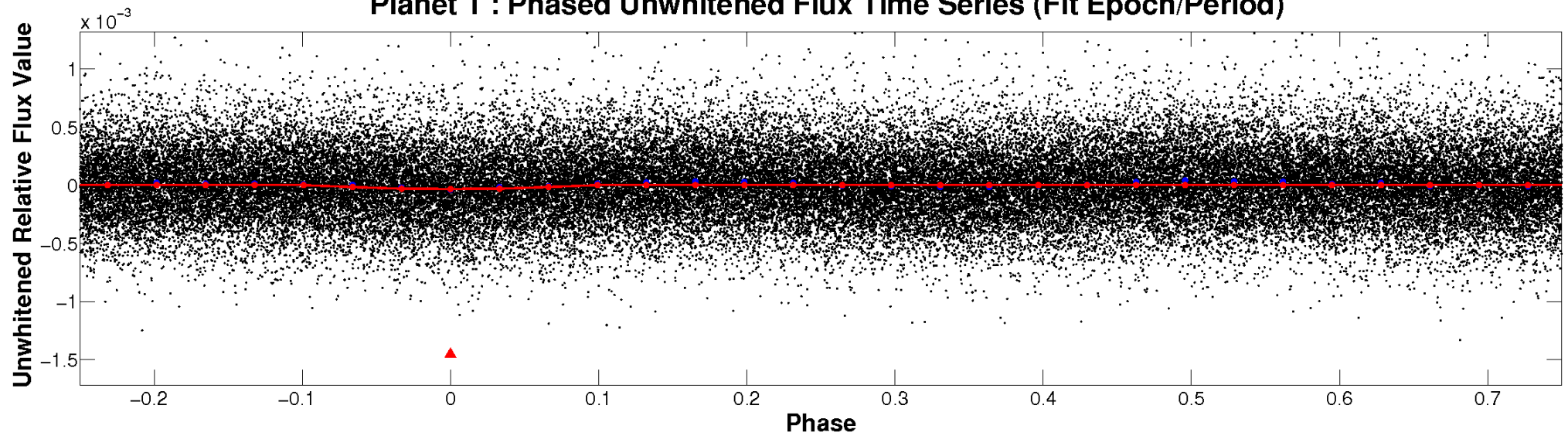
# ALT Odd/Even

TCE 007119522-01

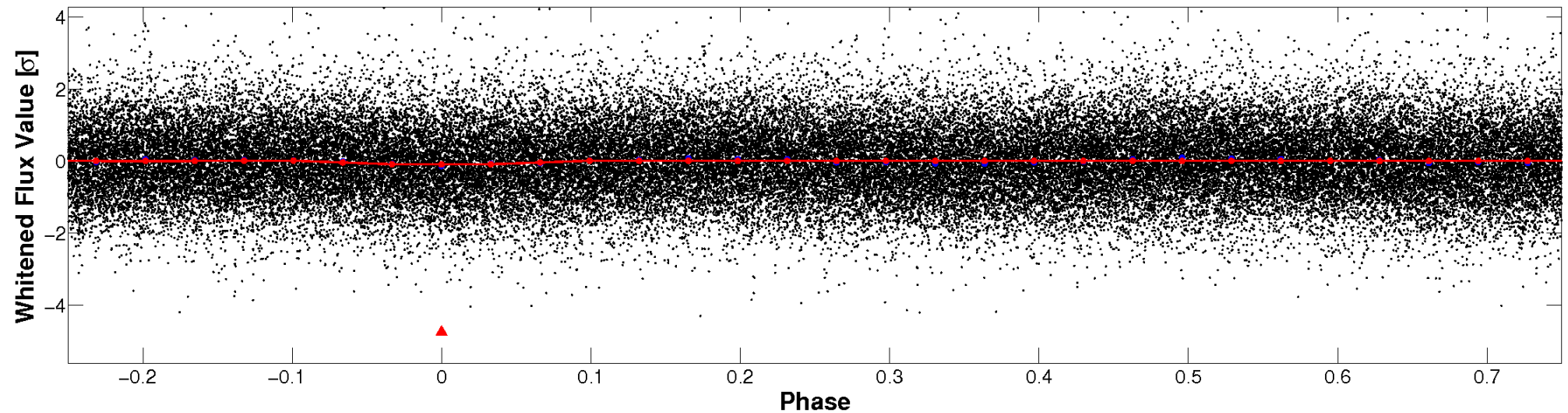


# Non-Whitened Vs. Whitened Light Curve

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

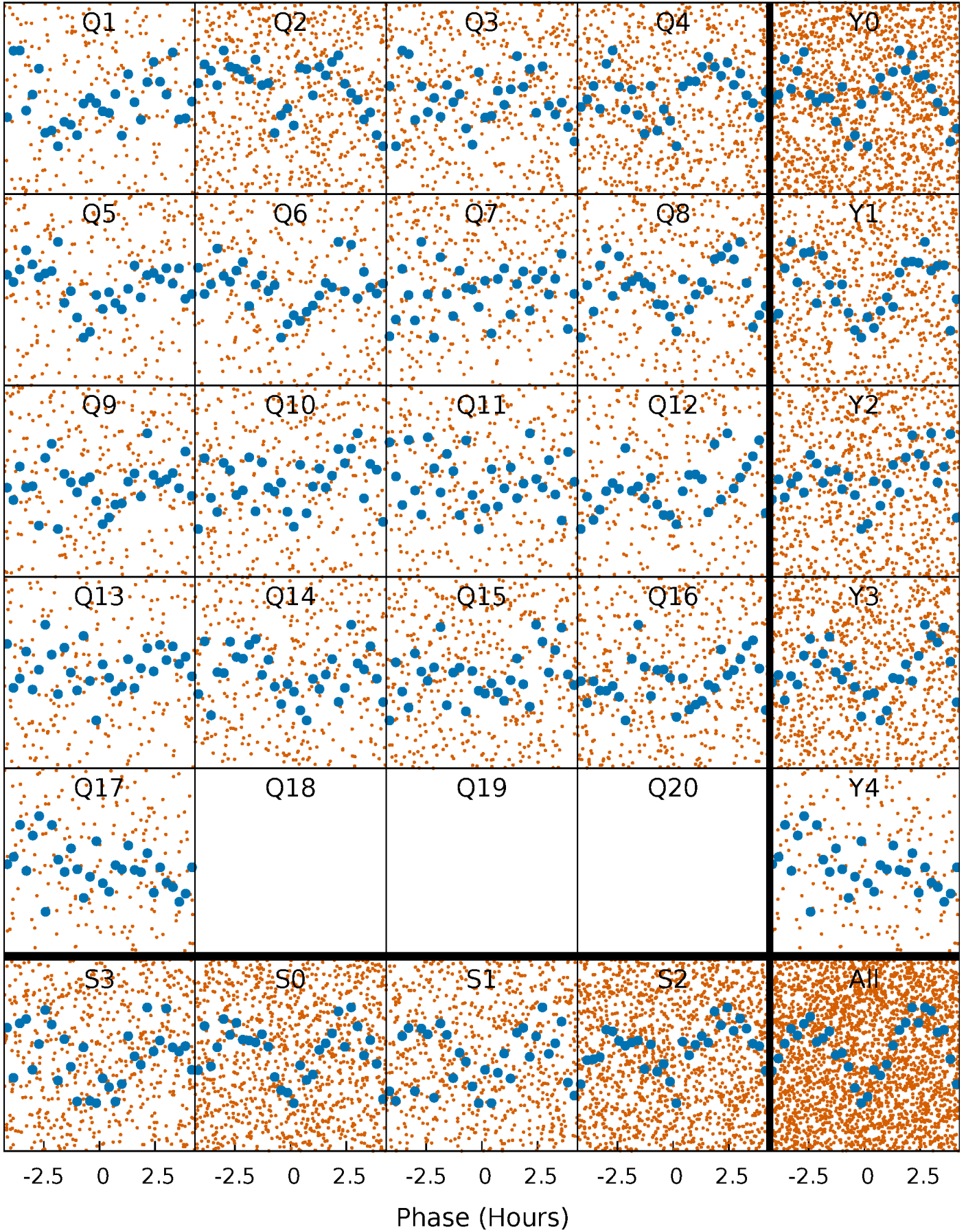


**Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)**



# PDC Quarter-Phased Transit Curves

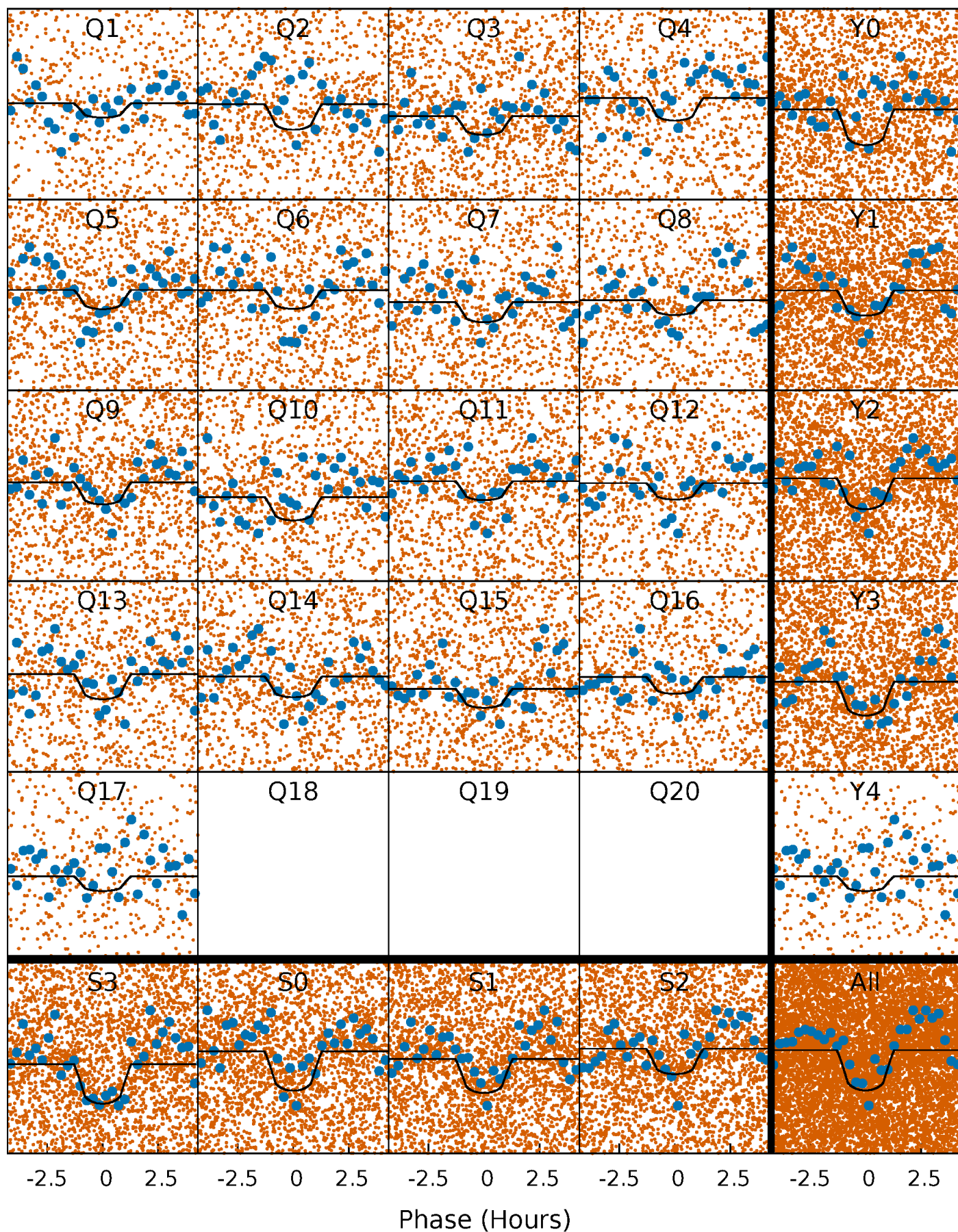
TCE 007119522-01 P= 0.618183 Days  $T_0=131.536514$  (BKJD)





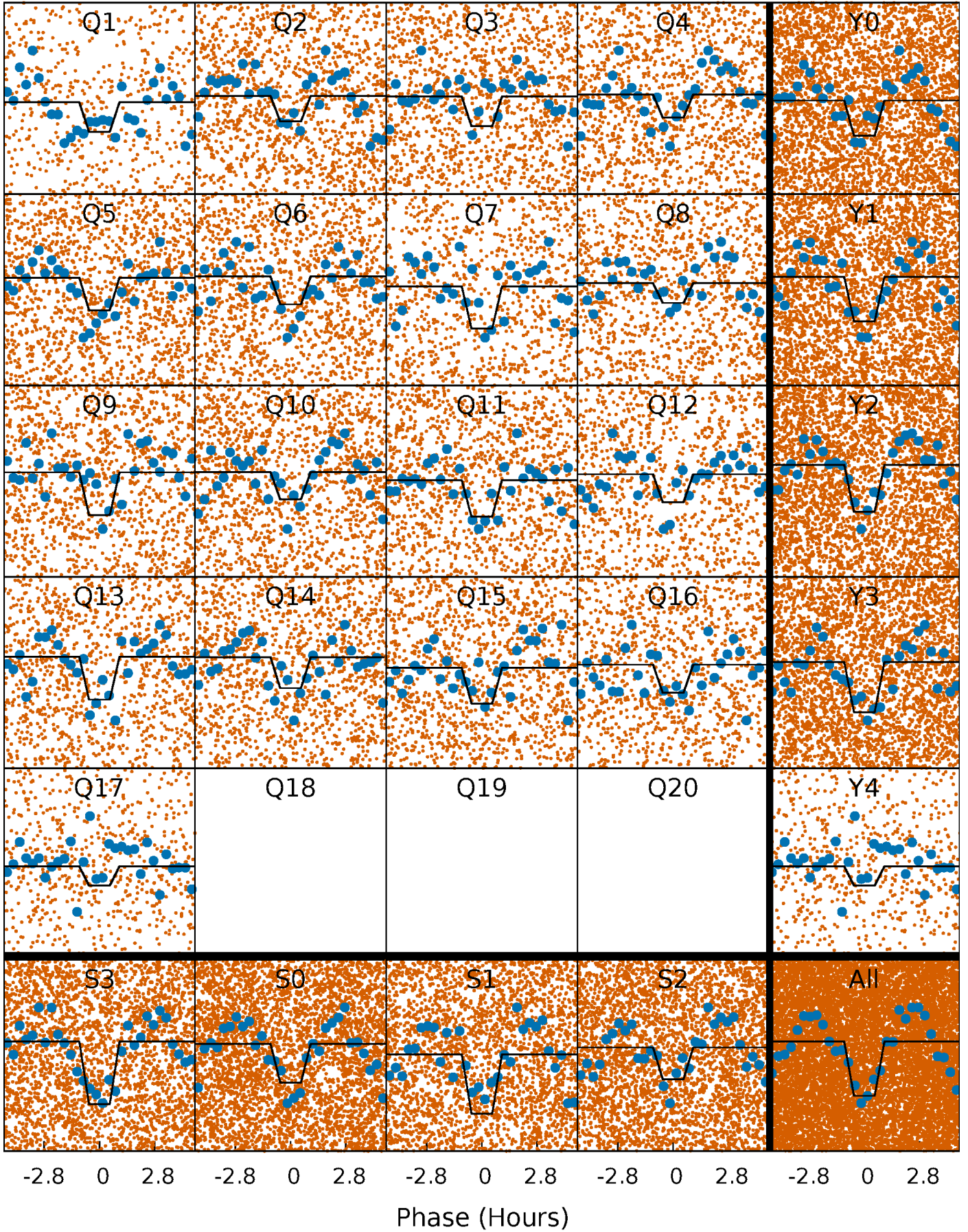
# DV Quarter-Phased Transit Curves

TCE 007119522-01 P= 0.618183 Days  $T_0=131.536514$  (BKJD)



# Alt. Detrend Quarter-Phased Transit Curves

TCE 007119522-01 P= 0.618200 Days  $T_0=131.521310$  (BKJD)

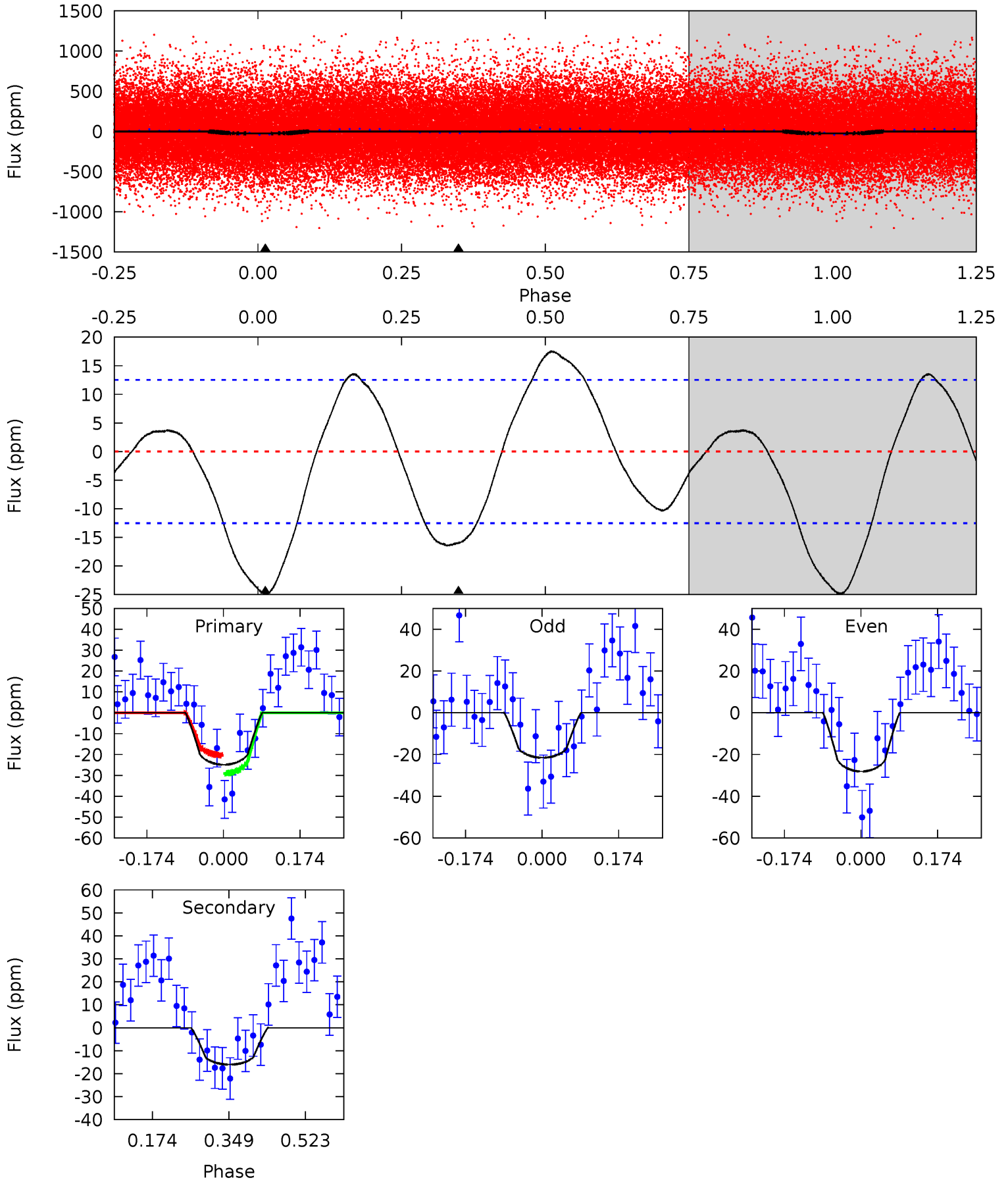




# DV Model-Shift Uniqueness Test

007119522-01, P = 0.618183 Days, E = 130.918331 Days

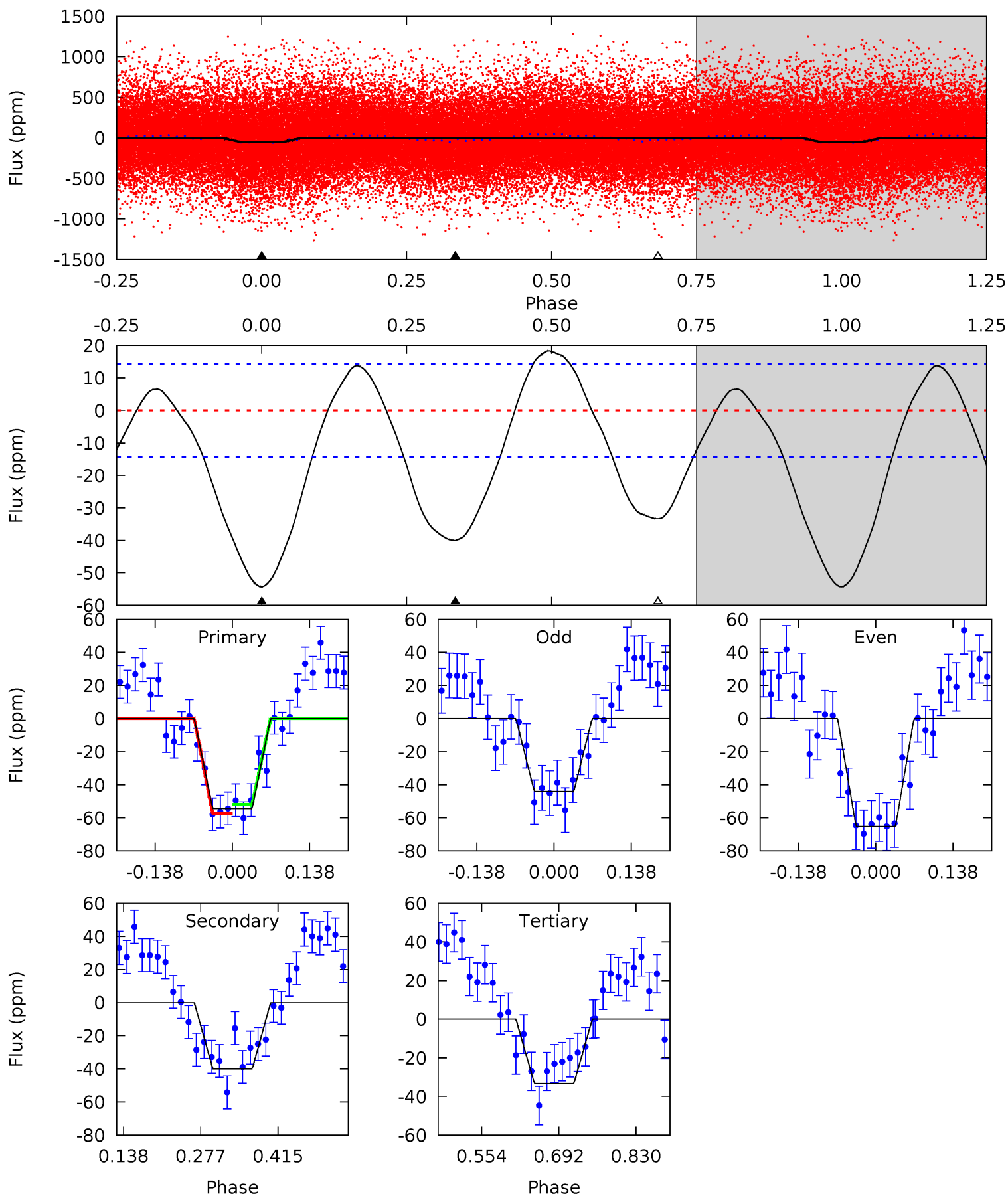
Pri	Sec	Ter	Pos	FA <sub>1</sub>	FA <sub>2</sub>	F <sub>Red</sub>	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.83	5.69	0	0	4.45	1.36	2.89	8.83	8.83	5.69	5.69	1.18	0.85	0.41	1.55



# Alt Model-Shift Uniqueness Test

007119522-01, P = 0.618200 Days, E = 130.903110 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
17.0	12.5	10.4	0	4.50	1.48	5.38	6.56	17.0	2.07	12.5	3.32	1.05	0.25	0.88





### Stellar Parameters For KIC 007119522

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R$ ( $R_{\odot}$ )	$M(M_{\odot})$	$p_{\star}$ ( $\text{g}\cdot\text{cm}^{-3}$ )
	$5585^{+203}_{-169}$	$3.837^{+0.615}_{-0.205}$	$-0.220^{+0.300}_{-0.250}$	$2.073^{+0.634}_{-1.178}$	$1.076^{+0.152}_{-0.228}$	$0.170^{+1.439}_{-0.091}$
	+4%/-3%	+16%/-5%	+136%/-114%	+31%/-57%	+14%/-21%	+845%/-54%
Source	PHO54	PHO54	PHO54	DSEP		

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

### Secondary Eclipse Parameters for KIC 007119522-01 / KOI

Detrend	Depth (ppm)	$R_p$ ( $R_{\oplus}$ )	$T_{max}$ (K)	$T_{obs}$ (K)	$A_{obs}$
DV	$-16 \pm 3$	$1.22^{+0.72}_{-0.64}$	$4069^{+404}_{-677}$	$4430^{+1612}_{-950}$	$1.283^{+3.902}_{-0.805}$
Alt.	$-40 \pm 3$	$1.56^{+0.84}_{-0.63}$	$4052^{+445}_{-590}$	$4998^{+1154}_{-863}$	$1.897^{+3.320}_{-1.081}$

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

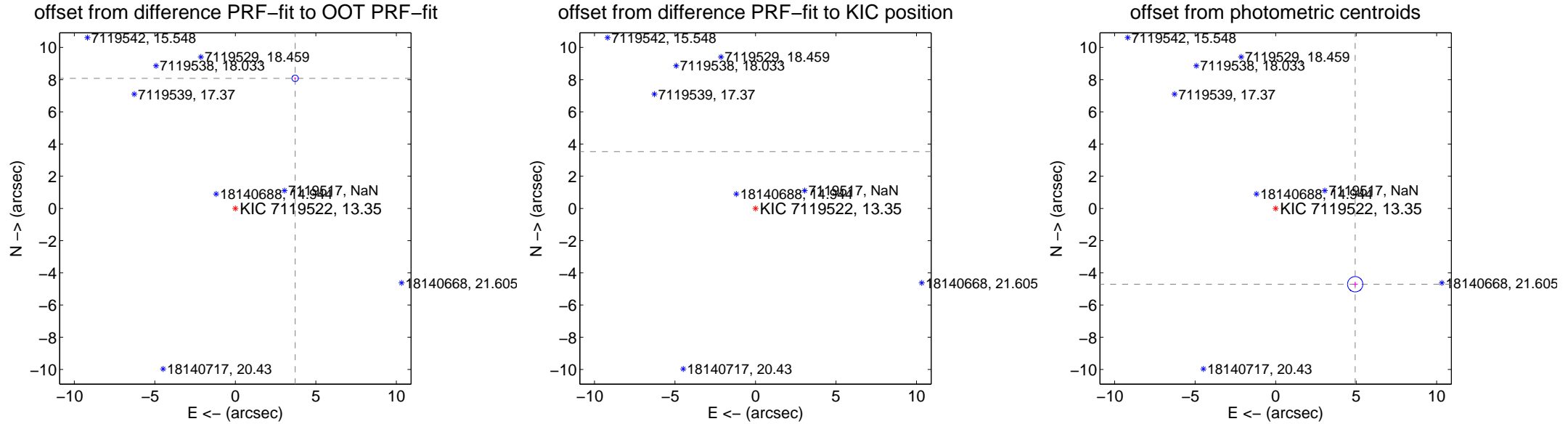
## DV Centroid Data

Supplemental centroid analysis for 007119522-01. Kepler magnitude: 13.35. Transit SNR 7.54

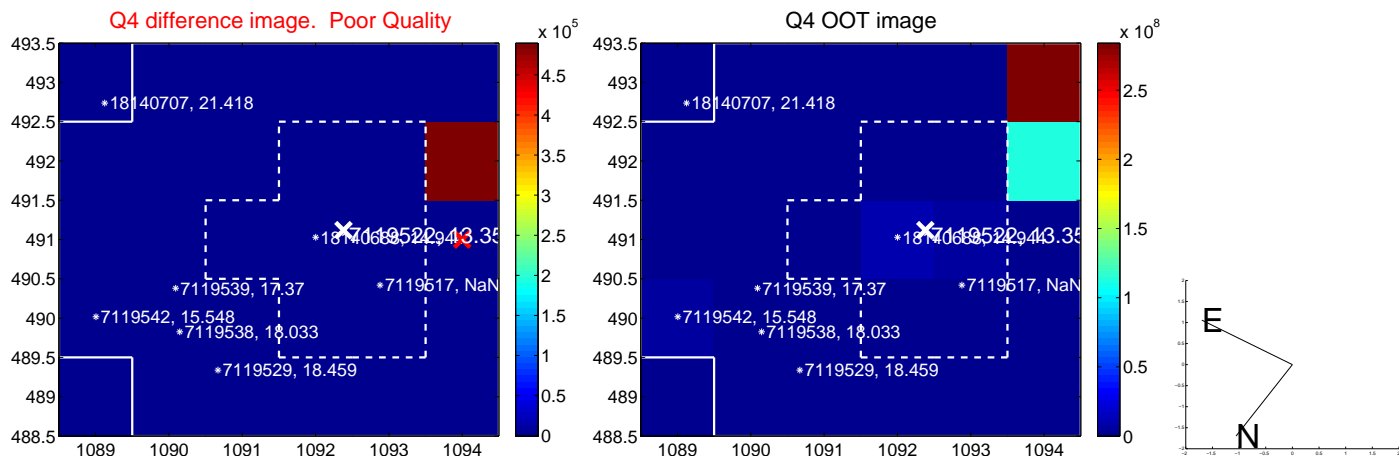
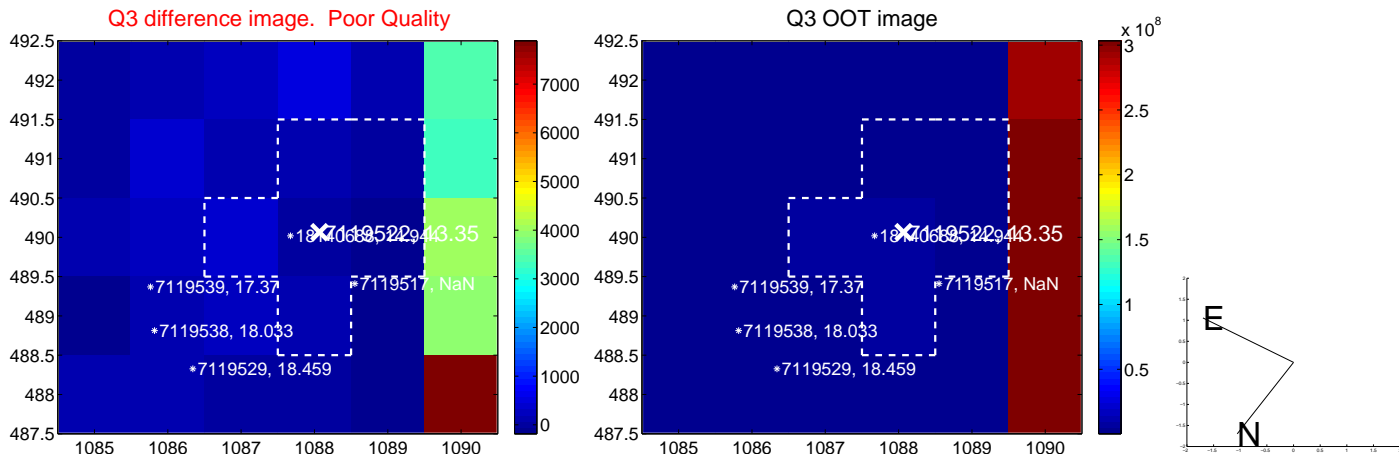
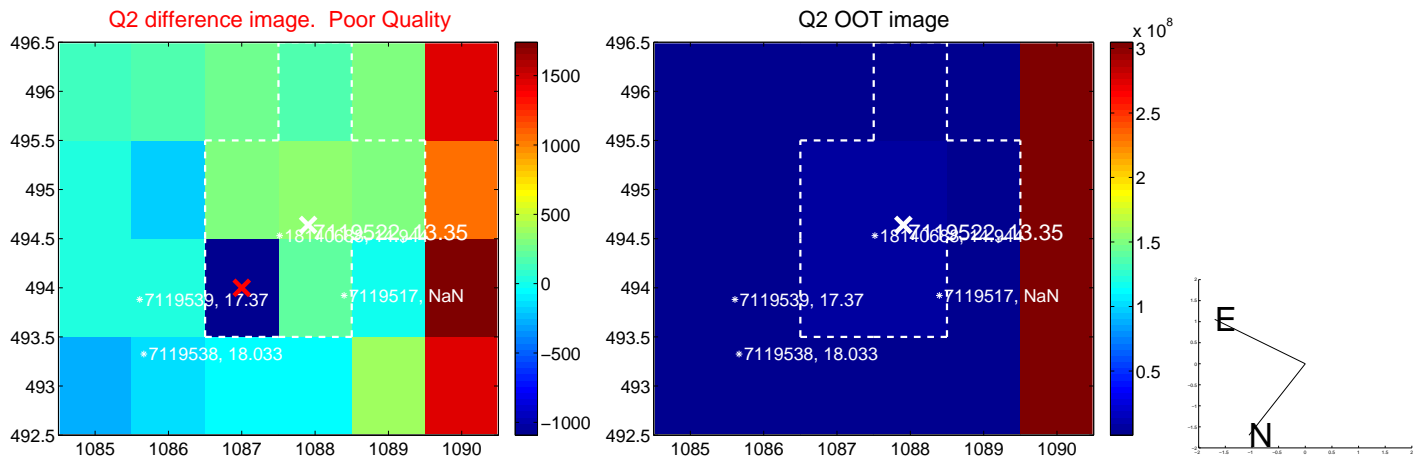
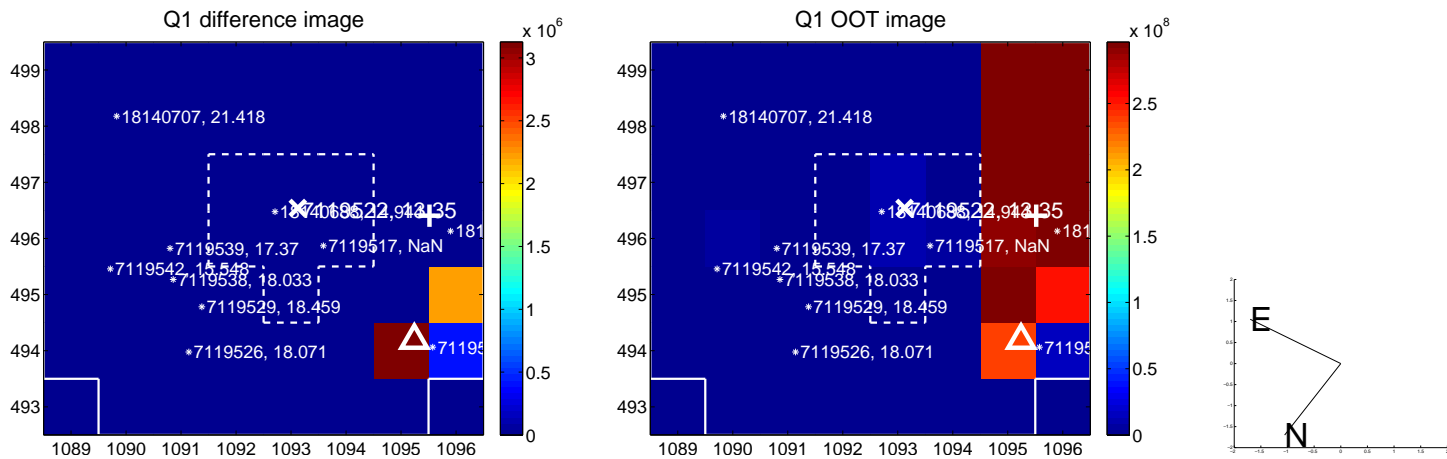
There are 1 quarters with good PRF difference image offsets

The OOT PRF centroid is offset from the target star catalog position by about 9.54 arcsec so the offset from difference PRF-fit to OOT-fit may be invalid.

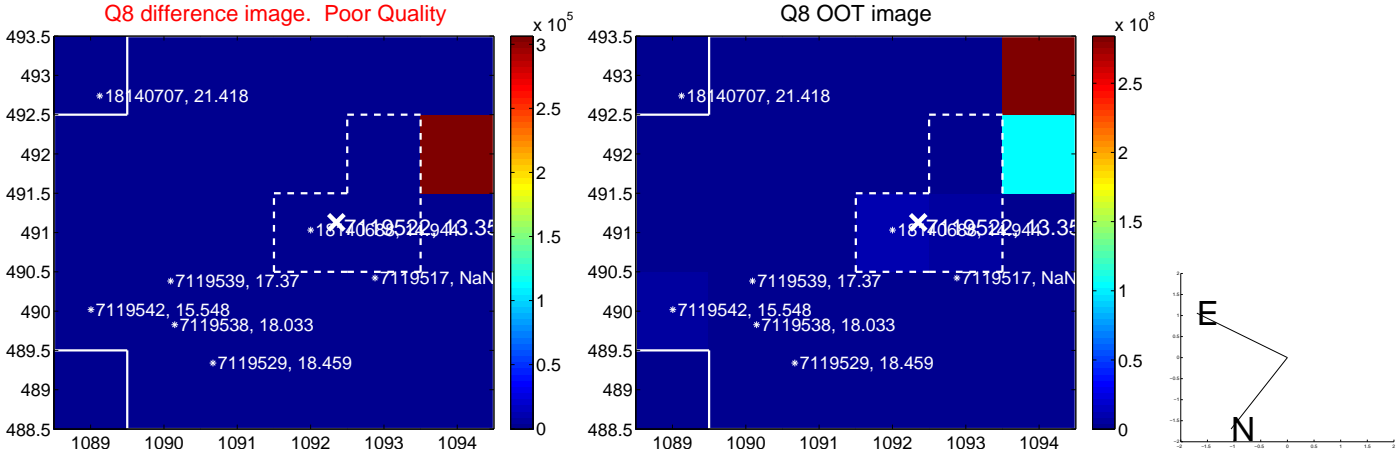
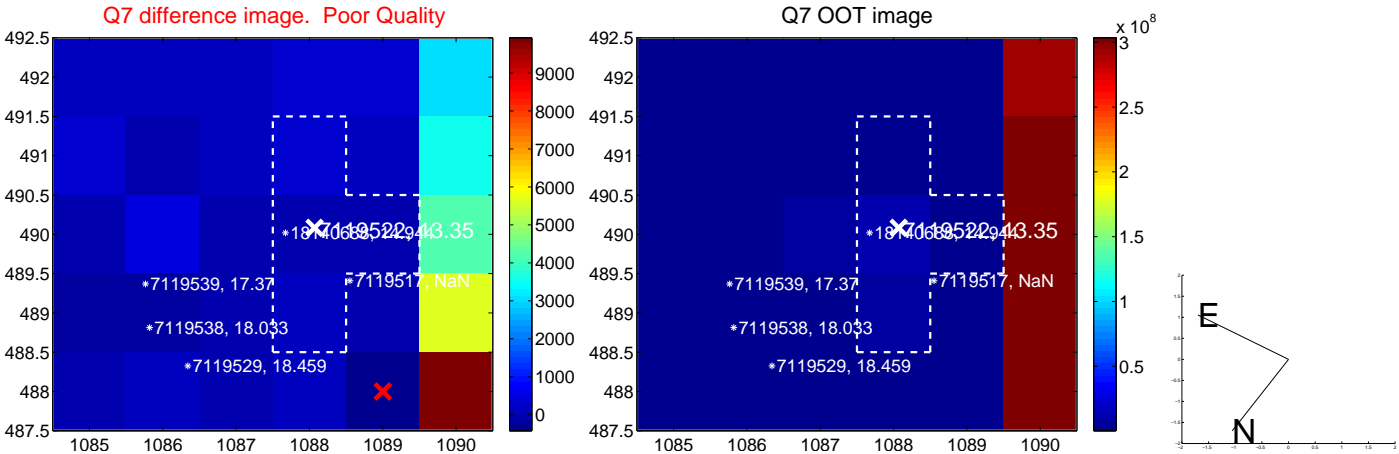
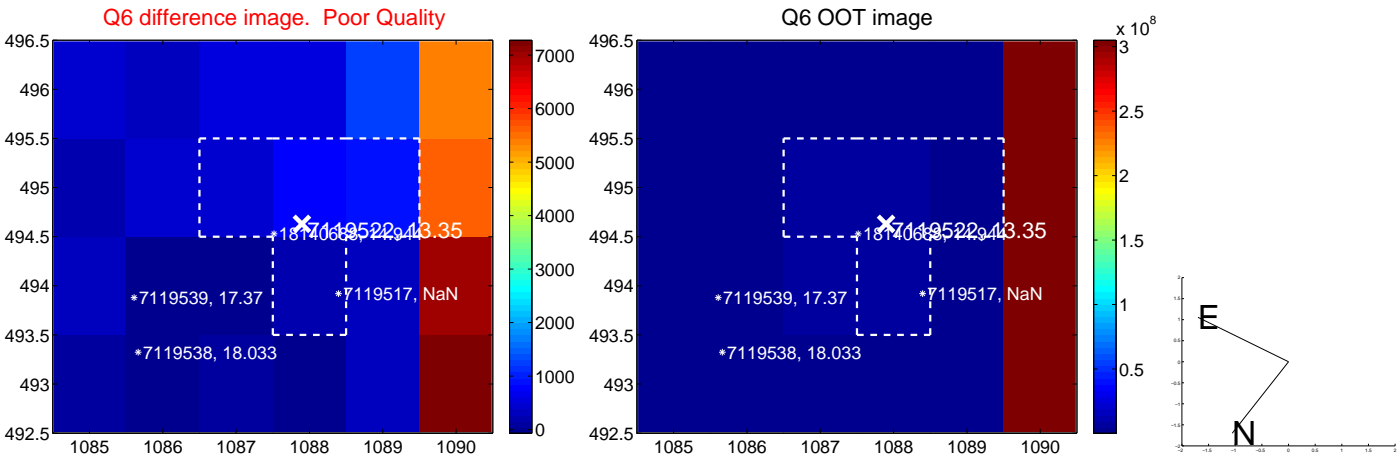
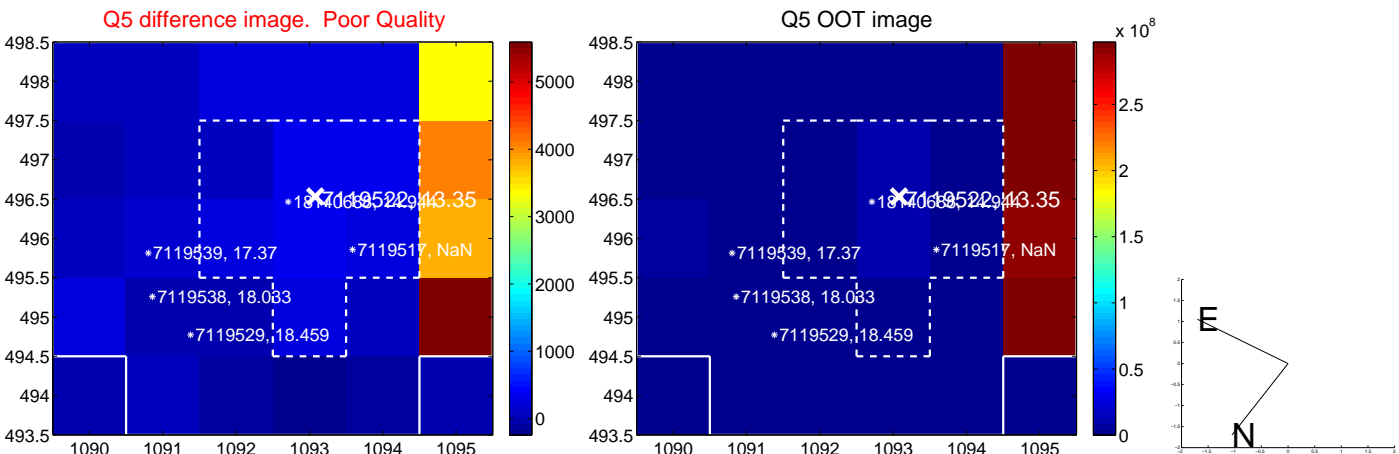
	Distance in arcsec	Distance / $\sigma$	$\Delta$ RA	$\Delta$ Dec
PRF-fit source offset from OOT	$8.895 \pm 0.067$	133.33	$-3.716 \pm 0.067$	$8.082 \pm 0.067$
PRF-fit source offset from KIC position	$12.608 \pm 0.067$	189.01	$-12.103 \pm 0.067$	$3.533 \pm 0.067$
photometric centroid source offset	$6.83 \pm 0.16$	43.10	$-4.94 \pm 0.16$	$-4.71 \pm 0.15$



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

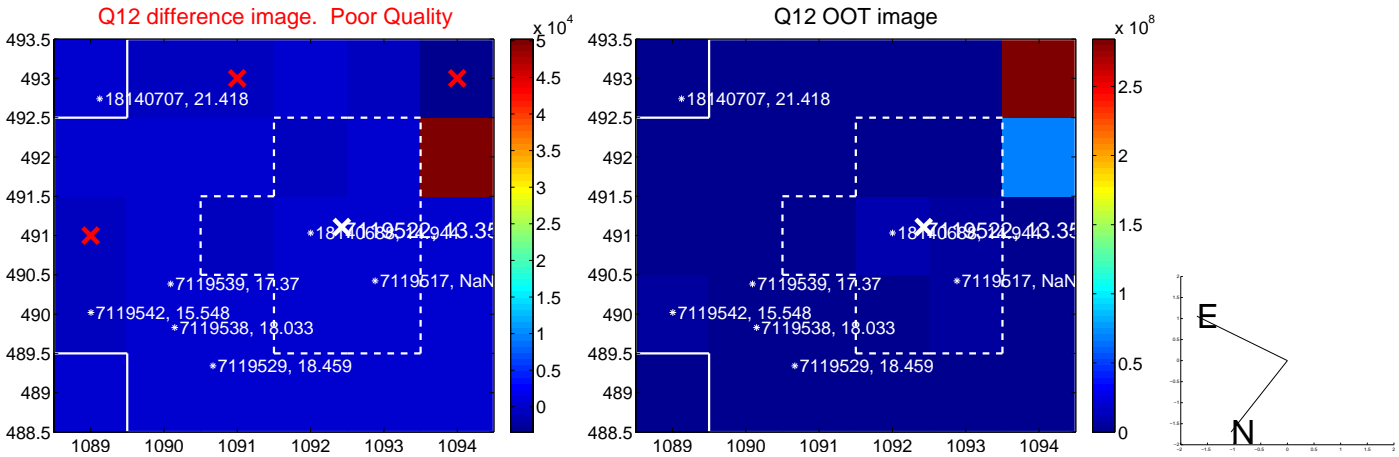
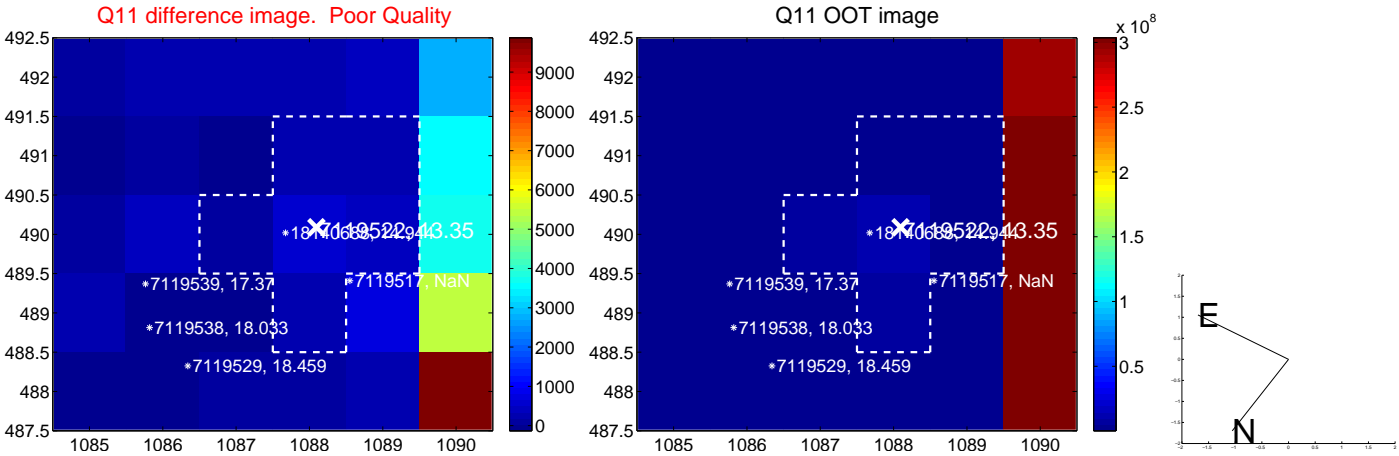
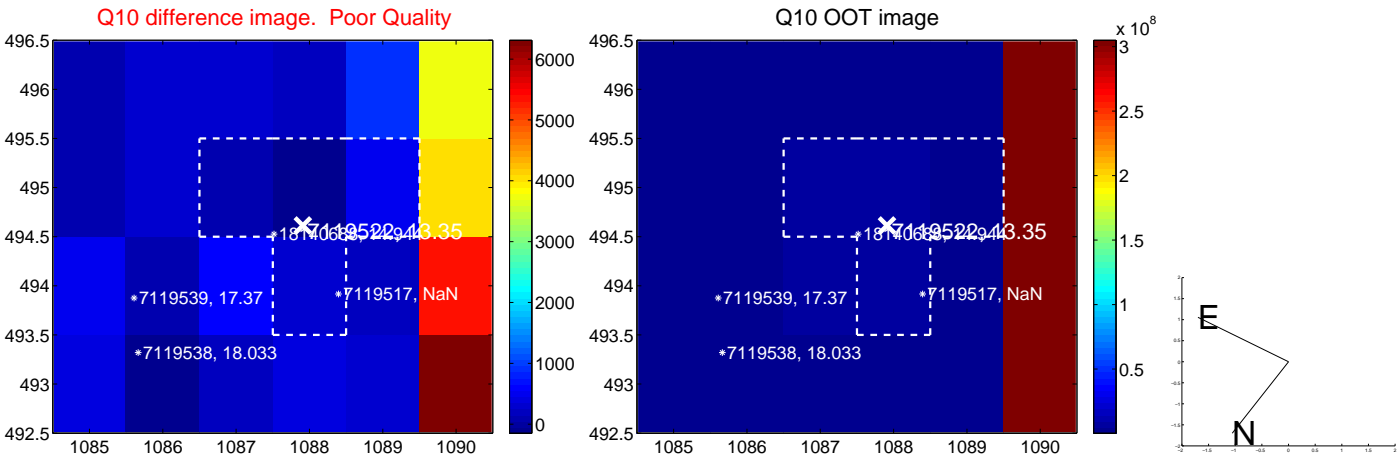
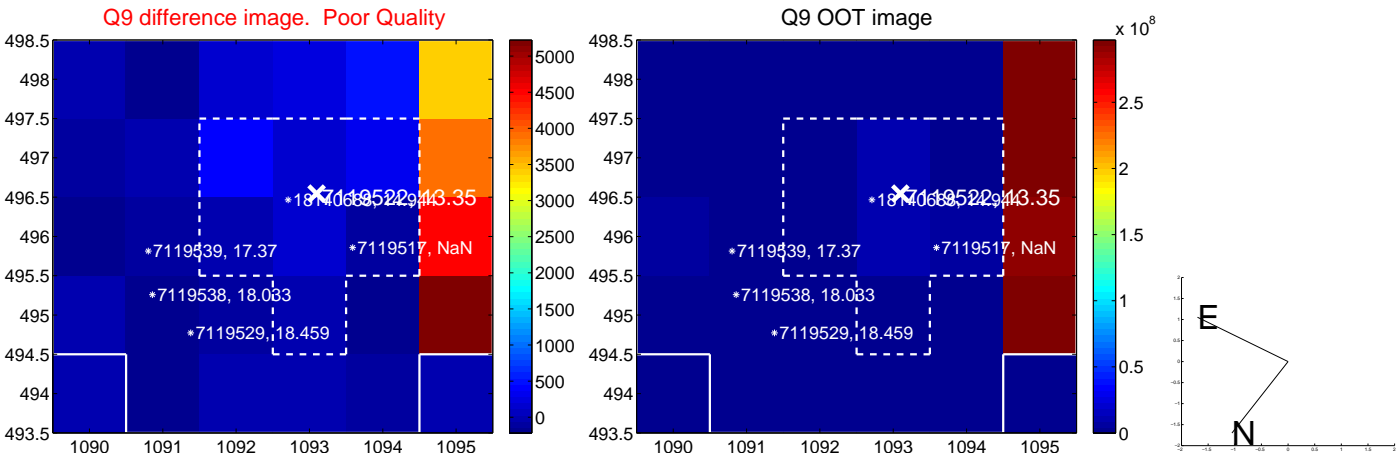


white  $\times$ : KIC target position; +: OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.

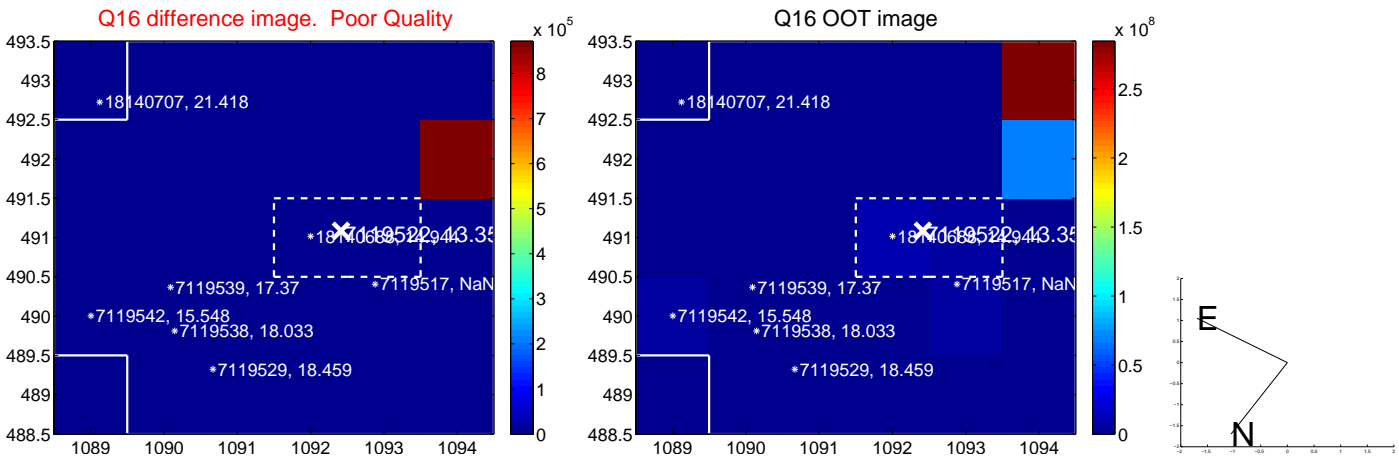
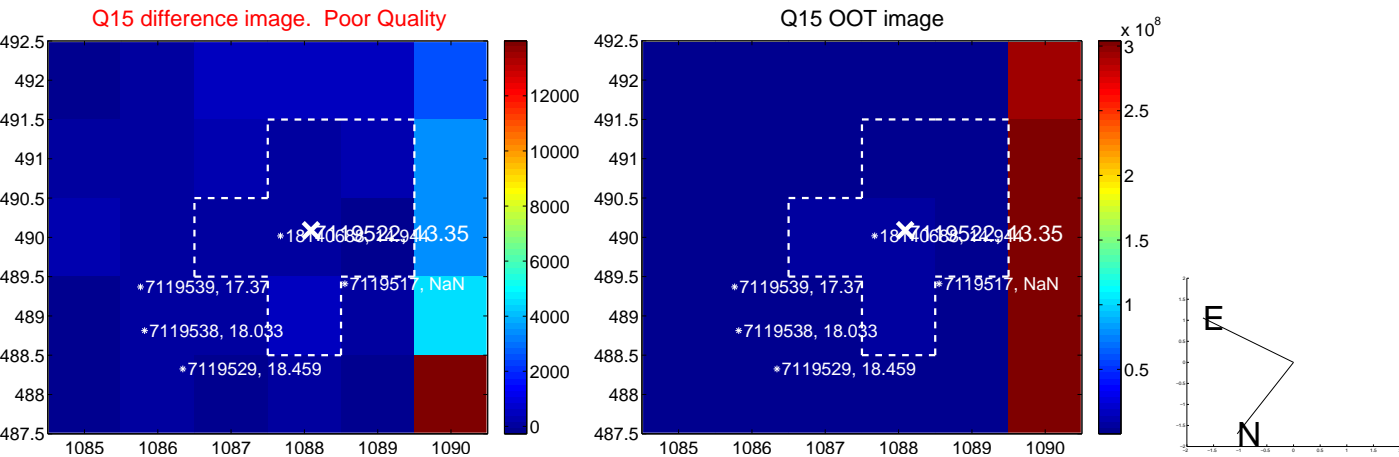
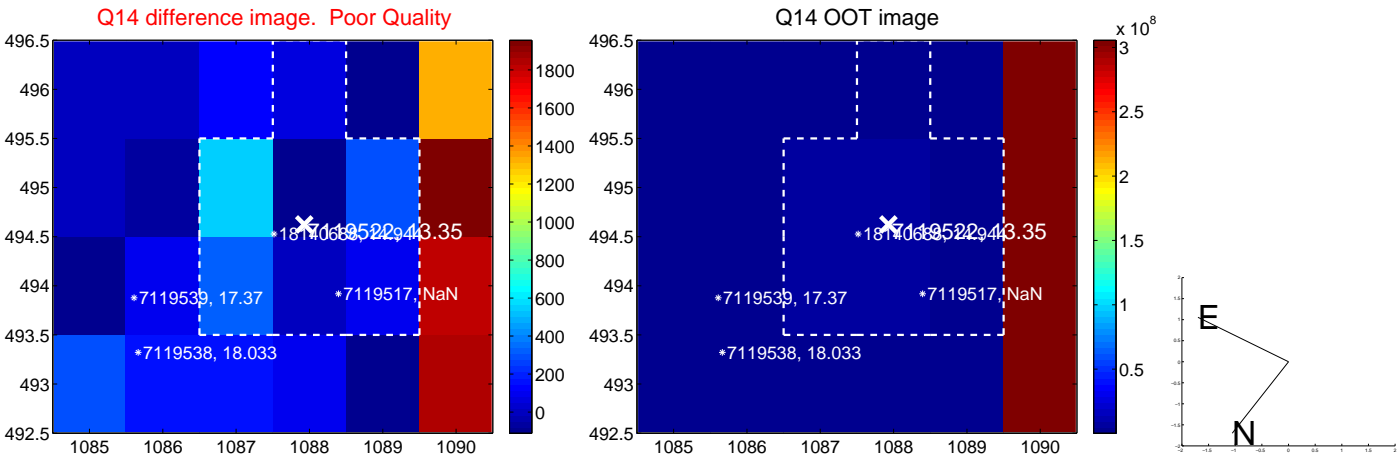
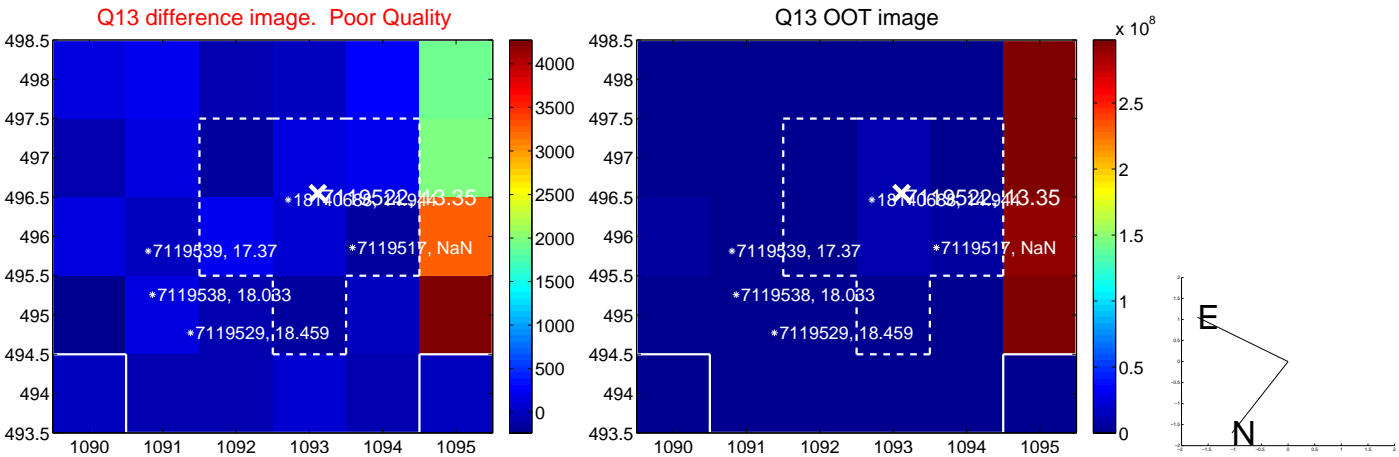




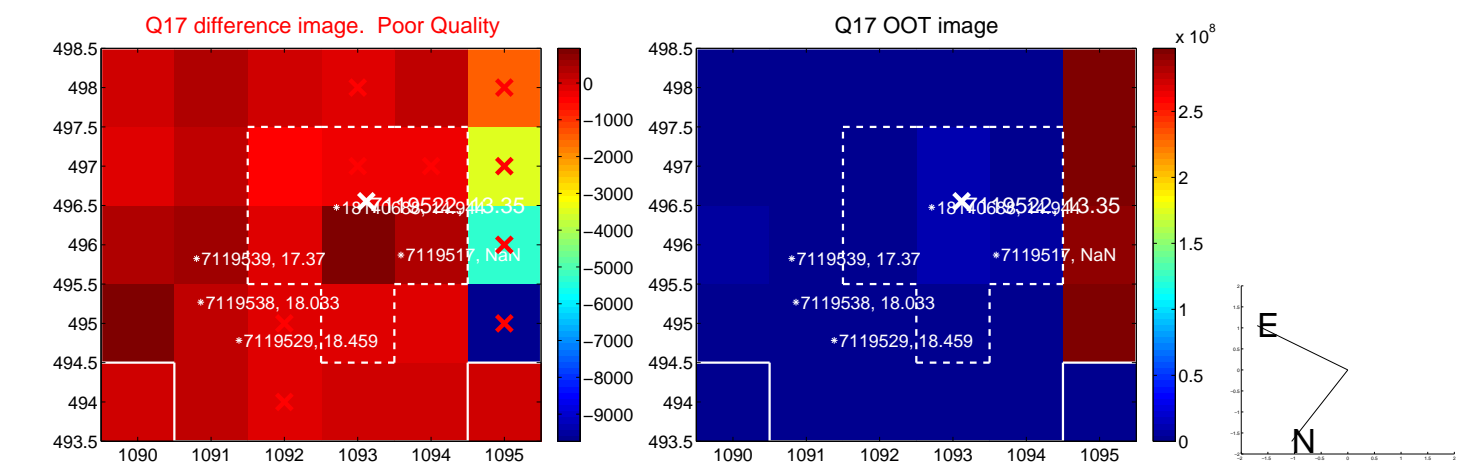
white  $\times$ : KIC target position; +: OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.



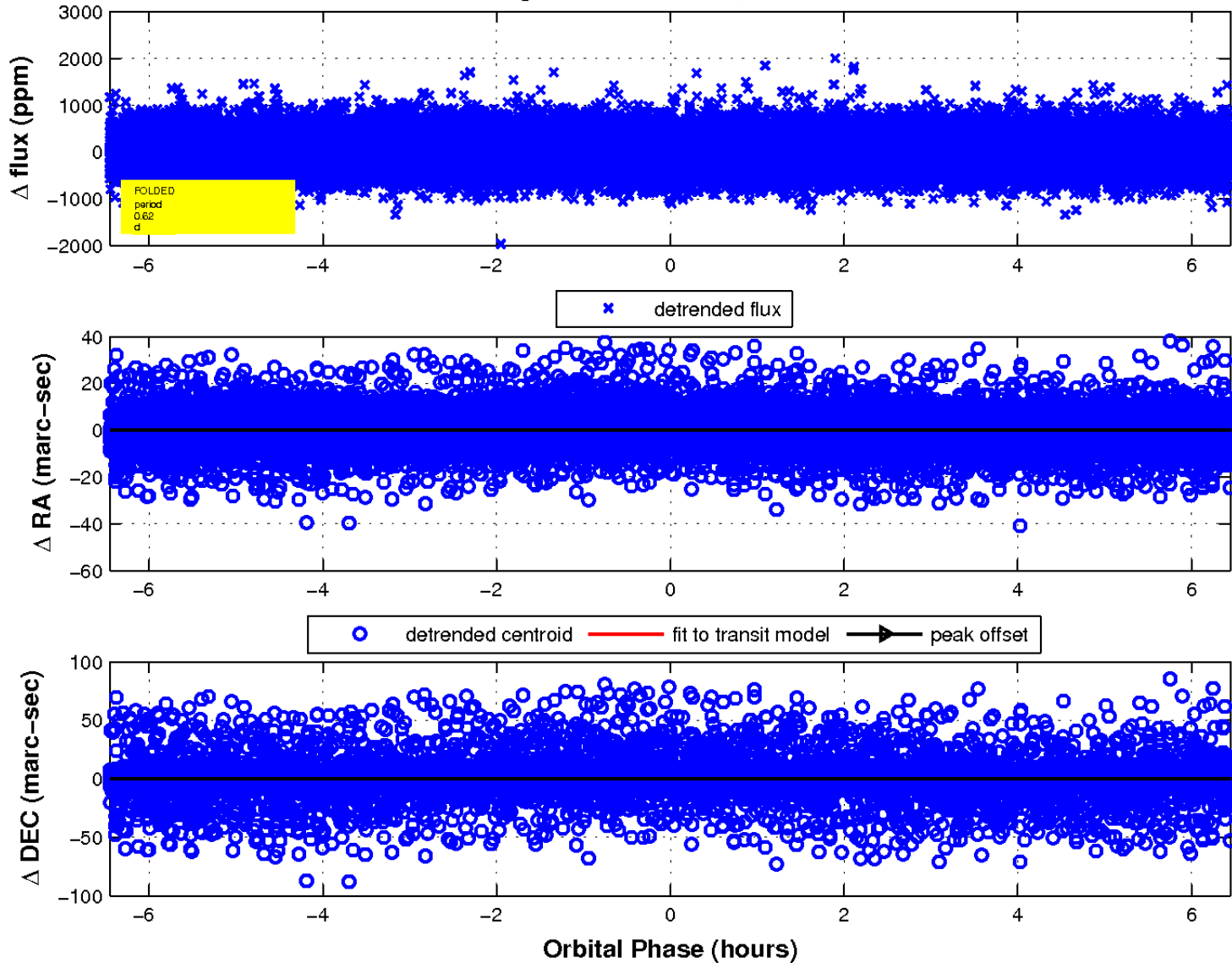
white  $\times$ : KIC target position; +: OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.



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



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

