

KIC 007117436

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})
007117436-01	OBS	No	0.566762	131.836129	10.8	4.126	7.8	4.0	1.02	6140	0.35	7026.95

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007117436-01	OBS	FP	0.00	1	0	0	1	LPP_DV—EPHEM_MATCH

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 for comment definitions.

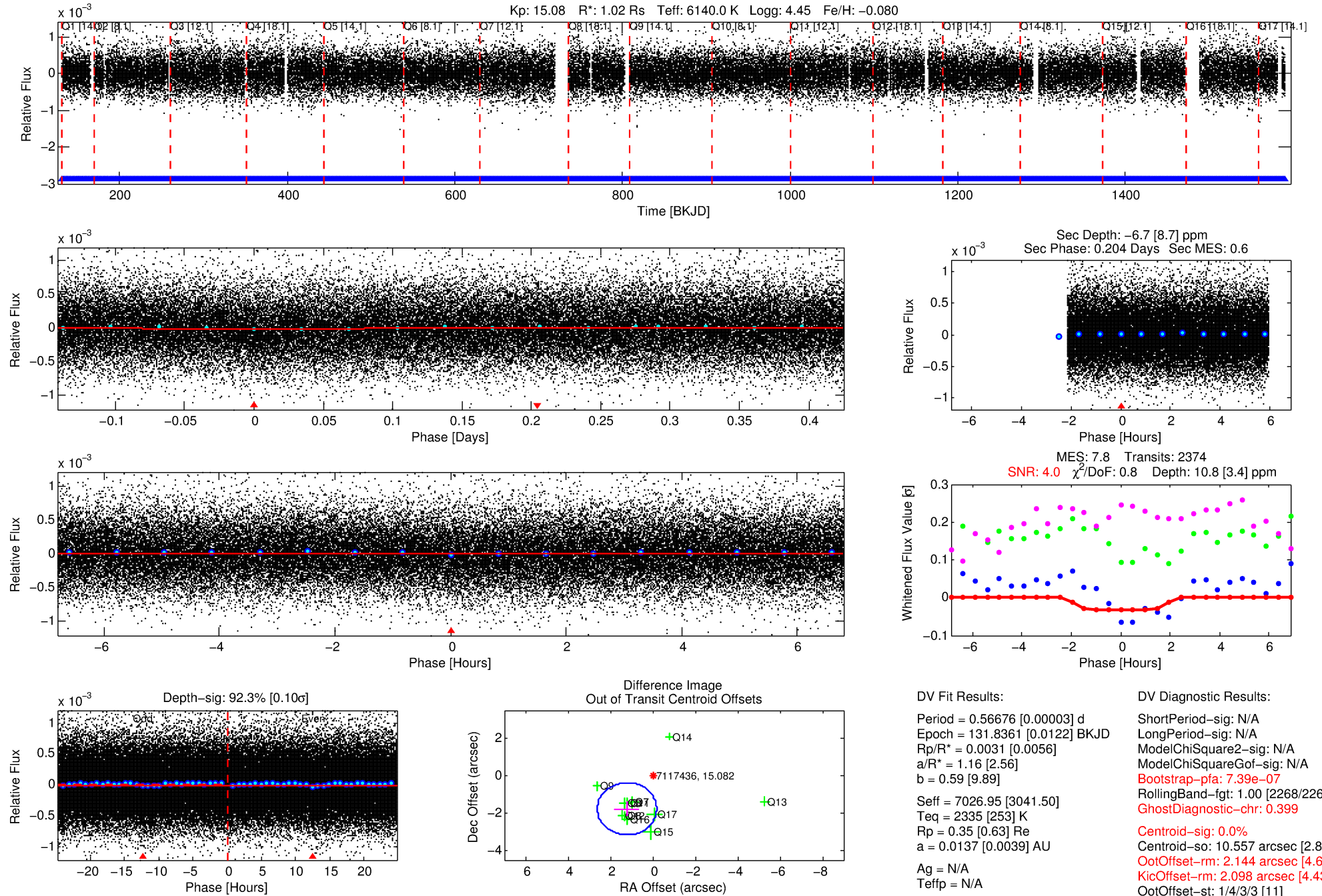
Ephemeris Match Information For 007117436-01

TCE (1)	KIC	Parent (2)	Parent KIC	P ₁ :P ₂	Dist ($''$)	Δ Row	Δ Col	m ₂	m ₁	D ₂ /D ₁	Mechanism	Flag	σ_P	σ_T
007117436-01	7117436	RR-Lyr-pri	7198959	1:1	1054.7	247	95	7.86	15.08	56663.00	Direct-PRF	0	2.91	24.51

Notes: P₁:P₂ is the period ratio. Dist is the distance in arcseconds. Δ Row and Δ Col are the number of pixels apart in row and column. m₂ and m₁ are the magnitudes of the parent and child. D₂/D₁ is the parent's transit depth divided by the child's. σ_P and σ_T are the significance of the match in period and epoch. For a match to be considered significant $\sigma_P < 5.0$ and $\sigma_T < 5.0$. Matches which have σ_P and σ_T very close to this cutoff should receive extra scrutiny, especially if the period ratio is very large.

DV One-Page Summary

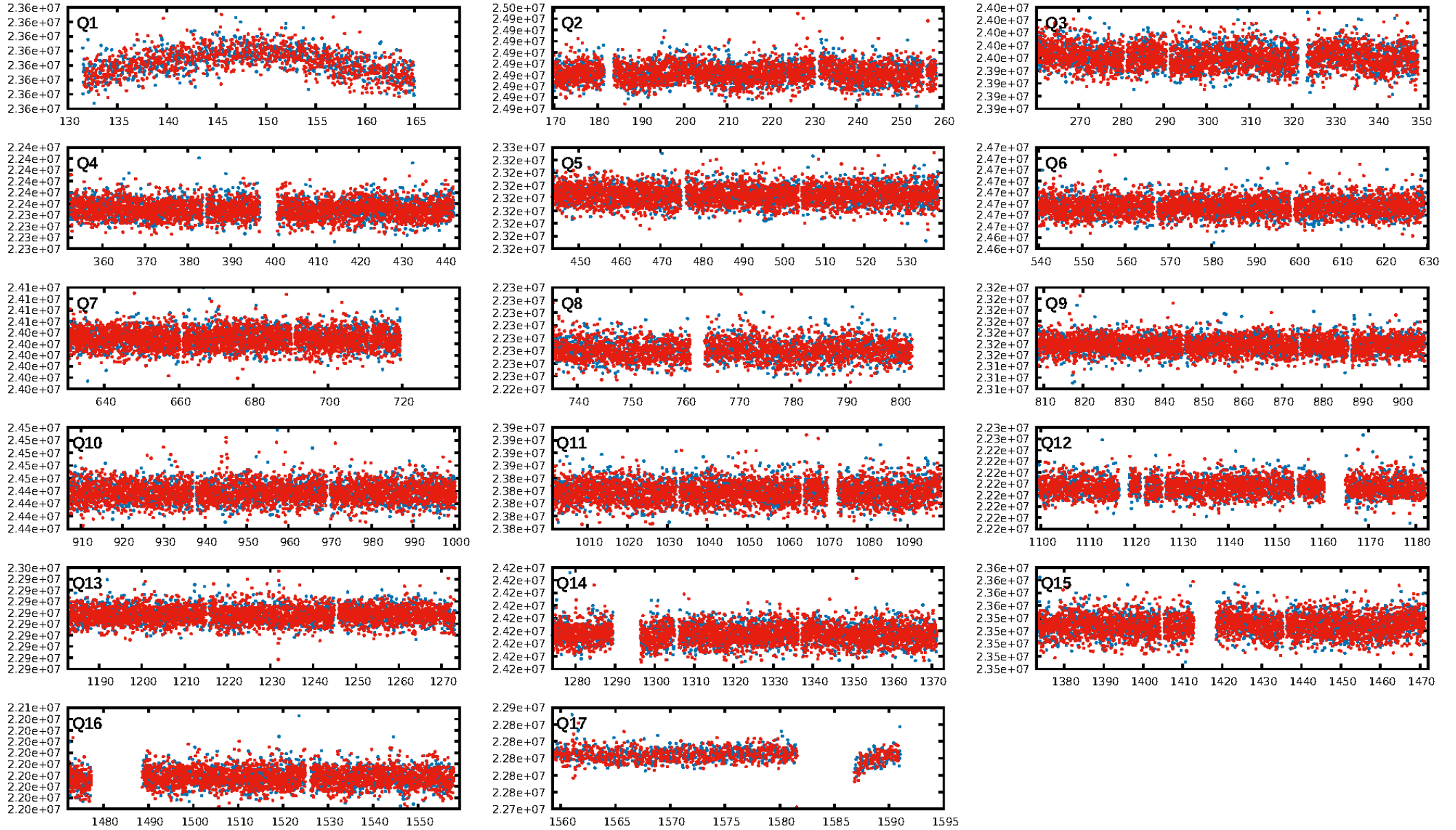
KIC: 7117436 Candidate: 1 of 1 Period: 0.567 d



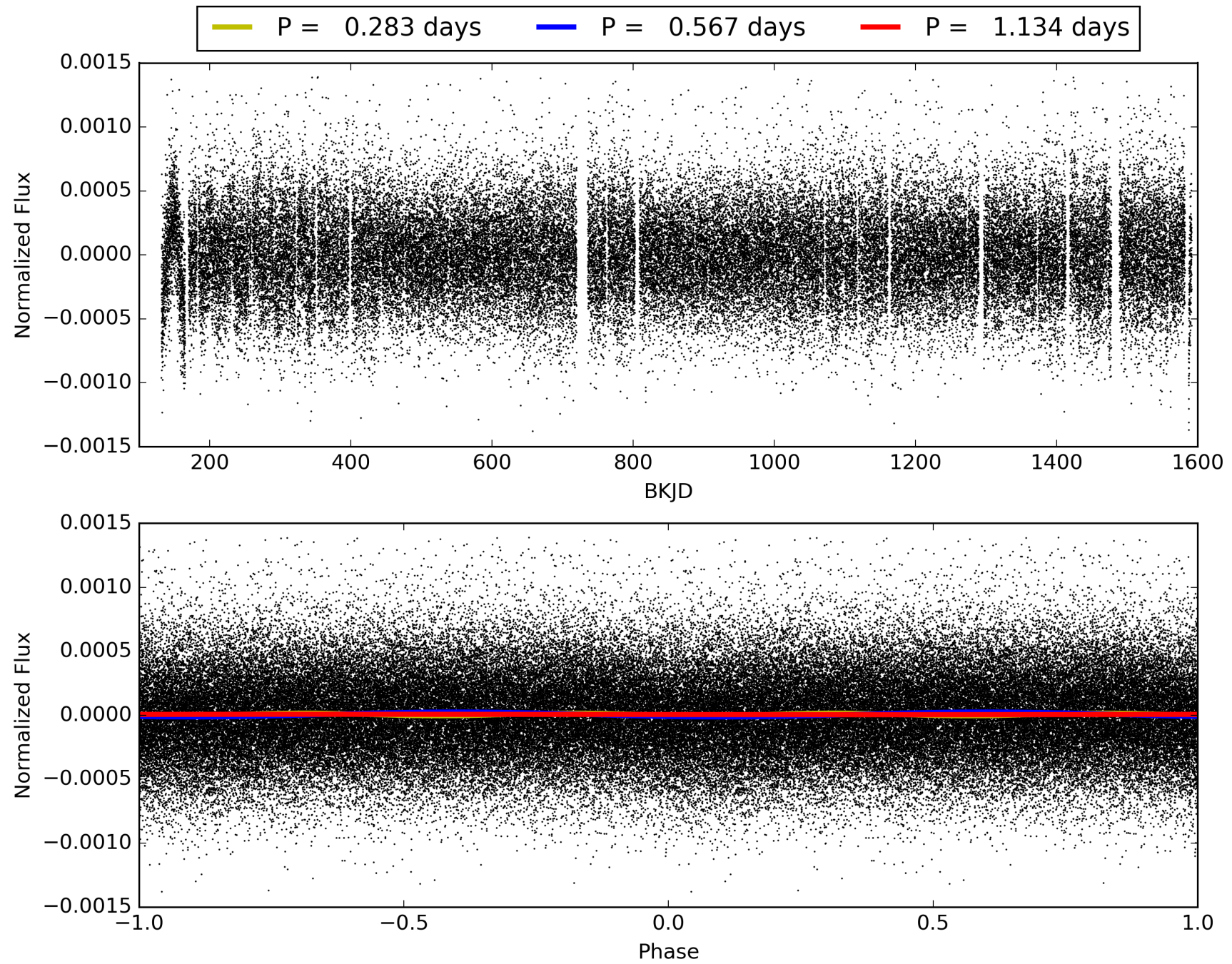
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 13:50:35 Z

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

TCE 007117436-01, PDC Light Curves

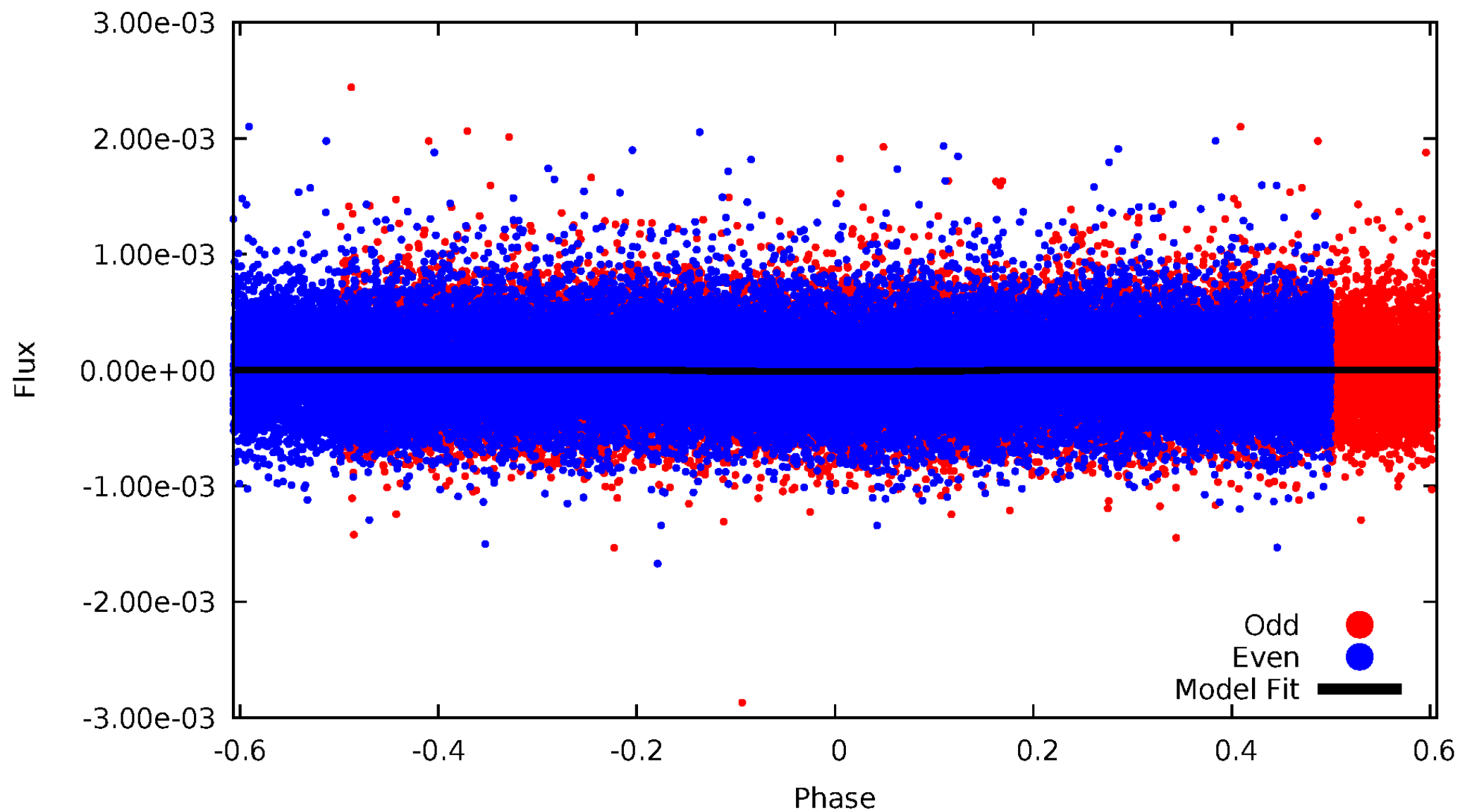


TCE 007117436-01



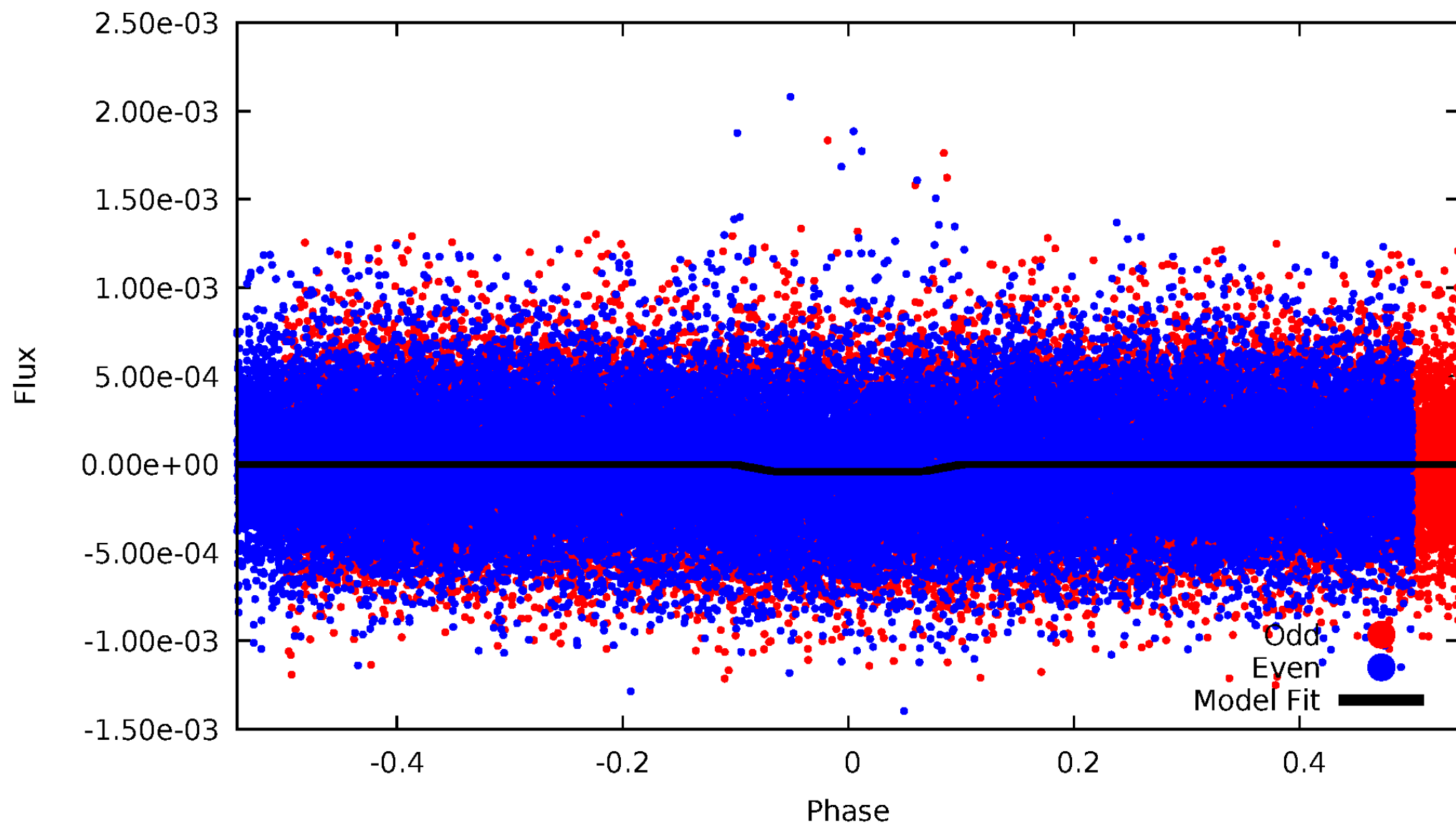
DV Odd/Even

TCE 007117436-01



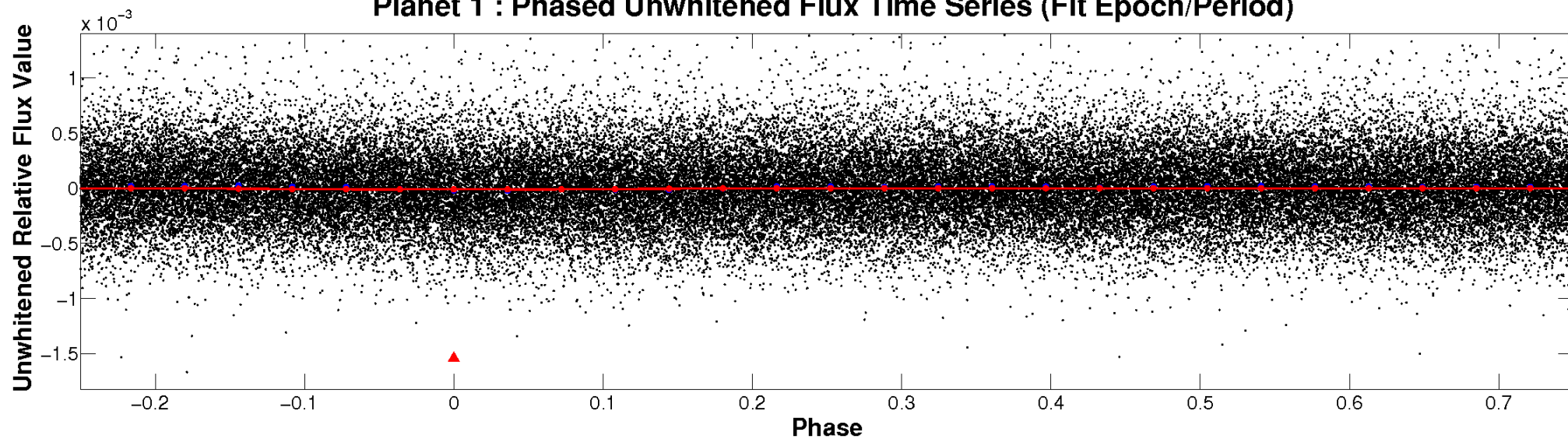
ALT Odd/Even

TCE 007117436-01

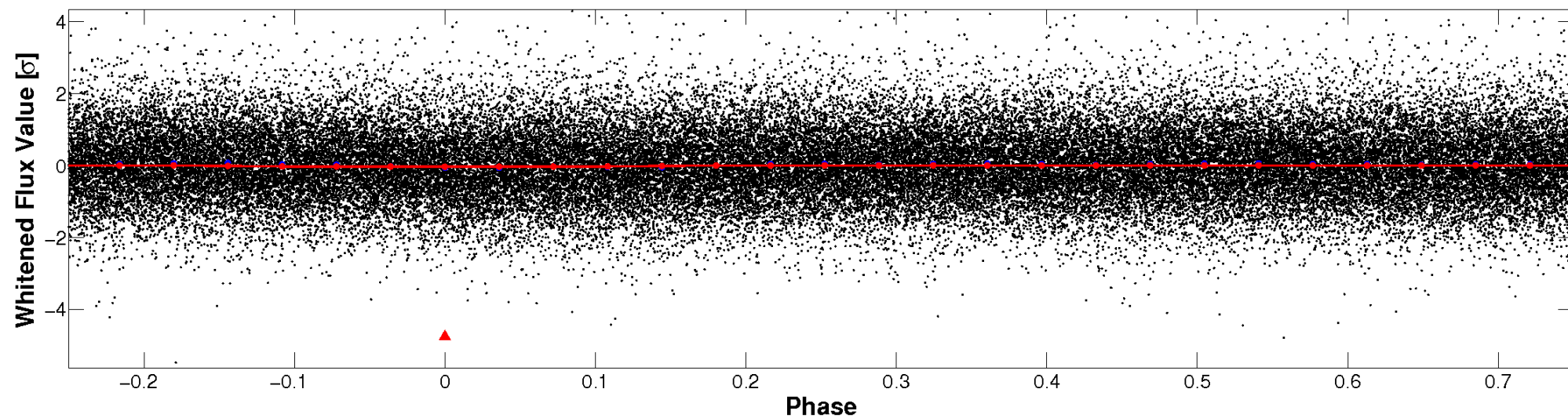


Non-Whitened Vs. Whitened Light Curve

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

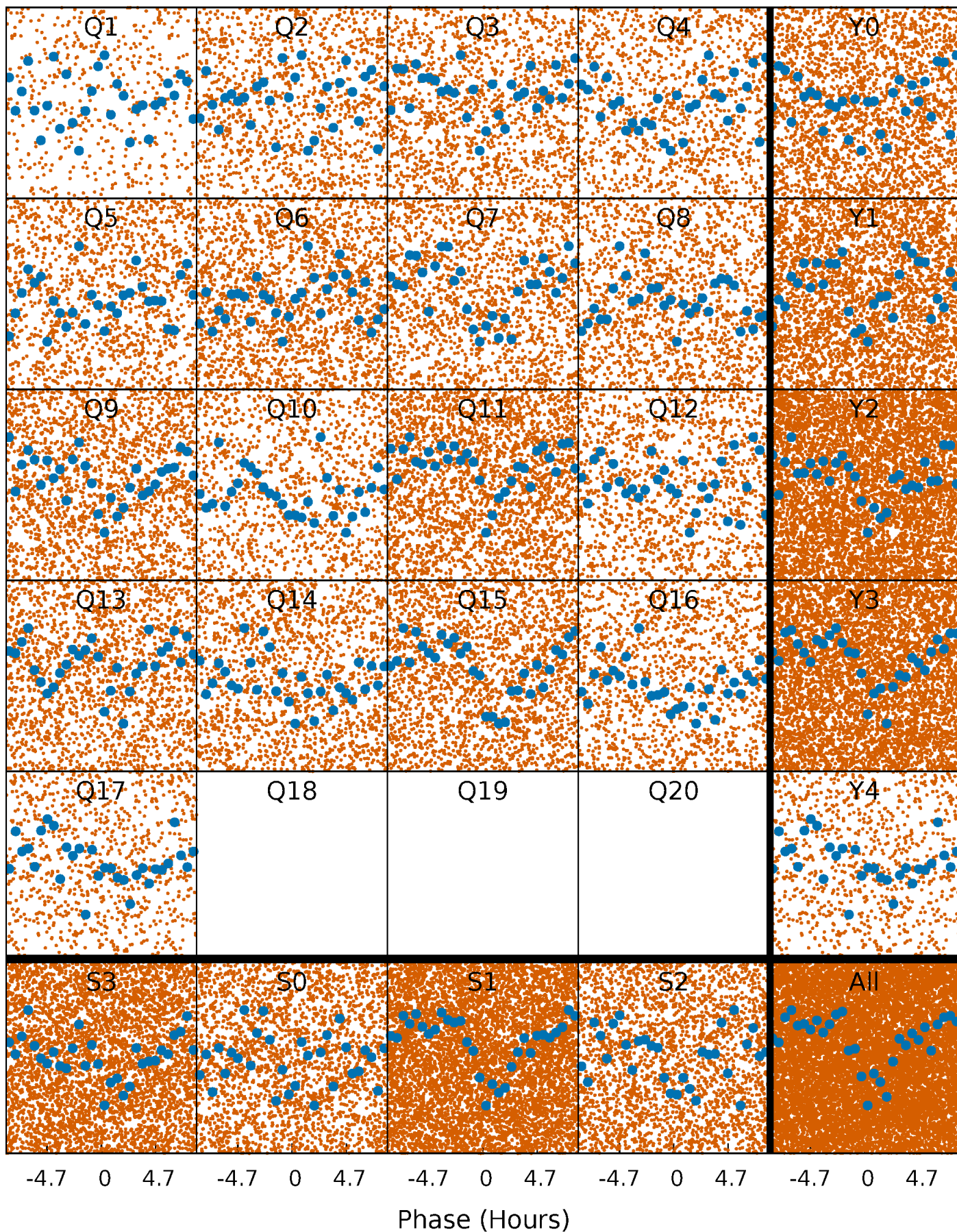


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



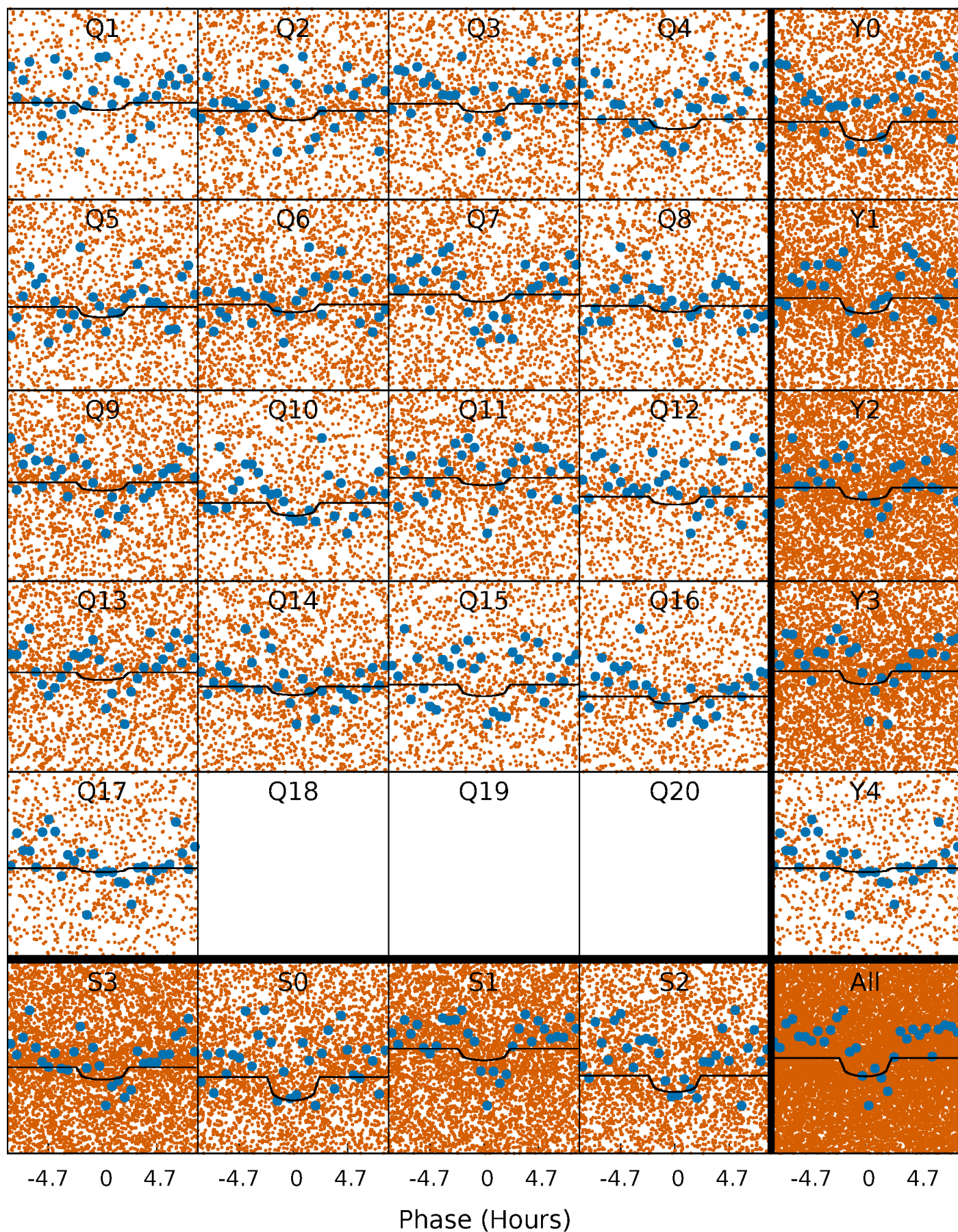
PDC Quarter-Phased Transit Curves

TCE 007117436-01 P= 0.566762 Days $T_0=131.836129$ (BKJD)



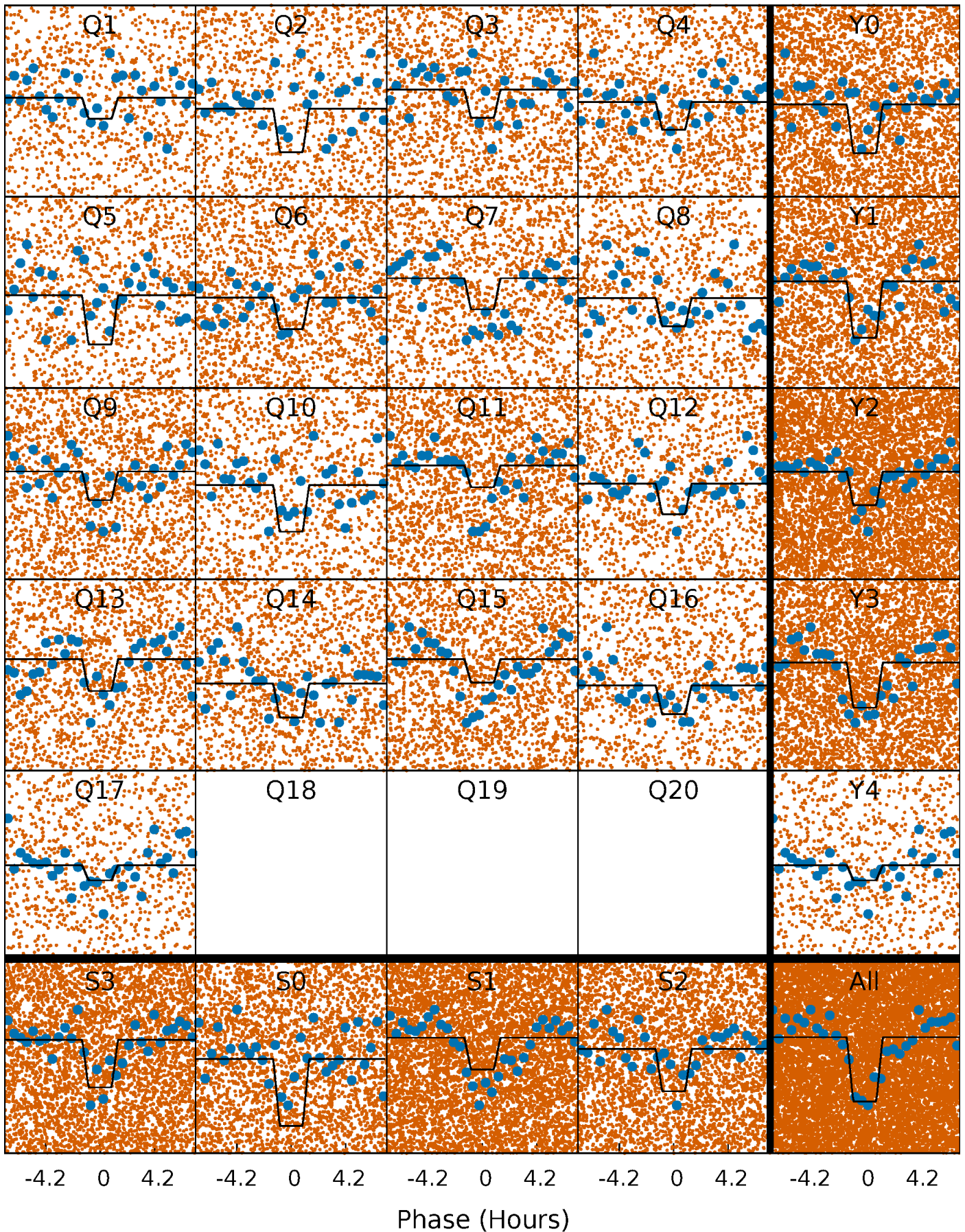
DV Quarter-Phased Transit Curves

TCE 007117436-01 P= 0.566762 Days $T_0=131.836129$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

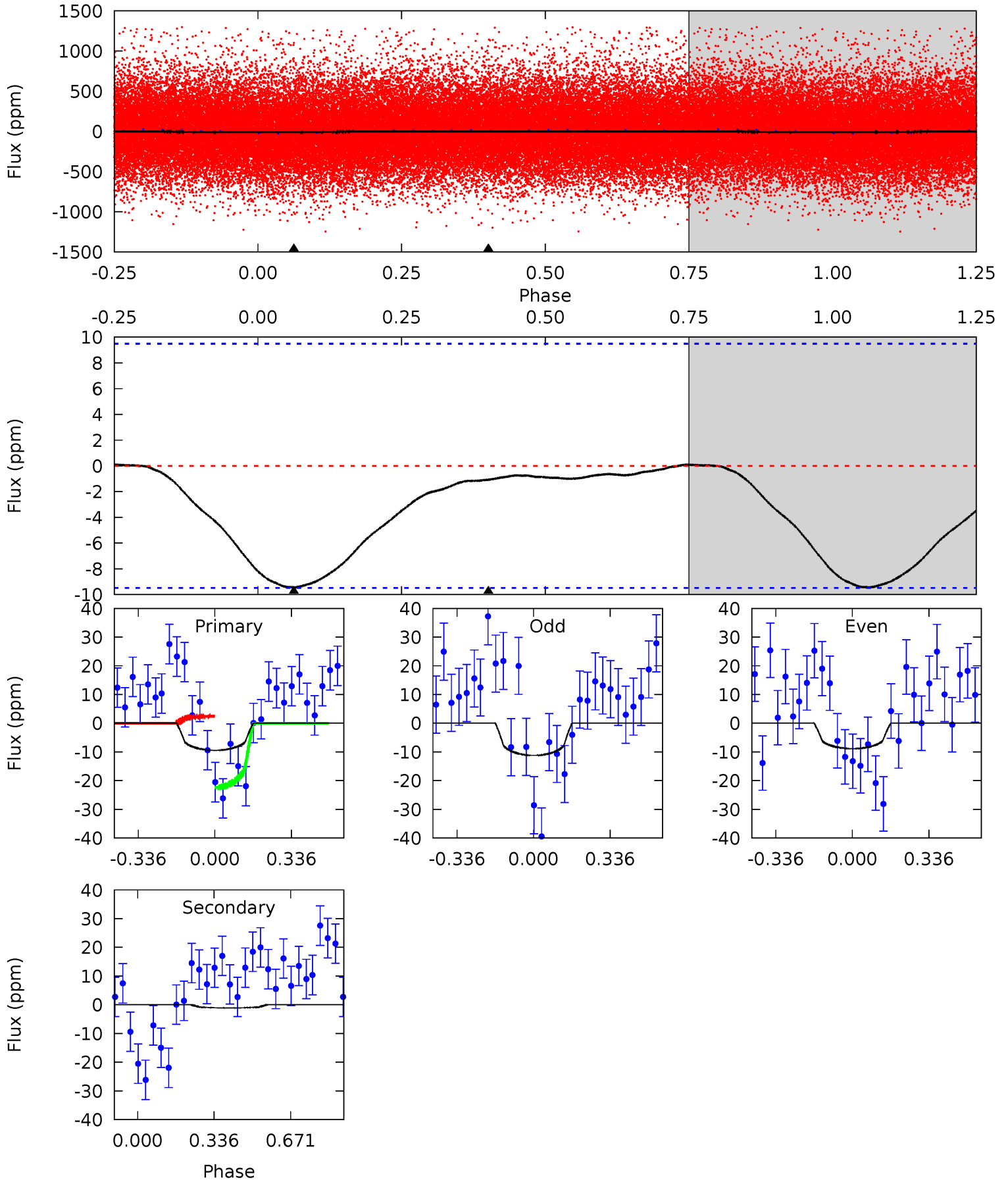
TCE 007117436-01 P= 0.566821 Days $T_0=131.778050$ (BKJD)



DV Model-Shift Uniqueness Test

007117436-01, P = 0.566762 Days, E = 131.269367 Days

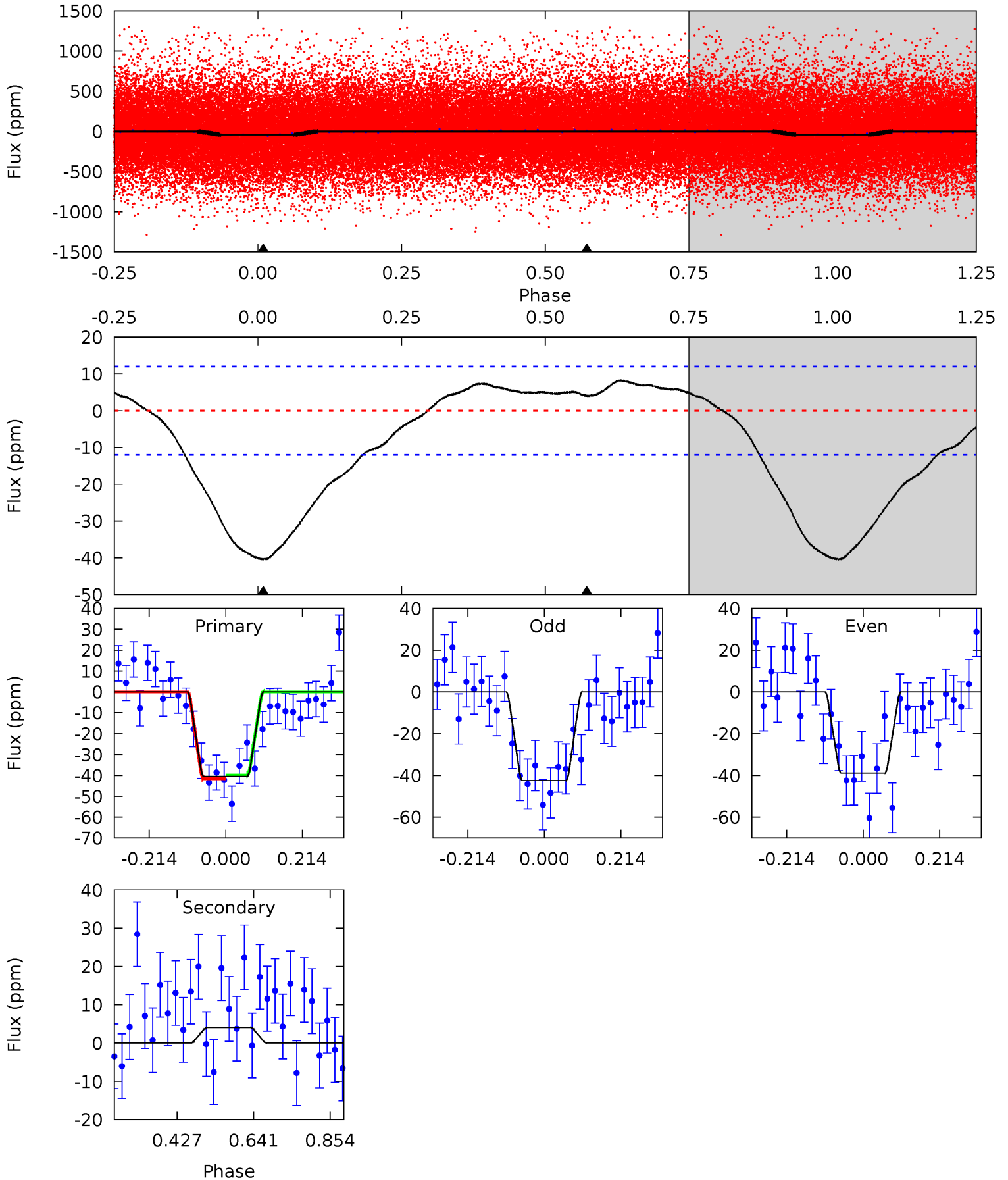
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
4.29	0.49	0	0	4.30	0.96	0.08	4.29	4.29	0.49	0.49	0.54	0.97	0.01	4.54



Alt Model-Shift Uniqueness Test

007117436-01, P = 0.566821 Days, E = 131.211229 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14.8	-1.47	0	0	4.40	1.24	1.47	14.8	14.8	-1.47	-1.47	0.65	0.96	0.17	0.33



Stellar Parameters For KIC 007117436

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6140^{+171}_{-214}	$4.452^{+0.056}_{-0.224}$	$-0.080^{+0.250}_{-0.300}$	$1.020^{+0.341}_{-0.114}$	$1.071^{+0.151}_{-0.135}$	$1.419^{+0.409}_{-0.747}$
	+3%/-3%	+1%/-5%	+312%/-375%	+33%/-11%	+14%/-13%	+29%/-53%
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 007117436-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-1 ± 2	$0.59^{+0.56}_{-0.39}$	3331^{+246}_{-170}	-2763^{+7508}_{-925}	$0.203^{+2.458}_{-0.454}$
Alt.	4 ± 3	$0.90^{+0.61}_{-0.54}$	3339^{+291}_{-185}	-3857^{+430}_{-1265}	$-0.433^{+0.333}_{-2.378}$

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 $A_{obs} \gg 1.0$

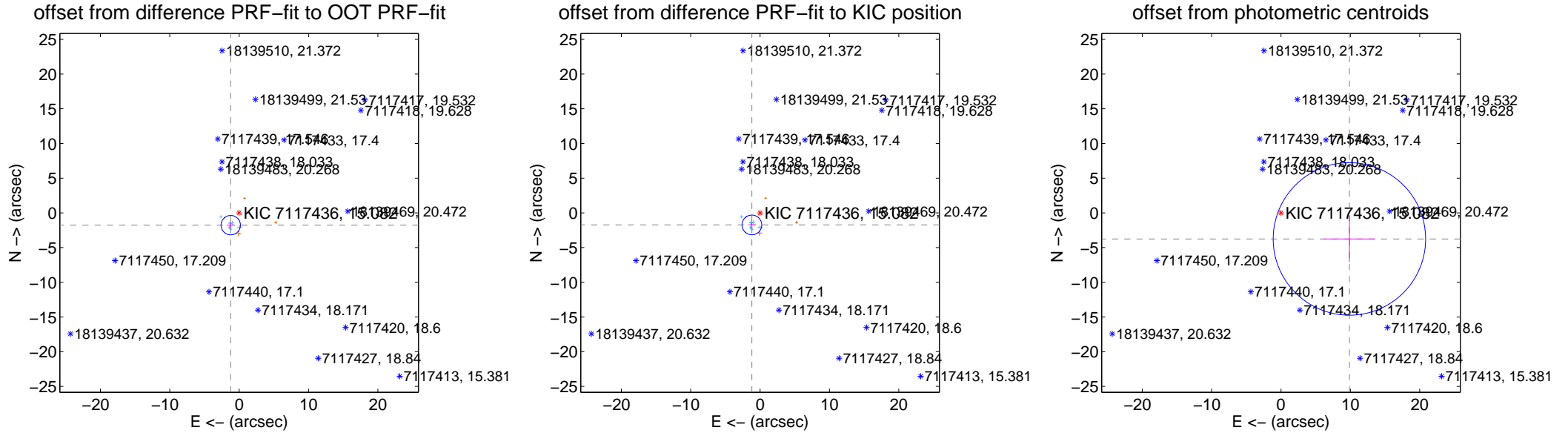
DV Centroid Data

Supplemental centroid analysis for 007117436-01. Kepler magnitude: 15.08. Transit SNR 3.97

There are 8 quarters with good PRF difference image offsets

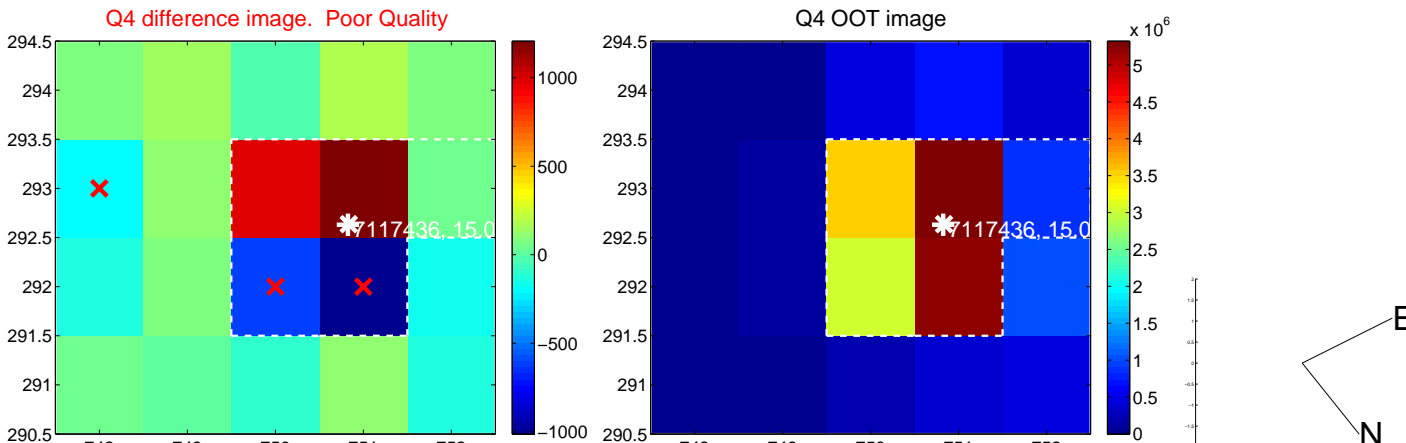
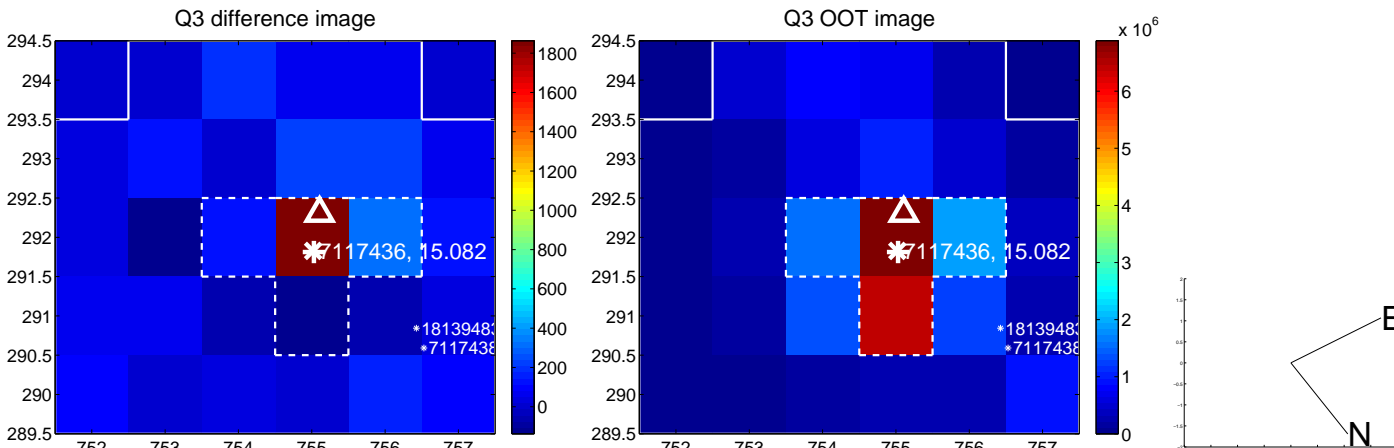
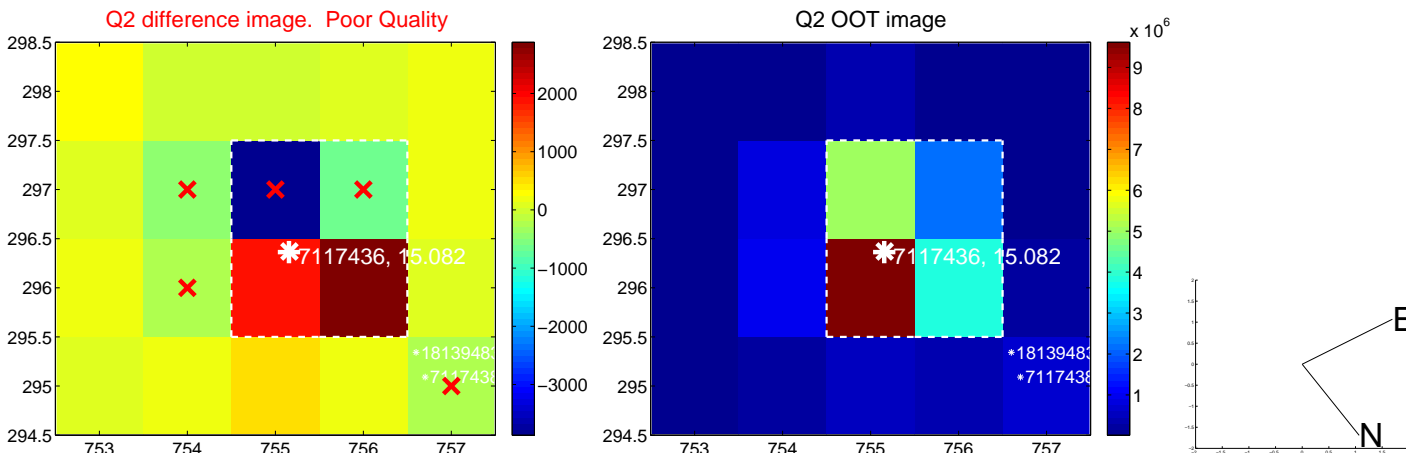
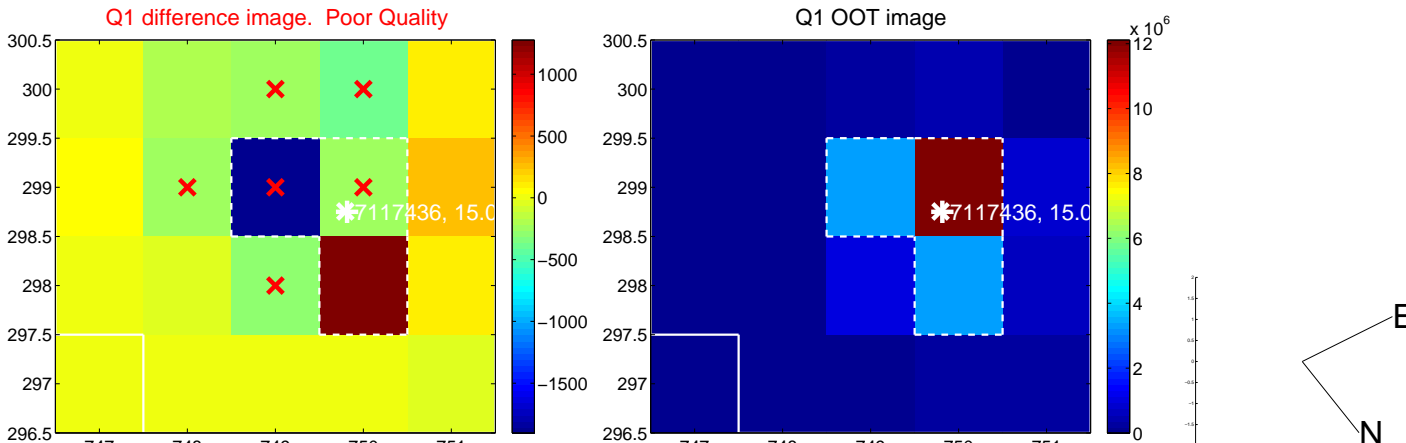
The direct PRF centroid is offset from the target star catalog position by about 0.06 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.144 \pm 0.466	4.60	1.214 \pm 0.564	-1.767 \pm 0.384
PRF-fit source offset from KIC position	2.098 \pm 0.474	4.43	1.178 \pm 0.553	-1.737 \pm 0.400
photometric centroid source offset	10.56 \pm 3.66	2.88	-9.87 \pm 3.71	-3.76 \pm 3.30

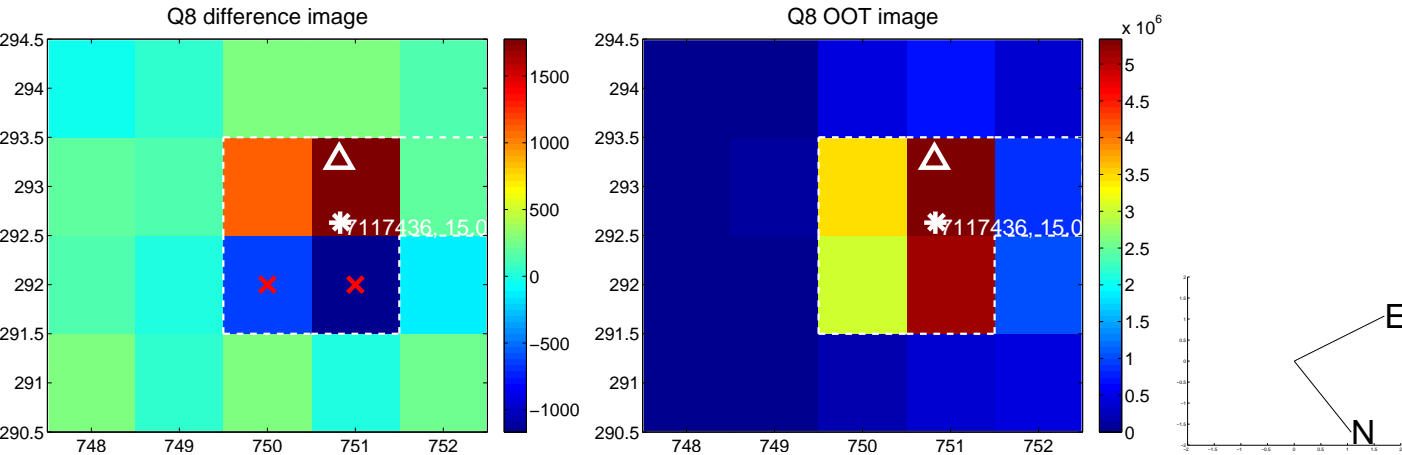
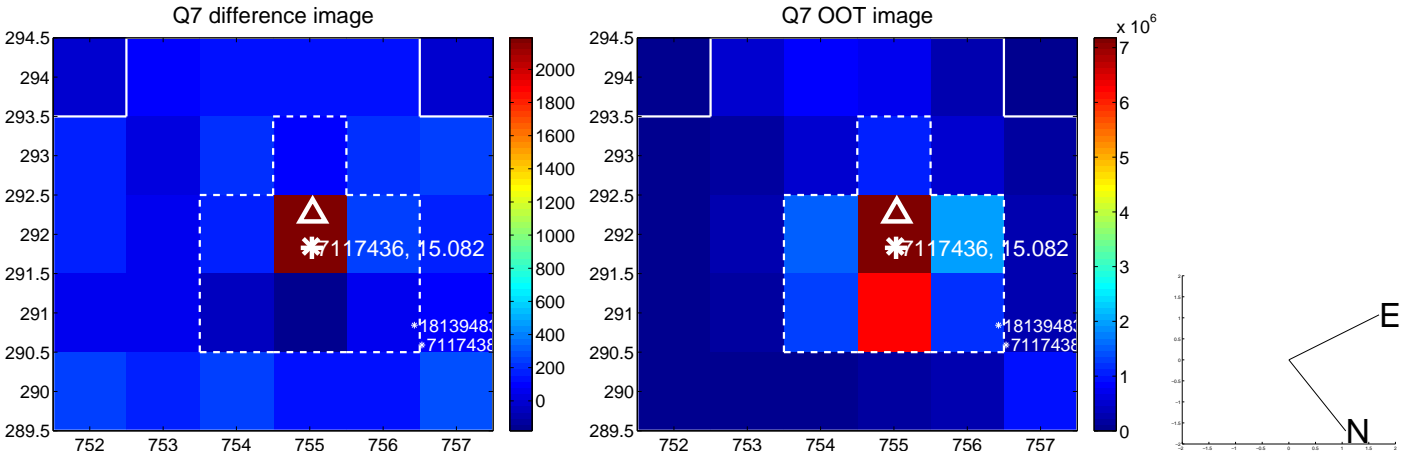
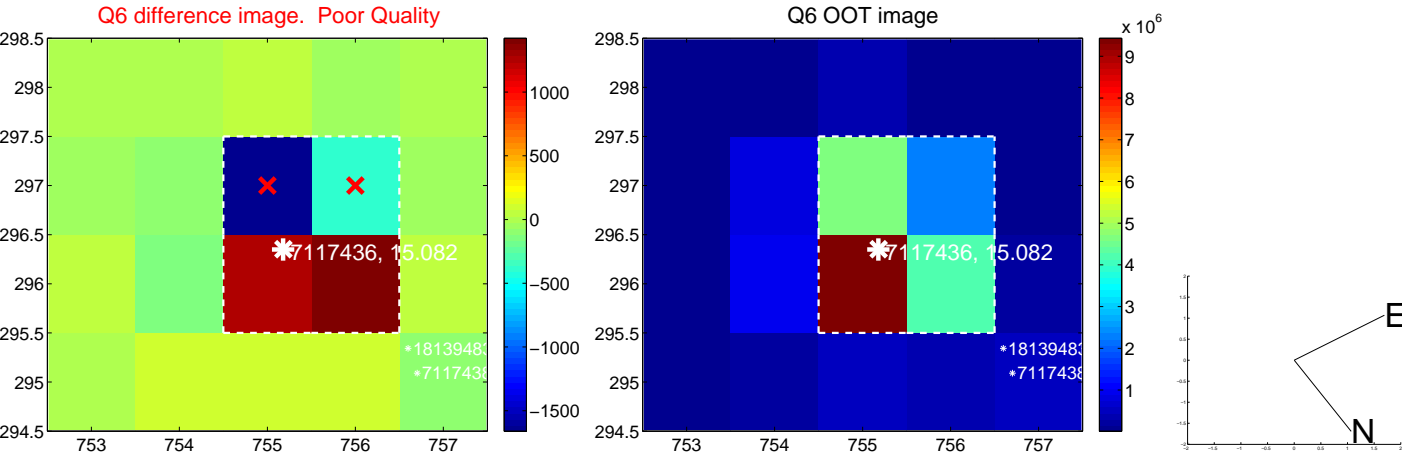
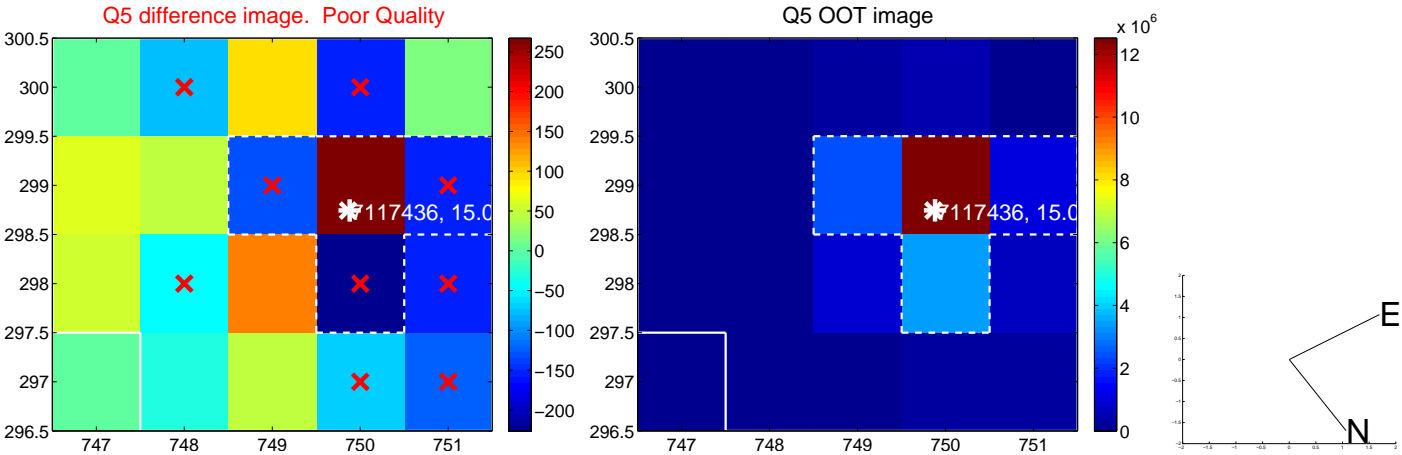


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

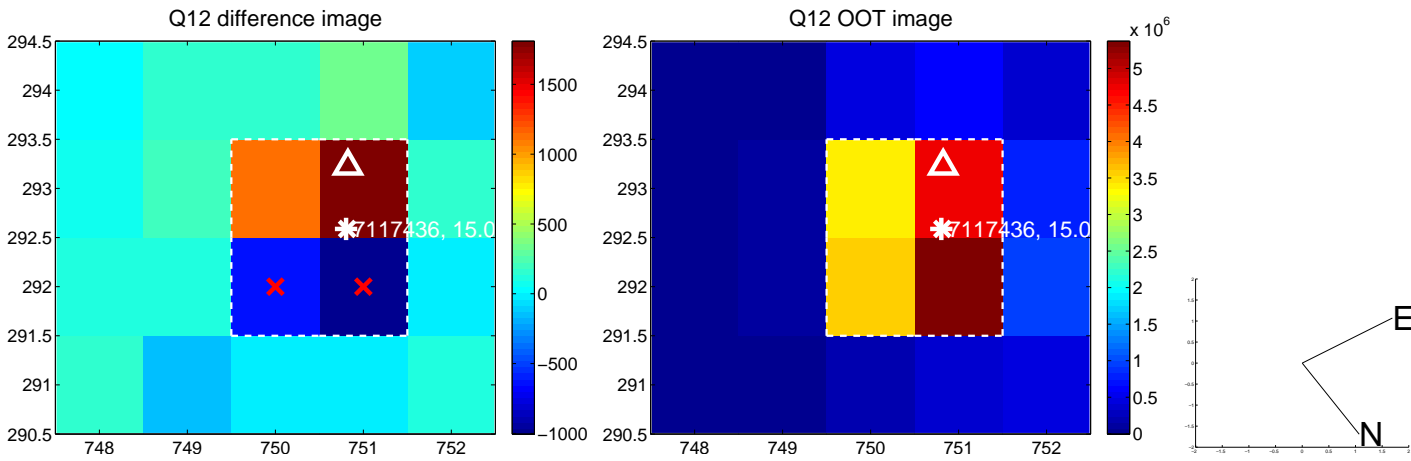
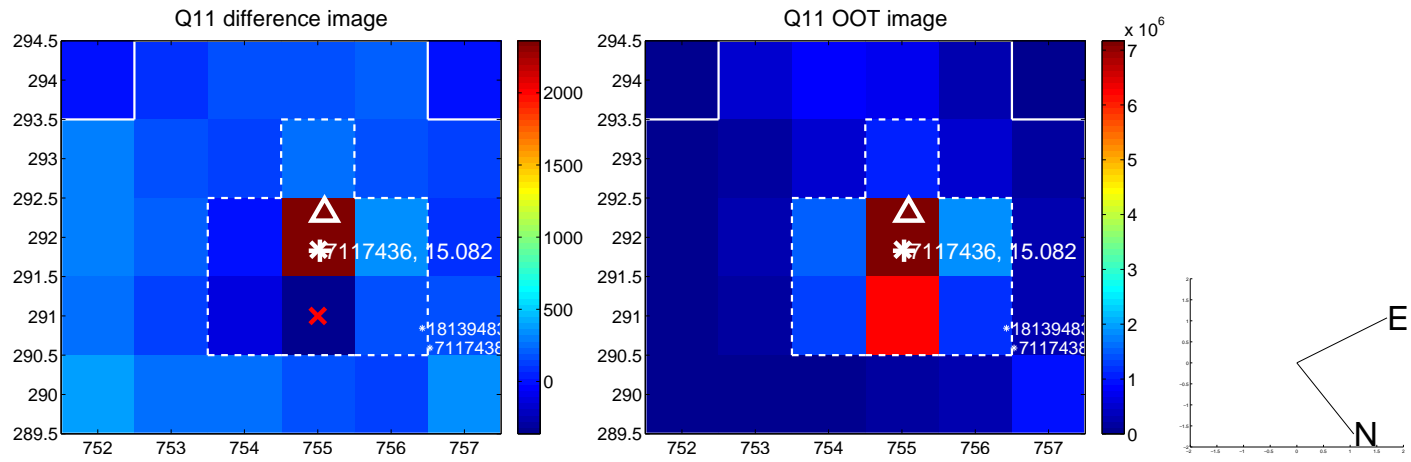
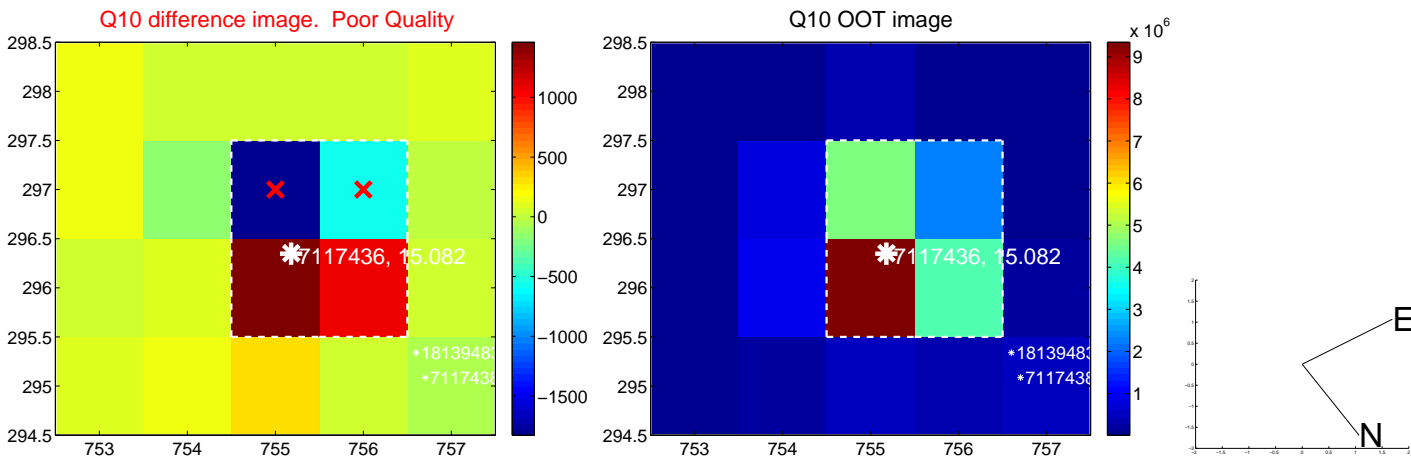
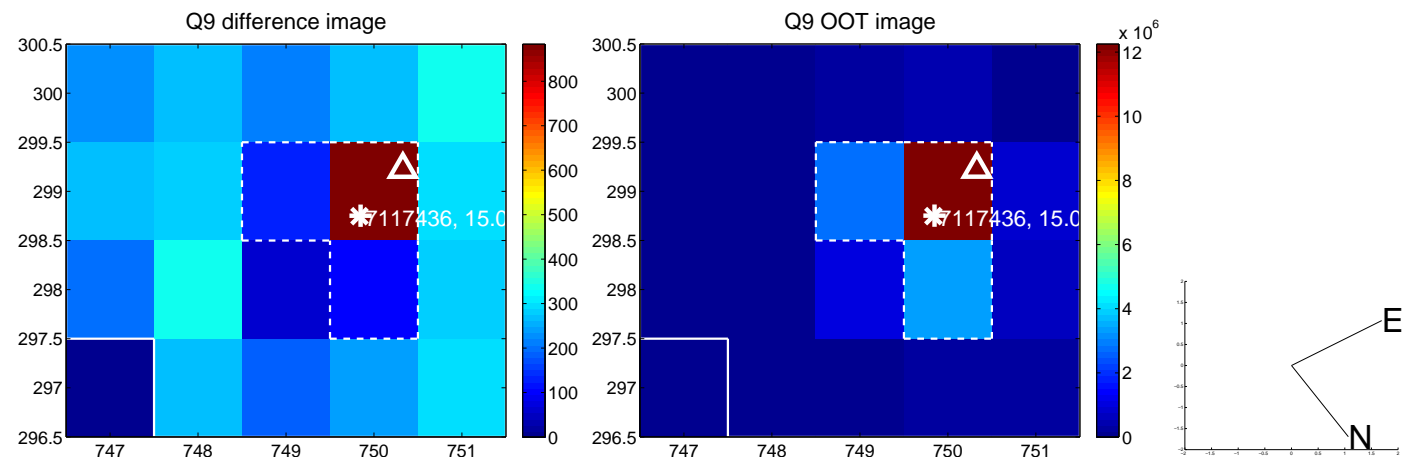
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



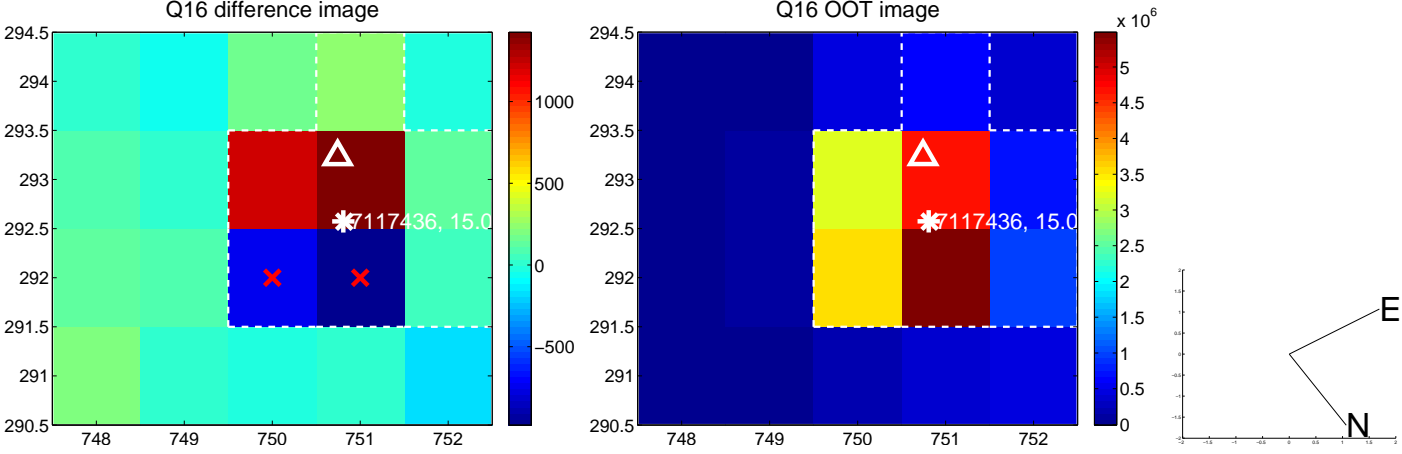
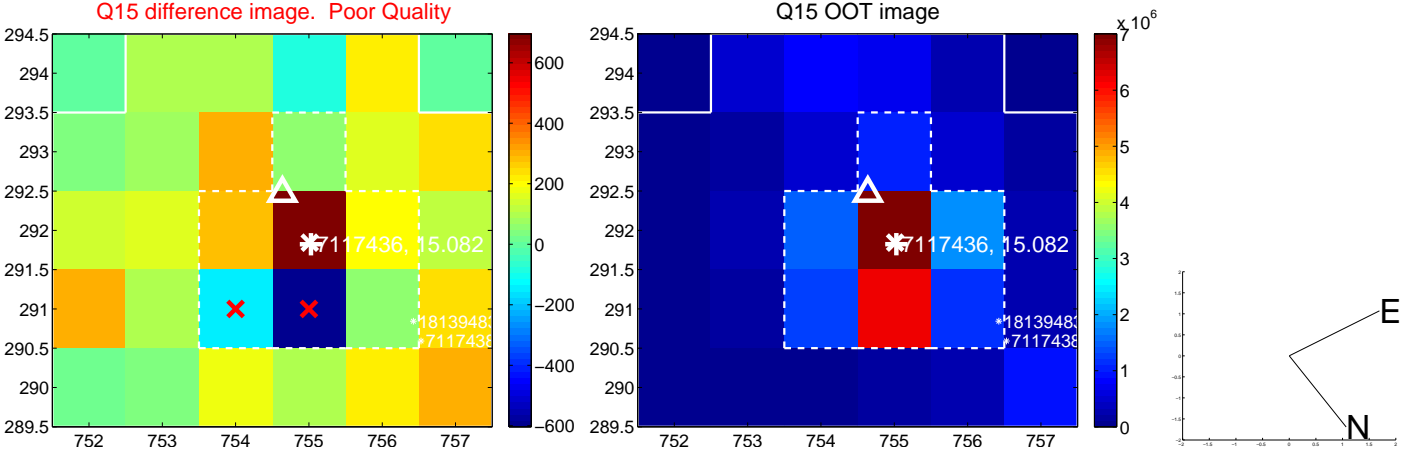
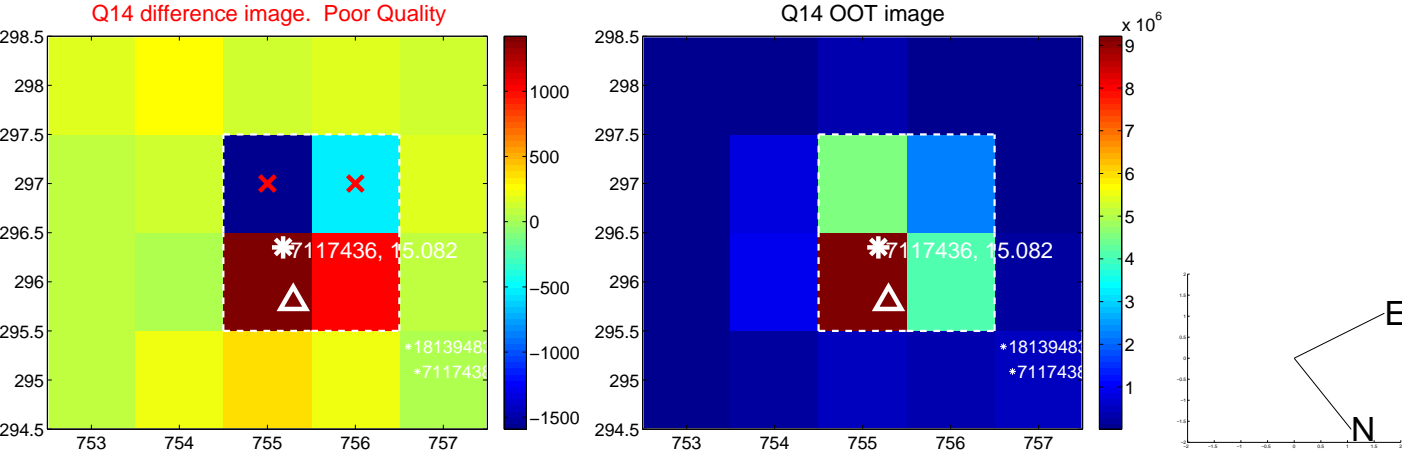
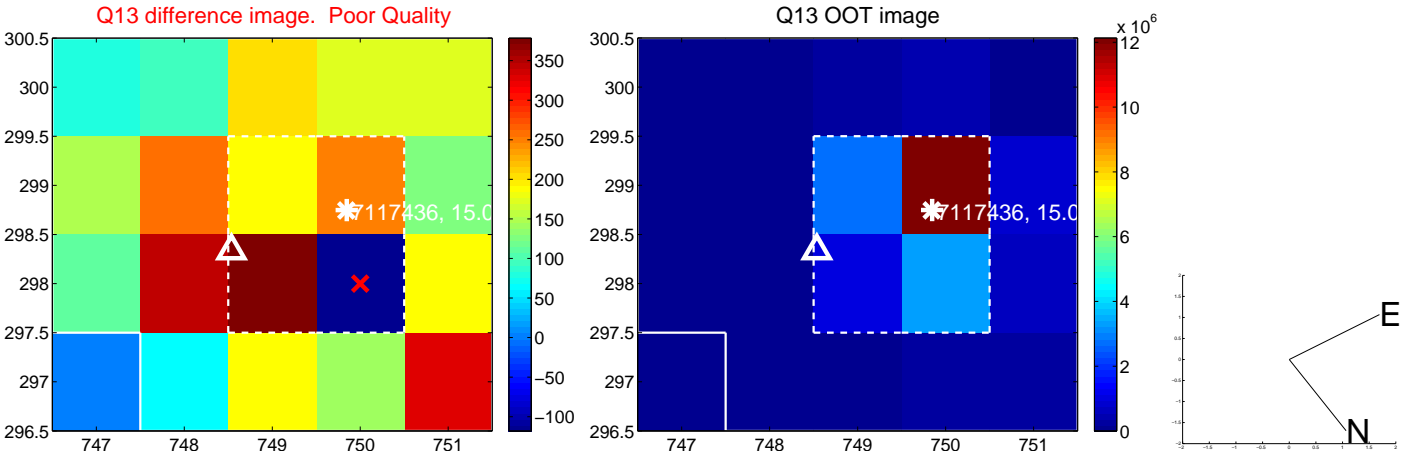
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



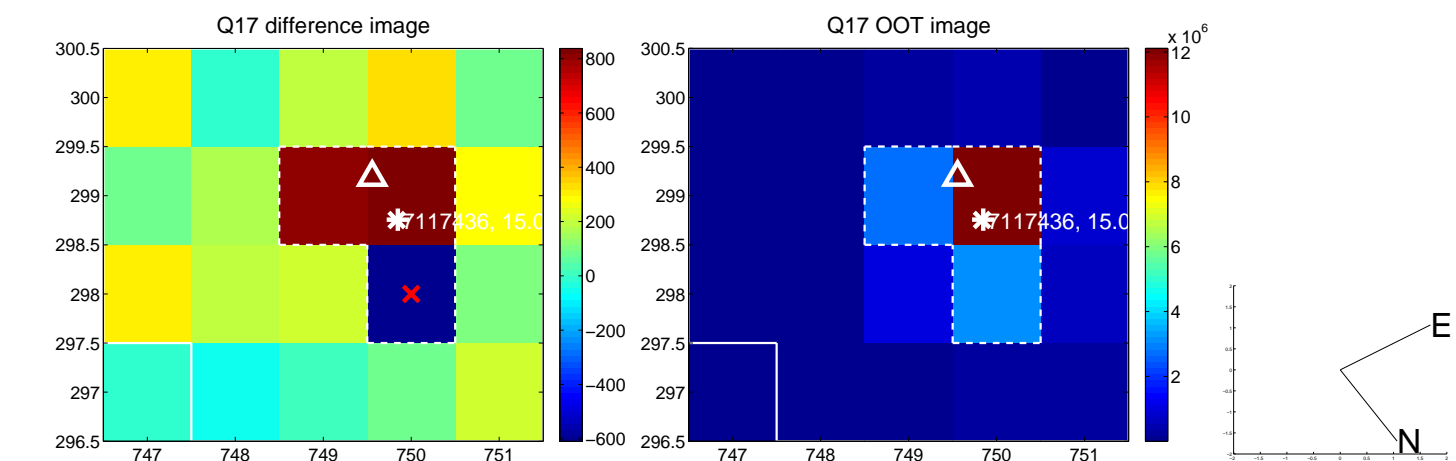
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



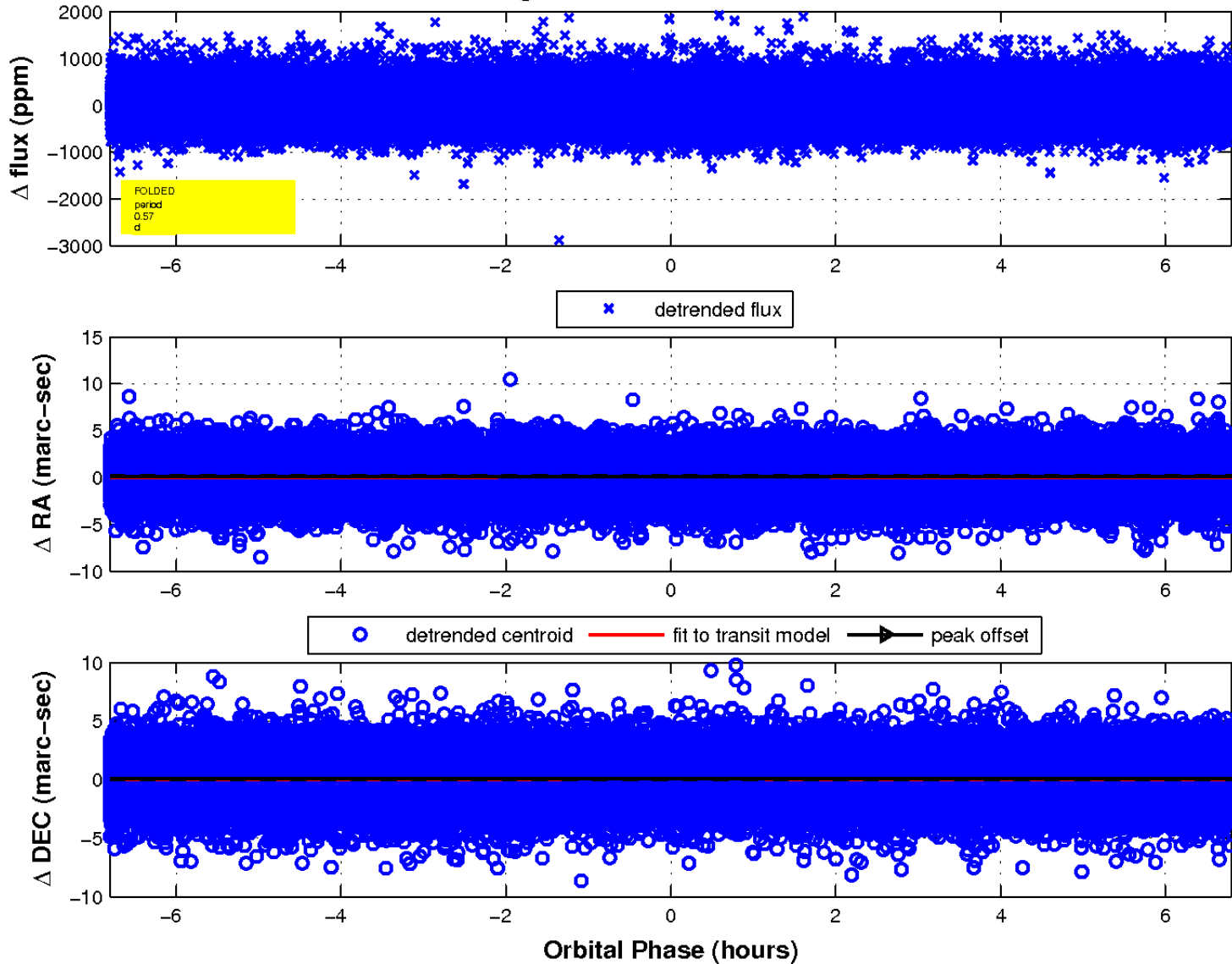
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

