

KIC 011341314

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})
011341314-01	OBS	5887.01	9.833087	132.630728	43.9	15.665	9.9	10.8	1.20	5929	0.81	189.31

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011341314-01	OBS	FP	0.00	0	0	0	1	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.

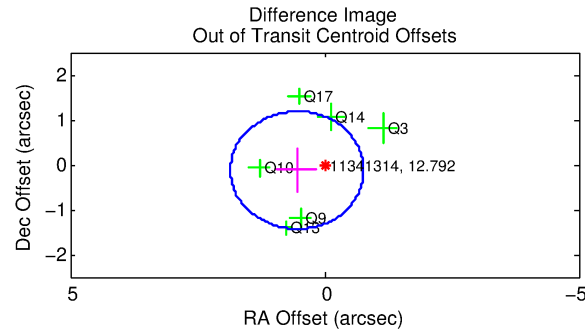
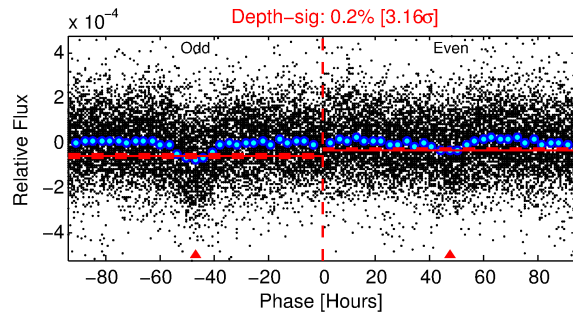
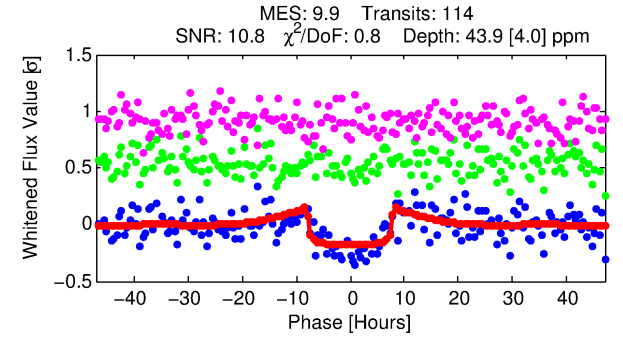
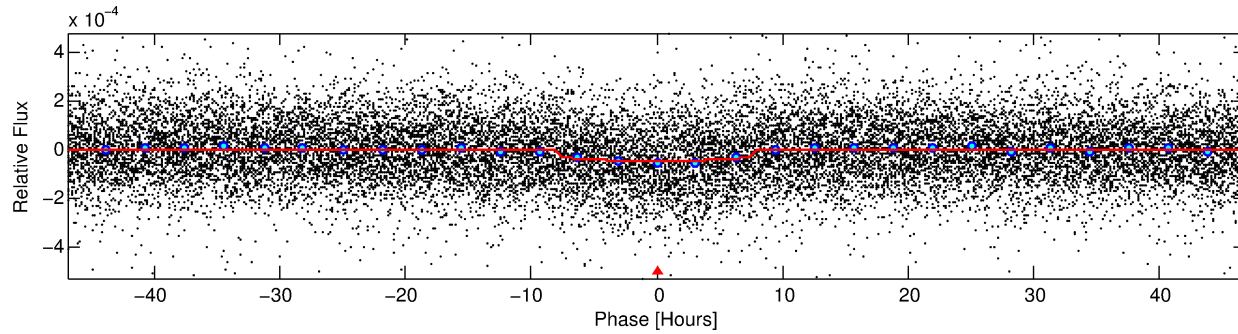
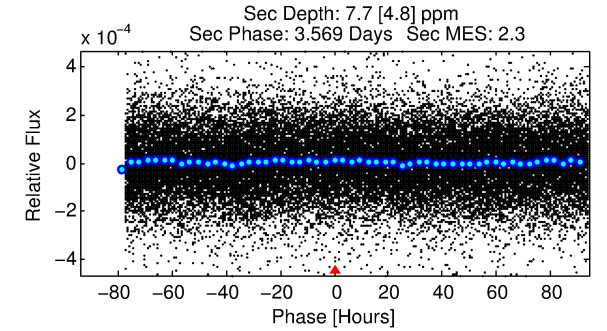
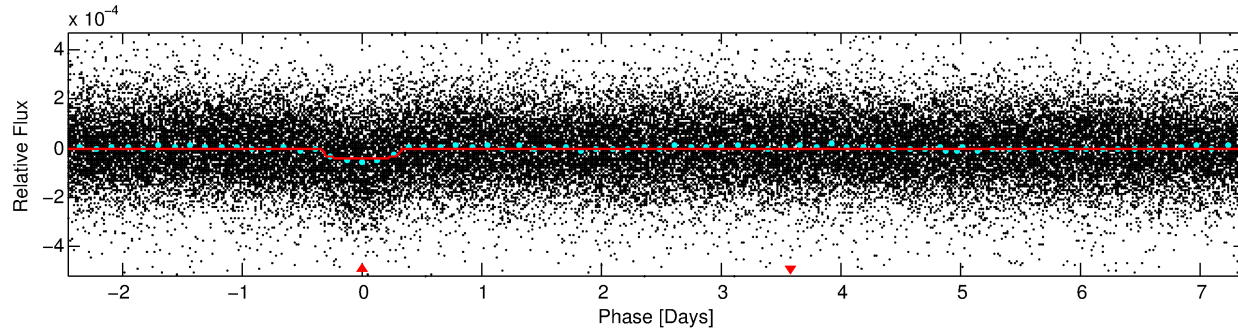
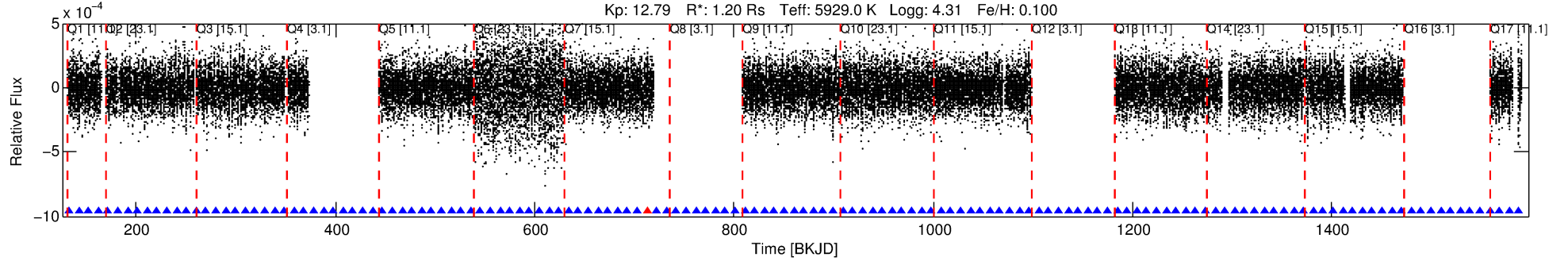
Ephemeris Match Information For 011341314-01

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
011341314-01	11341314	011235323-02	11235323	1:1	866.0	218	0	13.49	12.80	483.95	Col-Anomaly	0	4.07	3.12

Notes: $P_1:P_2$ 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. m_2 and m_1 are the magnitudes of the parent and child. D_2/D_1 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: 11341314 Candidate: 1 of 1 Period: 9.833 d
KOI: K05887.01 Corr: 0.932



DV Fit Results:

Period = 9.83309 [0.00013] d
Epoch = 132.6307 [0.0107] BKJD
Rp/R* = 0.0062 [0.0021]
a/R* = 4.44 [6.58]
b = 0.42 [3.08]
Seff = 189.31 [41.42]
Teq = 946 [52] K
Rp = 0.81 [0.31] Re
a = 0.0919 [0.0127] AU
Ag = 55.22 [52.68] [1.03σ]
Teffp = 3986 [928] K [3.27σ]

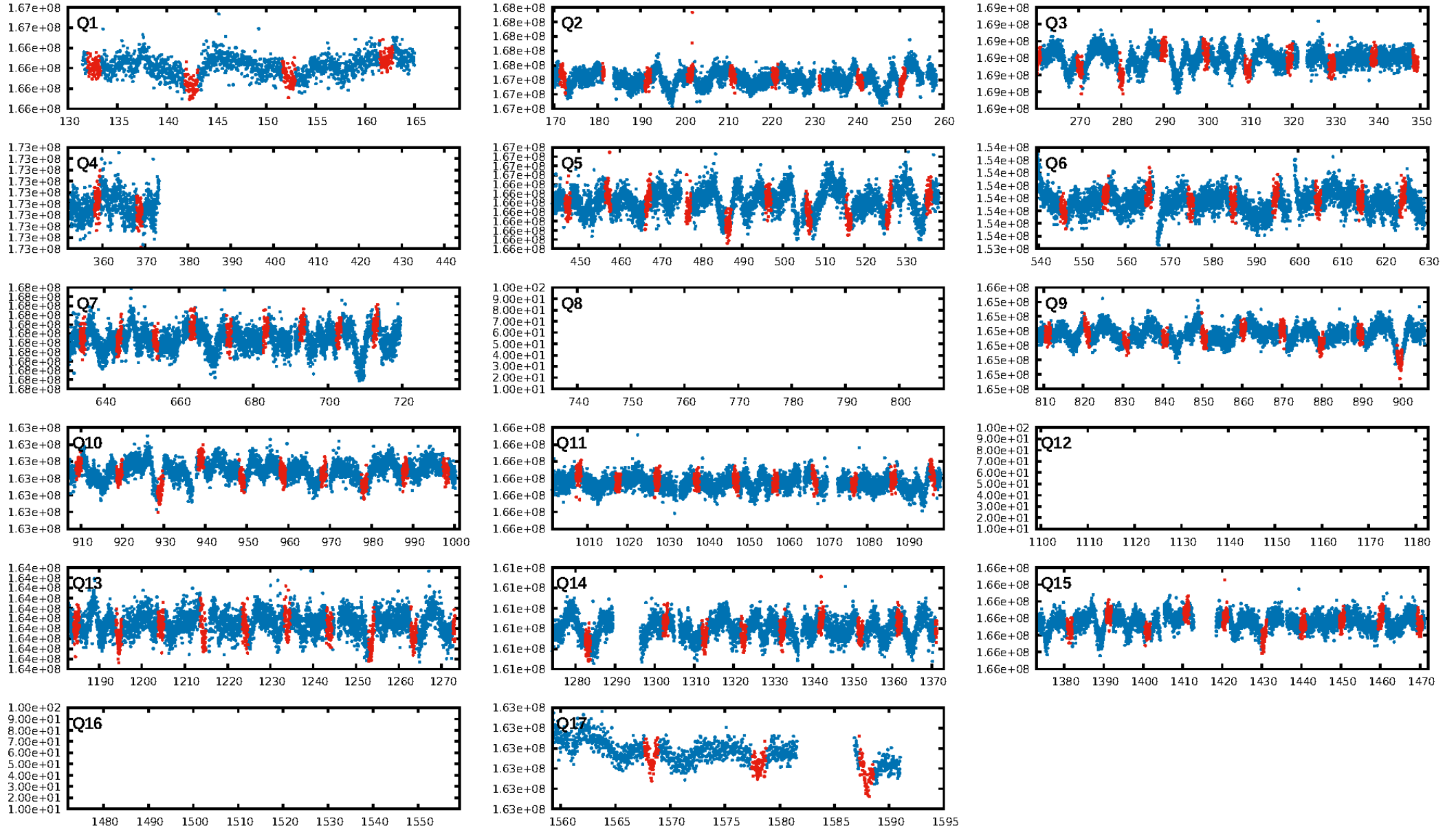
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 1.8%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 1.39e-21
RollingBand-fgt: 0.99 [104/105]
GhostDiagnostic-chr: -17.56
Centroid-sig: 2.9%
Centroid-so: 1.240 arcsec [1.68σ]
OotOffset-rm: 0.557 arcsec [1.28σ]
OotOffset-st: 2/1/0/3 [6]
KicOffset-rm: 0.678 arcsec [1.55σ]
KicOffset-st: 2/1/0/3 [6]
DiffImageQuality-fgm: 1.00 [6/6]
DiffImageOverlap-fno: 1.00 [14/14]

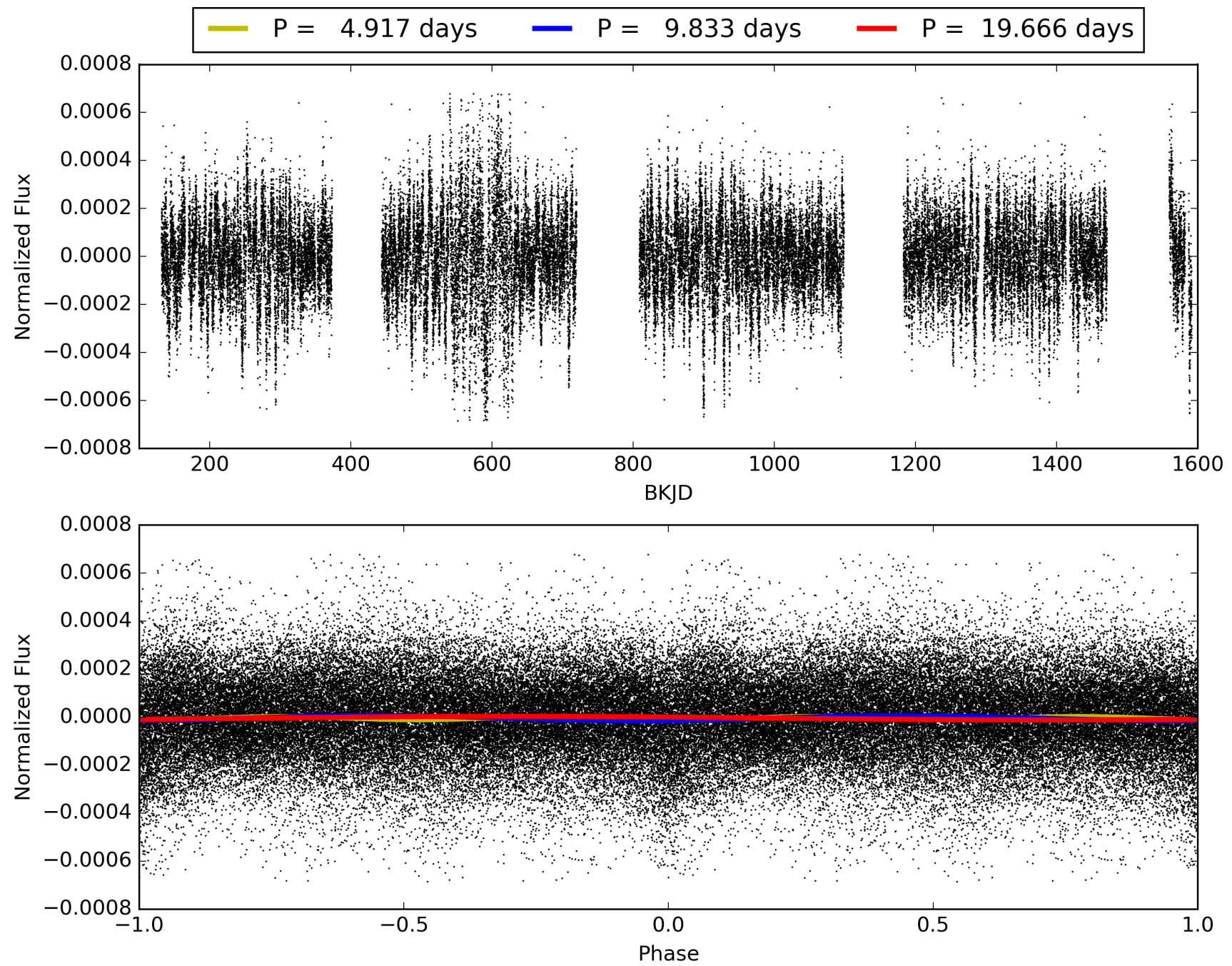
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 20:24:56 Z

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

TCE 011341314-01, PDC Light Curves

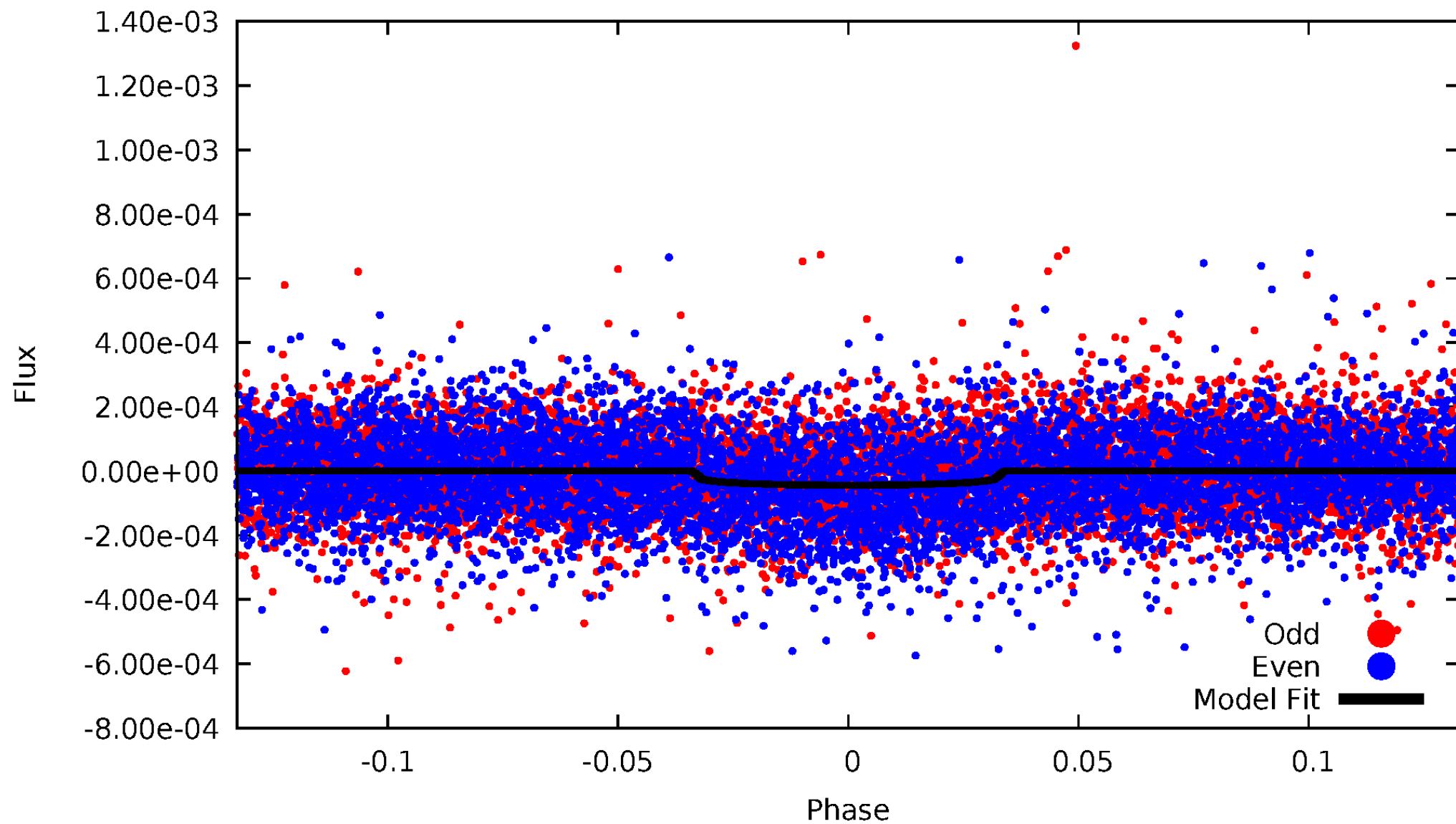


TCE 011341314-01



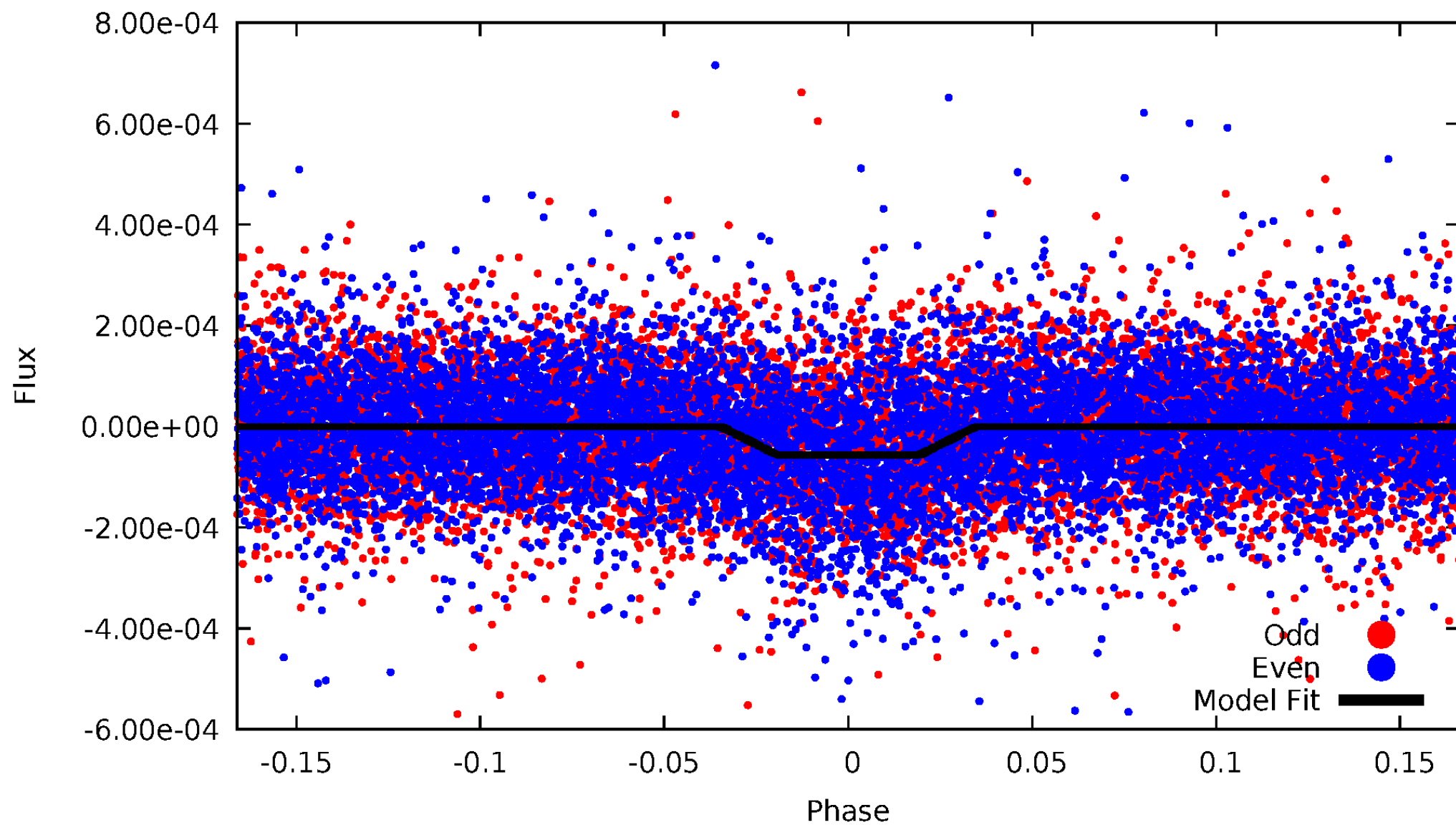
DV Odd/Even

TCE 011341314-01



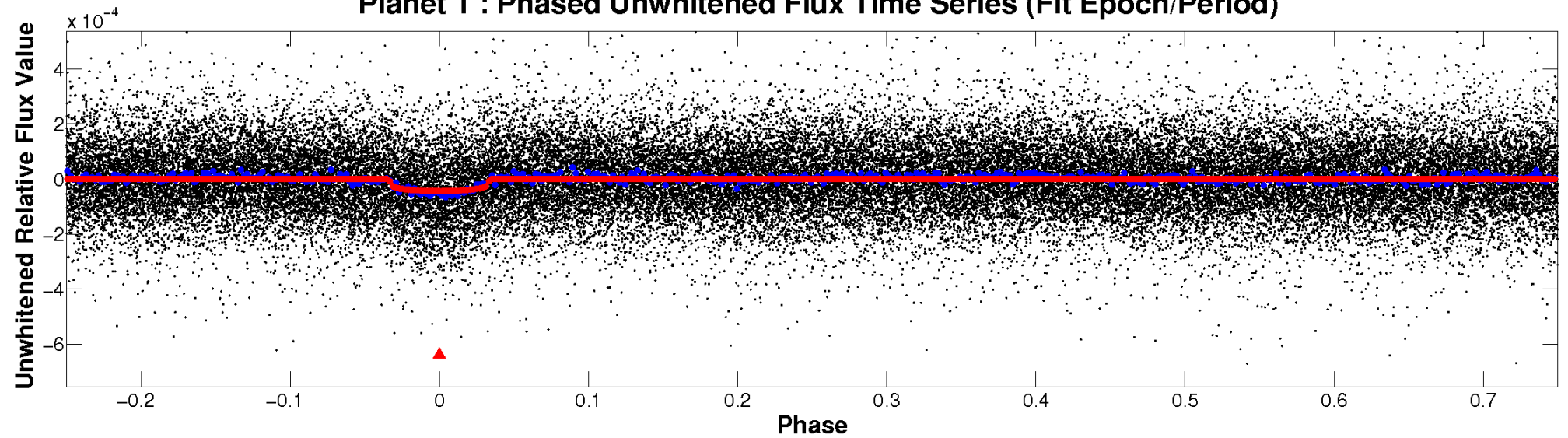
ALT Odd/Even

TCE 011341314-01

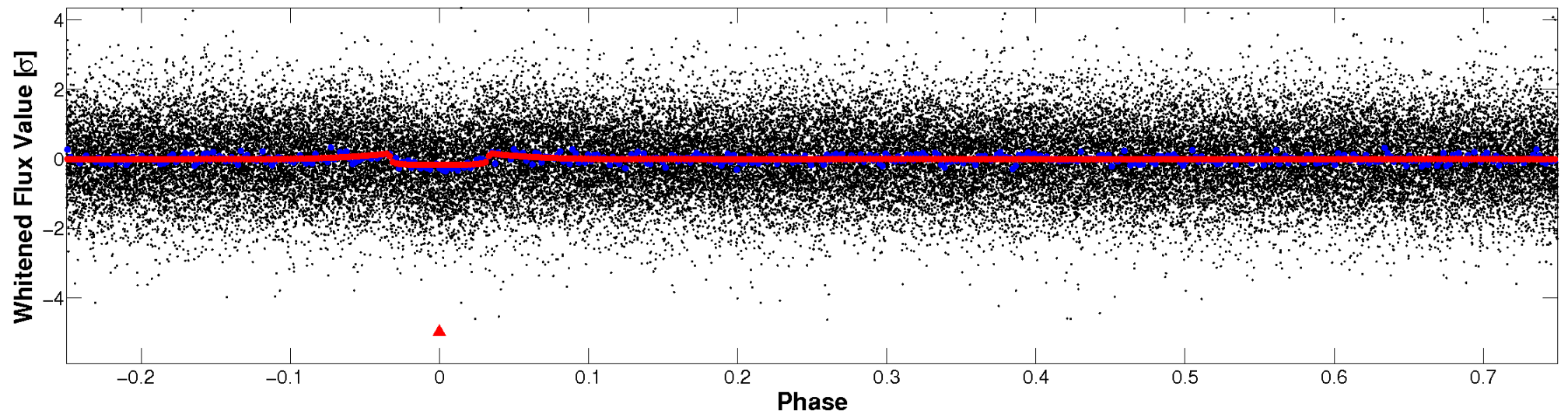


Non-Whitened Vs. Whitened Light Curve

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

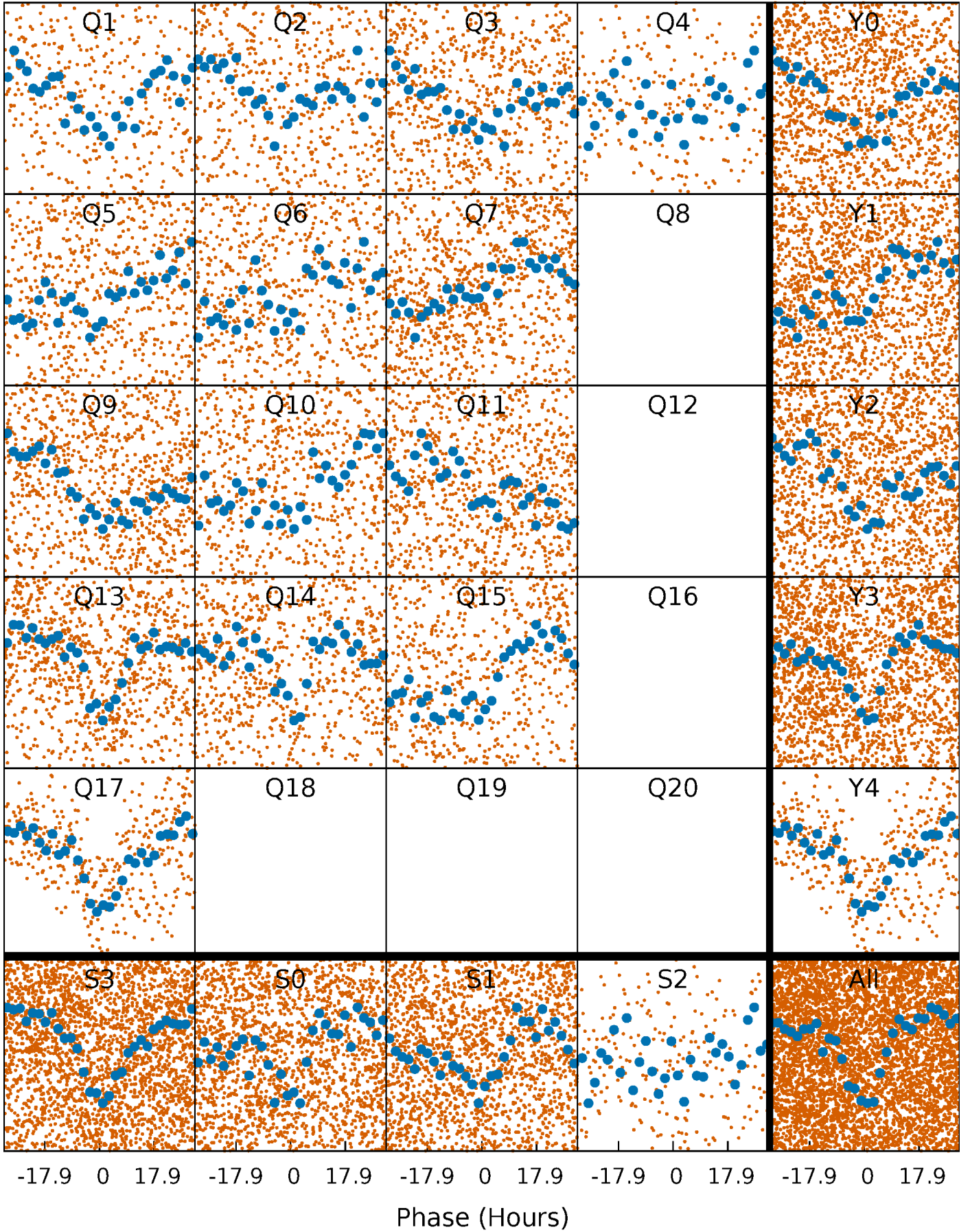


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



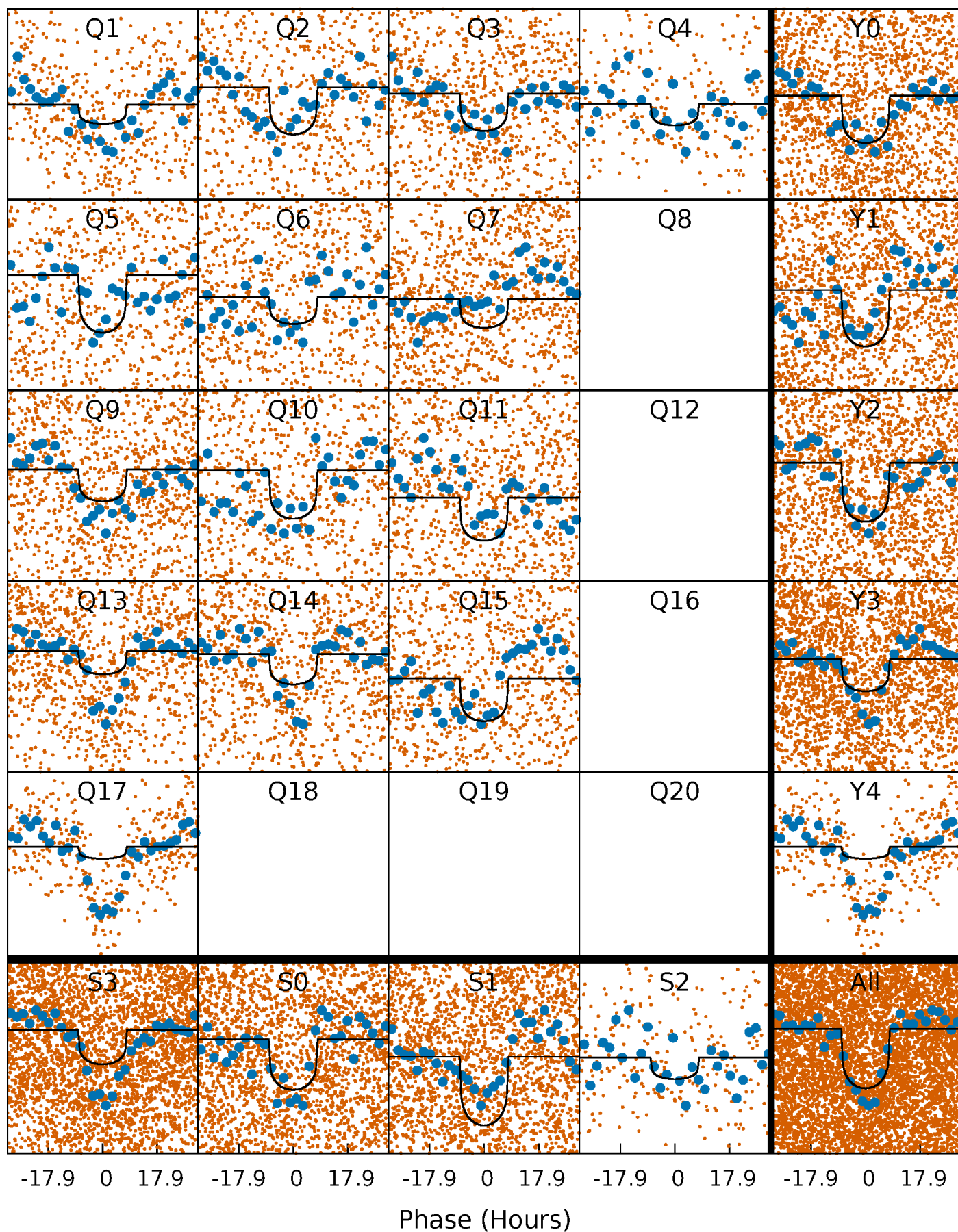
PDC Quarter-Phased Transit Curves

TCE 011341314-01 P= 9.833087 Days $T_0=132.630728$ (BKJD)



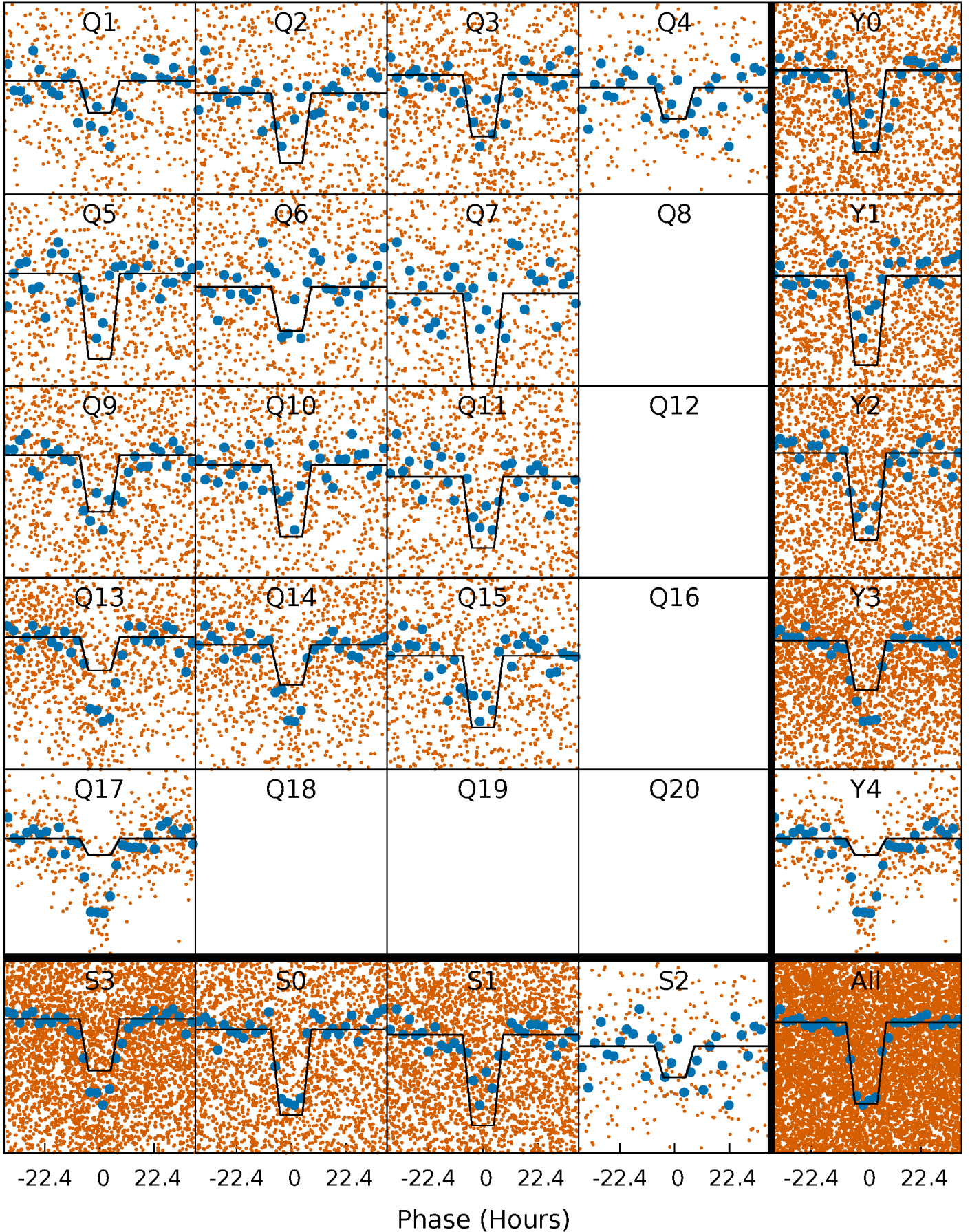
DV Quarter-Phased Transit Curves

TCE 011341314-01 P= 9.833087 Days $T_0=132.630728$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

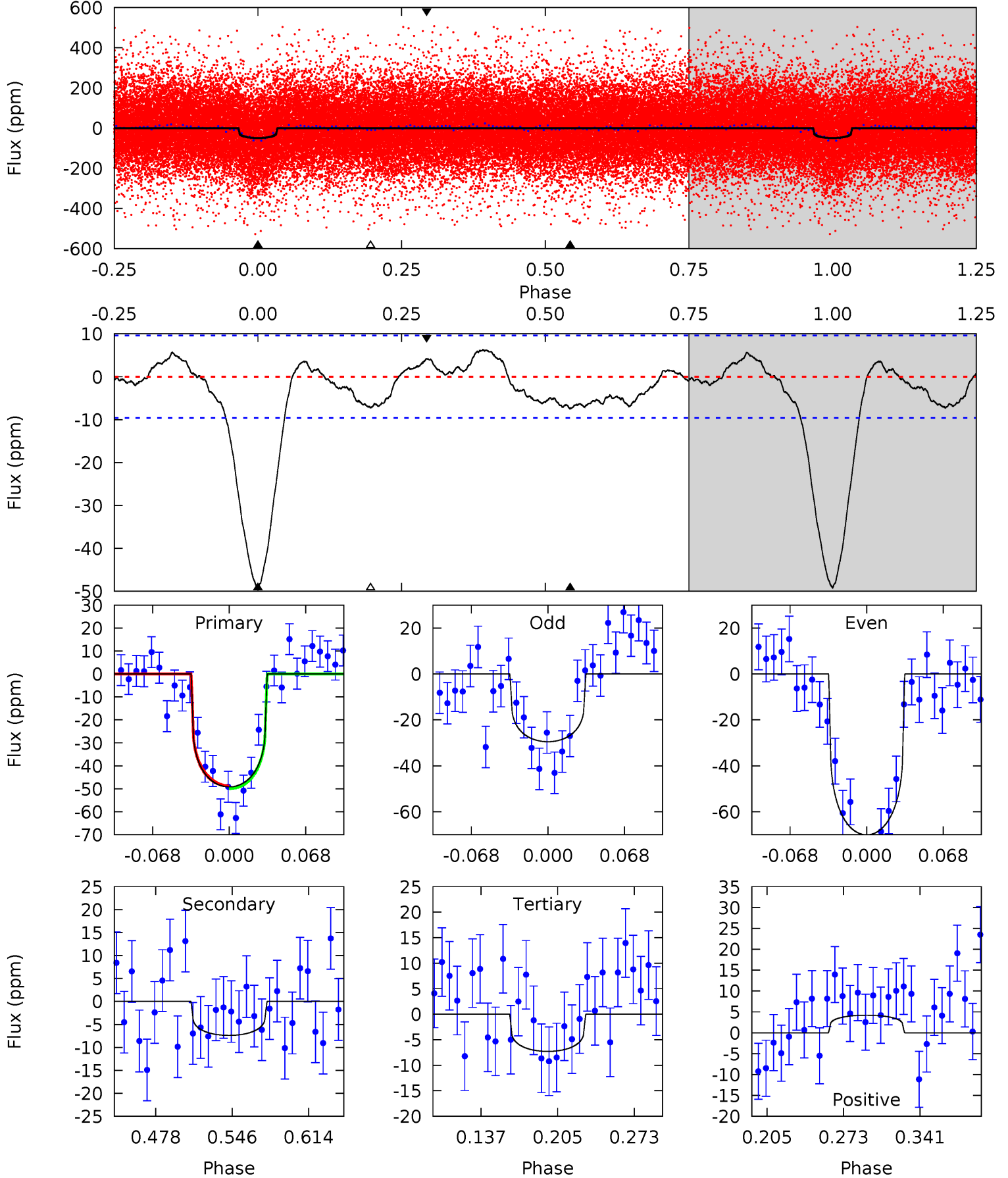
TCE 011341314-01 P= 9.833773 Days $T_0=132.568612$ (BKJD)



DV Model-Shift Uniqueness Test

011341314-01, P = 9.833087 Days, E = 122.797641 Days

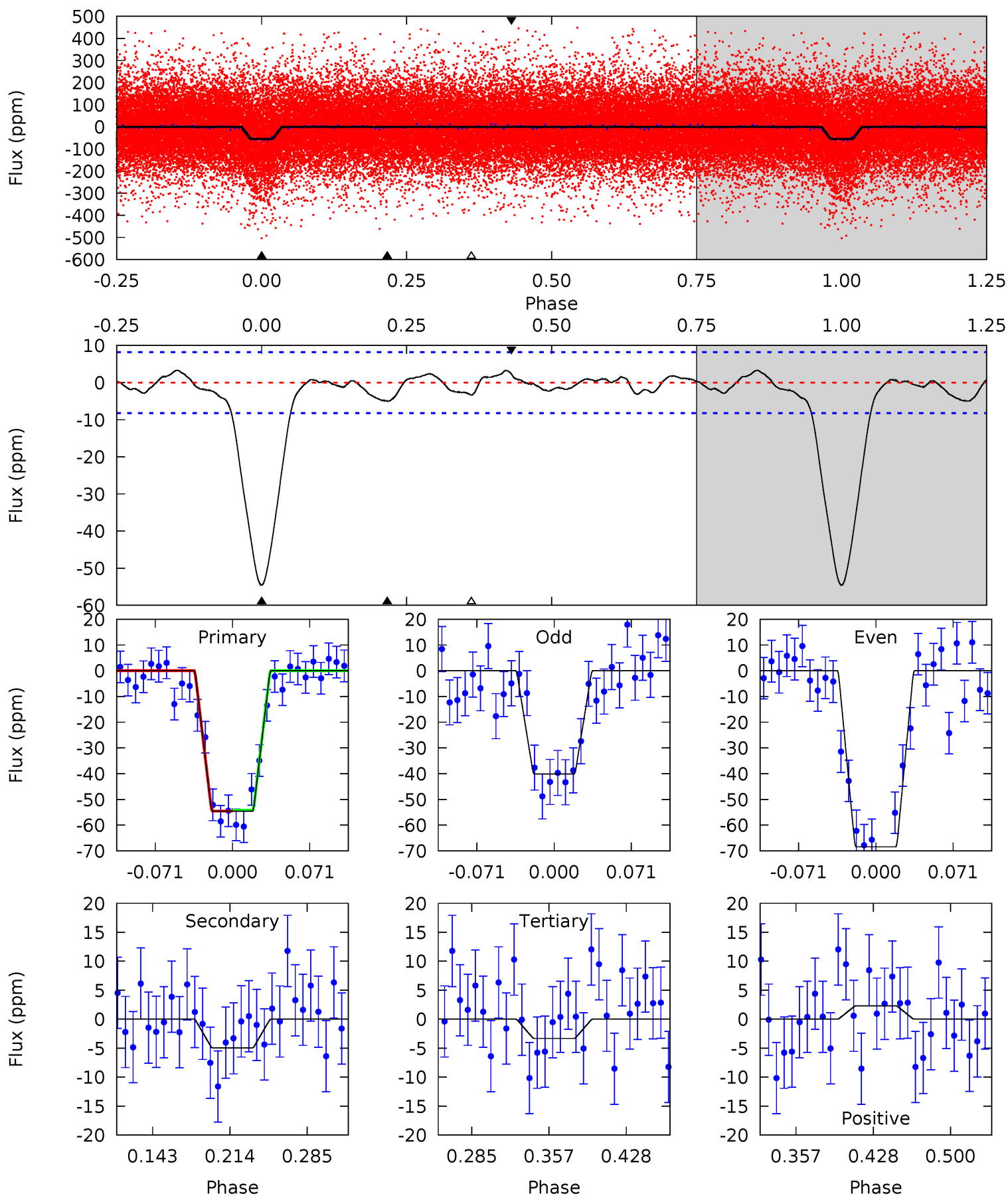
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
23.8	3.57	3.52	2.03	4.64	1.82	1.70	20.3	21.8	0.05	1.54	9.87	1.12	0.11	0.28



Alt Model-Shift Uniqueness Test

011341314-01, P = 9.833773 Days, E = 122.734839 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
30.8	2.79	1.88	1.30	4.64	1.80	0.95	29.0	29.5	0.91	1.49	8.02	1.24	0.06	0.09



Stellar Parameters For KIC 011341314

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5929^{+71}_{-79}	$4.308^{+0.121}_{-0.110}$	$0.100^{+0.150}_{-0.150}$	$1.202^{+0.185}_{-0.148}$	$1.071^{+0.079}_{-0.073}$	$0.868^{+0.429}_{-0.287}$
	+1%/-1%	+3%/-3%	+150%/-150%	+15%/-12%	+7%/-7%	+49%/-33%
Source	SPE90	SPE90	SPE90	DSEP		

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

Secondary Eclipse Parameters for KIC 011341314-01 / KOI 5887.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-7 ± 2	$0.81^{+0.28}_{-0.28}$	1318^{+65}_{-50}	4182^{+826}_{-481}	52^{+80}_{-27}
Alt.	-5 ± 2	$0.98^{+0.30}_{-0.28}$	1316^{+59}_{-51}	3630^{+496}_{-371}	23^{+27}_{-12}

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 $A_{obs} \gg 1.0$

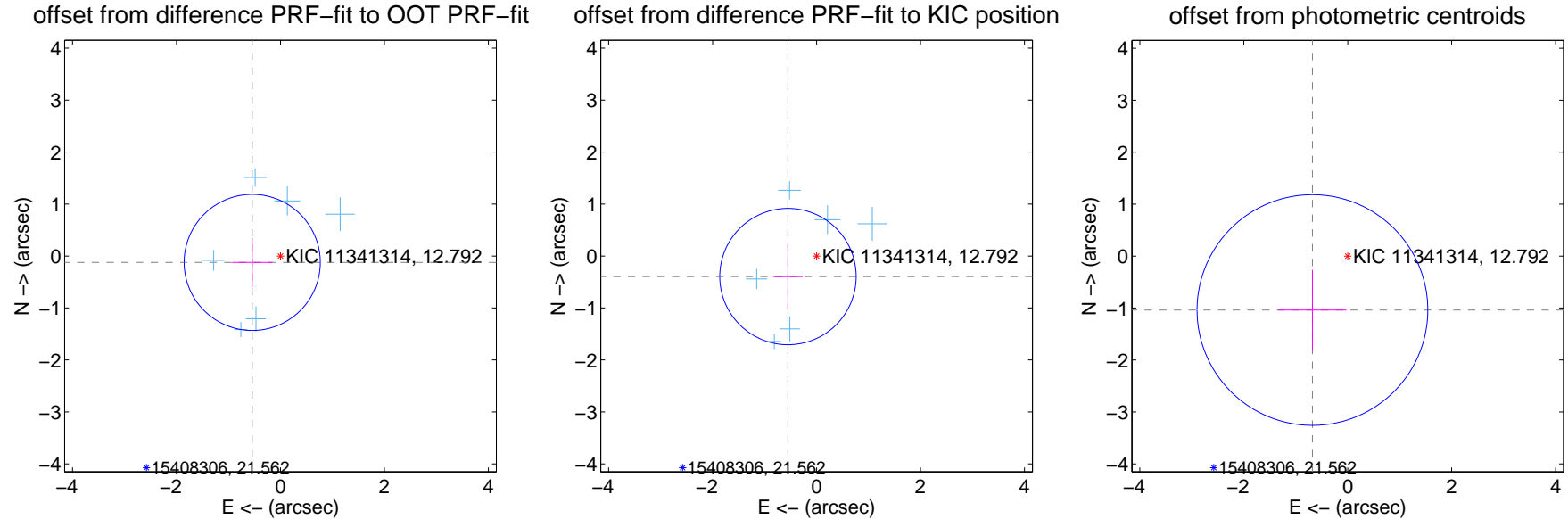
DV Centroid Data

Supplemental centroid analysis for 011341314-01. Kepler magnitude: 12.79. Transit SNR 10.84

There are 6 quarters with good PRF difference image offsets

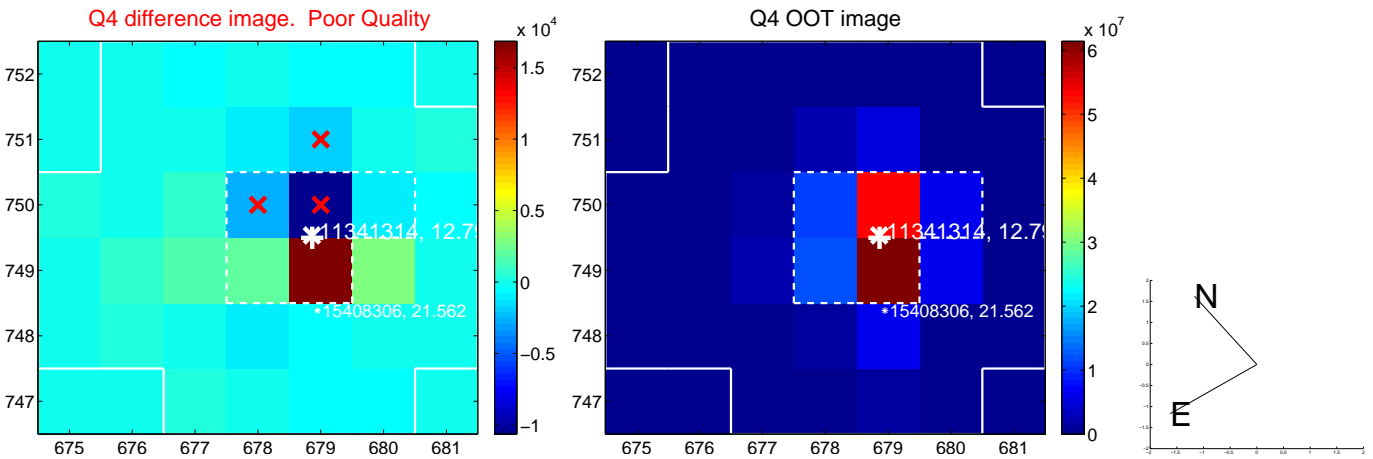
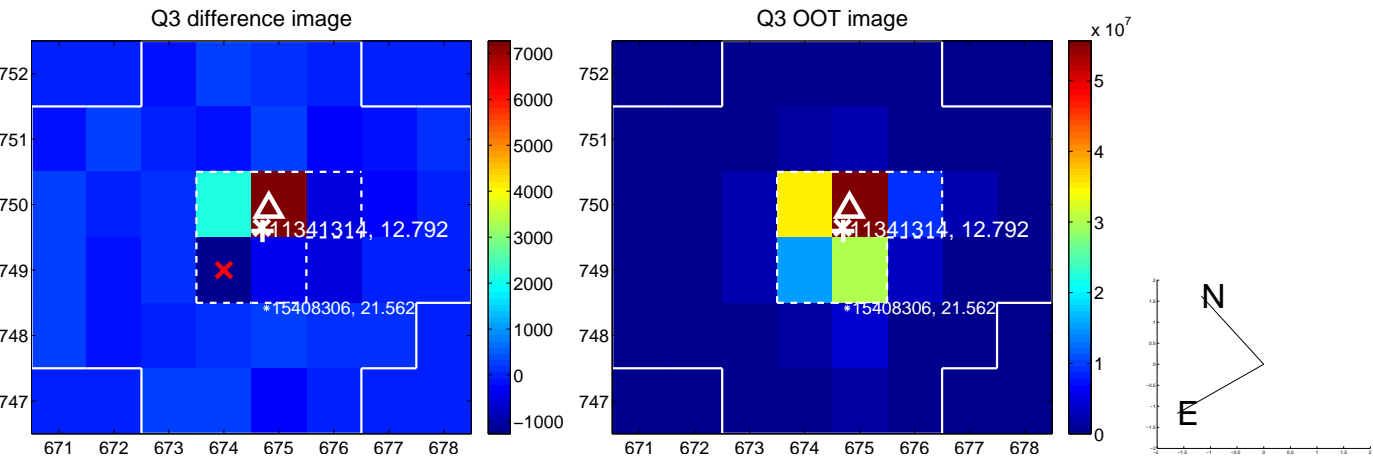
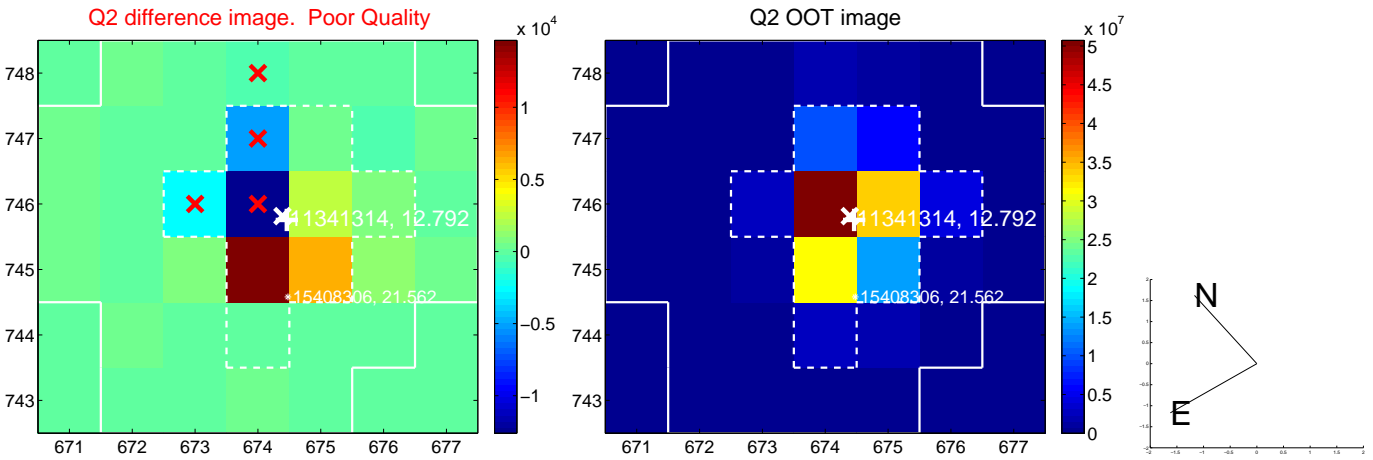
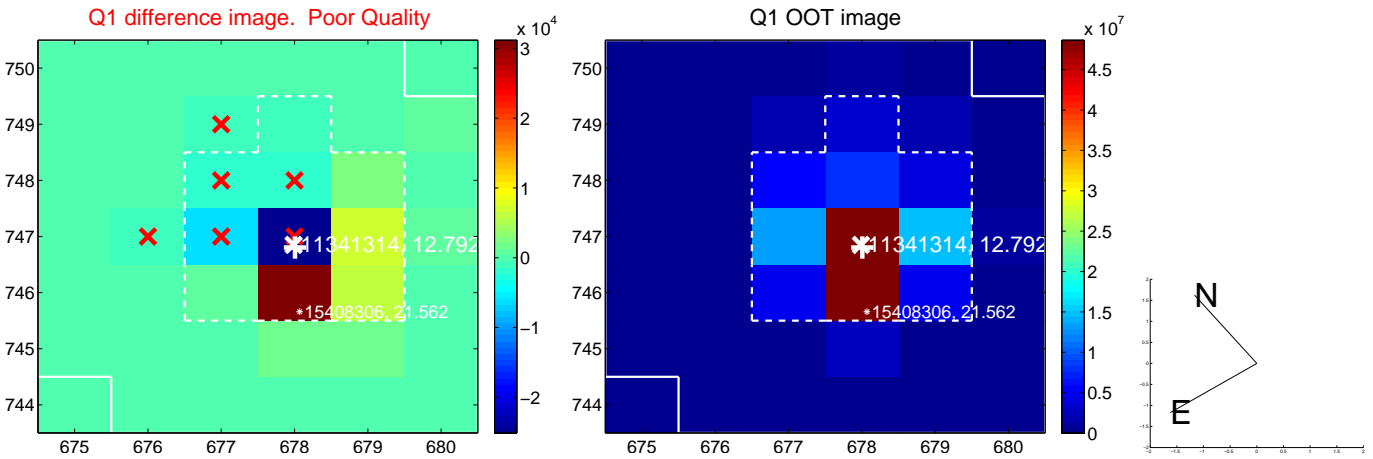
The direct PRF centroid is offset from the target star catalog position by about 0.25 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.557 ± 0.436	1.28	0.543 ± 0.388	-0.123 ± 0.476
PRF-fit source offset from KIC position	0.678 ± 0.437	1.55	0.550 ± 0.283	-0.395 ± 0.638
photometric centroid source offset	1.24 ± 0.74	1.68	0.68 ± 0.66	-1.04 ± 0.77

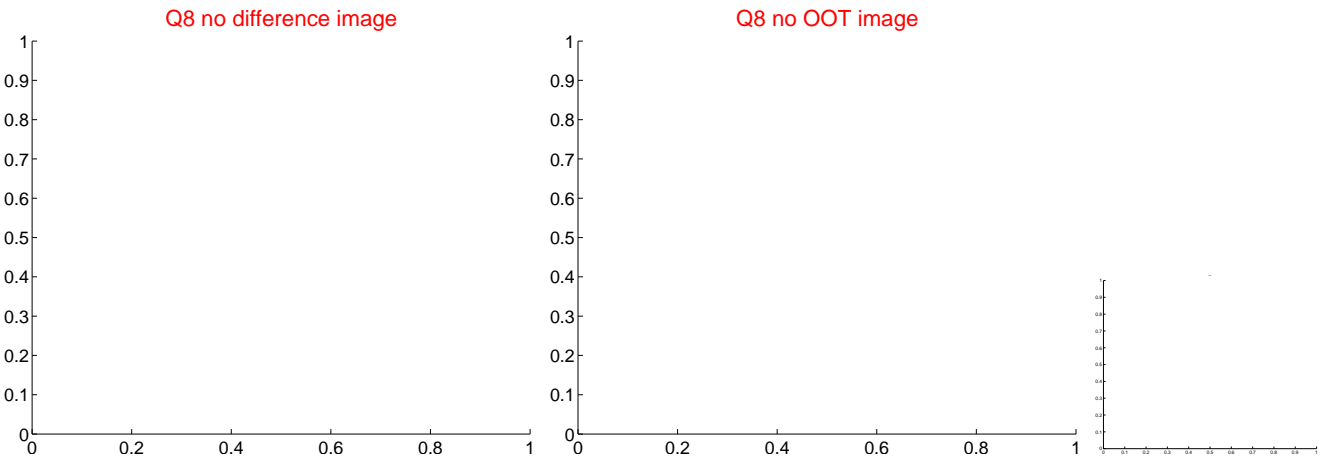
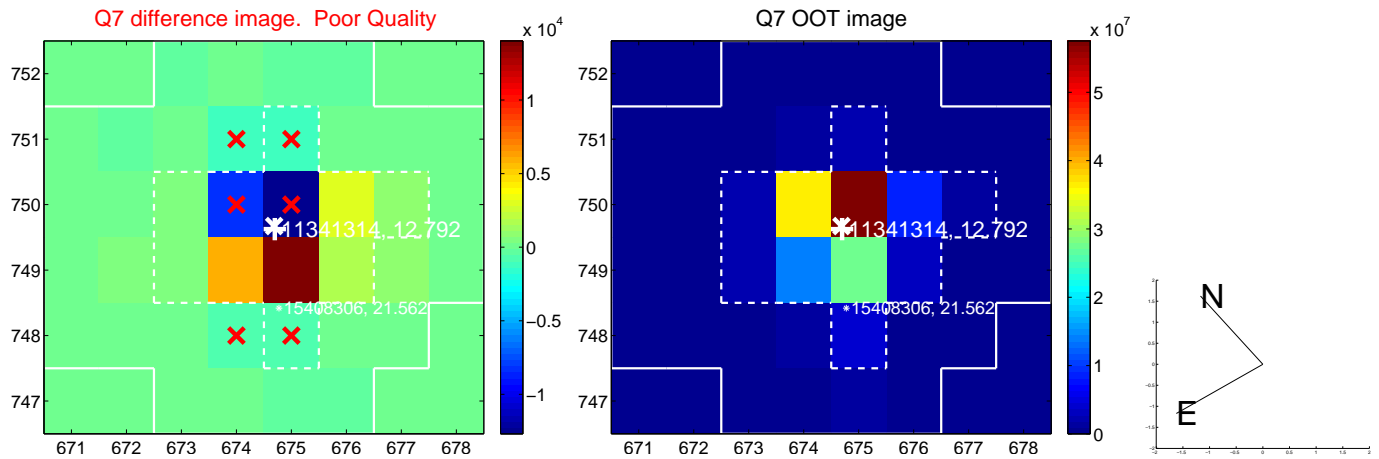
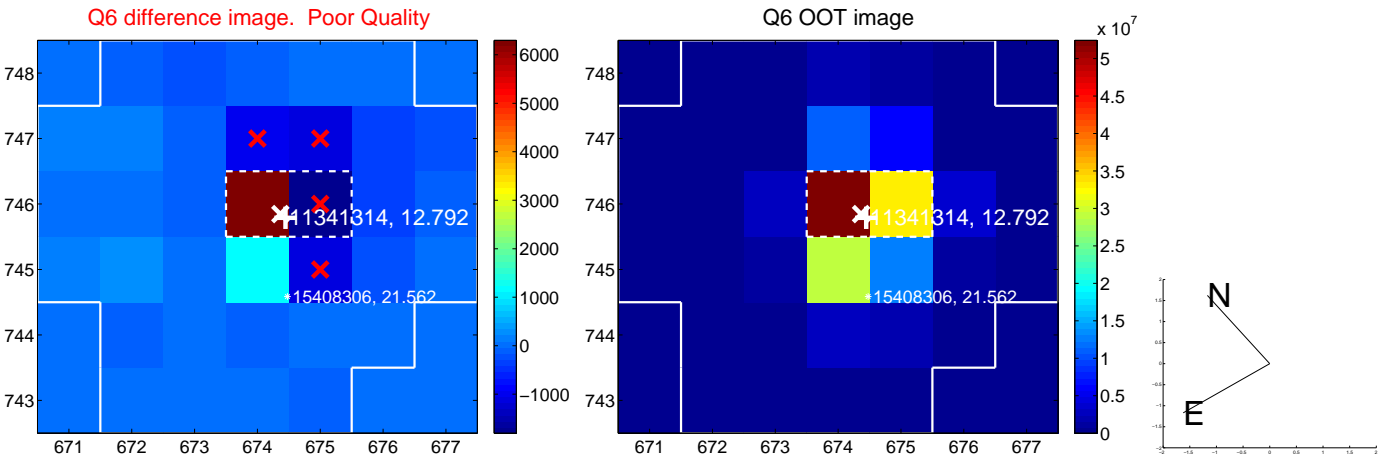
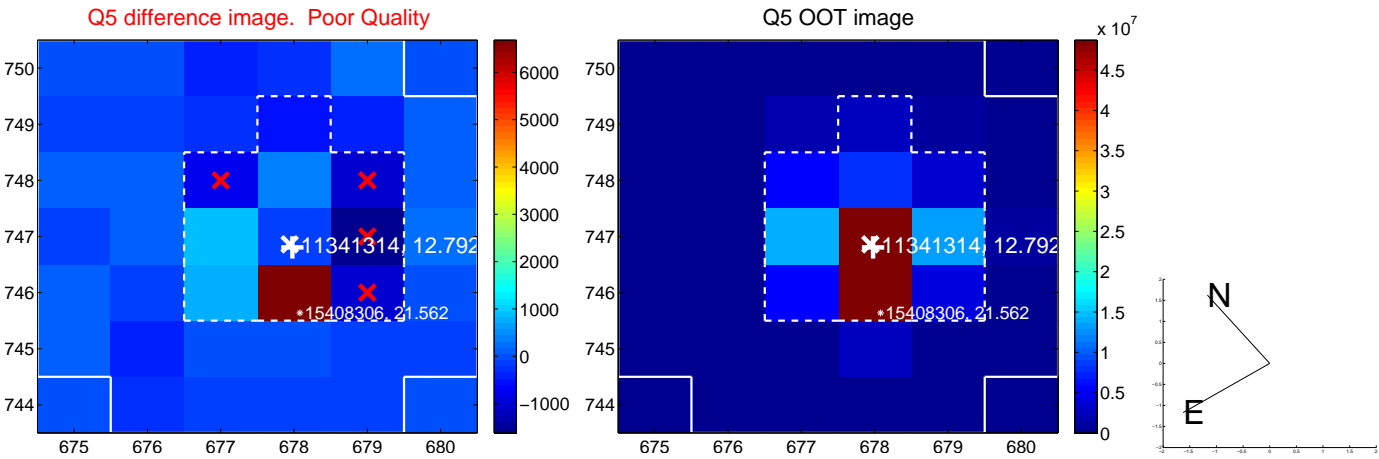


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

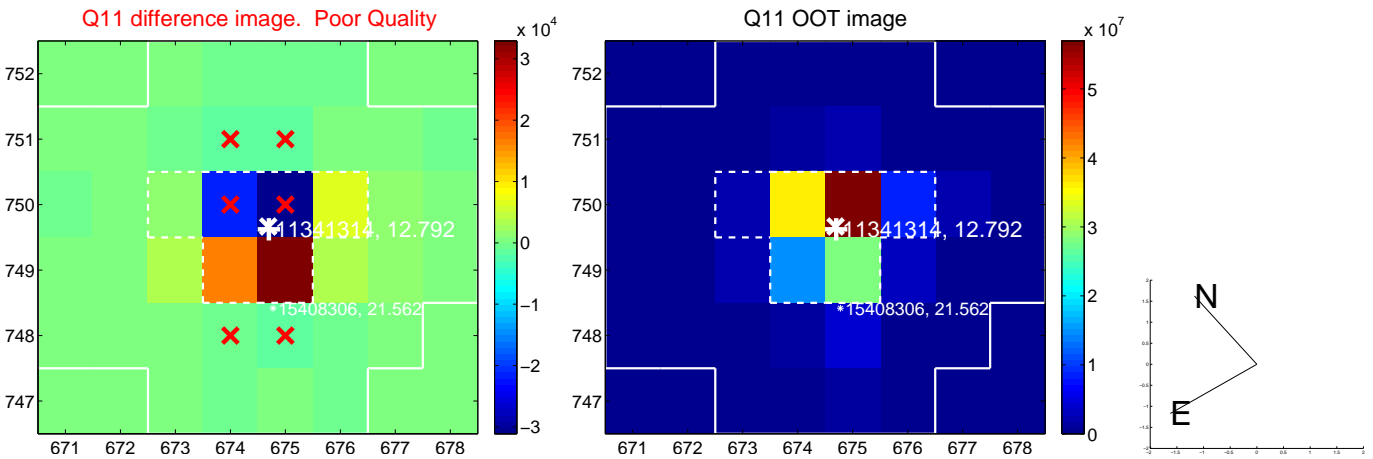
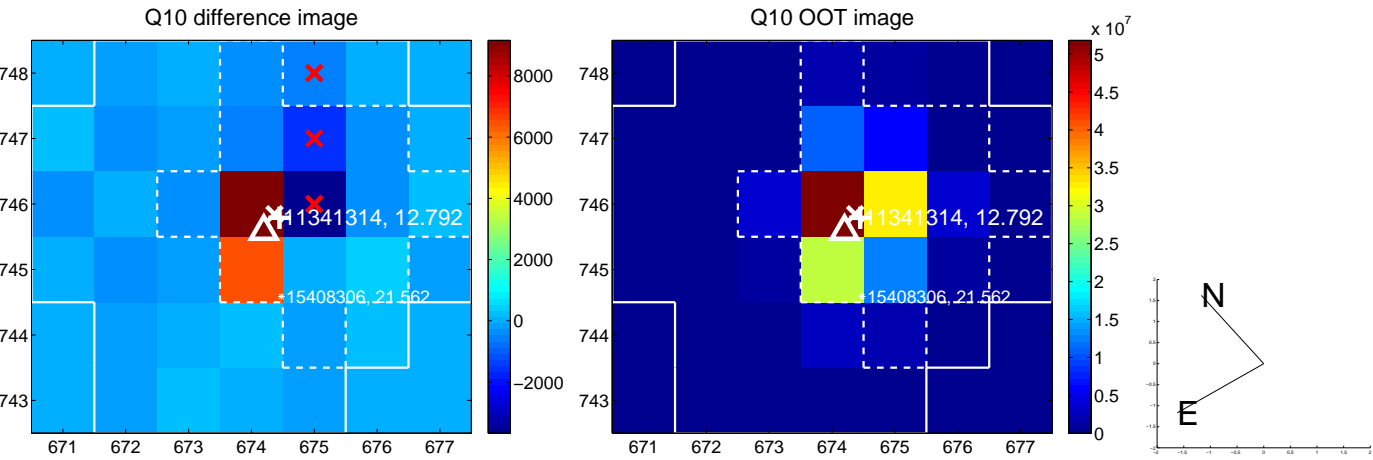
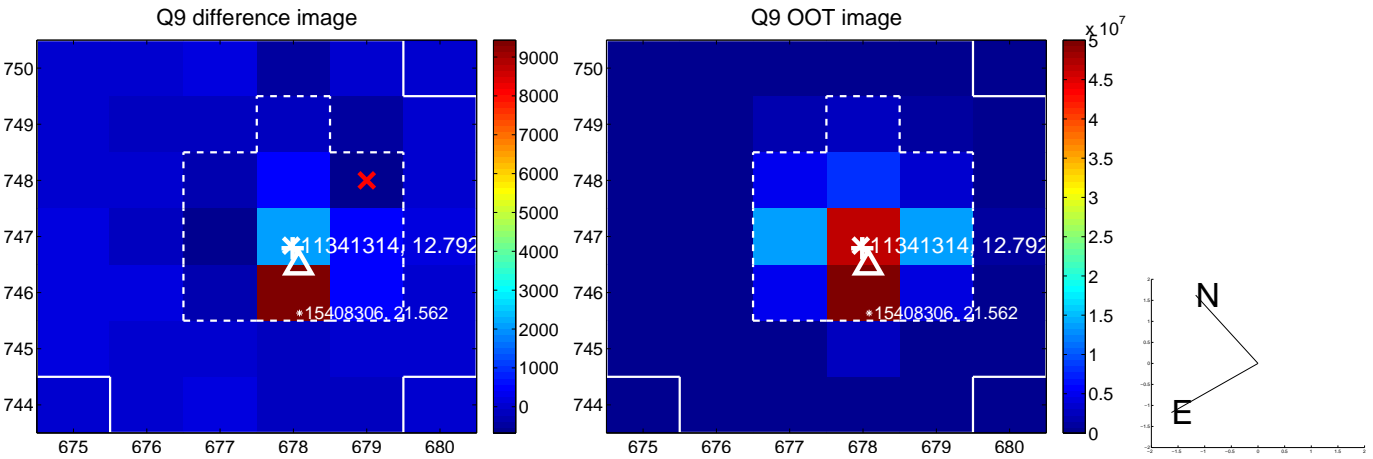
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



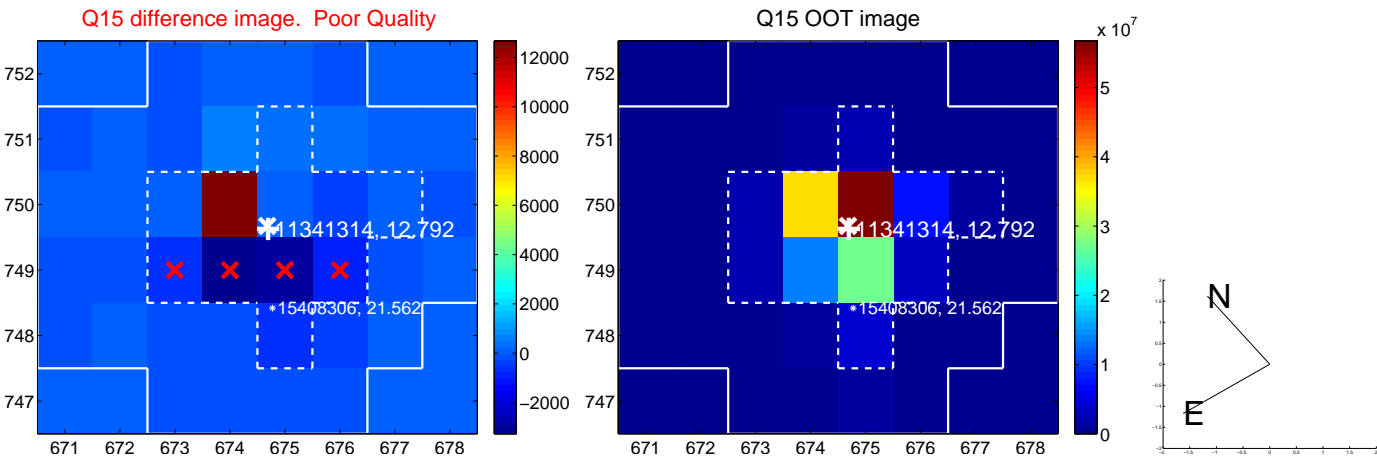
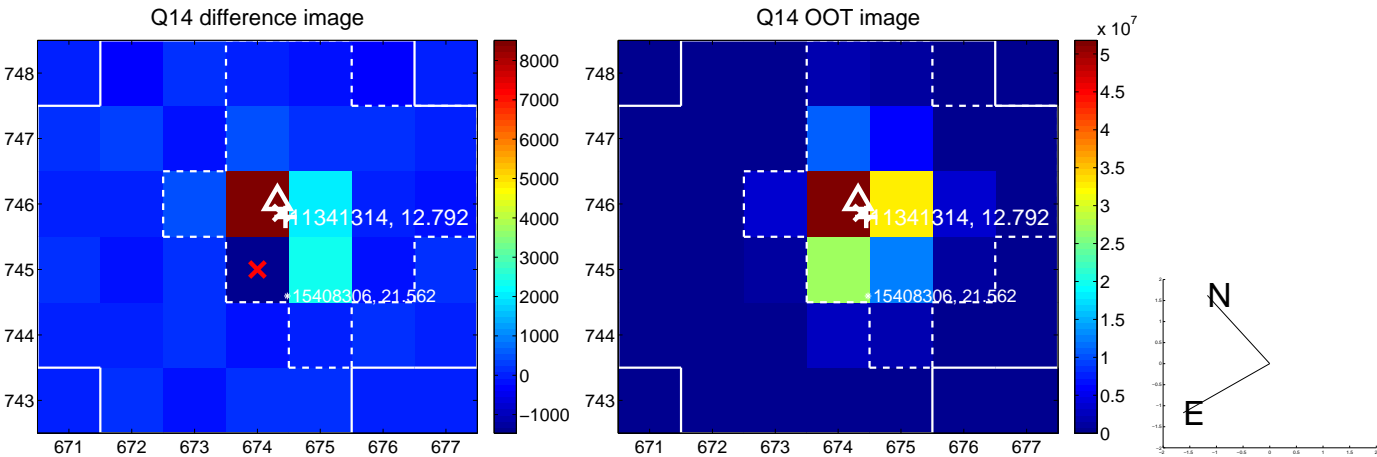
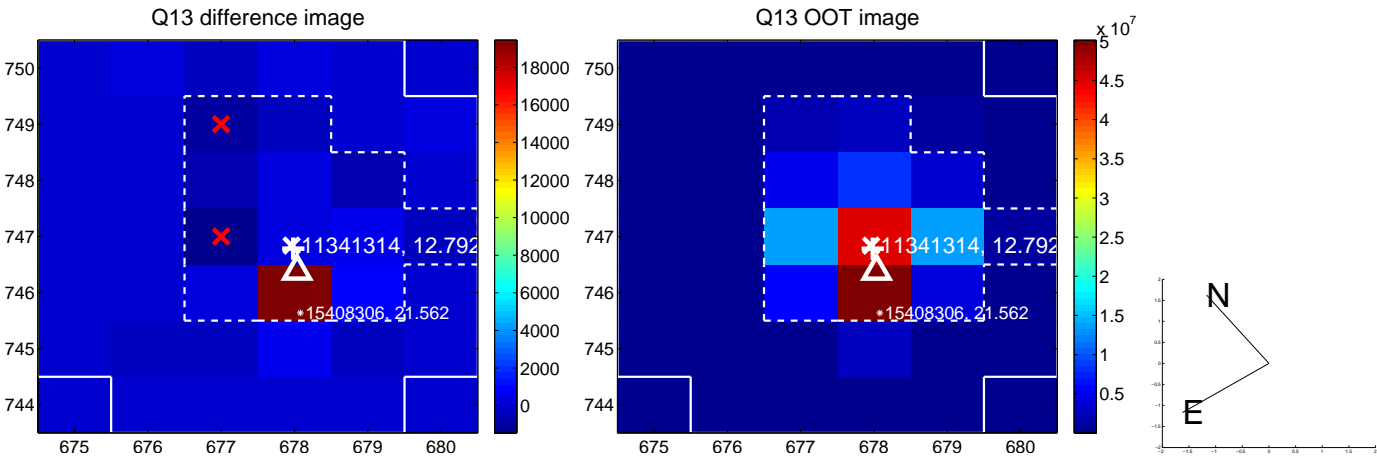
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.



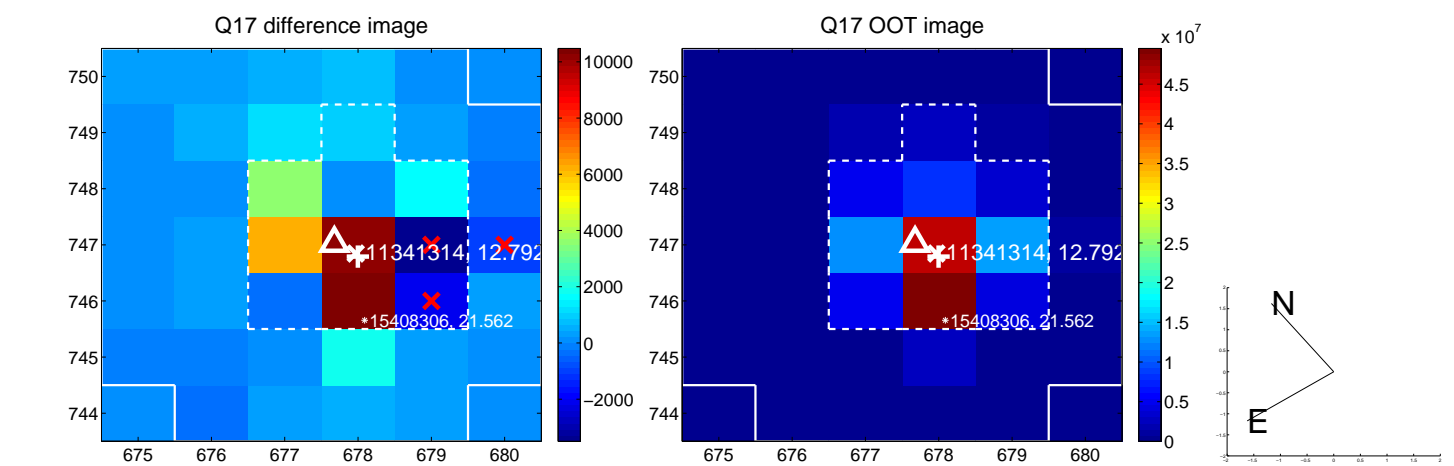
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



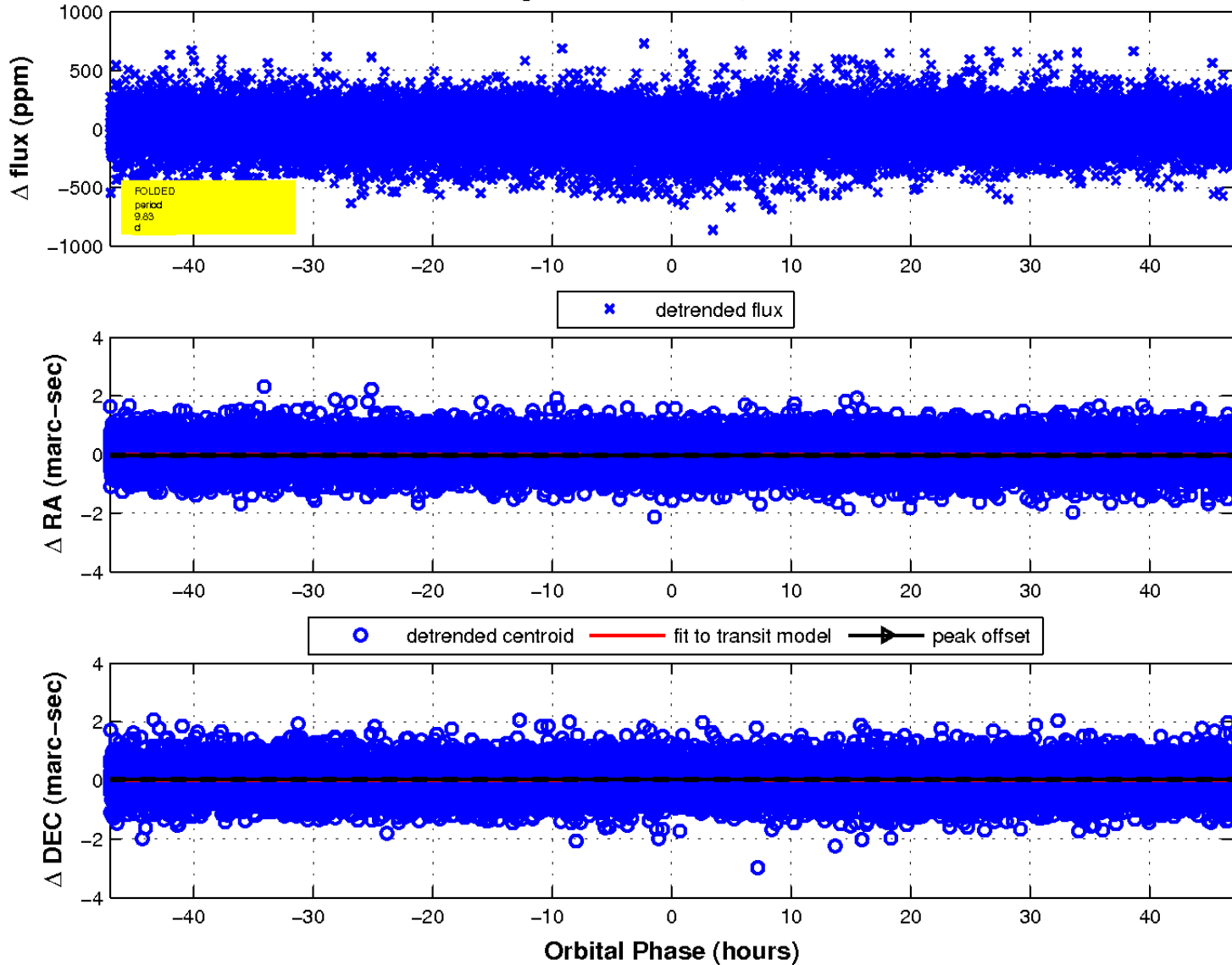
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

