

KIC 011463211

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})
011463211-01	OBS	0770.01	1.506353	131.832848	1821.7	1.584	130.7	141.8	0.83	5714	4.24	1053.14

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011463211-01	OBS	FP	0.00	0	0	1	0	CENT_UNRESOLVED_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 for comment definitions.

Ephemeris Match Information For 011463211-01

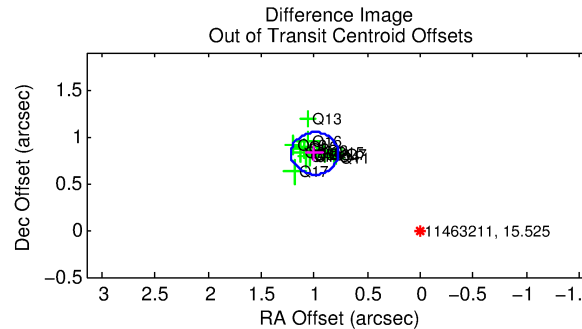
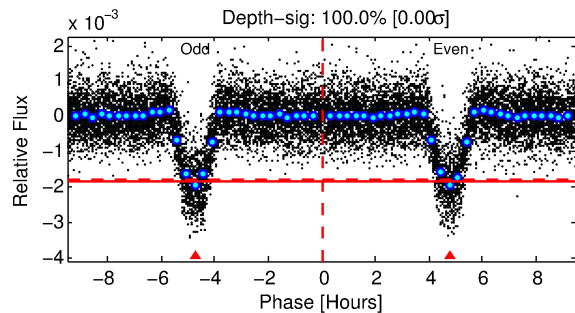
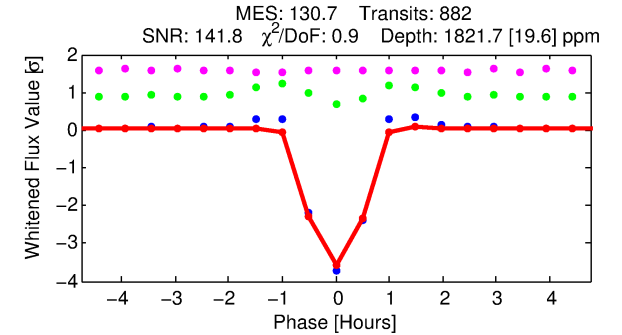
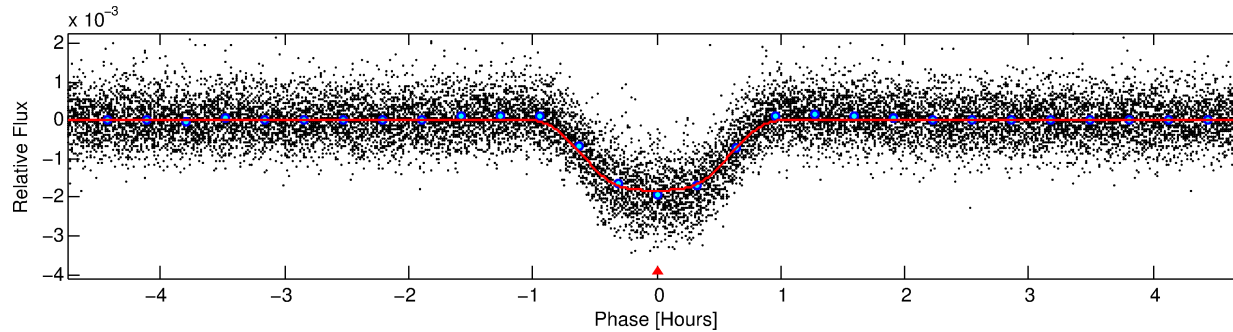
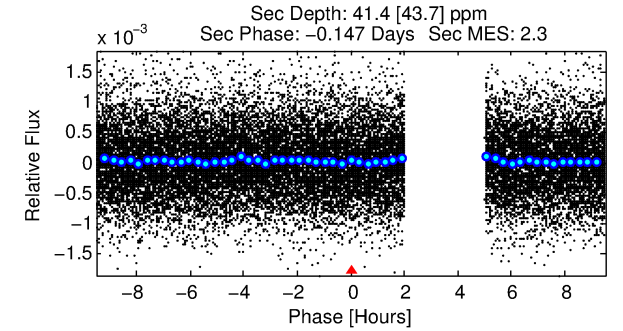
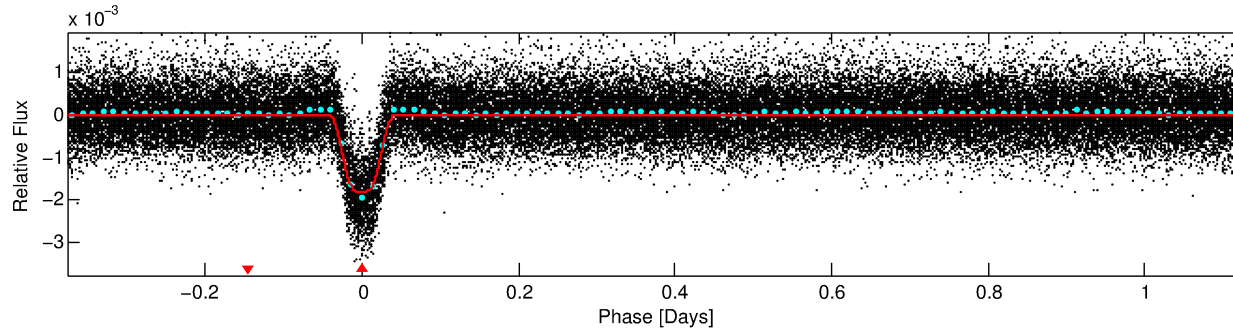
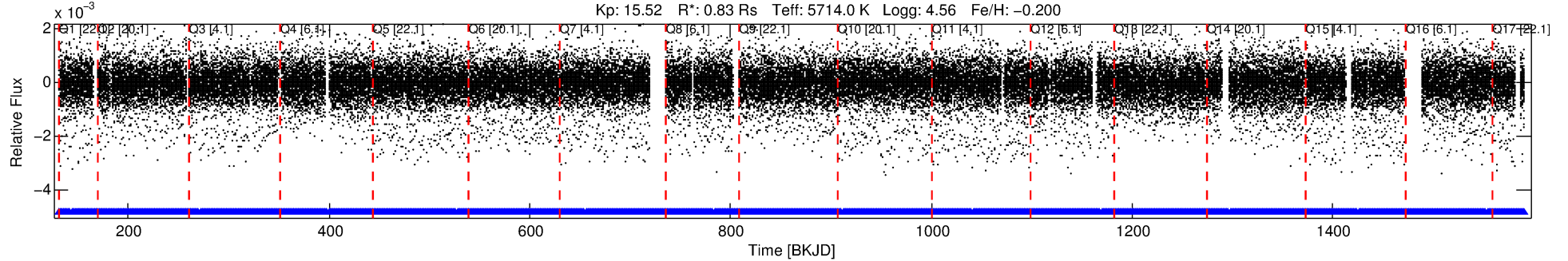
No Significant Match Found

DV One-Page Summary

KIC: 11463211 Candidate: 1 of 1 Period: 1.506 d

KOI: K00770.01 Corr: 0.985

Kp: 15.52 R*: 0.83 Rs Teff: 5714.0 K Logg: 4.56 Fe/H: -0.200



DV Fit Results:

Period = 1.50635 [0.00000] d
Epoch = 131.8328 [0.0002] BKJD
Rp/R* = 0.0468 [0.0009]
a/R* = 4.00 [0.29]
b = 0.90 [0.02]
Seff = 1053.14 [328.15]
Teq = 1453 [113] K
Rp = 4.24 [0.95] Re
a = 0.0250 [0.0048] AU
Ag = 0.79 [0.87] [-0.24σ]
Teffp = 2119 [563] K [1.16σ]

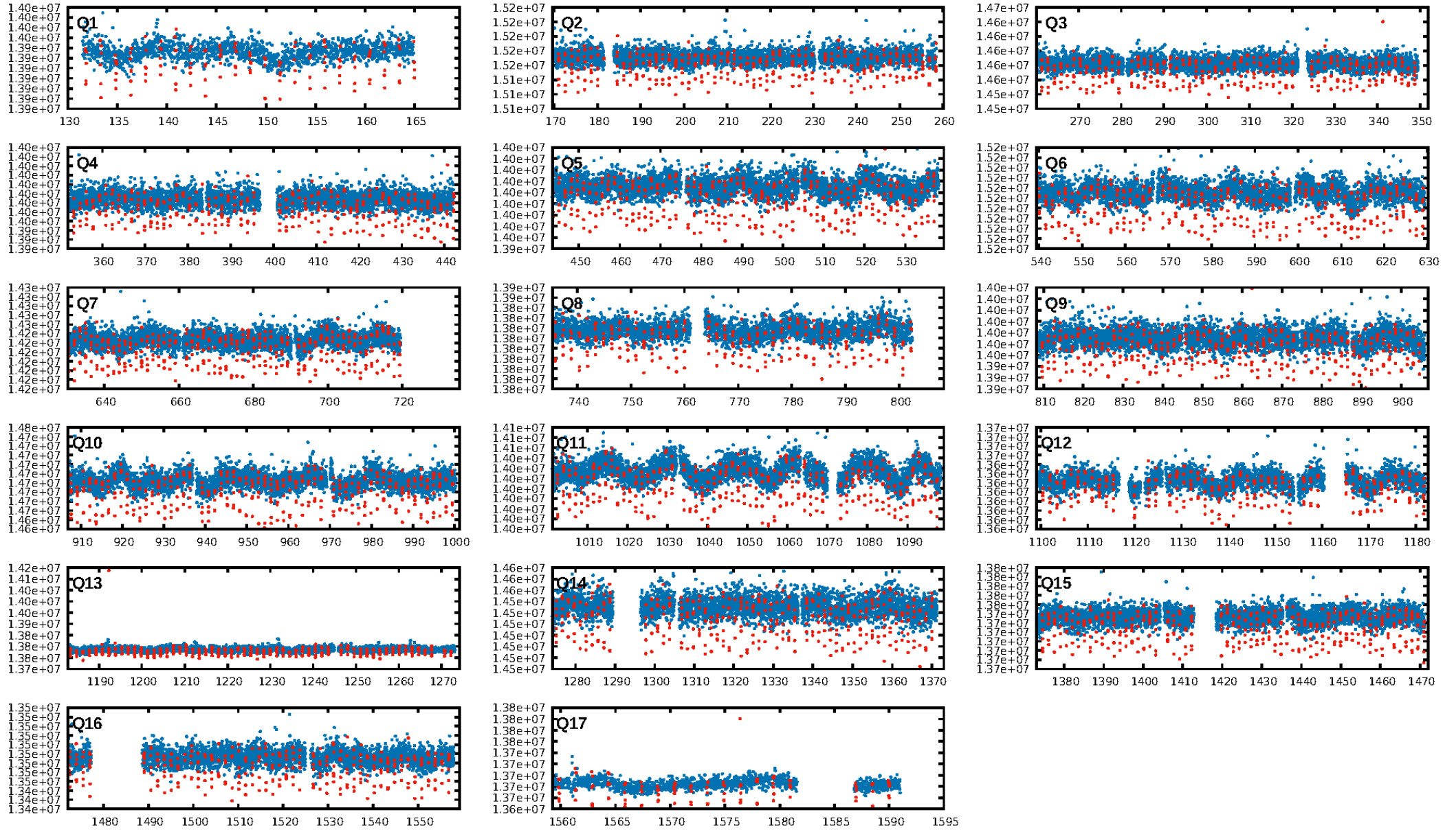
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 0.00e+00
RollingBand-fgt: 1.00 [841/841]
GhostDiagnostic-chr: 2.182
Centroid-sig: 0.0%
Centroid-so: 1.002 arcsec [10.36σ]
OotOffset-rm: 1.292 arcsec [17.32σ]
KicOffset-rm: 1.144 arcsec [14.98σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 1.00 [17/17]
DiffImageOverlap-fno: 1.00 [17/17]

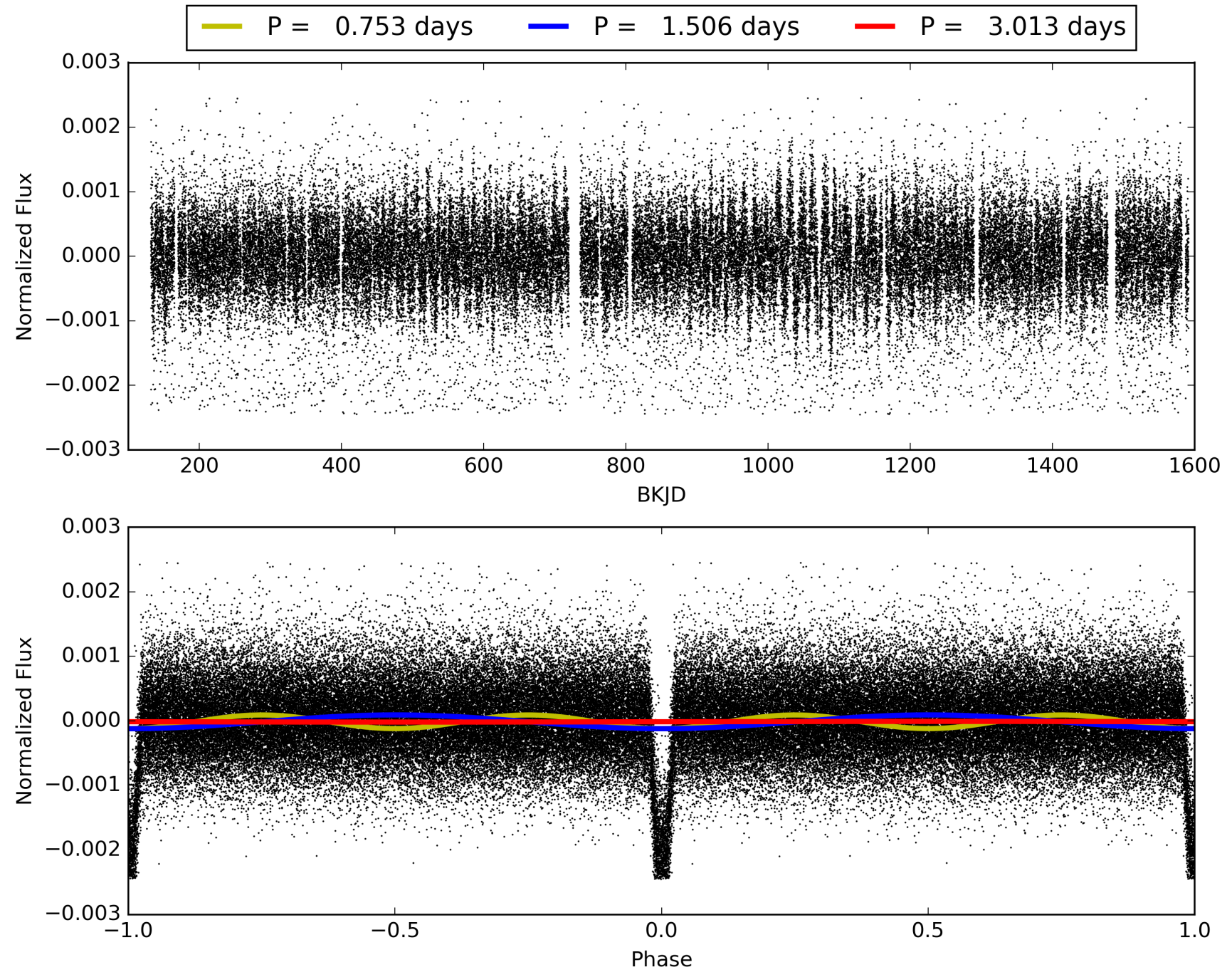
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 23:22:38 Z

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

TCE 011463211-01, PDC Light Curves

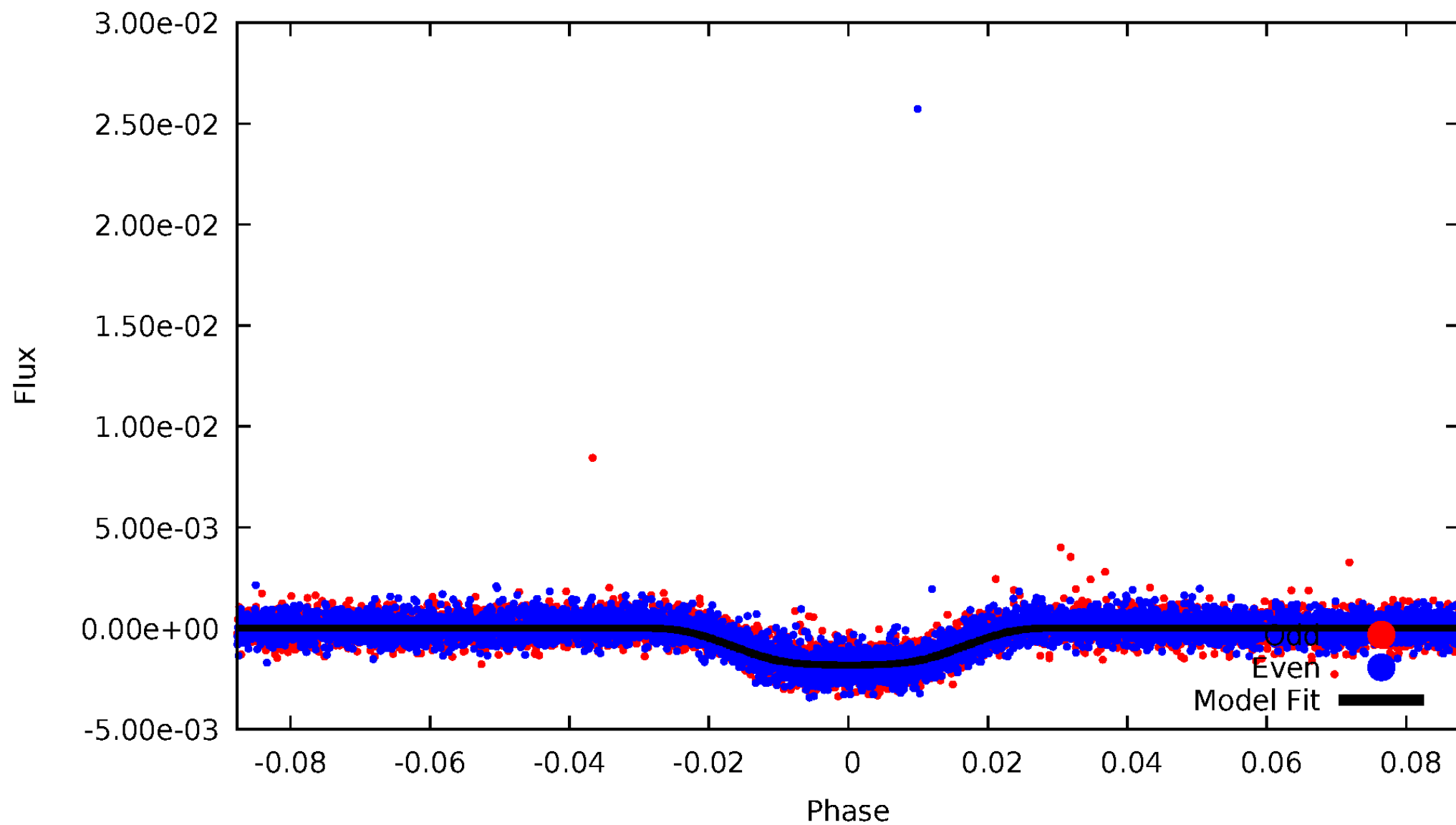


TCE 011463211-01



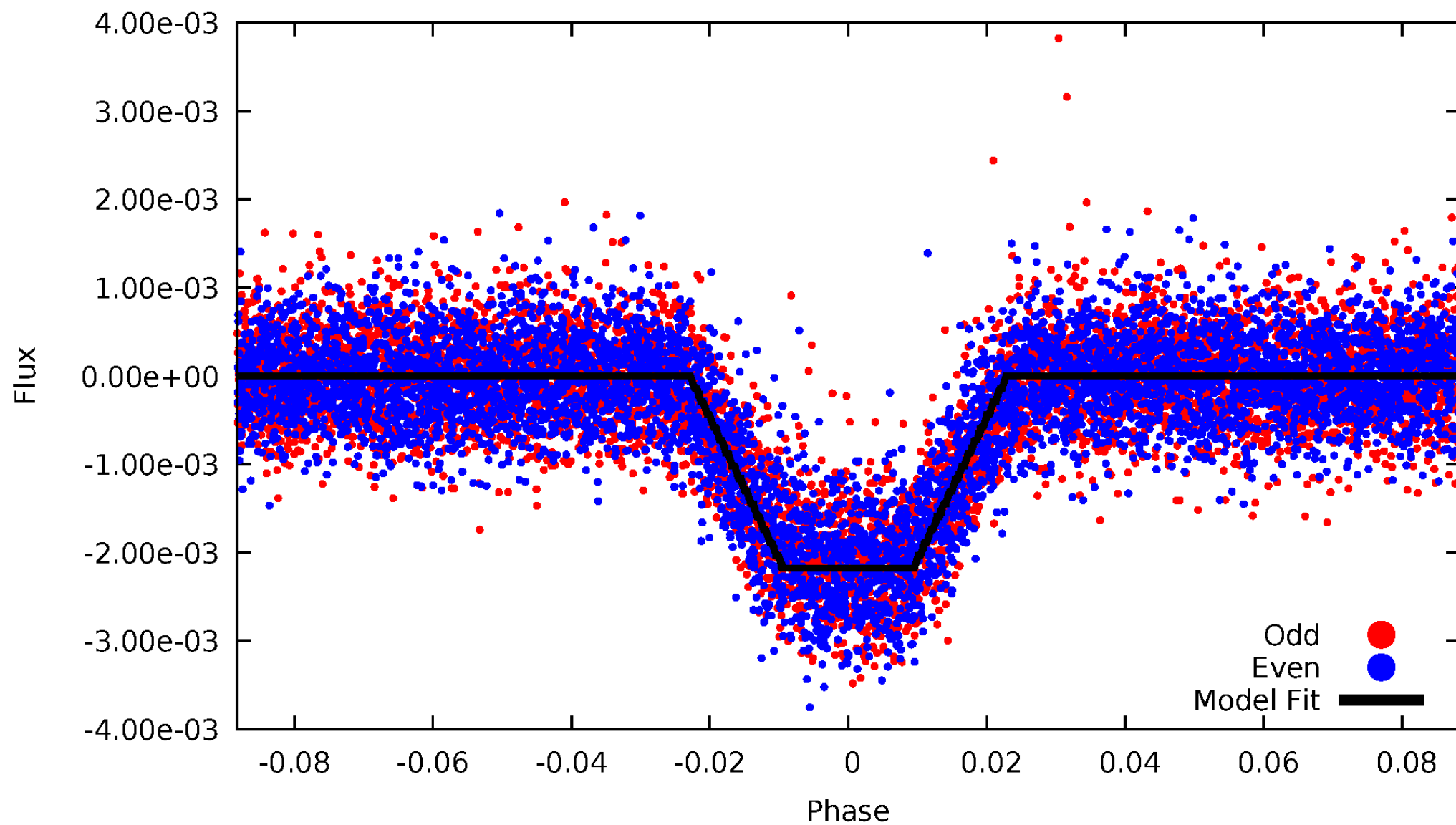
DV Odd/Even

TCE 011463211-01



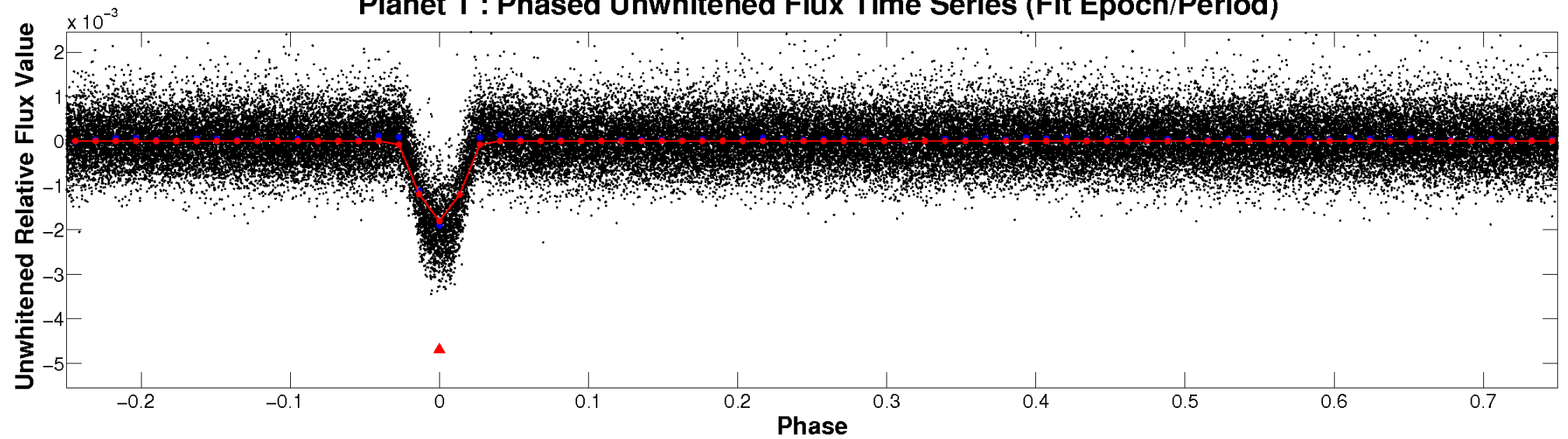
ALT Odd/Even

TCE 011463211-01

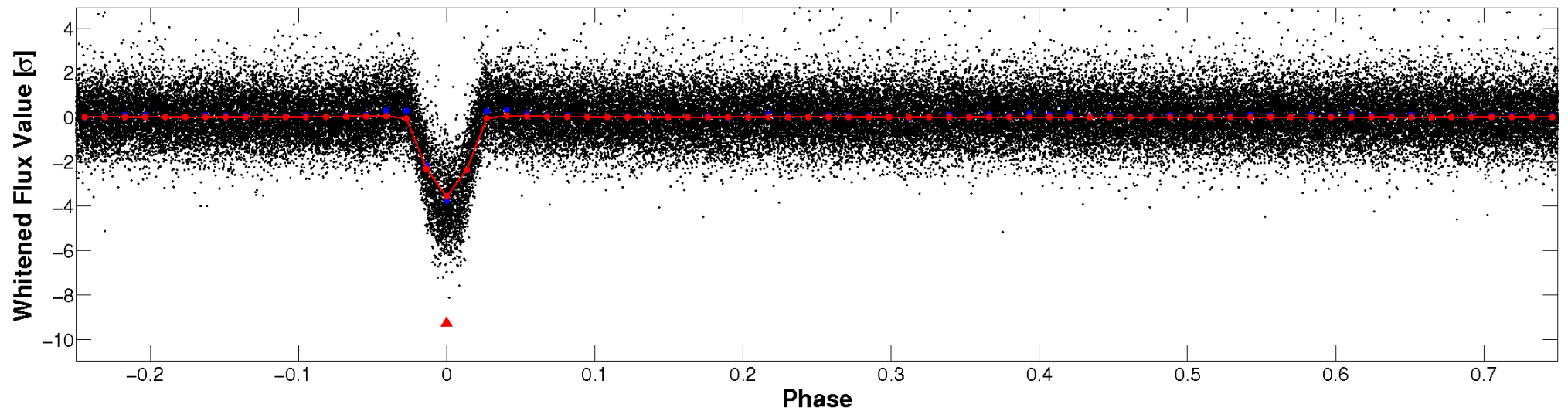


Non-Whitened Vs. Whitened Light Curve

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

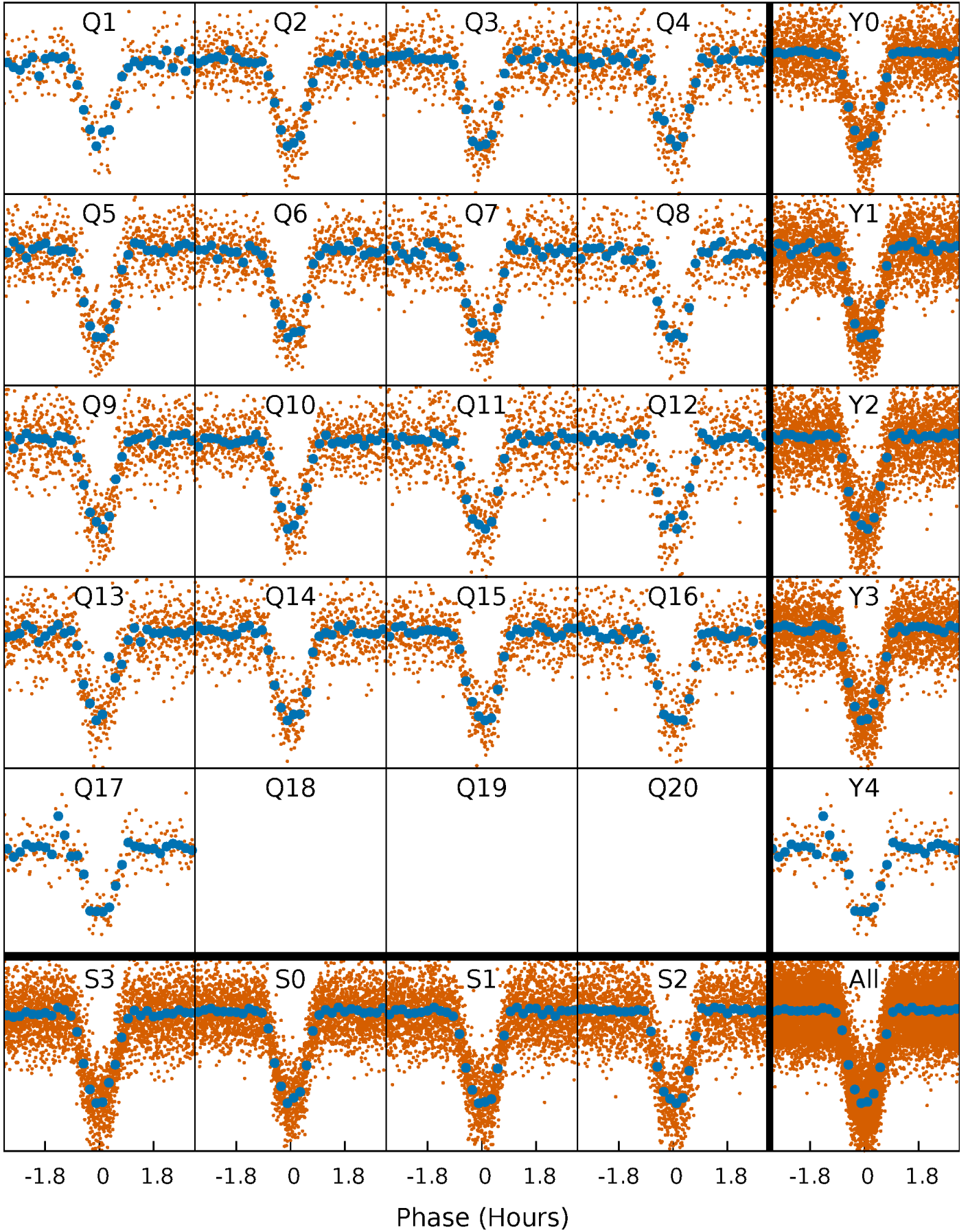


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



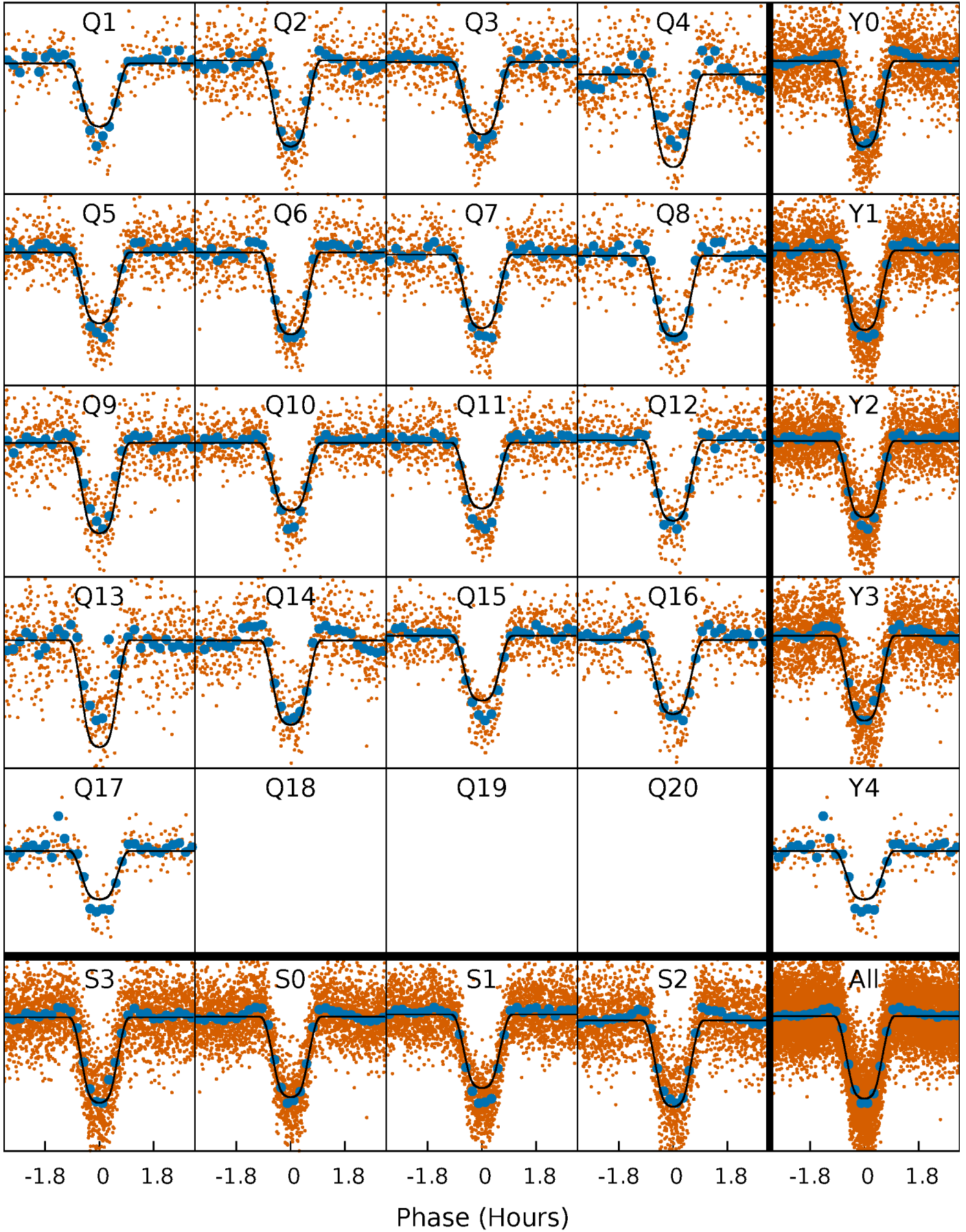
PDC Quarter-Phased Transit Curves

TCE 011463211-01 P= 1.506353 Days $T_0=131.832848$ (BKJD)



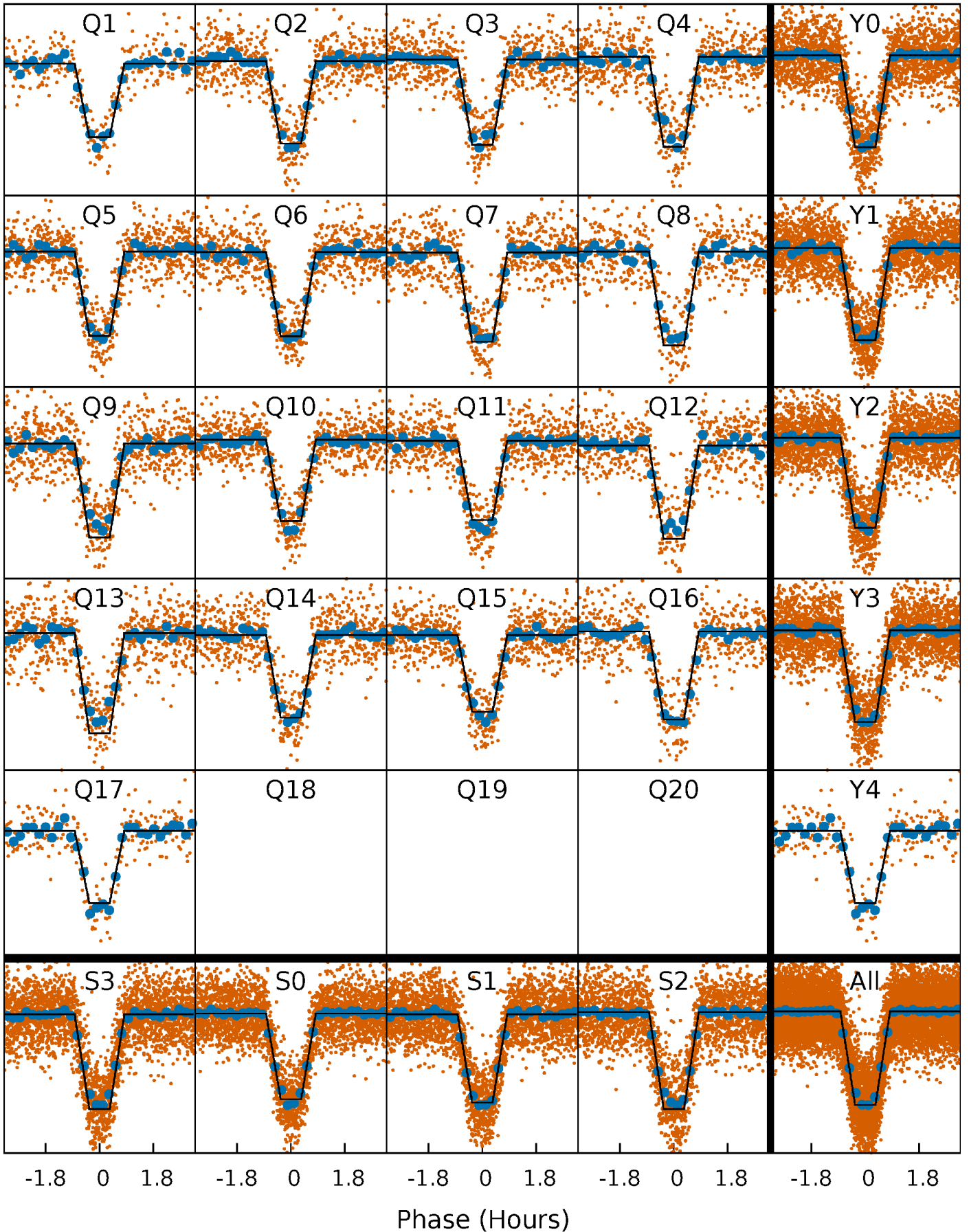
DV Quarter-Phased Transit Curves

TCE 011463211-01 P= 1.506353 Days $T_0=131.832848$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

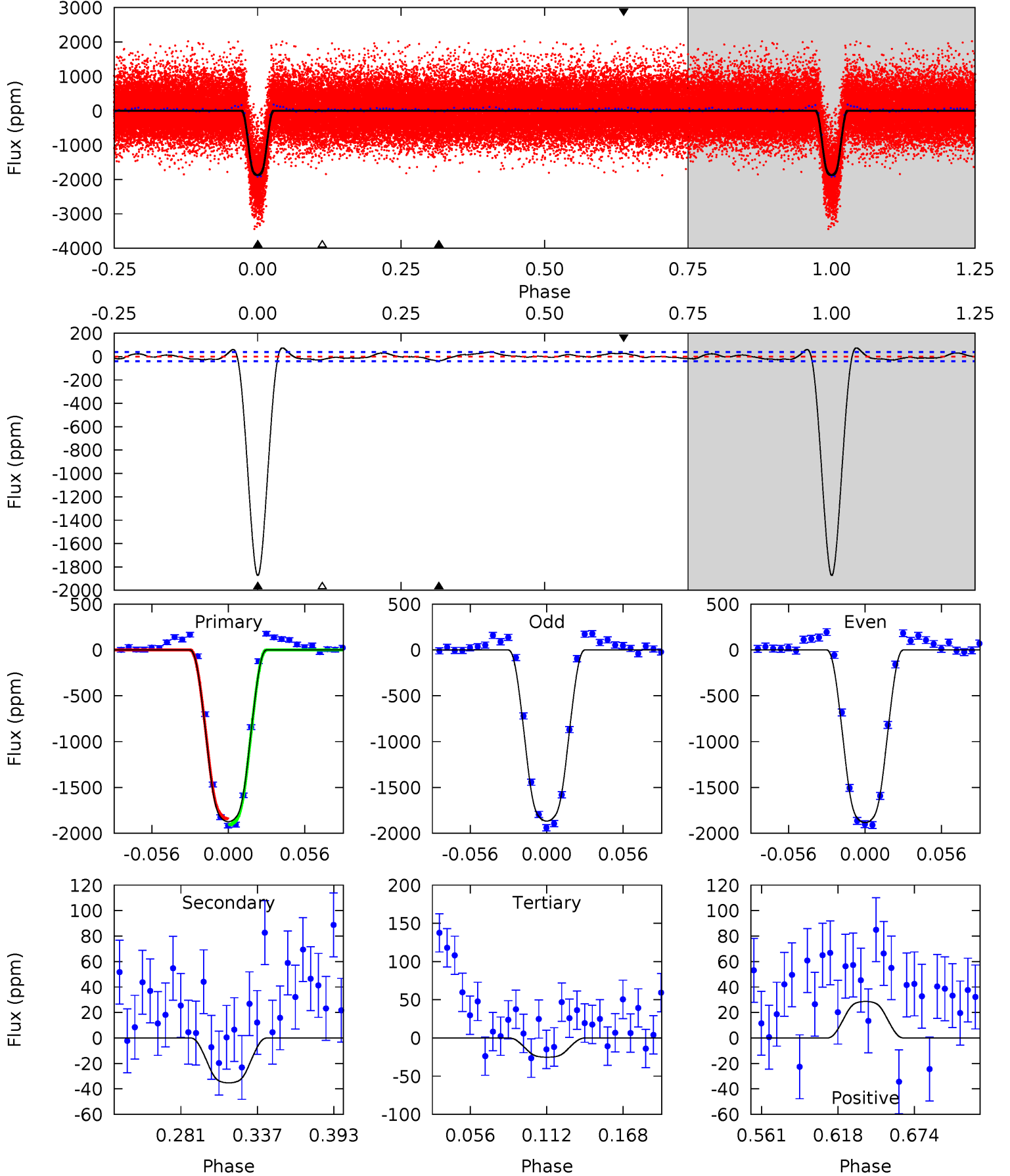
TCE 011463211-01 P= 1.506354 Days $T_0=131.832867$ (BKJD)



DV Model-Shift Uniqueness Test

011463211-01, P = 1.506353 Days, E = 130.326495 Days

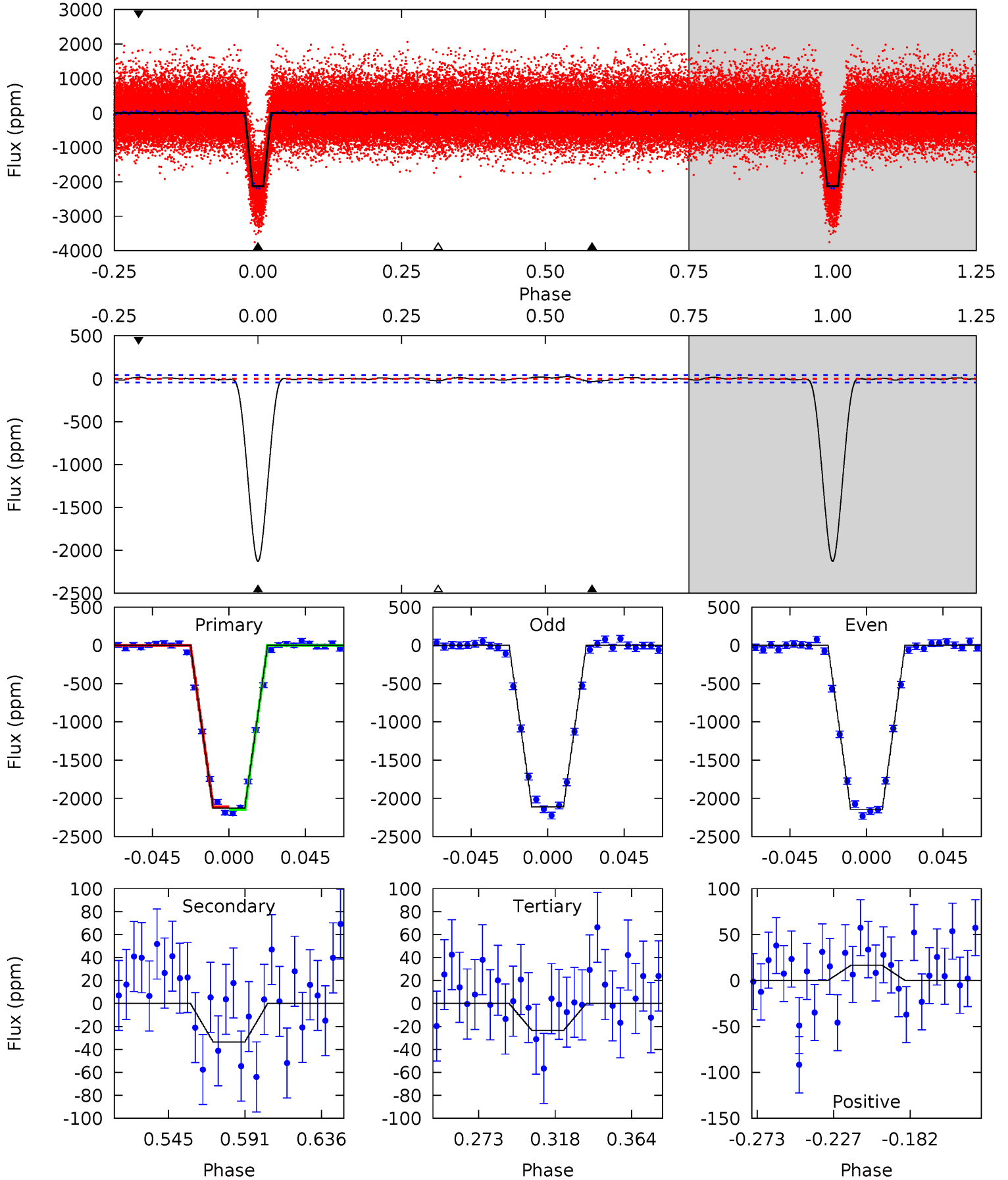
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
227.1	4.28	3.05	3.47	4.68	1.91	1.94	224.1	223.7	1.22	0.80	1.02	0.98	0.04	3.94



Alt Model-Shift Uniqueness Test

011463211-01, P = 1.506354 Days, E = 130.326513 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
233.0	3.68	2.58	1.80	4.73	2.00	0.99	230.4	231.2	1.11	1.88	1.84	0.99	0.01	1.70



Stellar Parameters For KIC 011463211

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5714^{+155}_{-172}	$4.563^{+0.040}_{-0.160}$	$-0.200^{+0.300}_{-0.300}$	$0.831^{+0.186}_{-0.080}$	$0.926^{+0.090}_{-0.110}$	$2.272^{+0.467}_{-0.979}$
	+3%/-3%	+1%/-4%	+150%/-150%	+22%/-10%	+10%/-12%	+21%/-43%
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 011463211-01 / KOI 0770.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-35 ± 8	$4.36^{+0.54}_{-0.29}$	2073^{+107}_{-89}	2539^{+146}_{-199}	$0.602^{+0.188}_{-0.162}$
Alt.	-34 ± 9	$4.35^{+0.55}_{-0.33}$	2071^{+117}_{-90}	2525^{+153}_{-234}	$0.585^{+0.190}_{-0.171}$

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 $T_{\text{obs}} \gg T_{\text{max}}$ AND $A_{\text{obs}} \gg 1.0$

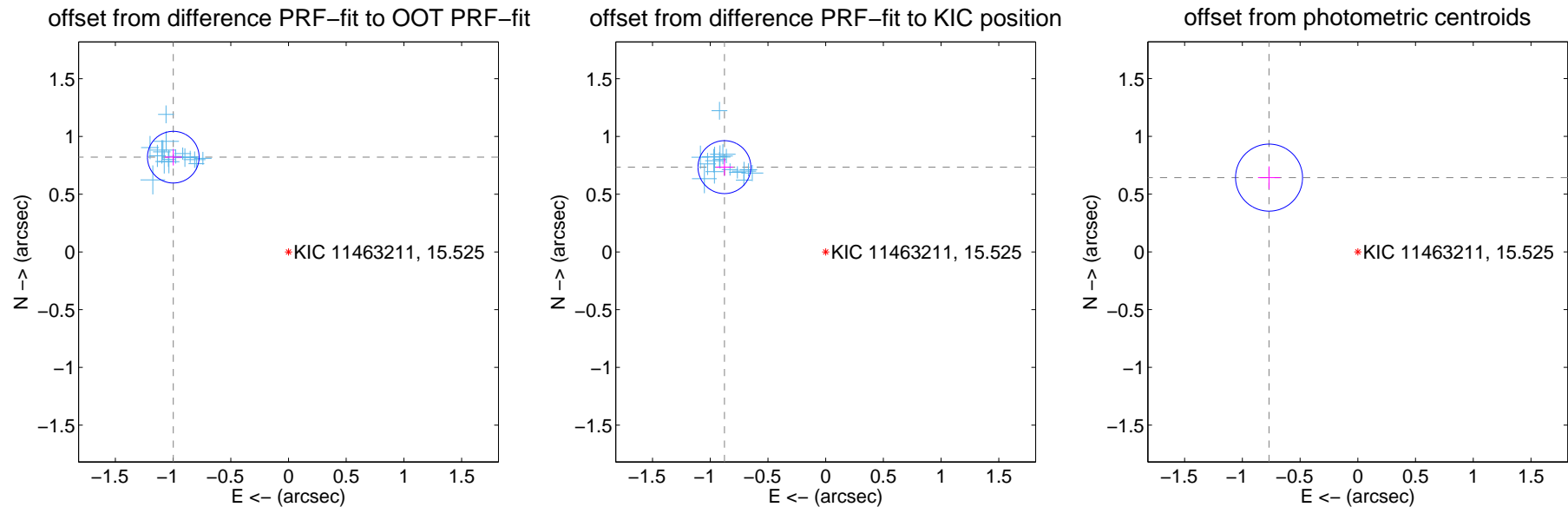
DV Centroid Data

Supplemental centroid analysis for 011463211-01. Kepler magnitude: 15.53. Transit SNR 141.84

There are 17 quarters with good PRF difference image offsets

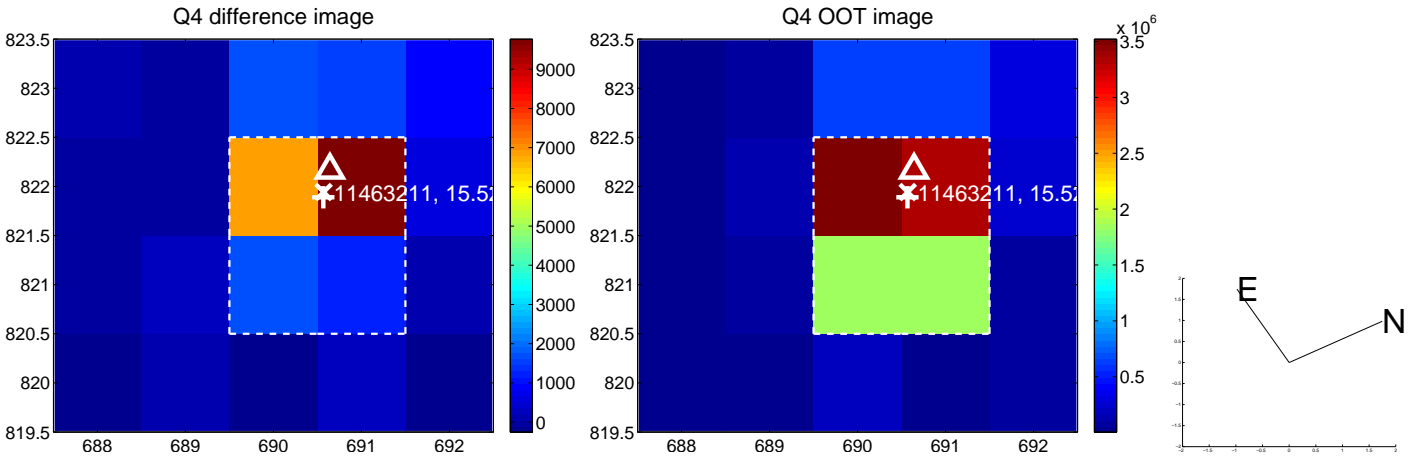
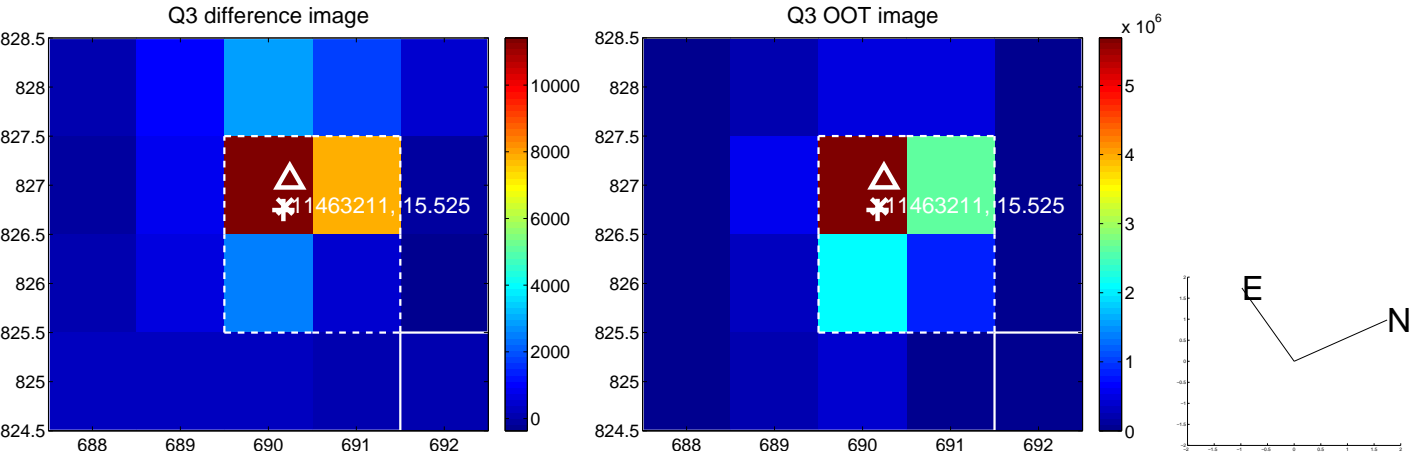
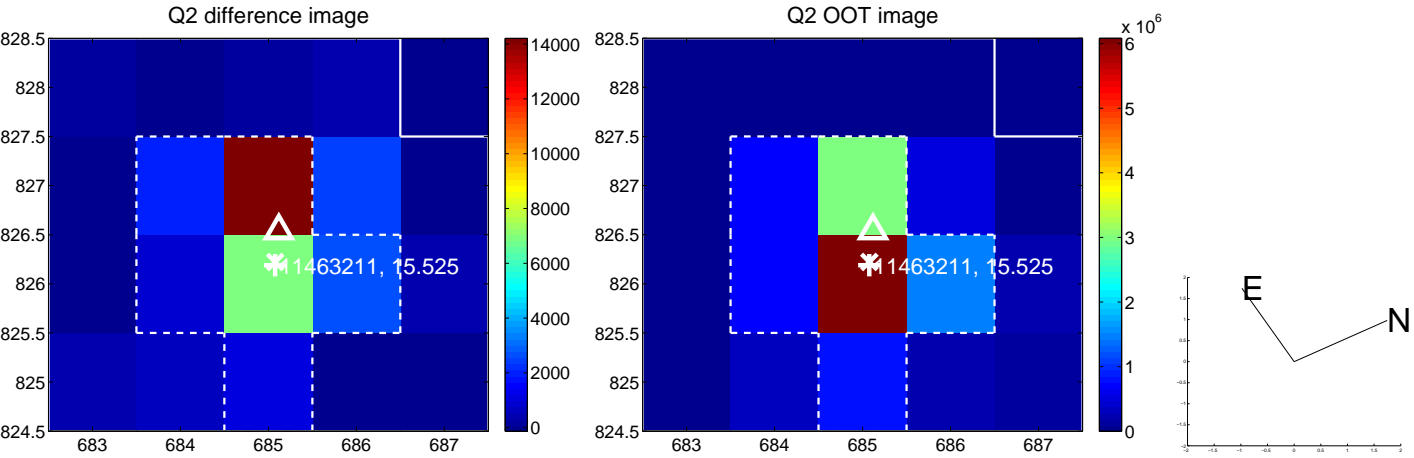
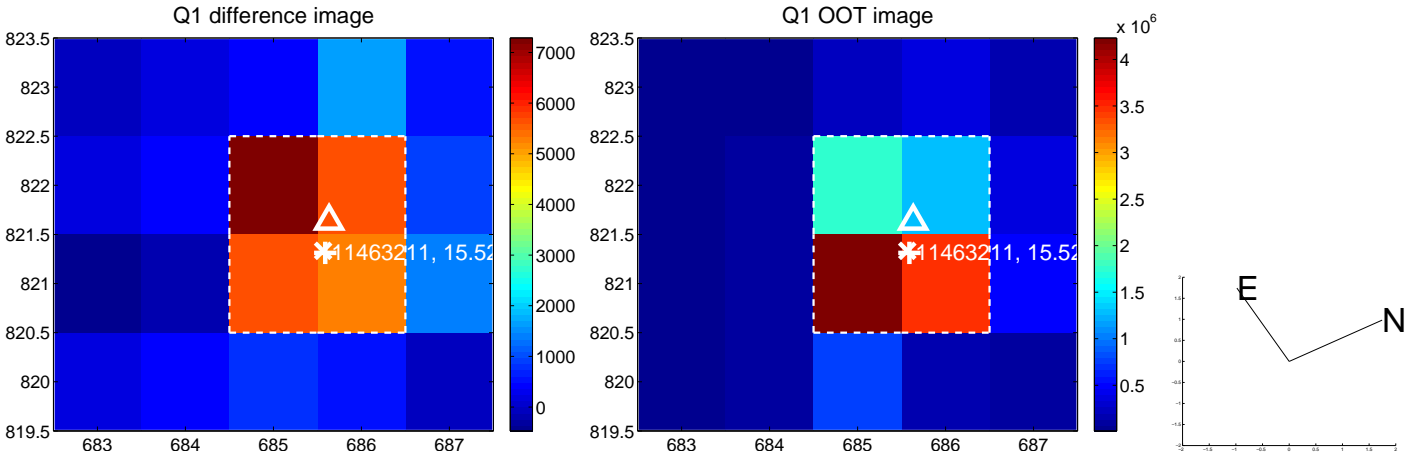
The direct PRF centroid is offset from the target star catalog position by about 0.13 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.292 ± 0.075	17.32	0.998 ± 0.075	0.821 ± 0.072
PRF-fit source offset from KIC position	1.144 ± 0.076	14.98	0.877 ± 0.074	0.734 ± 0.074
photometric centroid source offset	1.00 ± 0.10	10.36	0.77 ± 0.10	0.64 ± 0.10

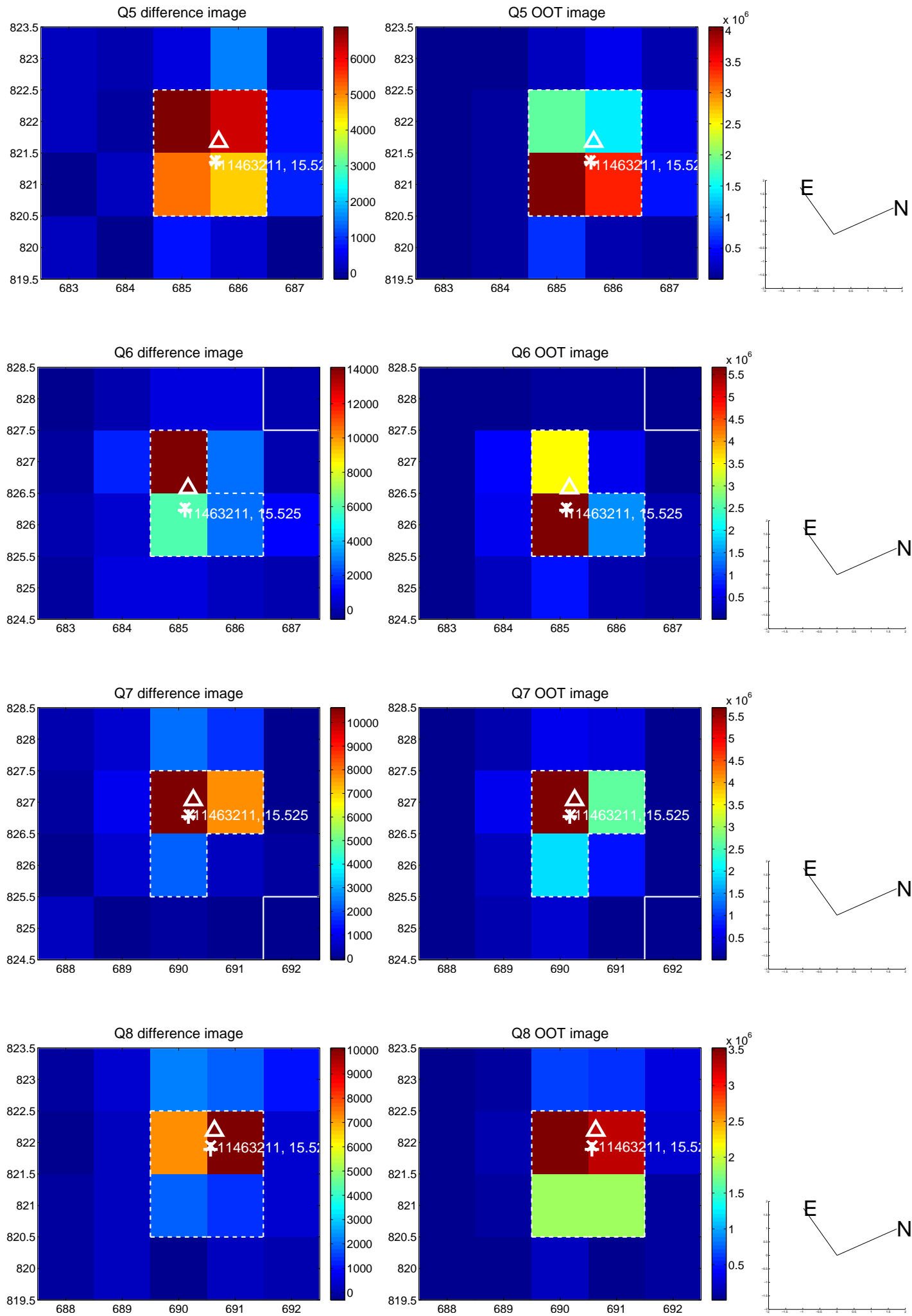


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

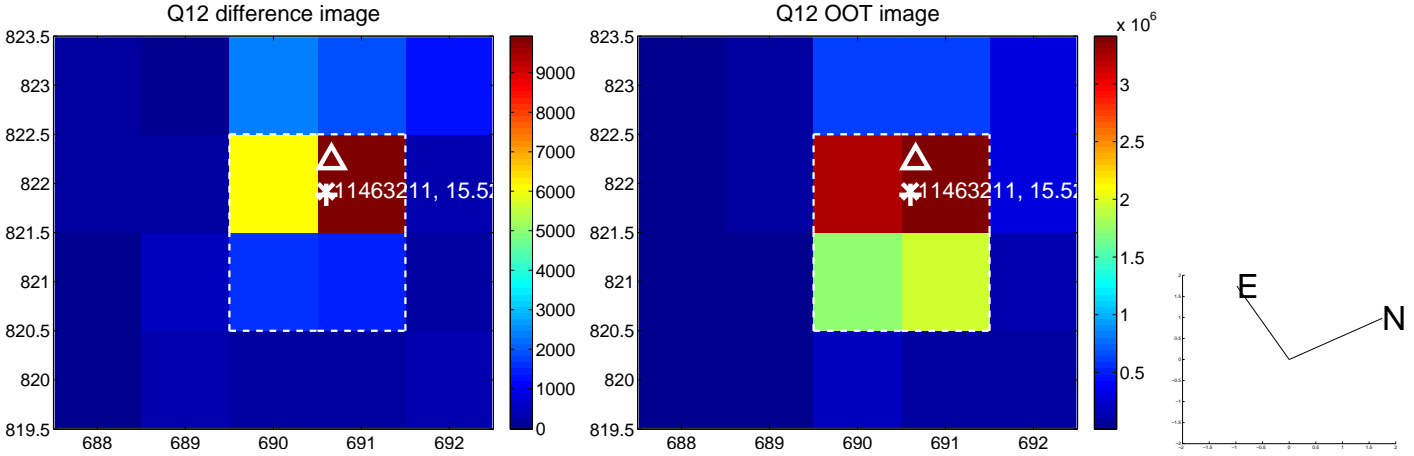
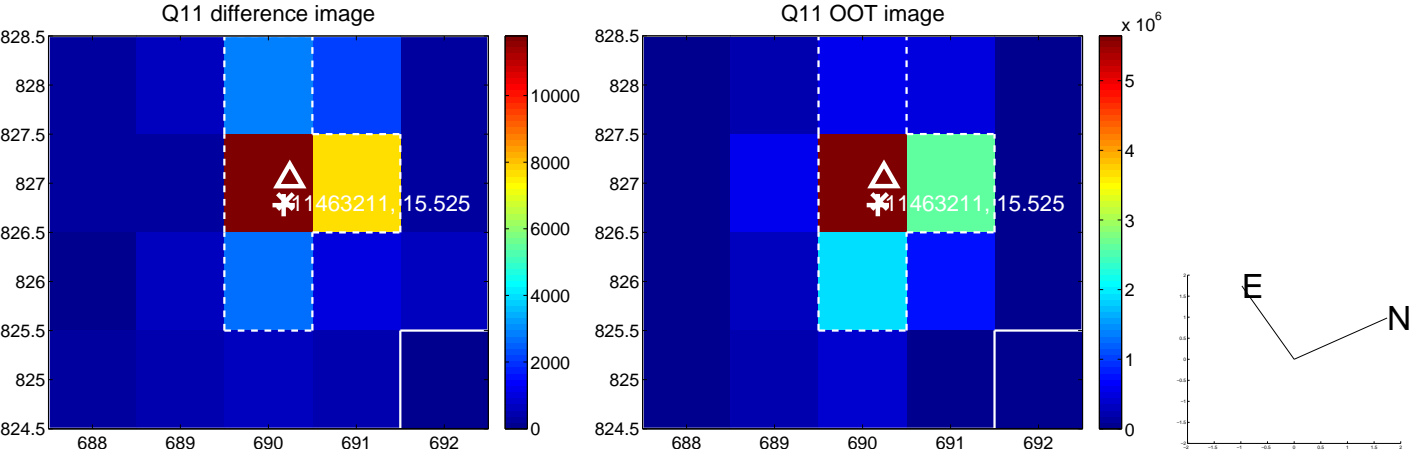
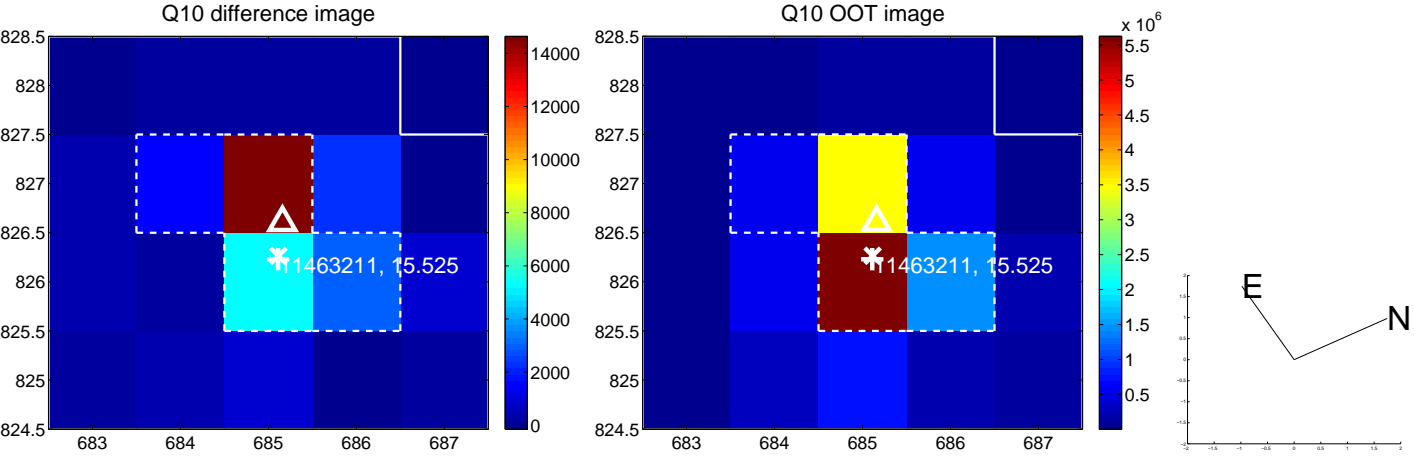
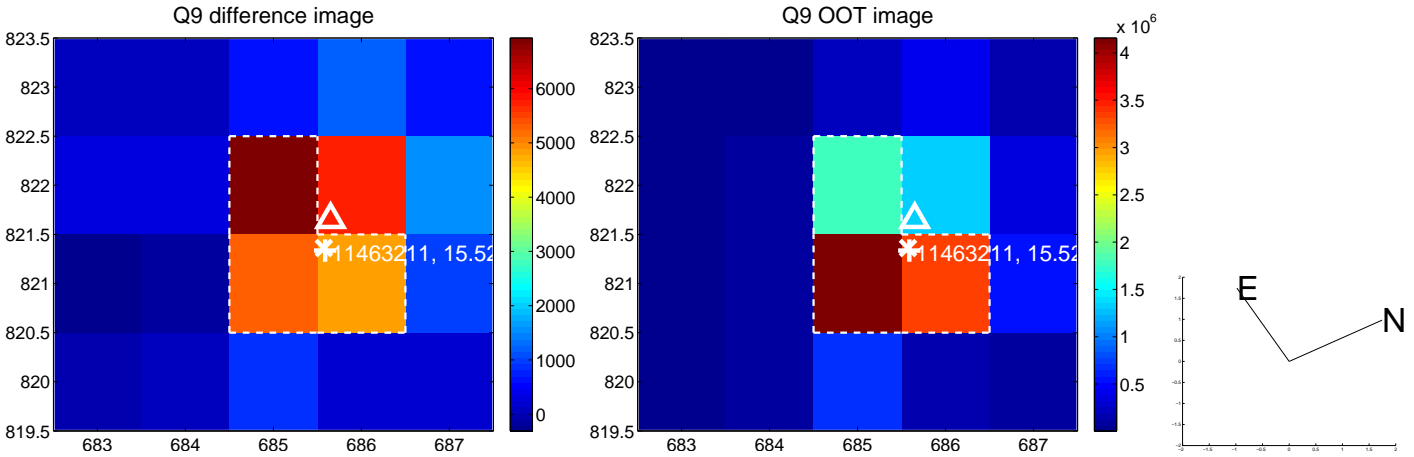
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



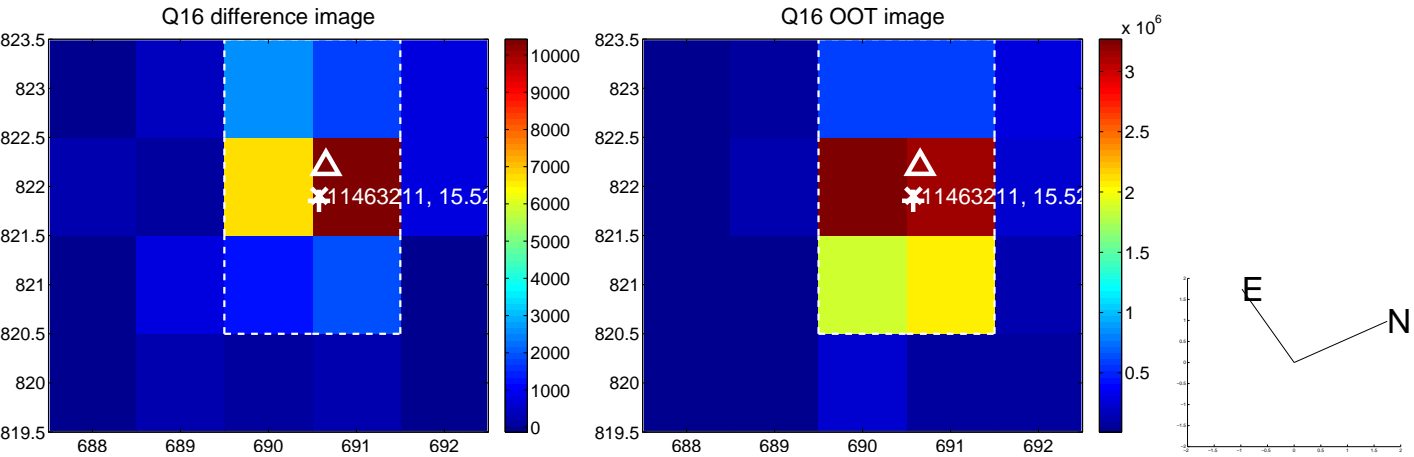
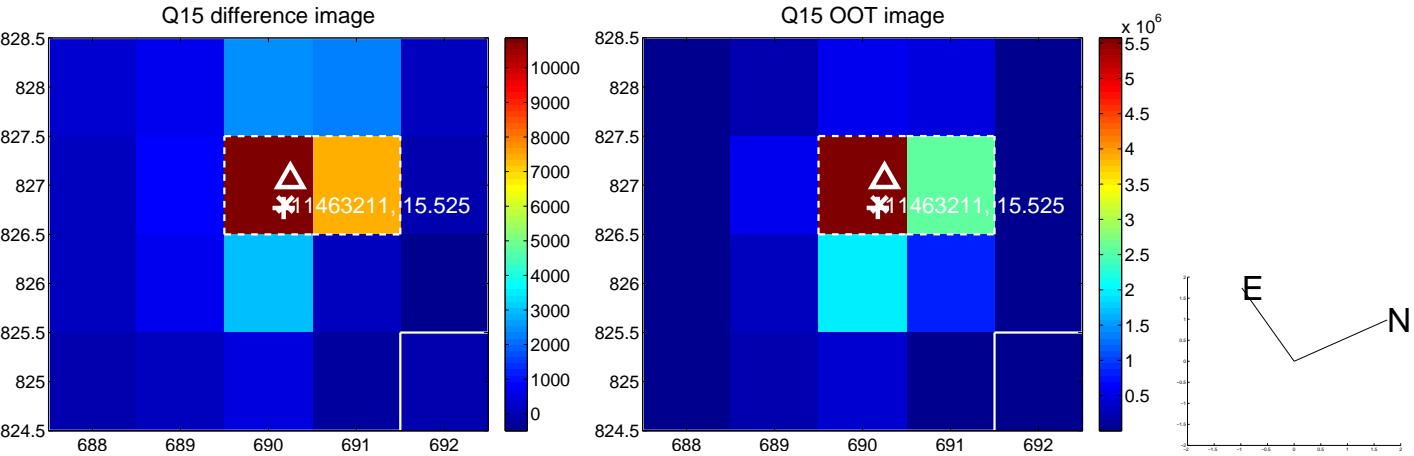
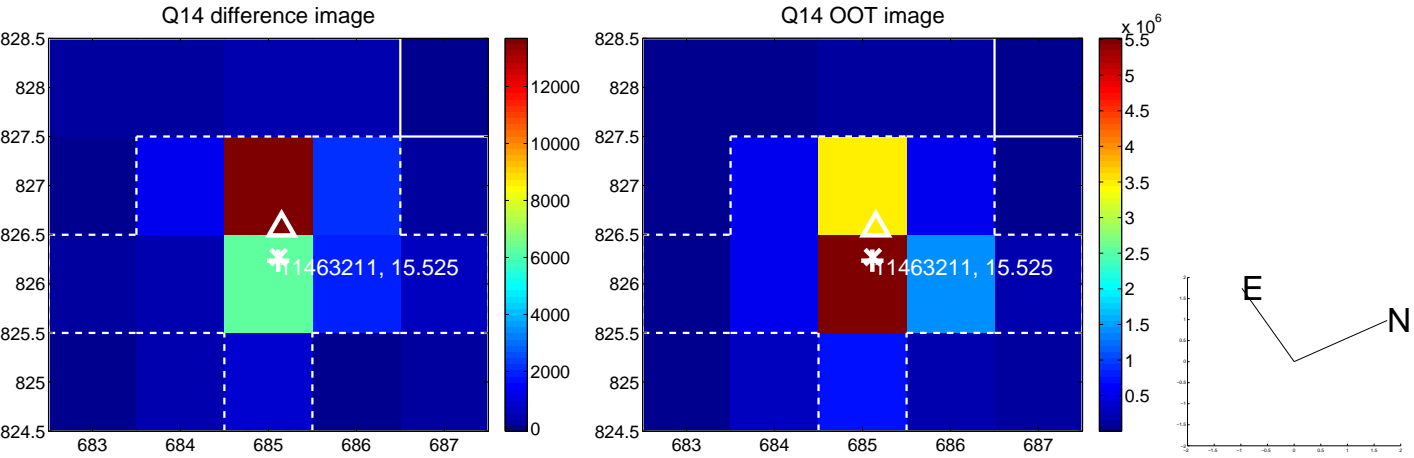
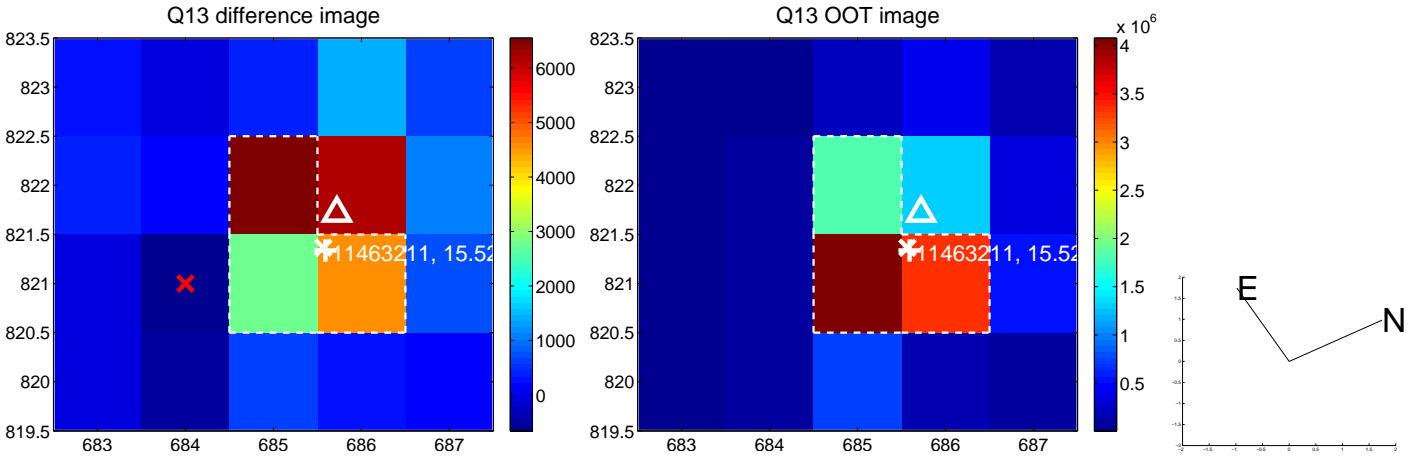
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



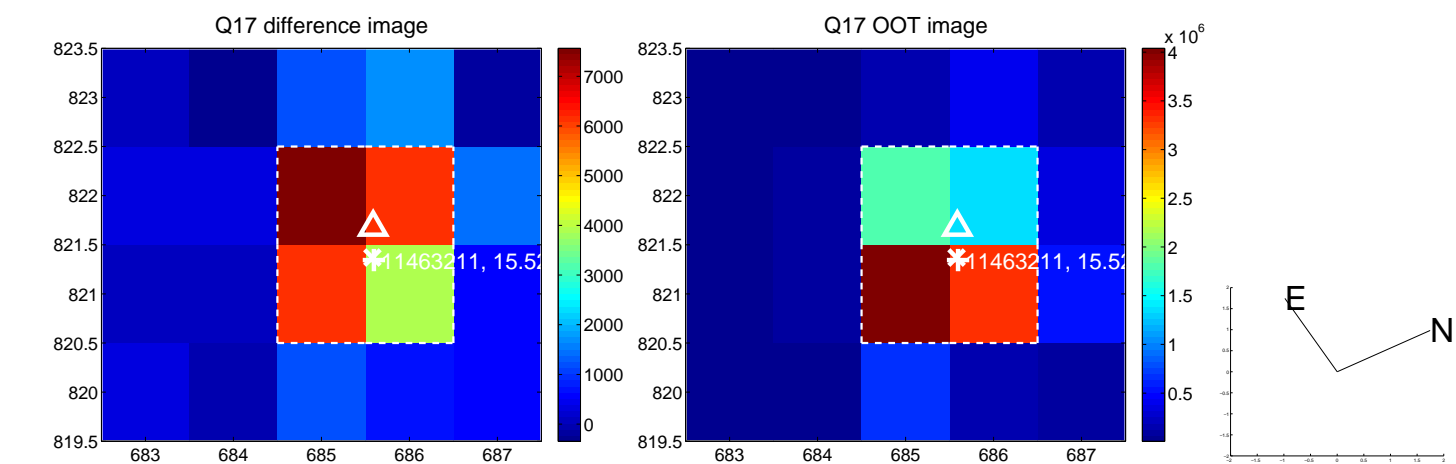
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



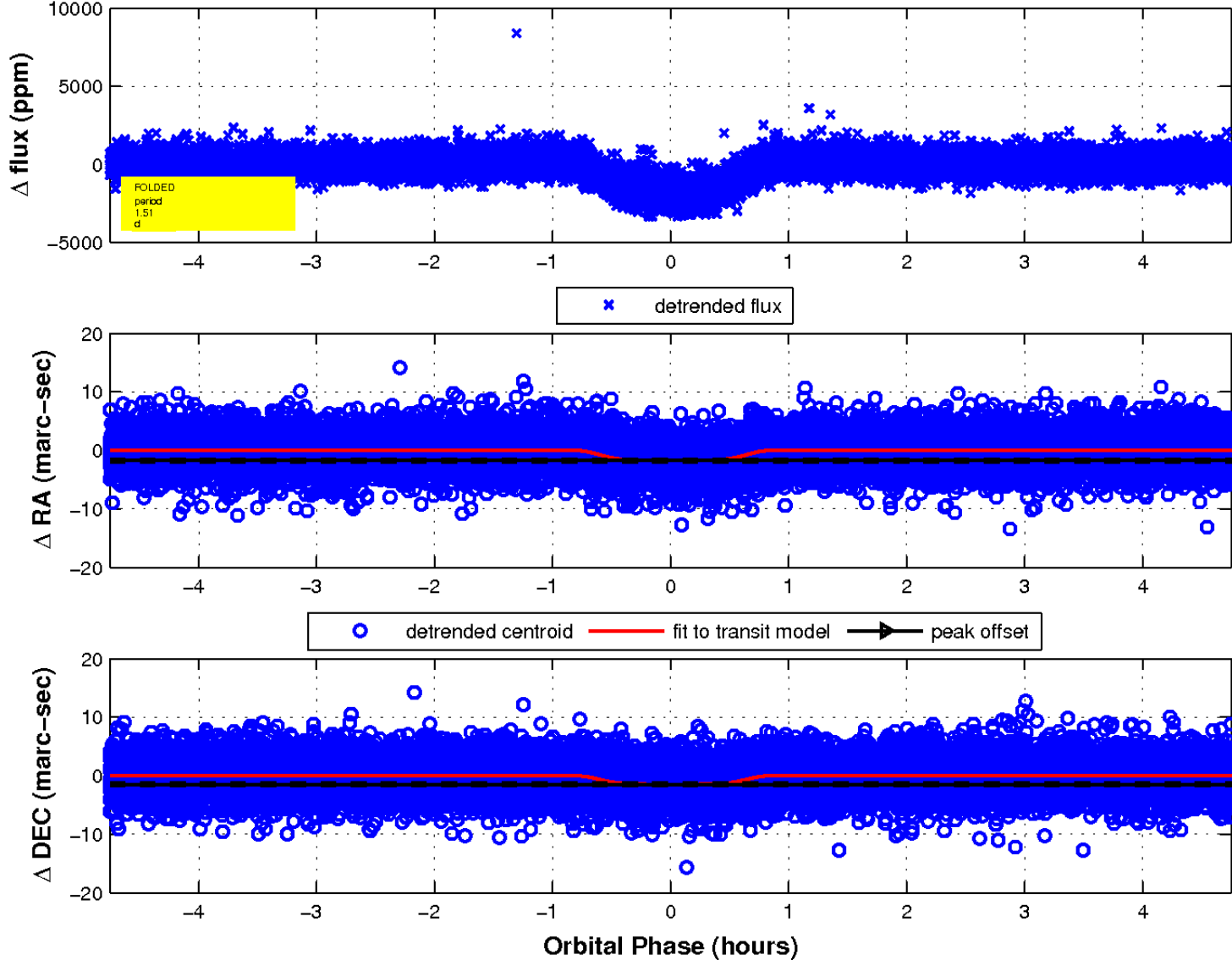
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

