

KIC 006699368

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})
006699368-01	OBS	1694.01	3.690316	131.542312	459.0	1.335	35.1	44.5	1.05	6120	3.18	636.37

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006699368-01	OBS	PC	0.87	0	0	0	0	NO_COMMENT

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

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

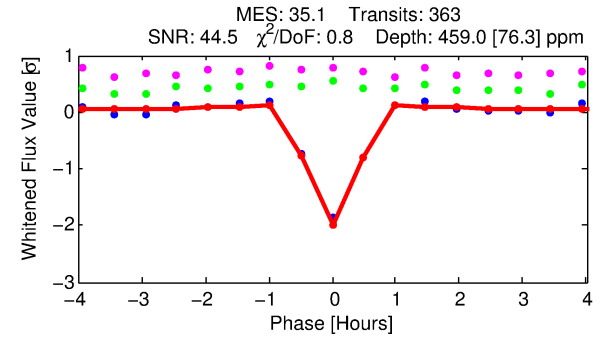
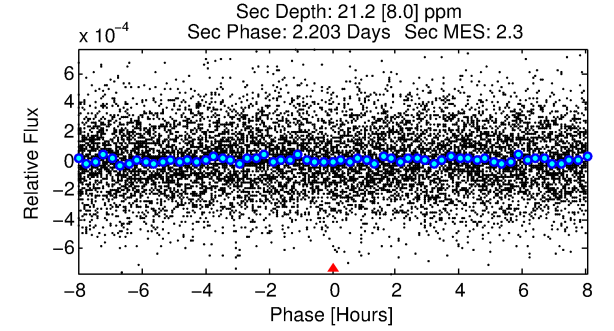
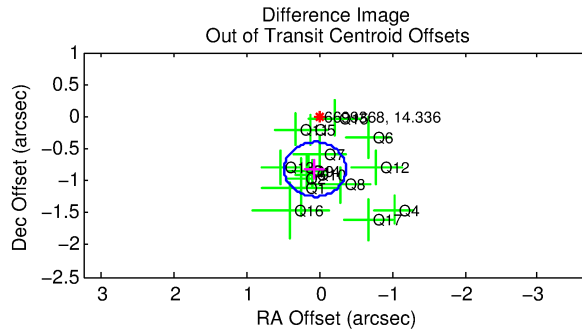
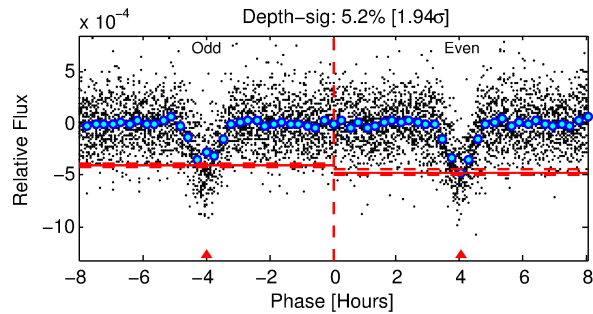
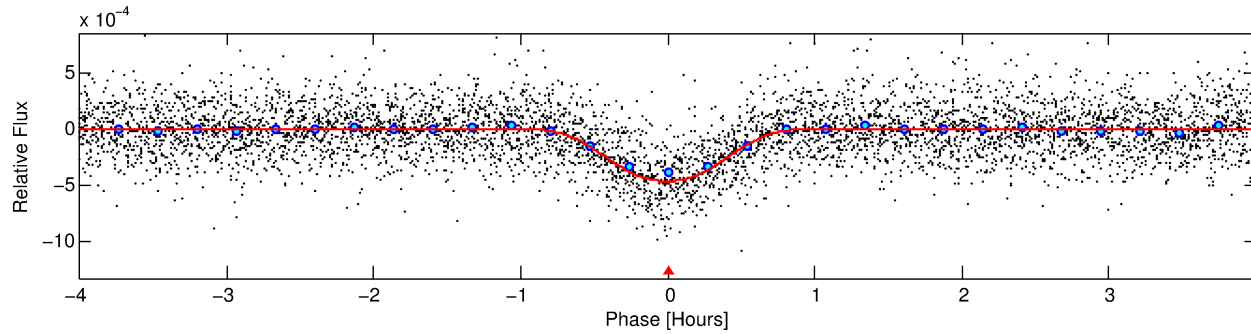
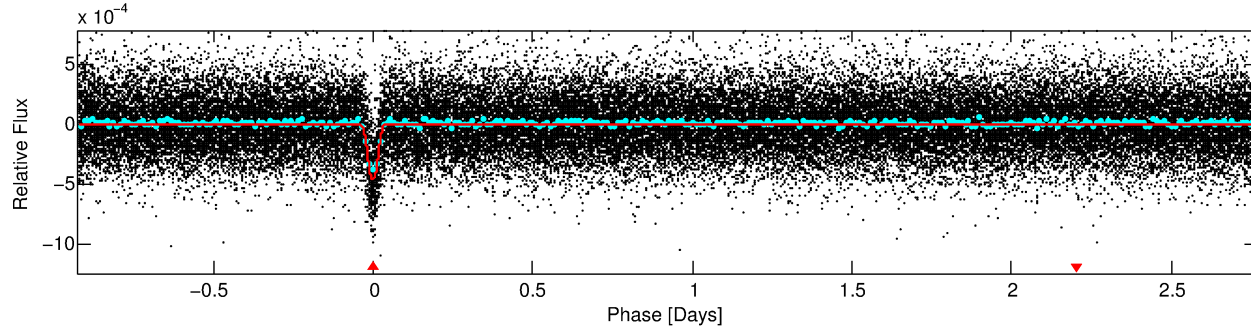
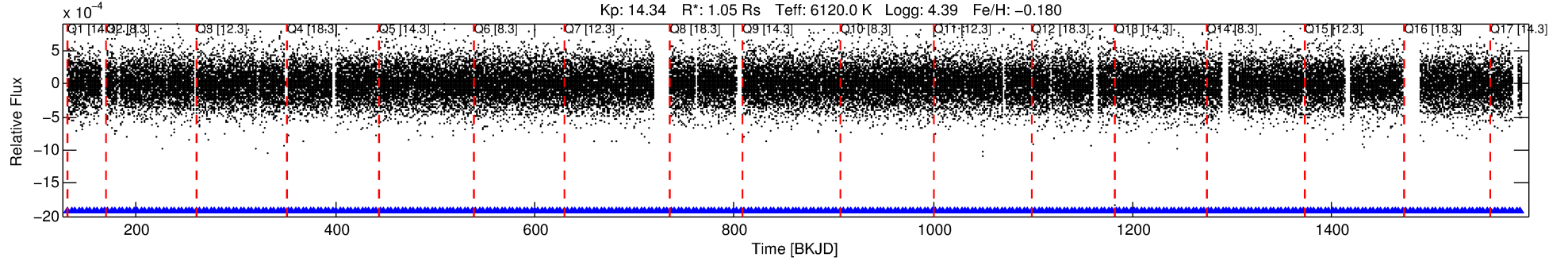
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006699368-01

No Significant Match Found

DV One-Page Summary

KIC: 6699368 Candidate: 1 of 1 Period: 3.690 d
KOI: K01694.01 Corr: 0.979



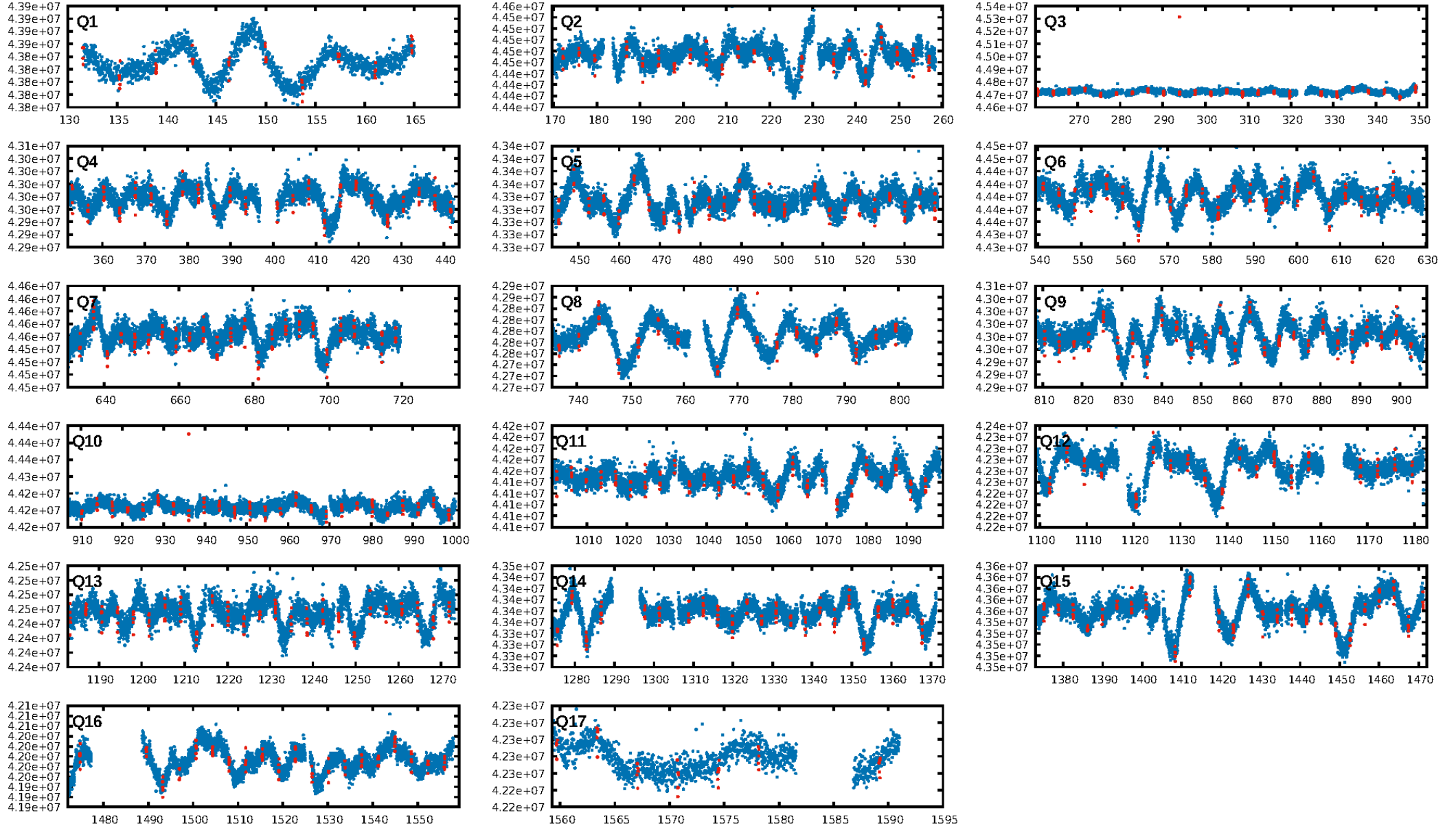
DV Fit Results:

Period = 3.69032 [0.00000] d
Epoch = 131.5423 [0.0005] BKJD
Rp/R* = 0.0276 [0.0084]
a/R* = 6.75 [1.52]
b = 0.98 [0.02]
Seff = 636.37 [258.99]
Teq = 1281 [130] K
Rp = 3.18 [1.39] Re
a = 0.0468 [0.0124] AU
Ag = 2.53 [2.05] [0.74 σ]
Teffp = 2496 [453] K [2.58 σ]

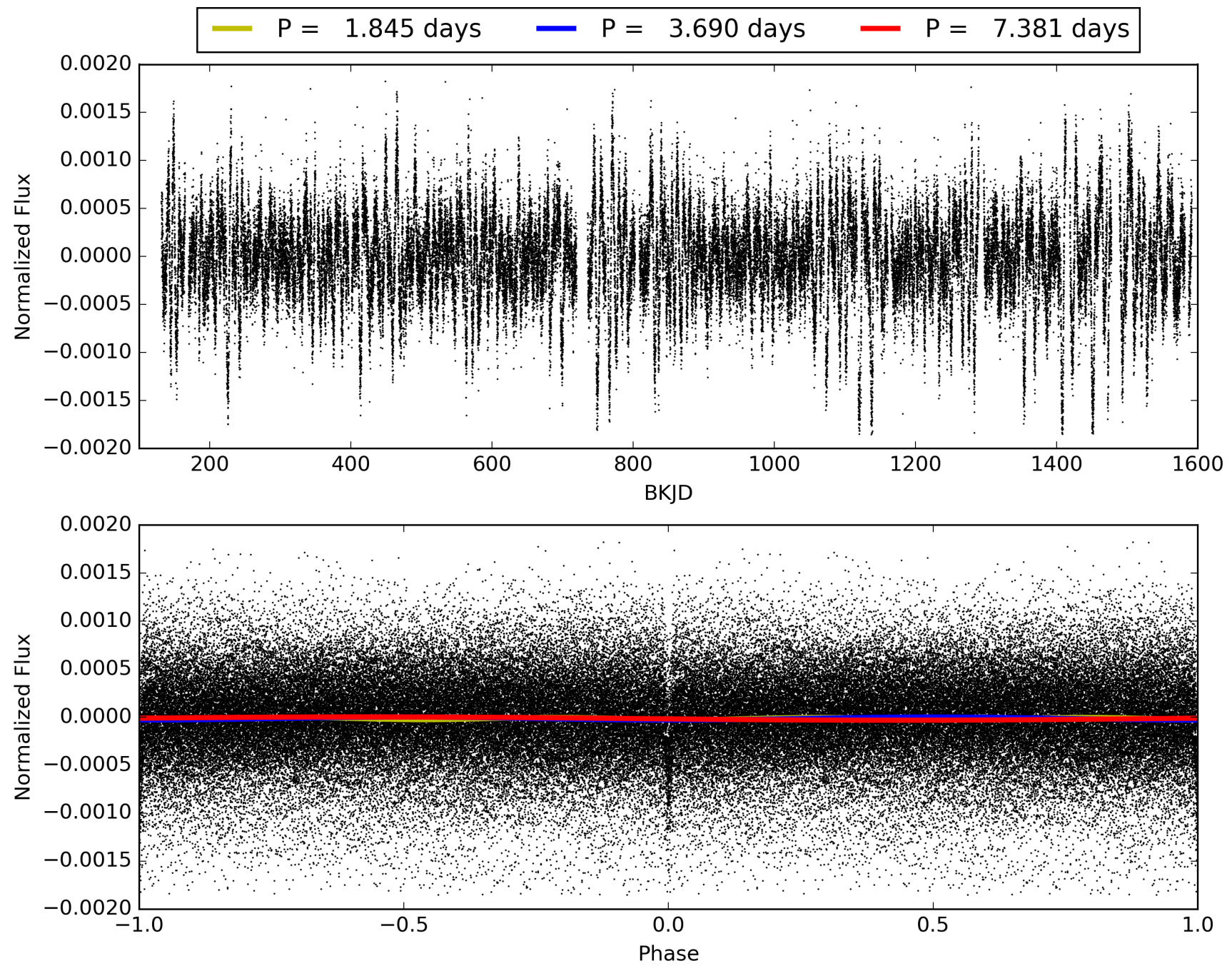
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 4.20e-261
RollingBand-fgt: 1.00 [346/346]
GhostDiagnostic-chr: 10.54
Centroid-sig: 6.5%
Centroid-so: 0.305 arcsec [0.99 σ]
OotOffset-rm: 0.826 arcsec [5.83 σ]
KicOffset-rm: 0.660 arcsec [4.75 σ]
OotOffset-st: 4/3/4/5 [16]
KicOffset-st: 4/3/4/5 [16]
DiffImageQuality-fgm: 1.00 [16/16]
DiffImageOverlap-fno: 1.00 [17/17]

TCE 006699368-01, PDC Light Curves

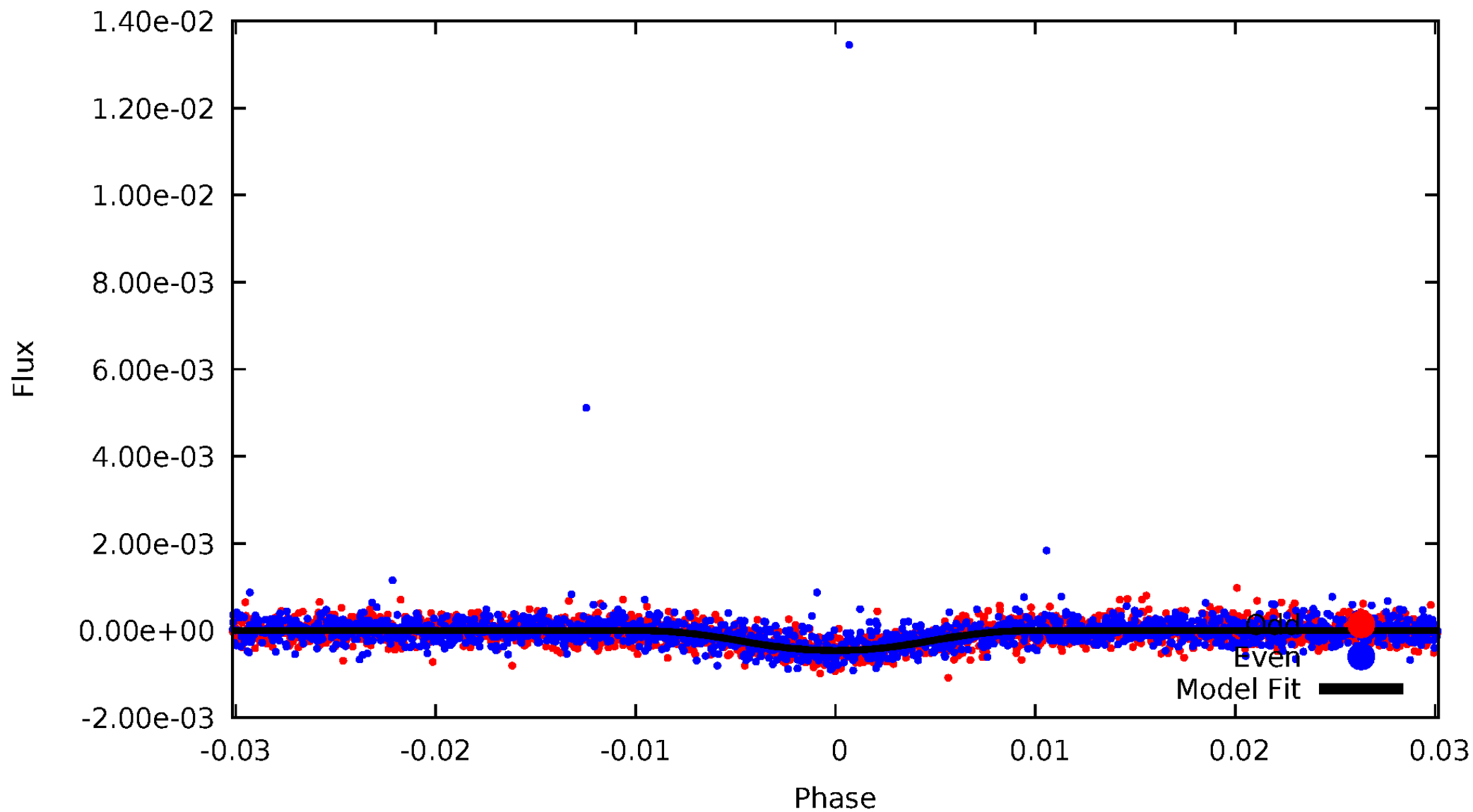


TCE 006699368-01



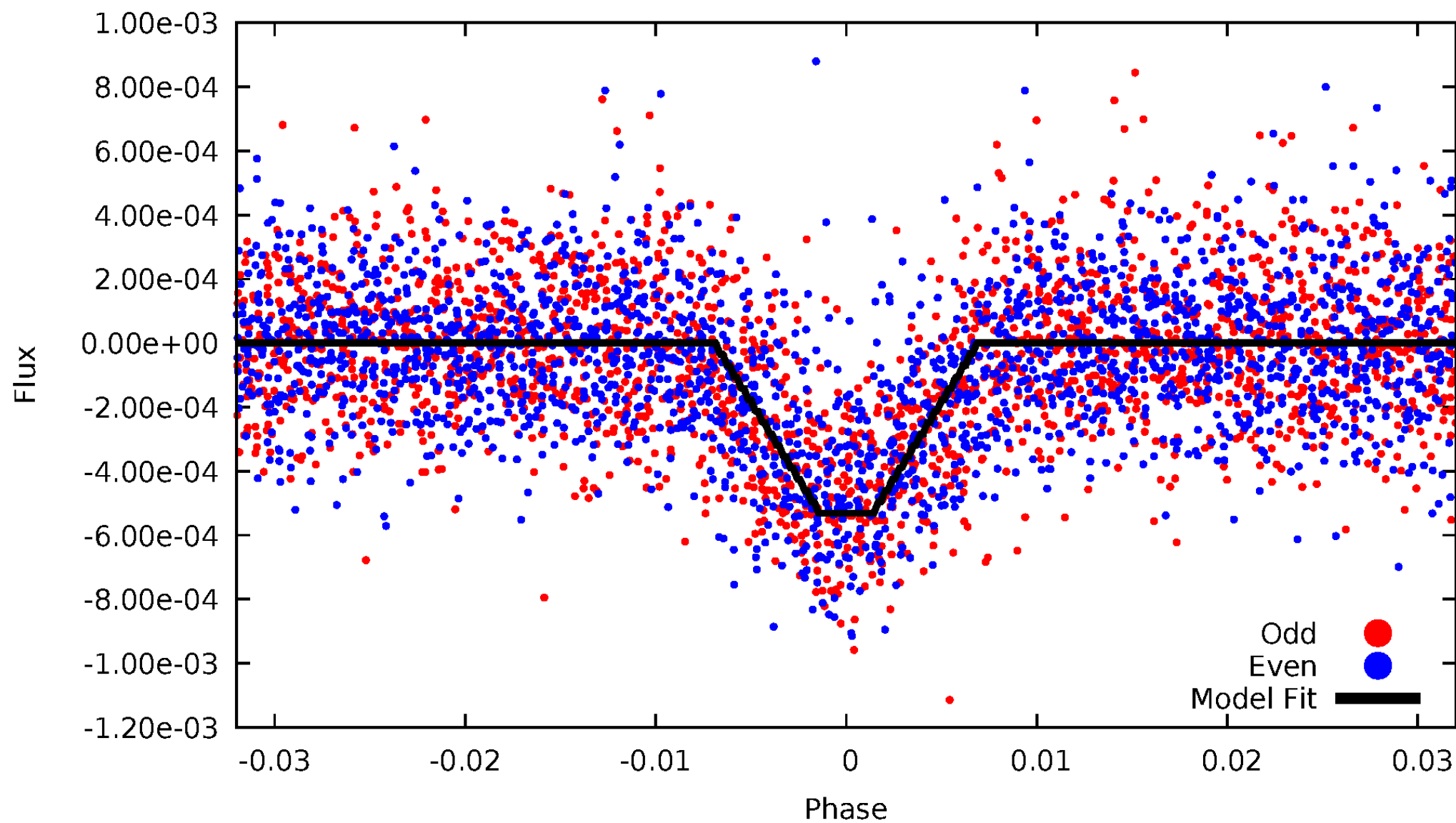
DV Odd/Even

TCE 006699368-01

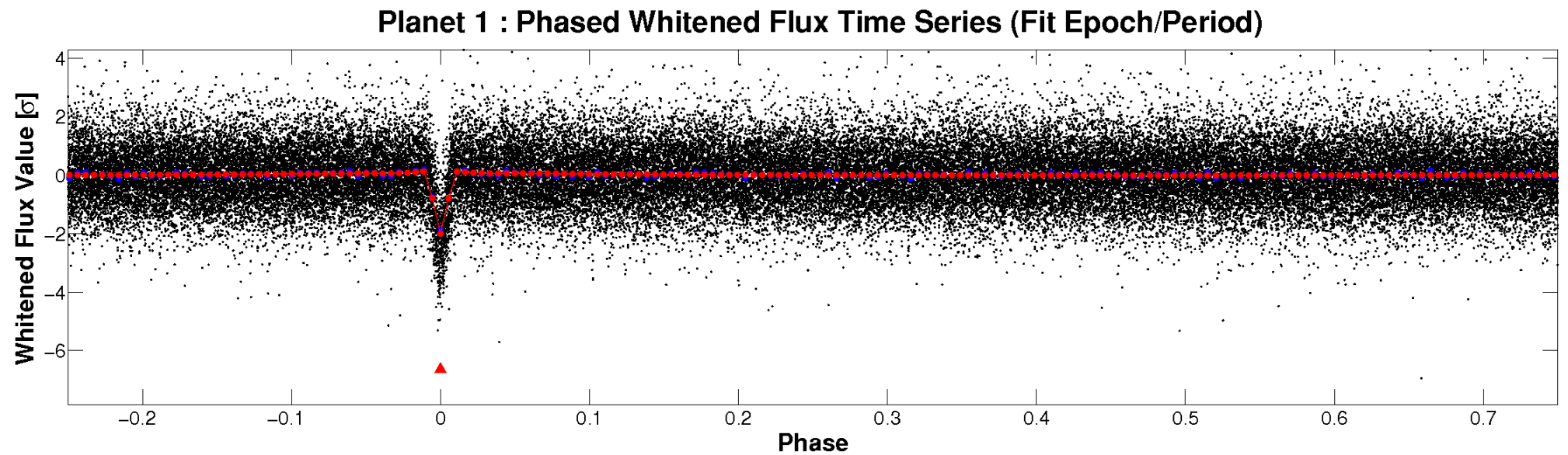
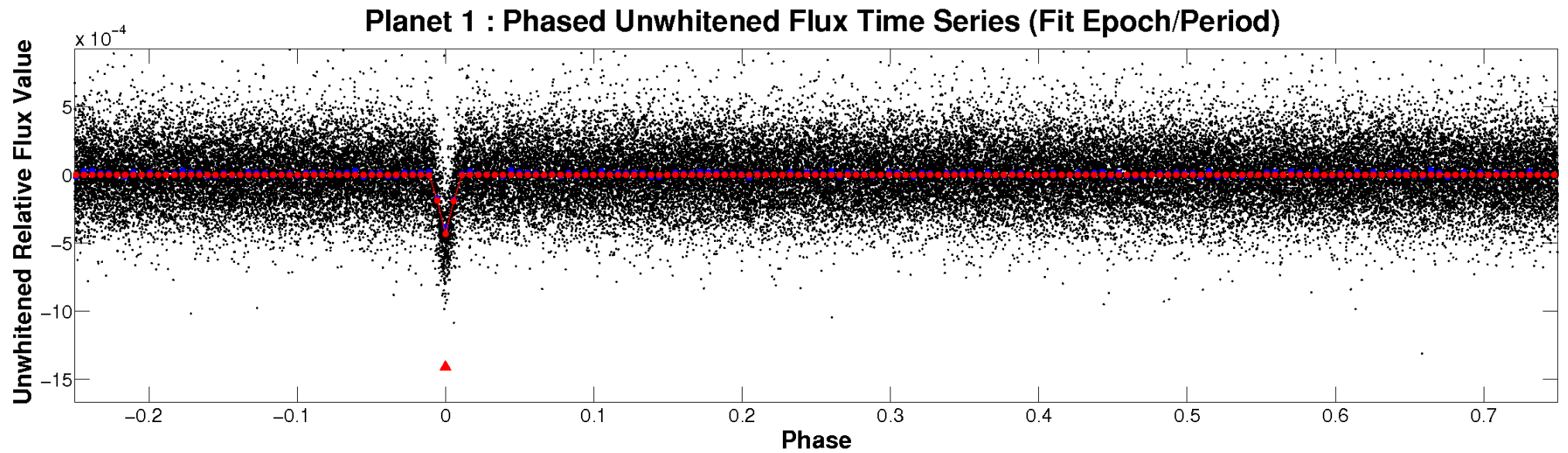


ALT Odd/Even

TCE 006699368-01

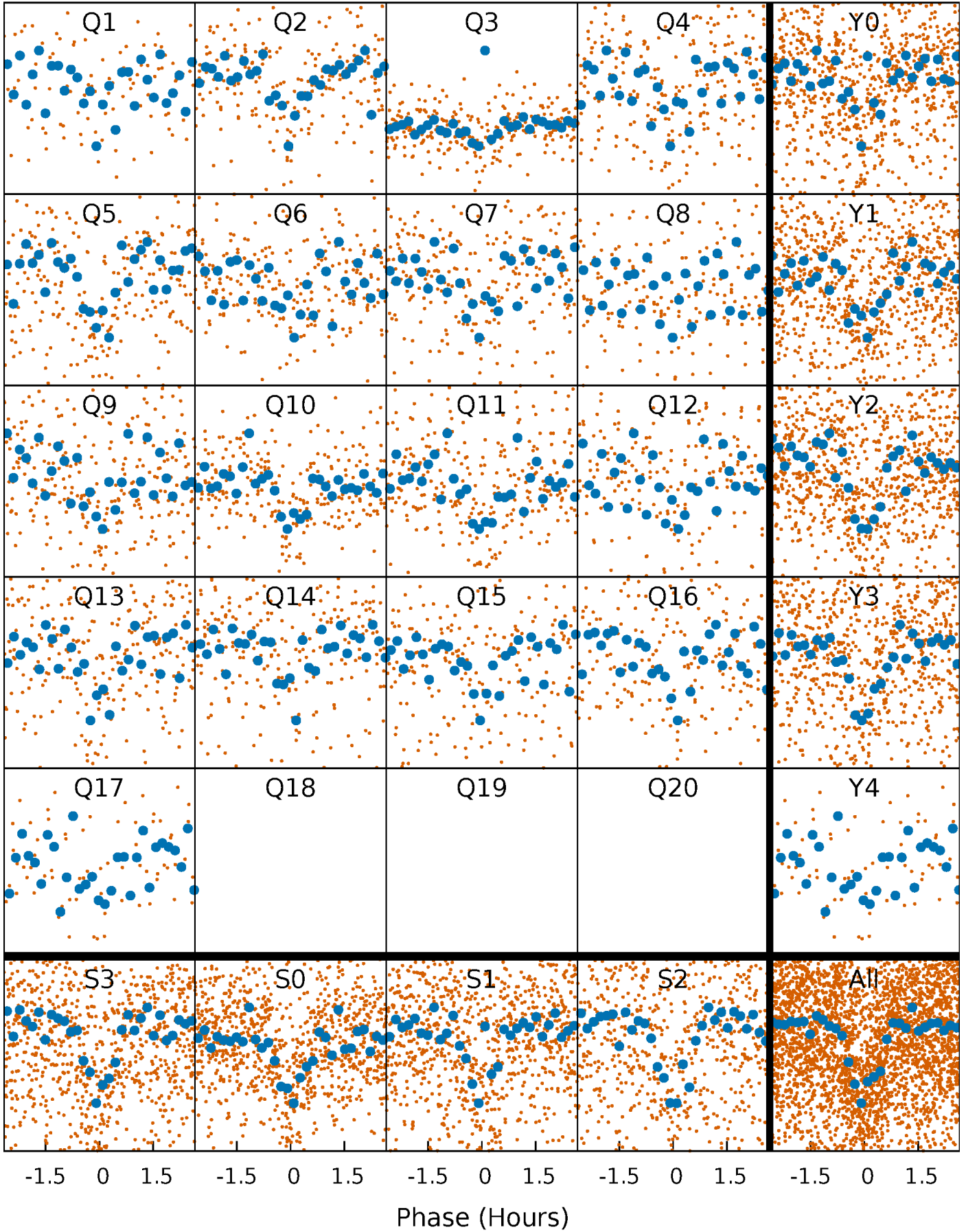


Non-Whitened Vs. Whitened Light Curve



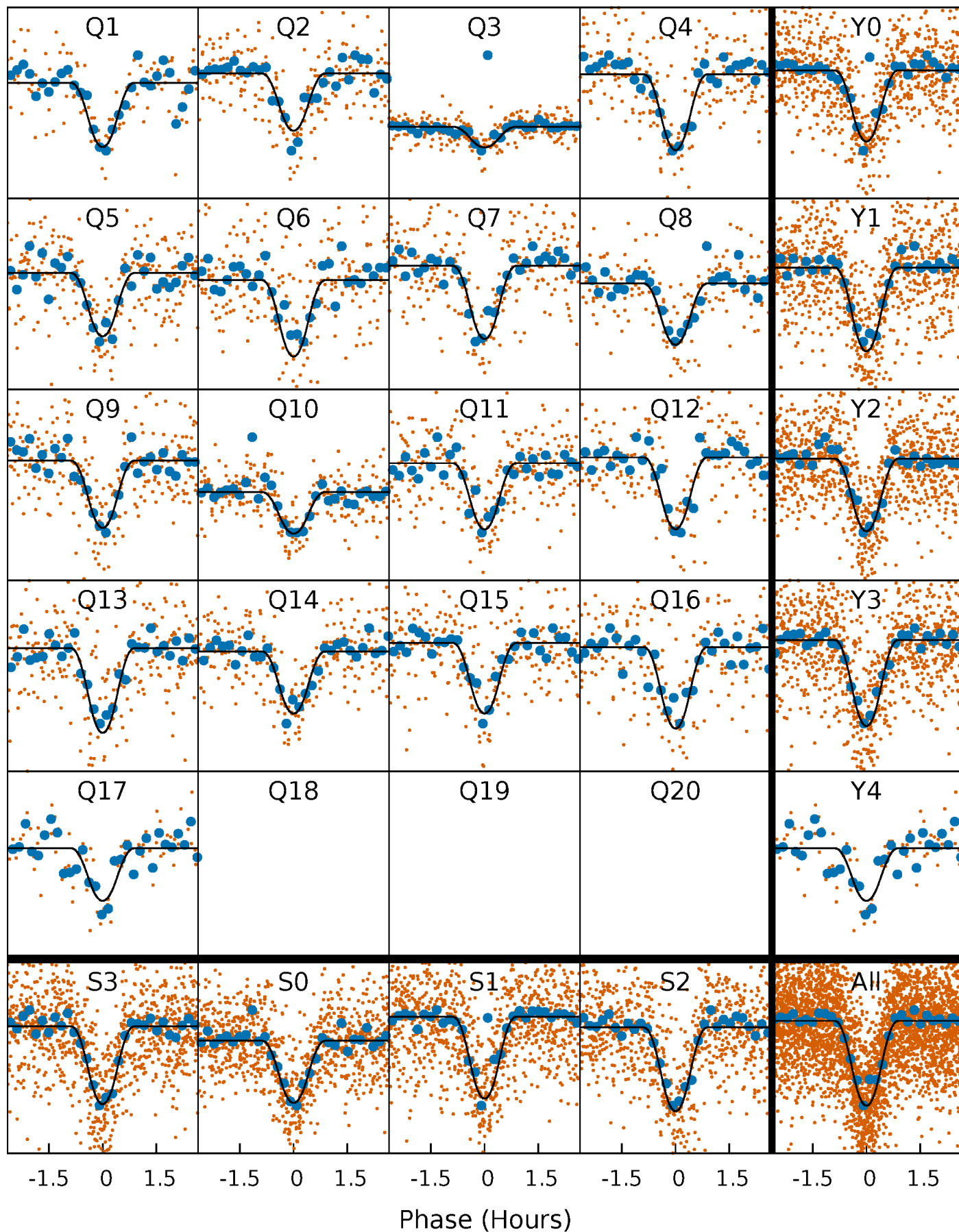
PDC Quarter-Phased Transit Curves

TCE 006699368-01 P= 3.690316 Days $T_0=131.542312$ (BKJD)



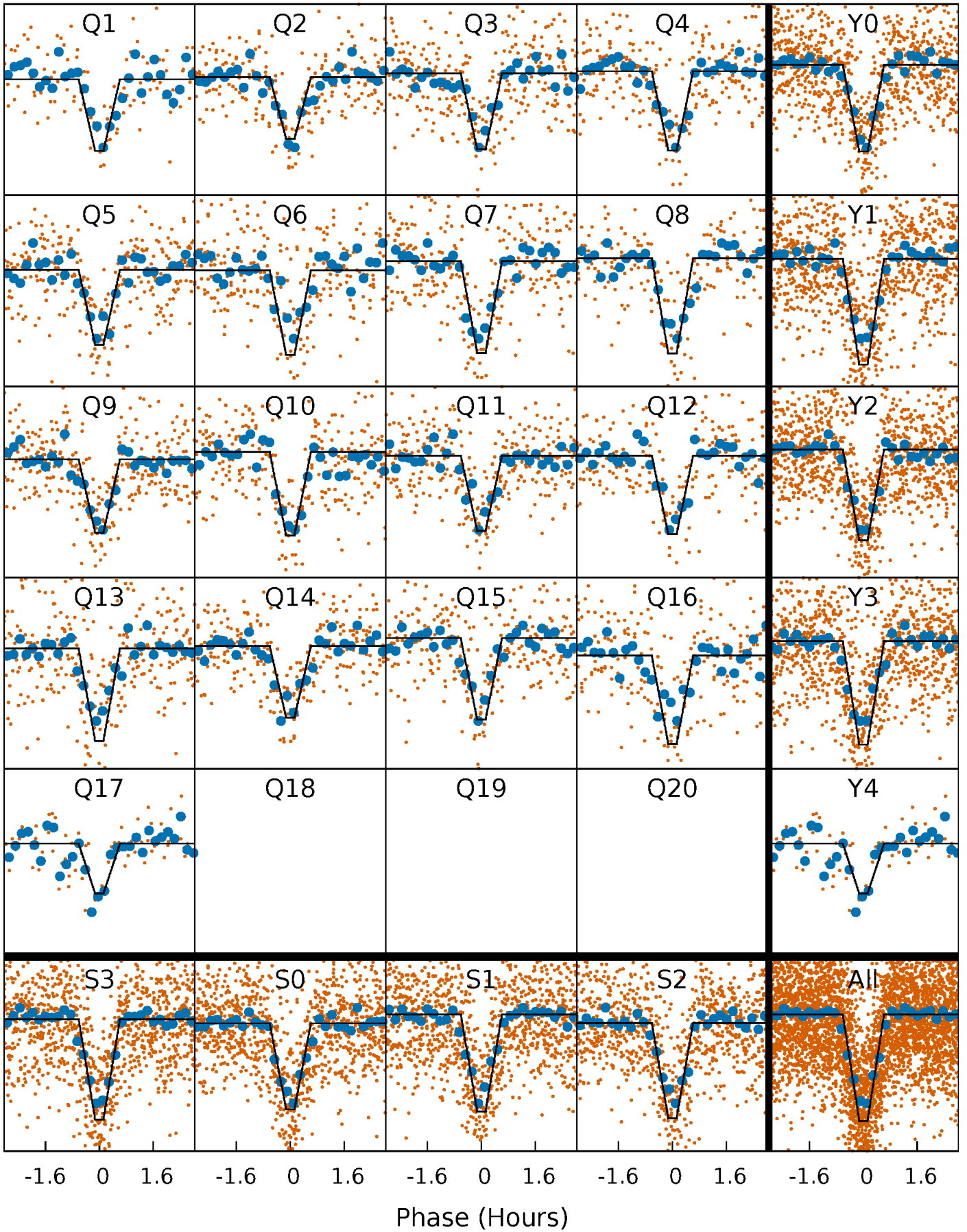
DV Quarter-Phased Transit Curves

TCE 006699368-01 P= 3.690316 Days $T_0=131.542312$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

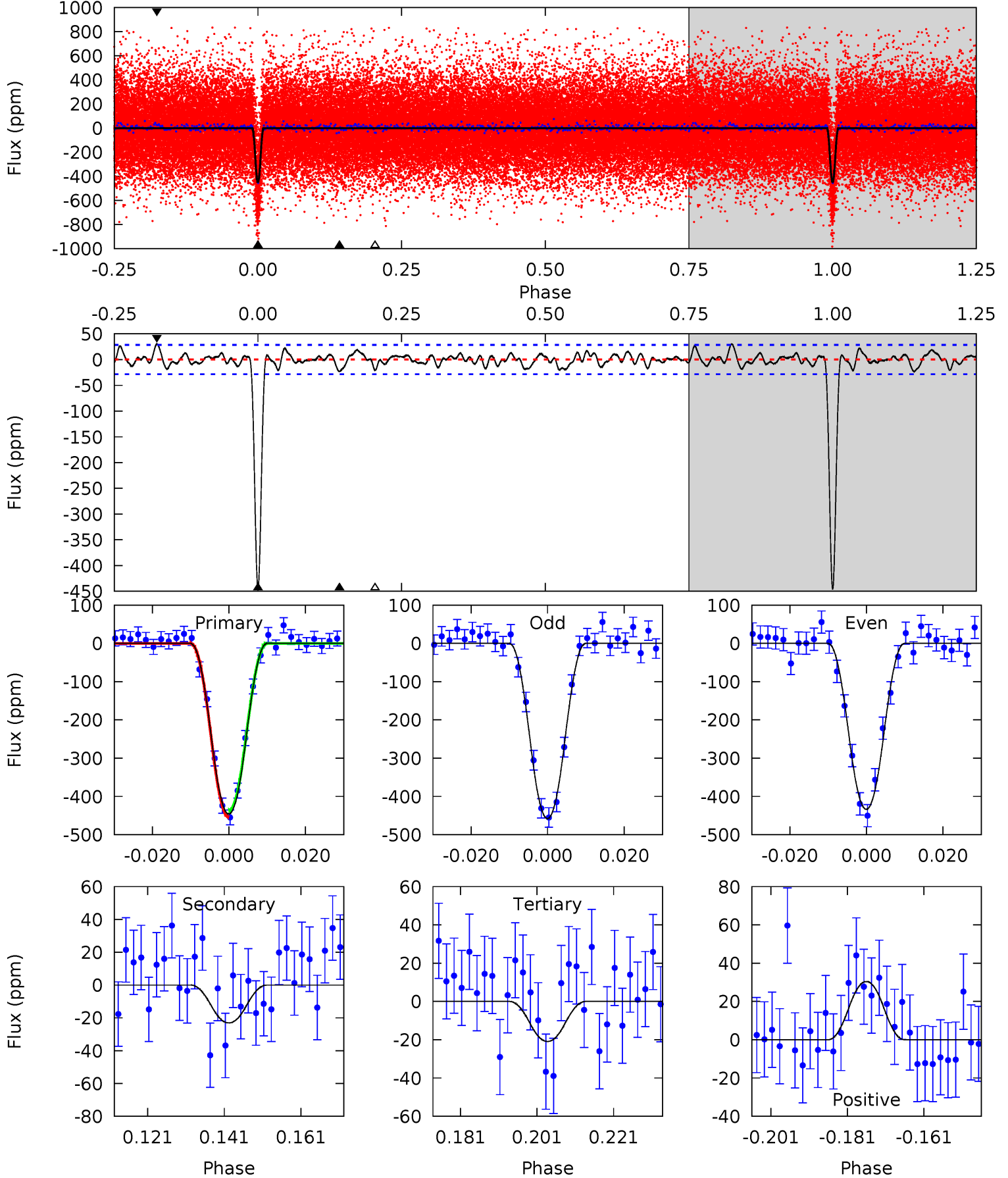
TCE 006699368-01 P= 3.690329 Days $T_0=131.539870$ (BKJD)



DV Model-Shift Uniqueness Test

006699368-01, P = 3.690316 Days, E = 127.851996 Days

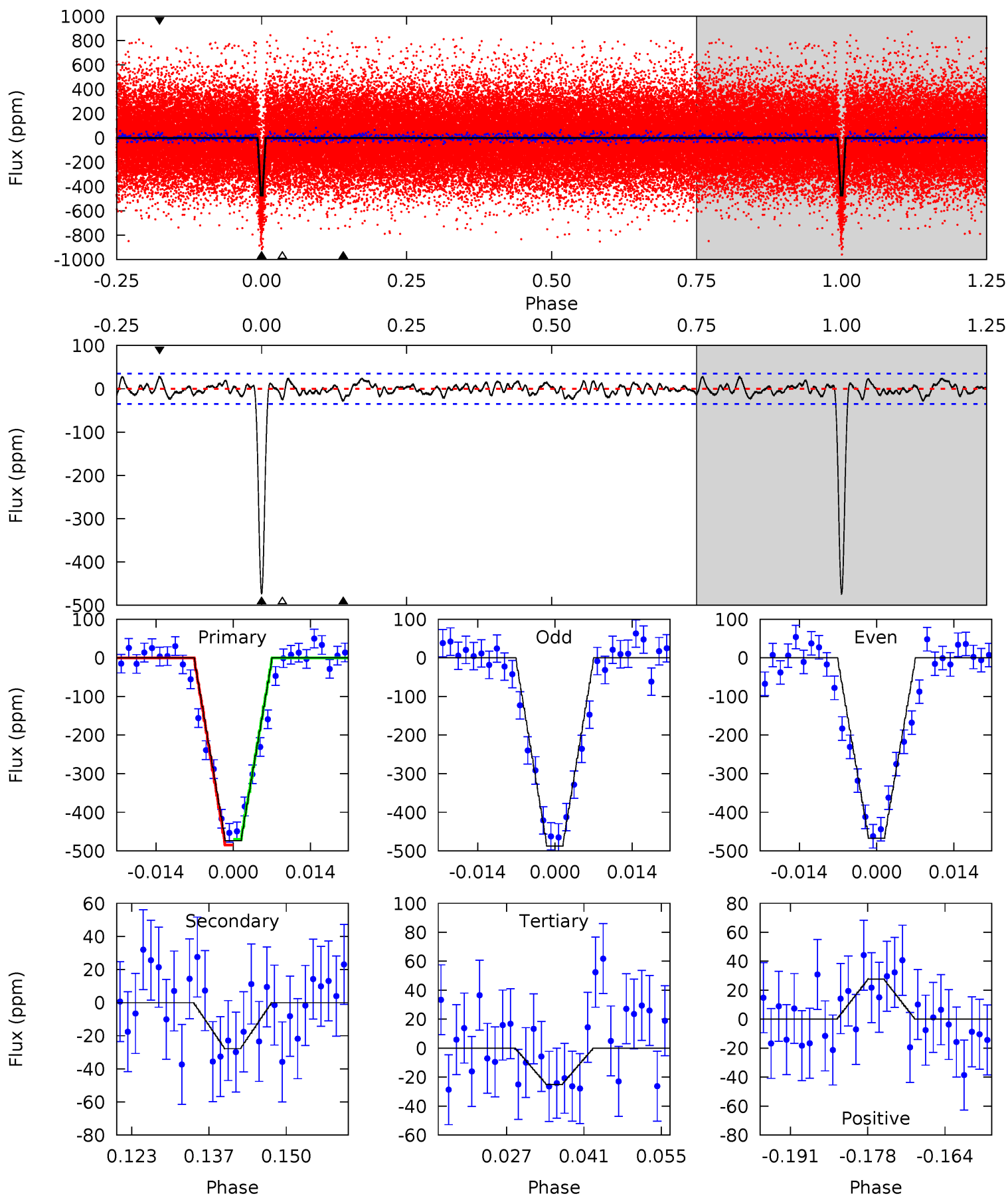
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
76.6	3.97	3.59	5.22	4.89	2.32	1.53	73.0	71.4	0.38	-1.26	2.07	0.89	0.06	1.35



Alt Model-Shift Uniqueness Test

006699368-01, P = 3.690329 Days, E = 127.849541 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
66.9	3.93	3.54	3.91	4.97	2.47	1.41	63.3	63.0	0.39	0.02	1.44	0.96	0.06	1.01



Stellar Parameters For KIC 006699368

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6120^{+181}_{-200}	$4.395^{+0.090}_{-0.210}$	$-0.180^{+0.300}_{-0.300}$	$1.054^{+0.334}_{-0.143}$	$1.003^{+0.153}_{-0.125}$	$1.207^{+0.486}_{-0.634}$
	+3%/-3%	+2%/-5%	+167%/-167%	+32%/-14%	+15%/-12%	+40%/-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 006699368-01 / KOI 1694.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-23 ± 6	$3.34^{+1.13}_{-1.07}$	1820^{+149}_{-102}	3092^{+410}_{-288}	$2.430^{+2.831}_{-1.120}$
Alt.	-28 ± 7	$2.76^{+1.06}_{-1.02}$	1809^{+138}_{-93}	3383^{+540}_{-369}	$4.236^{+7.240}_{-2.169}$

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 $A_{\text{obs}} \gg 1.0$

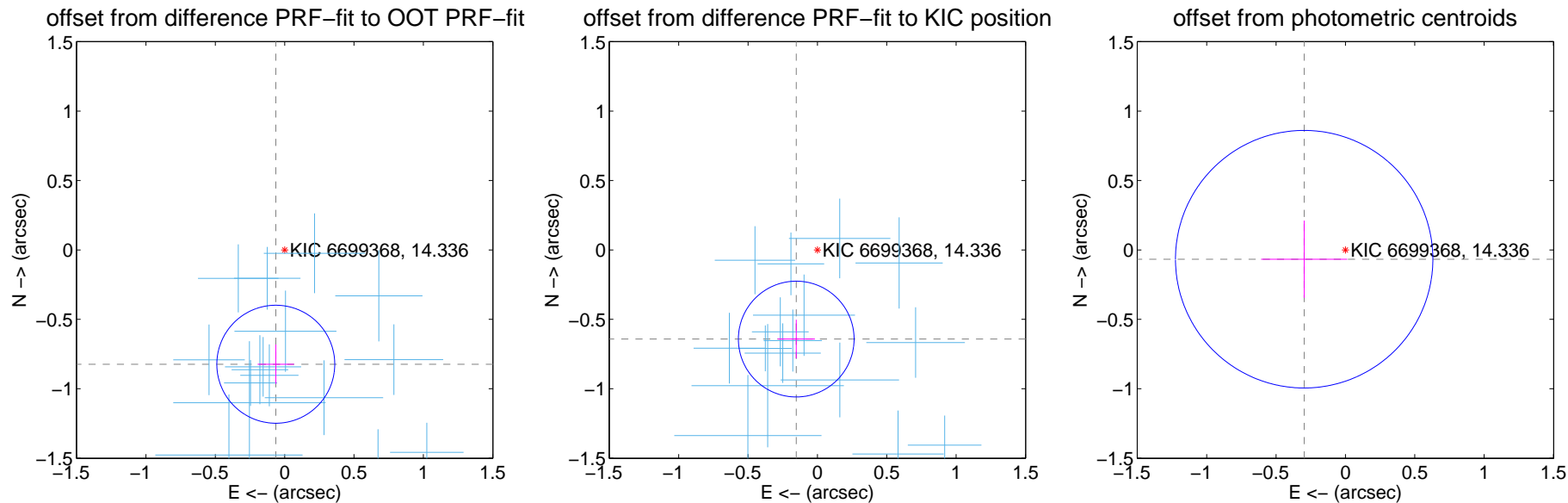
DV Centroid Data

Supplemental centroid analysis for 006699368-01. Kepler magnitude: 14.34. Transit SNR 44.55

There are 16 quarters with good PRF difference image offsets

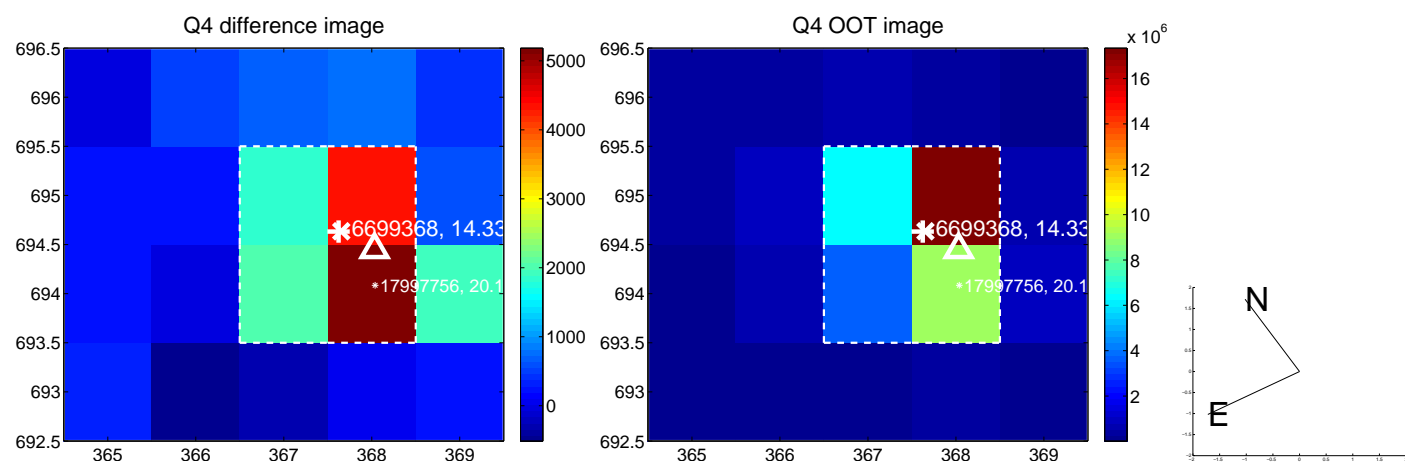
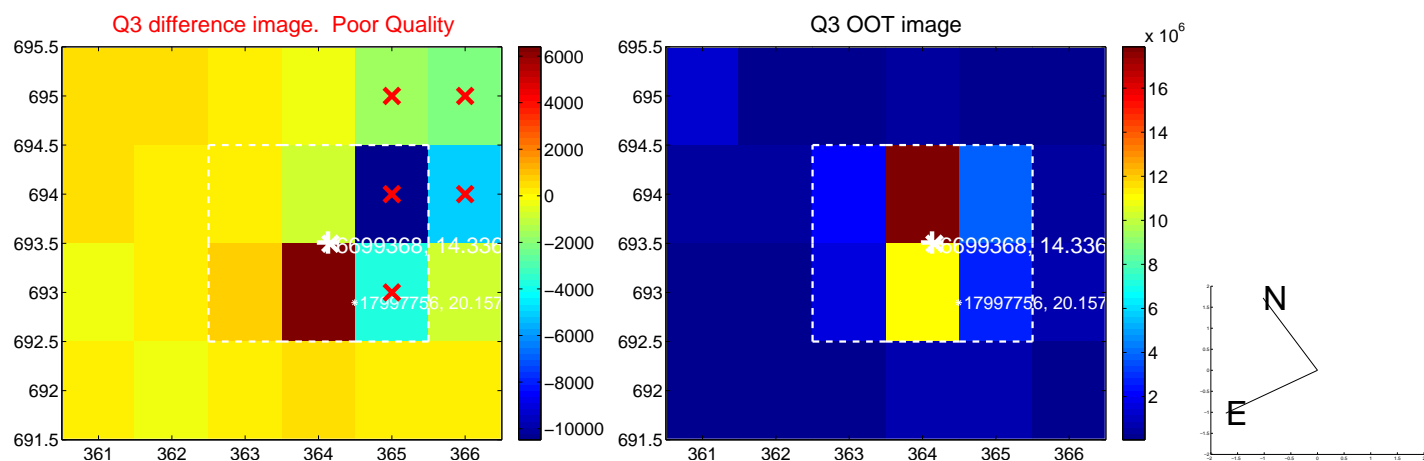
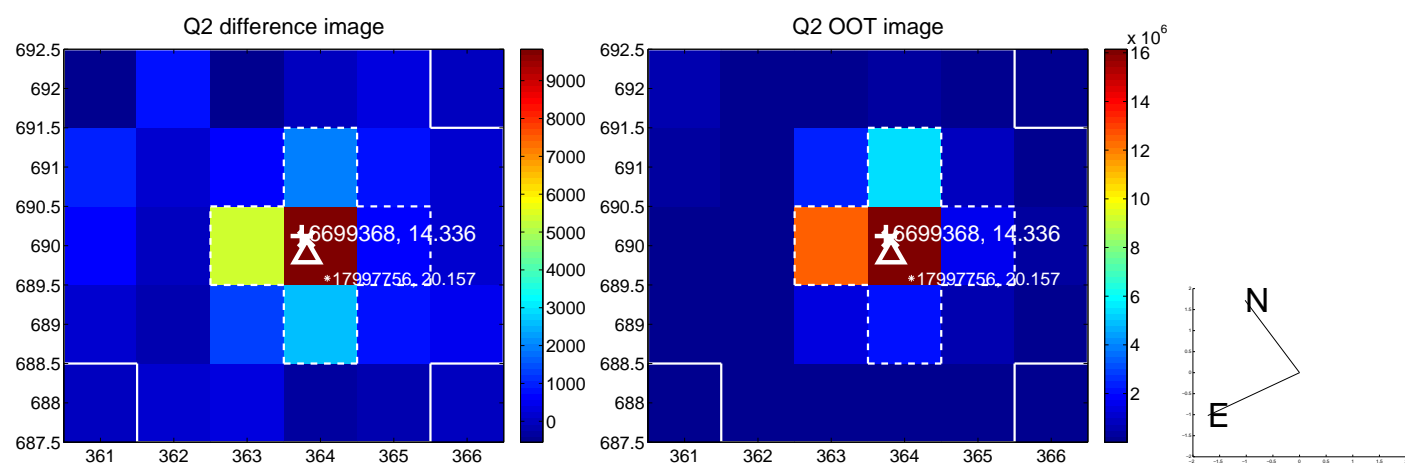
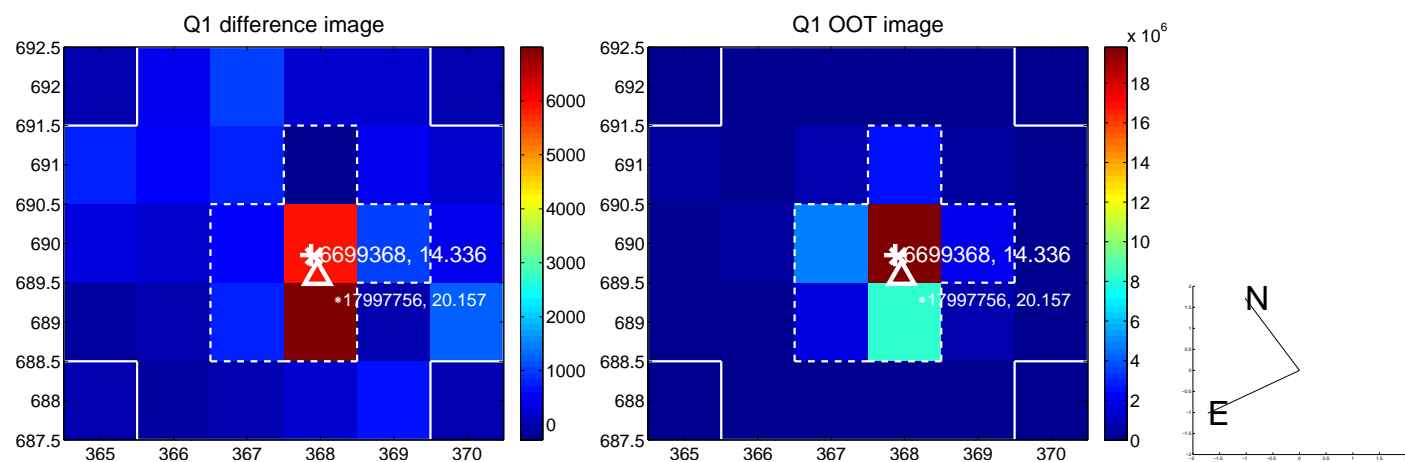
The direct PRF centroid is offset from the target star catalog position by about 0.16 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.826 ± 0.142	5.83	0.064 ± 0.131	-0.823 ± 0.142
PRF-fit source offset from KIC position	0.660 ± 0.139	4.75	0.153 ± 0.134	-0.642 ± 0.139
photometric centroid source offset	0.30 ± 0.31	0.99	0.30 ± 0.31	-0.07 ± 0.28

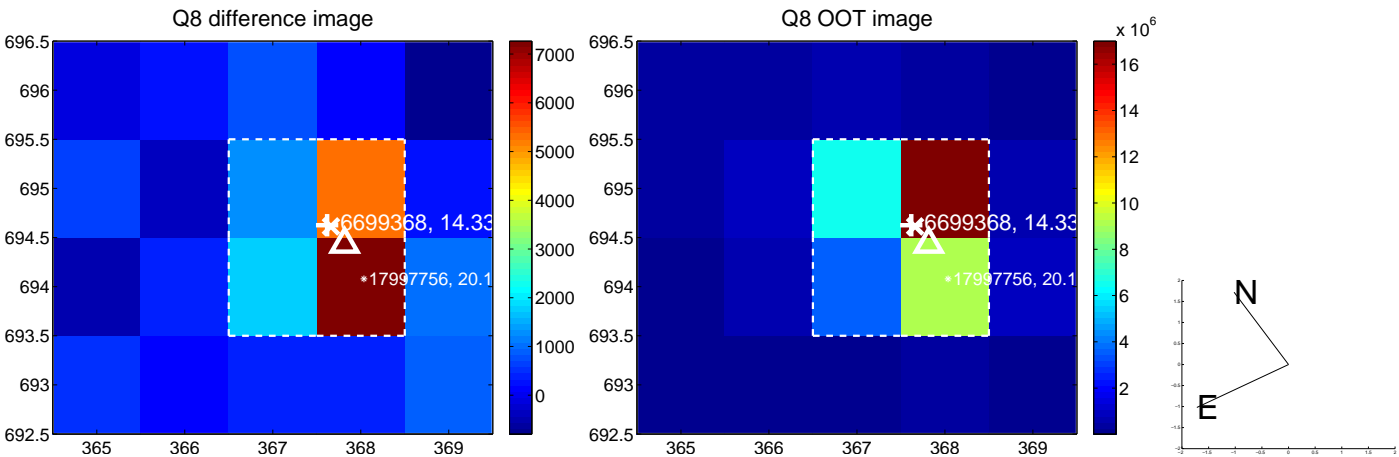
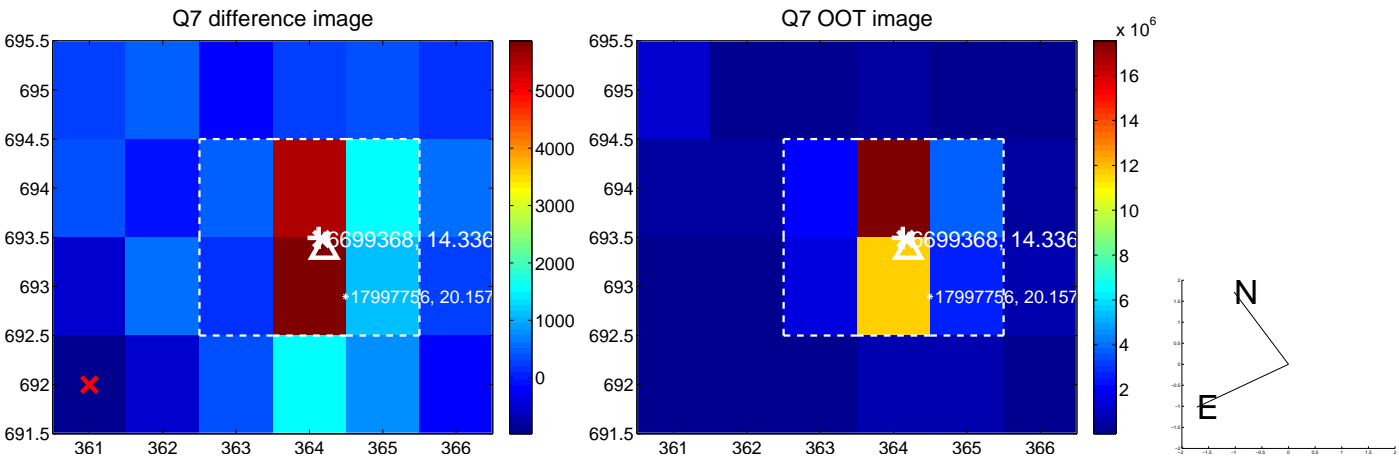
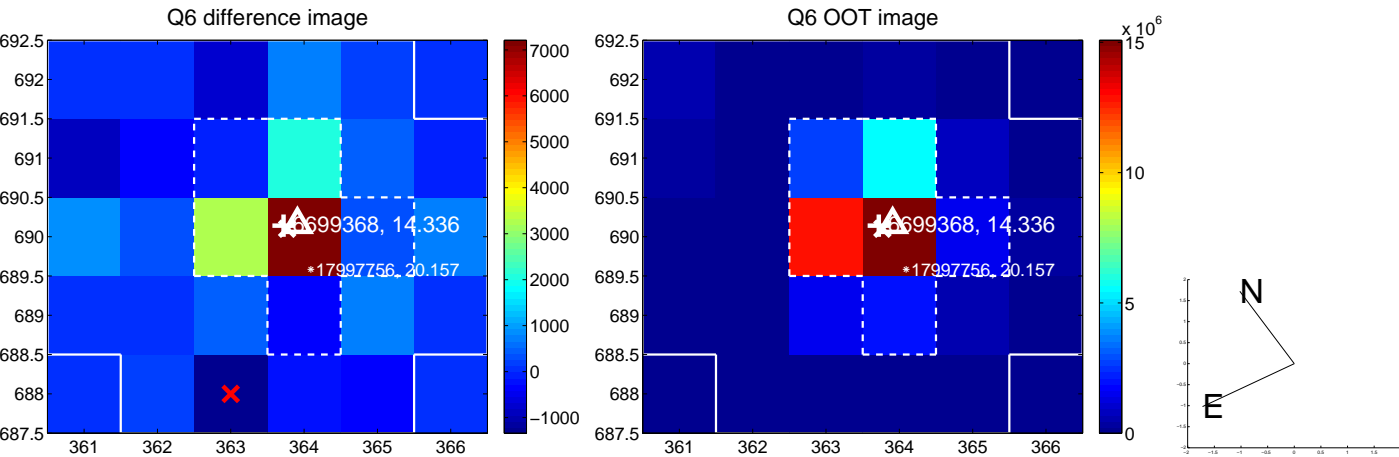
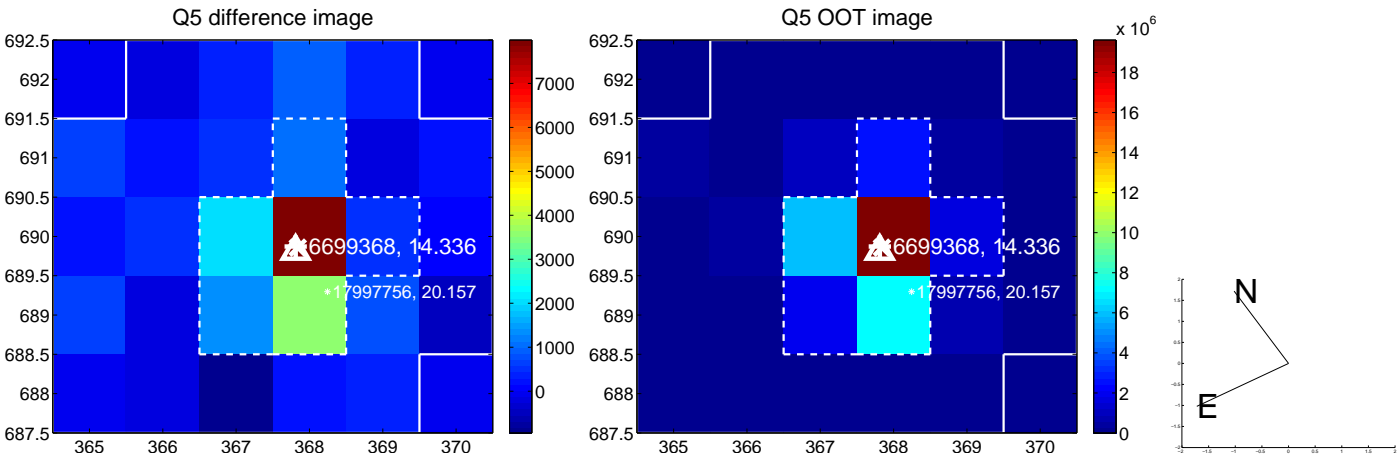


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

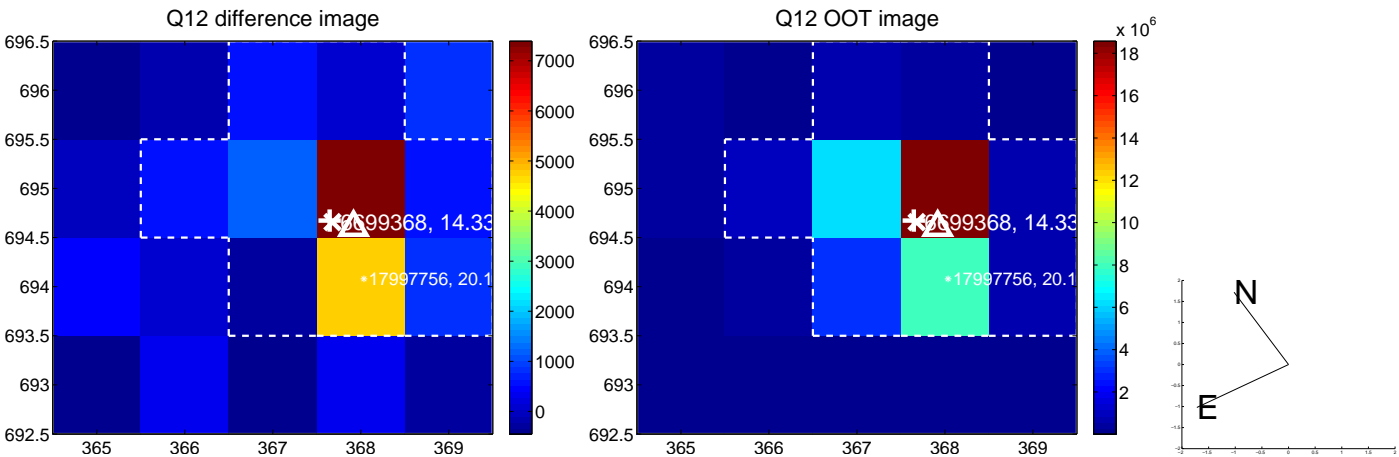
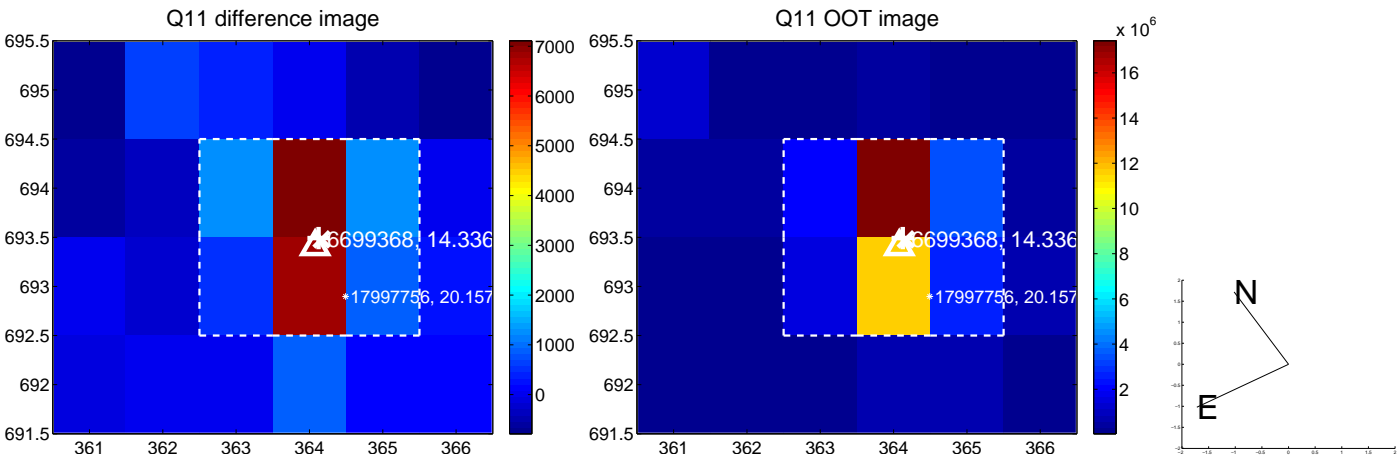
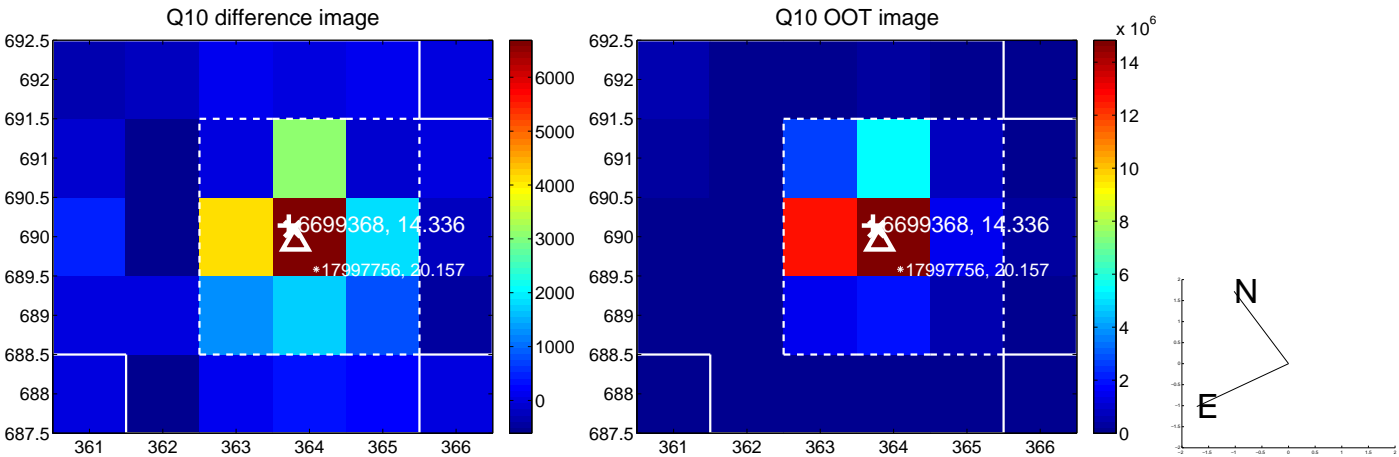
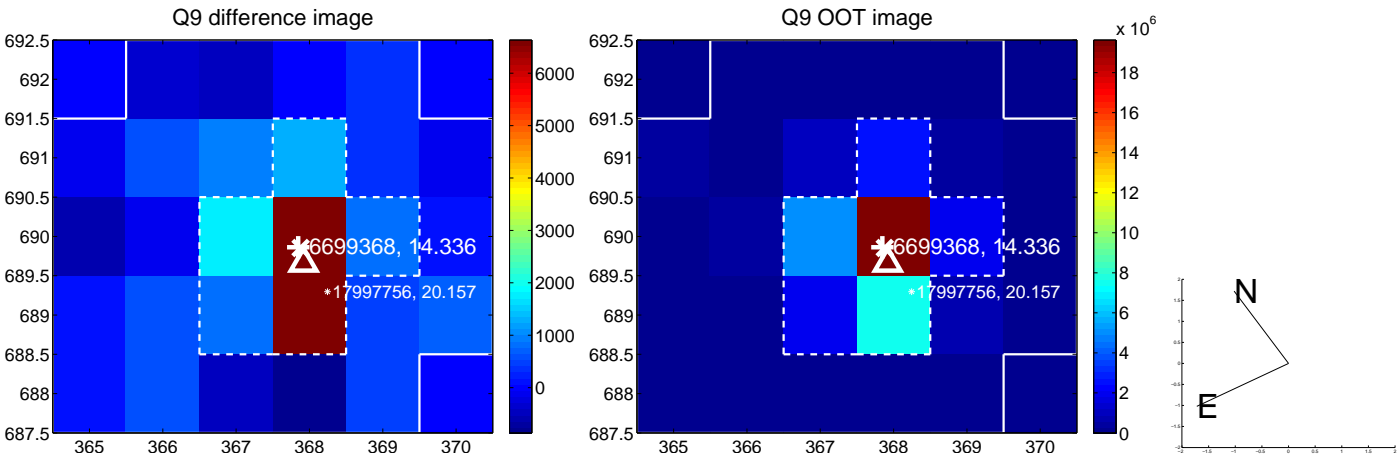
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



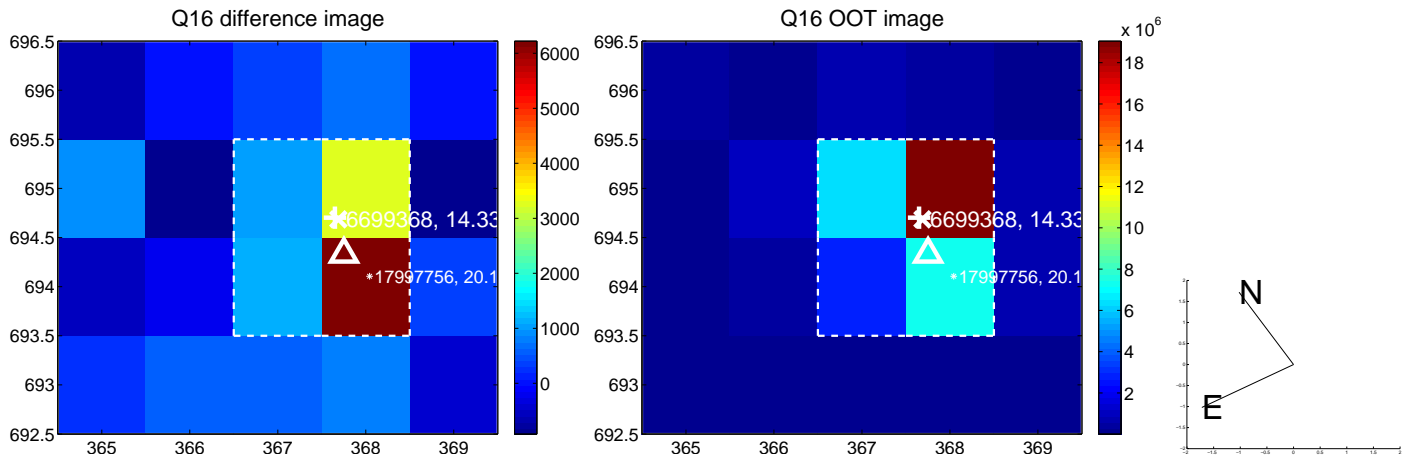
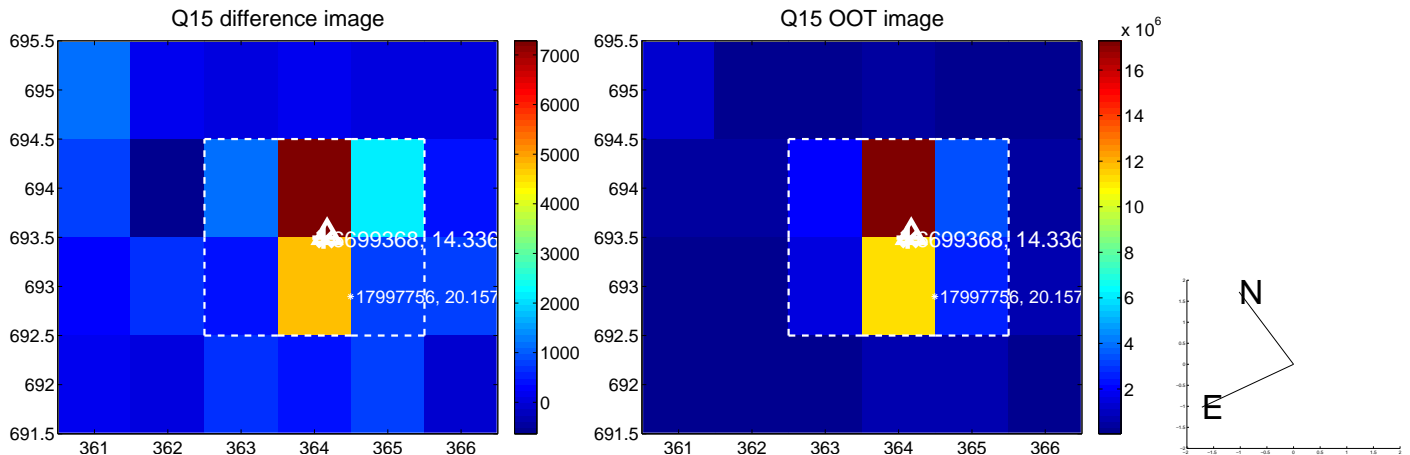
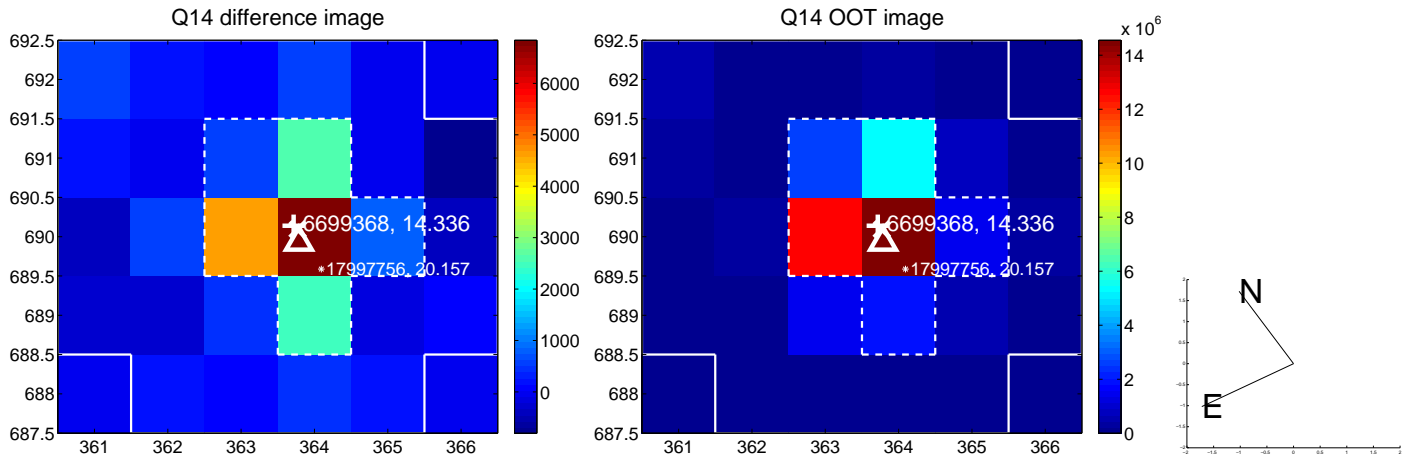
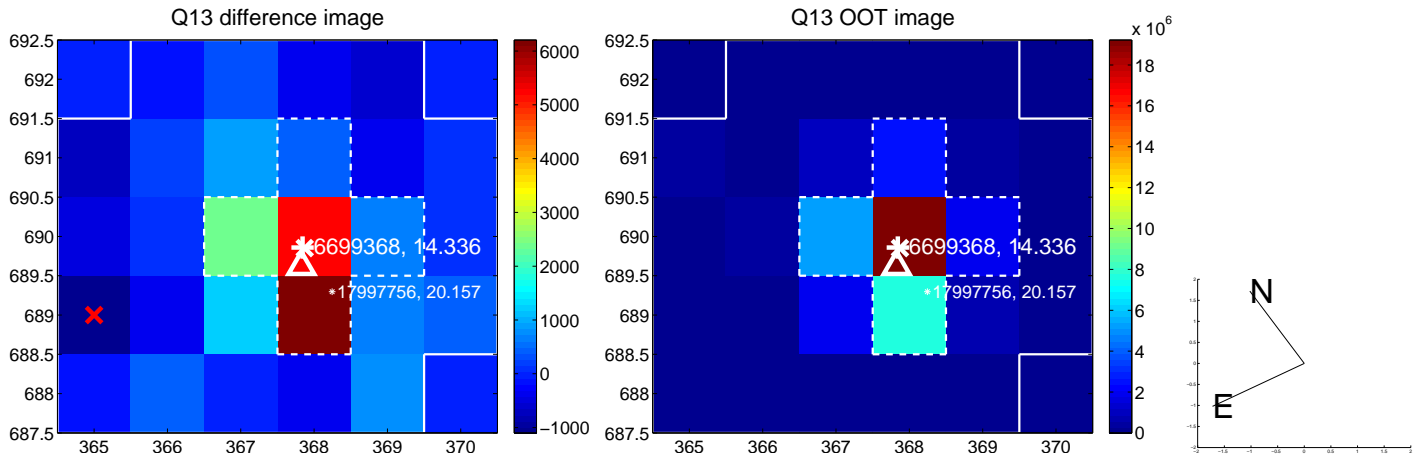
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



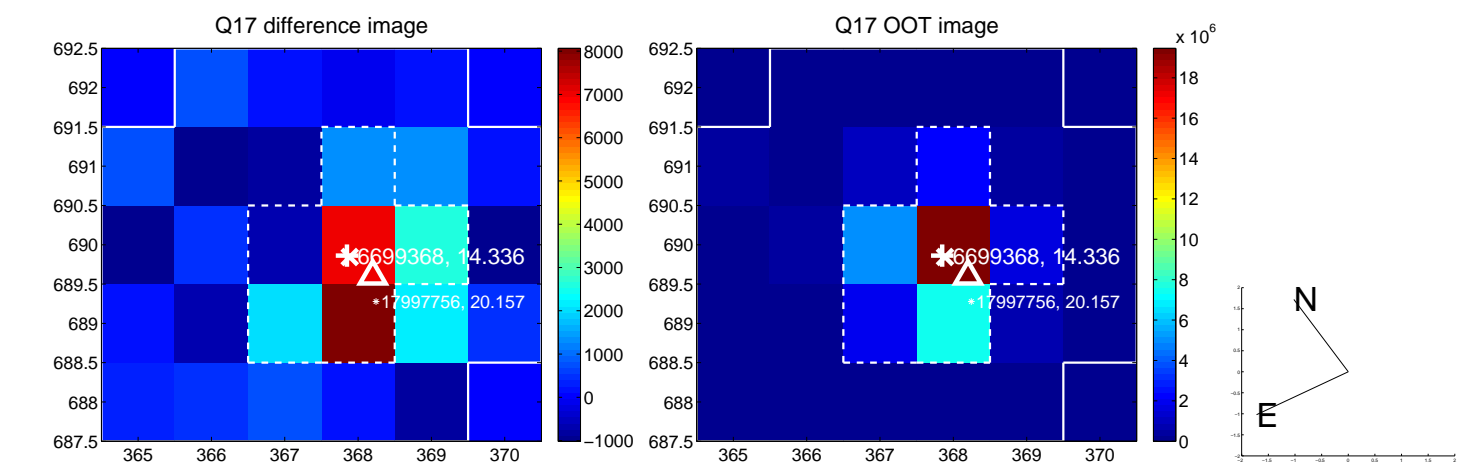
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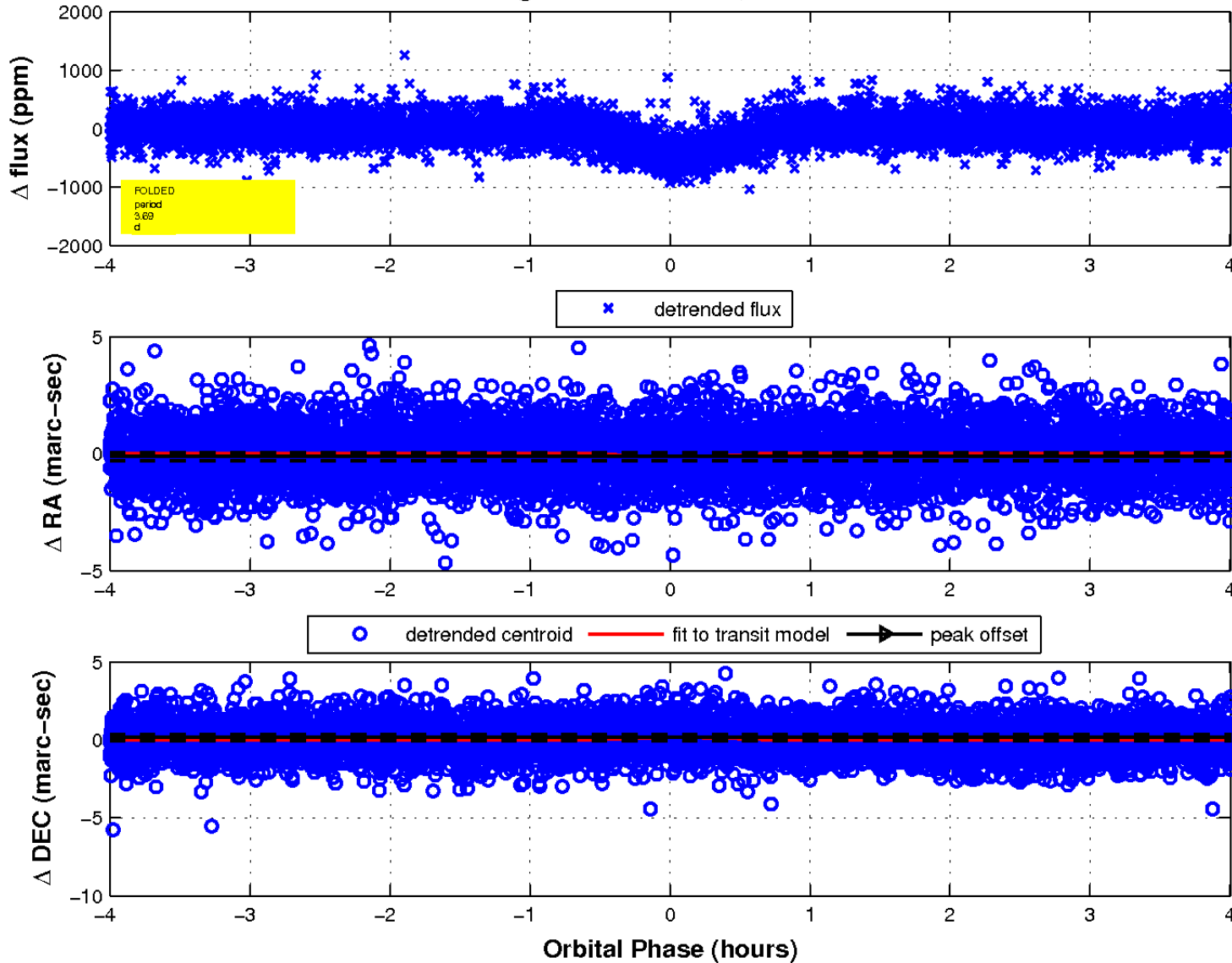
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fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

