

KIC 003765771

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})
003765771-01	OBS	1189.01	2.783878	133.229121	841.7	2.378	77.5	80.4	2.15	6028	8.51	3310.87

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003765771-01	OBS	FP	0.00	0	1	1	0	DEPTH_ODDEVEN_ALT—MOD_ODDEVEN_DV—MOD_ODDEVEN_ALT—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.

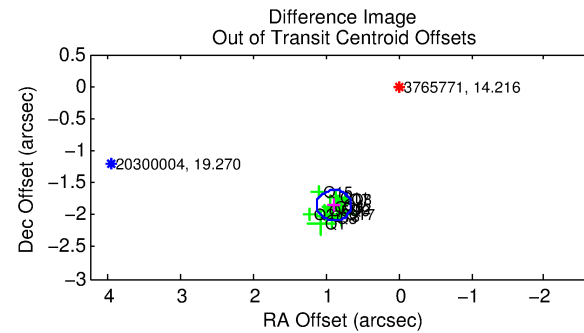
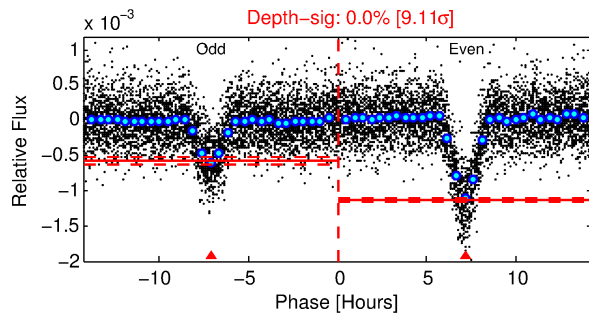
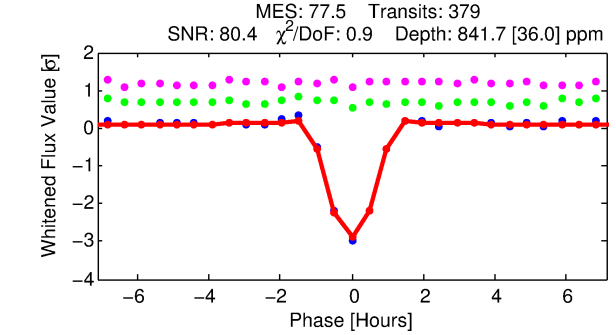
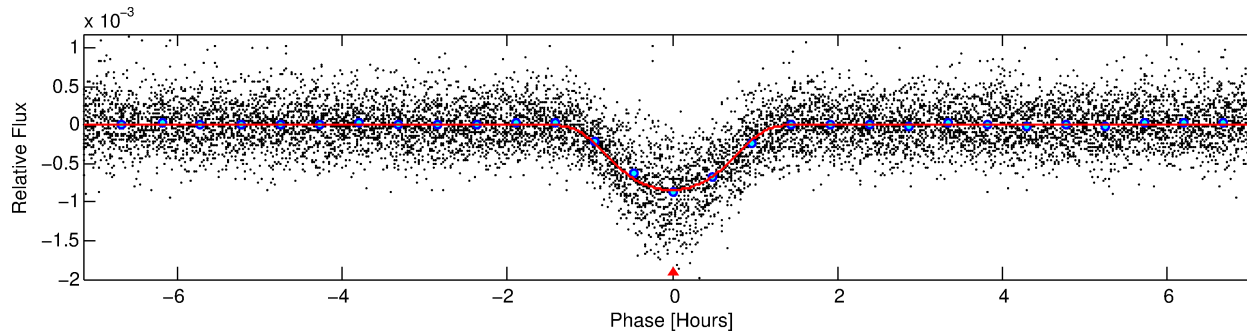
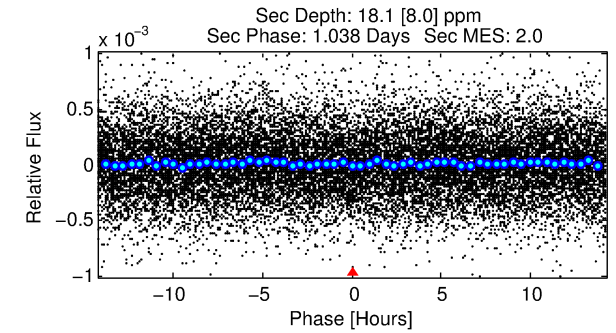
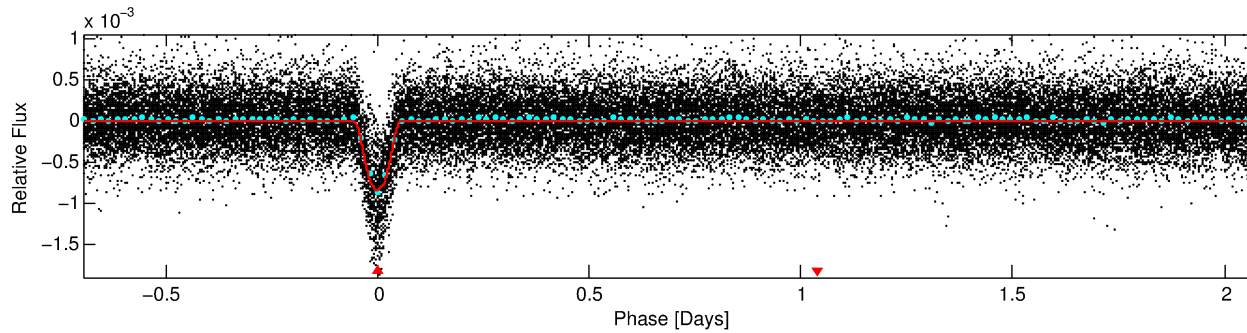
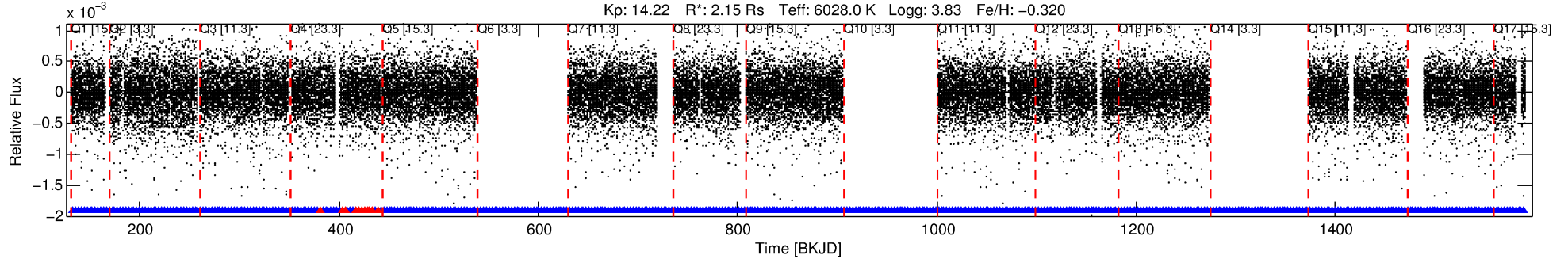
Ephemeris Match Information For 003765771-01

No Significant Match Found

DV One-Page Summary

KIC: 3765771 Candidate: 1 of 1 Period: 2.784 d
KOI: K01189.01 Corr: 0.990

Kp: 14.22 R*: 2.15 Rs Teff: 6028.0 K Logg: 3.83 Fe/H: -0.320



DV Fit Results:

Period = 2.78388 [0.00000] d
Epoch = 133.2291 [0.0005] BKJD
Rp/R* = 0.0363 [0.0030]
a/R* = 3.37 [0.18]
b = 0.97 [0.01]
Seff = 3310.87 [1277.62]
Teq = 1934 [187] K
Rp = 8.51 [2.49] Re
a = 0.0406 [0.0102] AU
Ag = 0.23 [0.14] [-5.63σ]
Teffp = 2063 [244] K [0.42σ]

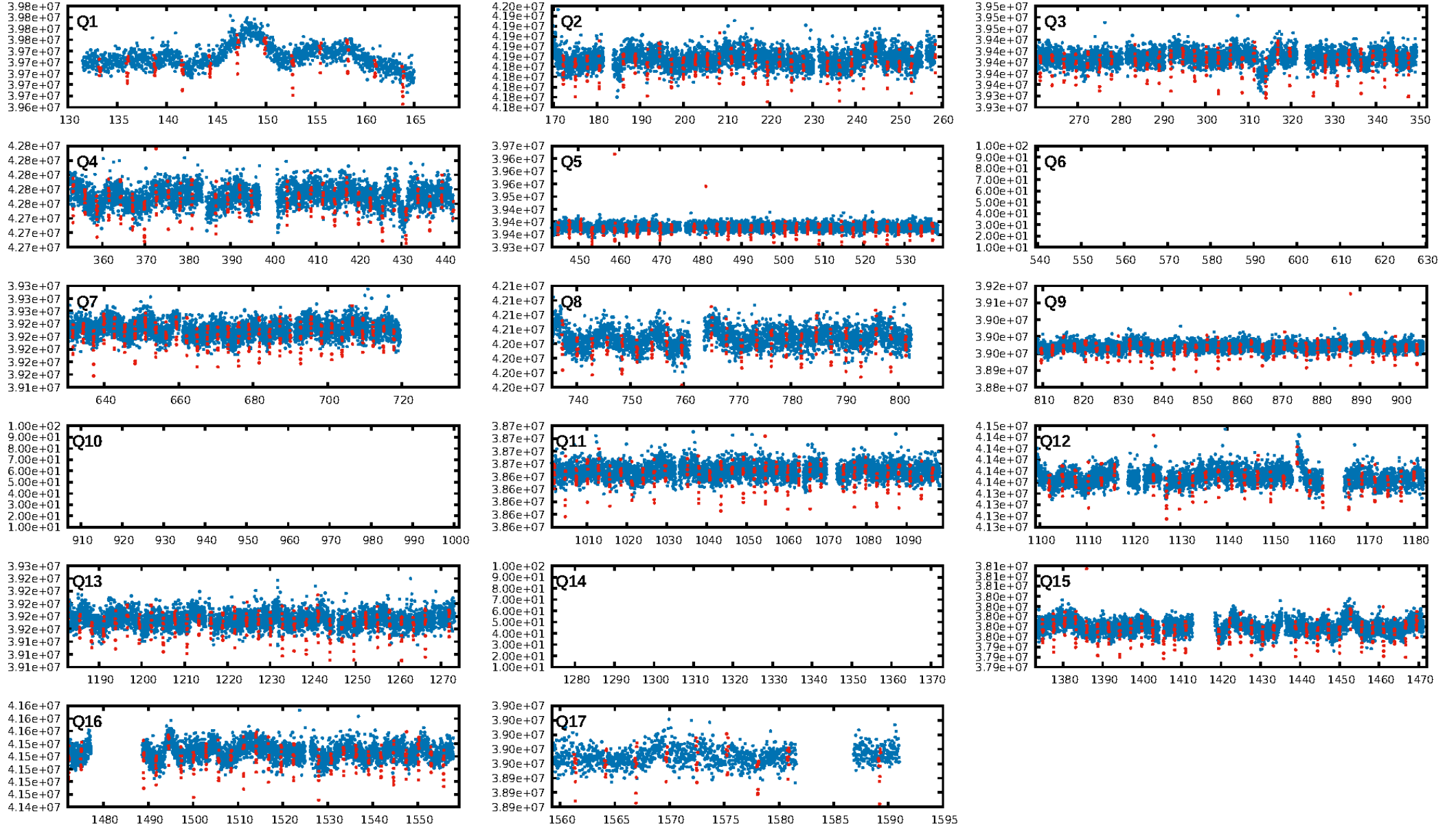
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 0.00e+00
RollingBand-fgt: 0.97 [347/358]
GhostDiagnostic-chr: 1.378
Centroid-sig: 0.0%
Centroid-so: 2.223 arcsec [13.86σ]
OotOffset-rm: 2.057 arcsec [26.09σ]
KicOffset-rm: 2.116 arcsec [25.79σ]
OotOffset-st: 1/4/4/5 [14]
KicOffset-st: 1/4/4/5 [14]
DiffImageQuality-fgm: 1.00 [14/14]
DiffImageOverlap-fno: 1.00 [14/14]

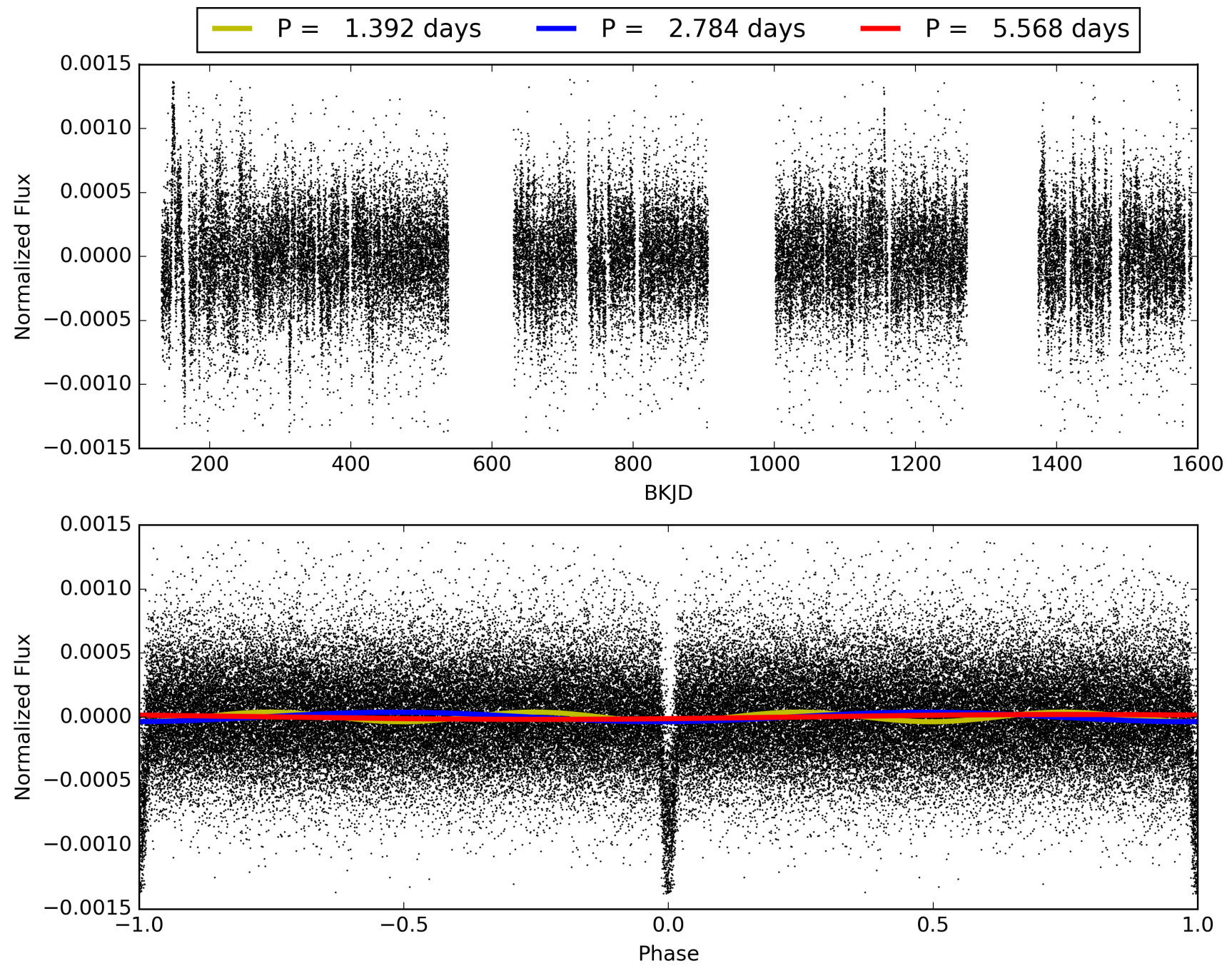
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 23:11:40 Z

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

TCE 003765771-01, PDC Light Curves

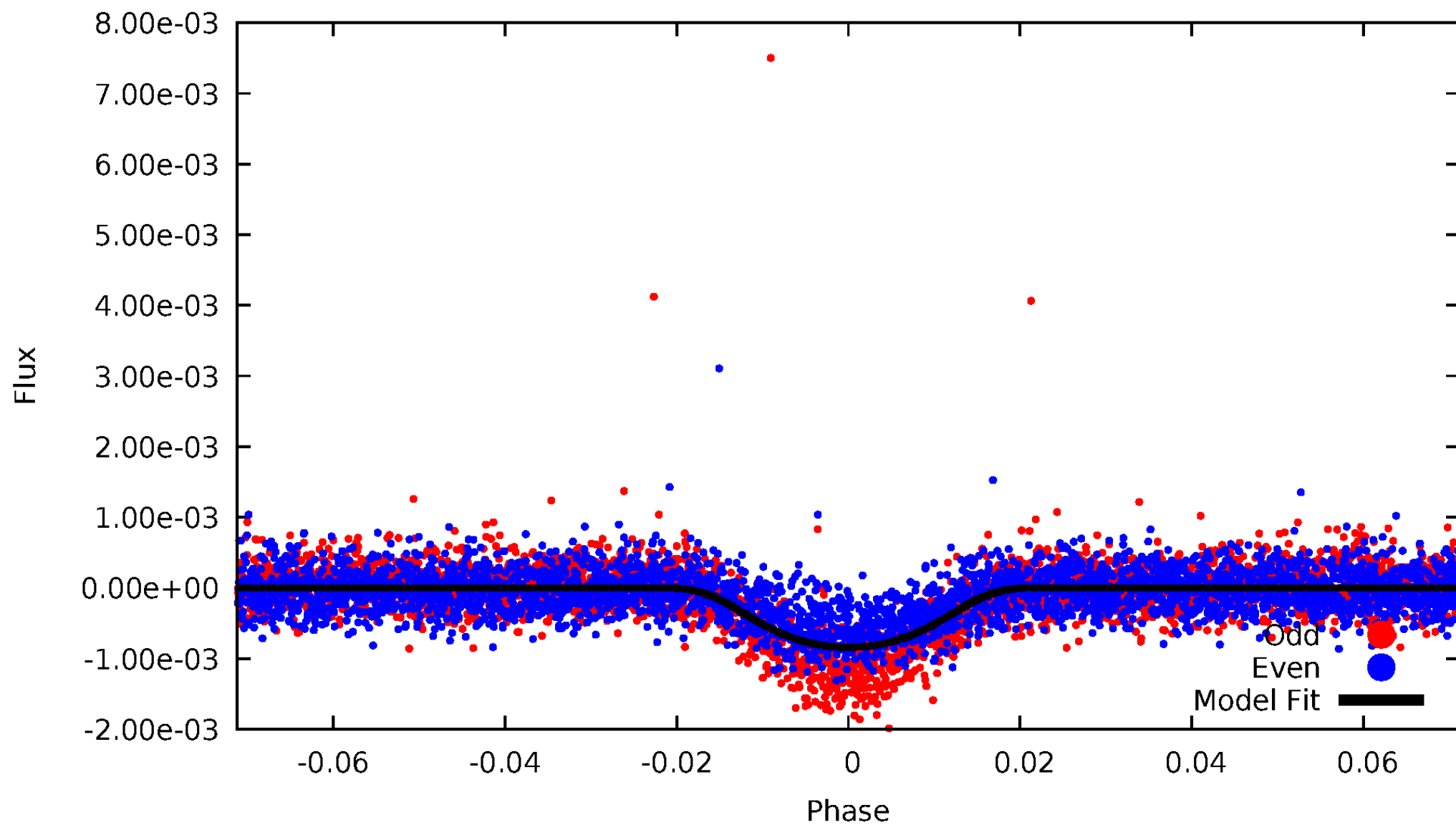


TCE 003765771-01



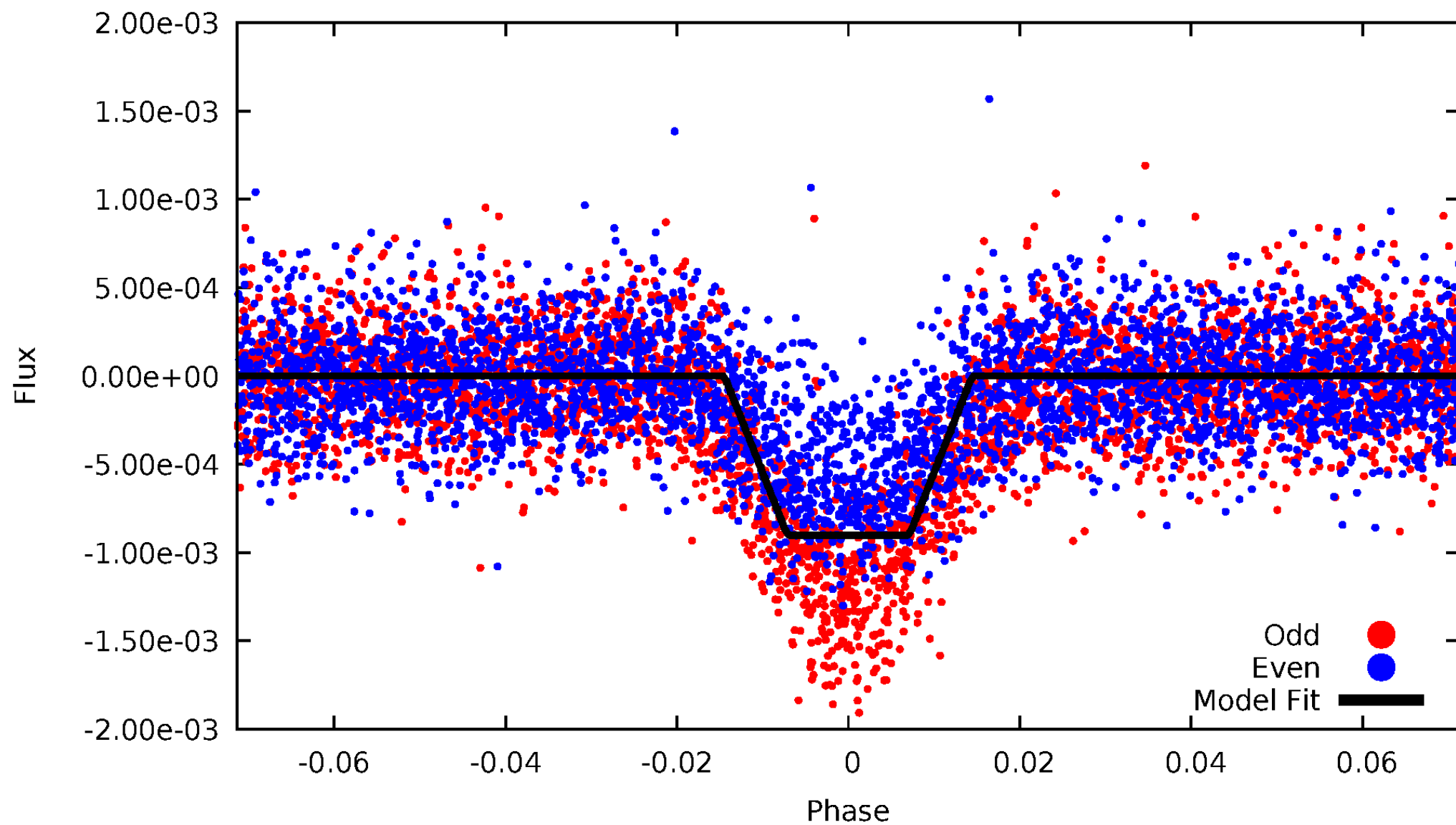
DV Odd/Even

TCE 003765771-01



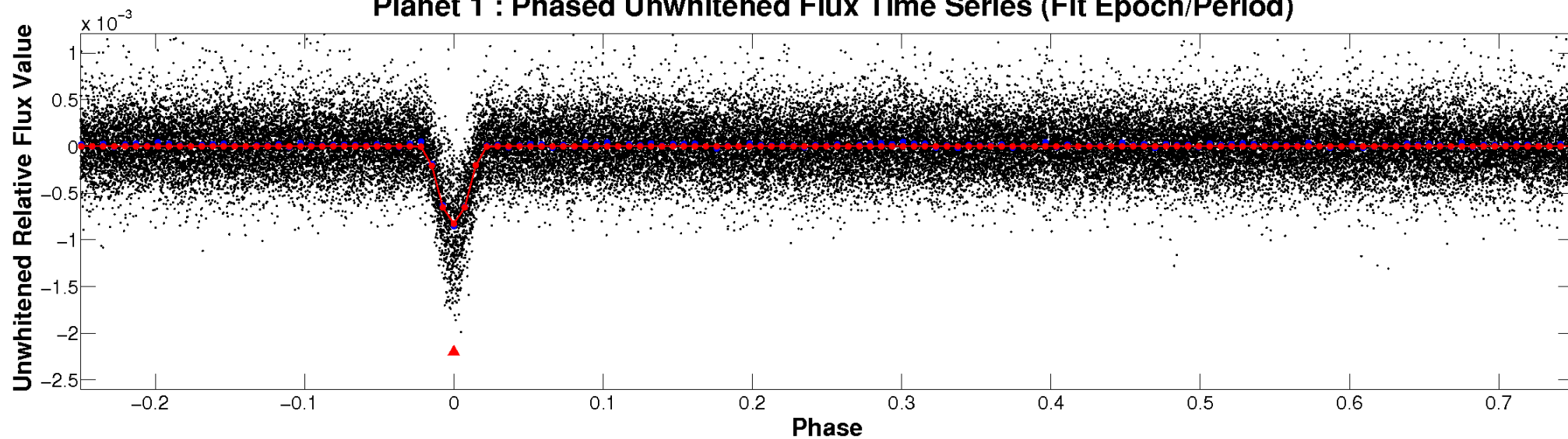
ALT Odd/Even

TCE 003765771-01

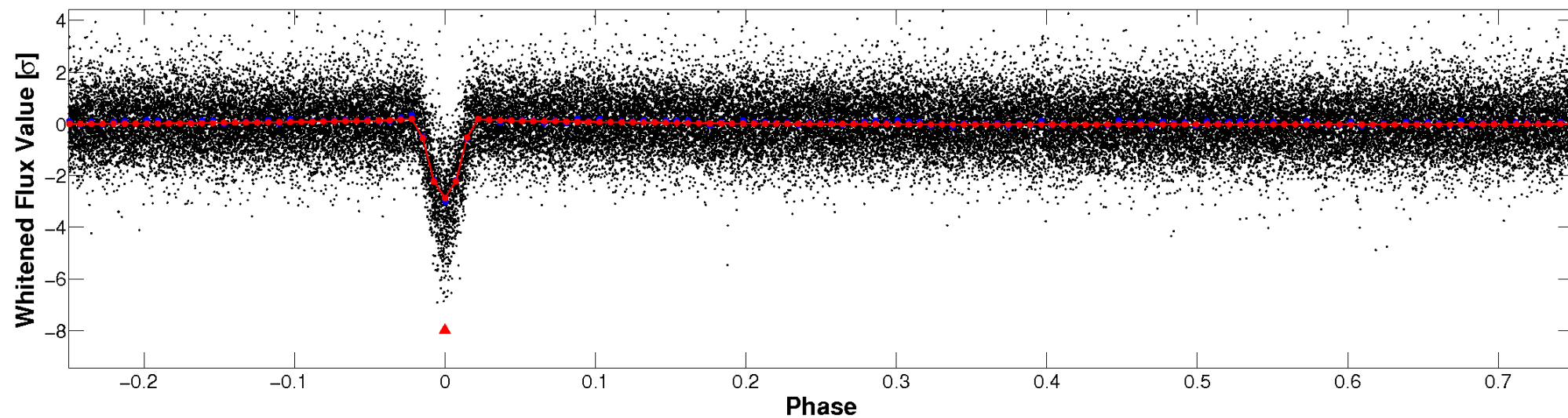


Non-Whitened Vs. Whitened Light Curve

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

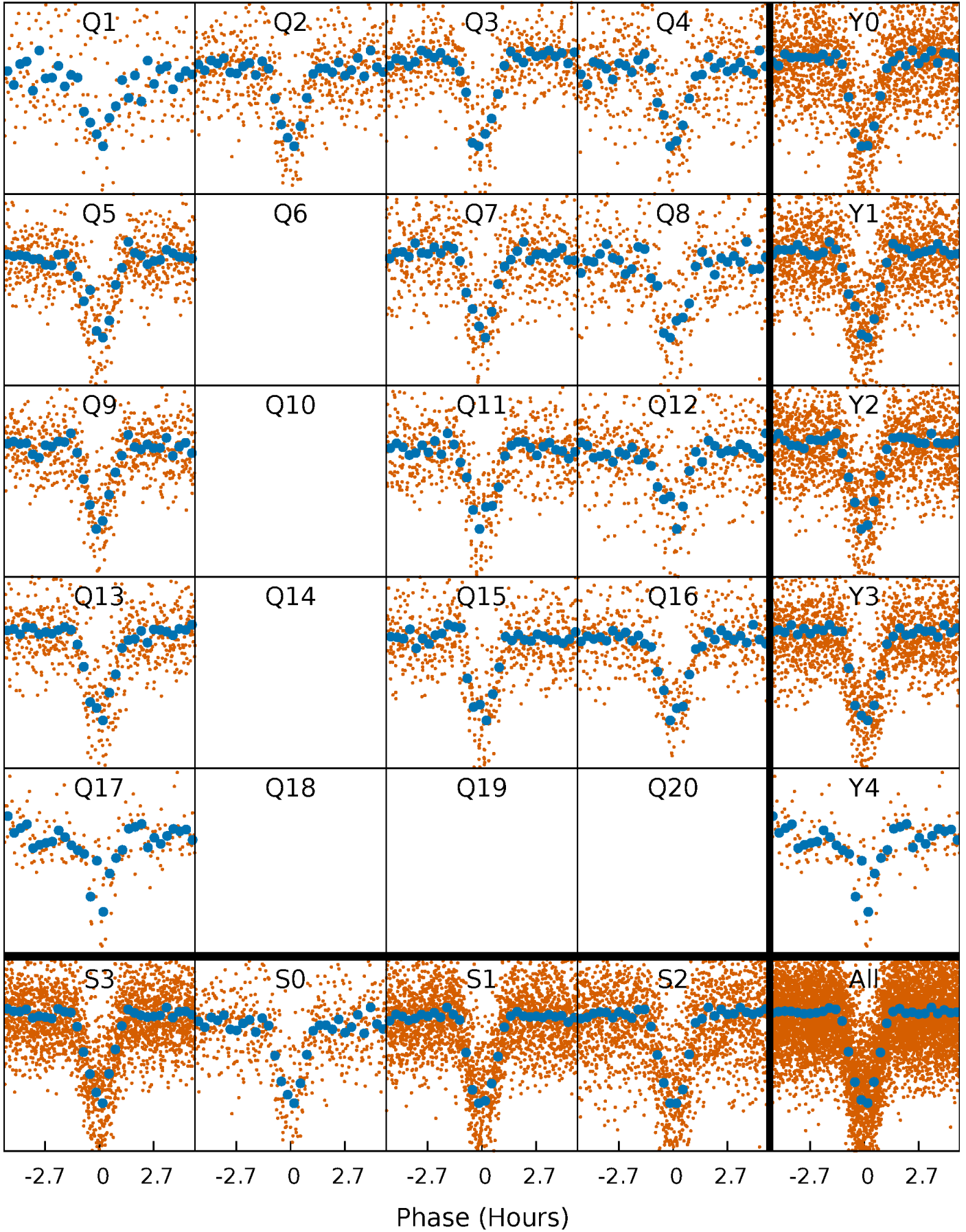


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



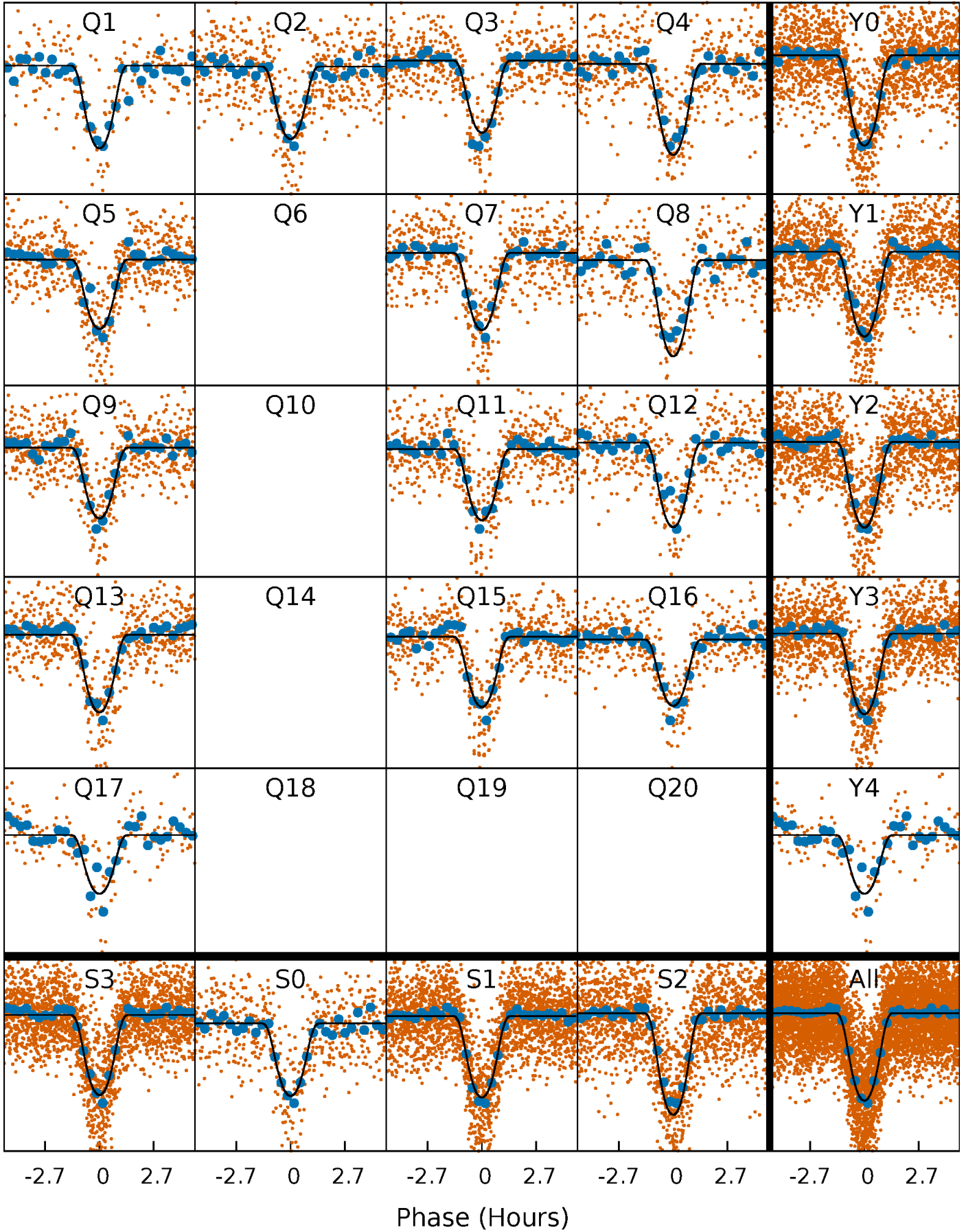
PDC Quarter-Phased Transit Curves

TCE 003765771-01 P= 2.783878 Days $T_0=133.229121$ (BKJD)



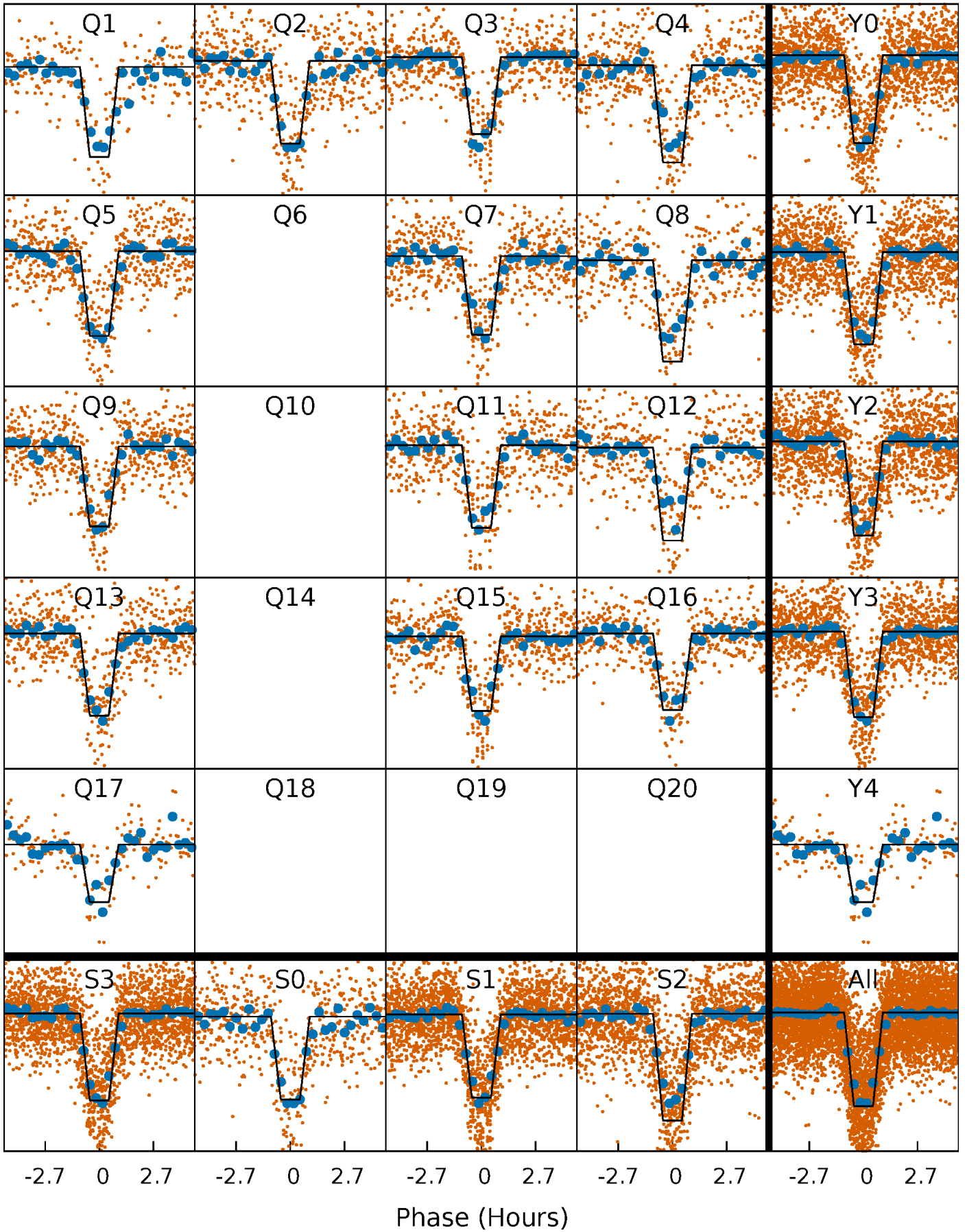
DV Quarter-Phased Transit Curves

TCE 003765771-01 P= 2.783878 Days $T_0=133.229121$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

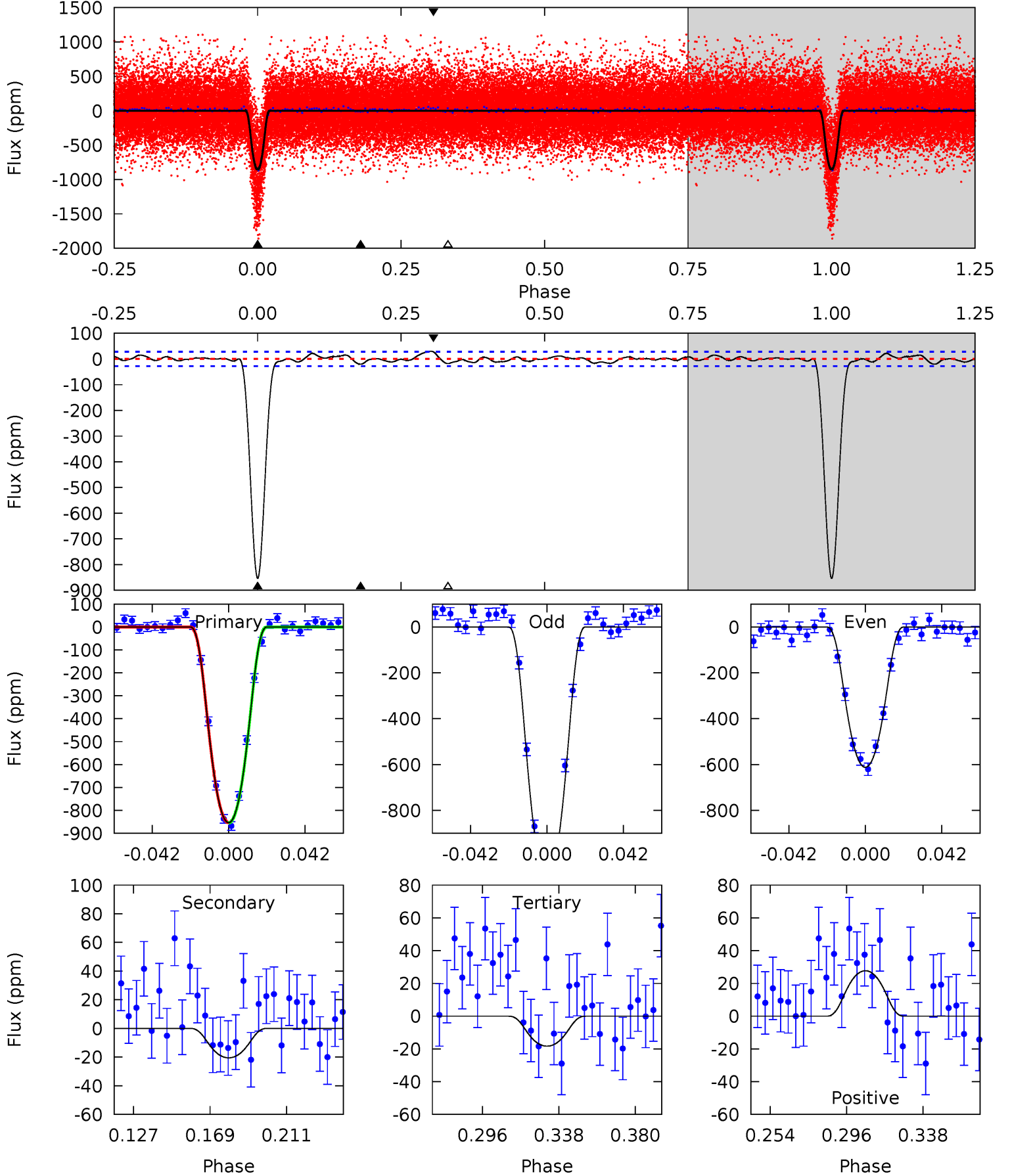
TCE 003765771-01 P= 2.783888 Days $T_0=133.226767$ (BKJD)



DV Model-Shift Uniqueness Test

003765771-01, P = 2.783878 Days, E = 130.445243 Days

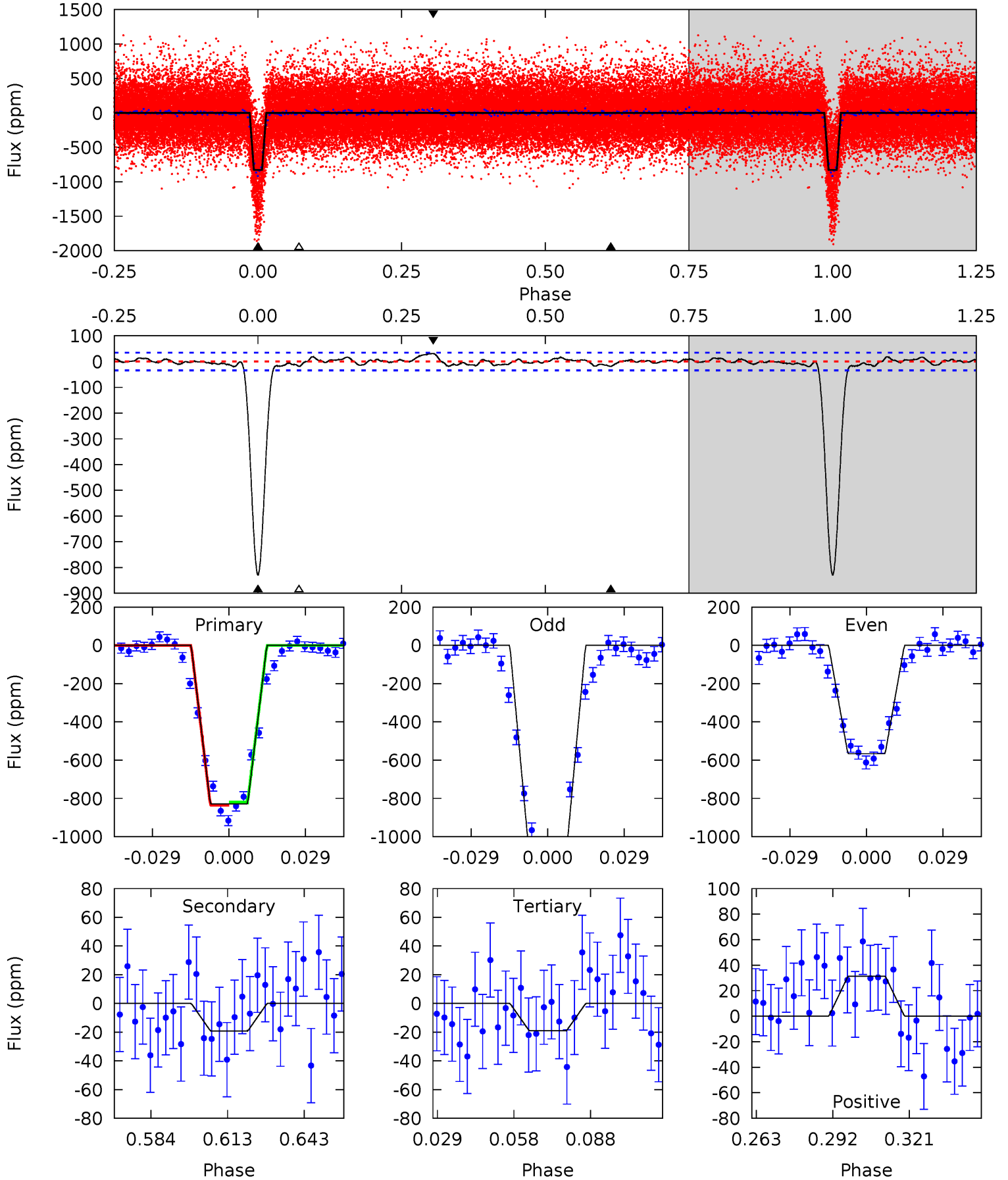
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
144.7	3.48	3.11	4.69	4.74	2.03	1.53	141.6	140.0	0.37	-1.22	41.2	1.04	0.03	0.10



Alt Model-Shift Uniqueness Test

003765771-01, P = 2.783888 Days, E = 130.442879 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
116.3	2.69	2.67	4.41	4.82	2.18	1.37	113.6	111.9	0.02	-1.71	36.6	1.04	0.04	1.10



Stellar Parameters For KIC 003765771

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6028^{+81}_{-81}	$3.835^{+0.217}_{-0.093}$	$-0.320^{+0.150}_{-0.150}$	$2.147^{+0.325}_{-0.603}$	$1.148^{+0.106}_{-0.171}$	$0.163^{+0.210}_{-0.048}$
	+1%/-1%	+6%/-2%	+47%/-47%	+15%/-28%	+9%/-15%	+129%/-30%
Source	SPE74	SPE74	SPE74	DSEP		

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

Secondary Eclipse Parameters for KIC 003765771-01 / KOI 1189.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-21 ± 6	$8.23^{+1.25}_{-1.24}$	2683^{+122}_{-181}	-2122^{+4604}_{-478}	$0.277^{+0.129}_{-0.094}$
Alt.	-19 ± 7	$6.86^{+1.14}_{-1.07}$	2681^{+123}_{-165}	2394^{+424}_{-4917}	$0.364^{+0.204}_{-0.160}$

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

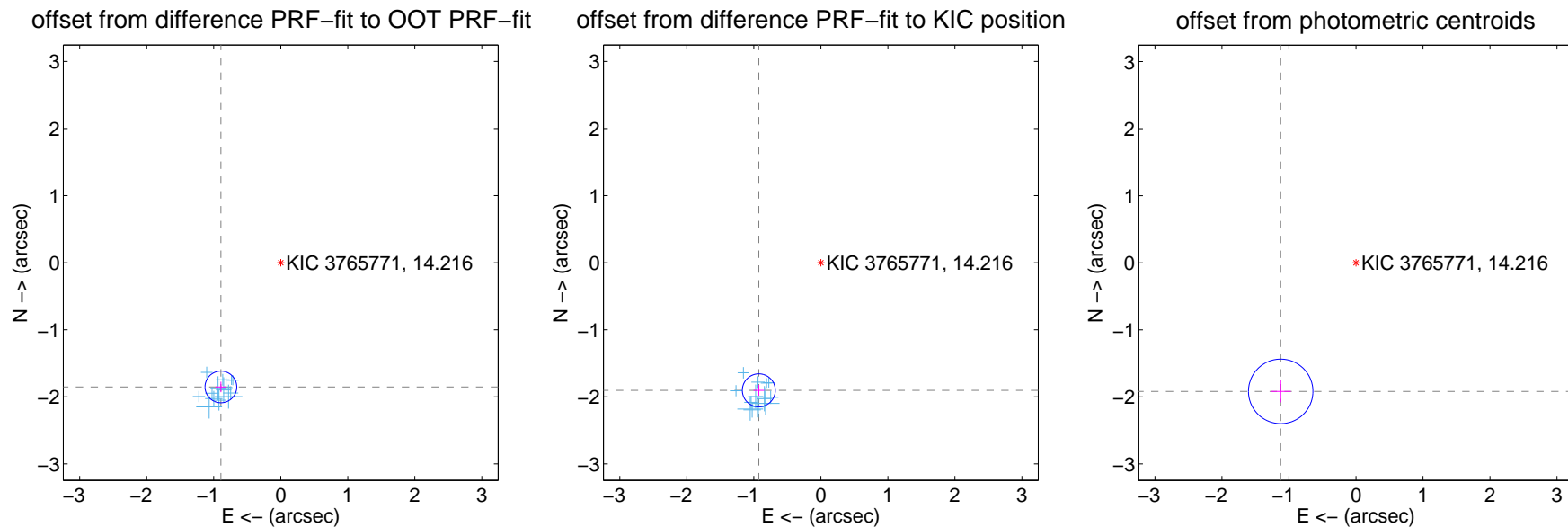
DV Centroid Data

Supplemental centroid analysis for 003765771-01. Kepler magnitude: 14.22. Transit SNR 80.39

There are 14 quarters with good PRF difference image offsets

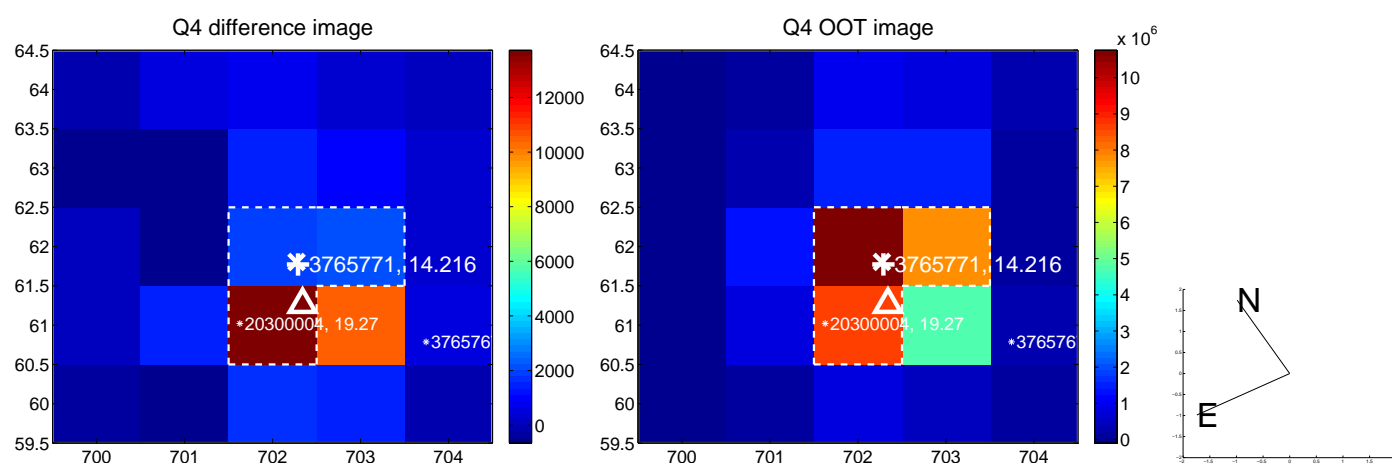
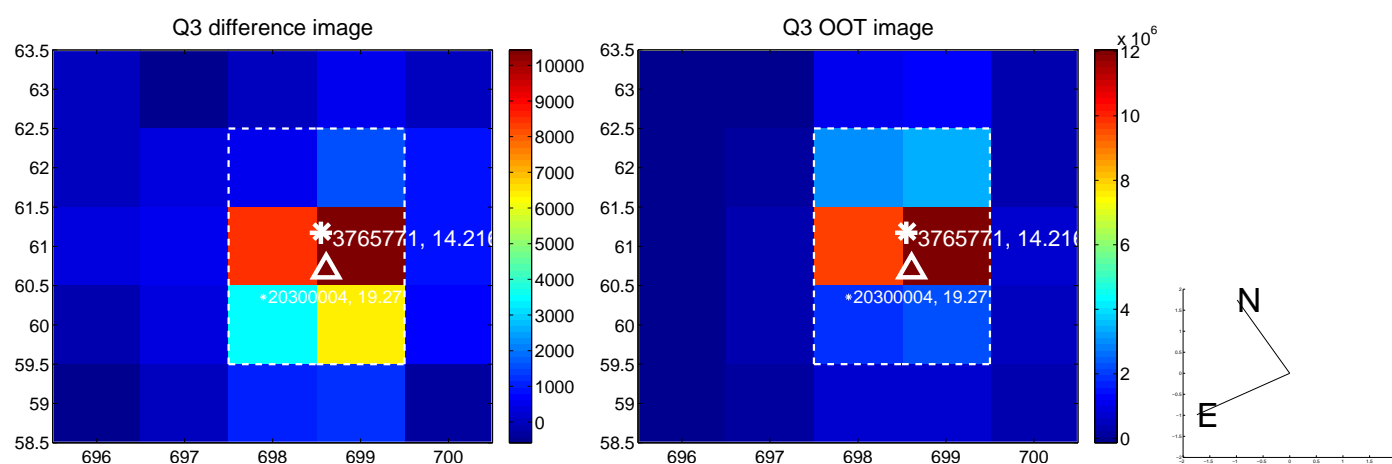
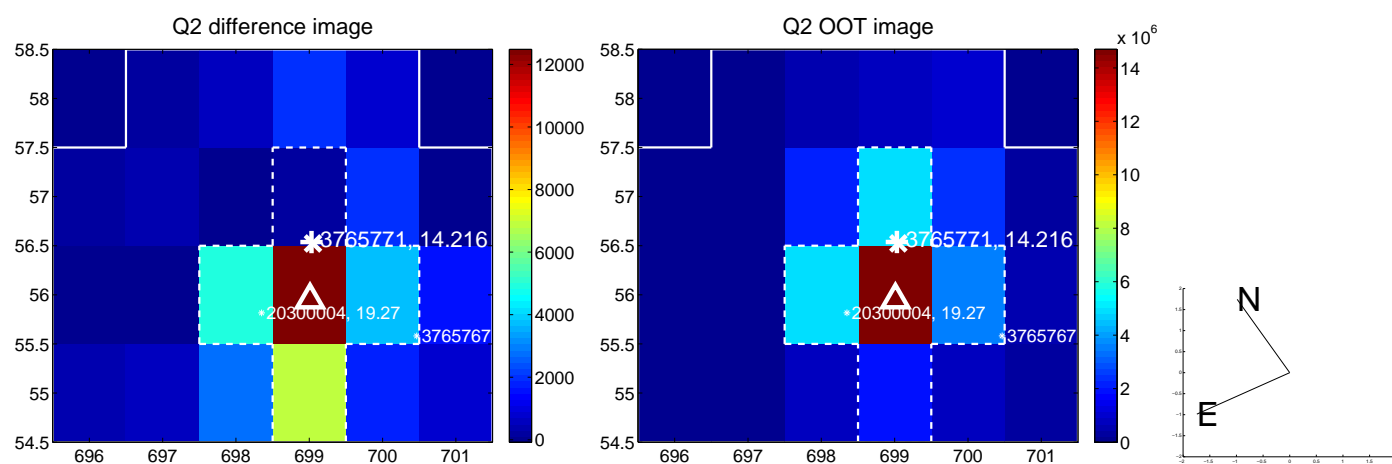
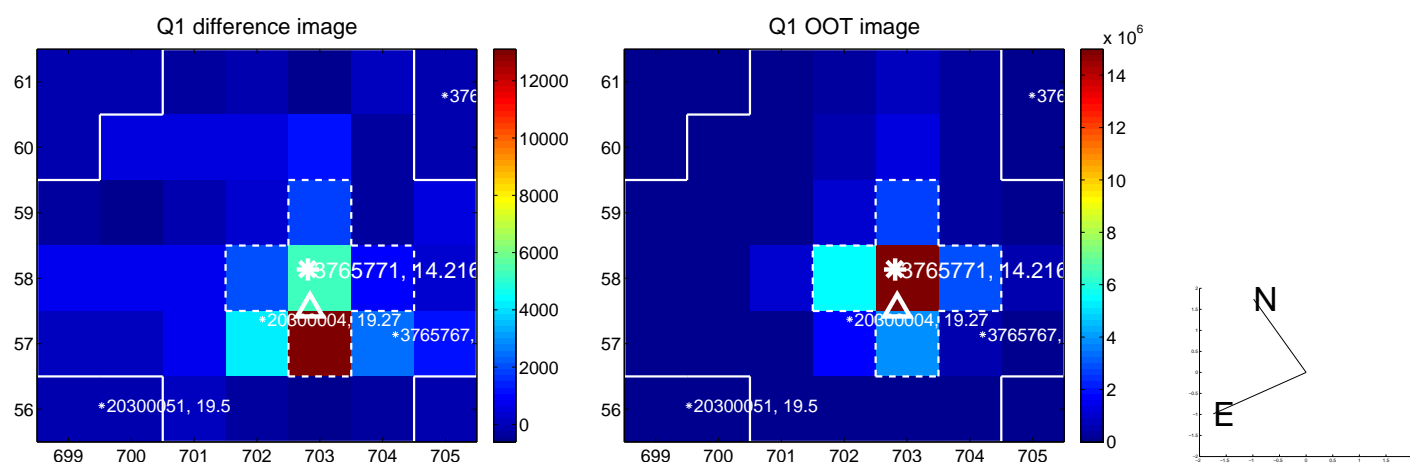
The direct PRF centroid is offset from the target star catalog position by about 0.11 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.057 ± 0.079	26.09	0.893 ± 0.081	-1.852 ± 0.078
PRF-fit source offset from KIC position	2.116 ± 0.082	25.79	0.926 ± 0.080	-1.903 ± 0.083
photometric centroid source offset	2.22 ± 0.16	13.86	1.12 ± 0.15	-1.92 ± 0.16

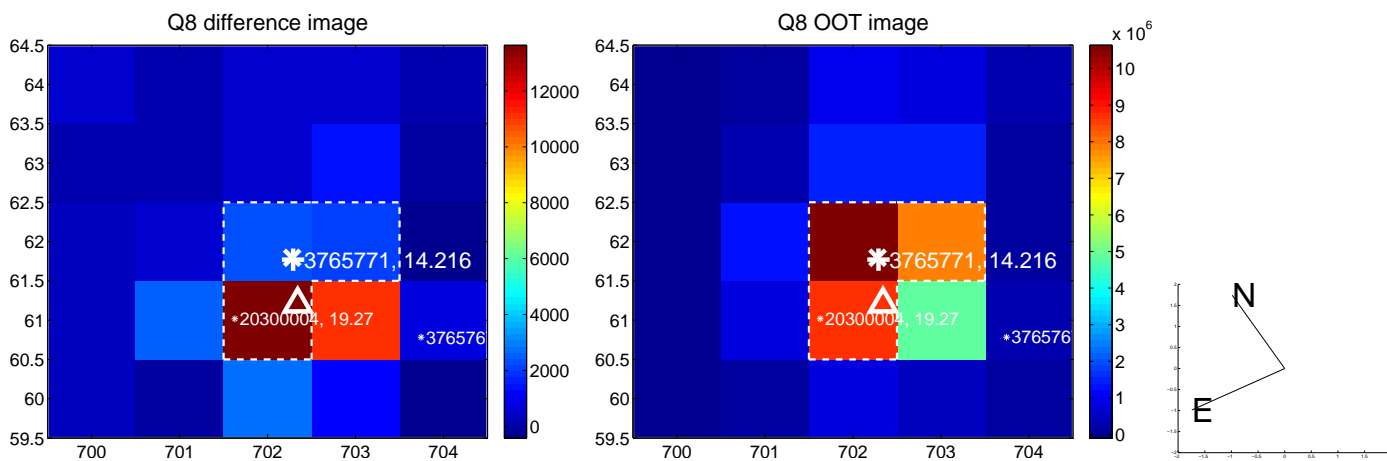
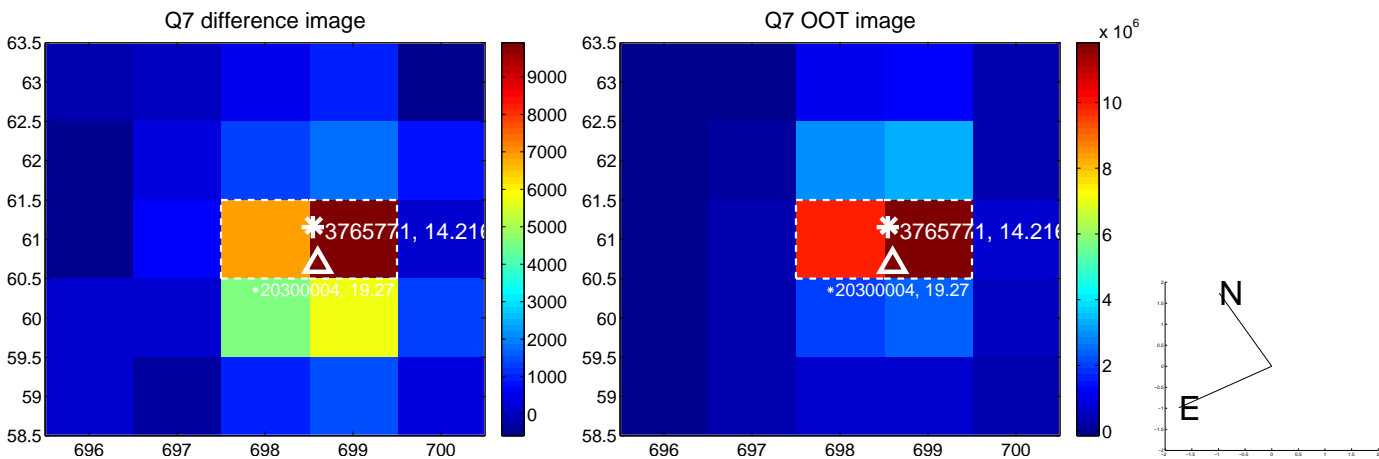
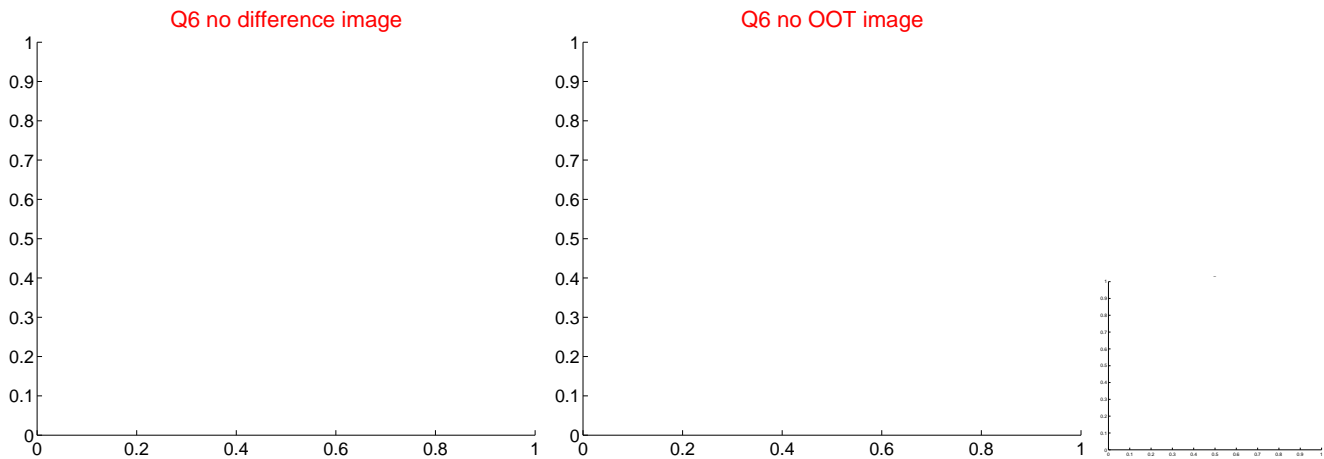
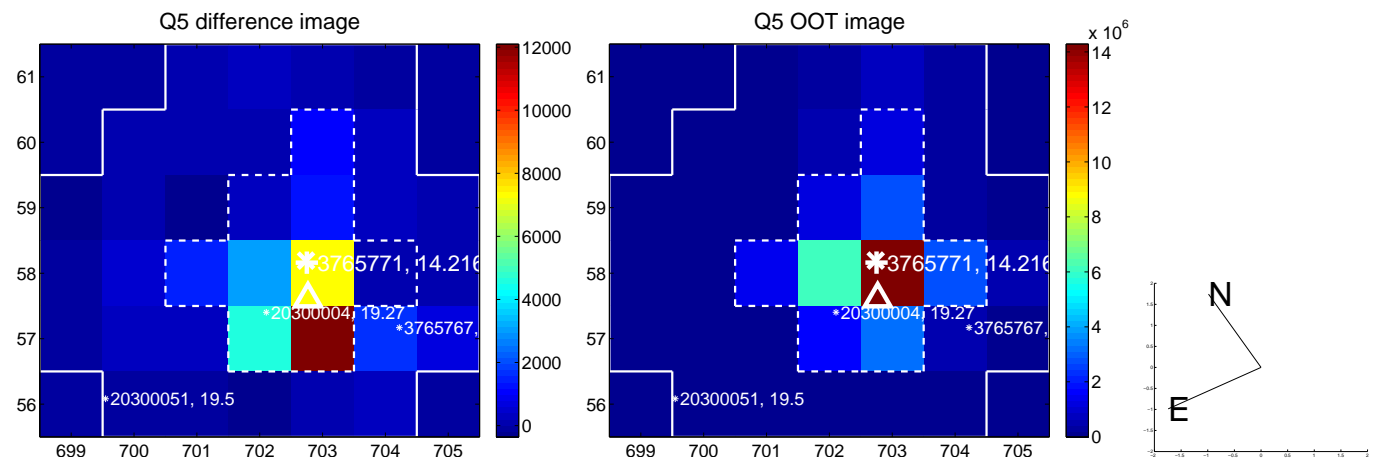


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

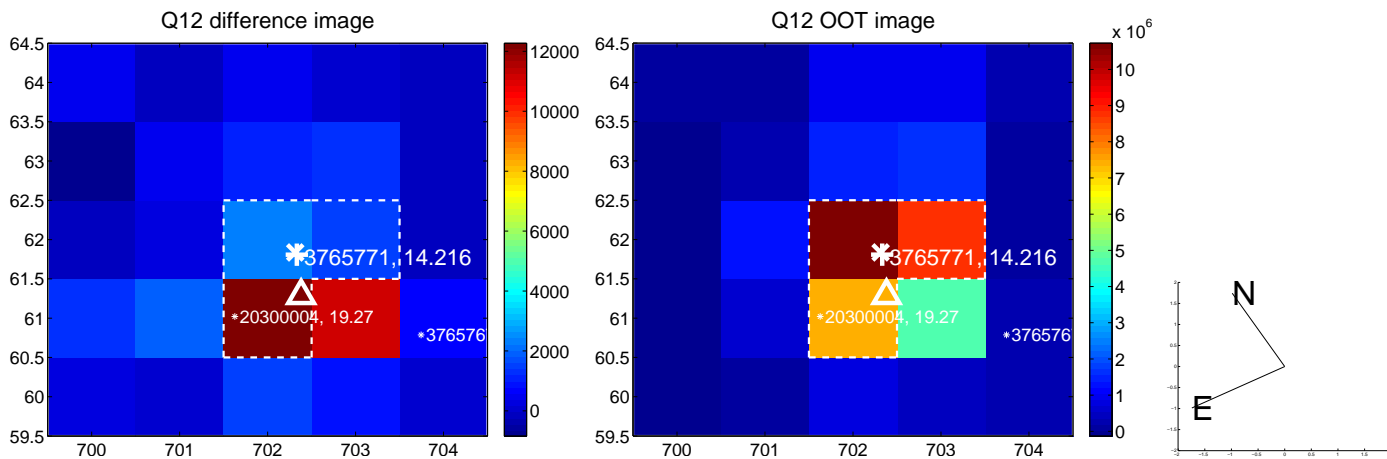
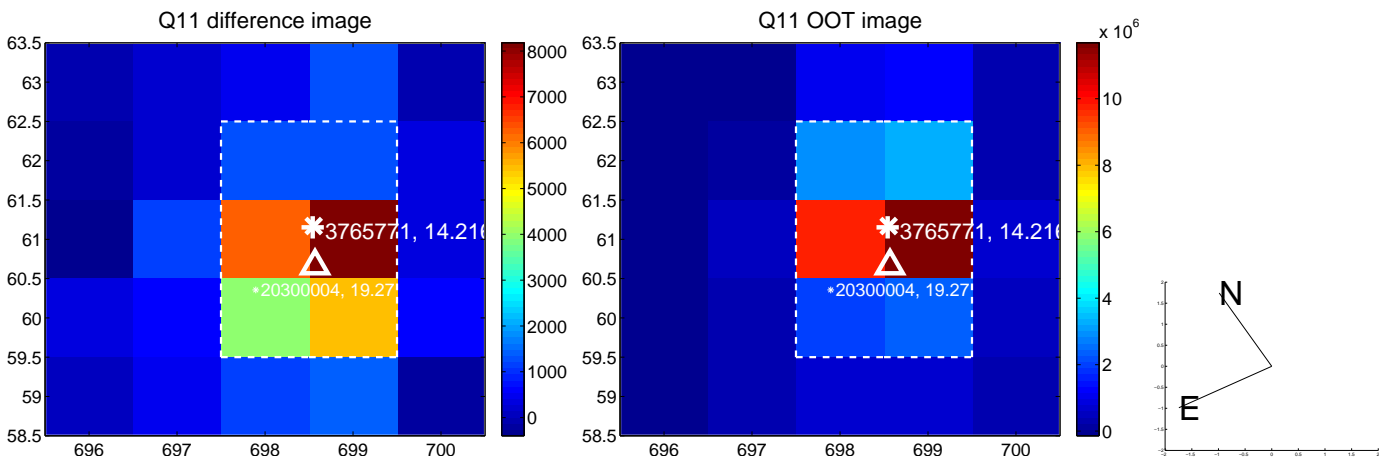
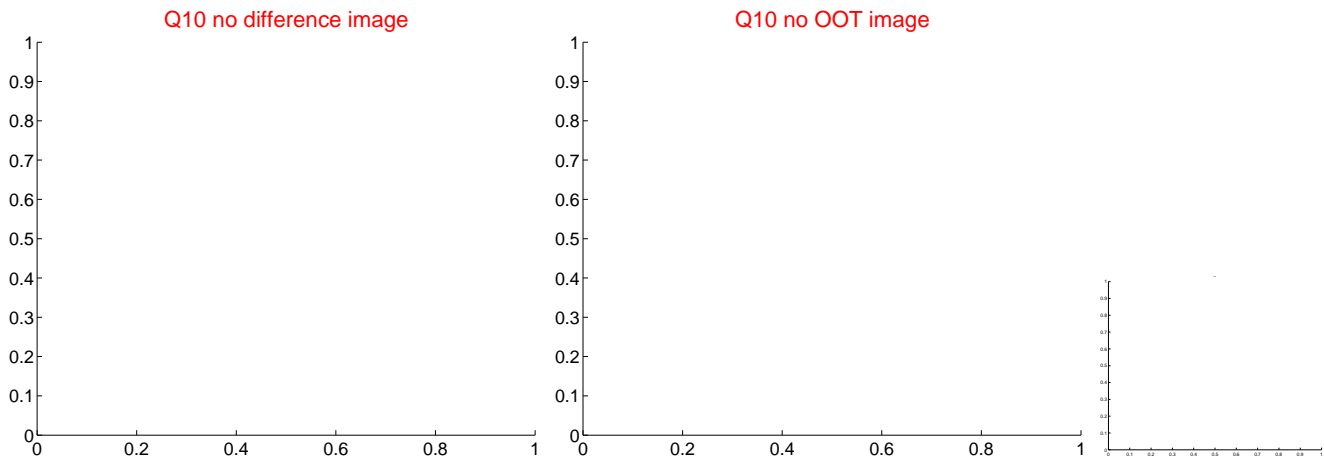
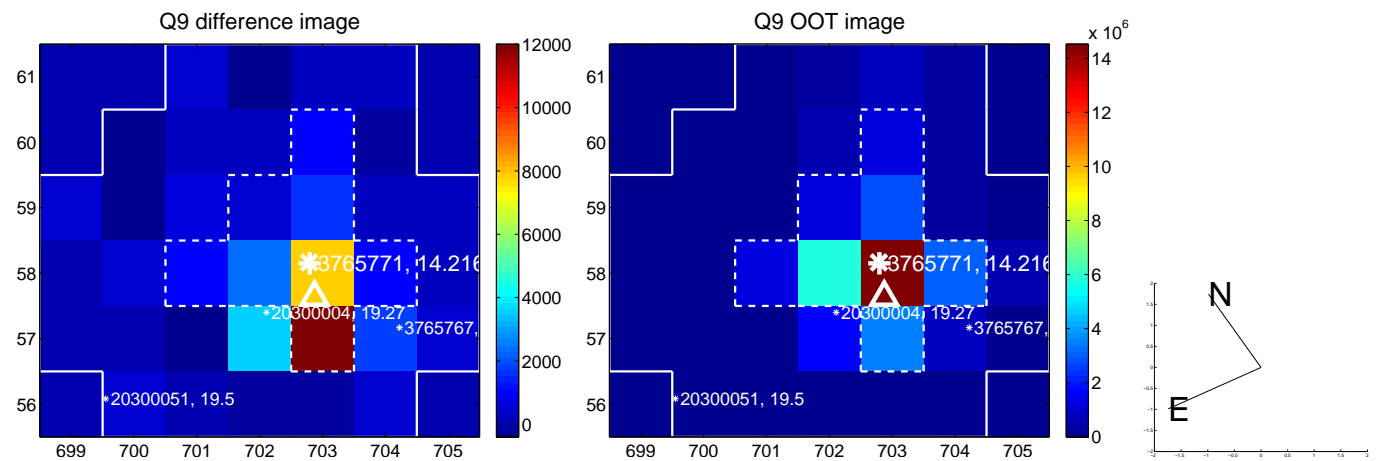
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



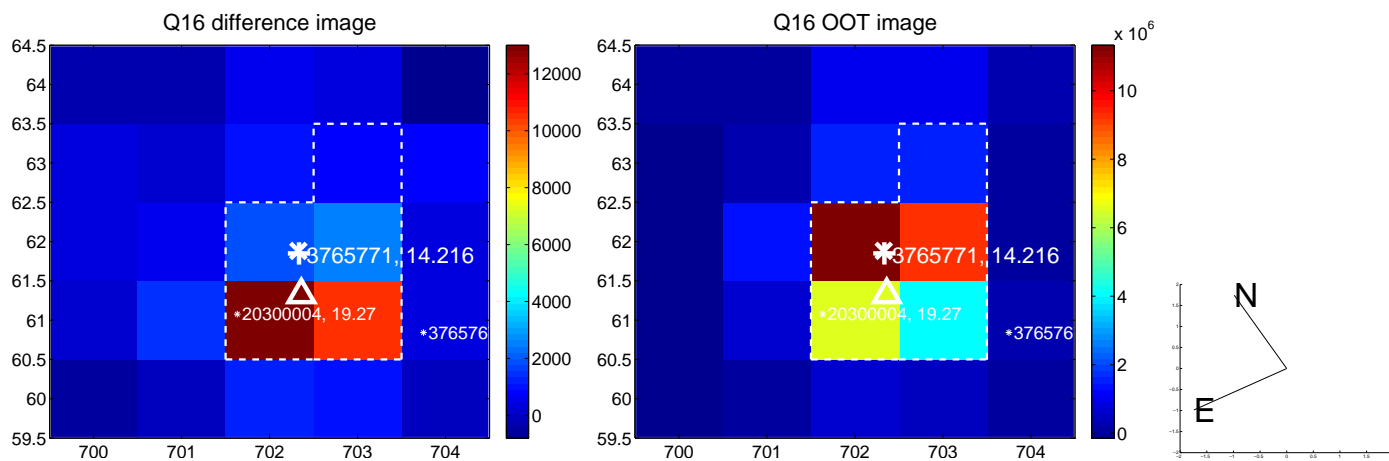
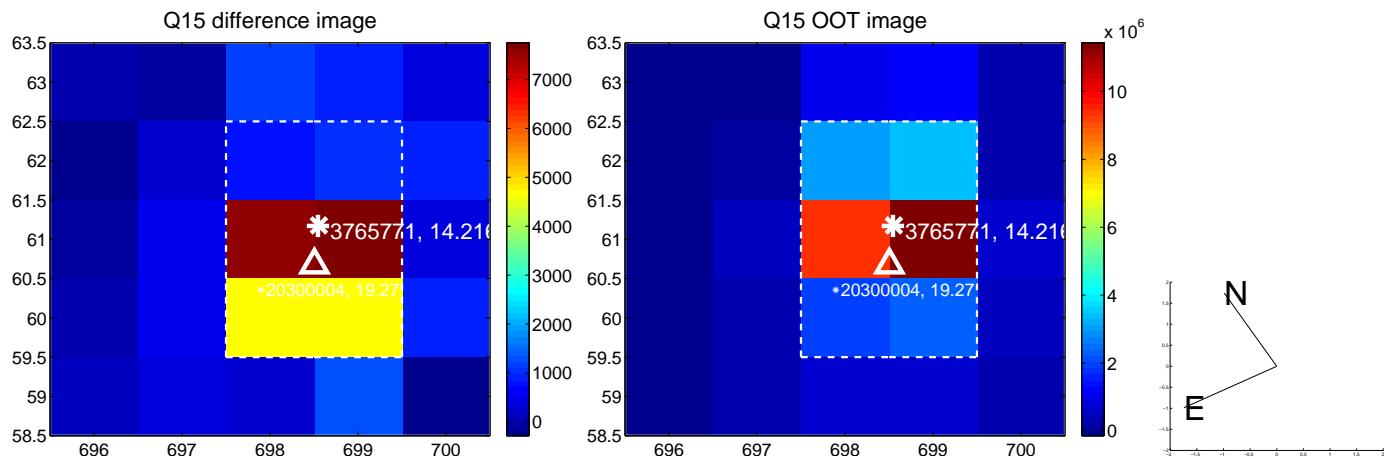
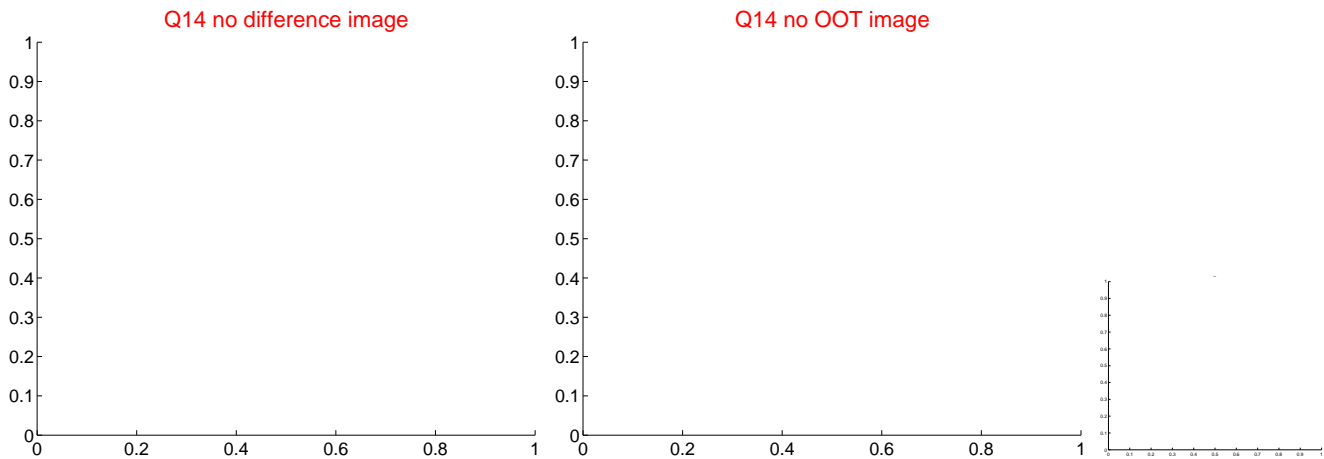
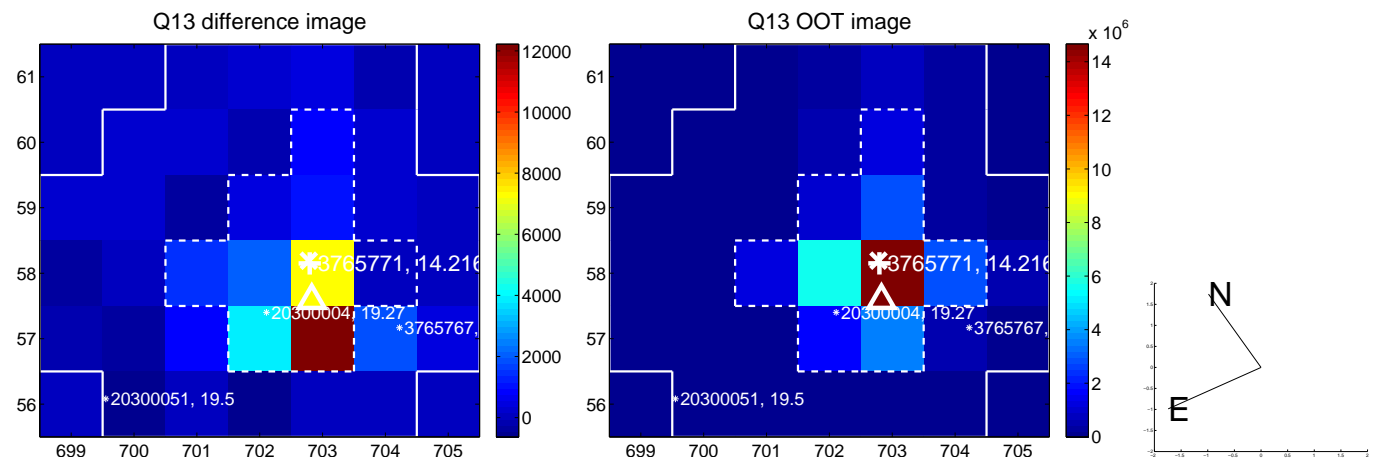
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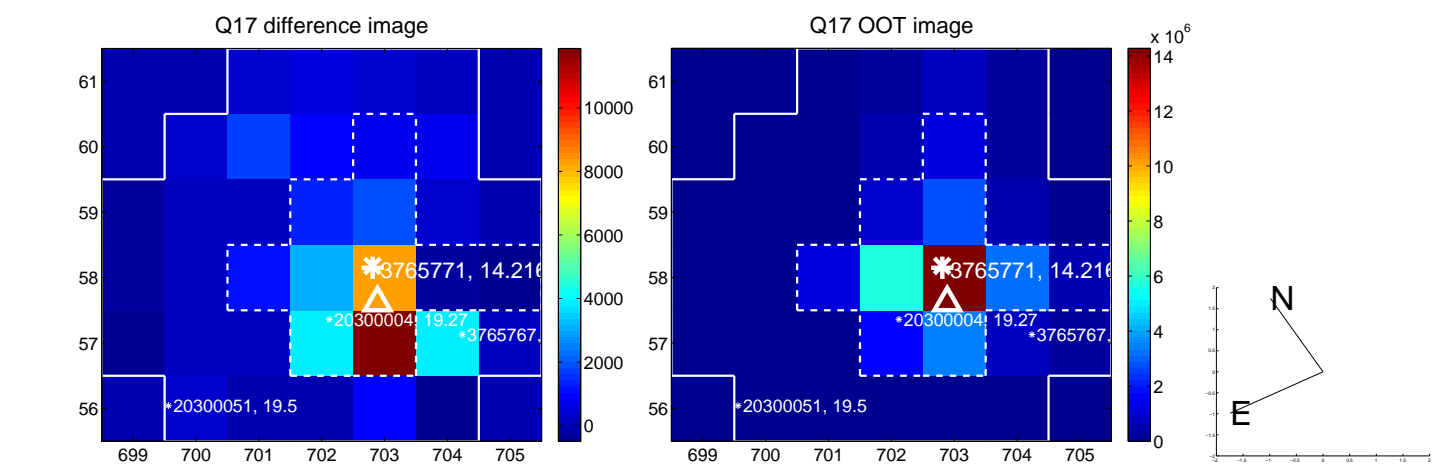
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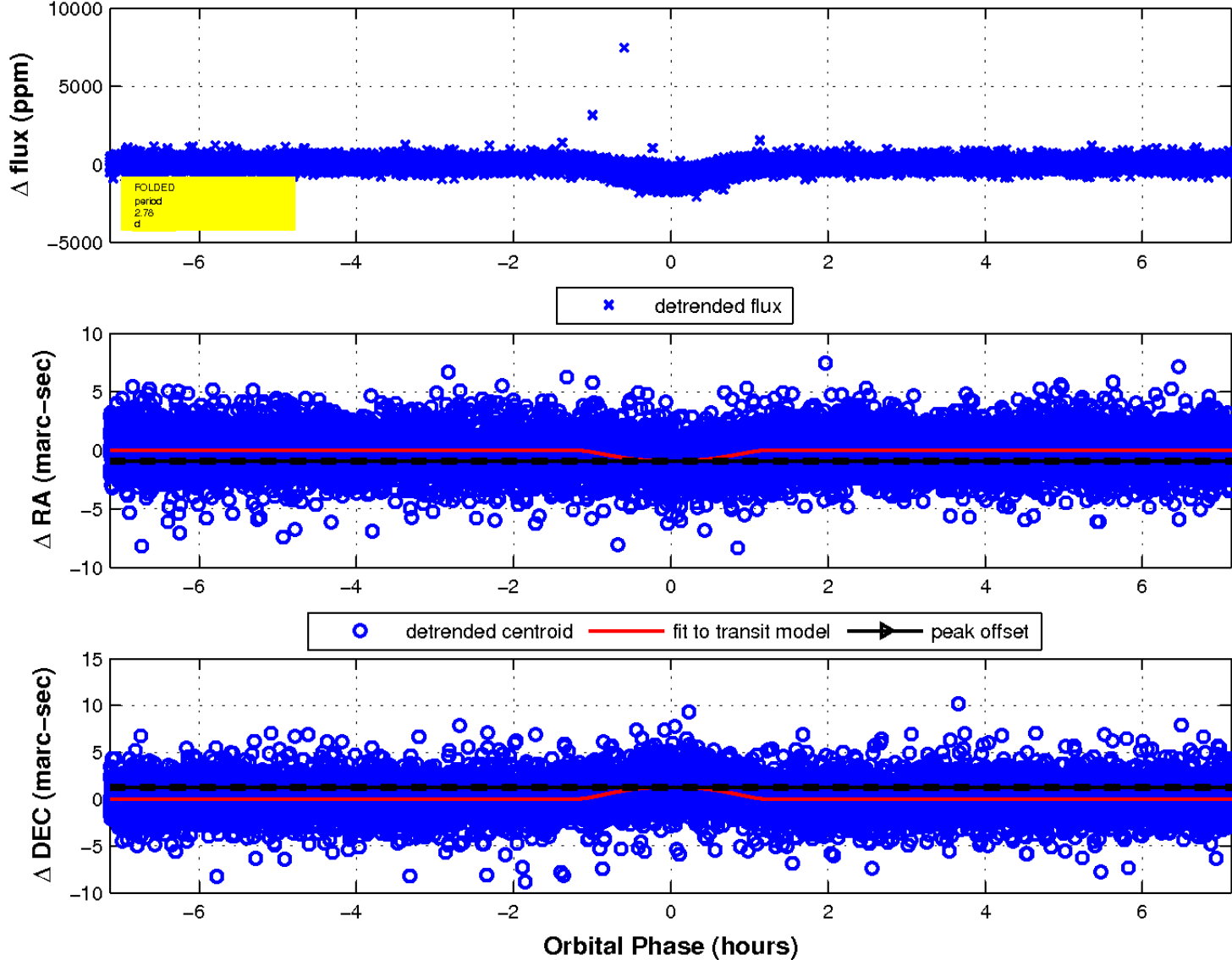
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.



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



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

