

KIC 007045496

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})
007045496-01	OBS	1939.01	13.474685	133.492631	736.6	2.831	29.4	32.6	0.73	5395	2.31	38.31

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007045496-01	OBS	PC	1.00	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.

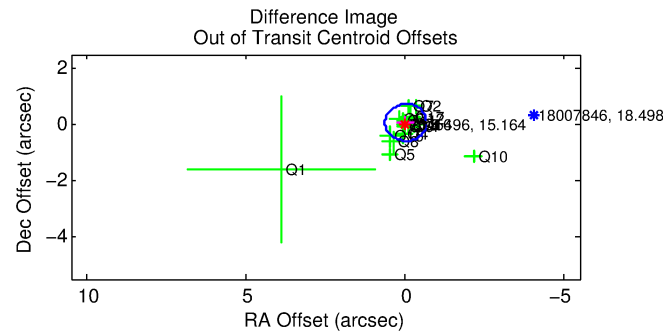
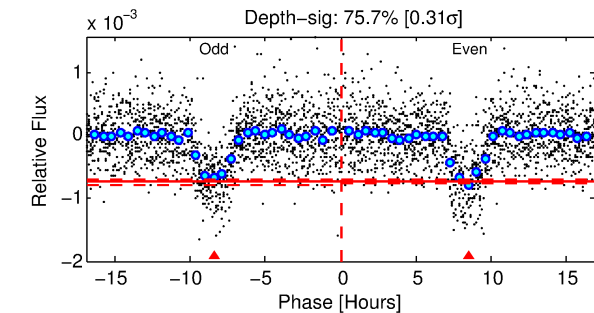
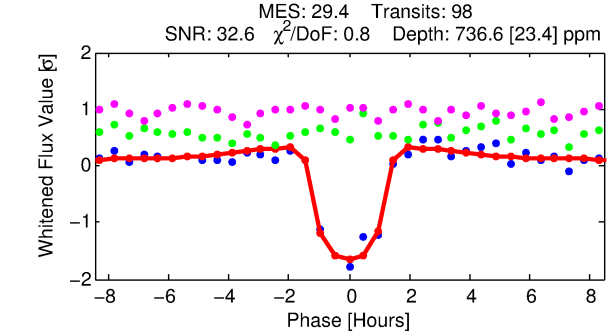
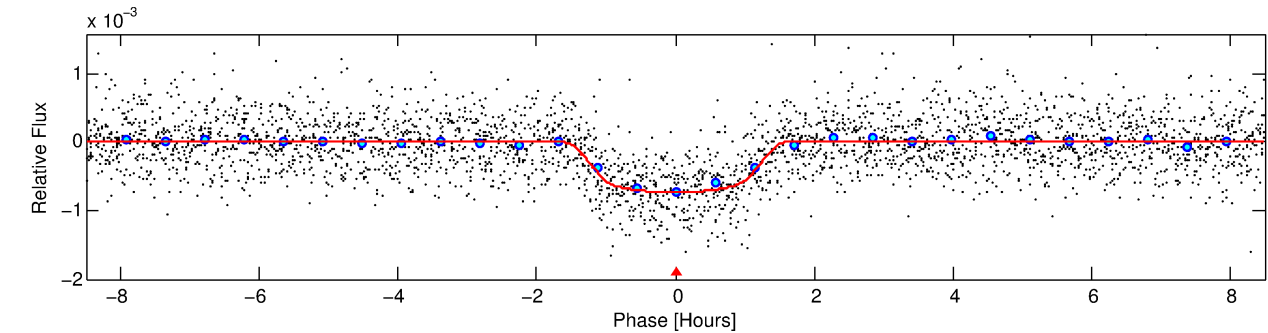
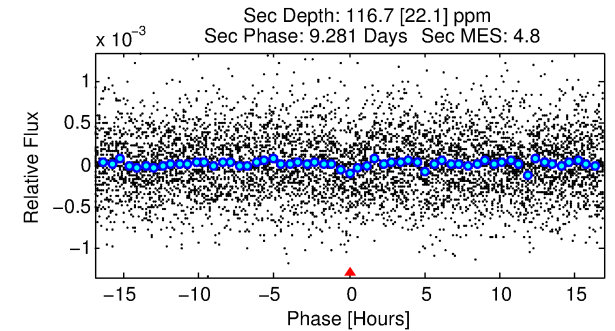
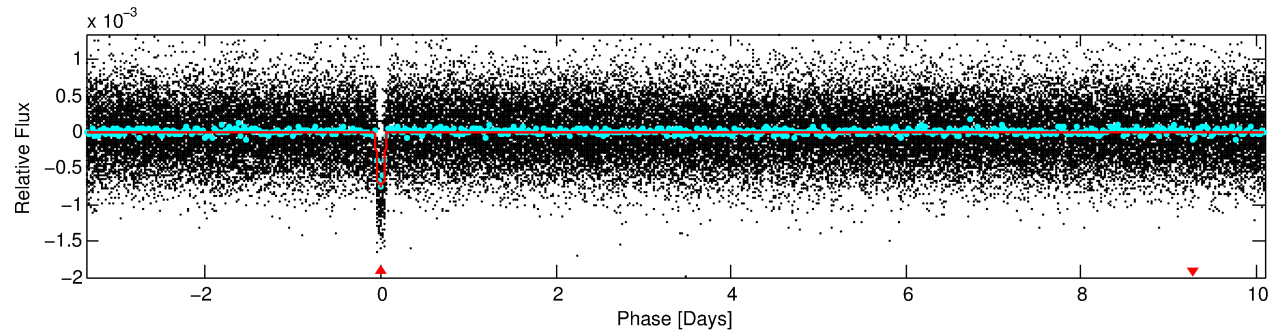
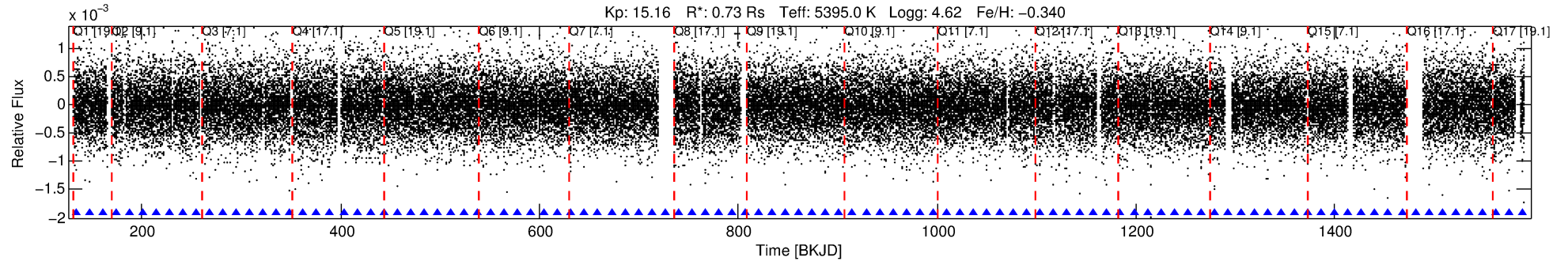
Ephemeris Match Information For 007045496-01

No Significant Match Found

DV One-Page Summary

KIC: 7045496 Candidate: 1 of 1 Period: 13.475 d

KOI: K01939.01 Corr: 0.961



DV Fit Results:

Period = 13.47469 [0.00003] d
Epoch = 133.4926 [0.0018] BKJD
Rp/R* = 0.0288 [0.0040]
a/R* = 20.38 [11.76]
b = 0.86 [0.17]
Seff = 38.31 [8.78]
Teq = 634 [36] K
Rp = 2.31 [0.50] Re
a = 0.1033 [0.0142] AU
Ag = 128.57 [49.84] [2.56σ]
Teff = 3303 [293] K [9.04σ]

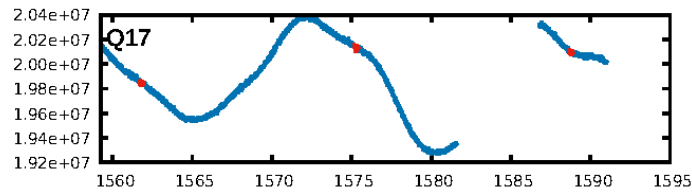
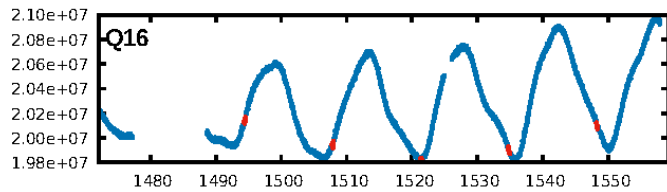
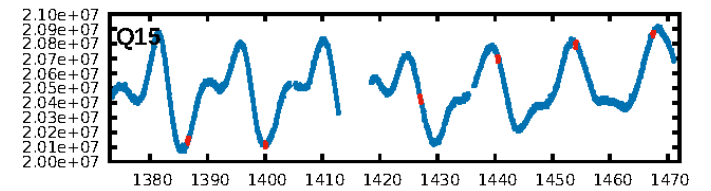
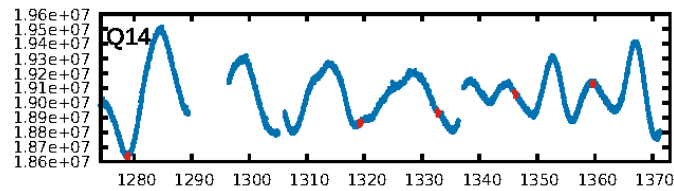
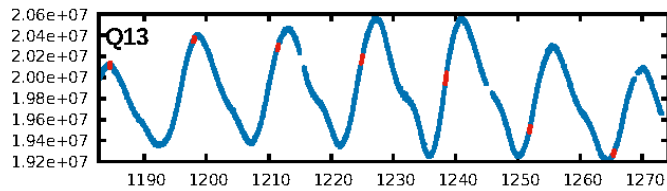
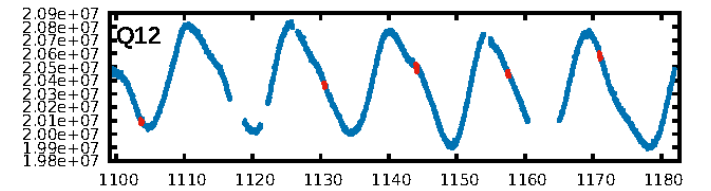
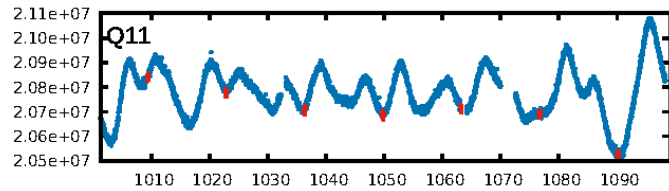
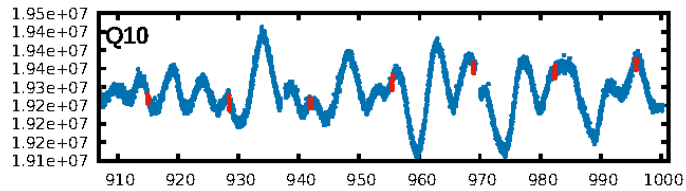
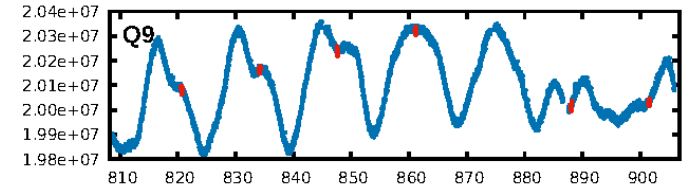
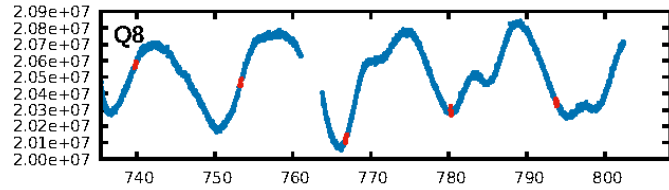
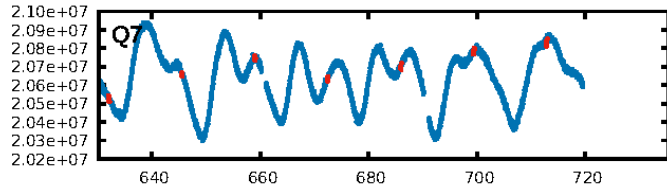
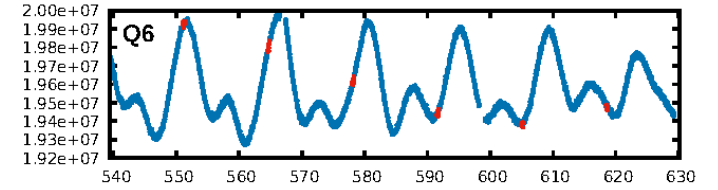
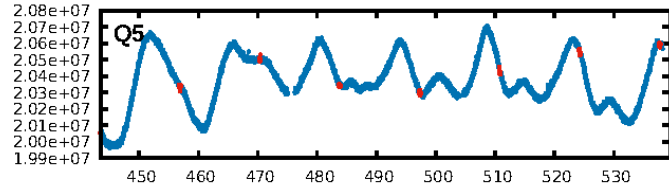
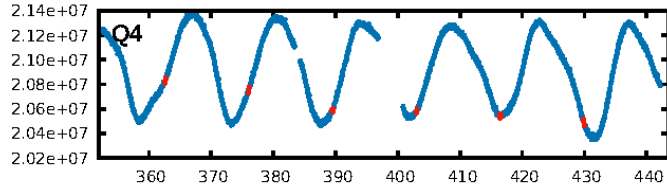
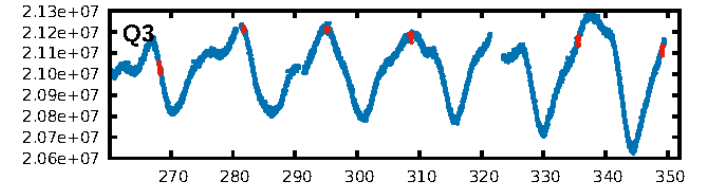
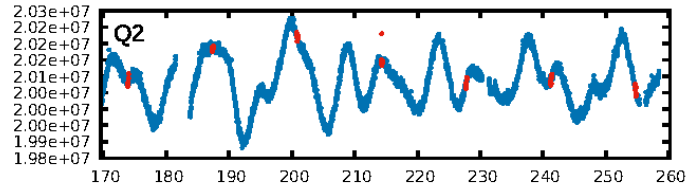
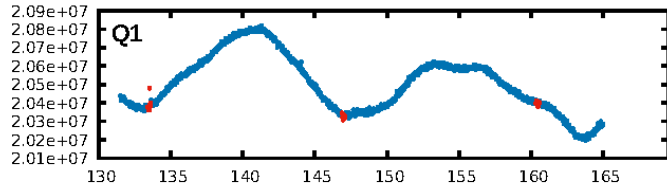
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 99.7%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 1.94e-179
RollingBand-fgt: 1.00 [92/92]
GhostDiagnostic-chr: 3.291
Centroid-sig: 36.8%
Centroid-so: 0.133 arcsec [0.34σ]
OotOffset-rm: 0.078 arcsec [0.36σ]
KicOffset-rm: 0.054 arcsec [0.30σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 0.94 [16/17]
DiffImageOverlap-fno: 1.00 [17/17]

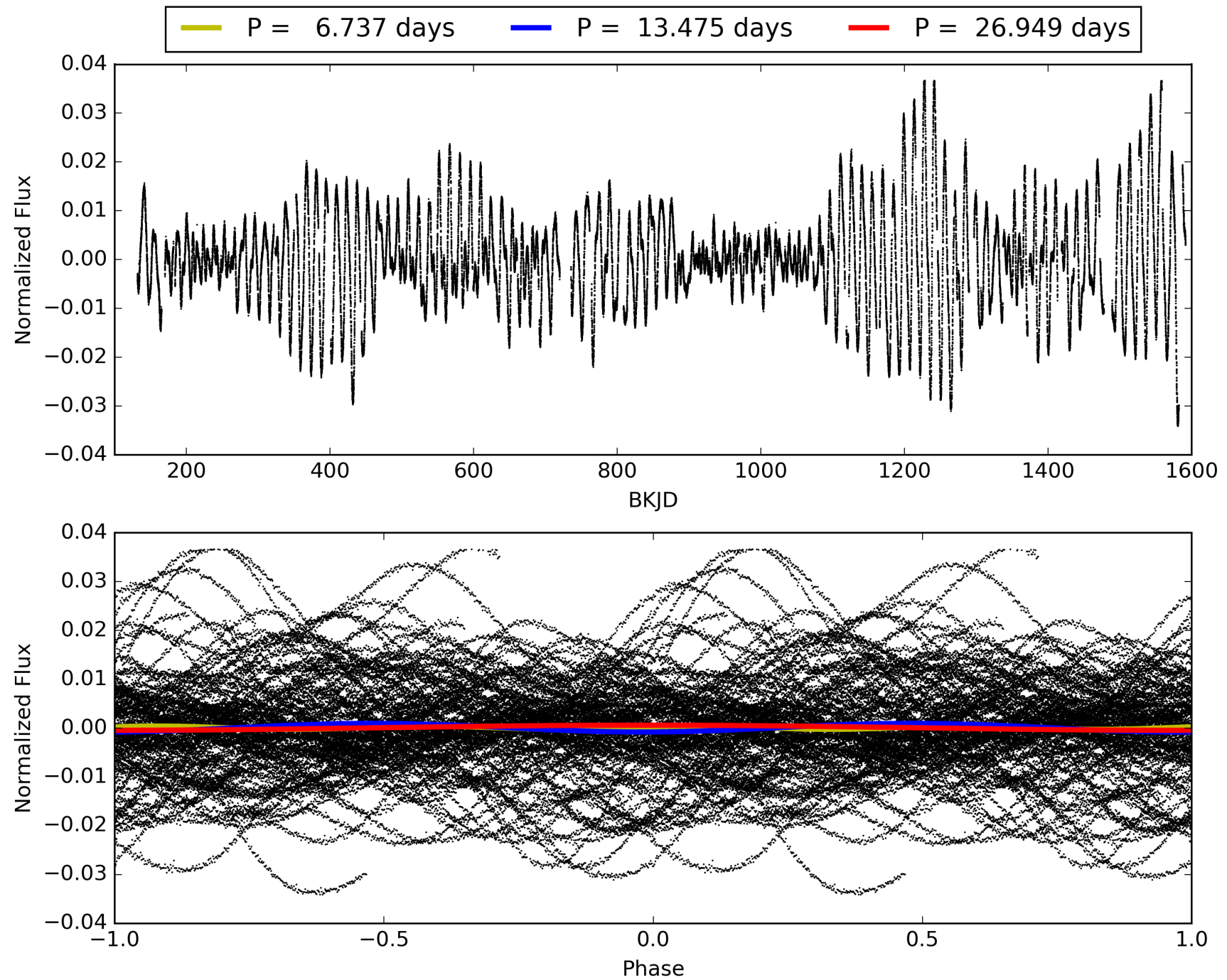
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 15:02:58 Z

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

TCE 007045496-01, PDC Light Curves

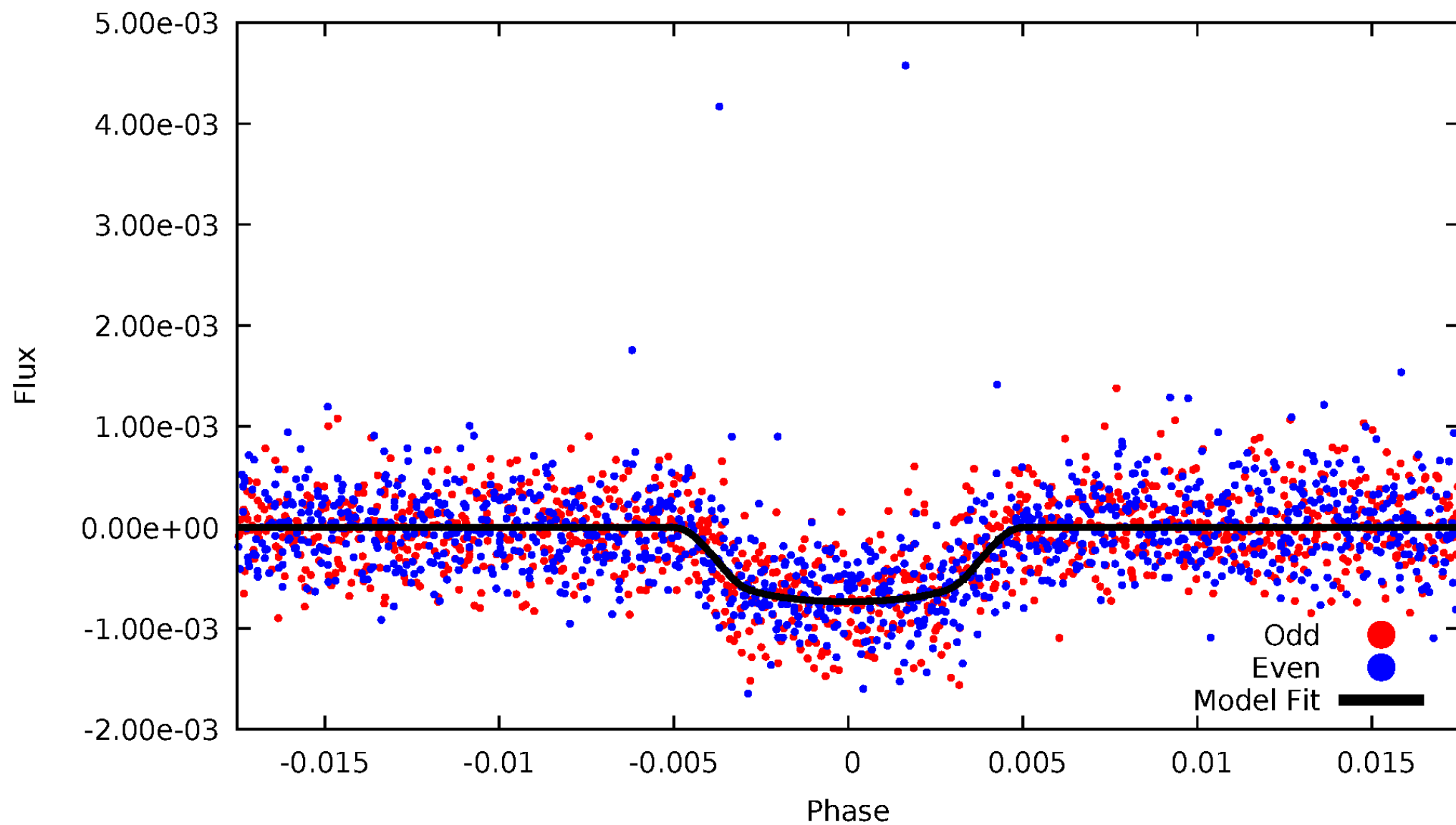


TCE 007045496-01



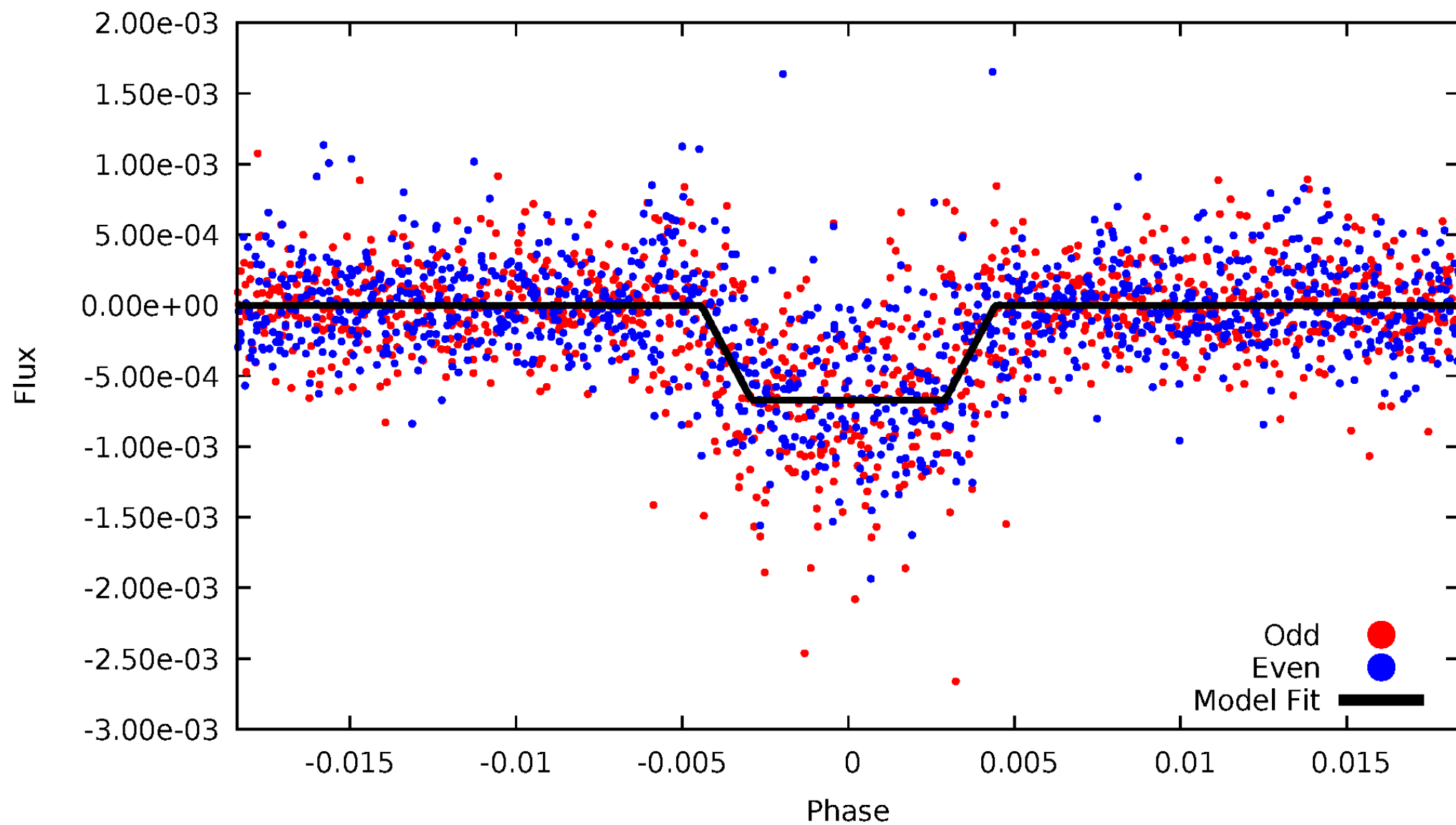
DV Odd/Even

TCE 007045496-01

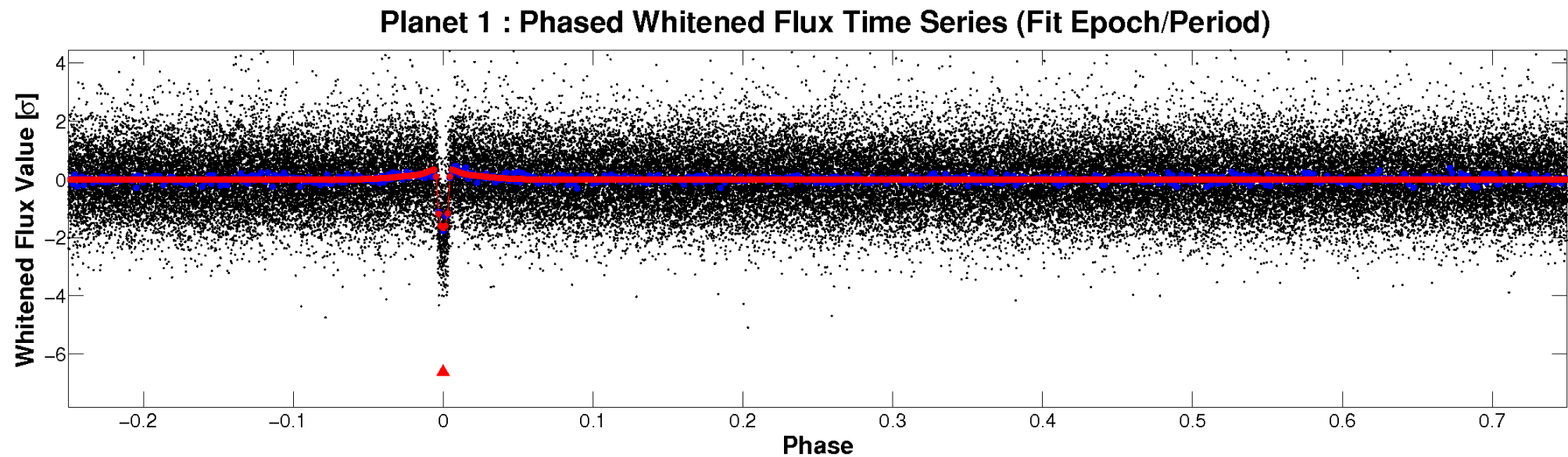
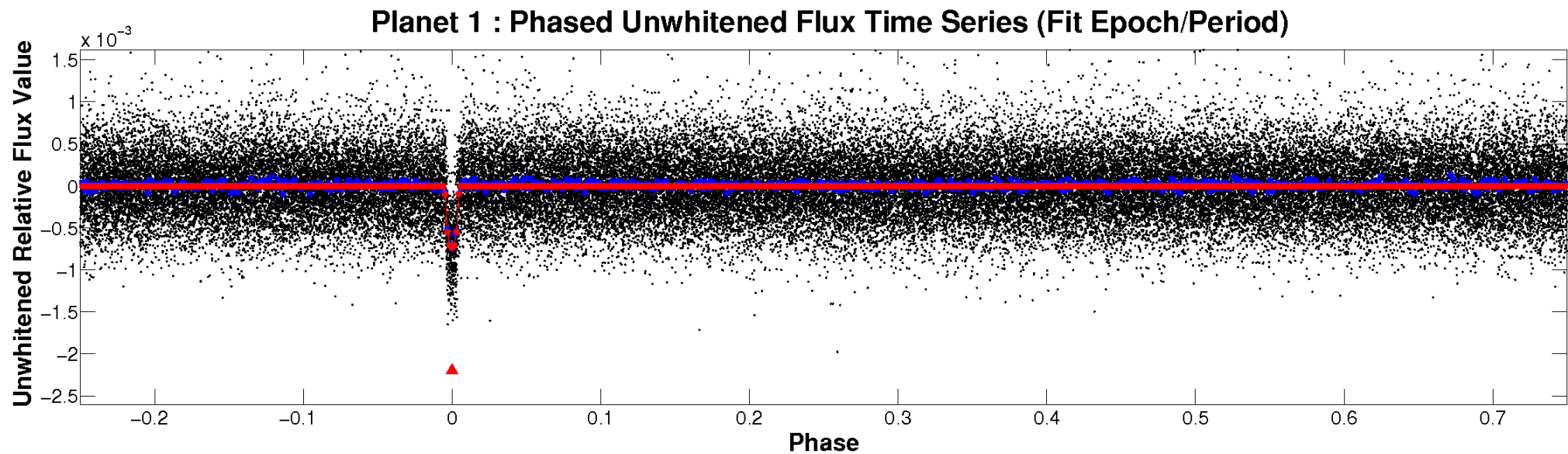


ALT Odd/Even

TCE 007045496-01

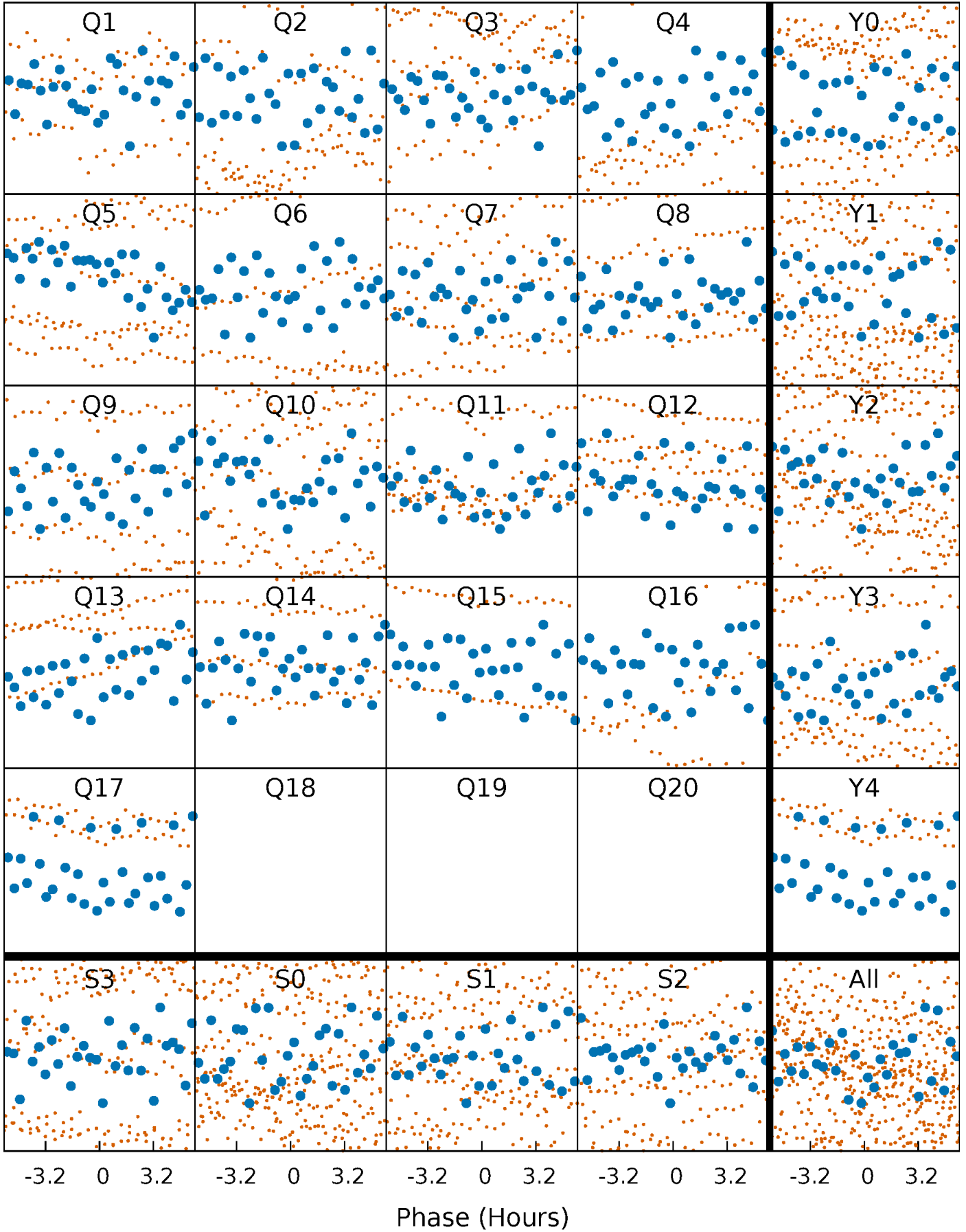


Non-Whitened Vs. Whitened Light Curve



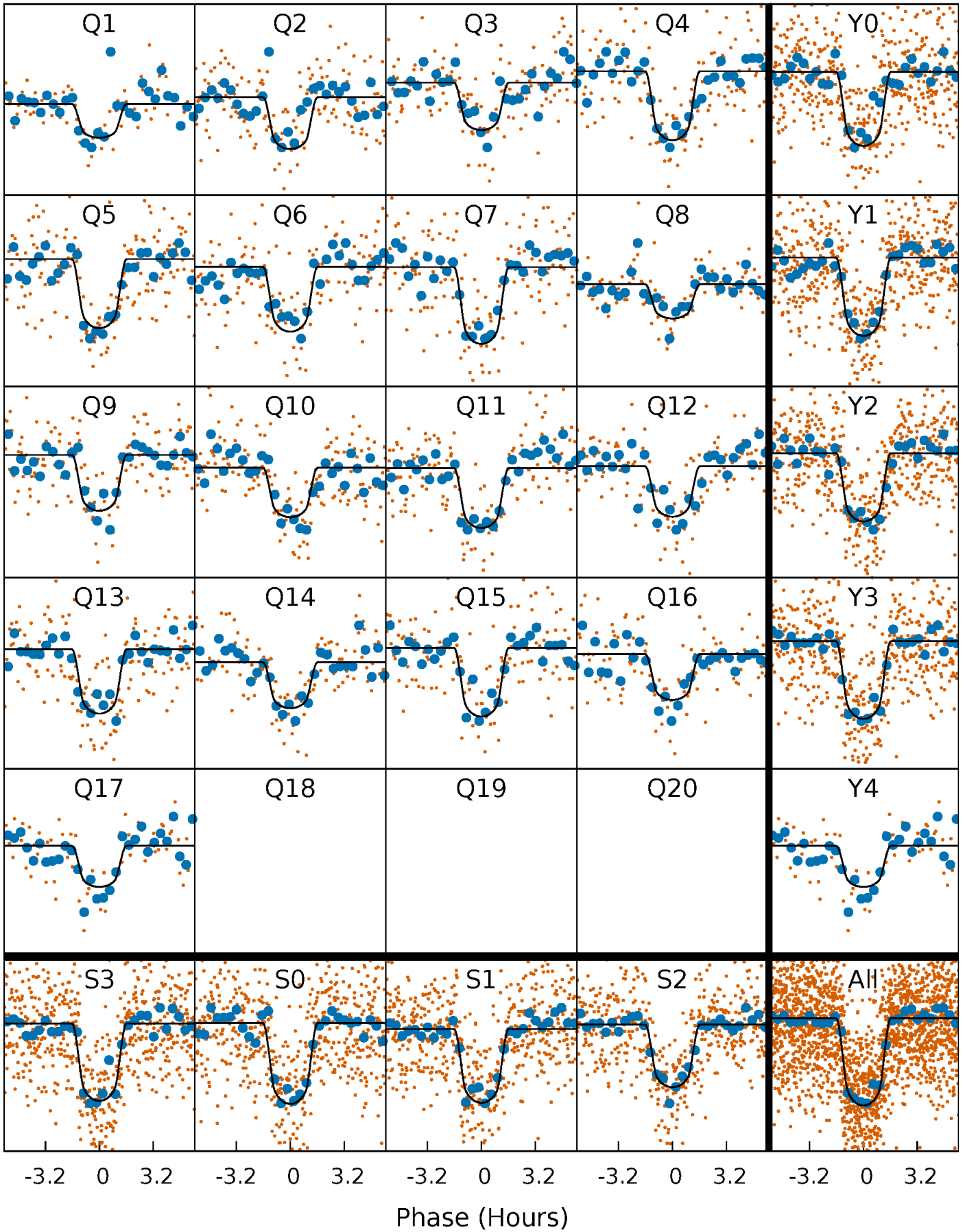
PDC Quarter-Phased Transit Curves

TCE 007045496-01 P= 13.474685 Days $T_0=133.492631$ (BKJD)



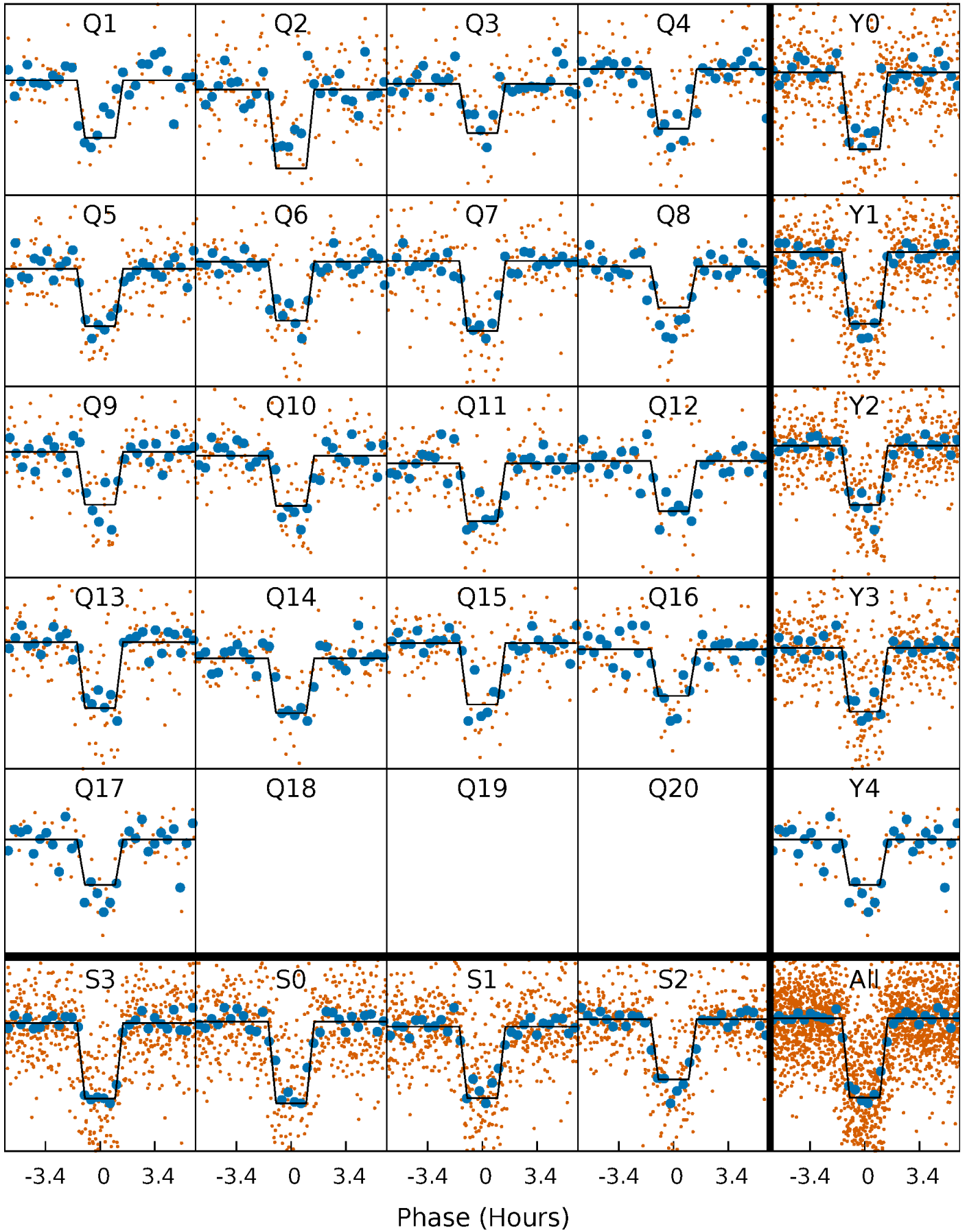
DV Quarter-Phased Transit Curves

TCE 007045496-01 P= 13.474685 Days $T_0=133.492631$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

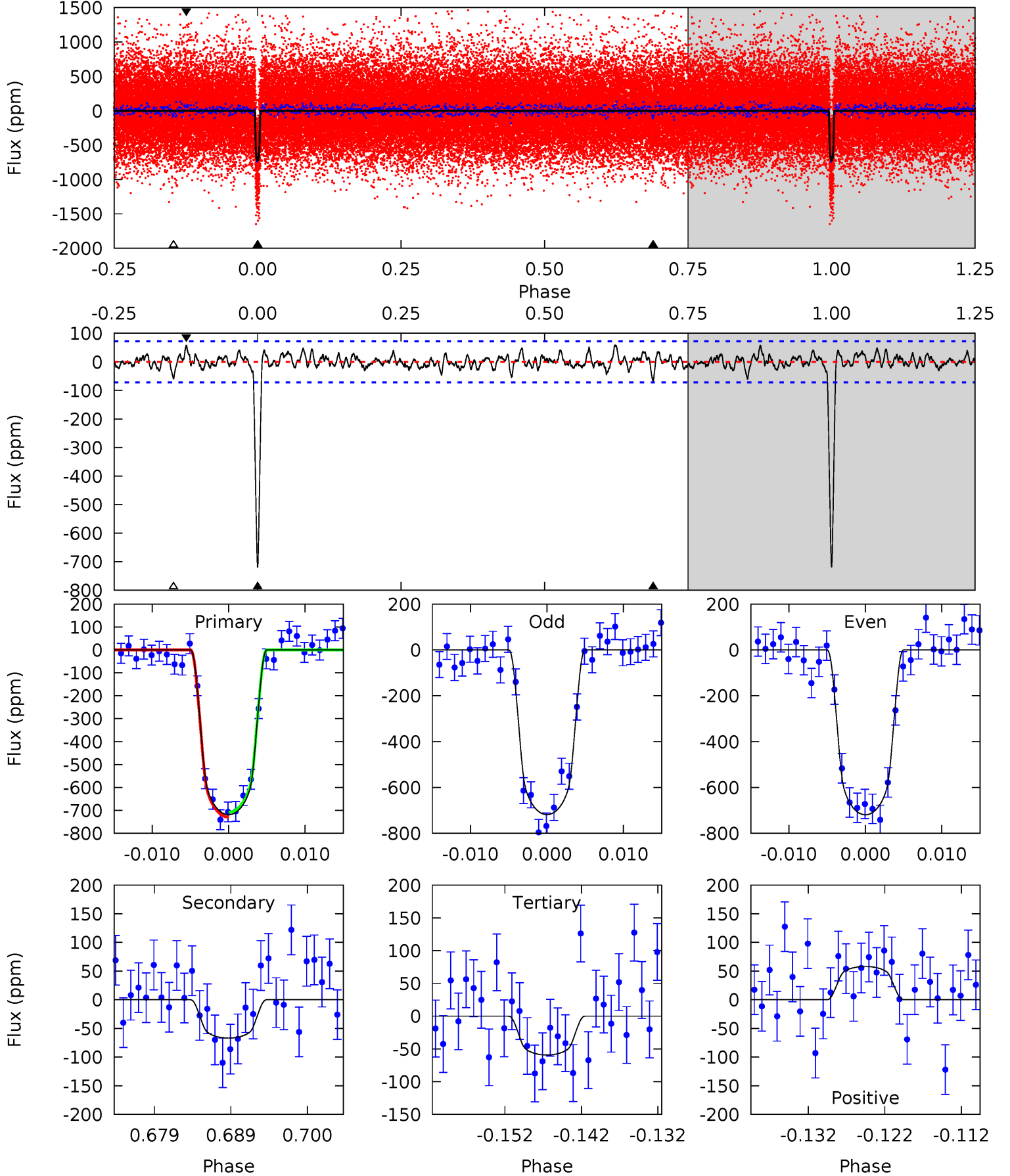
TCE 007045496-01 P= 13.474586 Days $T_0=133.499374$ (BKJD)



DV Model-Shift Uniqueness Test

007045496-01, P = 13.474685 Days, E = 120.017946 Days

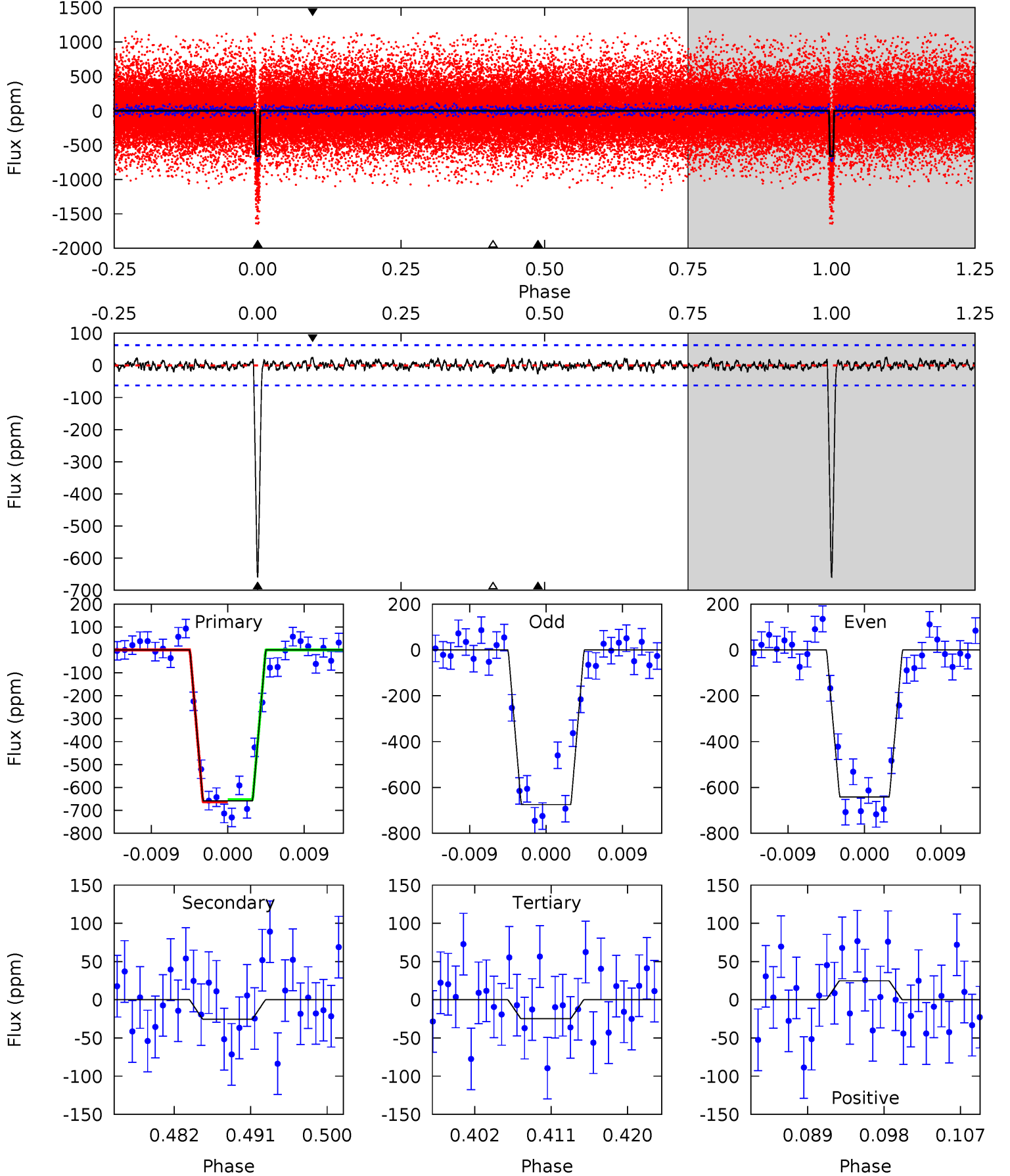
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
50.5	4.70	4.16	4.08	5.02	2.57	1.25	46.3	46.4	0.53	0.62	0.02	0.98	0.07	0.76



Alt Model-Shift Uniqueness Test

007045496-01, $P = 13.474586$ Days, $E = 120.024788$ Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
53.0	2.05	2.00	2.00	5.05	2.61	0.67	51.0	51.0	0.05	0.05	1.34	0.99	0.04	0.41



Stellar Parameters For KIC 007045496

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5395^{+160}_{-144}	$4.615^{+0.035}_{-0.105}$	$-0.340^{+0.300}_{-0.300}$	$0.734^{+0.123}_{-0.057}$	$0.821^{+0.076}_{-0.093}$	$2.929^{+0.521}_{-0.927}$
	+3%/-3%	+1%/-2%	+88%/-88%	+17%/-8%	+9%/-11%	+18%/-32%
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 007045496-01 / KOI 1939.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-67 ± 14	$2.36^{+0.40}_{-0.35}$	899^{+38}_{-31}	3377^{+204}_{-188}	68^{+31}_{-20}
Alt.	-26 ± 12	$2.11^{+0.39}_{-0.34}$	900^{+39}_{-35}	3014^{+263}_{-288}	32^{+24}_{-17}

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 $A_{obs} \gg 1.0$

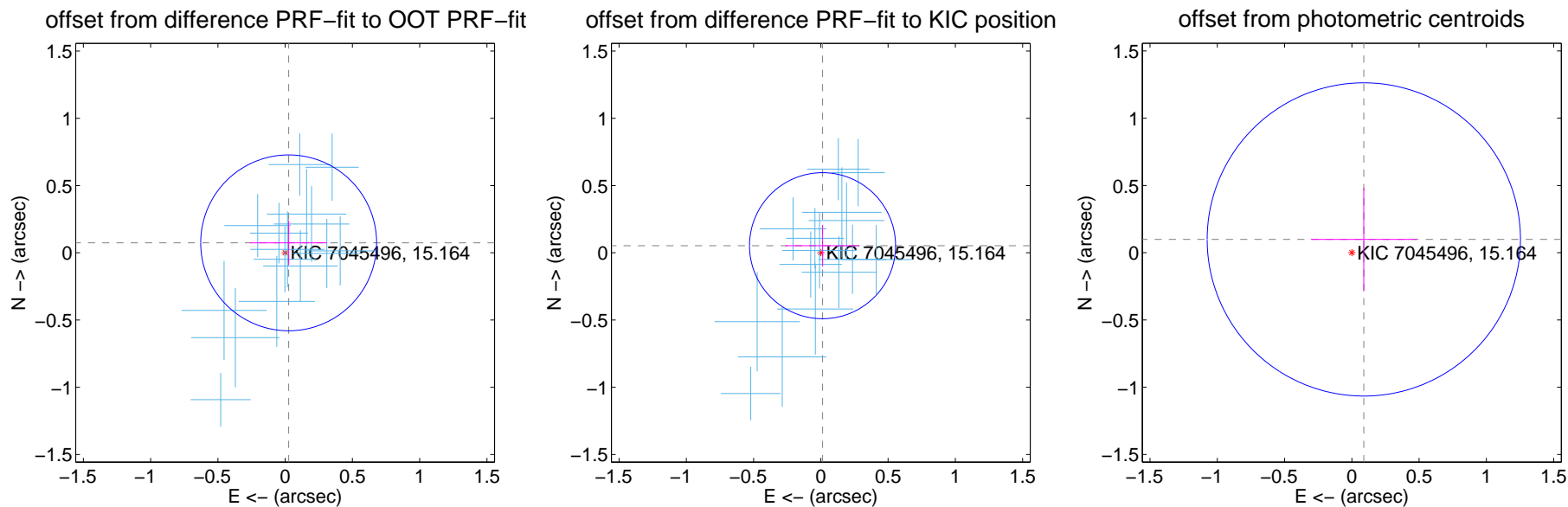
DV Centroid Data

Supplemental centroid analysis for 007045496-01. Kepler magnitude: 15.16. Transit SNR 32.62

There are 16 quarters with good PRF difference image offsets

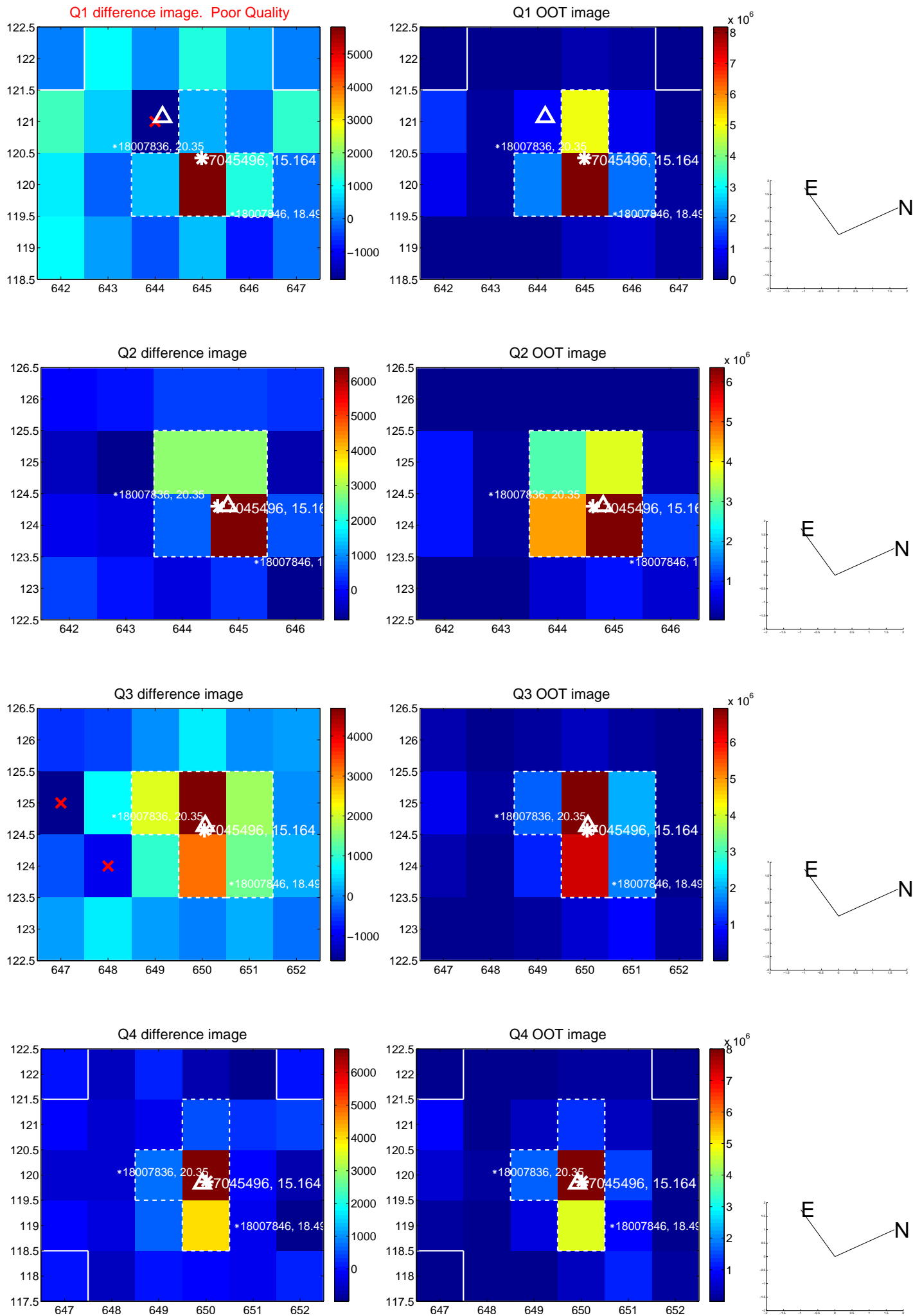
The direct PRF centroid is offset from the target star catalog position by about 0.01 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.078 ± 0.218	0.36	-0.026 ± 0.285	0.074 ± 0.167
PRF-fit source offset from KIC position	0.054 ± 0.181	0.30	-0.013 ± 0.276	0.053 ± 0.155
photometric centroid source offset	0.13 ± 0.39	0.34	-0.09 ± 0.39	0.10 ± 0.38

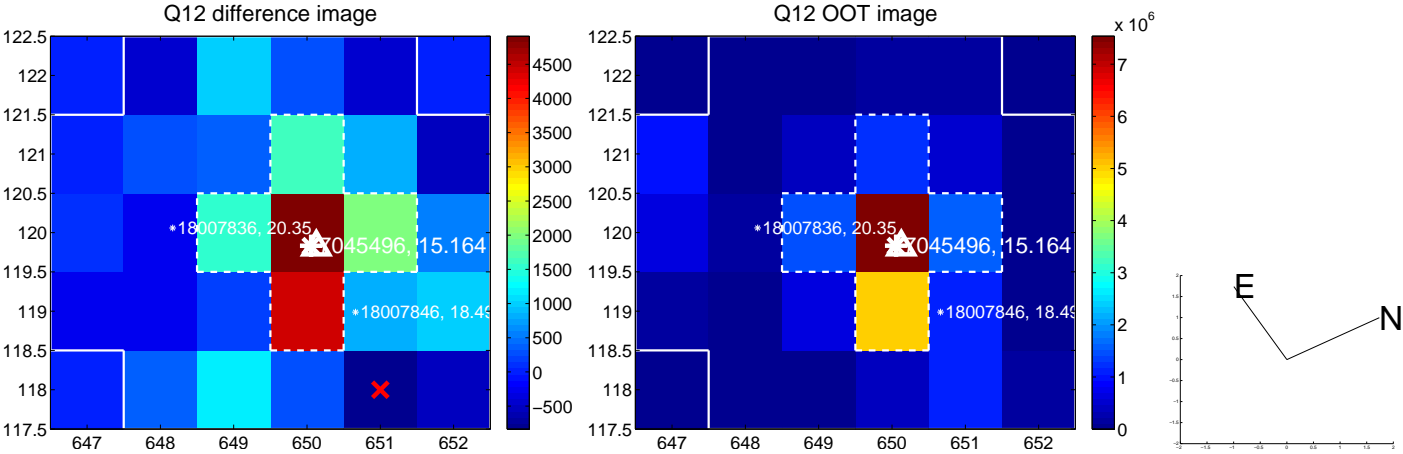
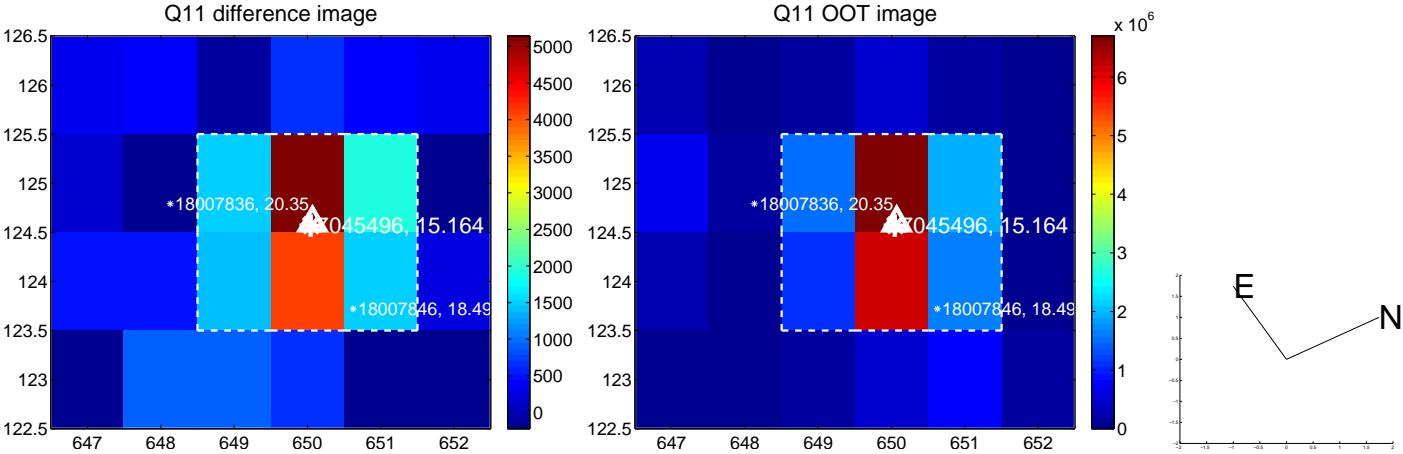
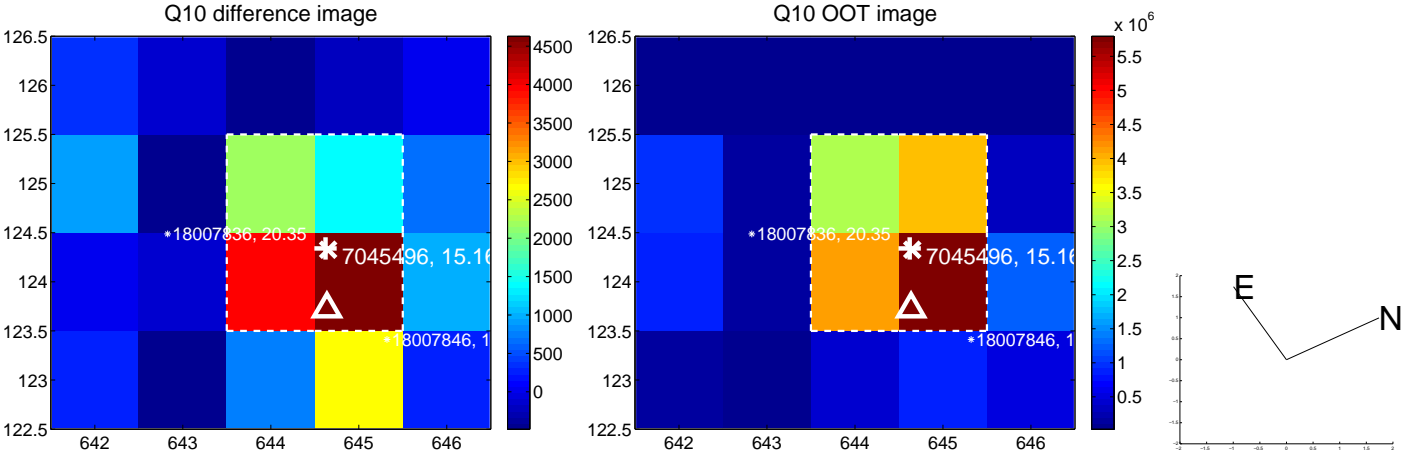
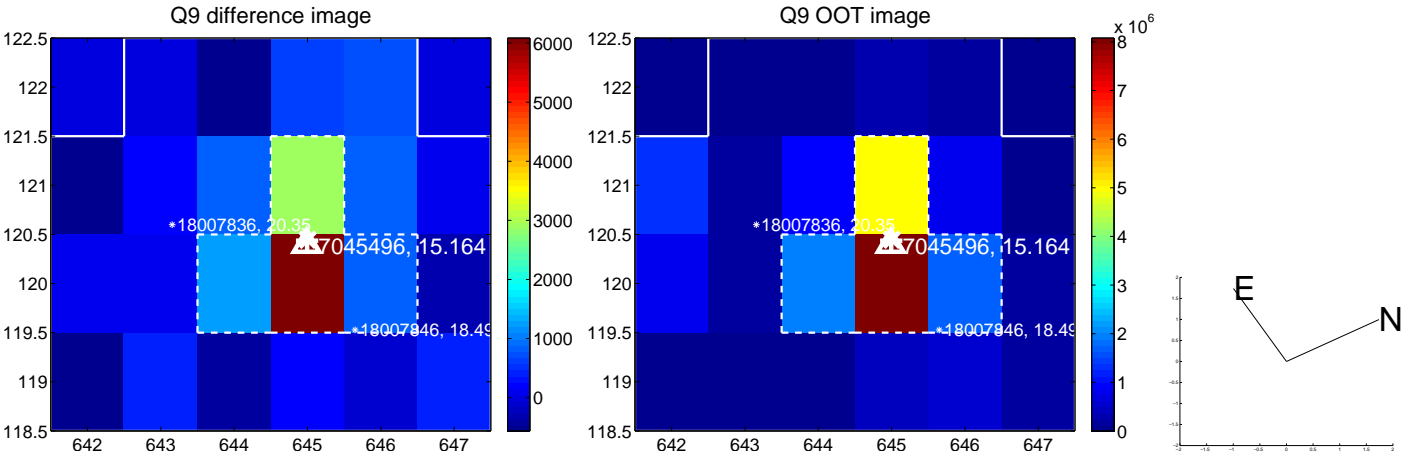


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

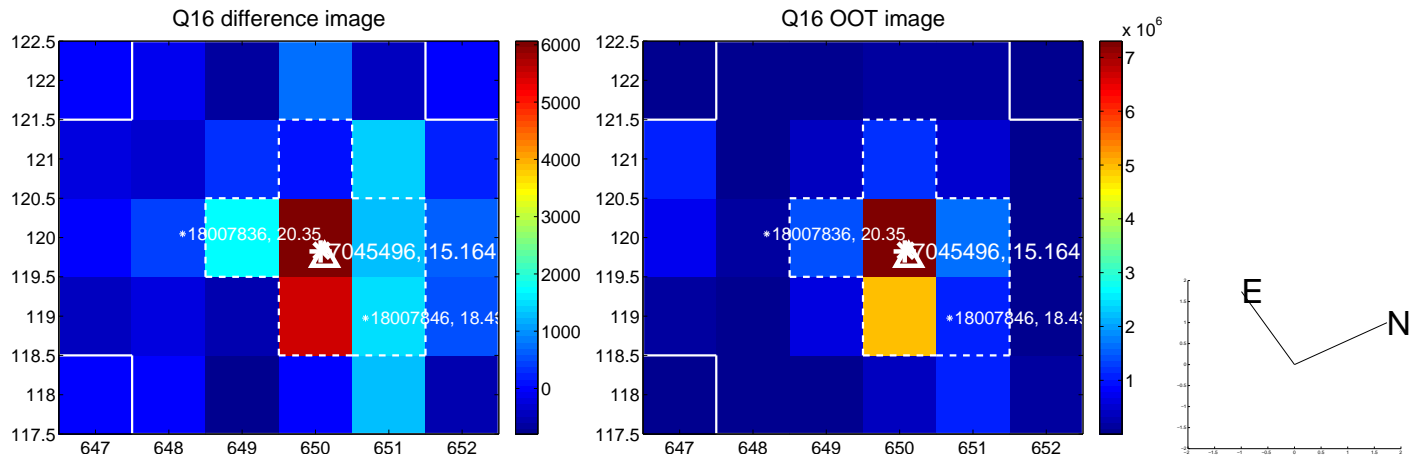
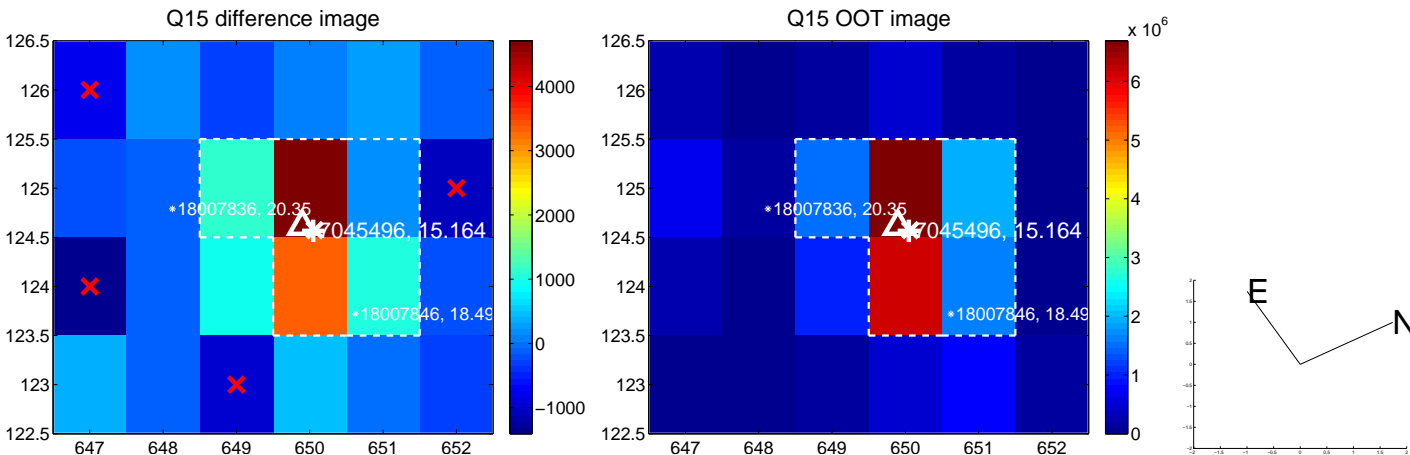
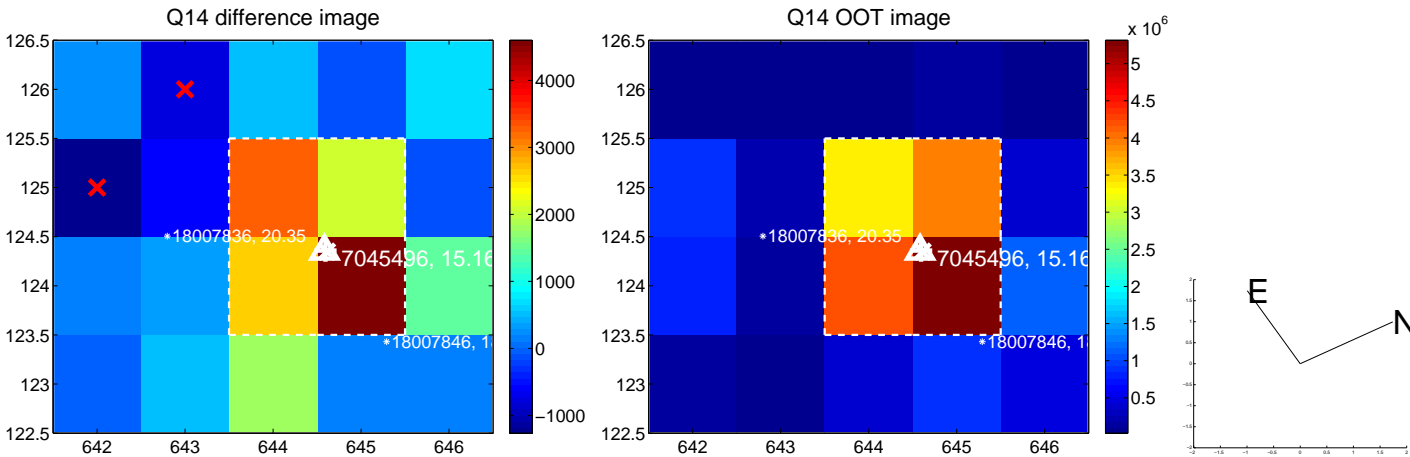
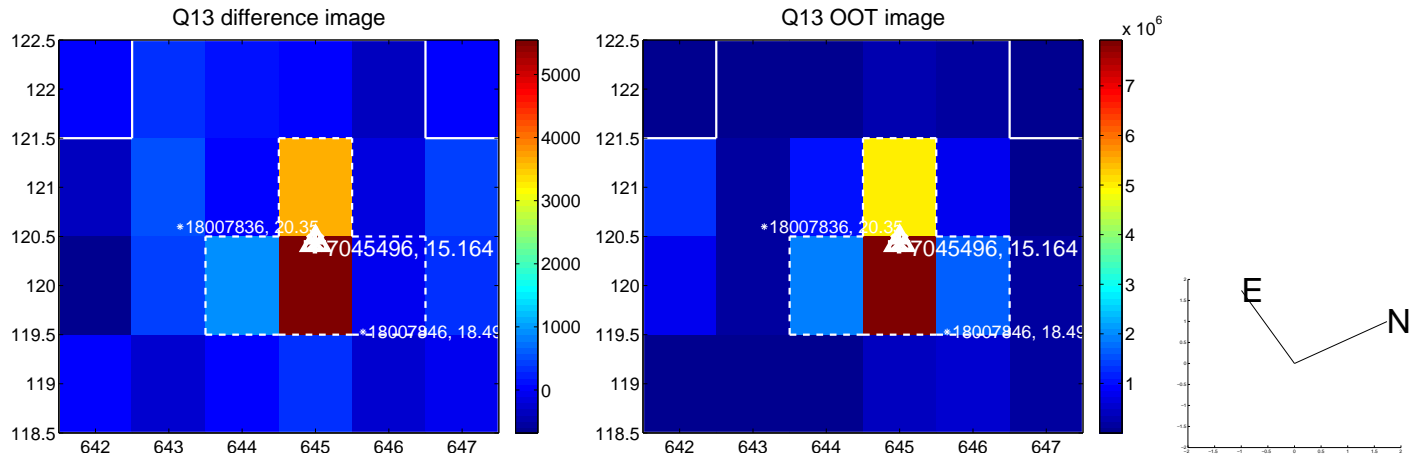
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



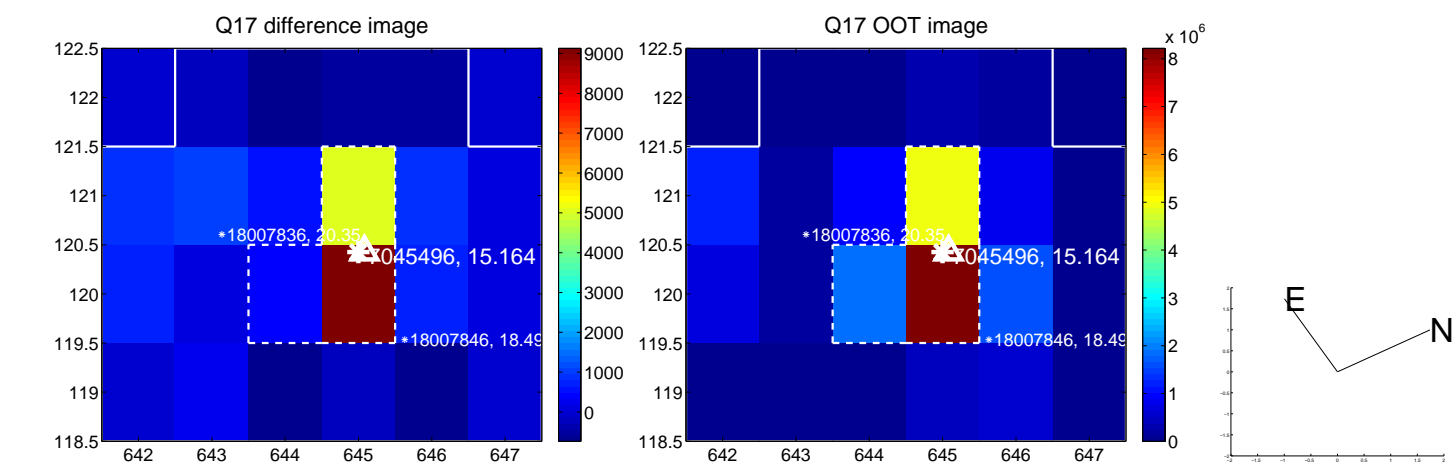
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



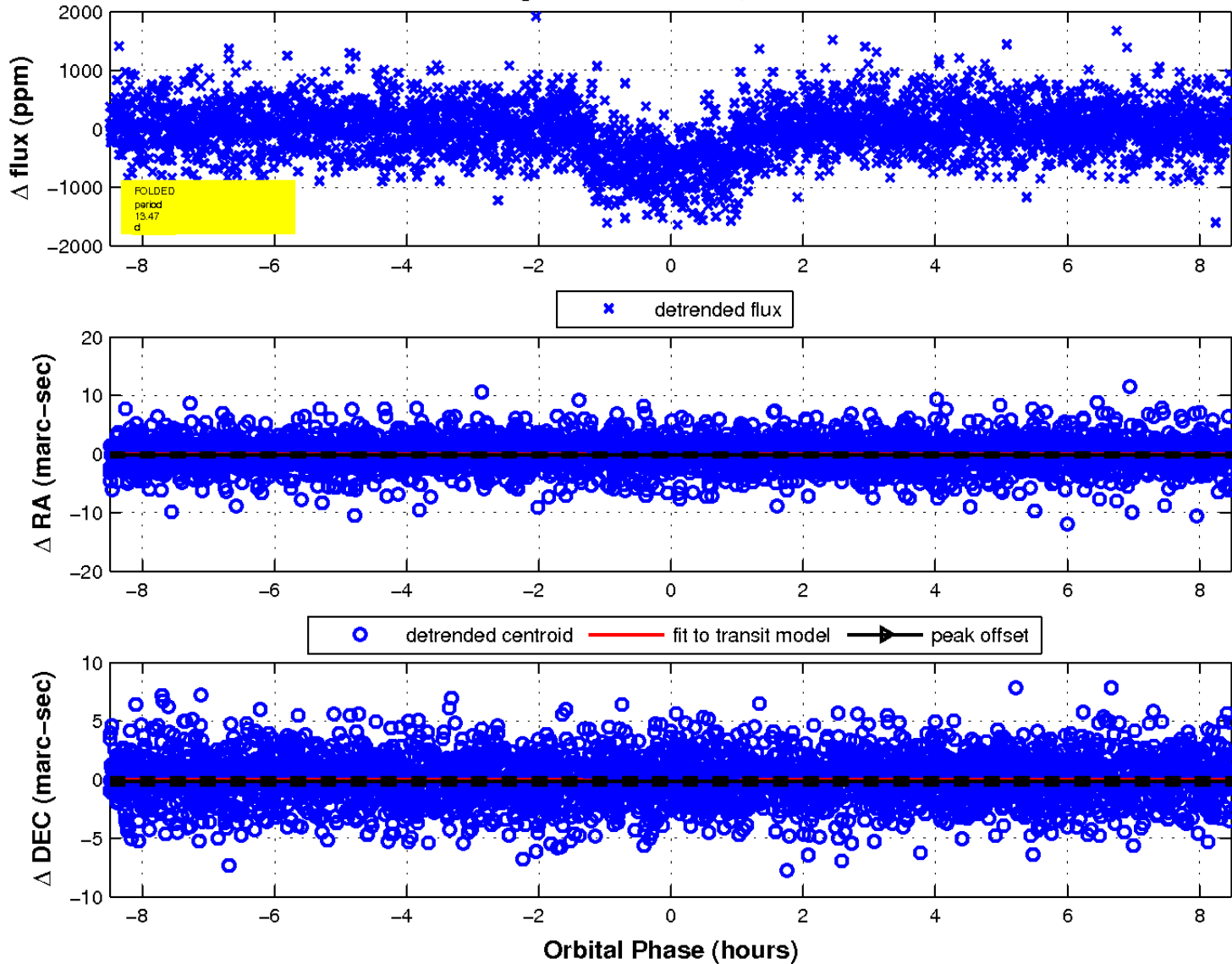
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

