

KIC 005621294

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})
005621294-01	OBS	6606.01	0.938903	131.837931	54900.4	3.500	10690.5	-1.0	3.00	8615	71.65	79577.68

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005621294-01	OBS	FP	0.00	0	1	0	0	SWEET_EB—MOD_SEC_ALT—CENT_NOFITS

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.

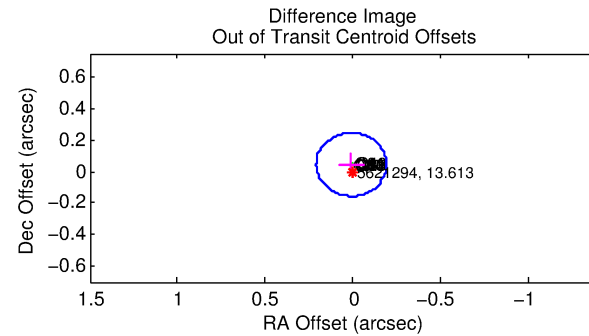
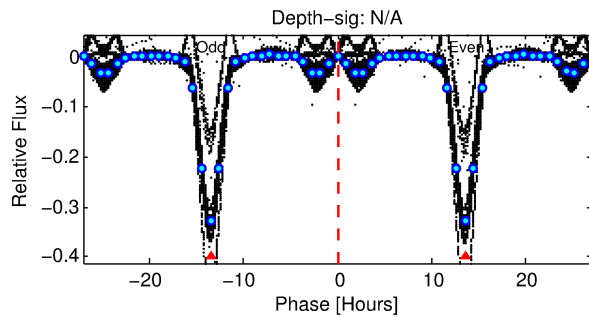
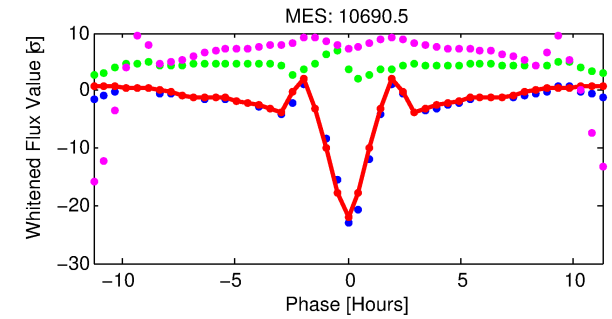
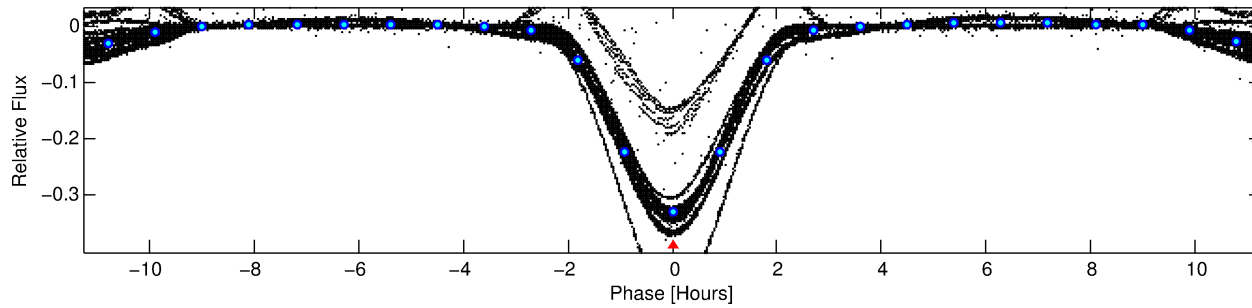
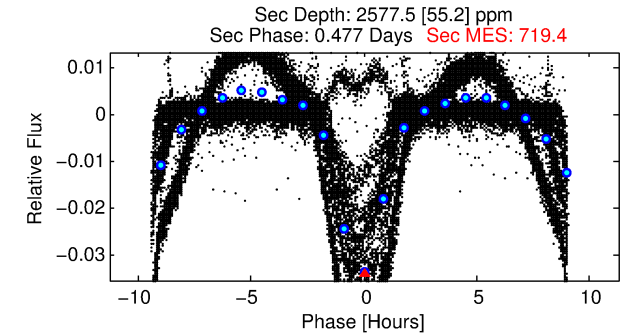
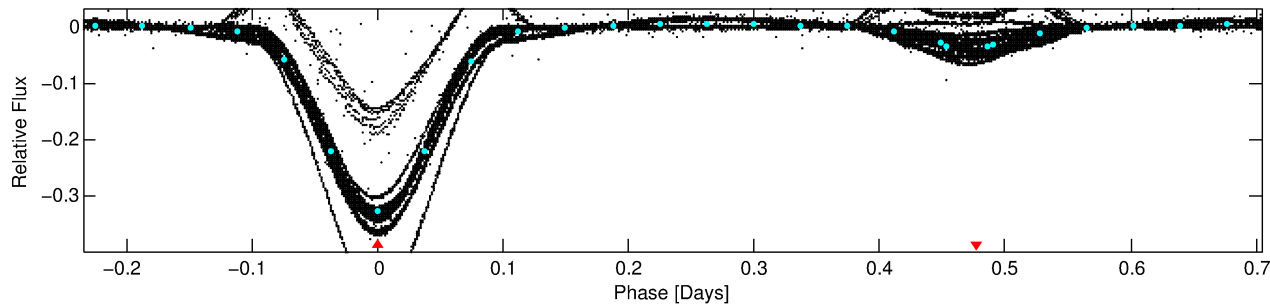
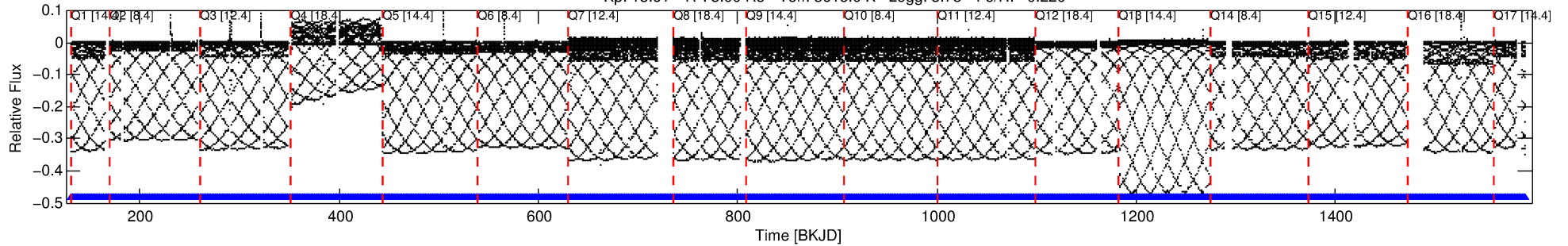
Ephemeris Match Information For 005621294-01

No Significant Match Found

DV One-Page Summary

KIC: 5621294 Candidate: 1 of 1 Period: 0.939 d
KOI: K06606.01 Corr: 0.836

Kp: 13.61 R*: 3.00 Rs Teff: 8615.0 K Logg: 3.78 Fe/H: -0.220



TPS TCE Results:

Period = 0.93890 d
Epoch = 131.8379 BKJD

DV fit results are unavailable

DV Diagnostic Results:

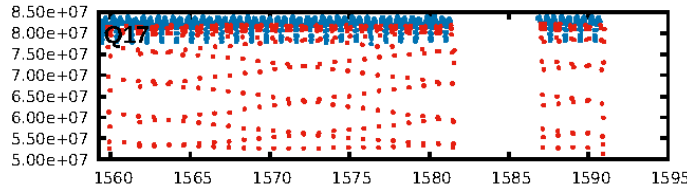
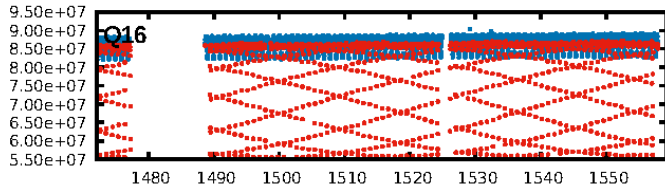
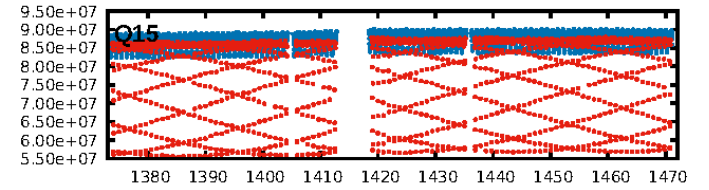
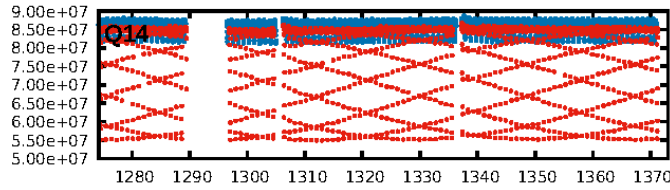
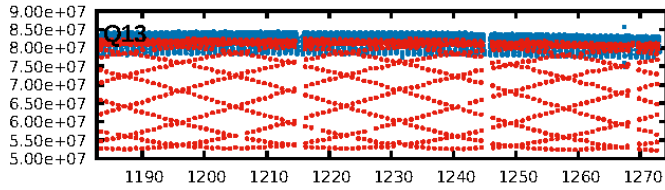
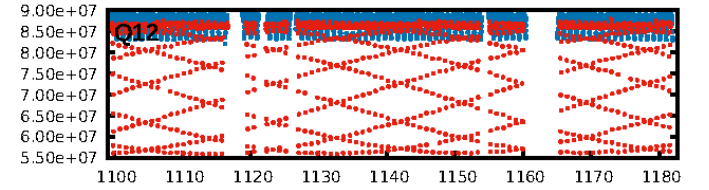
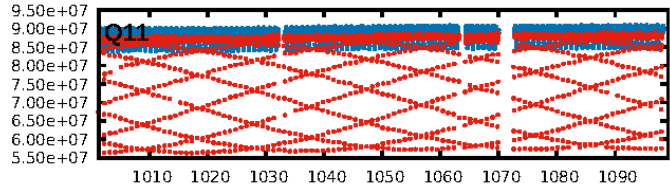
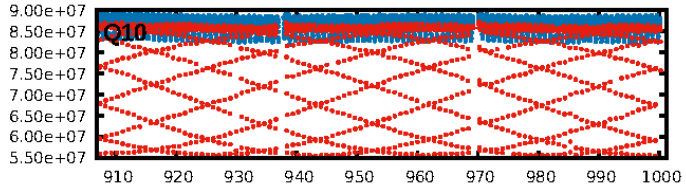
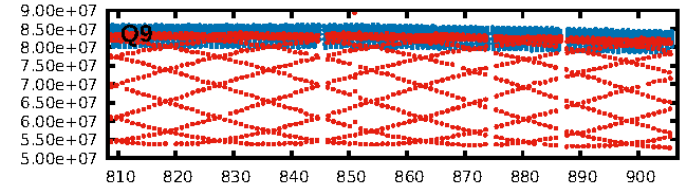
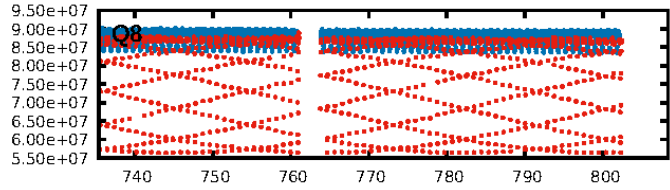
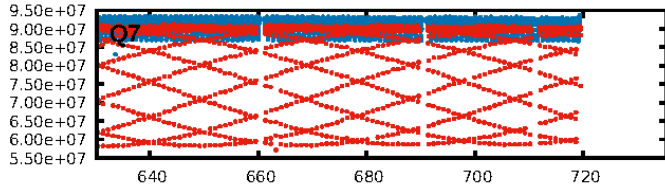
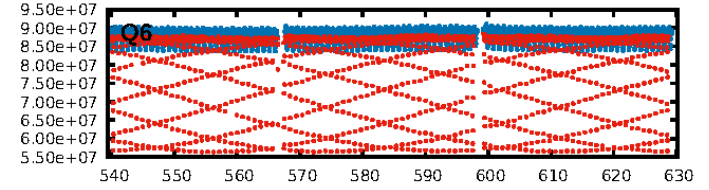
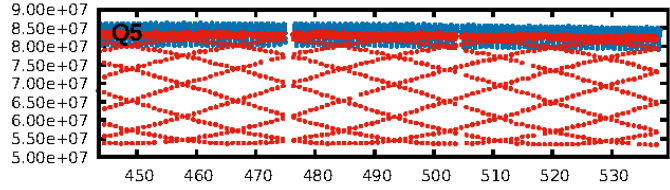
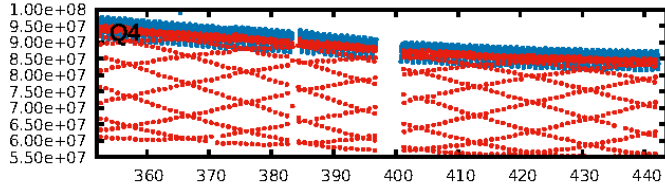
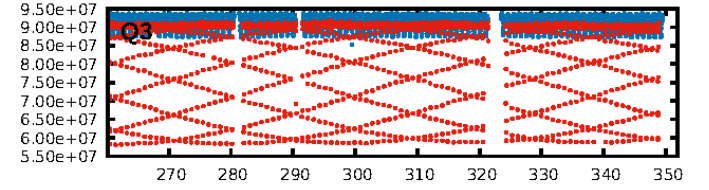
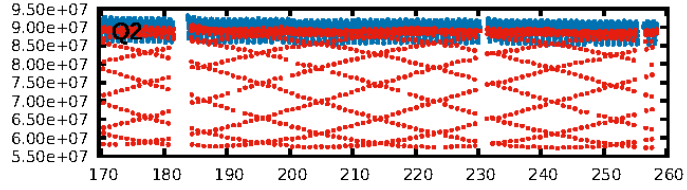
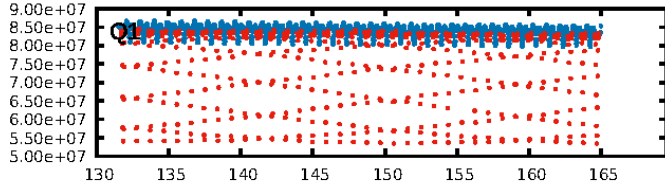
ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [1367/1367]
GhostDiagnostic-chr: N/A

Centroid-sig: 0.0%
Centroid-so: 0.054 arcsec [218.77σ]
OotOffset-rm: 0.046 arcsec [0.70σ]
KicOffset-rm: 0.017 arcsec [0.24σ]
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]

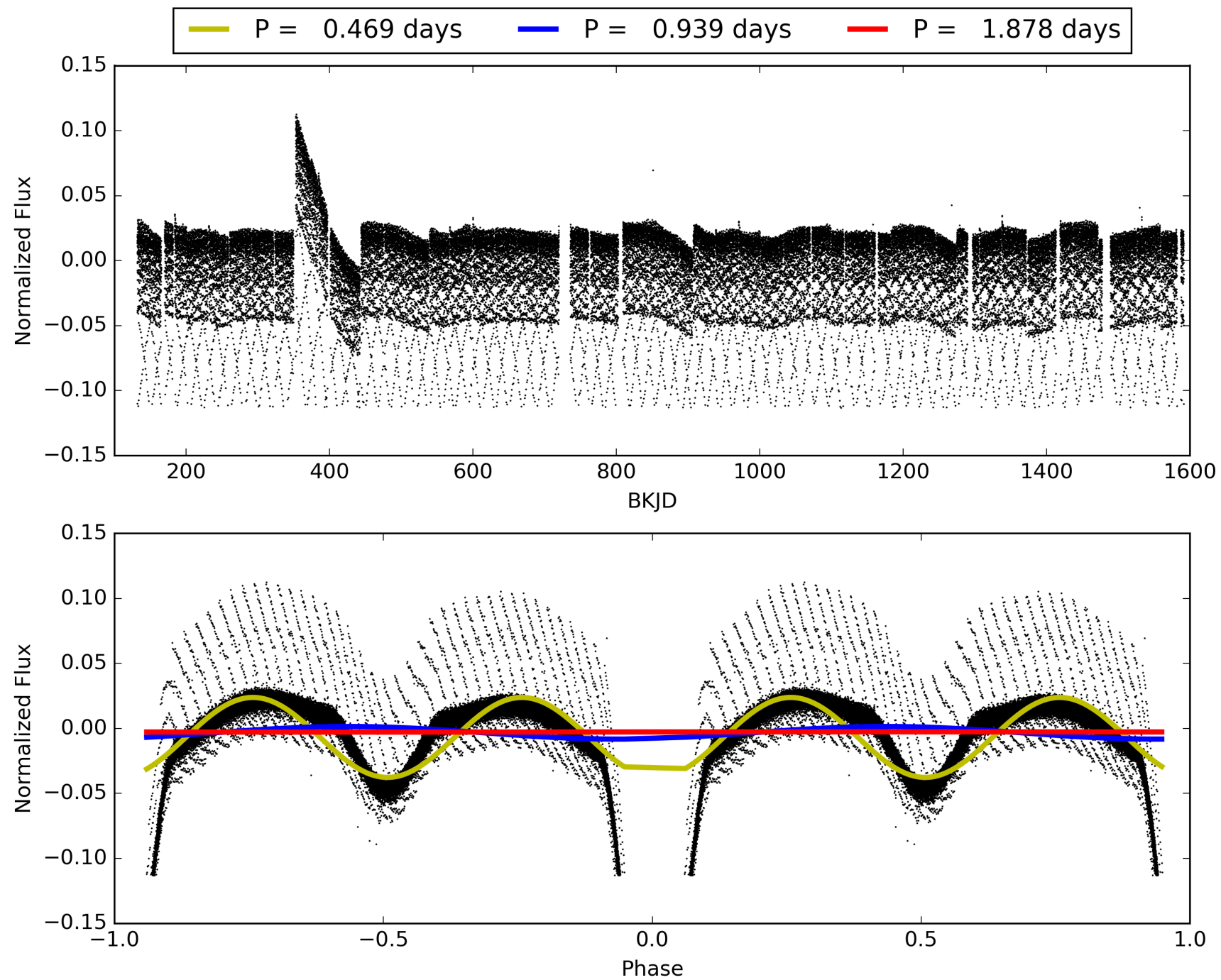
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 03-Feb-2016 09:58:40 Z

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

TCE 005621294-01, PDC Light Curves

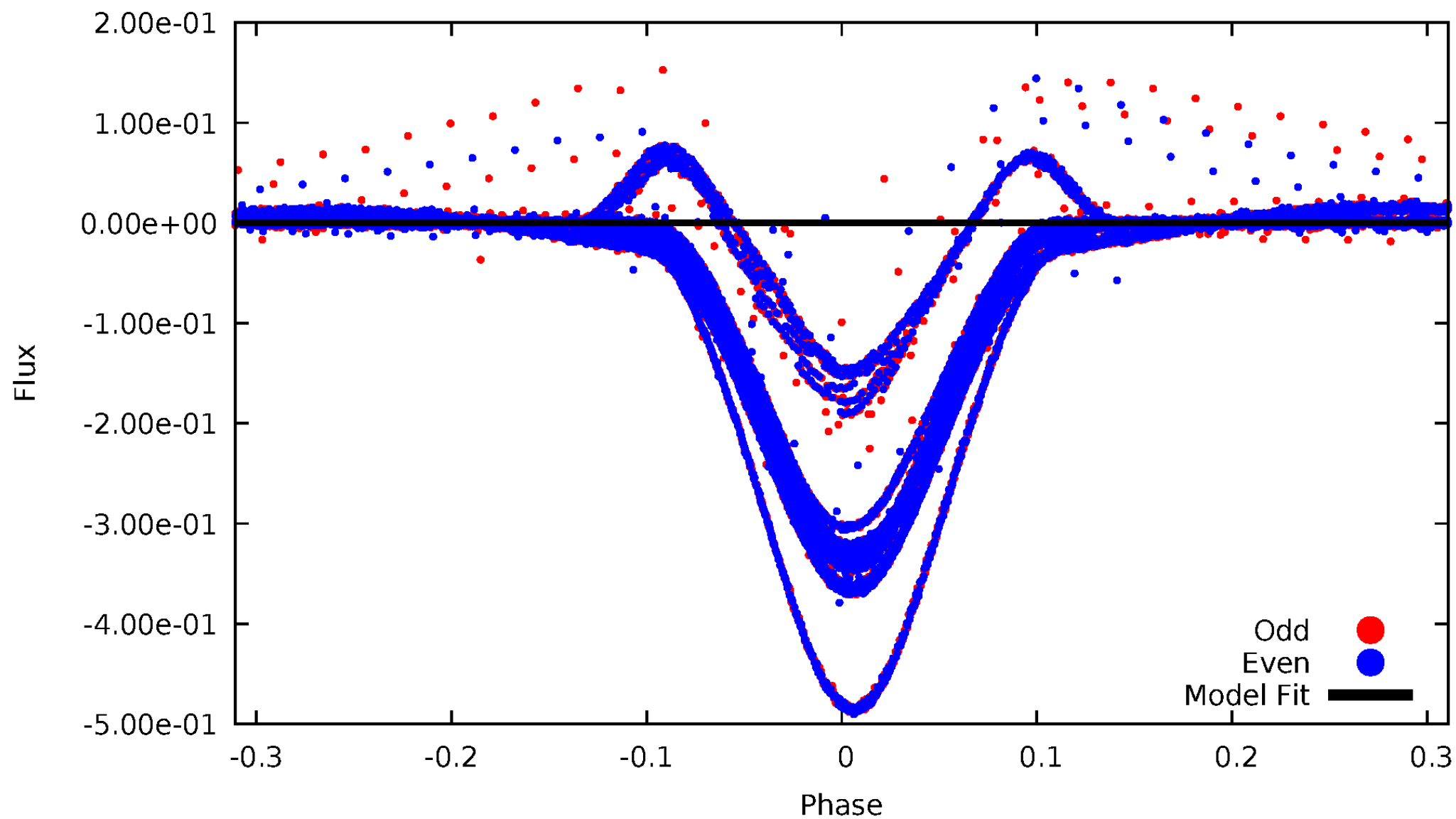


TCE 005621294-01



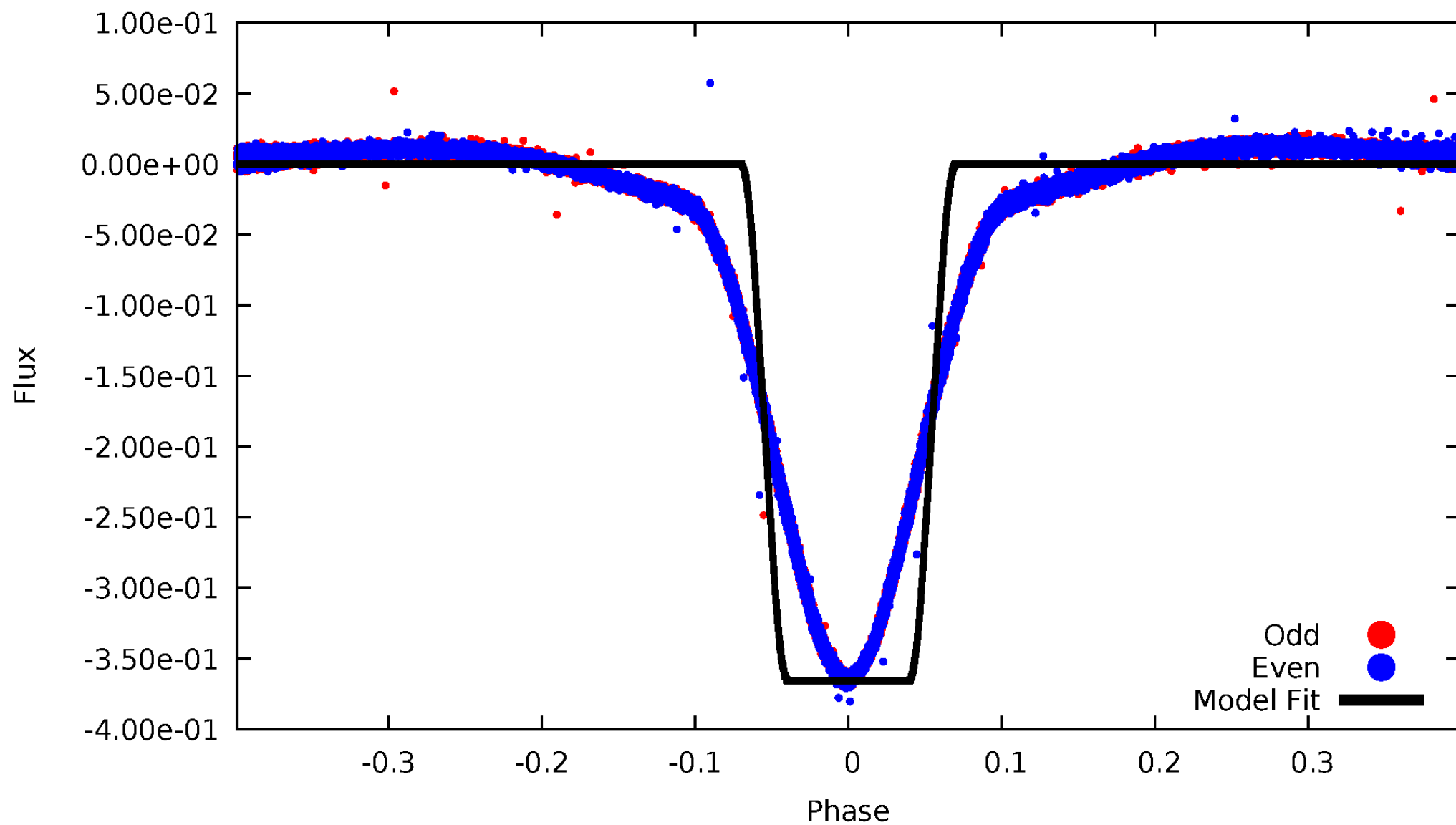
DV Odd/Even

TCE 005621294-01



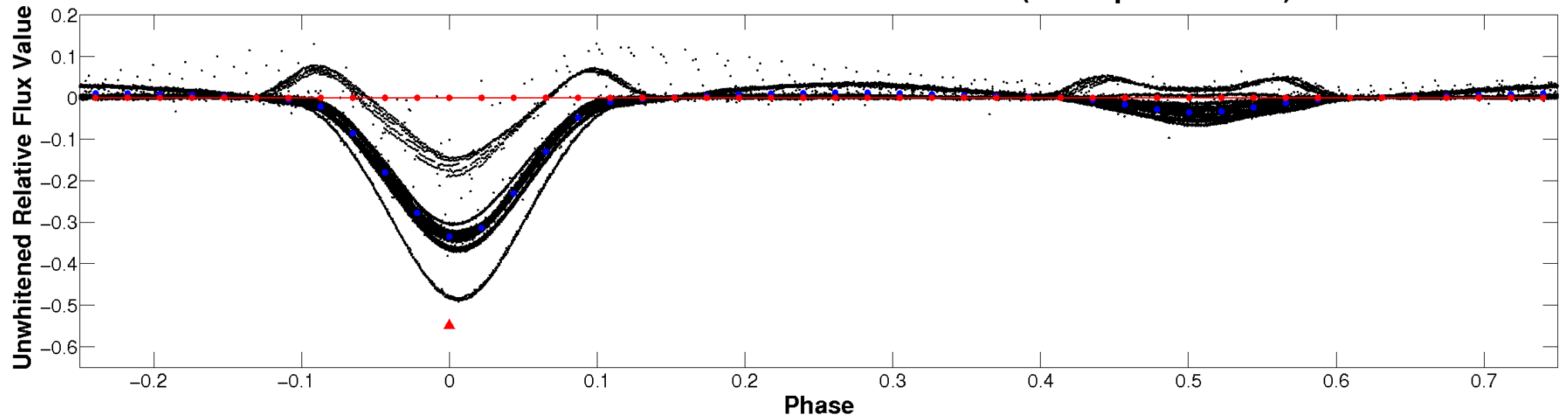
ALT Odd/Even

TCE 005621294-01



Non-Whitened Vs. Whitened Light Curve

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

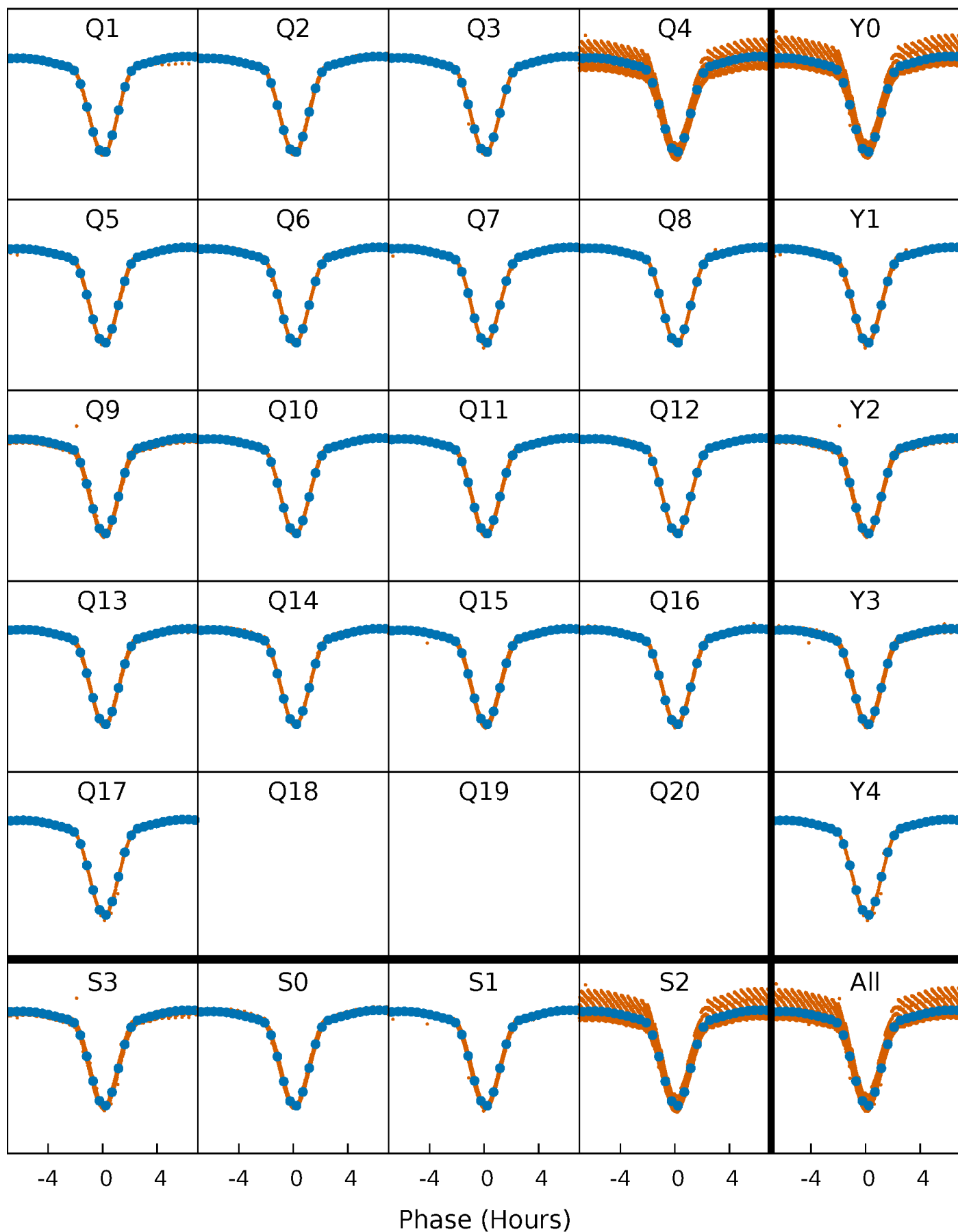


Planet 1 : Phased Whitened Flux Time Series (TPS Epoch/Period)



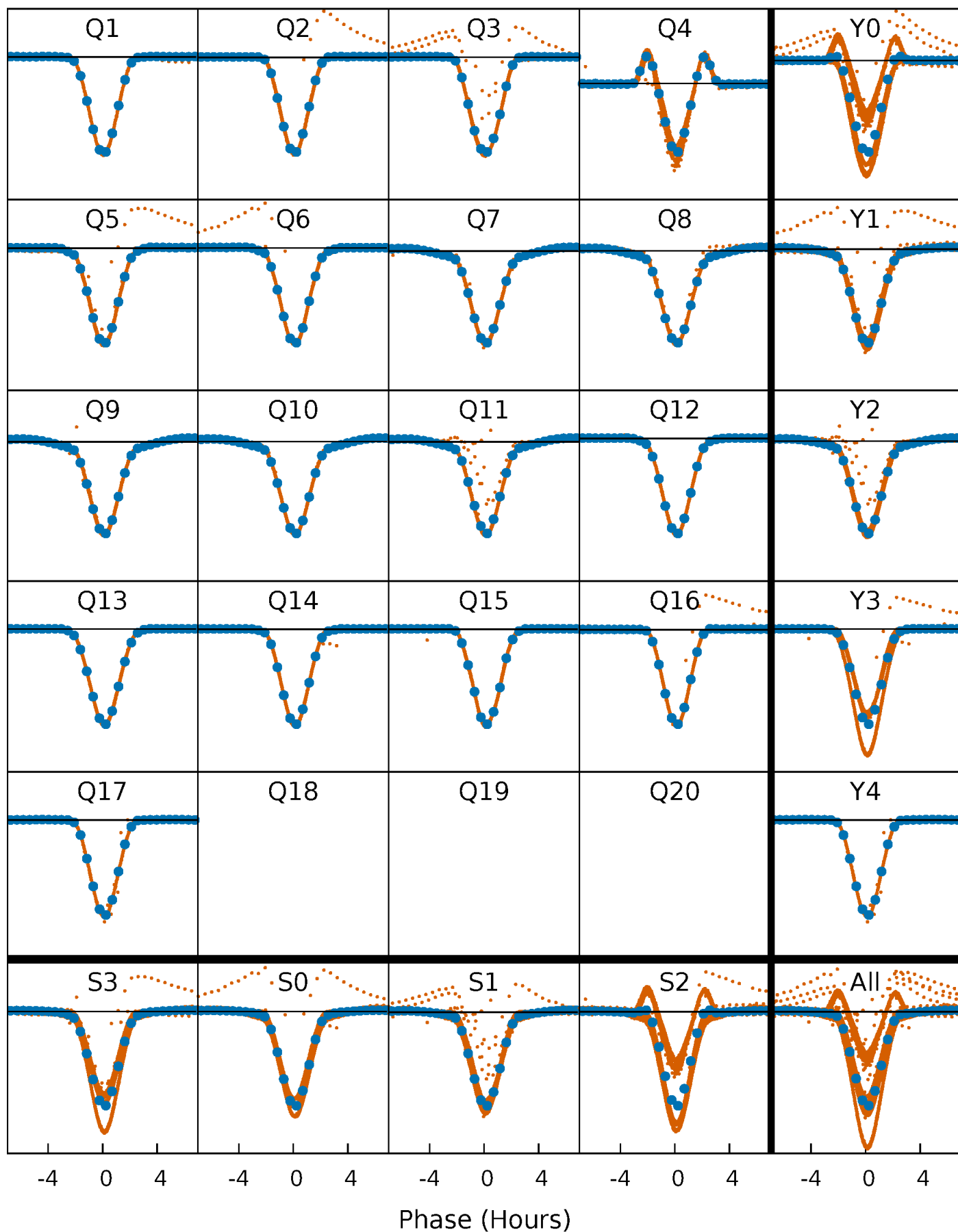
PDC Quarter-Phased Transit Curves

TCE 005621294-01 P= 0.938903 Days $T_0=131.837931$ (BKJD)



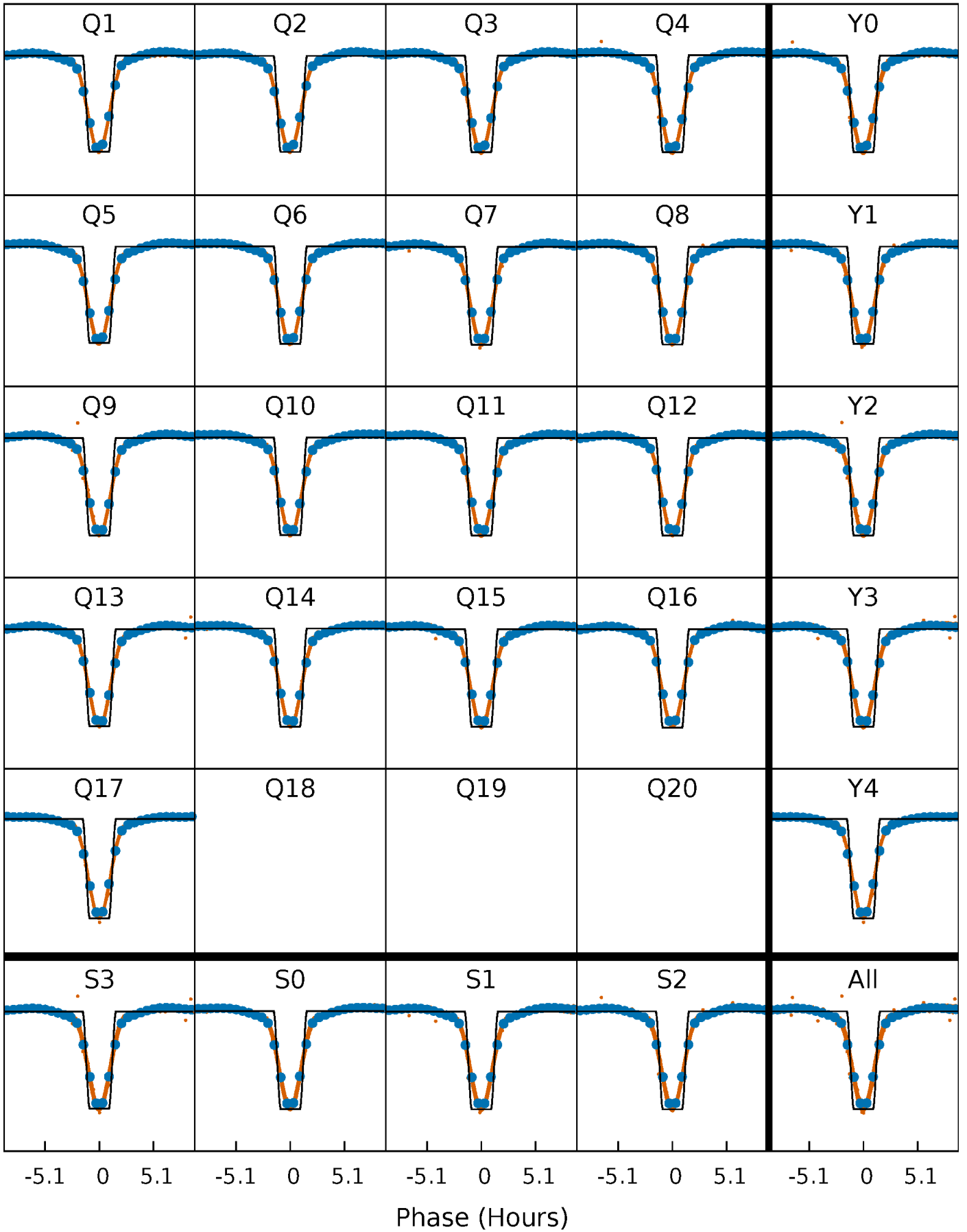
DV Quarter-Phased Transit Curves

TCE 005621294-01 P= 0.938903 Days $T_0=131.837931$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

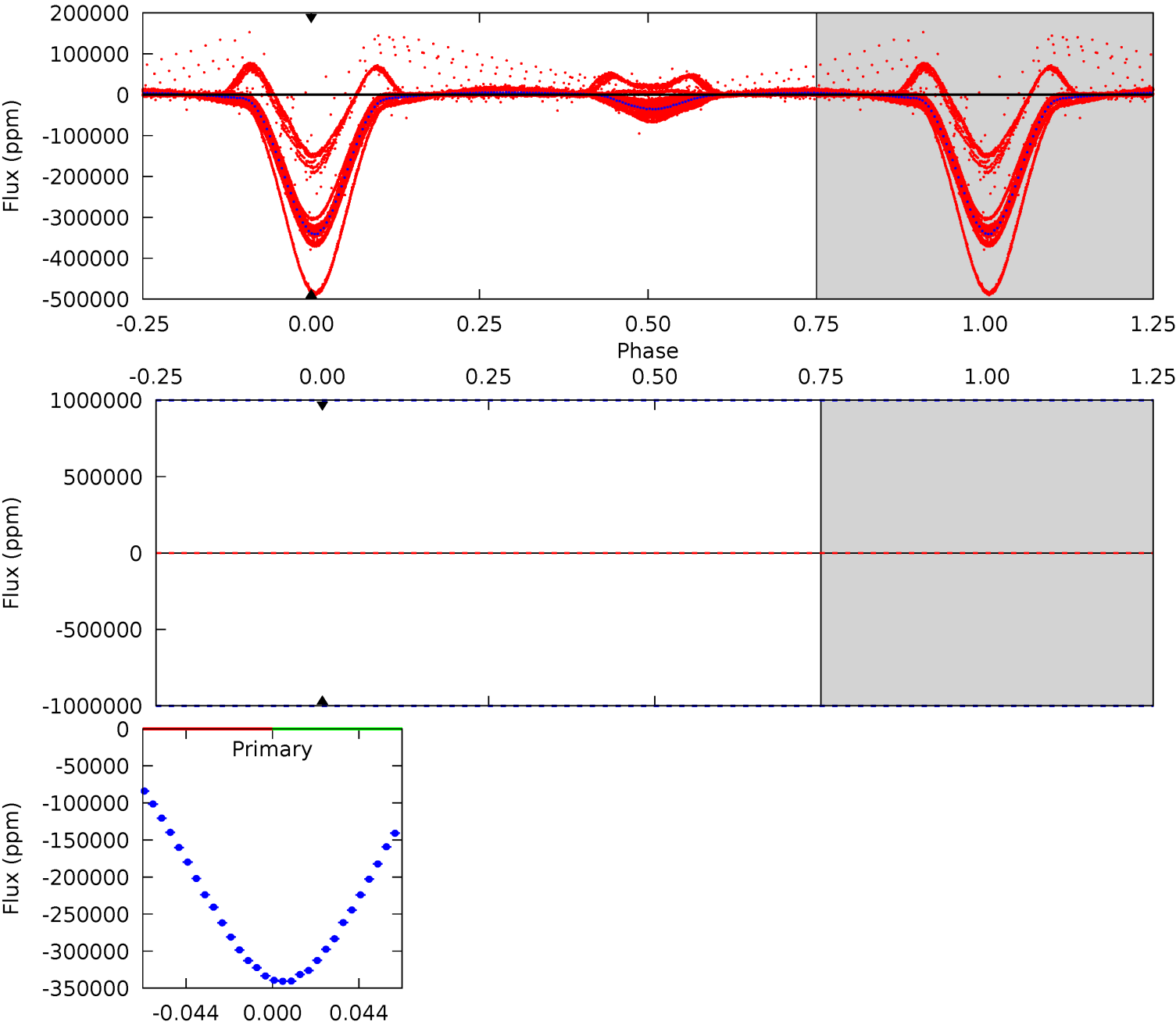
TCE 005621294-01 P= 0.938903 Days $T_0=131.842728$ (BKJD)



DV Model-Shift Uniqueness Test

005621294-01, P = 0.938903 Days, E = 130.899028 Days

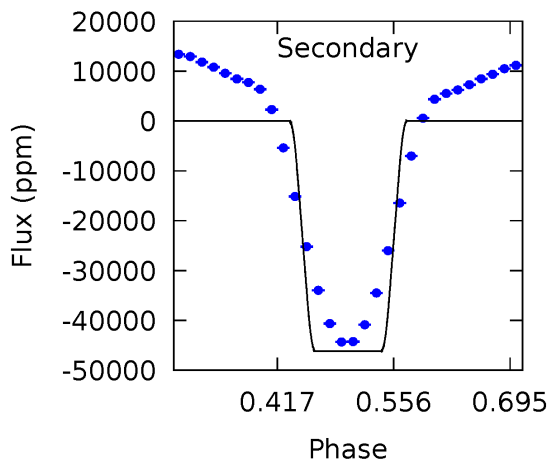
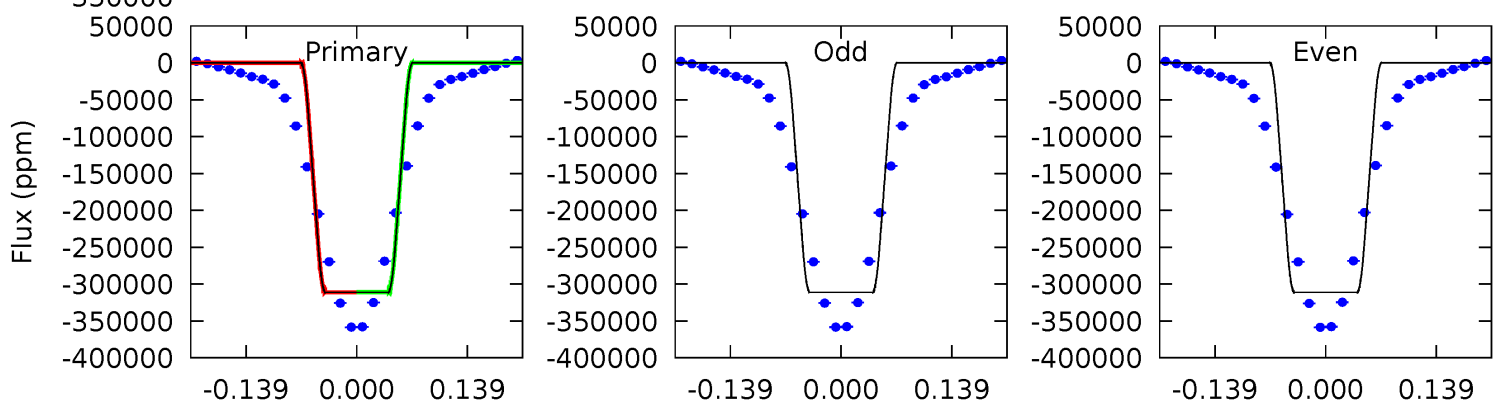
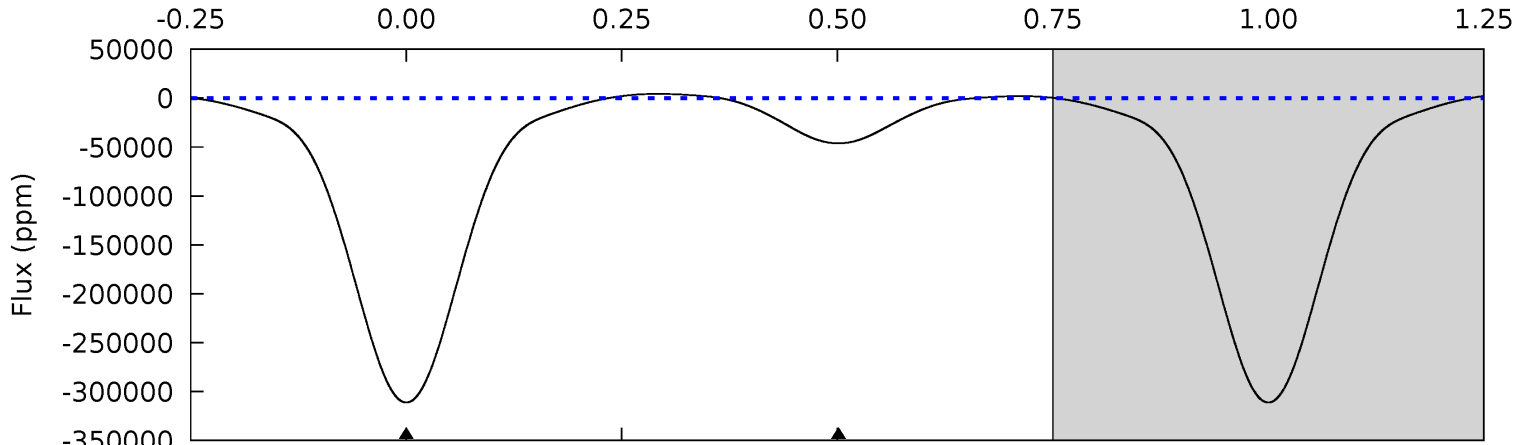
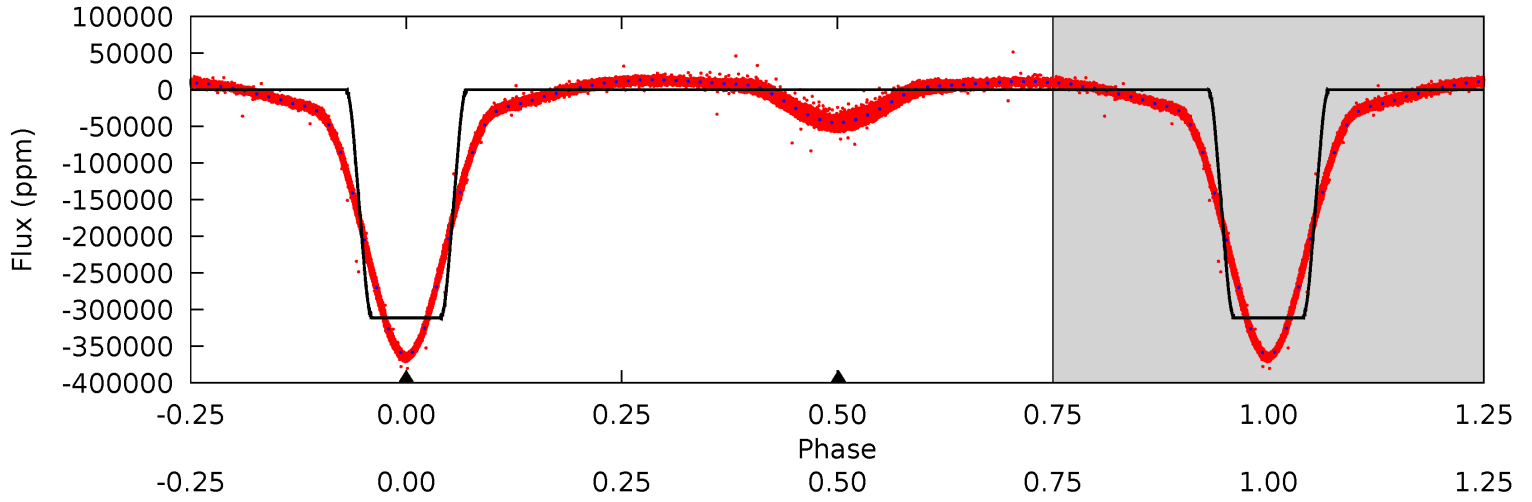
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

005621294-01, P = 0.938903 Days, E = 130.903825 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2905	431.0	0	0	4.50	1.48	80.4	2905	2905	431.0	431.0	0.44	1.00	0.01	2.28



Stellar Parameters For KIC 005621294

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	8615^{+239}_{-376}	$3.784^{+0.405}_{-0.108}$	$-0.220^{+0.400}_{-0.350}$	$3.003^{+0.737}_{-1.370}$	$2.002^{+0.353}_{-0.471}$	$0.104^{+0.399}_{-0.043}$
	+3%/-4%	+11%/-3%	+182%/-159%	+25%/-46%	+18%/-24%	+383%/-41%
Source	KIC0	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 005621294-01 / KOI 6606.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	0 ± 1000000	$65.26^{+34.81}_{-31.17}$	5785^{+446}_{-665}	-3737^{+15953}_{-8277}	$0.204^{+9.659}_{-9.307}$
Alt.	-46171 ± 107	$184.28^{+47.20}_{-49.77}$	5770^{+447}_{-649}	4092^{+773}_{-6855}	$0.457^{+0.347}_{-0.168}$

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

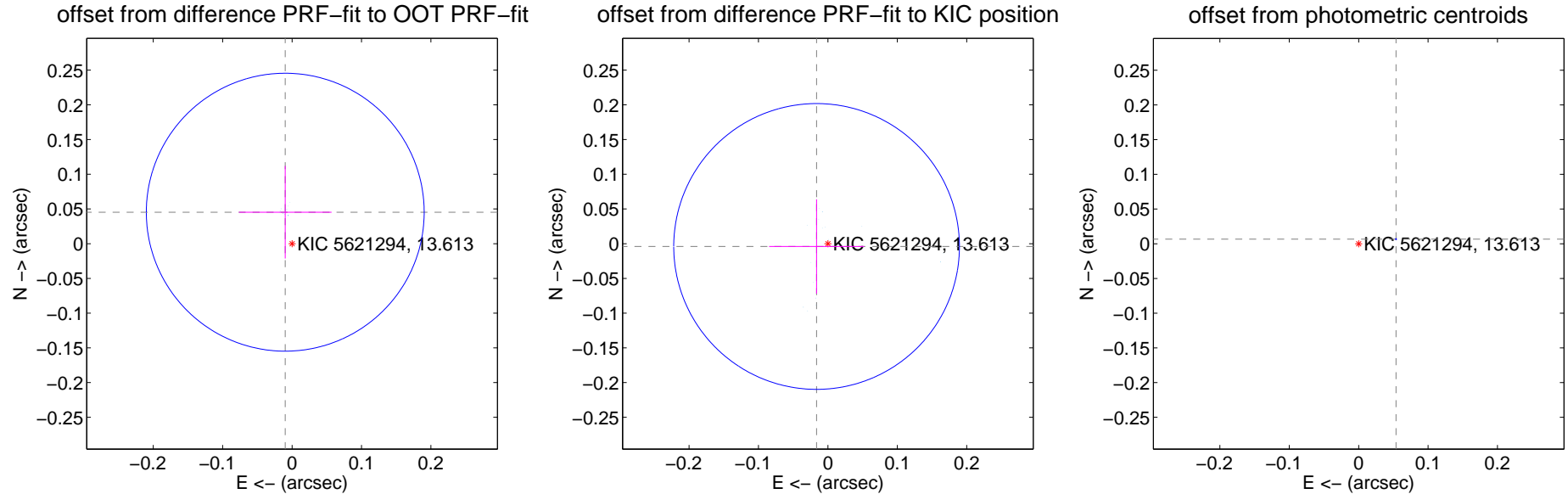
DV Centroid Data

Supplemental centroid analysis for 005621294-01. Kepler magnitude: 13.61. Transit SNR -1.00

There are 17 quarters with good PRF difference image offsets

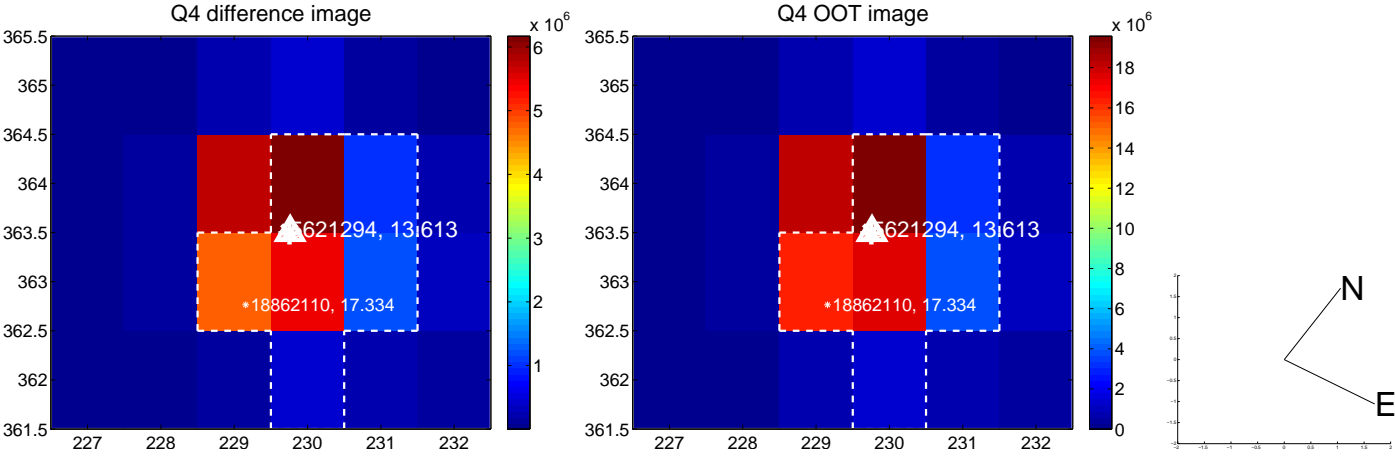
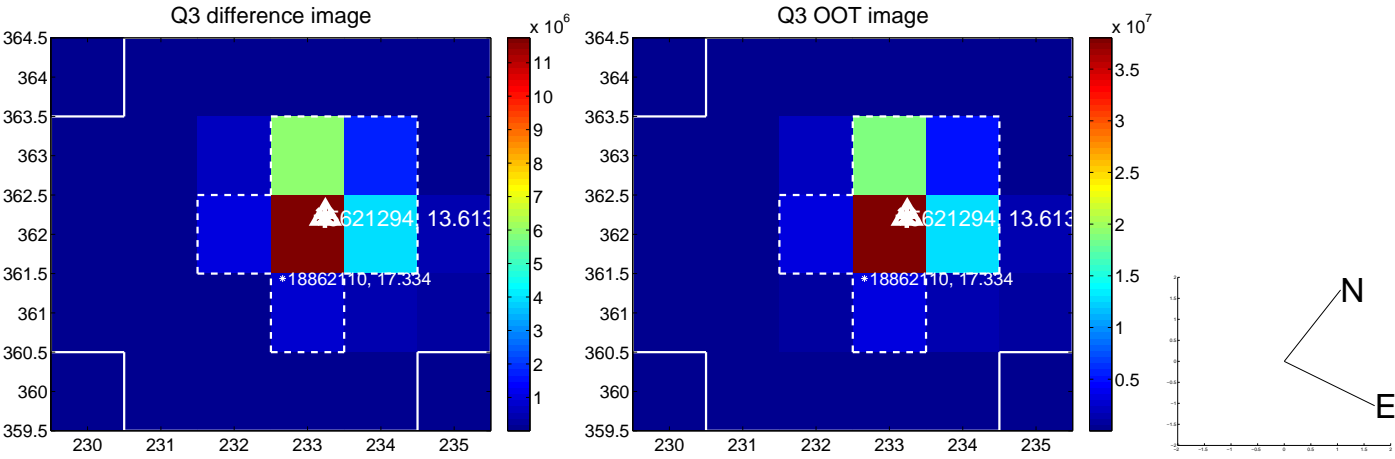
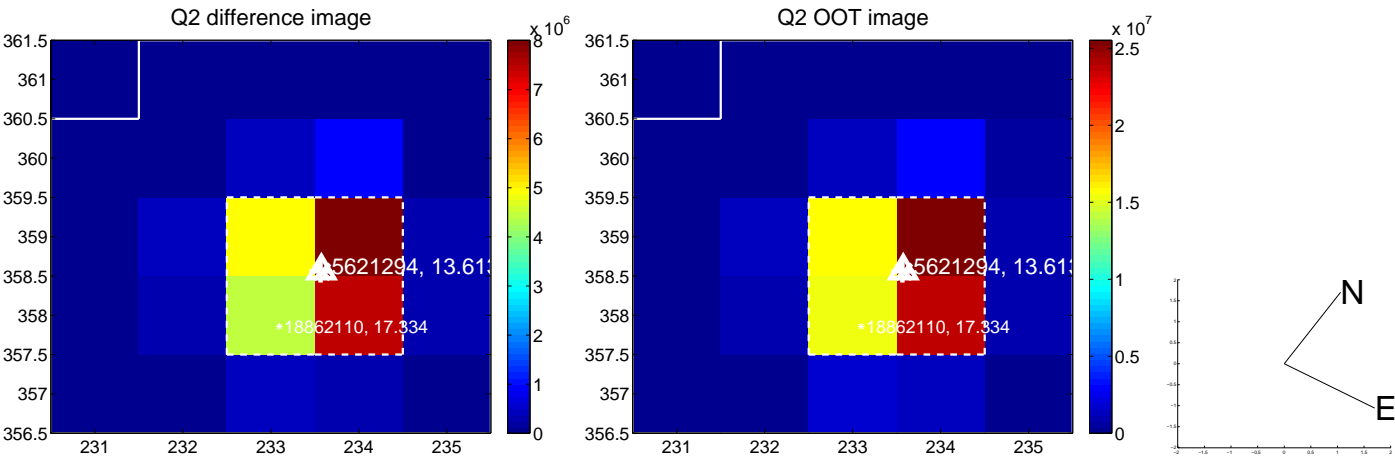
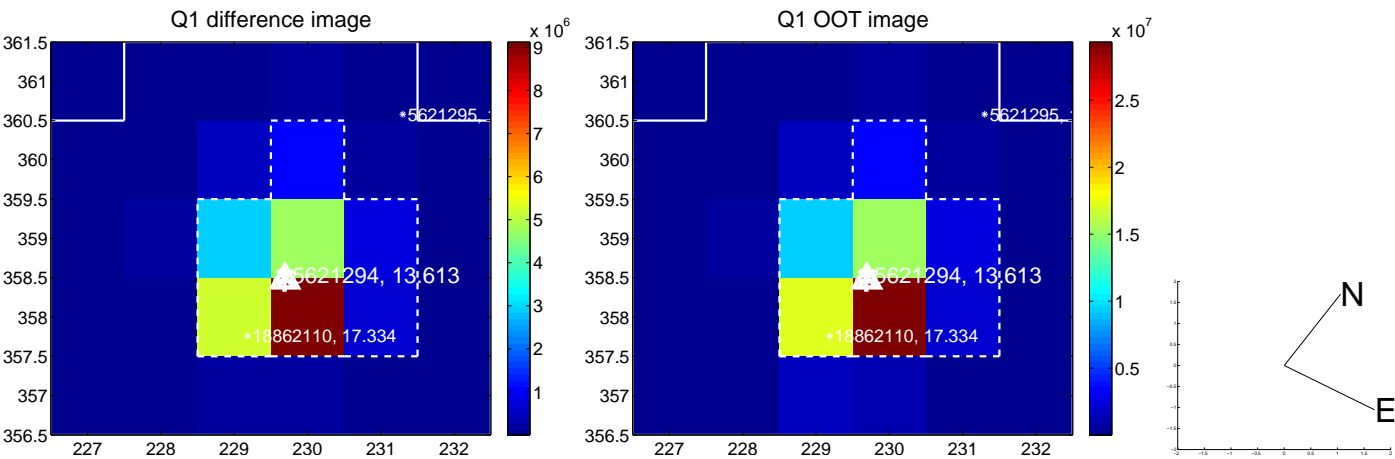
The direct PRF centroid is offset from the target star catalog position by about 0.12 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.046 ± 0.067	0.70	0.010 ± 0.067	0.045 ± 0.067
PRF-fit source offset from KIC position	0.017 ± 0.069	0.24	0.016 ± 0.068	-0.004 ± 0.068
photometric centroid source offset	0.05 ± 0.00	218.77	-0.05 ± 0.00	0.01 ± 0.00

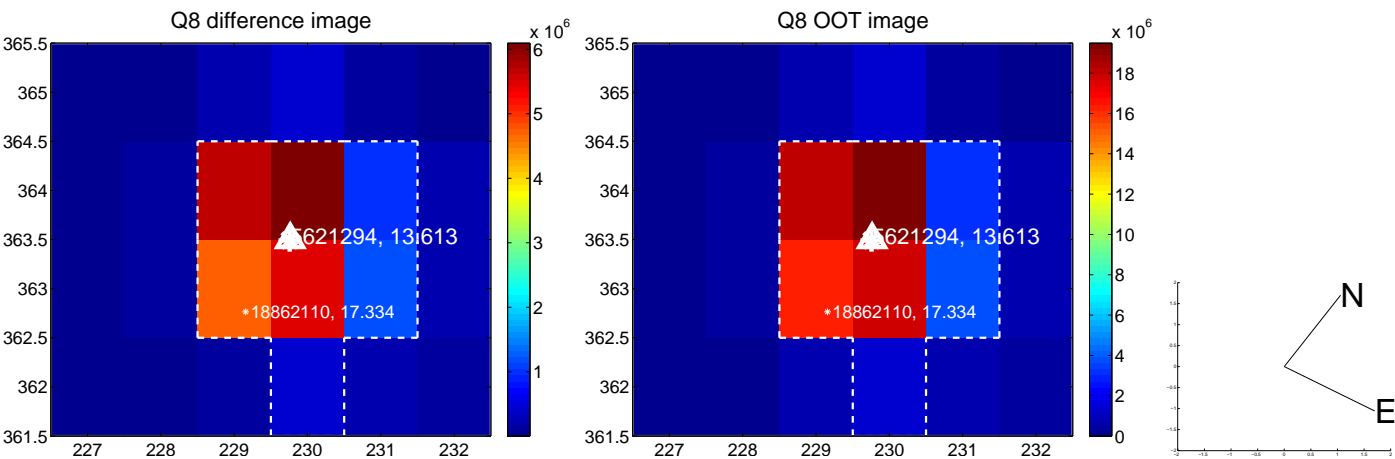
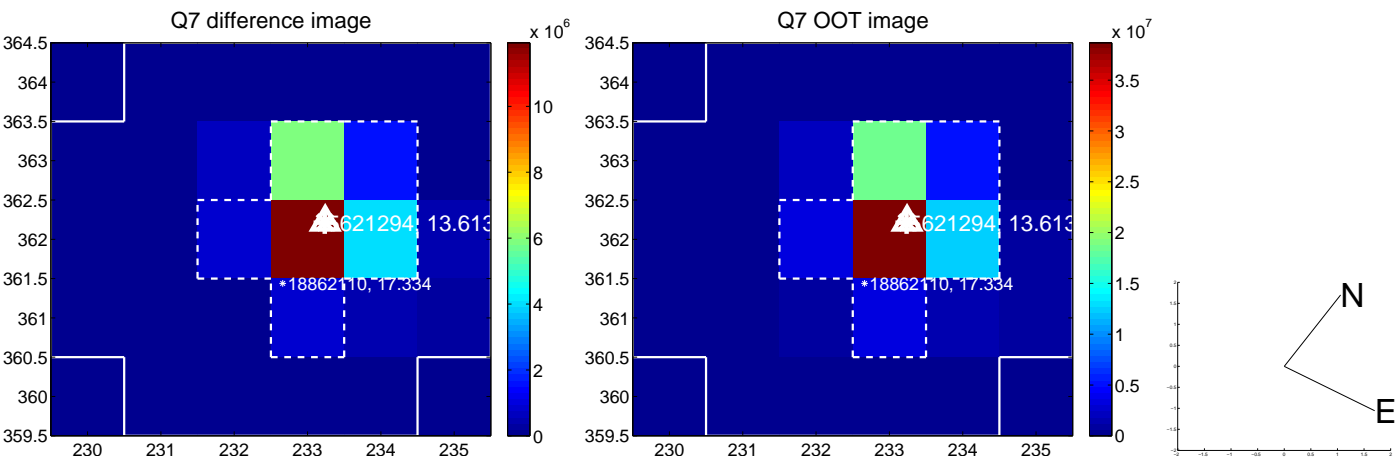
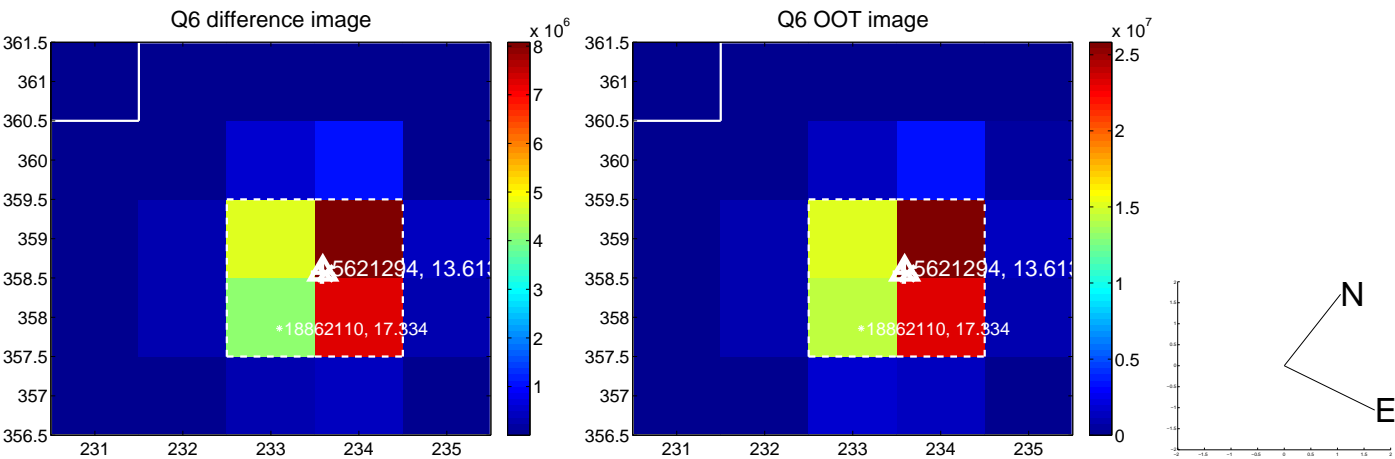
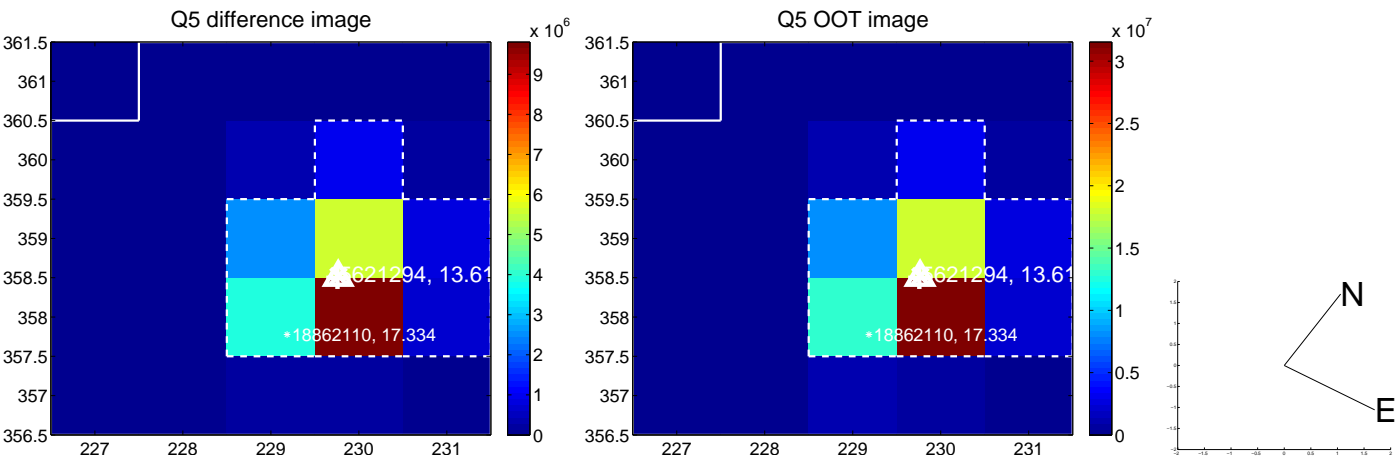


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

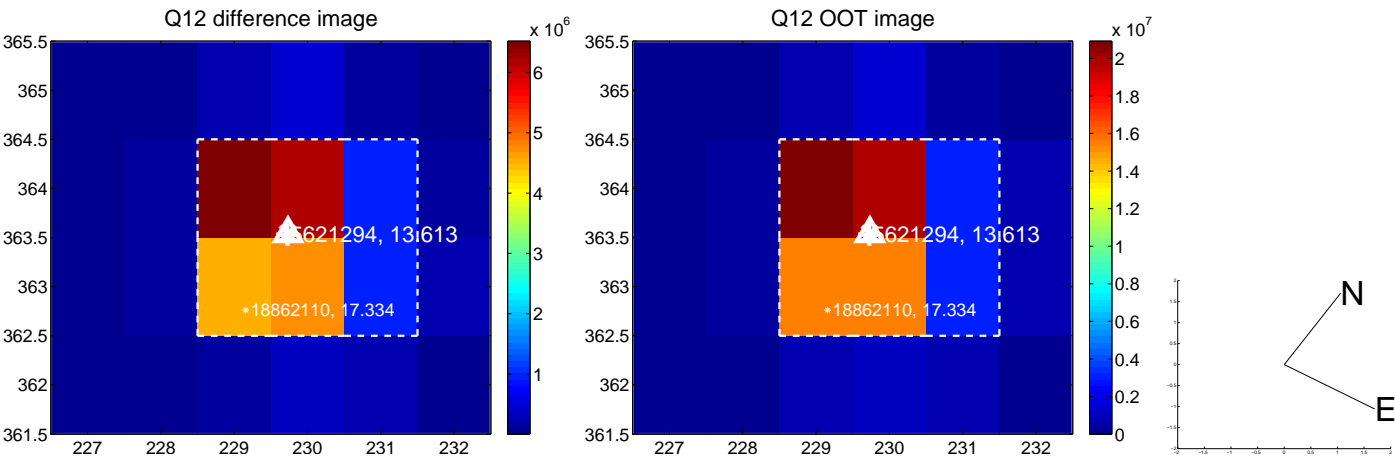
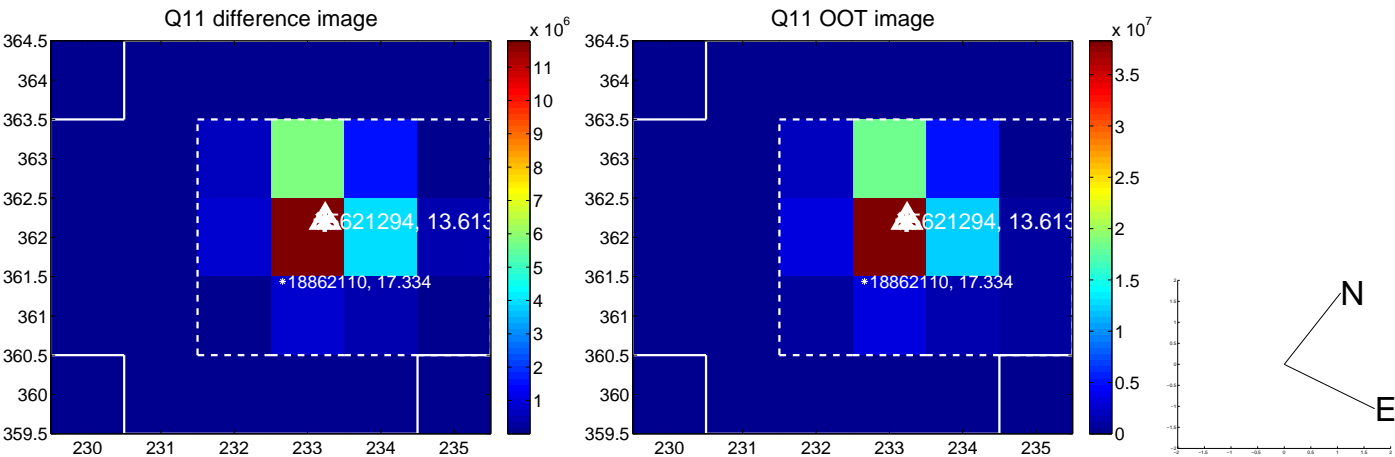
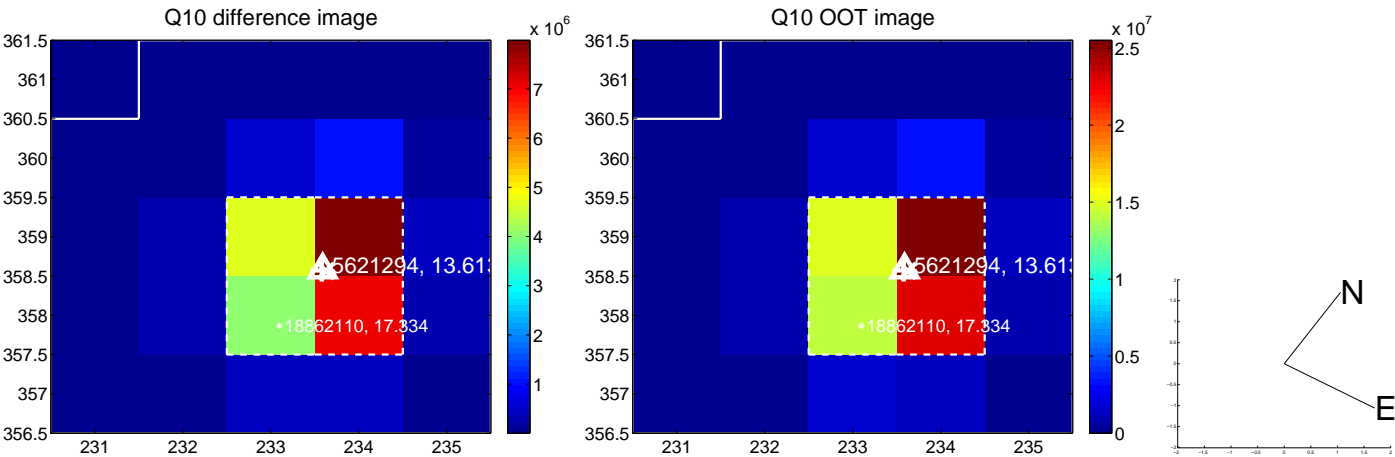
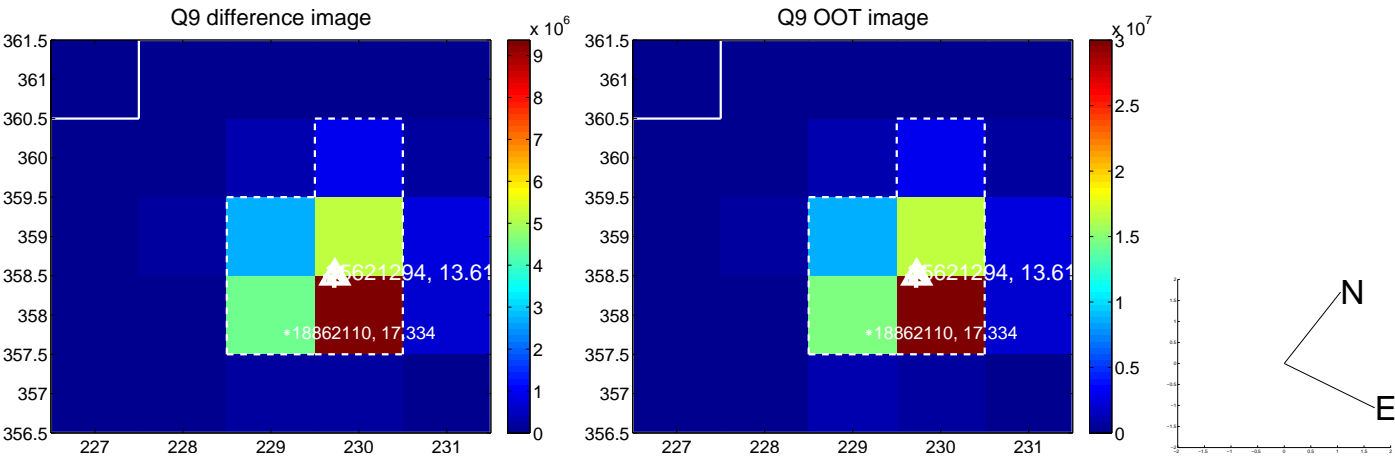
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



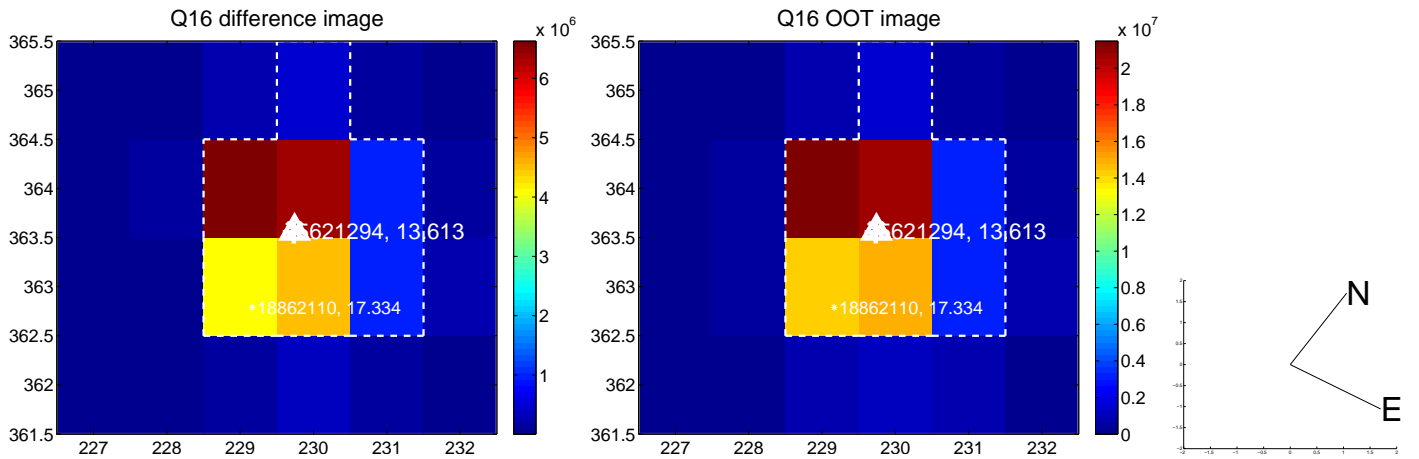
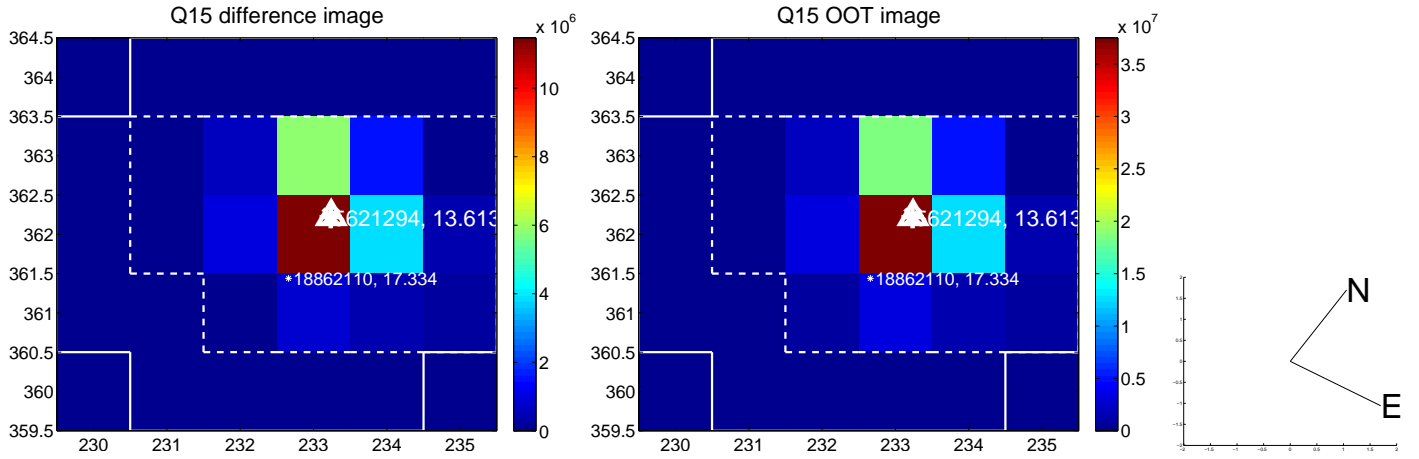
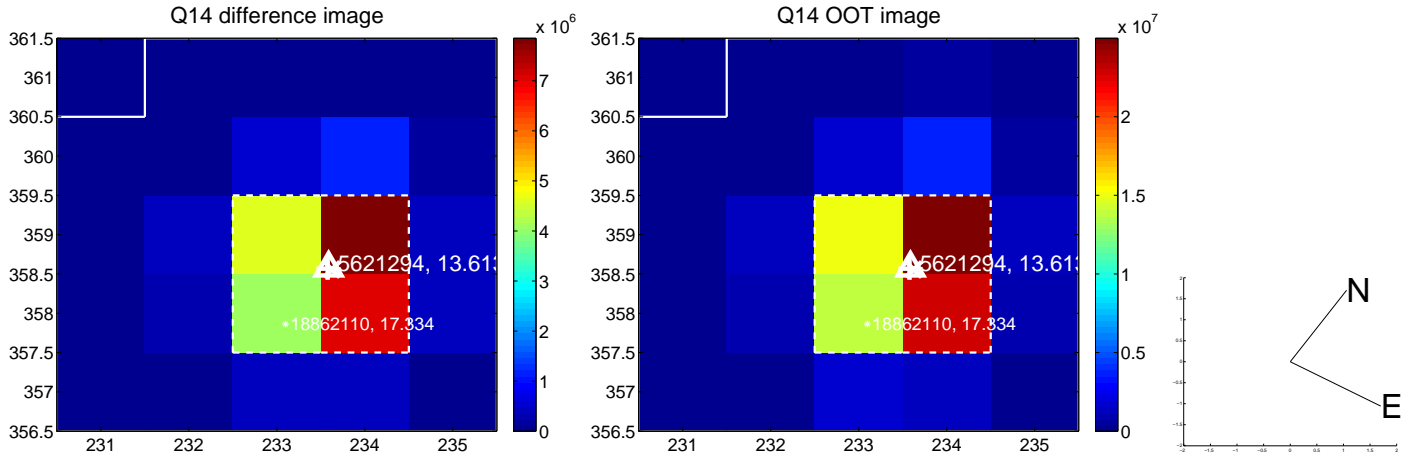
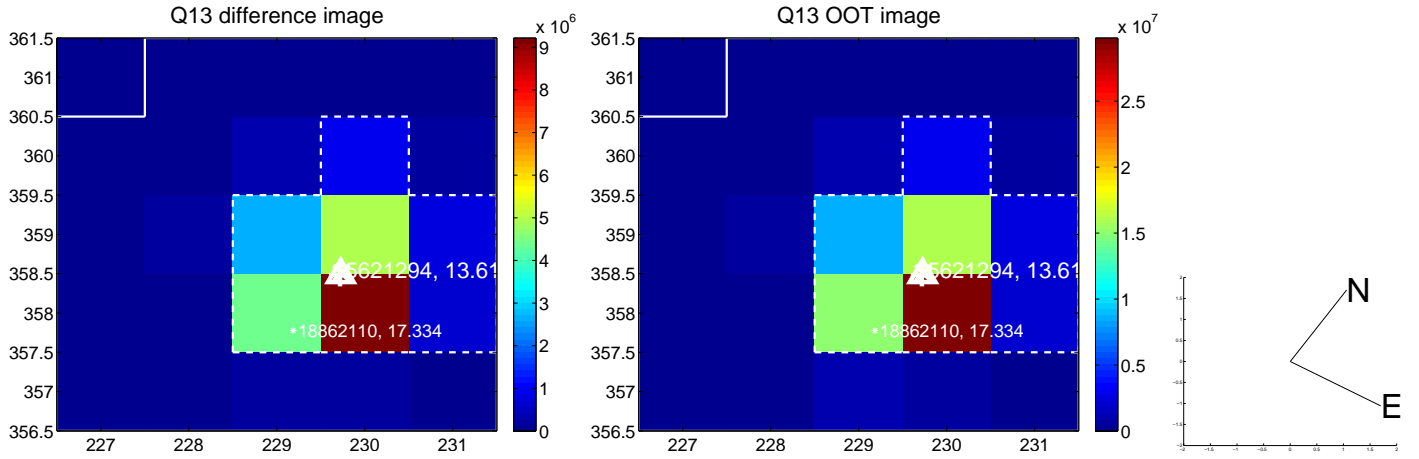
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



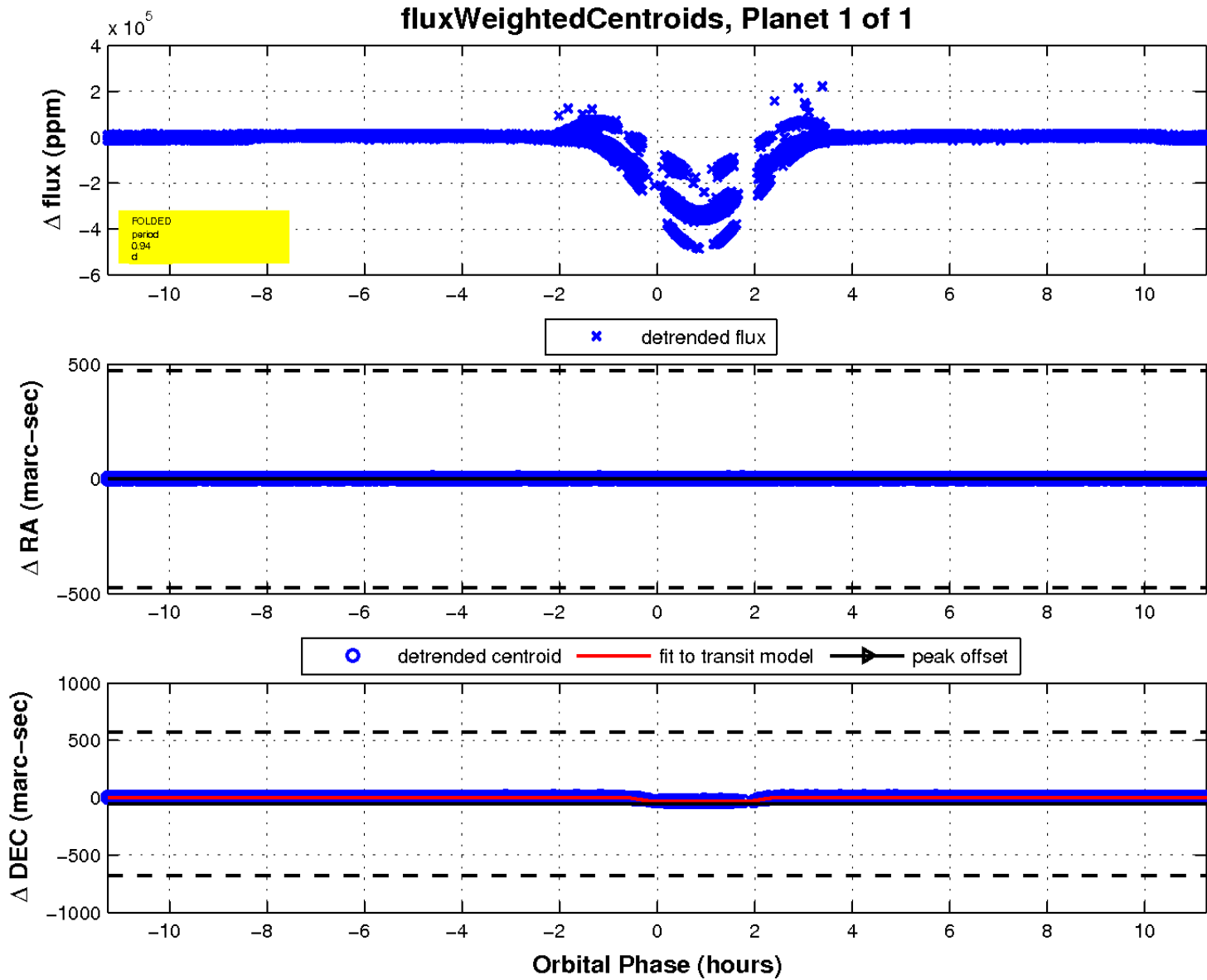
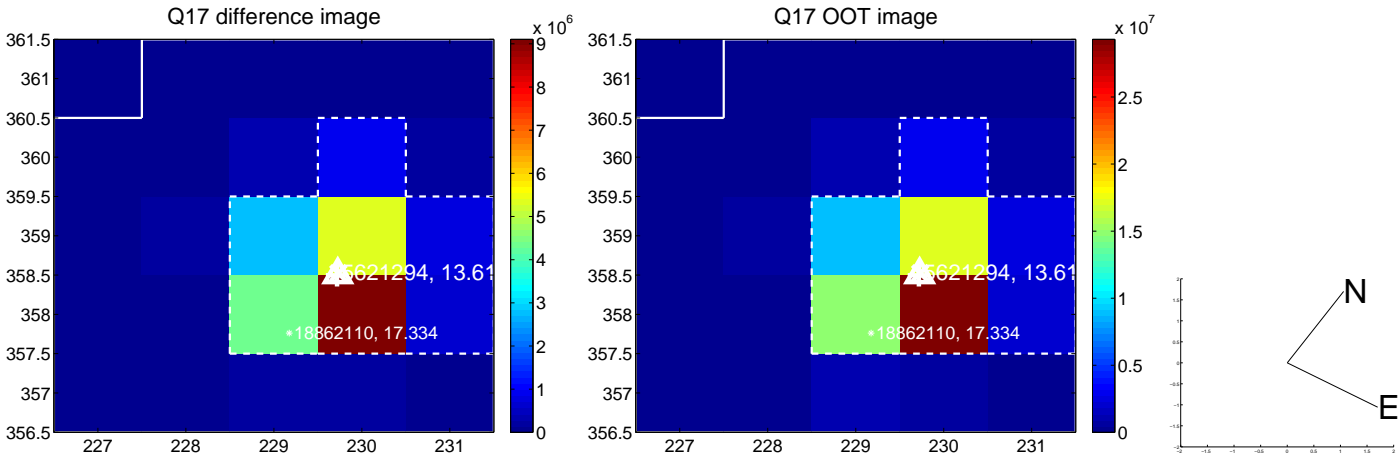
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

