

KIC 004832197

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})
004832197-01	OBS	1661.01	0.947738	132.387315	10336.1	1.697	1297.9	1802.0	1.27	6302	16.07	6868.54

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
004832197-01	OBS	FP	0.00	0	1	0	0	DEPTH_ODDEVEN_ALT—MOD_ODDEVEN_DV—MOD_ODDEVEN_ALT

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.

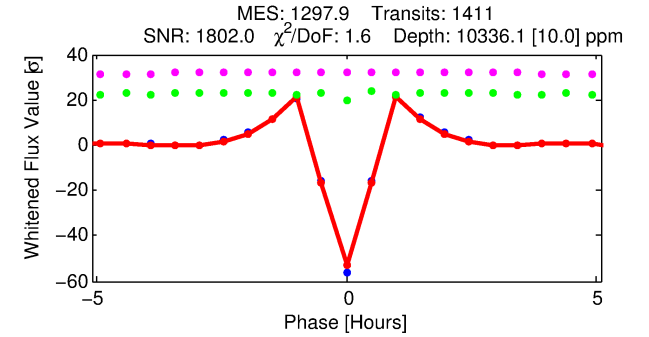
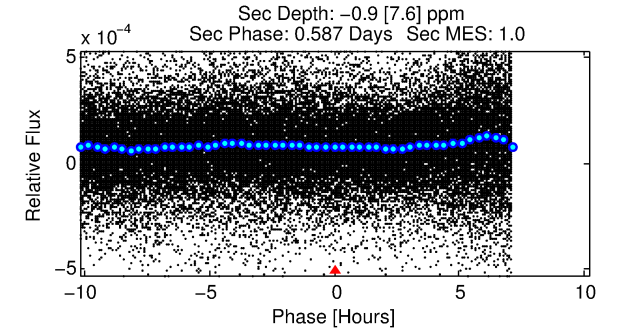
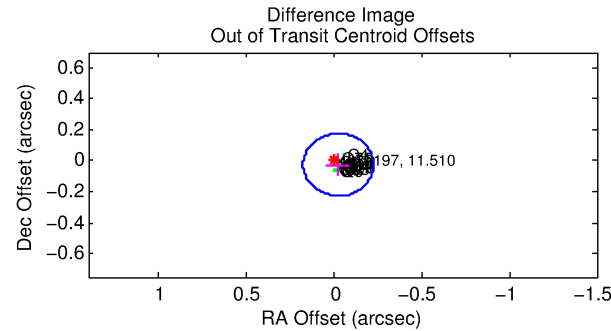
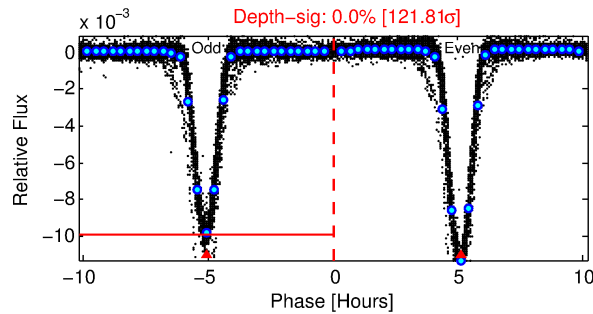
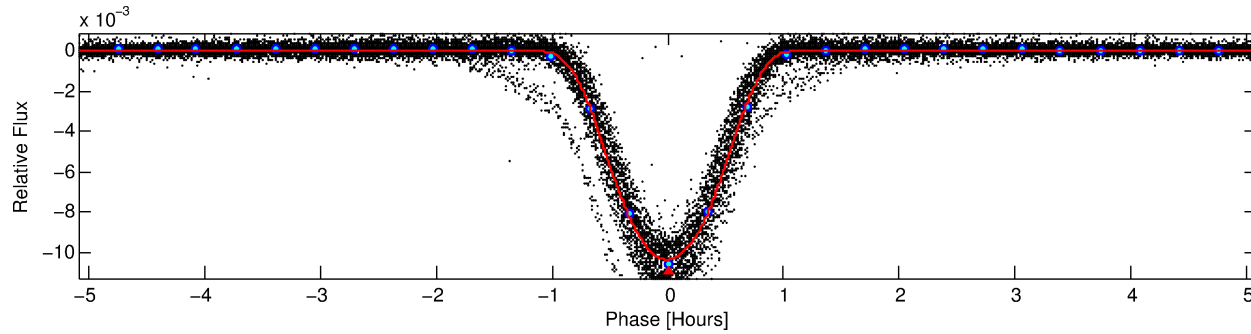
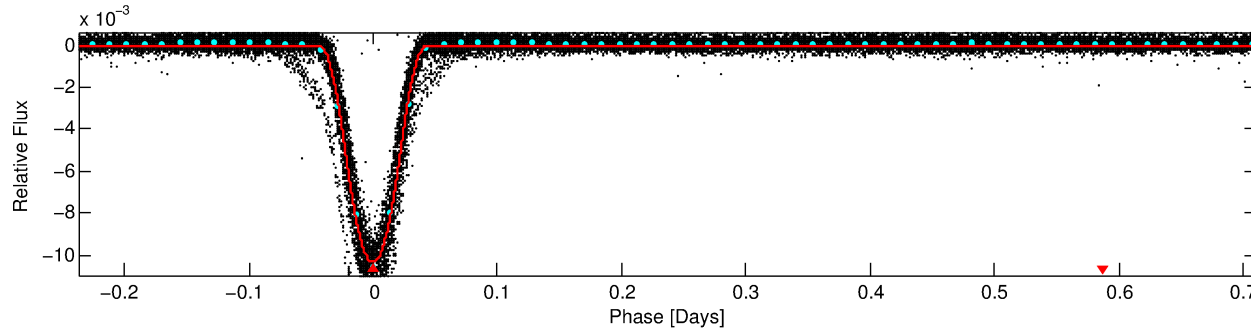
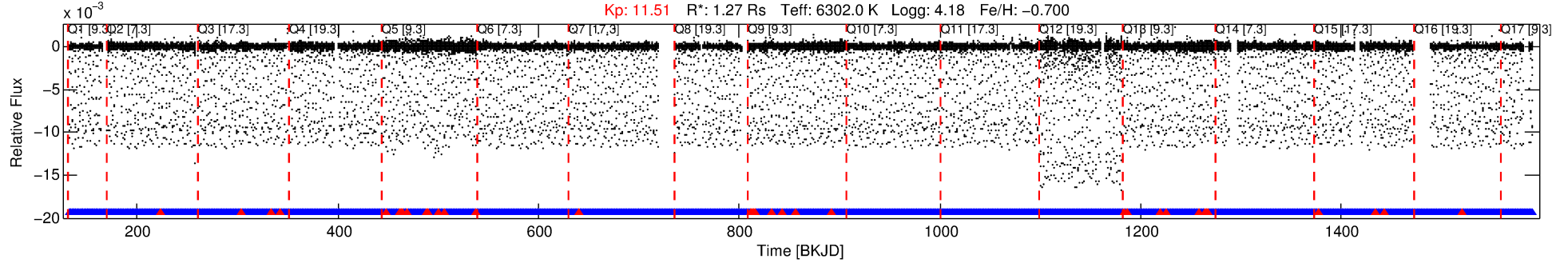
Ephemeris Match Information For 004832197-01

No Significant Match Found

DV One-Page Summary

KIC: 4832197 Candidate: 1 of 1 Period: 0.948 d
KOI: K01661.01 Corr: 0.969

Kp: 11.51 R*: 1.27 Rs Teff: 6302.0 K Logg: 4.18 Fe/H: -0.700



DV Fit Results:

Period = 0.94774 [0.00000] d
Epoch = 132.3873 [0.0000] BKJD
Rp/R* = 0.1161 [0.0004]
a/R* = 2.94 [0.01]
b = 0.91 [0.00]
Seff = 6868.54 [3421.43]
Teff = 2321 [289] K
Rp = 16.07 [4.46] Re
a = 0.0182 [0.0053] AU
Ag = N/A
Teffp = N/A

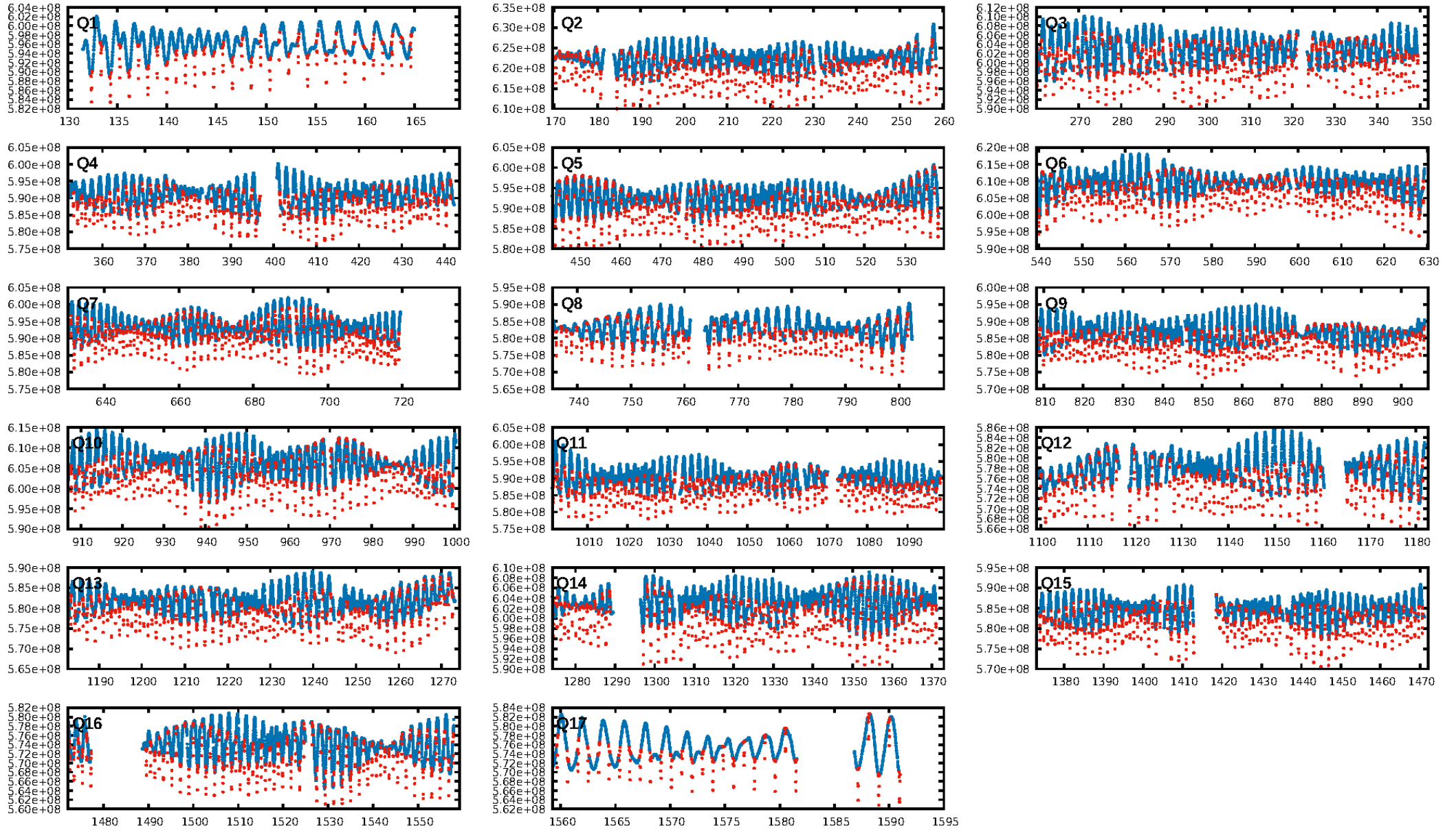
DV Diagnostic Results:

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 [1311/1347]
GhostDiagnostic-chr: 7.759
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 0.036 arcsec [0.53σ]
KicOffset-rm: 0.218 arcsec [3.22σ]
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]

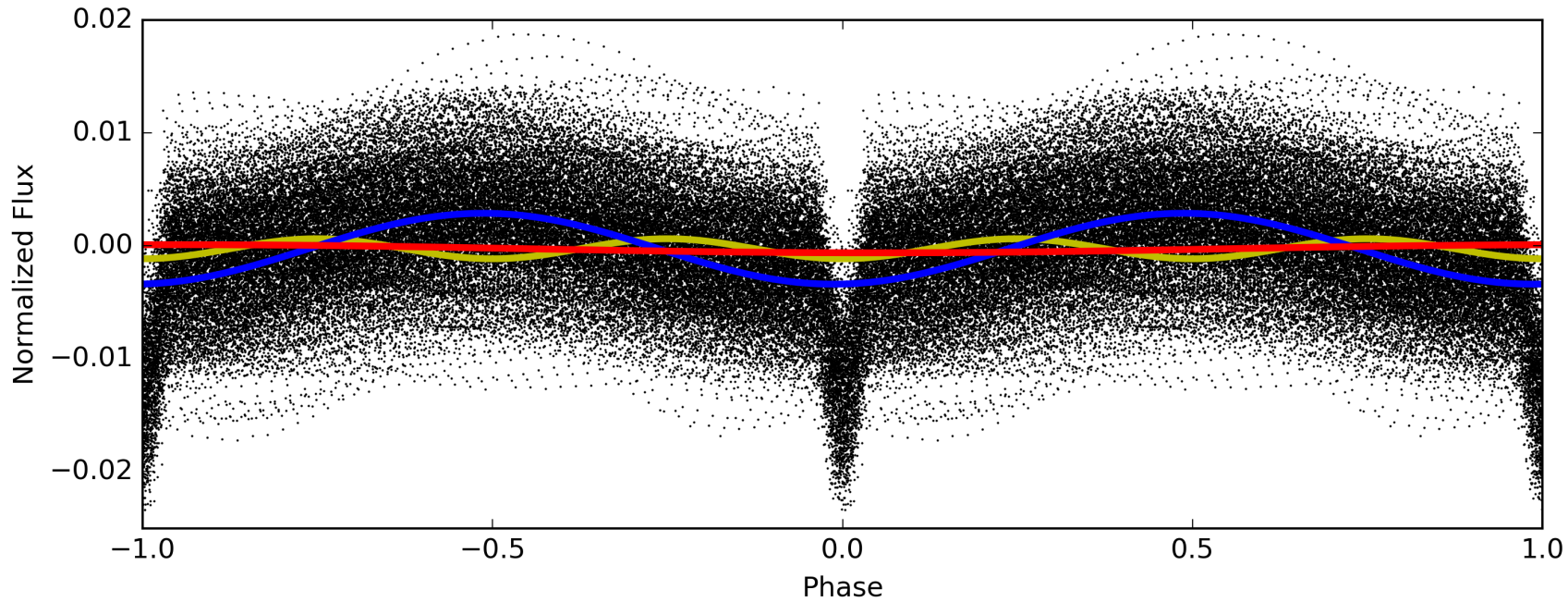
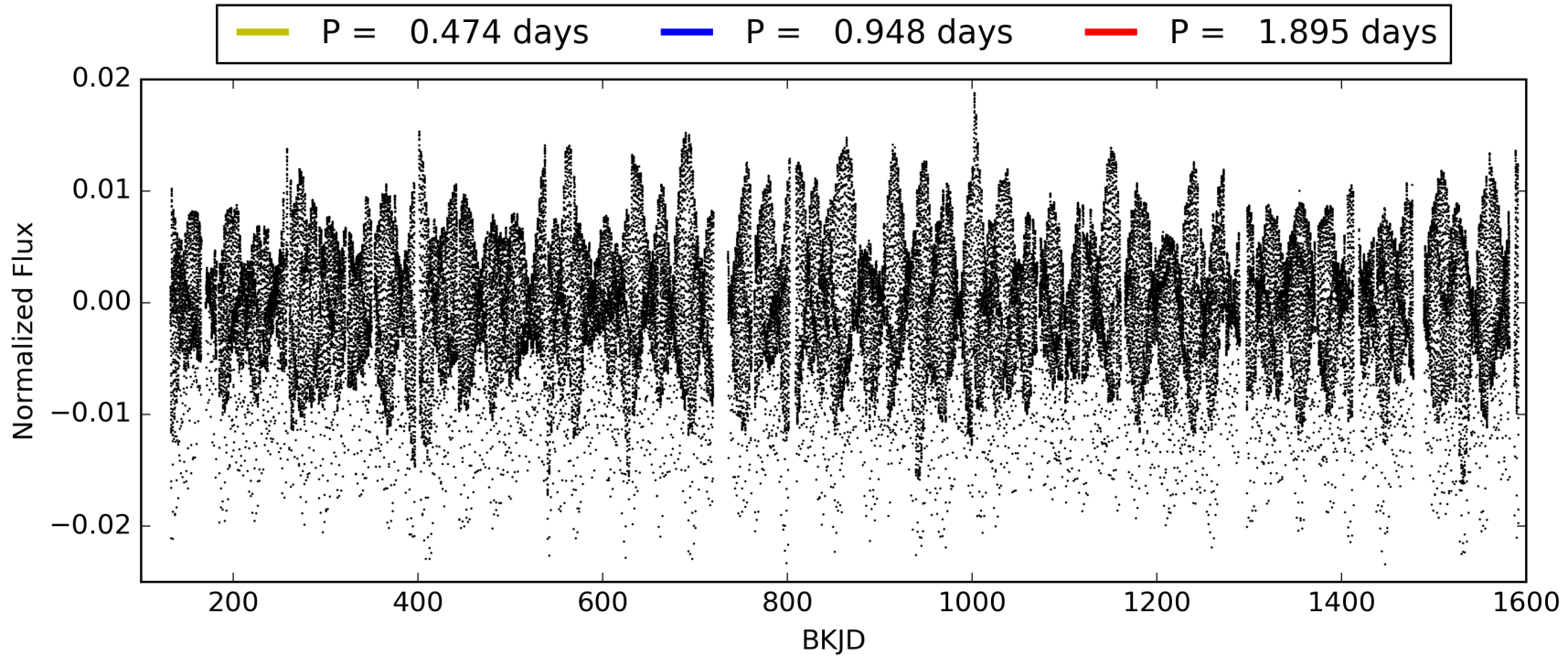
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 03:58:21 Z

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

TCE 004832197-01, PDC Light Curves

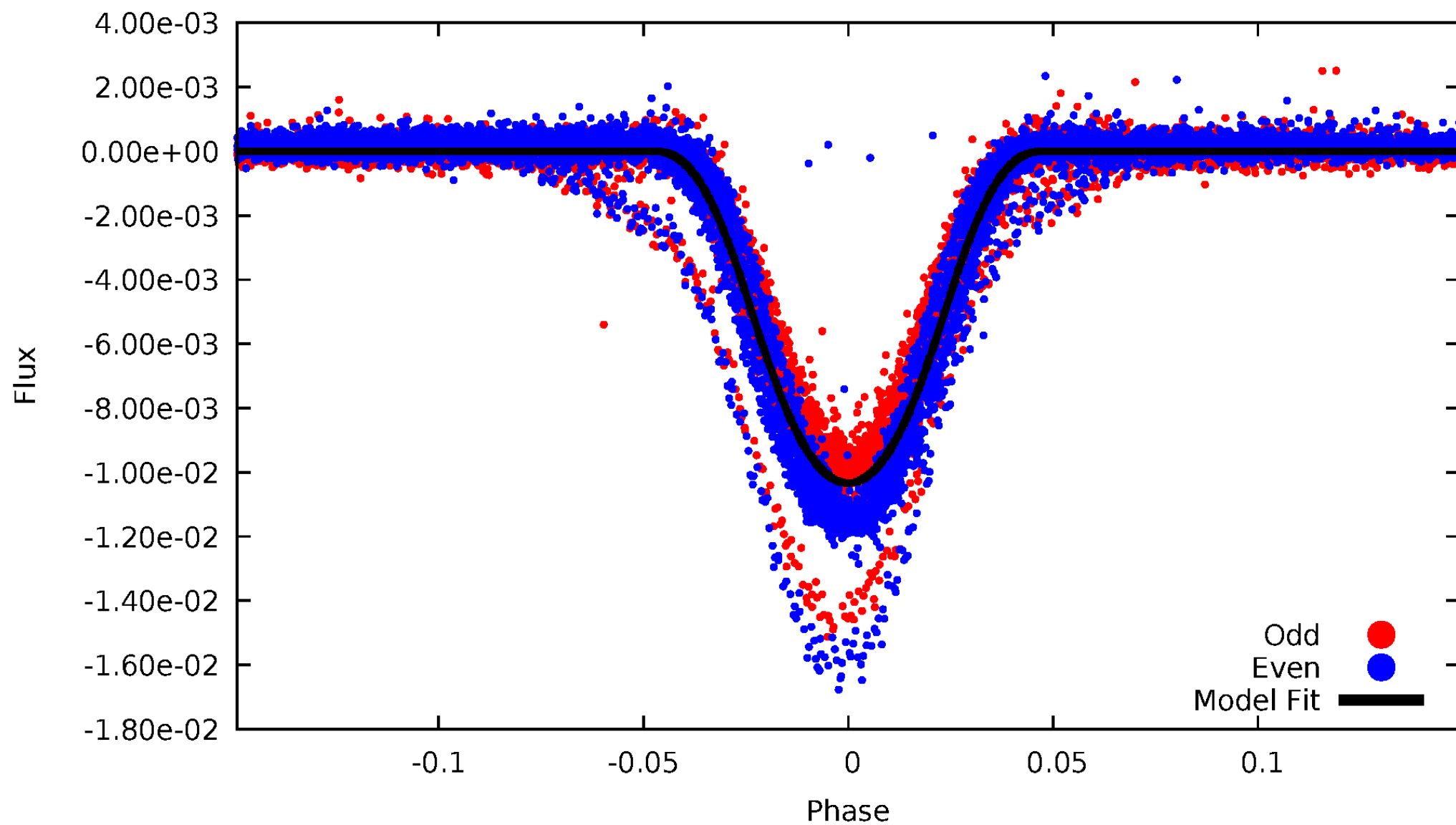


TCE 004832197-01



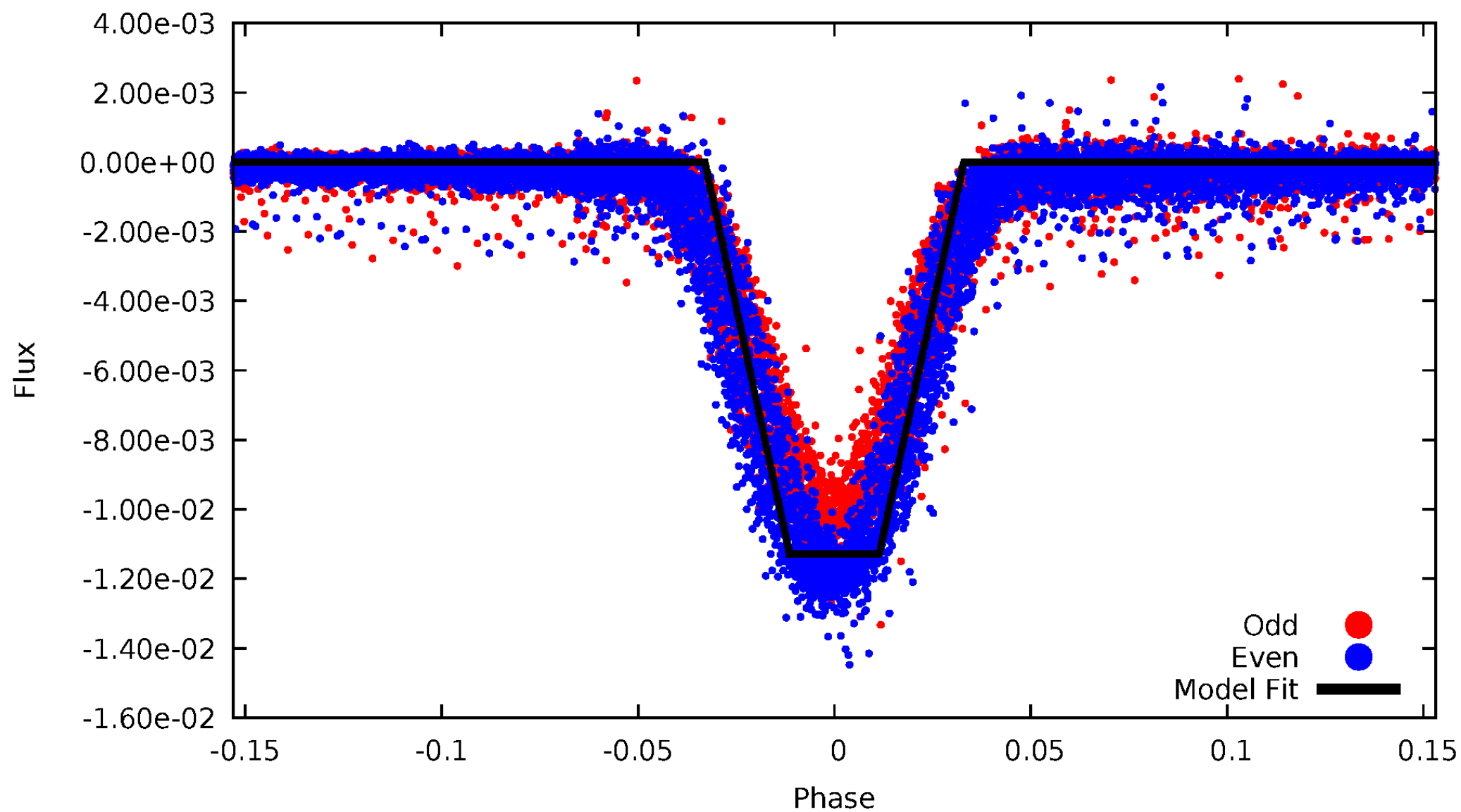
DV Odd/Even

TCE 004832197-01



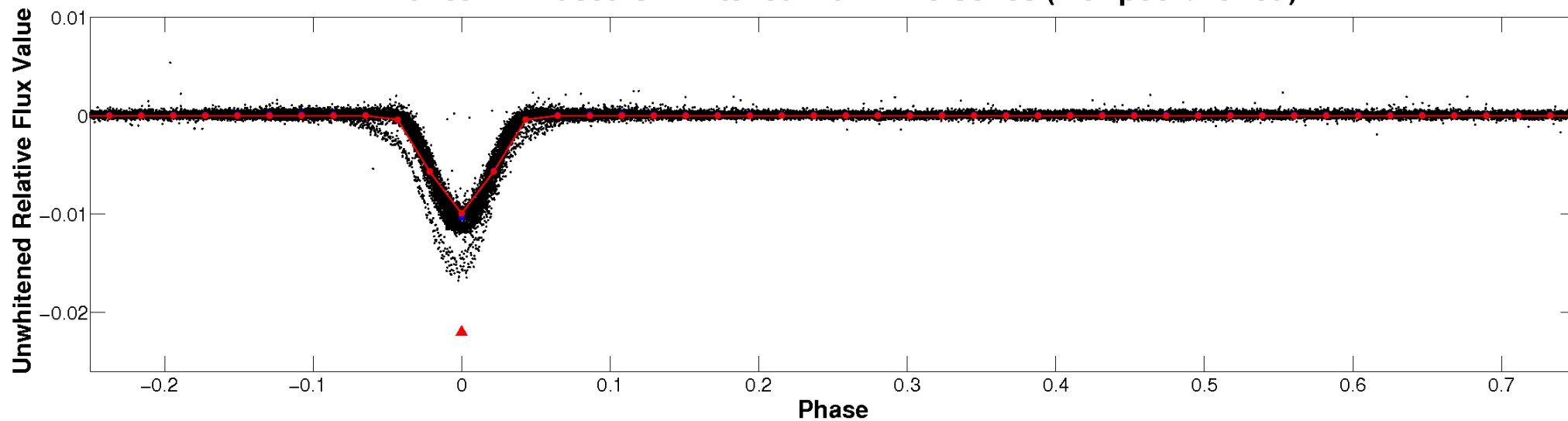
ALT Odd/Even

TCE 004832197-01

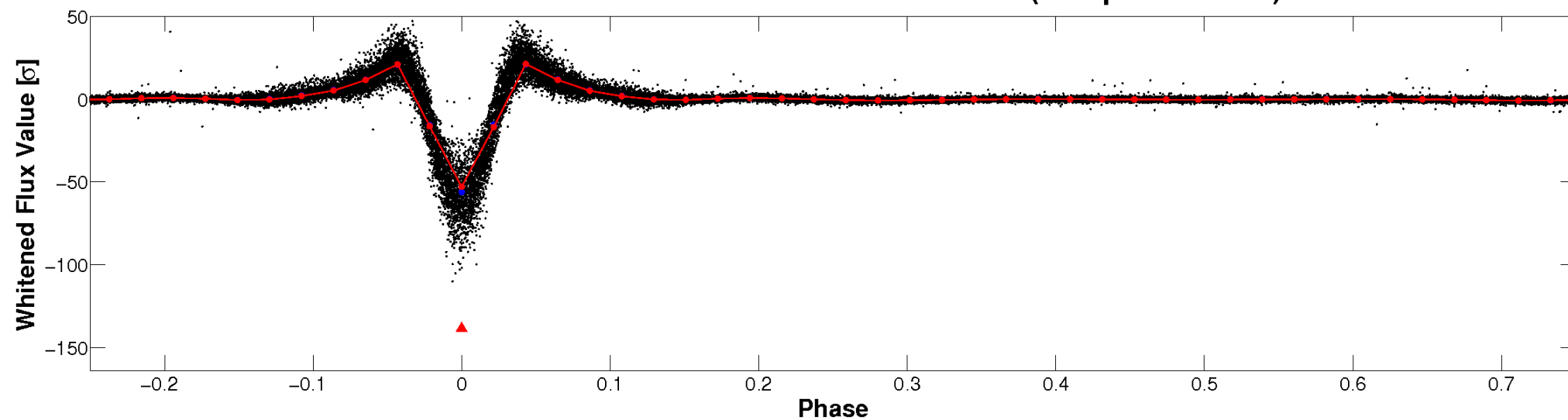


Non-Whitened Vs. Whitened Light Curve

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

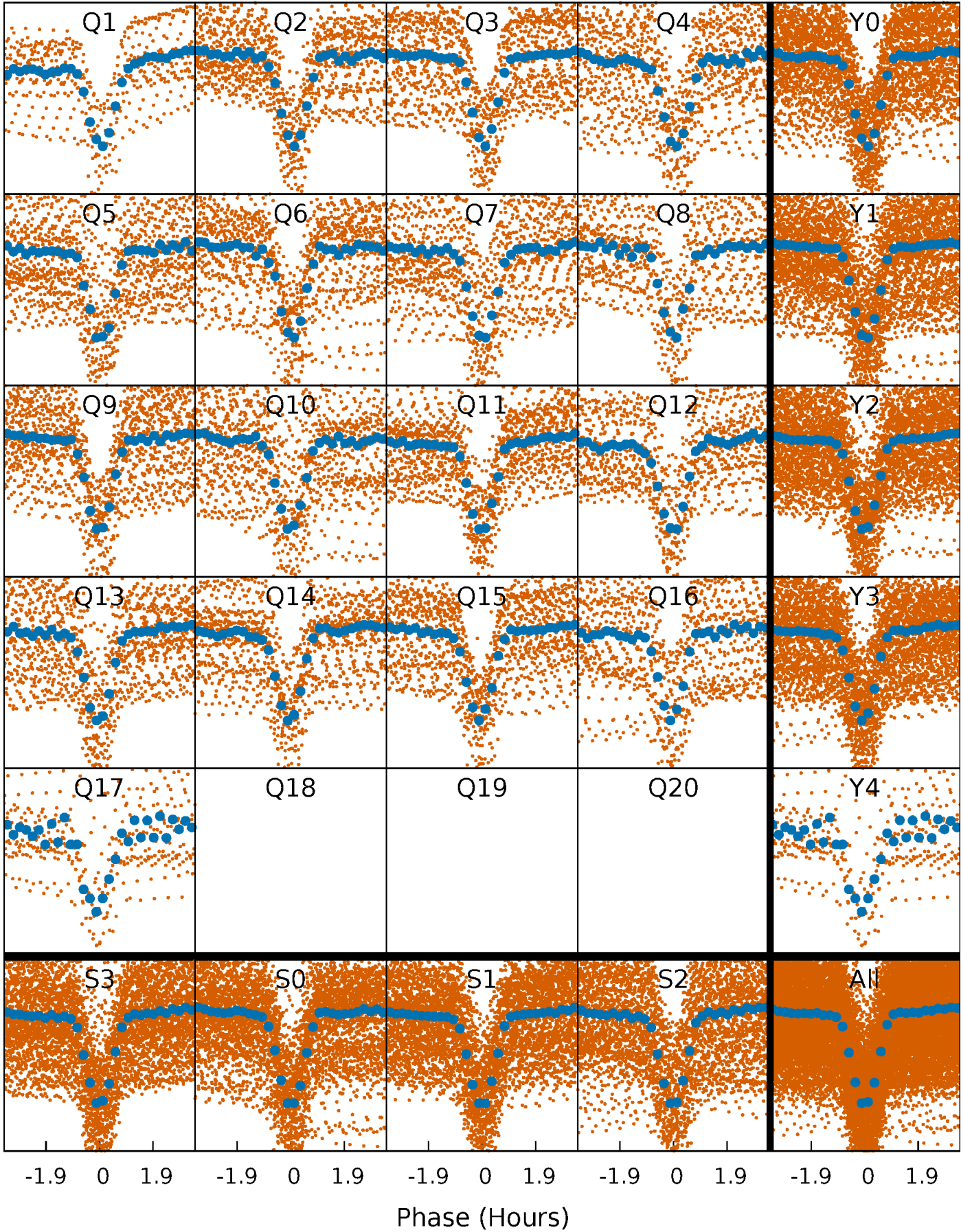


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



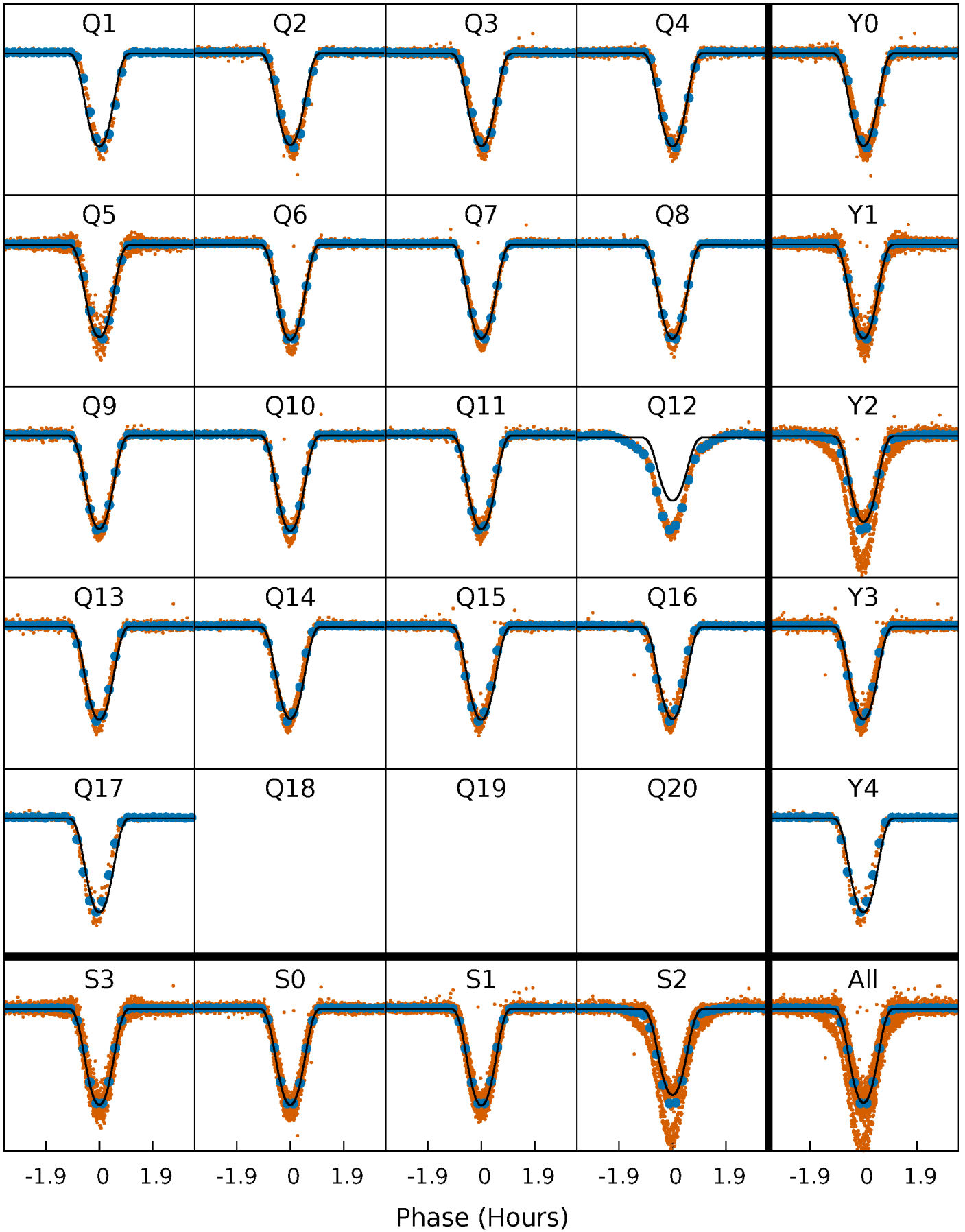
PDC Quarter-Phased Transit Curves

TCE 004832197-01 P= 0.947738 Days $T_0=132.387315$ (BKJD)



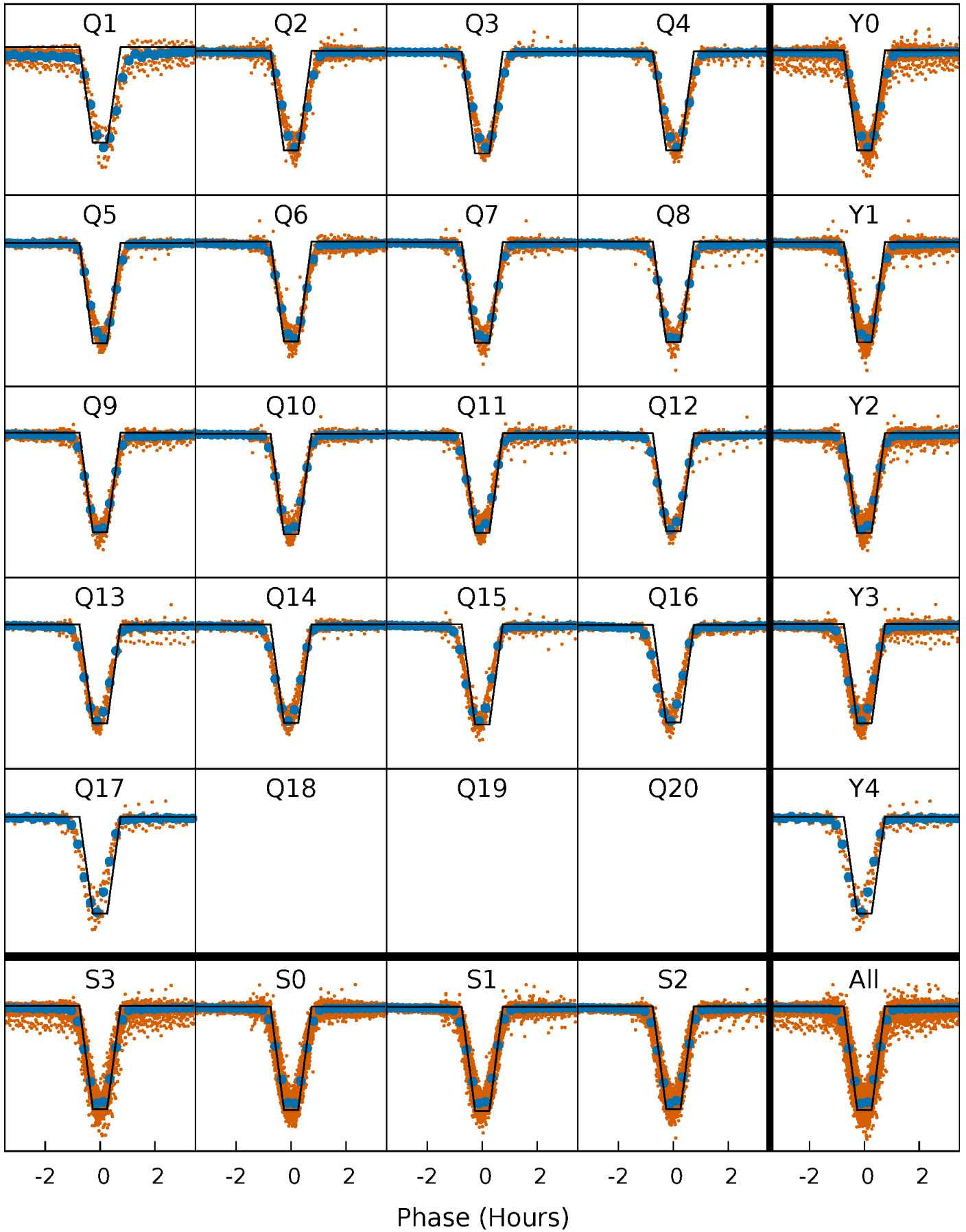
DV Quarter-Phased Transit Curves

TCE 004832197-01 P= 0.947738 Days $T_0=132.387315$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

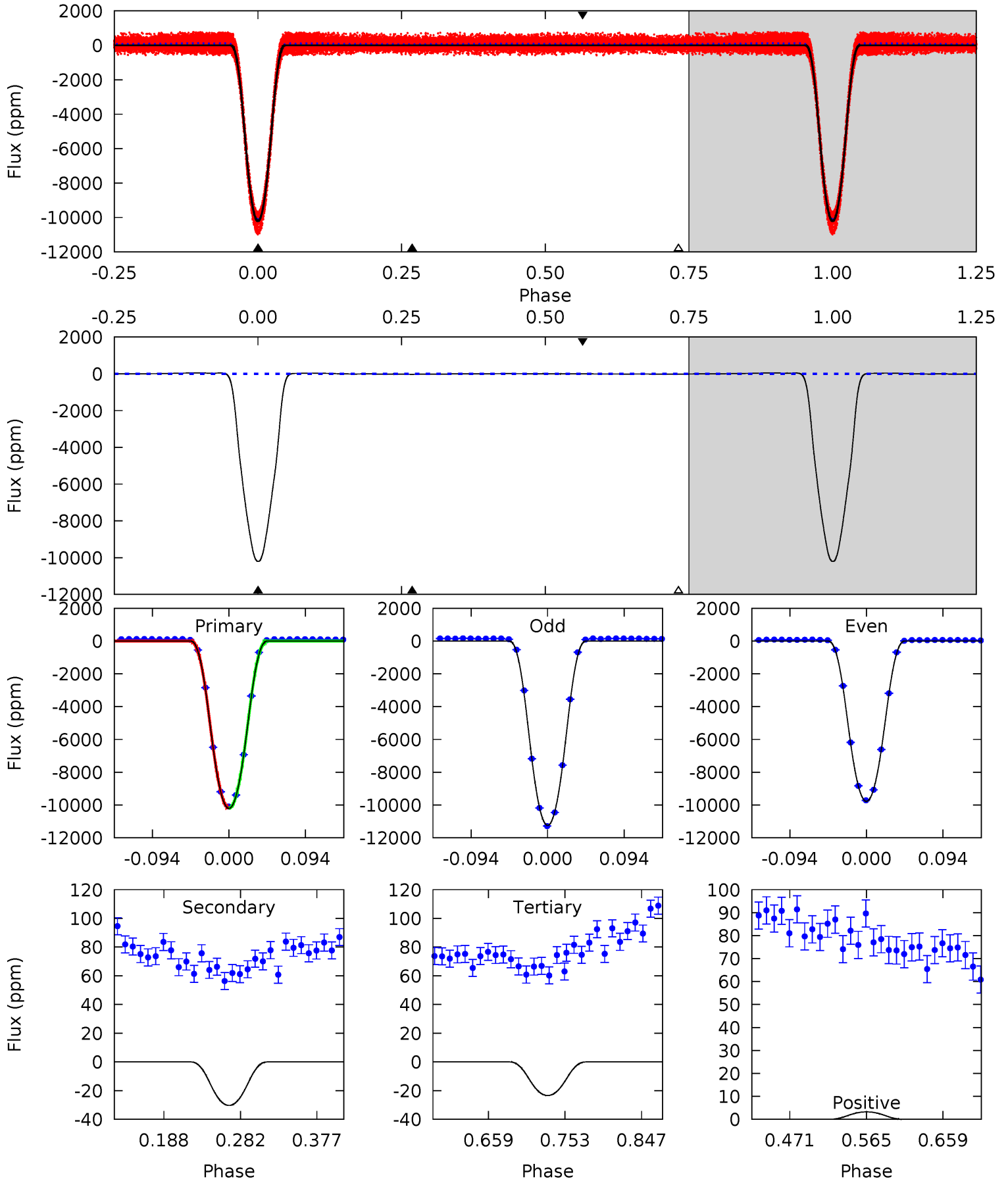
TCE 004832197-01 $P = 0.947741$ Days $T_0 = 132.385038$ (BKJD)



DV Model-Shift Uniqueness Test

004832197-01, P = 0.947738 Days, E = 131.439577 Days

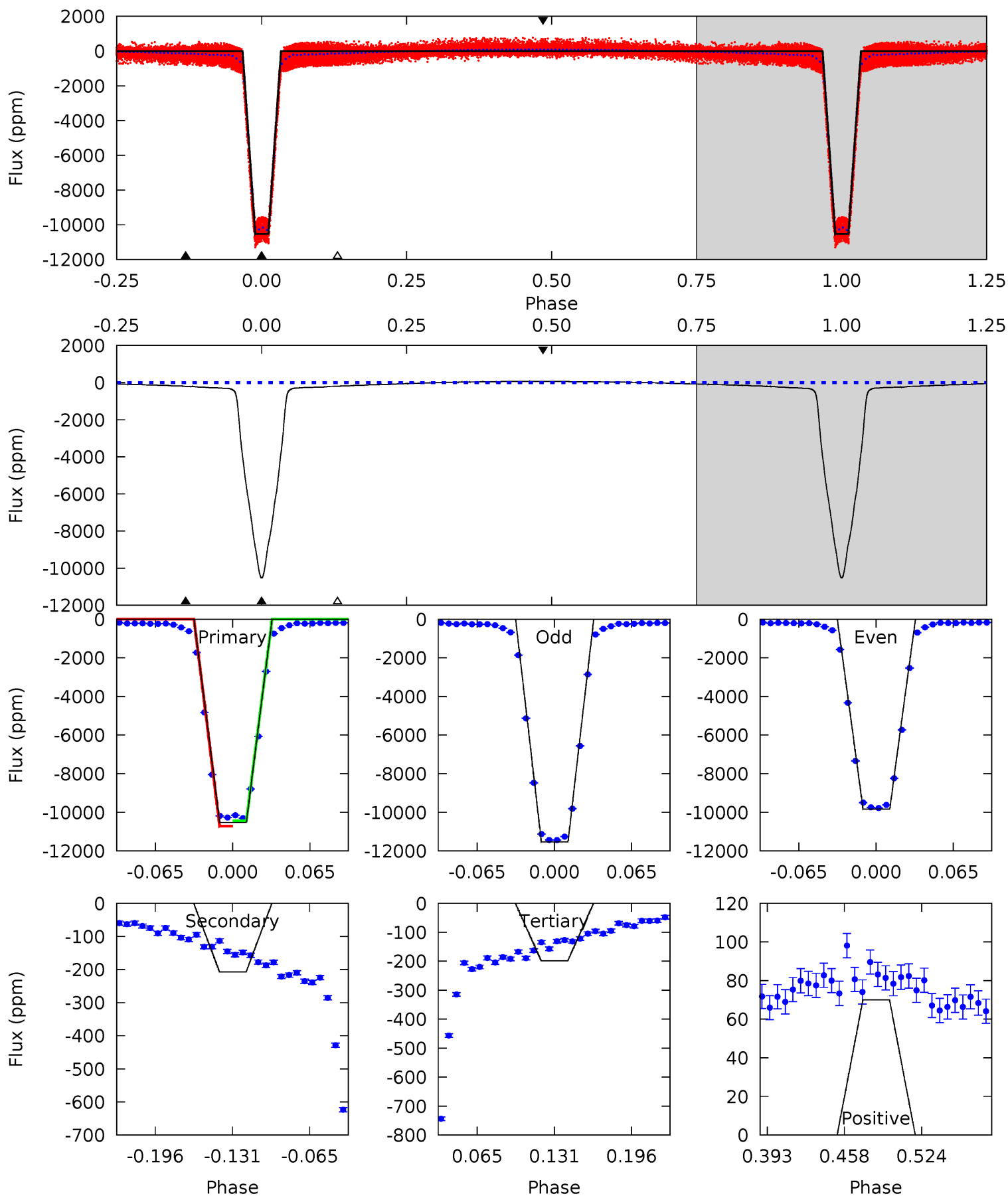
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3134	9.31	7.19	0.99	4.58	1.67	5.26	3127	3133	2.12	8.32	239.6	1.01	0.01	4.46



Alt Model-Shift Uniqueness Test

004832197-01, P = 0.947741 Days, E = 131.437297 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2268	44.6	42.7	15.1	4.65	1.84	19.9	2225	2253	1.95	29.6	202.1	1.01	0.01	25.7



Stellar Parameters For KIC 004832197

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6302^{+170}_{-170}	$4.183^{+0.293}_{-0.158}$	$-0.700^{+0.300}_{-0.300}$	$1.269^{+0.317}_{-0.352}$	$0.895^{+0.113}_{-0.076}$	$0.616^{+1.025}_{-0.299}$
	$+3\%/-3\%$	$+7\%/-4\%$	$+43\%/-43\%$	$+25\%/-28\%$	$+13\%/-8\%$	$+166\%/-48\%$
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 004832197-01 / KOI 1661.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-30 ± 3	$15.76^{+2.33}_{-2.44}$	3201^{+229}_{-260}	-3176^{+169}_{-144}	$0.023^{+0.009}_{-0.006}$
Alt.	-207 ± 5	$14.67^{+2.01}_{-2.28}$	3224^{+222}_{-252}	-2844^{+393}_{-213}	$0.177^{+0.069}_{-0.037}$

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

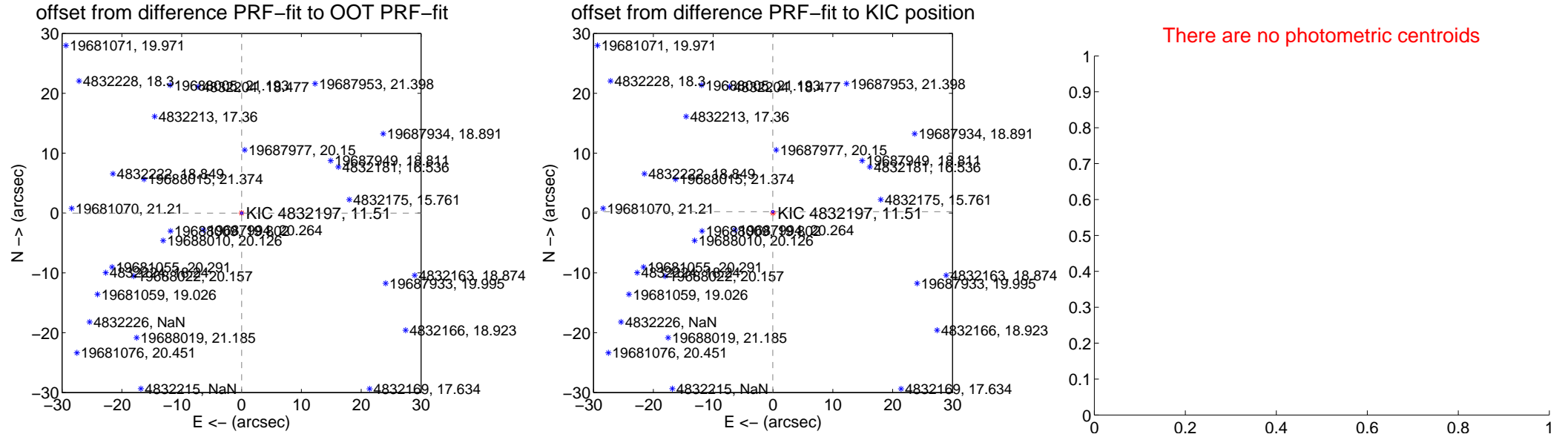
DV Centroid Data

Supplemental centroid analysis for 004832197-01. **Kepler magnitude: 11.51.** Transit SNR 1802.03

There are 17 quarters with good PRF difference image offsets

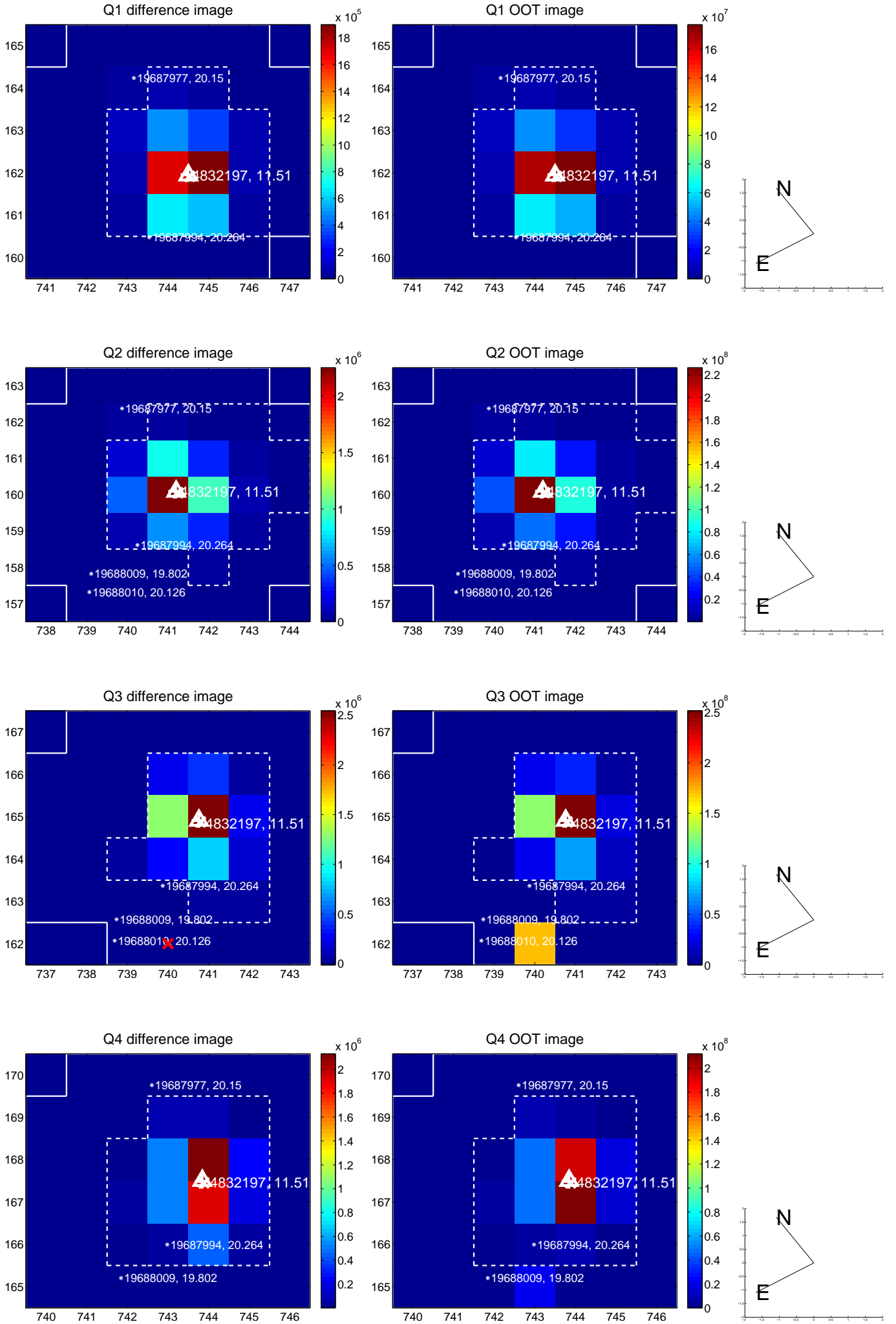
The direct PRF centroid is offset from the target star catalog position by about 0.30 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.036 ± 0.067	0.53	-0.025 ± 0.067	-0.025 ± 0.067
PRF-fit source offset from KIC position	0.218 ± 0.068	3.22	0.034 ± 0.067	0.216 ± 0.068
photometric centroid source offset	—	—	—	—

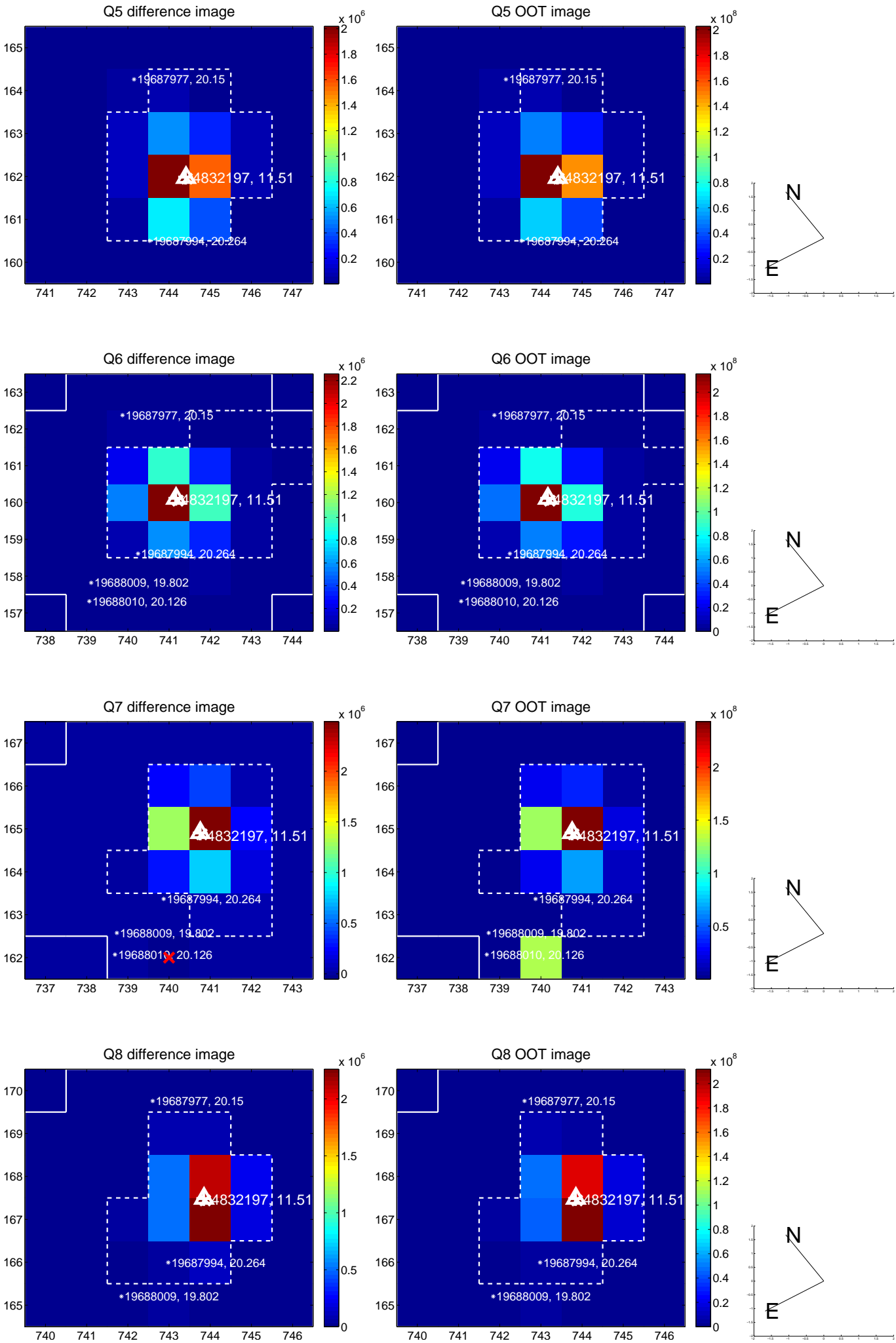


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

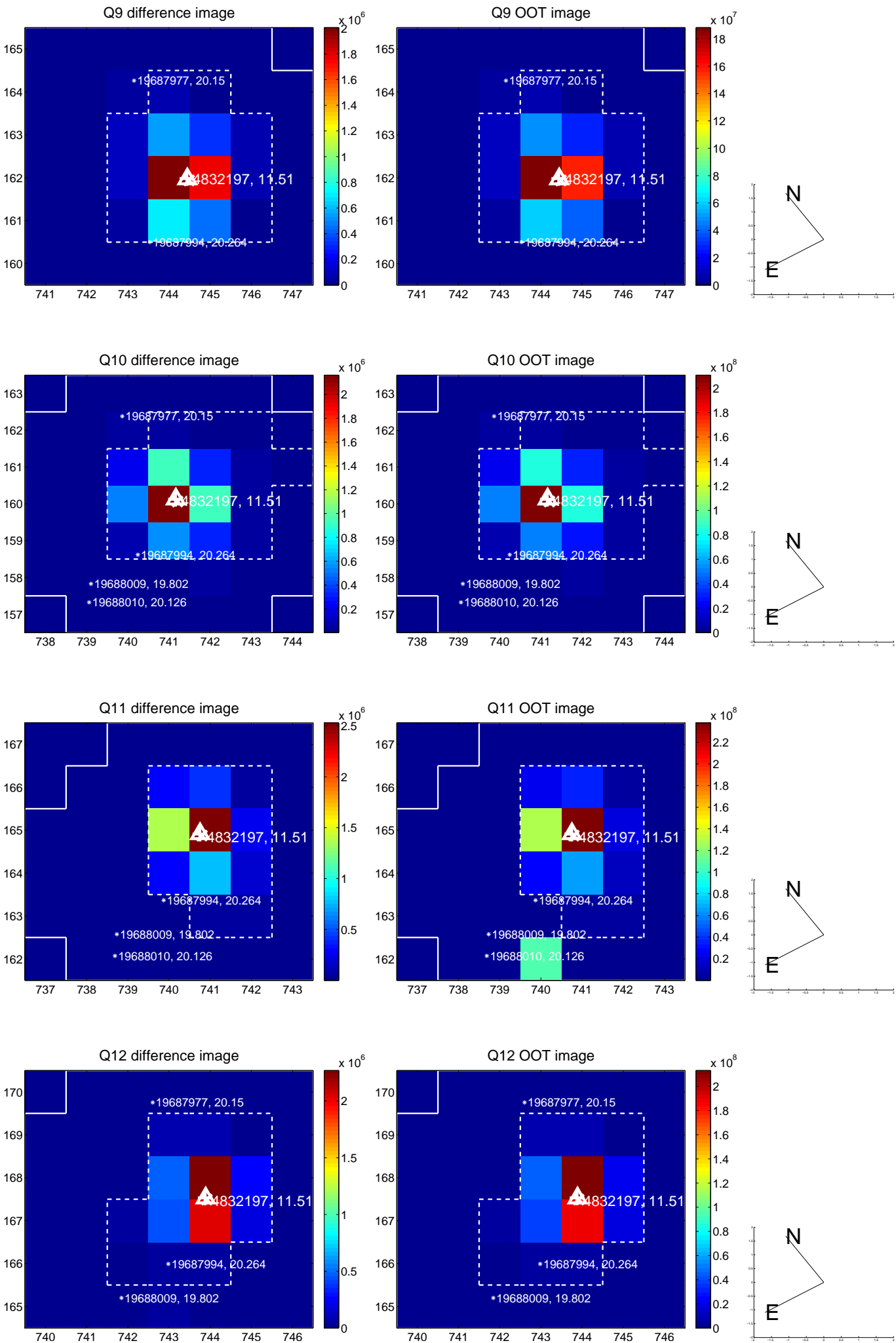
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



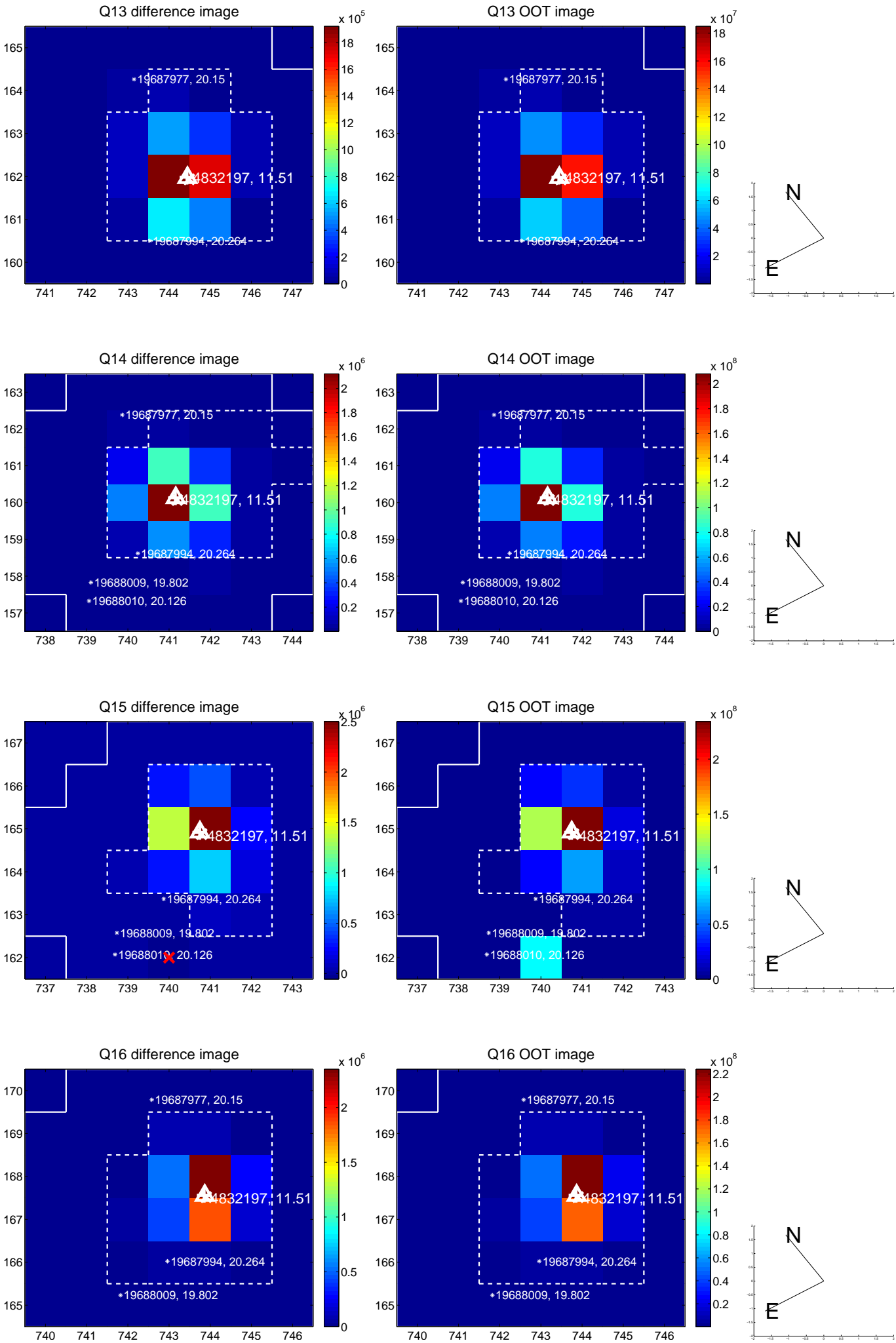
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



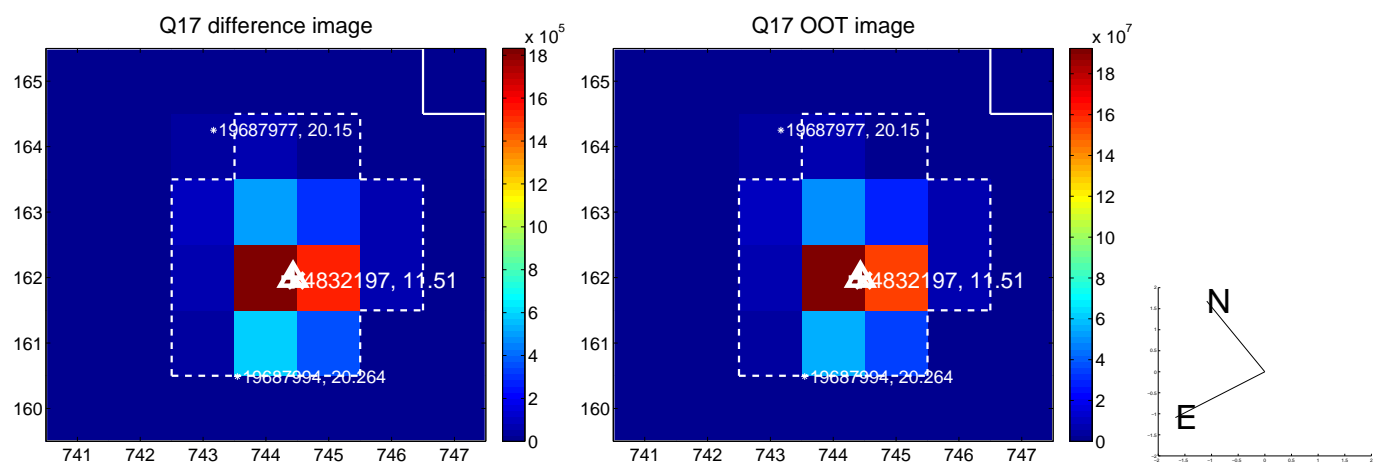
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



folded centroid time series figure for this object.

UKIRT Image

Declination

