

KIC 006584273

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})
006584273-01	OBS	3287.01	51.110861	143.776046	364.8	8.464	19.7	21.4	0.88	5968	2.00	12.40

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006584273-01	OBS	PC	0.95	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.

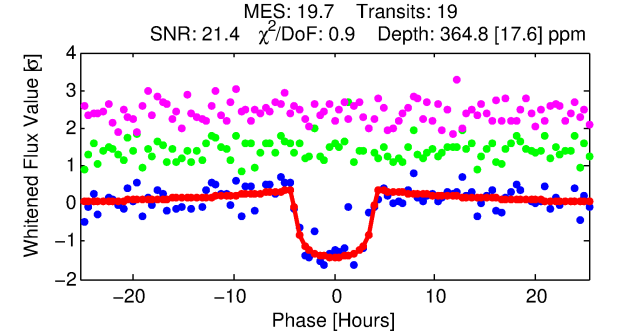
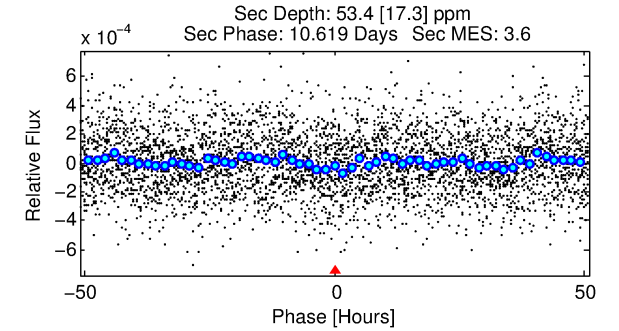
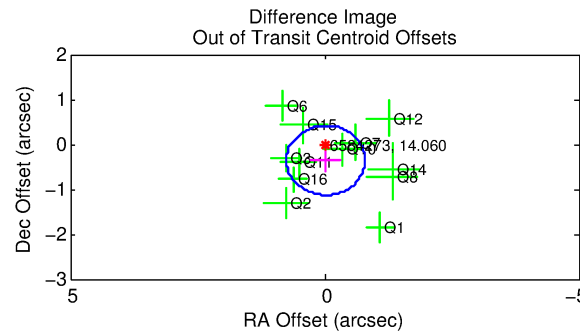
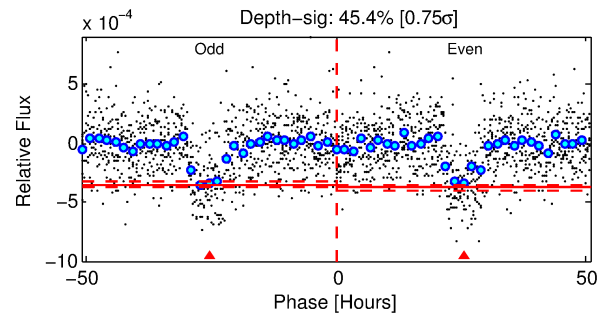
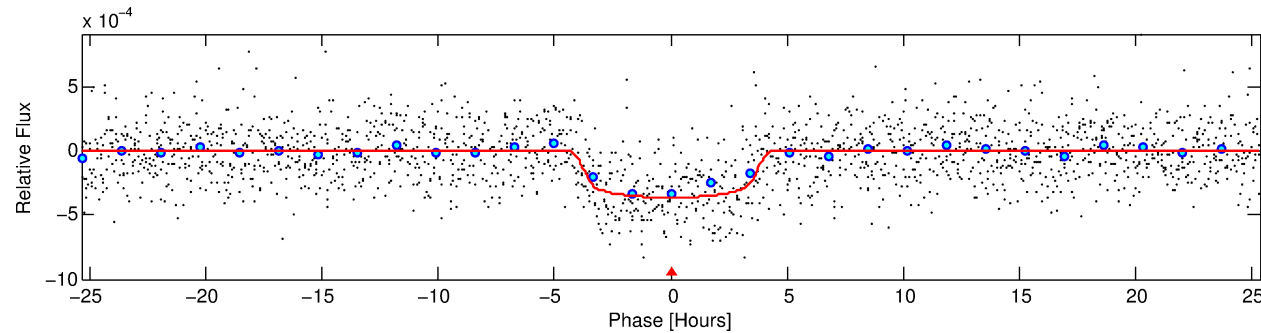
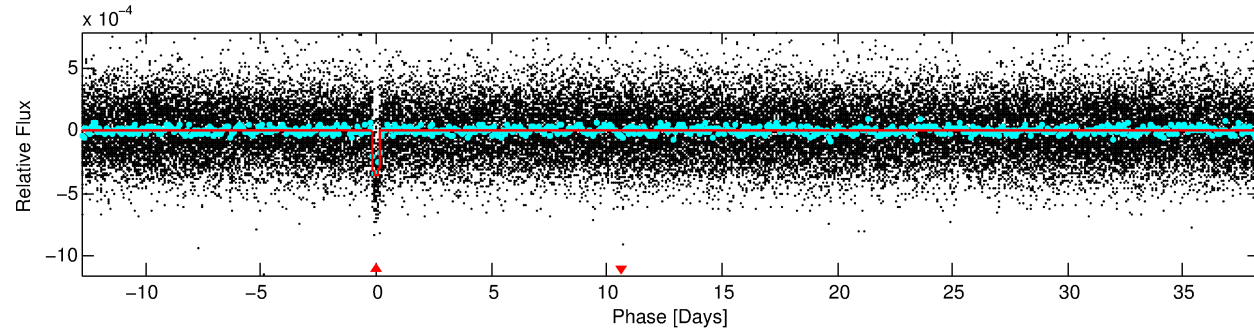
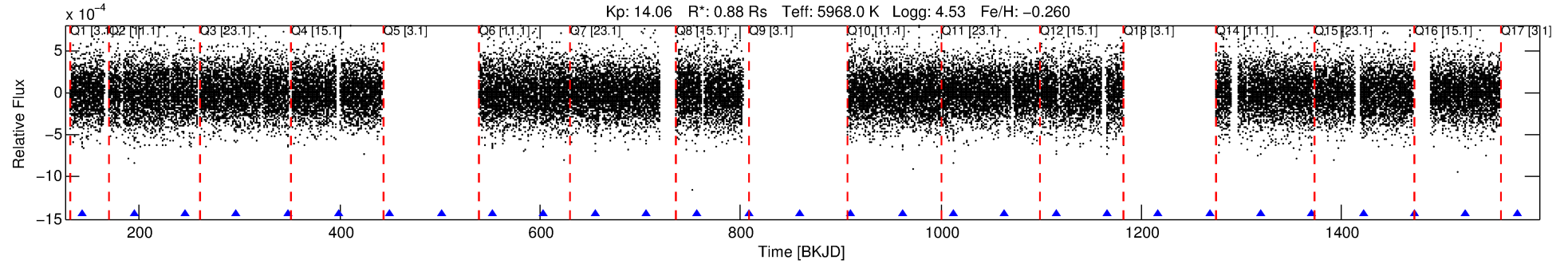
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006584273-01

No Significant Match Found

DV One-Page Summary

KIC: 6584273 Candidate: 1 of 1 Period: 51.111 d
KOI: K03287.01 Corr: 0.972



DV Fit Results:

Period = 51.11086 [0.00041] d
Epoch = 143.7760 [0.0063] BKJD
Rp/R* = 0.0208 [0.0012]
a/R* = 21.65 [5.80]
b = 0.91 [0.05]
Seff = 12.40 [4.45]
Teq = 479 [43] K
Rp = 2.00 [0.57] Re
a = 0.2667 [0.0623] AU
Ag = 524.95 [253.50] [2.07 σ]
Teffp = 3541 [323] K [9.40 σ]

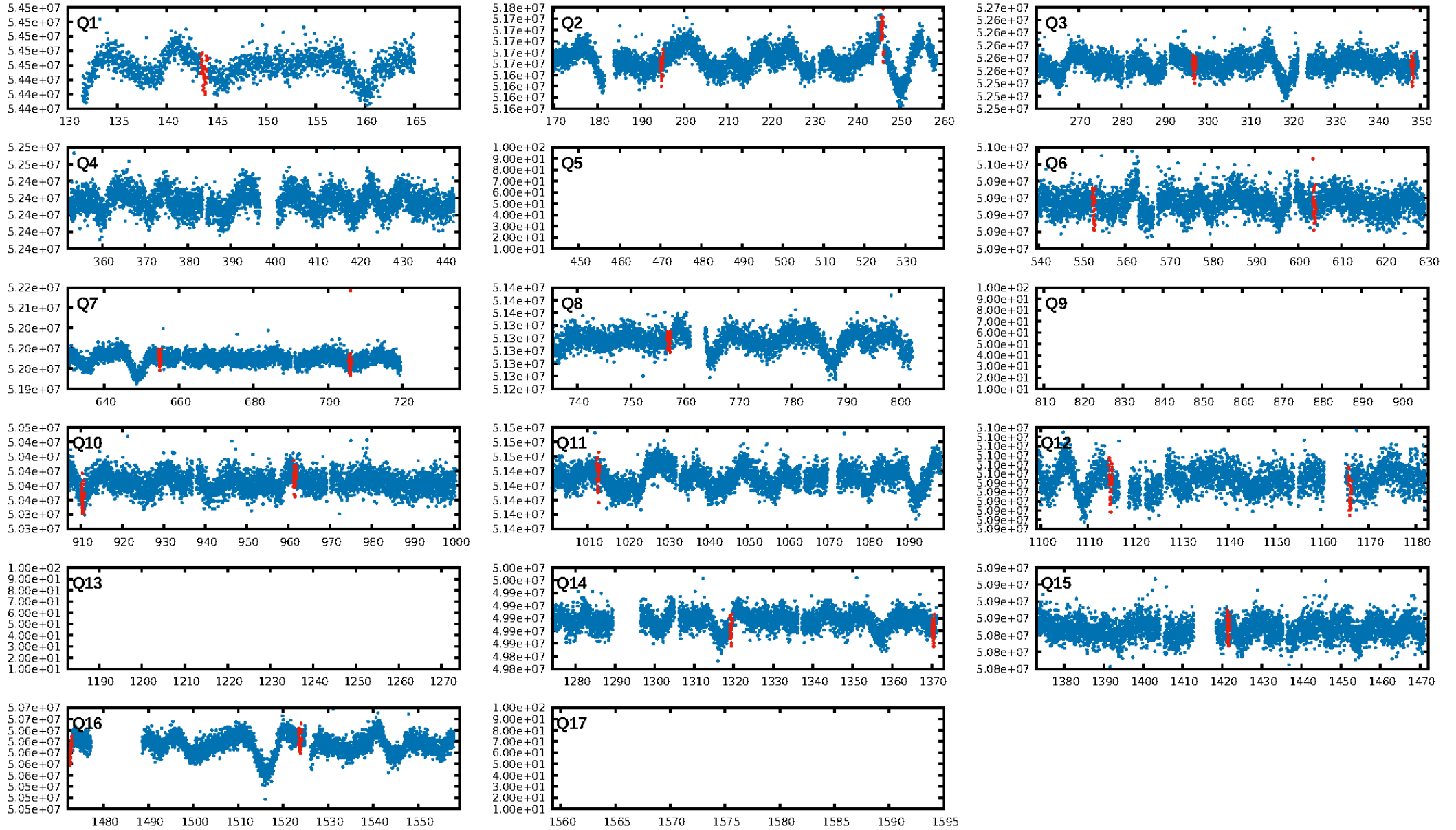
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 31.9%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 1.01e-77
RollingBand-fgt: 1.00 [18/18]
GhostDiagnostic-chr: 8.446
Centroid-sig: 41.7%
Centroid-so: 0.575 arcsec [0.95 σ]
OotOffset-rm: 0.359 arcsec [1.39 σ]
KicOffset-rm: 0.408 arcsec [1.60 σ]
OotOffset-st: 4/4/3/1 [12]
KicOffset-st: 4/4/3/1 [12]
DiffImageQuality-fgm: 1.00 [12/12]
DiffImageOverlap-fno: 1.00 [12/12]

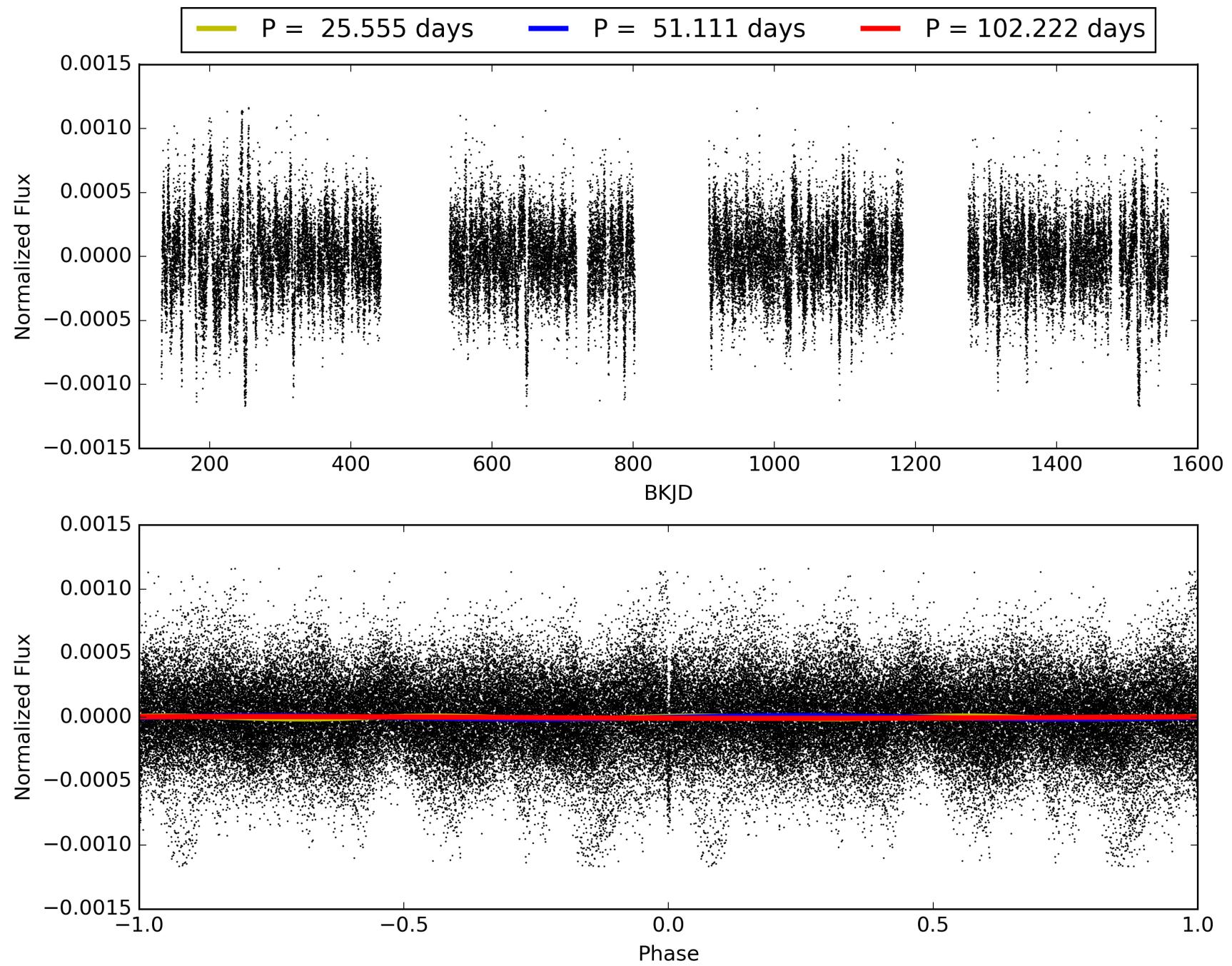
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 22:43:50 Z

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

TCE 006584273-01, PDC Light Curves

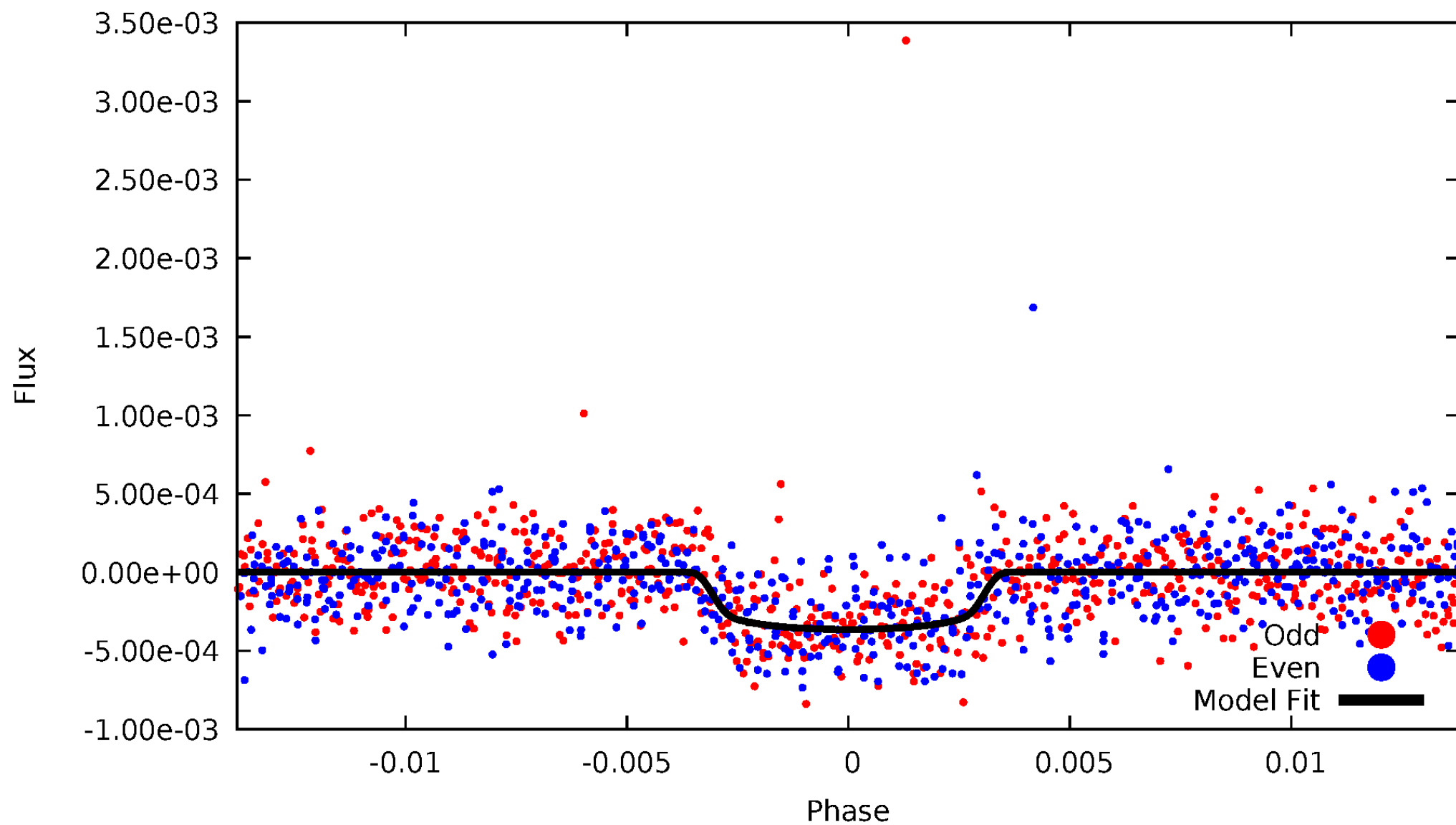


TCE 006584273-01



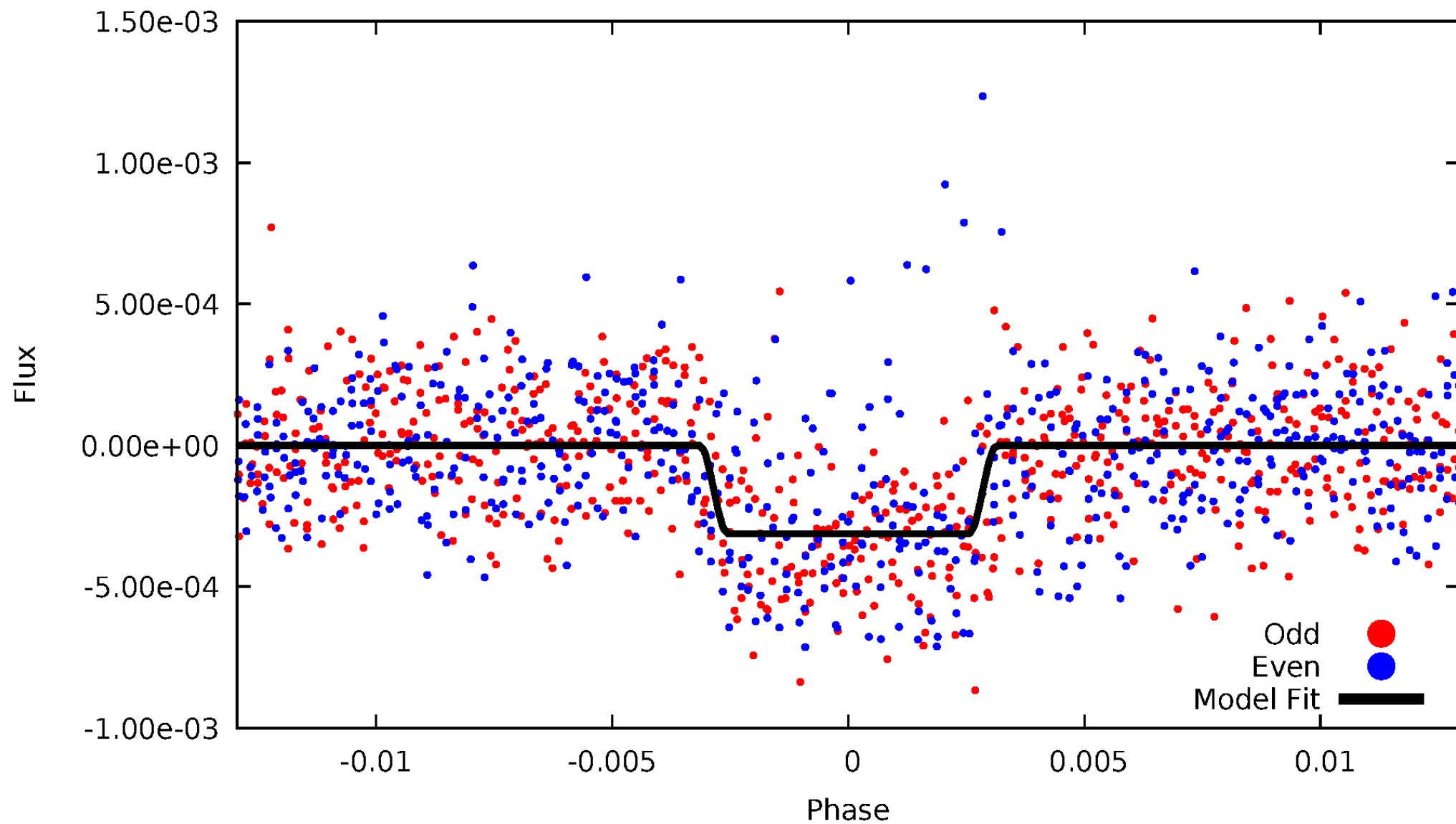
DV Odd/Even

TCE 006584273-01

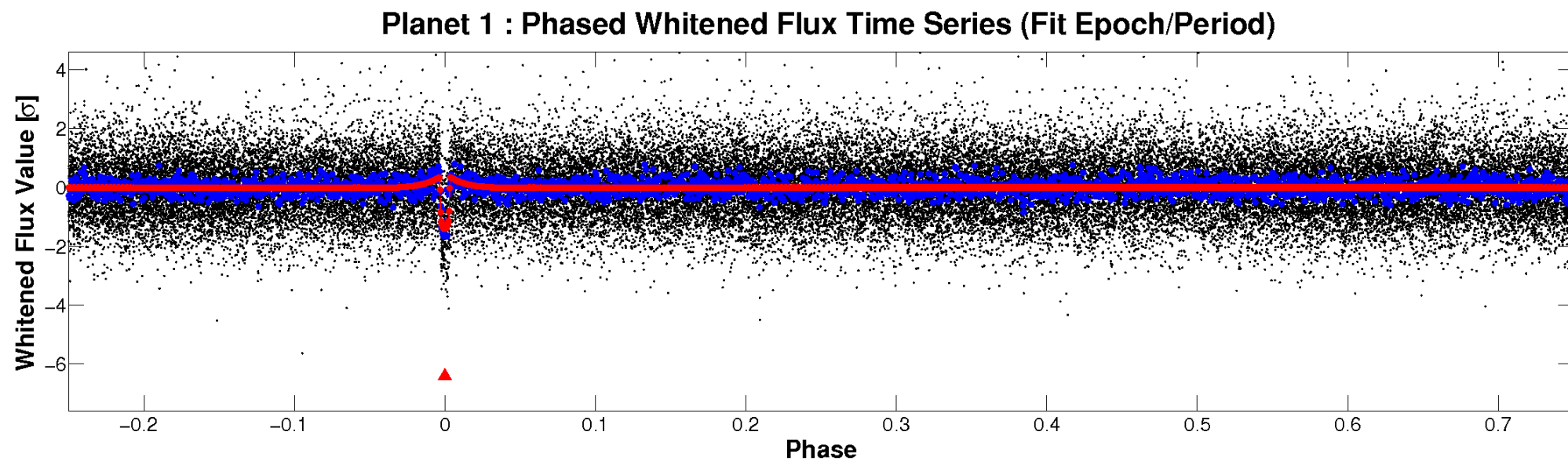
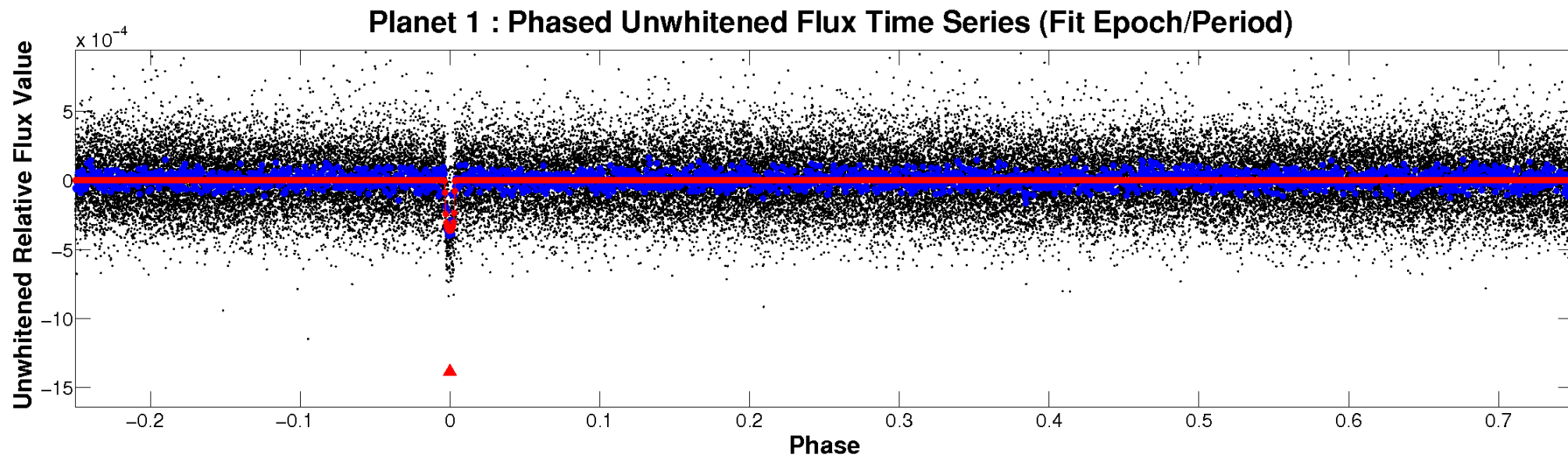


ALT Odd/Even

TCE 006584273-01

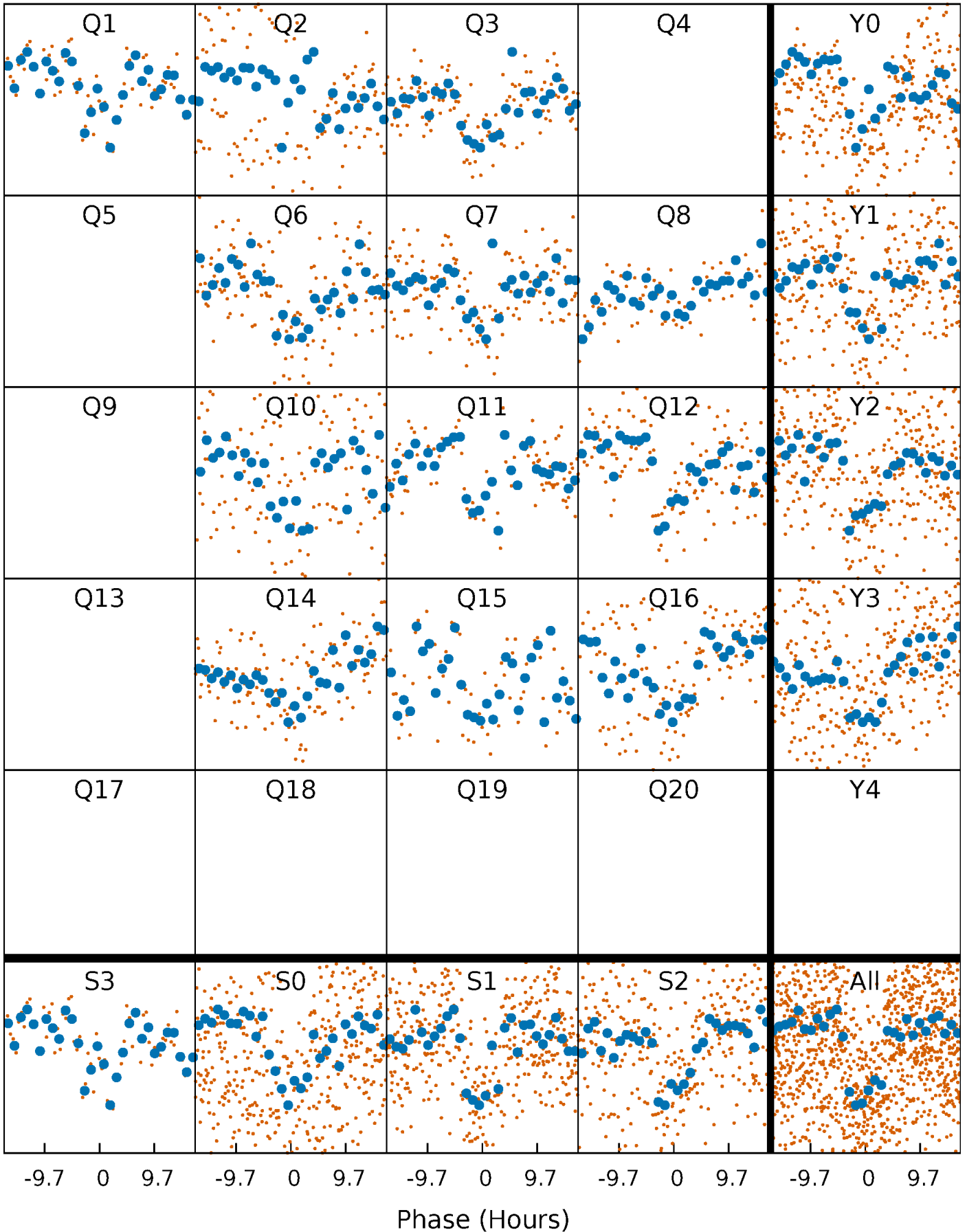


Non-Whitened Vs. Whitened Light Curve



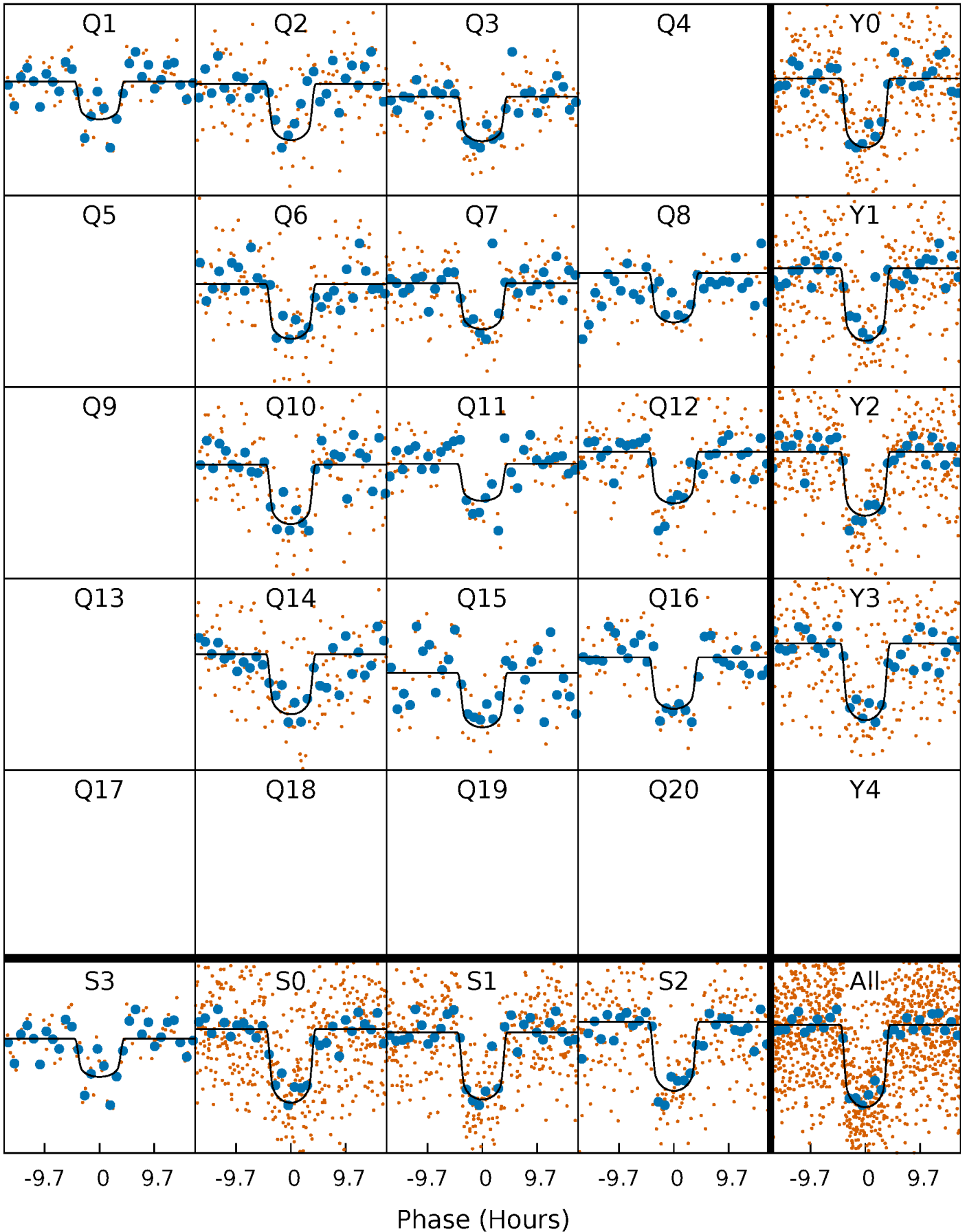
PDC Quarter-Phased Transit Curves

TCE 006584273-01 P= 51.110861 Days $T_0=143.776046$ (BKJD)



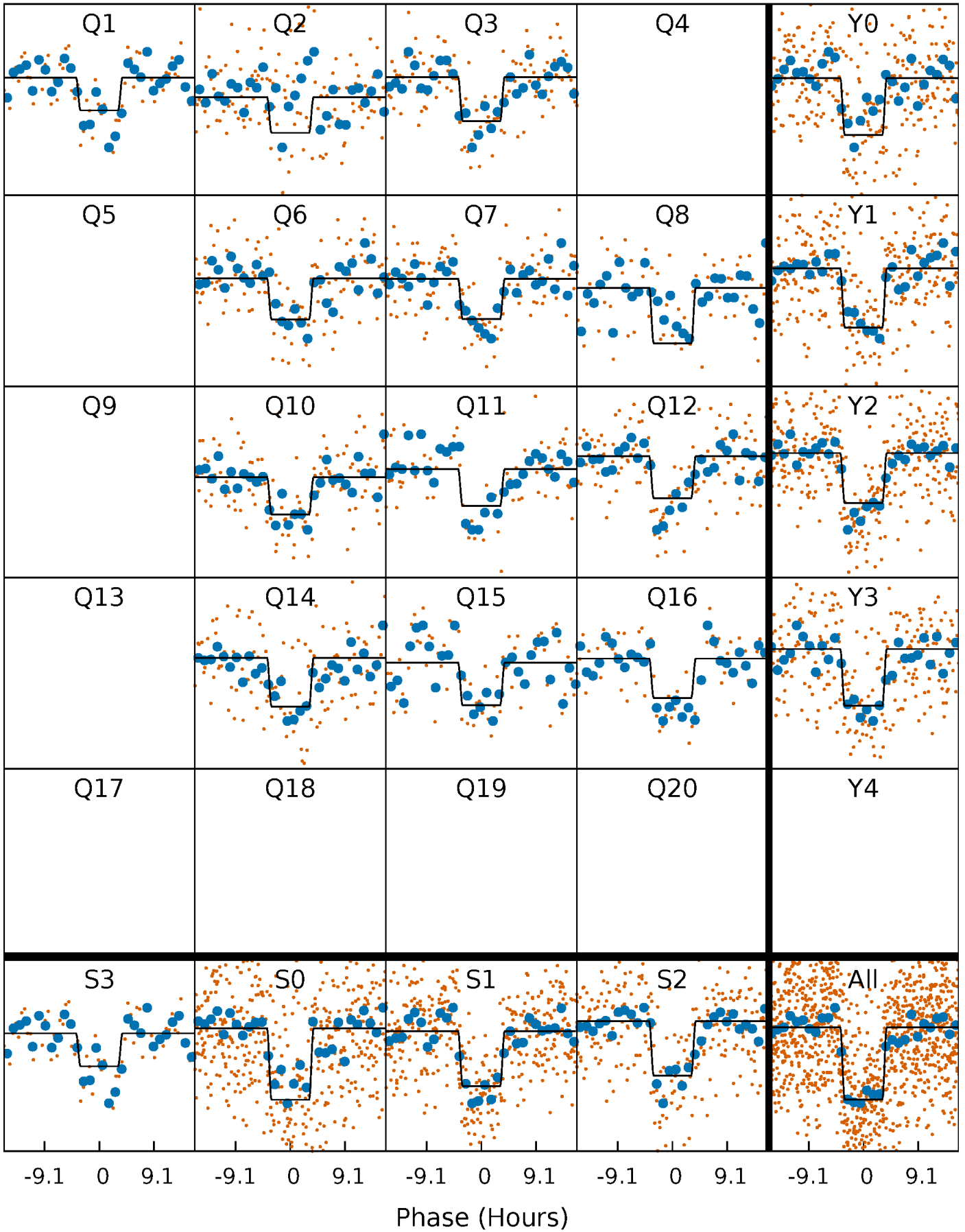
DV Quarter-Phased Transit Curves

TCE 006584273-01 P= 51.110861 Days $T_0=143.776046$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

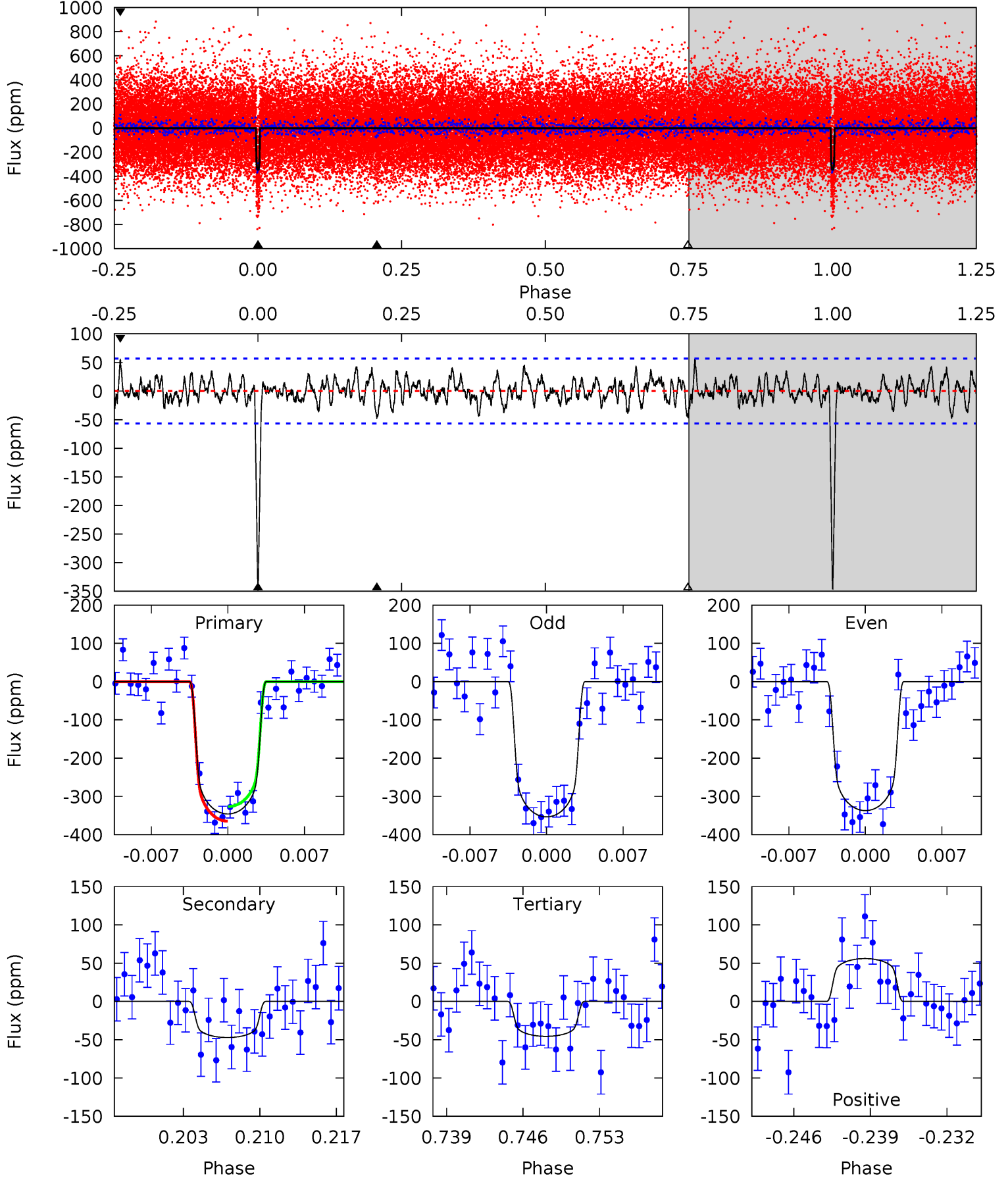
TCE 006584273-01 P= 51.110357 Days $T_0=143.779909$ (BKJD)



DV Model-Shift Uniqueness Test

006584273-01, P = 51.110861 Days, E = 92.665185 Days

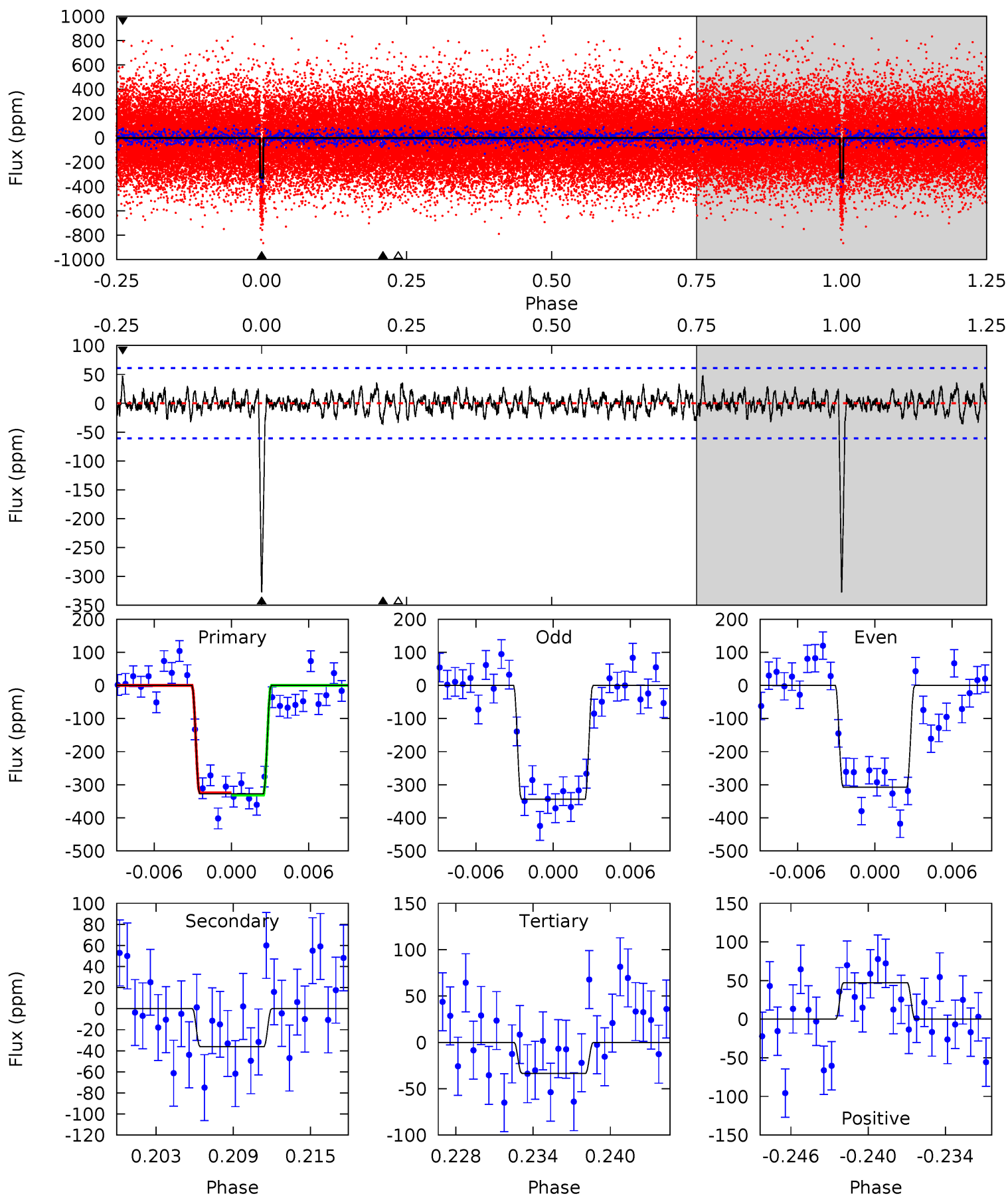
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
31.0	4.23	4.09	5.03	5.09	2.69	1.44	27.0	26.0	0.14	-0.80	0.74	0.92	0.14	1.71



Alt Model-Shift Uniqueness Test

006584273-01, P = 51.110357 Days, E = 92.669552 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
27.5	3.04	2.81	3.98	5.12	2.74	1.03	24.7	23.5	0.23	-0.94	1.52	0.86	0.13	0.29



Stellar Parameters For KIC 006584273

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5968^{+143}_{-178}	$4.534^{+0.046}_{-0.184}$	$-0.260^{+0.300}_{-0.300}$	$0.881^{+0.246}_{-0.077}$	$0.970^{+0.107}_{-0.118}$	$1.995^{+0.459}_{-0.967}$
	+2%/-3%	+1%/-4%	+115%/-115%	+28%/-9%	+11%/-12%	+23%/-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 006584273-01 / KOI 3287.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-47 ± 11	$2.06^{+0.28}_{-0.20}$	680^{+40}_{-29}	3804^{+176}_{-192}	414^{+150}_{-115}
Alt.	-36 ± 12	$1.76^{+0.24}_{-0.19}$	680^{+42}_{-29}	3817^{+238}_{-258}	429^{+199}_{-164}

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 $A_{obs} \gg 1.0$

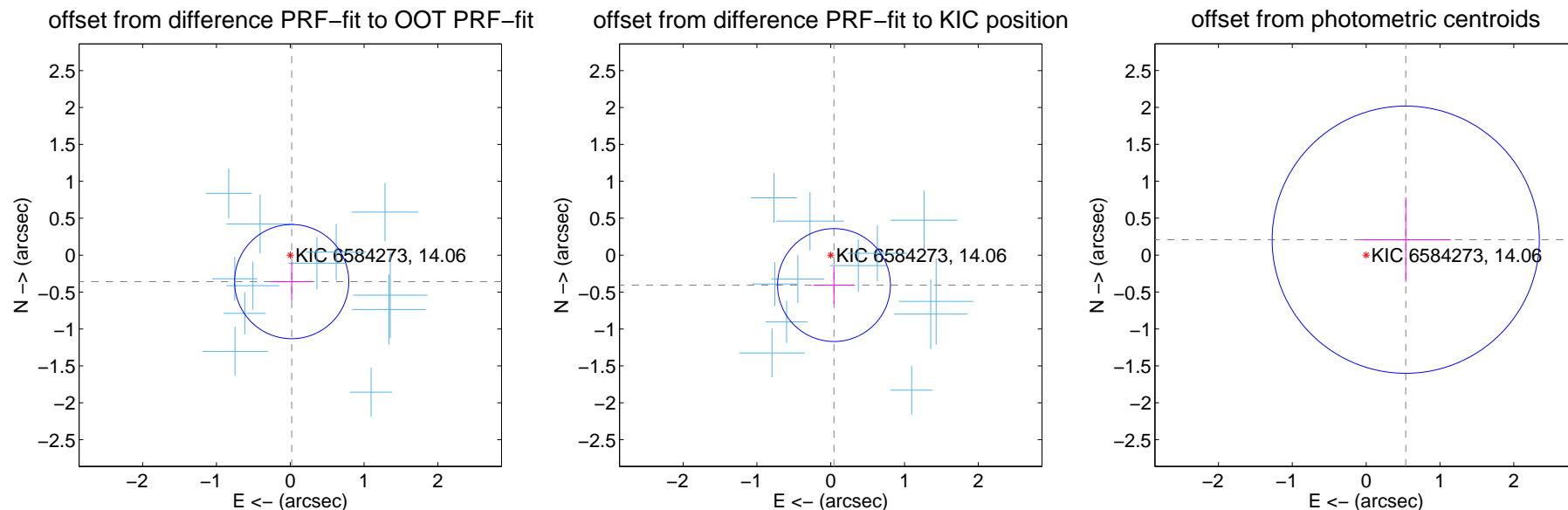
DV Centroid Data

Supplemental centroid analysis for 006584273-01. Kepler magnitude: 14.06. Transit SNR 21.45

There are 12 quarters with good PRF difference image offsets

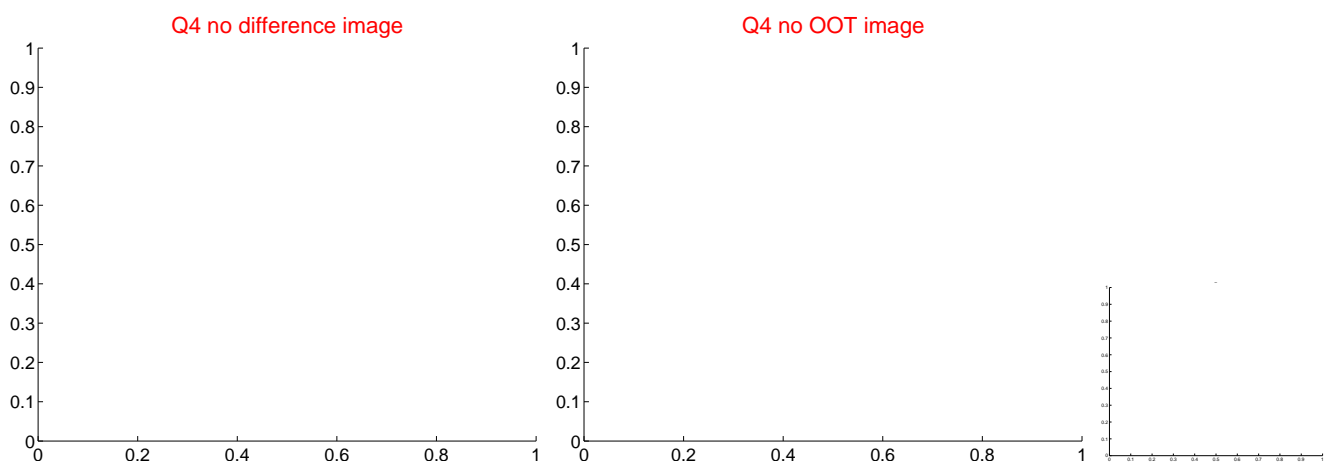
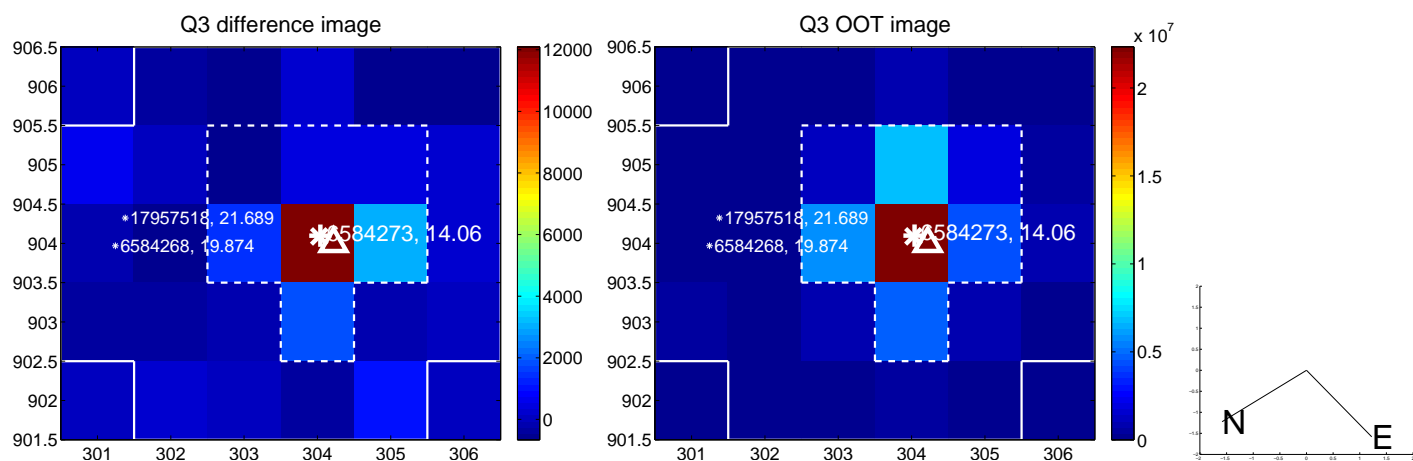
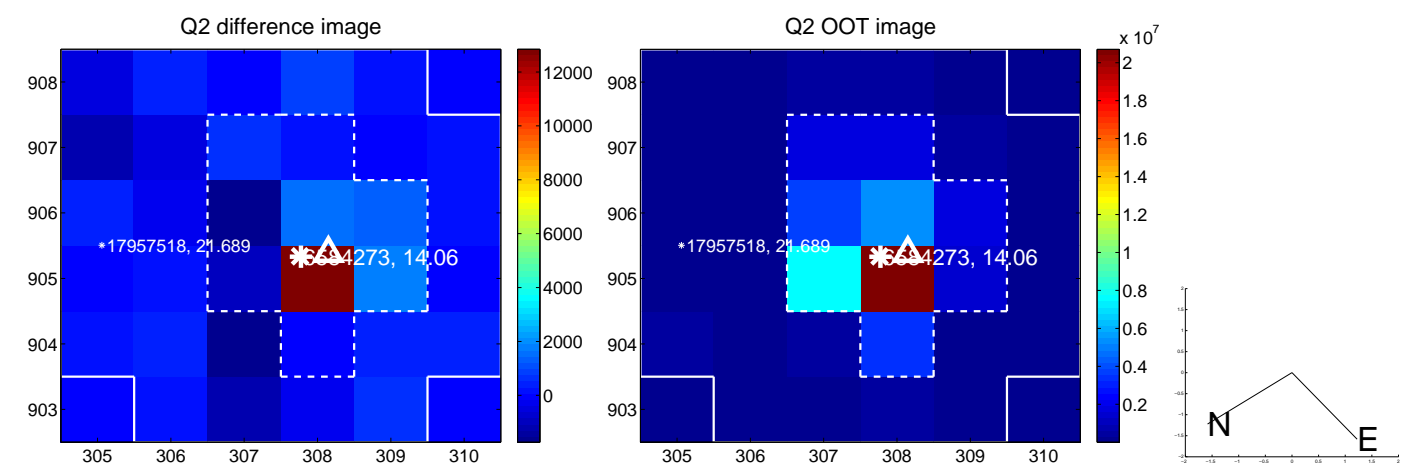
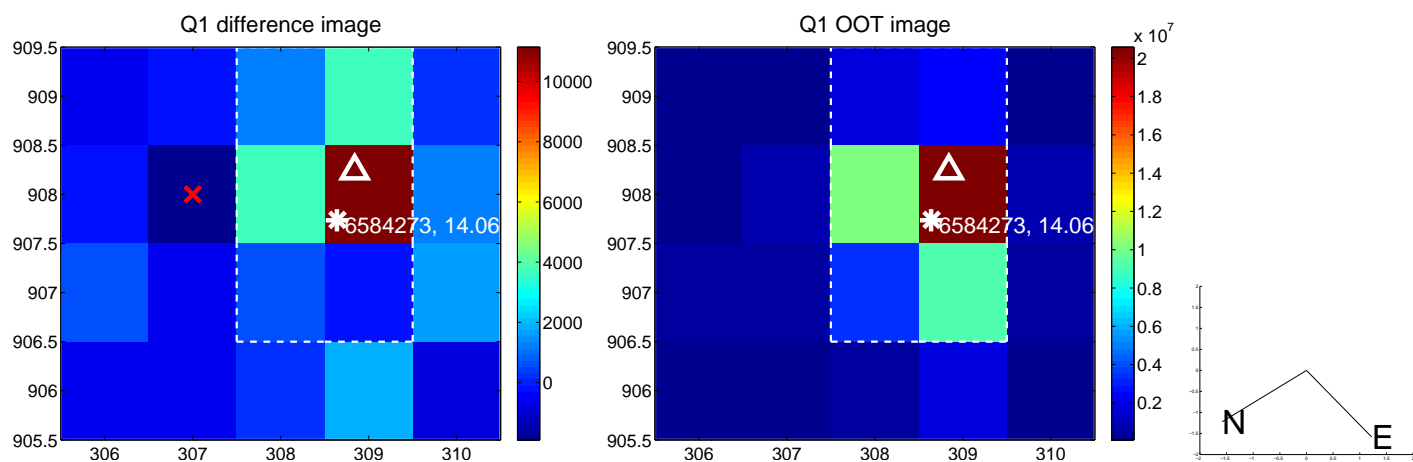
The direct PRF centroid is offset from the target star catalog position by about 0.12 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.359 ± 0.258	1.39	-0.019 ± 0.282	-0.358 ± 0.258
PRF-fit source offset from KIC position	0.408 ± 0.255	1.60	-0.044 ± 0.280	-0.405 ± 0.254
photometric centroid source offset	0.58 ± 0.60	0.95	-0.54 ± 0.61	0.21 ± 0.57

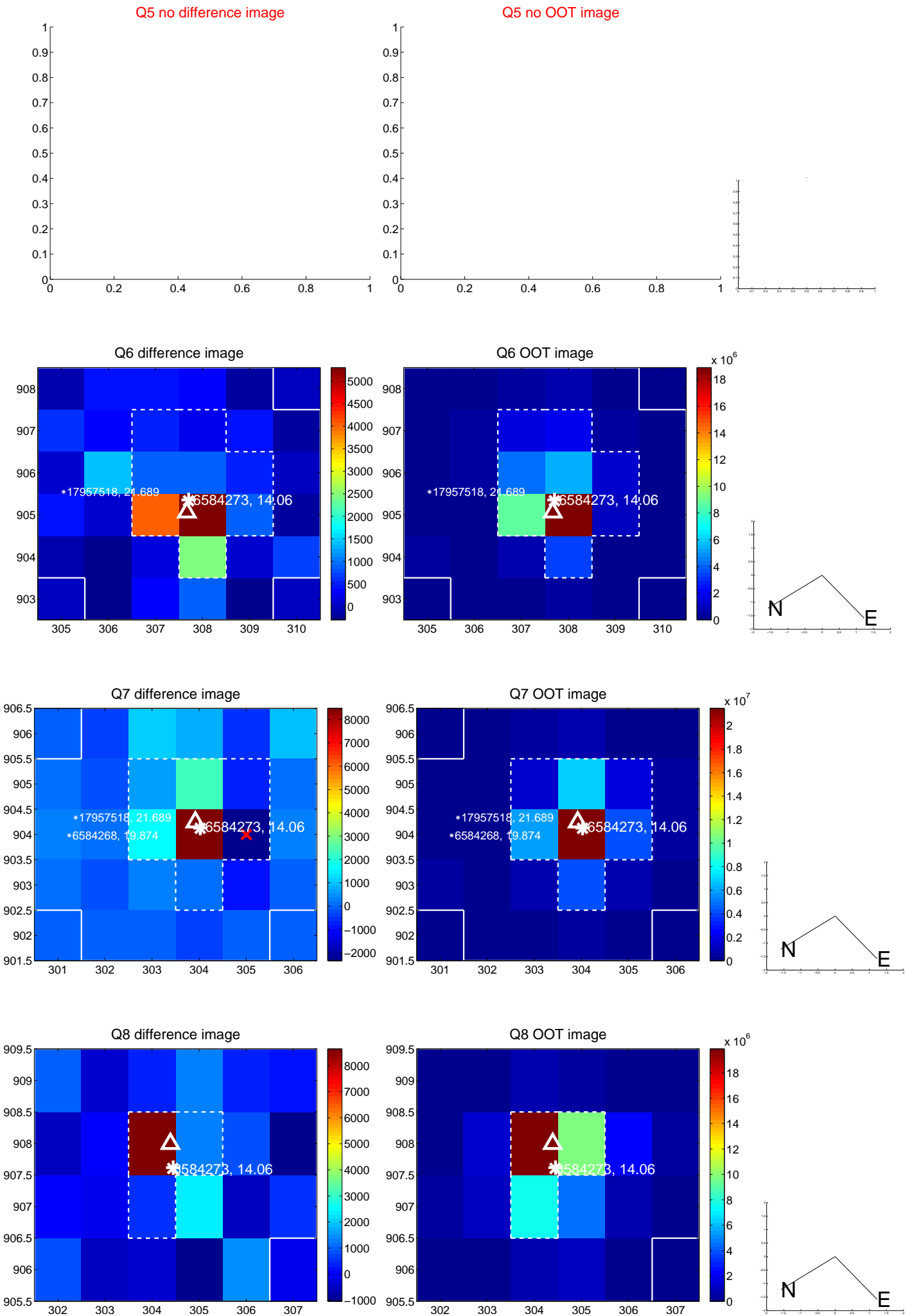


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

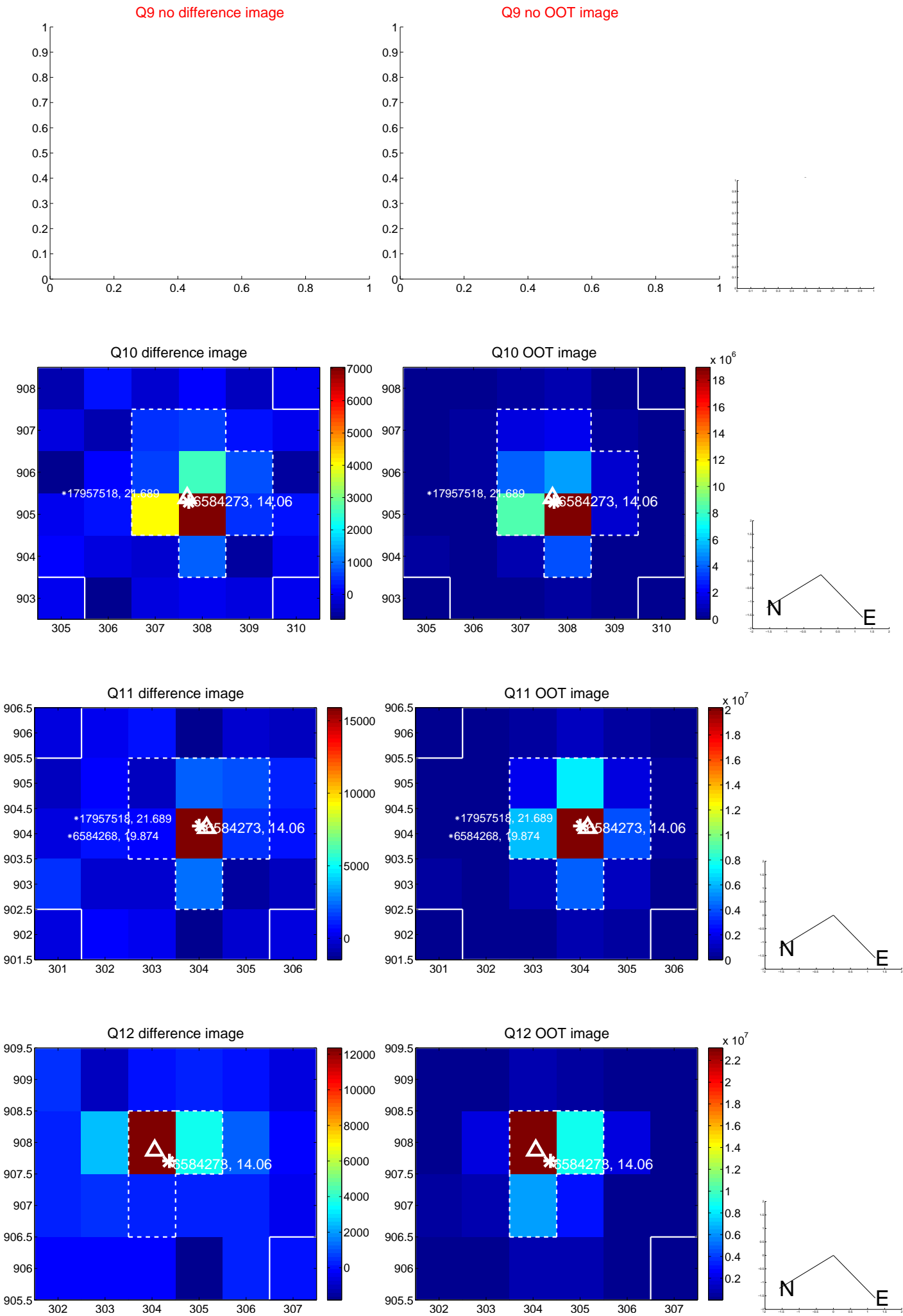
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



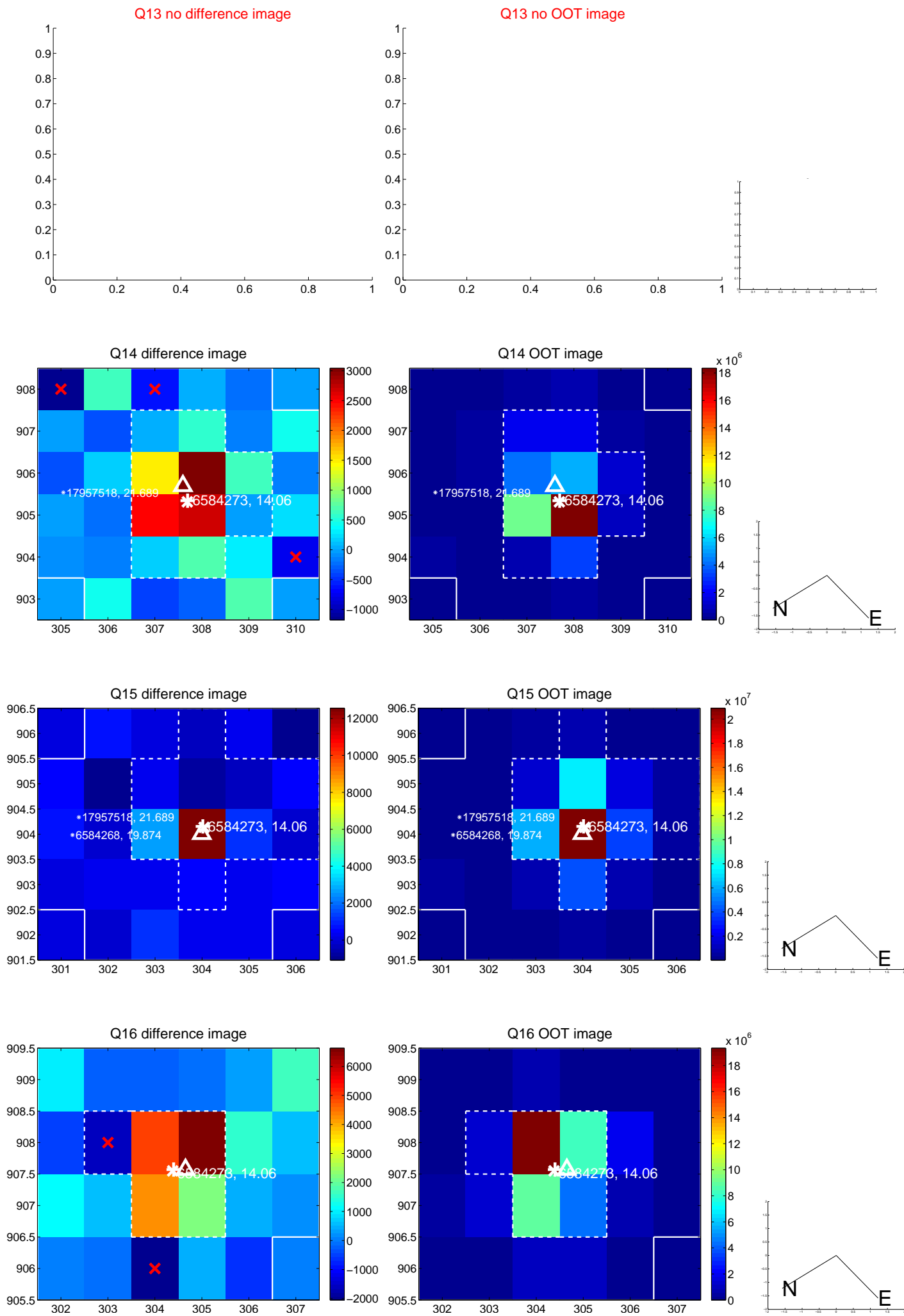
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



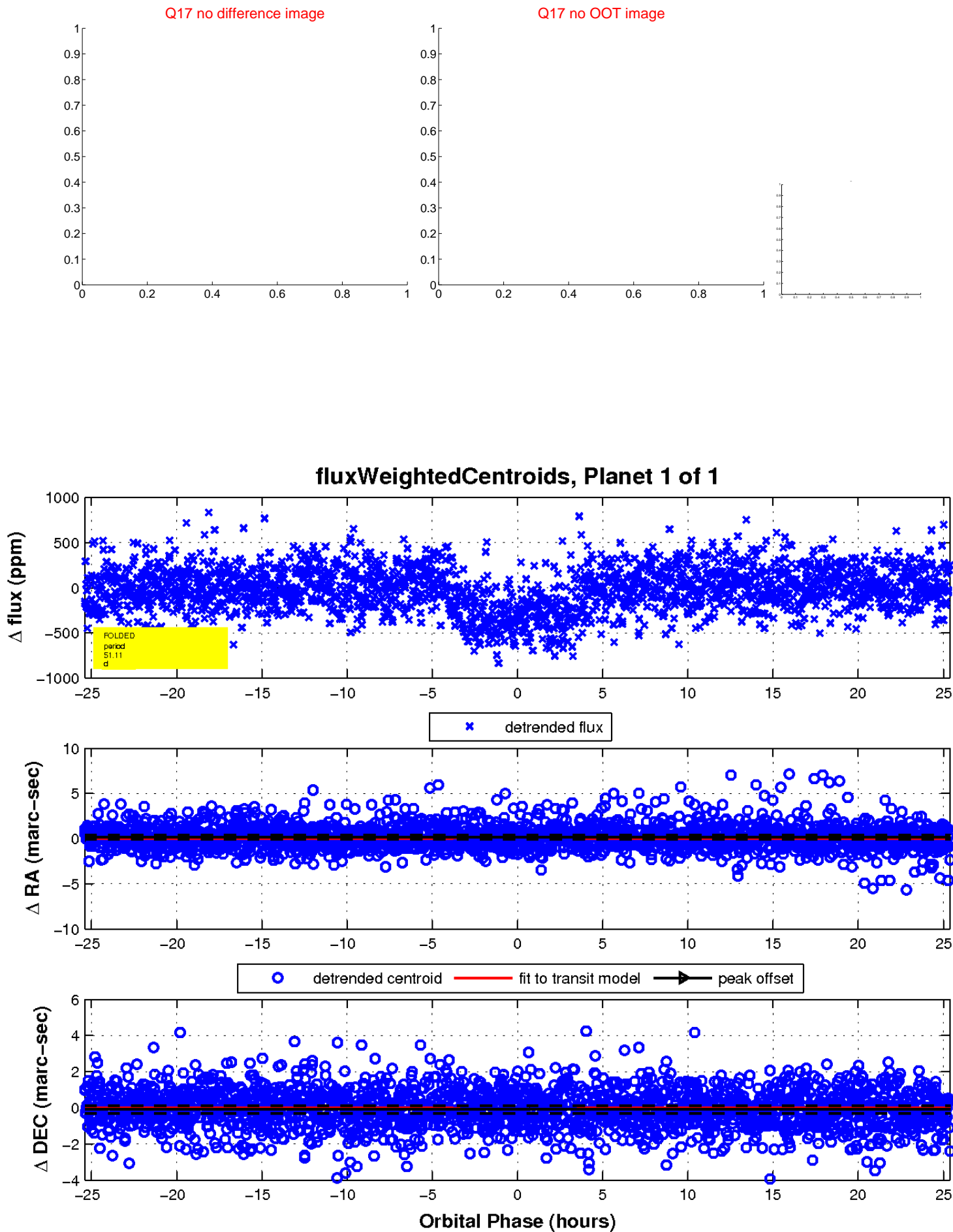
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

