

KIC 006934045

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})
006934045-01	OBS	5336.01	265.702637	167.121847	265.6	19.912	8.3	10.6	1.86	6537	3.23	6.92

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006934045-01	OBS	PC	0.50	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.

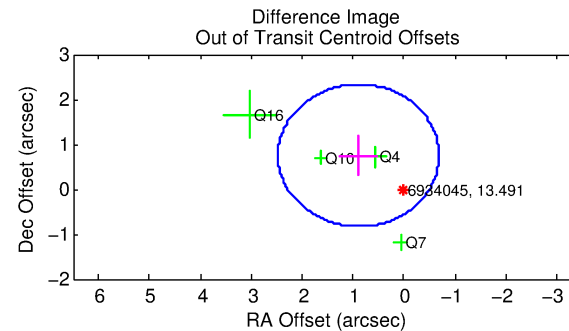
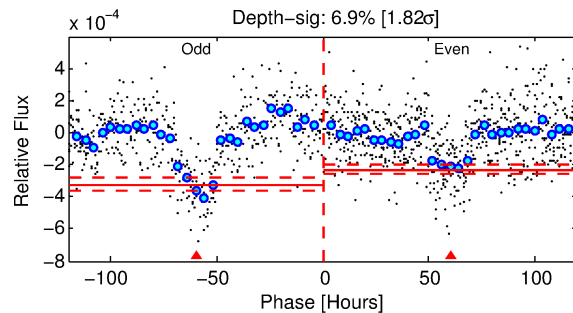
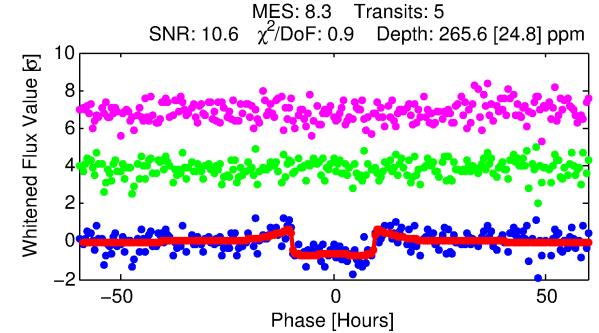
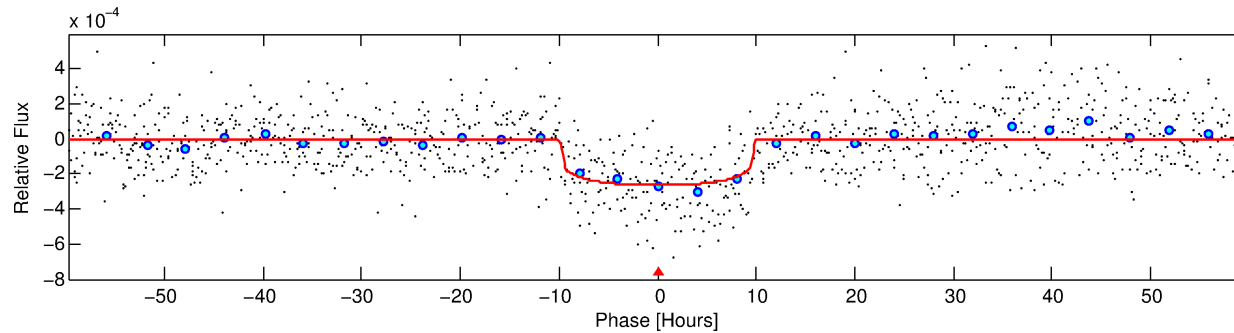
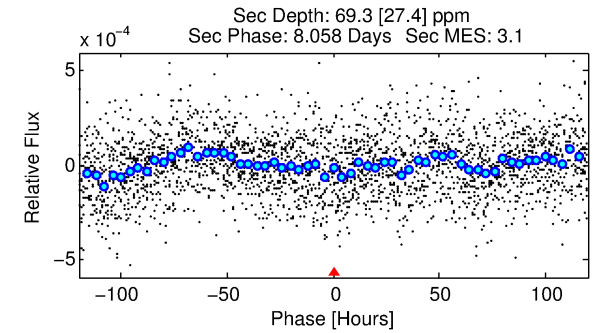
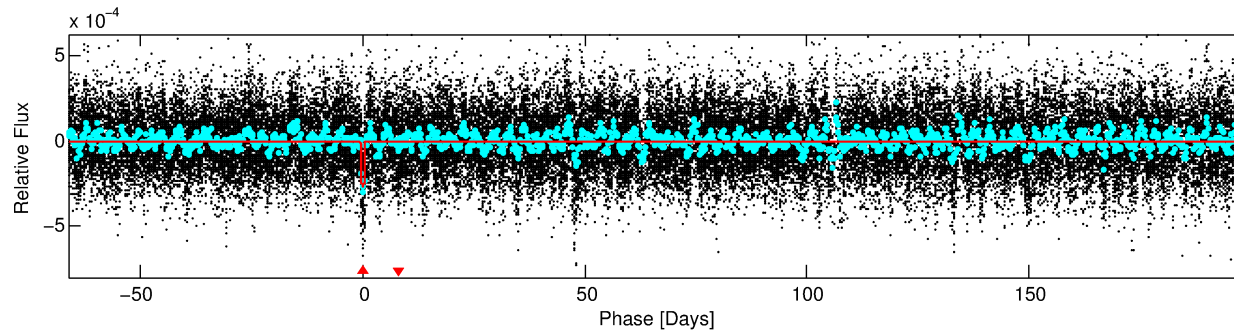
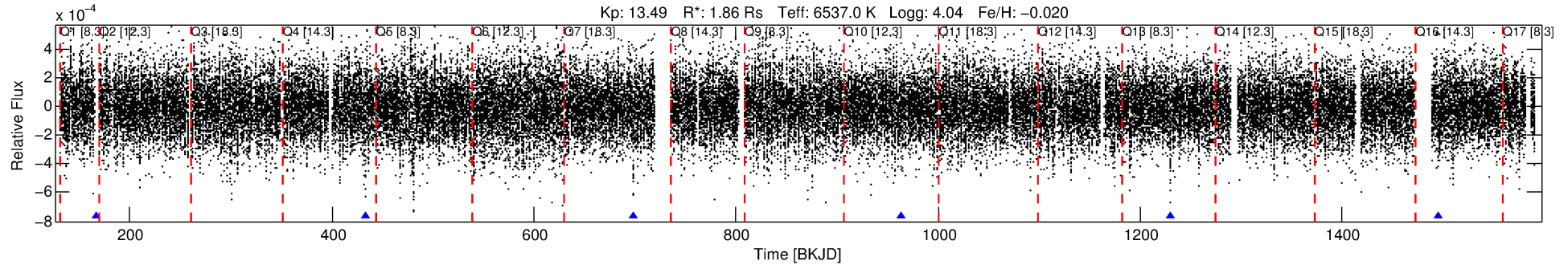
Ephemeris Match Information For 006934045-01

No Significant Match Found

DV One-Page Summary

KIC: 6934045 Candidate: 1 of 1 Period: 265.703 d

KOI: K05336.01 Corr: 0.924



DV Fit Results:

Period = 265.70264 [0.00514] d
Epoch = 167.1218 [0.0179] BKJD
Rp/R* = 0.0159 [0.0023]
a/R* = 76.82 [56.92]
b = 0.68 [0.59]
Seff = 6.92 [2.92]
Teq = 414 [44] K
Rp = 3.23 [1.06] Re
a = 0.9040 [0.2379] AU
Ag = 2992.61 [1901.42] [1.57σ]
Teff = 4729 [603] K [7.14σ]

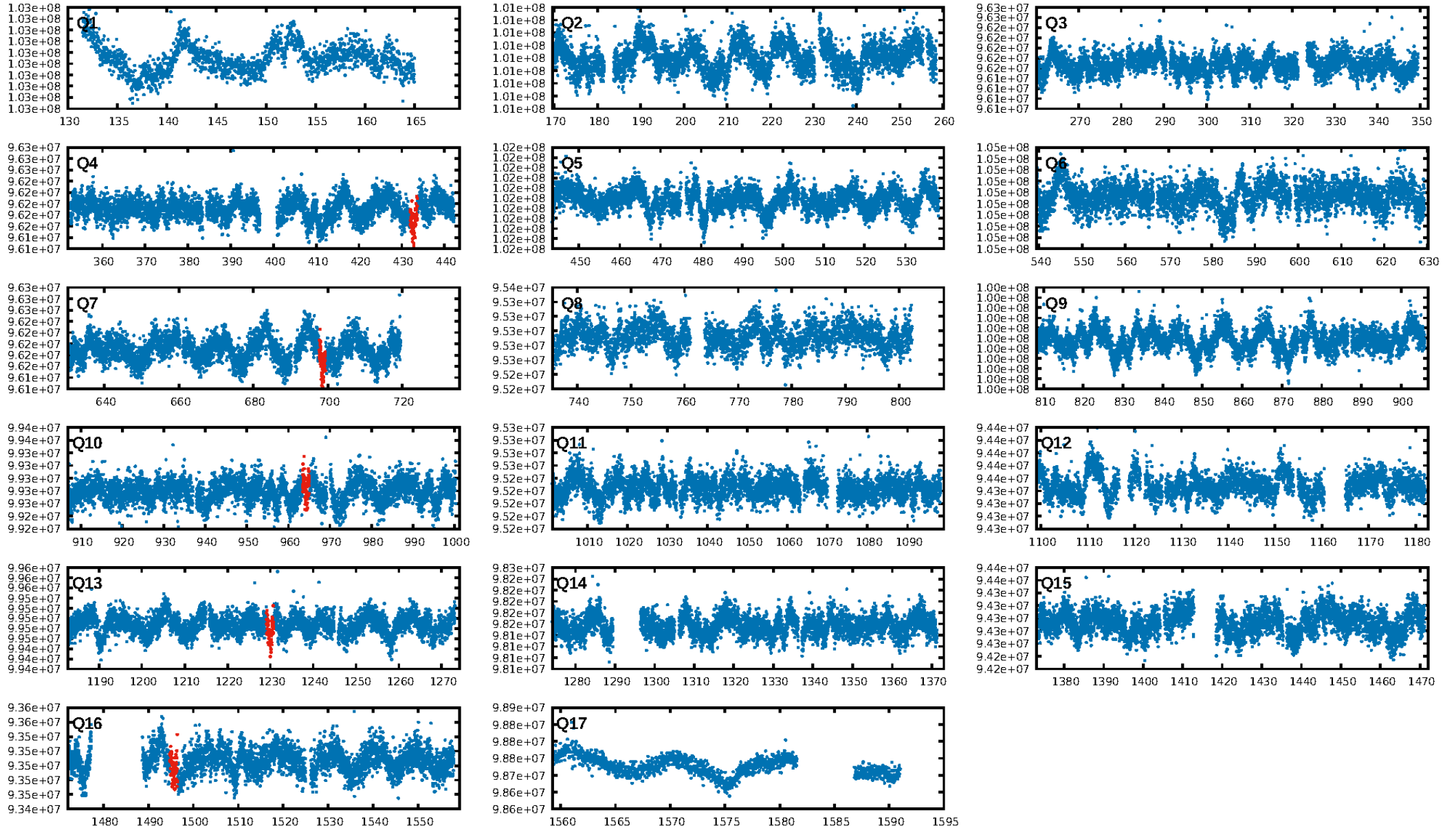
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 47.9%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 5.04e-15
RollingBand-fgt: 1.00 [5/5]
GhostDiagnostic-chr: 26.17
Centroid-sig: 8.4%
Centroid-so: 0.757 arcsec [1.15σ]
OotOffset-rm: 1.164 arcsec [2.21σ]
KicOffset-rm: 1.172 arcsec [1.33σ]
OotOffset-st: 1/1/2/0 [4]
KicOffset-st: 1/1/2/0 [4]
DiffImageQuality-fgm: 0.50 [2/4]
DiffImageOverlap-fno: 1.00 [4/4]

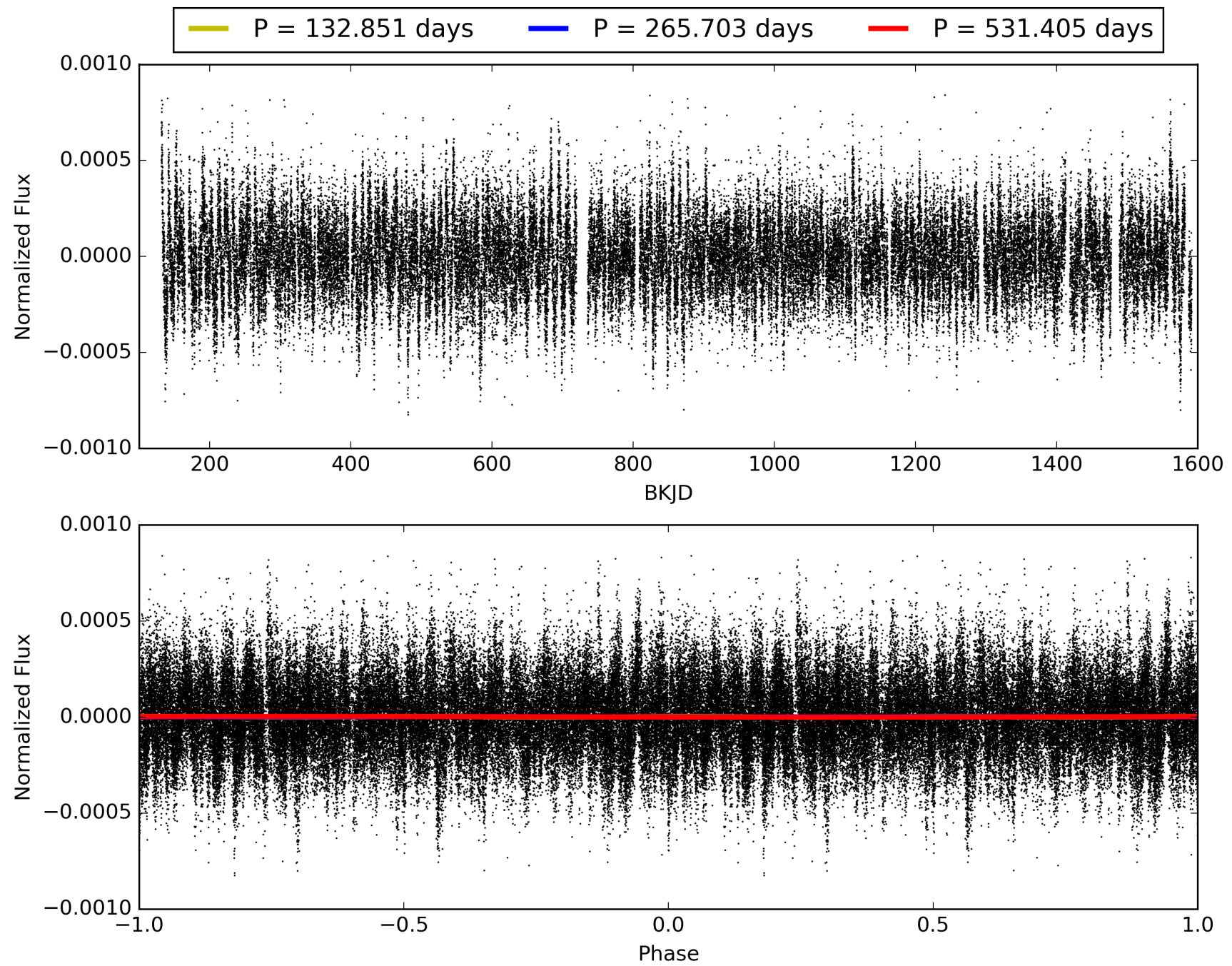
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 15:26:18 Z

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

TCE 006934045-01, PDC Light Curves

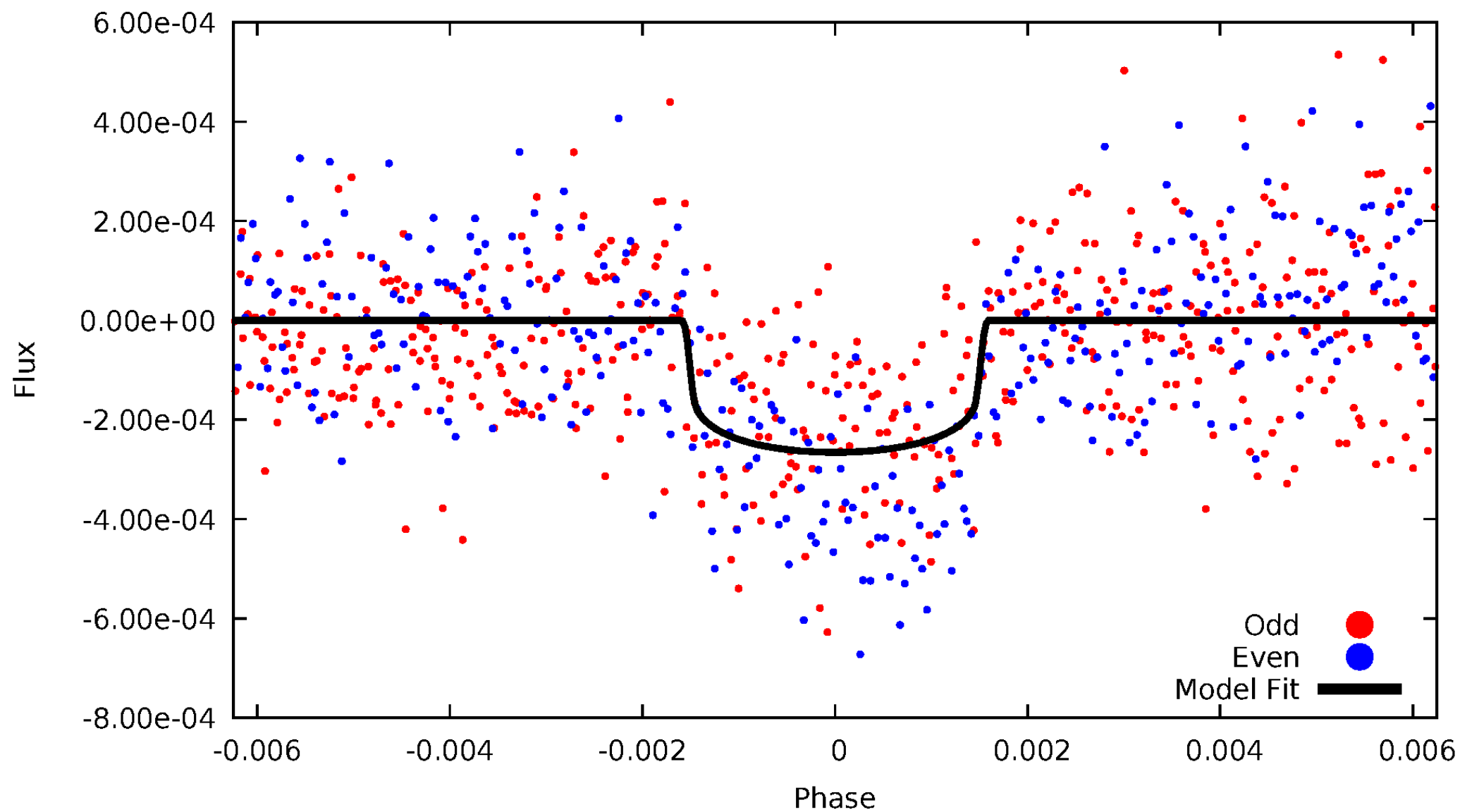


TCE 006934045-01



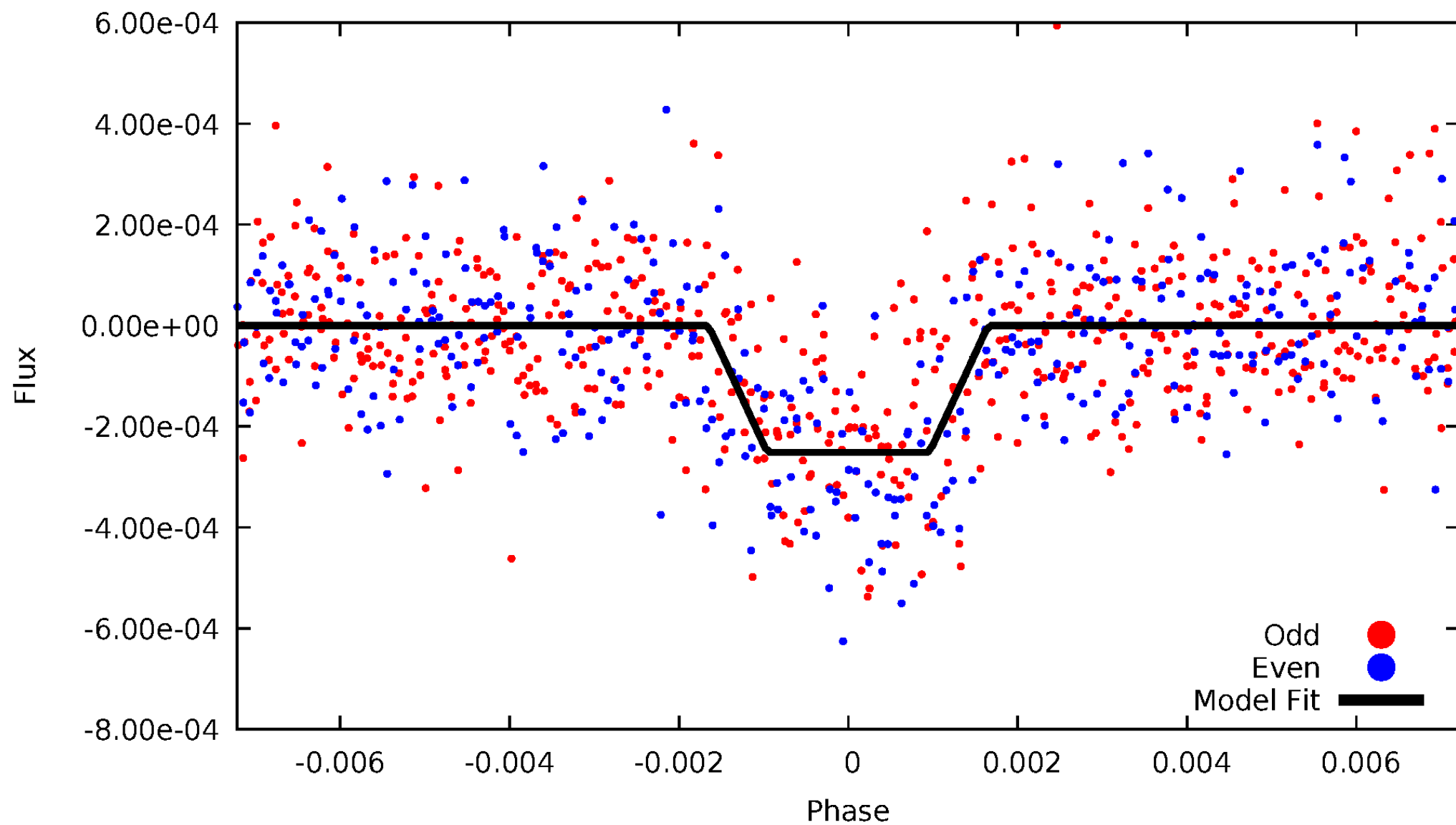
DV Odd/Even

TCE 006934045-01

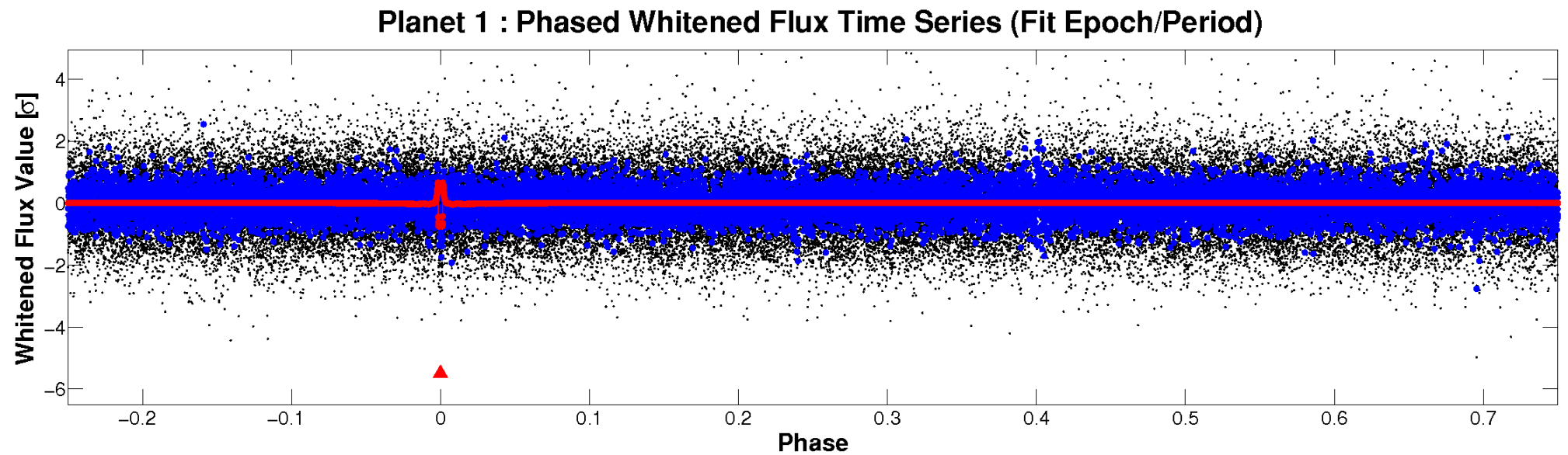
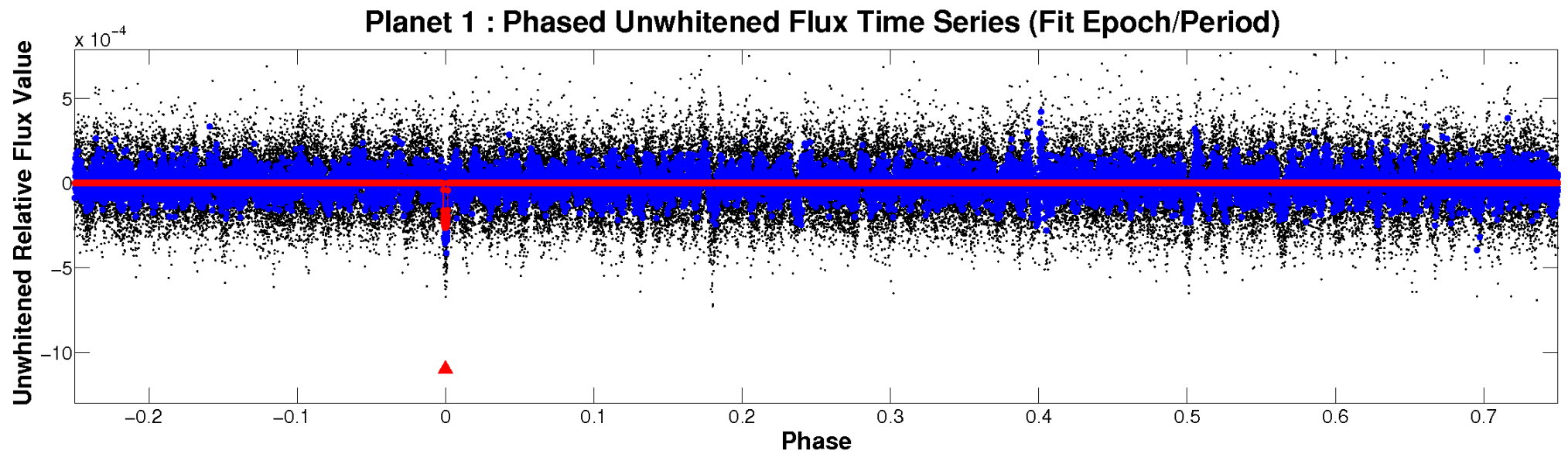


ALT Odd/Even

TCE 006934045-01

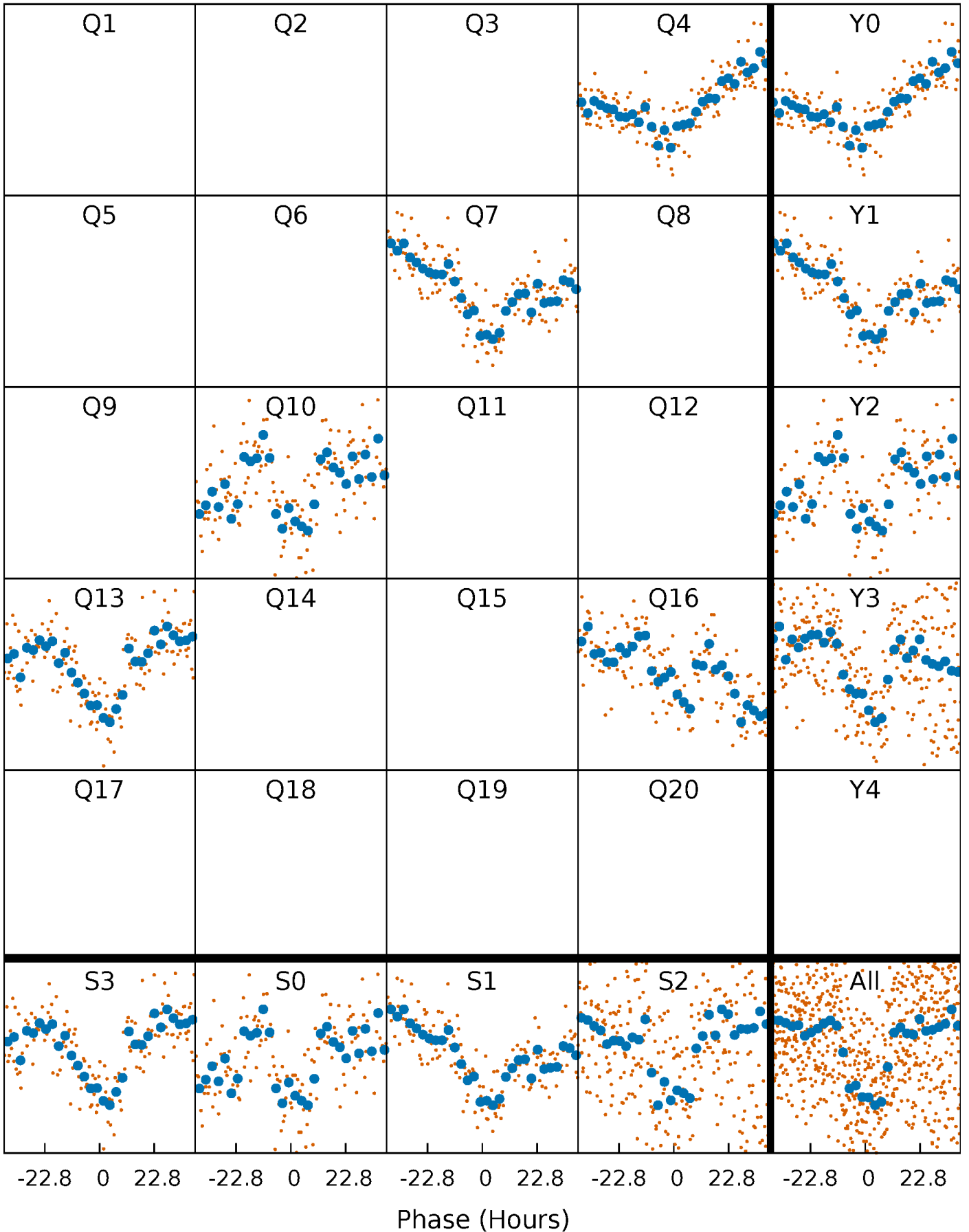


Non-Whitened Vs. Whitened Light Curve



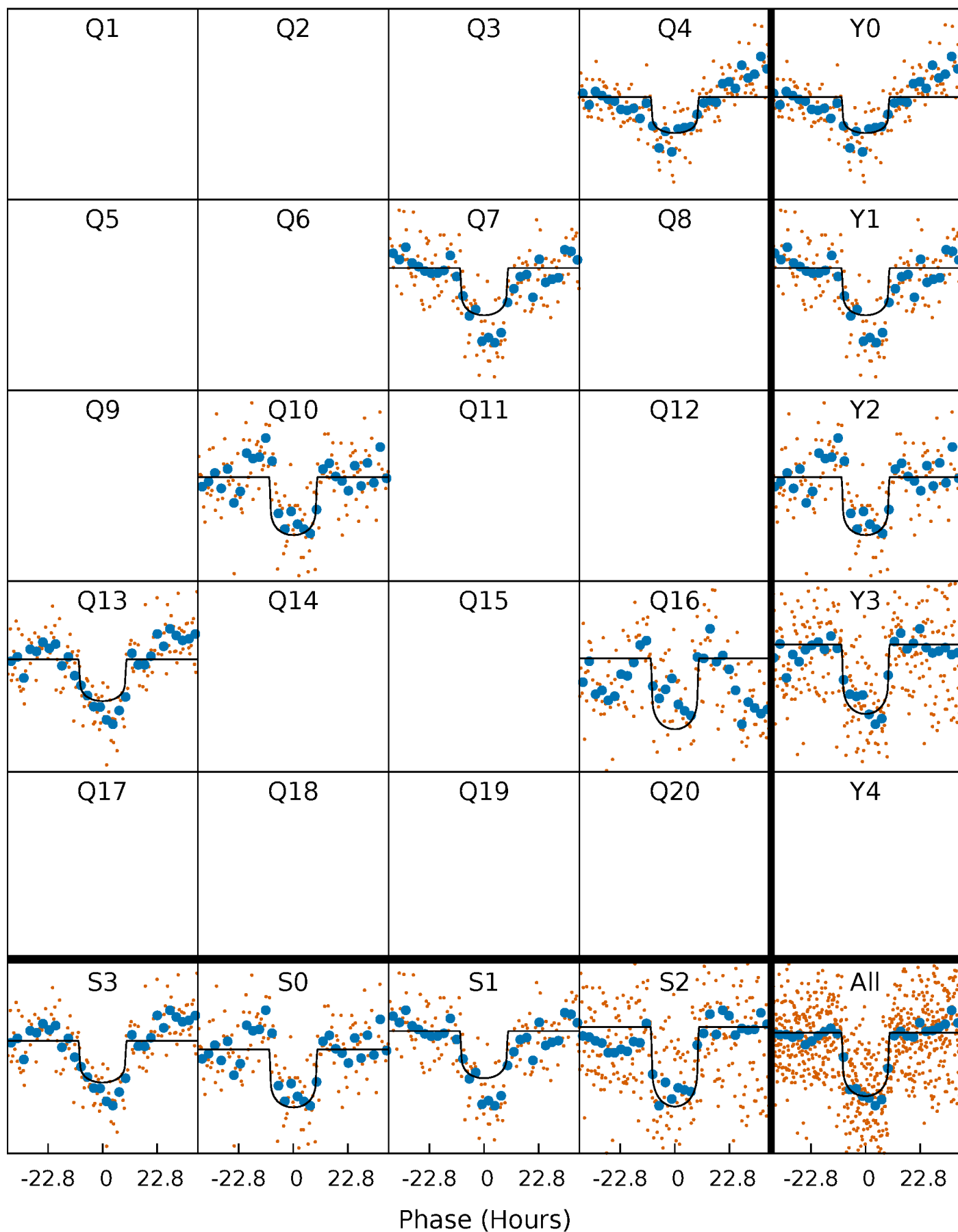
PDC Quarter-Phased Transit Curves

TCE 006934045-01 P=265.702637 Days $T_0=167.121847$ (BKJD)



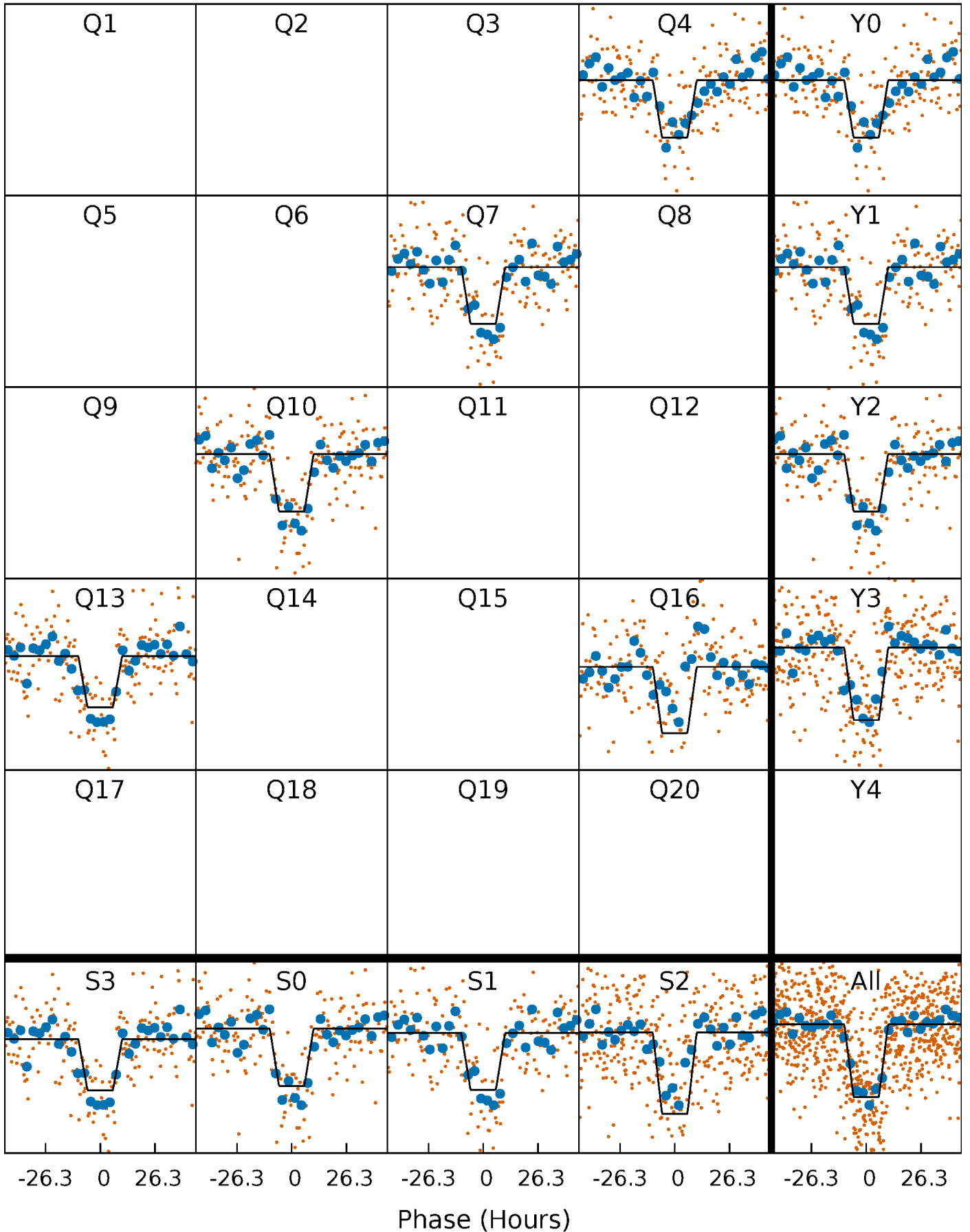
DV Quarter-Phased Transit Curves

TCE 006934045-01 P=265.702637 Days $T_0=167.121847$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

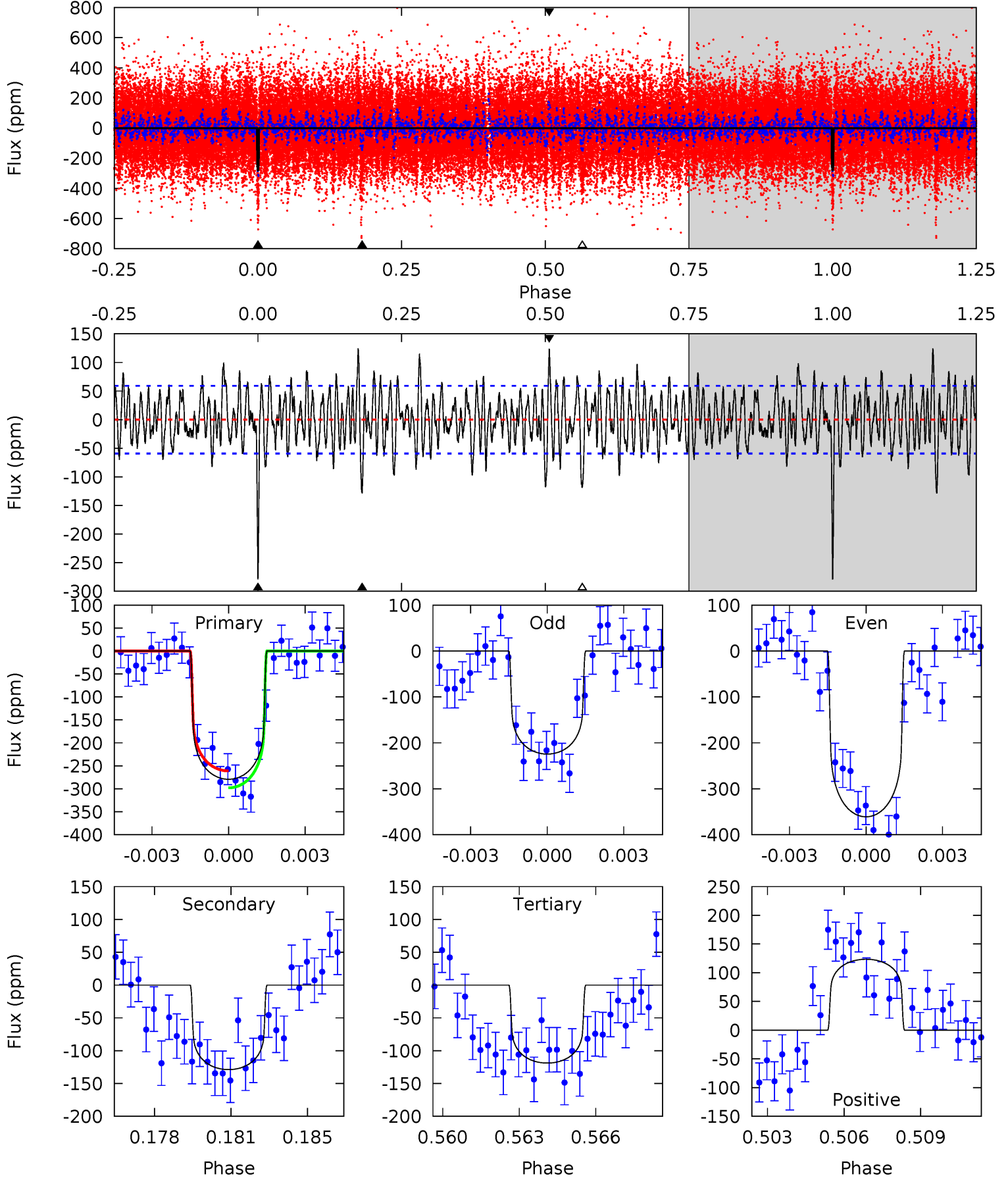
TCE 006934045-01 P=265.758881 Days $T_0=166.983014$ (BKJD)



DV Model-Shift Uniqueness Test

006934045-01, P = 265.702637 Days, E = 167.121847 Days

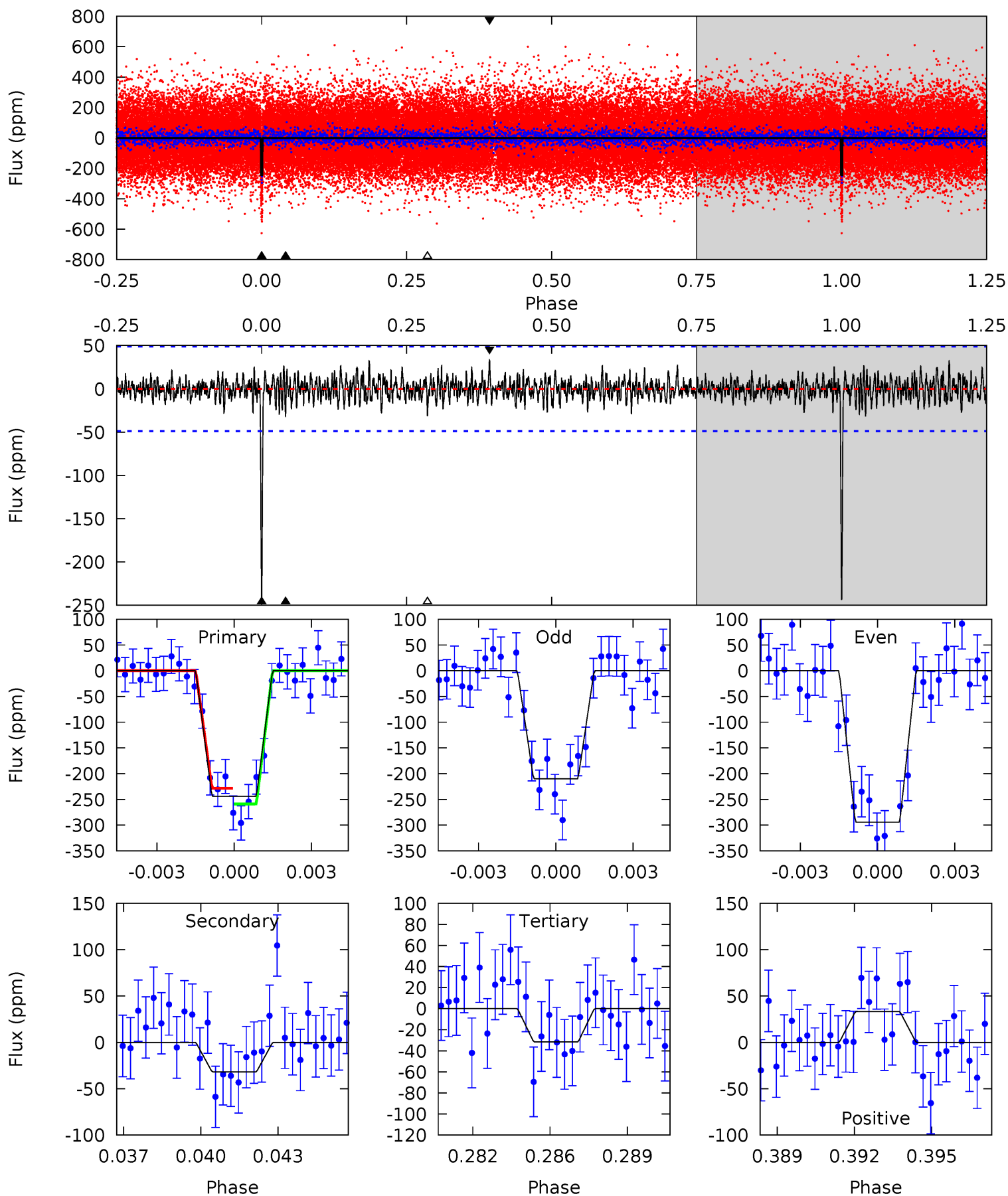
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
24.8	11.4	10.5	10.9	5.24	2.95	3.47	14.2	13.8	0.88	0.47	5.94	0.90	0.31	1.64



Alt Model-Shift Uniqueness Test

006934045-01, P = 265.758881 Days, E = 166.983014 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
26.1	3.40	3.37	3.56	5.23	2.94	1.02	22.7	22.5	0.02	-0.16	4.41	0.88	0.12	1.65



Stellar Parameters For KIC 006934045

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6537^{+175}_{-214}	$4.044^{+0.228}_{-0.123}$	$-0.020^{+0.250}_{-0.300}$	$1.859^{+0.411}_{-0.548}$	$1.397^{+0.150}_{-0.257}$	$0.306^{+0.377}_{-0.129}$
	+3%/-3%	+6%/-3%	+1250%/-1500%	+22%/-29%	+11%/-18%	+123%/-42%
Source	PHO1	FLK73	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 006934045-01 / KOI 5336.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-129 ± 11	$3.11^{+0.64}_{-0.63}$	568^{+36}_{-41}	5522^{+460}_{-399}	5926^{+3200}_{-1951}
Alt.	-32 ± 9	$3.09^{+0.66}_{-0.64}$	570^{+37}_{-44}	4144^{+354}_{-349}	1422^{+999}_{-579}

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 $A_{obs} \gg 1.0$

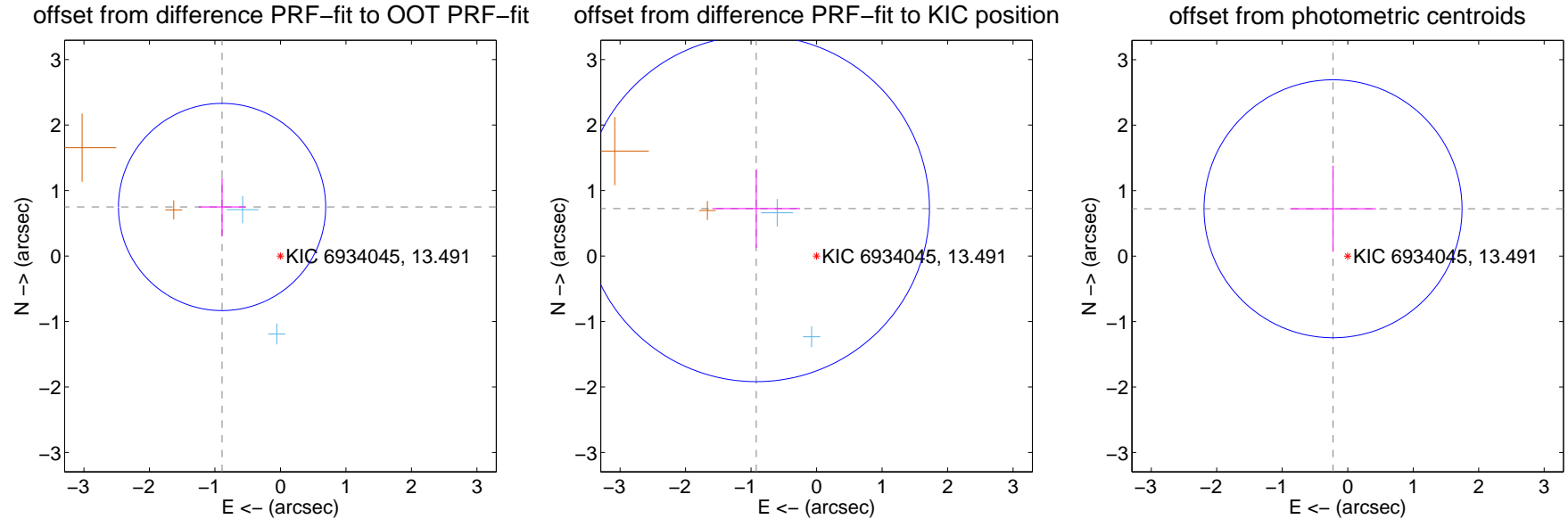
DV Centroid Data

Supplemental centroid analysis for 006934045-01. Kepler magnitude: 13.49. Transit SNR 10.61

There are 2 quarters with good PRF difference image offsets

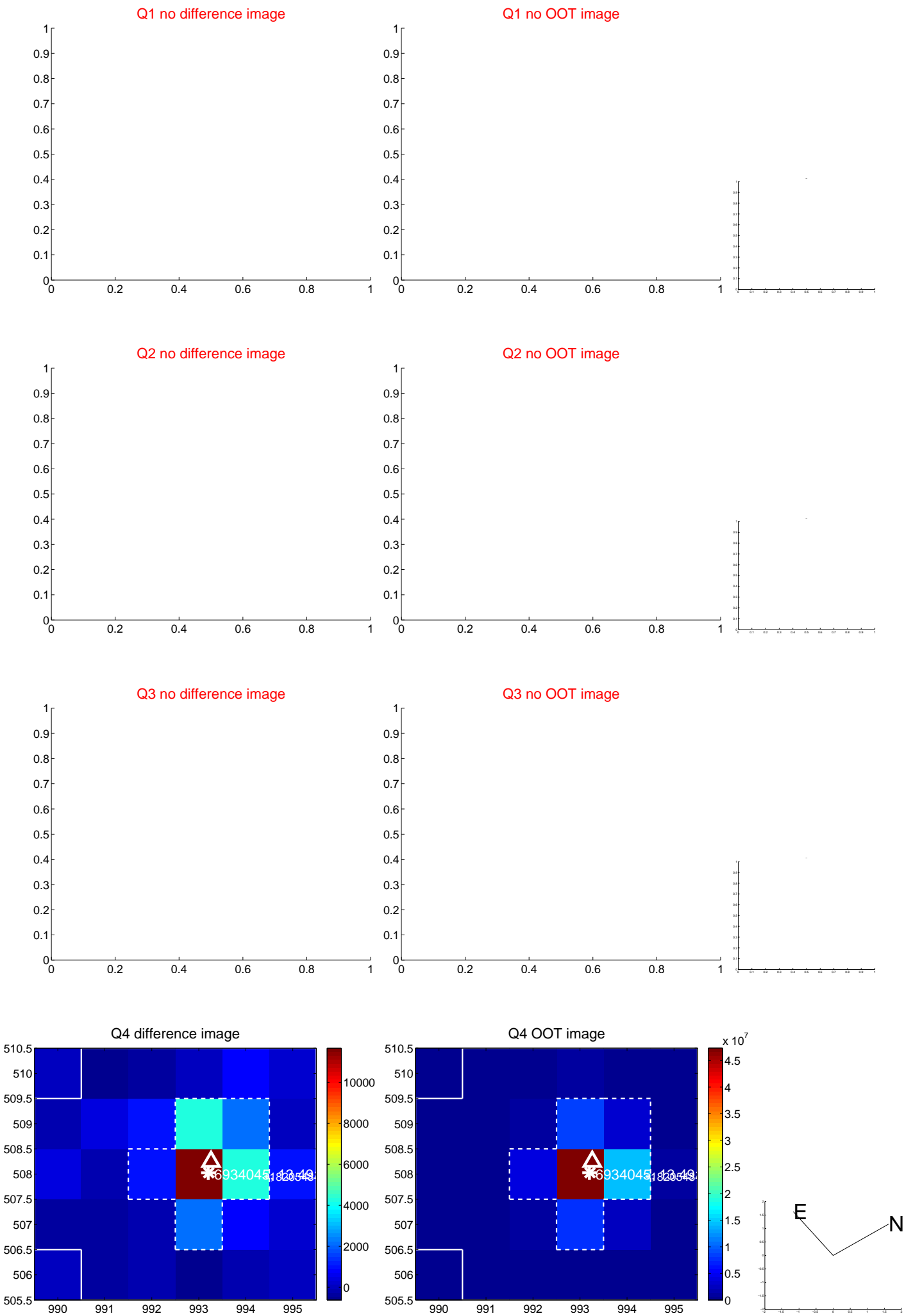
The direct PRF centroid is offset from the target star catalog position by about 0.07 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.164 ± 0.527	2.21	0.892 ± 0.357	0.749 ± 0.440
PRF-fit source offset from KIC position	1.172 ± 0.881	1.33	0.921 ± 0.669	0.725 ± 0.600
photometric centroid source offset	0.76 ± 0.66	1.15	0.22 ± 0.66	0.72 ± 0.66

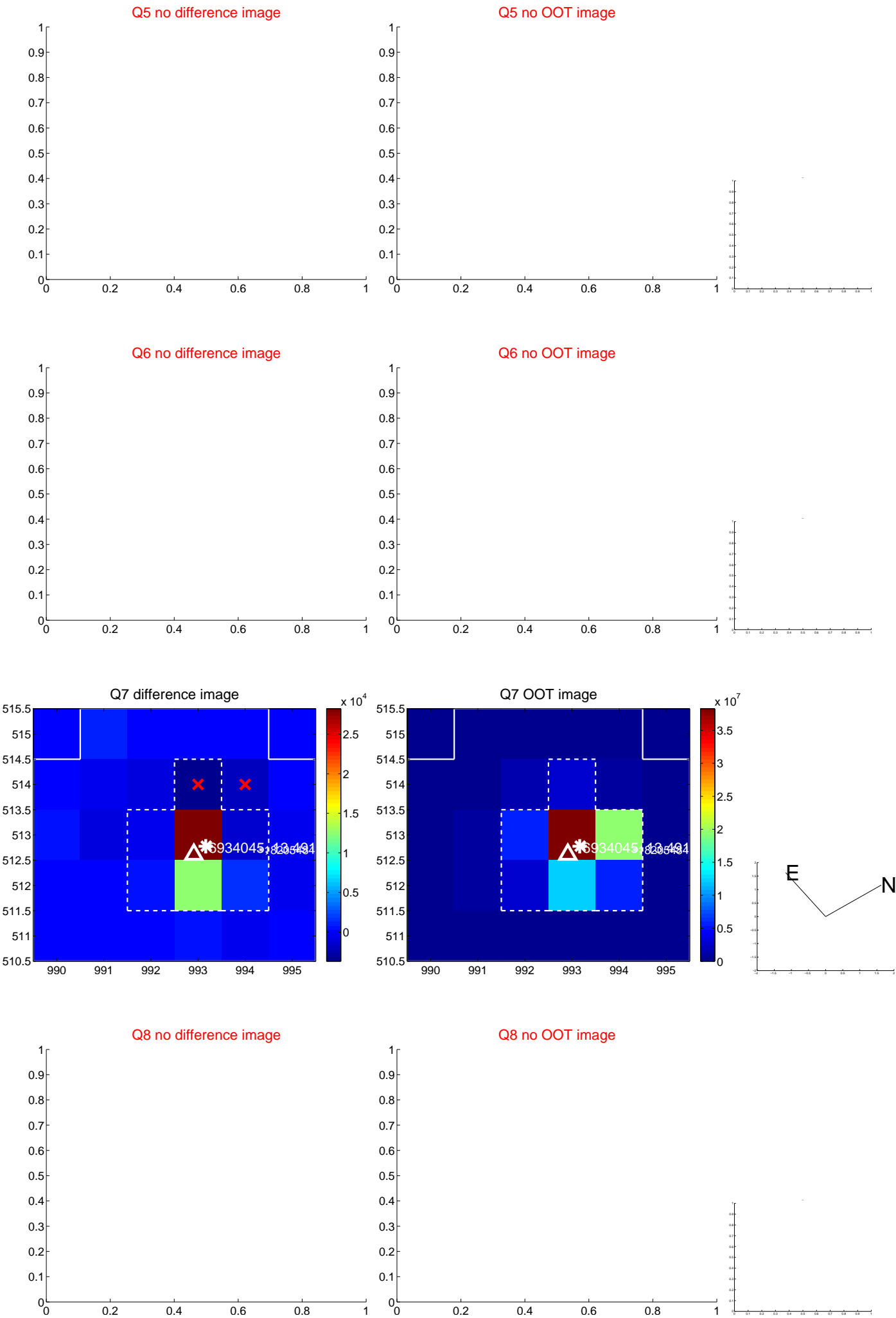


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

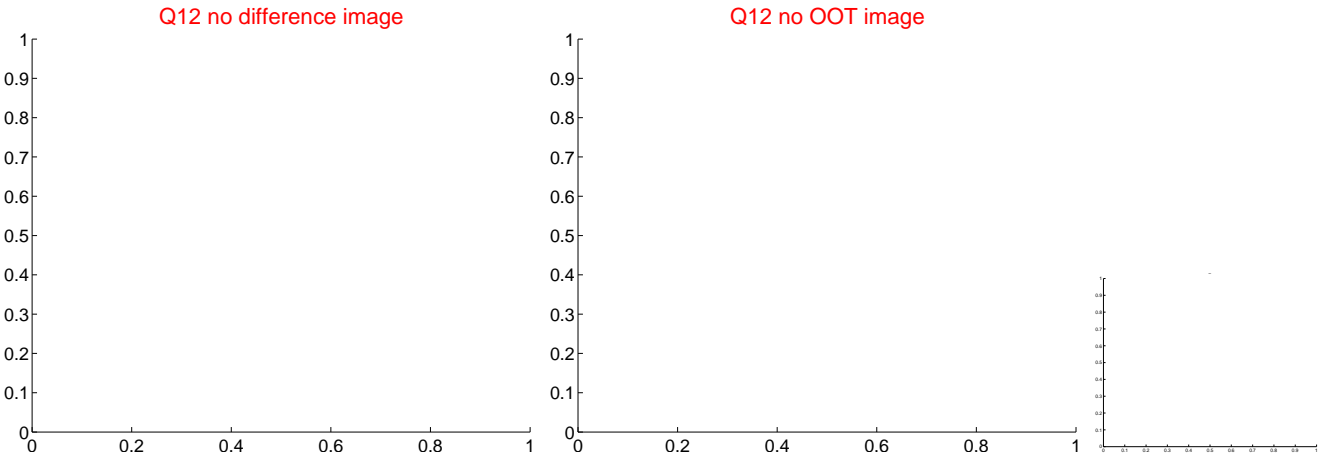
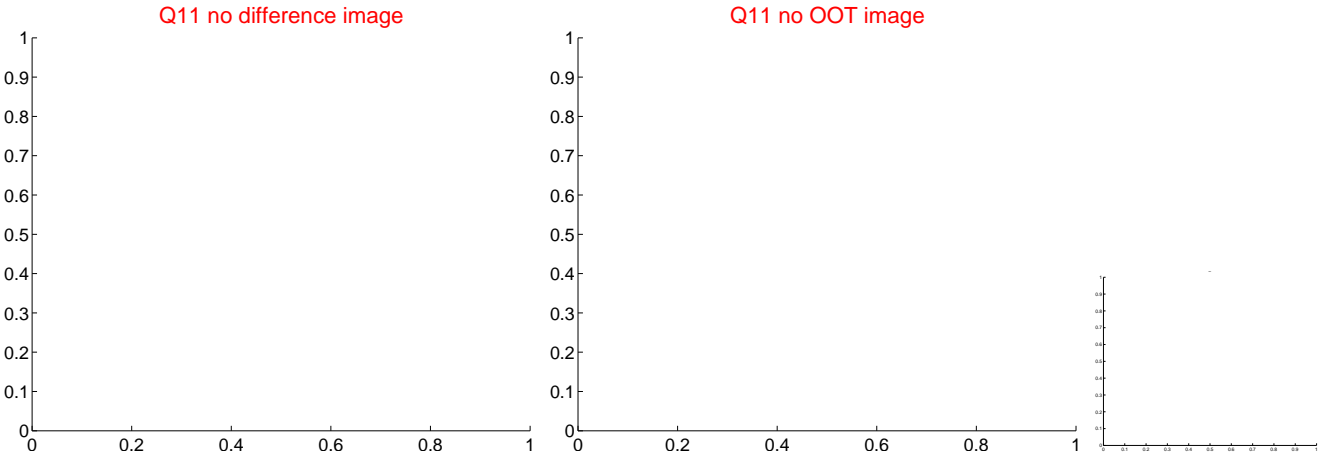
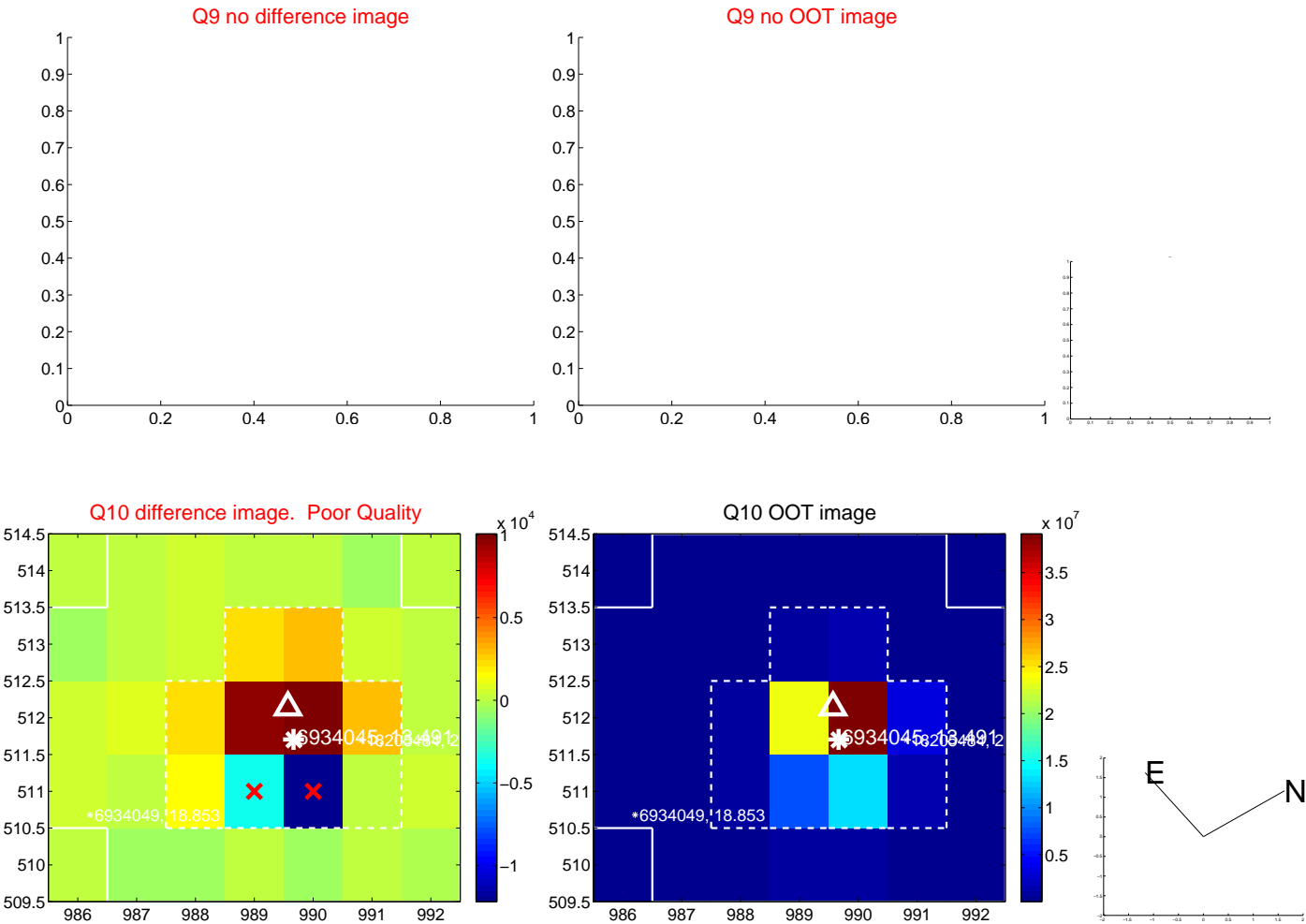
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



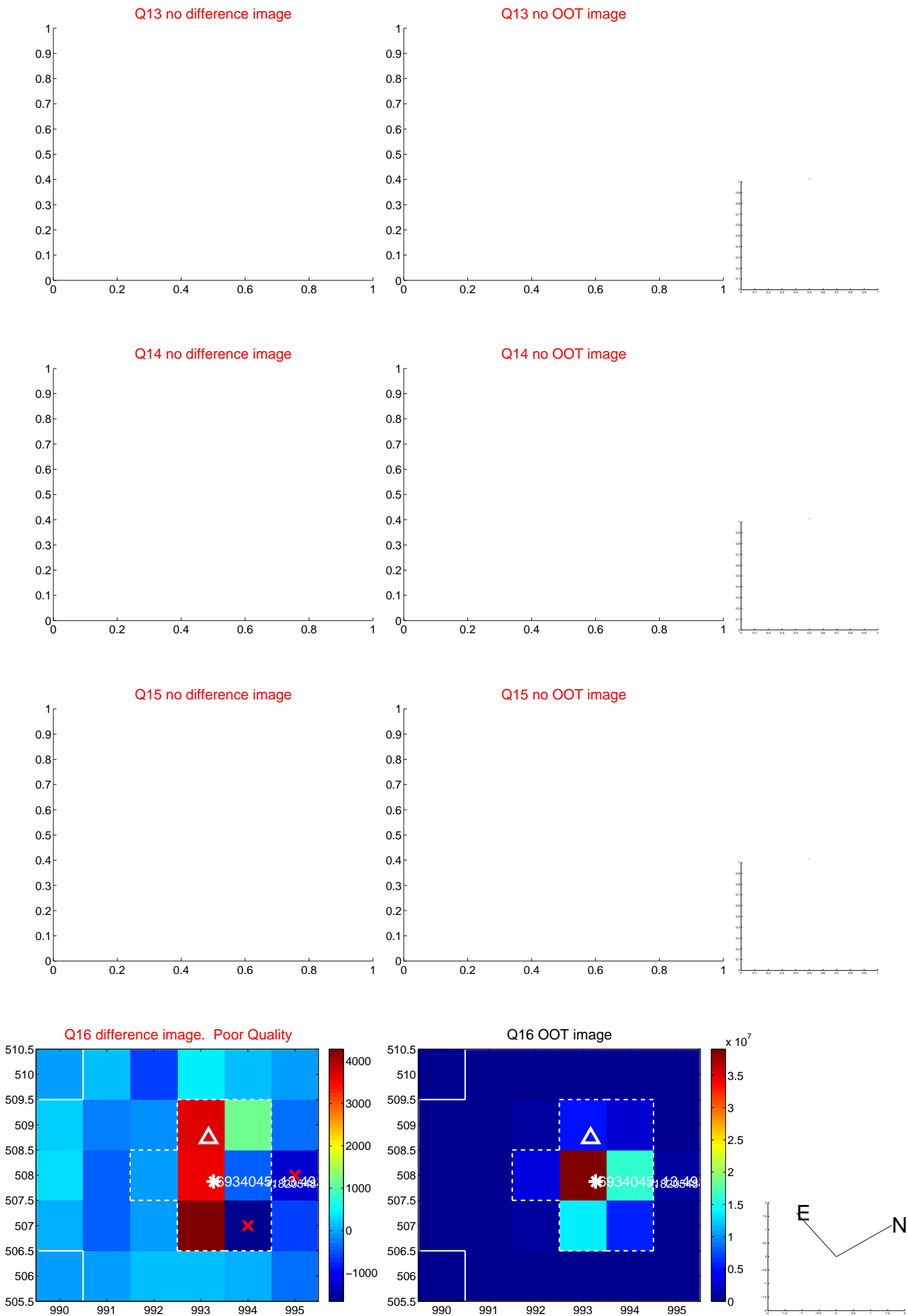
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



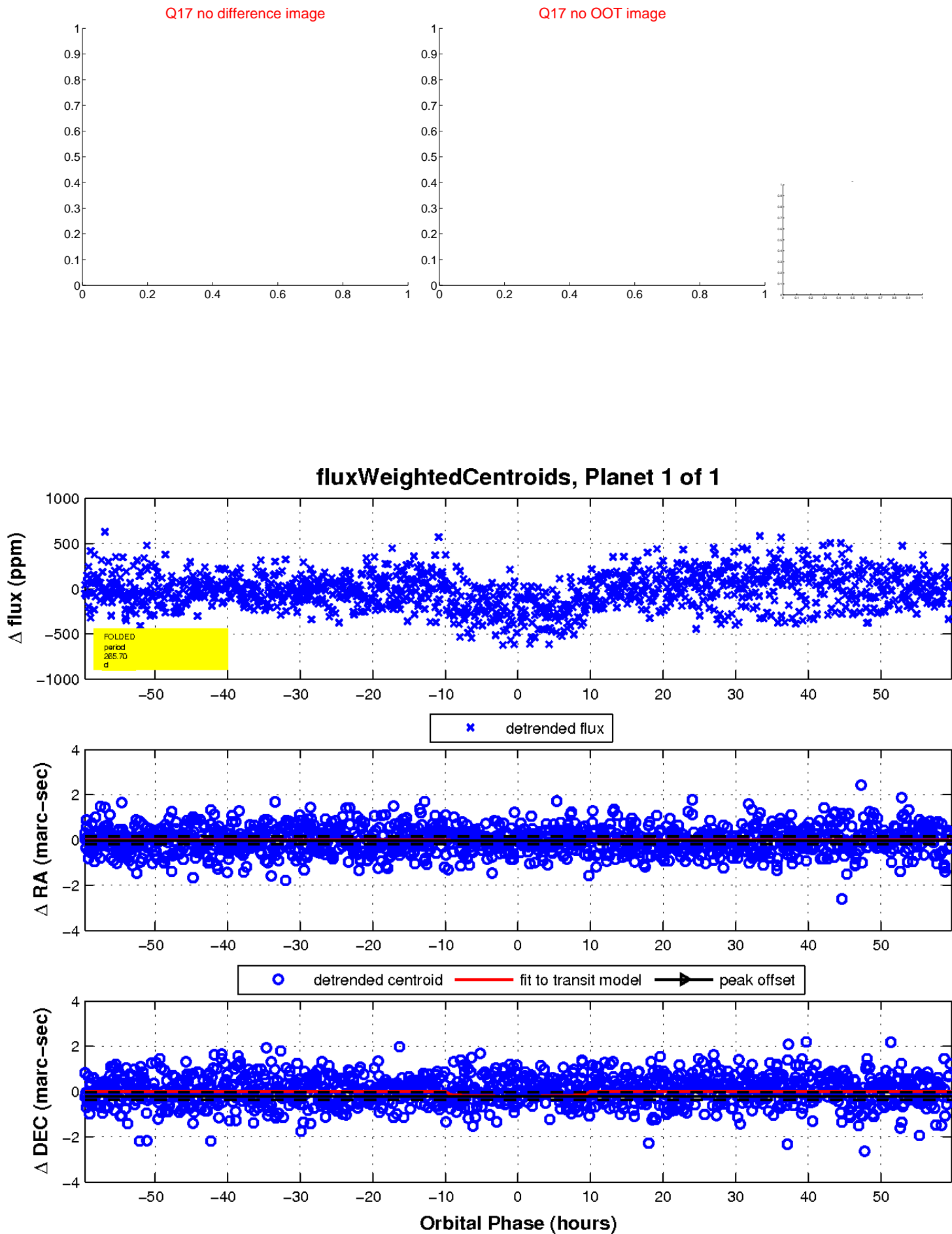
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

