

KIC 006263593

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})
006263593-01	OBS	3049.01	22.476576	136.823011	478.6	3.976	10.9	11.0	0.57	4563	1.62	7.28

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006263593-01	OBS	PC	0.80	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.

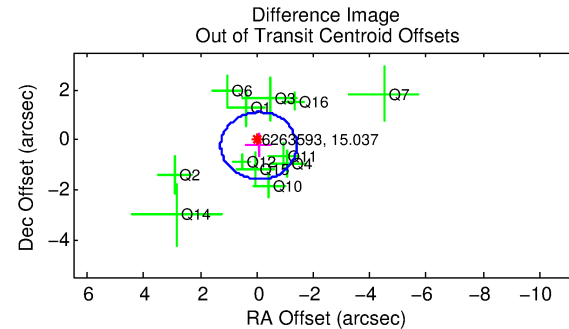
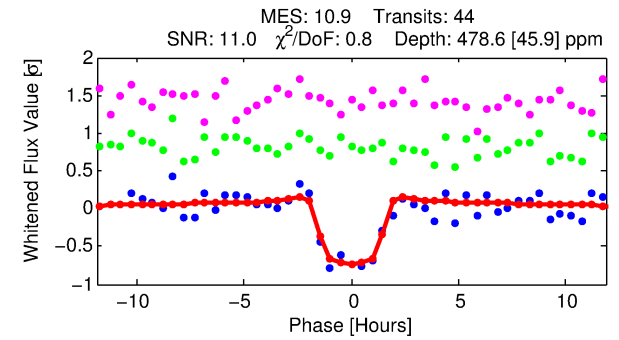
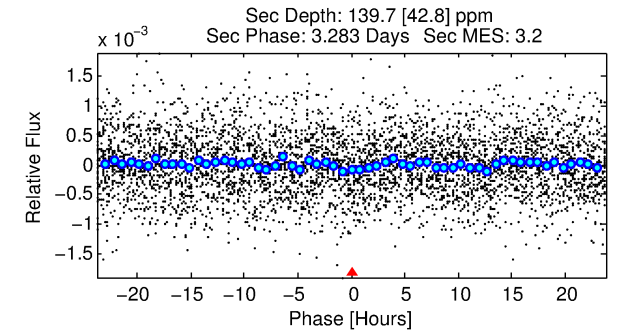
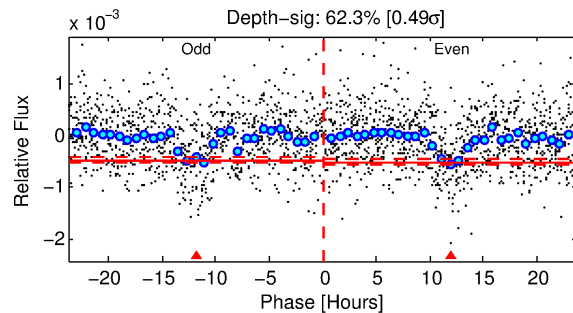
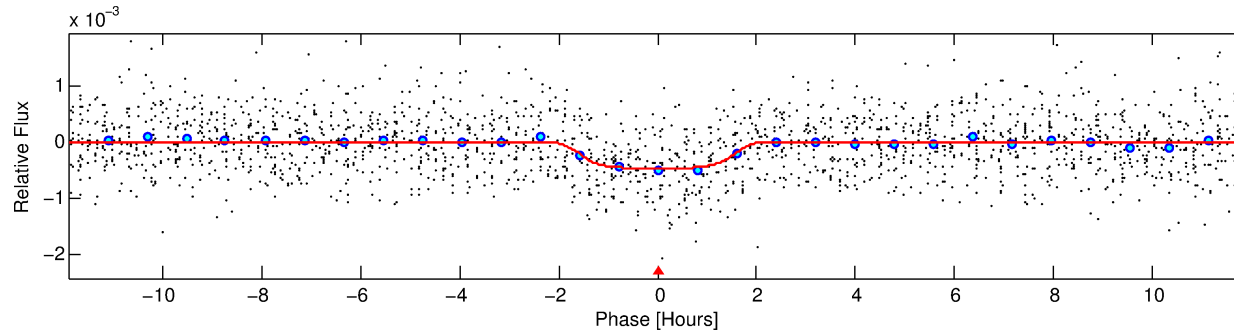
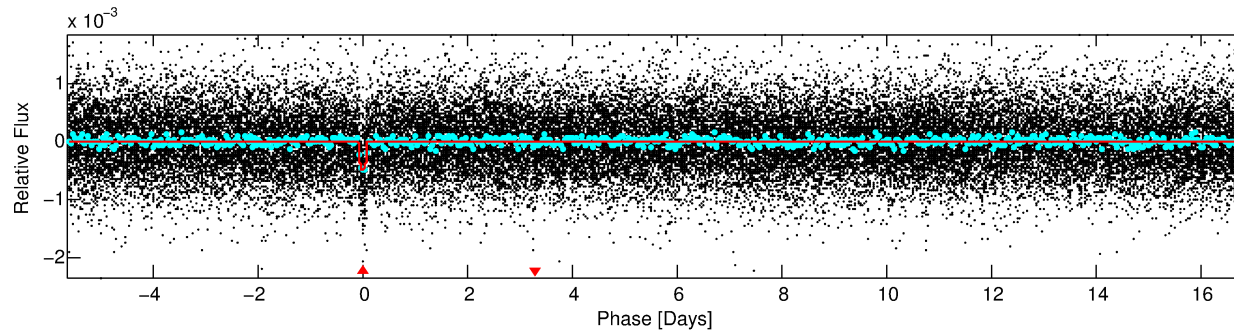
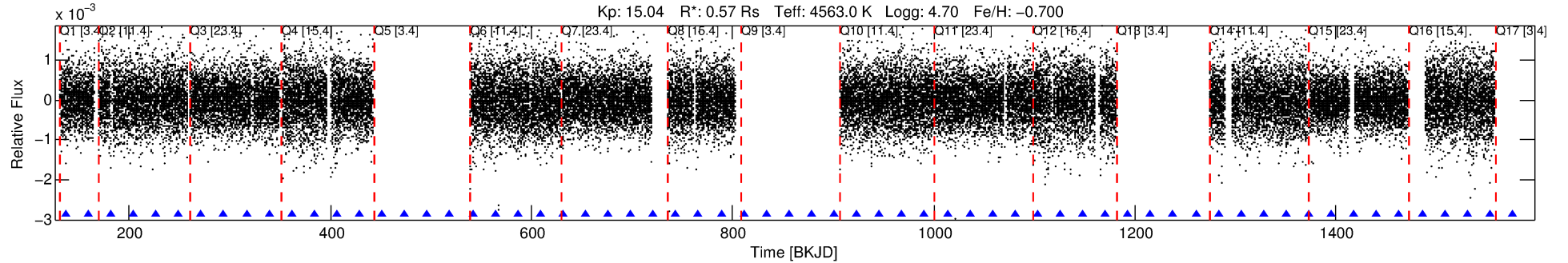
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006263593-01

No Significant Match Found

DV One-Page Summary

KIC: 6263593 Candidate: 1 of 1 Period: 22.477 d
KOI: K03049.01 Corr: 0.947



DV Fit Results:

Period = 22.47658 [0.00018] d
Epoch = 136.8230 [0.0066] BKJD
Rp/R* = 0.0261 [0.0028]
a/R* = 17.63 [6.21]
b = 0.94 [0.04]
Seff = 7.28 [1.12]
Teq = 419 [16] K
Rp = 1.62 [0.23] Re
a = 0.1310 [0.0094] AU
Ag = 505.09 [195.33] [2.58 σ]
Teffp = 3070 [302] K [8.77 σ]

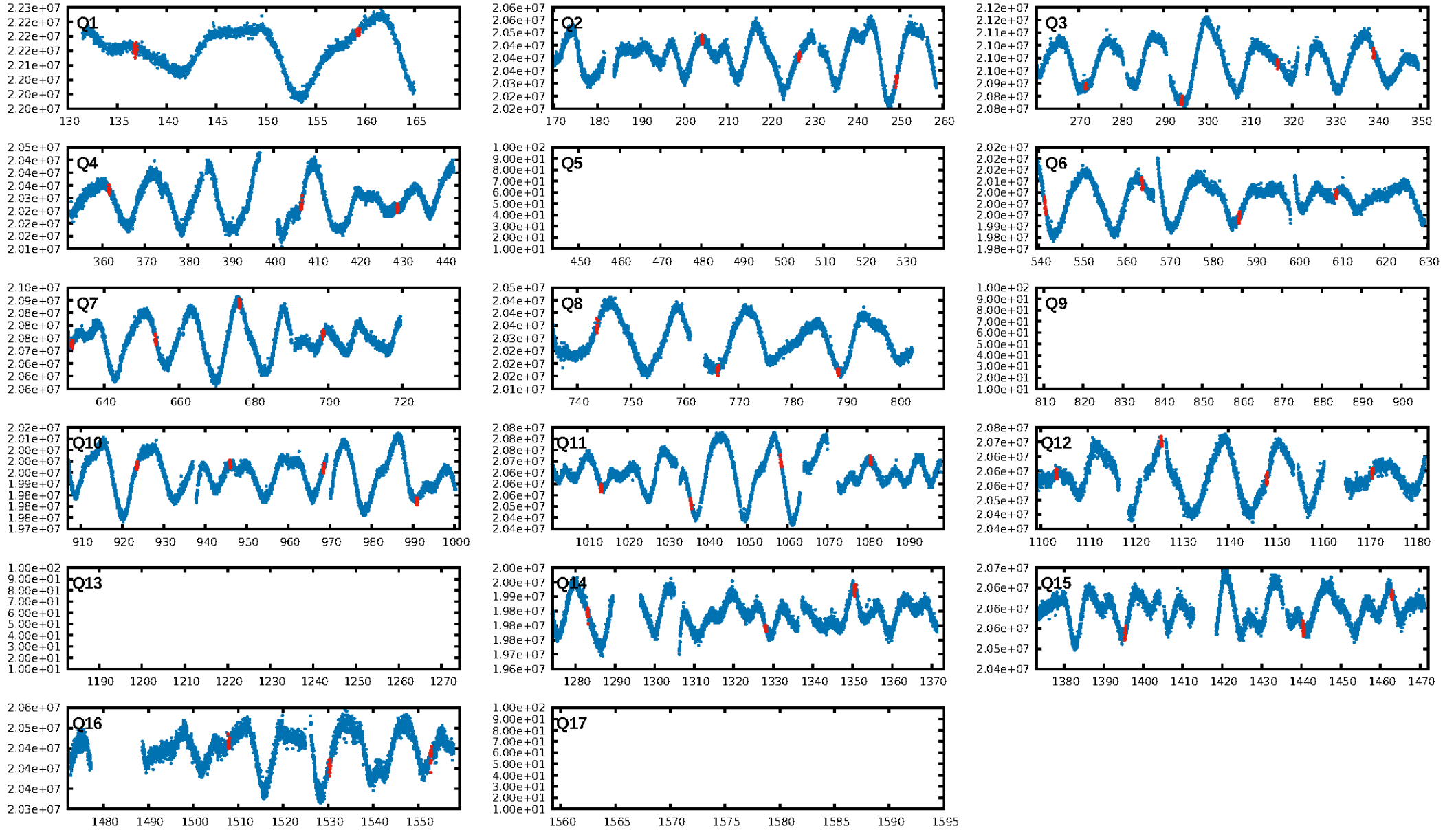
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 84.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 2.75e-27
RollingBand-fgt: 1.00 [42/42]
GhostDiagnostic-chr: 1.781
Centroid-sig: 22.7%
Centroid-so: 1.003 arcsec [0.80 σ]
OotOffset-rm: 0.249 arcsec [0.56 σ]
KicOffset-rm: 0.280 arcsec [0.62 σ]
OotOffset-st: 4/4/3/1 [12]
KicOffset-st: 4/4/3/1 [12]
DiffImageQuality-fgm: 0.75 [9/12]
DiffImageOverlap-fno: 1.00 [13/13]

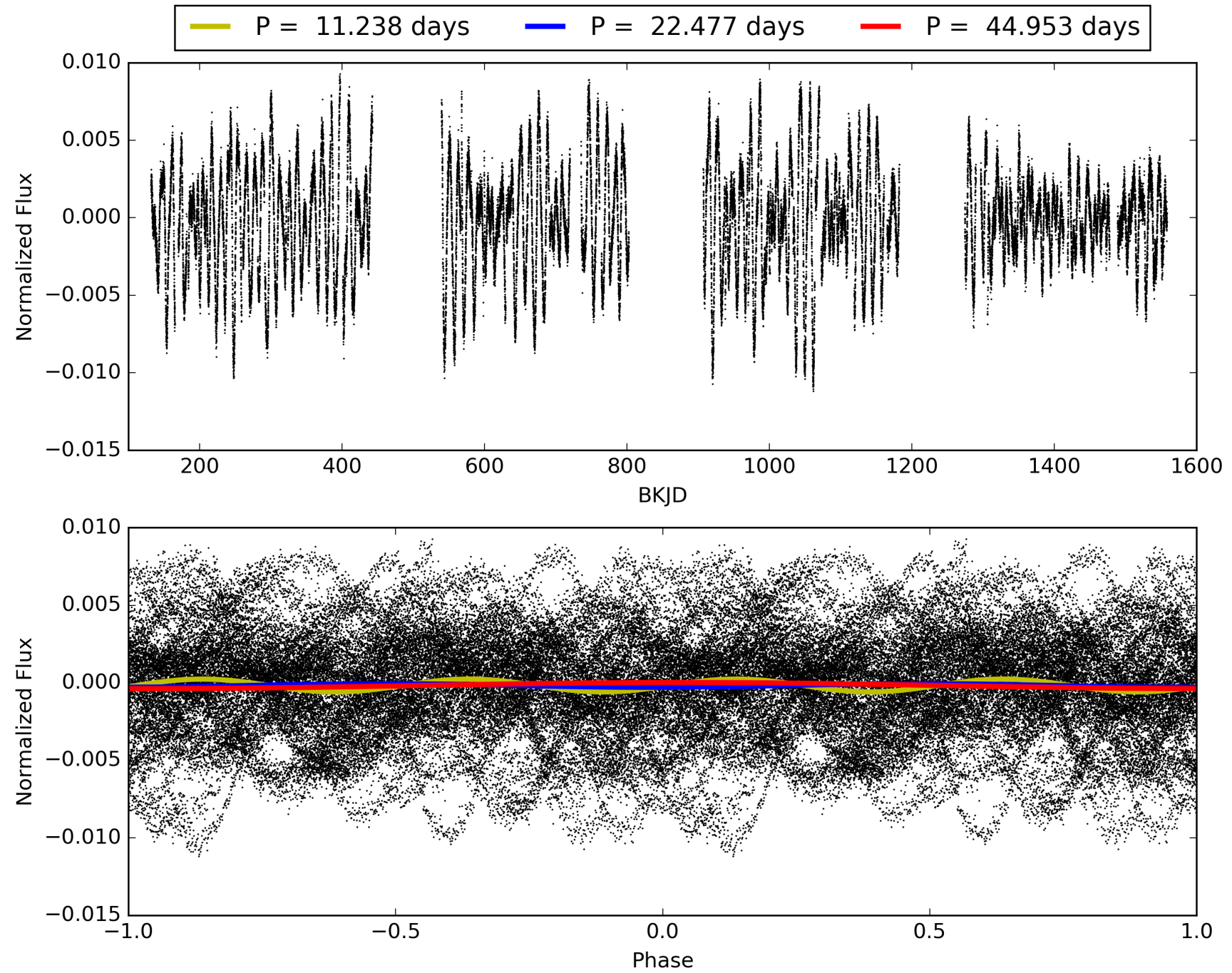
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 22:51:19 Z

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

TCE 006263593-01, PDC Light Curves

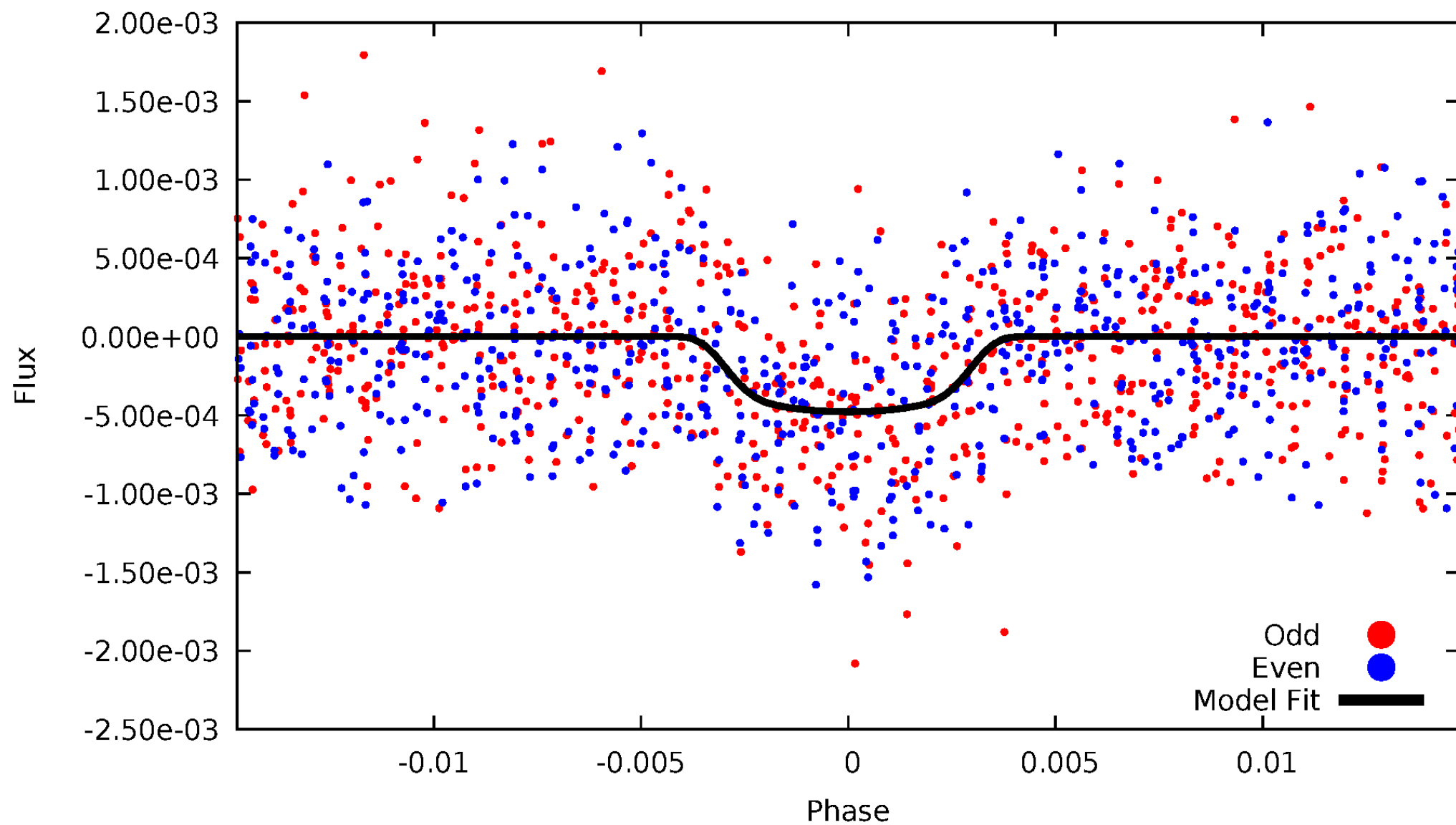


TCE 006263593-01



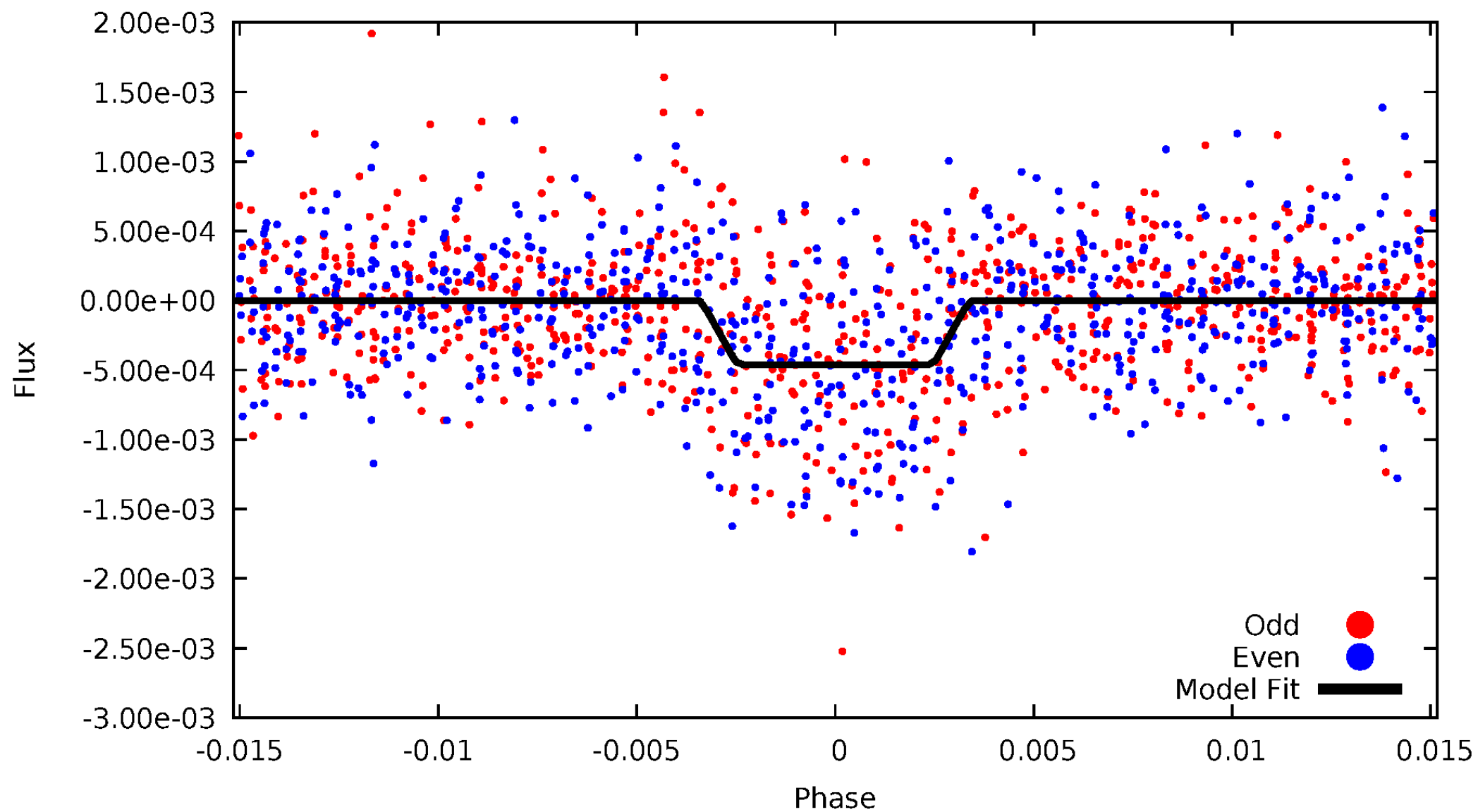
DV Odd/Even

TCE 006263593-01

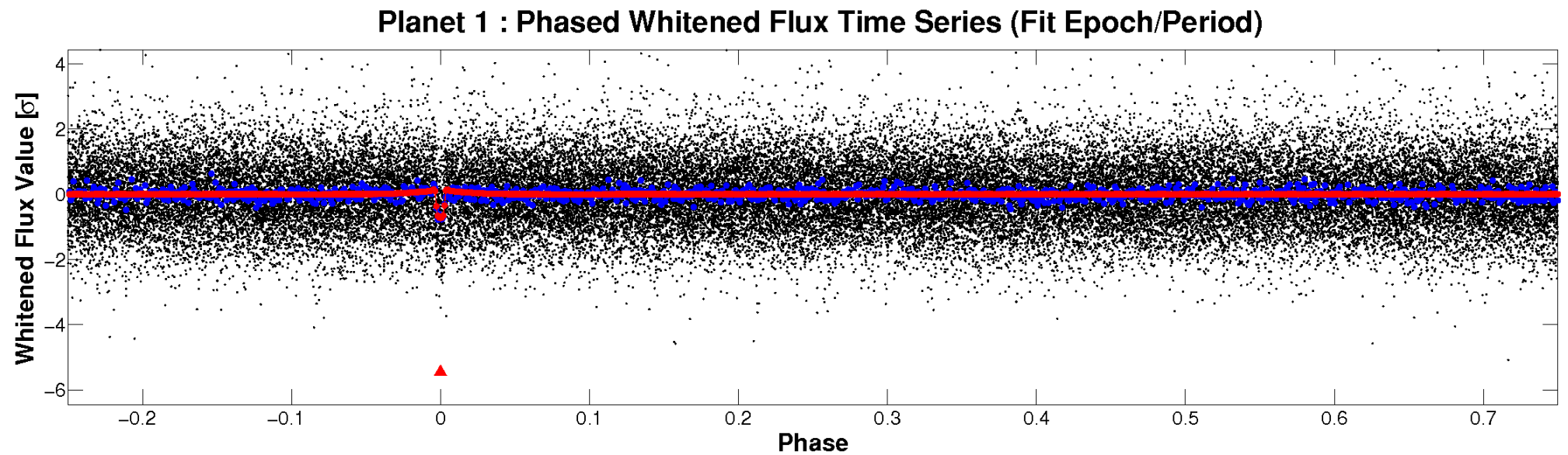
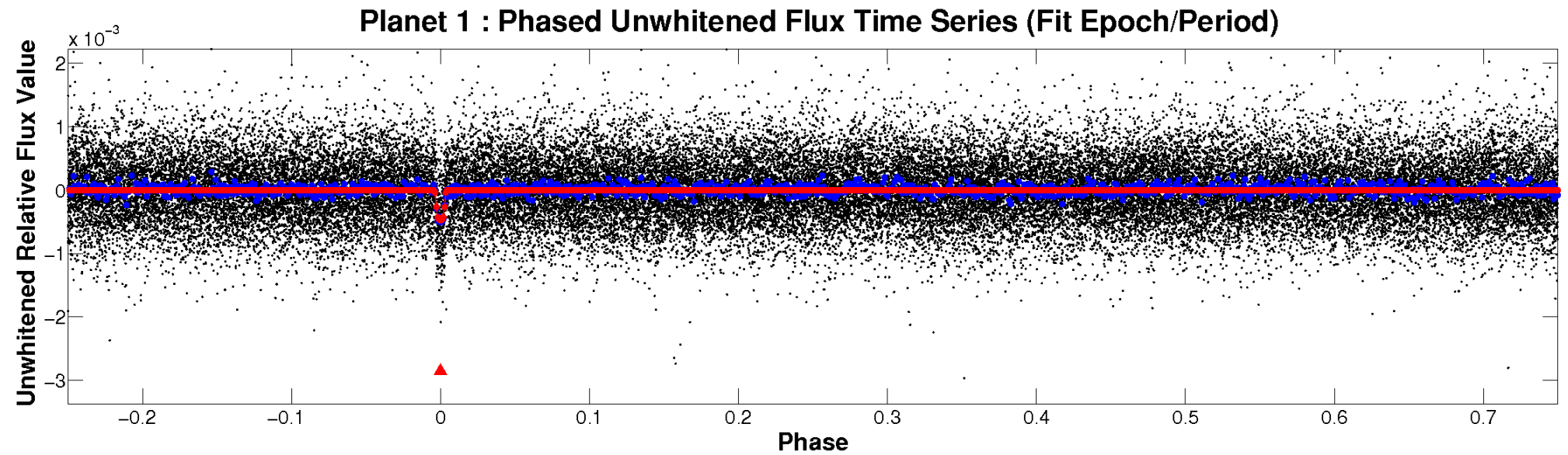


ALT Odd/Even

TCE 006263593-01

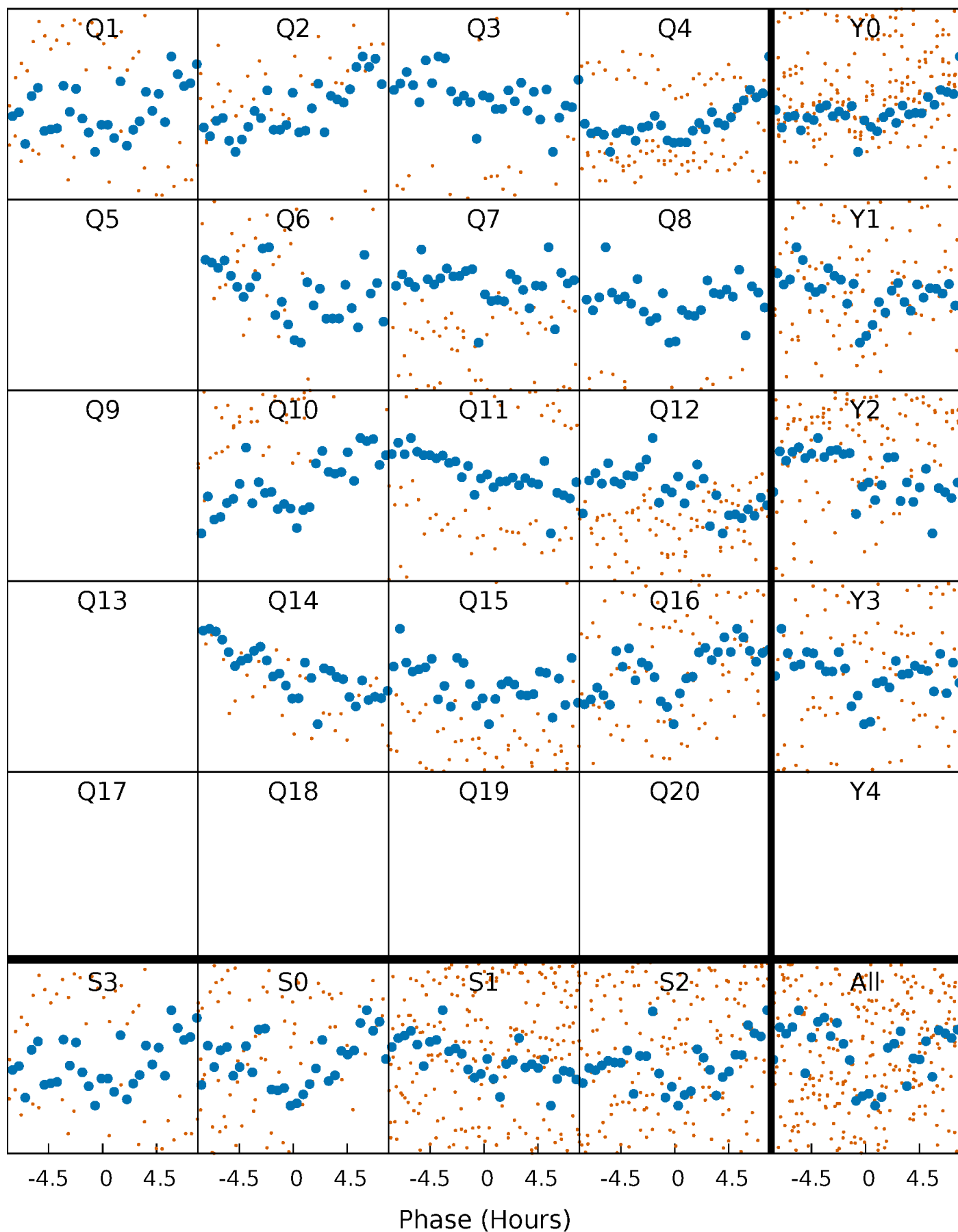


Non-Whitened Vs. Whitened Light Curve



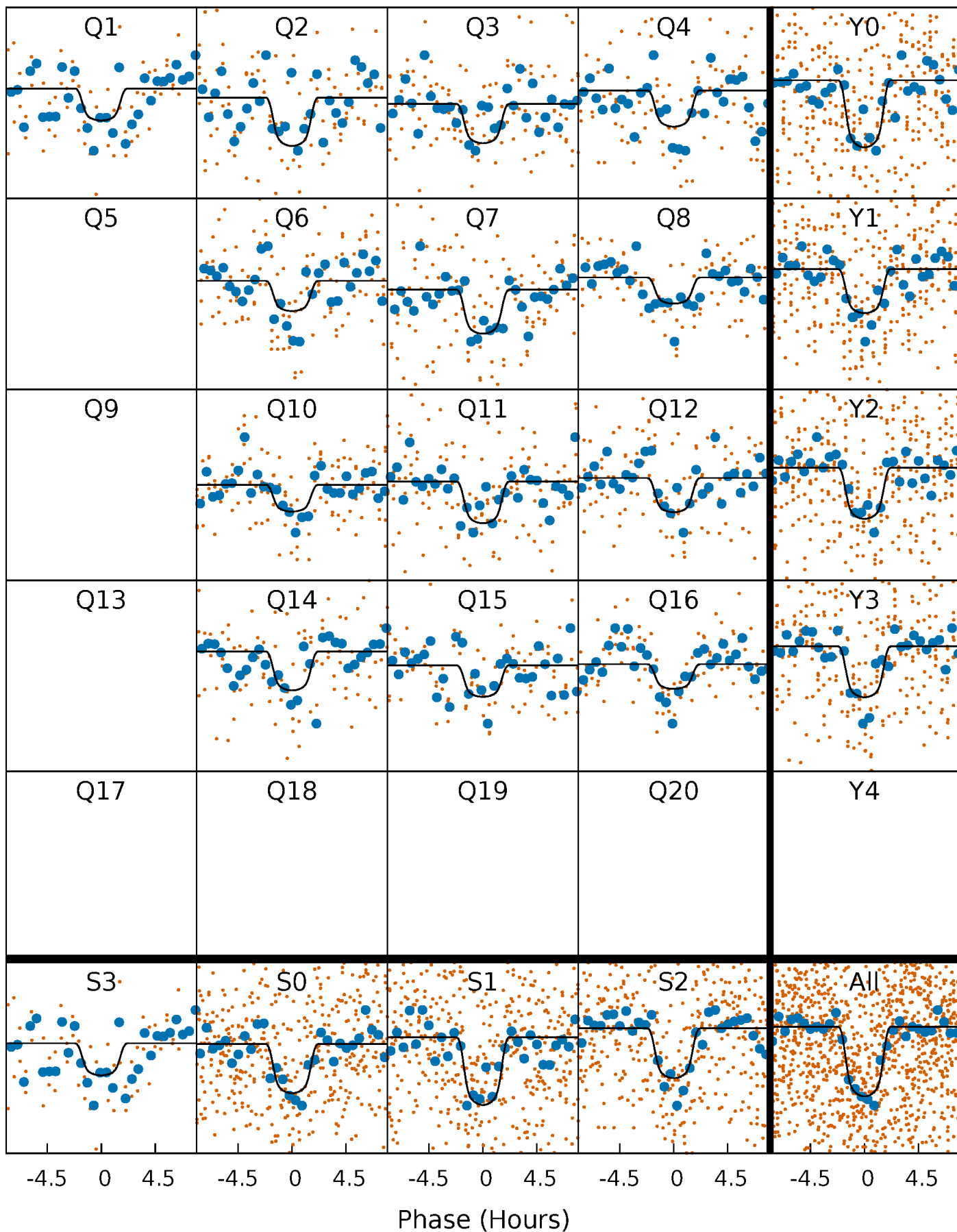
PDC Quarter-Phased Transit Curves

TCE 006263593-01 P= 22.476576 Days $T_0=136.823011$ (BKJD)



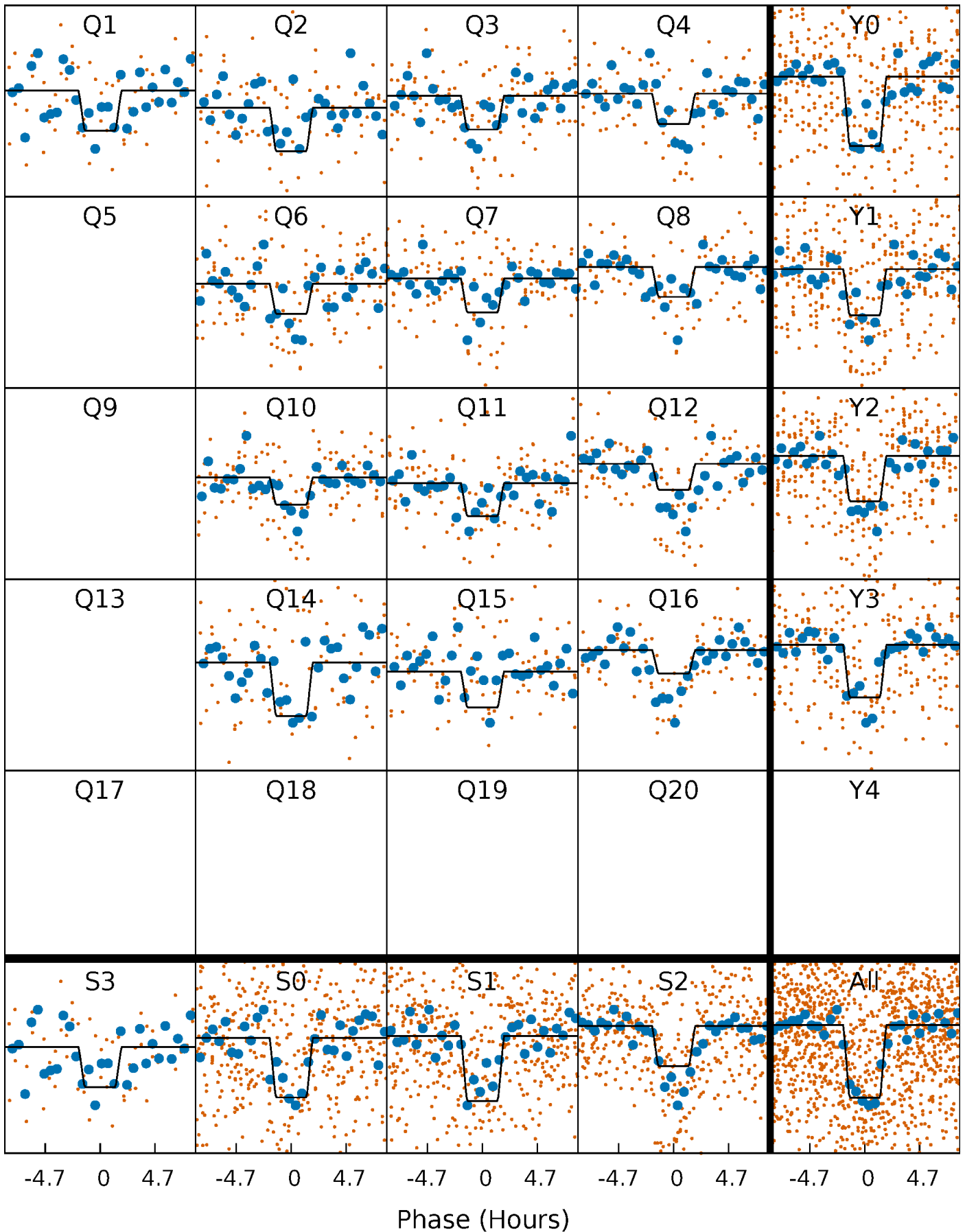
DV Quarter-Phased Transit Curves

TCE 006263593-01 P= 22.476576 Days $T_0=136.823011$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

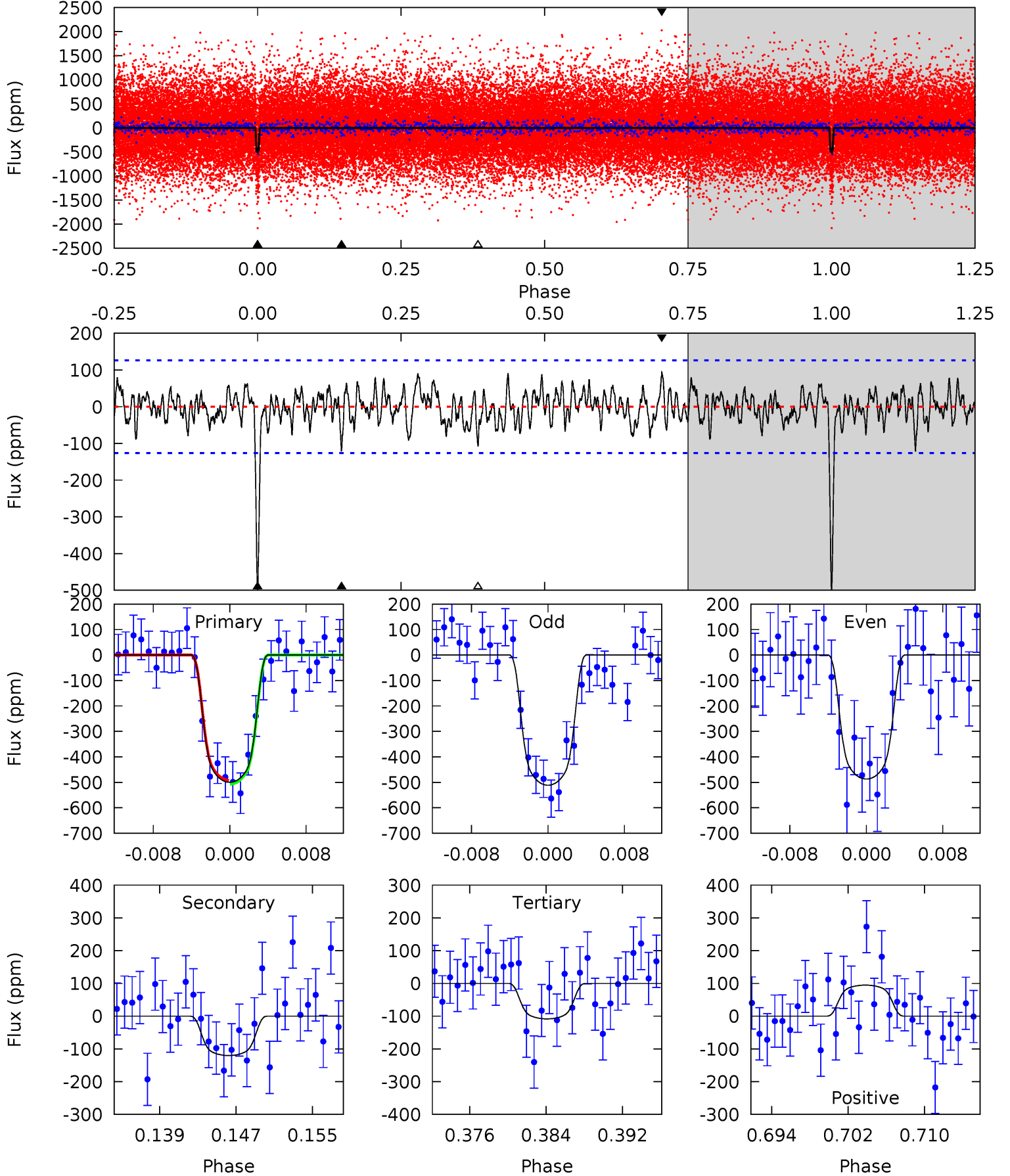
TCE 006263593-01 P= 22.476572 Days $T_0=136.822916$ (BKJD)



DV Model-Shift Uniqueness Test

006263593-01, $P = 22.476576$ Days, $E = 114.346435$ Days

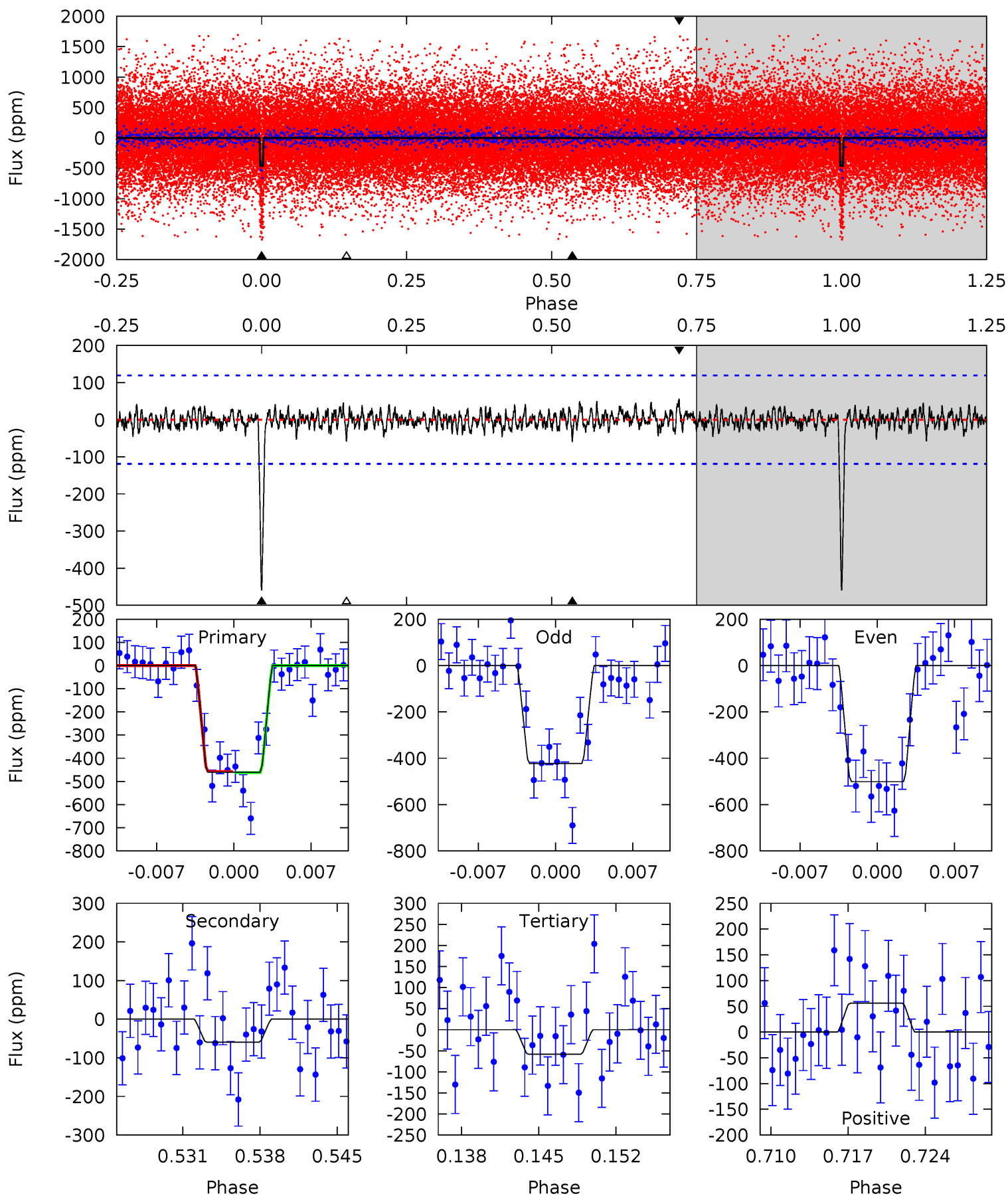
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
20.1	4.83	4.36	3.81	5.07	2.65	1.44	15.7	16.3	0.48	1.03	0.49	1.03	0.16	0.30



Alt Model-Shift Uniqueness Test

006263593-01, $P = 22.476572$ Days, $E = 114.346344$ Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
19.7	2.55	2.50	2.39	5.10	2.70	0.73	17.2	17.3	0.05	0.16	1.67	1.11	0.11	0.11



Stellar Parameters For KIC 006263593

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	4563^{+123}_{-137}	$4.704^{+0.032}_{-0.048}$	$-0.700^{+0.300}_{-0.300}$	$0.567^{+0.052}_{-0.042}$	$0.592^{+0.049}_{-0.045}$	$4.580^{+0.711}_{-0.801}$
	+3%/-3%	+1%/-1%	+43%/-43%	+9%/-7%	+8%/-8%	+16%/-17%
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 006263593-01 / KOI 3049.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-120 ± 25	$1.63^{+0.18}_{-0.18}$	588^{+19}_{-18}	3369^{+189}_{-169}	426^{+149}_{-114}
Alt.	-60 ± 23	$1.34^{+0.18}_{-0.17}$	587^{+21}_{-20}	3202^{+240}_{-233}	305^{+177}_{-122}

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

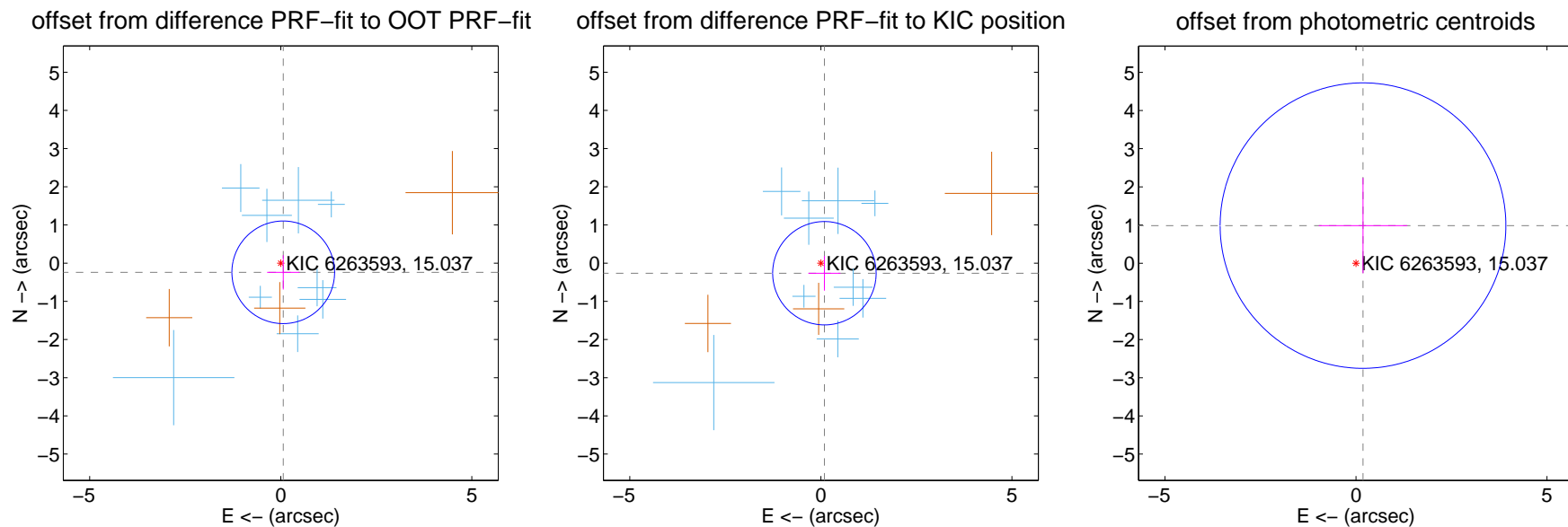
DV Centroid Data

Supplemental centroid analysis for 006263593-01. Kepler magnitude: 15.04. Transit SNR 10.99

There are 9 quarters with good PRF difference image offsets

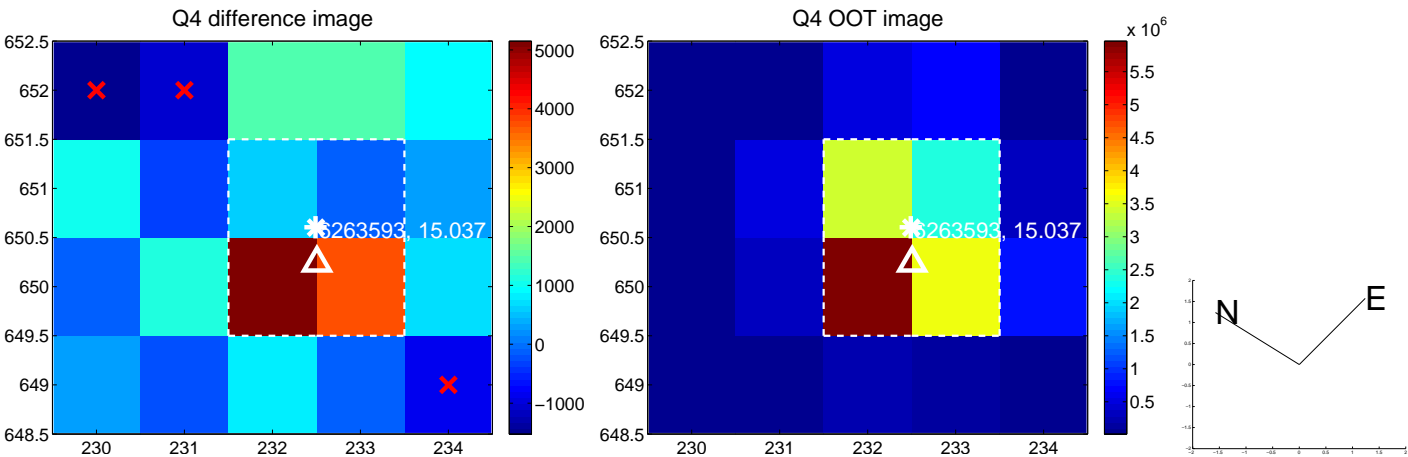
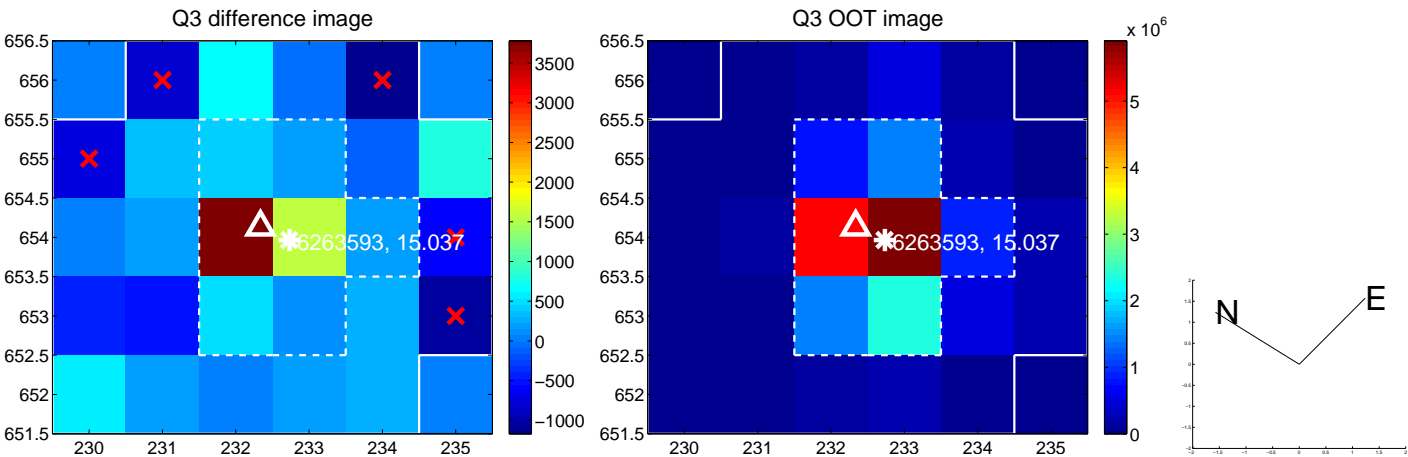
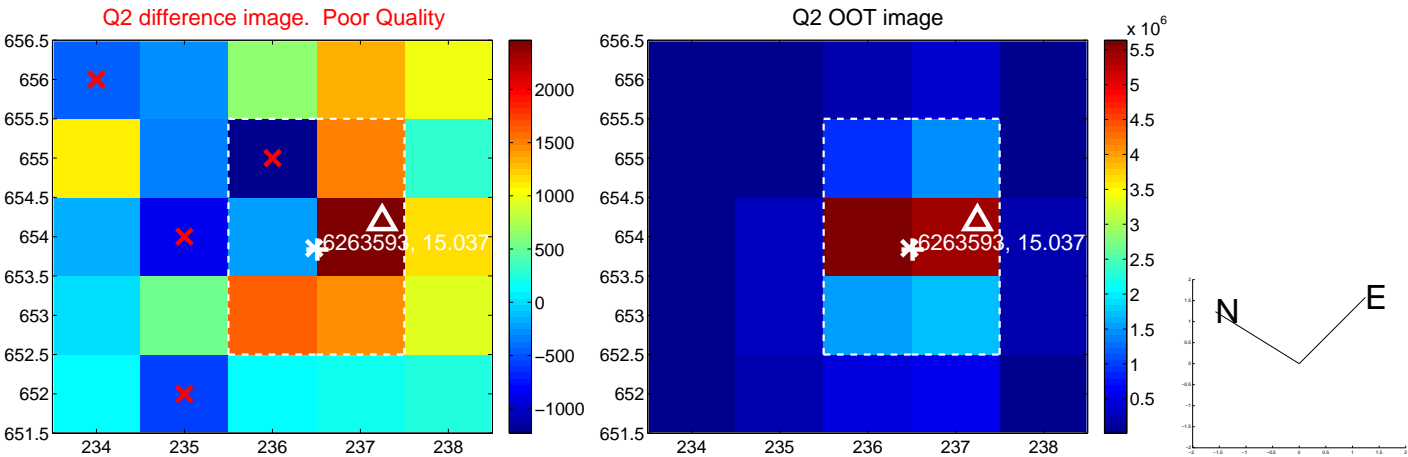
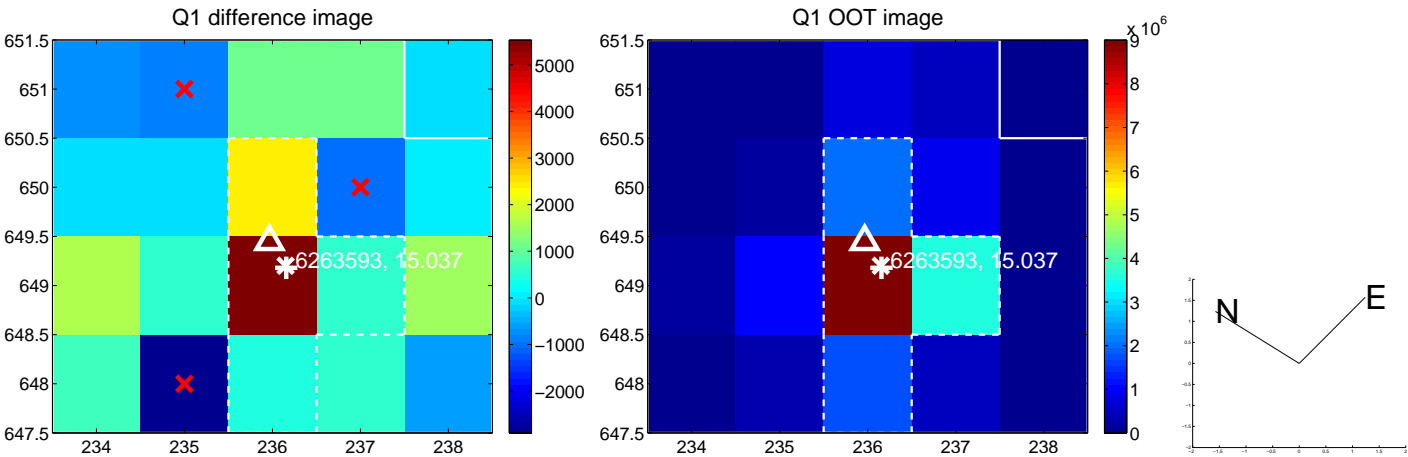
The direct PRF centroid is offset from the target star catalog position by about 0.10 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.249 ± 0.448	0.56	-0.065 ± 0.422	-0.240 ± 0.450
PRF-fit source offset from KIC position	0.280 ± 0.451	0.62	-0.093 ± 0.419	-0.264 ± 0.455
photometric centroid source offset	1.00 ± 1.25	0.80	-0.18 ± 1.16	0.99 ± 1.25

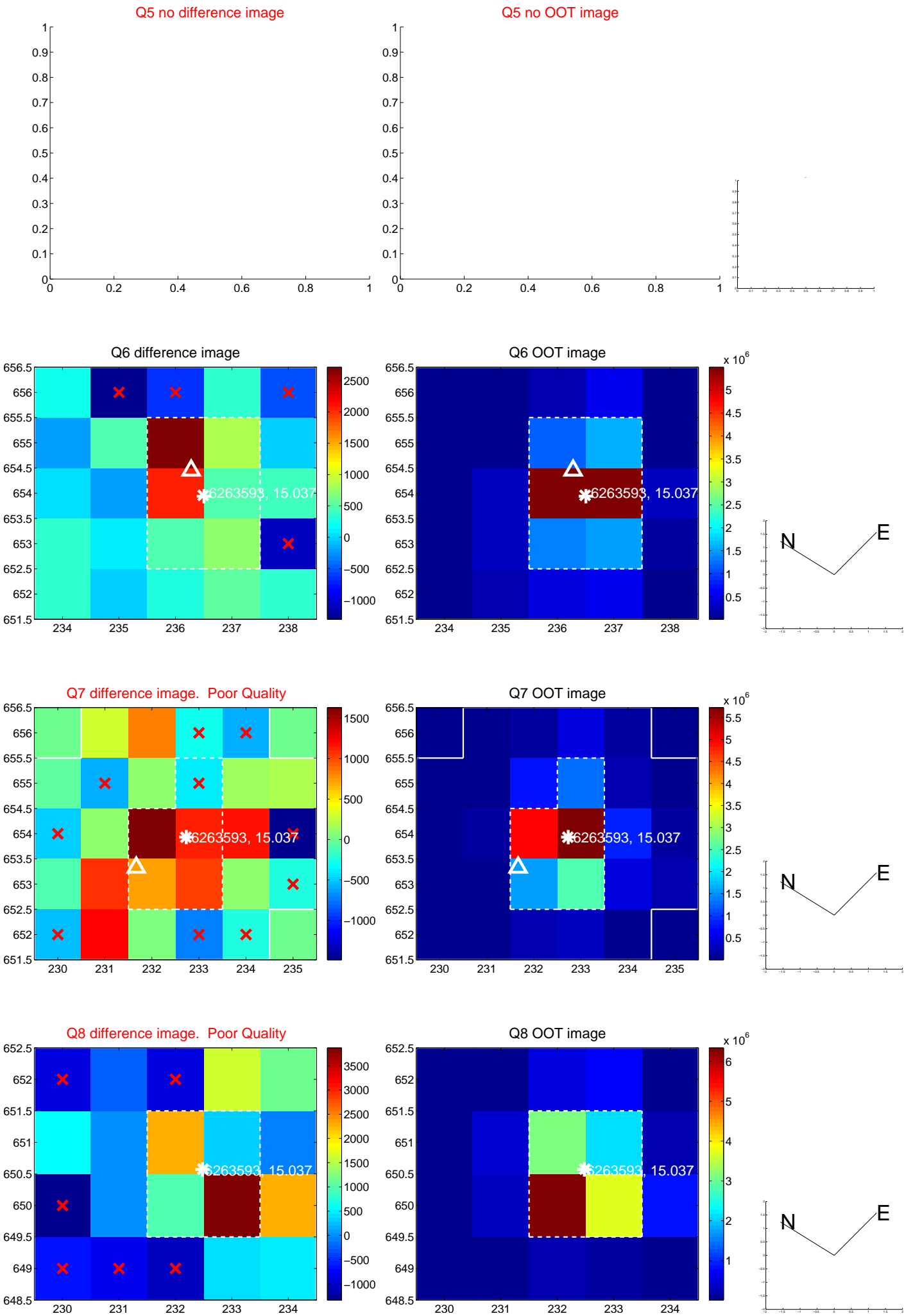


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

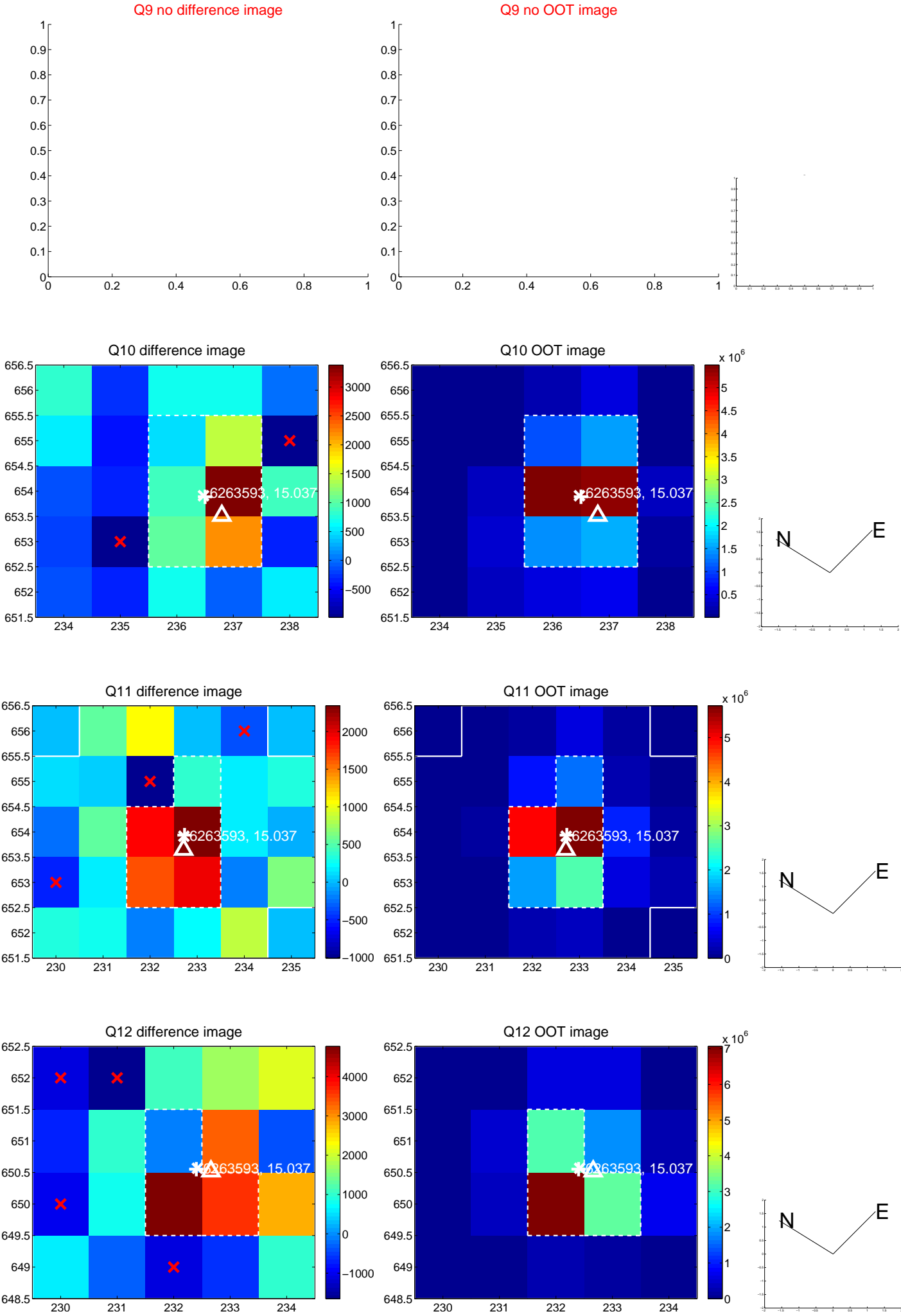
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



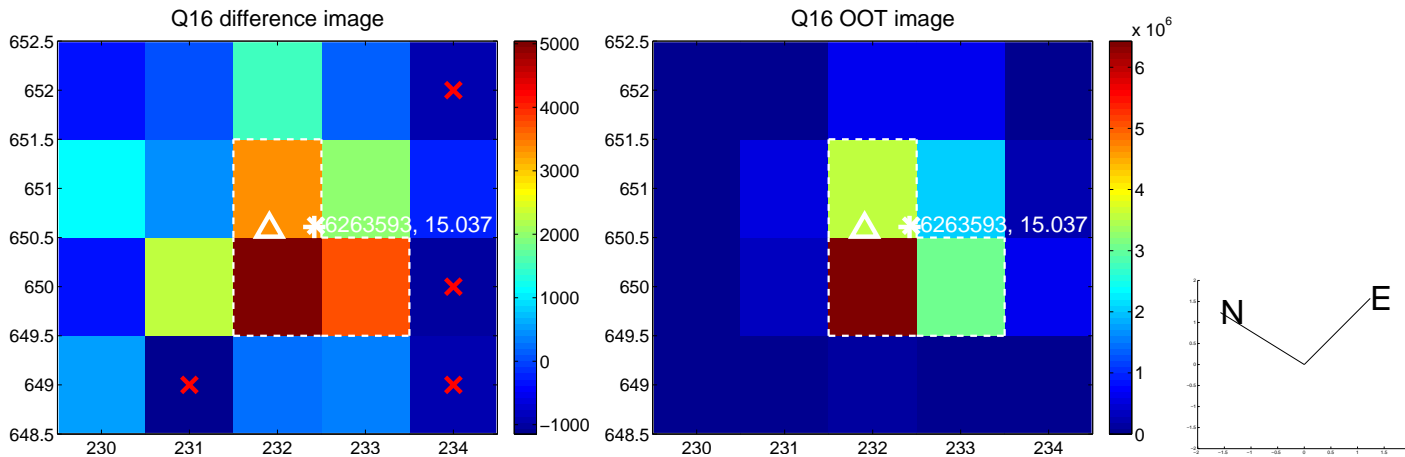
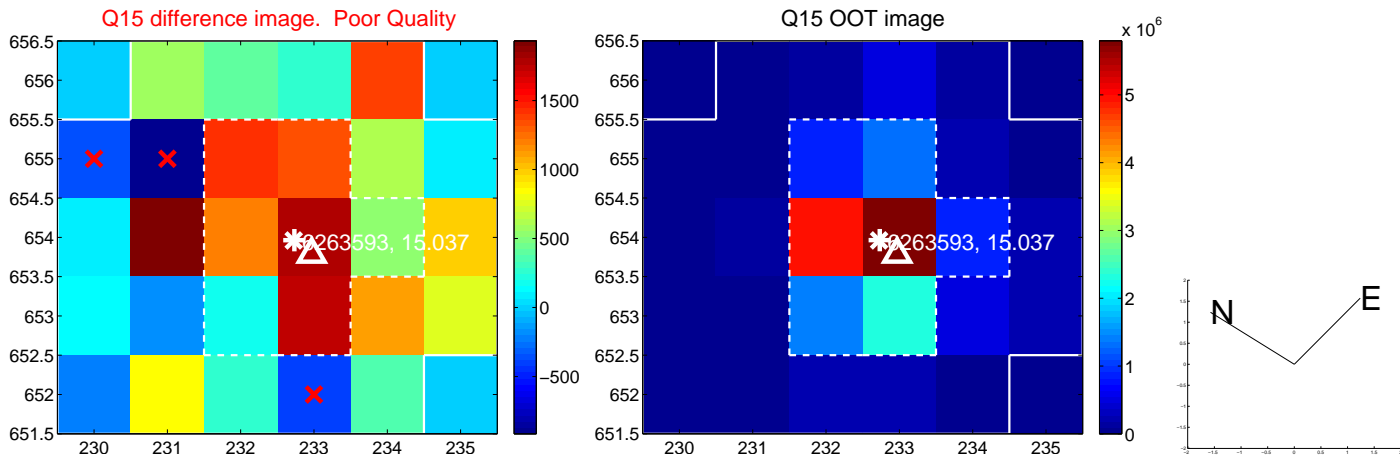
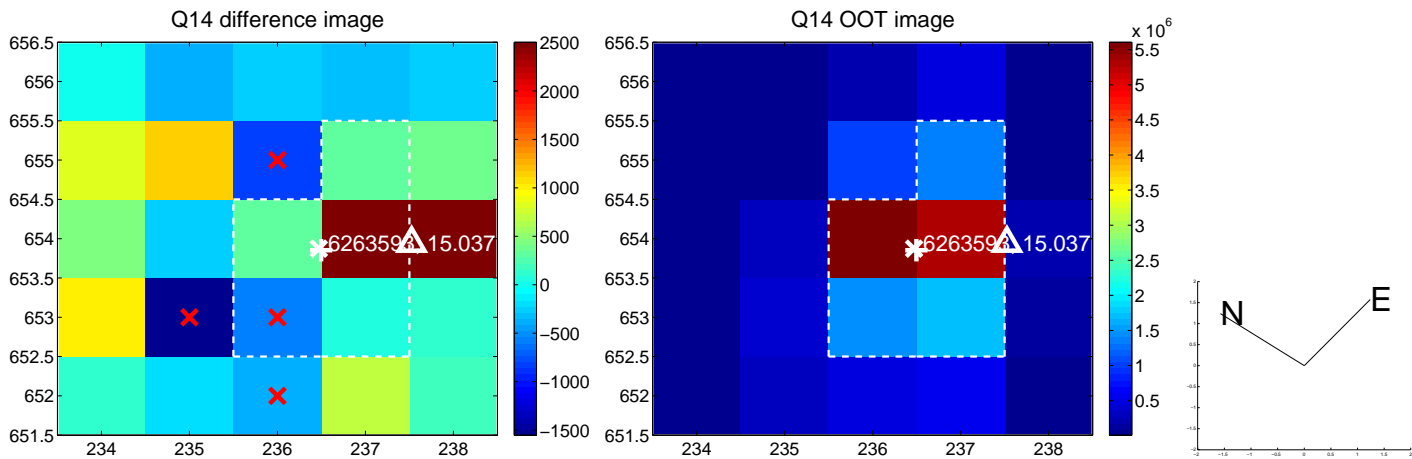
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



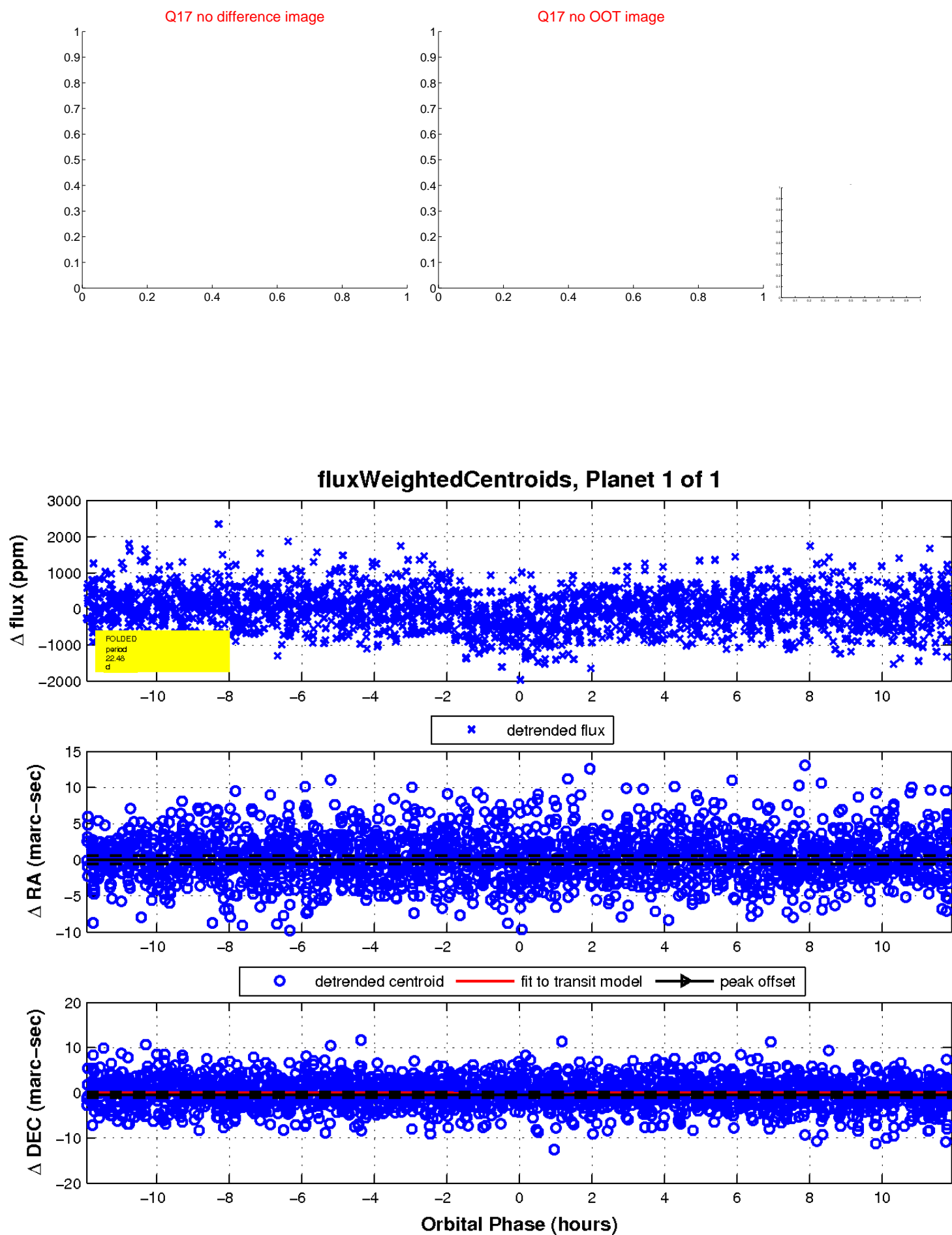
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

