

KIC 008397675

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})
008397675-01	OBS	1140.01	0.553261	131.785994	615.6	1.500	27.4	-1.0	3.14	5679	7.79	43874.48

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008397675-01	OBS	PC	0.76	0	0	0	0	PLANET_IN_STAR—CENT_NOFITS

Notes: OBS = Observed. INJ = Injected. INV = Inverted. SCR = Scrambled.

N = Not Transit-Like. S = Stellar Eclipse. C = Centroid Offset. E = Ephemeris Match.

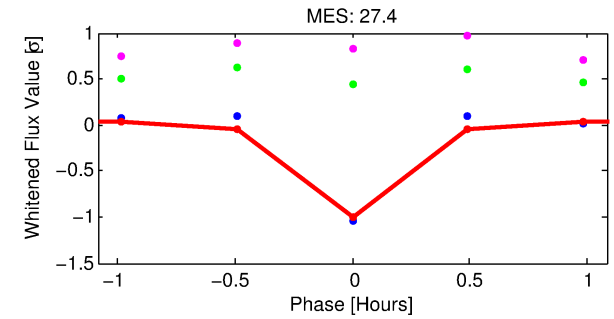
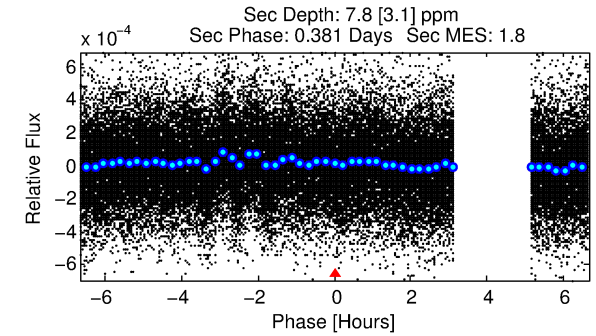
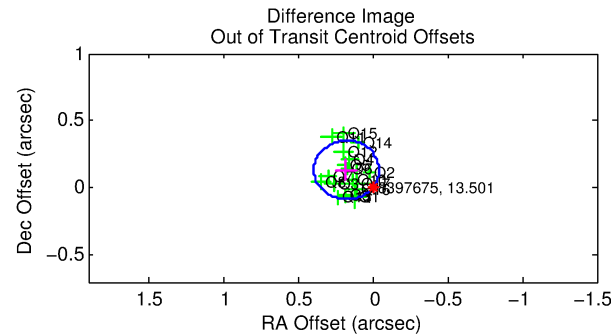
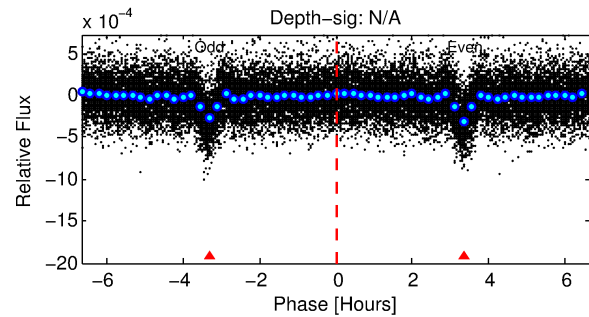
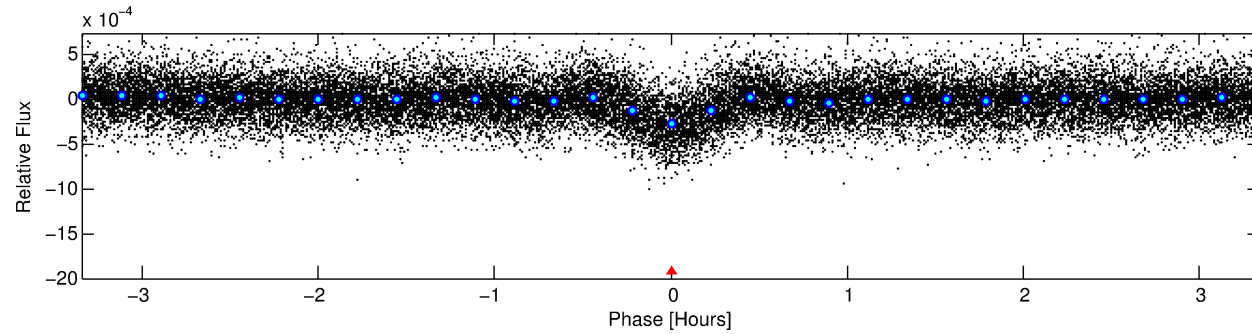
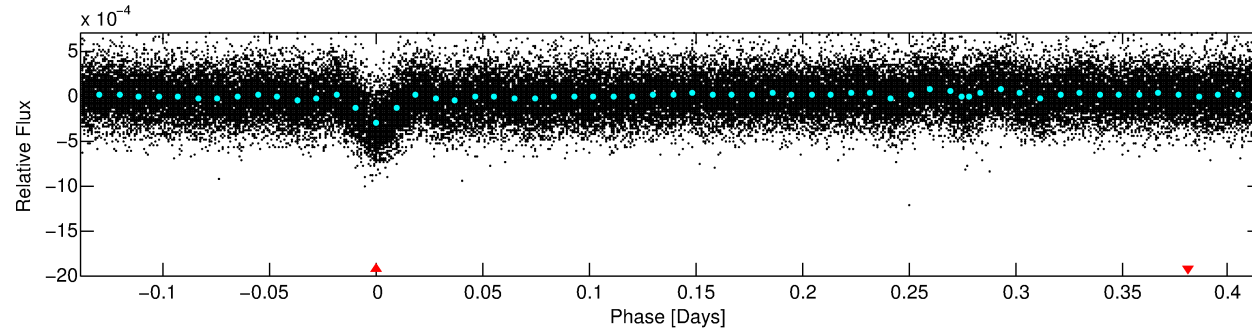
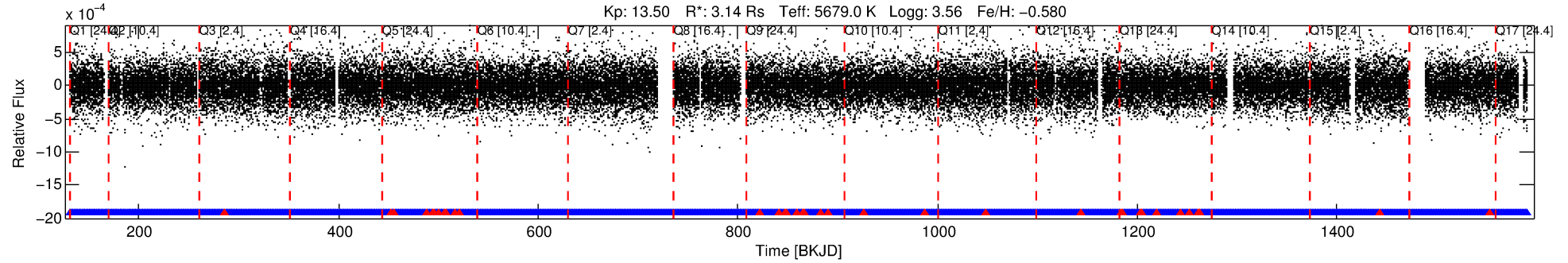
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008397675-01

No Significant Match Found

DV One-Page Summary

KIC: 8397675 Candidate: 1 of 1 Period: 0.553 d
KOI: K01140.01 Corr: 0.763



TPS TCE Results:

Period = 0.55326 d
Epoch = 131.7860 BKJD

DV fit results are unavailable

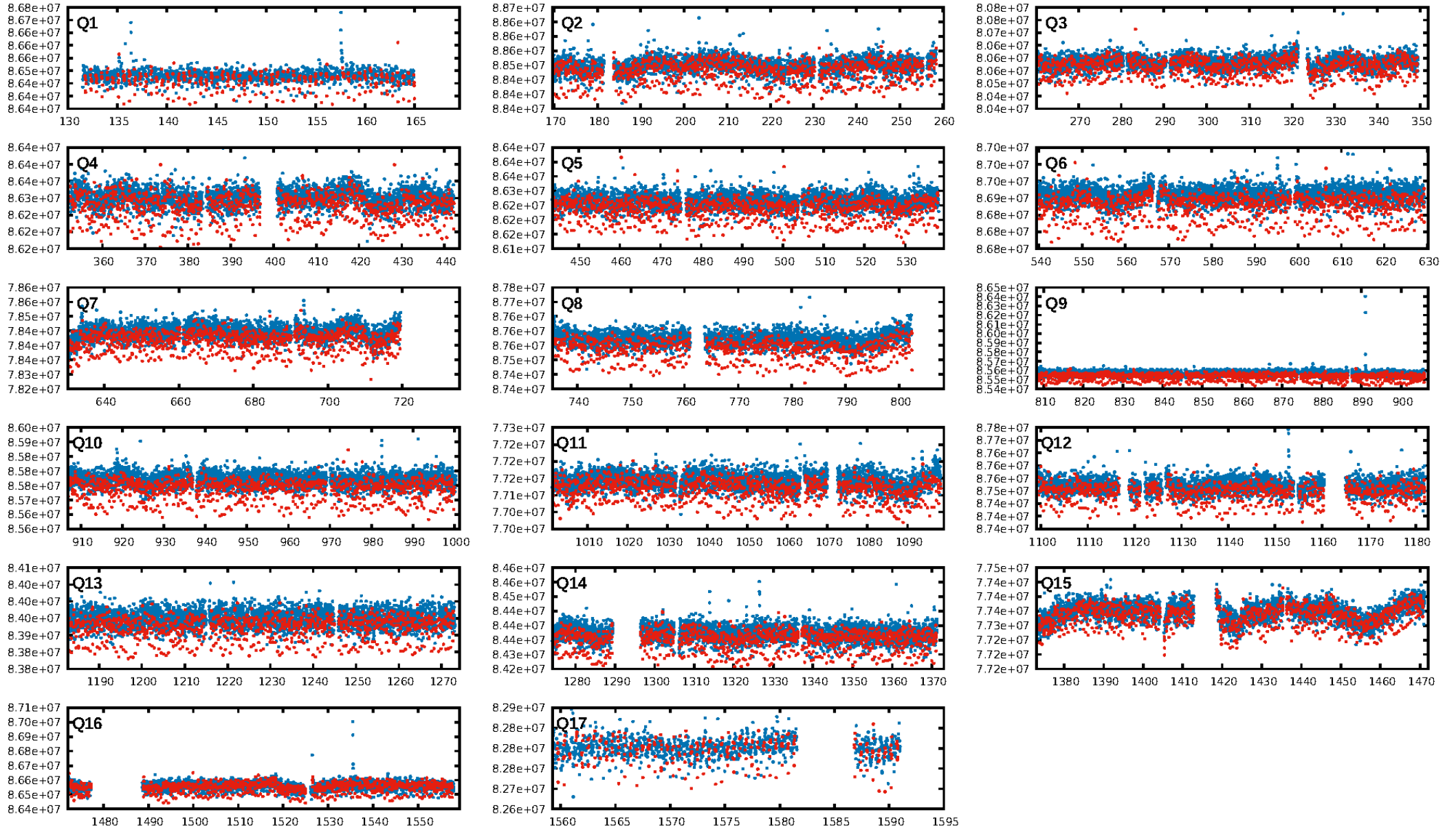
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.77e-137
RollingBand-fgt: 0.98 [2276/2312]
GhostDiagnostic-chr: 2.449
Centroid-sig: 0.0%
Centroid-so: 1.006 arcsec [28.11σ]
OotOffset-rm: 0.221 arcsec [3.04σ]
KicOffset-rm: 0.170 arcsec [2.13σ]
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]

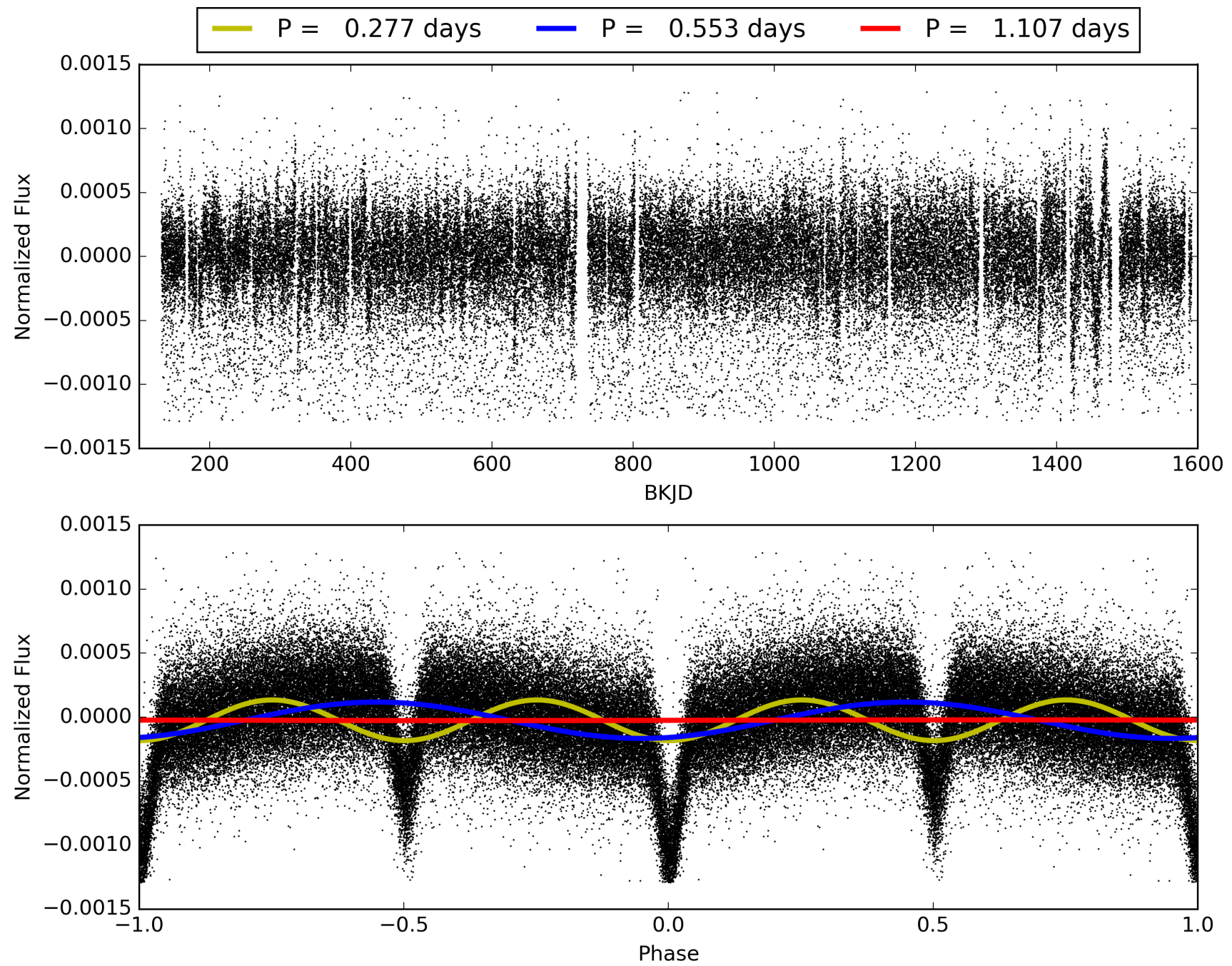
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 00:52:32 Z

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

TCE 008397675-01, PDC Light Curves

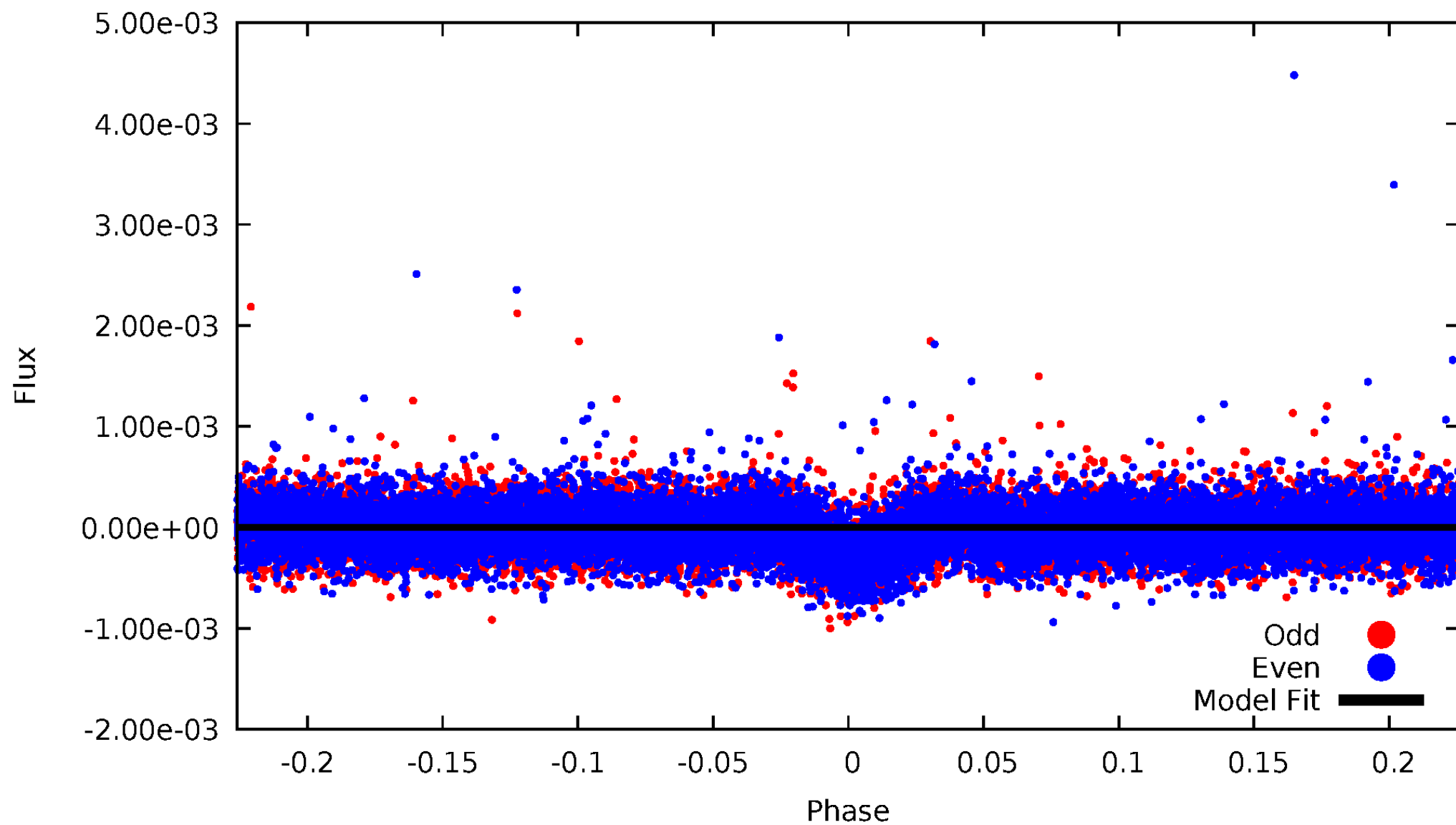


TCE 008397675-01



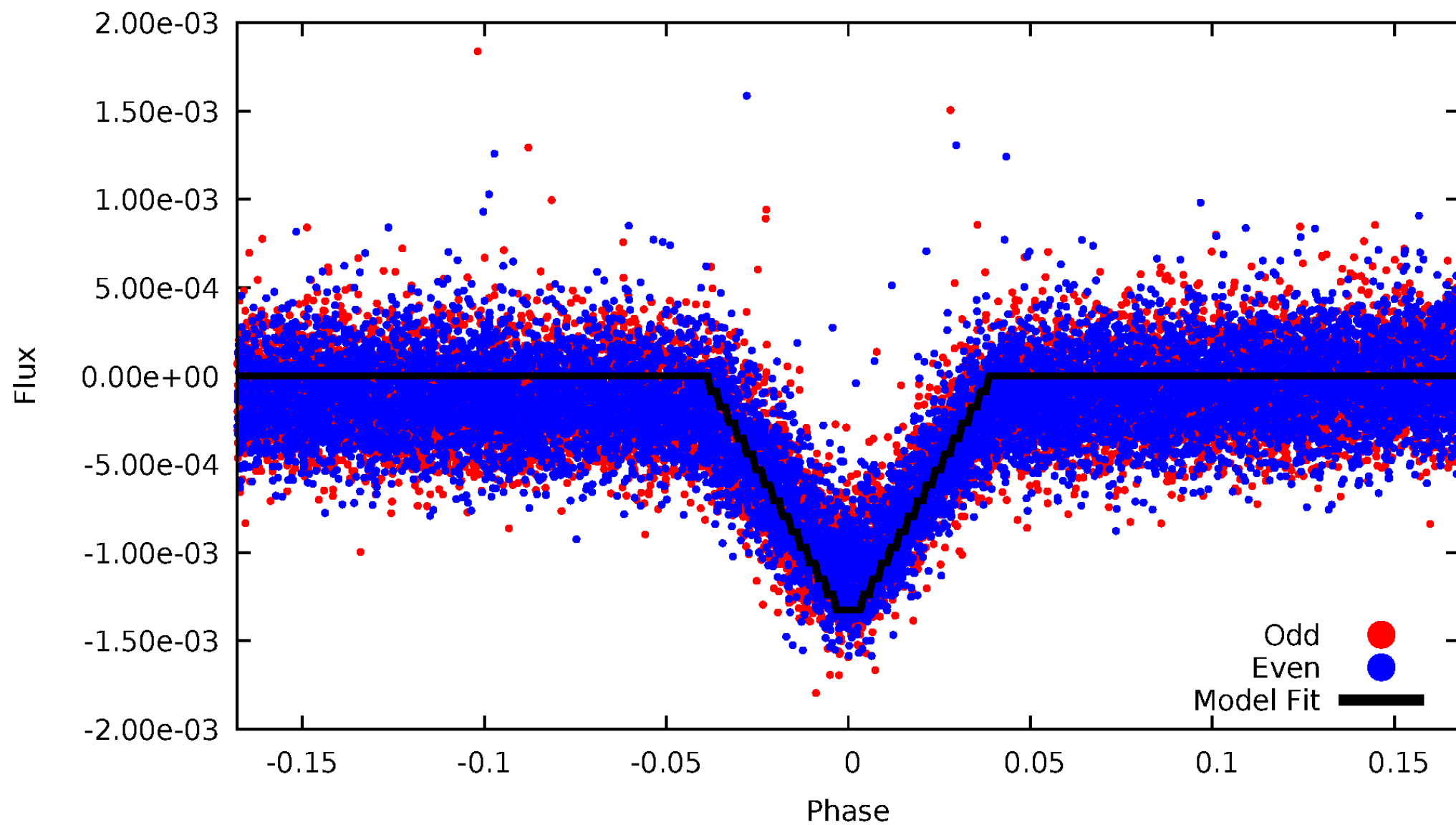
DV Odd/Even

TCE 008397675-01

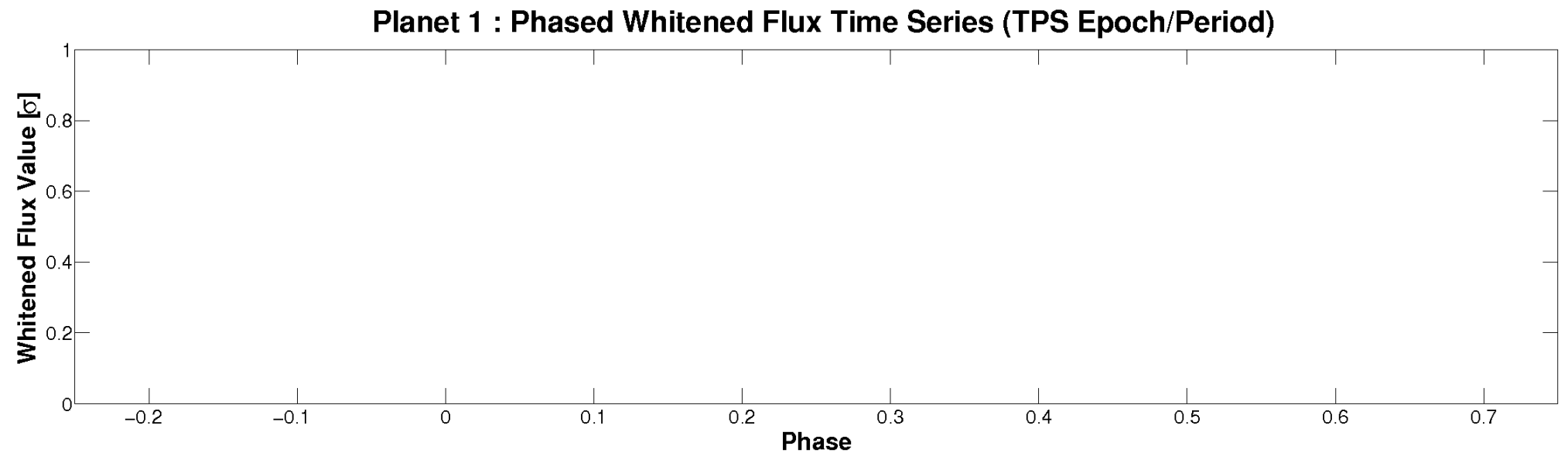
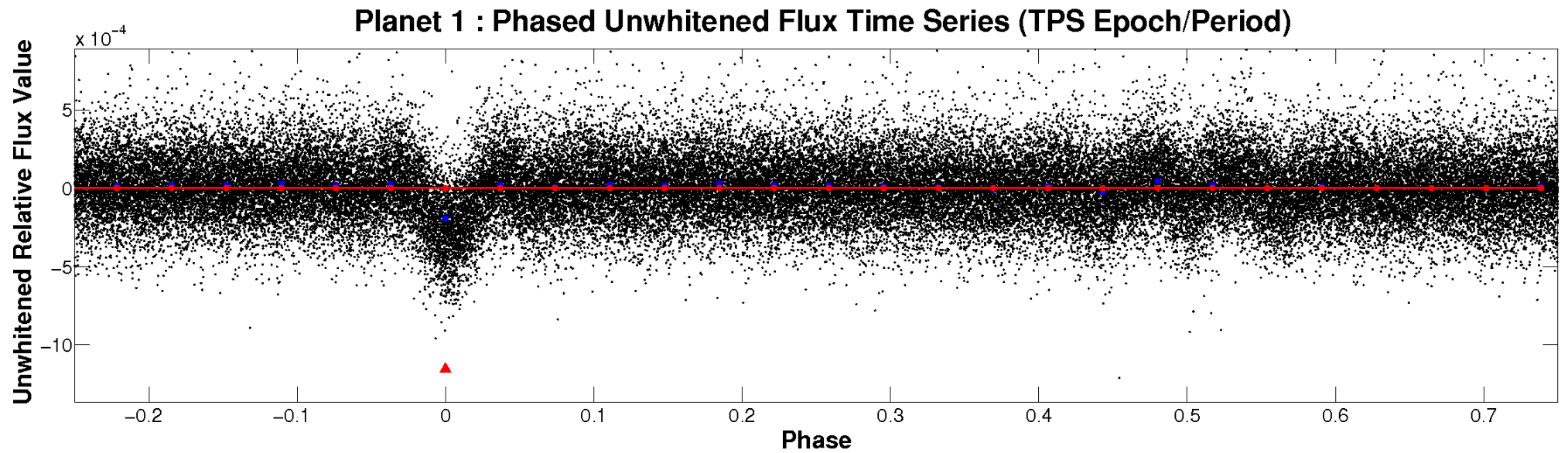


ALT Odd/Even

TCE 008397675-01

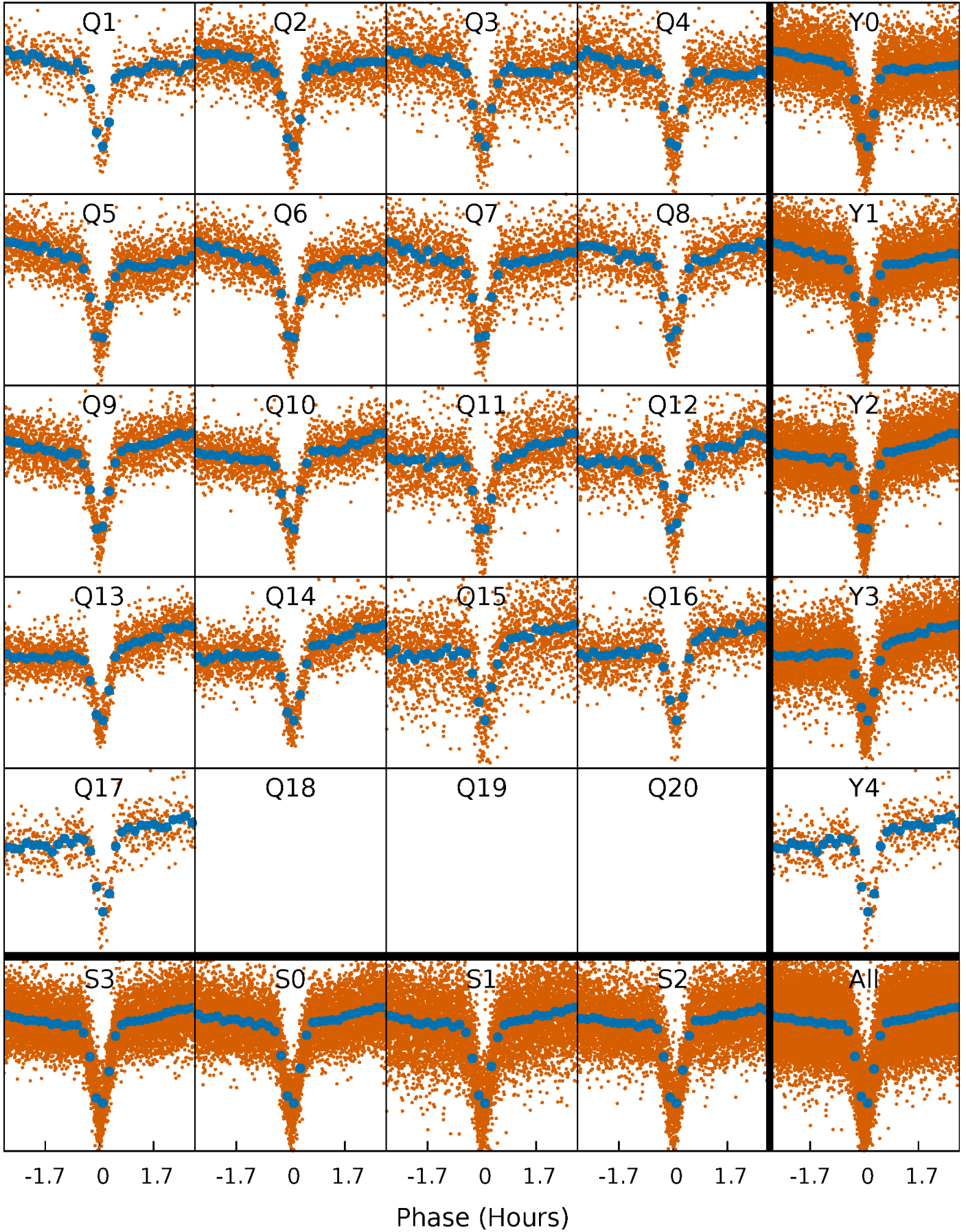


Non-Whitened Vs. Whitened Light Curve



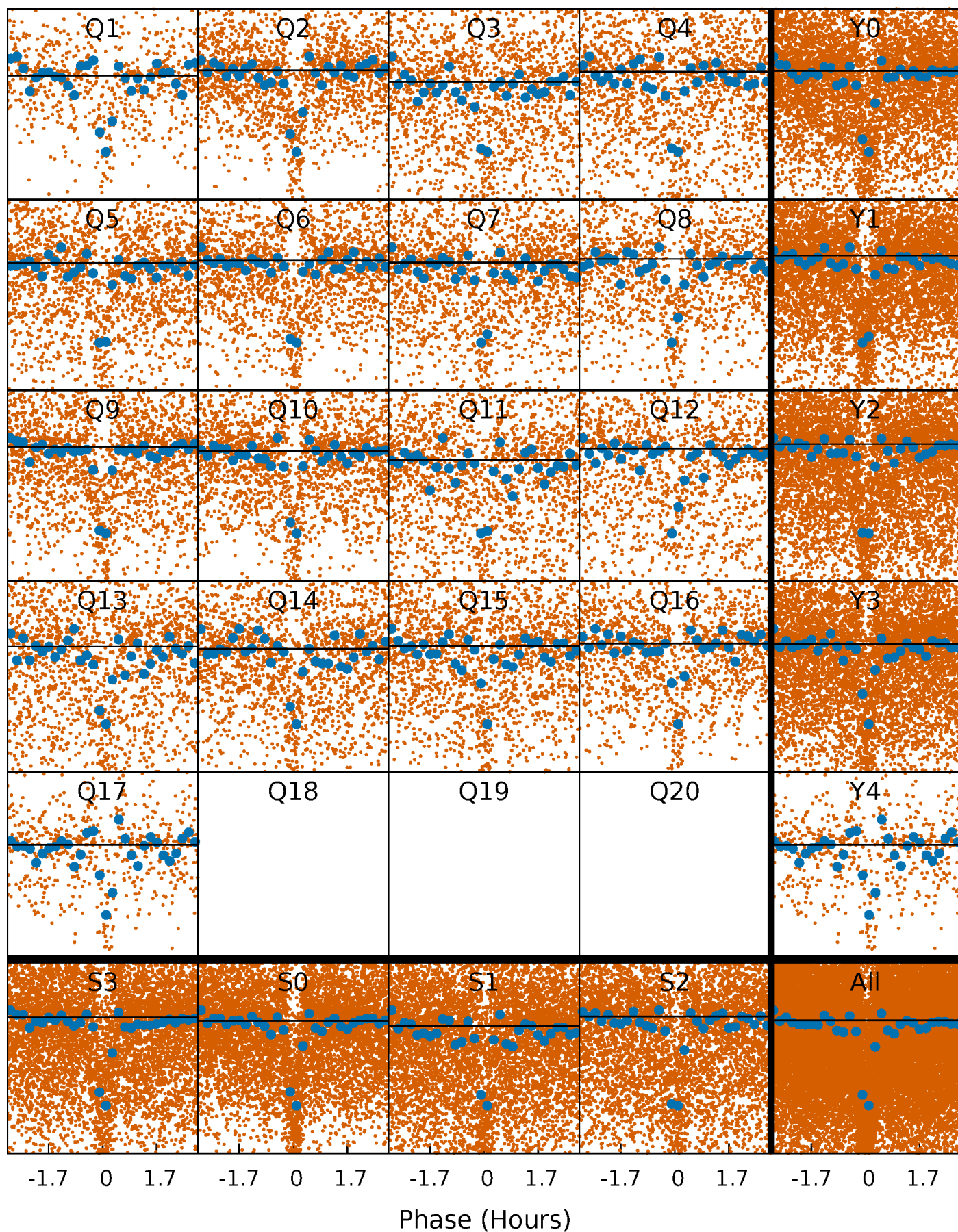
PDC Quarter-Phased Transit Curves

TCE 008397675-01 P= 0.553262 Days $T_0=131.785994$ (BKJD)



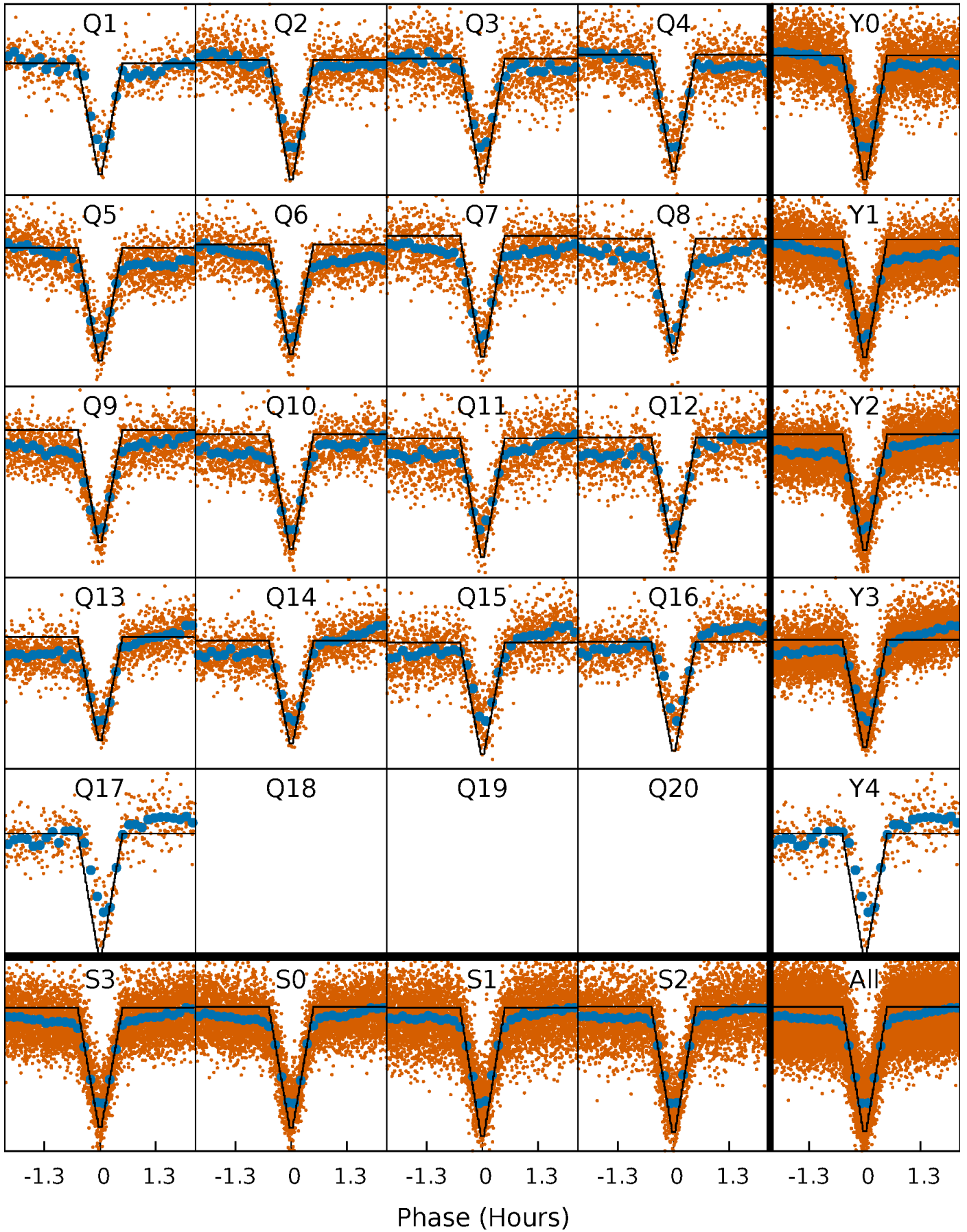
DV Quarter-Phased Transit Curves

TCE 008397675-01 P= 0.553262 Days $T_0=131.785994$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

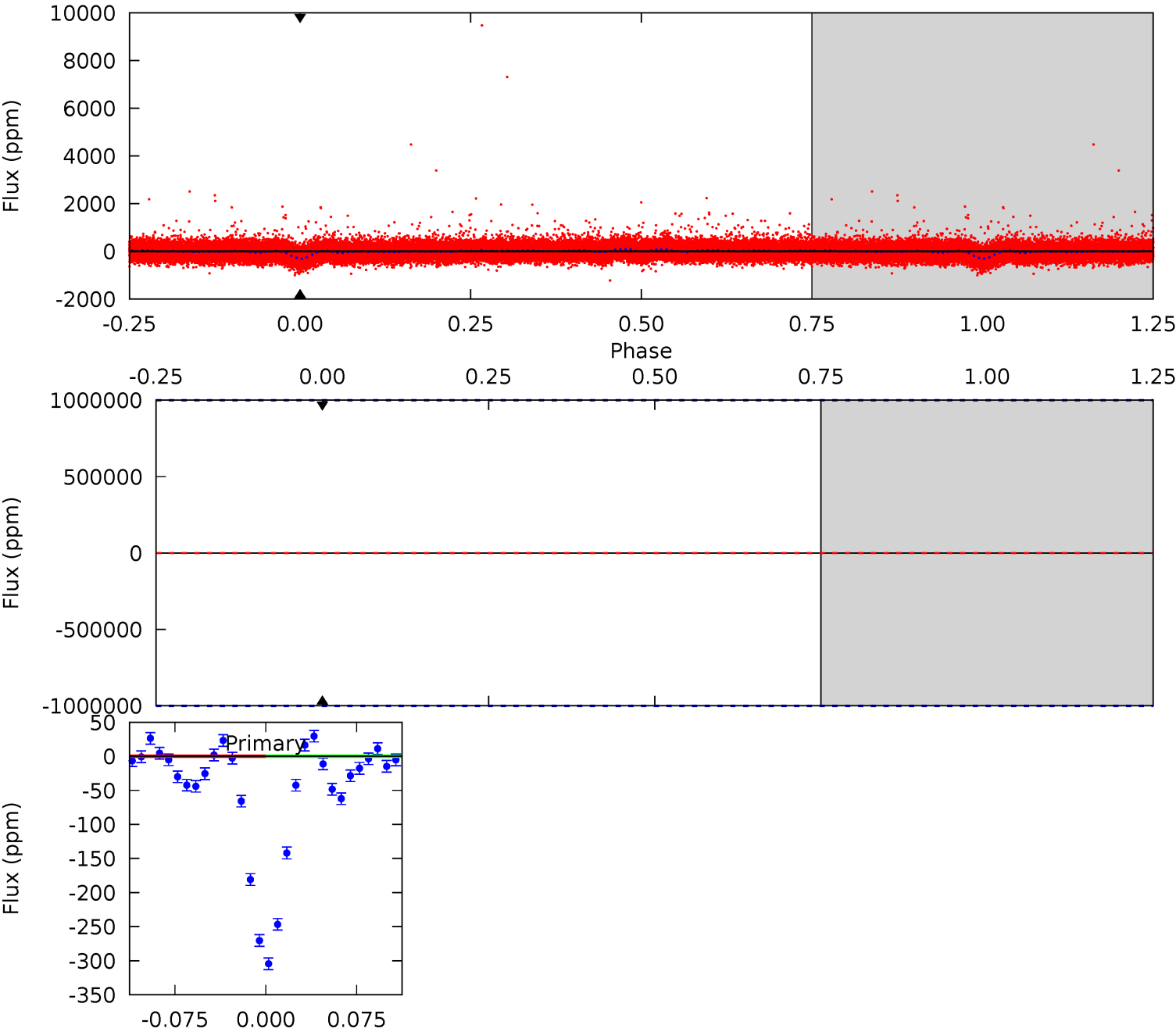
TCE 008397675-01 P= 0.553262 Days $T_0=131.787221$ (BKJD)



DV Model-Shift Uniqueness Test

008397675-01, P = 0.553262 Days, E = 131.232732 Days

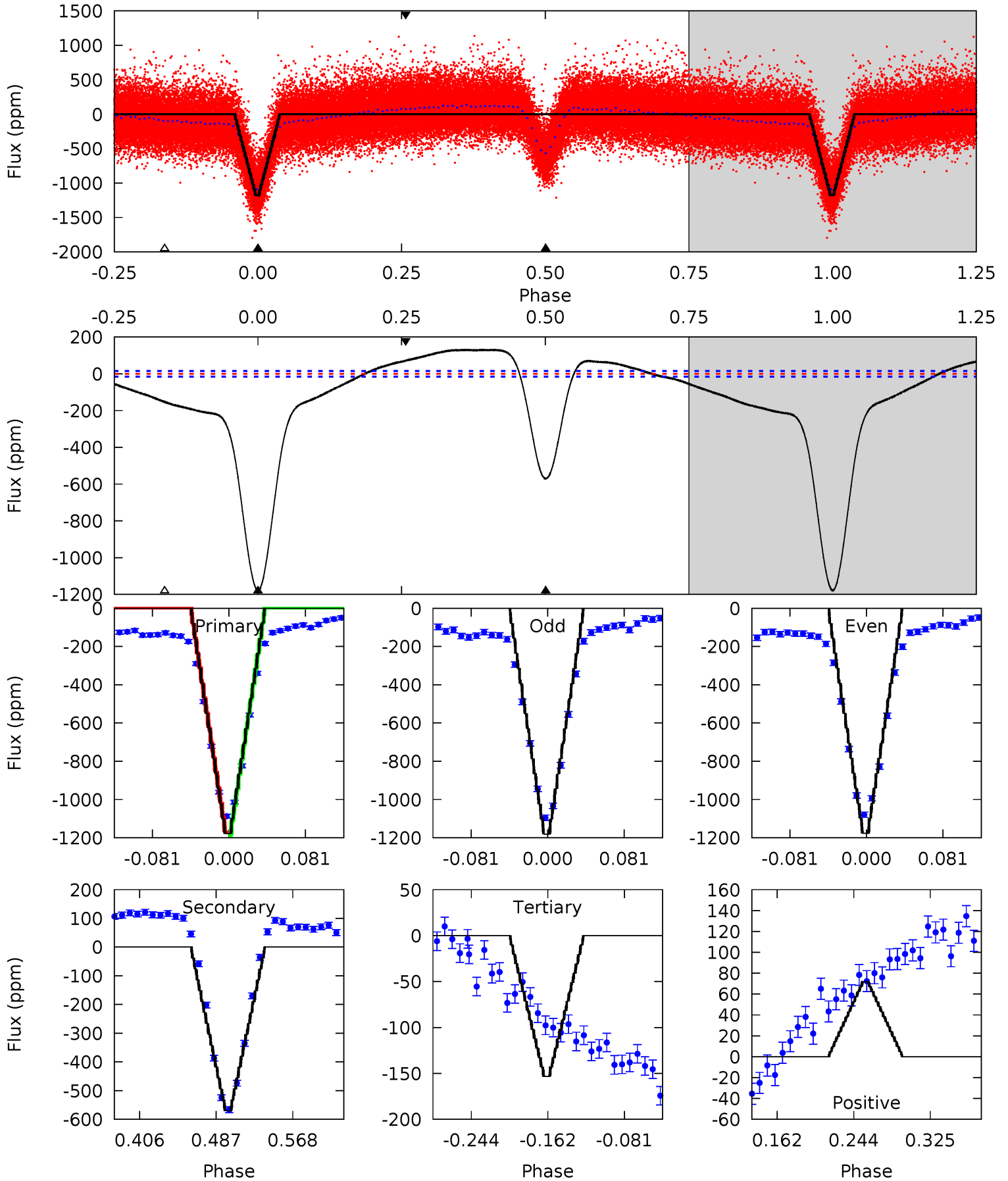
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

008397675-01, P = 0.553262 Days, E = 131.233959 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
353.8	171.2	46.0	21.6	4.61	1.74	31.2	307.8	332.2	125.2	149.6	0.61	0.99	0.10	3.18



Stellar Parameters For KIC 008397675

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5679^{+202}_{-202}	$3.565^{+0.840}_{-0.210}$	$-0.580^{+0.350}_{-0.250}$	$3.142^{+0.939}_{-2.191}$	$1.325^{+0.168}_{-0.469}$	$0.060^{+1.245}_{-0.032}$
	+4%/-4%	+24%/-6%	+60%/-43%	+30%/-70%	+13%/-35%	+2071%/-53%
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 008397675-01 / KOI 1140.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	0 ± 1000000	$23.61^{+28.62}_{-17.69}$	5057^{+559}_{-919}	-4911^{+24018}_{-15434}	$-0.194^{+42.019}_{-43.210}$
Alt.	-570 ± 3	$26.61^{+29.27}_{-18.41}$	5073^{+535}_{-963}	-3859^{+8530}_{-648}	$0.091^{+0.806}_{-0.070}$

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 $A_{obs} \gg 1.0$

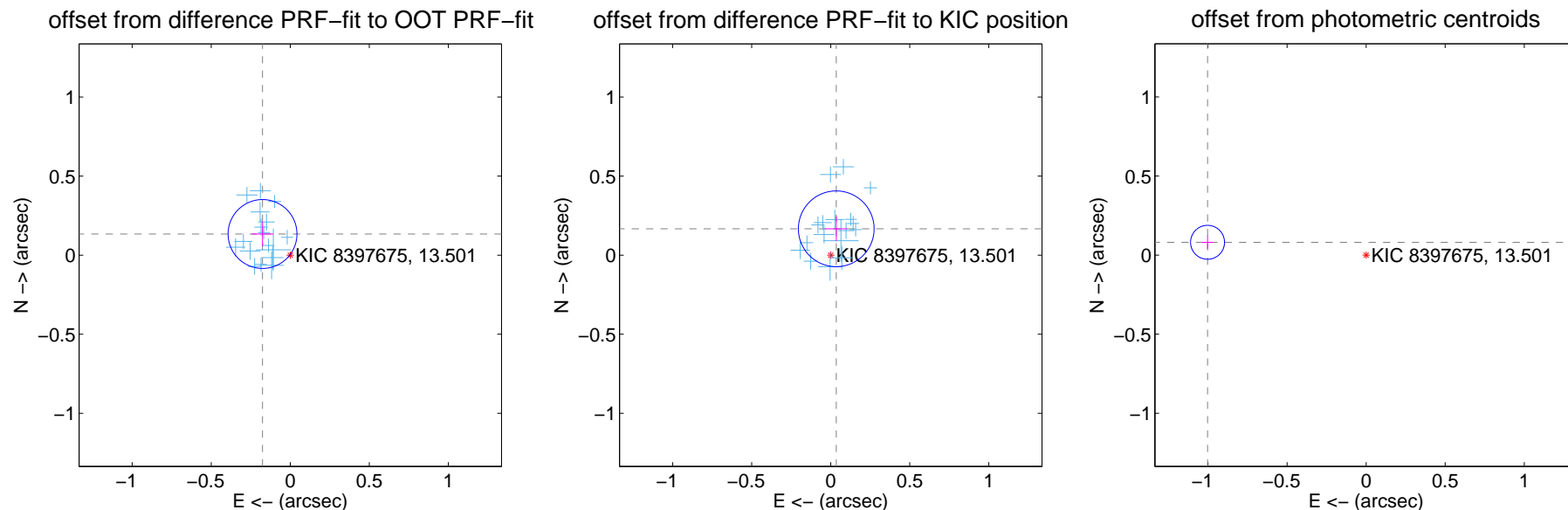
DV Centroid Data

Supplemental centroid analysis for 008397675-01. Kepler magnitude: 13.50. Transit SNR -1.00

There are 17 quarters with good PRF difference image offsets

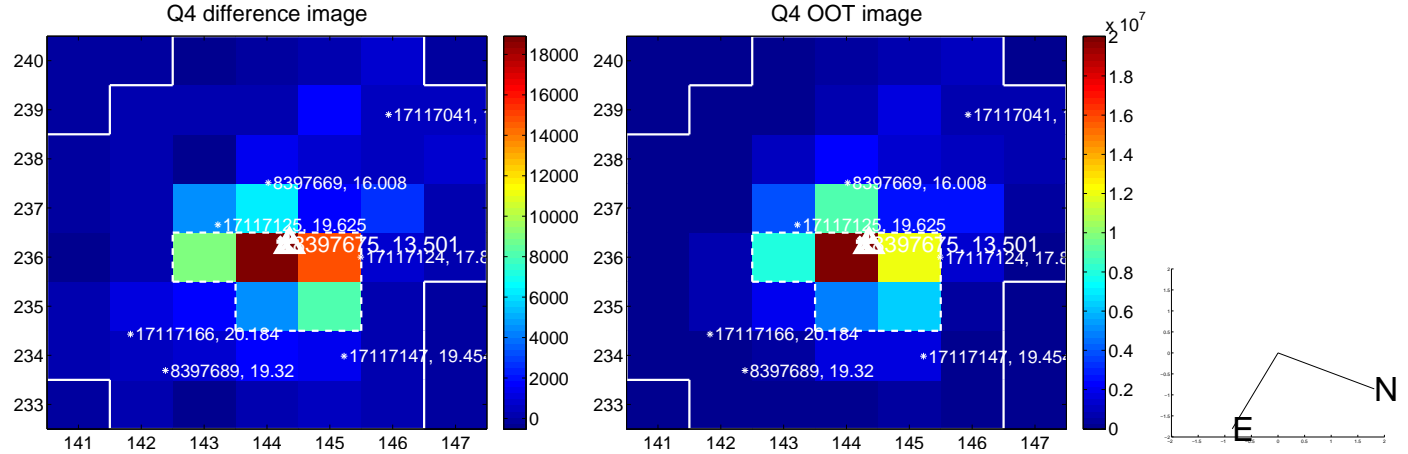
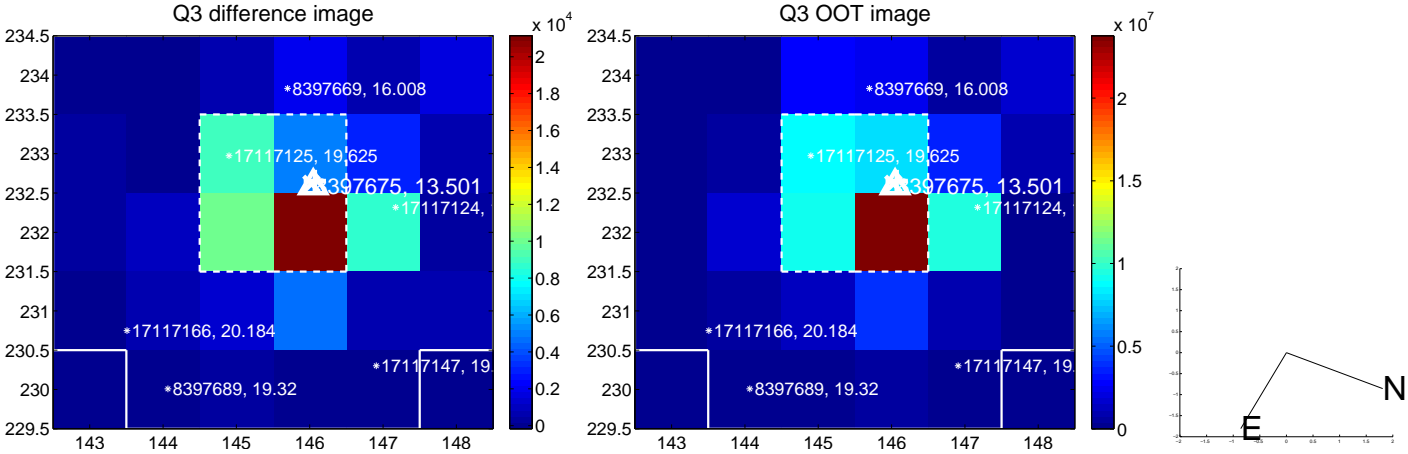
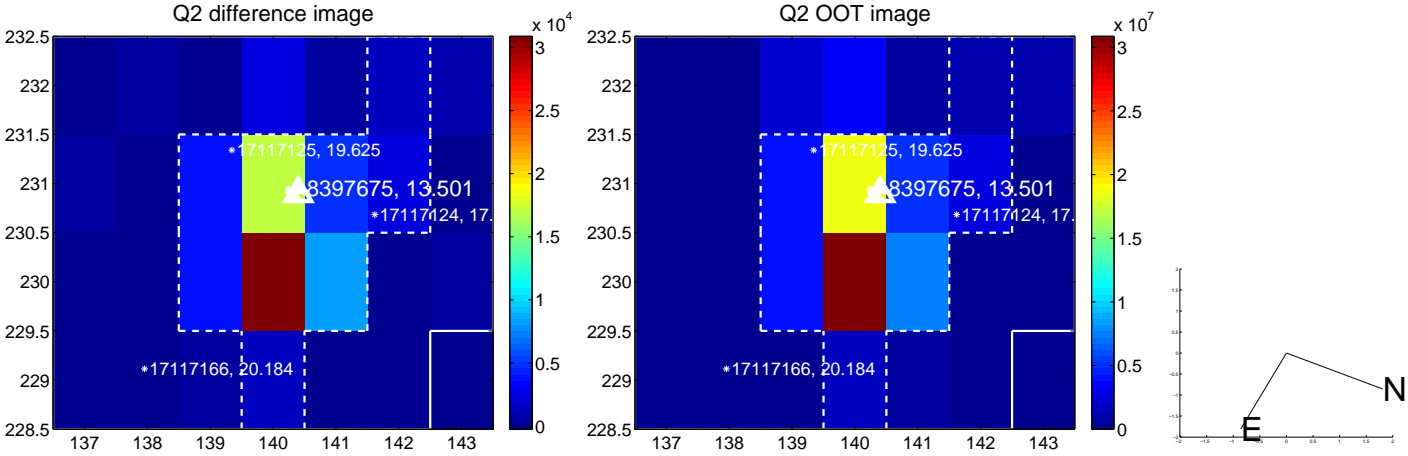
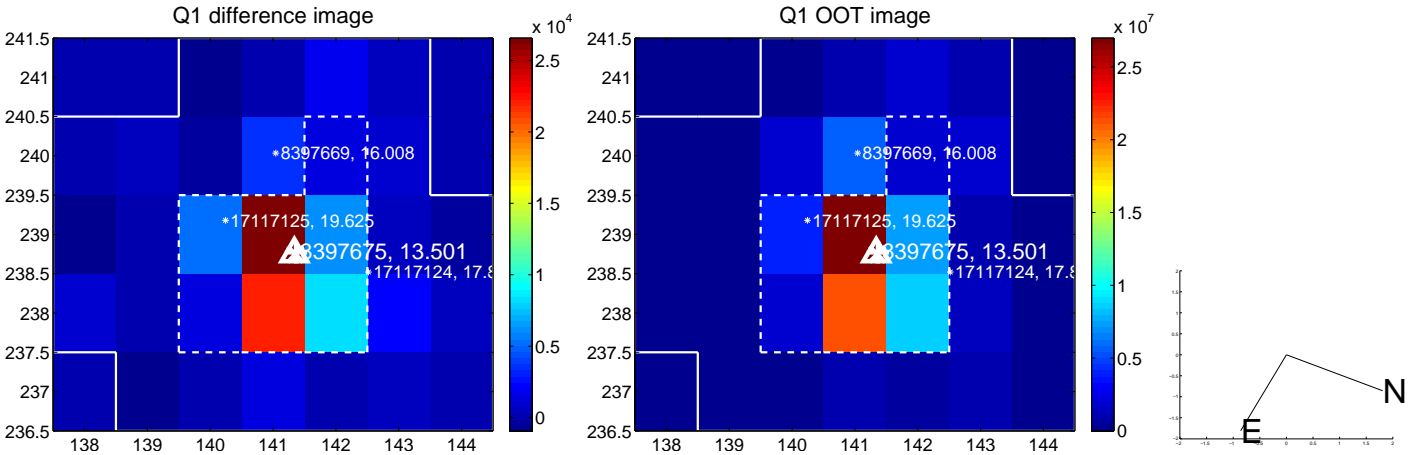
The direct PRF centroid is offset from the target star catalog position by about 0.18 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.221 ± 0.073	3.04	0.175 ± 0.069	0.134 ± 0.078
PRF-fit source offset from KIC position	0.170 ± 0.080	2.13	-0.035 ± 0.072	0.167 ± 0.079
photometric centroid source offset	1.01 ± 0.04	28.11	1.00 ± 0.04	0.08 ± 0.04

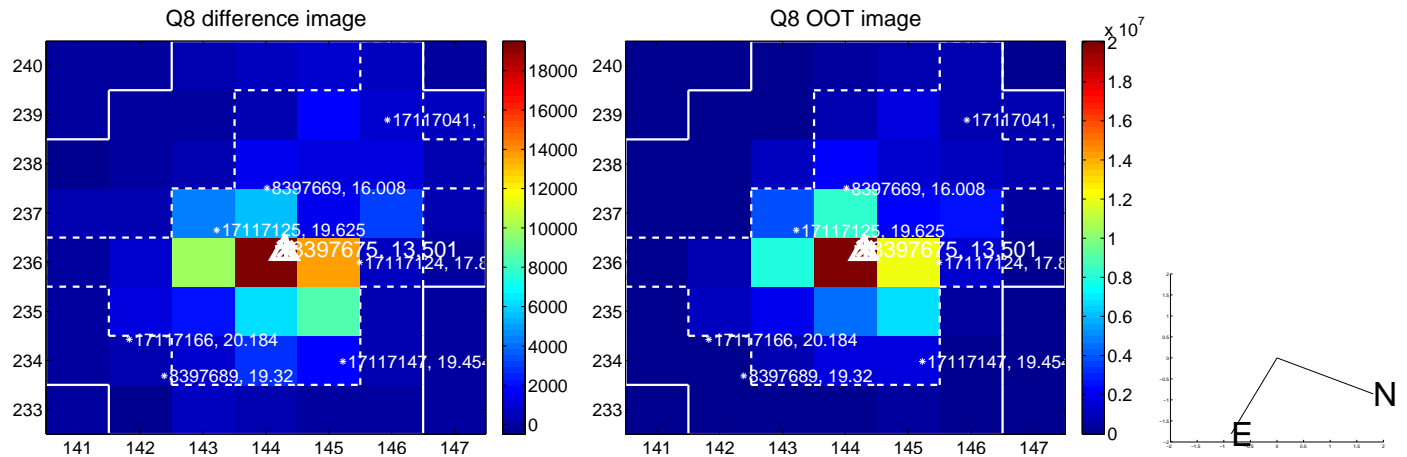
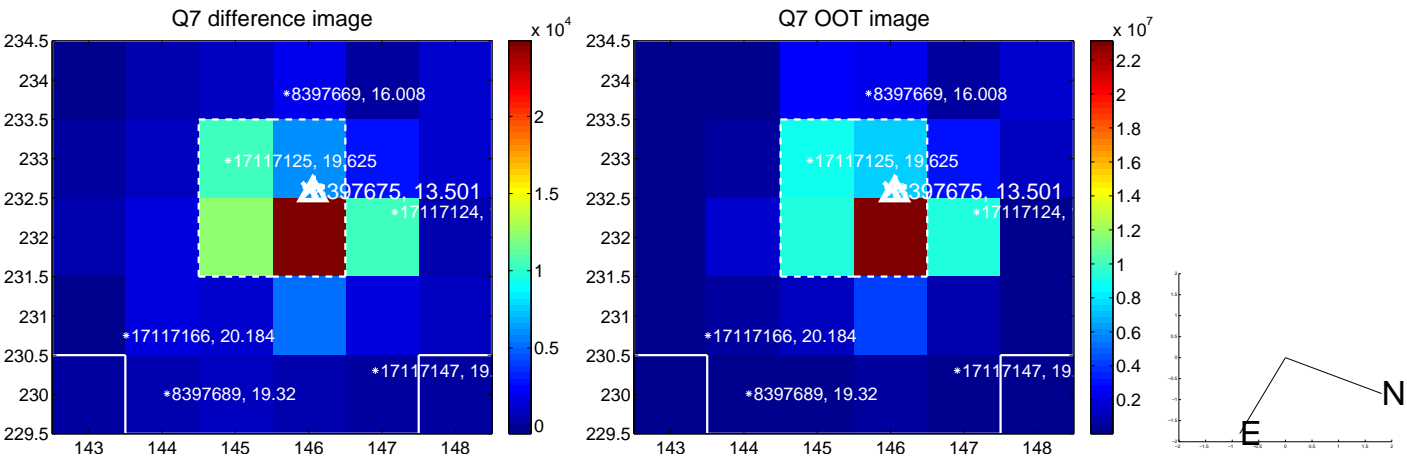
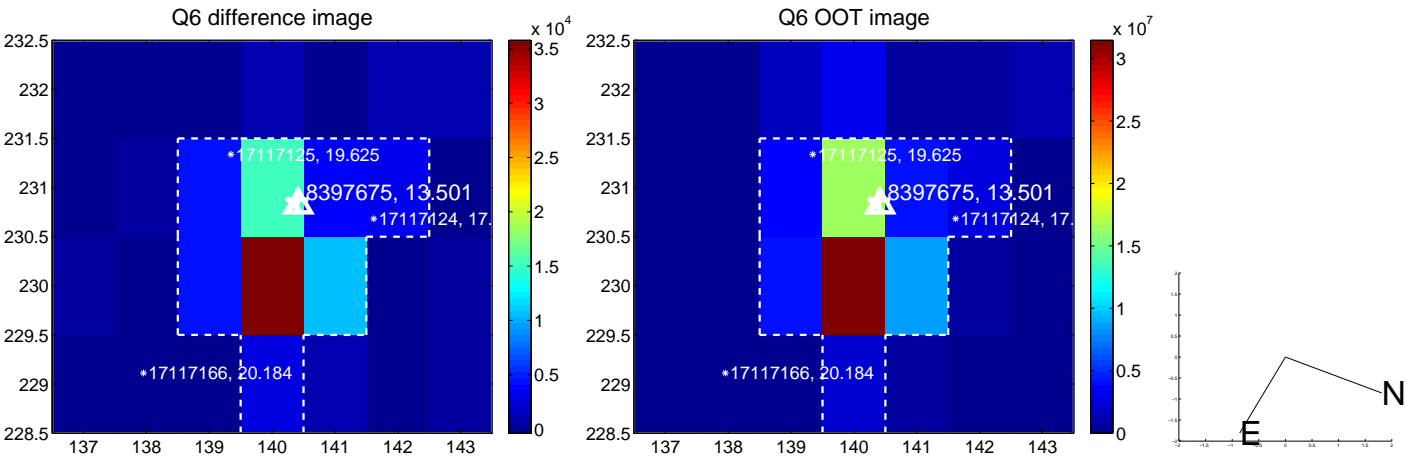
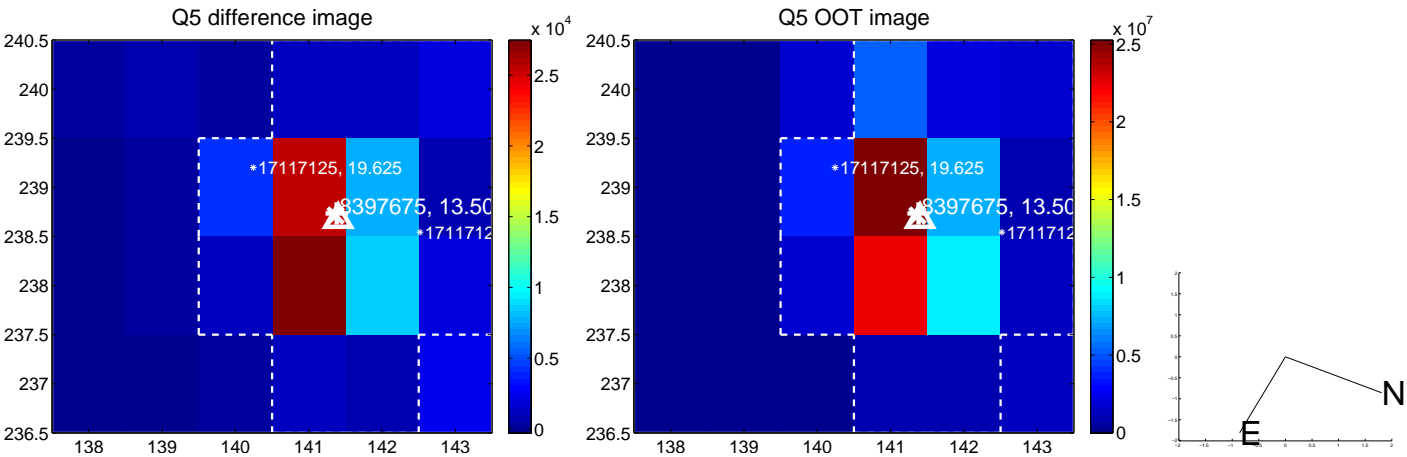


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets**; **Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

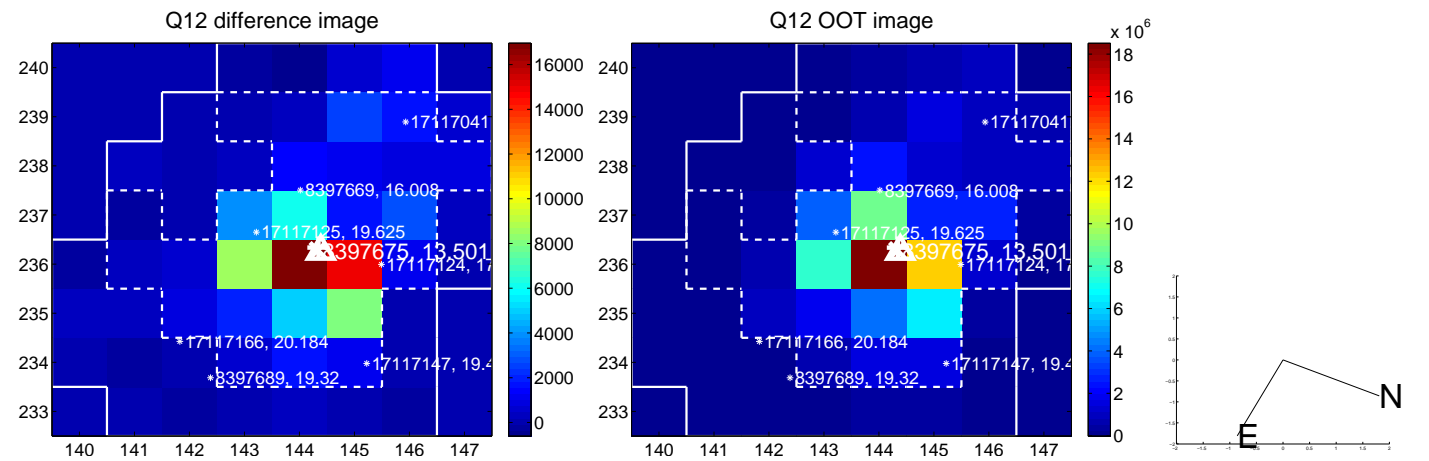
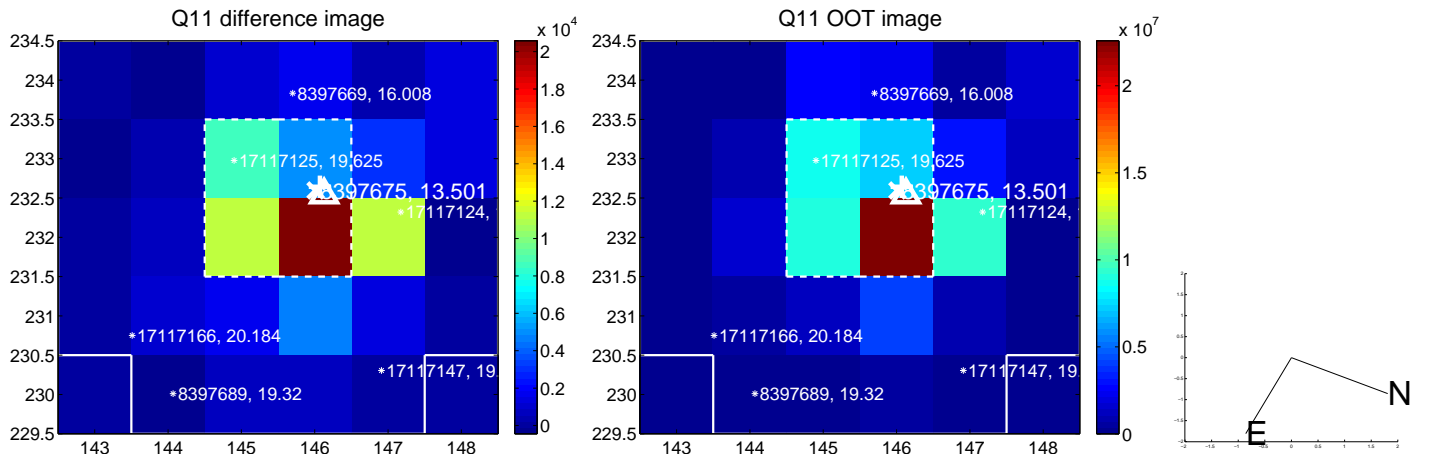
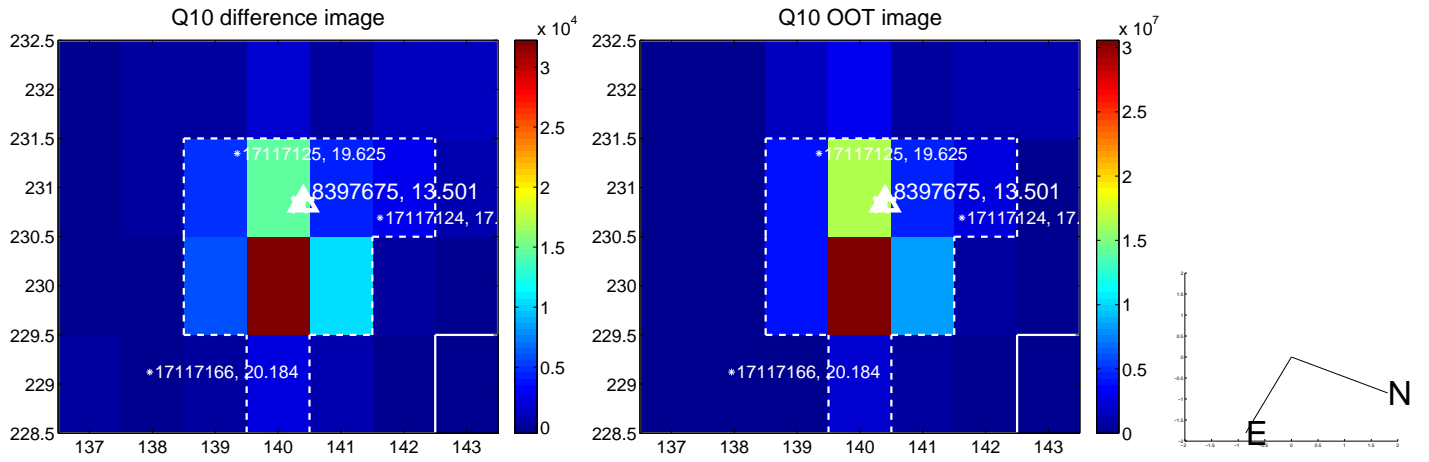
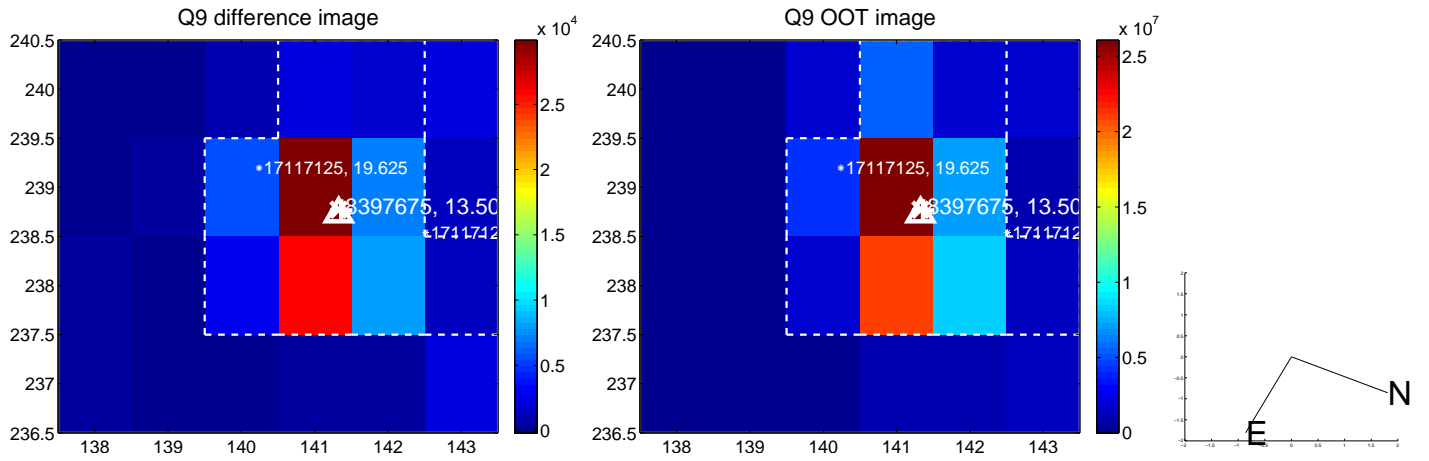
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



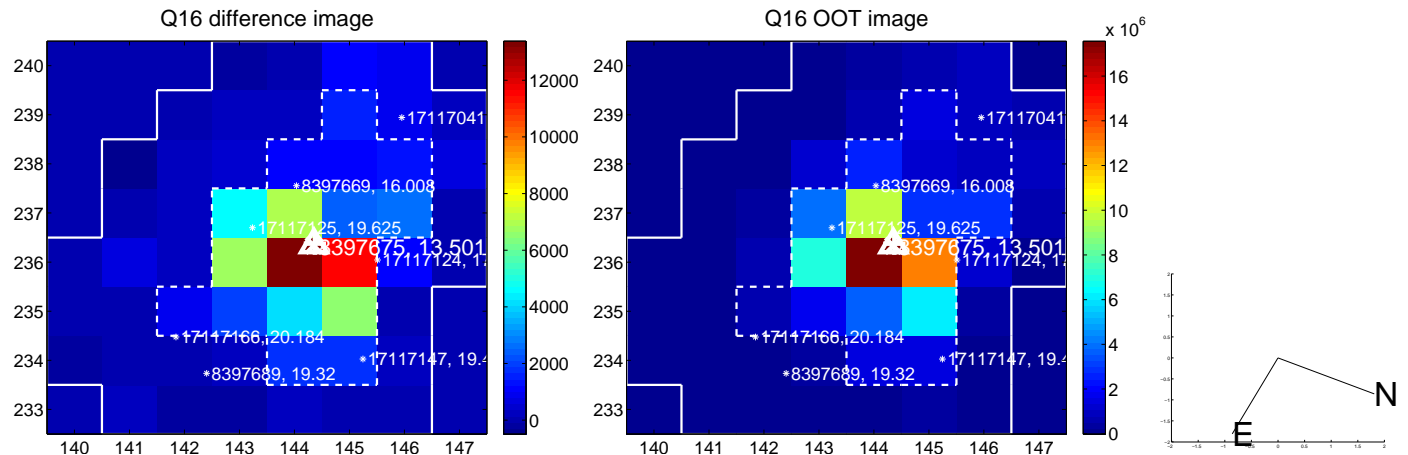
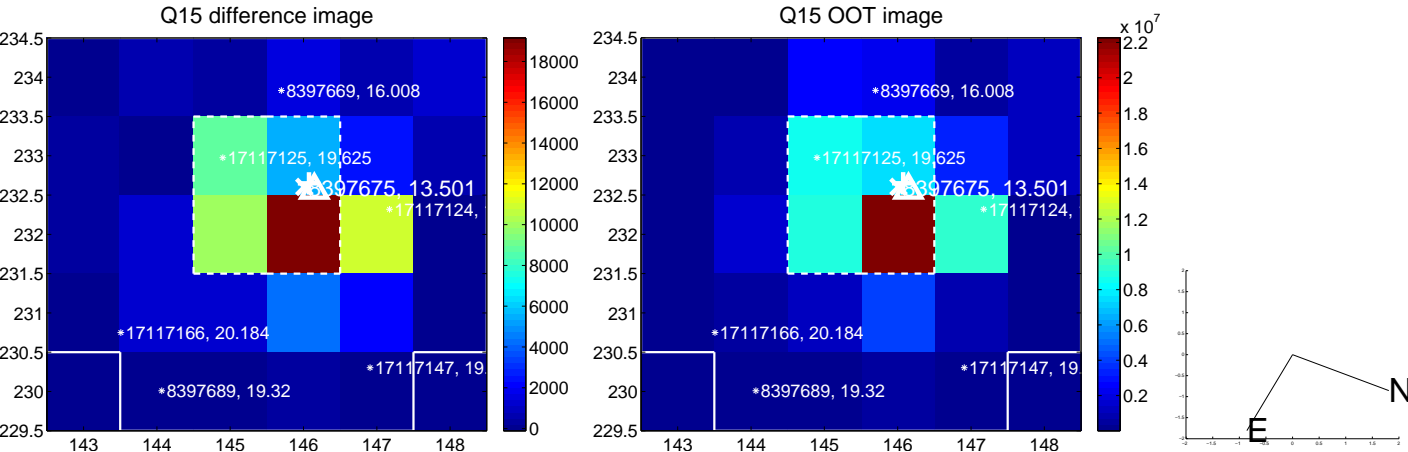
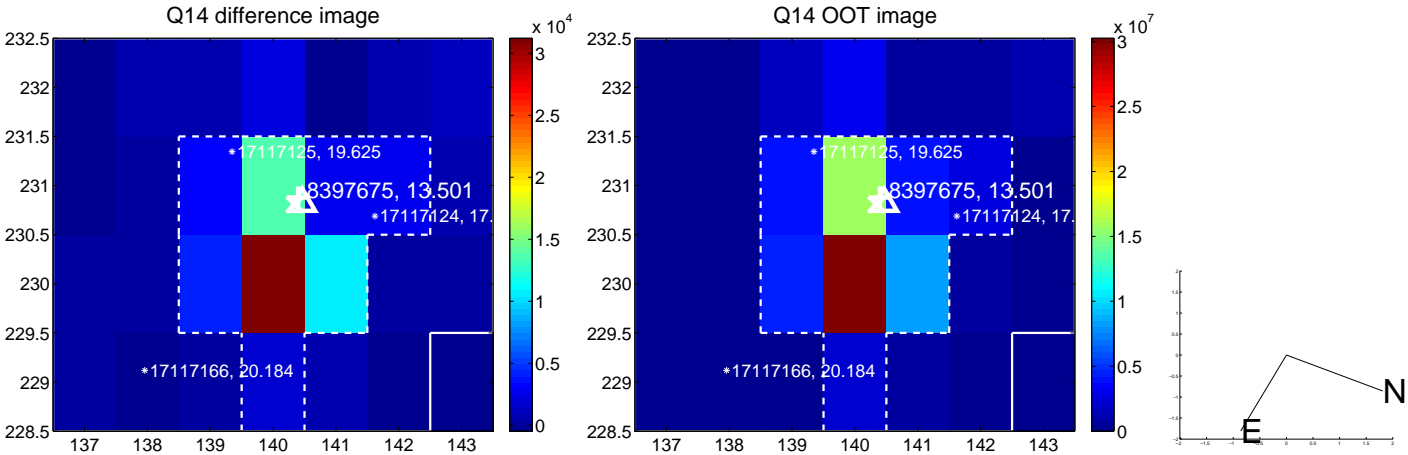
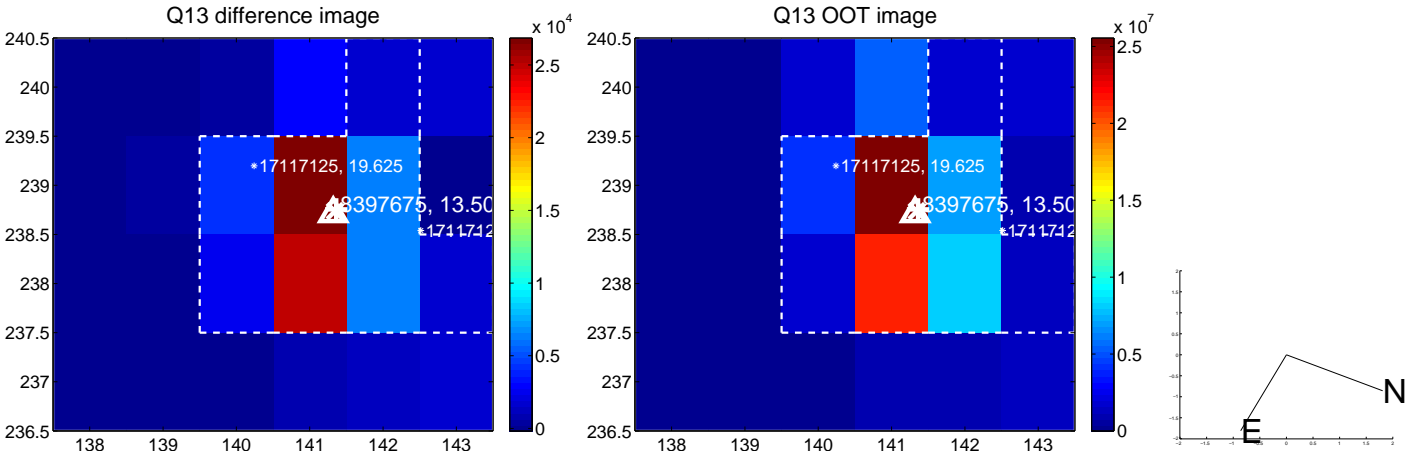
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



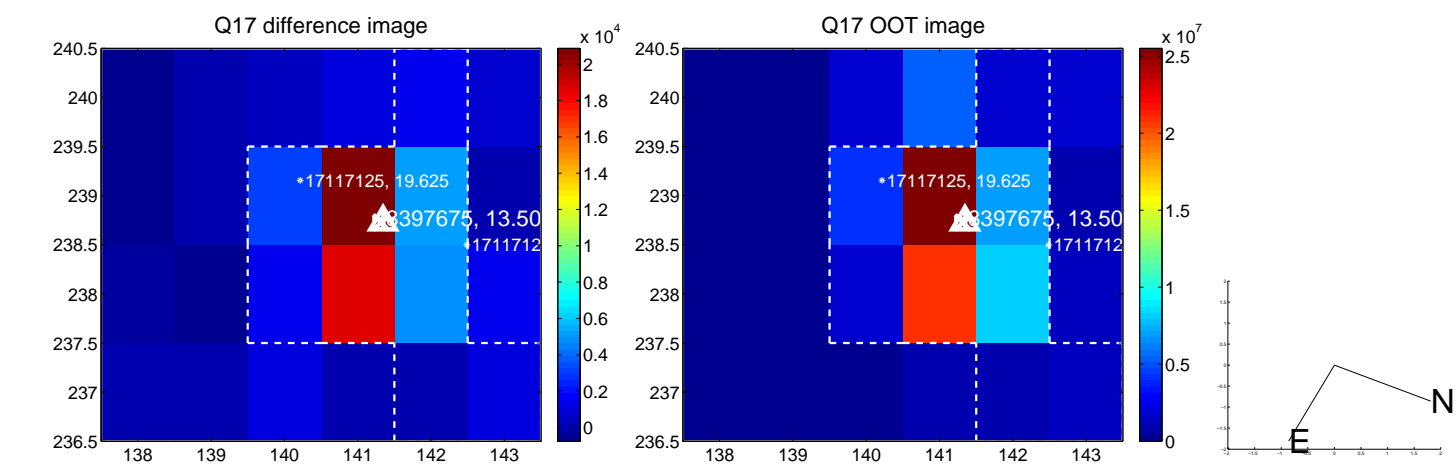
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



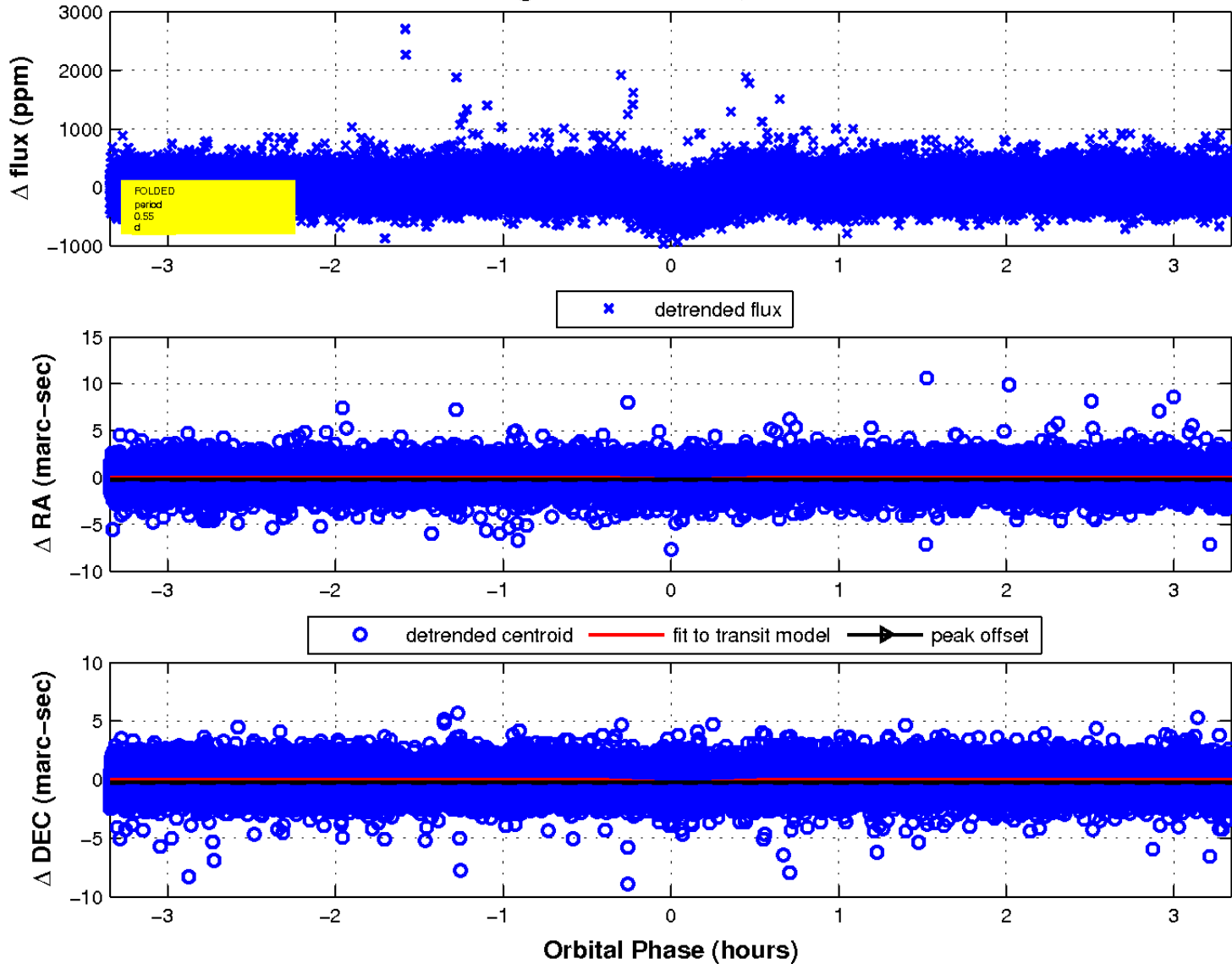
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

