

KIC 010671354

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})
010671354-01	OBS	No	0.796626	132.184111	295.5	2.000	8.3	-1.0	1.76	7281	3.07	20965.08

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010671354-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—LPP_ALT—CENT_NOFITS

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

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

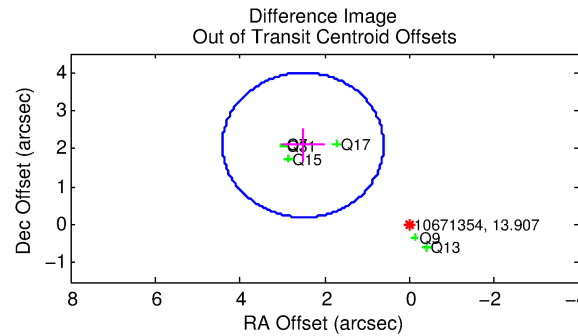
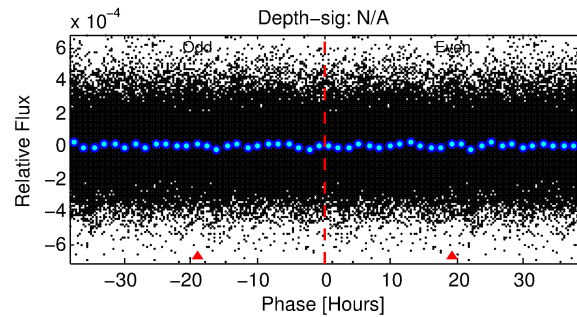
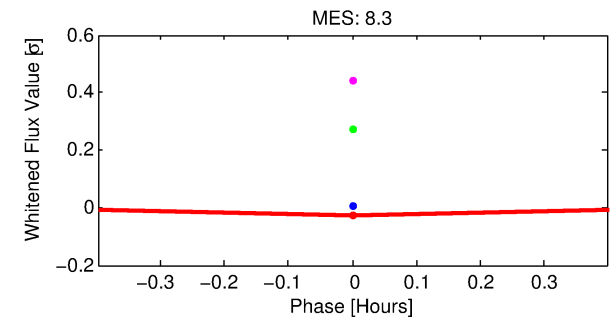
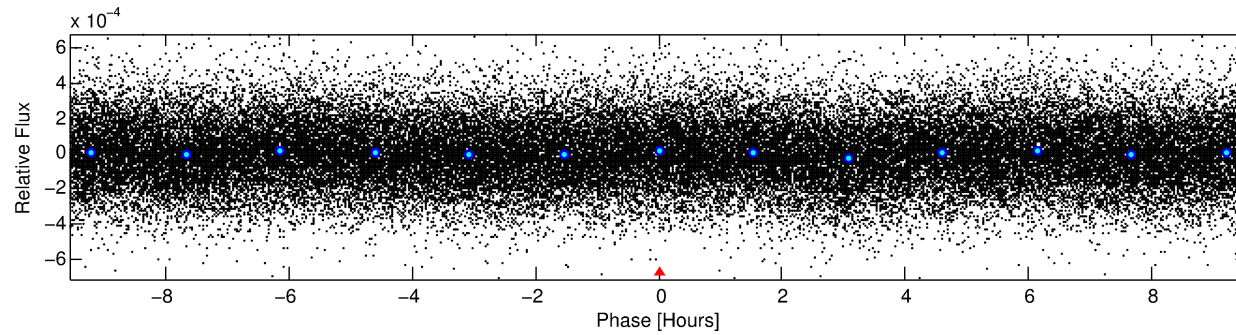
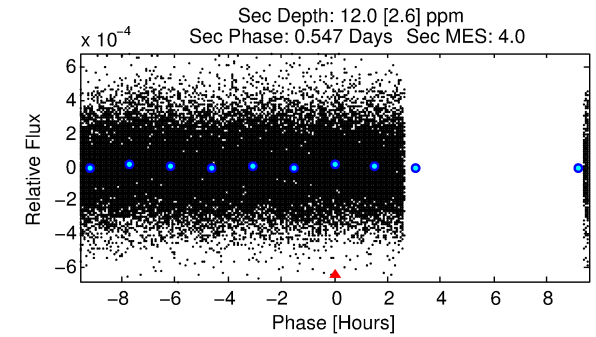
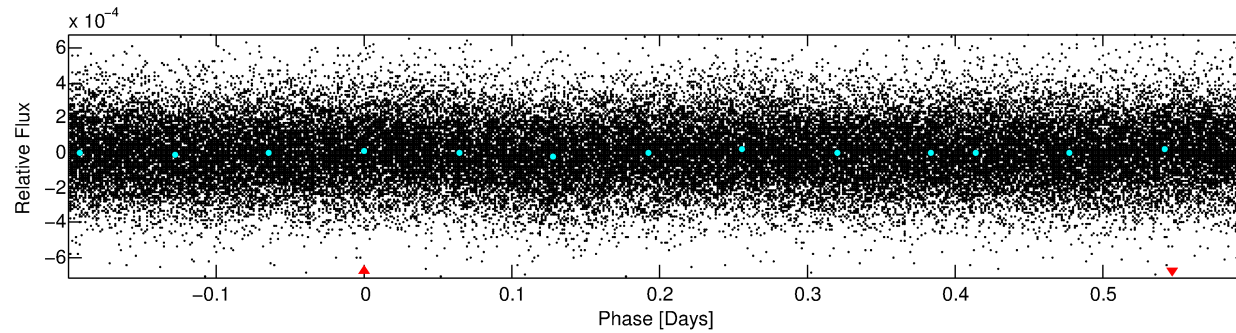
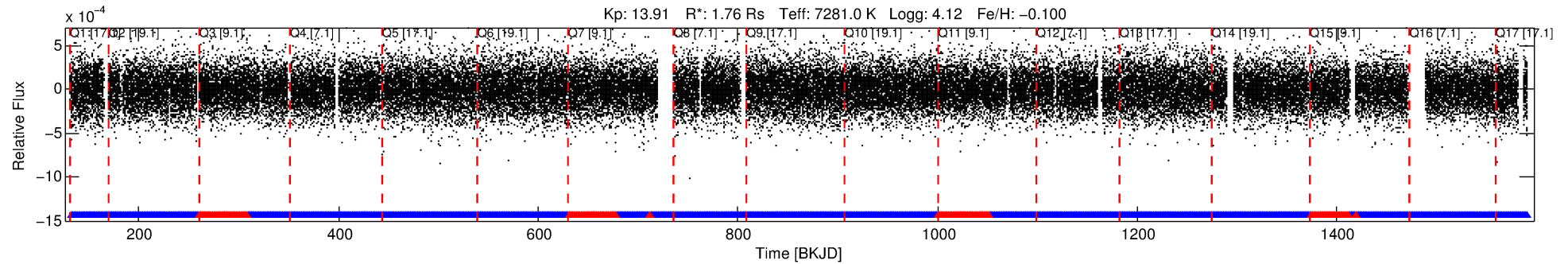
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 010671354-01

No Significant Match Found

DV One-Page Summary

KIC: 10671354 Candidate: 1 of 1 Period: 0.797 d



TPS TCE Results:

Period = 0.79663 d
Epoch = 132.1841 BKJD

DV fit results are unavailable

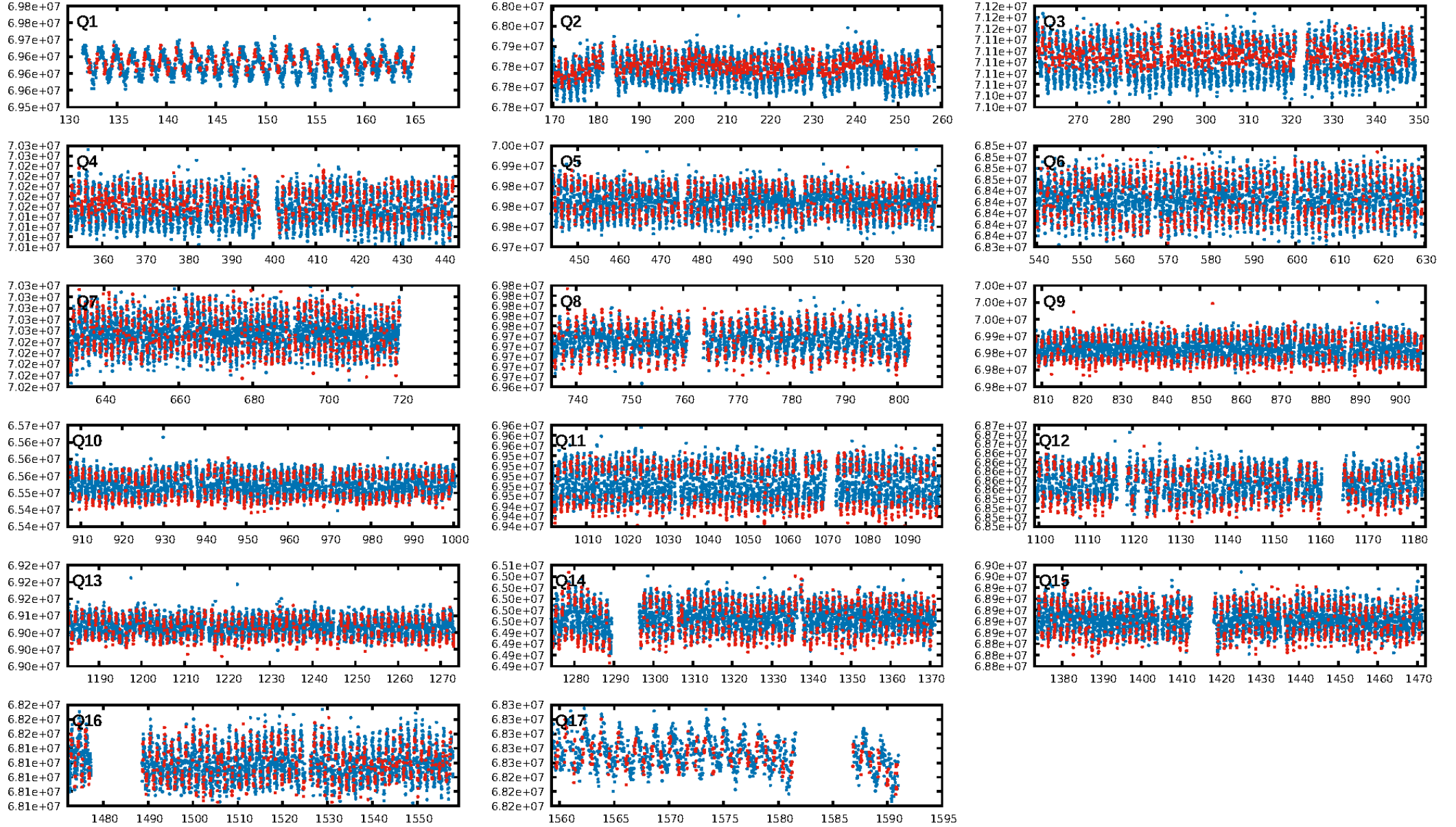
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 2.22e-15
RollingBand-fgt: 0.86 [1391/1621]
GhostDiagnostic-chr: -0.4376
Centroid-sig: 59.0%
Centroid-so: 0.321 arcsec [0.60σ]
OotOffset-rm: 3.269 arcsec [5.16σ]
KicOffset-rm: 3.296 arcsec [4.91σ]
OotOffset-st: 0/4/0/3 [7]
KicOffset-st: 0/4/0/3 [7]
DiffImageQuality-fgm: 0.71 [5/7]
DiffImageOverlap-fno: 1.00 [17/17]

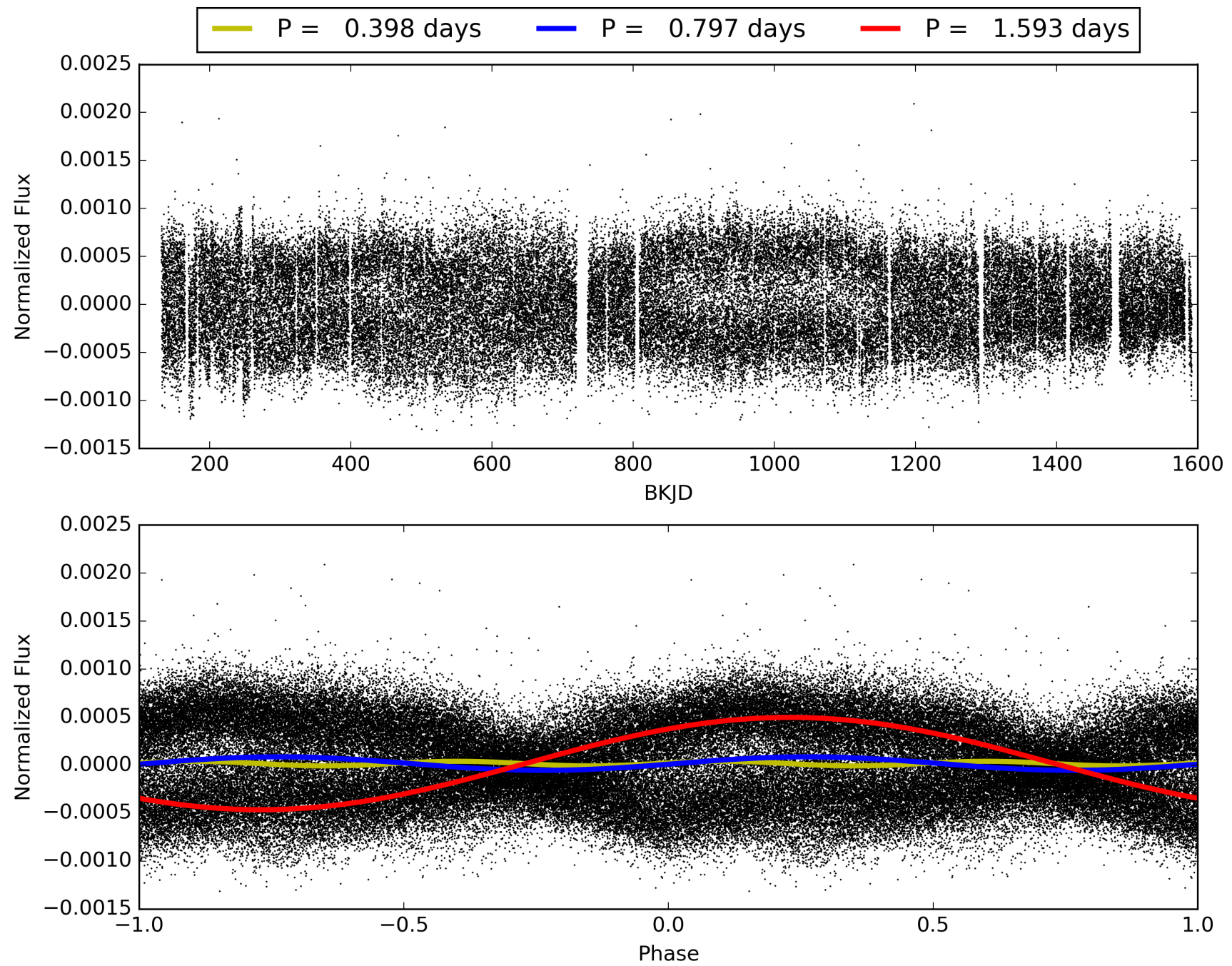
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 21:43:48 Z

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

TCE 010671354-01, PDC Light Curves

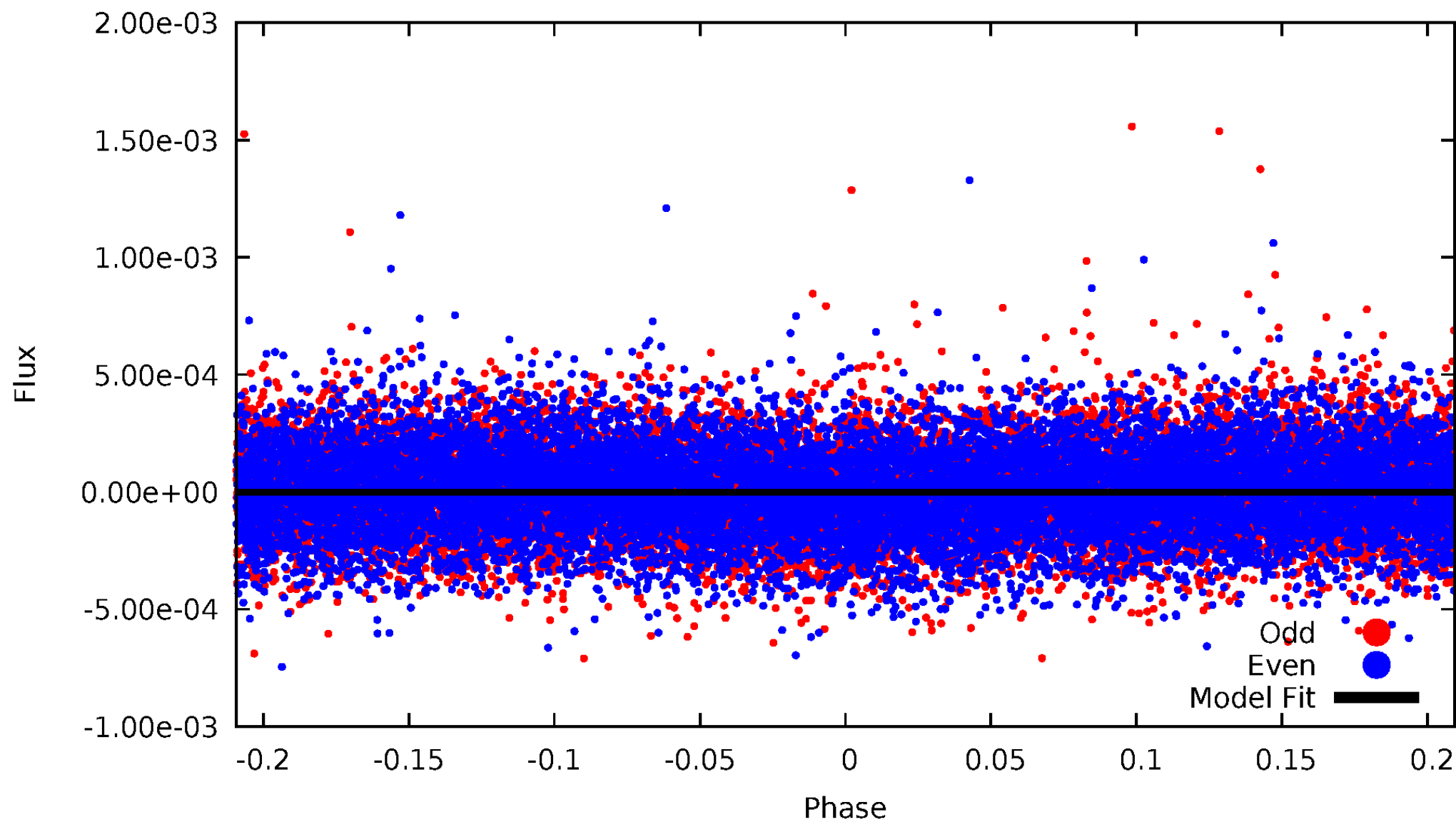


TCE 010671354-01



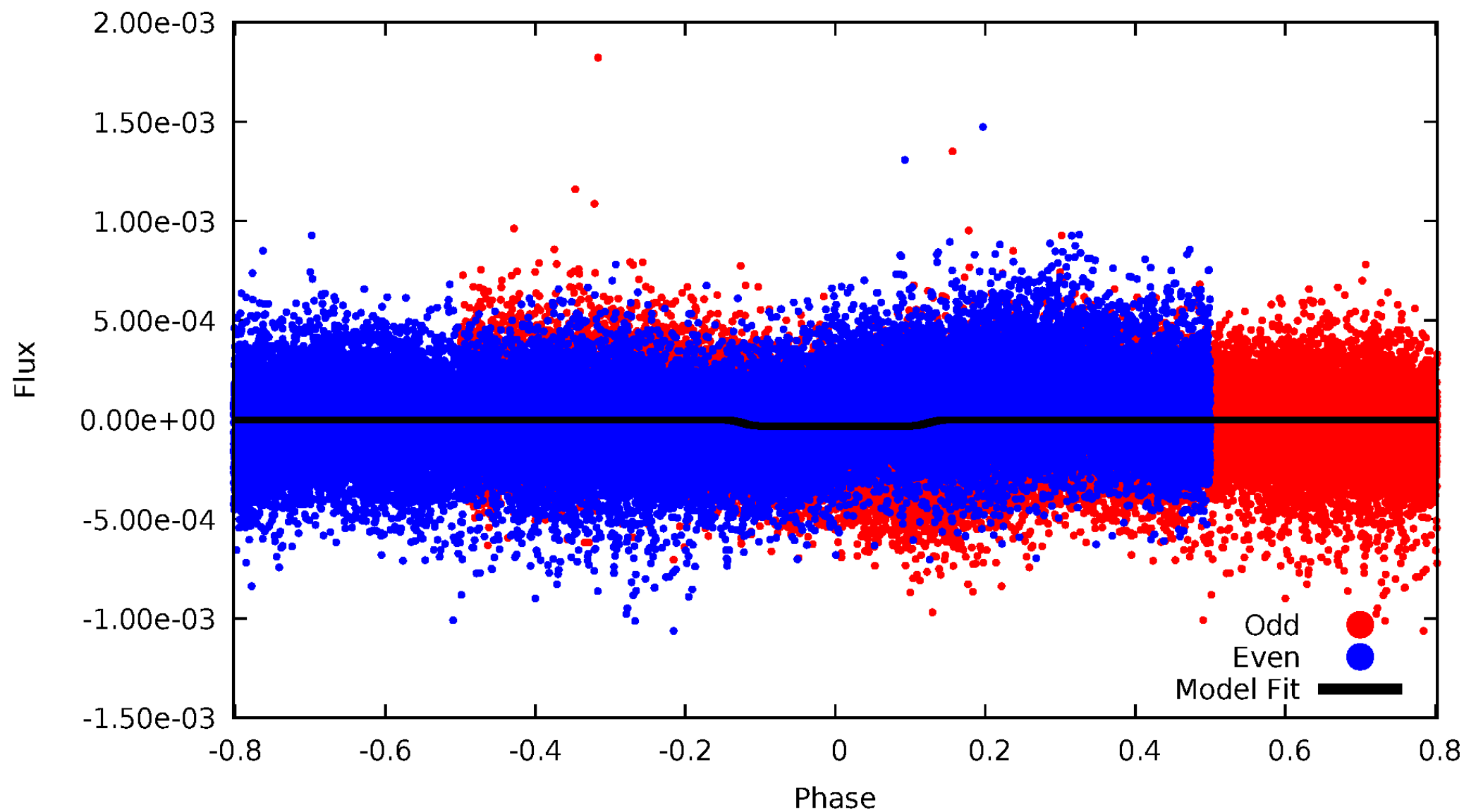
DV Odd/Even

TCE 010671354-01

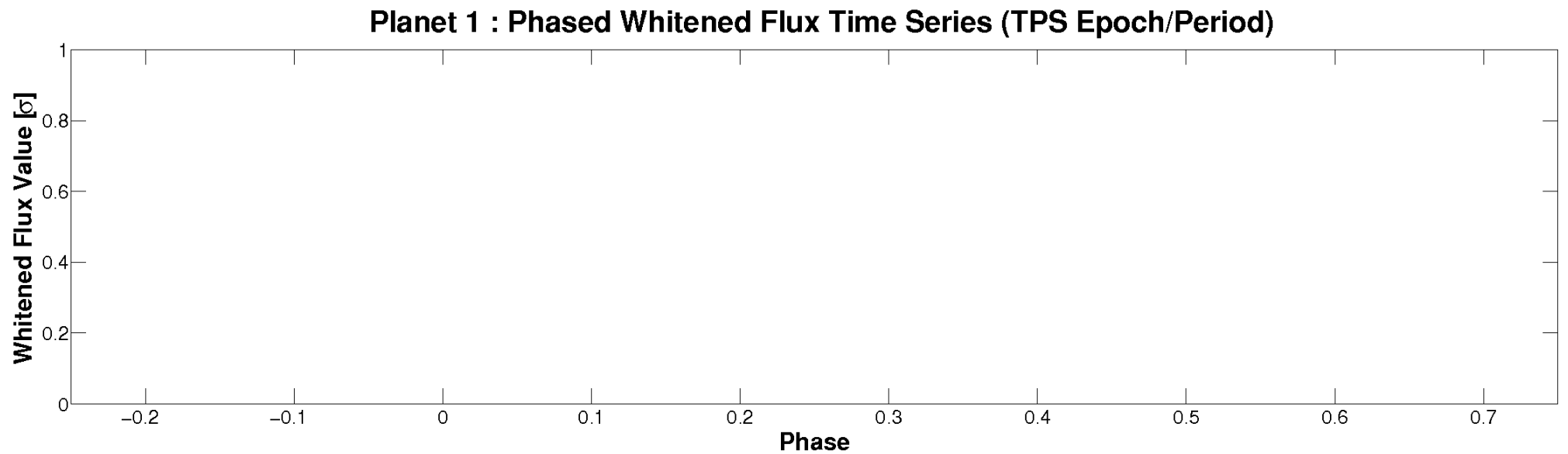
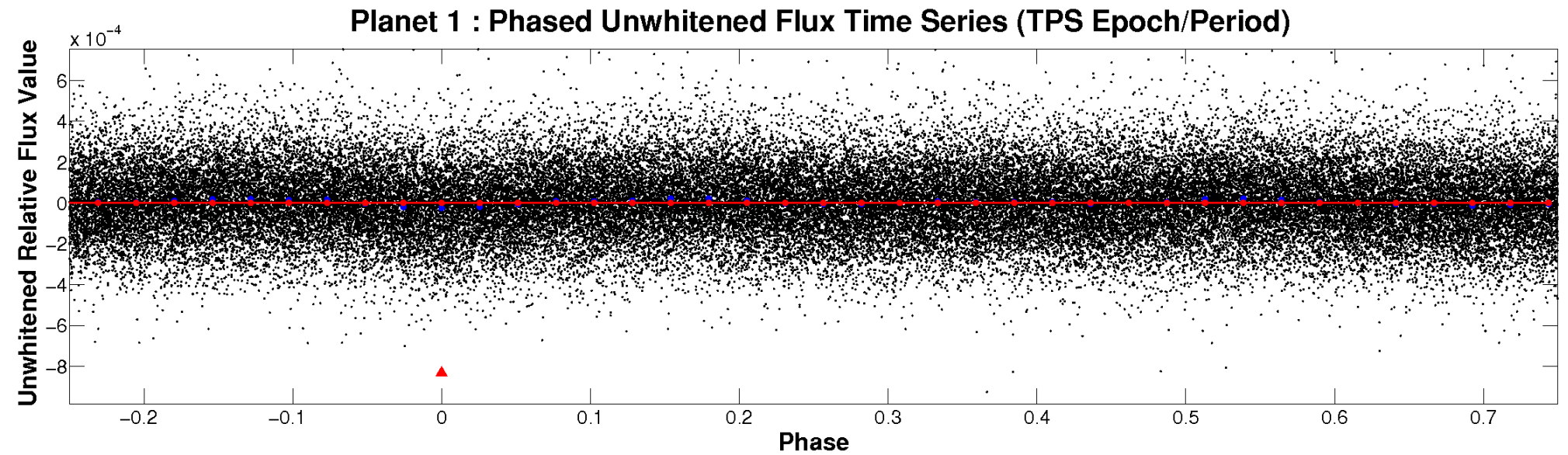


ALT Odd/Even

TCE 010671354-01

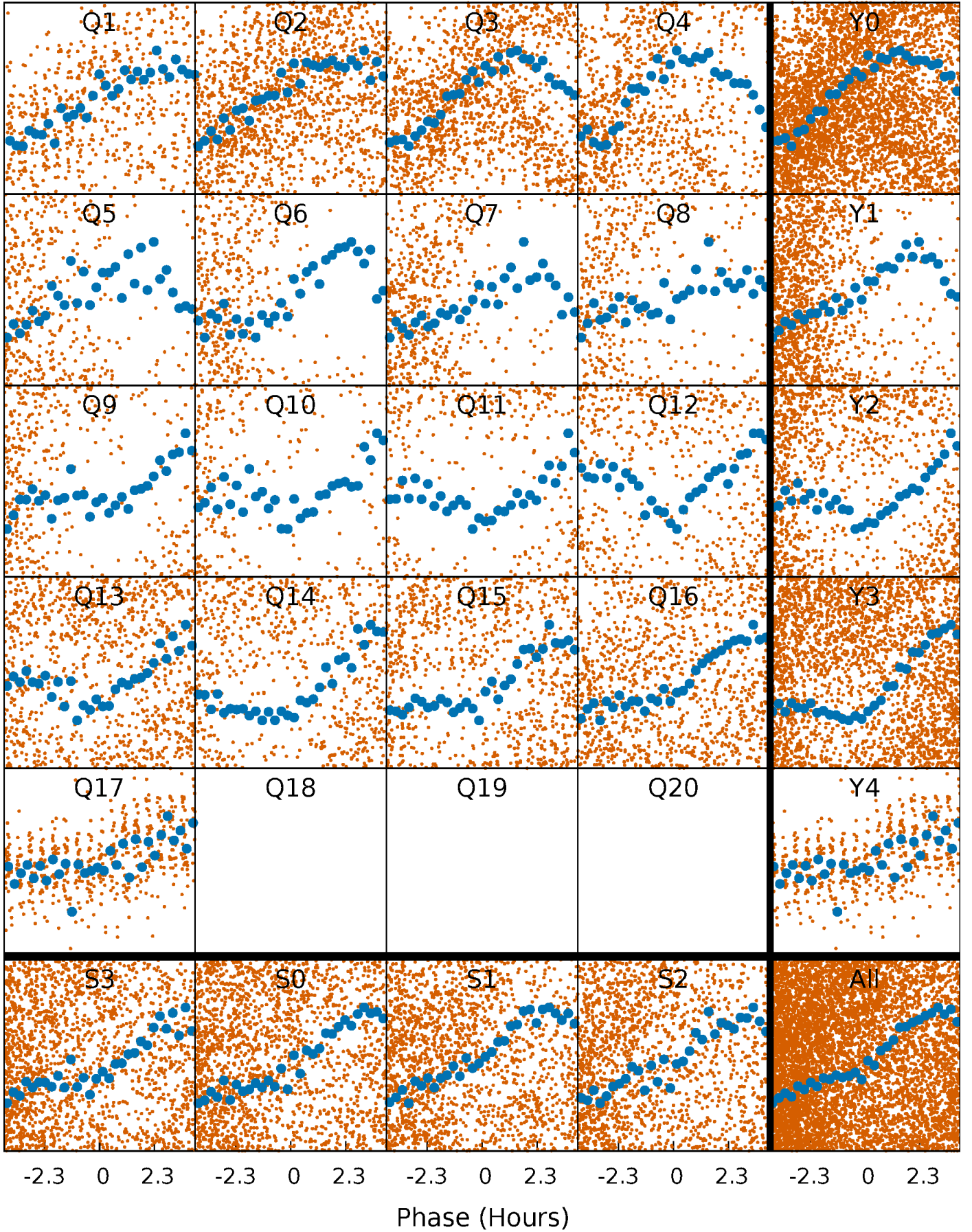


Non-Whitened Vs. Whitened Light Curve



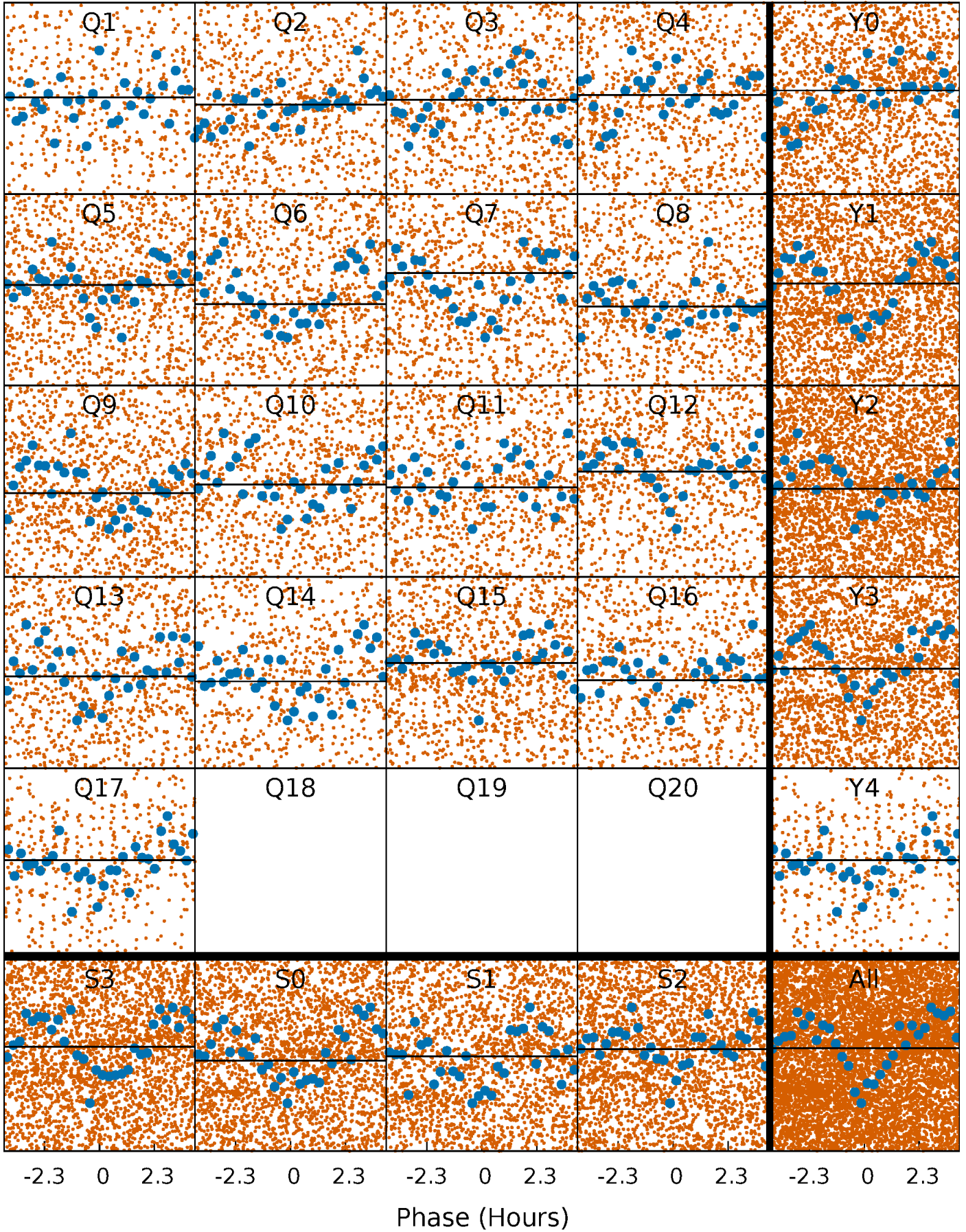
PDC Quarter-Phased Transit Curves

TCE 010671354-01 P= 0.796626 Days $T_0=132.184111$ (BKJD)



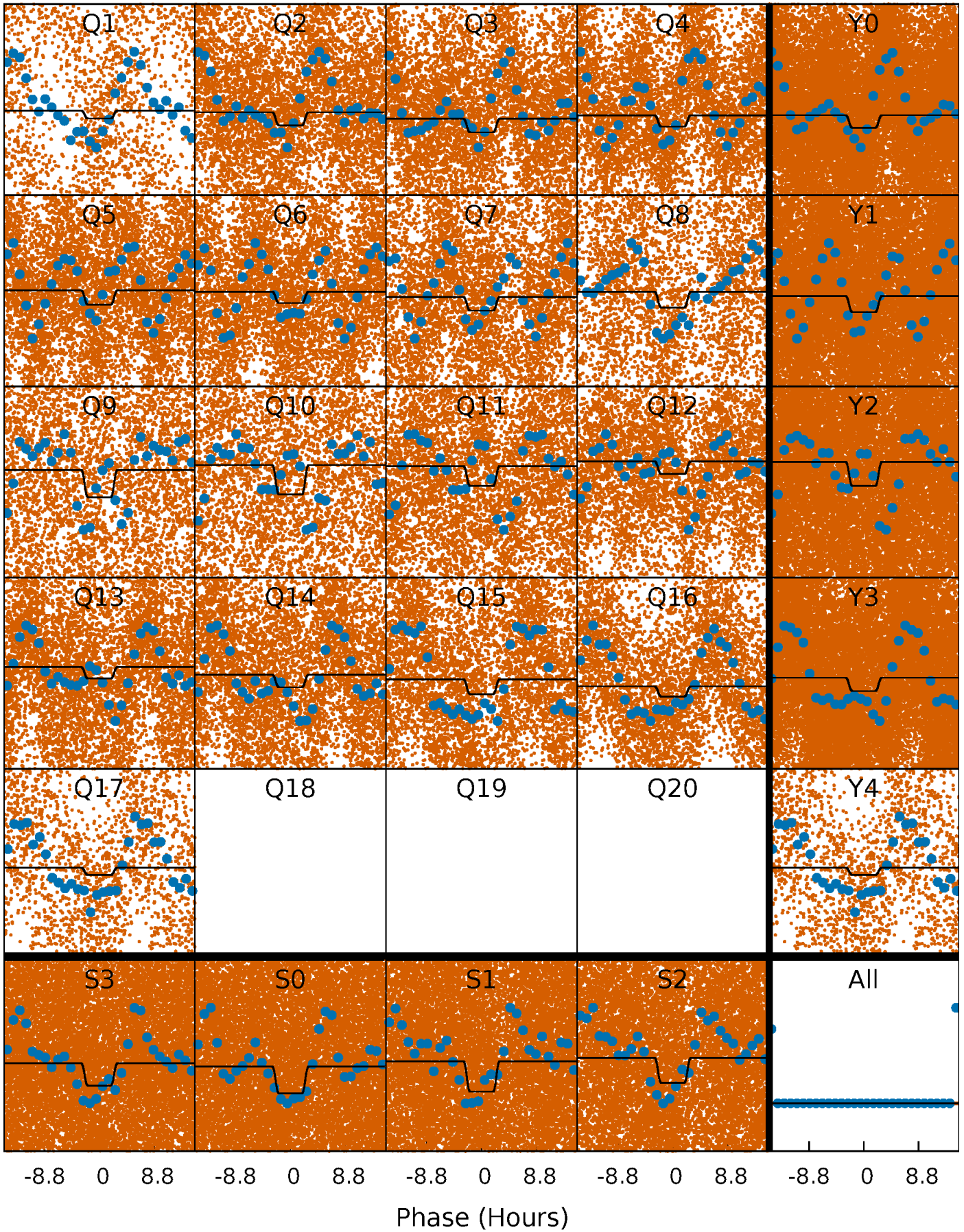
DV Quarter-Phased Transit Curves

TCE 010671354-01 P= 0.796626 Days $T_0=132.184111$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

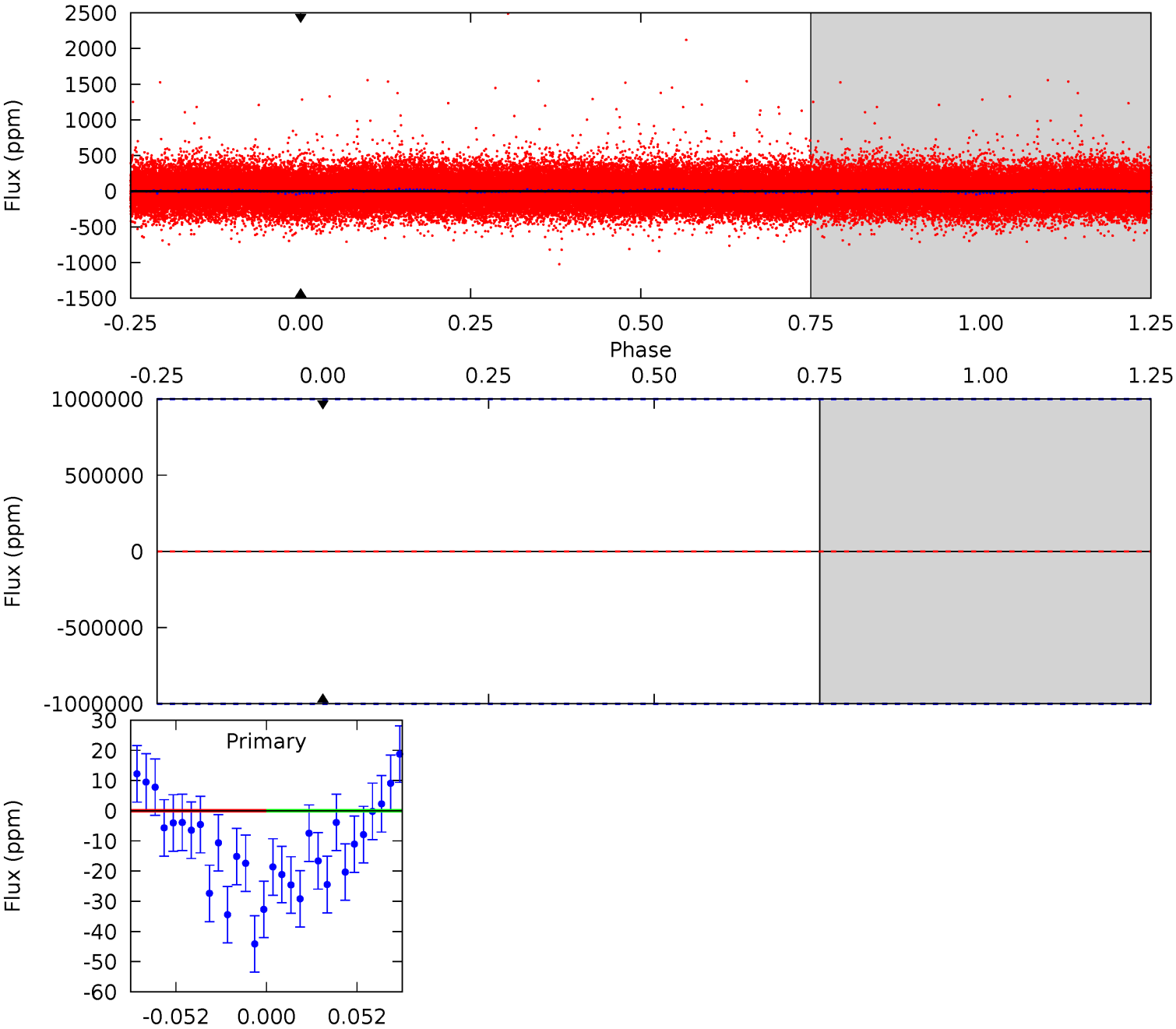
TCE 010671354-01 P= 0.796626 Days $T_0=132.061277$ (BKJD)



DV Model-Shift Uniqueness Test

010671354-01, P = 0.796626 Days, E = 131.387485 Days

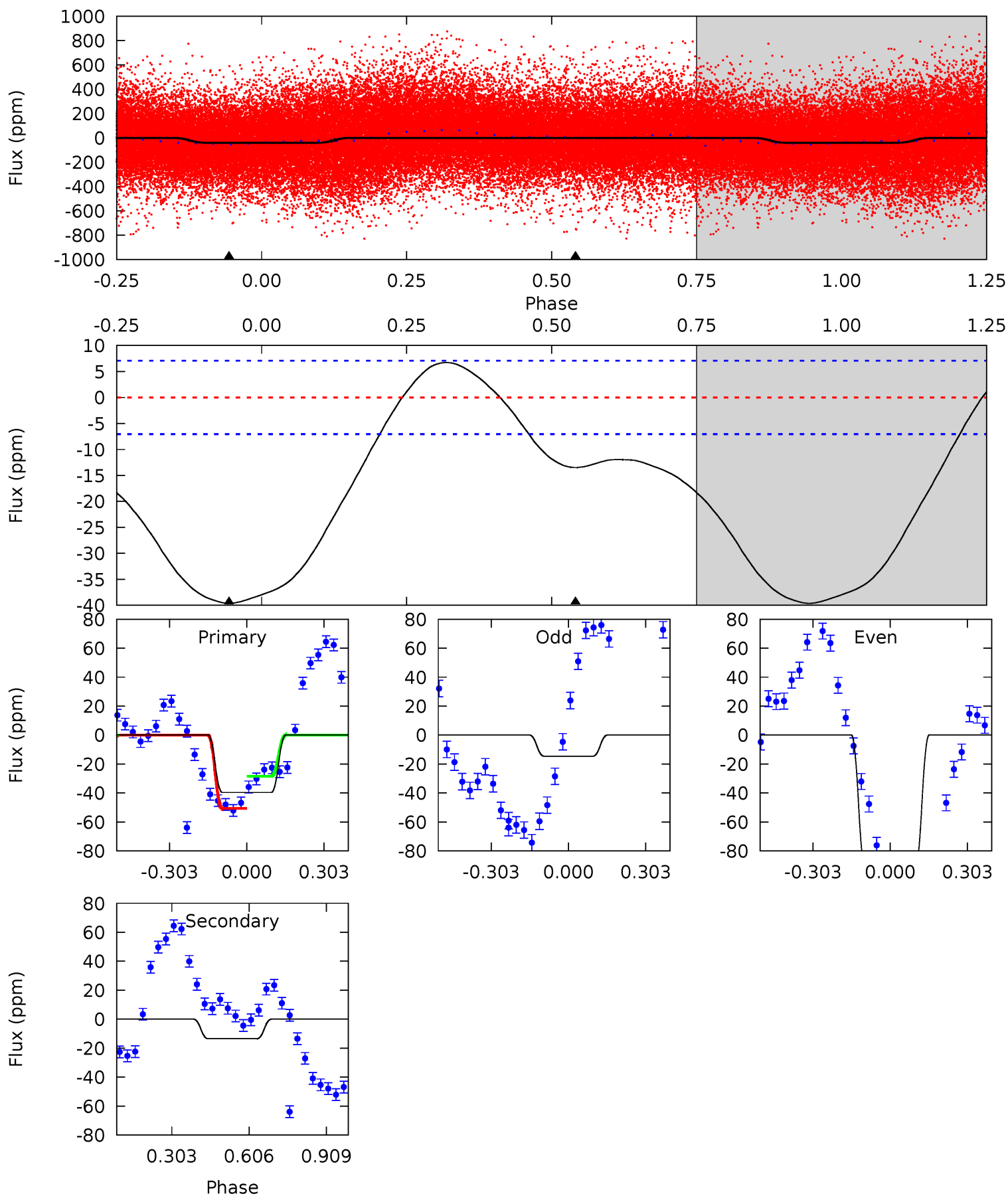
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

010671354-01, P = 0.796626 Days, E = 131.264651 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
24.3	8.26	0	0	4.33	1.03	2.78	24.3	24.3	8.26	8.26	28.4	1.33	0.14	7.40



Stellar Parameters For KIC 010671354

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7281^{+228}_{-330}	$4.125^{+0.132}_{-0.182}$	$-0.100^{+0.200}_{-0.350}$	$1.759^{+0.555}_{-0.370}$	$1.505^{+0.234}_{-0.234}$	$0.389^{+0.297}_{-0.194}$
	+3%/-5%	+3%/-4%	+200%/-350%	+32%/-21%	+16%/-16%	+76%/-50%
Source	KIC0	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 010671354-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	0 ± 1000000	$14.16^{+15.53}_{-10.02}$	4288^{+365}_{-295}	-4485^{+46241}_{-31662}	$-0.444^{+219.979}_{-180.017}$
Alt.	-13 ± 2	$13.20^{+13.79}_{-9.26}$	4293^{+335}_{-290}	-3755^{+507}_{-232}	$0.015^{+0.165}_{-0.012}$

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

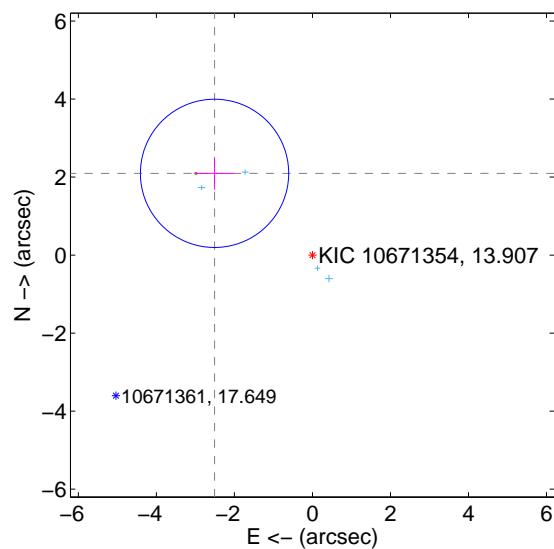
Supplemental centroid analysis for 010671354-01. Kepler magnitude: 13.91. Transit SNR -1.00

There are 5 quarters with good PRF difference image offsets

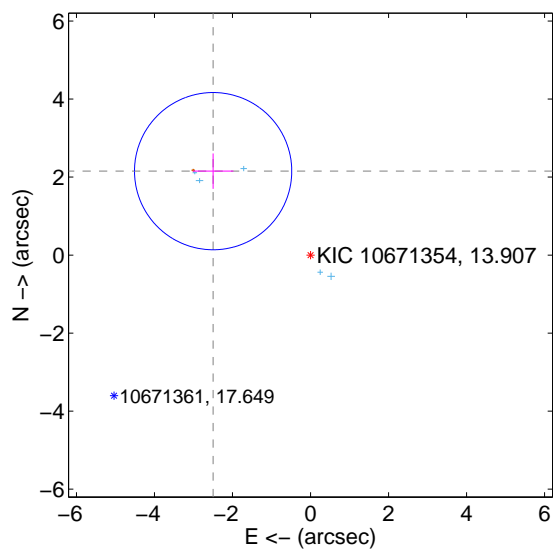
The direct PRF centroid is offset from the target star catalog position by about 0.09 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	3.269 \pm 0.633	5.16	2.509 \pm 0.501	2.096 \pm 0.419
PRF-fit source offset from KIC position	3.296 \pm 0.672	4.91	2.497 \pm 0.519	2.152 \pm 0.453
photometric centroid source offset	0.32 \pm 0.53	0.60	-0.28 \pm 0.54	-0.16 \pm 0.52

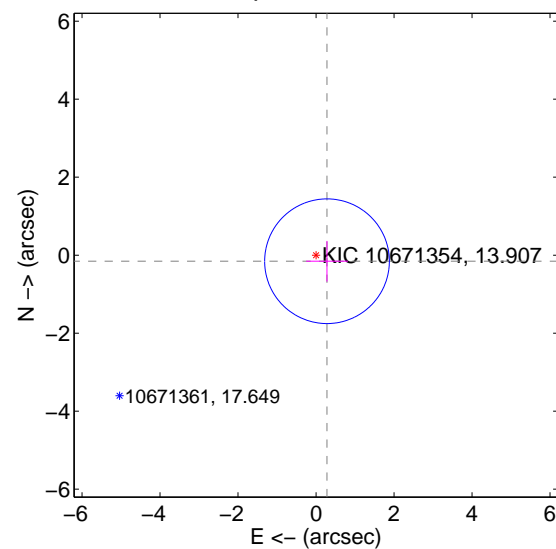
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

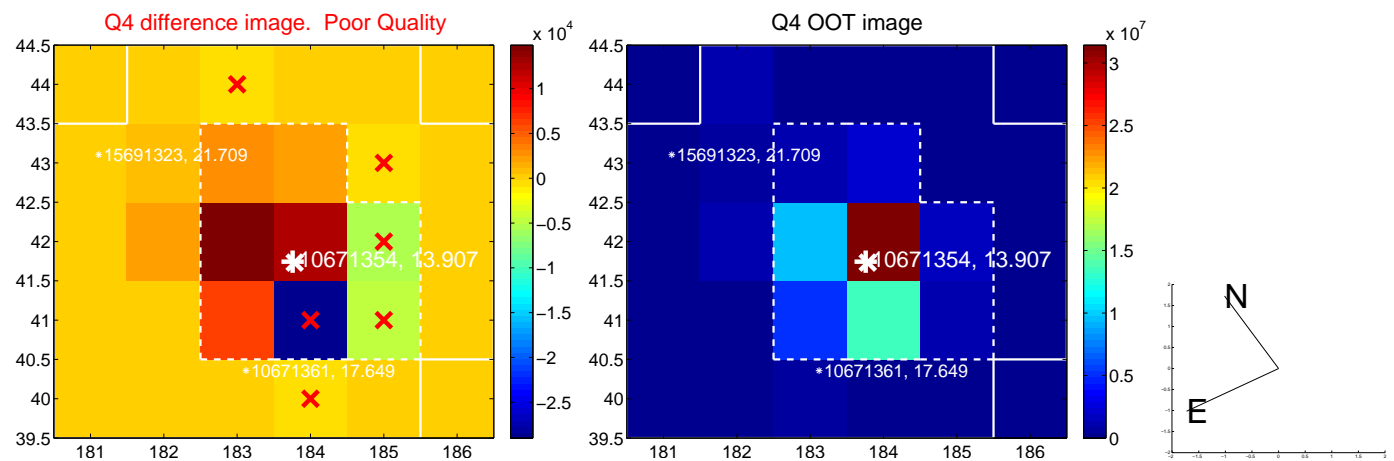
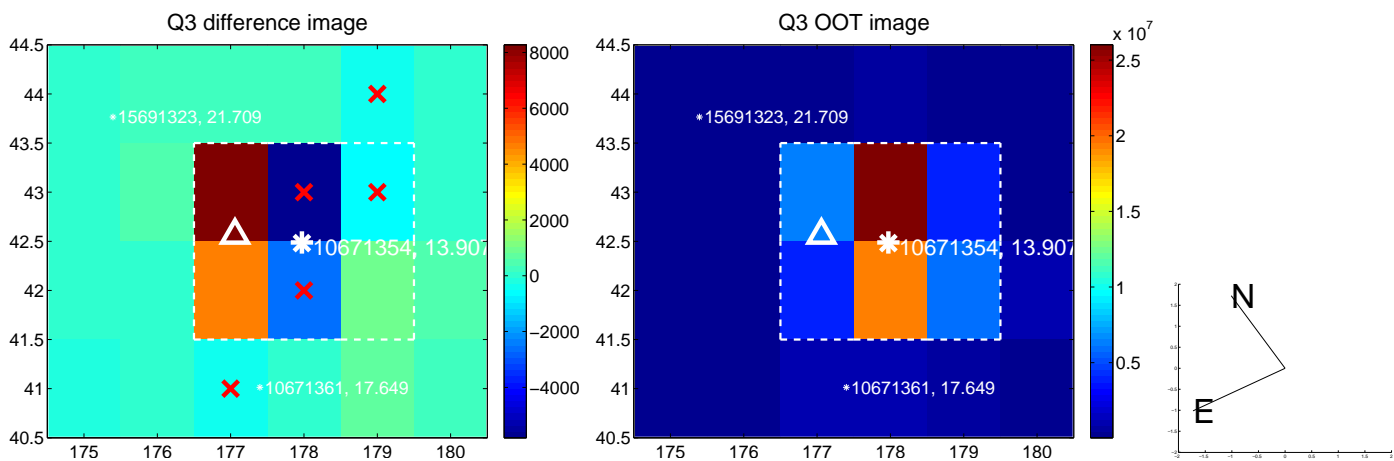
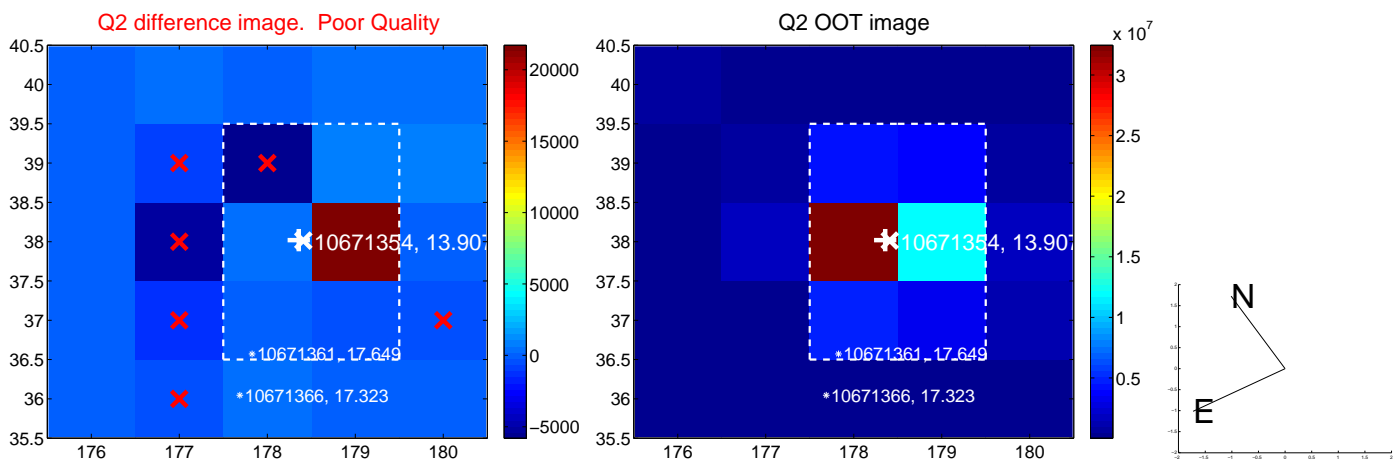
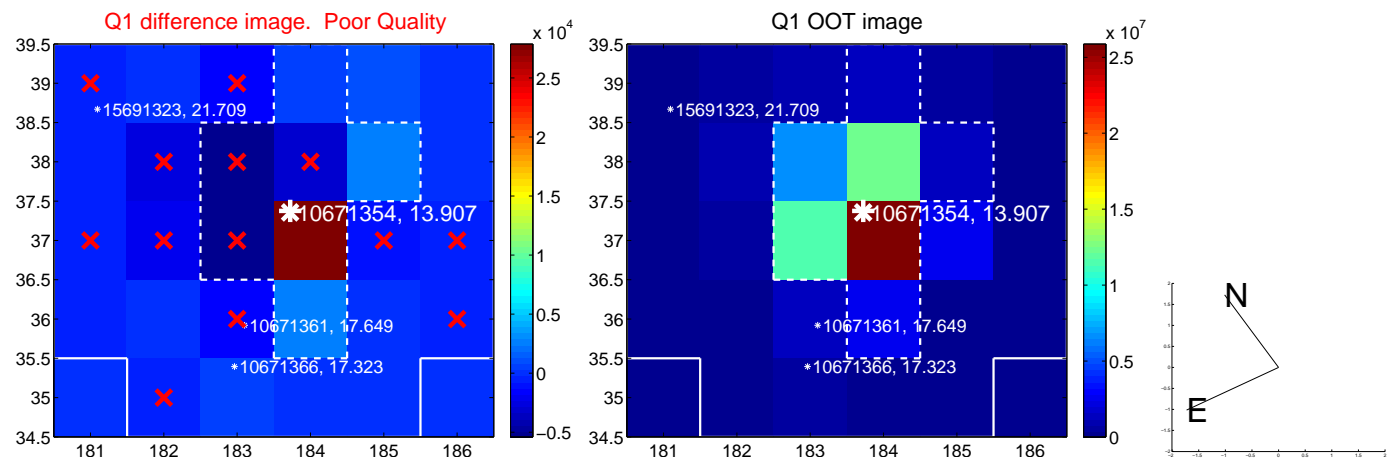


offset from photometric centroids

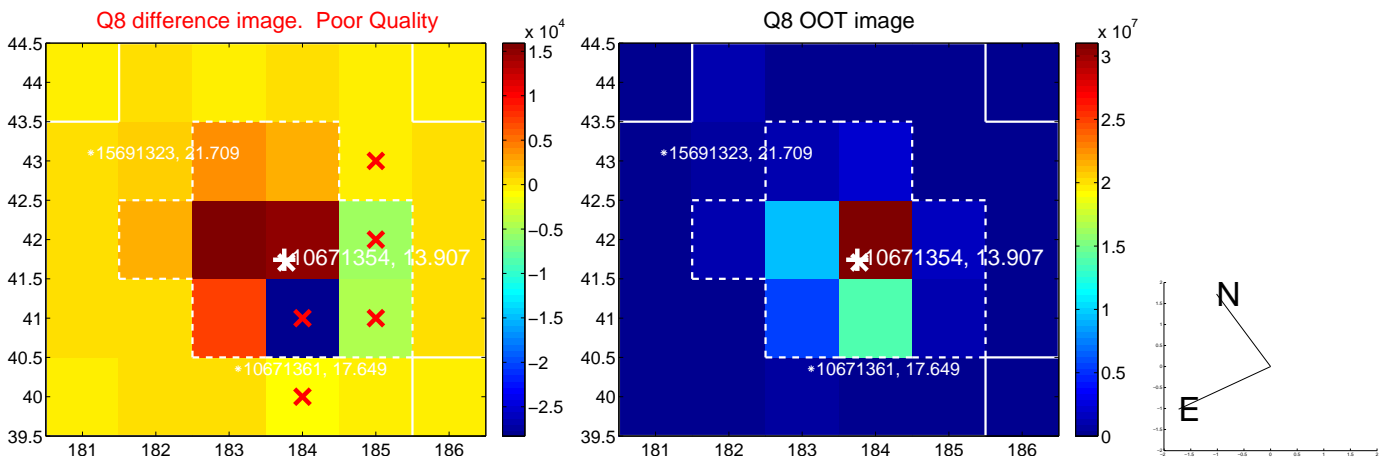
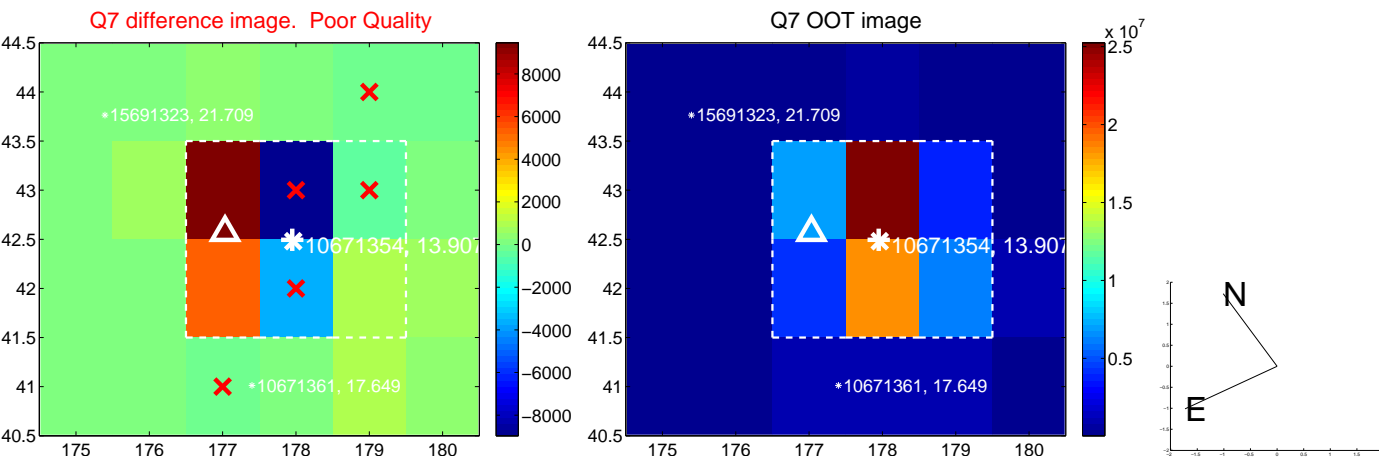
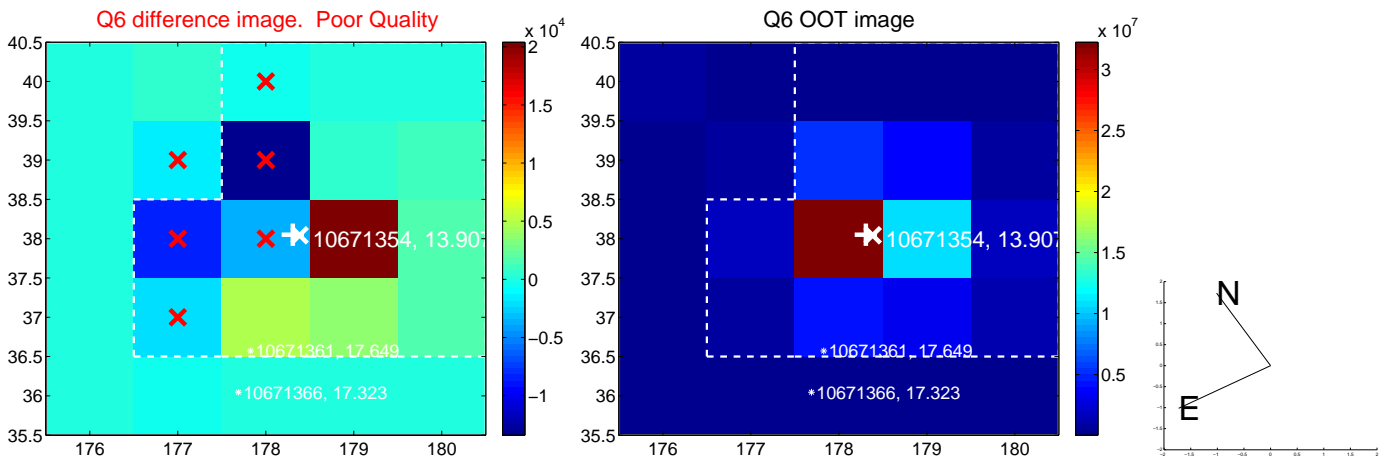
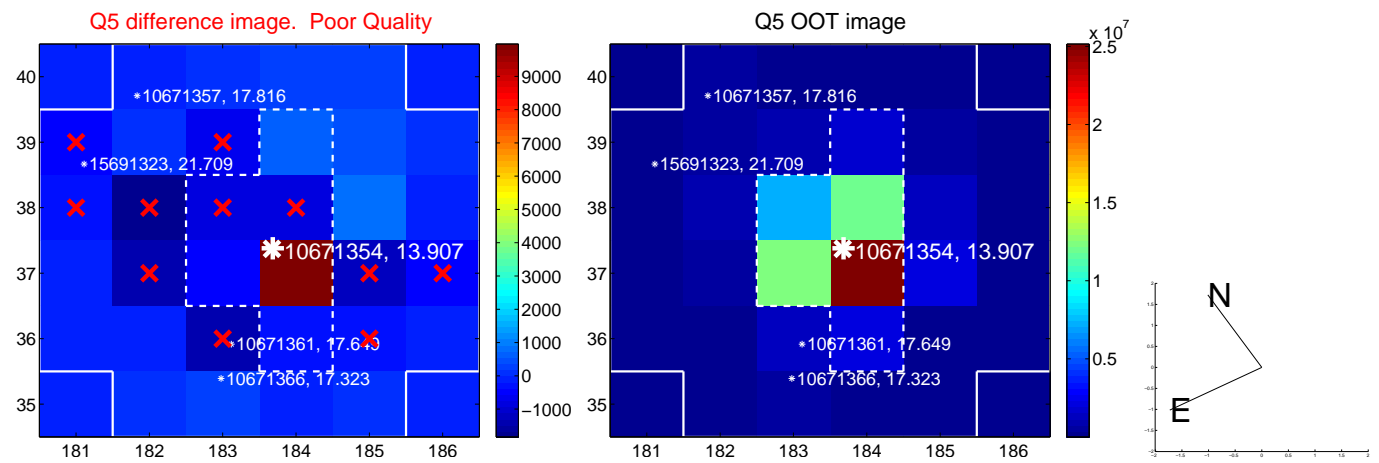


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

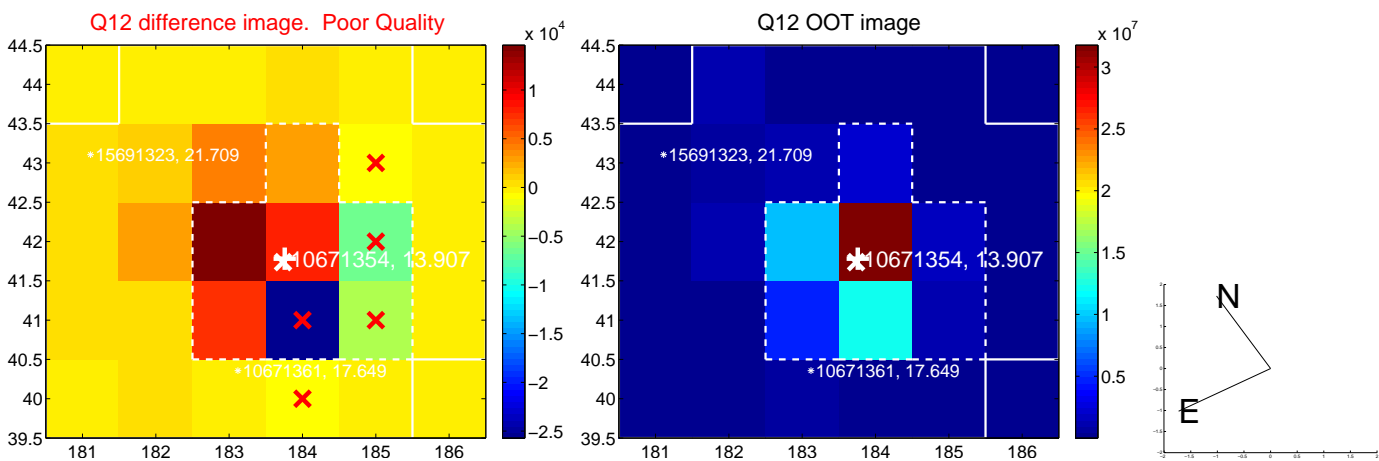
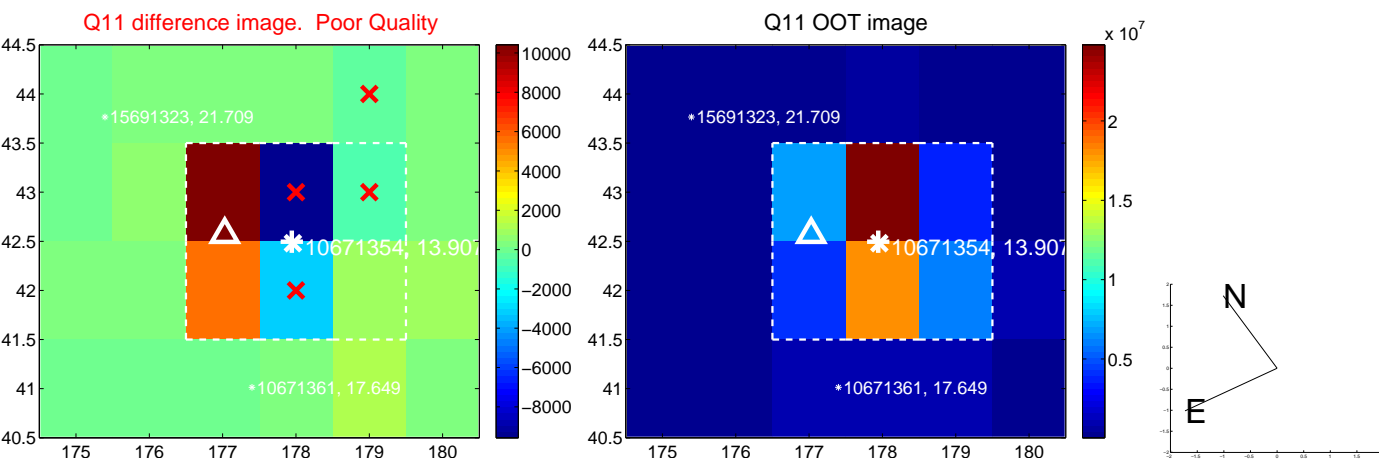
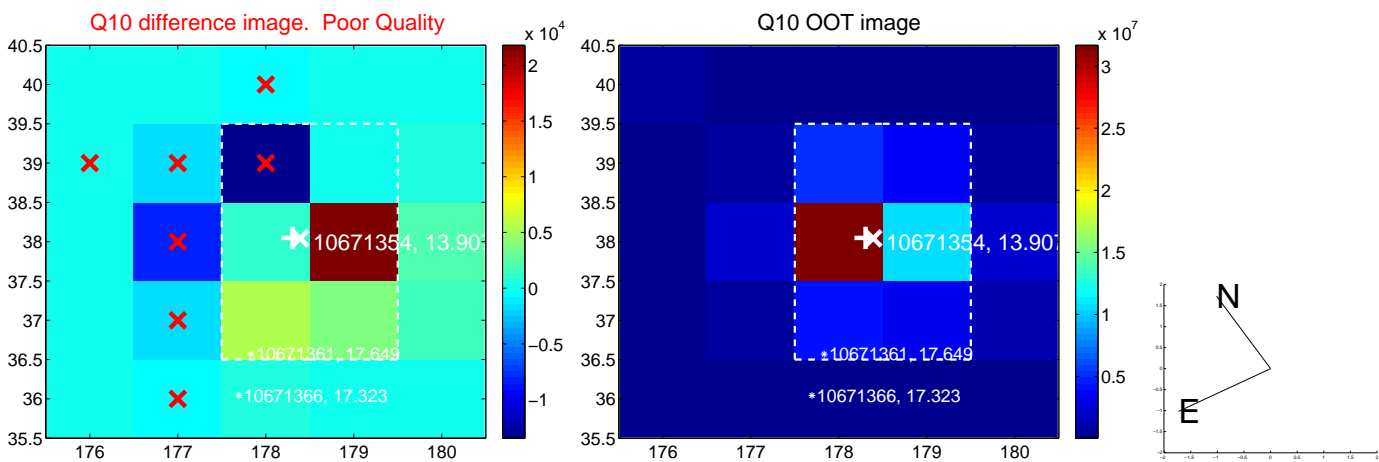
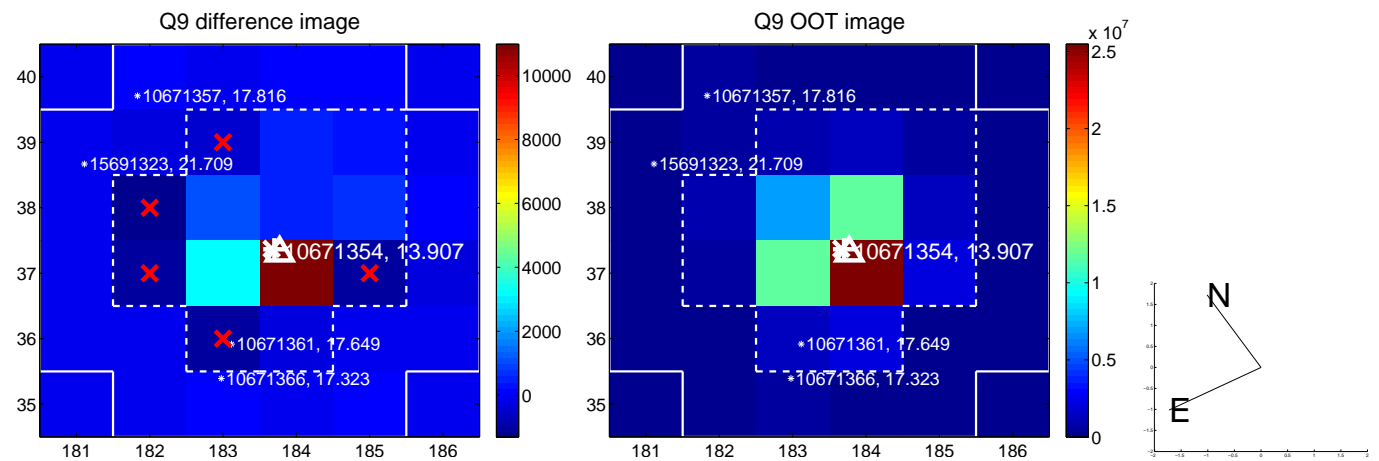
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



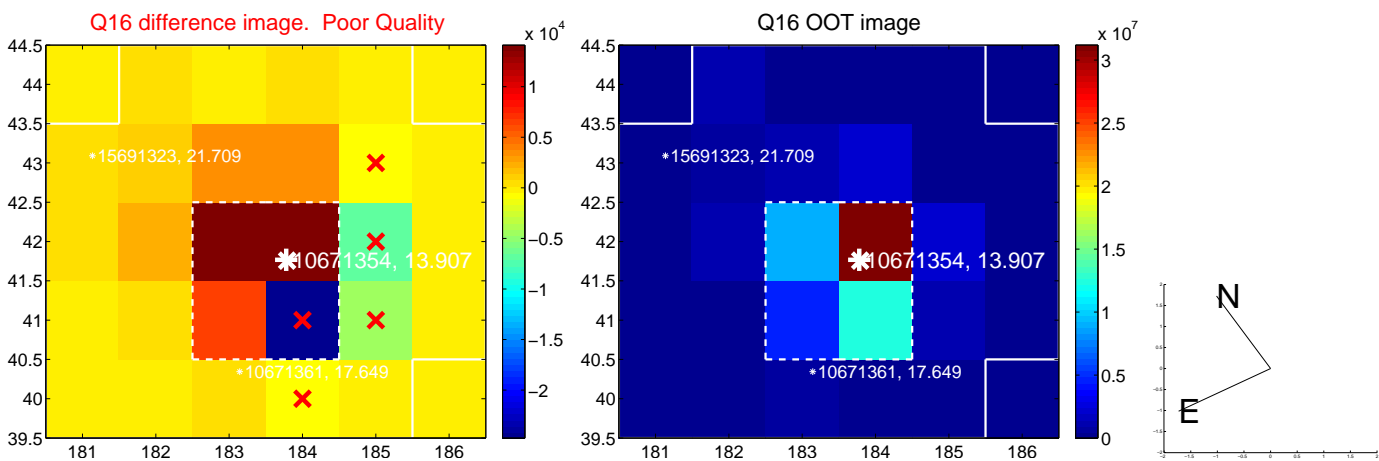
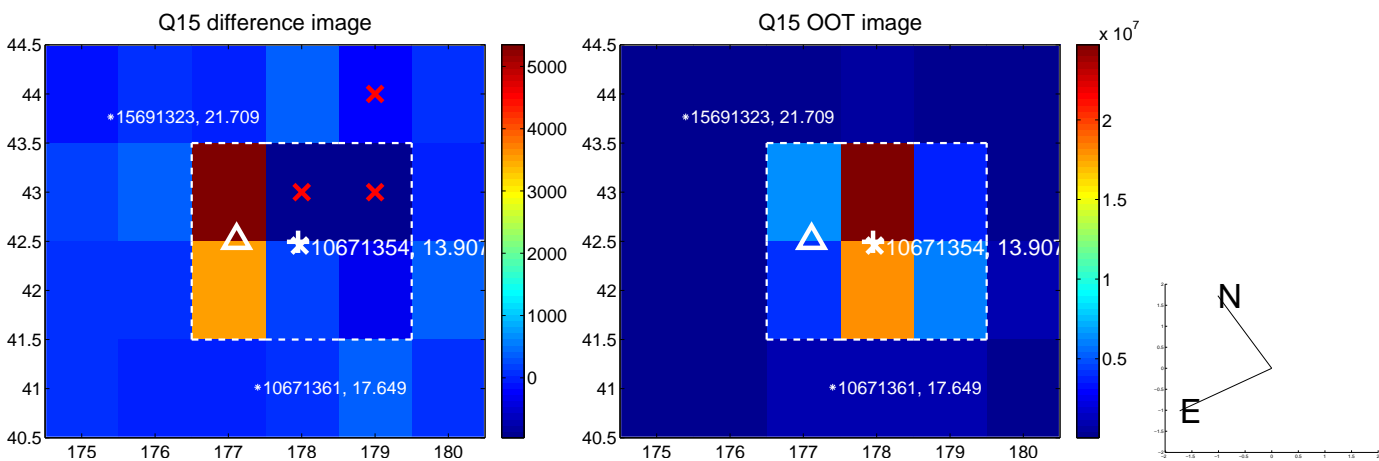
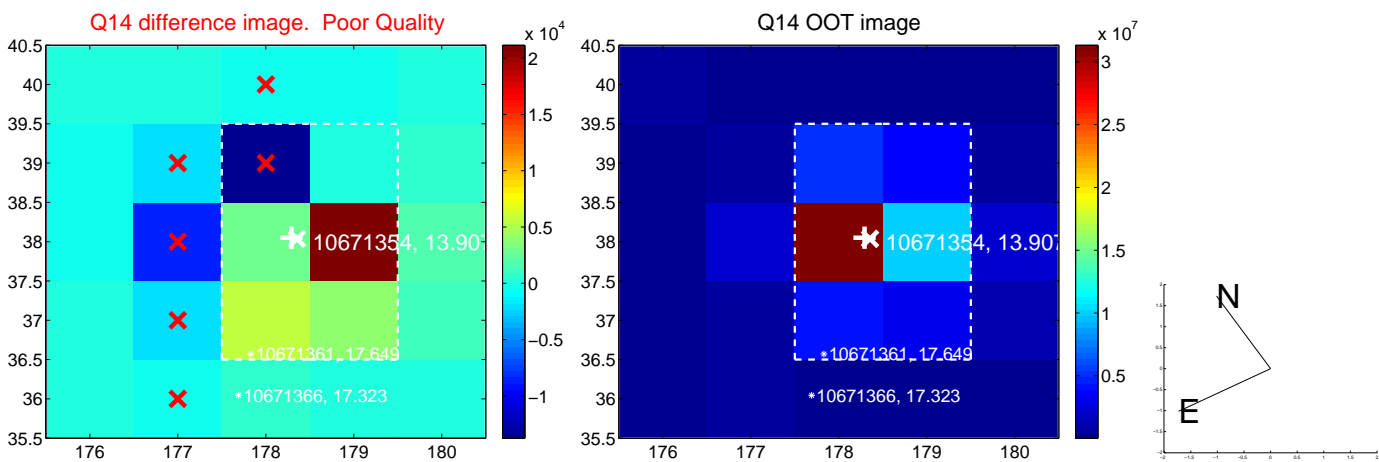
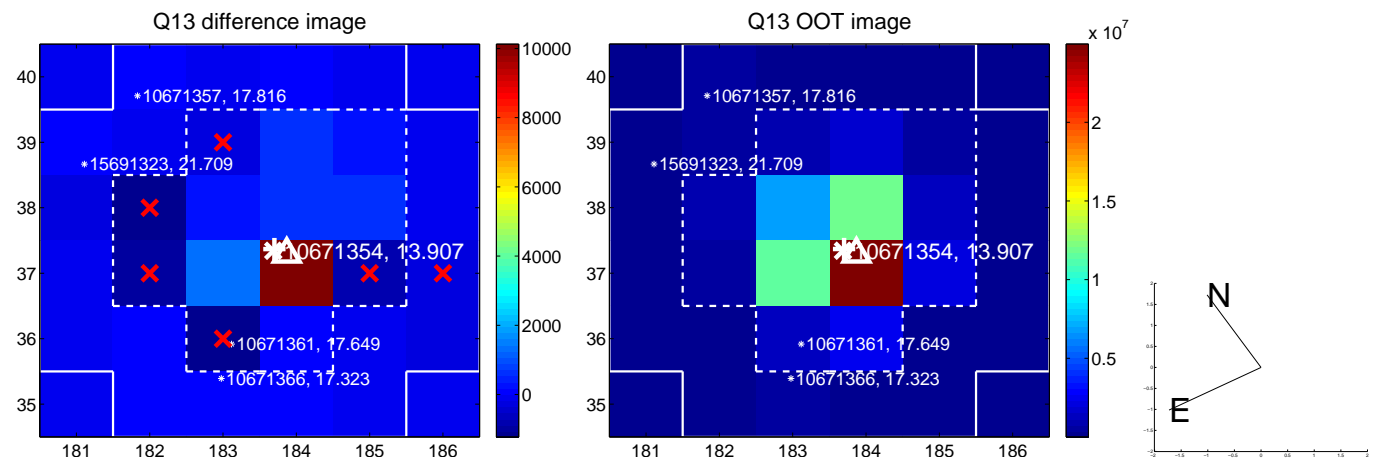
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



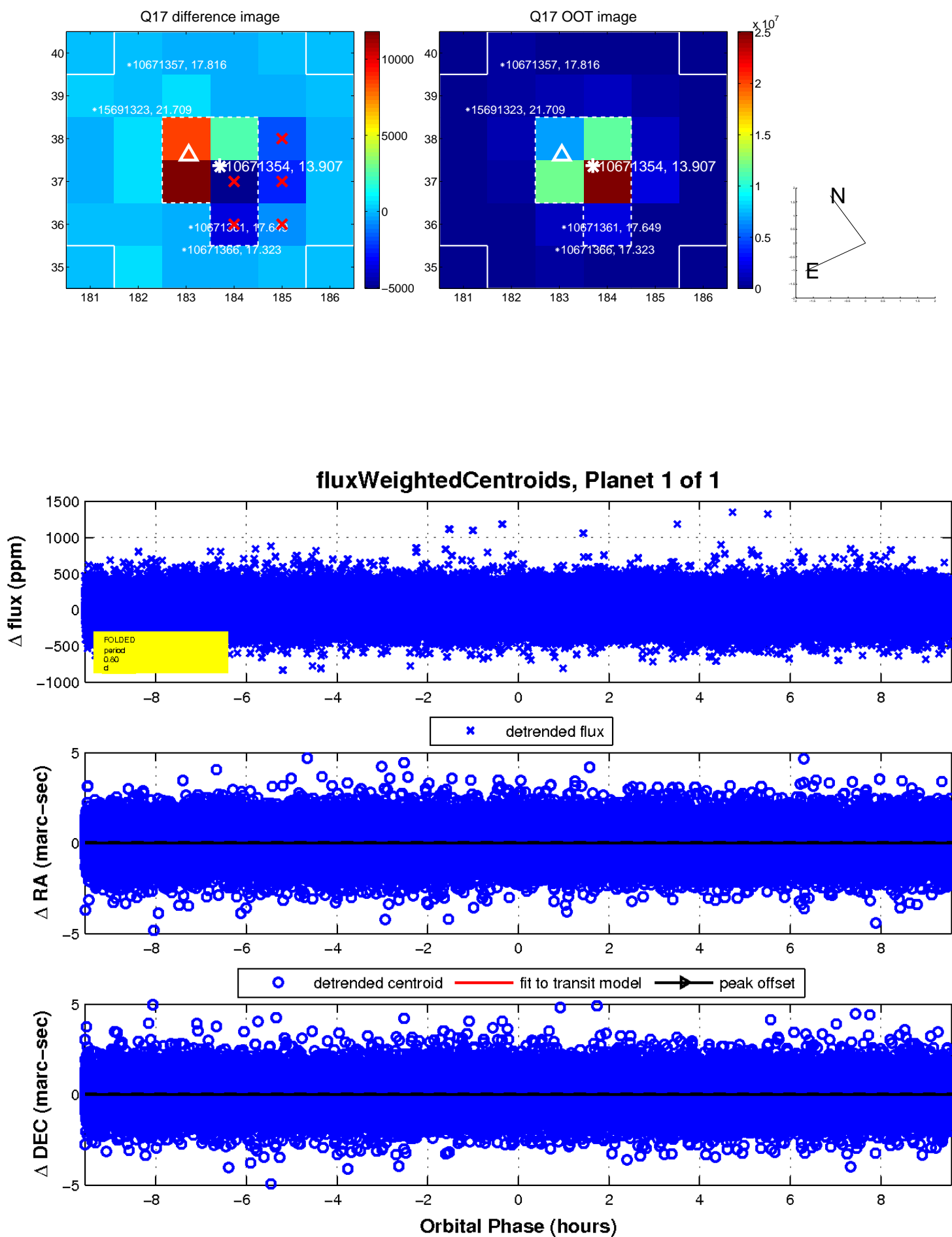
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

