

KIC 006032448

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})
006032448-01	OBS	No	1.226880	132.444126	1862.7	4.500	12.7	-1.0	0.75	4585	3.10	542.83

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006032448-01	OBS	FP	0.00	1	0	1	0	SWEET_NTL — LPP_DV — CENT_NOFITS — HALO_GHOST

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

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

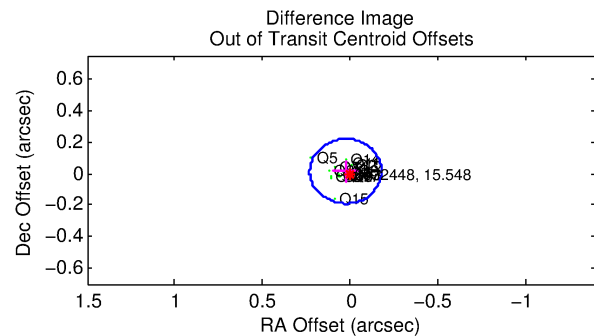
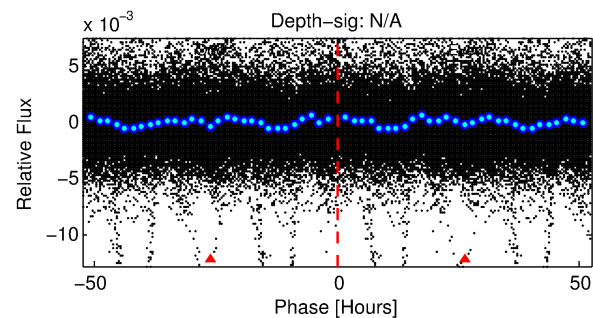
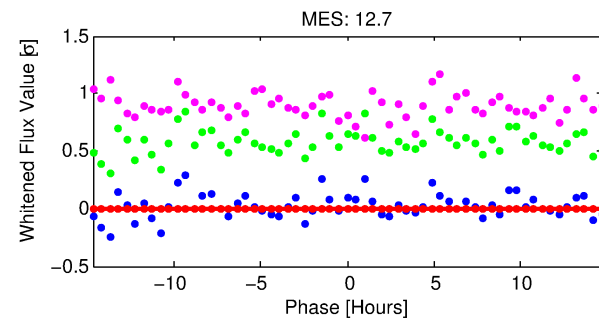
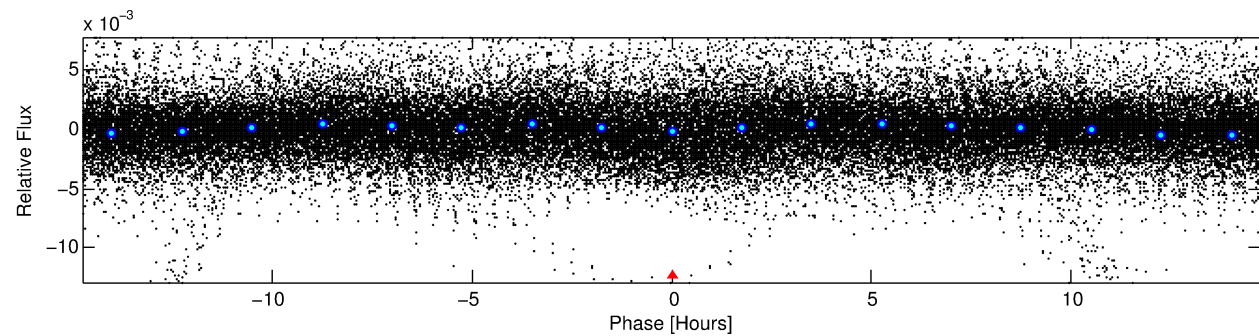
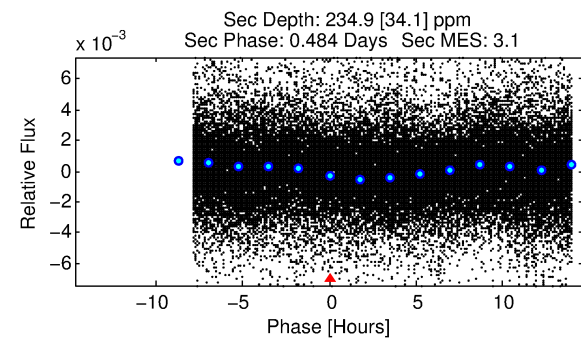
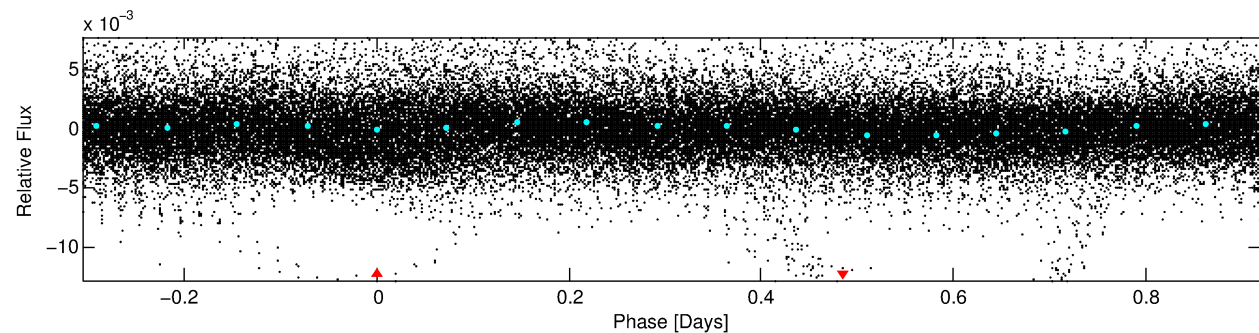
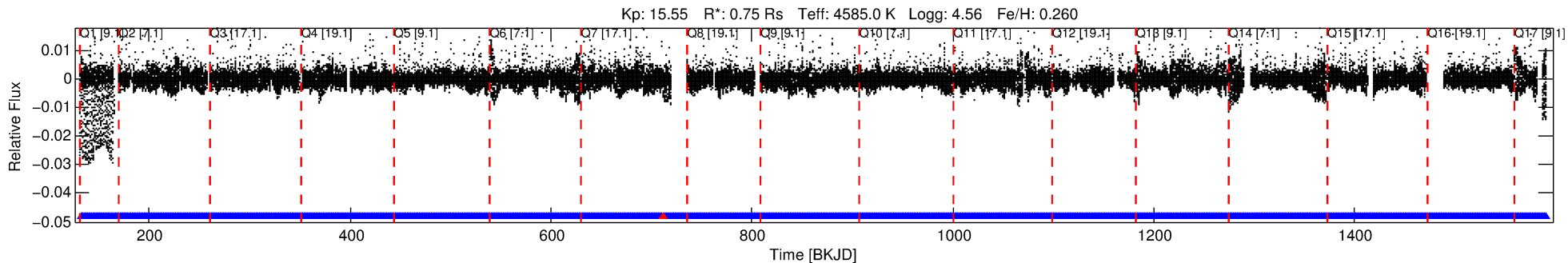
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006032448-01

No Significant Match Found

DV One-Page Summary

KIC: 6032448 Candidate: 1 of 1 Period: 1.227 d



TPS TCE Results:

Period = 1.22688 d
Epoch = 132.4441 BKJD

DV fit results are unavailable

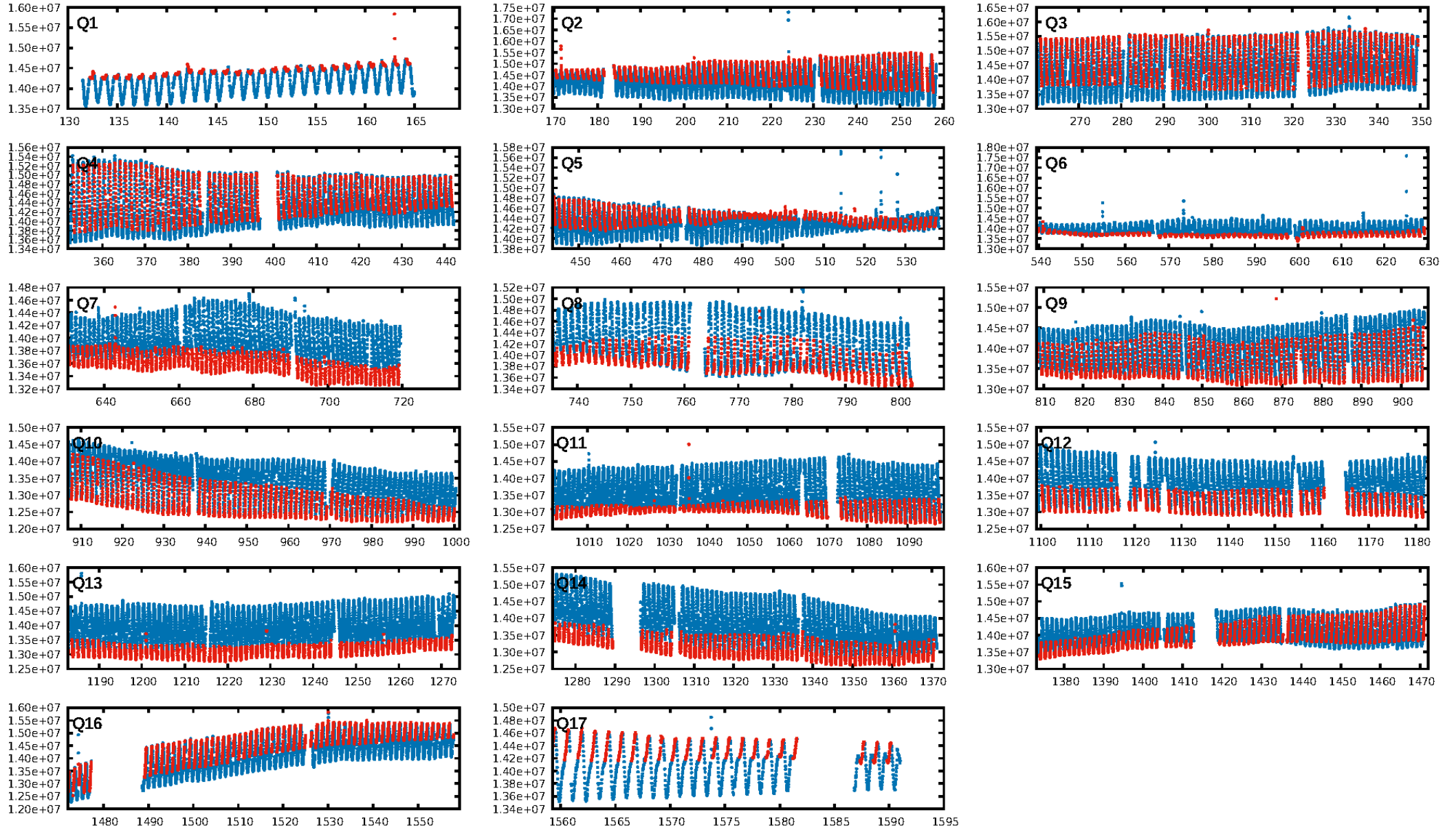
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 4.03e-26
RollingBand-fgt: 1.00 [1049/1050]
GhostDiagnostic-chr: -0.2277
Centroid-sig: 0.0%
Centroid-so: 0.318 arcsec [21.10σ]
OotOffset-rm: 0.031 arcsec [0.46σ]
KicOffset-rm: 0.270 arcsec [3.89σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 0.59 [10/17]
DiffImageOverlap-fno: 1.00 [17/17]

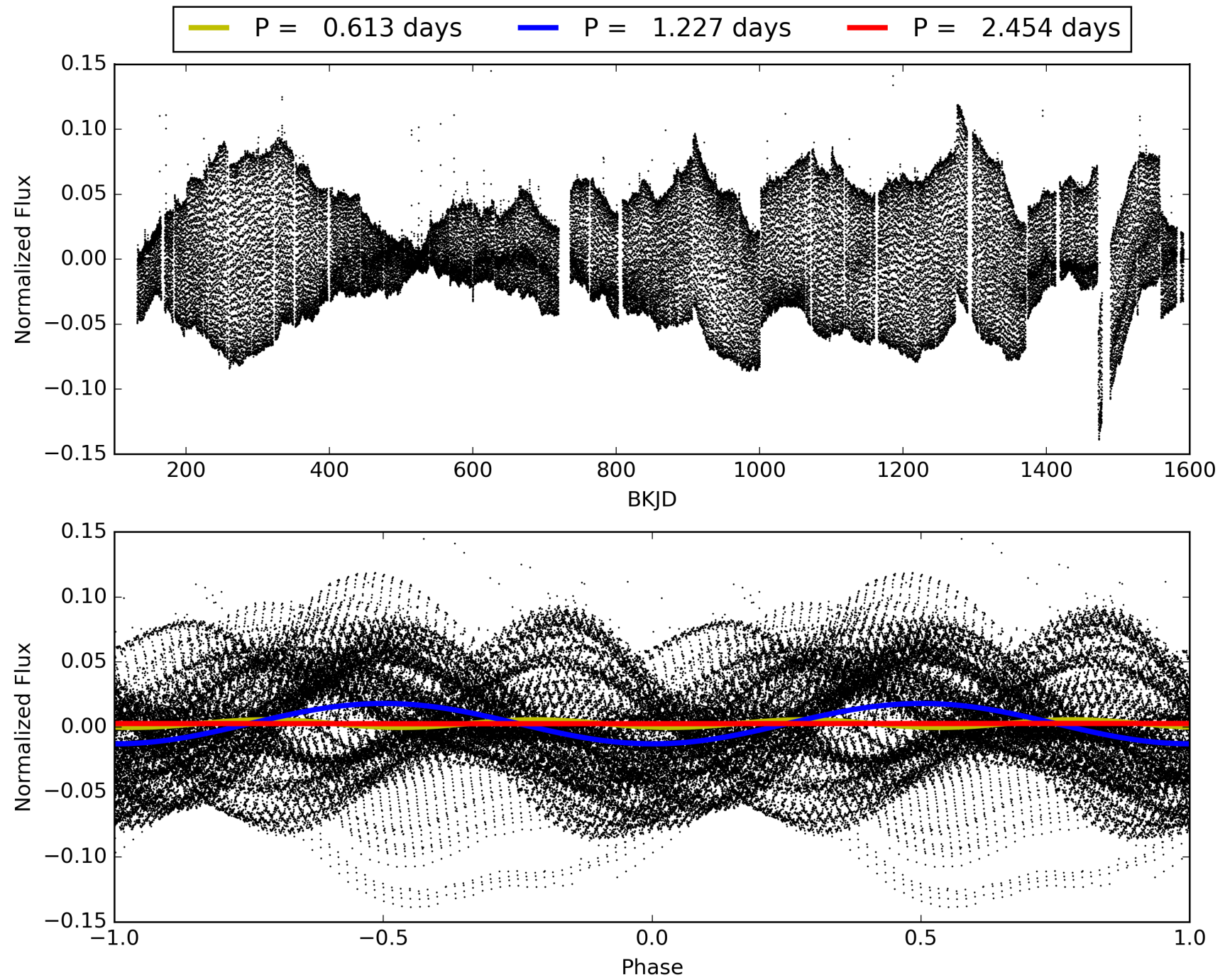
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 05:10:22 Z

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

TCE 006032448-01, PDC Light Curves

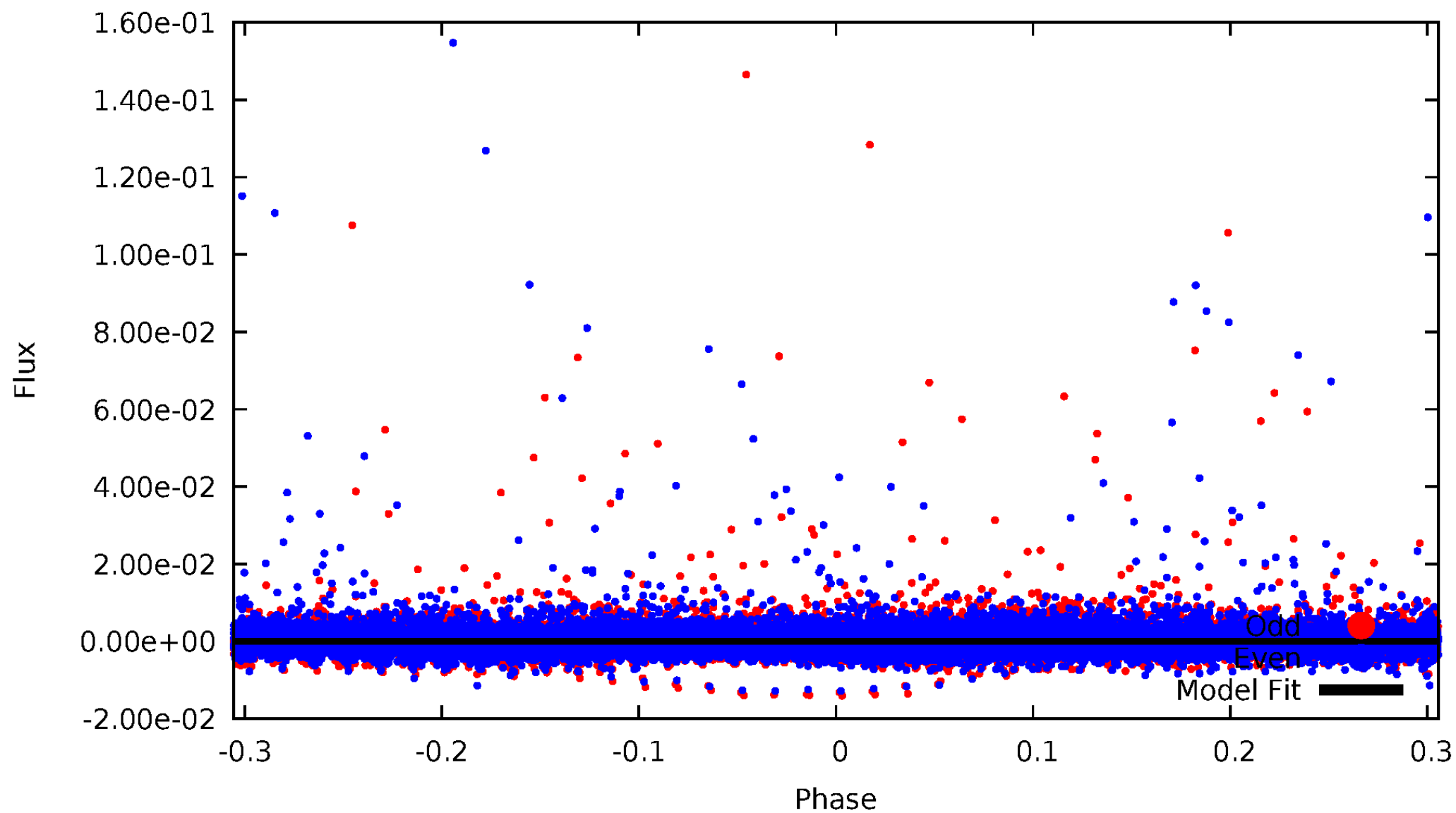


TCE 006032448-01



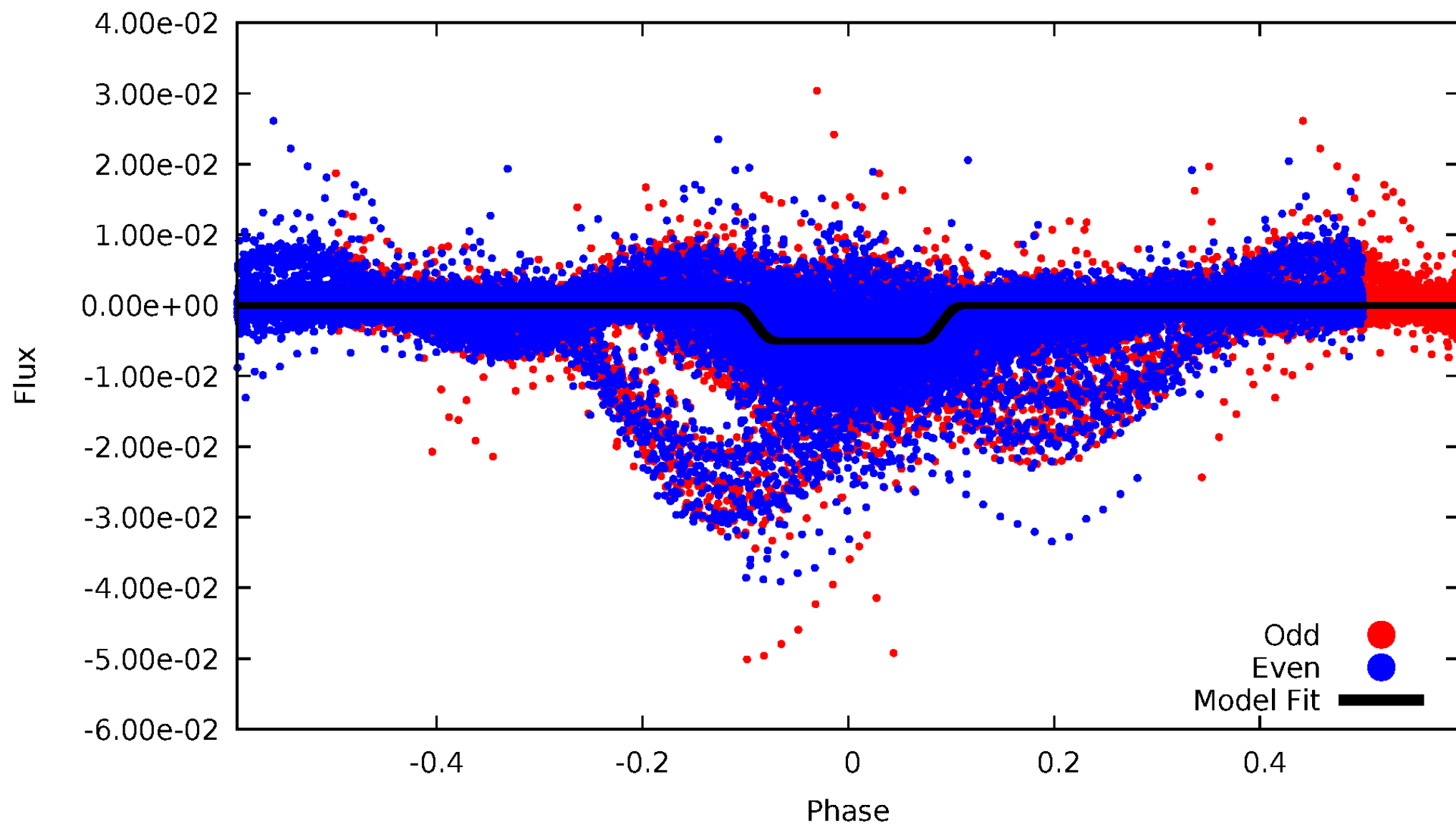
DV Odd/Even

TCE 006032448-01



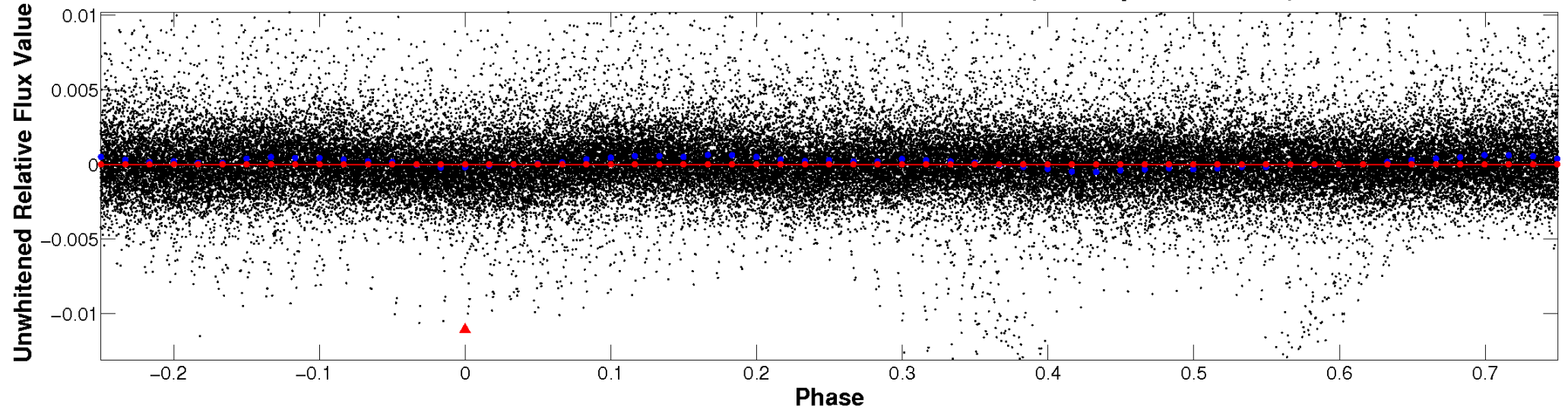
ALT Odd/Even

TCE 006032448-01

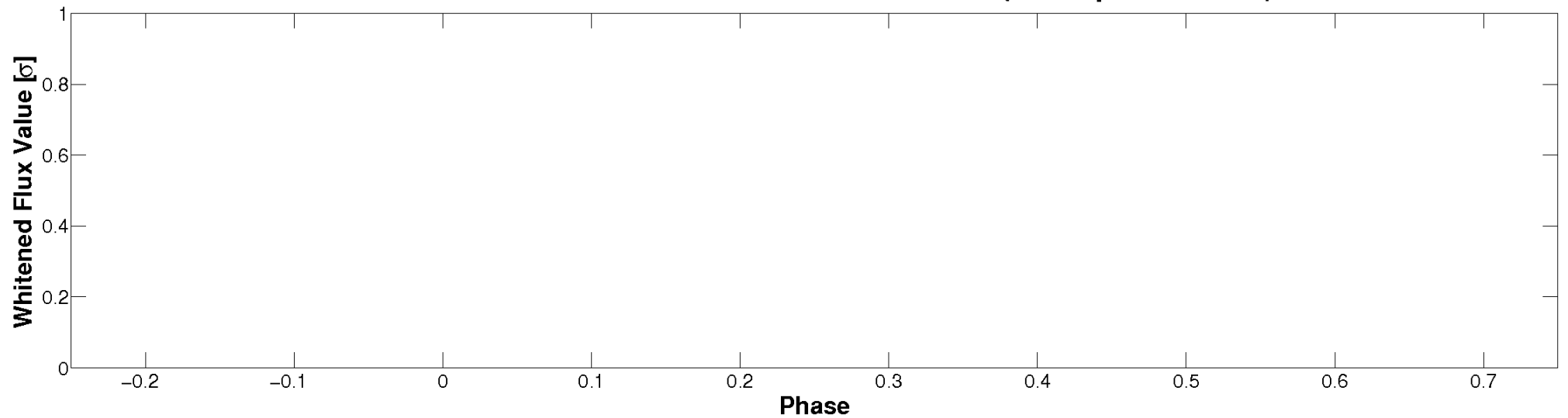


Non-Whitened Vs. Whitened Light Curve

Planet 1 : Phased Unwhitened Flux Time Series (TPS Epoch/Period)

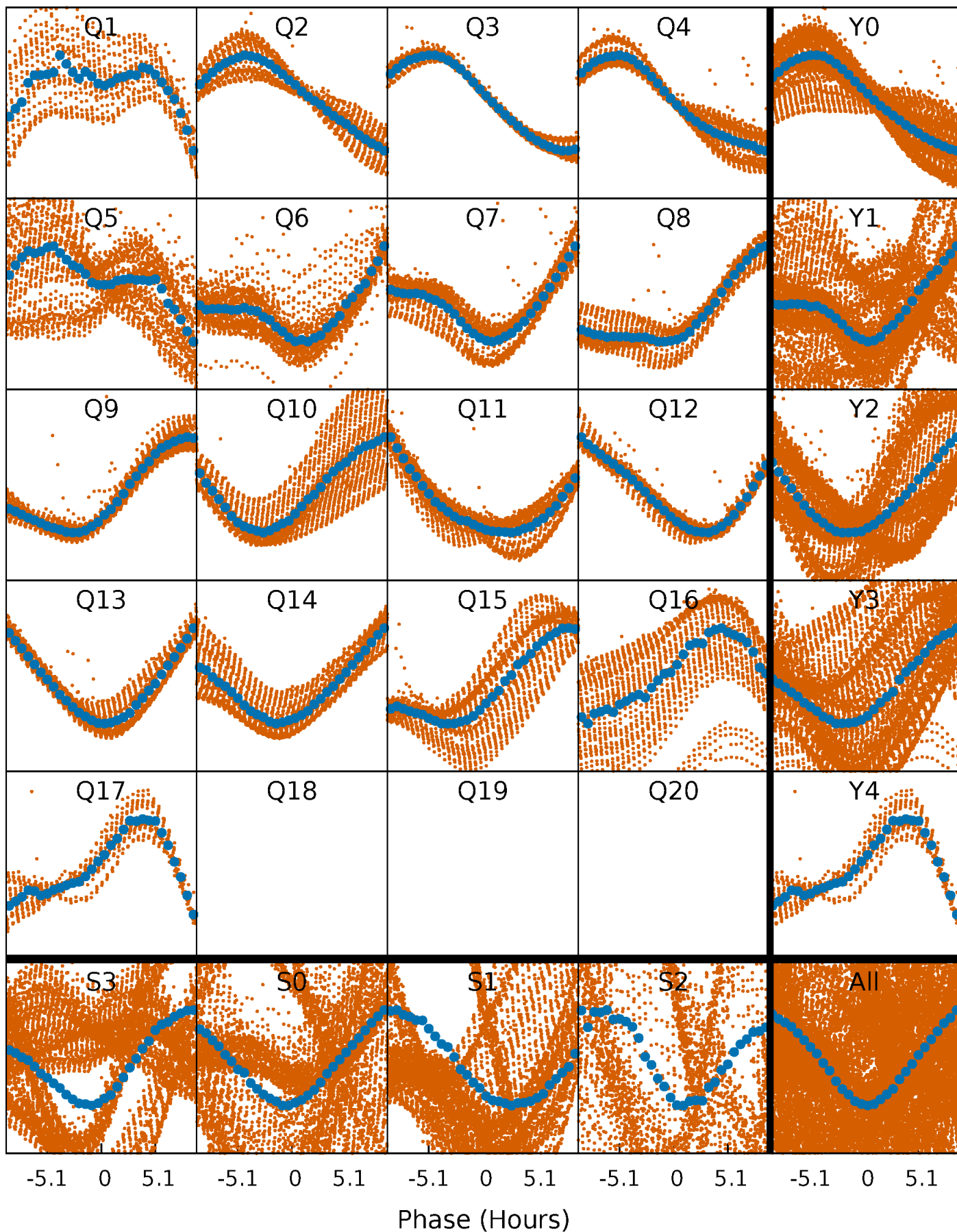


Planet 1 : Phased Whitened Flux Time Series (TPS Epoch/Period)



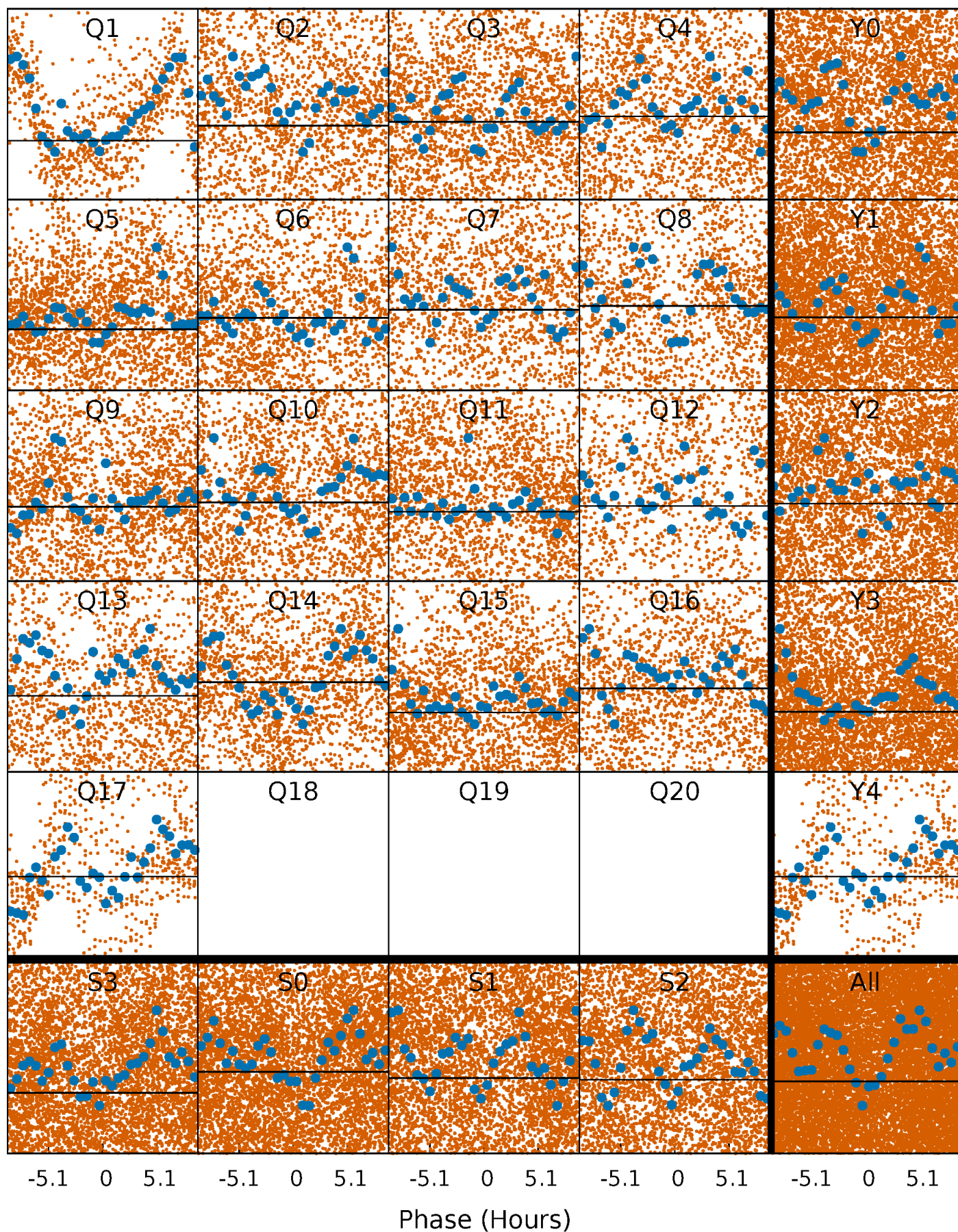
PDC Quarter-Phased Transit Curves

TCE 006032448-01 P= 1.226880 Days $T_0=132.444126$ (BKJD)



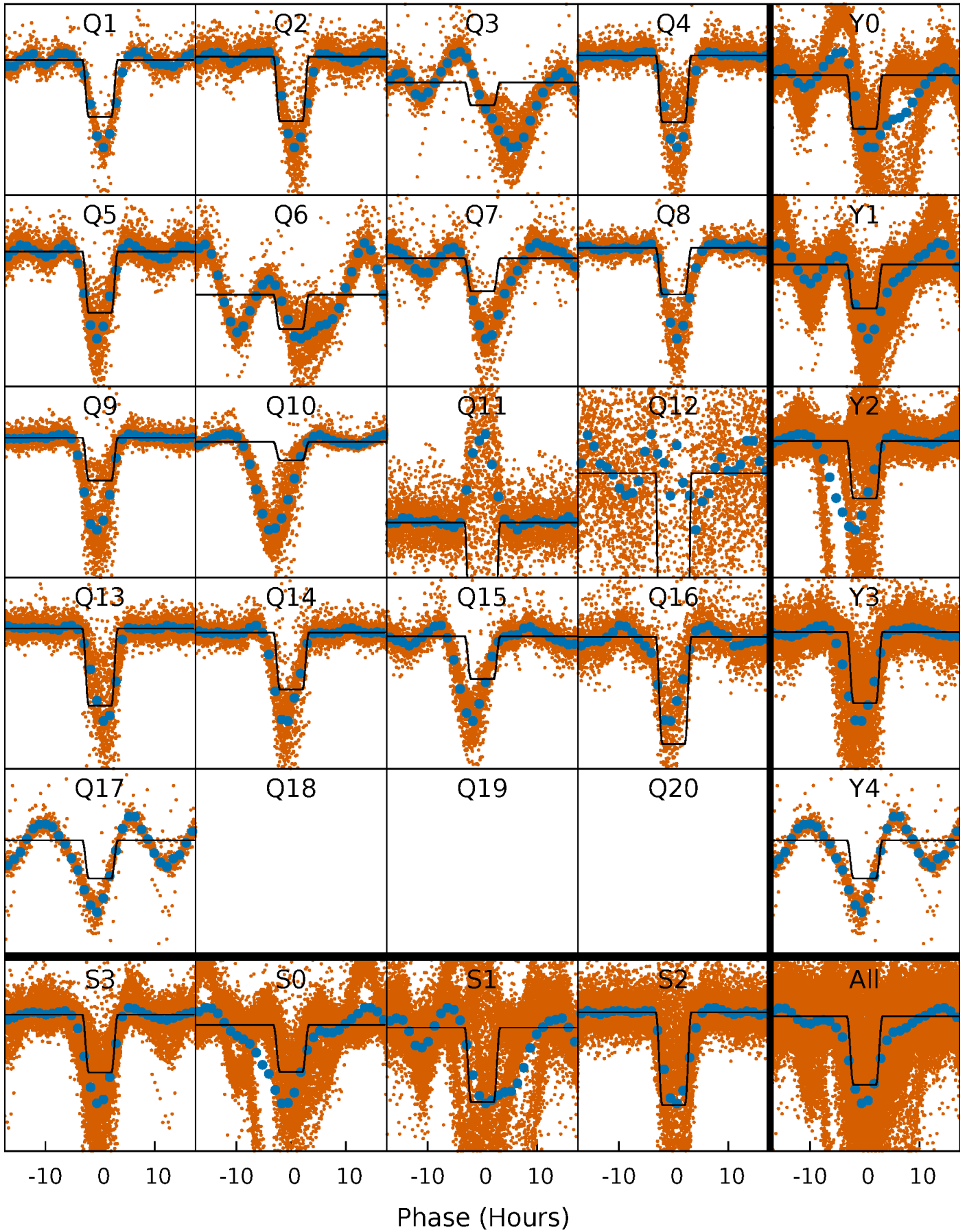
DV Quarter-Phased Transit Curves

TCE 006032448-01 P= 1.226880 Days $T_0=132.444126$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

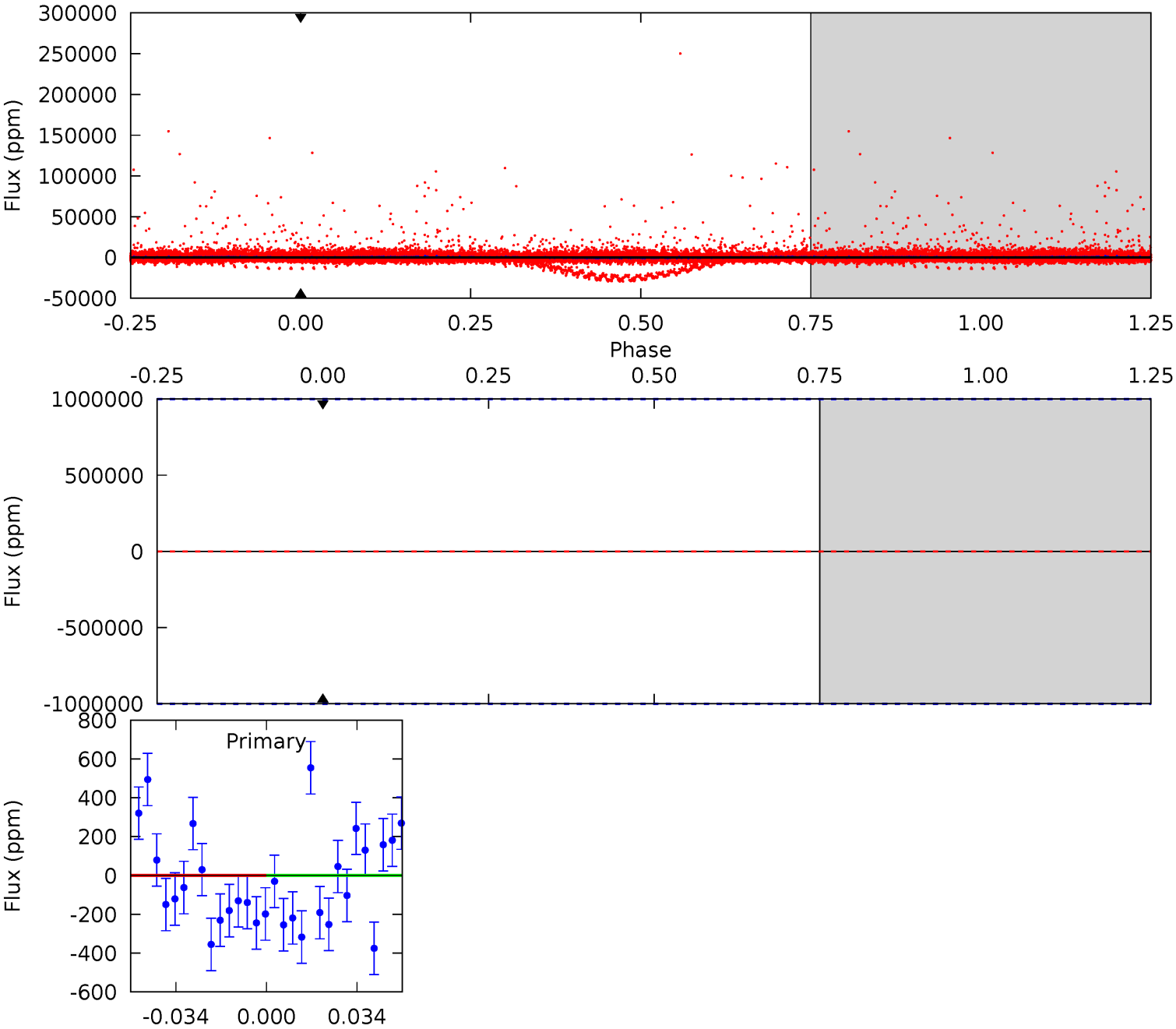
TCE 006032448-01 P= 1.226880 Days $T_0=132.447589$ (BKJD)



DV Model-Shift Uniqueness Test

006032448-01, P = 1.226880 Days, E = 131.217246 Days

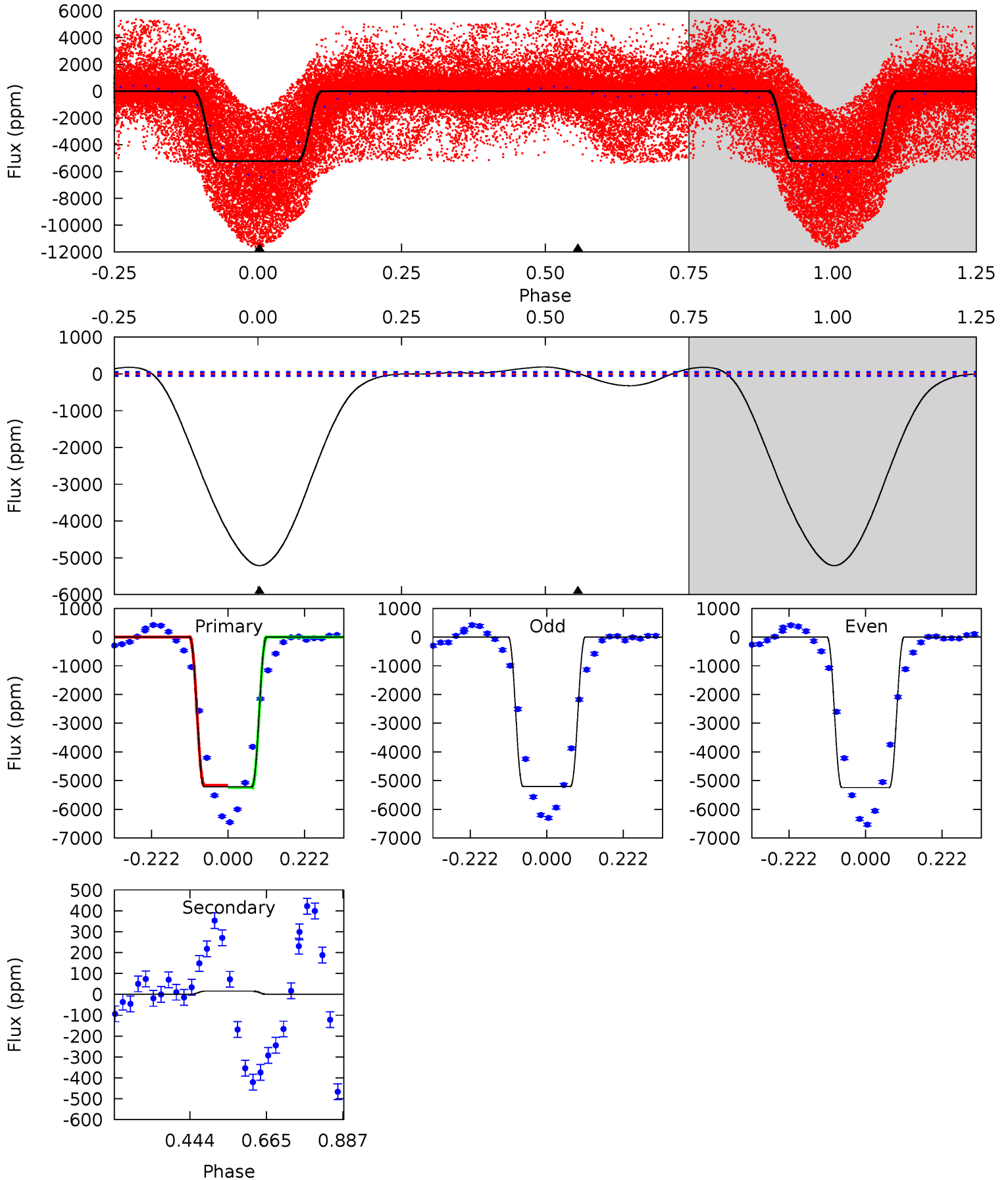
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

006032448-01, P = 1.226880 Days, E = 131.220709 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
439.3	-1.29	0	0	4.39	1.22	2.51	439.3	439.3	-1.29	-1.29	1.58	1.04	0.03	3.38



Stellar Parameters For KIC 006032448

	$T_{\text{eff}}(K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	4585^{+152}_{-152}	$4.556^{+0.064}_{-0.024}$	$0.260^{+0.150}_{-0.300}$	$0.752^{+0.031}_{-0.067}$	$0.741^{+0.049}_{-0.053}$	$2.453^{+0.672}_{-0.203}$
	+3%/-3%	+1%/-1%	+58%/-115%	+4%/-9%	+7%/-7%	+27%/-8%
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 006032448-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	0 ± 1000000	$7.00^{+6.77}_{-4.65}$	1710^{+59}_{-63}	-3746^{+15227}_{-6847}	$-10.958^{+922.586}_{-740.465}$
Alt.	15 ± 12	$7.90^{+6.87}_{-5.35}$	1705^{+58}_{-62}	-2331^{+77}_{-231}	$-0.044^{+0.038}_{-0.446}$

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

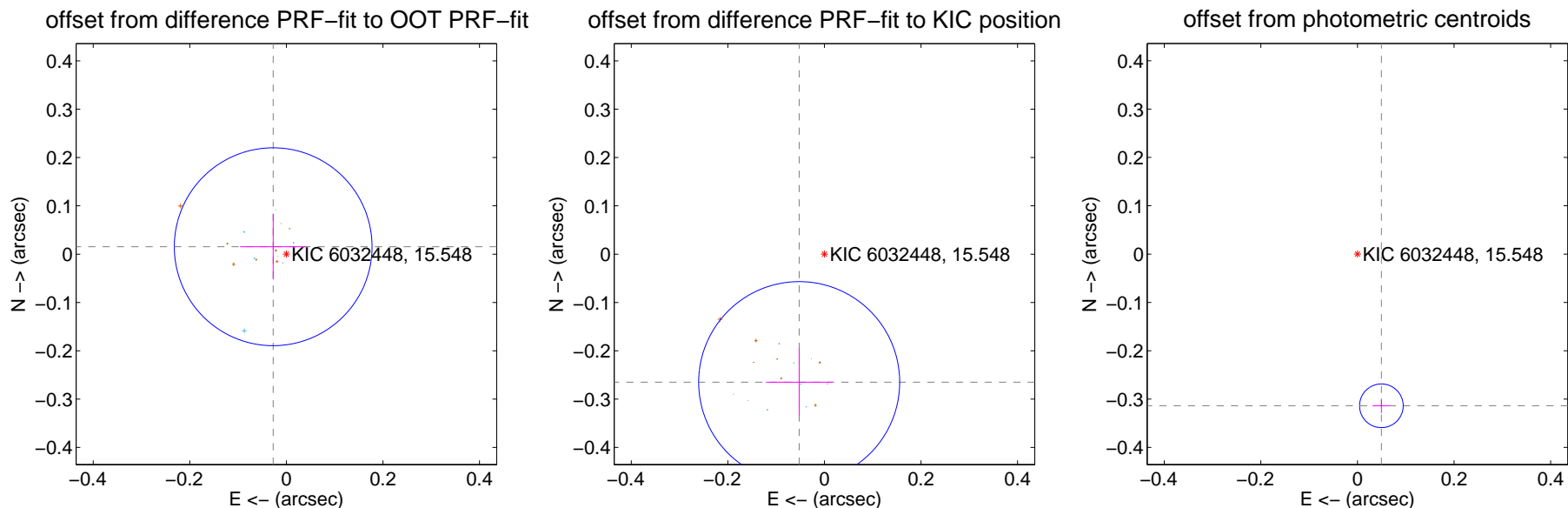
DV Centroid Data

Supplemental centroid analysis for 006032448-01. Kepler magnitude: 15.55. Transit SNR -1.00

There are 10 quarters with good PRF difference image offsets

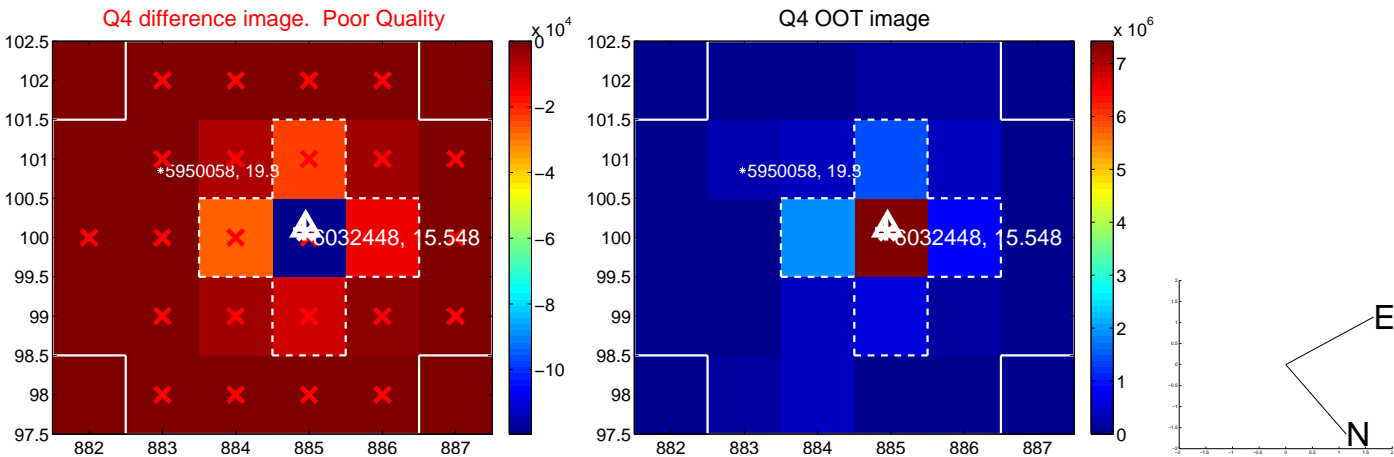
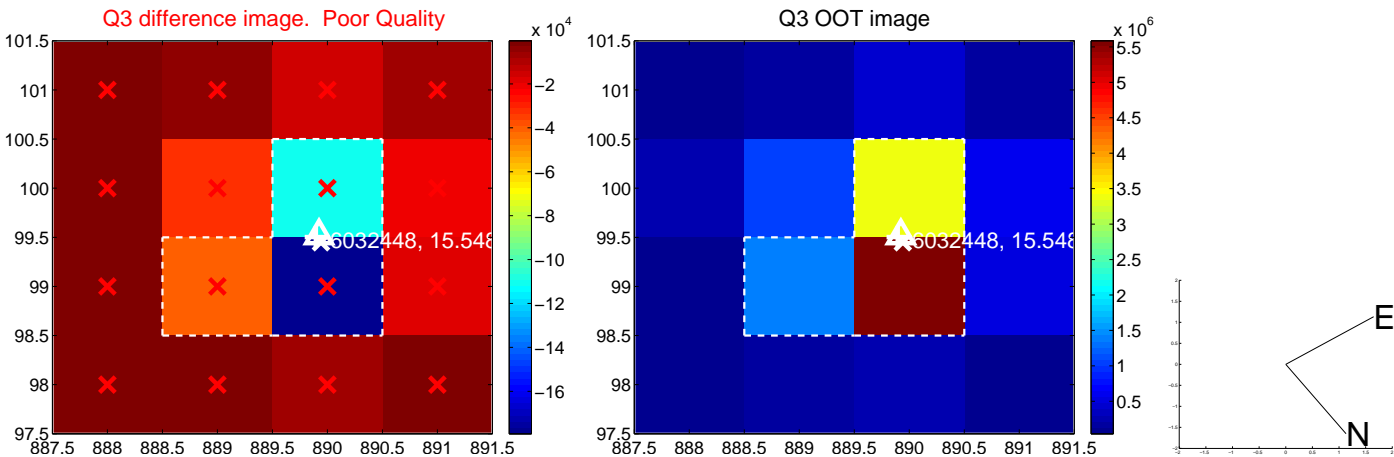
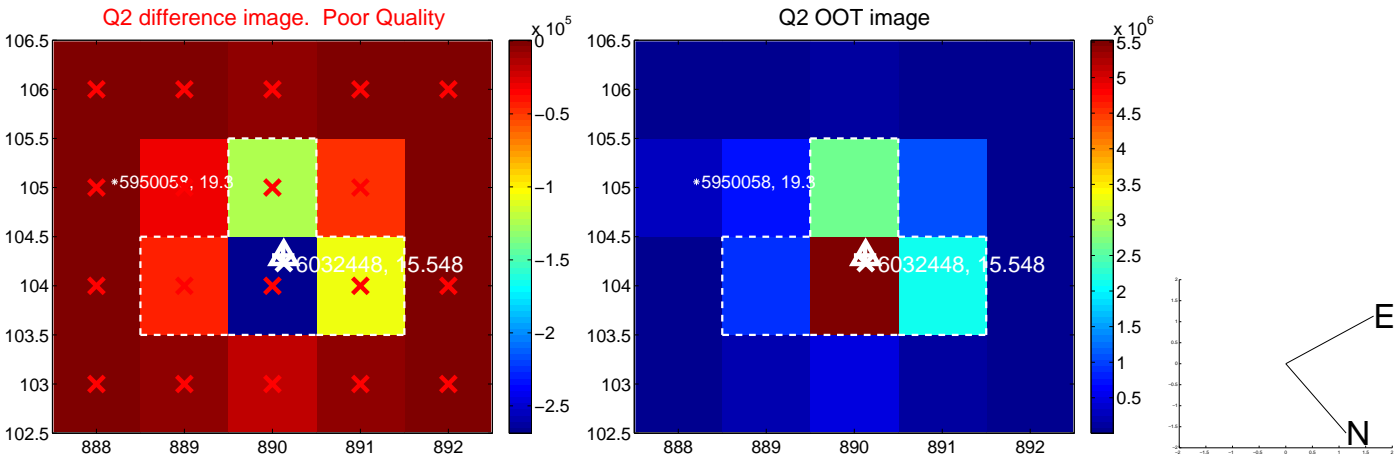
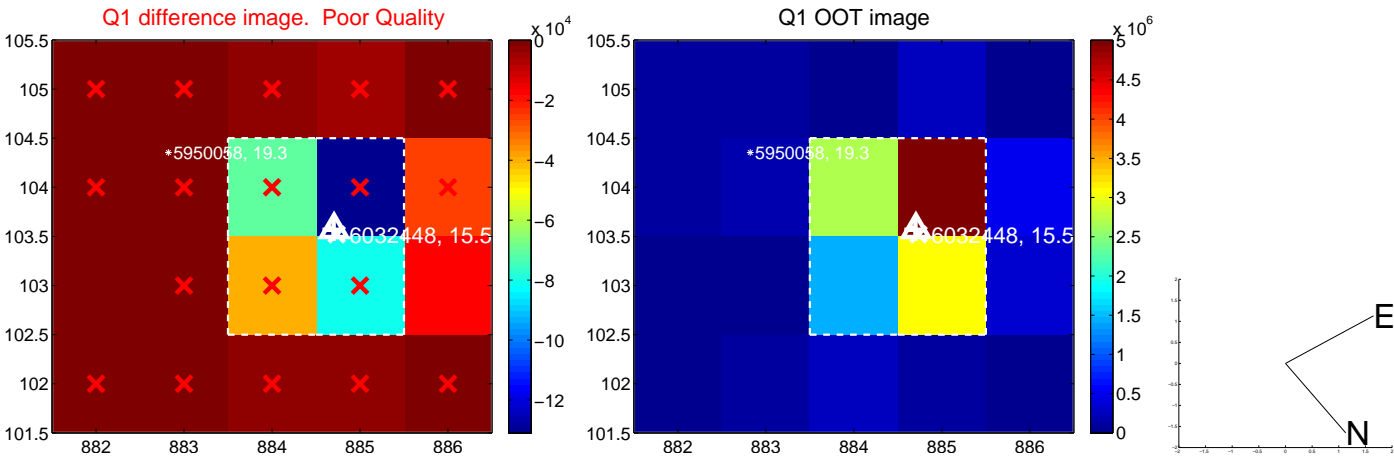
The direct PRF centroid is offset from the target star catalog position by about 0.30 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.031 ± 0.068	0.46	0.027 ± 0.068	0.015 ± 0.068
PRF-fit source offset from KIC position	0.270 ± 0.069	3.89	0.052 ± 0.069	-0.265 ± 0.070
photometric centroid source offset	0.32 ± 0.02	21.10	-0.05 ± 0.02	-0.31 ± 0.01

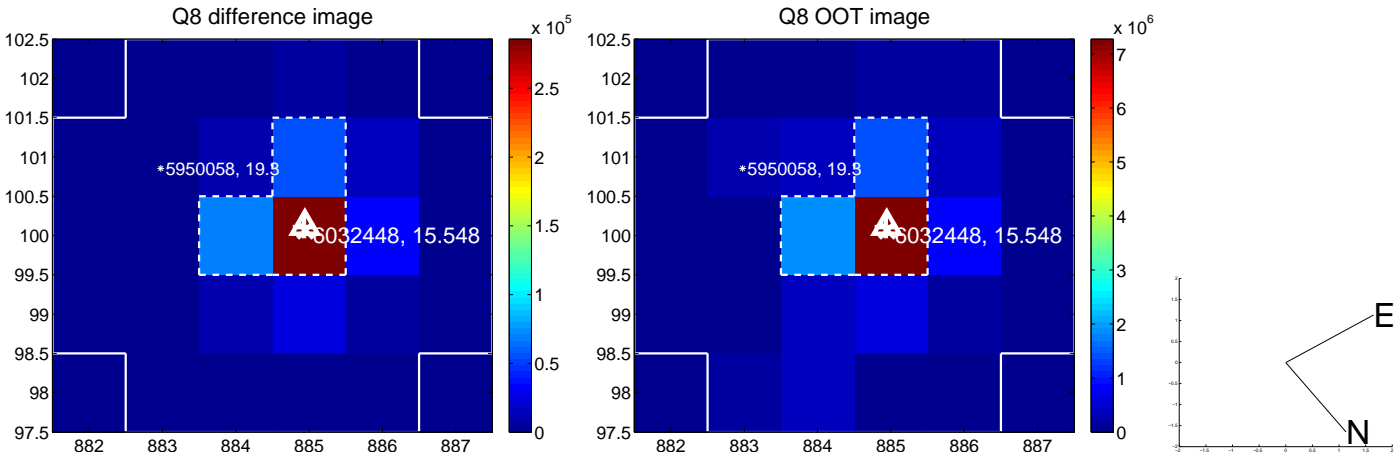
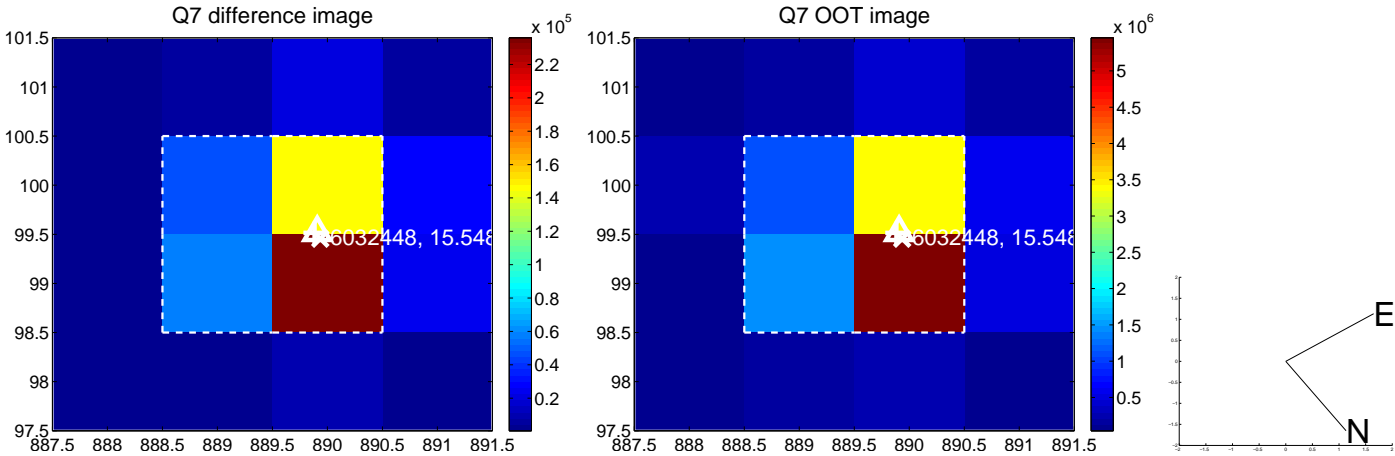
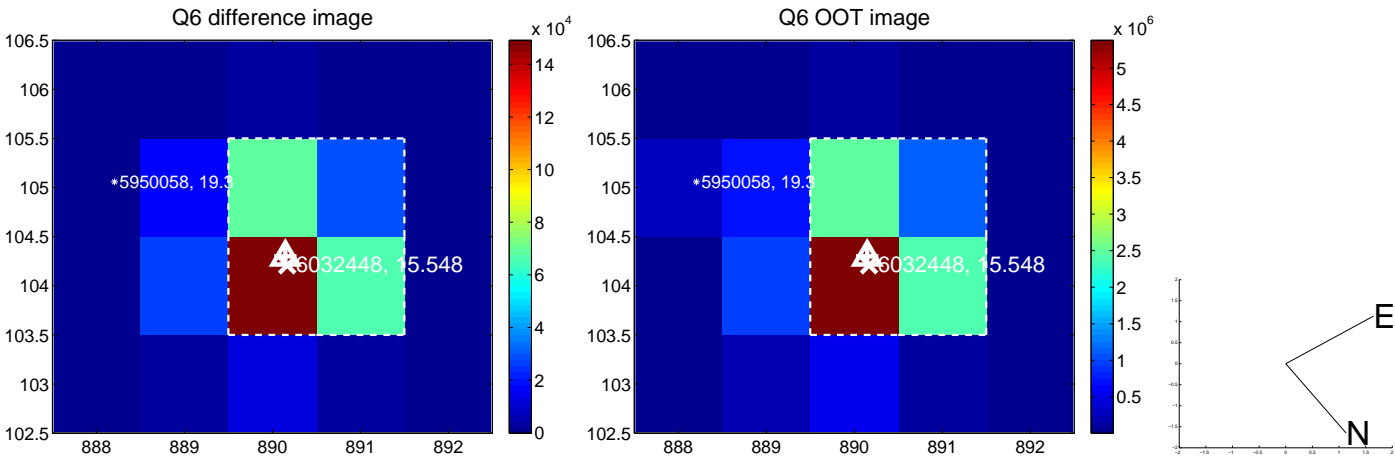
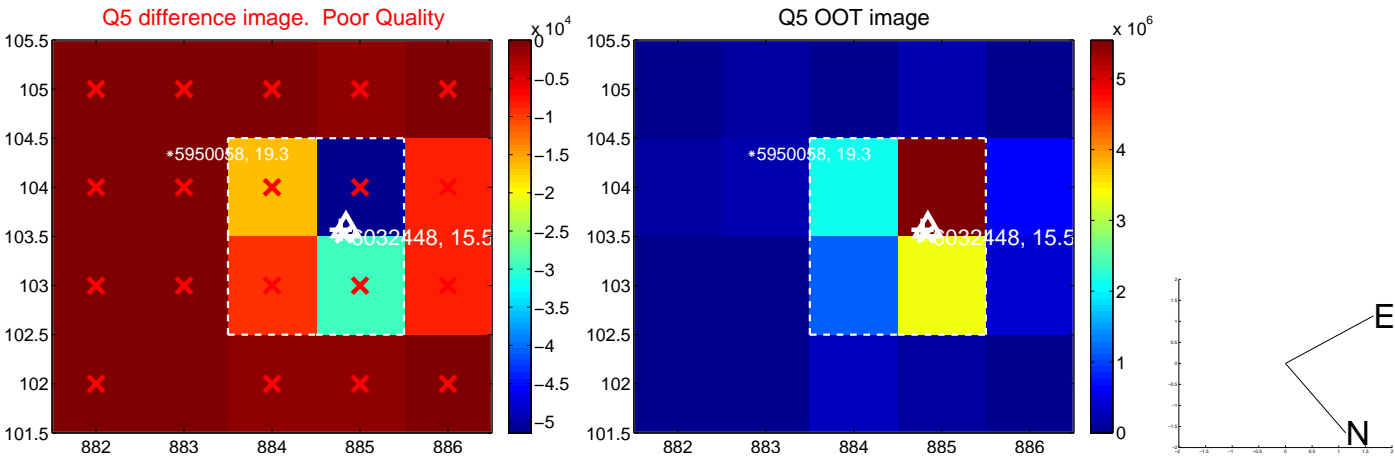


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

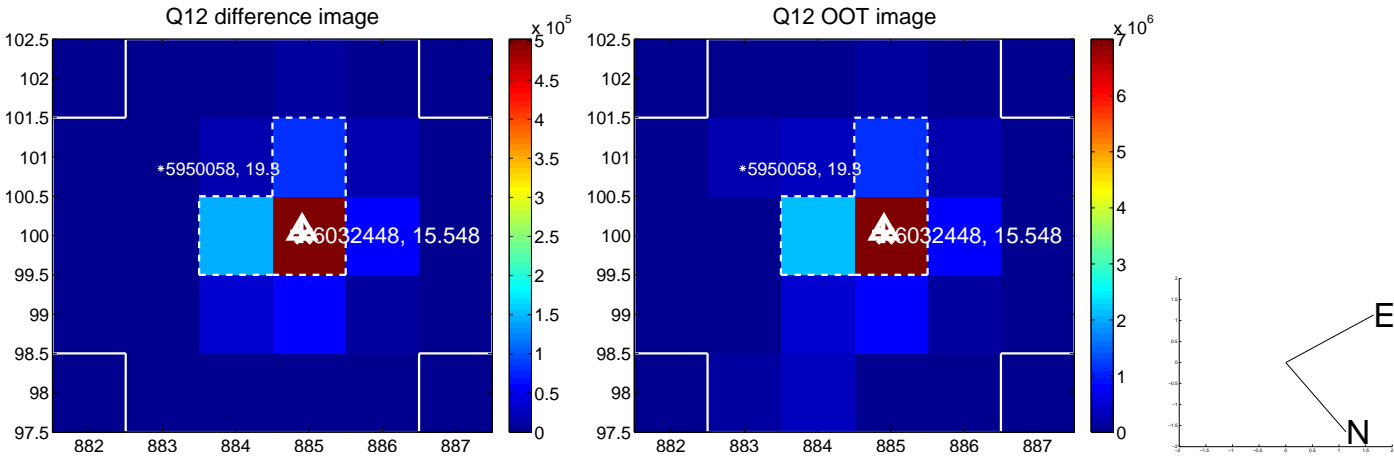
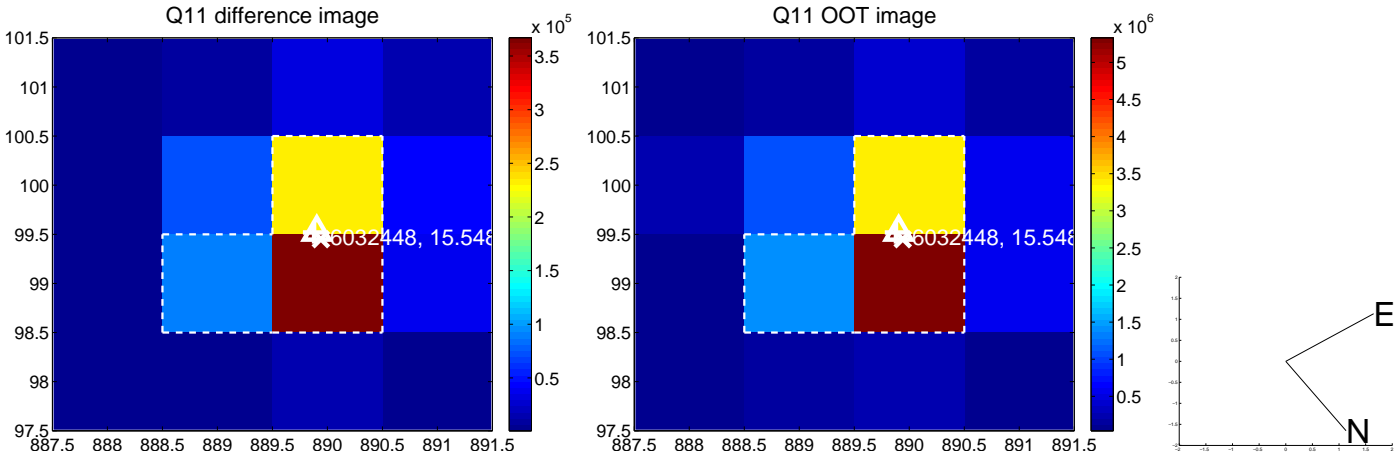
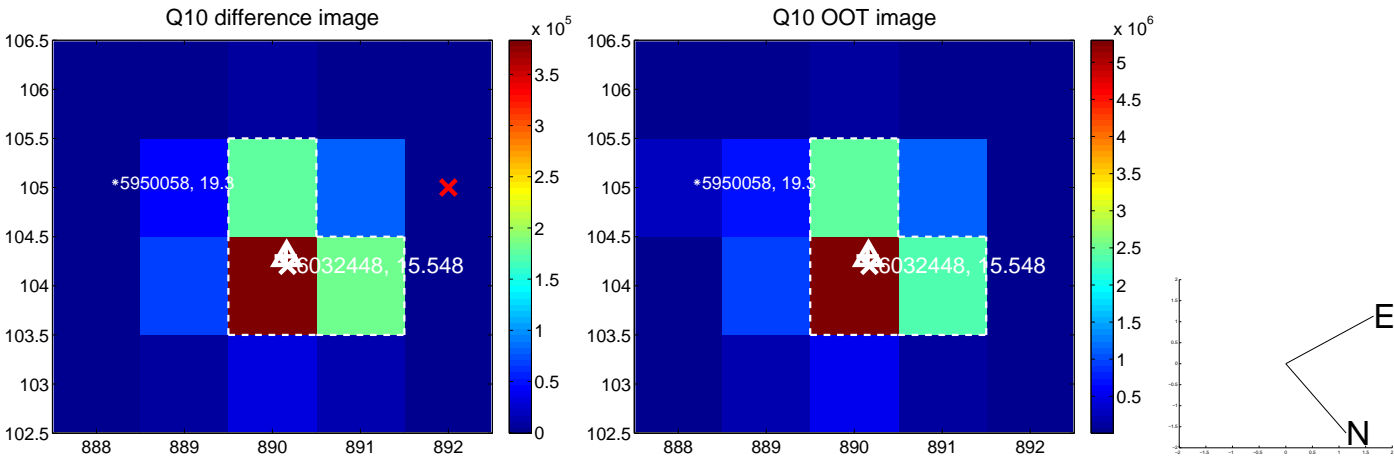
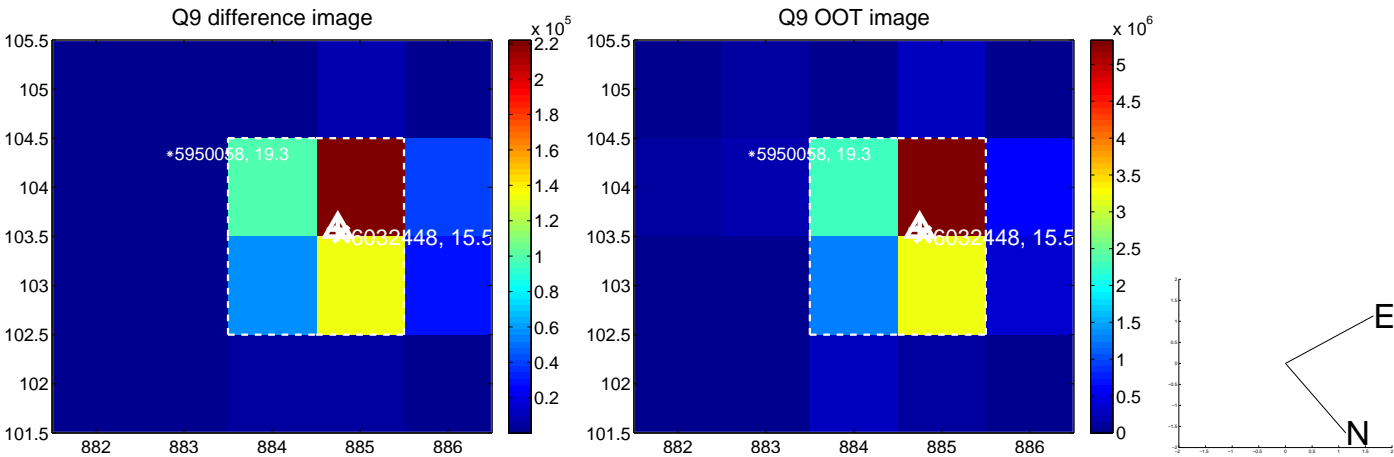
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



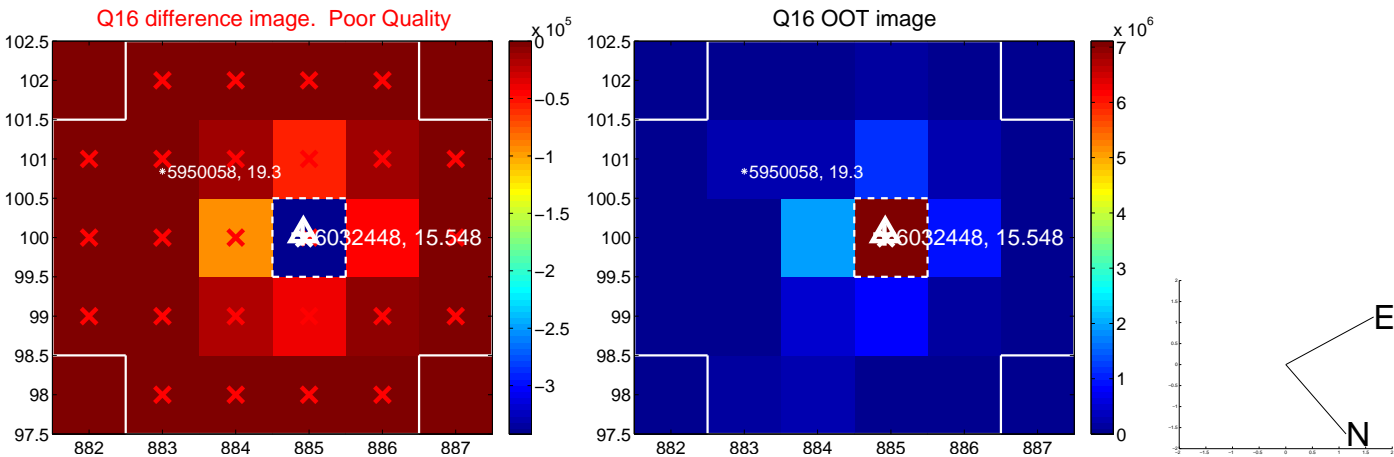
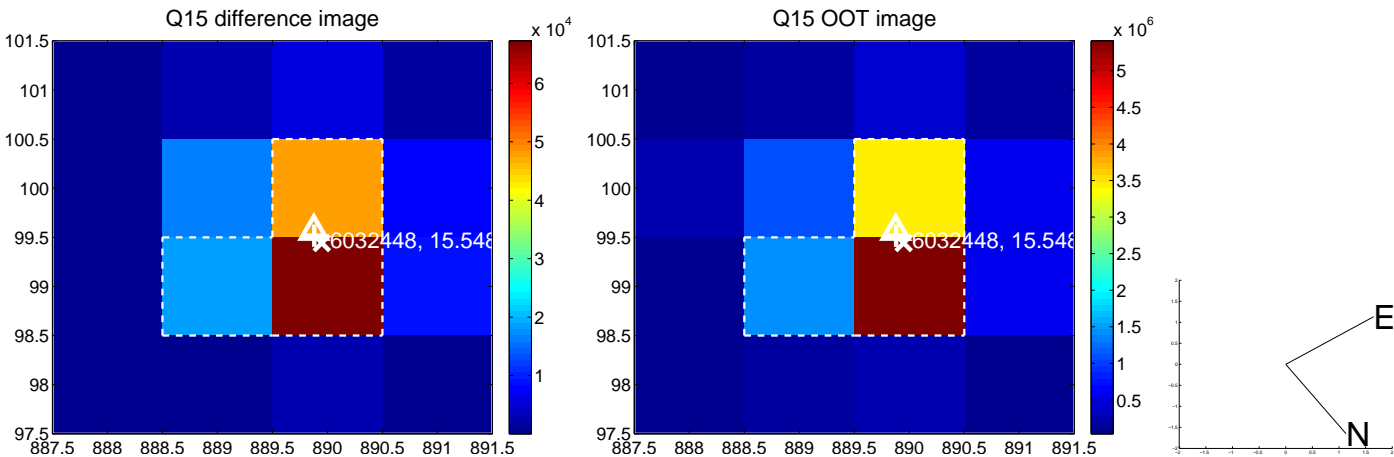
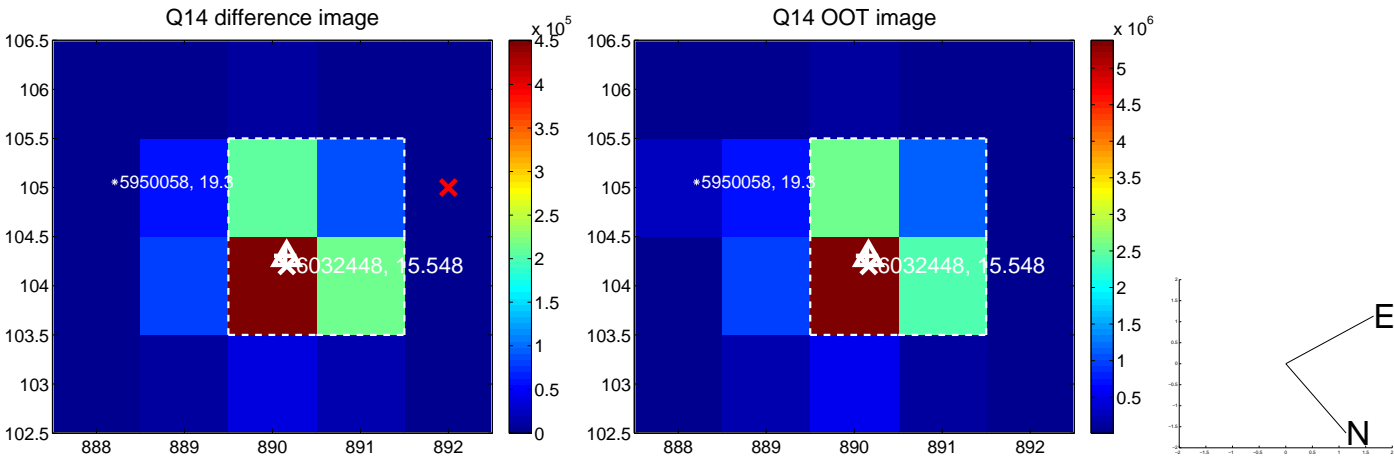
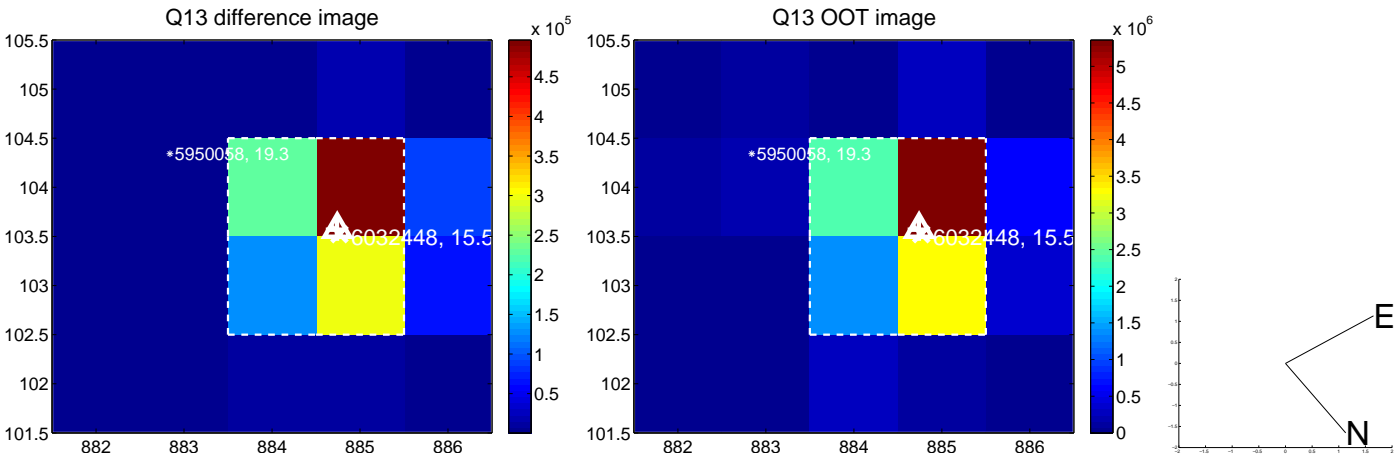
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



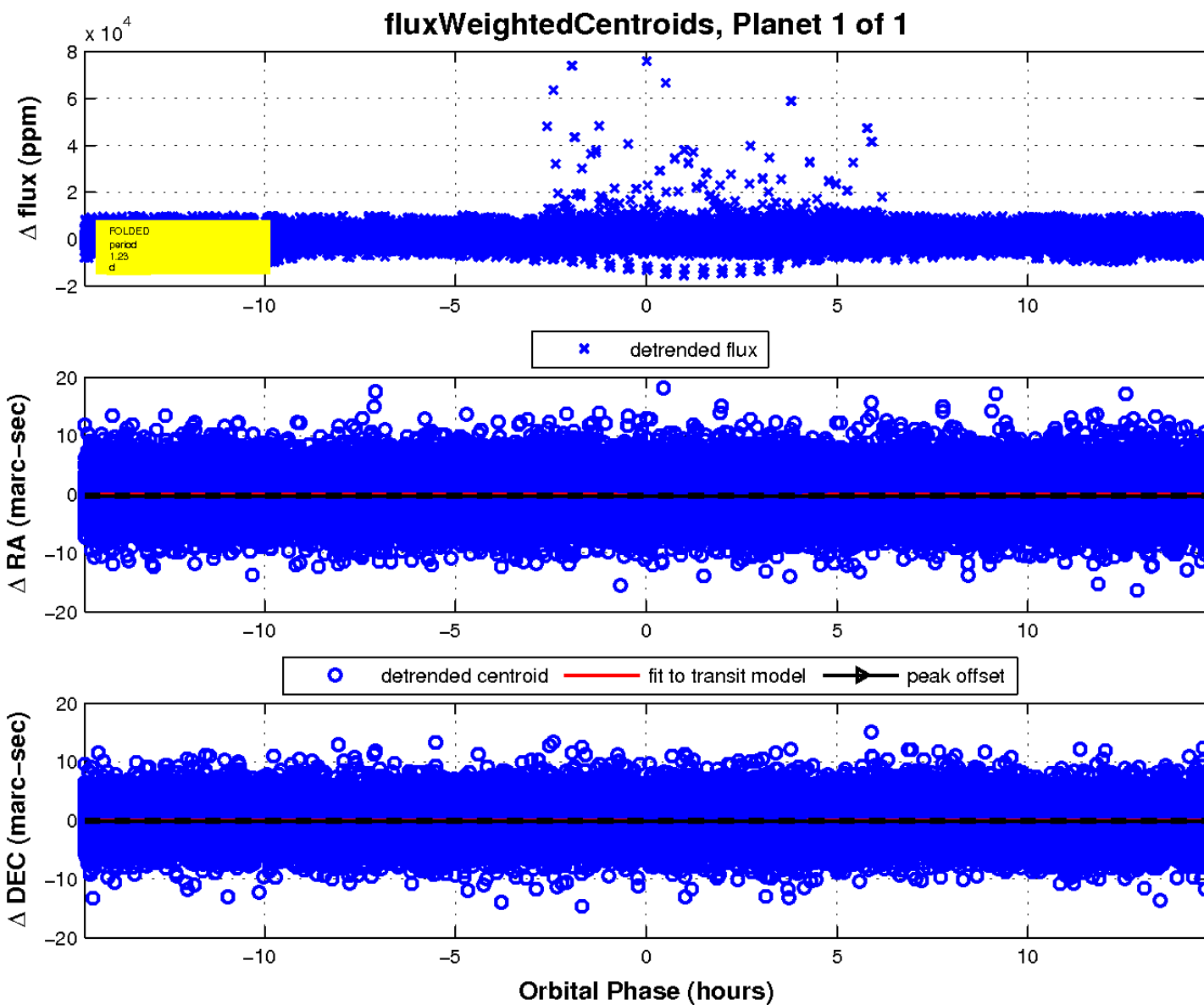
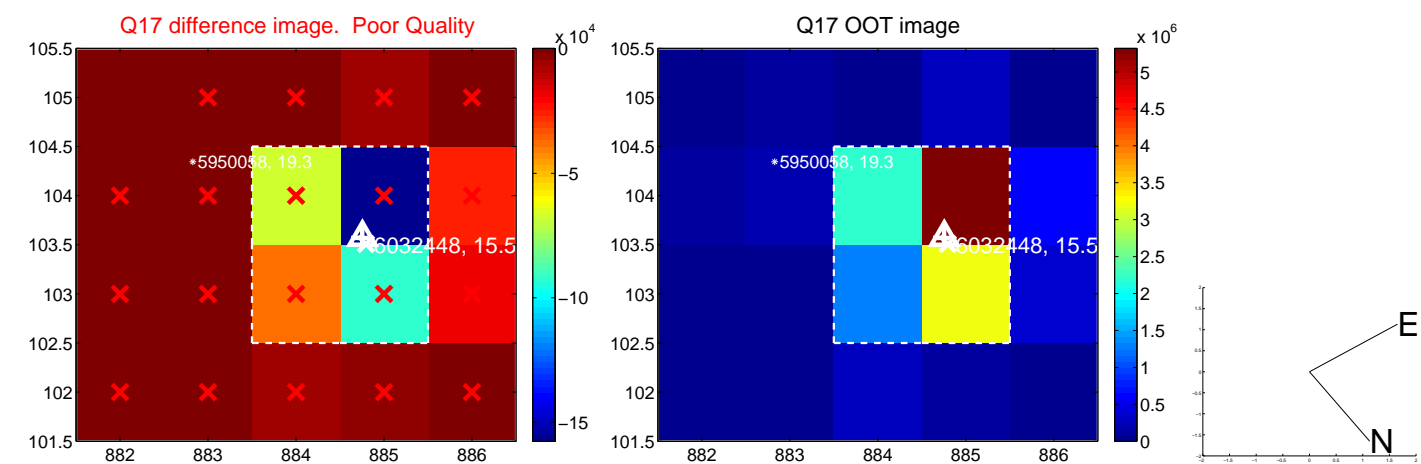
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white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination

