

KIC 010264202

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})
010264202-01	OBS	7300.01	0.517573	131.514119	86025.1	1.500	4893.1	-1.0	0.70	5427	20.53	2852.57

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010264202-01	OBS	FP	0.00	0	1	0	0	DEPTH_ODDEVEN_DV—DEPTH_ODDEVEN_ALT—MOD_ODDEVEN_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 010264202-01

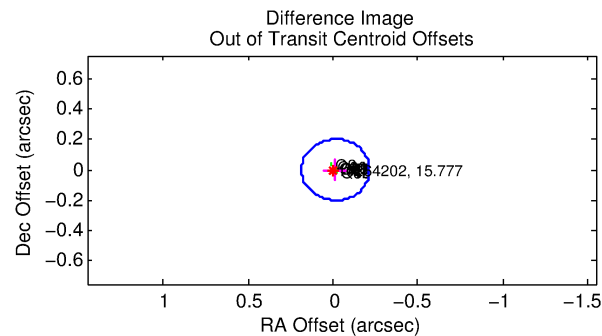
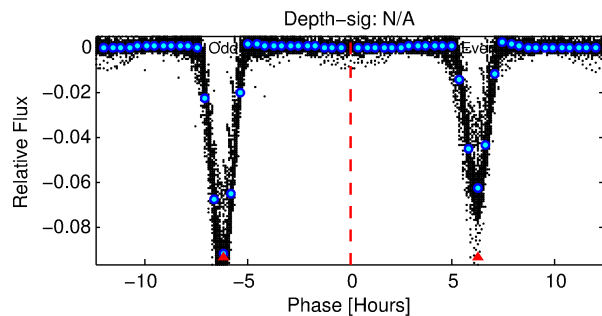
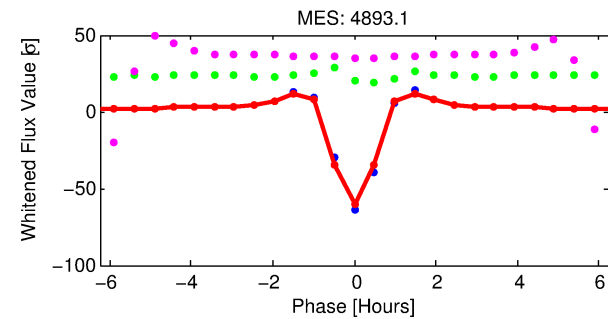
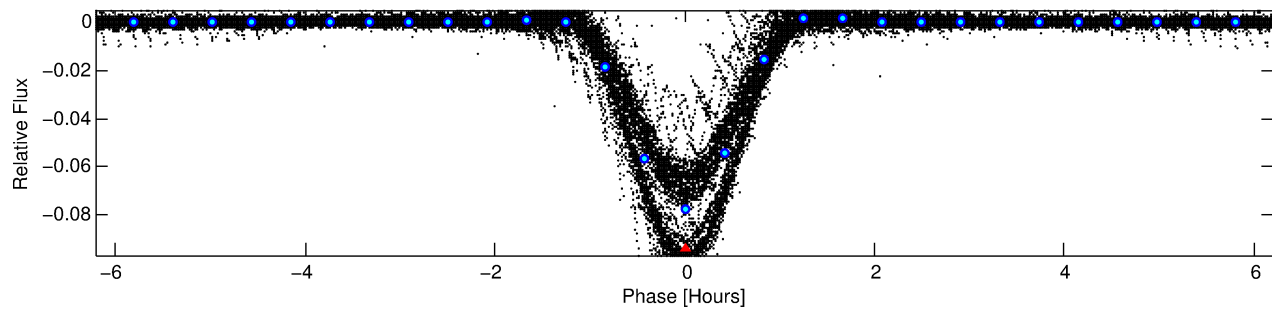
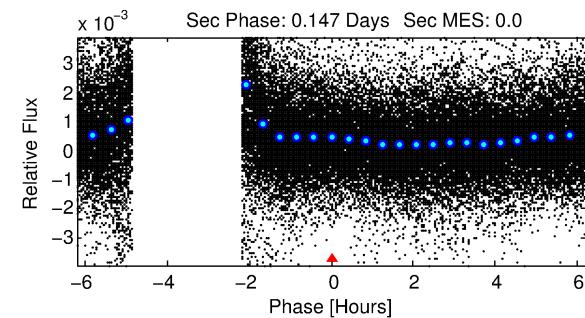
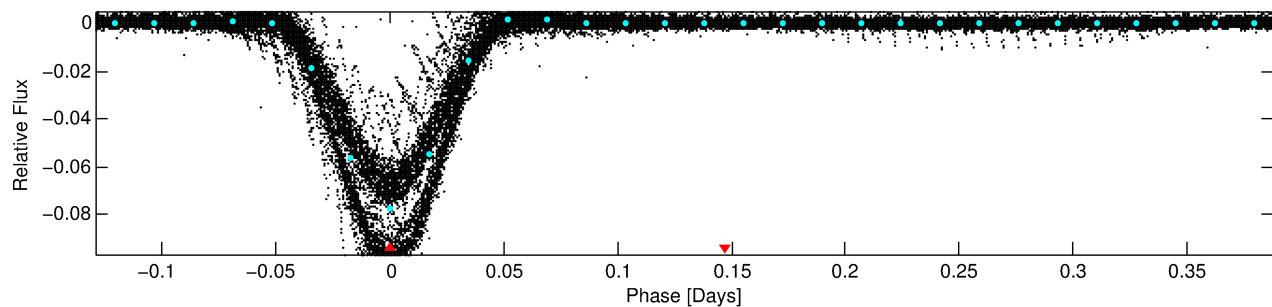
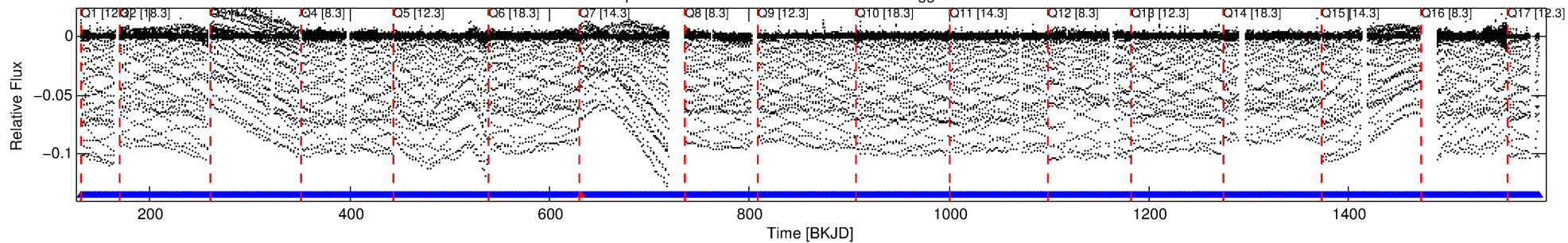
No Significant Match Found

DV One-Page Summary

KIC: 10264202 Candidate: 1 of 1 Period: 0.518 d

KOI: K07300.01 Corr: 0.822

Kp: 15.78 R*: 0.70 Rs Teff: 5427.0 K Logg: 4.63 Fe/H: -0.520



TPS TCE Results:

Period = 0.51757 d
Epoch = 131.5141 BKJD

DV fit results are unavailable

DV Diagnostic Results:

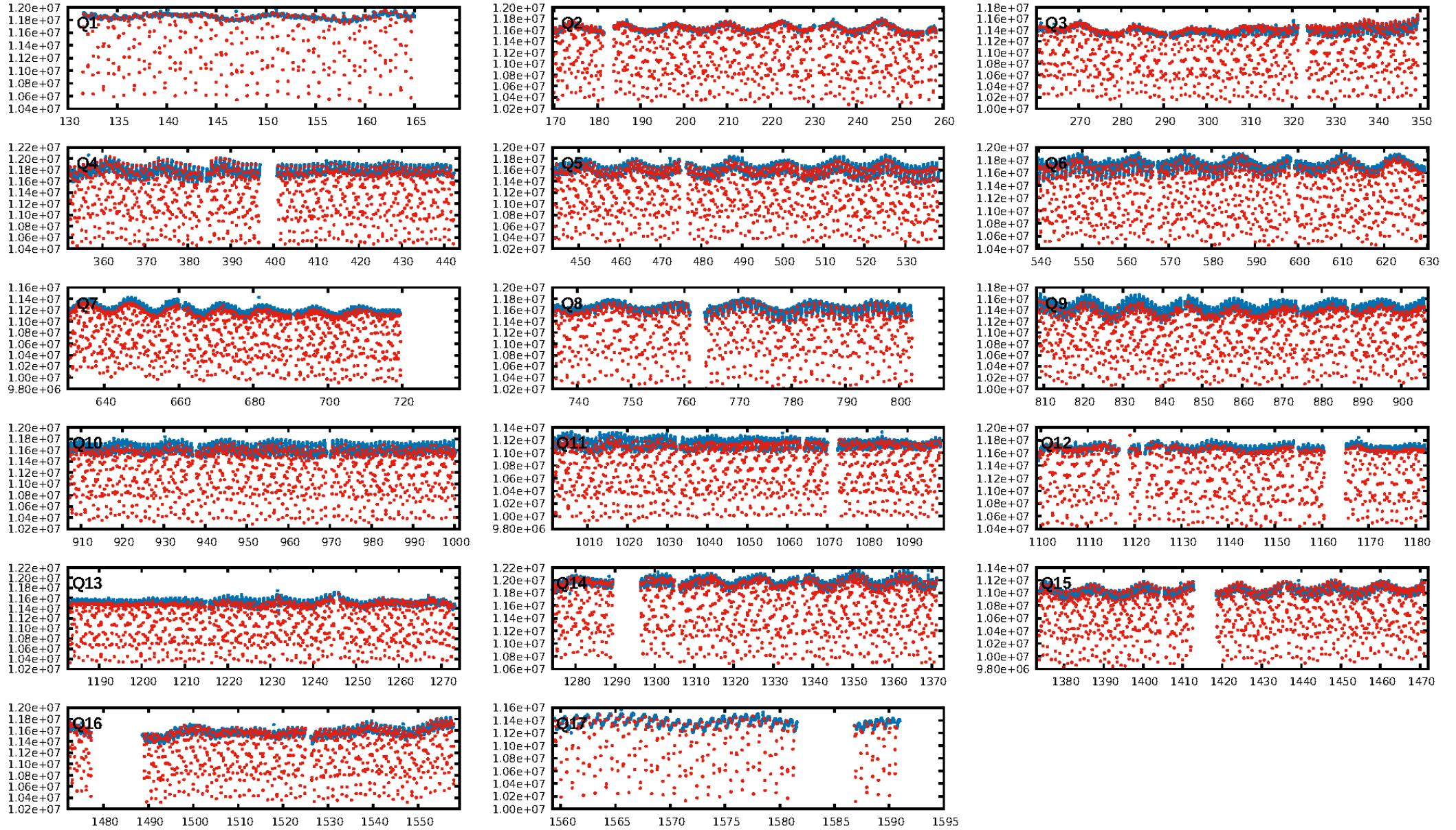
ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [2474/2475]
GhostDiagnostic-chr: 2.538

Centroid-sig: 0.0%
Centroid-so: 0.068 arcsec [54.35σ]
OotOffset-rm: 0.014 arcsec [0.22σ]
KicOffset-rm: 0.052 arcsec [0.77σ]
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]

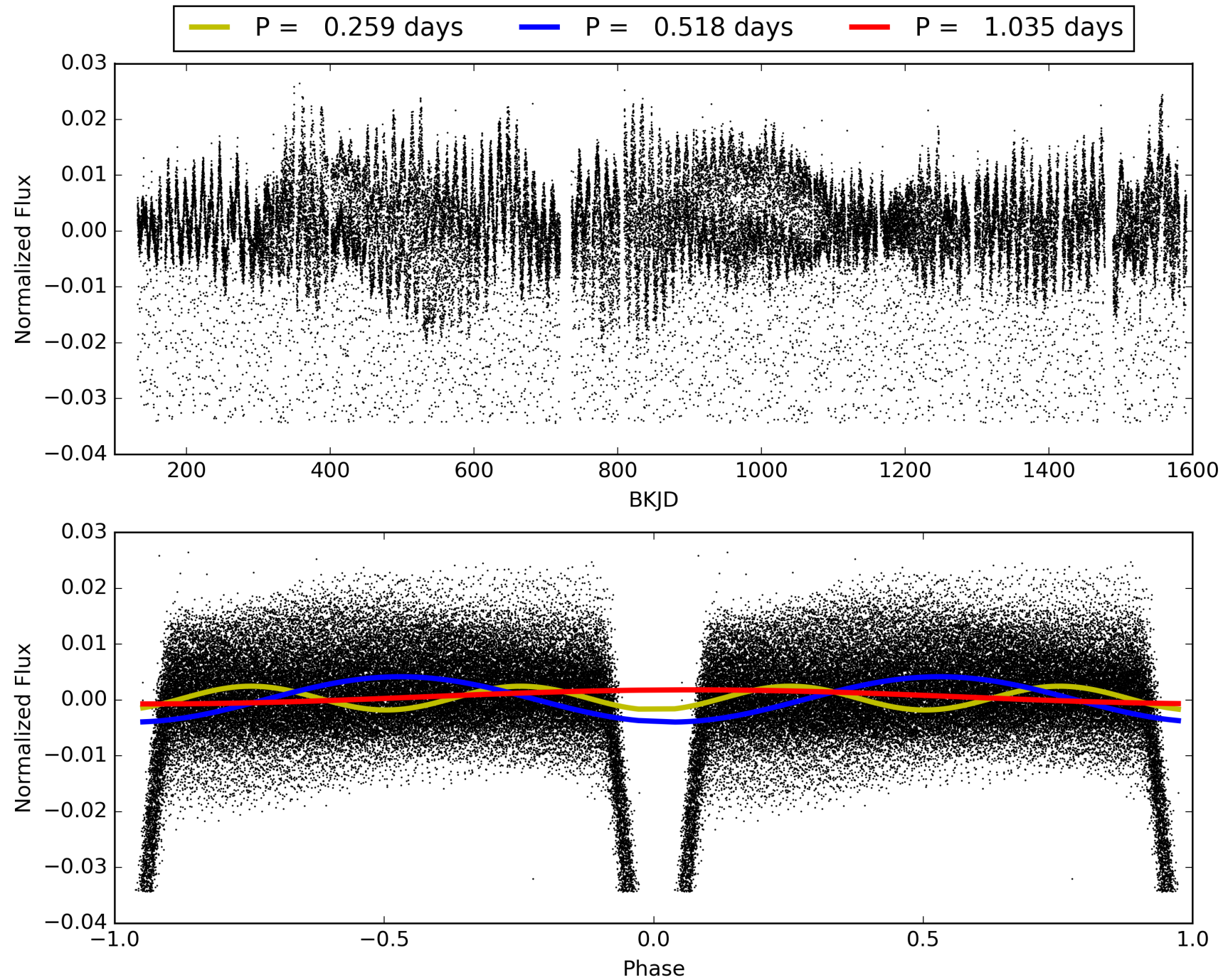
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 07:09:42 Z

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

TCE 010264202-01, PDC Light Curves

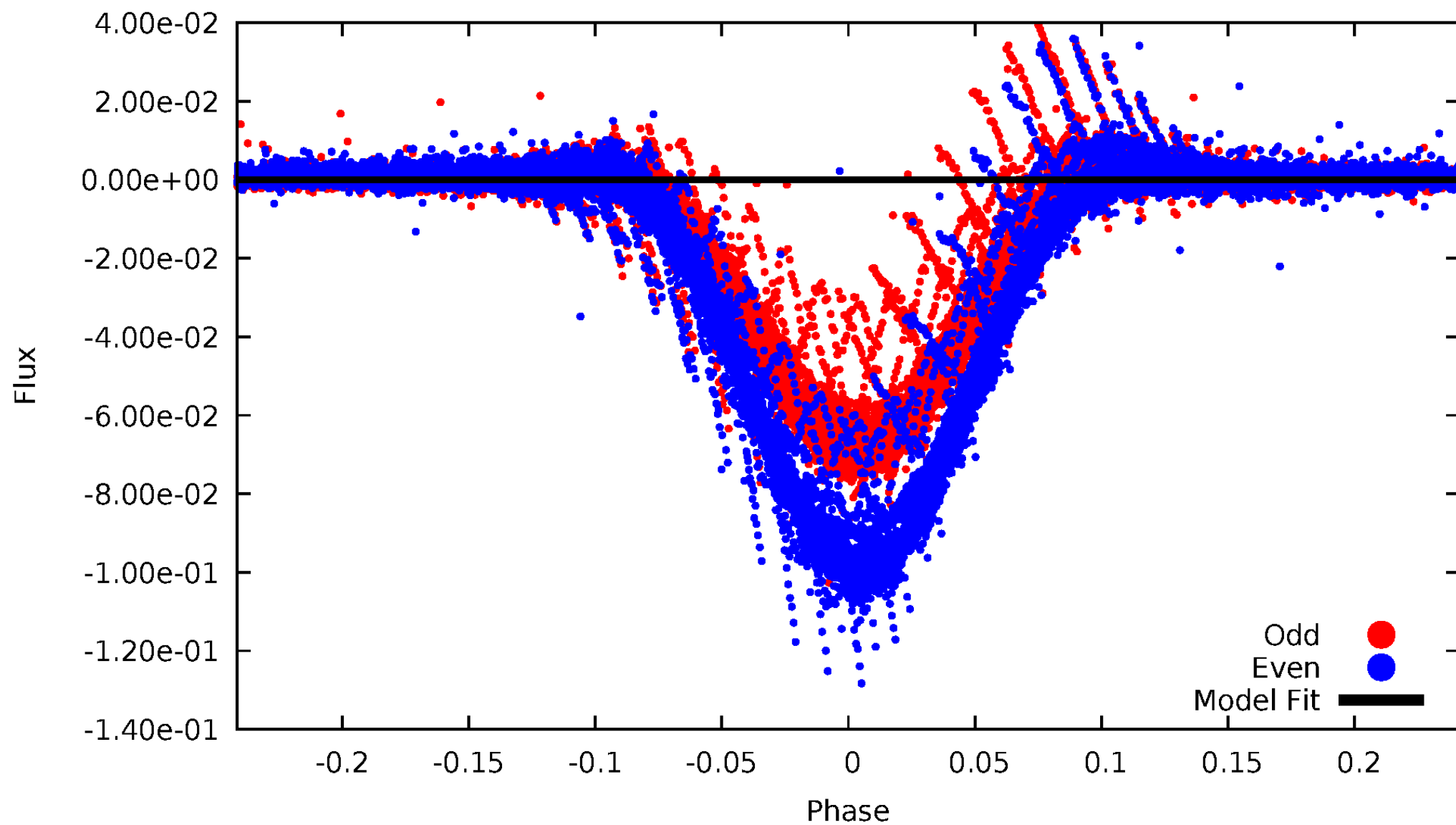


TCE 010264202-01



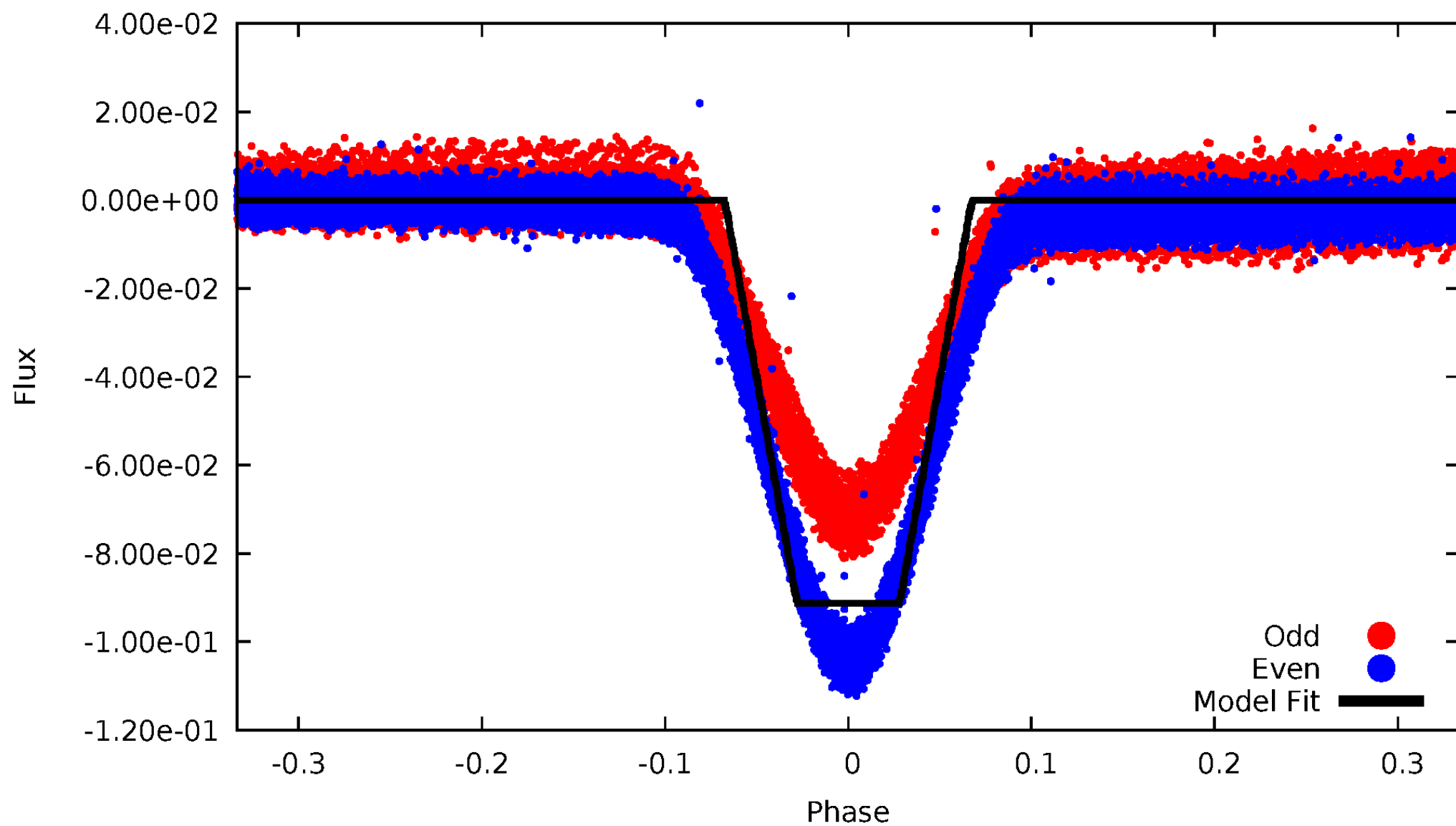
DV Odd/Even

TCE 010264202-01



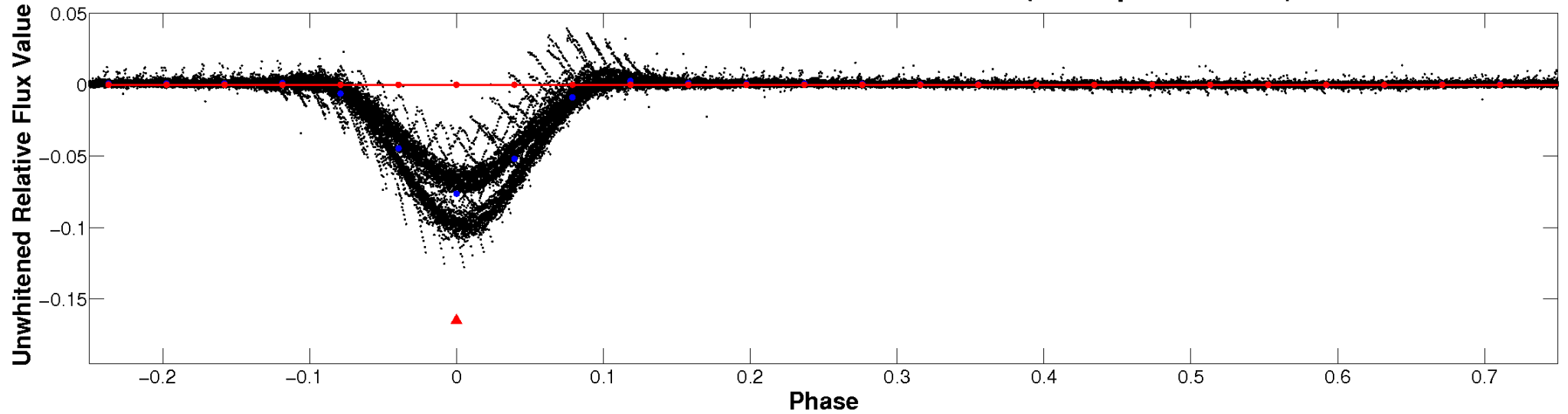
ALT Odd/Even

TCE 010264202-01

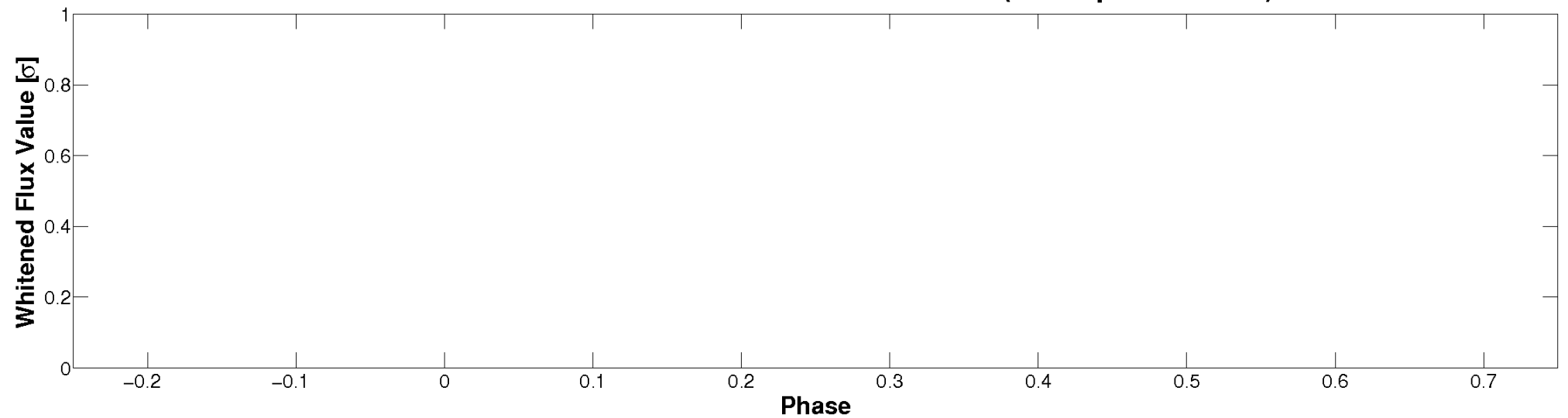


Non-Whitened Vs. Whitened Light Curve

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

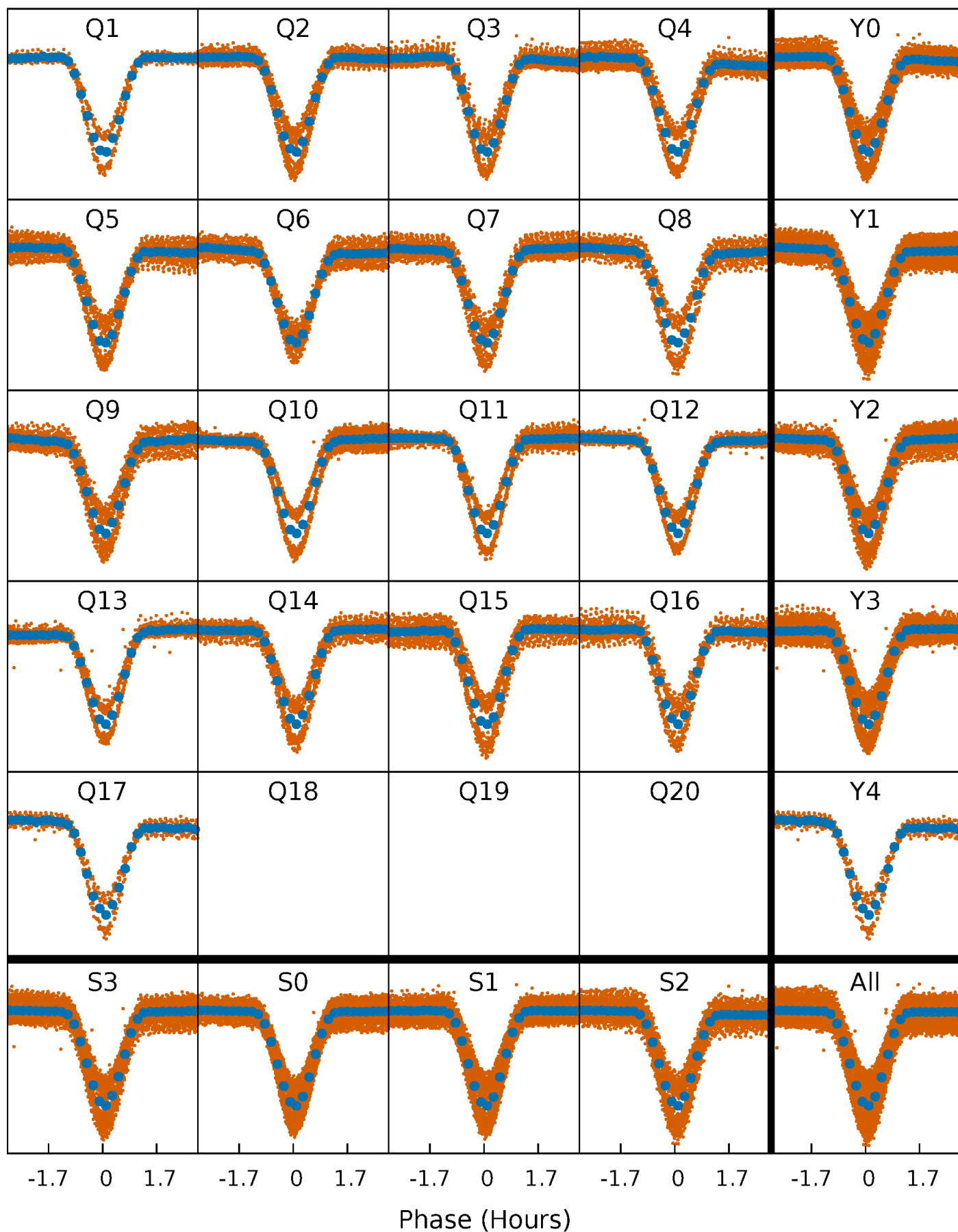


Planet 1 : Phased Whitened Flux Time Series (TPS Epoch/Period)



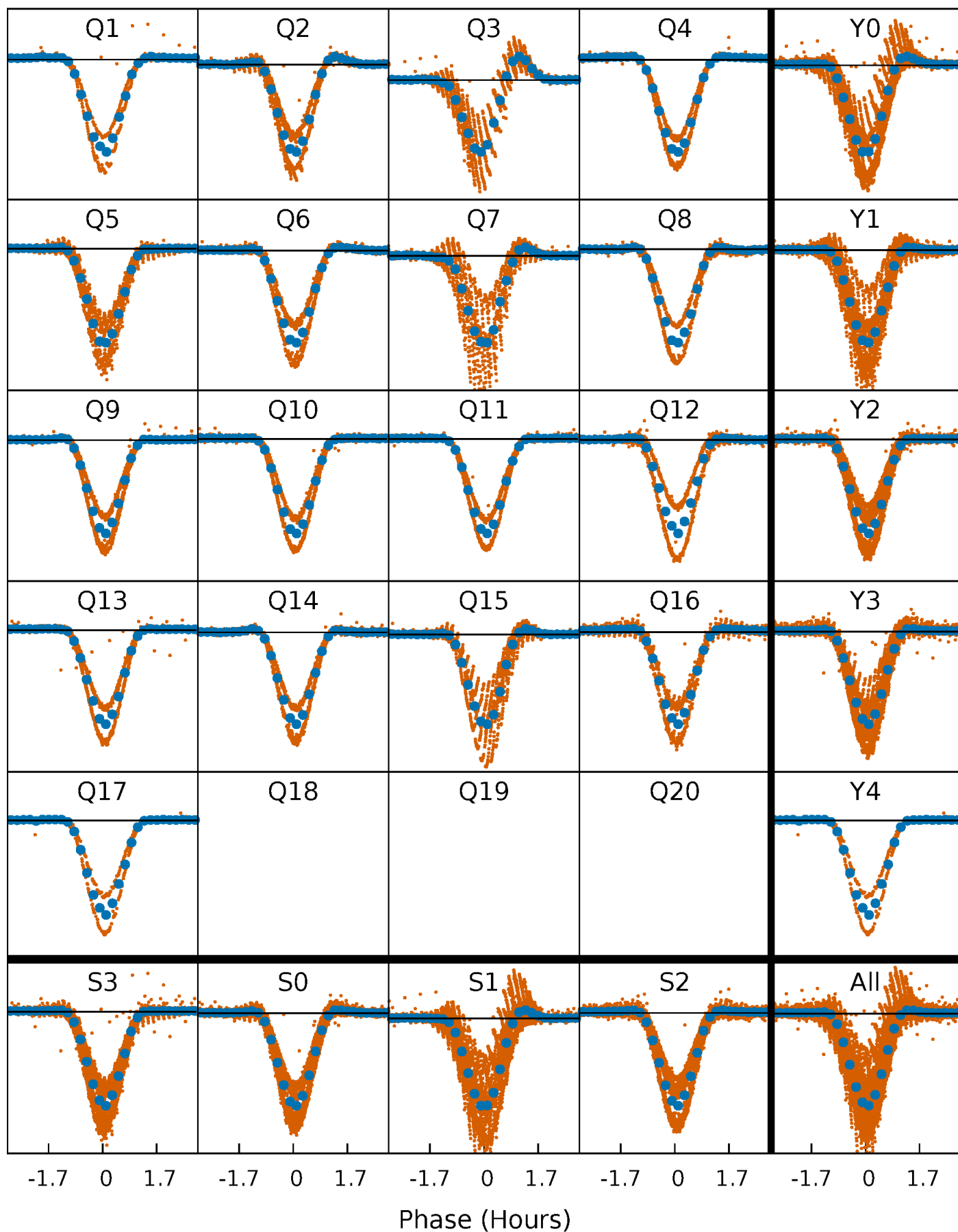
PDC Quarter-Phased Transit Curves

TCE 010264202-01 P= 0.517573 Days $T_0=131.514119$ (BKJD)



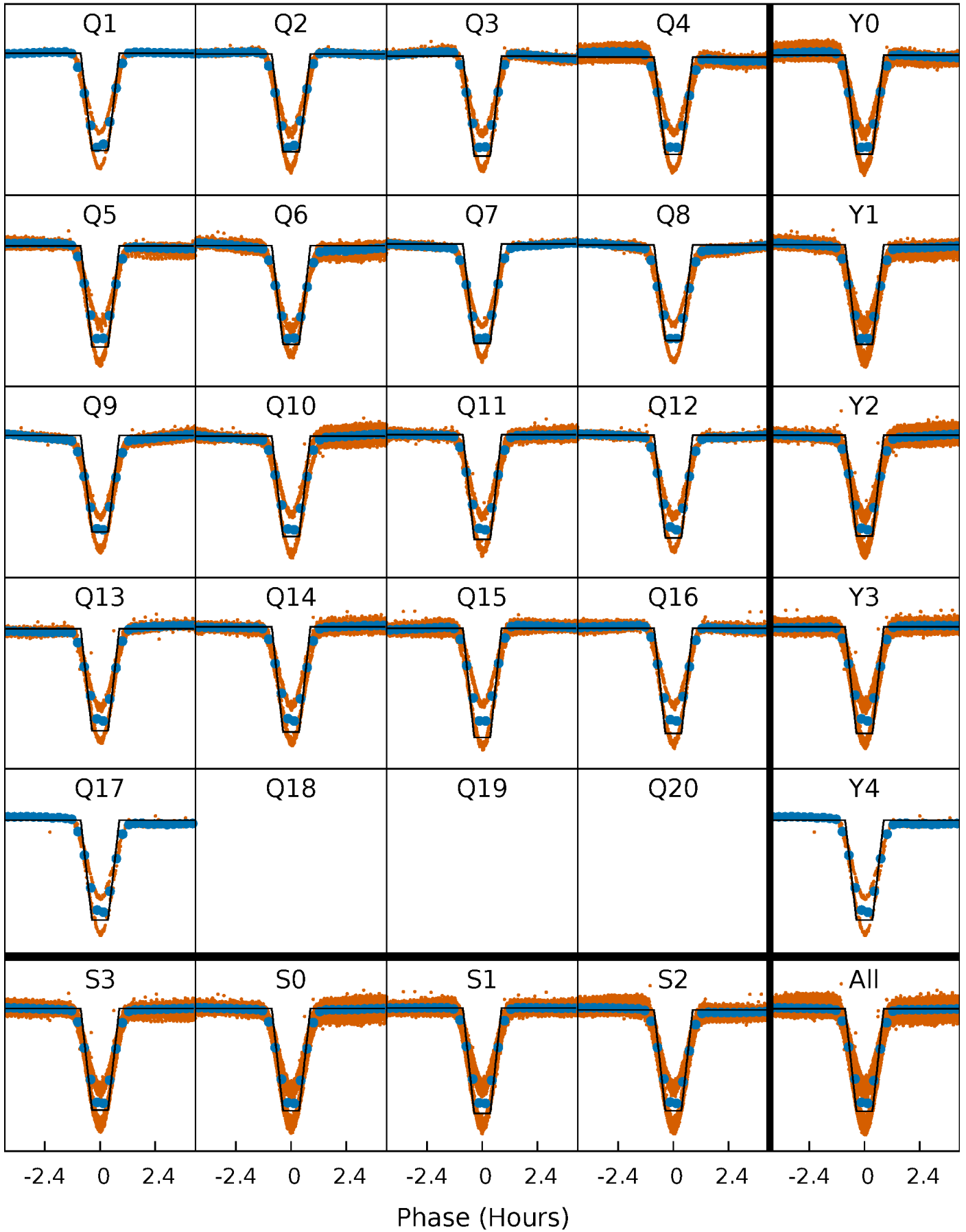
DV Quarter-Phased Transit Curves

TCE 010264202-01 P= 0.517573 Days $T_0=131.514119$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

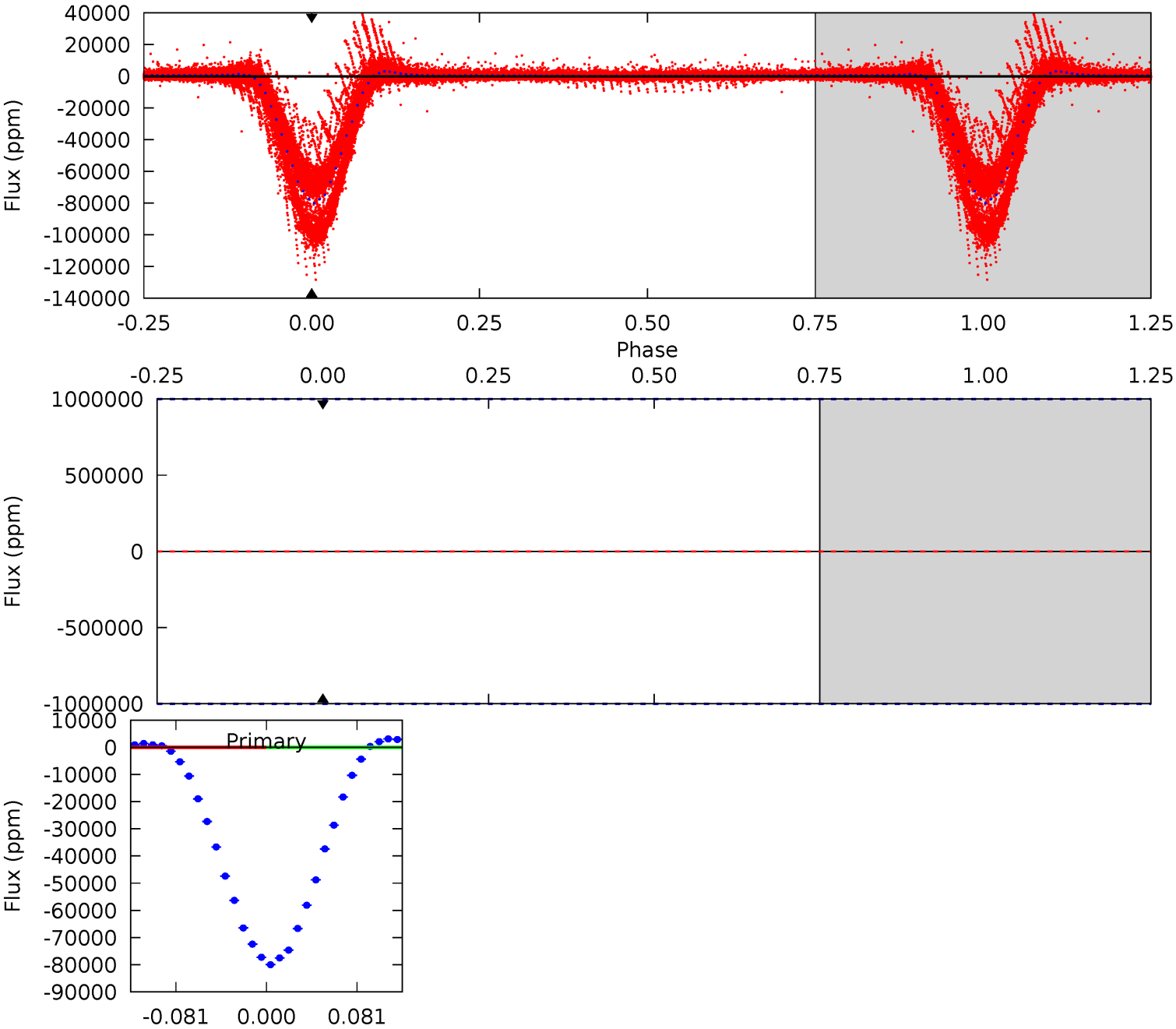
TCE 010264202-01 $P = 0.517573$ Days $T_0 = 131.516268$ (BKJD)



DV Model-Shift Uniqueness Test

010264202-01, P = 0.517573 Days, E = 130.996546 Days

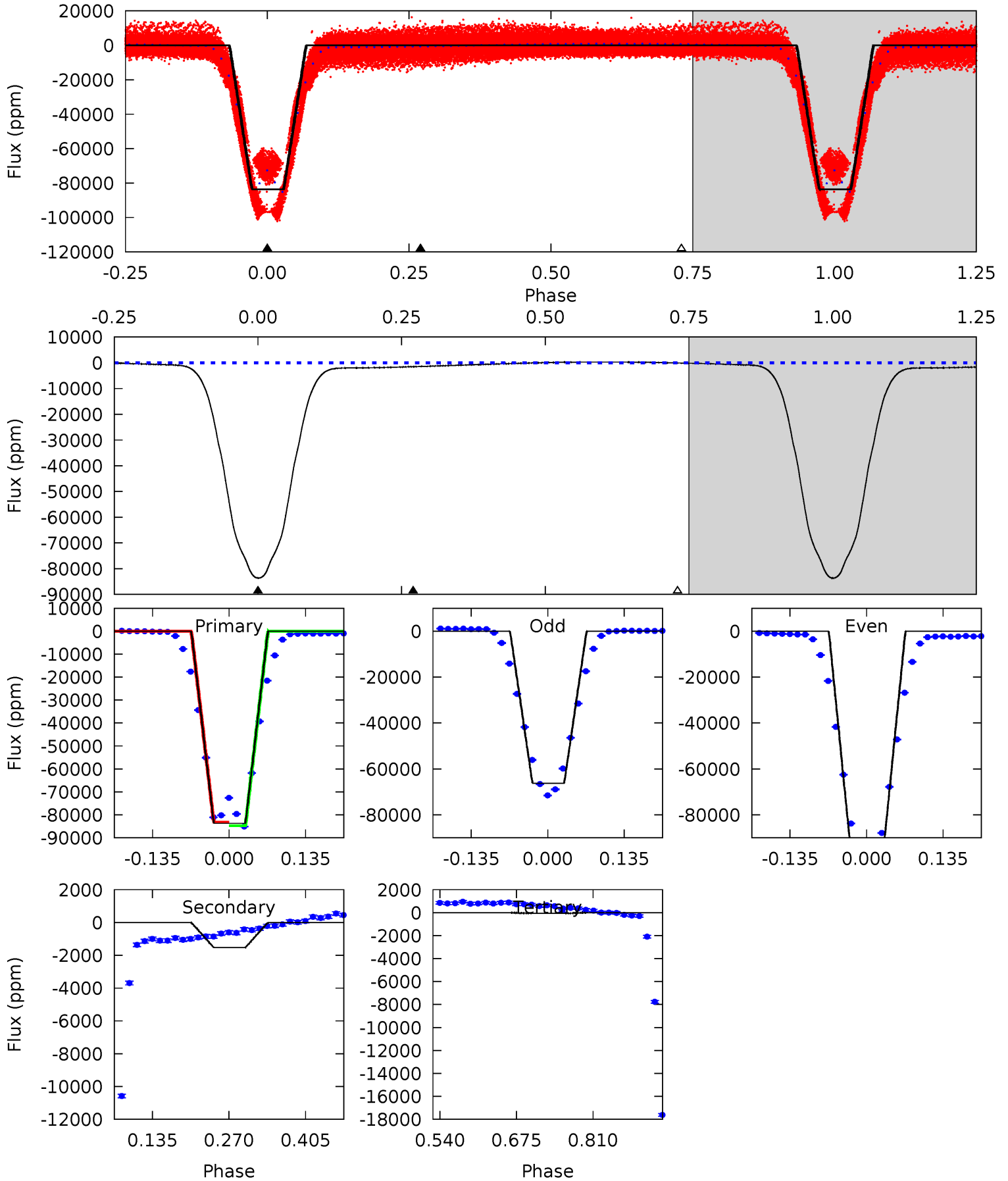
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

010264202-01, P = 0.517573 Days, E = 130.998695 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
1921	35.0	1.55	0	4.50	1.49	7.95	1920	1921	33.4	35.0	413.5	1.04	0.00	16.7



Stellar Parameters For KIC 010264202

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5427^{+162}_{-162}	$4.633^{+0.032}_{-0.104}$	$-0.520^{+0.300}_{-0.300}$	$0.700^{+0.117}_{-0.047}$	$0.776^{+0.075}_{-0.075}$	$3.191^{+0.544}_{-0.979}$
	+3%/-3%	+1%/-2%	+58%/-58%	+17%/-7%	+10%/-10%	+17%/-31%
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 010264202-01 / KOI 7300.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	0 ± 1000000	$21.21^{+7.61}_{-7.96}$	2637^{+111}_{-99}	2935^{+3409}_{-8926}	$0.677^{+22.421}_{-18.532}$
Alt.	-1523 ± 44	$23.42^{+8.49}_{-8.30}$	2639^{+114}_{-103}	-2470^{+5172}_{-247}	$0.202^{+0.287}_{-0.093}$

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 $A_{obs} \gg 1.0$

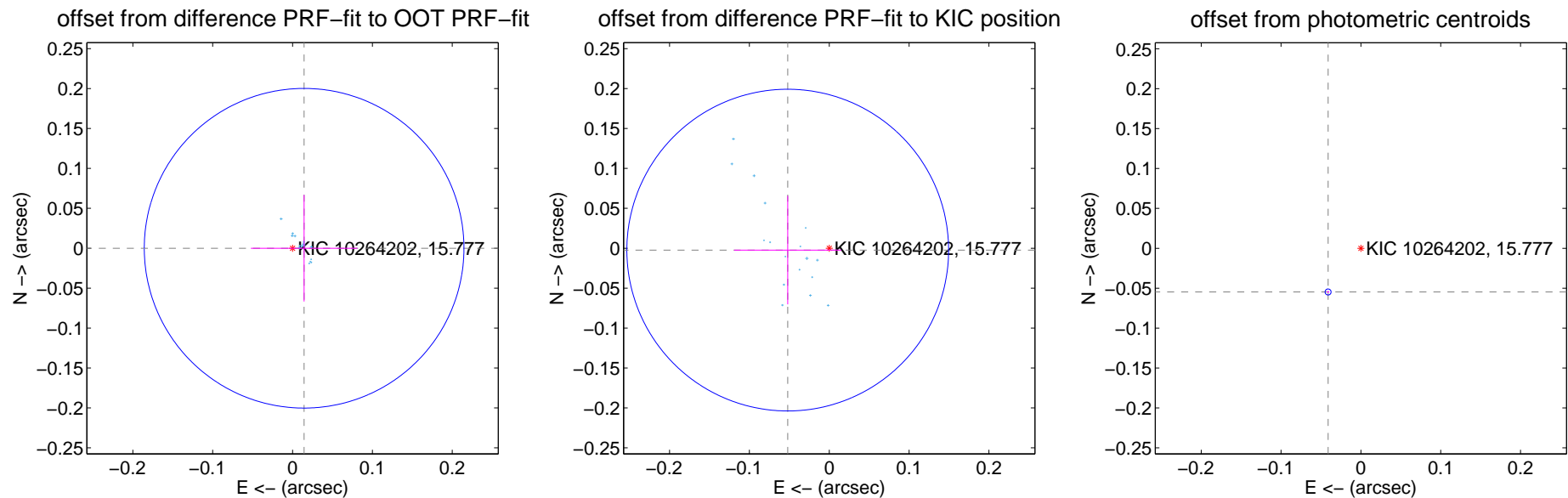
DV Centroid Data

Supplemental centroid analysis for 010264202-01. Kepler magnitude: 15.78. Transit SNR -1.00

There are 17 quarters with good PRF difference image offsets

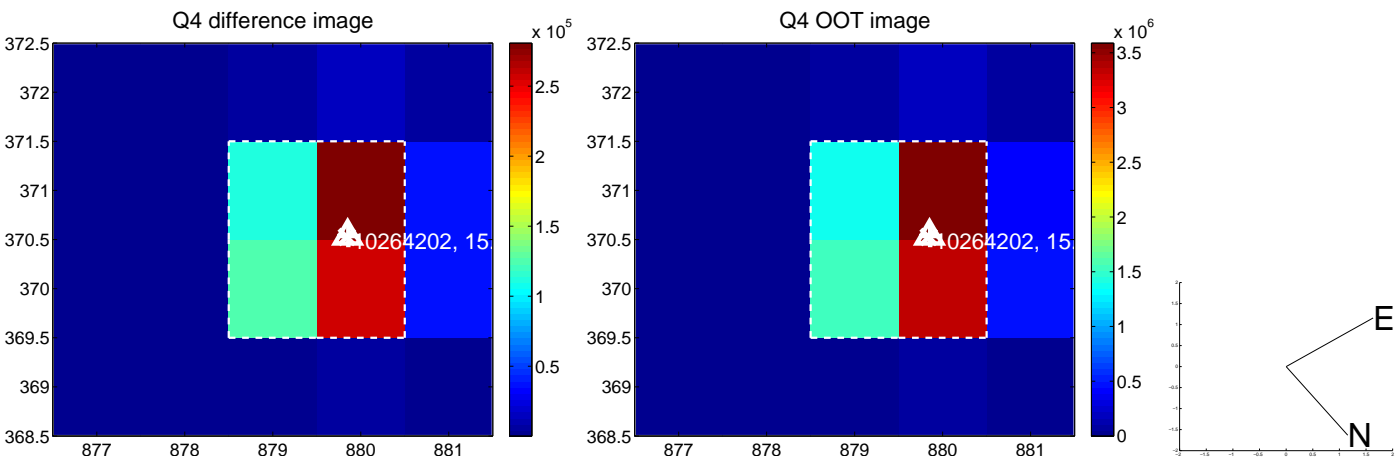
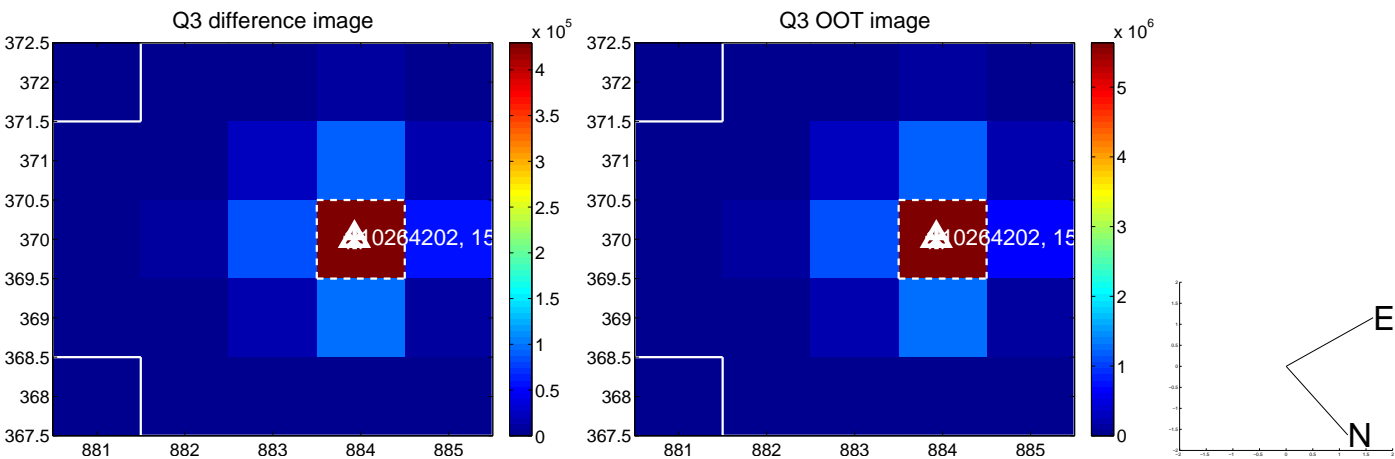
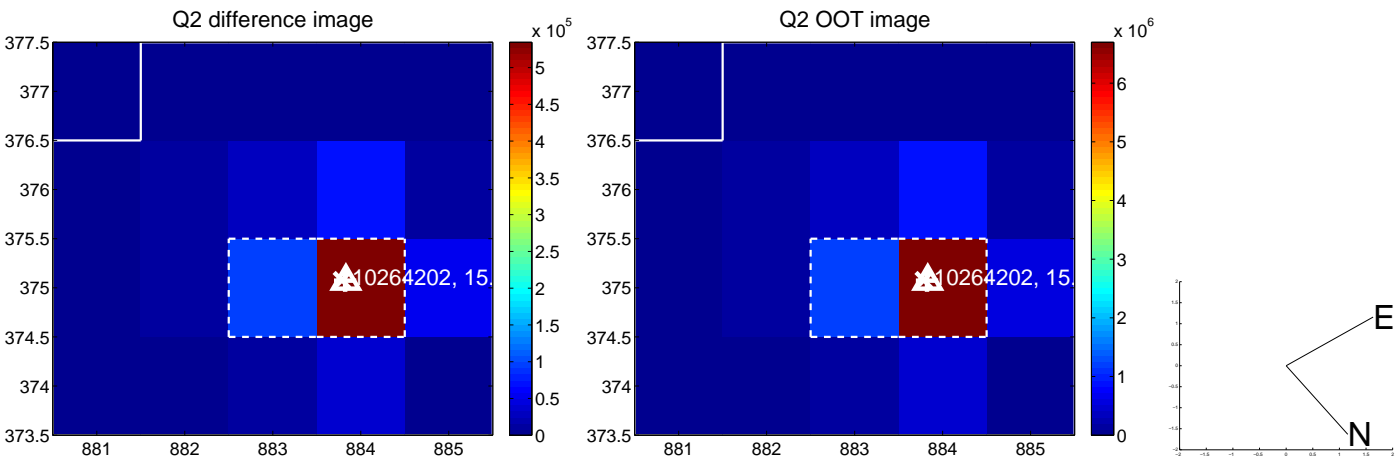
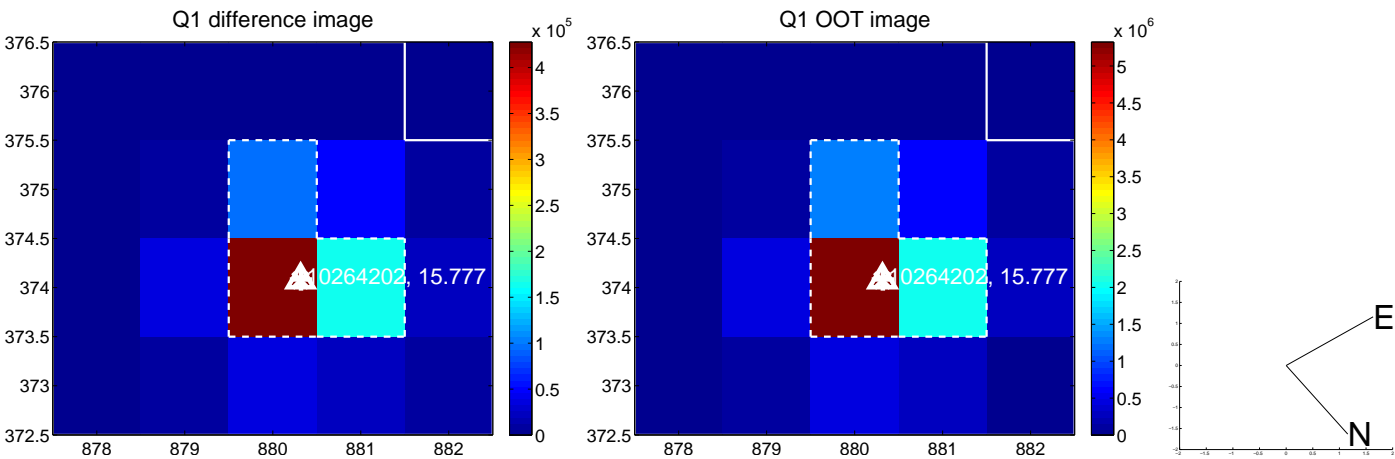
The direct PRF centroid is offset from the target star catalog position by about 0.04 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.014 ± 0.067	0.22	-0.014 ± 0.067	-0.000 ± 0.067
PRF-fit source offset from KIC position	0.052 ± 0.067	0.77	0.052 ± 0.067	-0.002 ± 0.068
photometric centroid source offset	0.07 ± 0.00	54.35	0.04 ± 0.00	-0.05 ± 0.00

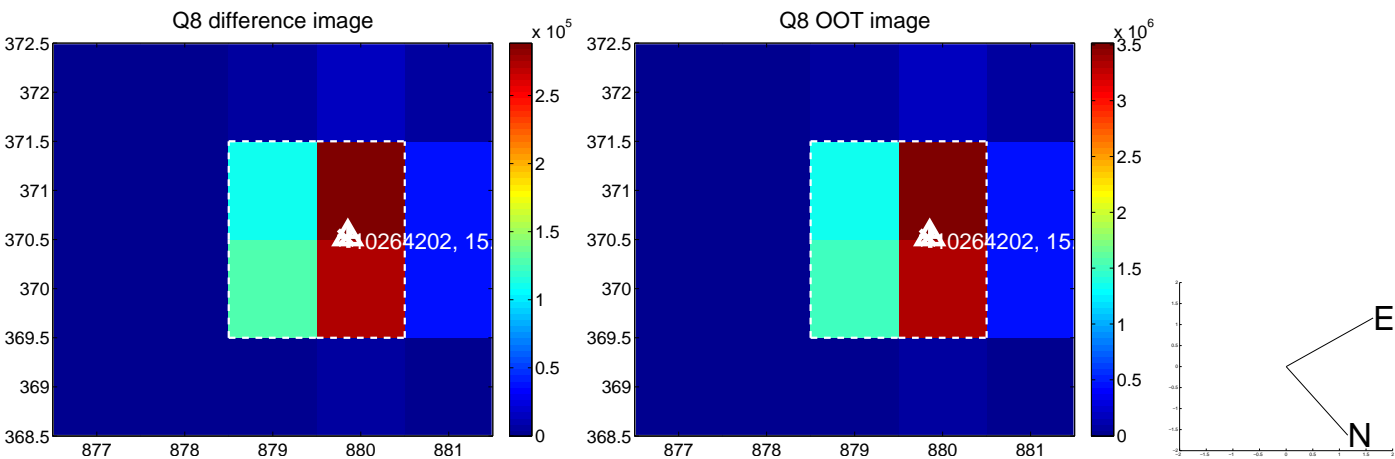
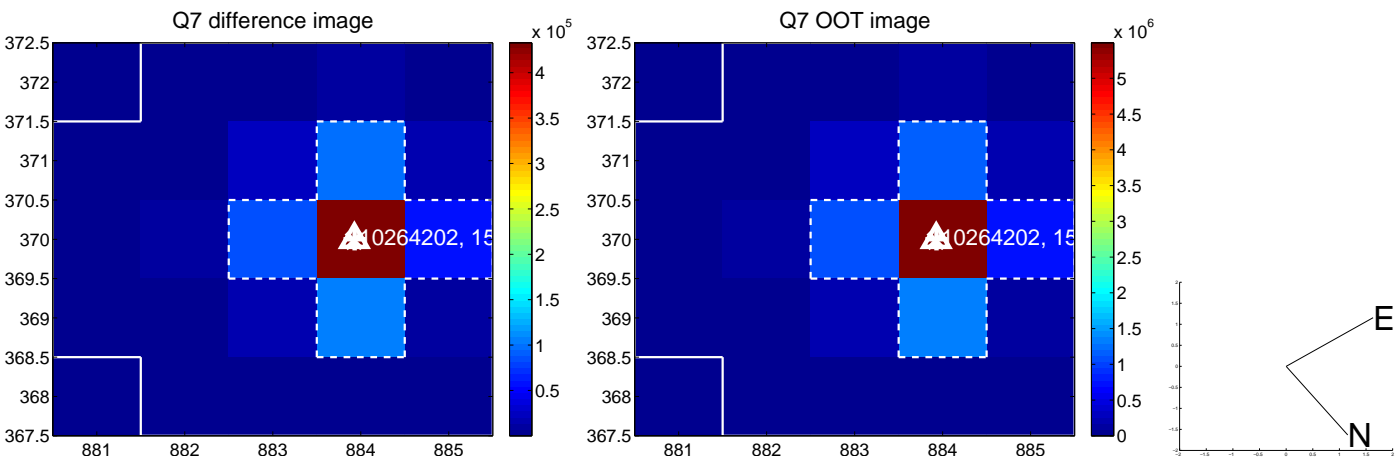
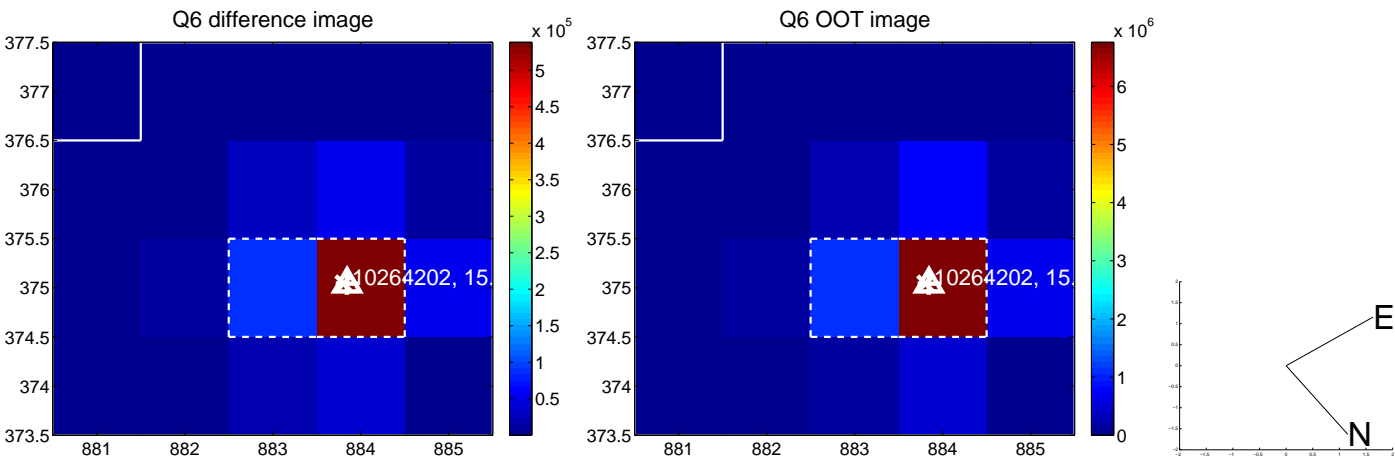
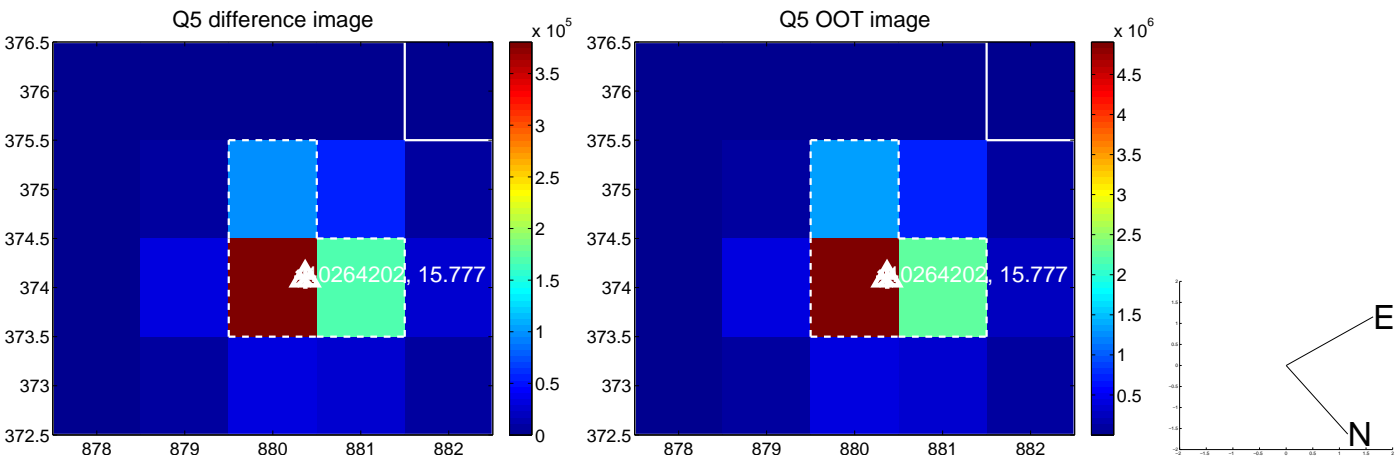


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

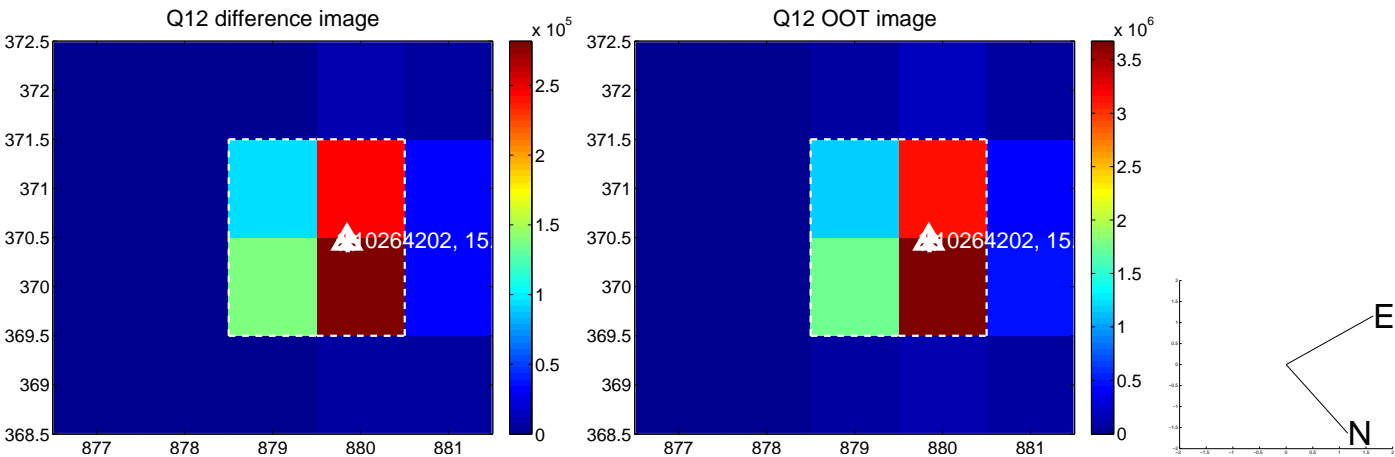
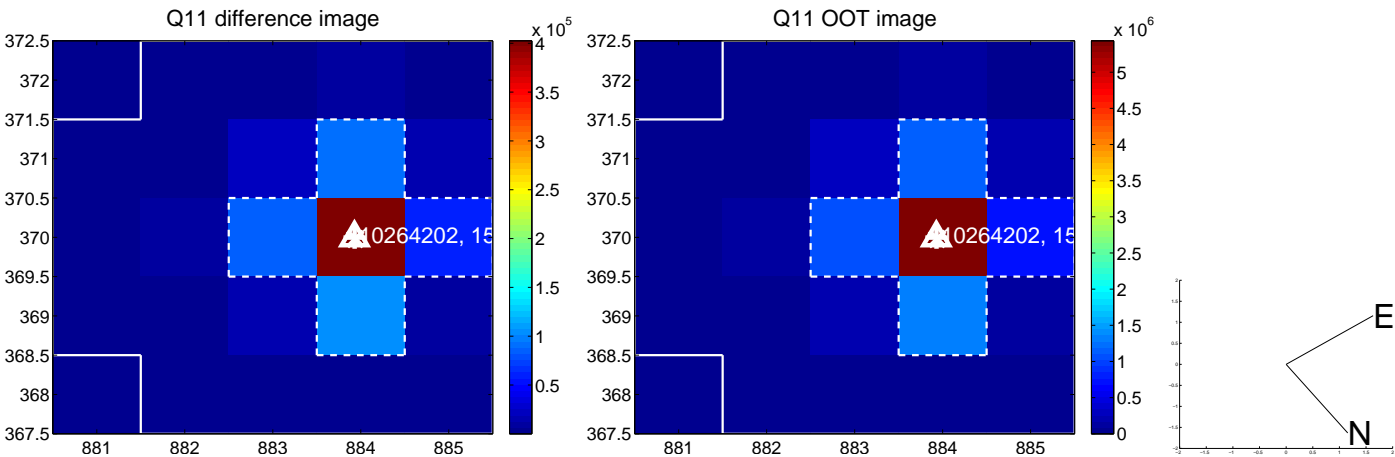
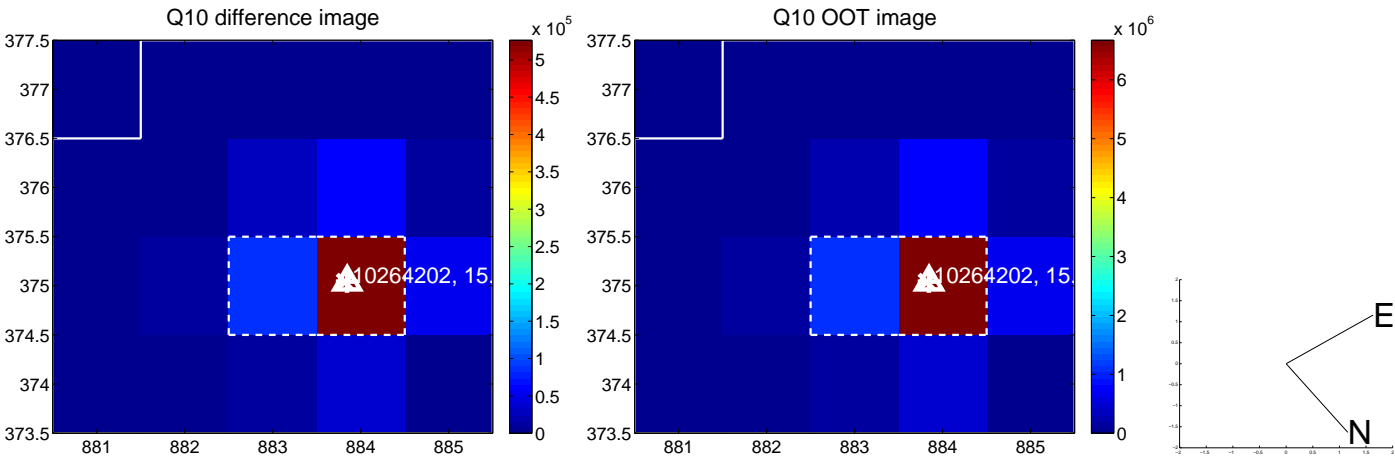
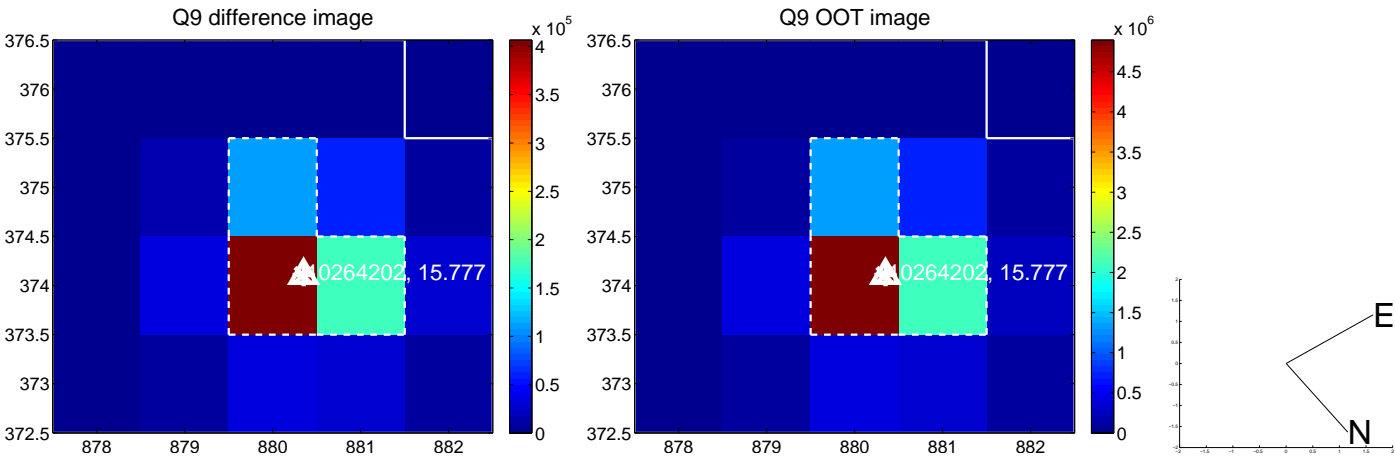
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



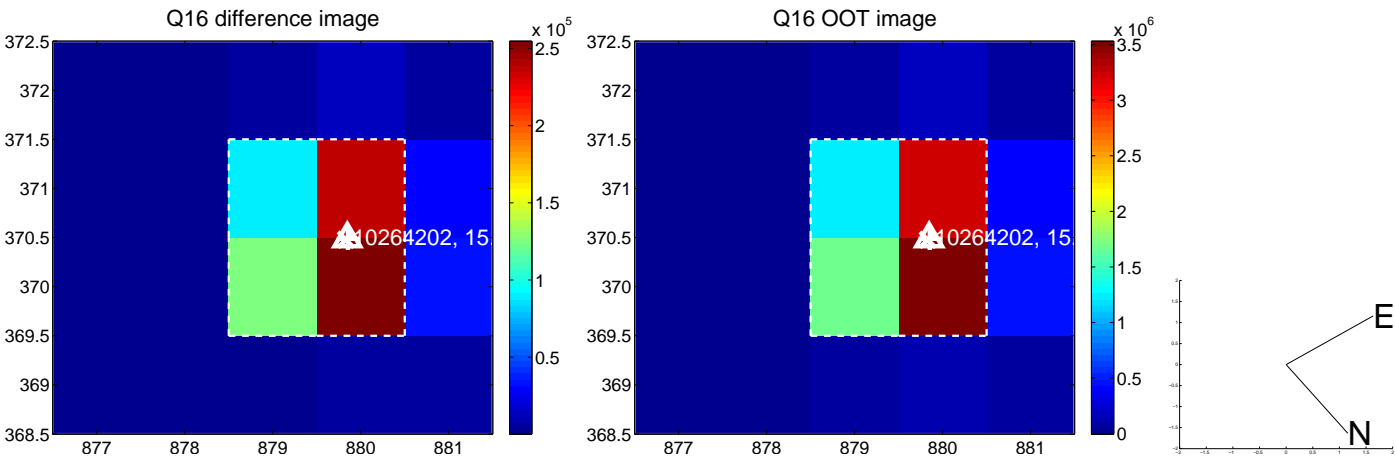
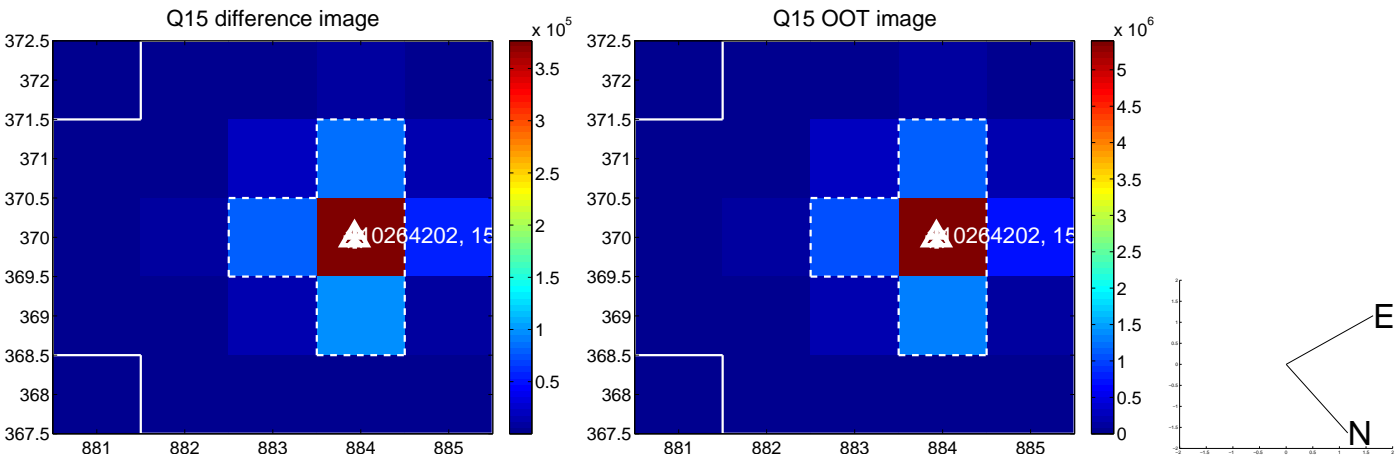
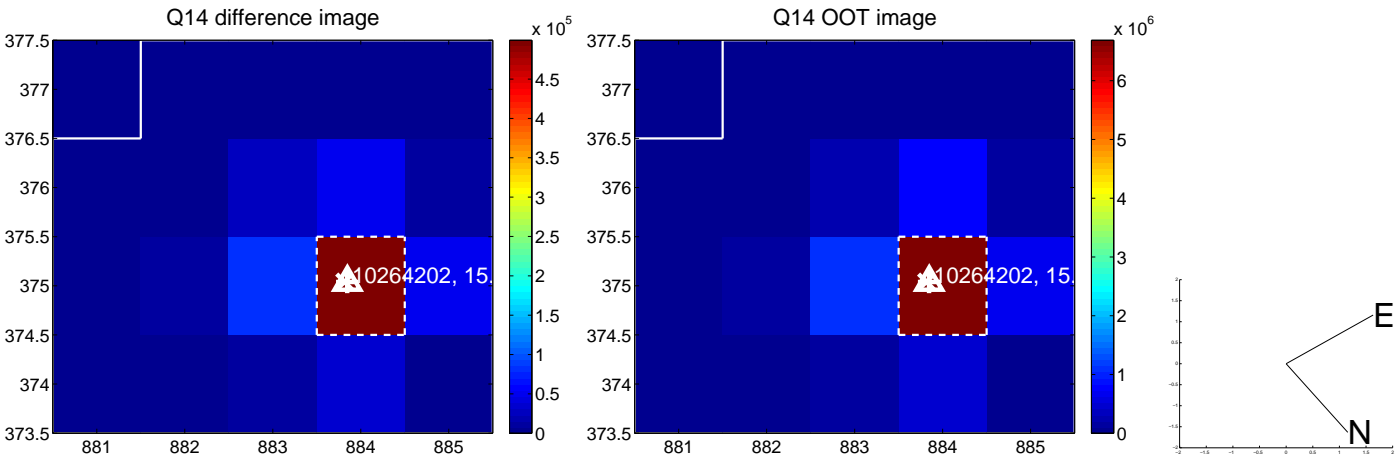
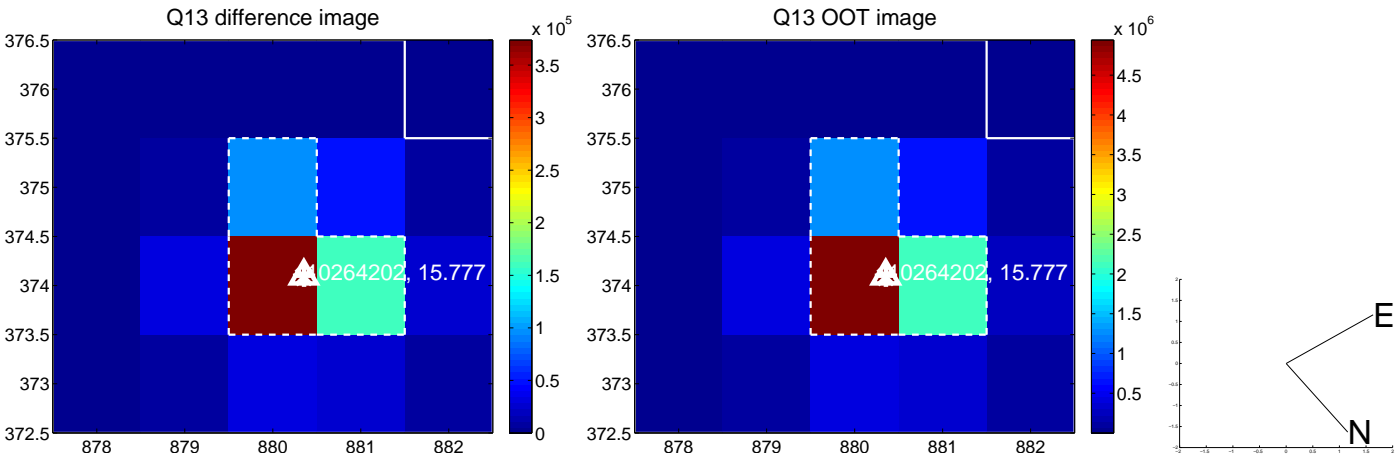
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



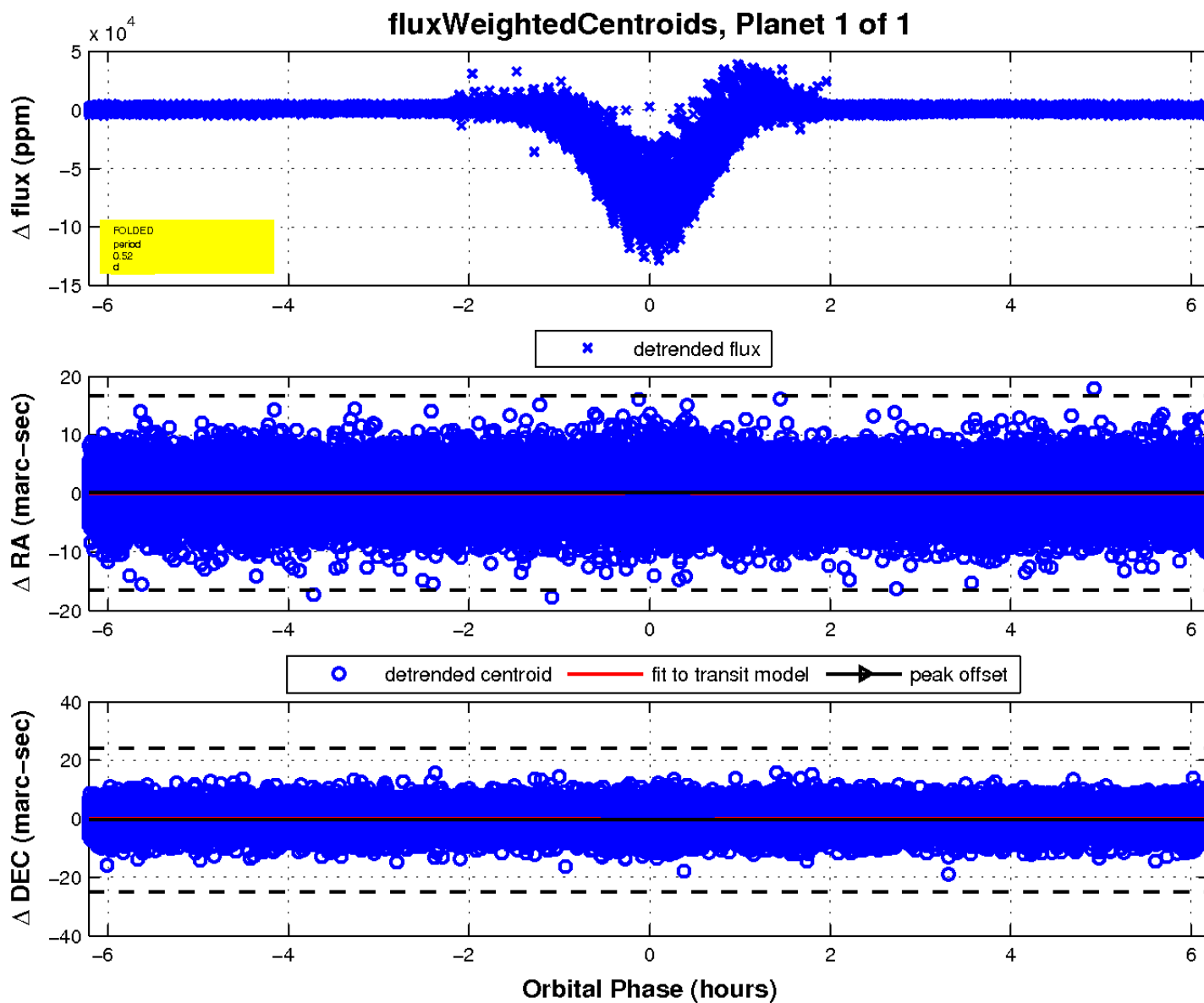
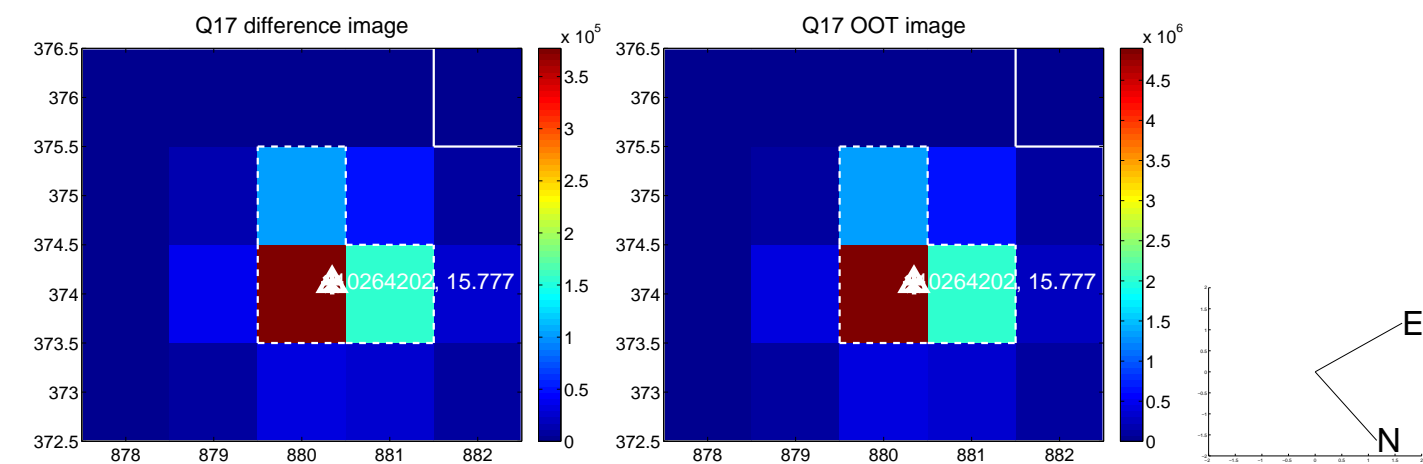
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UKIRT Image

Declination

