

KIC 010794242

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})
010794242-01	OBS	7372.01	7.143764	137.797719	123564.5	4.500	15515.9	-1.0	0.99	5655	34.72	187.24

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010794242-01	OBS	FP	0.00	0	1	0	0	MOD_SEC_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.

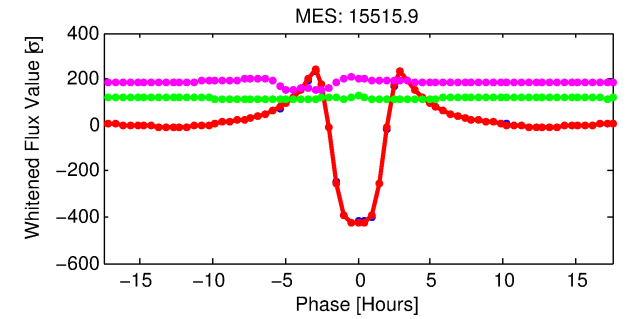
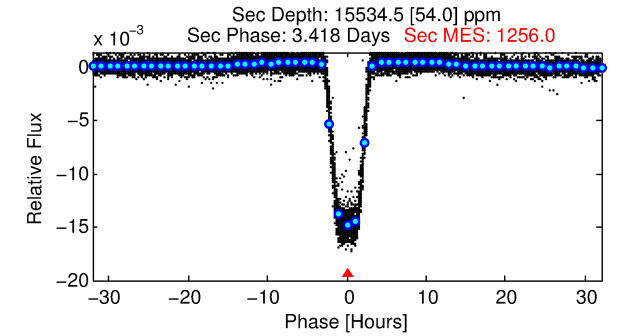
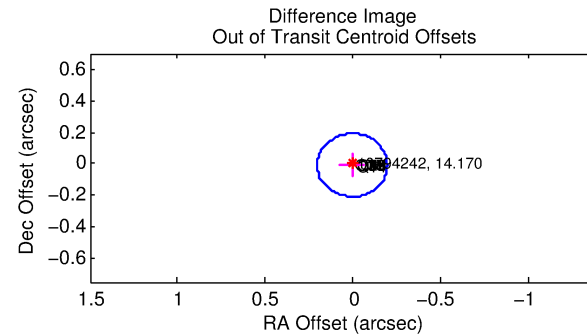
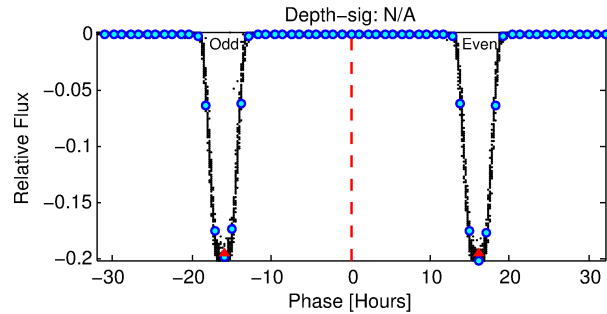
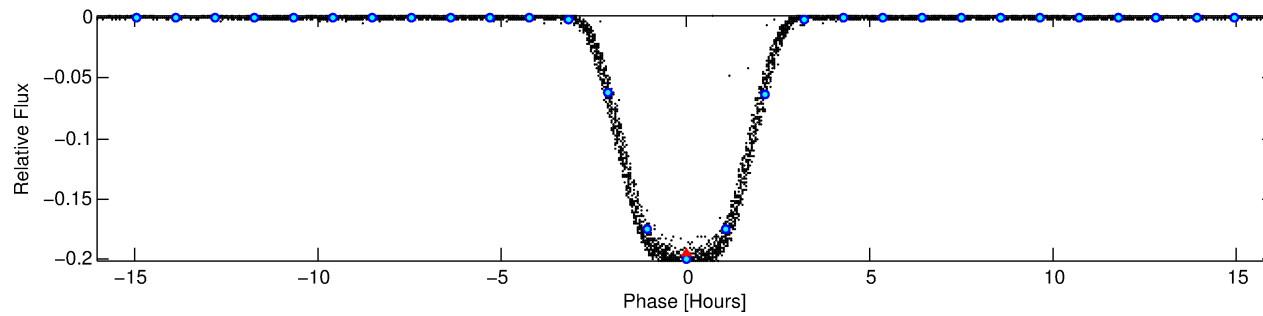
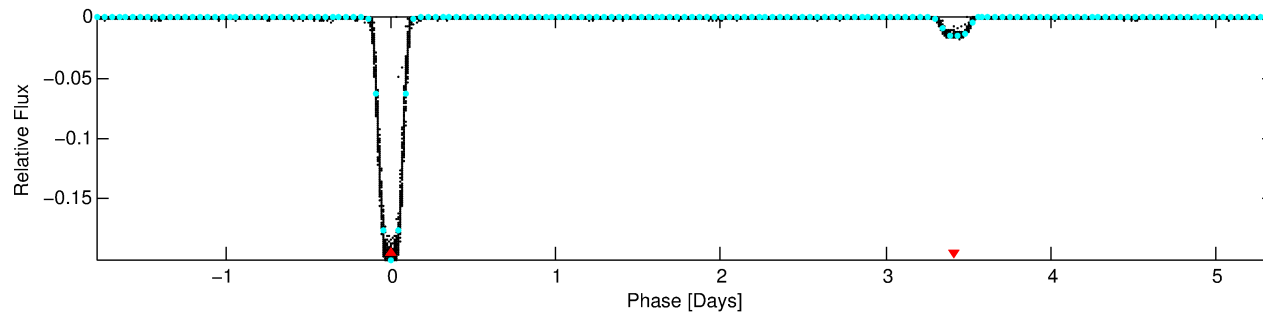
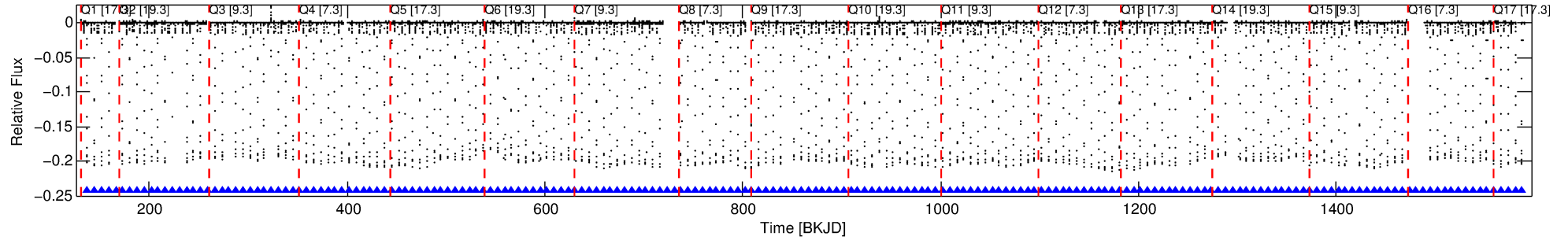
Ephemeris Match Information For 010794242-01

No Significant Match Found

DV One-Page Summary

KIC: 10794242 Candidate: 1 of 1 Period: 7.144 d
KOI: K07372.01 Corr: 0.878

Kp: 14.17 R*: 0.99 Rs Teff: 5655.0 K Logg: 4.39 Fe/H: -0.140



TPS TCE Results:

Period = 7.14376 d
Epoch = 137.7977 BKJD

DV fit results are unavailable

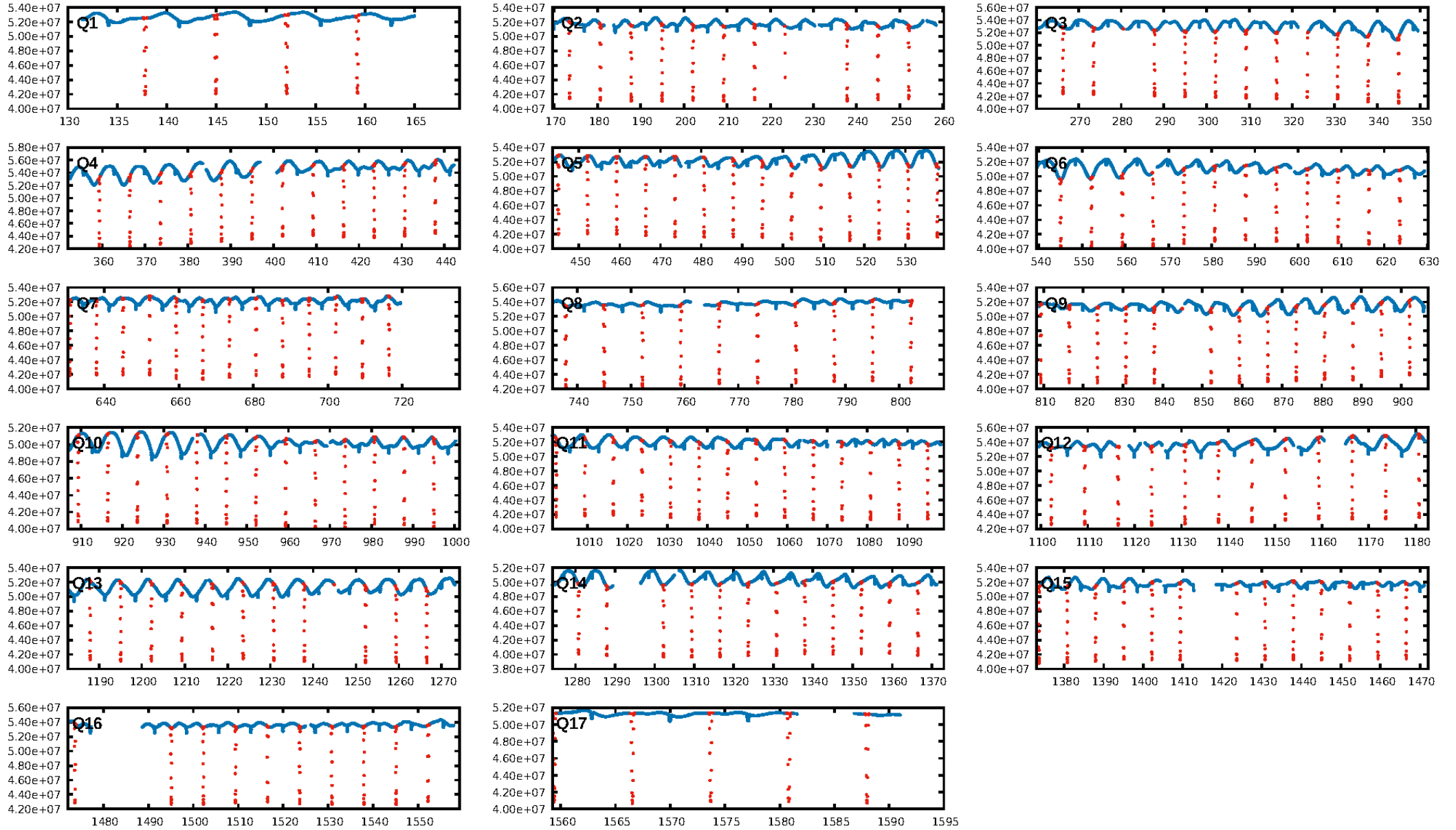
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [181/181]
GhostDiagnostic-chr: 0.971
Centroid-sig: 0.0%
Centroid-so: 0.178 arcsec [362.91σ]
OotOffset-rm: 0.009 arcsec [0.13σ]
KicOffset-rm: 0.151 arcsec [2.25σ]
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]

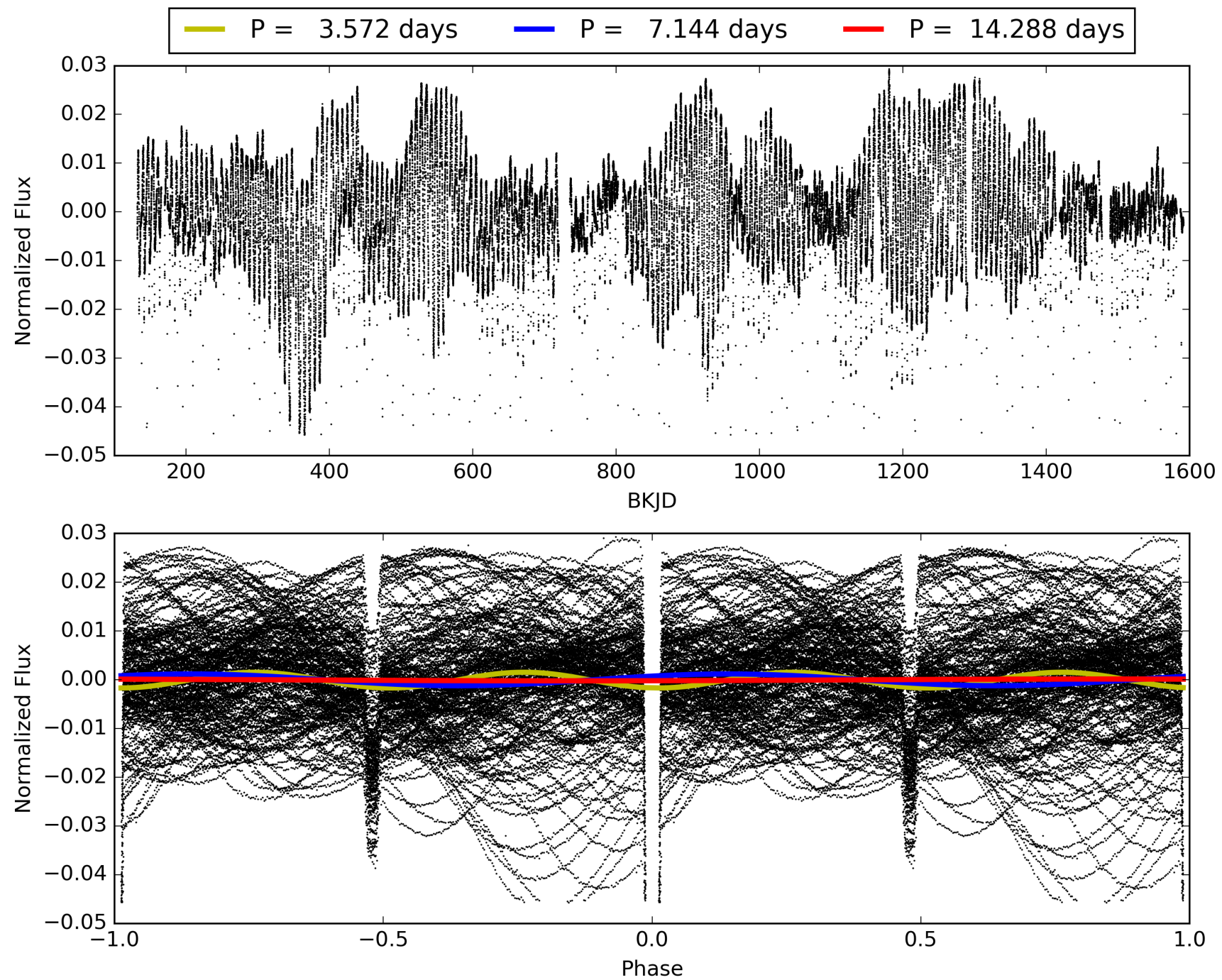
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 05:38:39 Z

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

TCE 010794242-01, PDC Light Curves

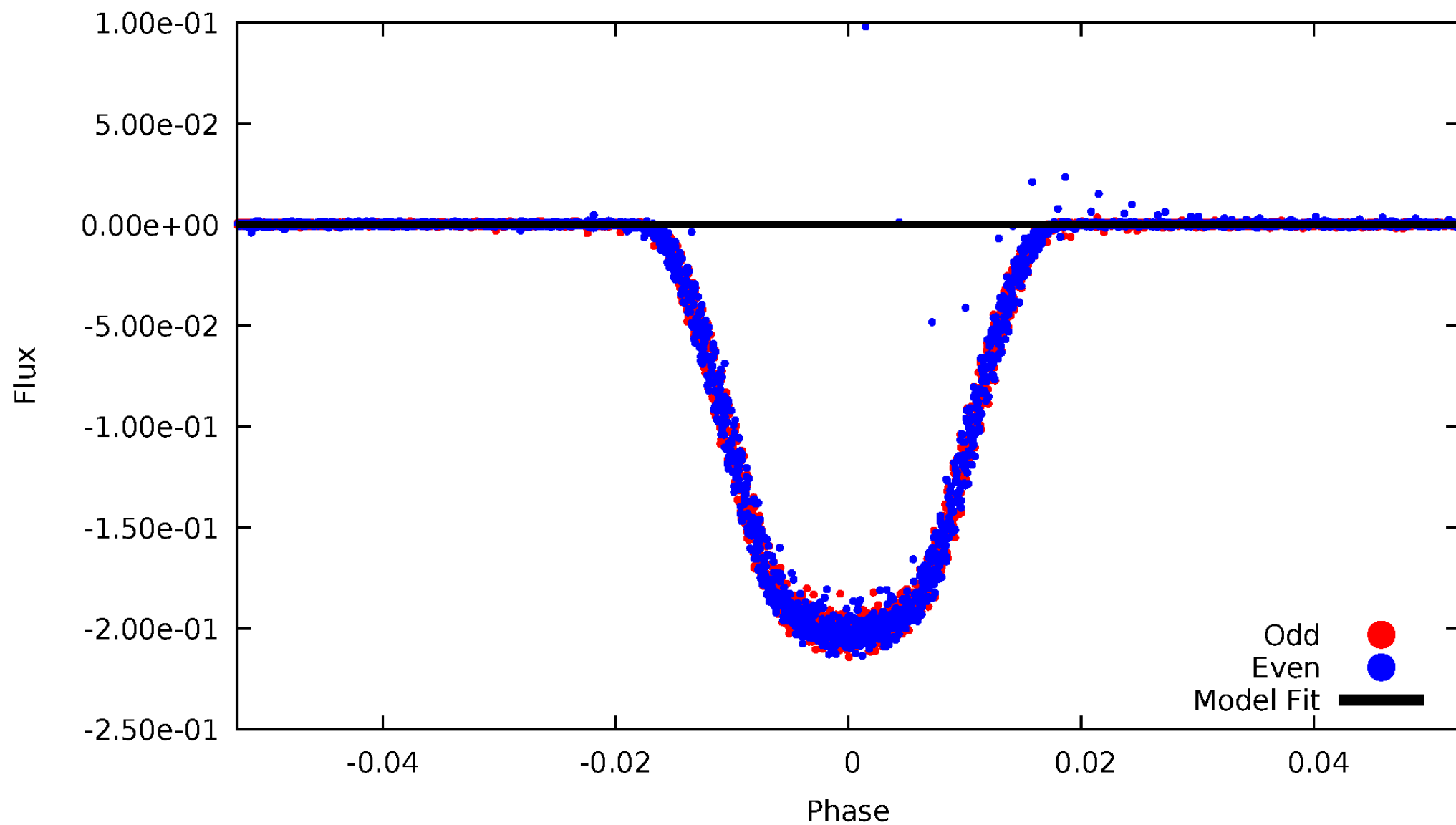


TCE 010794242-01



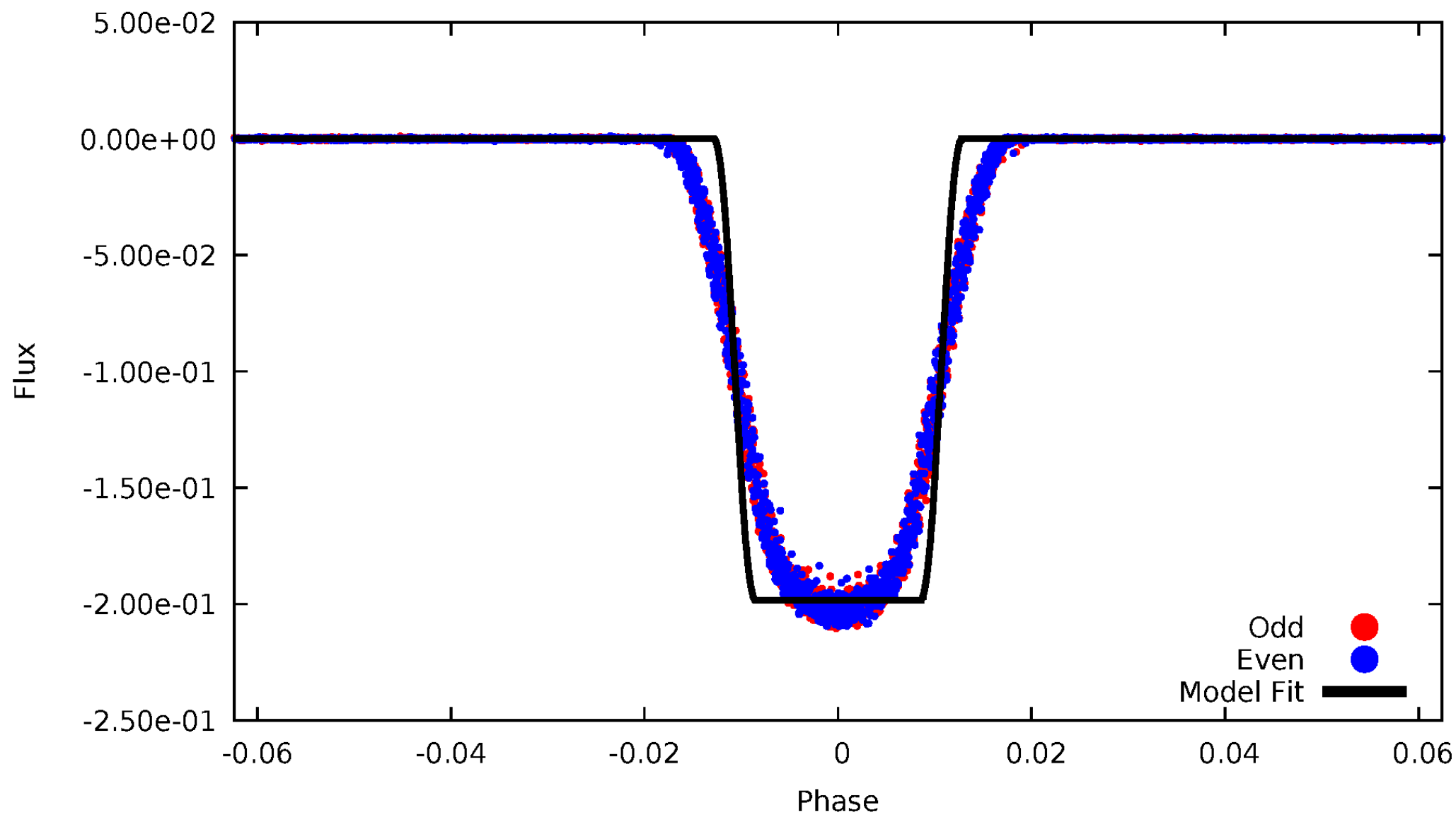
DV Odd/Even

TCE 010794242-01



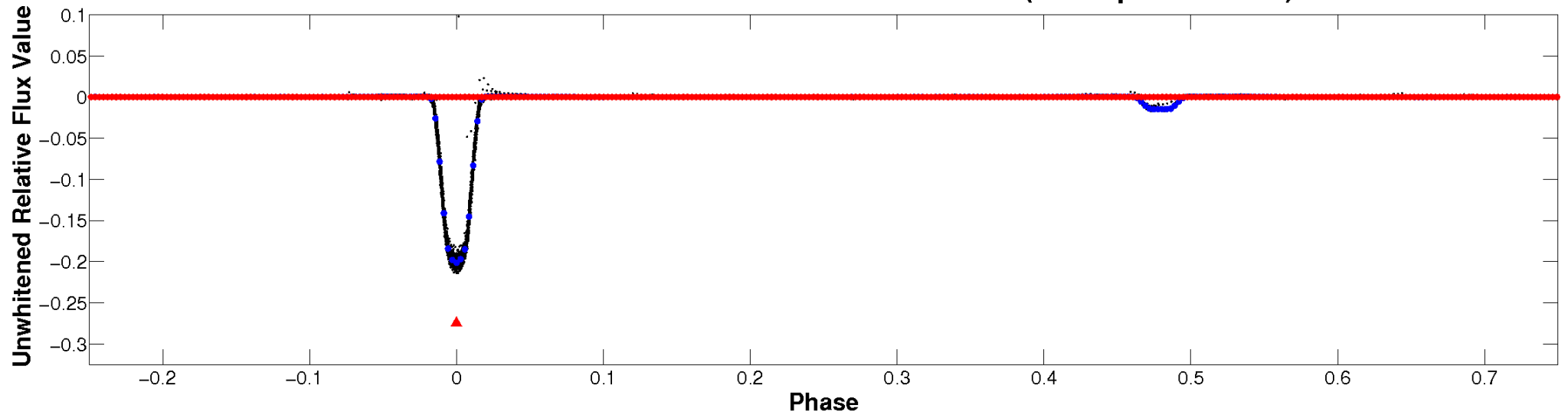
ALT Odd/Even

TCE 010794242-01

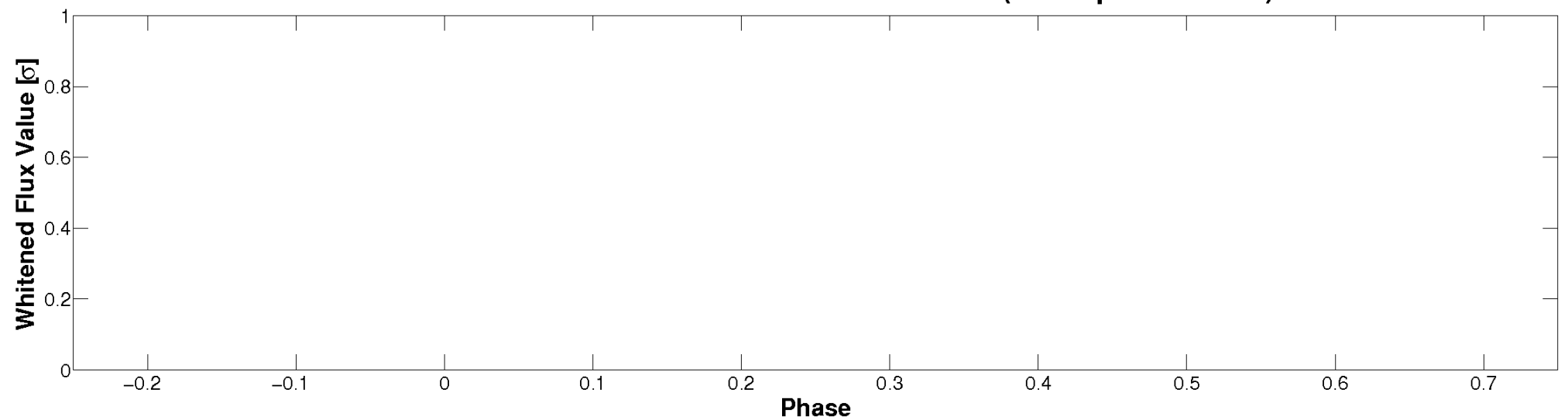


Non-Whitened Vs. Whitened Light Curve

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

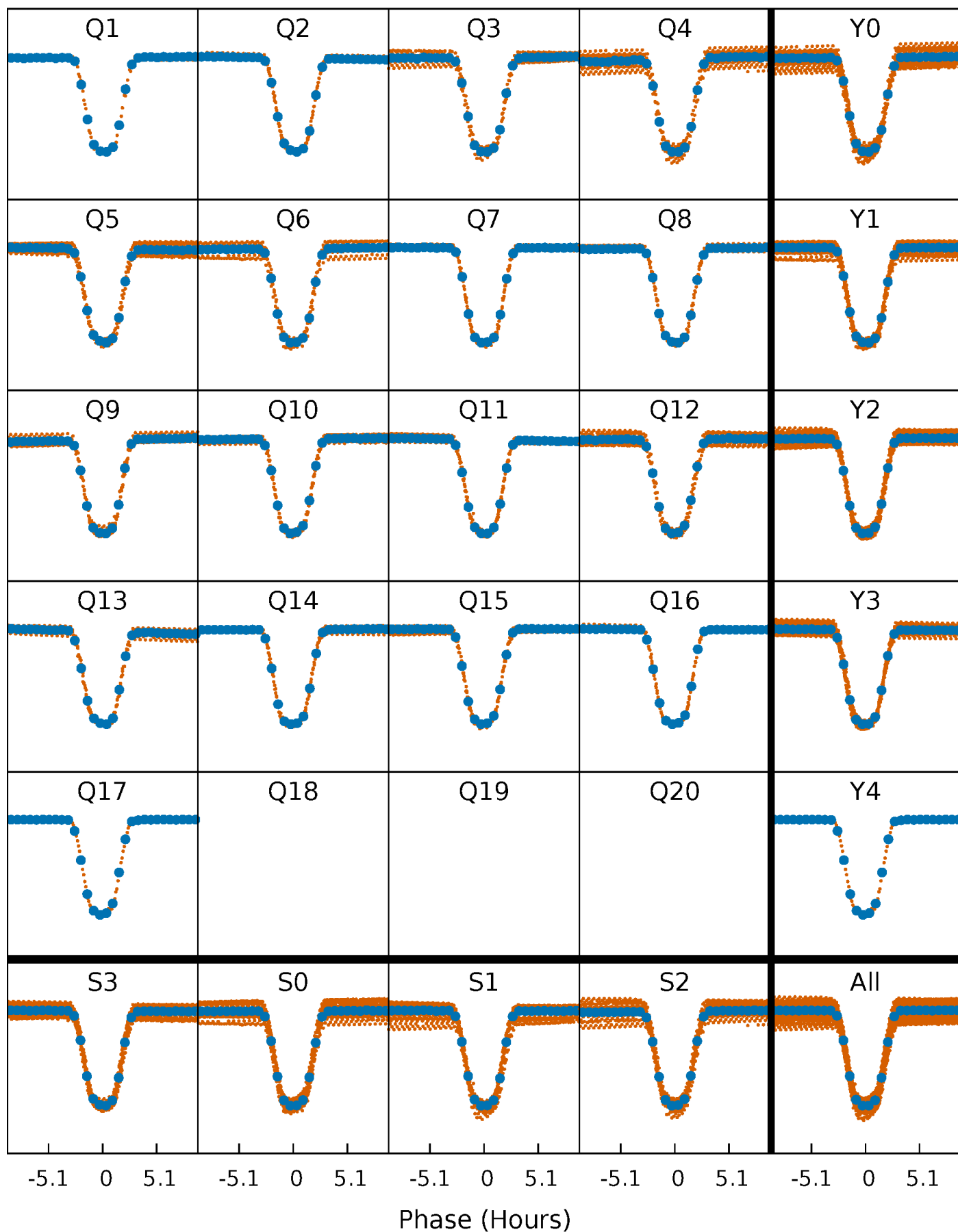


Planet 1 : Phased Whitened Flux Time Series (TPS Epoch/Period)



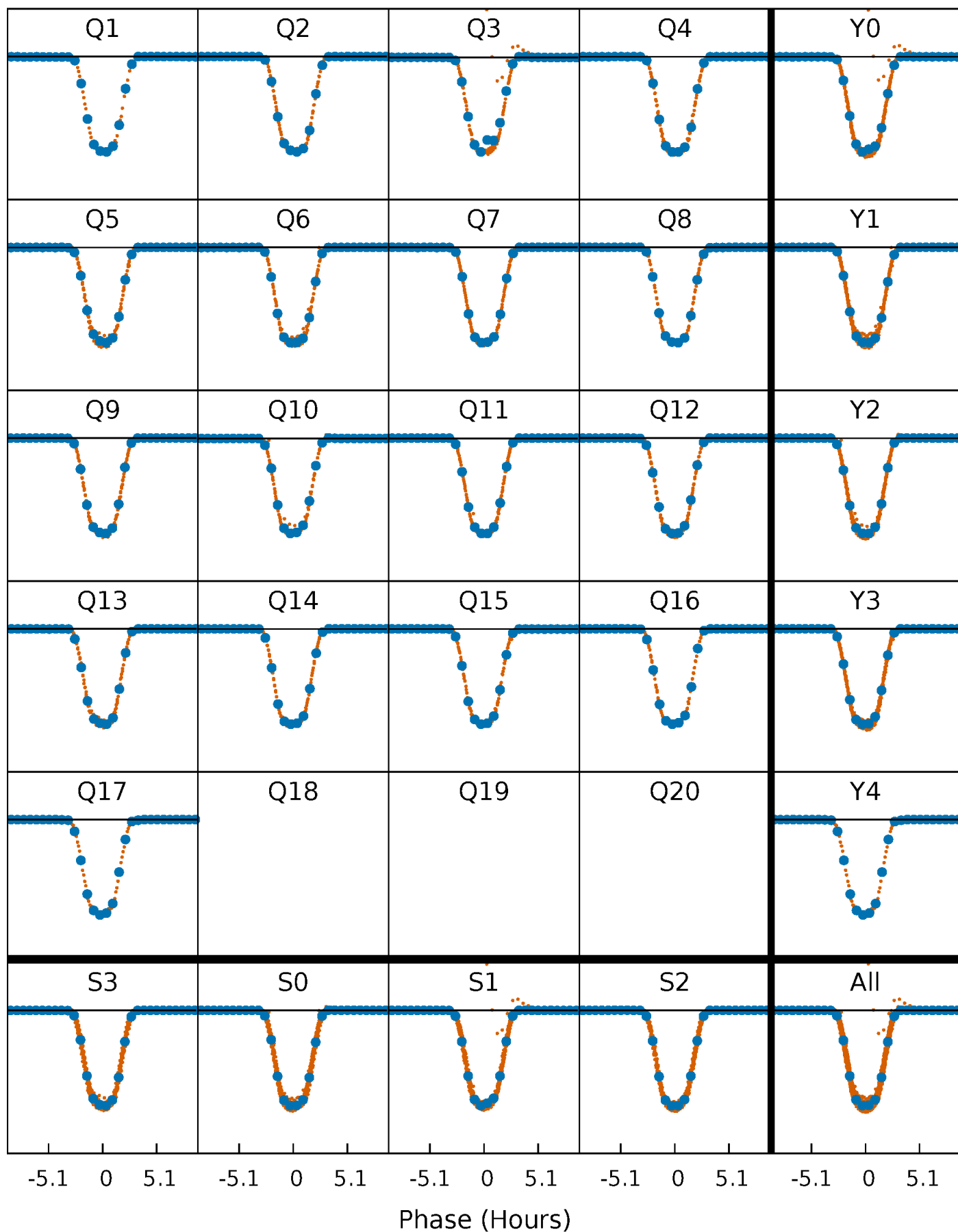
PDC Quarter-Phased Transit Curves

TCE 010794242-01 P= 7.143764 Days $T_0=137.797719$ (BKJD)



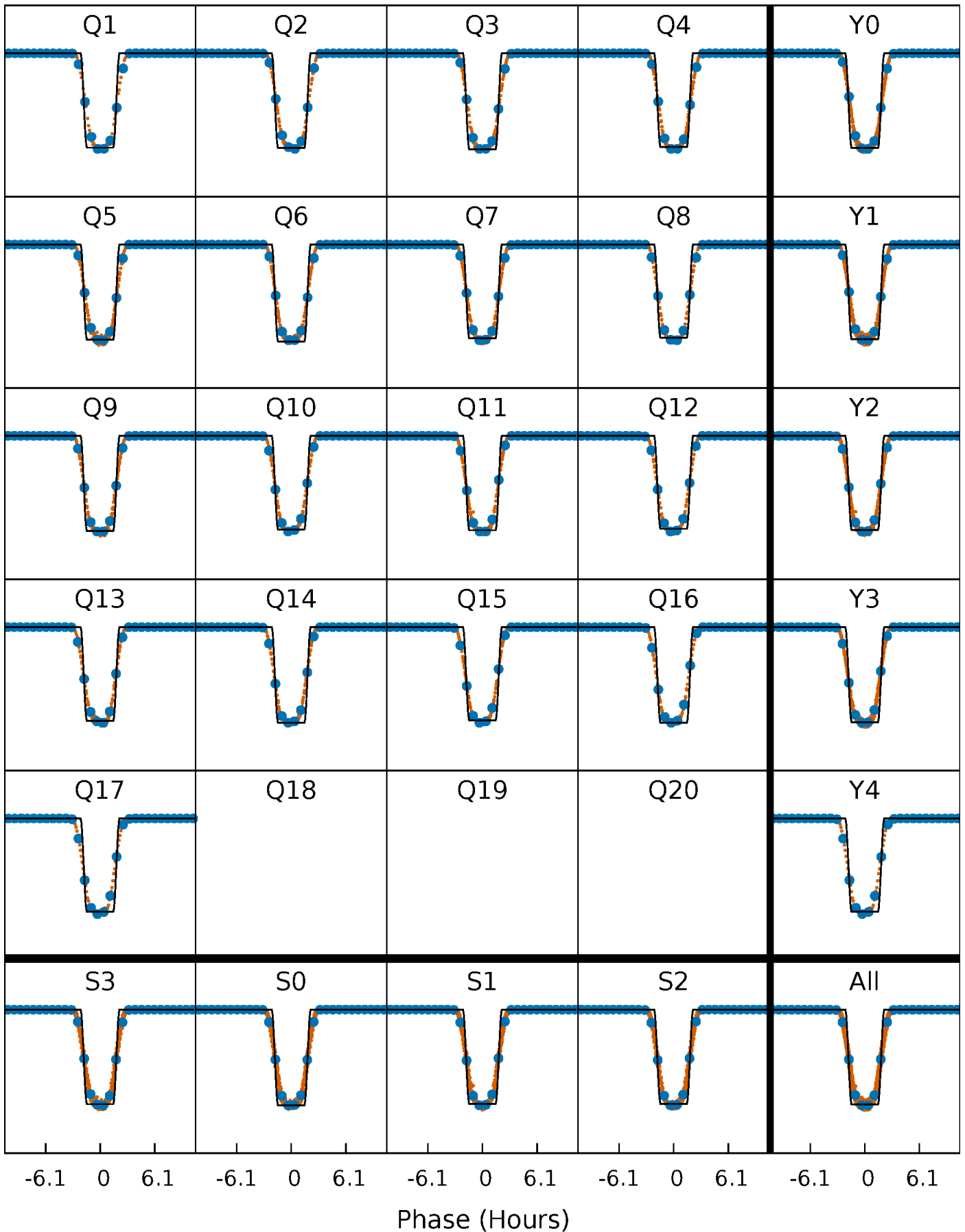
DV Quarter-Phased Transit Curves

TCE 010794242-01 P= 7.143764 Days $T_0=137.797719$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

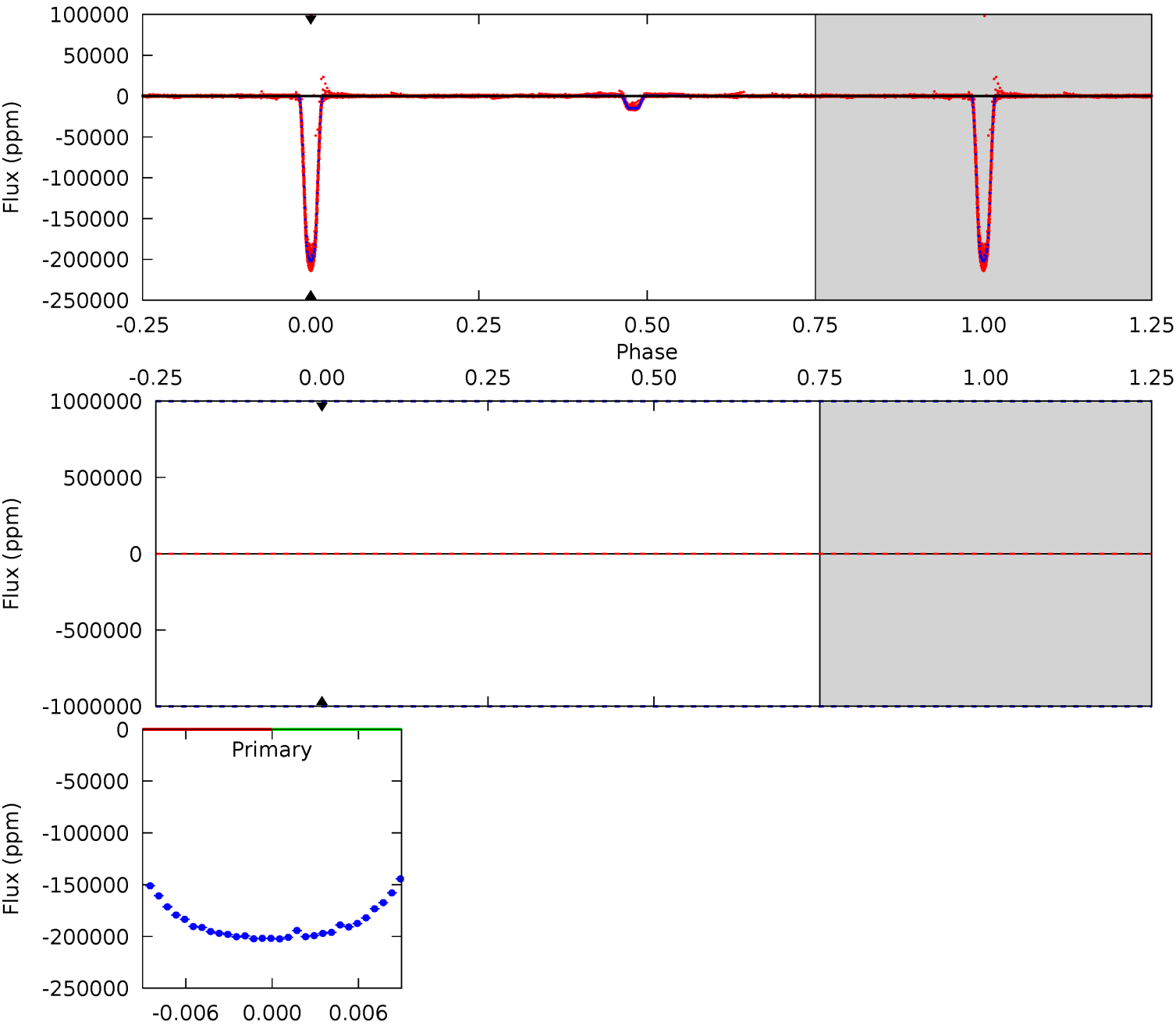
TCE 010794242-01 P= 7.143764 Days $T_0=137.798347$ (BKJD)



DV Model-Shift Uniqueness Test

010794242-01, P = 7.143764 Days, E = 130.653955 Days

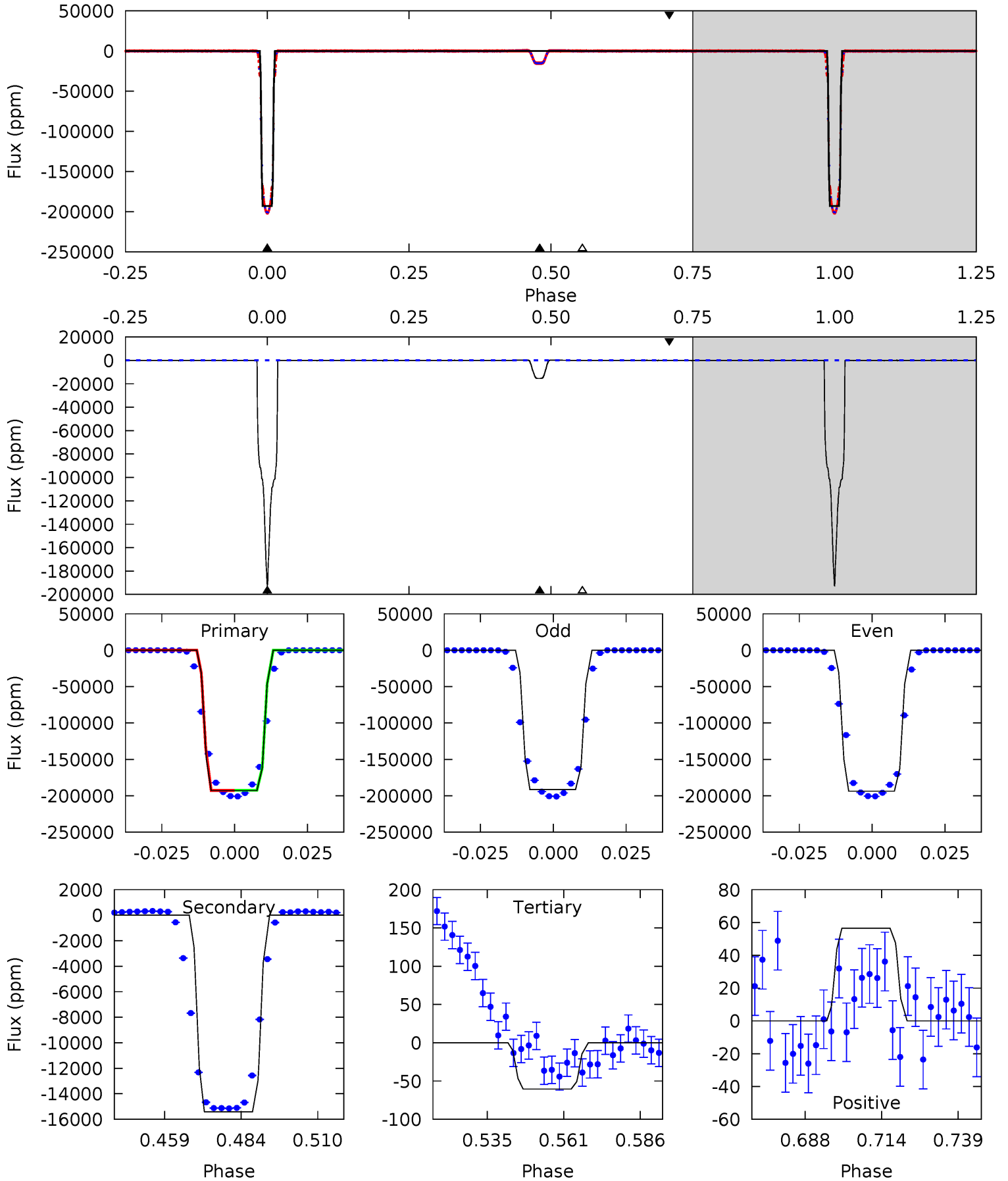
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

010794242-01, P = 7.143764 Days, E = 130.654583 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11701	935.1	3.67	3.43	4.84	2.23	3.13	11697	11698	931.4	931.7	70.5	1.00	0.00	0



Stellar Parameters For KIC 010794242

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5655^{+152}_{-152}	$4.386^{+0.132}_{-0.182}$	$-0.140^{+0.300}_{-0.300}$	$0.992^{+0.280}_{-0.173}$	$0.873^{+0.123}_{-0.076}$	$1.258^{+0.765}_{-0.607}$
	+3%/-3%	+3%/-4%	+214%/-214%	+28%/-17%	+14%/-9%	+61%/-48%
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 010794242-01 / KOI 7372.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	0 ± 1000000	$35.56^{+13.27}_{-10.75}$	1329^{+95}_{-78}	2354^{+3538}_{-8054}	$1.229^{+263.513}_{-227.539}$
Alt.	-15416 ± 16	$48.03^{+13.11}_{-10.58}$	1322^{+104}_{-78}	3483^{+309}_{-217}	18^{+12}_{-7}

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 $A_{obs} \gg 1.0$

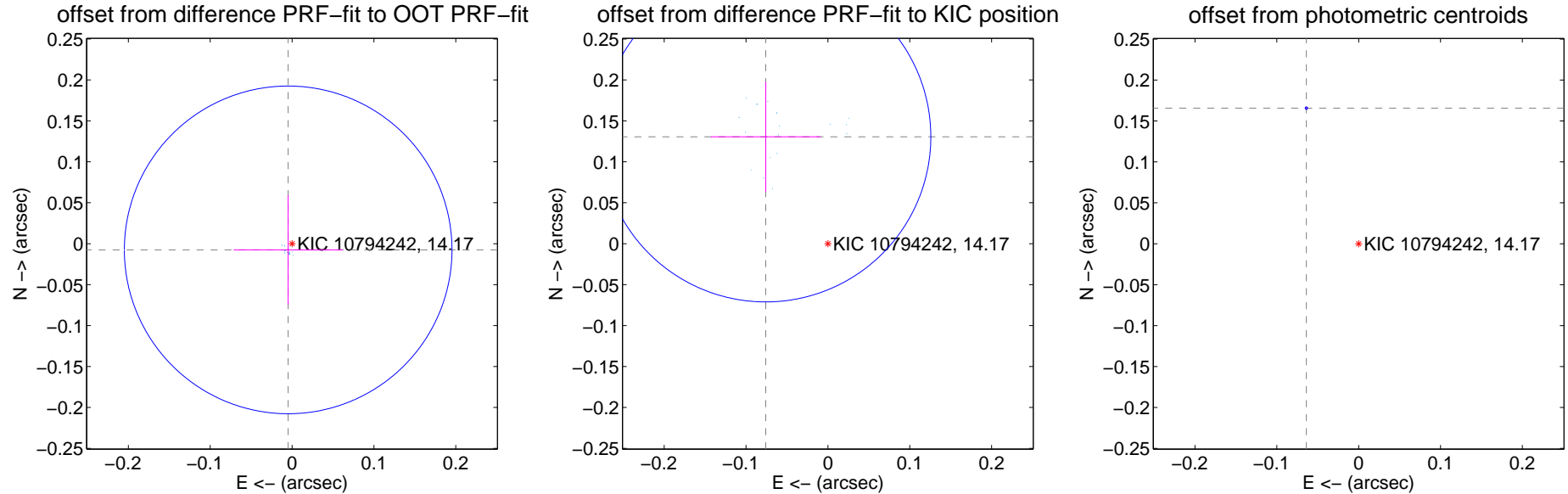
DV Centroid Data

Supplemental centroid analysis for 010794242-01. Kepler magnitude: 14.17. Transit SNR -1.00

There are 17 quarters with good PRF difference image offsets

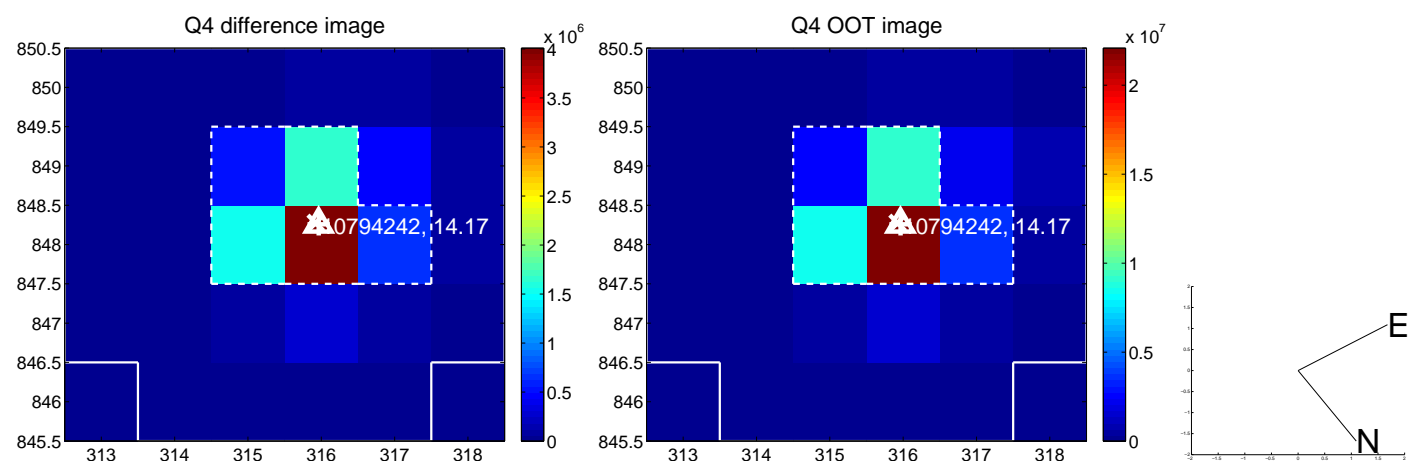
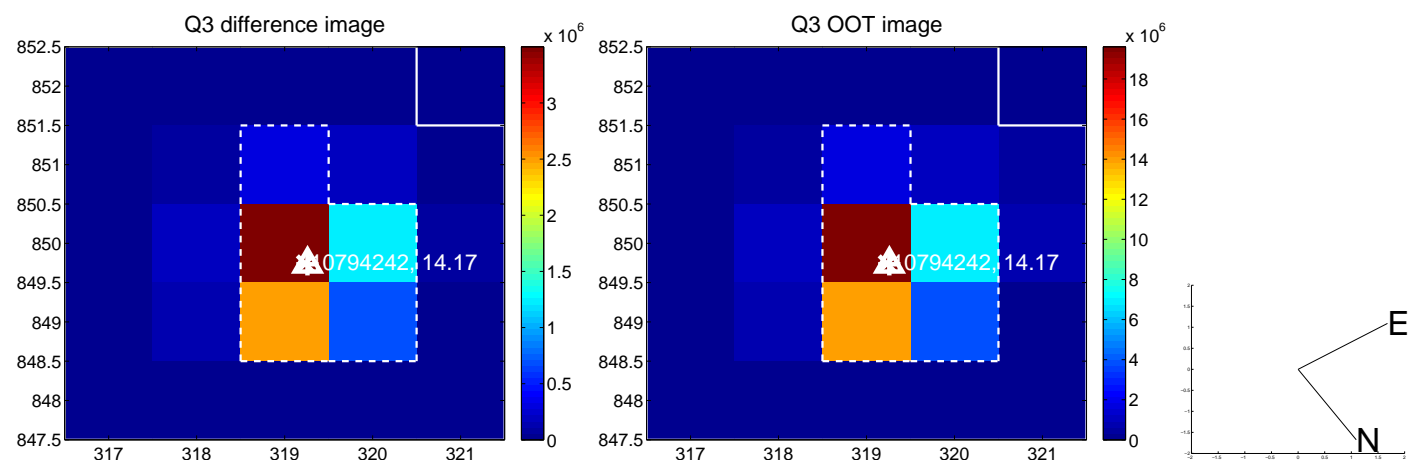
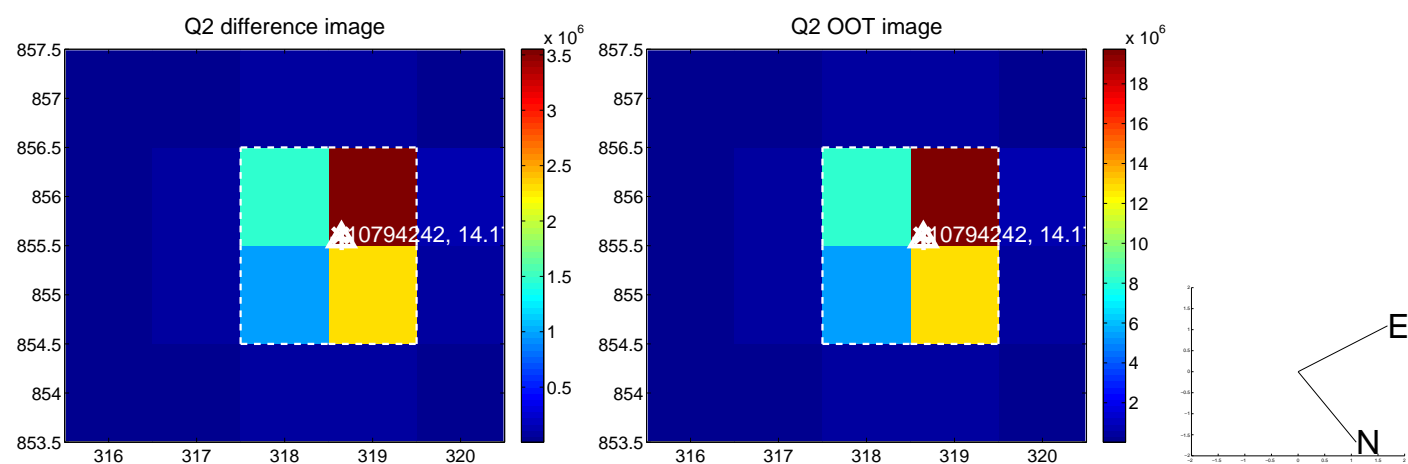
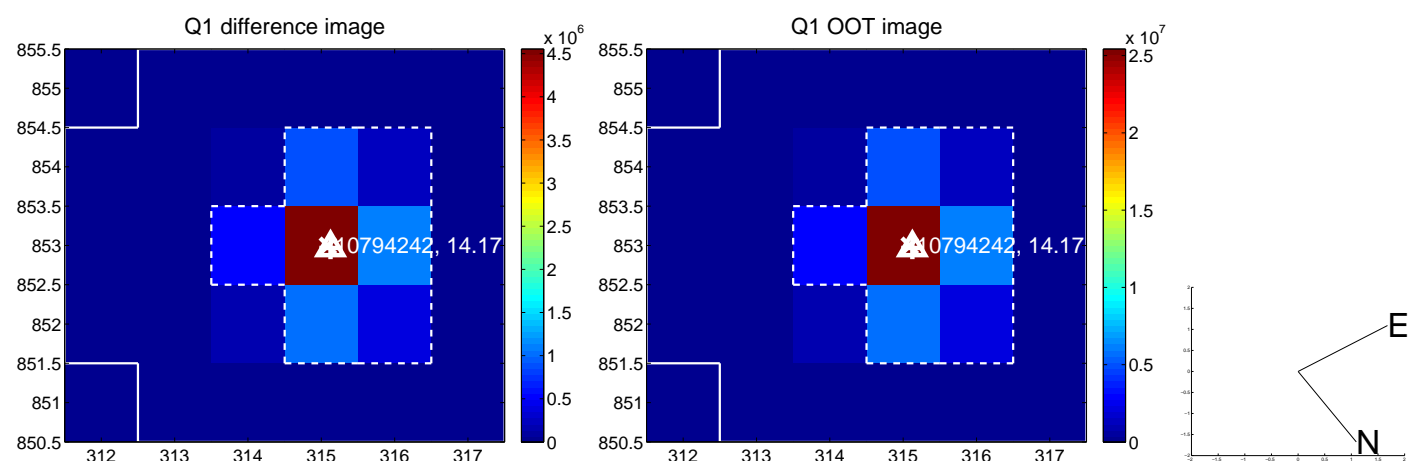
The direct PRF centroid is offset from the target star catalog position by about 0.20 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.009 ± 0.067	0.13	0.005 ± 0.067	-0.008 ± 0.067
PRF-fit source offset from KIC position	0.151 ± 0.067	2.25	0.076 ± 0.067	0.131 ± 0.067
photometric centroid source offset	0.18 ± 0.00	362.91	0.06 ± 0.00	0.17 ± 0.00

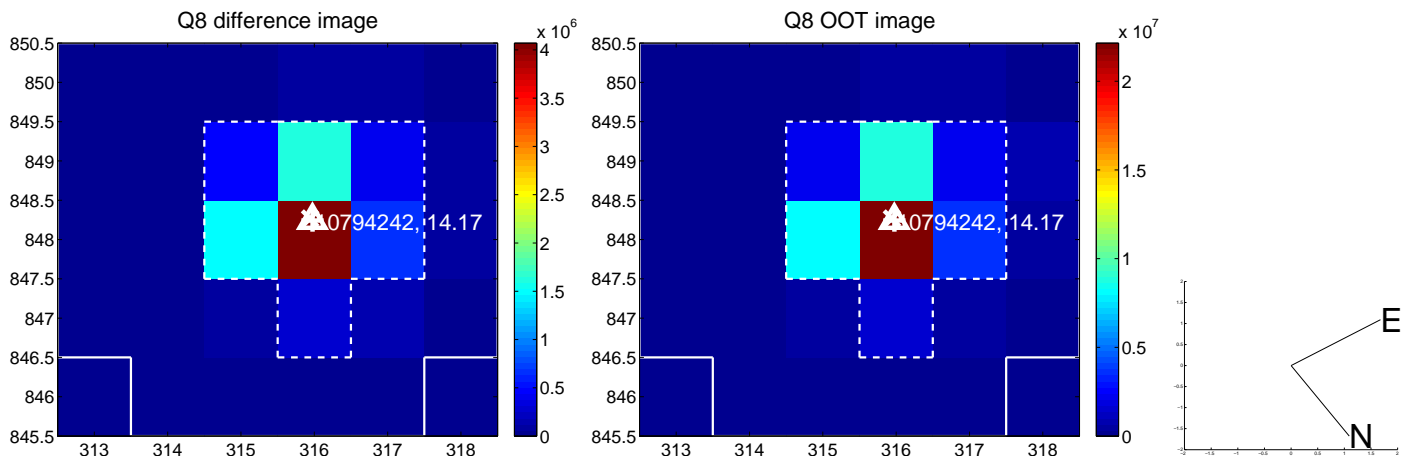
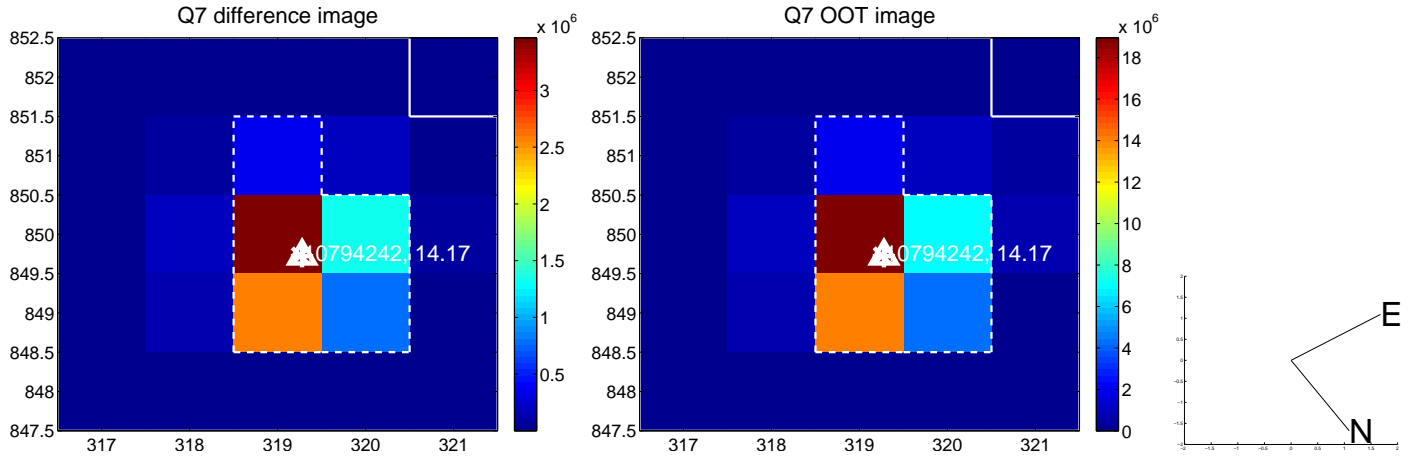
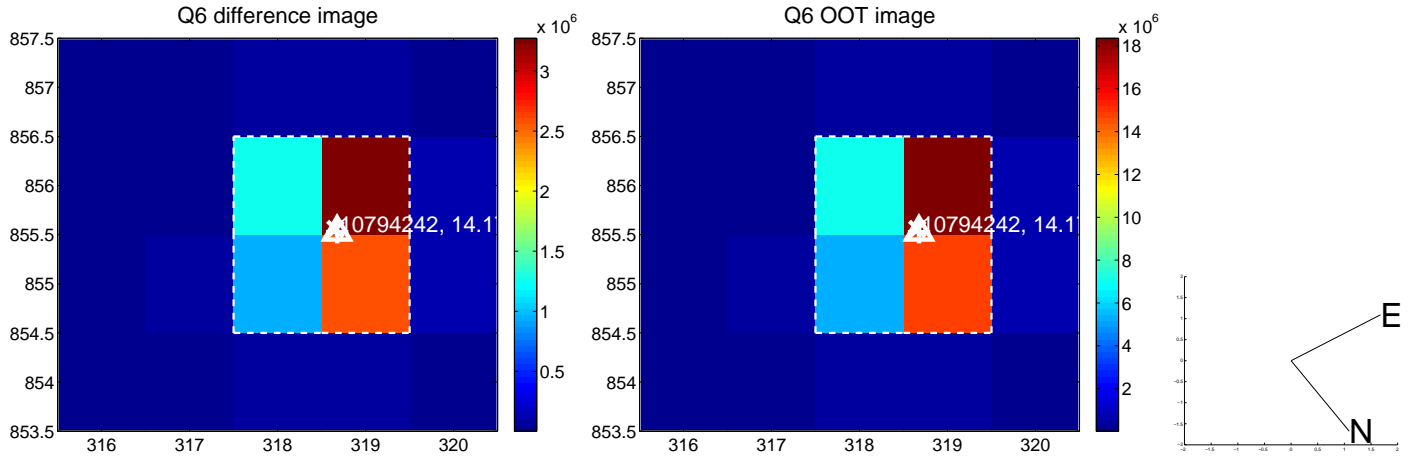
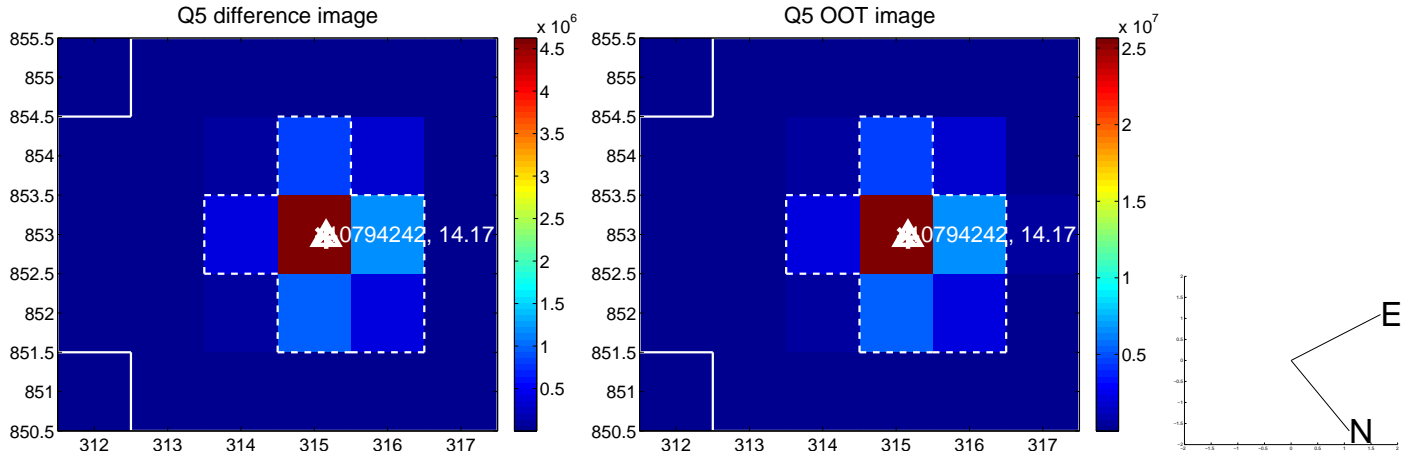


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

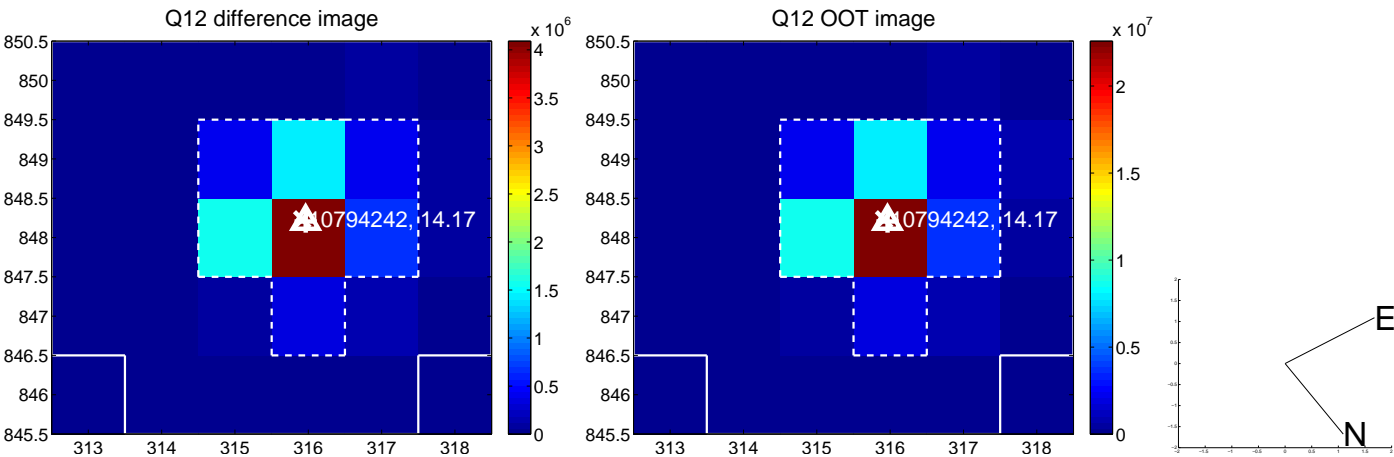
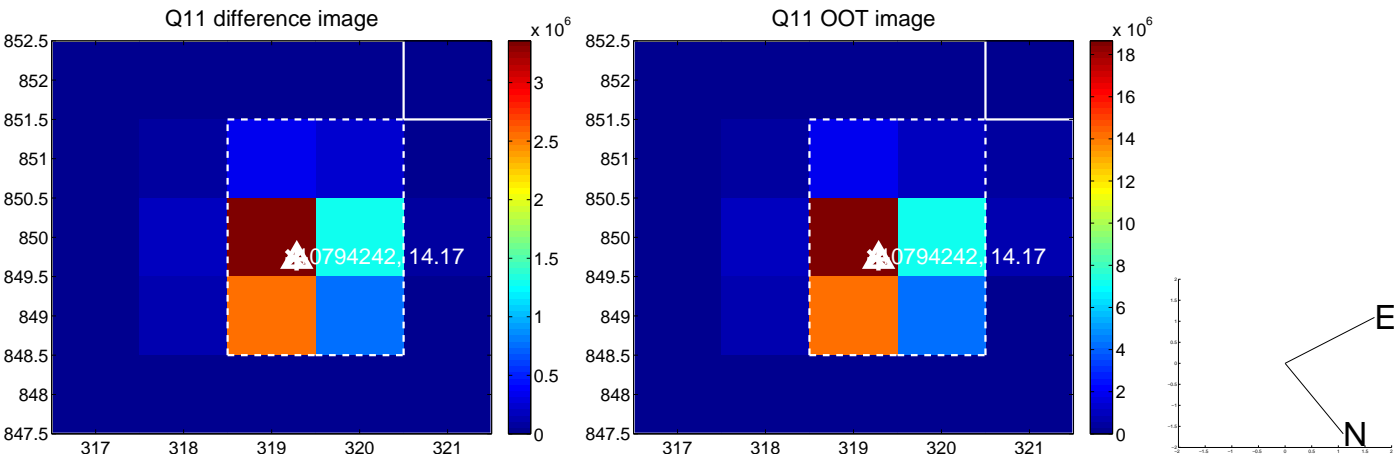
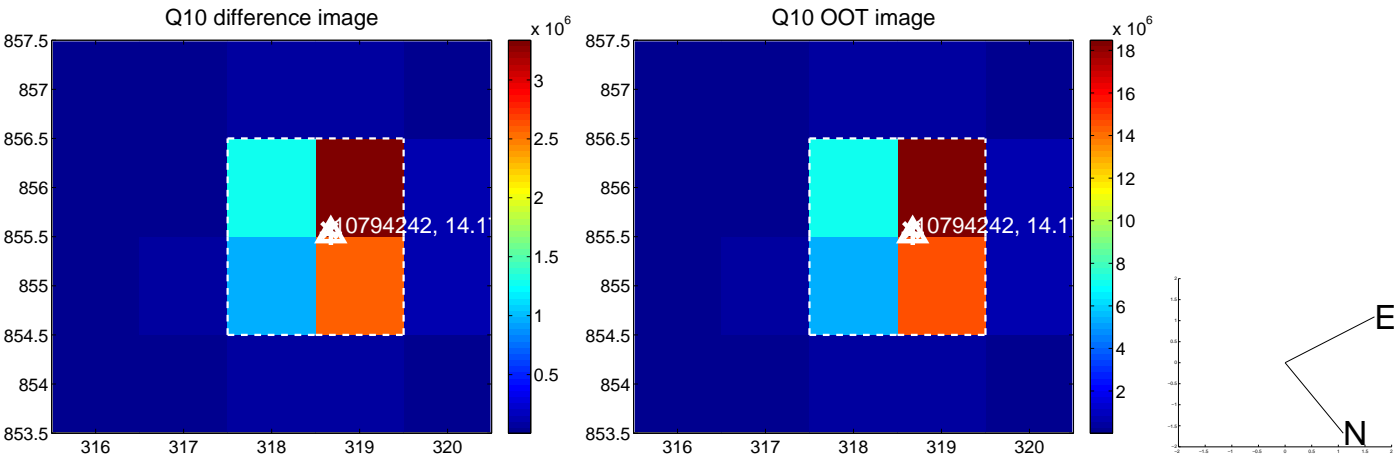
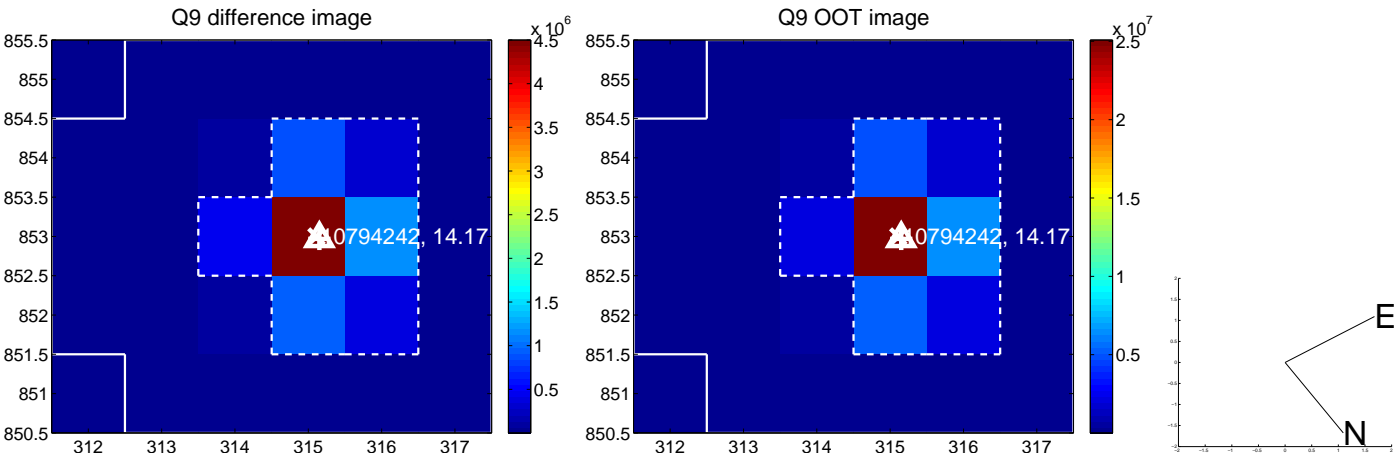
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



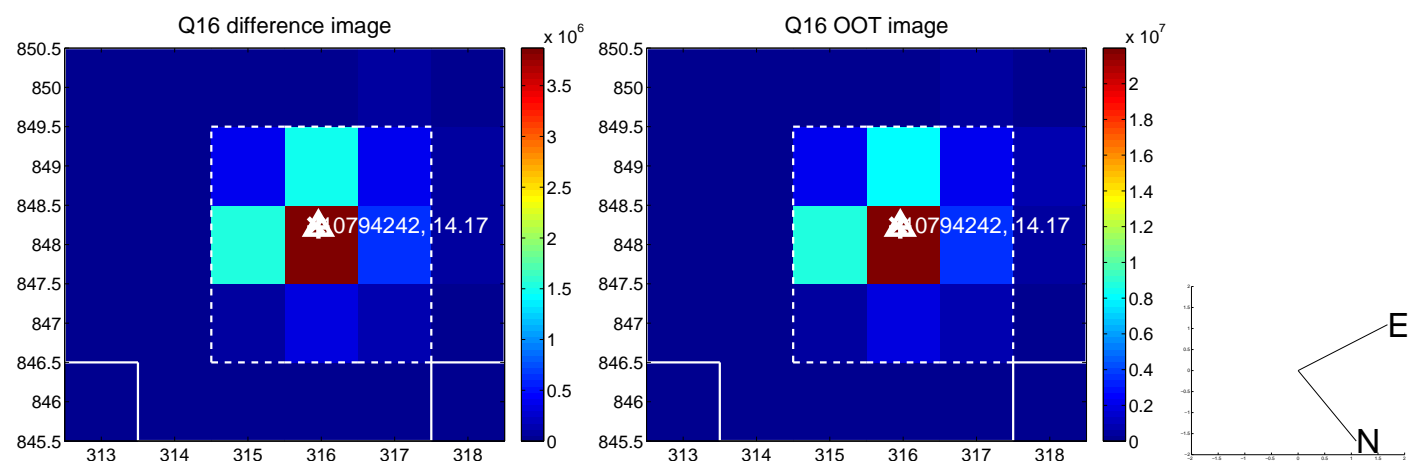
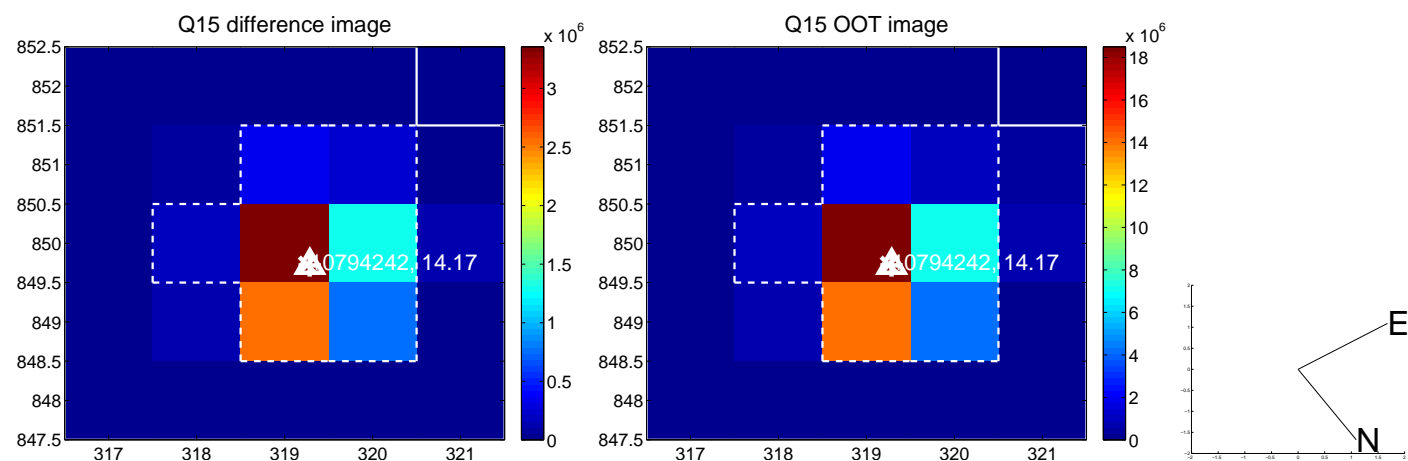
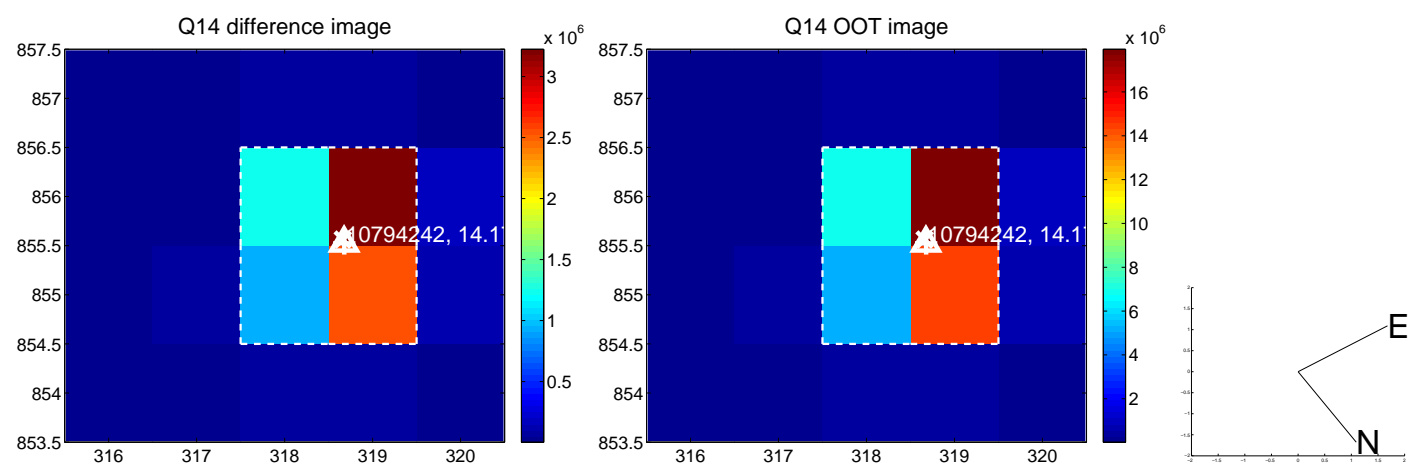
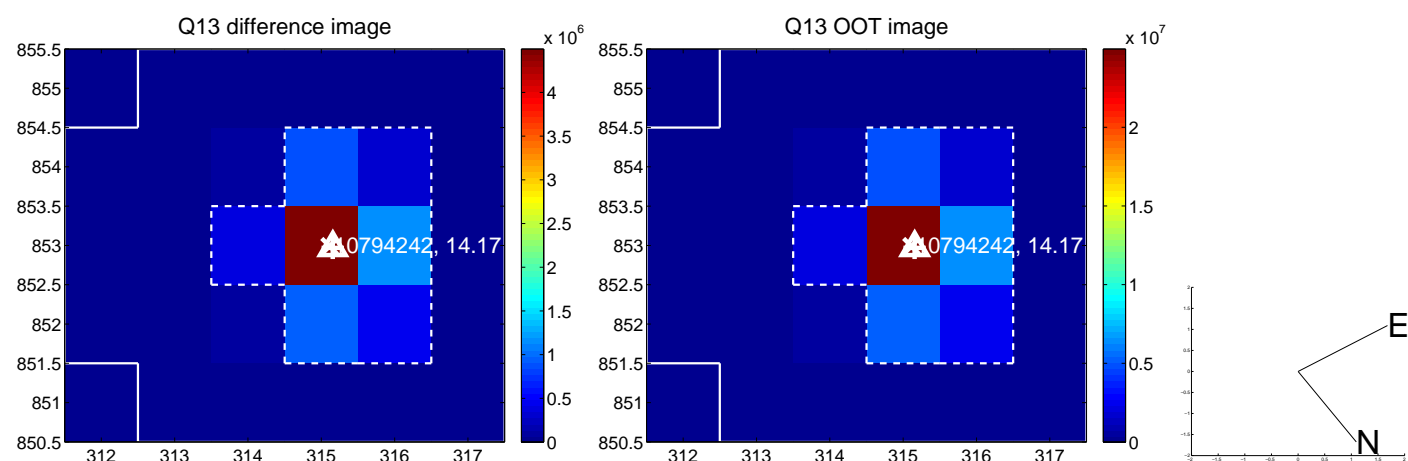
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



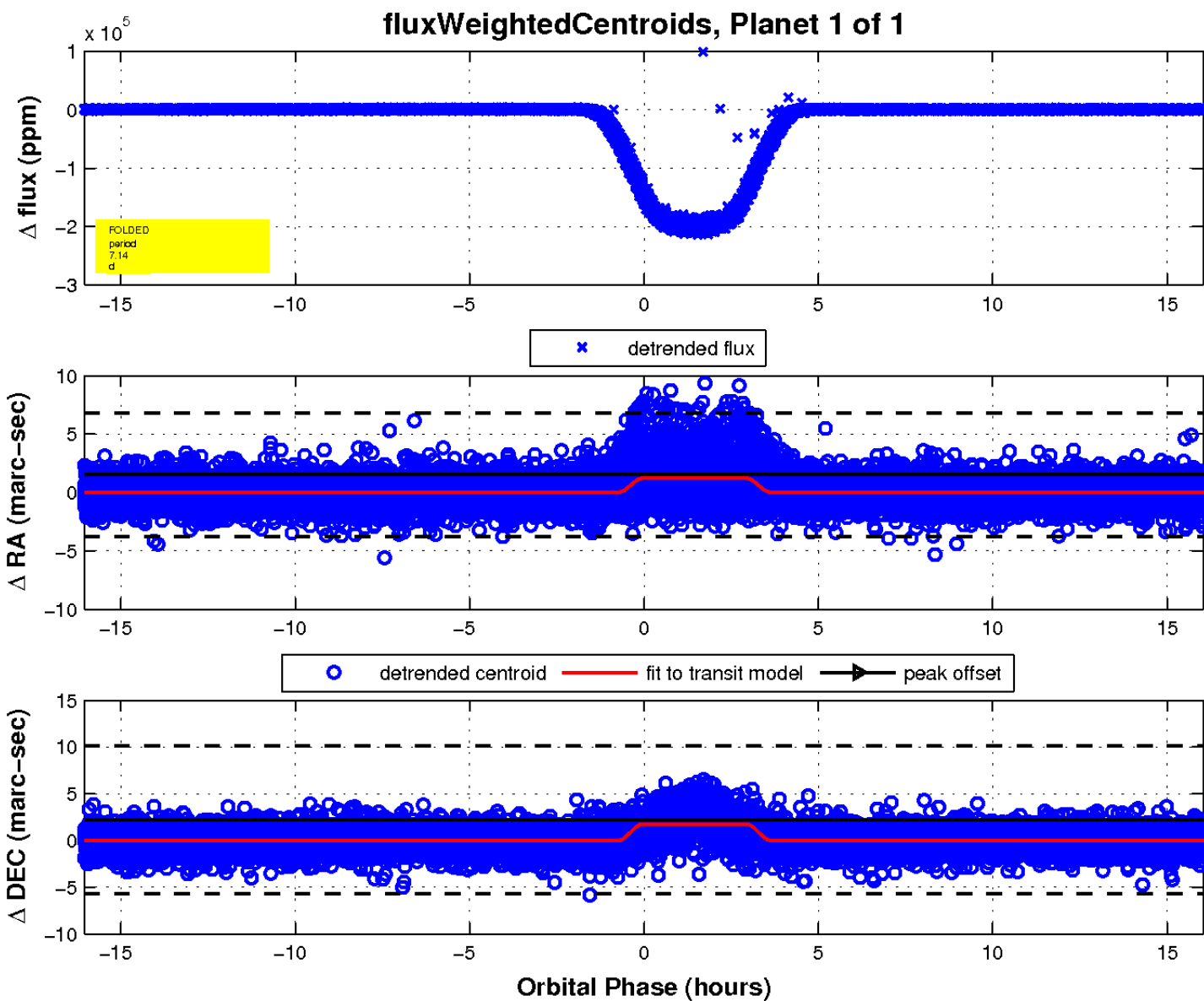
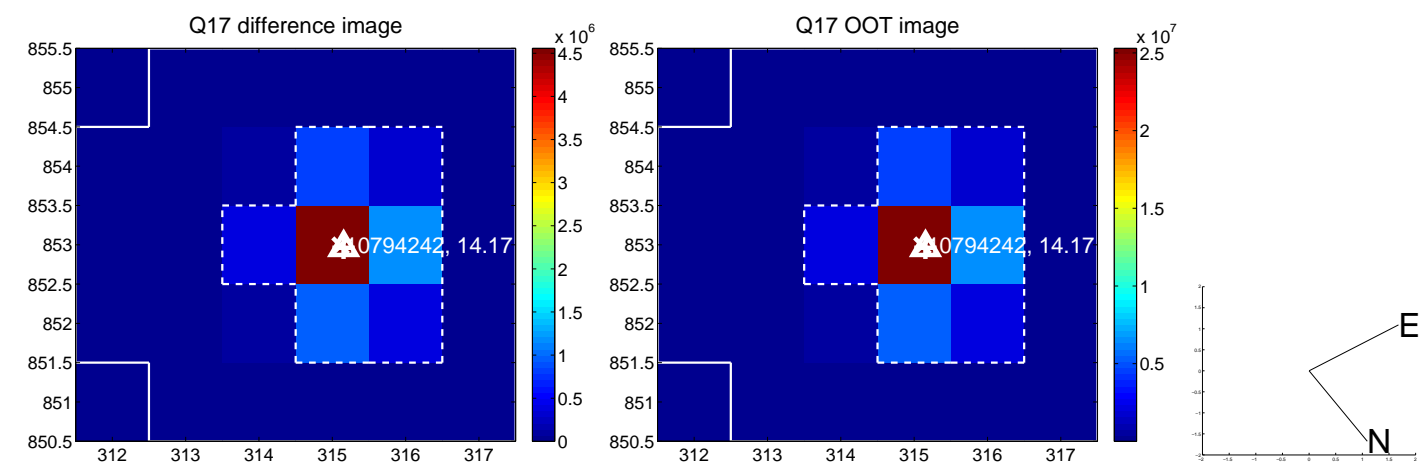
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UKIRT Image

Declination

