

KIC 010337295

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})
010337295-01	OBS	No	368.321795	154.184188	395.7	20.137	7.7	8.4	0.81	5875	1.79	0.74

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010337295-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—CENT_FEW_MEAS

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

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

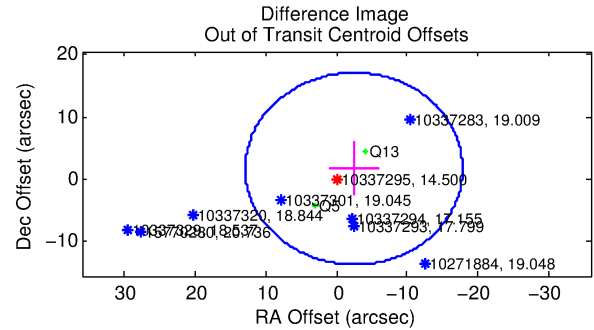
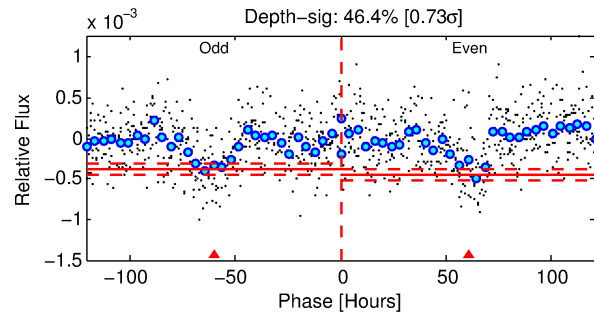
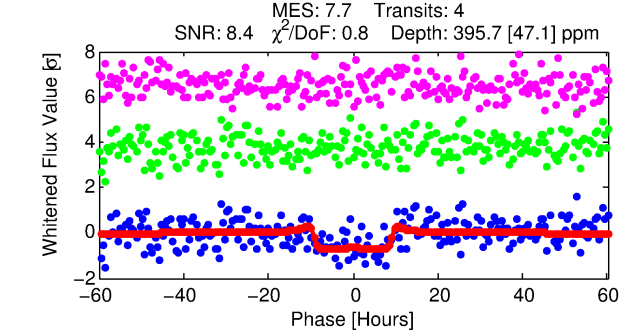
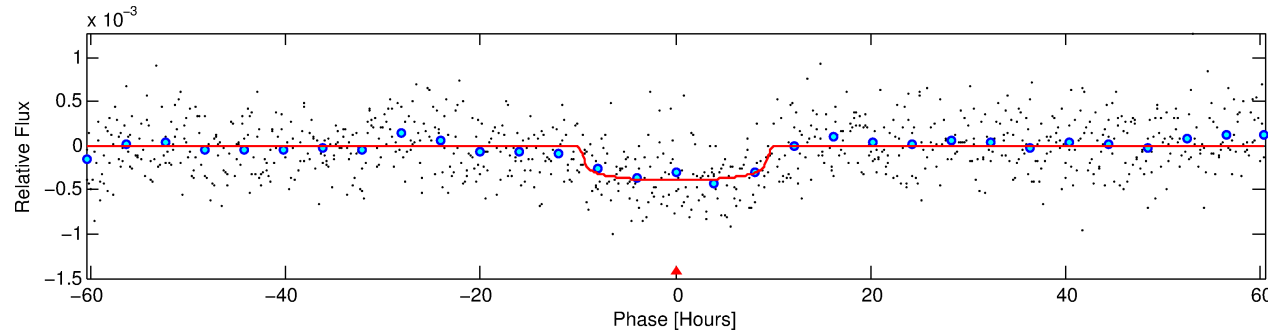
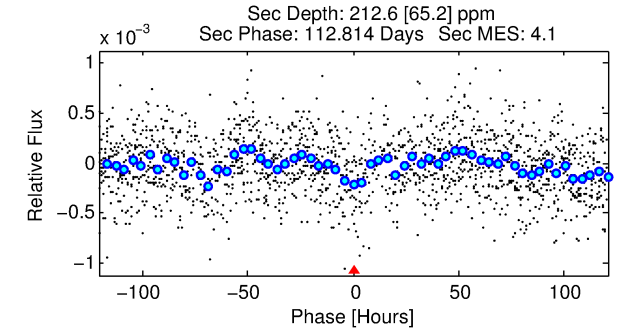
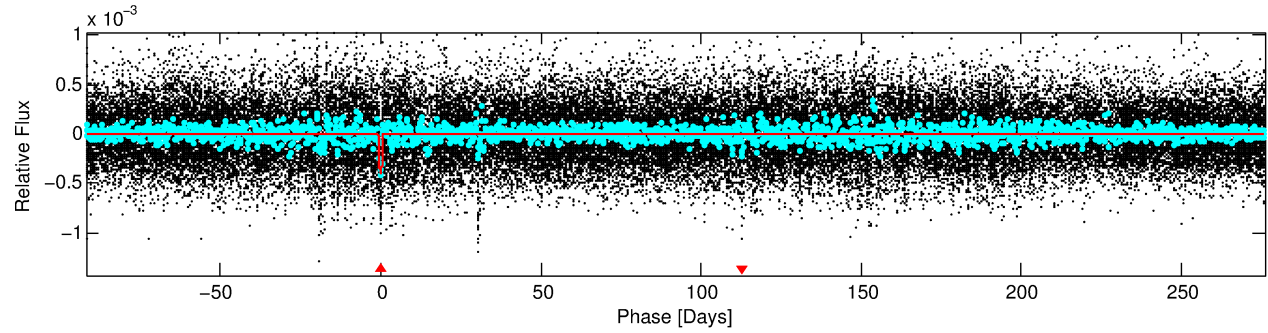
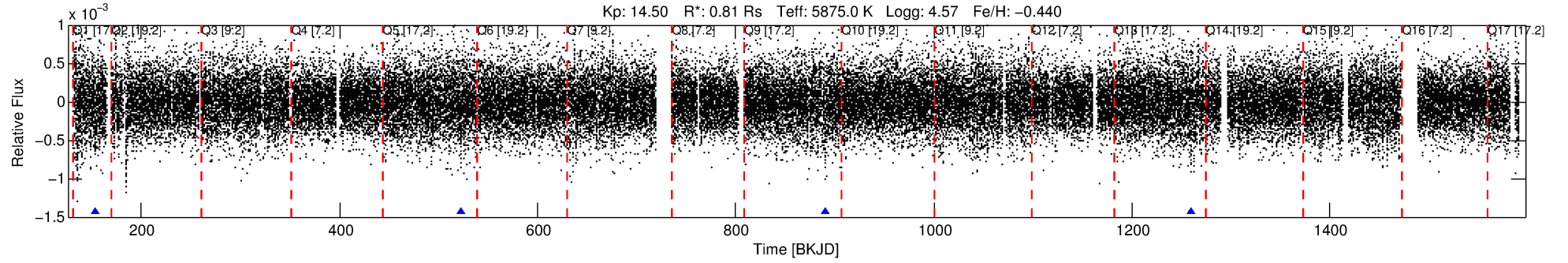
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 010337295-01

No Significant Match Found

DV One-Page Summary

KIC: 10337295 Candidate: 1 of 1 Period: 368.322 d



DV Fit Results:

Period = 368.32180 [0.01223] d
Epoch = 154.1842 [0.0216] BKJD
Rp/R* = 0.0203 [0.0028]
a/R* = 85.26 [51.41]
b = 0.82 [0.25]
Seff = 0.74 [0.24]
Teq = 237 [19] K
Rp = 1.79 [0.50] Re
a = 0.9662 [0.1990] AU
Ag = 34193.47 [17542.37] [1.95 σ]
Teff = 4974 [531] K [8.91 σ]

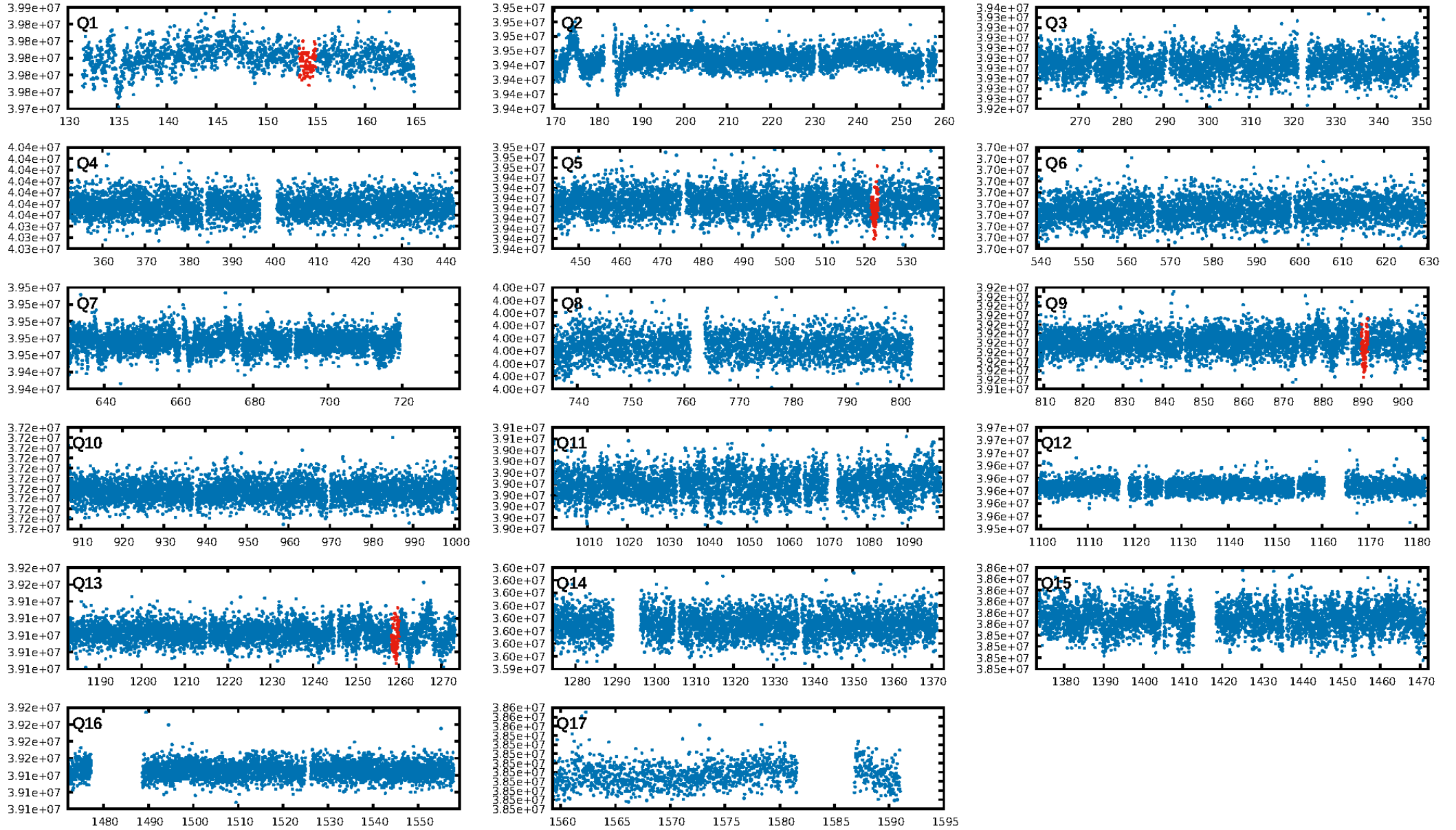
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 97.5%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 1.68e-08
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 1.829
Centroid-sig: N/A
Centroid-so: 2.838 arcsec [1.55 σ]
OotOffset-rm: 2.999 arcsec [0.58 σ]
KicOffset-rm: 3.193 arcsec [0.82 σ]
OotOffset-st: 0/0/0/2 [2]
KicOffset-st: 0/0/0/2 [2]
DiffImageQuality-fgm: 0.00 [0/2]
DiffImageOverlap-fno: 1.00 [4/4]

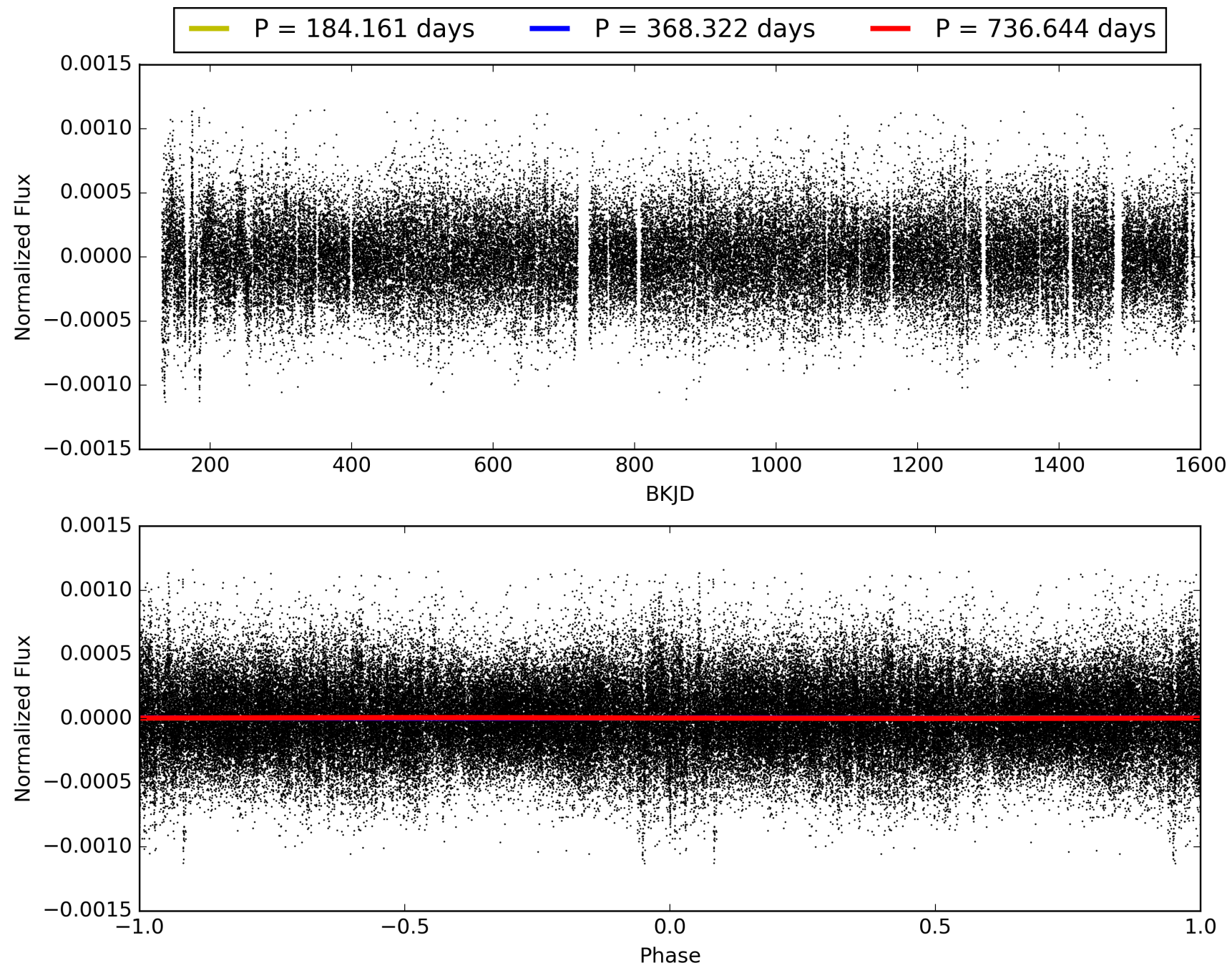
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 21:07:14 Z

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

TCE 010337295-01, PDC Light Curves

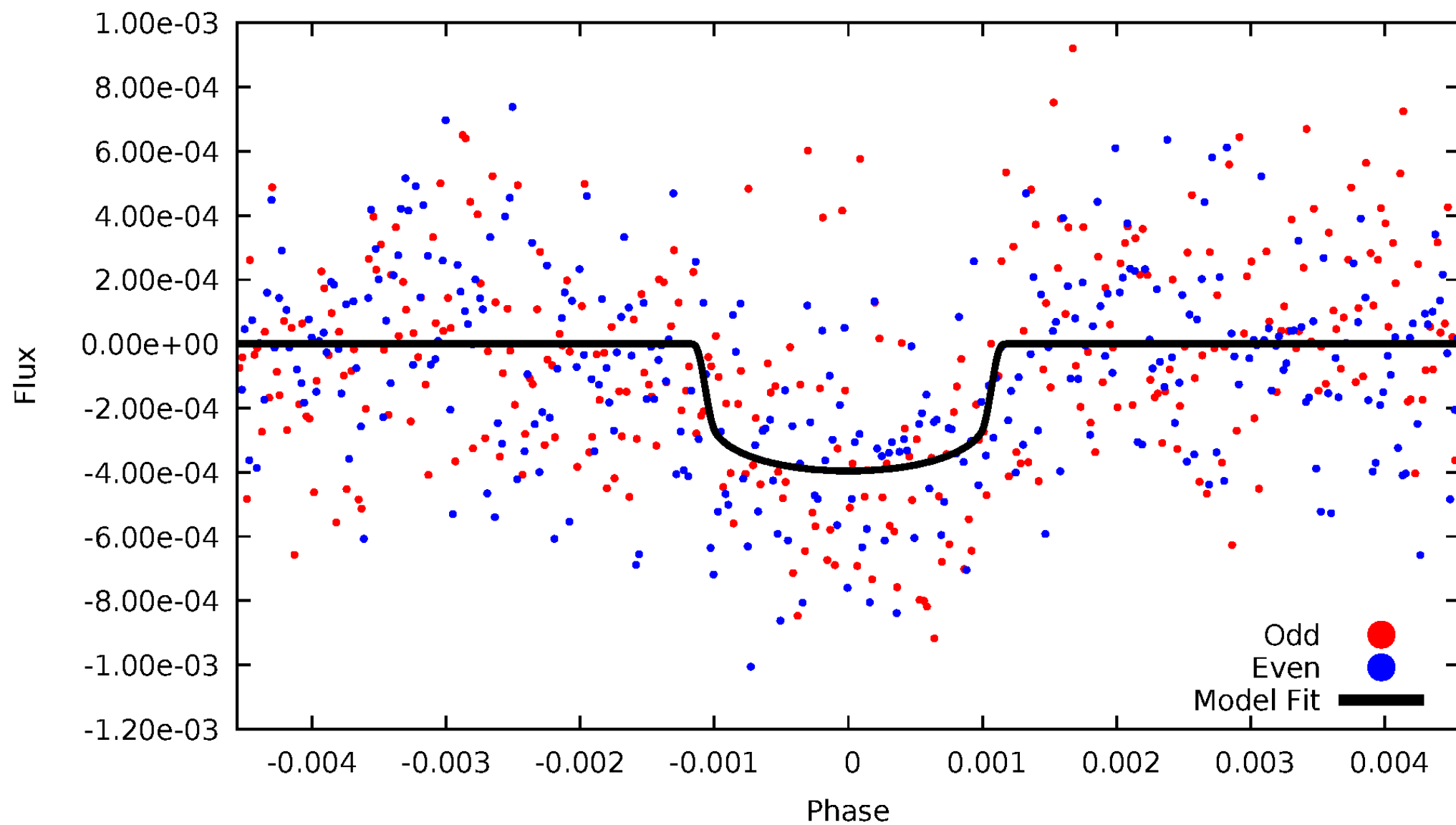


TCE 010337295-01



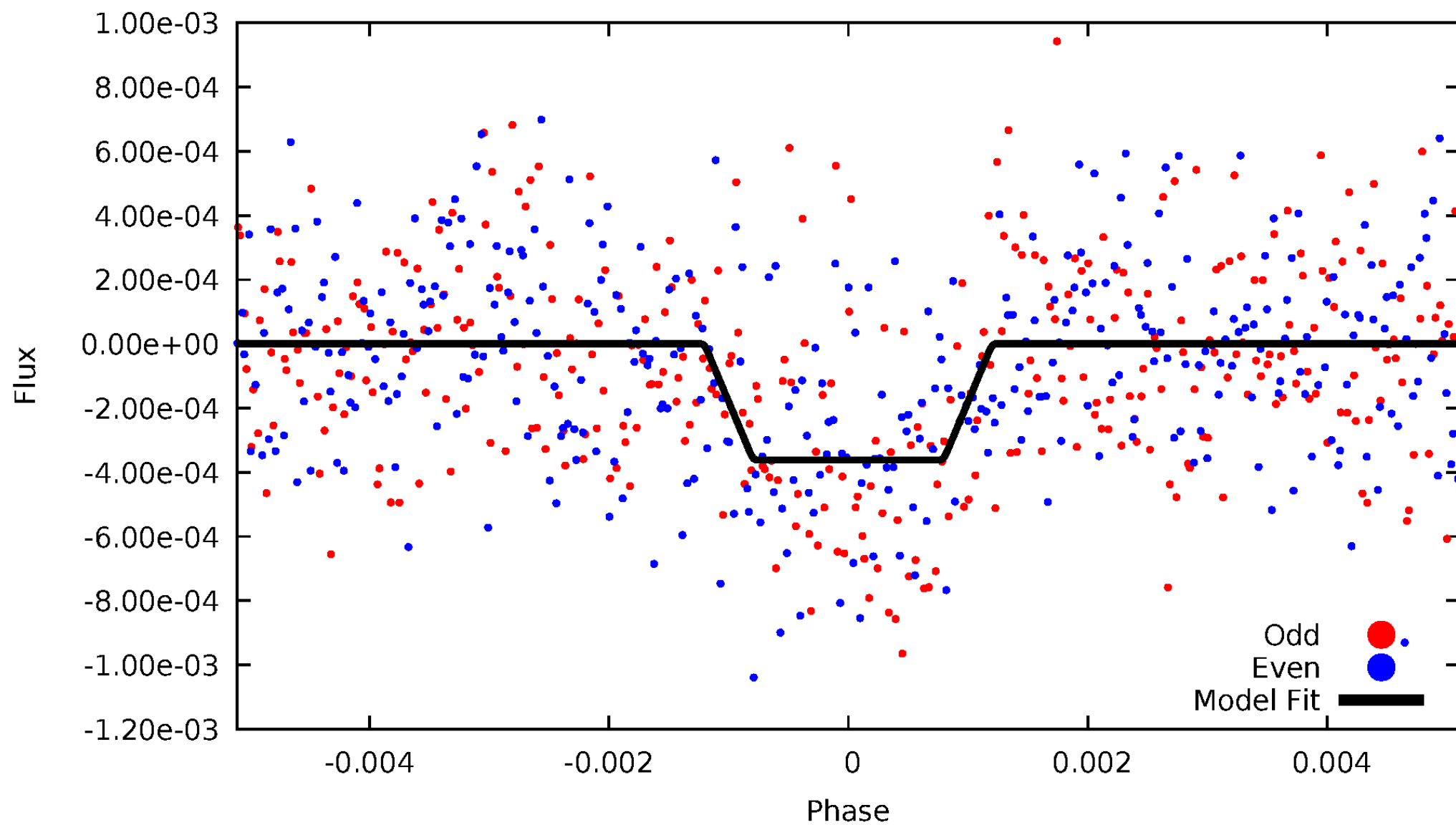
DV Odd/Even

TCE 010337295-01

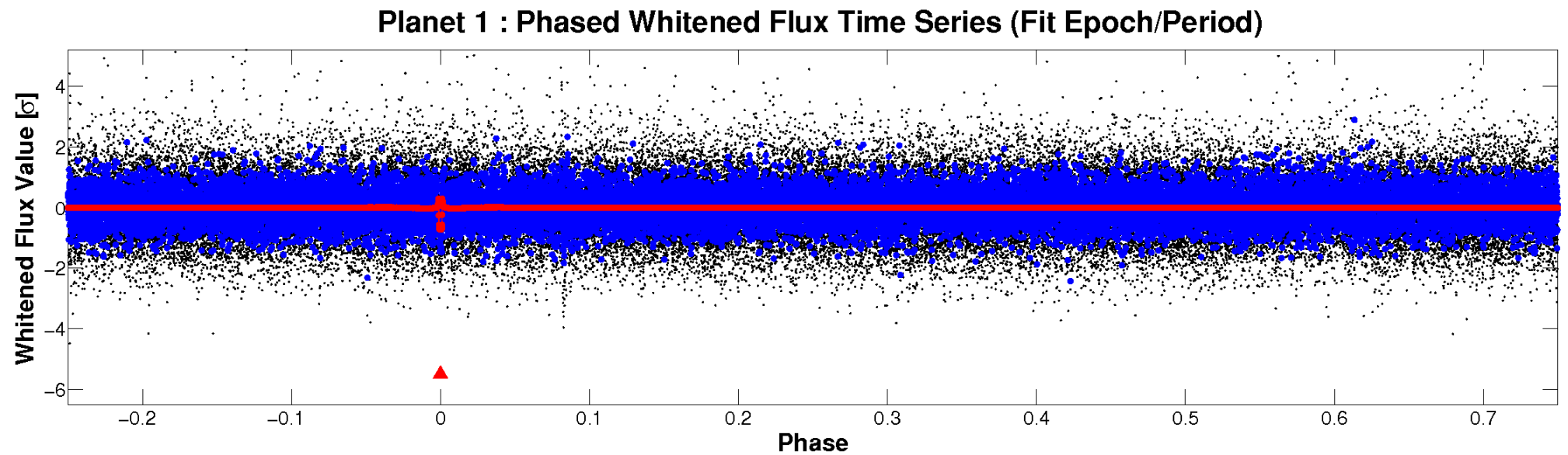
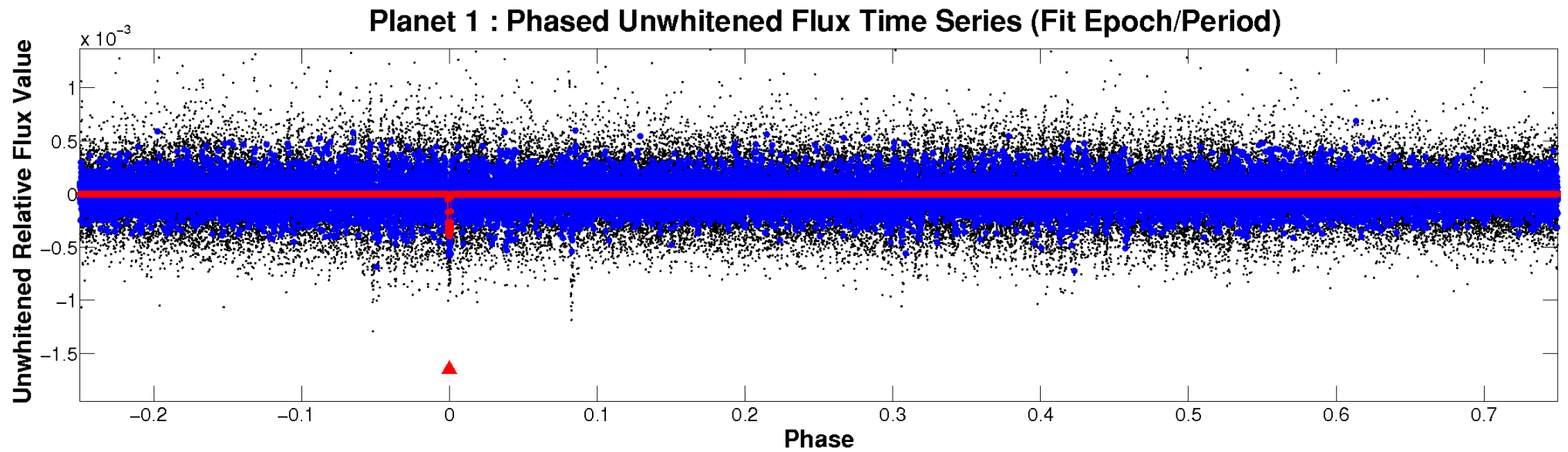


ALT Odd/Even

TCE 010337295-01

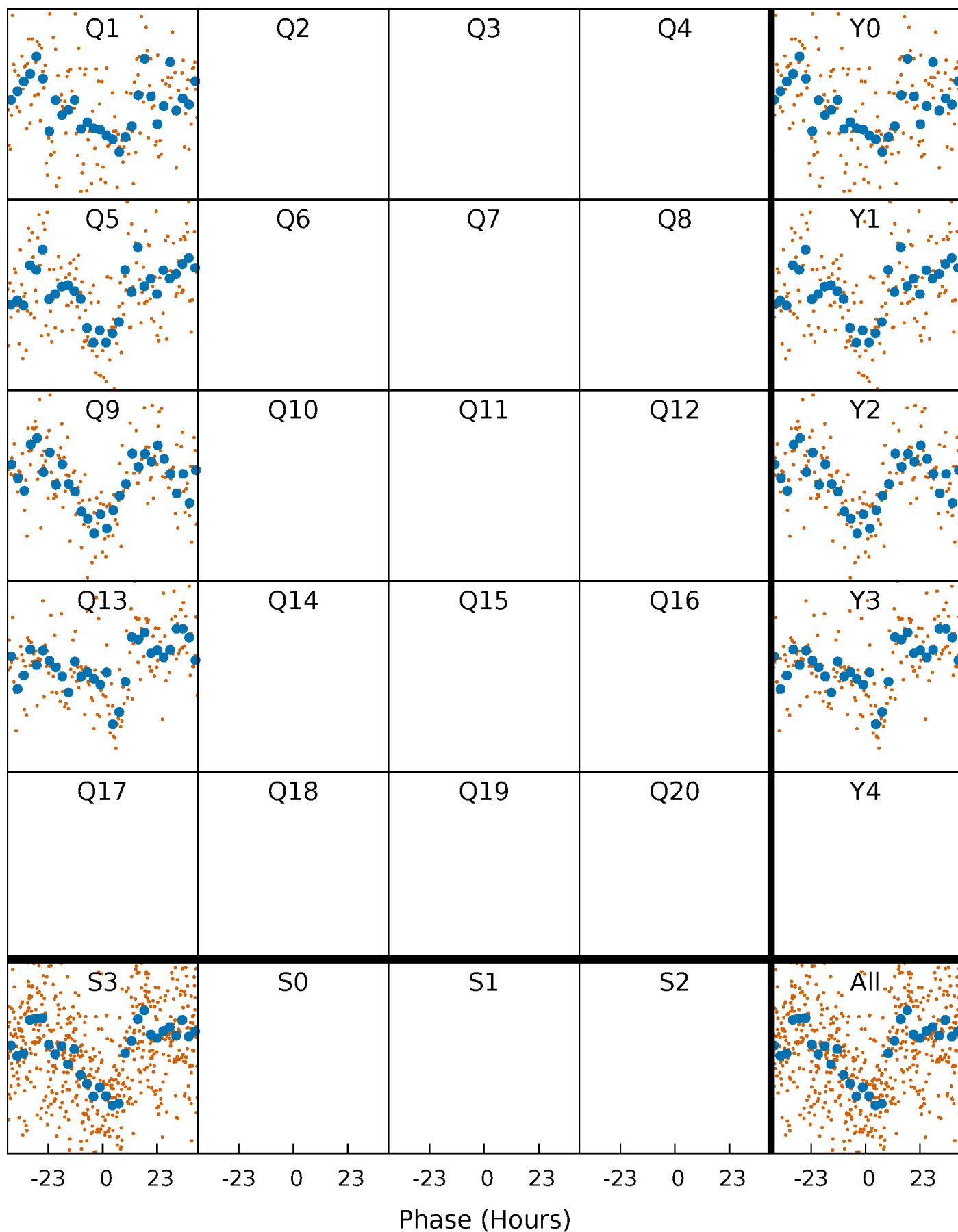


Non-Whitened Vs. Whitened Light Curve



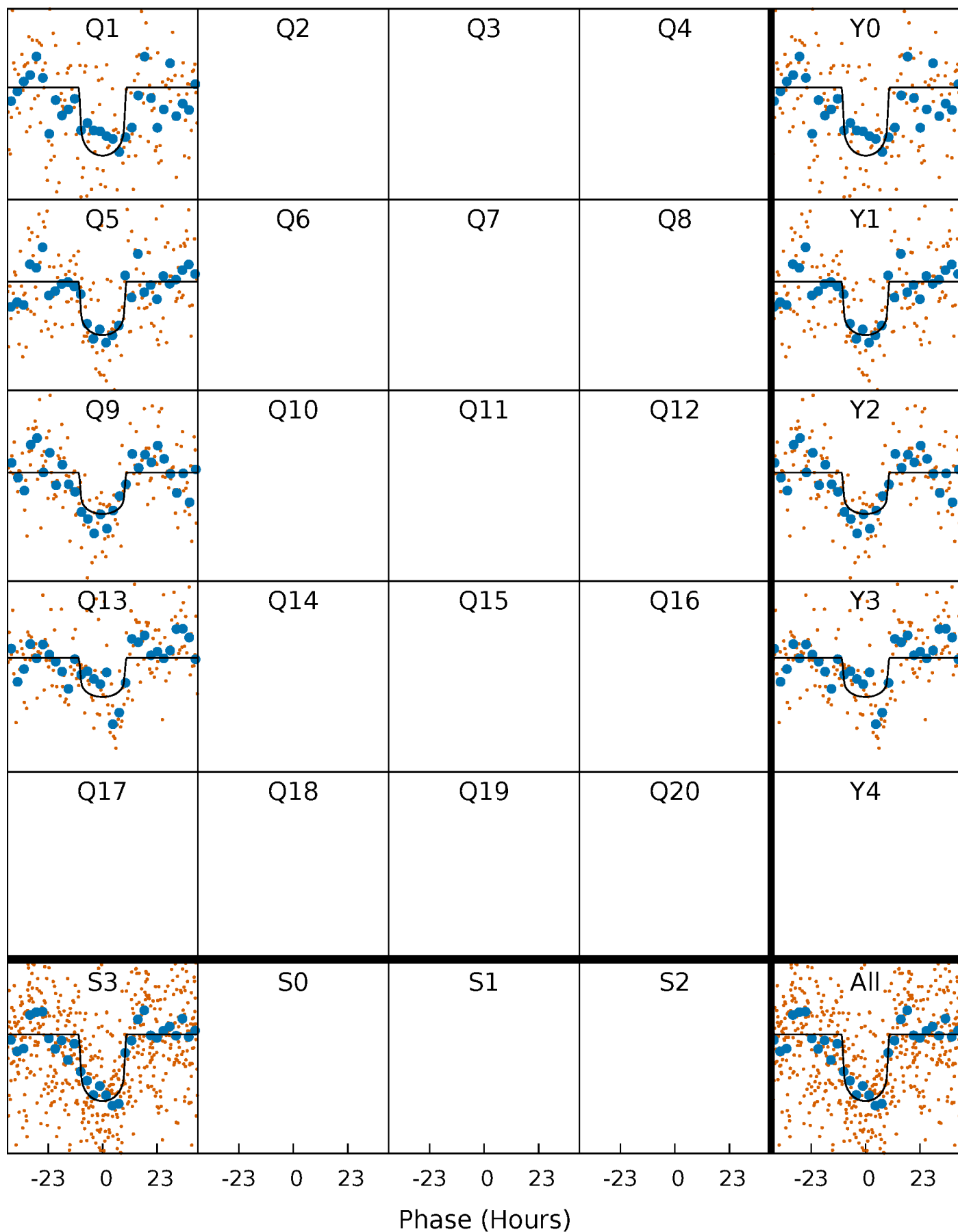
PDC Quarter-Phased Transit Curves

TCE 010337295-01 $P=368.321795$ Days $T_0=154.184188$ (BKJD)



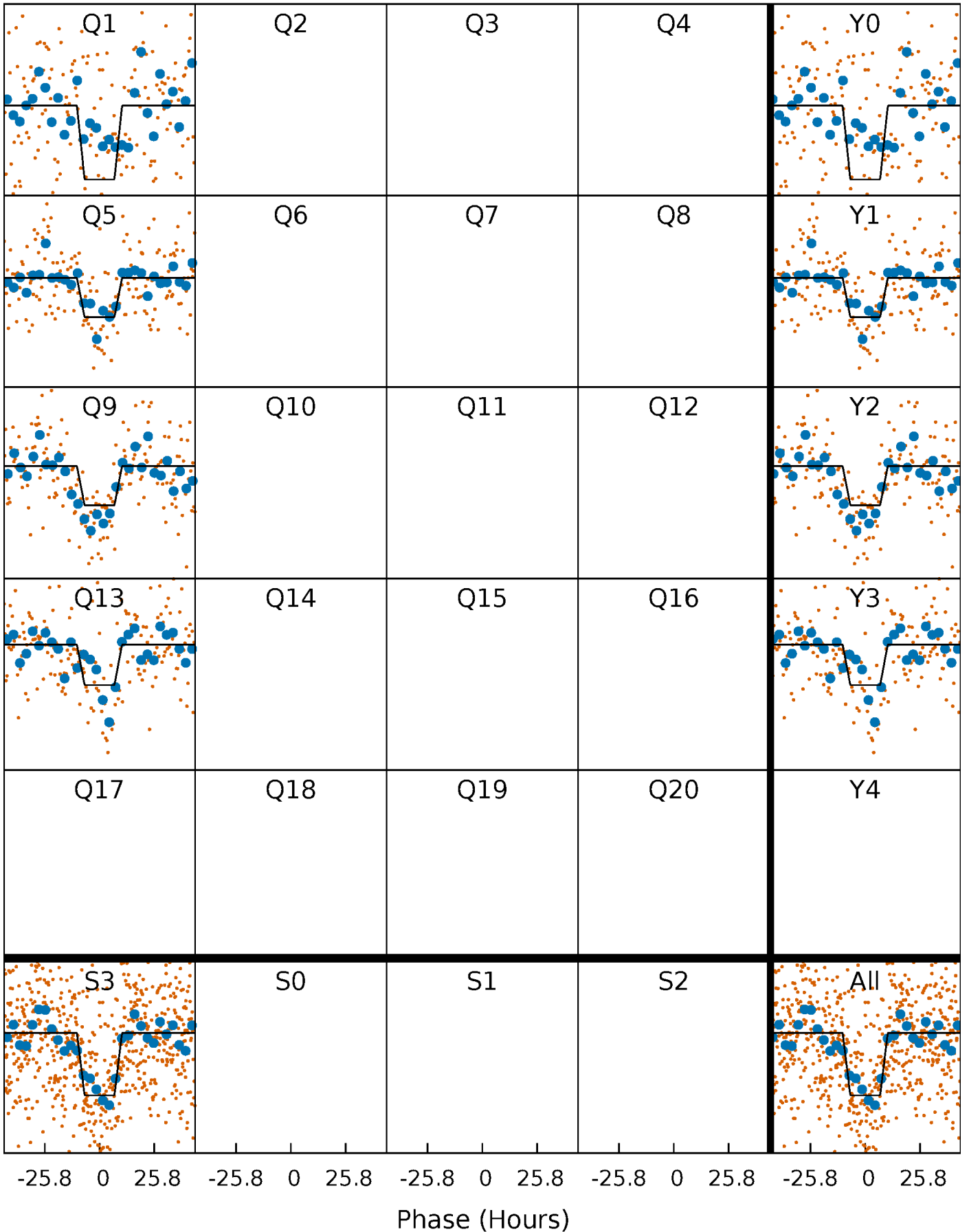
DV Quarter-Phased Transit Curves

TCE 010337295-01 $P=368.321795$ Days $T_0=154.184188$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

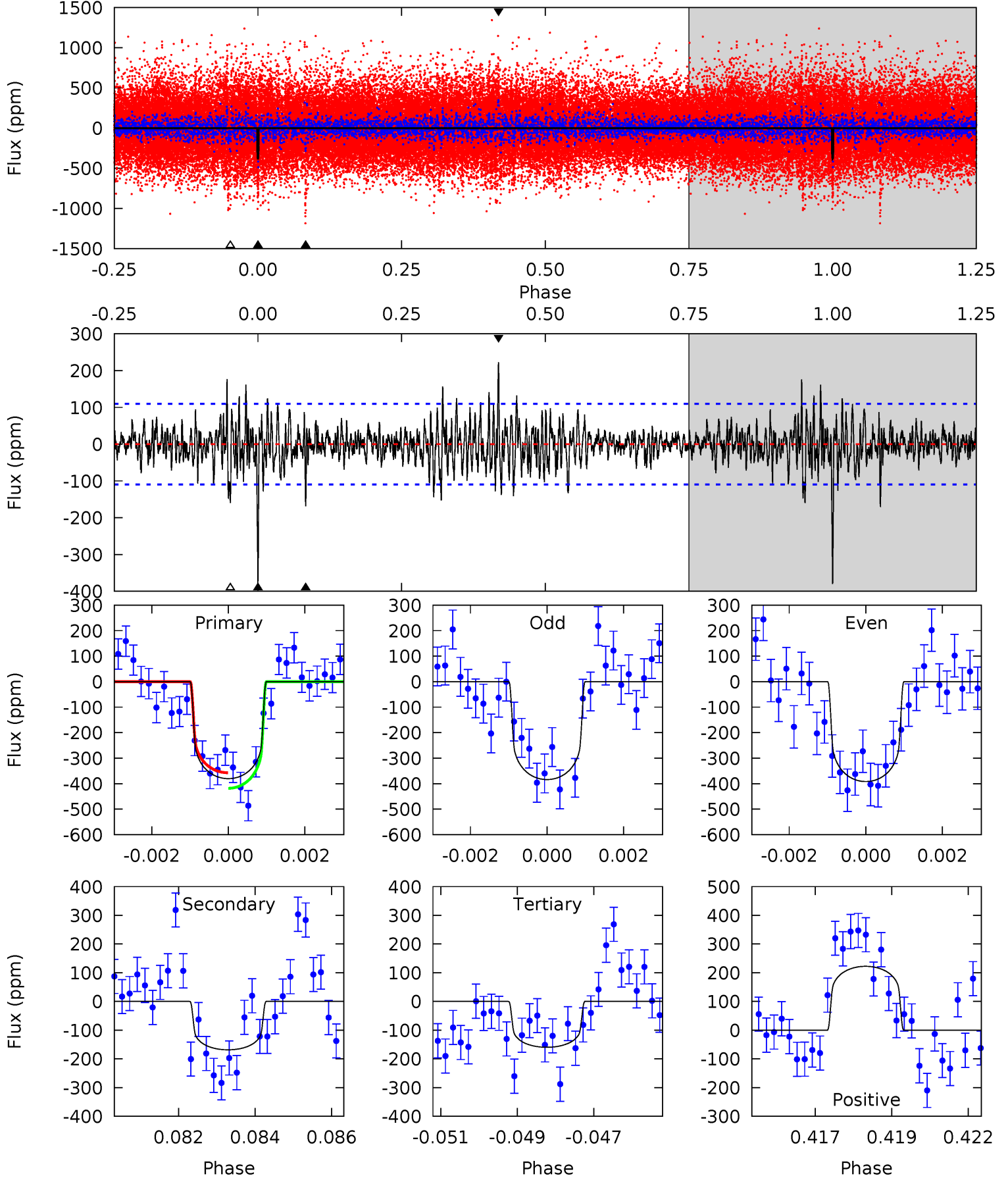
TCE 010337295-01 P=368.369409 Days $T_0=154.111750$ (BKJD)



DV Model-Shift Uniqueness Test

010337295-01, P = 368.321795 Days, E = 154.184188 Days

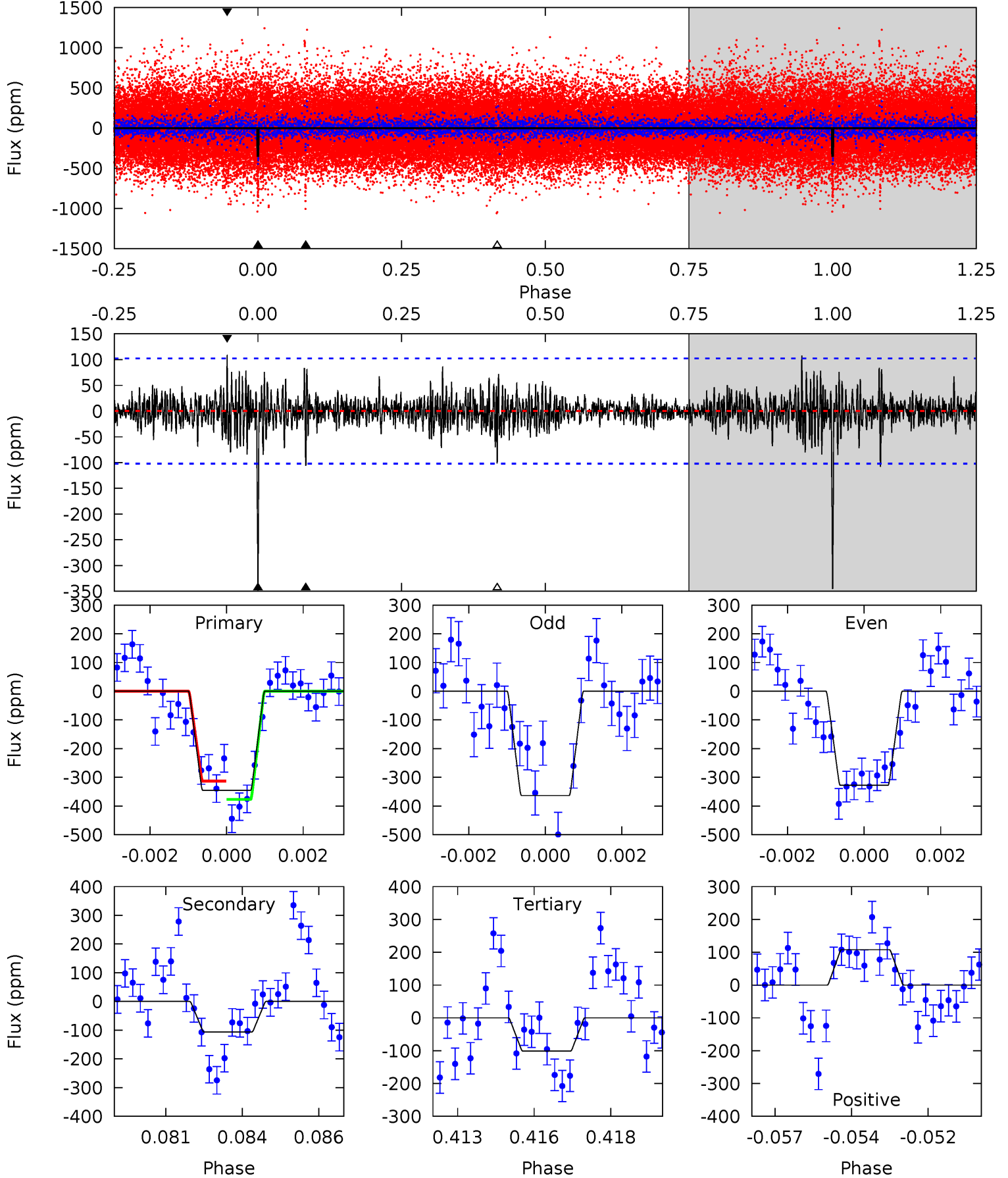
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
18.4	8.14	7.72	10.7	5.30	3.04	2.05	10.7	7.63	0.43	-2.60	0.19	1.03	0.37	1.47



Alt Model-Shift Uniqueness Test

010337295-01, P = 368.369409 Days, E = 154.111750 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
17.9	5.50	5.24	5.58	5.29	3.03	1.14	12.6	12.3	0.26	-0.08	0.93	0.95	0.24	1.65



Stellar Parameters For KIC 010337295

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5875^{+159}_{-159}	$4.574^{+0.042}_{-0.168}$	$-0.440^{+0.300}_{-0.300}$	$0.805^{+0.194}_{-0.065}$	$0.890^{+0.087}_{-0.106}$	$2.403^{+0.493}_{-1.024}$
	+3%/-3%	+1%/-4%	+68%/-68%	+24%/-8%	+10%/-12%	+21%/-43%
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 010337295-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-168 ± 21	$1.86^{+0.35}_{-0.29}$	336^{+19}_{-13}	4788^{+363}_{-291}	24282^{+10918}_{-7242}
Alt.	-106 ± 19	$1.71^{+0.32}_{-0.27}$	336^{+19}_{-14}	4506^{+370}_{-302}	17963^{+8633}_{-6024}

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

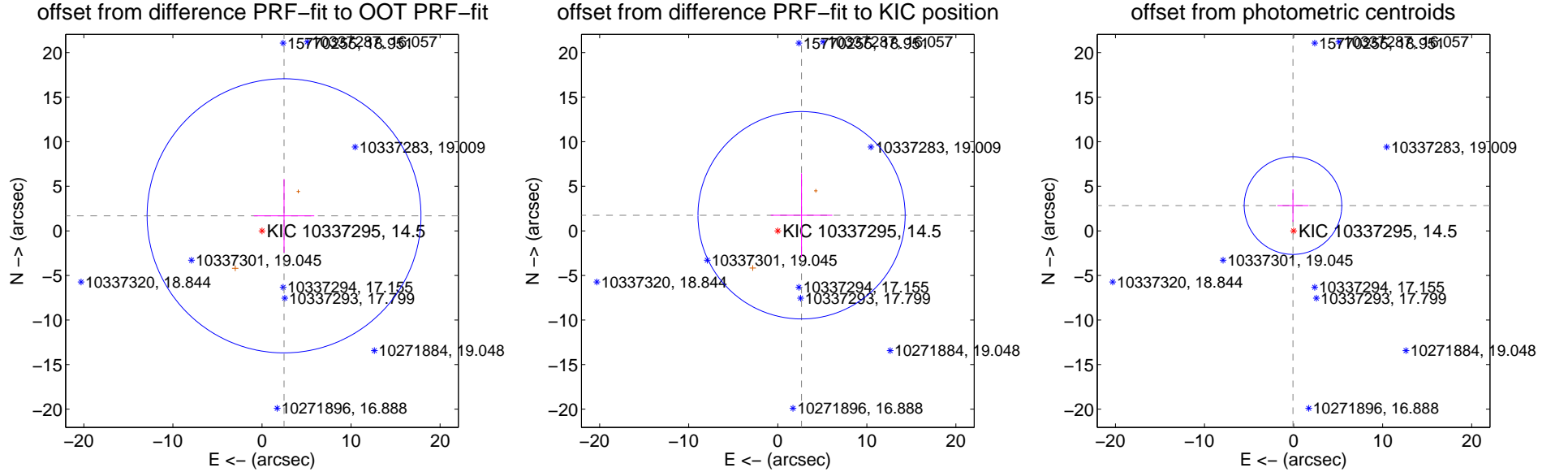
DV Centroid Data

Supplemental centroid analysis for 010337295-01. Kepler magnitude: 14.50. Transit SNR 8.37

There are 0 quarters with good PRF difference image offsets

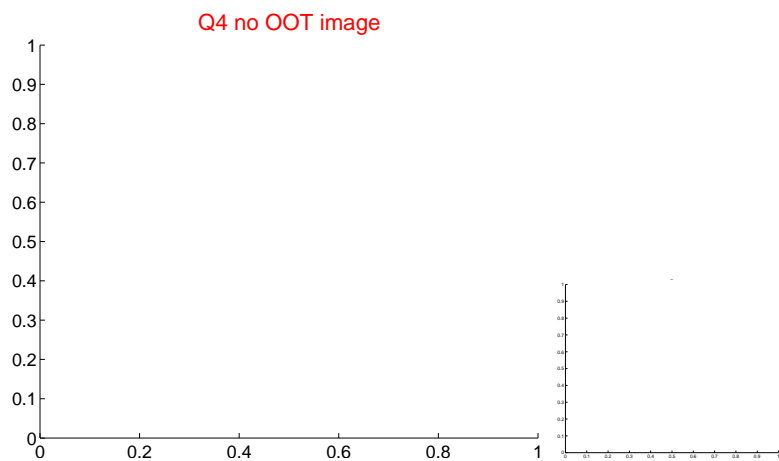
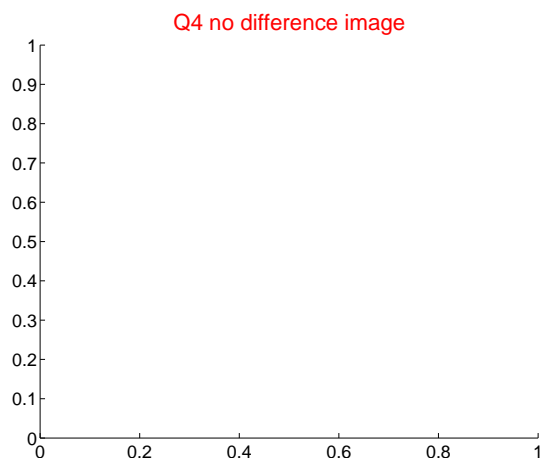
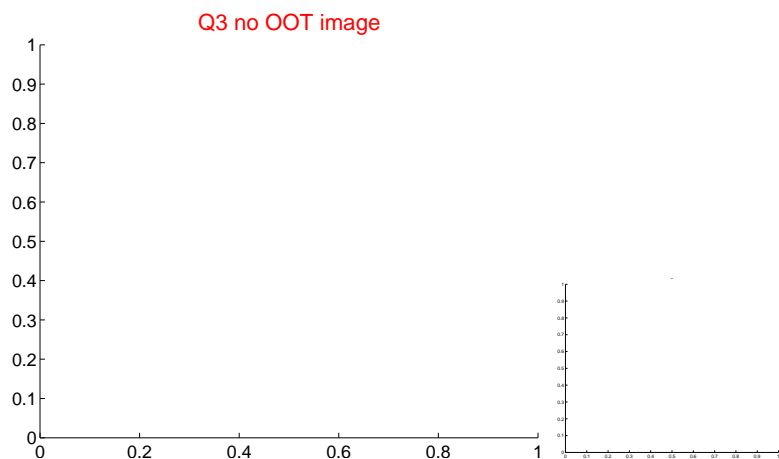
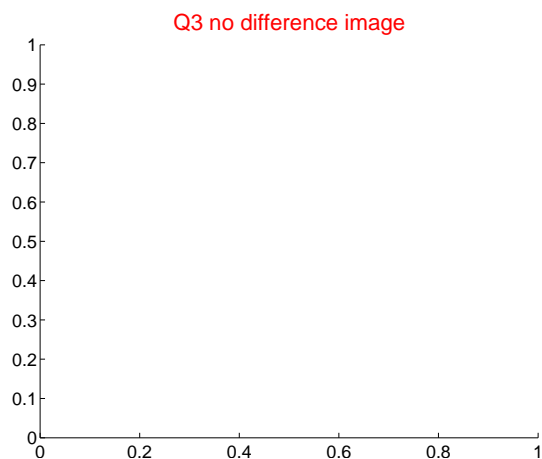
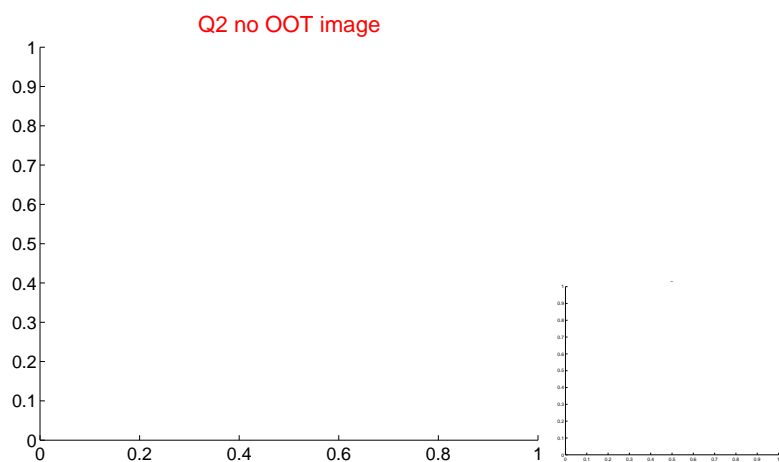
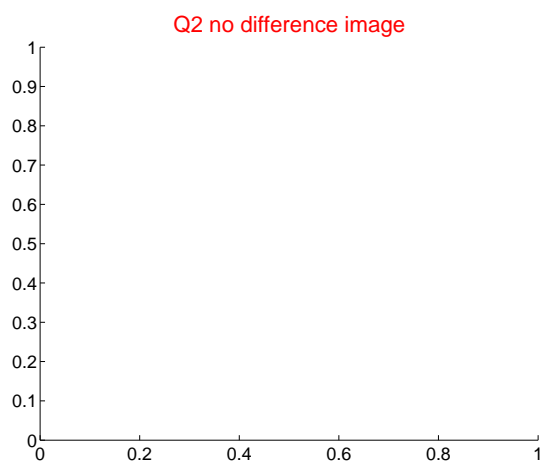
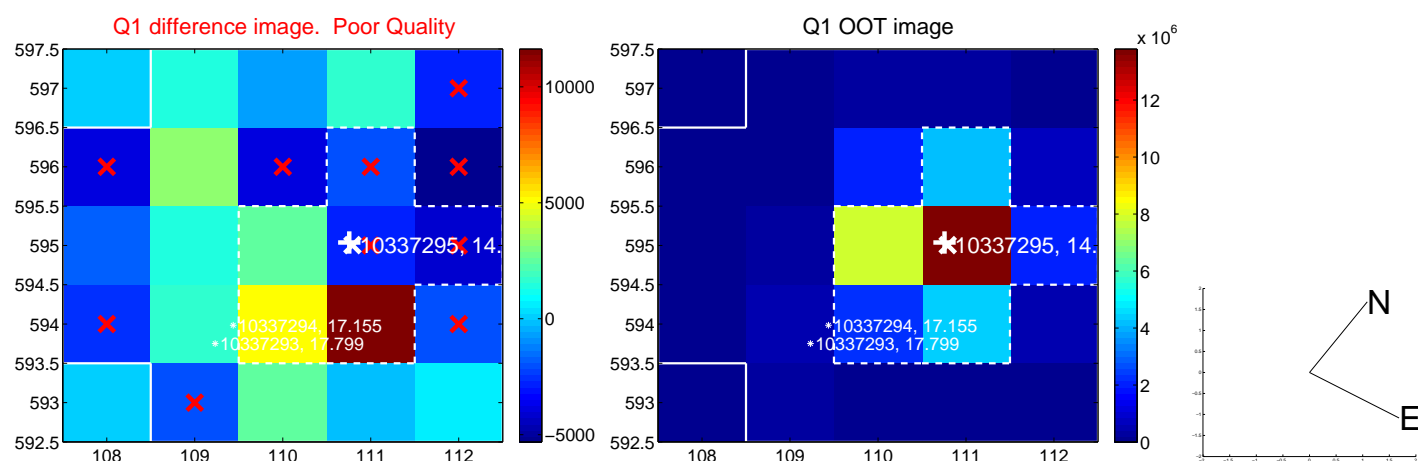
The direct PRF centroid is offset from the target star catalog position by about 0.21 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.999 ± 5.126	0.58	-2.478 ± 3.390	1.689 ± 4.129
PRF-fit source offset from KIC position	3.193 ± 3.878	0.82	-2.671 ± 3.461	1.750 ± 4.709
photometric centroid source offset	2.84 ± 1.83	1.55	0.07 ± 1.75	2.84 ± 1.83

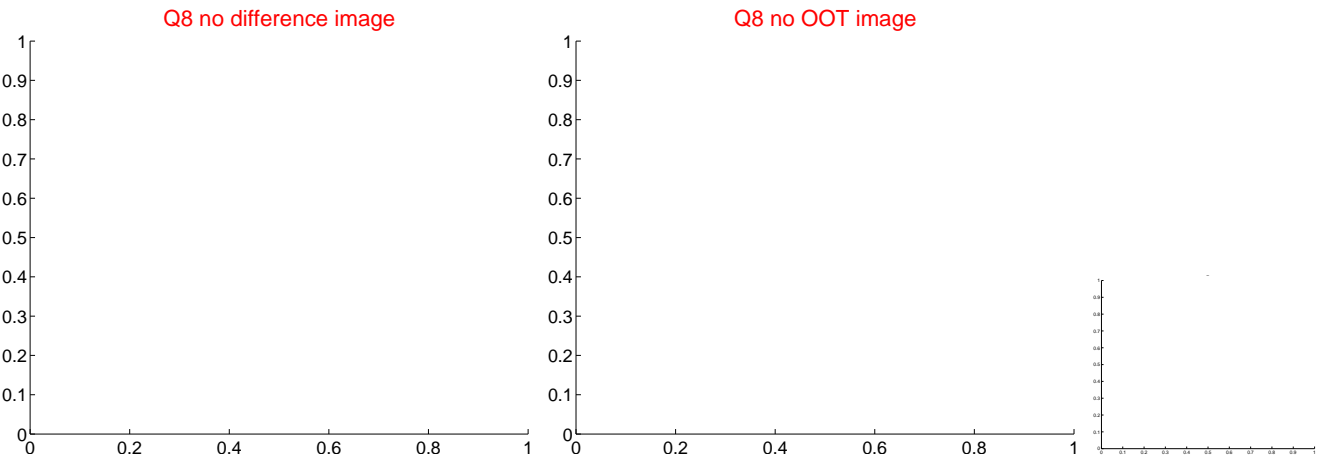
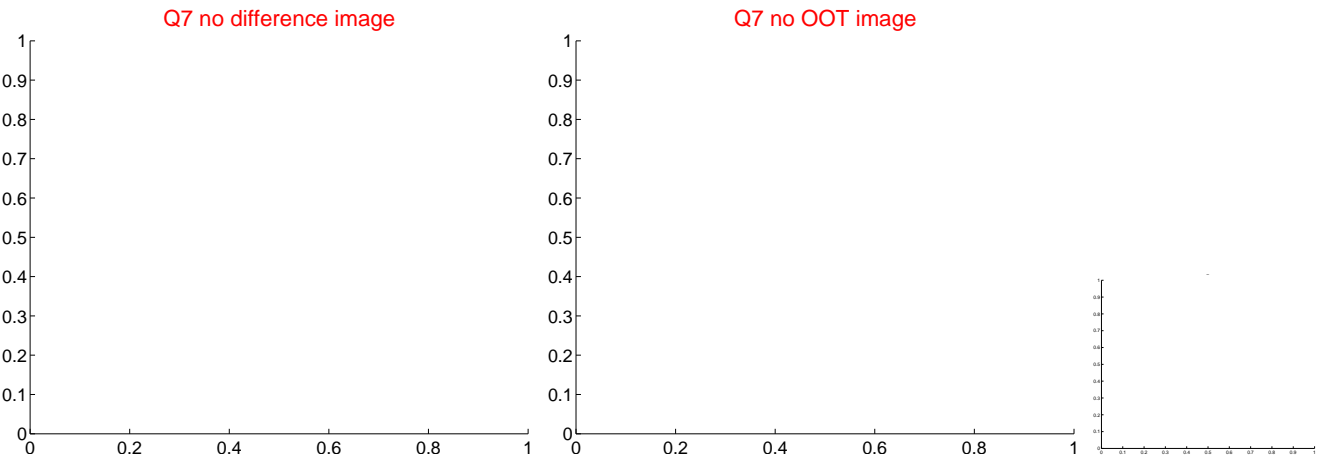
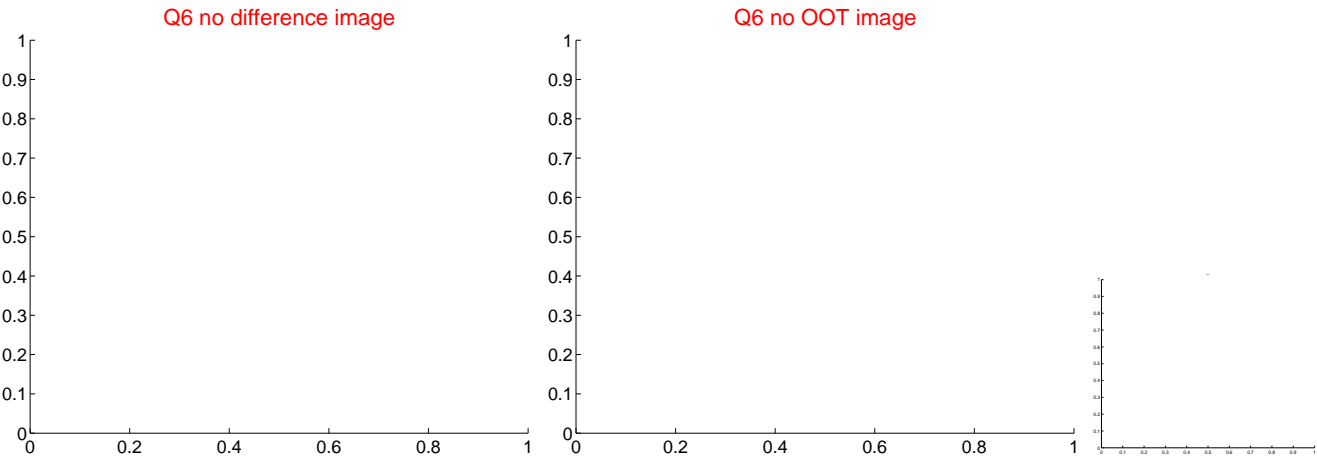
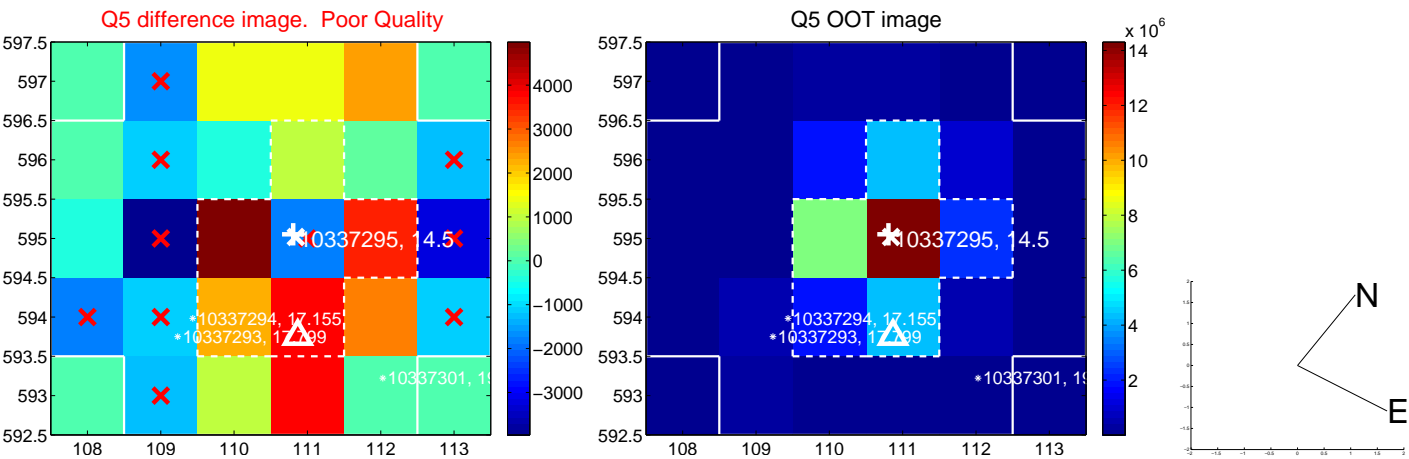


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

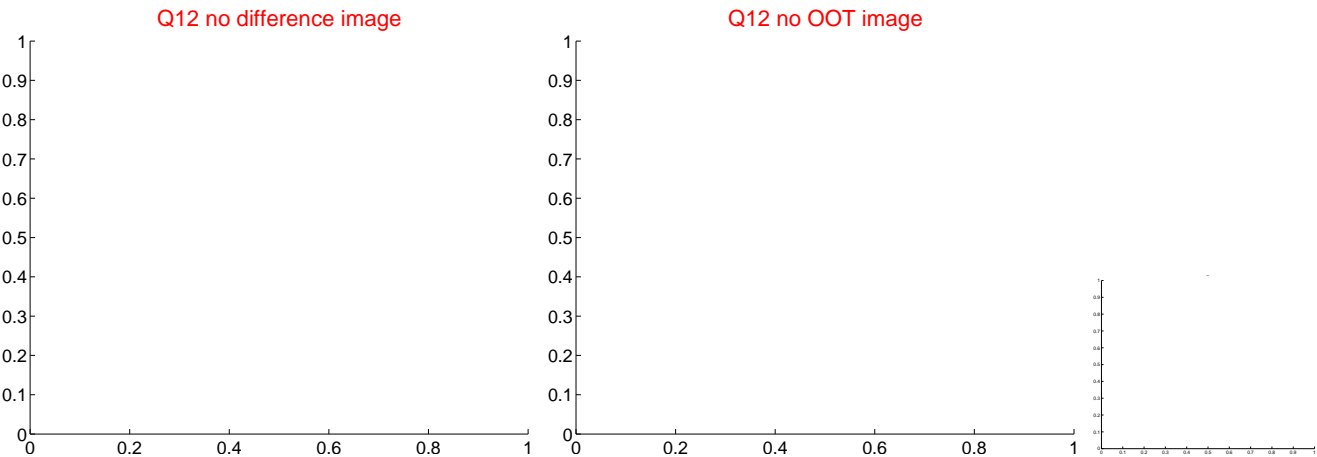
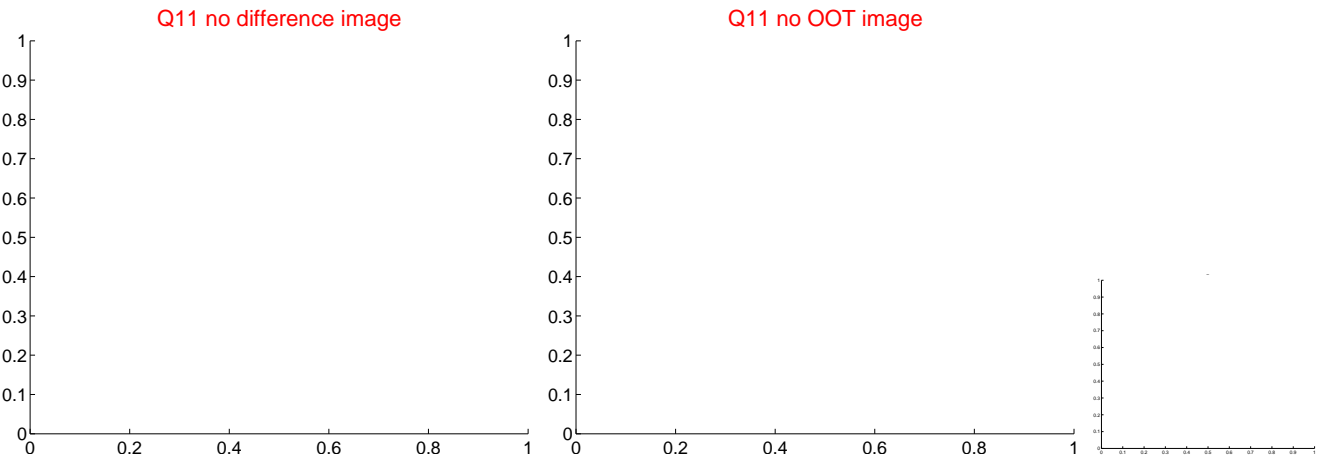
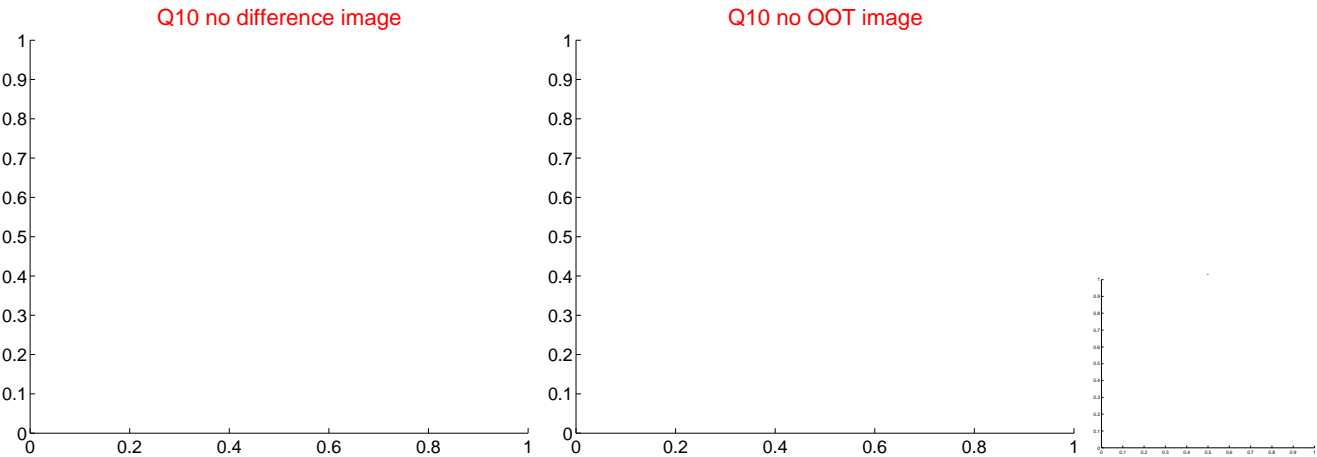
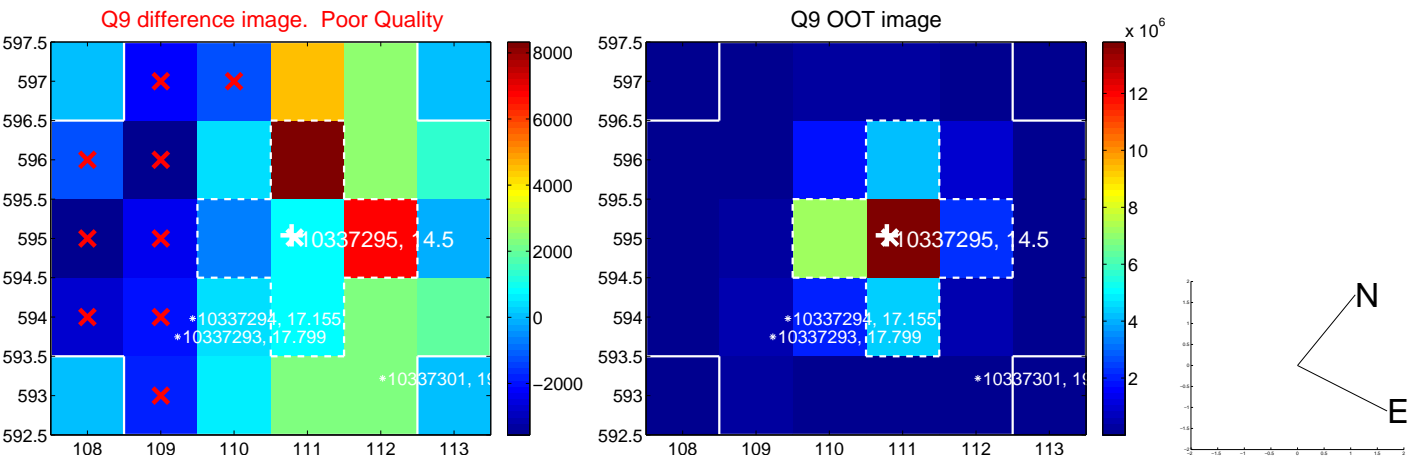
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



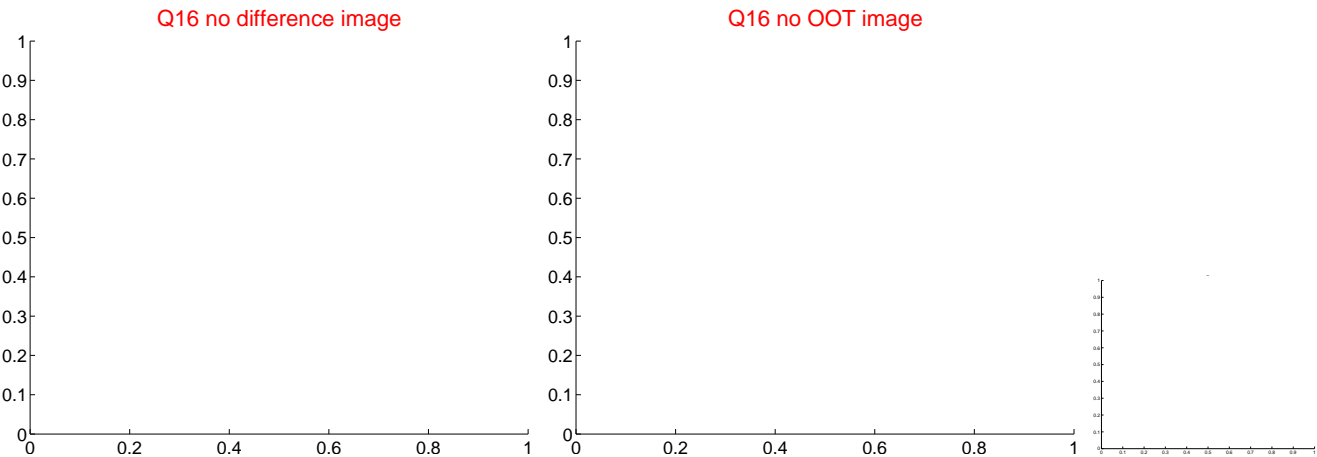
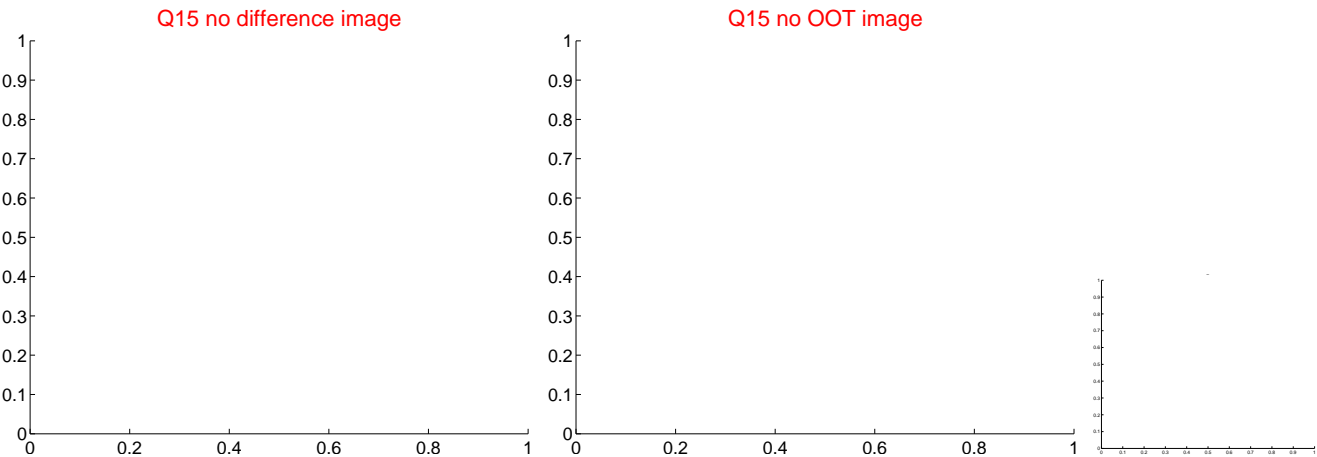
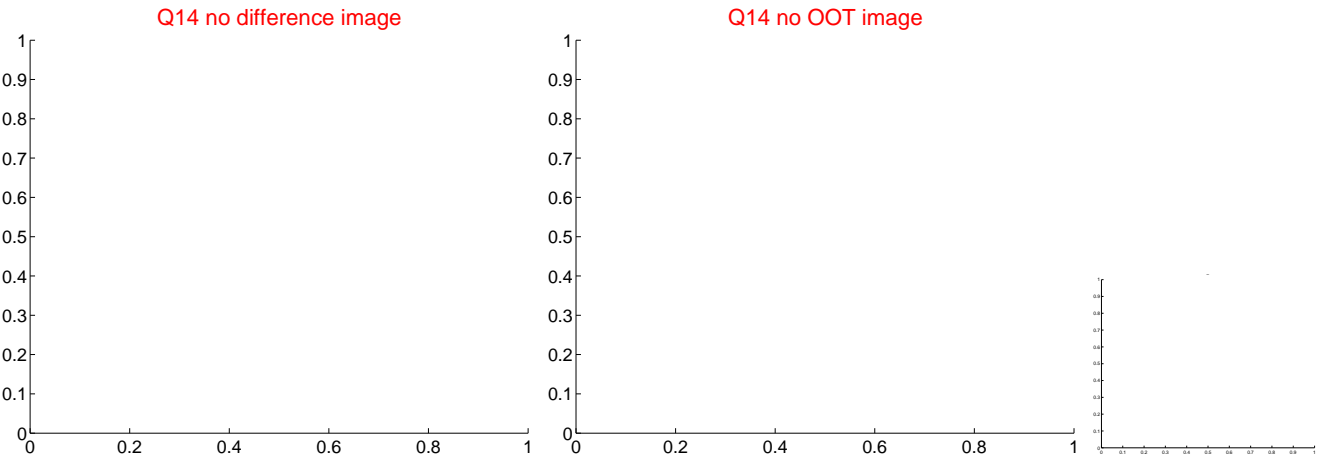
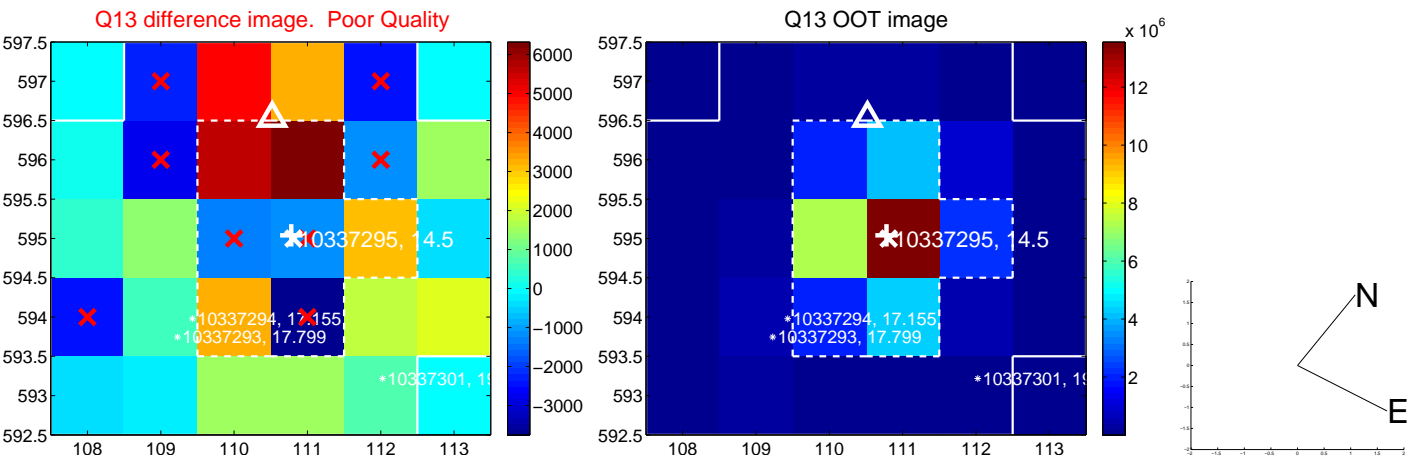
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



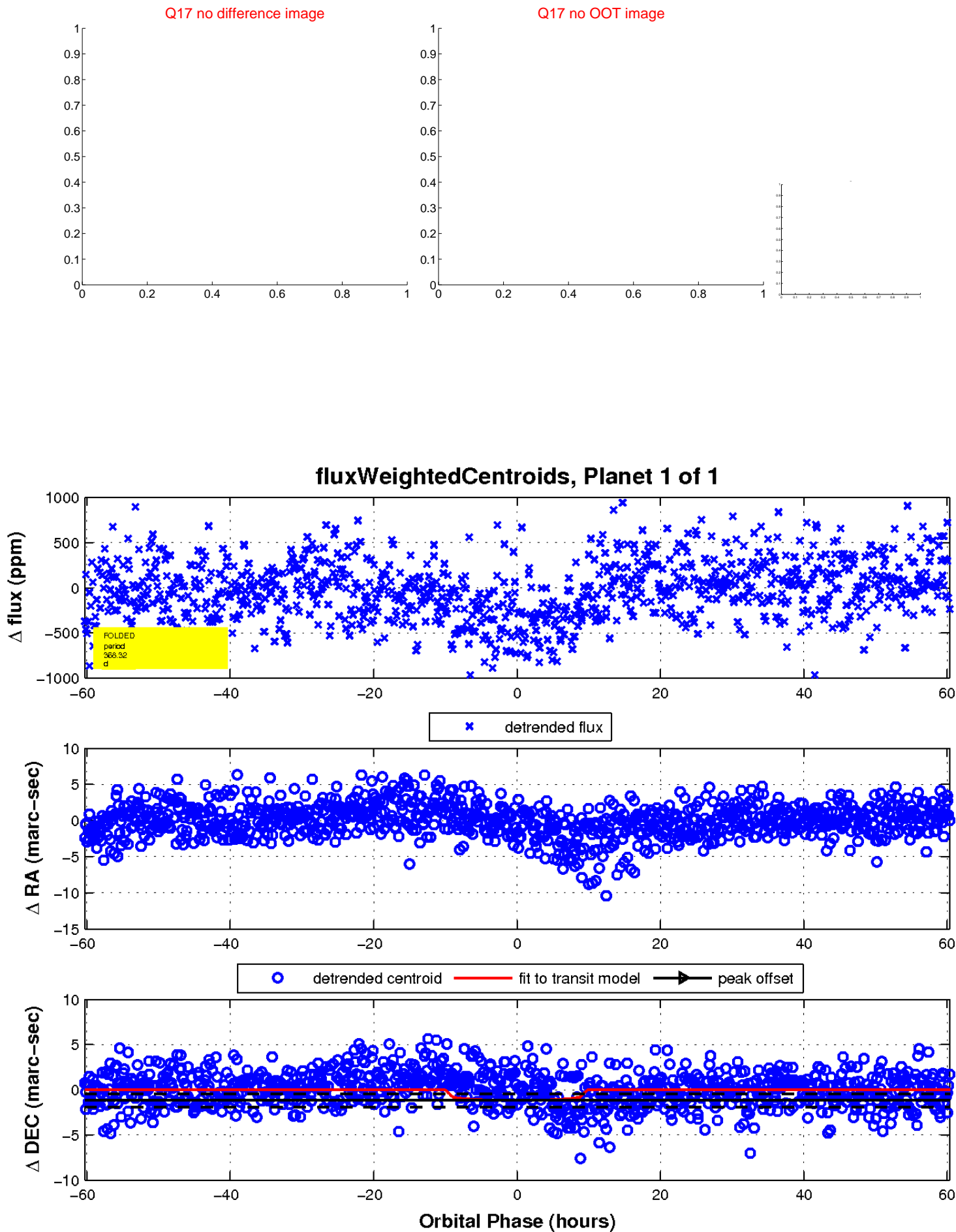
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



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



UKIRT Image

