

KIC 008035632

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})
008035632-01	OBS	No	342.992596	253.247262	786.8	19.368	7.7	8.3	1.00	6063	2.84	1.25

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008035632-01	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_SKYE—CENT_FEW_DIFFS—HALO_GHOST

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

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

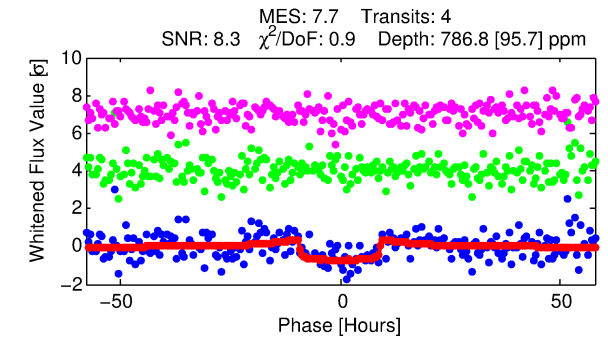
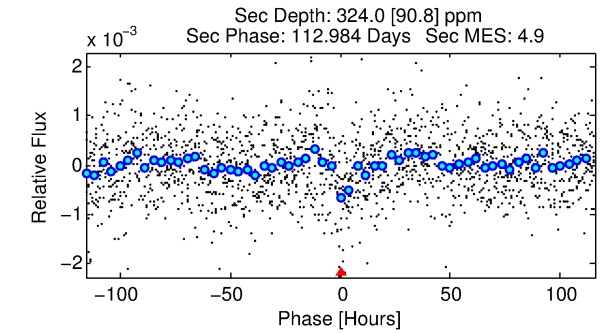
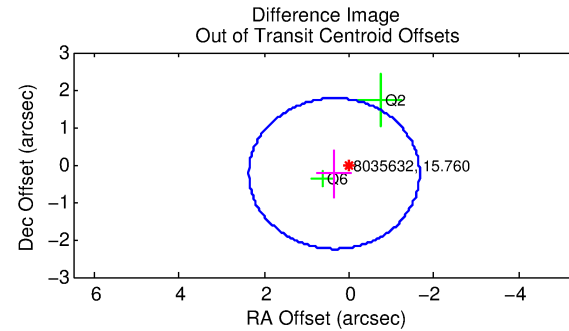
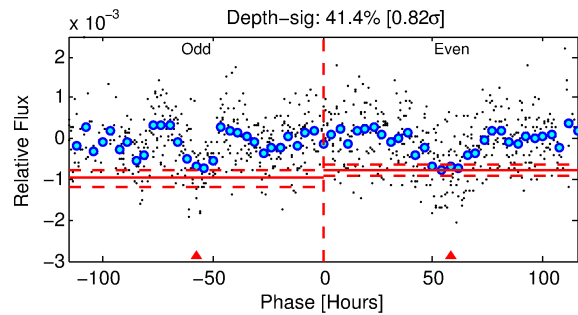
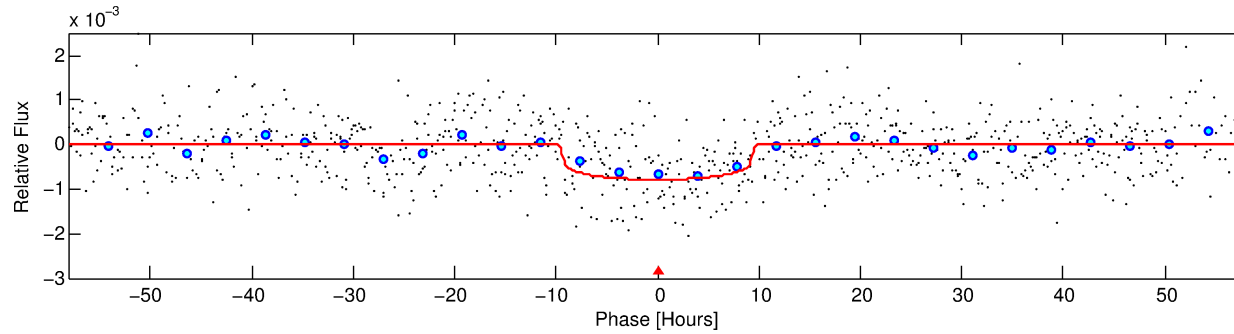
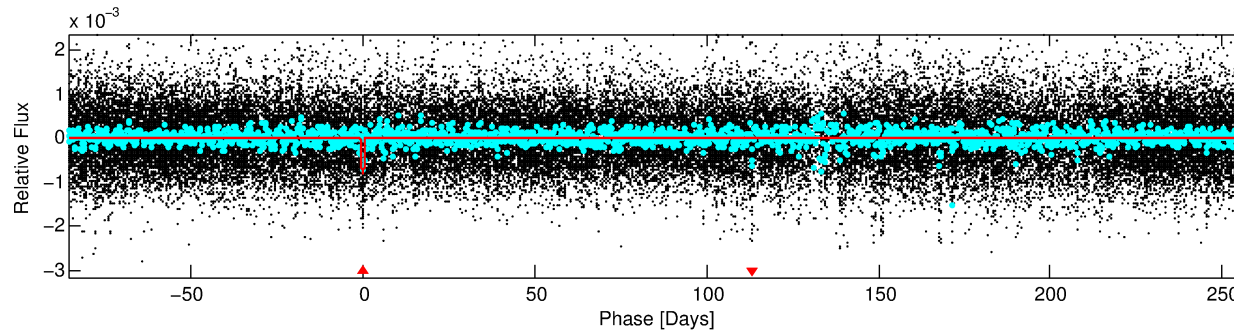
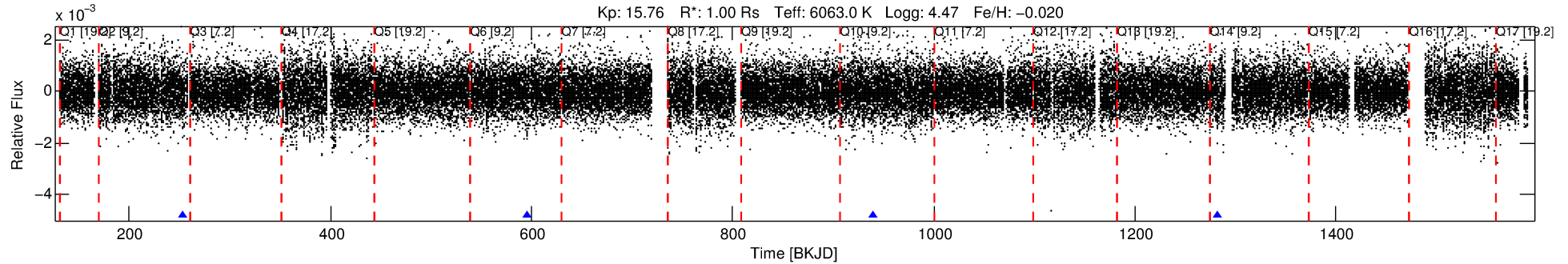
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008035632-01

No Significant Match Found

DV One-Page Summary

KIC: 8035632 Candidate: 1 of 1 Period: 342.993 d



DV Fit Results:

Period = 342.99260 [0.01103] d
Epoch = 253.2473 [0.0205] BKJD
Rp/R* = 0.0260 [0.0097]
a/R* = 128.46 [221.89]
b = 0.39 [3.79]
Seff = 1.25 [0.46]
Teq = 270 [24] K
Rp = 2.84 [1.30] Re
a = 0.9837 [0.2234] AU
Ag = 21320.98 [18377.16] [1.16 σ]
Teffp = 5041 [1018] K [4.69 σ]

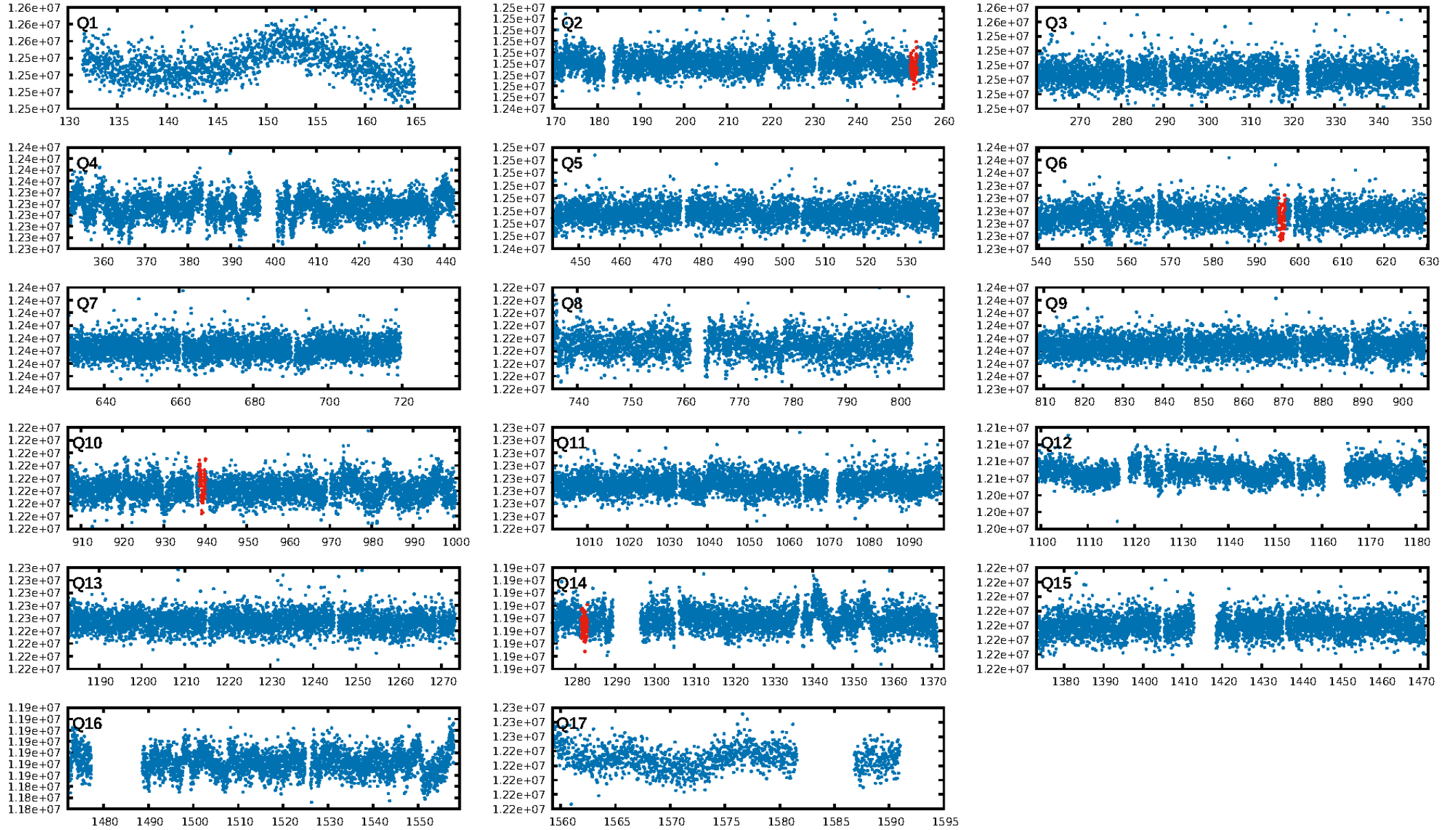
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 26.1%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 7.95e-10
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: 0.1546
Centroid-sig: 0.1%
Centroid-so: 5.841 arcsec [1.92 σ]
OotOffset-rm: 0.417 arcsec [0.62 σ]
KicOffset-rm: 0.576 arcsec [0.87 σ]
OotOffset-st: 2/0/0/0 [2]
KicOffset-st: 2/0/0/0 [2]
DiffImageQuality-fgm: 0.50 [1/2]
DiffImageOverlap-fno: 1.00 [2/2]

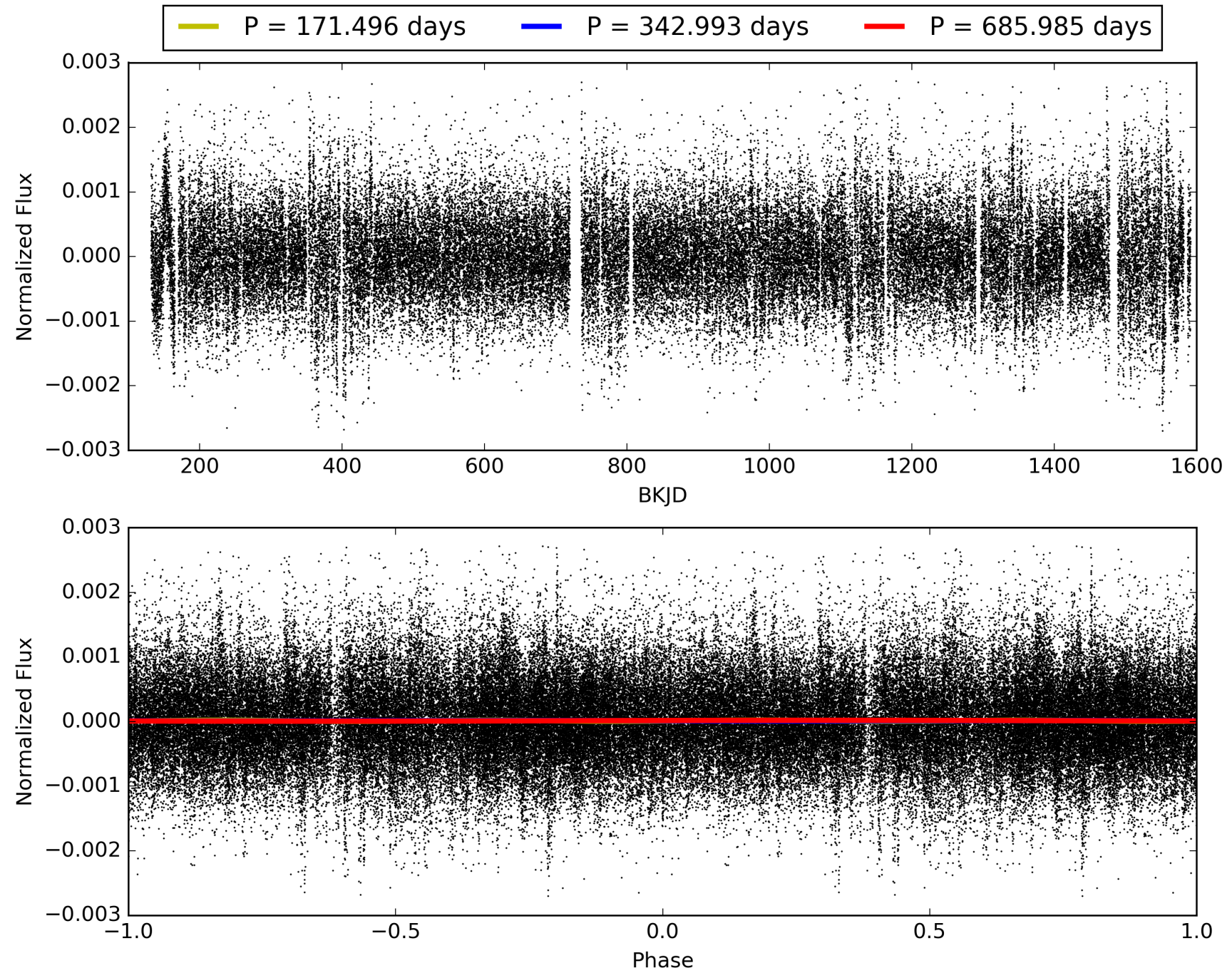
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 01:32:02 Z

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

TCE 008035632-01, PDC Light Curves

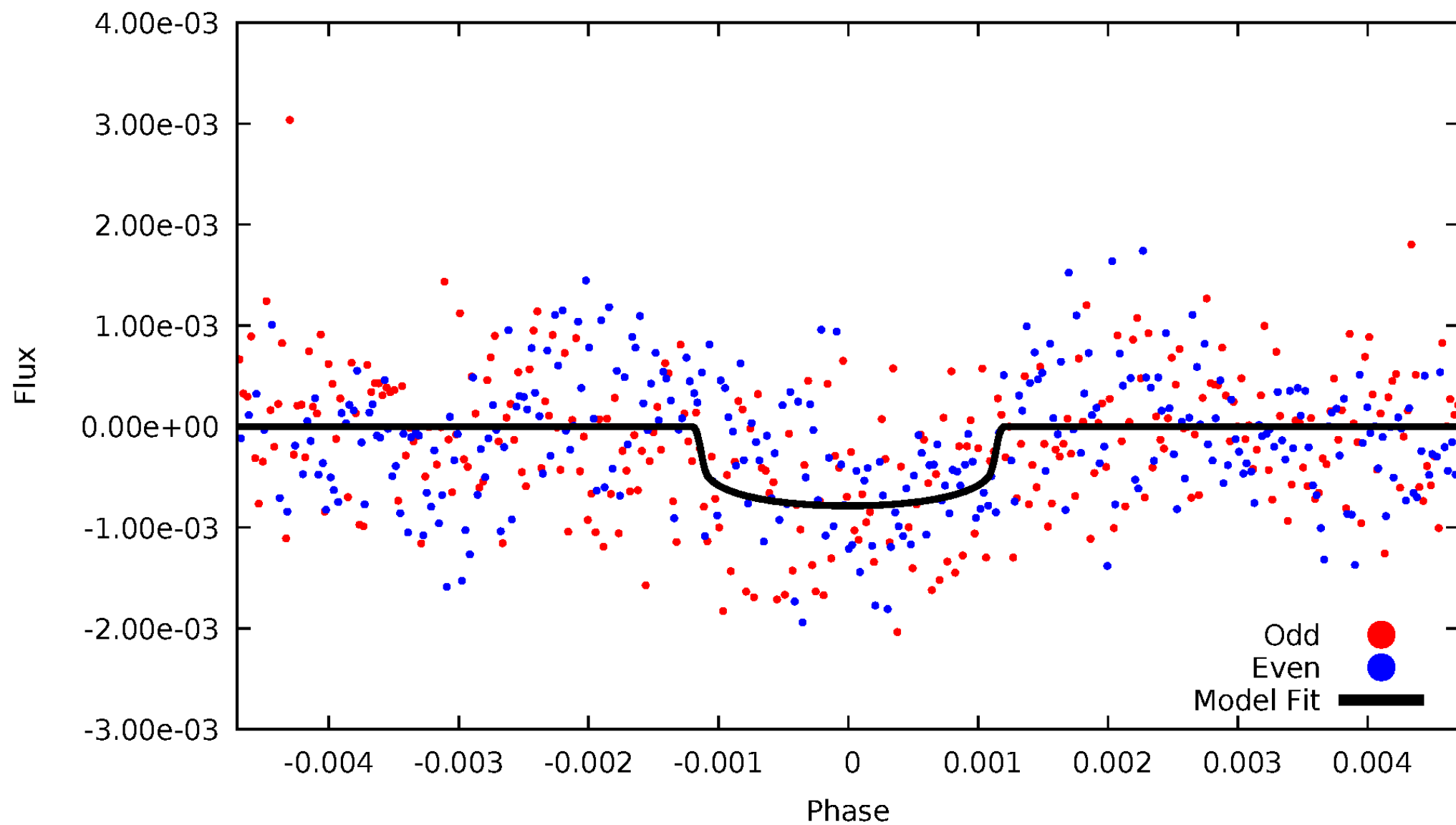


TCE 008035632-01



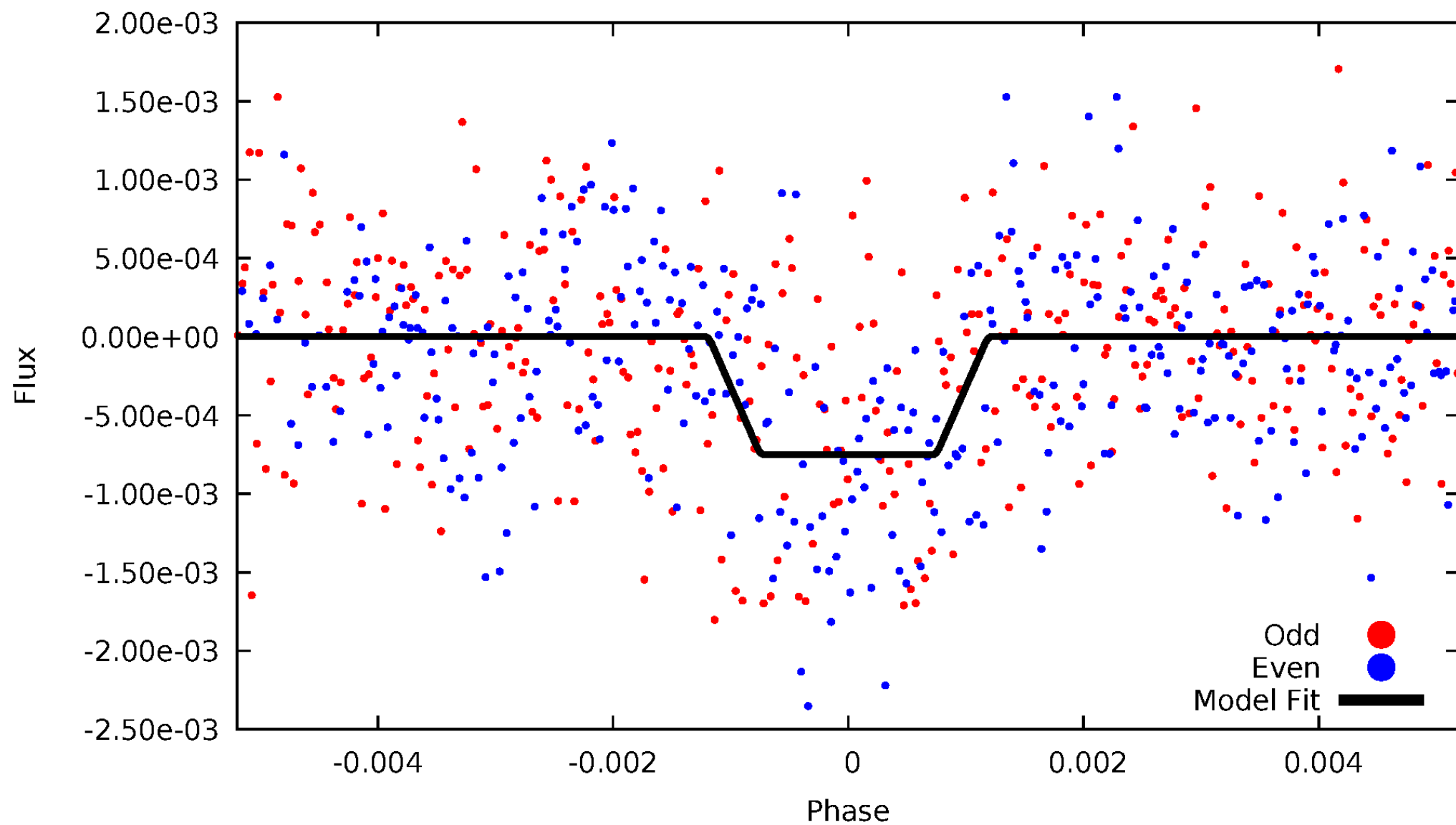
DV Odd/Even

TCE 008035632-01

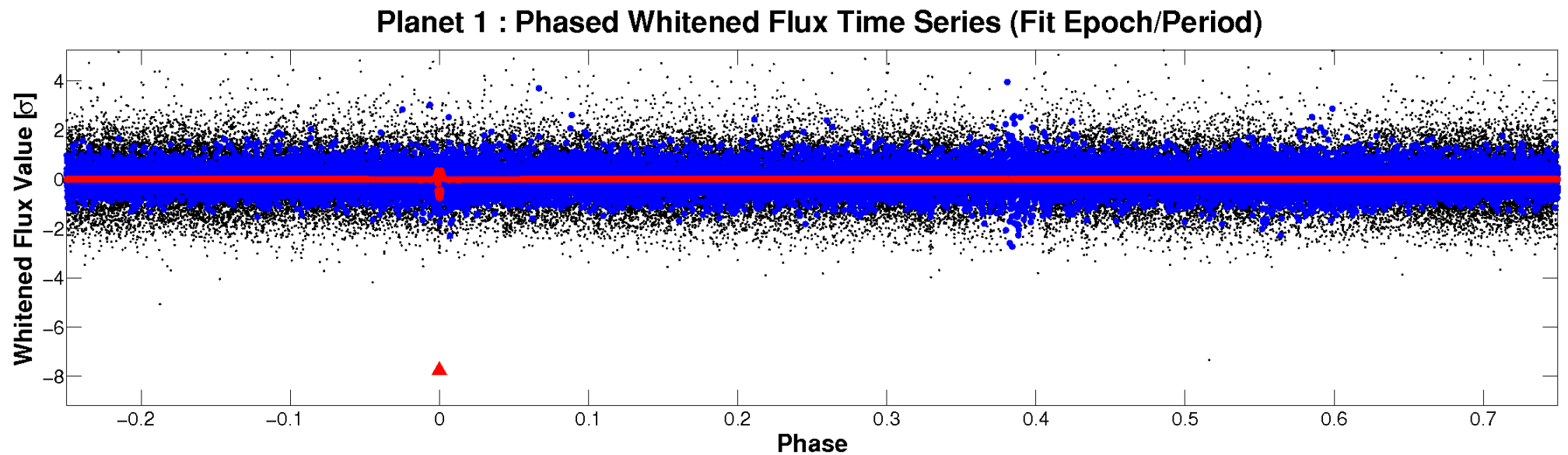
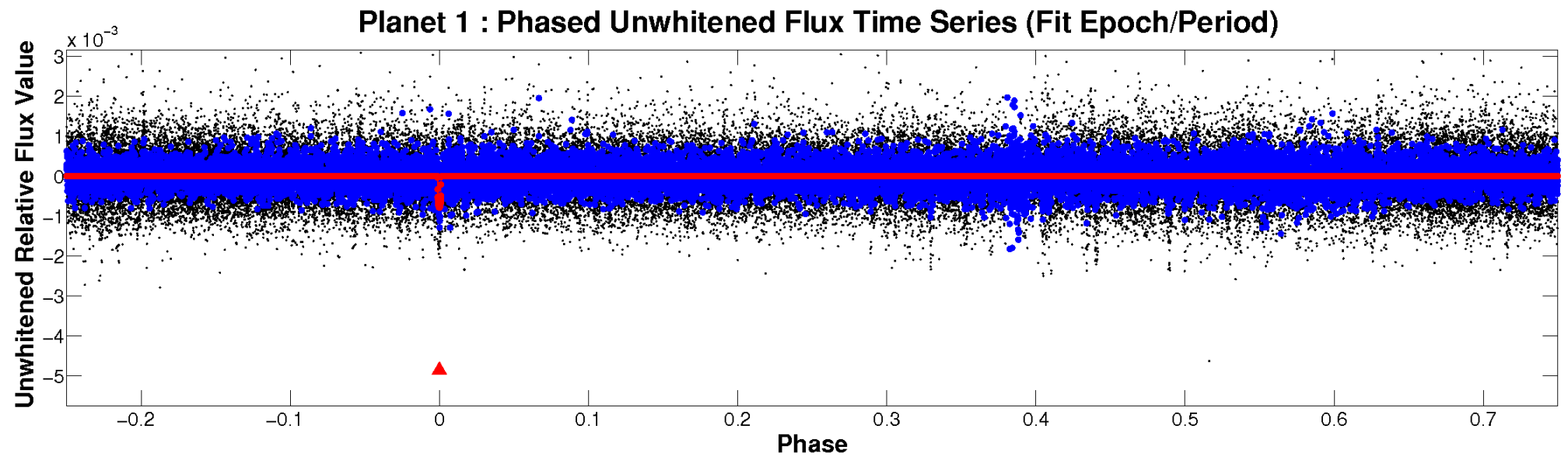


ALT Odd/Even

TCE 008035632-01

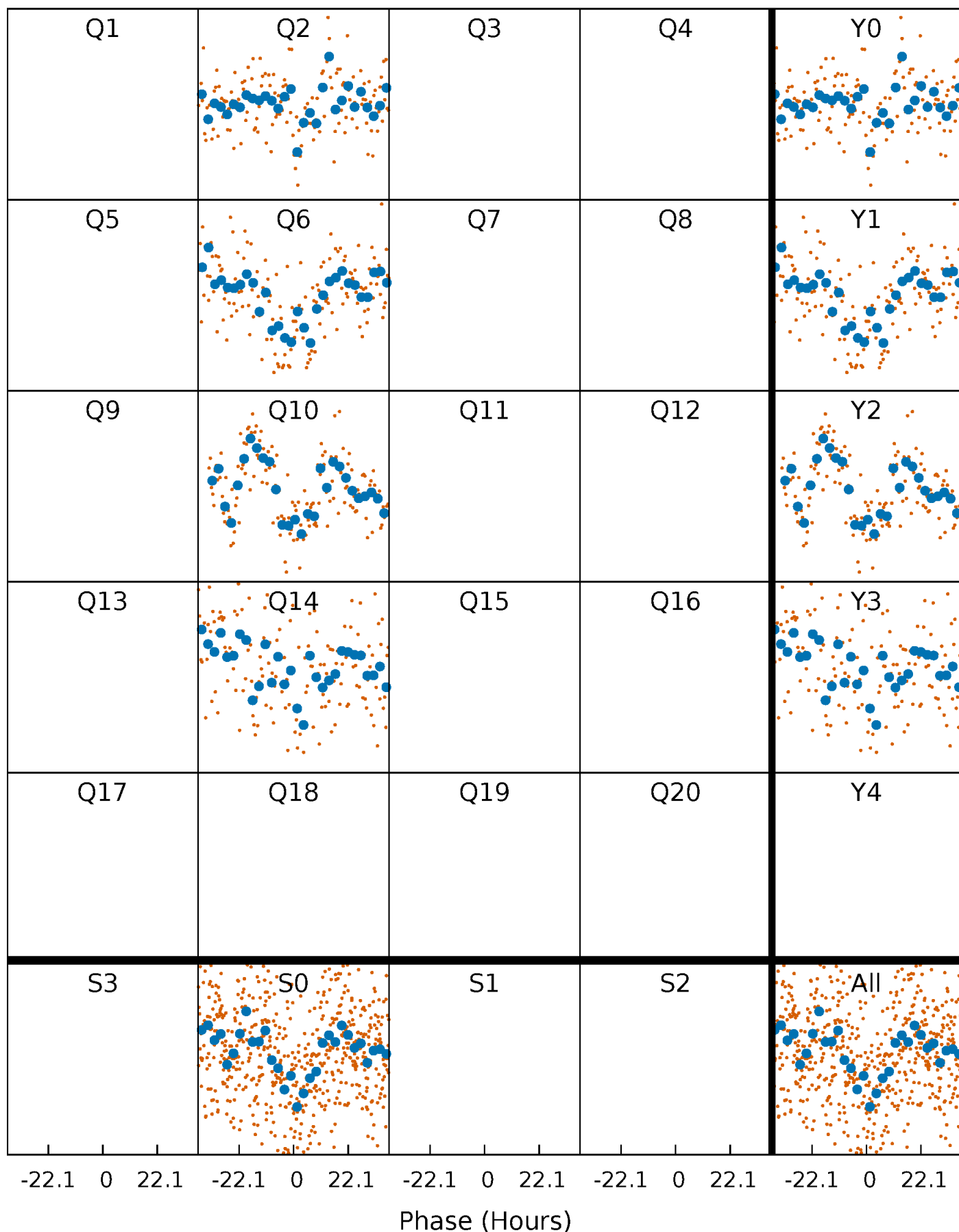


Non-Whitened Vs. Whitened Light Curve



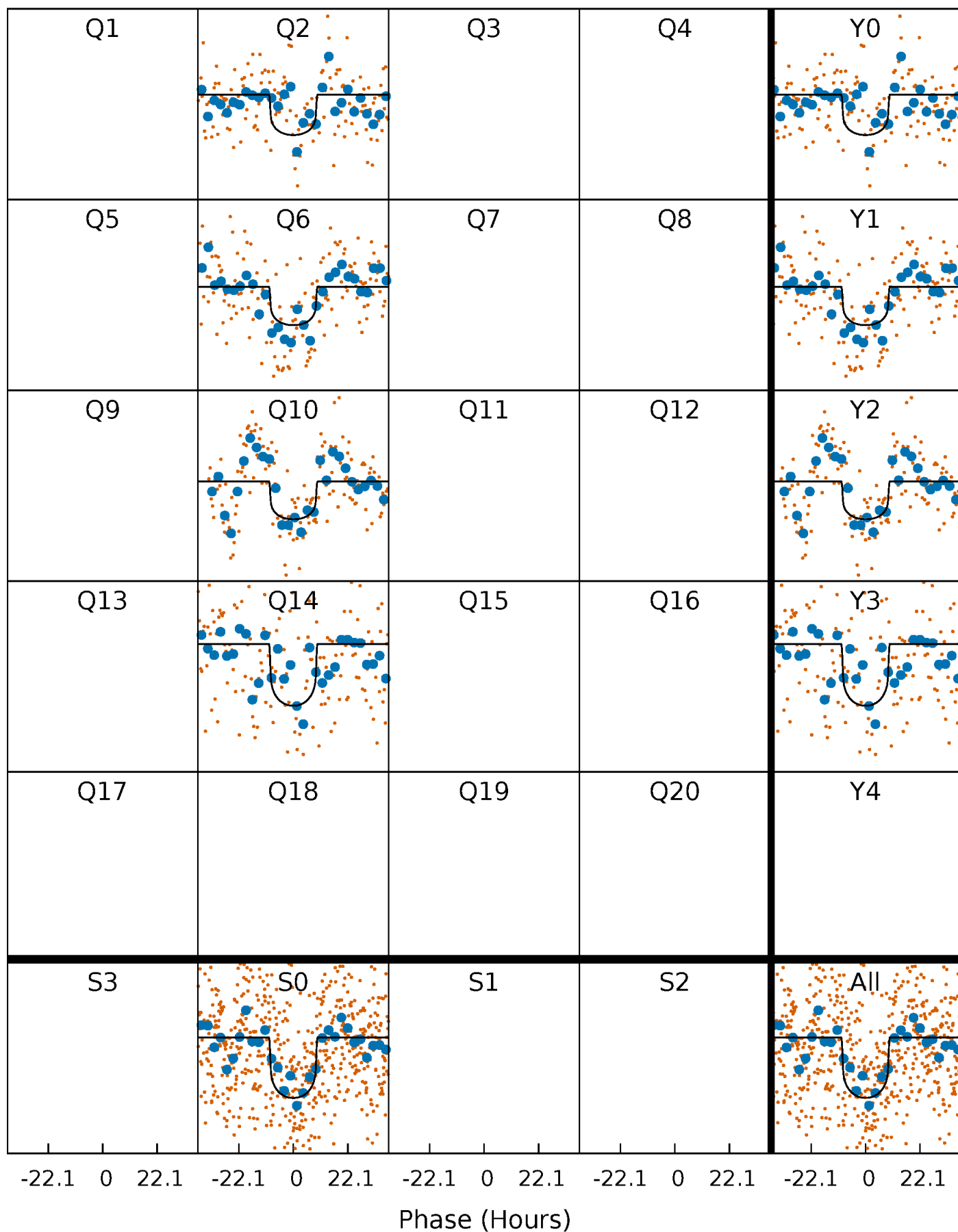
PDC Quarter-Phased Transit Curves

TCE 008035632-01 P=342.992596 Days $T_0=253.247262$ (BKJD)



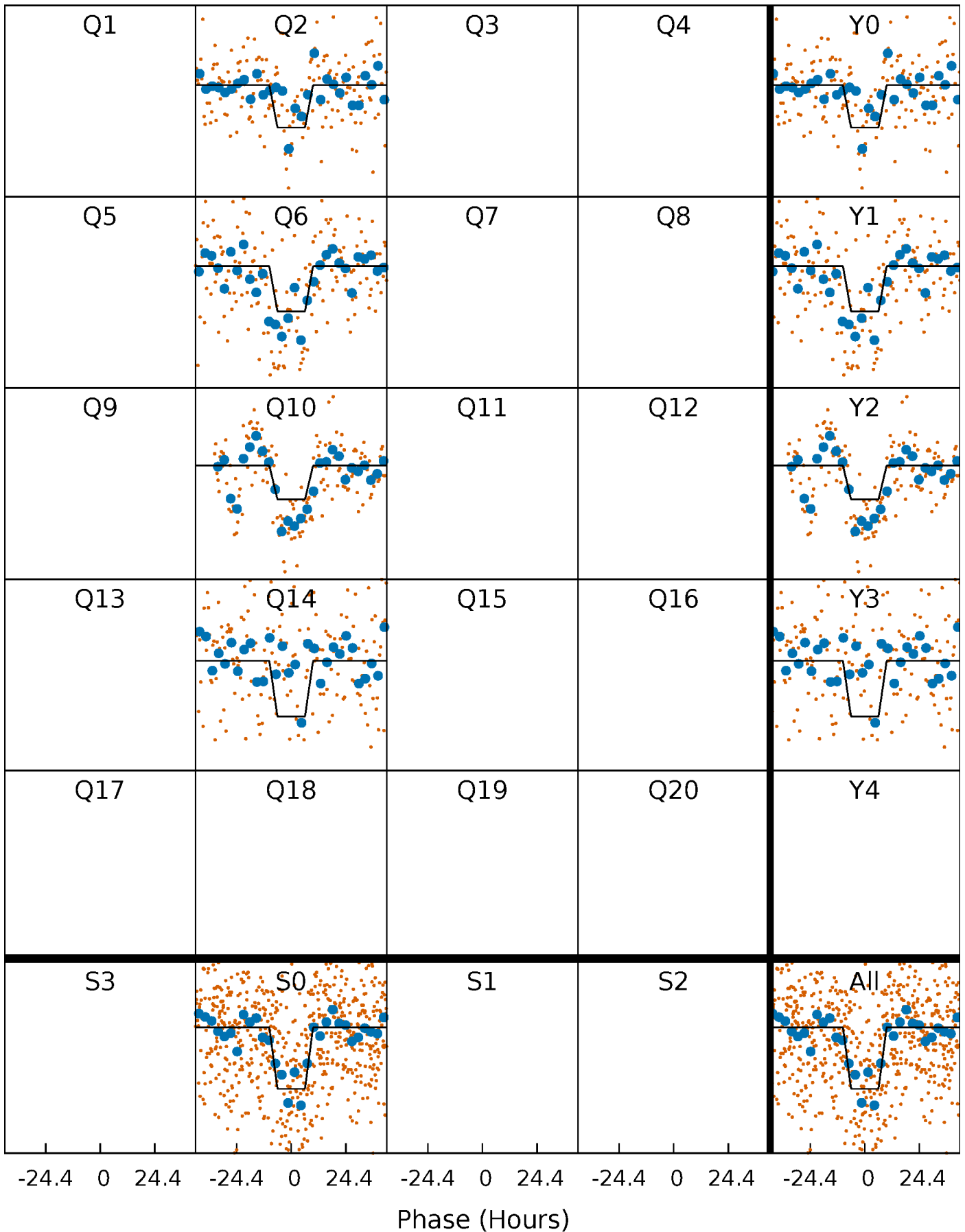
DV Quarter-Phased Transit Curves

TCE 008035632-01 P=342.992596 Days $T_0=253.247262$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

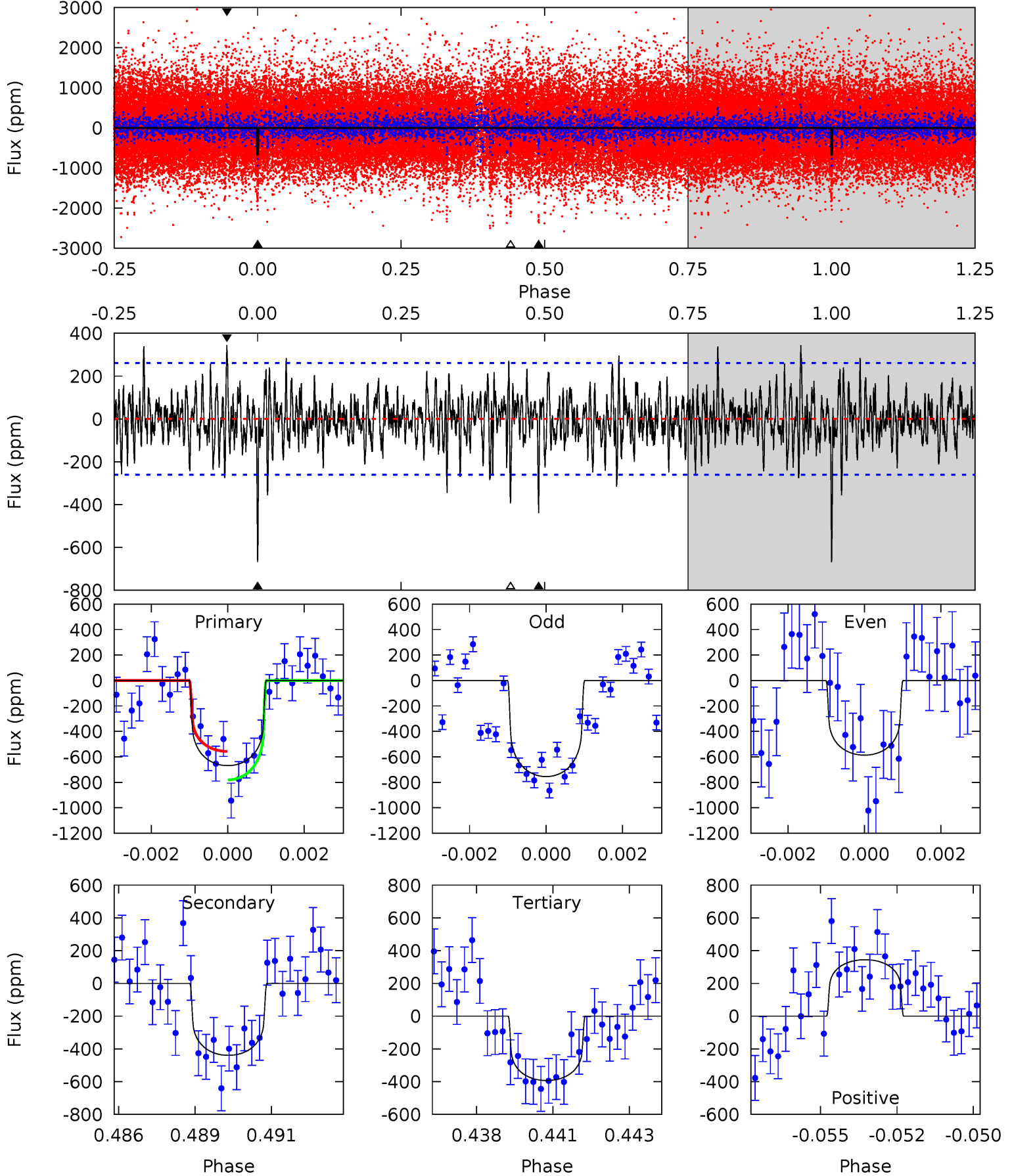
TCE 008035632-01 P=342.929626 Days $T_0=253.368994$ (BKJD)



DV Model-Shift Uniqueness Test

008035632-01, P = 342.992596 Days, E = 253.247262 Days

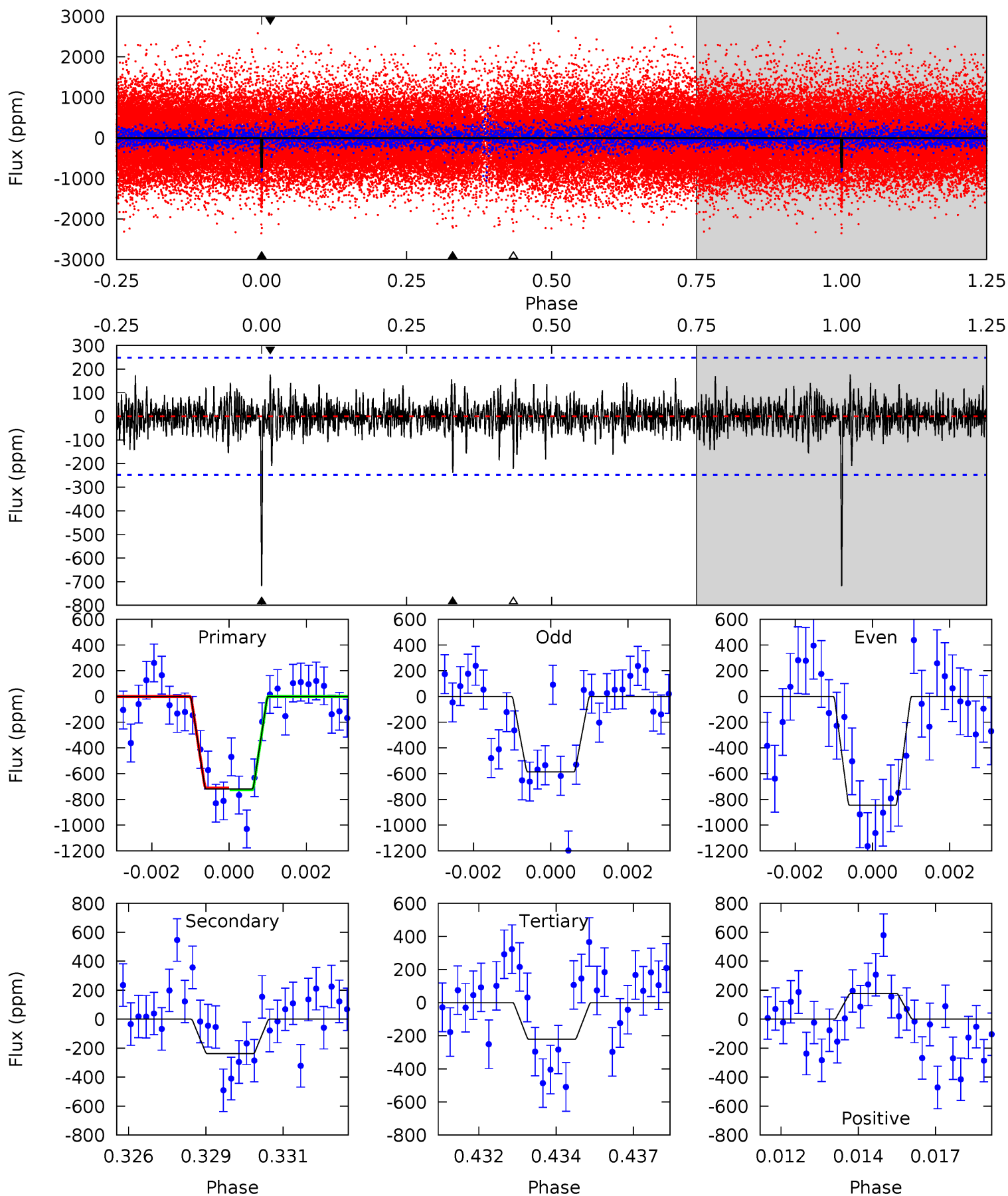
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.6	8.92	7.98	7.00	5.29	3.04	1.92	5.59	6.58	0.94	1.92	1.72	1.07	0.34	2.27



Alt Model-Shift Uniqueness Test

008035632-01, P = 342.929626 Days, E = 253.368994 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
15.3	5.05	4.72	3.76	5.29	3.04	1.01	10.6	11.5	0.34	1.29	2.78	0.97	0.20	0.14



Stellar Parameters For KIC 008035632

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6063^{+181}_{-217}	$4.470^{+0.058}_{-0.184}$	$-0.020^{+0.250}_{-0.300}$	$1.001^{+0.267}_{-0.114}$	$1.079^{+0.130}_{-0.145}$	$1.517^{+0.369}_{-0.726}$
	+3%/-4%	+1%/-4%	+1250%/-1500%	+27%/-11%	+12%/-13%	+24%/-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 008035632-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-439 ± 49	$2.99^{+1.18}_{-1.10}$	384^{+25}_{-19}	5405^{+1441}_{-669}	25688^{+38889}_{-12591}
Alt.	-237 ± 47	$3.14^{+1.25}_{-1.15}$	386^{+25}_{-19}	4665^{+977}_{-539}	12484^{+17616}_{-6220}

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

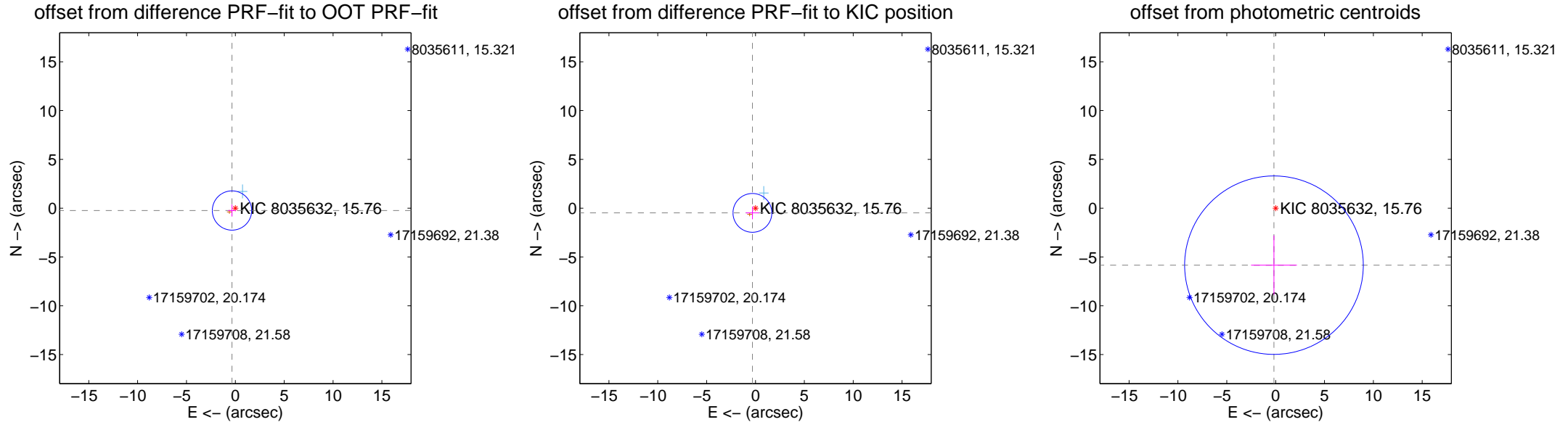
DV Centroid Data

Supplemental centroid analysis for 008035632-01. Kepler magnitude: 15.76. Transit SNR 8.30

There are 1 quarters with good PRF difference image offsets

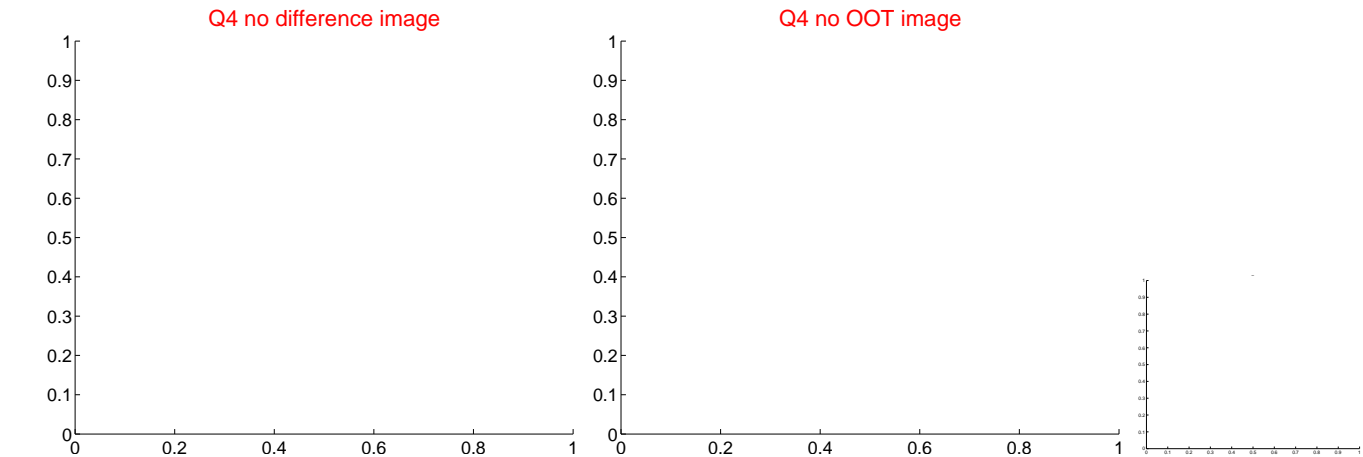
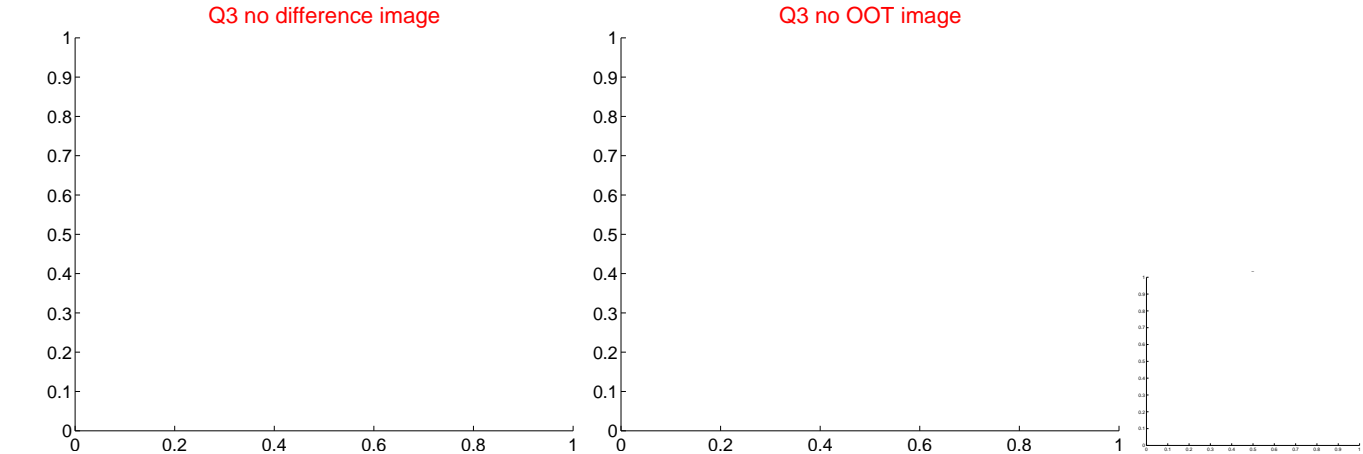
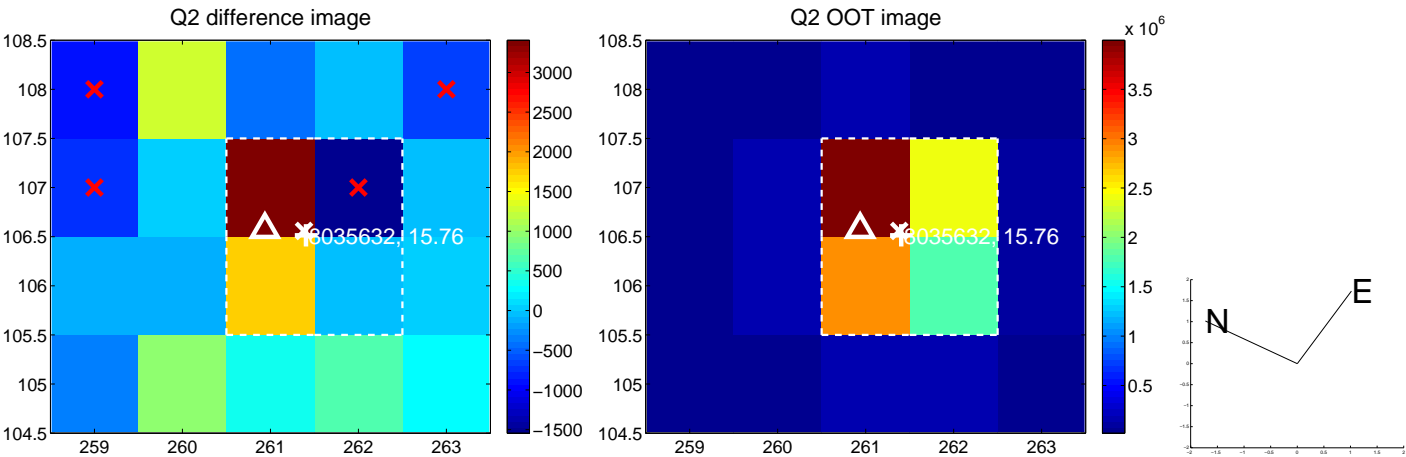
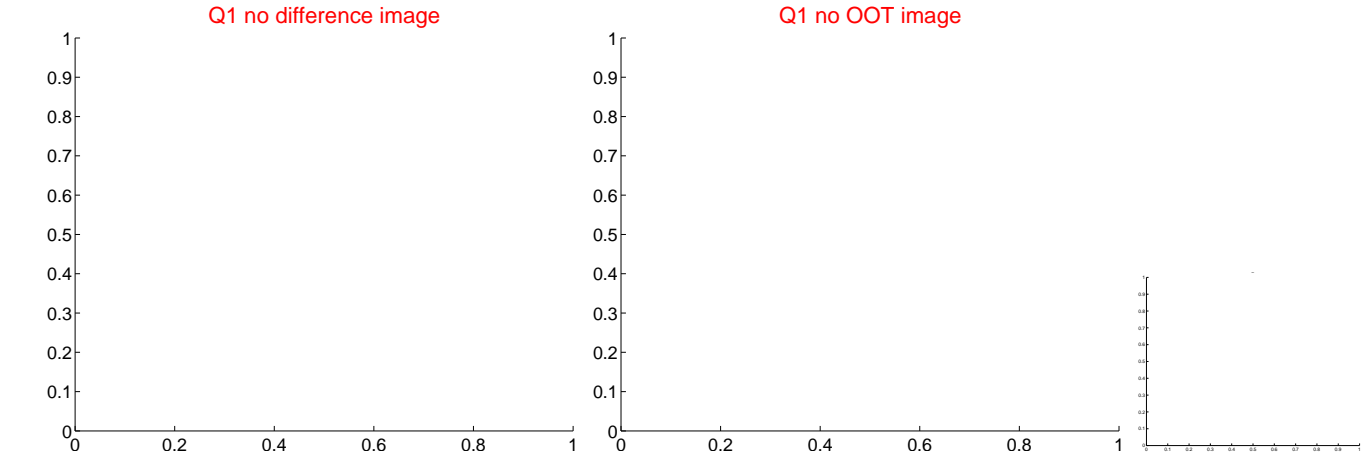
The direct PRF centroid is offset from the target star catalog position by about 0.25 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.417 ± 0.671	0.62	0.341 ± 0.395	-0.239 ± 0.611
PRF-fit source offset from KIC position	0.576 ± 0.662	0.87	0.315 ± 0.679	-0.483 ± 0.655
photometric centroid source offset	5.84 ± 3.05	1.92	0.17 ± 2.34	-5.84 ± 3.05

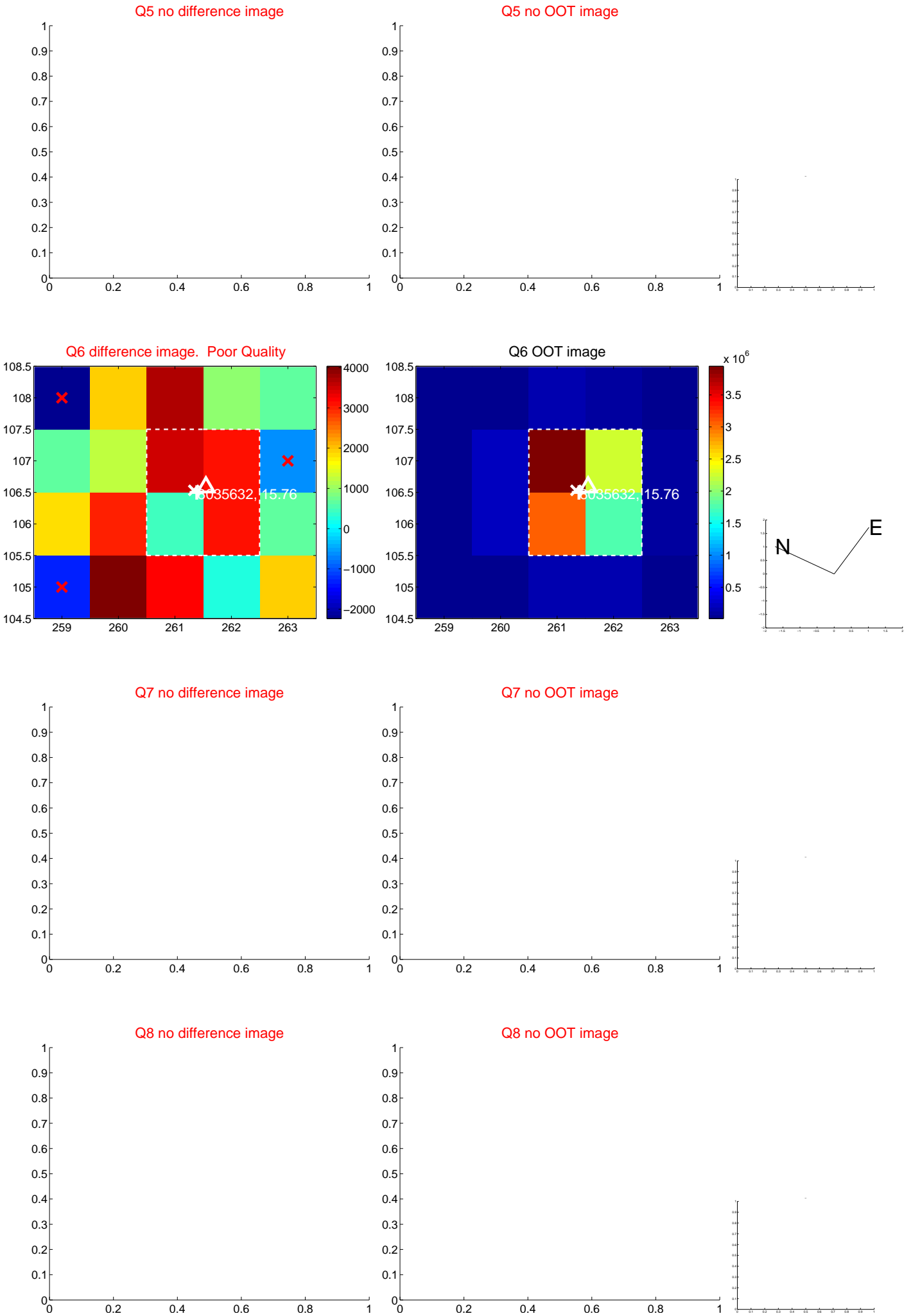


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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



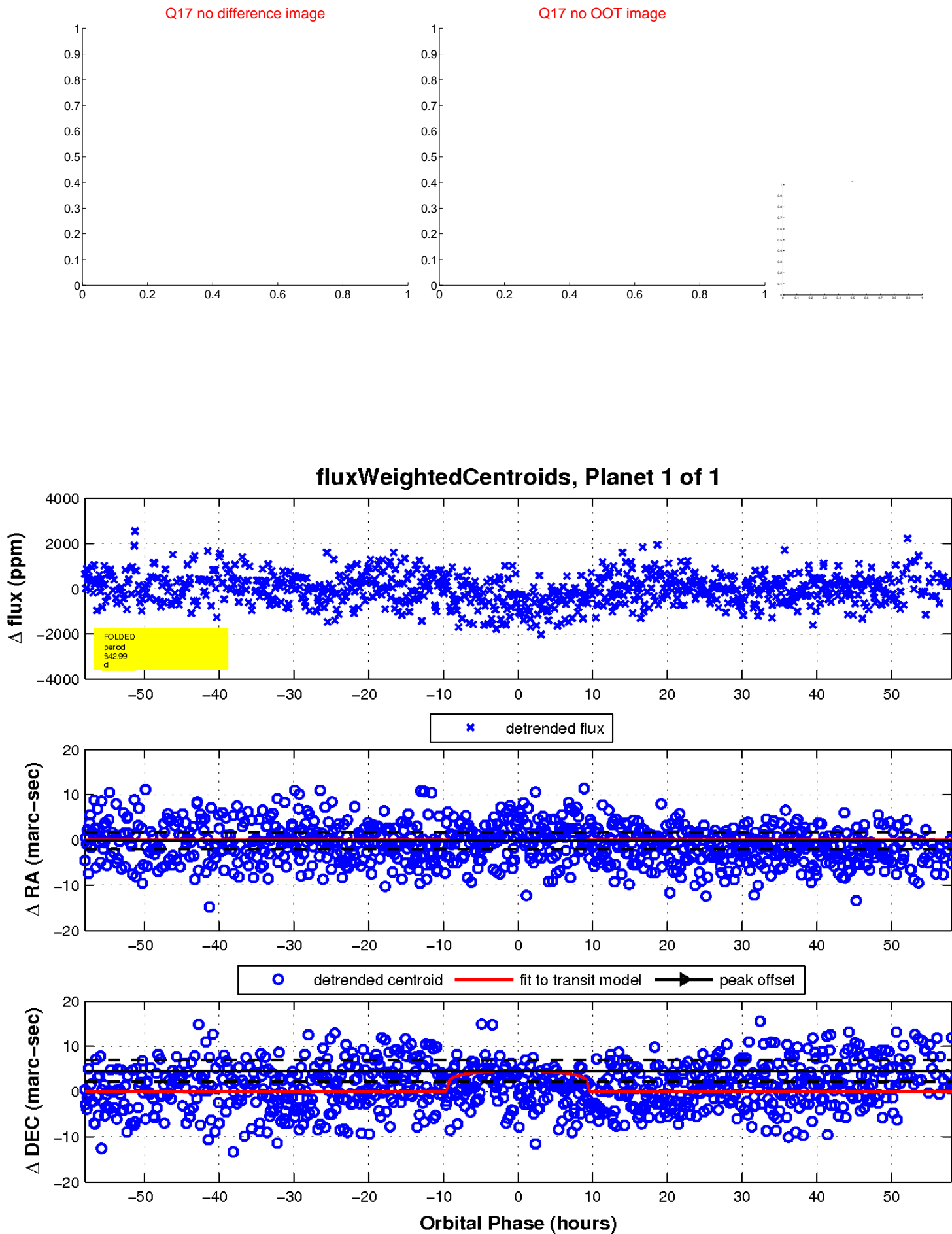
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

