

KIC 008352449

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})
008352449-01	OBS	No	275.834189	404.356624	686.7	10.770	8.0	7.0	0.96	6029	2.59	1.53

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008352449-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS

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

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

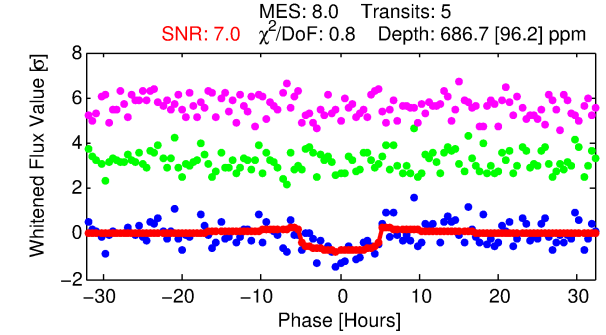
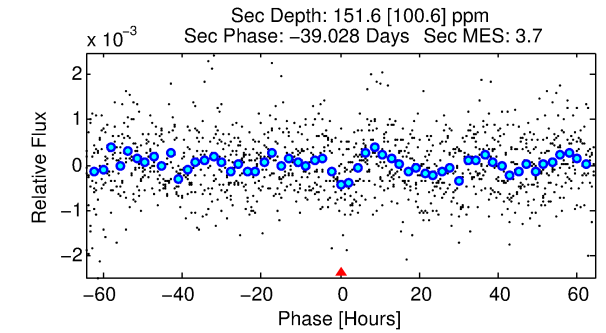
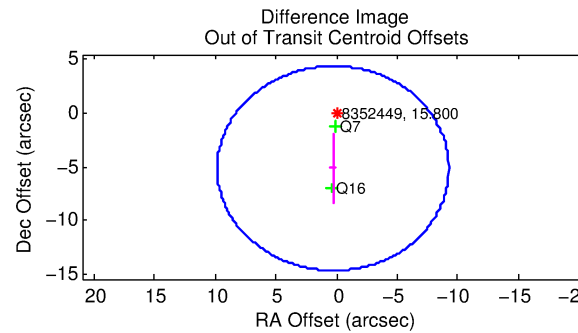
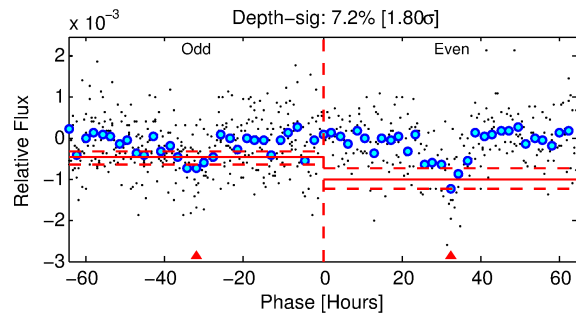
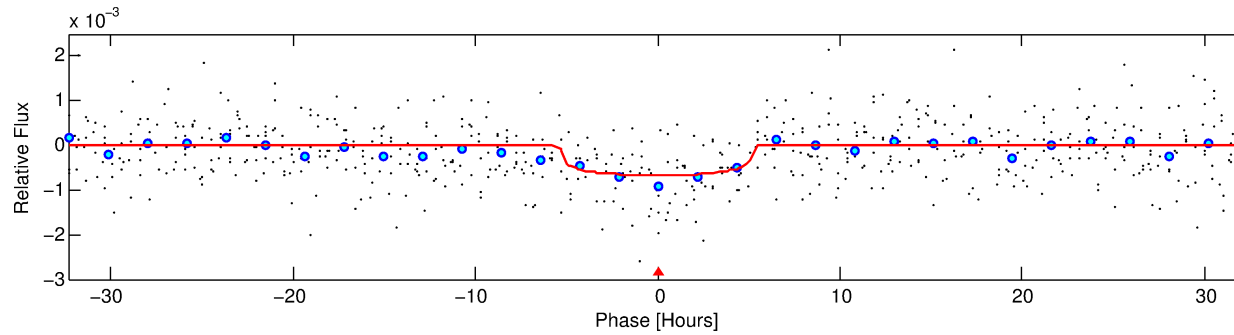
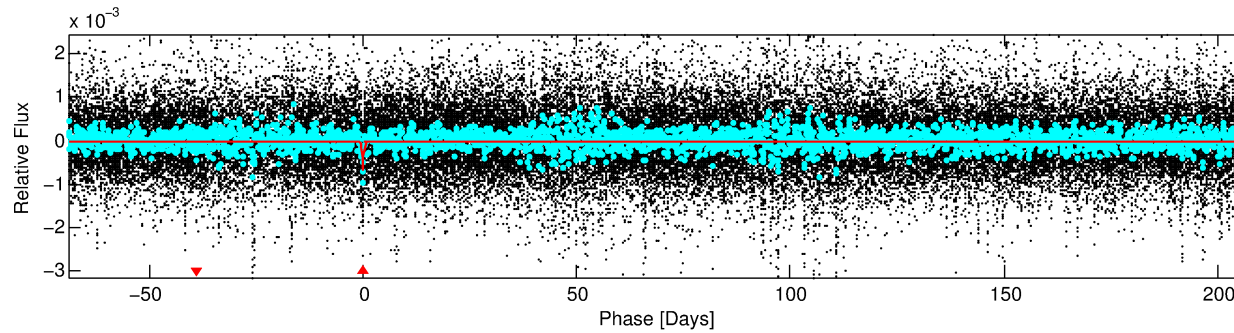
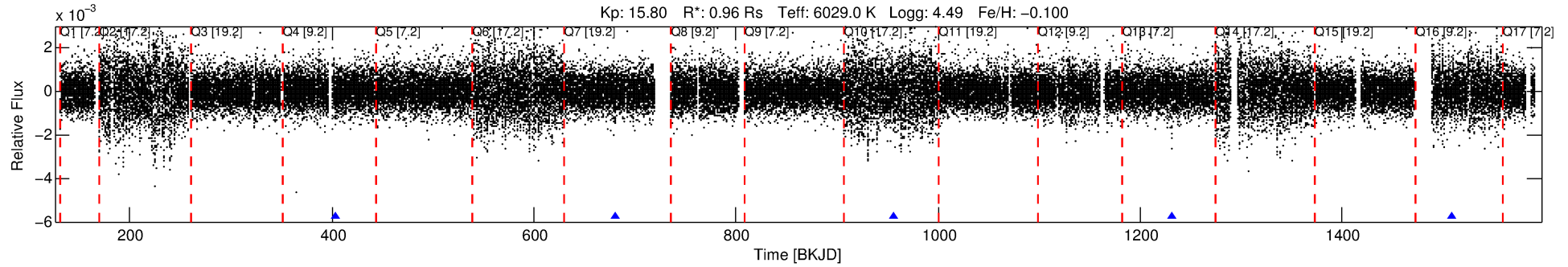
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008352449-01

No Significant Match Found

DV One-Page Summary

KIC: 8352449 Candidate: 1 of 1 Period: 275.834 d



DV Fit Results:

Period = 275.83419 [0.00856] d
Epoch = 404.3566 [0.0208] BKJD
Rp/R* = 0.0248 [0.0151]
a/R* = 170.39 [486.73]
b = 0.54 [3.77]
Seff = 1.53 [0.60]
Teq = 284 [28] K
Rp = 2.59 [1.75] Re
a = 0.8403 [0.2110] AU
Ag = 8800.18 [12610.79] [0.70 σ]
Teffp = 4248 [1479] K [2.68 σ]

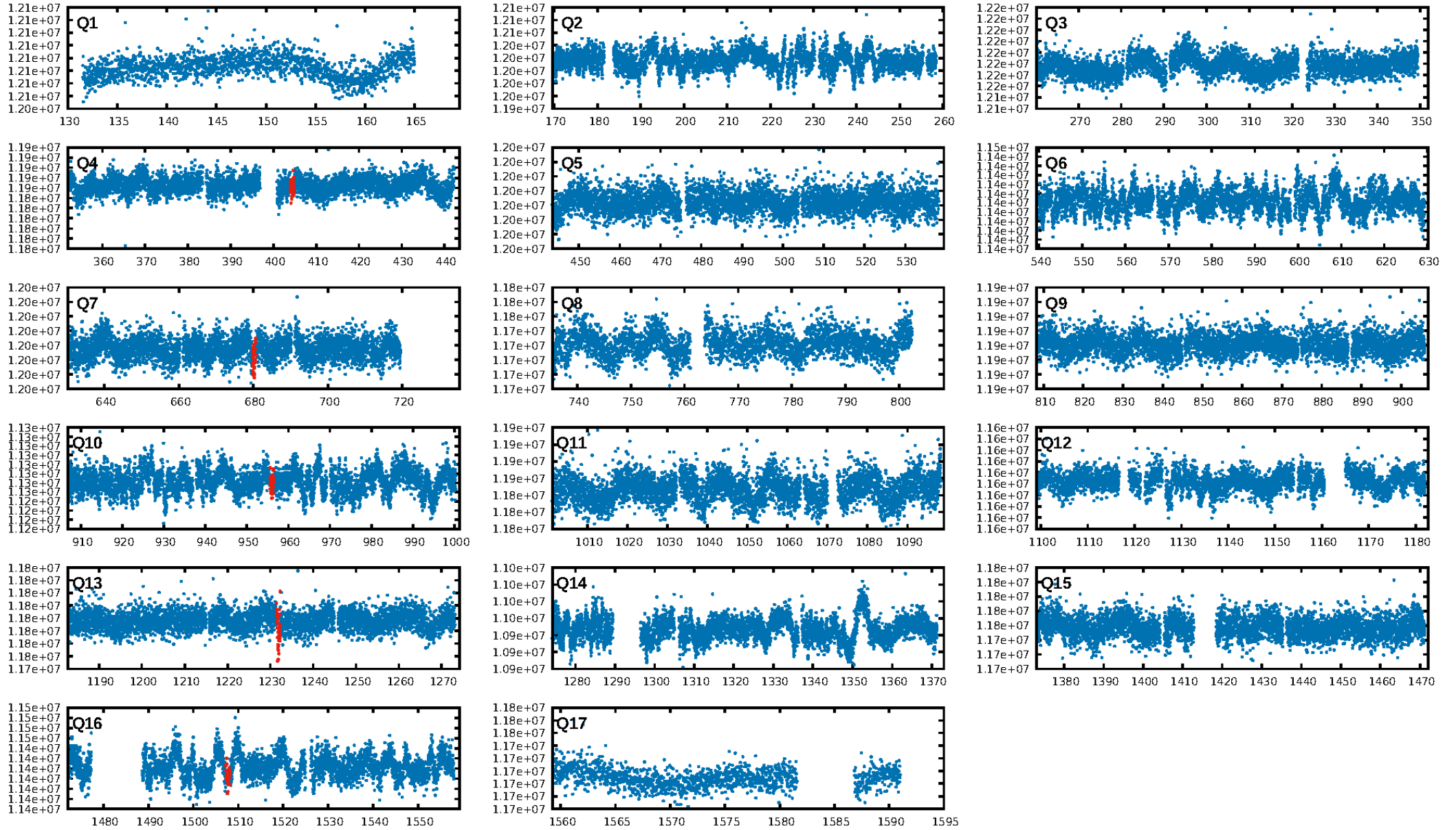
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 14.9%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 4.63e-11
RollingBand-fgt: 1.00 [5/5]
GhostDiagnostic-chr: 0.6915
Centroid-sig: 11.8%
Centroid-so: 4.024 arcsec [1.57 σ]
OotOffset-rm: 5.174 arcsec [1.62 σ]
OotOffset-st: 0/1/1/0 [2]
KicOffset-rm: 5.192 arcsec [1.63 σ]
KicOffset-st: 0/1/1/0 [2]
DiffImageQuality-fgm: 0.00 [0/2]
DiffImageOverlap-fno: 1.00 [4/4]

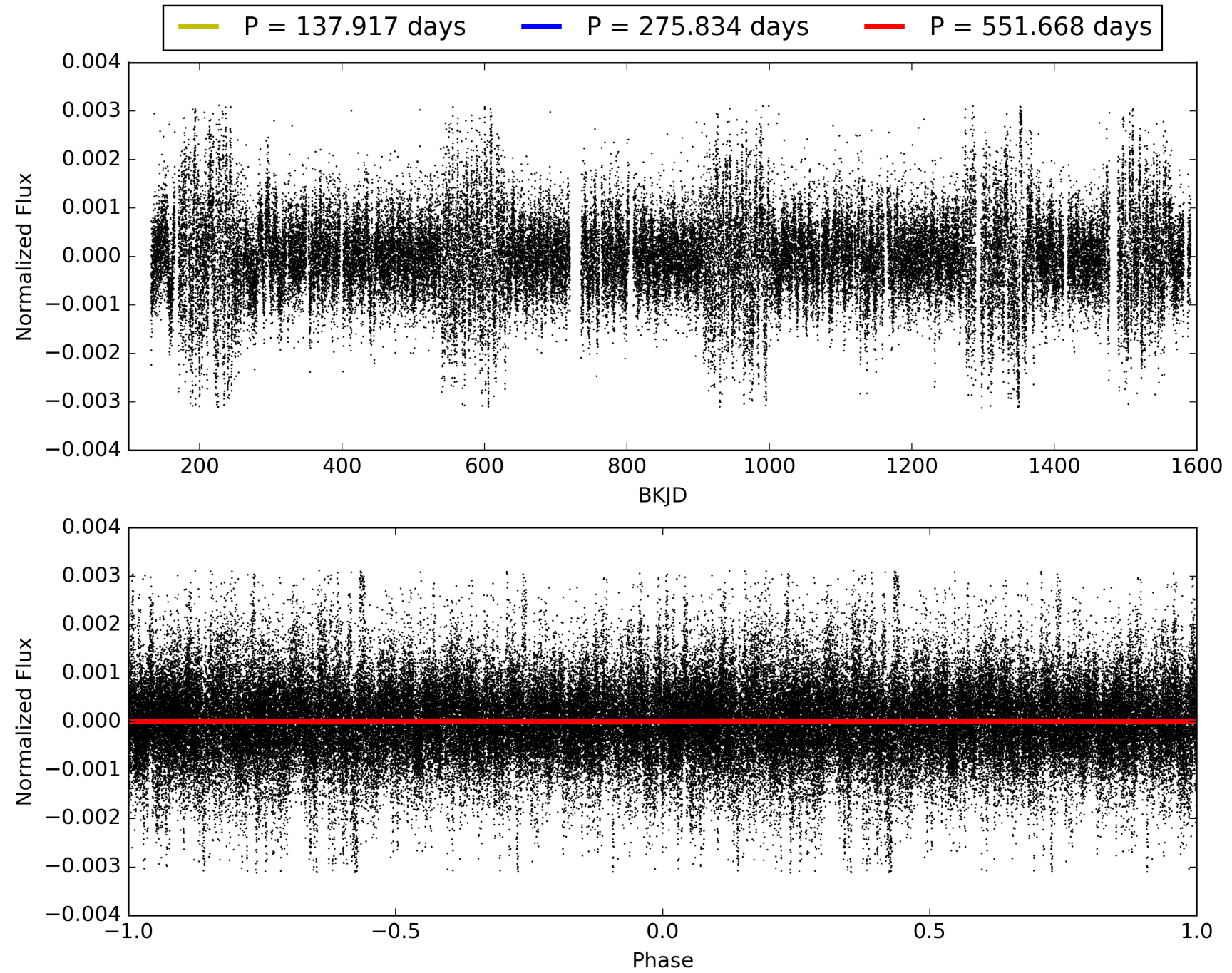
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 21:15:54 Z

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

TCE 008352449-01, PDC Light Curves

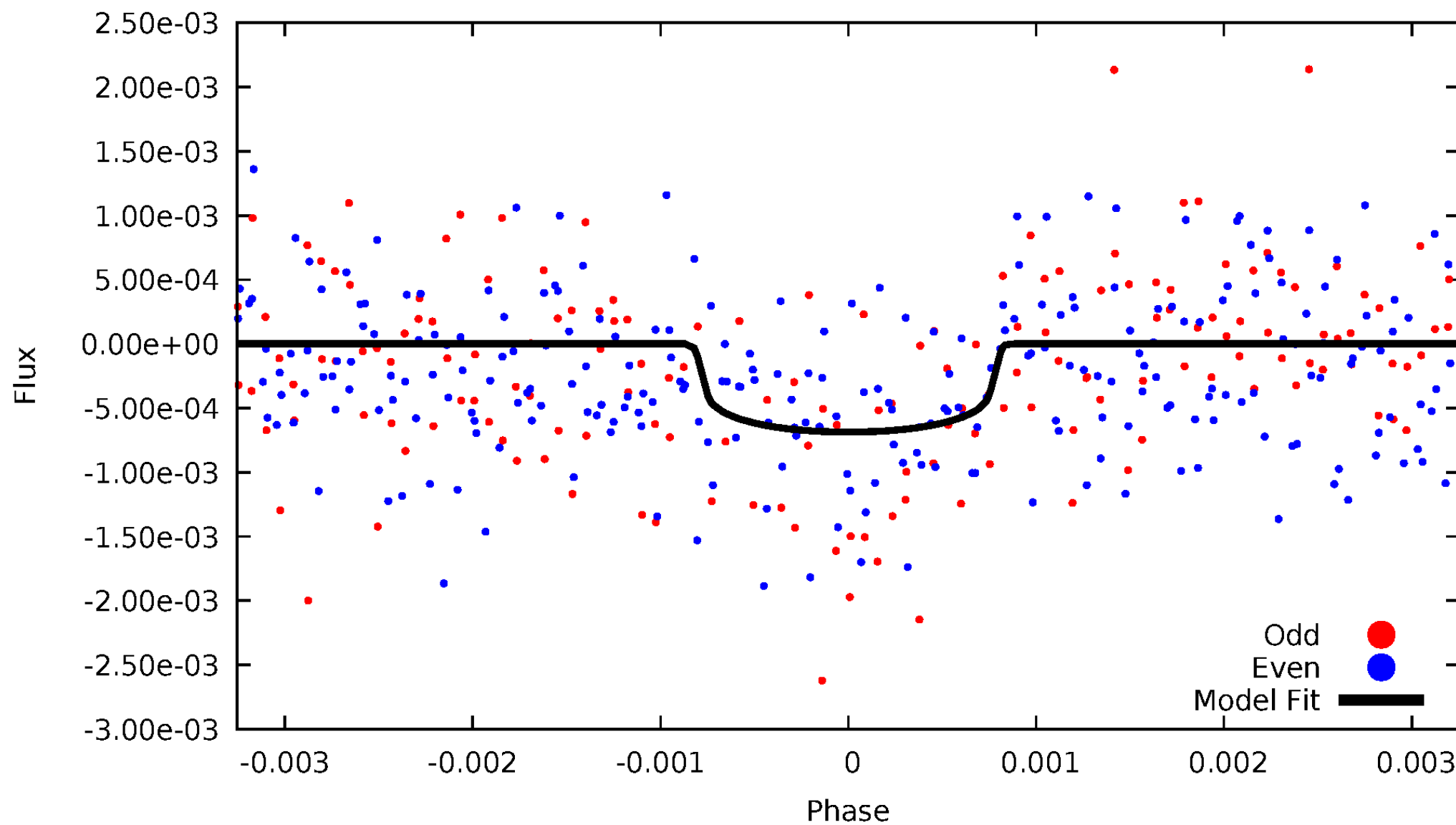


TCE 008352449-01



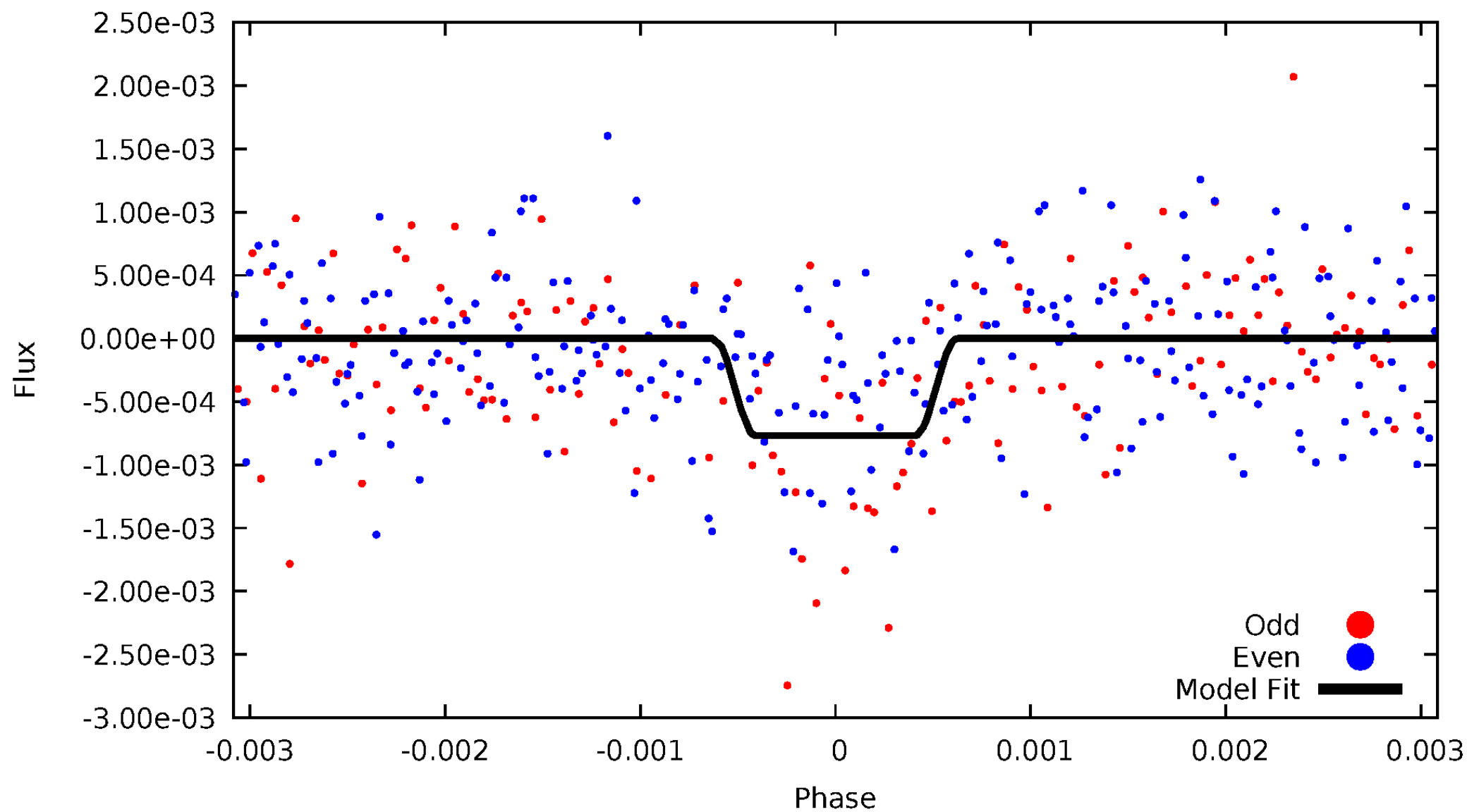
DV Odd/Even

TCE 008352449-01

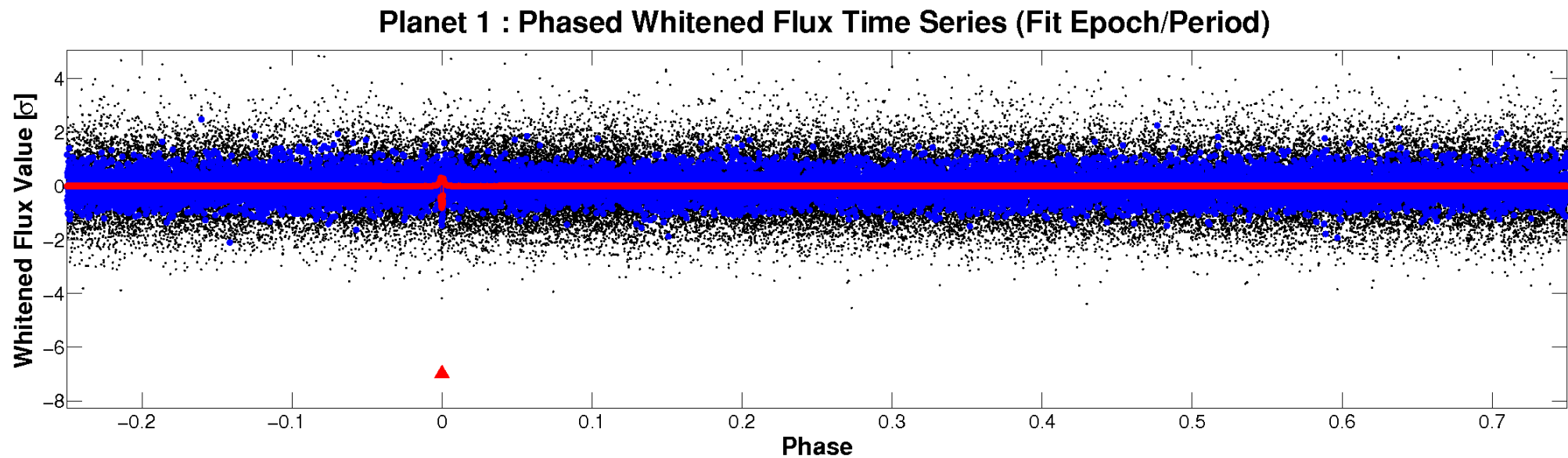
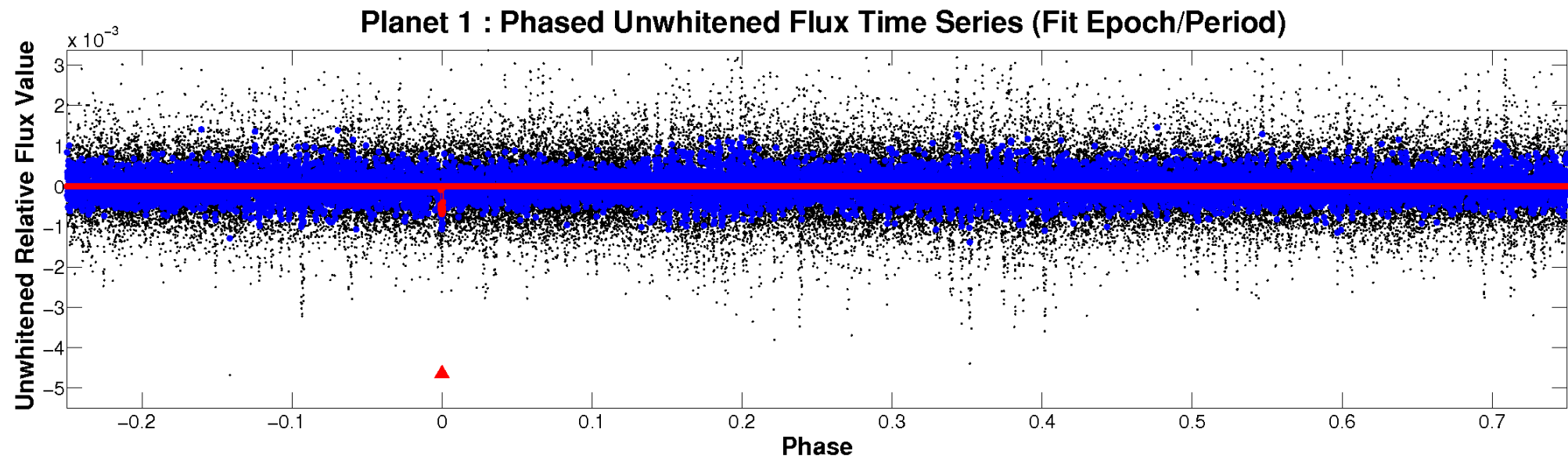


ALT Odd/Even

TCE 008352449-01

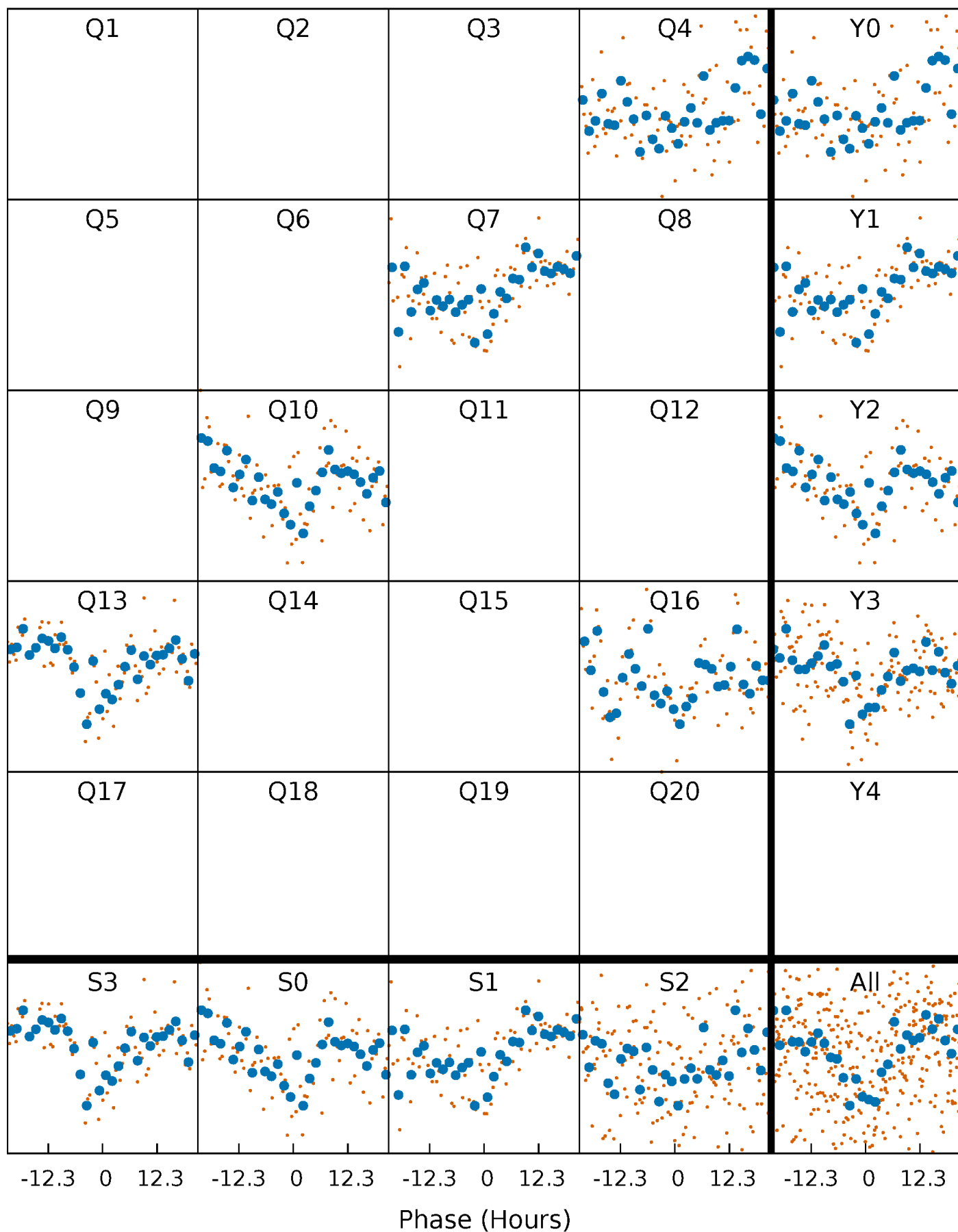


Non-Whitened Vs. Whitened Light Curve



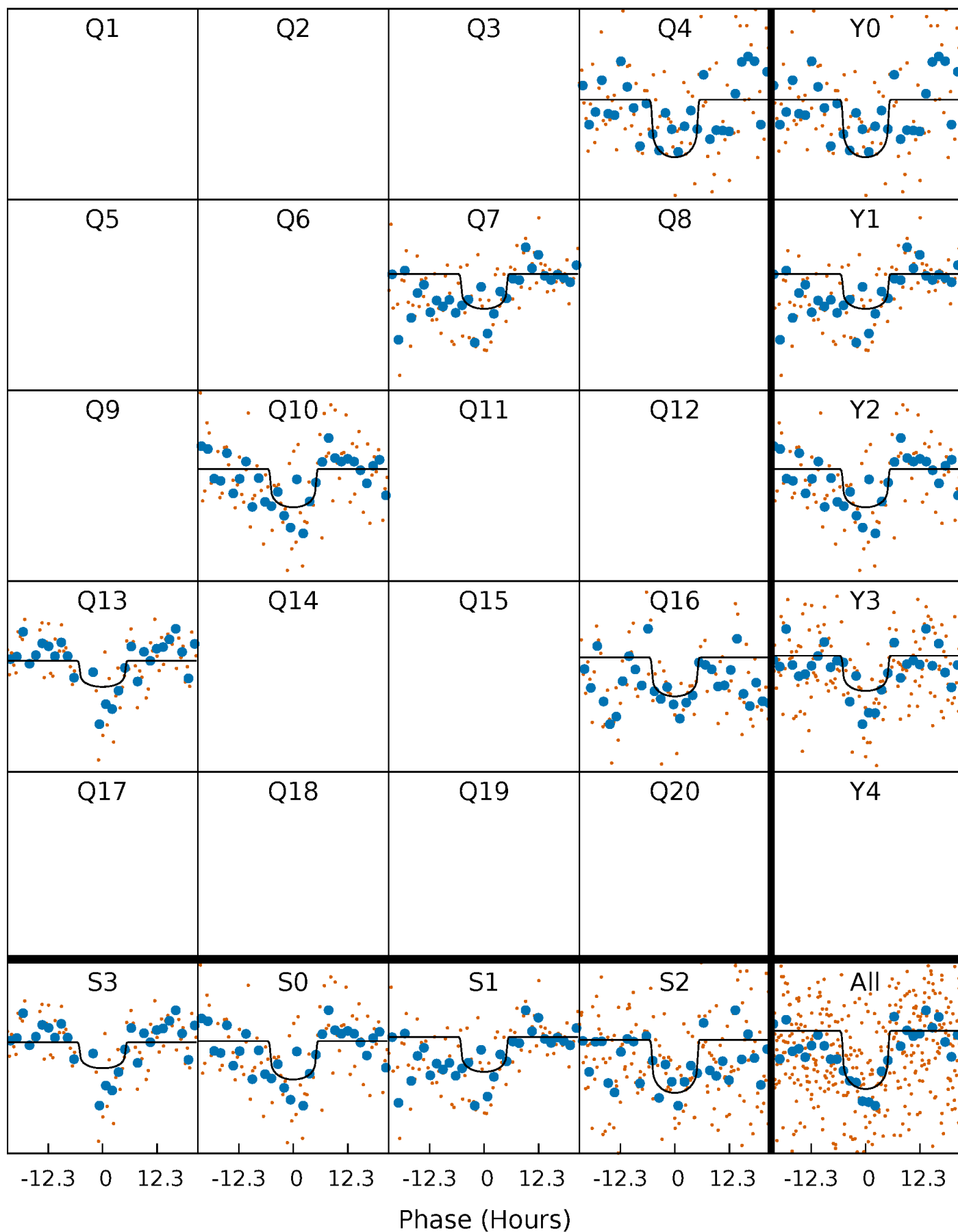
PDC Quarter-Phased Transit Curves

TCE 008352449-01 P=275.834189 Days $T_0=404.356624$ (BKJD)



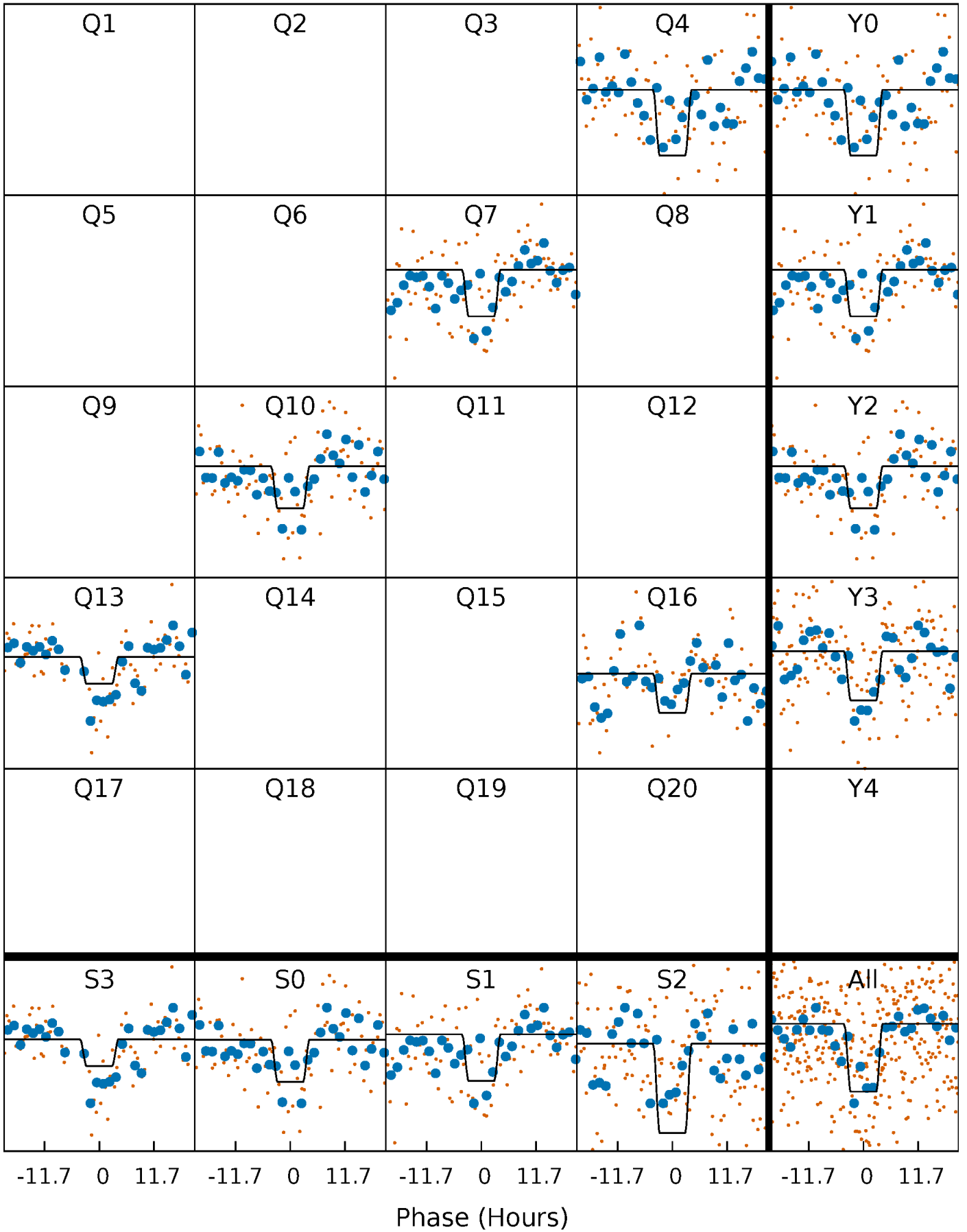
DV Quarter-Phased Transit Curves

TCE 008352449-01 P=275.834189 Days $T_0=404.356624$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

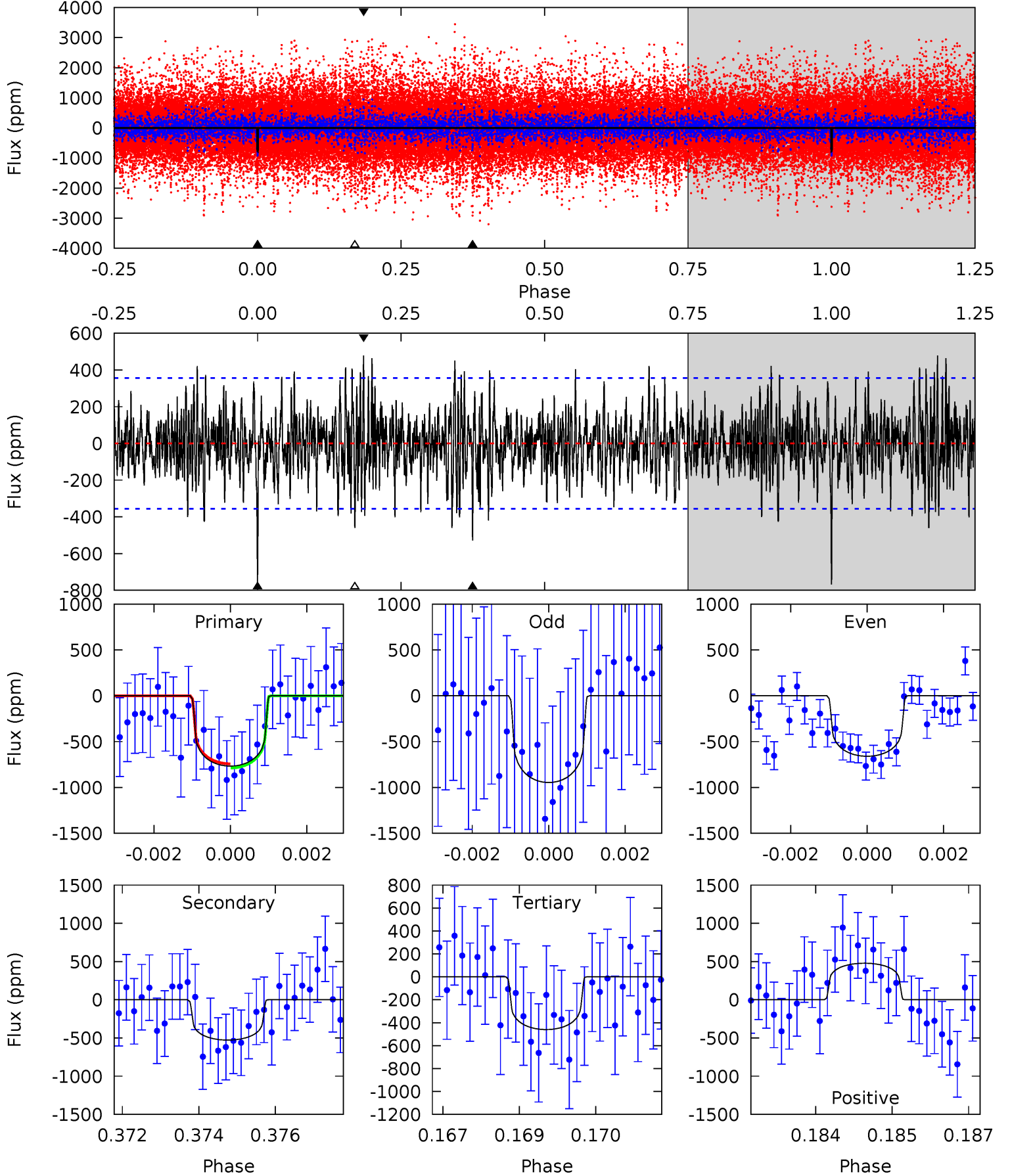
TCE 008352449-01 $P=275.859871$ Days $T_0=404.308808$ (BKJD)



DV Model-Shift Uniqueness Test

008352449-01, P = 275.834189 Days, E = 128.522435 Days

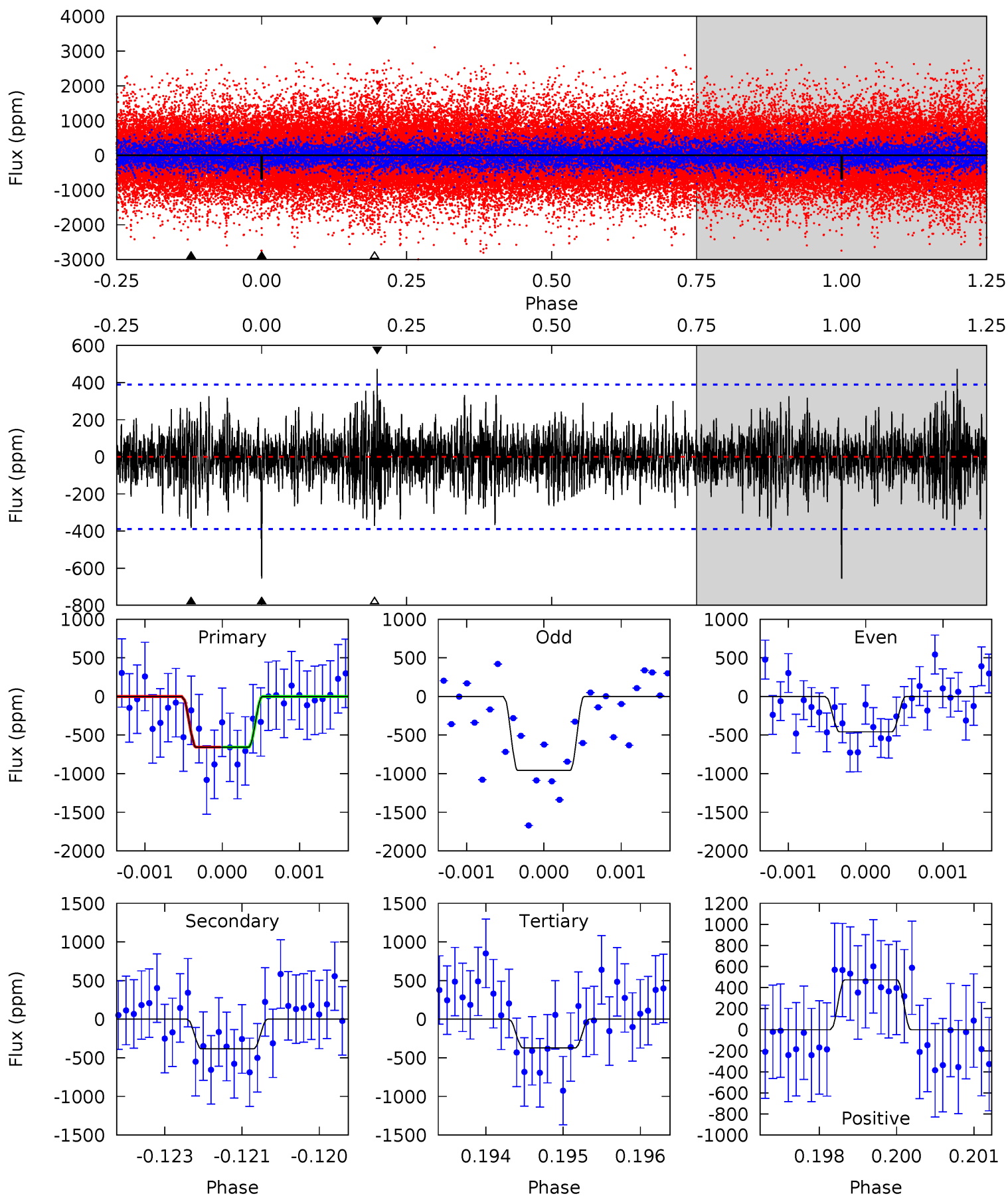
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.6	7.95	6.93	7.20	5.36	3.15	2.06	4.62	4.35	1.02	0.75	2.03	1.02	0.38	0.34



Alt Model-Shift Uniqueness Test

008352449-01, P = 275.859871 Days, E = 128.448937 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.15	5.34	5.17	6.59	5.42	3.24	1.41	3.98	2.56	0.17	-1.25	3.34	1.06	0.42	0.01



Stellar Parameters For KIC 008352449

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6029^{+189}_{-210}	$4.494^{+0.050}_{-0.200}$	$-0.100^{+0.250}_{-0.350}$	$0.956^{+0.285}_{-0.095}$	$1.040^{+0.129}_{-0.142}$	$1.675^{+0.446}_{-0.850}$
	+3%/-3%	+1%/-4%	+250%/-350%	+30%/-10%	+12%/-14%	+27%/-51%
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 008352449-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-528 ± 66	$2.84^{+1.69}_{-1.55}$	403^{+29}_{-20}	5582^{+3118}_{-905}	$24586^{+100308}_{-14437}$
Alt.	-383 ± 72	$3.00^{+1.80}_{-1.47}$	406^{+29}_{-21}	5146^{+1987}_{-866}	16216^{+45178}_{-10012}

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

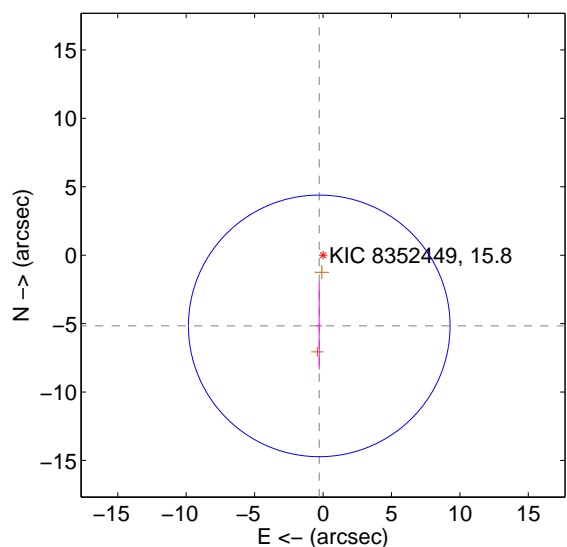
Supplemental centroid analysis for 008352449-01. Kepler magnitude: 15.80. Transit SNR 7.00

There are 0 quarters with good PRF difference image offsets

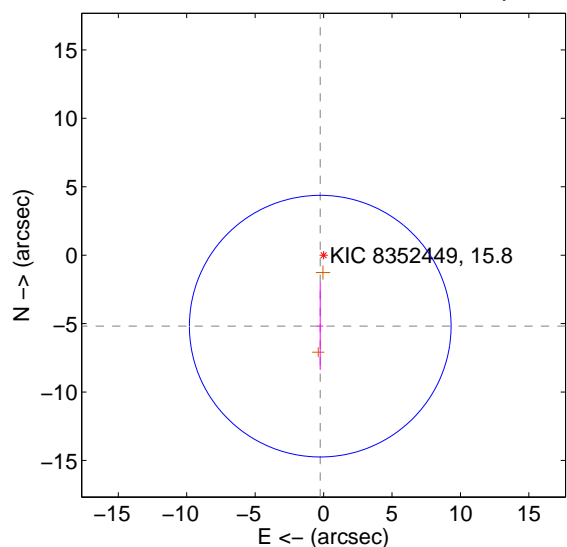
The direct PRF centroid is offset from the target star catalog position by about 0.03 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	5.174 ± 3.186	1.62	0.278 ± 0.198	-5.167 ± 3.190
PRF-fit source offset from KIC position	5.192 ± 3.186	1.63	0.244 ± 0.210	-5.186 ± 3.190
photometric centroid source offset	4.02 ± 2.56	1.57	-4.01 ± 2.56	0.28 ± 1.88

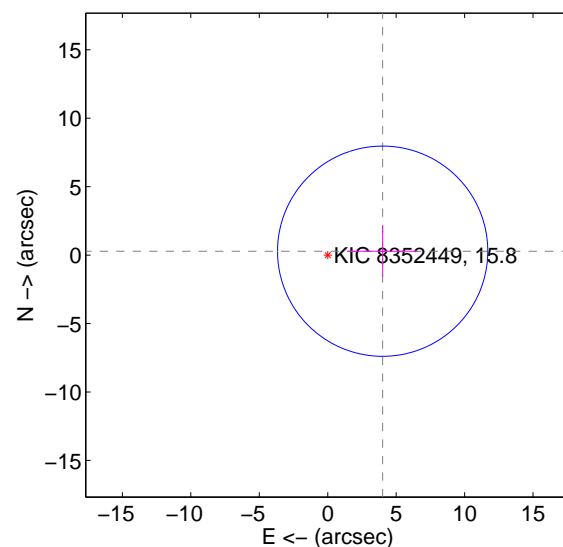
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

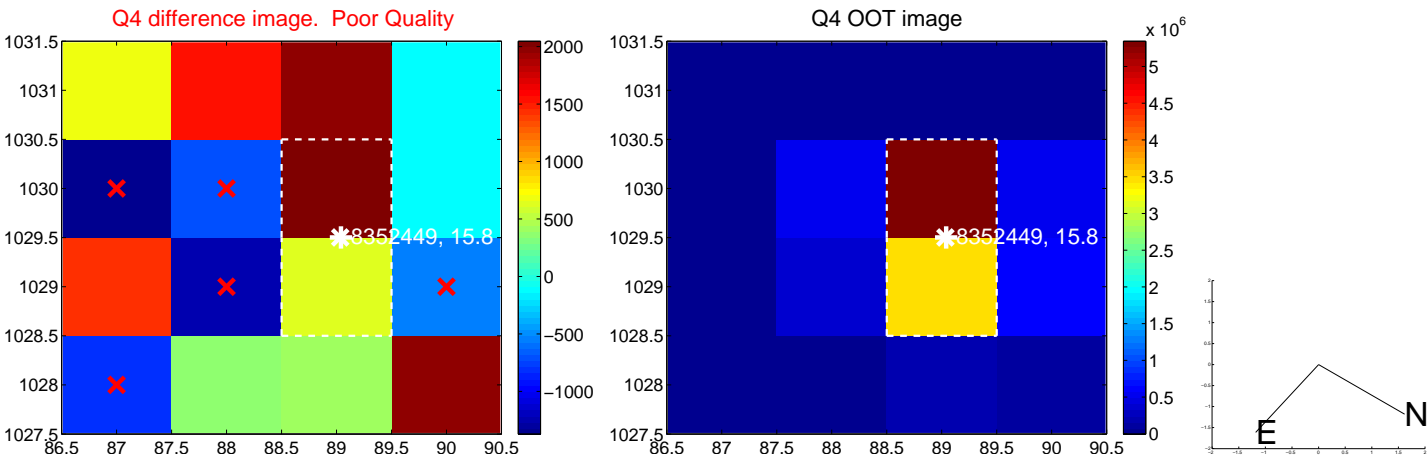
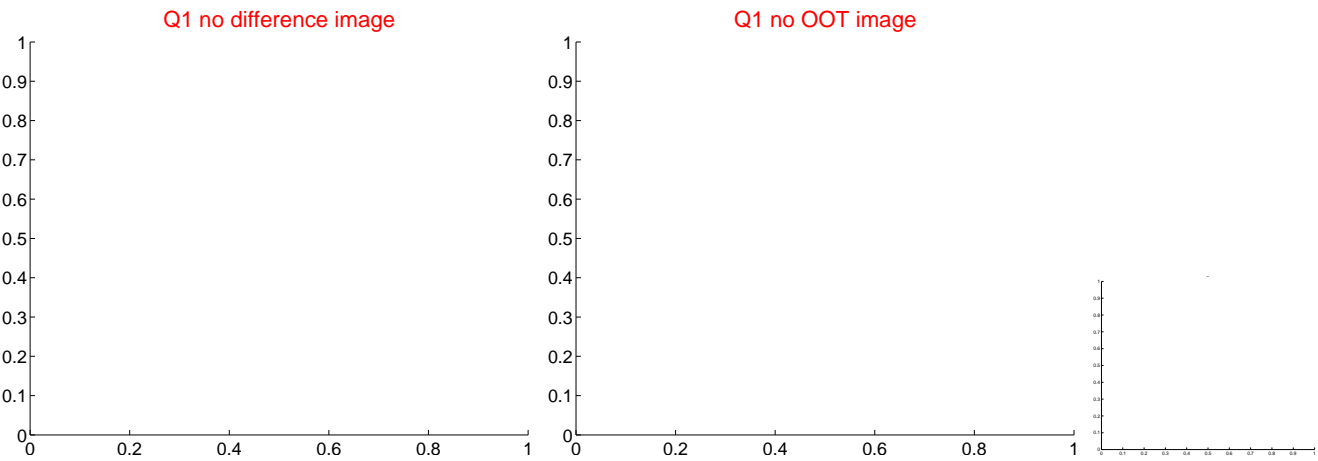


offset from photometric centroids



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 ×: 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.

Q5 no difference image



Q5 no OOT image



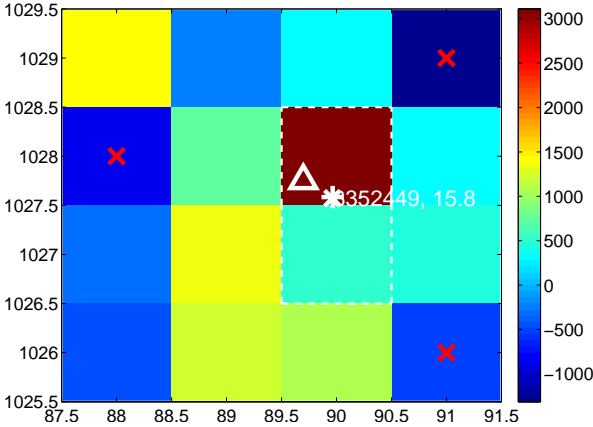
Q6 no difference image



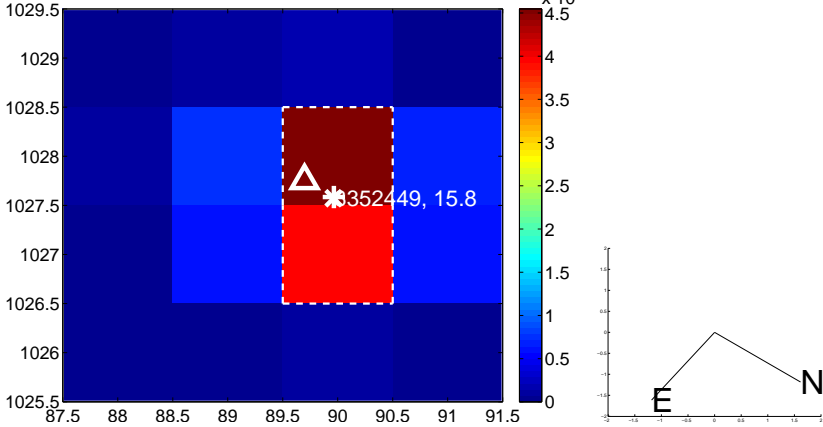
Q6 no OOT image



Q7 difference image. Poor Quality



Q7 OOT image



Q8 no difference image



Q8 no OOT image



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

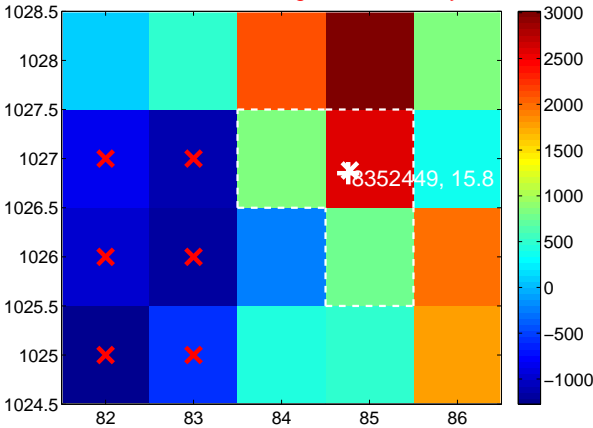
Q9 no difference image



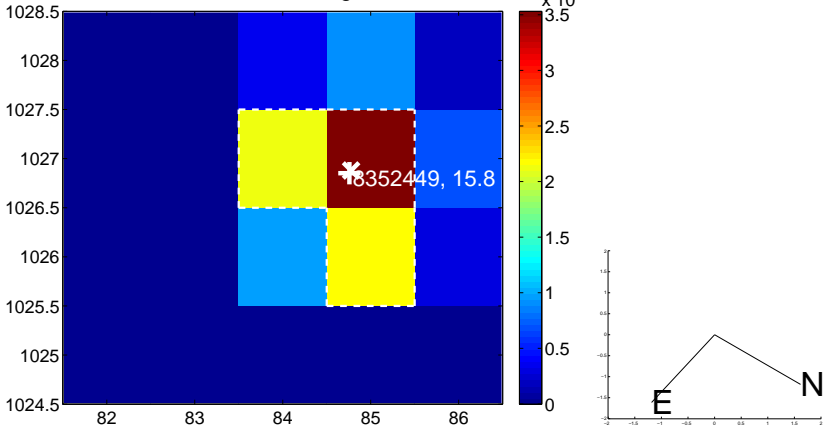
Q9 no OOT image



Q10 difference image. Poor Quality



Q10 OOT image



Q11 no difference image



Q11 no OOT image



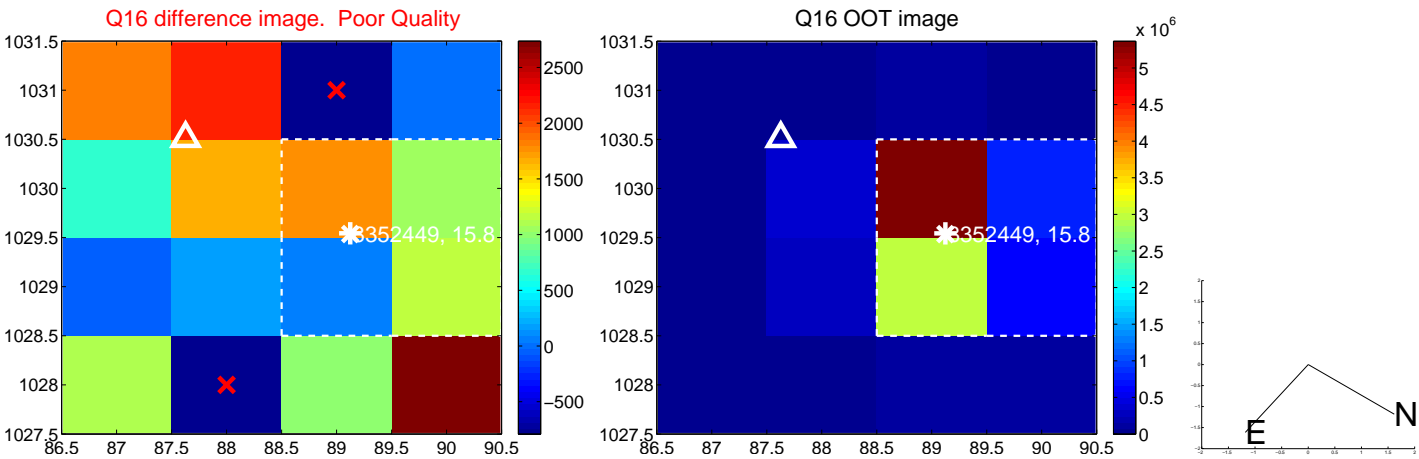
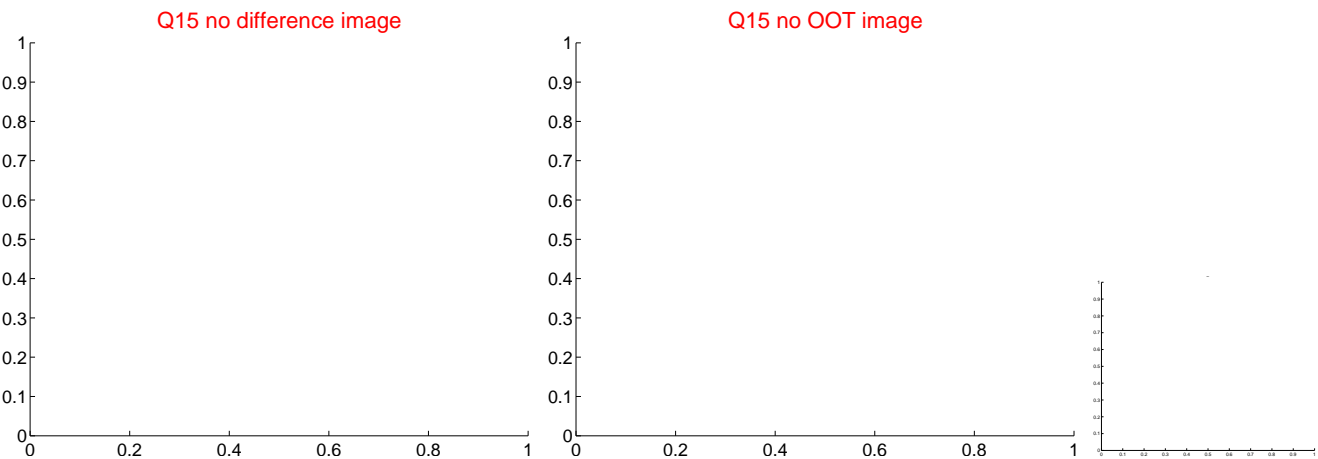
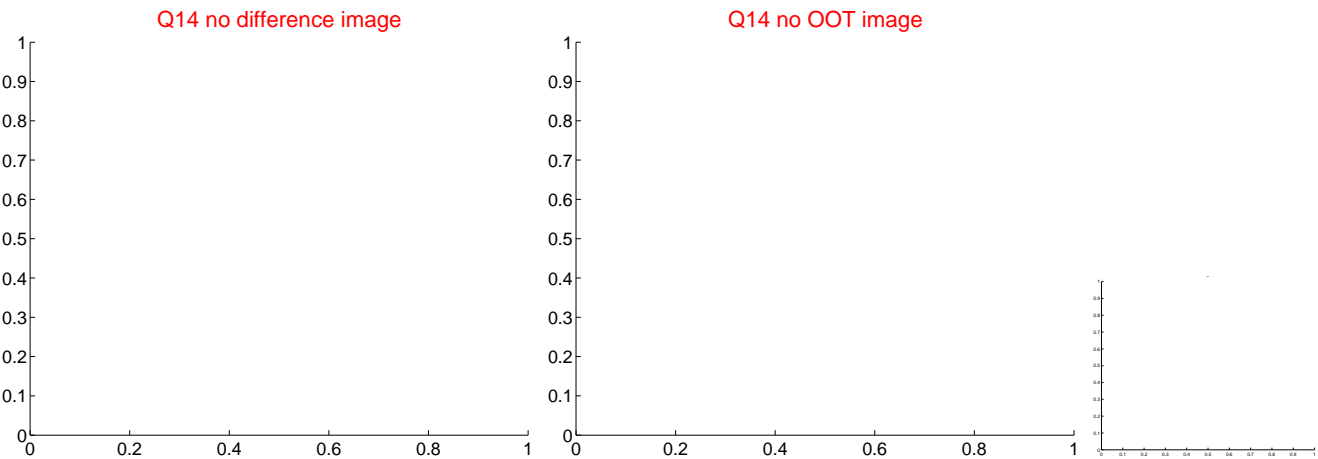
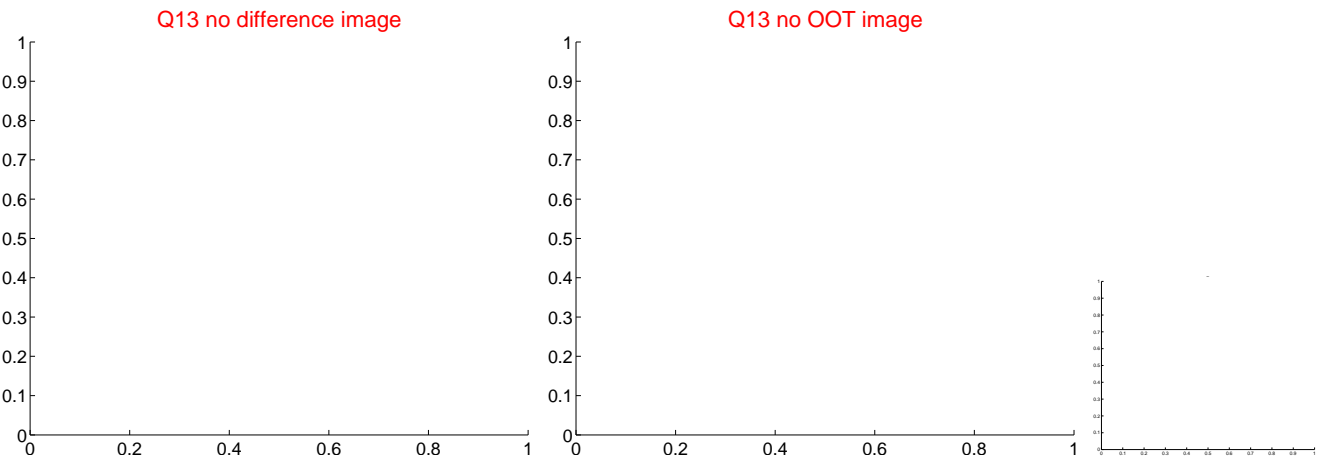
Q12 no difference image



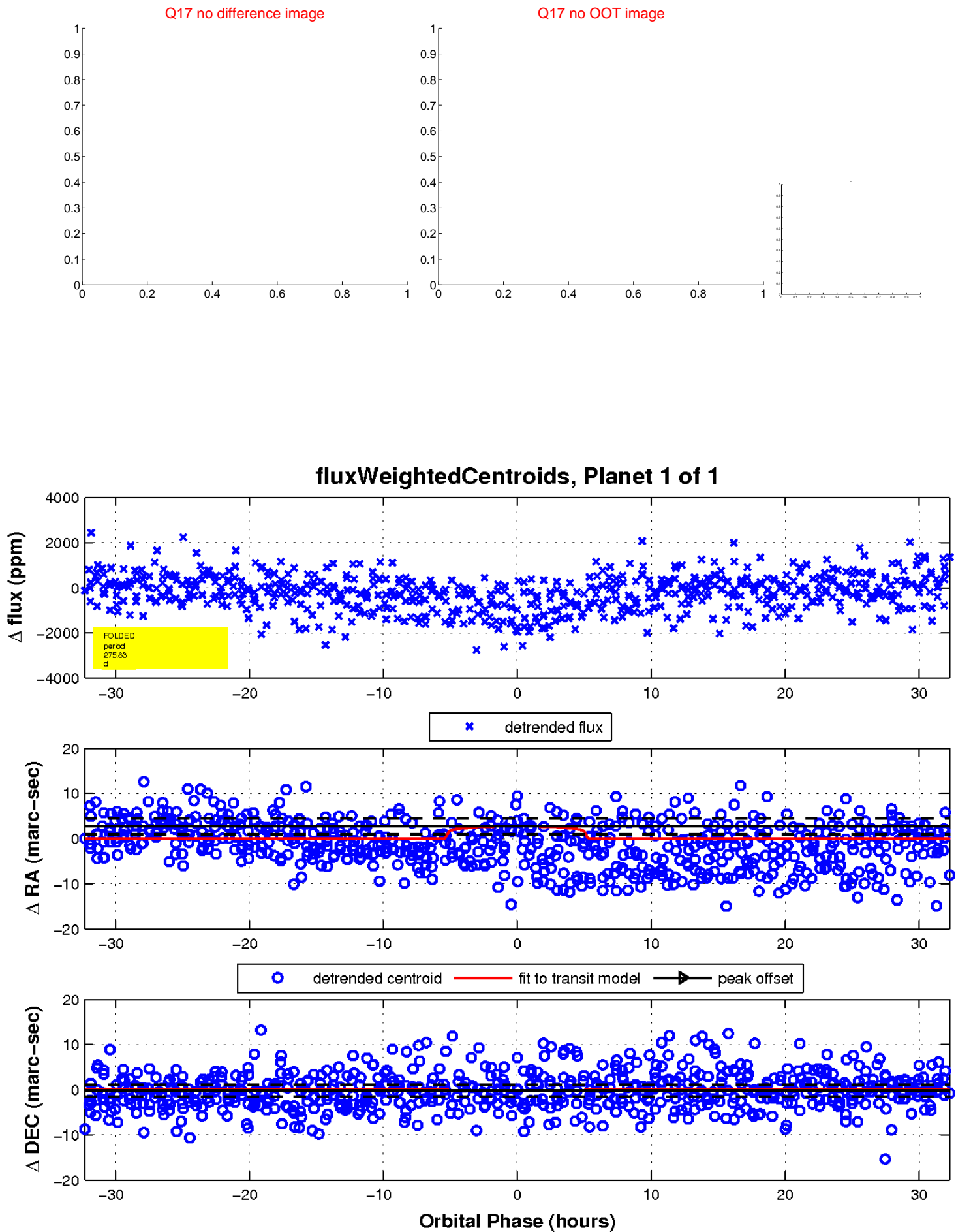
Q12 no OOT image



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.



UKIRT Image

Declination

