

KIC 003440429

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})
003440429-01	OBS	No	4.350866	131.717587	0.0	30.129	8.8	0.0	3.96	6409	0.01	5880.11

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003440429-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—MOD_NONUNIQ_DV—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.

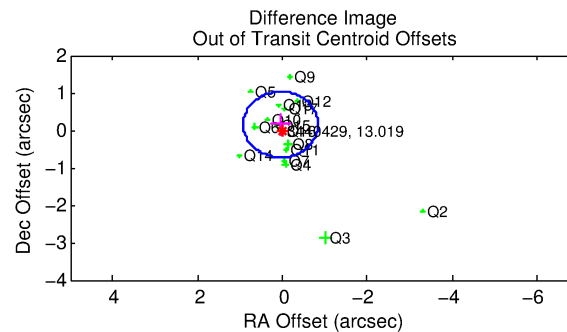
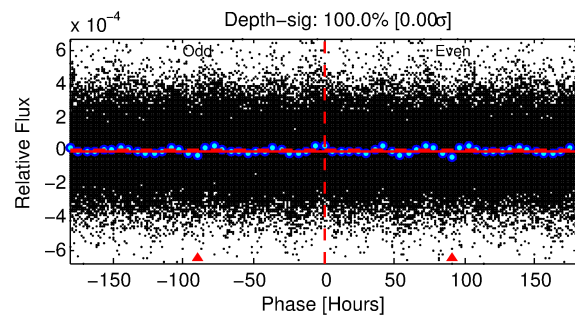
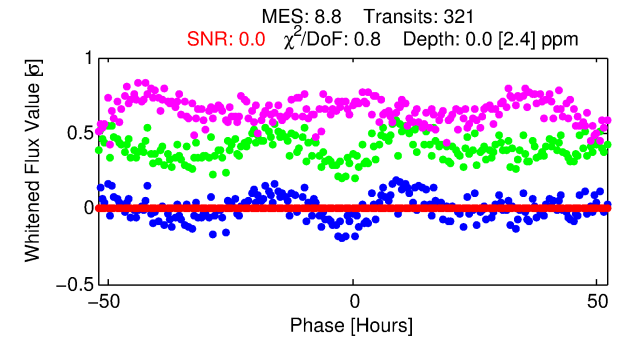
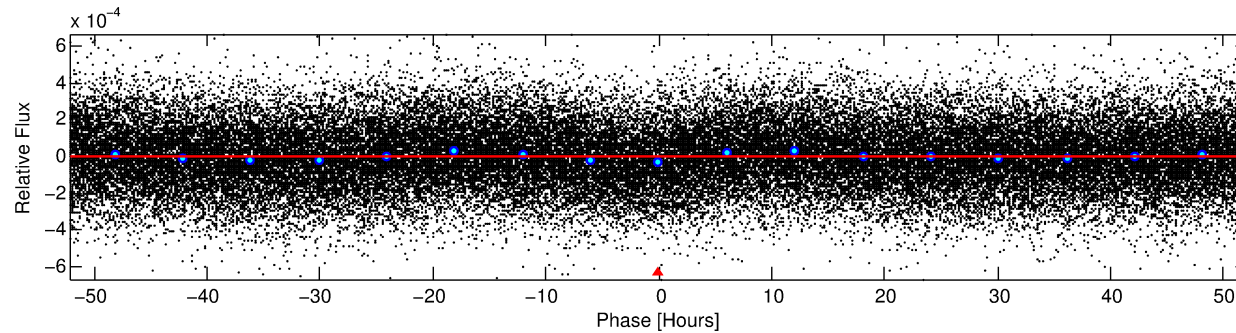
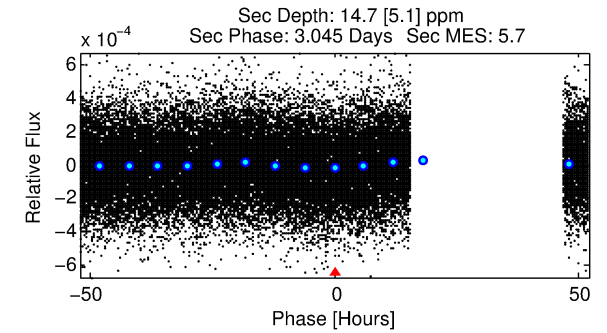
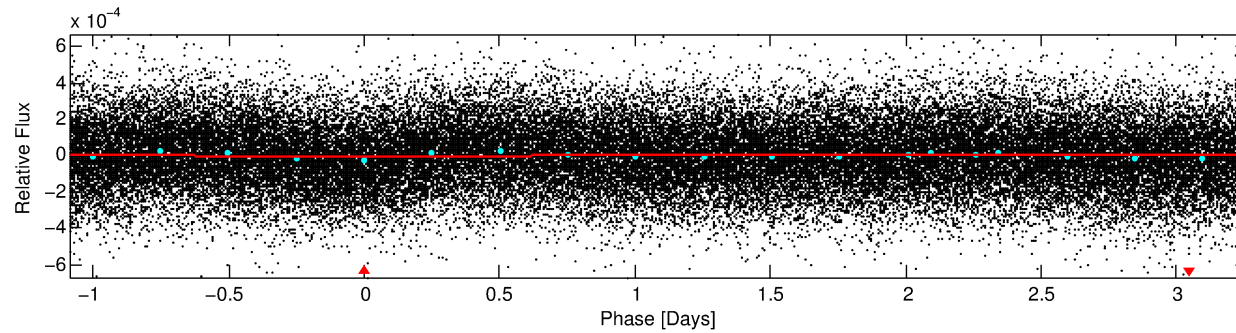
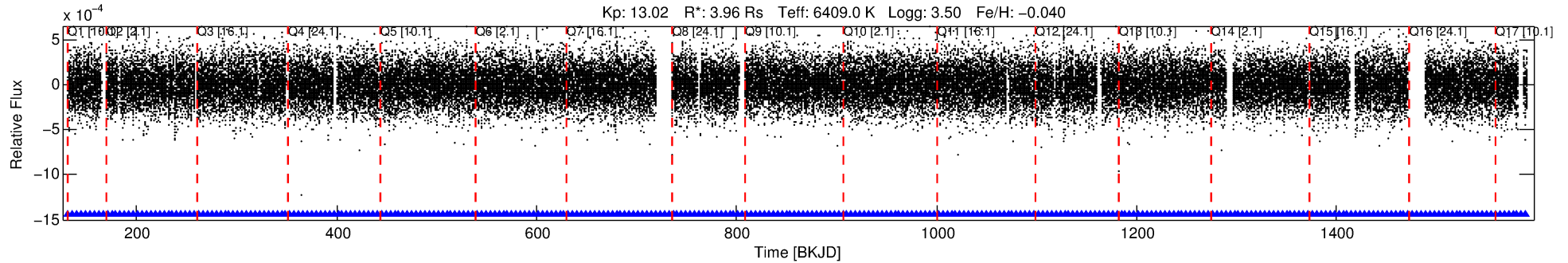
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 003440429-01

No Significant Match Found

DV One-Page Summary

KIC: 3440429 Candidate: 1 of 1 Period: 4.351 d



DV Fit Results:

Period = 4.35087 [3.15062] d
Epoch = 131.7176 [477.1369] BKJD
Rp/R* = 0.0000 [0.0431]
a/R* = 1.23 [179.00]
b = 0.40 [1045.78]
Seff = 5880.11 [6852.04]
Teq = 2233 [650] K
Rp = 0.01 [18.59] Re
a = 0.0634 [0.0398] AU
Ag = 285484.37 [992856220.95] [0.00σ]
Teffp = 79801 [69384441] K [0.00σ]

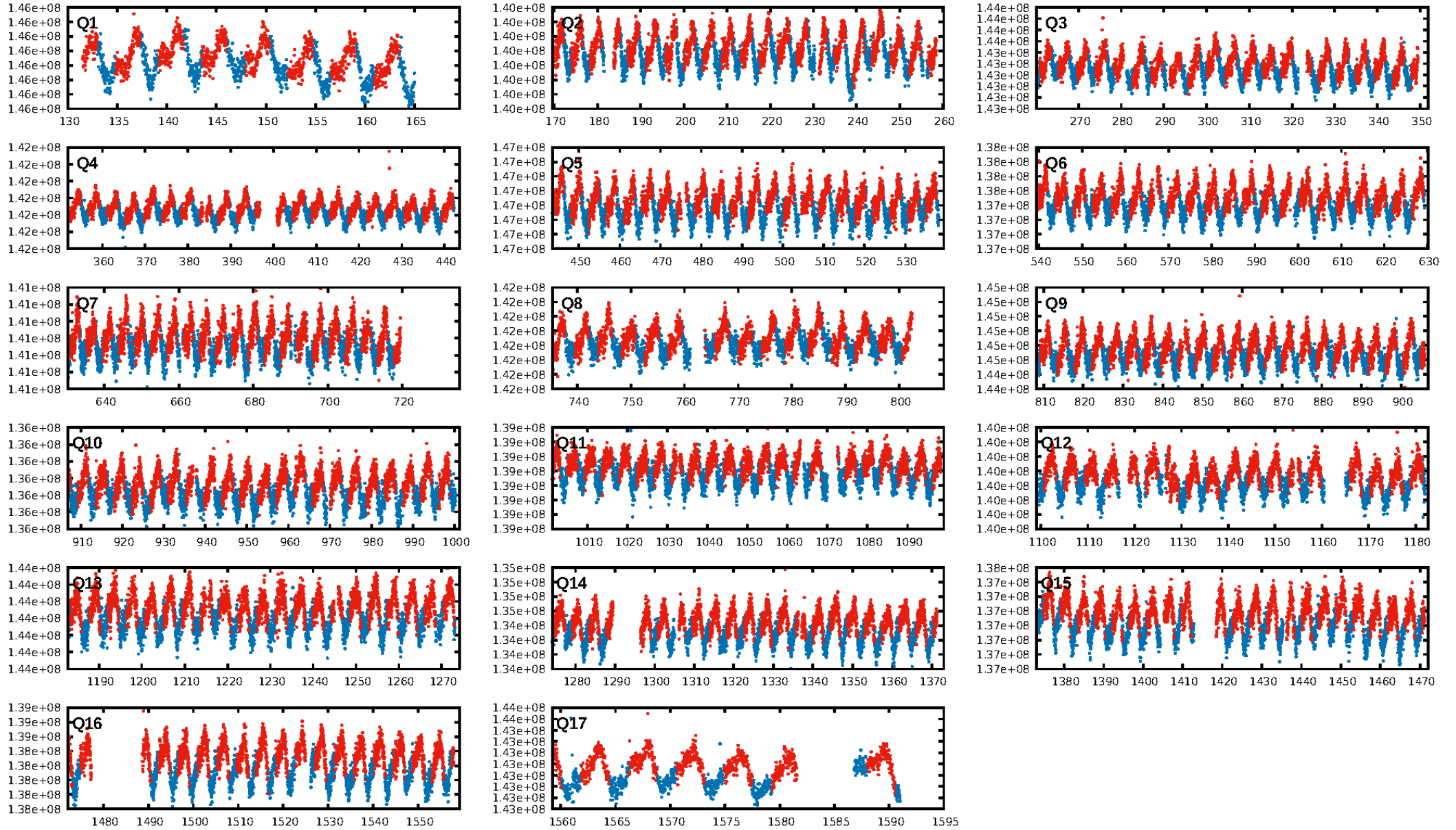
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.24e-24
RollingBand-fgt: 1.00 [306/306]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 0.155 arcsec [0.53σ]
KicOffset-rm: 0.183 arcsec [0.59σ]
OotOffset-st: 4/4/4/4 [16]
KicOffset-st: 4/4/4/4 [16]
DiffImageQuality-fgm: 0.00 [0/16]
DiffImageOverlap-fno: 1.00 [17/17]

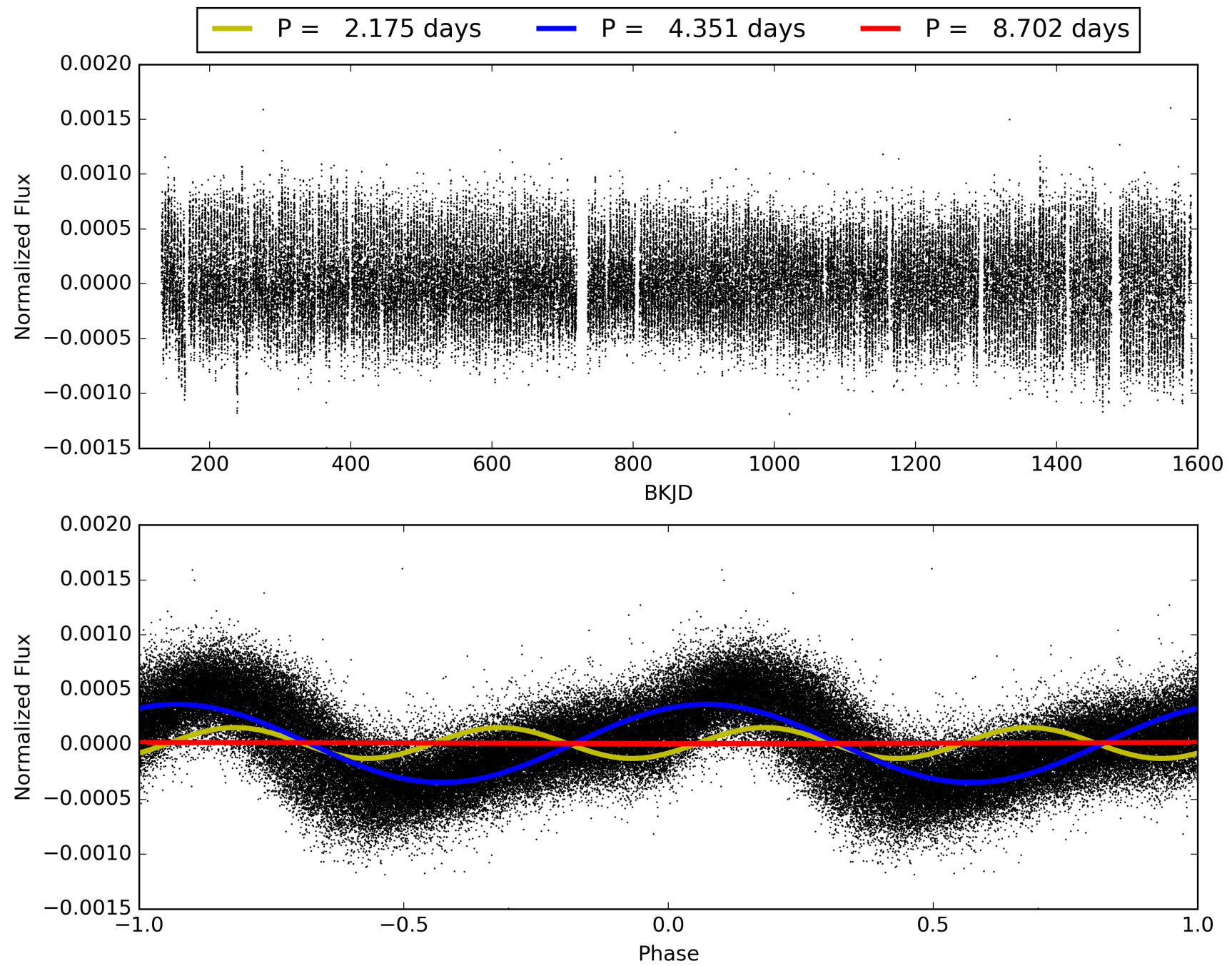
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 12:58:53 Z

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

TCE 003440429-01, PDC Light Curves

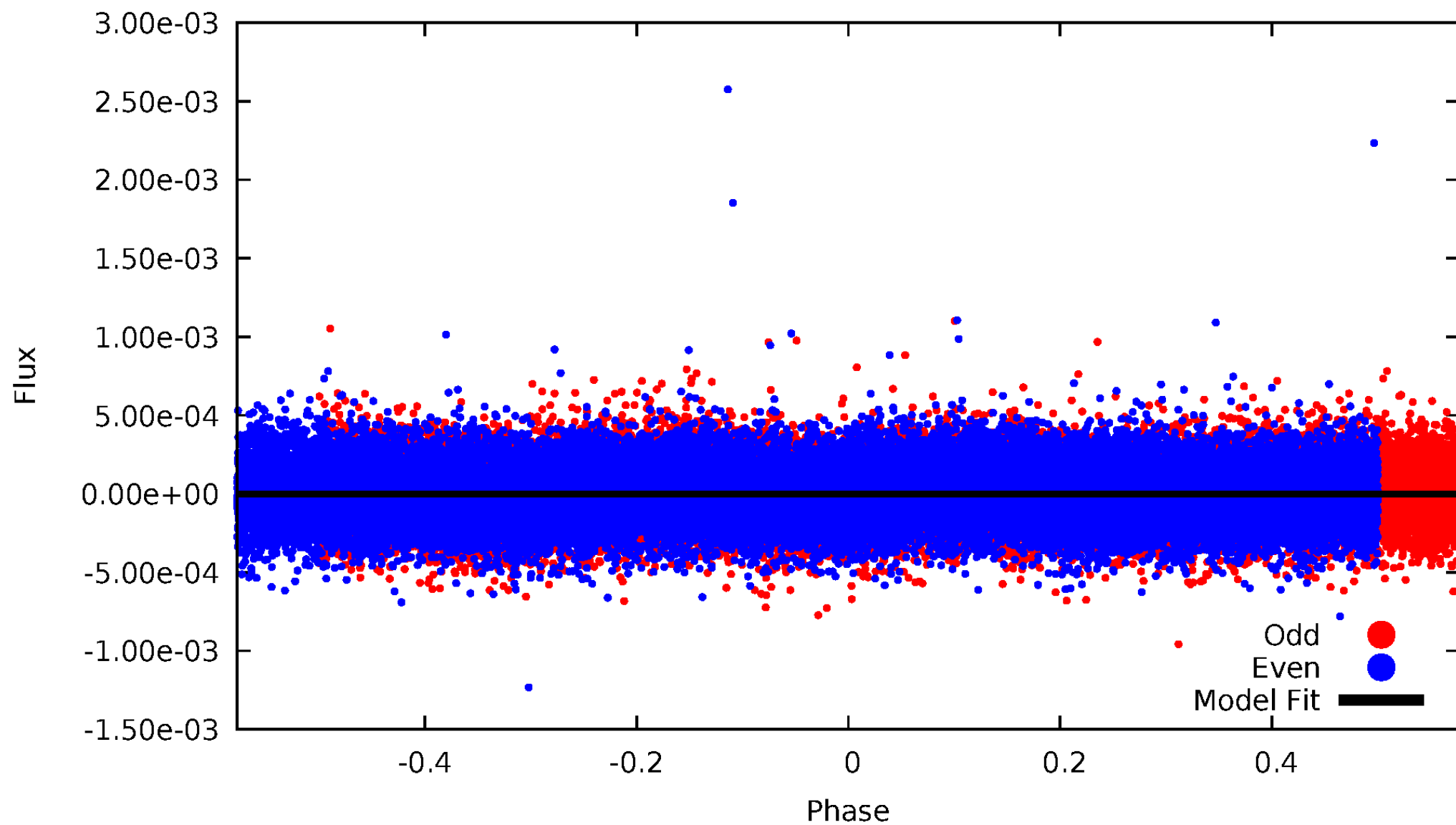


TCE 003440429-01



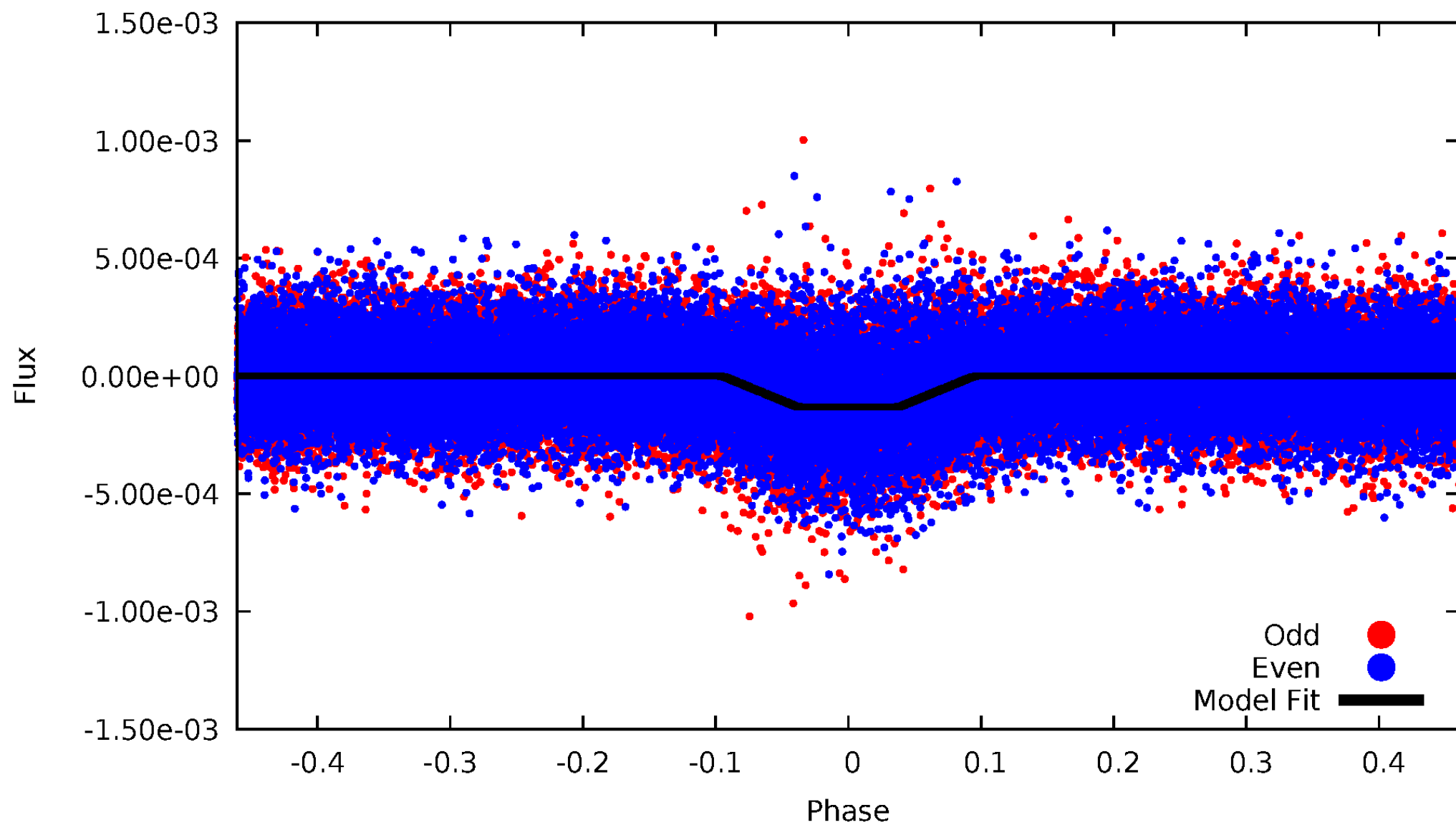
DV Odd/Even

TCE 003440429-01



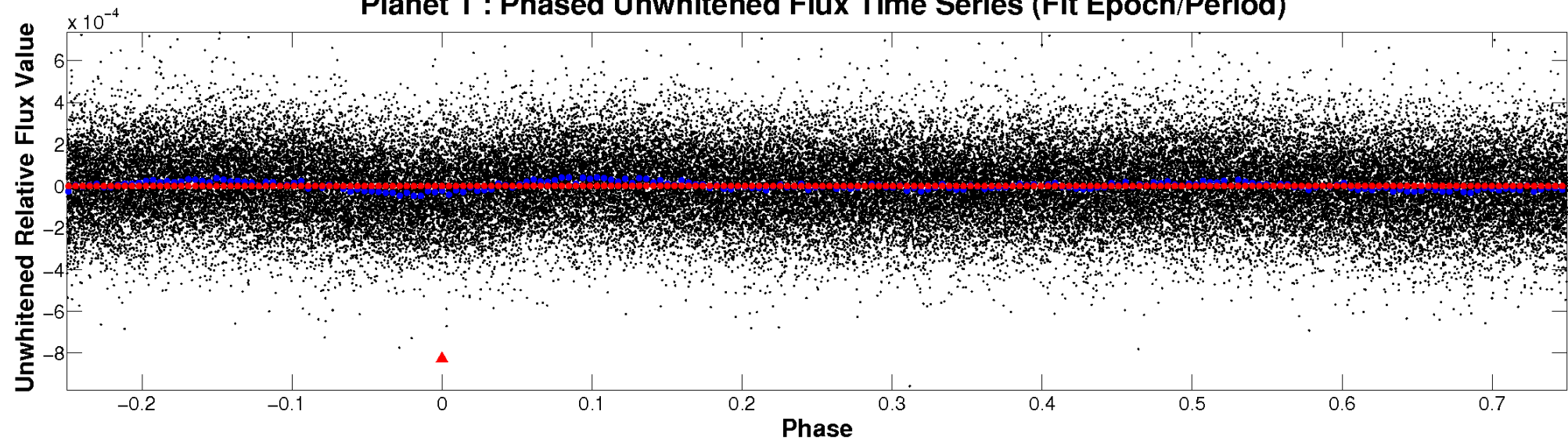
ALT Odd/Even

TCE 003440429-01

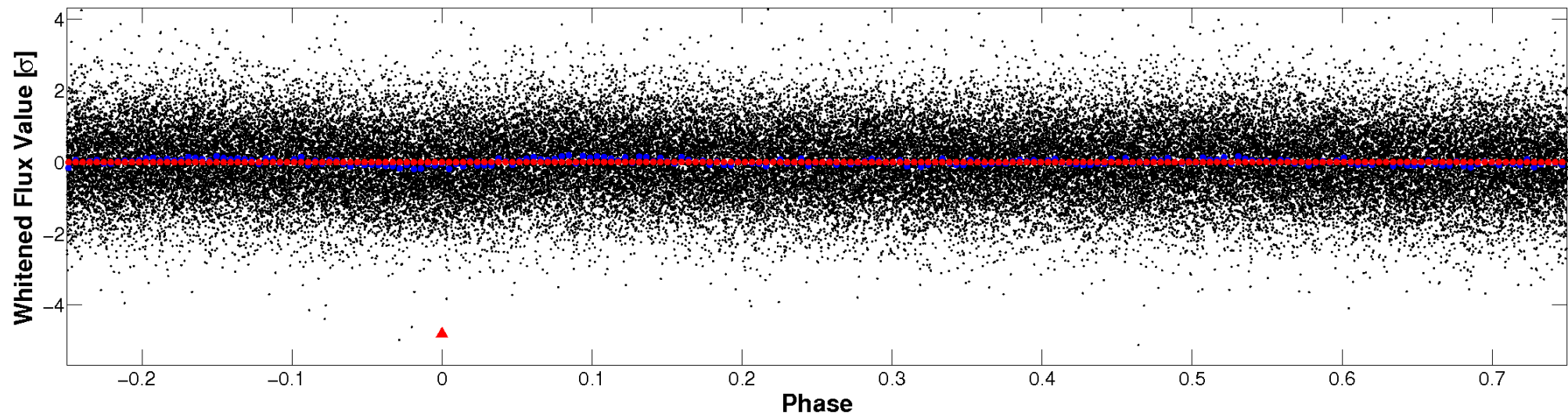


Non-Whitened Vs. Whitened Light Curve

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

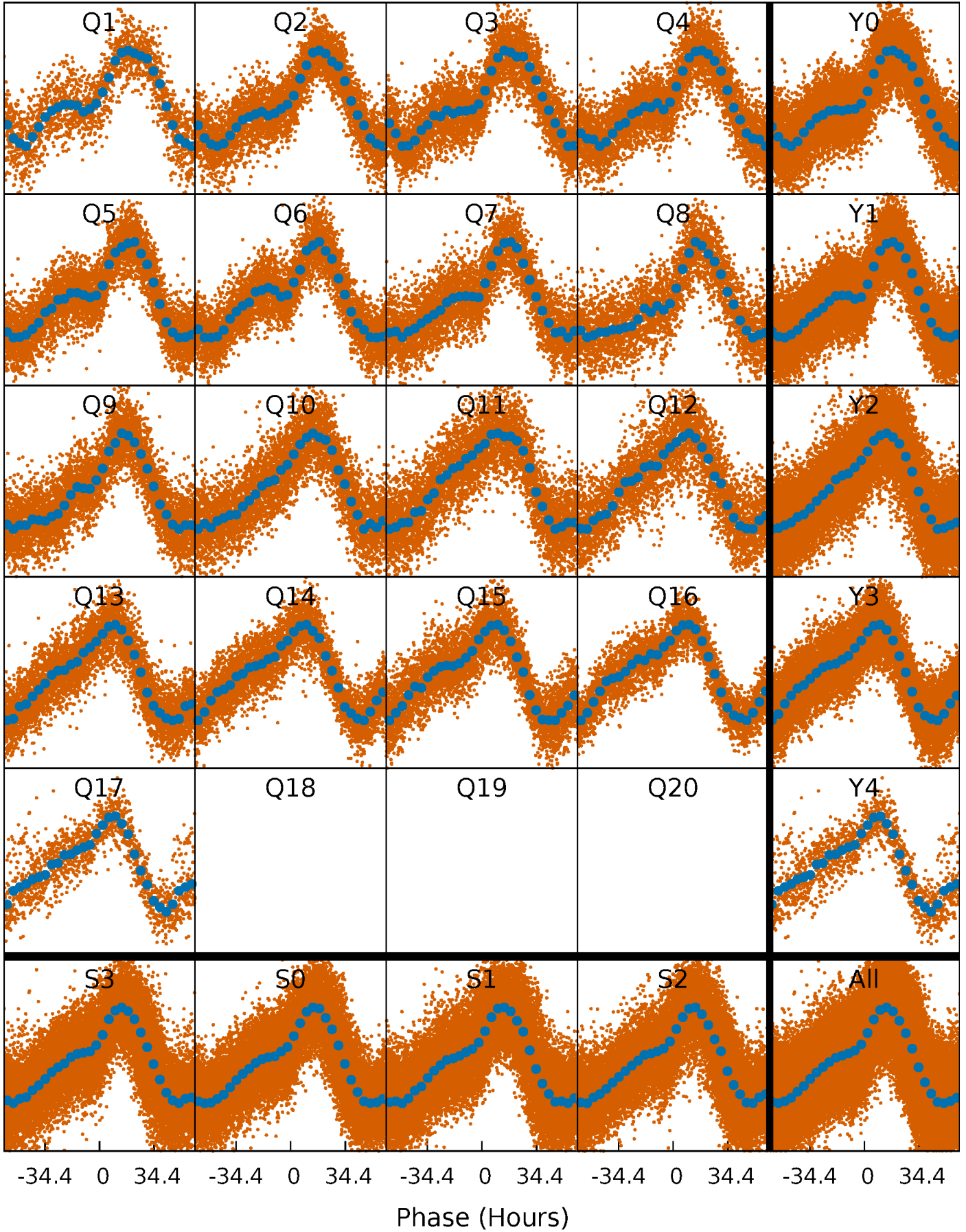


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



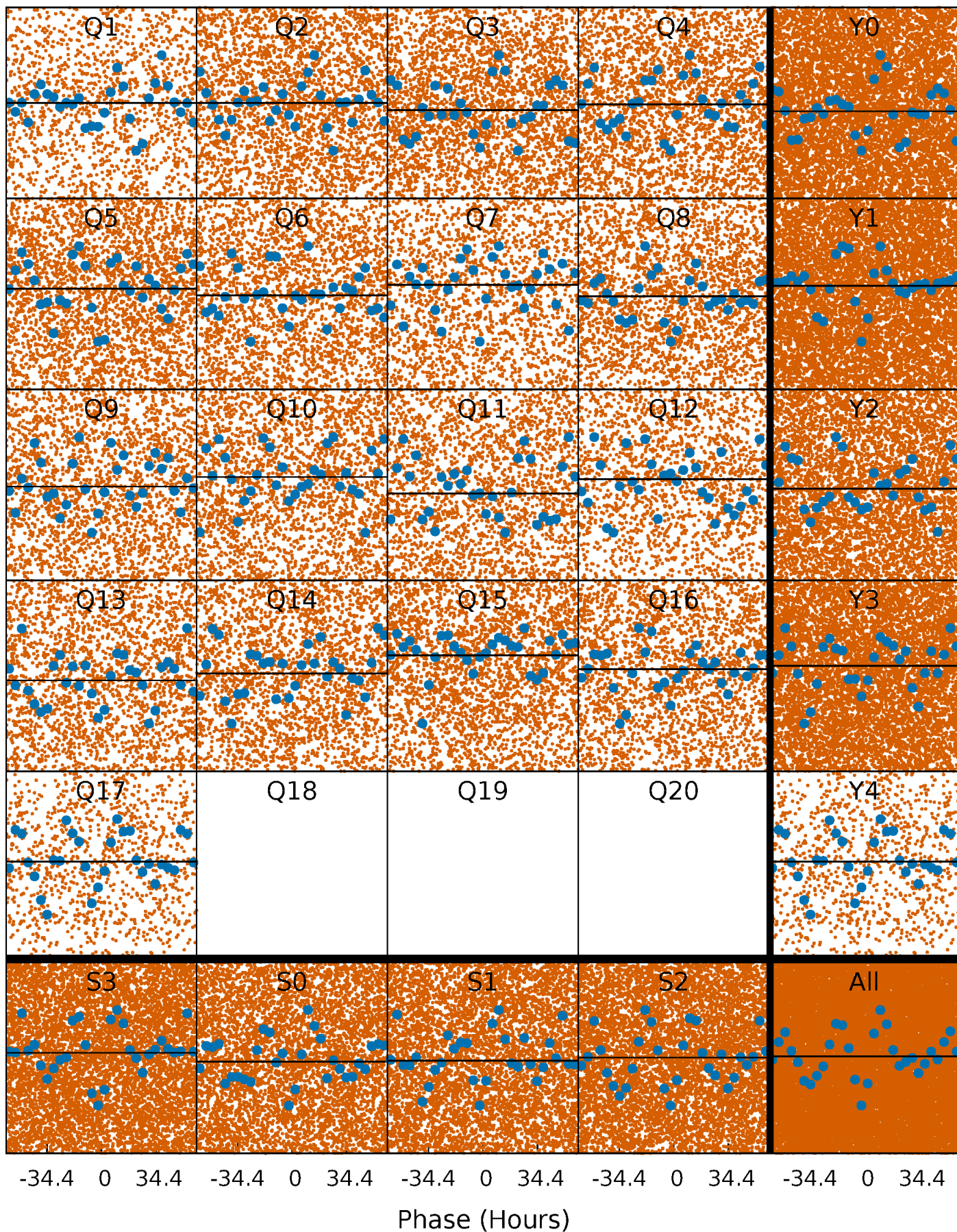
PDC Quarter-Phased Transit Curves

TCE 003440429-01 P= 4.350866 Days $T_0=131.717587$ (BKJD)



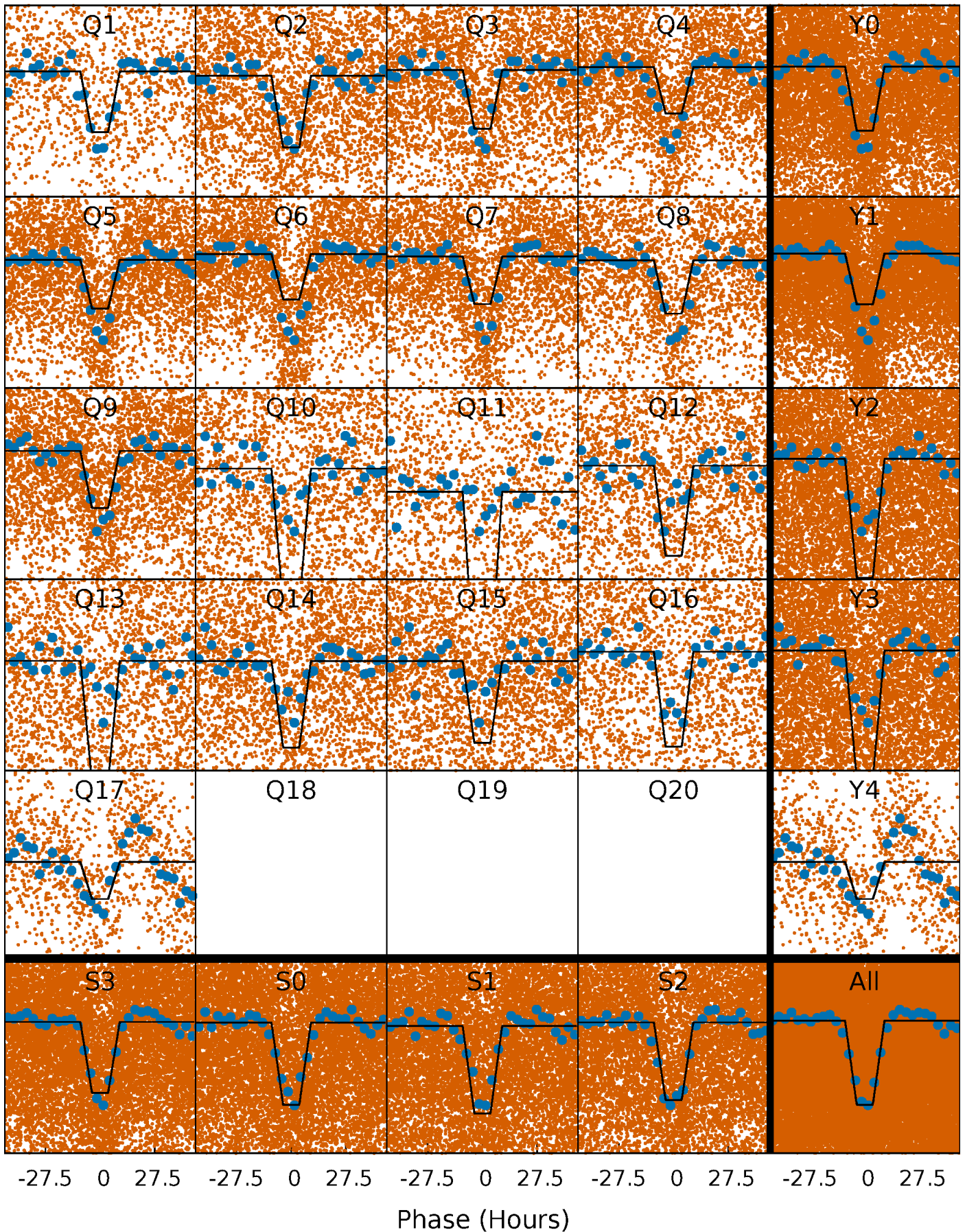
DV Quarter-Phased Transit Curves

TCE 003440429-01 P= 4.350866 Days $T_0=131.717587$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

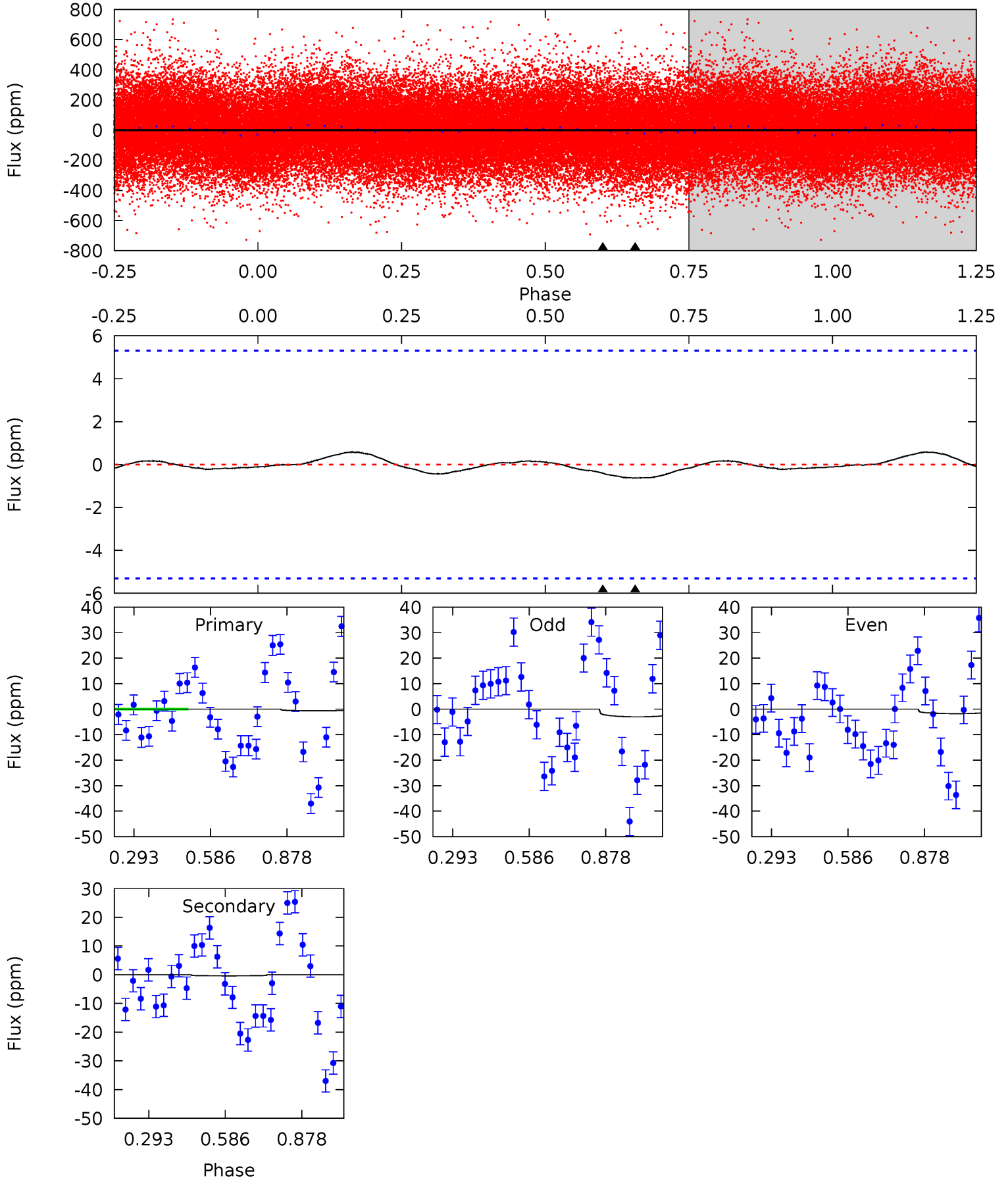
TCE 003440429-01 P= 4.350143 Days $T_0=131.706138$ (BKJD)



DV Model-Shift Uniqueness Test

003440429-01, P = 4.350866 Days, E = 127.366721 Days

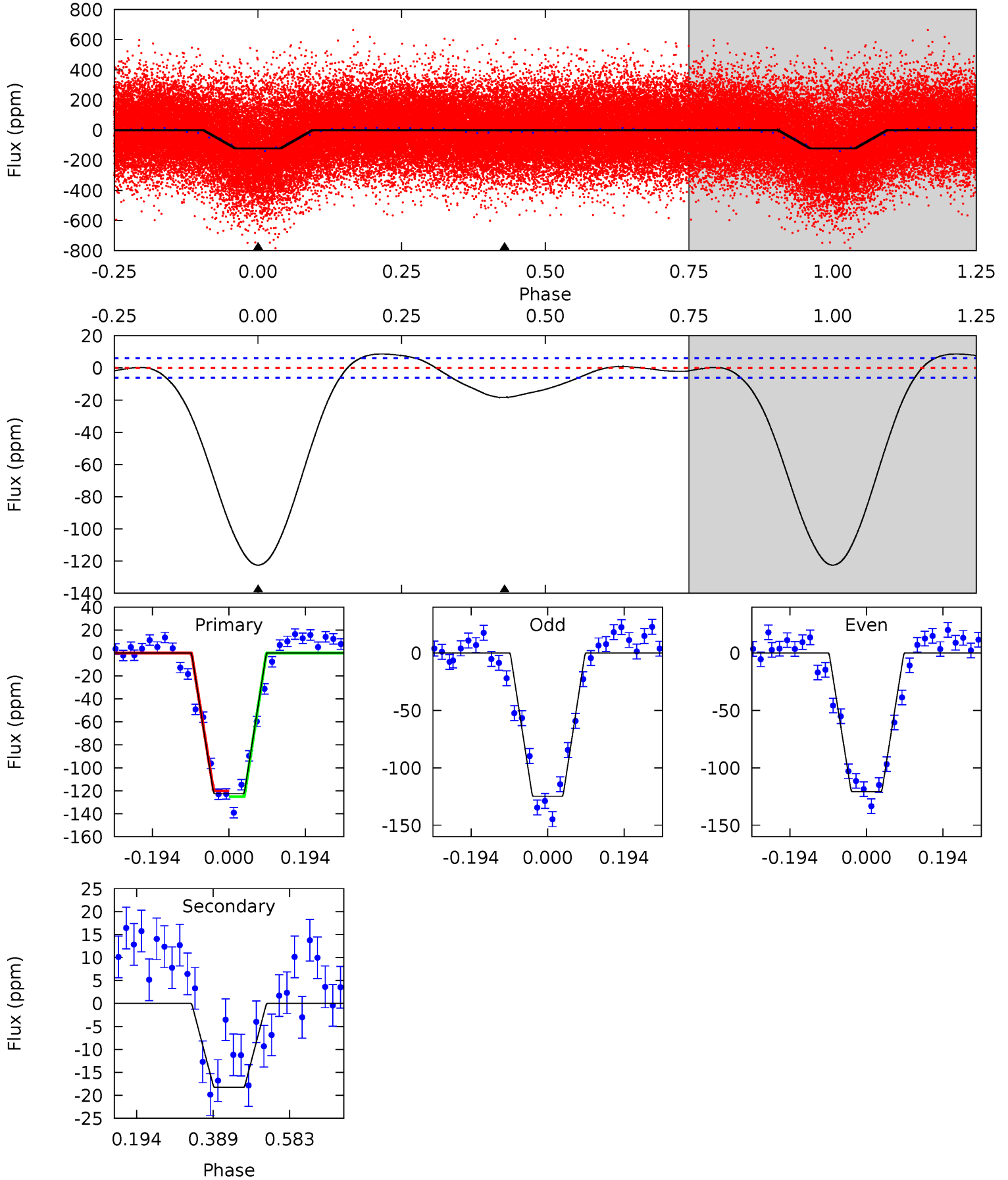
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0.52	0.33	0	0	4.33	1.05	0.23	0.52	0.52	0.33	0.33	0.52	-0.12	0.48	0.48



Alt Model-Shift Uniqueness Test

003440429-01, P = 4.350143 Days, E = 127.355995 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
88.8	13.2	0	0	4.42	1.30	2.64	88.8	88.8	13.2	13.2	1.48	0.90	0.07	1.78



Stellar Parameters For KIC 003440429

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6409^{+195}_{-176}	$3.498^{+0.376}_{-0.094}$	$-0.040^{+0.300}_{-0.250}$	$3.955^{+0.414}_{-1.654}$	$1.795^{+0.164}_{-0.383}$	$0.041^{+0.121}_{-0.012}$
	+3%/-3%	+11%/-3%	+750%/-625%	+10%/-42%	+9%/-21%	+297%/-29%
Source	PHO1	FLK73	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 003440429-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-0 ± 1	$11.76^{+14.23}_{-8.42}$	2984^{+1081}_{-499}	-3070^{+376}_{-770}	$0.002^{+0.056}_{-0.021}$
Alt.	-18 ± 1	$13.73^{+14.46}_{-9.48}$	3011^{+965}_{-534}	-2540^{+6578}_{-871}	$0.197^{+1.788}_{-0.164}$

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 $A_{obs} \gg 1.0$

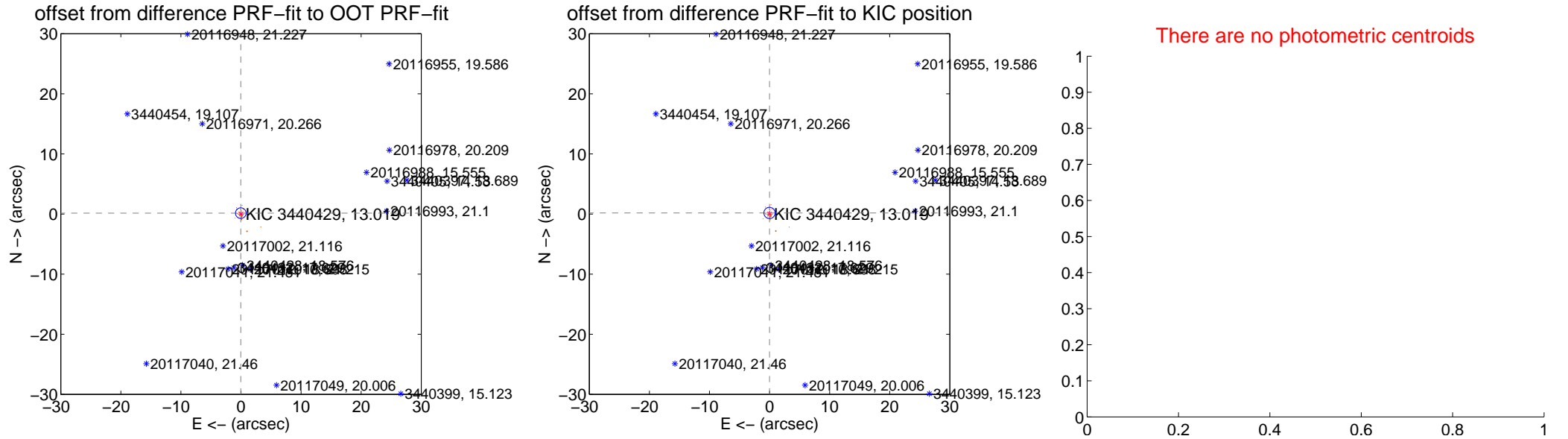
DV Centroid Data

Supplemental centroid analysis for 003440429-01. Kepler magnitude: 13.02. Transit SNR 0.00

There are 0 quarters with good PRF difference image offsets

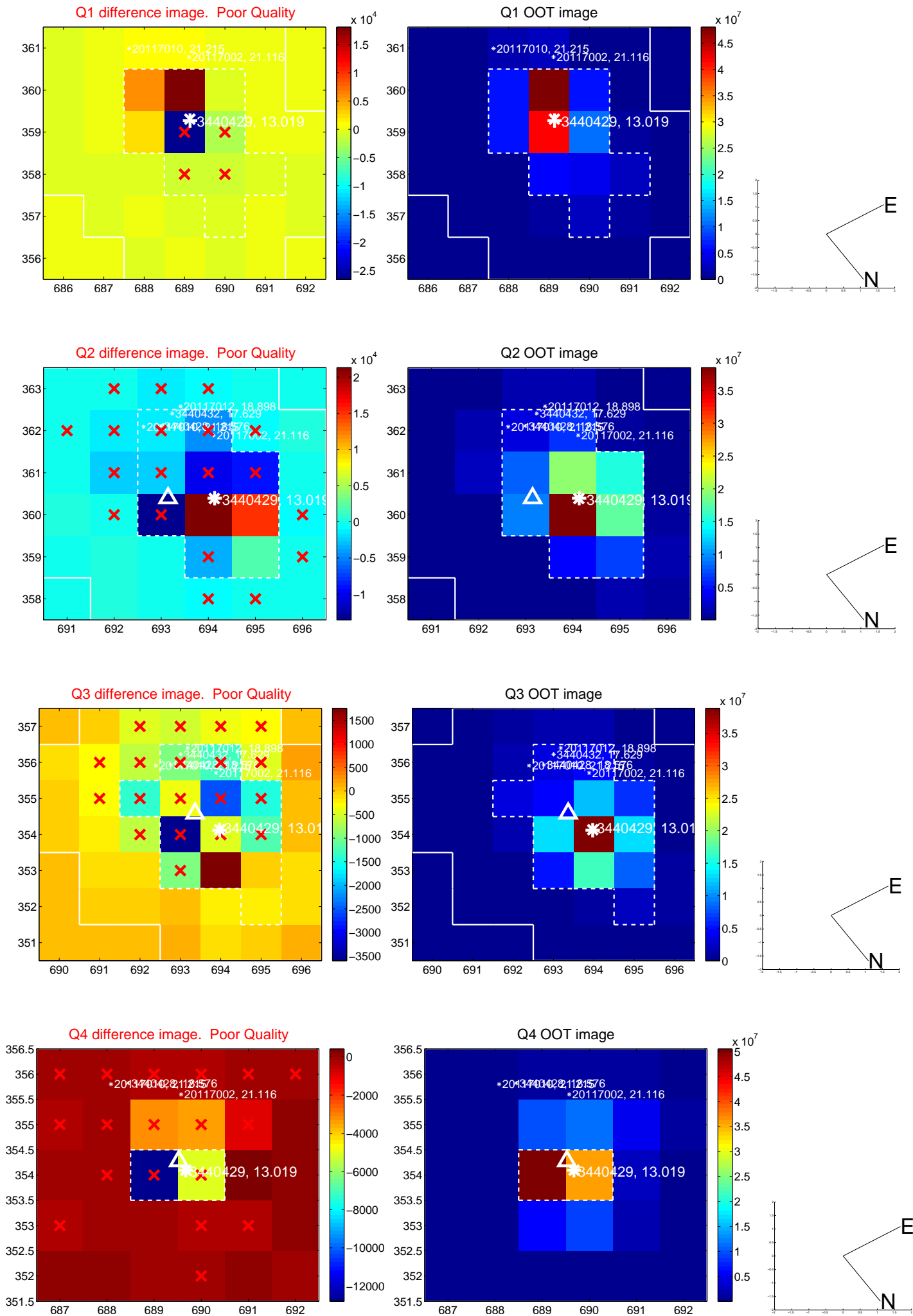
The direct PRF centroid is offset from the target star catalog position by about 0.09 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.155 ± 0.294	0.53	0.039 ± 0.239	0.150 ± 0.266
PRF-fit source offset from KIC position	0.183 ± 0.311	0.59	0.011 ± 0.231	0.183 ± 0.304
photometric centroid source offset	—	—	—	—

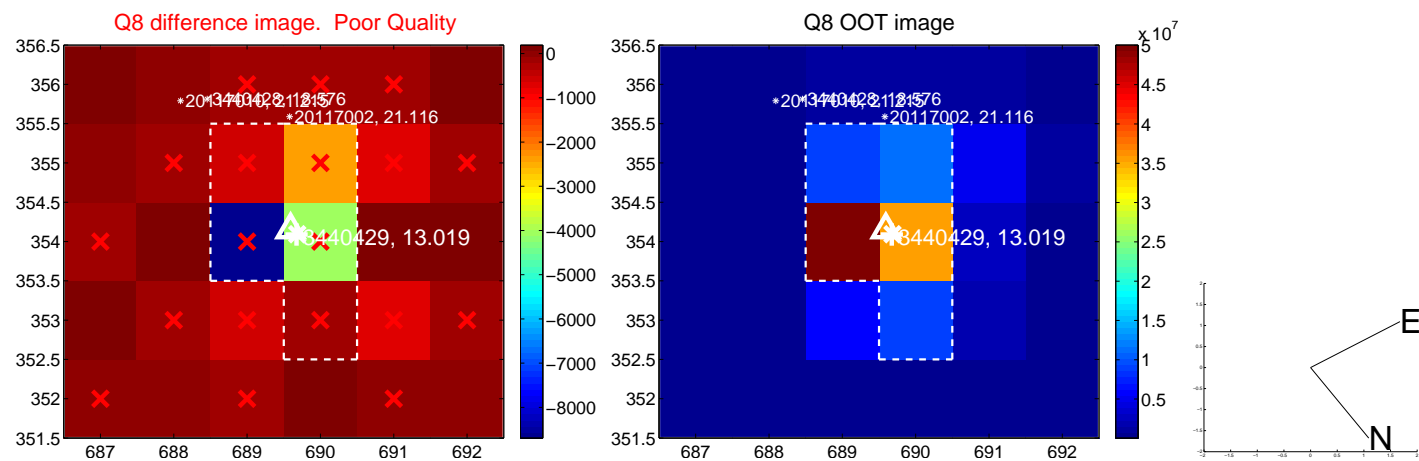
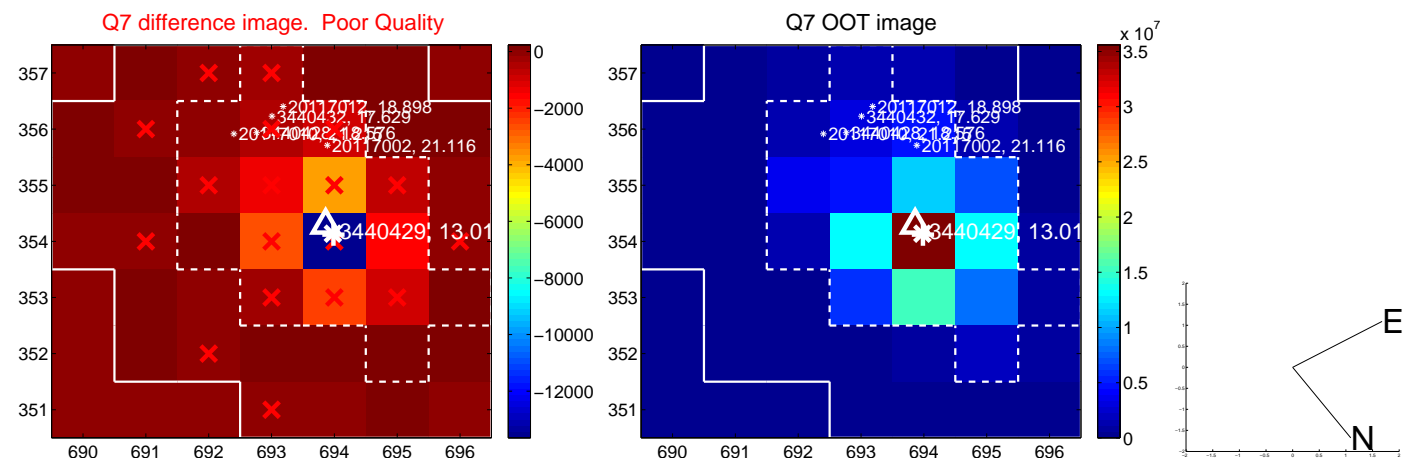
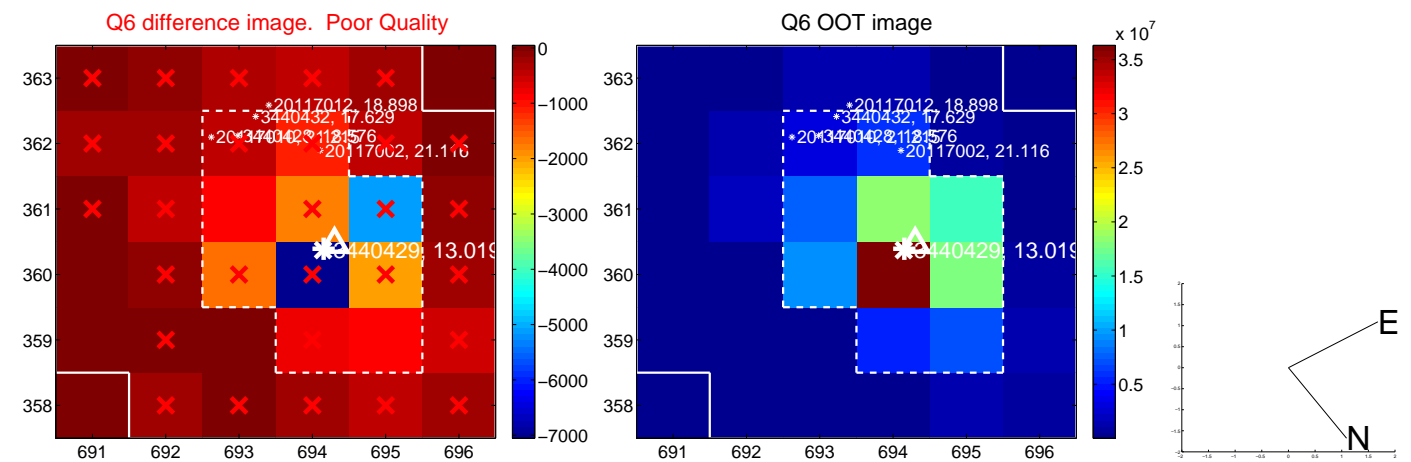
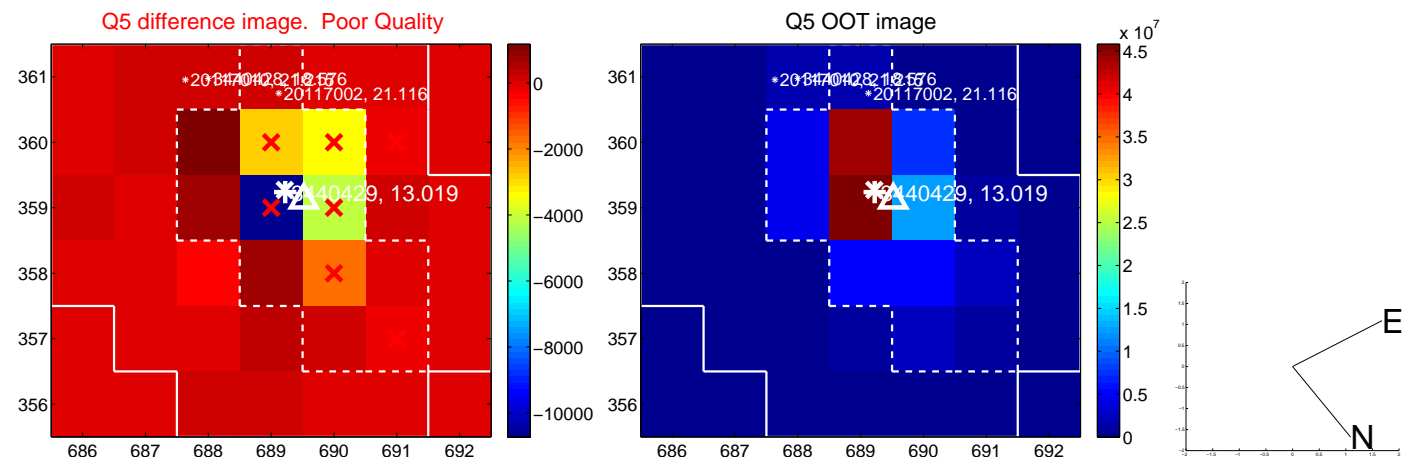


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

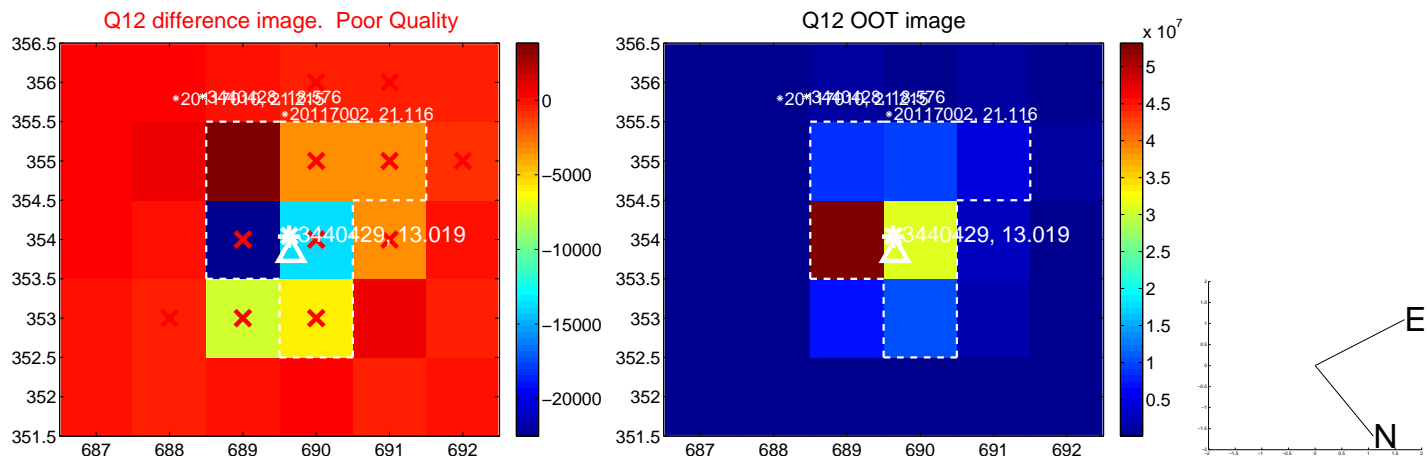
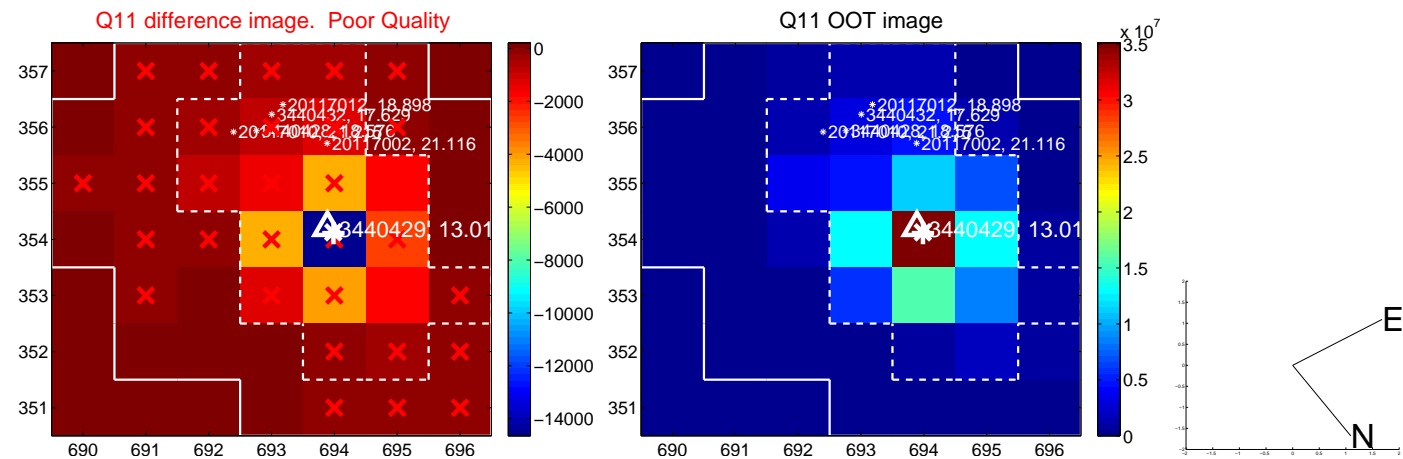
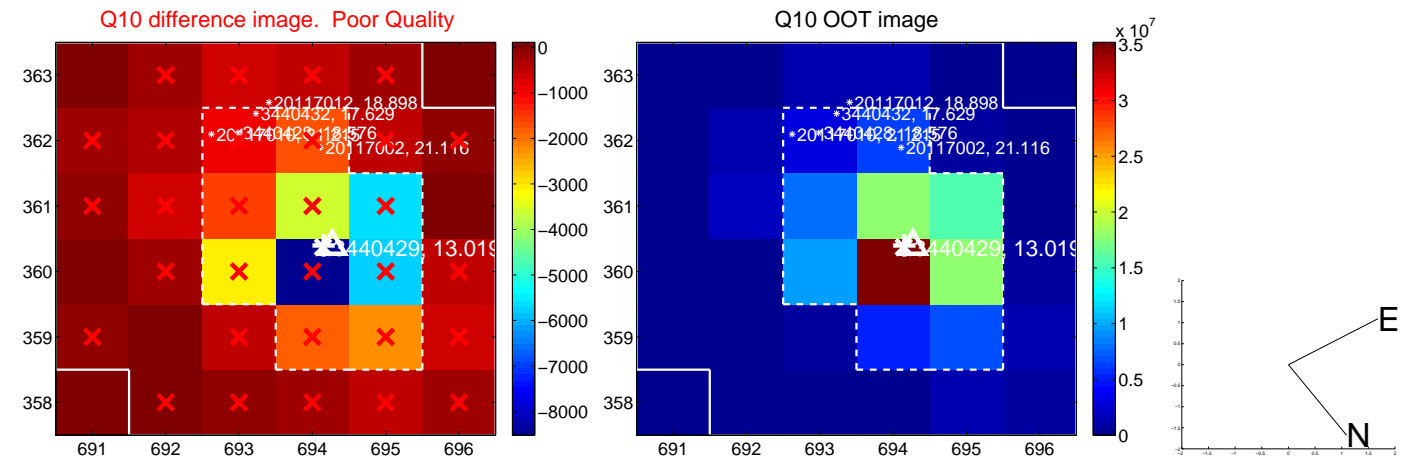
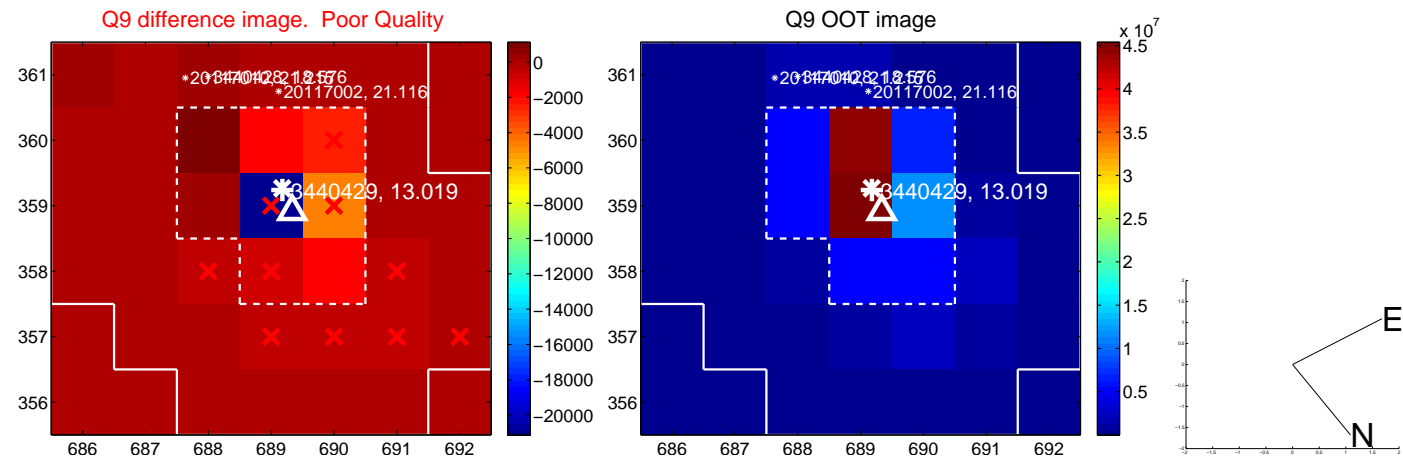
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



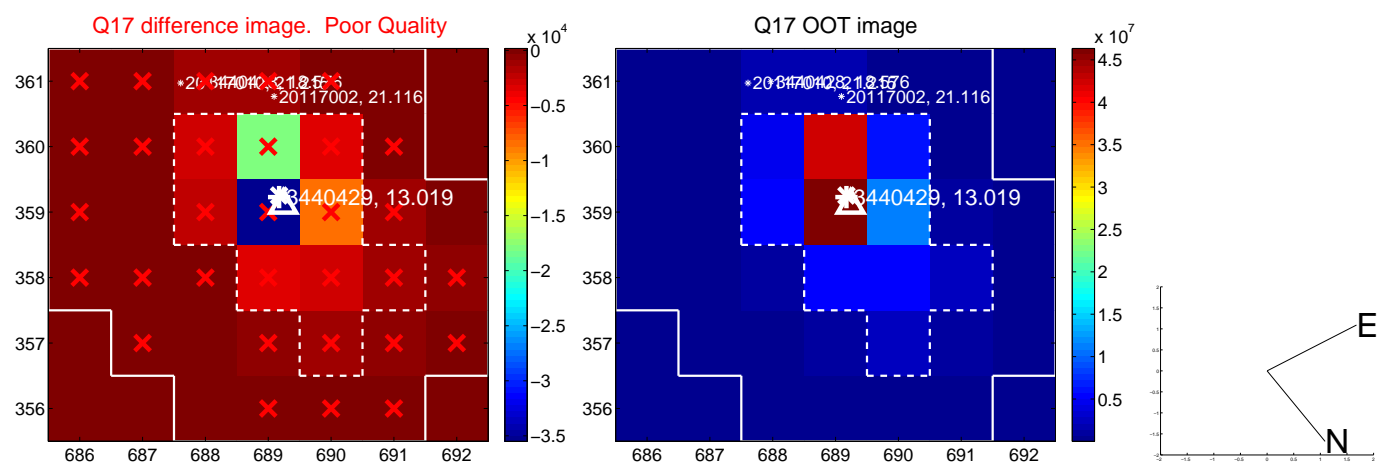
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



folded centroid time series figure for this object.



UKIRT Image

Declination

