

KIC 003629119

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})
003629119-01	OBS	8242.01	331.557229	237.266612	323.4	5.739	7.1	7.6	0.80	5762	1.67	0.78

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003629119-01	OBS	PC	0.17	0	0	0	0	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.

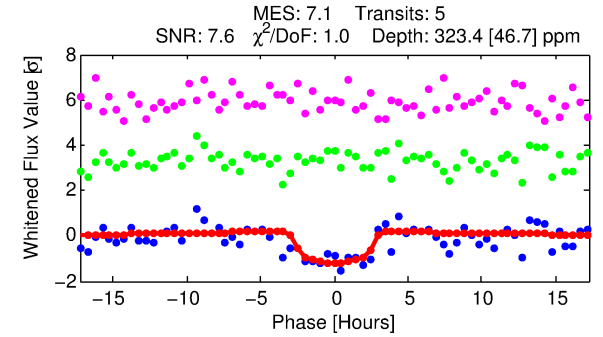
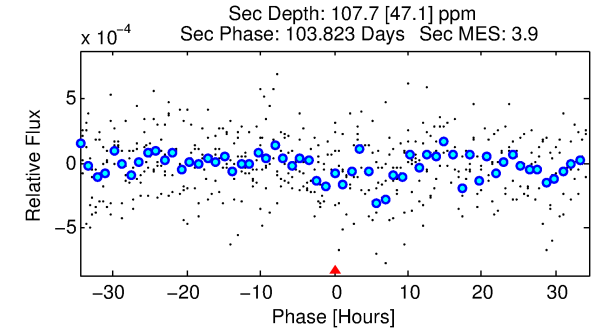
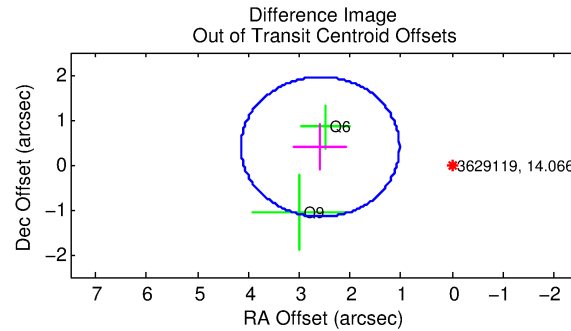
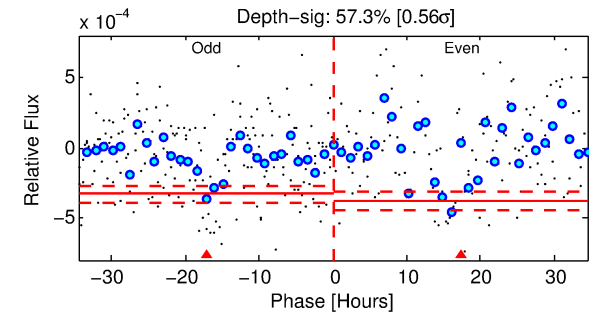
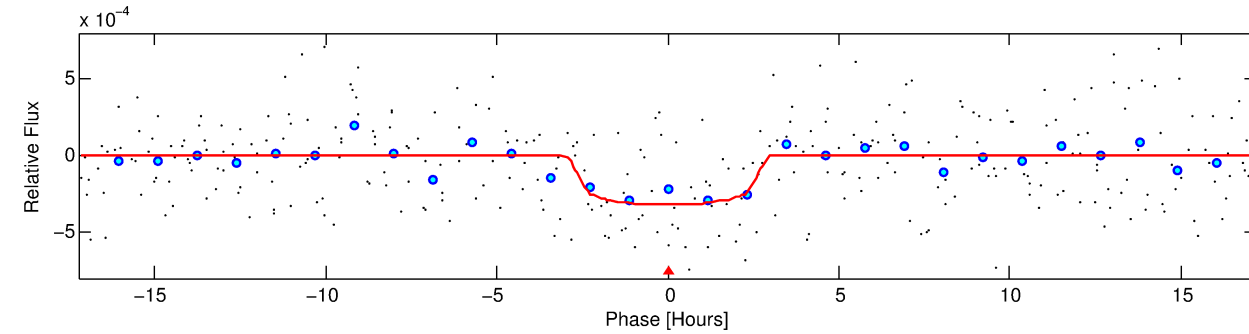
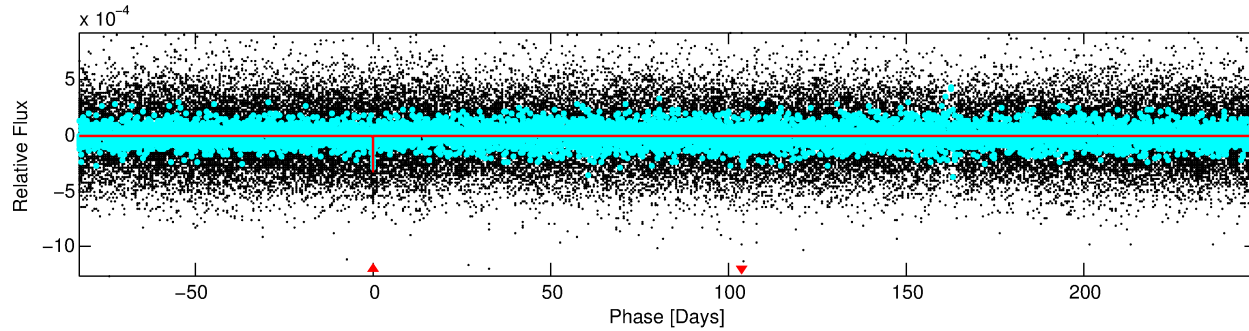
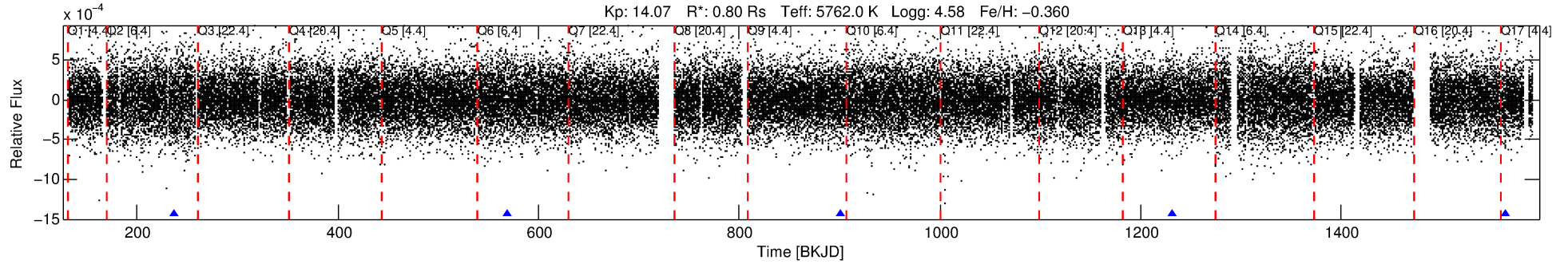
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 003629119-01

No Significant Match Found

DV One-Page Summary

KIC: 3629119 Candidate: 1 of 1 Period: 331.557 d



DV Fit Results:

Period = 331.55723 [0.00611] d
Epoch = 237.2666 [0.0148] BKJD
Rp/R* = 0.0191 [0.0115]
a/R* = 230.56 [669.26]
b = 0.88 [0.79]
Seff = 0.78 [0.24]
Teff = 240 [19] K
Rp = 1.67 [1.08] Re
a = 0.8991 [0.1818] AU
Ag = 17209.36 [22669.86] [0.76 σ]
Teffp = 4249 [1369] K [2.93 σ]

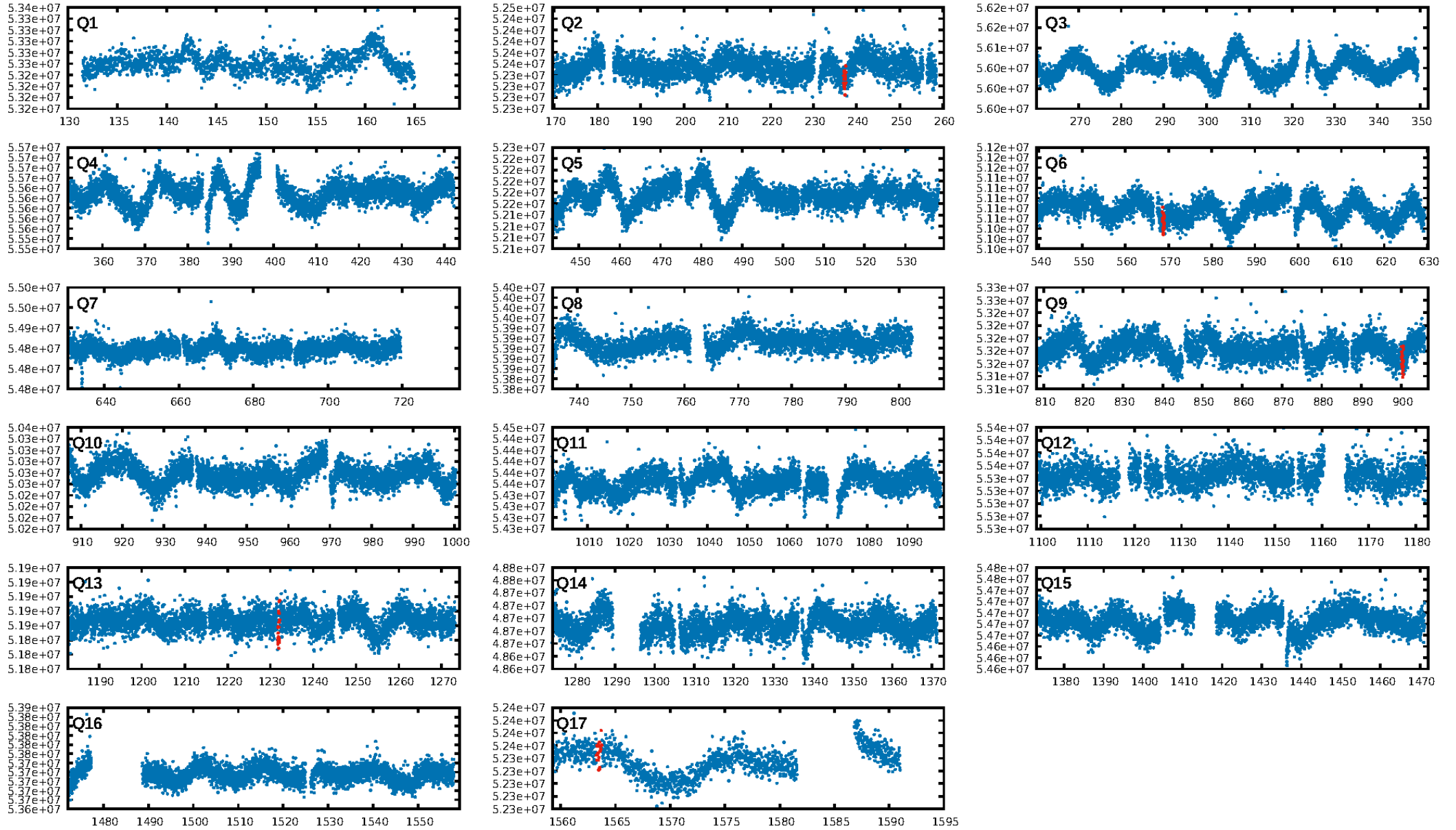
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 93.0%
ModelChiSquareGof-sig: 99.3%
Bootstrap-pfa: 1.22e-10
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: 9.031
Centroid-sig: 74.3%
Centroid-so: 1.366 arcsec [1.25 σ]
OotOffset-rm: 2.617 arcsec [5.04 σ]
KicOffset-st: 1/0/0/1 [2]
KicOffset-st: 1/0/0/1 [2]
DiffImageQuality-fgm: 1.00 [2/2]
DiffImageOverlap-fno: 1.00 [4/4]

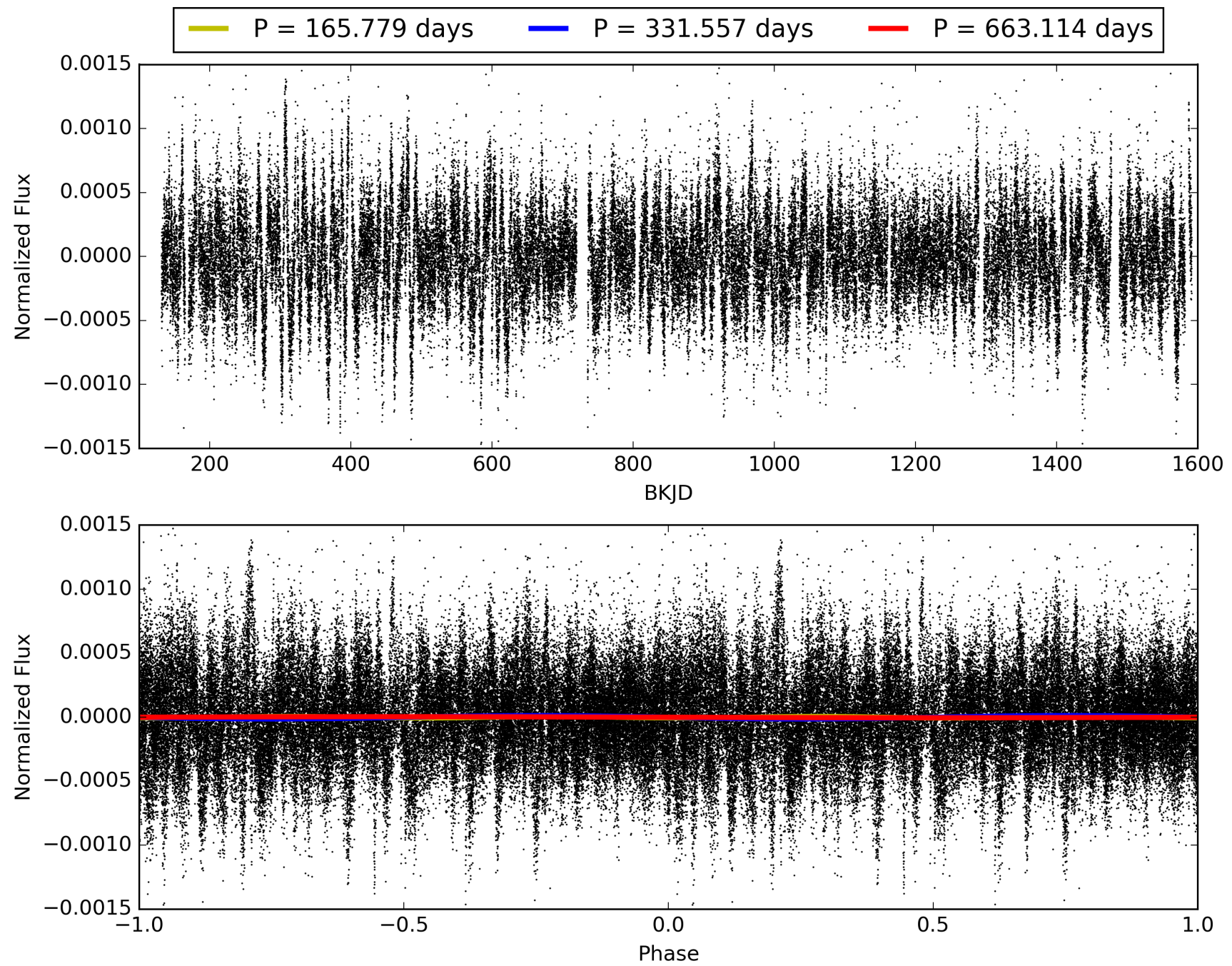
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 22:12:21 Z

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

TCE 003629119-01, PDC Light Curves

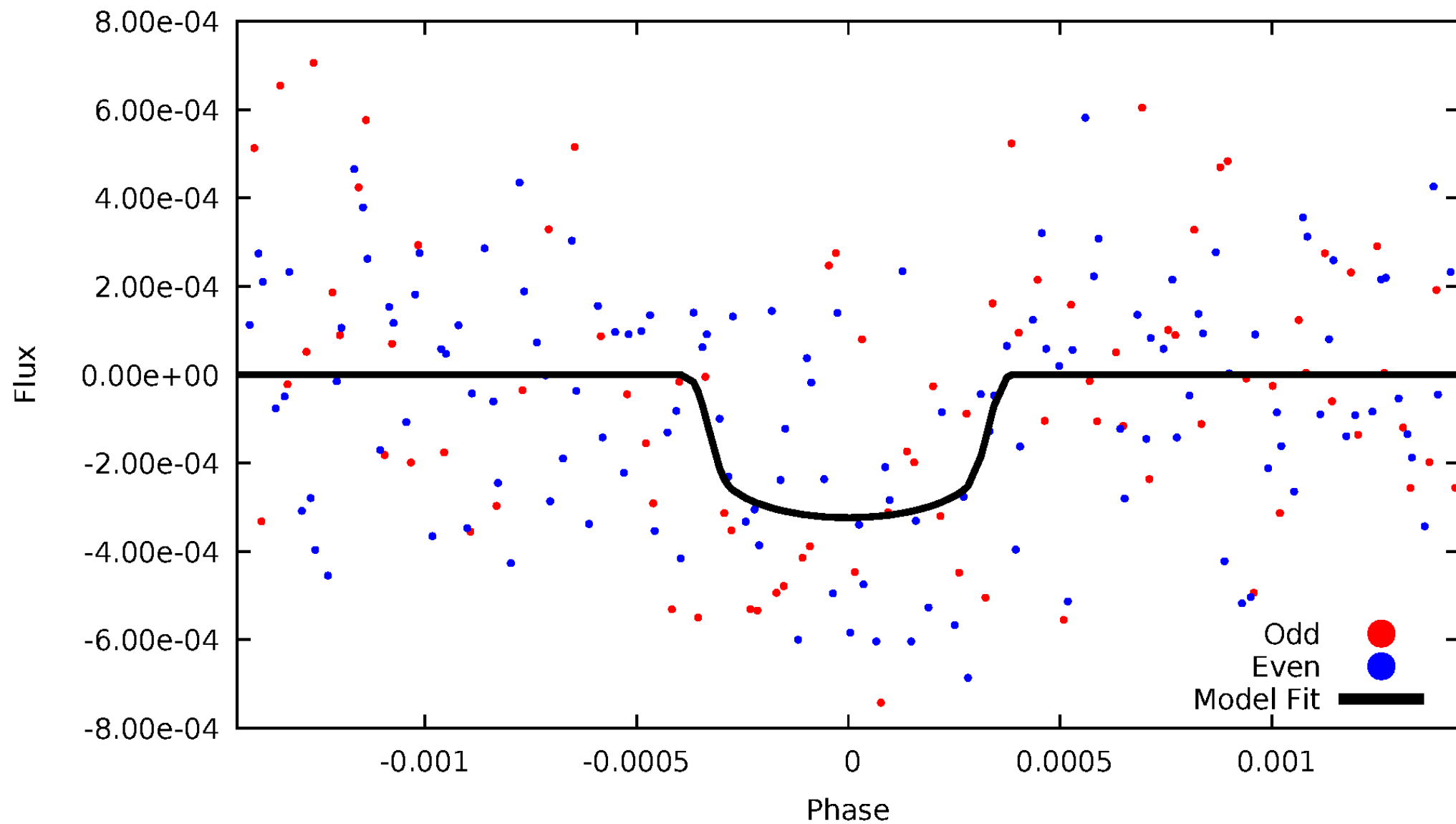


TCE 003629119-01



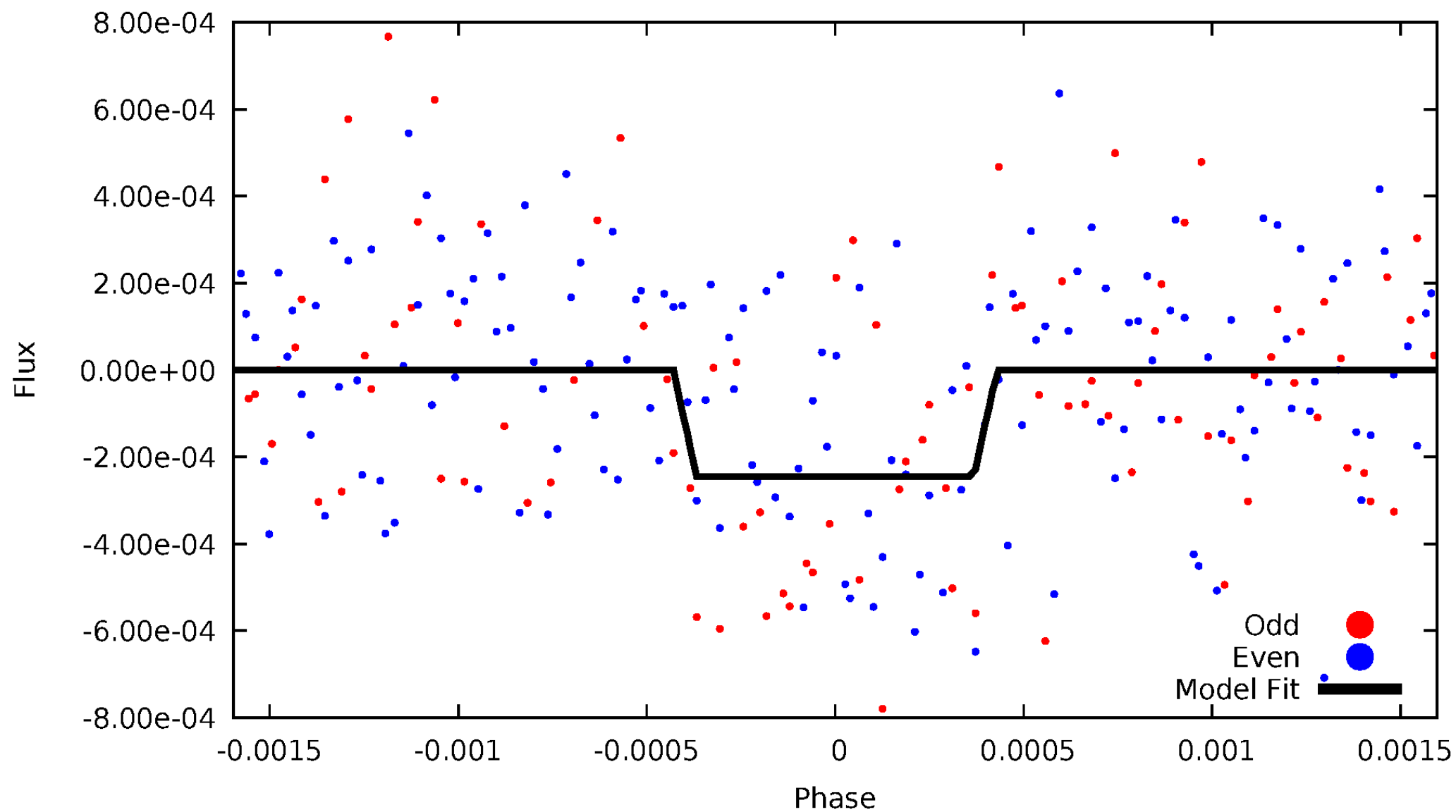
DV Odd/Even

TCE 003629119-01



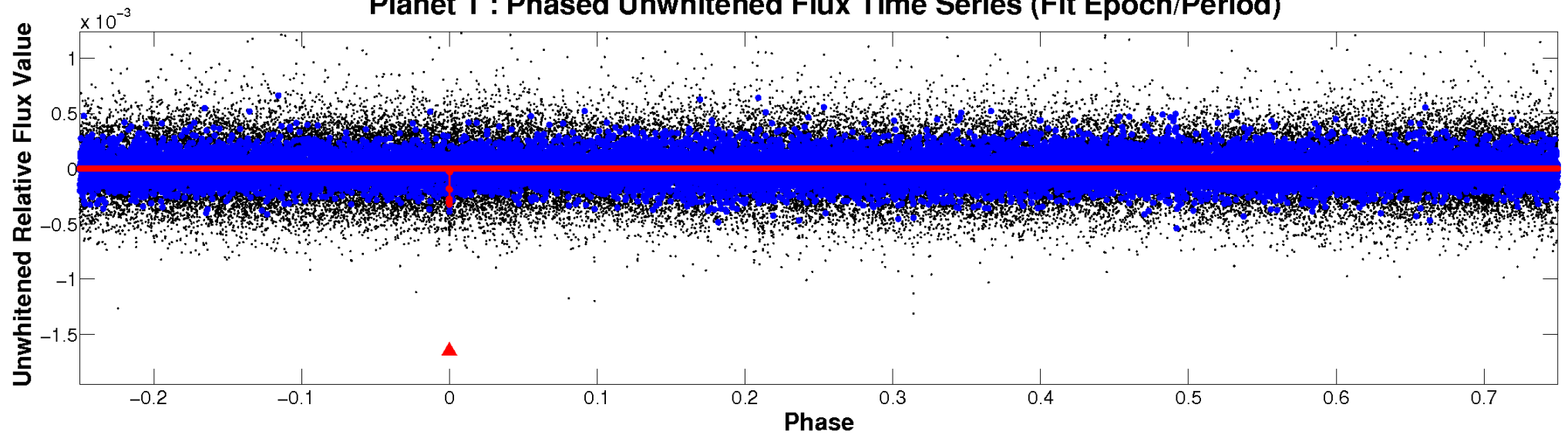
ALT Odd/Even

TCE 003629119-01

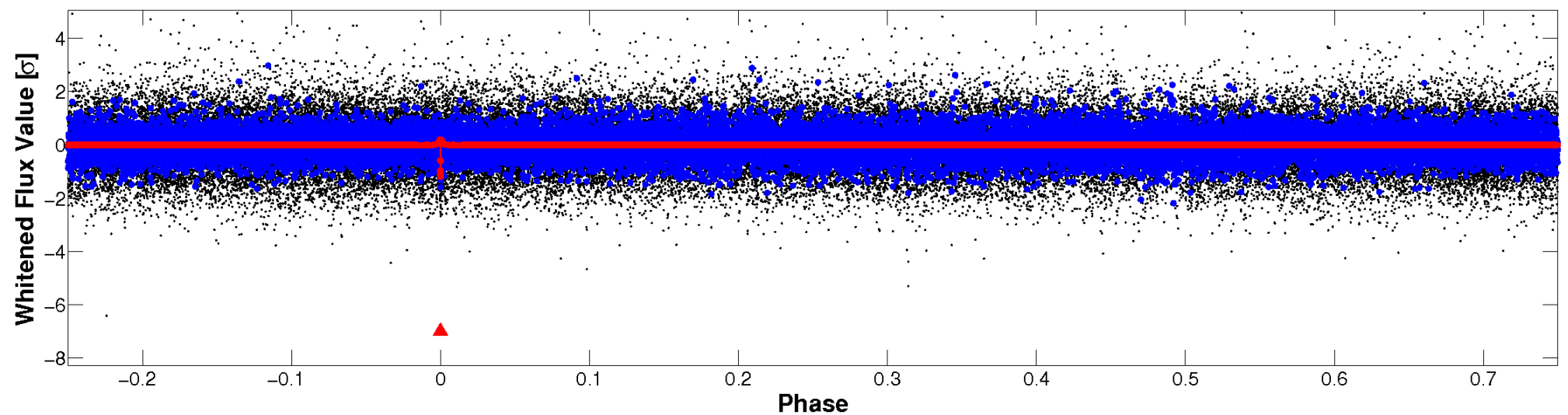


Non-Whitened Vs. Whitened Light Curve

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

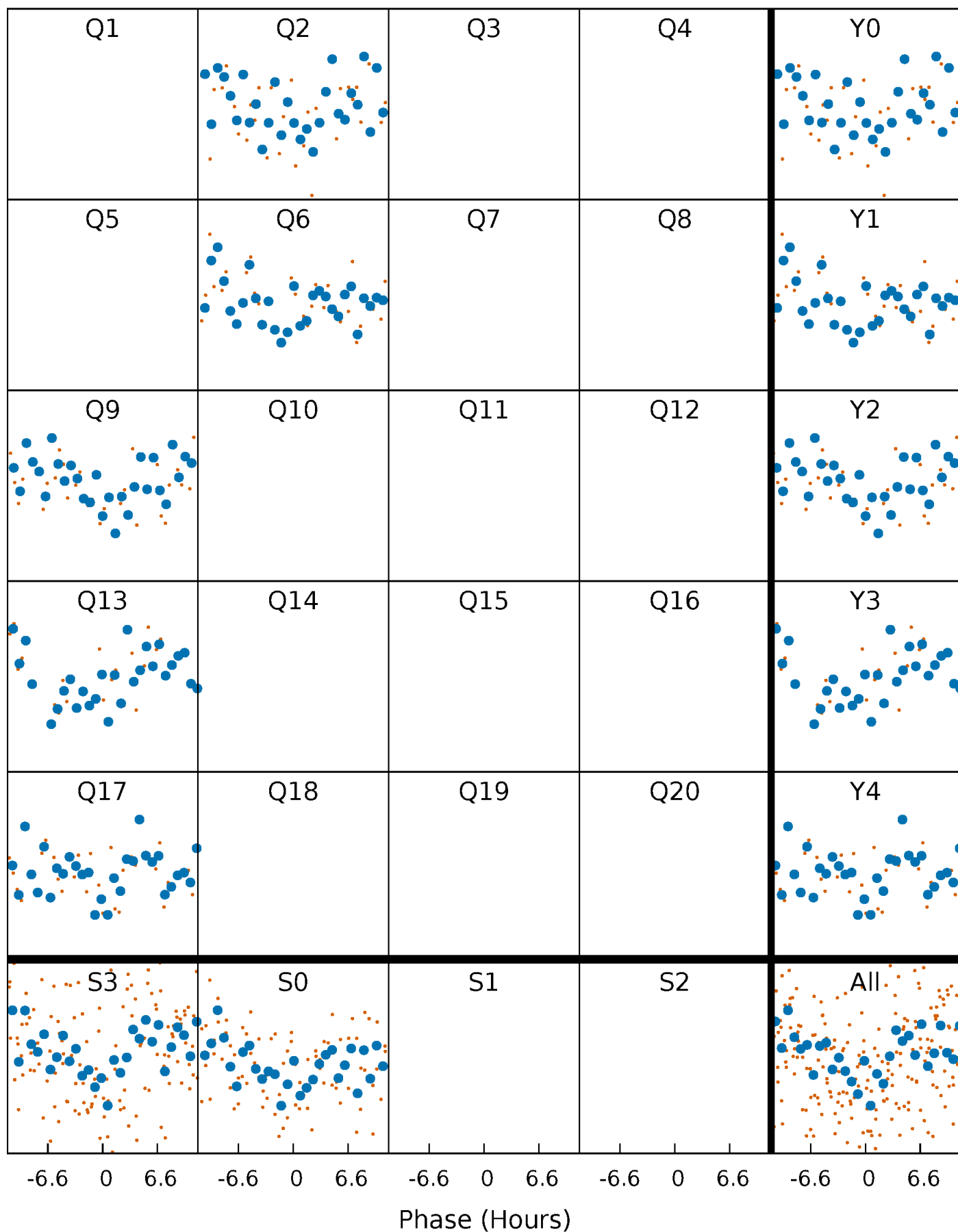


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



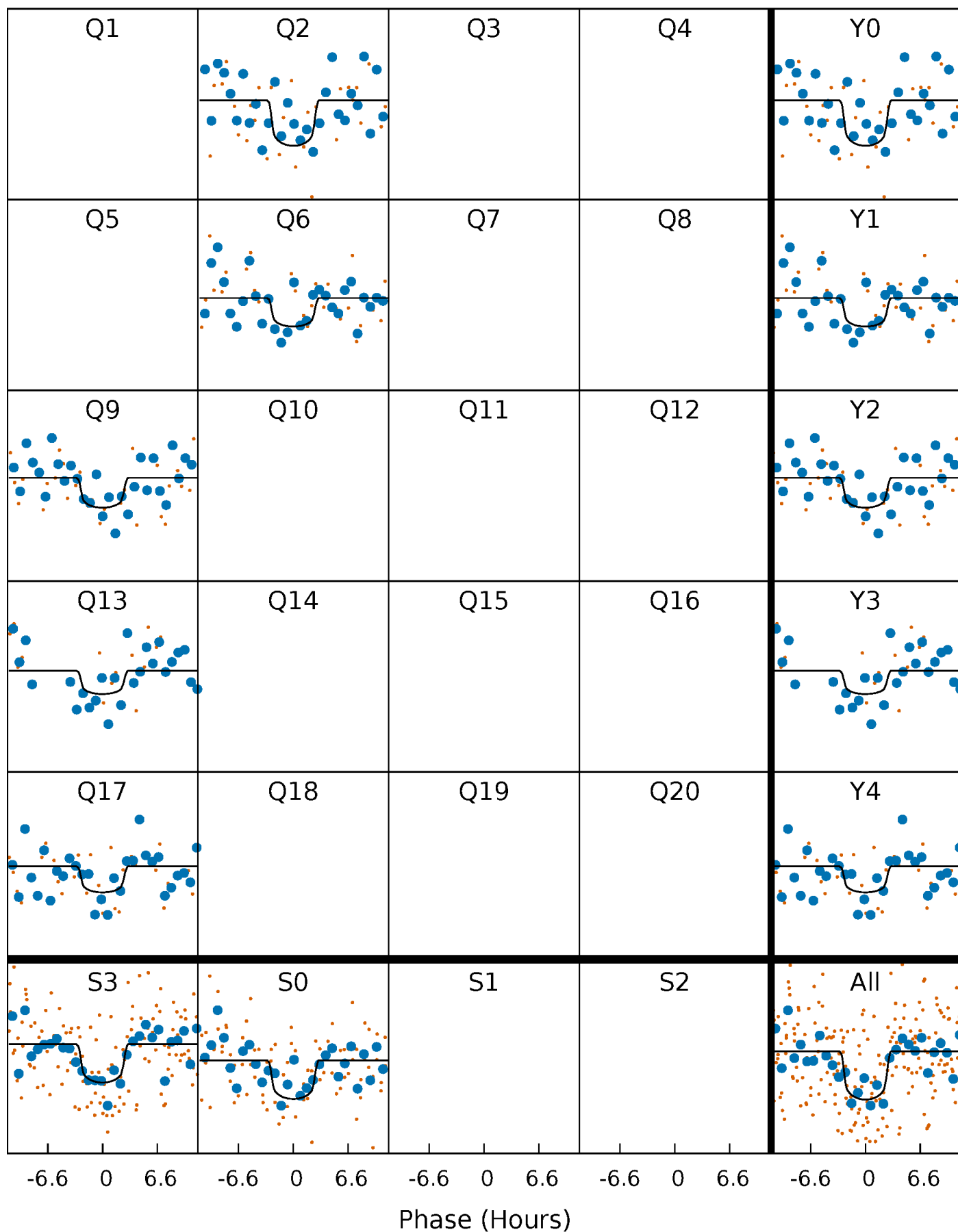
PDC Quarter-Phased Transit Curves

TCE 003629119-01 P=331.557229 Days $T_0=237.266612$ (BKJD)



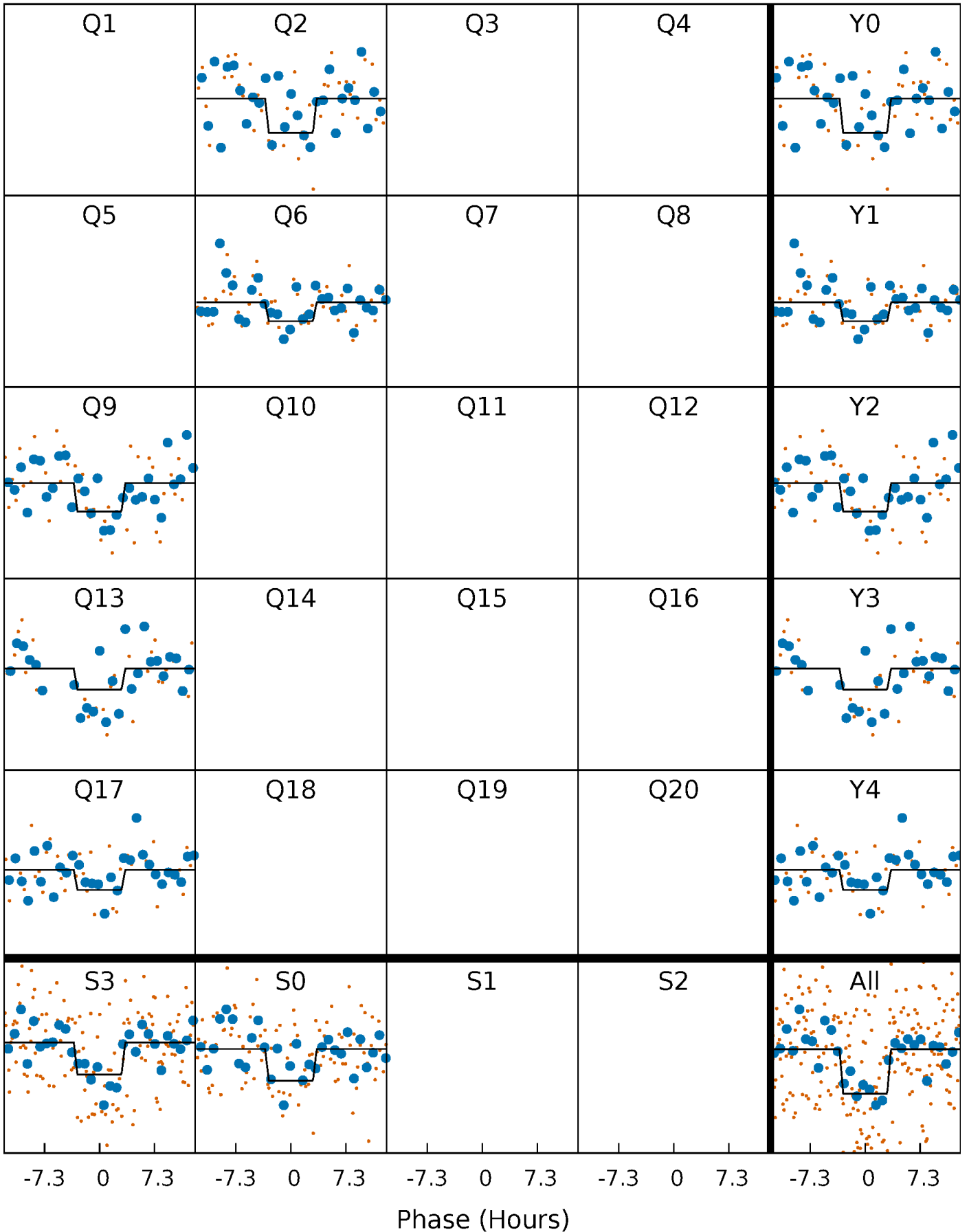
DV Quarter-Phased Transit Curves

TCE 003629119-01 P=331.557229 Days $T_0=237.266612$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

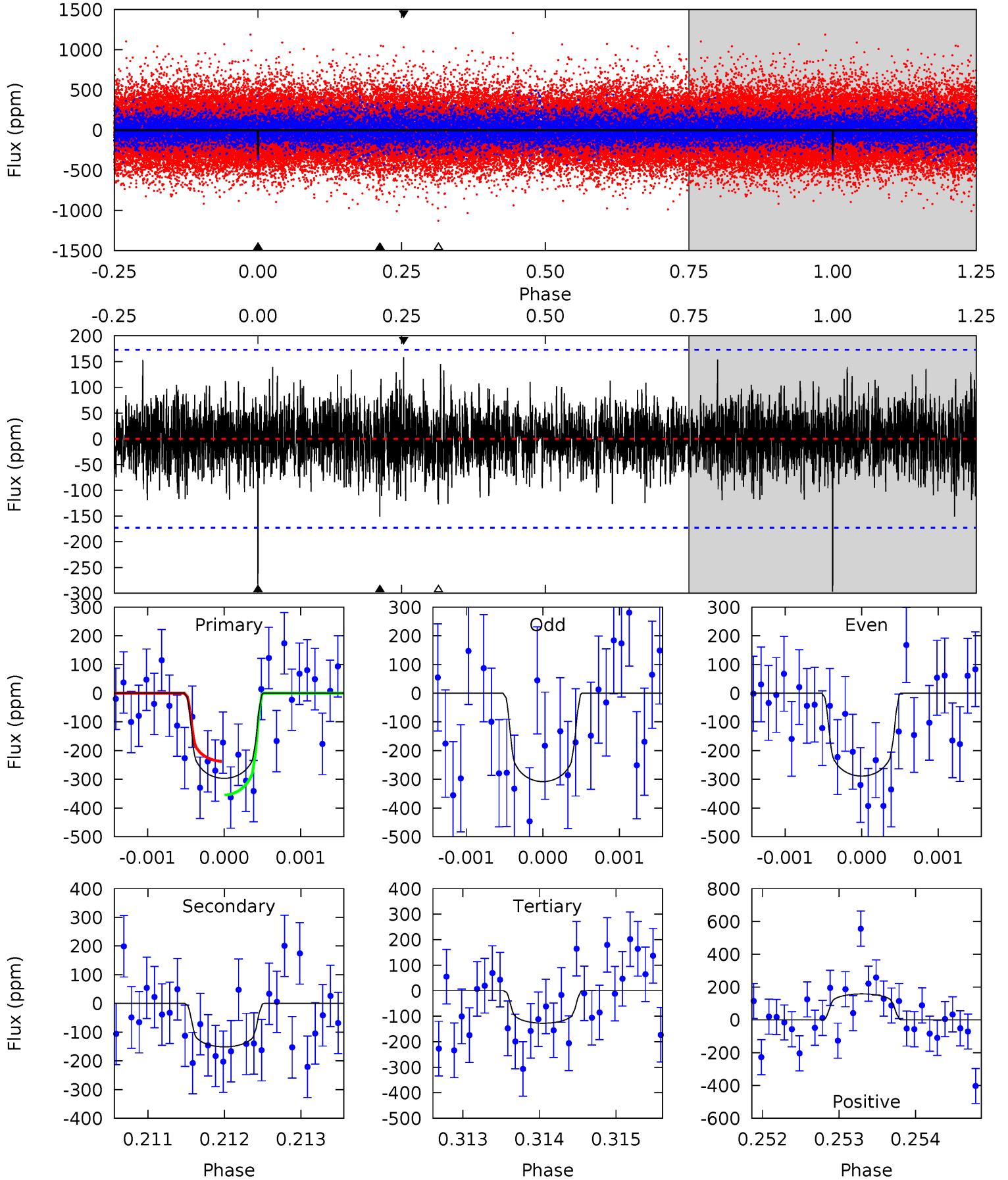
TCE 003629119-01 P=331.561756 Days $T_0=237.236797$ (BKJD)



DV Model-Shift Uniqueness Test

003629119-01, P = 331.557229 Days, E = 237.266612 Days

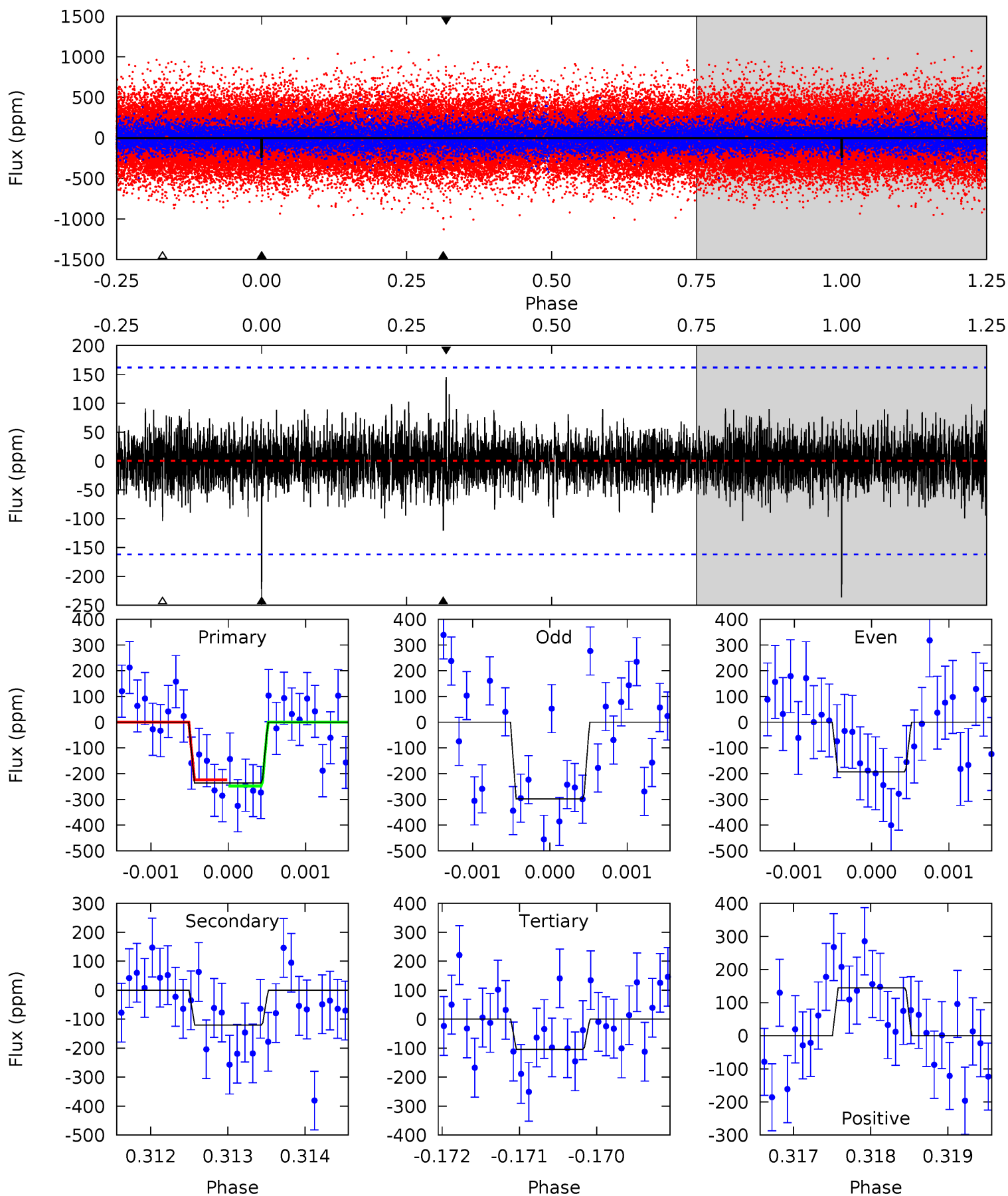
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.43	4.81	4.05	5.03	5.50	3.37	1.27	5.38	4.40	0.75	-0.22	0.30	0.94	0.35	1.86



Alt Model-Shift Uniqueness Test

003629119-01, P = 331.561756 Days, E = 237.236797 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.98	4.07	3.52	4.89	5.48	3.34	0.97	4.46	3.09	0.56	-0.82	1.75	1.24	0.38	0.41



Stellar Parameters For KIC 003629119

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5762^{+155}_{-155}	$4.576^{+0.040}_{-0.160}$	$-0.360^{+0.300}_{-0.300}$	$0.801^{+0.193}_{-0.064}$	$0.892^{+0.087}_{-0.096}$	$2.443^{+0.397}_{-1.052}$
	+3%/-3%	+1%/-3%	+83%/-83%	+24%/-8%	+10%/-11%	+16%/-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 003629119-01 / KOI 8242.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-151 ± 31	$1.82^{+0.99}_{-1.01}$	341^{+18}_{-14}	4658^{+2134}_{-716}	19699^{+79665}_{-11771}
Alt.	-120 ± 30	$1.49^{+1.09}_{-0.80}$	341^{+18}_{-14}	4767^{+2050}_{-893}	22338^{+83597}_{-14971}

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

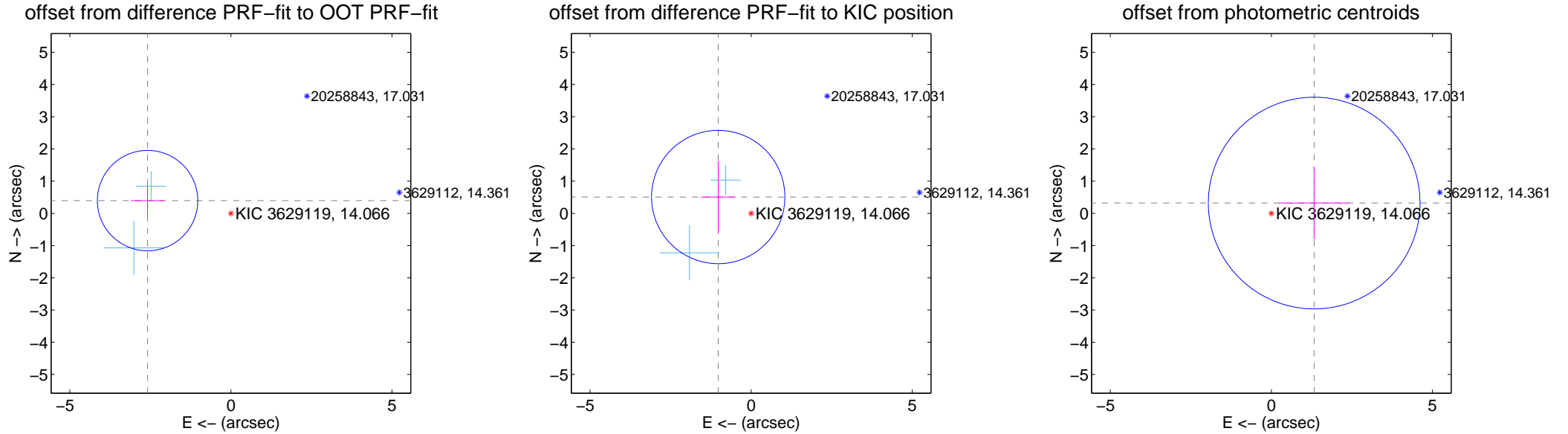
DV Centroid Data

Supplemental centroid analysis for 003629119-01. Kepler magnitude: 14.07. Transit SNR 7.57

There are 2 quarters with good PRF difference image offsets

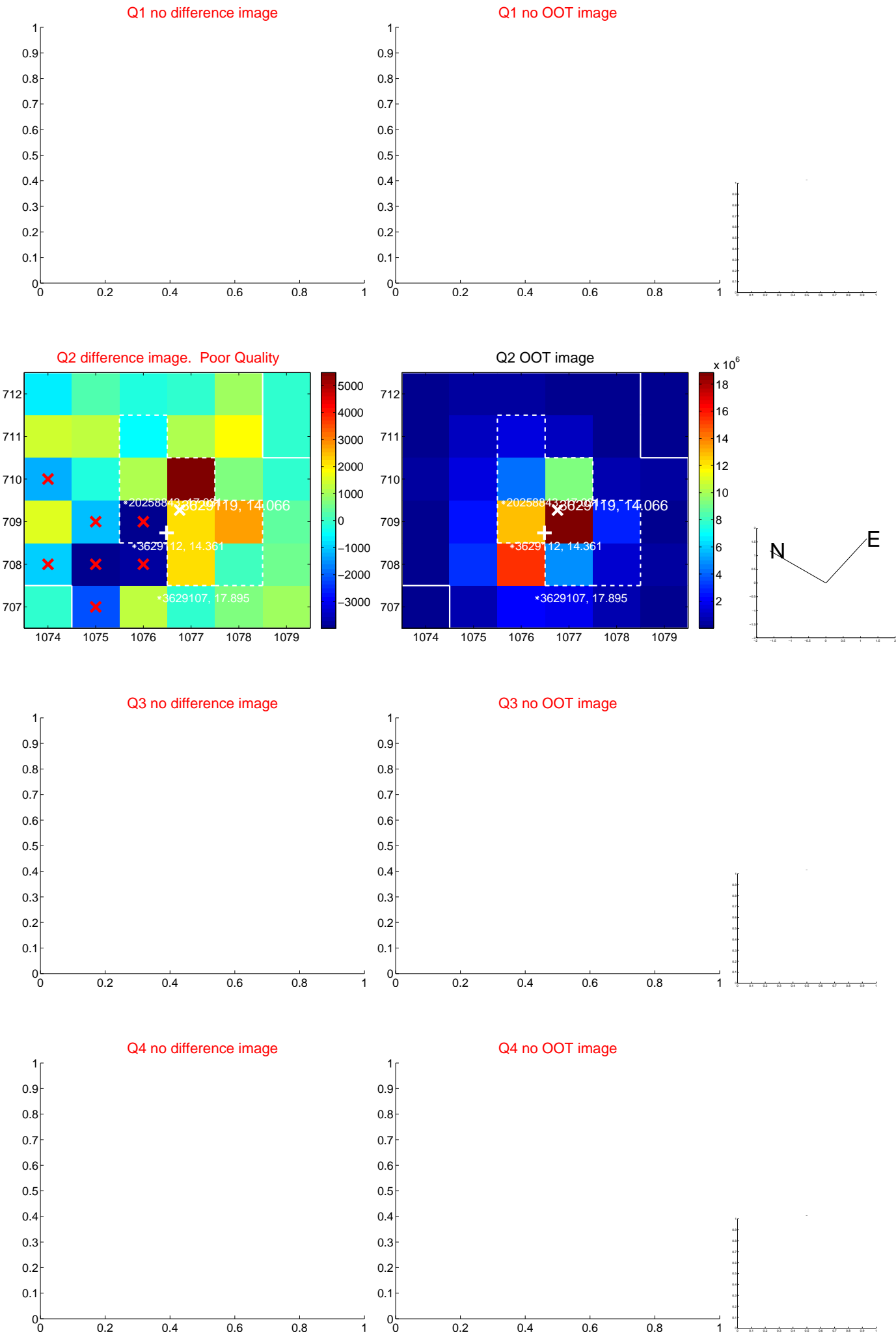
The direct PRF centroid is offset from the target star catalog position by about 1.11 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.617 ± 0.519	5.04	2.587 ± 0.520	0.396 ± 0.487
PRF-fit source offset from KIC position	1.141 ± 0.690	1.65	1.022 ± 0.534	0.507 ± 1.117
photometric centroid source offset	1.37 ± 1.09	1.25	-1.33 ± 1.09	0.32 ± 1.12

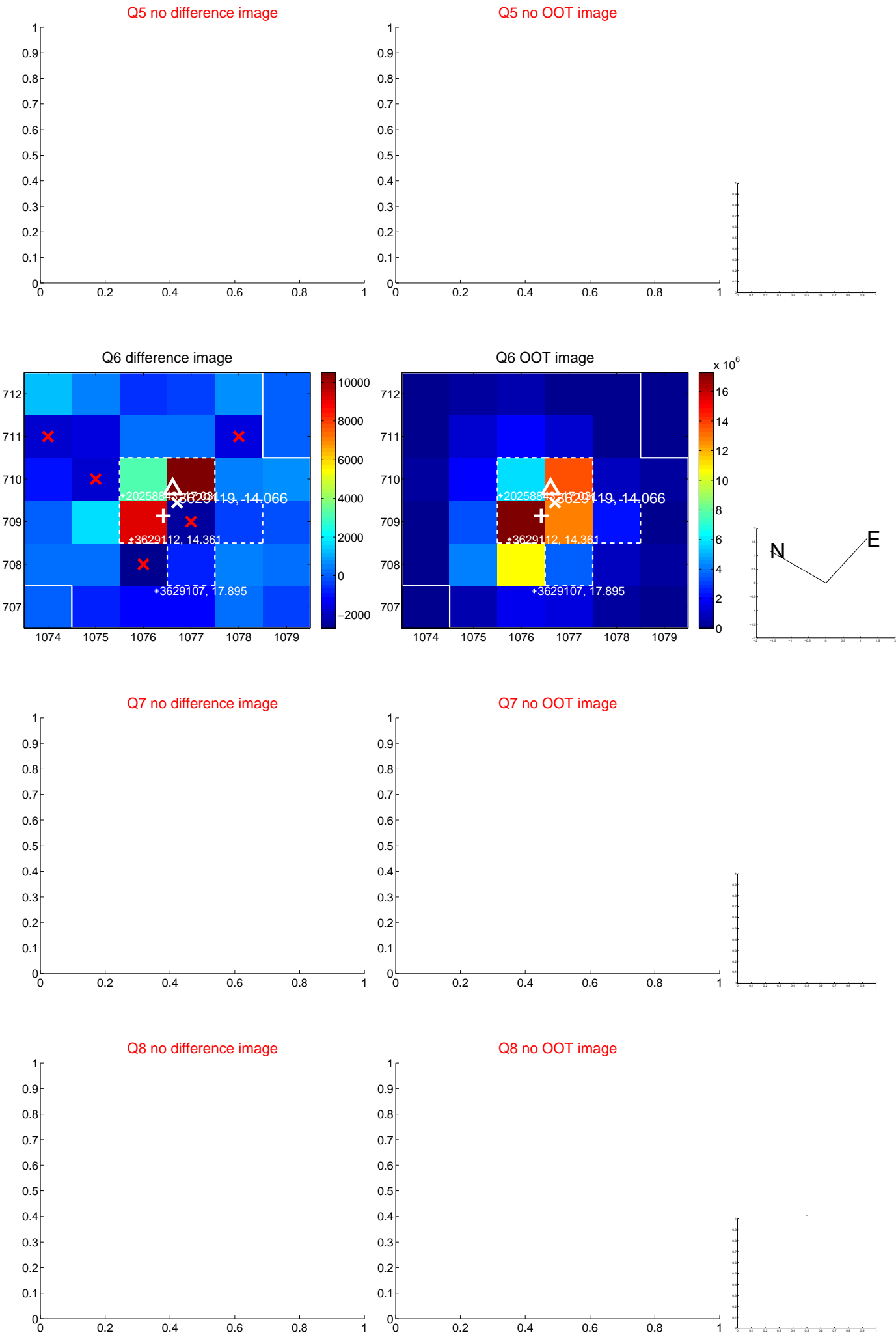


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

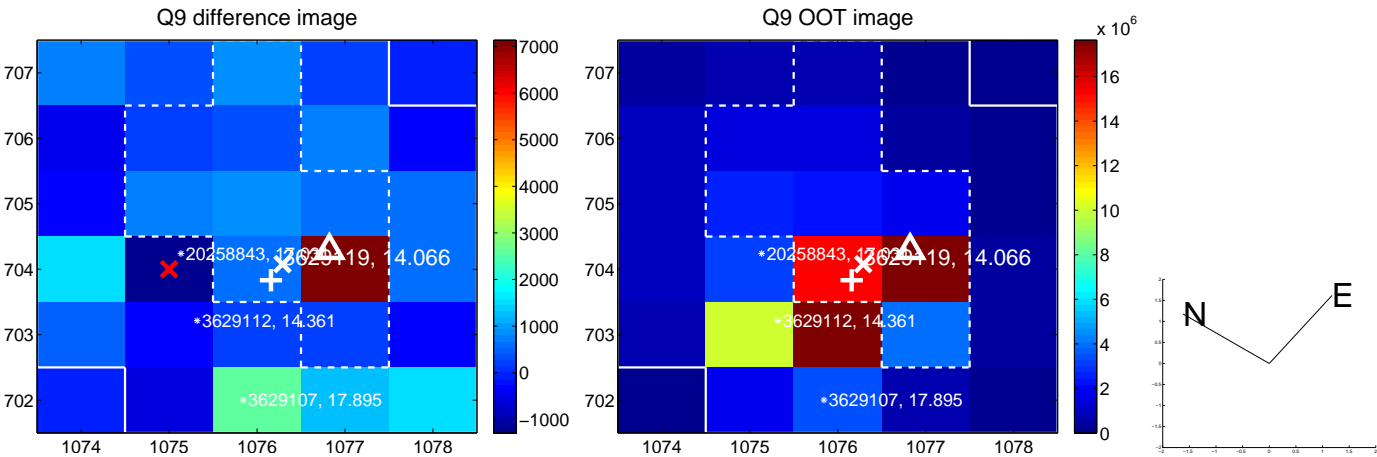
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



white ×: 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

