

KIC 007969349

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})
007969349-01	OBS	No	372.743229	227.982253	803.8	29.493	7.3	9.3	1.01	6244	3.62	1.29

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007969349-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE—ALL_TRANS_CHASES—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.

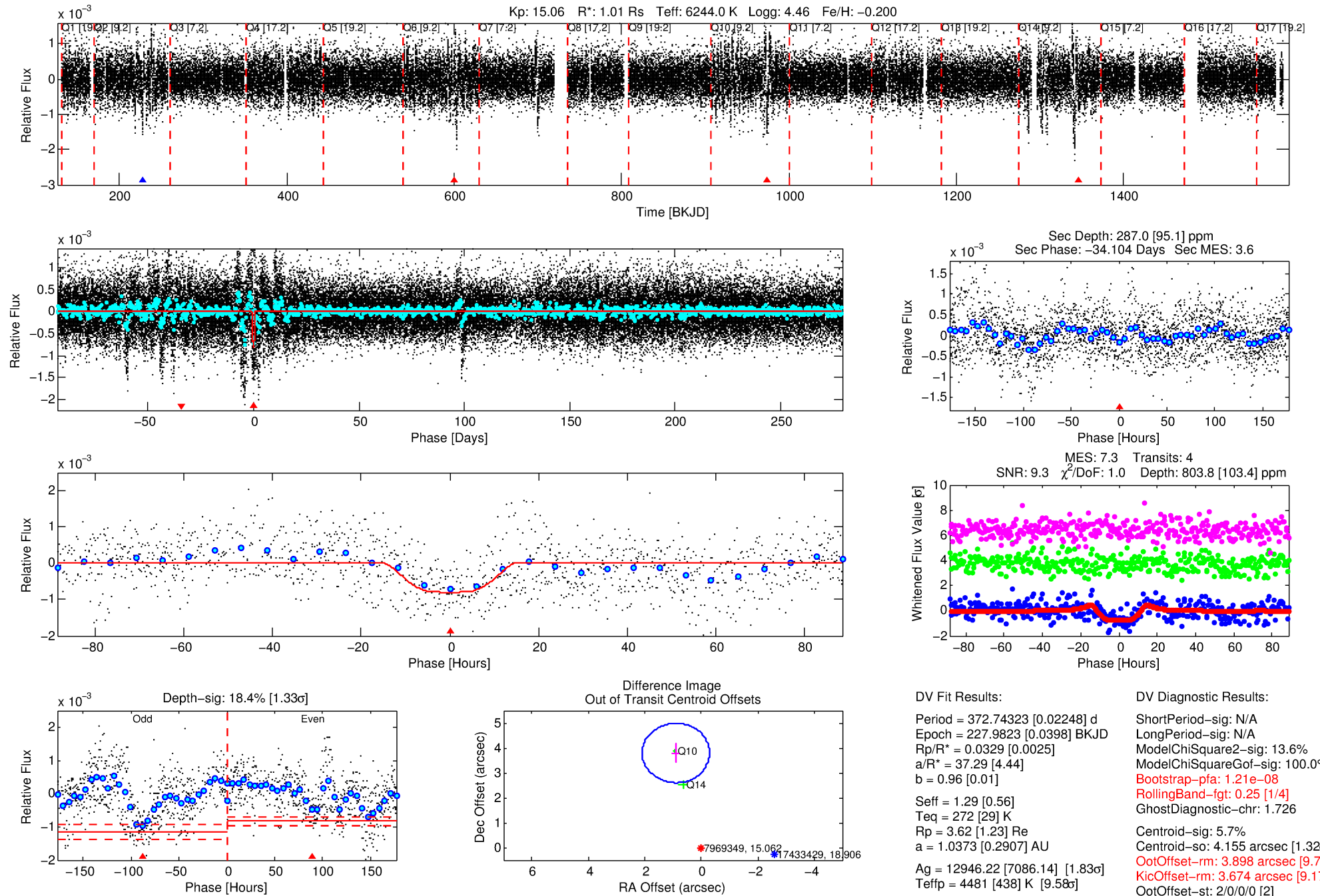
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007969349-01

No Significant Match Found

DV One-Page Summary

KIC: 7969349 Candidate: 1 of 1 Period: 372.743 d



DV Fit Results:

Period = 372.74323 [0.02248] d
 Epoch = 227.9823 [0.0398] BKJD
 Rp/R* = 0.0329 [0.0025]
 a/R* = 37.29 [4.44]
 b = 0.96 [0.01]
 Seff = 1.29 [0.56]
 Teq = 272 [29] K
 Rp = 3.62 [1.23] Re
 a = 1.0373 [0.2907] AU
 Ag = 12946.22 [7086.14] [1.83 σ]
 Teffp = 4481 [438] K [9.58 σ]

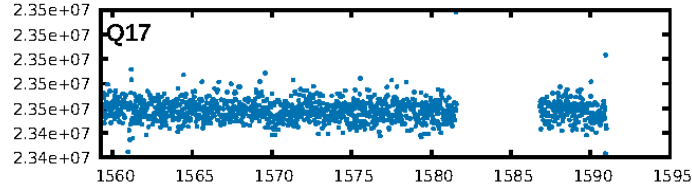
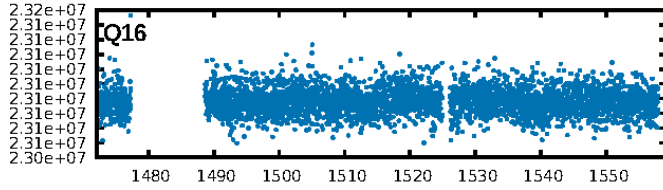
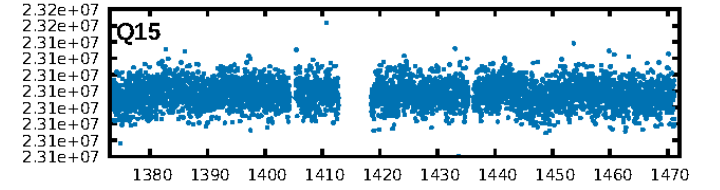
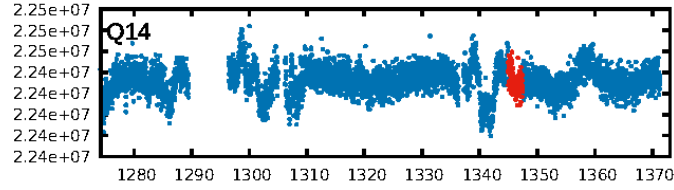
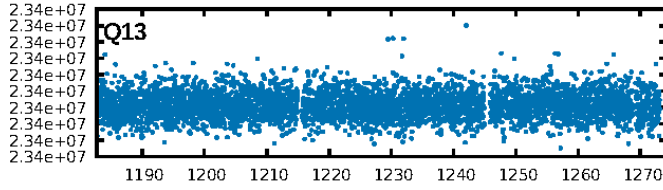
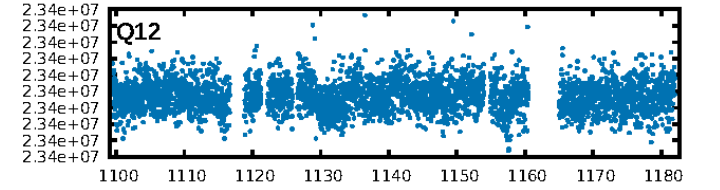
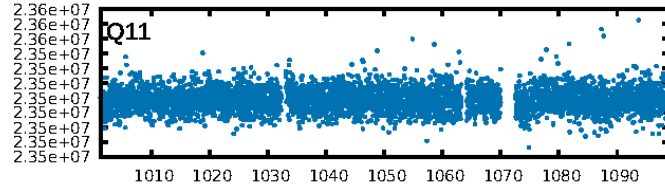
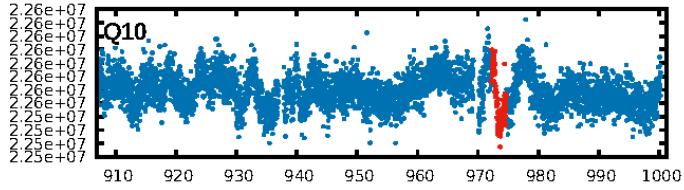
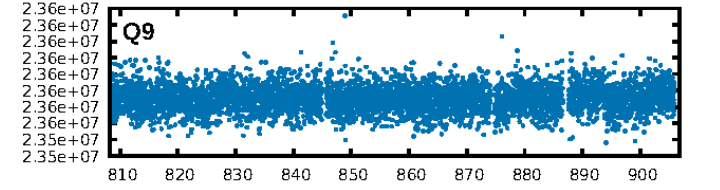
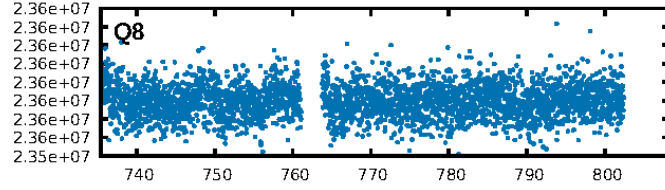
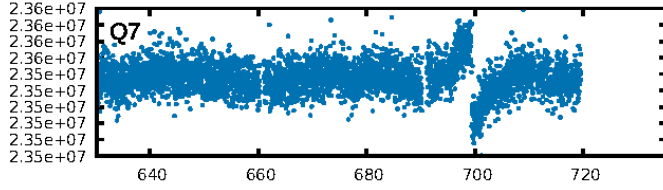
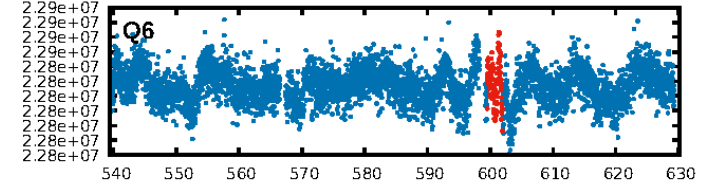
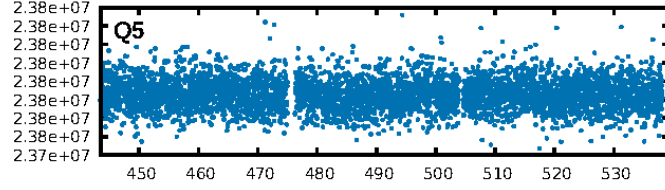
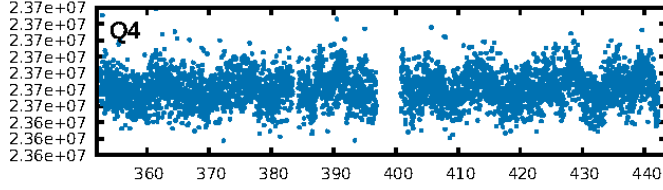
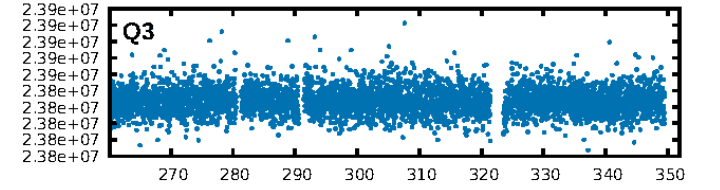
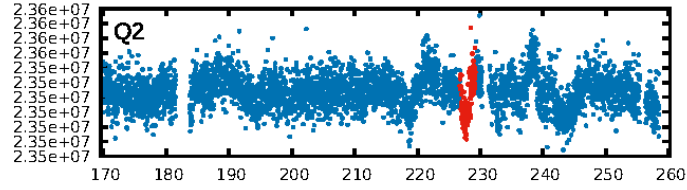
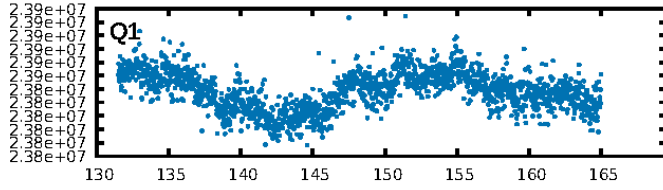
DV Diagnostic Results:

ShortPeriod-sig: N/A
 LongPeriod-sig: N/A
 ModelChiSquare2-sig: 13.6%
 ModelChiSquareGof-sig: 100.0%
 Bootstrap-pfa: 1.21e-08
 RollingBand-fgt: 0.25 [1/4]
 GhostDiagnostic-chr: 1.726
 Centroid-sig: 5.7%
 Centroid-so: 4.155 arcsec [1.32 σ]
 OotOffset-rm: 3.898 arcsec [9.79 σ]
 KicOffset-rm: 3.674 arcsec [9.17 σ]
 OotOffset-st: 2/0/0/0 [2]
 KicOffset-st: 2/0/0/0 [2]
 DiffImageQuality-fgm: 0.00 [0/2]
 DiffImageOverlap-fno: 1.00 [3/3]

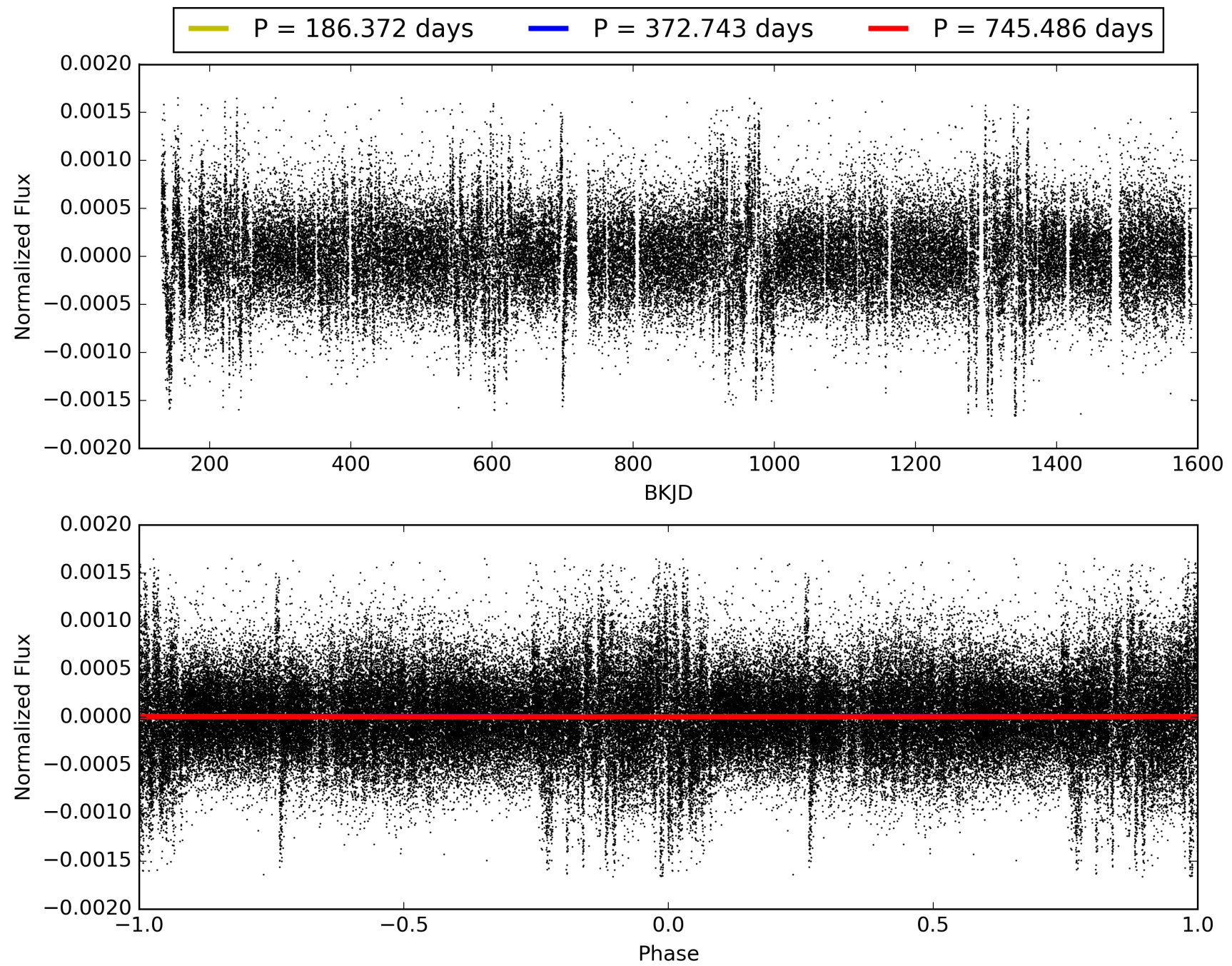
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 05:26:30 Z

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

TCE 007969349-01, PDC Light Curves

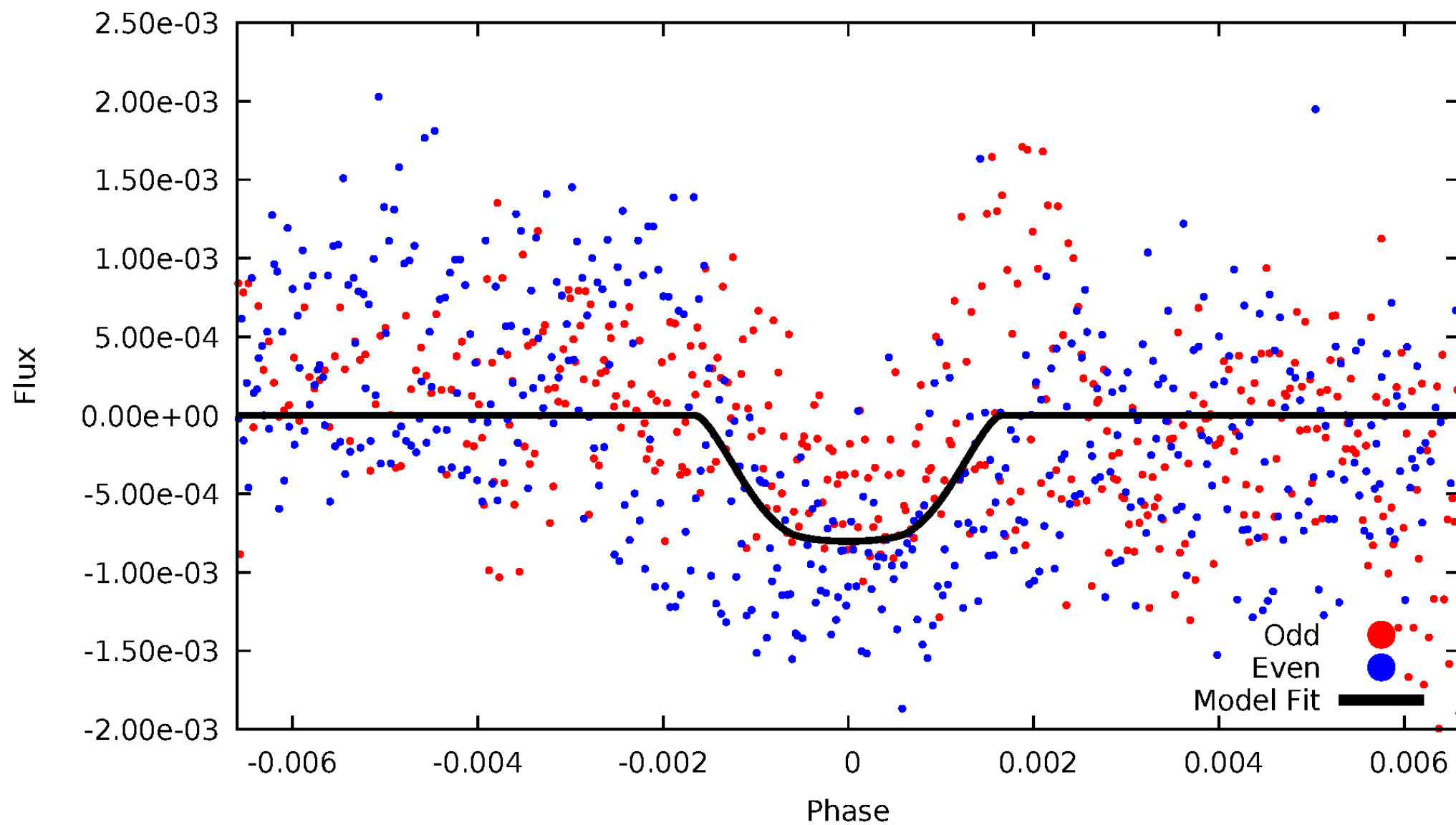


TCE 007969349-01



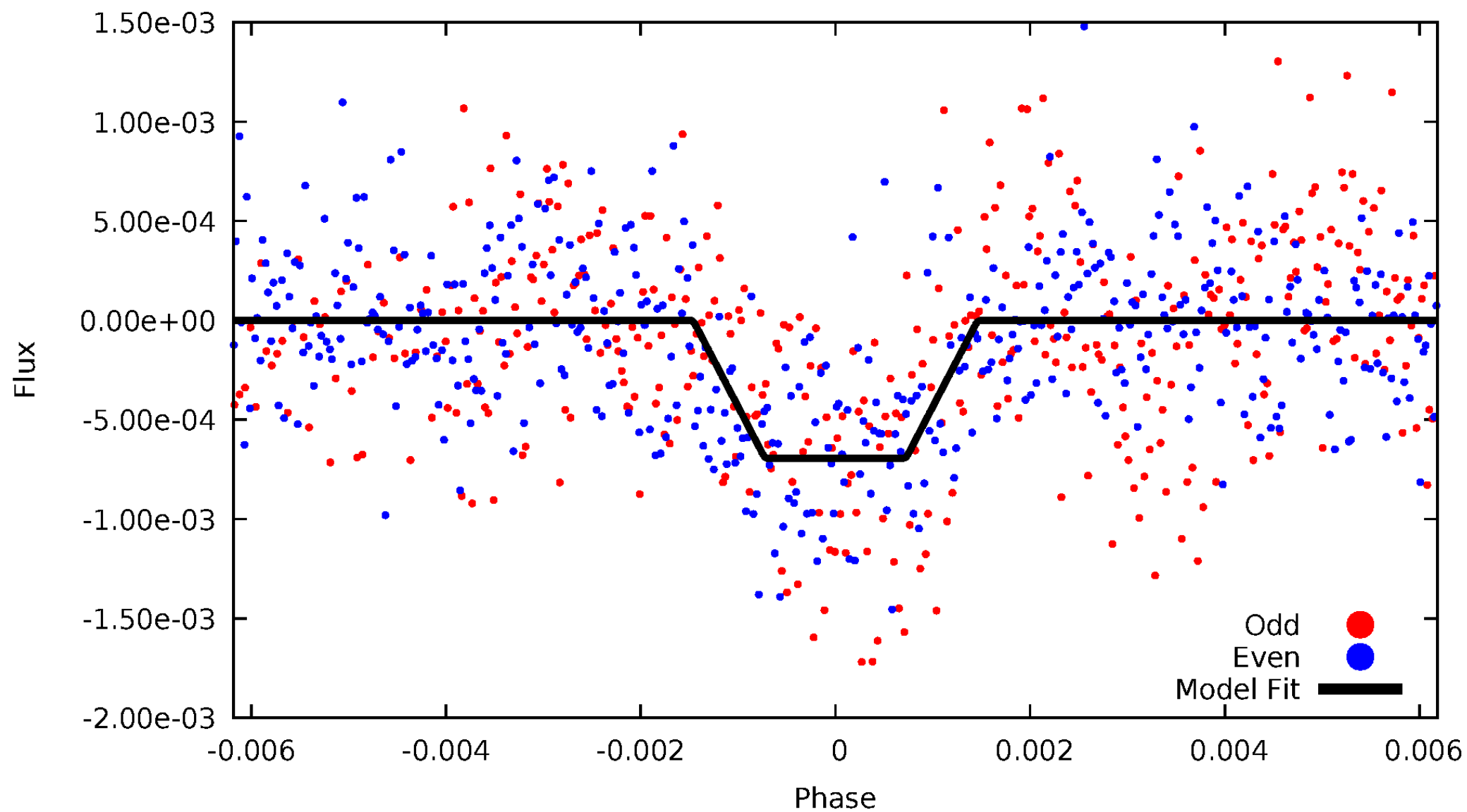
DV Odd/Even

TCE 007969349-01



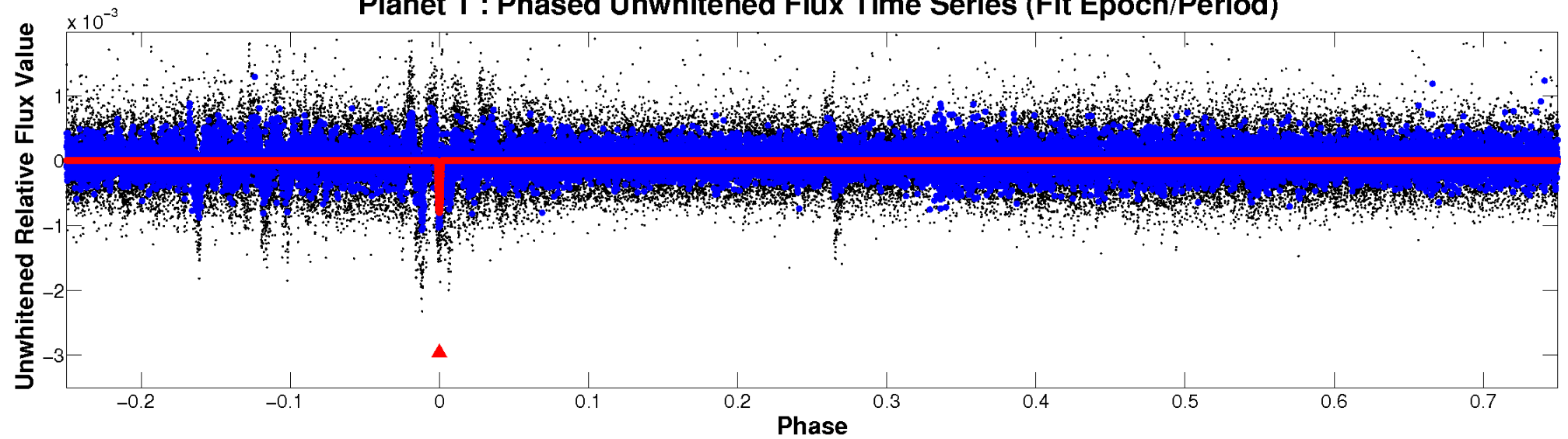
ALT Odd/Even

TCE 007969349-01

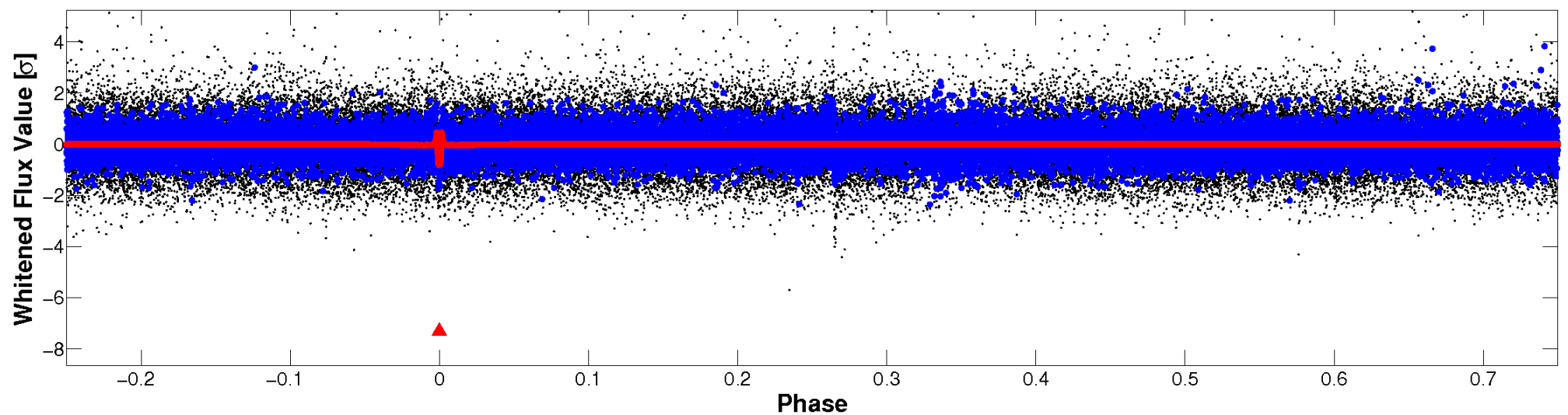


Non-Whitened Vs. Whitened Light Curve

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

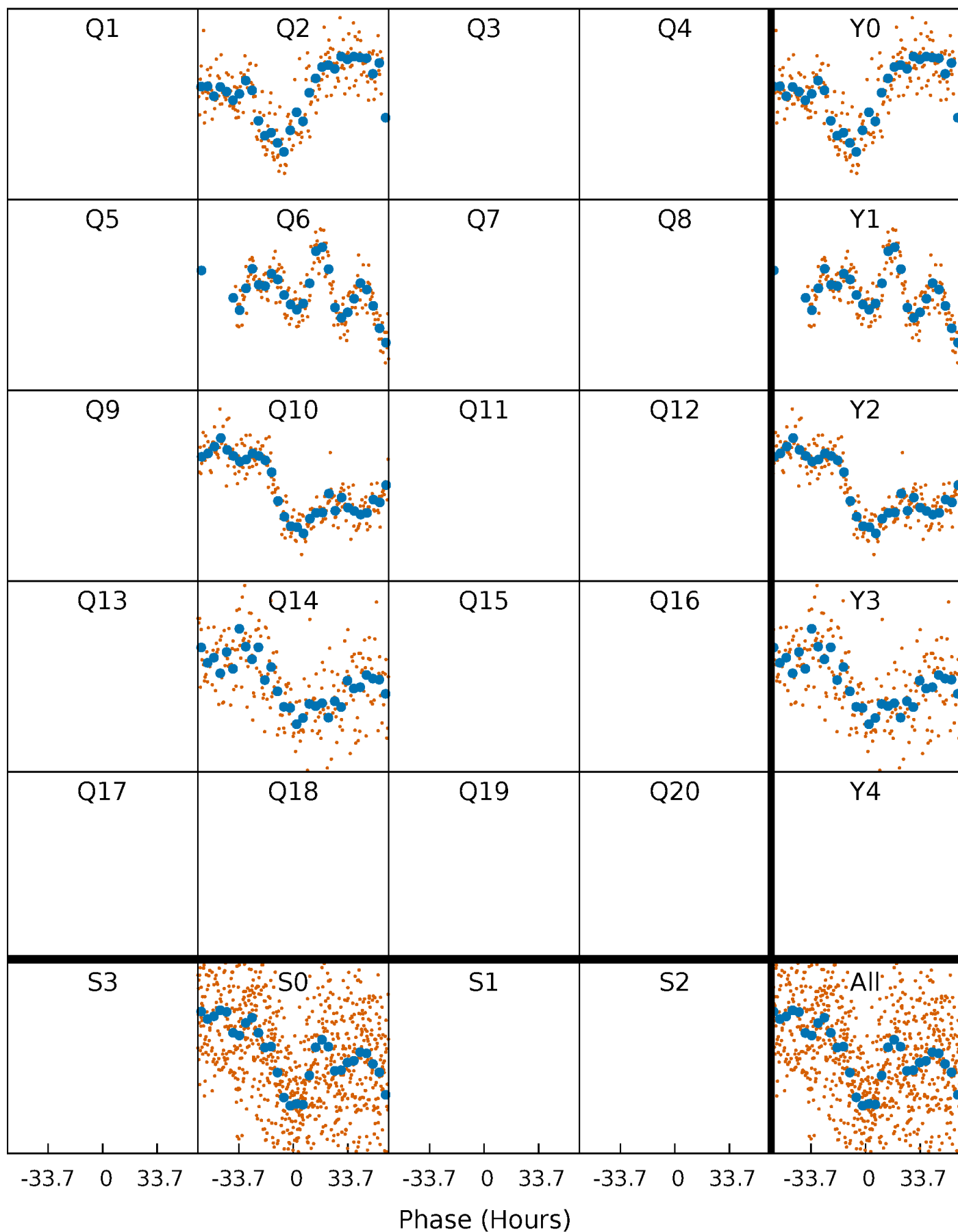


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



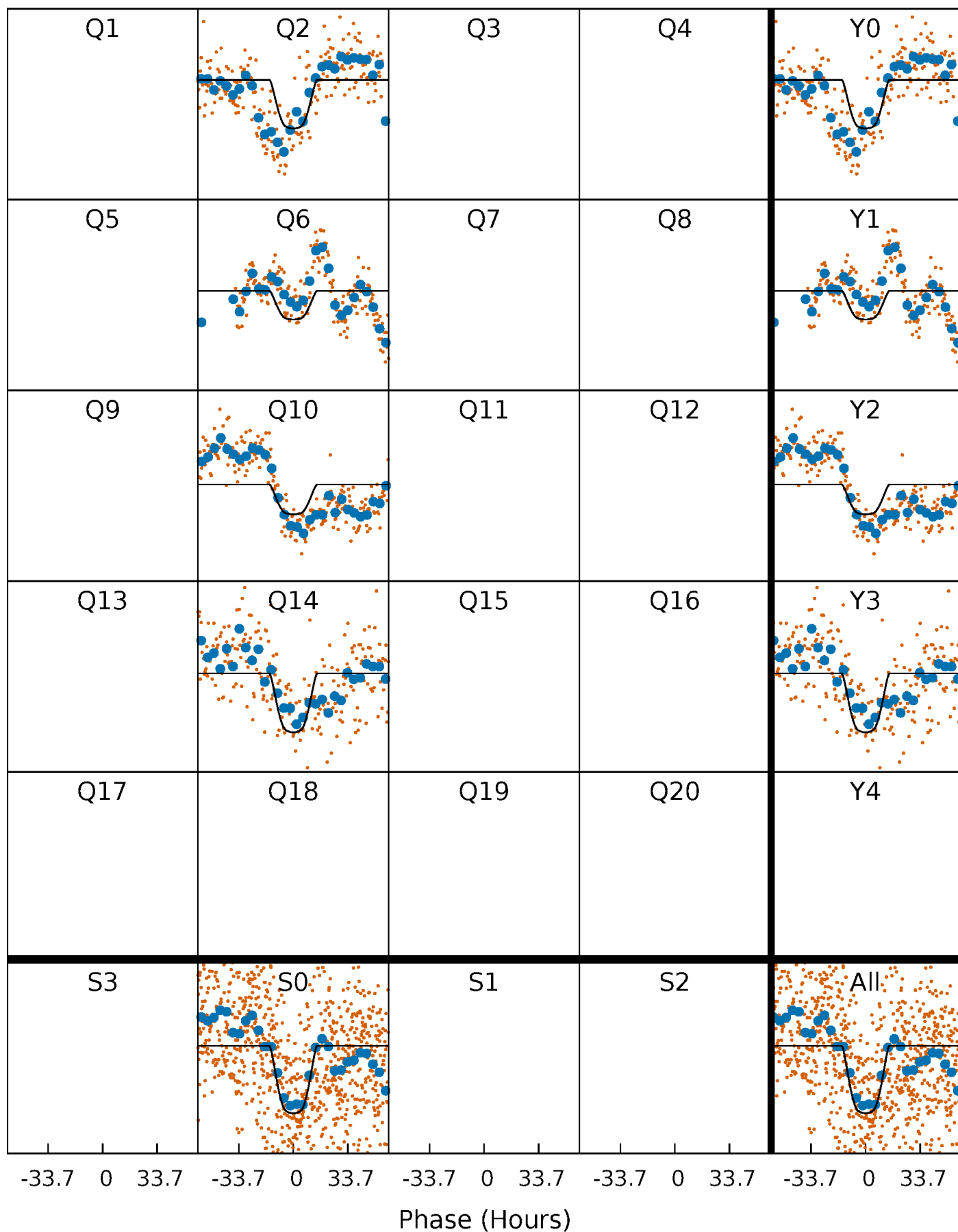
PDC Quarter-Phased Transit Curves

TCE 007969349-01 P=372.743229 Days $T_0=227.982253$ (BKJD)



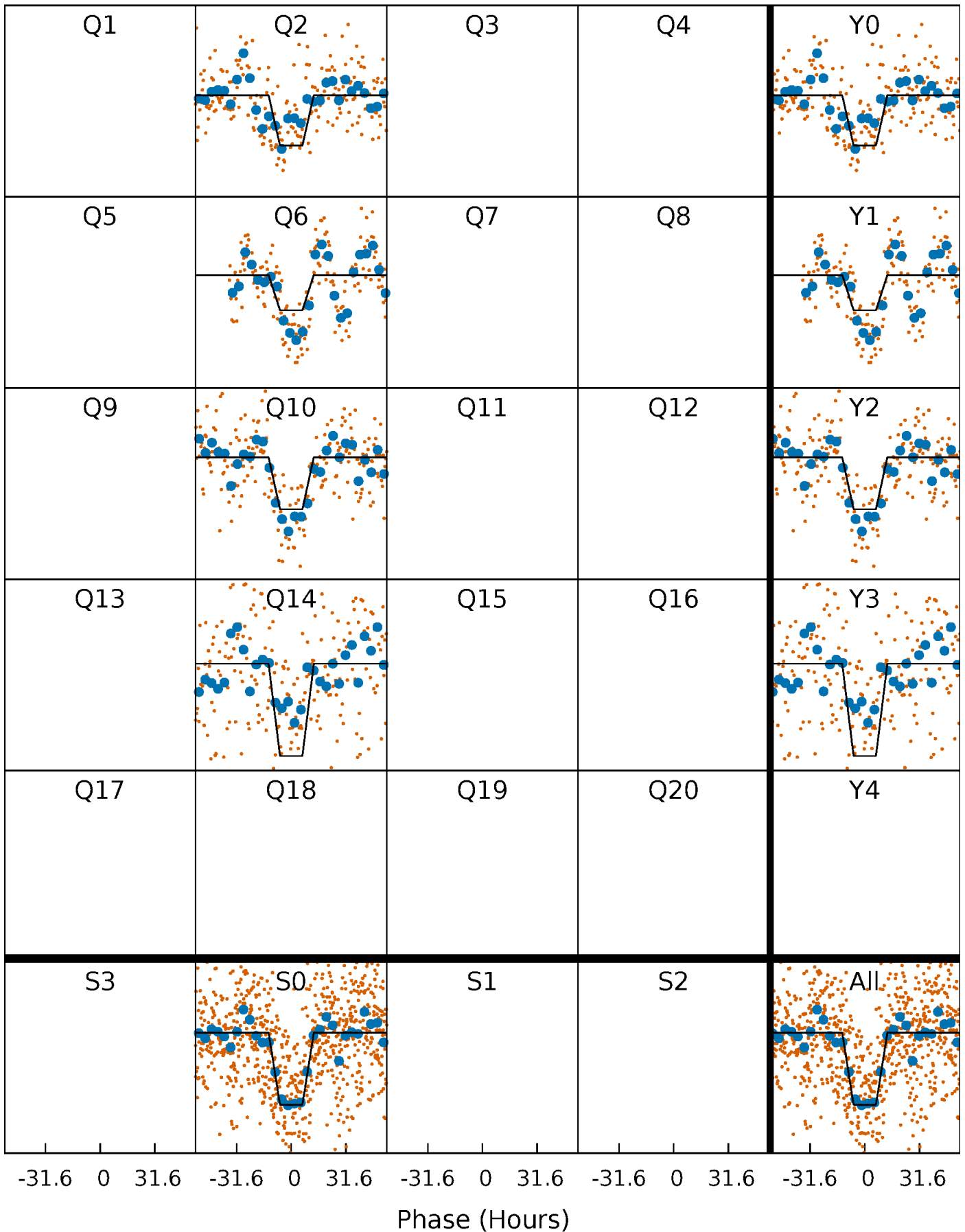
DV Quarter-Phased Transit Curves

TCE 007969349-01 P=372.743229 Days $T_0=227.982253$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

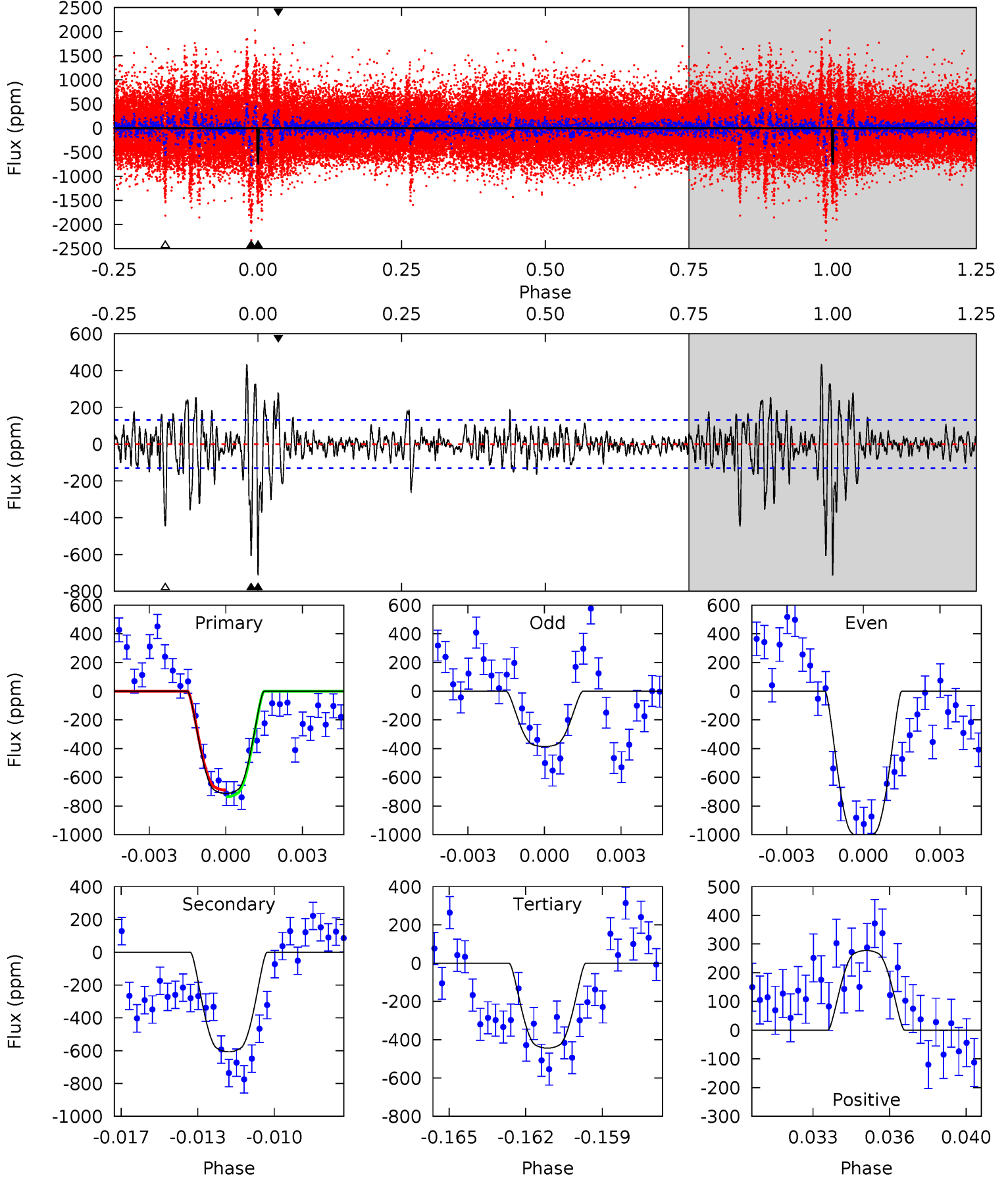
TCE 007969349-01 P=372.755813 Days $T_0=227.956203$ (BKJD)



DV Model-Shift Uniqueness Test

007969349-01, $P = 372.743229$ Days, $E = 227.982253$ Days

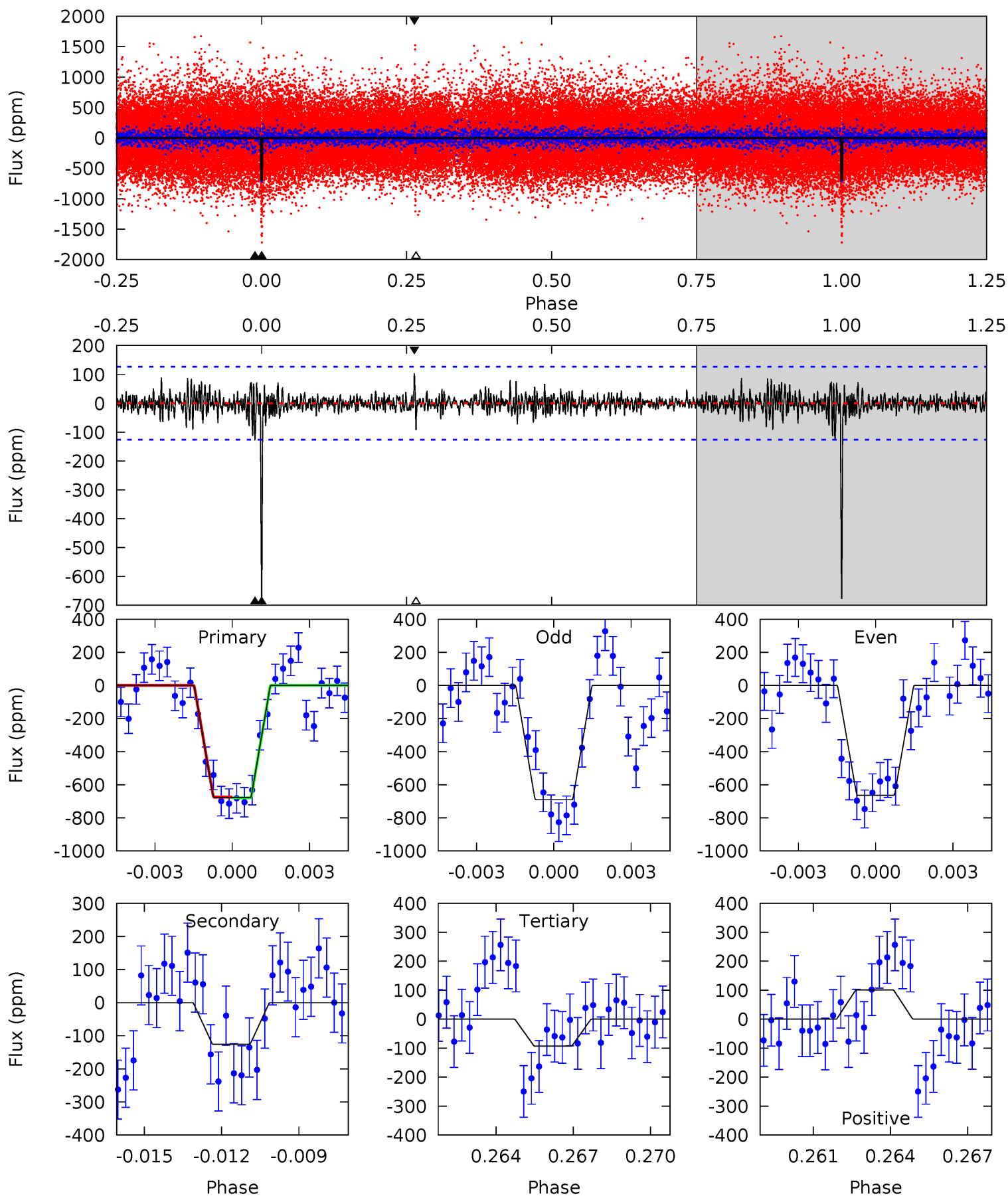
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
28.5	24.3	17.7	11.1	5.23	2.94	3.47	10.7	17.4	6.51	13.2	12.8	0.94	0.38	0.95



Alt Model-Shift Uniqueness Test

007969349-01, P = 372.755813 Days, E = 227.956203 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
28.2	5.24	3.87	4.21	5.25	2.97	0.93	24.3	24.0	1.37	1.03	0.56	1.02	0.13	0.09



Stellar Parameters For KIC 007969349

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6244^{+188}_{-225}	$4.460^{+0.056}_{-0.224}$	$-0.200^{+0.250}_{-0.300}$	$1.009^{+0.335}_{-0.112}$	$1.069^{+0.158}_{-0.144}$	$1.466^{+0.454}_{-0.821}$
	+3%/-4%	+1%/-5%	+125%/-150%	+33%/-11%	+15%/-13%	+31%/-56%
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 007969349-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-607 ± 25	$3.75^{+0.70}_{-0.40}$	389^{+31}_{-22}	5435^{+276}_{-253}	25061^{+6162}_{-6663}
Alt.	-126 ± 24	$3.06^{+0.56}_{-0.44}$	389^{+31}_{-19}	4292^{+236}_{-233}	7698^{+3143}_{-2527}

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

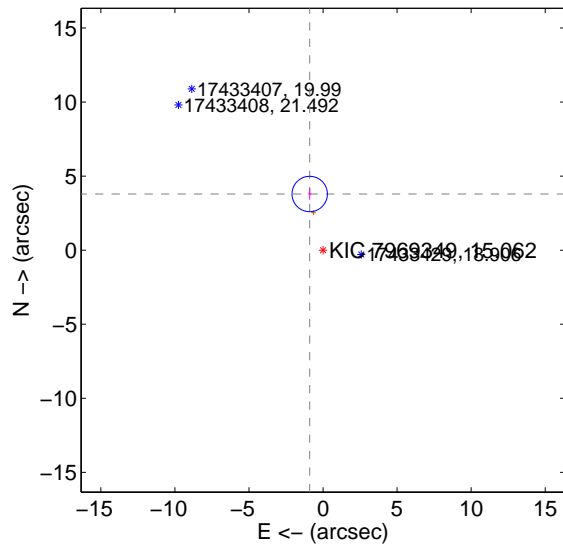
Supplemental centroid analysis for 007969349-01. Kepler magnitude: 15.06. Transit SNR 9.35

There are 0 quarters with good PRF difference image offsets

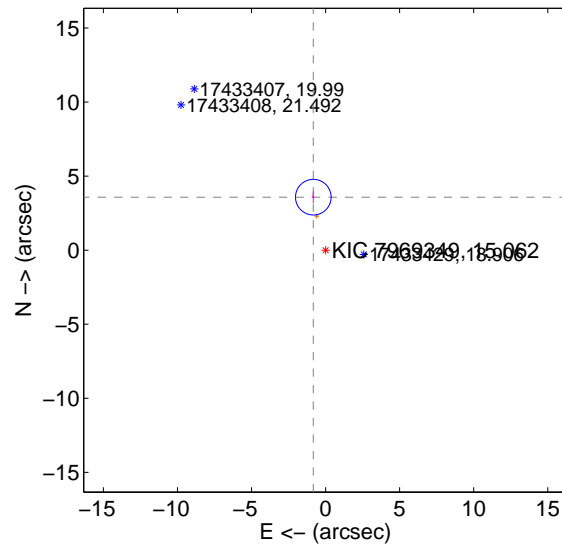
The direct PRF centroid is offset from the target star catalog position by about 0.23 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	3.898 \pm 0.398	9.79	0.900 \pm 0.105	3.793 \pm 0.390
PRF-fit source offset from KIC position	3.674 \pm 0.401	9.17	0.828 \pm 0.099	3.579 \pm 0.394
photometric centroid source offset	4.16 \pm 3.15	1.32	-0.65 \pm 2.30	-4.10 \pm 3.17

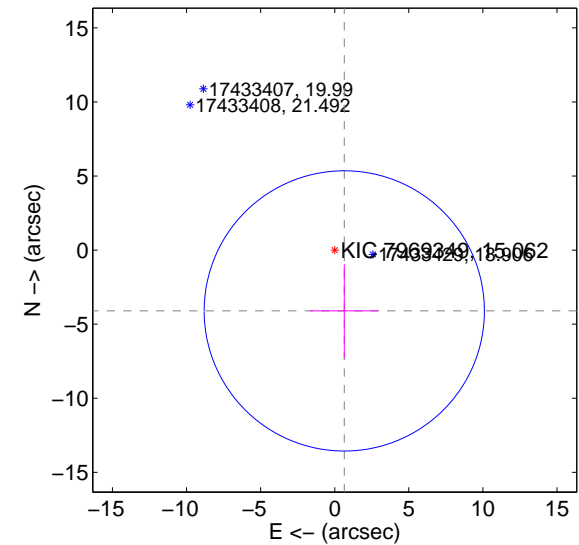
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

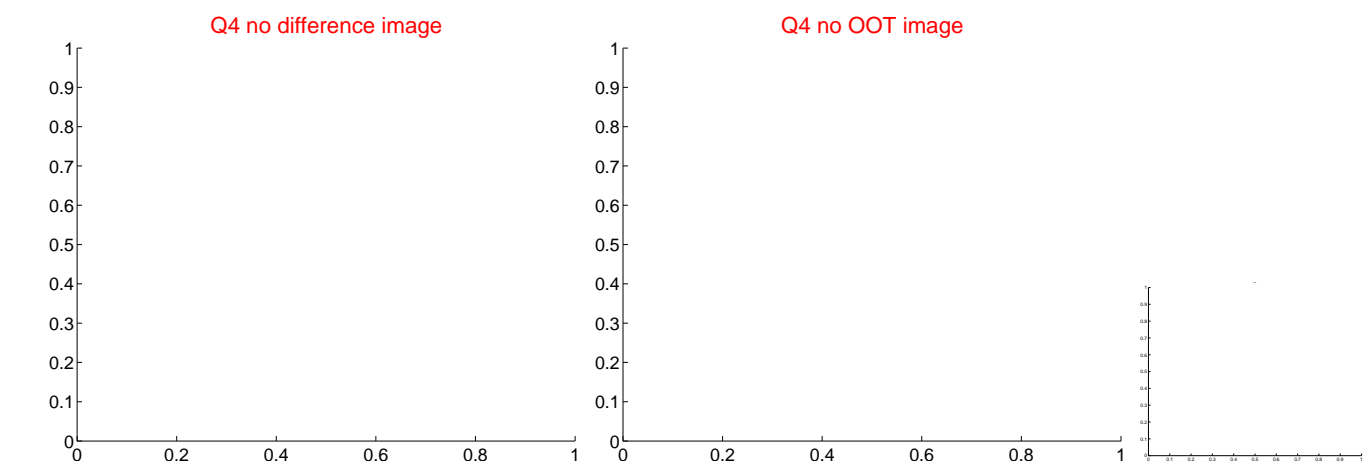
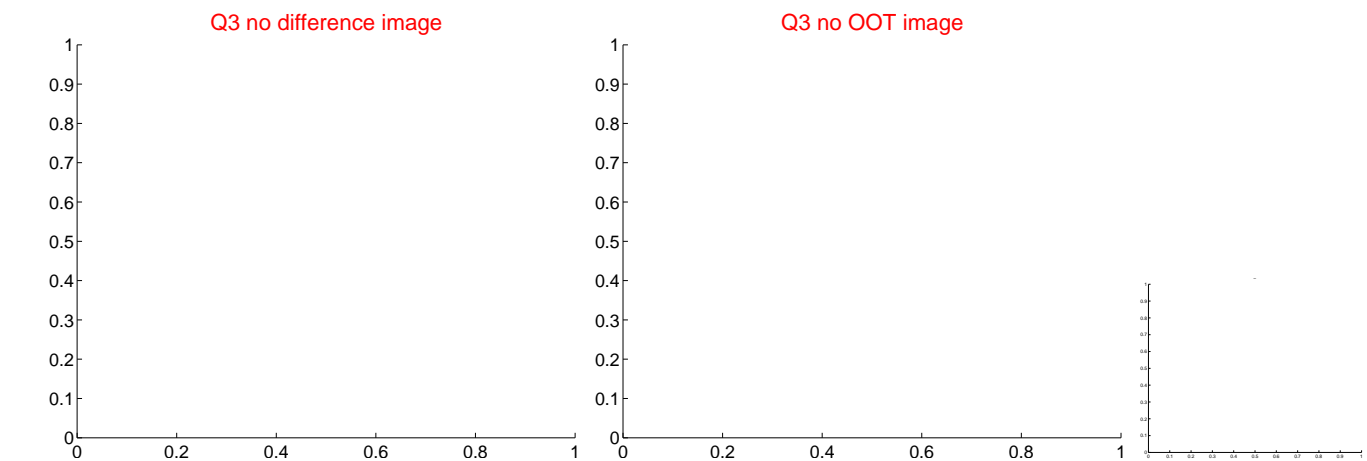
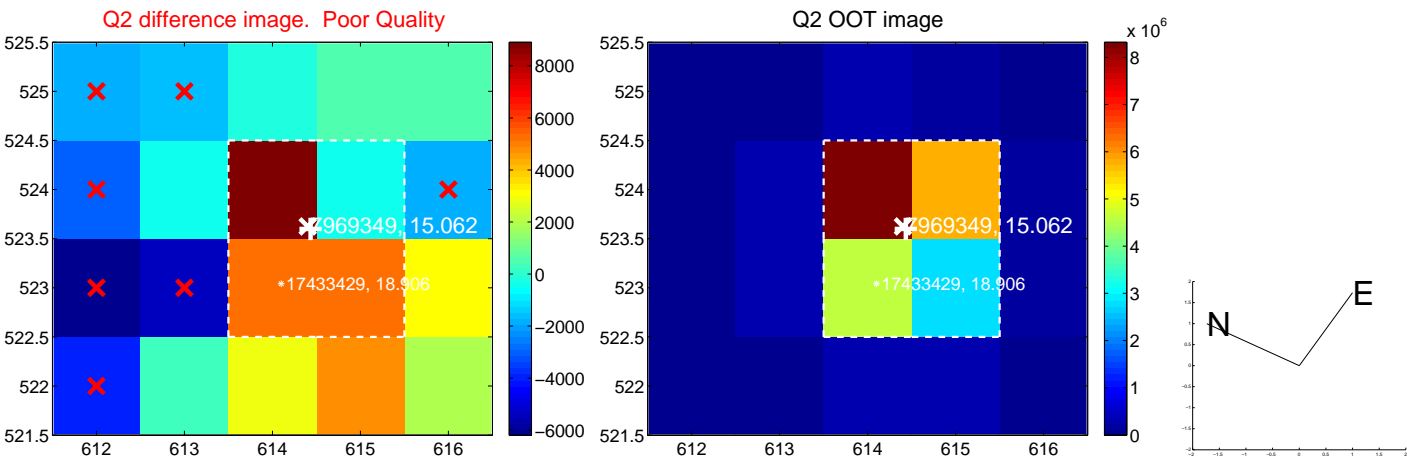
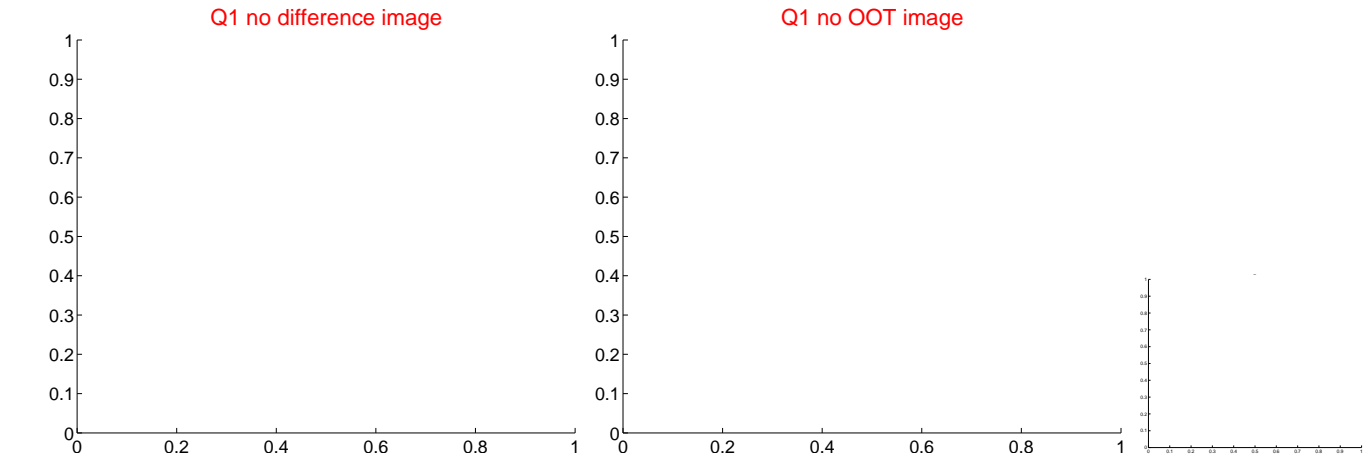


offset from photometric centroids



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.

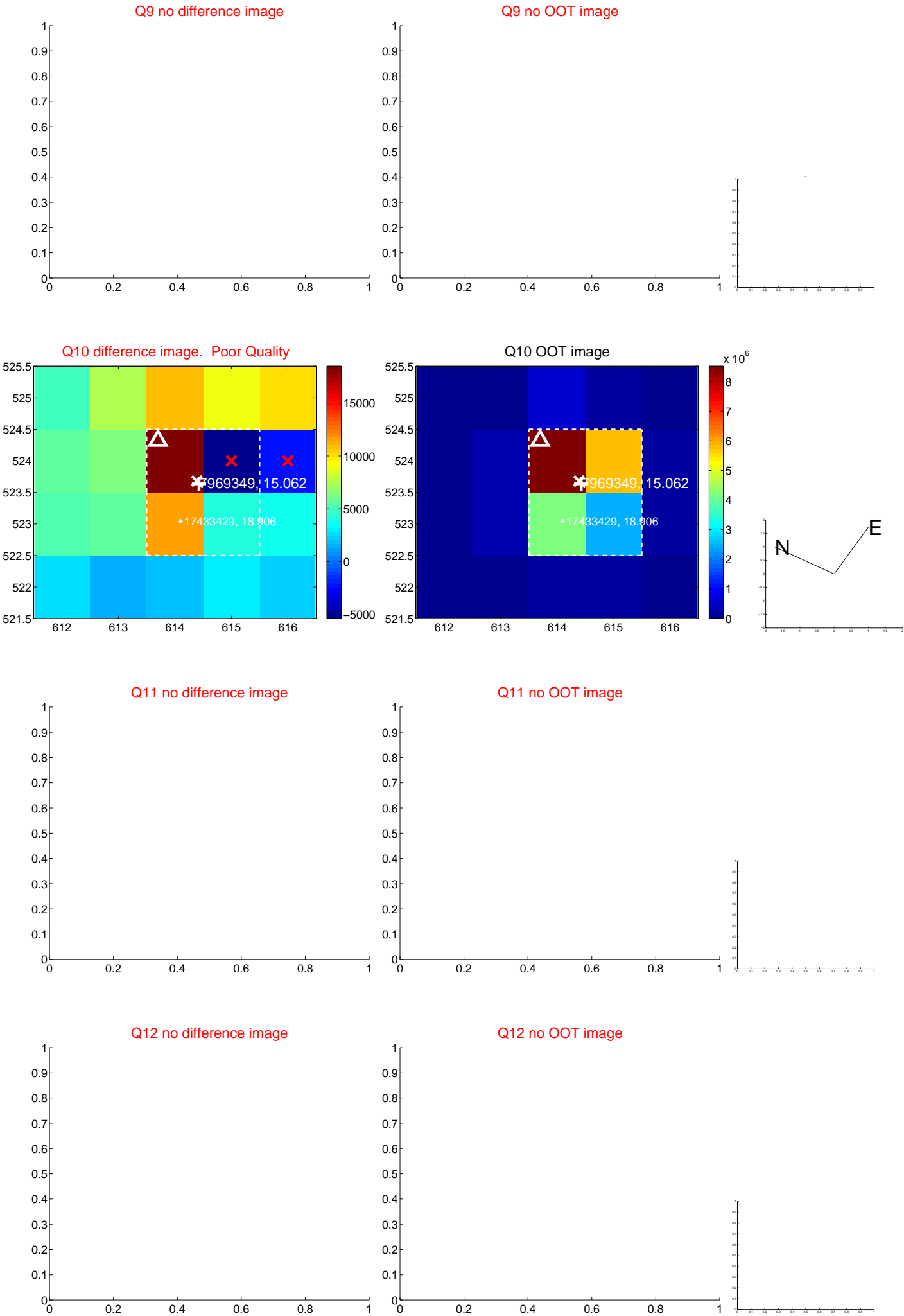
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



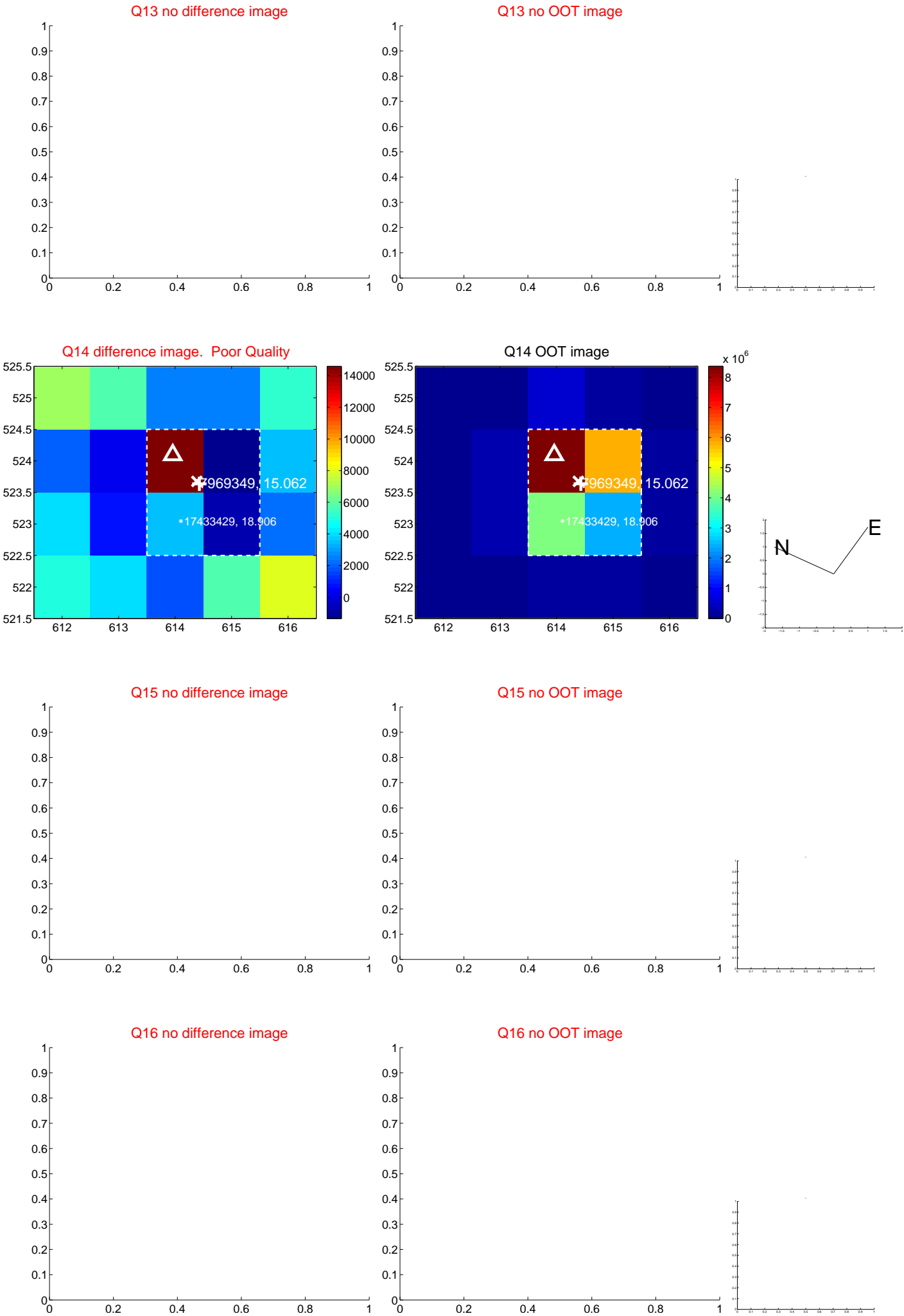
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



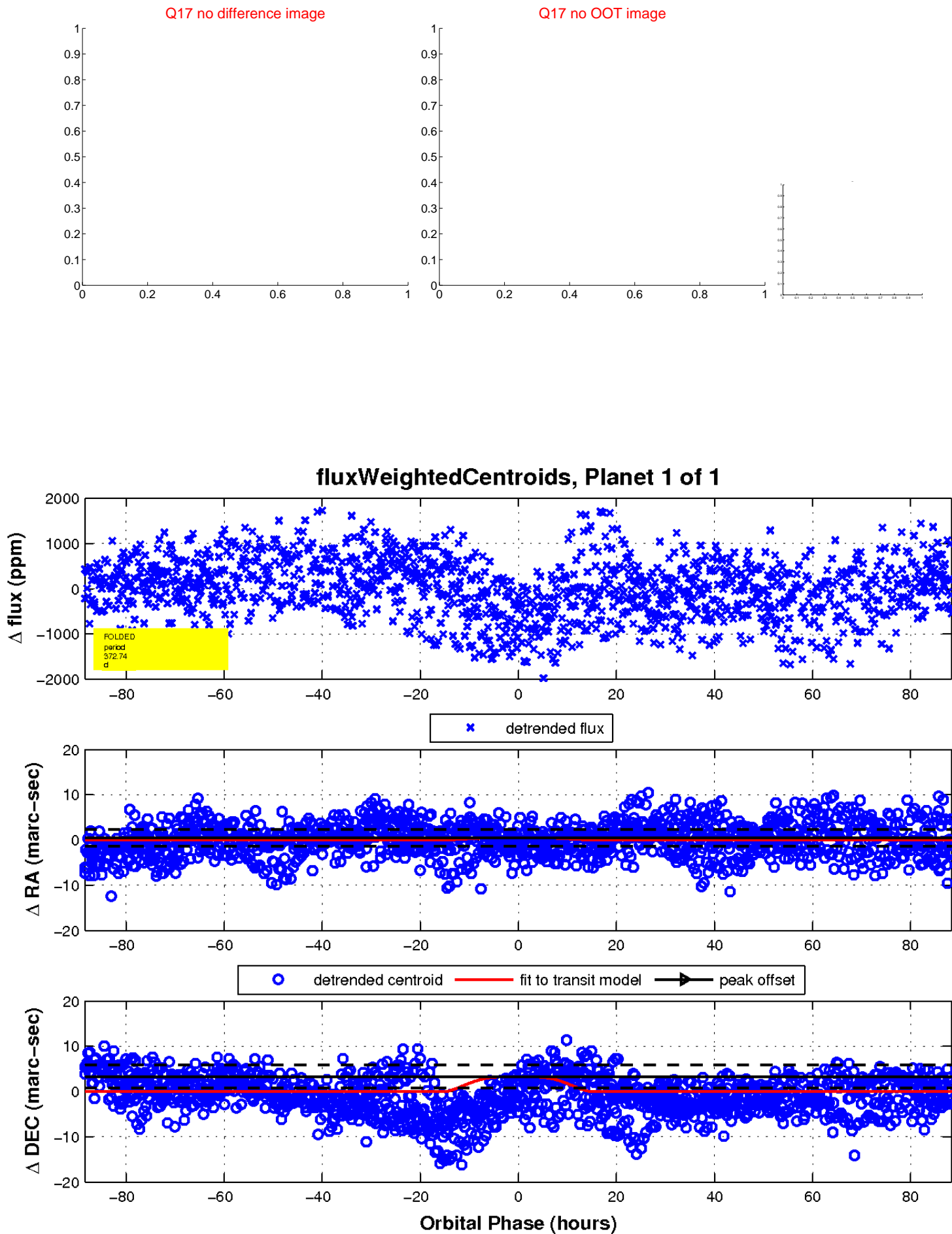
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



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



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



UKIRT Image

Declination

