

KIC 005276332

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})
005276332-01	OBS	7723.01	357.826962	255.208936	123.2	9.235	7.5	7.3	1.31	6131	1.65	2.09

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005276332-01	OBS	FP	0.27	1	0	0	0	ALL_TRANS_CHASES—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.

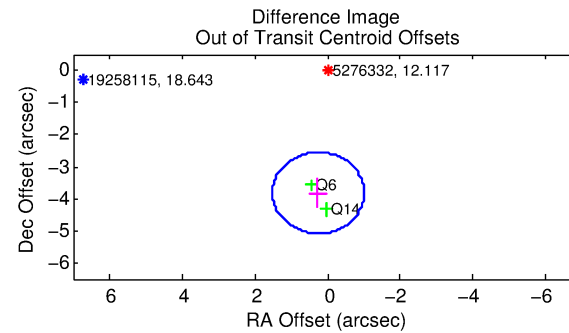
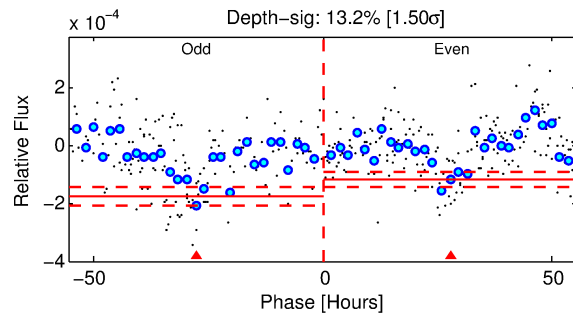
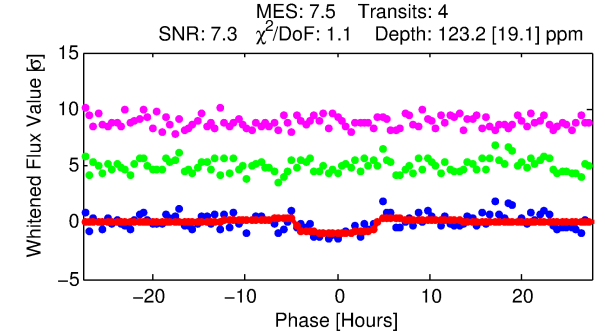
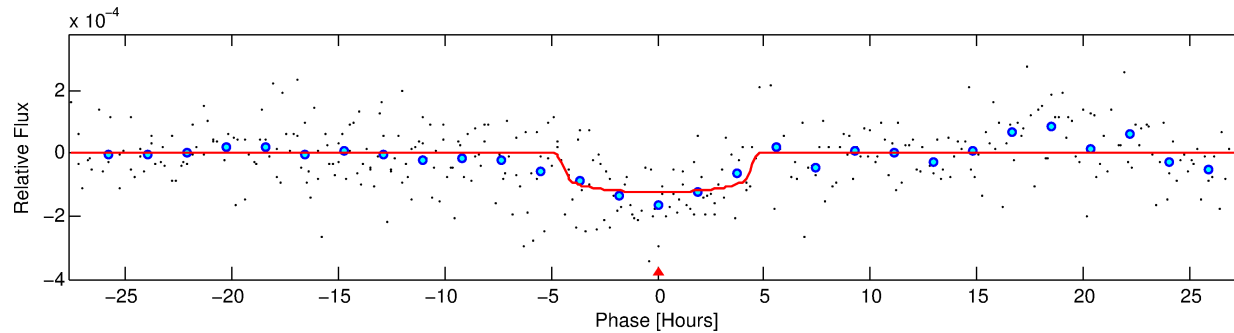
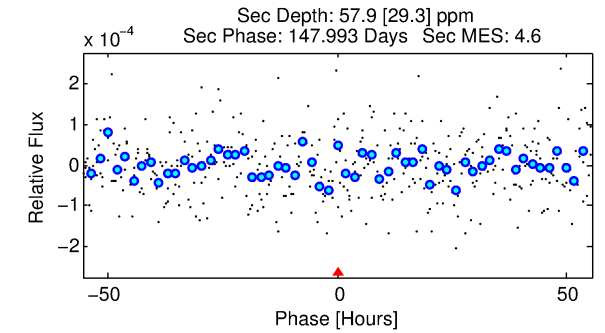
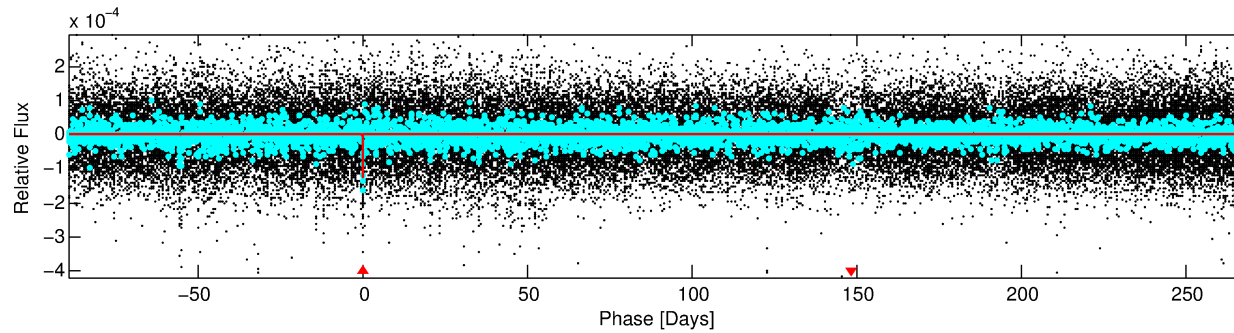
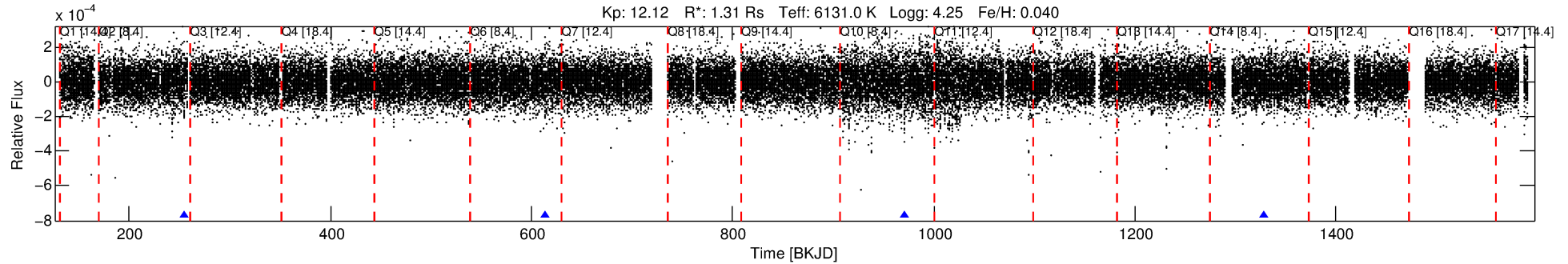
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005276332-01

No Significant Match Found

DV One-Page Summary

KIC: 5276332 Candidate: 1 of 1 Period: 357.827 d



DV Fit Results:

Period = 357.82696 [0.00926] d
Epoch = 255.2089 [0.0186] BKJD
Rp/R* = 0.0115 [0.0044]
a/R* = 164.04 [308.80]
b = 0.85 [0.64]
Seff = 2.09 [0.62]
Teq = 306 [23] K
Rp = 1.65 [0.73] Re
a = 1.0220 [0.1879] AU
Ag = 12203.43 [11663.98] [1.05σ]
Teff = 4980 [1155] K [4.05σ]

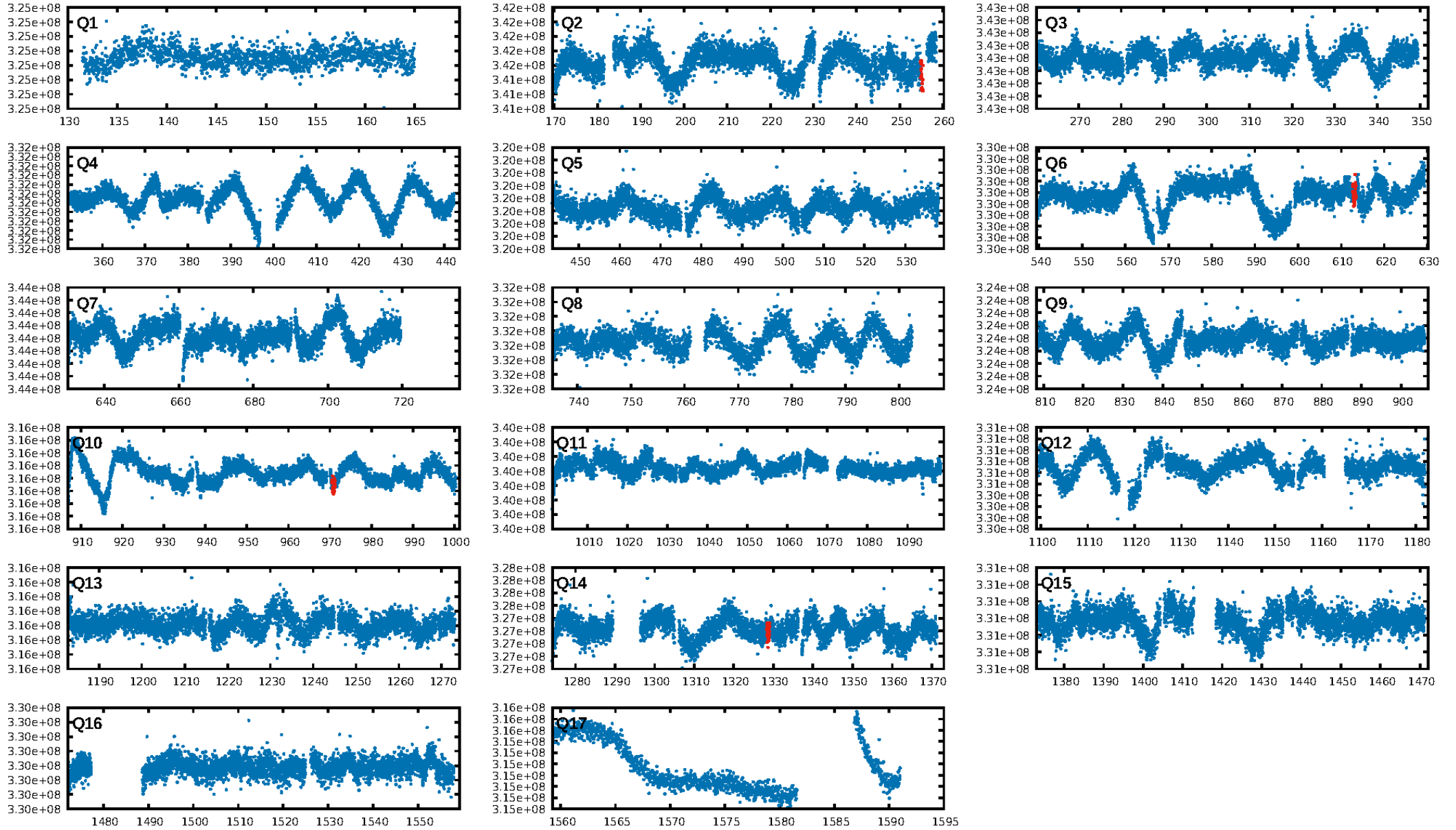
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 54.6%
ModelChiSquareGof-sig: 97.7%
Bootstrap-pfa: 4.66e-09
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: 0.9753
Centroid-sig: 17.8%
Centroid-so: 1.482 arcsec [1.04σ]
OotOffset-rm: 3.826 arcsec [9.08σ]
KicOffset-rm: 3.771 arcsec [7.42σ]
OotOffset-st: 2/0/0/0 [2]
KicOffset-st: 2/0/0/0 [2]
DiffImageQuality-fgm: 0.00 [0/2]
DiffImageOverlap-fno: 1.00 [2/2]

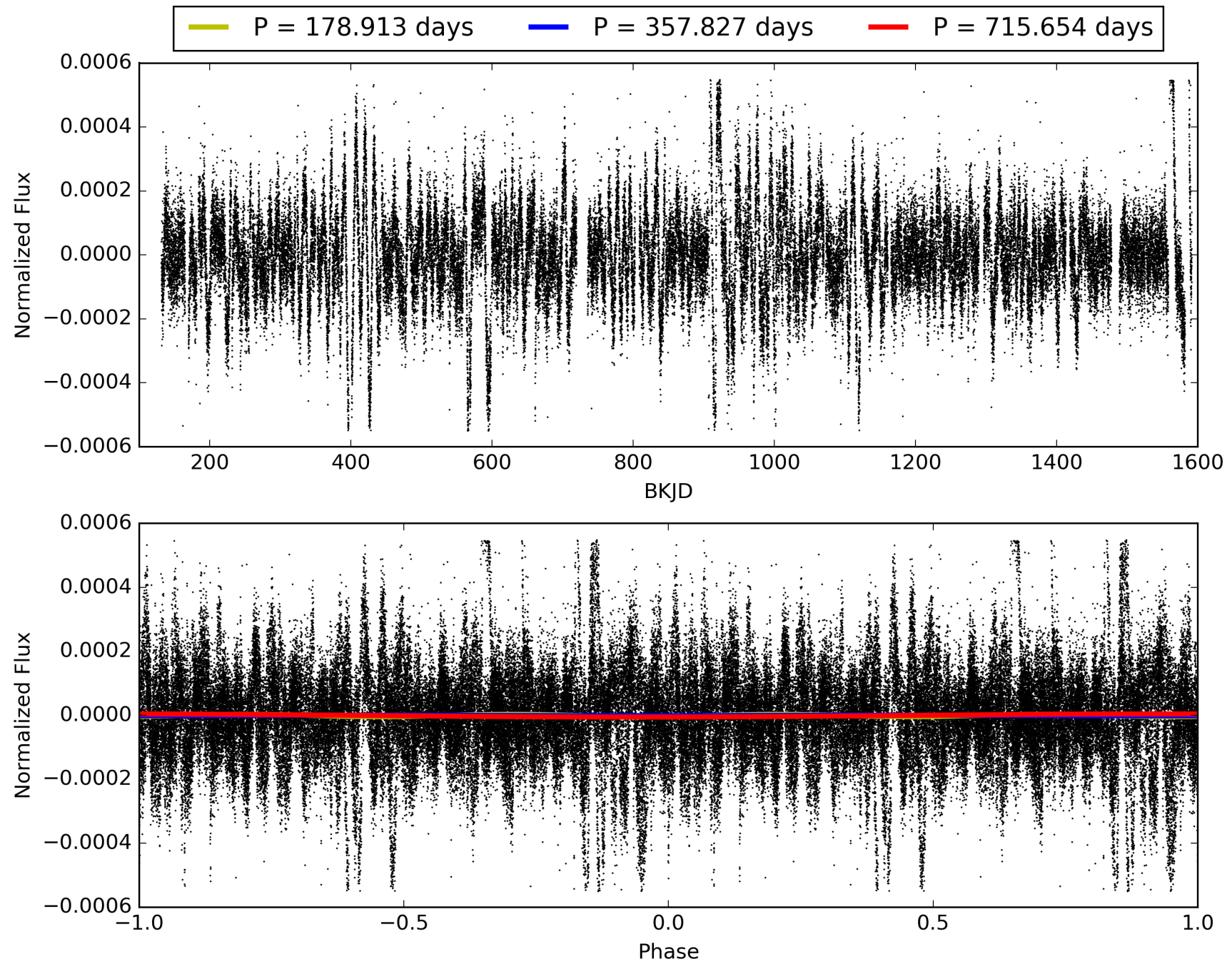
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 13:29:30 Z

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

TCE 005276332-01, PDC Light Curves

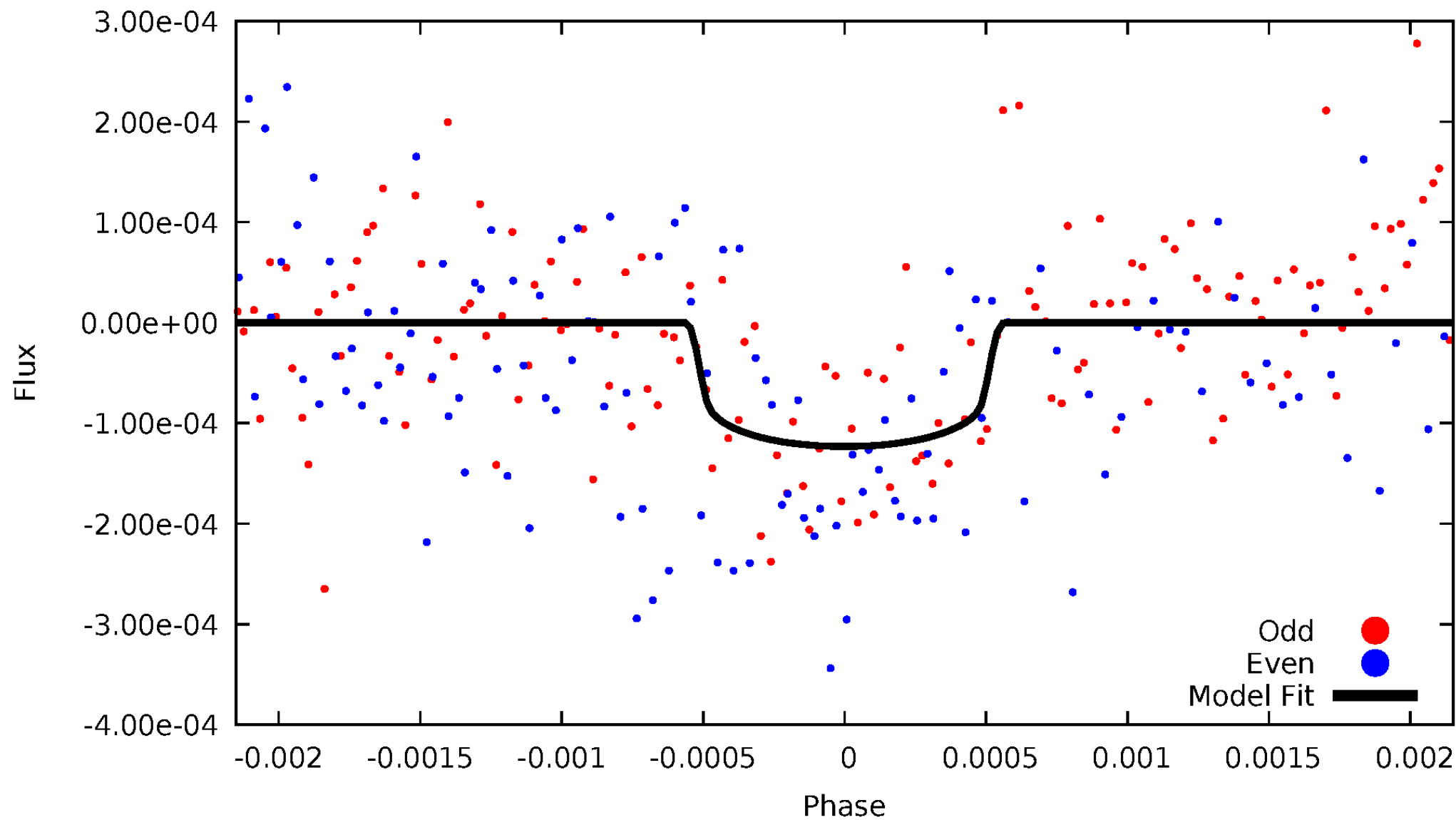


TCE 005276332-01



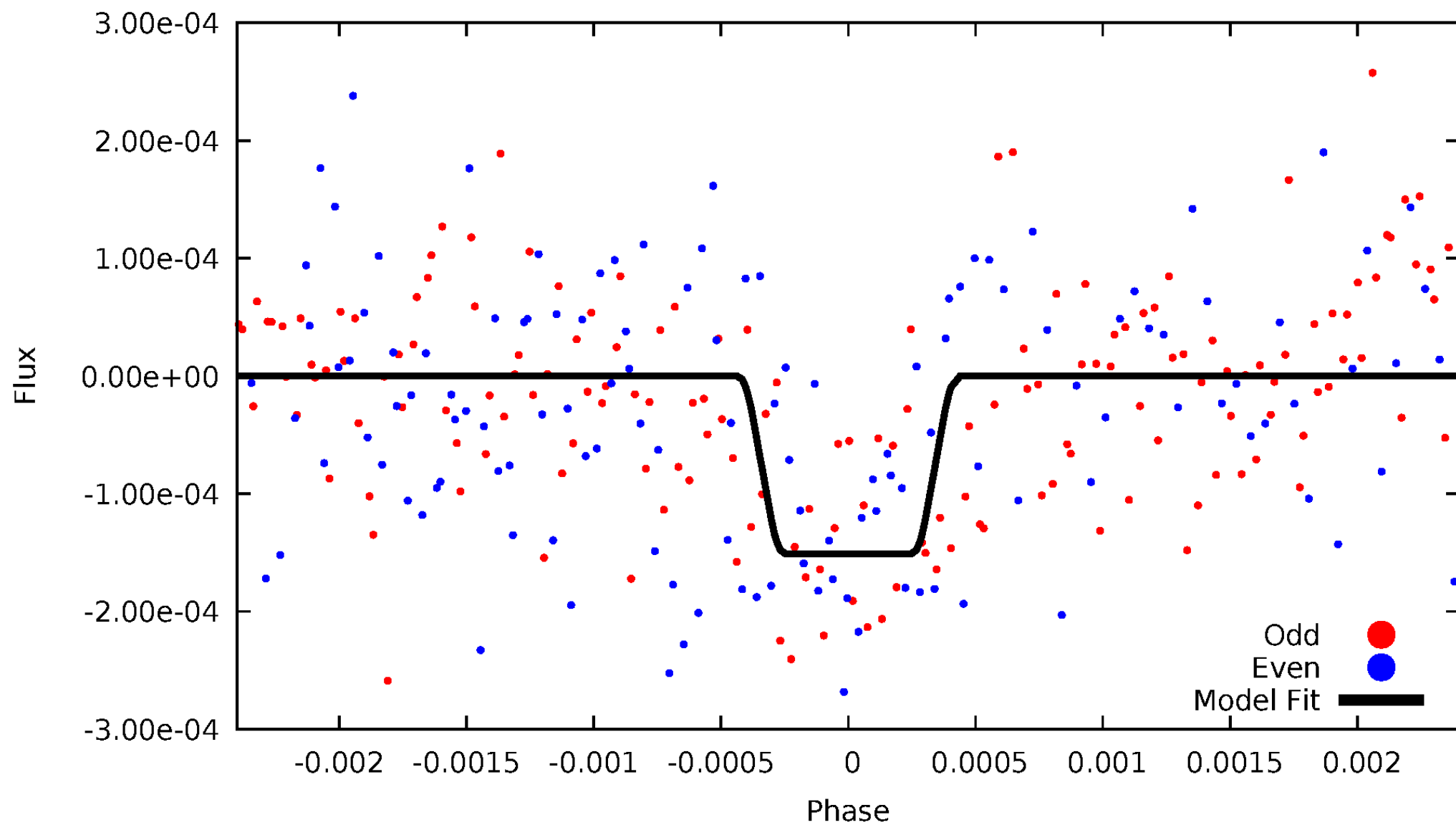
DV Odd/Even

TCE 005276332-01



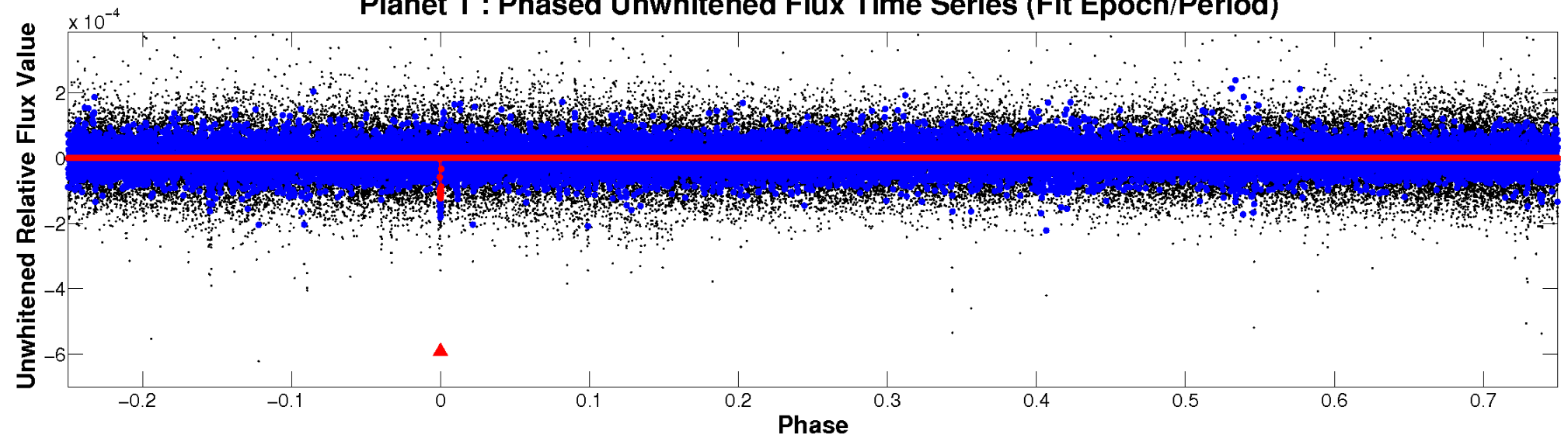
ALT Odd/Even

TCE 005276332-01

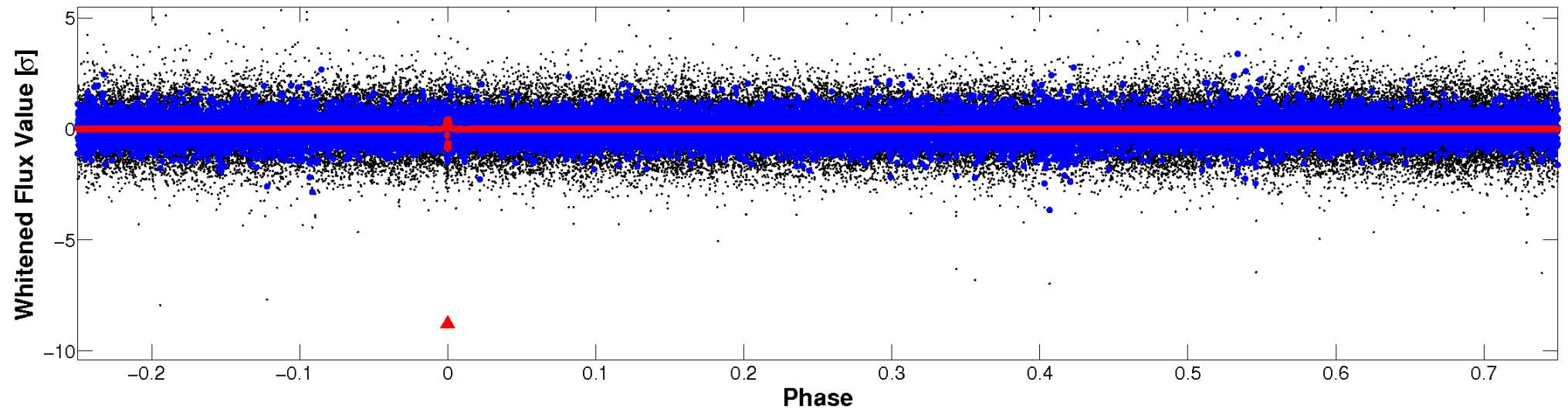


Non-Whitened Vs. Whitened Light Curve

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

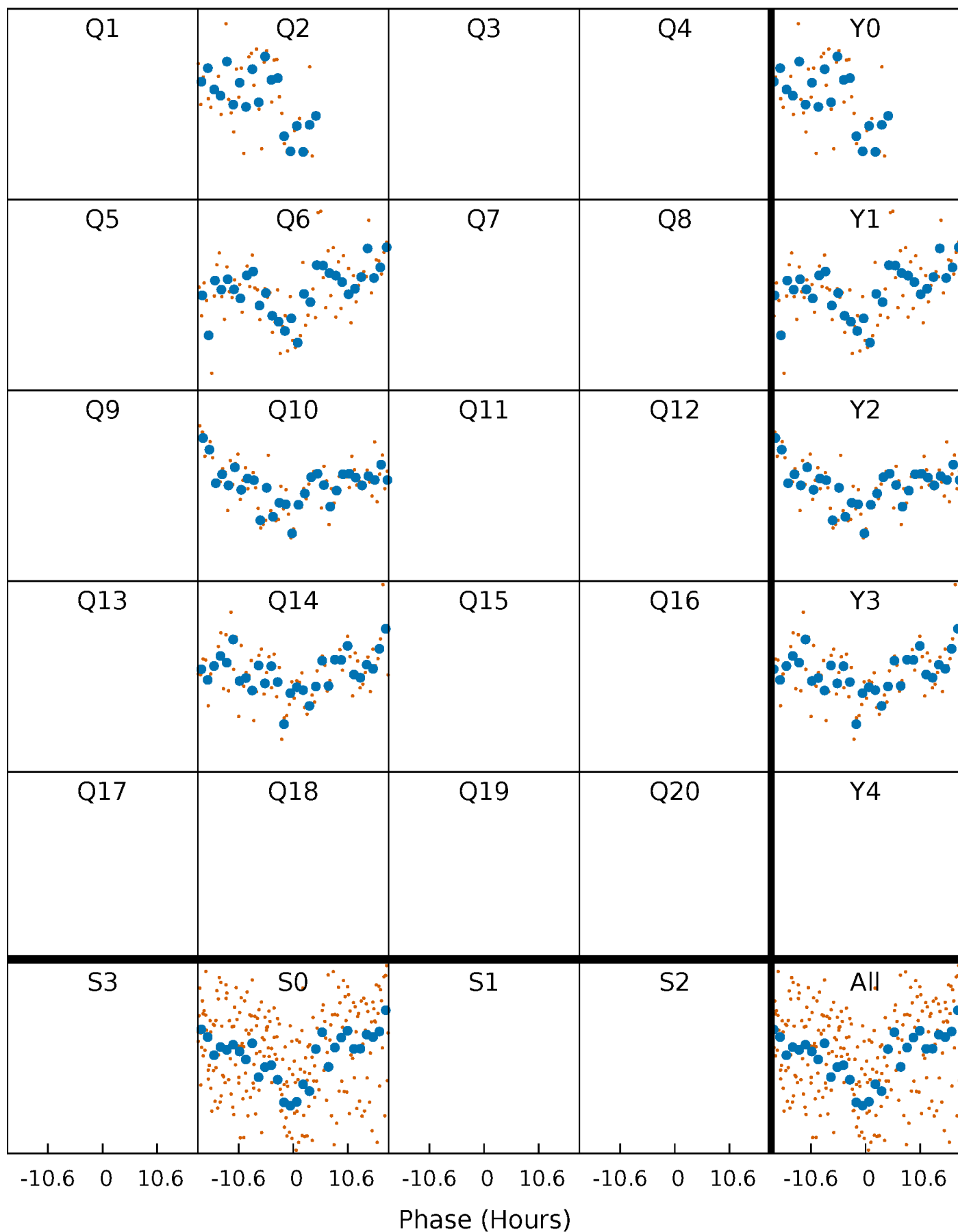


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



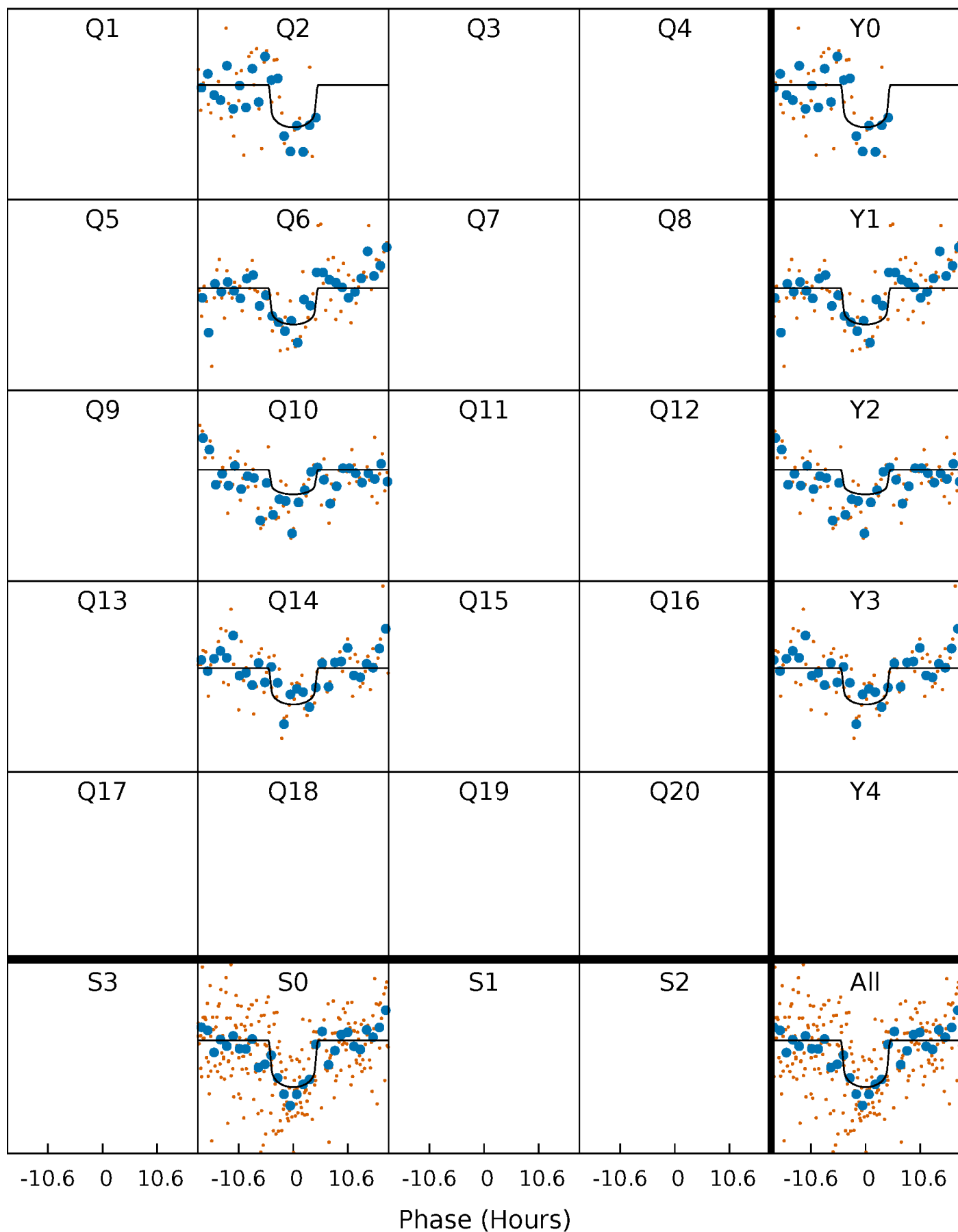
PDC Quarter-Phased Transit Curves

TCE 005276332-01 P=357.826962 Days $T_0=255.208935$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 005276332-01 P=357.826962 Days $T_0=255.208935$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

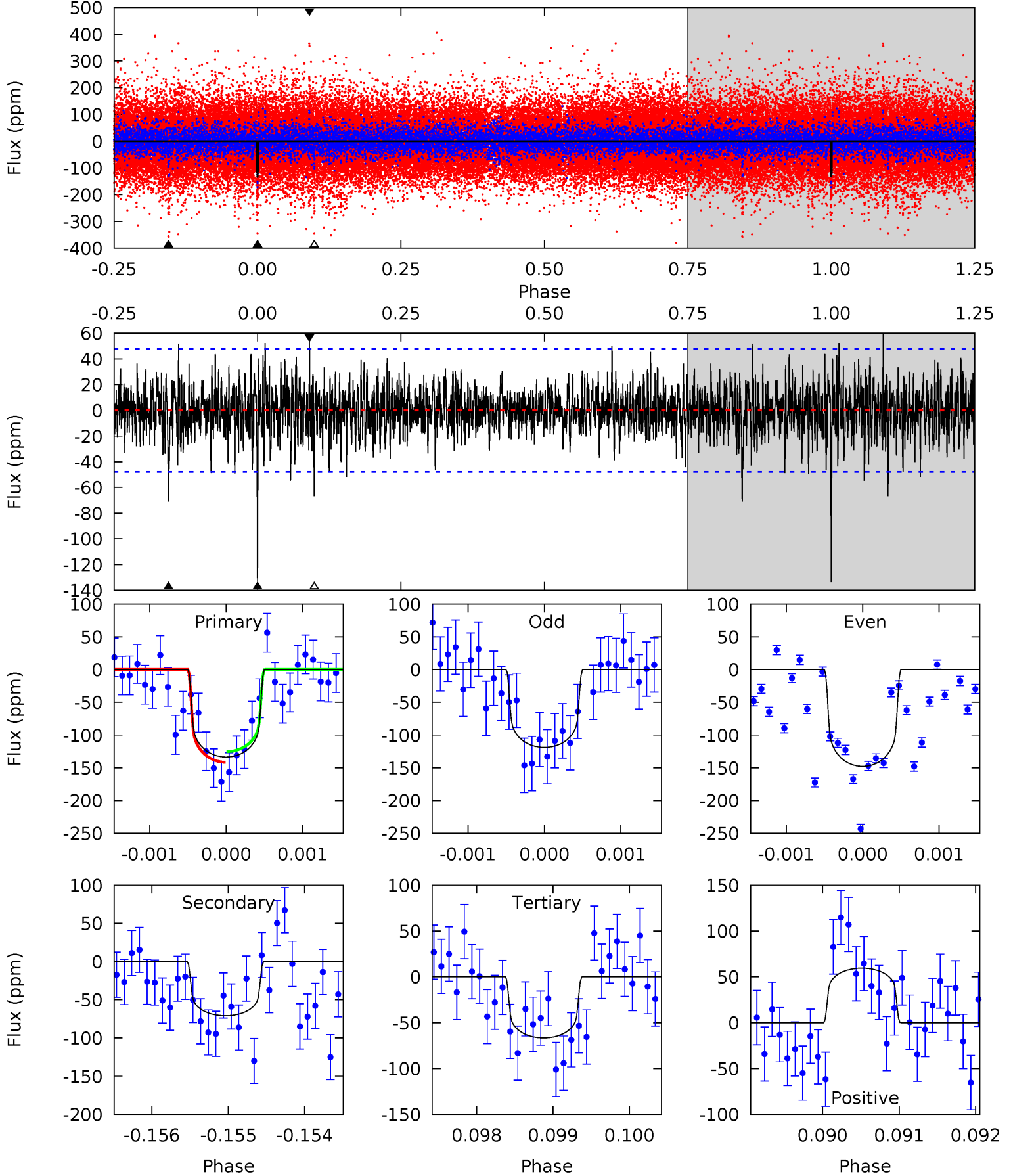
TCE 005276332-01 P=357.825692 Days $T_0=255.199991$ (BKJD)



DV Model-Shift Uniqueness Test

005276332-01, P = 357.826962 Days, E = 255.208935 Days

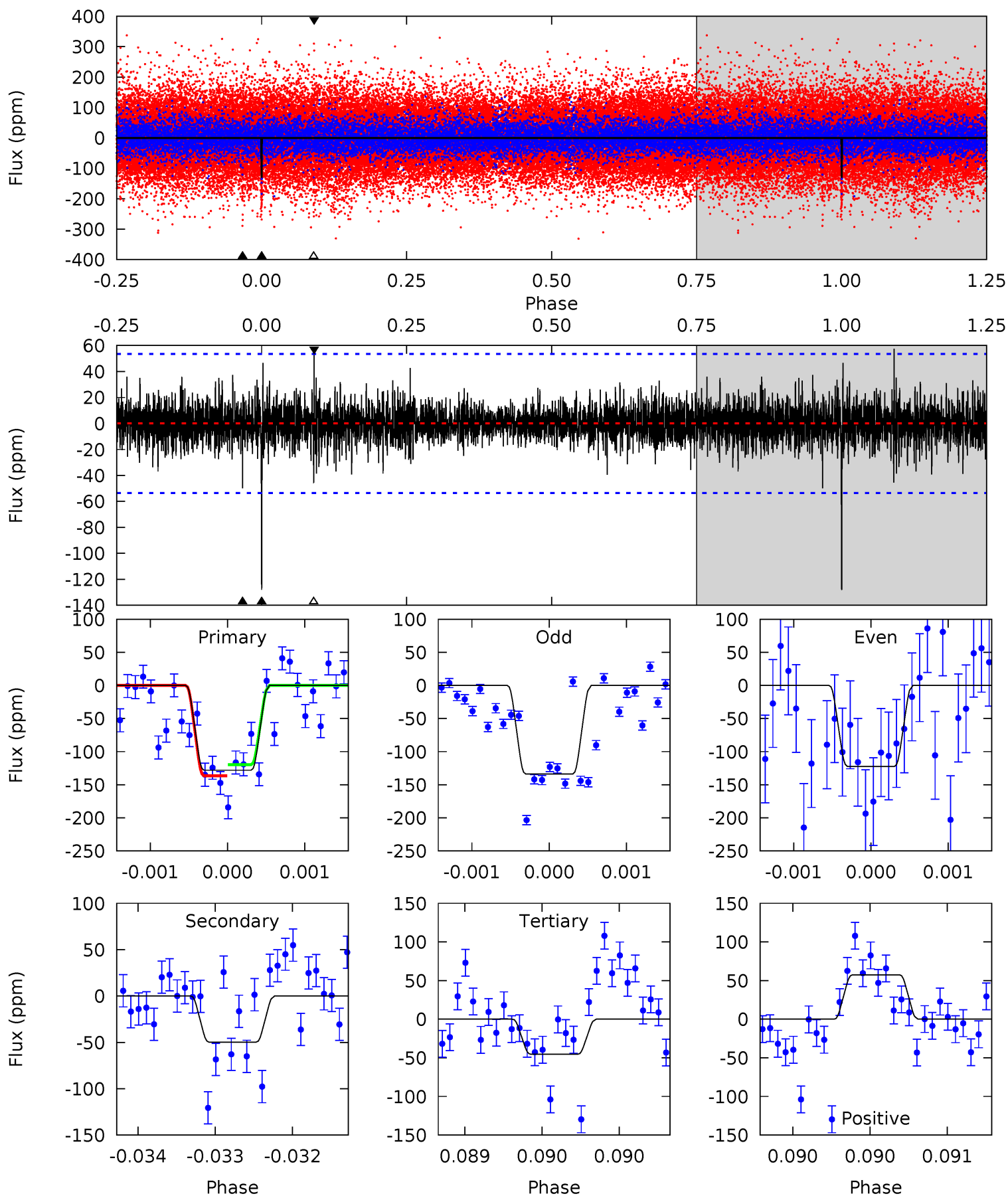
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
15.1	8.03	7.56	6.74	5.43	3.26	1.61	7.58	8.39	0.47	1.29	1.64	1.05	0.31	0.92



Alt Model-Shift Uniqueness Test

005276332-01, P = 357.825692 Days, E = 255.199991 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.1	5.10	4.65	5.89	5.49	3.35	1.08	8.48	7.25	0.45	-0.79	0.60	1.03	0.31	0.86



Stellar Parameters For KIC 005276332

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6131^{+167}_{-204}	$4.248^{+0.145}_{-0.145}$	$0.040^{+0.250}_{-0.300}$	$1.312^{+0.288}_{-0.236}$	$1.109^{+0.143}_{-0.143}$	$0.692^{+0.494}_{-0.291}$
	+3%/-3%	+3%/-3%	+625%/-750%	+22%/-18%	+13%/-13%	+71%/-42%
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 005276332-01 / KOI 7723.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-71 ± 9	$1.69^{+0.64}_{-0.64}$	426^{+28}_{-25}	5231^{+1174}_{-664}	14440^{+20950}_{-6896}
Alt.	-50 ± 10	$1.76^{+0.66}_{-0.61}$	429^{+27}_{-27}	4739^{+979}_{-528}	9298^{+12149}_{-4509}

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

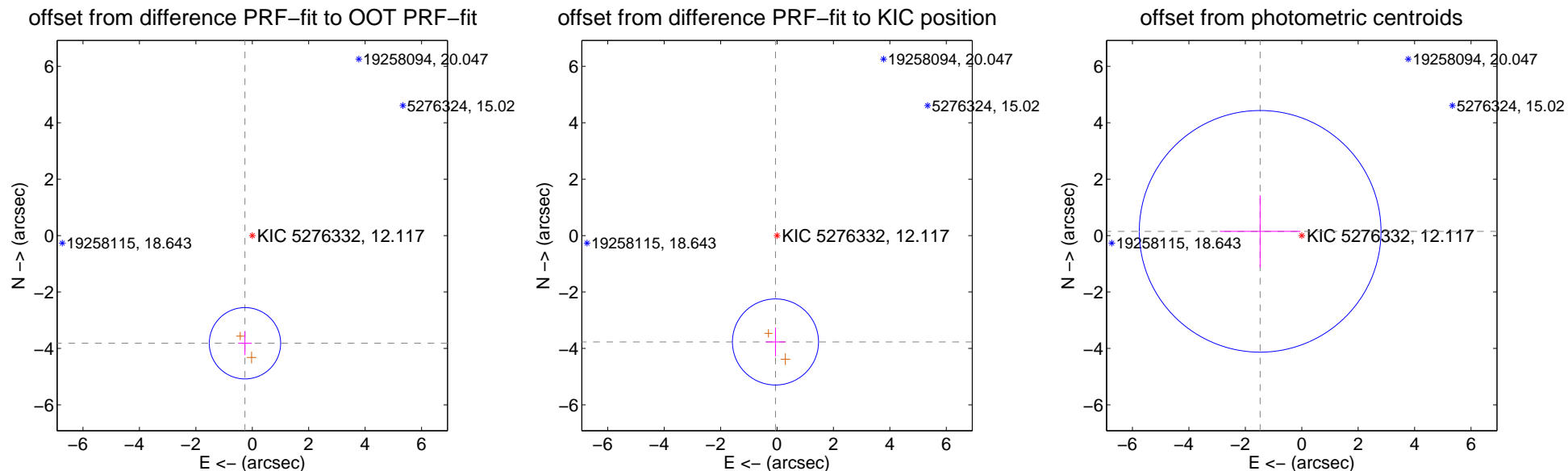
DV Centroid Data

Supplemental centroid analysis for 005276332-01. Kepler magnitude: 12.12. Transit SNR 7.27

There are 0 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.33 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	3.826 ± 0.421	9.08	0.259 ± 0.241	-3.817 ± 0.422
PRF-fit source offset from KIC position	3.771 ± 0.509	7.42	0.054 ± 0.351	-3.771 ± 0.509
photometric centroid source offset	1.48 ± 1.43	1.04	1.47 ± 1.43	0.15 ± 1.28

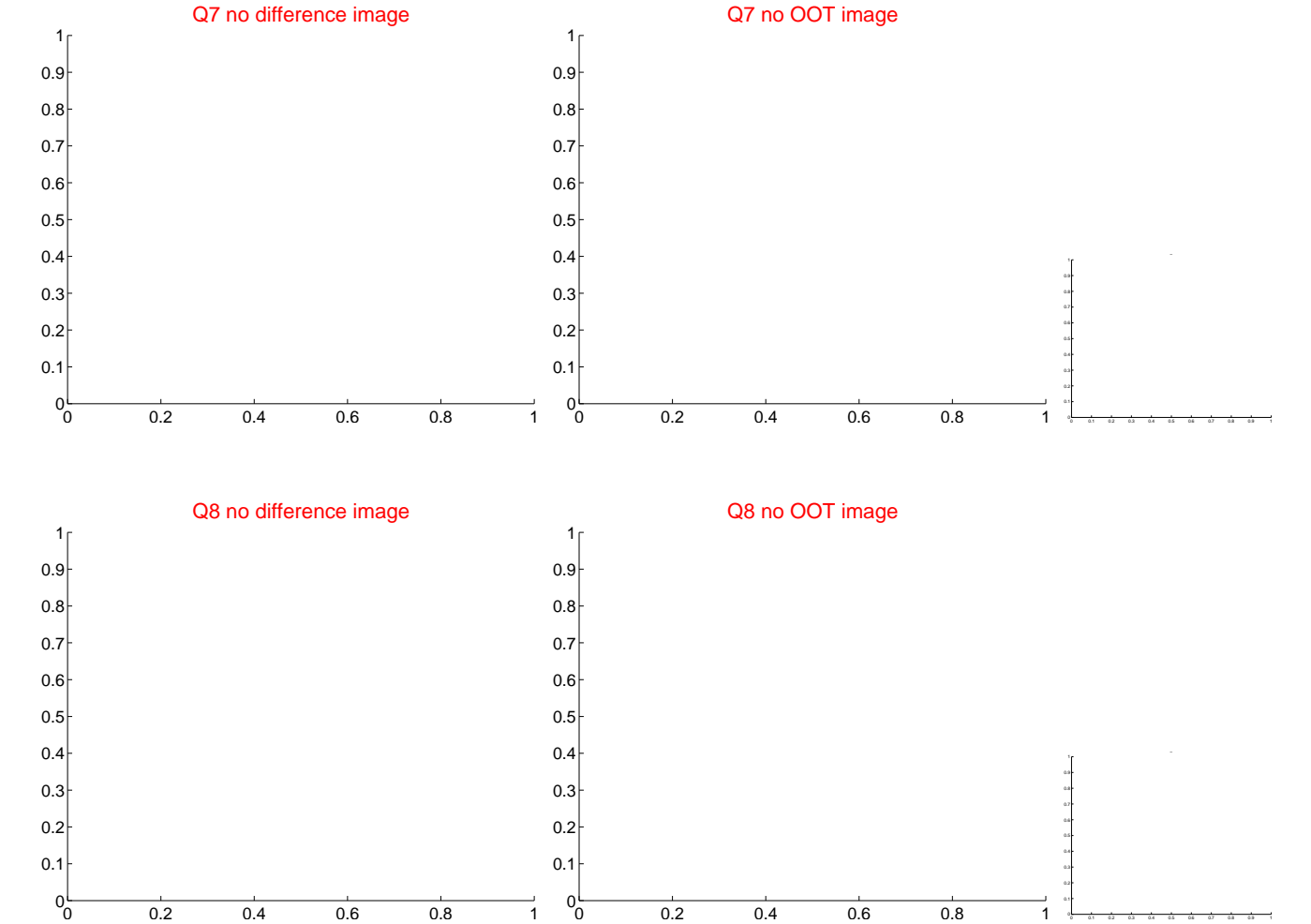
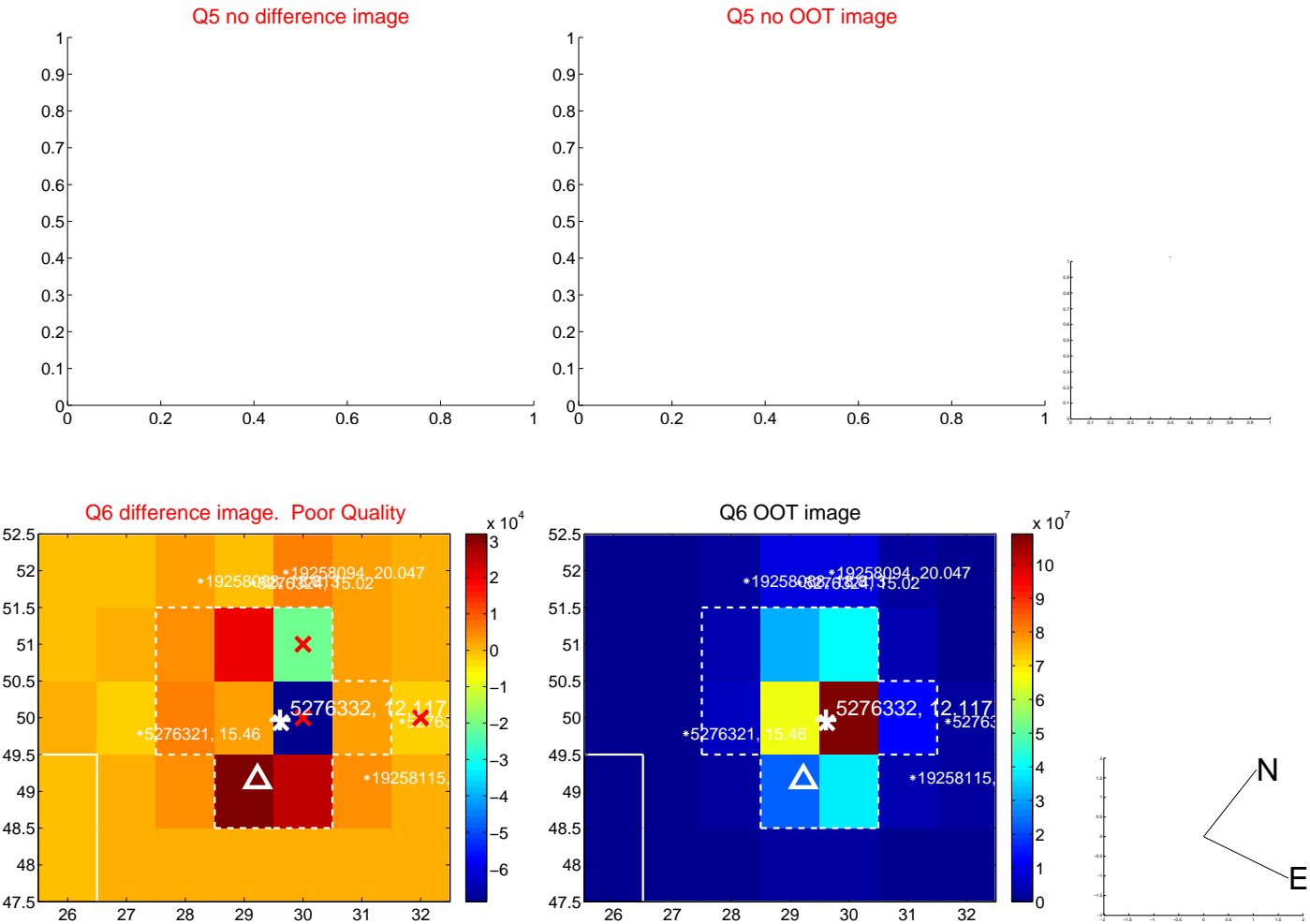


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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



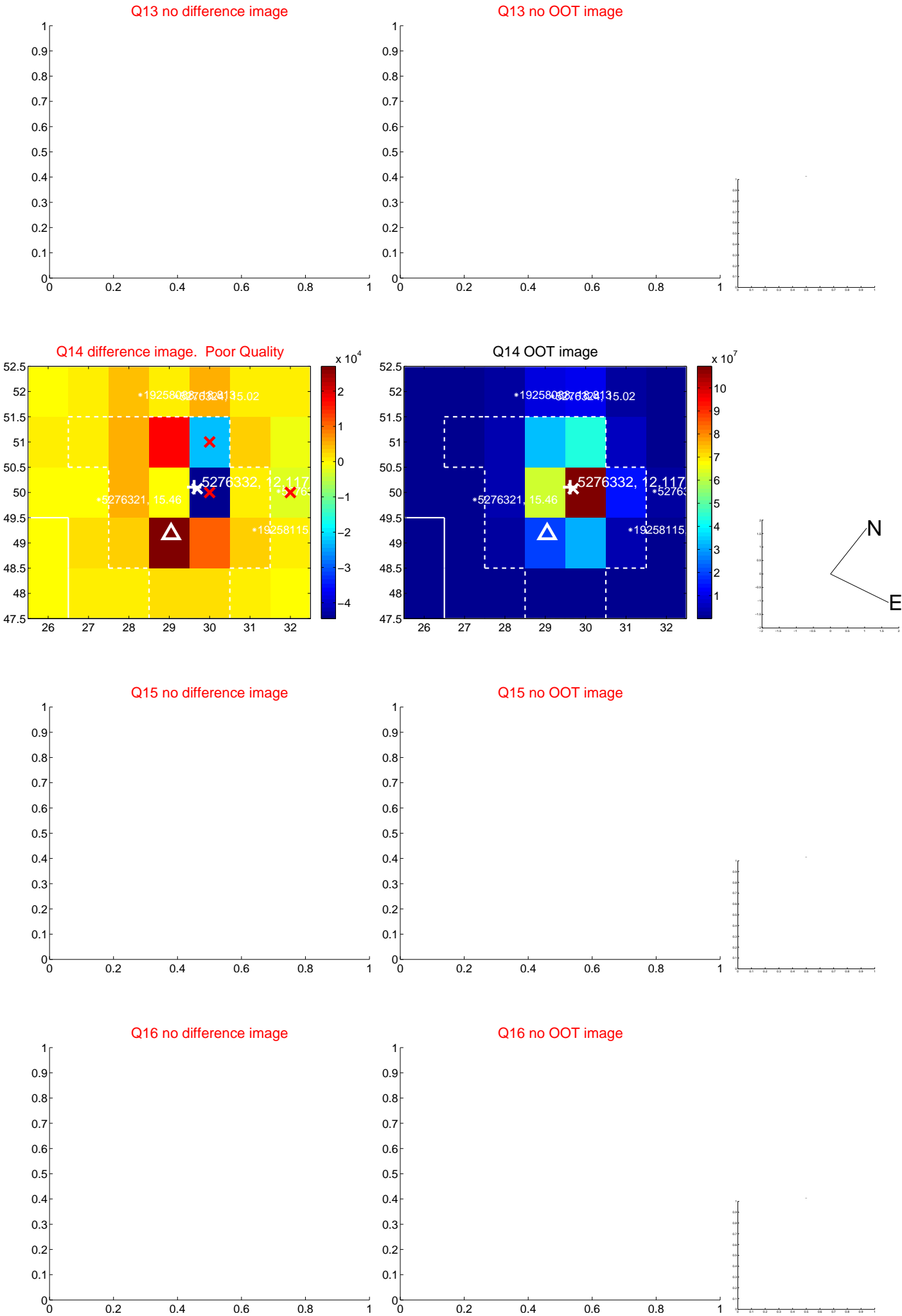
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



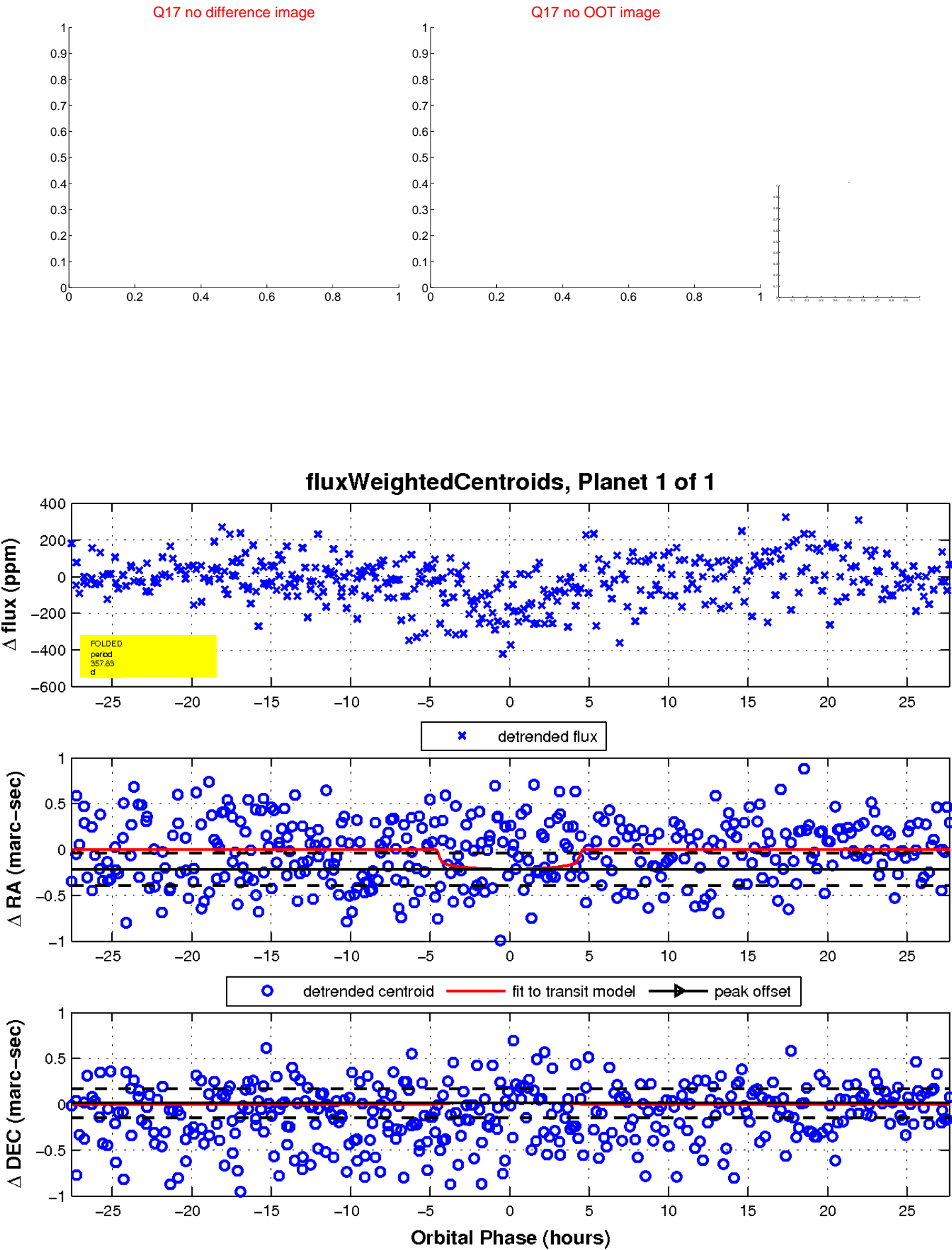
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

