

KIC 005957288

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})
005957288-01	OBS	No	361.632367	154.546024	1013.2	31.463	8.2	9.2	1.11	5730	6.83	1.36

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005957288-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE—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.

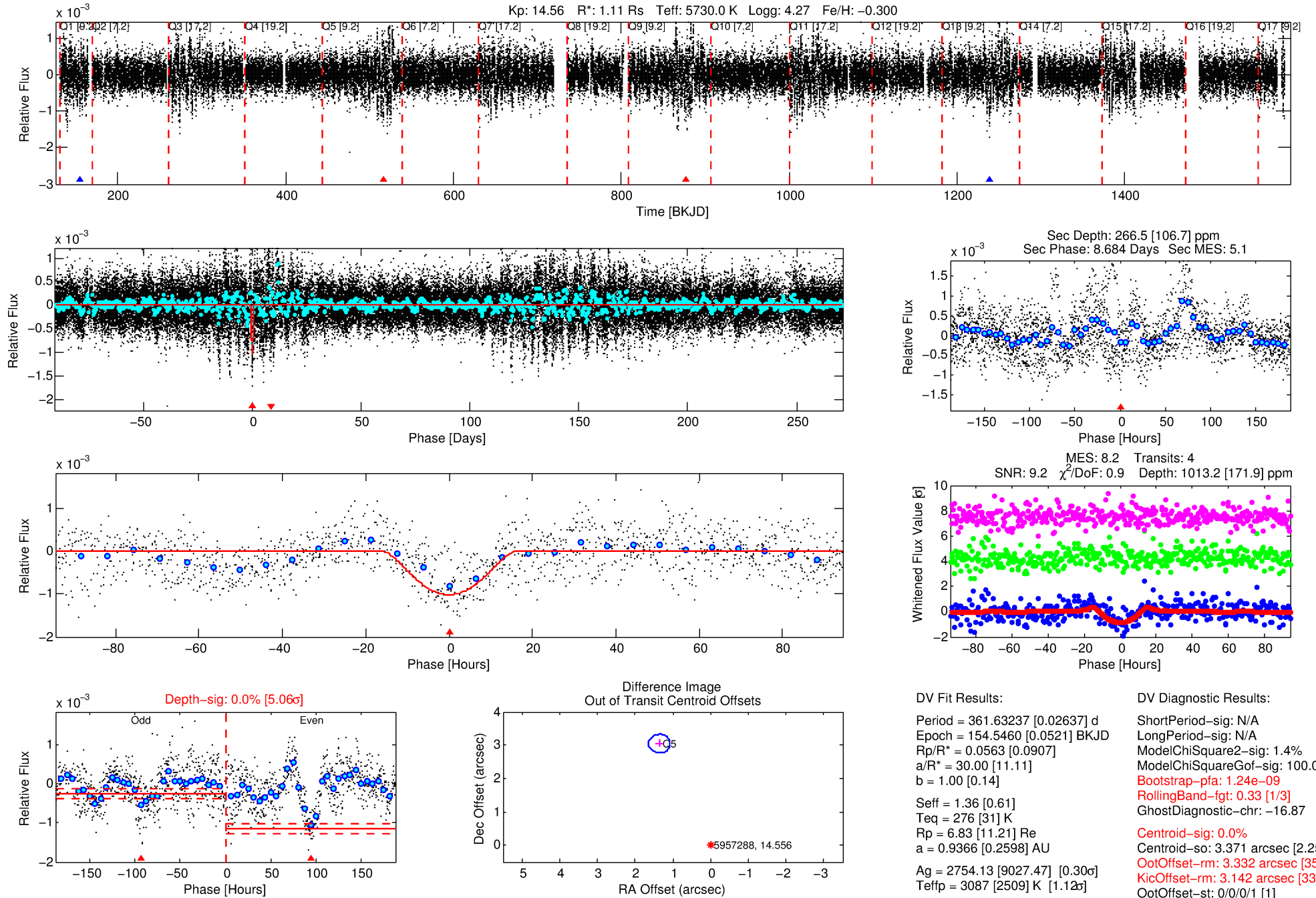
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005957288-01

No Significant Match Found

DV One-Page Summary

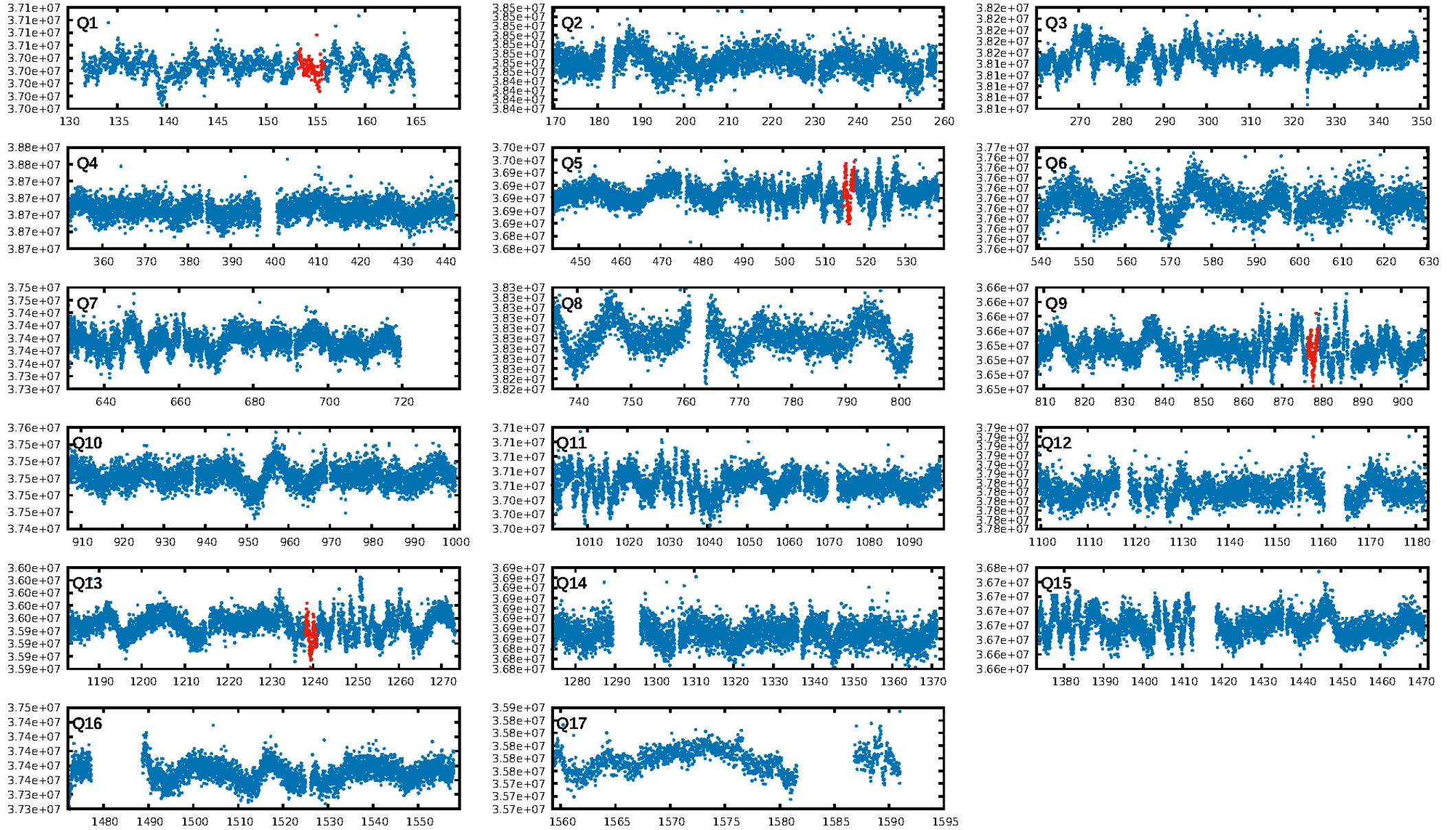
KIC: 5957288 Candidate: 1 of 1 Period: 361.632 d



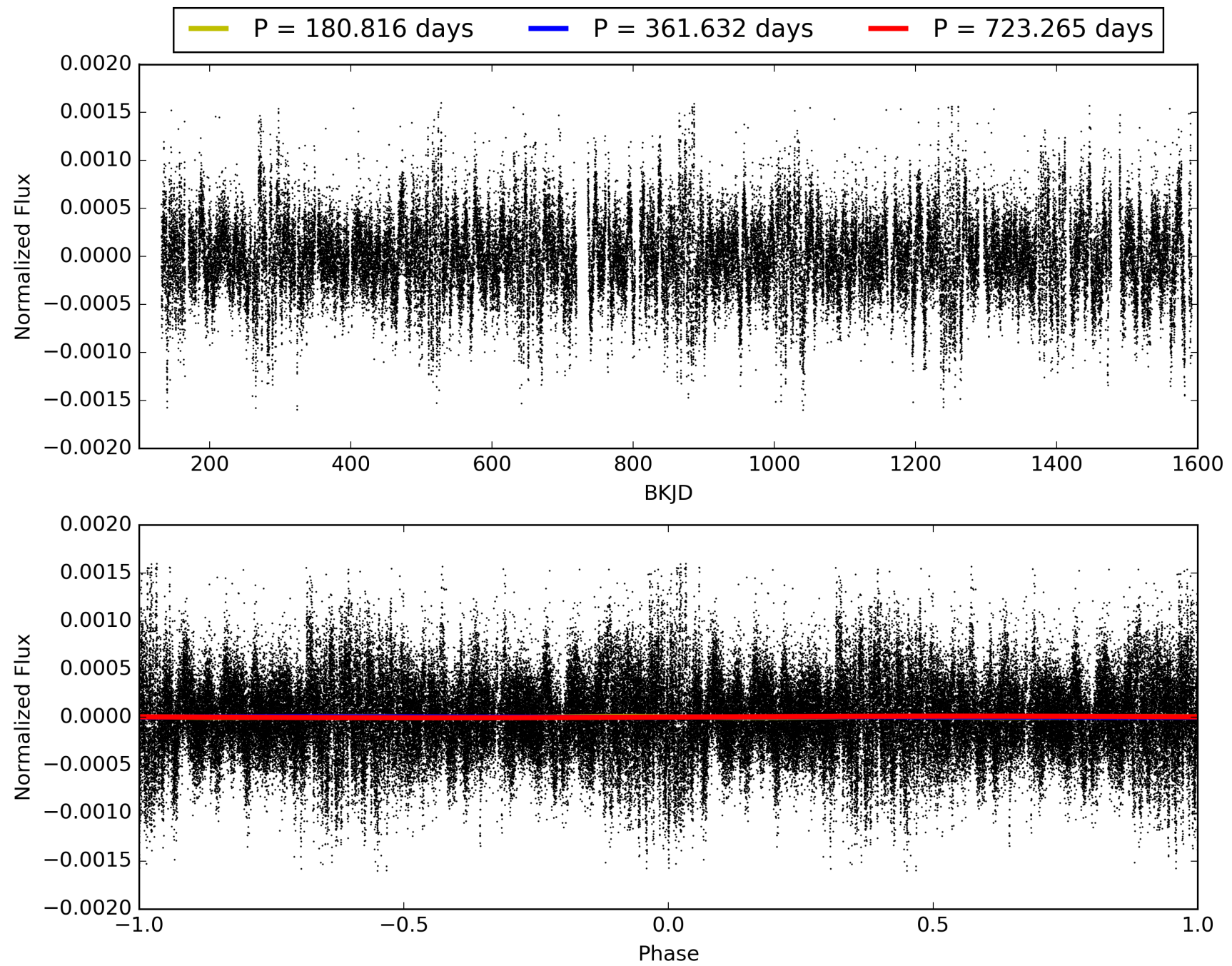
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 16:24:51 Z

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

TCE 005957288-01, PDC Light Curves

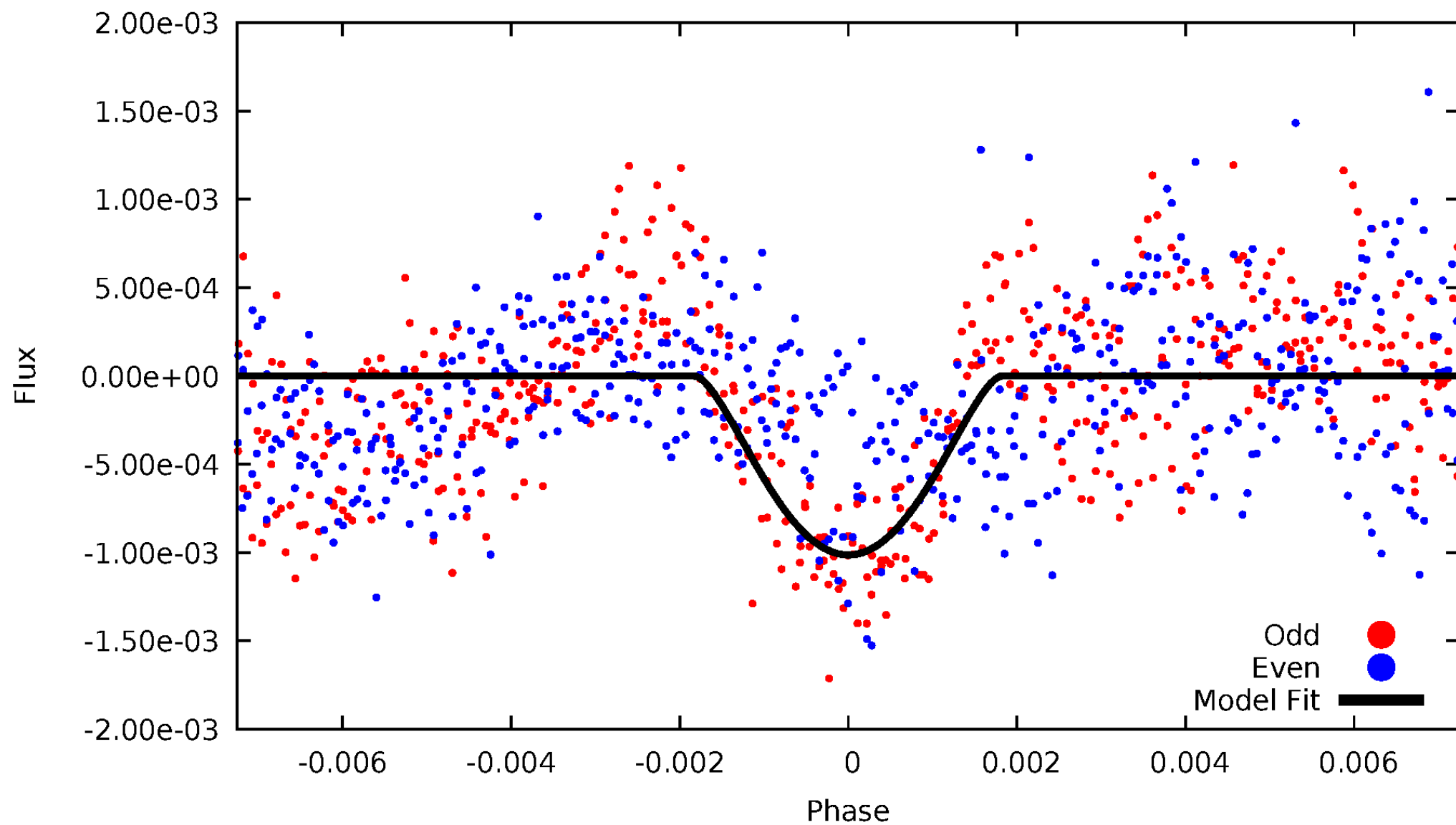


TCE 005957288-01



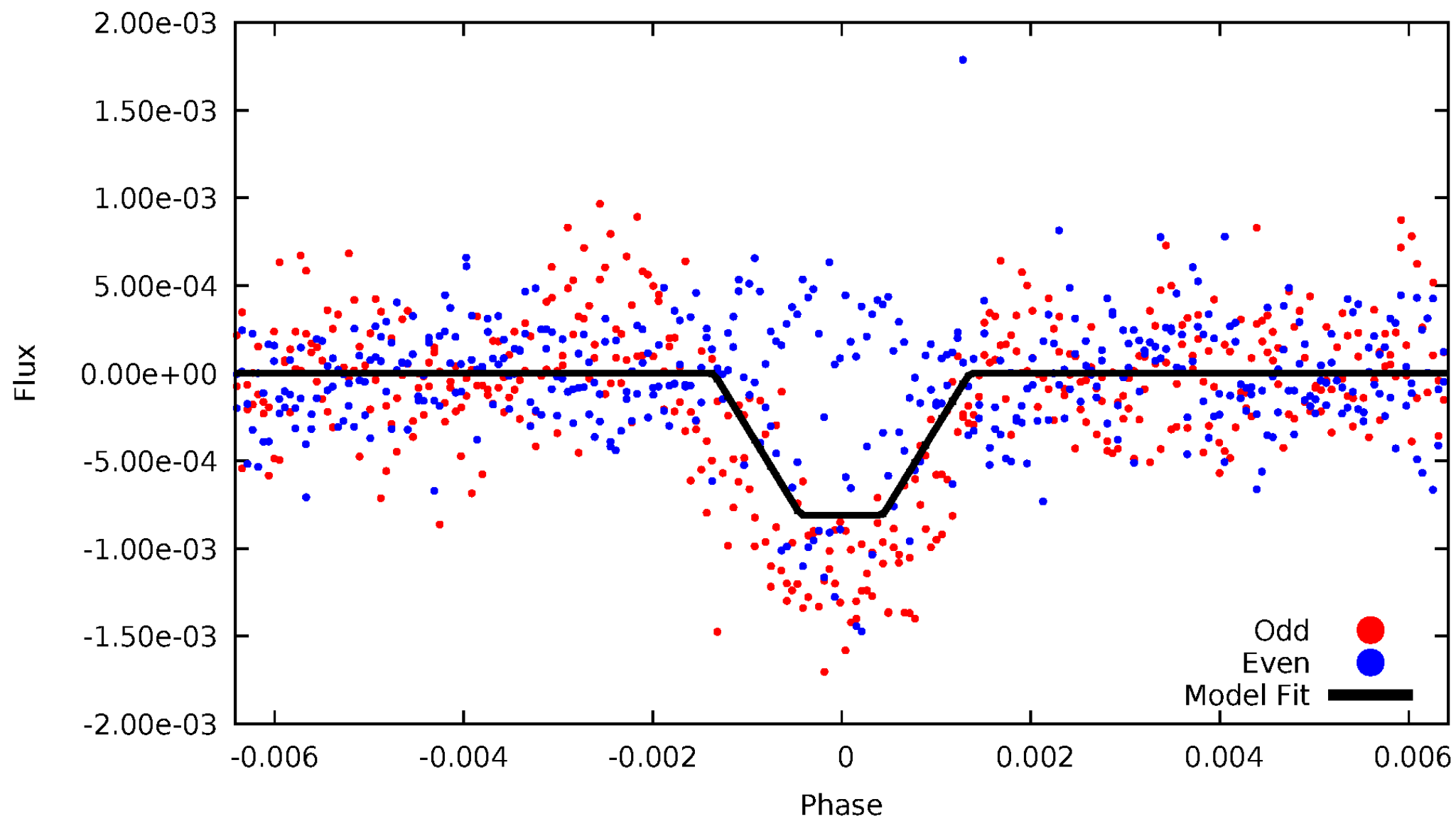
DV Odd/Even

TCE 005957288-01



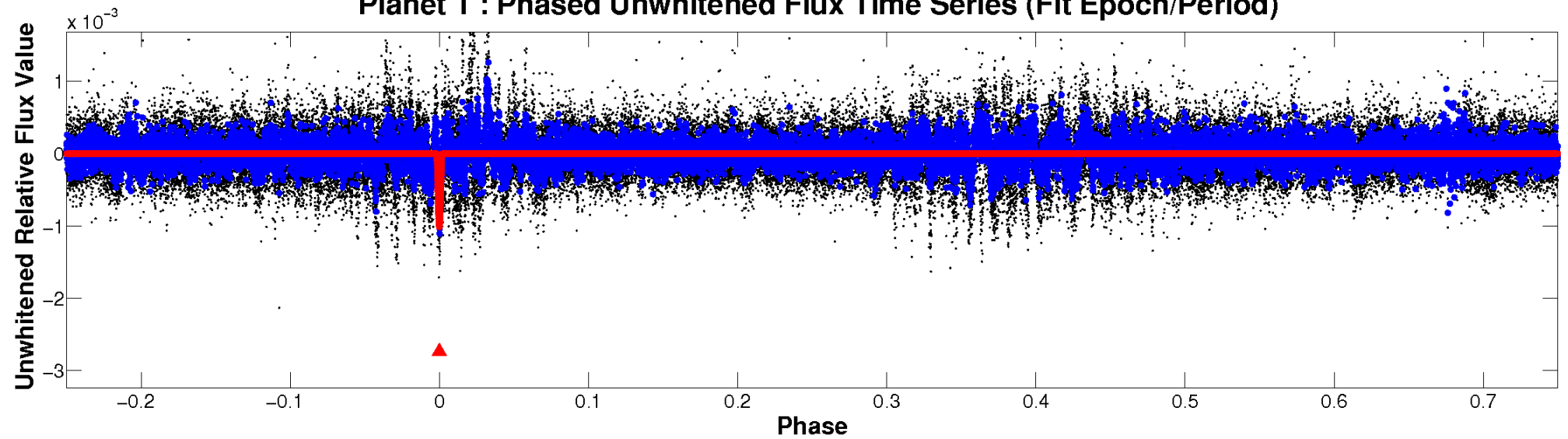
ALT Odd/Even

TCE 005957288-01

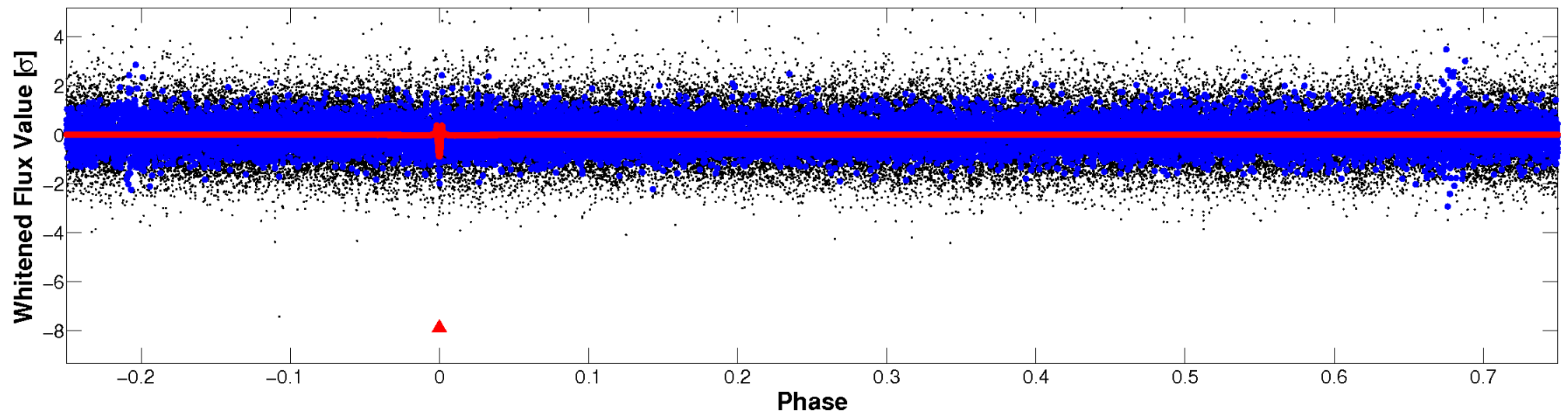


Non-Whitened Vs. Whitened Light Curve

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

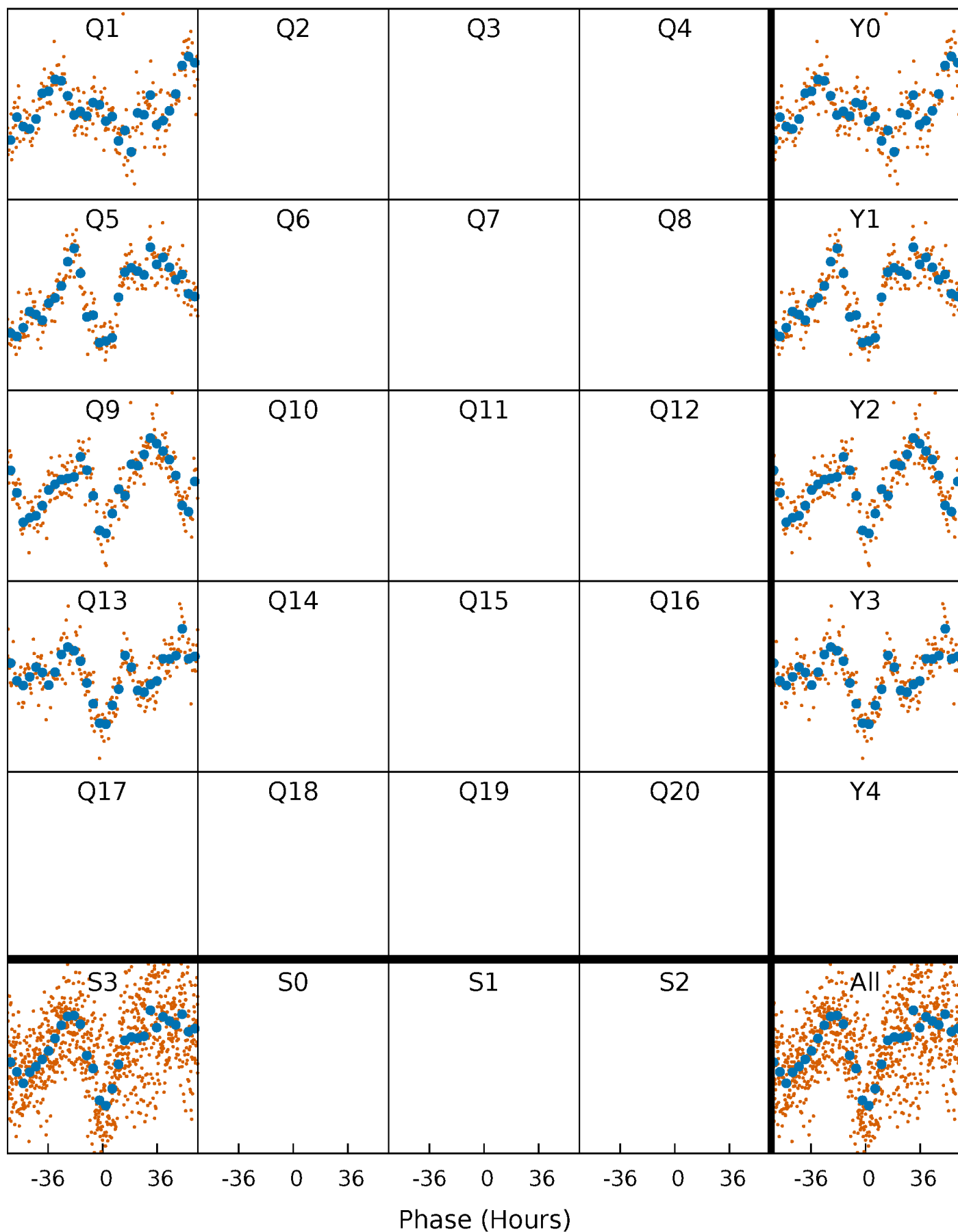


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



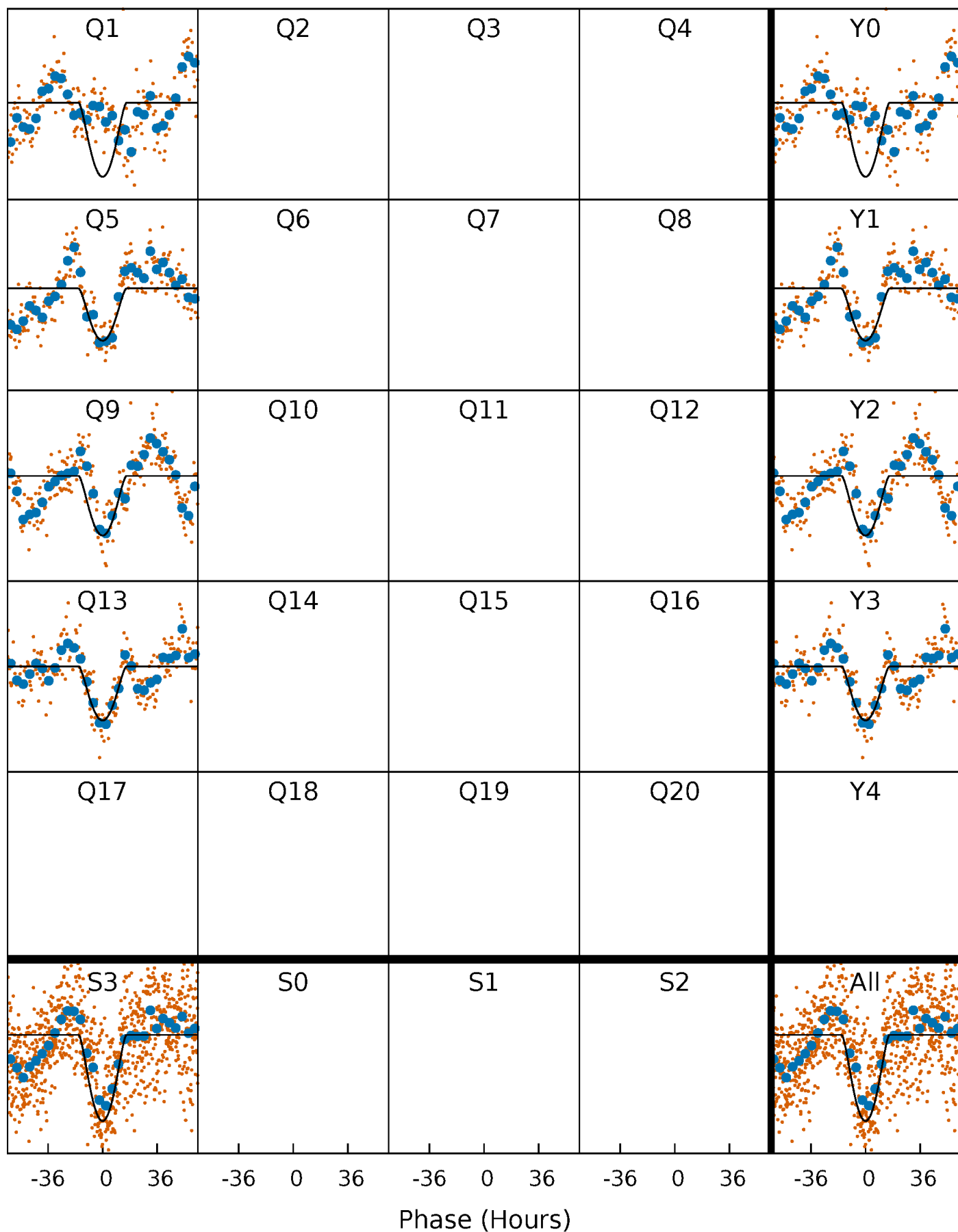
PDC Quarter-Phased Transit Curves

TCE 005957288-01 P=361.632367 Days $T_0=154.546024$ (BKJD)



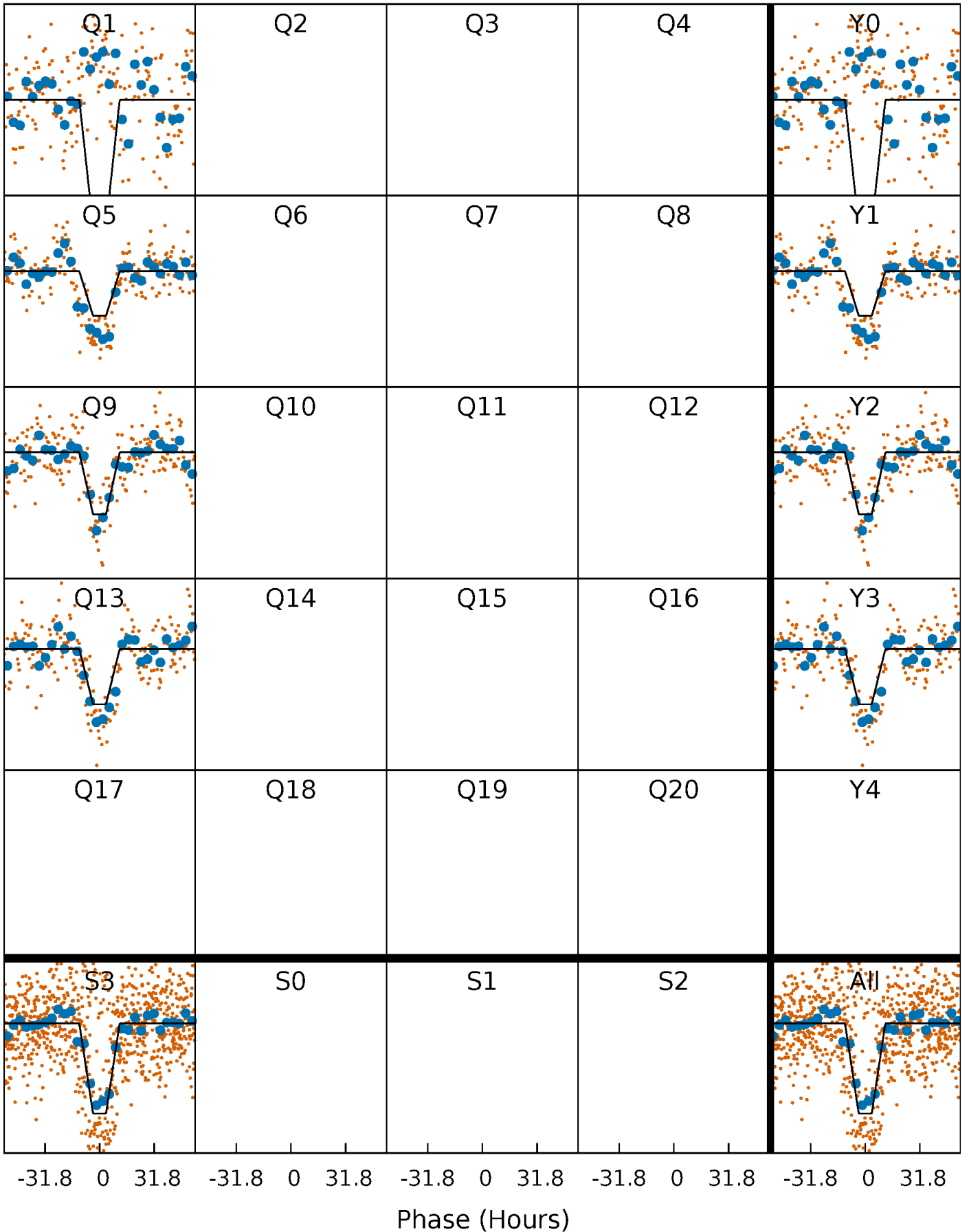
DV Quarter-Phased Transit Curves

TCE 005957288-01 P=361.632367 Days $T_0=154.546024$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

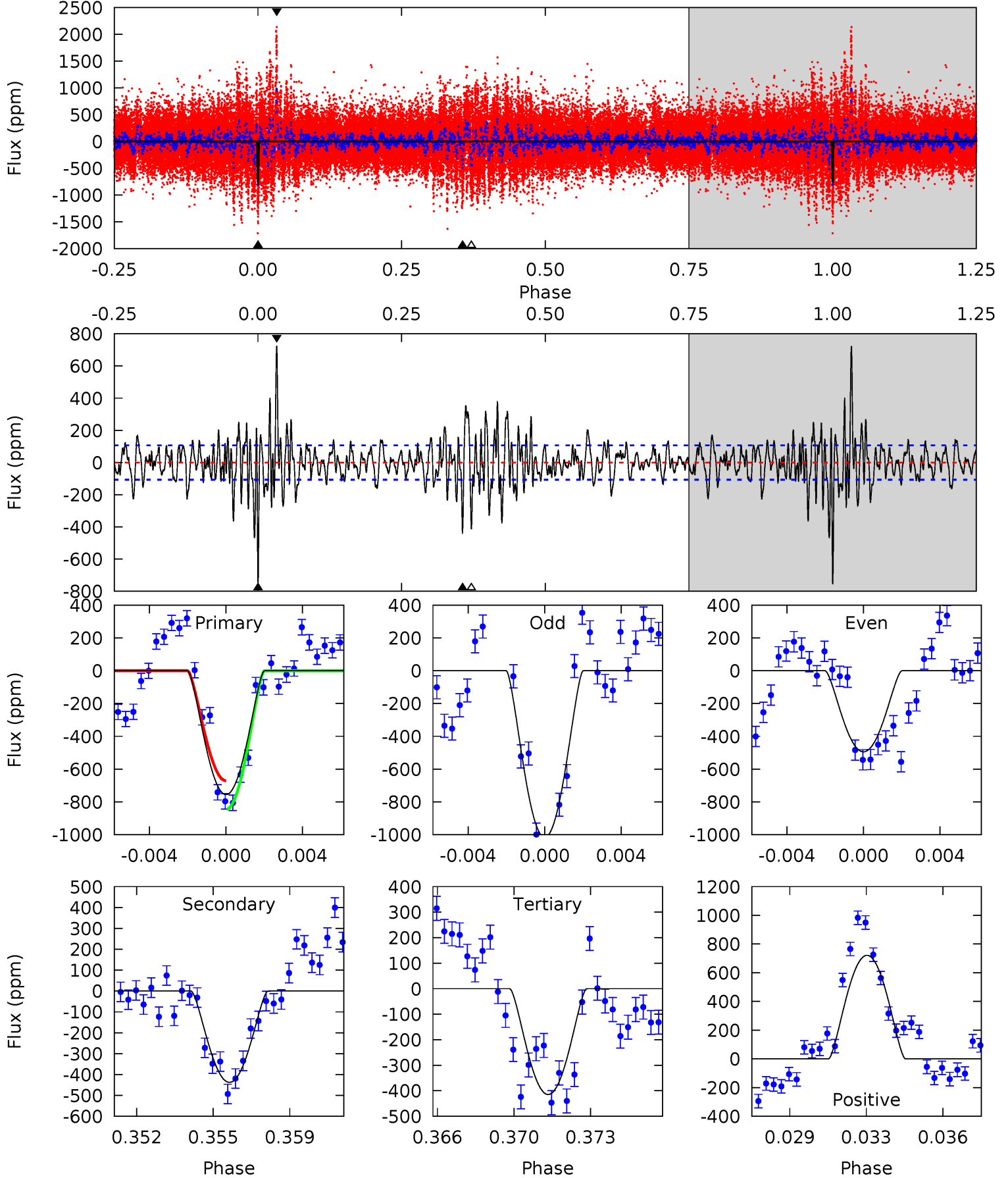
TCE 005957288-01 P=361.592278 Days $T_0=154.650461$ (BKJD)



DV Model-Shift Uniqueness Test

005957288-01, P = 361.632367 Days, E = 154.546024 Days

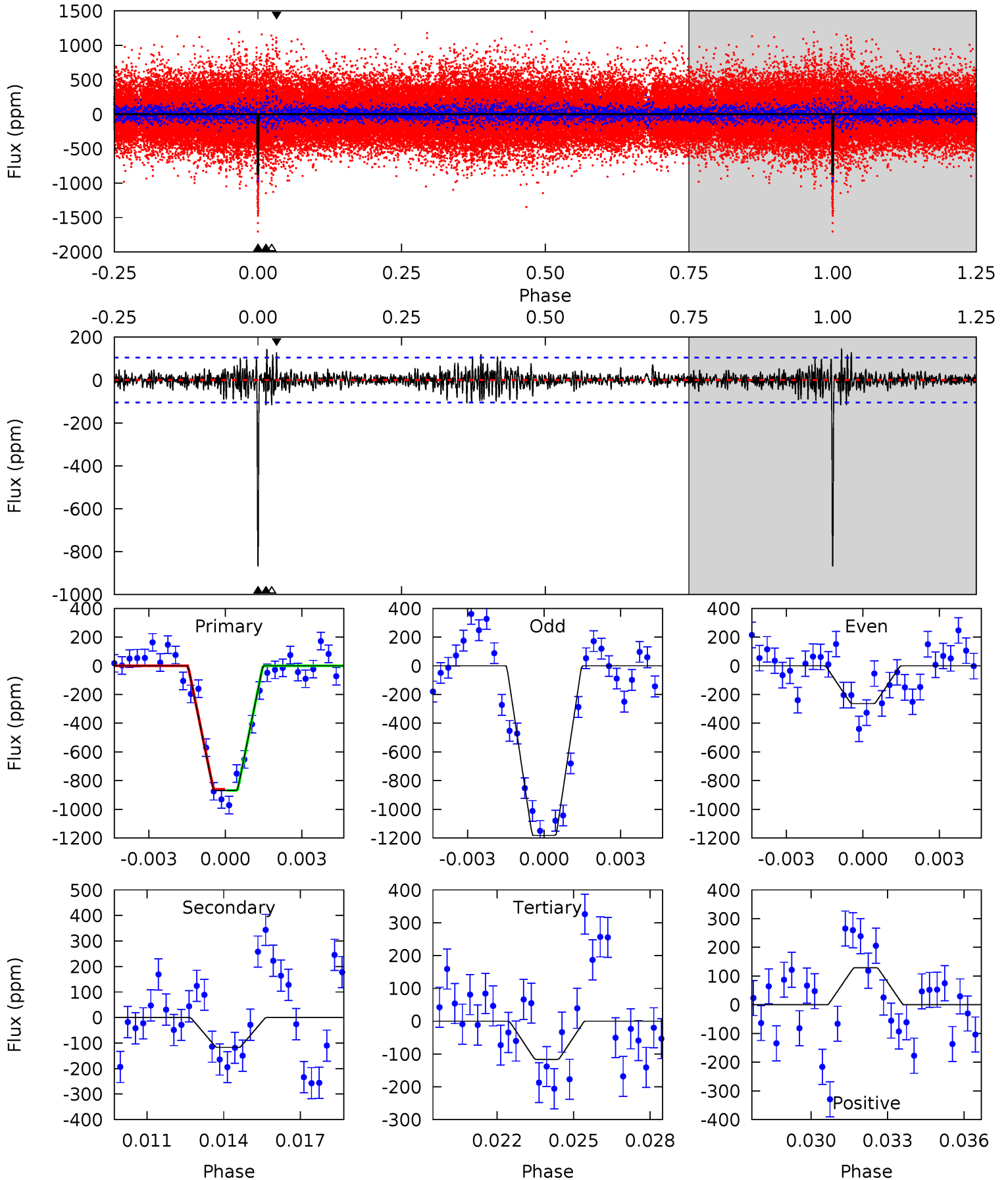
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
36.8	21.3	20.2	35.2	5.22	2.91	5.54	16.6	1.67	1.11	-13.8	12.6	0.85	0.49	4.23



Alt Model-Shift Uniqueness Test

005957288-01, P = 361.592278 Days, E = 154.650461 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
43.7	5.88	5.85	6.49	5.27	2.99	1.33	37.8	37.2	0.03	-0.61	24.0	0.76	0.14	0.22



Stellar Parameters For KIC 005957288

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5730^{+172}_{-155}	$4.268^{+0.247}_{-0.202}$	$-0.300^{+0.300}_{-0.250}$	$1.113^{+0.338}_{-0.276}$	$0.838^{+0.130}_{-0.070}$	$0.856^{+1.166}_{-0.432}$
	+3%/-3%	+6%/-5%	+100%/-83%	+30%/-25%	+16%/-8%	+136%/-50%
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 005957288-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-438 ± 21	$10.76^{+9.79}_{-7.20}$	383^{+33}_{-30}	3302^{+1664}_{-509}	1885^{+15539}_{-1385}
Alt.	-117 ± 20	$8.67^{+9.66}_{-5.96}$	385^{+32}_{-30}	2921^{+1374}_{-498}	757^{+7711}_{-590}

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

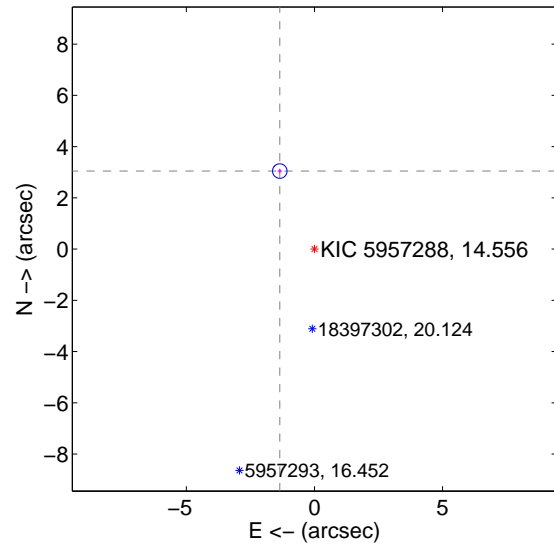
Supplemental centroid analysis for 005957288-01. Kepler magnitude: 14.56. Transit SNR 9.17

There are 0 quarters with good PRF difference image offsets

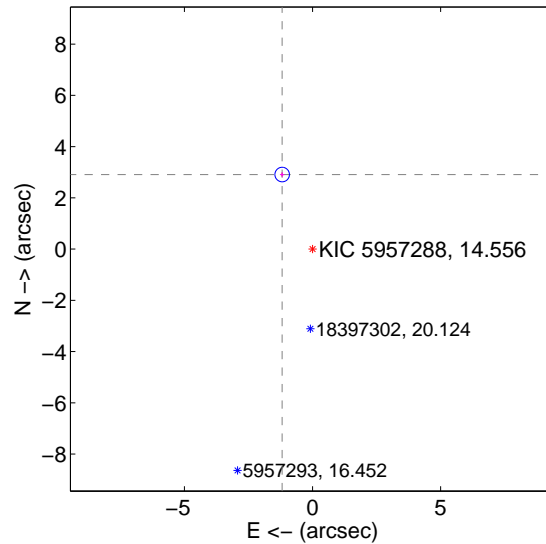
The direct PRF centroid is offset from the target star catalog position by about 0.22 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	3.332 \pm 0.094	35.37	1.352 \pm 0.087	3.046 \pm 0.096
PRF-fit source offset from KIC position	3.142 \pm 0.094	33.28	1.185 \pm 0.087	2.910 \pm 0.096
photometric centroid source offset	3.37 \pm 1.50	2.25	2.65 \pm 1.56	2.09 \pm 1.40

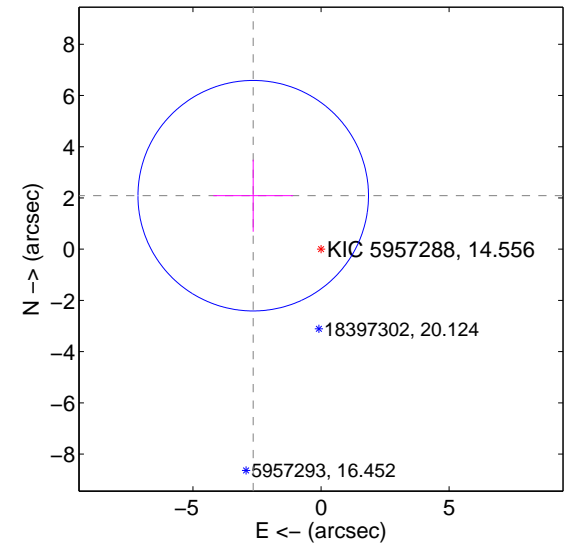
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

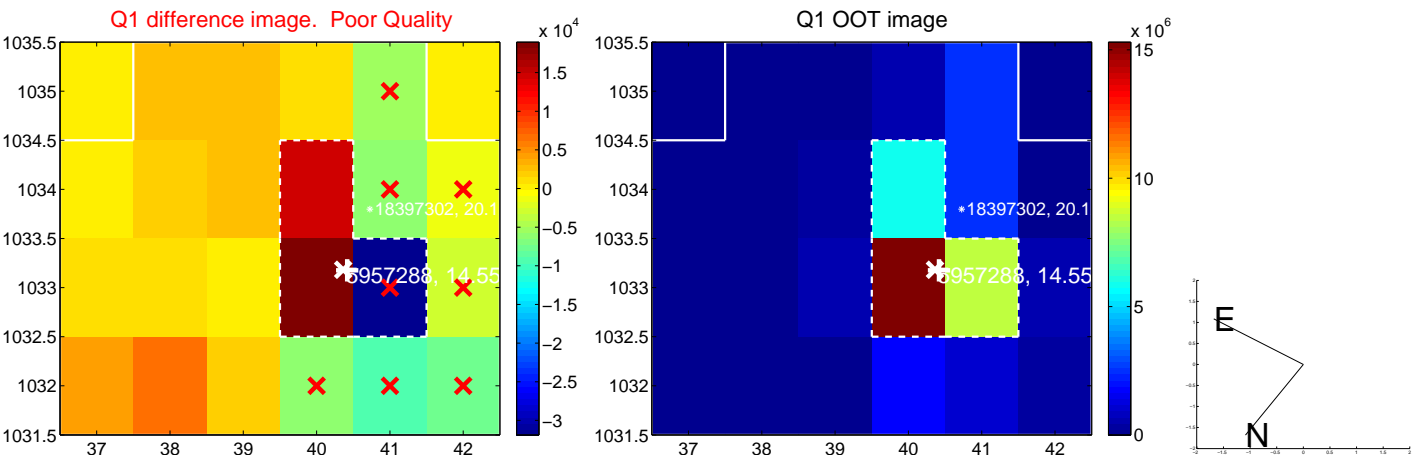


offset from photometric centroids

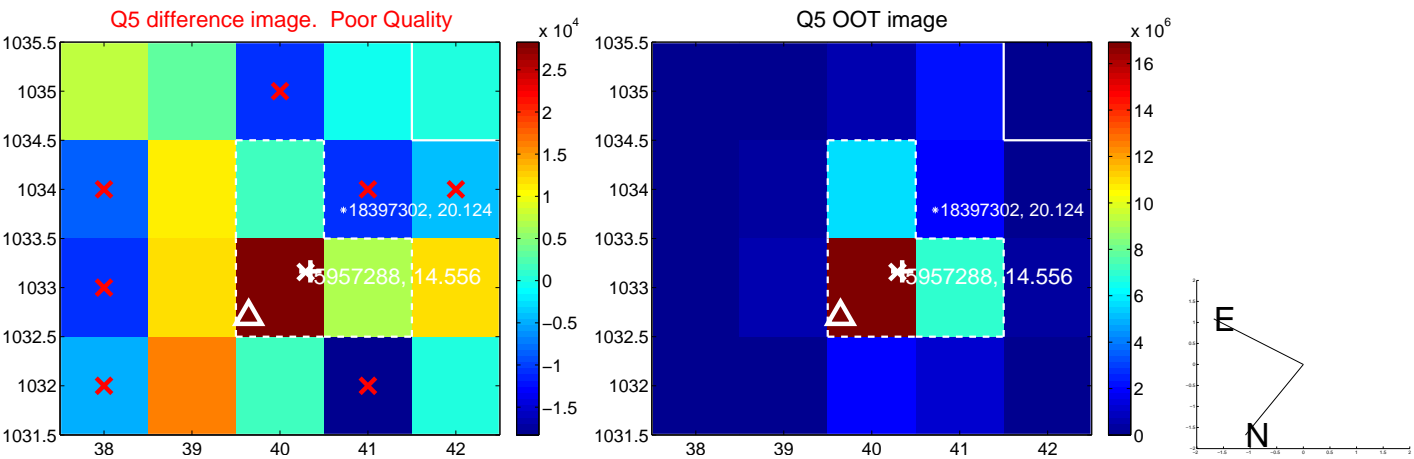


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

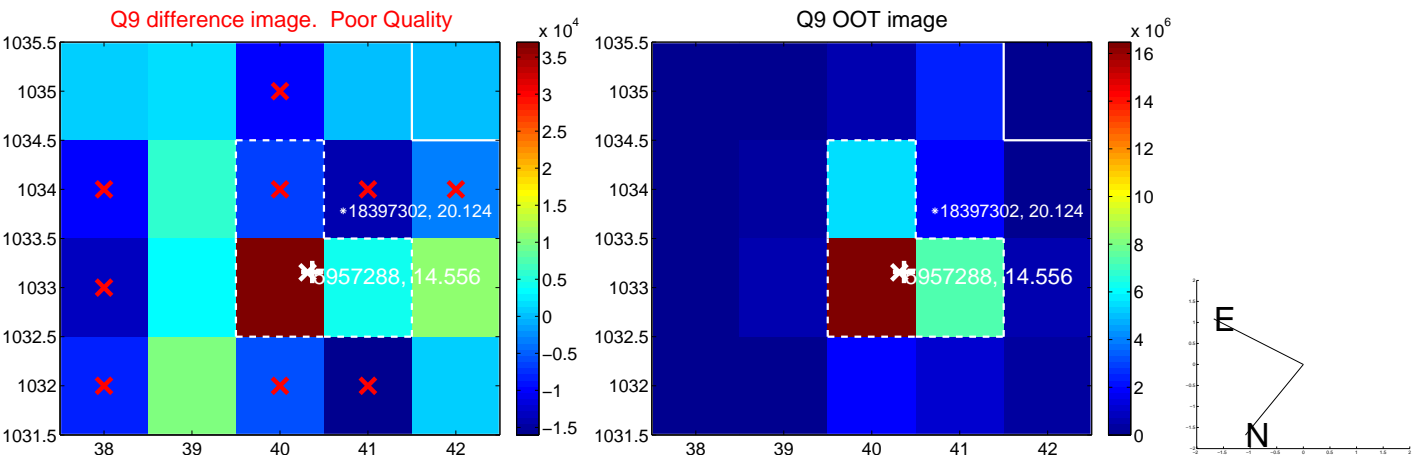
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



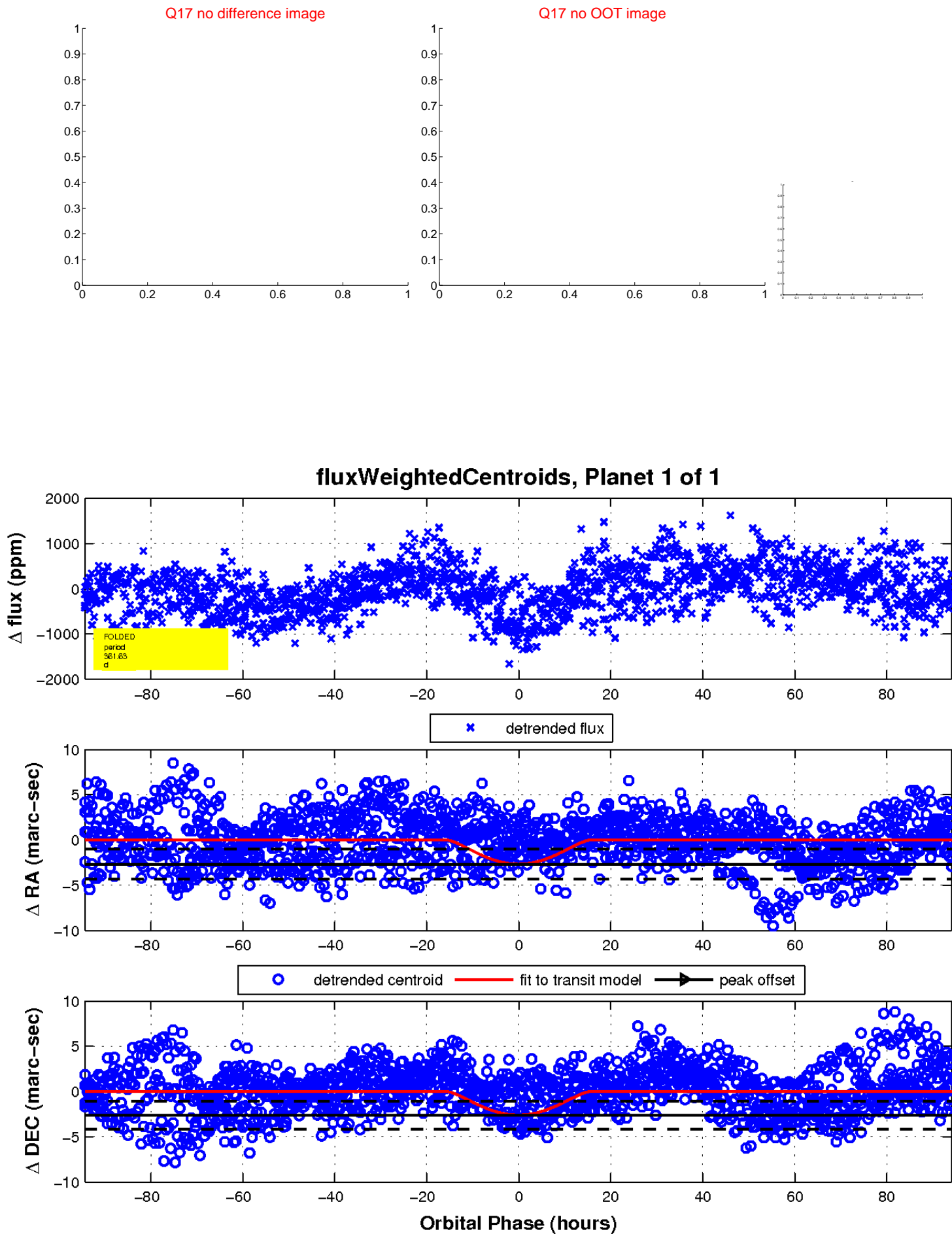
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



white \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

