

KIC 005097690

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})
005097690-01	OBS	No	332.867461	184.104117	410.1	9.572	9.3	8.6	13.45	5172	31.07	59.76

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005097690-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_SATURATED

Notes: OBS = Observed. INJ = Injected. INV = Inverted. SCR = Scrambled.

N = Not Transit-Like. S = Stellar Eclipse. C = Centroid Offset. E = Ephemeris Match.

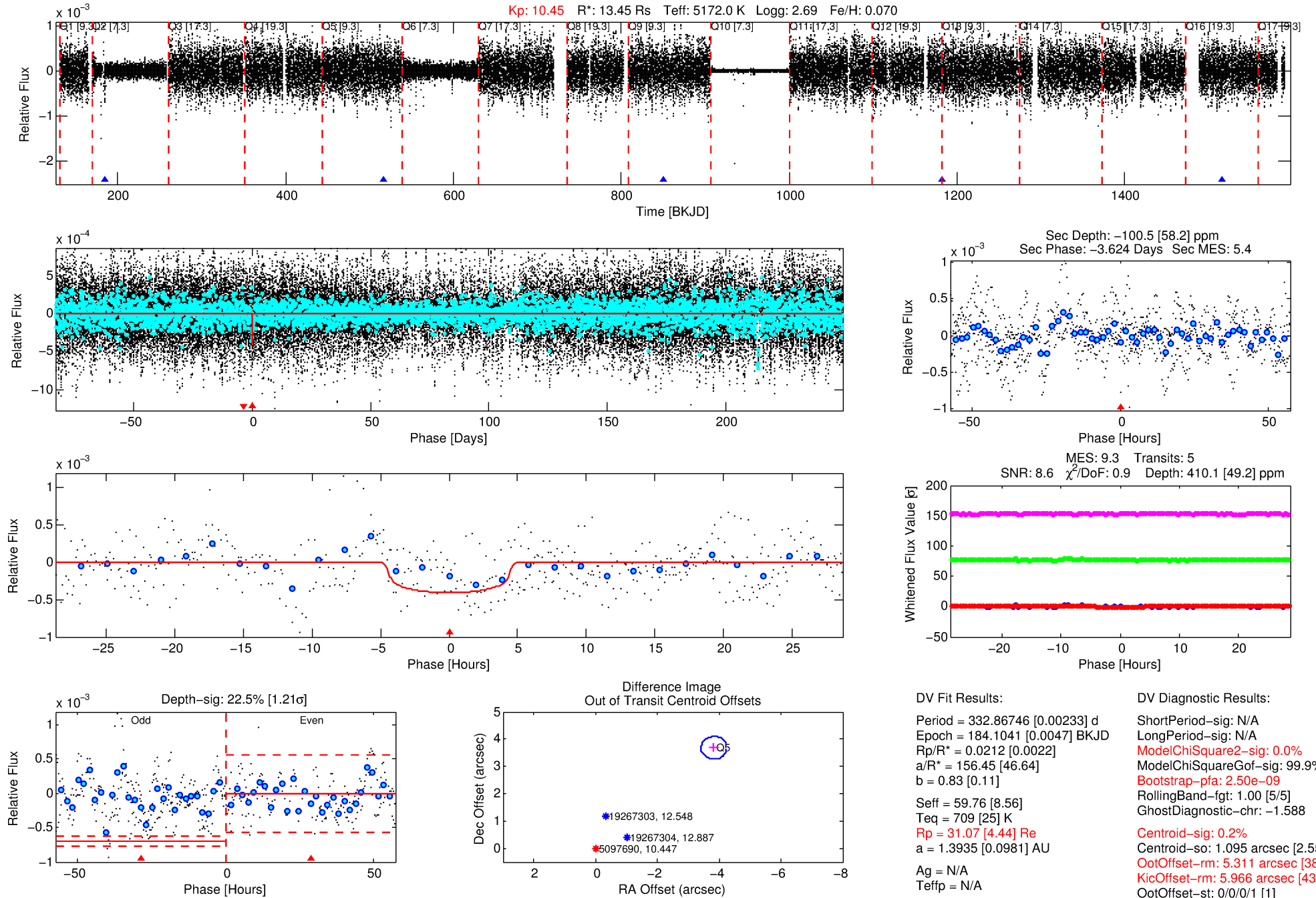
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005097690-01

No Significant Match Found

DV One-Page Summary

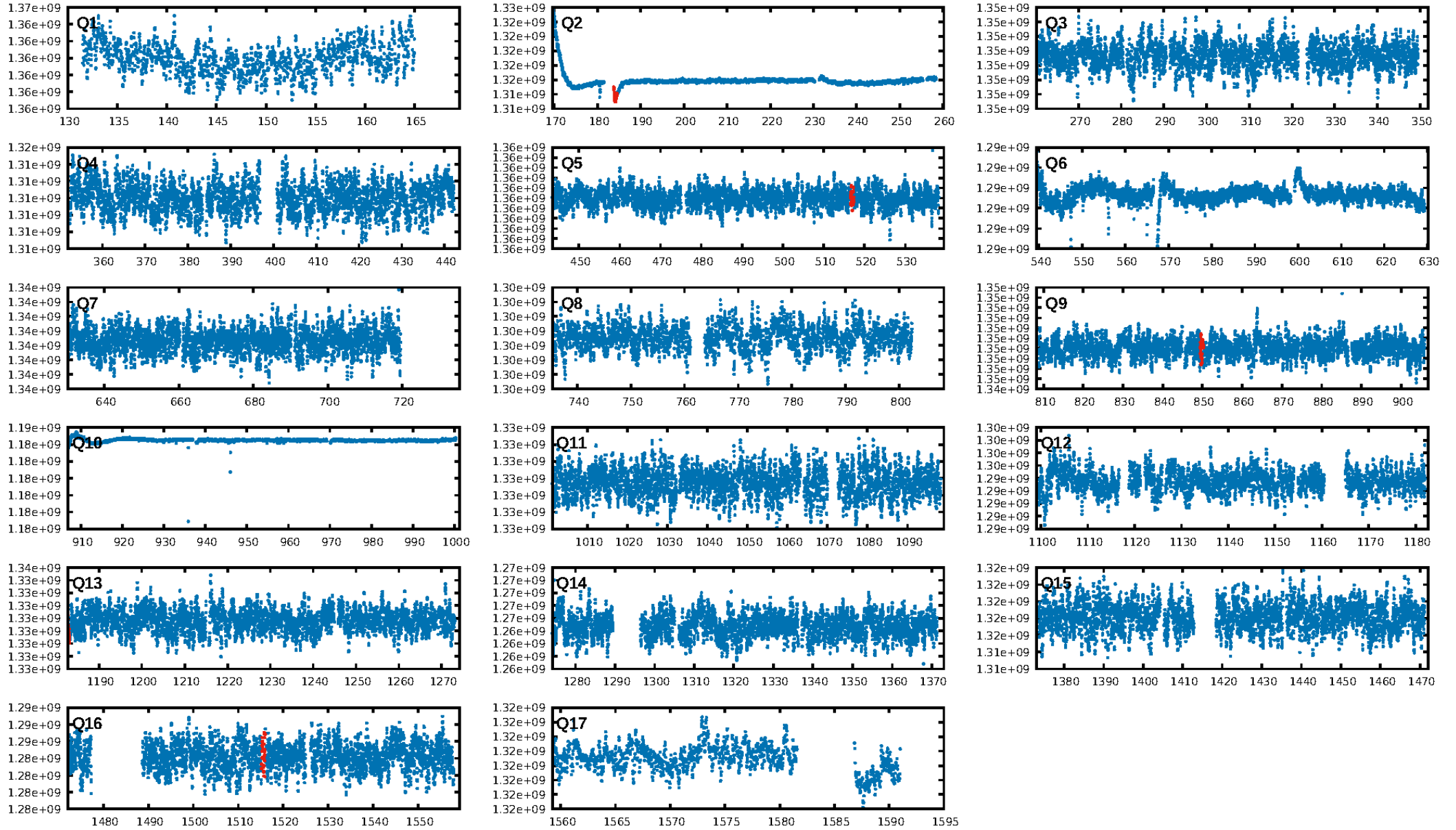
KIC: 5097690 Candidate: 1 of 1 Period: 332.867 d



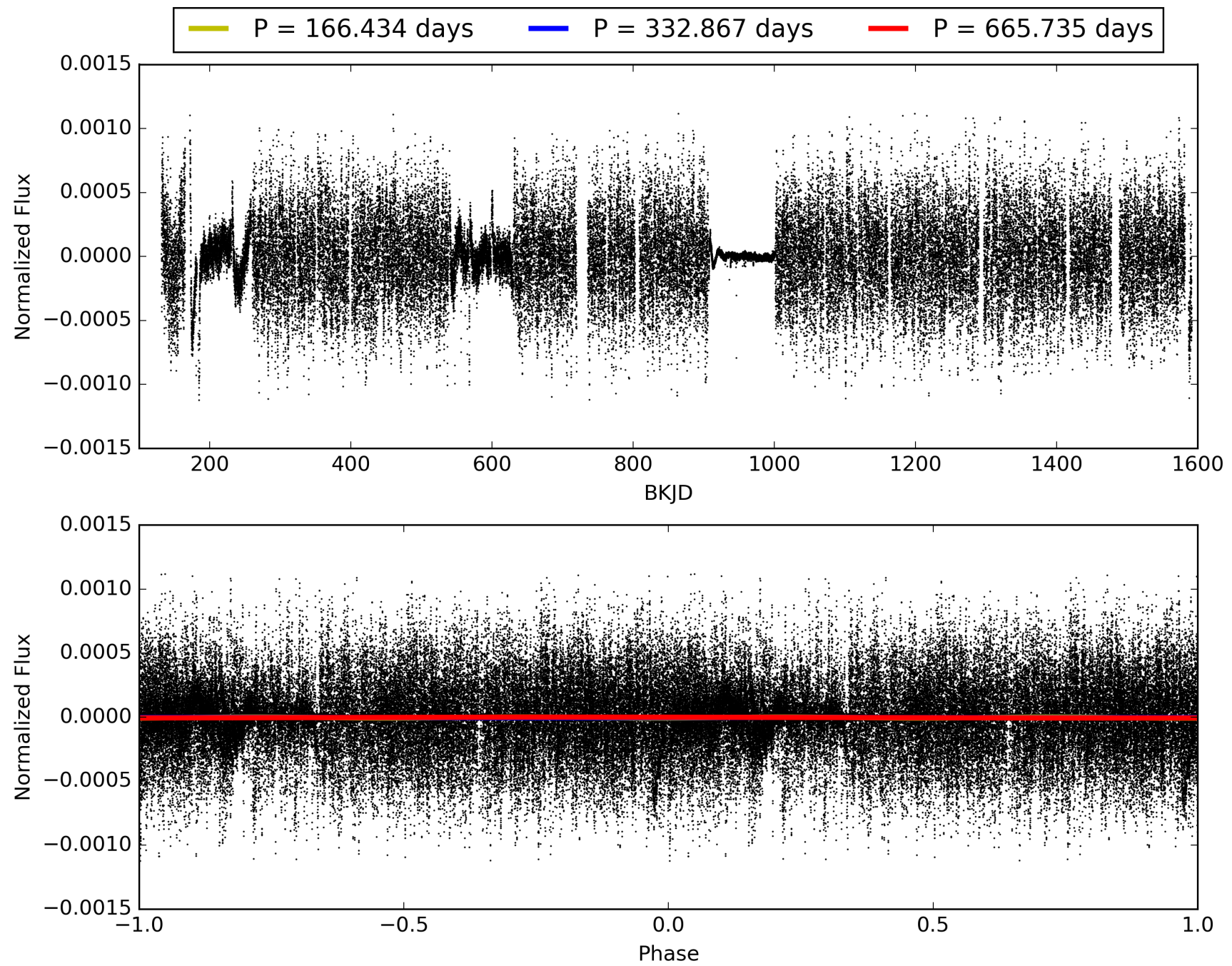
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 19:02:36 Z

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

TCE 005097690-01, PDC Light Curves

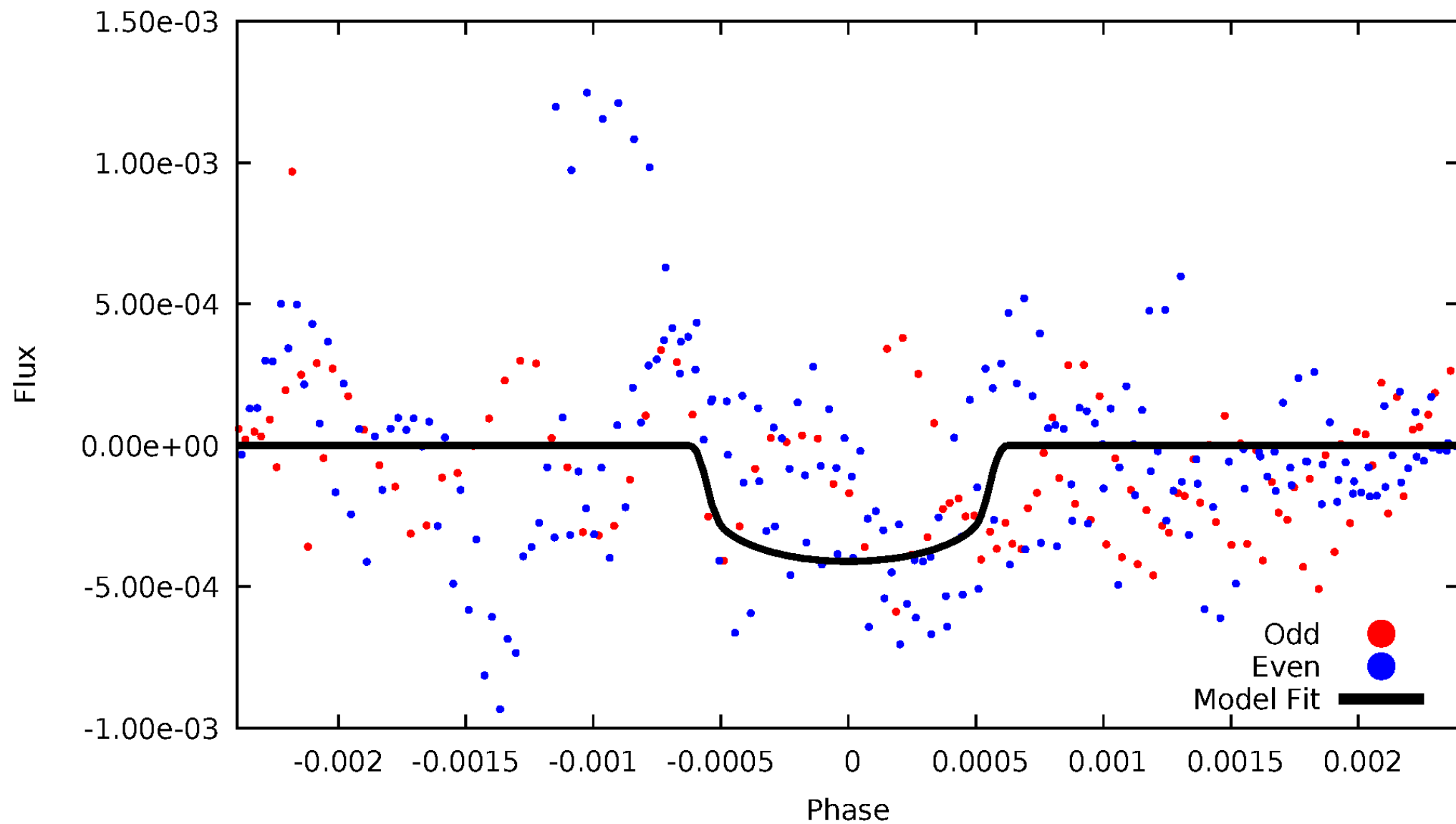


TCE 005097690-01



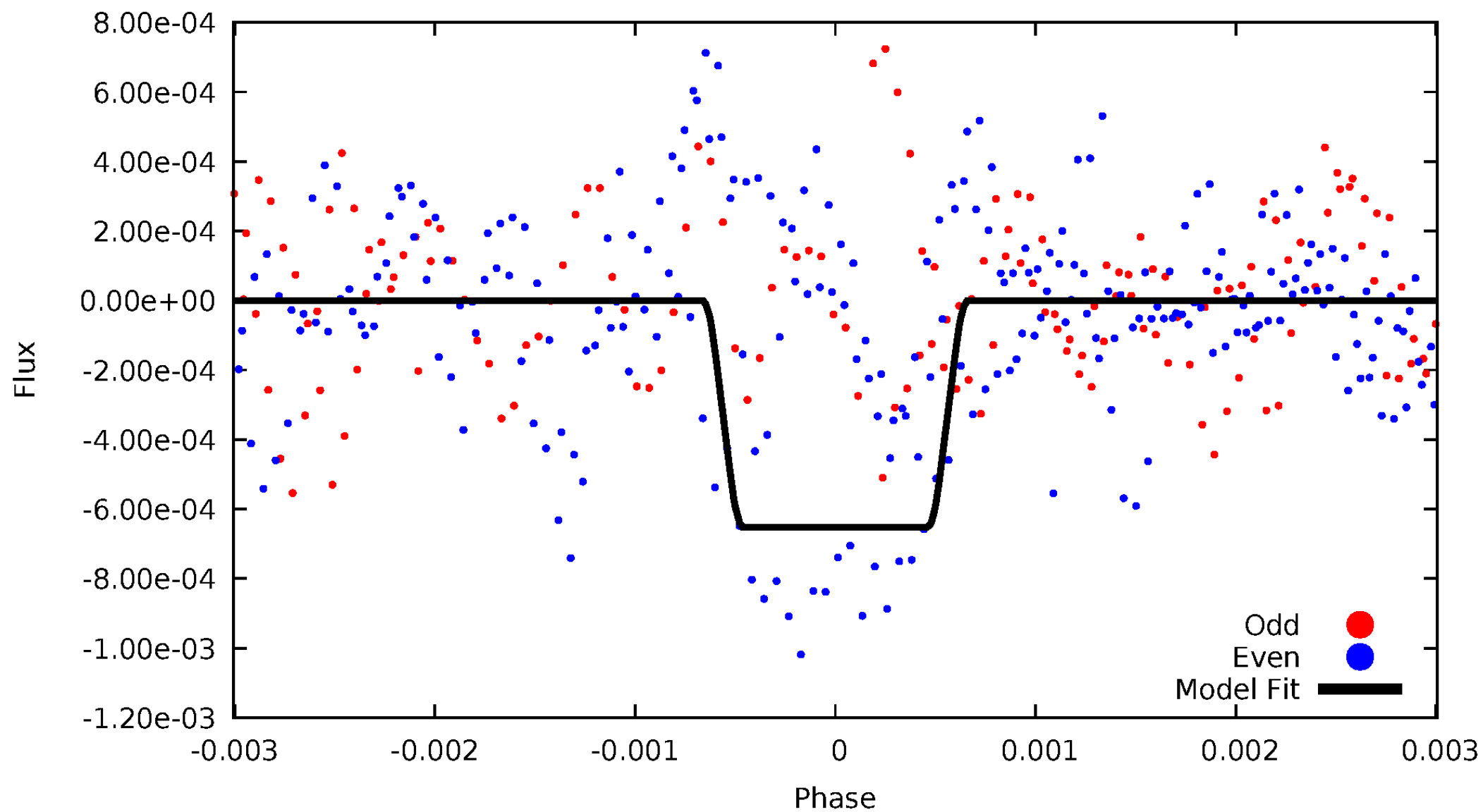
DV Odd/Even

TCE 005097690-01



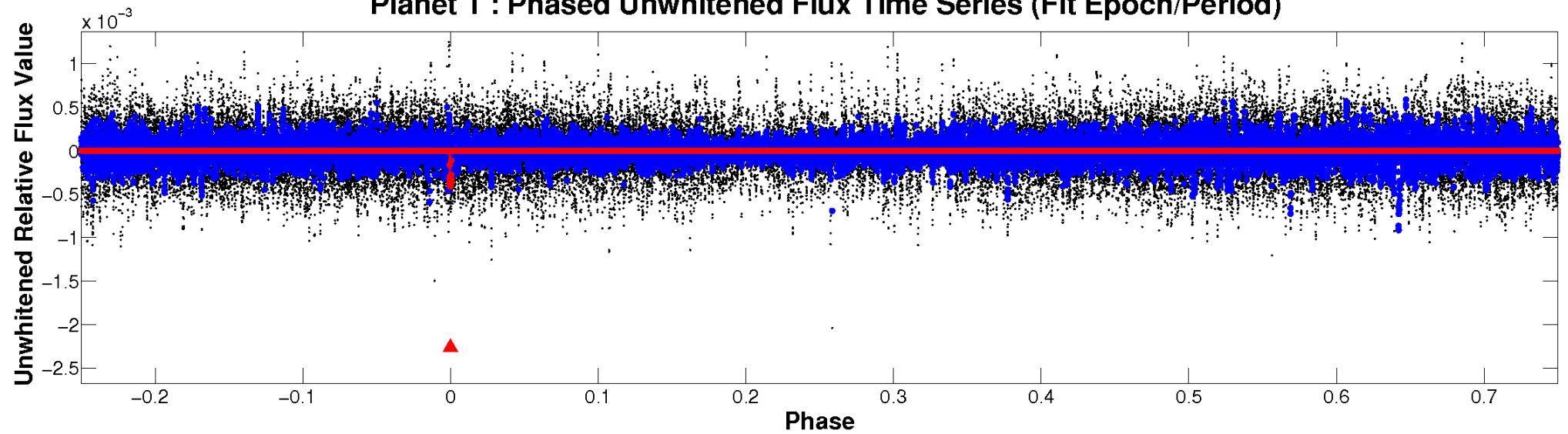
ALT Odd/Even

TCE 005097690-01

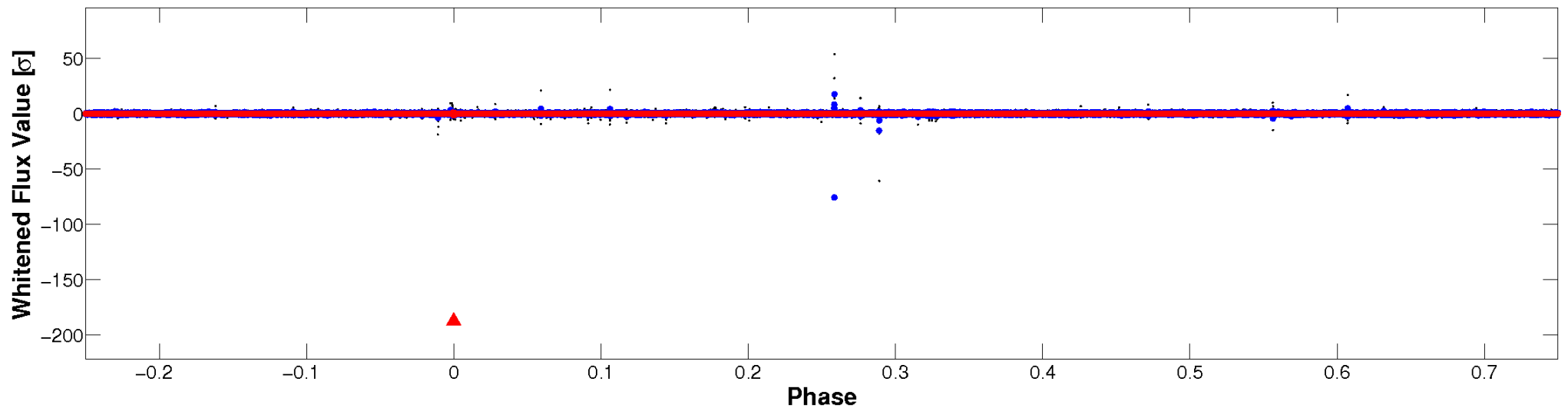


Non-Whitened Vs. Whitened Light Curve

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

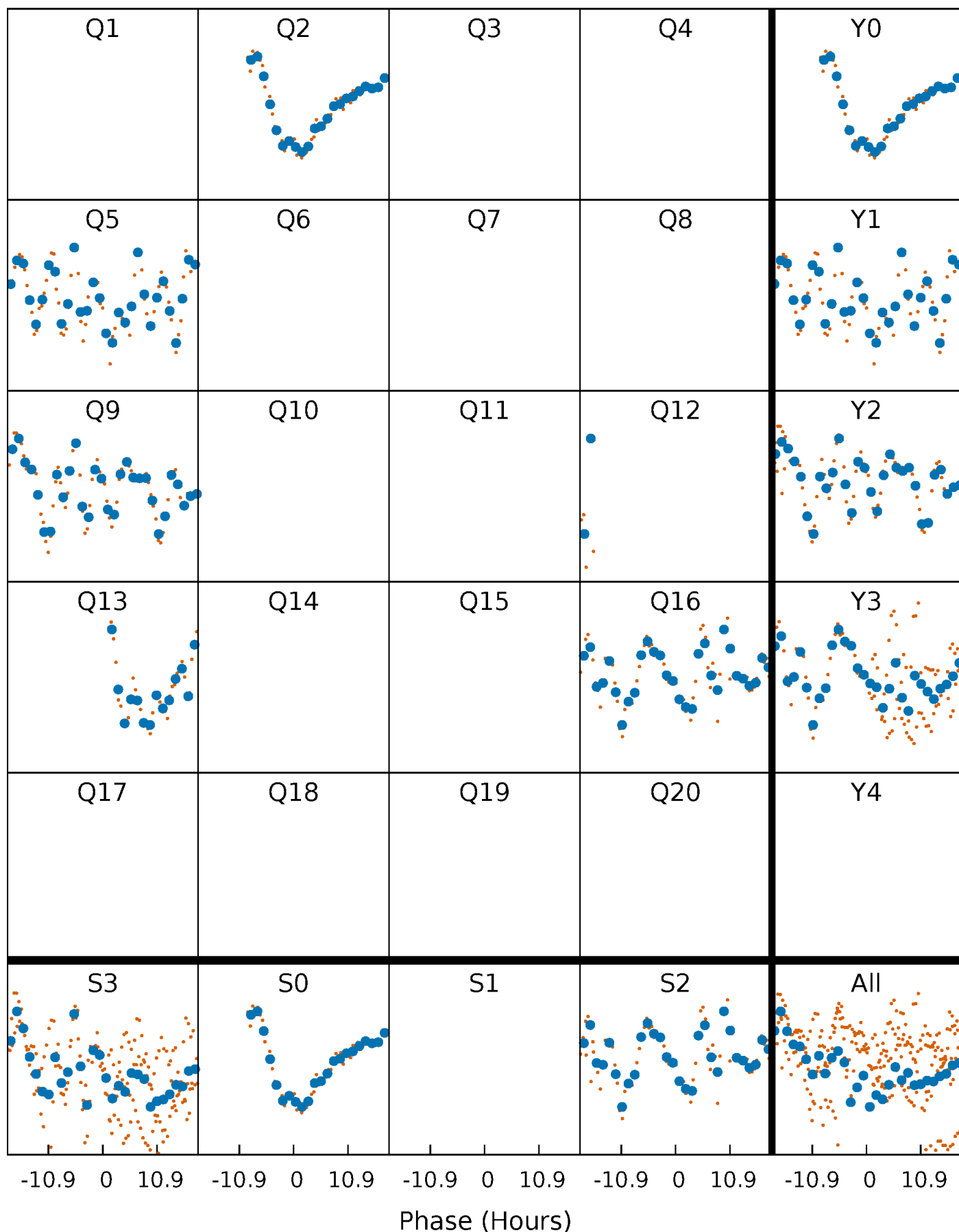


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



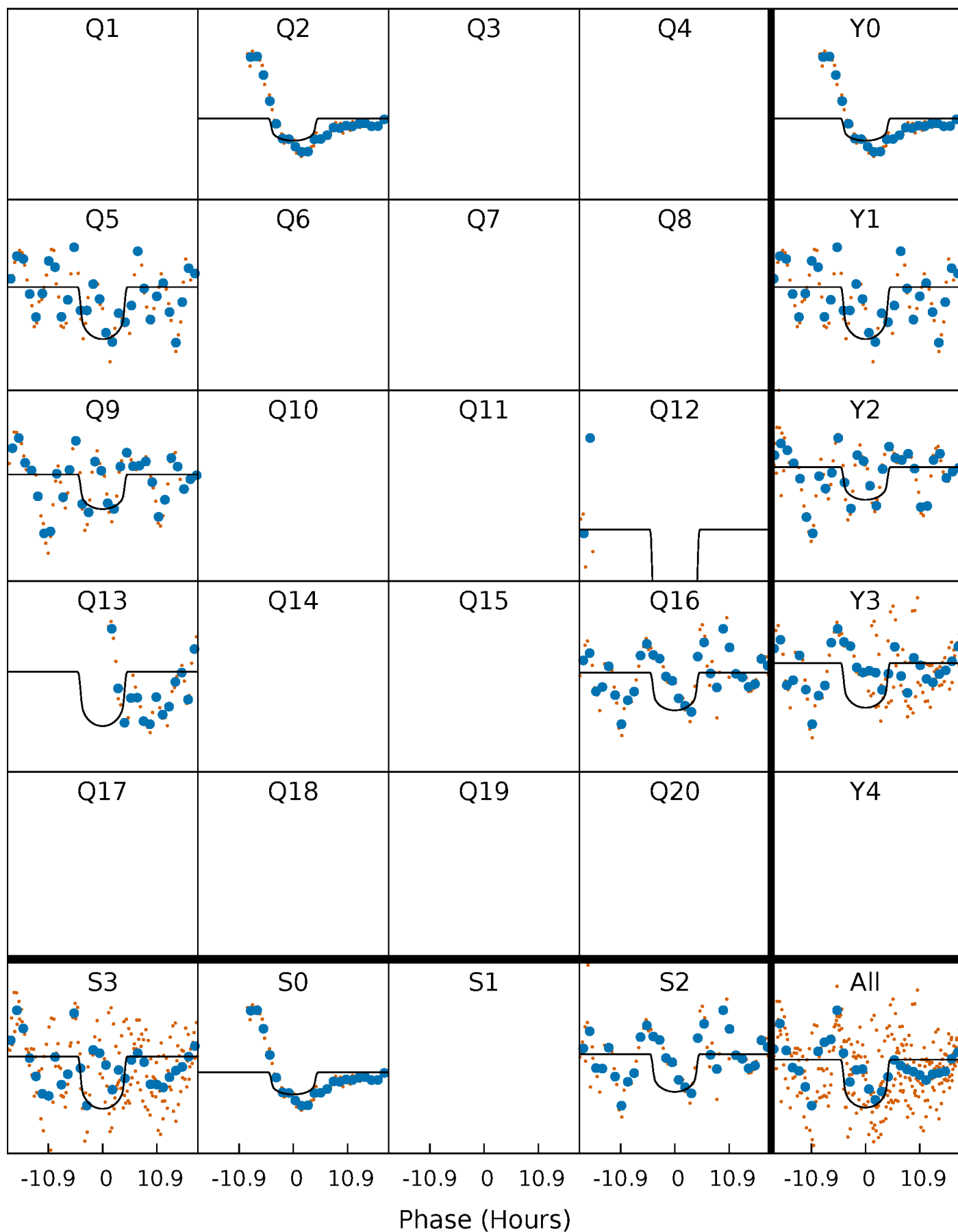
PDC Quarter-Phased Transit Curves

TCE 005097690-01 P=332.867461 Days $T_0=184.104117$ (BKJD)



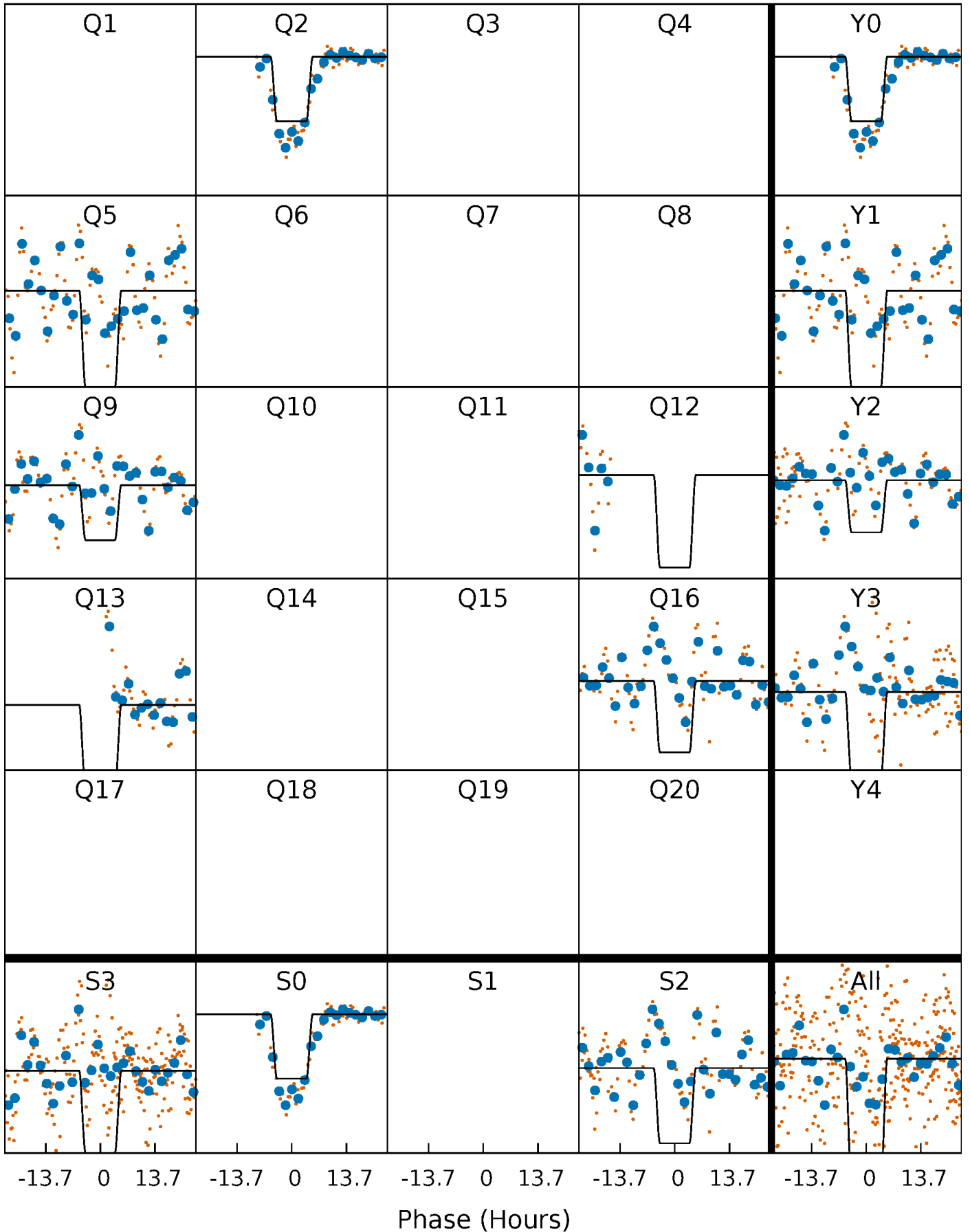
DV Quarter-Phased Transit Curves

TCE 005097690-01 P=332.867461 Days $T_0=184.104117$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

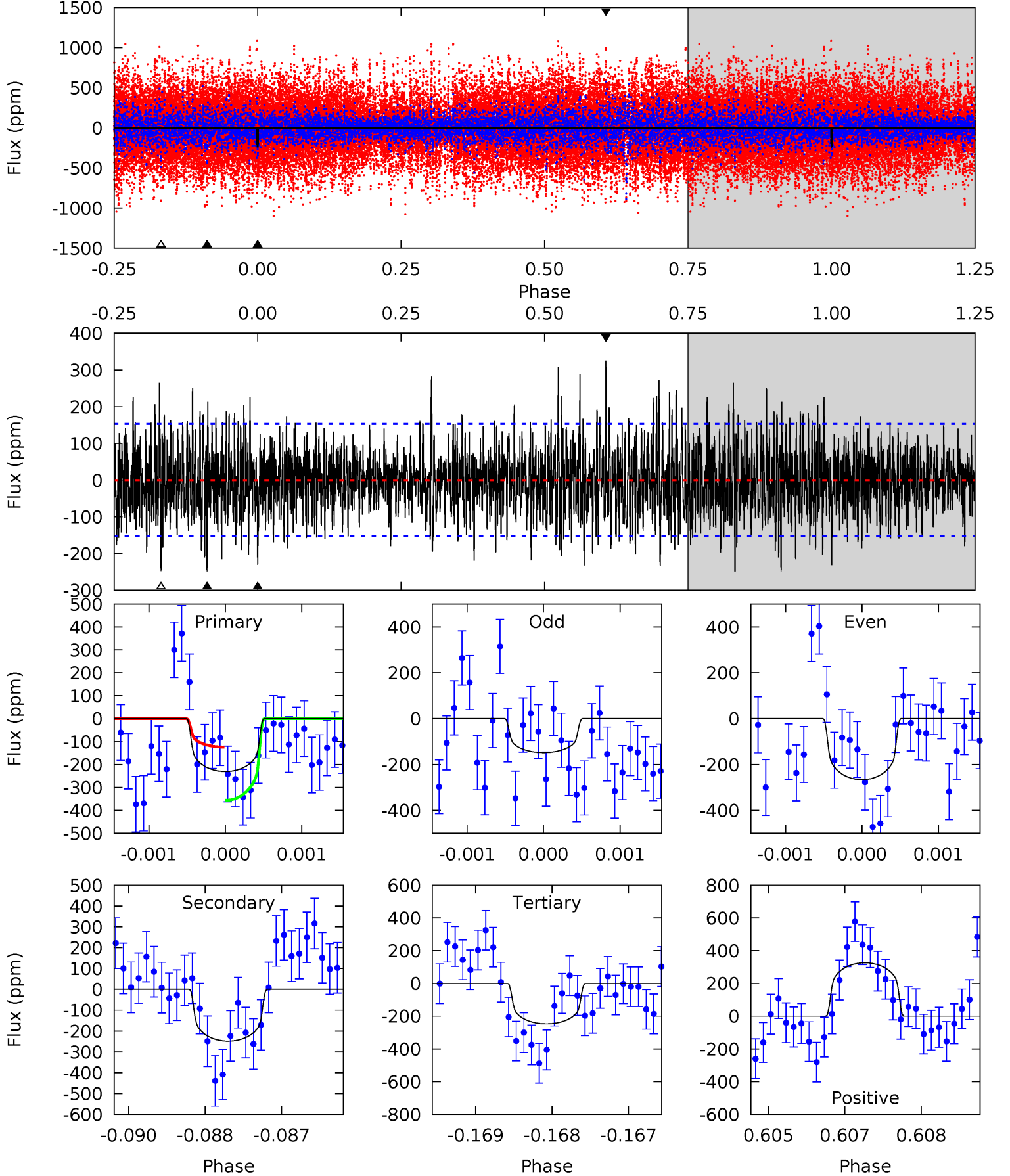
TCE 005097690-01 P=332.869504 Days $T_0=184.085719$ (BKJD)



DV Model-Shift Uniqueness Test

005097690-01, P = 332.867461 Days, E = 184.104117 Days

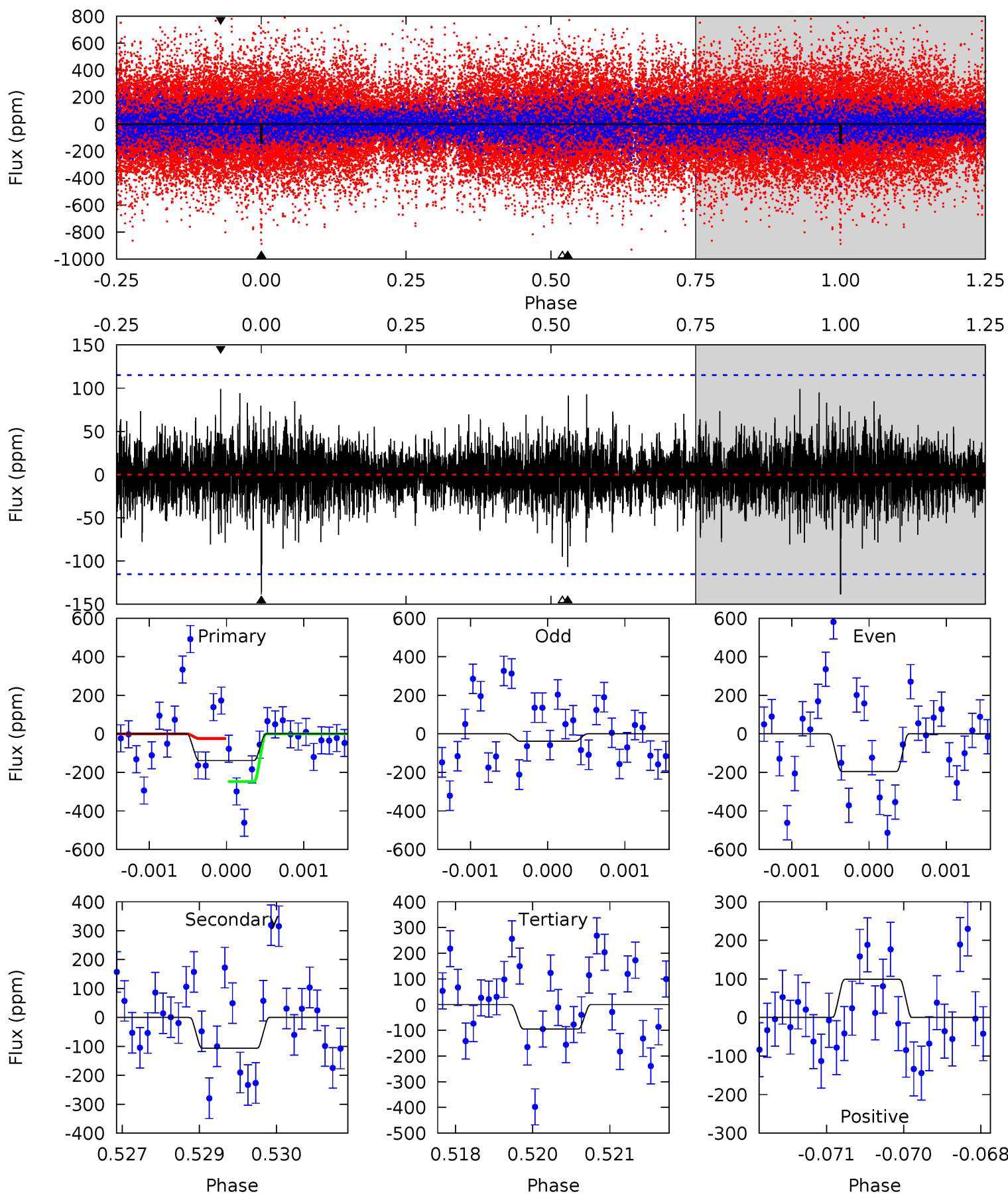
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.16	8.80	8.75	11.5	5.41	3.23	2.73	-0.58	-3.36	0.05	-2.72	1.86	1.10	0.57	4.05



Alt Model-Shift Uniqueness Test

005097690-01, P = 332.869504 Days, E = 184.085719 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.51	5.00	4.45	4.64	5.41	3.22	1.07	2.06	1.87	0.55	0.36	3.44	26.0	0.42	5.18



Stellar Parameters For KIC 005097690

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5172^{+100}_{-151}	$2.693^{+0.033}_{-0.027}$	$0.070^{+0.050}_{-0.450}$	$13.454^{+0.312}_{-1.325}$	$3.257^{+0.054}_{-0.456}$	$0.002^{+0.000}_{-0.000}$
	+2%/-3%	+1%/-1%	+71%/-643%	+2%/-10%	+2%/-14%	+19%/-7%
Source	SPE74	AST9	SPE74	DSEP		

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

Secondary Eclipse Parameters for KIC 005097690-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-249 ± 28	$30.87^{+3.20}_{-3.47}$	989^{+23}_{-27}	4576^{+250}_{-229}	279^{+75}_{-59}
Alt.	-107 ± 21	$37.17^{+3.52}_{-3.27}$	988^{+23}_{-28}	3656^{+180}_{-176}	81^{+23}_{-21}

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

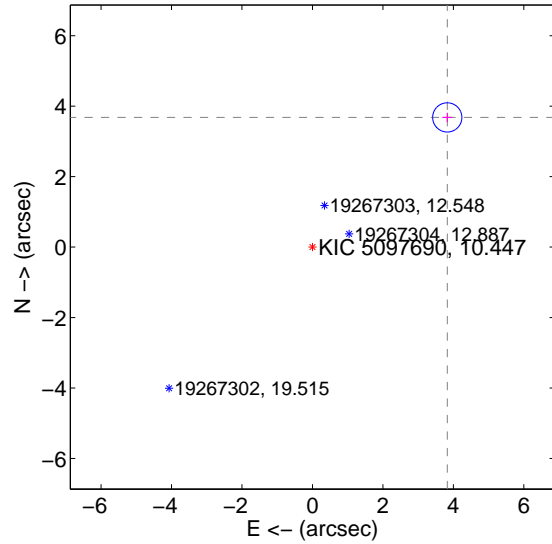
Supplemental centroid analysis for 005097690-01. **Kepler magnitude: 10.45.** Transit SNR 8.56

There are 0 quarters with good PRF difference image offsets

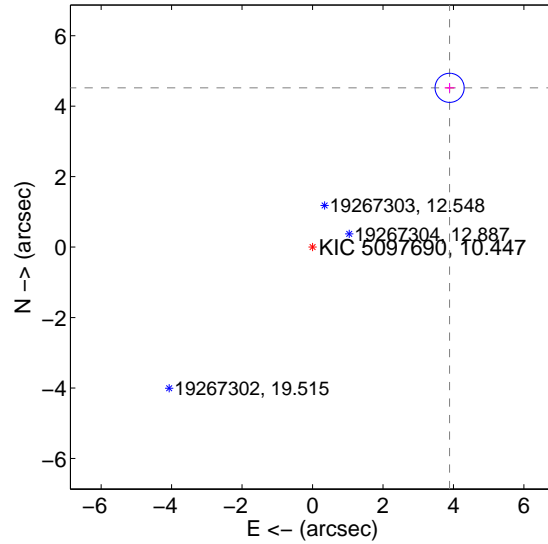
The direct PRF centroid is offset from the target star catalog position by about 0.84 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	5.311 ± 0.138	38.42	-3.828 ± 0.141	3.682 ± 0.135
PRF-fit source offset from KIC position	5.966 ± 0.138	43.33	-3.892 ± 0.141	4.522 ± 0.135
photometric centroid source offset	1.09 ± 0.43	2.55	-0.19 ± 0.29	-1.08 ± 0.43

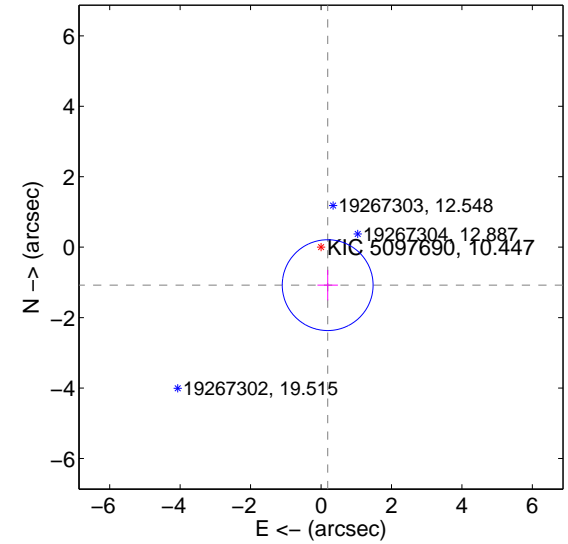
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position



offset from photometric centroids

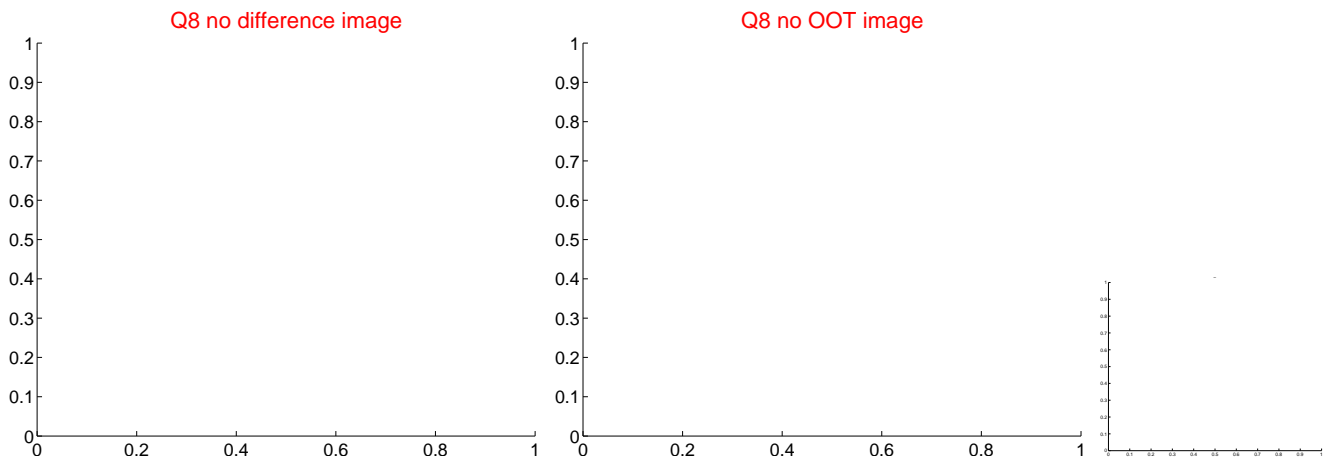
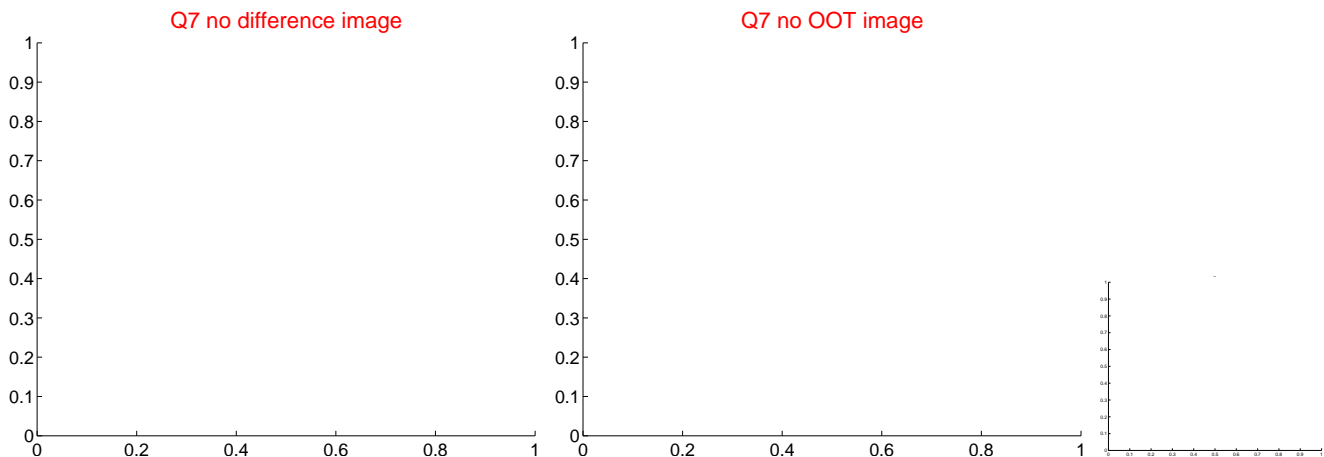
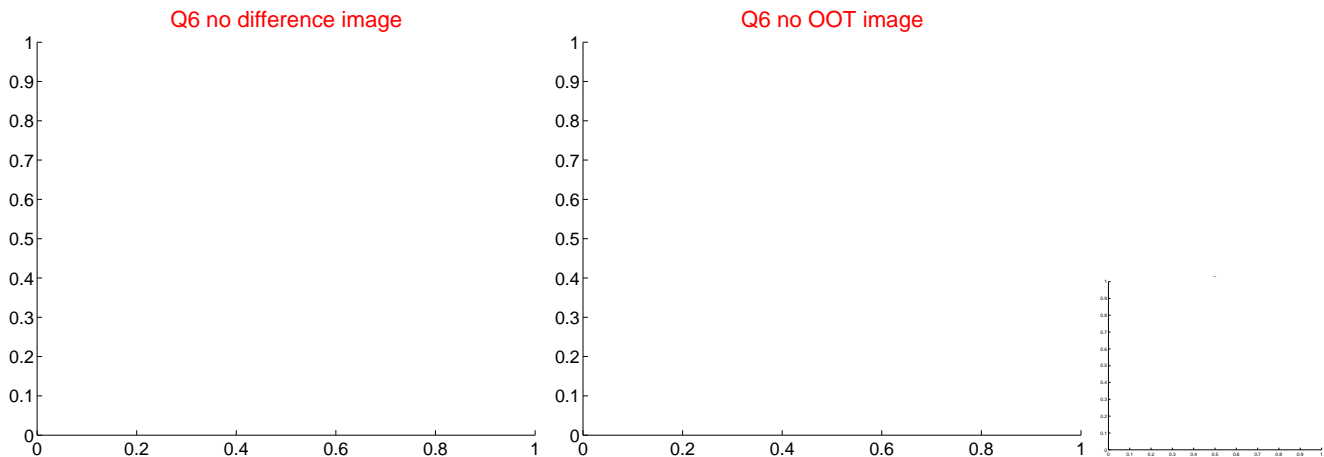
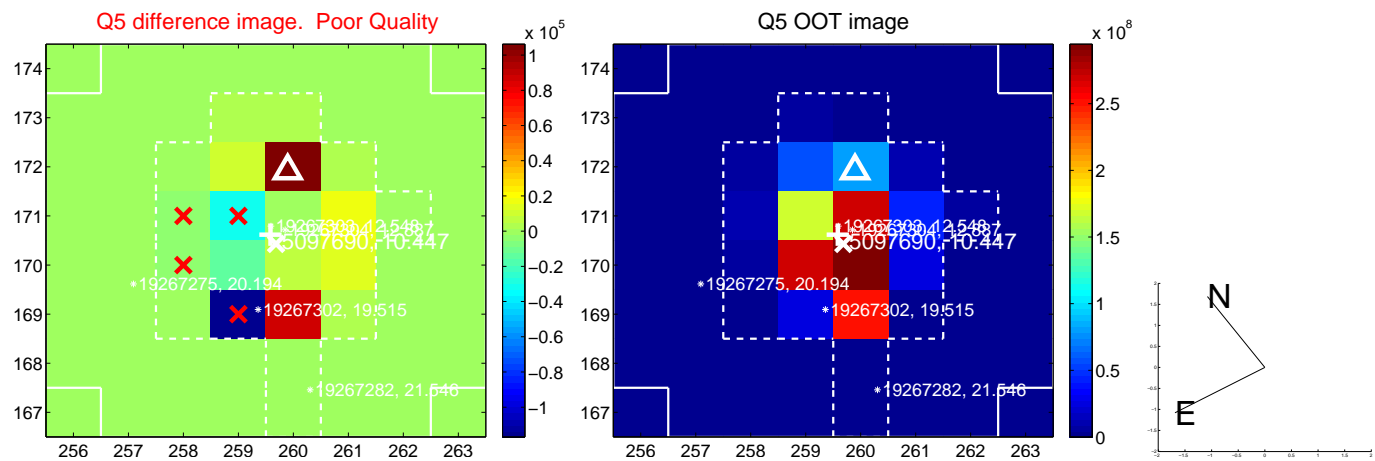


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

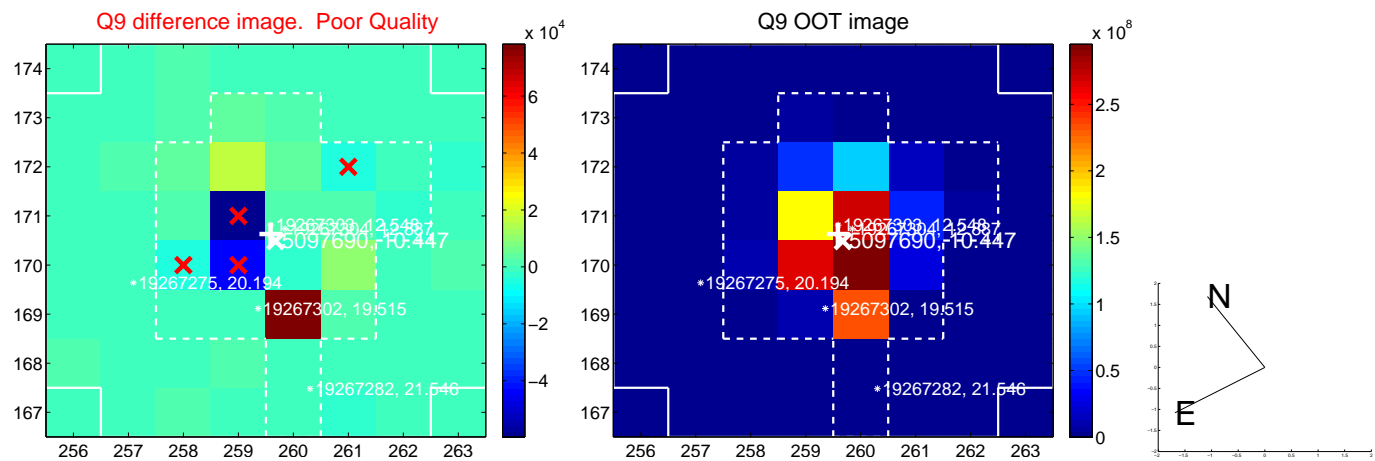
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



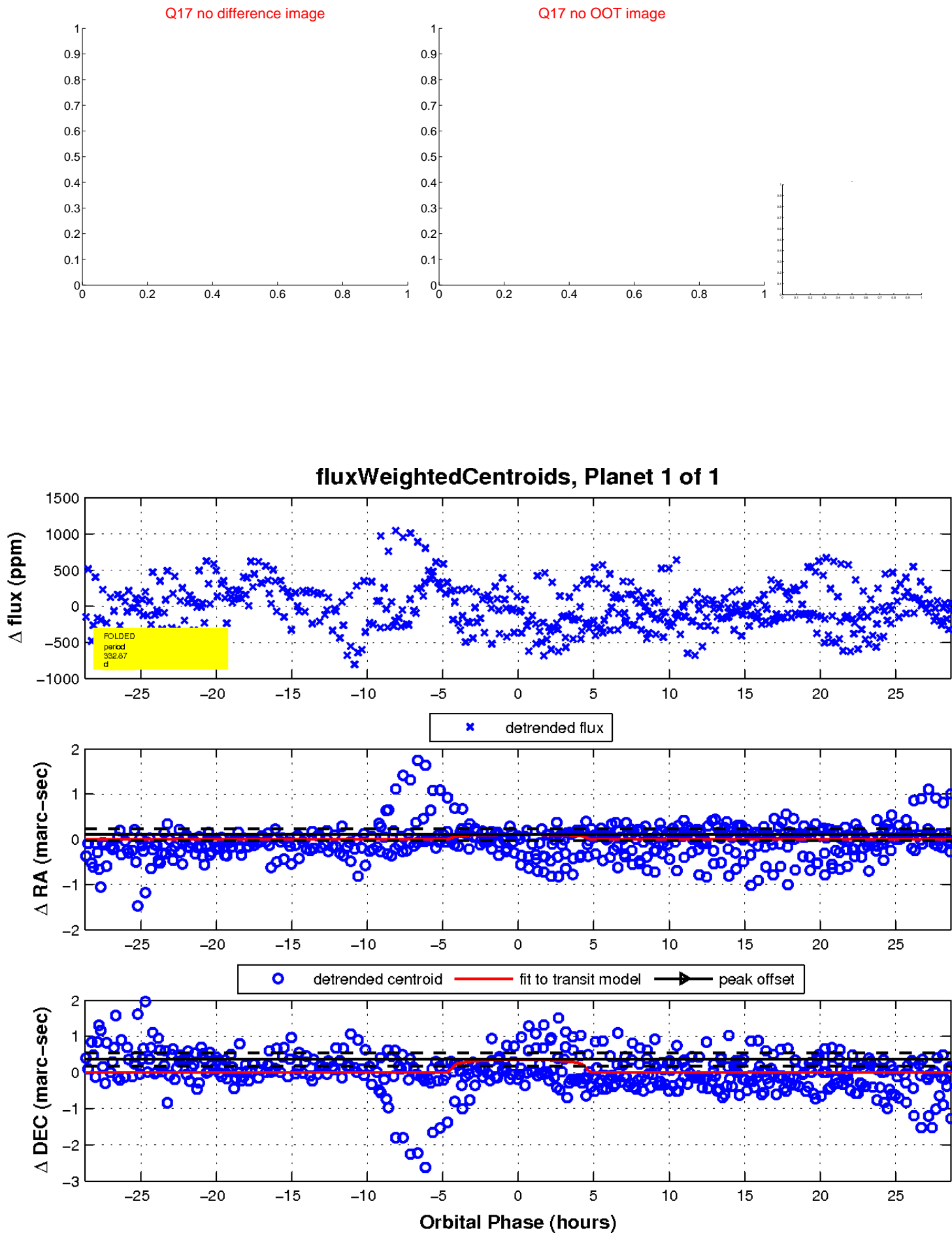
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

