

KIC 009466335

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})
009466335-01	OBS	No	302.050667	187.640251	1392.3	50.856	11.4	14.5	0.76	5193	5.55	0.60

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
009466335-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—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.

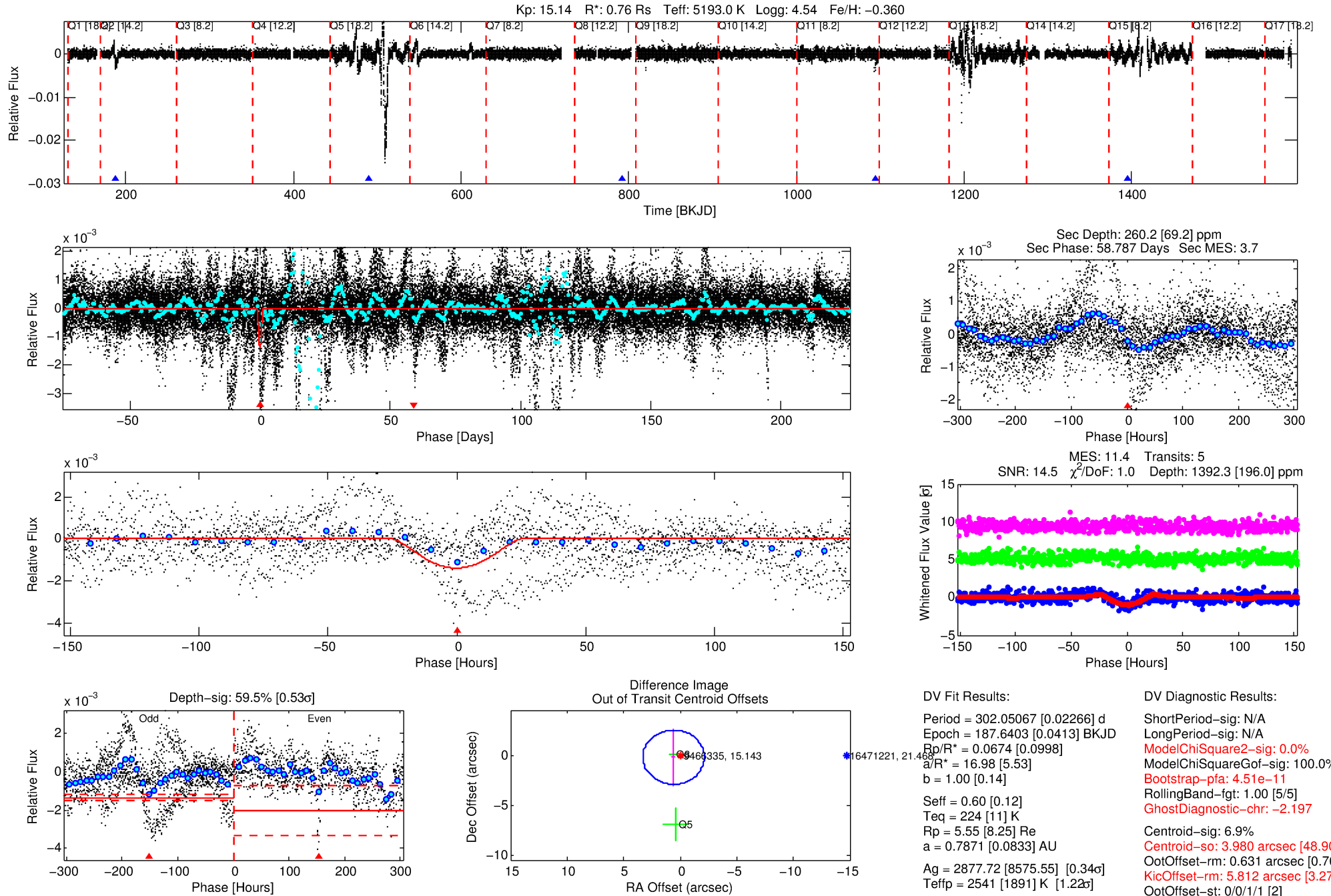
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 009466335-01

No Significant Match Found

DV One-Page Summary

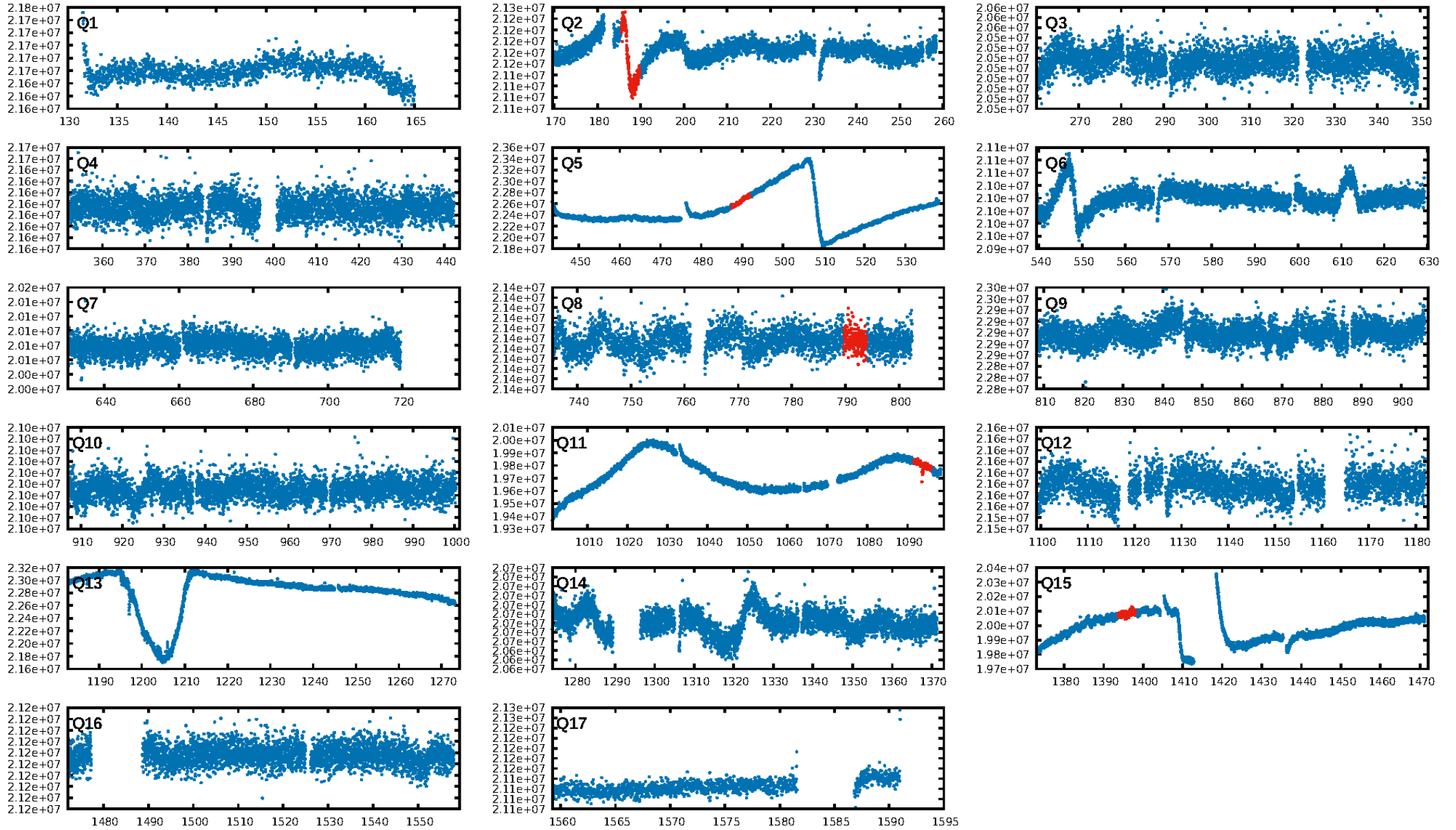
KIC: 9466335 Candidate: 1 of 1 Period: 302.051 d



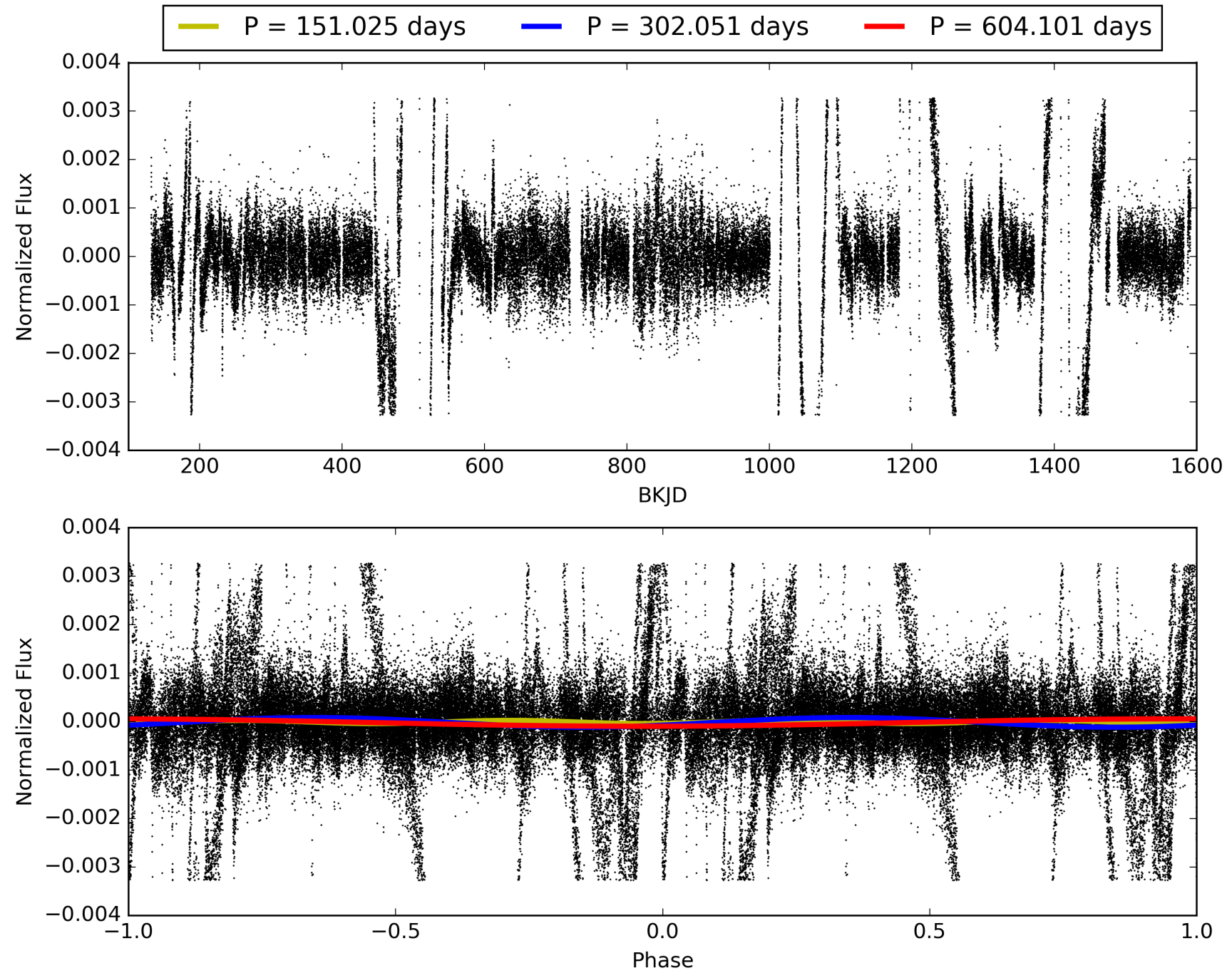
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 13:42:43 Z

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

TCE 009466335-01, PDC Light Curves

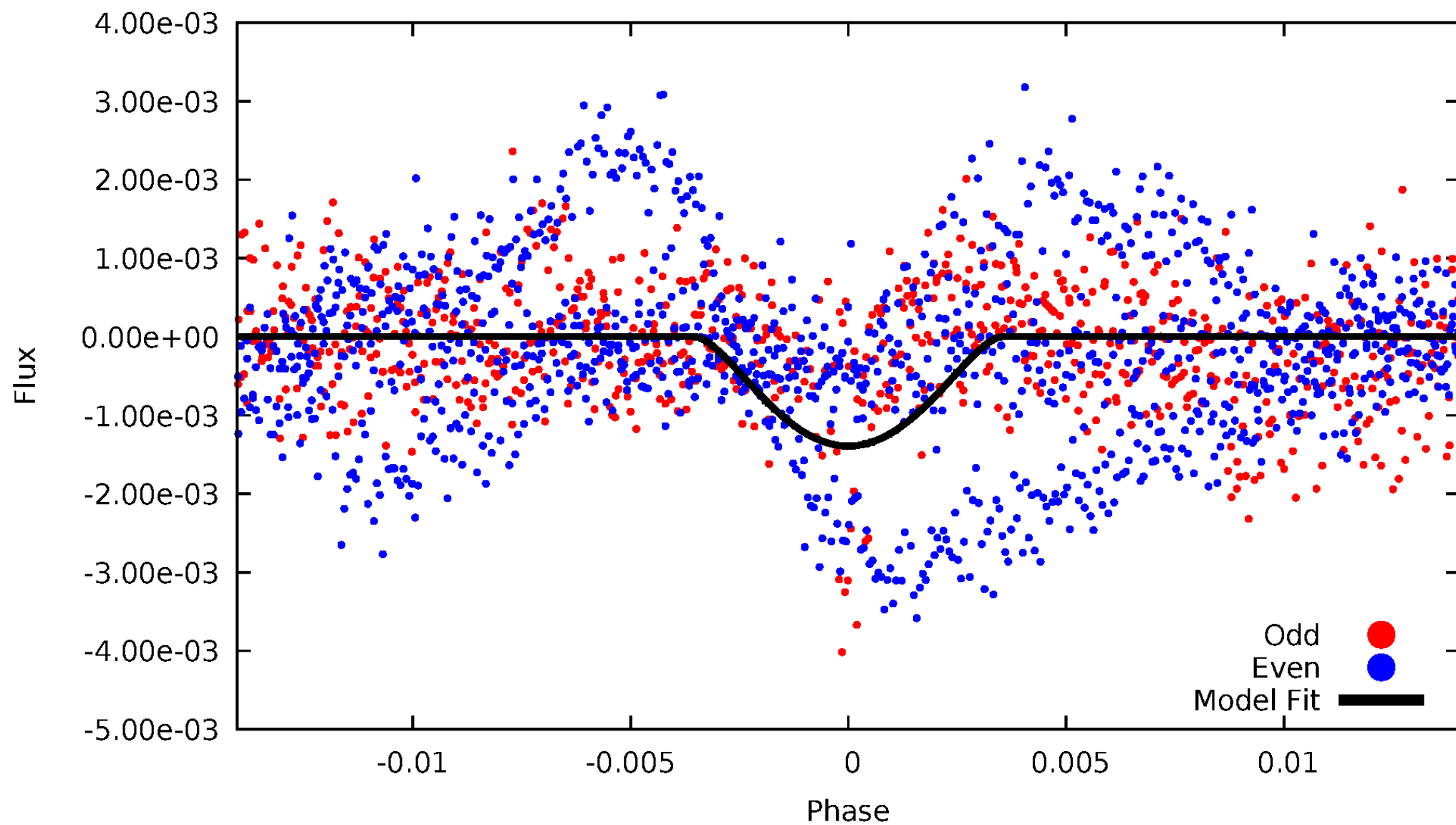


TCE 009466335-01



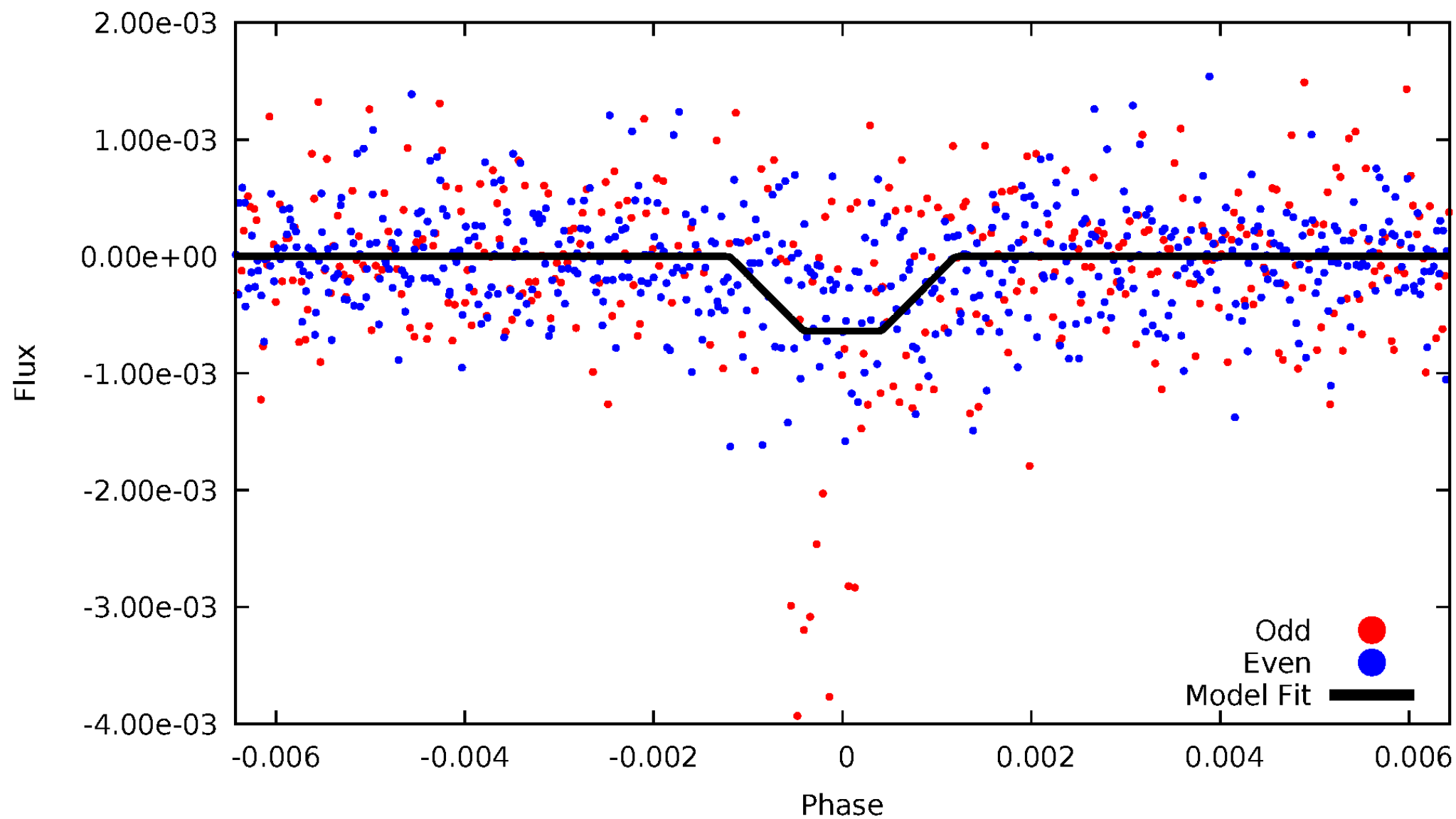
DV Odd/Even

TCE 009466335-01



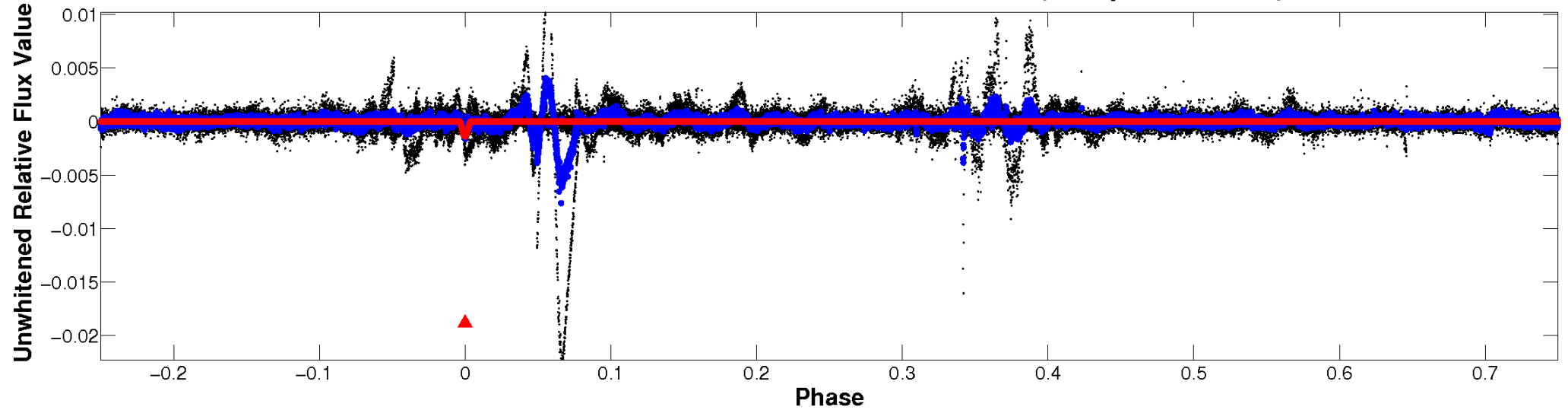
ALT Odd/Even

TCE 009466335-01

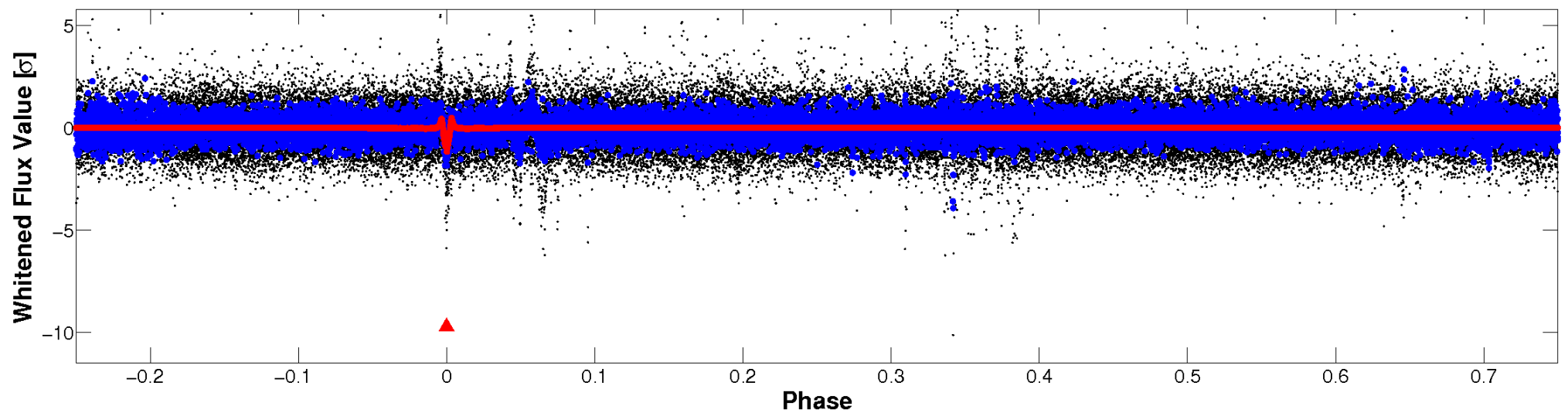


Non-Whitened Vs. Whitened Light Curve

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 009466335-01 P=302.050667 Days $T_0=187.640251$ (BKJD)



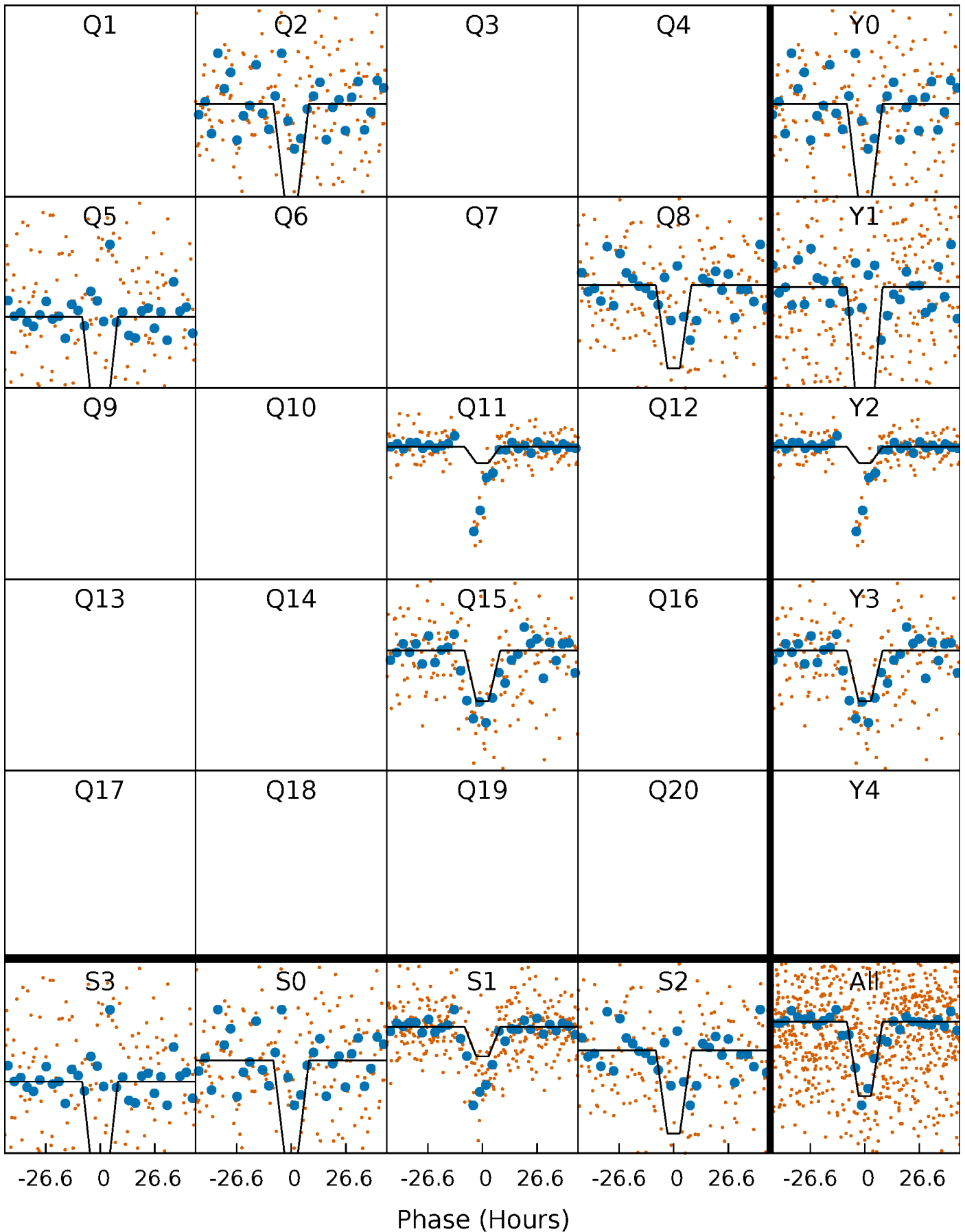
DV Quarter-Phased Transit Curves

TCE 009466335-01 P=302.050667 Days $T_0=187.640251$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

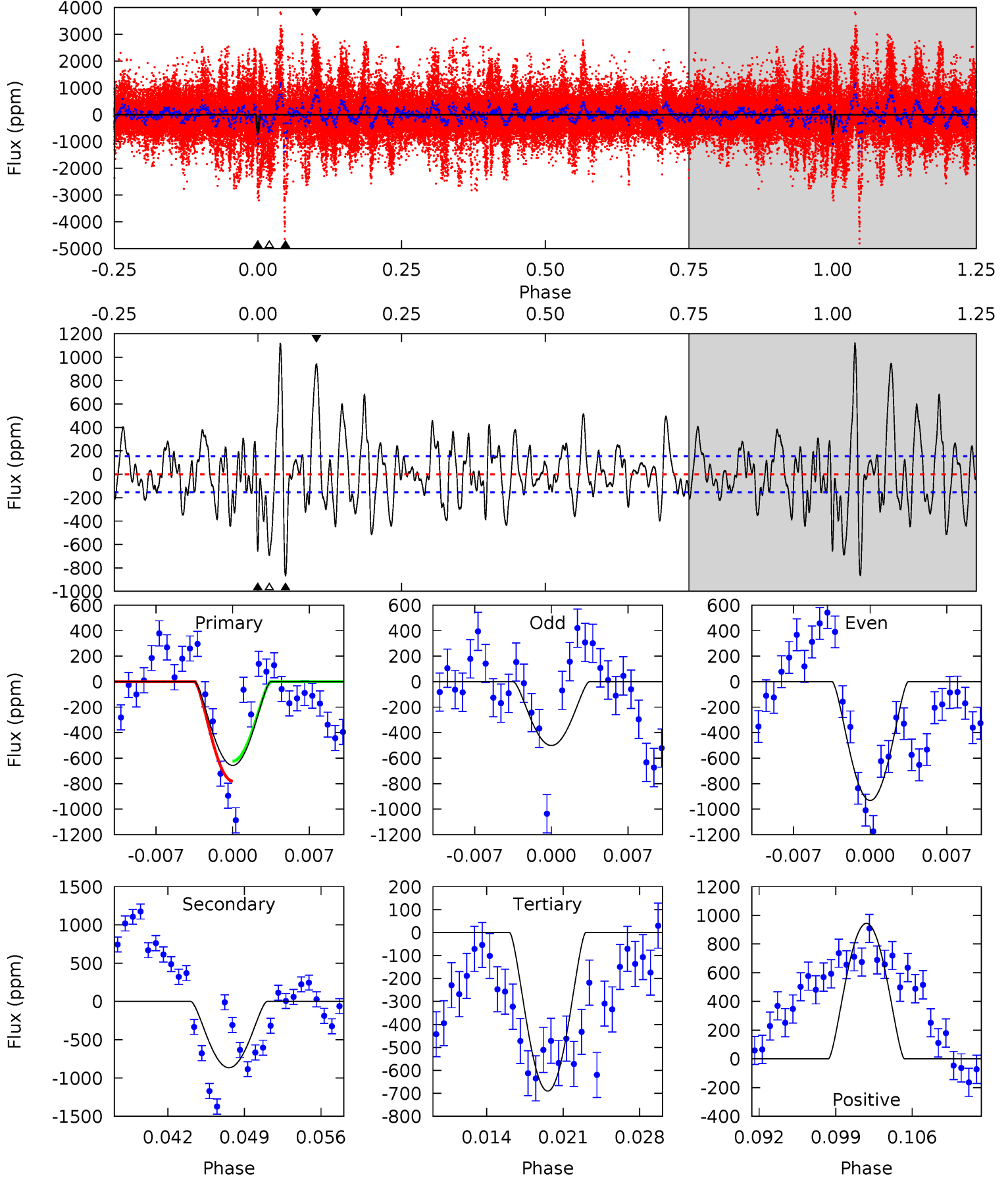
TCE 009466335-01 P=302.001206 Days $T_0=187.889491$ (BKJD)



DV Model-Shift Uniqueness Test

009466335-01, P = 302.050667 Days, E = 187.640251 Days

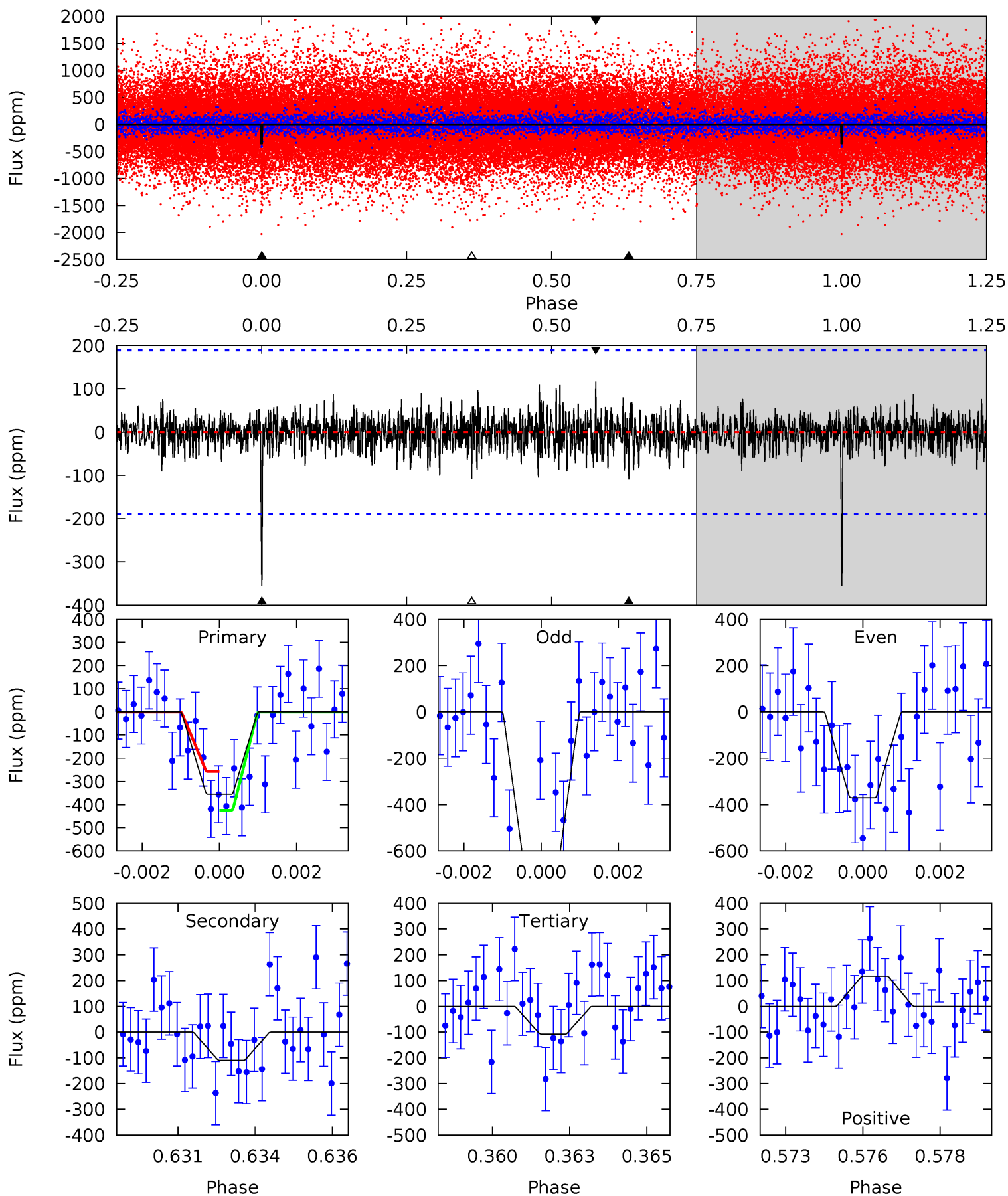
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
21.7	28.6	22.8	31.2	5.09	2.69	8.01	-1.11	-9.50	5.78	-2.61	4.57	1.76	0.56	2.60



Alt Model-Shift Uniqueness Test

009466335-01, P = 302.001206 Days, E = 187.889491 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.94	3.07	3.03	3.27	5.29	3.03	0.85	6.91	6.66	0.04	-0.21	5.82	5.39	0.25	2.34



Stellar Parameters For KIC 009466335

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5193^{+155}_{-155}	$4.535^{+0.096}_{-0.072}$	$-0.360^{+0.350}_{-0.300}$	$0.755^{+0.086}_{-0.086}$	$0.713^{+0.104}_{-0.045}$	$2.332^{+0.911}_{-0.552}$
	+3%/-3%	+2%/-2%	+97%/-83%	+11%/-11%	+15%/-6%	+39%/-24%
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 009466335-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-865 ± 30	$8.44^{+6.49}_{-5.69}$	312^{+13}_{-13}	3313^{+1554}_{-493}	4179^{+34612}_{-2815}
Alt.	-109 ± 36	$6.53^{+6.54}_{-4.32}$	312^{+14}_{-14}	2642^{+1010}_{-409}	821^{+6540}_{-616}

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 $A_{obs} \gg 1.0$

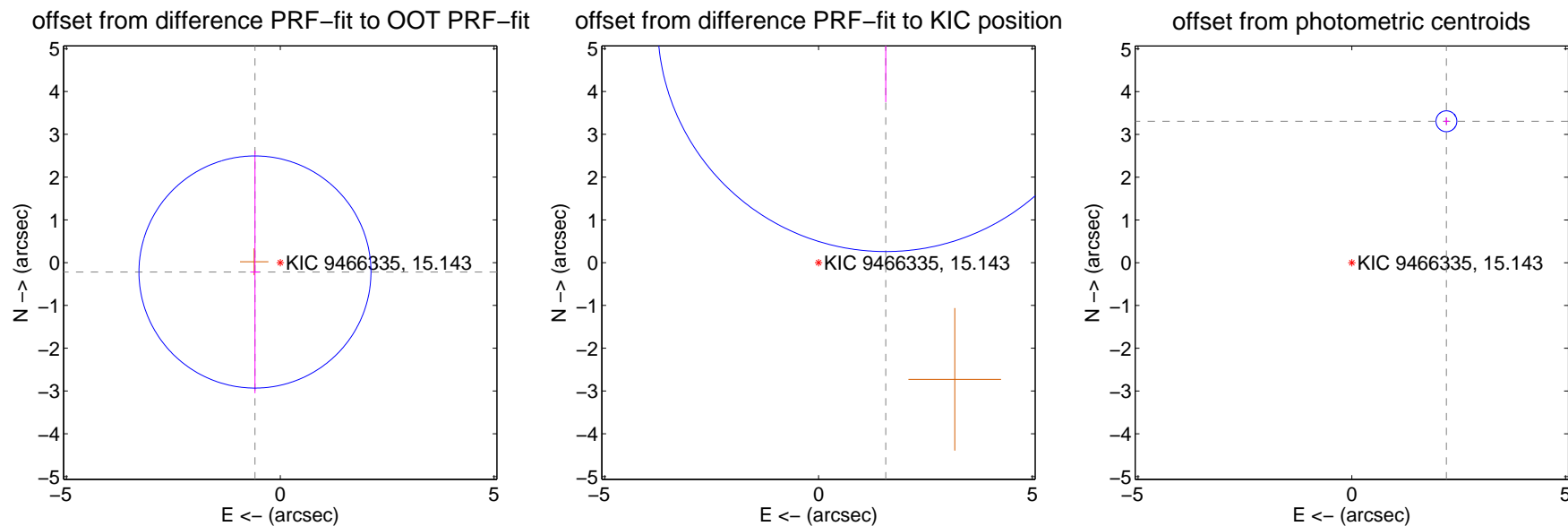
DV Centroid Data

Supplemental centroid analysis for 009466335-01. Kepler magnitude: 15.14. Transit SNR 14.53

There are 0 quarters with good PRF difference image offsets

The OOT PRF centroid is offset from the target star catalog position by about 6.21 arcsec so the offset from difference PRF-fit to OOT-fit may be invalid.

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.631 ± 0.904	0.70	0.592 ± 0.109	-0.219 ± 2.835
PRF-fit source offset from KIC position	5.812 ± 1.779	3.27	-1.574 ± 0.582	5.595 ± 1.840
photometric centroid source offset	3.98 ± 0.08	48.90	-2.21 ± 0.06	3.31 ± 0.09

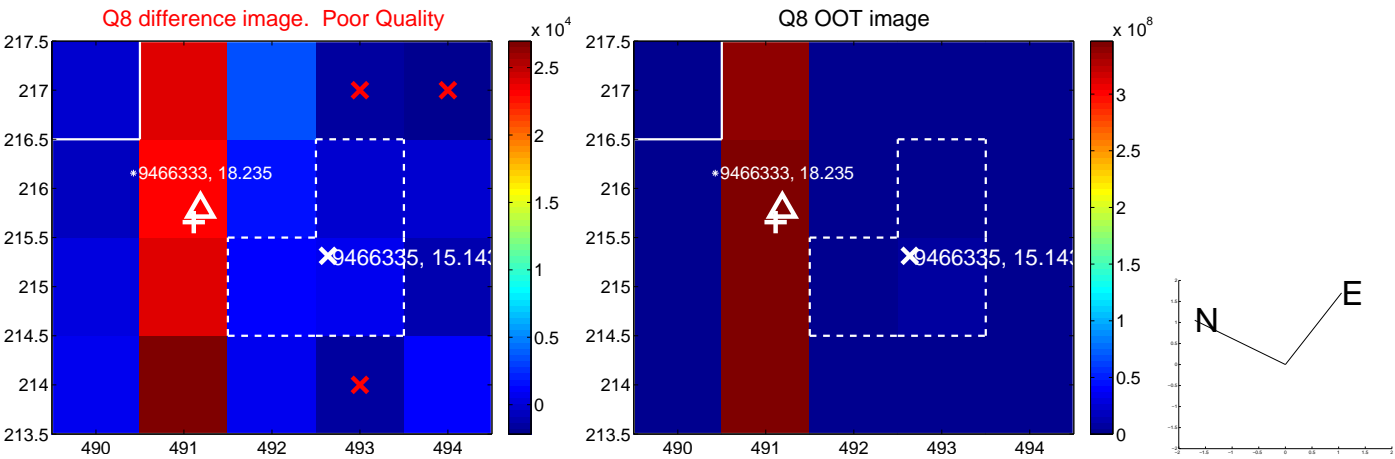
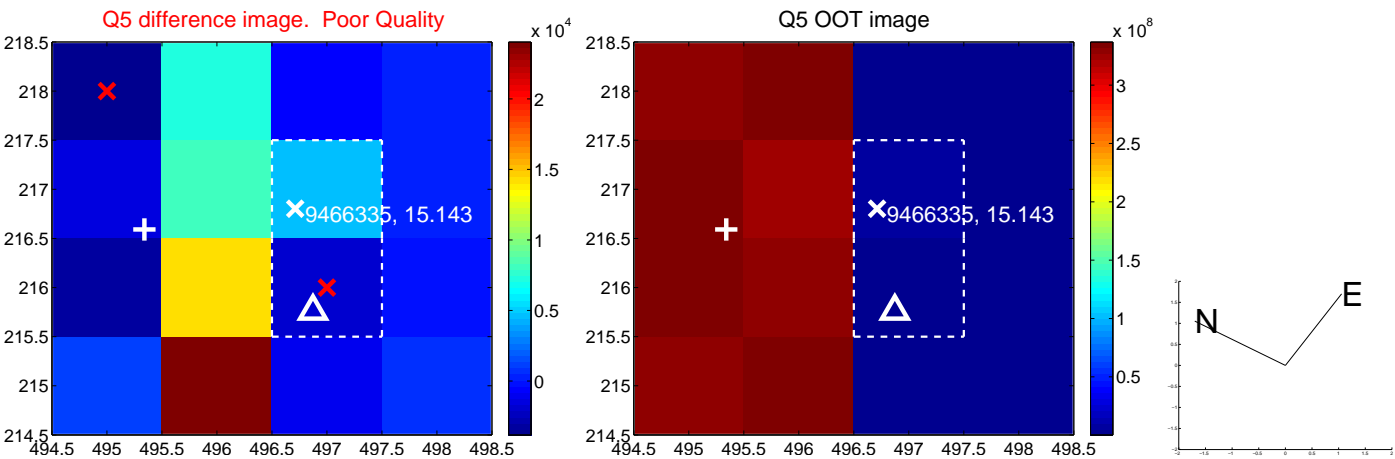


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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



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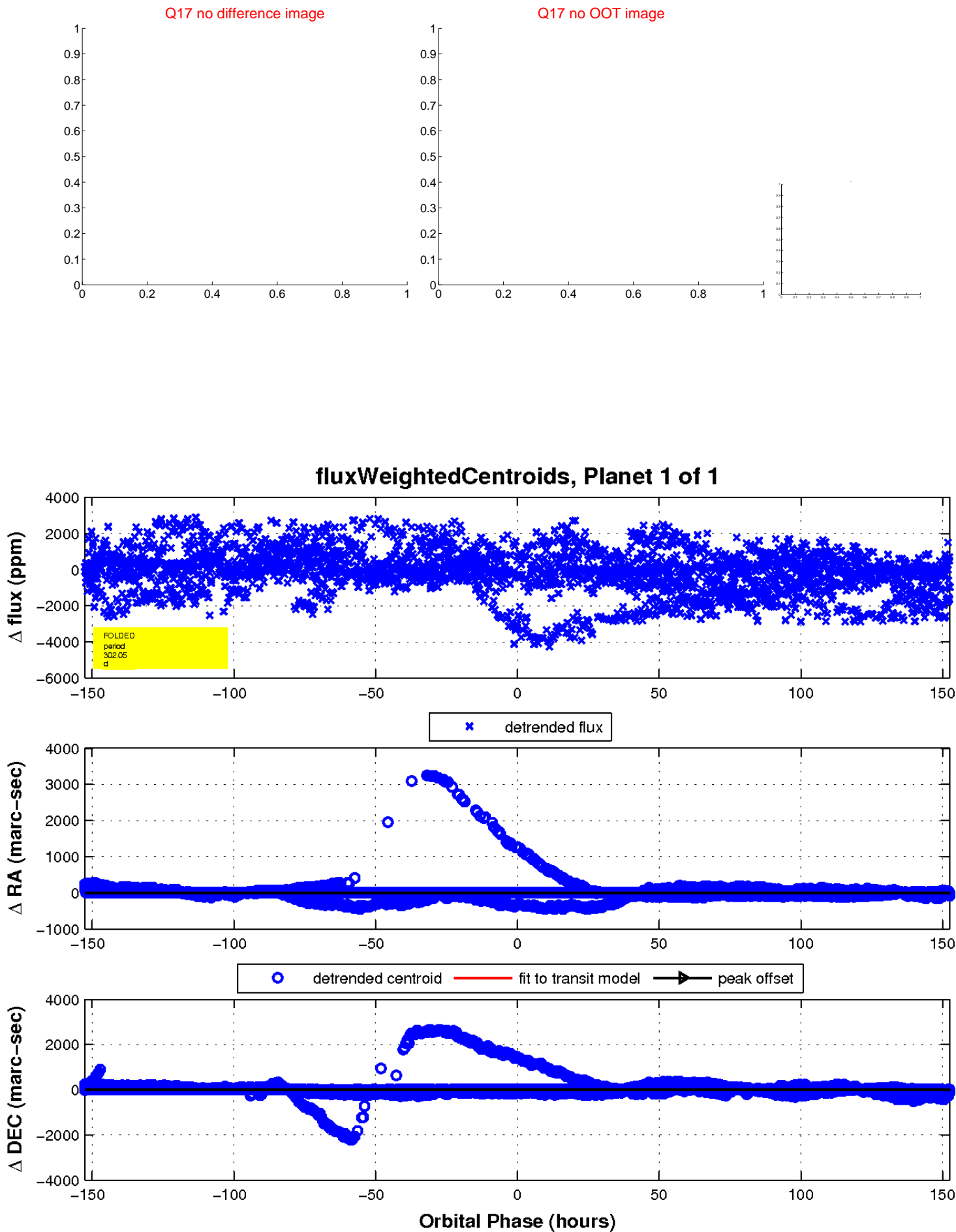
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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UKIRT Image

Declination

