

KIC 005004660

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})
005004660-01	OBS	No	370.465335	163.938096	722.5	44.898	22.9	32.9	44.45	4174	256.41	364.23

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005004660-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—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.

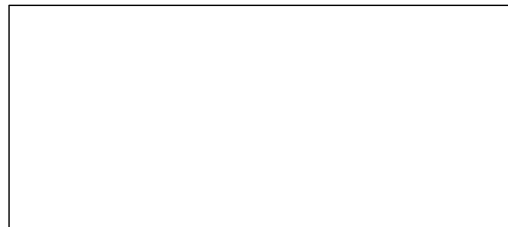
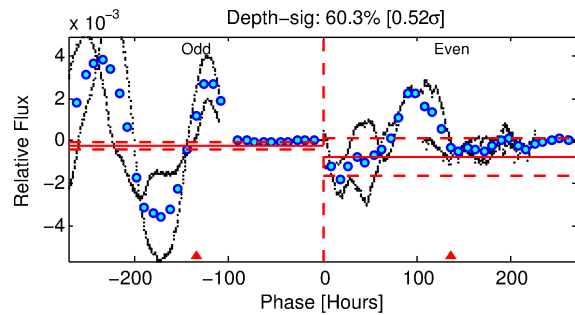
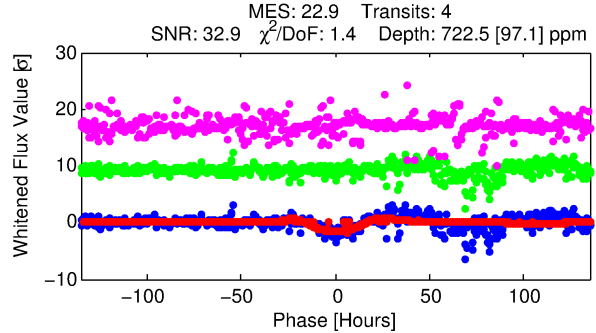
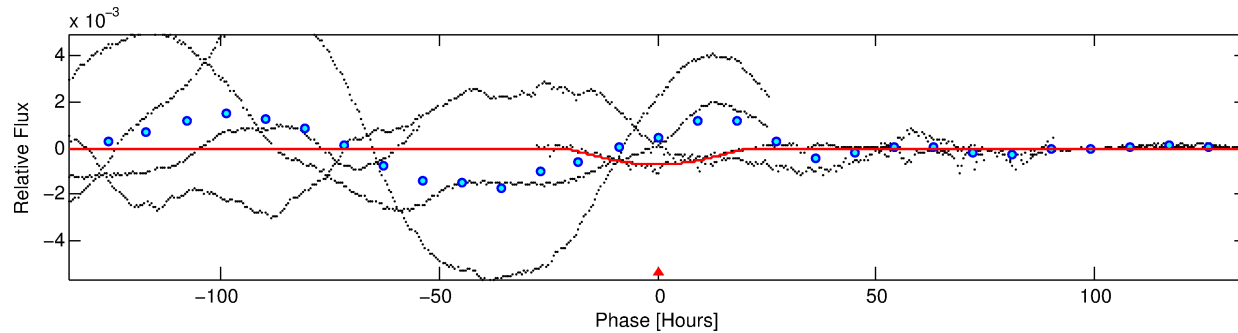
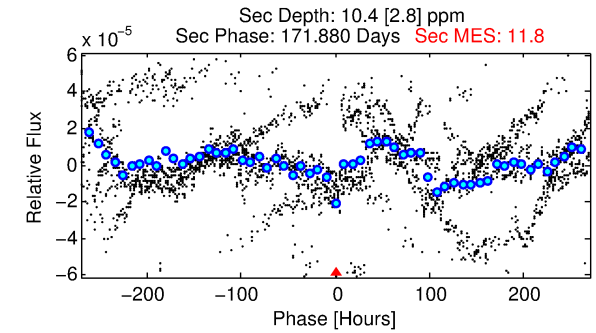
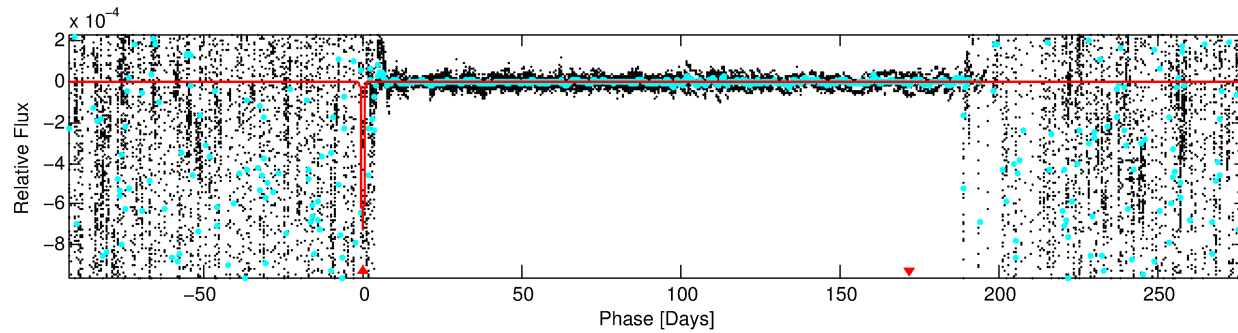
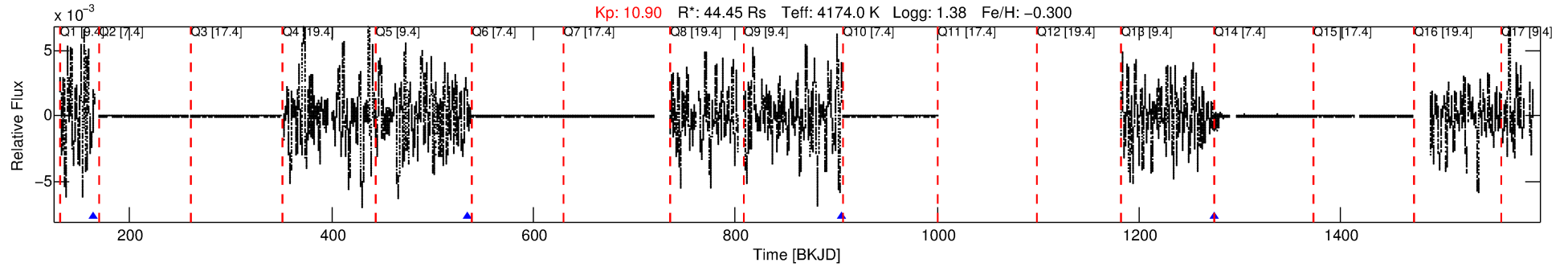
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005004660-01

No Significant Match Found

DV One-Page Summary

KIC: 5004660 Candidate: 1 of 1 Period: 370.465 d



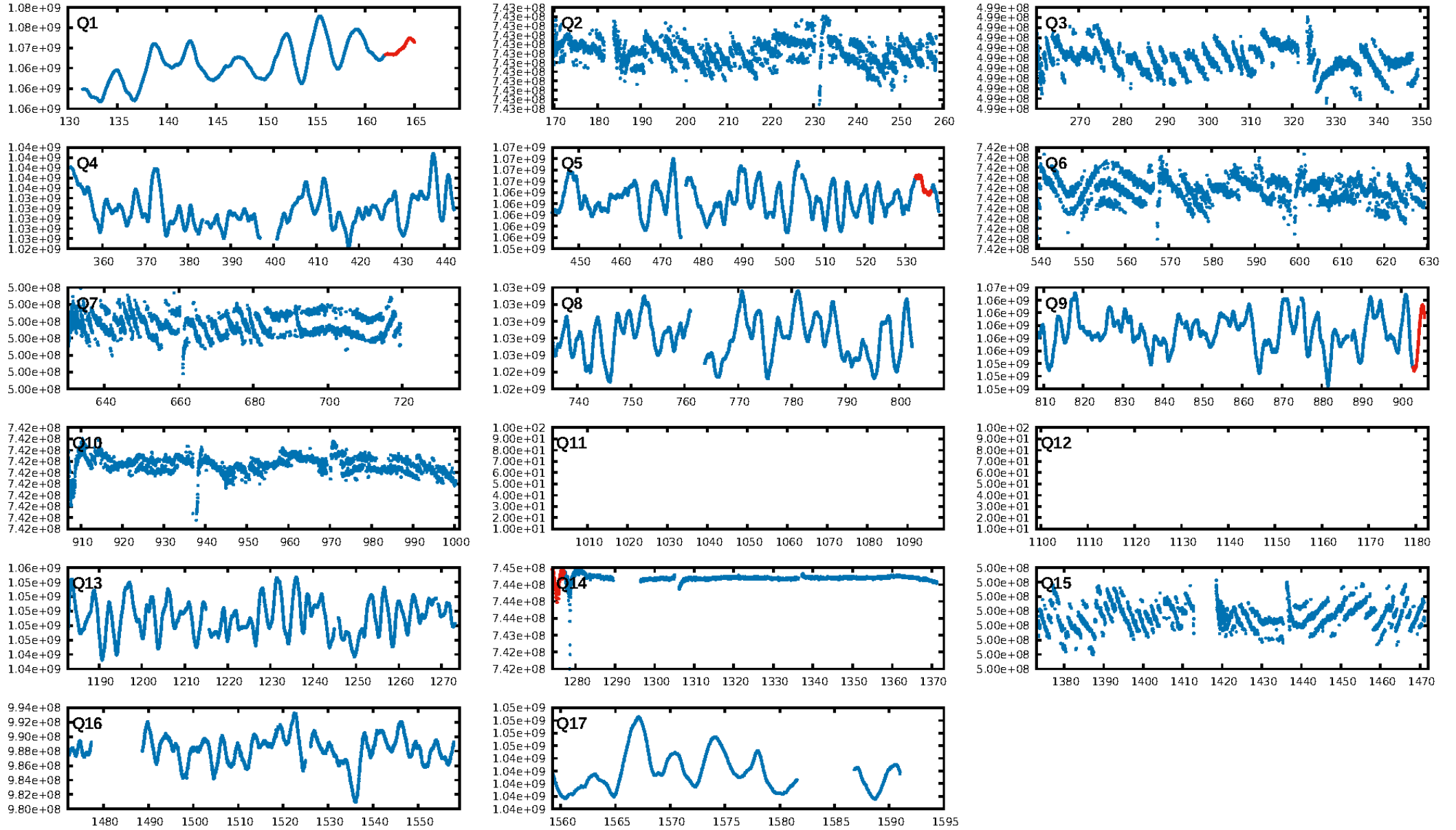
DV Fit Results:

Period = 370.46533 [0.03960] d
Epoch = 163.9381 [0.1175] BKJD
 $R_p/R^* = 0.0529$ [0.0490]
 $a/R^* = 20.80$ [4.41]
 $b = 1.00$ [0.06]
 $S_{\text{eff}} = 364.23$ [109.29]
 $T_{\text{eq}} = 1114$ [84] K
 $R_p = 256.41$ [248.76] R_e
 $a = 1.2147$ [0.2668] AU
 $A_g = 0.13$ [0.24] [-3.60σ]
 $T_{\text{effp}} = 1030$ [483] K [-0.17σ]

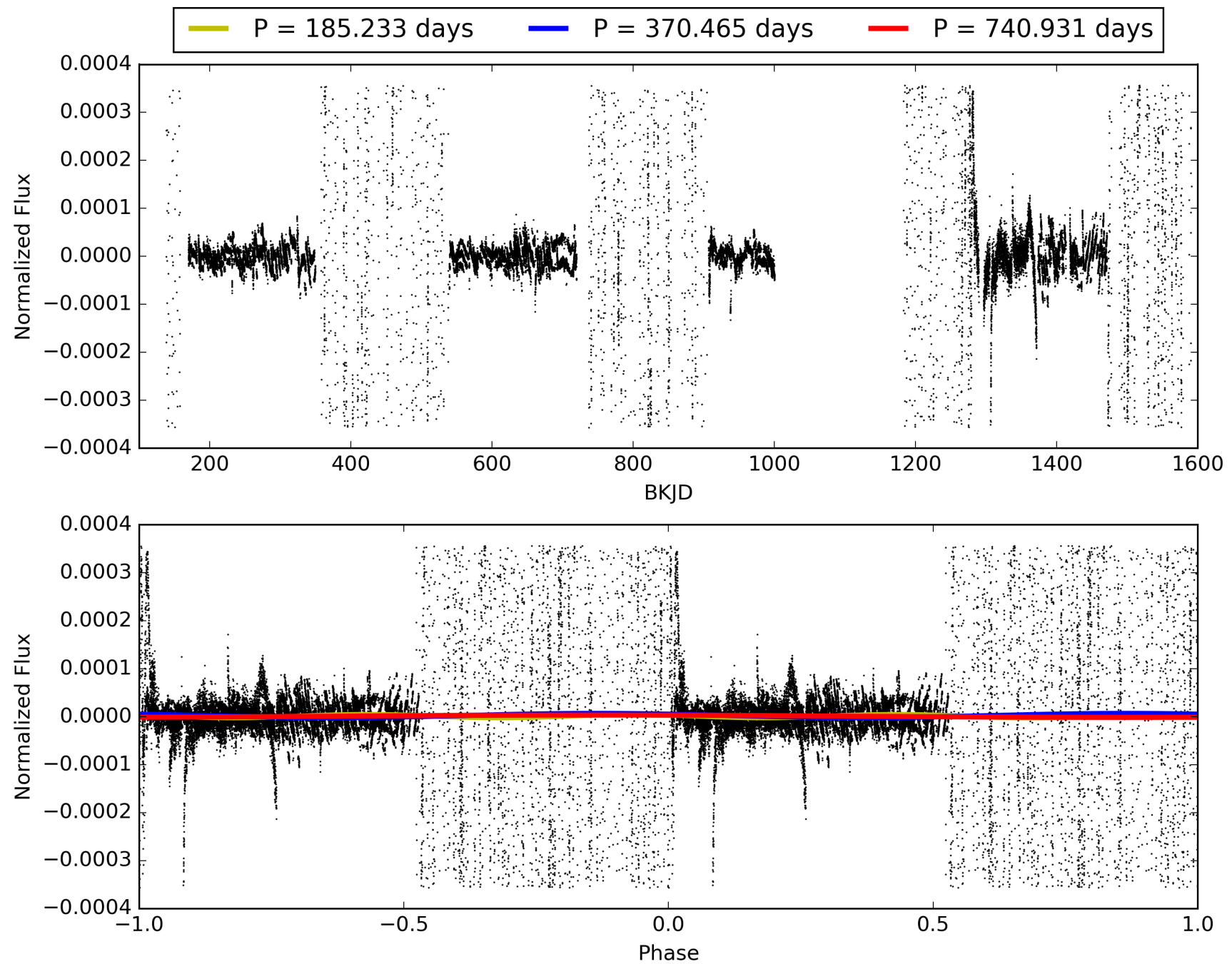
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 32.2%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 1.13e-13
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 0.2903
Centroid-sig: 0.0%
Centroid-so: 2.010 arcsec [5.87σ]
OotOffset-rm: N/A
KicOffset-rm: N/A
OotOffset-st: 0/0/0/0 [0]
KicOffset-st: 0/0/0/0 [0]
DiffImageQuality-fgm: N/A
DiffImageOverlap-fno: 1.00 [1/1]

TCE 005004660-01, PDC Light Curves

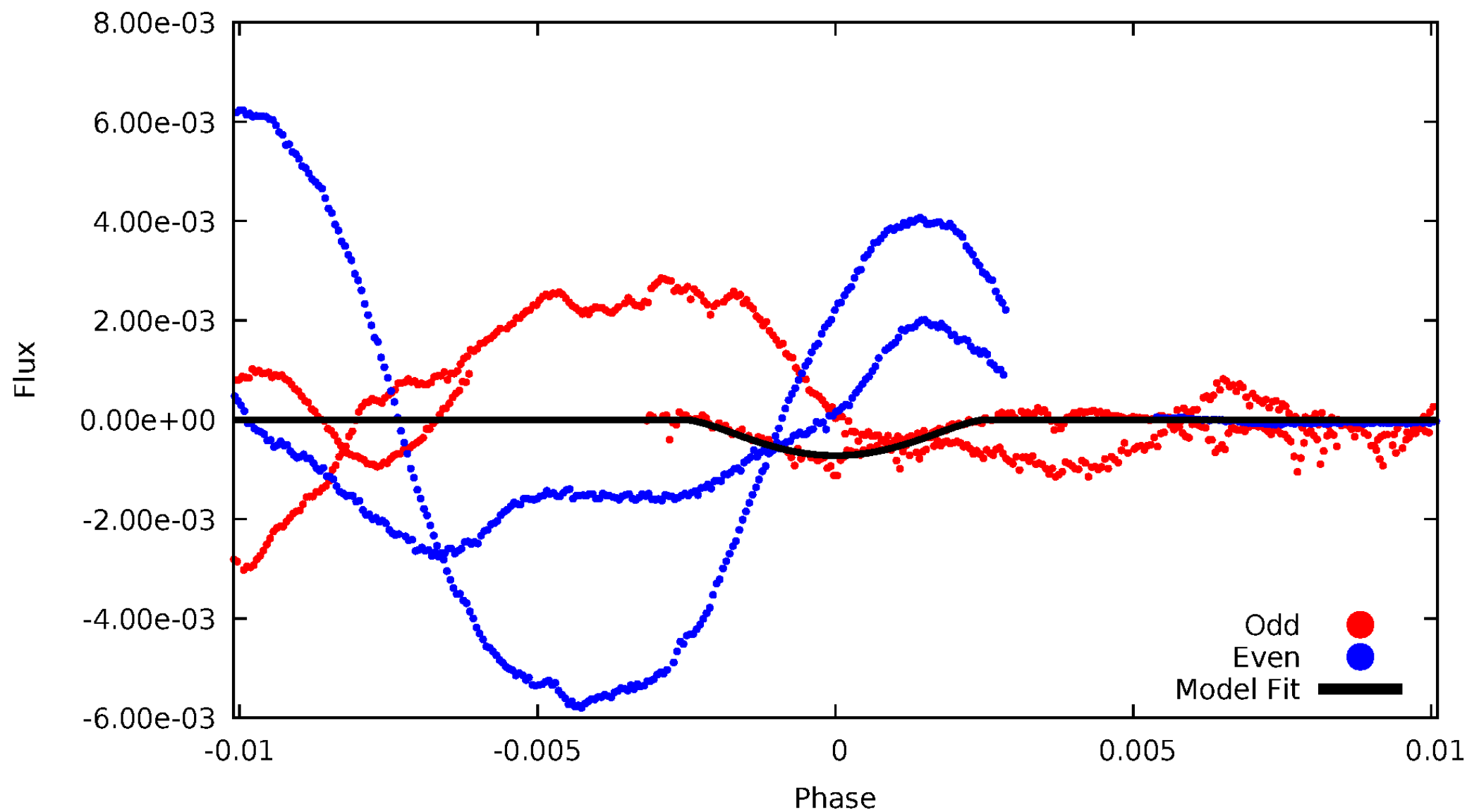


TCE 005004660-01



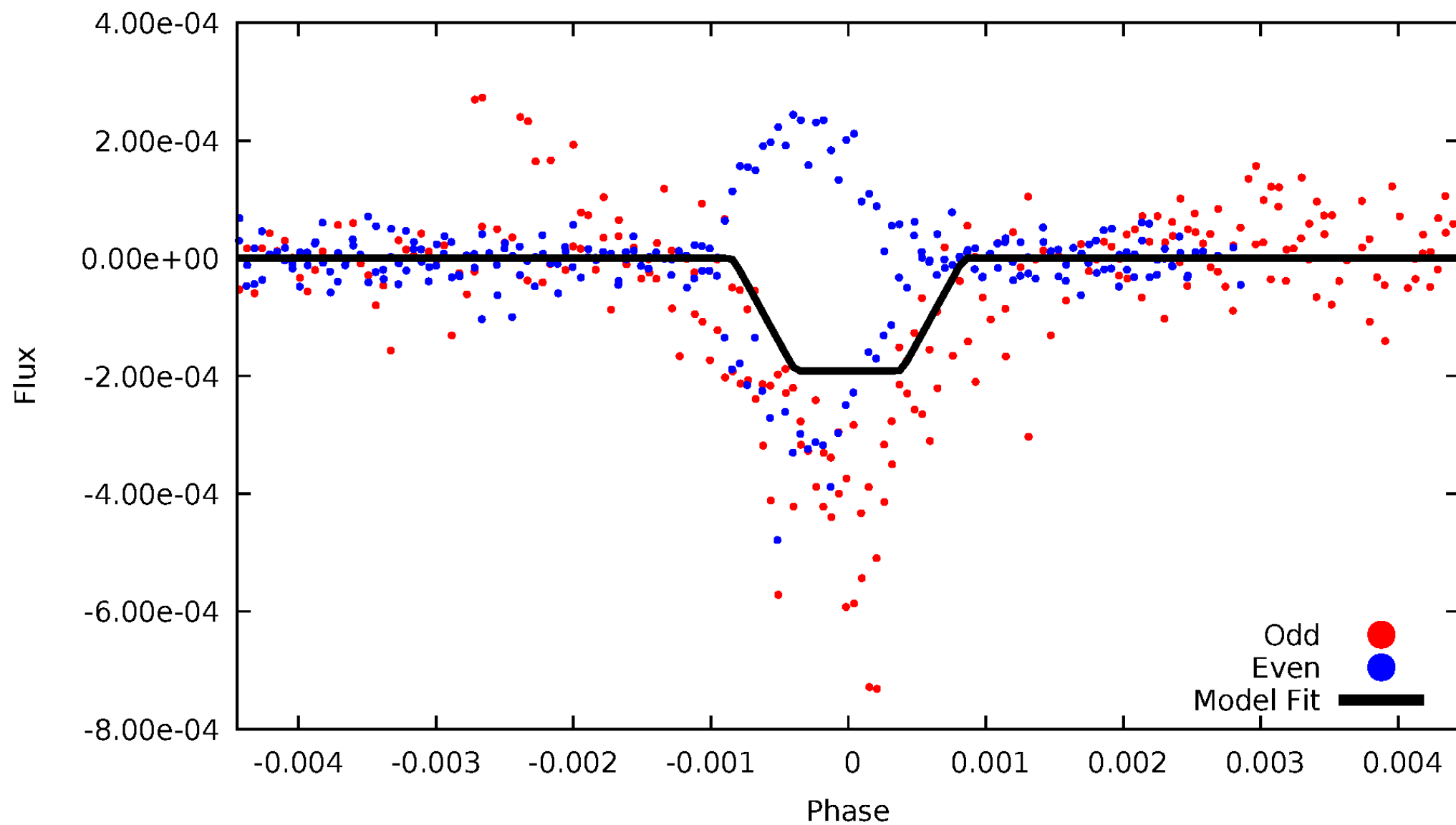
DV Odd/Even

TCE 005004660-01

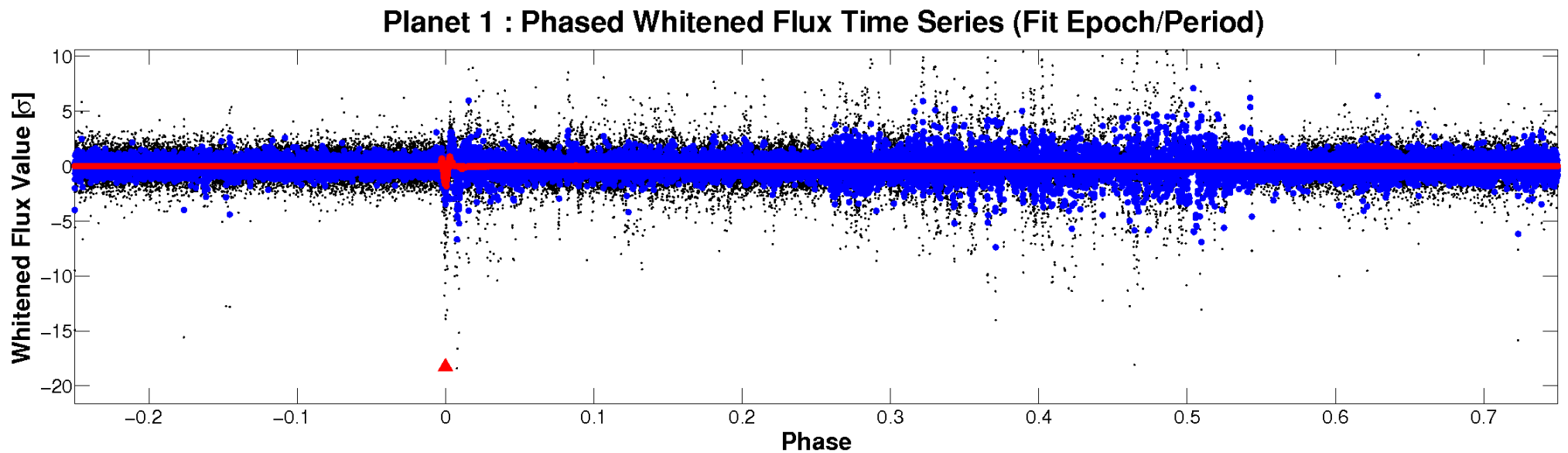
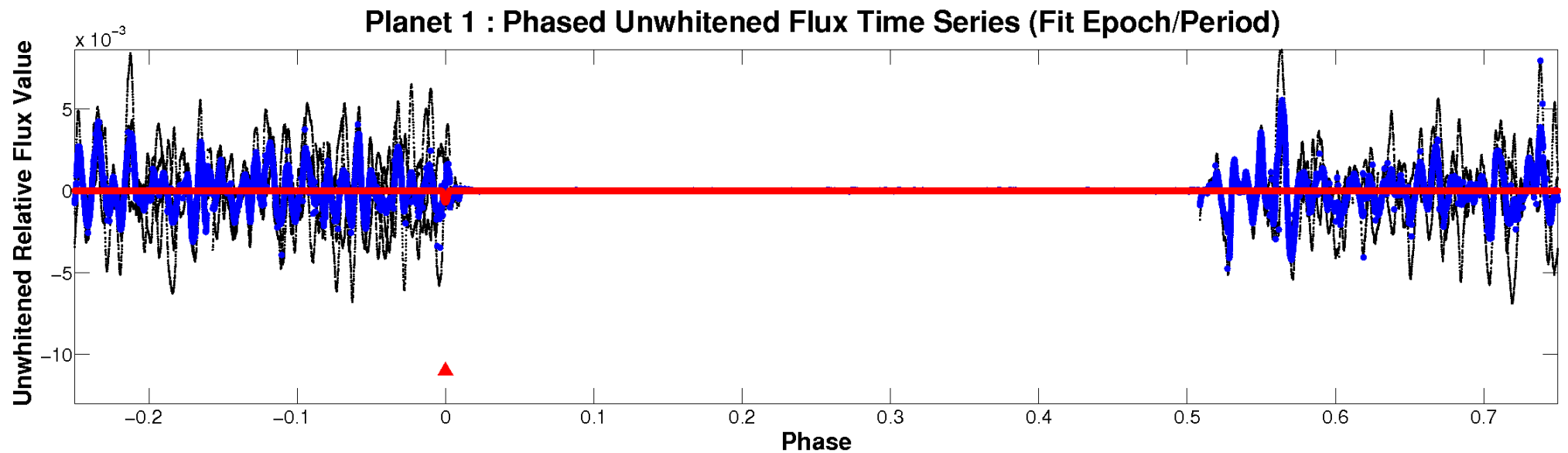


ALT Odd/Even

TCE 005004660-01

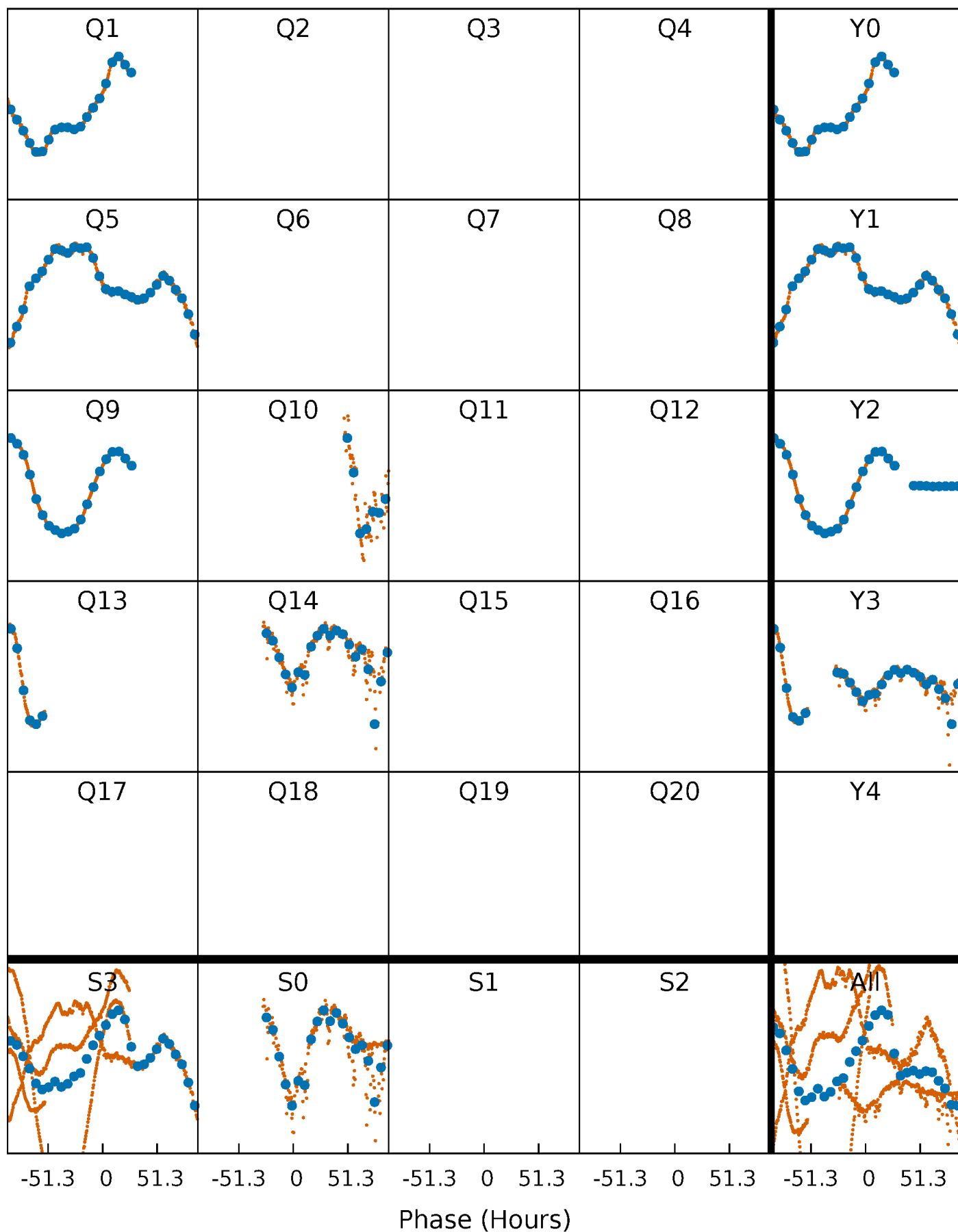


Non-Whitened Vs. Whitened Light Curve



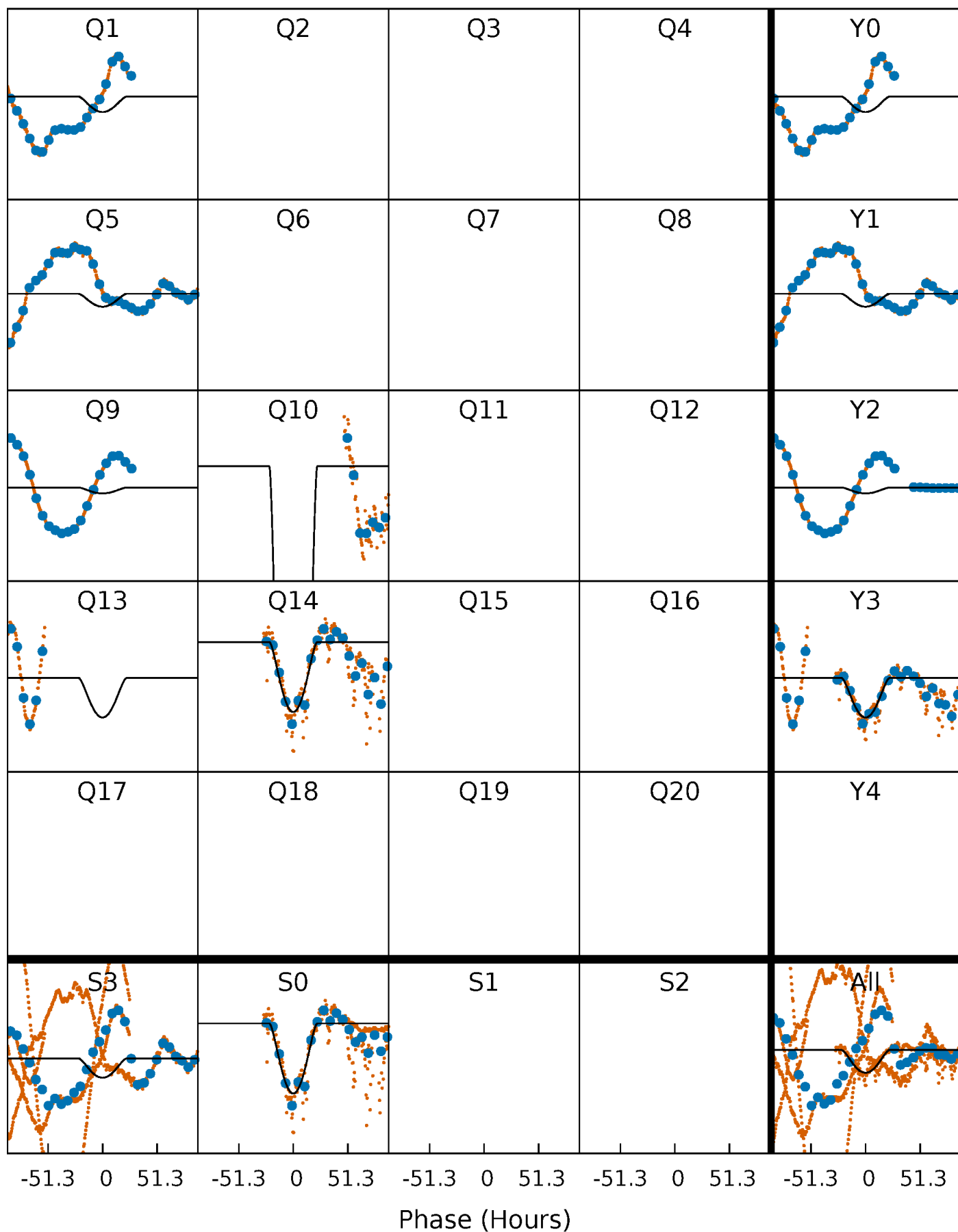
PDC Quarter-Phased Transit Curves

TCE 005004660-01 P=370.465335 Days $T_0=163.938096$ (BKJD)



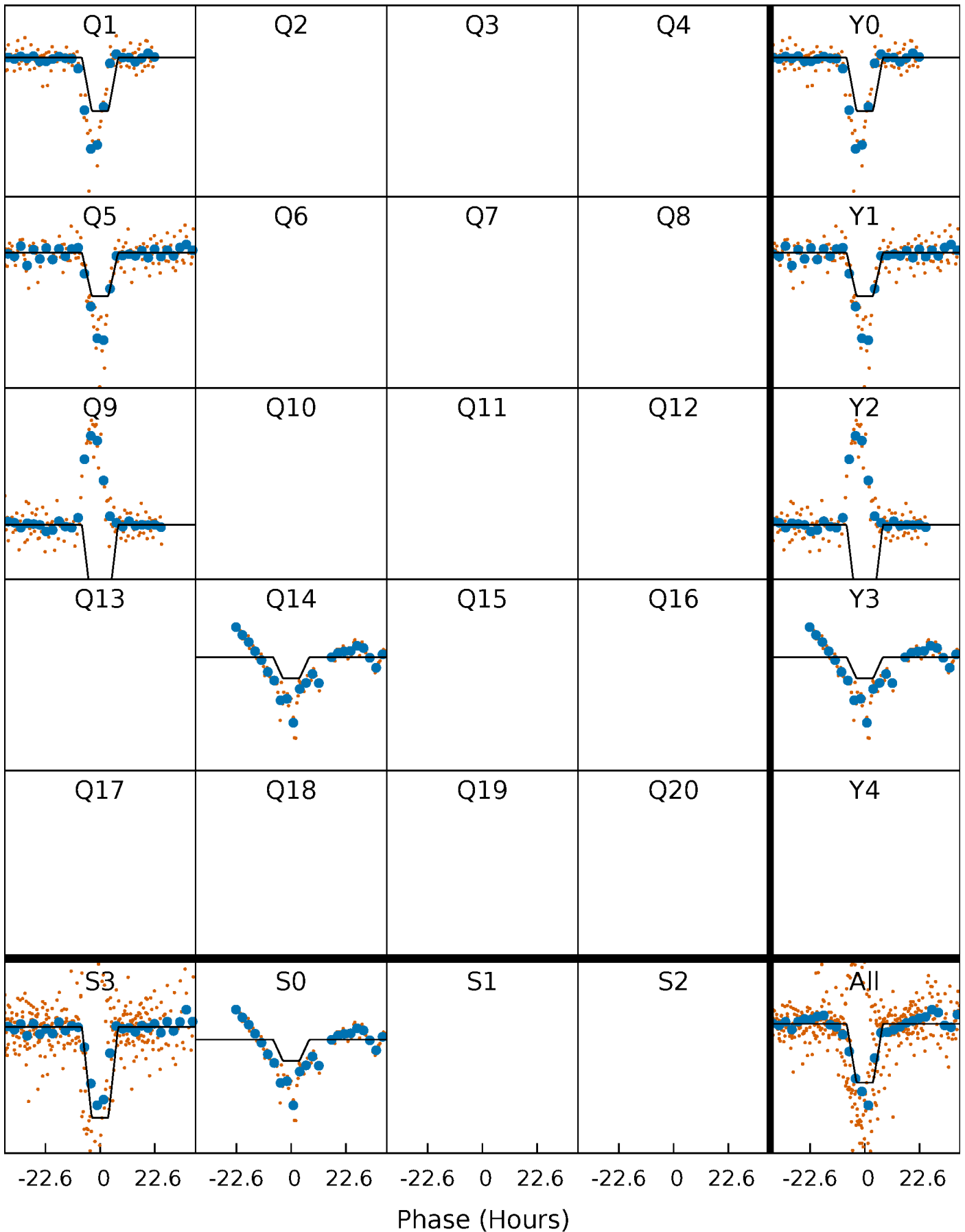
DV Quarter-Phased Transit Curves

TCE 005004660-01 P=370.465335 Days $T_0=163.938096$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

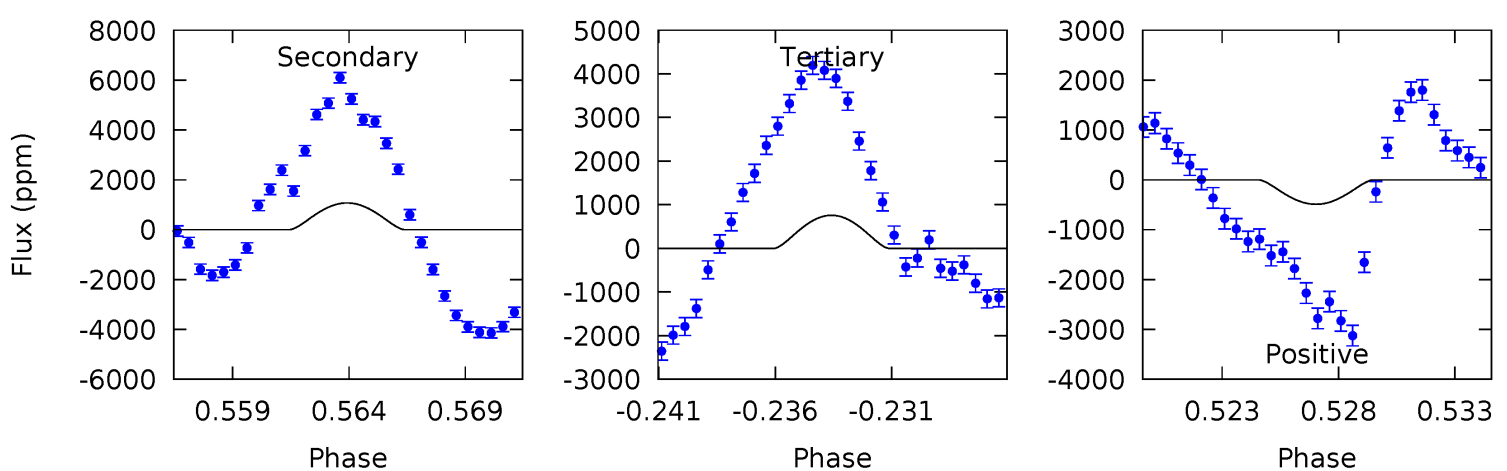
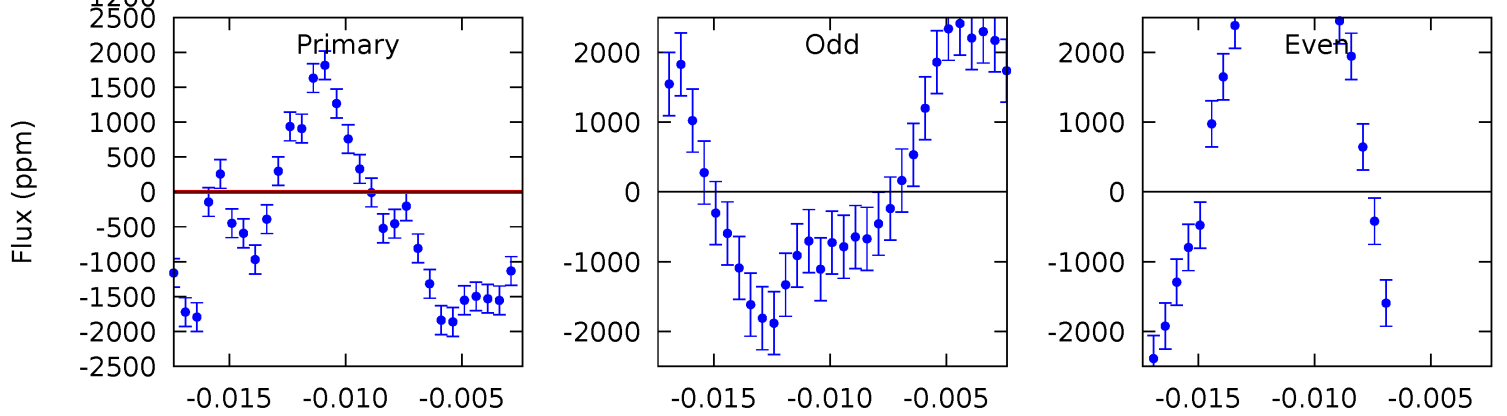
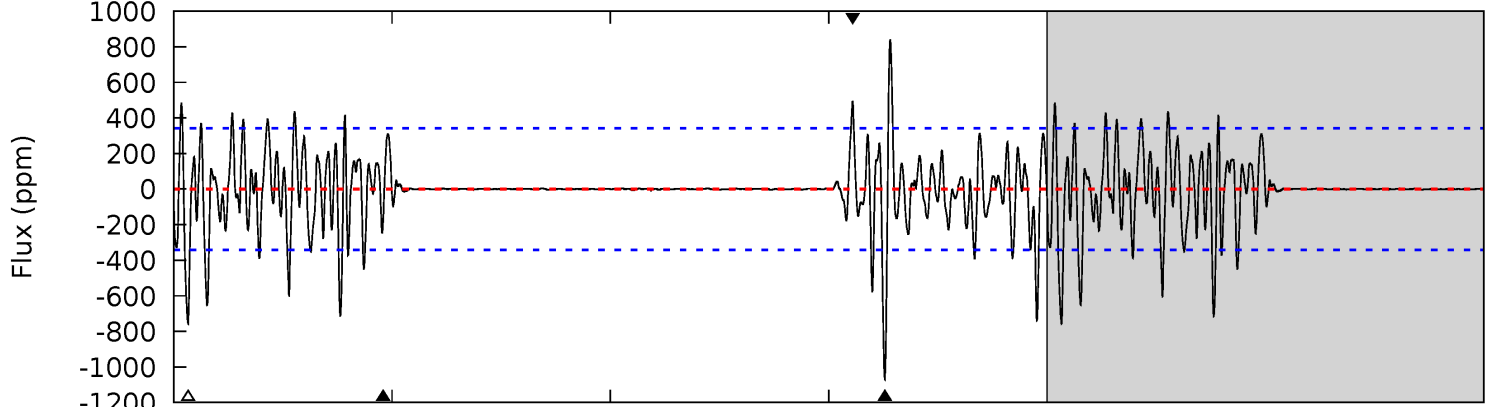
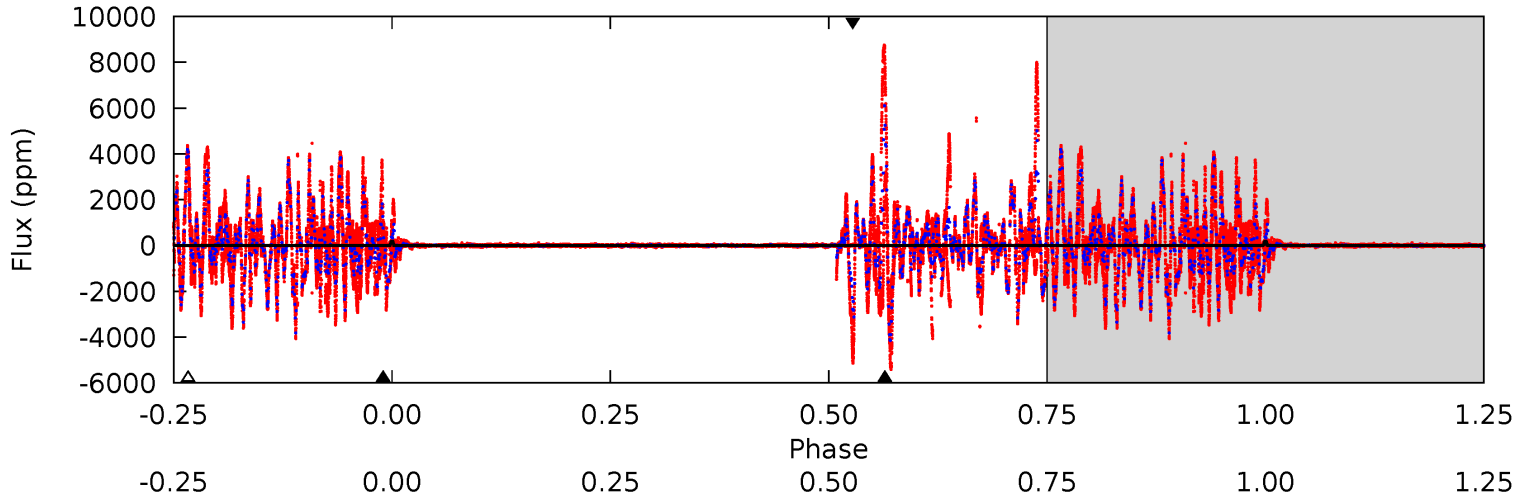
TCE 005004660-01 P=370.399142 Days $T_0=164.071411$ (BKJD)



DV Model-Shift Uniqueness Test

005004660-01, P = 370.465335 Days, E = 163.938096 Days

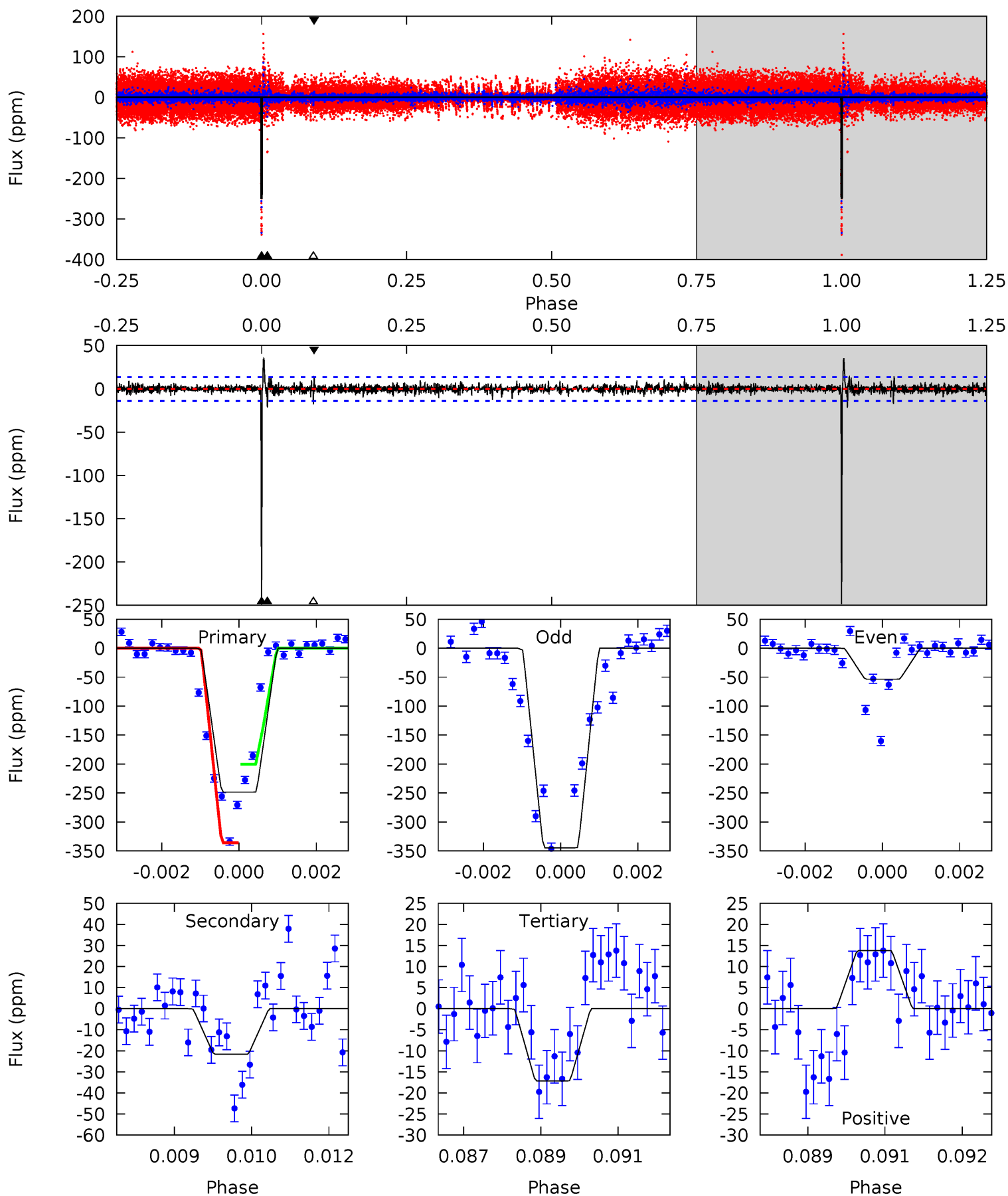
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2.70	16.1	11.4	7.40	5.15	2.80	1.99	-8.69	-4.69	4.73	8.73	8.19	1.19	0.44	3.65



Alt Model-Shift Uniqueness Test

005004660-01, P = 370.399142 Days, E = 164.071411 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
96.7	8.41	6.67	5.36	5.36	3.14	1.12	90.0	91.3	1.75	3.06	65.7	0.77	0.12	23.8



Stellar Parameters For KIC 005004660

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	4174^{+62}_{-75}	$1.383^{+0.144}_{-0.096}$	$-0.300^{+0.150}_{-0.150}$	$44.453^{+4.218}_{-12.654}$	$1.743^{+0.070}_{-0.632}$	$0.000^{+0.000}_{-0.000}$
	+1%/-2%	+10%/-7%	+50%/-50%	+9%/-28%	+4%/-36%	+83%/-28%
Source	SPE74	SPE74	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 005004660-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-1071 ± 66	$282.36^{+237.34}_{-166.43}$	1560^{+56}_{-88}	3364^{+1299}_{-547}	11^{+53}_{-8}
Alt.	-22 ± 3	$178.88^{+180.94}_{-121.64}$	1561^{+59}_{-83}	2081^{+944}_{-4112}	$0.536^{+4.468}_{-0.407}$

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 $A_{obs} \gg 1.0$

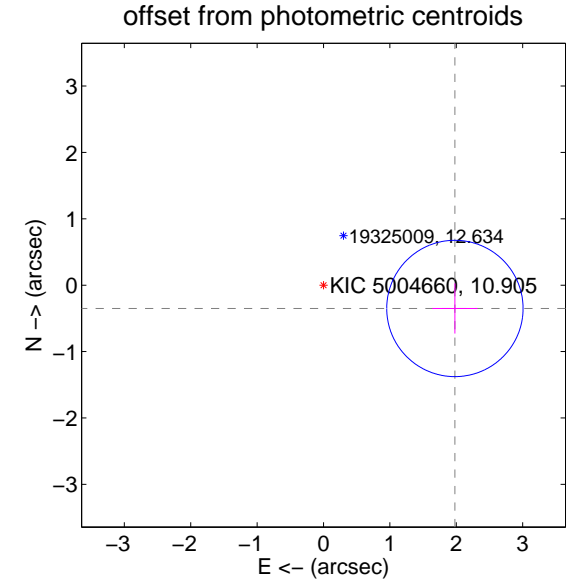
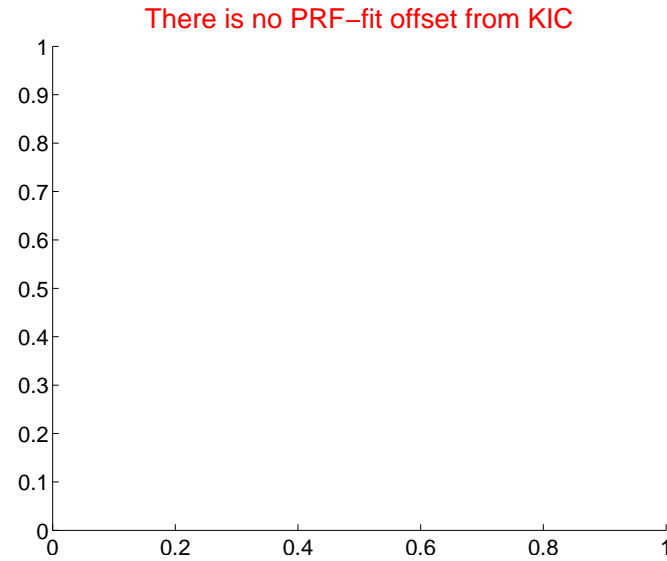
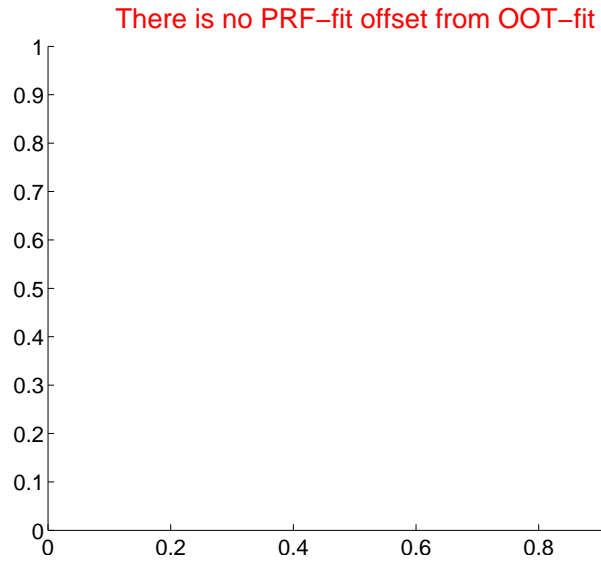
DV Centroid Data

Supplemental centroid analysis for 005004660-01. **Kepler magnitude: 10.90.** Transit SNR 32.94

There are 0 quarters with good PRF difference image offsets

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

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	—	—	—	—
PRF-fit source offset from KIC position	—	—	—	—
photometric centroid source offset	2.01 \pm 0.34	5.87	-1.98 \pm 0.34	-0.35 \pm 0.38

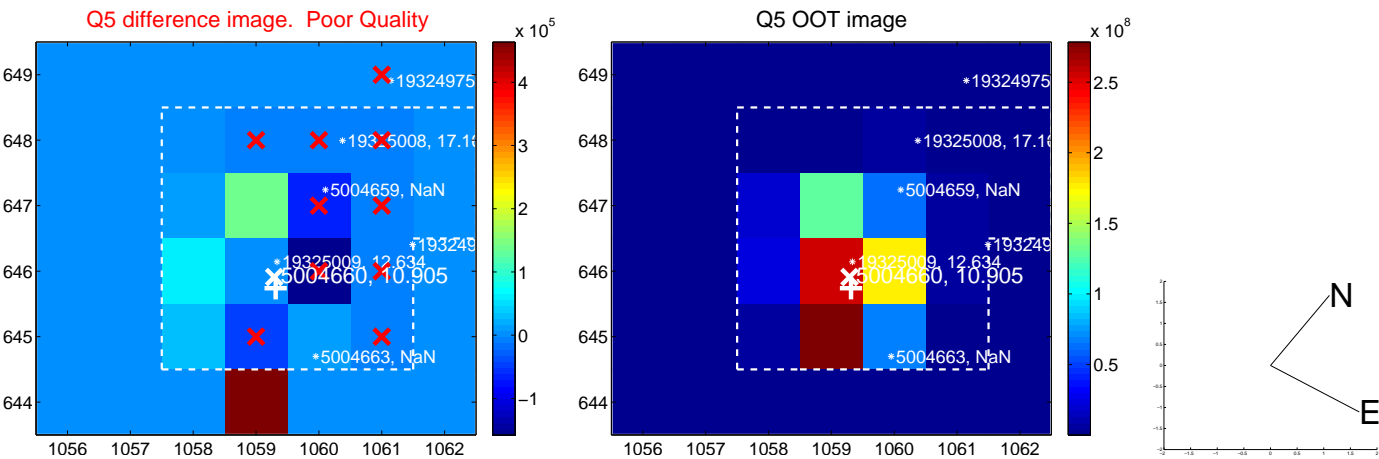


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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



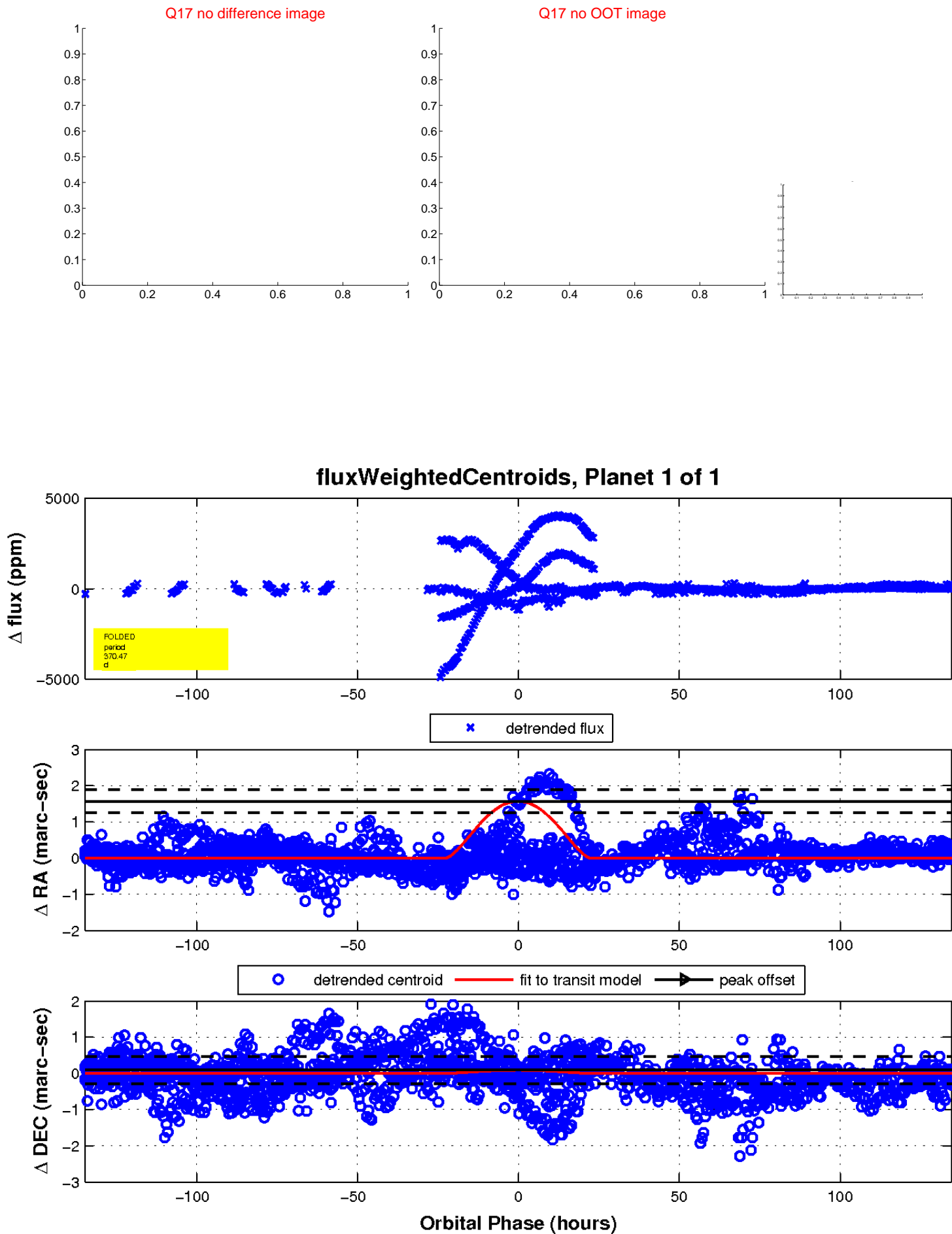
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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UKIRT Image

