

KIC 006954726

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})
006954726-01	OBS	No	525.630032	404.733191	25175.2	14.004	24.2	8.3	2.40	15896	63.20	97.97

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006954726-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—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.

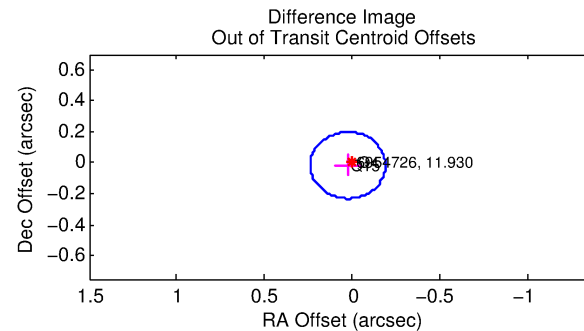
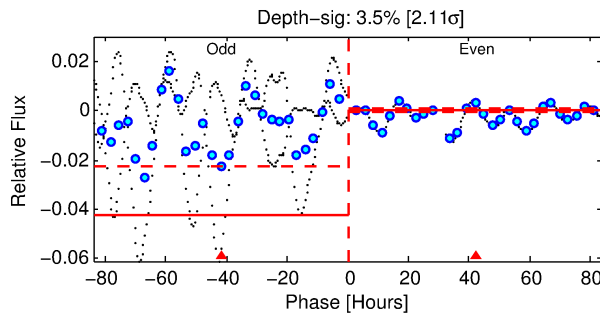
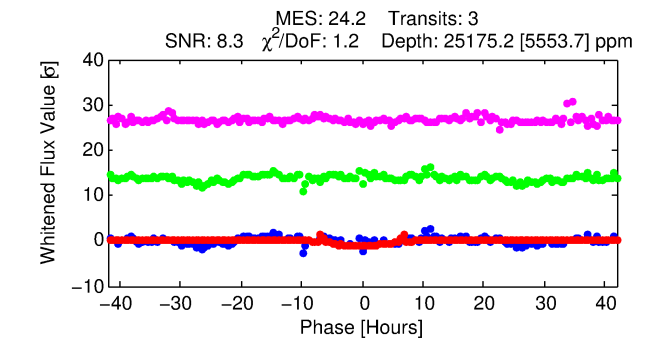
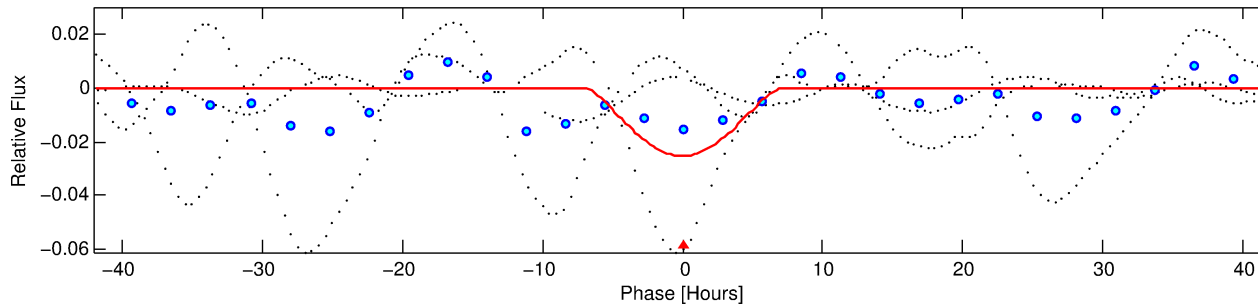
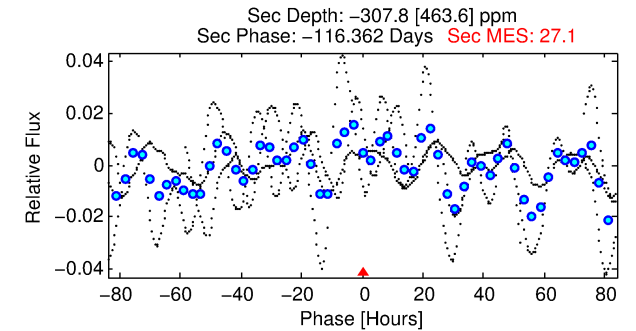
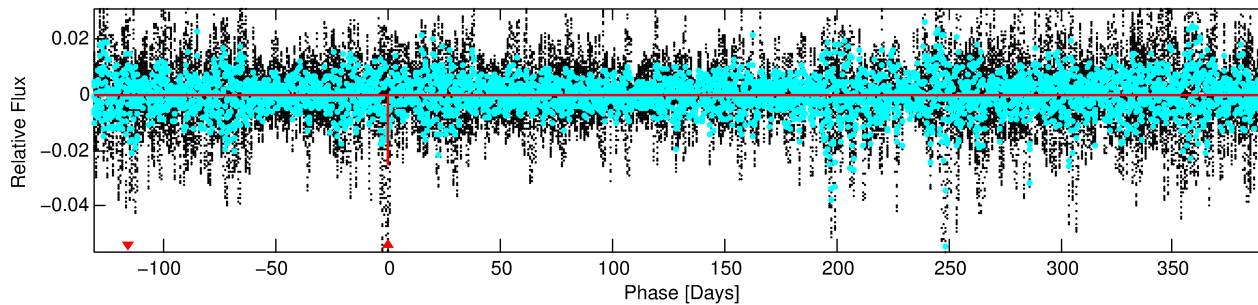
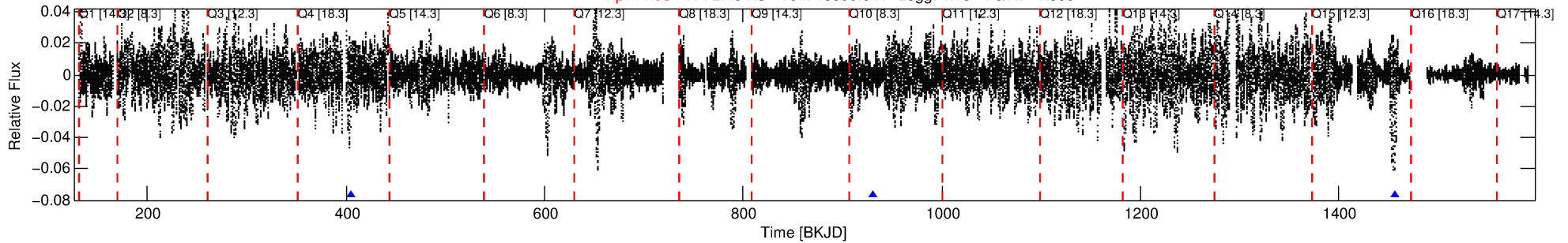
Ephemeris Match Information For 006954726-01

No Significant Match Found

DV One-Page Summary

KIC: 6954726 Candidate: 1 of 1 Period: 525.630 d

Kp: 11.93 R*: 2.40 Rs Teff: 15896.0 K Logg: 4.15 Fe/H: -1.500



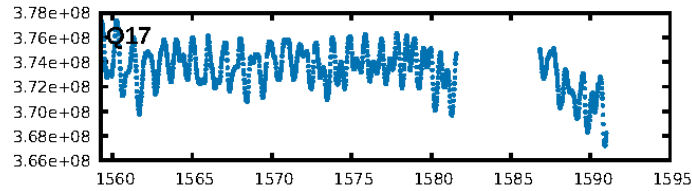
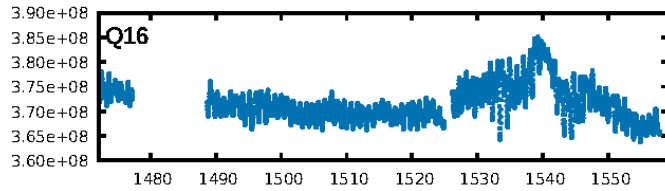
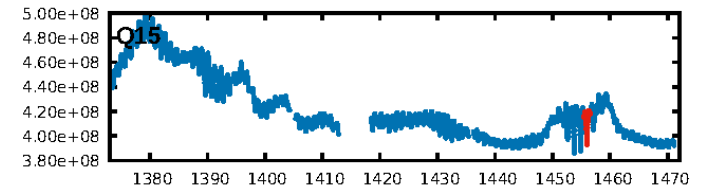
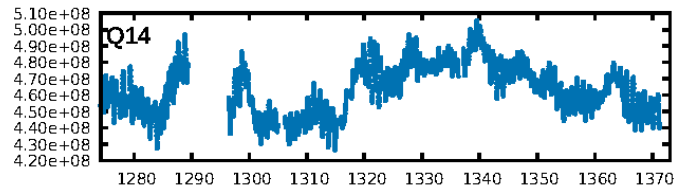
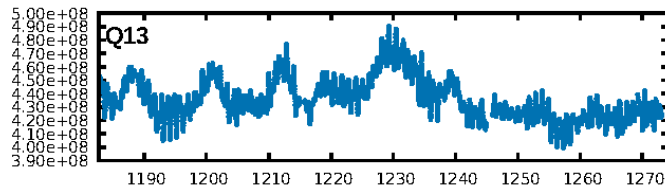
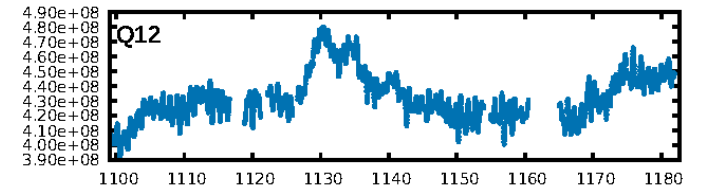
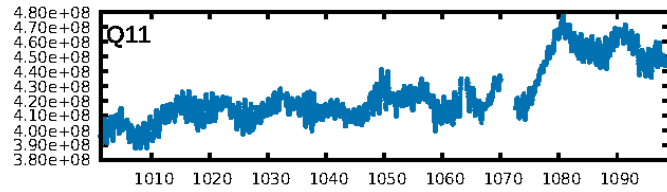
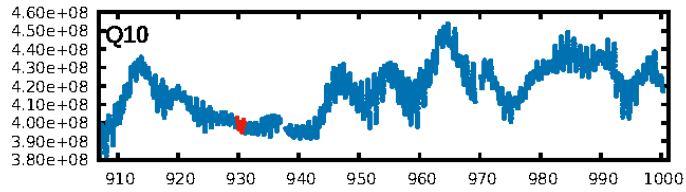
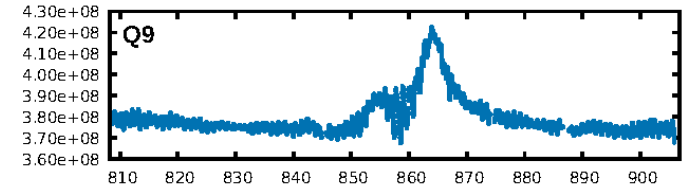
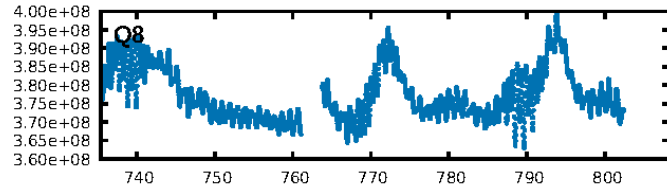
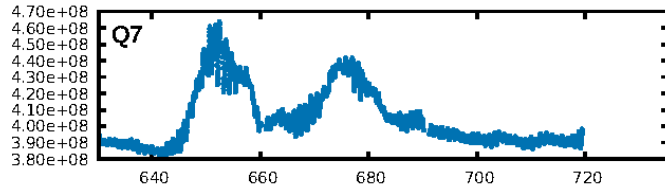
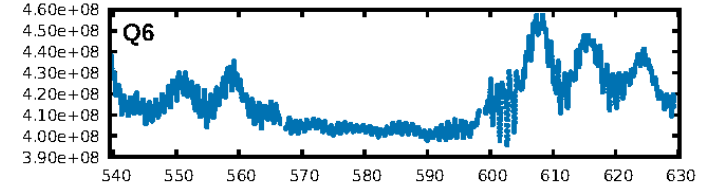
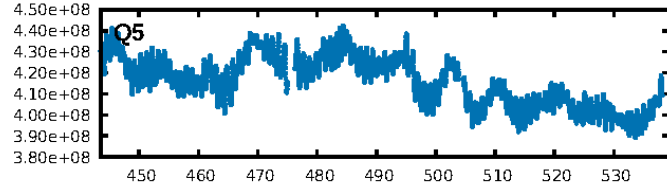
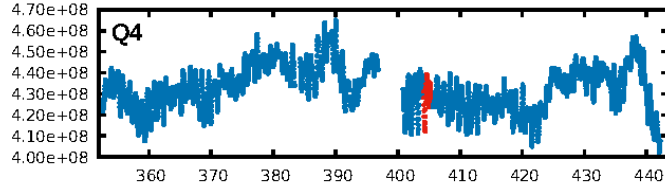
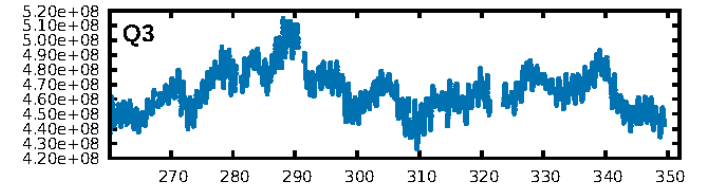
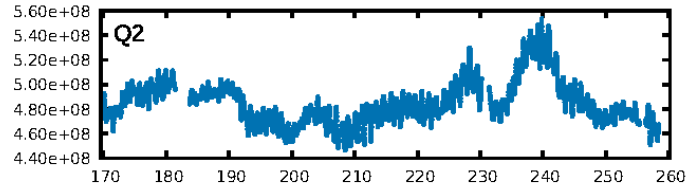
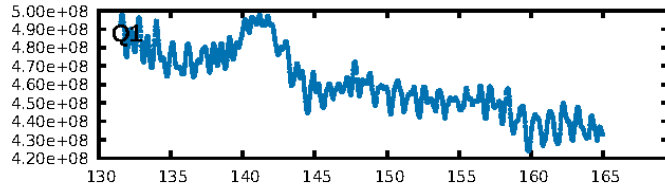
DV Fit Results:

Period = 525.63003 [0.00770] d
Epoch = 404.7332 [0.0083] BKJD
Rp/R* = 0.2409 [0.4144]
a/R* = 210.82 [25.12]
b = 1.00 [0.56]
Seff = 97.97 [0.00]
Teq = 802 [0] K
Rp = 63.20 [108.72] Re
a = 1.8370 [0.0000] AU
Ag = N/A
Teffp = N/A

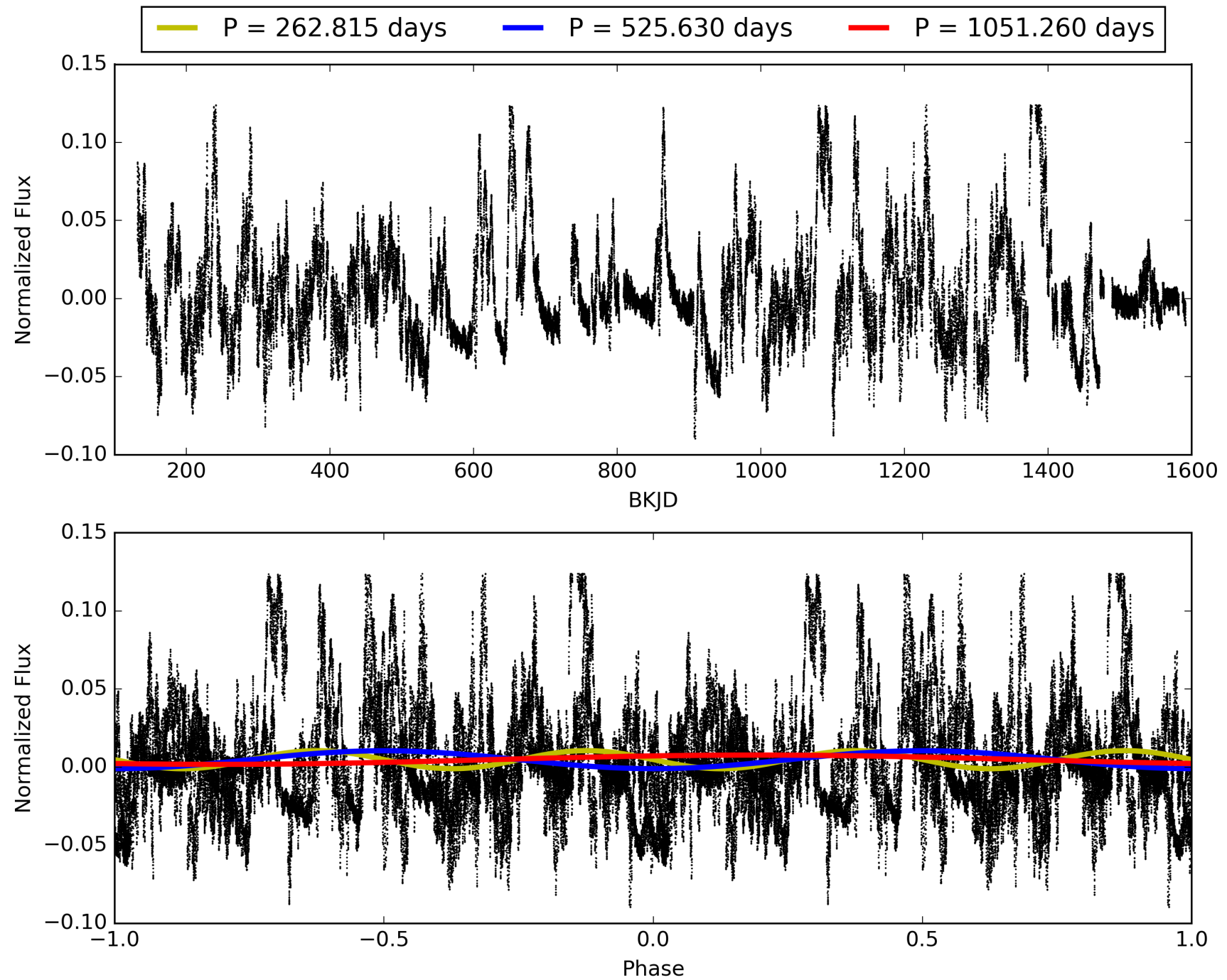
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 99.0%
Bootstrap-pfa: 5.87e-07
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 0.8924
Centroid-sig: 61.5%
Centroid-so: 0.161 arcsec [7.91σ]
OotOffset-rm: 0.031 arcsec [0.43σ]
KicOffset-rm: 0.043 arcsec [0.34σ]
OotOffset-st: 0/1/1/0 [2]
KicOffset-st: 0/1/1/0 [2]
DiffImageQuality-fgm: 0.50 [1/2]
DiffImageOverlap-fno: 1.00 [2/2]

TCE 006954726-01, PDC Light Curves

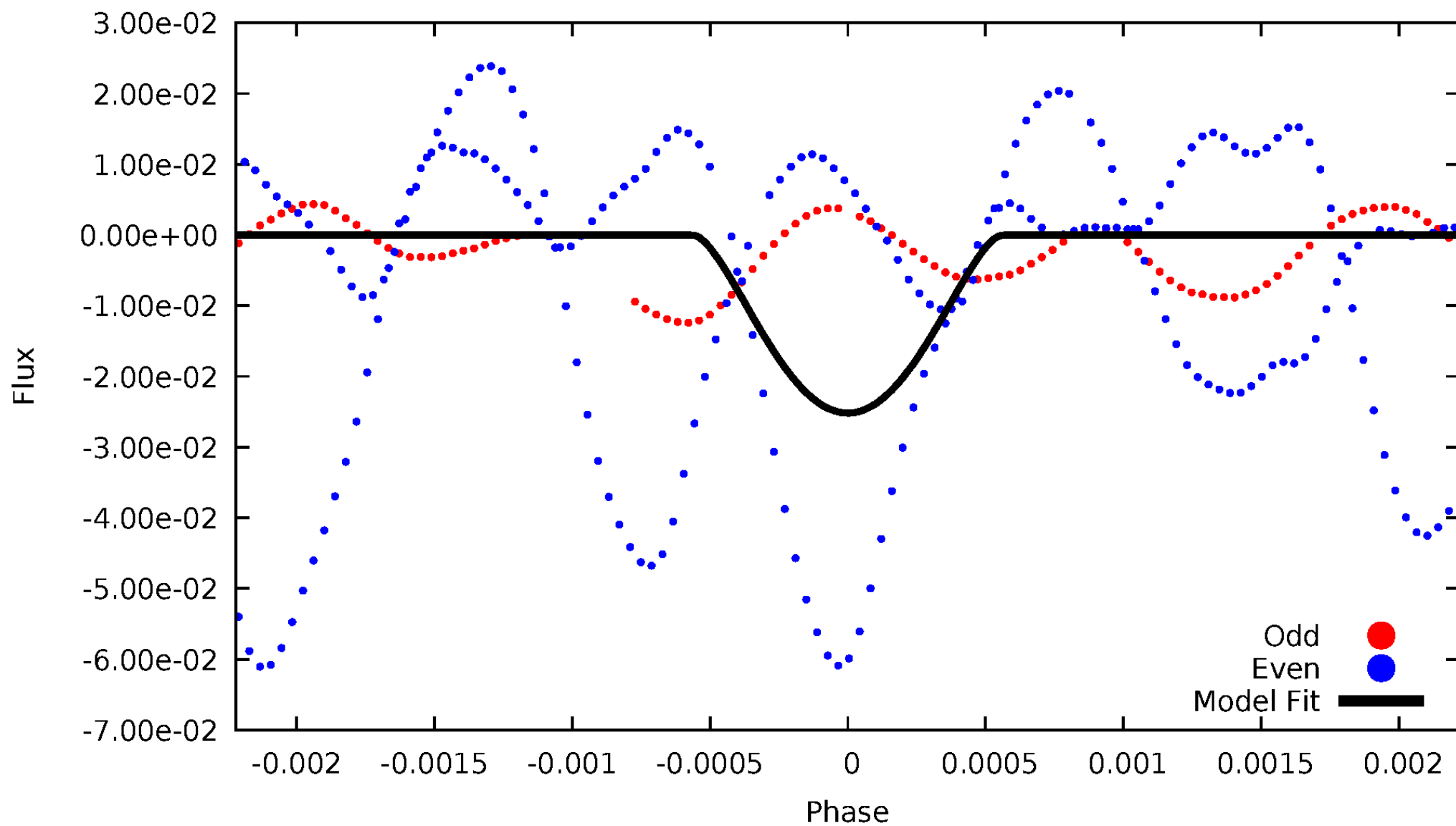


TCE 006954726-01



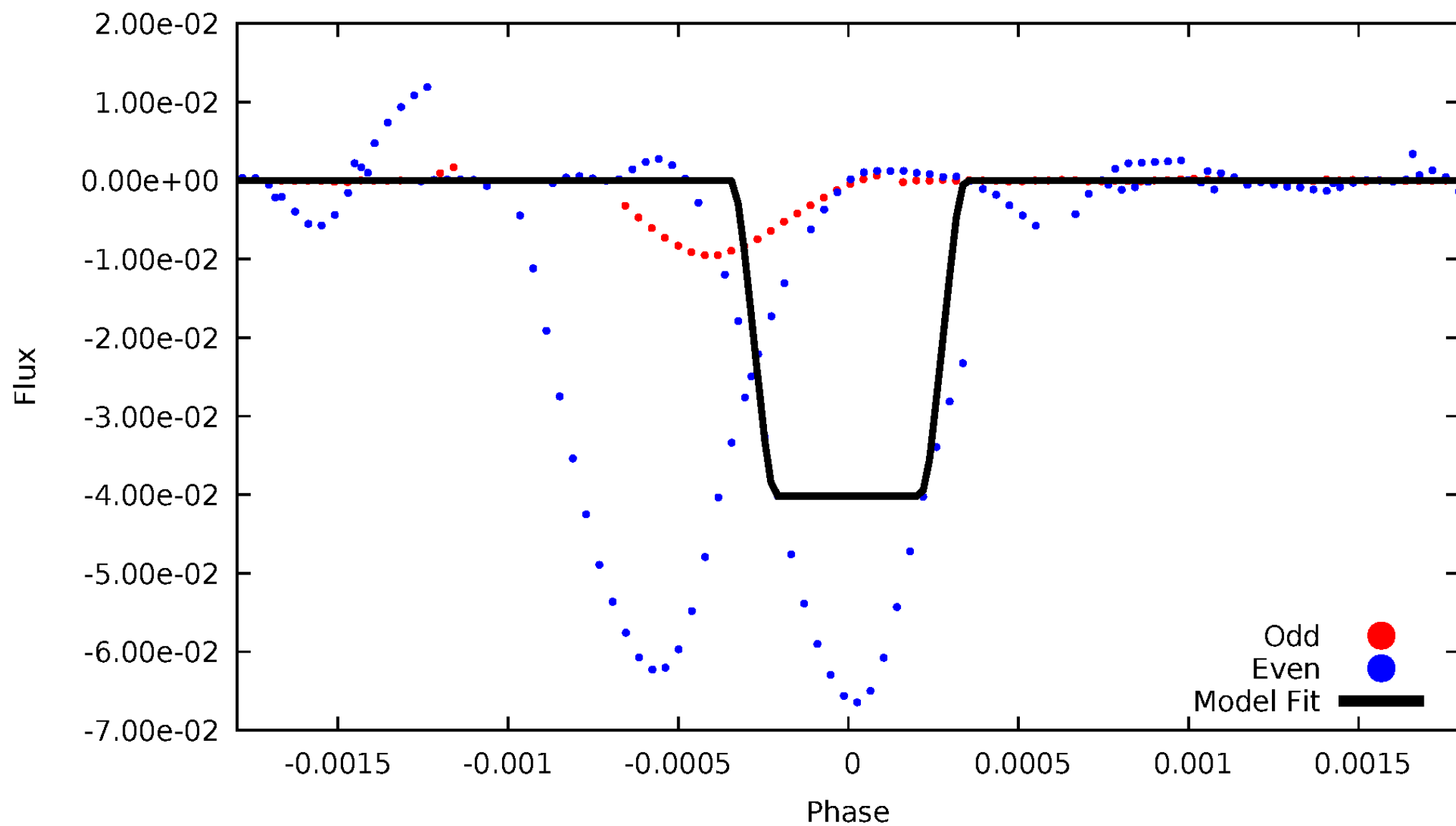
DV Odd/Even

TCE 006954726-01



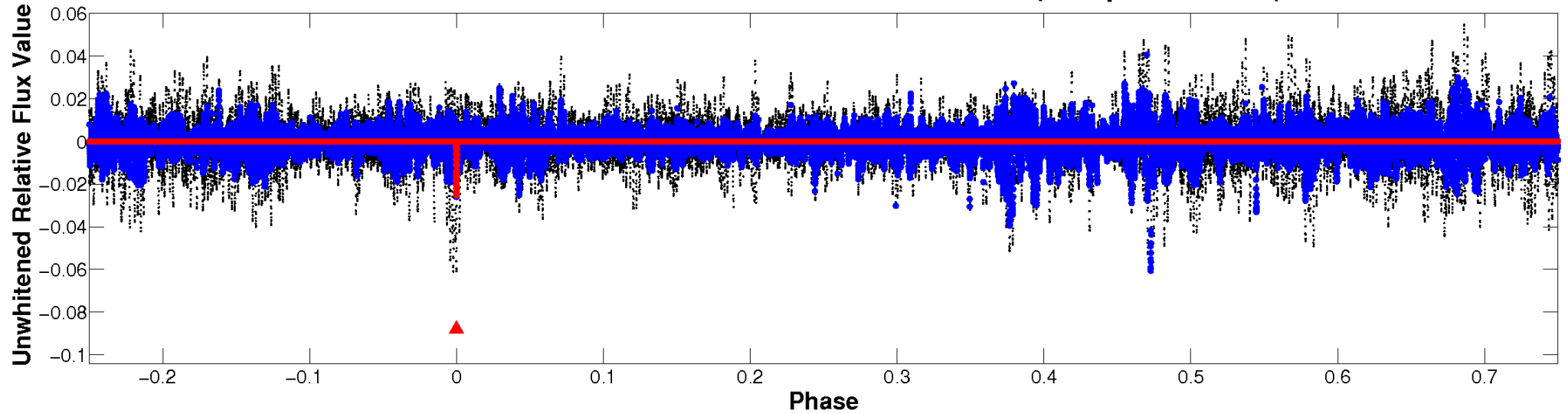
ALT Odd/Even

TCE 006954726-01

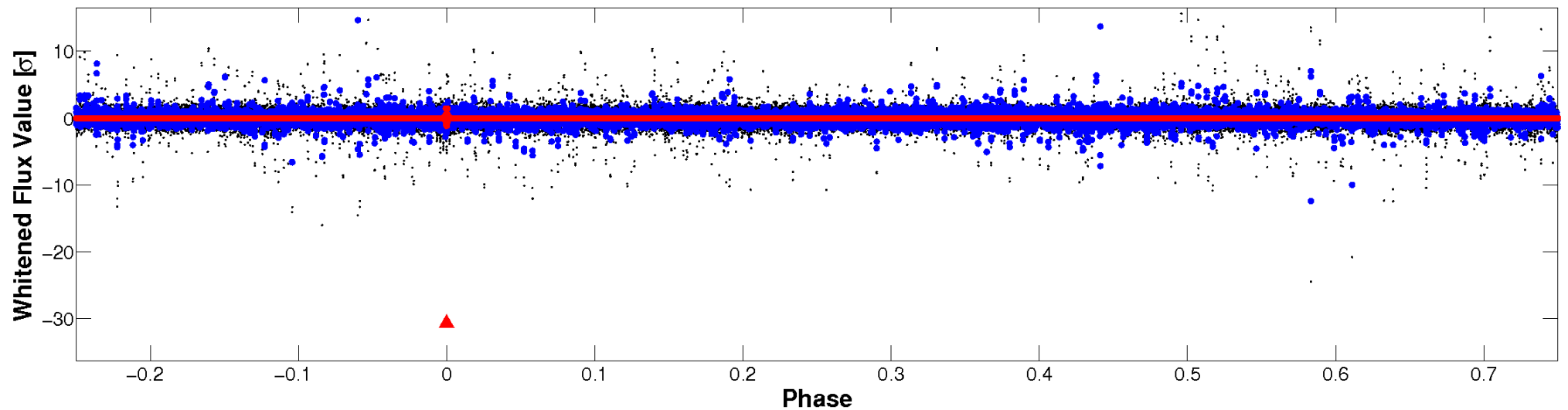


Non-Whitened Vs. Whitened Light Curve

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

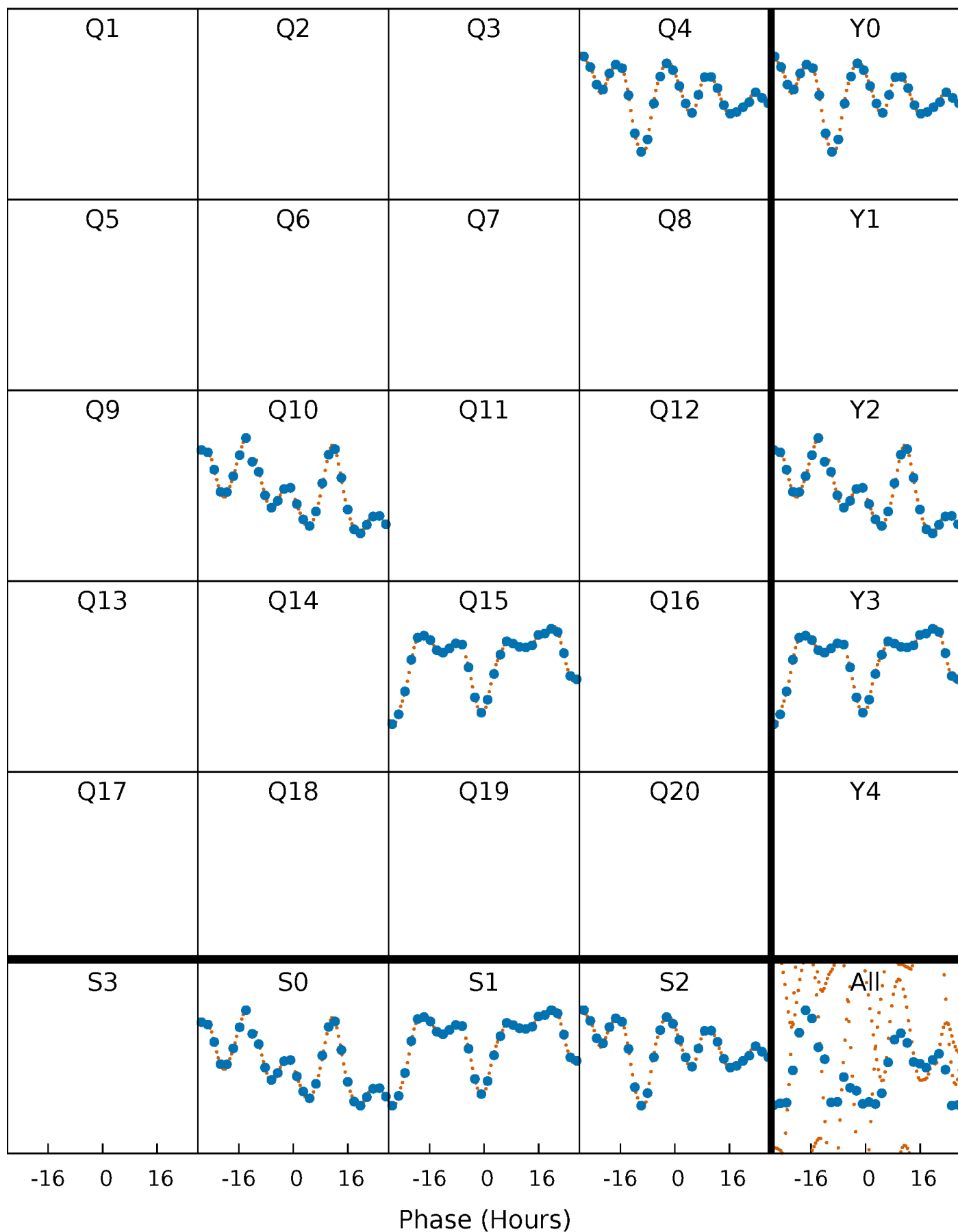


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



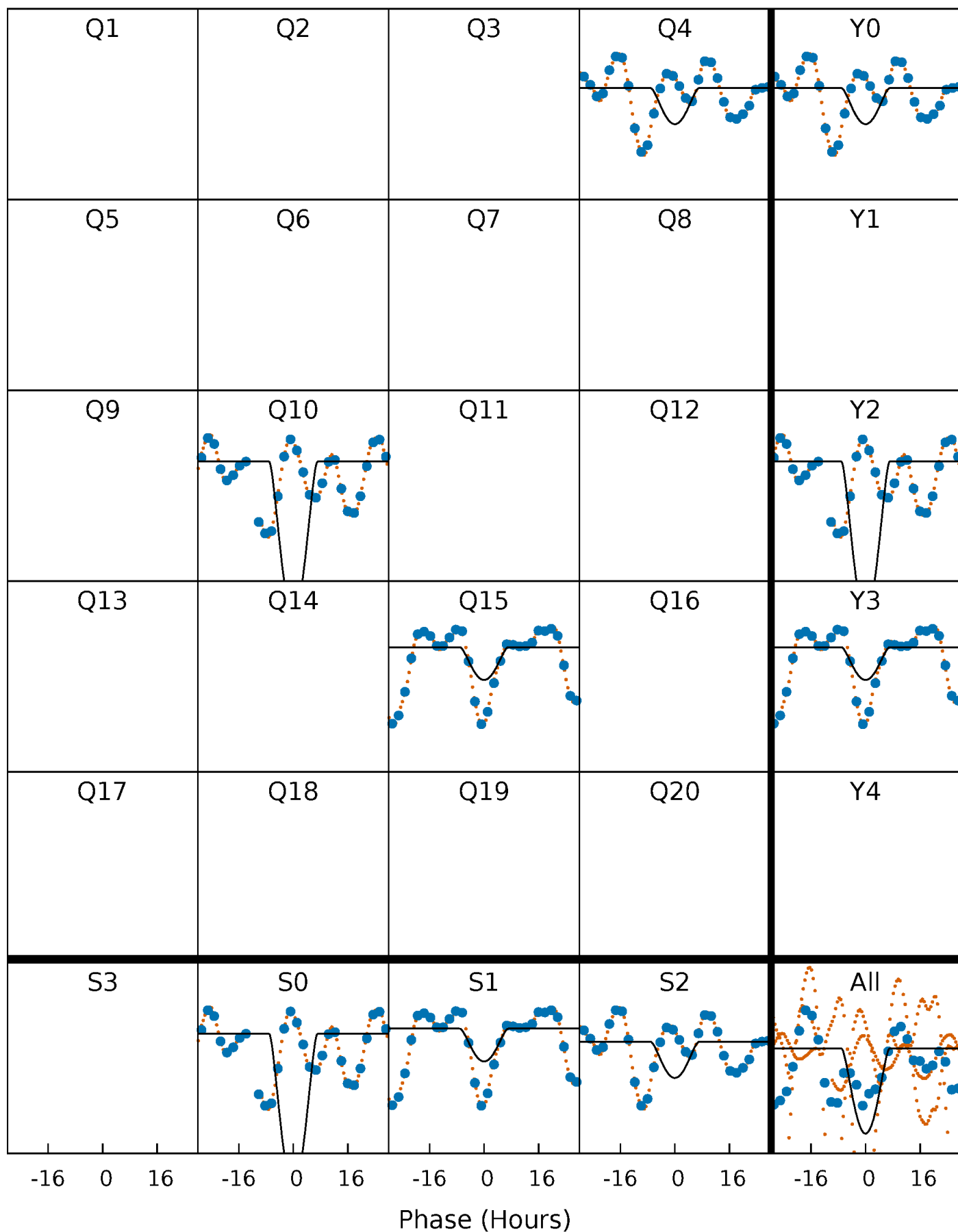
PDC Quarter-Phased Transit Curves

TCE 006954726-01 P=525.630032 Days $T_0=404.733191$ (BKJD)



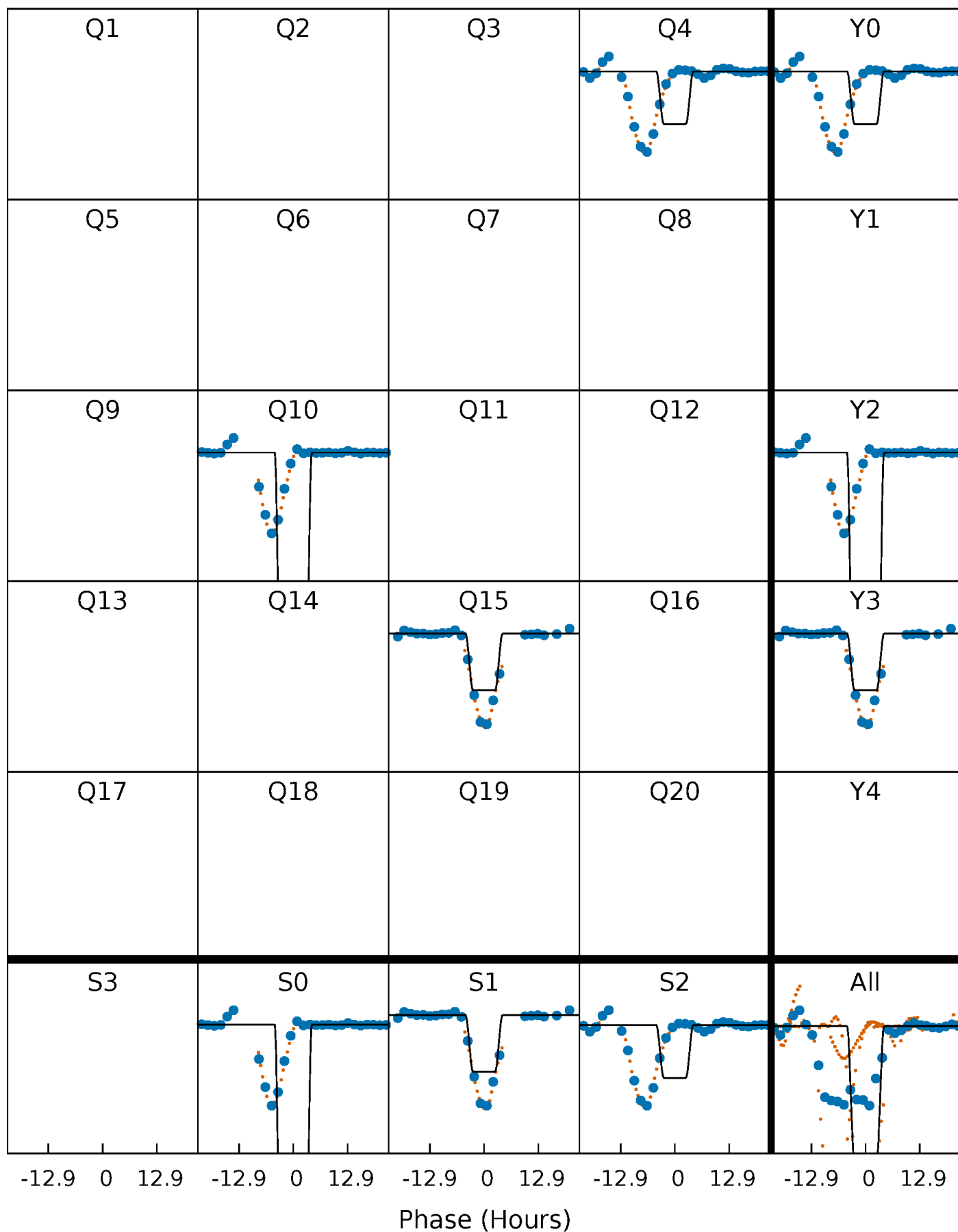
DV Quarter-Phased Transit Curves

TCE 006954726-01 P=525.630032 Days $T_0=404.733191$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

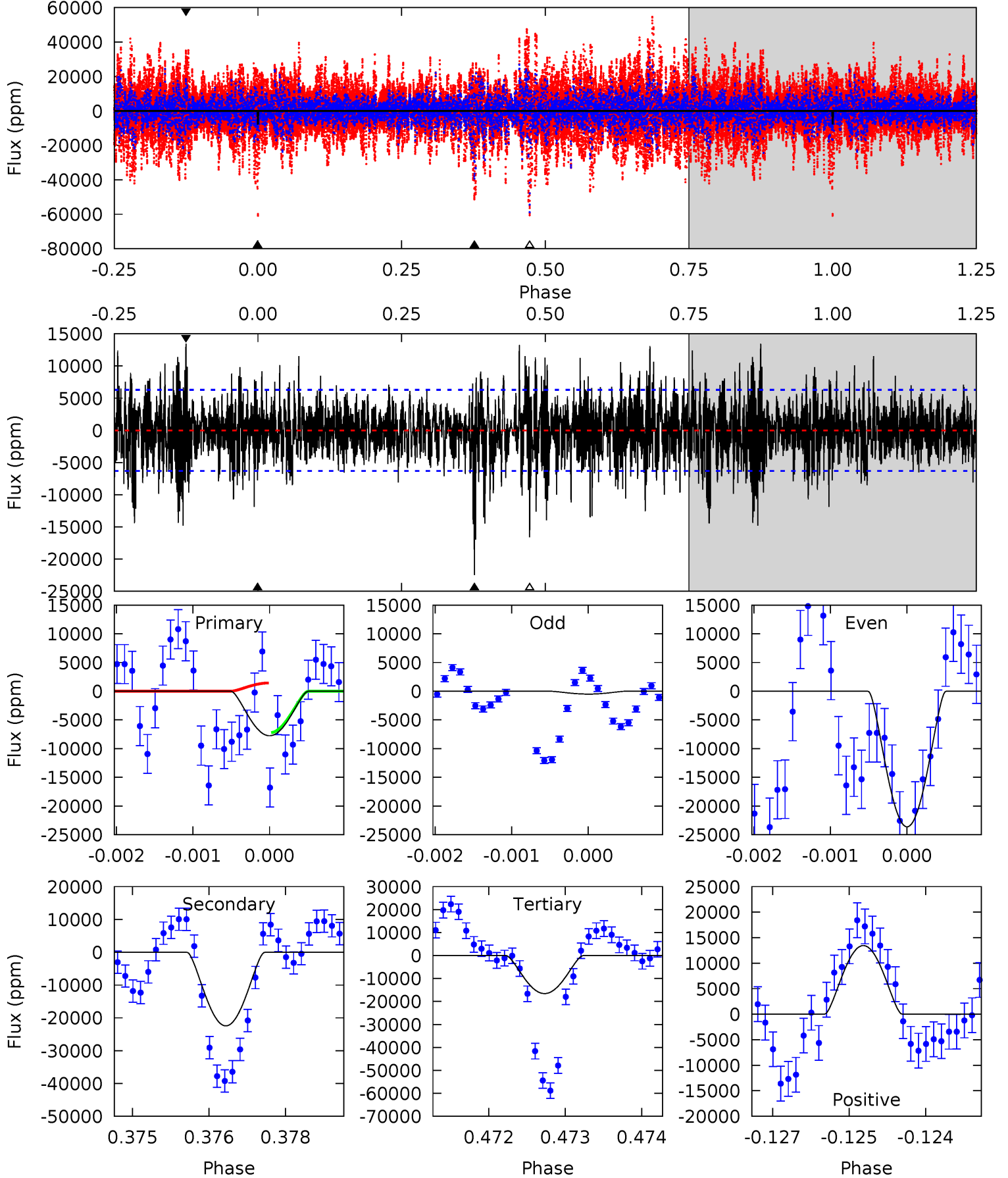
TCE 006954726-01 P=525.660142 Days $T_0=404.641447$ (BKJD)



DV Model-Shift Uniqueness Test

006954726-01, P = 525.630032 Days, E = 404.733191 Days

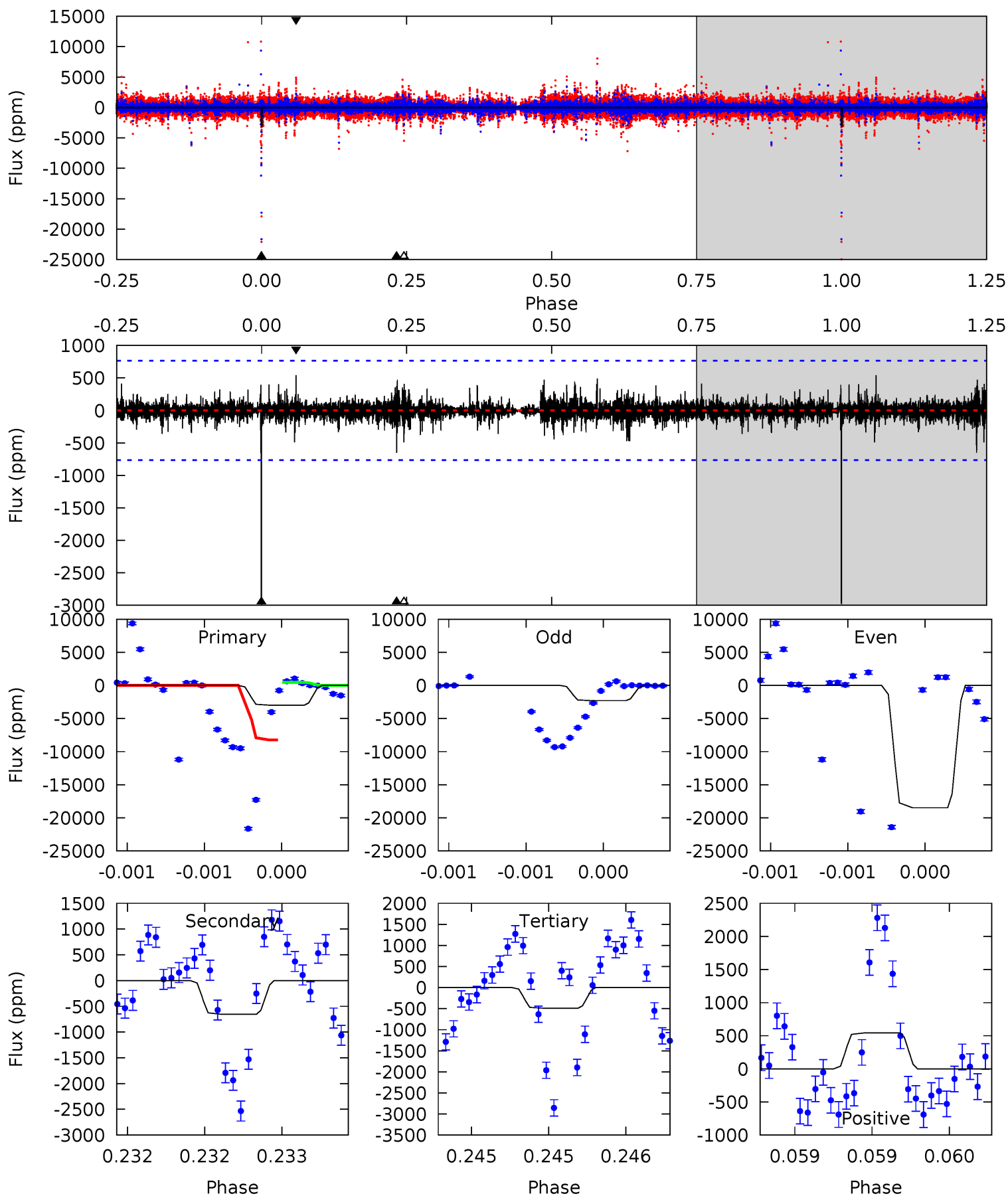
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.69	19.3	14.3	11.6	5.43	3.26	3.11	-7.60	-4.91	5.06	7.75	10.1	31.1	0.37	2.44



Alt Model-Shift Uniqueness Test

006954726-01, P = 525.660142 Days, E = 404.641447 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
21.5	4.72	3.53	3.92	5.52	3.40	0.64	18.0	17.6	1.19	0.80	54.4	4.63	0.15	0



Stellar Parameters For KIC 006954726

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	15896^{+1}_{-1}	$4.152^{+1.000}_{-1.000}$	$-1.500^{+1.000}_{-1.000}$	$2.404^{+1.000}_{-1.000}$	$2.995^{+1.000}_{-1.000}$	$0.304^{+1.000}_{-1.000}$
	+0%/-0%	+24%/-24%	+67%/-67%	+42%/-42%	+33%/-33%	+329%/-329%
Source	KIC0	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 006954726-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-22443 ± 1160	$103.33^{+89.96}_{-72.65}$	1120^{+24}_{-25}	7636^{+13631}_{-2143}	4109^{+43217}_{-2957}
Alt.	-654 ± 139	$98.93^{+90.68}_{-68.02}$	1122^{+25}_{-24}	3609^{+1982}_{-662}	128^{+1119}_{-95}

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 $A_{obs} \gg 1.0$

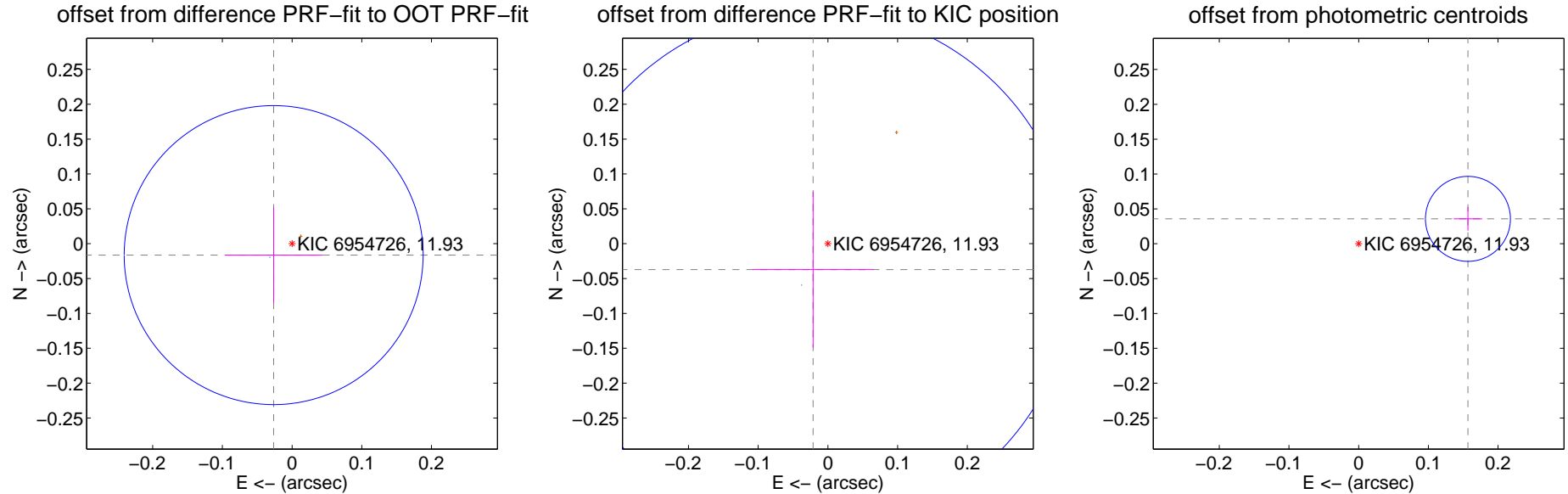
DV Centroid Data

Supplemental centroid analysis for 006954726-01. **Kepler magnitude: 11.93.** Transit SNR 8.28

There are 1 quarters with good PRF difference image offsets

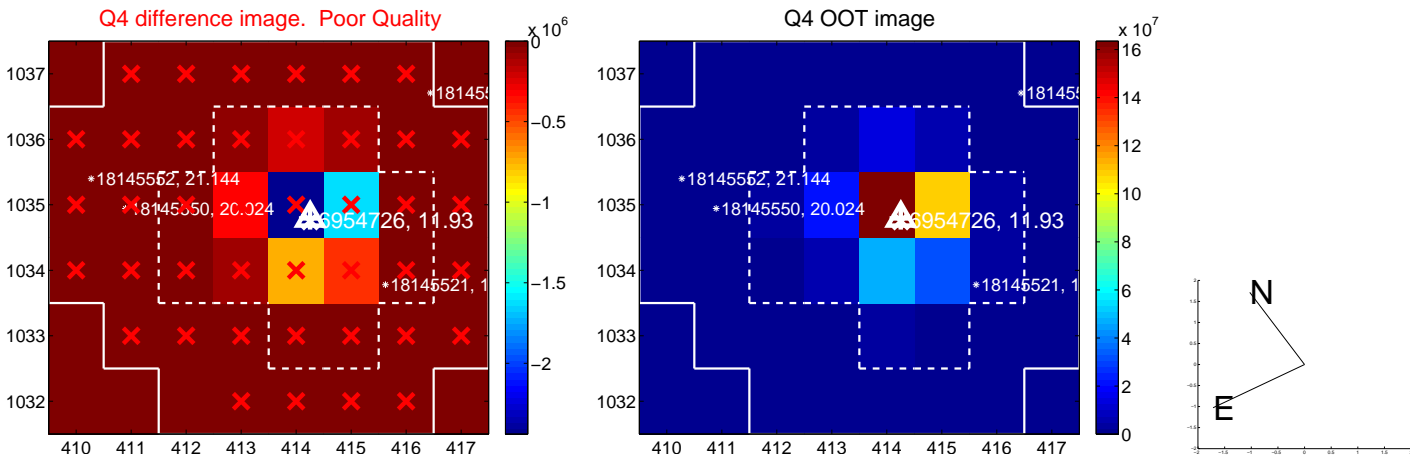
The direct PRF centroid is offset from the target star catalog position by about 0.04 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.031 ± 0.071	0.43	0.026 ± 0.070	-0.016 ± 0.068
PRF-fit source offset from KIC position	0.043 ± 0.125	0.34	0.021 ± 0.087	-0.037 ± 0.112
photometric centroid source offset	0.16 ± 0.02	7.91	-0.16 ± 0.02	0.04 ± 0.02



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



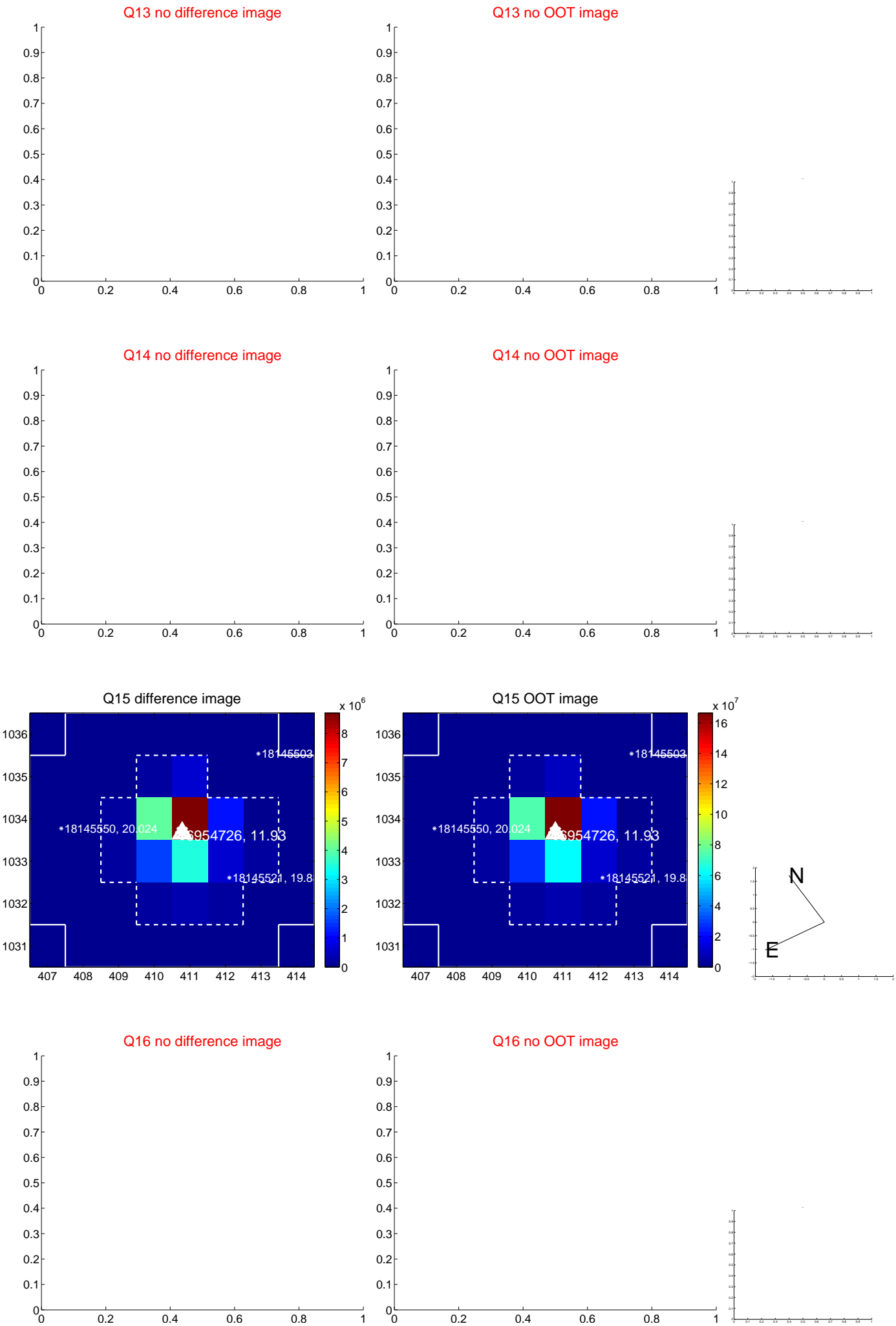
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



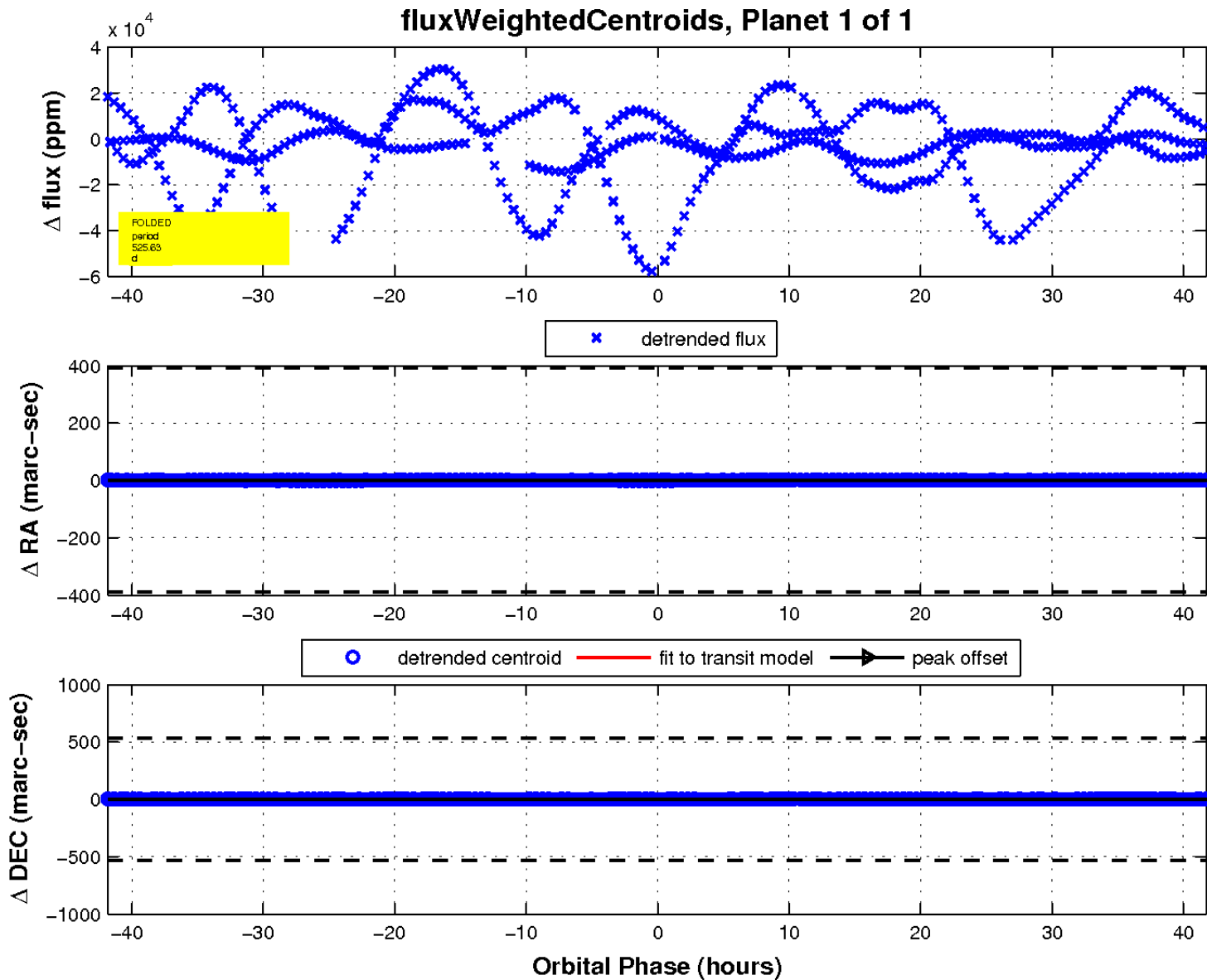
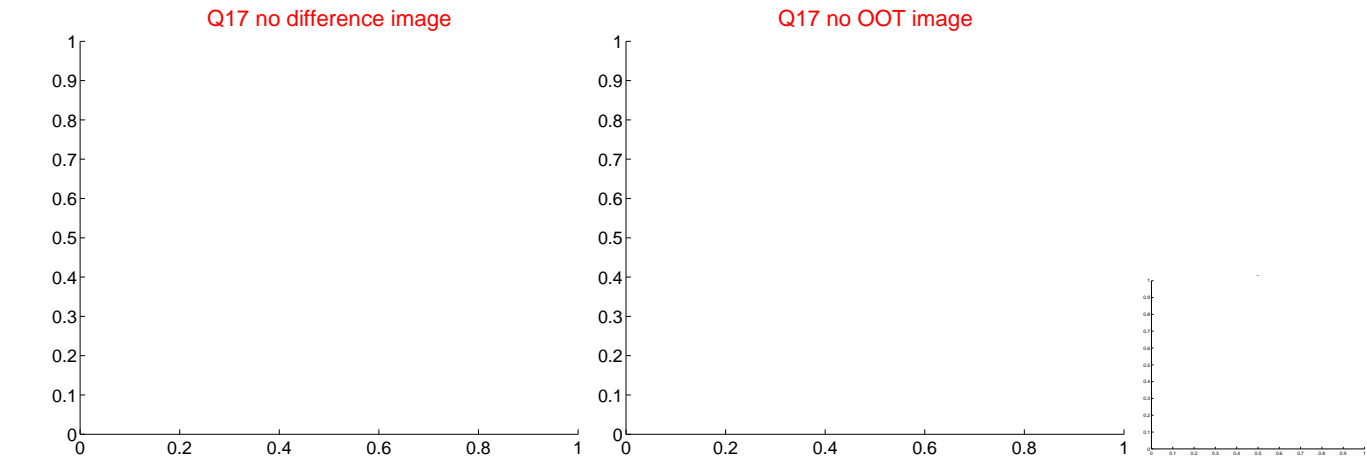
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UKIRT Image

Declination

