

KIC 011015241

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})
011015241-01	OBS	No	393.488206	240.396247	946.9	17.916	14.0	9.2	0.98	5601	4.10	0.85

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011015241-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_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.

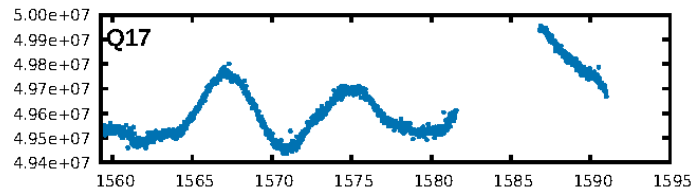
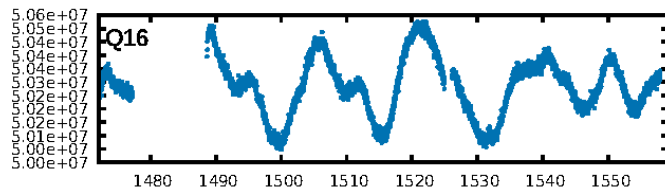
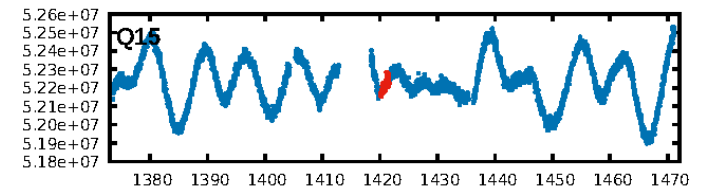
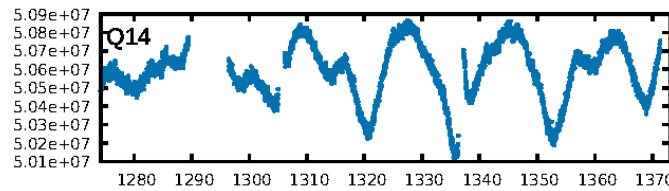
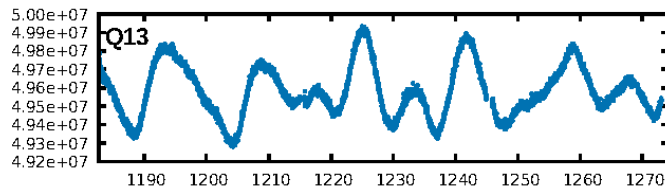
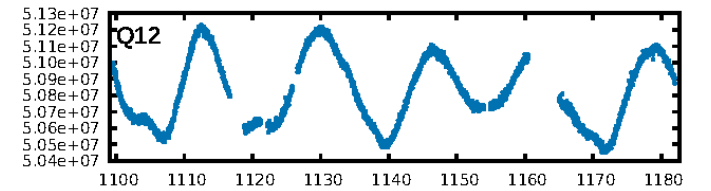
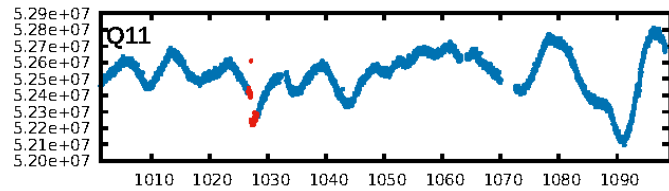
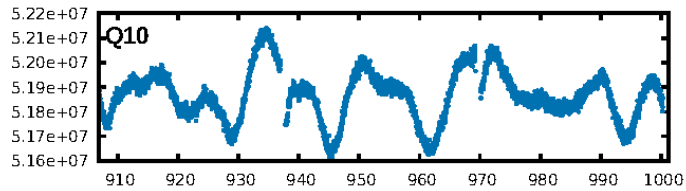
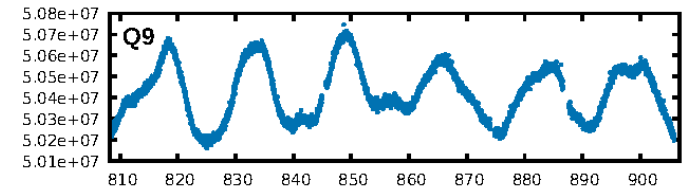
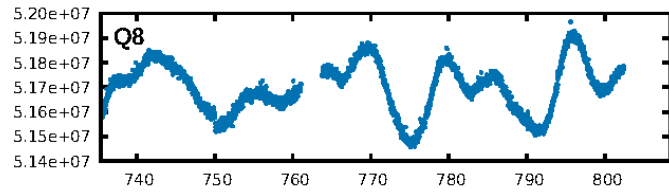
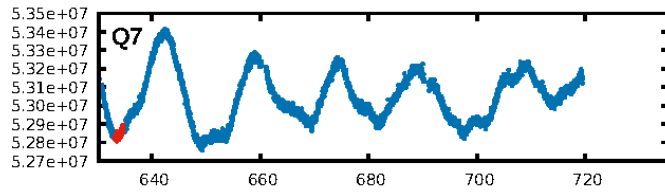
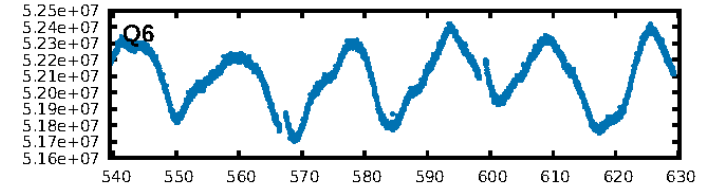
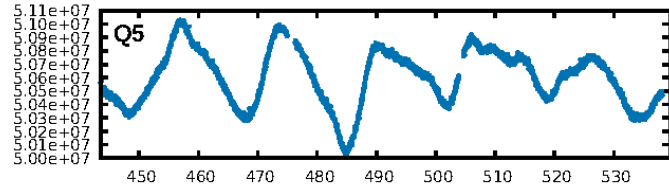
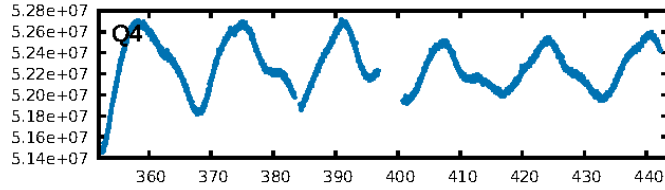
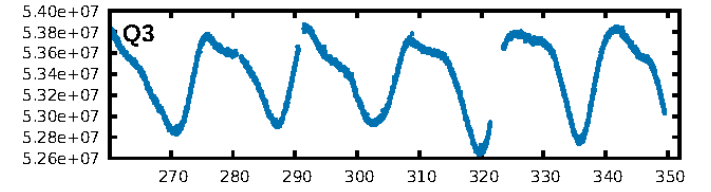
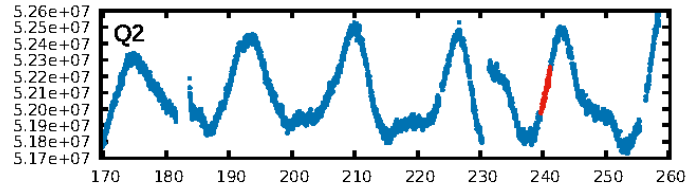
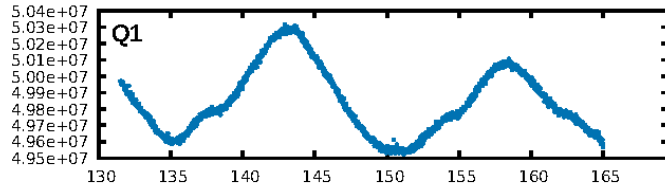
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011015241-01

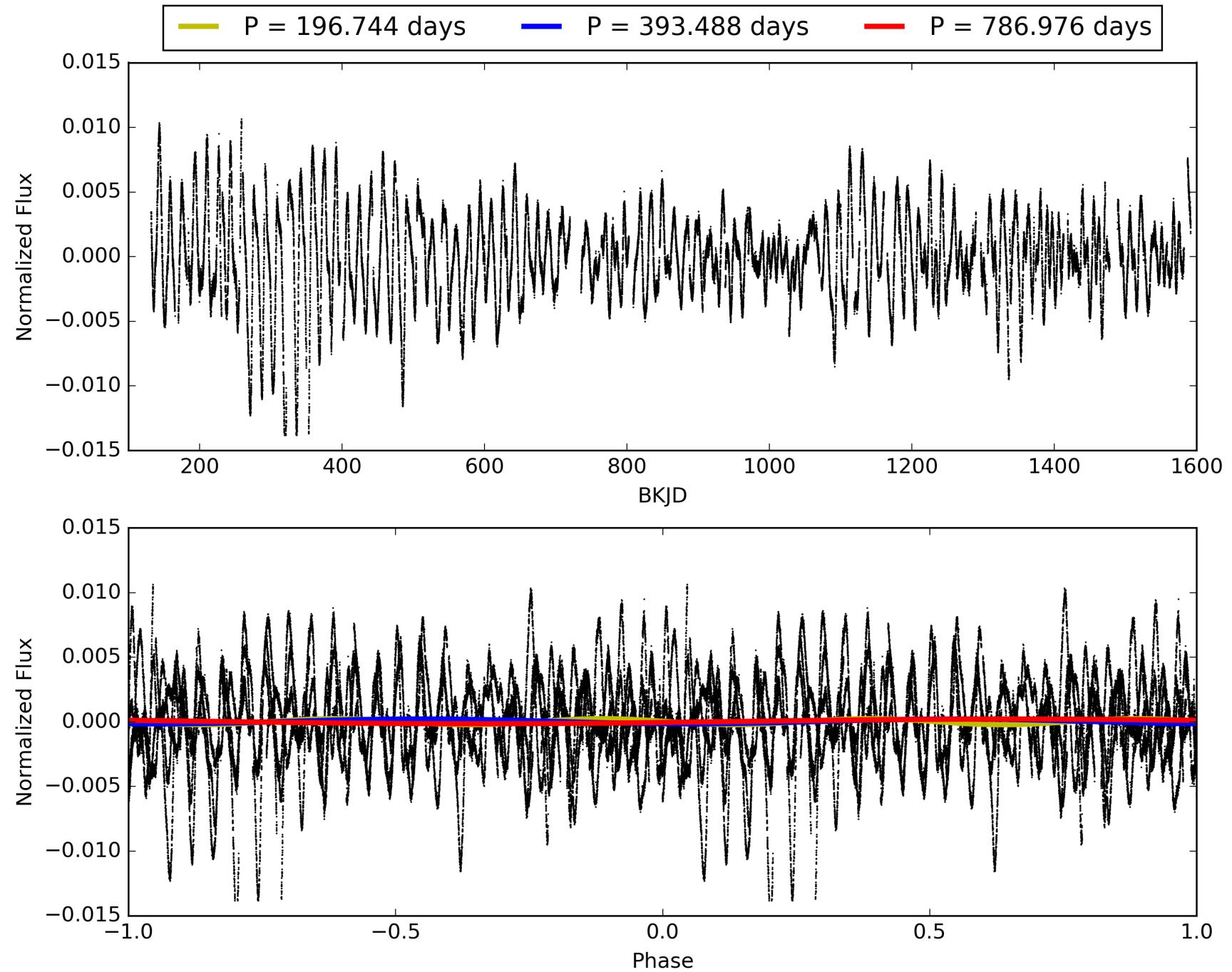
No Significant Match Found

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

TCE 011015241-01, PDC Light Curves

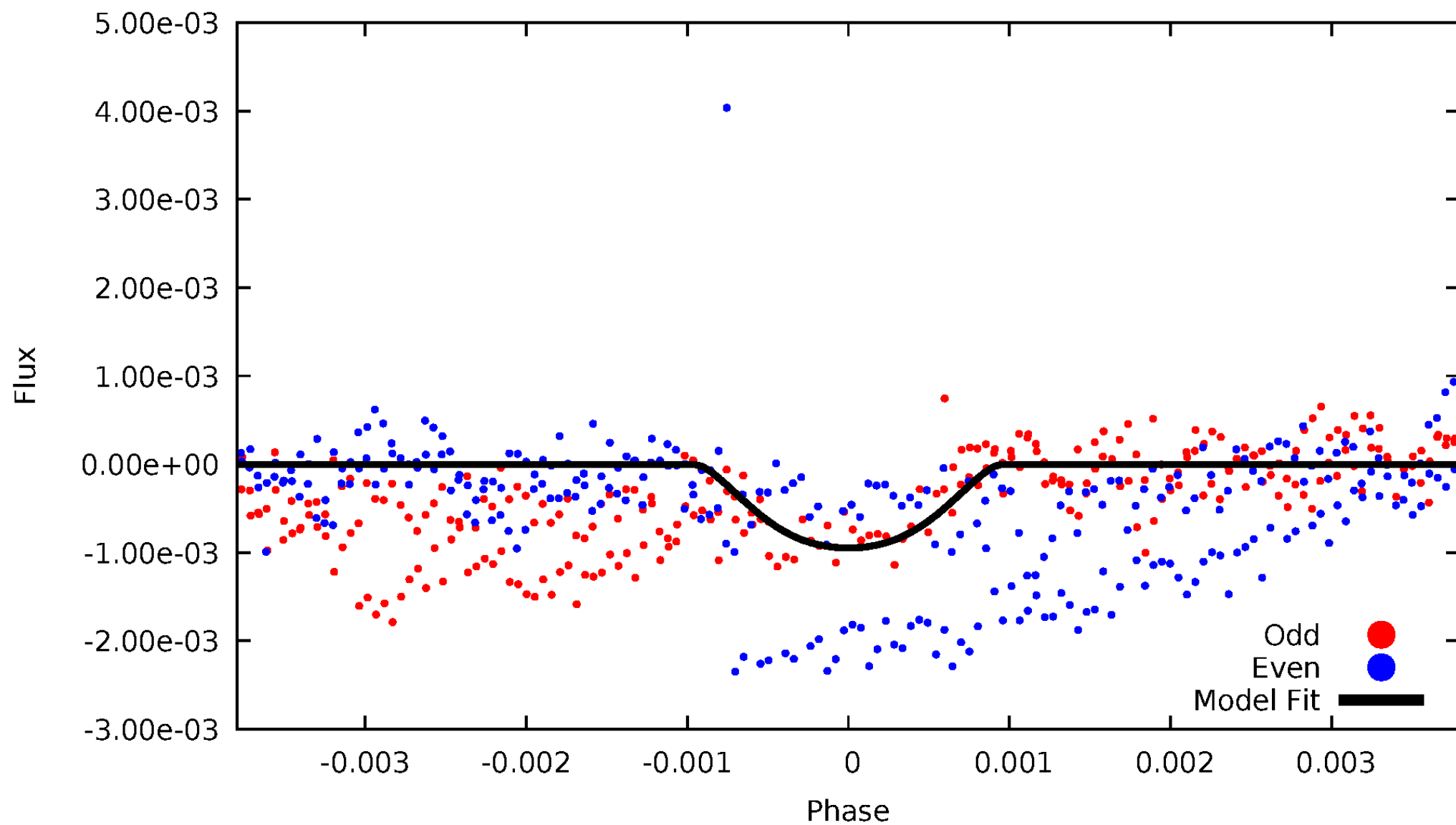


TCE 011015241-01



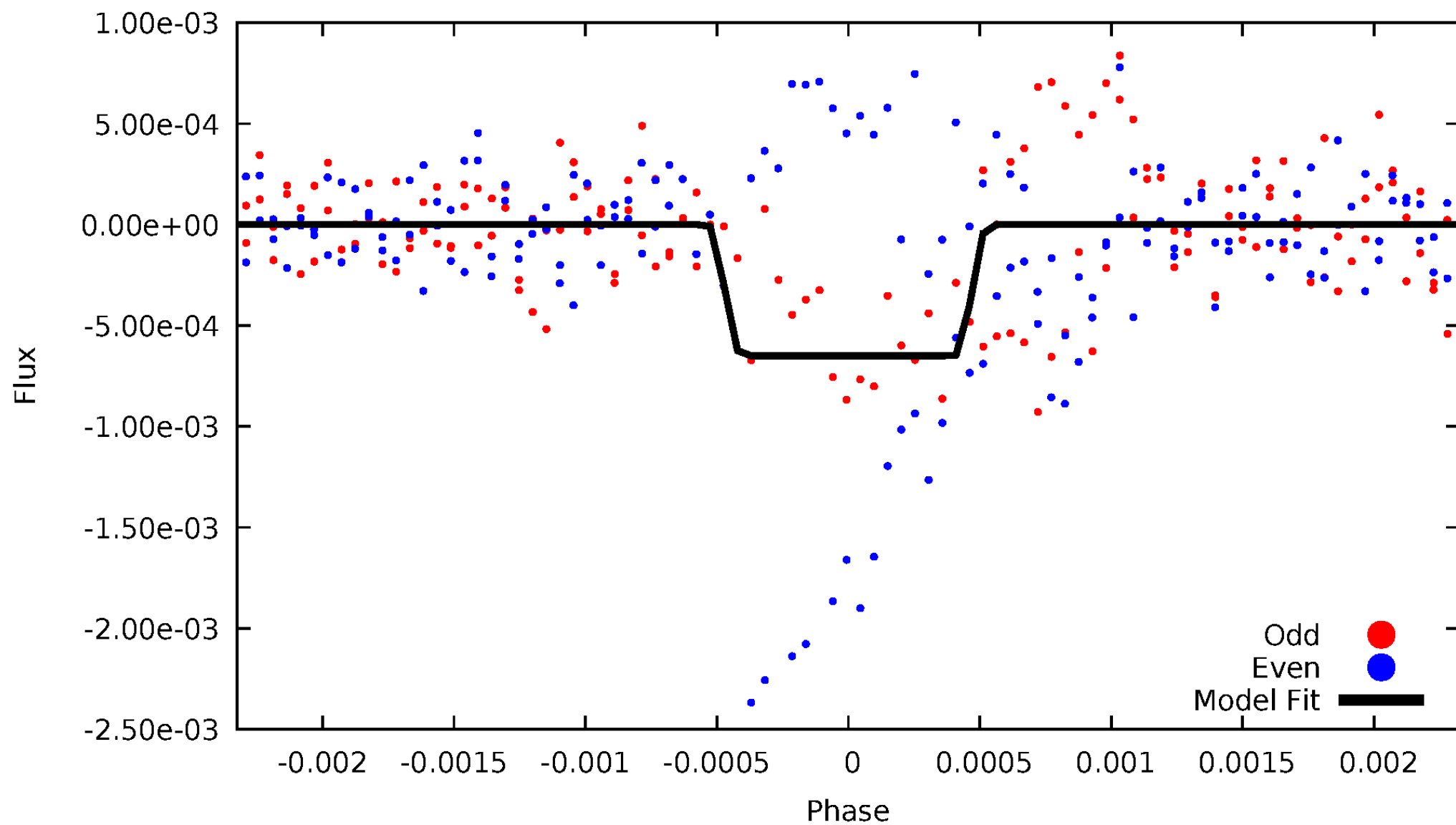
DV Odd/Even

TCE 011015241-01



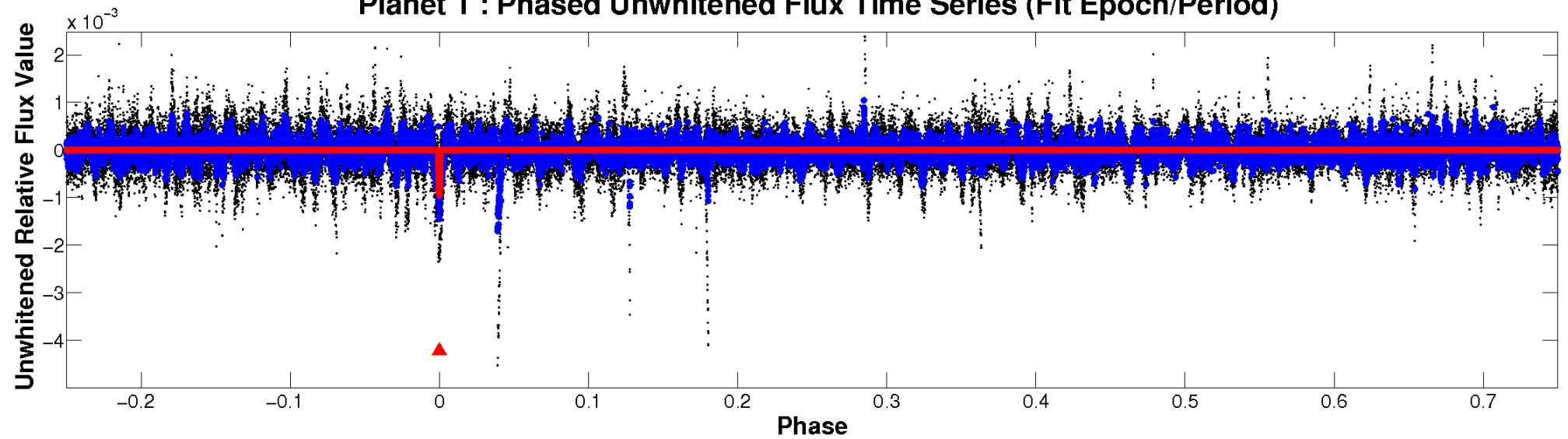
ALT Odd/Even

TCE 011015241-01

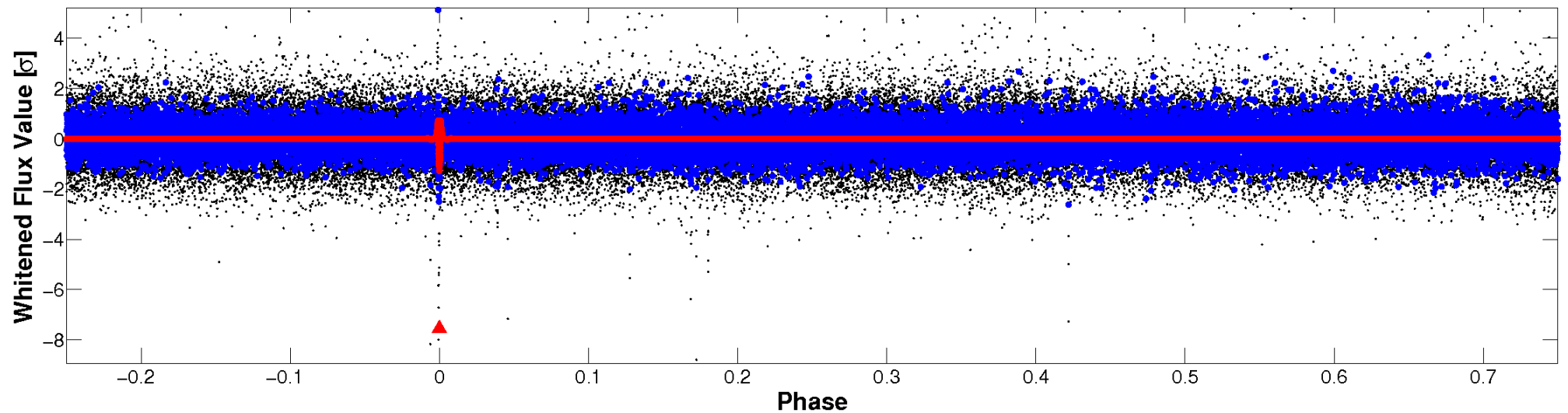


Non-Whitened Vs. Whitened Light Curve

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

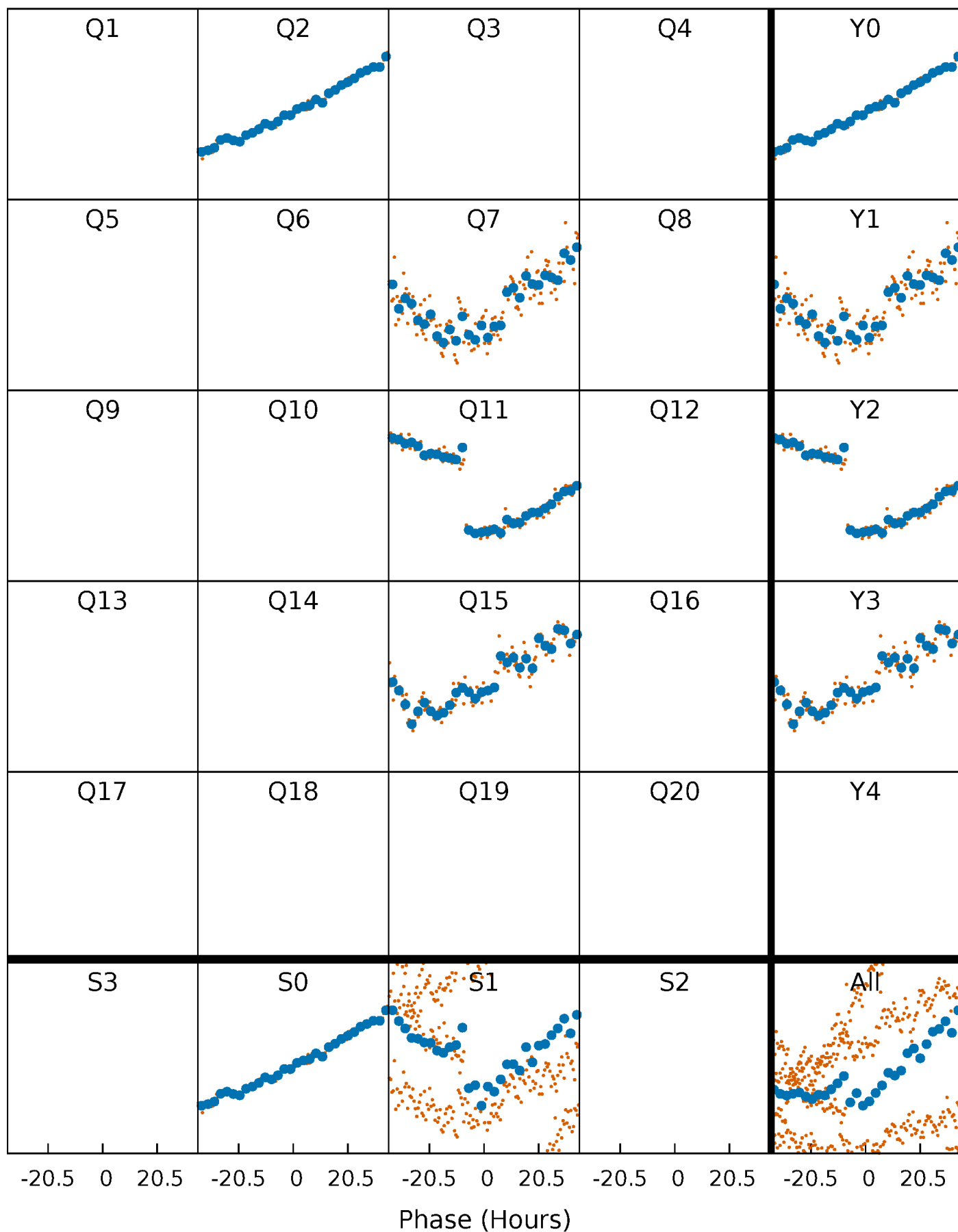


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



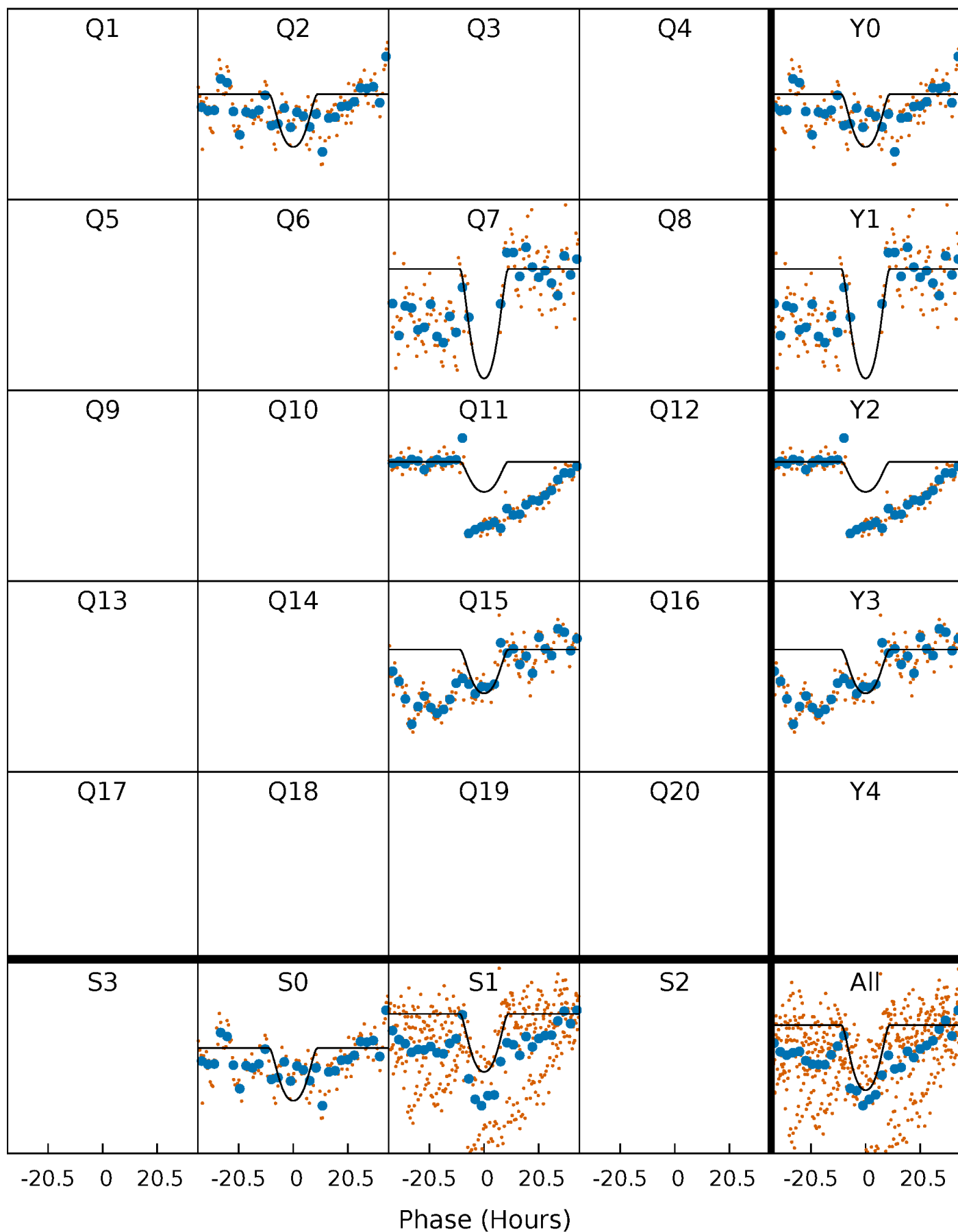
PDC Quarter-Phased Transit Curves

TCE 011015241-01 P=393.488206 Days $T_0=240.396247$ (BKJD)



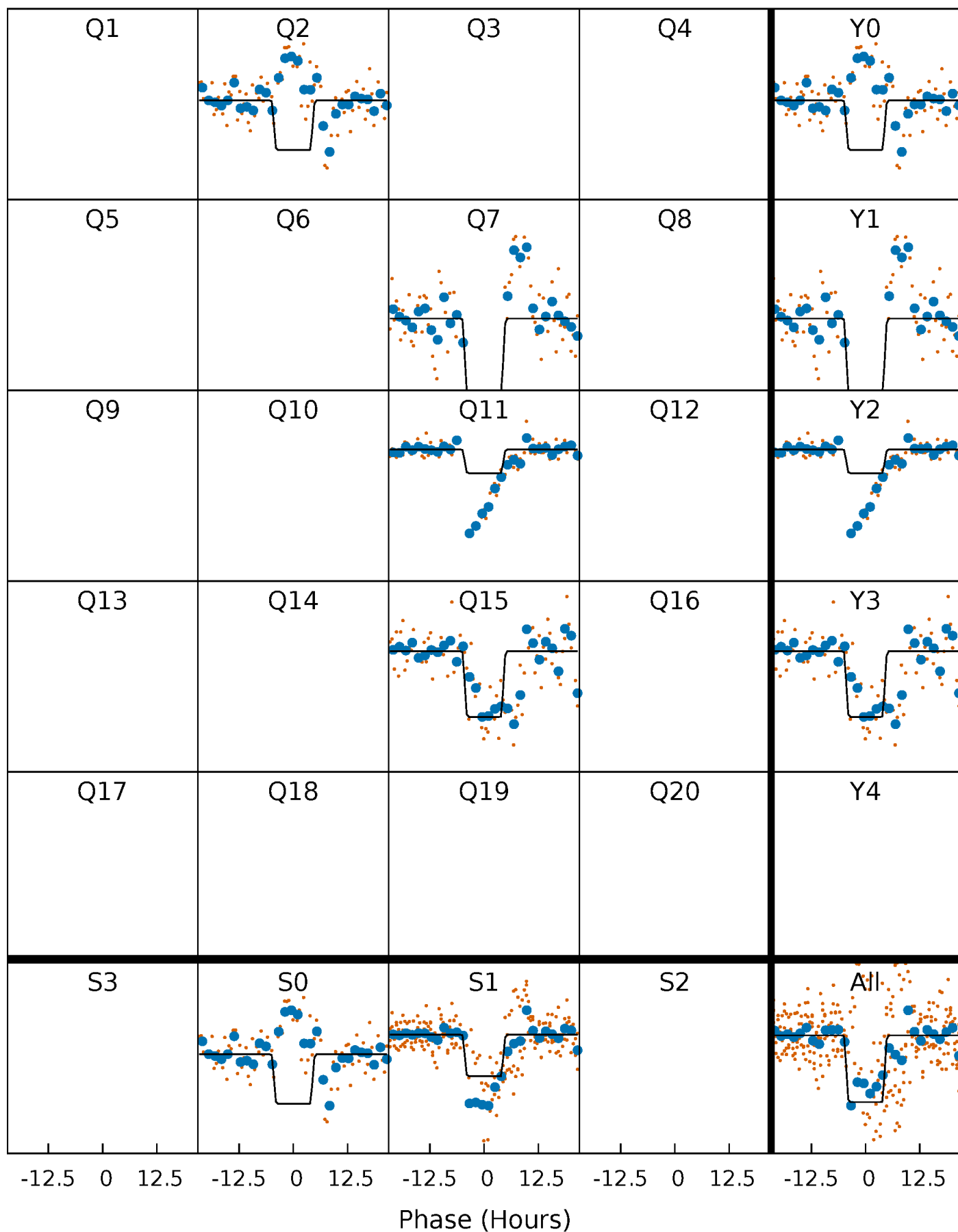
DV Quarter-Phased Transit Curves

TCE 011015241-01 P=393.488206 Days $T_0=240.396247$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

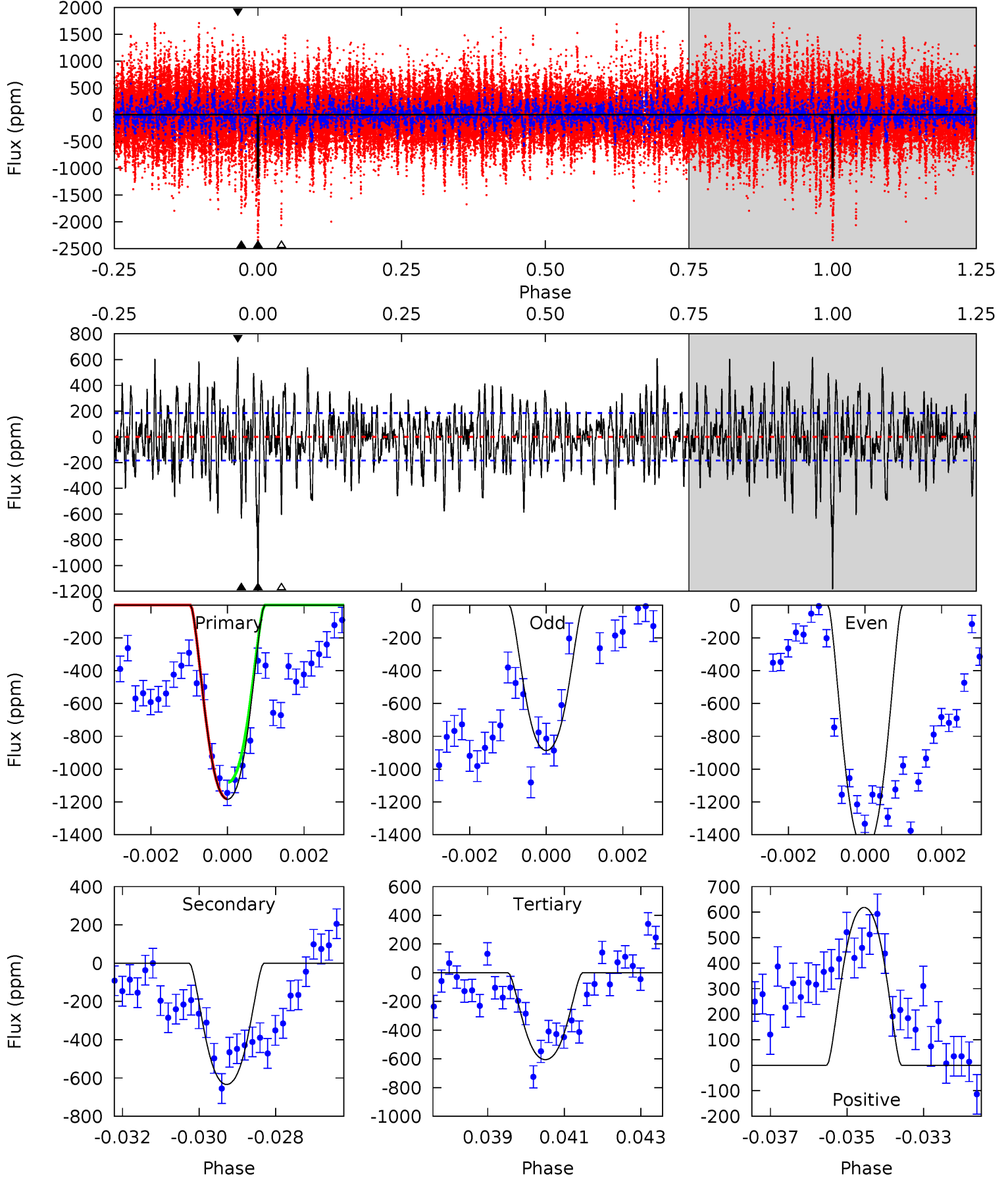
TCE 011015241-01 P=393.386897 Days $T_0=240.529359$ (BKJD)



DV Model-Shift Uniqueness Test

011015241-01, P = 393.488206 Days, E = 240.396247 Days

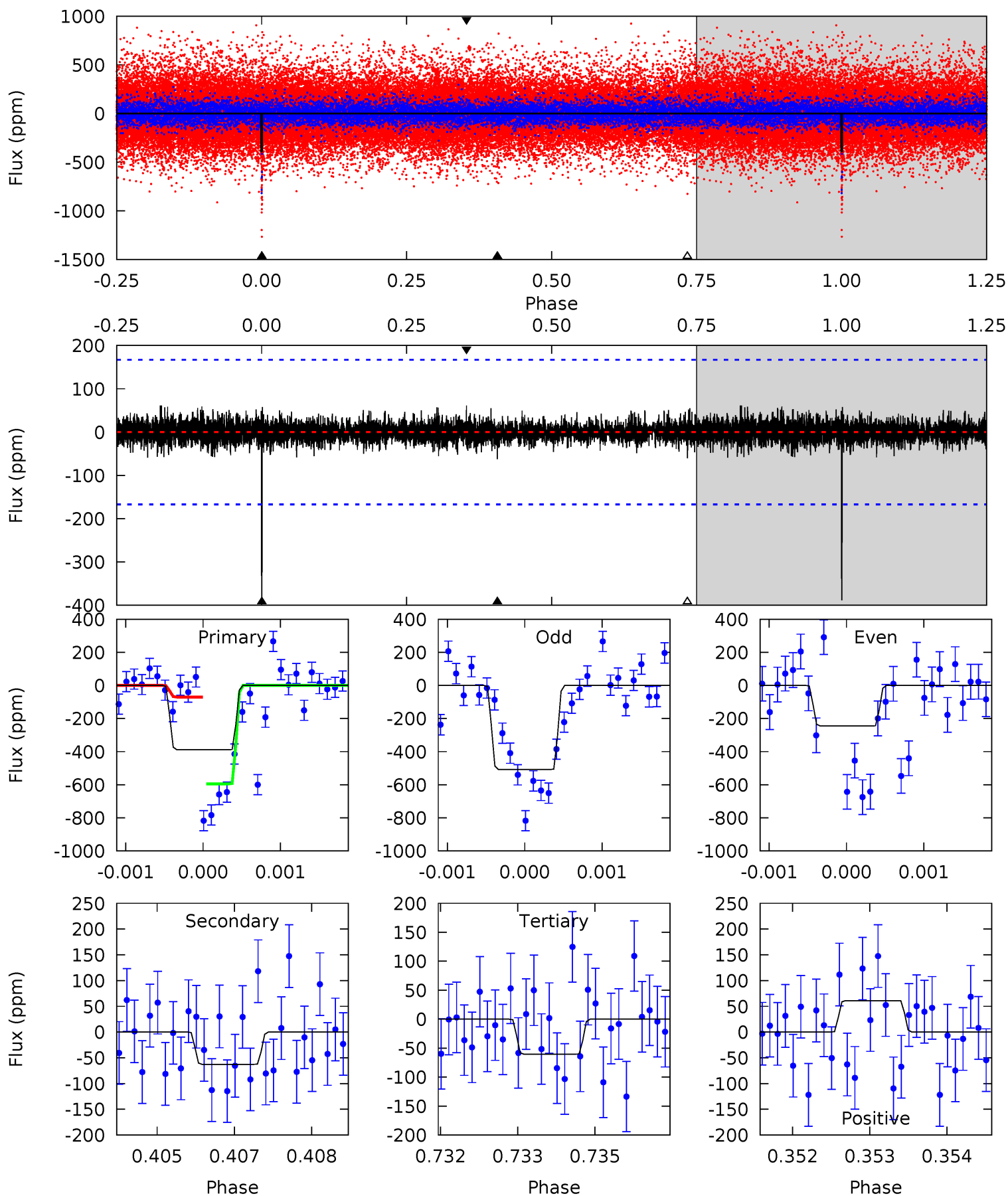
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
34.3	18.4	17.5	17.9	5.33	3.09	5.45	16.8	16.4	0.83	0.44	8.78	1.38	0.34	1.43



Alt Model-Shift Uniqueness Test

011015241-01, P = 393.386897 Days, E = 240.529359 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.6	2.04	1.96	1.98	5.44	3.27	0.49	10.7	10.7	0.08	0.05	4.68	1.10	0.14	8.49



Stellar Parameters For KIC 011015241

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5601^{+152}_{-152}	$4.390^{+0.149}_{-0.182}$	$-0.100^{+0.300}_{-0.250}$	$0.984^{+0.280}_{-0.173}$	$0.869^{+0.123}_{-0.076}$	$1.283^{+0.885}_{-0.605}$
	+3%/-3%	+3%/-4%	+300%/-250%	+28%/-18%	+14%/-9%	+69%/-47%
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 011015241-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-634 ± 34	$4.09^{+1.28}_{-1.09}$	343^{+25}_{-21}	4708^{+592}_{-406}	21001^{+17681}_{-8662}
Alt.	-63 ± 31	$2.78^{+1.01}_{-1.03}$	343^{+24}_{-20}	3535^{+596}_{-462}	4311^{+6799}_{-2708}

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 $A_{obs} \gg 1.0$

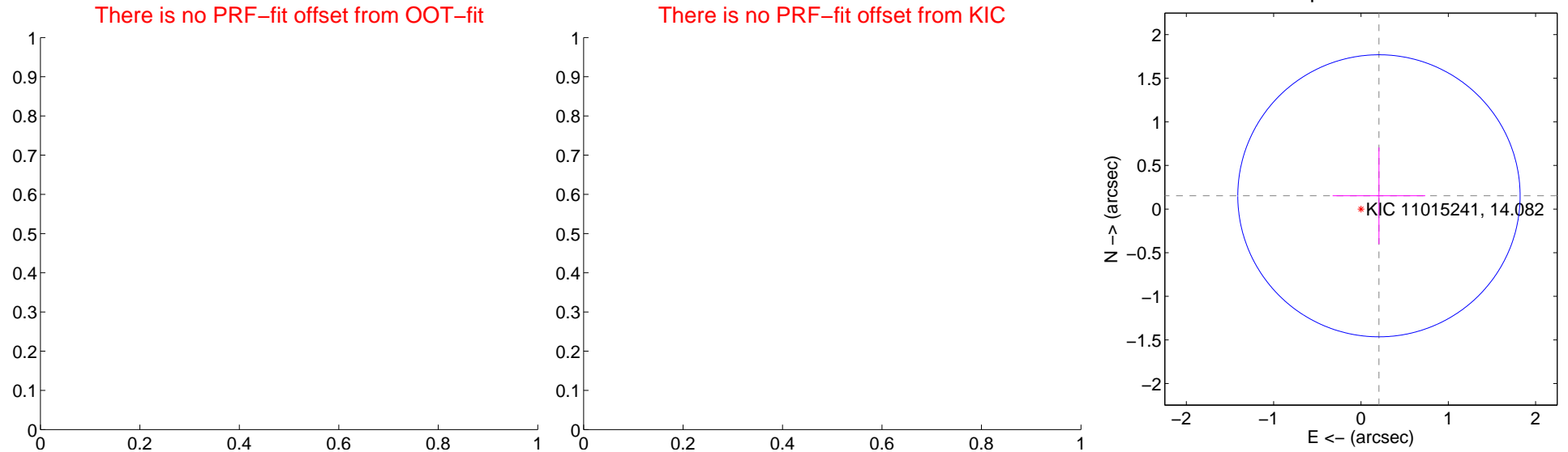
DV Centroid Data

Supplemental centroid analysis for 011015241-01. Kepler magnitude: 14.08. Transit SNR 9.17

There are 0 quarters with good PRF difference image offsets

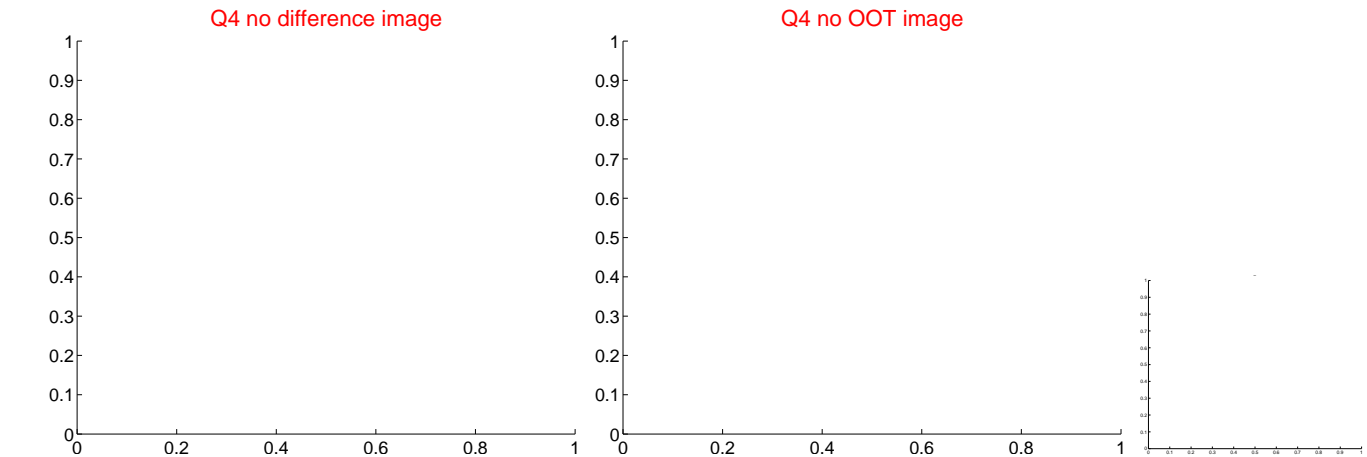
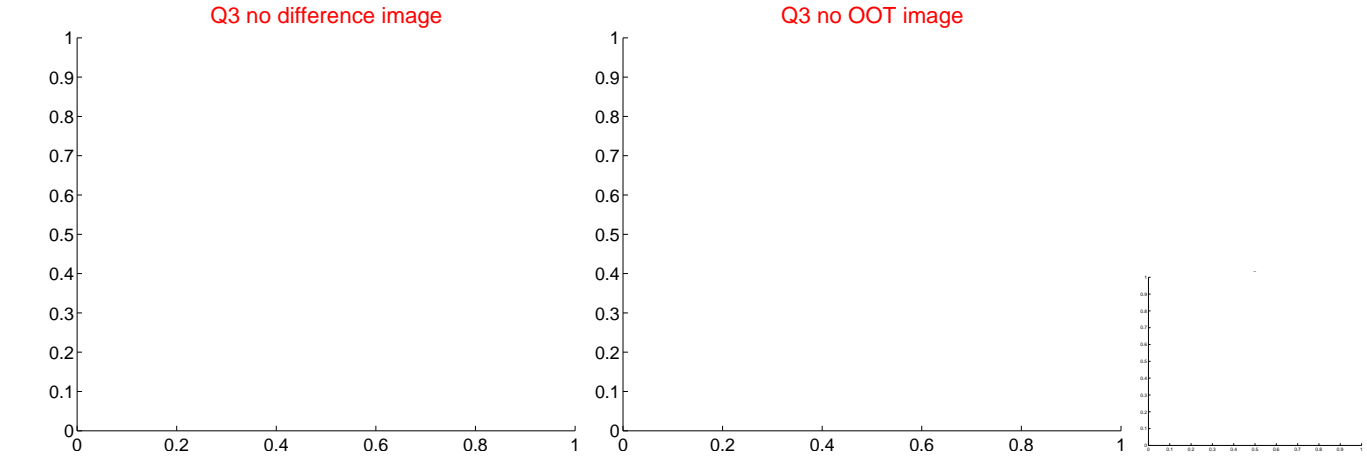
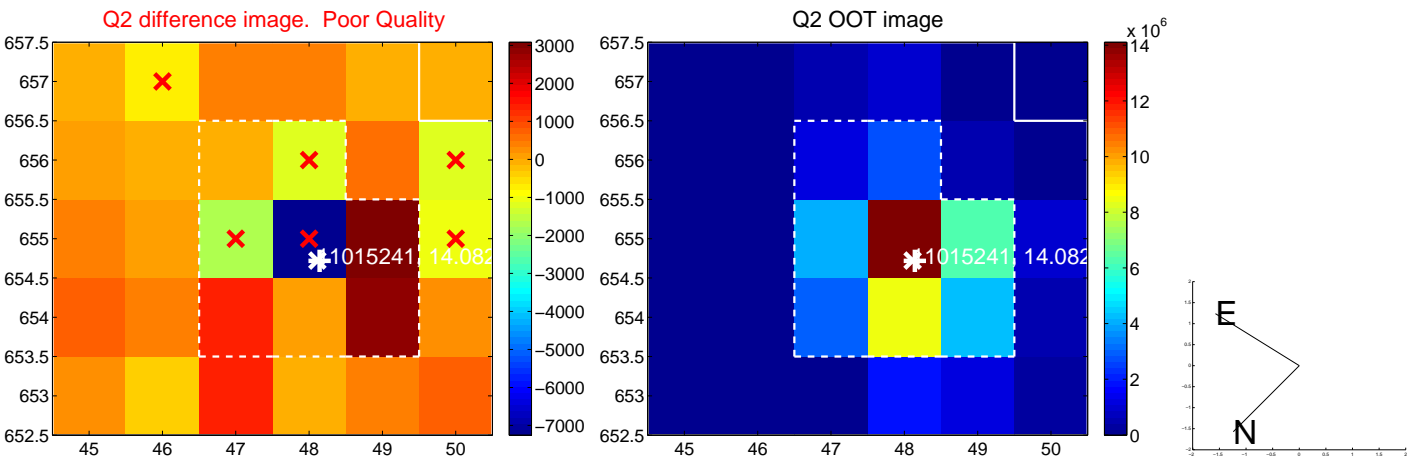
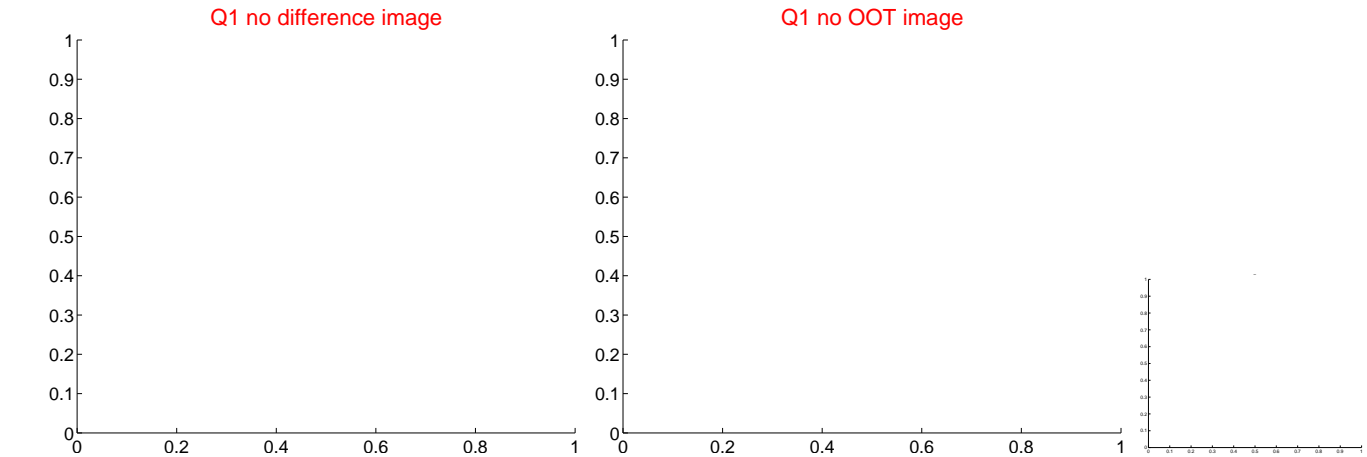
The direct PRF centroid is offset from the target star catalog position by about NaN arcsec

	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	0.26 ± 0.54	0.48	-0.21 ± 0.53	0.15 ± 0.55



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.



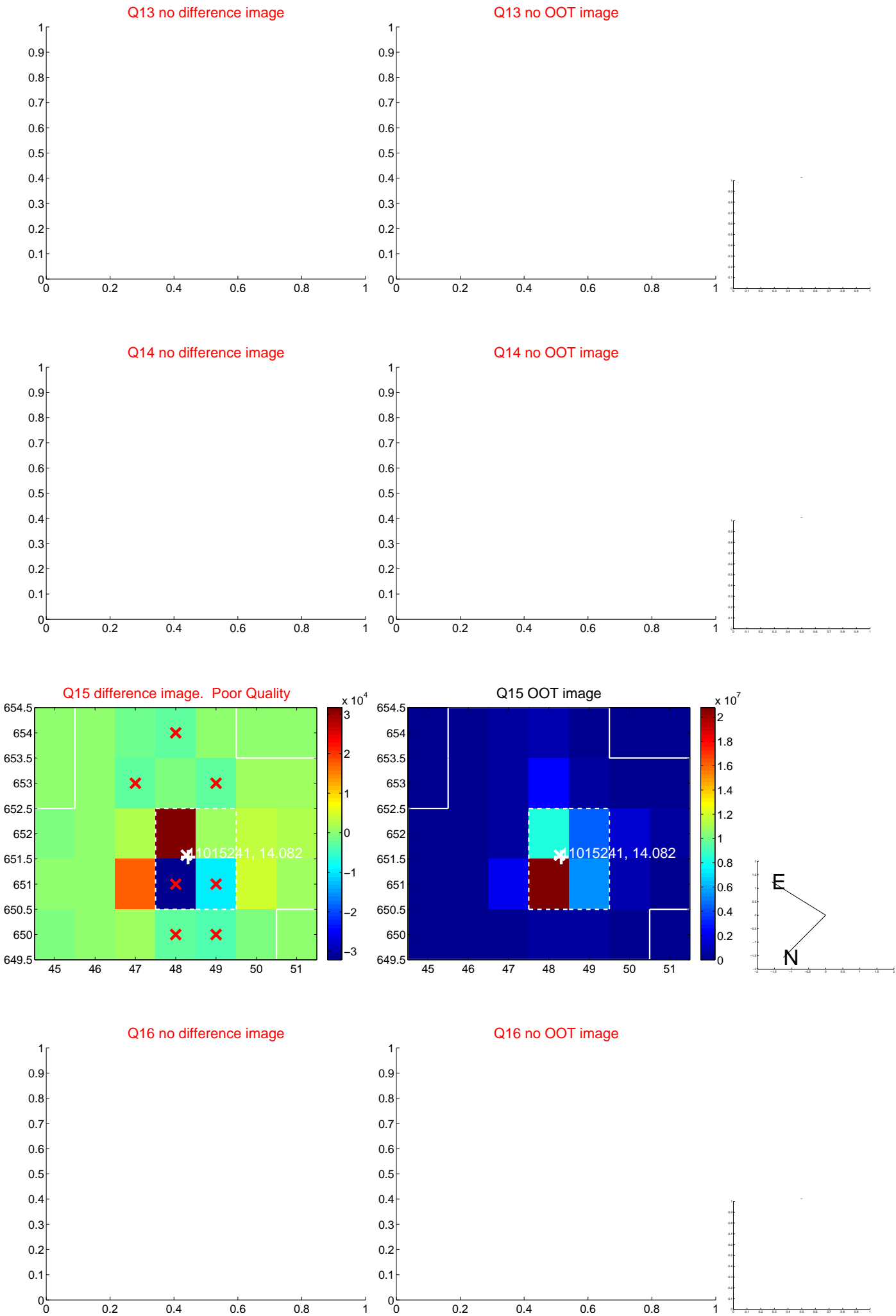
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



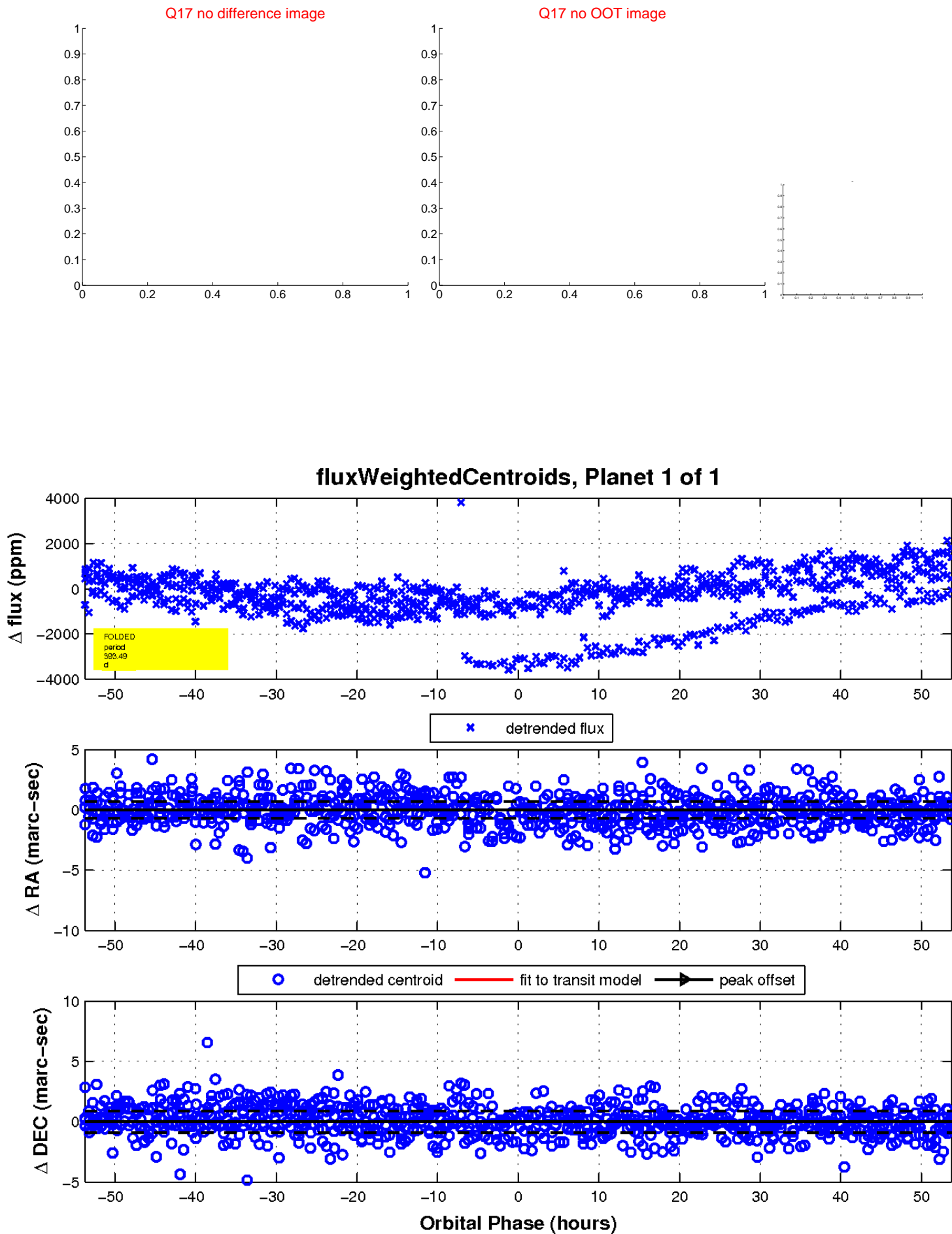
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



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



UKIRT Image

Declination

