

KIC 003441303

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})
003441303-01	OBS	No	508.896979	201.963437	561.3	6.231	7.7	5.7	1.07	6322	3.88	0.98

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003441303-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—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.

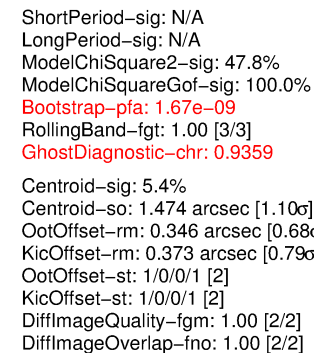
N = Not Transit-Like. S = Stellar Eclipse. C = Centroid Offset. E = Ephemeris Match.

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

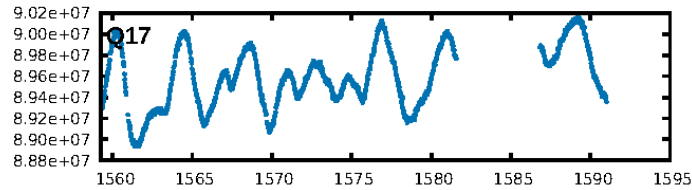
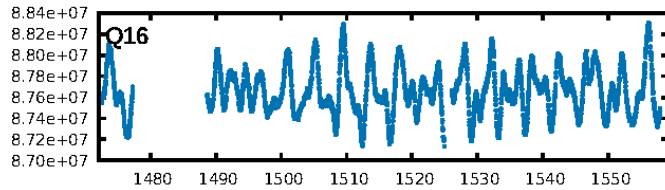
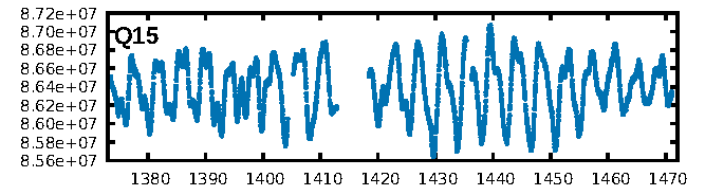
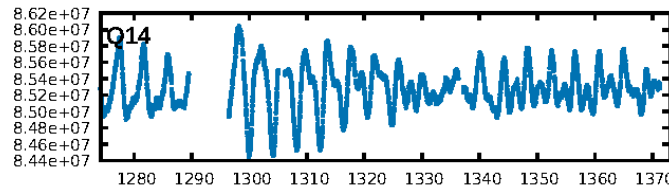
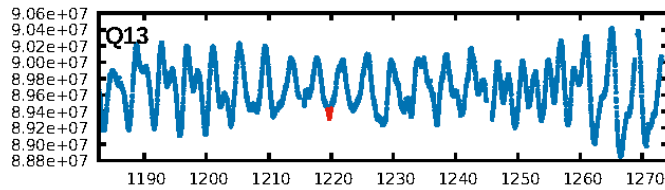
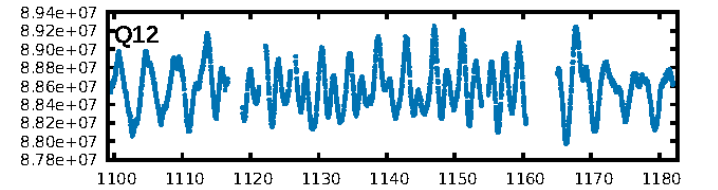
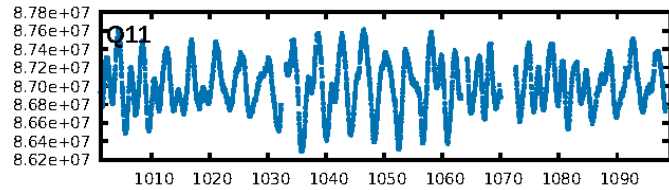
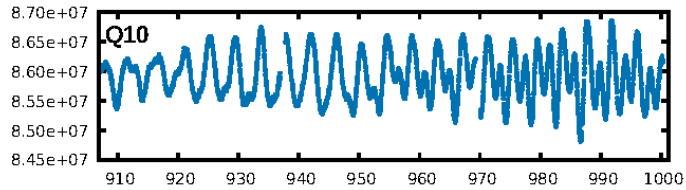
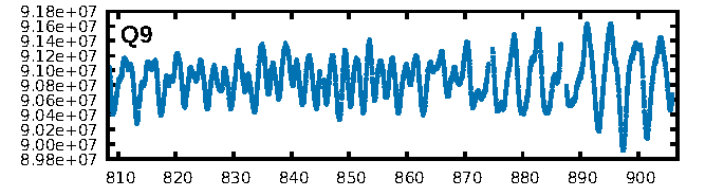
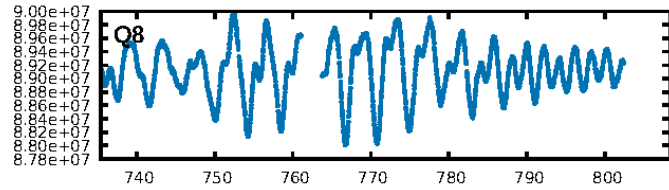
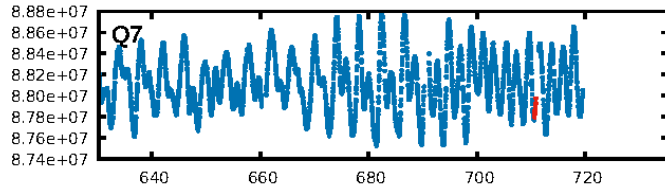
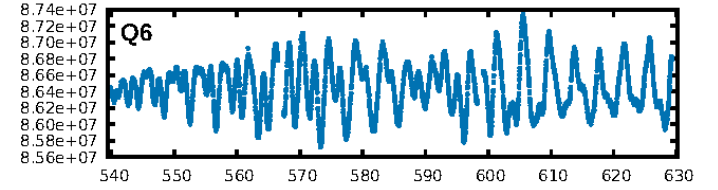
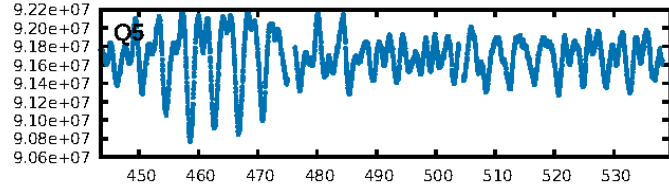
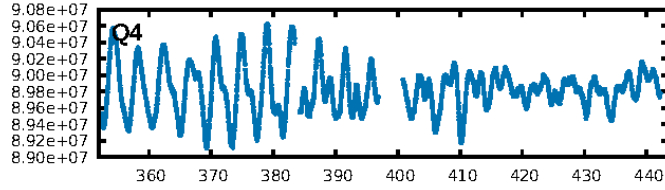
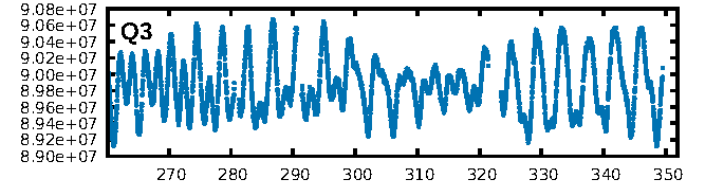
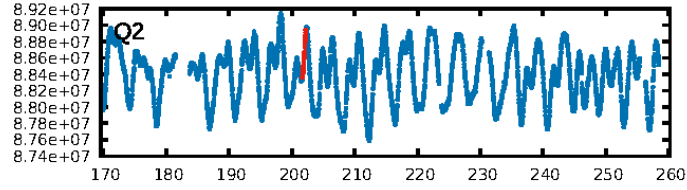
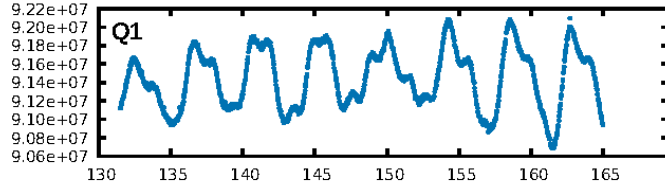
Ephemeris Match Information For 003441303-01

No Significant Match Found

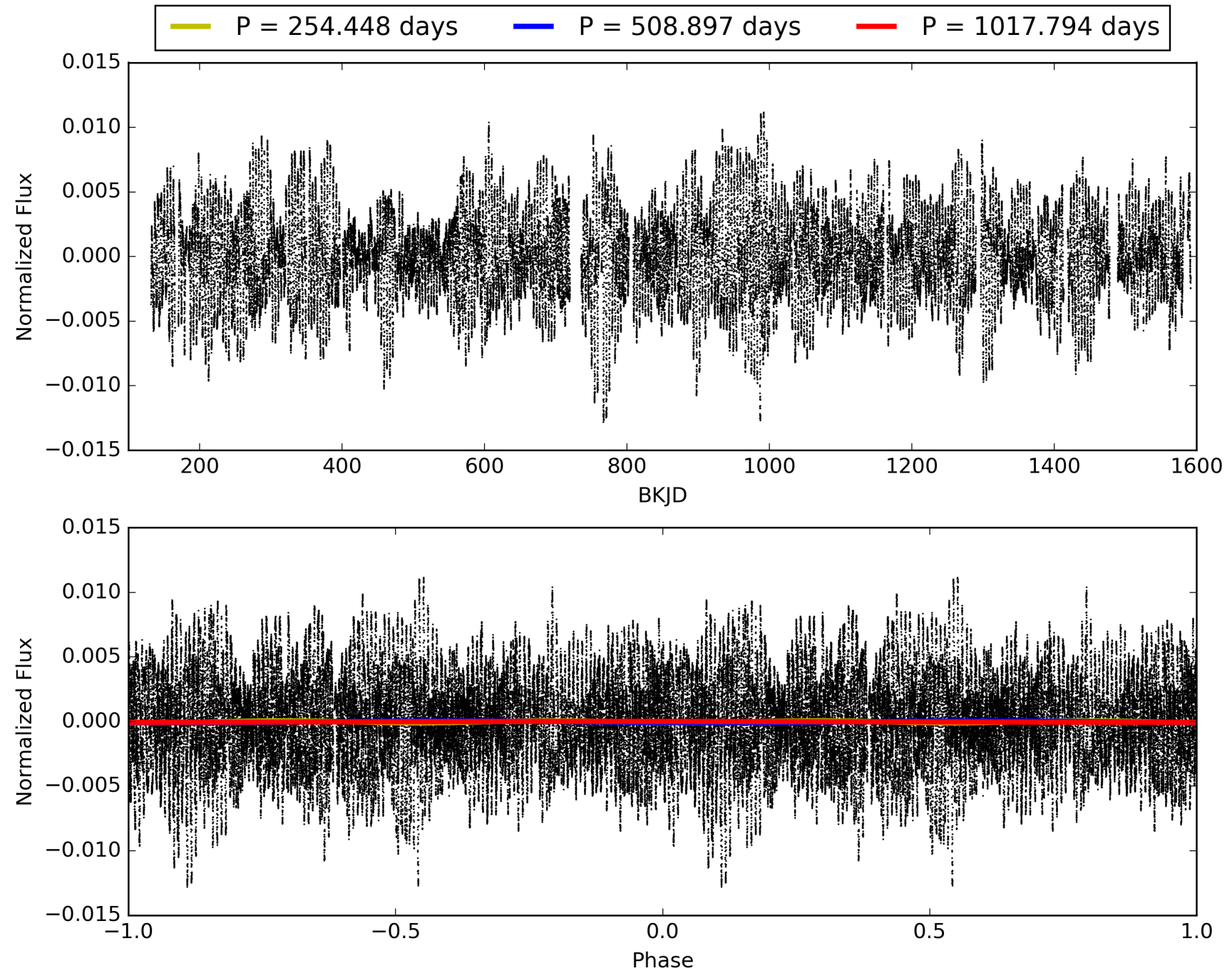
KIC: 3441303 Candidate: 1 of 1 Period: 508.897 d



TCE 003441303-01, PDC Light Curves

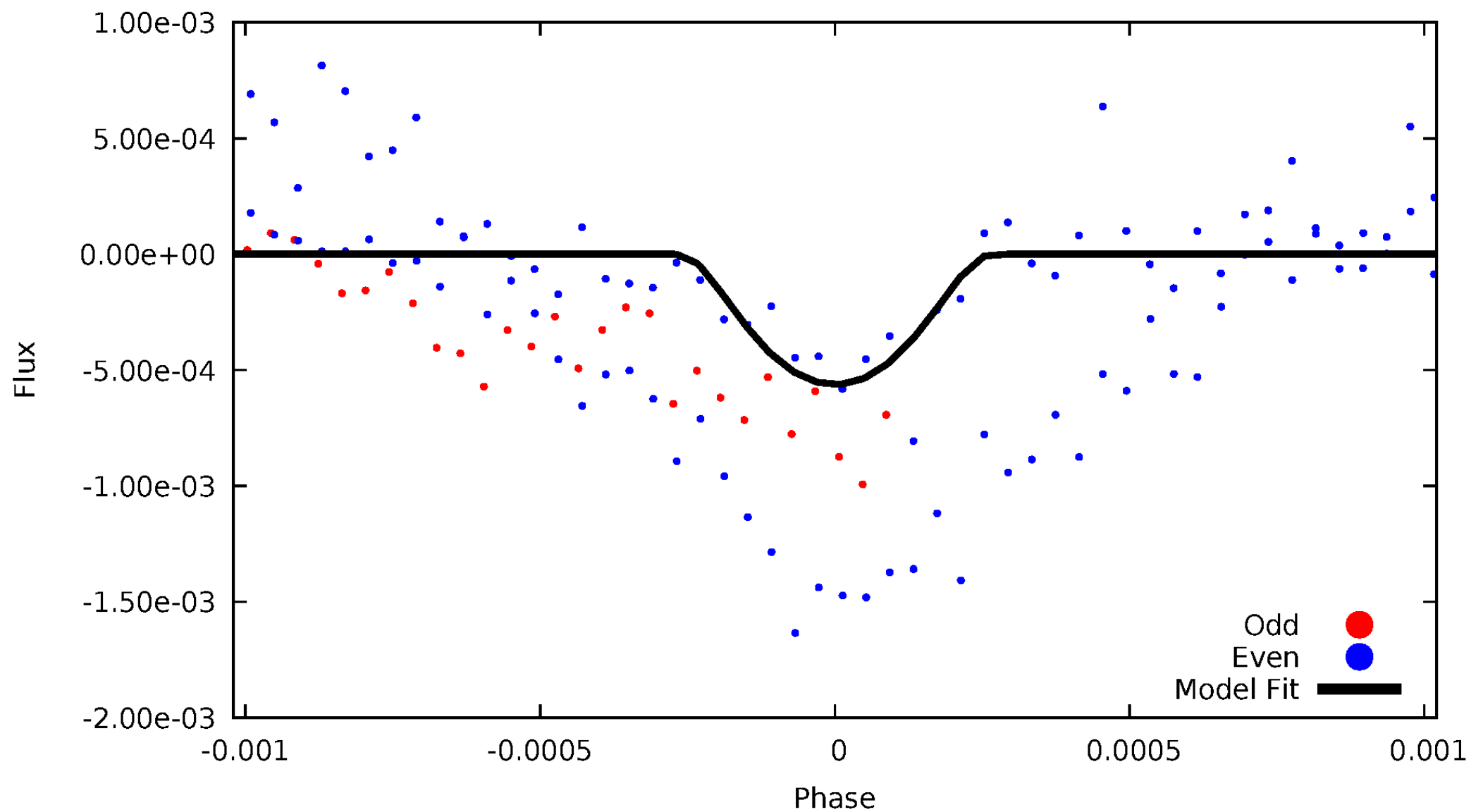


TCE 003441303-01



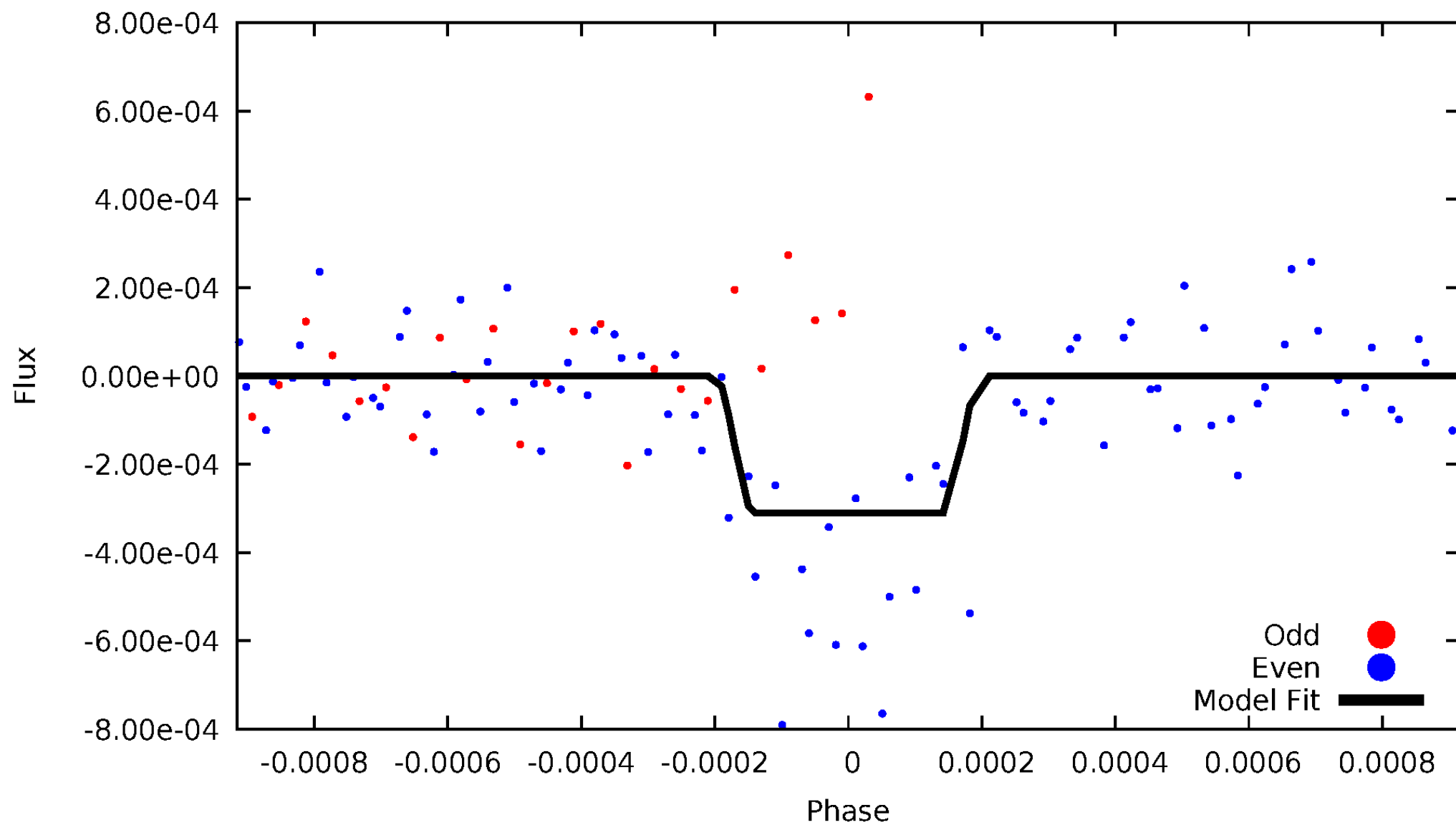
DV Odd/Even

TCE 003441303-01



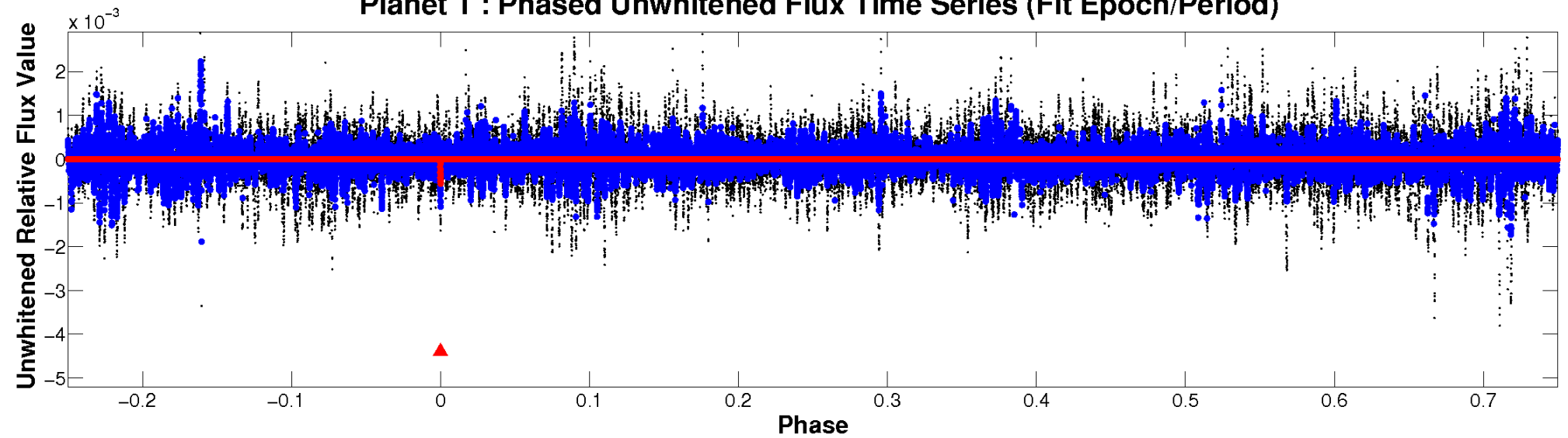
ALT Odd/Even

TCE 003441303-01

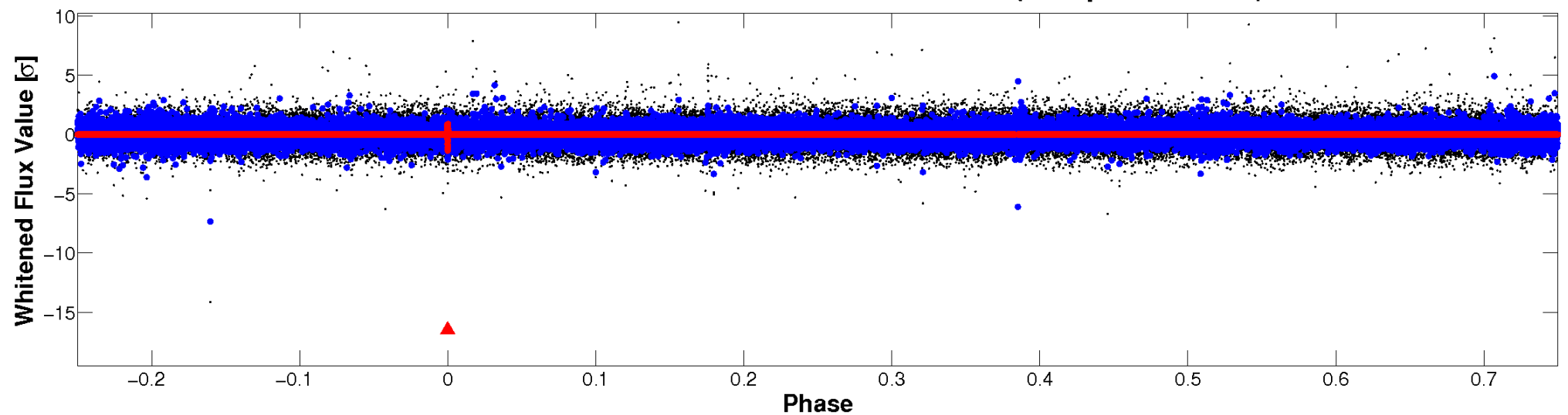


Non-Whitened Vs. Whitened Light Curve

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

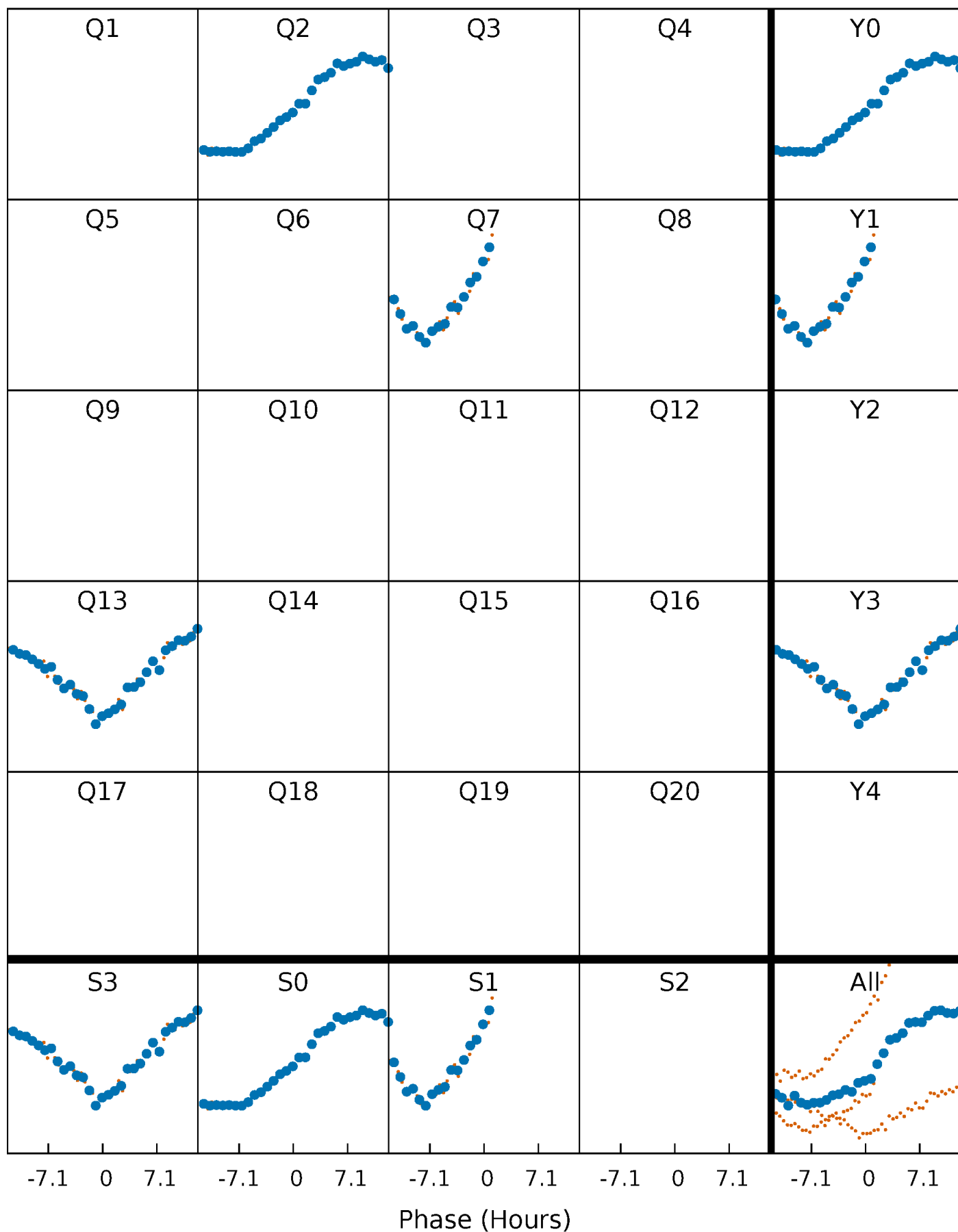


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



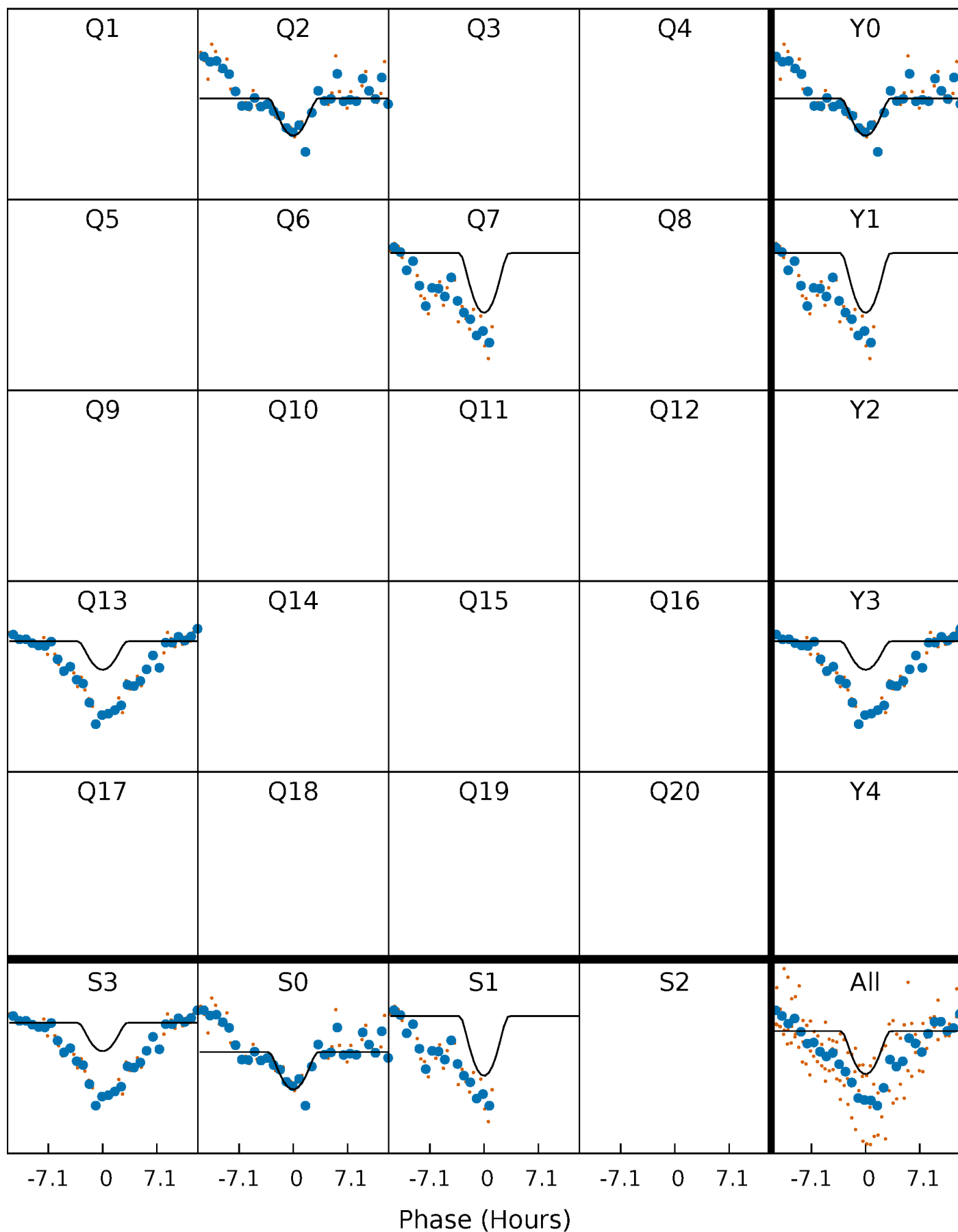
PDC Quarter-Phased Transit Curves

TCE 003441303-01 P=508.896979 Days $T_0=201.963437$ (BKJD)



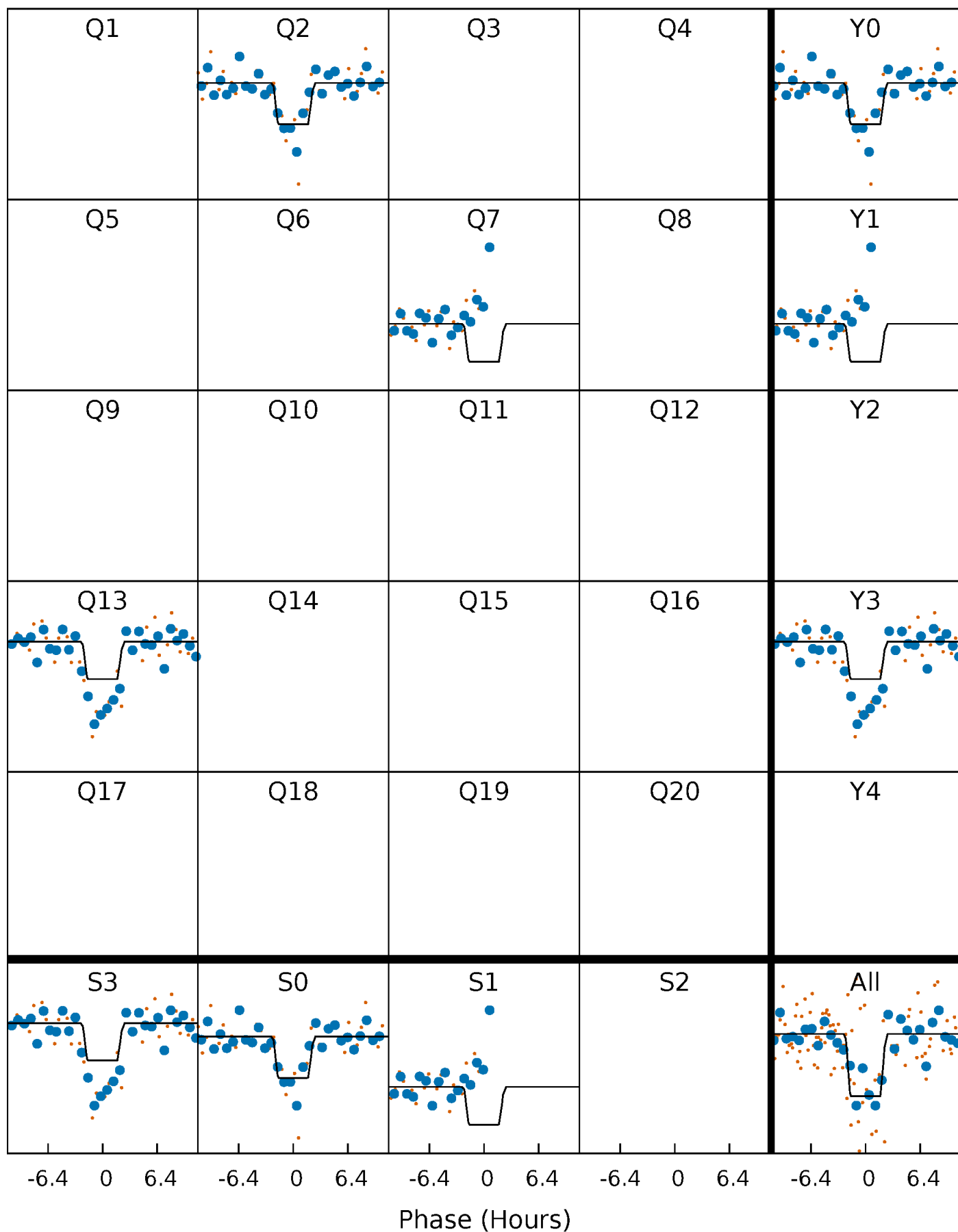
DV Quarter-Phased Transit Curves

TCE 003441303-01 P=508.896979 Days $T_0=201.963437$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

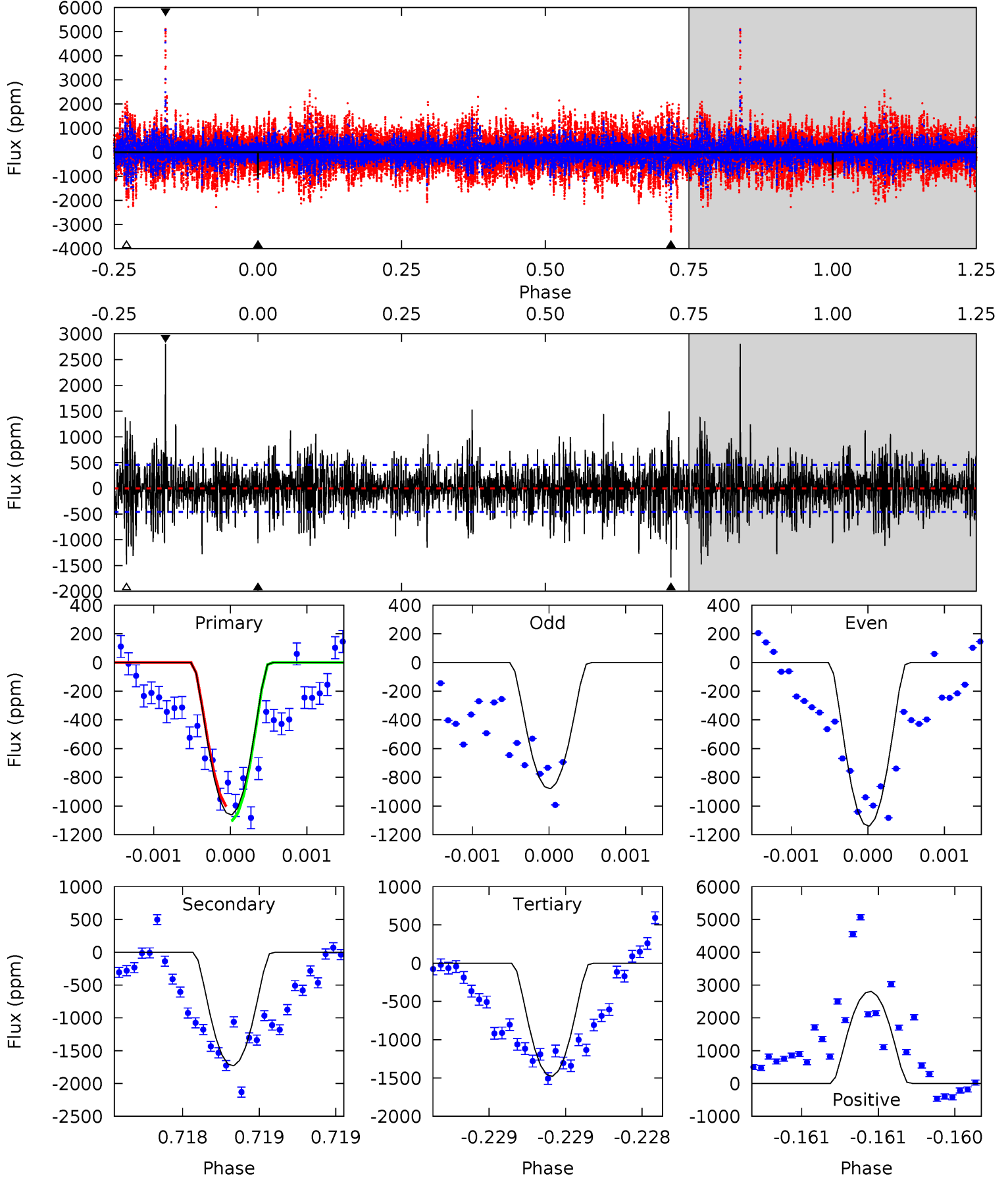
TCE 003441303-01 P=508.884189 Days $T_0=202.005063$ (BKJD)



DV Model-Shift Uniqueness Test

003441303-01, P = 508.896979 Days, E = 201.963437 Days

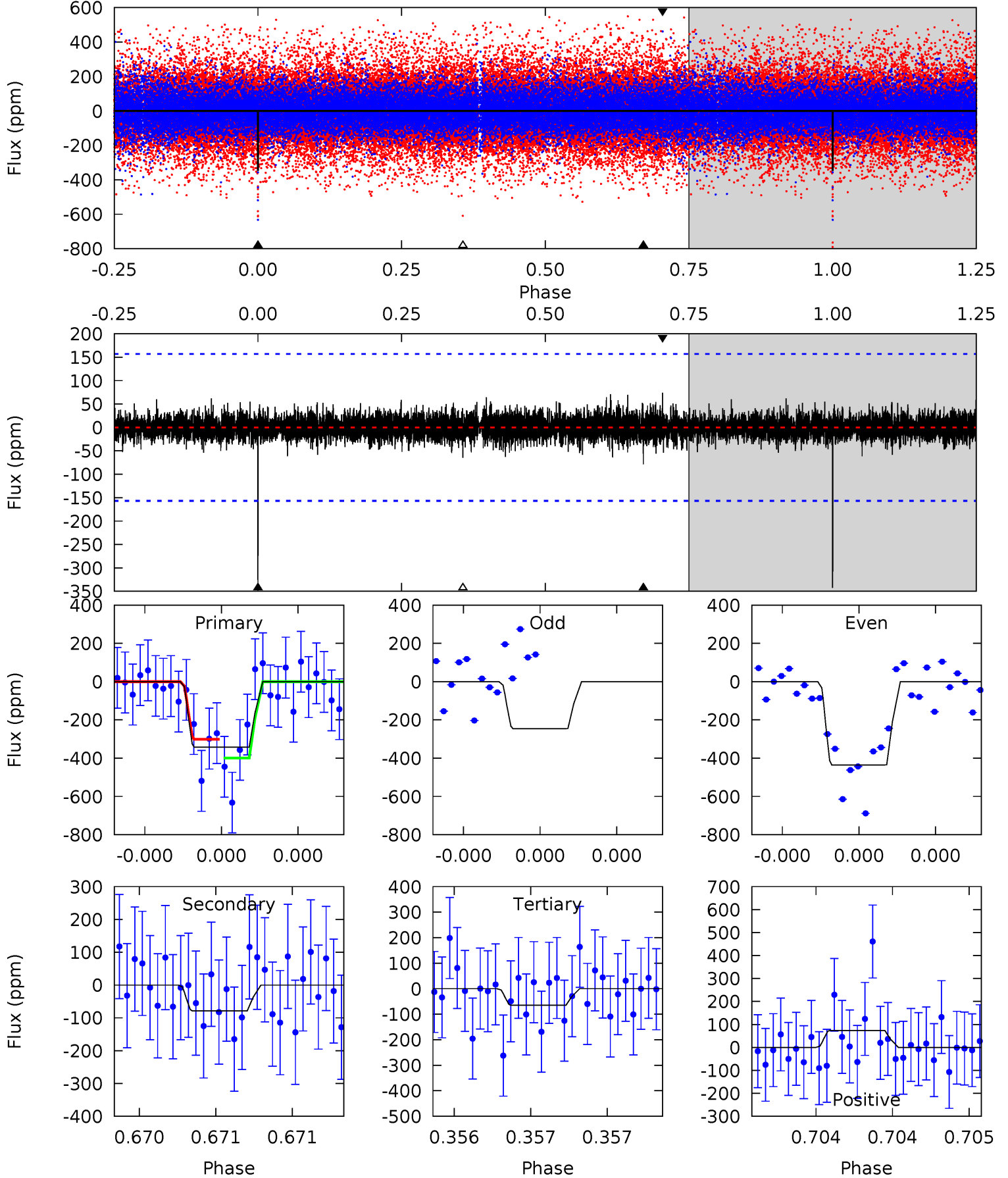
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.9	21.1	18.0	34.2	5.57	3.47	4.06	-5.06	-21.2	3.07	-13.1	1.27	1.20	0.62	0.62



Alt Model-Shift Uniqueness Test

003441303-01, P = 508.884189 Days, E = 202.005063 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.3	2.82	2.33	2.64	5.62	3.55	0.53	9.94	9.63	0.49	0.18	3.15	0.64	0.18	1.75



Stellar Parameters For KIC 003441303

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6322^{+156}_{-188}	$4.426^{+0.062}_{-0.188}$	$-0.120^{+0.250}_{-0.350}$	$1.075^{+0.299}_{-0.128}$	$1.124^{+0.144}_{-0.144}$	$1.274^{+0.406}_{-0.637}$
	+2%/-3%	+1%/-4%	+208%/-292%	+28%/-12%	+13%/-13%	+32%/-50%
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 003441303-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-1729 ± 82	$4.85^{+3.72}_{-3.00}$	360^{+23}_{-16}	6472^{+5499}_{-1519}	$67716^{+397523}_{-46079}$
Alt.	-79 ± 28	$3.79^{+3.24}_{-2.46}$	361^{+23}_{-18}	3750^{+1908}_{-690}	4783^{+32785}_{-3478}

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

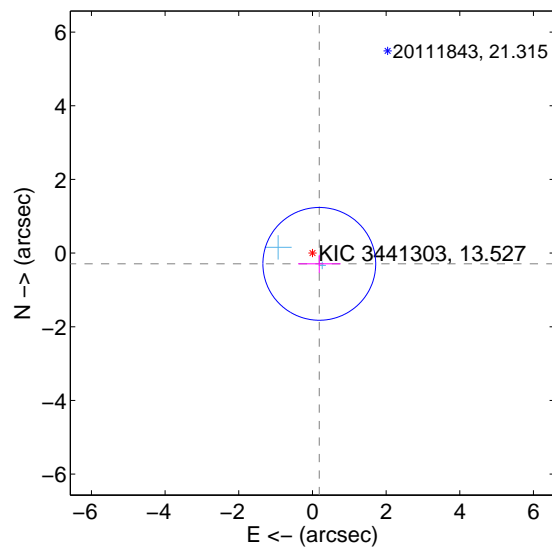
Supplemental centroid analysis for 003441303-01. Kepler magnitude: 13.53. Transit SNR 5.75

There are 2 quarters with good PRF difference image offsets

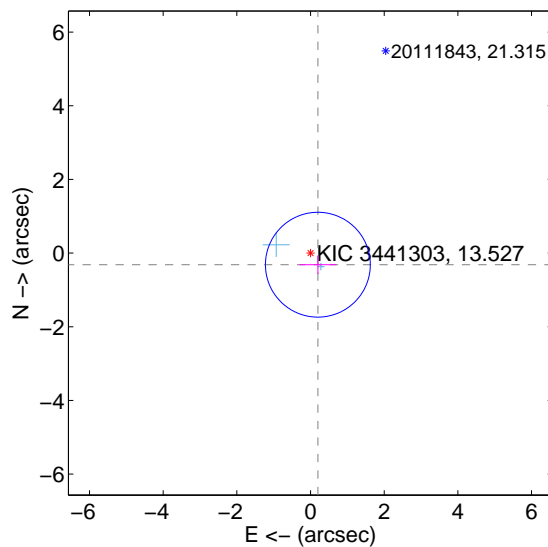
The direct PRF centroid is offset from the target star catalog position by about 0.04 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.346 ± 0.510	0.68	-0.186 ± 0.577	-0.292 ± 0.244
PRF-fit source offset from KIC position	0.373 ± 0.474	0.79	-0.200 ± 0.500	-0.315 ± 0.251
photometric centroid source offset	1.47 ± 1.33	1.10	-0.48 ± 0.89	-1.39 ± 1.38

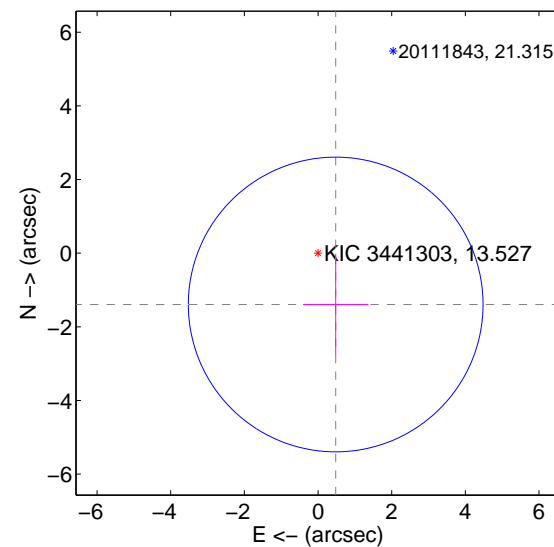
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

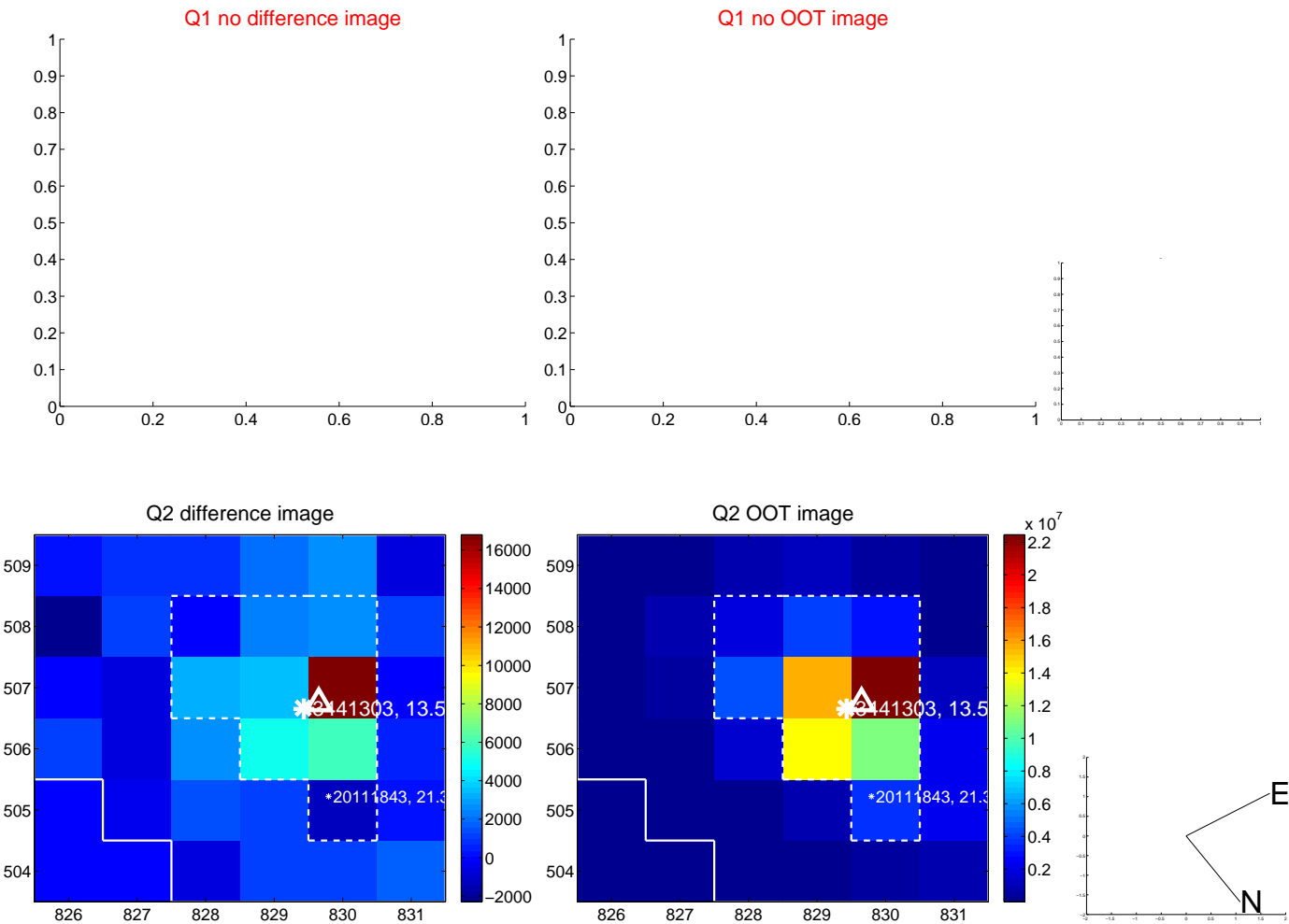


offset from photometric centroids

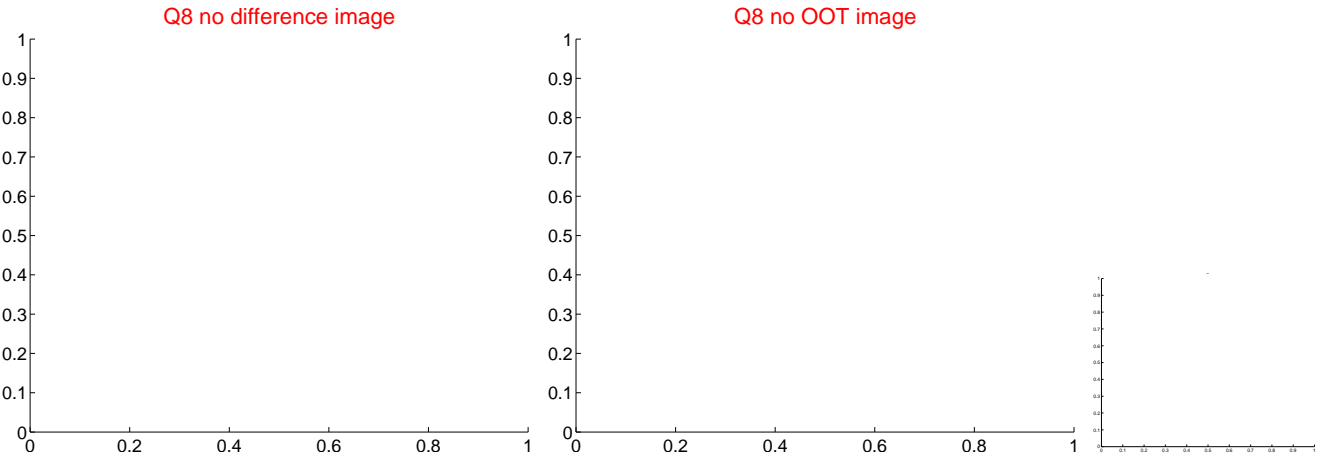
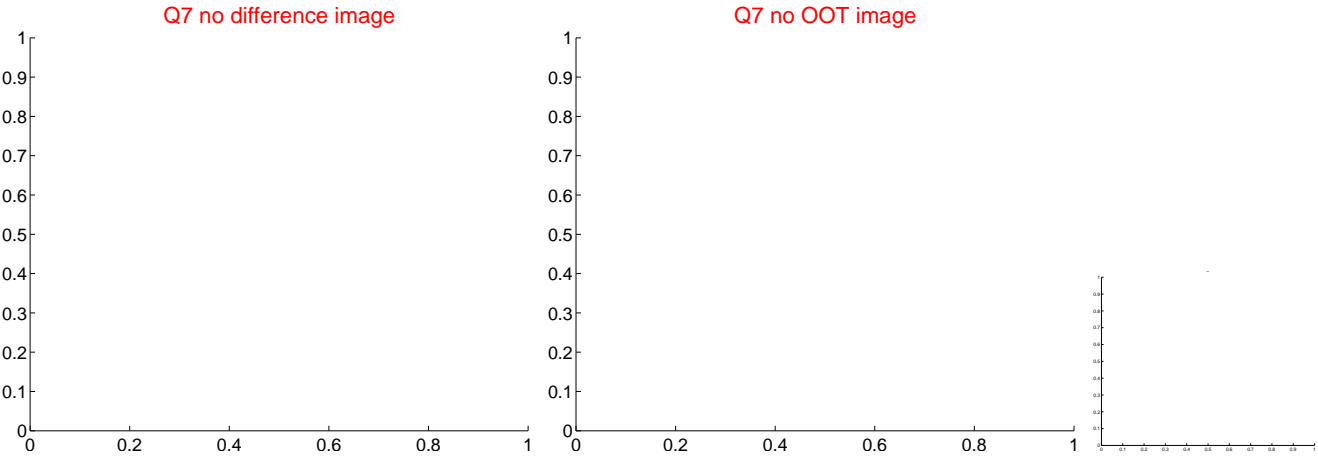
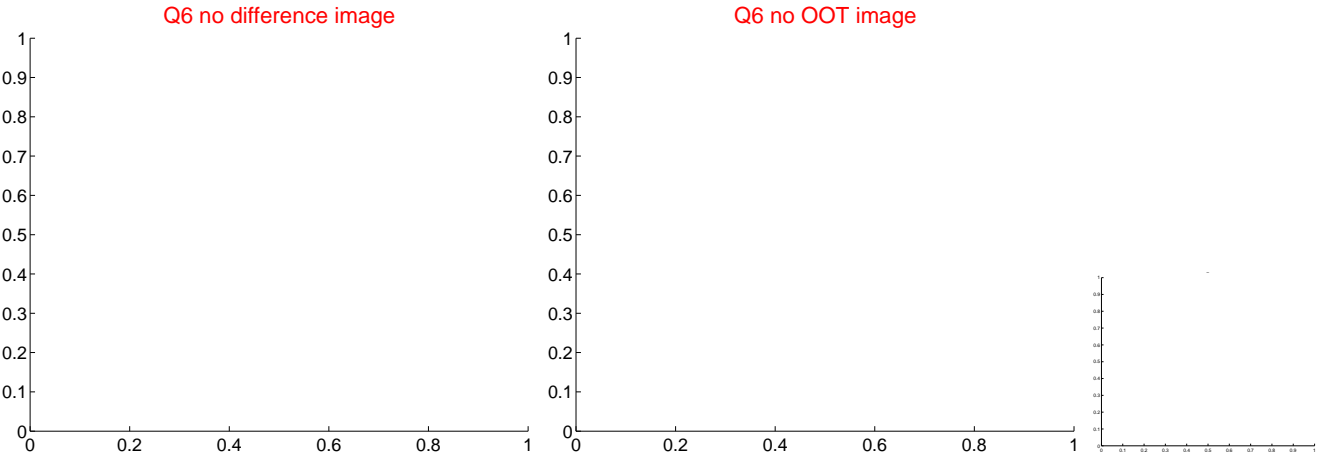
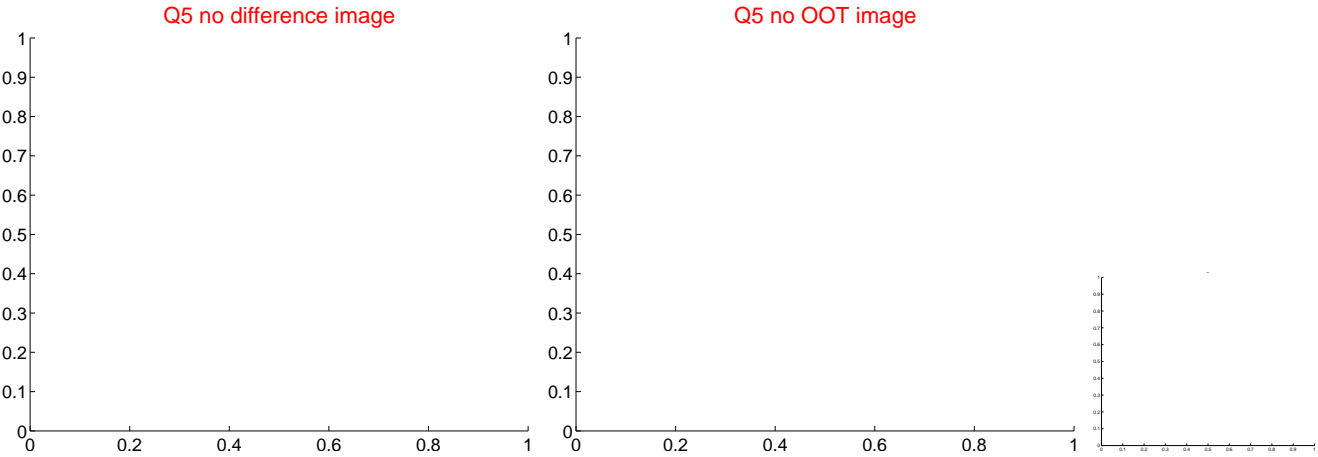


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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



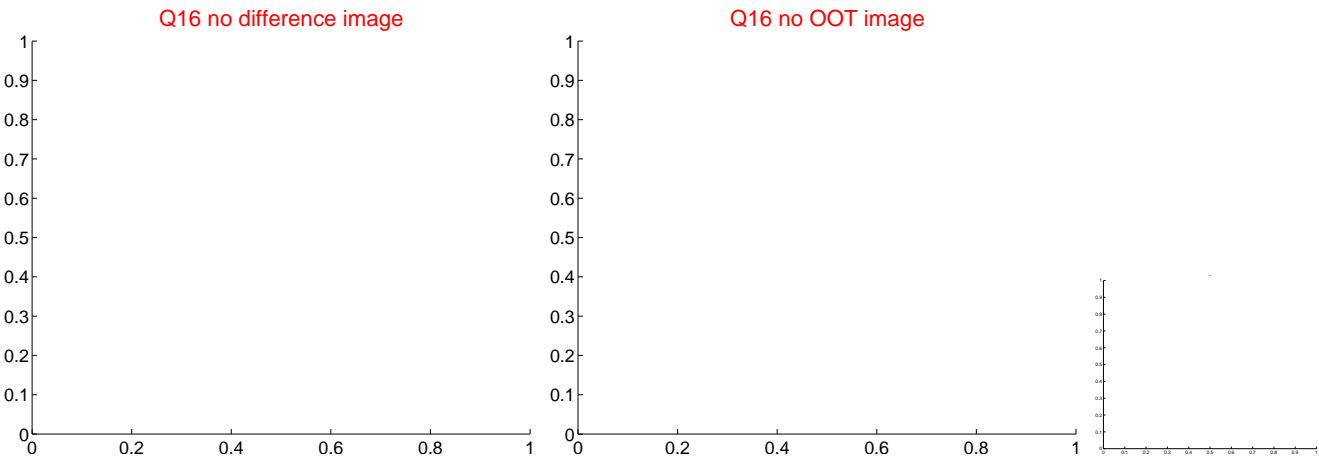
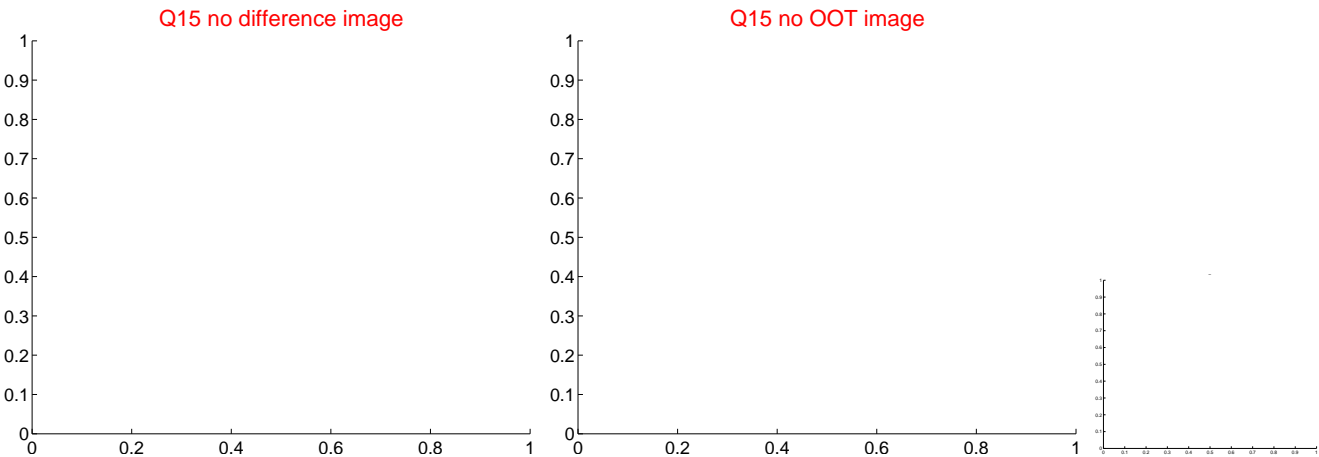
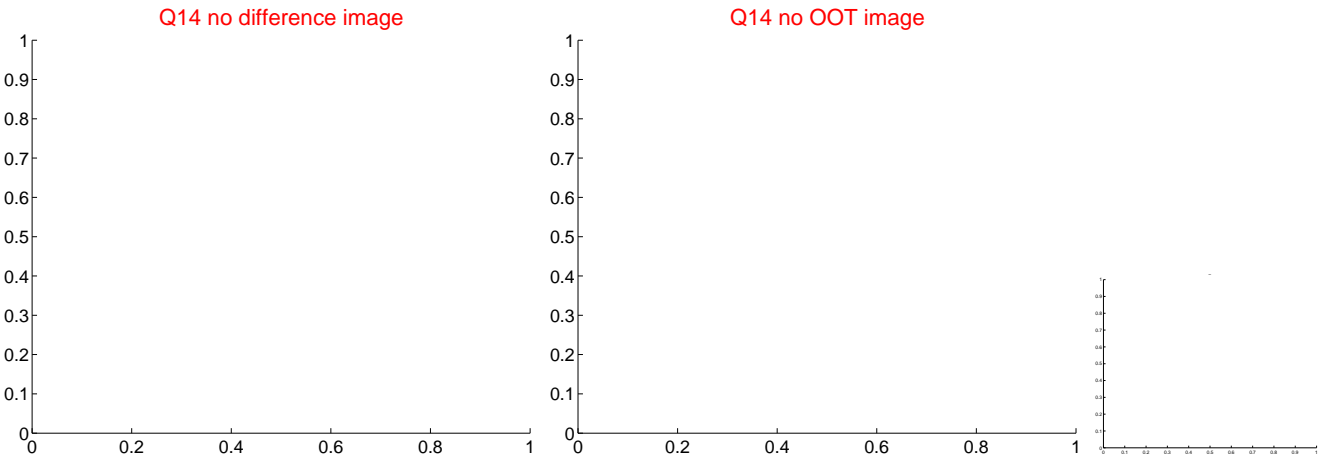
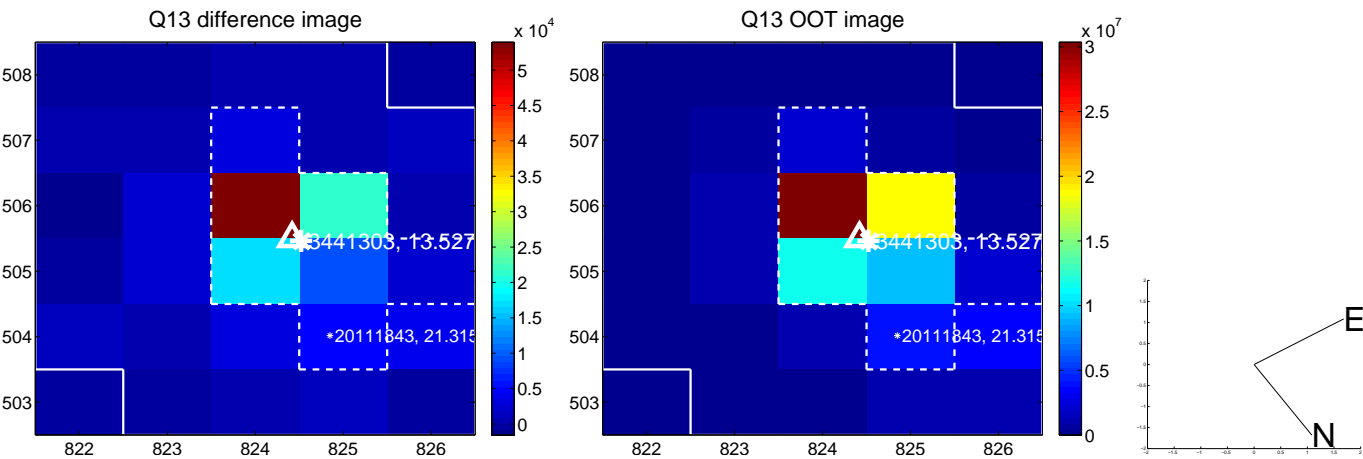
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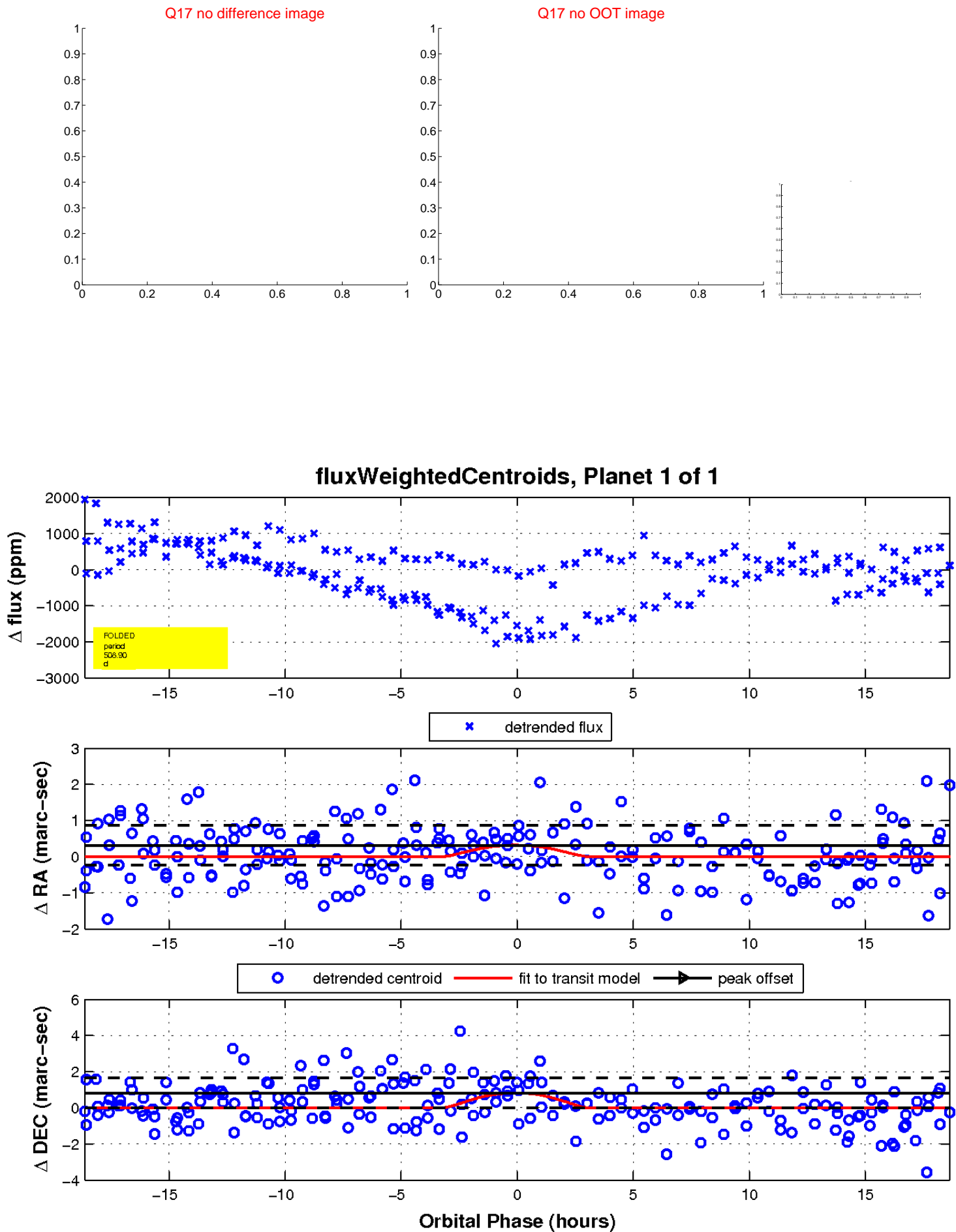
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UKIRT Image

