

KIC 005534082

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})
005534082-01	OBS	No	237.996173	286.718228	641.1	14.052	10.5	10.0	1.30	5615	3.50	2.66

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005534082-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE—ALL_TRANS_CHASES—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.

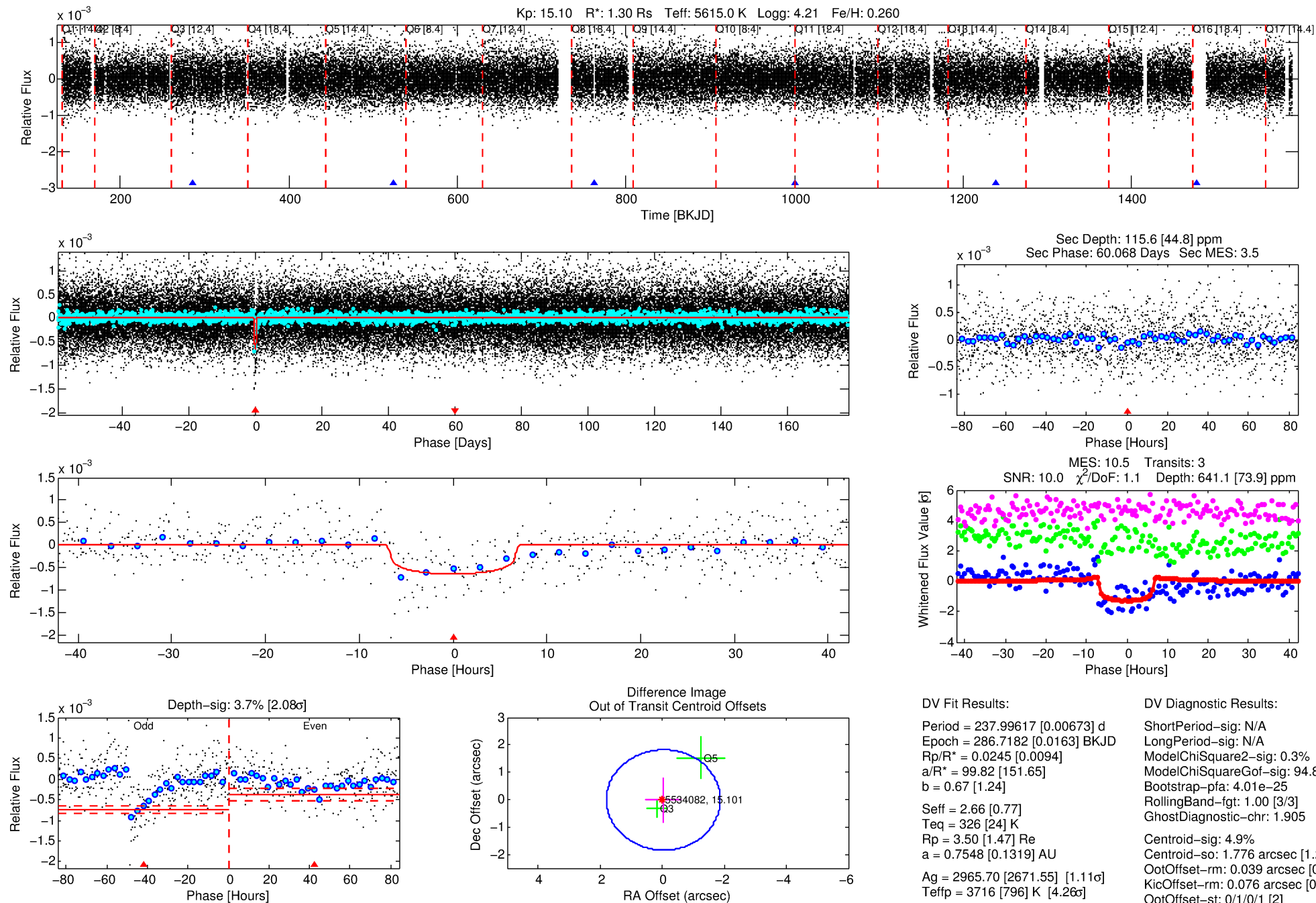
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005534082-01

No Significant Match Found

DV One-Page Summary

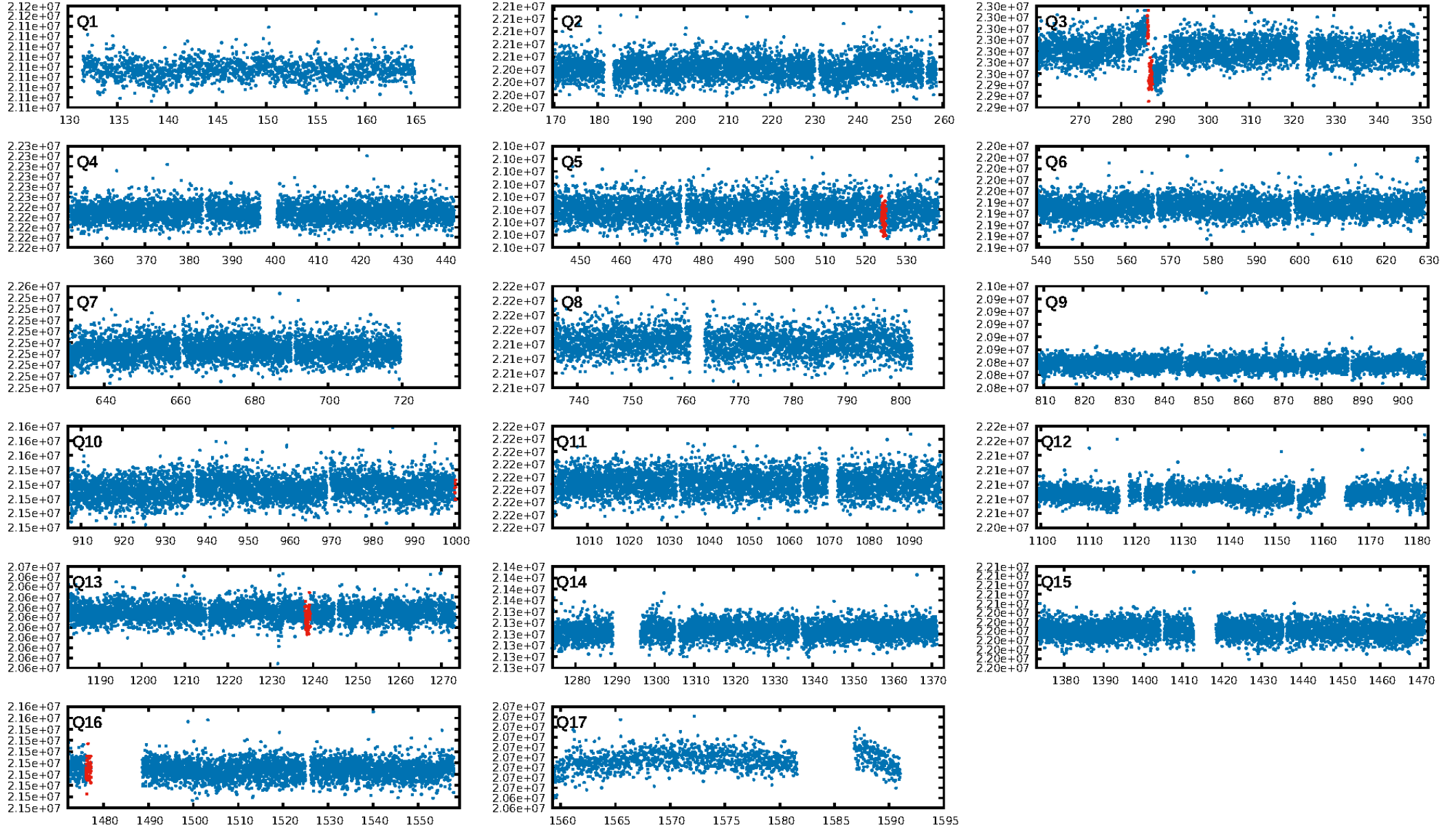
KIC: 5534082 Candidate: 1 of 1 Period: 237.996 d



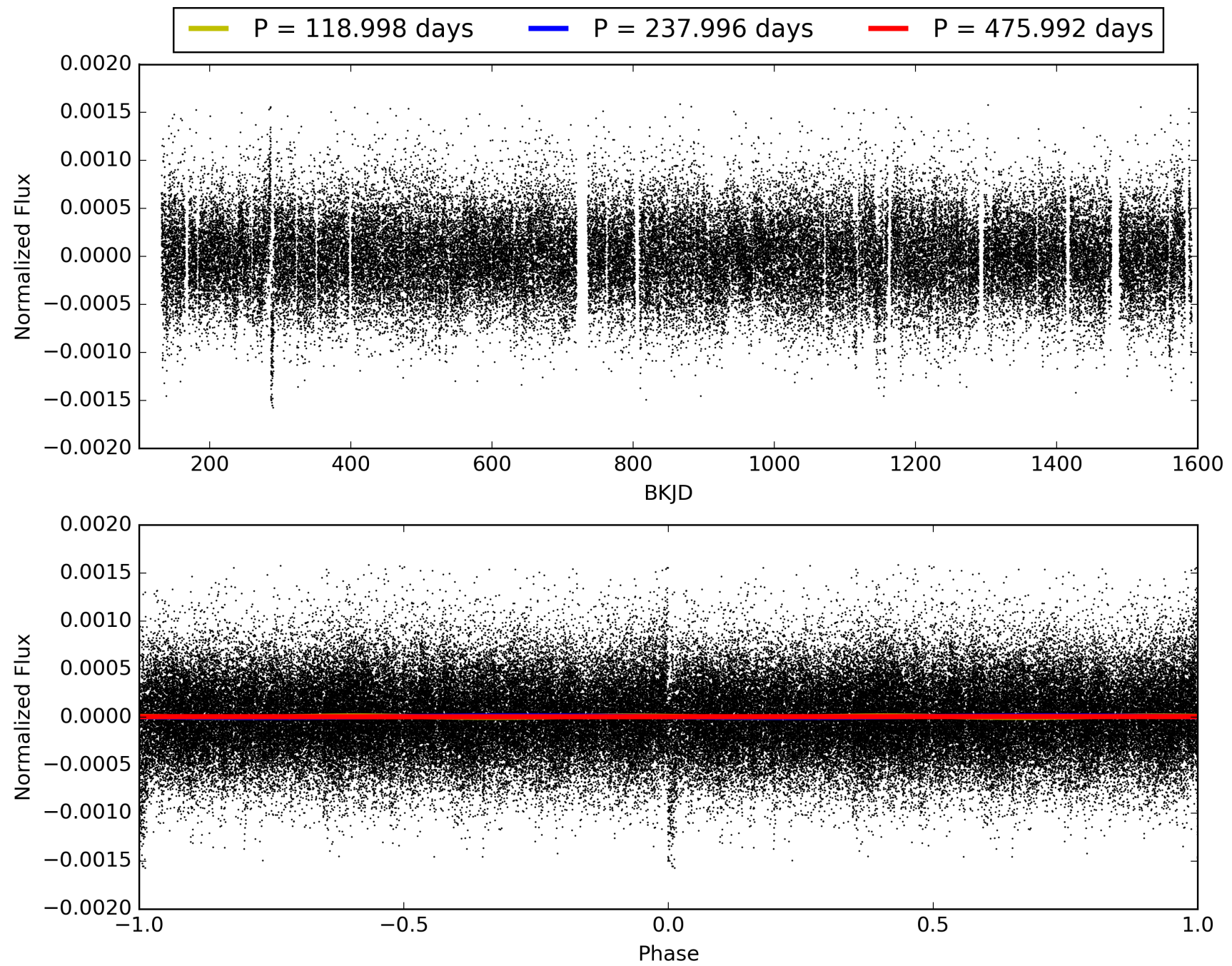
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 14:12:23 Z

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

TCE 005534082-01, PDC Light Curves

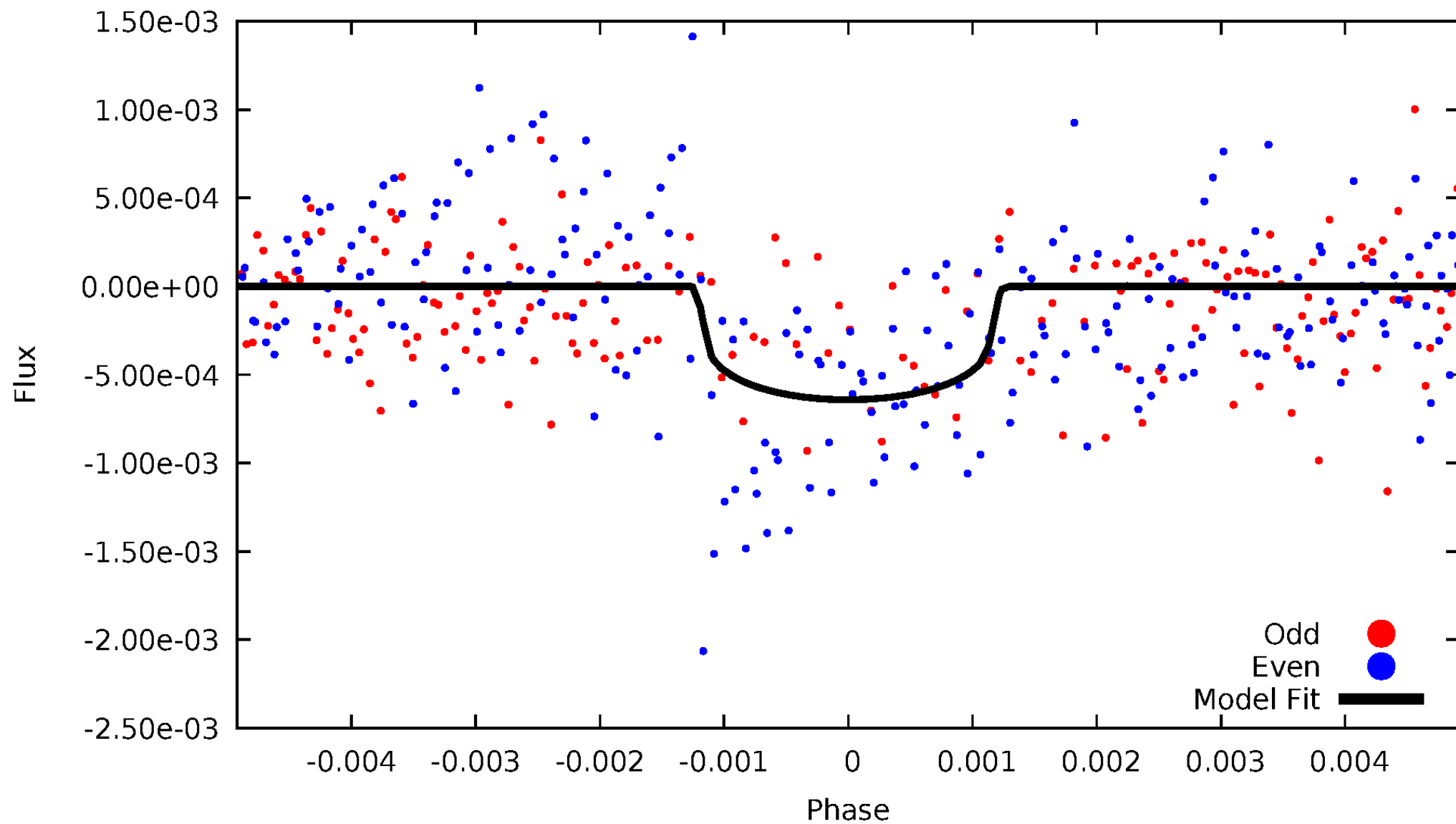


TCE 005534082-01



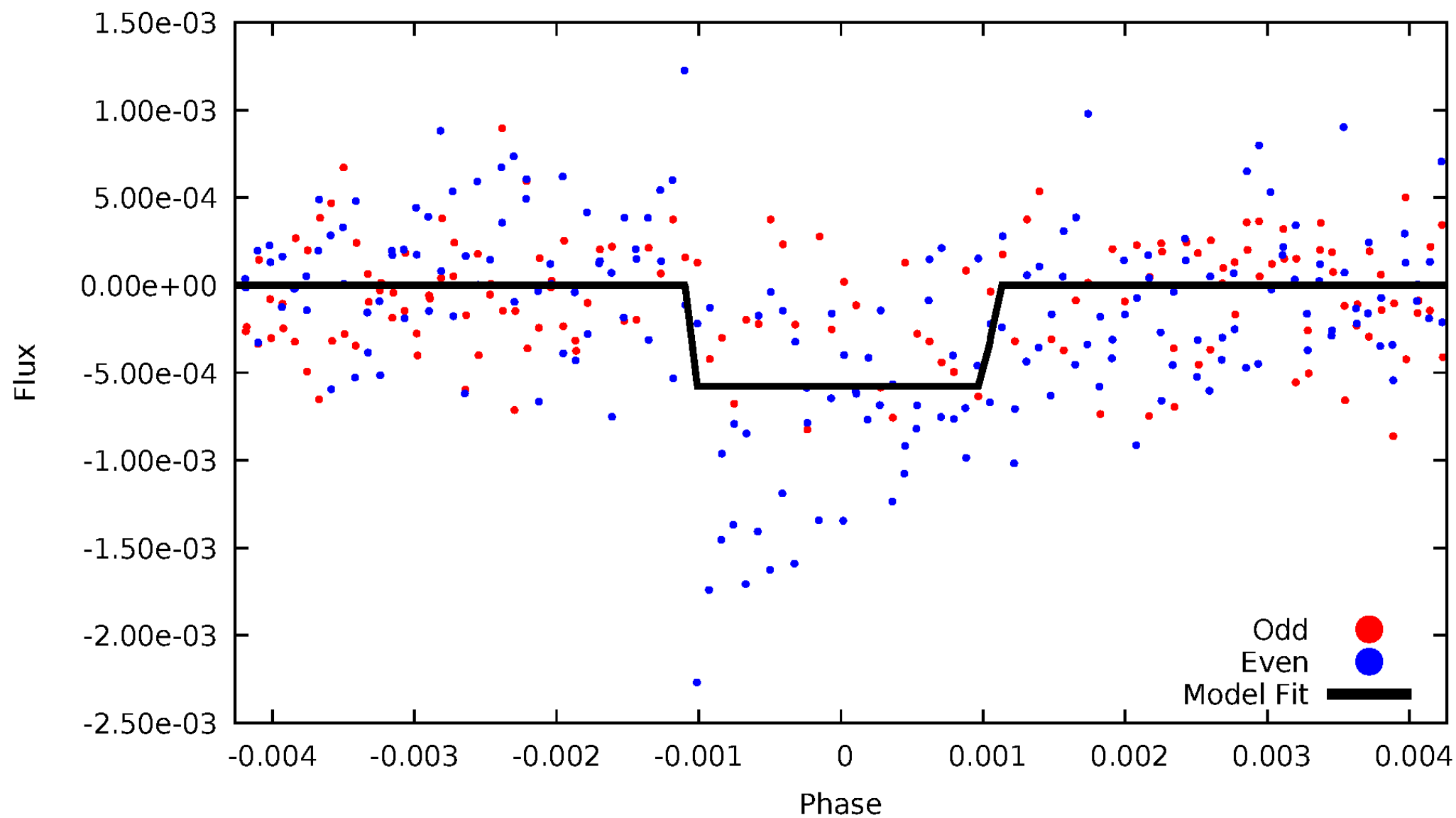
DV Odd/Even

TCE 005534082-01

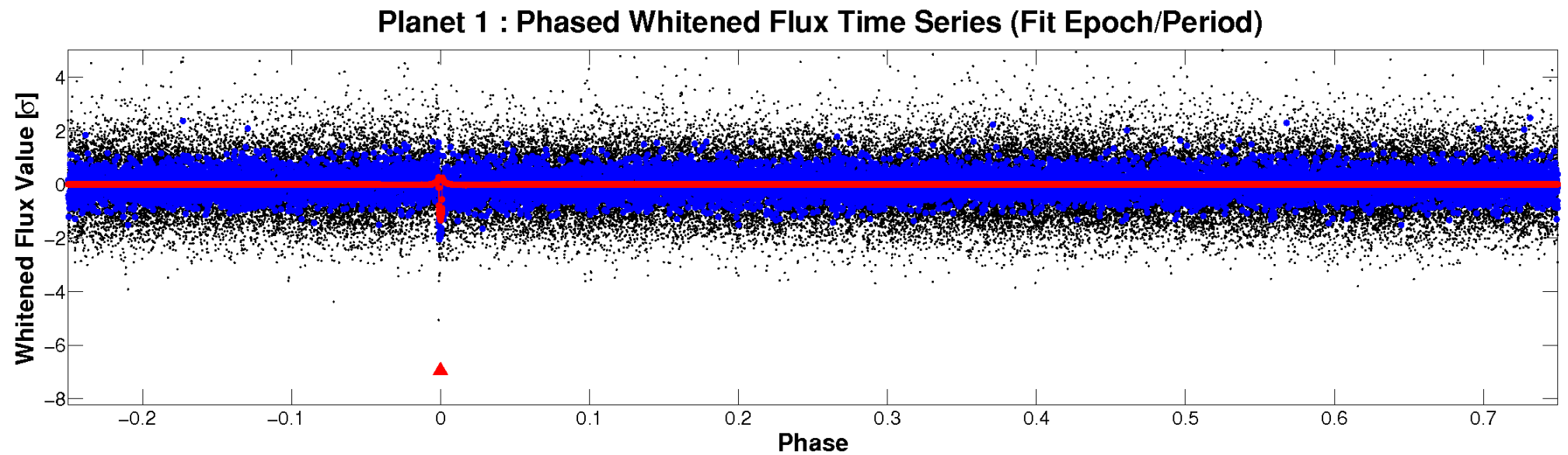
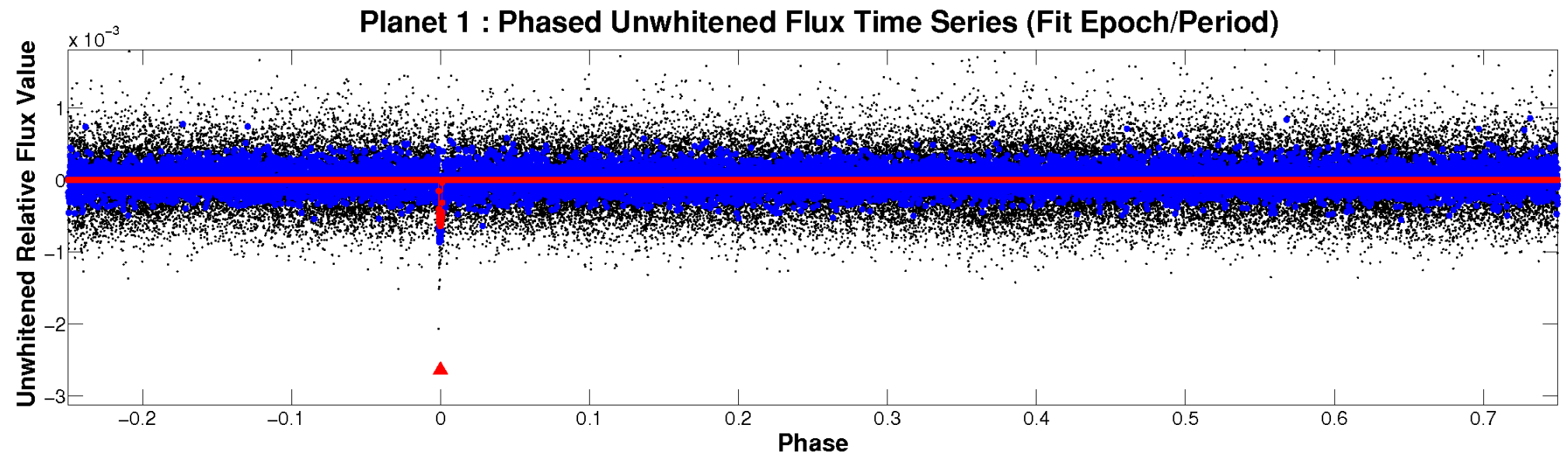


ALT Odd/Even

TCE 005534082-01

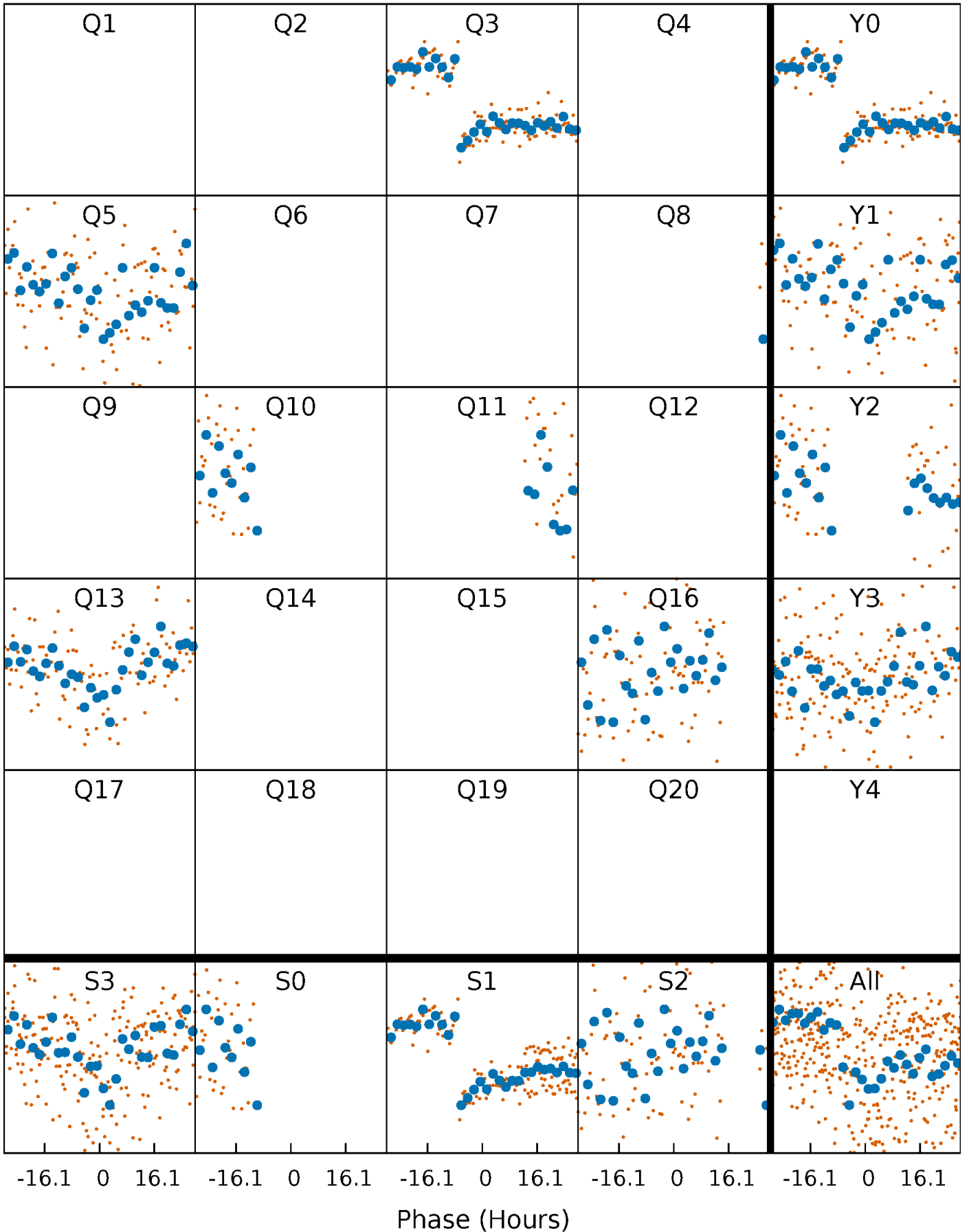


Non-Whitened Vs. Whitened Light Curve



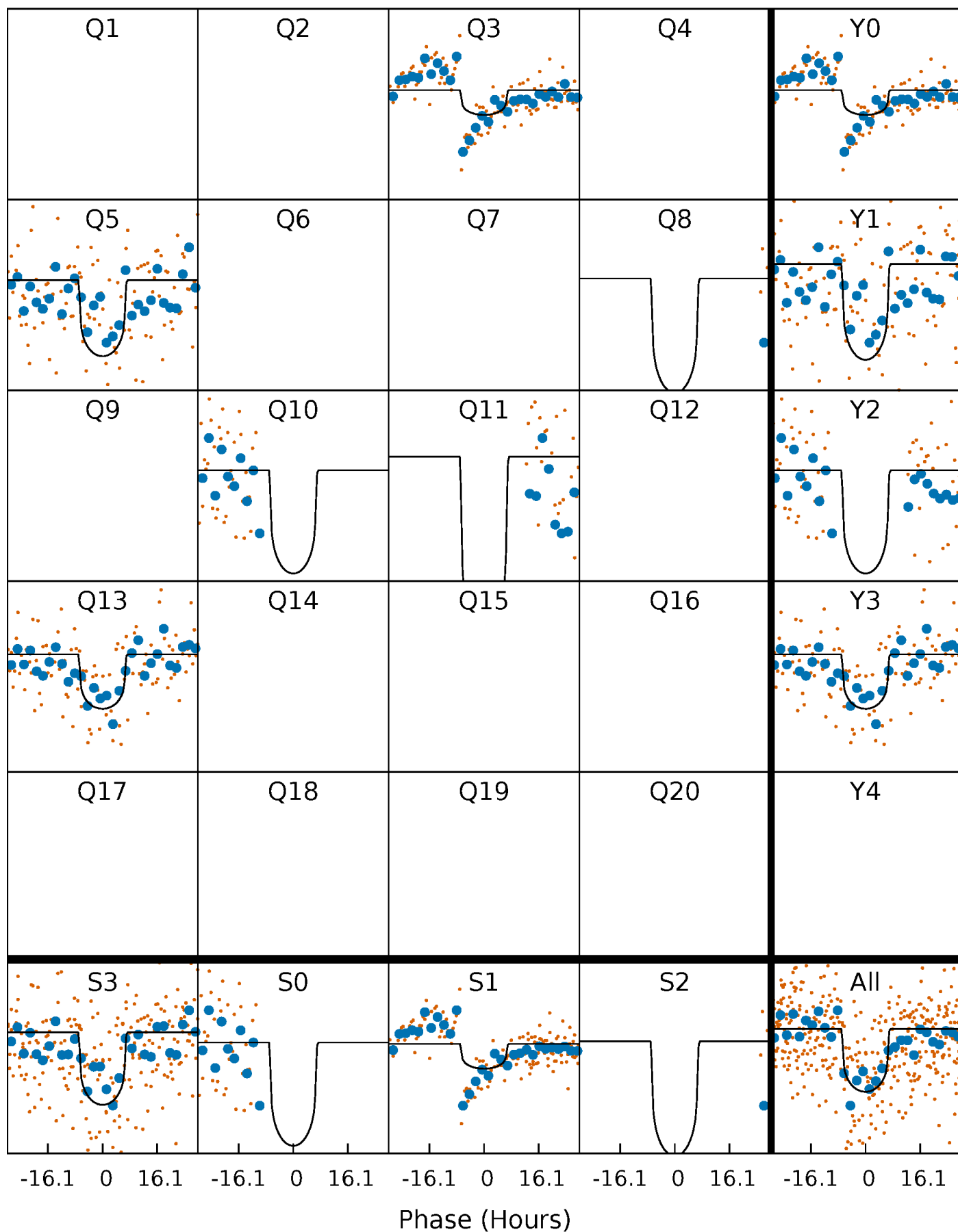
PDC Quarter-Phased Transit Curves

TCE 005534082-01 P=237.996173 Days $T_0=286.718228$ (BKJD)



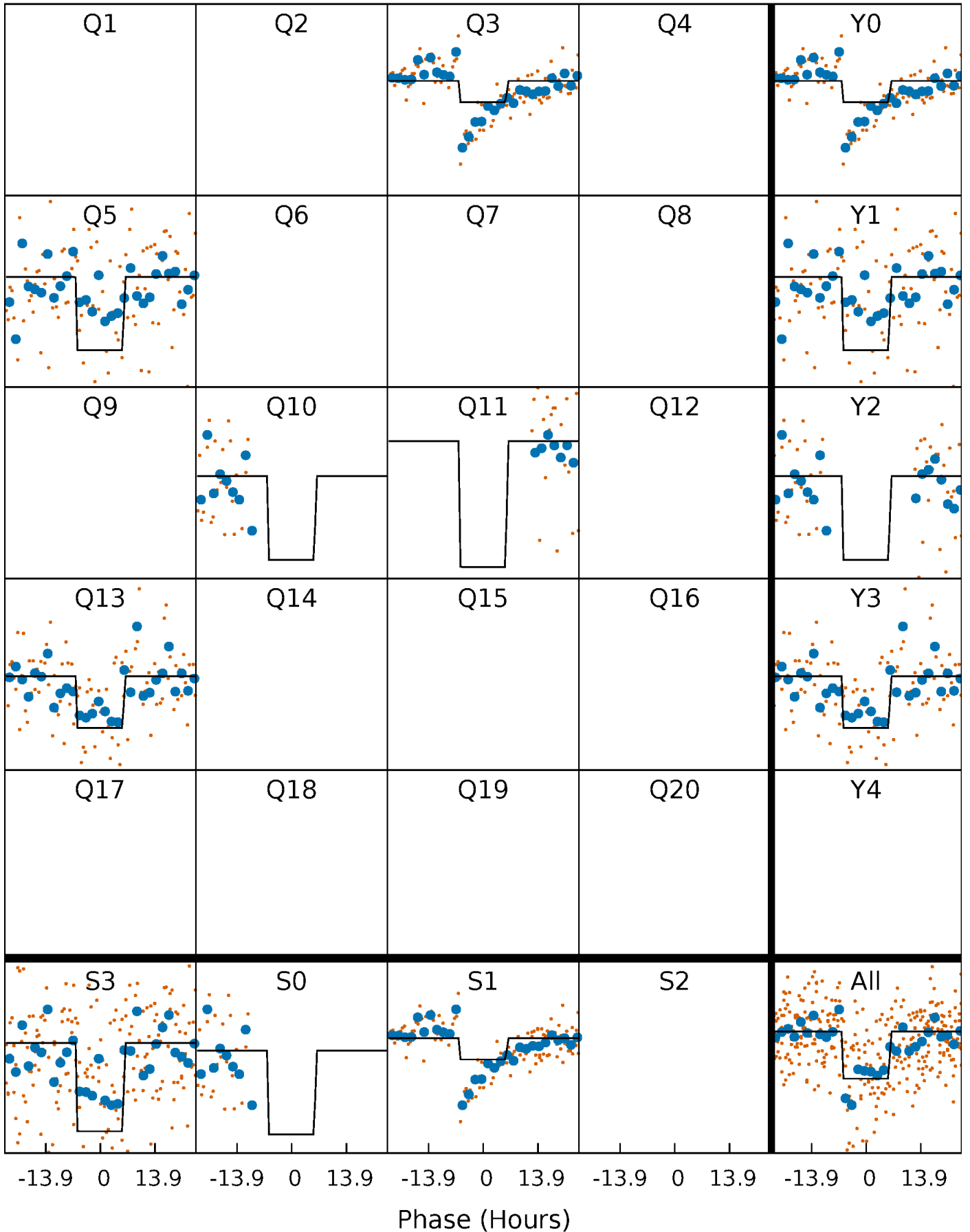
DV Quarter-Phased Transit Curves

TCE 005534082-01 P=237.996173 Days $T_0=286.718228$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

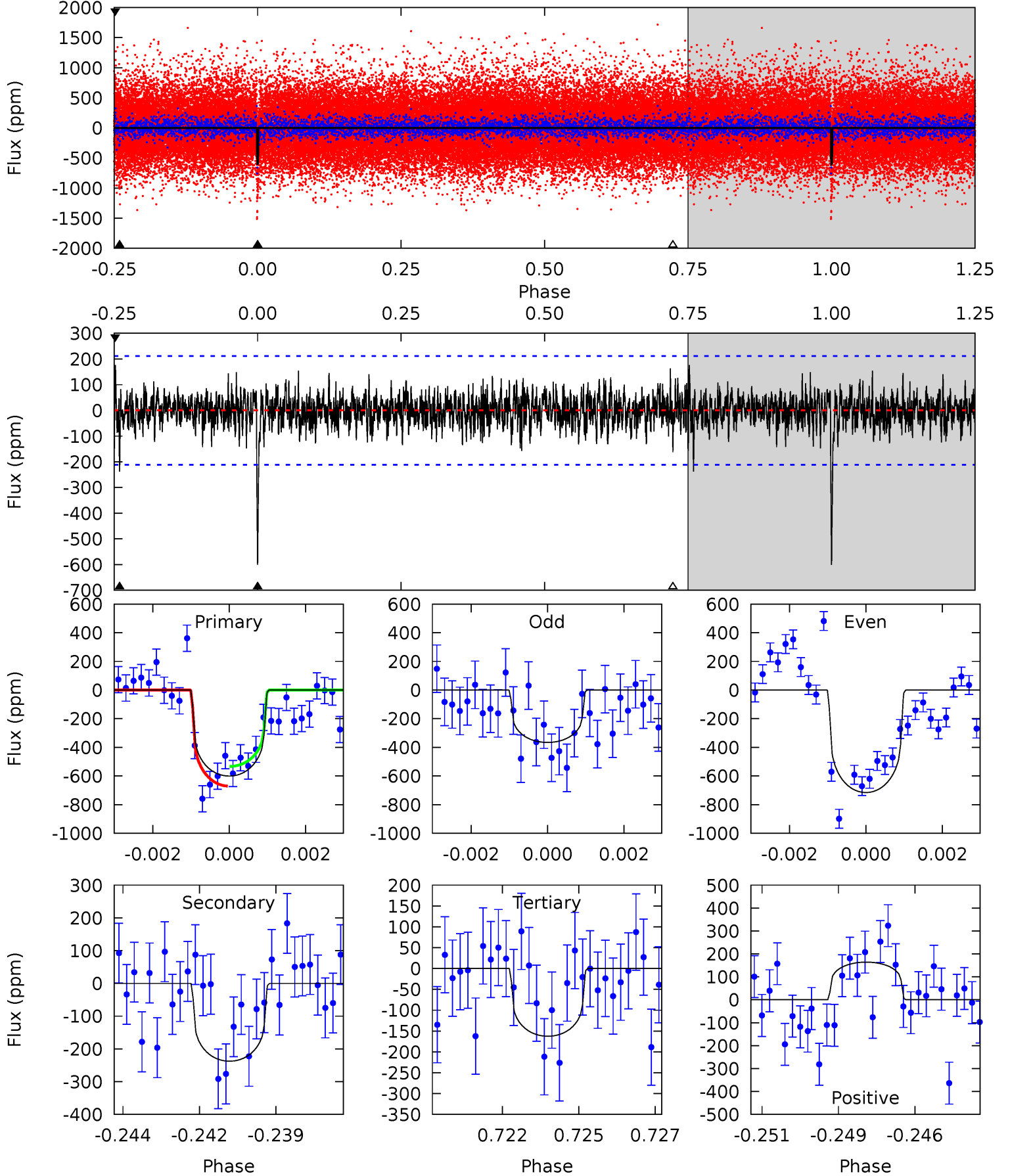
TCE 005534082-01 P=238.010107 Days $T_0=286.681457$ (BKJD)



DV Model-Shift Uniqueness Test

005534082-01, $P = 237.996173$ Days, $E = 48.722055$ Days

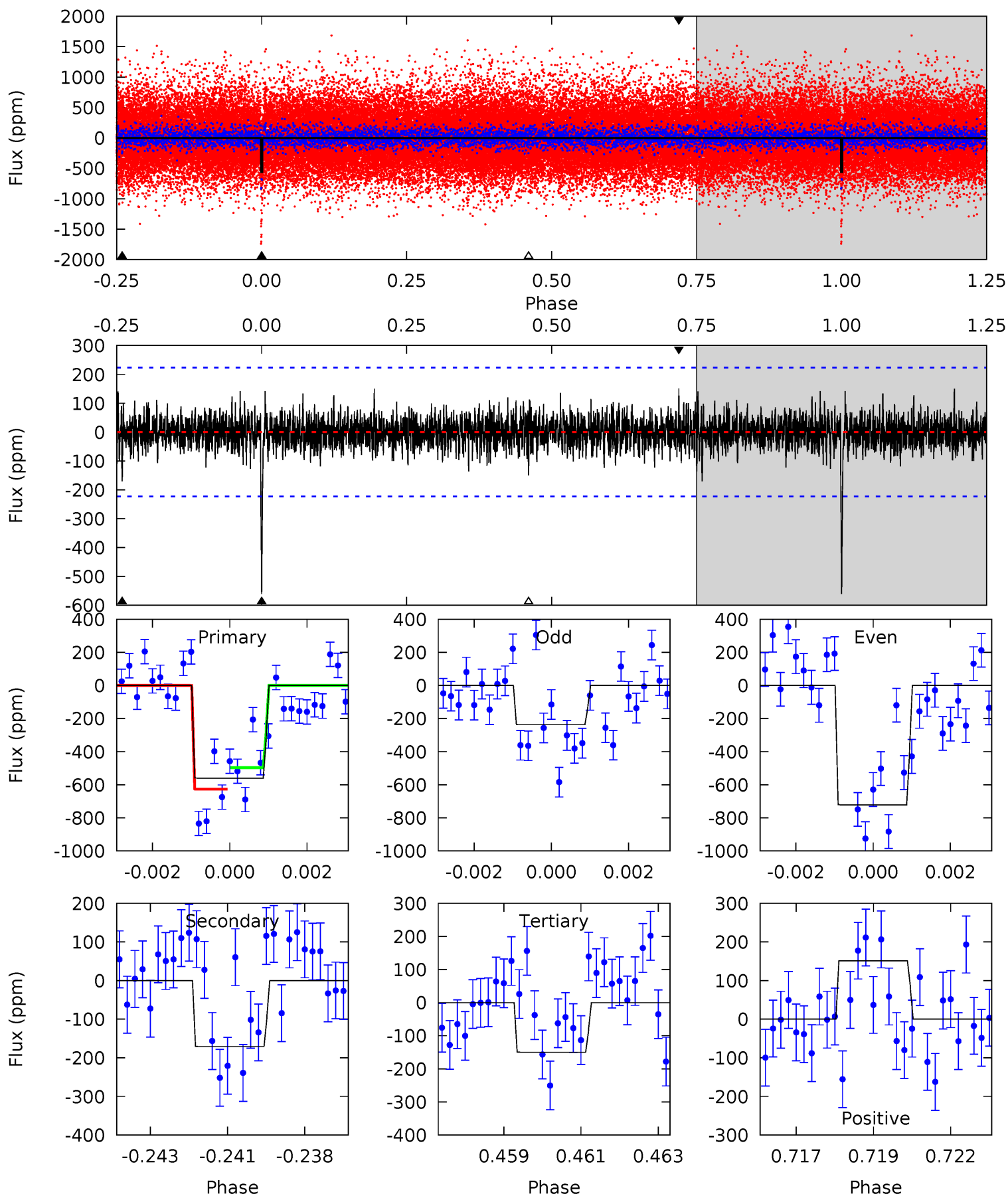
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
15.0	5.94	4.06	4.10	5.29	3.02	1.19	10.9	10.9	1.87	1.83	4.15	1.10	0.23	1.72



Alt Model-Shift Uniqueness Test

005534082-01, P = 238.010107 Days, E = 48.671350 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.3	4.07	3.56	3.60	5.31	3.06	0.93	9.78	9.74	0.50	0.46	5.43	1.39	0.21	1.55



Stellar Parameters For KIC 005534082

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5615^{+84}_{-76}	$4.212^{+0.168}_{-0.112}$	$0.260^{+0.150}_{-0.150}$	$1.305^{+0.207}_{-0.231}$	$1.012^{+0.069}_{-0.062}$	$0.642^{+0.529}_{-0.213}$
	+1%/-1%	+4%/-3%	+58%/-58%	+16%/-18%	+7%/-6%	+83%/-33%
Source	SPE68	SPE68	SPE68	DSEP		

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

Secondary Eclipse Parameters for KIC 005534082-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-238 ± 40	$3.56^{+1.29}_{-1.38}$	453^{+22}_{-25}	4547^{+1029}_{-525}	5925^{+10307}_{-2844}
Alt.	-171 ± 42	$3.38^{+1.31}_{-1.29}$	453^{+23}_{-24}	4362^{+916}_{-532}	4849^{+8111}_{-2620}

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

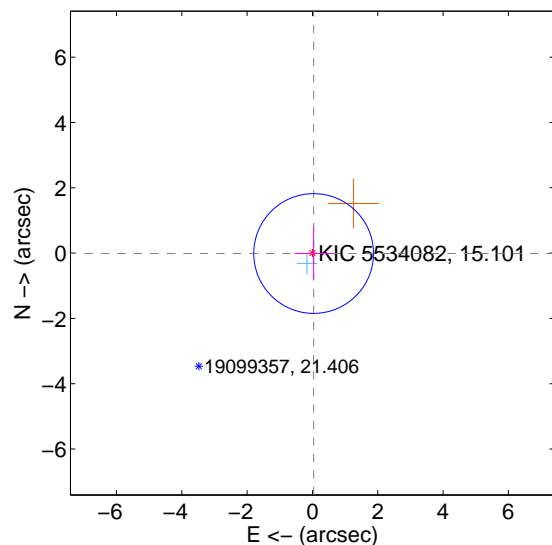
Supplemental centroid analysis for 005534082-01. Kepler magnitude: 15.10. Transit SNR 10.04

There are 1 quarters with good PRF difference image offsets

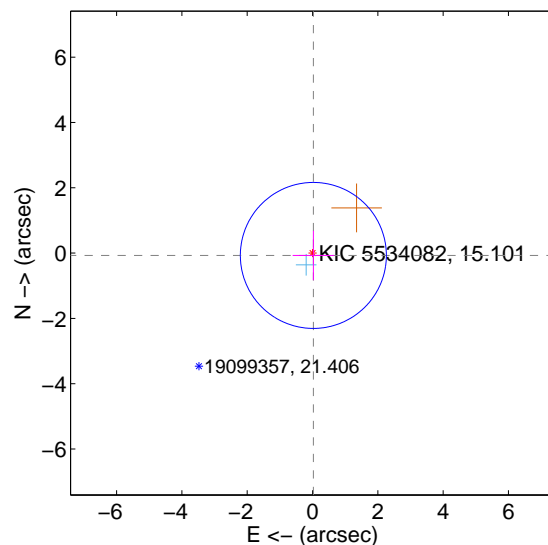
The direct PRF centroid is offset from the target star catalog position by about 0.17 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.039 ± 0.611	0.06	-0.037 ± 0.584	-0.013 ± 0.799
PRF-fit source offset from KIC position	0.076 ± 0.745	0.10	-0.025 ± 0.634	-0.071 ± 0.758
photometric centroid source offset	1.78 ± 1.47	1.21	-0.07 ± 1.48	-1.77 ± 1.47

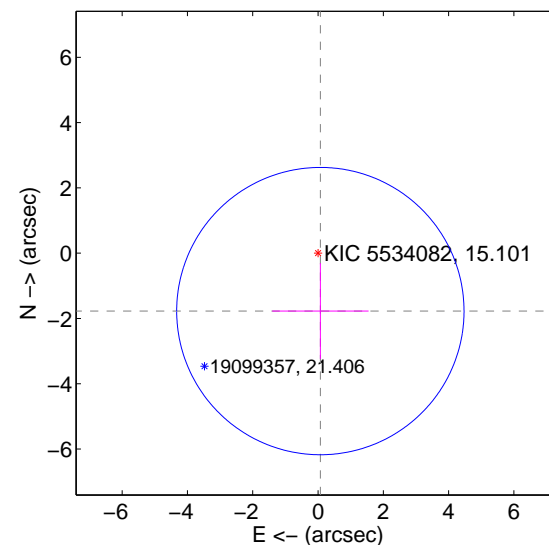
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

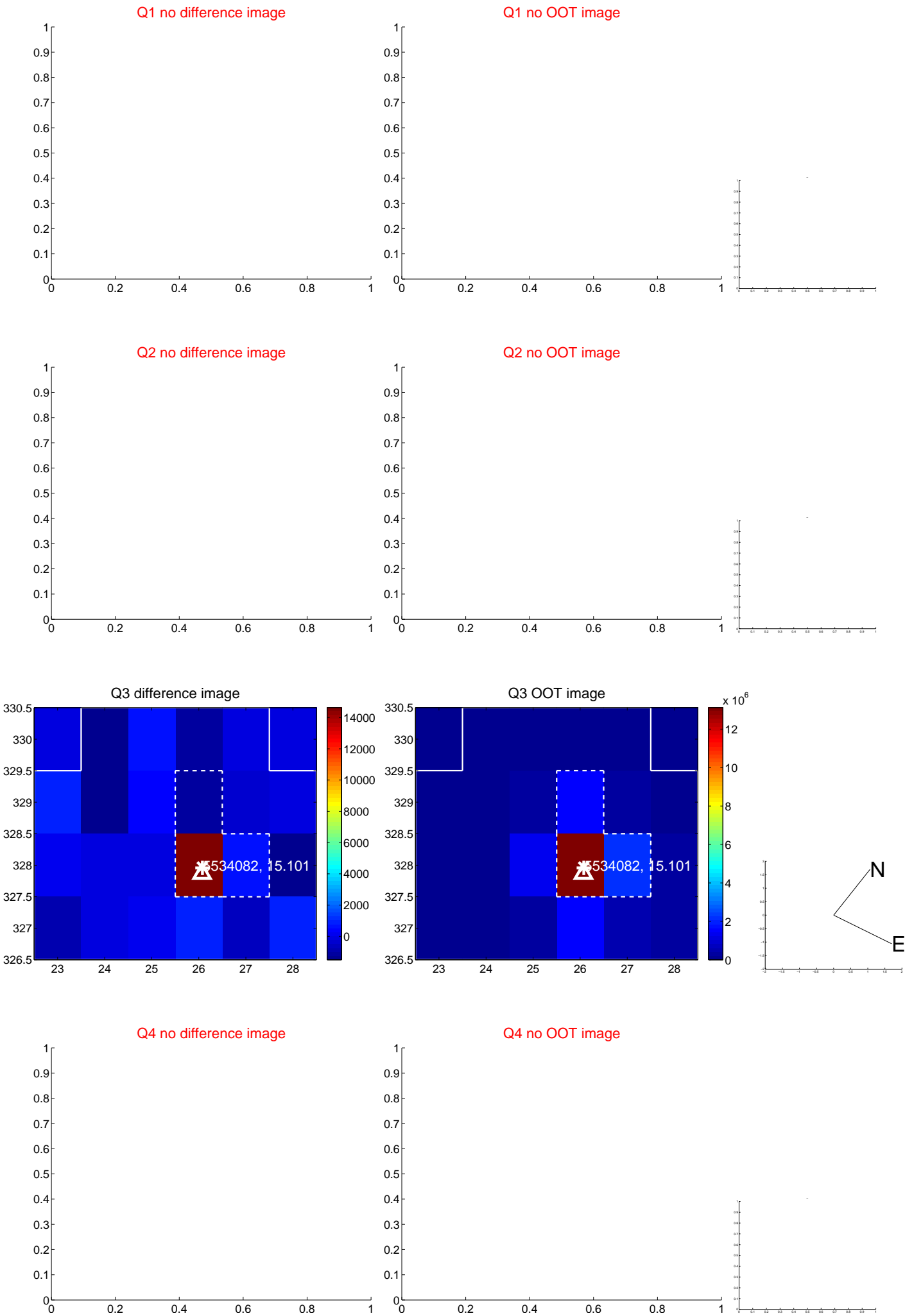


offset from photometric centroids

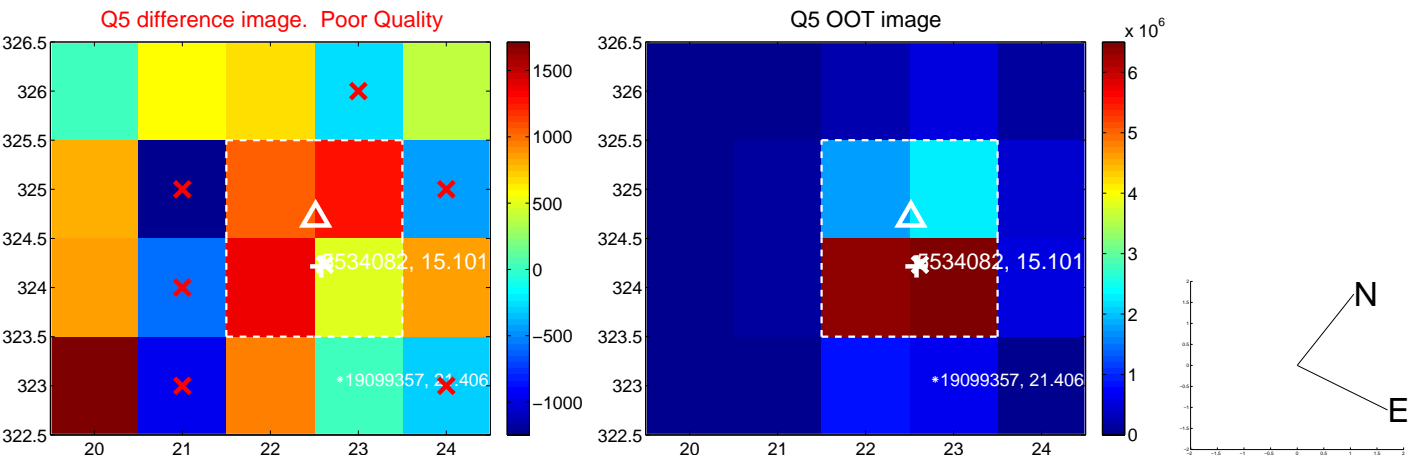


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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



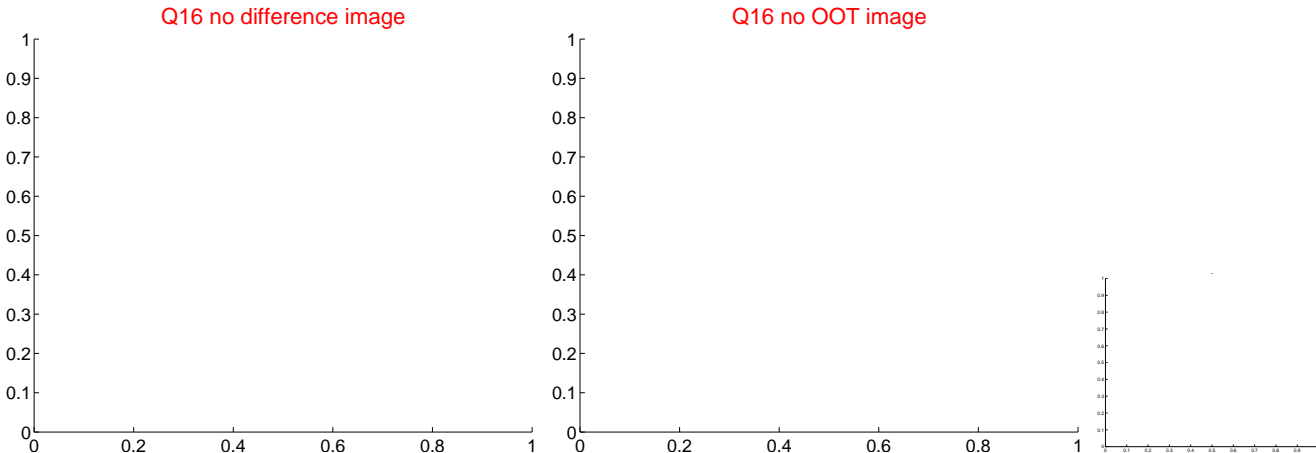
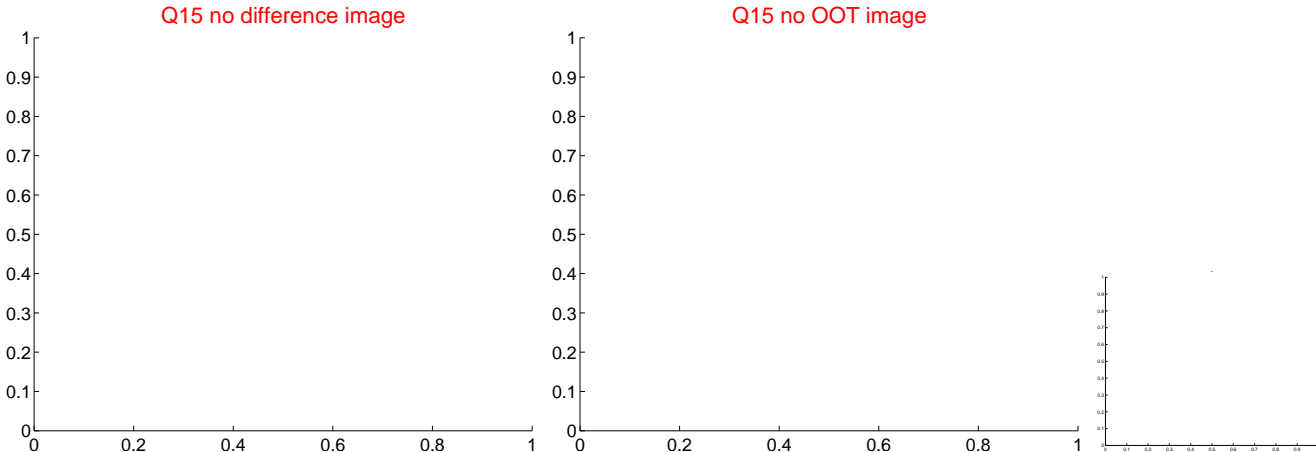
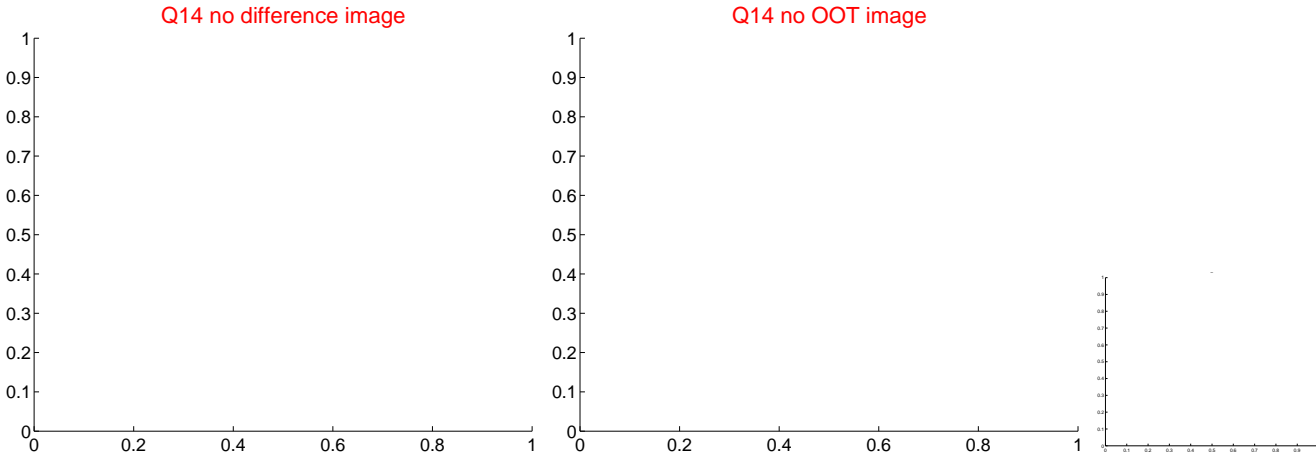
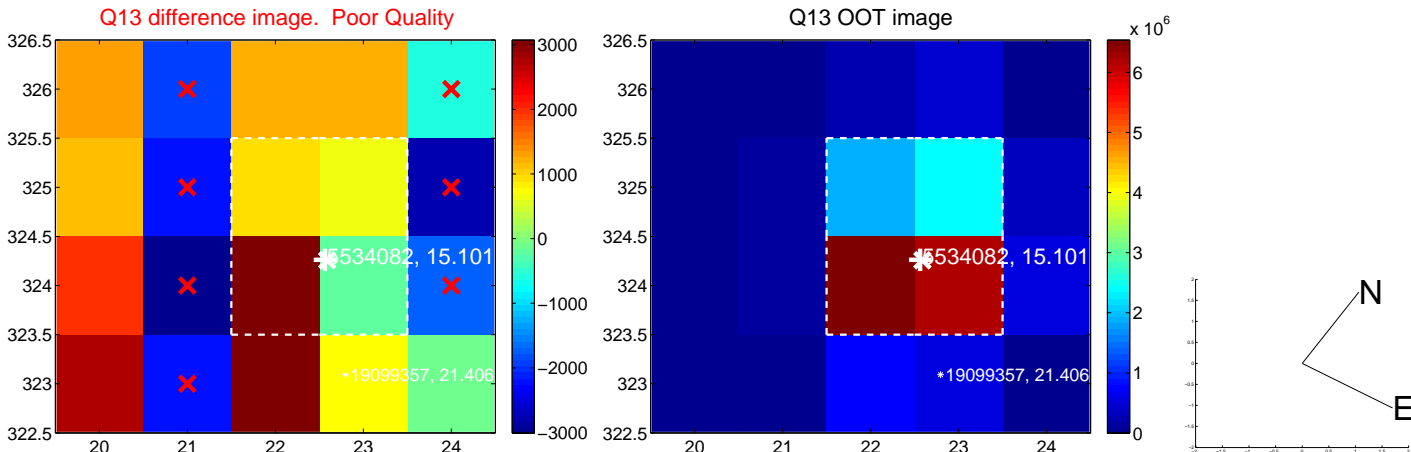
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



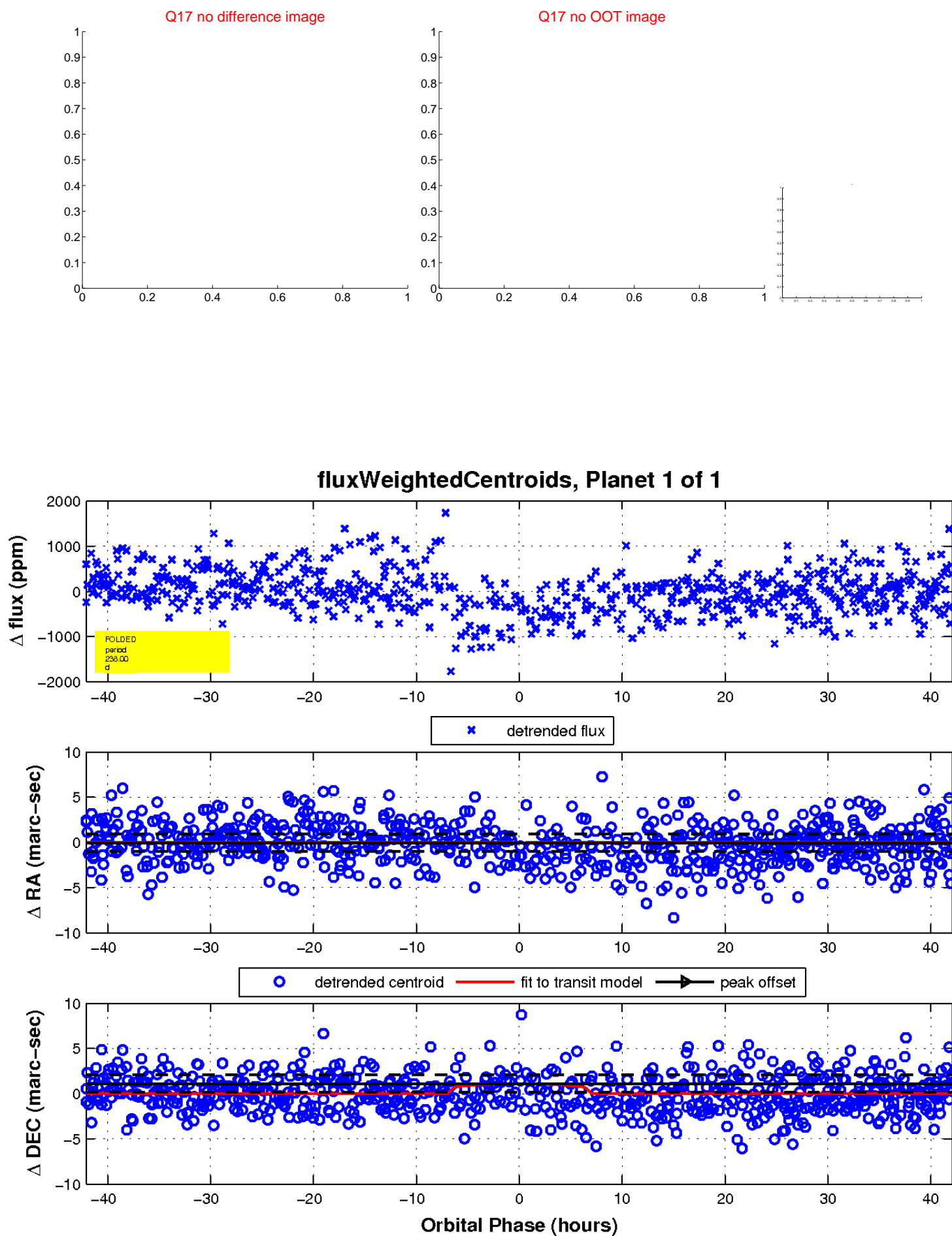
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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UKIRT Image

Declination

