

KIC 006519869

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})
006519869-01	OBS	No	452.658158	293.466347	458.2	5.206	15.7	3.0	2.58	7360	6.01	10.12

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006519869-01	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—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—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.

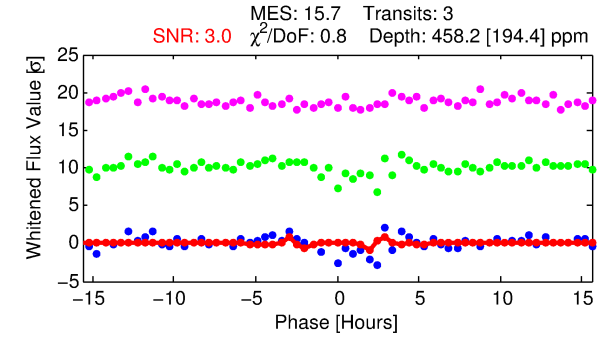
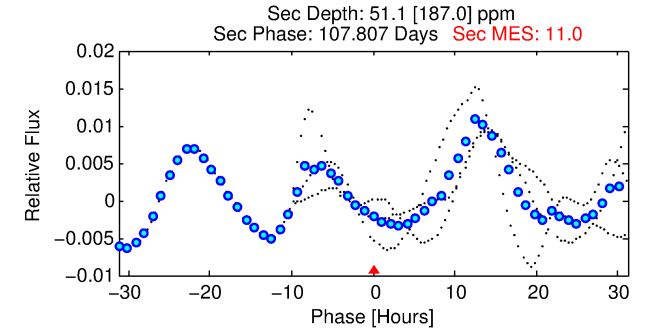
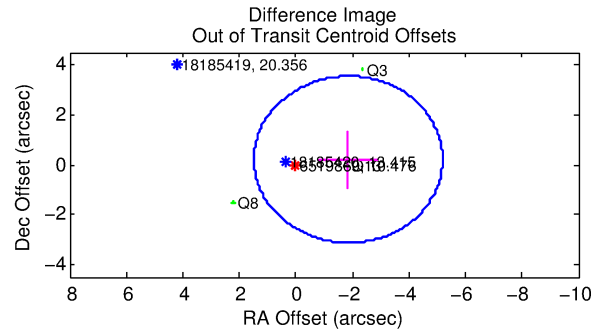
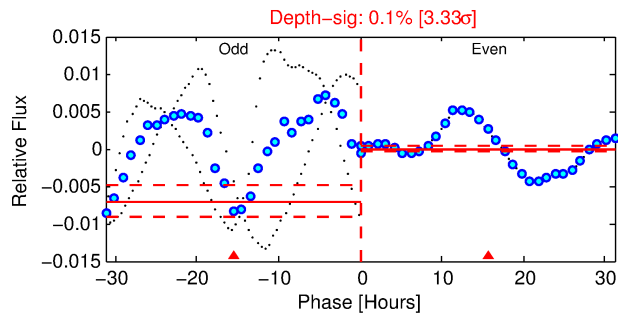
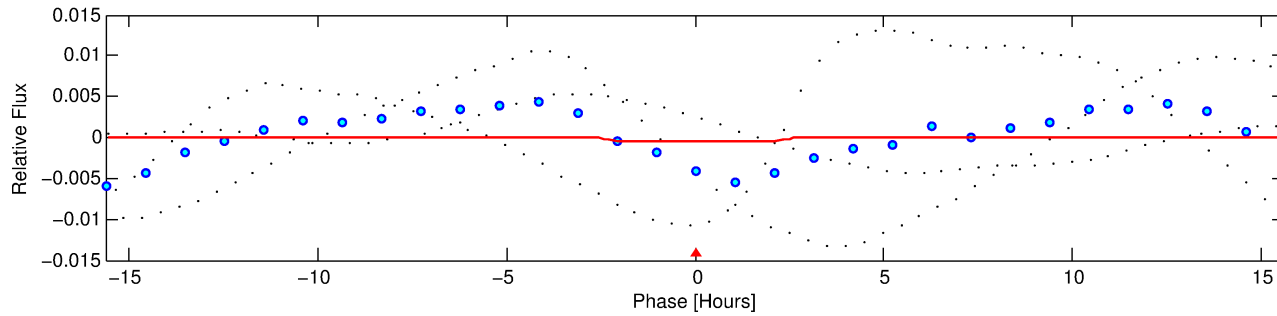
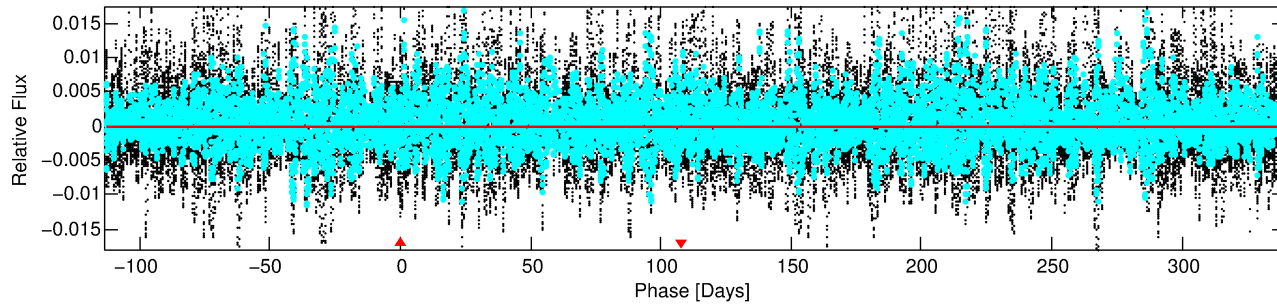
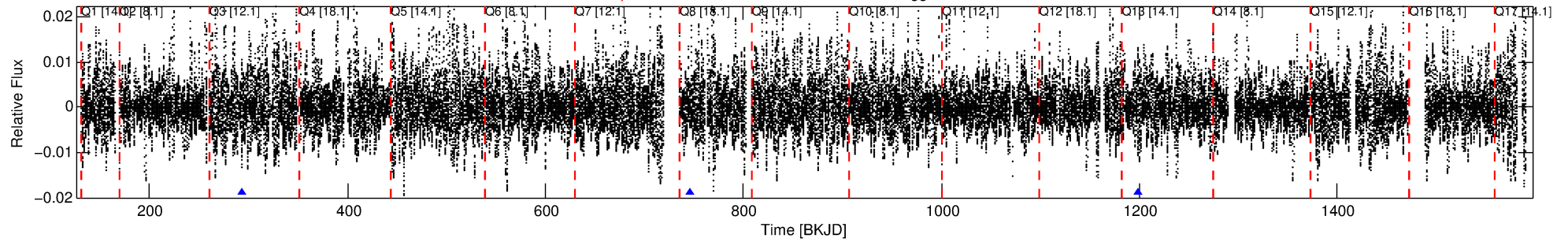
Ephemeris Match Information For 006519869-01

No Significant Match Found

DV One-Page Summary

KIC: 6519869 Candidate: 1 of 1 Period: 452.658 d

Kp: 10.48 R*: 2.58 Rs Teff: 7360.0 K Logg: 3.79 Fe/H: -0.540



DV Fit Results:

Period = 452.65816 [0.00372] d
Epoch = 293.4663 [0.0045] BKJD
Rp/R* = 0.0213 [0.0104]
a/R* = 452.70 [964.01]
b = 0.76 [1.18]
Seff = 10.12 [8.24]
Teq = 455 [93] K
Rp = 6.02 [4.12] Re
a = 1.3158 [0.6410] AU
Ag = 1345.62 [5204.75] [0.26σ]
Teff = 4259 [4033] K [0.94σ]

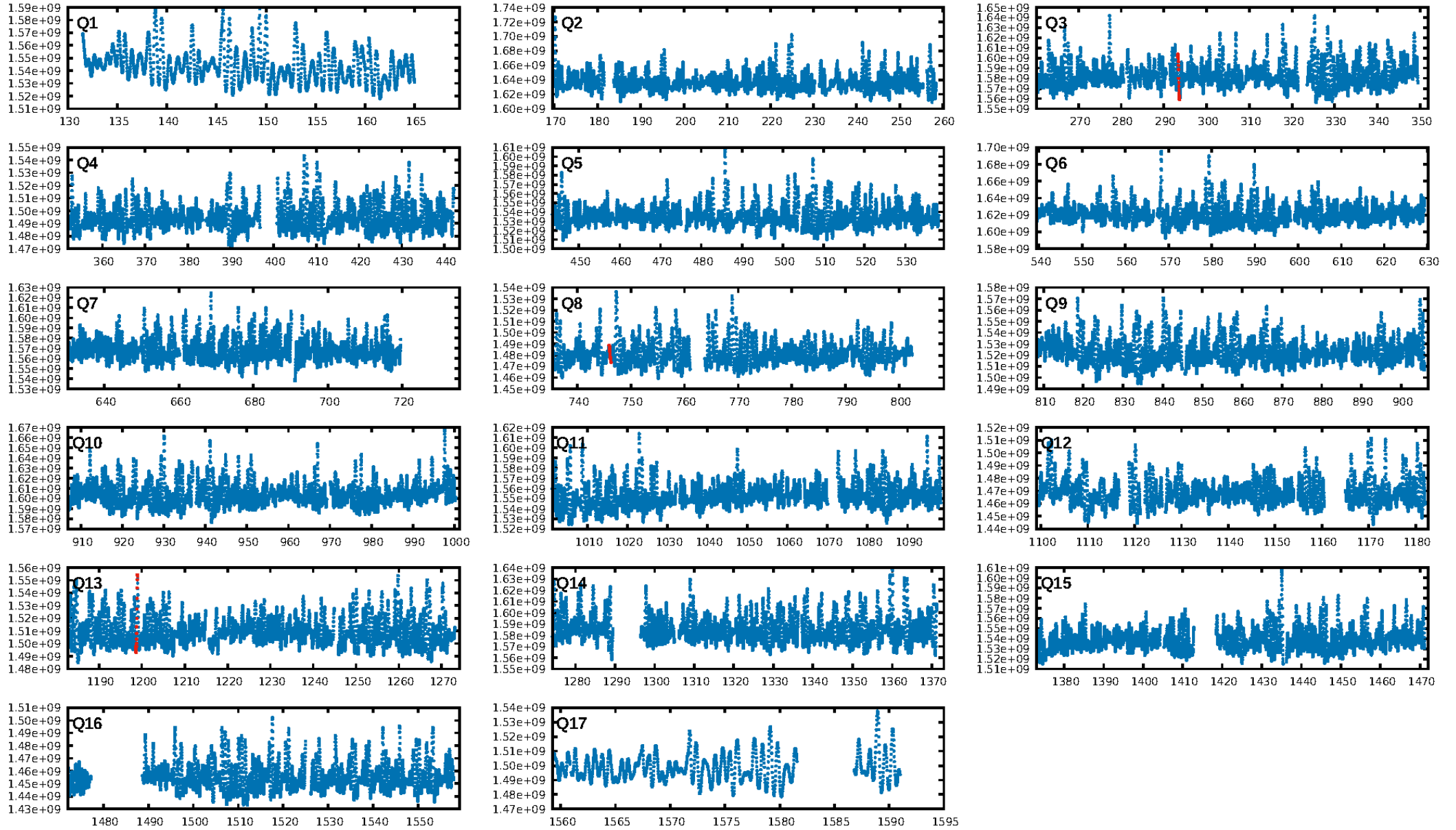
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 97.0%
ModelChiSquareGof-sig: 98.6%
Bootstrap-pfa: 5.52e-08
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: -2.244
Centroid-sig: 9.7%
Centroid-so: 1.020 arcsec [0.92σ]
OotOffset-rm: 1.864 arcsec [1.68σ]
KicOffset-rm: 1.937 arcsec [2.40σ]
OotOffset-st: 0/1/1/1 [3]
KicOffset-st: 0/1/1/1 [3]
DiffImageQuality-fgm: 0.00 [0/3]
DiffImageOverlap-fno: 1.00 [3/3]

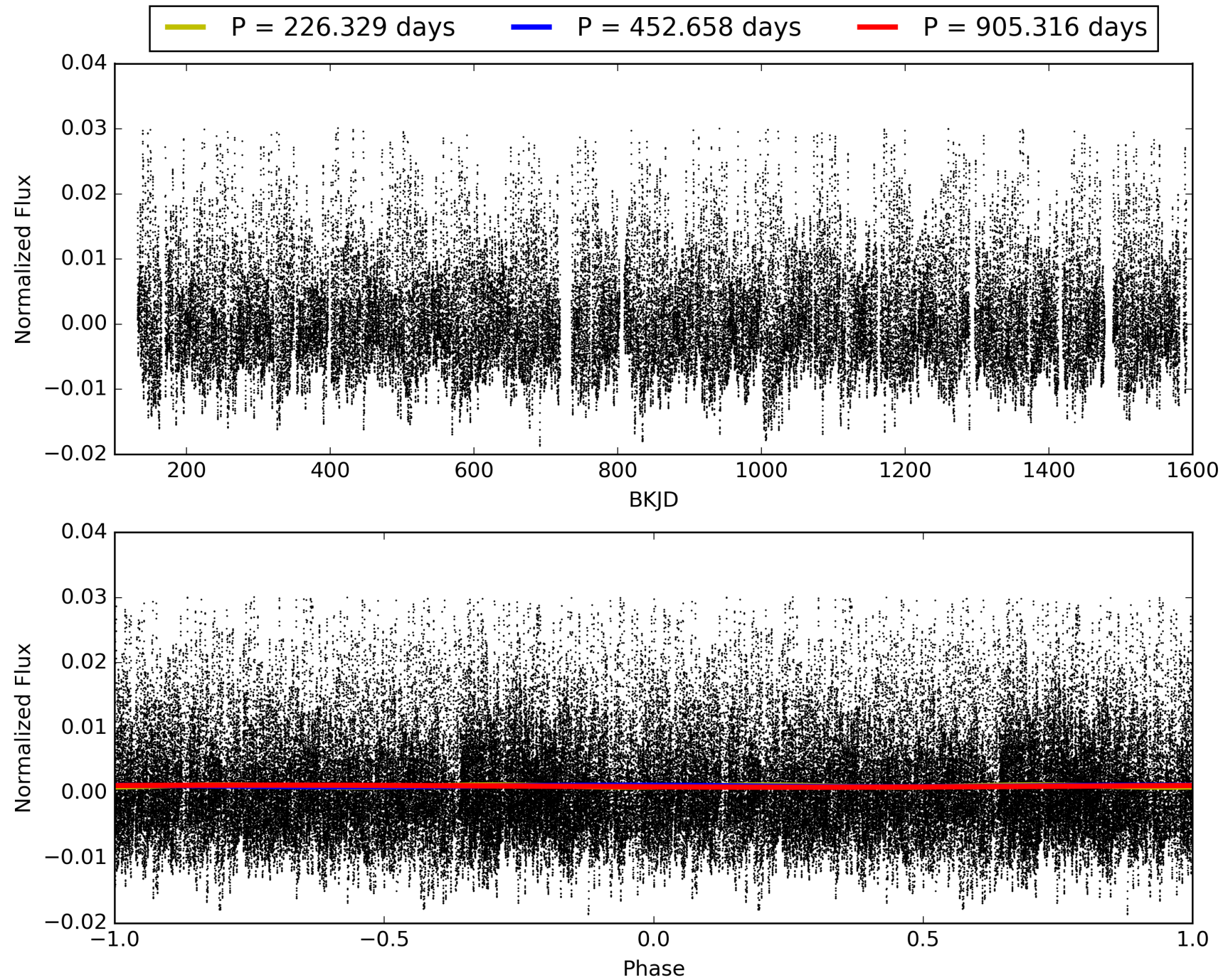
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 01:54:33 Z

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

TCE 006519869-01, PDC Light Curves

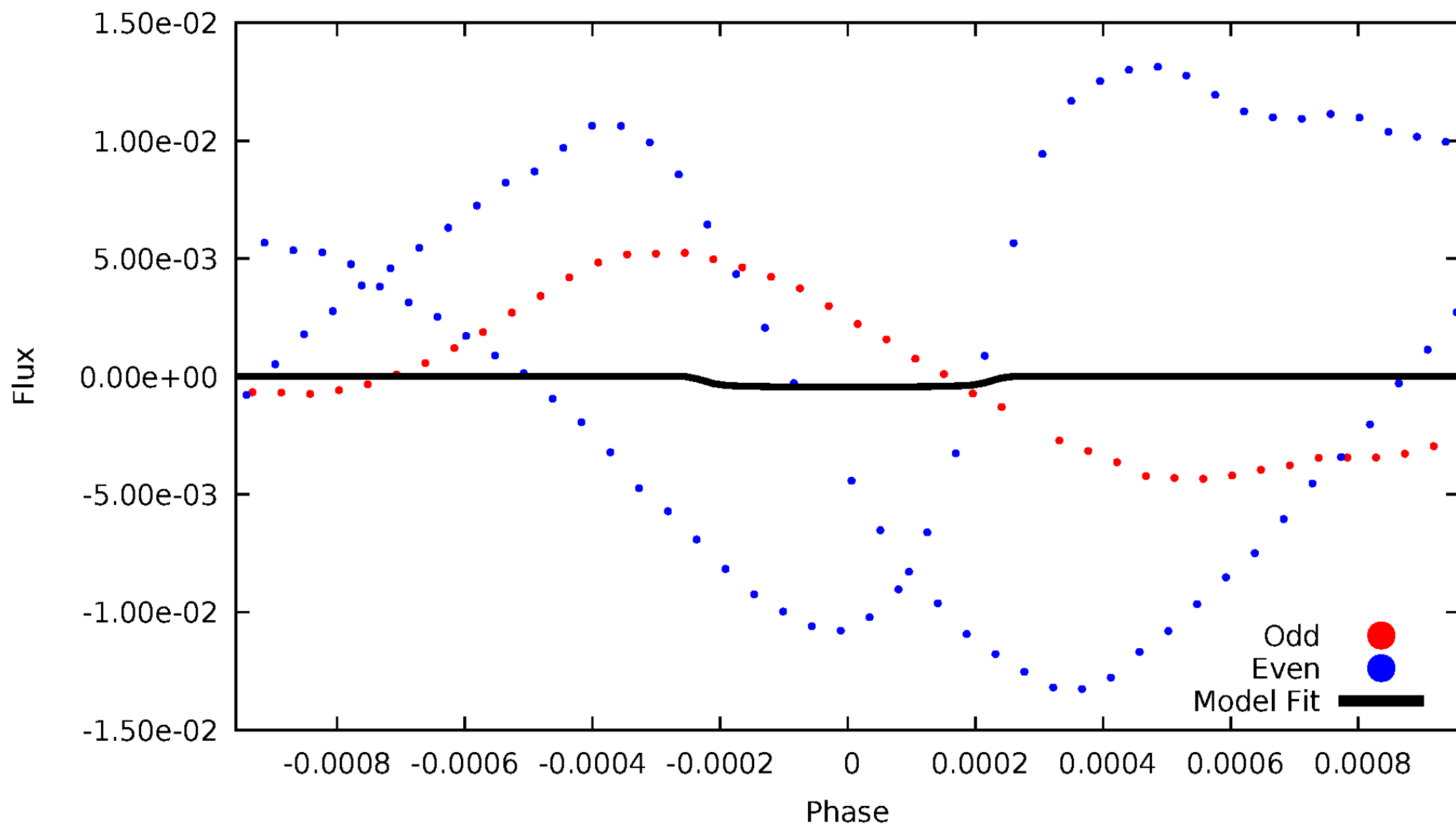


TCE 006519869-01



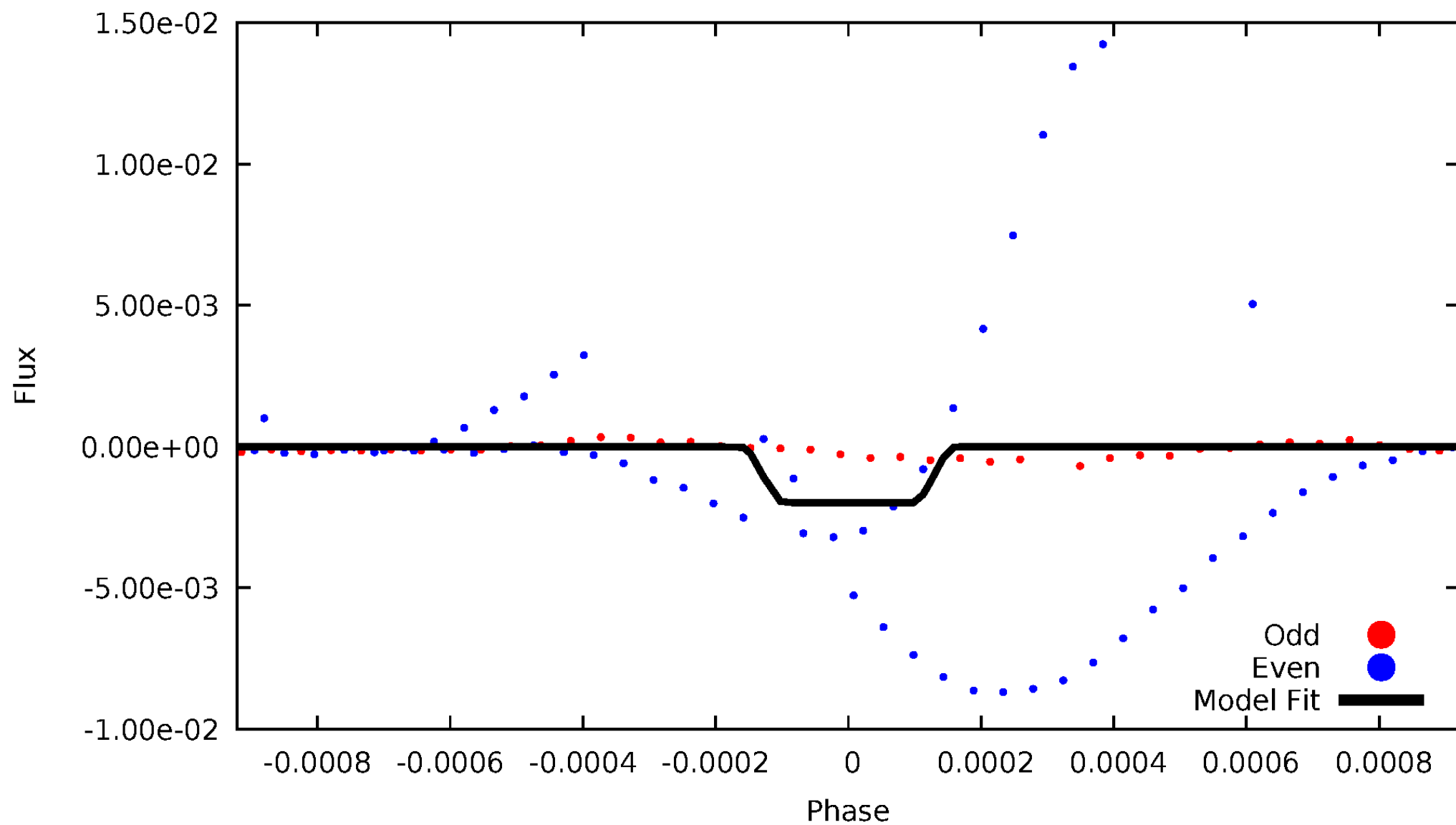
DV Odd/Even

TCE 006519869-01



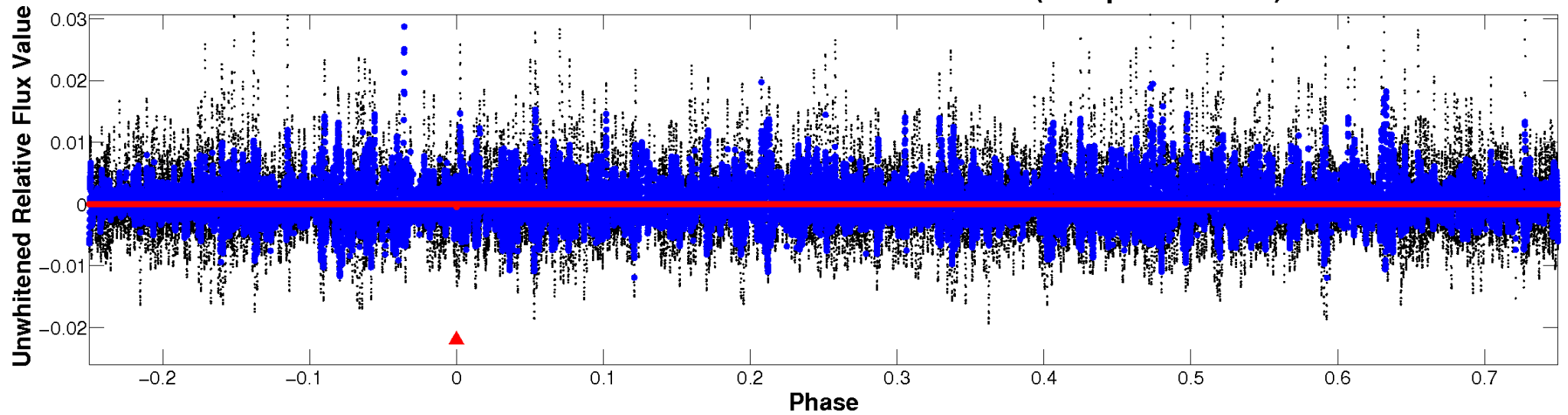
ALT Odd/Even

TCE 006519869-01

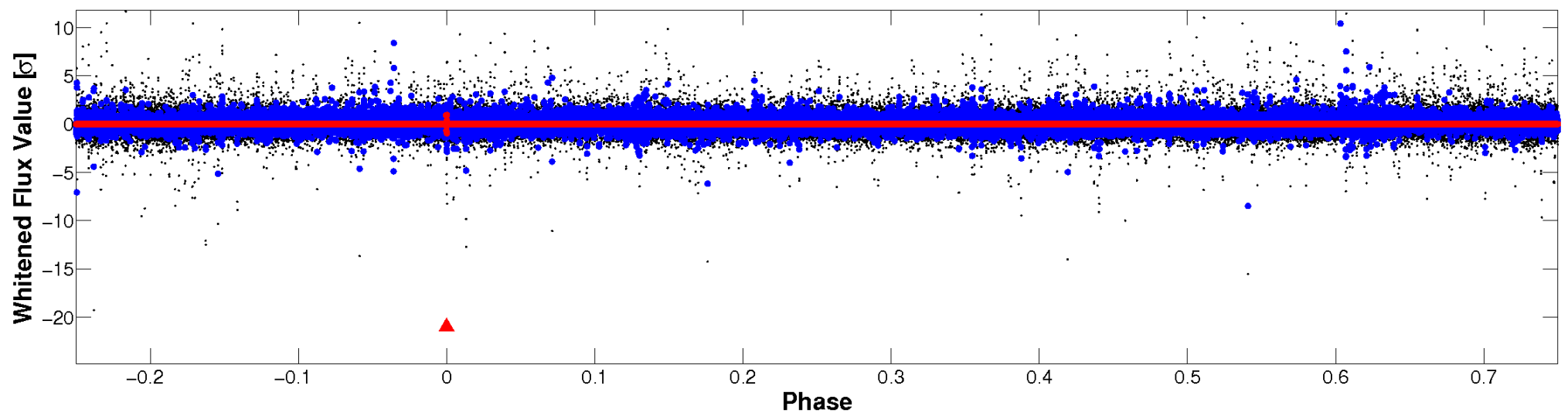


Non-Whitened Vs. Whitened Light Curve

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

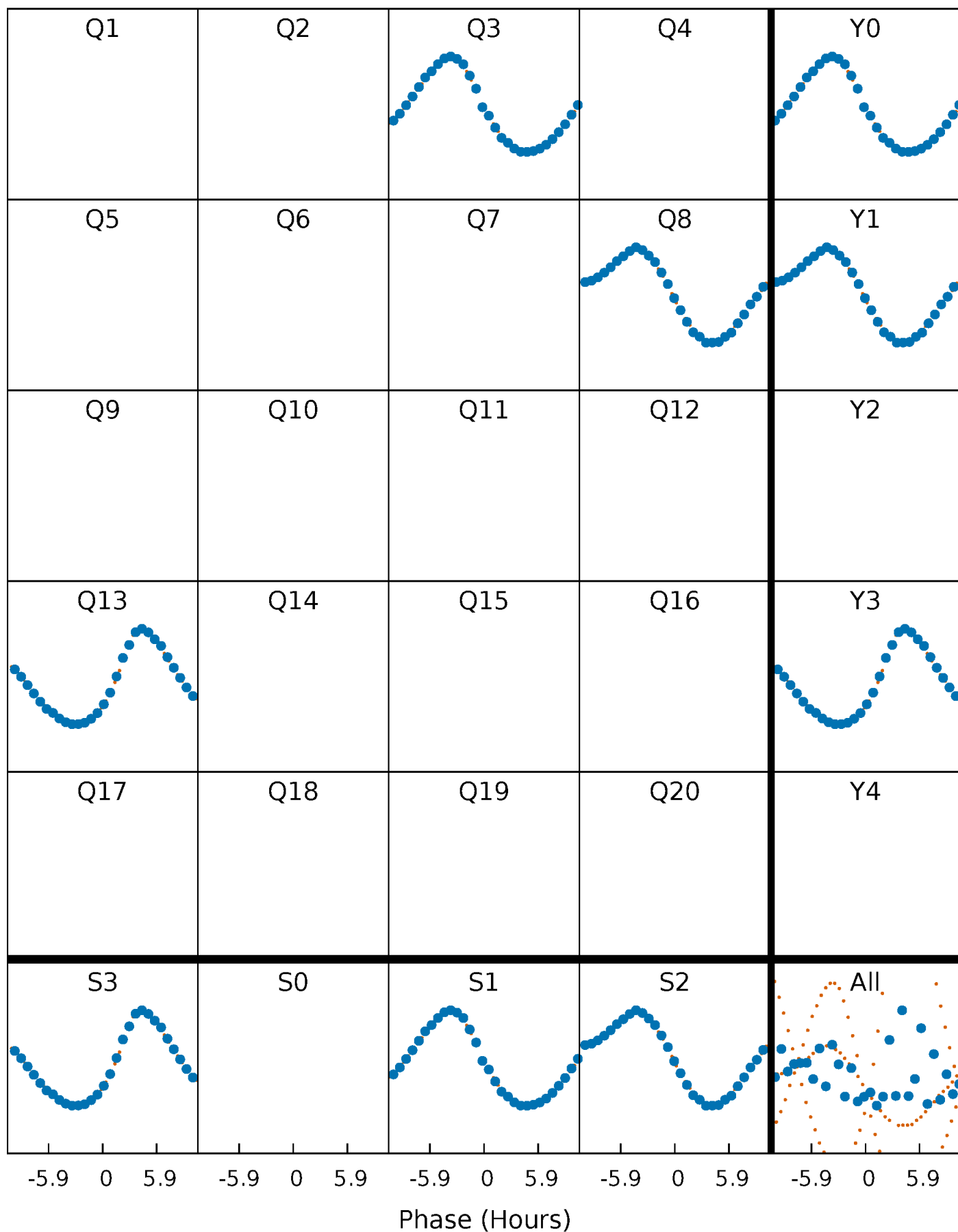


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



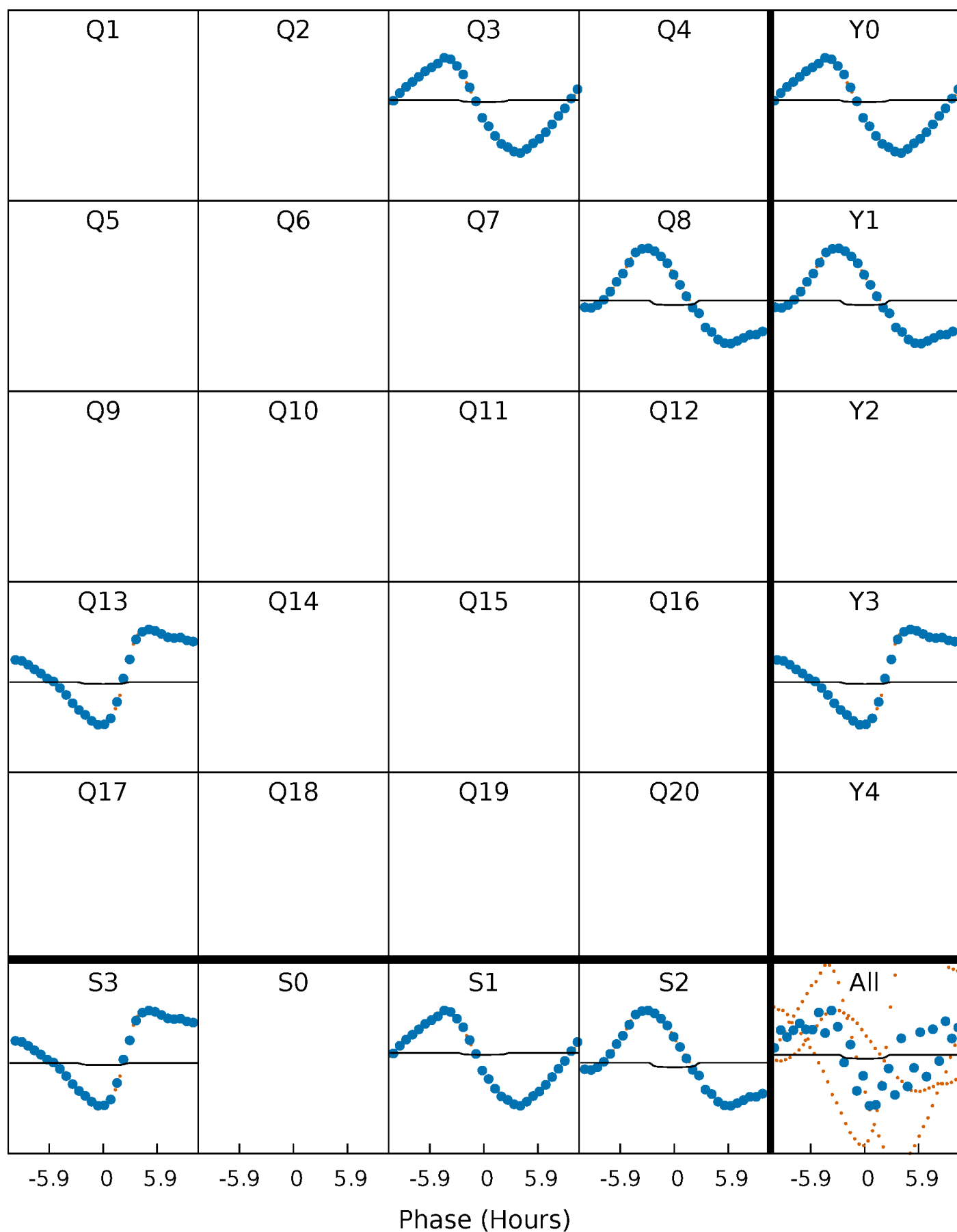
PDC Quarter-Phased Transit Curves

TCE 006519869-01 P=452.658158 Days $T_0=293.466347$ (BKJD)



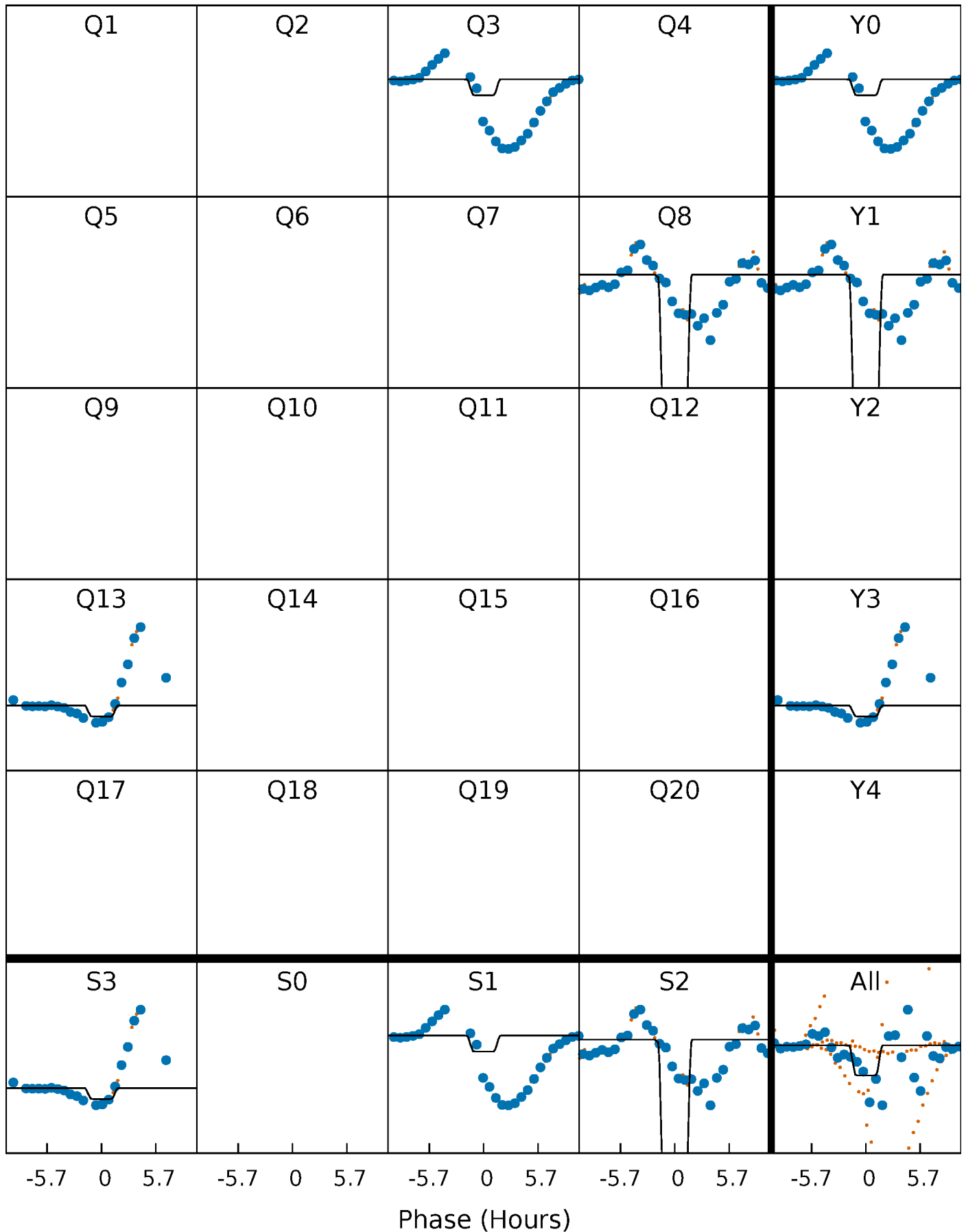
DV Quarter-Phased Transit Curves

TCE 006519869-01 P=452.658158 Days $T_0=293.466347$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

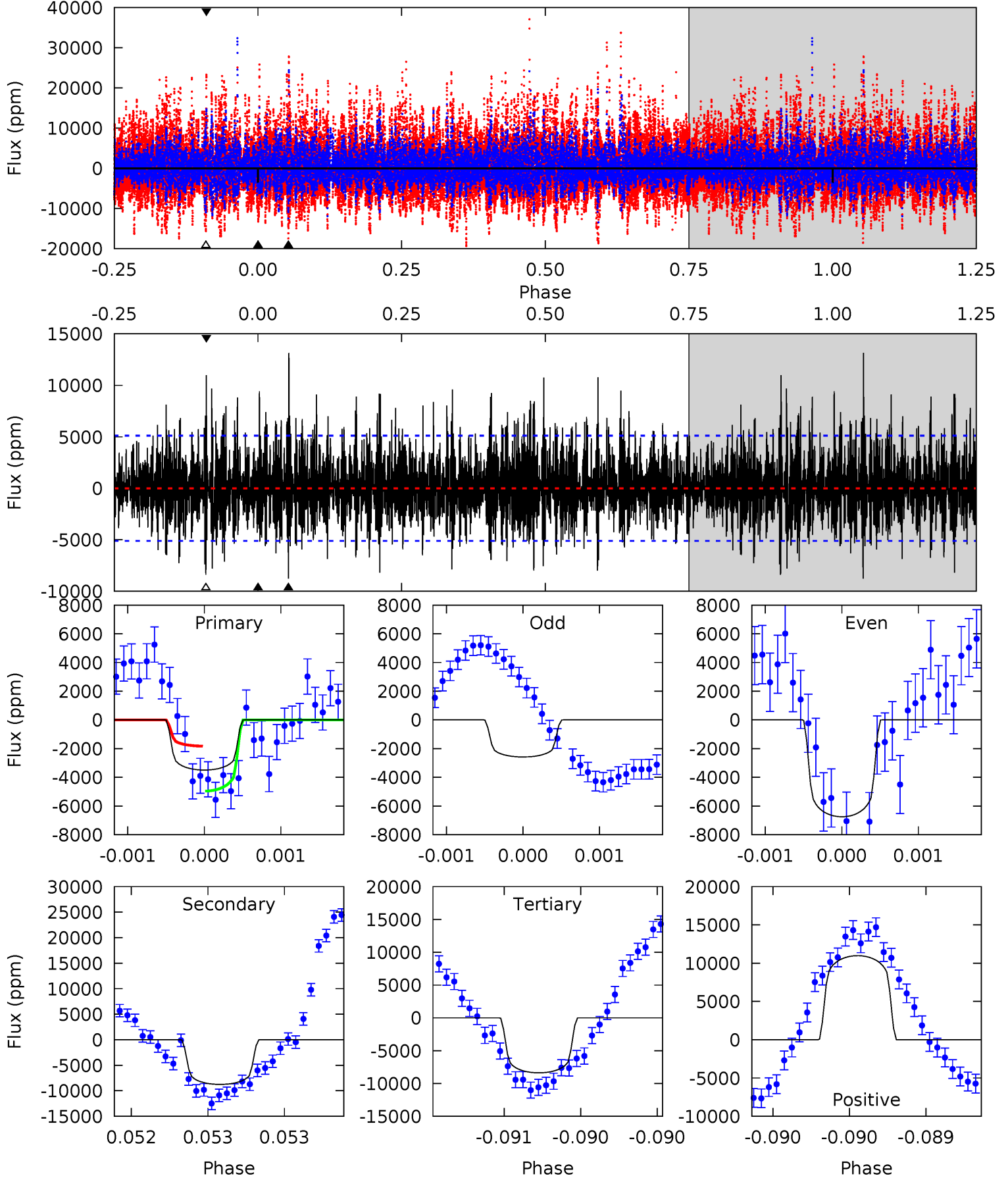
TCE 006519869-01 P=452.651032 Days $T_0=293.465443$ (BKJD)



DV Model-Shift Uniqueness Test

006519869-01, P = 452.658158 Days, E = 293.466347 Days

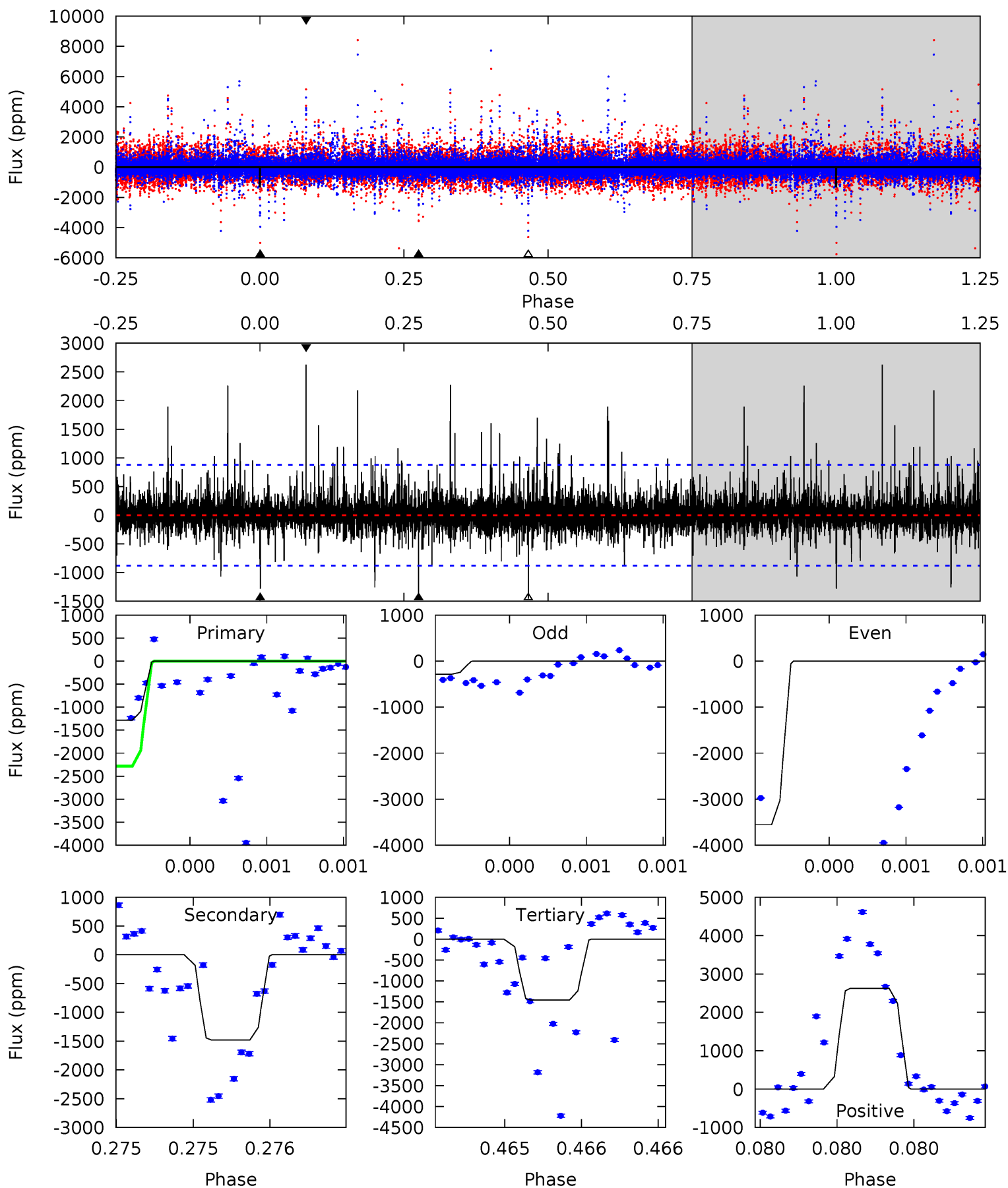
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.81	9.54	9.13	12.0	5.57	3.47	2.83	-5.32	-8.16	0.41	-2.43	2.06	0.82	0.60	1.70



Alt Model-Shift Uniqueness Test

006519869-01, P = 452.651032 Days, E = 293.465443 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.26	9.52	9.35	16.9	5.65	3.60	1.38	-1.09	-8.63	0.17	-7.38	8.48	1.02	0.64	6.66



Stellar Parameters For KIC 006519869

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	7360^{+233}_{-285}	$3.785^{+0.476}_{-0.084}$	$-0.540^{+0.300}_{-0.300}$	$2.582^{+0.416}_{-1.248}$	$1.482^{+0.209}_{-0.313}$	$0.121^{+0.561}_{-0.031}$
	+3%/-4%	+13%/-2%	+56%/-56%	+16%/-48%	+14%/-21%	+463%/-26%
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 006519869-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-8753 ± 917	$5.28^{+3.21}_{-2.57}$	614^{+45}_{-74}	25980^{+41129}_{-9476}	$291367^{+764583}_{-178494}$
Alt.	-1479 ± 155	$11.20^{+3.88}_{-3.19}$	613^{+43}_{-75}	6791^{+1109}_{-769}	11377^{+11246}_{-5046}

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

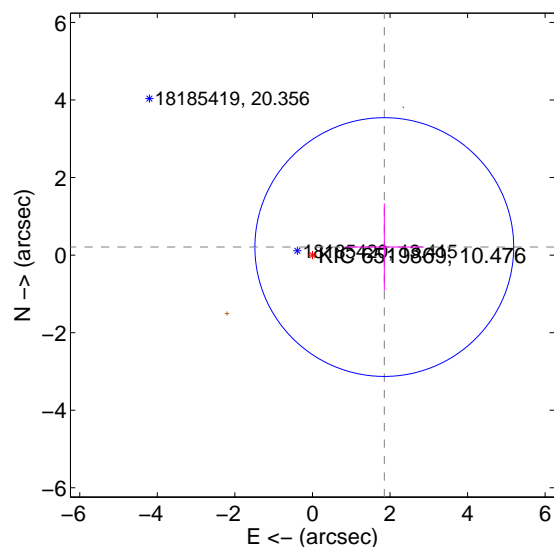
Supplemental centroid analysis for 006519869-01. **Kepler magnitude: 10.48.** Transit SNR 3.01

There are 0 quarters with good PRF difference image offsets

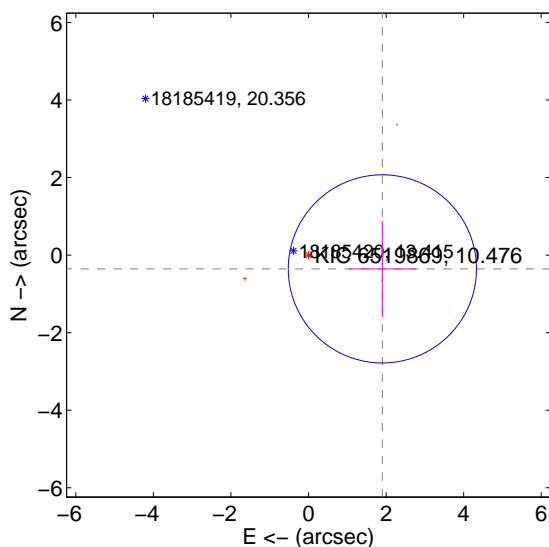
The direct PRF centroid is offset from the target star catalog position by about 0.60 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.864 ± 1.112	1.68	-1.853 ± 1.019	0.207 ± 1.124
PRF-fit source offset from KIC position	1.937 ± 0.809	2.40	-1.904 ± 0.866	-0.356 ± 1.242
photometric centroid source offset	1.02 ± 1.11	0.92	0.33 ± 0.85	-0.97 ± 1.14

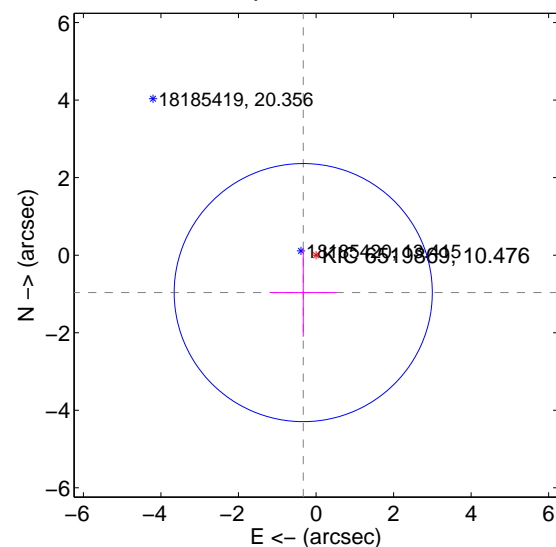
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

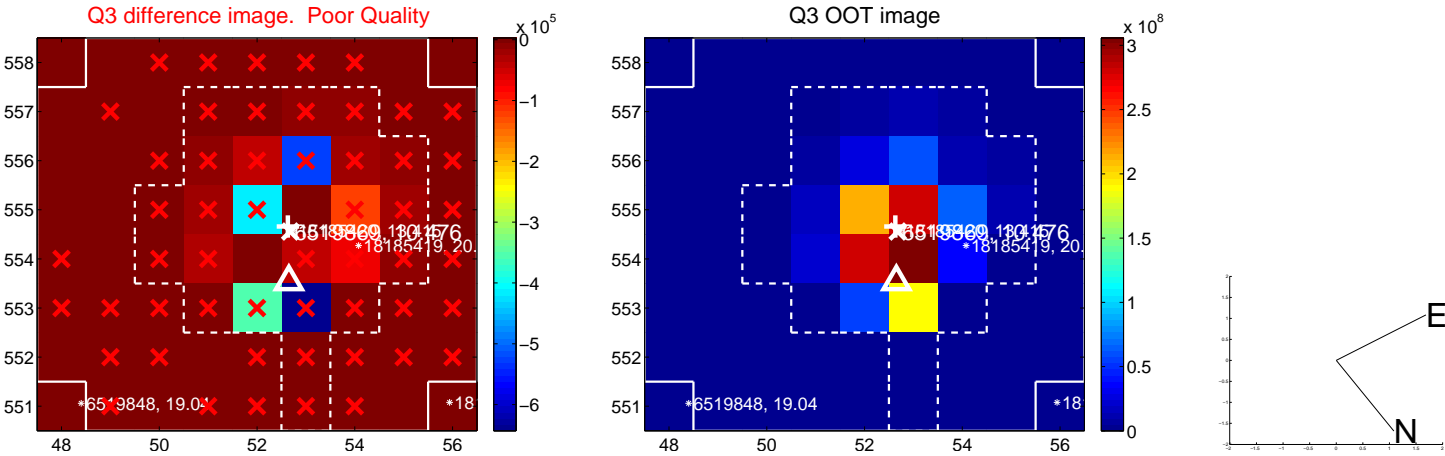


offset from photometric centroids

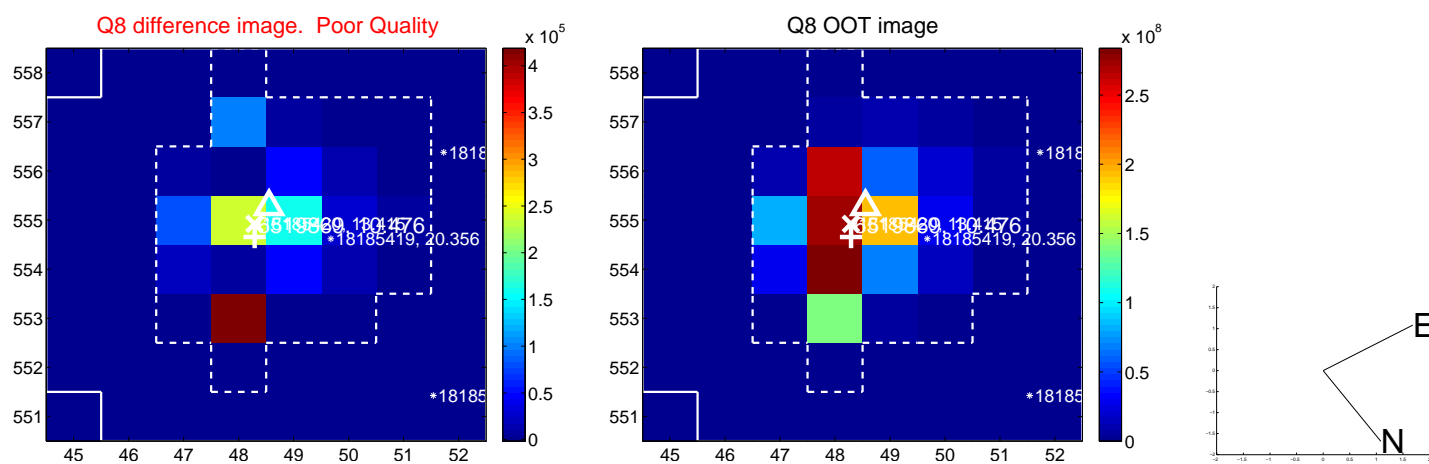
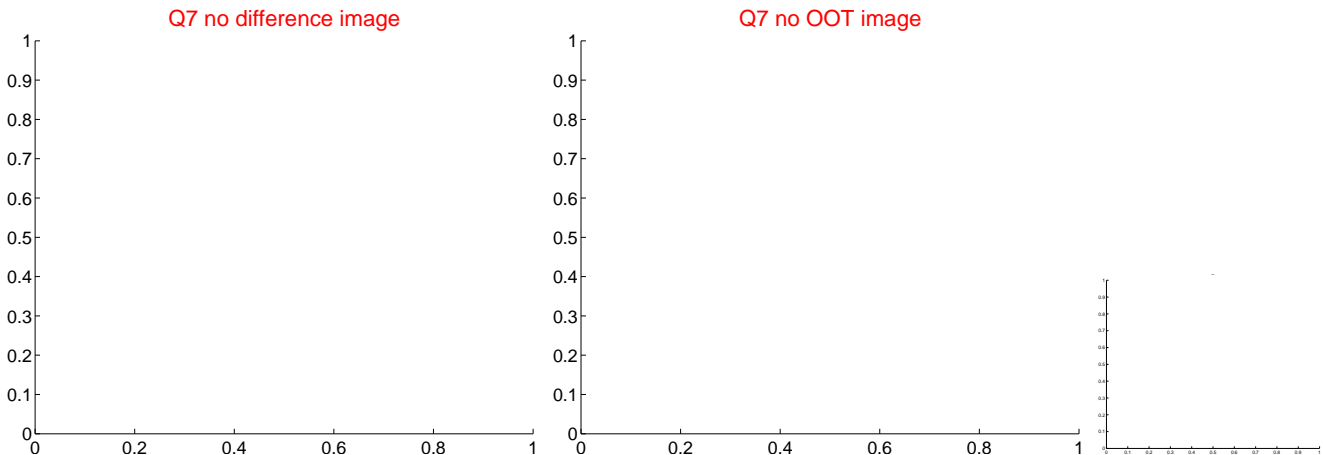
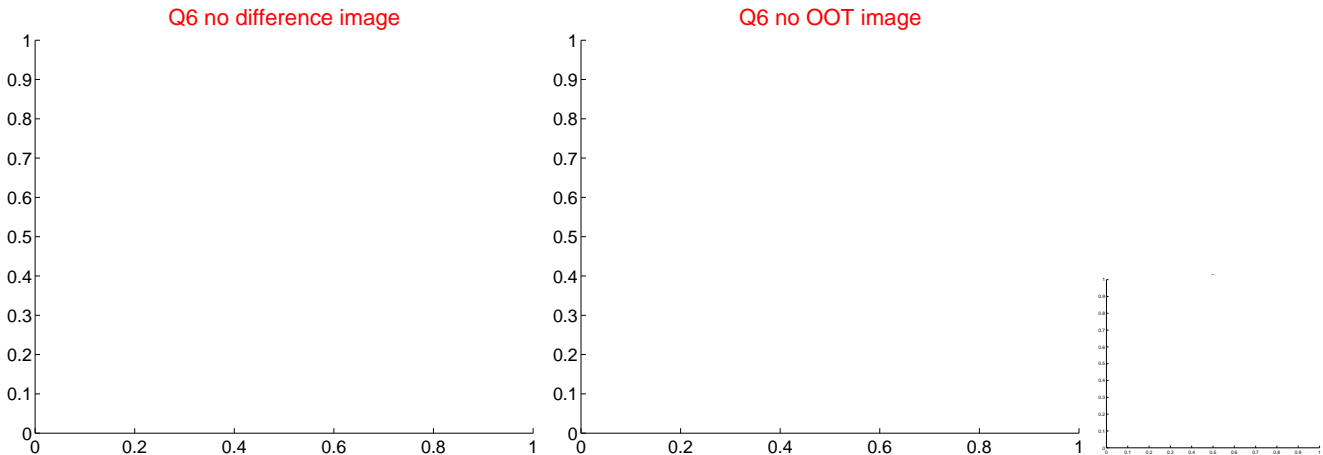
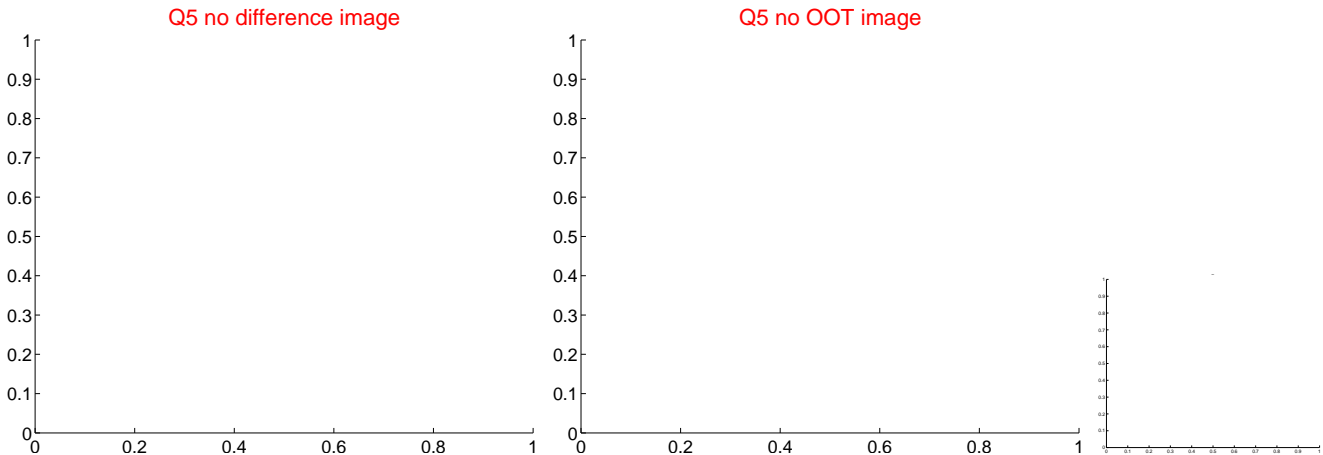


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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



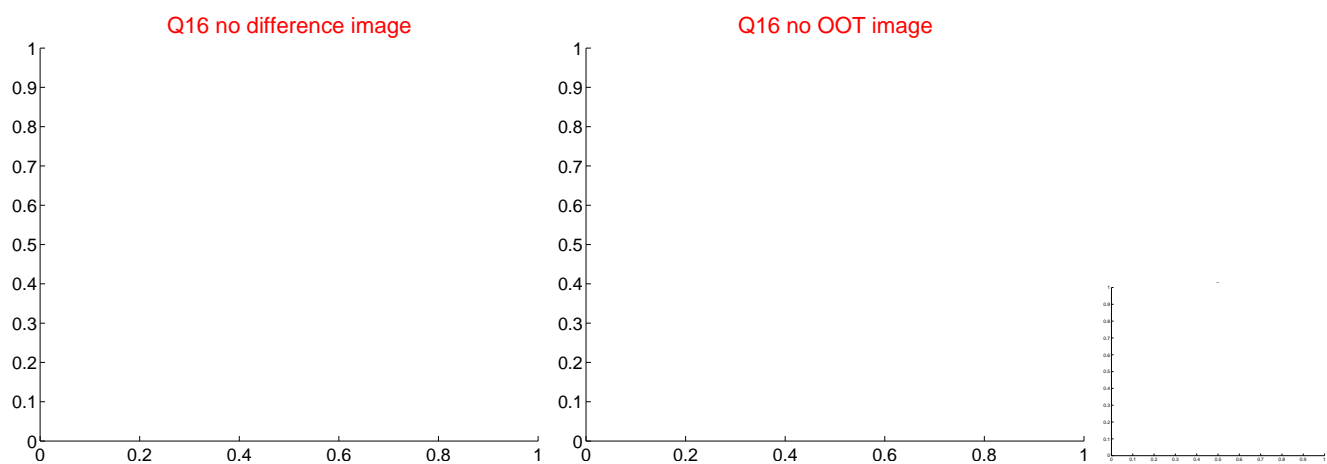
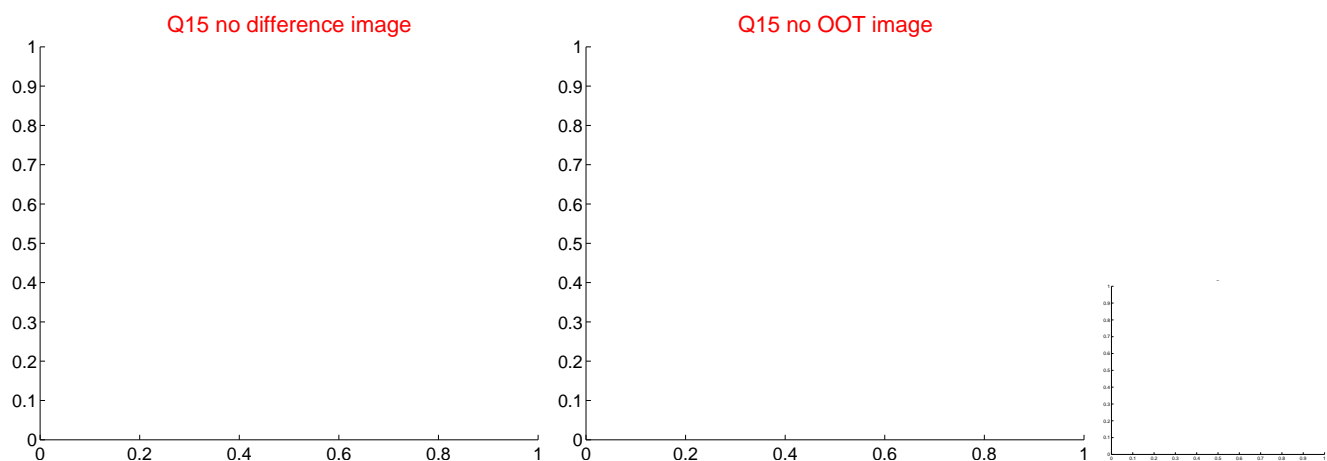
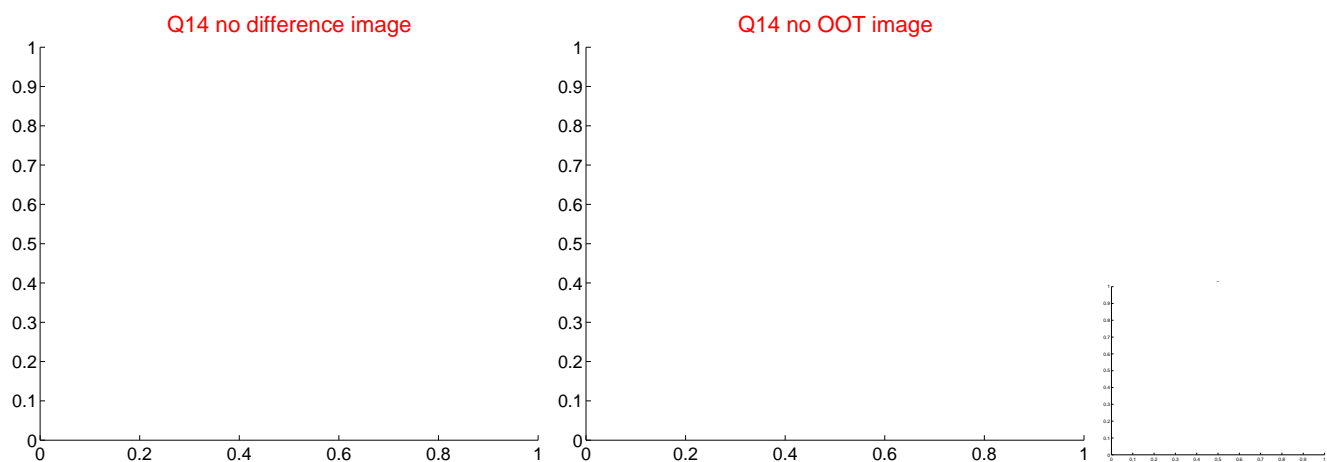
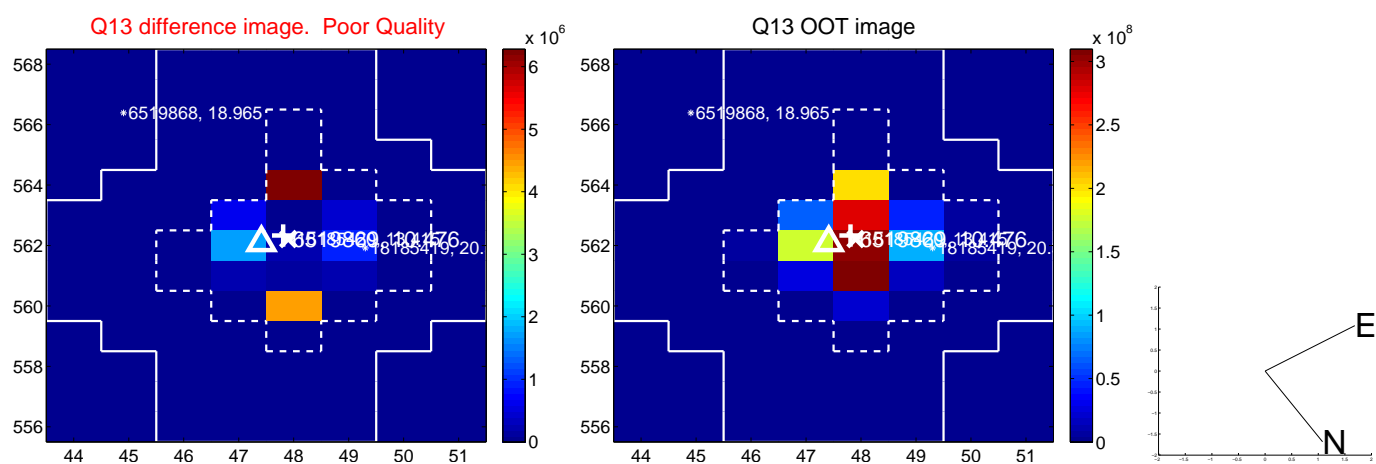
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



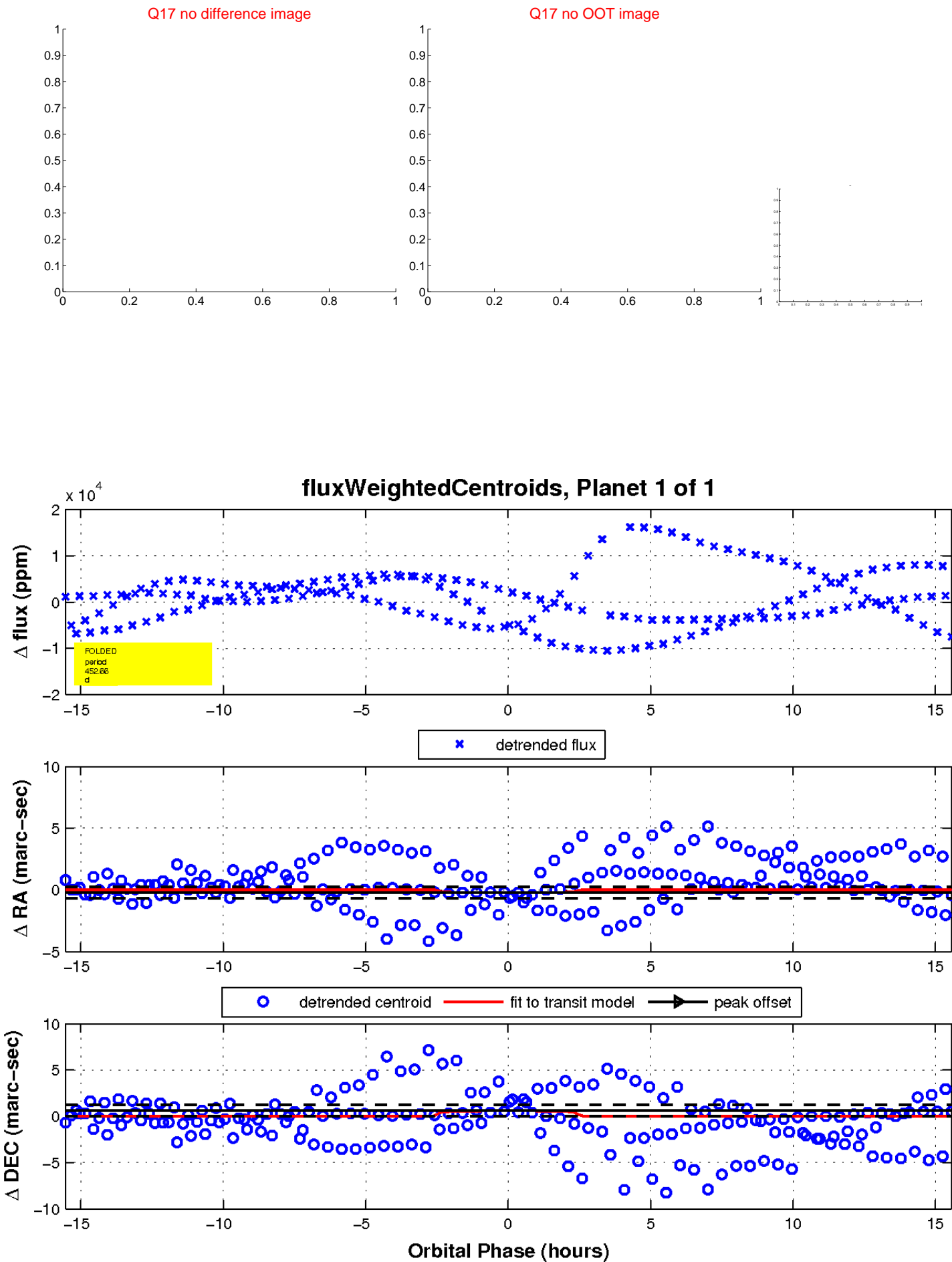
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



This figure shows a deep-field astronomical image of a star field. A prominent star is located near the center, exhibiting a bright, saturated core and a characteristic cross-shaped diffraction pattern. The image is overlaid with a blue grid. The horizontal axis is labeled with green text: '05.0', '04.0', '19:24:03.0', '02.0', and '01.0'. The vertical axis is labeled with green text: '56:30.0', '40.0', '50.041:57:00.0', and '20.0'. The background is dark, with several other stars visible as smaller, fainter sources.

Declination