

KIC 005638699

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})
005638699-01	OBS	8256.01	343.585601	204.007242	182.0	19.291	7.6	7.8	1.33	5770	1.83	1.87

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005638699-01	OBS	FP	0.11	1	0	0	0	LPP_DV—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.

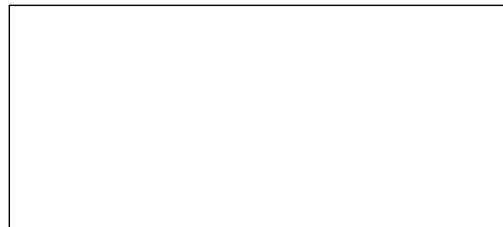
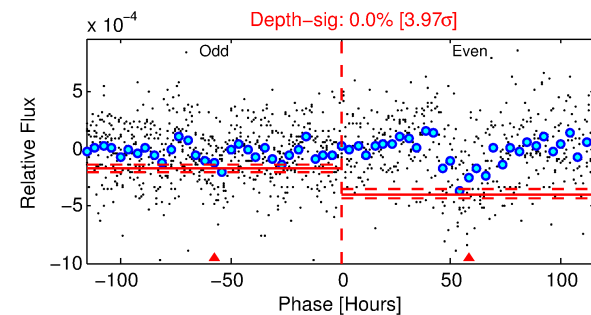
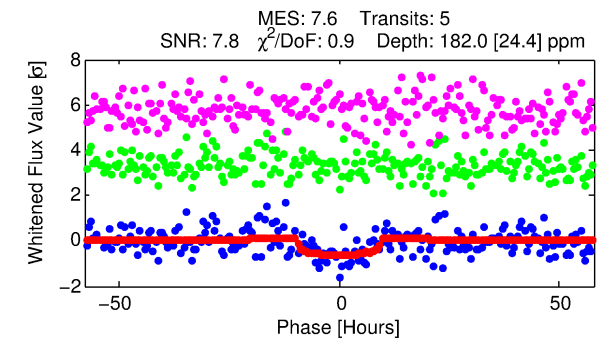
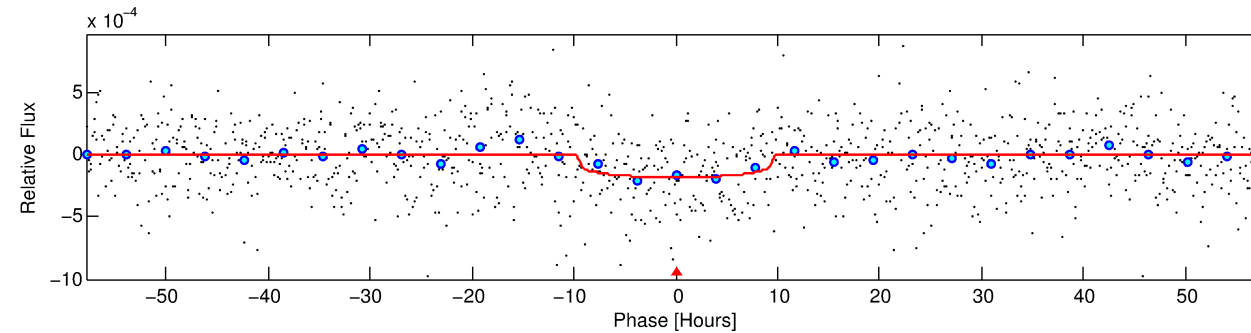
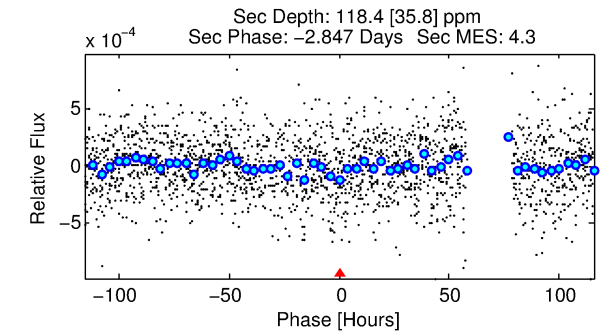
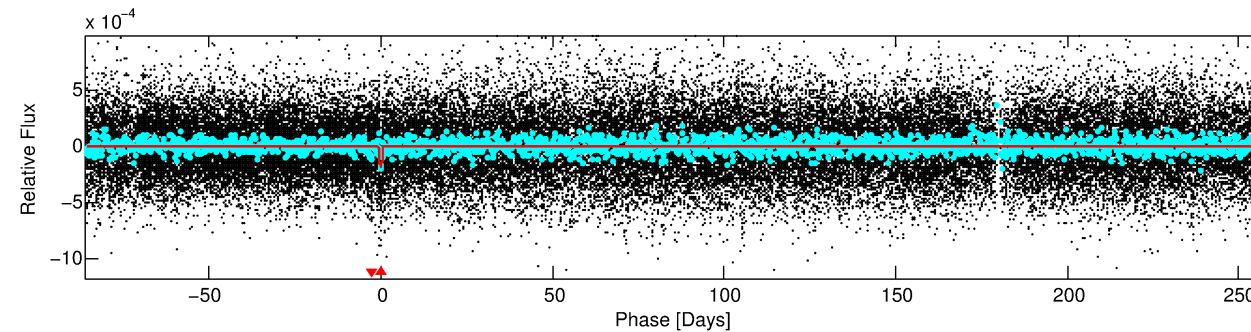
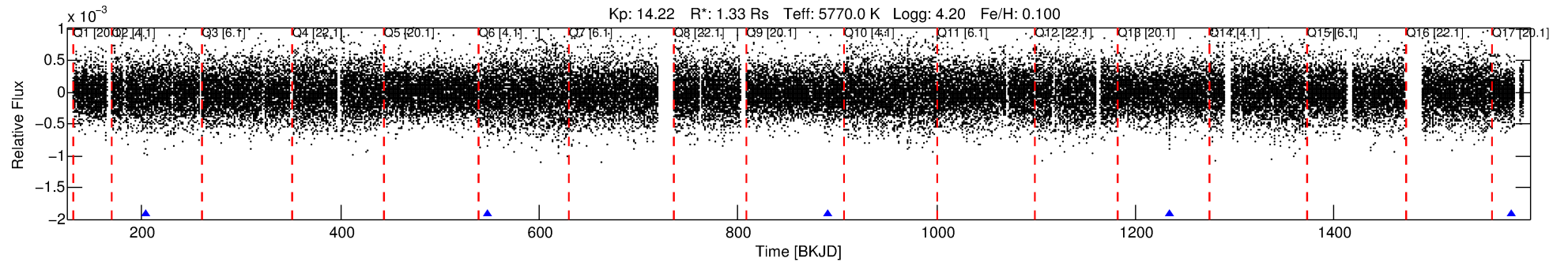
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005638699-01

No Significant Match Found

DV One-Page Summary

KIC: 5638699 Candidate: 1 of 1 Period: 343.586 d



DV Fit Results:

Period = 343.58560 [0.01162] d
Epoch = 204.0072 [0.0321] BKJD
Rp/R* = 0.0127 [0.0107]
a/R* = 117.99 [434.82]
b = 0.52 [5.14]
Seff = 1.87 [0.57]
Teq = 298 [23] K
Rp = 1.83 [1.59] Re
a = 0.9655 [0.1788] AU
Ag = 18071.50 [31593.97] [0.57σ]
Teffp = 5348 [2304] K [2.19σ]

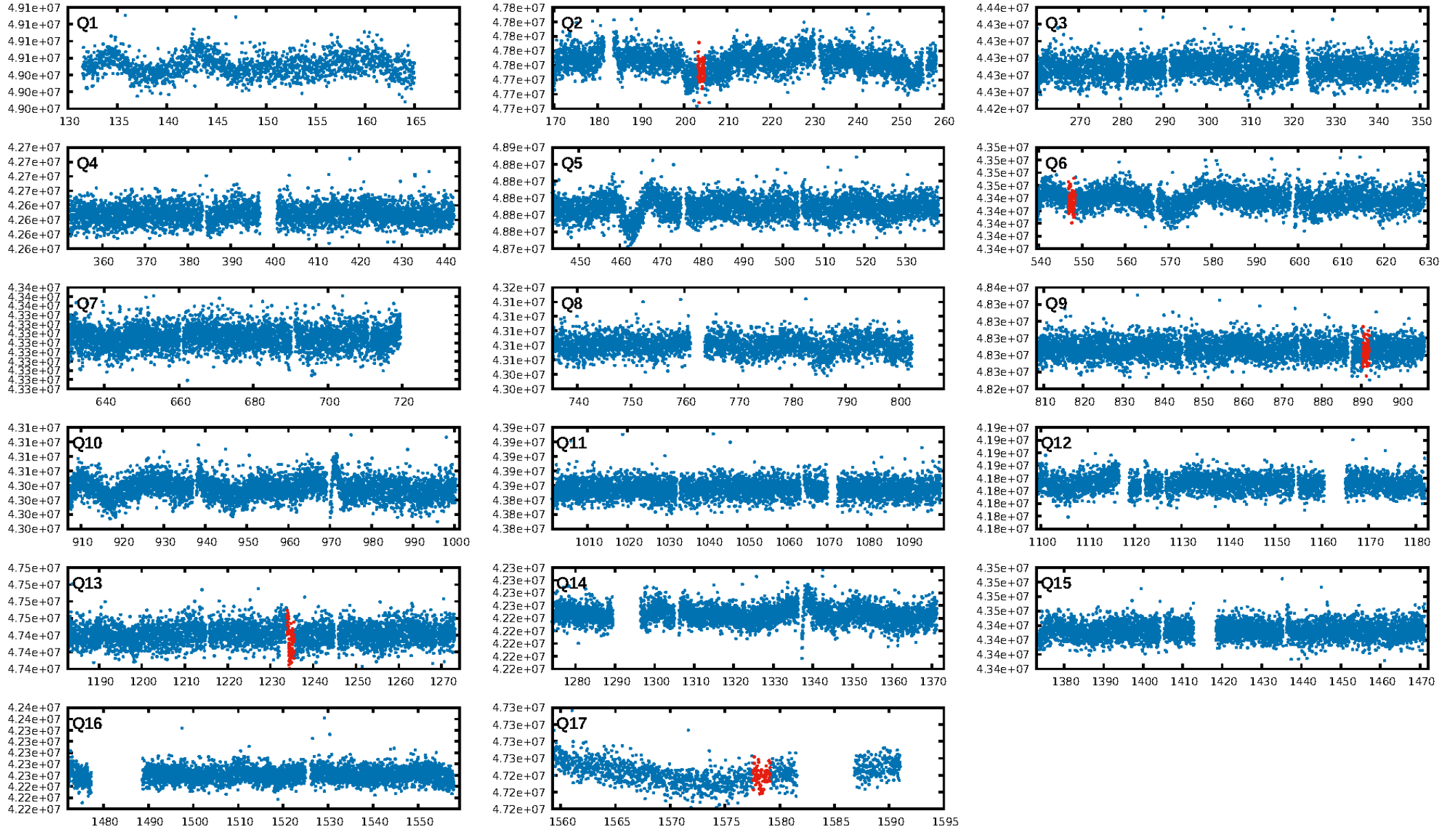
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 1.2%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 2.83e-13
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: -5.828
Centroid-sig: 11.6%
Centroid-so: 1.978 arcsec [1.25σ]
OotOffset-rm: N/A
KicOffset-rm: N/A
OotOffset-st: 0/0/0/0 [0]
KicOffset-st: 0/0/0/0 [0]
DiffImageQuality-fgm: N/A
DiffImageOverlap-fno: 1.00 [5/5]

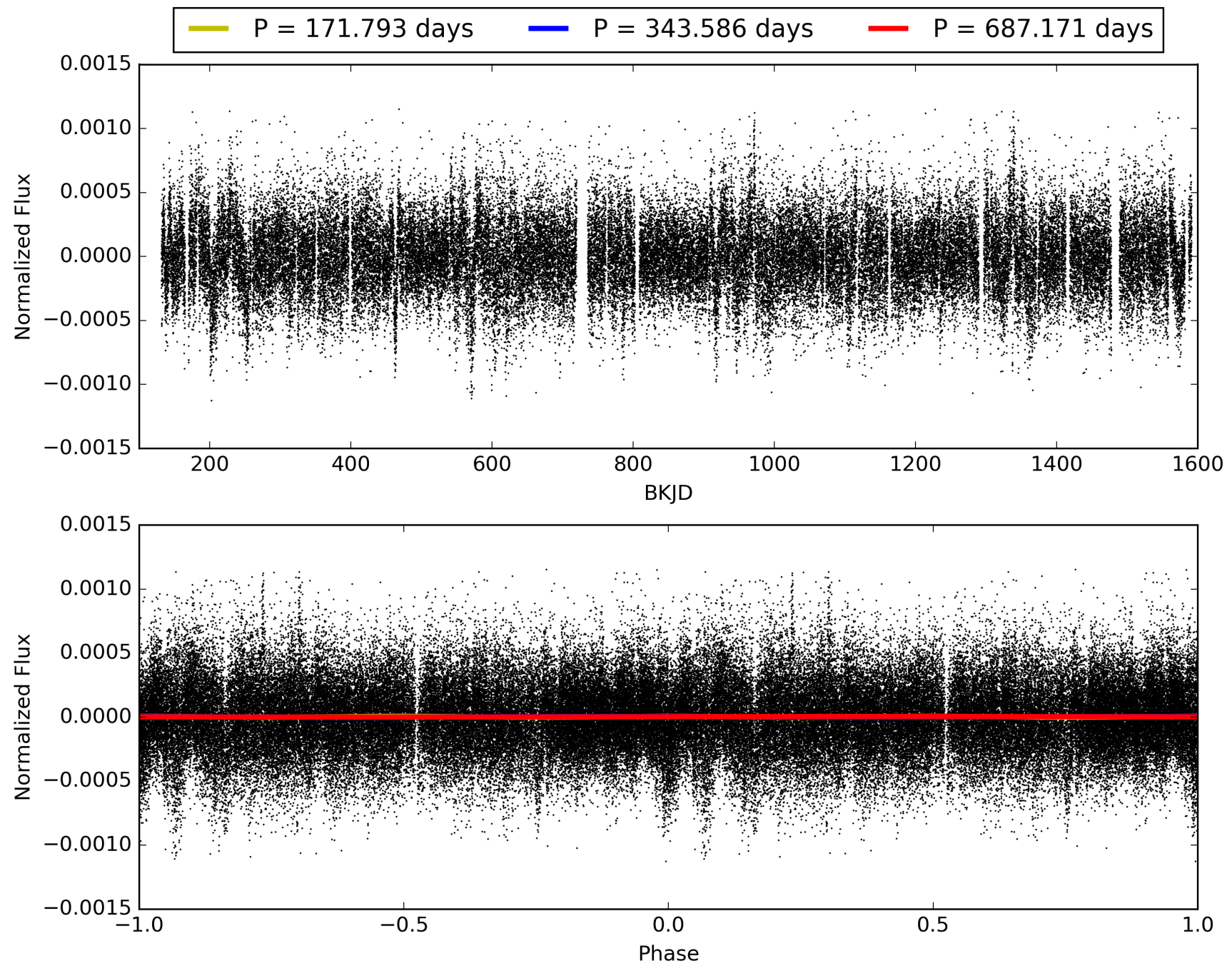
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 11:05:44 Z

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

TCE 005638699-01, PDC Light Curves

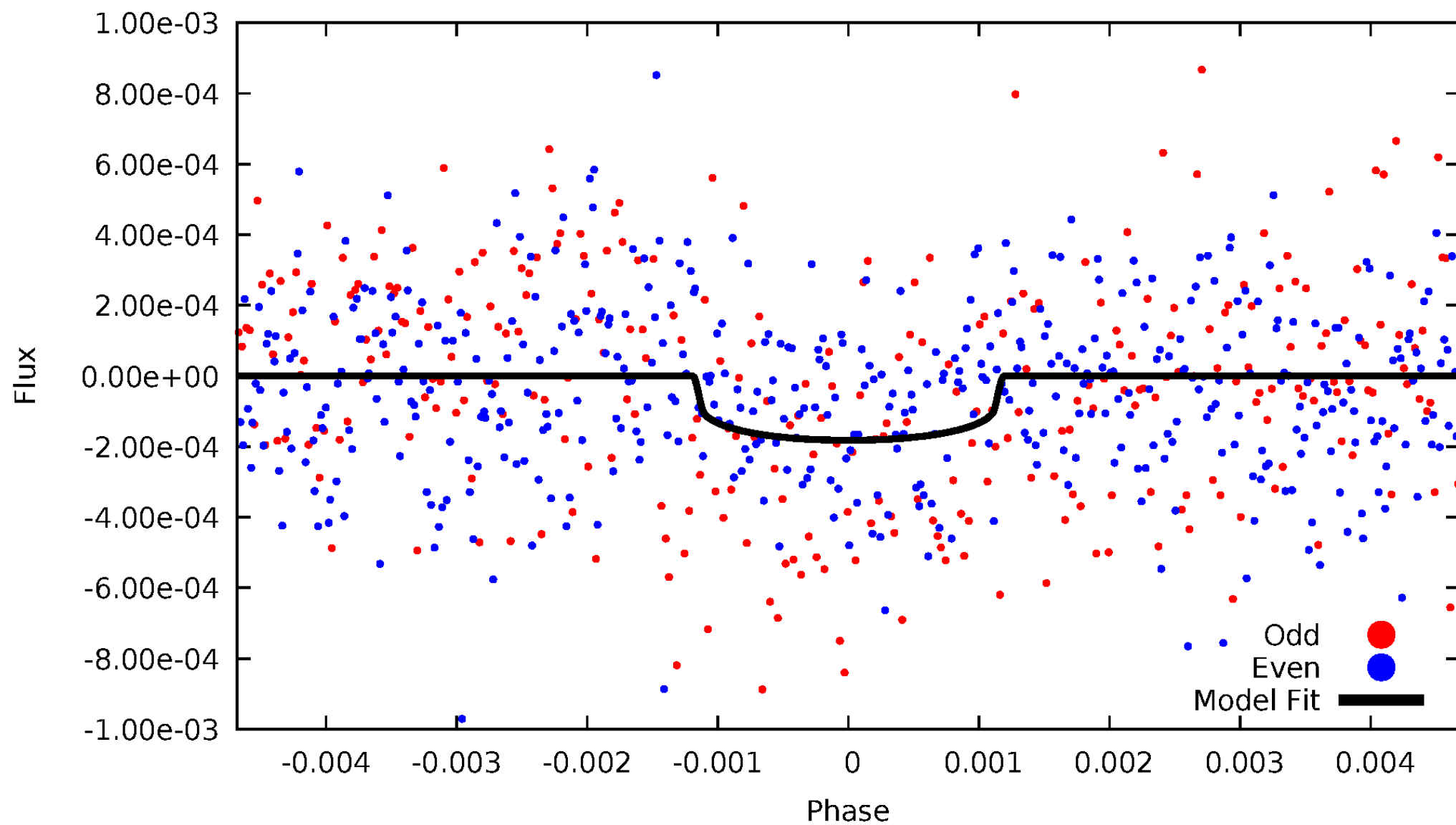


TCE 005638699-01



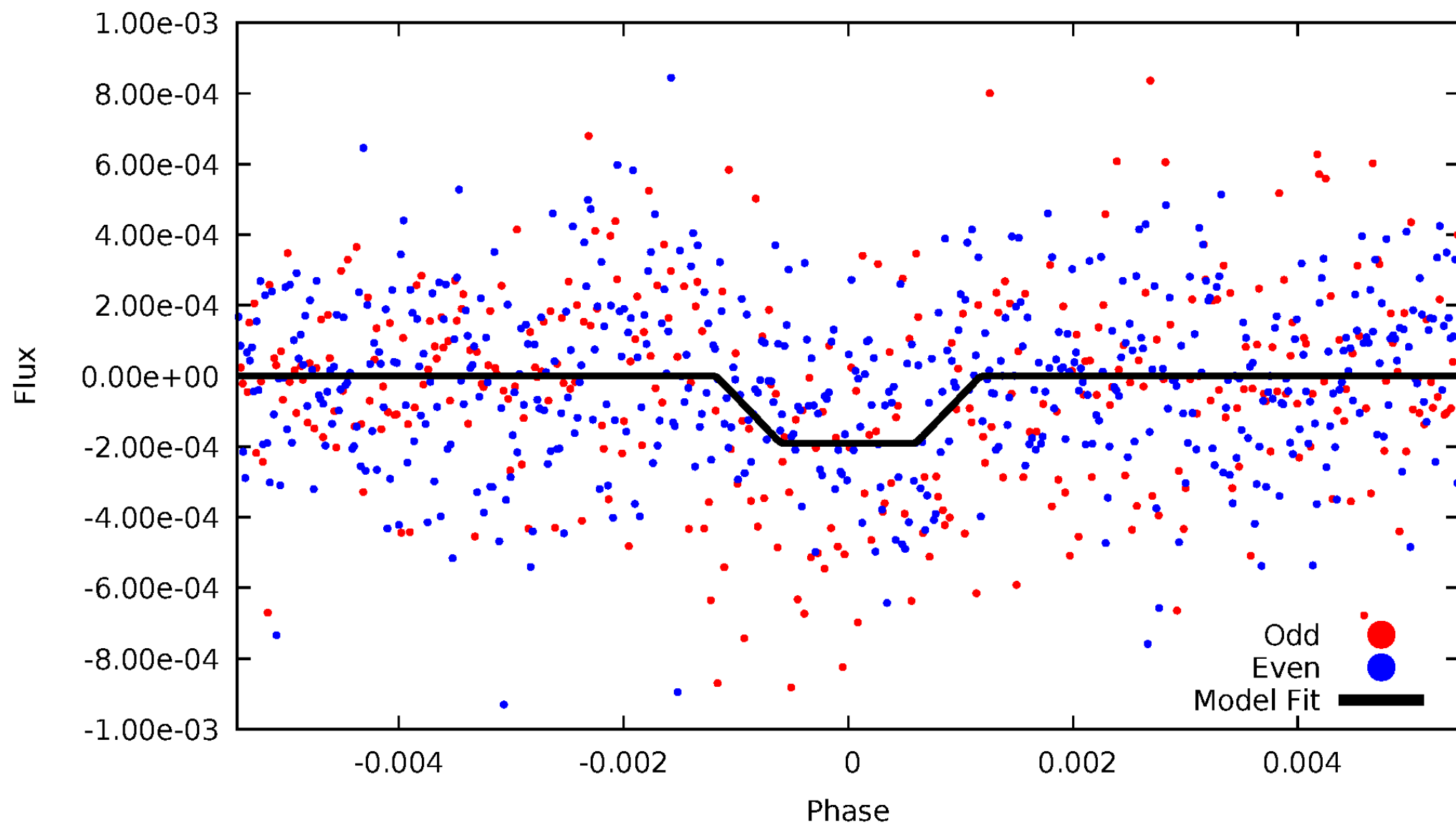
DV Odd/Even

TCE 005638699-01



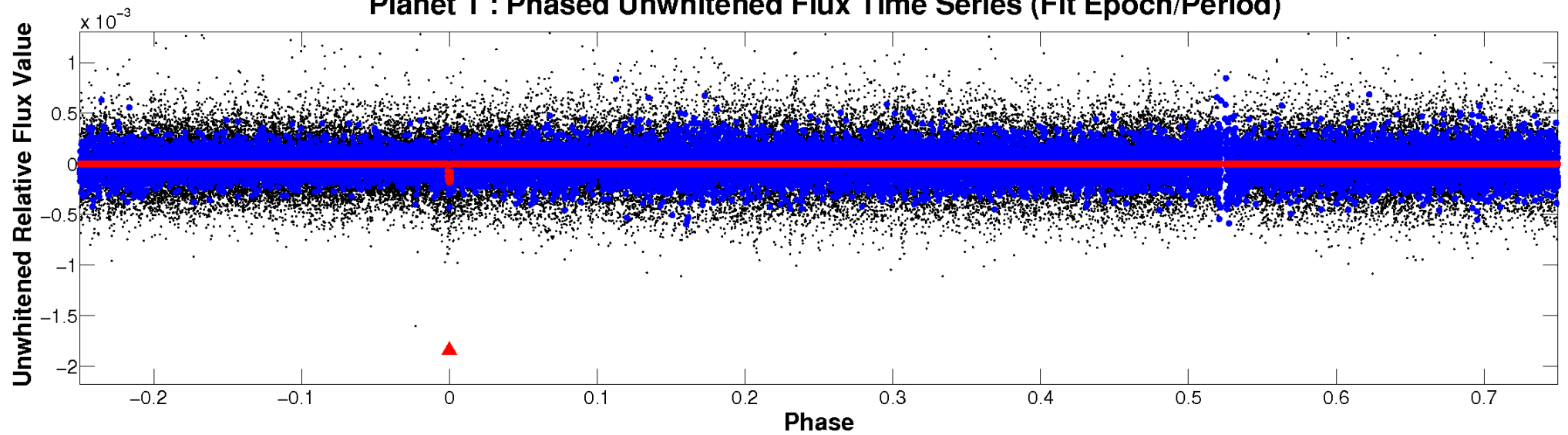
ALT Odd/Even

TCE 005638699-01

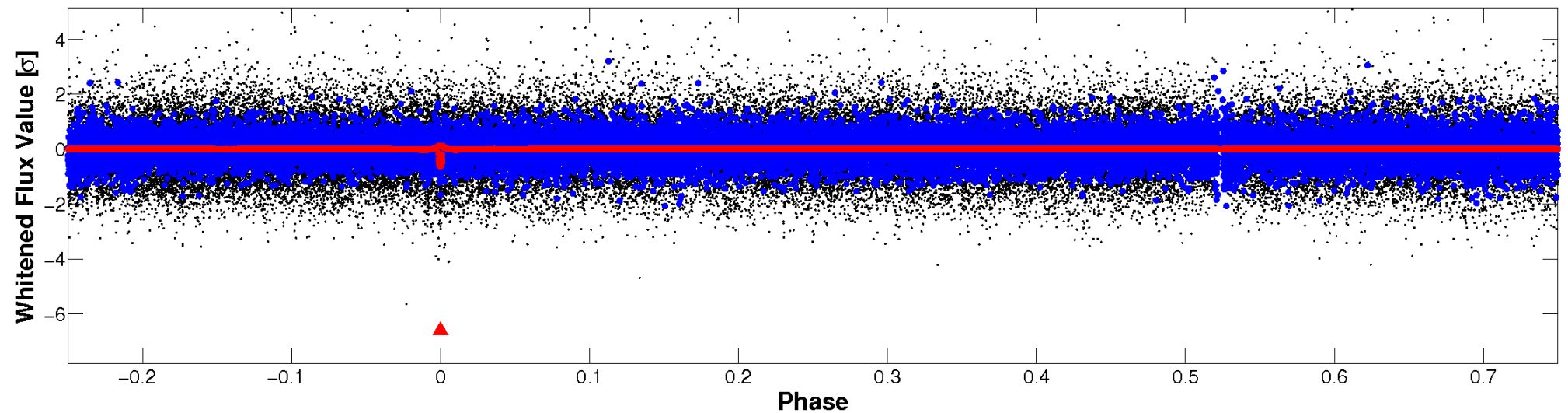


Non-Whitened Vs. Whitened Light Curve

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

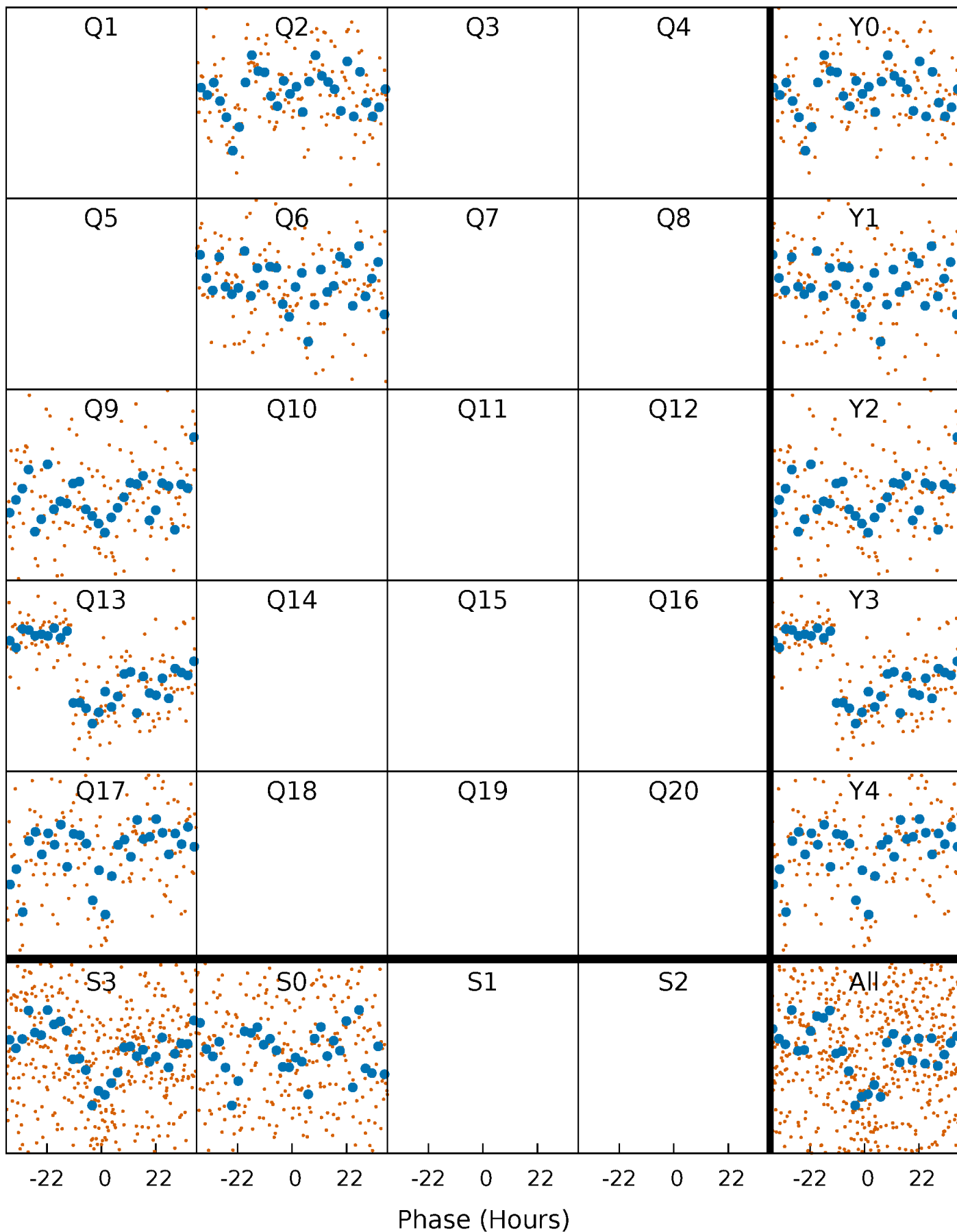


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



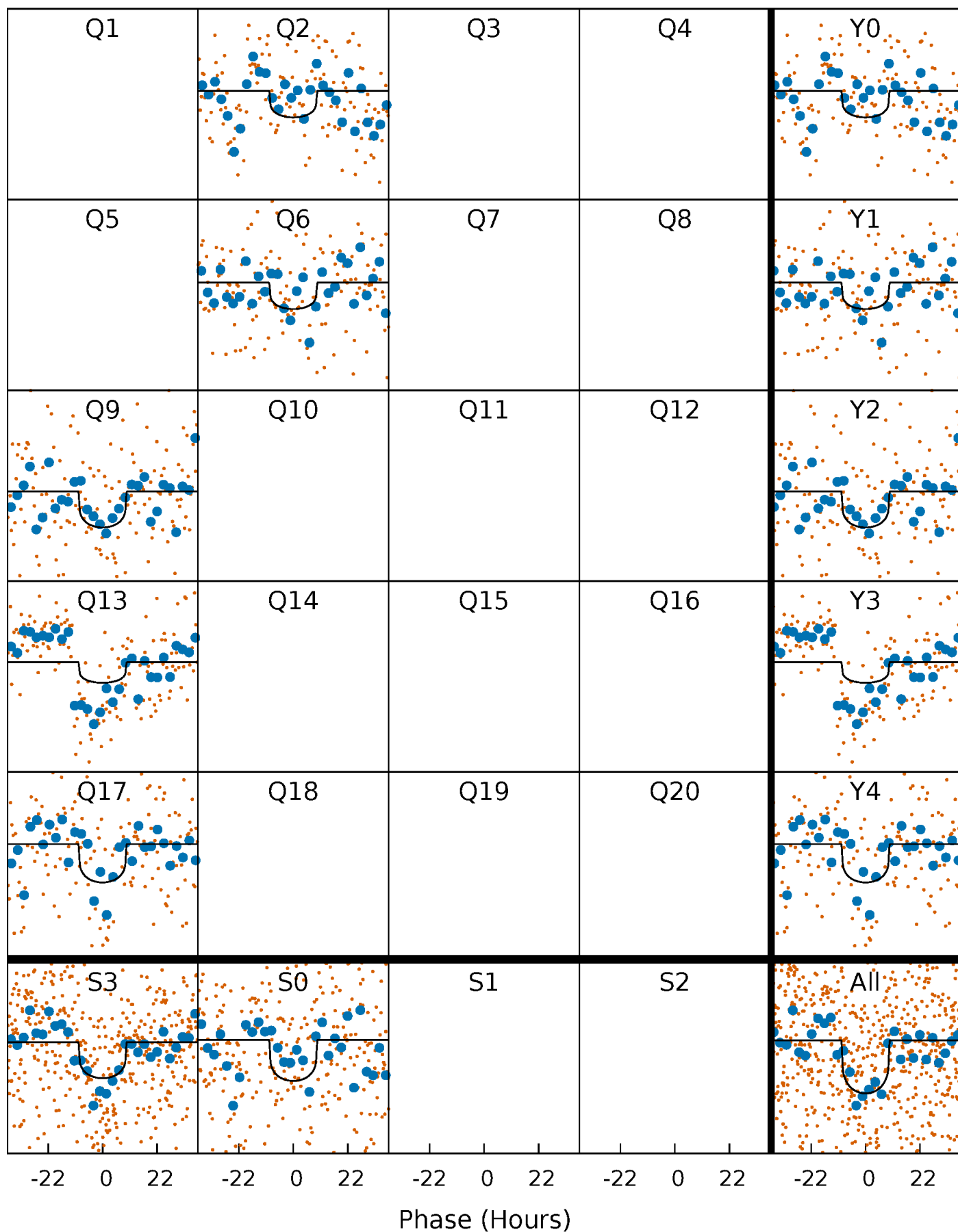
PDC Quarter-Phased Transit Curves

TCE 005638699-01 $P=343.585601$ Days $T_0=204.007242$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 005638699-01 P=343.585601 Days $T_0=204.007242$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

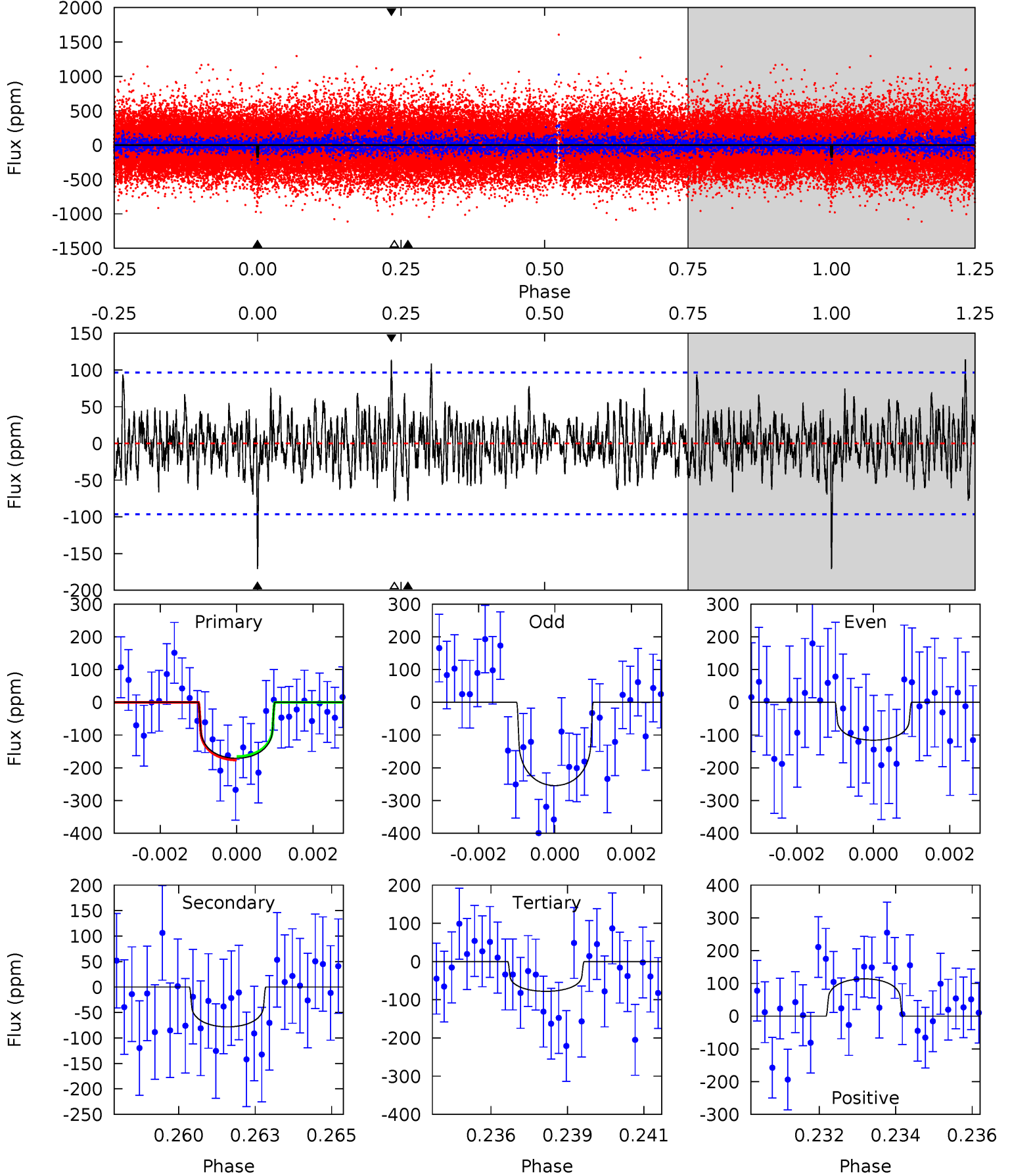
TCE 005638699-01 P=343.556256 Days $T_0=204.043998$ (BKJD)



DV Model-Shift Uniqueness Test

005638699-01, P = 343.585601 Days, E = 204.007242 Days

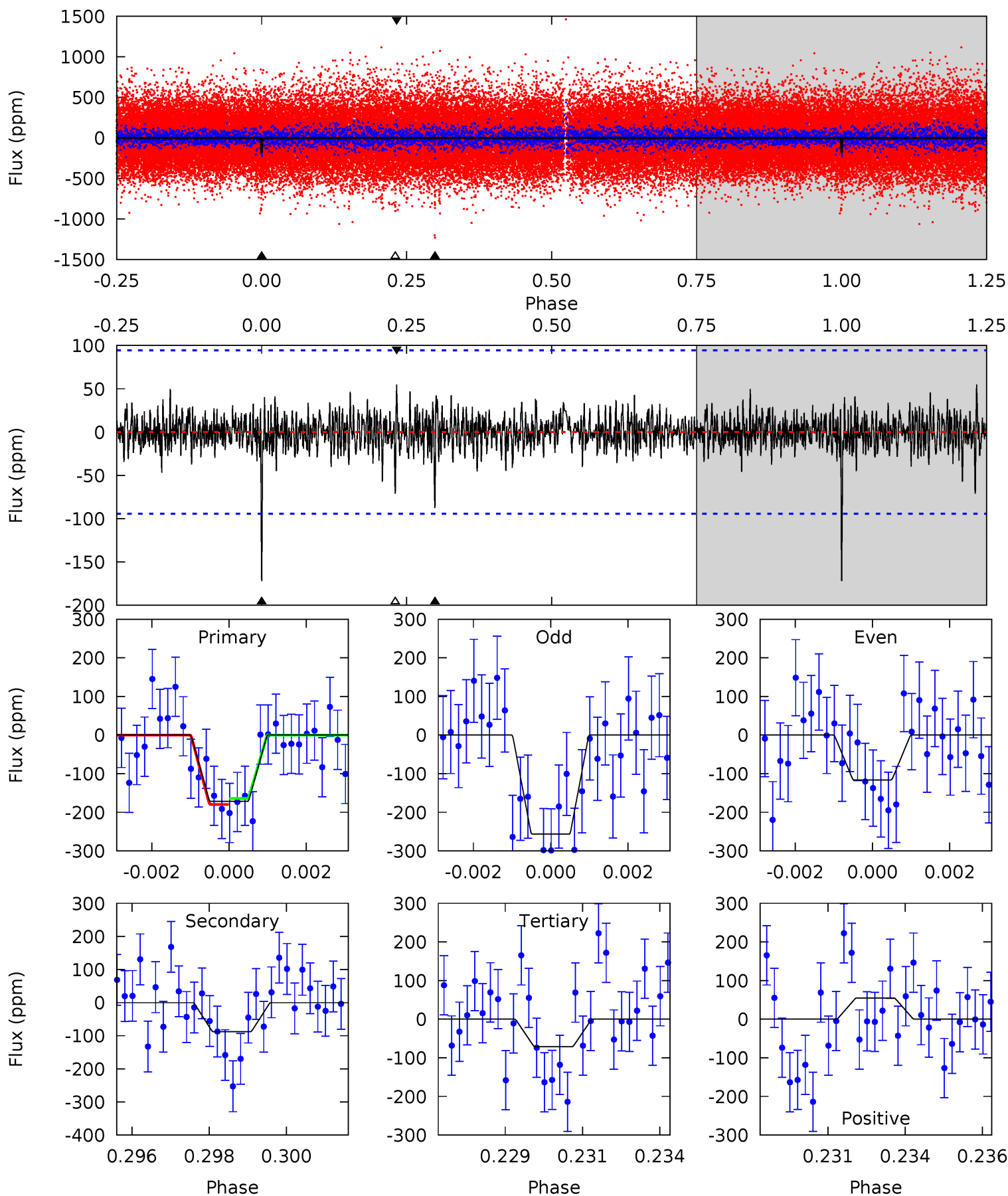
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.37	4.28	4.27	6.24	5.29	3.04	1.46	5.10	3.12	0.02	-1.96	3.71	1.32	0.40	0.28



Alt Model-Shift Uniqueness Test

005638699-01, P = 343.556256 Days, E = 204.043998 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.66	4.92	3.99	3.08	5.29	3.04	0.85	5.66	6.57	0.93	1.84	3.86	1.43	0.24	0.43



Stellar Parameters For KIC 005638699

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5770^{+78}_{-78}	$4.200^{+0.176}_{-0.108}$	$0.100^{+0.150}_{-0.150}$	$1.326^{+0.206}_{-0.252}$	$1.017^{+0.090}_{-0.065}$	$0.614^{+0.487}_{-0.199}$
	+1%/-1%	+4%/-3%	+150%/-150%	+16%/-19%	+9%/-6%	+79%/-32%
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 005638699-01 / KOI 8256.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-78 ± 18	$2.06^{+1.53}_{-1.24}$	417^{+19}_{-24}	4654^{+2358}_{-852}	9493^{+44652}_{-6497}
Alt.	-88 ± 18	$2.11^{+1.54}_{-1.28}$	413^{+20}_{-21}	4686^{+2566}_{-834}	9967^{+50194}_{-6643}

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 $A_{obs} \gg 1.0$

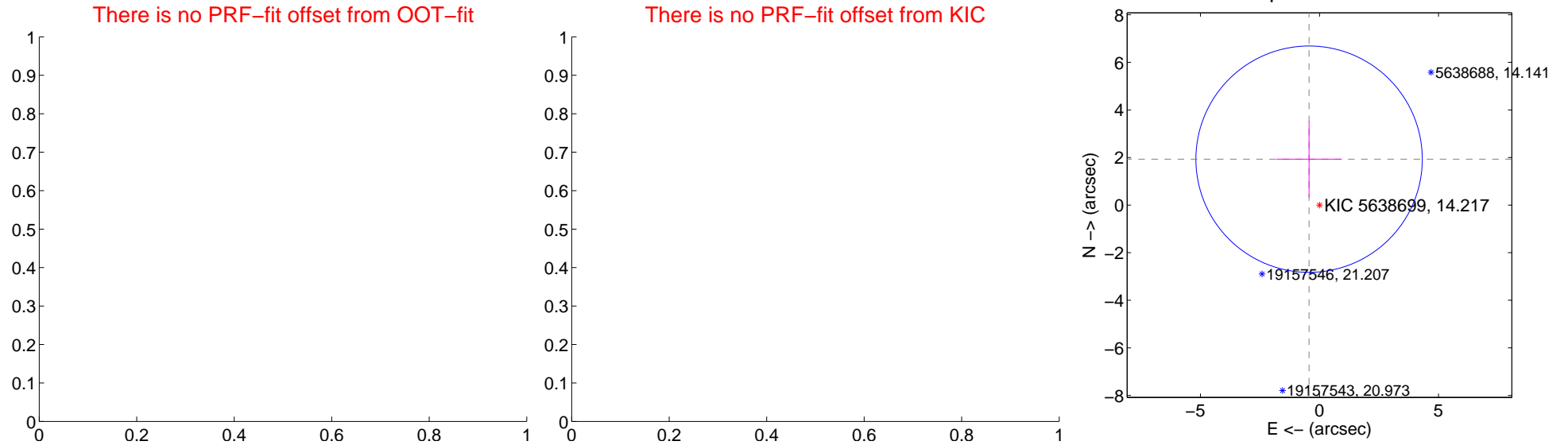
DV Centroid Data

Supplemental centroid analysis for 005638699-01. Kepler magnitude: 14.22. Transit SNR 7.81

There are 0 quarters with good PRF difference image offsets

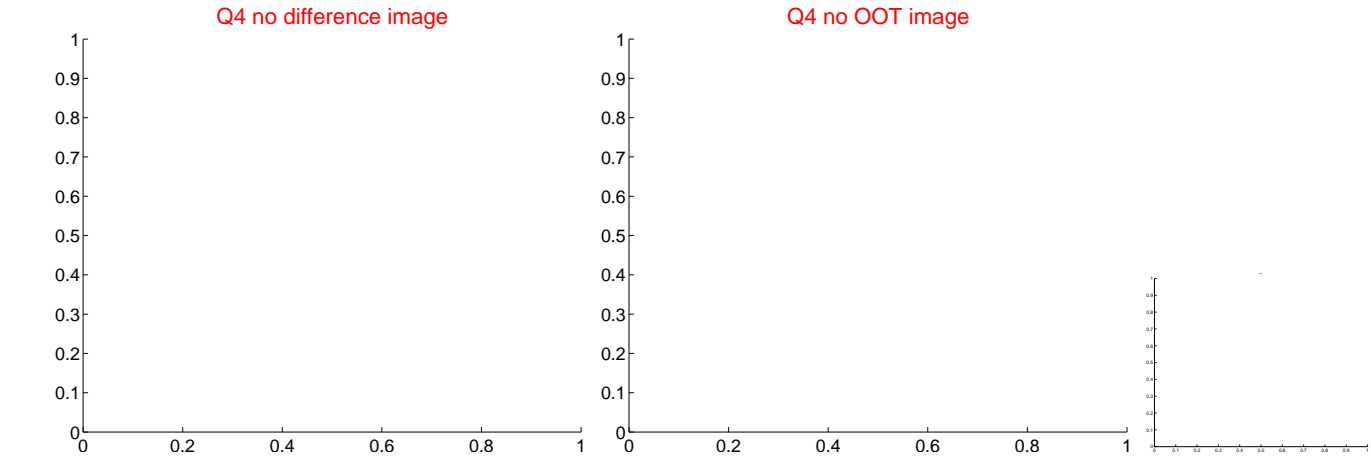
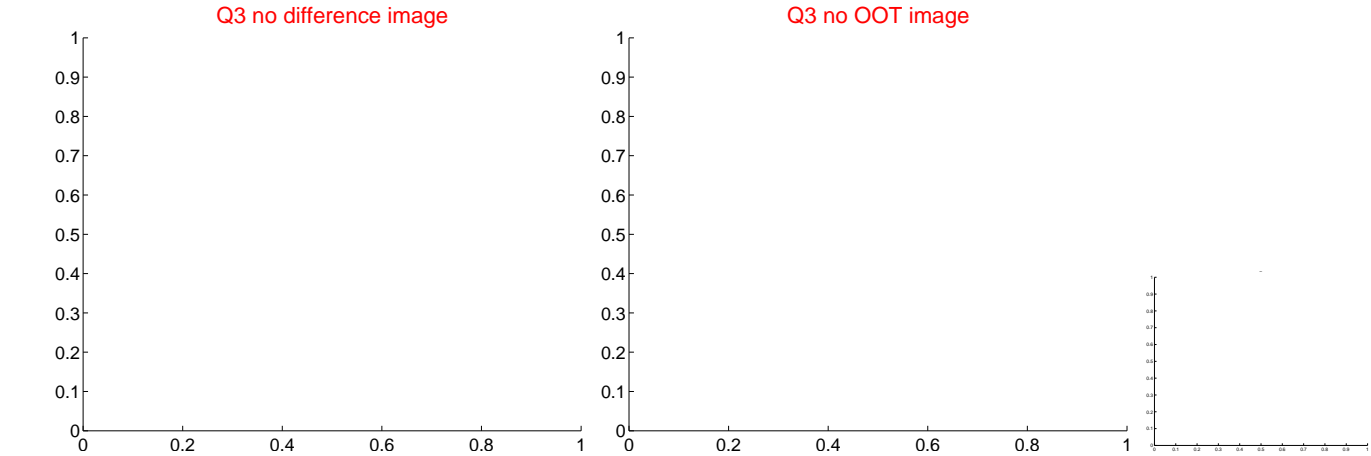
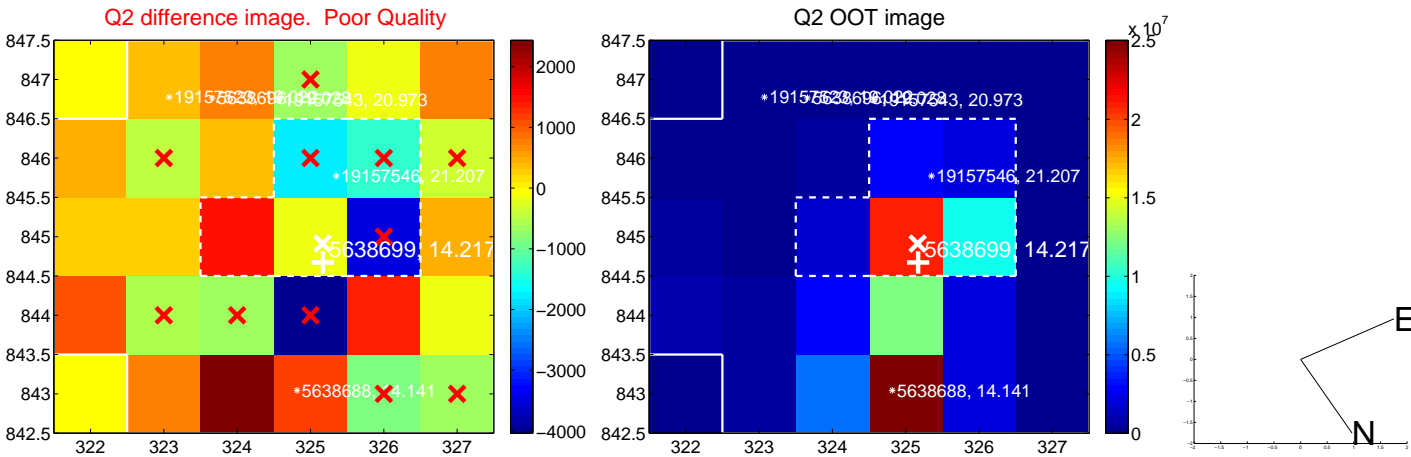
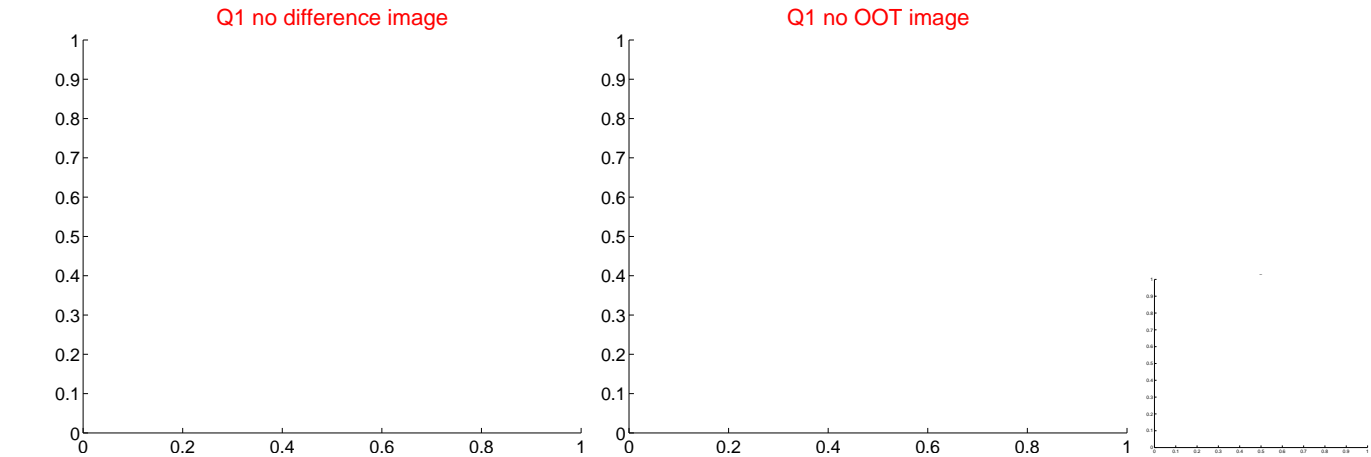
The direct PRF centroid is offset from the target star catalog position by about NaN arcsec

	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	1.98 ± 1.59	1.25	0.44 ± 1.37	1.93 ± 1.60

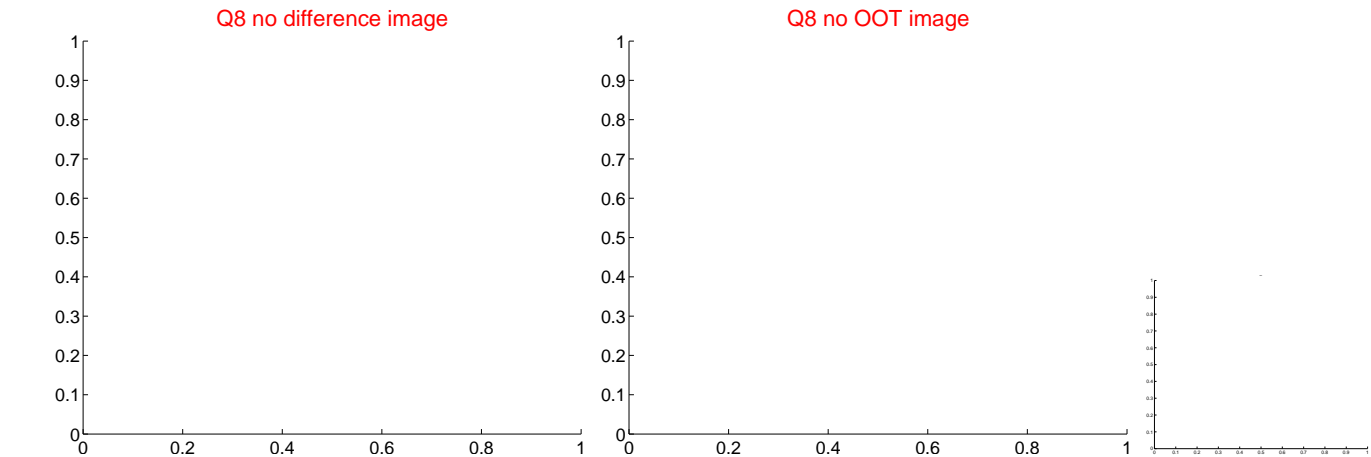
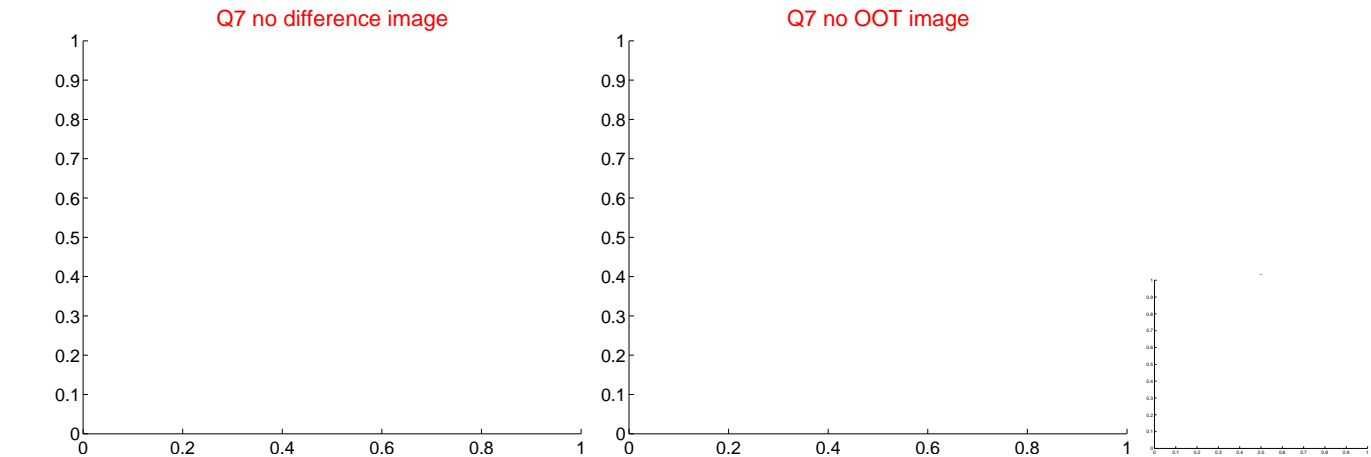
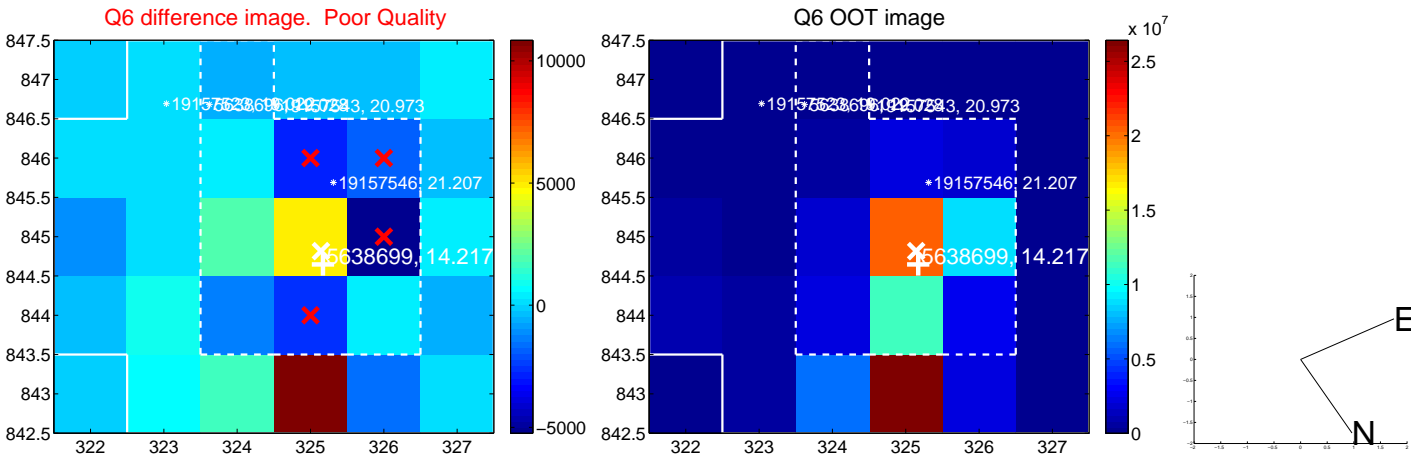
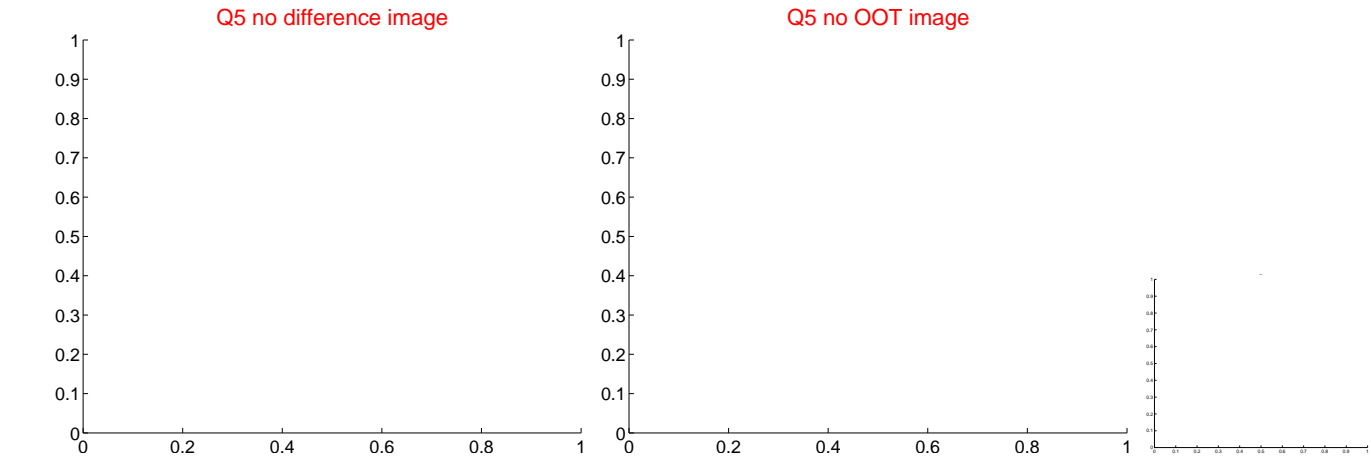


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

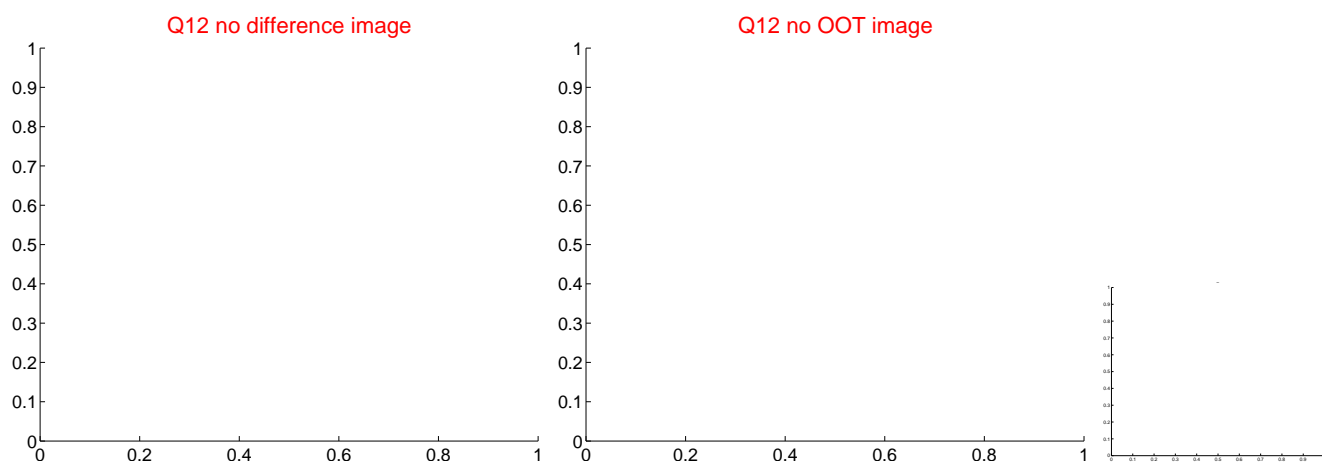
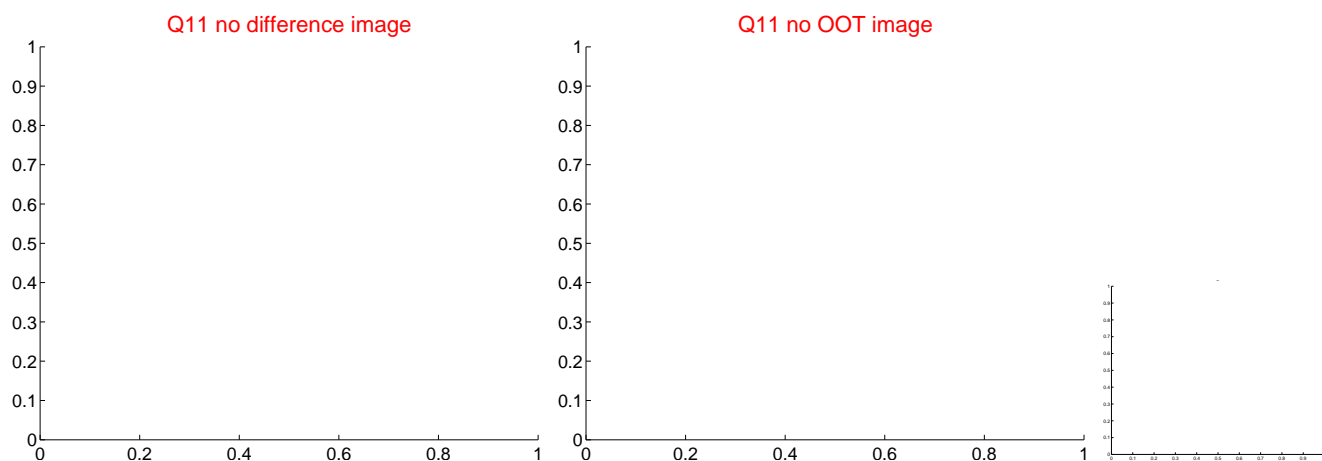
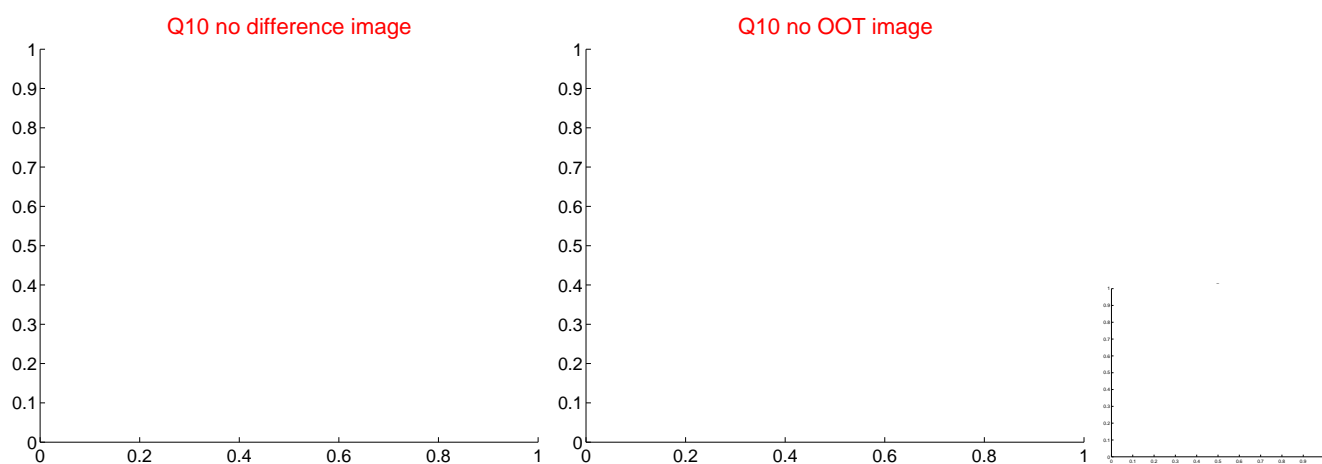
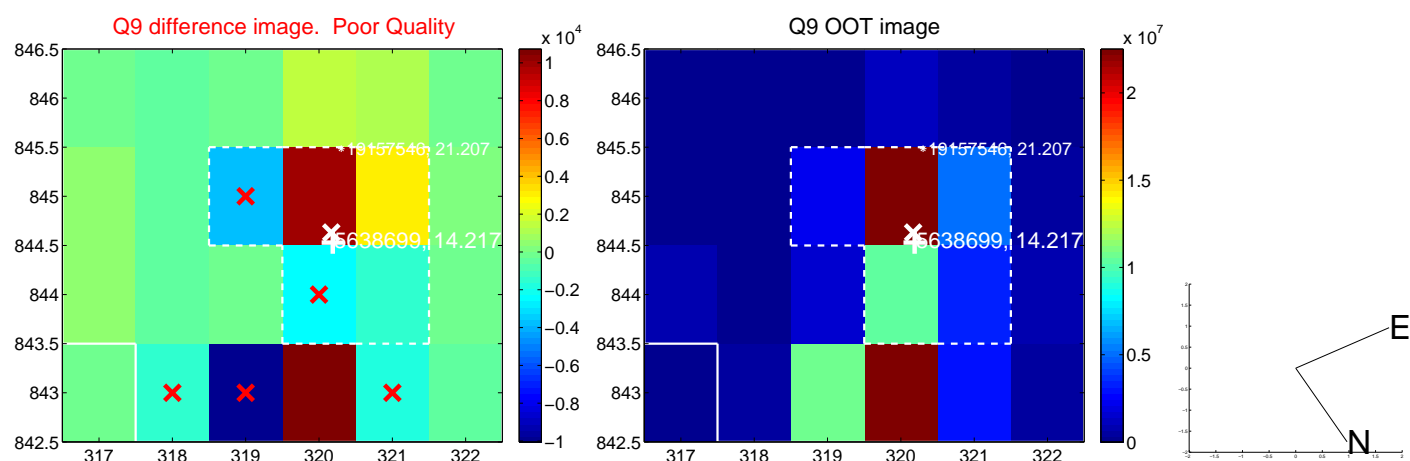
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



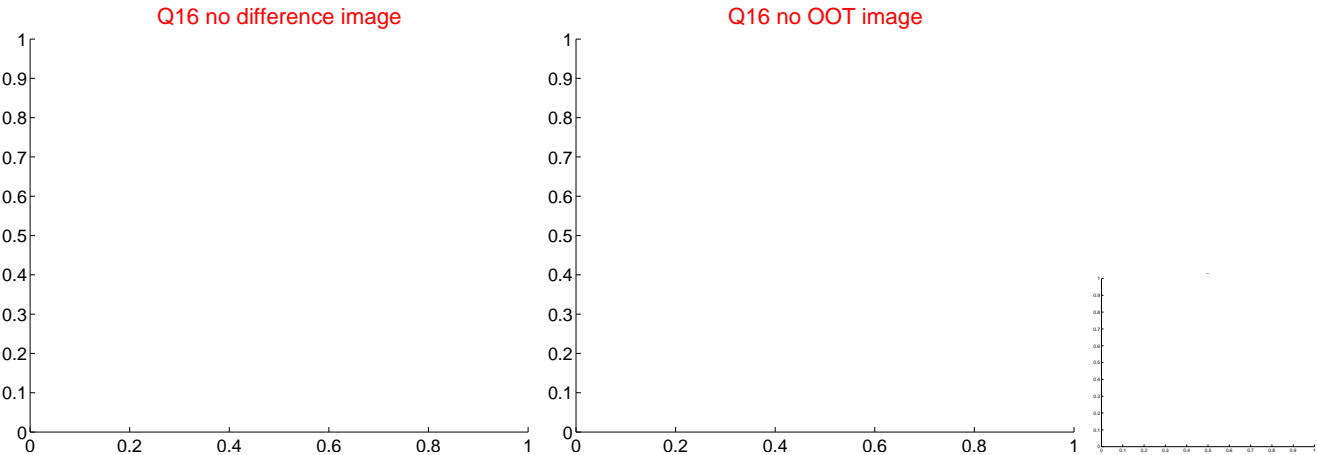
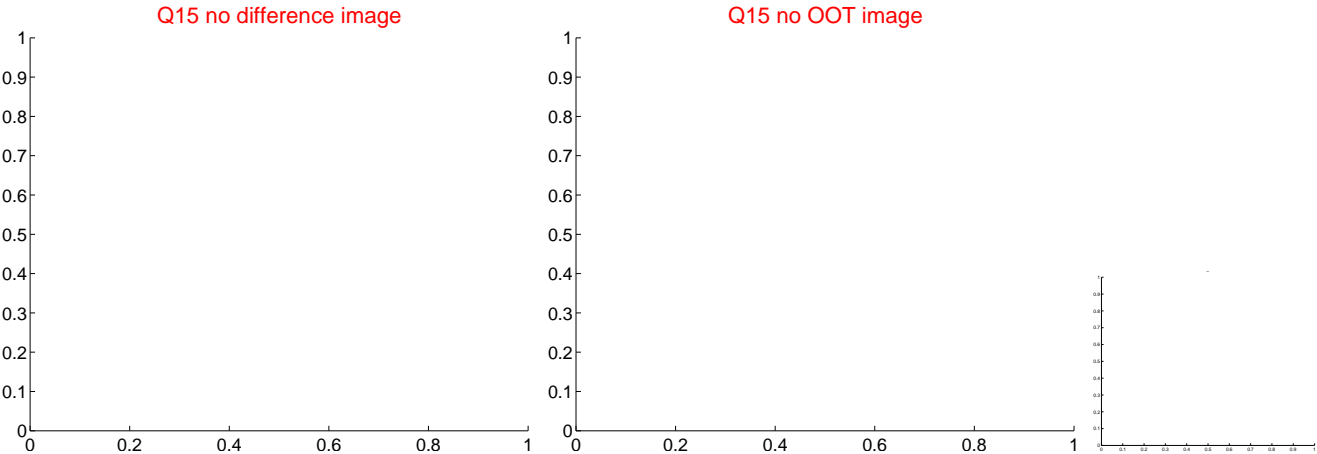
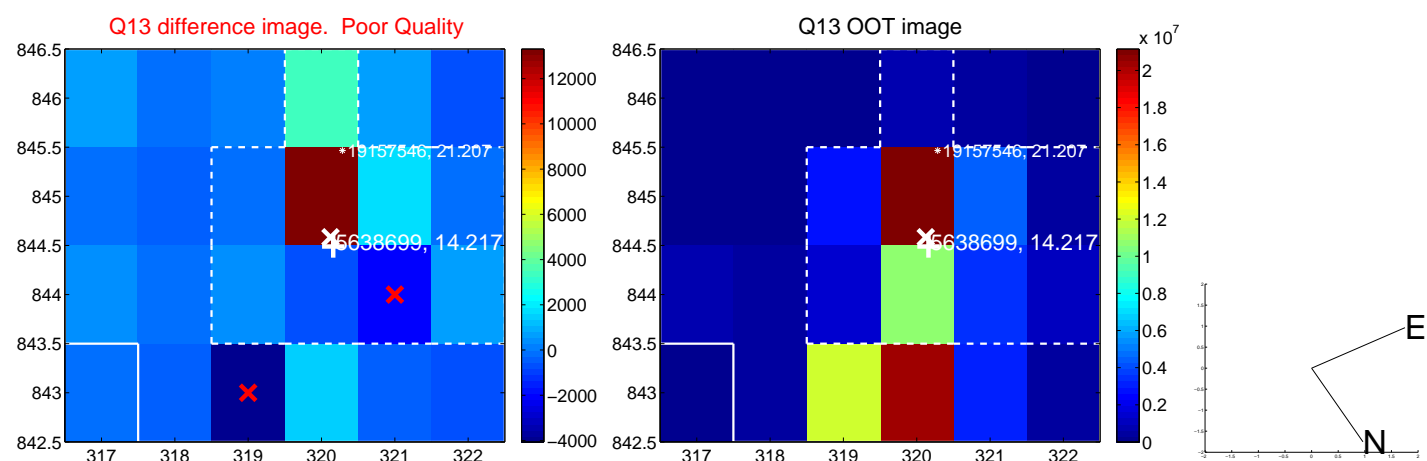
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



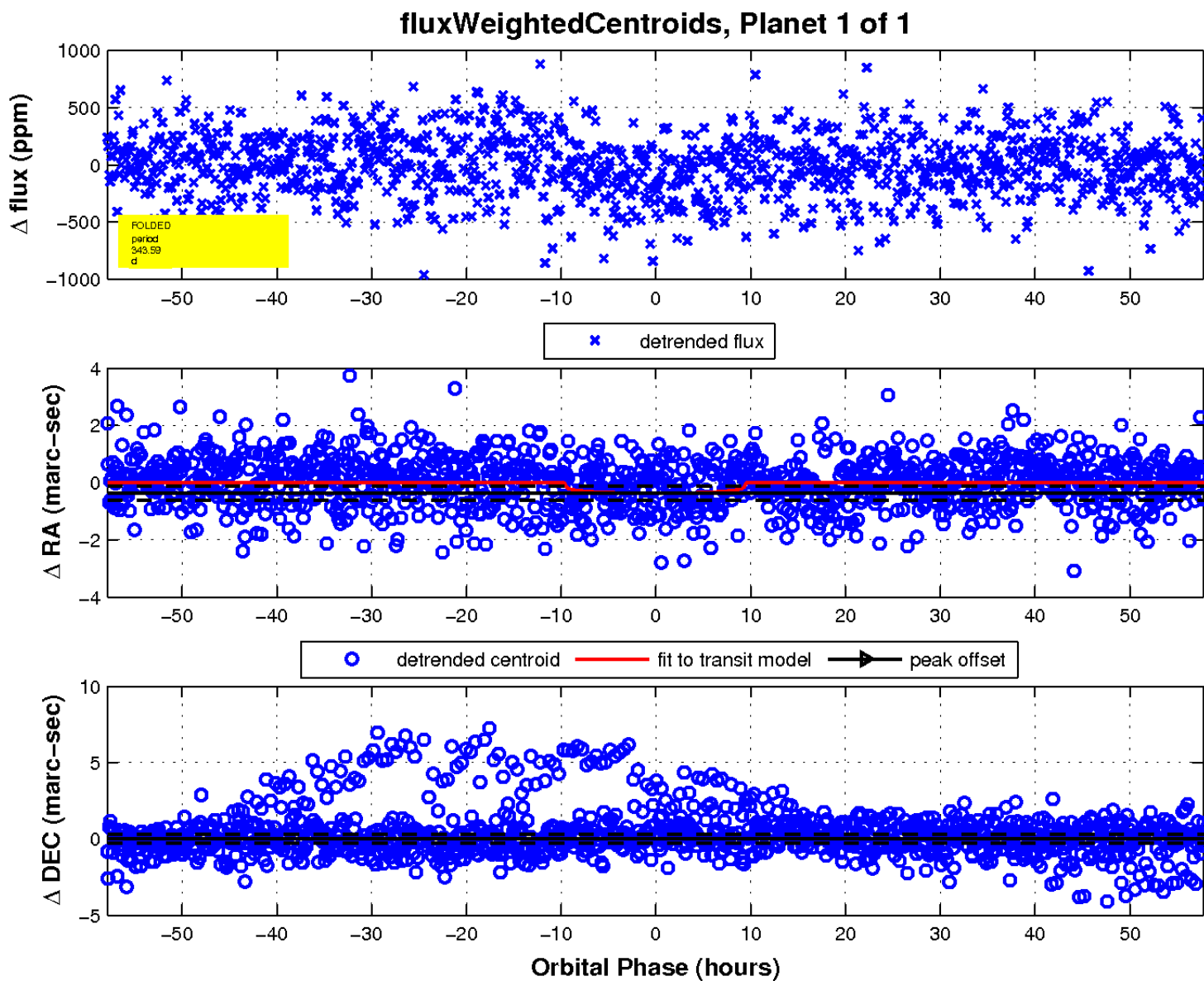
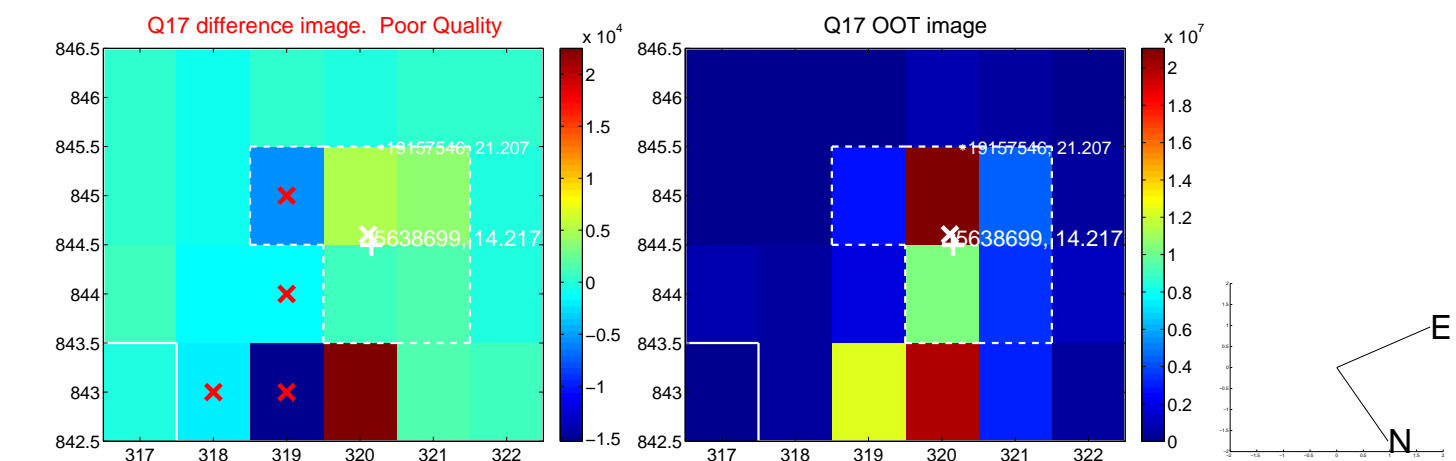
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



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.



Declination