

KIC 005956633

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})
005956633-01	OBS	No	365.909680	152.526045	496.4	5.846	7.3	3.6	0.89	5713	2.21	0.75

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005956633-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE—LPP_DV—ALL_TRANS_CHASES—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 005956633-01

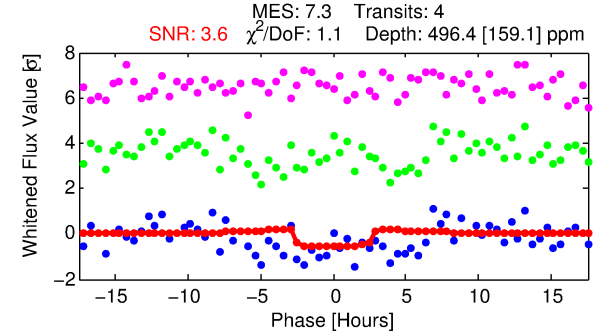
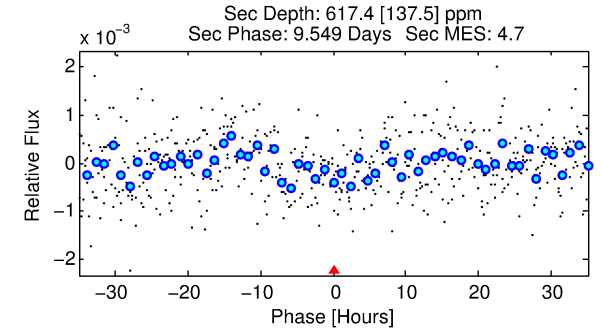
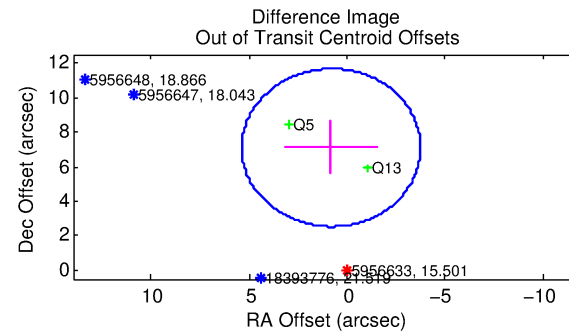
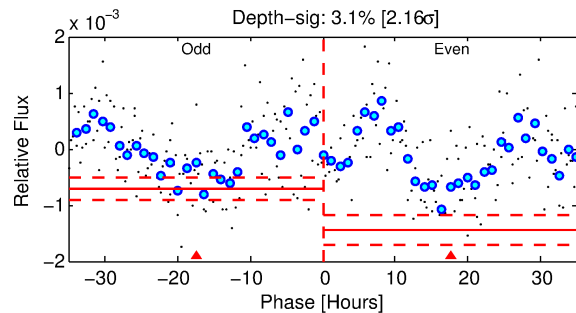
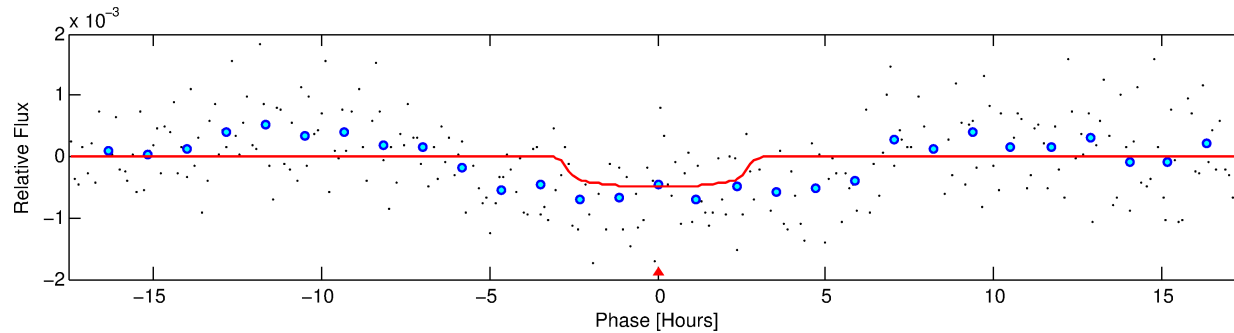
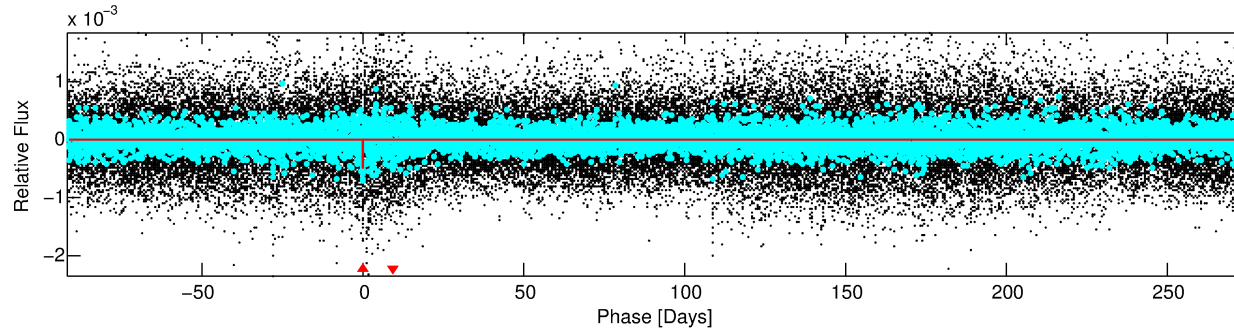
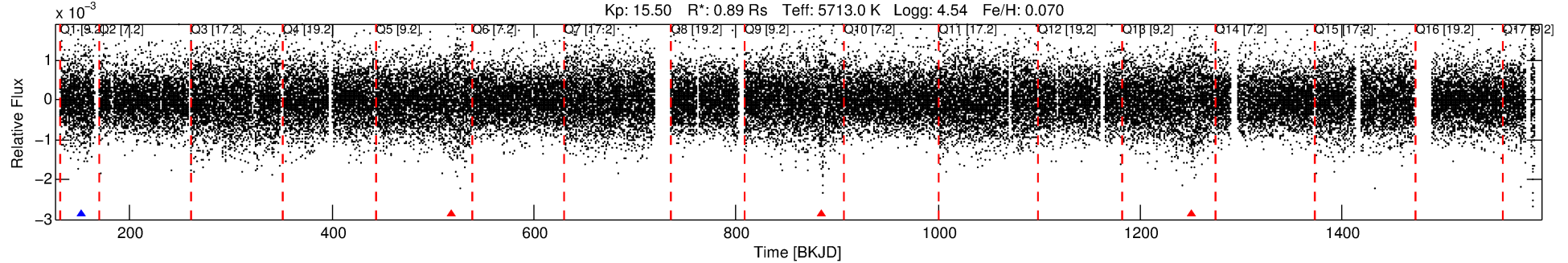
No Significant Match Found

DV One-Page Summary

KIC: 5956633 Candidate: 1 of 1 Period: 365.910 d

KOI: K04107 Corr: No Ephemeris Match

Kp: 15.50 R*: 0.89 Rs Teff: 5713.0 K Logg: 4.54 Fe/H: 0.070



DV Fit Results:

Period = 365.90968 [0.01217] d
Epoch = 152.5260 [0.0204] BKJD
Rp/R* = 0.0227 [0.0278]
a/R* = 303.19 [1594.65]
b = 0.80 [2.37]
Seff = 0.75 [0.25]
Teq = 238 [19] K
Rp = 2.21 [2.76] Re
a = 1.0050 [0.2069] AU
Ag = 70020.60 [173312.59] [0.40σ]
Teffp = 5975 [3674] K [1.56σ]

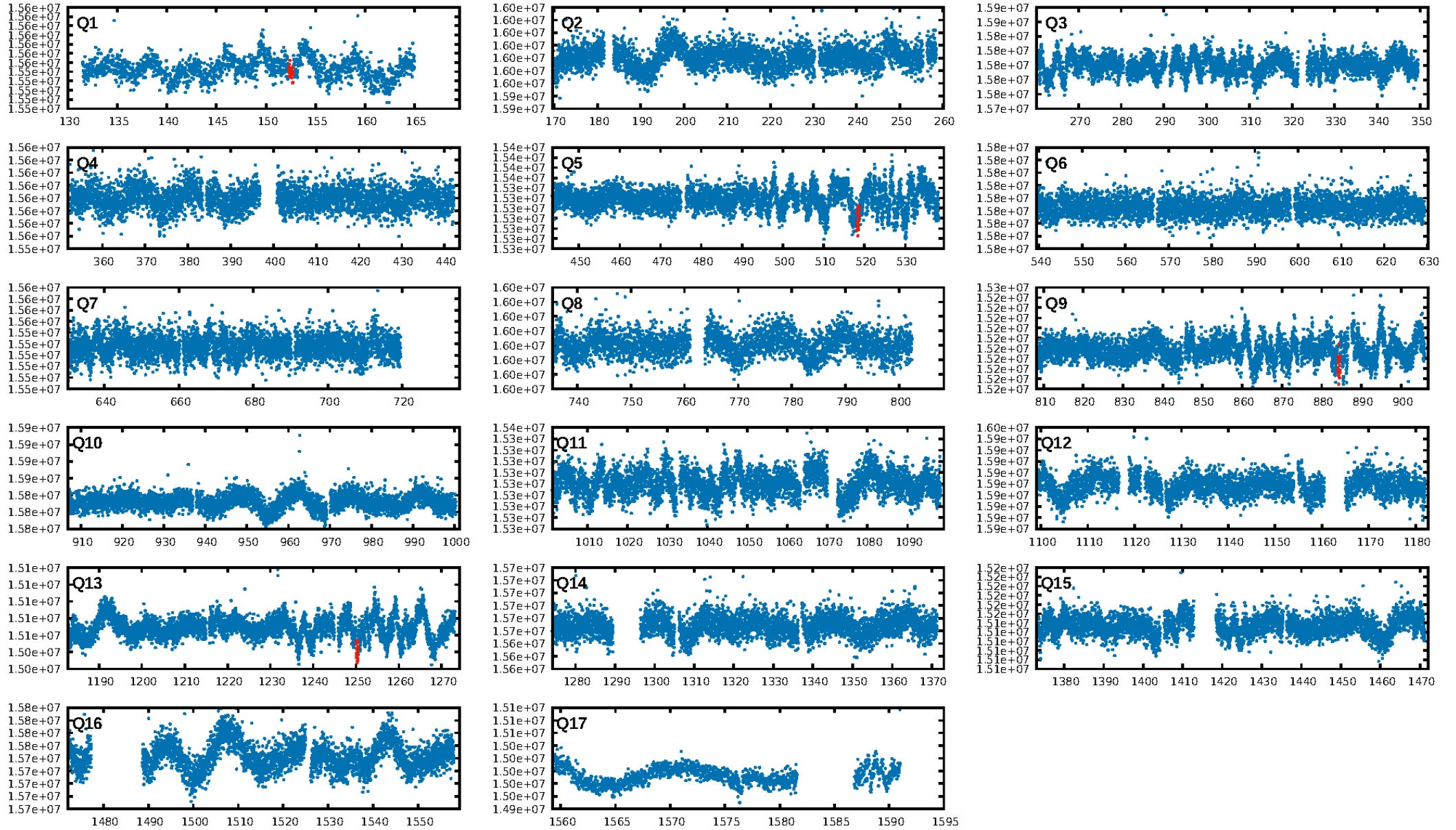
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 38.0%
ModelChiSquareGof-sig: 95.8%
Bootstrap-pfa: 1.58e-08
RollingBand-fgt: 0.00 [0/3]
GhostDiagnostic-chr: -2.472
Centroid-sig: 5.3%
Centroid-so: 8.869 arcsec [1.72σ]
OotOffset-rm: 7.143 arcsec [4.69σ]
KicOffset-rm: 7.178 arcsec [4.76σ]
OotOffset-st: 0/0/0/2 [2]
KicOffset-st: 0/0/0/2 [2]
DiffImageQuality-fgm: 0.00 [0/2]
DiffImageOverlap-fno: 1.00 [4/4]

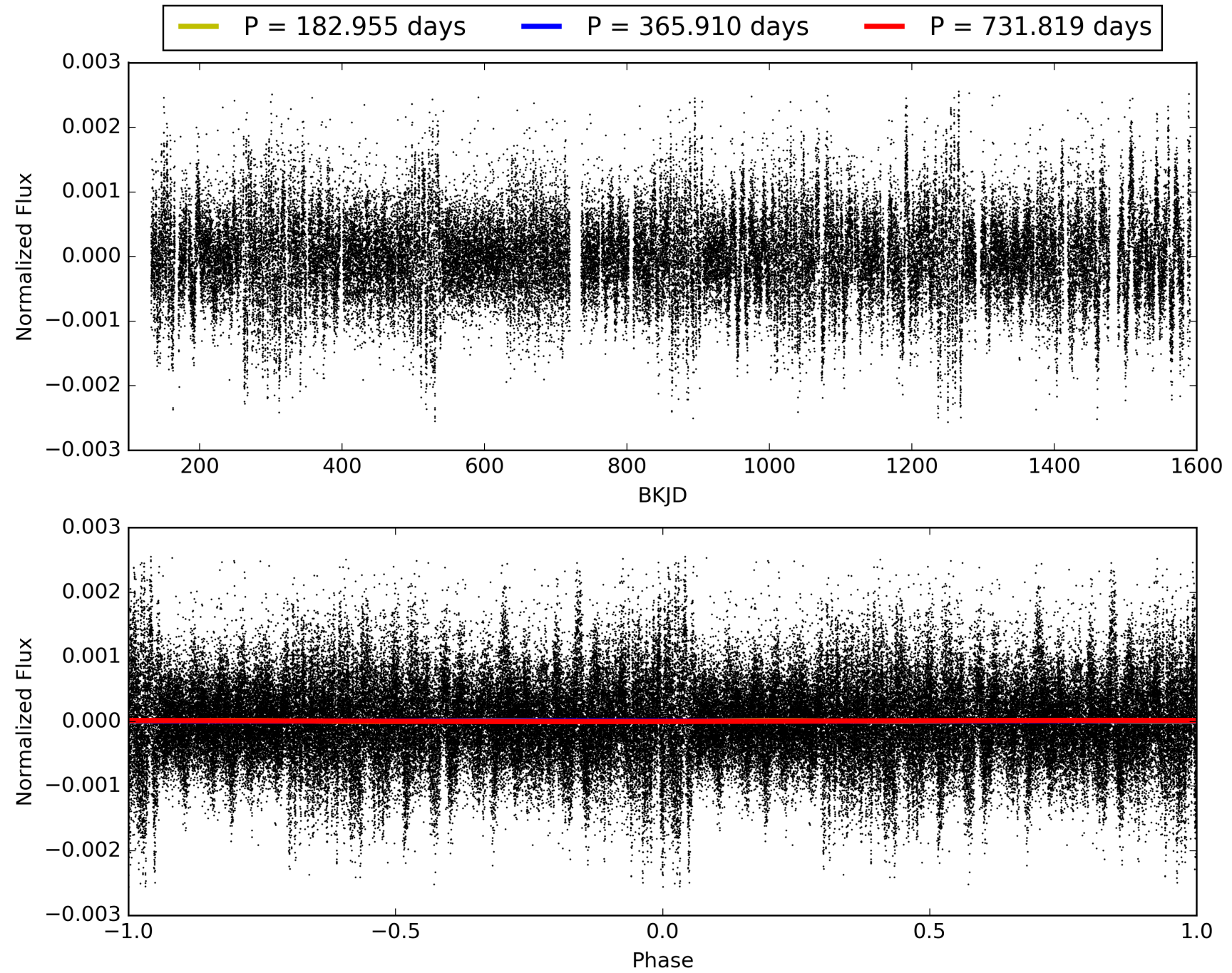
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 15:37:26 Z

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

TCE 005956633-01, PDC Light Curves

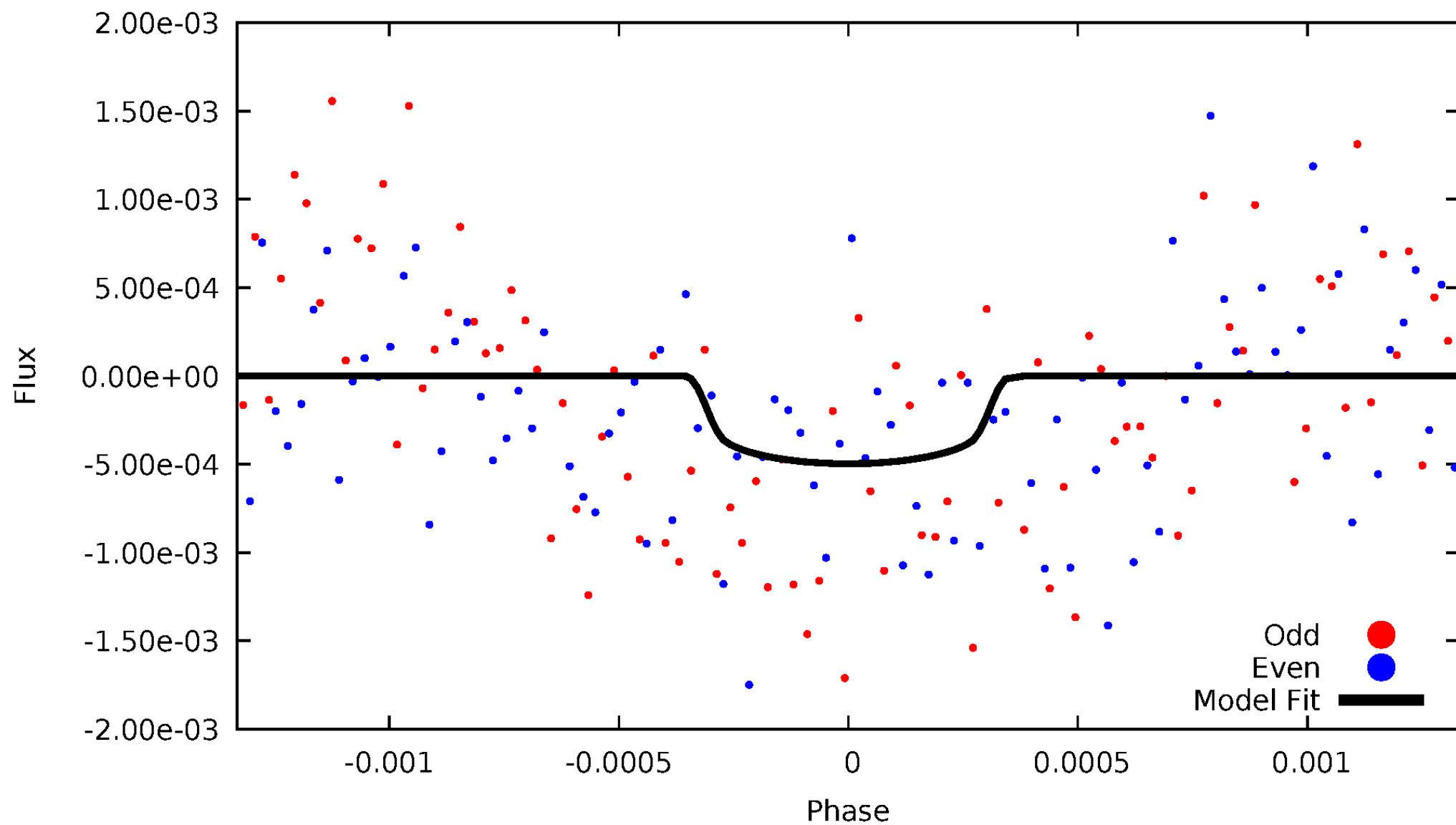


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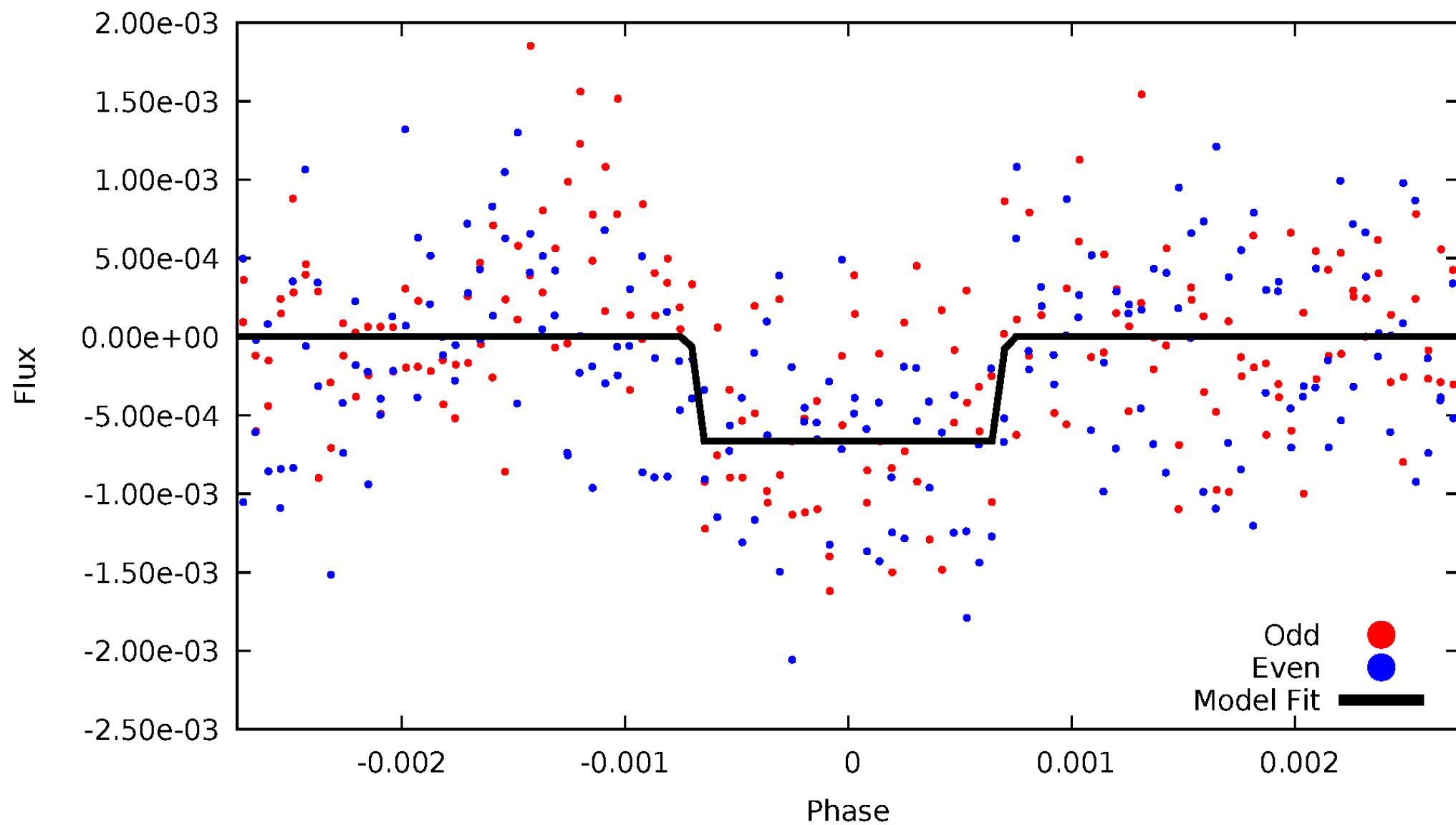
DV Odd/Even

TCE 005956633-01

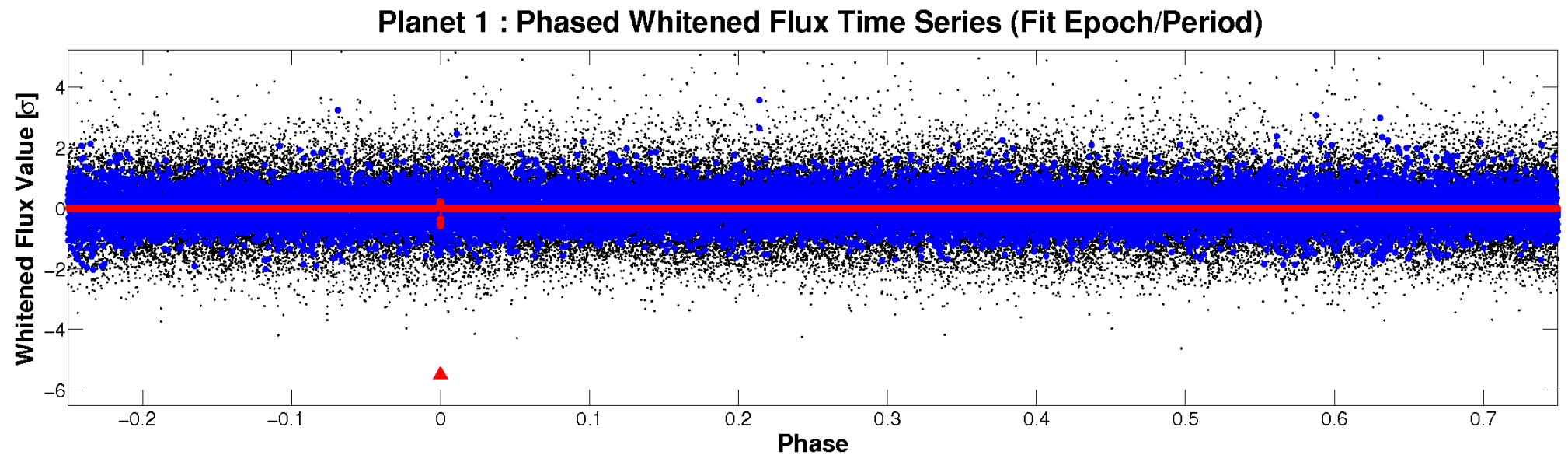
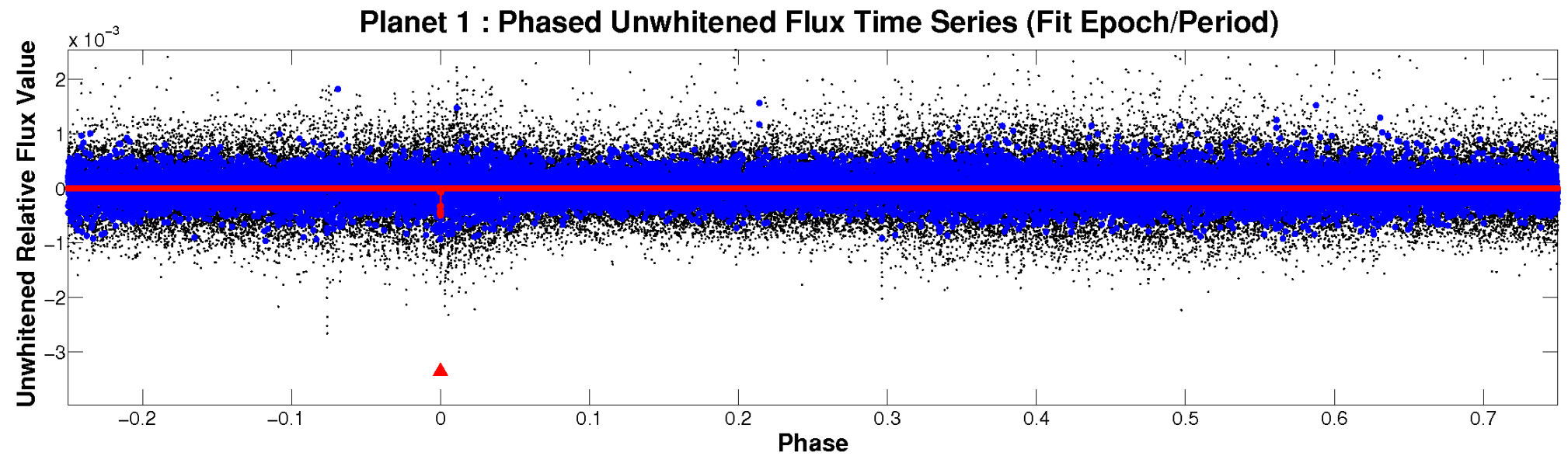


ALT Odd/Even

TCE 005956633-01

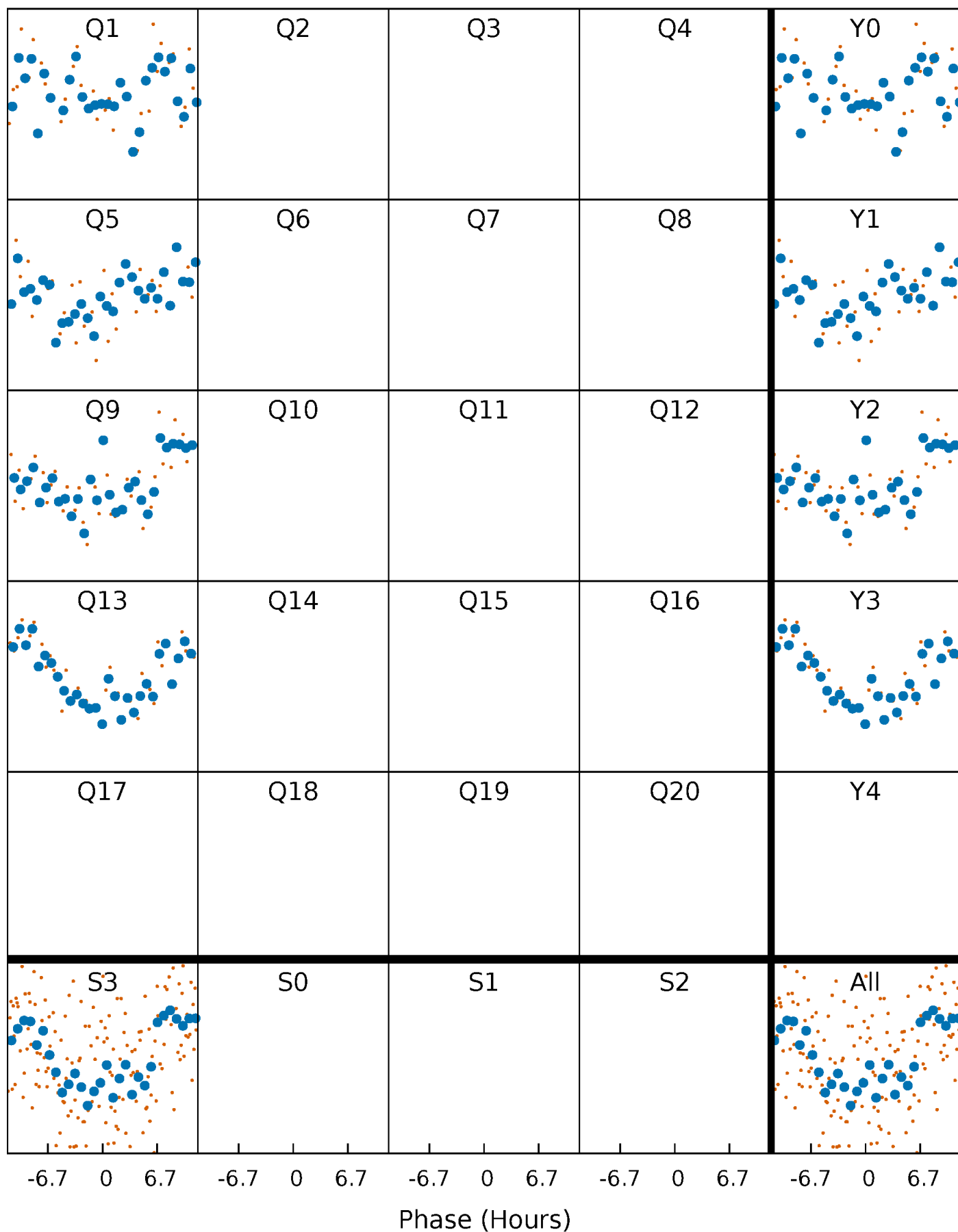


Non-Whitened Vs. Whitened Light Curve



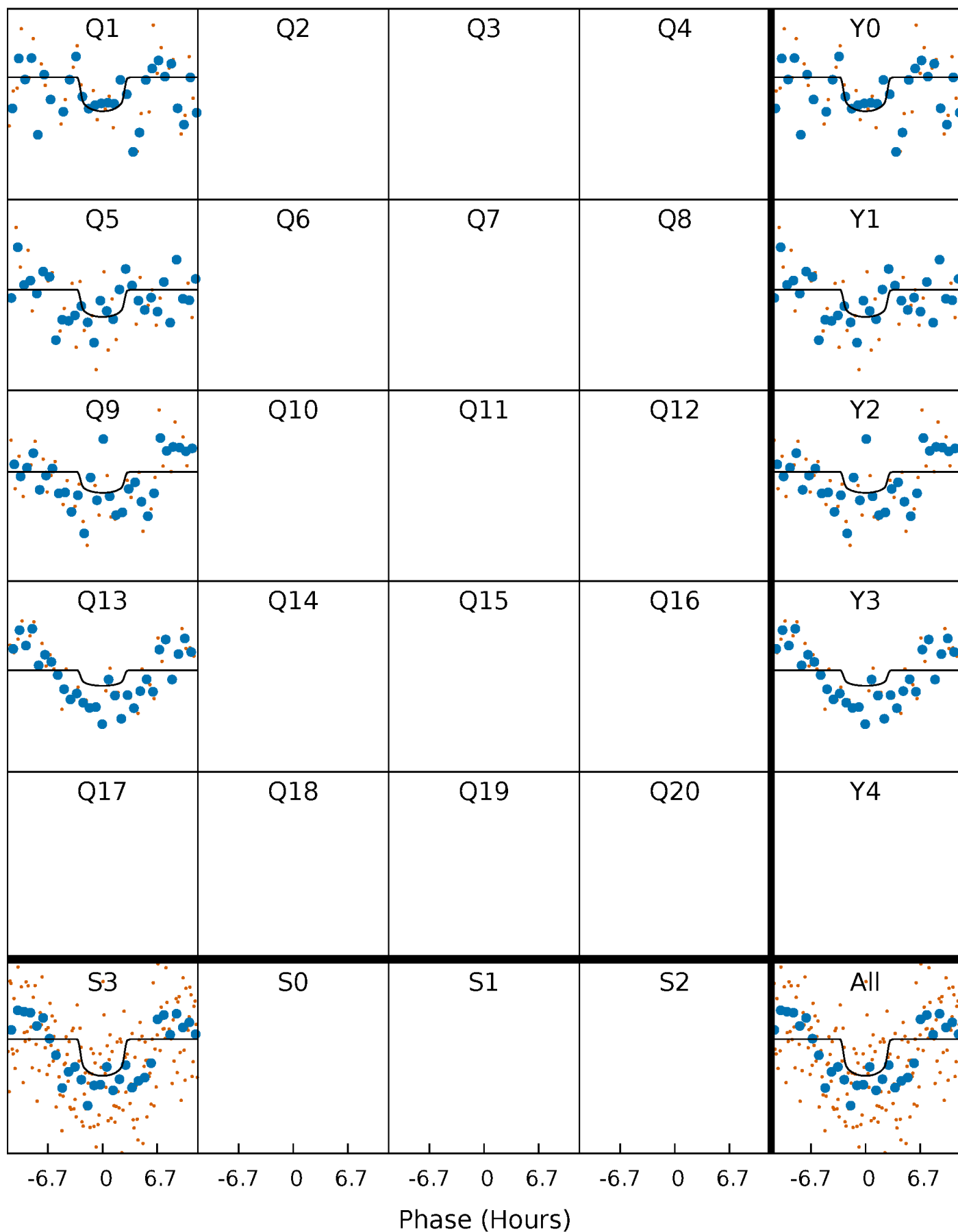
PDC Quarter-Phased Transit Curves

TCE 005956633-01 P=365.909680 Days $T_0=152.526045$ (BKJD)



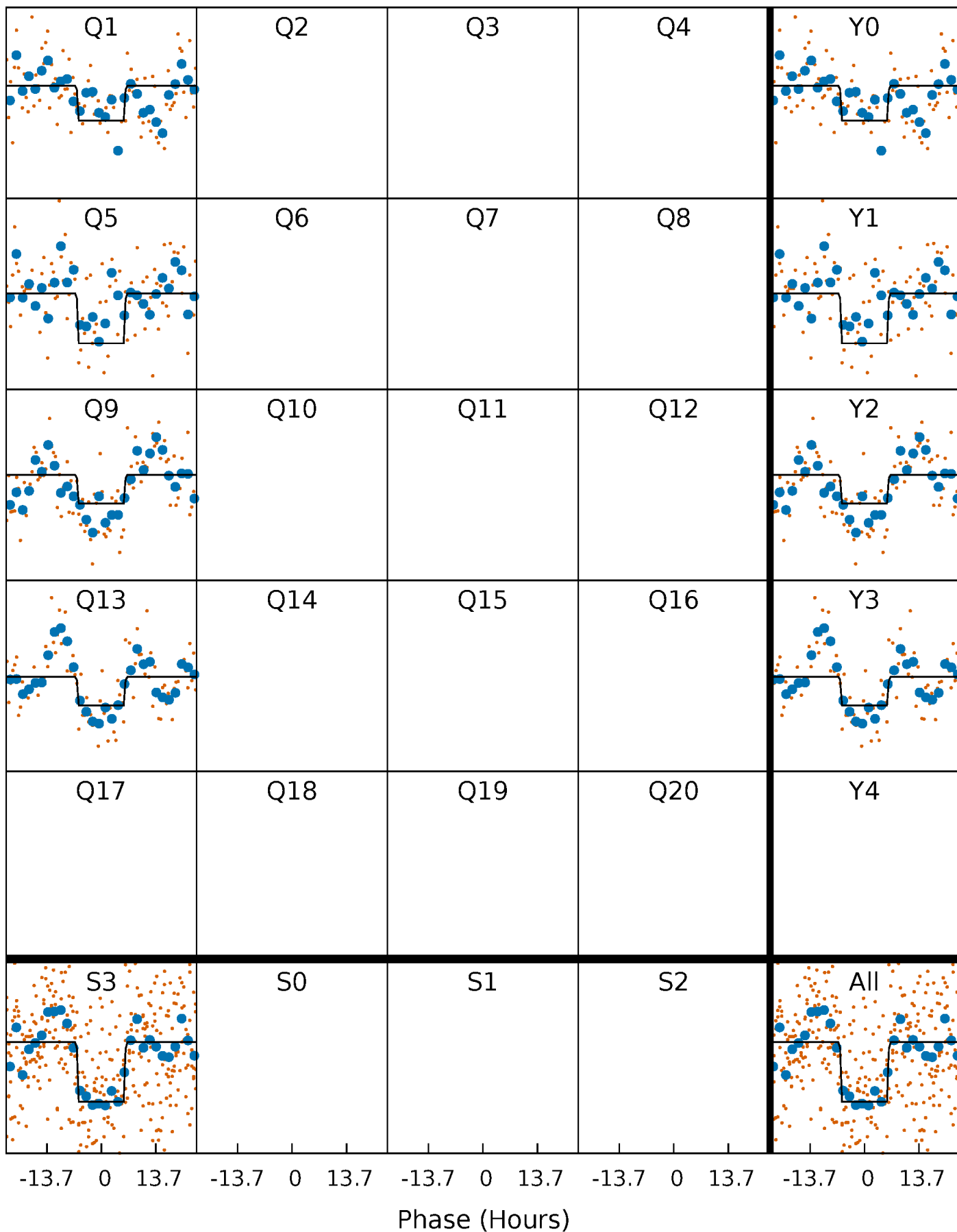
DV Quarter-Phased Transit Curves

TCE 005956633-01 P=365.909680 Days $T_0=152.526045$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

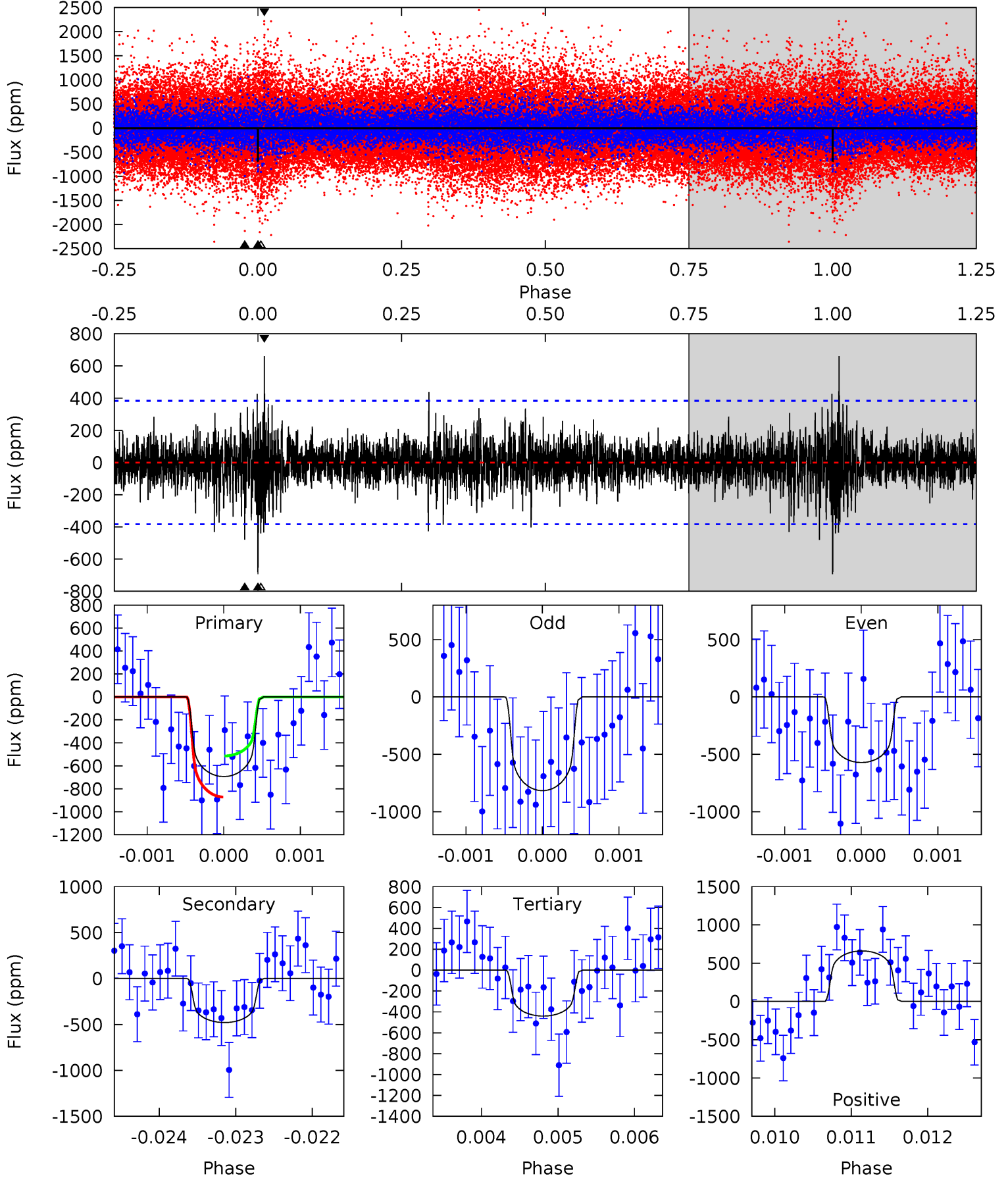
TCE 005956633-01 P=365.924193 Days $T_0=152.509865$ (BKJD)



DV Model-Shift Uniqueness Test

005956633-01, P = 365.909680 Days, E = 152.526045 Days

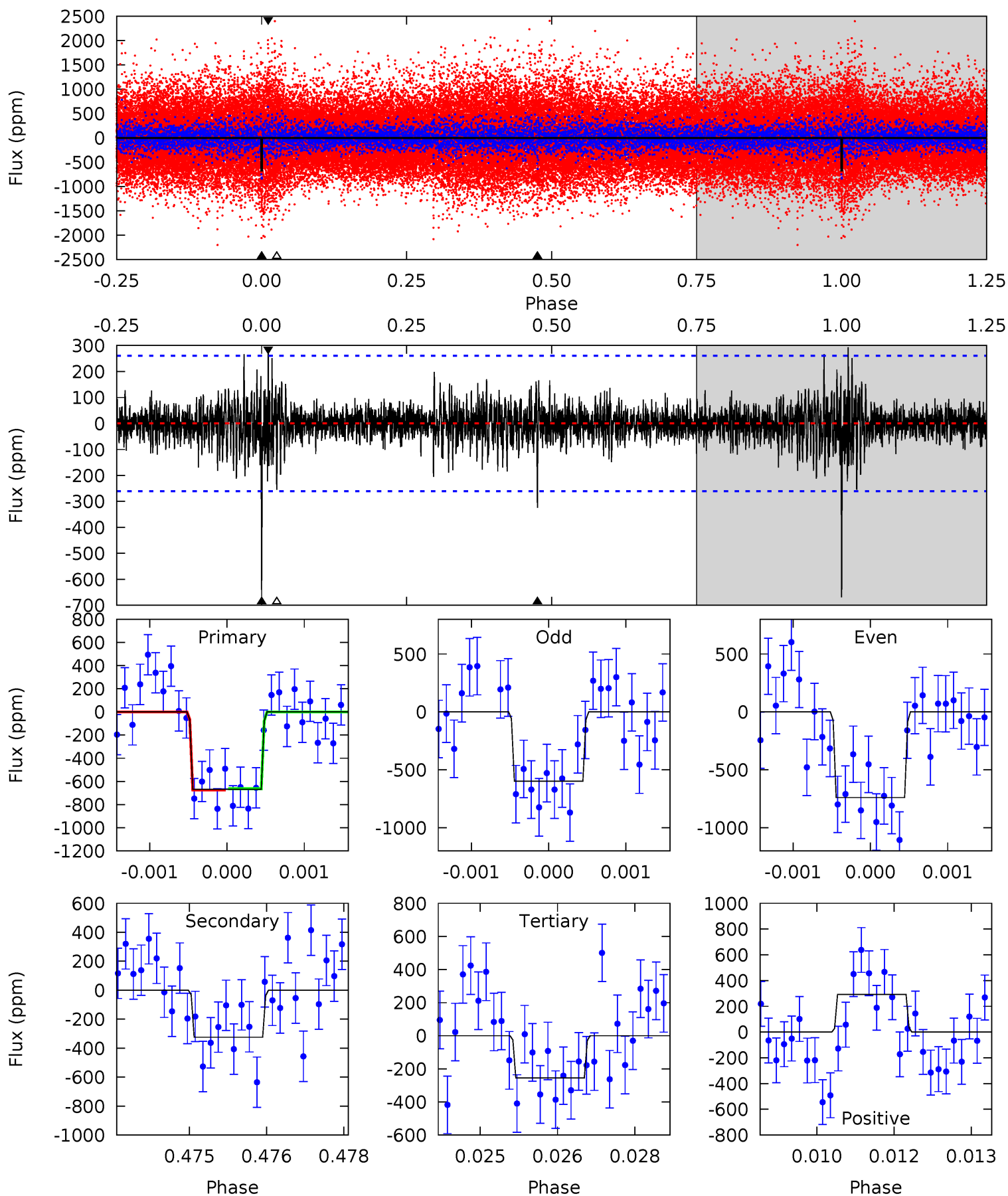
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.97	6.89	6.33	9.49	5.51	3.38	1.41	3.64	0.48	0.56	-2.60	1.76	1.09	0.49	2.58



Alt Model-Shift Uniqueness Test

005956633-01, P = 365.924193 Days, E = 152.509865 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.8	6.70	5.27	6.05	5.38	3.18	1.08	8.53	7.76	1.43	0.65	1.46	1.02	0.30	0.12



Stellar Parameters For KIC 005956633

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5713^{+156}_{-173}	$4.541^{+0.032}_{-0.168}$	$0.070^{+0.250}_{-0.300}$	$0.893^{+0.215}_{-0.072}$	$1.010^{+0.083}_{-0.134}$	$2.000^{+0.429}_{-0.882}$
	+3%/-3%	+1%/-4%	+357%/-429%	+24%/-8%	+8%/-13%	+21%/-44%
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 005956633-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-479 ± 70	$3.13^{+2.70}_{-1.95}$	339^{+19}_{-14}	4859^{+3186}_{-945}	$25785^{+148887}_{-18093}$
Alt.	-325 ± 48	$3.29^{+2.55}_{-2.01}$	339^{+20}_{-13}	4428^{+2426}_{-803}	16213^{+89034}_{-11012}

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 $T_{\text{obs}} \gg T_{\text{max}}$ AND $A_{\text{obs}} \gg 1.0$

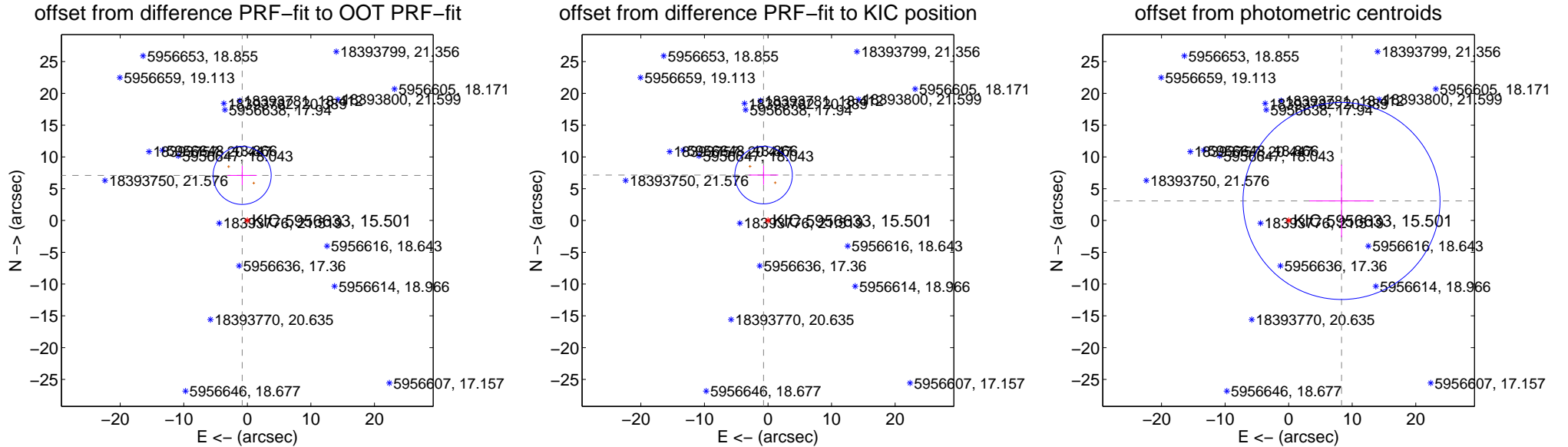
DV Centroid Data

Supplemental centroid analysis for 005956633-01. Kepler magnitude: 15.50. Transit SNR 3.58

There are 0 quarters with good PRF difference image offsets

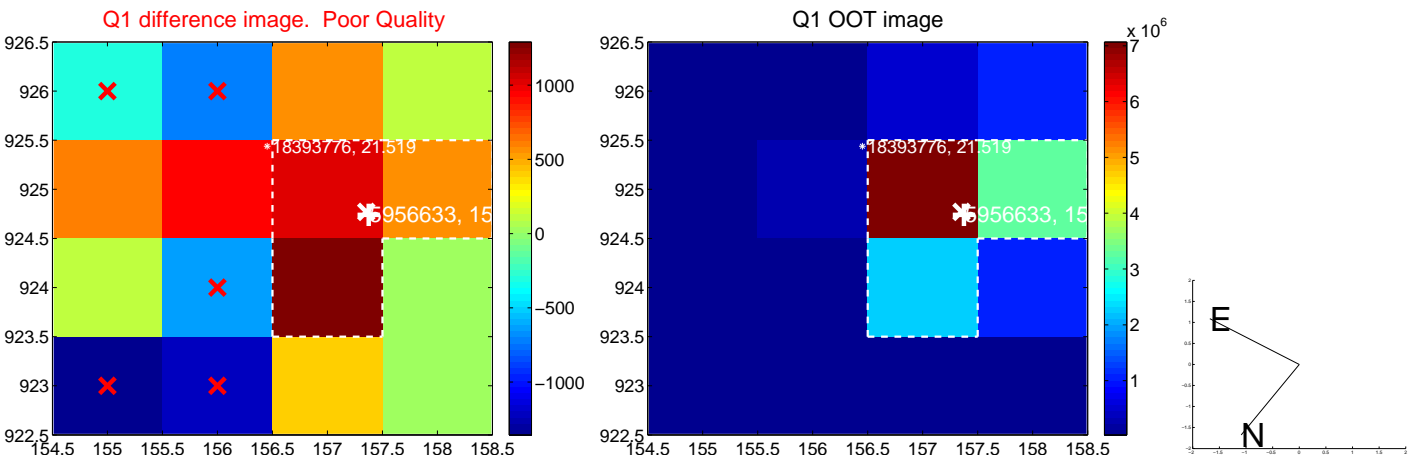
The direct PRF centroid is offset from the target star catalog position by about 0.14 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	7.143 \pm 1.522	4.69	0.815 \pm 2.306	7.096 \pm 1.509
PRF-fit source offset from KIC position	7.178 \pm 1.508	4.76	0.694 \pm 2.309	7.145 \pm 1.499
photometric centroid source offset	8.87 \pm 5.17	1.72	-8.32 \pm 5.09	3.08 \pm 5.71

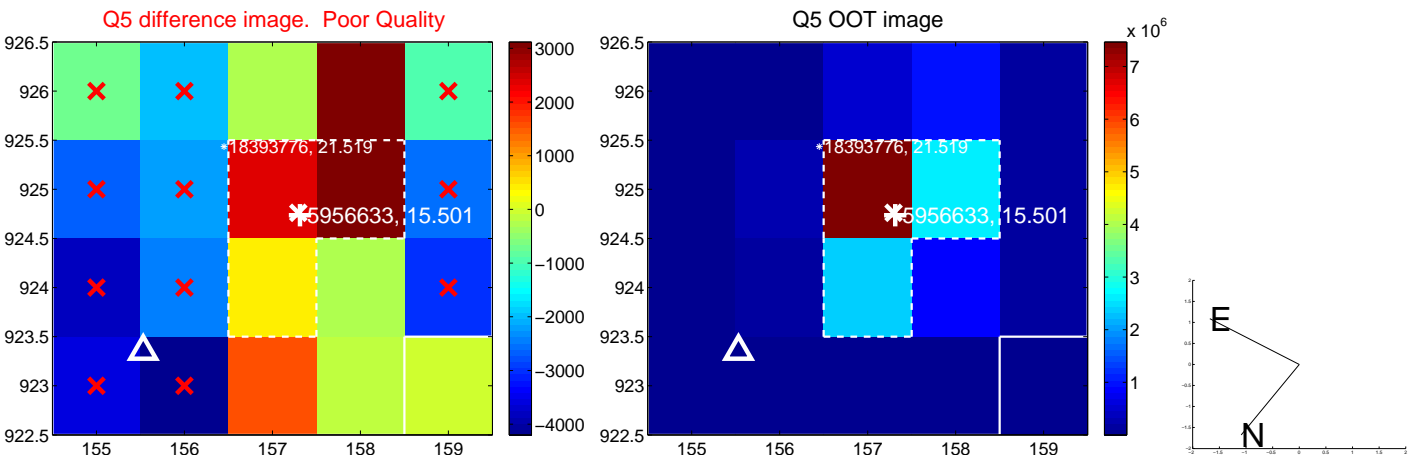


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

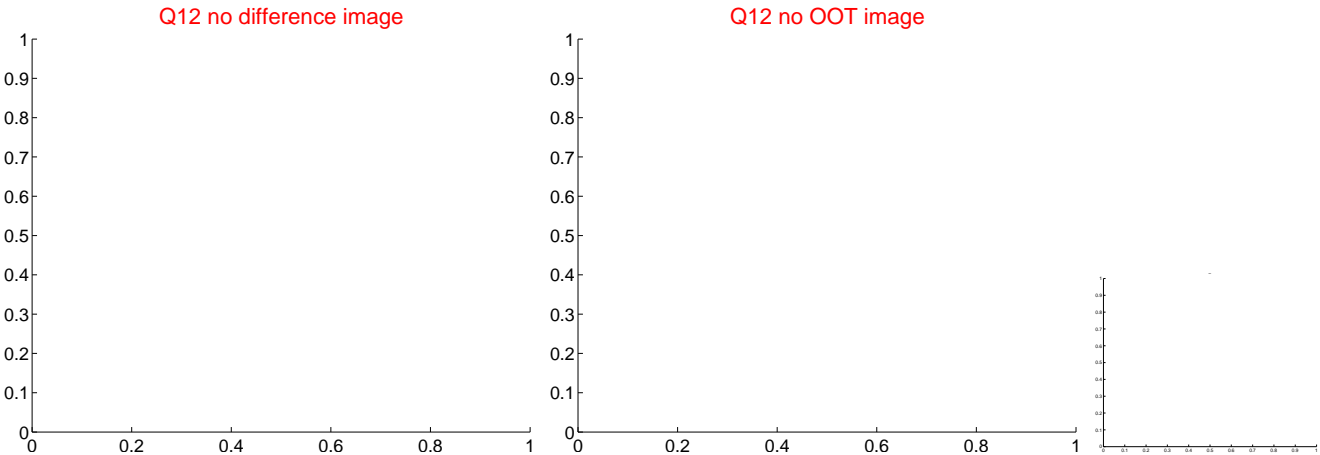
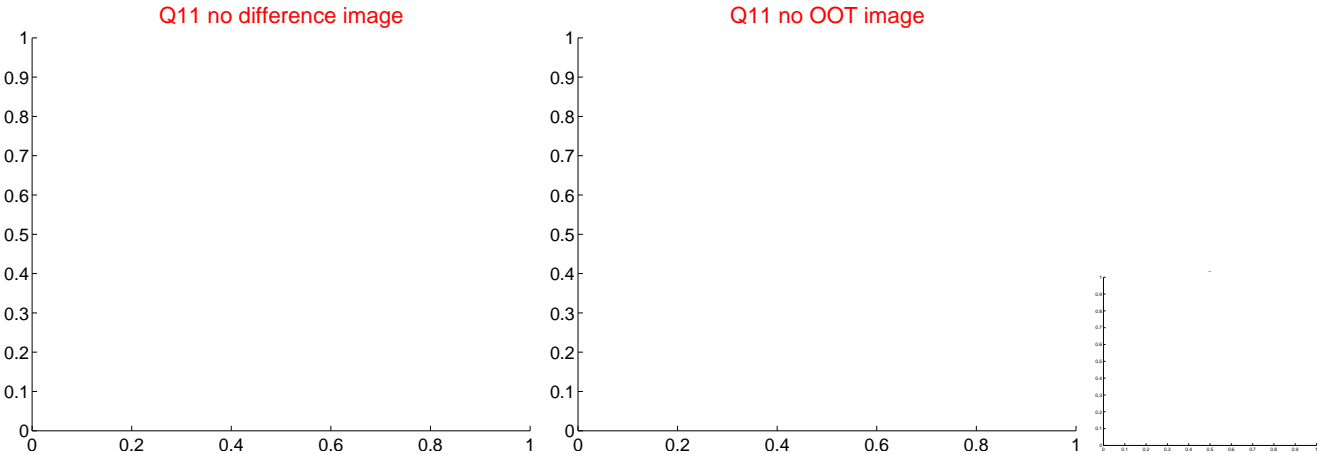
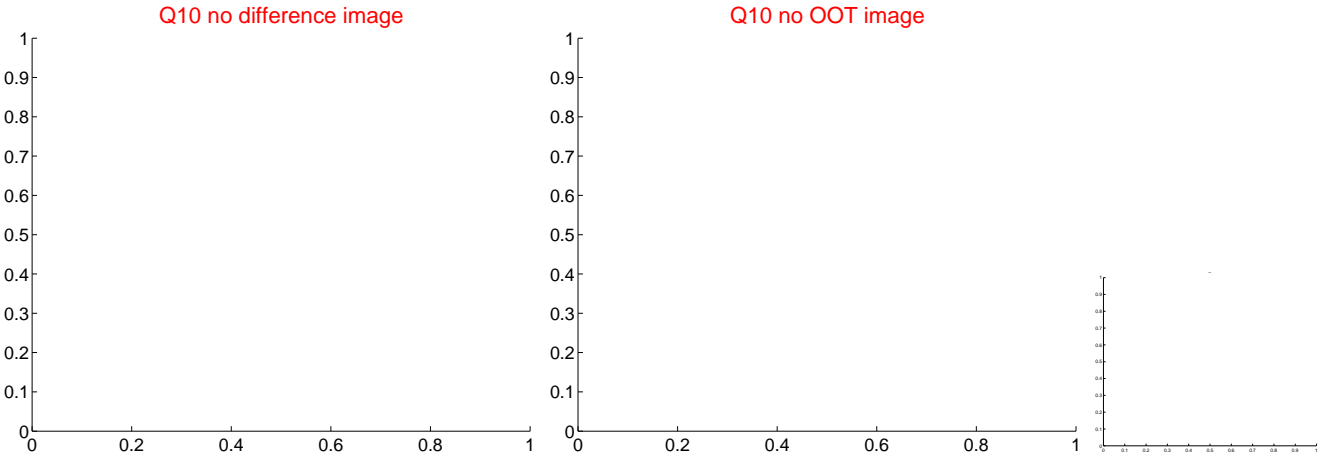
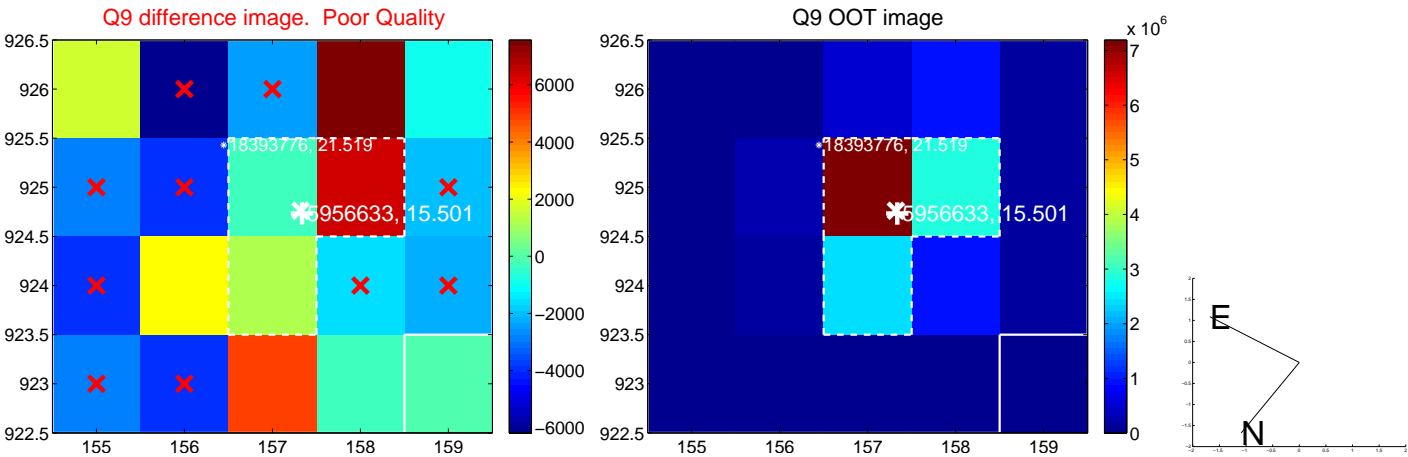
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.



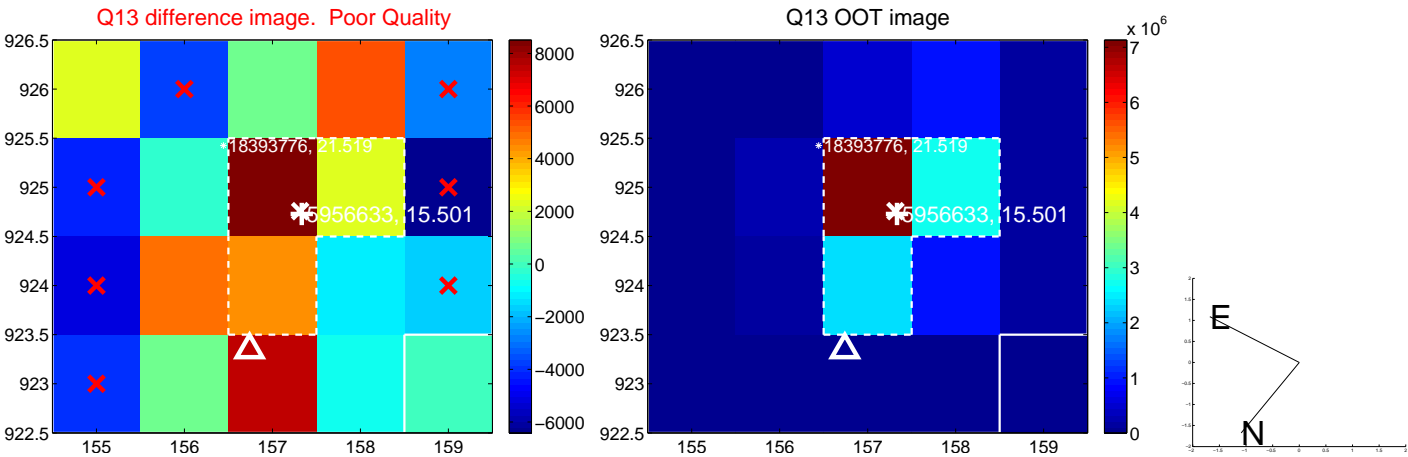
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.



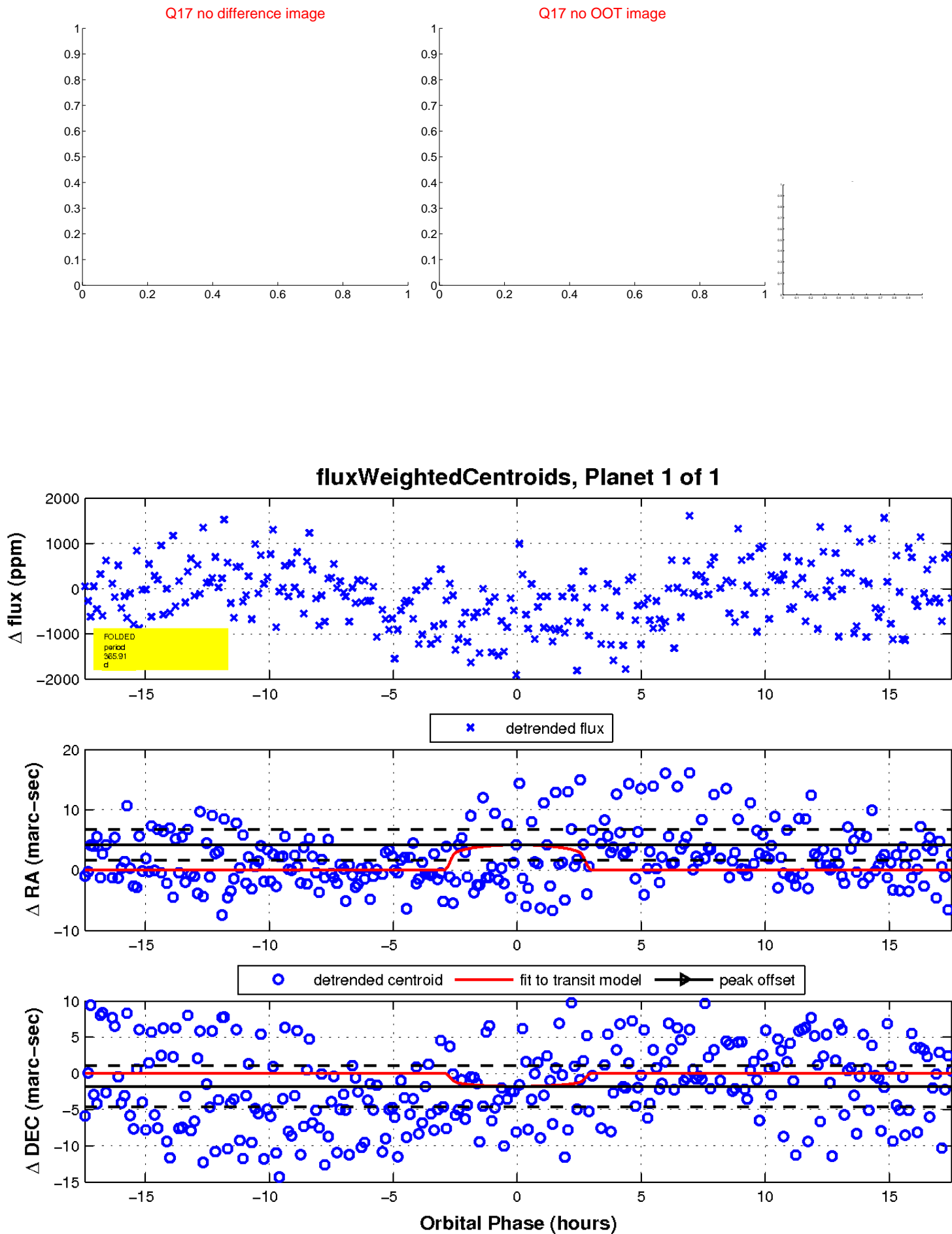
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.



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

