

KIC 005957211

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})
005957211-01	OBS	No	357.895759	166.716471	2535.9	24.792	9.2	9.6	0.96	6184	8.89	1.21

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005957211-01	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.

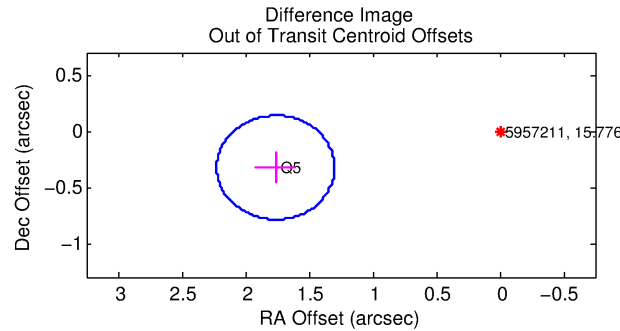
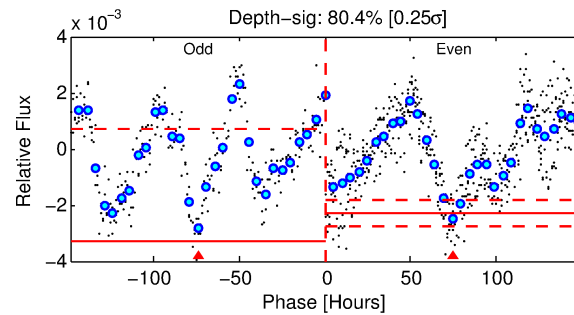
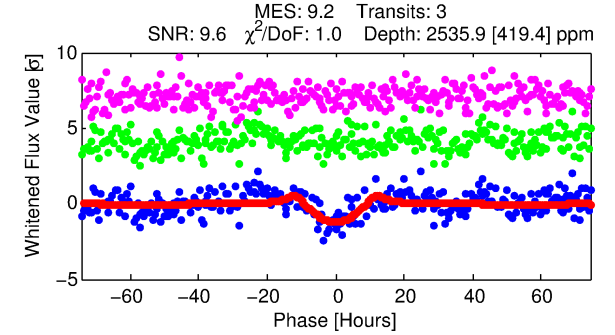
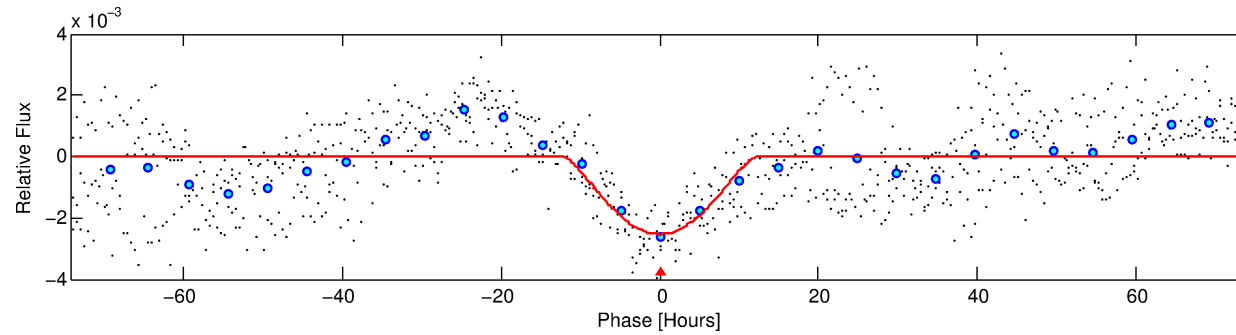
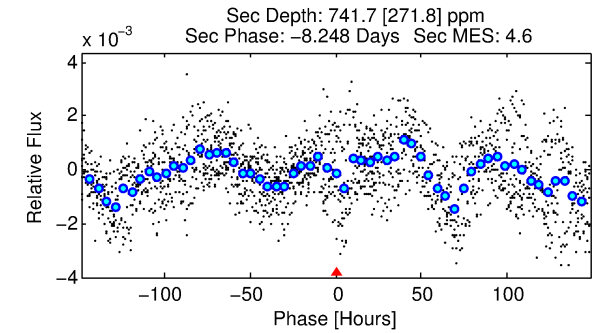
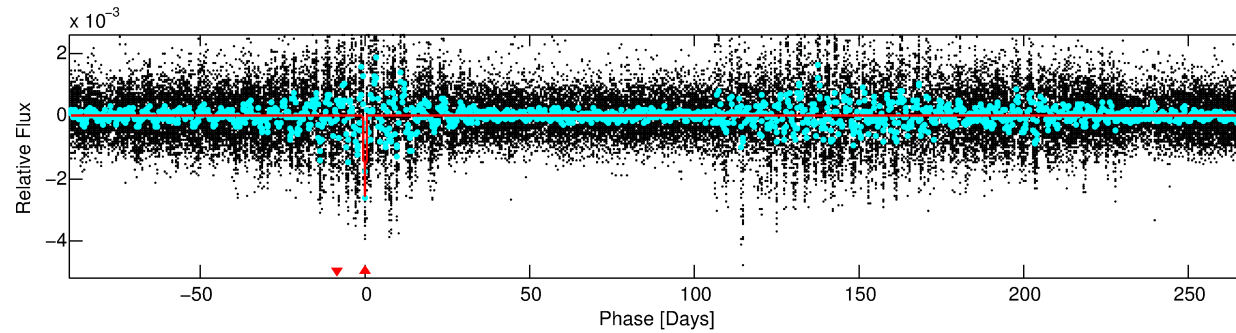
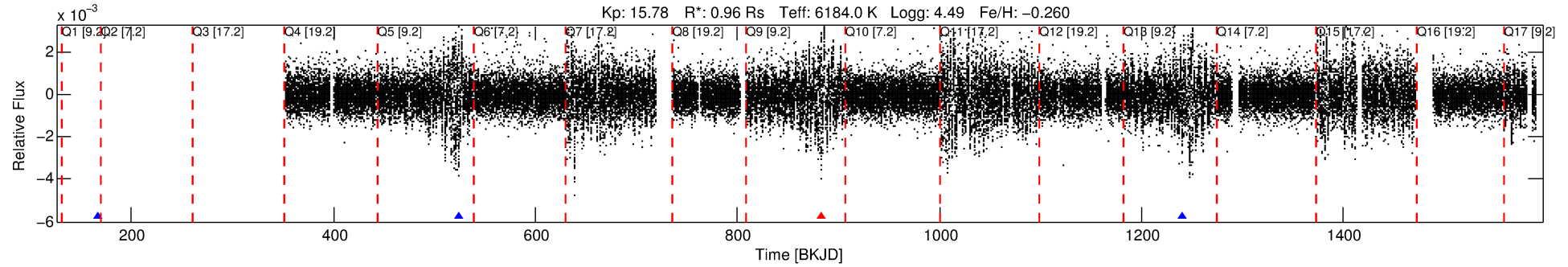
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005957211-01

No Significant Match Found

DV One-Page Summary

KIC: 5957211 Candidate: 1 of 1 Period: 357.896 d



DV Fit Results:

Period = 357.89576 [0.02825] d
Epoch = 166.7165 [0.0614] BKJD
Rp/R* = 0.0849 [0.1698]
a/R* = 46.59 [19.75]
b = 1.00 [0.25]
Seff = 1.21 [0.51]
Teq = 268 [28] K
Rp = 8.89 [17.99] Re
a = 0.9971 [0.2684] AU
Ag = 5138.15 [20737.28] [0.25σ]
Teff = 3502 [3520] K [0.92σ]

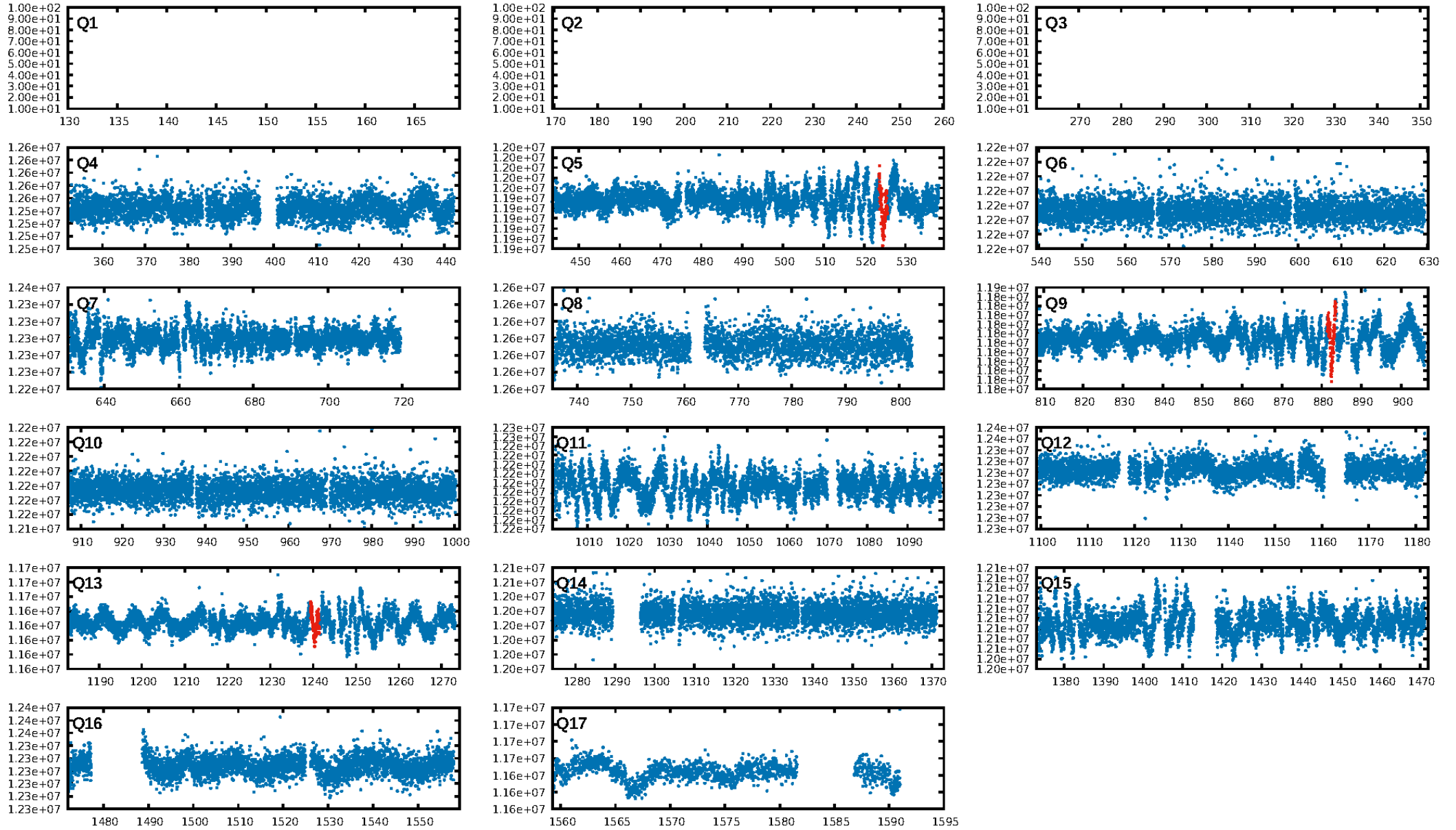
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 38.6%
ModelChiSquareGoF-sig: 99.6%
Bootstrap-pfa: 7.04e-10
RollingBand-fgt: 0.67 [2/3]
GhostDiagnostic-chr: -3.942
Centroid-sig: 18.5%
Centroid-so: 1.807 arcsec [1.01σ]
OotOffset-rm: 1.792 arcsec [11.62σ]
KicOffset-rm: 1.570 arcsec [10.18σ]
OotOffset-st: 0/0/0/1 [1]
KicOffset-st: 0/0/0/1 [1]
DiffImageQuality-fgm: 0.00 [0/1]
DiffImageOverlap-fno: 1.00 [2/2]

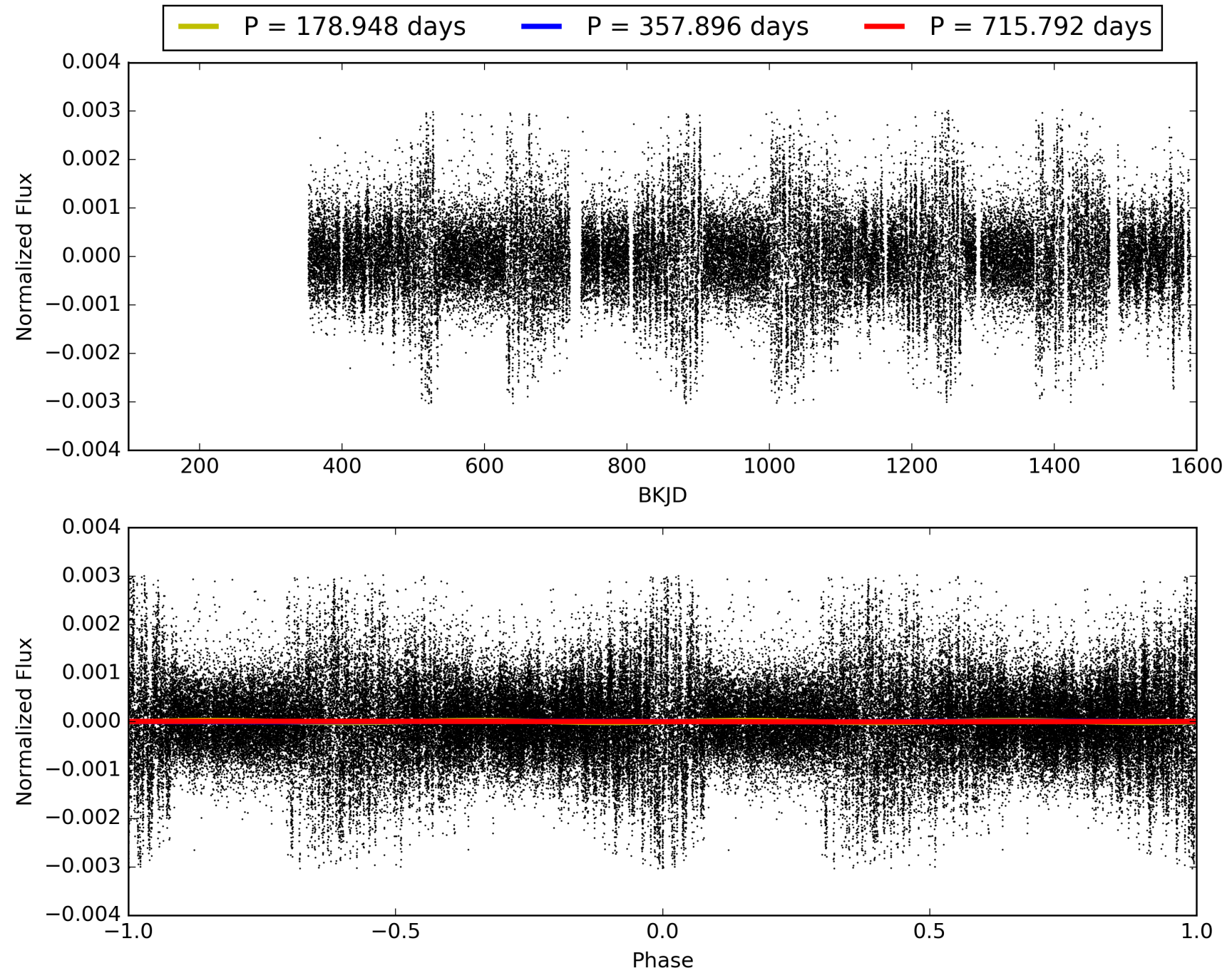
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 15:14:42 Z

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

TCE 005957211-01, PDC Light Curves

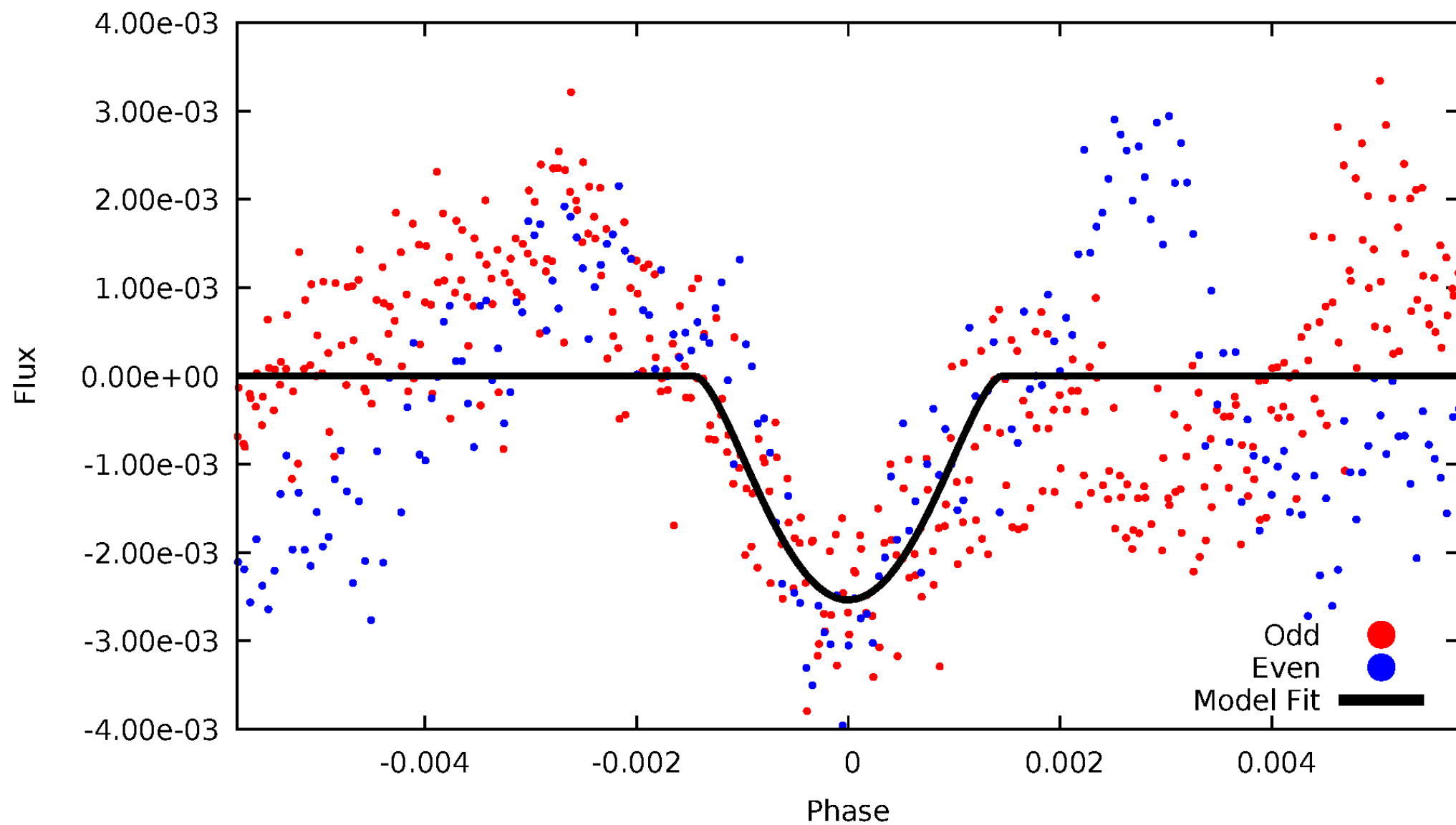


TCE 005957211-01



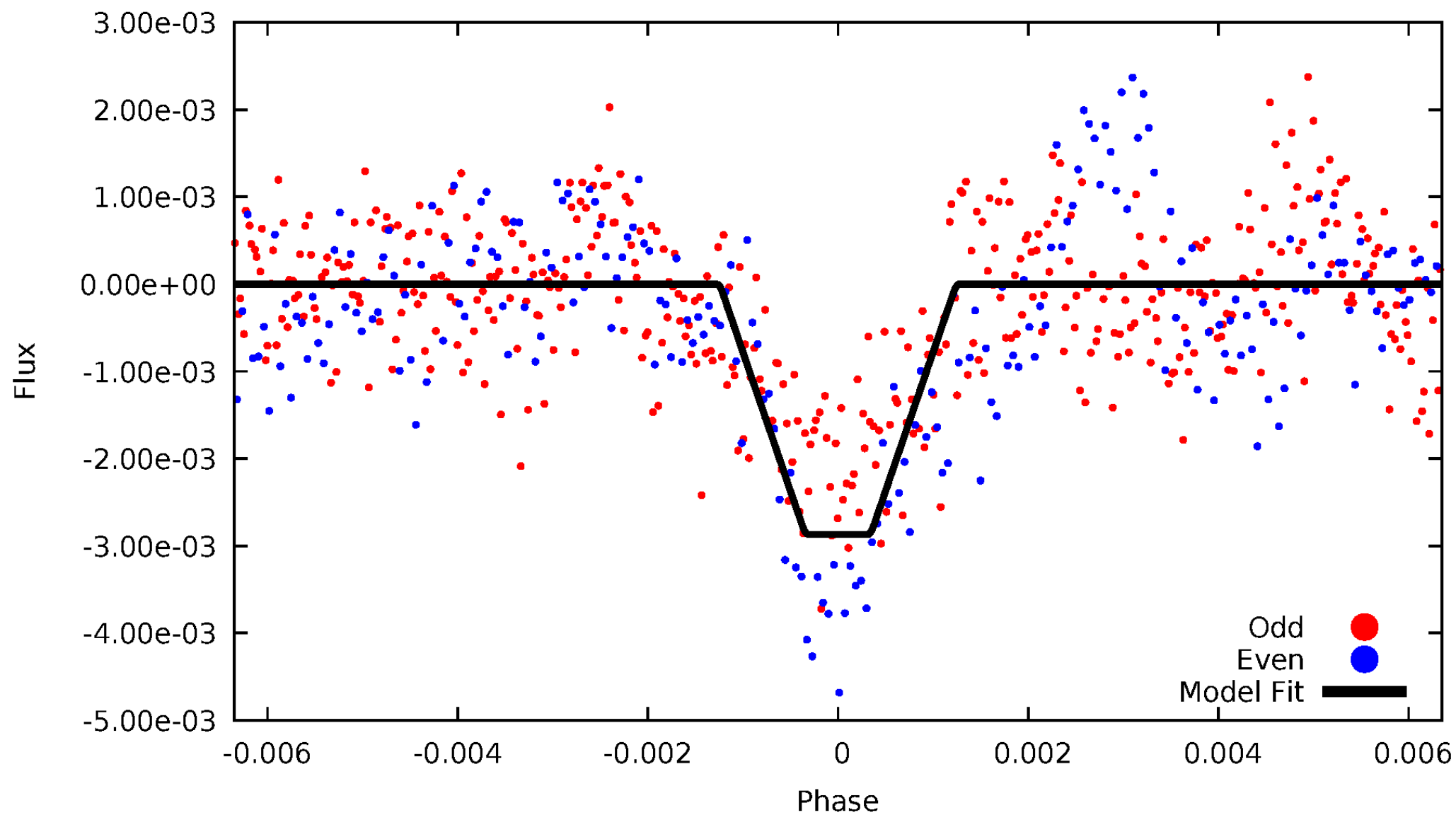
DV Odd/Even

TCE 005957211-01

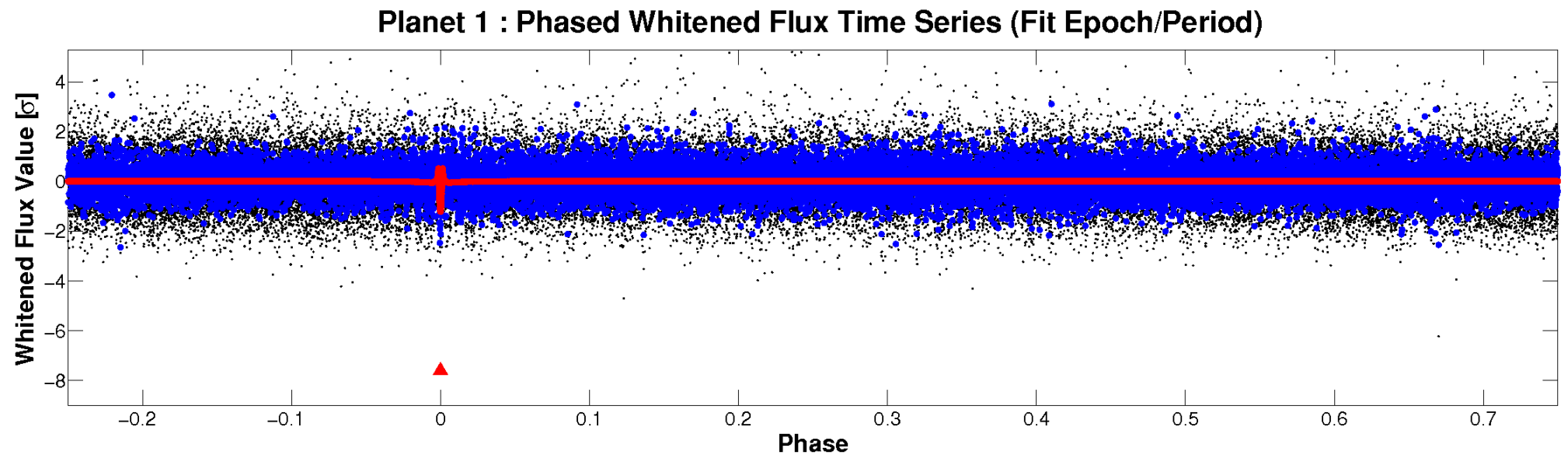
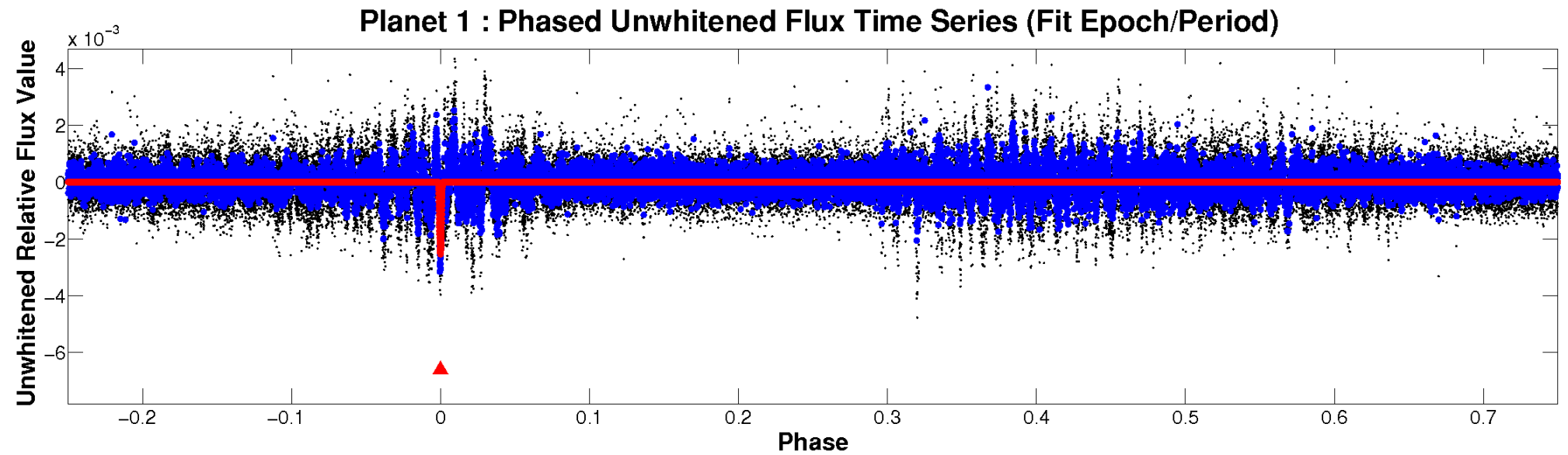


ALT Odd/Even

TCE 005957211-01

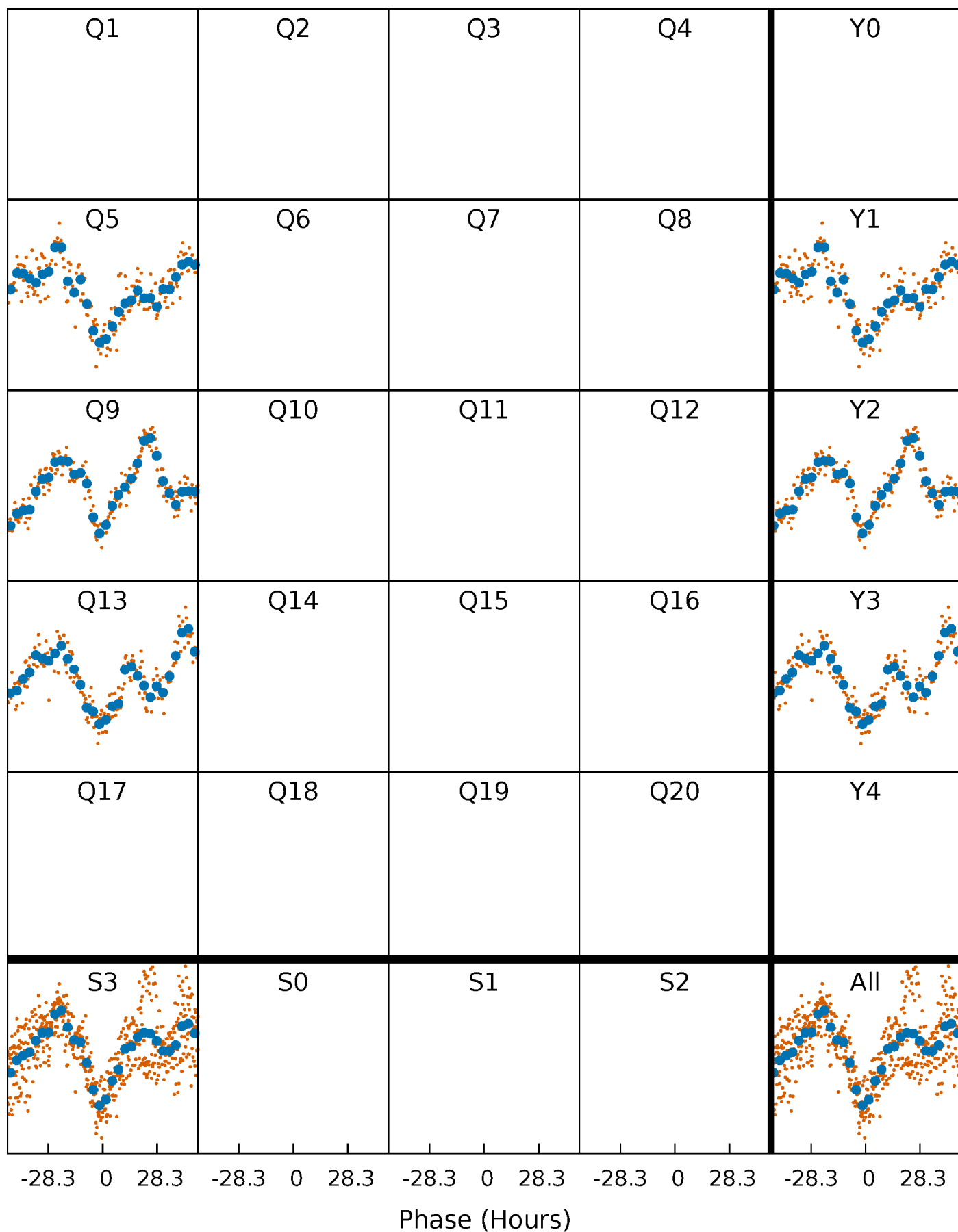


Non-Whitened Vs. Whitened Light Curve



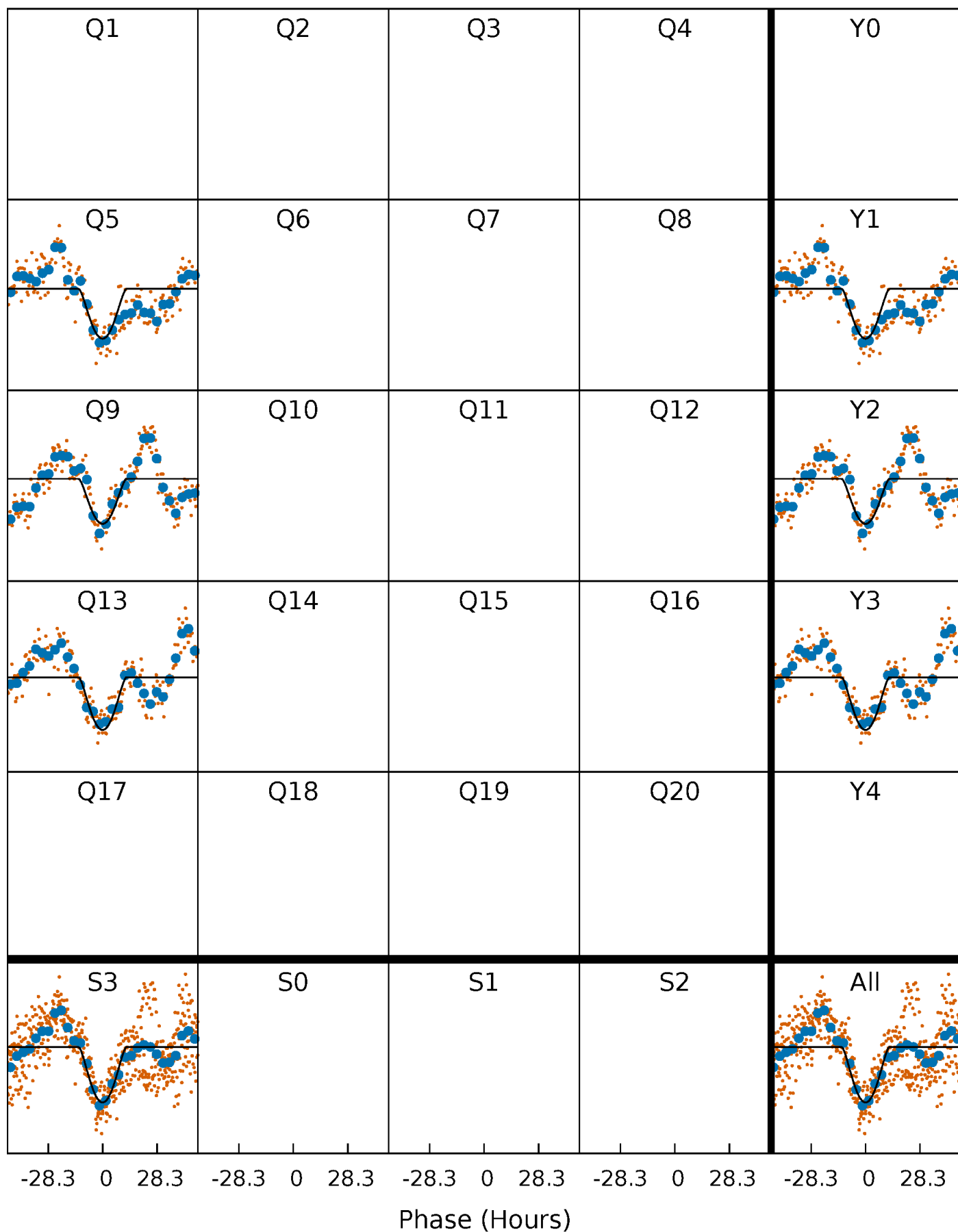
PDC Quarter-Phased Transit Curves

TCE 005957211-01 P=357.895759 Days $T_0=166.716471$ (BKJD)



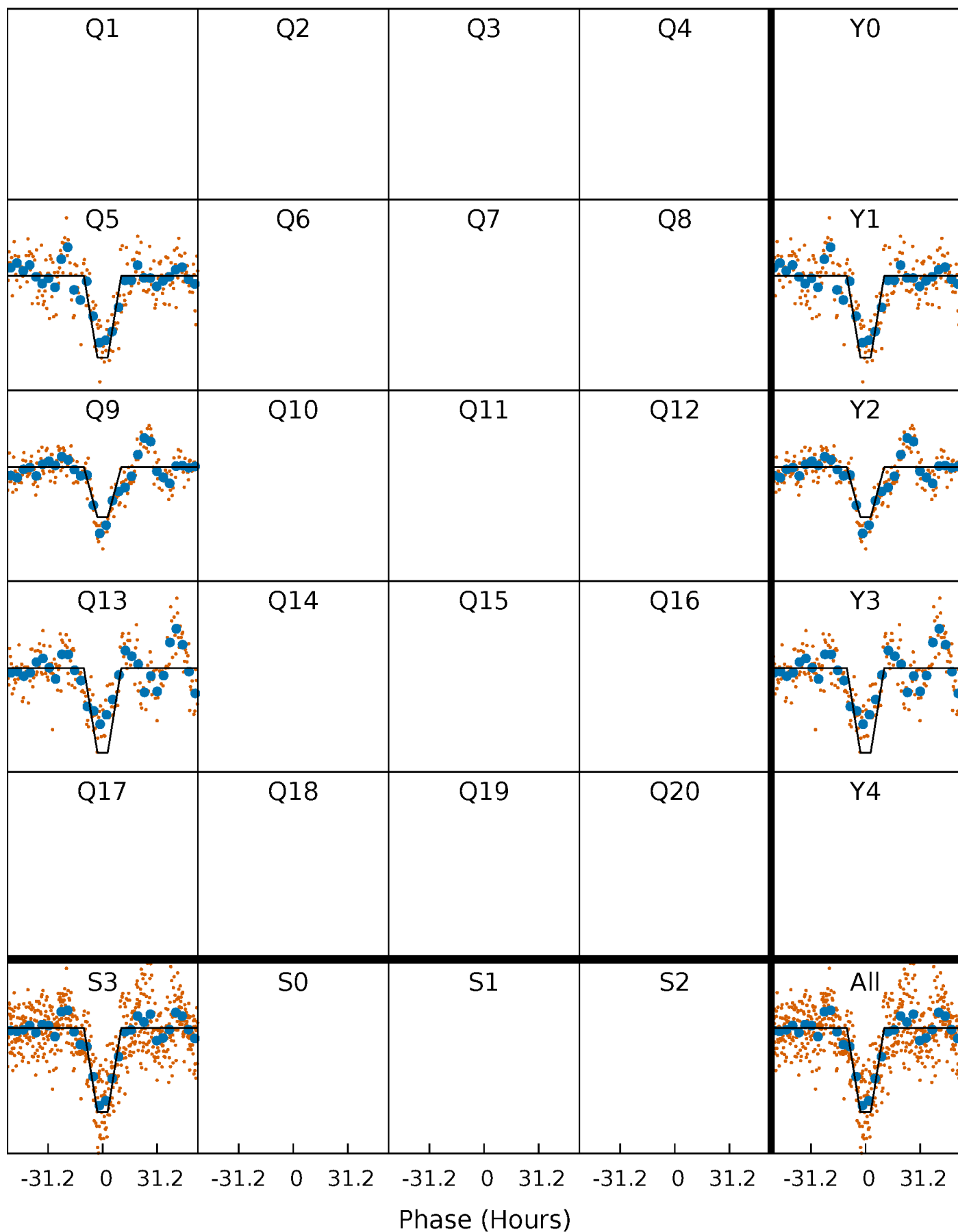
DV Quarter-Phased Transit Curves

TCE 005957211-01 P=357.895759 Days $T_0=166.716471$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

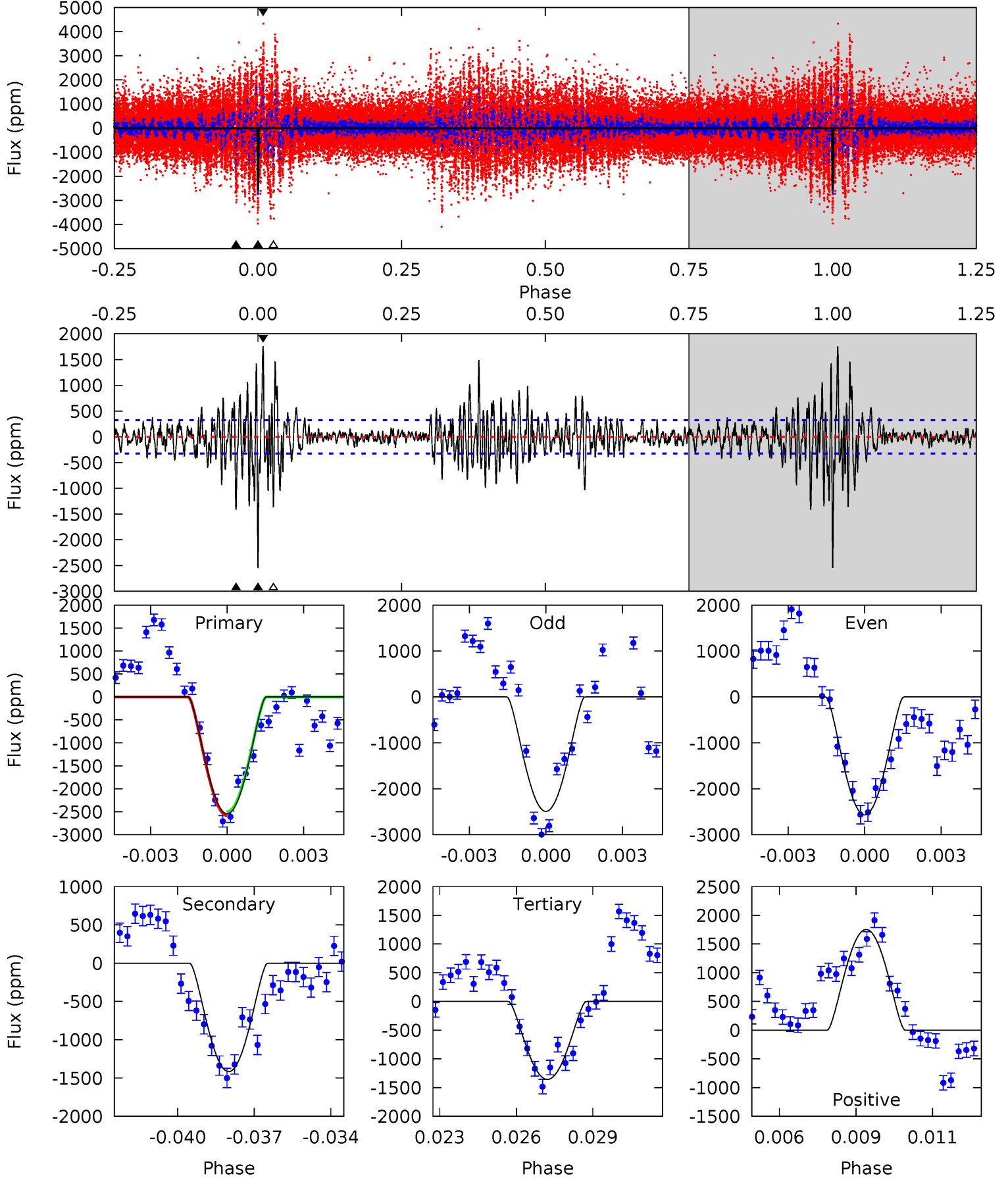
TCE 005957211-01 P=357.948293 Days $T_0=166.586867$ (BKJD)



DV Model-Shift Uniqueness Test

005957211-01, P = 357.895759 Days, E = 166.716471 Days

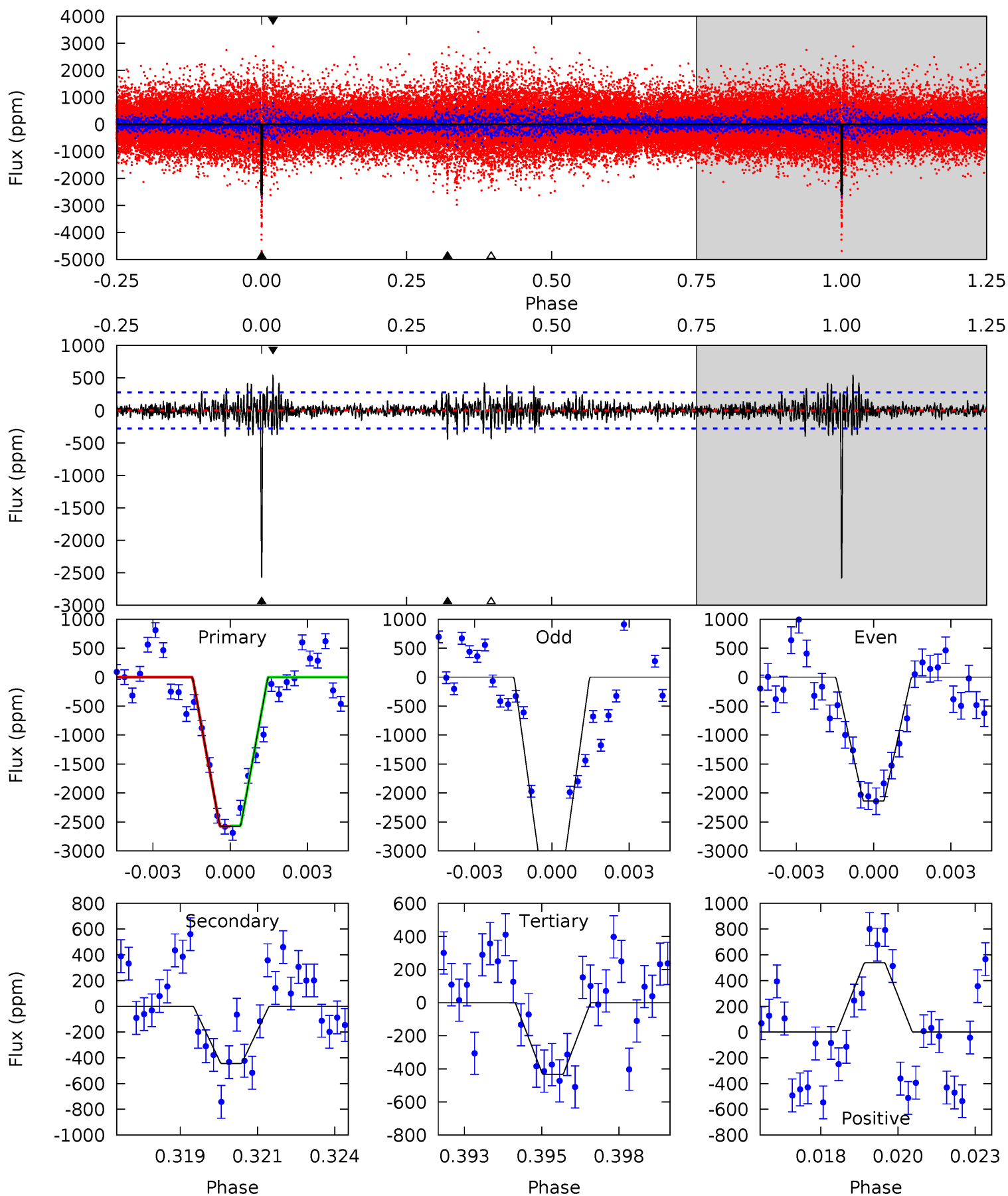
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
41.3	23.0	22.0	28.5	5.26	2.98	5.06	19.3	12.8	0.95	-5.48	0.58	1.02	0.41	0.66



Alt Model-Shift Uniqueness Test

005957211-01, P = 357.948293 Days, E = 166.586867 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
49.1	8.49	8.26	10.3	5.28	3.02	1.78	40.8	38.8	0.23	-1.78	11.8	1.07	0.17	0.10



Stellar Parameters For KIC 005957211

	$T_{\text{eff}}(K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6184^{+197}_{-241}	$4.488^{+0.054}_{-0.216}$	$-0.260^{+0.250}_{-0.300}$	$0.959^{+0.305}_{-0.102}$	$1.031^{+0.144}_{-0.144}$	$1.647^{+0.474}_{-0.876}$
	+3%/-4%	+1%/-5%	+96%/-115%	+32%/-11%	+14%/-14%	+29%/-53%
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 005957211-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-1417 ± 62	$17.63^{+15.80}_{-11.35}$	383^{+26}_{-22}	3465^{+1603}_{-549}	2392^{+16815}_{-1710}
Alt.	-445 ± 52	$15.50^{+15.06}_{-11.16}$	382^{+29}_{-20}	3053^{+1530}_{-518}	997^{+10645}_{-745}

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 $A_{obs} \gg 1.0$

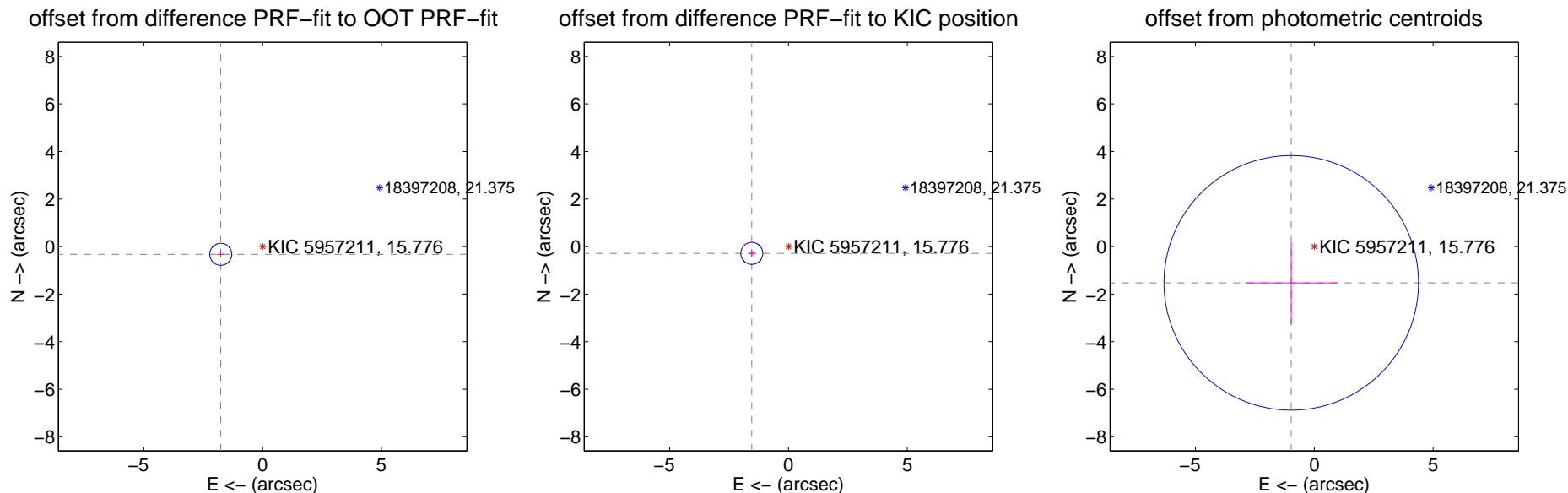
DV Centroid Data

Supplemental centroid analysis for 005957211-01. Kepler magnitude: 15.78. Transit SNR 9.59

There are 0 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.22 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.792 ± 0.154	11.62	1.763 ± 0.155	-0.326 ± 0.136
PRF-fit source offset from KIC position	1.570 ± 0.154	10.18	1.544 ± 0.155	-0.287 ± 0.136
photometric centroid source offset	1.81 ± 1.78	1.01	0.97 ± 1.93	-1.53 ± 1.72

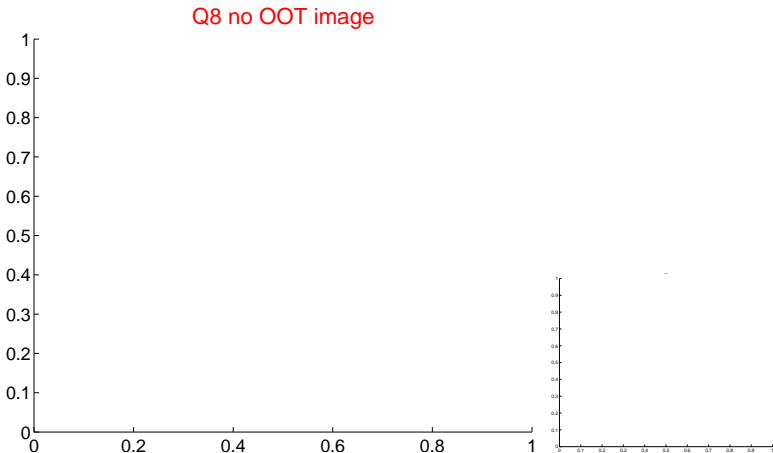
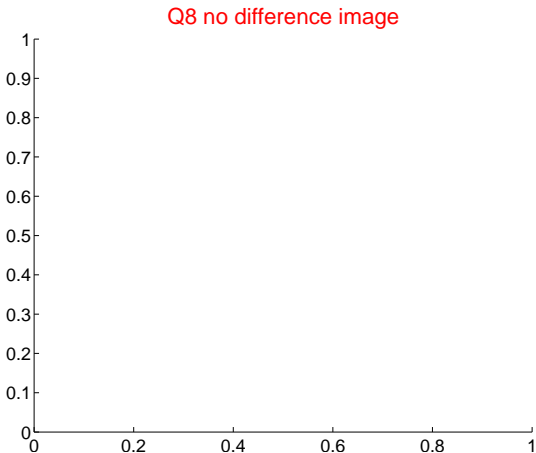
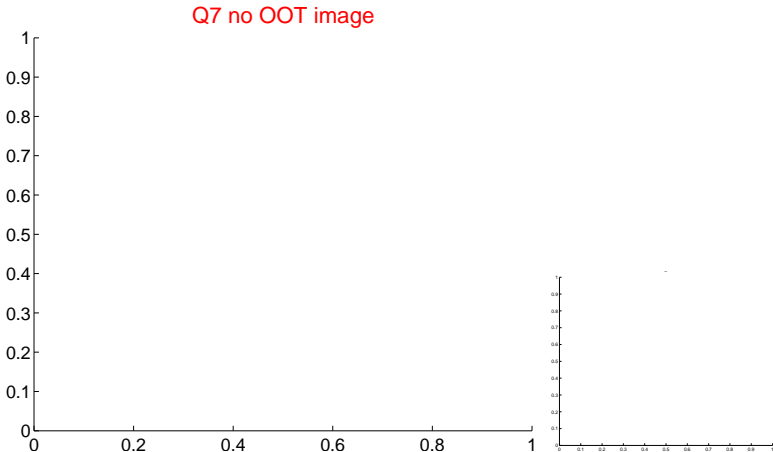
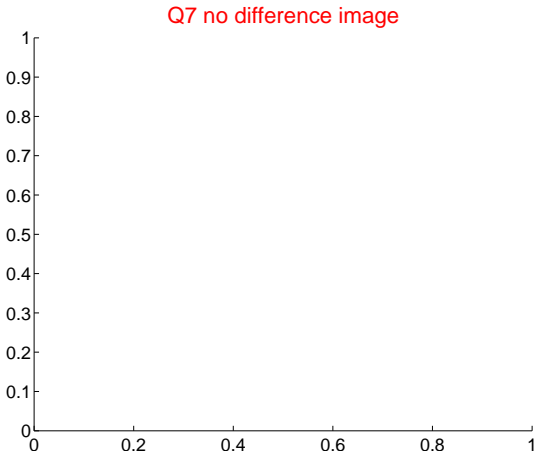
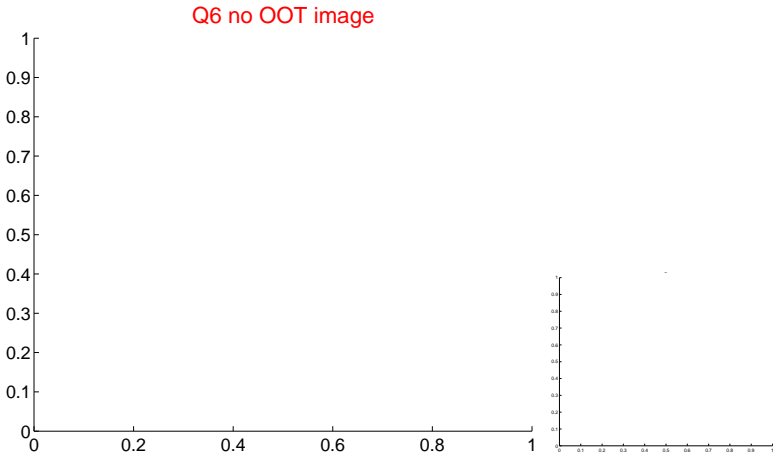
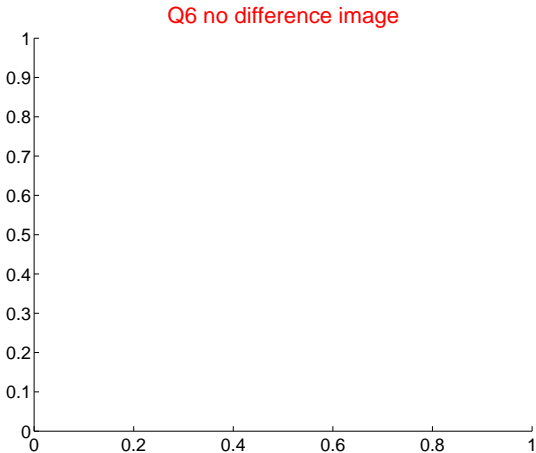
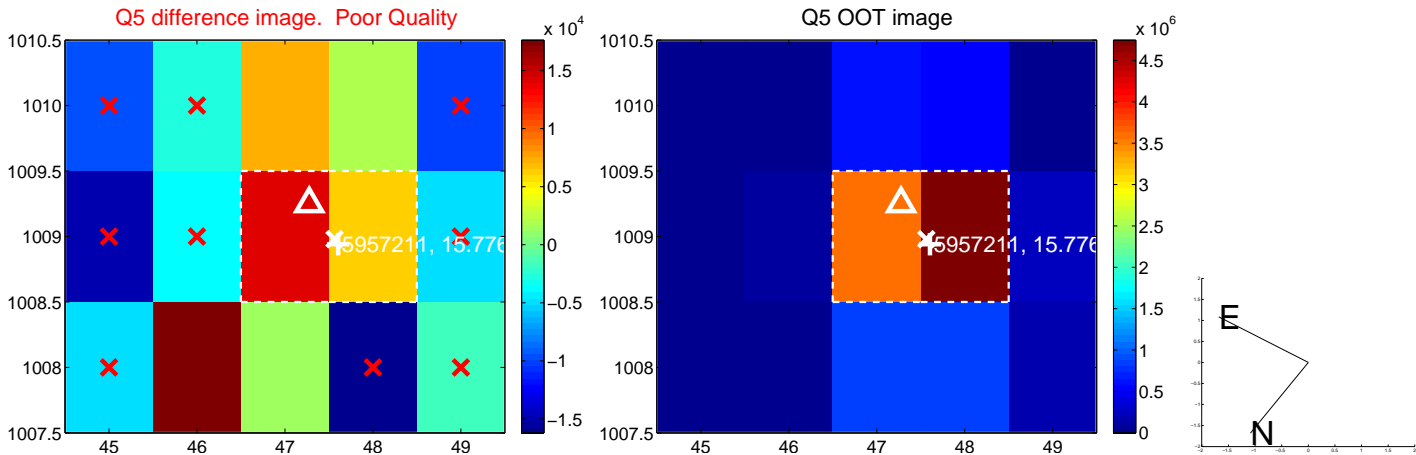


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

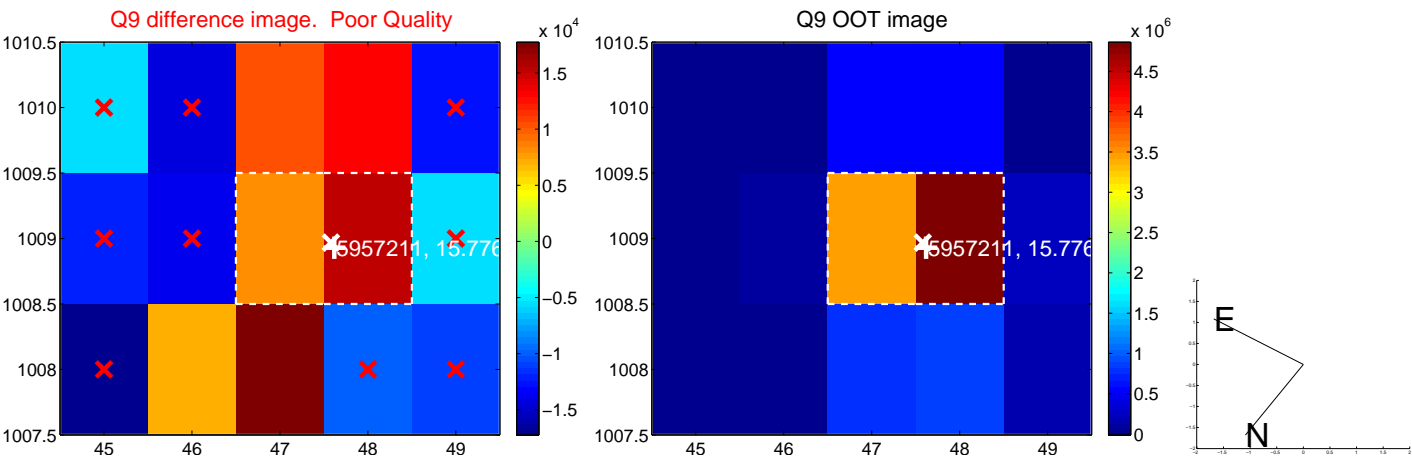
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



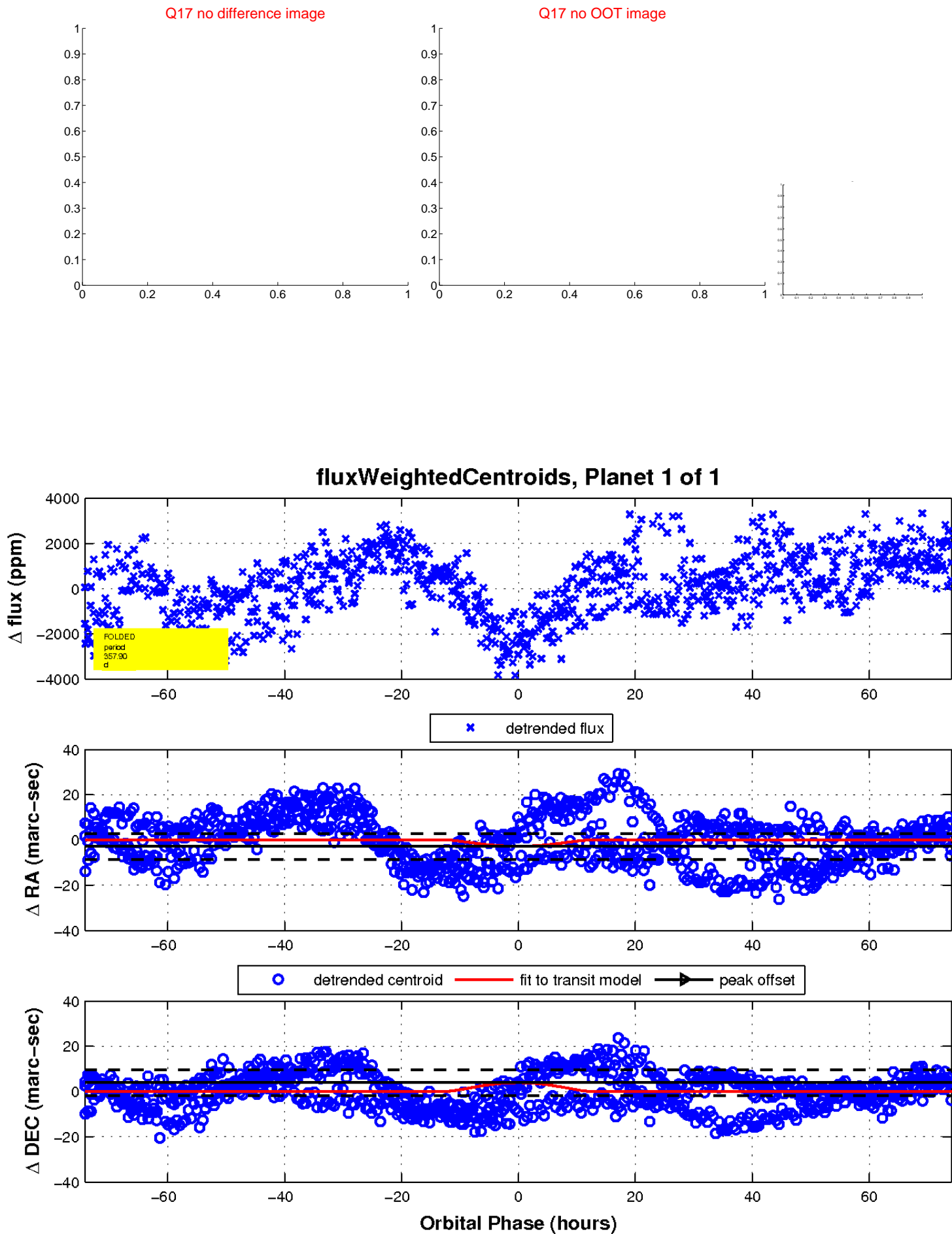
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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.



UKIRT Image

Declination

