

KIC 006757637

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})
006757637-01	OBS	No	229.669861	280.467507	162.8	3.192	9.1	9.5	1.68	5442	2.56	4.21

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006757637-01	OBS	FP	0.01	1	0	0	0	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.

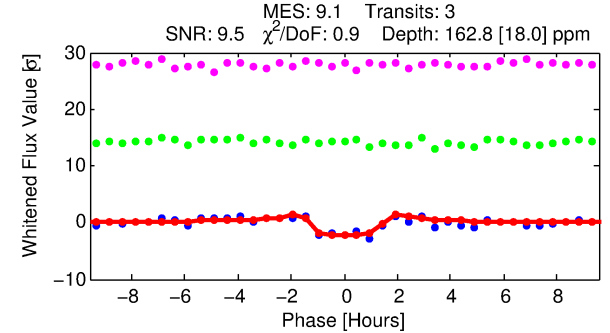
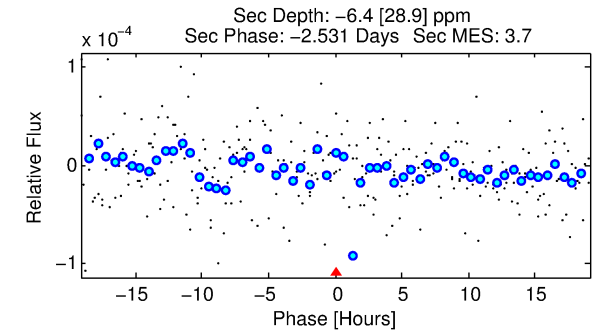
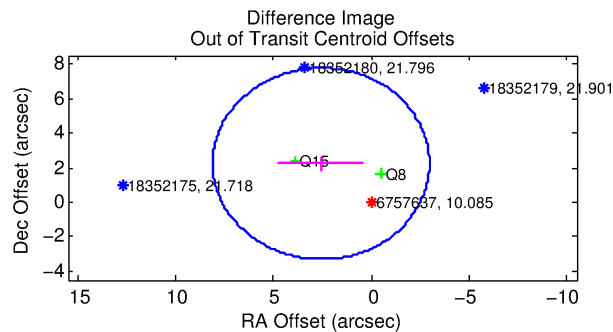
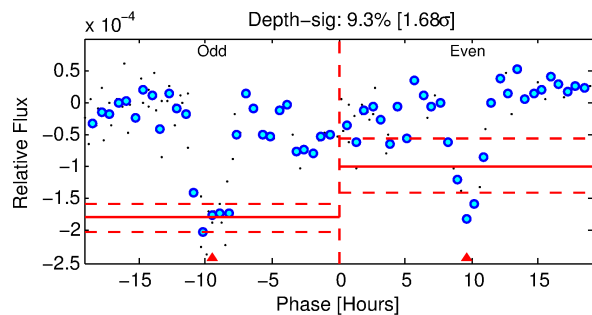
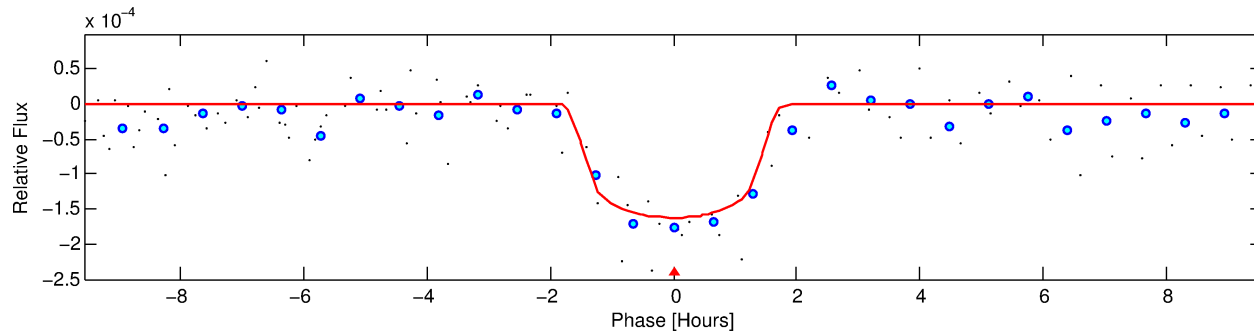
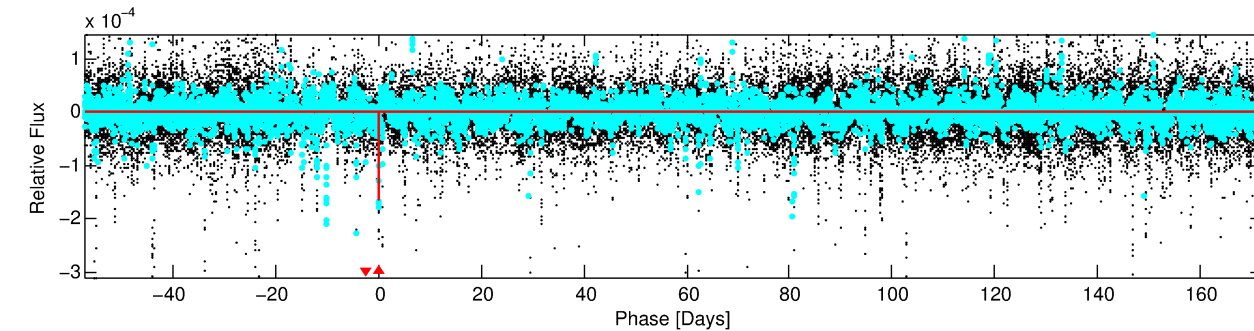
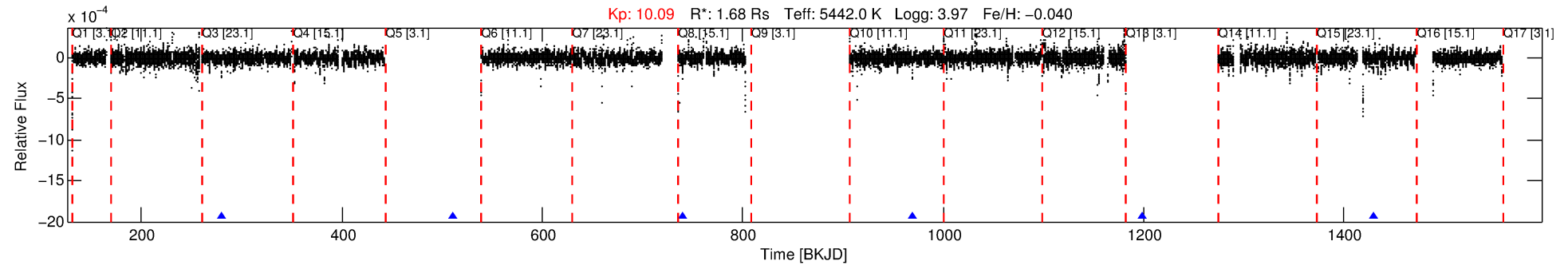
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006757637-01

No Significant Match Found

DV One-Page Summary

KIC: 6757637 Candidate: 1 of 1 Period: 229.670 d



DV Fit Results:

Period = 229.66986 [0.00157] d
Epoch = 280.4675 [0.0055] BKJD
Rp/R* = 0.0139 [0.0049]
a/R* = 265.04 [396.58]
b = 0.89 [0.35]
Seff = 4.21 [3.58]
Teff = 365 [78] K
Rp = 2.55 [1.55] Re
a = 0.7269 [0.3690] AU
Ag = N/A
Teffp = N/A

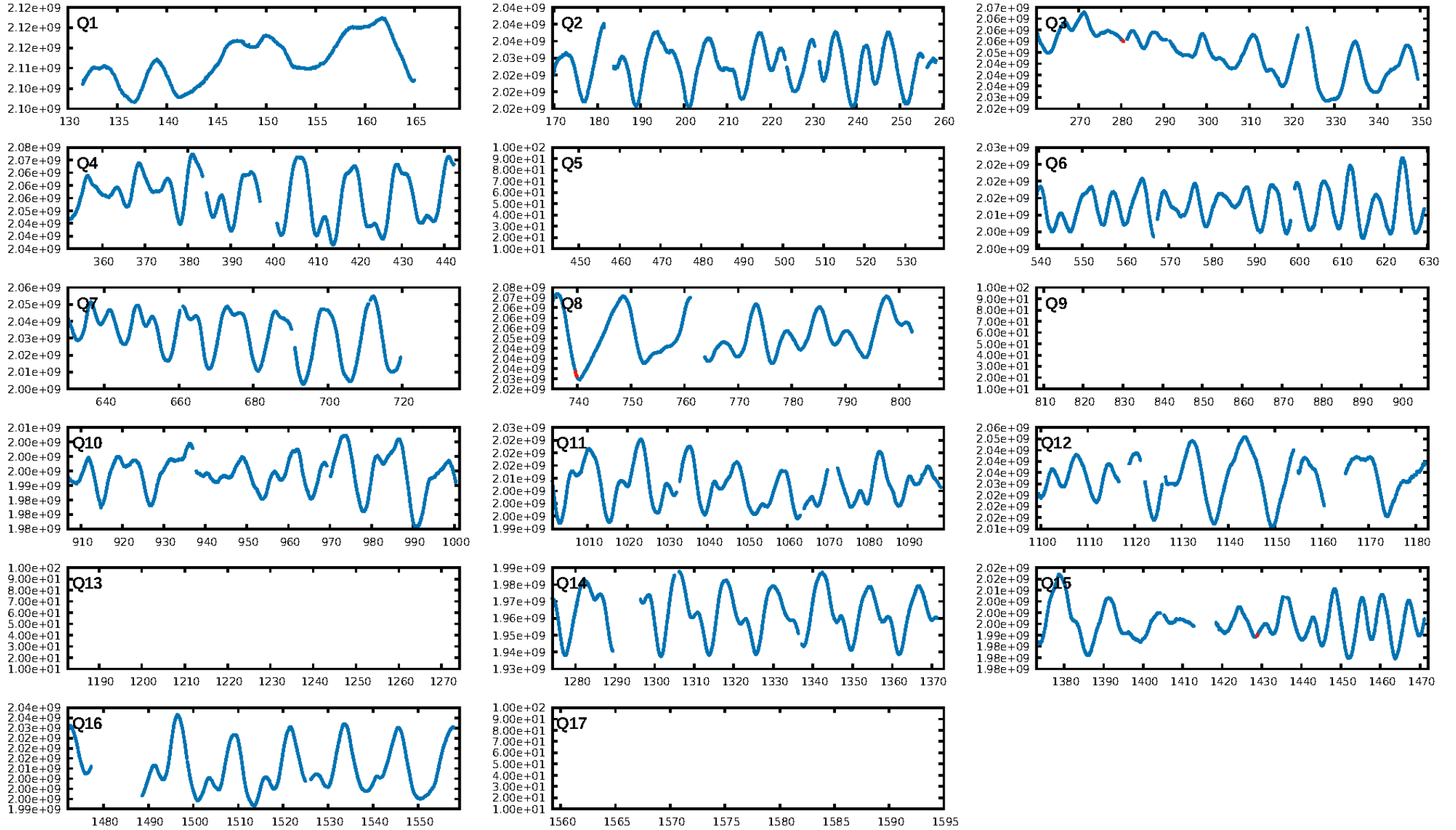
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 52.1%
ModelChiSquareGof-sig: 97.0%
Bootstrap-pfa: 7.41e-10
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: N/A
Centroid-sig: 22.8%
Centroid-so: 1.743 arcsec [1.41 σ]
OotOffset-rm: 3.403 arcsec [1.84 σ]
KicOffset-rm: 4.220 arcsec [1.84 σ]
OotOffset-st: 0/1/1/0 [2]
KicOffset-st: 0/1/1/0 [2]
DiffImageQuality-fgm: 0.00 [0/2]
DiffImageOverlap-fno: 1.00 [2/2]

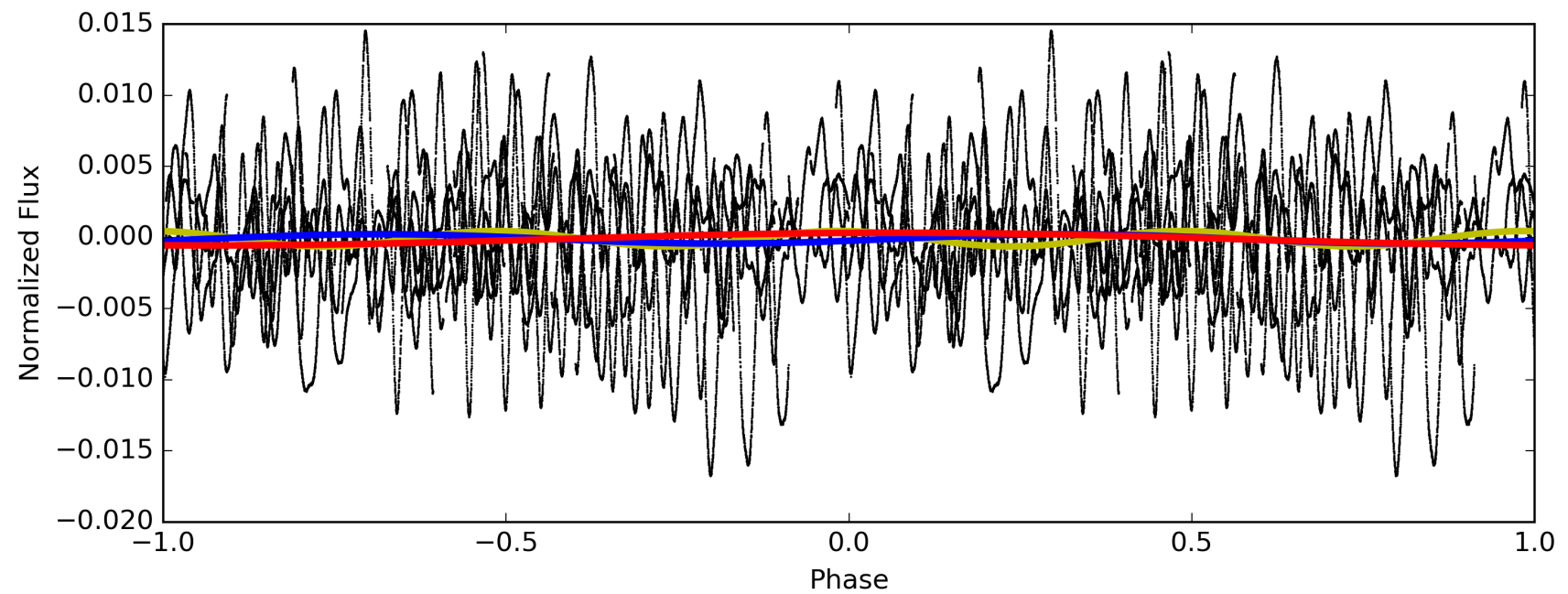
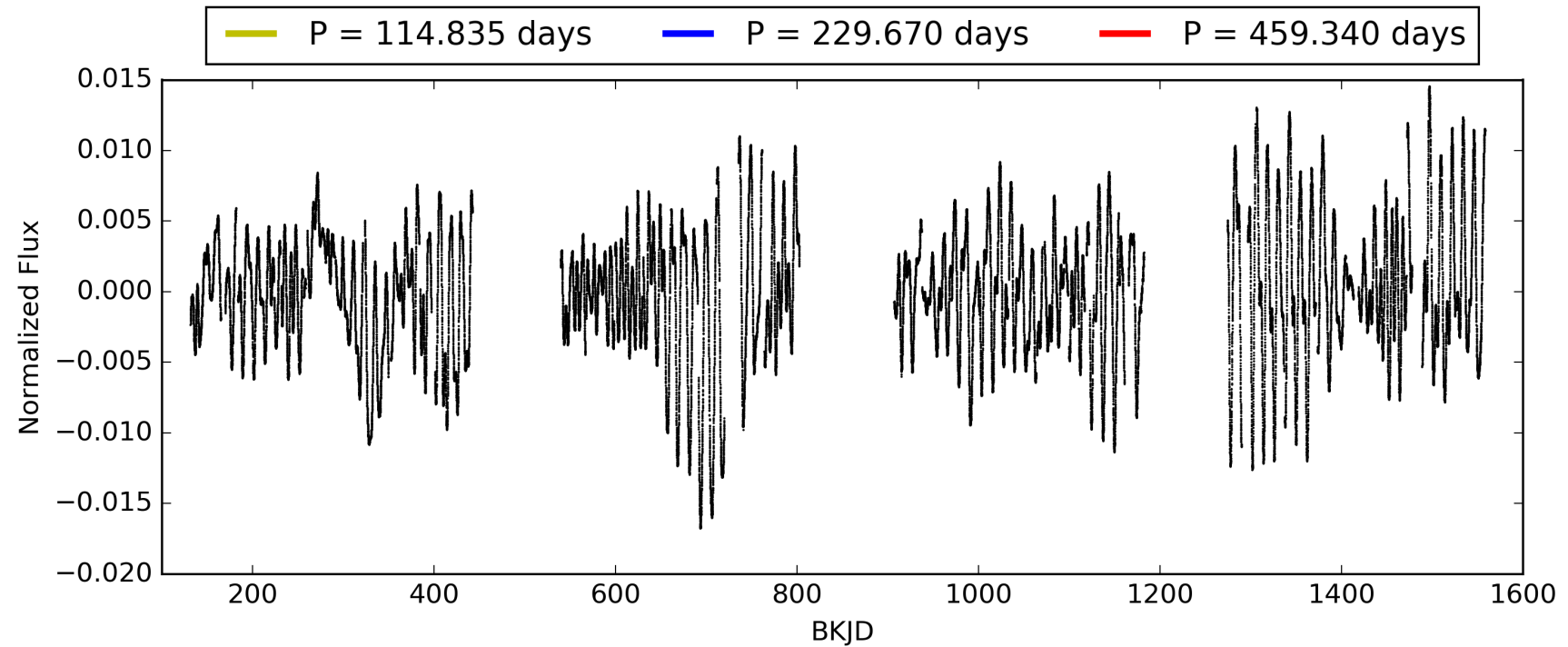
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 21:11:56 Z

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

TCE 006757637-01, PDC Light Curves

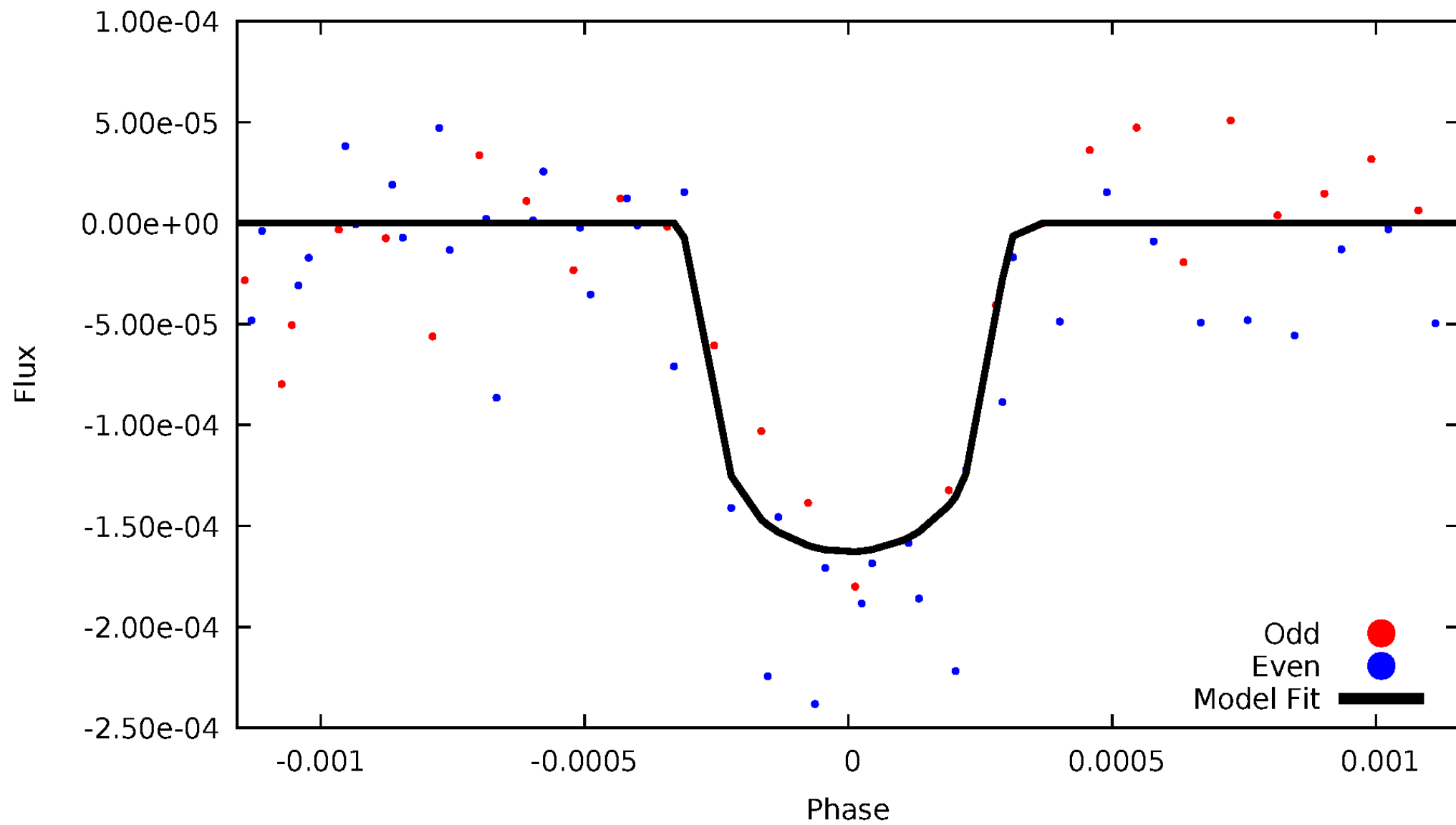


TCE 006757637-01



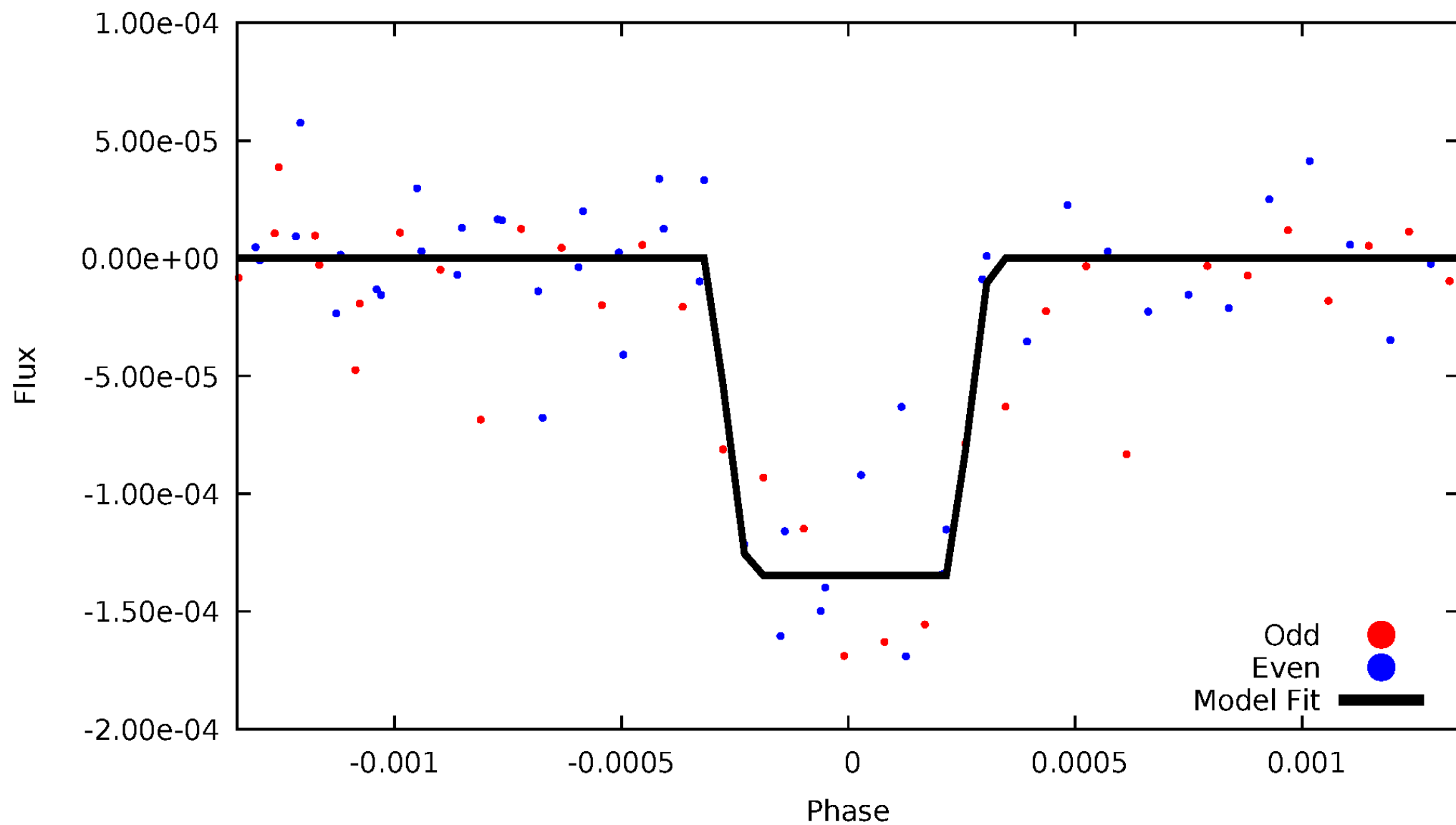
DV Odd/Even

TCE 006757637-01



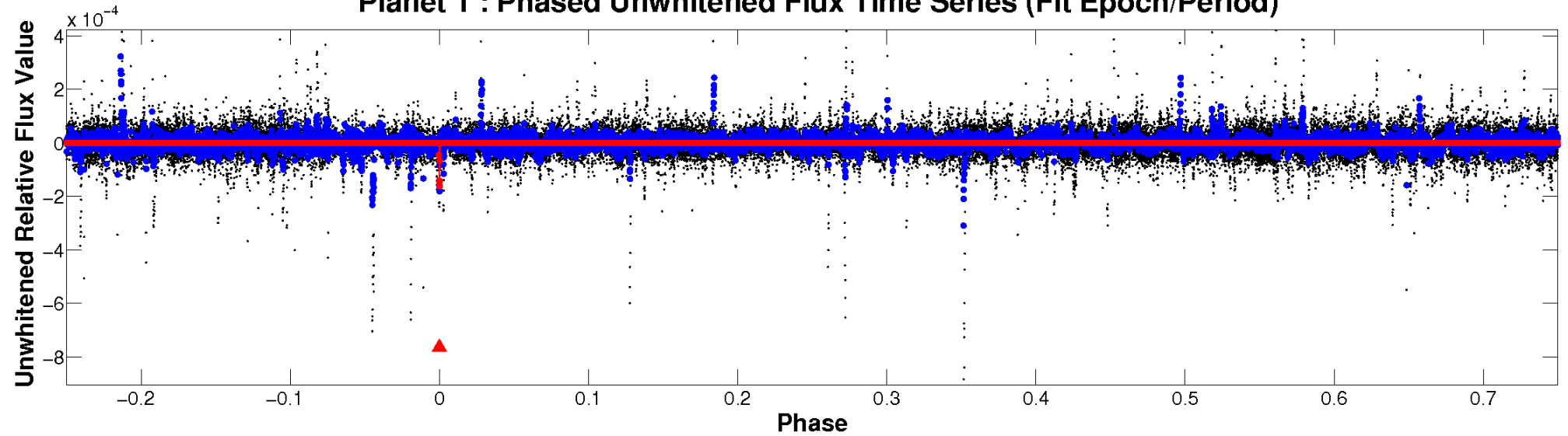
ALT Odd/Even

TCE 006757637-01

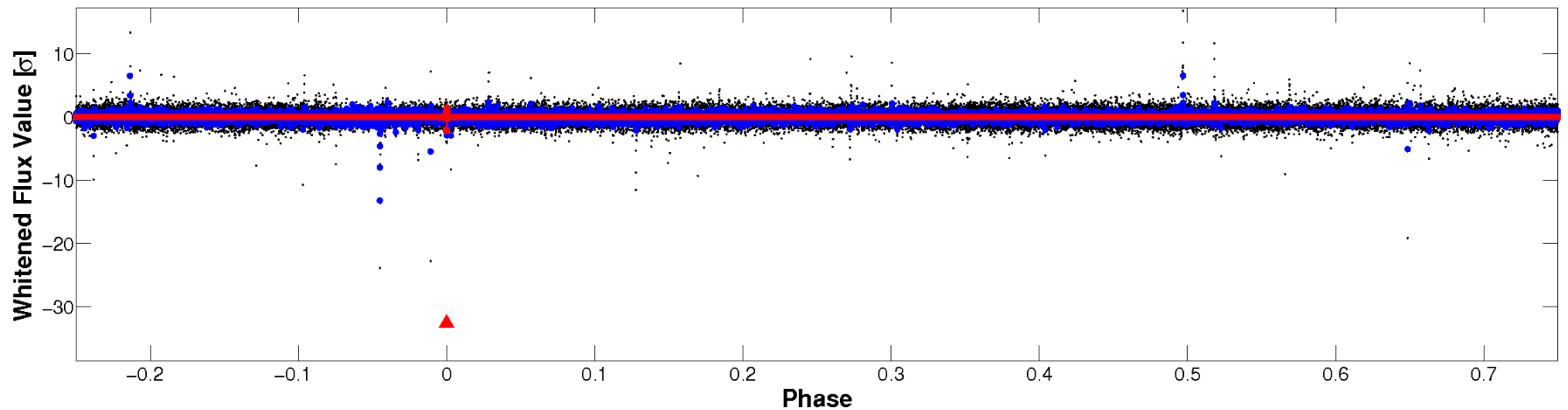


Non-Whitened Vs. Whitened Light Curve

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

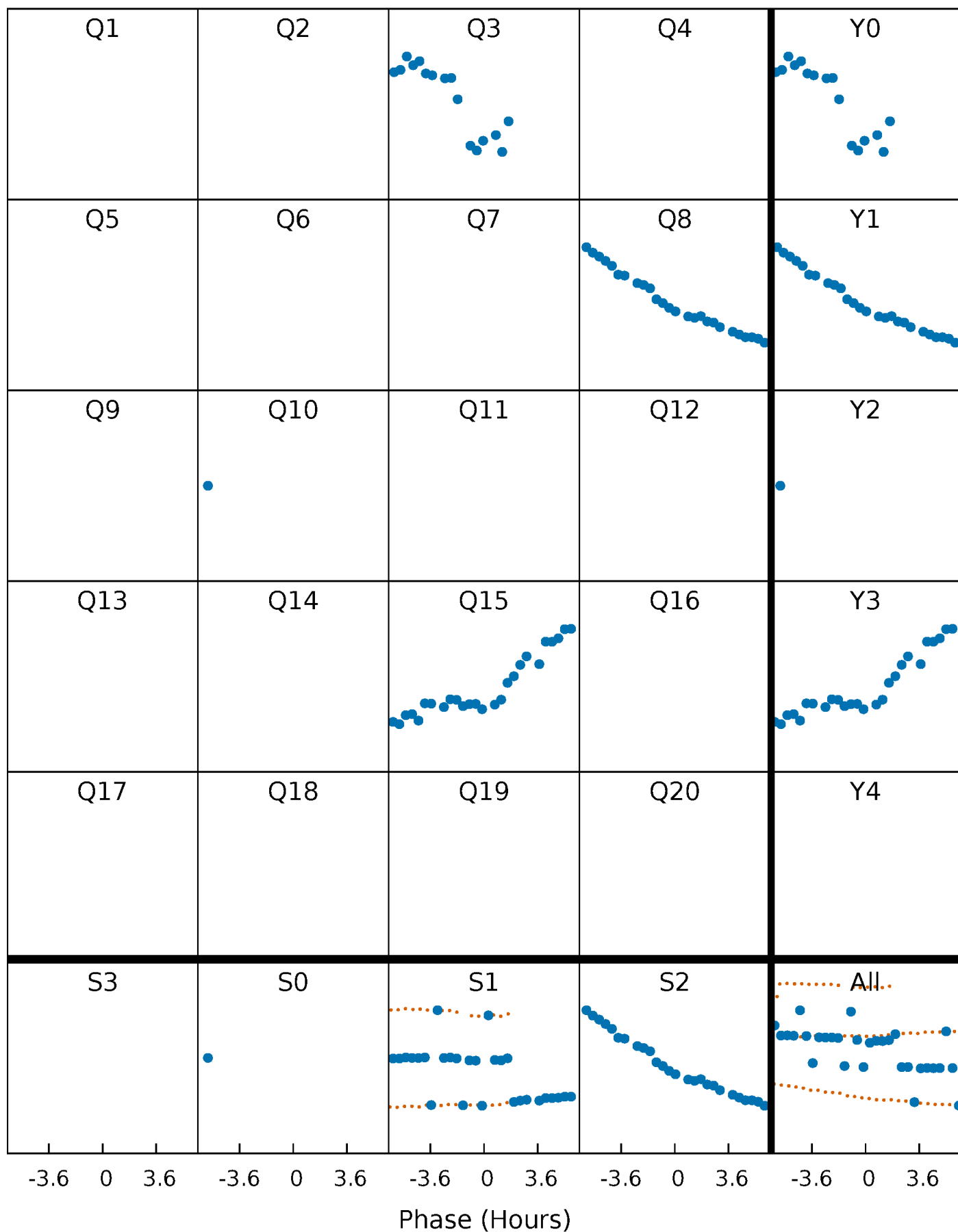


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



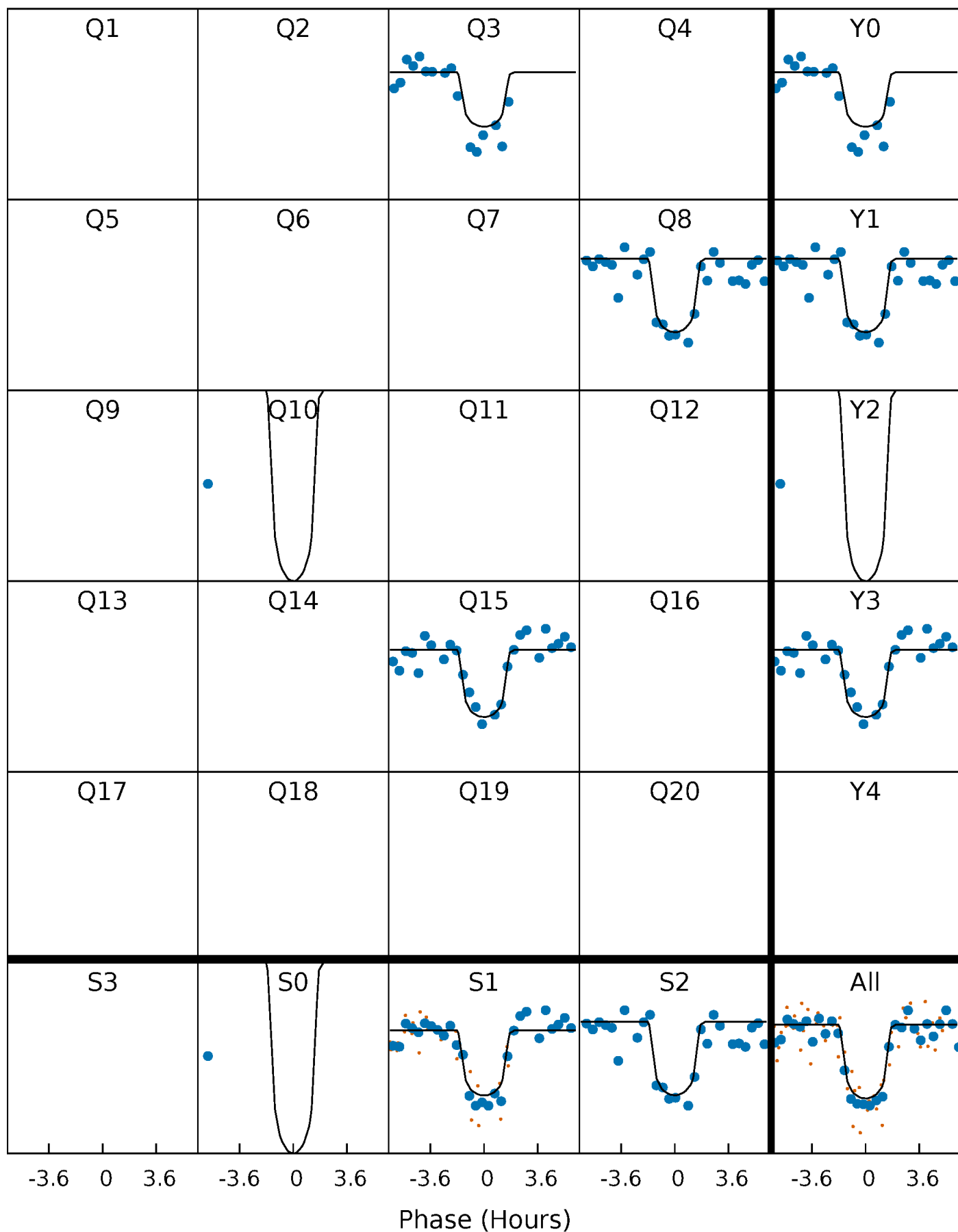
PDC Quarter-Phased Transit Curves

TCE 006757637-01 P=229.669861 Days $T_0=280.467507$ (BKJD)



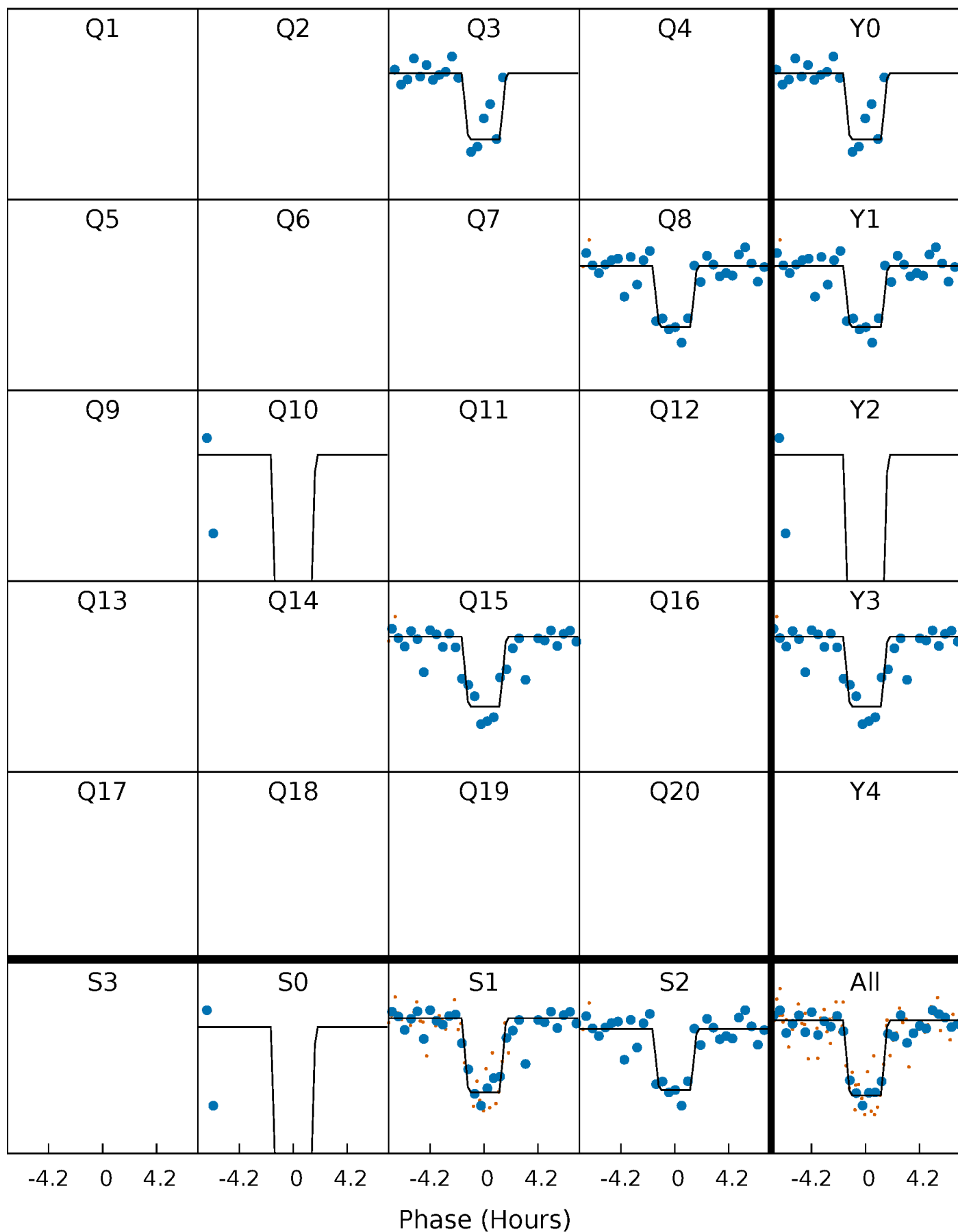
DV Quarter-Phased Transit Curves

TCE 006757637-01 P=229.669861 Days $T_0=280.467507$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

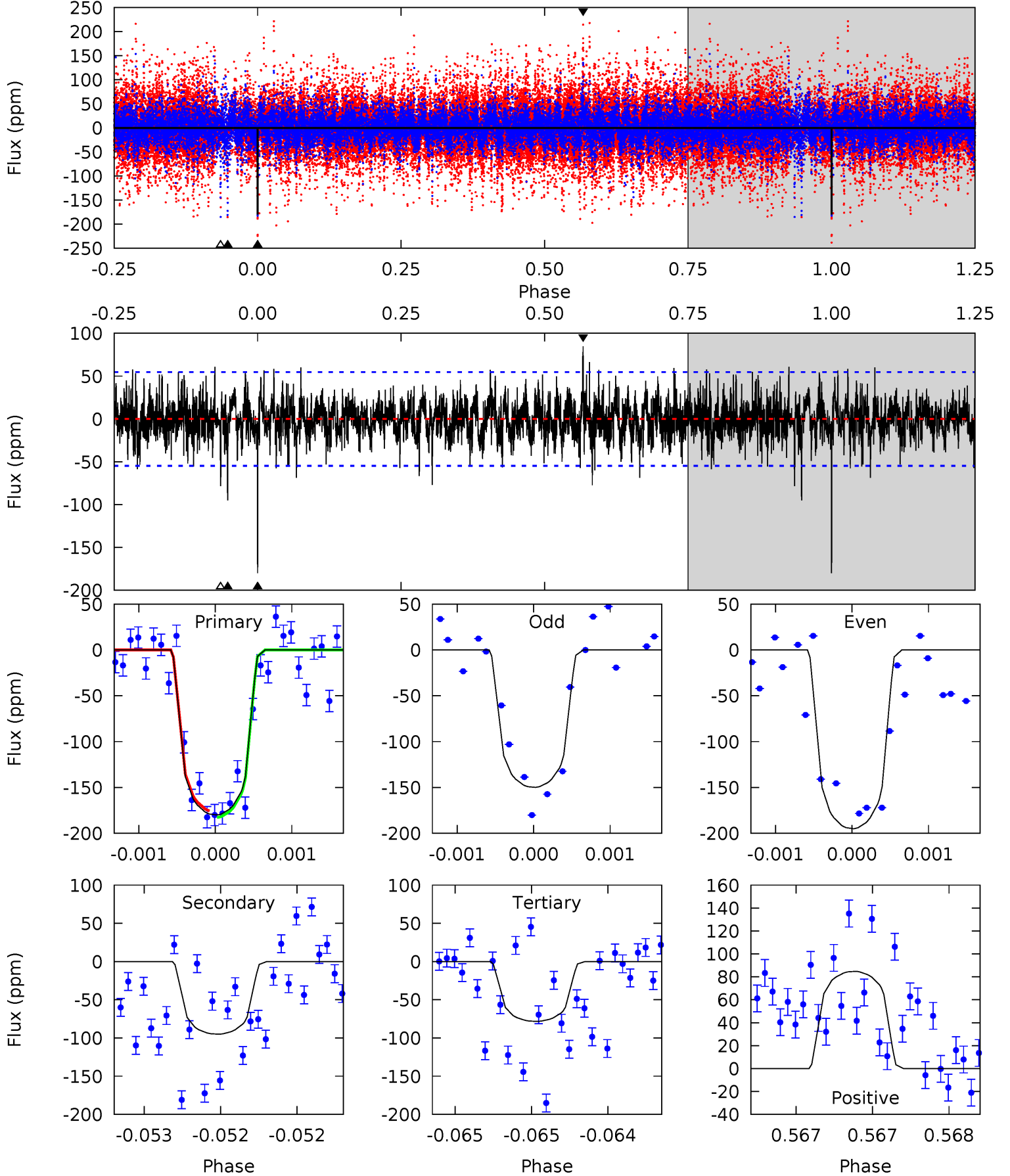
TCE 006757637-01 P=229.671012 Days $T_0=280.466858$ (BKJD)



DV Model-Shift Uniqueness Test

006757637-01, P = 229.669861 Days, E = 50.797646 Days

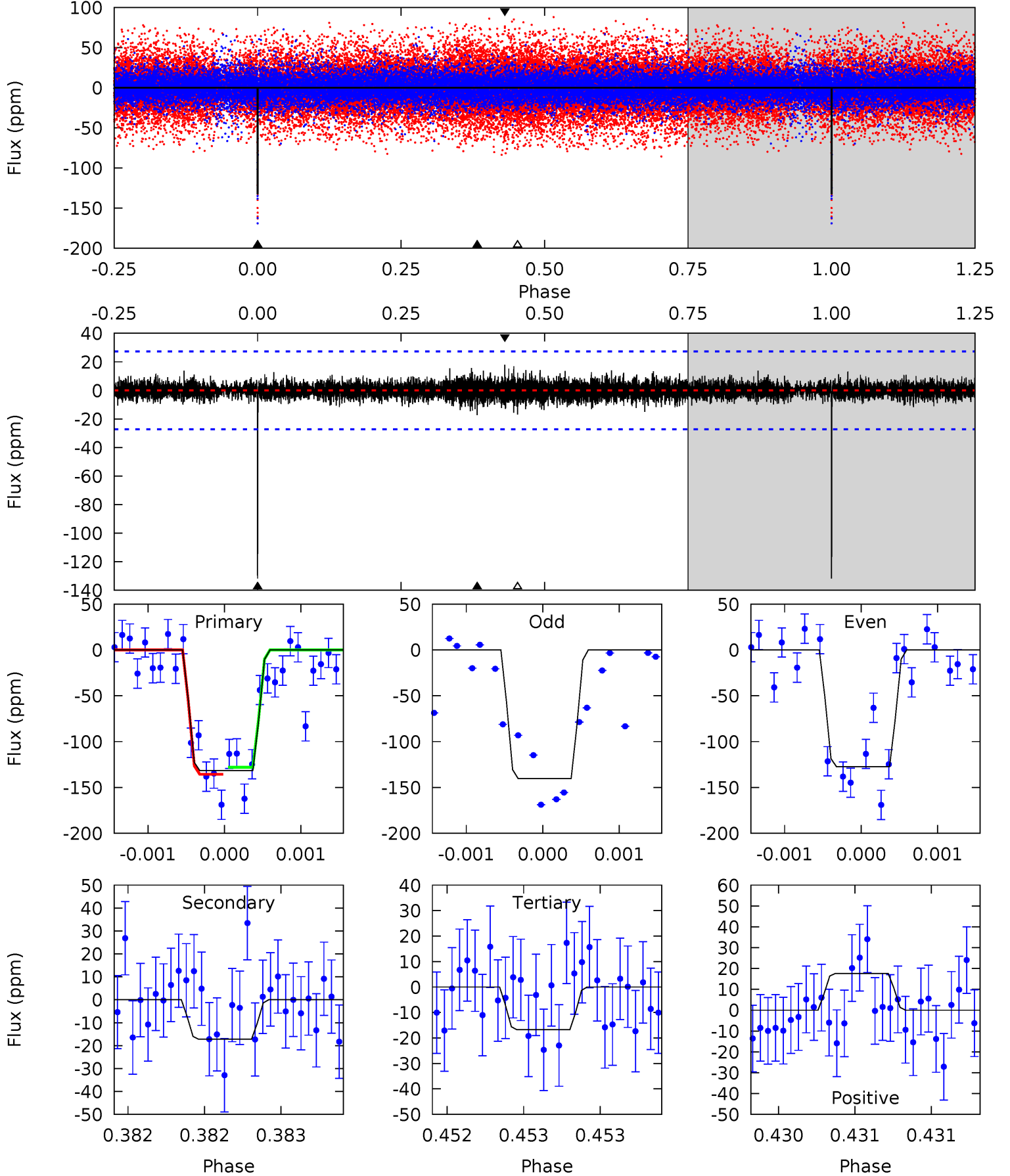
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
18.3	9.64	7.94	8.60	5.55	3.45	1.79	10.3	9.66	1.70	1.04	1.98	1.05	0.32	0.35



Alt Model-Shift Uniqueness Test

006757637-01, P = 229.671012 Days, E = 50.795846 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
26.8	3.50	3.41	3.58	5.55	3.44	0.74	23.4	23.2	0.09	-0.08	1.24	0.98	0.12	0.79



Stellar Parameters For KIC 006757637

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5442^{+164}_{-131}	$3.973^{+0.504}_{-0.180}$	$-0.040^{+0.300}_{-0.250}$	$1.683^{+0.553}_{-0.830}$	$0.972^{+0.107}_{-0.131}$	$0.287^{+1.546}_{-0.162}$
	+3%/-2%	+13%/-5%	+750%/-625%	+33%/-49%	+11%/-13%	+538%/-56%
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 006757637-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-95 ± 10	$2.44^{+1.02}_{-1.03}$	504^{+47}_{-69}	4659^{+808}_{-502}	4588^{+9130}_{-2307}
Alt.	-17 ± 5	$1.95^{+1.04}_{-0.87}$	502^{+48}_{-67}	3667^{+726}_{-408}	1324^{+2759}_{-789}

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 $A_{obs} \gg 1.0$

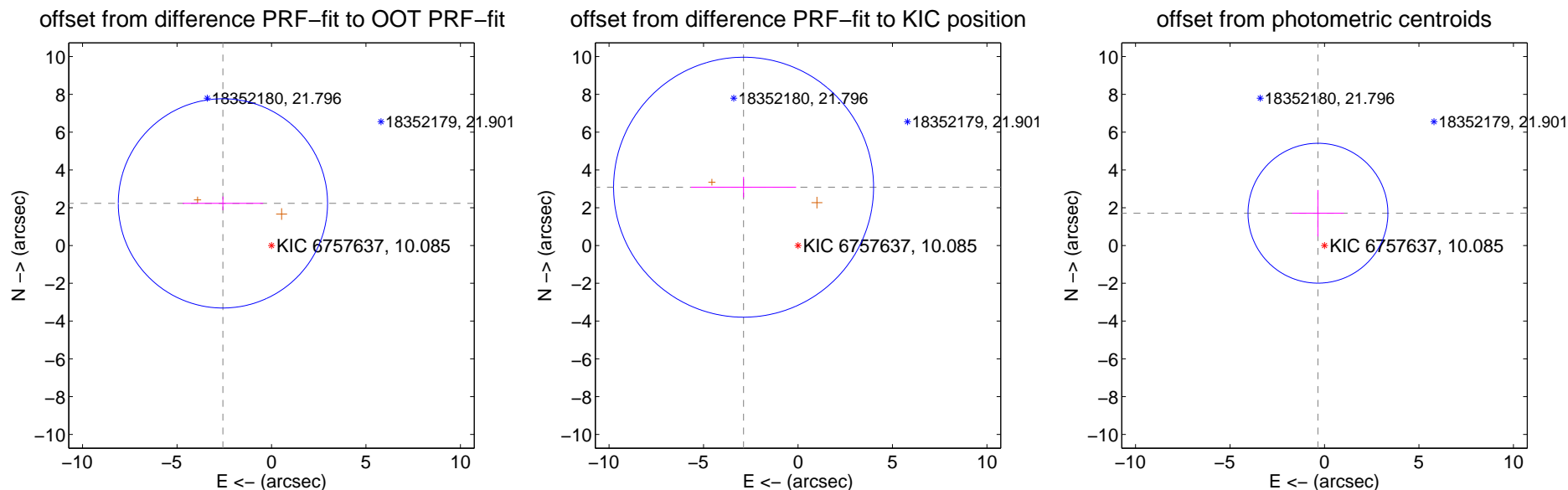
DV Centroid Data

Supplemental centroid analysis for 006757637-01. **Kepler magnitude: 10.09.** Transit SNR 9.52

There are 0 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 1.14 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	3.403 ± 1.846	1.84	2.571 ± 2.131	2.229 ± 0.365
PRF-fit source offset from KIC position	4.220 ± 2.293	1.84	2.880 ± 2.781	3.085 ± 0.545
photometric centroid source offset	1.74 ± 1.23	1.41	0.35 ± 1.37	1.71 ± 1.23

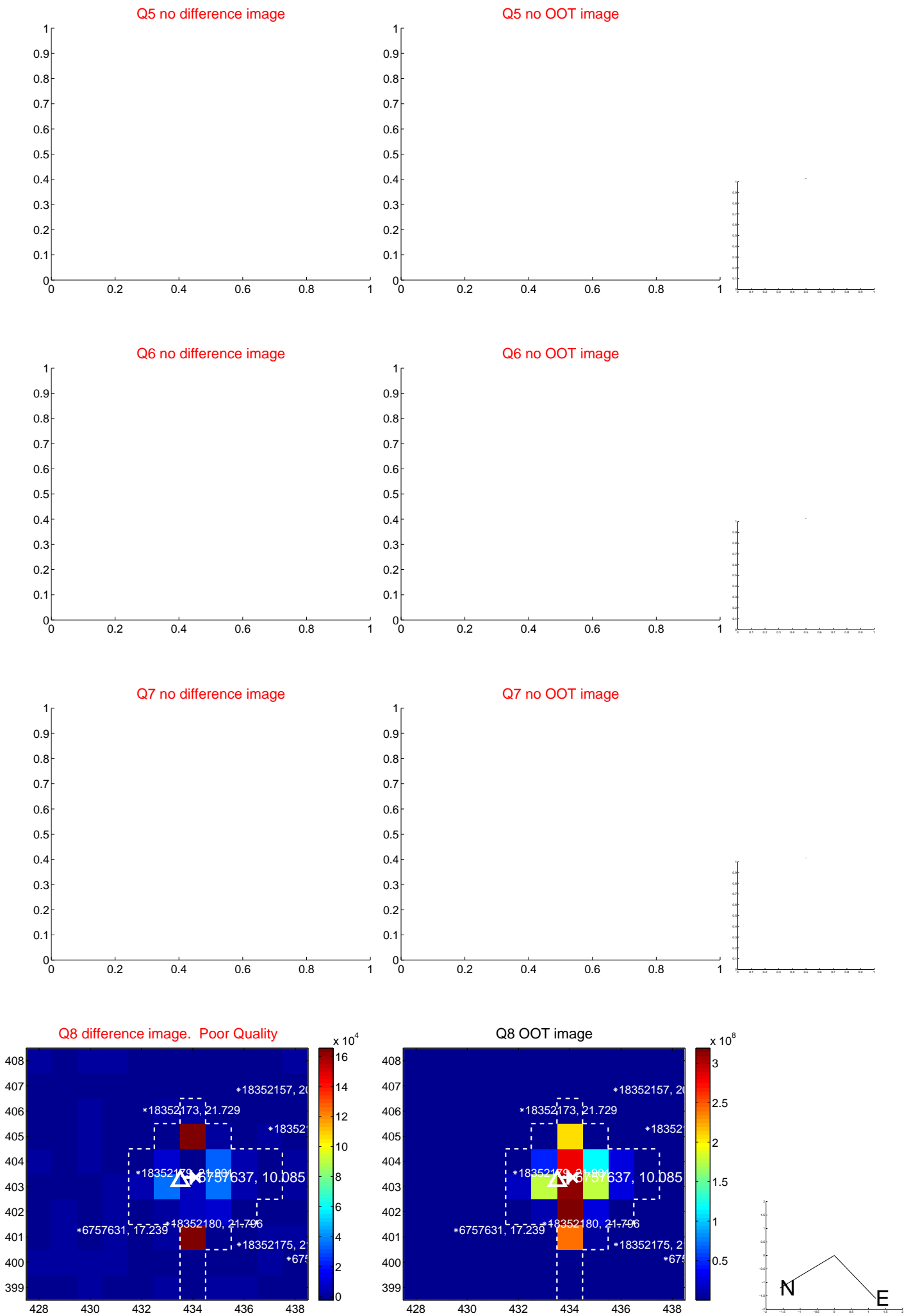


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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



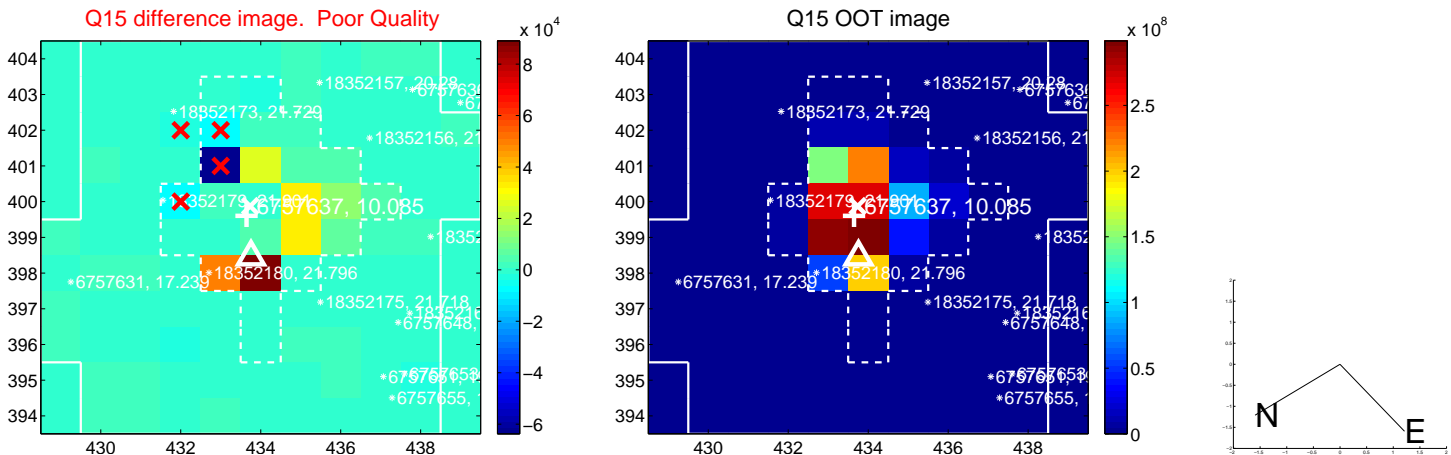
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



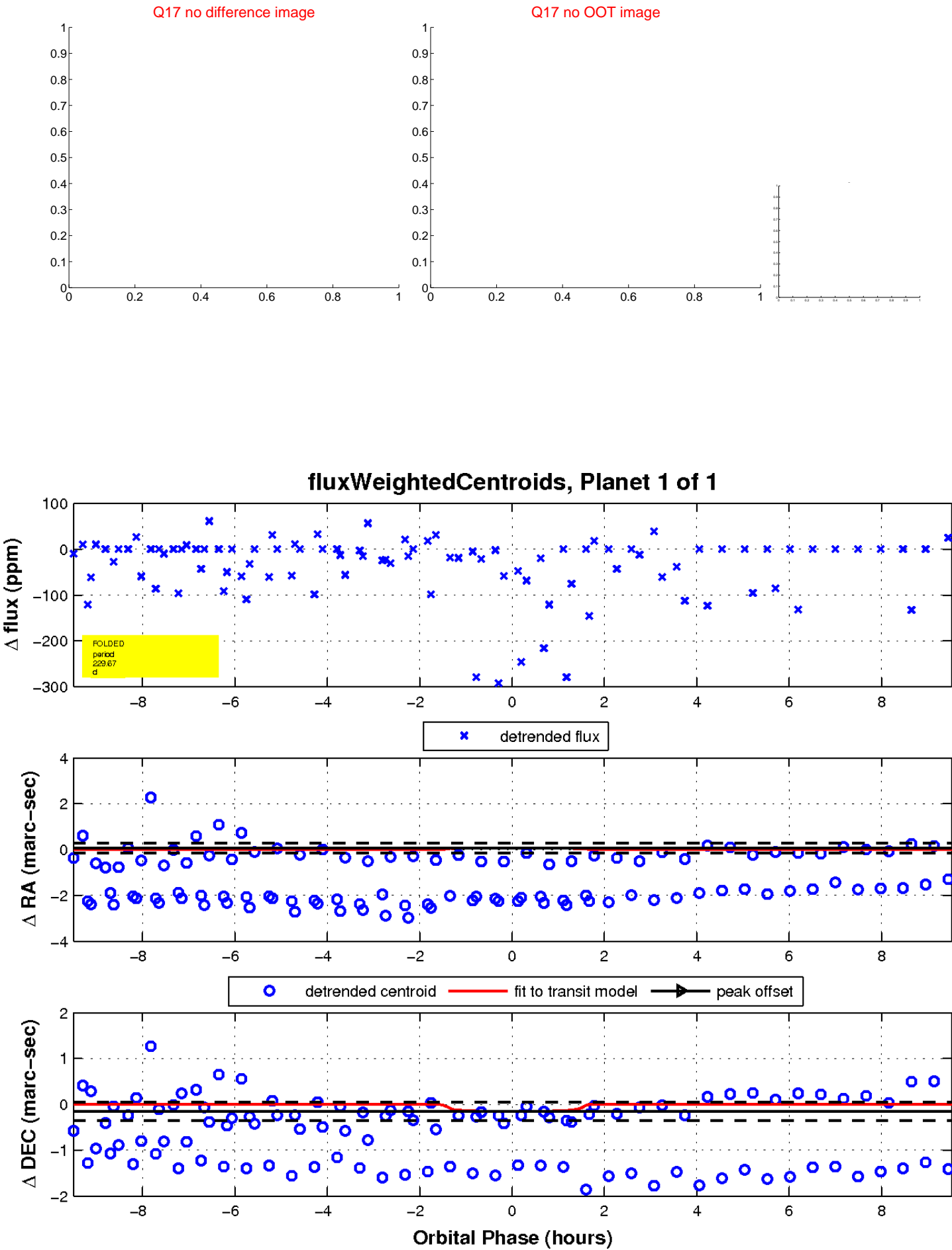
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

