

KIC 006201242

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})
006201242-01	OBS	No	366.380069	149.598790	1670.2	30.697	7.9	8.1	1.04	6309	7.97	1.45

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006201242-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—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.

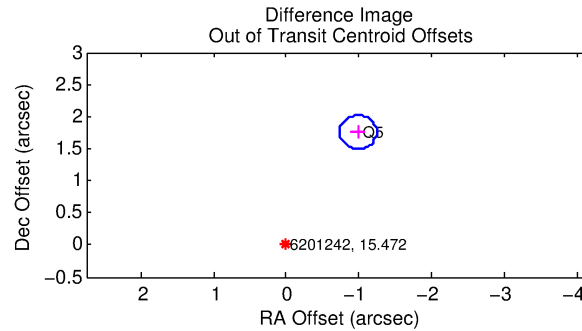
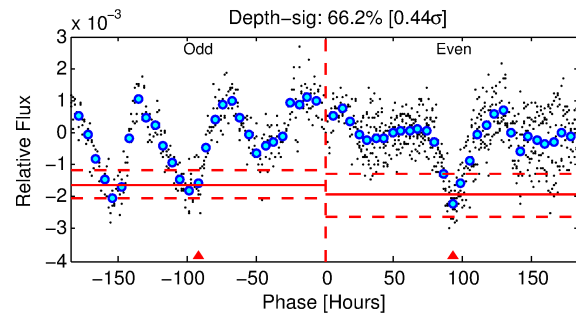
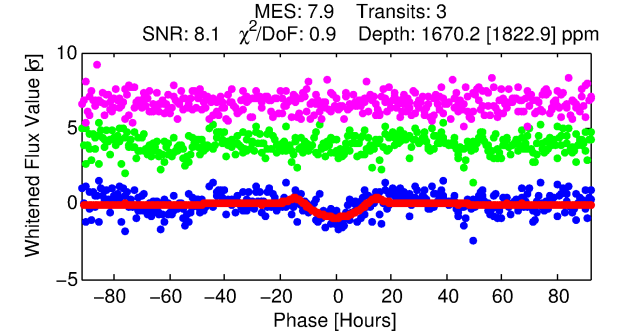
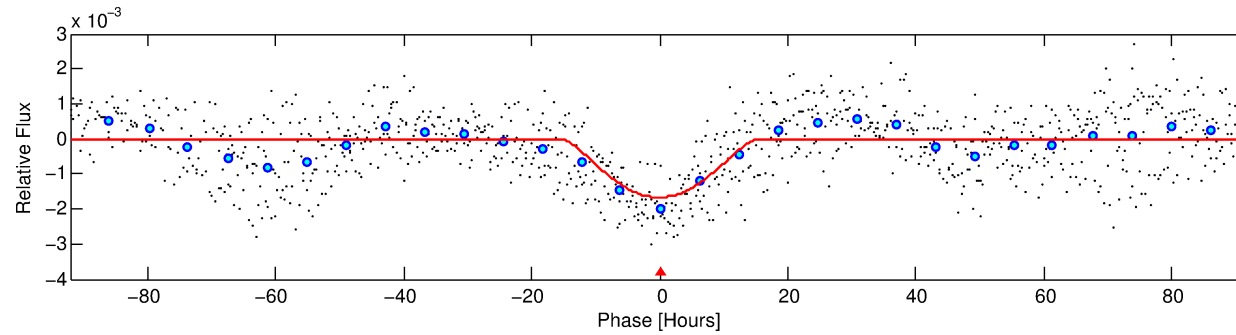
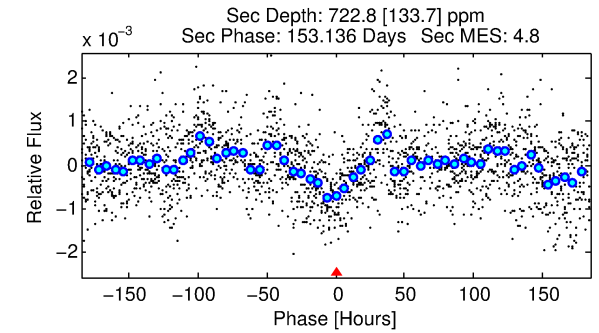
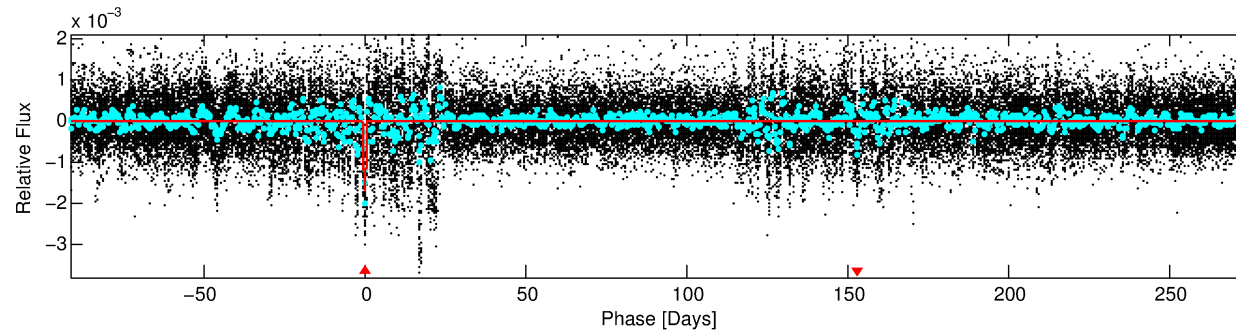
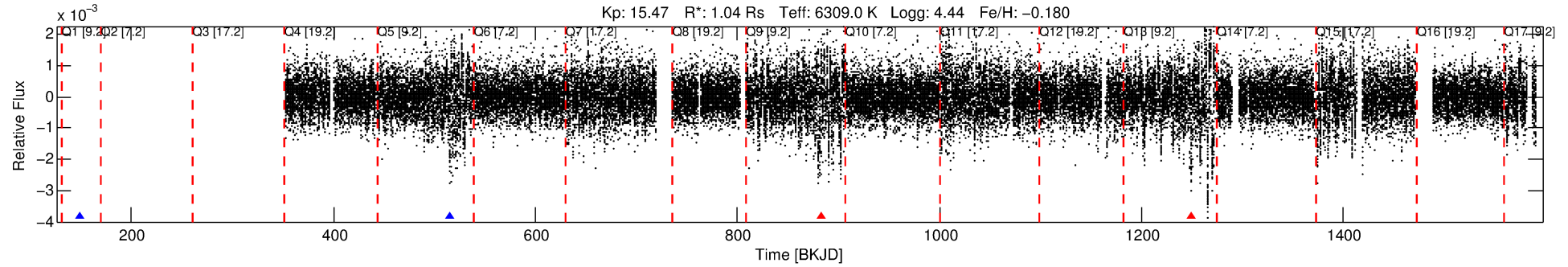
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006201242-01

No Significant Match Found

DV One-Page Summary

KIC: 6201242 Candidate: 1 of 1 Period: 366.380 d



DV Fit Results:

Period = 366.38007 [0.03906] d
Epoch = 149.5988 [0.0764] BKJD
Rp/R* = 0.0700 [0.1345]
a/R* = 34.73 [14.77]
b = 1.00 [0.24]
Seff = 1.45 [0.62]
Teq = 280 [30] K
Rp = 7.97 [15.52] Re
a = 1.0338 [0.2751] AU
Ag = 6682.16 [25830.72] [0.26σ]
Teff = 3910 [3763] K [0.96σ]

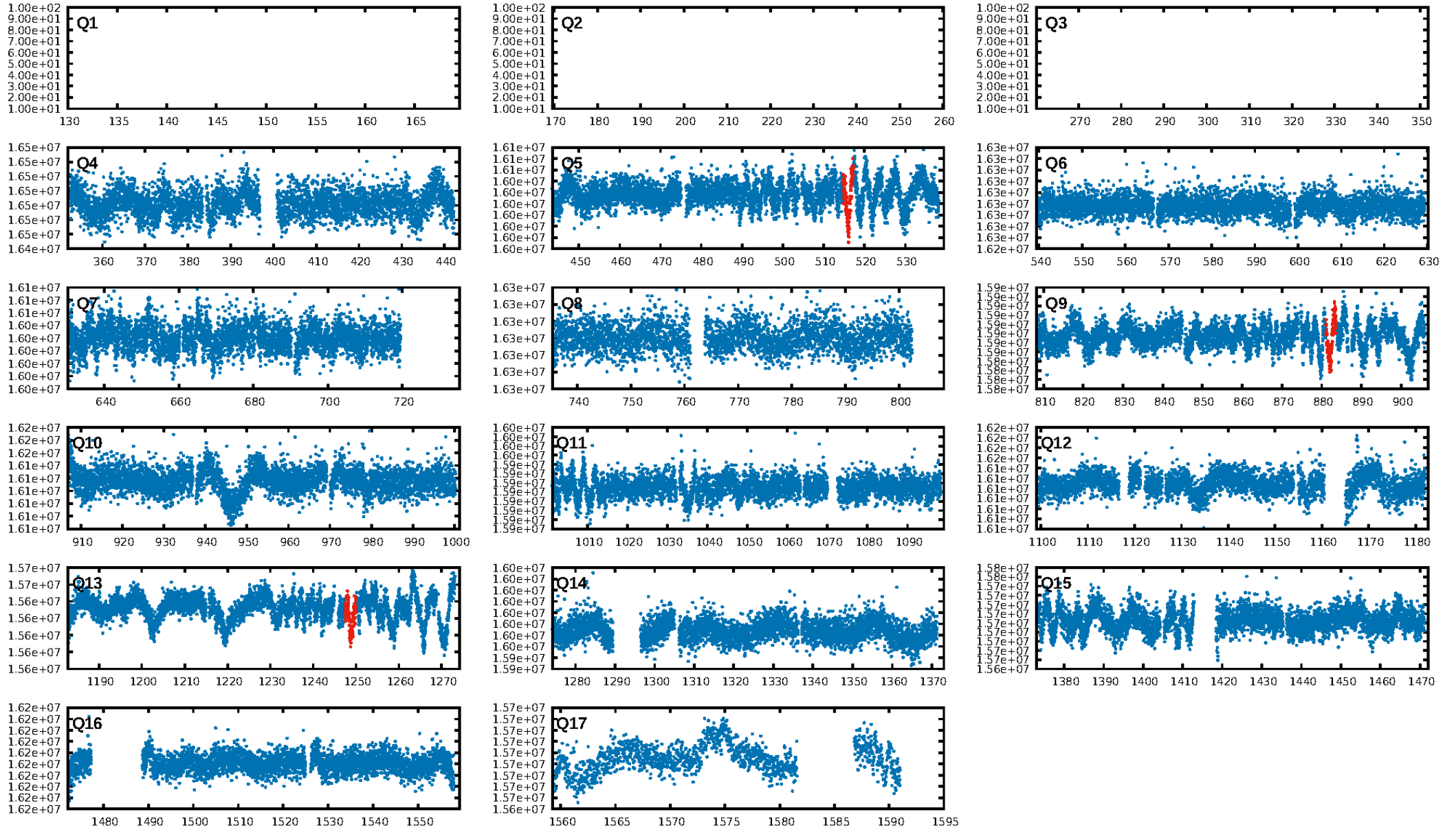
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 47.4%
ModelChiSquareGoF-sig: 100.0%
Bootstrap-pfa: 4.66e-10
RollingBand-fgt: 0.33 [1/3]
GhostDiagnostic-chr: 4.714
Centroid-sig: 5.9%
Centroid-so: 4.885 arcsec [1.72σ]
OotOffset-rm: 2.014 arcsec [23.29σ]
KicOffset-rm: 2.070 arcsec [23.93σ]
OotOffset-st: 0/0/0/1 [1]
KicOffset-st: 0/0/0/1 [1]
DiffImageQuality-fgm: 1.00 [1/1]
DiffImageOverlap-fno: 1.00 [2/2]

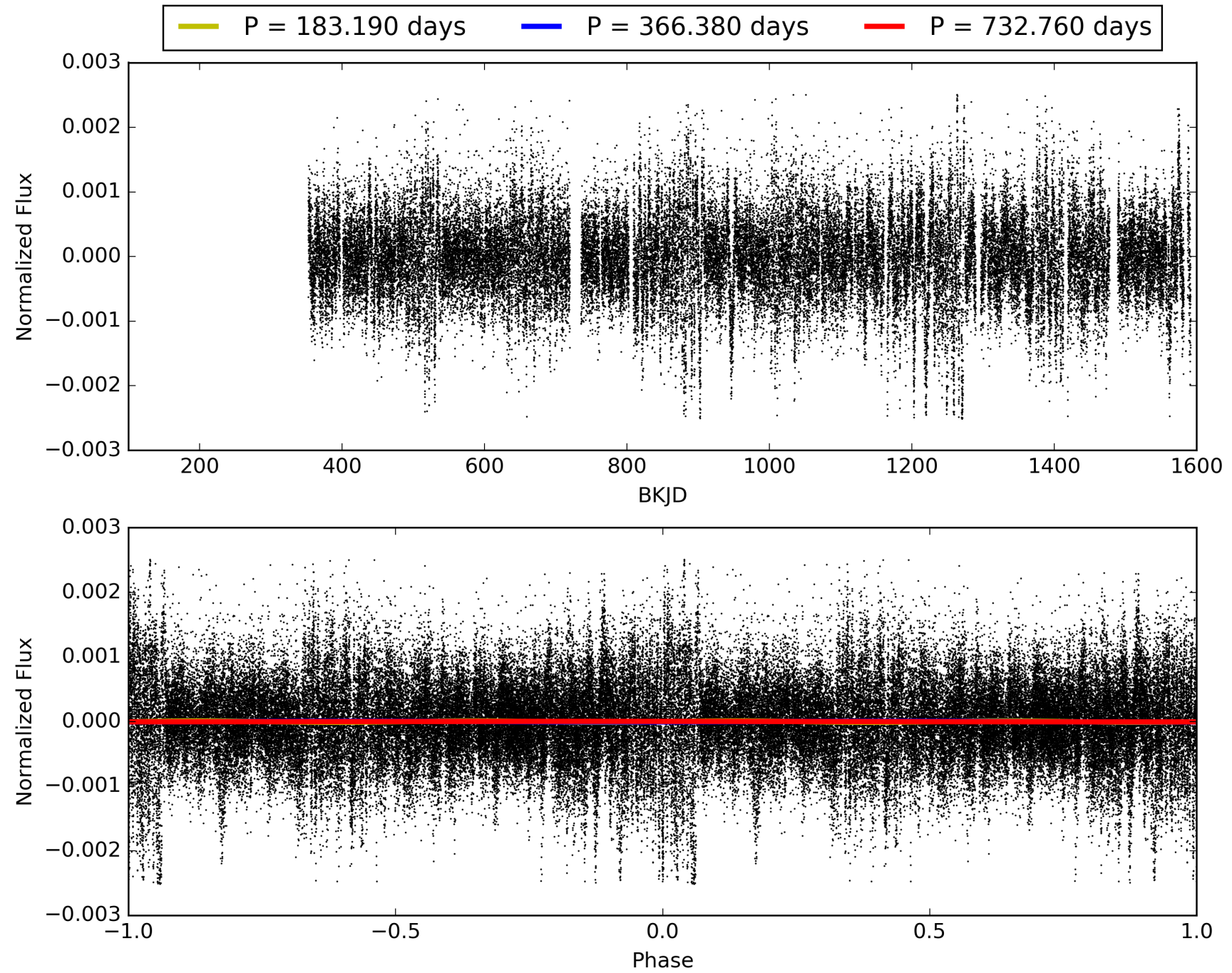
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 15:09:11 Z

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

TCE 006201242-01, PDC Light Curves

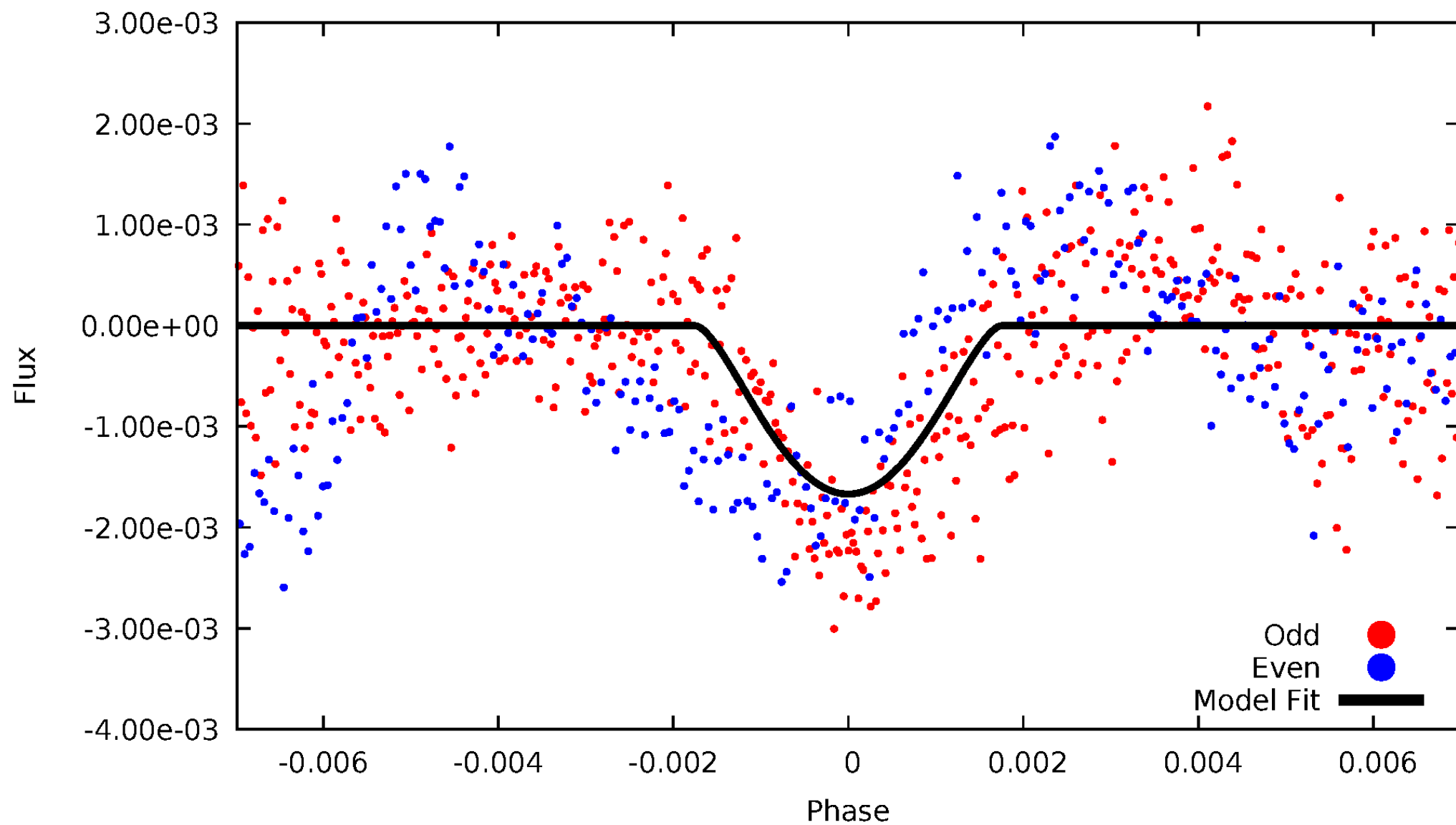


TCE 006201242-01



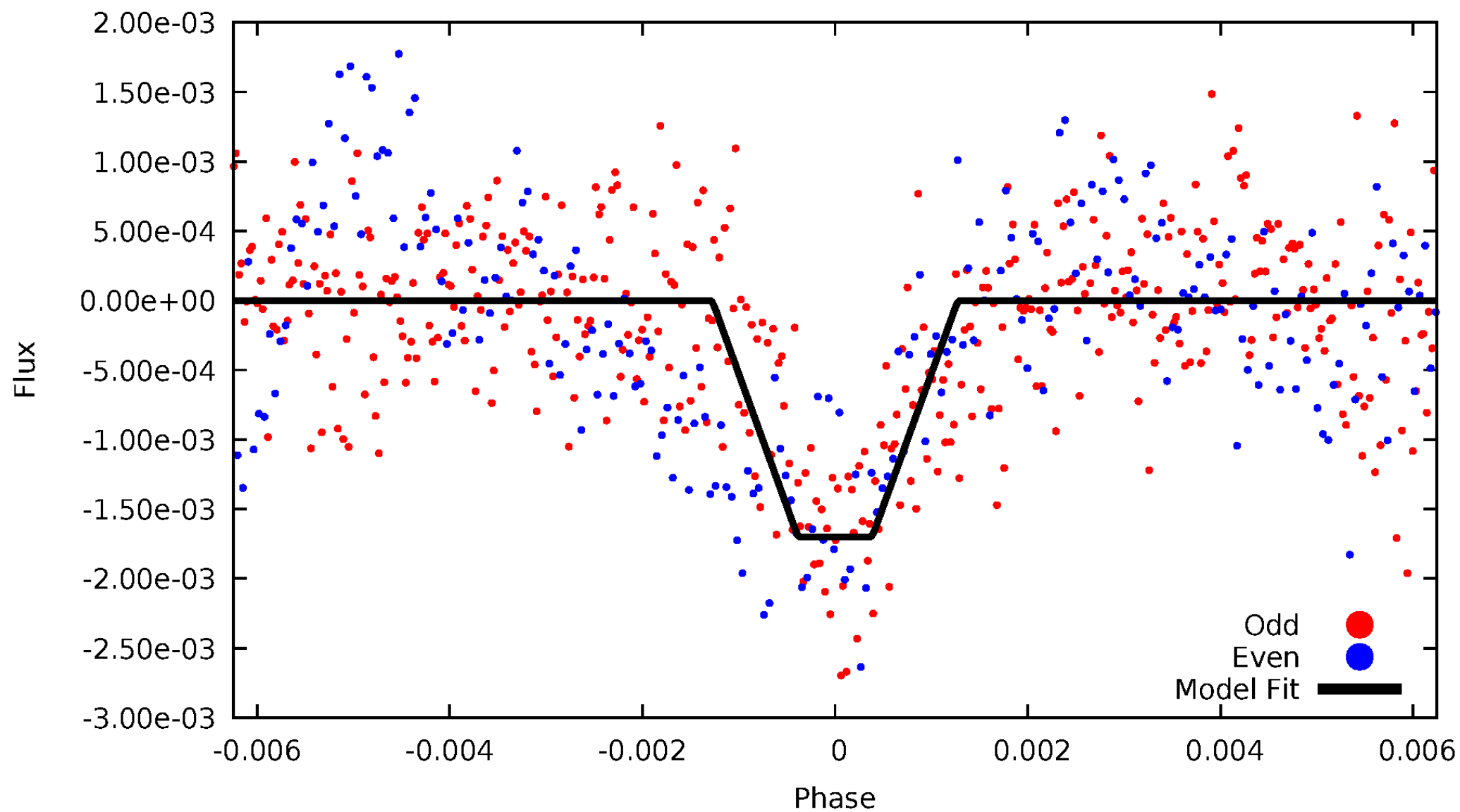
DV Odd/Even

TCE 006201242-01

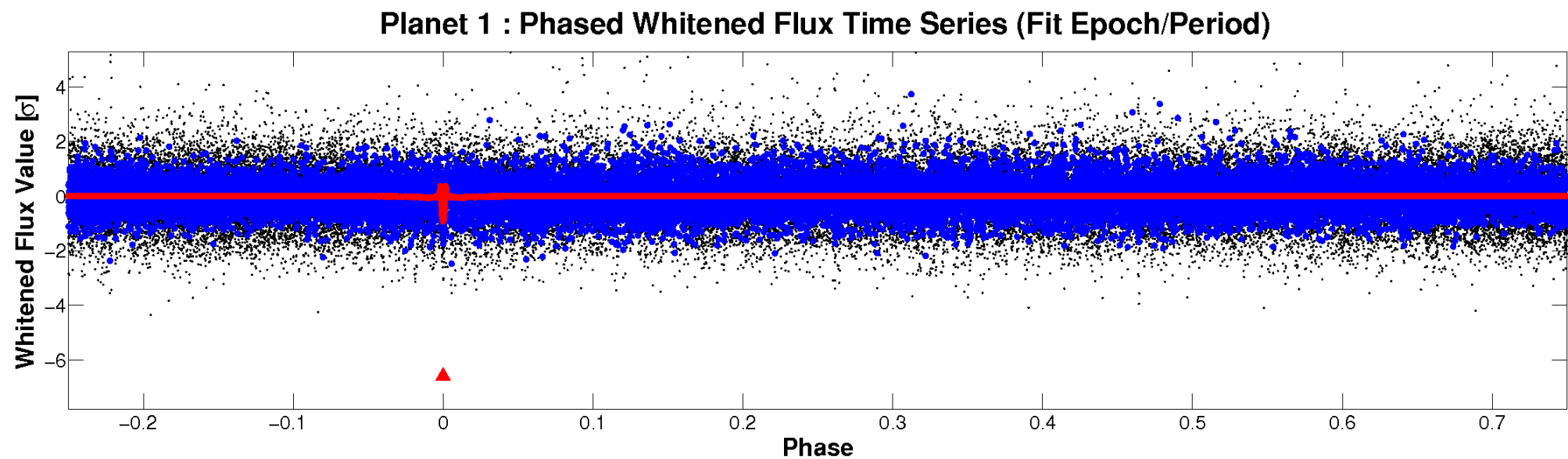
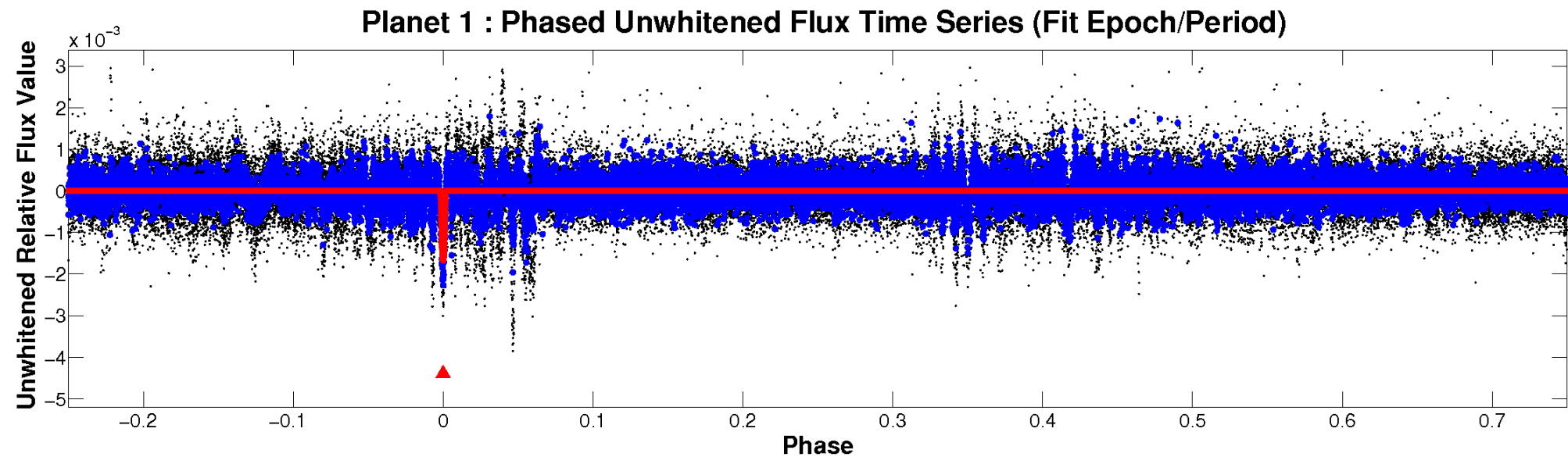


ALT Odd/Even

TCE 006201242-01

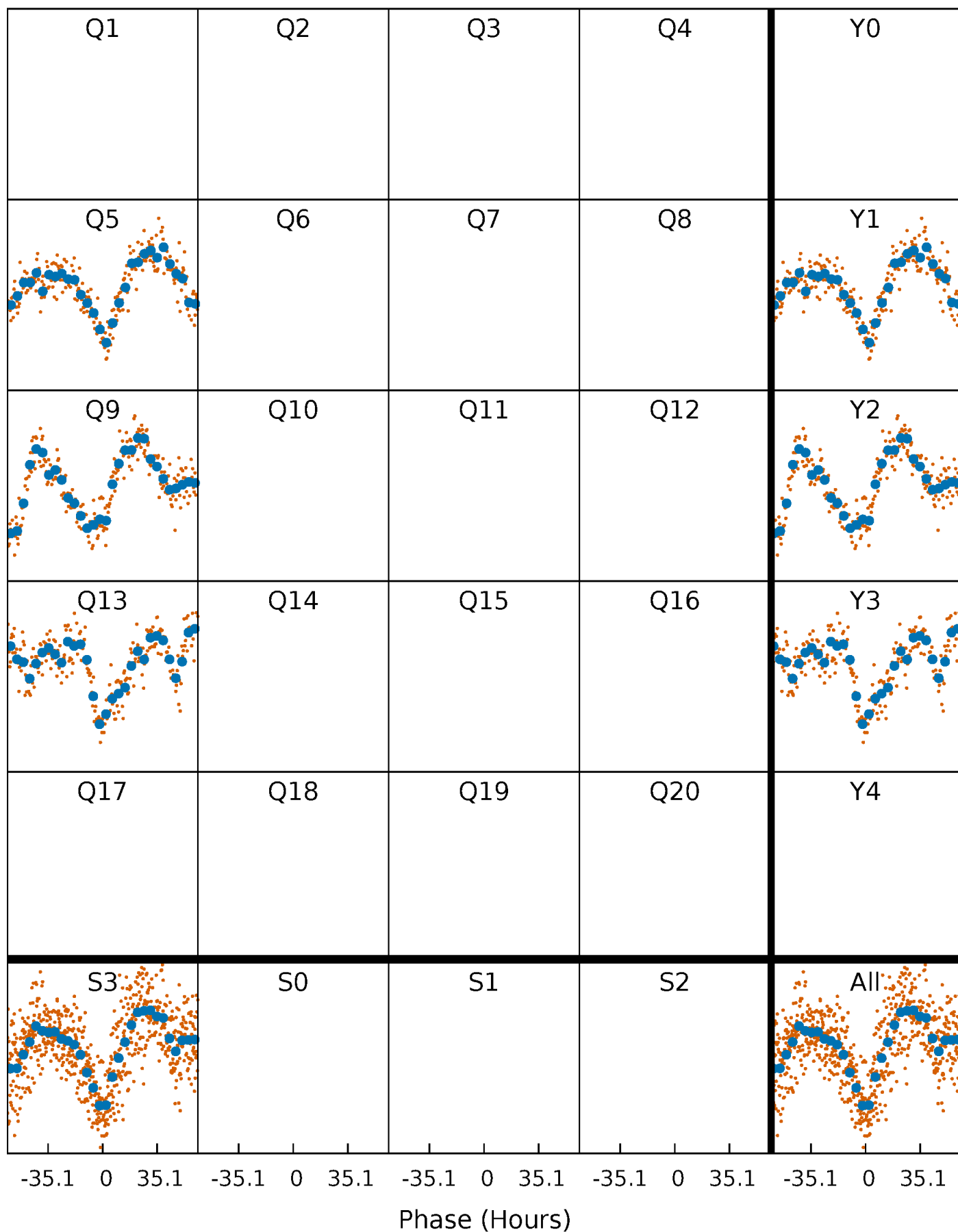


Non-Whitened Vs. Whitened Light Curve



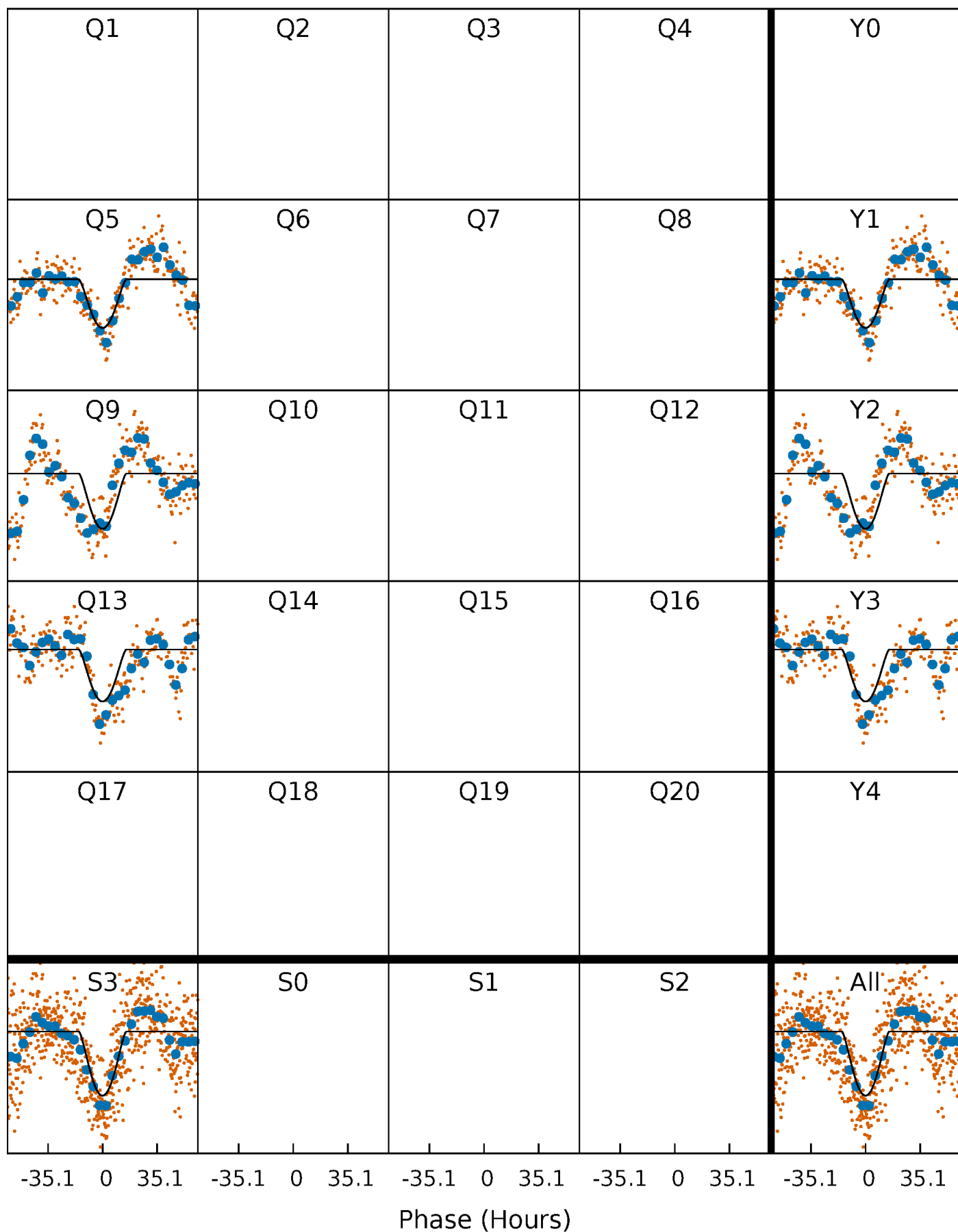
PDC Quarter-Phased Transit Curves

TCE 006201242-01 P=366.380068 Days $T_0=149.598790$ (BKJD)



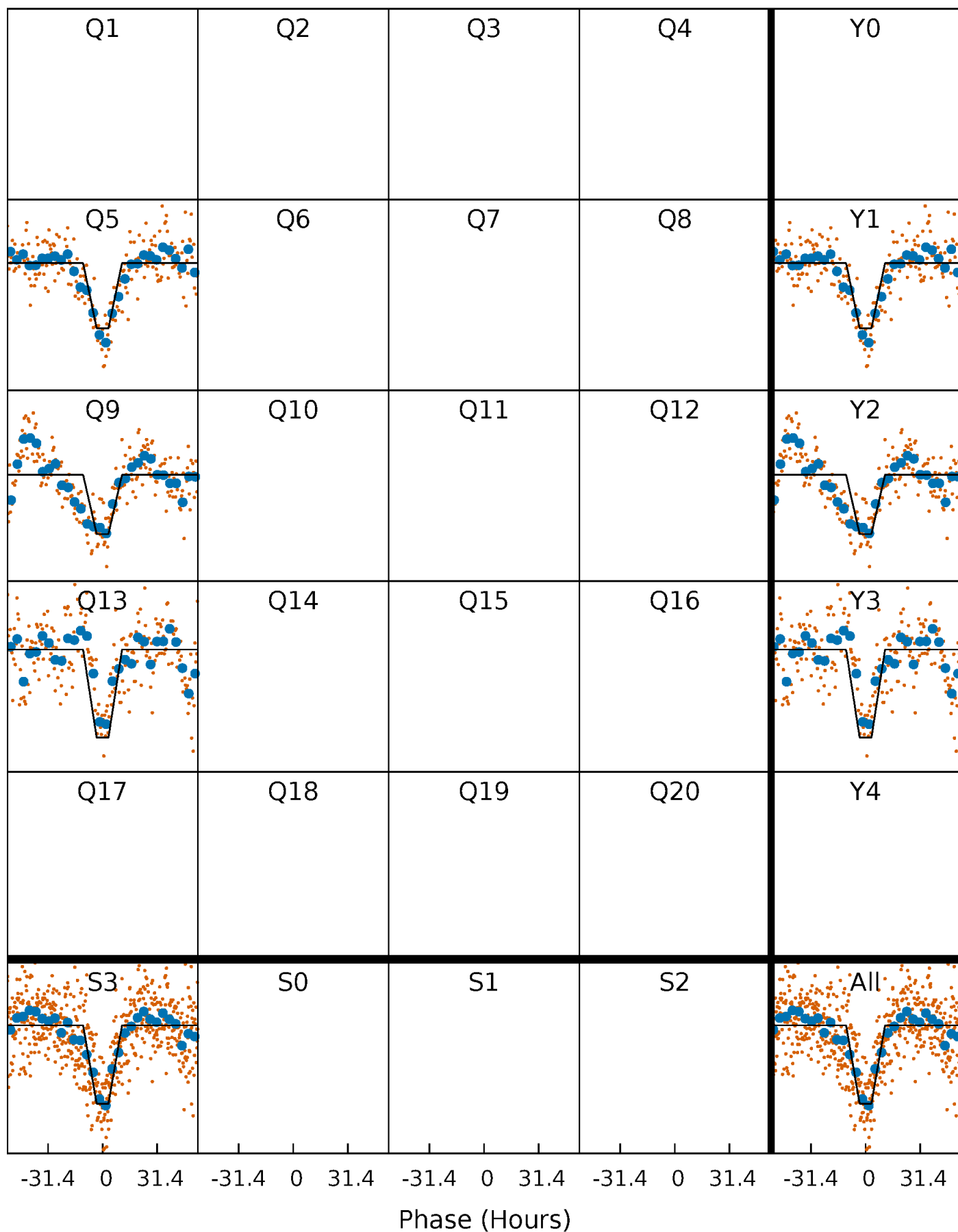
DV Quarter-Phased Transit Curves

TCE 006201242-01 P=366.380068 Days $T_0=149.598790$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

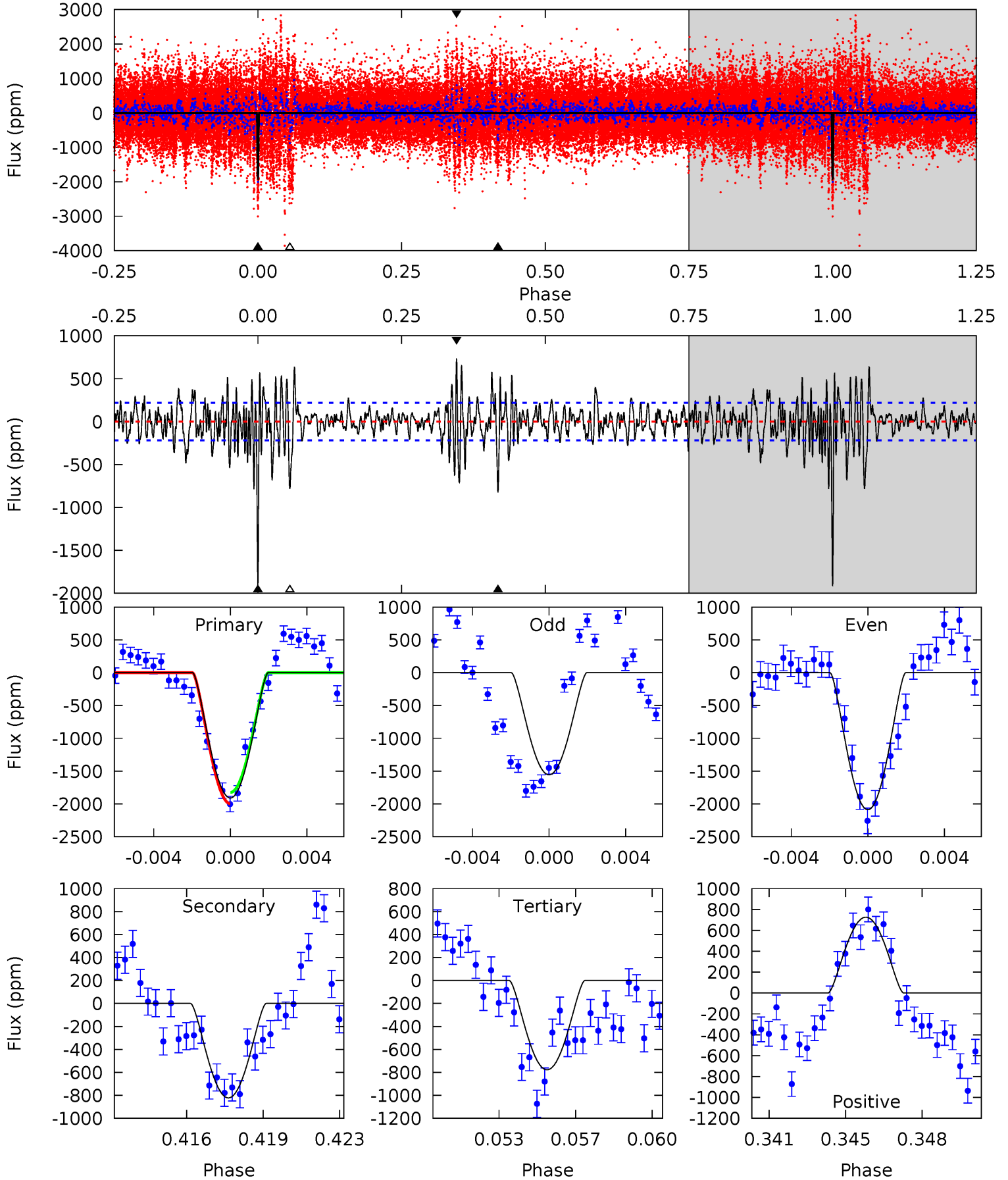
TCE 006201242-01 P=366.298808 Days $T_0=149.752056$ (BKJD)



DV Model-Shift Uniqueness Test

006201242-01, P = 366.380068 Days, E = 149.598790 Days

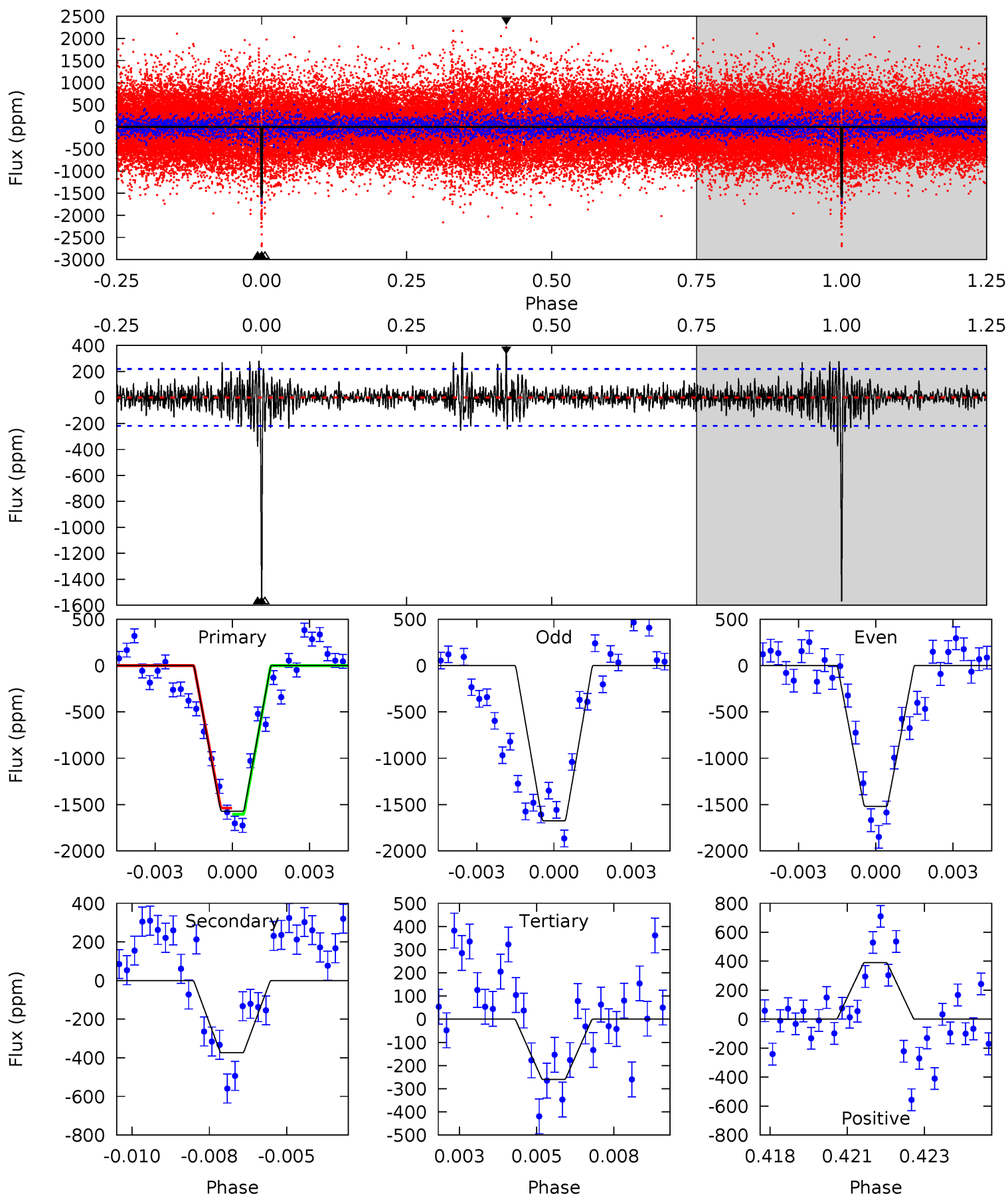
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
45.7	19.7	18.6	17.4	5.22	2.92	4.31	27.1	28.3	1.07	2.29	6.03	0.98	0.28	2.03



Alt Model-Shift Uniqueness Test

006201242-01, P = 366.298808 Days, E = 149.752056 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
37.9	9.01	6.28	9.43	5.28	3.02	1.54	31.6	28.5	2.73	-0.42	1.78	0.94	0.20	0.81



Stellar Parameters For KIC 006201242

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6309^{+175}_{-263}	$4.441^{+0.067}_{-0.216}$	$-0.180^{+0.250}_{-0.300}$	$1.044^{+0.326}_{-0.116}$	$1.096^{+0.154}_{-0.154}$	$1.355^{+0.403}_{-0.736}$
	+3%/-4%	+2%/-5%	+139%/-167%	+31%/-11%	+14%/-14%	+30%/-54%
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 006201242-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-822 ± 42	$14.51^{+13.05}_{-9.81}$	397^{+29}_{-22}	3545^{+1700}_{-649}	2281^{+18533}_{-1675}
Alt.	-373 ± 41	$13.06^{+12.80}_{-9.05}$	397^{+29}_{-23}	3206^{+1749}_{-552}	1307^{+12500}_{-991}

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

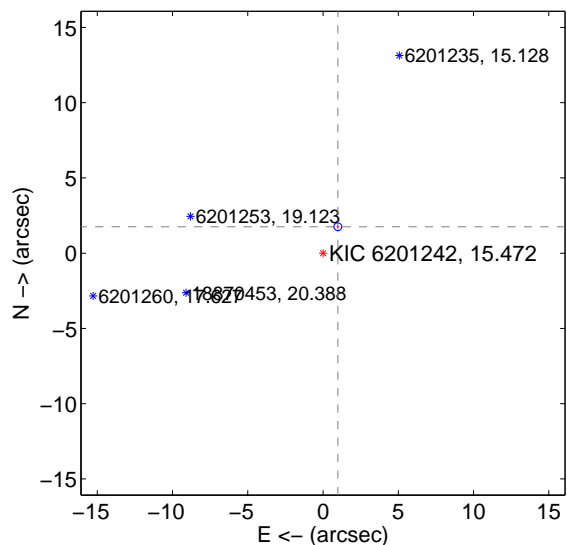
Supplemental centroid analysis for 006201242-01. Kepler magnitude: 15.47. Transit SNR 8.09

There are 1 quarters with good PRF difference image offsets

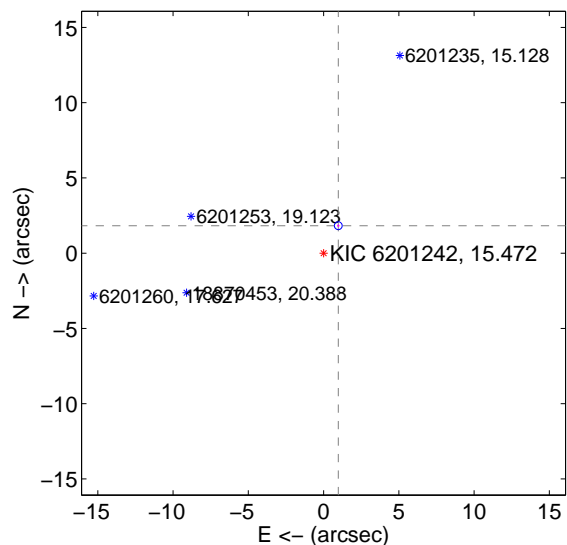
The direct PRF centroid is offset from the target star catalog position by about 0.07 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.014 ± 0.086	23.29	-0.985 ± 0.086	1.757 ± 0.087
PRF-fit source offset from KIC position	2.070 ± 0.087	23.93	-0.976 ± 0.086	1.825 ± 0.087
photometric centroid source offset	4.88 ± 2.84	1.72	-4.83 ± 2.86	0.74 ± 1.37

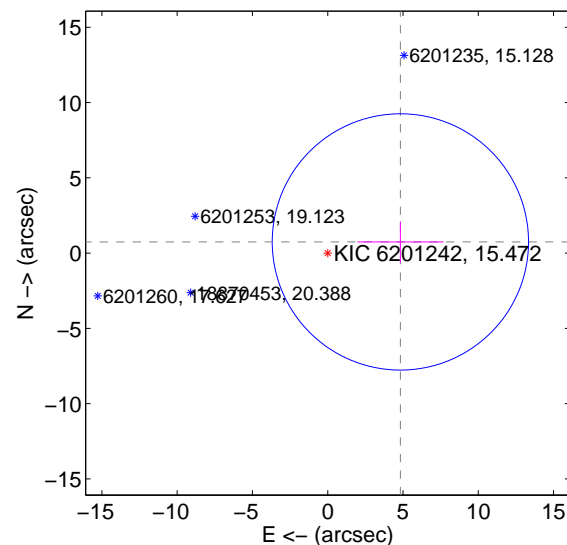
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position



offset from photometric centroids

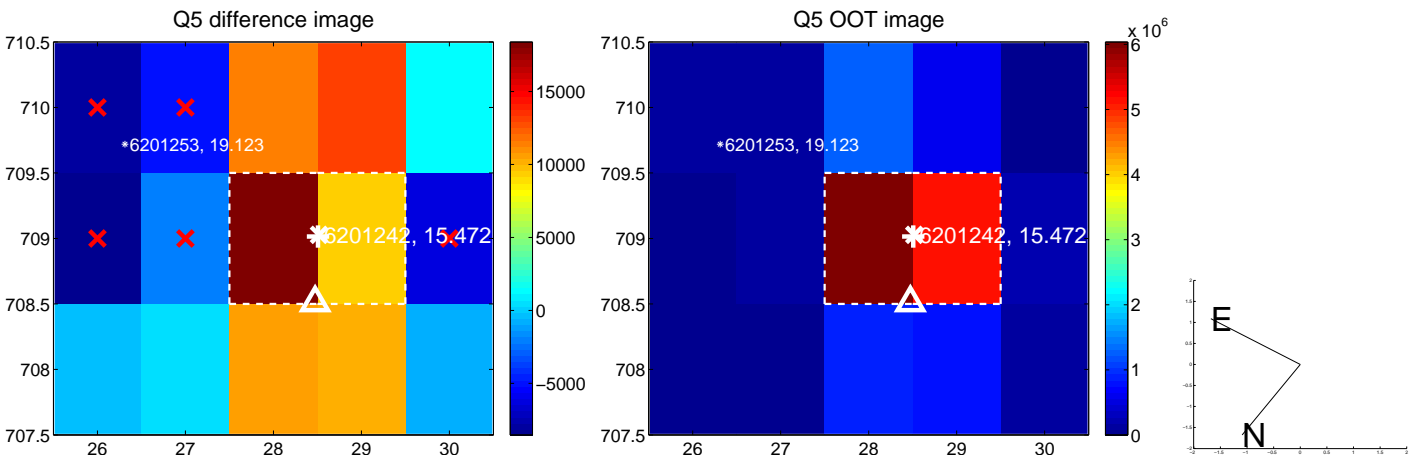


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

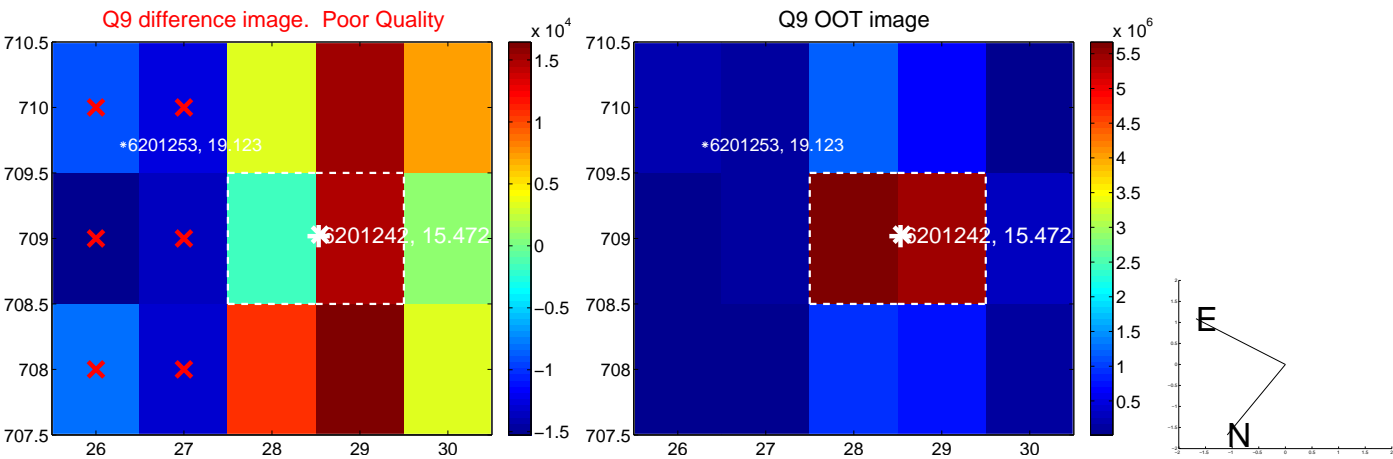
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



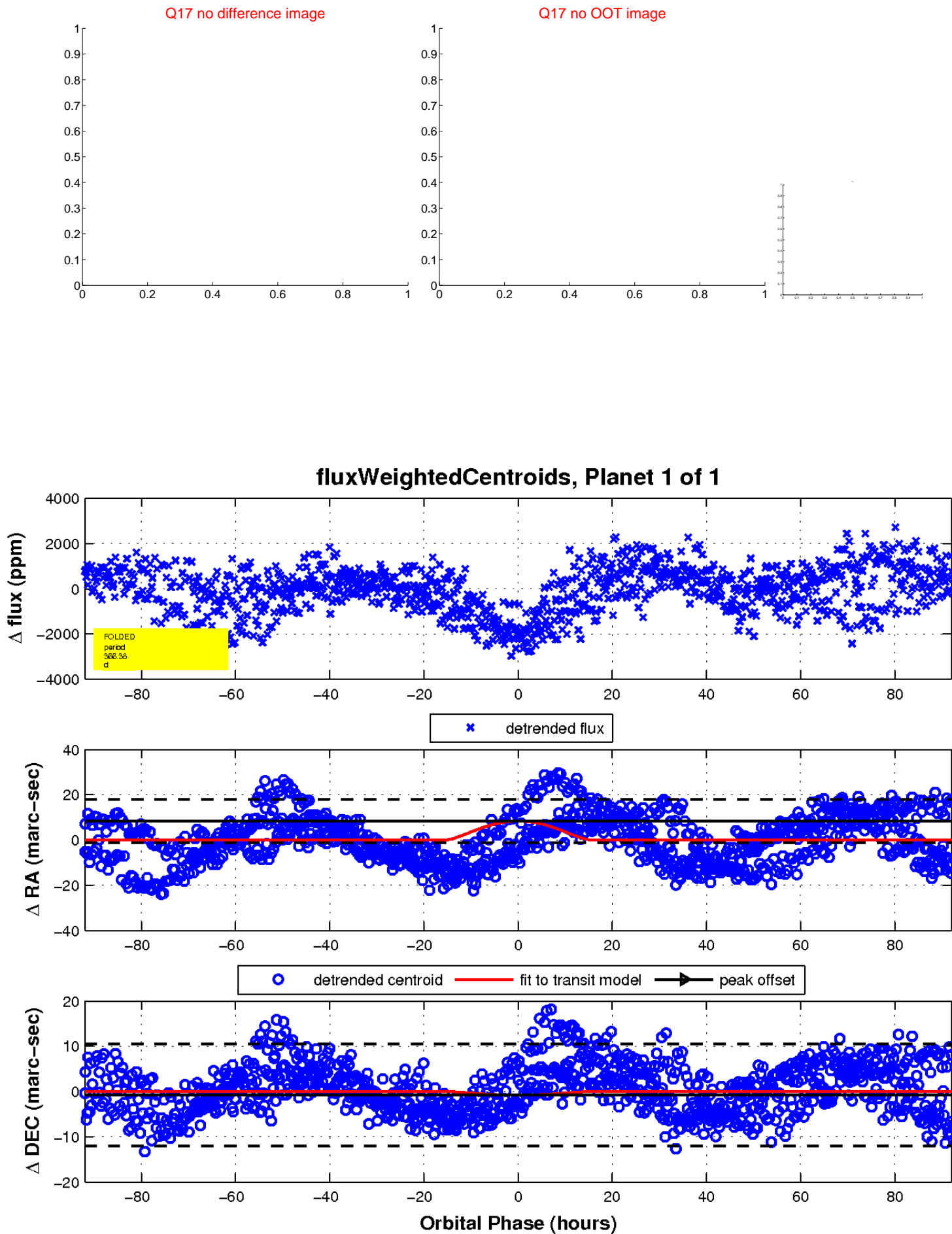
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



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



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



UKIRT Image

Declination

