

KIC 003735196

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})
003735196-01	OBS	No	151.439011	191.143005	125.9	2.356	8.9	5.5	152.28	3293	219.87	0.00

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003735196-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE—MOD_TER_DV—MOD_POS_DV—MOD_TER_ALT—CENT_SATURATED

Notes: OBS = Observed. INJ = Injected. INV = Inverted. SCR = Scrambled.

N = Not Transit-Like. S = Stellar Eclipse. C = Centroid Offset. E = Ephemeris Match.

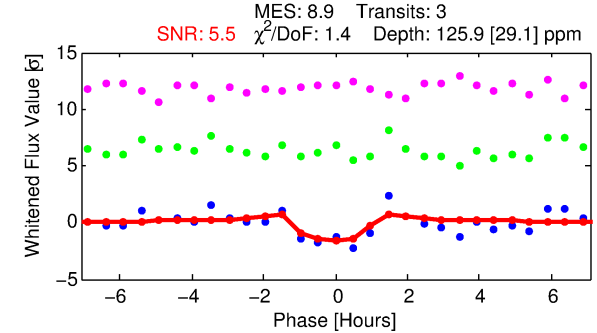
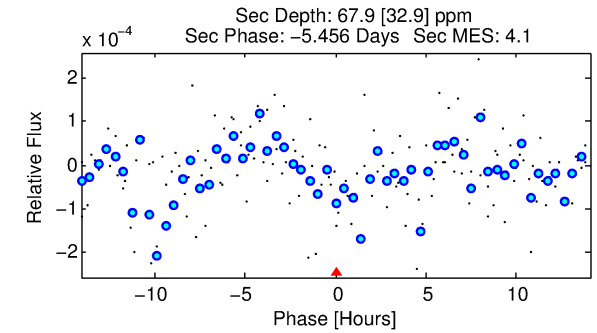
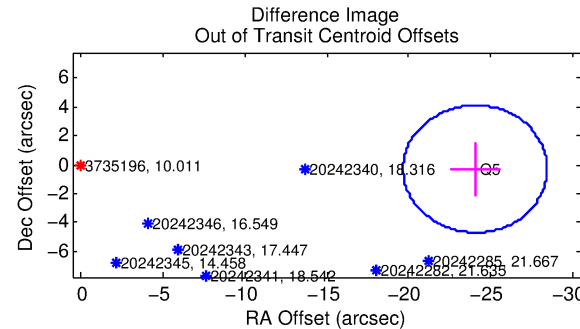
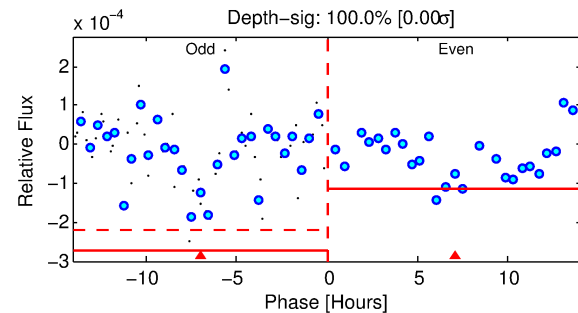
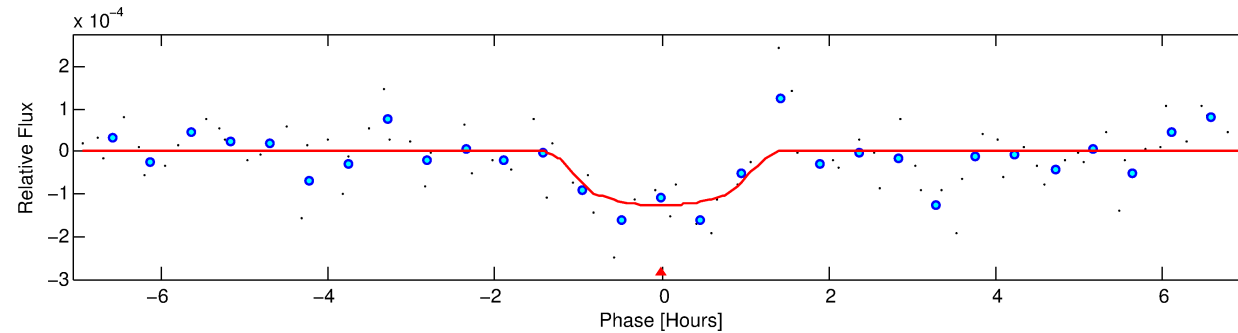
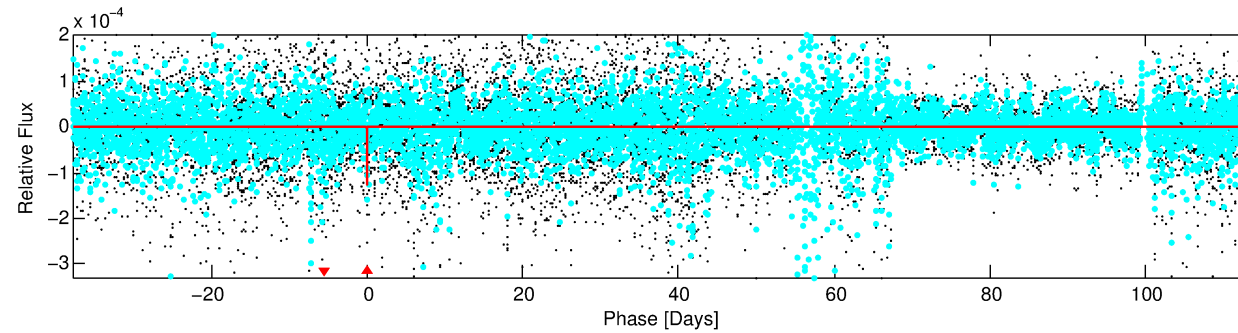
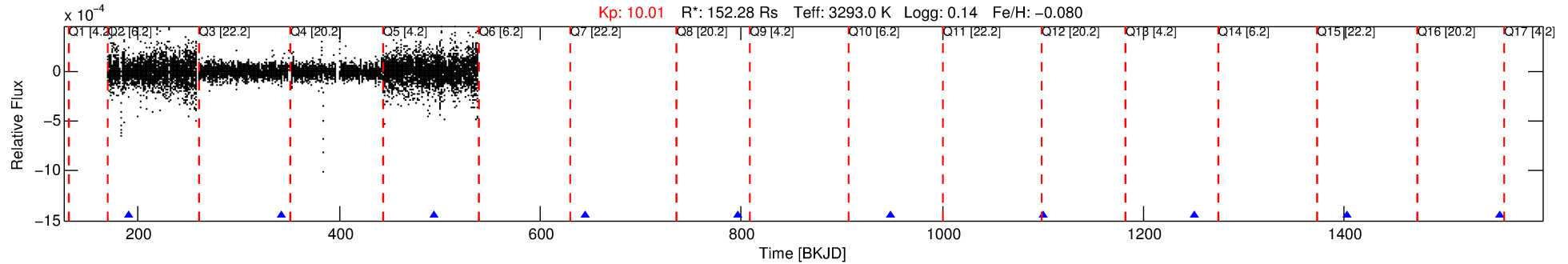
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 003735196-01

No Significant Match Found

DV One-Page Summary

KIC: 3735196 Candidate: 1 of 1 Period: 151.439 d



DV Fit Results:

Period = 151.43901 [0.01027] d
Epoch = 191.1430 [0.0109] BKJD
Rp/R* = 0.0132 [0.0279]
a/R* = 228.80 [1467.18]
b = 0.90 [1.43]
Seff = N/A
Teq = N/A
Rp = 219.87 [465.55] Re
a = N/A
Ag = N/A
Teff = N/A

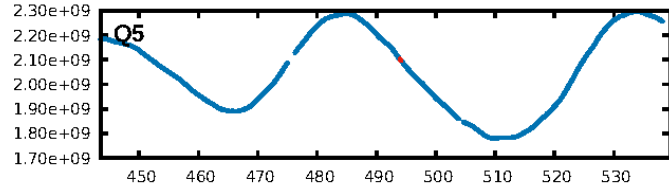
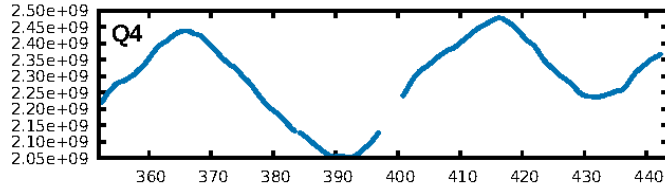
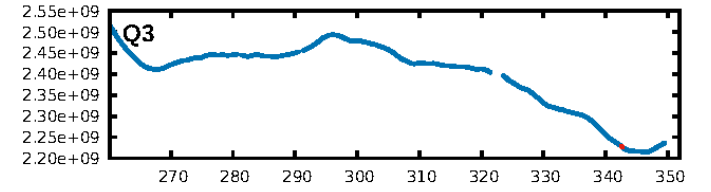
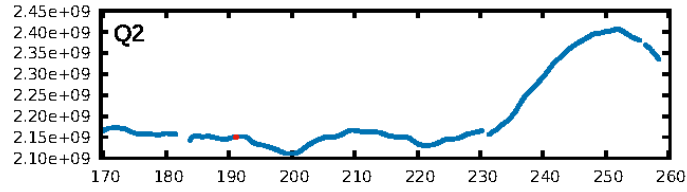
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.4%
ModelChiSquareGoF-sig: 26.8%
Bootstrap-pfa: 2.25e-12
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: N/A
Centroid-sig: 2.0%
Centroid-so: 10.433 arcsec [1.18 σ]
OotOffset-rm: 24.040 arcsec [16.44 σ]
KicOffset-rm: 22.242 arcsec [15.17 σ]
OotOffset-st: 0/0/0/1 [1]
KicOffset-st: 0/0/0/1 [1]
DiffImageQuality-fgm: 0.00 [0/1]
DiffImageOverlap-fno: 1.00 [3/3]

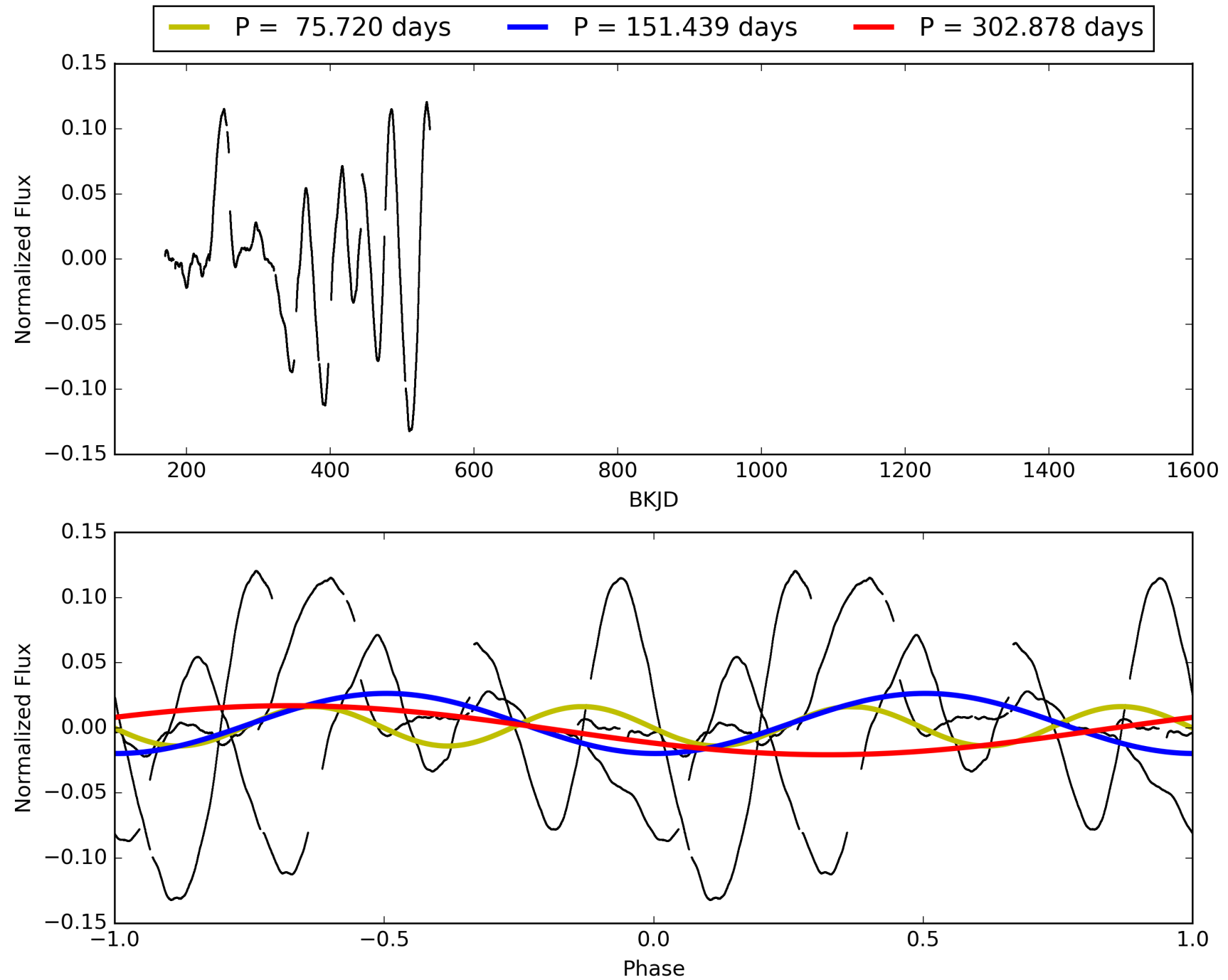
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 12:44:53 Z

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

TCE 003735196-01, PDC Light Curves

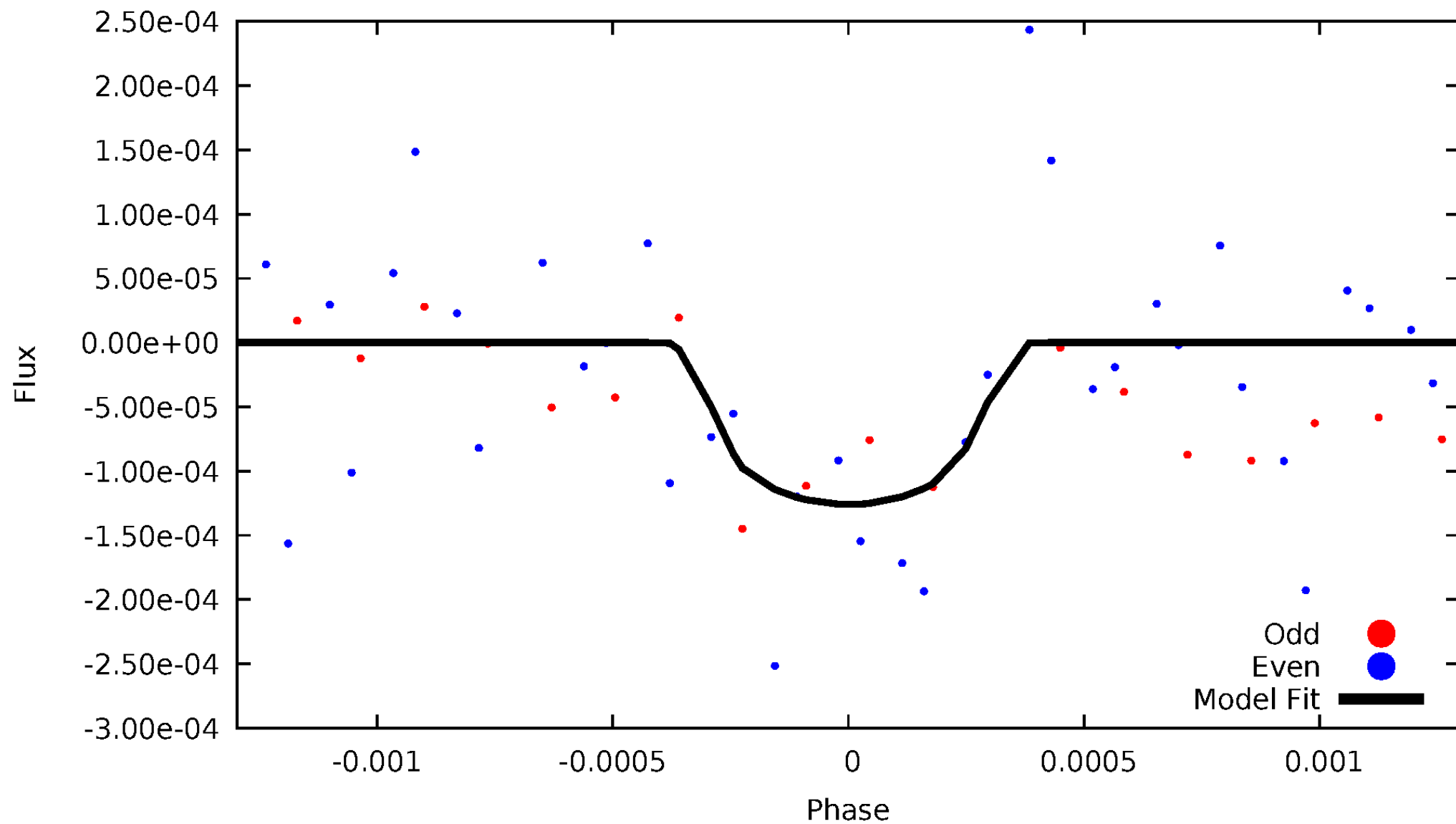


TCE 003735196-01



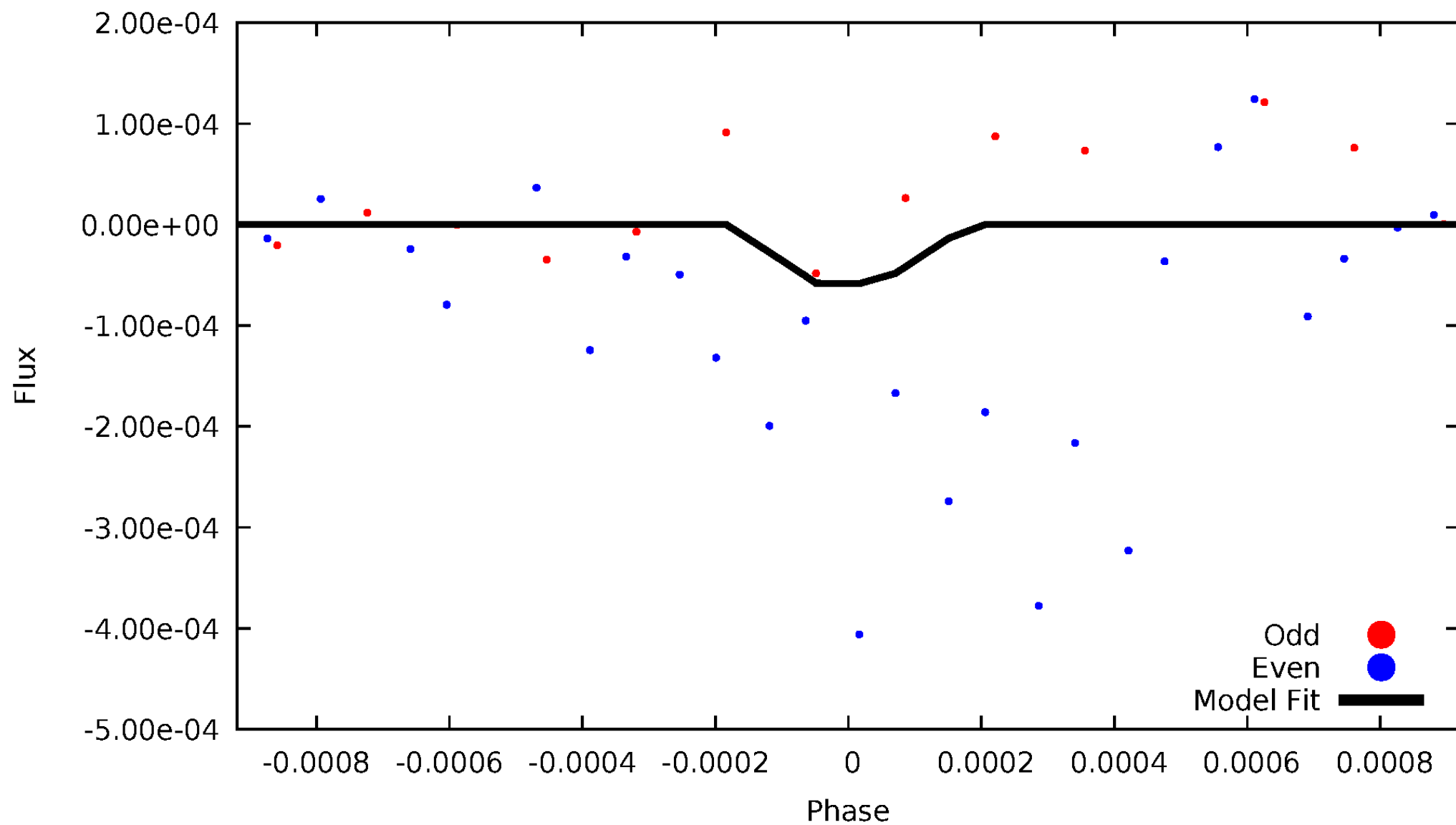
DV Odd/Even

TCE 003735196-01

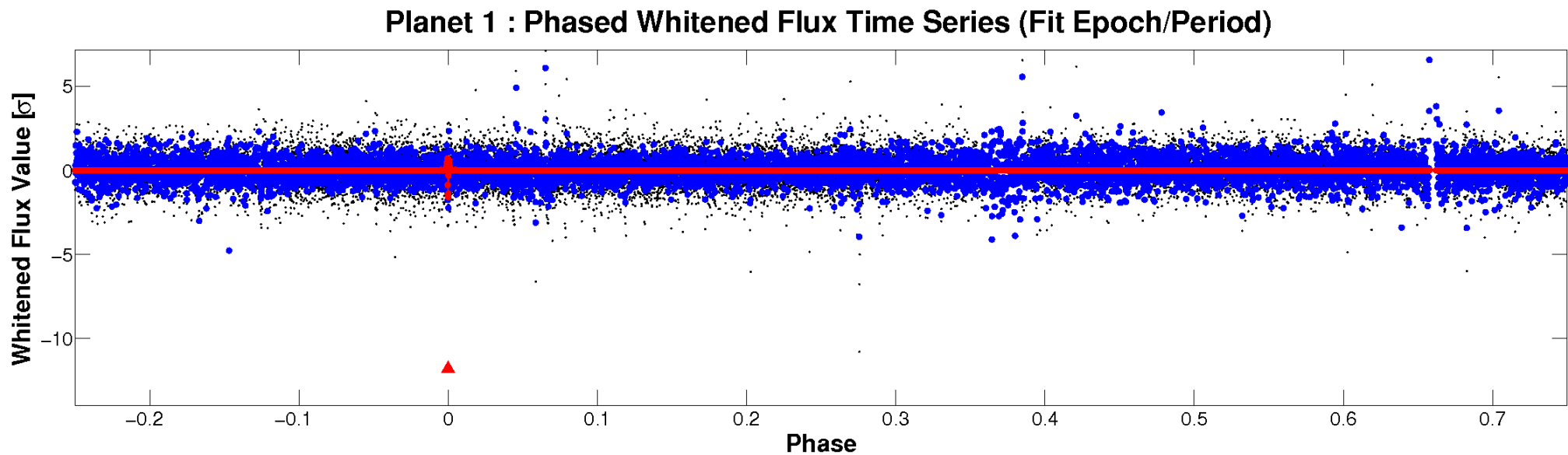
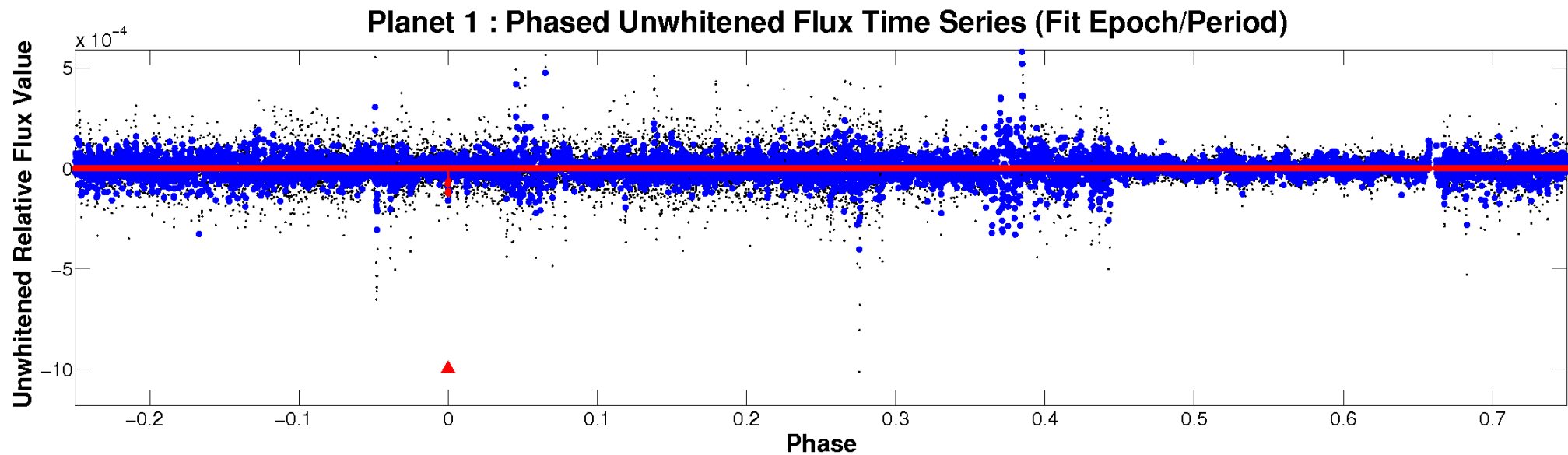


ALT Odd/Even

TCE 003735196-01

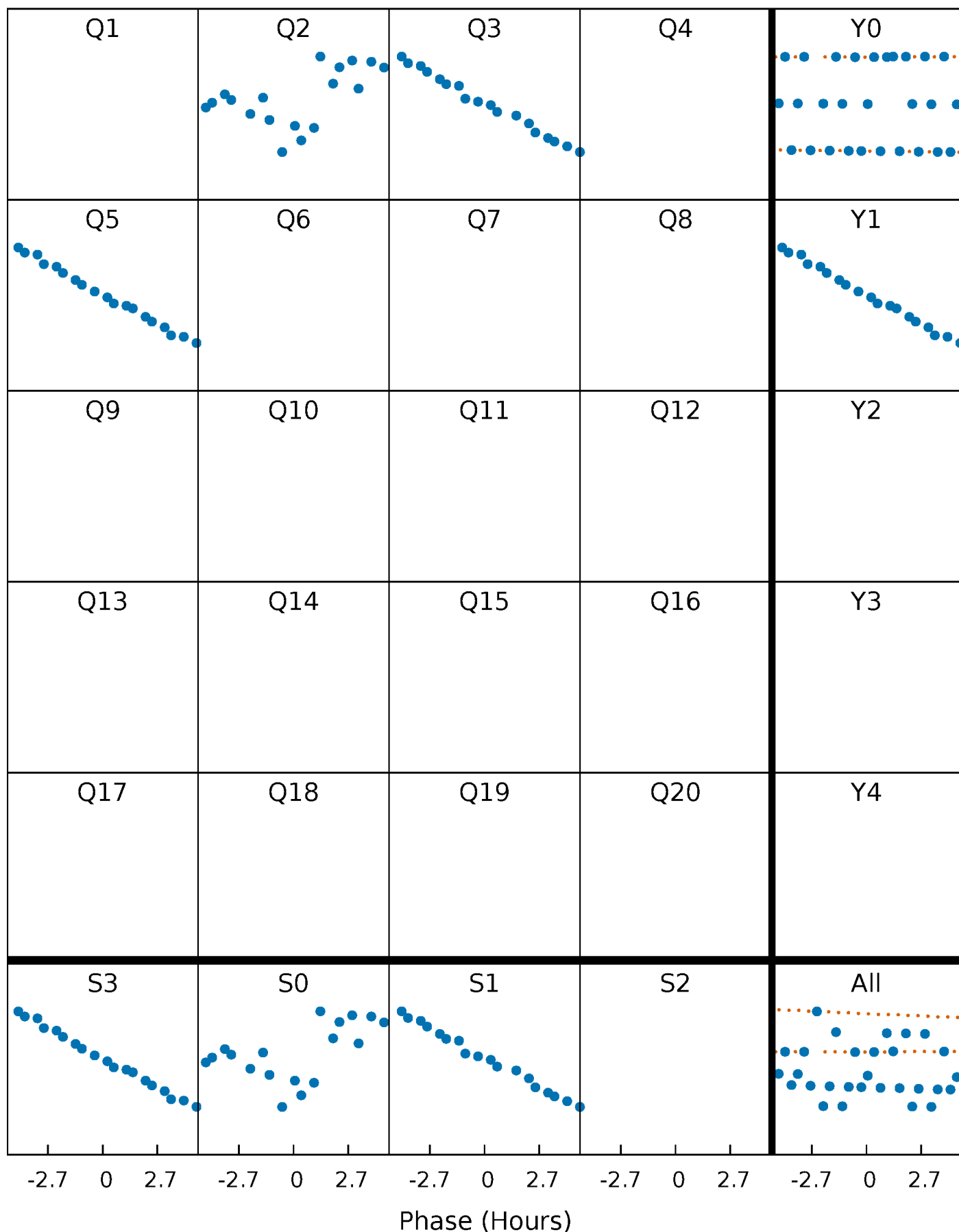


Non-Whitened Vs. Whitened Light Curve



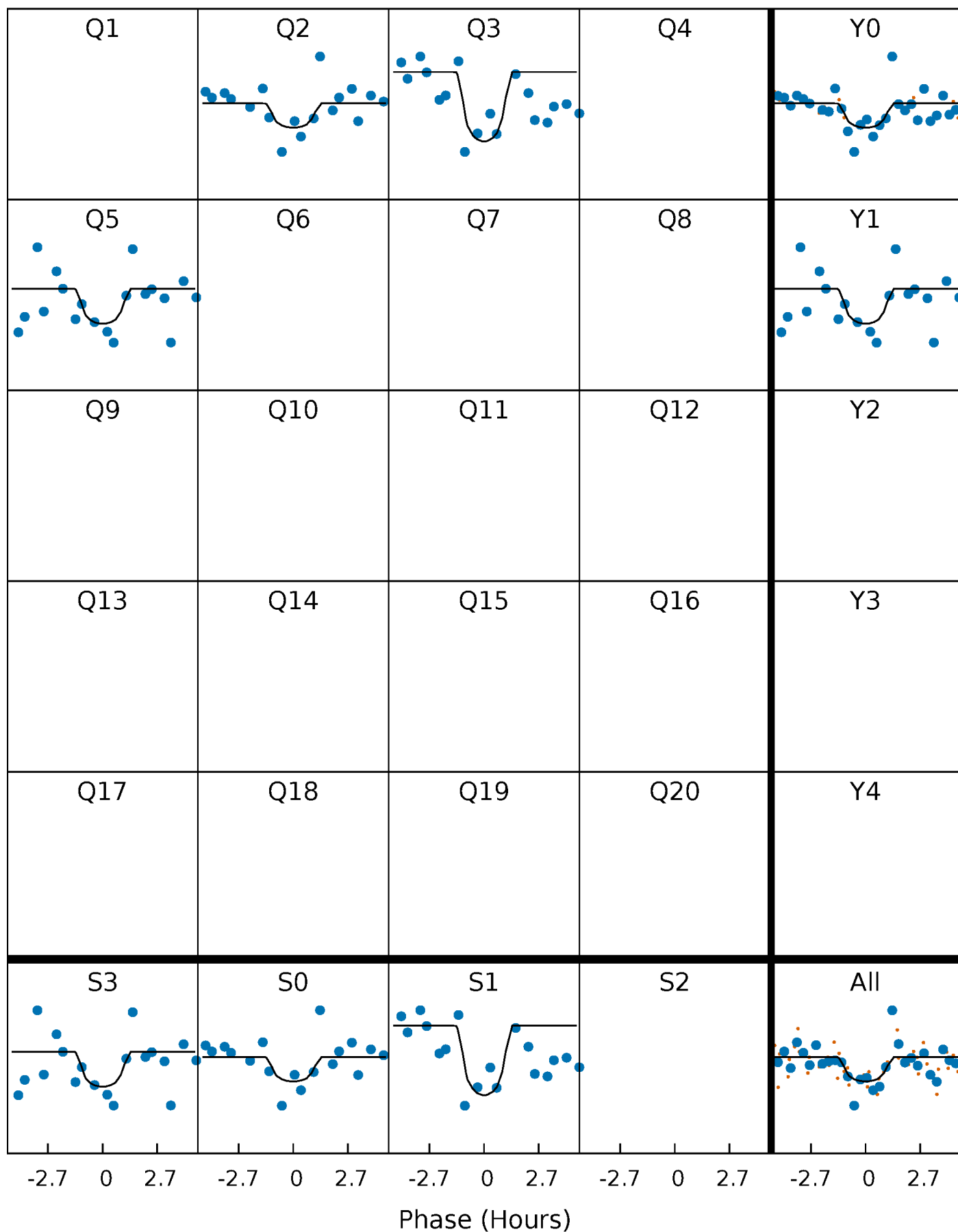
PDC Quarter-Phased Transit Curves

TCE 003735196-01 P=151.439011 Days $T_0=191.143005$ (BKJD)



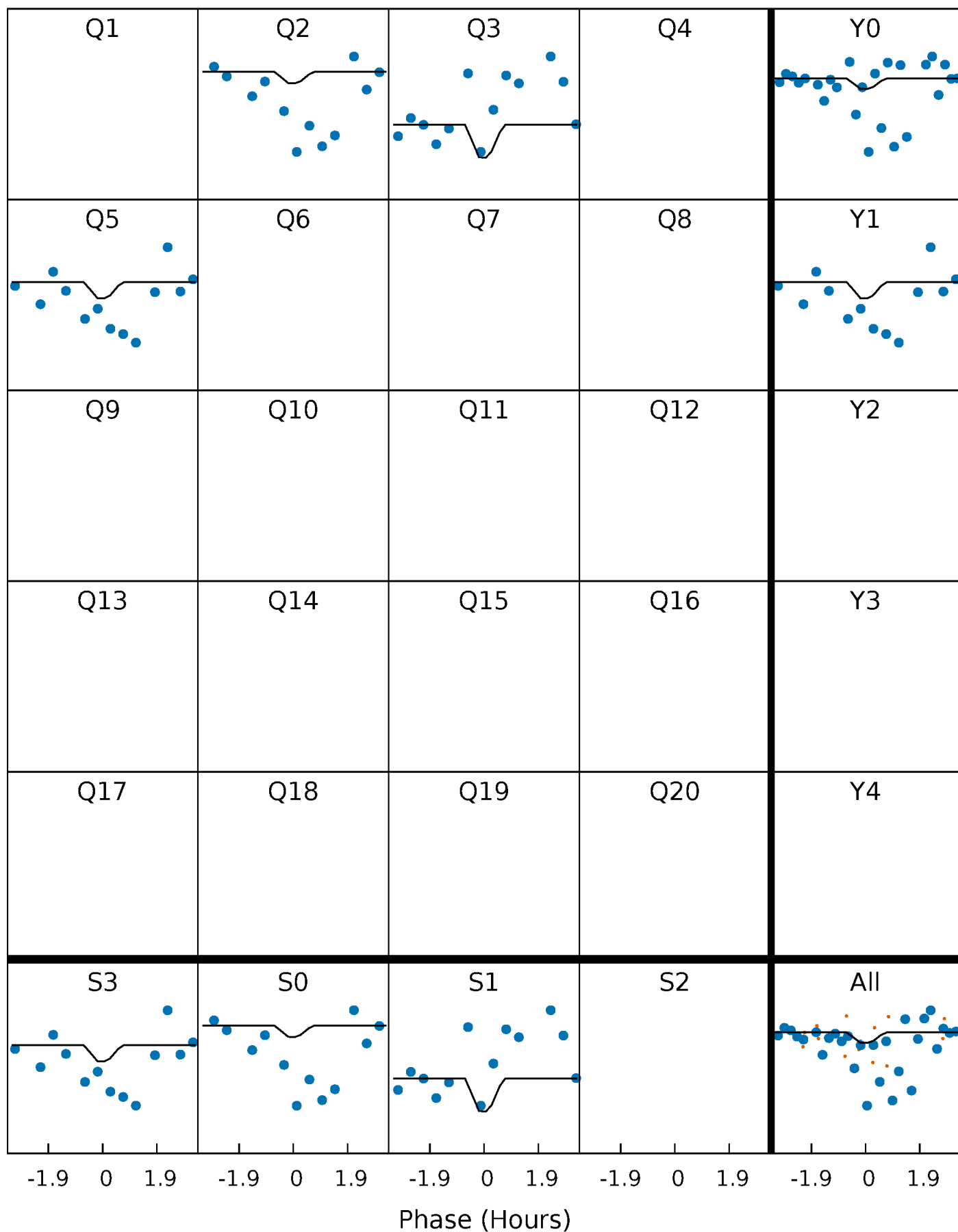
DV Quarter-Phased Transit Curves

TCE 003735196-01 P=151.439011 Days $T_0=191.143005$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

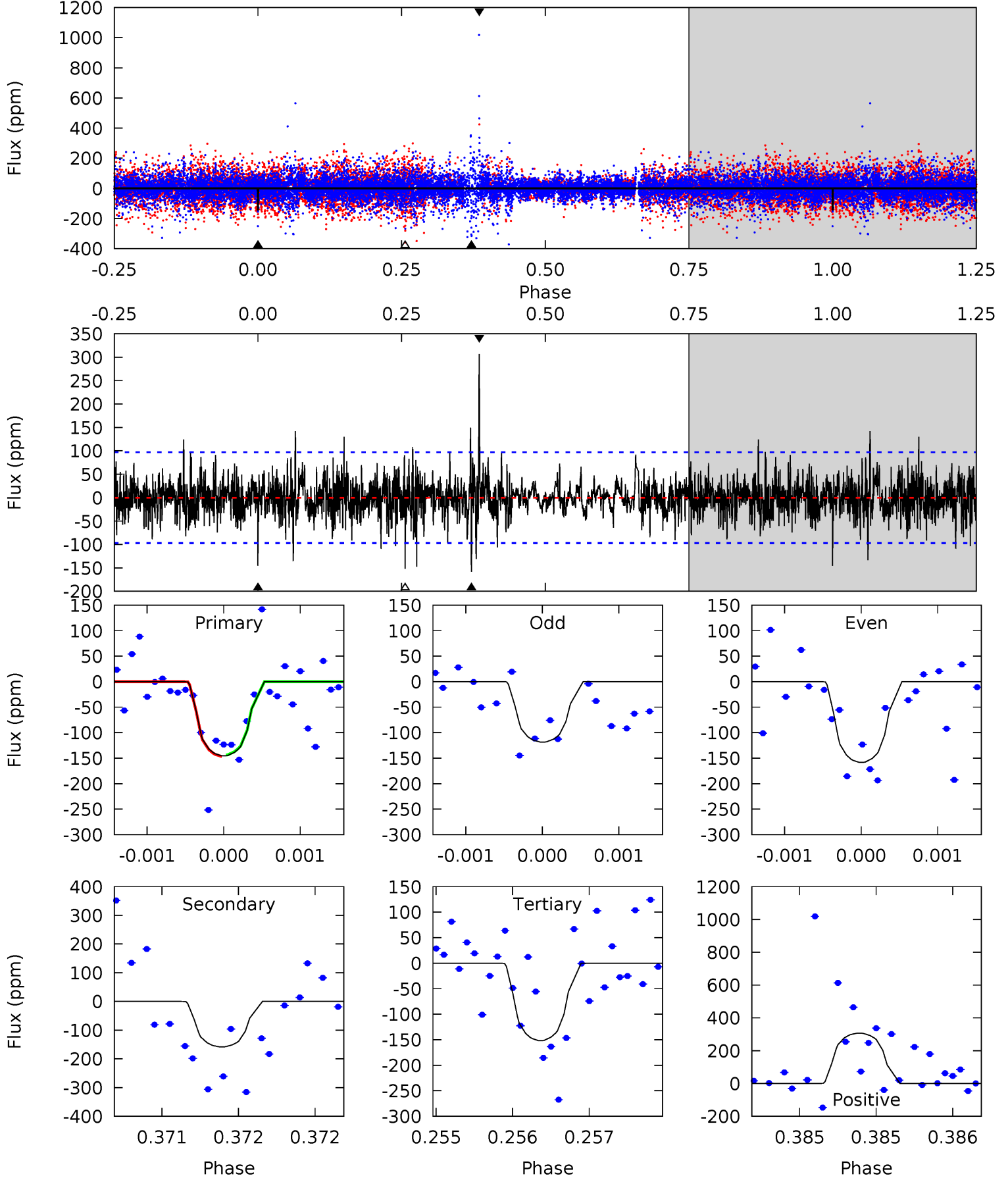
TCE 003735196-01 P=151.438414 Days $T_0=191.116955$ (BKJD)



DV Model-Shift Uniqueness Test

003735196-01, P = 151.439011 Days, E = 39.703994 Days

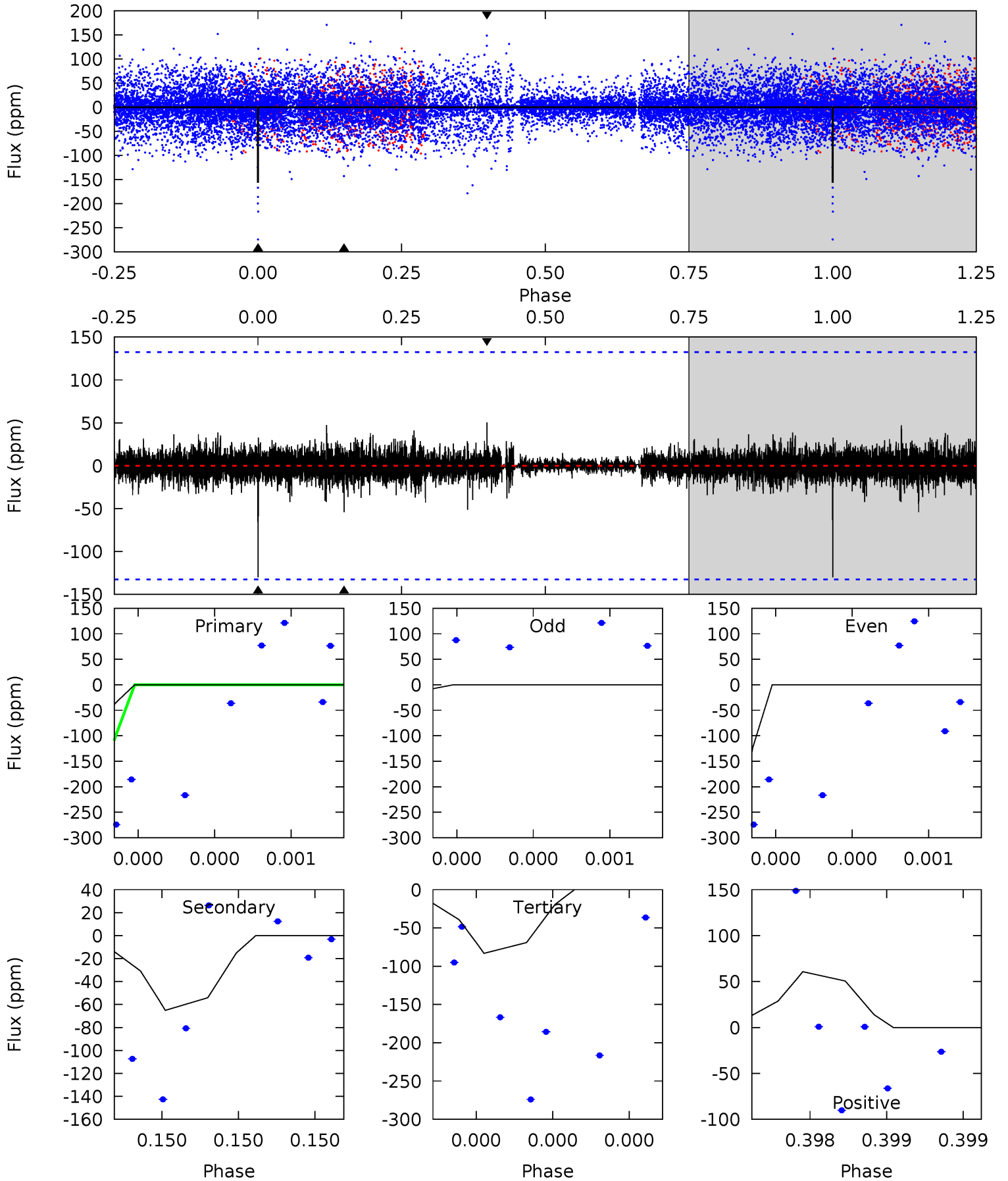
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.21	8.93	8.56	17.3	5.49	3.35	1.72	-0.36	-9.11	0.37	-8.38	1.10	0.99	0.66	0.08



Alt Model-Shift Uniqueness Test

003735196-01, P = 151.438414 Days, E = 39.678541 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5.61	2.34	2.99	2.18	5.72	3.70	0.41	2.63	3.43	-0.65	0.16	10.8	1.34	0.28	8.06



Stellar Parameters For KIC 003735196

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	3293^{+107}_{-88}	$0.136^{+0.212}_{-0.050}$	$-0.080^{+0.250}_{-0.150}$	$152.284^{+7.966}_{-29.874}$	$1.156^{+0.189}_{-0.155}$	$0.000^{+0.000}_{-0.000}$
	+3%/-3%	+156%/-37%	+312%/-188%	+5%/-20%	+16%/-13%	+97%/-11%
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 003735196-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-158 ± 18	$384.54^{+383.80}_{-259.79}$	3220^{+148}_{-165}	-2461^{+6227}_{-375}	$0.211^{+1.708}_{-0.162}$
Alt.	-54 ± 23	$362.23^{+319.83}_{-248.50}$	3218^{+136}_{-171}	-2739^{+5818}_{-160}	$0.075^{+0.684}_{-0.057}$

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 $A_{\text{obs}} \gg 1.0$

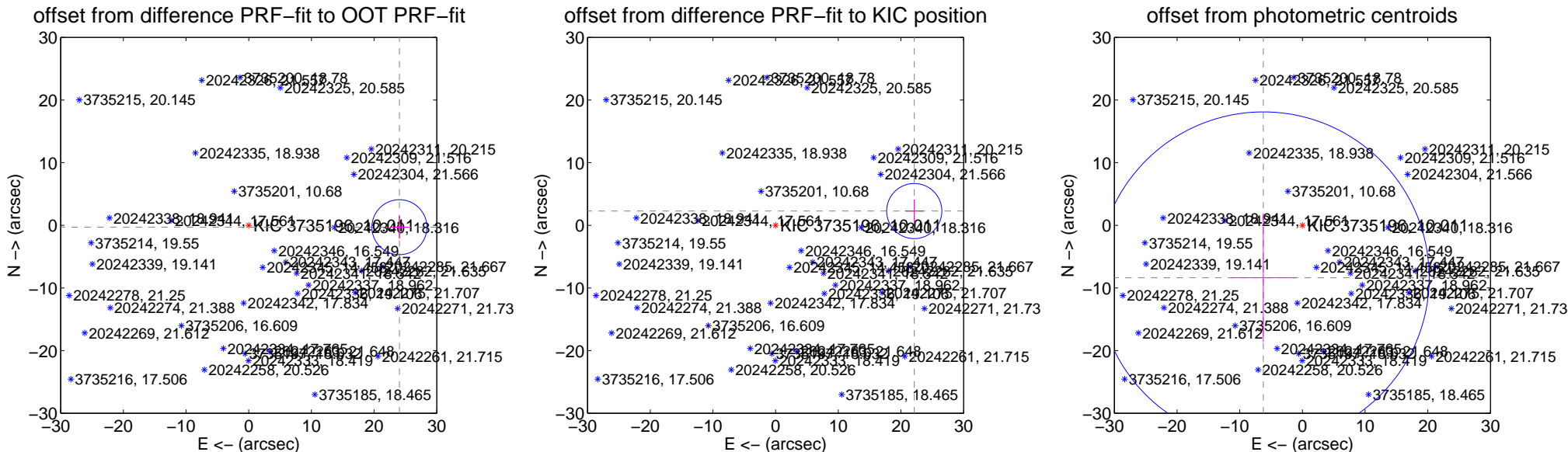
DV Centroid Data

Supplemental centroid analysis for 003735196-01. **Kepler magnitude: 10.01.** Transit SNR 5.48

There are 0 quarters with good PRF difference image offsets

The OOT PRF centroid is offset from the target star catalog position by about 3.21 arcsec so the offset from difference PRF-fit to OOT-fit may be invalid.

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	24.040 \pm 1.462	16.44	-24.038 \pm 1.462	-0.300 \pm 1.826
PRF-fit source offset from KIC position	22.242 \pm 1.466	15.17	-22.125 \pm 1.462	2.273 \pm 1.826
photometric centroid source offset	10.43 \pm 8.82	1.18	6.24 \pm 5.25	-8.36 \pm 10.28



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.

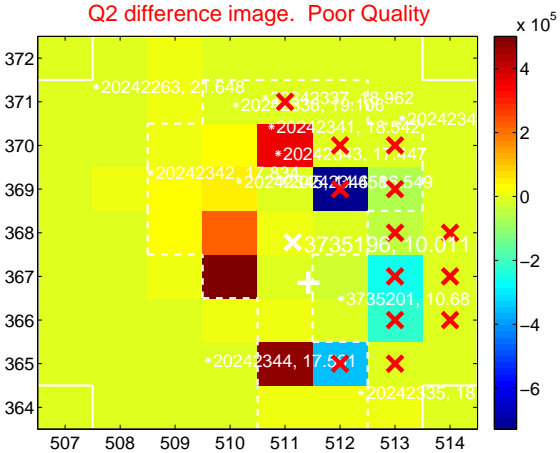
Q1 no difference image



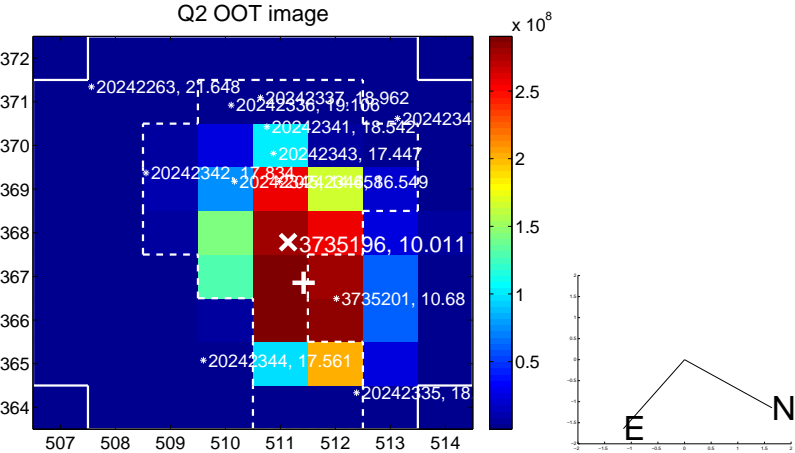
Q1 no OOT image



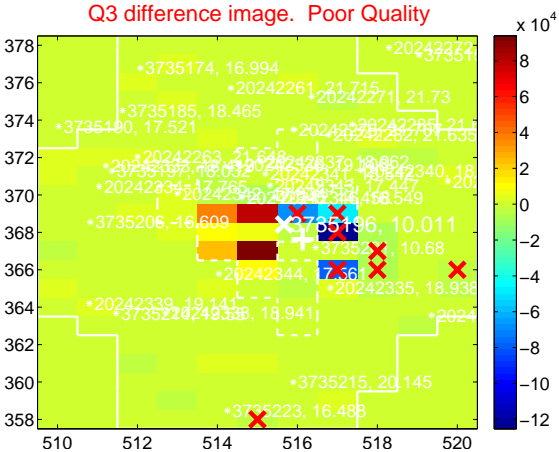
Q2 difference image. Poor Quality



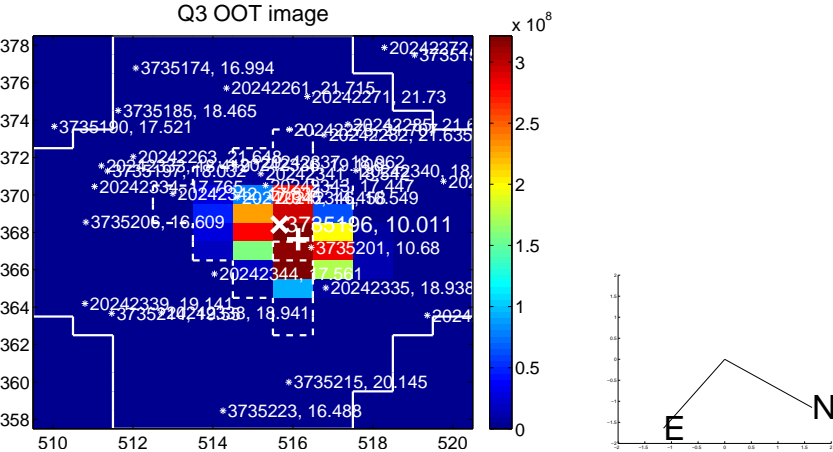
Q2 OOT image



Q3 difference image. Poor Quality



Q3 OOT image



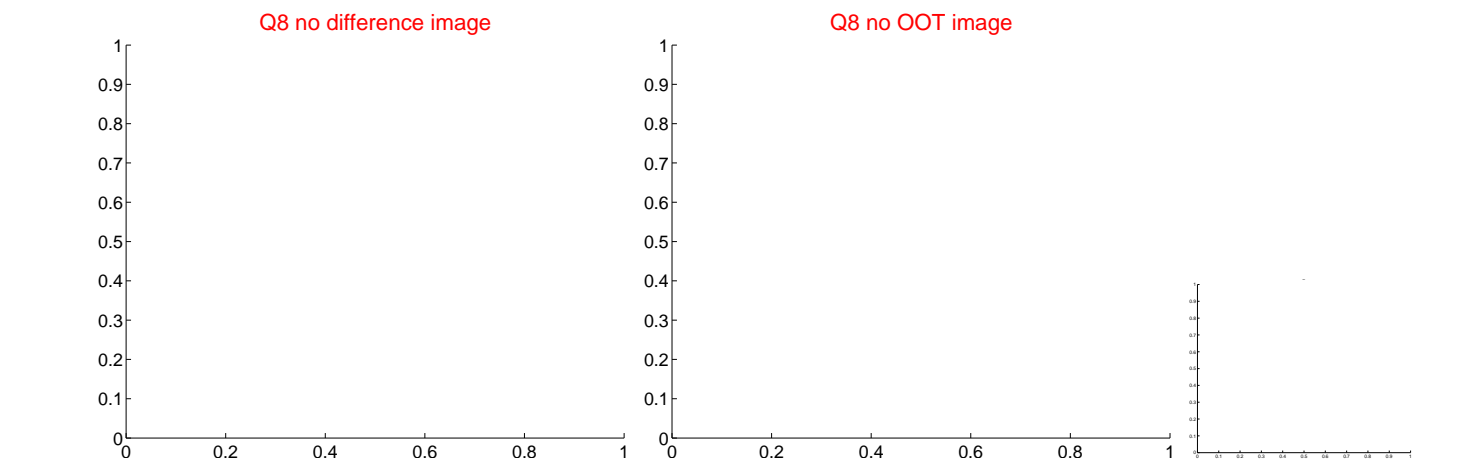
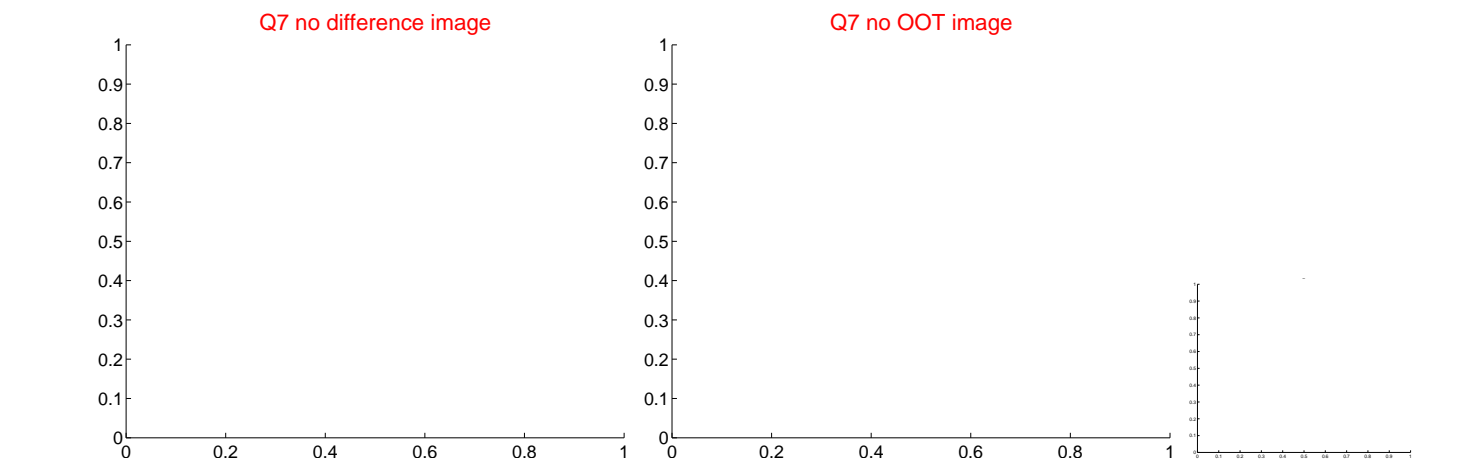
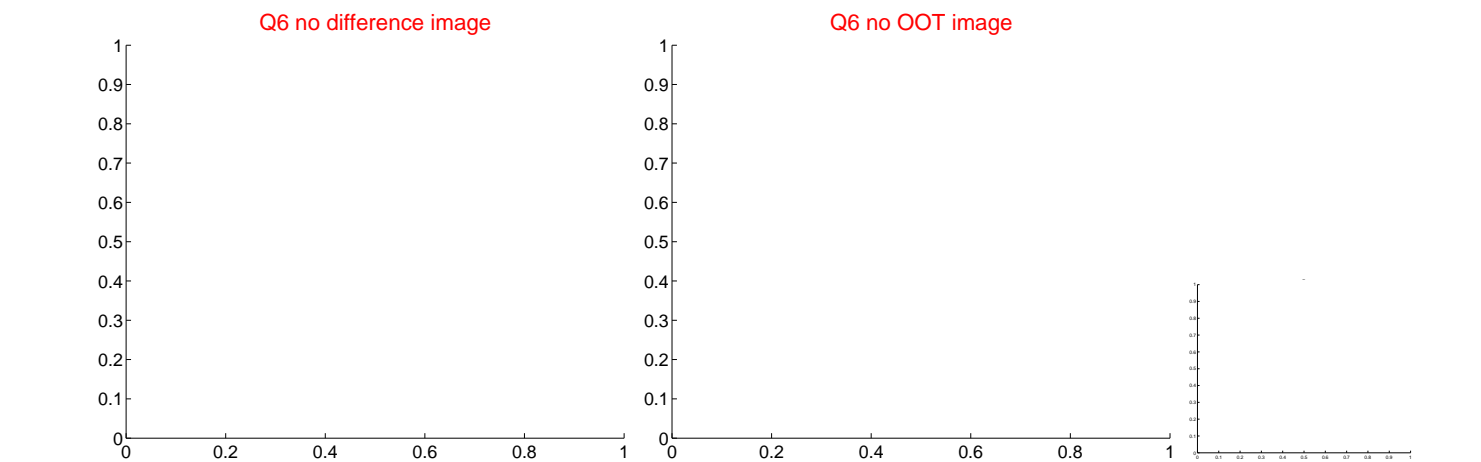
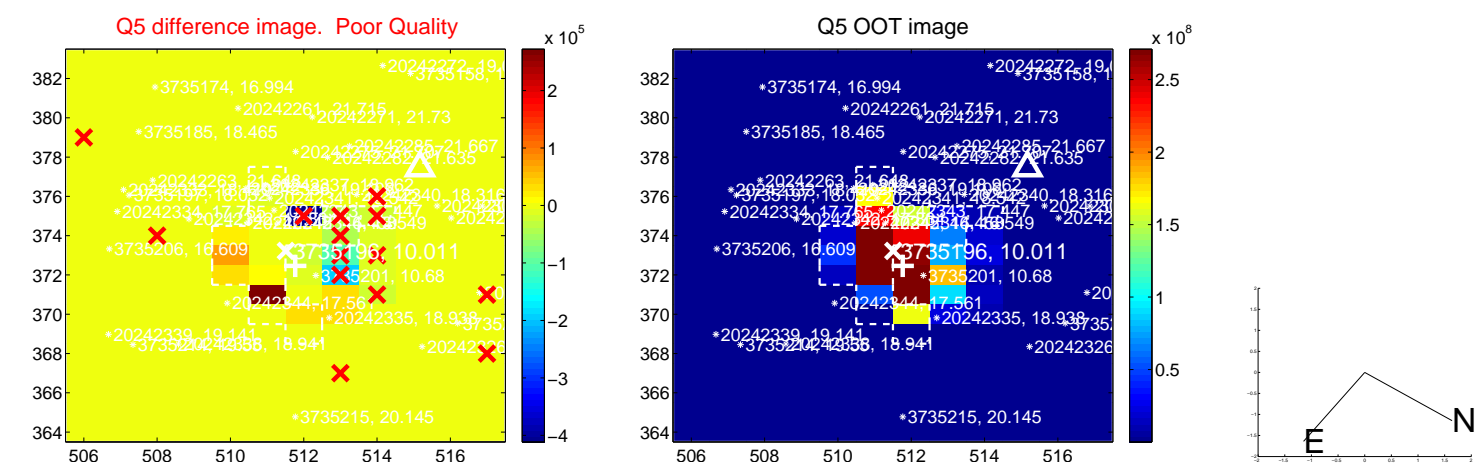
Q4 no difference image



Q4 no OOT image



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



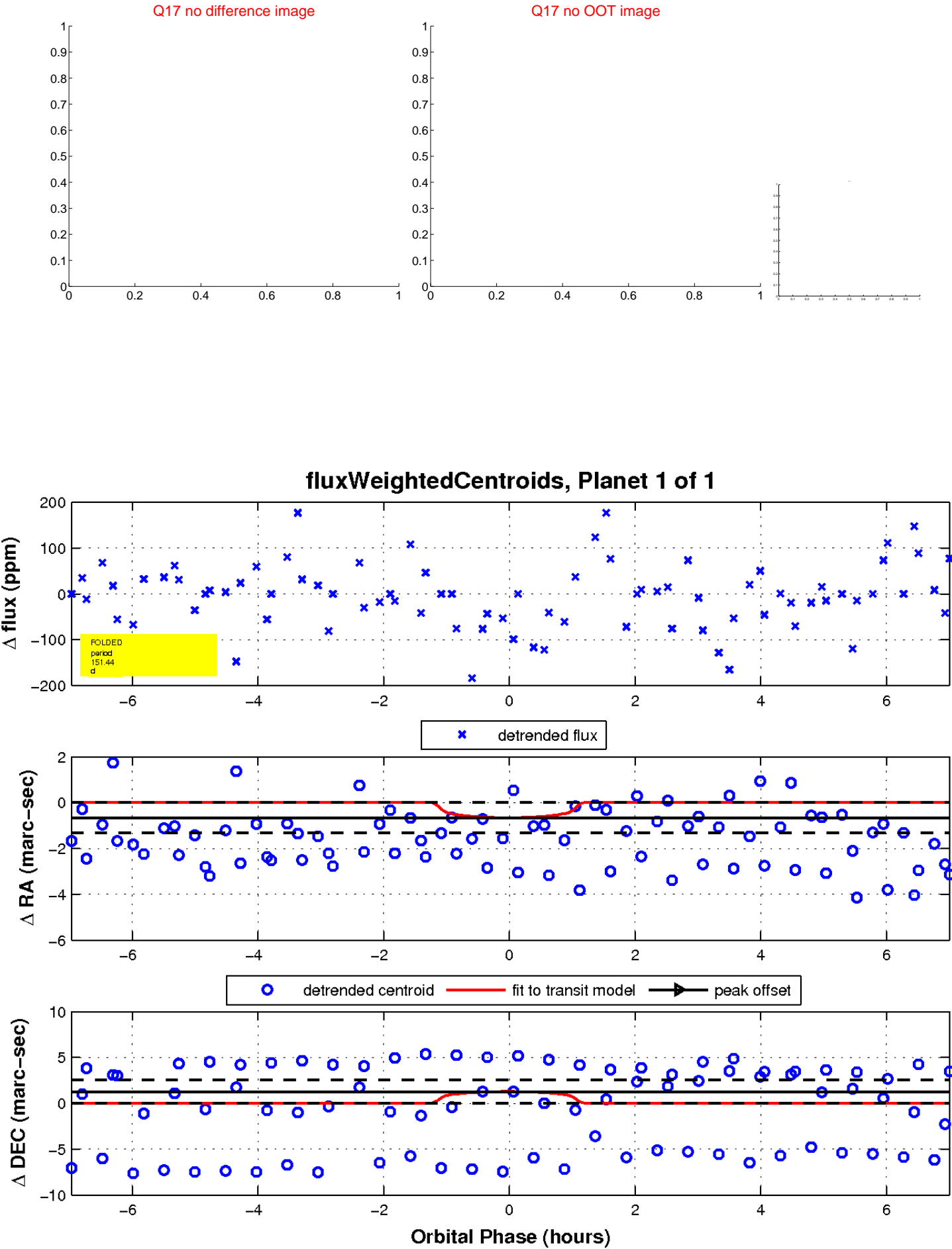
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

