

KIC 011757328

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})
011757328-01	OBS	No	310.355381	266.632855	170.9	29.367	8.8	8.5	2.13	5633	3.93	4.50

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011757328-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—INCONSISTENT_TRANS—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.

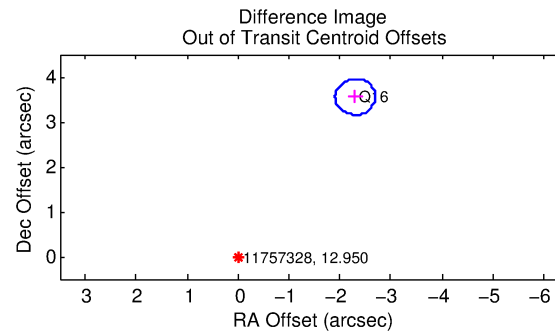
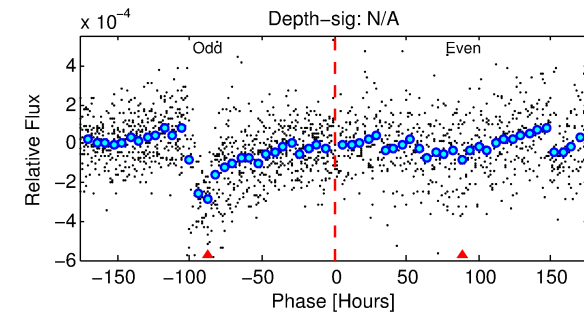
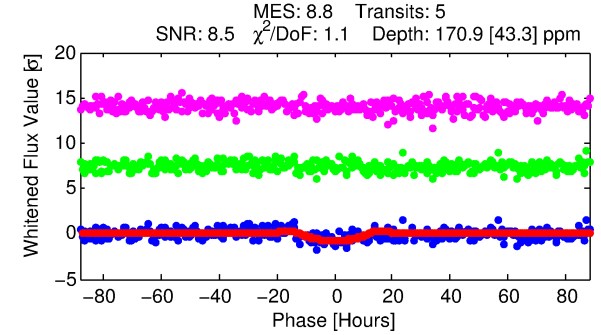
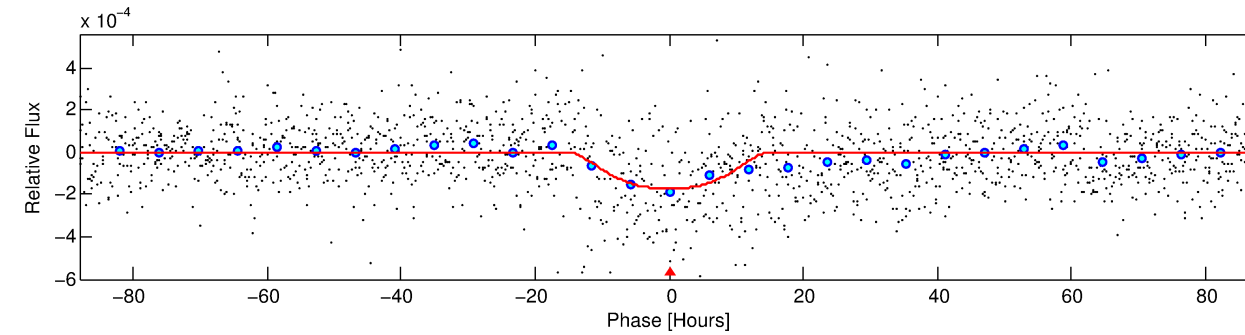
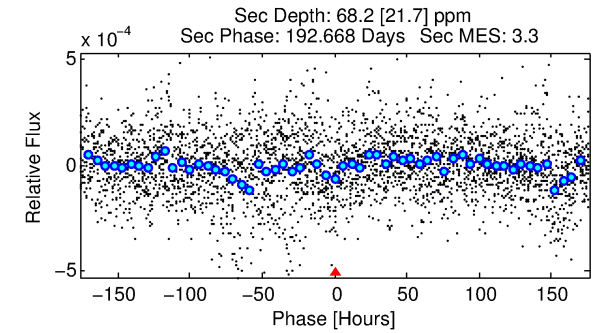
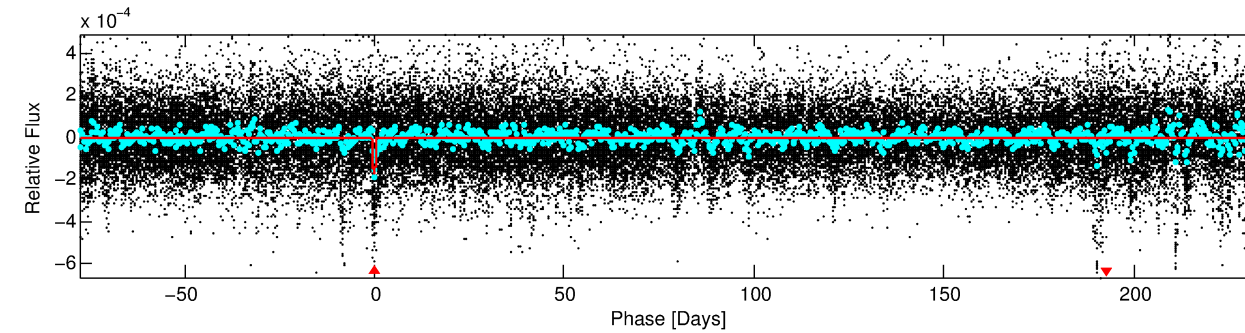
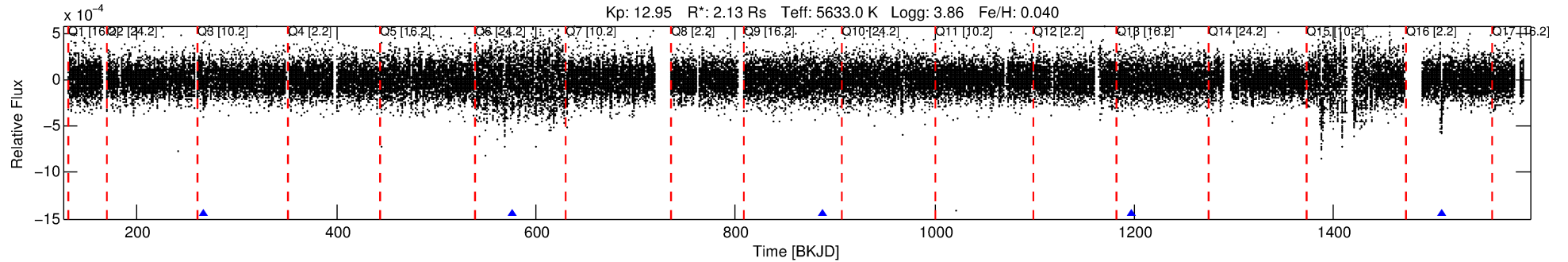
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011757328-01

No Significant Match Found

DV One-Page Summary

KIC: 11757328 Candidate: 1 of 1 Period: 310.355 d



DV Fit Results:

Period = 310.35538 [0.02264] d
Epoch = 266.6329 [0.0588] BKJD
Rp/R* = 0.0169 [0.0030]
a/R* = 21.00 [4.35]
b = 0.98 [0.01]
Seff = 4.50 [2.47]
Teq = 371 [51] K
Rp = 3.93 [1.62] Re
a = 0.9526 [0.3271] AU
Ag = 2206.97 [1580.57] [1.40σ]
Teffp = 3936 [484] K [7.33σ]

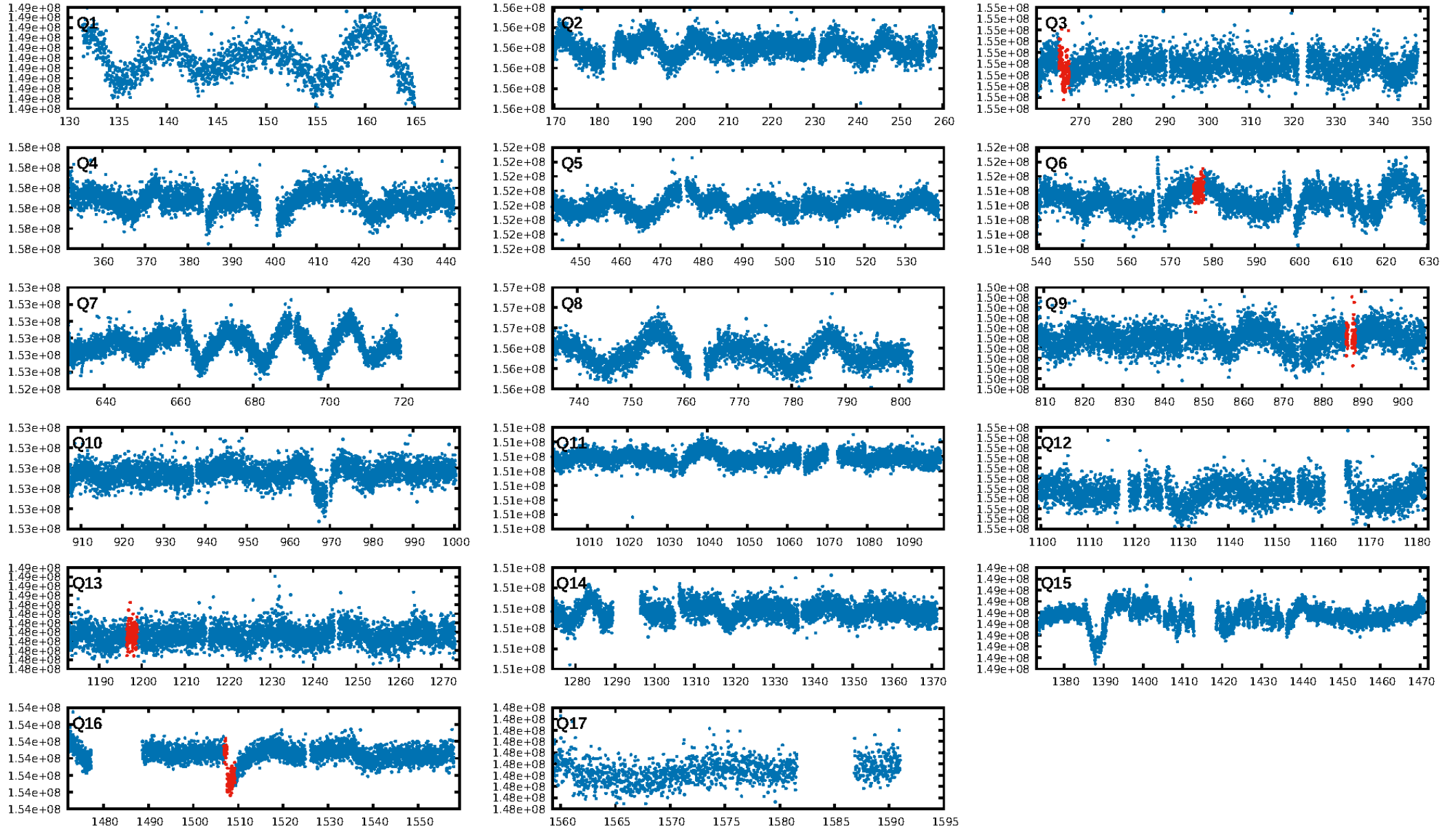
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 4.03e-14
RollingBand-fgt: 1.00 [5/5]
GhostDiagnostic-chr: -1.258
Centroid-sig: 70.0%
Centroid-so: 0.691 arcsec [0.73σ]
OotOffset-rm: 4.233 arcsec [31.89σ]
KicOffset-rm: 4.202 arcsec [31.62σ]
OotOffset-st: 0/0/1/0 [1]
KicOffset-st: 0/0/1/0 [1]
DiffImageQuality-fgm: 1.00 [1/1]
DiffImageOverlap-fno: 1.00 [2/2]

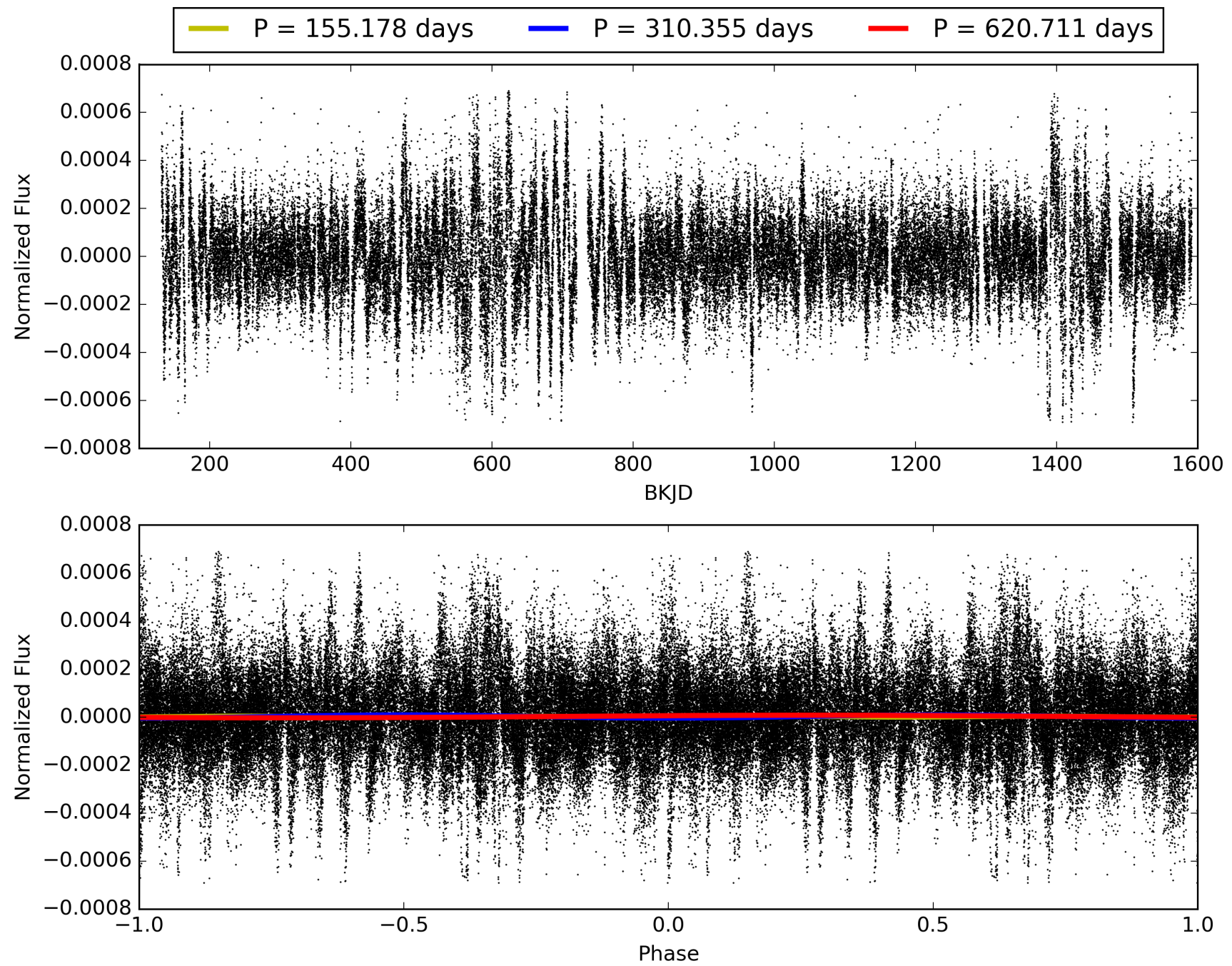
Software Revision: svn-ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 20:31:39 Z

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

TCE 011757328-01, PDC Light Curves

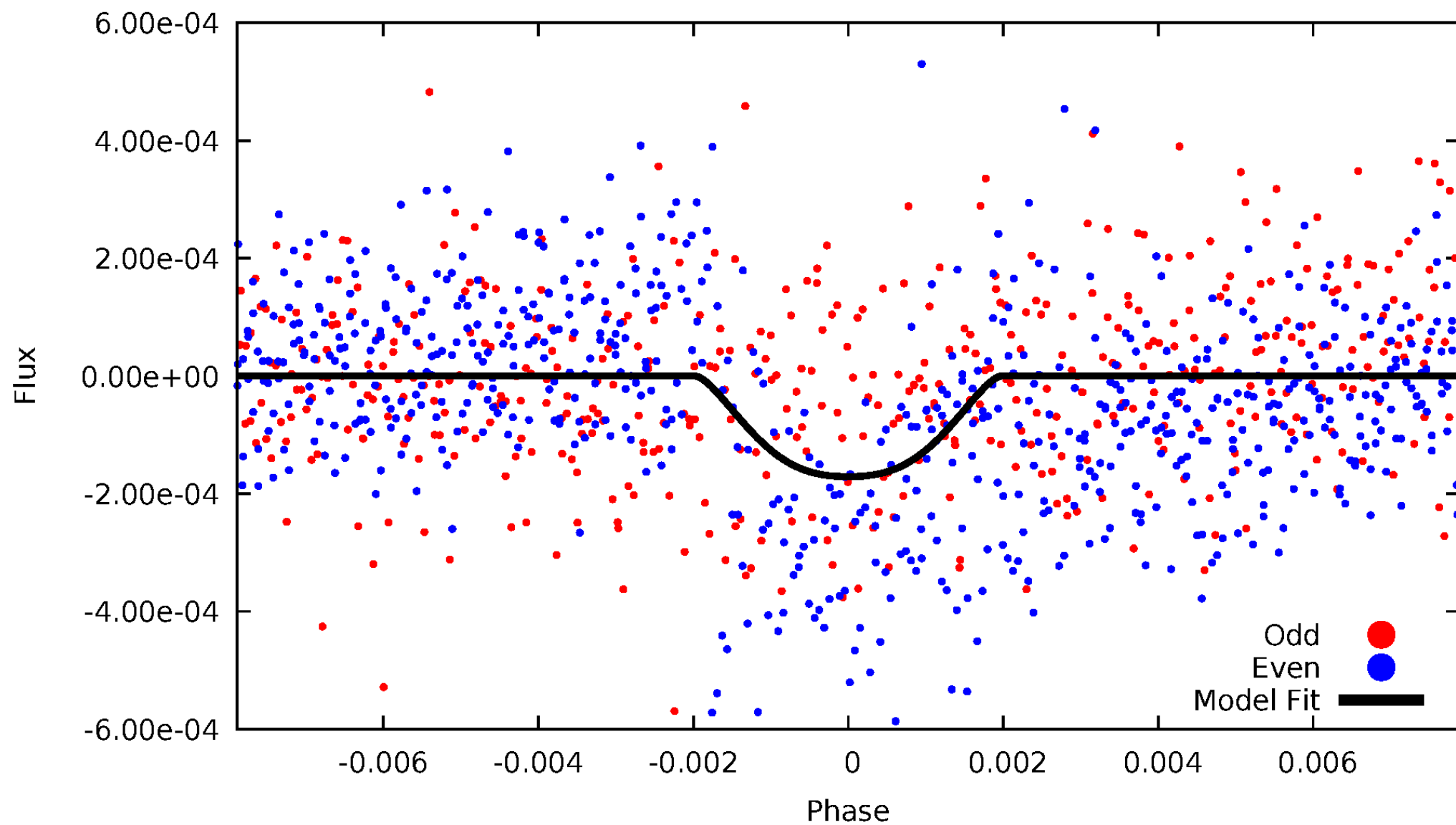


TCE 011757328-01



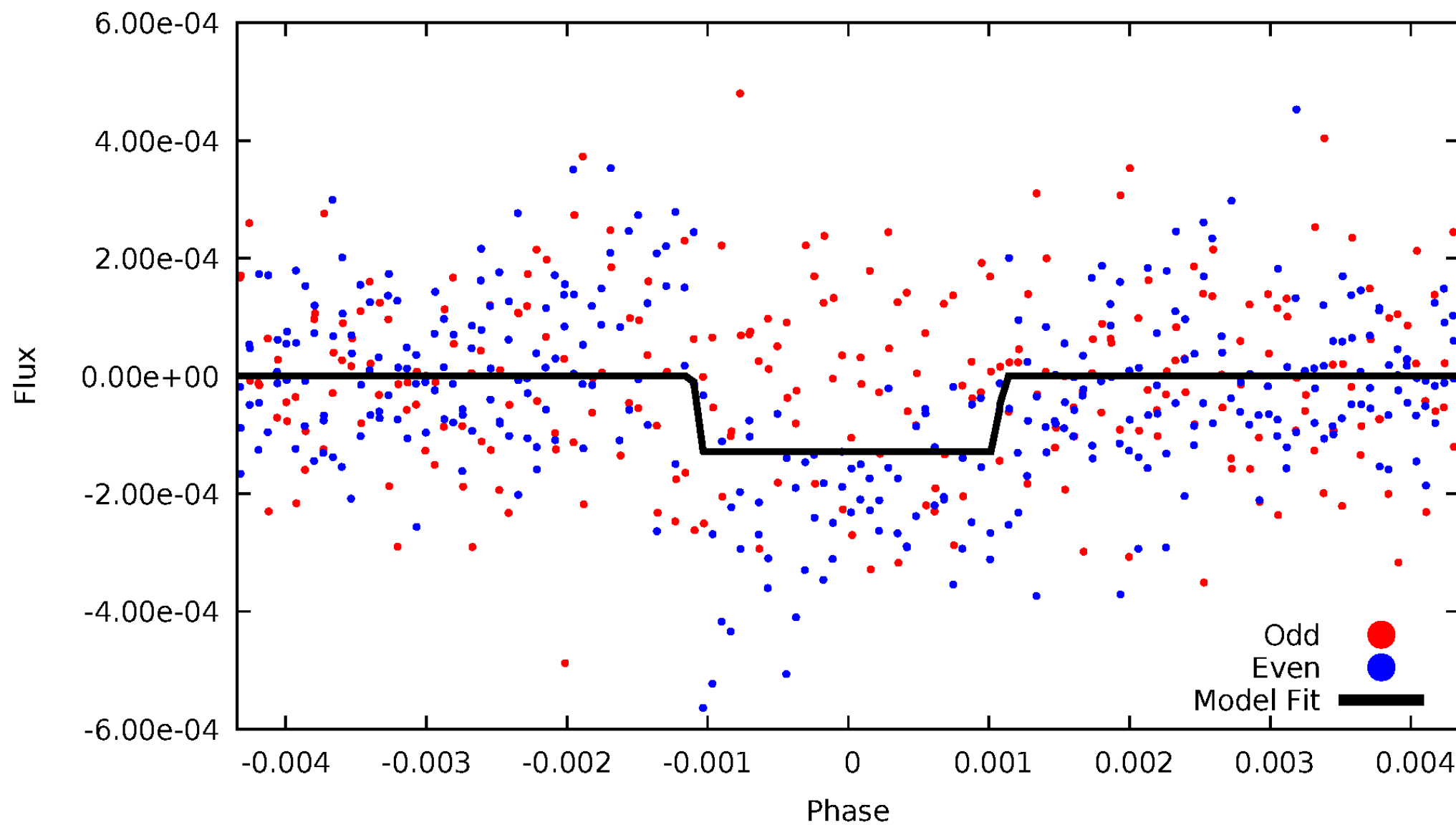
DV Odd/Even

TCE 011757328-01



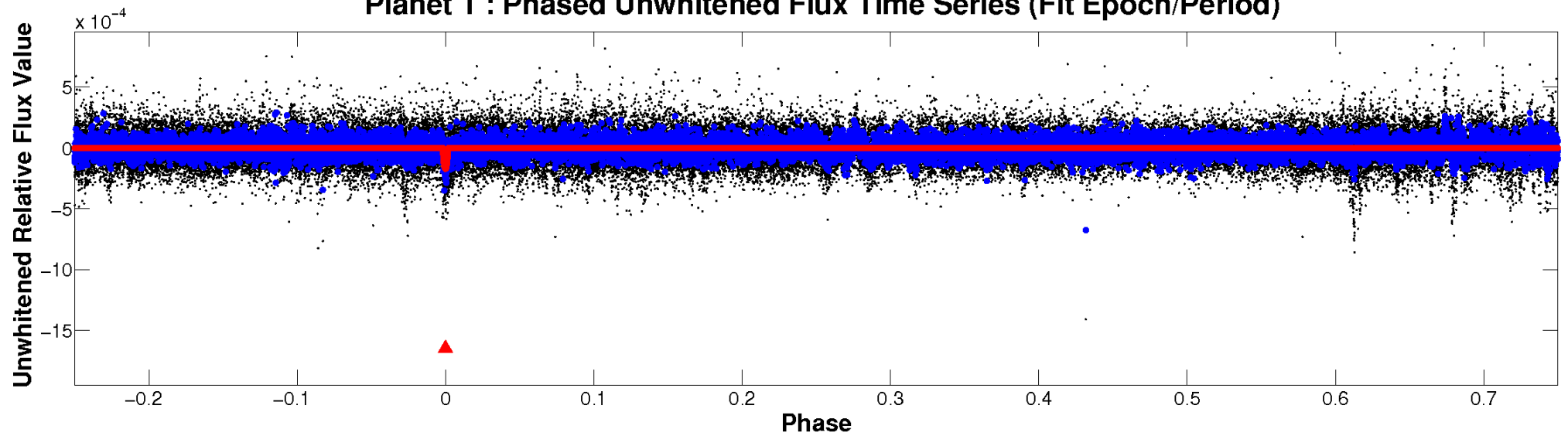
ALT Odd/Even

TCE 011757328-01

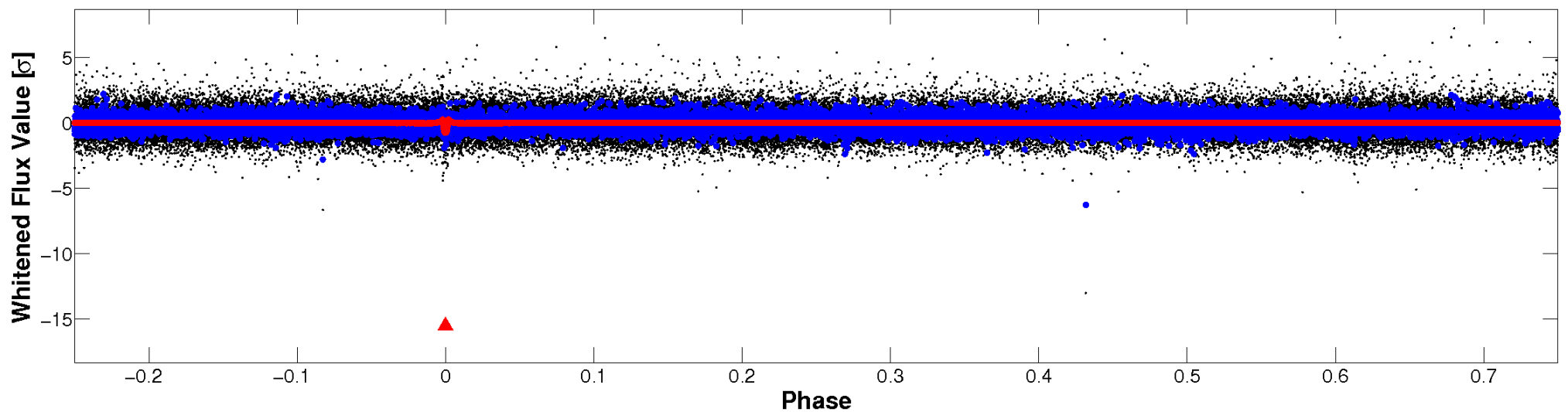


Non-Whitened Vs. Whitened Light Curve

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 011757328-01 P=310.355381 Days $T_0=266.632855$ (BKJD)



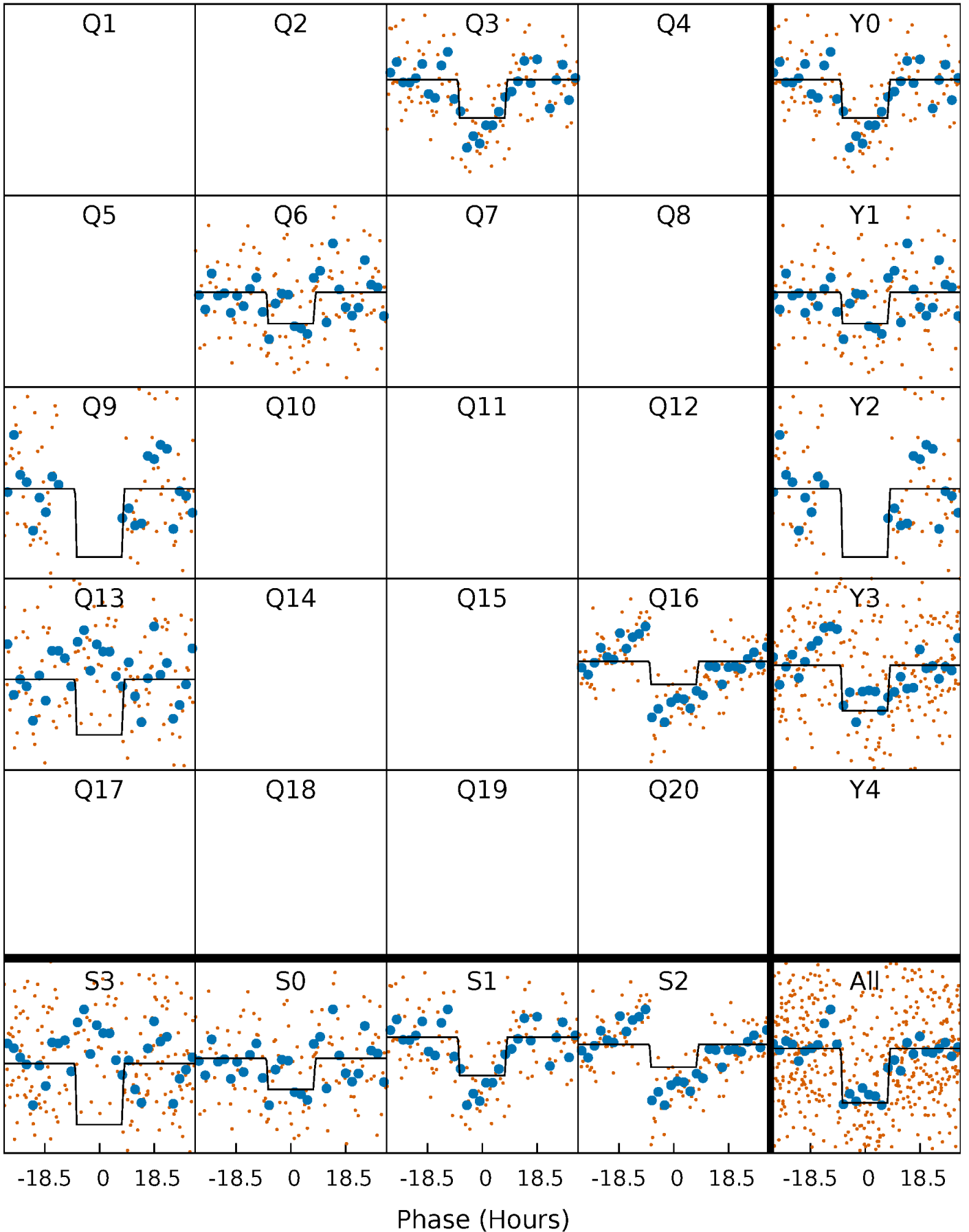
DV Quarter-Phased Transit Curves

TCE 011757328-01 $P=310.355381$ Days $T_0=266.632855$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

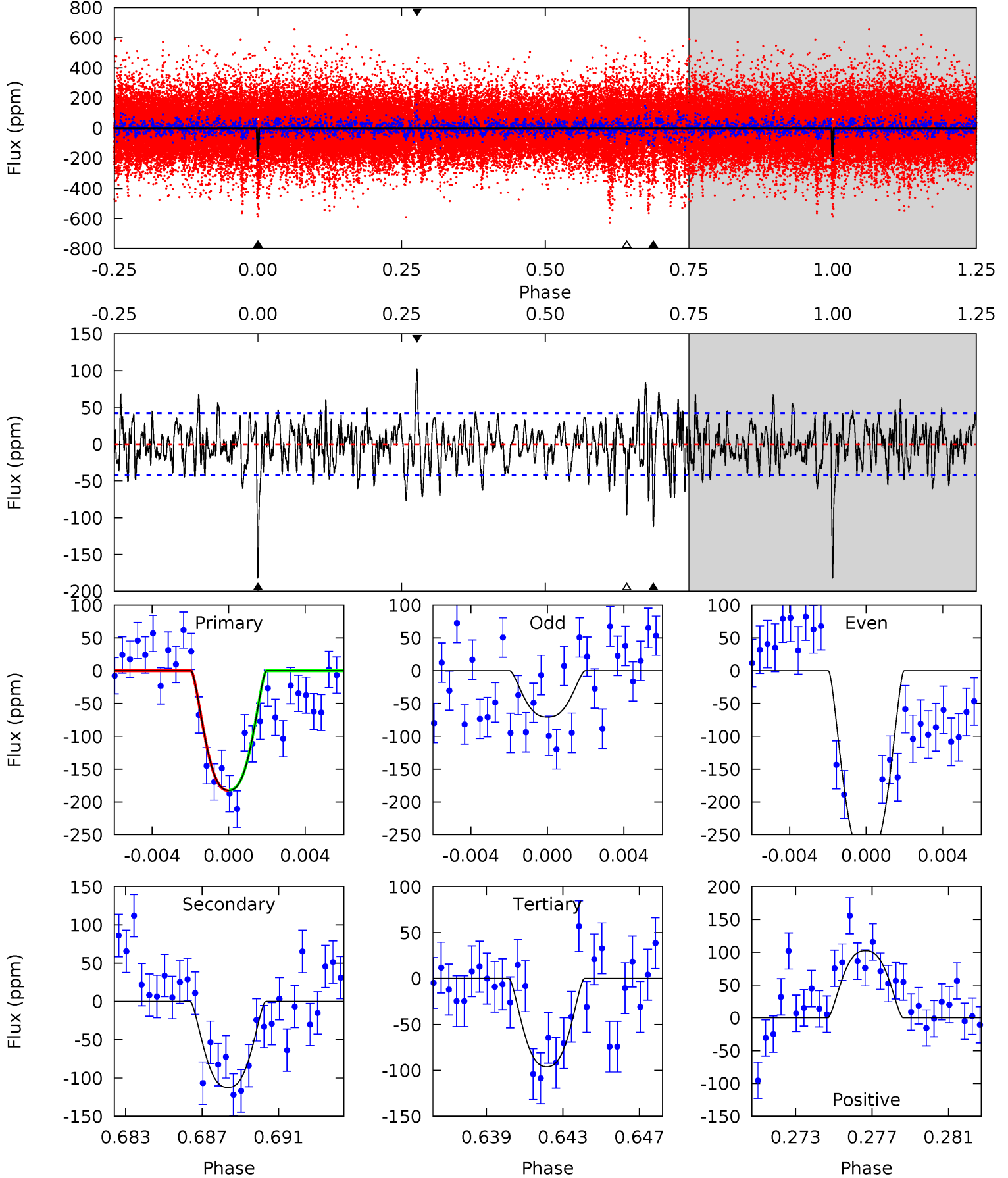
TCE 011757328-01 P=310.304042 Days $T_0=266.612949$ (BKJD)



DV Model-Shift Uniqueness Test

011757328-01, P = 310.355381 Days, E = 266.632855 Days

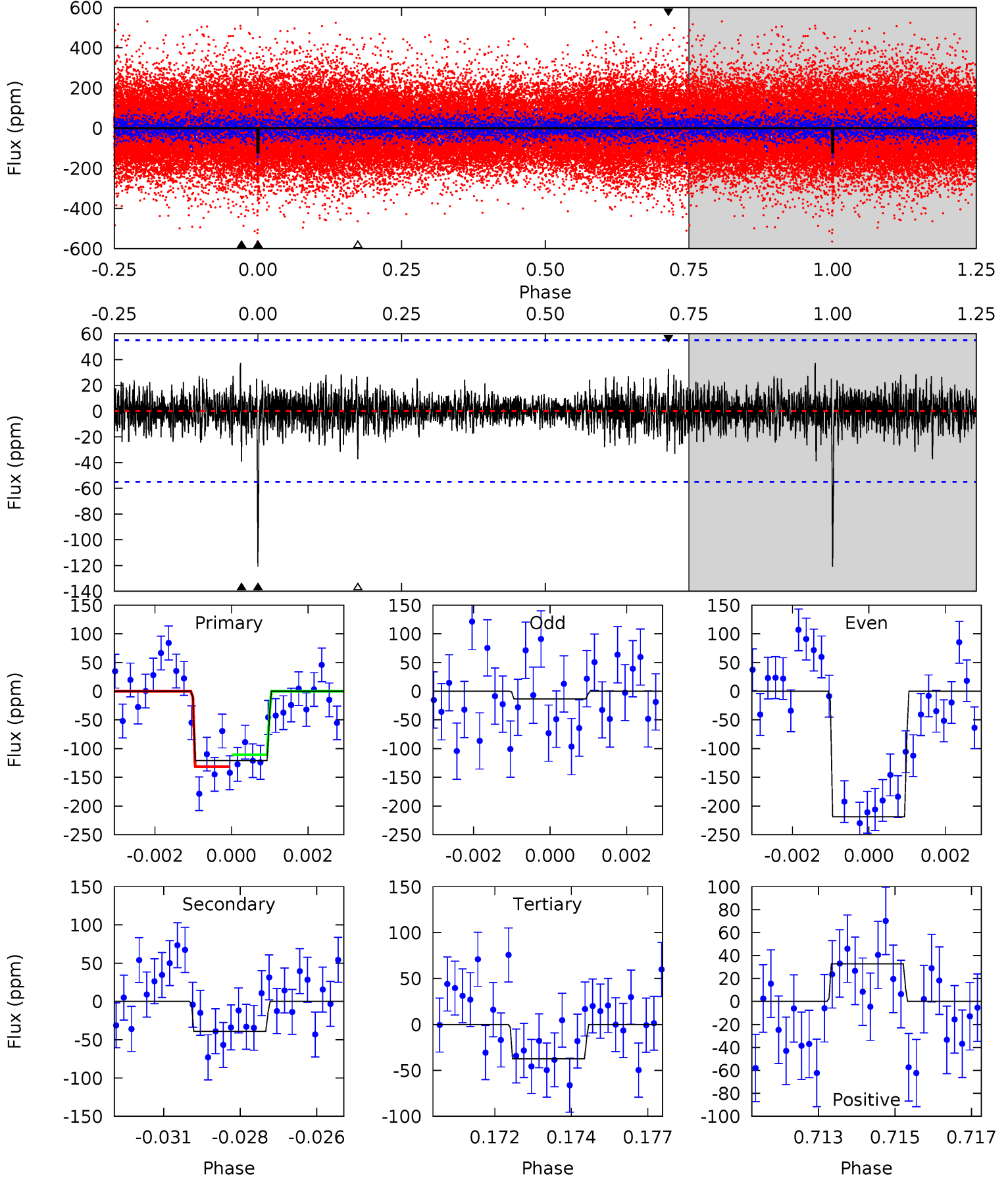
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
22.5	13.8	11.8	12.6	5.20	2.88	3.17	10.6	9.85	2.01	1.23	13.2	1.04	0.36	0.04



Alt Model-Shift Uniqueness Test

011757328-01, P = 310.304042 Days, E = 266.612949 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.7	3.77	3.60	3.16	5.31	3.06	0.83	8.05	8.49	0.17	0.61	9.91	0.90	0.24	0.99



Stellar Parameters For KIC 011757328

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$\rho_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5633^{+169}_{-135}	$3.860^{+0.308}_{-0.103}$	$0.040^{+0.250}_{-0.250}$	$2.128^{+0.341}_{-0.795}$	$1.196^{+0.150}_{-0.225}$	$0.175^{+0.410}_{-0.054}$
	+3%/-2%	+8%/-3%	+625%/-625%	+16%/-37%	+13%/-19%	+235%/-31%
Source	PHO1	FLK73	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 011757328-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-112 ± 8	$3.75^{+0.92}_{-0.94}$	513^{+31}_{-45}	4606^{+402}_{-290}	3951^{+2765}_{-1364}
Alt.	-39 ± 10	$2.44^{+0.85}_{-0.72}$	514^{+30}_{-46}	4389^{+680}_{-435}	3192^{+3664}_{-1557}

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

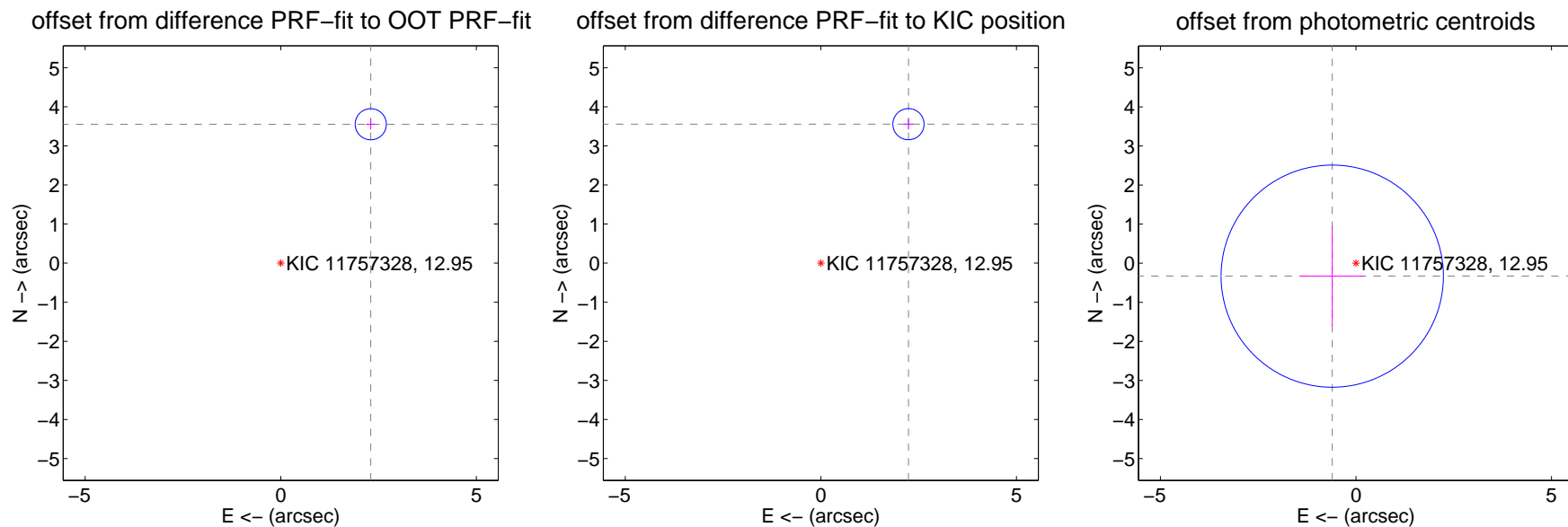
DV Centroid Data

Supplemental centroid analysis for 011757328-01. Kepler magnitude: 12.95. Transit SNR 8.52

There are 1 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.06 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	4.233 \pm 0.133	31.89	-2.301 \pm 0.124	3.554 \pm 0.136
PRF-fit source offset from KIC position	4.202 \pm 0.133	31.62	-2.239 \pm 0.124	3.555 \pm 0.136
photometric centroid source offset	0.69 \pm 0.95	0.73	0.61 \pm 0.82	-0.33 \pm 1.28



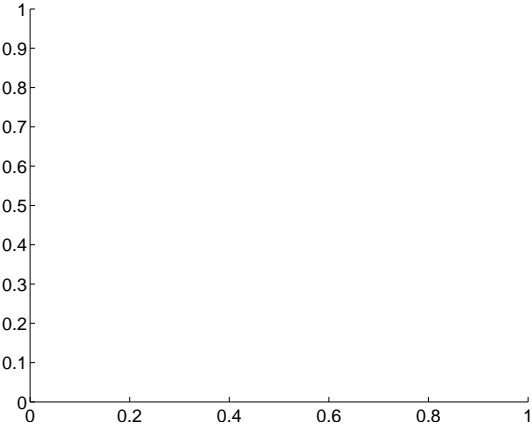
Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

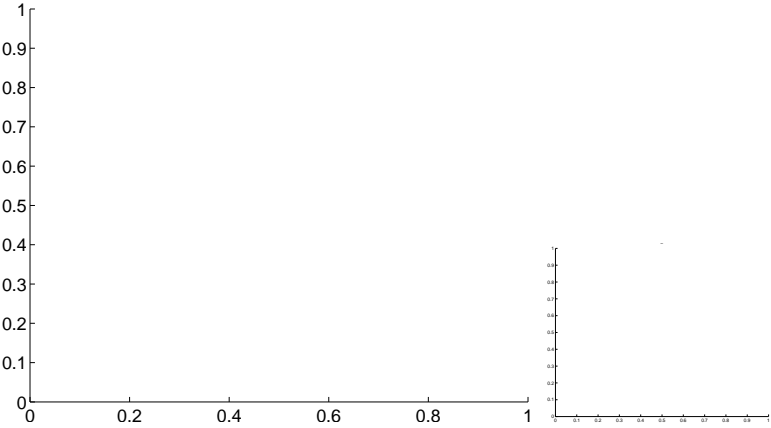


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.

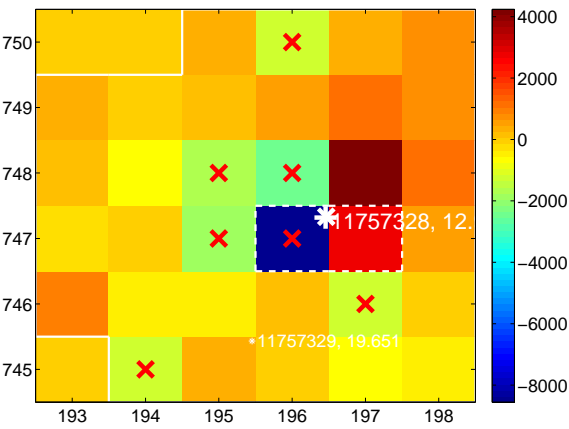
Q5 no difference image



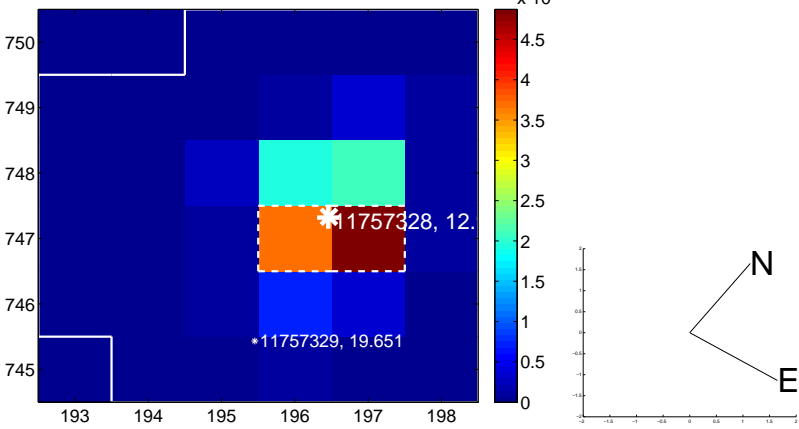
Q5 no OOT image



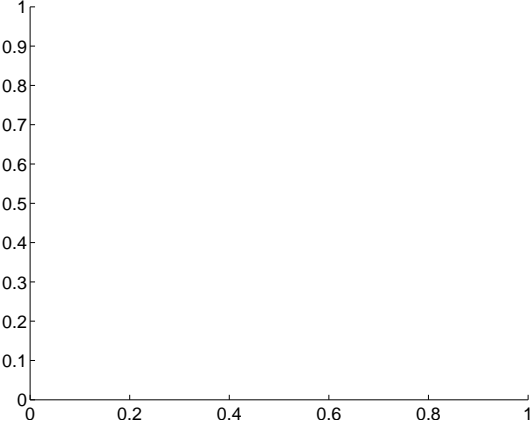
Q6 difference image. Poor Quality



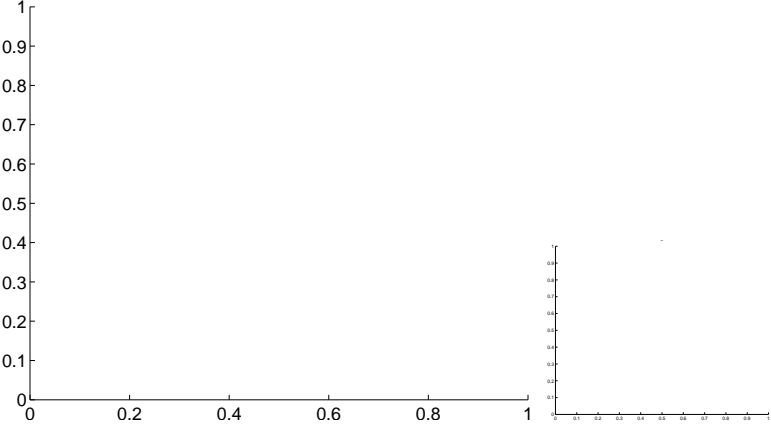
Q6 OOT image



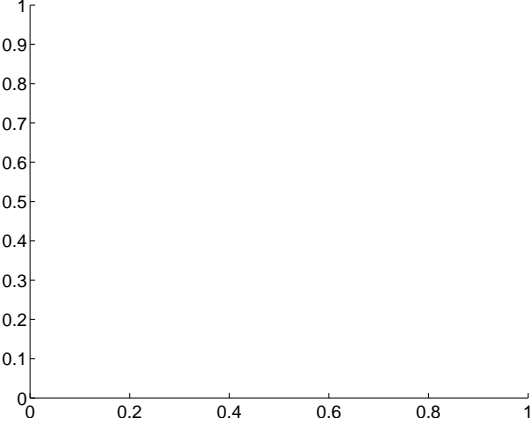
Q7 no difference image



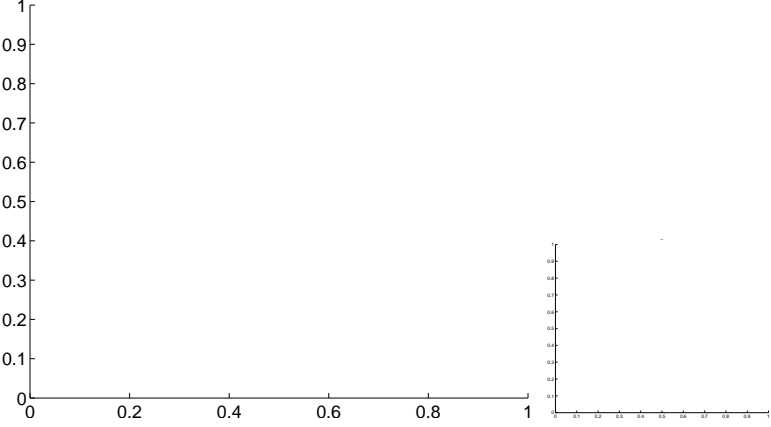
Q7 no OOT image



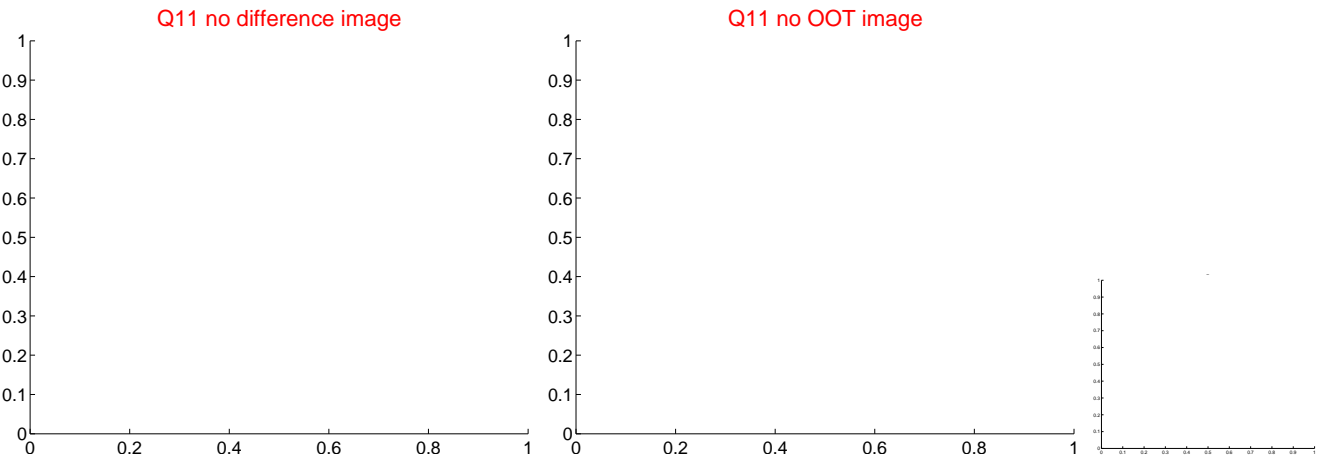
Q8 no difference image



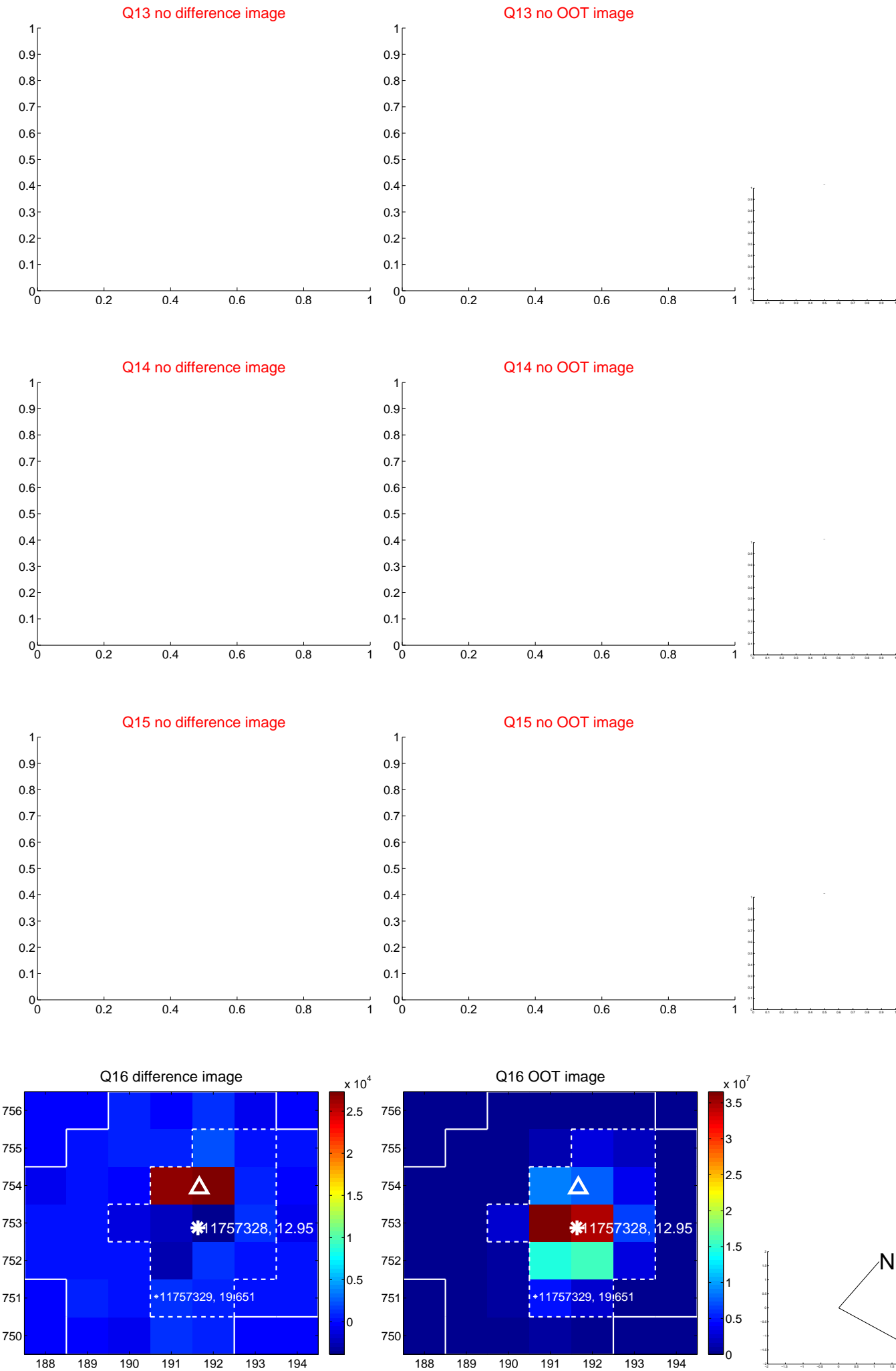
Q8 no OOT image



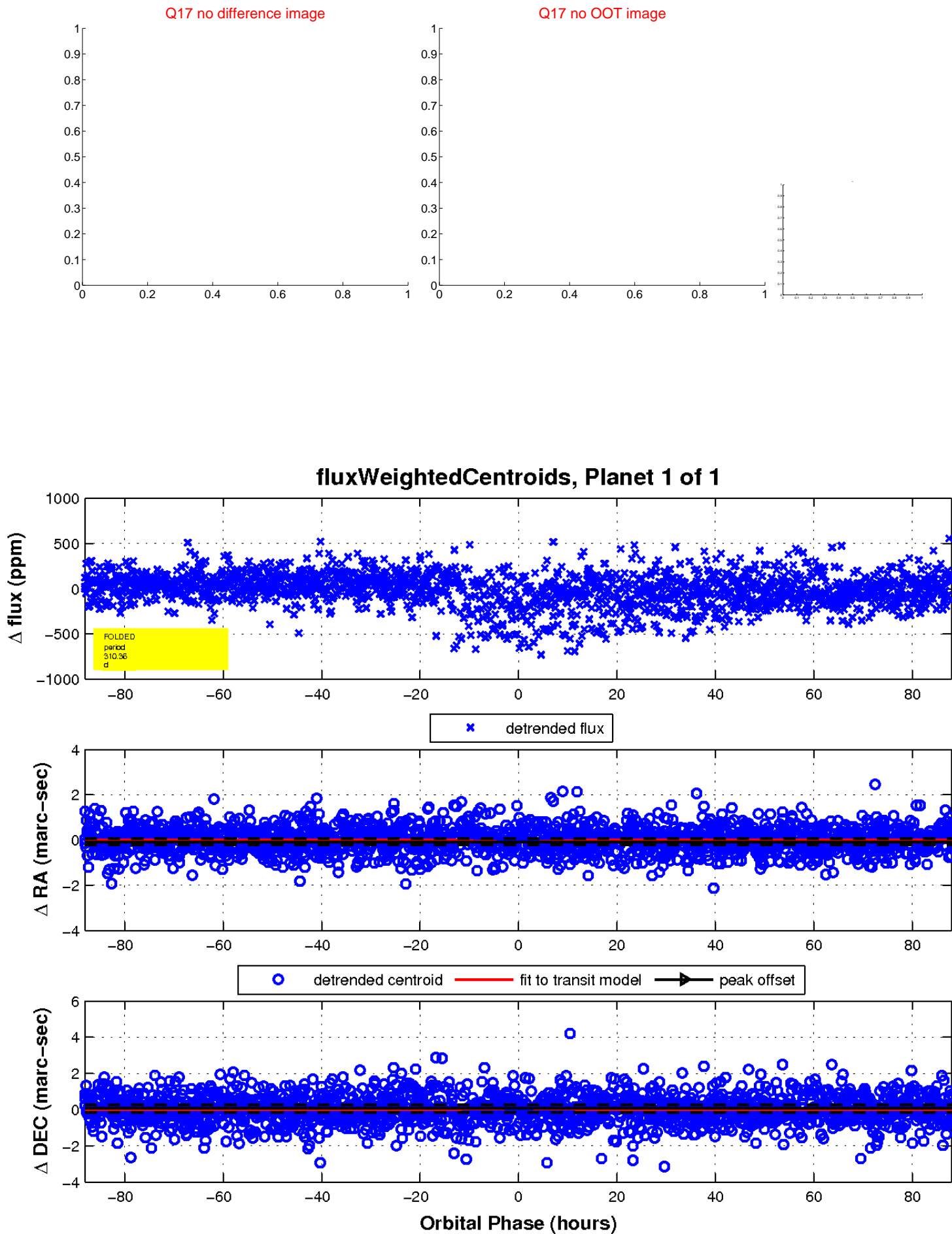
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

