

KIC 006467339

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})
006467339-01	OBS	No	357.970108	373.753990	805.9	18.823	10.5	10.6	0.62	4080	1.75	0.14

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006467339-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE—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.

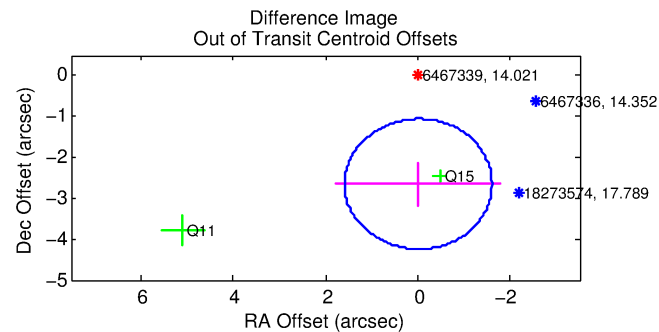
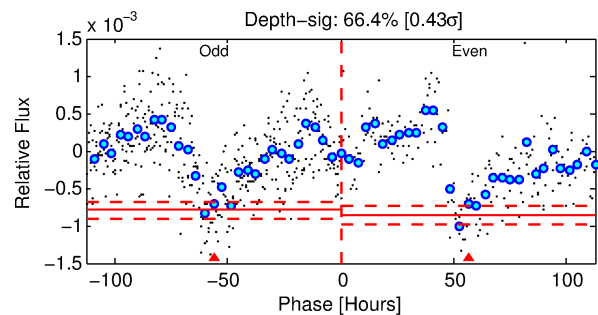
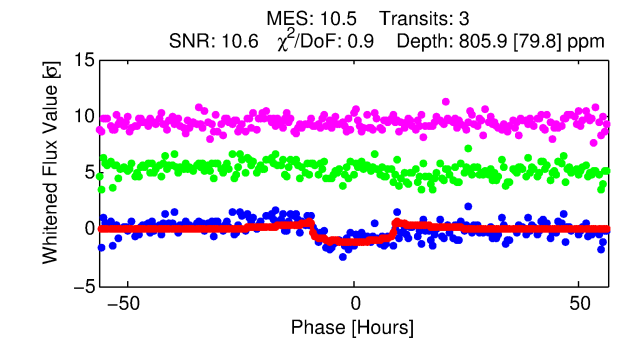
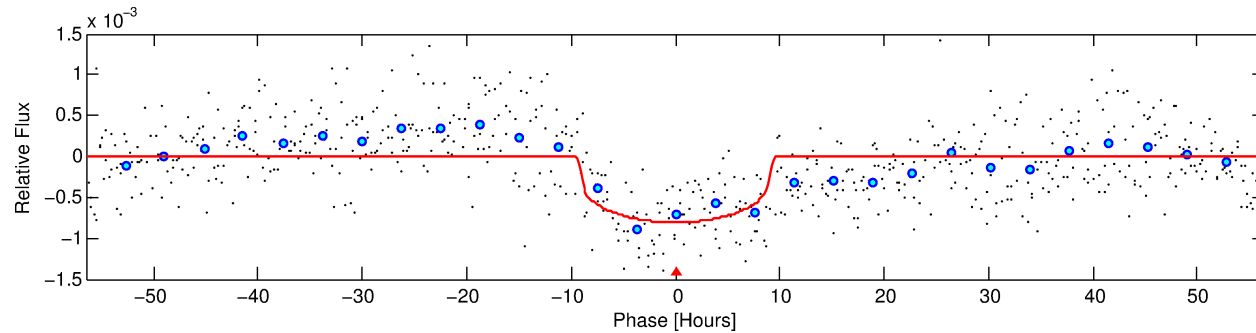
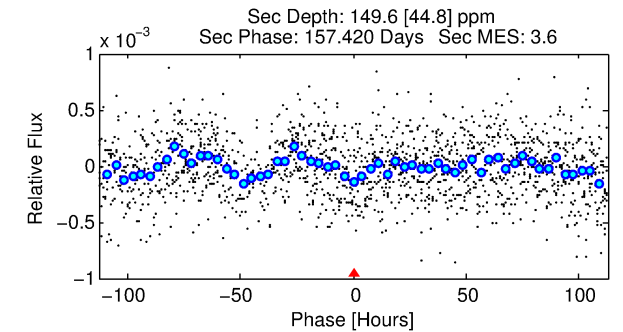
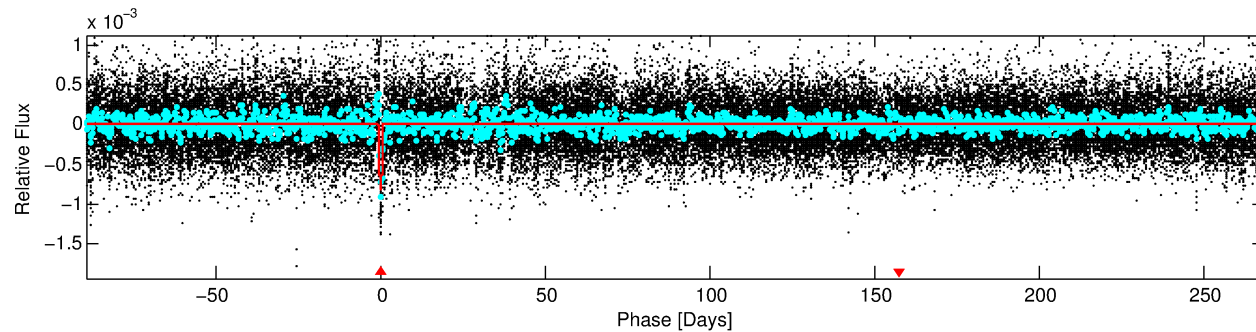
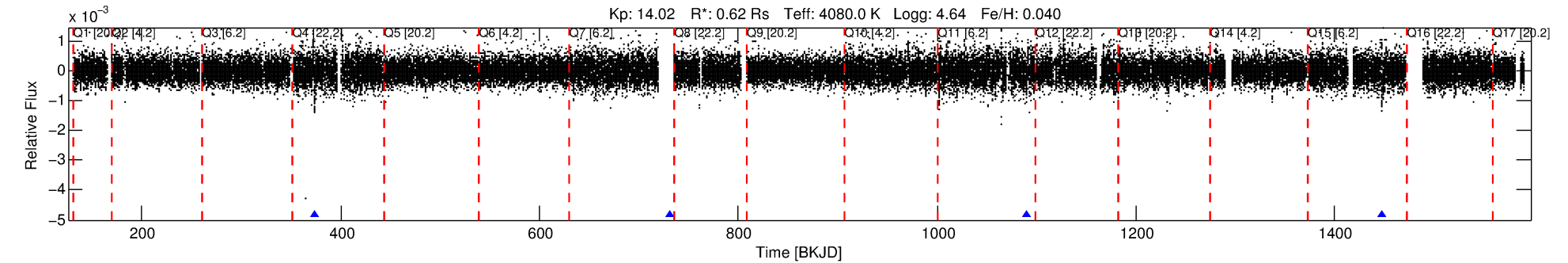
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006467339-01

No Significant Match Found

DV One-Page Summary

KIC: 6467339 Candidate: 1 of 1 Period: 357.970 d



DV Fit Results:

Period = 357.97011 [0.00665] d
Epoch = 373.7540 [0.0146] BKJD
Rp/R* = 0.0260 [0.0100]
a/R* = 134.36 [172.66]
b = 0.44 [2.34]
Seff = 0.14 [0.03]
Teq = 155 [7] K
Rp = 1.75 [0.70] Re
a = 0.8383 [0.0673] AU
Ag = 18823.55 [15698.14] [1.20 σ]
Teffp = 2801 [589] K [4.50 σ]

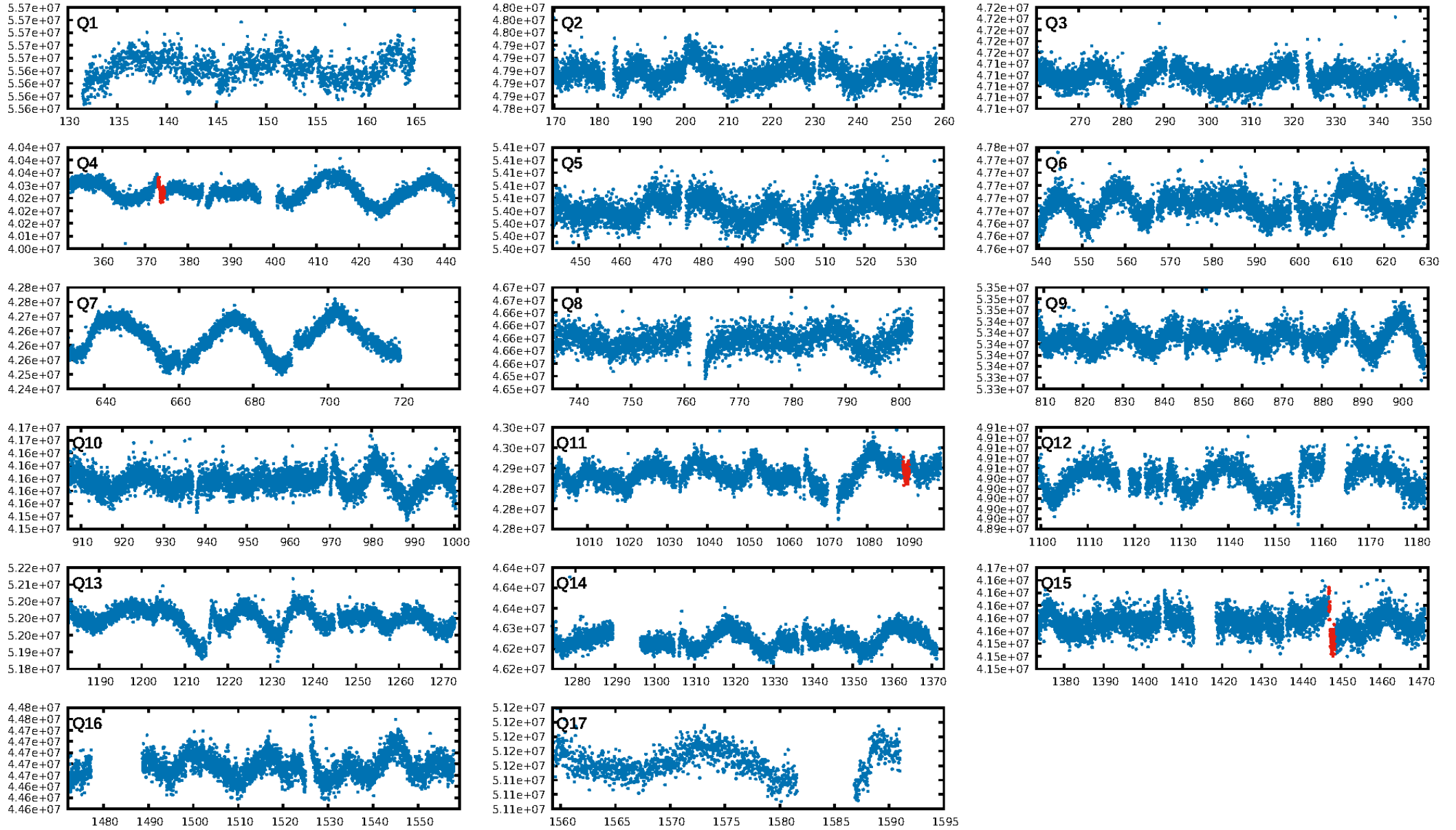
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 1.8%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 4.06e-20
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: -13.2
Centroid-sig: 23.0%
Centroid-so: 0.863 arcsec [1.56 σ]
OutOffset-rm: 2.651 arcsec [4.99 σ]
KicOffset-rm: 3.042 arcsec [2.23 σ]
OotOffset-st: 0/2/0/0 [2]
KicOffset-st: 0/2/0/0 [2]
DiffImageQuality-fgm: 0.50 [1/2]
DiffImageOverlap-fno: 1.00 [2/2]

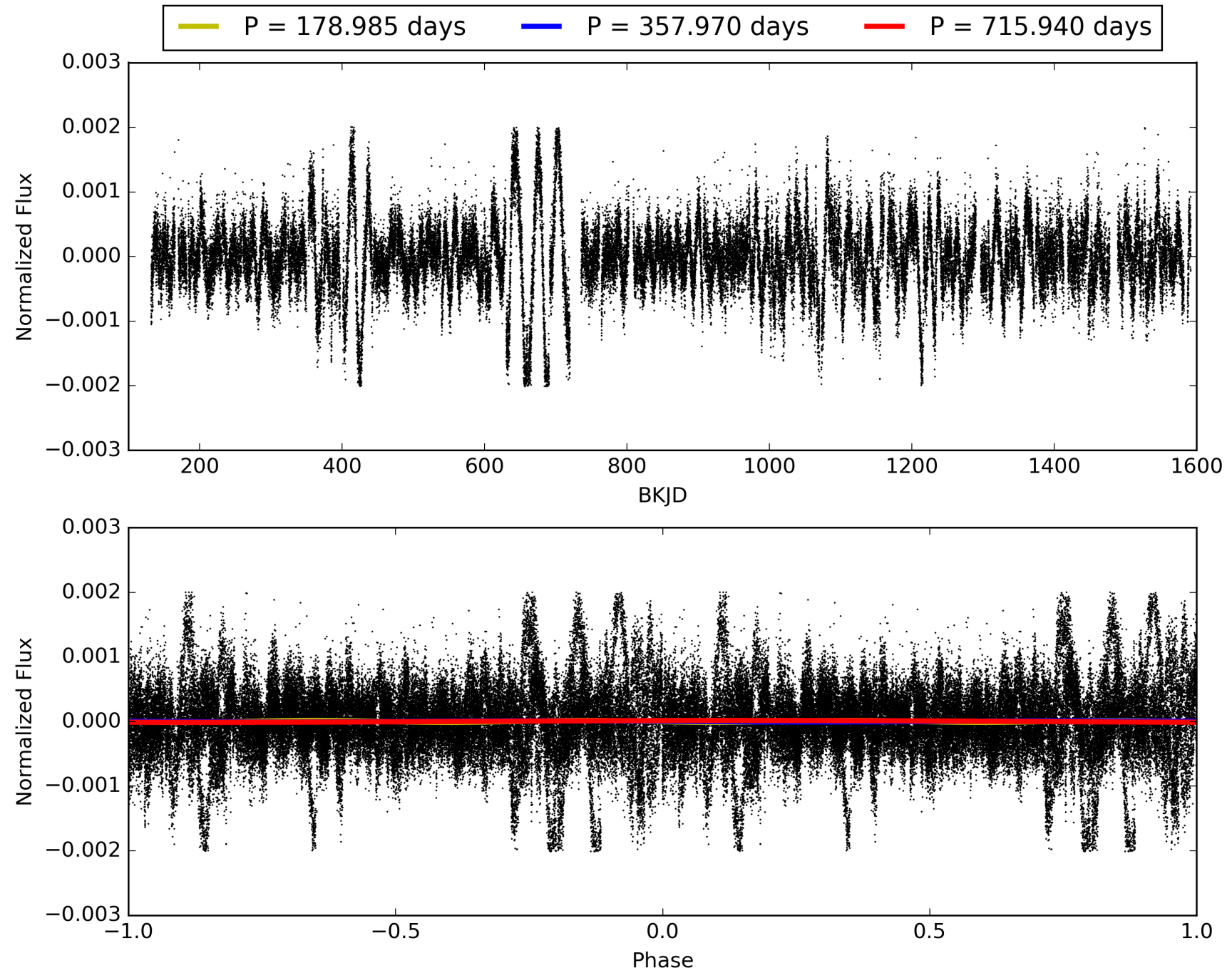
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 21:30:41 Z

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

TCE 006467339-01, PDC Light Curves

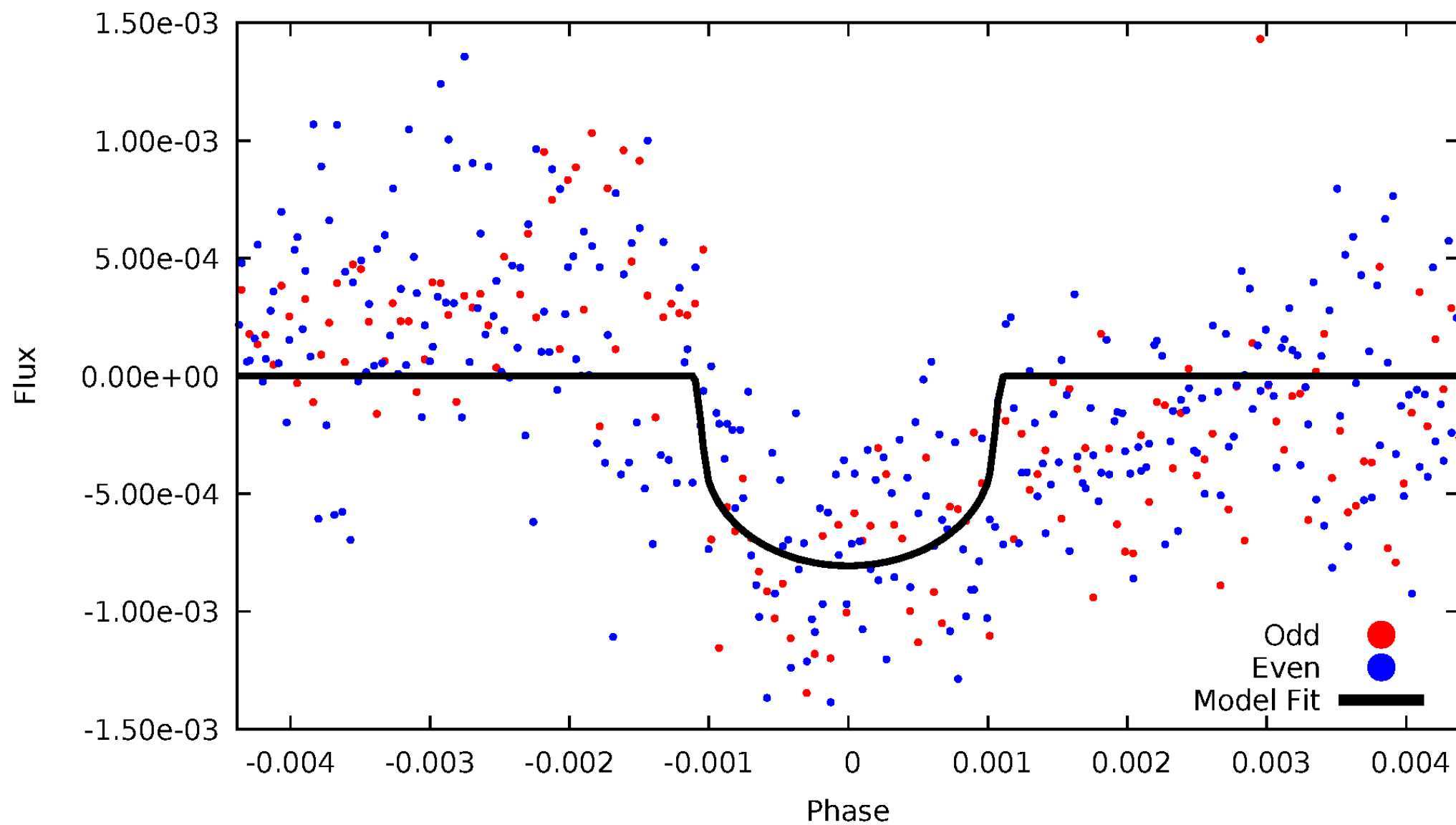


TCE 006467339-01



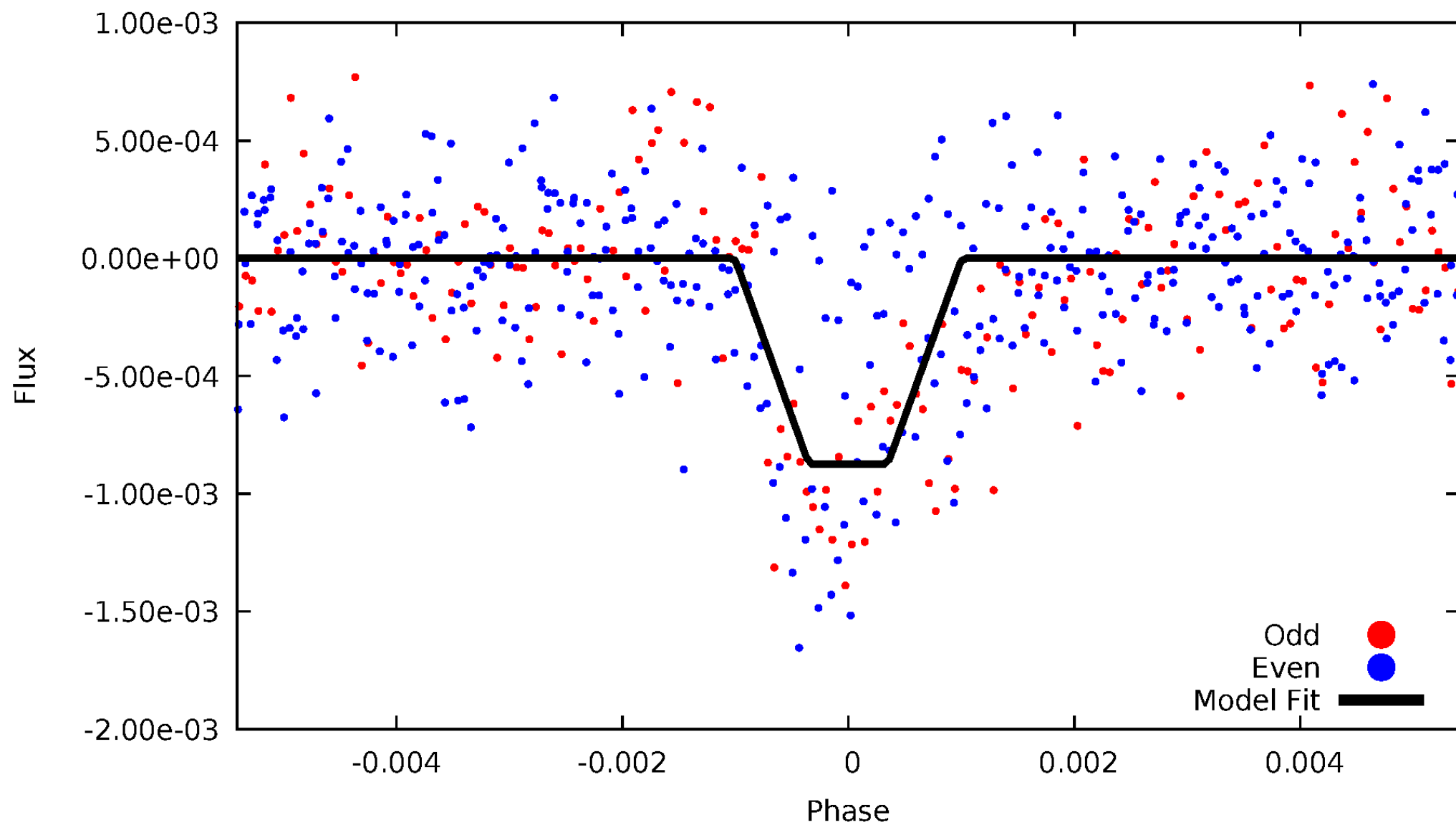
DV Odd/Even

TCE 006467339-01



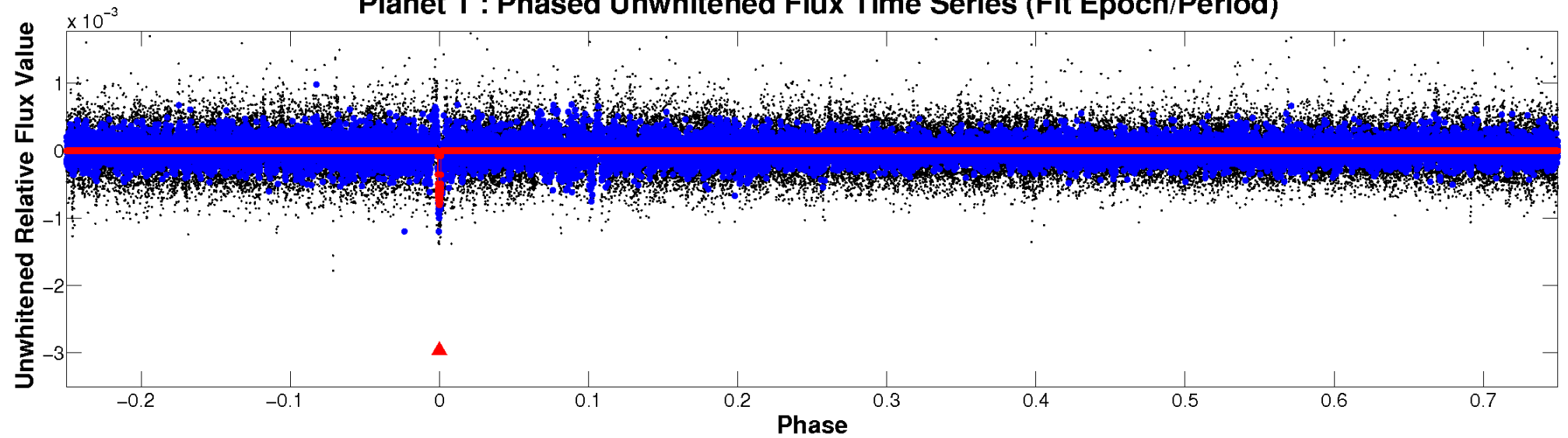
ALT Odd/Even

TCE 006467339-01

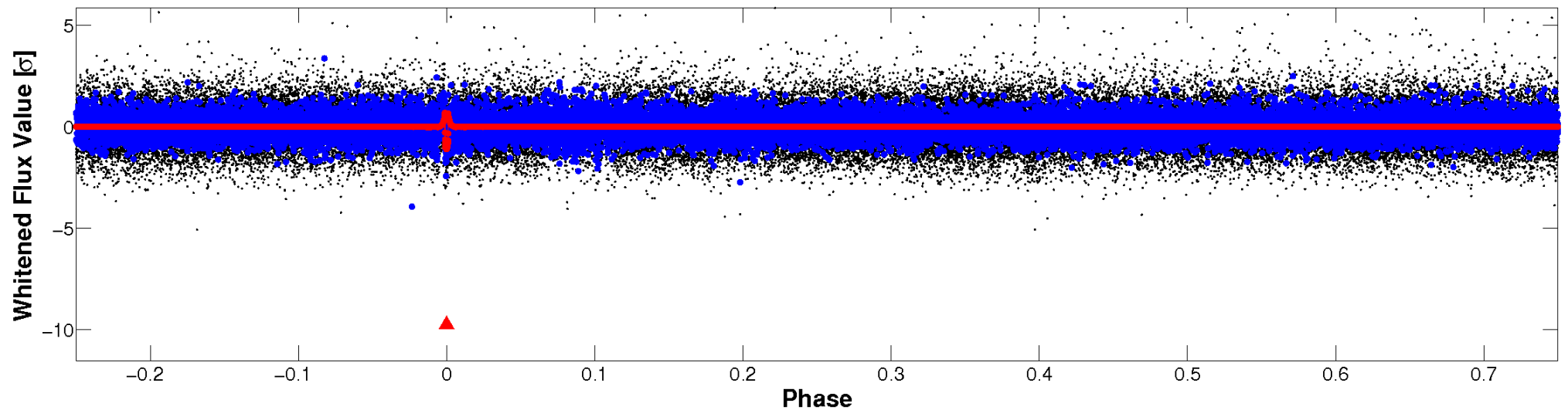


Non-Whitened Vs. Whitened Light Curve

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

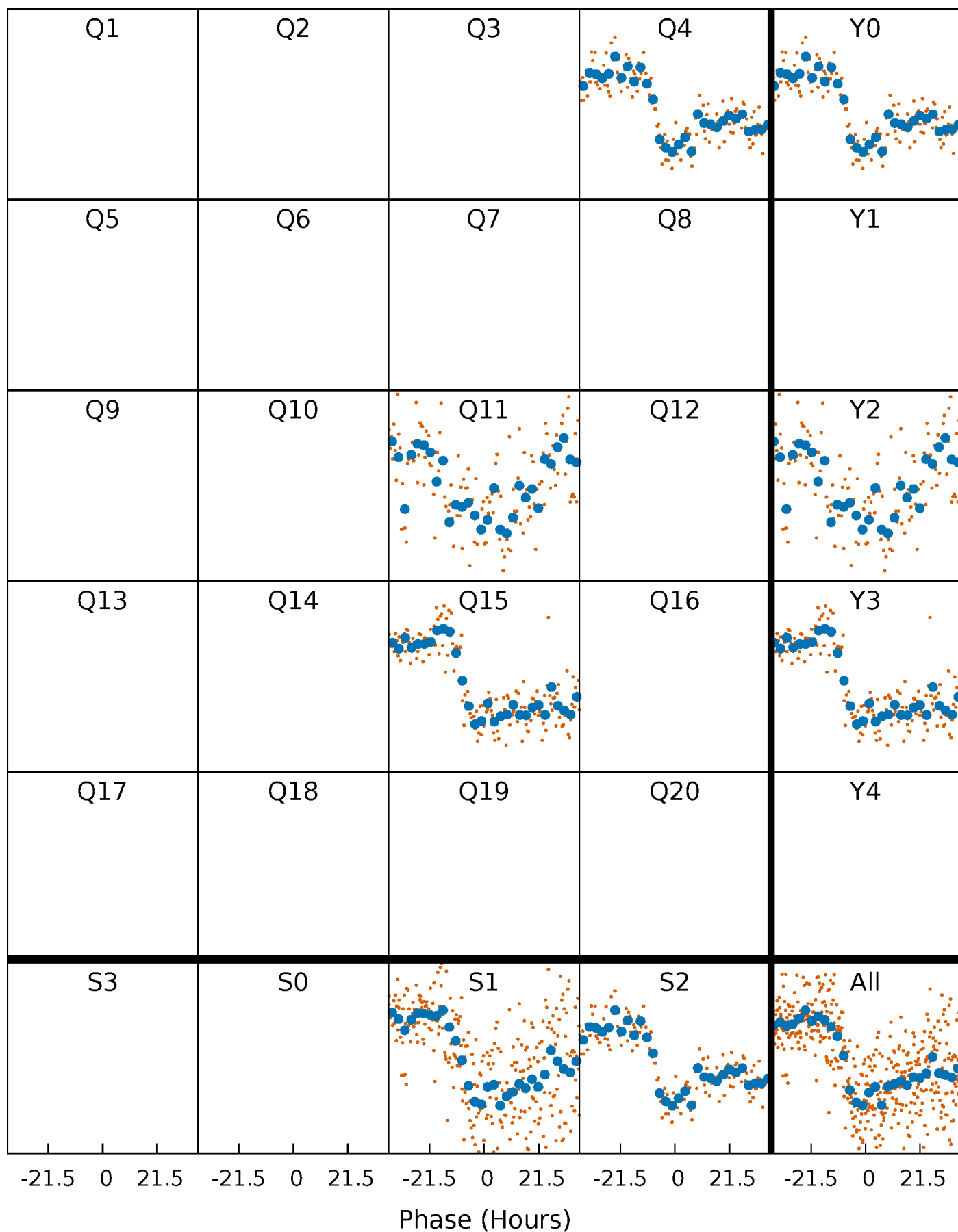


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



PDC Quarter-Phased Transit Curves

TCE 006467339-01 P=357.970107 Days $T_0=373.753990$ (BKJD)



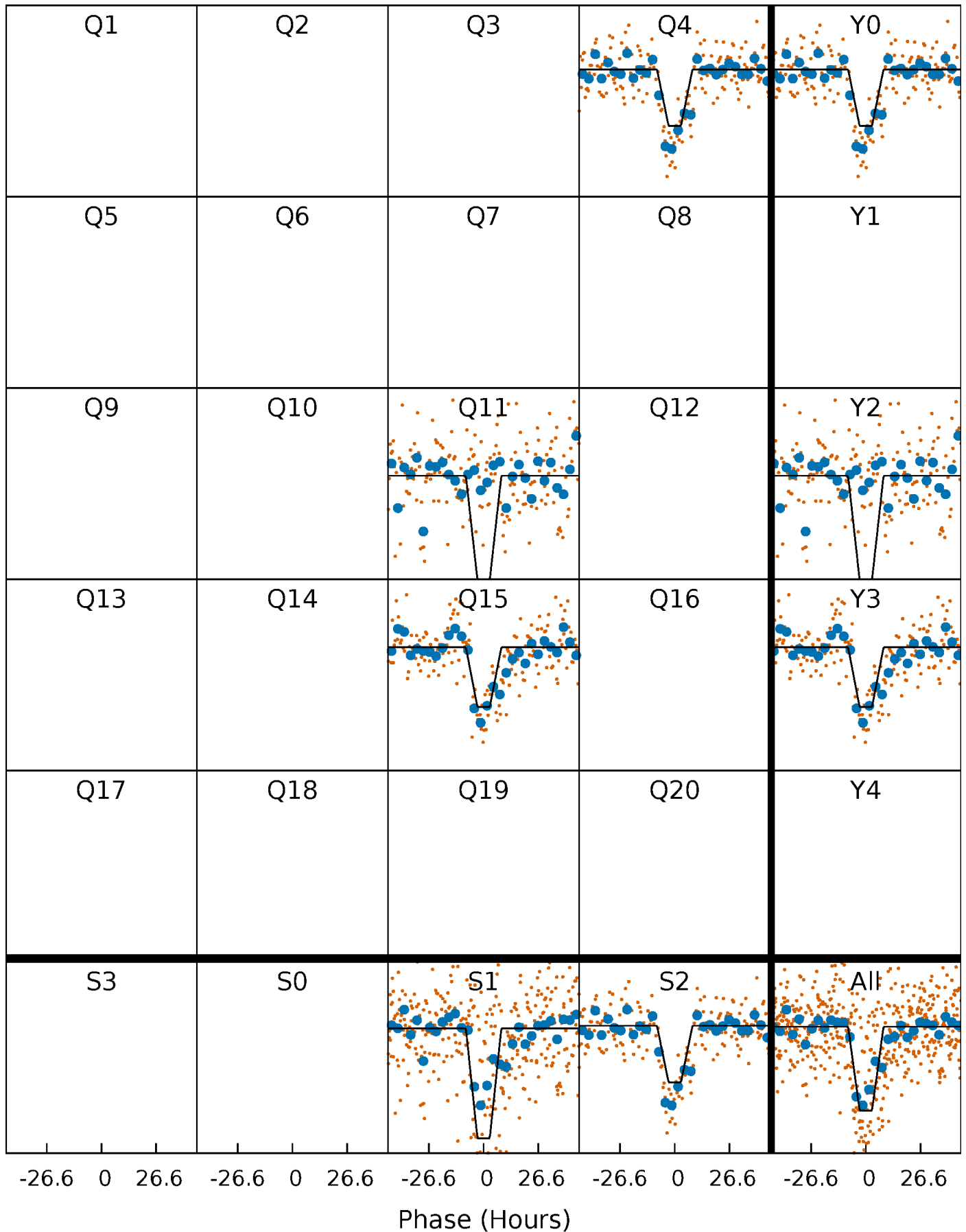
DV Quarter-Phased Transit Curves

TCE 006467339-01 P=357.970107 Days $T_0=373.753990$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

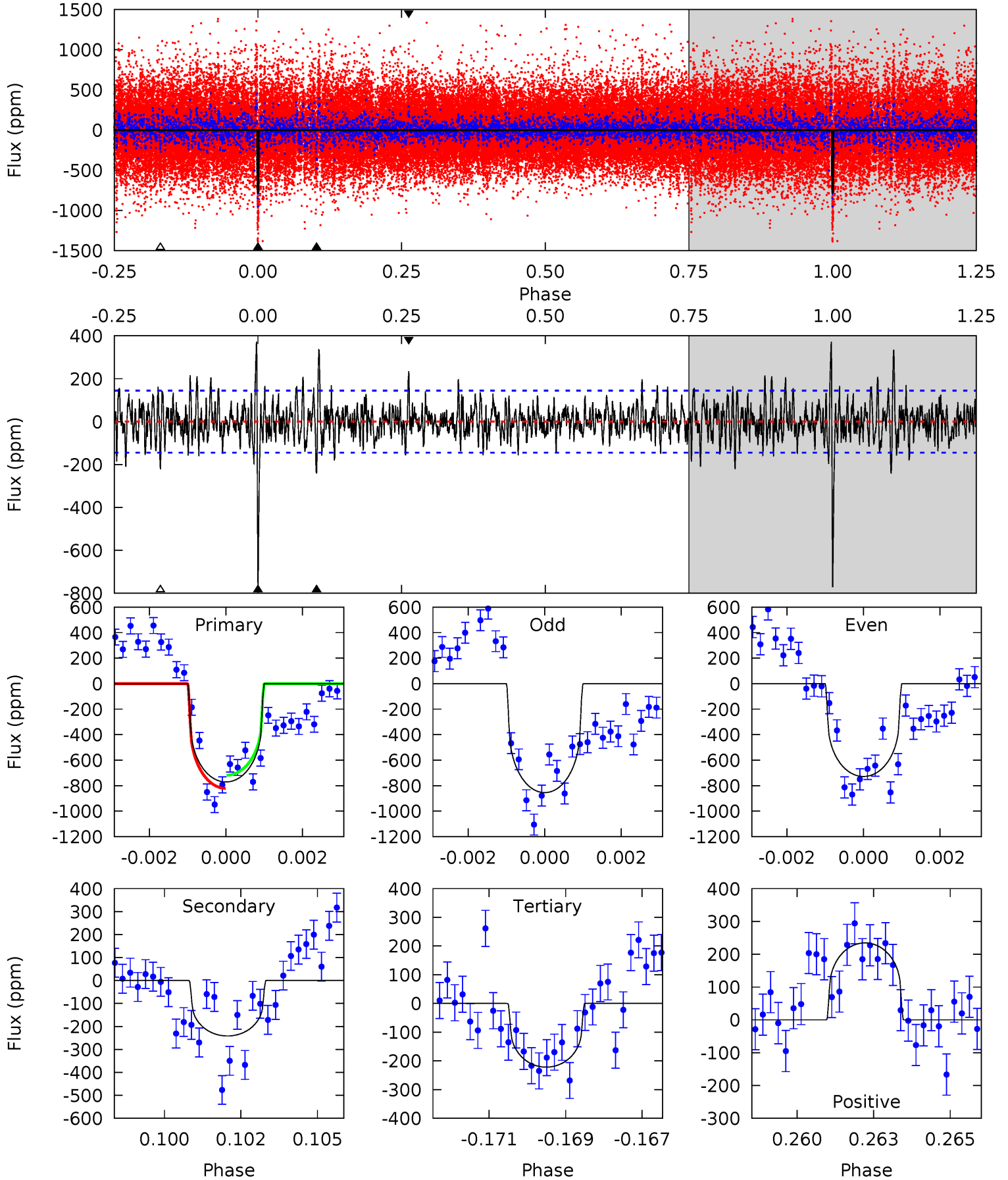
TCE 006467339-01 P=357.955104 Days $T_0=373.701484$ (BKJD)



DV Model-Shift Uniqueness Test

006467339-01, $P = 357.970107$ Days, $E = 15.783883$ Days

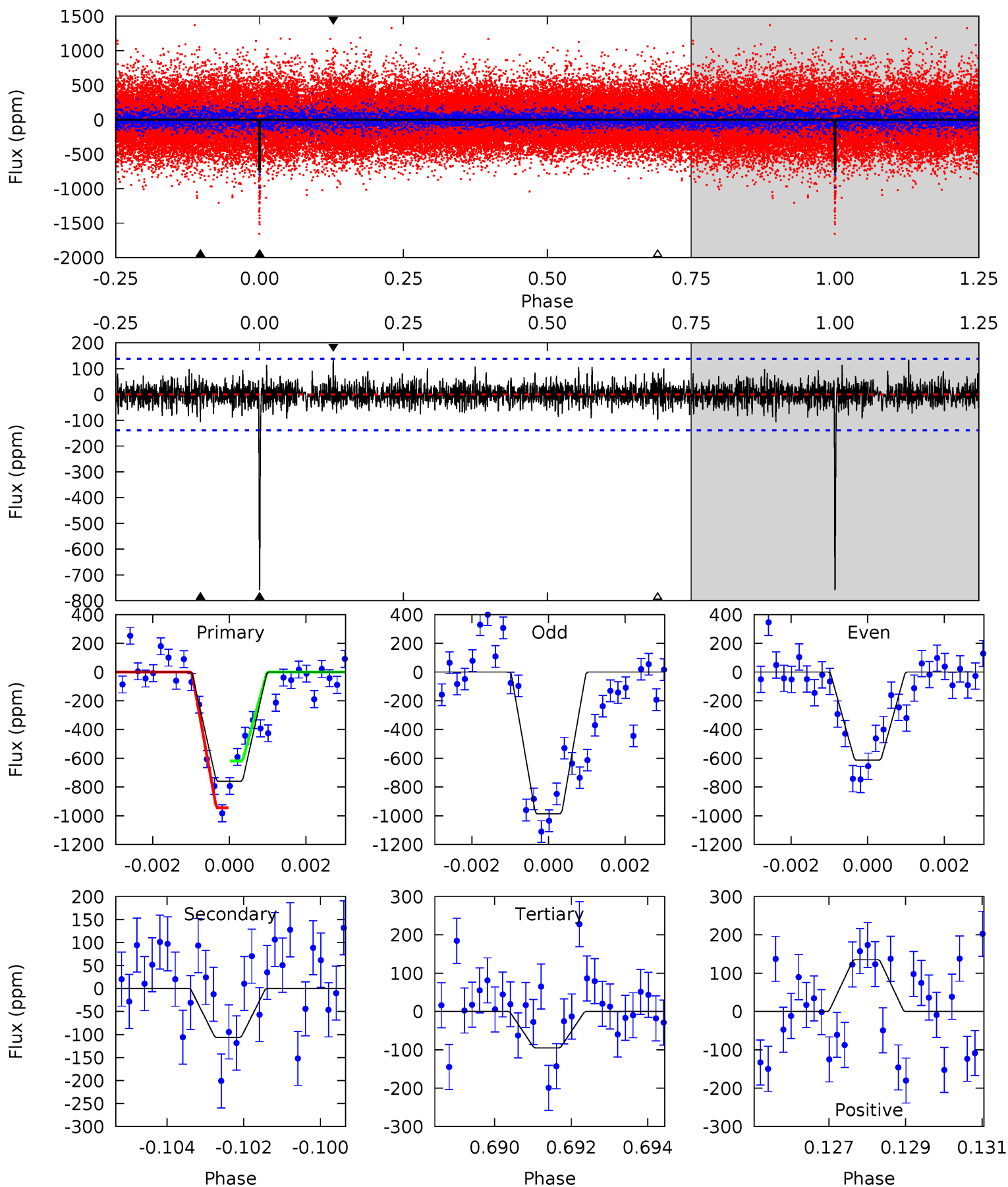
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
28.3	8.86	8.14	8.60	5.31	3.06	2.38	20.2	19.7	0.72	0.26	2.21	0.90	0.33	1.89



Alt Model-Shift Uniqueness Test

006467339-01, P = 357.955104 Days, E = 15.746380 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
29.1	4.07	3.64	5.19	5.32	3.08	1.13	25.5	23.9	0.43	-1.12	6.92	0.74	0.15	6.21



Stellar Parameters For KIC 006467339

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	4080^{+141}_{-155}	$4.642^{+0.056}_{-0.021}$	$0.040^{+0.250}_{-0.300}$	$0.619^{+0.039}_{-0.063}$	$0.612^{+0.052}_{-0.063}$	$3.641^{+0.988}_{-0.356}$
	+3%/-4%	+1%/-0%	+625%/-750%	+6%/-10%	+8%/-10%	+27%/-10%
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 006467339-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-242 ± 27	$1.68^{+0.68}_{-0.66}$	214^{+8}_{-8}	3454^{+610}_{-345}	33527^{+51155}_{-16763}
Alt.	-106 ± 26	$1.94^{+0.70}_{-0.70}$	214^{+8}_{-9}	2943^{+418}_{-267}	10938^{+15189}_{-5239}

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

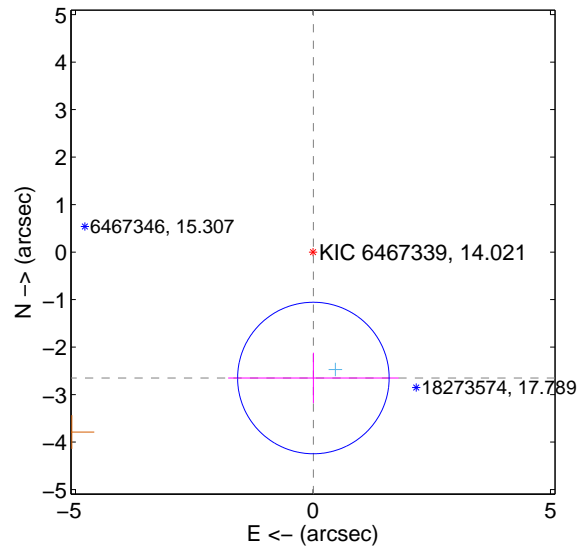
Supplemental centroid analysis for 006467339-01. Kepler magnitude: 14.02. Transit SNR 10.60

There are 1 quarters with good PRF difference image offsets

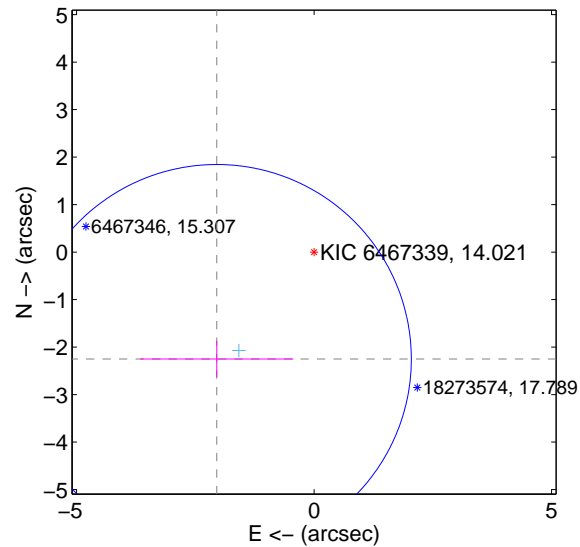
The OOT PRF centroid is offset from the target star catalog position by about 2.09 arcsec so the offset from difference PRF-fit to OOT-fit may be invalid.

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.651 ± 0.532	4.99	-0.008 ± 1.793	-2.651 ± 0.532
PRF-fit source offset from KIC position	3.042 ± 1.365	2.23	2.047 ± 1.613	-2.251 ± 0.383
photometric centroid source offset	0.86 ± 0.55	1.56	0.86 ± 0.55	-0.10 ± 0.45

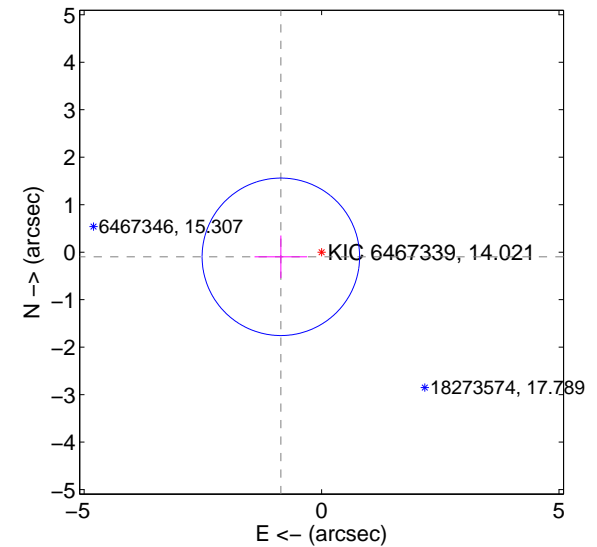
offset from difference PRF-fit to OOT PRF-fit



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.

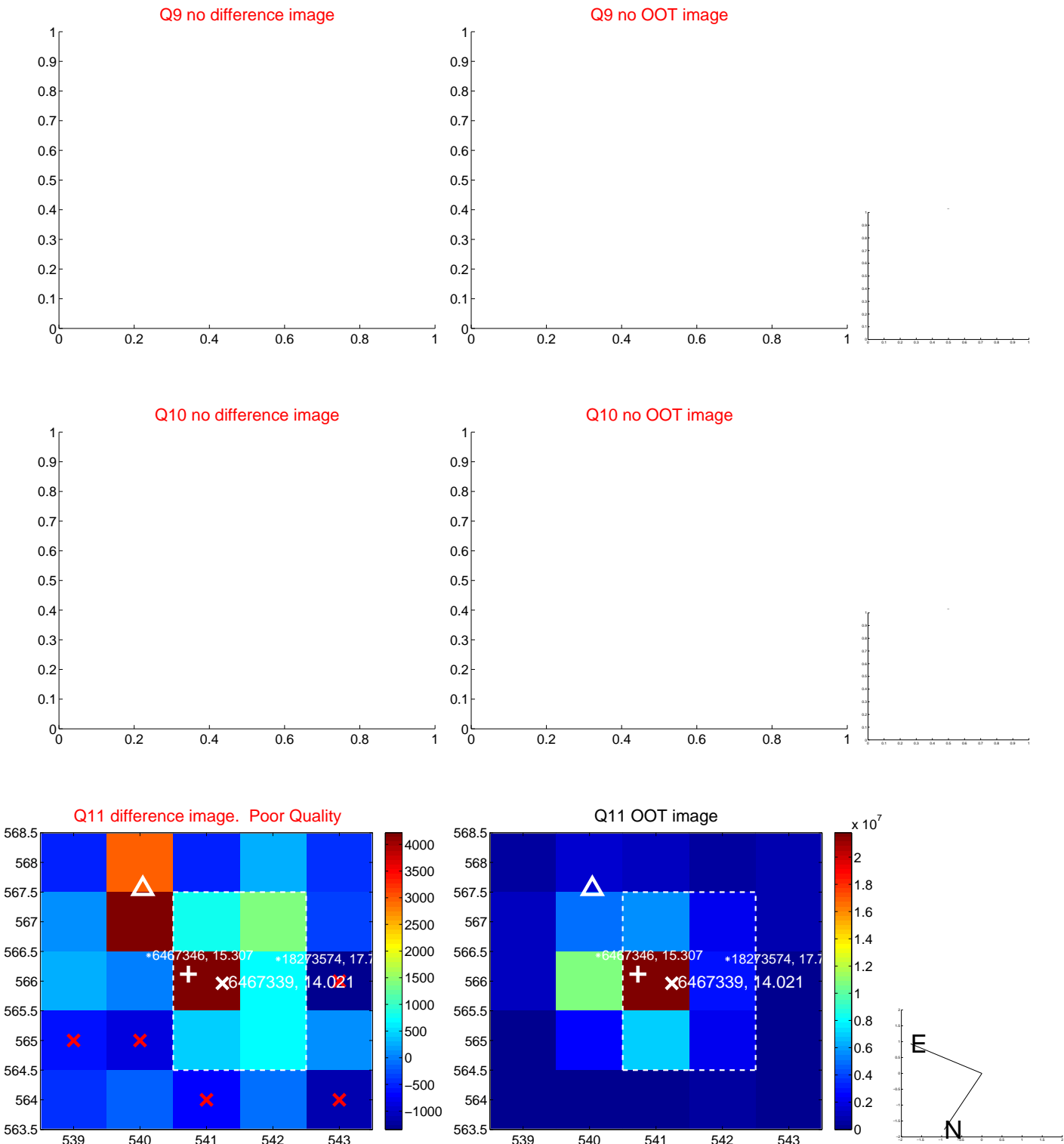
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



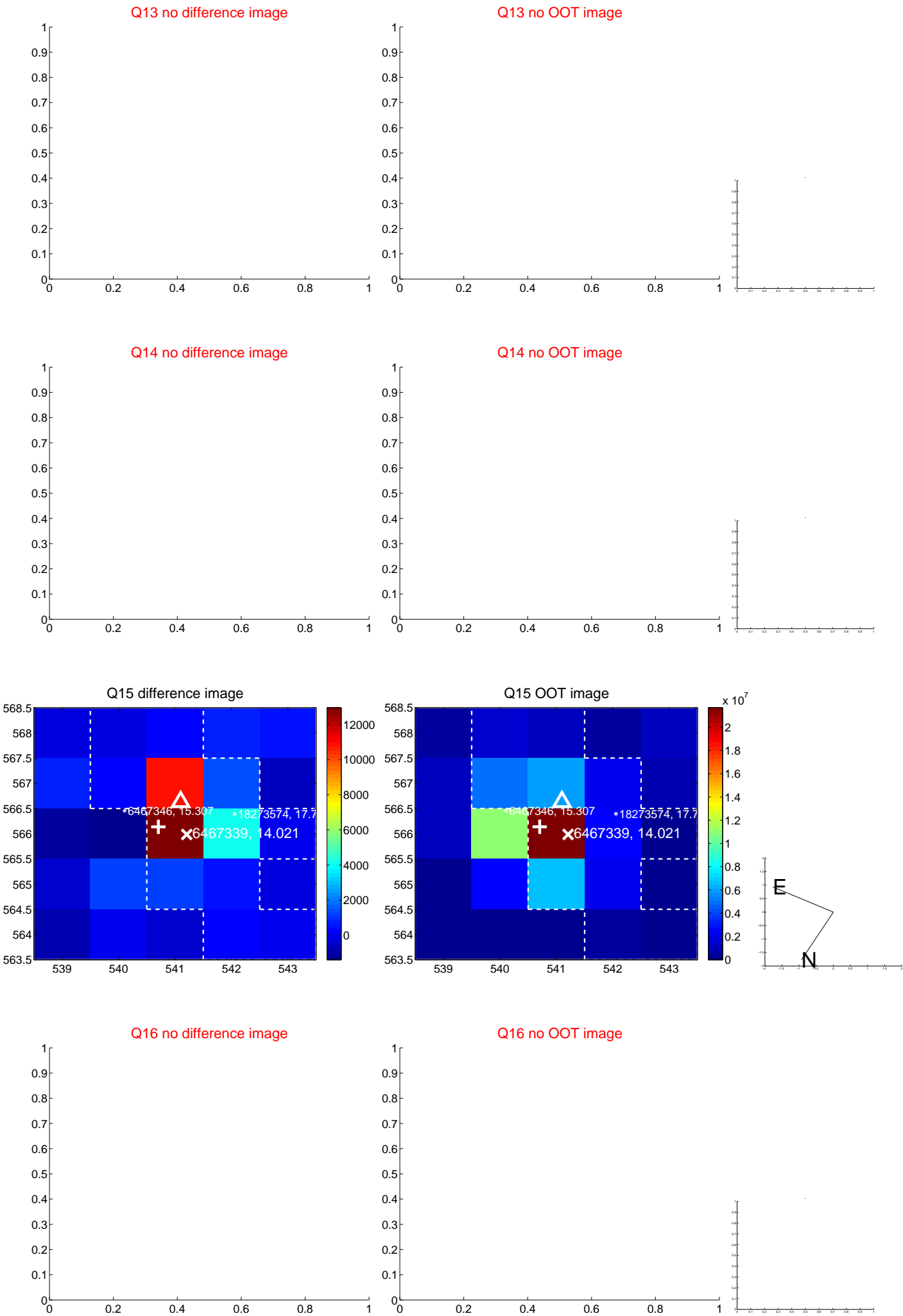
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



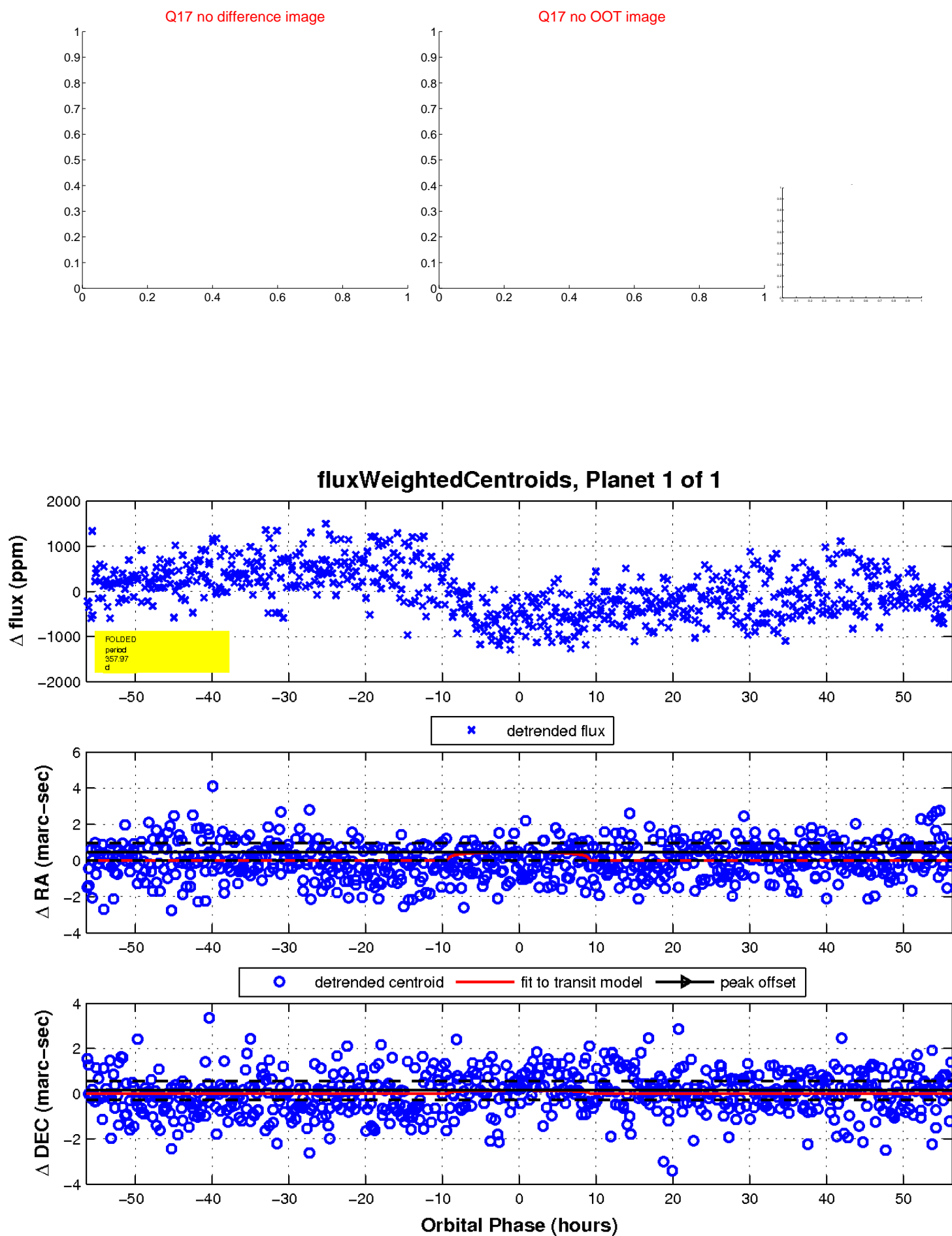
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

