

KIC 006367663

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})
006367663-01	OBS	5275.01	3.780647	131.643998	77.6	11.350	7.1	7.6	1.22	6318	1.25	966.23

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006367663-01	OBS	FP	0.00	1	0	0	0	LPP_DV—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.

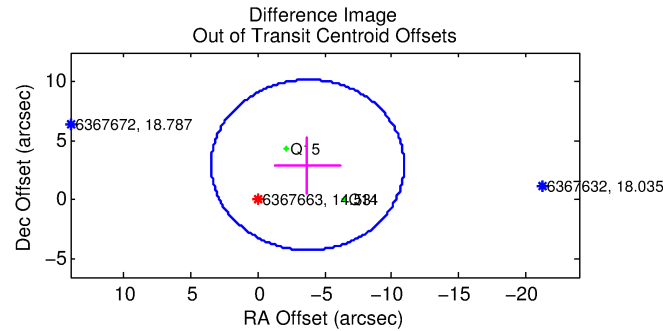
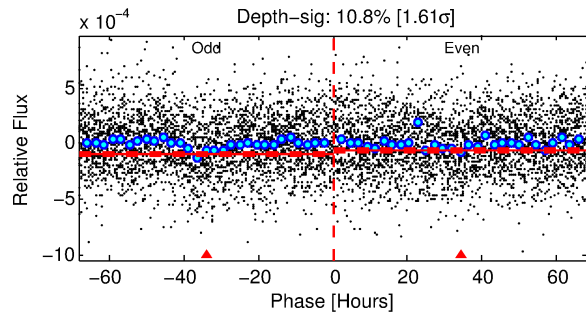
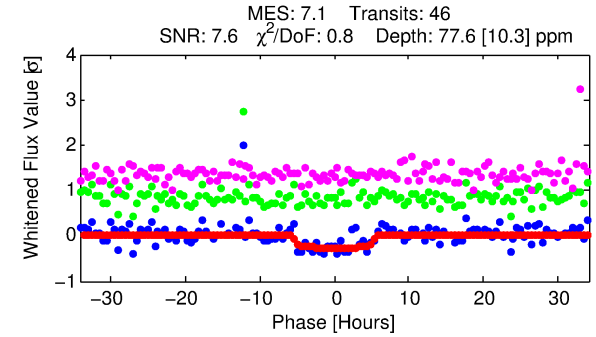
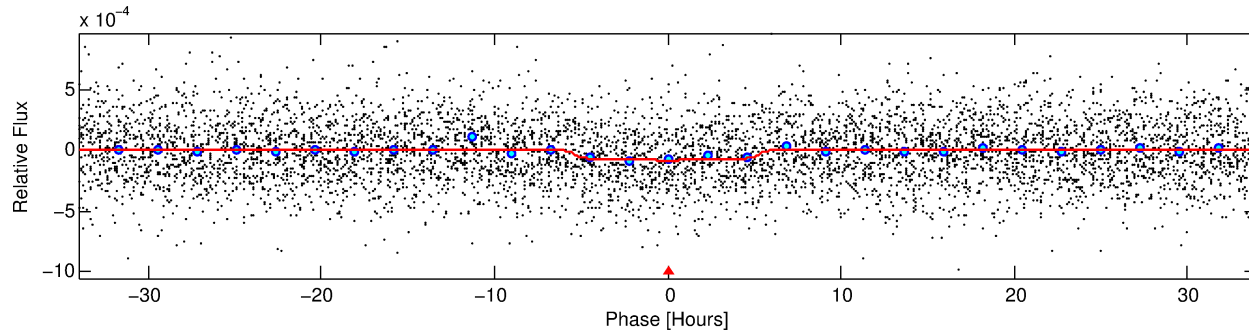
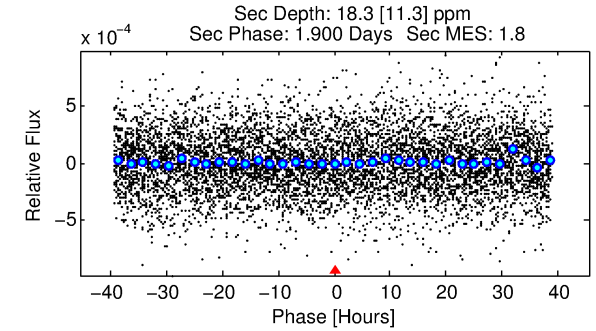
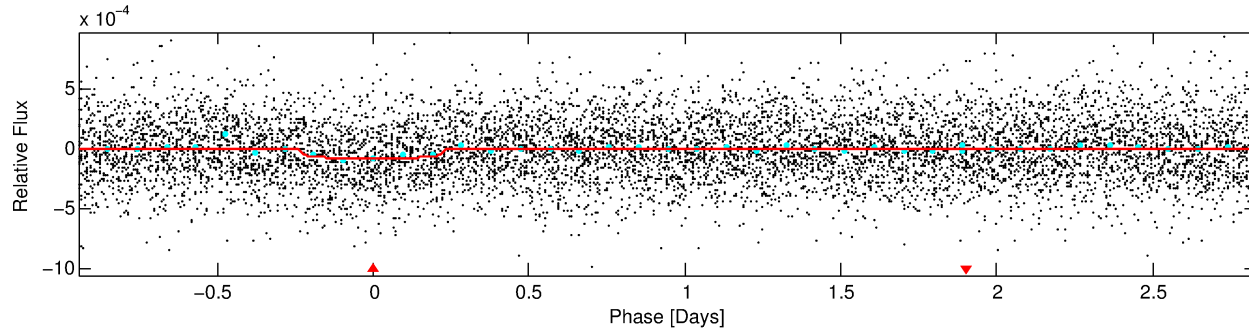
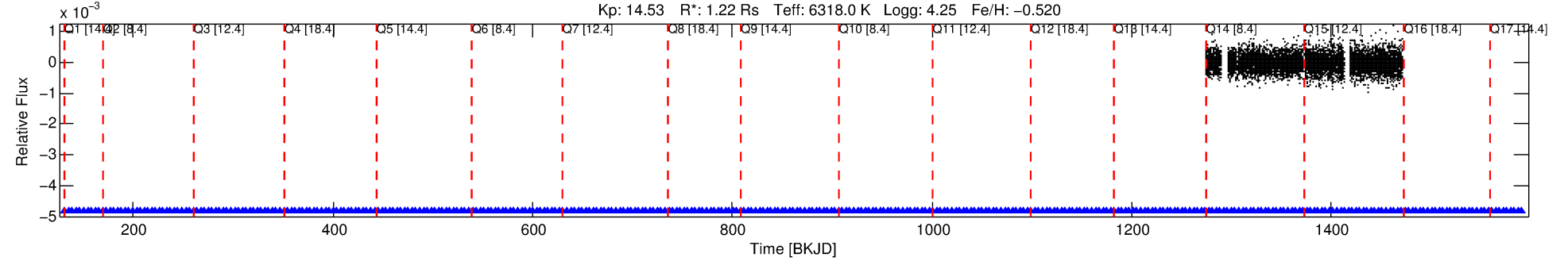
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006367663-01

No Significant Match Found

DV One-Page Summary

KIC: 6367663 Candidate: 1 of 1 Period: 3.781 d
KOI: K05275 Corr: No Ephemeris Match



DV Fit Results:

Period = 3.78065 [0.00006] d
Epoch = 131.6440 [0.0158] BKJD
Rp/R* = 0.0094 [0.0028]
a/R* = 1.49 [1.37]
b = 0.90 [0.35]
Seff = 966.23 [388.10]
Teff = 1422 [143] K
Rp = 1.25 [0.51] Re
a = 0.0467 [0.0115] AU
Ag = 13.99 [13.02] [1.00σ]
Teffp = 4251 [922] K [3.03σ]

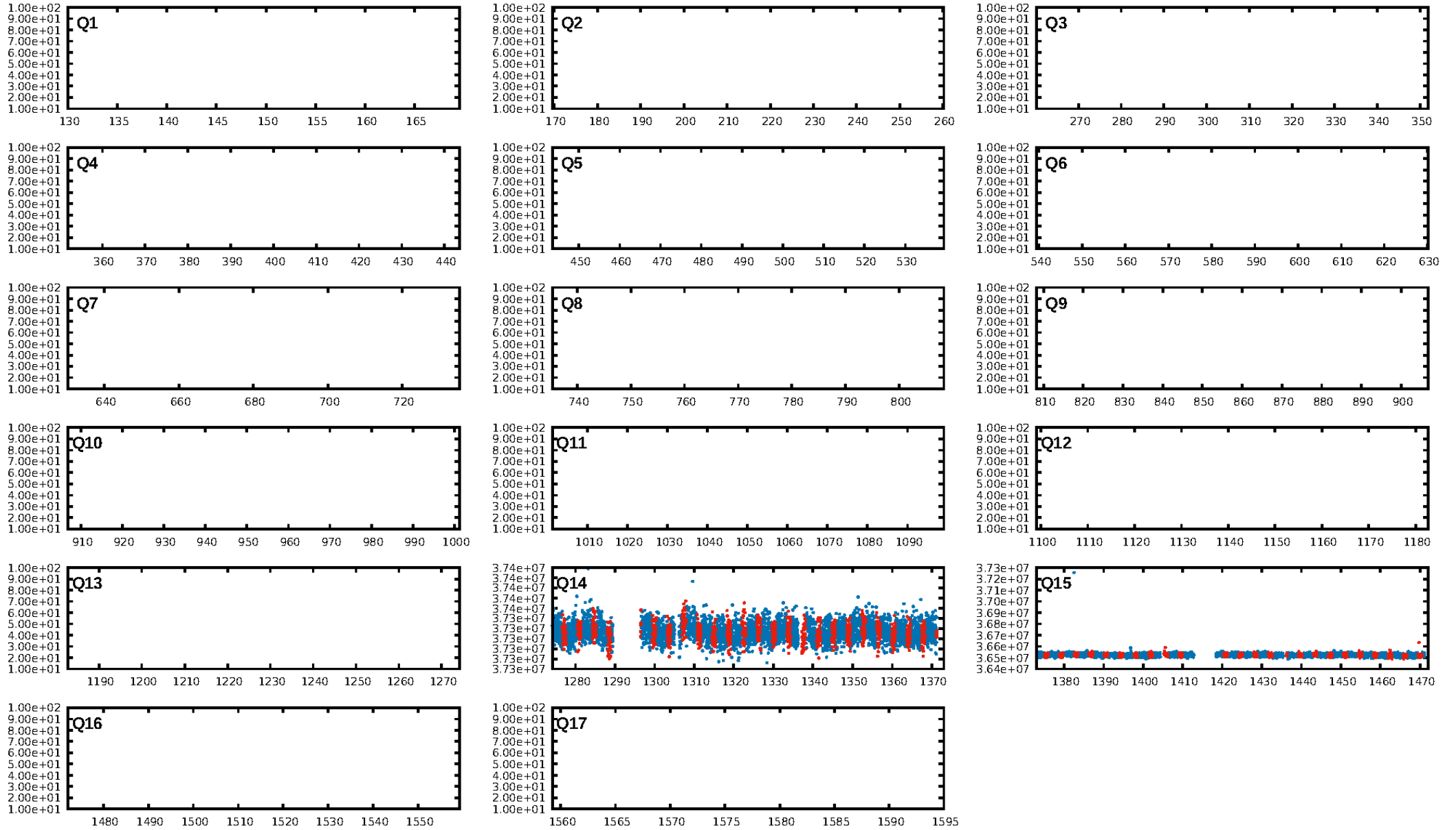
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 99.4%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 1.28e-18
RollingBand-fgt: 1.00 [46/46]
GhostDiagnostic-chr: 0.3342
Centroid-sig: 0.0%
Centroid-so: 7.627 arcsec [4.67σ]
OotOffset-rm: 4.767 arcsec [1.98σ]
KicOffset-rm: 4.704 arcsec [1.95σ]
OotOffset-st: 1/1/0/0 [2]
KicOffset-st: 1/1/0/0 [2]
DiffImageQuality-fgm: 0.00 [0/2]
DiffImageOverlap-fno: 1.00 [2/2]

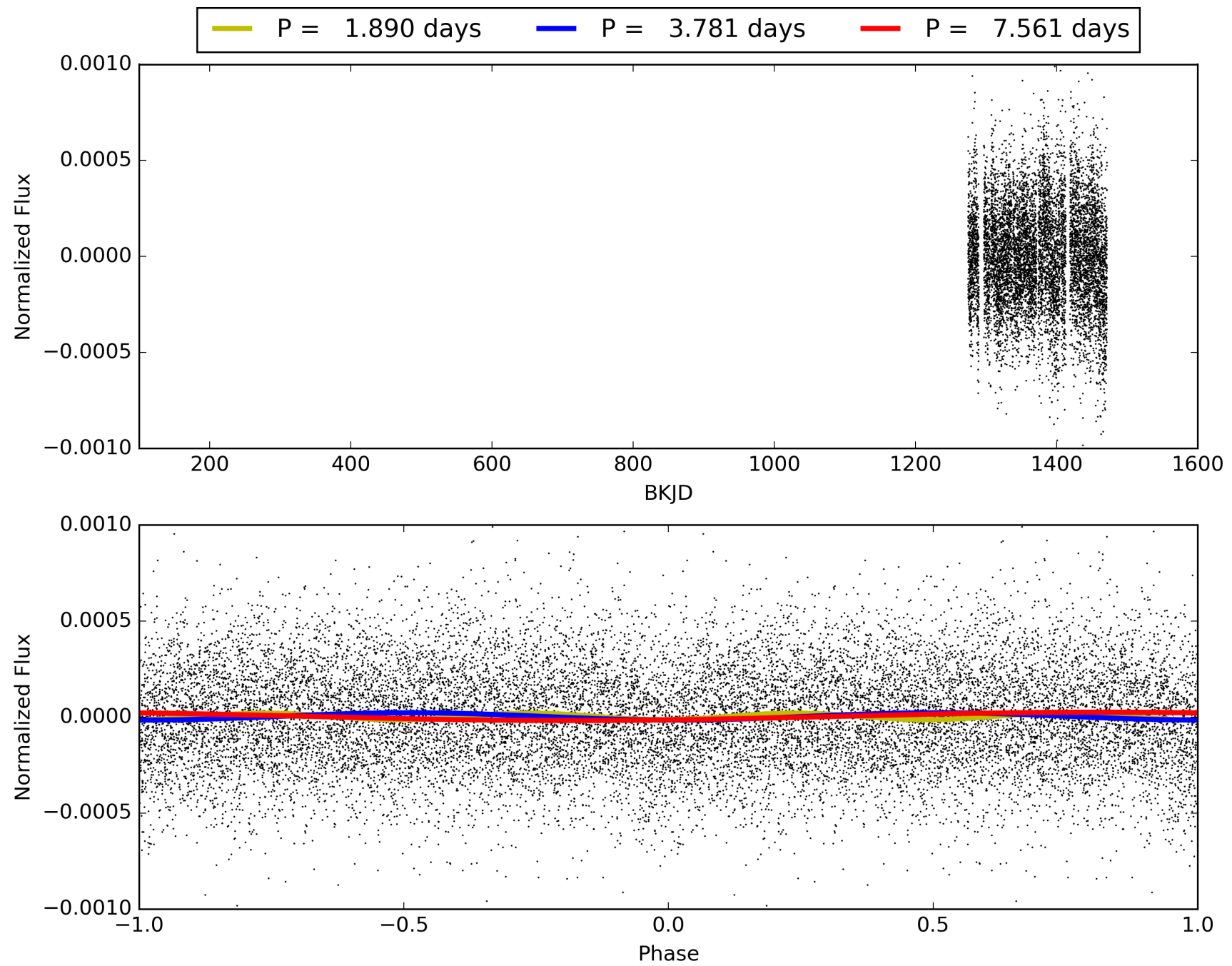
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 17:33:28 Z

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

TCE 006367663-01, PDC Light Curves

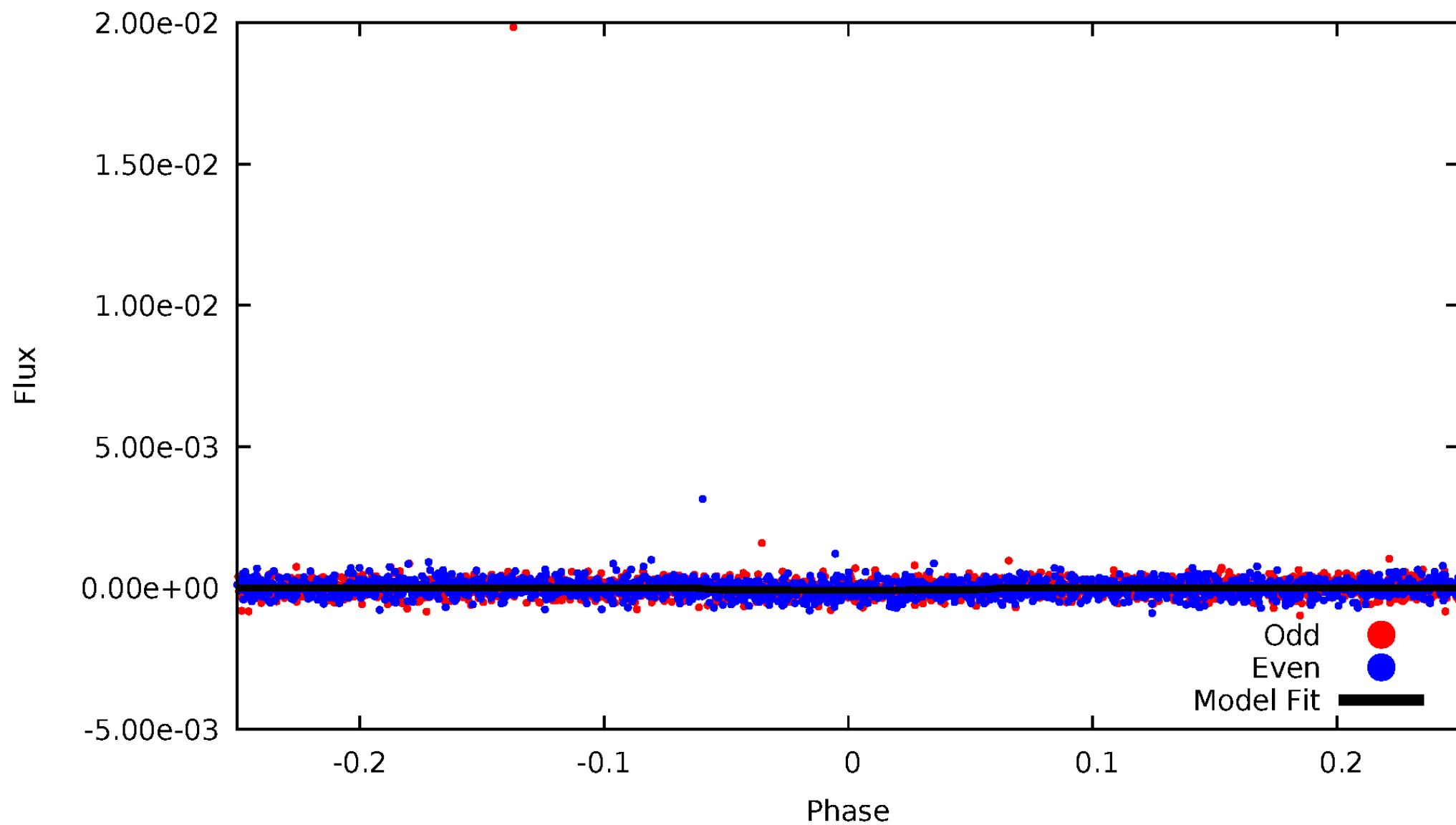


TCE 006367663-01



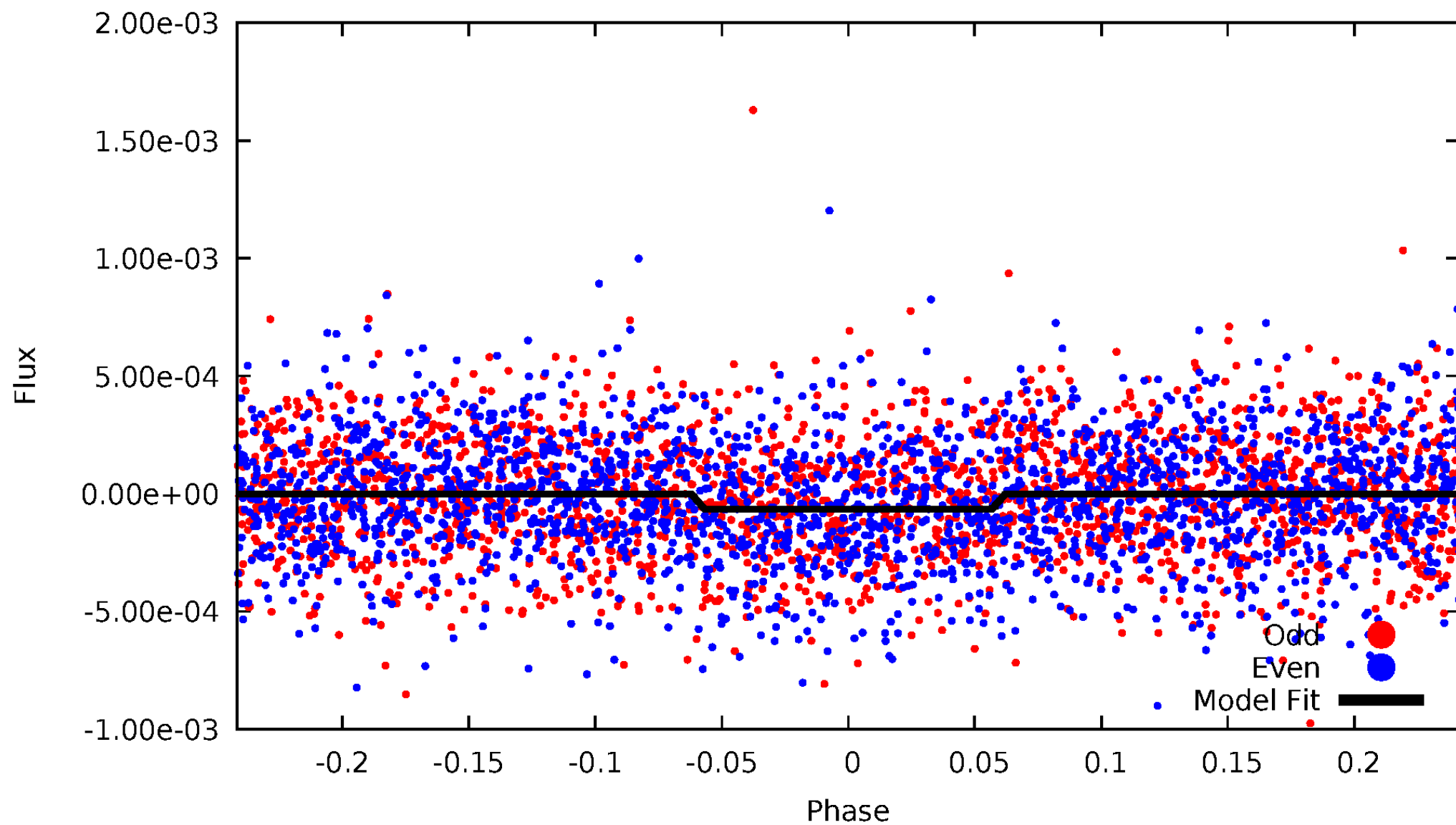
DV Odd/Even

TCE 006367663-01



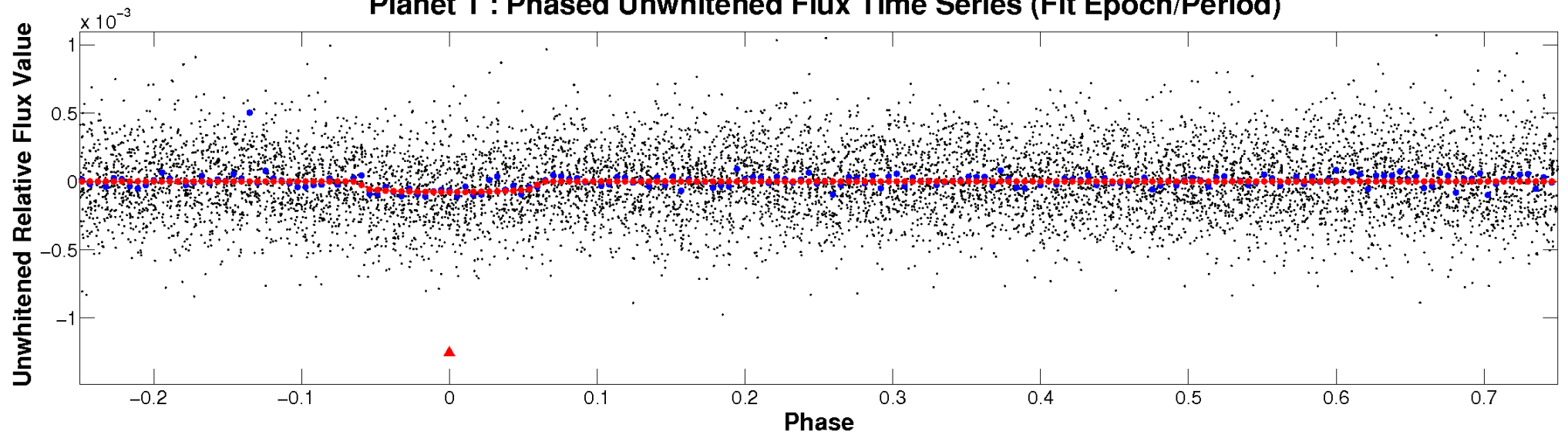
ALT Odd/Even

TCE 006367663-01

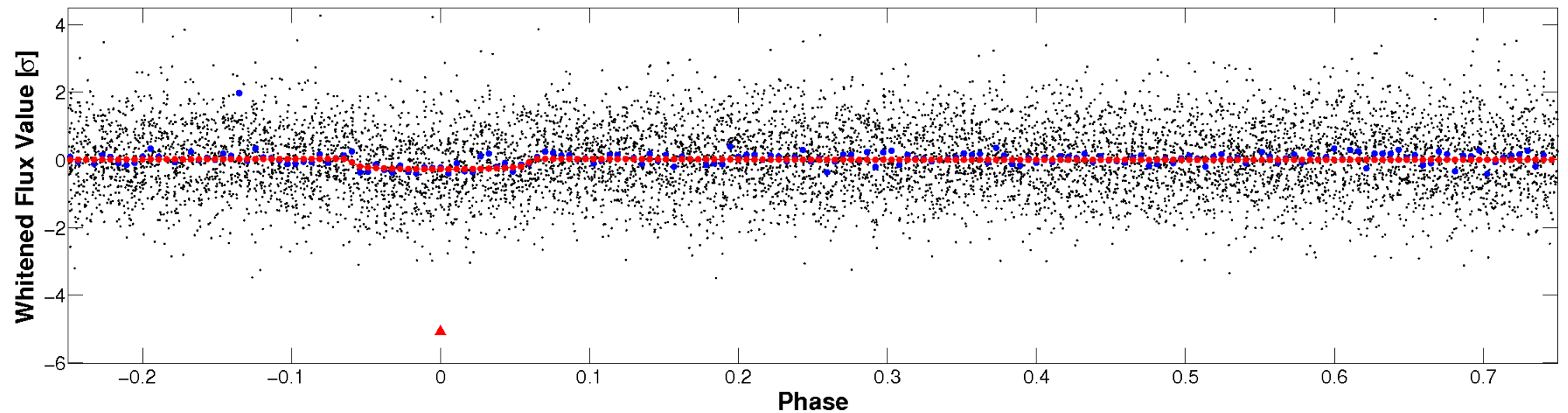


Non-Whitened Vs. Whitened Light Curve

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

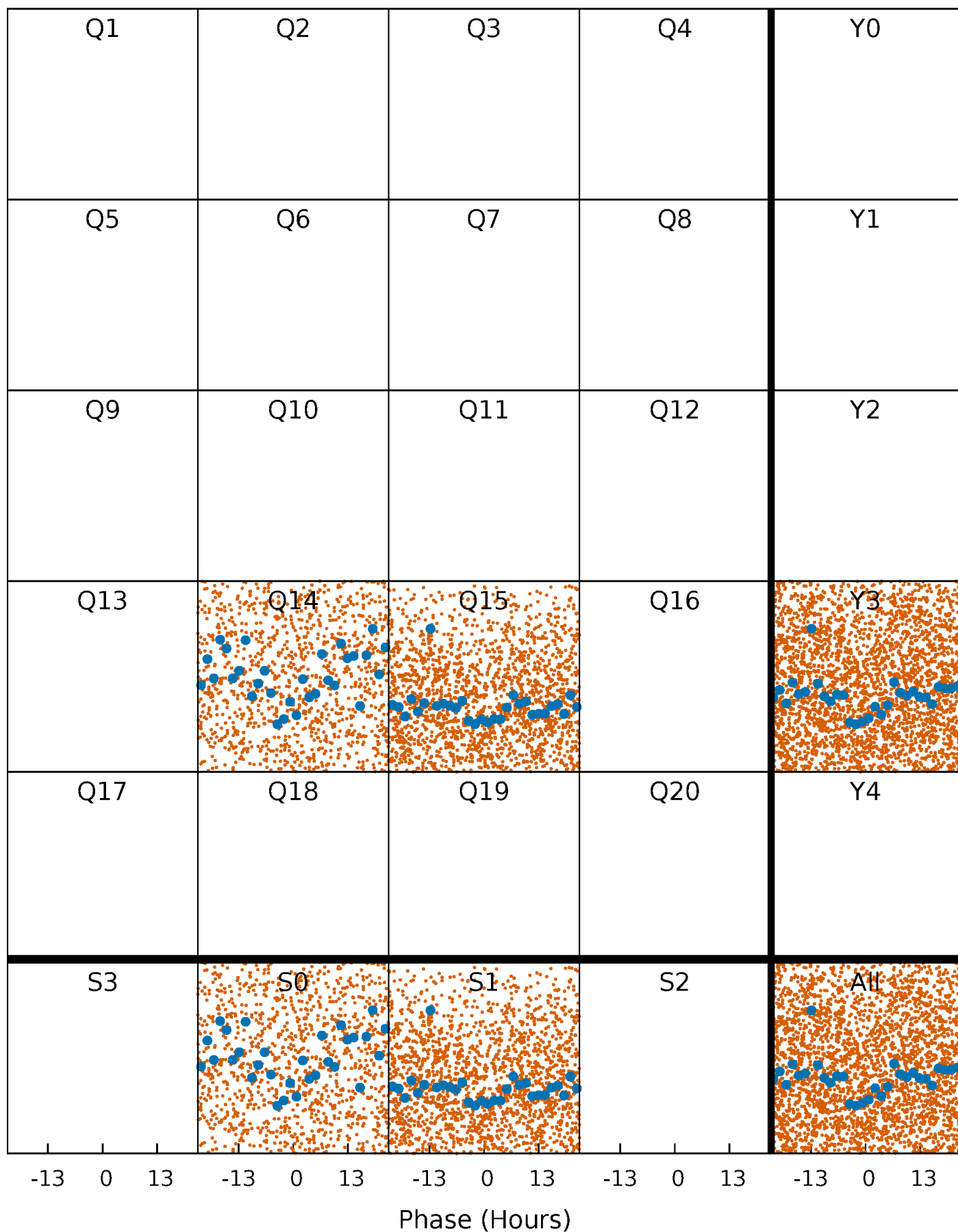


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



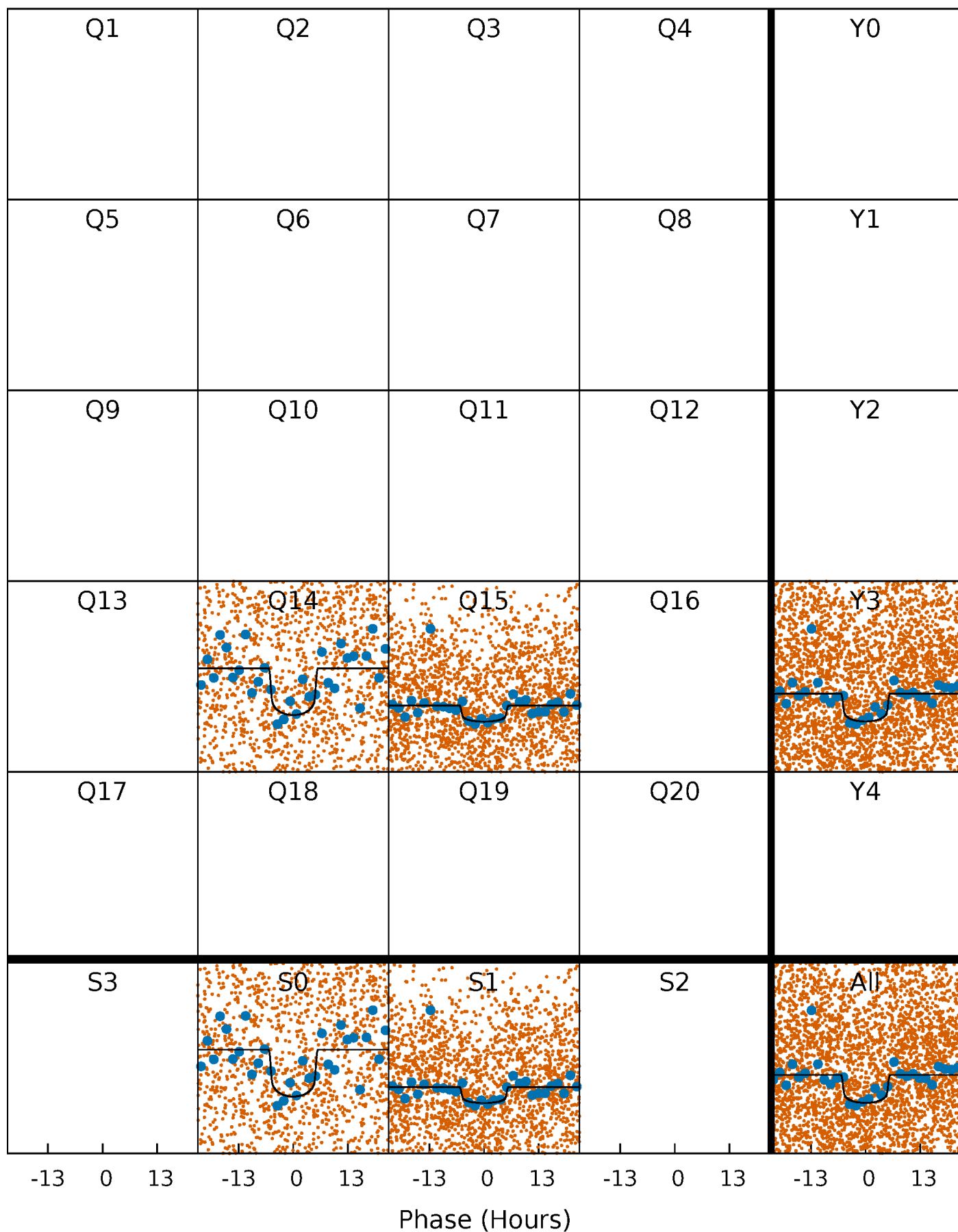
PDC Quarter-Phased Transit Curves

TCE 006367663-01 P= 3.780647 Days $T_0=131.643998$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 006367663-01 P= 3.780647 Days $T_0=131.643998$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

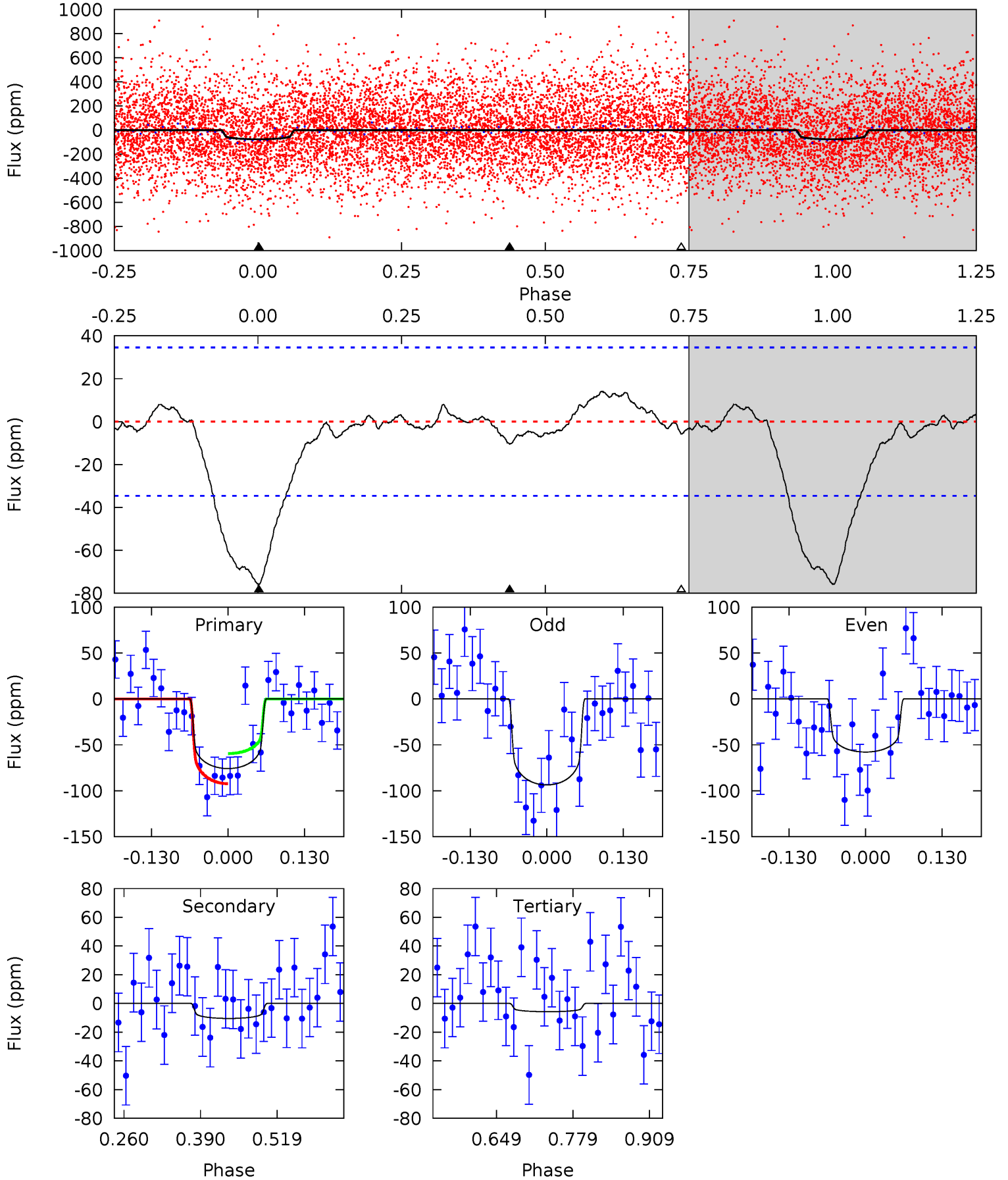
TCE 006367663-01 P= 3.780614 Days $T_0=131.663910$ (BKJD)



DV Model-Shift Uniqueness Test

006367663-01, P = 3.780647 Days, E = 131.643998 Days

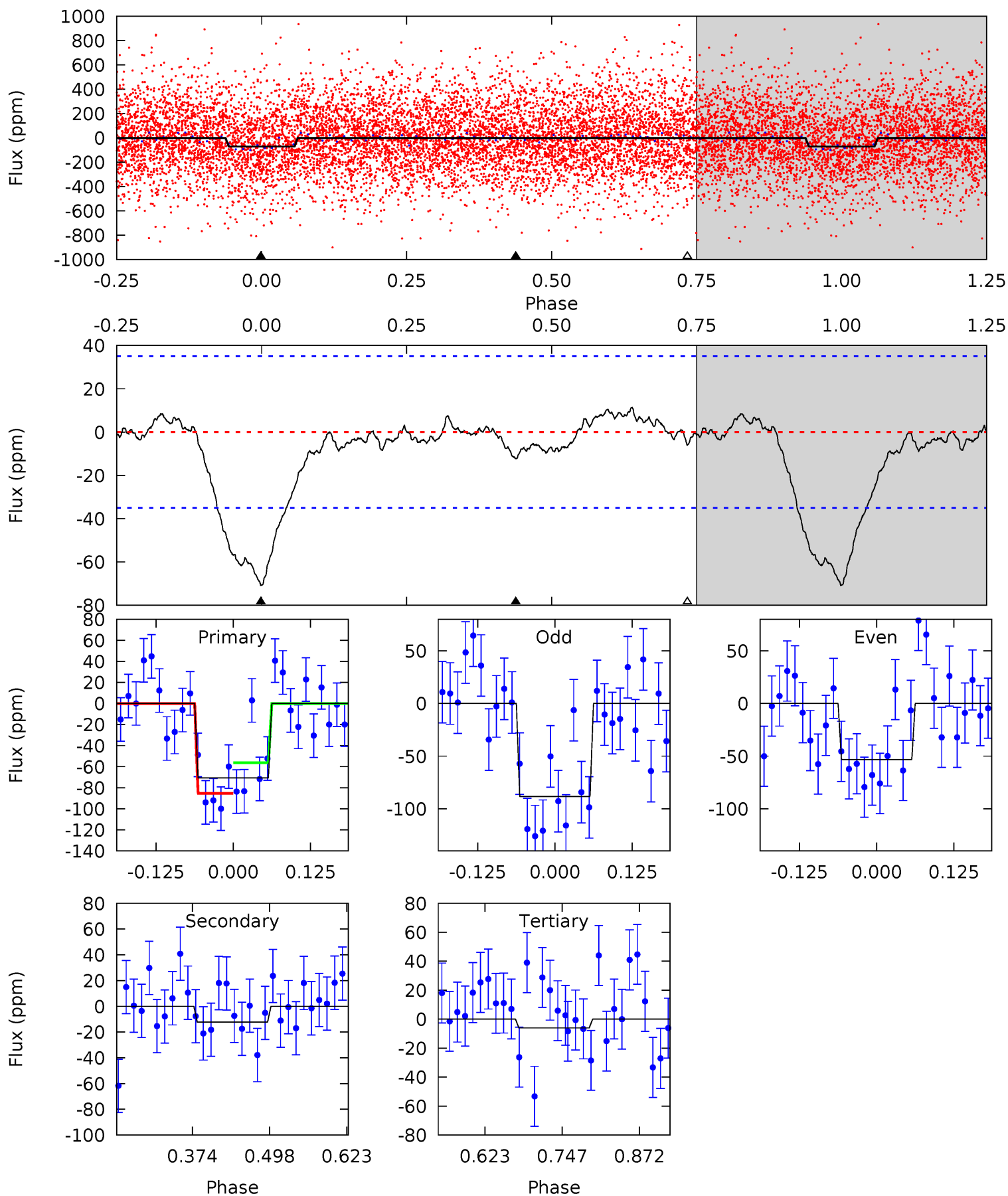
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.89	1.36	0.75	0	4.51	1.51	0.74	9.14	9.89	0.62	1.36	2.40	1.07	0.16	2.17



Alt Model-Shift Uniqueness Test

006367663-01, P = 3.780614 Days, E = 131.663910 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.13	1.58	0.78	0	4.52	1.54	0.62	8.35	9.13	0.79	1.58	2.28	0.93	0.14	1.90



Stellar Parameters For KIC 006367663

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6318^{+199}_{-244}	$4.247^{+0.209}_{-0.171}$	$-0.520^{+0.300}_{-0.300}$	$1.216^{+0.339}_{-0.277}$	$0.951^{+0.146}_{-0.110}$	$0.745^{+0.850}_{-0.346}$
	+3%/-4%	+5%/-4%	+58%/-58%	+28%/-23%	+15%/-12%	+114%/-46%
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 006367663-01 / KOI 5275.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-10 ± 8	$1.22^{+0.42}_{-0.37}$	1972^{+146}_{-151}	3953^{+762}_{-855}	$8.139^{+12.905}_{-6.384}$
Alt.	-12 ± 8	$1.05^{+0.40}_{-0.38}$	1982^{+152}_{-156}	4357^{+918}_{-827}	13^{+20}_{-9}

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 $A_{obs} \gg 1.0$

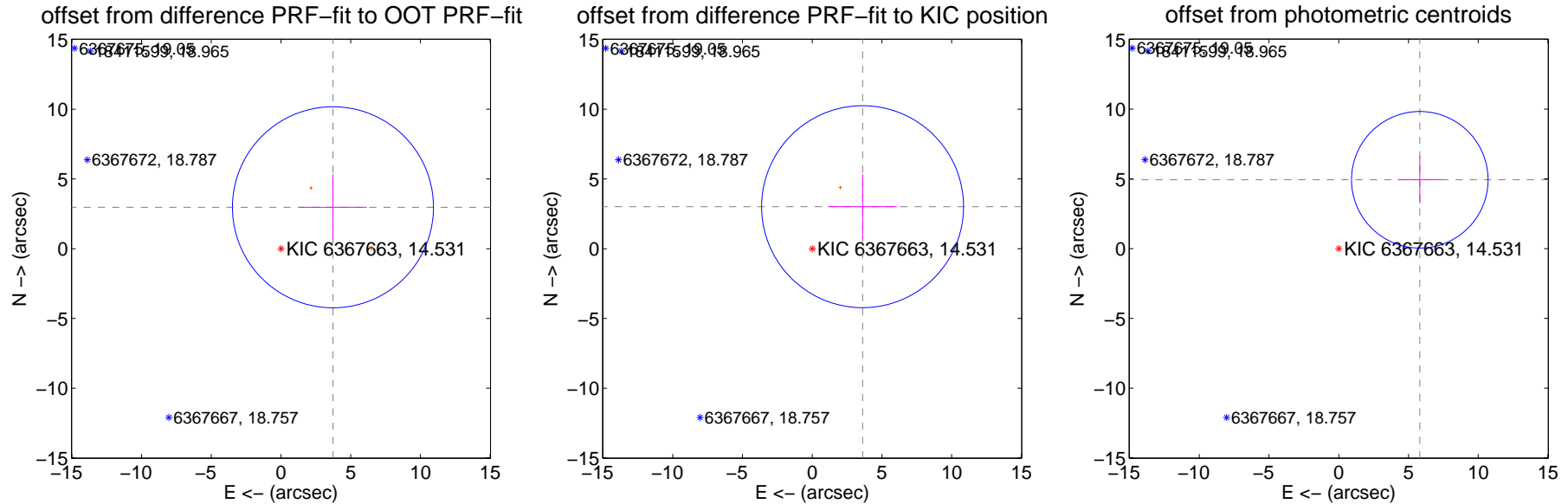
DV Centroid Data

Supplemental centroid analysis for 006367663-01. Kepler magnitude: 14.53. Transit SNR 7.61

There are 0 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.14 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	4.767 ± 2.403	1.98	-3.728 ± 2.431	2.971 ± 2.359
PRF-fit source offset from KIC position	4.704 ± 2.414	1.95	-3.613 ± 2.467	3.012 ± 2.336
photometric centroid source offset	7.63 ± 1.63	4.67	-5.81 ± 1.59	4.94 ± 1.70



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.



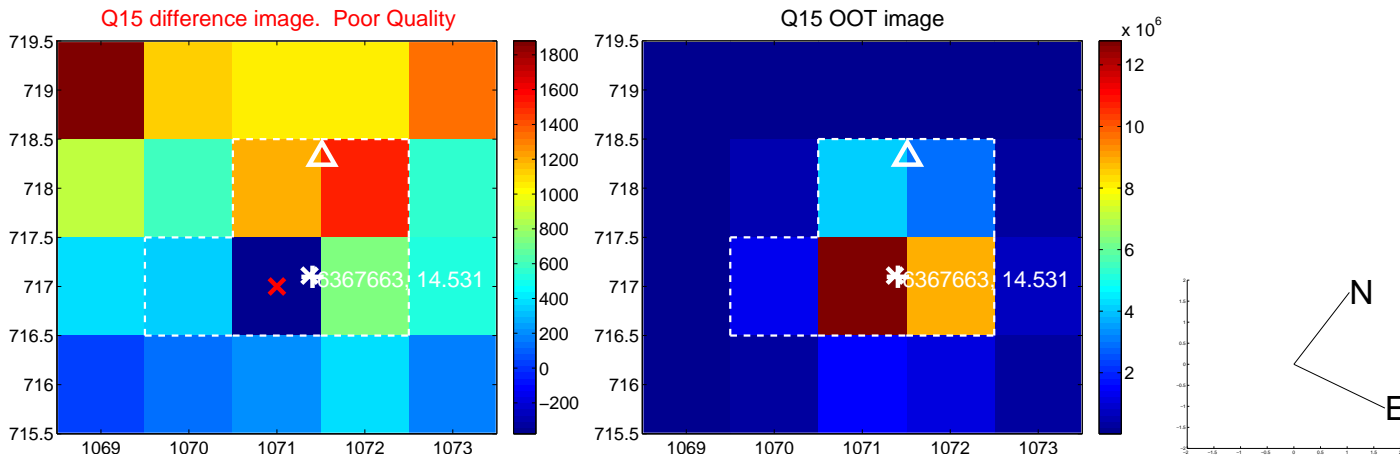
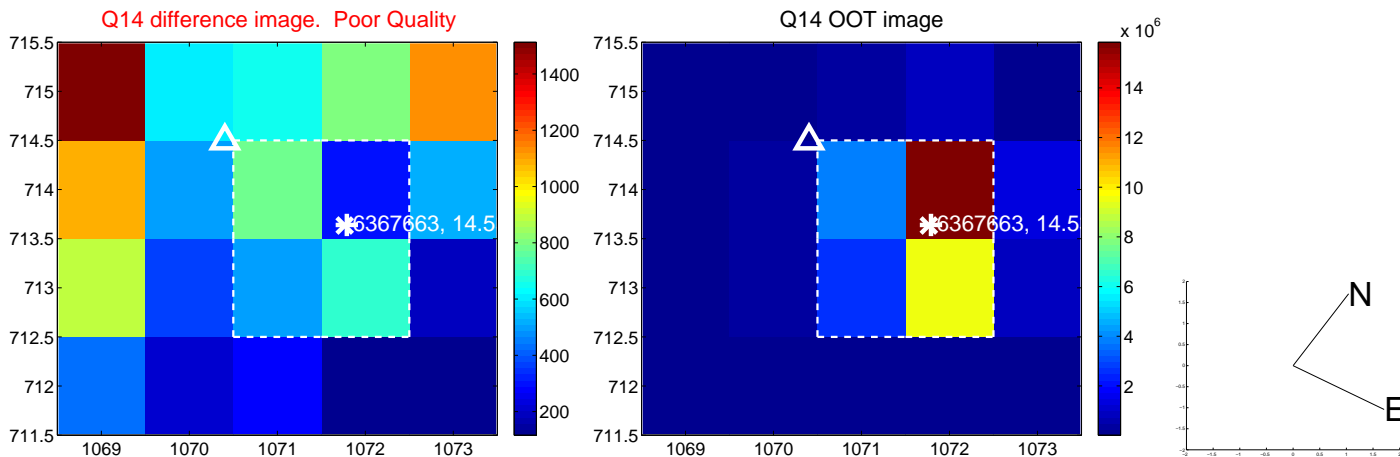
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



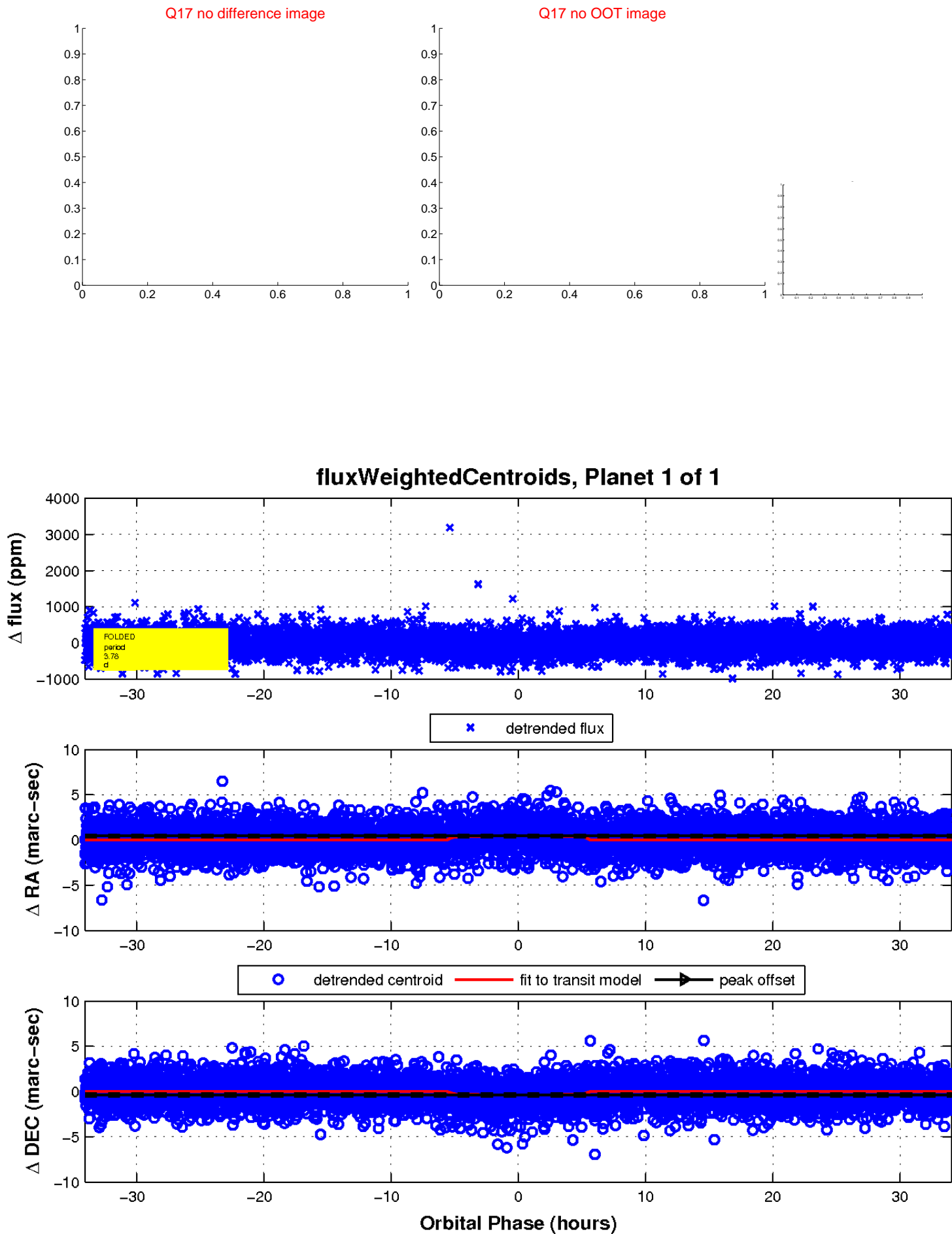
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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UKIRT Image

Declination

