

KIC 009832675

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})
009832675-01	OBS	No	363.390481	366.605766	641.4	12.297	10.2	8.8	1.06	6260	2.85	1.45

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
009832675-01	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_MARSHALL_TRACKER—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS—HALO_GHOST

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

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

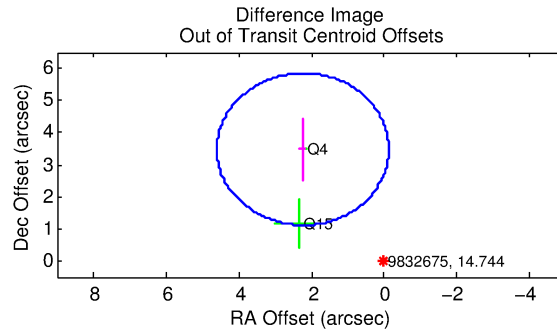
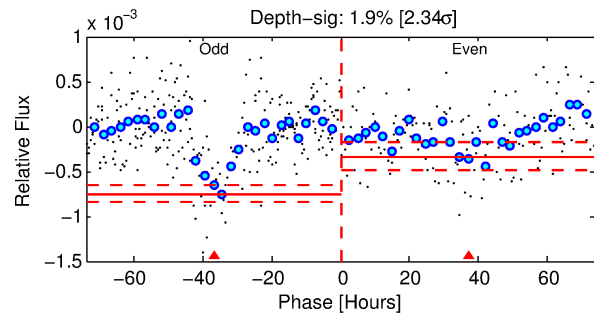
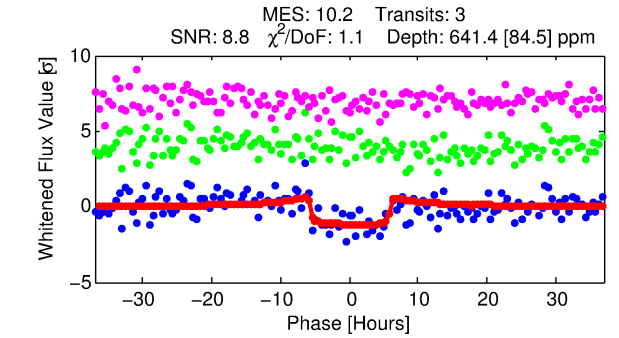
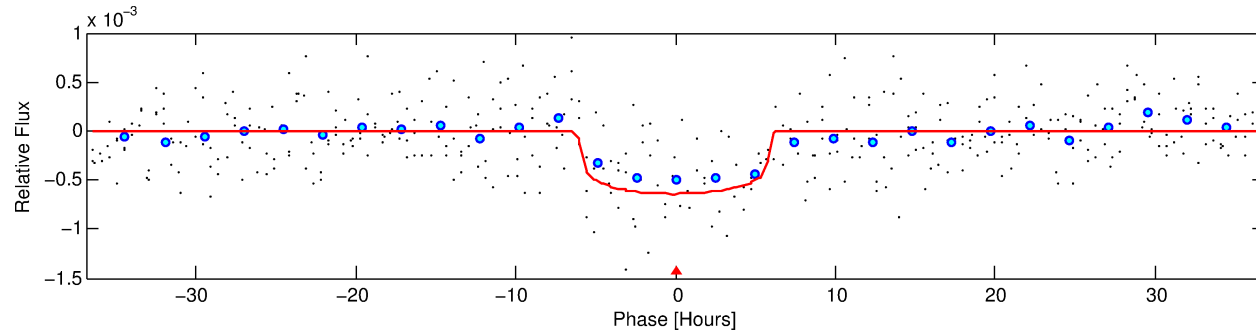
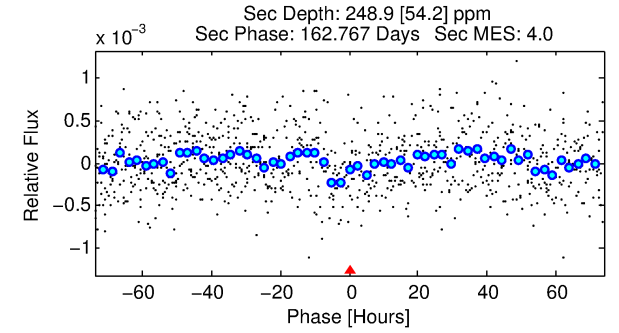
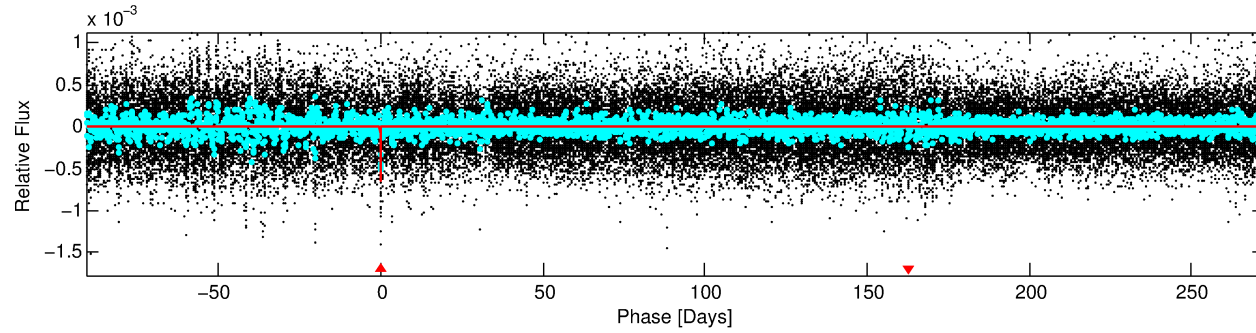
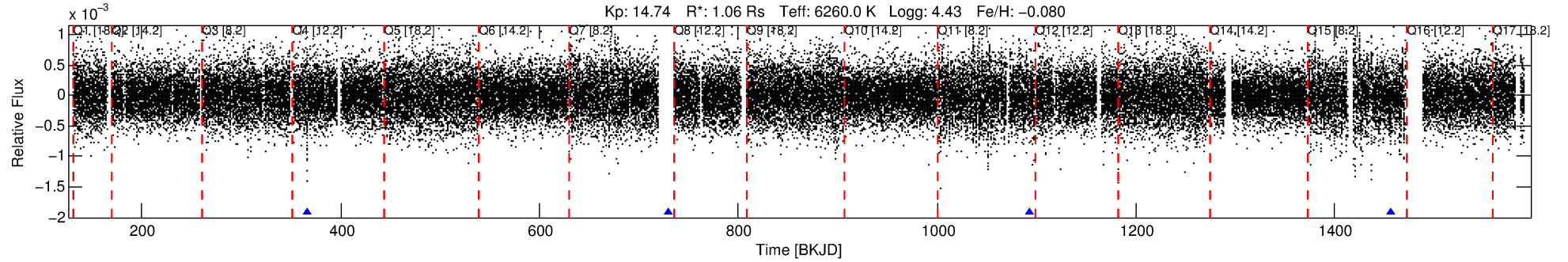
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 009832675-01

No Significant Match Found

DV One-Page Summary

KIC: 9832675 Candidate: 1 of 1 Period: 363.390 d



DV Fit Results:

Period = 363.39048 [0.00690] d
Epoch = 366.6058 [0.0147] BKJD
Rp/R* = 0.0246 [0.0067]
a/R* = 176.32 [233.45]
b = 0.66 [1.12]
Seff = 1.45 [0.62]
Teff = 280 [30] K
Rp = 2.85 [1.23] Re
a = 1.0343 [0.2861] AU
Ag = 18009.49 [12822.51] [1.40σ]
Teffp = 5015 [761] K [6.22σ]

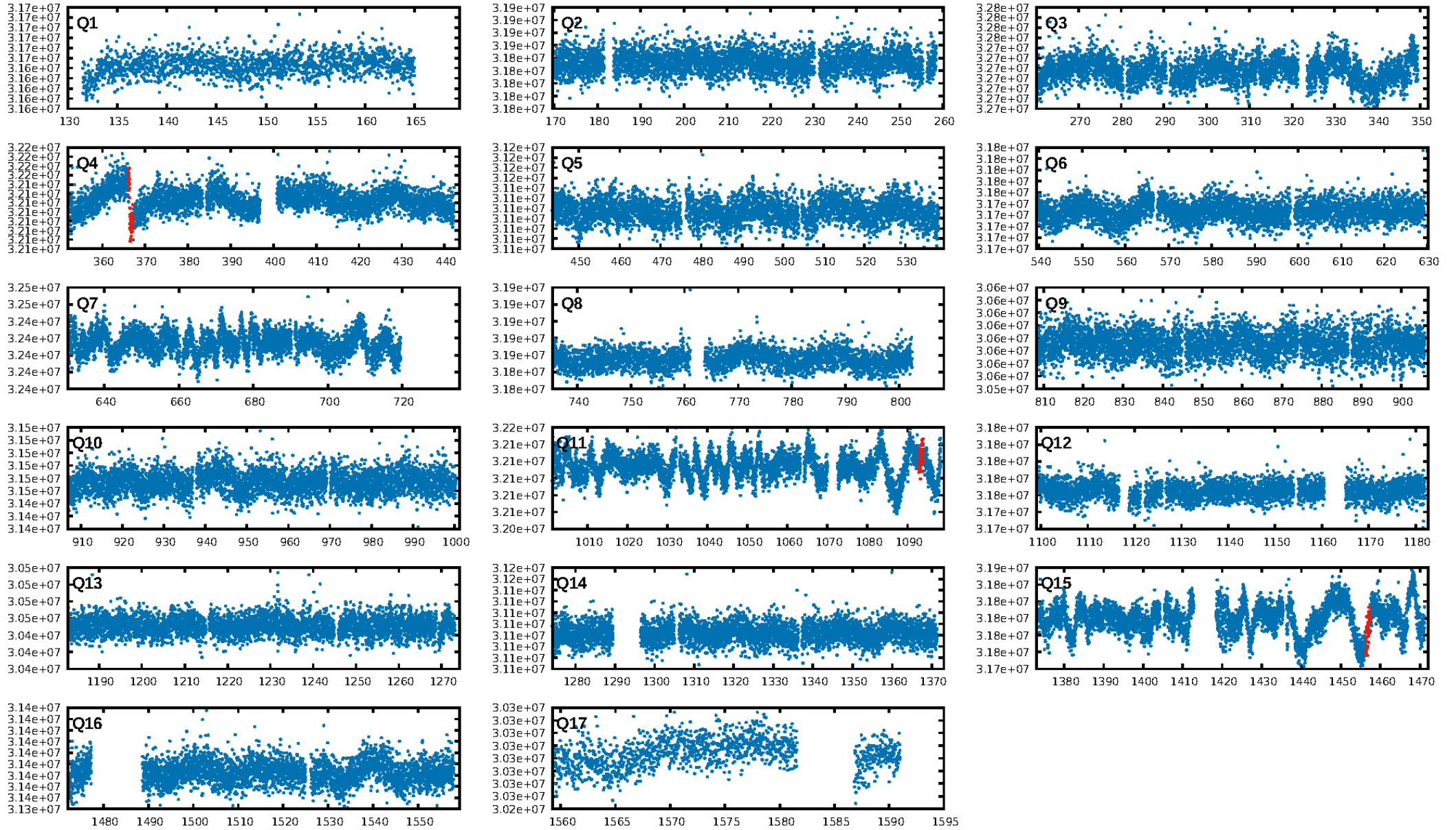
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 4.4%
ModelChiSquareGof-sig: 98.9%
Bootstrap-pfa: 4.96e-18
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: -0.002672
Centroid-sig: 0.0%
Centroid-so: 4.922 arcsec [3.52σ]
OotOffset-rm: 4.138 arcsec [5.25σ]
KicOffset-rm: 4.203 arcsec [8.34σ]
OotOffset-st: 0/1/1/0 [2]
KicOffset-st: 0/1/1/0 [2]
DiffImageQuality-fgm: 0.50 [1/2]
DiffImageOverlap-fno: 1.00 [2/2]

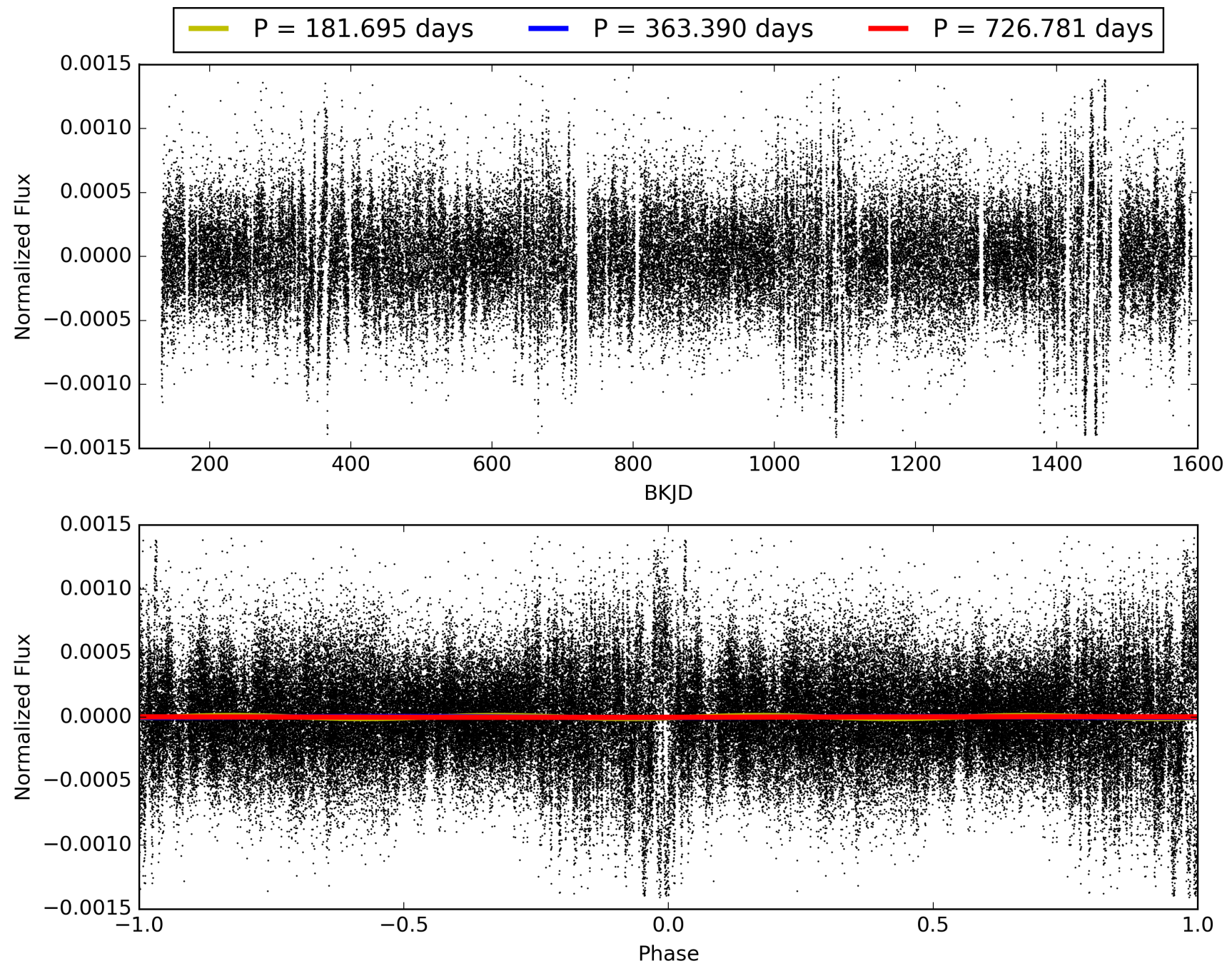
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 13:48:09 Z

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

TCE 009832675-01, PDC Light Curves

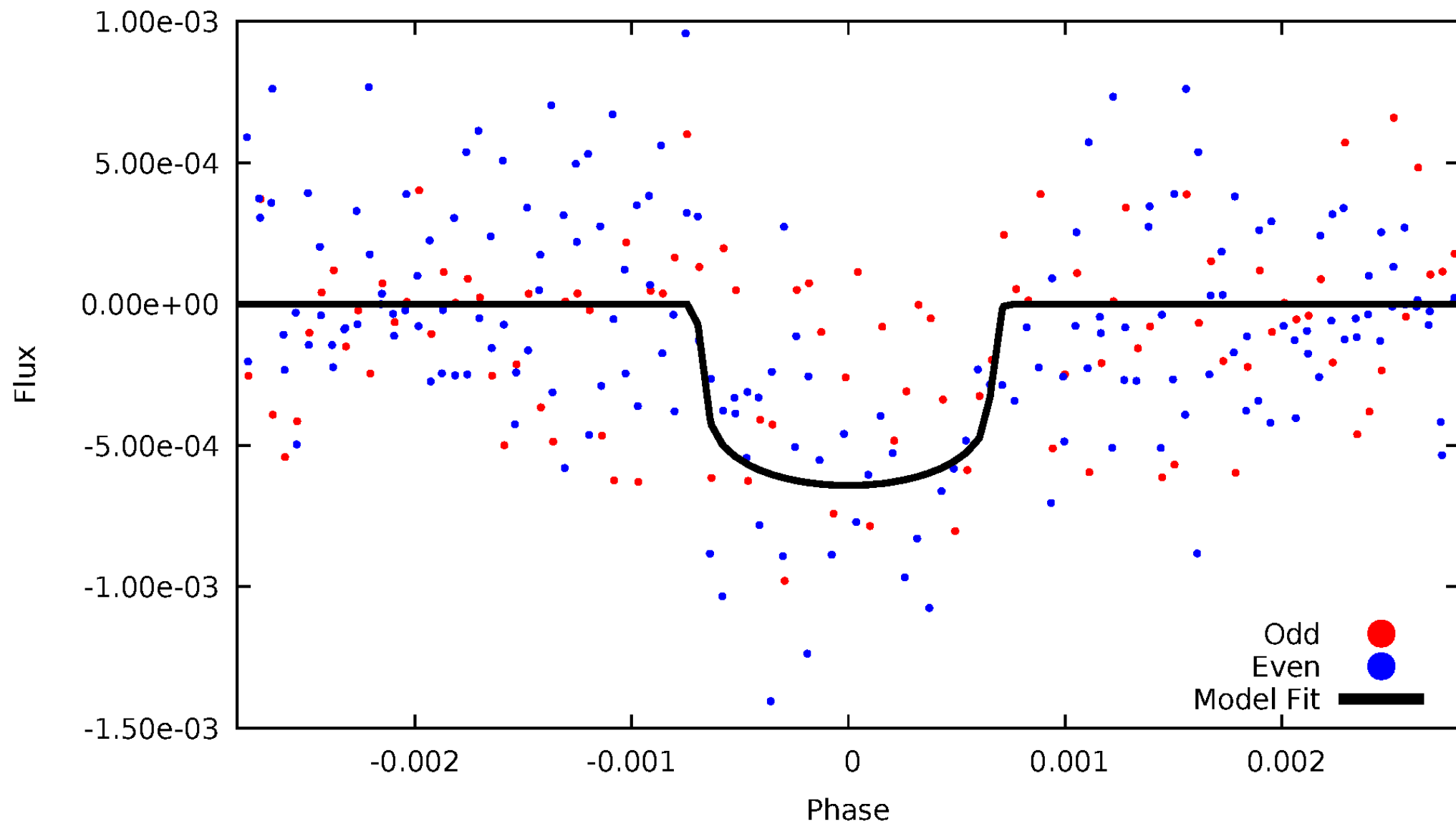


TCE 009832675-01



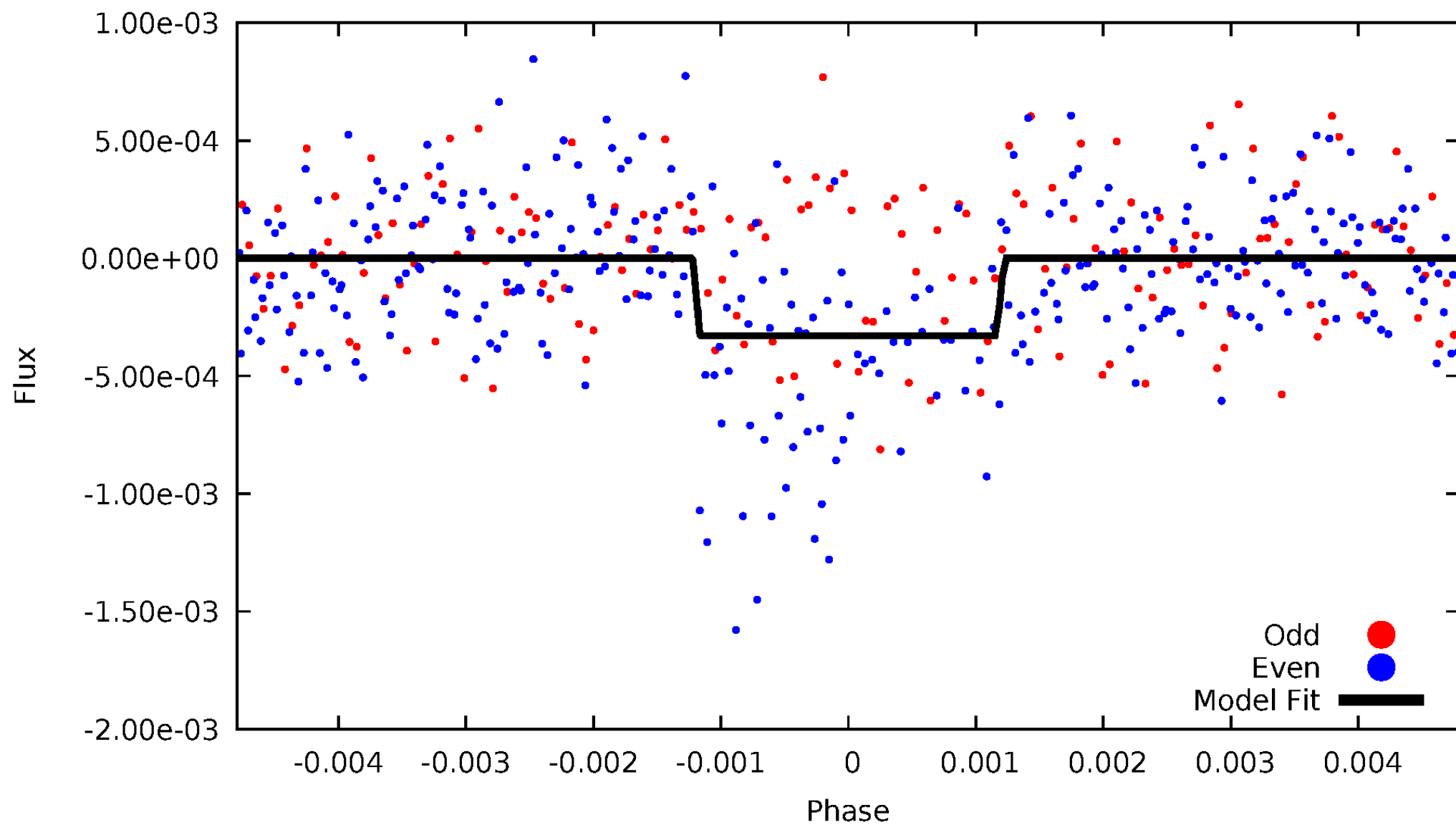
DV Odd/Even

TCE 009832675-01



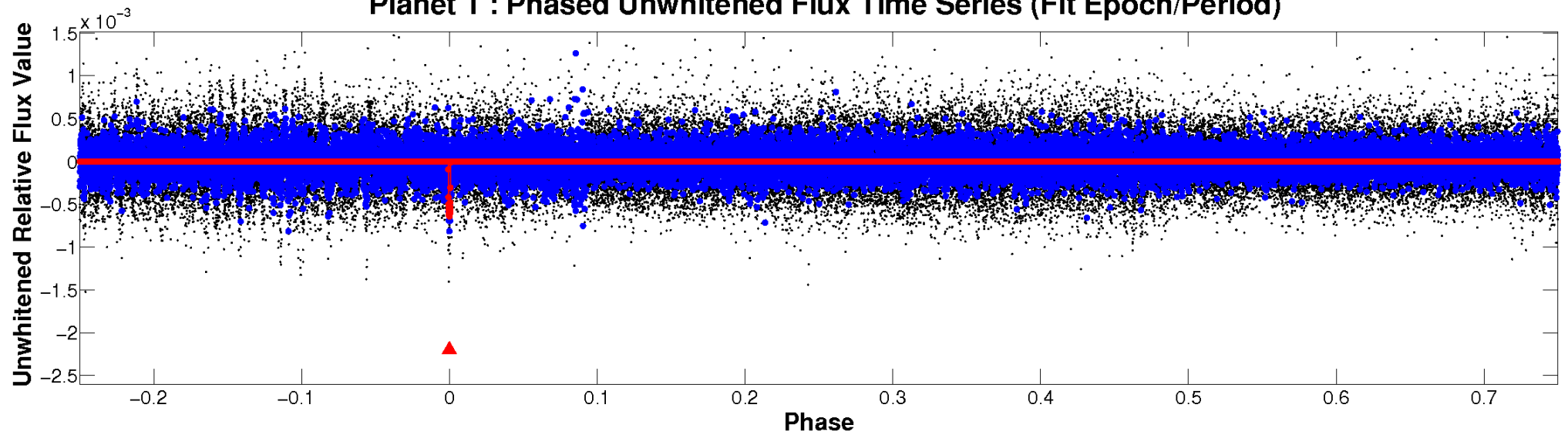
ALT Odd/Even

TCE 009832675-01

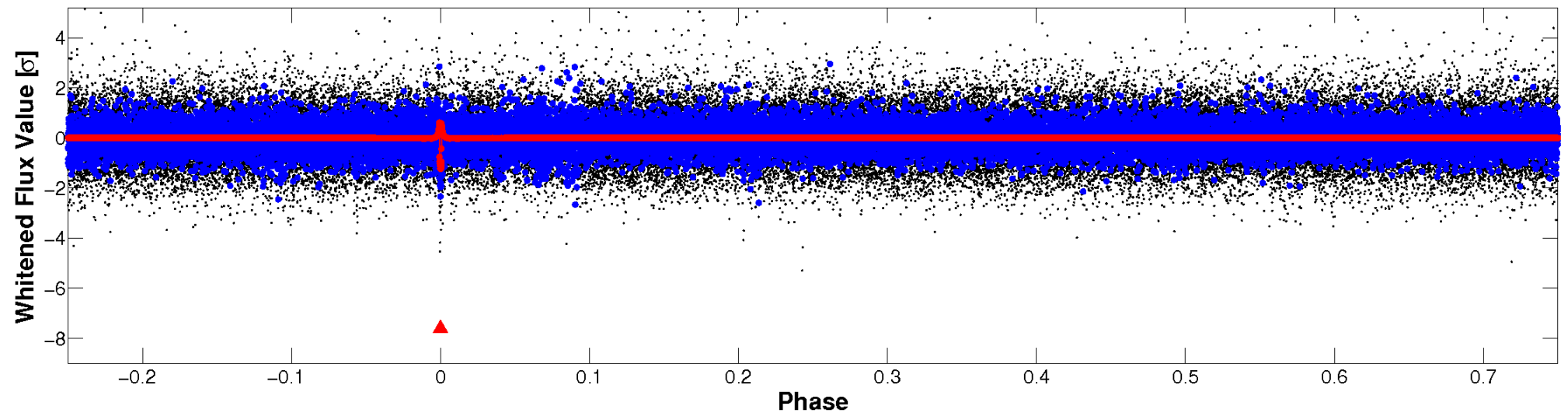


Non-Whitened Vs. Whitened Light Curve

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

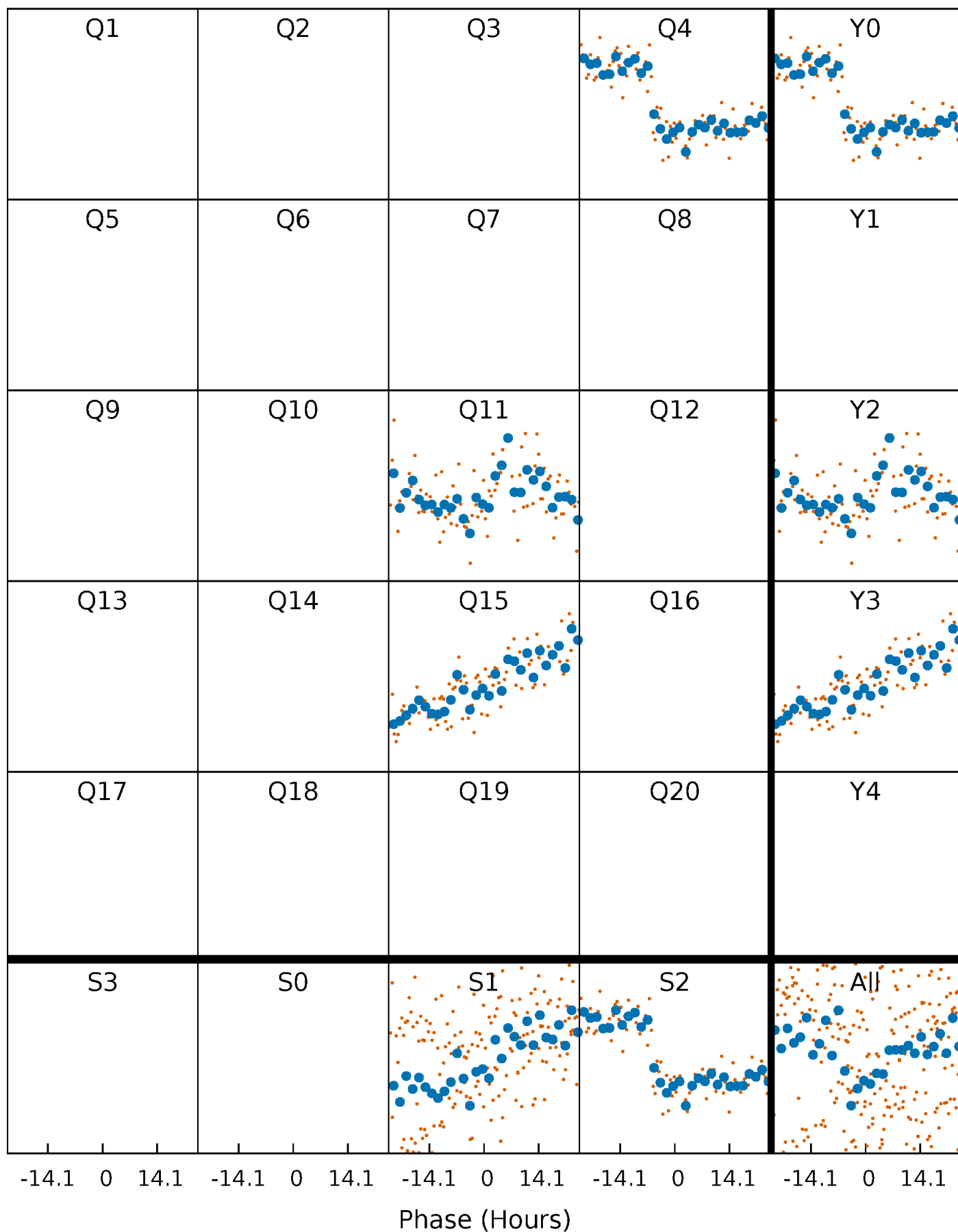


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



PDC Quarter-Phased Transit Curves

TCE 009832675-01 P=363.390481 Days $T_0=366.605766$ (BKJD)



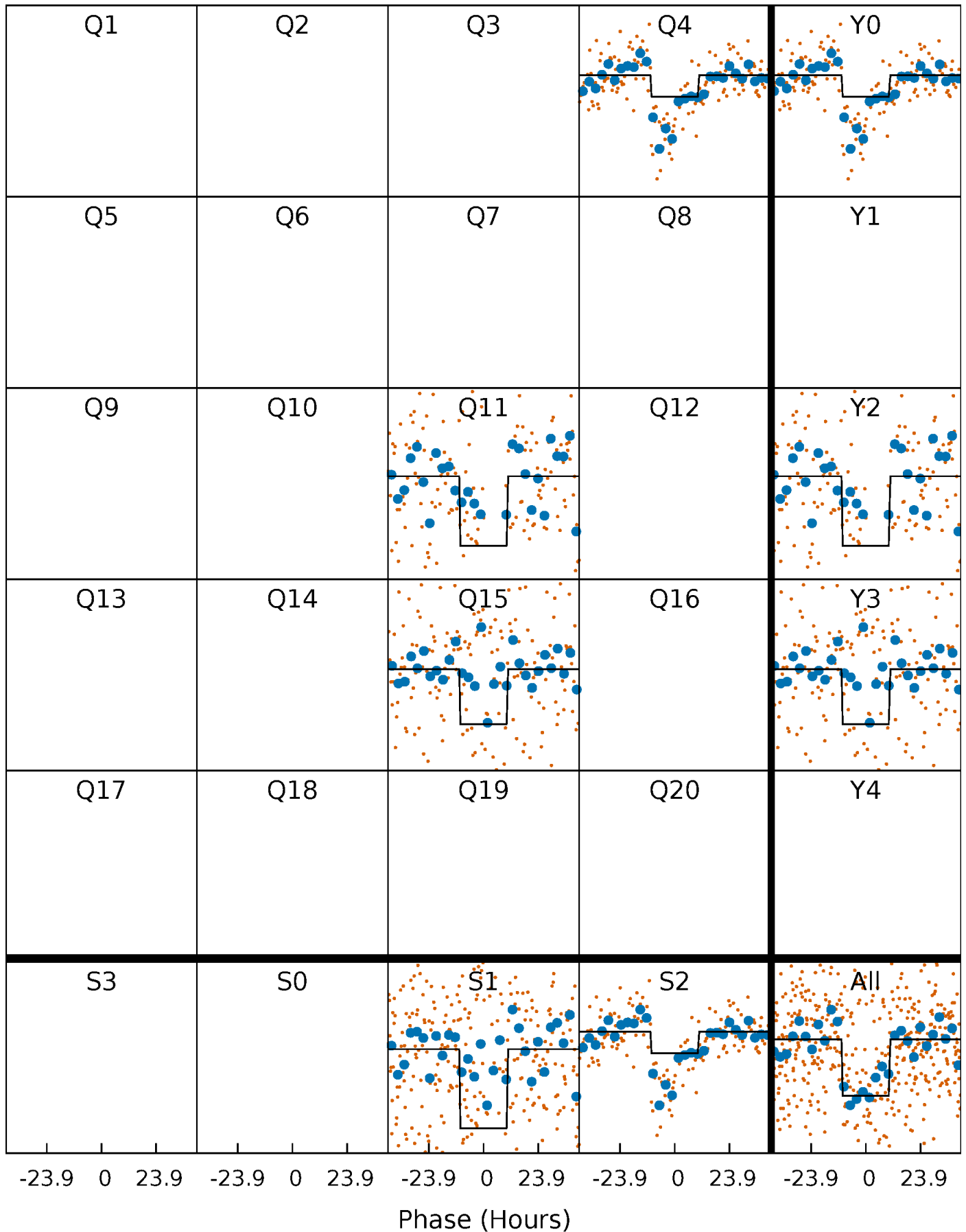
DV Quarter-Phased Transit Curves

TCE 009832675-01 P=363.390481 Days $T_0=366.605766$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

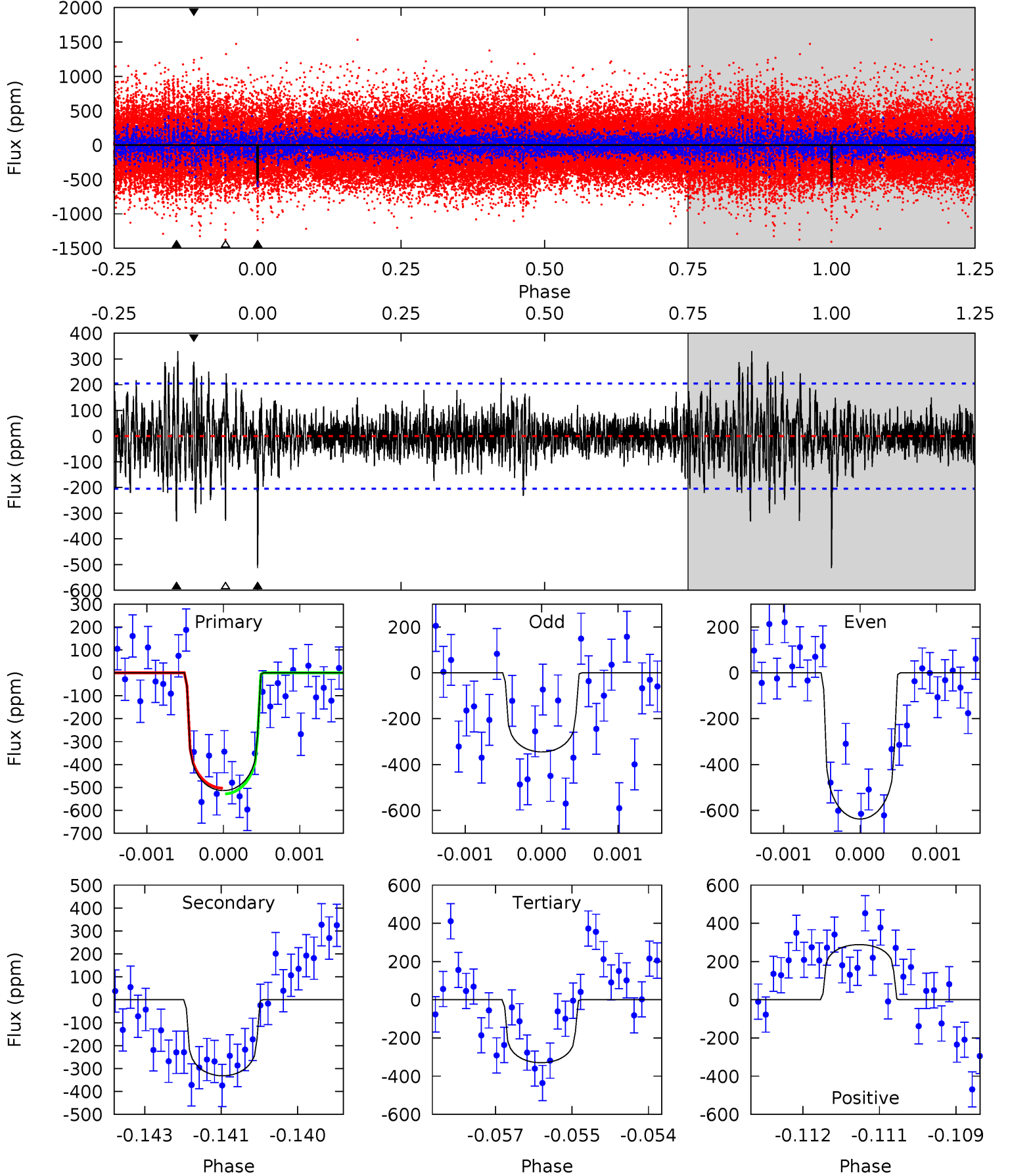
TCE 009832675-01 P=363.261018 Days $T_0=366.796478$ (BKJD)



DV Model-Shift Uniqueness Test

009832675-01, P = 363.390481 Days, E = 3.215285 Days

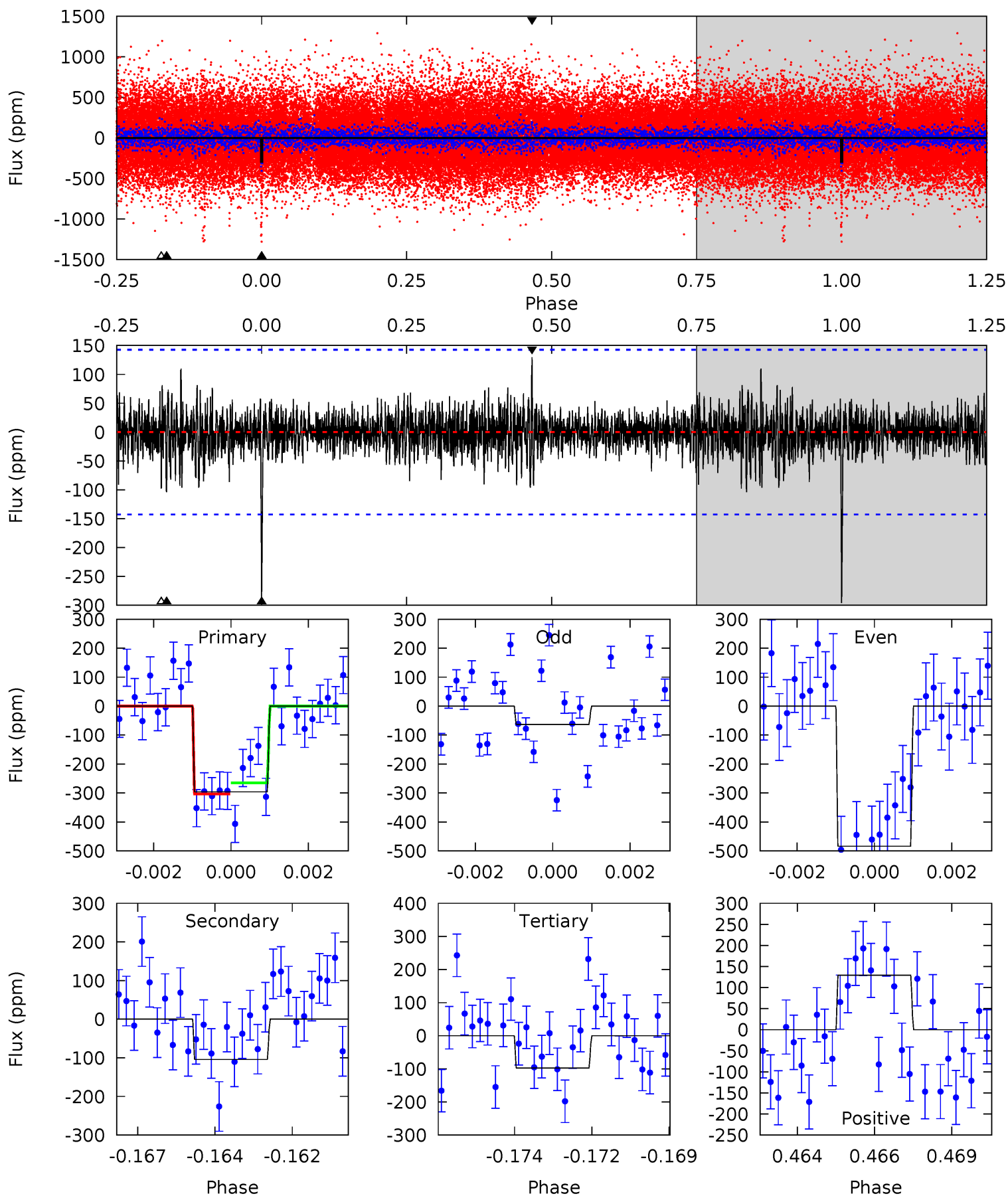
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.5	8.71	8.66	7.59	5.38	3.18	1.75	4.85	5.92	0.05	1.12	3.84	1.36	0.39	0.32



Alt Model-Shift Uniqueness Test

009832675-01, P = 363.261018 Days, E = 3.535460 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.0	3.87	3.63	4.81	5.29	3.03	0.92	7.36	6.18	0.24	-0.94	7.71	1.87	0.30	0.70



Stellar Parameters For KIC 009832675

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6260^{+168}_{-224}	$4.433^{+0.054}_{-0.216}$	$-0.080^{+0.250}_{-0.300}$	$1.063^{+0.353}_{-0.118}$	$1.118^{+0.159}_{-0.145}$	$1.310^{+0.381}_{-0.695}$
	+3%/-4%	+1%/-5%	+312%/-375%	+33%/-11%	+14%/-13%	+29%/-53%
Source	PHO1	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 009832675-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-331 ± 38	$3.02^{+0.90}_{-0.83}$	399^{+32}_{-21}	5407^{+854}_{-569}	21023^{+19185}_{-8603}
Alt.	-104 ± 27	$2.21^{+0.92}_{-0.81}$	400^{+31}_{-20}	4797^{+982}_{-639}	12324^{+17697}_{-6722}

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 $A_{obs} \gg 1.0$

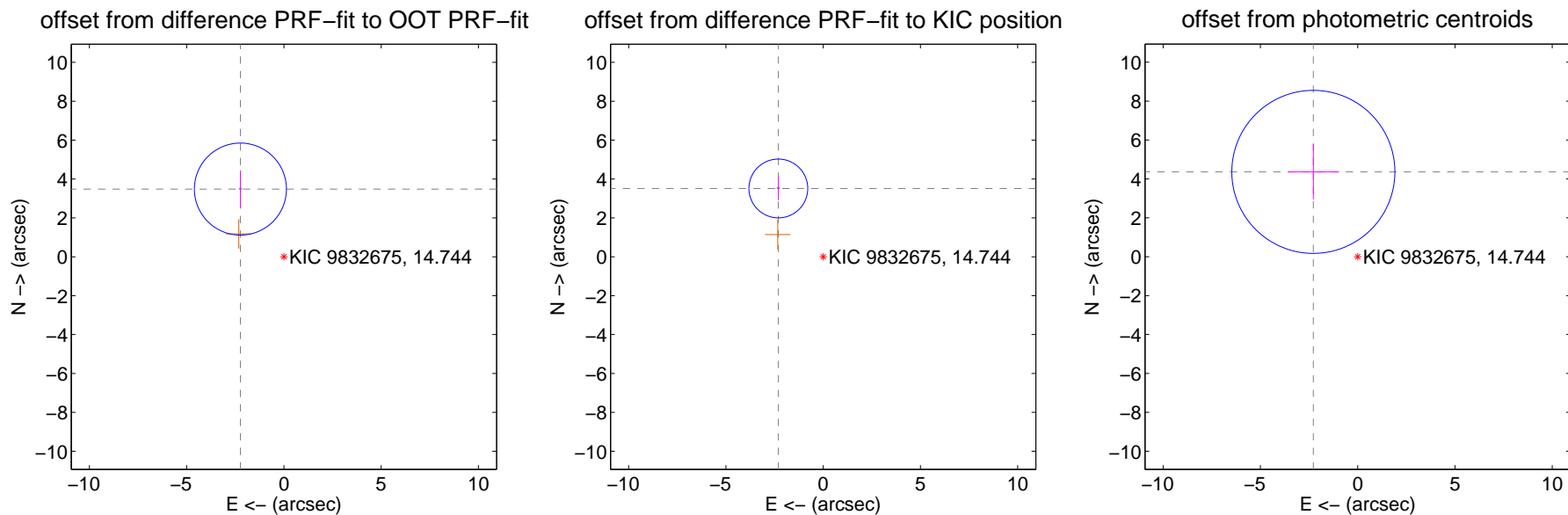
DV Centroid Data

Supplemental centroid analysis for 009832675-01. Kepler magnitude: 14.74. Transit SNR 8.80

There are 1 quarters with good PRF difference image offsets

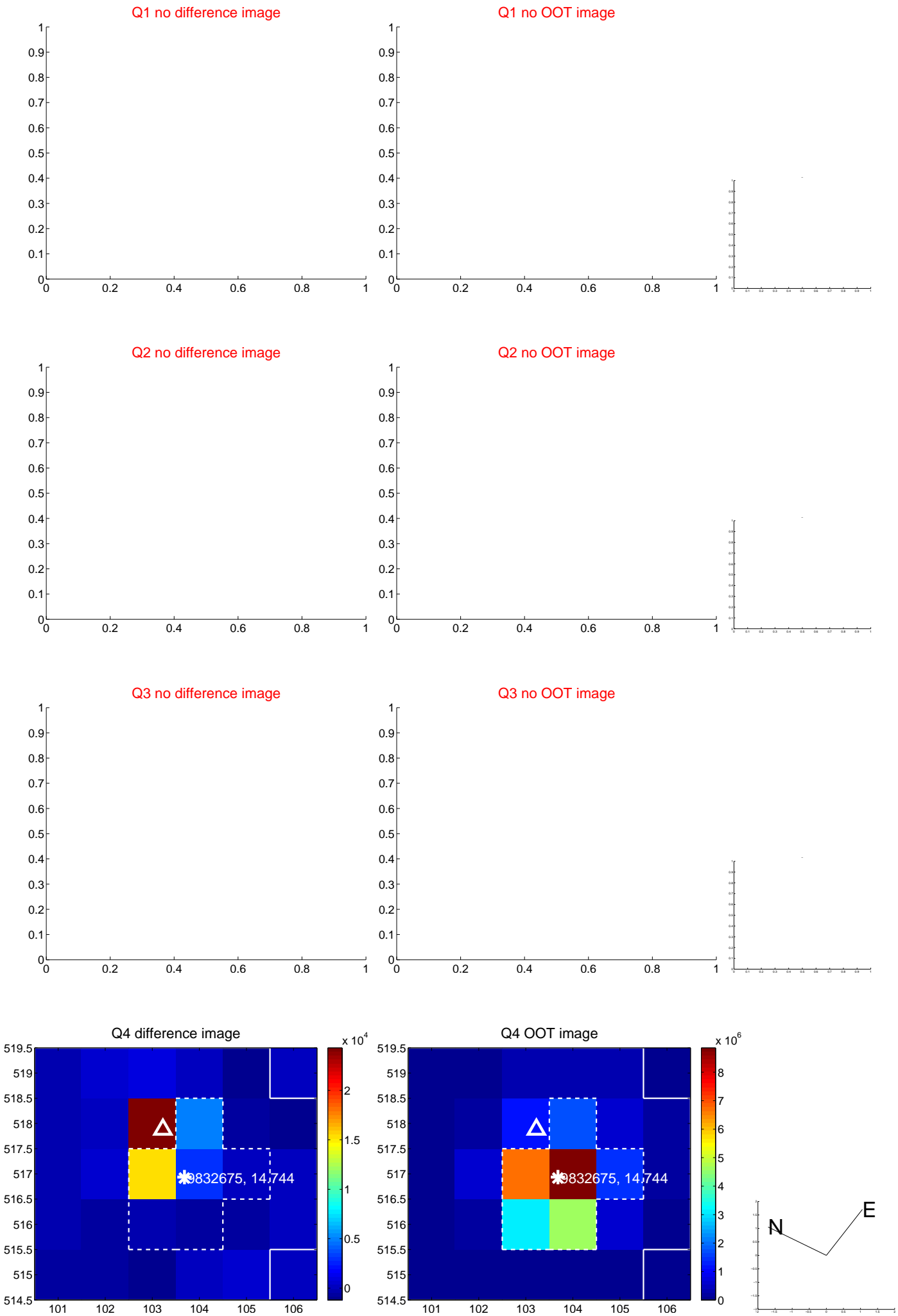
The direct PRF centroid is offset from the target star catalog position by about 0.04 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	4.138 ± 0.789	5.25	2.237 ± 0.076	3.481 ± 0.960
PRF-fit source offset from KIC position	4.203 ± 0.504	8.34	2.306 ± 0.067	3.514 ± 0.607
photometric centroid source offset	4.92 ± 1.40	3.52	2.28 ± 1.31	4.36 ± 1.42



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.

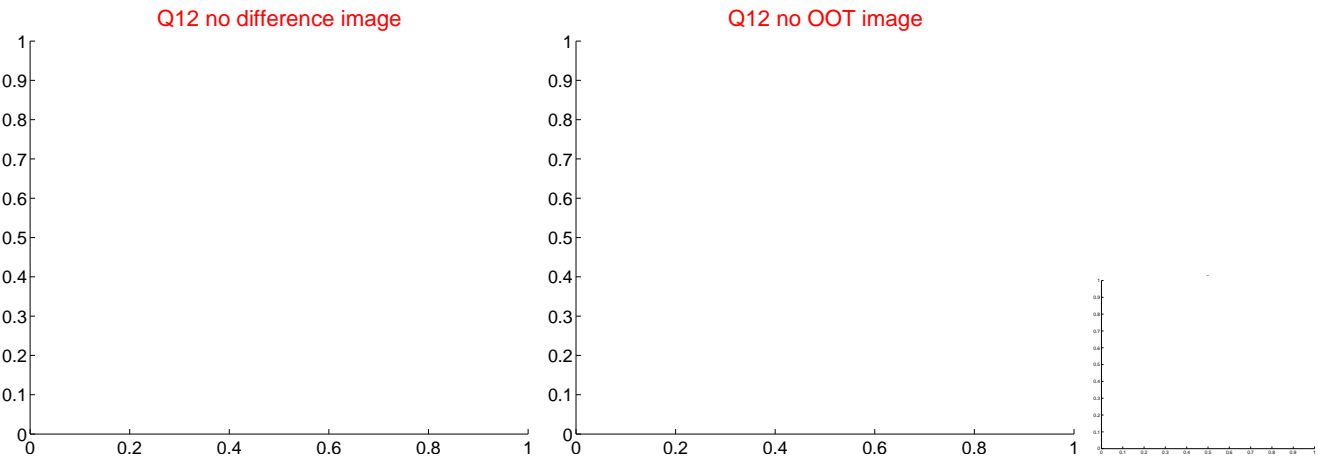
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



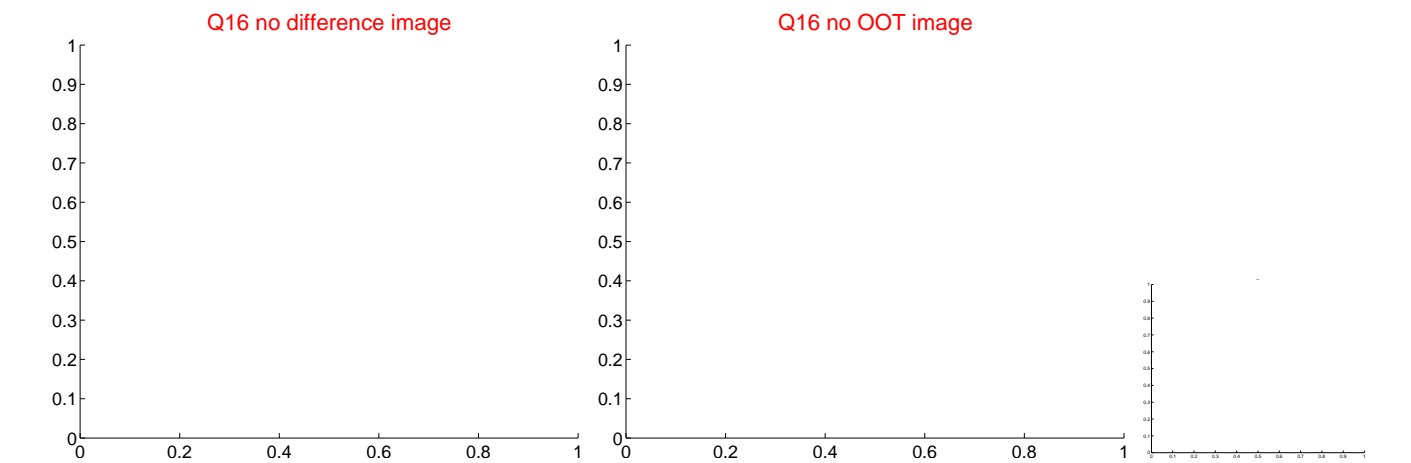
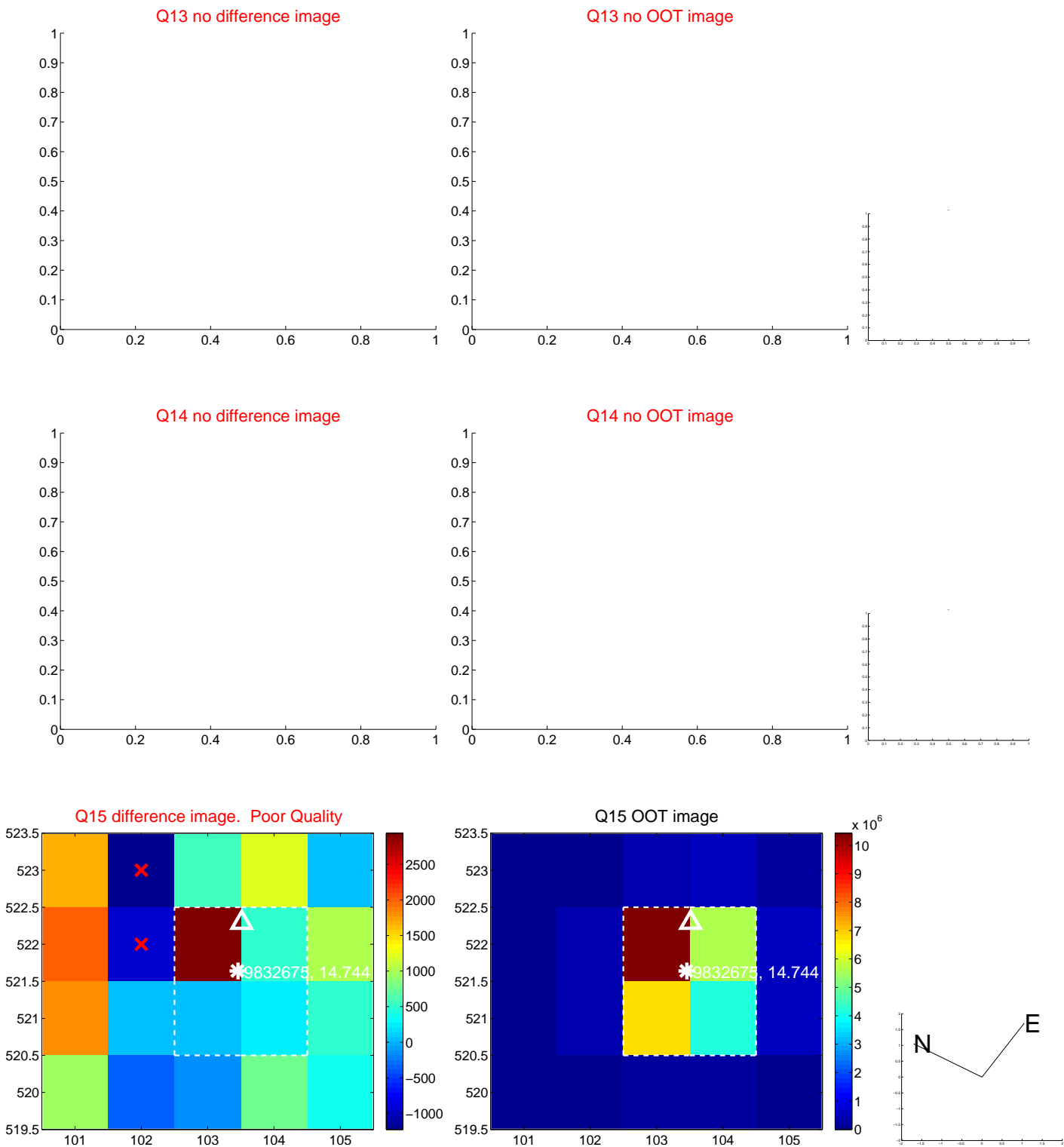
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



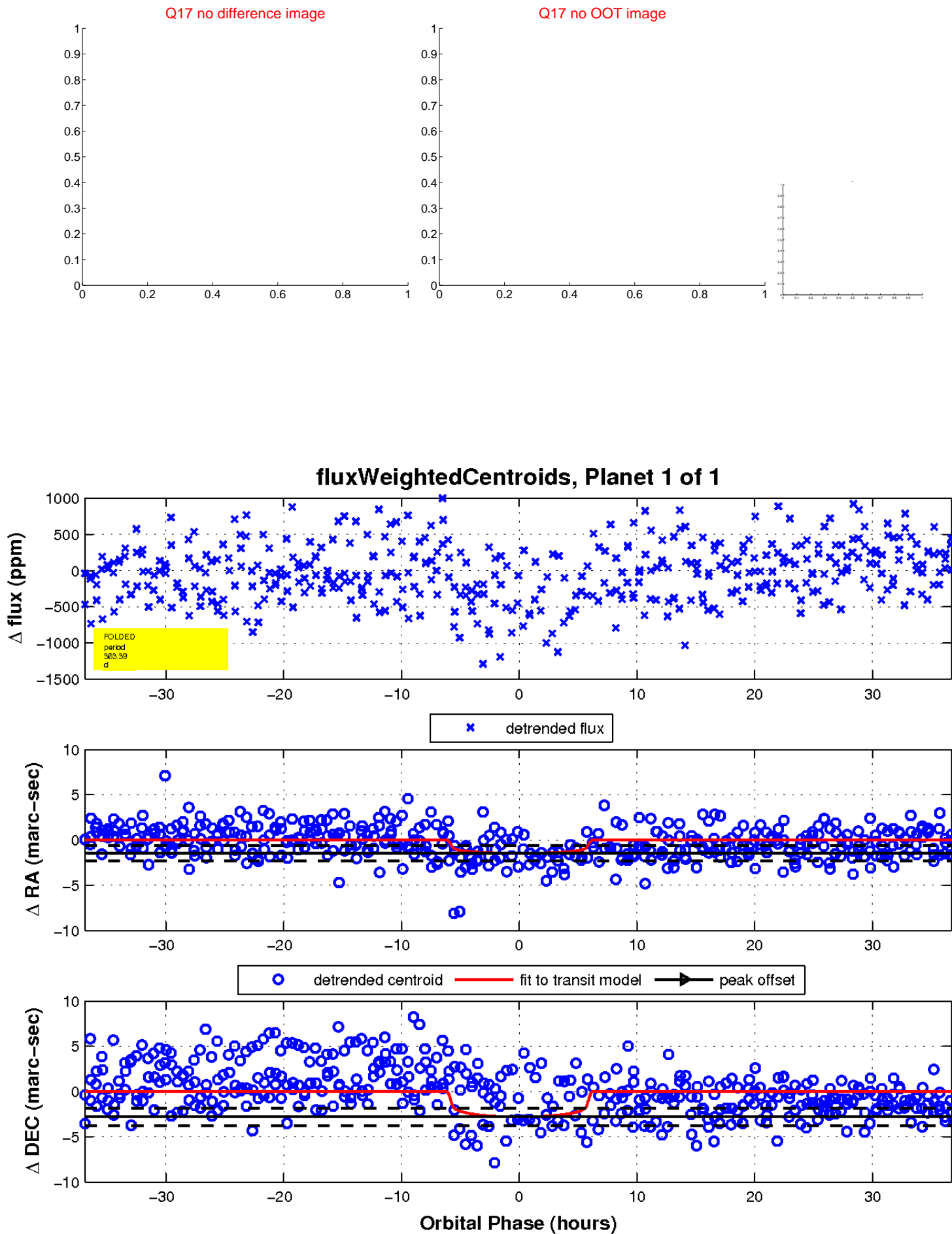
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white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination

