

KIC 010265524

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})
010265524-01	OBS	No	1.339387	132.774680	66.7	11.973	11.1	13.0	1.84	7474	1.56	13283.26

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010265524-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—CENT_FEW_MEAS

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

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

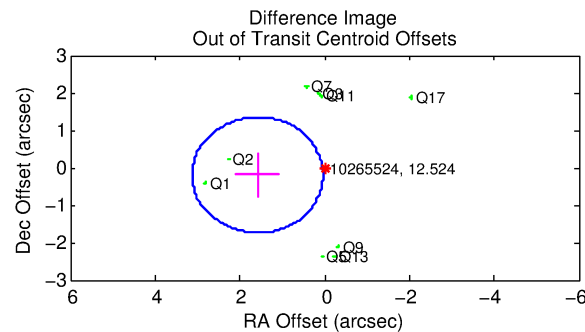
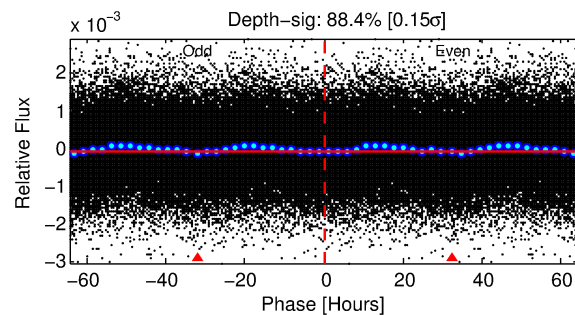
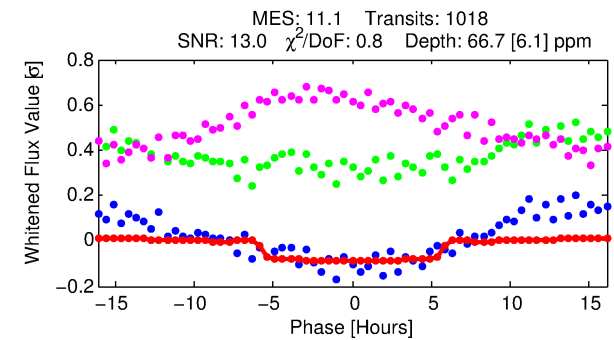
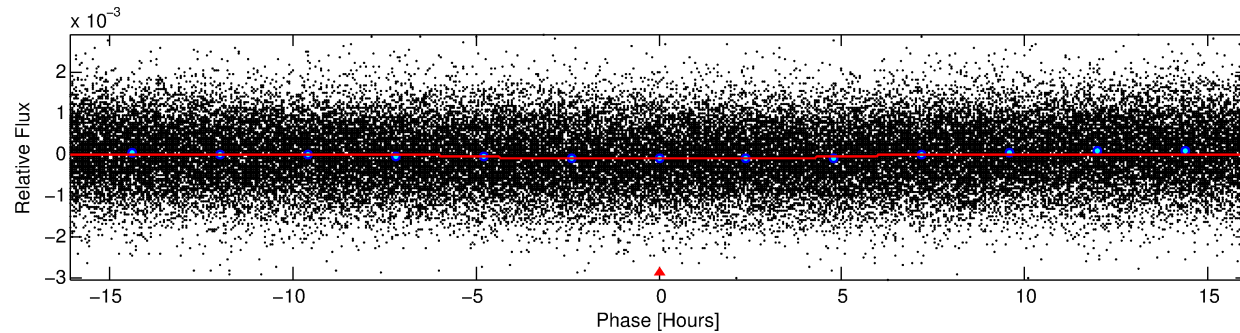
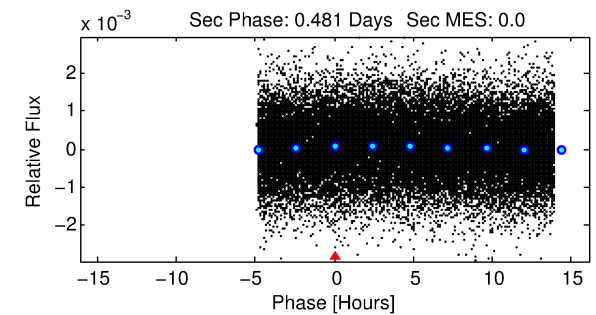
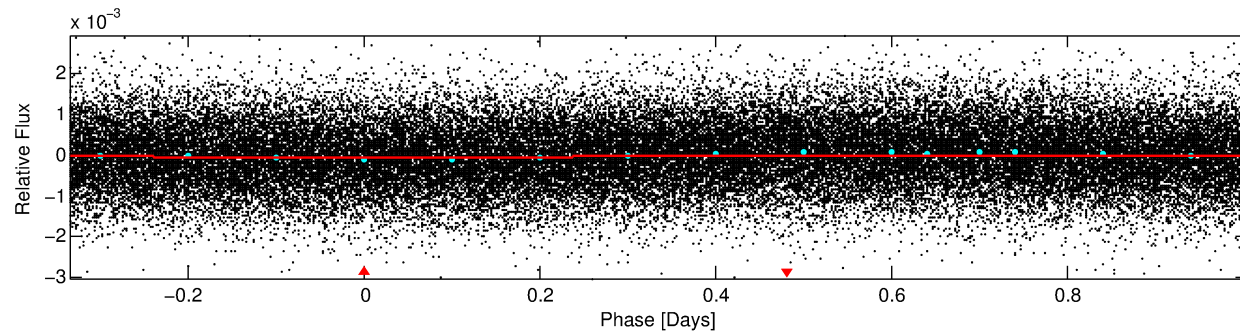
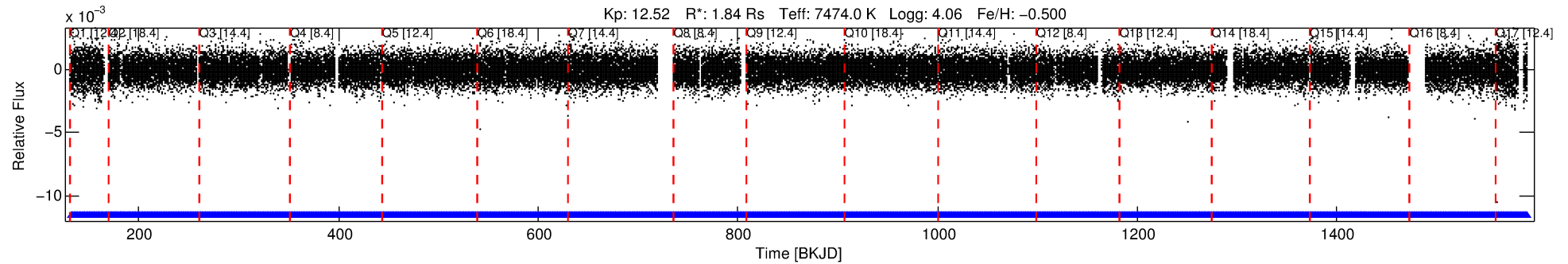
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 010265524-01

No Significant Match Found

DV One-Page Summary

KIC: 10265524 Candidate: 1 of 1 Period: 1.339 d



DV Fit Results:

Period = 1.33939 [0.00002] d
Epoch = 132.7747 [0.0079] BKJD
Rp/R* = 0.0078 [0.0072]
a/R* = 1.07 [0.82]
b = 0.49 [8.93]
Seff = 13283.27 [5911.17]
Teff = 2737 [305] K
Rp = 1.56 [1.51] Re
a = 0.0267 [0.0072] AU
Ag = N/A
Teffp = N/A

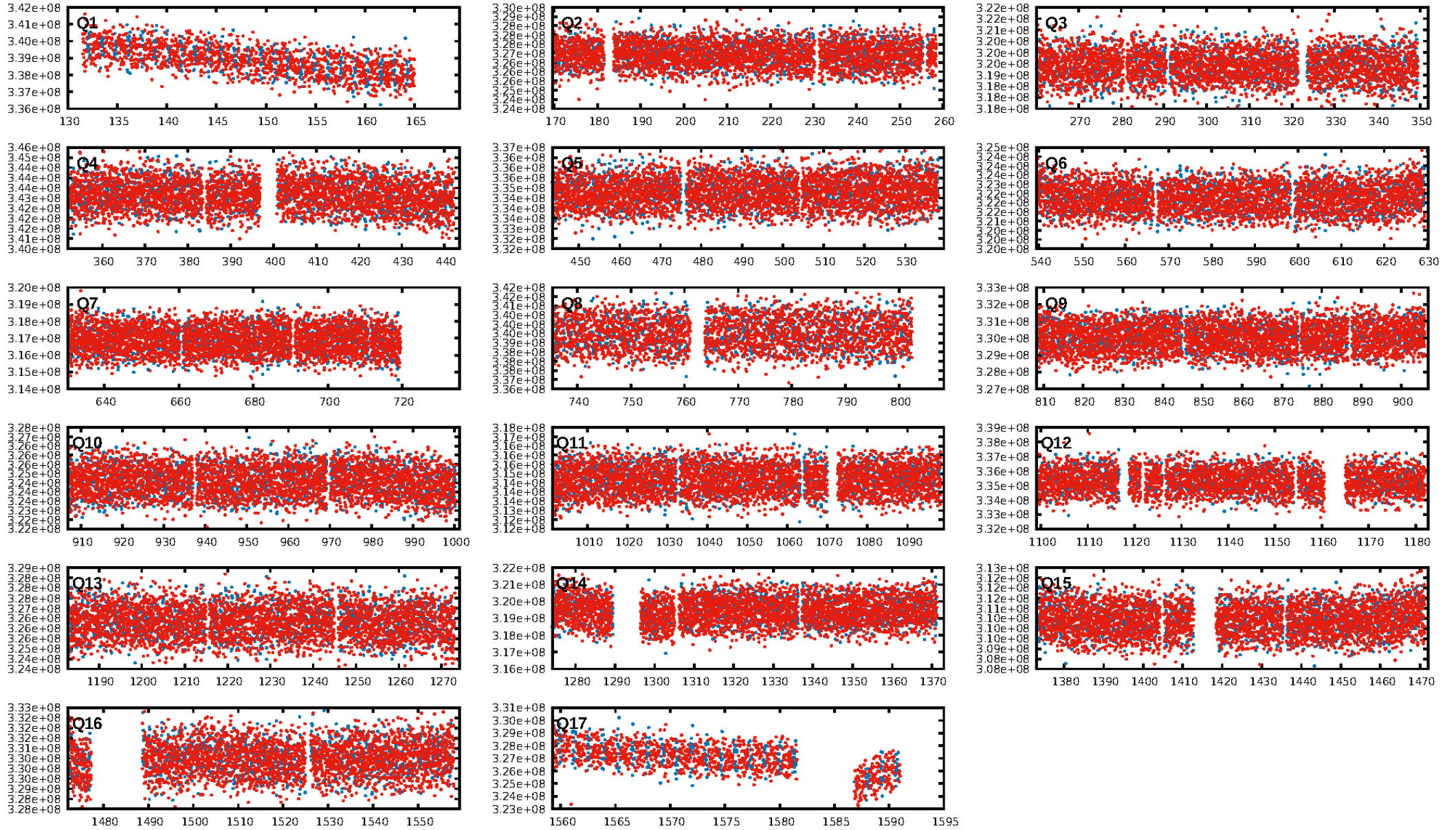
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [972/972]
GhostDiagnostic-chr: 1.916
Centroid-sig: 11.1%
Centroid-so: 0.163 arcsec [1.52σ]
OotOffset-rm: 1.594 arcsec [3.10σ]
KicOffset-rm: 1.471 arcsec [2.87σ]
OotOffset-st: 1/3/0/5 [9]
KicOffset-st: 1/3/0/5 [9]
DiffImageQuality-fgm: 0.44 [4/9]
DiffImageOverlap-fno: 1.00 [17/17]

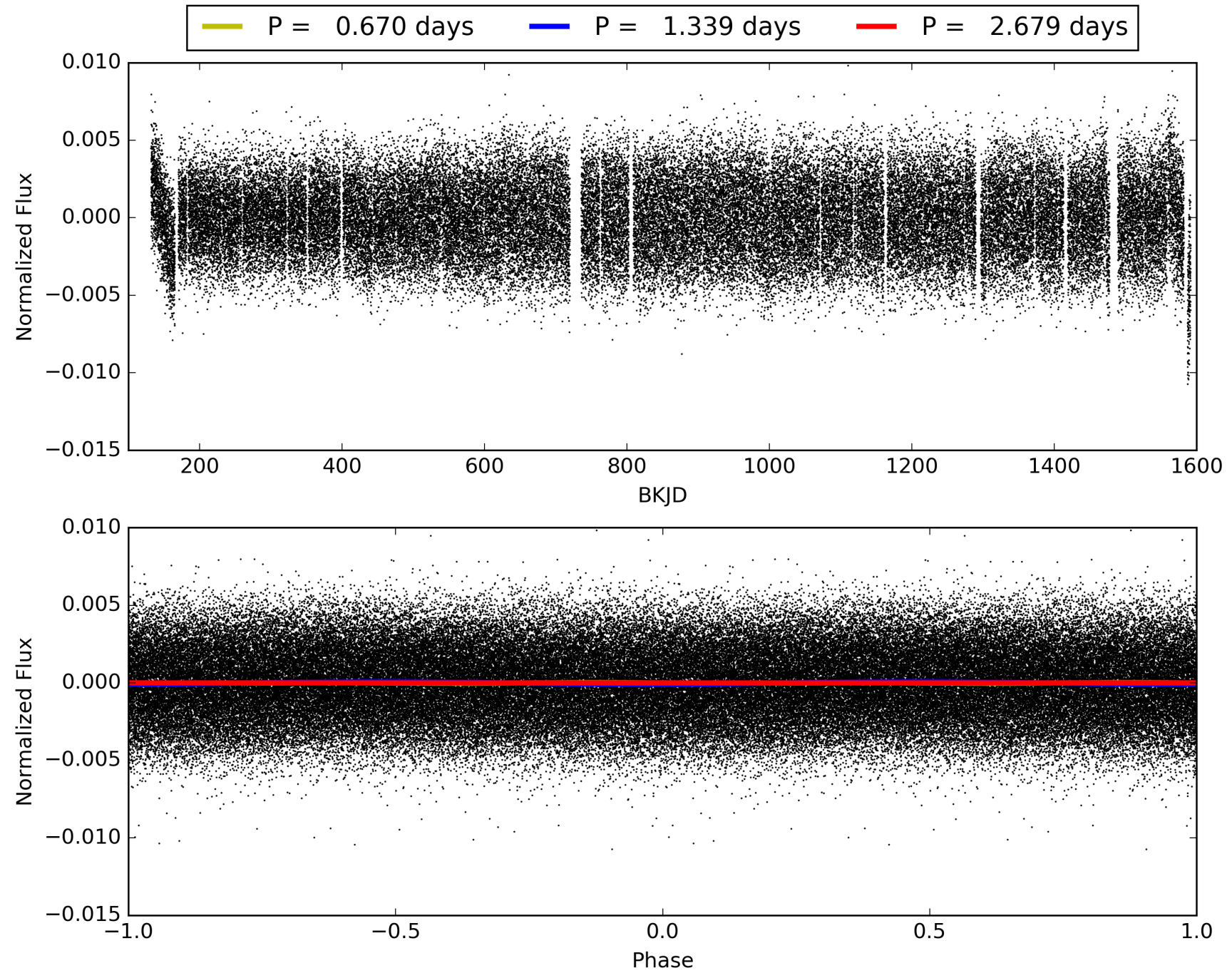
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 23:18:18 Z

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

TCE 010265524-01, PDC Light Curves

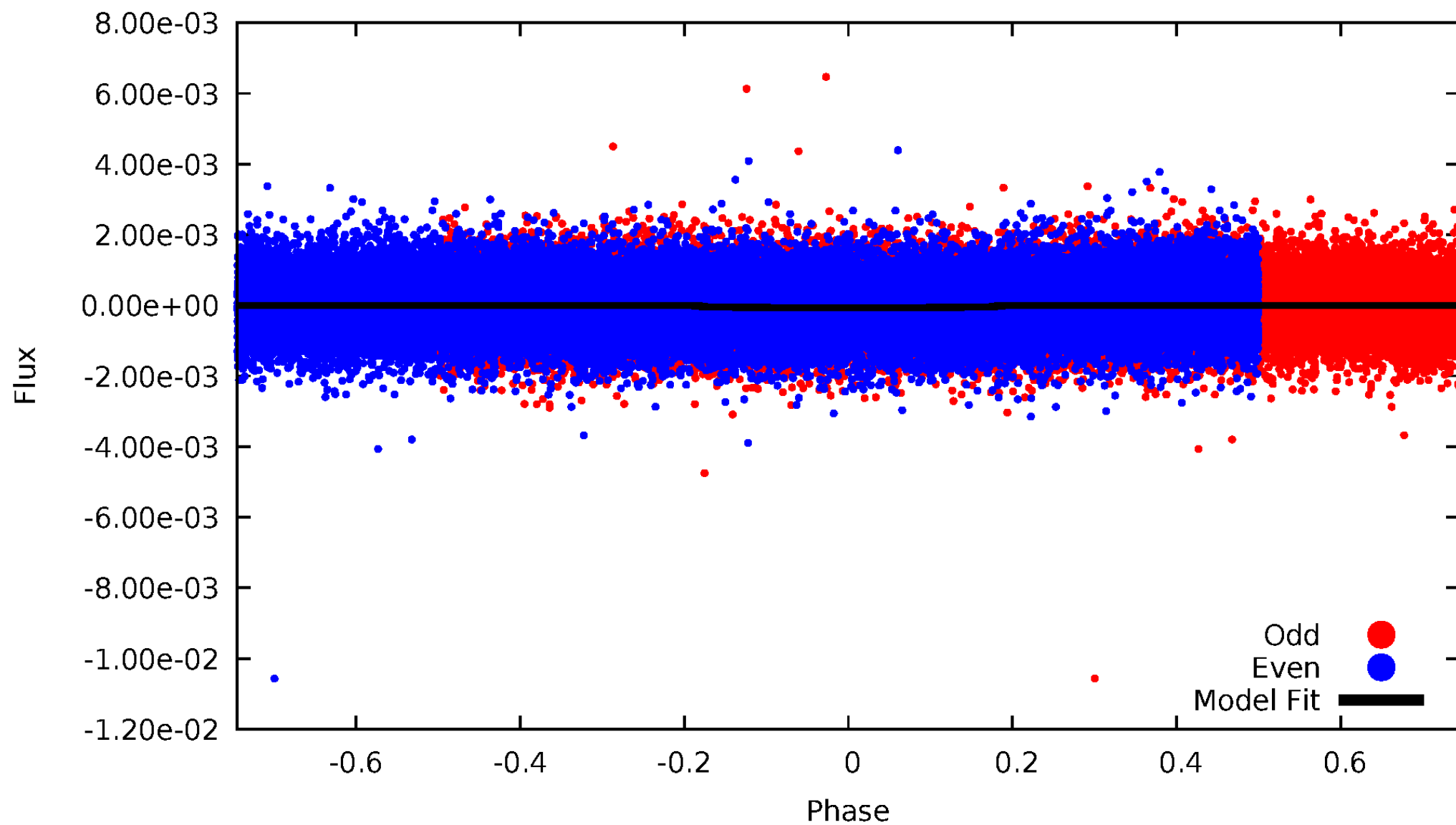


TCE 010265524-01



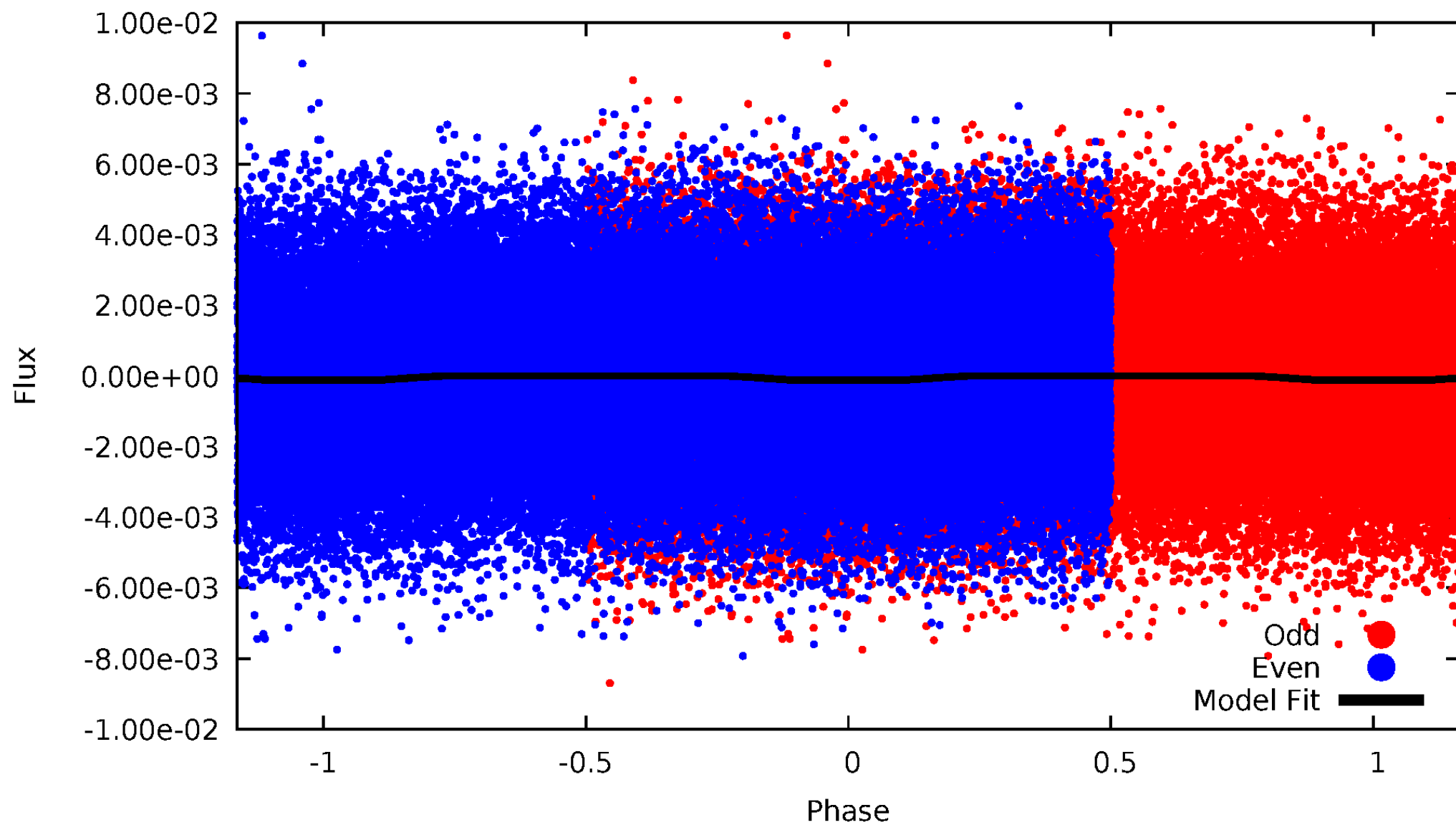
DV Odd/Even

TCE 010265524-01



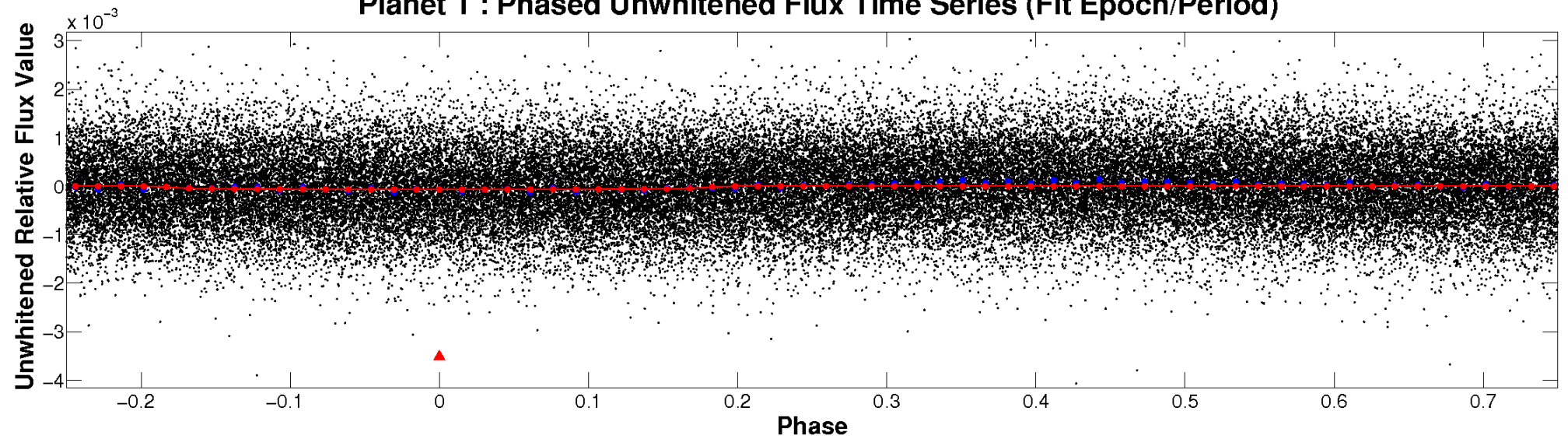
ALT Odd/Even

TCE 010265524-01

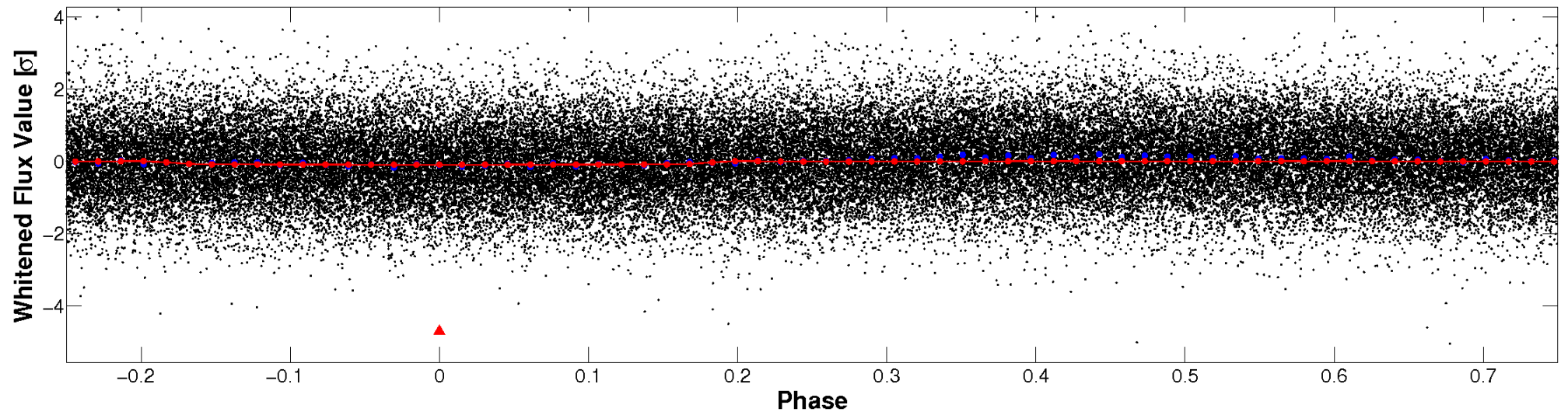


Non-Whitened Vs. Whitened Light Curve

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

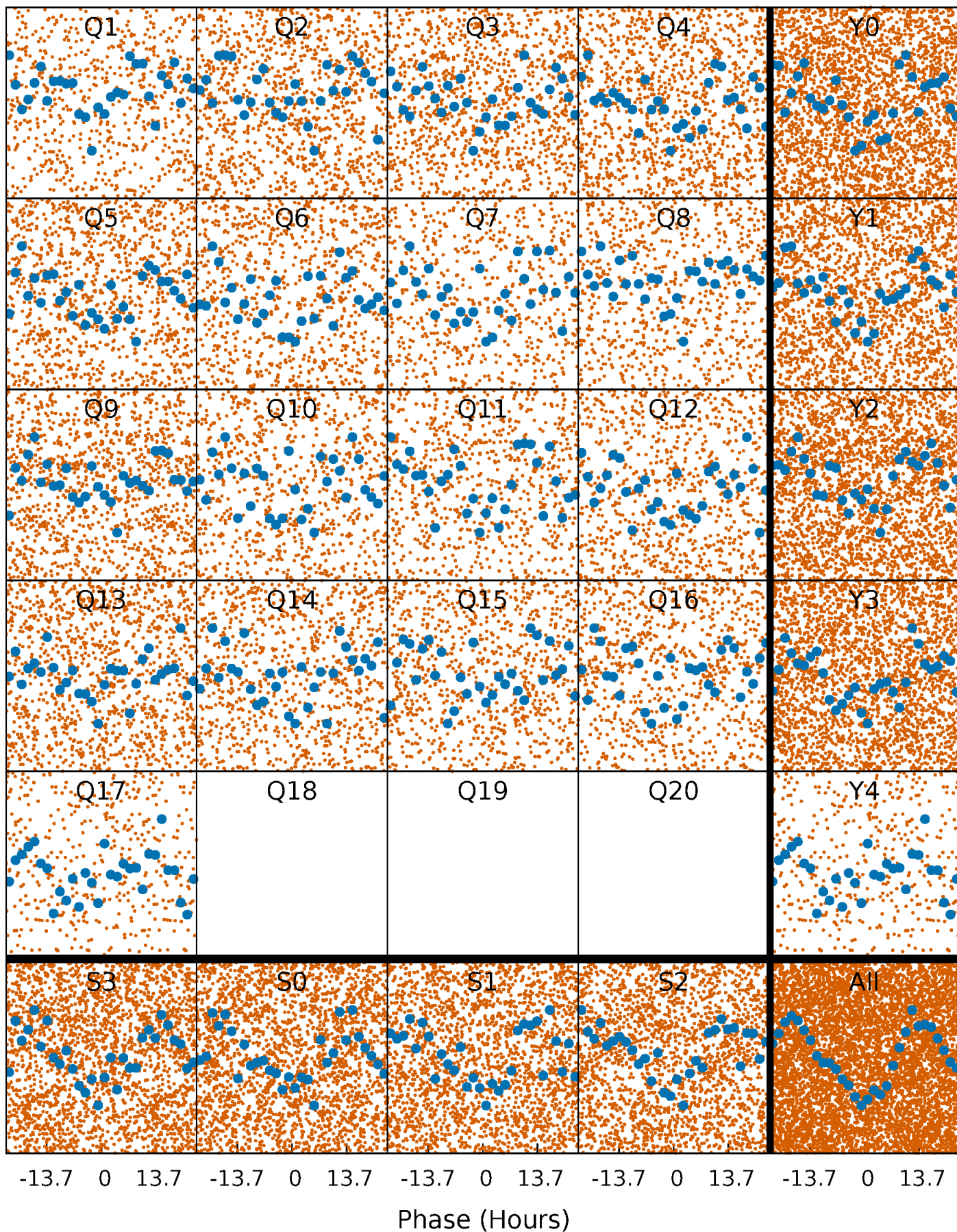


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



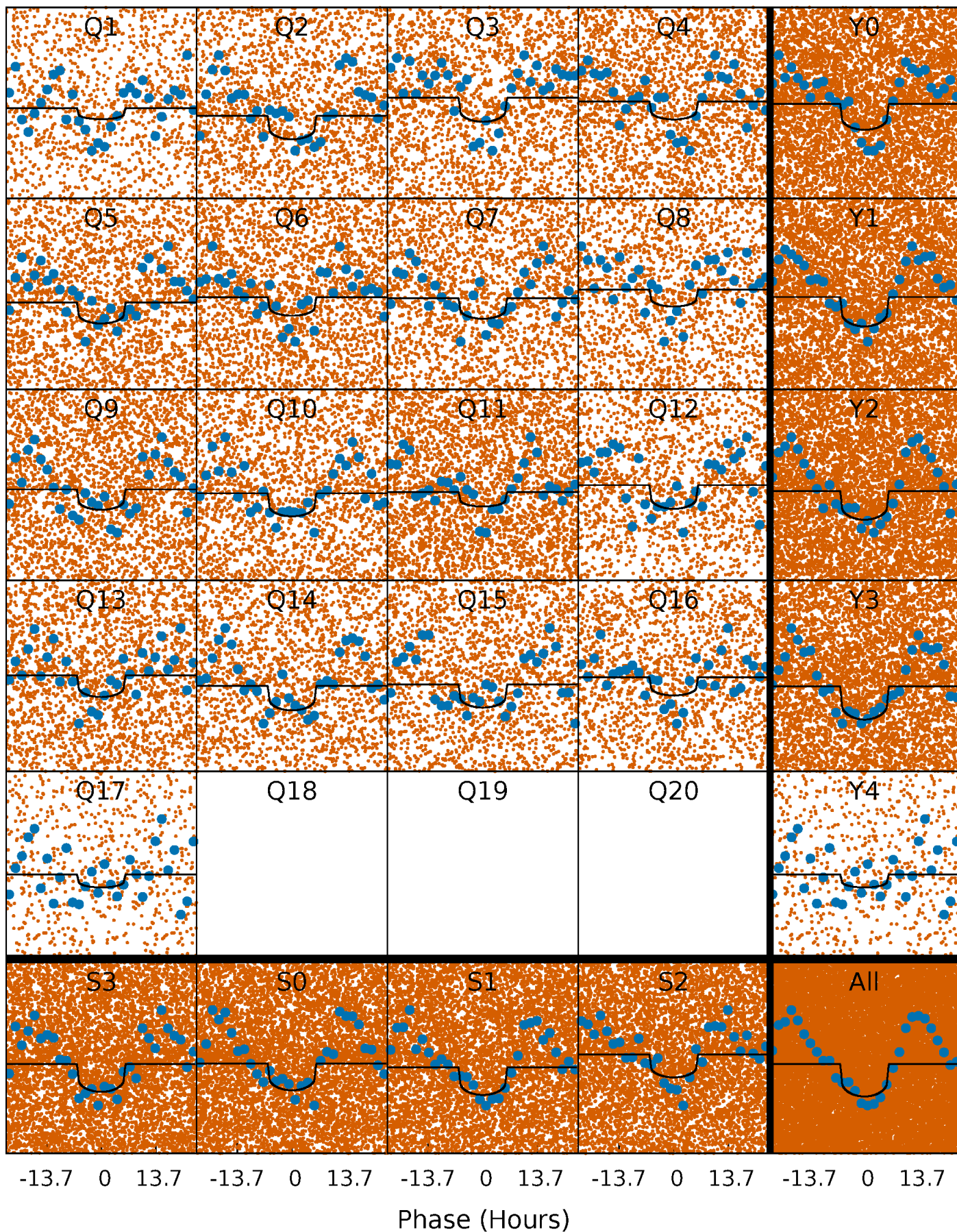
PDC Quarter-Phased Transit Curves

TCE 010265524-01 P= 1.339387 Days $T_0=132.774680$ (BKJD)



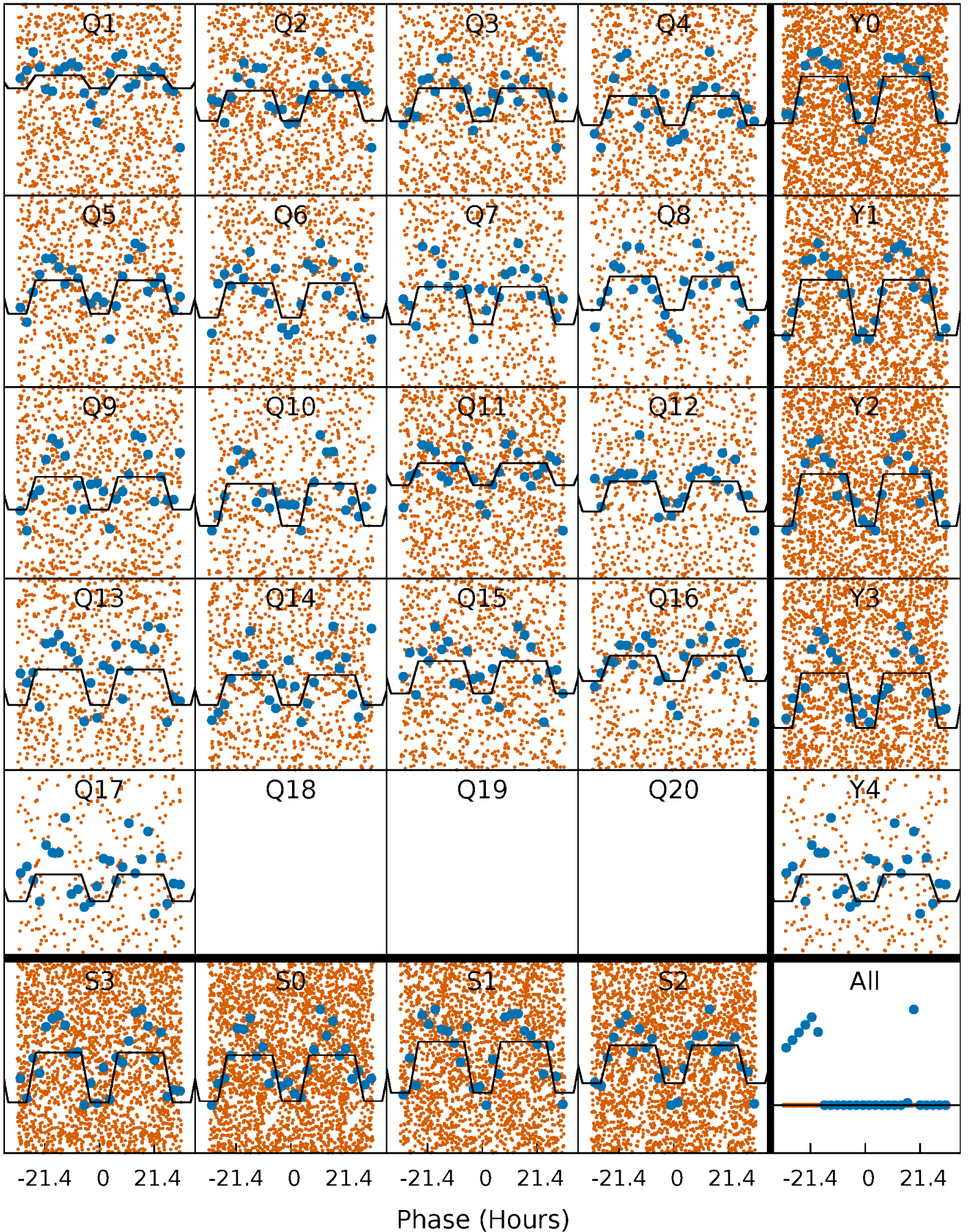
DV Quarter-Phased Transit Curves

TCE 010265524-01 P= 1.339387 Days $T_0=132.774680$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

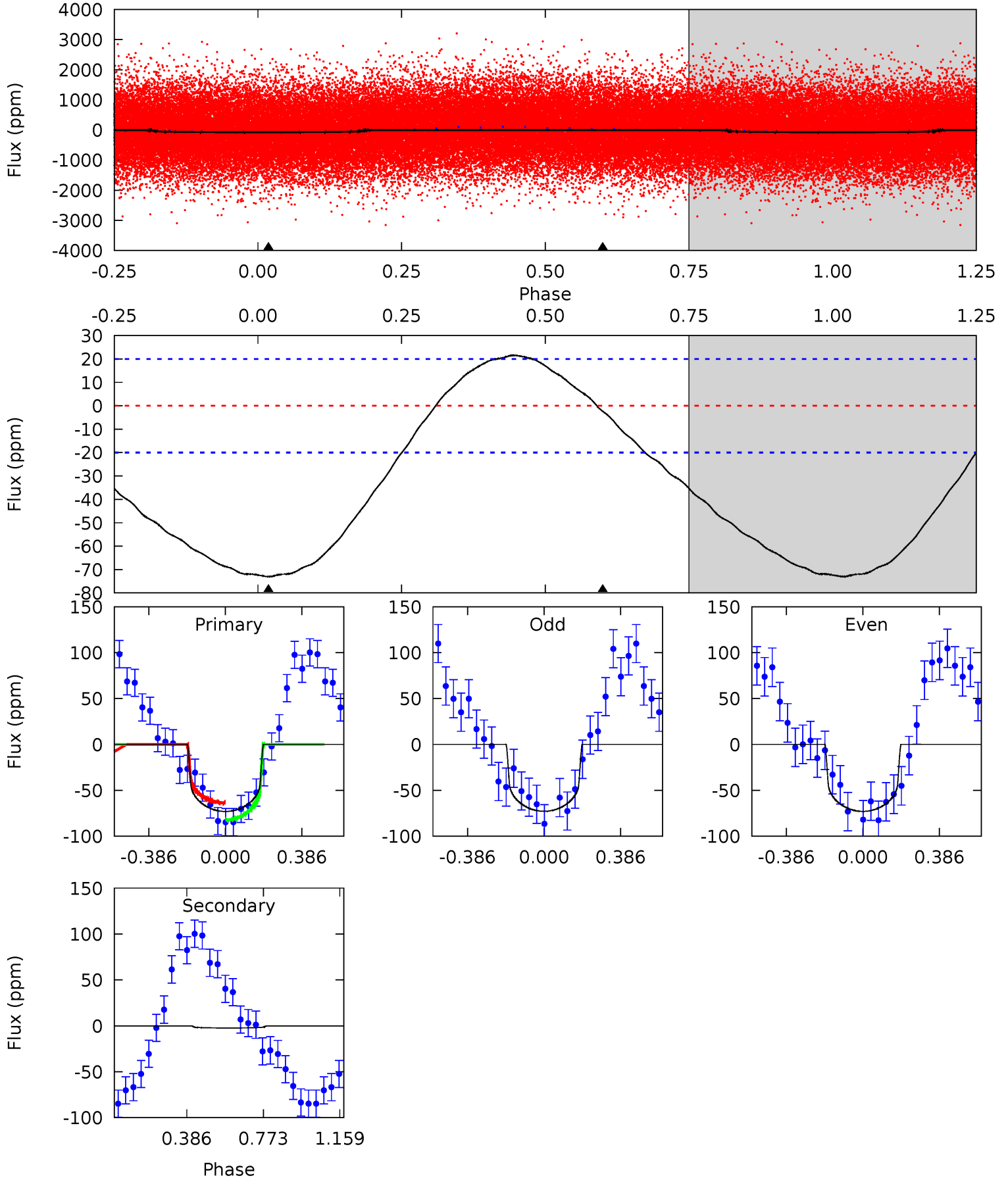
TCE 010265524-01 P= 1.339315 Days $T_0=132.818142$ (BKJD)



DV Model-Shift Uniqueness Test

010265524-01, P = 1.339387 Days, E = 131.435293 Days

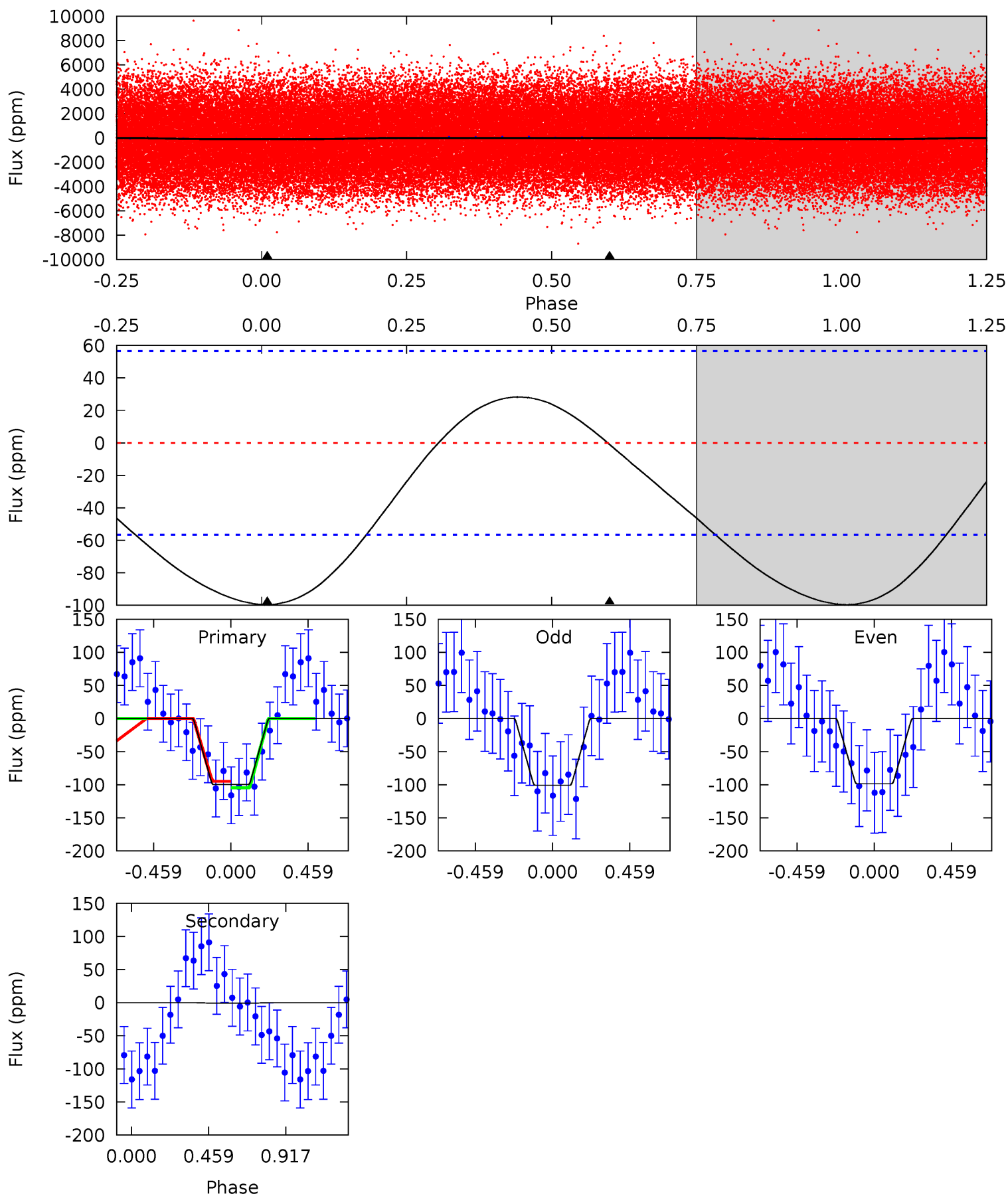
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
15.6	0.51	0	0	4.27	0.87	1.90	15.6	15.6	0.51	0.51	0.01	0.98	0.23	1.98



Alt Model-Shift Uniqueness Test

010265524-01, P = 1.339315 Days, E = 131.478827 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.46	0.07	0	0	4.23	0.74	0.83	7.46	7.46	0.07	0.07	0.09	0.68	0.22	0.37



Stellar Parameters For KIC 010265524

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	7474^{+233}_{-311}	$4.058^{+0.234}_{-0.156}$	$-0.500^{+0.250}_{-0.300}$	$1.837^{+0.509}_{-0.560}$	$1.404^{+0.198}_{-0.242}$	$0.319^{+0.470}_{-0.147}$
	+3%/-4%	+6%/-4%	+50%/-60%	+28%/-30%	+14%/-17%	+147%/-46%
Source	PHO54	PHO54	PHO54	DSEP		

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

Secondary Eclipse Parameters for KIC 010265524-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-2 ± 5	$1.81^{+1.30}_{-1.12}$	3788^{+284}_{-309}	-2964^{+7638}_{-950}	$0.214^{+1.661}_{-0.433}$
Alt.	-1 ± 13	$2.20^{+1.44}_{-1.27}$	3788^{+295}_{-317}	-3389^{+7958}_{-1367}	$0.080^{+1.517}_{-1.460}$

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 $A_{obs} \gg 1.0$

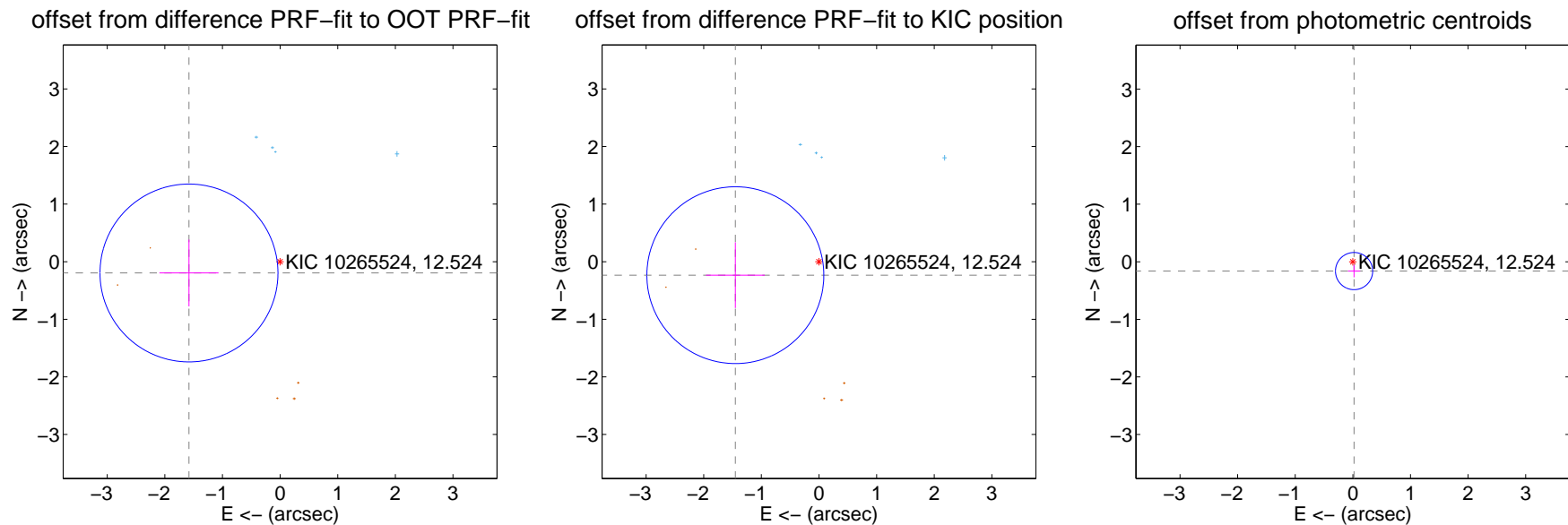
DV Centroid Data

Supplemental centroid analysis for 010265524-01. Kepler magnitude: 12.52. Transit SNR 13.03

There are 4 quarters with good PRF difference image offsets

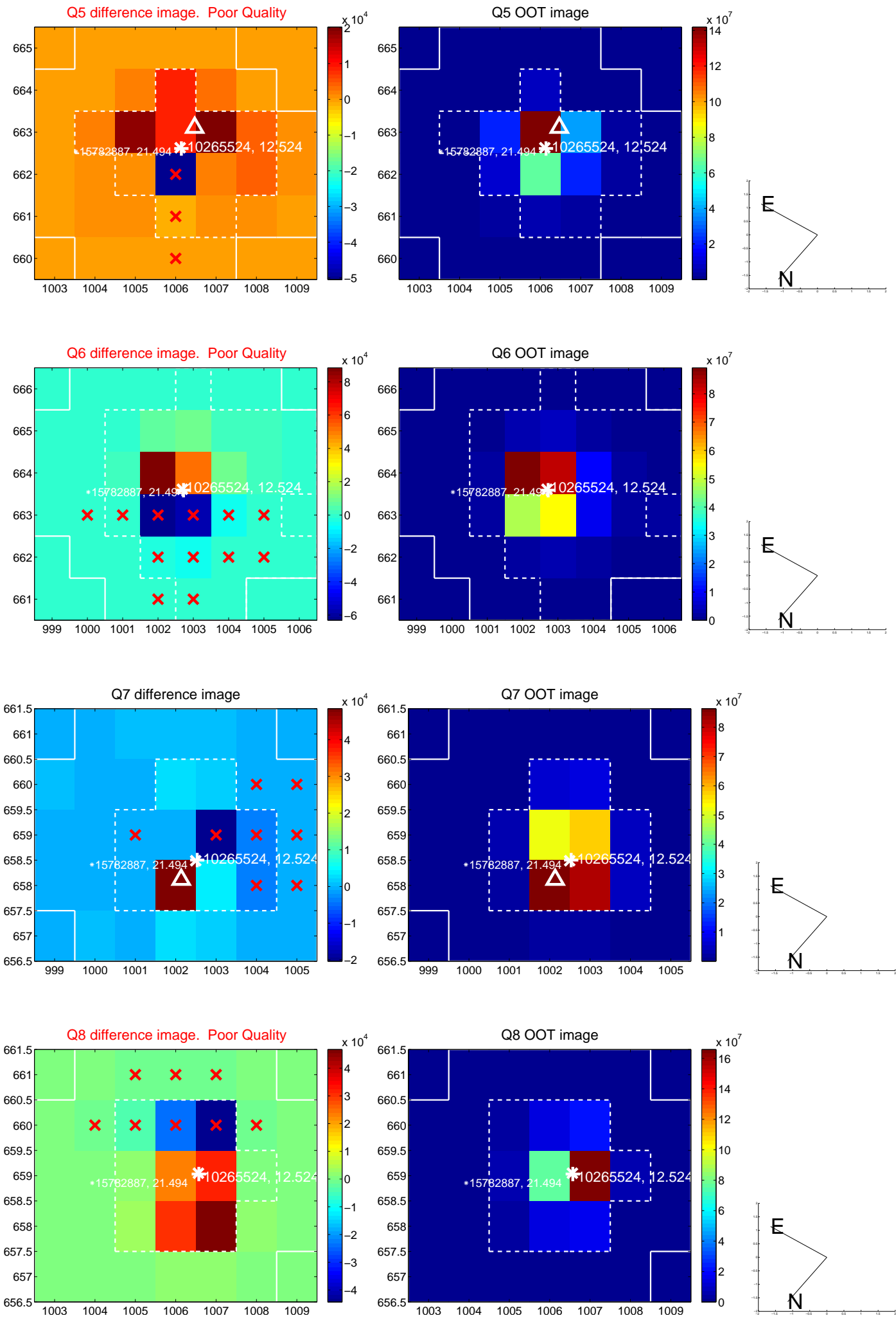
The direct PRF centroid is offset from the target star catalog position by about 0.16 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.594 ± 0.515	3.10	1.582 ± 0.514	-0.196 ± 0.579
PRF-fit source offset from KIC position	1.471 ± 0.512	2.87	1.452 ± 0.510	-0.234 ± 0.570
photometric centroid source offset	0.16 ± 0.11	1.52	-0.02 ± 0.11	-0.16 ± 0.11

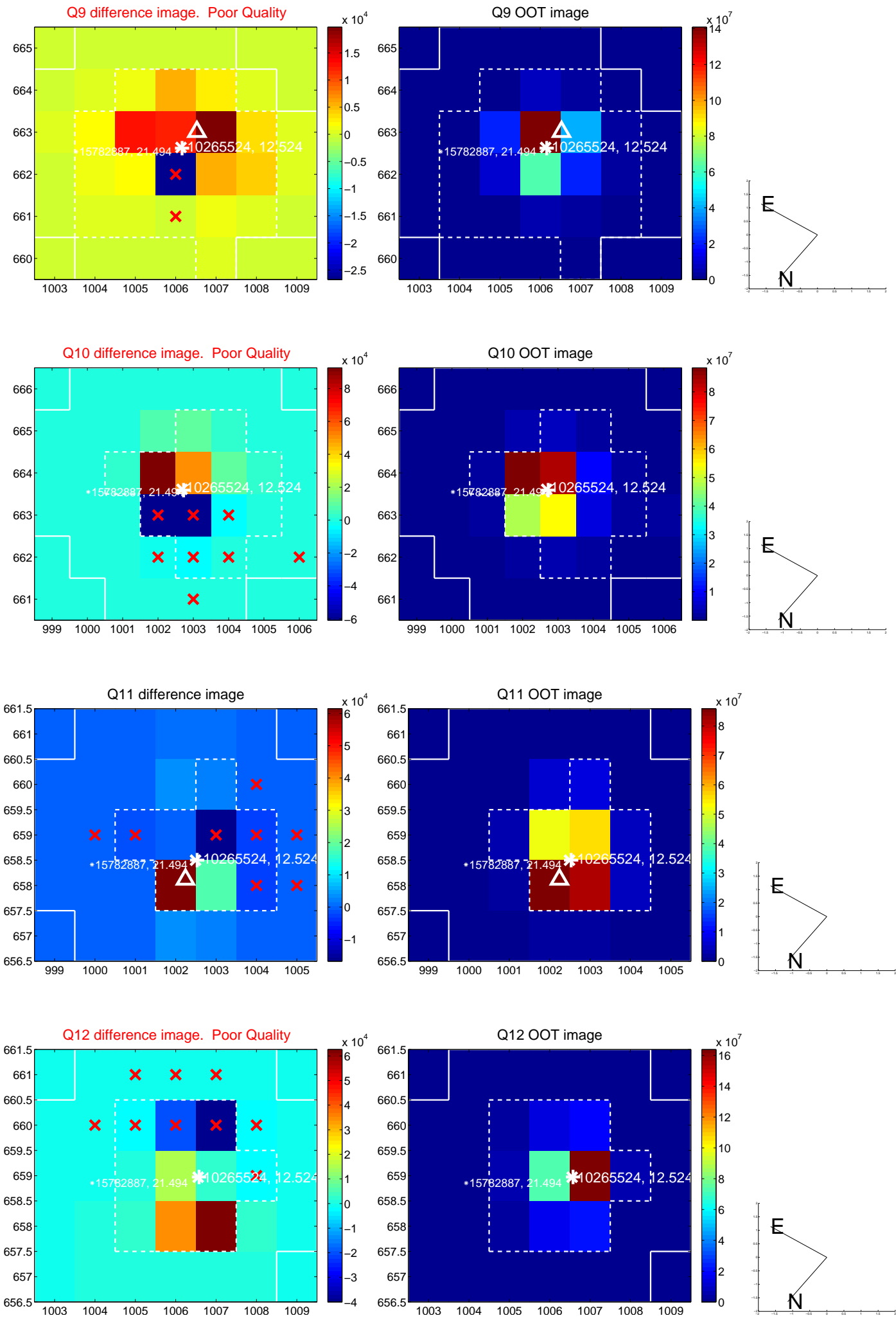


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets**; **Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

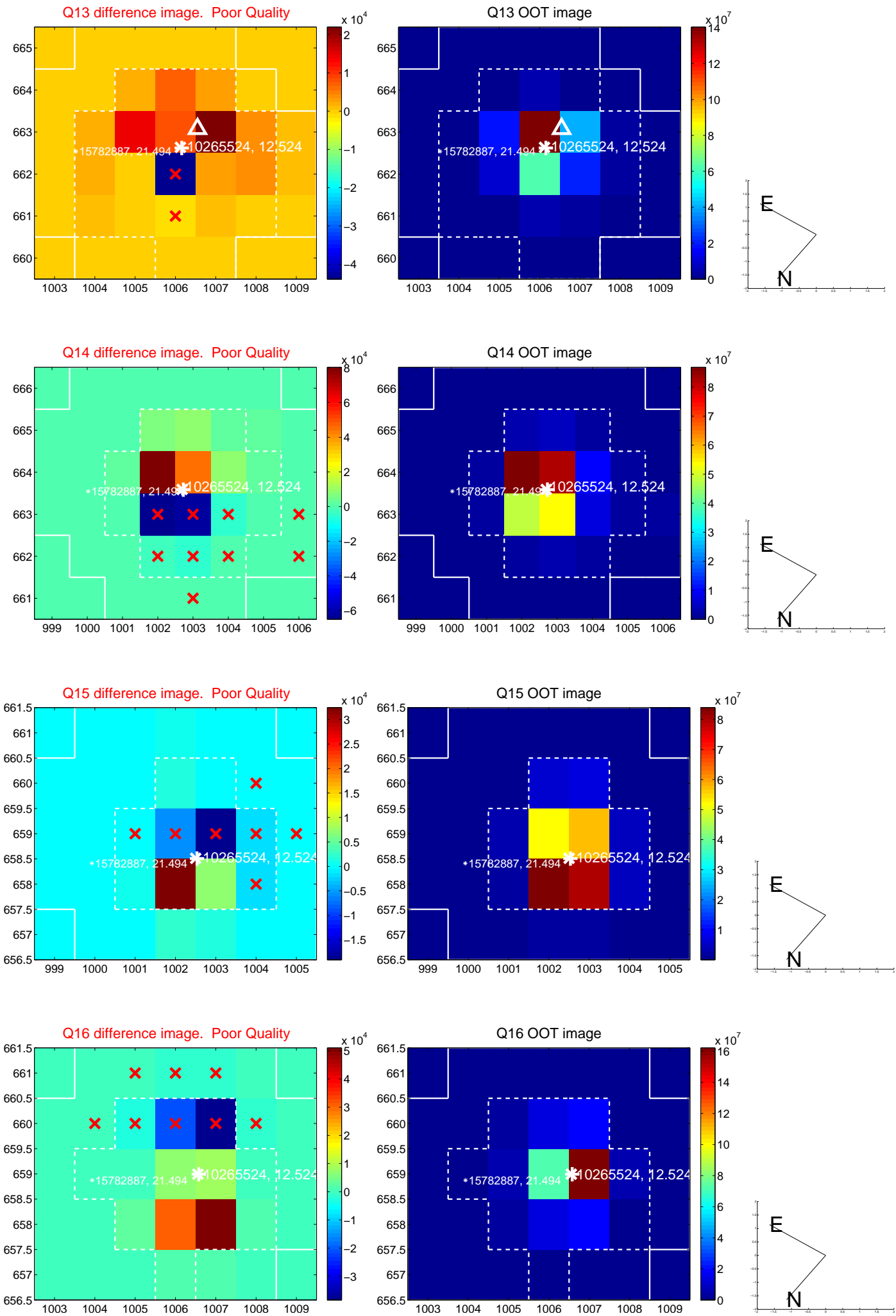
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



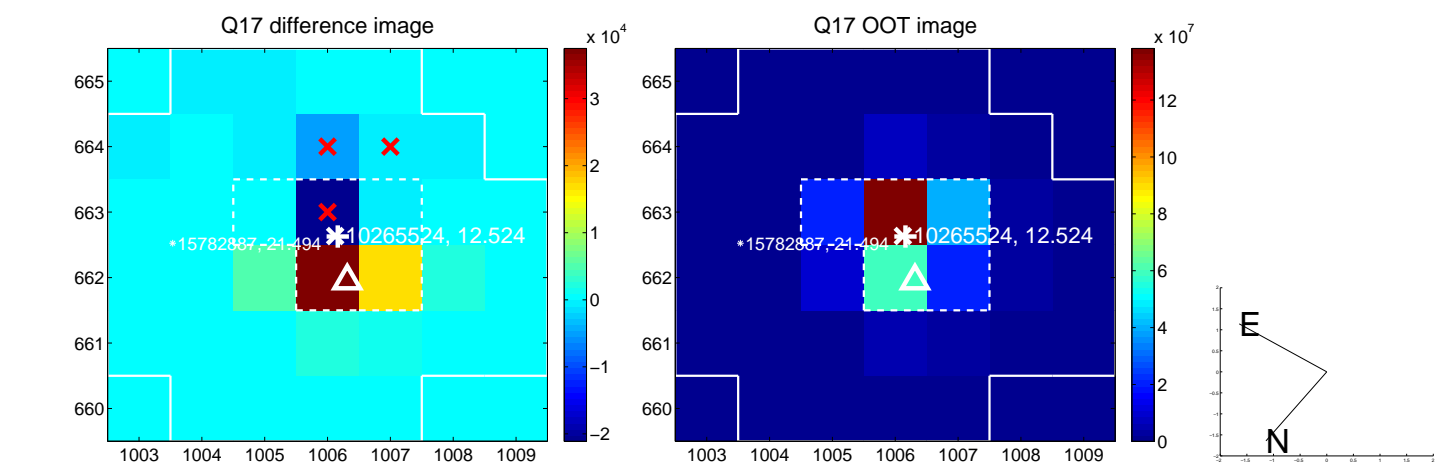
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



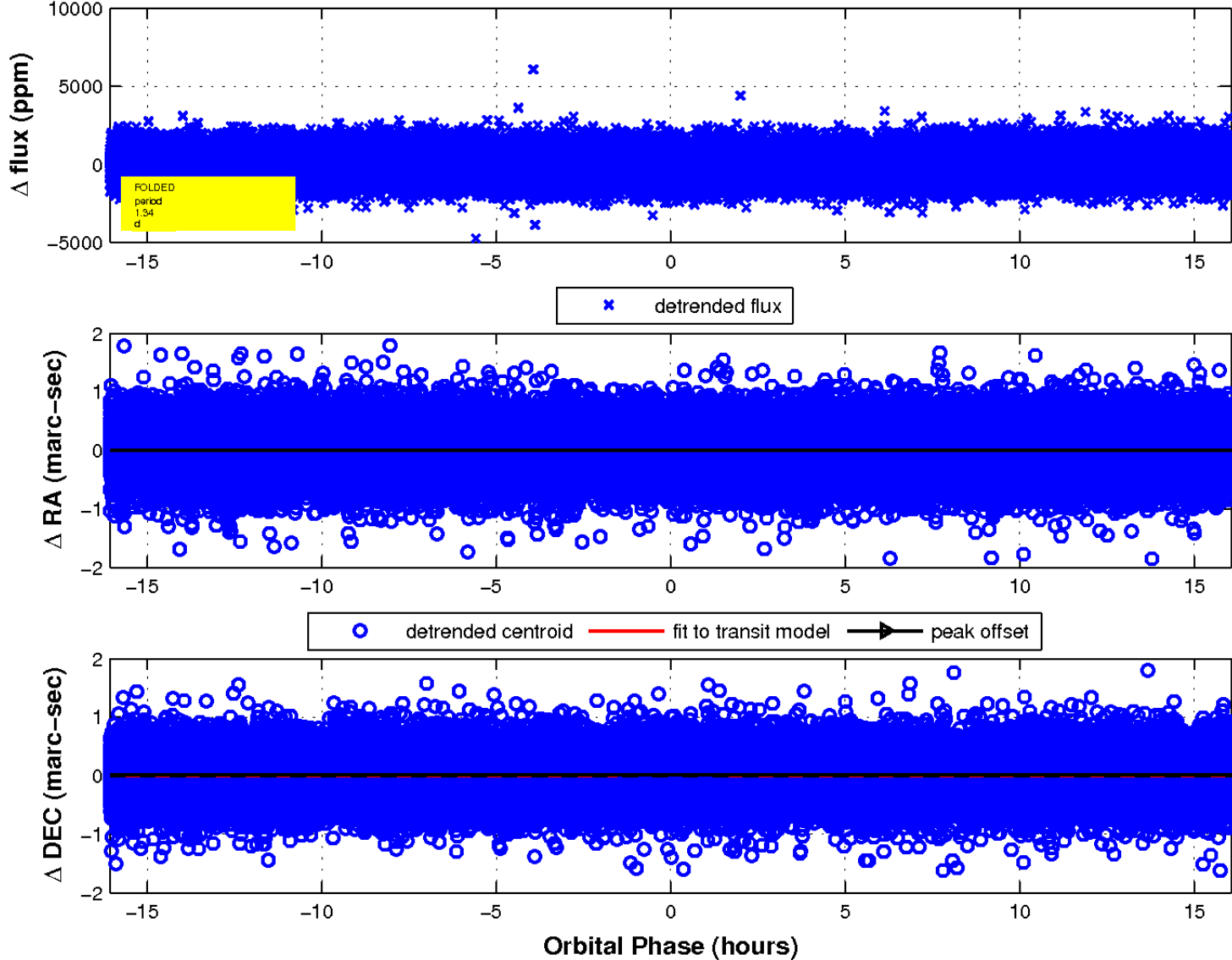
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

