

KIC 011182440

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})
011182440-01	OBS	No	275.311838	181.995973	122.4	8.561	7.6	4.9	1.50	6049	1.86	3.94

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011182440-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_SKYE—LPP_DV—MOD_TER_DV—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.

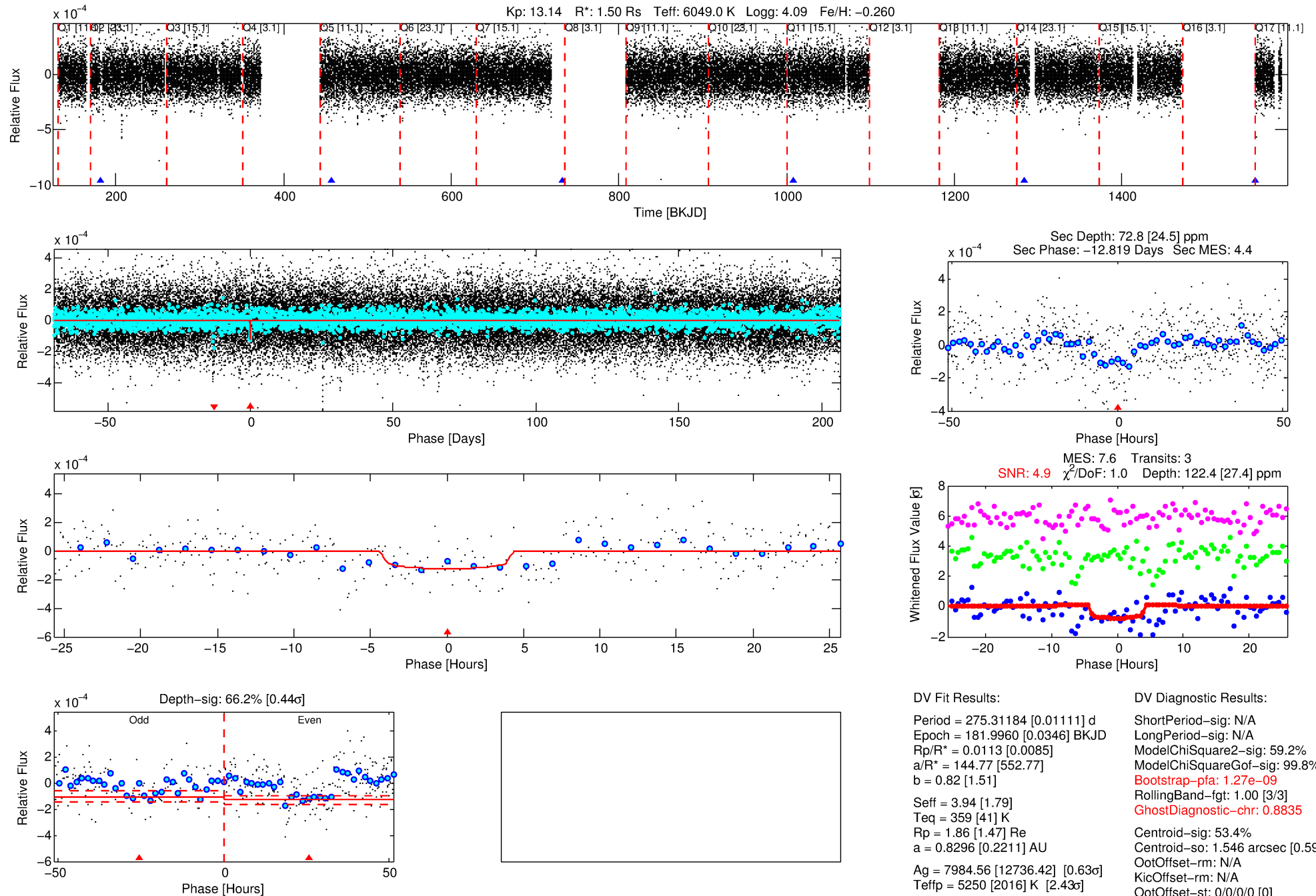
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011182440-01

No Significant Match Found

DV One-Page Summary

KIC: 11182440 Candidate: 1 of 1 Period: 275.312 d



DV Fit Results:

Period = 275.31184 [0.01111] d
Epoch = 181.9960 [0.0346] BKJD
Rp/R* = 0.0113 [0.0085]
a/R* = 144.77 [552.77]
b = 0.82 [1.51]
Seff = 3.94 [1.79]
Teq = 359 [41] K
Rp = 1.86 [1.47] Re
a = 0.8296 [0.2211] AU
Ag = 7984.56 [12736.42] [0.63 σ]
Teffp = 5250 [2016] K [2.43 σ]

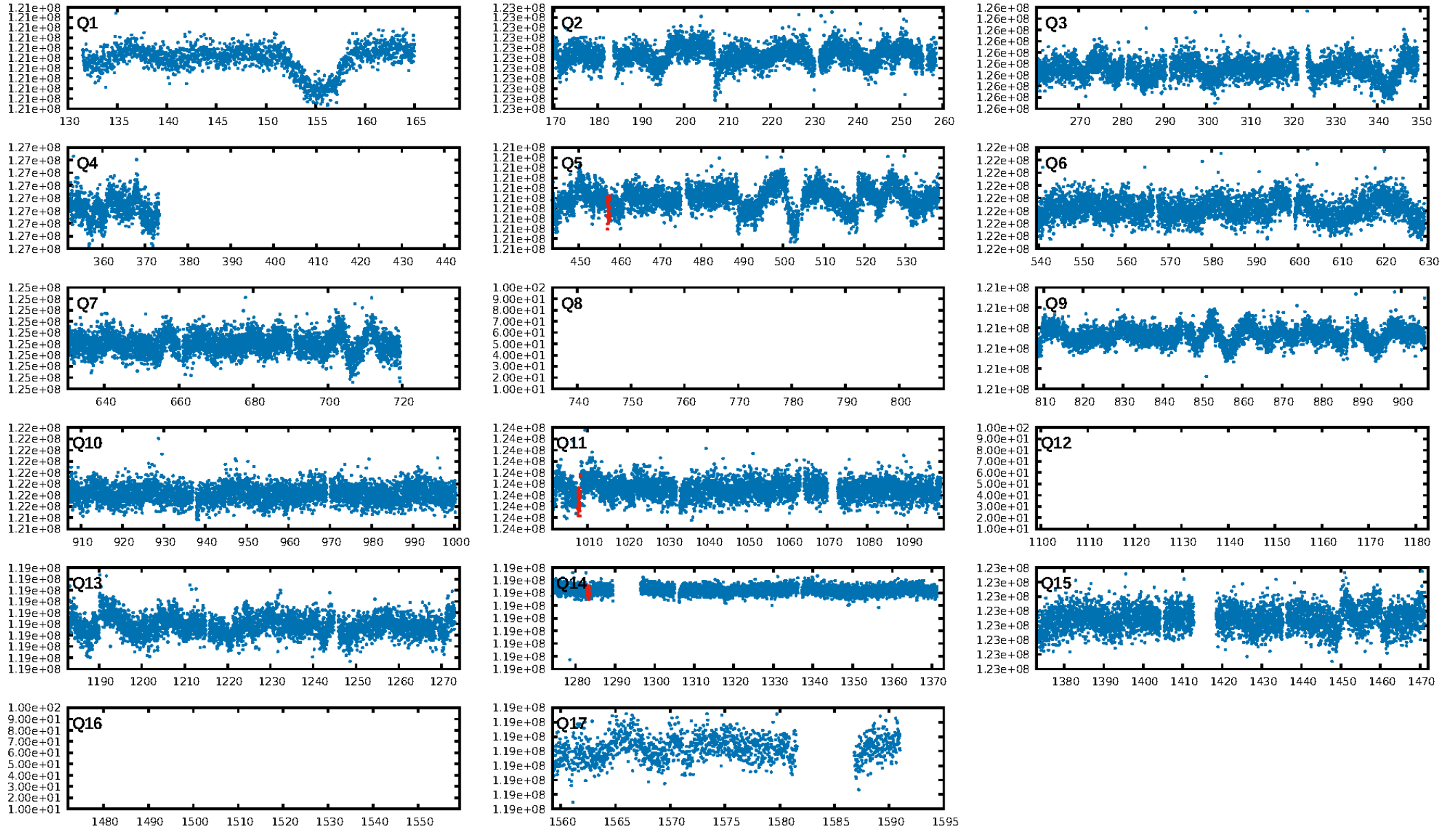
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 59.2%
ModelChiSquareGof-sig: 99.8%
Bootstrap-pfa: 1.27e-09
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 0.8835
Centroid-sig: 53.4%
Centroid-so: 1.546 arcsec [0.59 σ]
OotOffset-rm: N/A
KicOffset-rm: N/A
OotOffset-st: 0/0/0 [0]
KicOffset-st: 0/0/0 [0]
DiffImageQuality-fgm: N/A
DiffImageOverlap-fno: 1.00 [1/1]

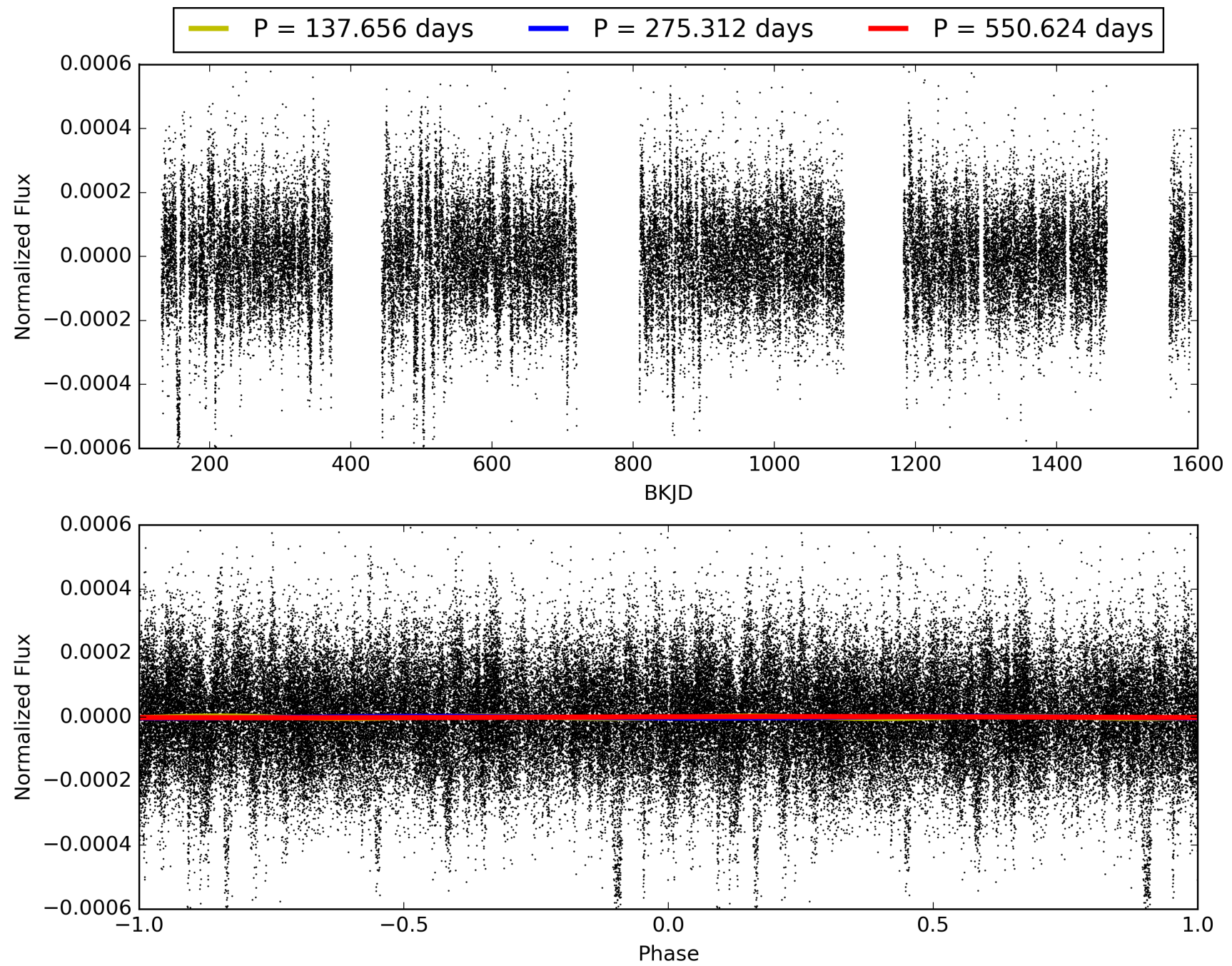
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 20:23:28 Z

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

TCE 011182440-01, PDC Light Curves

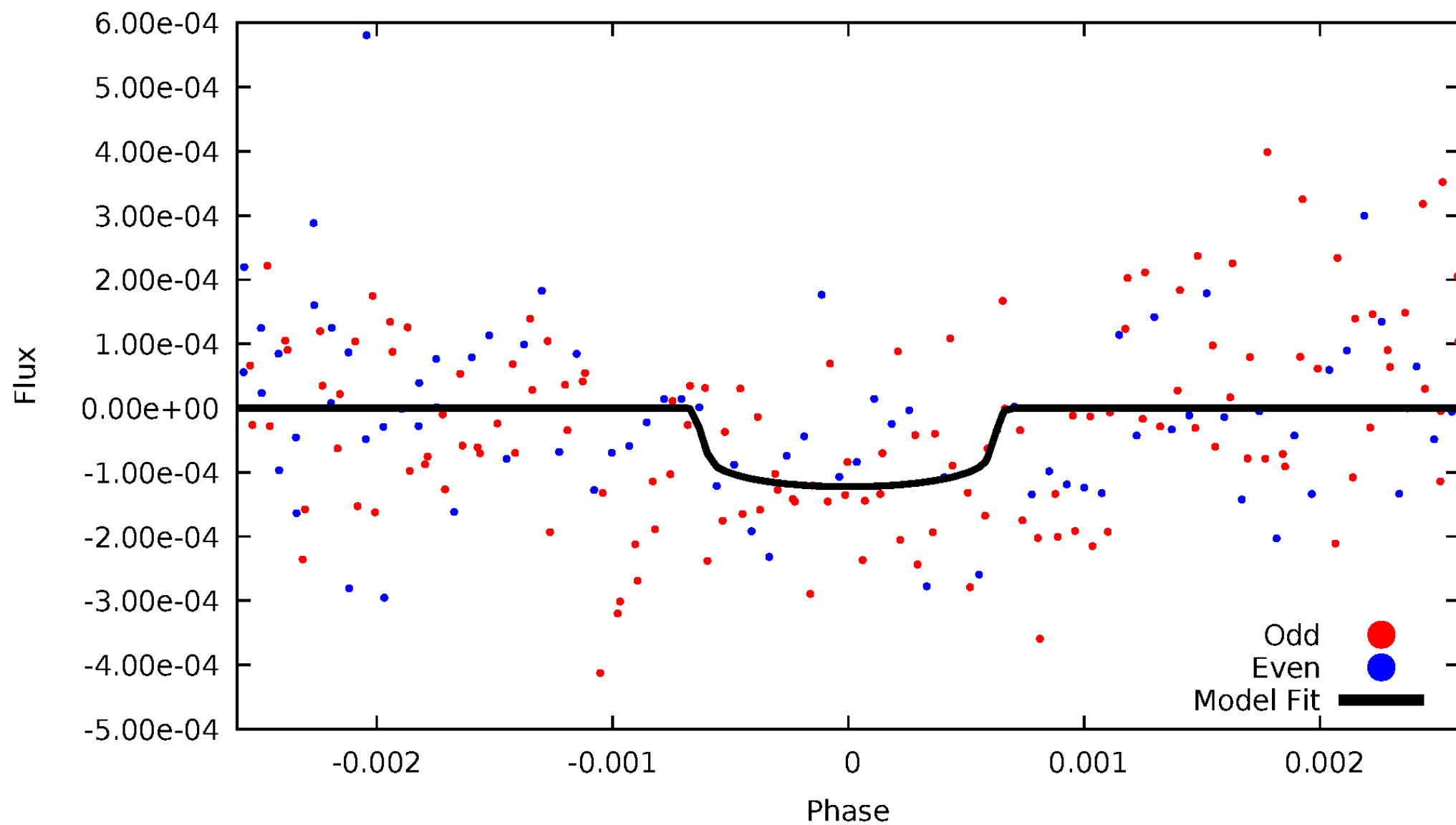


TCE 011182440-01



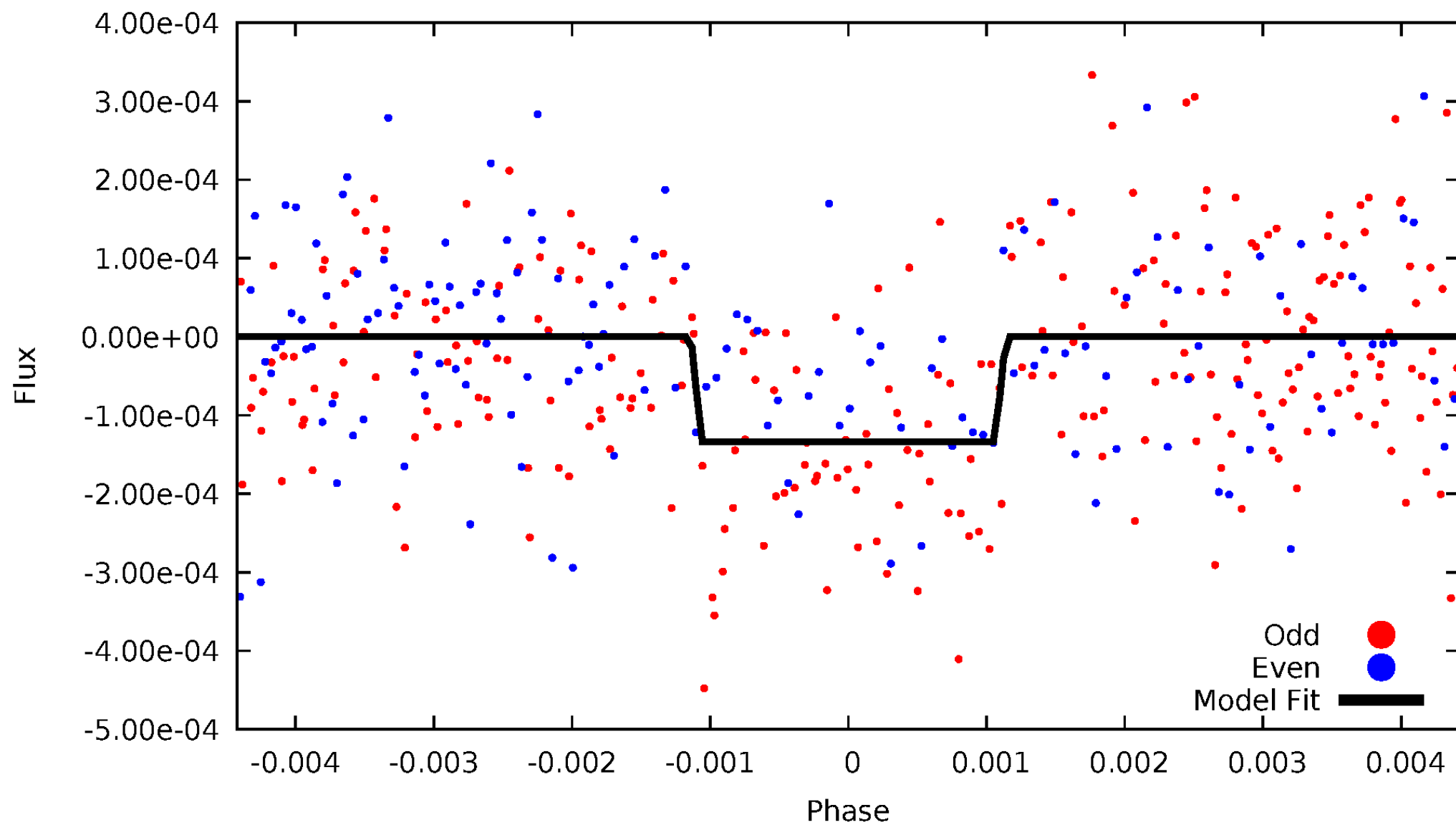
DV Odd/Even

TCE 011182440-01

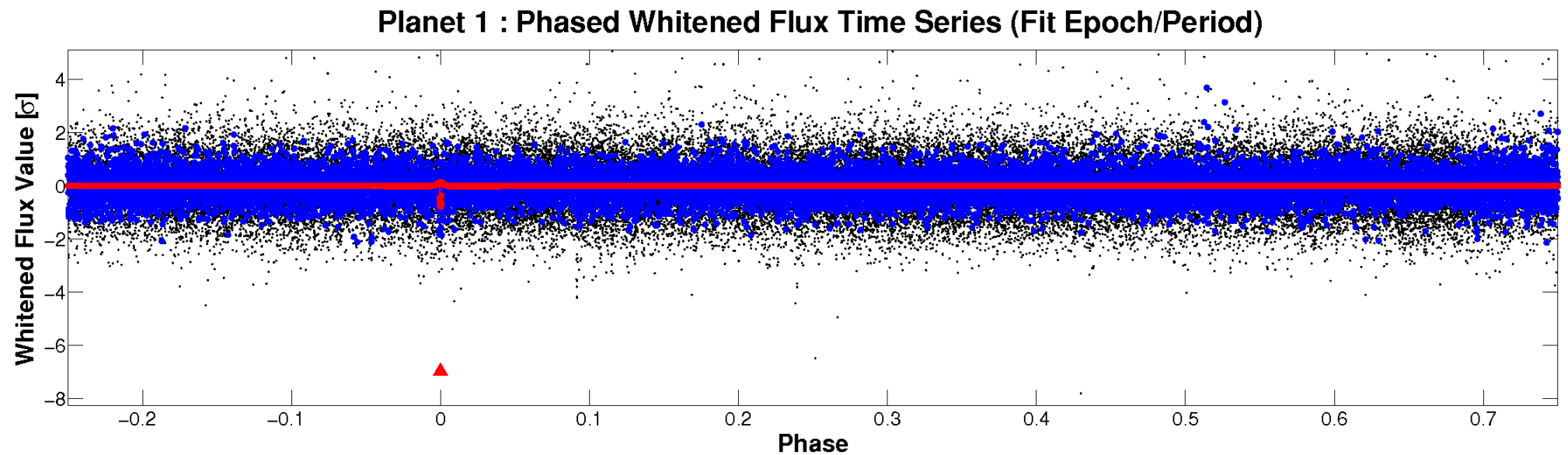
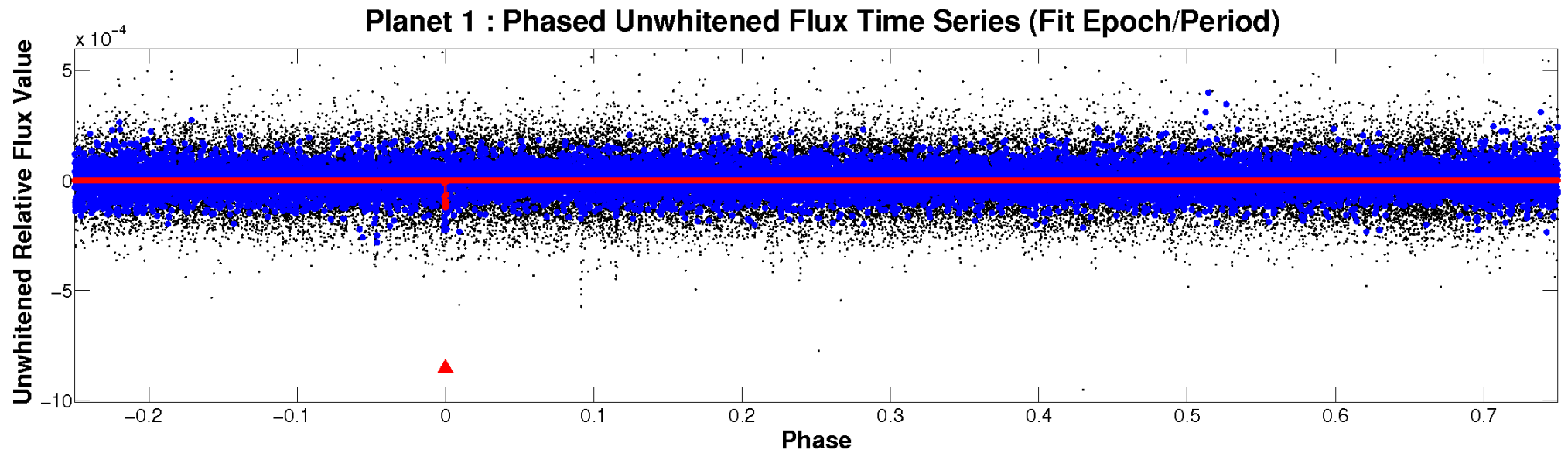


ALT Odd/Even

TCE 011182440-01

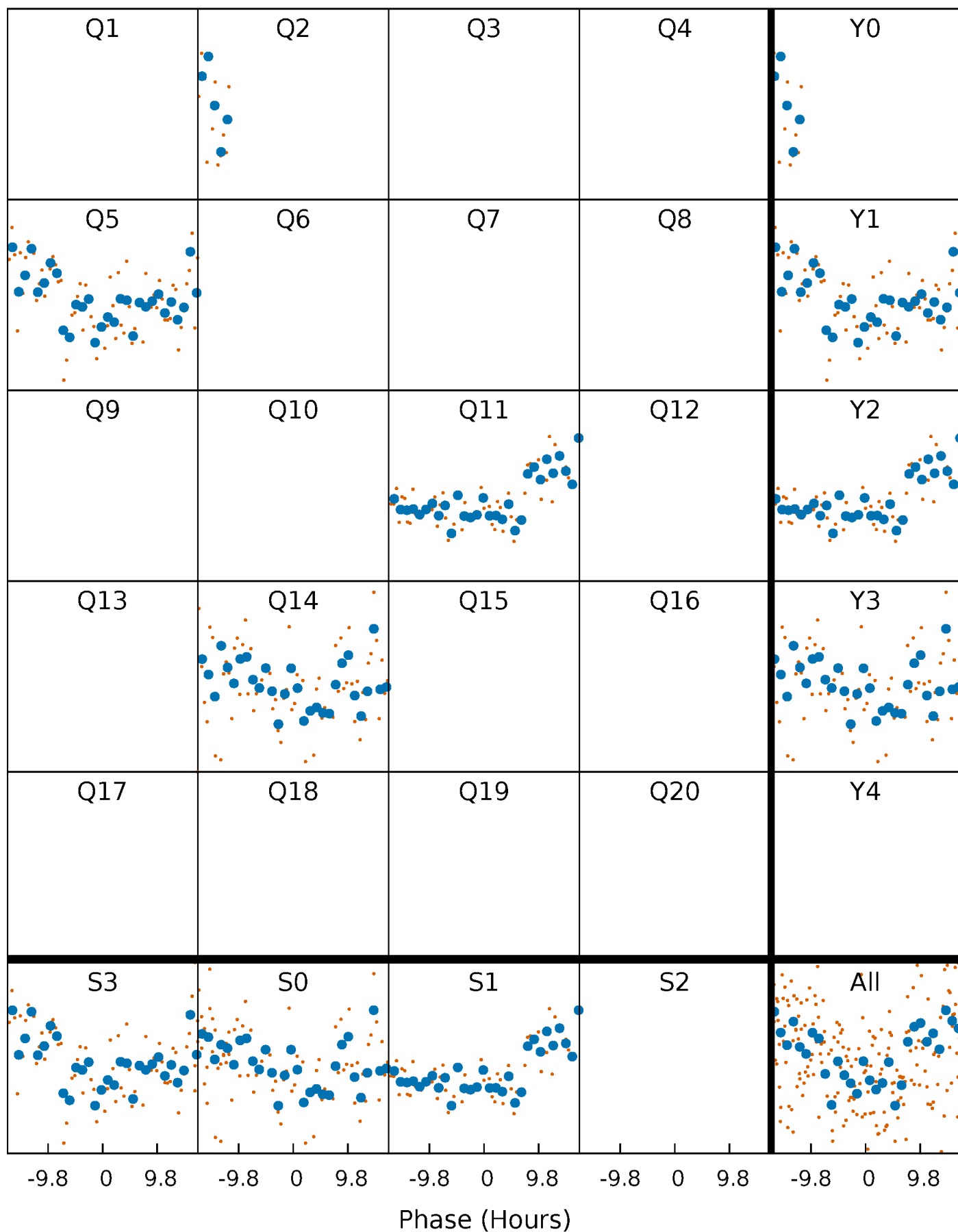


Non-Whitened Vs. Whitened Light Curve



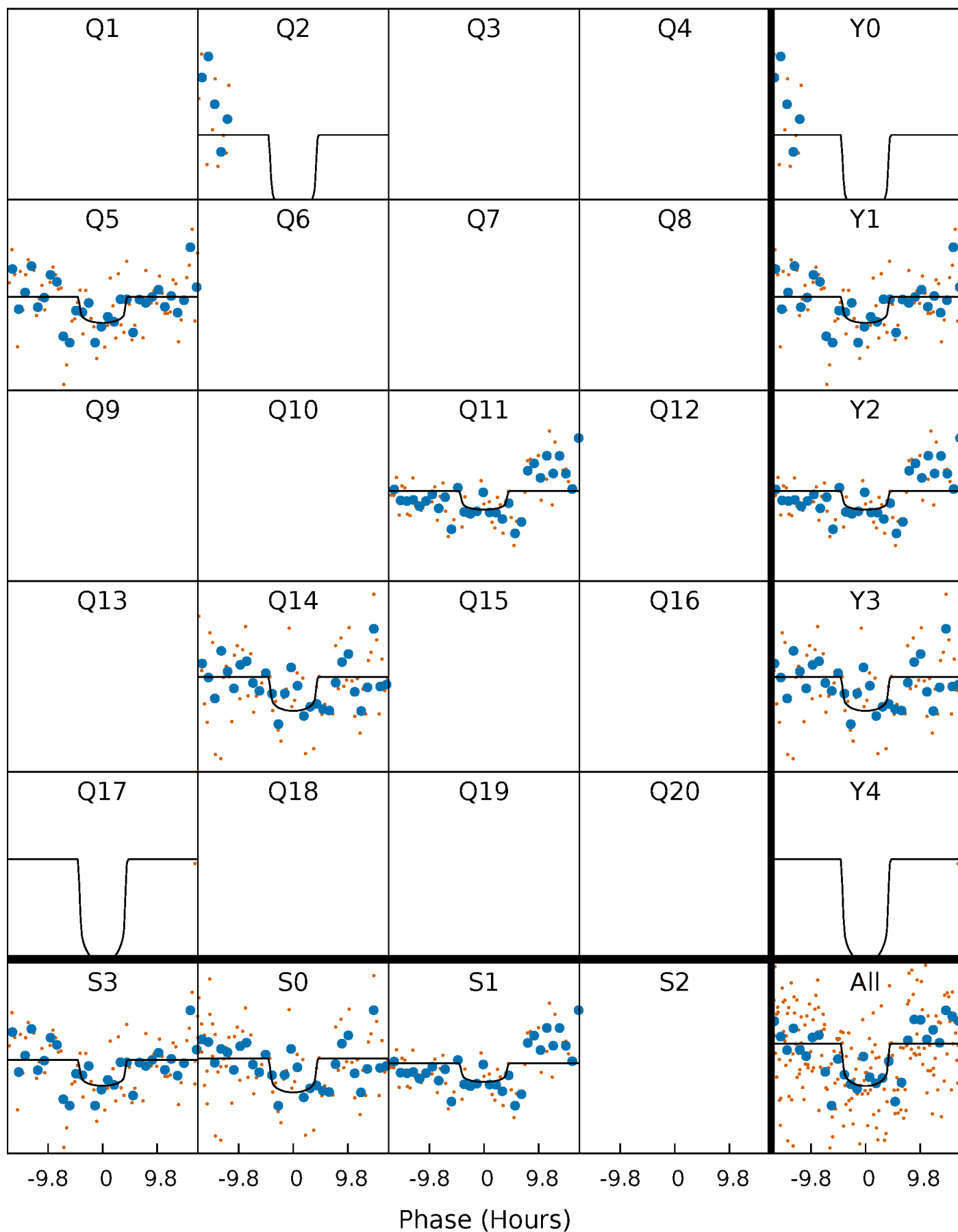
PDC Quarter-Phased Transit Curves

TCE 011182440-01 P=275.311838 Days $T_0=181.995973$ (BKJD)



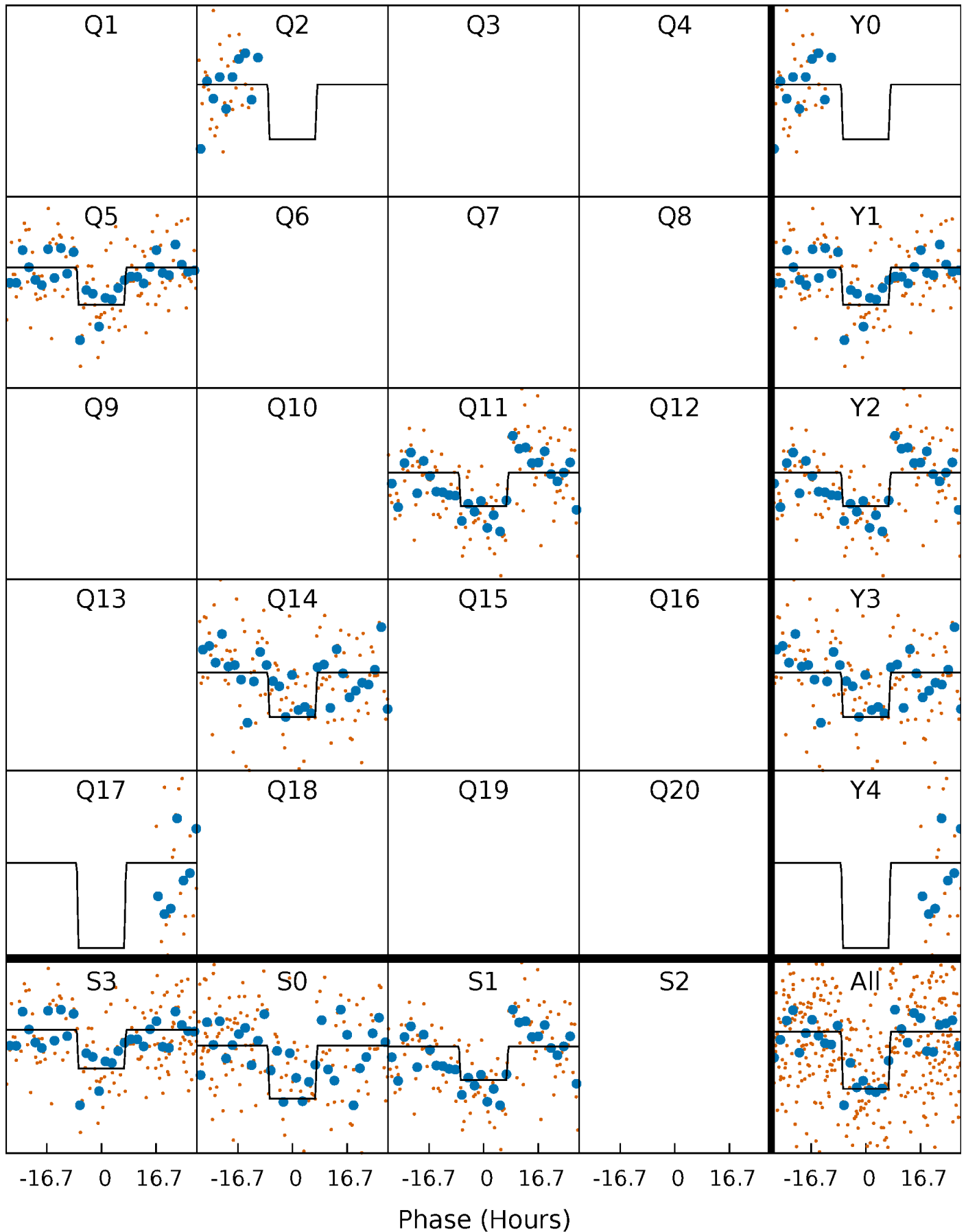
DV Quarter-Phased Transit Curves

TCE 011182440-01 P=275.311838 Days $T_0=181.995973$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

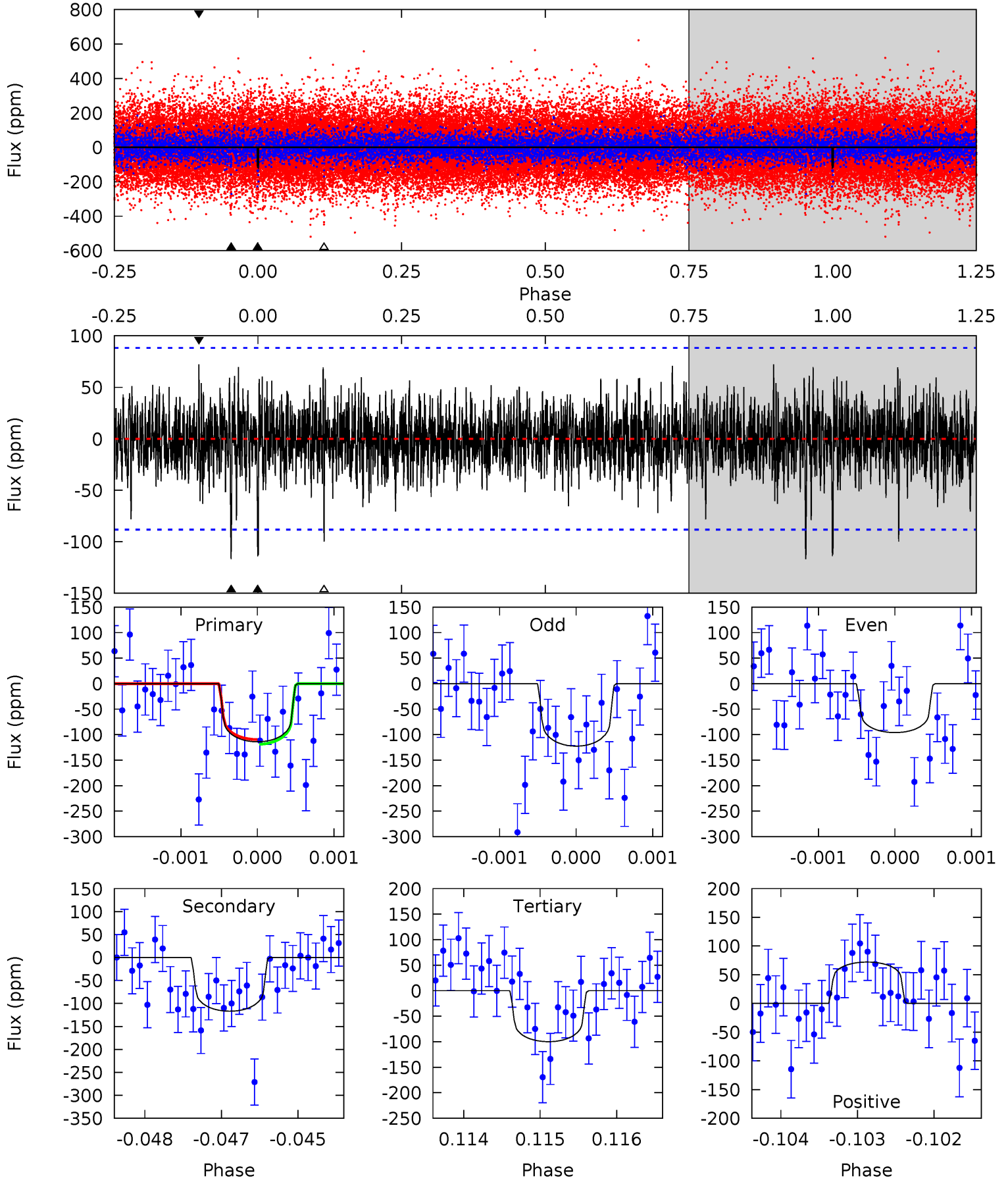
TCE 011182440-01 P=275.314976 Days $T_0=181.990412$ (BKJD)



DV Model-Shift Uniqueness Test

011182440-01, P = 275.311838 Days, E = 181.995973 Days

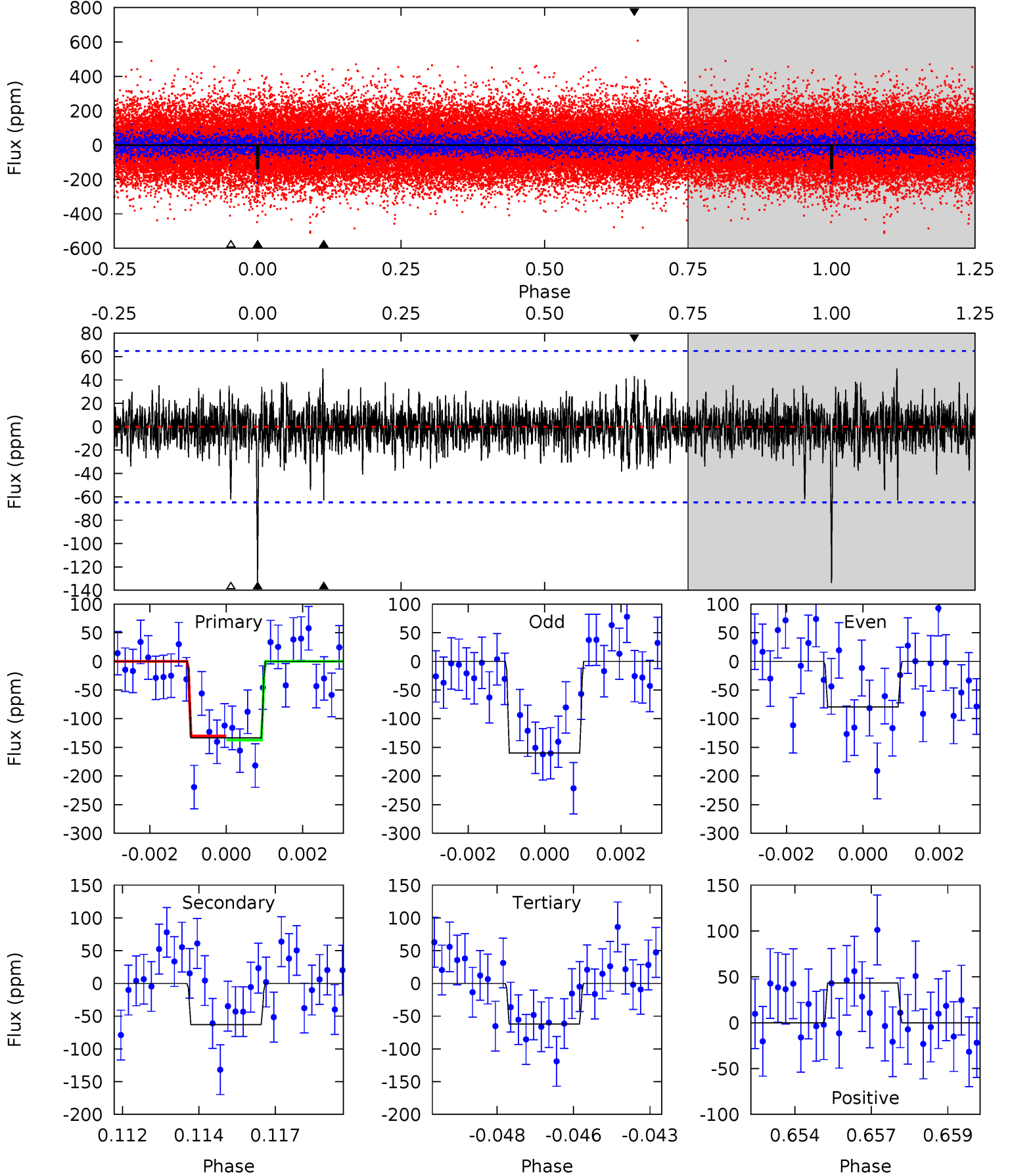
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.98	7.15	6.11	4.41	5.40	3.21	1.31	0.87	2.57	1.04	2.74	0.76	1.03	0.38	0.28



Alt Model-Shift Uniqueness Test

011182440-01, $P = 275.314976$ Days, $E = 181.990412$ Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.9	5.15	5.09	3.55	5.30	3.05	1.02	5.84	7.39	0.06	1.60	3.11	0.99	0.27	0.30



Stellar Parameters For KIC 011182440

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6049^{+164}_{-164}	$4.086^{+0.266}_{-0.114}$	$-0.260^{+0.300}_{-0.250}$	$1.503^{+0.316}_{-0.386}$	$1.005^{+0.174}_{-0.131}$	$0.417^{+0.603}_{-0.159}$
	+3%/-3%	+7%/-3%	+115%/-96%	+21%/-26%	+17%/-13%	+145%/-38%
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 011182440-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-117 ± 16	$1.99^{+1.31}_{-1.10}$	493^{+31}_{-40}	5565^{+3056}_{-1063}	11225^{+43607}_{-7246}
Alt.	-63 ± 12	$1.89^{+1.34}_{-1.09}$	494^{+32}_{-40}	4988^{+2600}_{-932}	6806^{+30393}_{-4540}

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

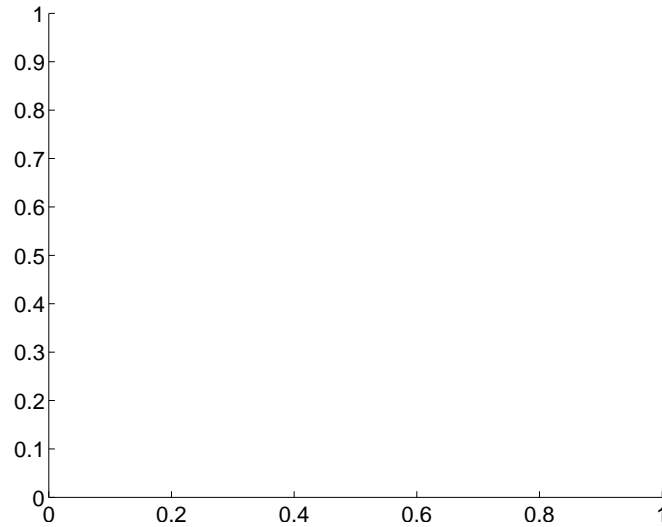
Supplemental centroid analysis for 011182440-01. Kepler magnitude: 13.14. Transit SNR 4.94

There are 0 quarters with good PRF difference image offsets

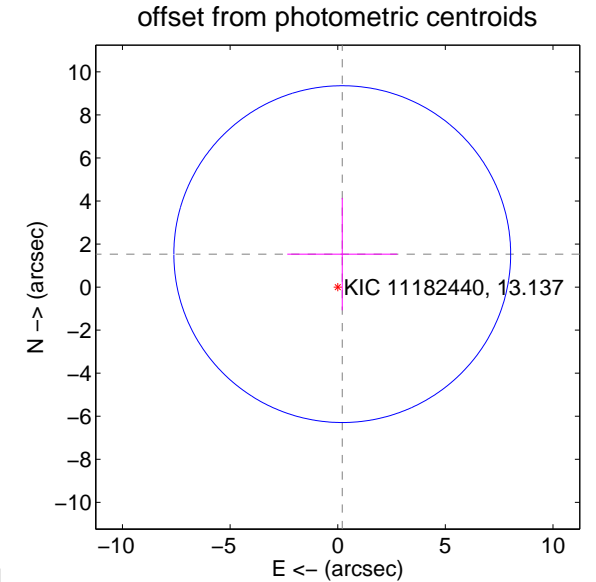
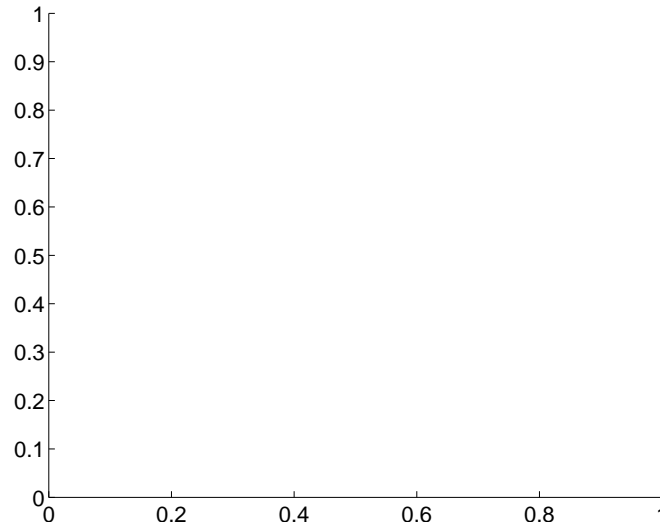
The direct PRF centroid is offset from the target star catalog position by about NaN arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	—	—	—	—
PRF-fit source offset from KIC position	—	—	—	—
photometric centroid source offset	1.55 ± 2.61	0.59	-0.21 ± 2.56	1.53 ± 2.61

There is no PRF-fit offset from OOT-fit



There is no PRF-fit offset from KIC

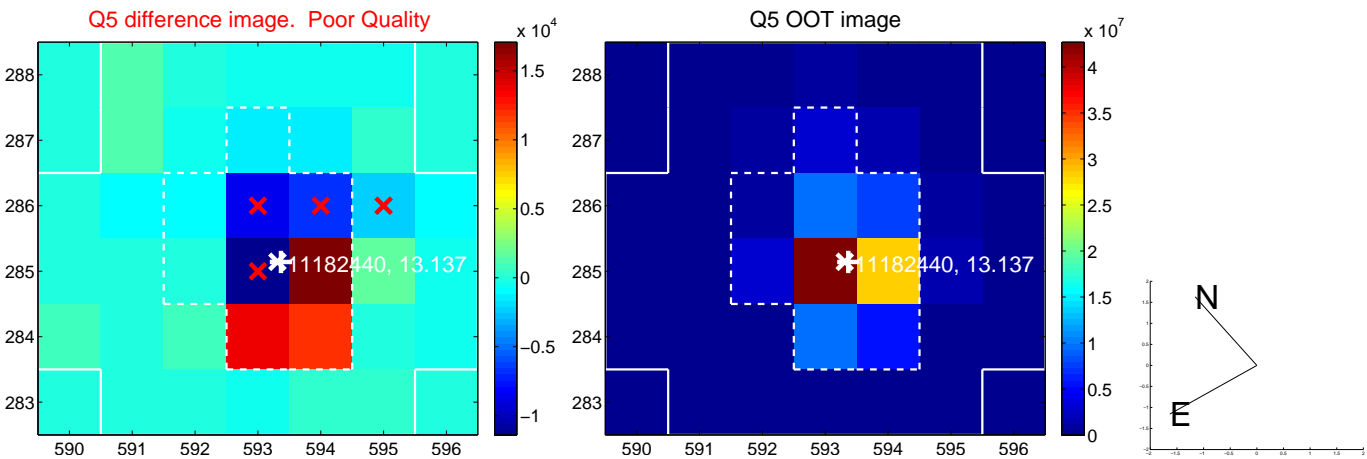


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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



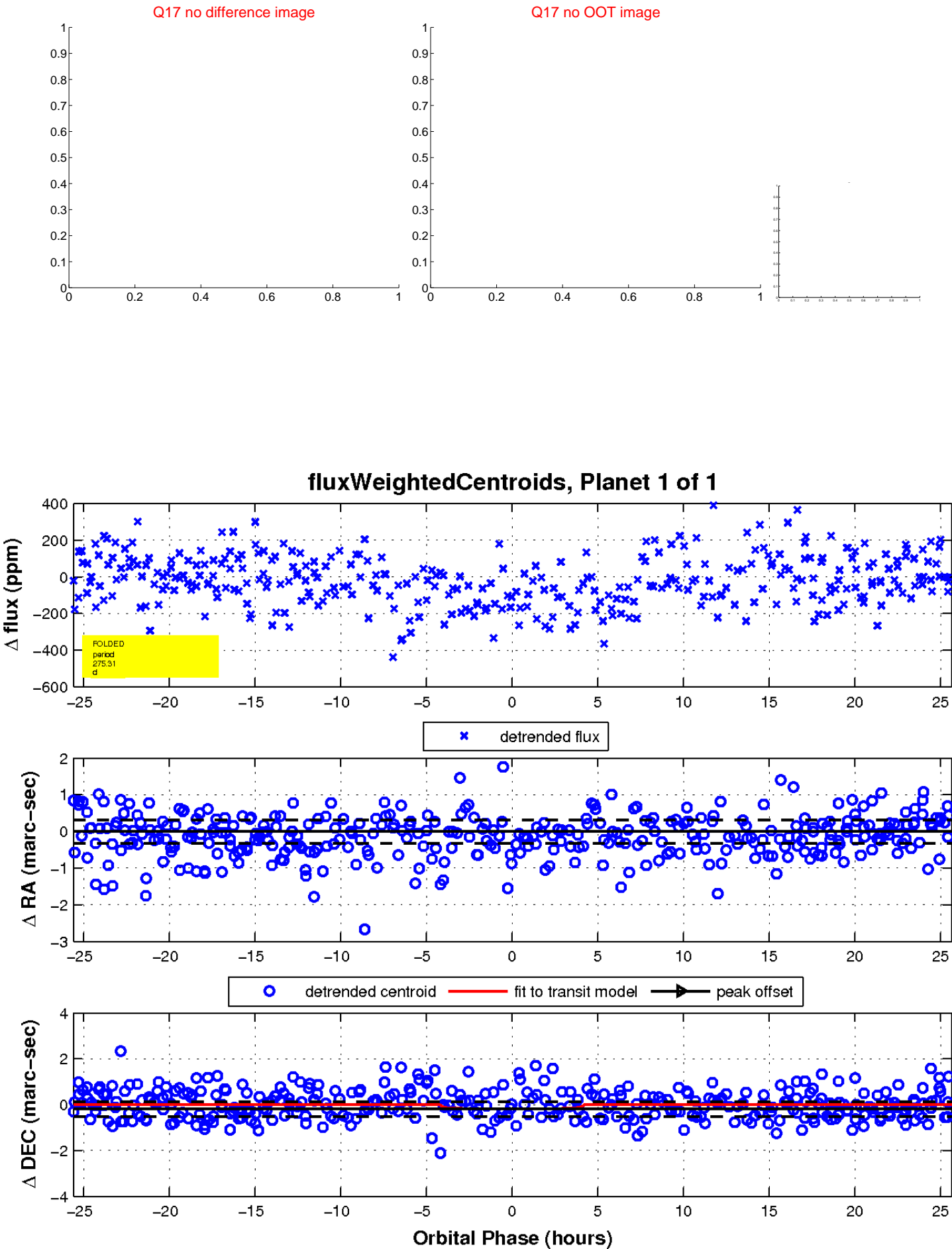
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

Declination

