

KIC 008817141

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})
008817141-01	OBS	No	376.529210	140.358725	665.9	15.000	11.4	-1.0	1.00	6092	2.57	1.12

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008817141-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS MARSHALL_SKYE LPP_DV LPP_ALT ALL_TRANS_CHASES INCONSISTENT_TRANS CENT_NOFITS

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

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

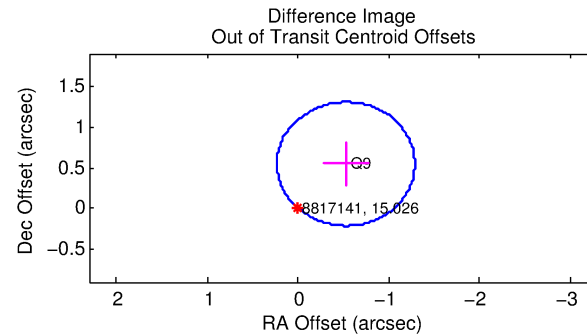
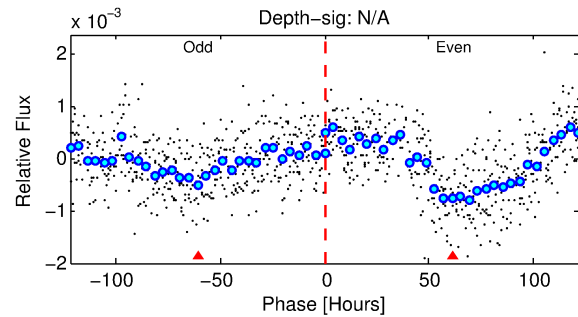
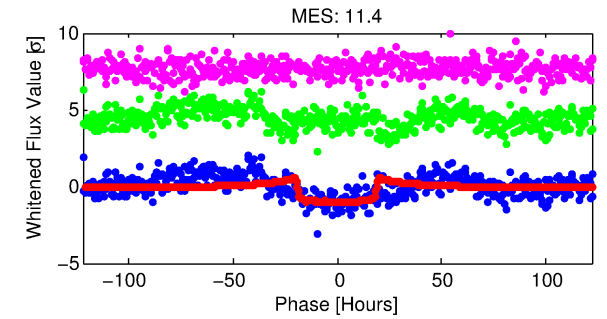
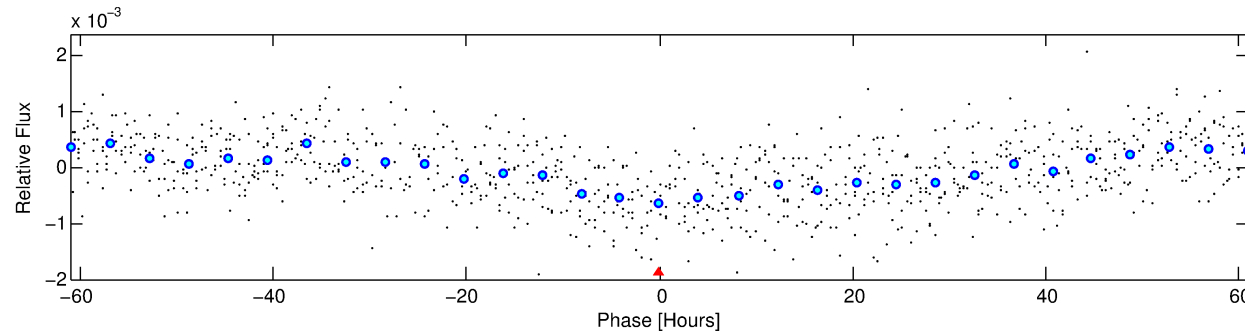
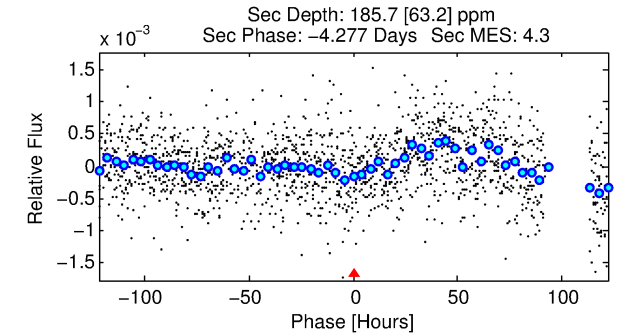
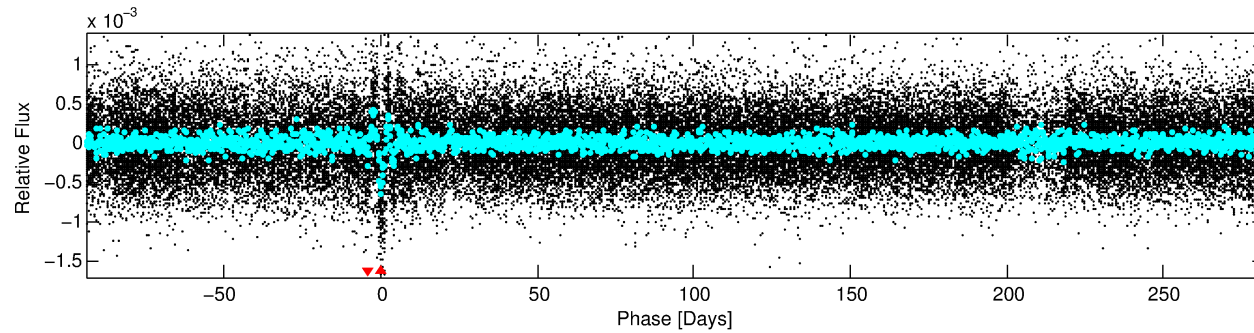
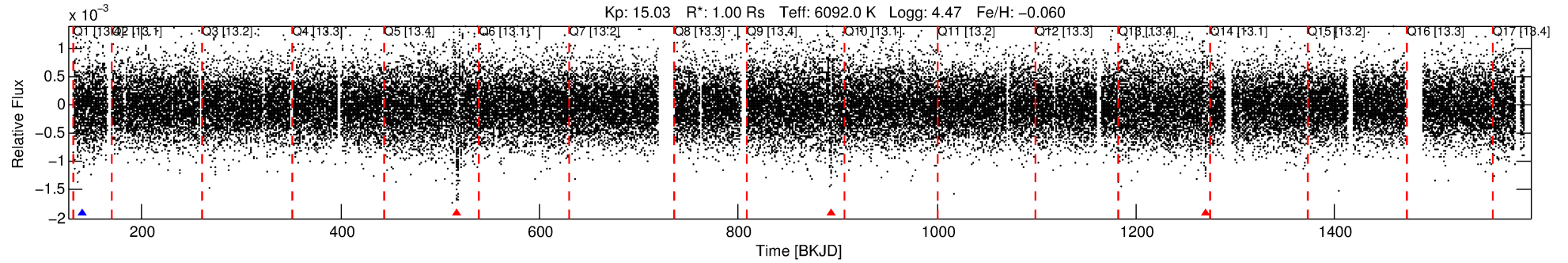
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008817141-01

No Significant Match Found

DV One-Page Summary

KIC: 8817141 Candidate: 1 of 1 Period: 376.529 d



TPS TCE Results:

Period = 376.52921 d
Epoch = 140.3587 BKJD

DV fit results are unavailable

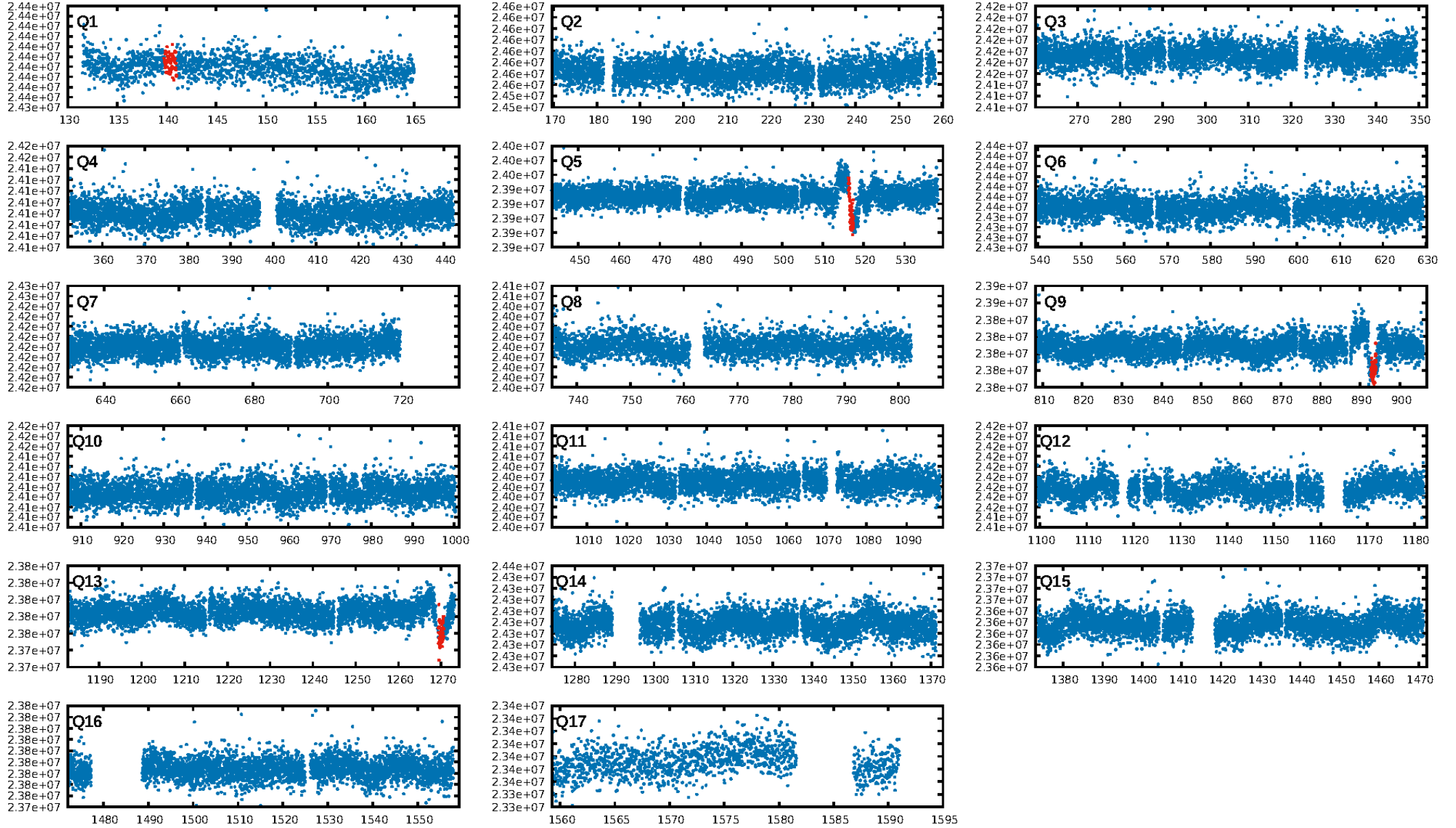
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 4.37e-16
RollingBand-fgt: 0.00 [0/3]
GhostDiagnostic-chr: 7.596
Centroid-sig: 45.9%
Centroid-so: 2.105 arcsec [0.81σ]
OotOffset-rm: 0.759 arcsec [3.00σ]
OotOffset-st: 0/0/0/1 [1]
KicOffset-rm: 0.699 arcsec [2.81σ]
KicOffset-st: 0/0/0/1 [1]
DiffImageQuality-fgm: 0.00 [0/1]
DiffImageOverlap-fno: 1.00 [3/3]

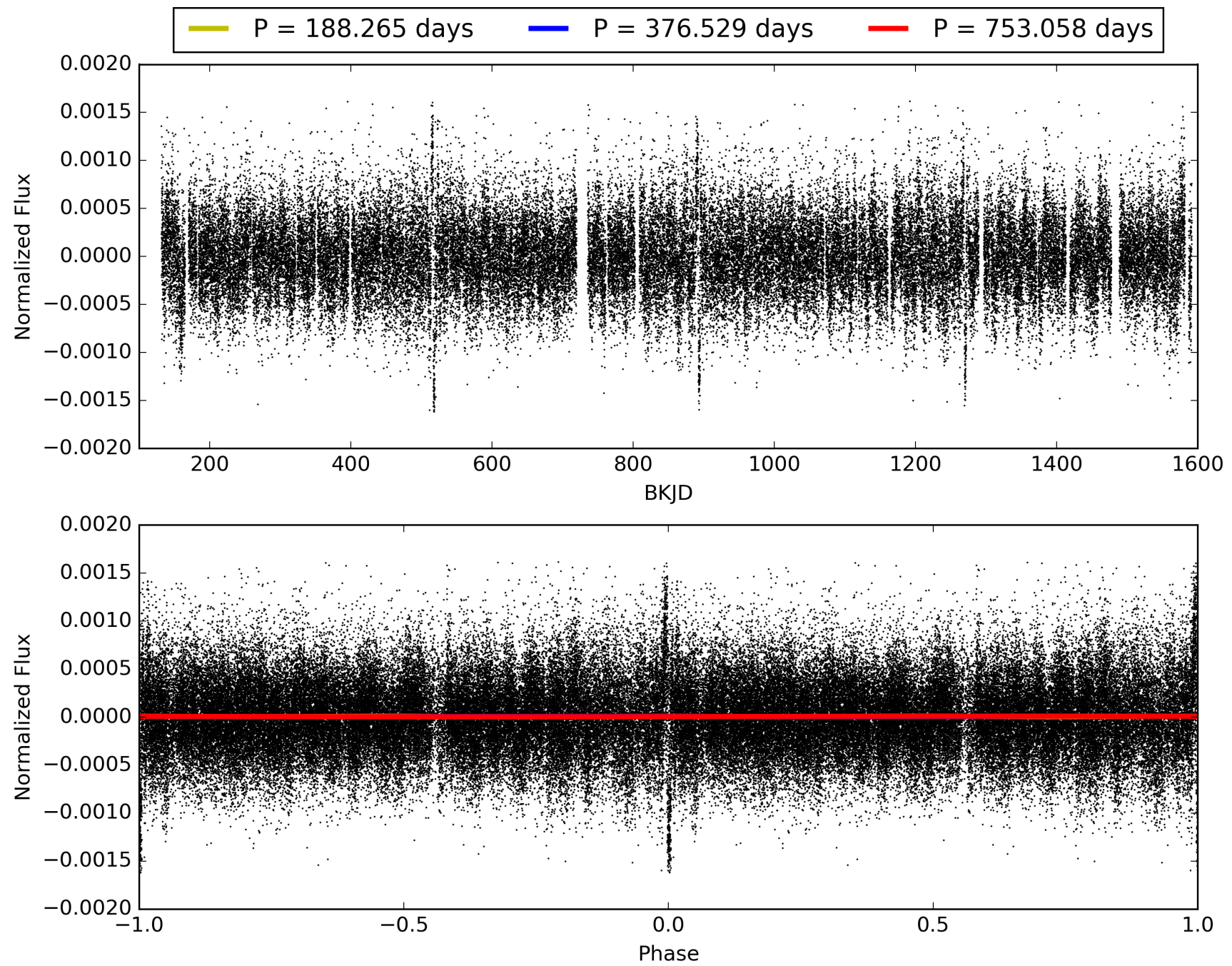
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 14:56:55 Z

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

TCE 008817141-01, PDC Light Curves

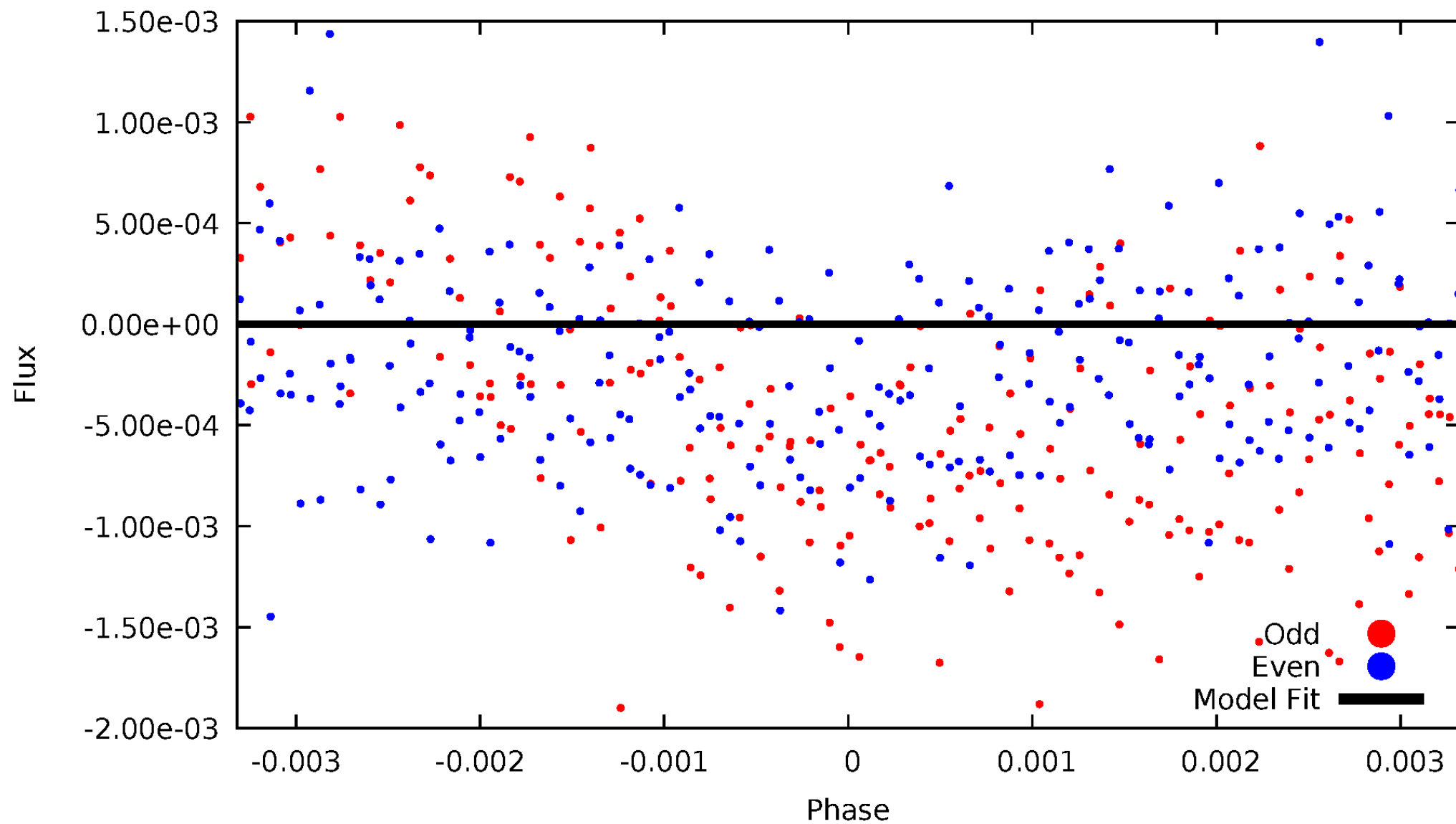


TCE 008817141-01



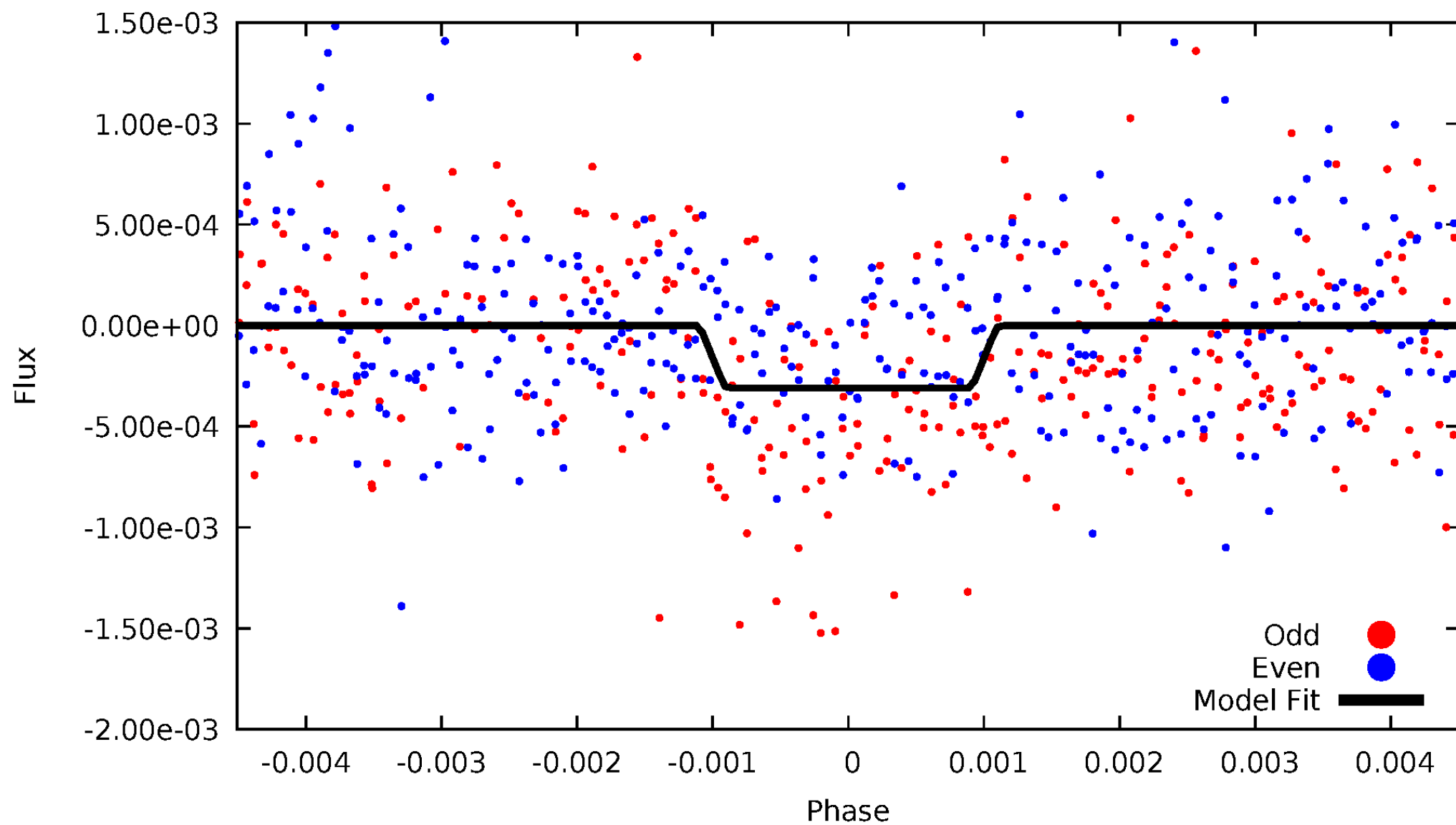
DV Odd/Even

TCE 008817141-01



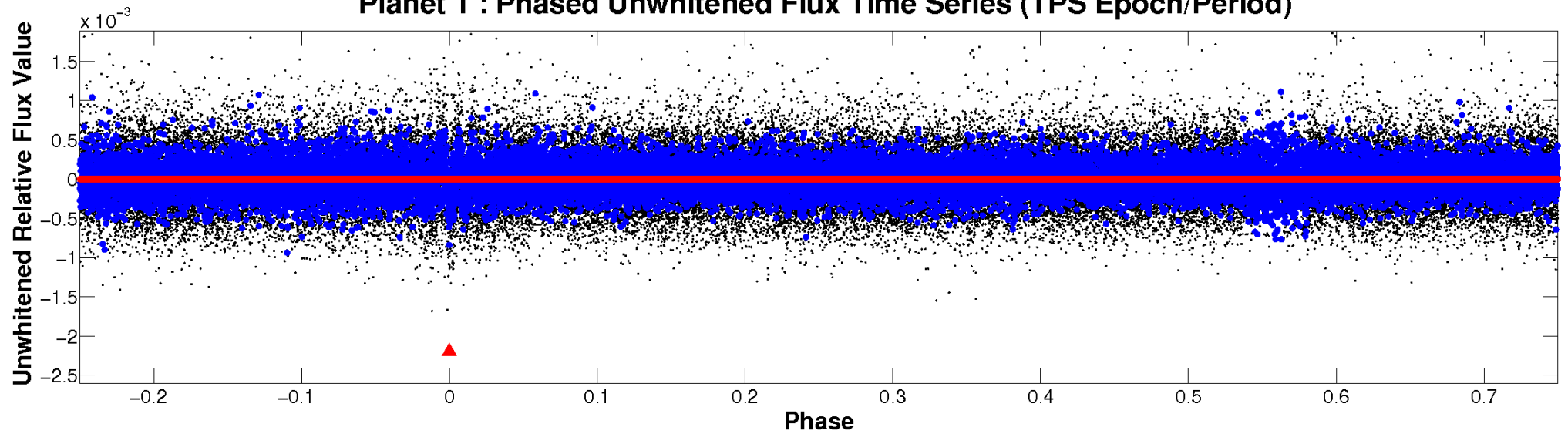
ALT Odd/Even

TCE 008817141-01

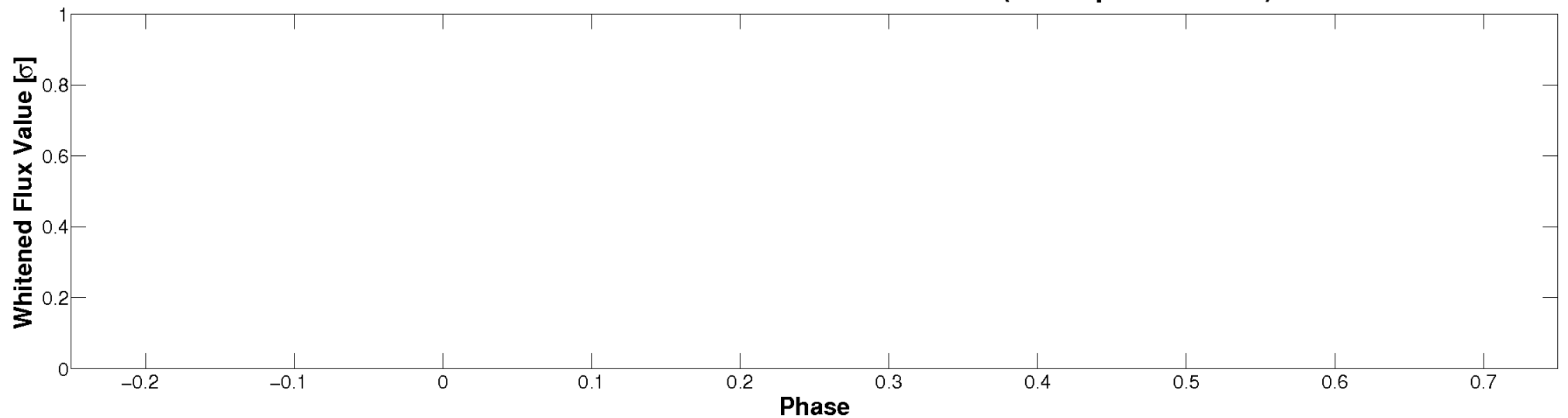


Non-Whitened Vs. Whitened Light Curve

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

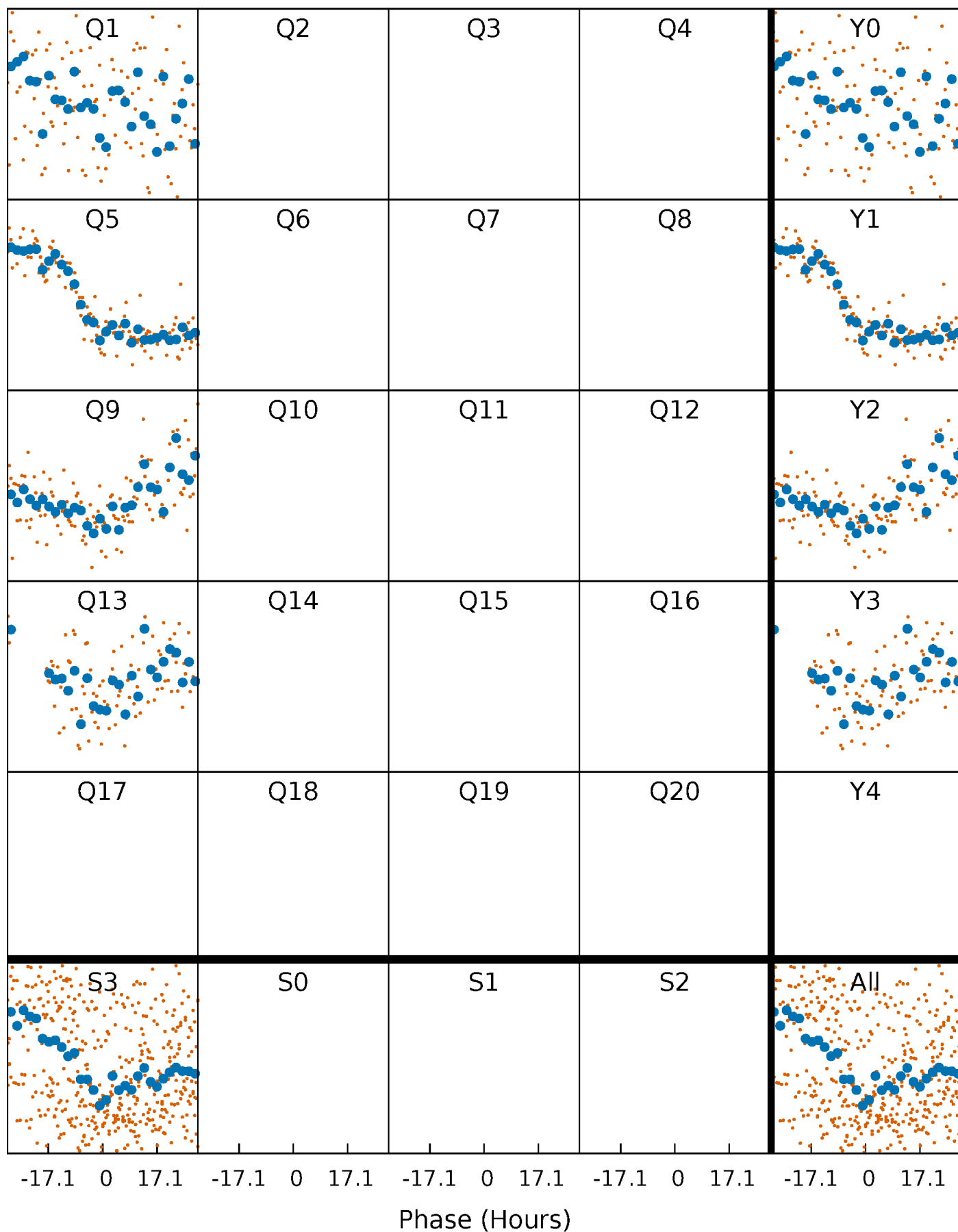


Planet 1 : Phased Whitened Flux Time Series (TPS Epoch/Period)



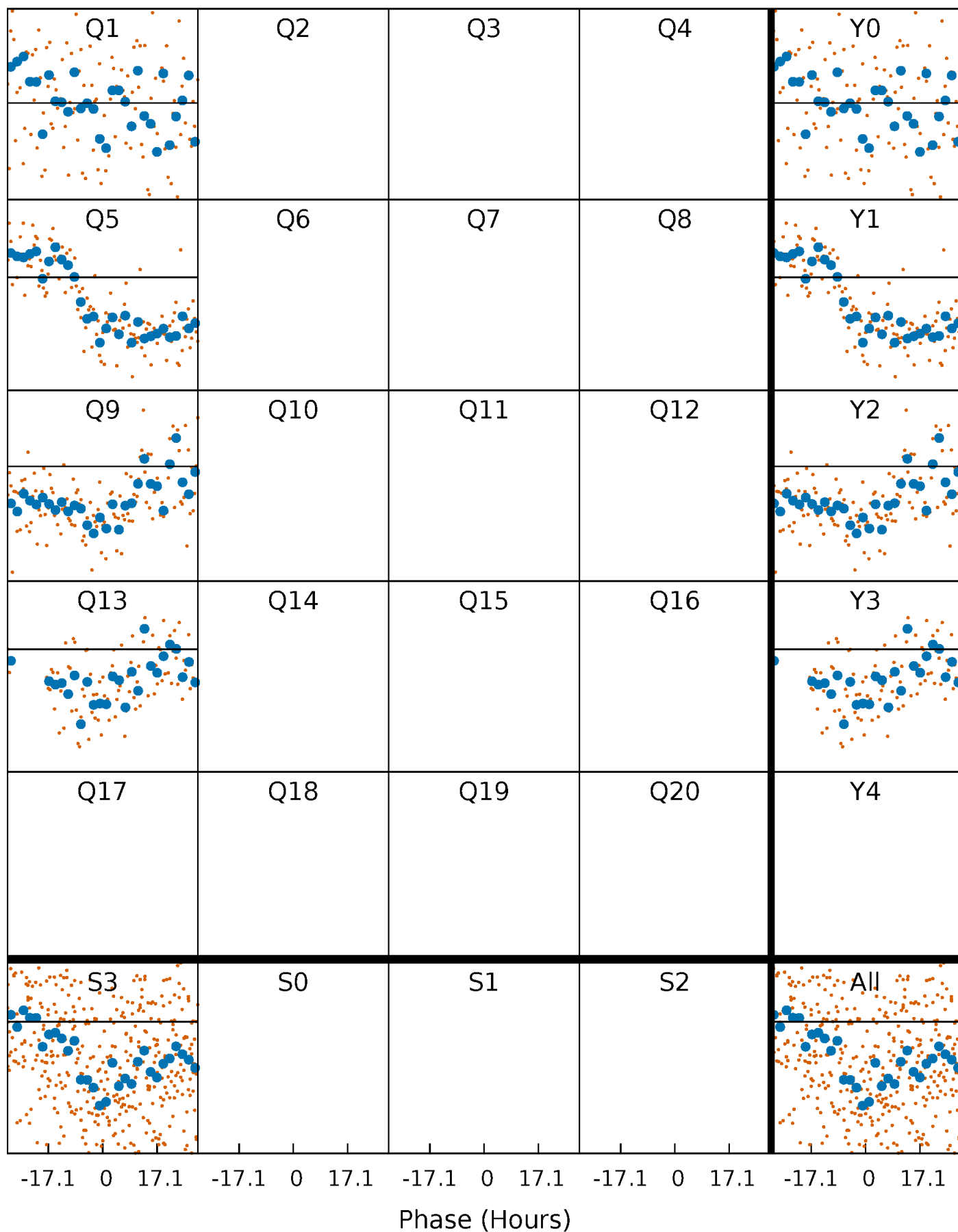
PDC Quarter-Phased Transit Curves

TCE 008817141-01 P=376.529210 Days $T_0=140.358725$ (BKJD)



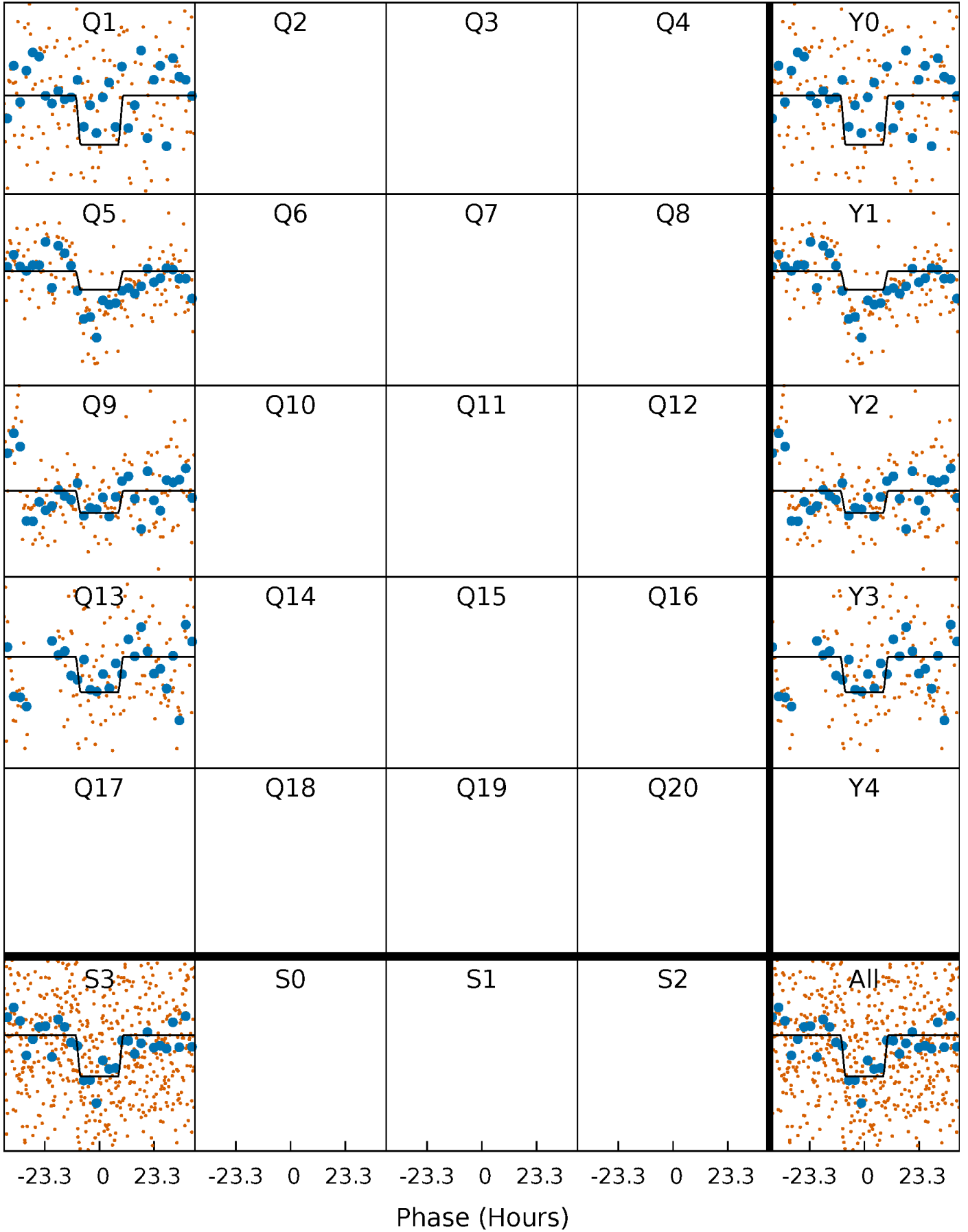
DV Quarter-Phased Transit Curves

TCE 008817141-01 $P=376.529210$ Days $T_0=140.358725$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

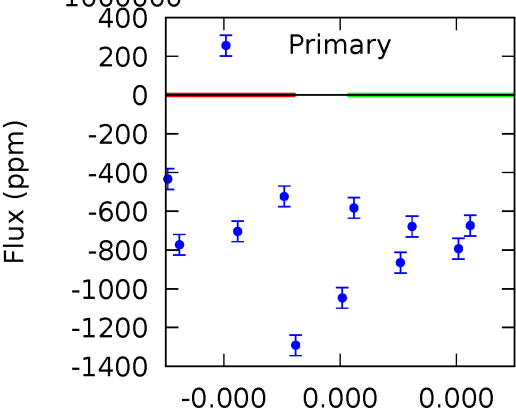
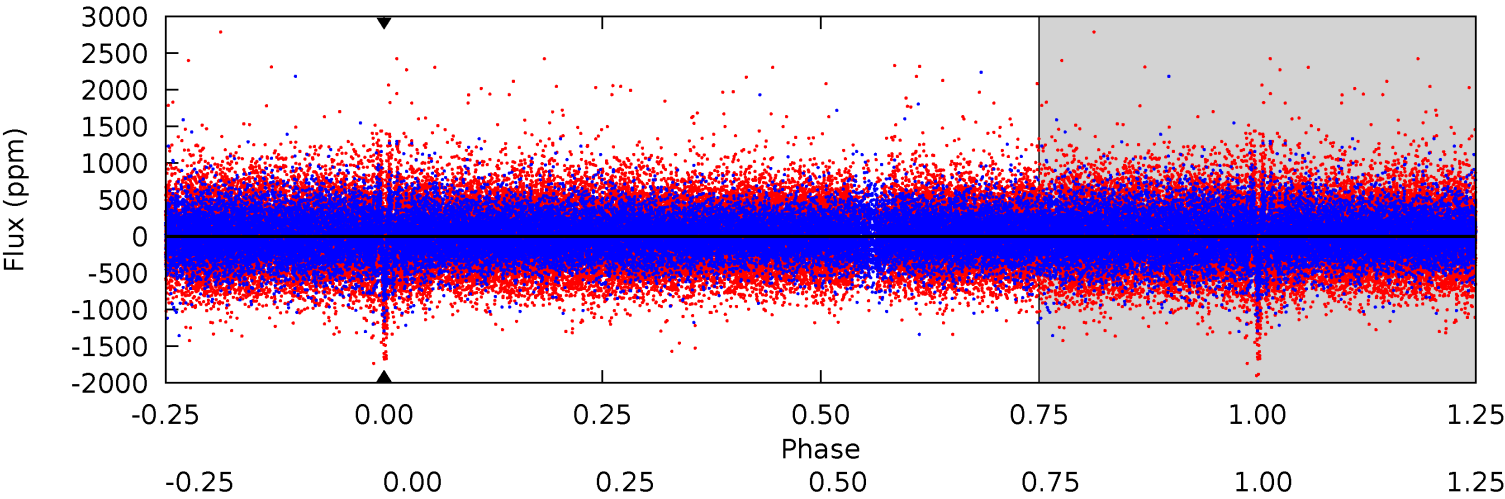
TCE 008817141-01 P=376.529210 Days $T_0=140.417791$ (BKJD)



DV Model-Shift Uniqueness Test

008817141-01, P = 376.529210 Days, E = 140.358725 Days

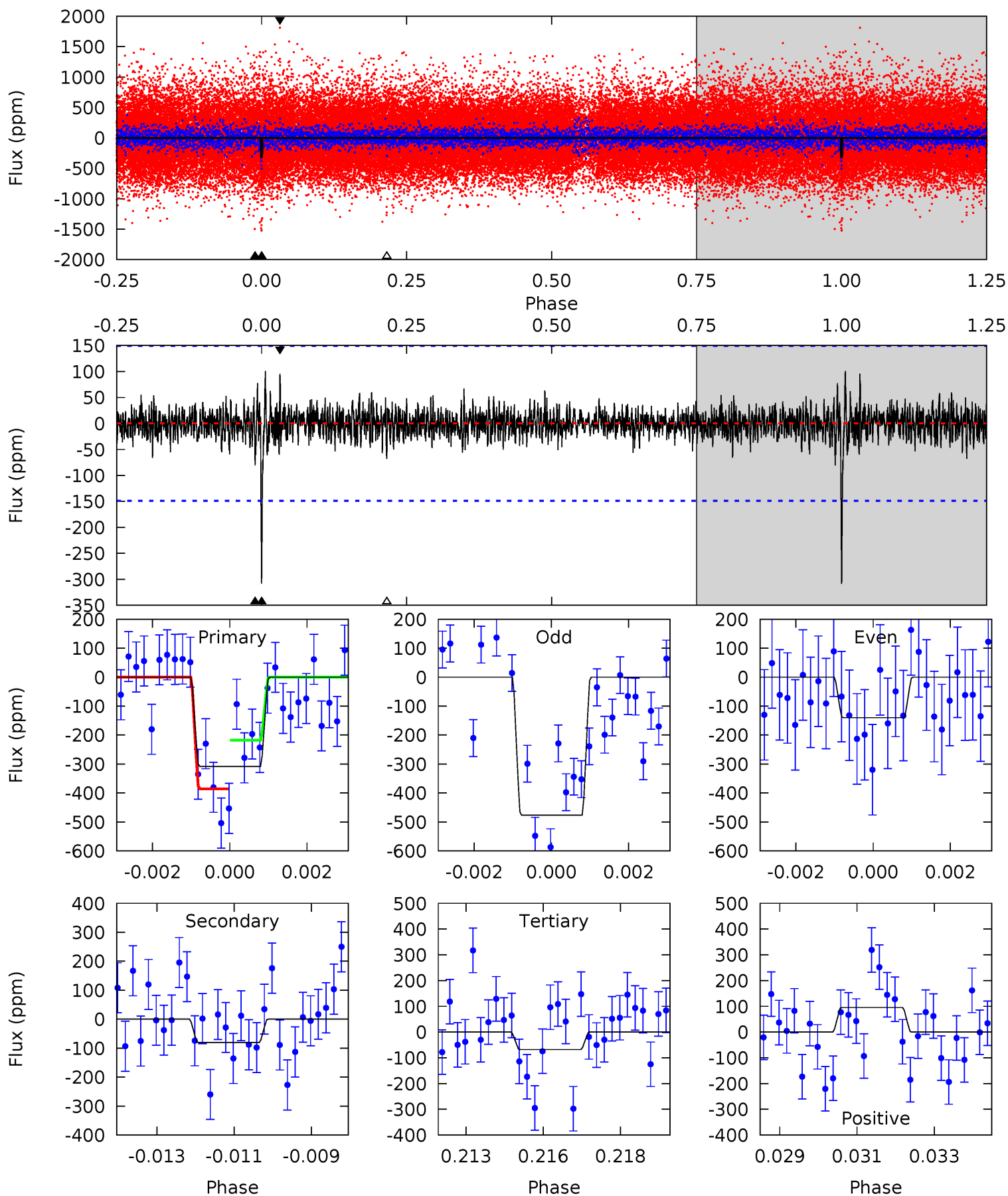
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

008817141-01, P = 376.529210 Days, E = 140.417791 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	2.87	2.42	3.40	5.31	3.06	0.69	8.56	7.58	0.45	-0.53	6.00	1.38	0.25	2.98



Stellar Parameters For KIC 008817141

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6092^{+183}_{-220}	$4.471^{+0.052}_{-0.208}$	$-0.060^{+0.250}_{-0.300}$	$0.998^{+0.312}_{-0.104}$	$1.074^{+0.137}_{-0.137}$	$1.522^{+0.427}_{-0.797}$
	+3%/-4%	+1%/-5%	+417%/-500%	+31%/-10%	+13%/-13%	+28%/-52%
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 008817141-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	0 ± 1000000	$8.82^{+8.77}_{-6.09}$	375^{+25}_{-20}	3989^{+18979}_{-23920}	$5972^{+1439067}_{-1076061}$
Alt.	-81 ± 28	$8.98^{+9.41}_{-6.32}$	375^{+29}_{-20}	2816^{+1262}_{-500}	589^{+5719}_{-463}

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 $A_{\text{obs}} \gg 1.0$

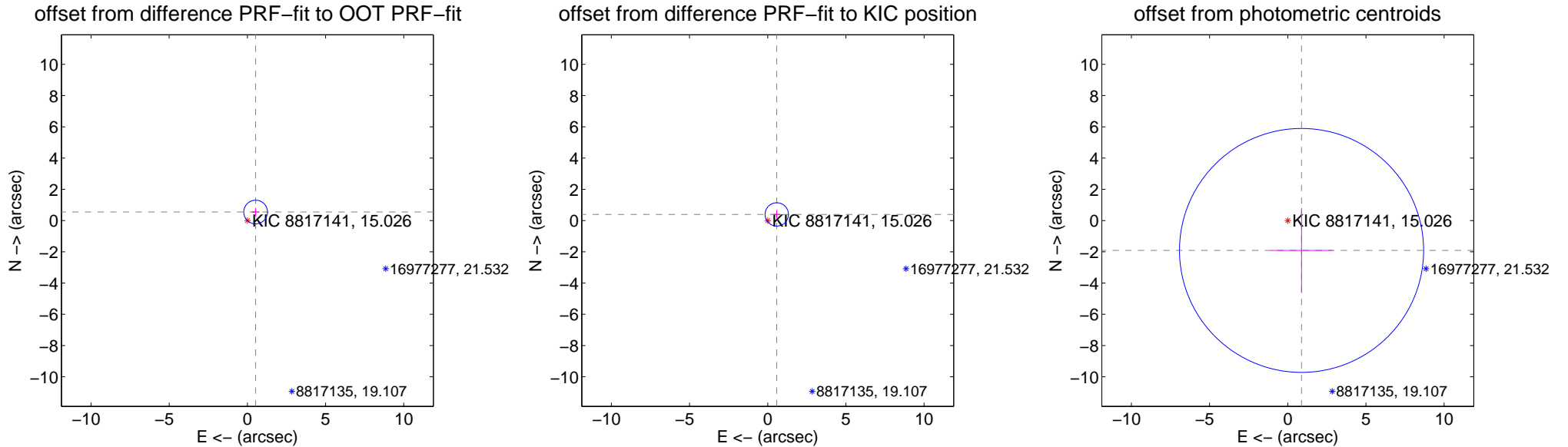
DV Centroid Data

Supplemental centroid analysis for 008817141-01. Kepler magnitude: 15.03. Transit SNR -1.00

There are 0 quarters with good PRF difference image offsets

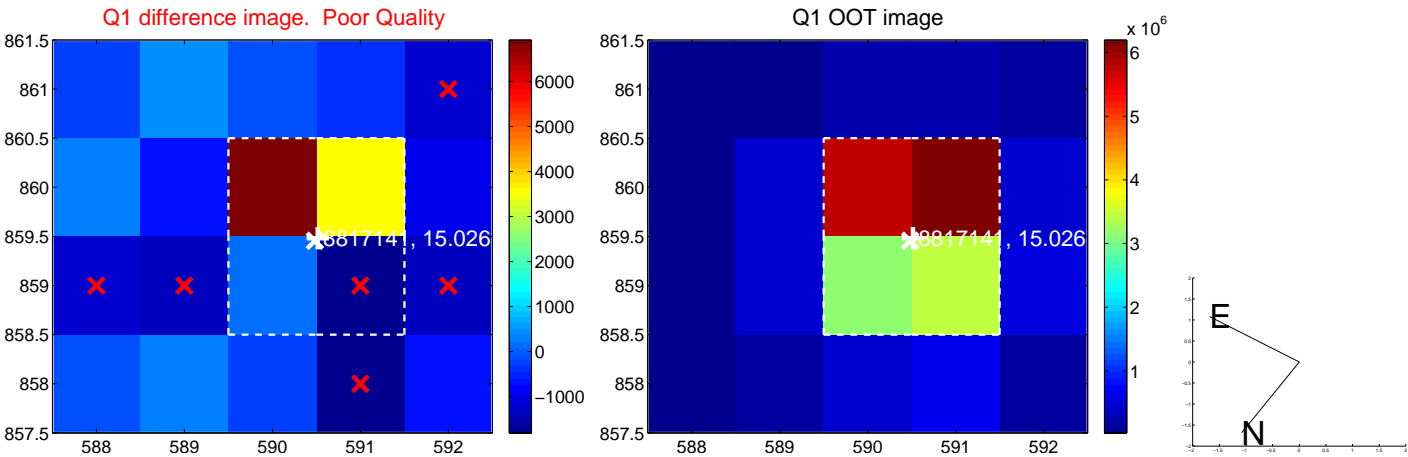
The direct PRF centroid is offset from the target star catalog position by about 0.16 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.759 \pm 0.253	3.00	-0.527 \pm 0.242	0.546 \pm 0.262
PRF-fit source offset from KIC position	0.699 \pm 0.249	2.81	-0.578 \pm 0.242	0.393 \pm 0.262
photometric centroid source offset	2.11 \pm 2.60	0.81	-0.88 \pm 1.98	-1.91 \pm 2.72

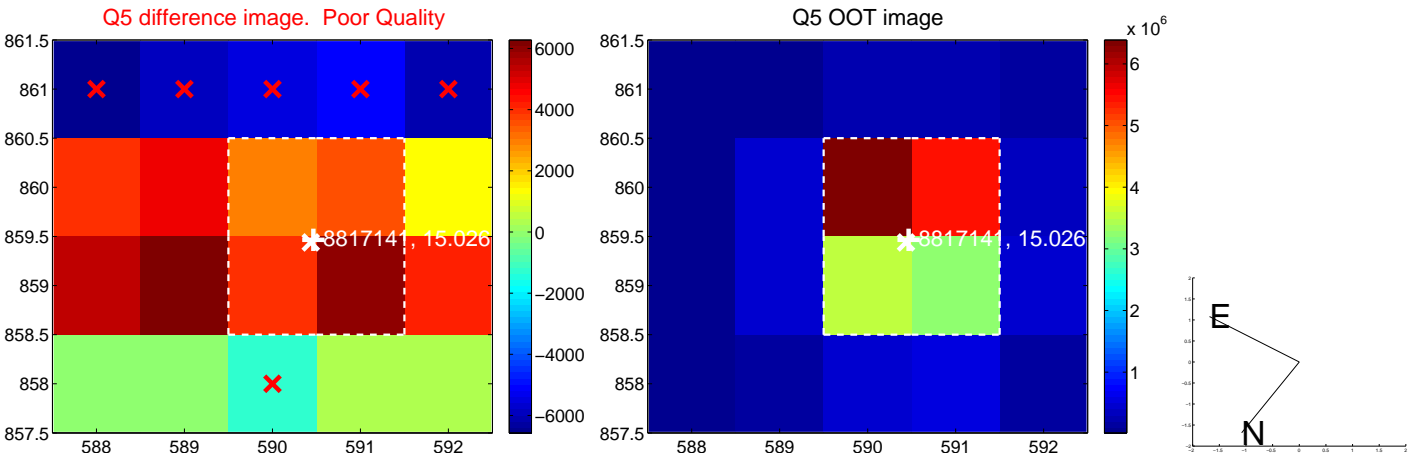


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

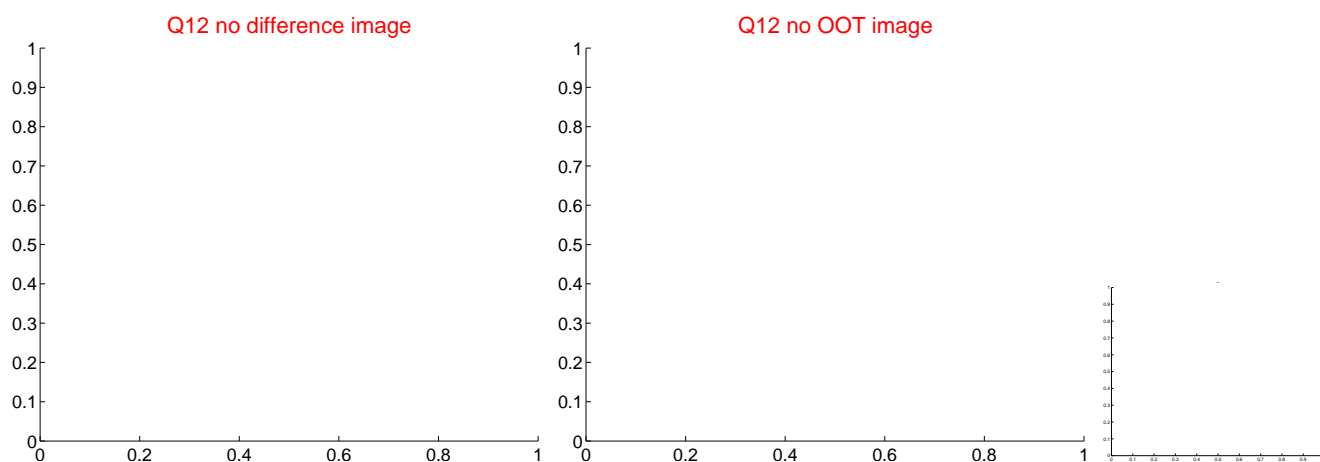
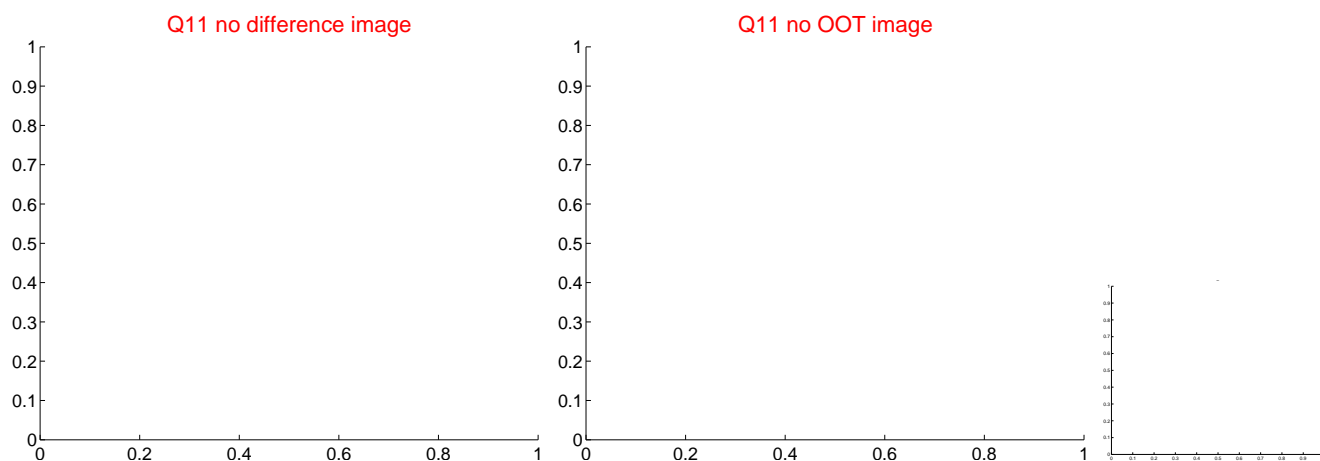
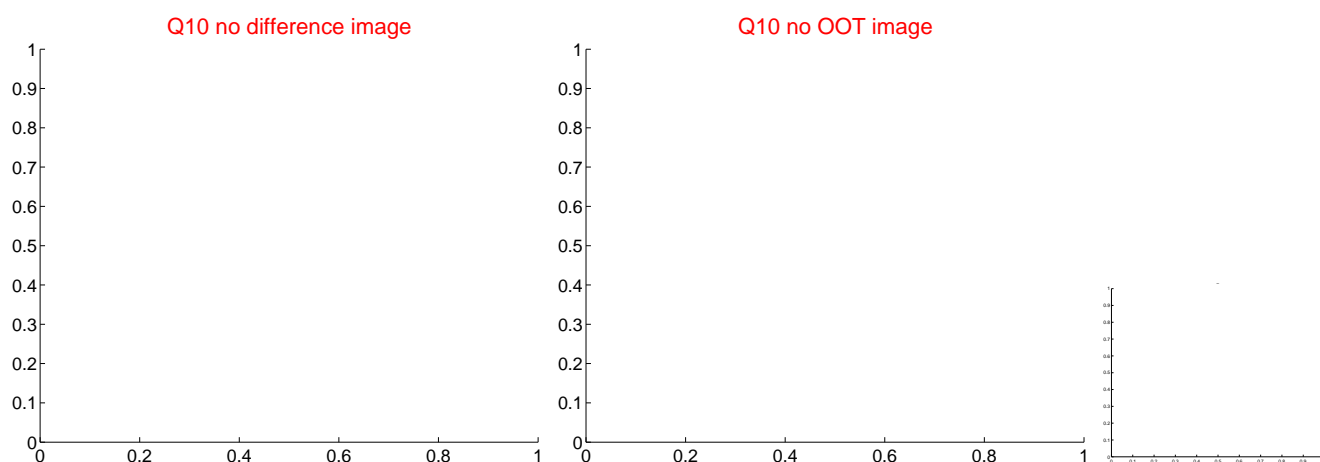
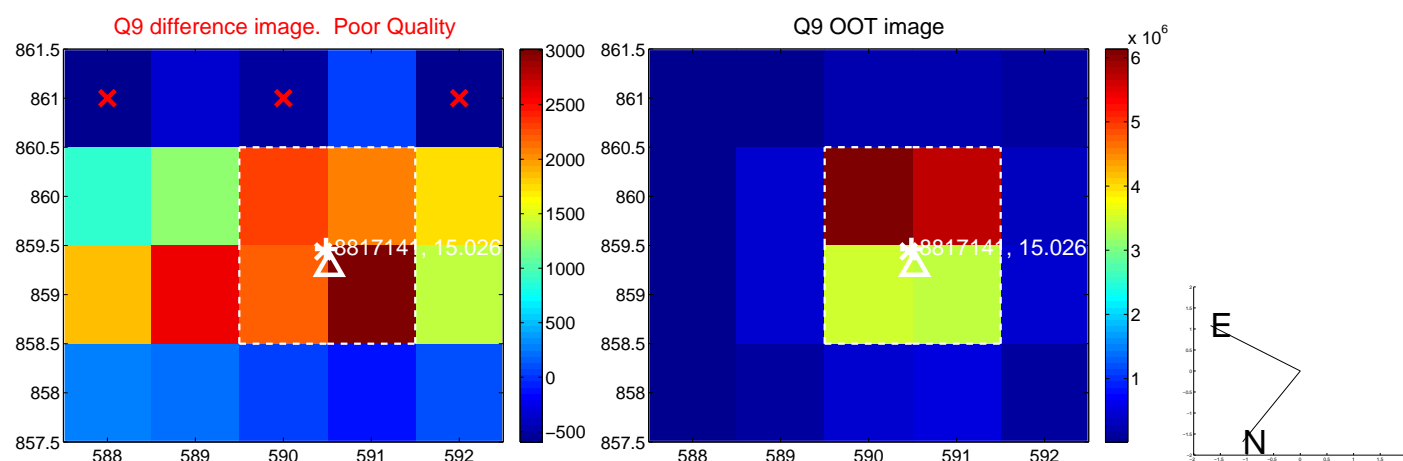
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.



white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.



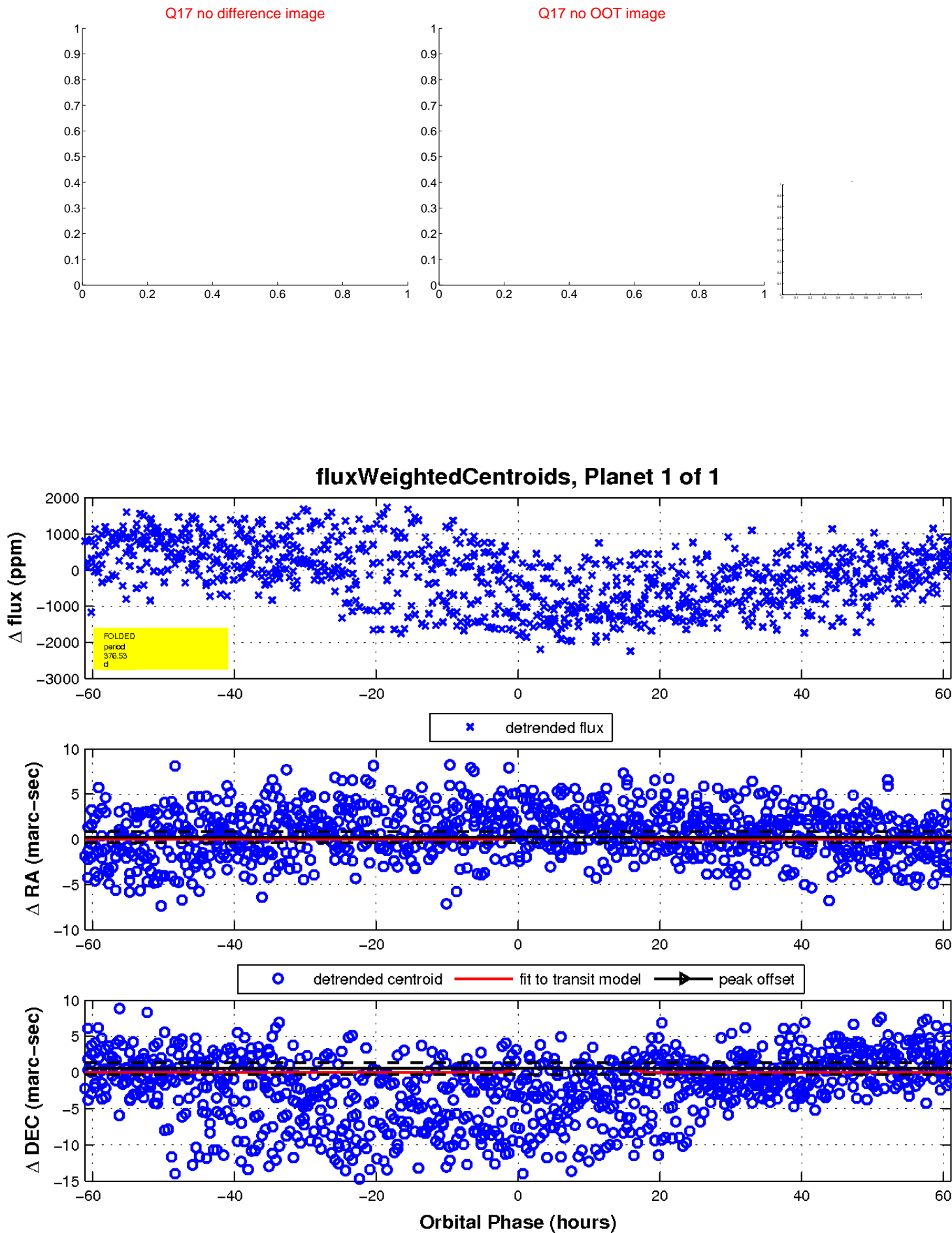
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



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

