

KIC 007819674

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})
007819674-01	OBS	No	408.451225	222.508259	282.1	17.849	7.5	8.6	1.03	5550	1.87	0.86

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007819674-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_SKYE—ALL_TRANS_CHASES—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.

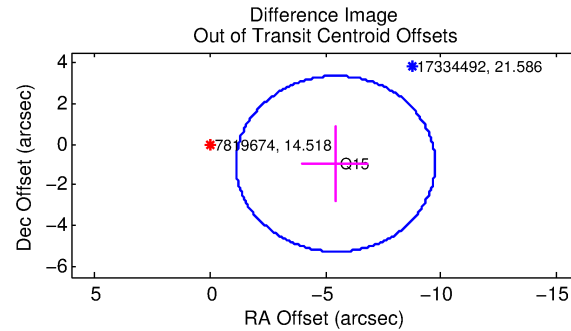
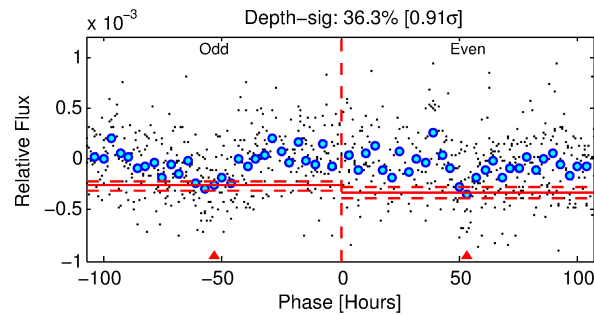
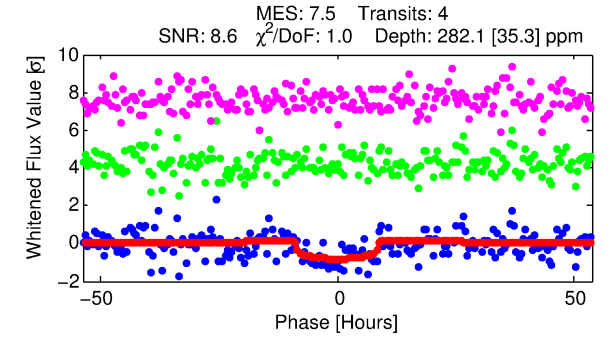
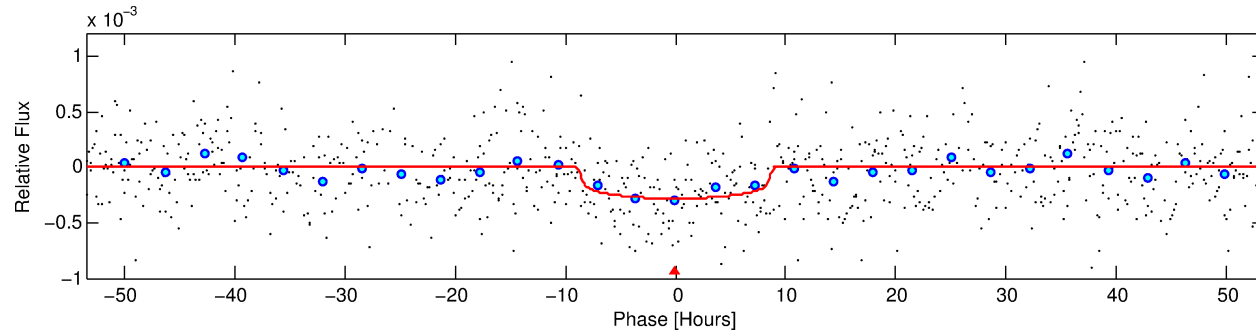
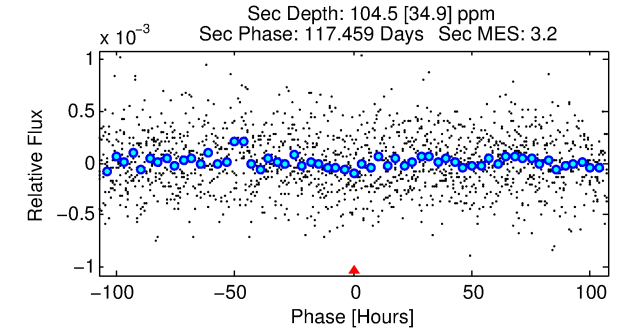
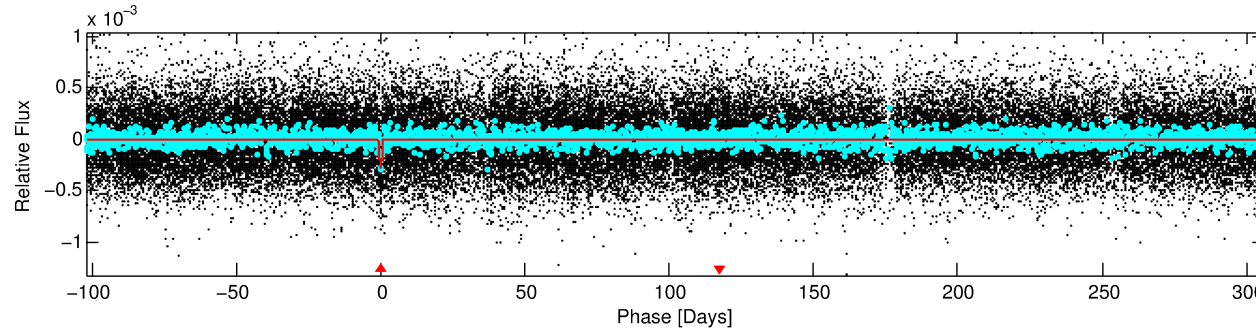
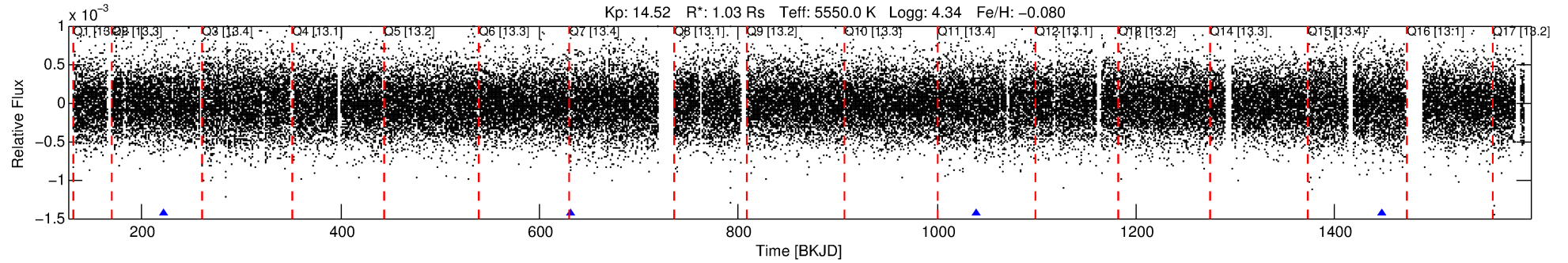
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007819674-01

No Significant Match Found

DV One-Page Summary

KIC: 7819674 Candidate: 1 of 1 Period: 408.451 d



DV Fit Results:

Period = 408.45122 [0.01463] d
Epoch = 222.5083 [0.0257] BKJD
Rp/R* = 0.0166 [0.0067]
a/R* = 122.65 [207.97]
b = 0.74 [1.07]
Seff = 0.86 [0.34]
Teff = 246 [24] K
Rp = 1.87 [0.93] Re
a = 1.0224 [0.2579] AU
Ag = 17166.46 [16361.50] [1.05σ]
Teffp = 4351 [962] K [4.27σ]

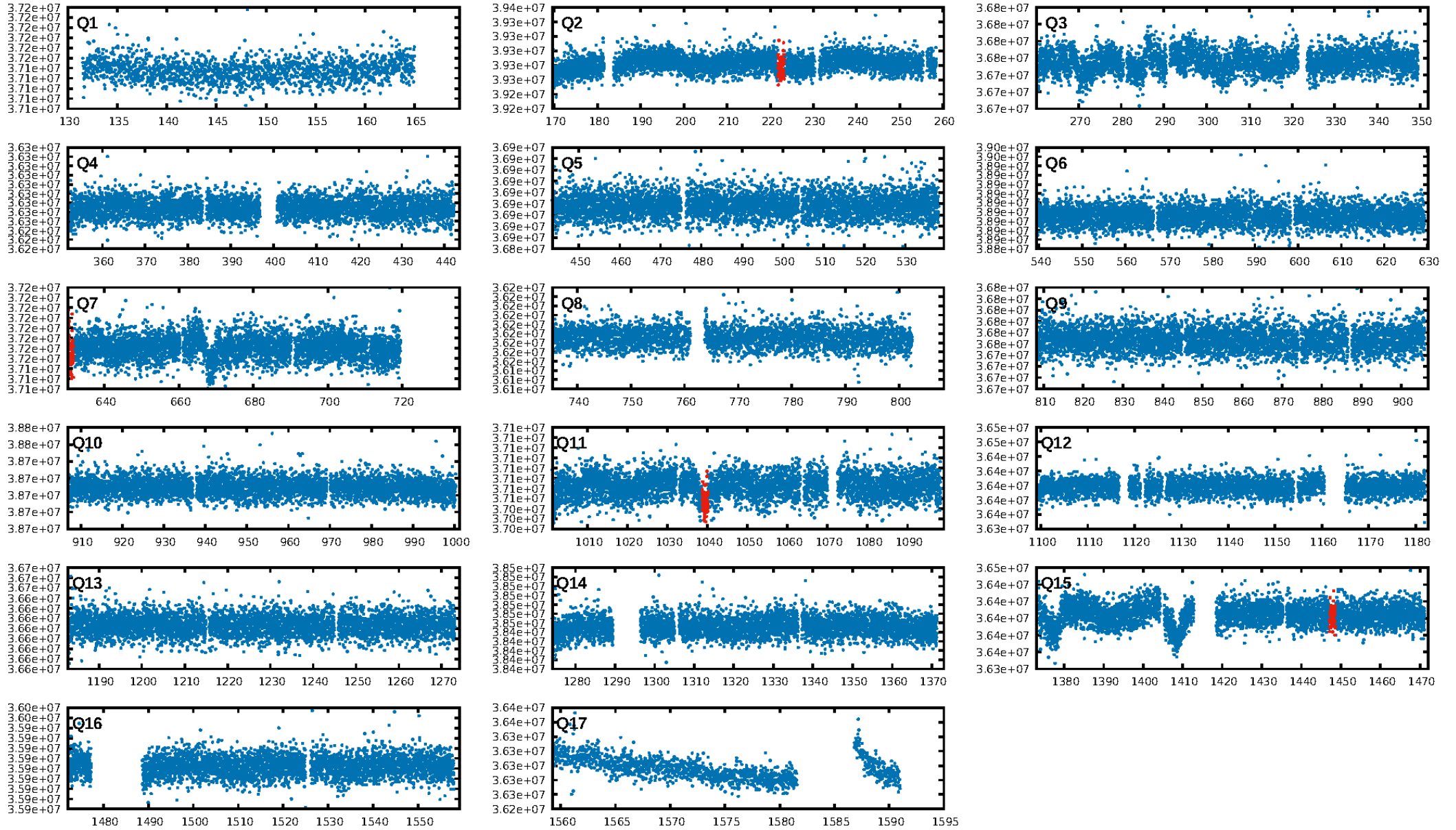
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 1.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 4.66e-12
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: 0.5032
Centroid-sig: 29.3%
Centroid-so: 1.521 arcsec [0.88σ]
OotOffset-rm: 5.523 arcsec [3.85σ]
KicOffset-rm: 5.508 arcsec [3.85σ]
OotOffset-st: 0/1/0/0 [1]
KicOffset-st: 0/1/0/0 [1]
DiffImageQuality-fgm: 0.00 [0/1]
DiffImageOverlap-fno: 1.00 [1/1]

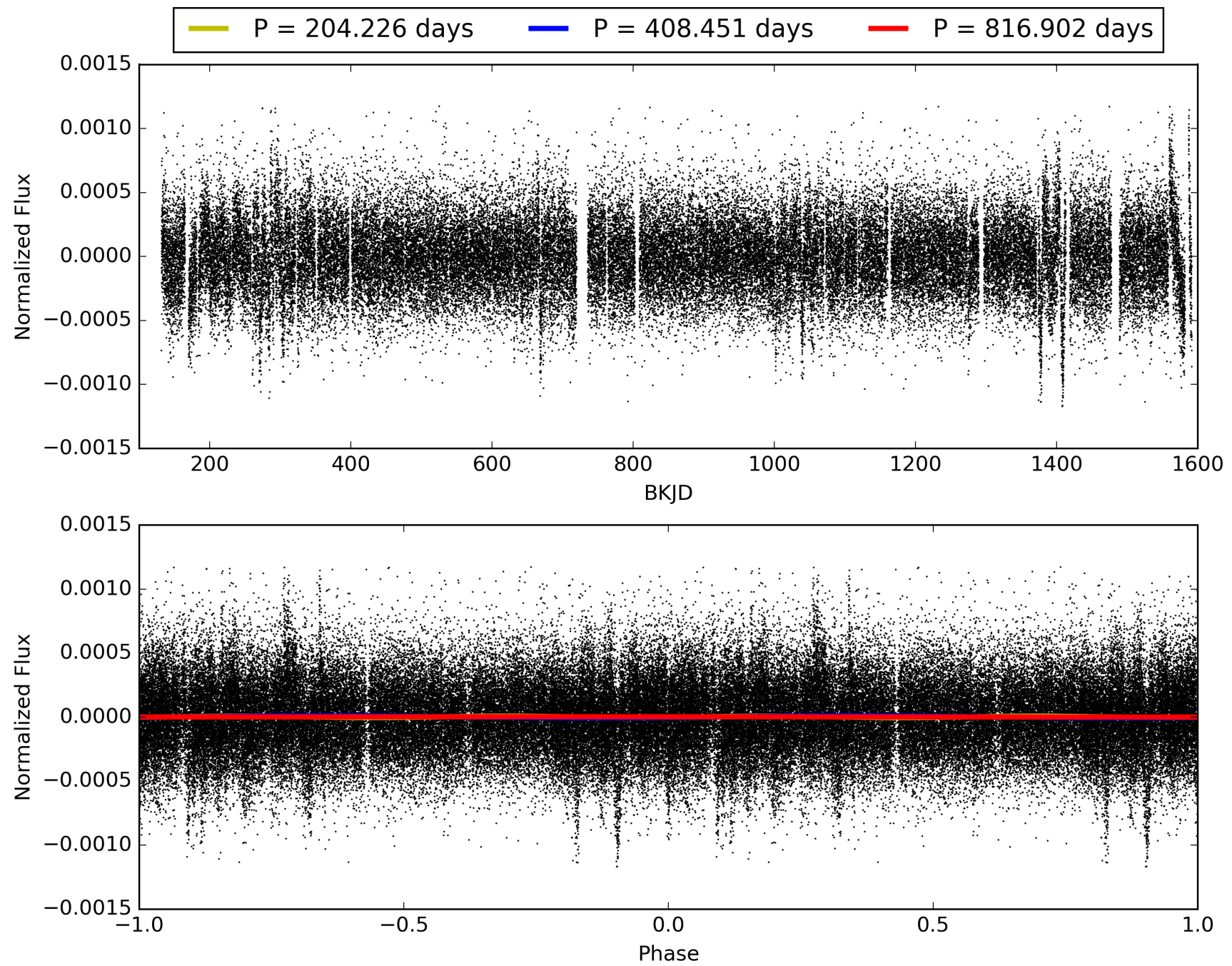
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 12:43:23 Z

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

TCE 007819674-01, PDC Light Curves

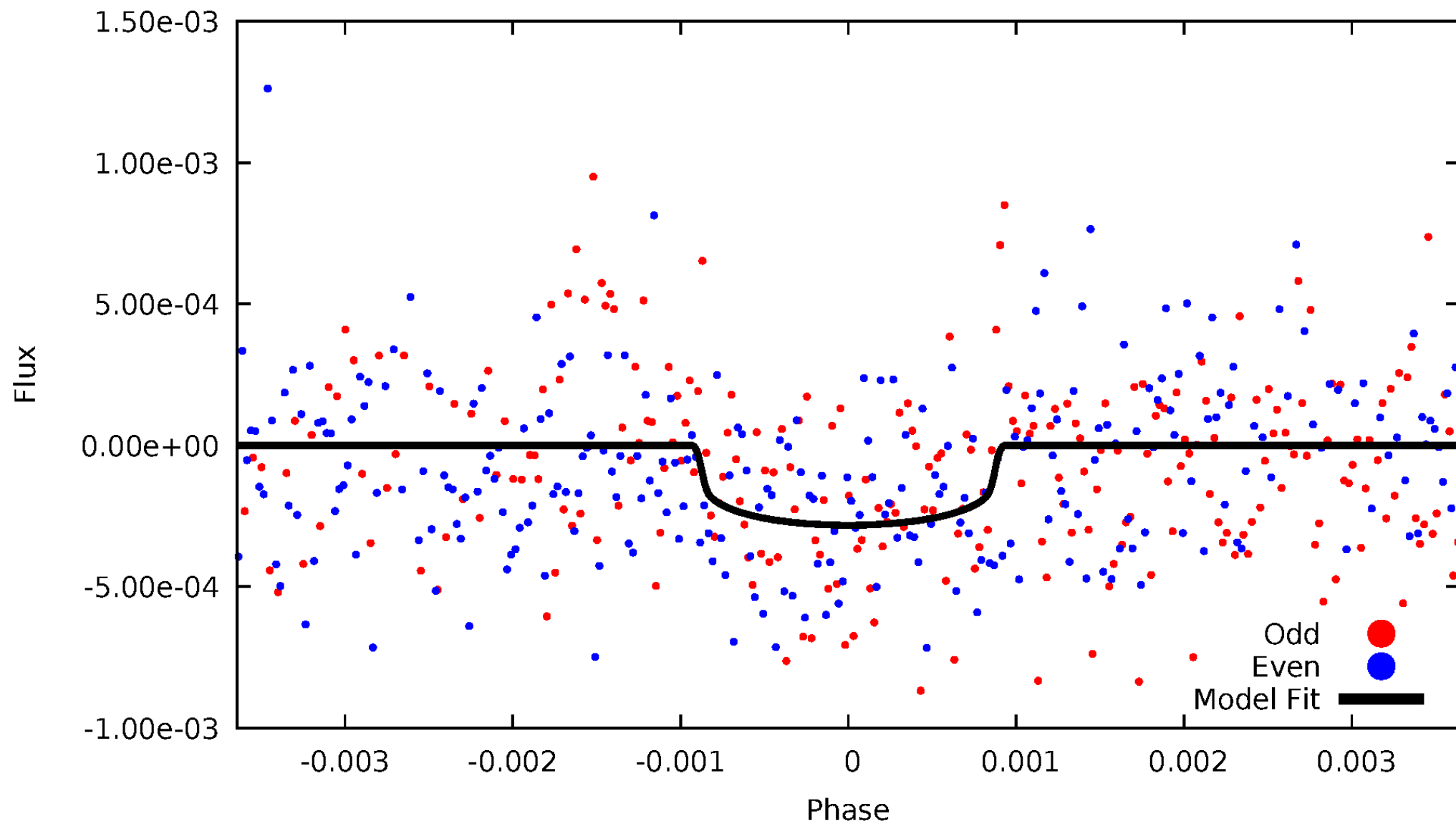


TCE 007819674-01



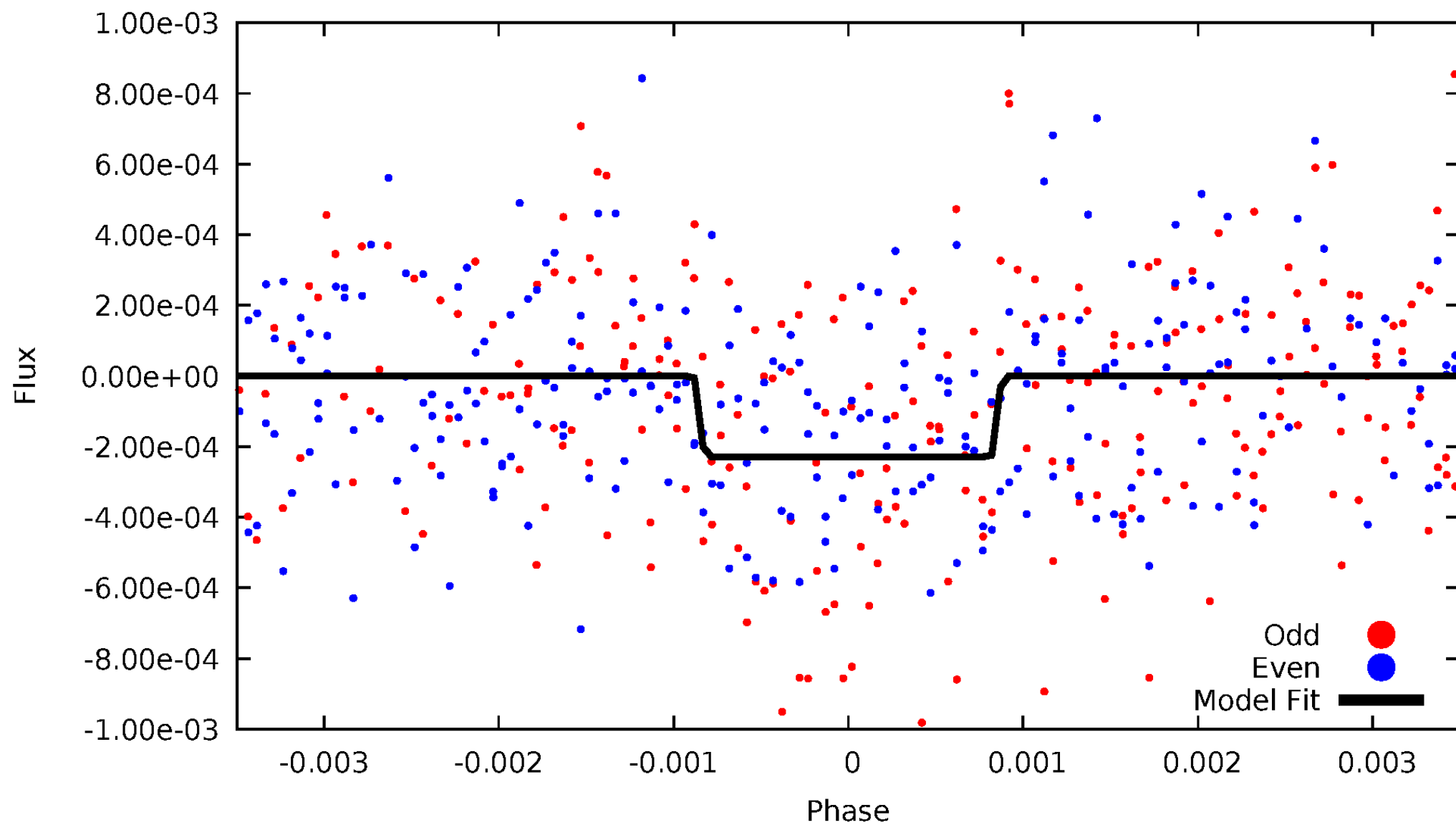
DV Odd/Even

TCE 007819674-01

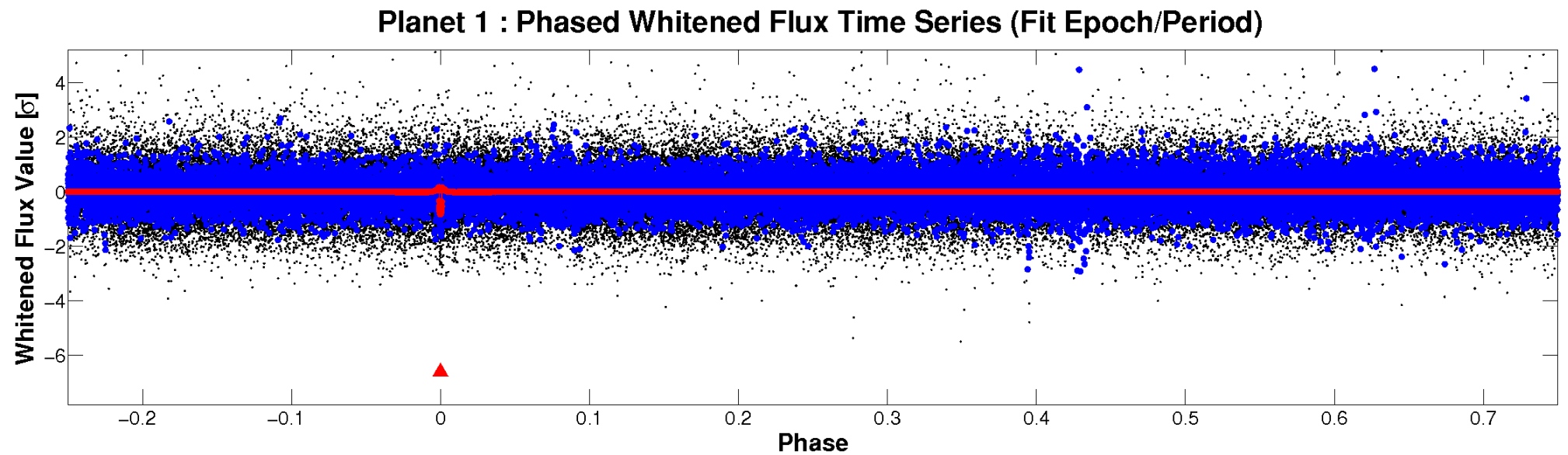
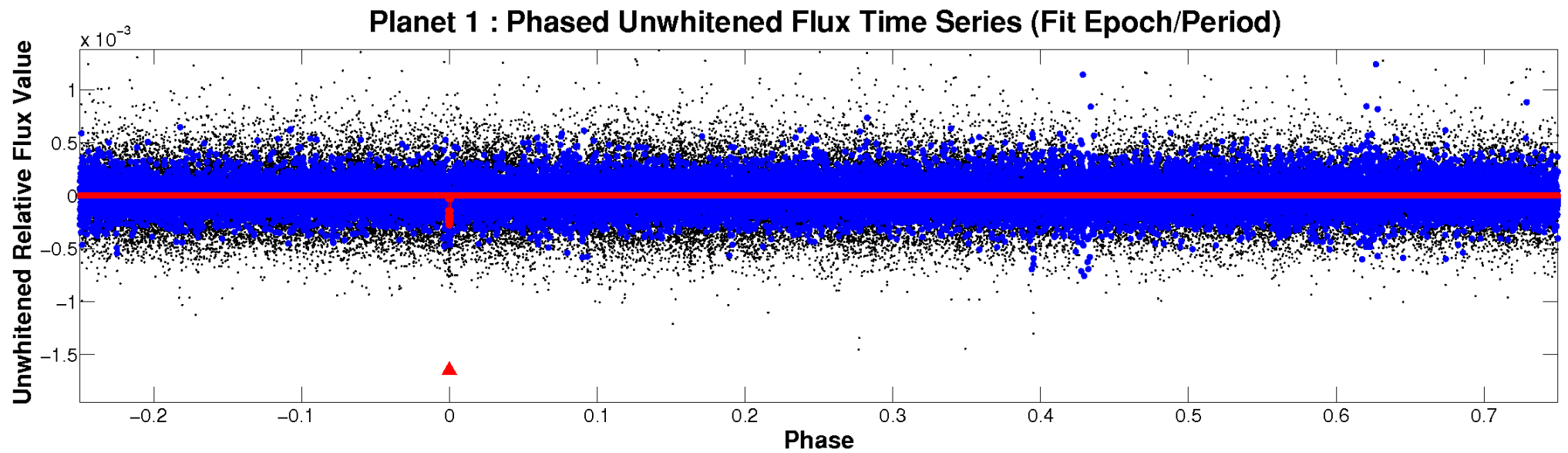


ALT Odd/Even

TCE 007819674-01

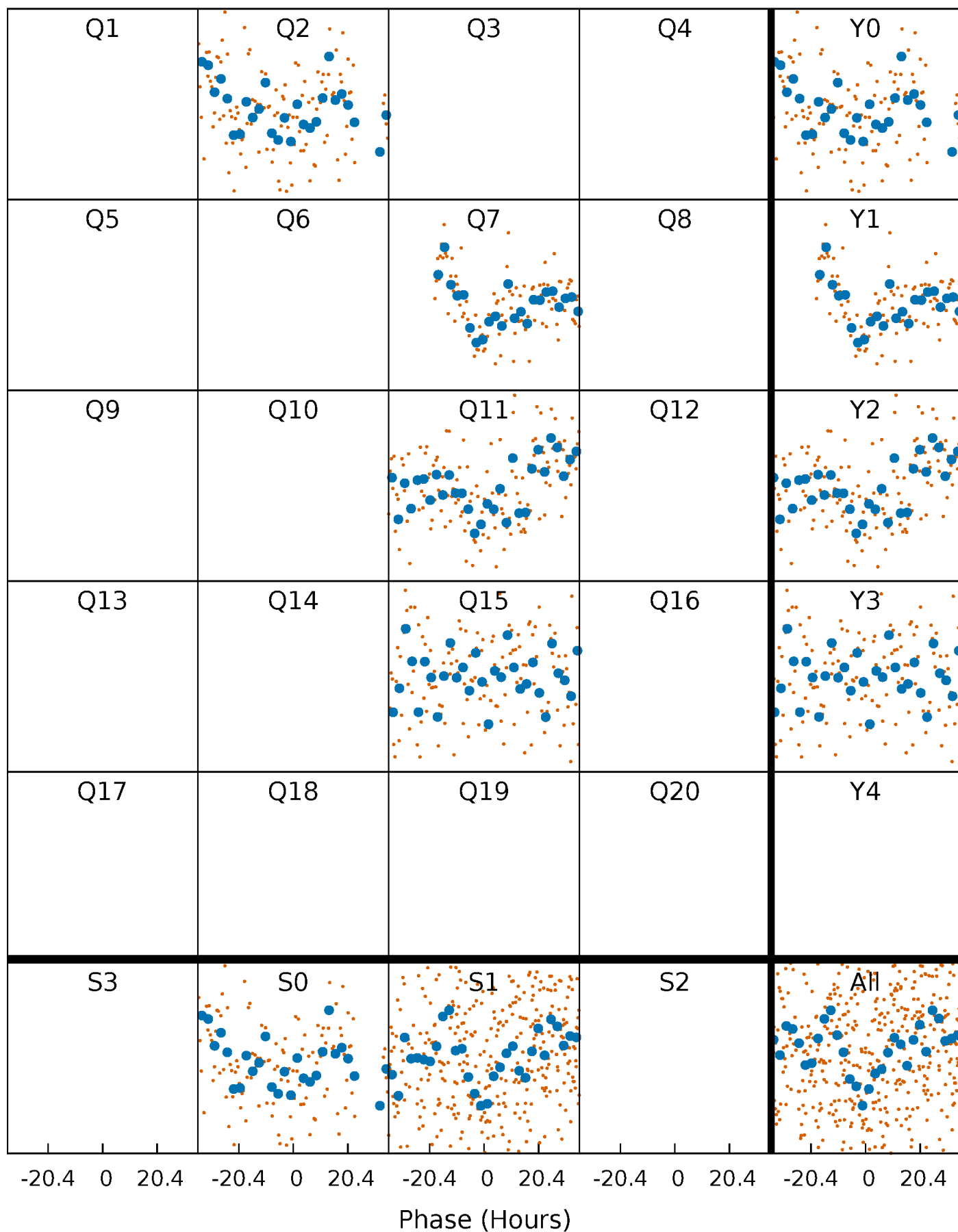


Non-Whitened Vs. Whitened Light Curve



PDC Quarter-Phased Transit Curves

TCE 007819674-01 P=408.451225 Days $T_0=222.508259$ (BKJD)



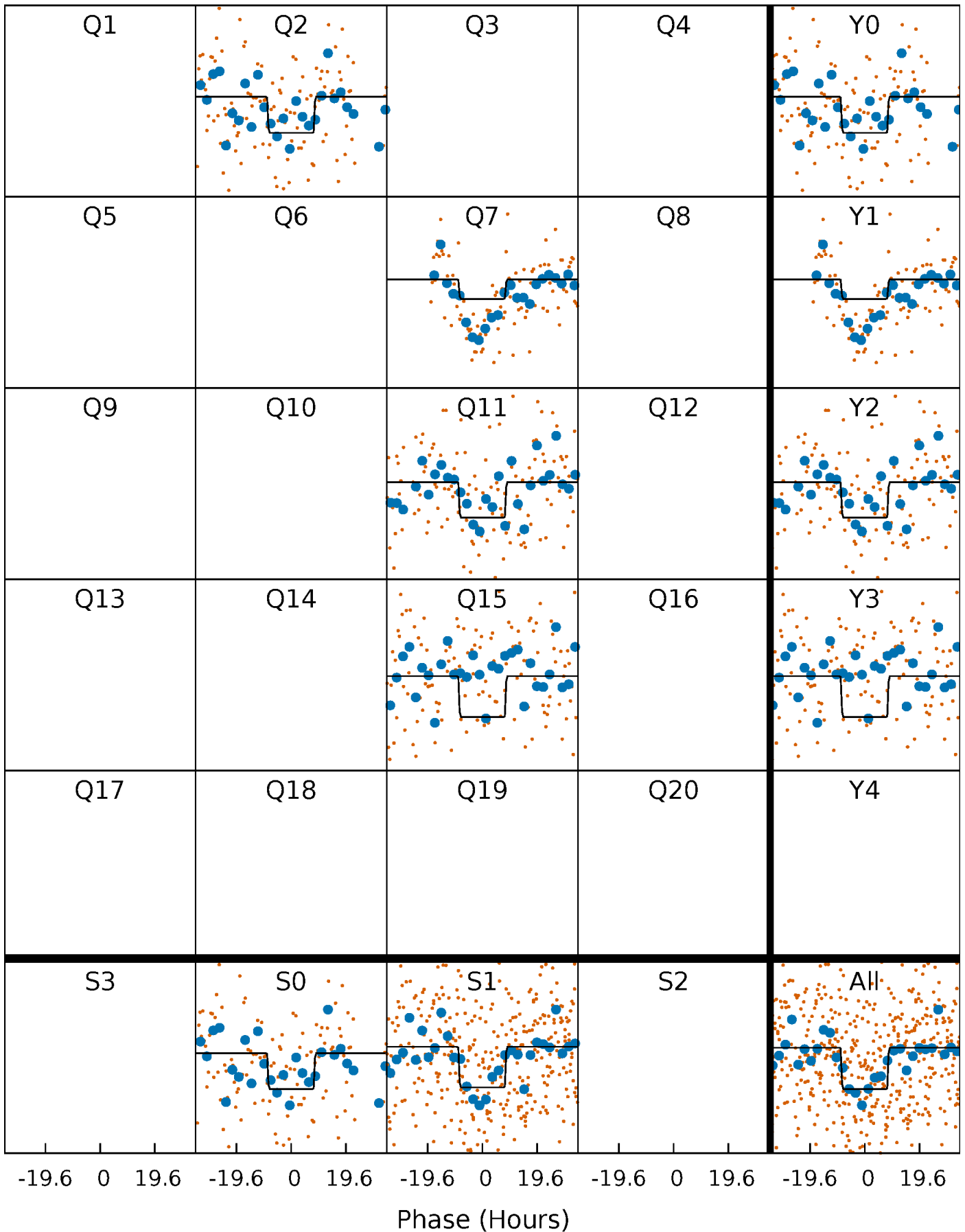
DV Quarter-Phased Transit Curves

TCE 007819674-01 P=408.451225 Days $T_0=222.508259$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

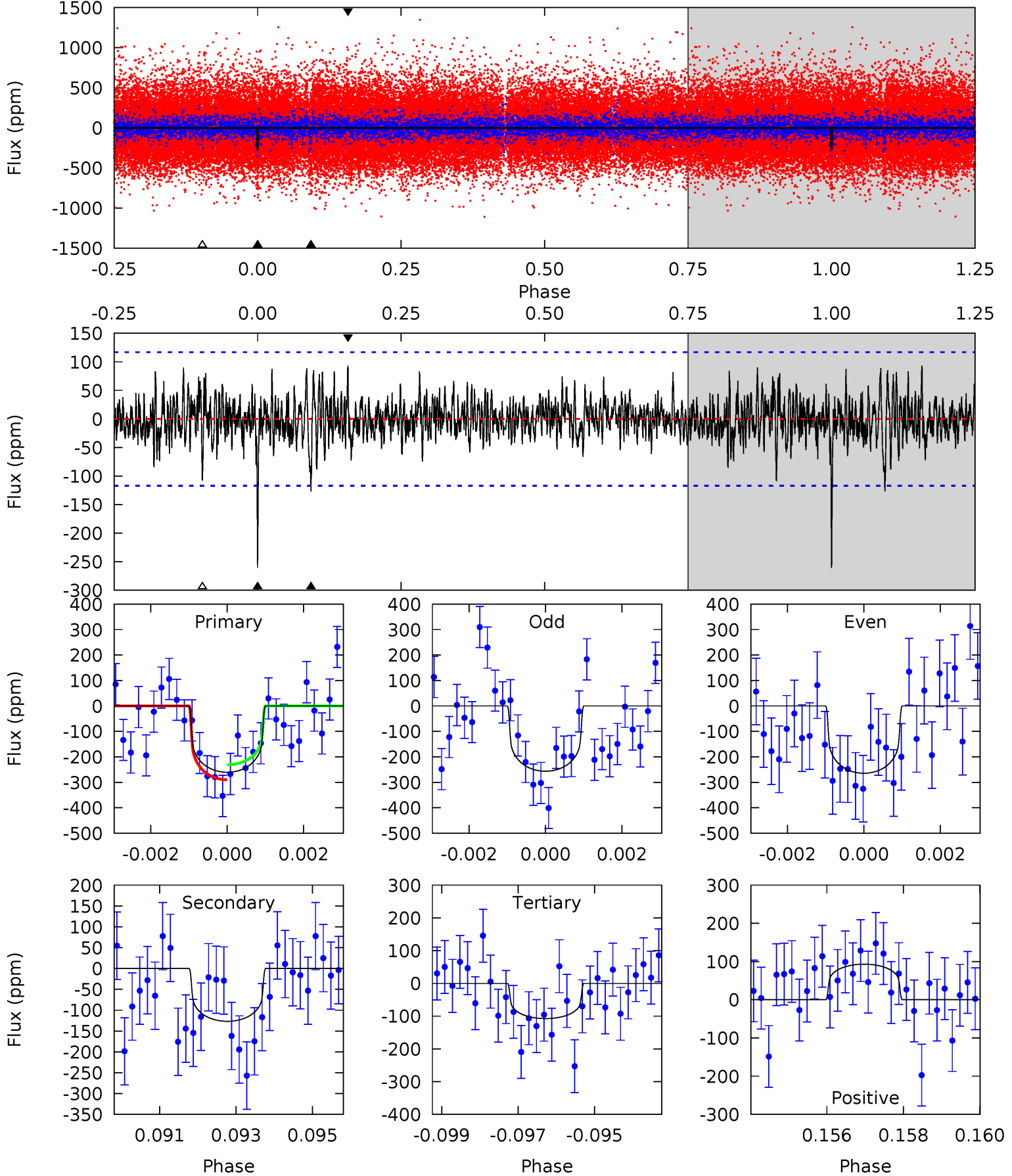
TCE 007819674-01 P=408.446431 Days $T_0=222.517127$ (BKJD)



DV Model-Shift Uniqueness Test

007819674-01, P = 408.451225 Days, E = 222.508259 Days

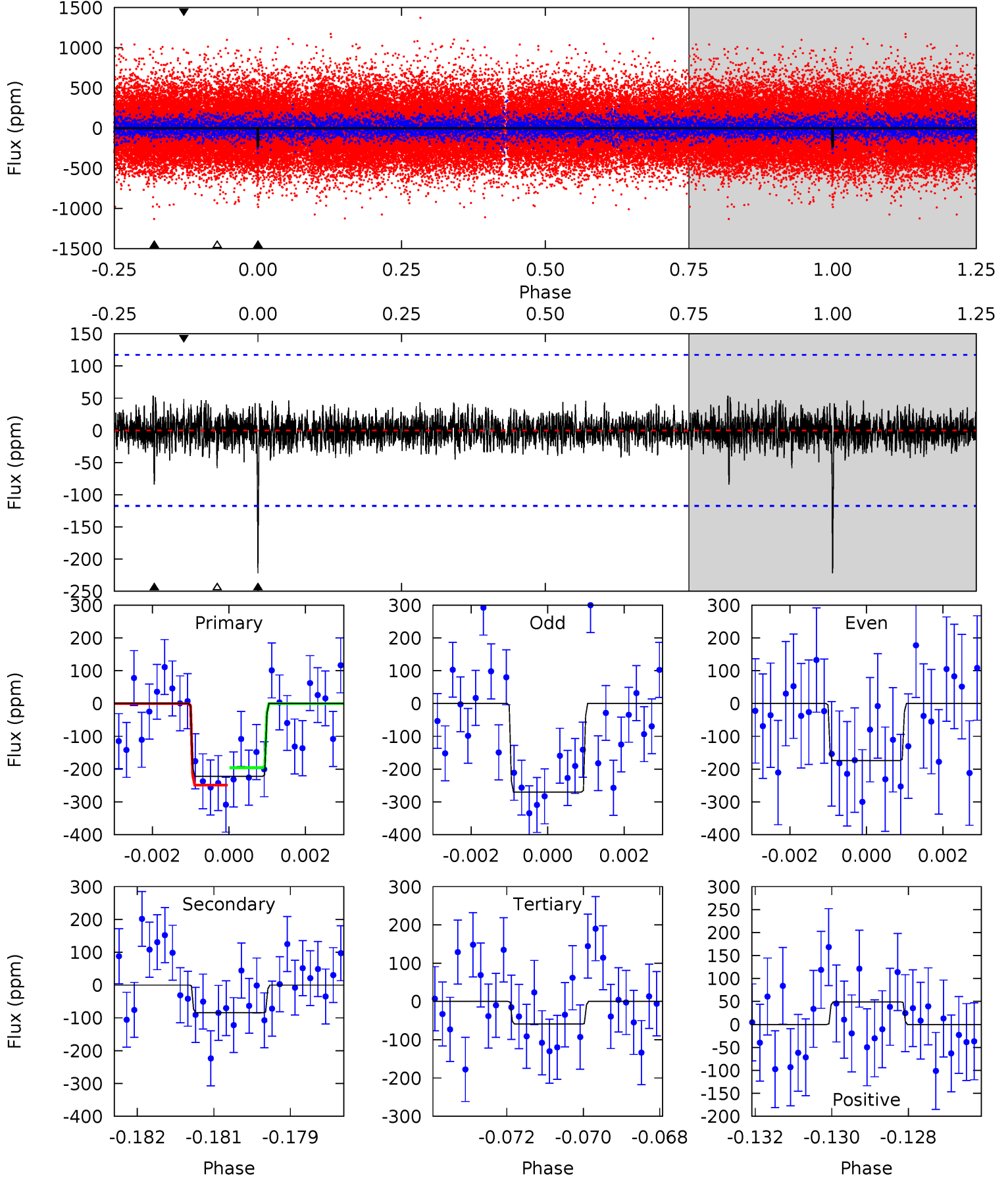
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.9	5.79	4.91	4.25	5.34	3.11	1.25	6.99	7.64	0.88	1.54	0.18	0.99	0.26	1.35



Alt Model-Shift Uniqueness Test

007819674-01, P = 408.446431 Days, E = 222.517127 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.1	3.83	2.68	2.23	5.35	3.13	0.67	7.43	7.89	1.15	1.60	2.20	1.28	0.20	1.21



Stellar Parameters For KIC 007819674

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5550^{+166}_{-149}	$4.343^{+0.171}_{-0.209}$	$-0.080^{+0.300}_{-0.250}$	$1.031^{+0.301}_{-0.201}$	$0.855^{+0.120}_{-0.065}$	$1.100^{+1.043}_{-0.571}$
	+3%/-3%	+4%/-5%	+375%/-312%	+29%/-19%	+14%/-8%	+95%/-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 007819674-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-127 ± 22	$1.94^{+0.91}_{-0.83}$	346^{+27}_{-24}	4625^{+1275}_{-587}	19264^{+39430}_{-10620}
Alt.	-84 ± 22	$1.69^{+0.87}_{-0.75}$	346^{+25}_{-24}	4488^{+1346}_{-574}	16550^{+43144}_{-9261}

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

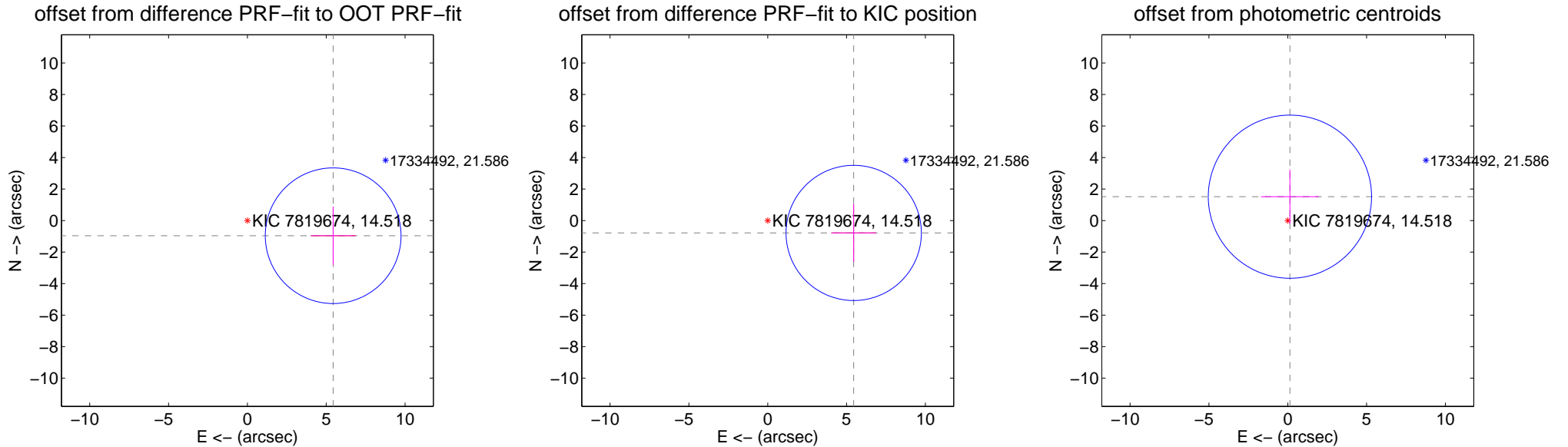
DV Centroid Data

Supplemental centroid analysis for 007819674-01. Kepler magnitude: 14.52. Transit SNR 8.63

There are 0 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.18 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	5.523 ± 1.435	3.85	-5.439 ± 1.420	-0.962 ± 1.835
PRF-fit source offset from KIC position	5.508 ± 1.430	3.85	-5.452 ± 1.420	-0.785 ± 1.835
photometric centroid source offset	1.52 ± 1.73	0.88	-0.14 ± 1.84	1.51 ± 1.72



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



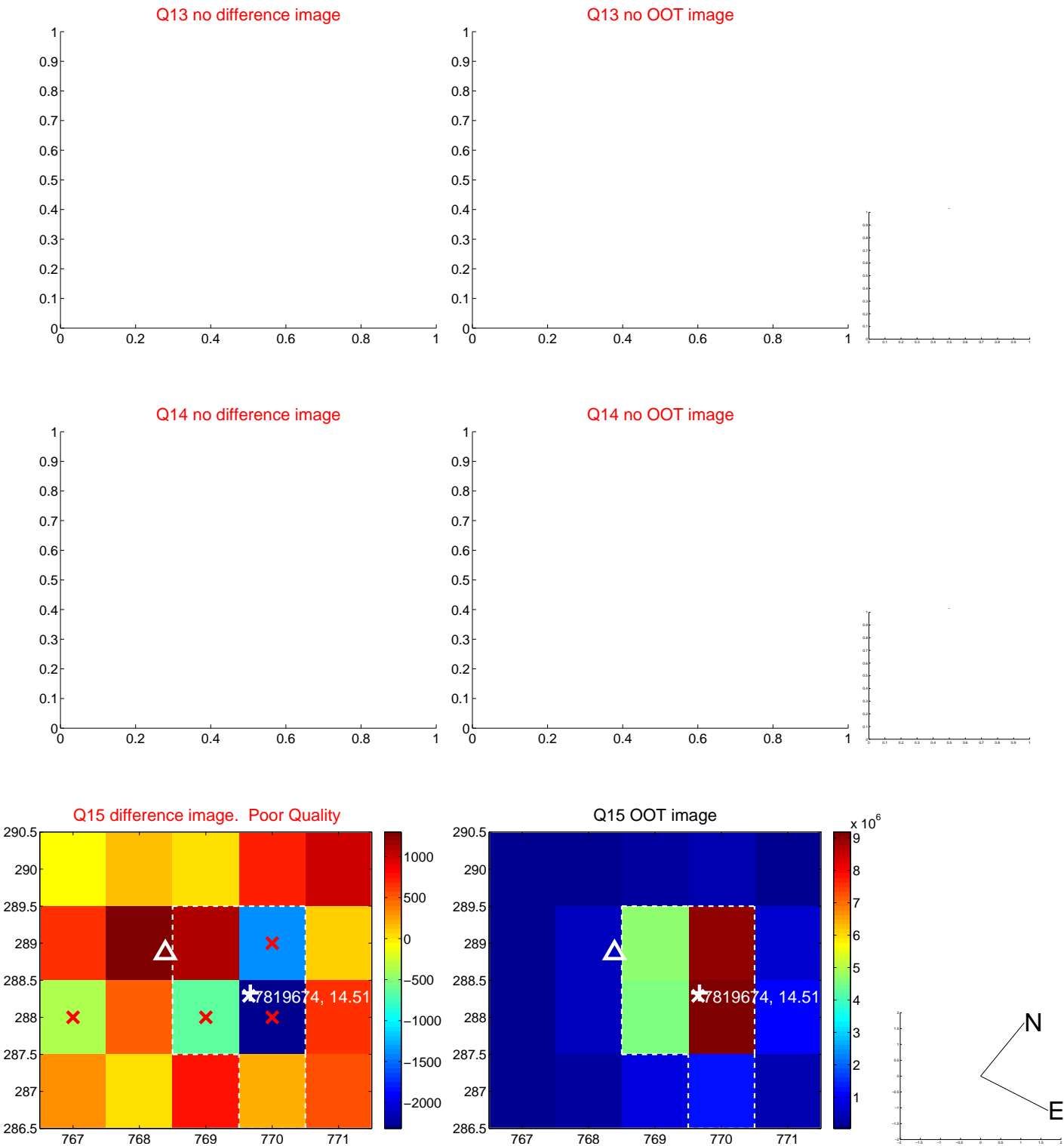
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



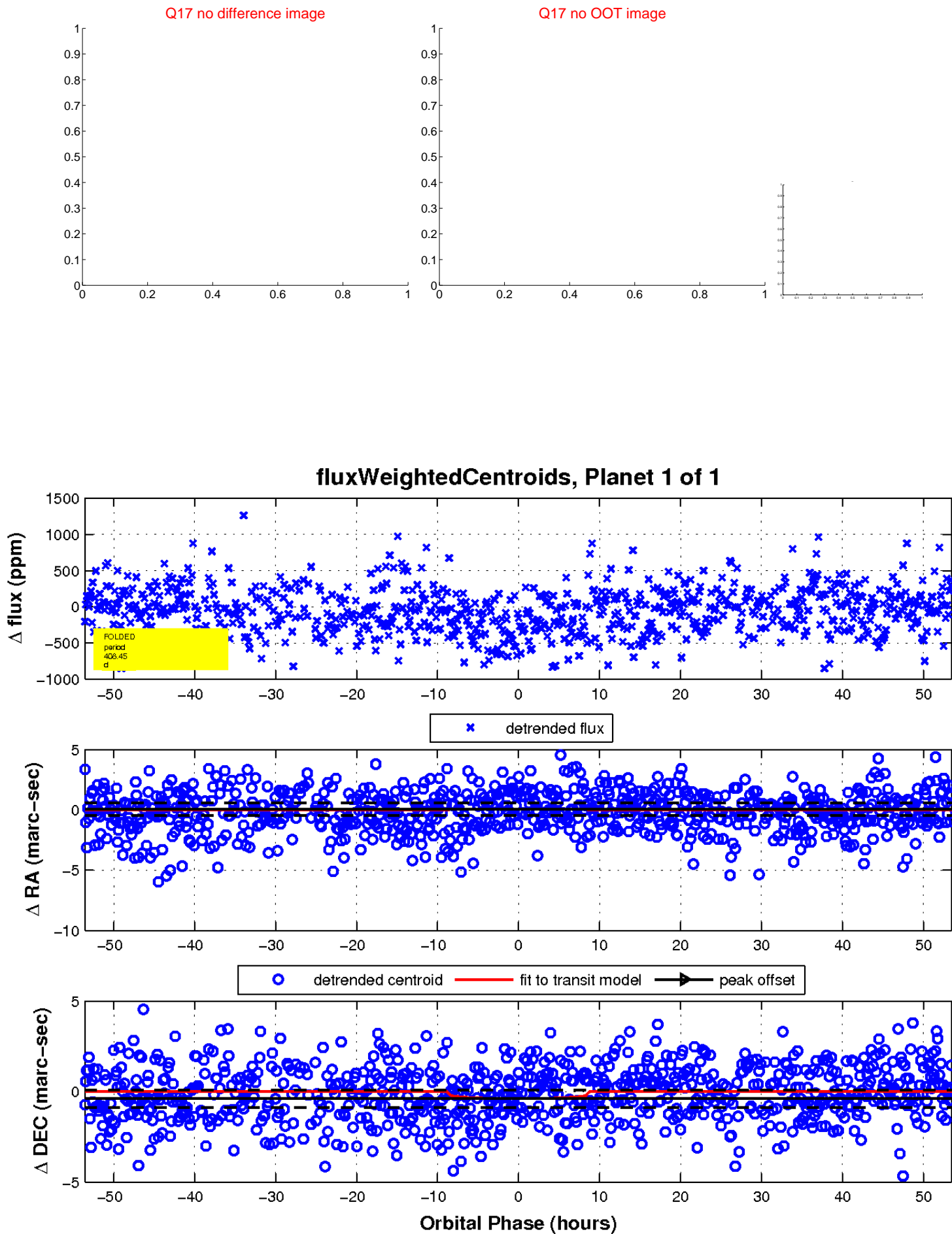
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



white ×: 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.



UKIRT Image

