

KIC 008808064

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})
008808064-01	OBS	8169.01	447.969204	559.642746	518.1	10.991	7.3	7.0	0.89	5911	2.17	0.67

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008808064-01	OBS	FP	0.15	1	0	0	0	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.

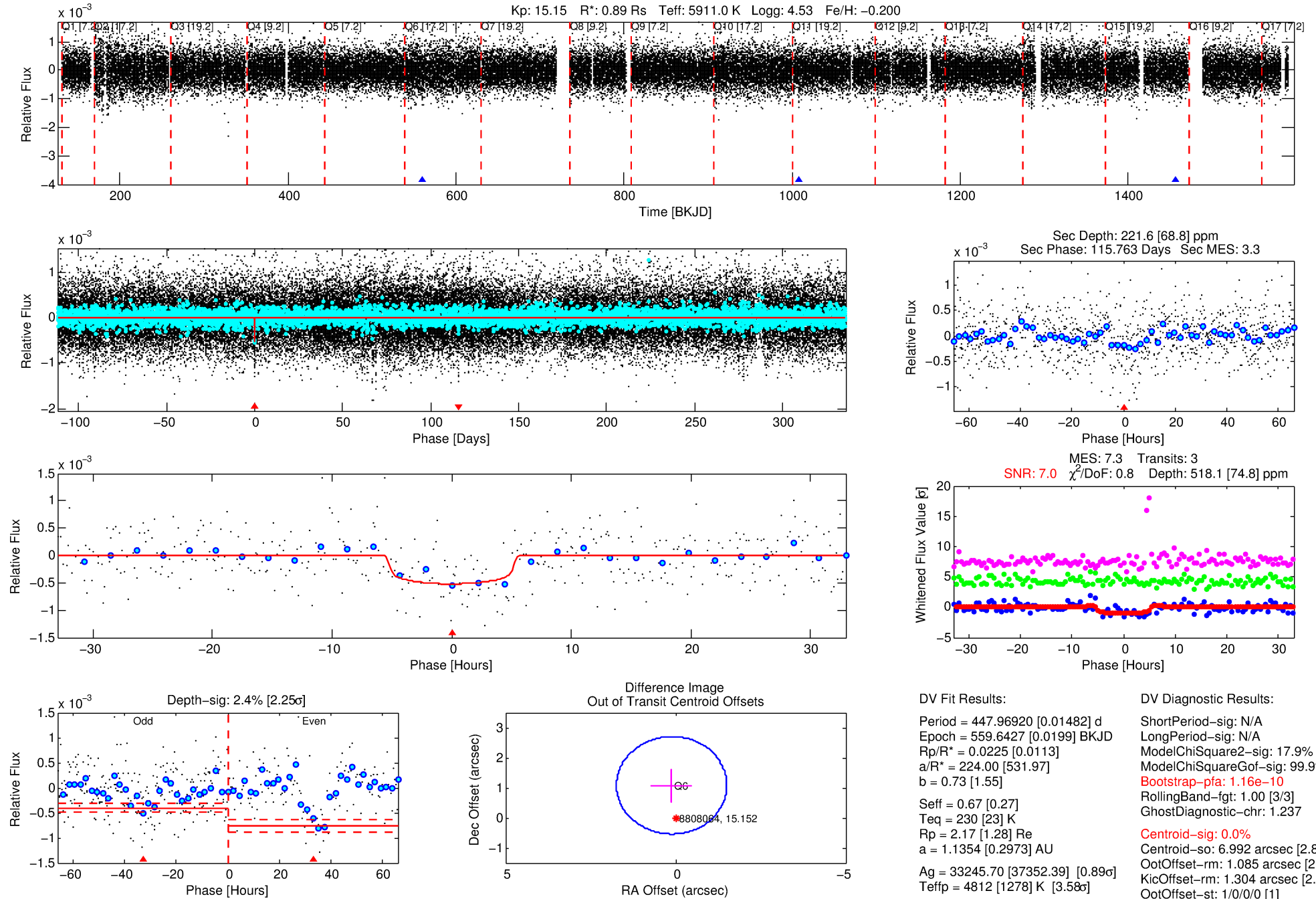
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008808064-01

No Significant Match Found

DV One-Page Summary

KIC: 8808064 Candidate: 1 of 1 Period: 447.969 d



DV Fit Results:

Period = 447.96920 [0.01482] d
Epoch = 559.6427 [0.0199] BKJD
Rp/R* = 0.0225 [0.0113]
a/R* = 224.00 [531.97]
b = 0.73 [1.55]
Seff = 0.67 [0.27]
Teq = 230 [23] K
Rp = 2.17 [1.28] Re
a = 1.1354 [0.2973] AU
Ag = 33245.70 [37352.39] [0.89 σ]
Teffp = 4812 [1278] K [3.58 σ]

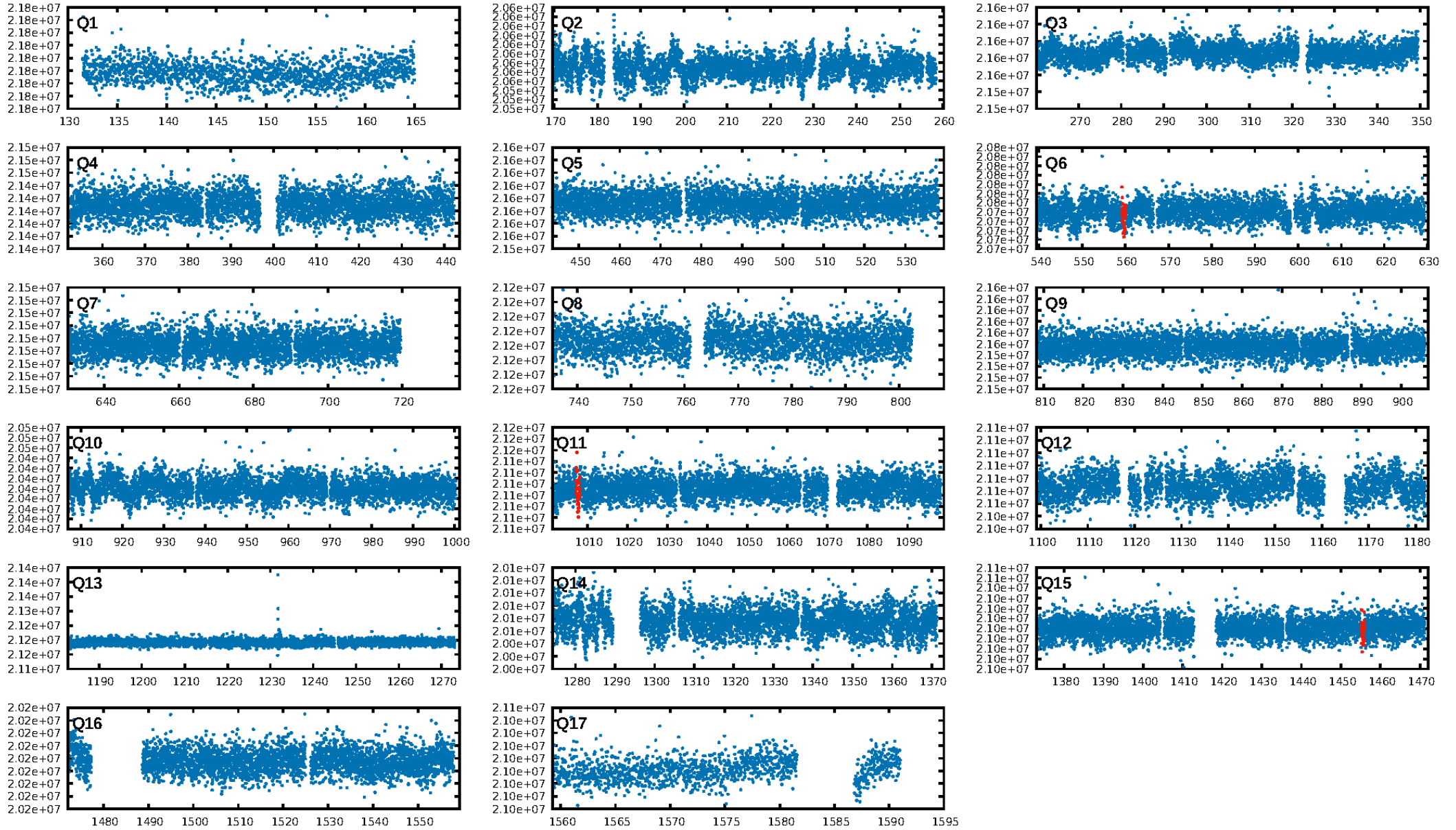
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 17.9%
ModelChiSquareGof-sig: 99.9%
Bootstrap-pfa: 1.16e-10
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 1.237
Centroid-sig: 0.0%
Centroid-so: 6.992 arcsec [2.88 σ]
OotOffset-rm: 1.085 arcsec [2.01 σ]
KicOffset-rm: 1.304 arcsec [2.41 σ]
OotOffset-st: 1/0/0/0 [1]
KicOffset-st: 1/0/0/0 [1]
DiffImageQuality-fgm: 0.00 [0/1]
DiffImageOverlap-fno: 1.00 [2/2]

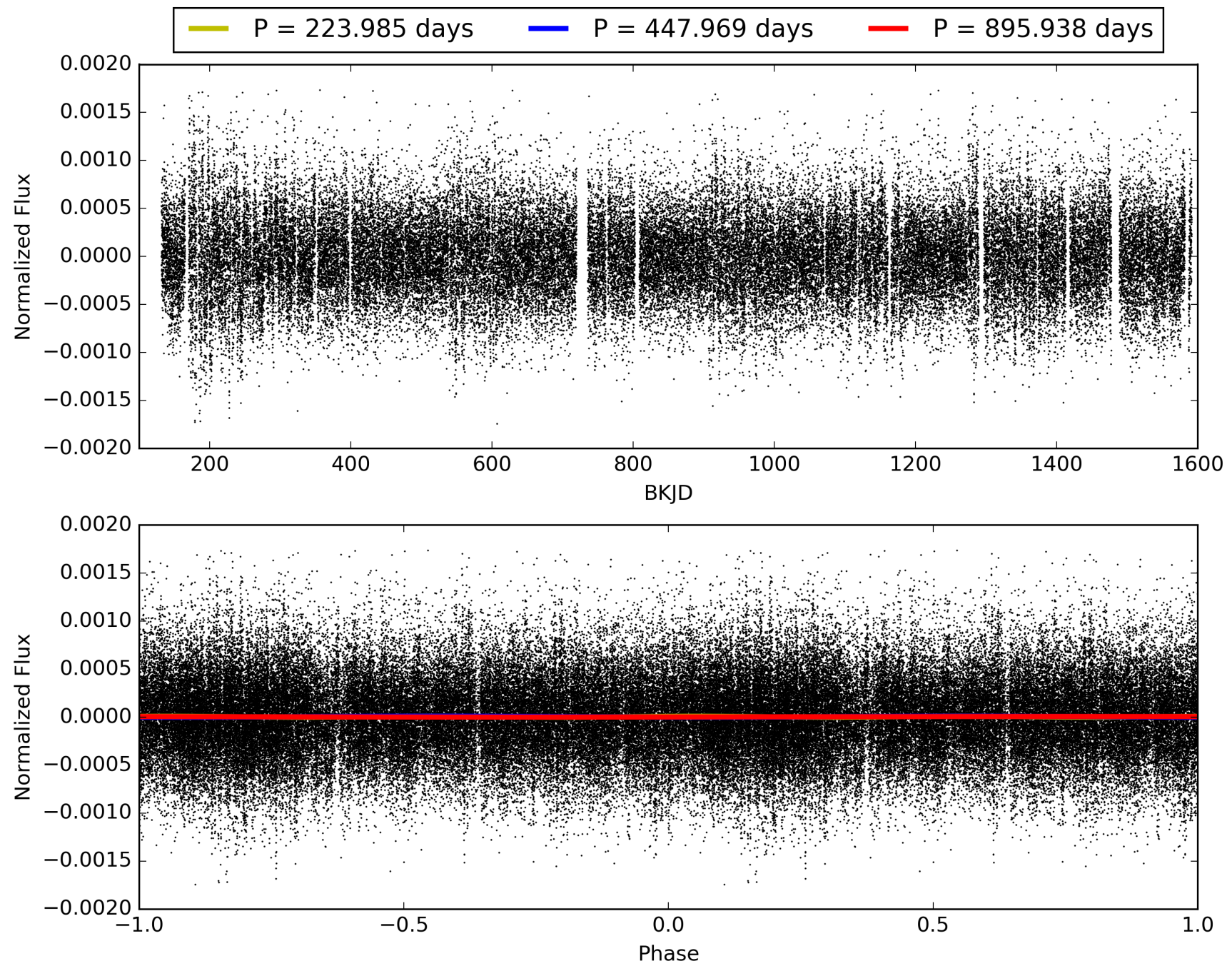
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 21:15:09 Z

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

TCE 008808064-01, PDC Light Curves

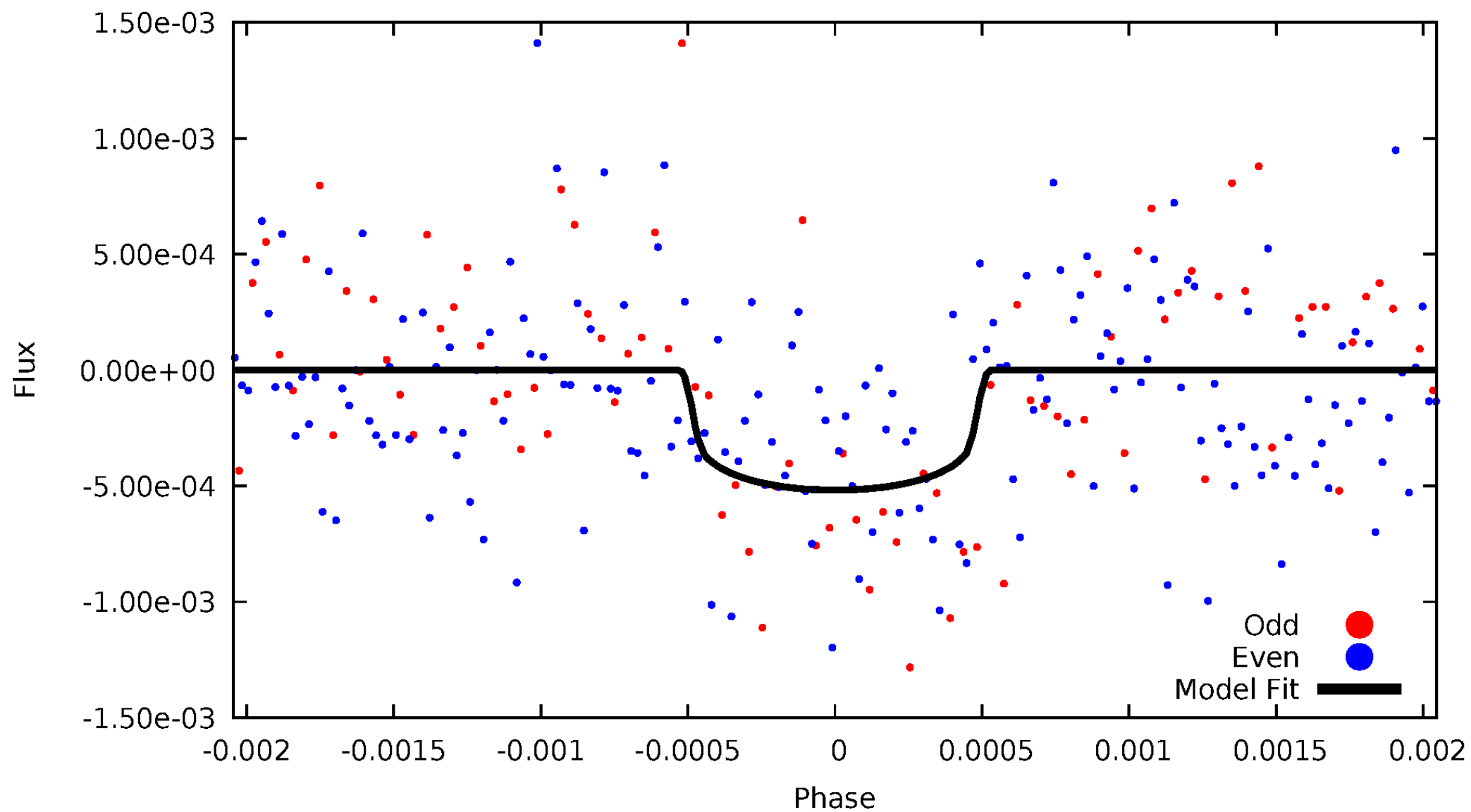


TCE 008808064-01



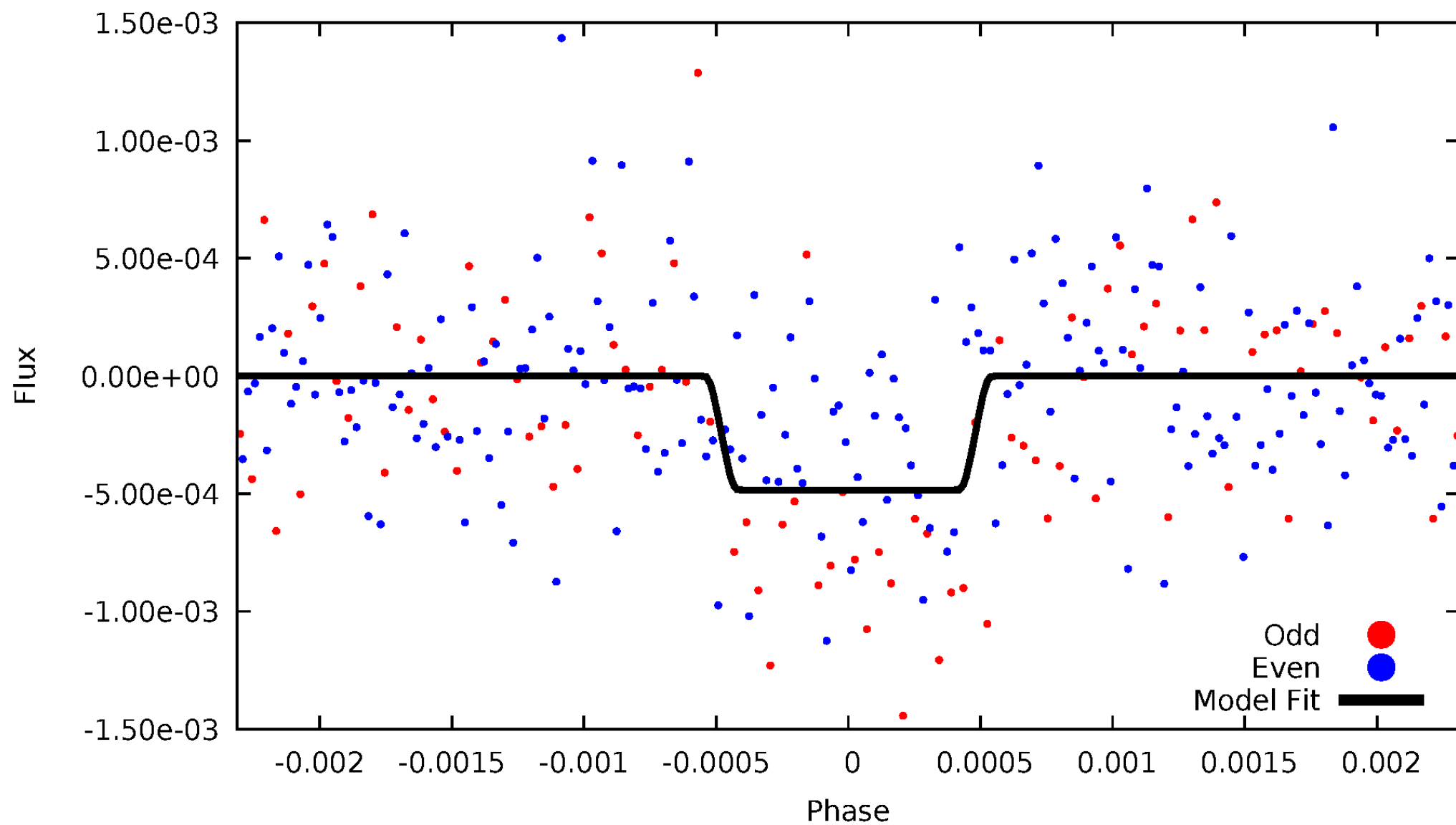
DV Odd/Even

TCE 008808064-01

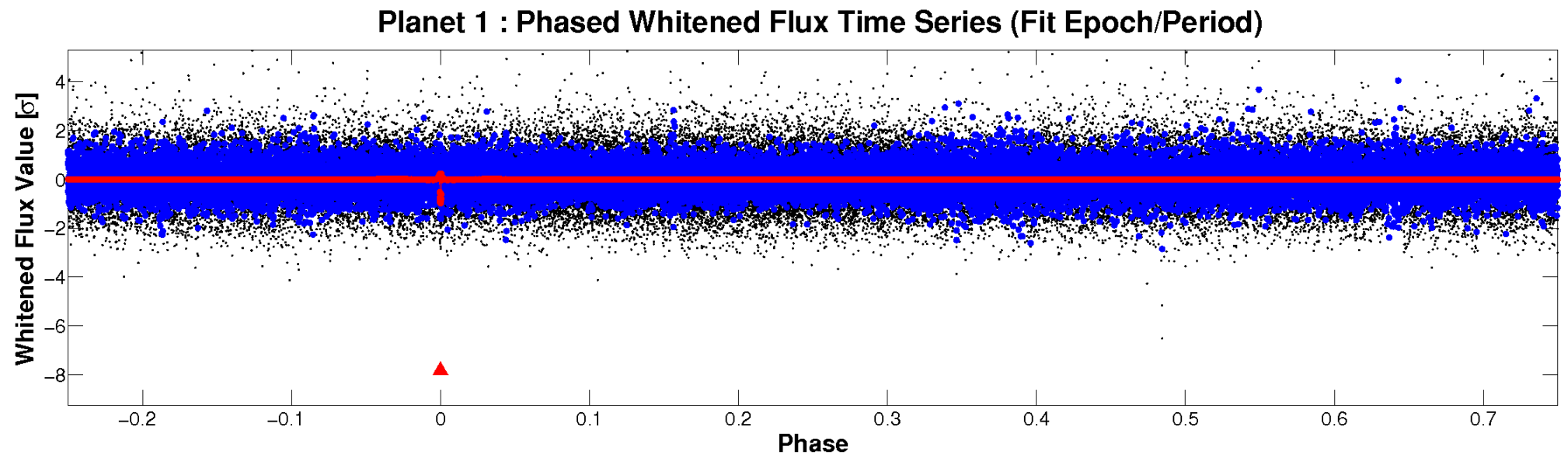
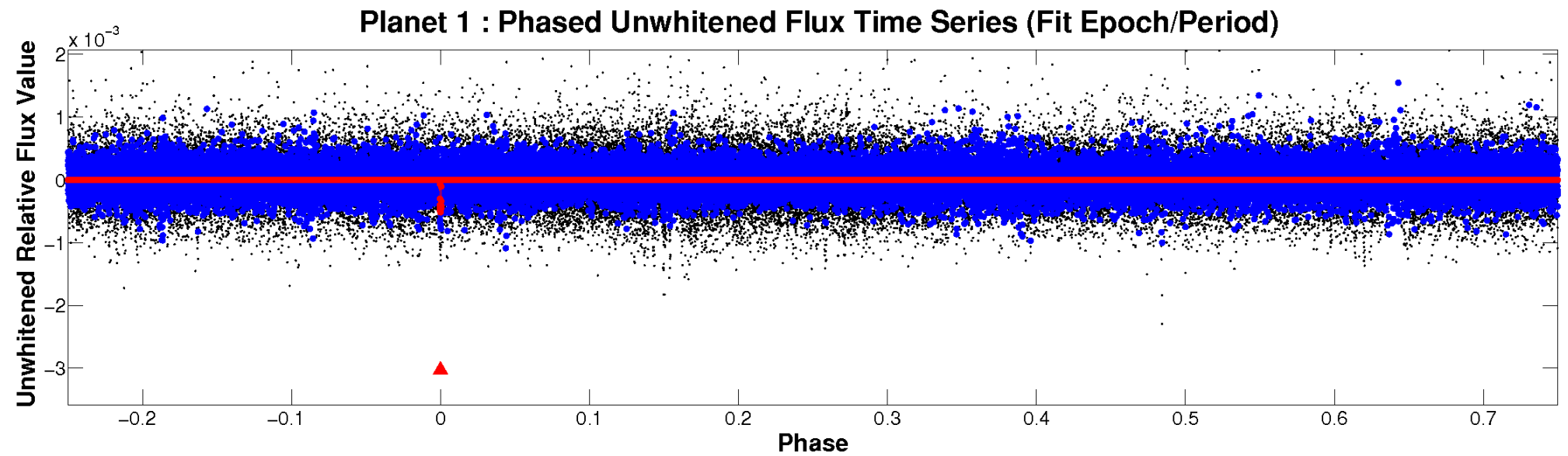


ALT Odd/Even

TCE 008808064-01

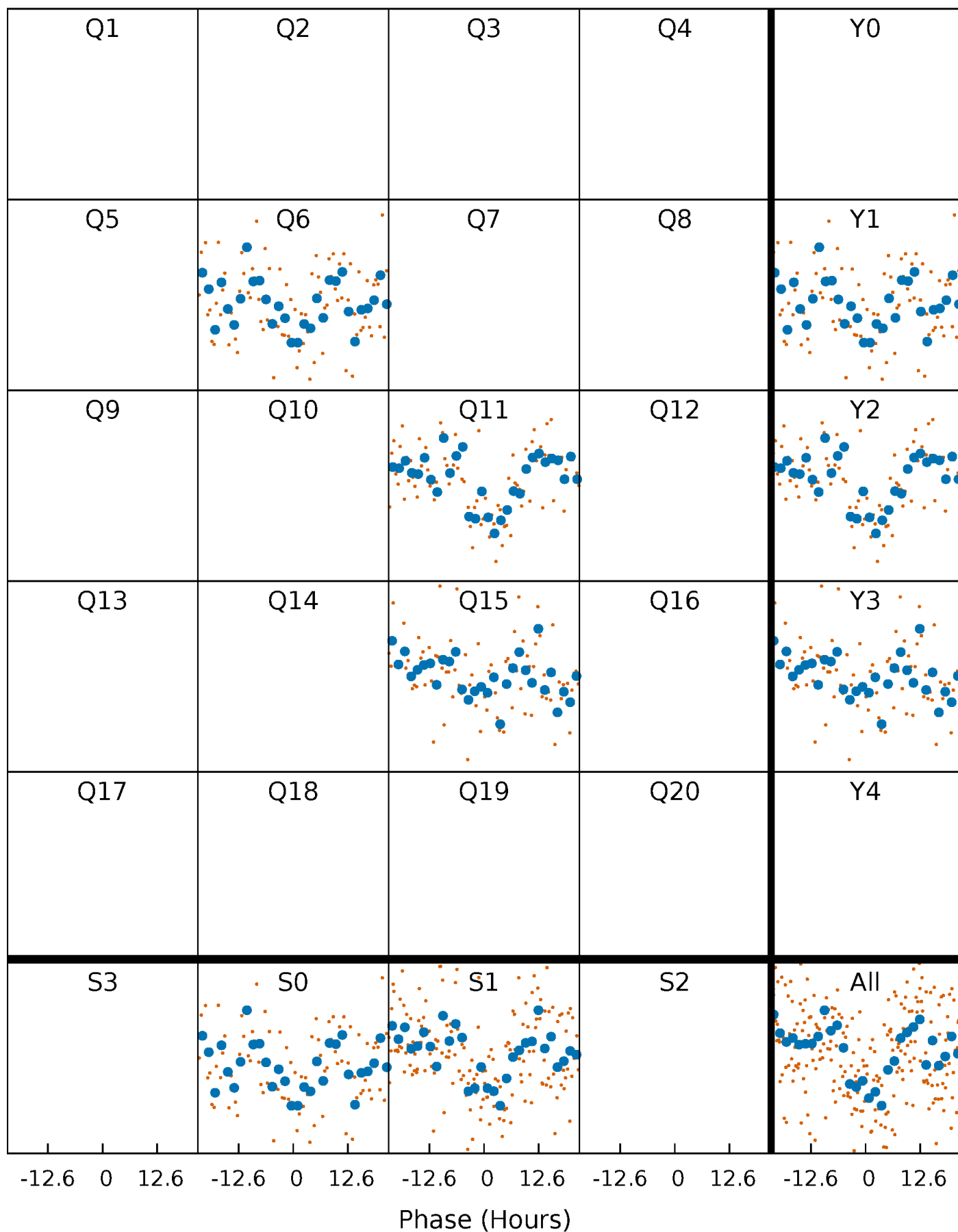


Non-Whitened Vs. Whitened Light Curve



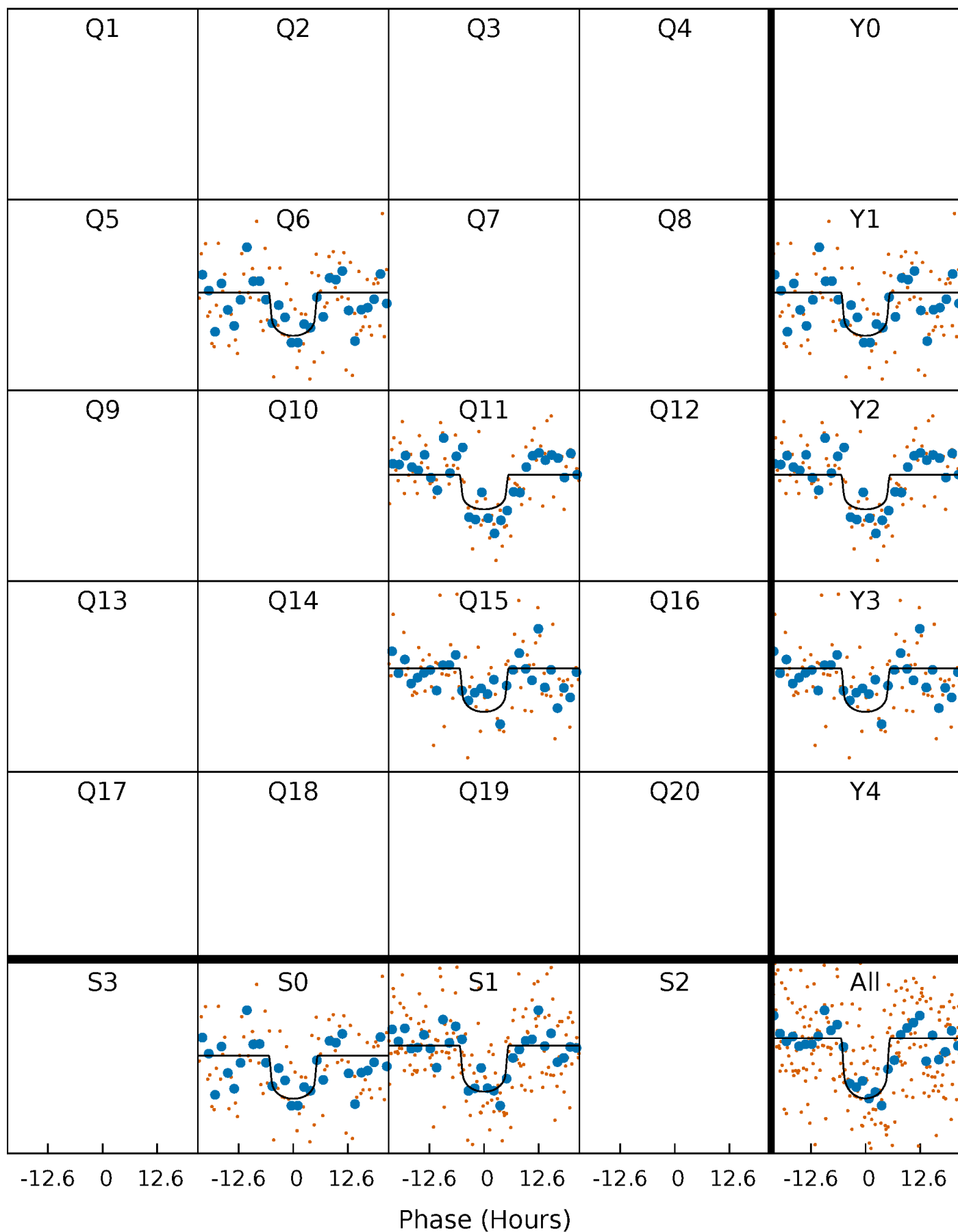
PDC Quarter-Phased Transit Curves

TCE 008808064-01 P=447.969204 Days $T_0=559.642746$ (BKJD)



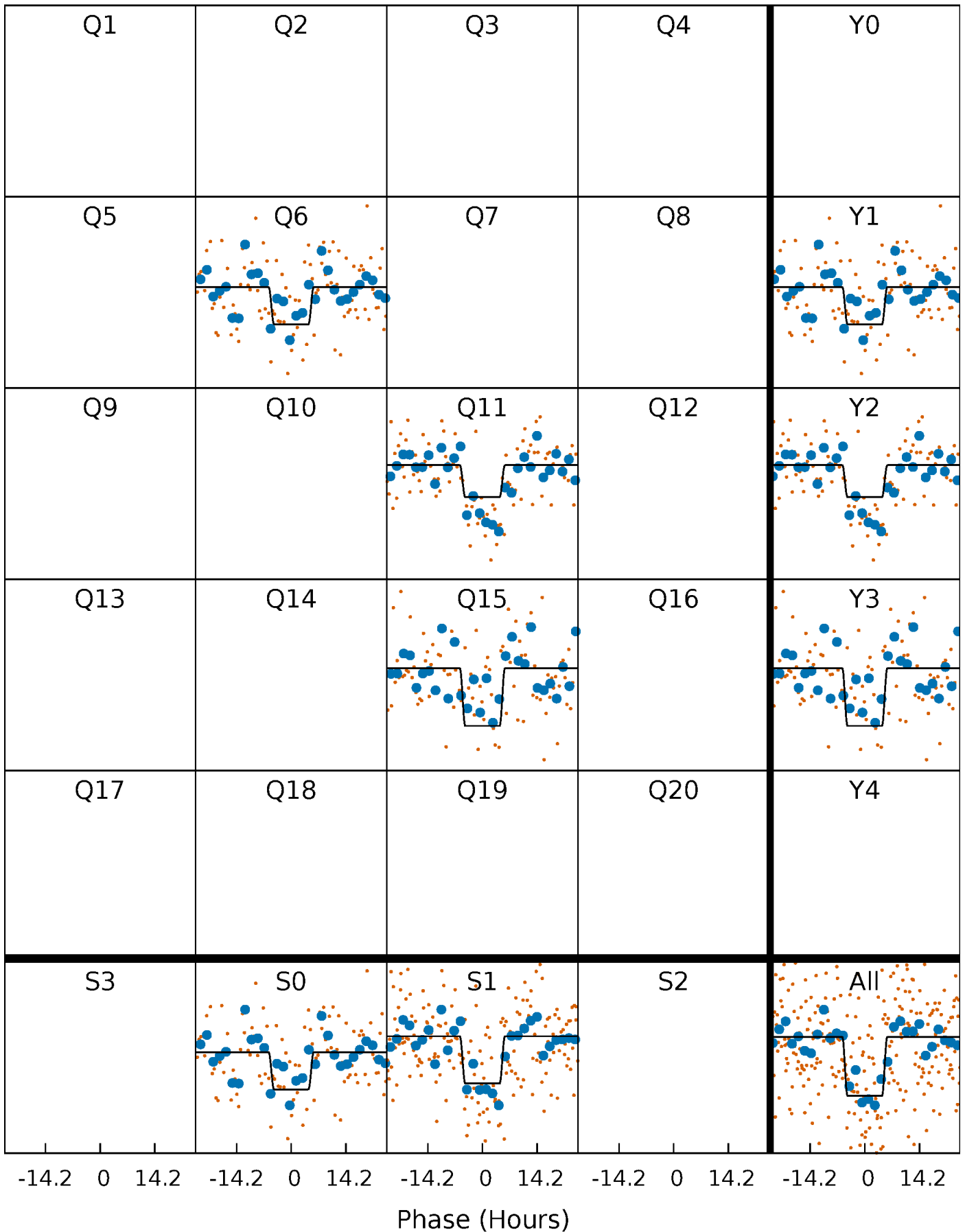
DV Quarter-Phased Transit Curves

TCE 008808064-01 P=447.969204 Days $T_0=559.642746$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

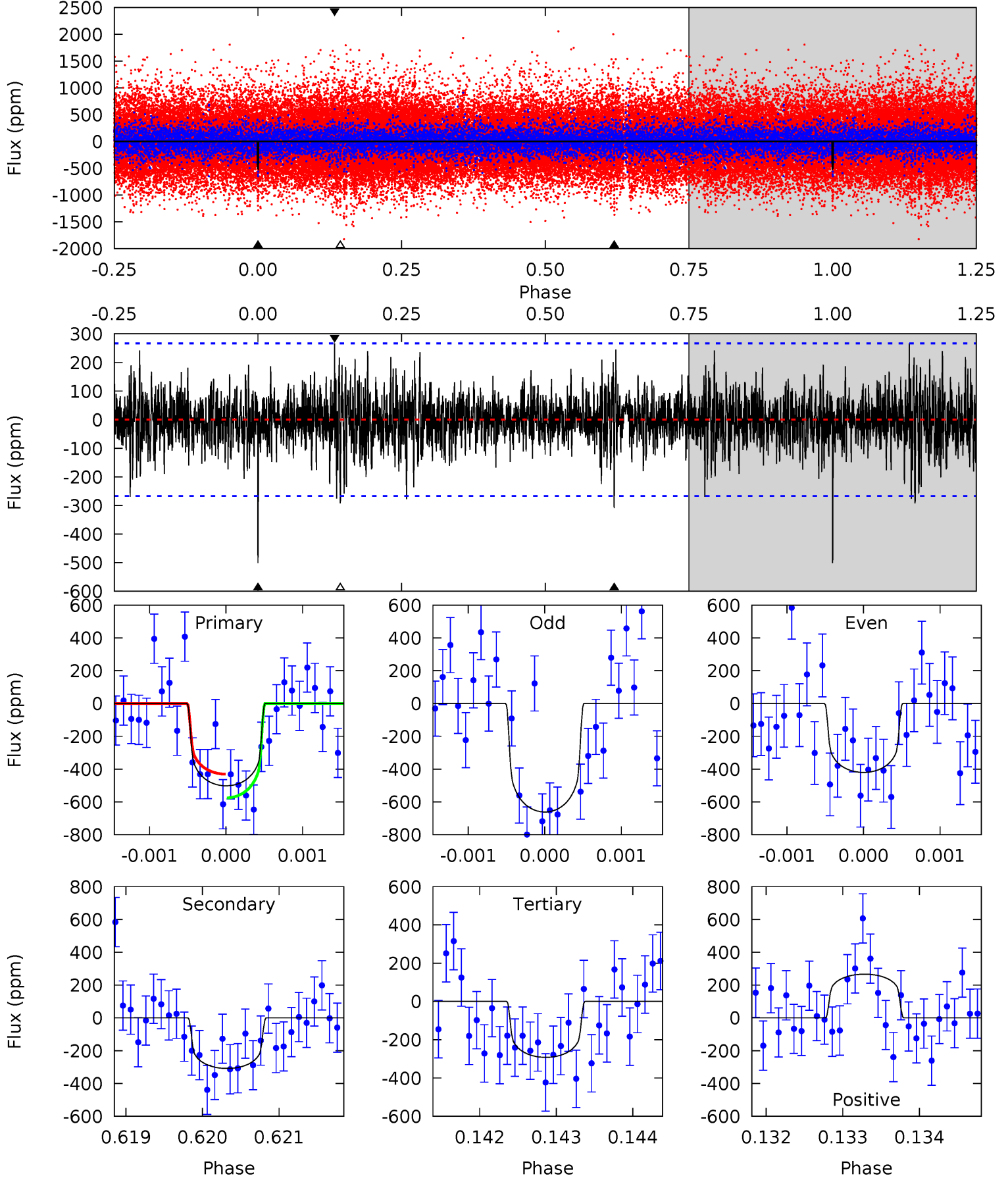
TCE 008808064-01 $P=447.958125$ Days $T_0=559.675500$ (BKJD)



DV Model-Shift Uniqueness Test

008808064-01, P = 447.969204 Days, E = 111.673542 Days

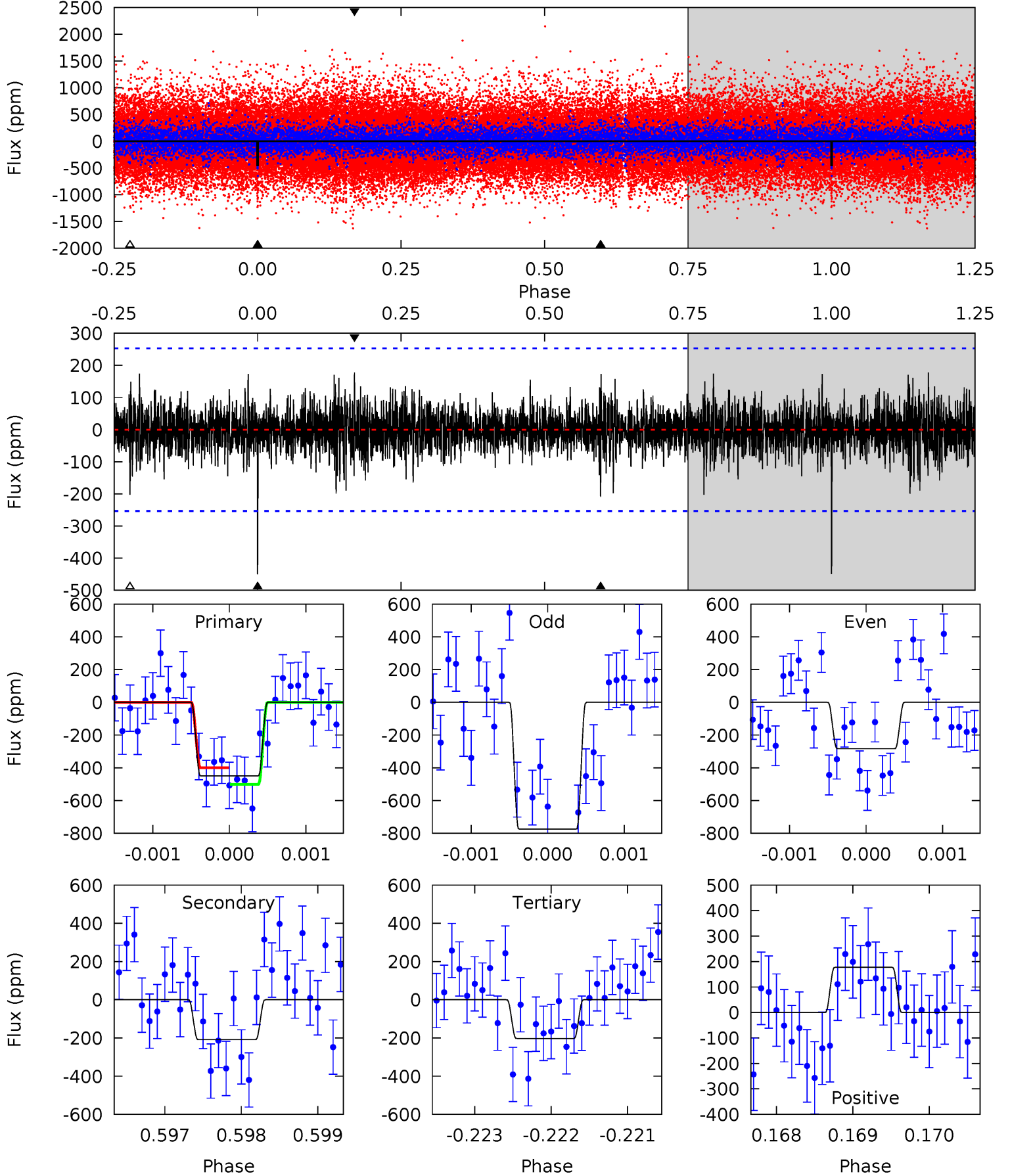
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.2	6.30	5.96	5.44	5.44	3.28	1.40	4.28	4.81	0.33	0.86	2.32	1.03	0.35	1.48



Alt Model-Shift Uniqueness Test

008808064-01, P = 447.958125 Days, E = 111.717375 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.65	4.48	4.34	3.81	5.44	3.26	1.02	5.31	5.84	0.13	0.67	5.02	1.43	0.28	1.09



Stellar Parameters For KIC 008808064

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5911^{+159}_{-177}	$4.530^{+0.050}_{-0.212}$	$-0.200^{+0.300}_{-0.300}$	$0.887^{+0.273}_{-0.091}$	$0.972^{+0.107}_{-0.131}$	$1.963^{+0.404}_{-1.031}$
	+3%/-3%	+1%/-5%	+150%/-150%	+31%/-10%	+11%/-13%	+21%/-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 008808064-01 / KOI 8169.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-308 ± 49	$2.31^{+1.23}_{-1.03}$	329^{+24}_{-15}	5248^{+1709}_{-824}	39483^{+97476}_{-22455}
Alt.	-209 ± 47	$2.29^{+1.14}_{-1.16}$	330^{+24}_{-17}	4830^{+1977}_{-729}	27015^{+88310}_{-15202}

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 $A_{obs} \gg 1.0$

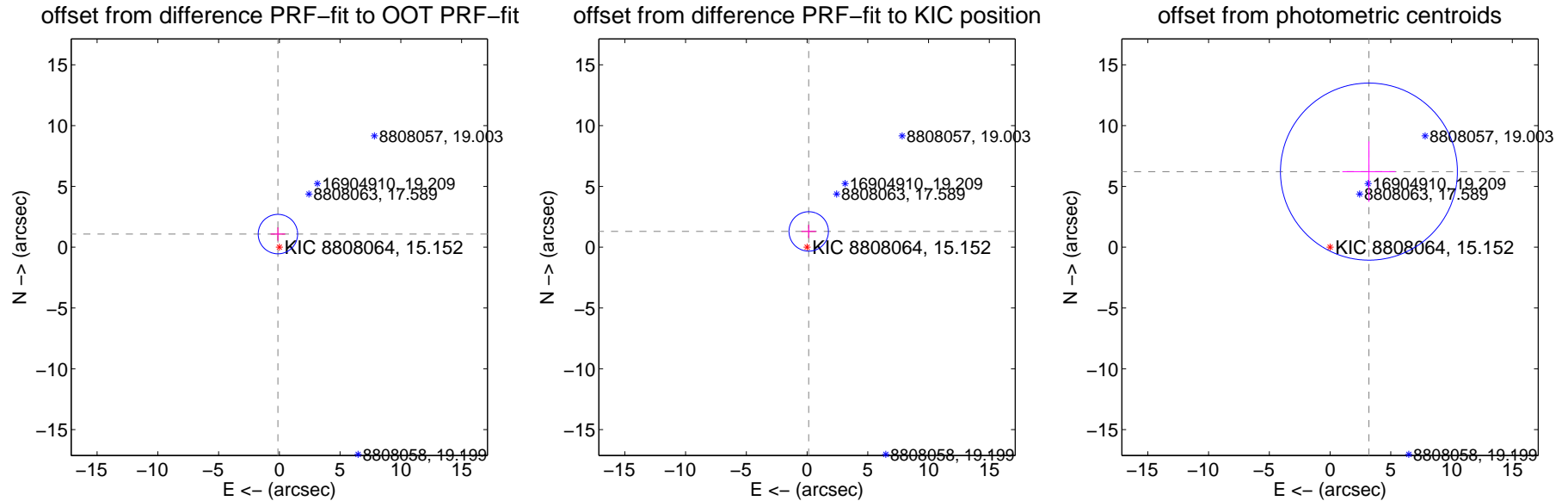
DV Centroid Data

Supplemental centroid analysis for 008808064-01. Kepler magnitude: 15.15. Transit SNR 6.97

There are 0 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.34 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.085 ± 0.541	2.01	0.118 ± 0.596	1.079 ± 0.540
PRF-fit source offset from KIC position	1.304 ± 0.541	2.41	-0.136 ± 0.596	1.297 ± 0.540
photometric centroid source offset	6.99 ± 2.43	2.88	-3.20 ± 2.19	6.22 ± 2.49

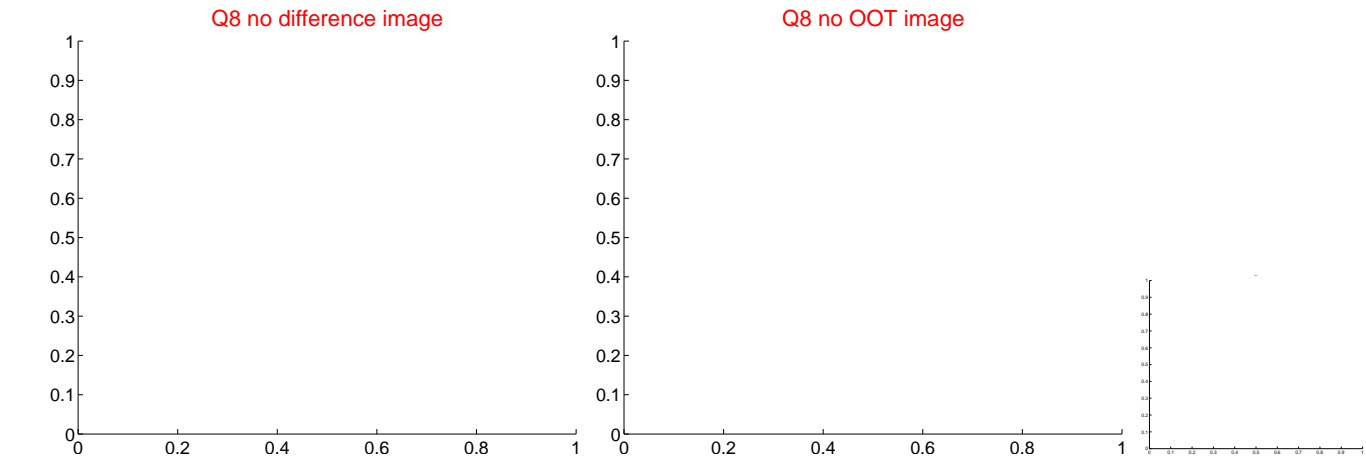
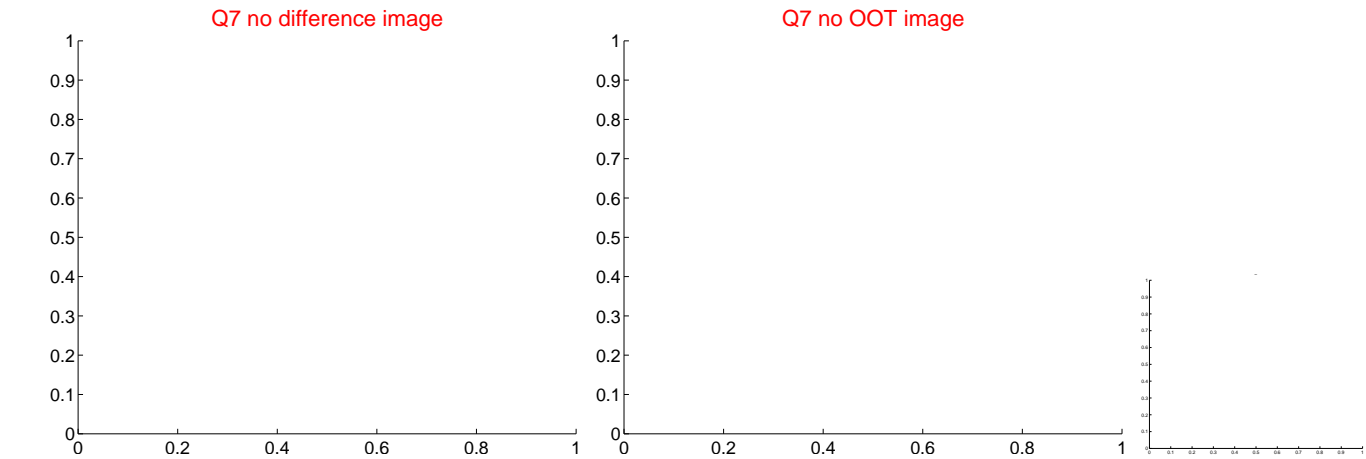
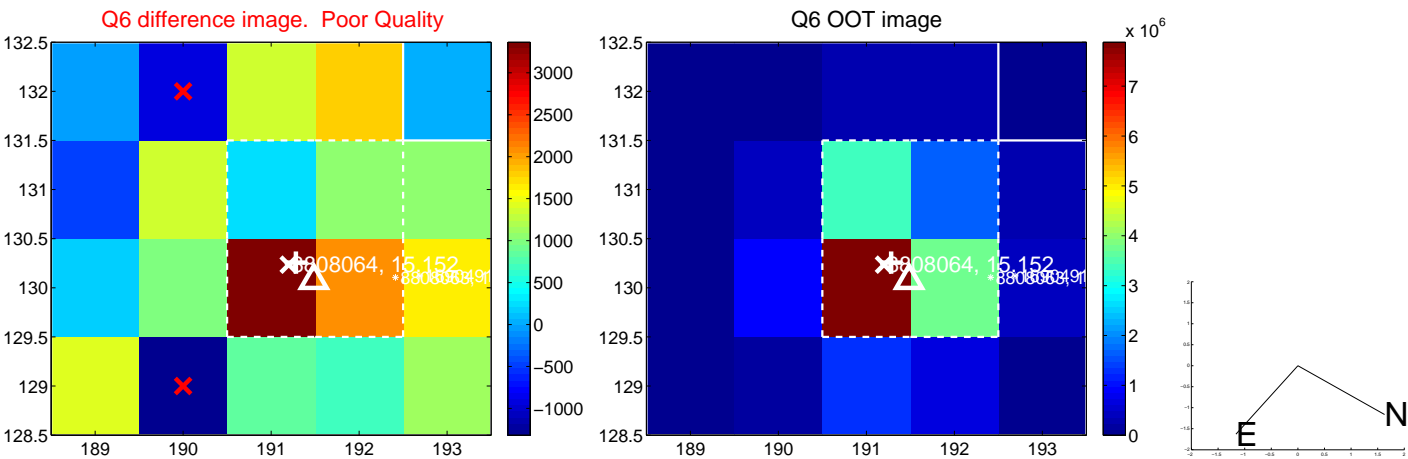
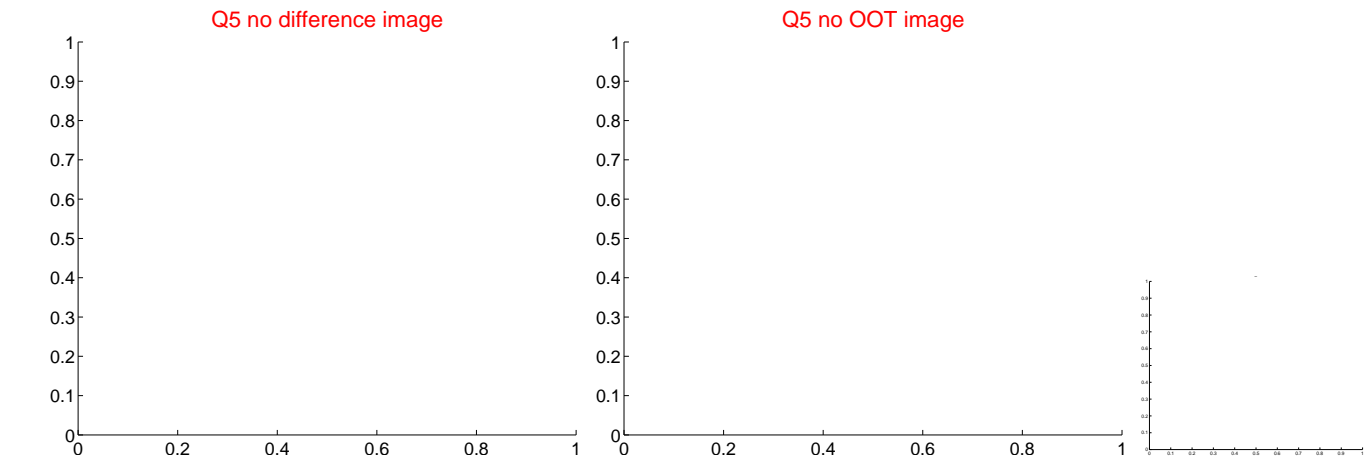


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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



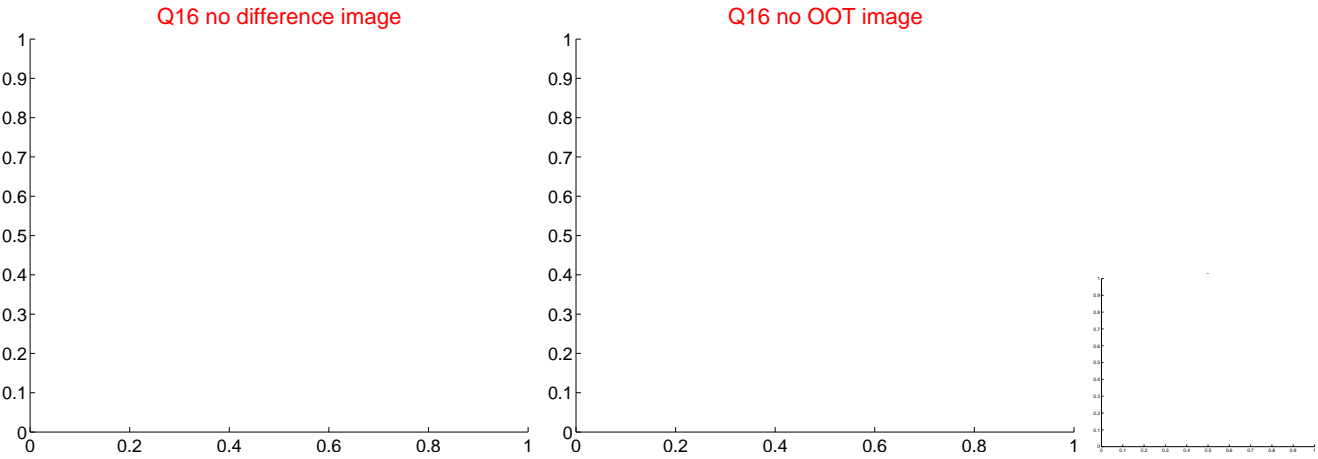
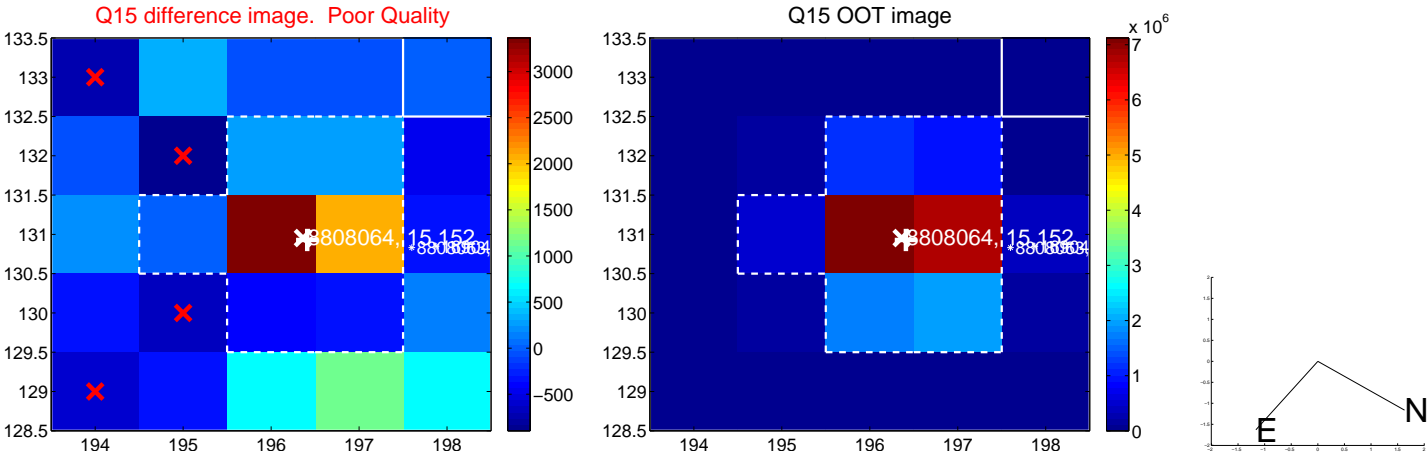
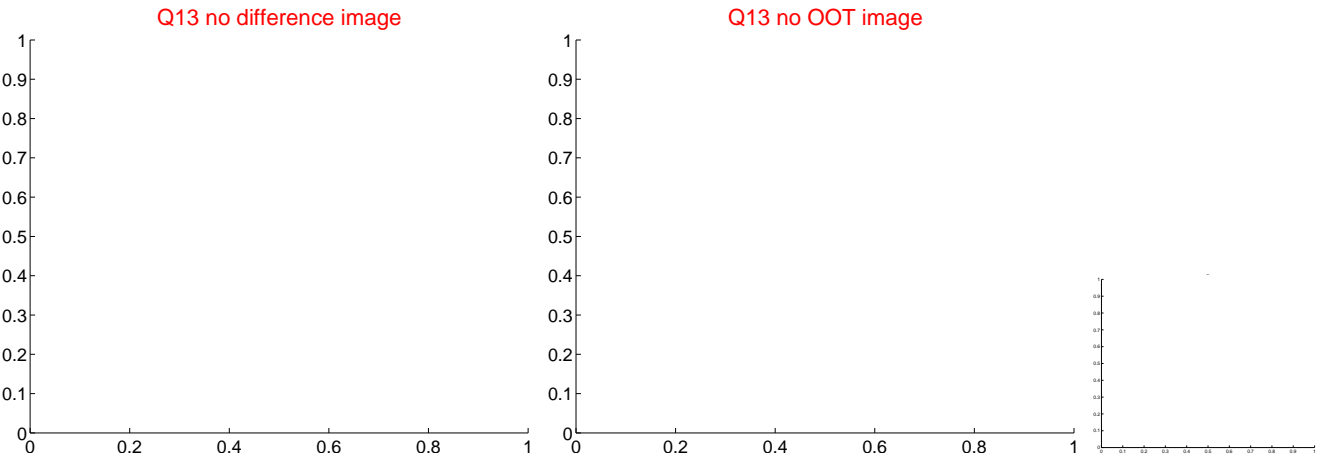
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



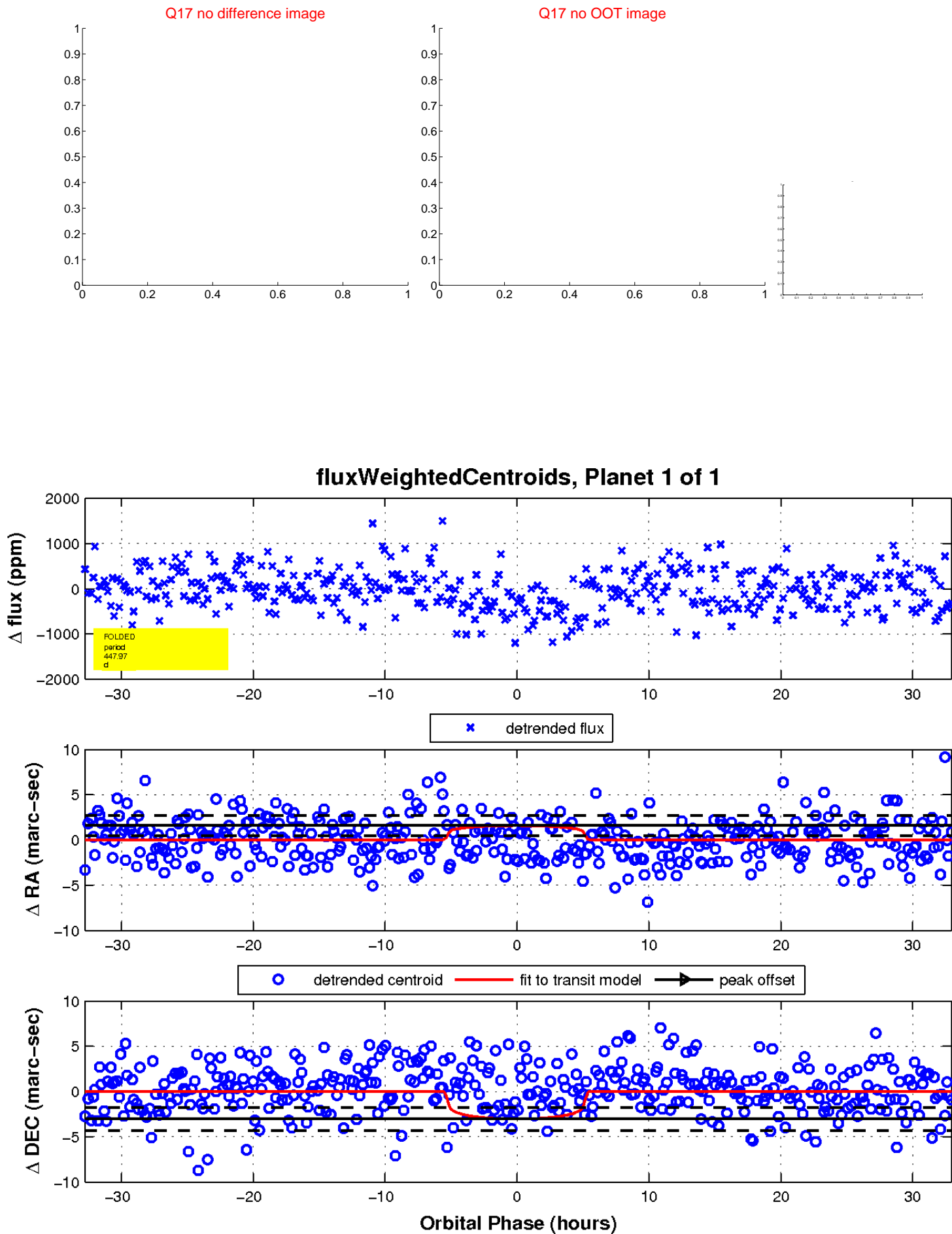
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UKIRT Image

Declination

