

KIC 005806765

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})
005806765-01	OBS	No	441.390161	513.028681	1014.8	5.507	7.5	7.6	0.74	5374	2.40	0.37

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005806765-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—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.

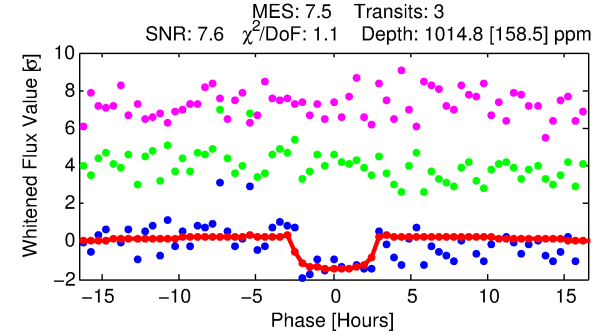
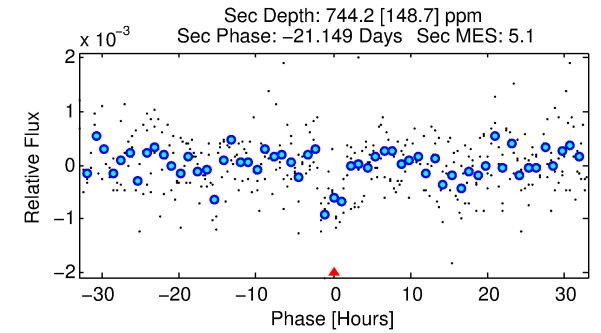
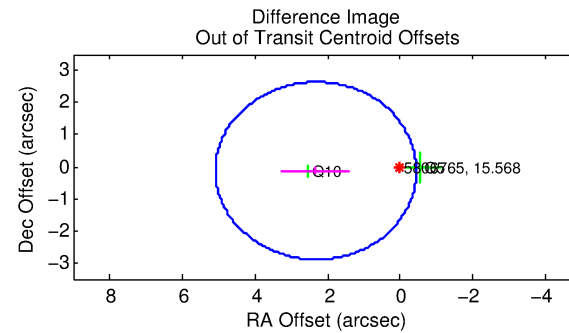
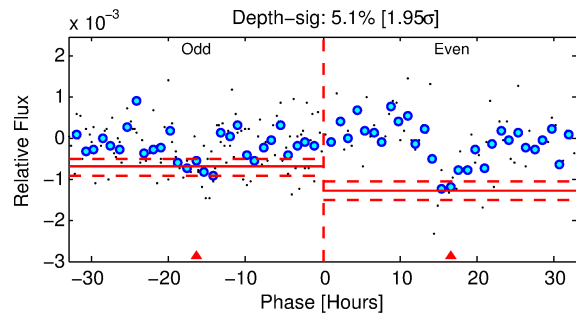
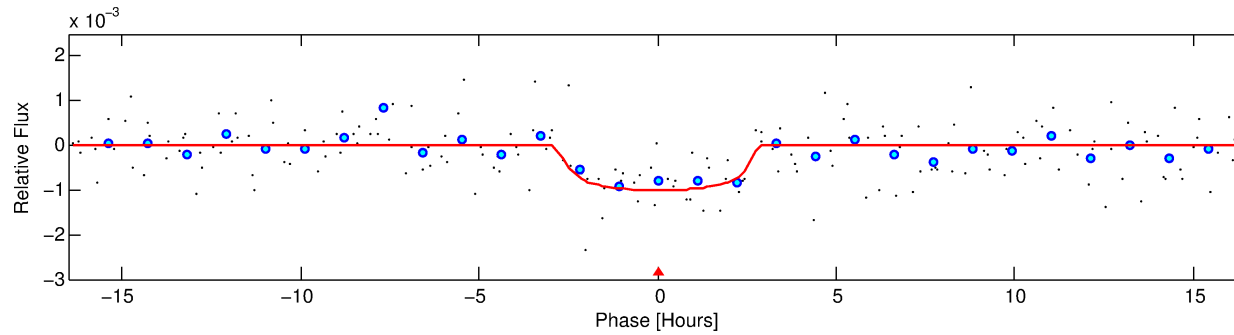
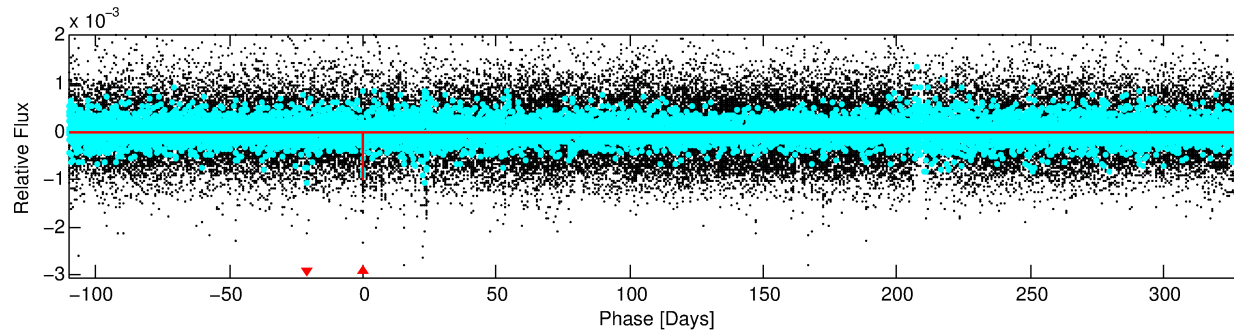
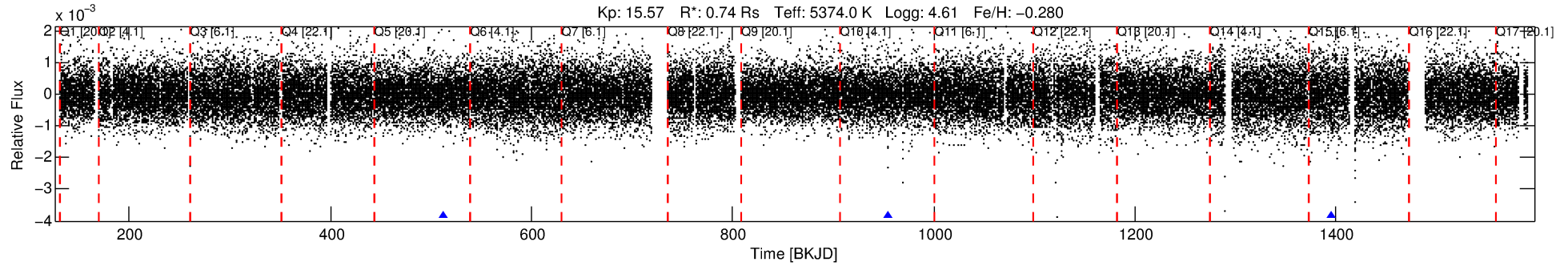
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005806765-01

No Significant Match Found

DV One-Page Summary

KIC: 5806765 Candidate: 1 of 1 Period: 441.390 d



DV Fit Results:

Period = 441.39016 [0.01011] d
Epoch = 513.0287 [0.0123] BKJD
Rp/R* = 0.0296 [0.0581]
a/R* = 557.38 [4369.09]
b = 0.48 [12.65]
Seff = 0.37 [0.09]
Teq = 198 [12] K
Rp = 2.40 [4.74] Re
a = 1.0632 [0.1555] AU
Ag = 80113.33 [315383.67] [0.25 σ]
Teff = 5159 [5072] K [0.98 σ]

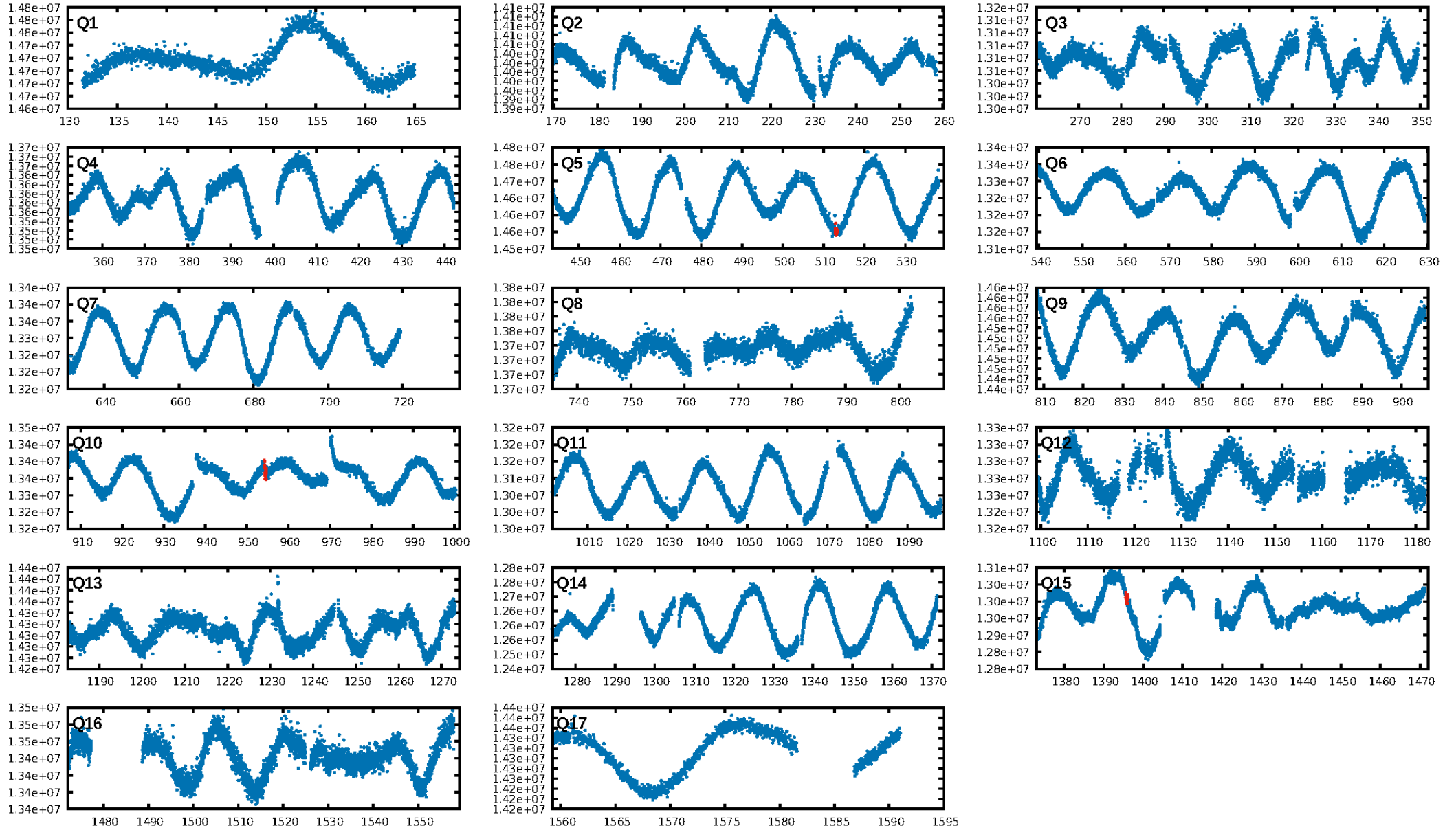
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 18.1%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 3.83e-10
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 0.6627
Centroid-sig: 26.9%
Centroid-so: 1.477 arcsec [0.93 σ]
OotOffset-rm: 2.323 arcsec [2.52 σ]
KicOffset-rm: 2.367 arcsec [1.63 σ]
OotOffset-st: 1/0/0/1 [2]
KicOffset-st: 1/0/0/1 [2]
DiffImageQuality-fgm: 1.00 [2/2]
DiffImageOverlap-fno: 1.00 [2/2]

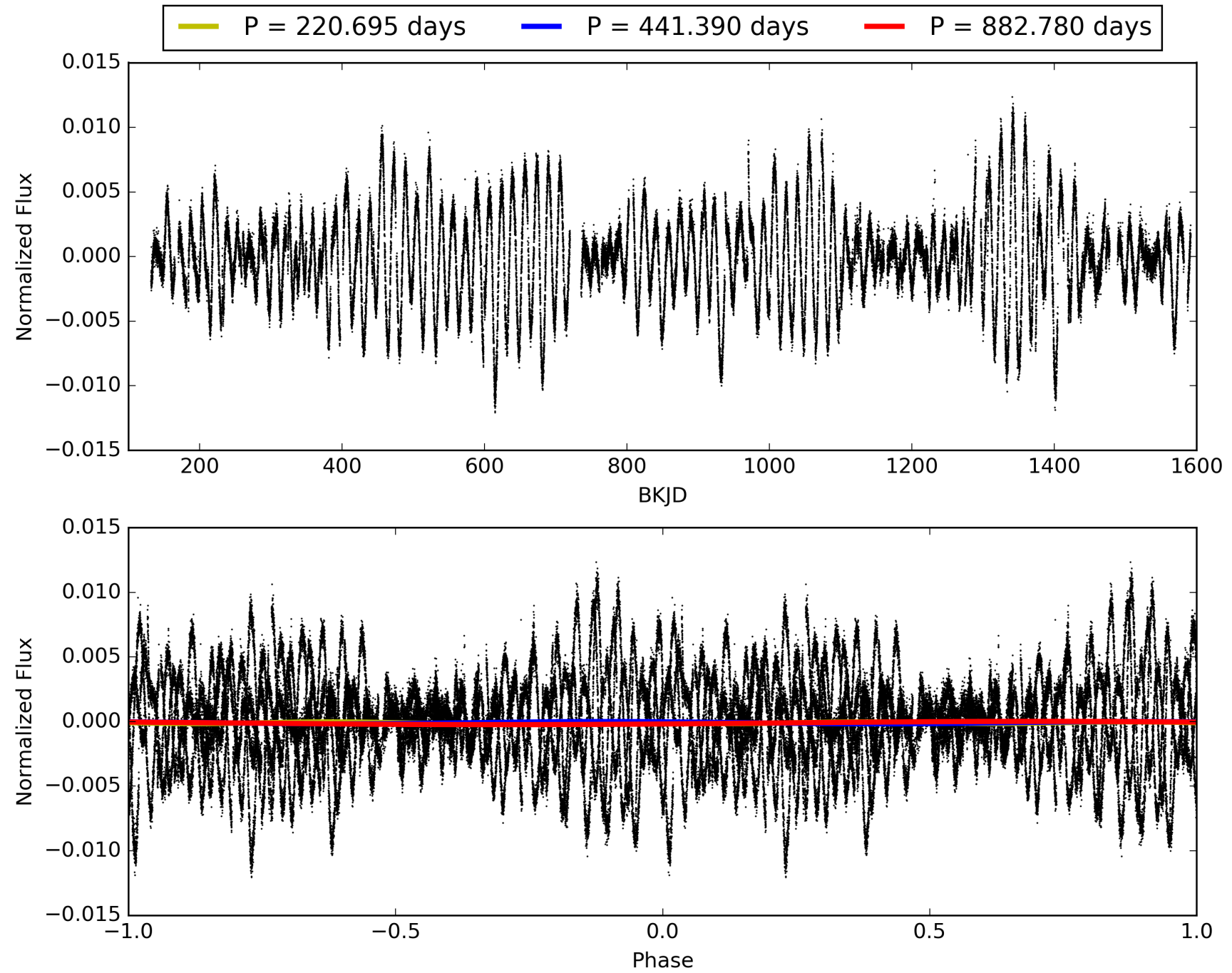
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 11:36:30 Z

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

TCE 005806765-01, PDC Light Curves

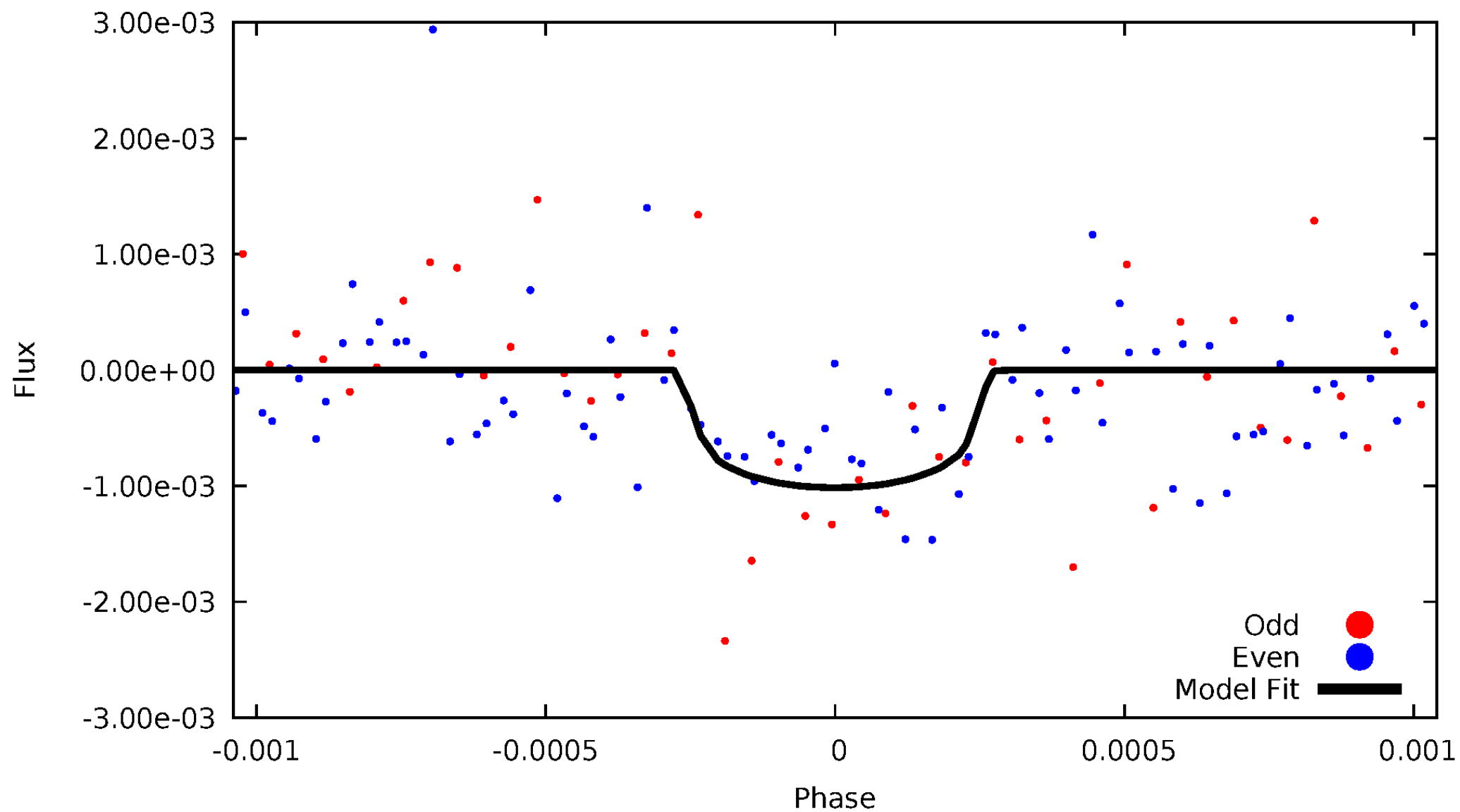


TCE 005806765-01



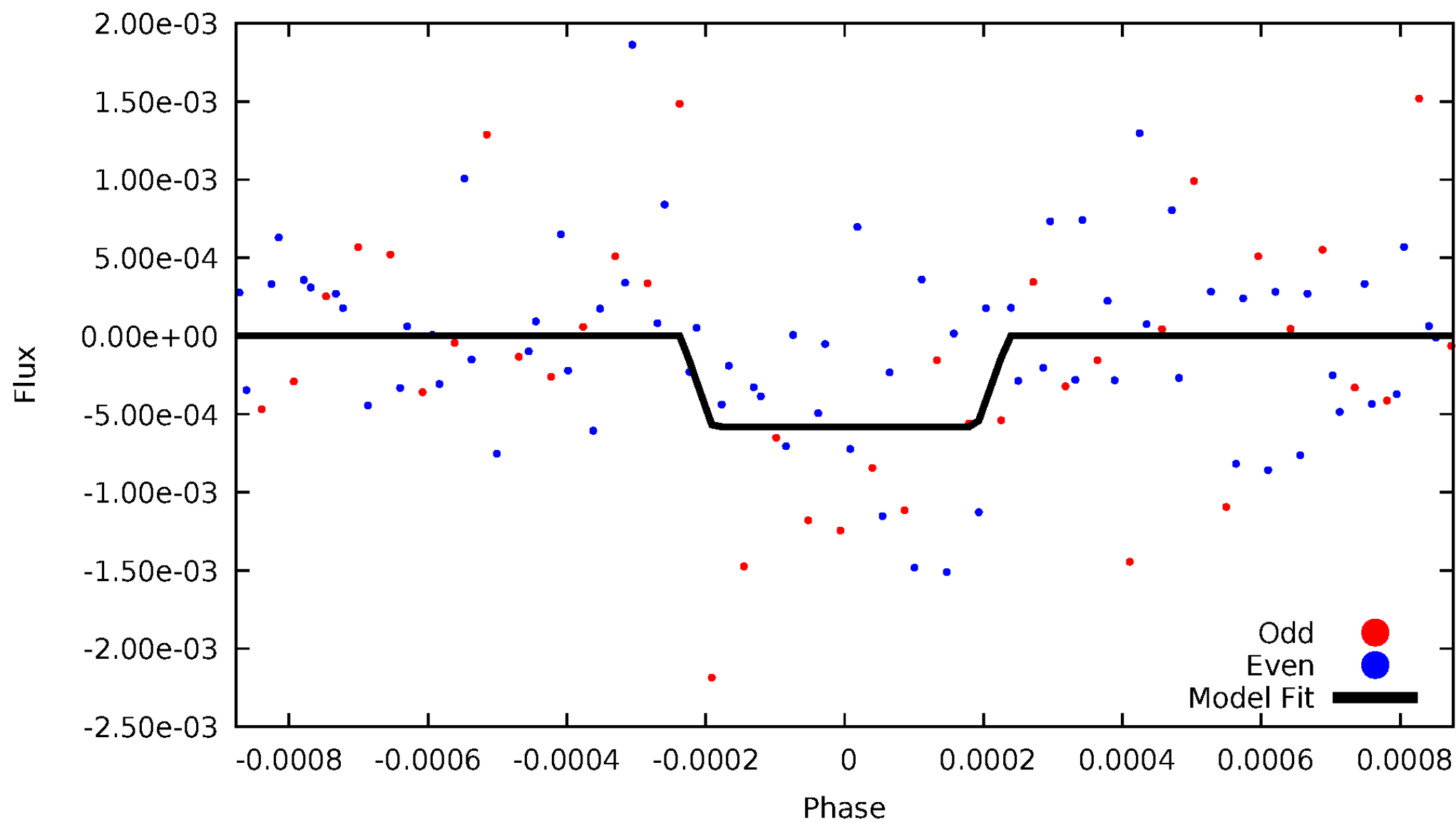
DV Odd/Even

TCE 005806765-01

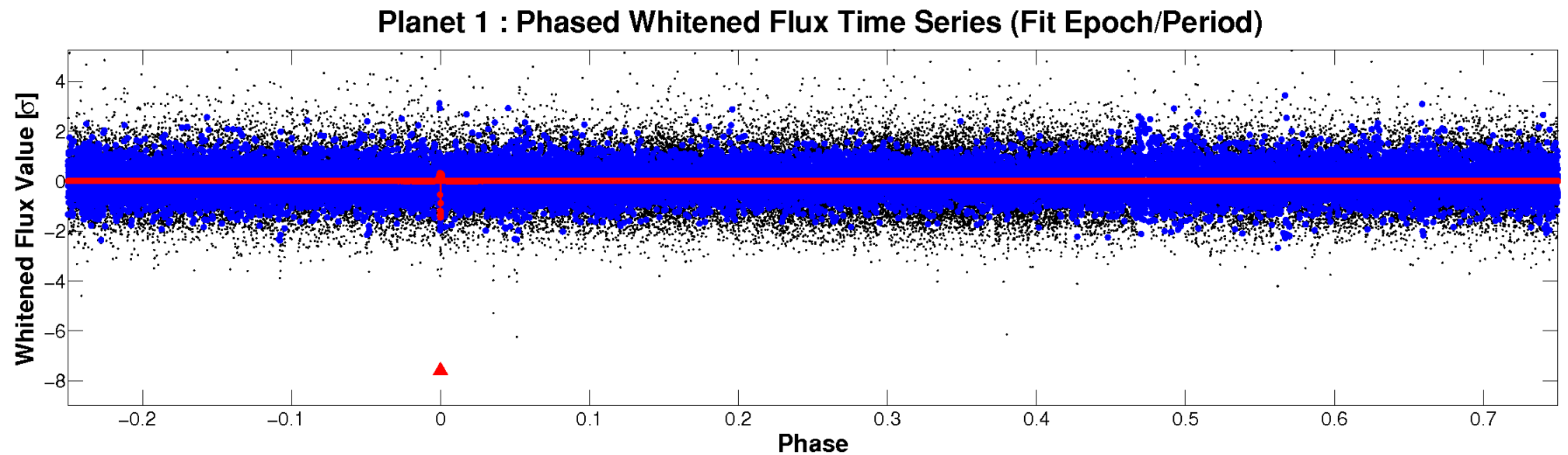
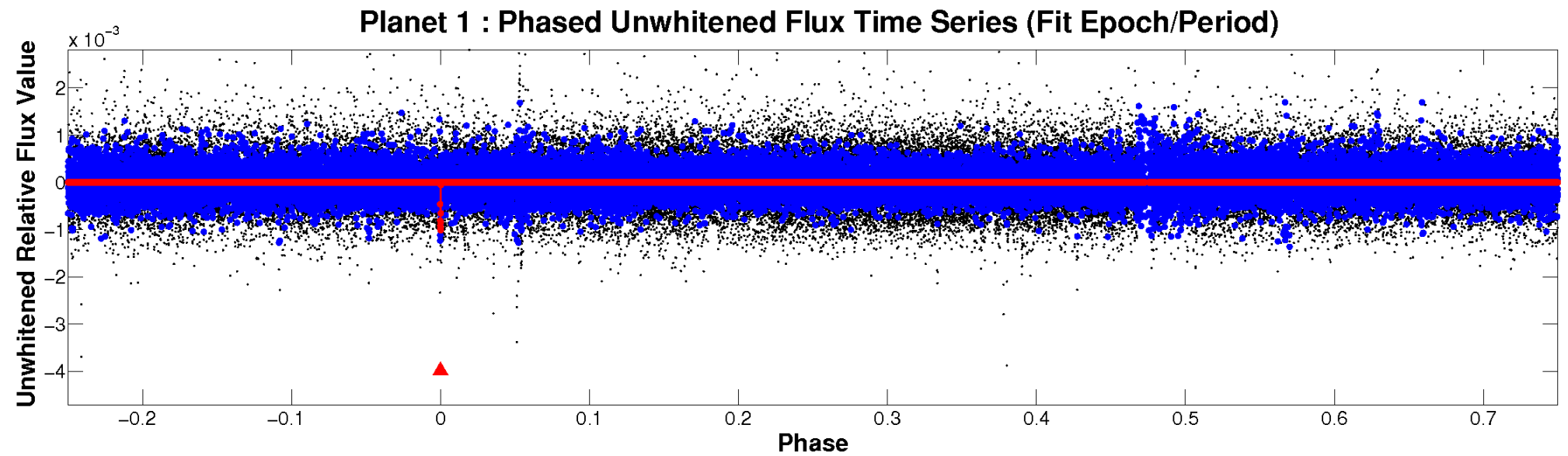


ALT Odd/Even

TCE 005806765-01

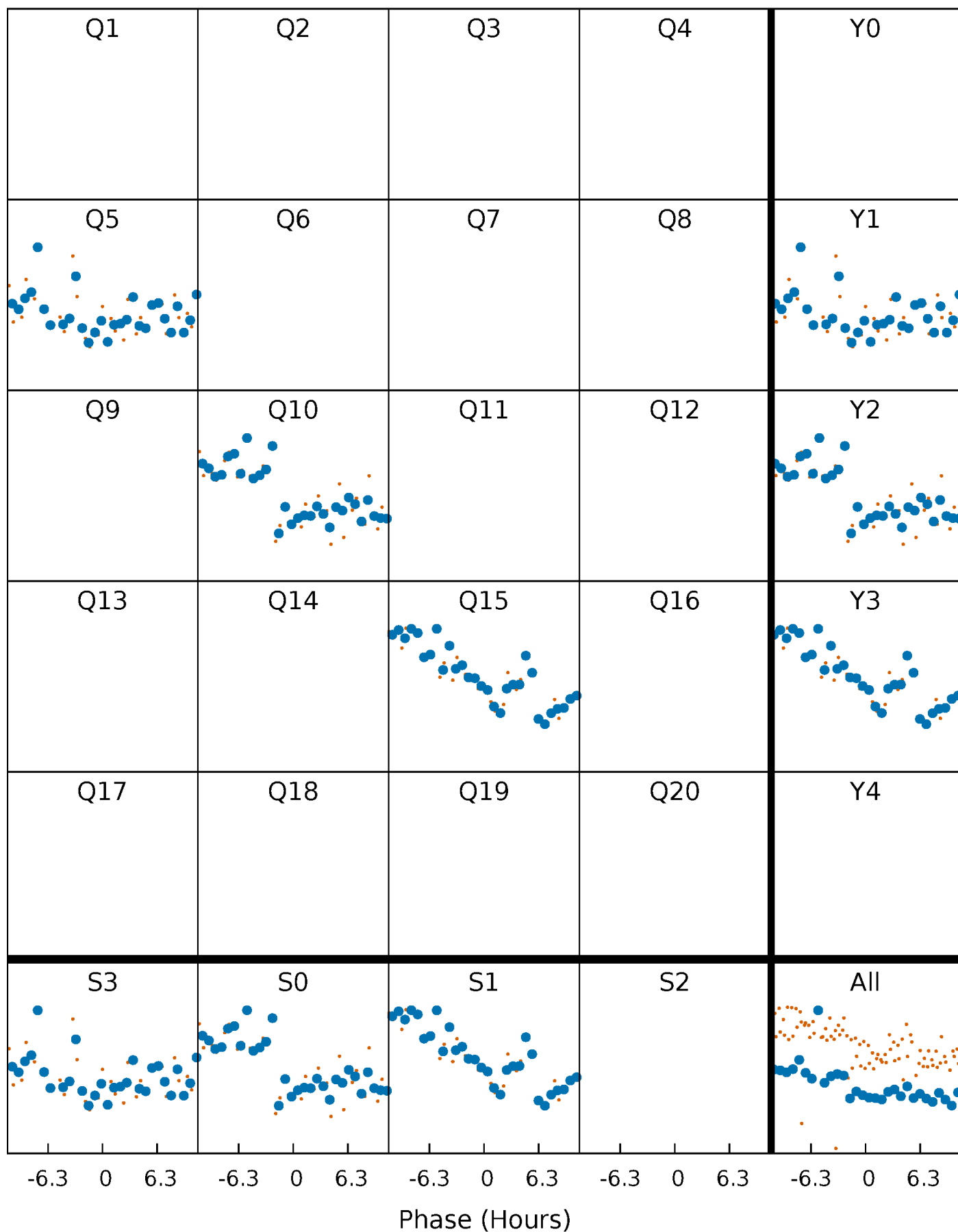


Non-Whitened Vs. Whitened Light Curve



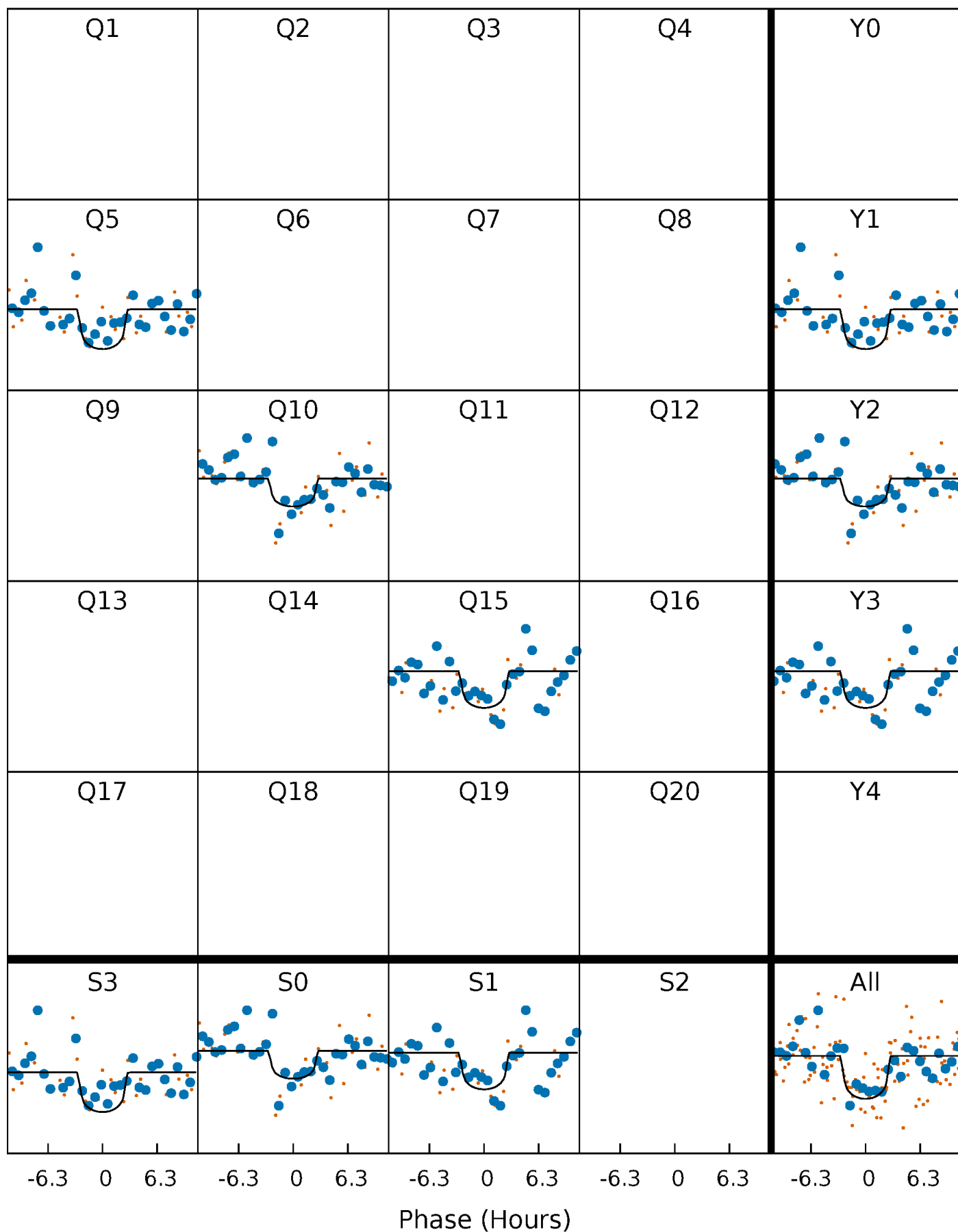
PDC Quarter-Phased Transit Curves

TCE 005806765-01 P=441.390161 Days $T_0=513.028681$ (BKJD)



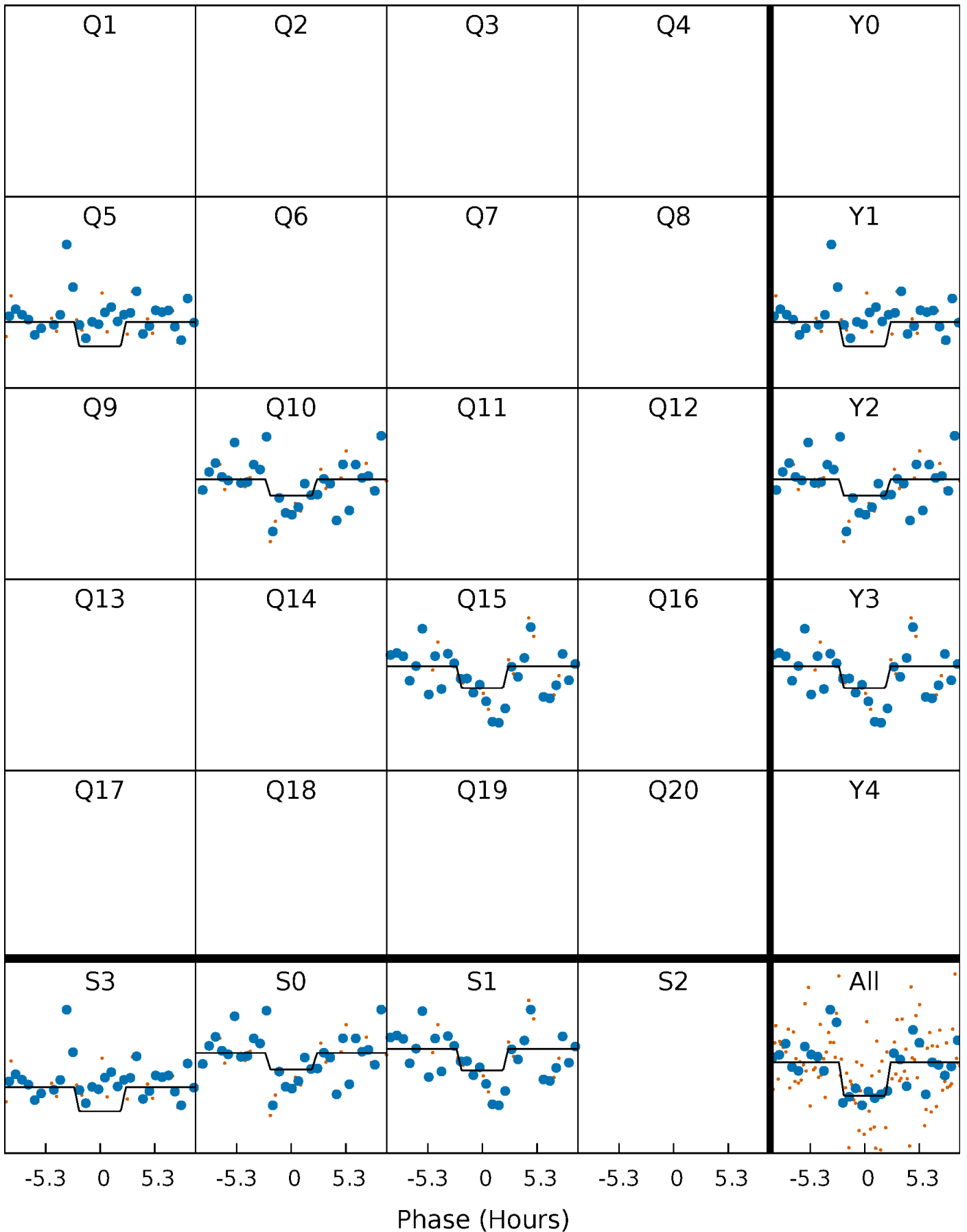
DV Quarter-Phased Transit Curves

TCE 005806765-01 P=441.390161 Days $T_0=513.028681$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

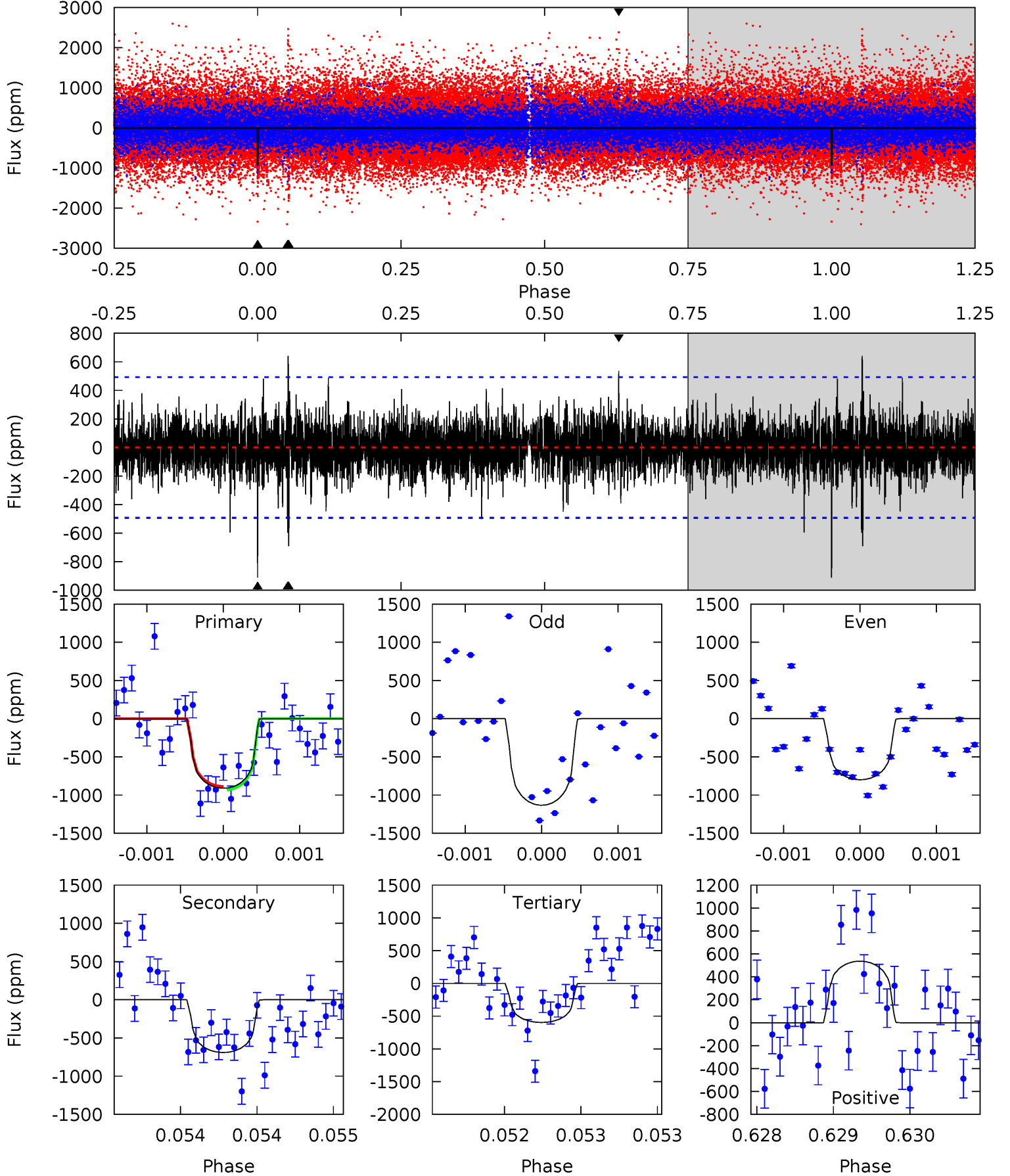
TCE 005806765-01 P=441.398952 Days $T_0=513.020253$ (BKJD)



DV Model-Shift Uniqueness Test

005806765-01, P = 441.390161 Days, E = 71.638520 Days

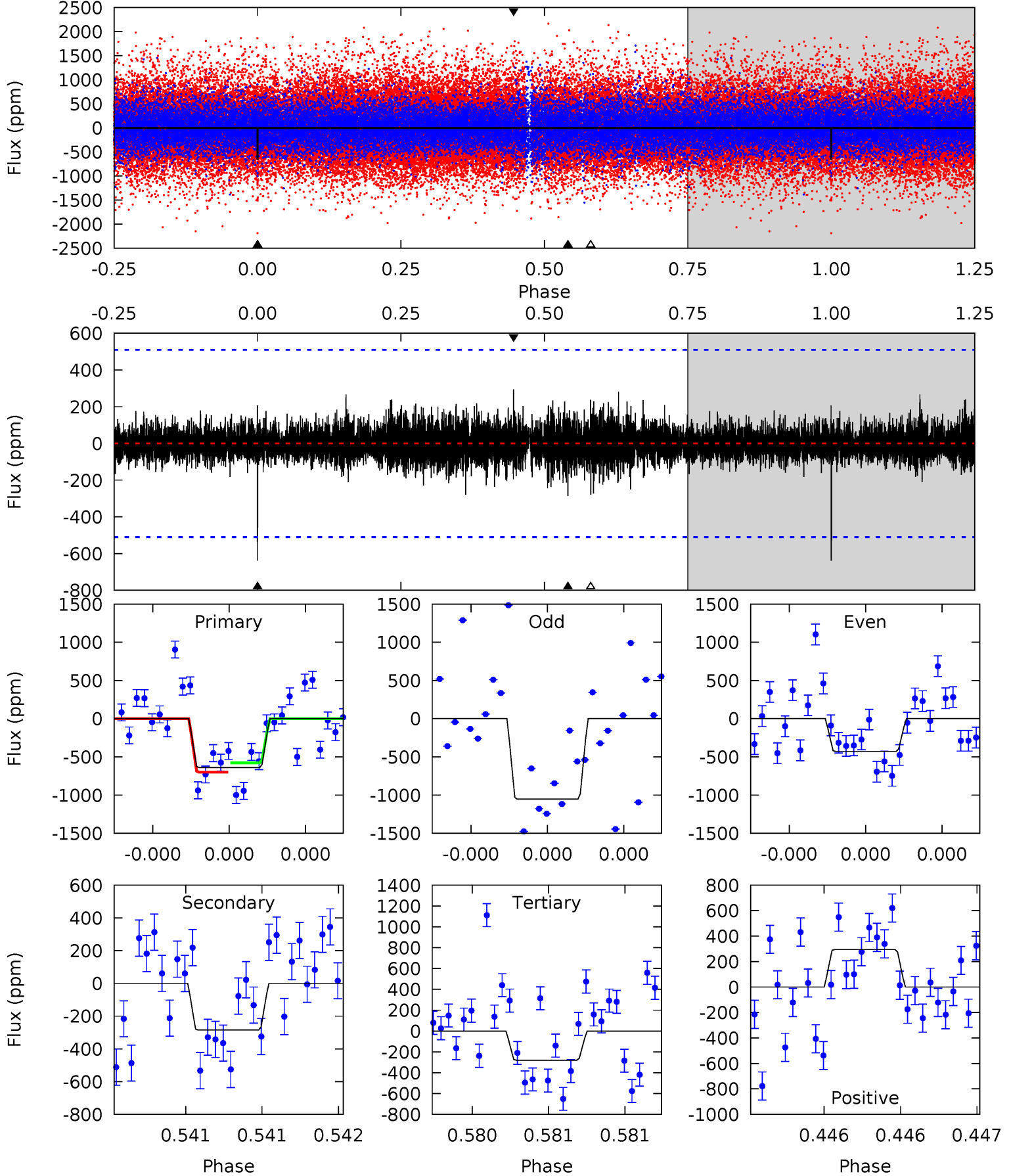
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.3	7.77	6.71	6.04	5.55	3.44	1.34	3.54	4.21	1.05	1.73	1.82	0.92	0.41	0.26



Alt Model-Shift Uniqueness Test

005806765-01, P = 441.398952 Days, E = 71.621301 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.00	3.12	3.06	3.22	5.59	3.51	0.67	3.94	3.78	0.06	-0.10	3.24	0.71	0.32	0.68



Stellar Parameters For KIC 005806765

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5374^{+159}_{-159}	$4.610^{+0.035}_{-0.112}$	$-0.280^{+0.300}_{-0.300}$	$0.744^{+0.132}_{-0.057}$	$0.833^{+0.078}_{-0.096}$	$2.848^{+0.439}_{-0.994}$
	+3%/-3%	+1%/-2%	+107%/-107%	+18%/-8%	+9%/-12%	+15%/-35%
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 005806765-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-690 ± 89	$4.24^{+4.18}_{-2.71}$	282^{+13}_{-11}	4135^{+2225}_{-868}	$23612^{+162817}_{-17744}$
Alt.	-285 ± 91	$4.32^{+4.06}_{-2.84}$	282^{+13}_{-11}	3529^{+1699}_{-656}	9361^{+66591}_{-7017}

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 $A_{obs} \gg 1.0$

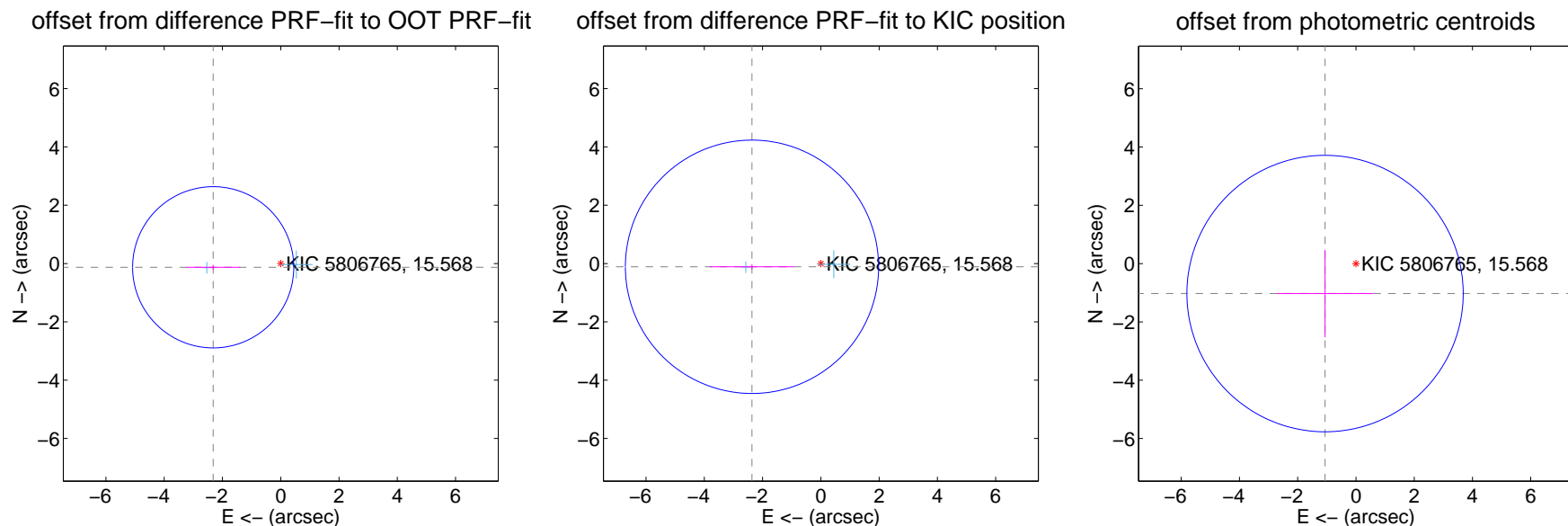
DV Centroid Data

Supplemental centroid analysis for 005806765-01. Kepler magnitude: 15.57. Transit SNR 7.55

There are 2 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.05 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.323 ± 0.922	2.52	2.319 ± 0.923	-0.129 ± 0.080
PRF-fit source offset from KIC position	2.367 ± 1.449	1.63	2.365 ± 1.448	-0.112 ± 0.082
photometric centroid source offset	1.48 ± 1.58	0.93	1.06 ± 1.66	-1.03 ± 1.50

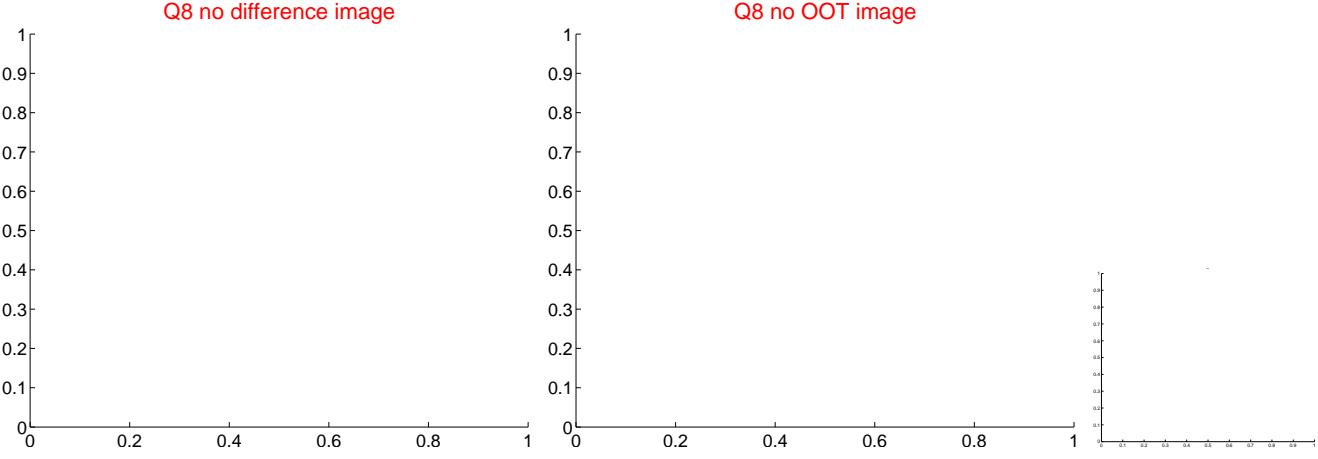
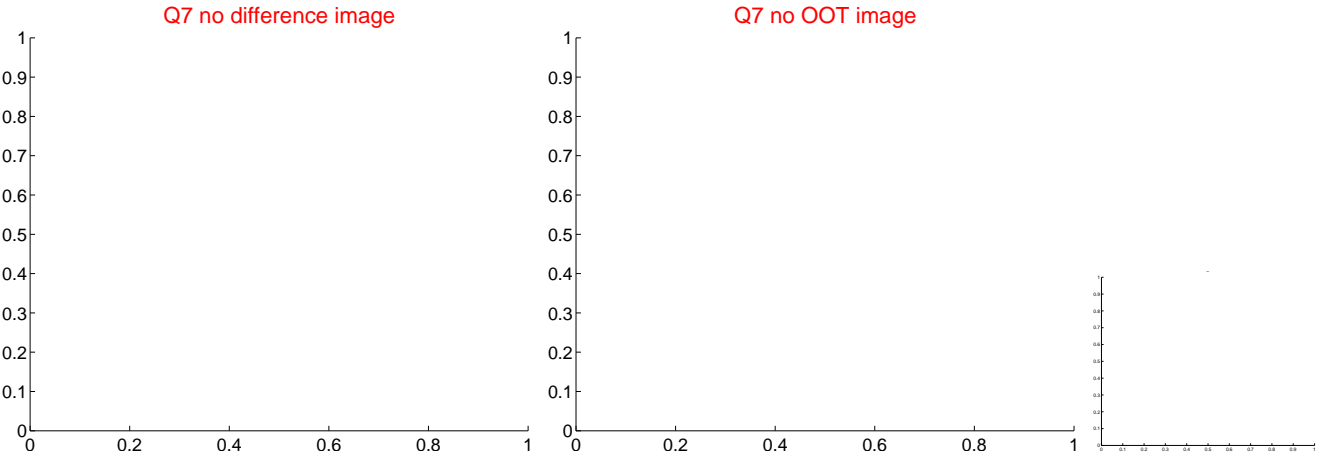
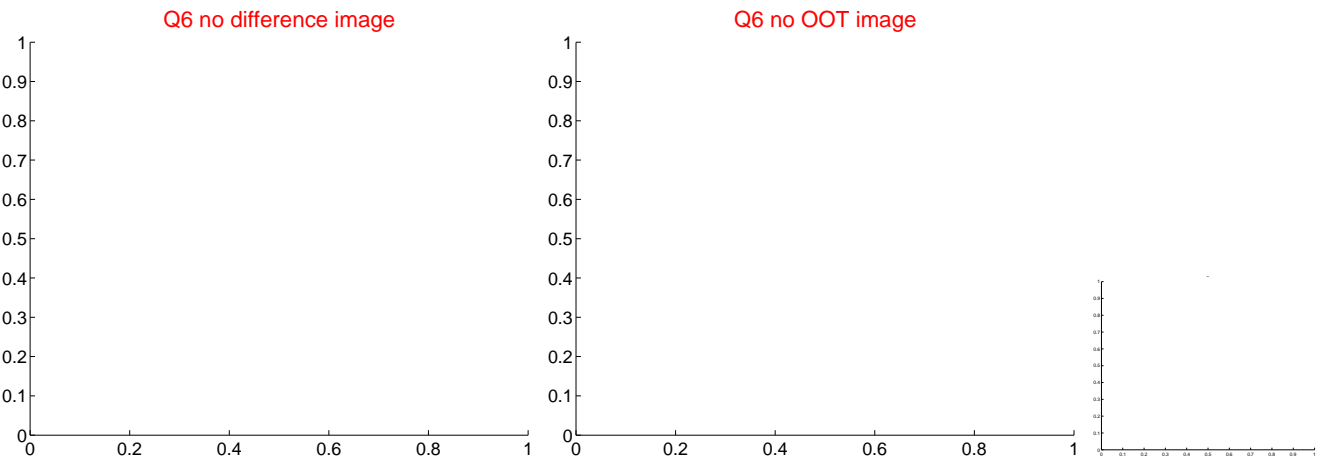
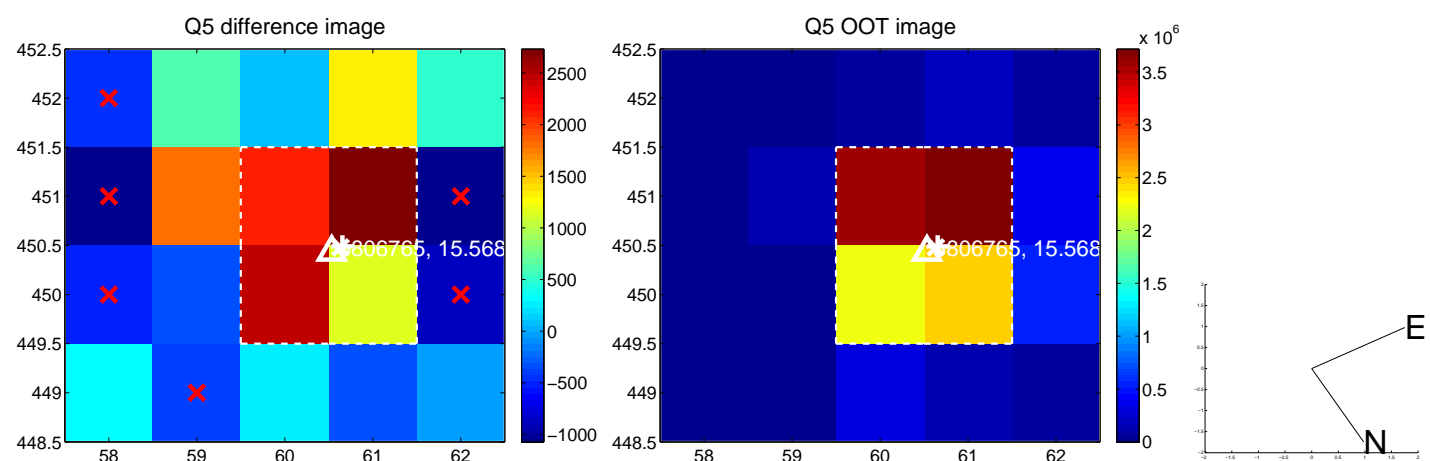


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

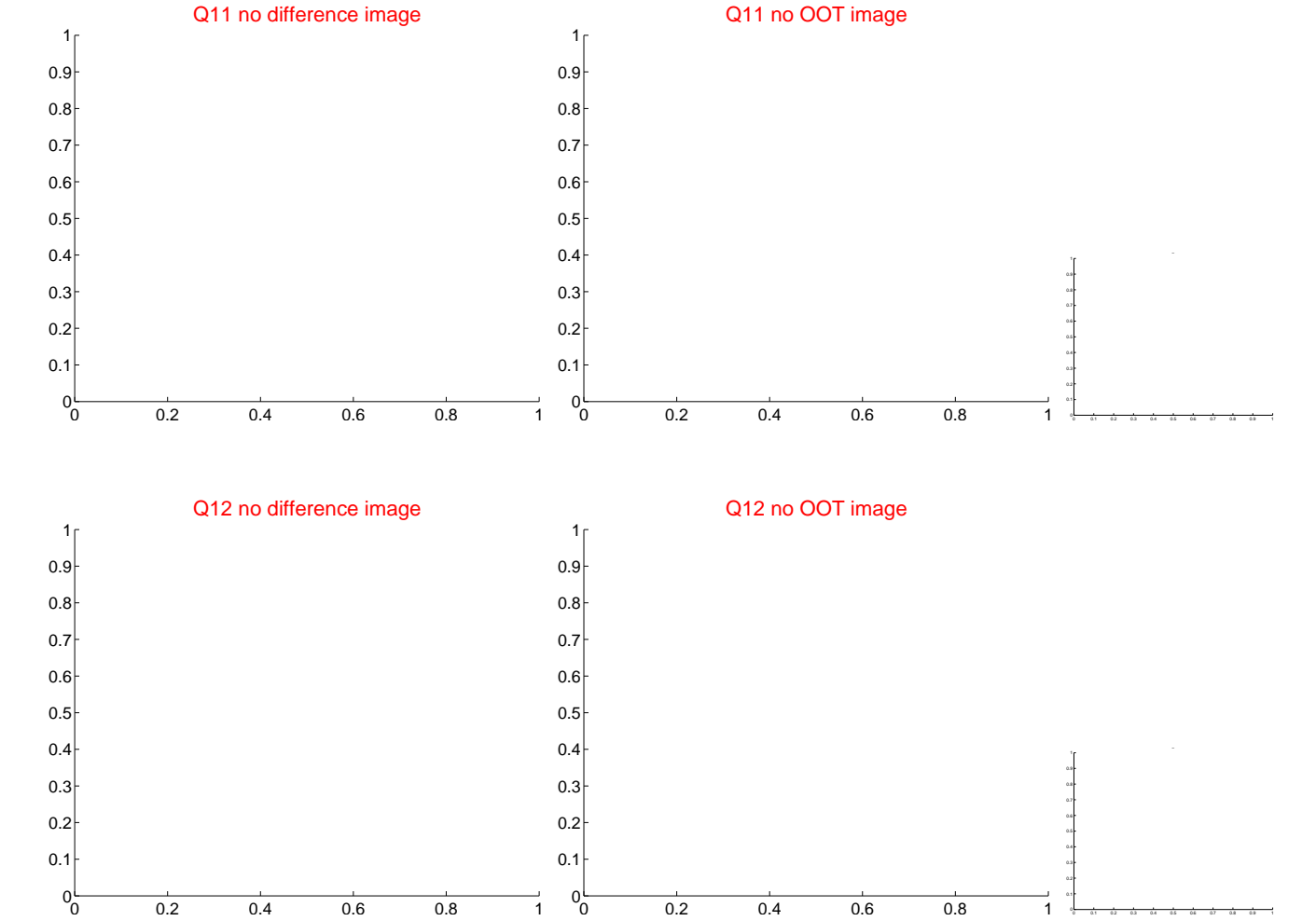
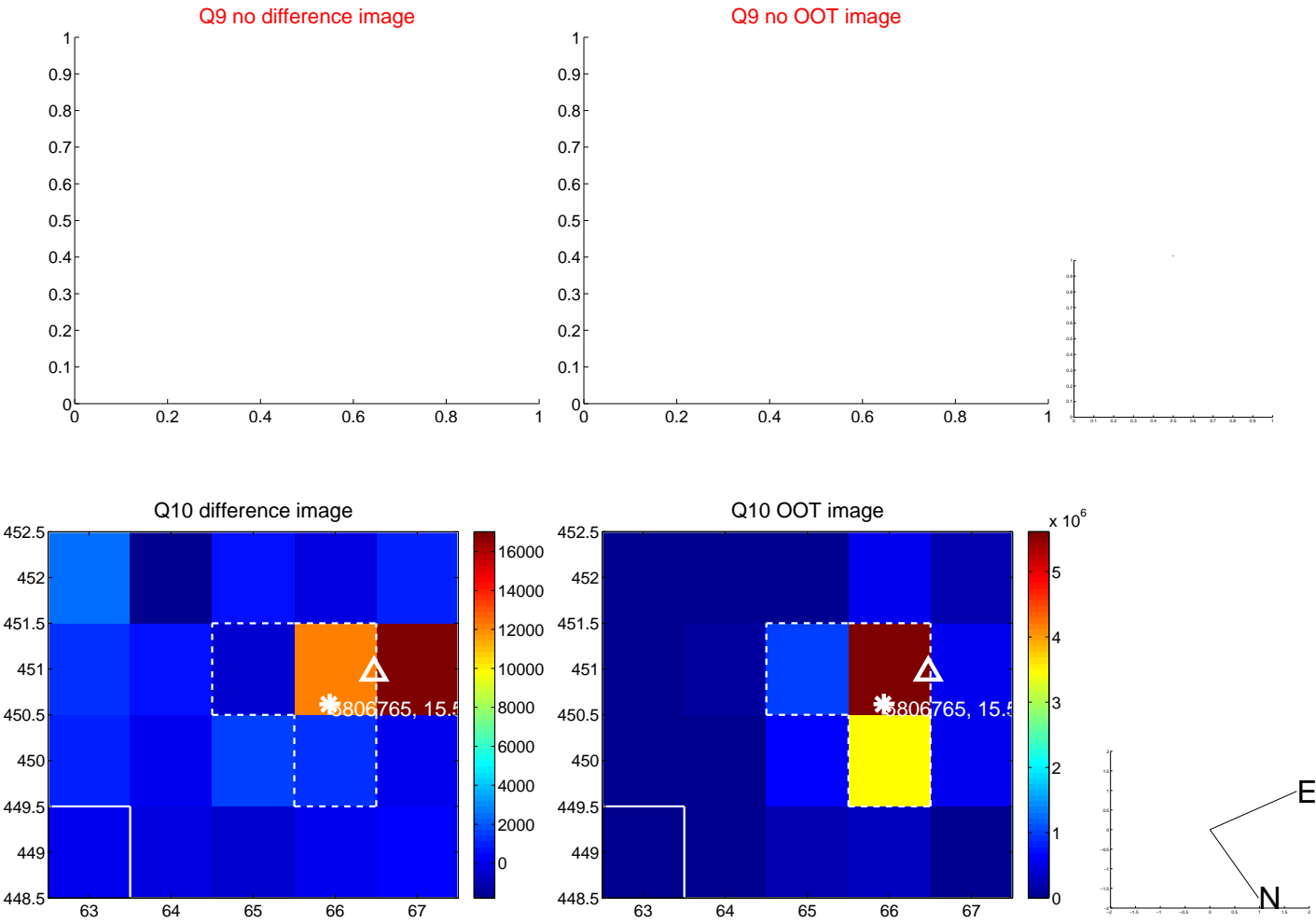
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



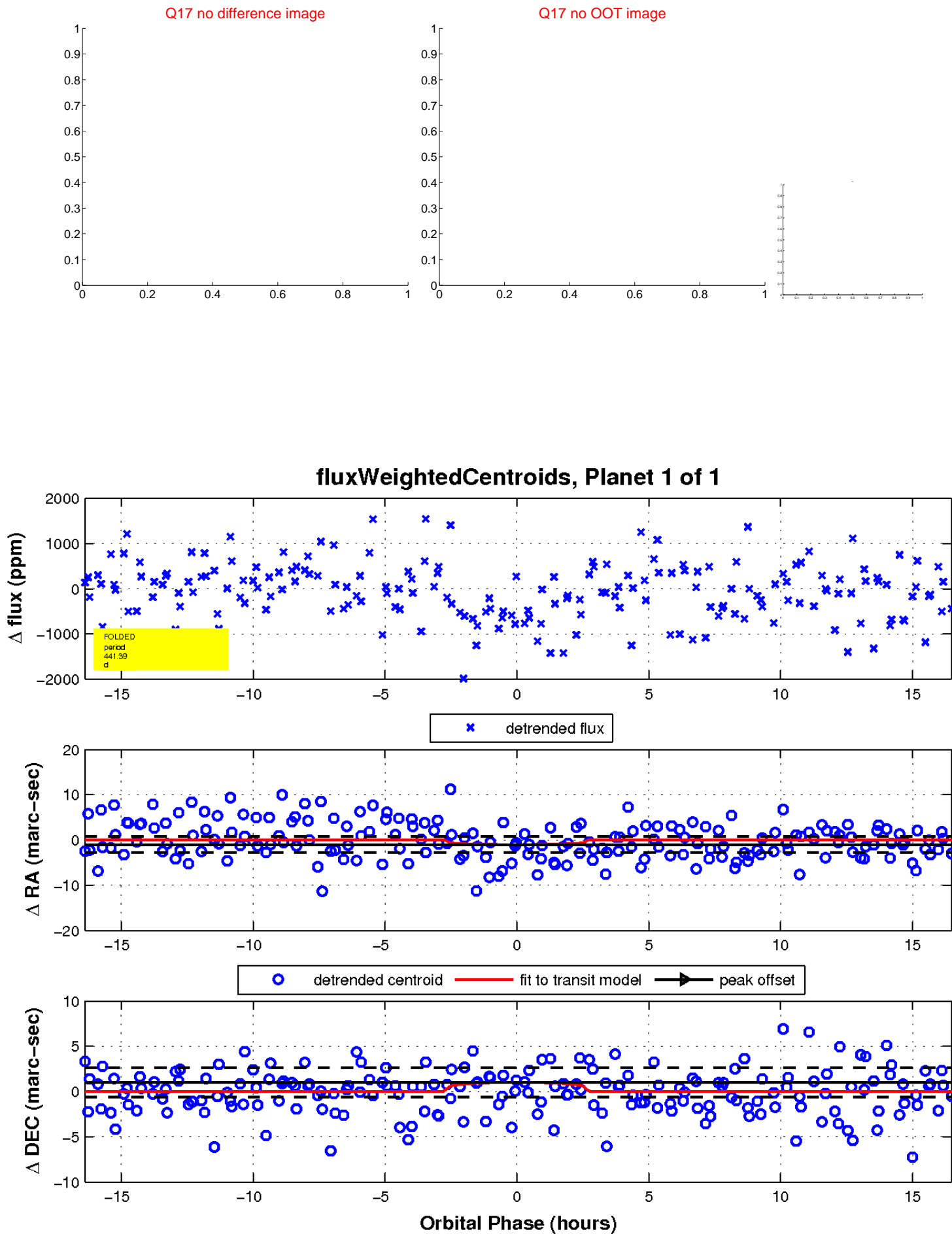
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UKIRT Image

Declination

