

KIC 004466676

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})
004466676-01	OBS	No	370.769941	500.859943	344.7	16.567	7.7	8.3	1.47	6569	2.96	2.74

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
004466676-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—ALL_TRANS_CHASES—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.

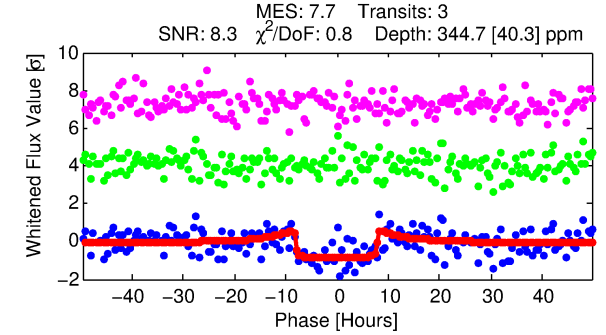
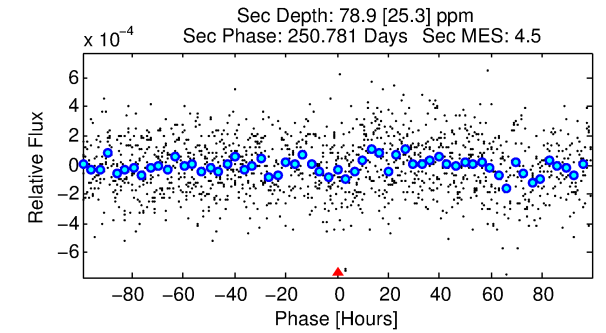
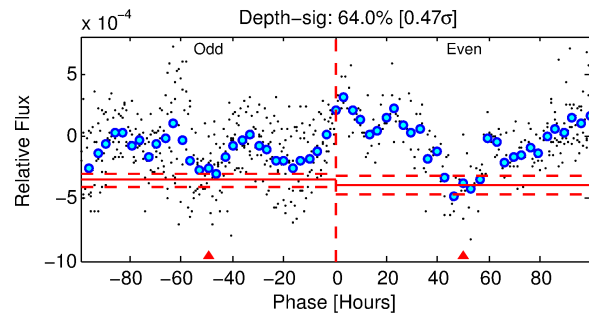
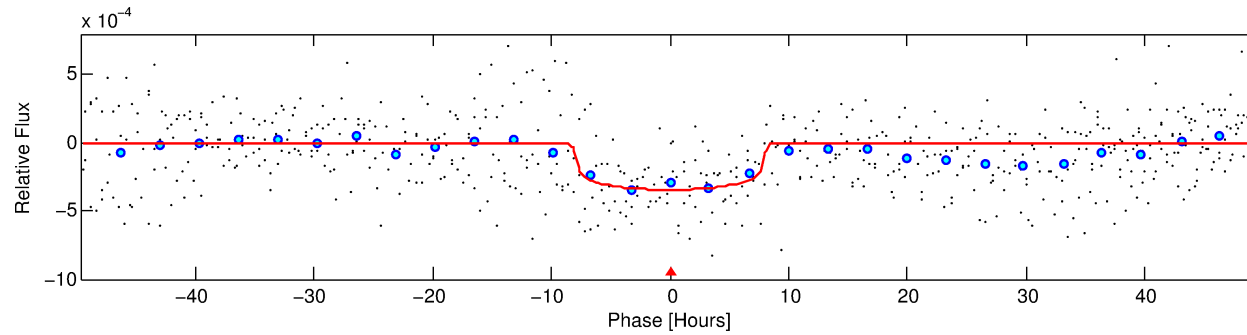
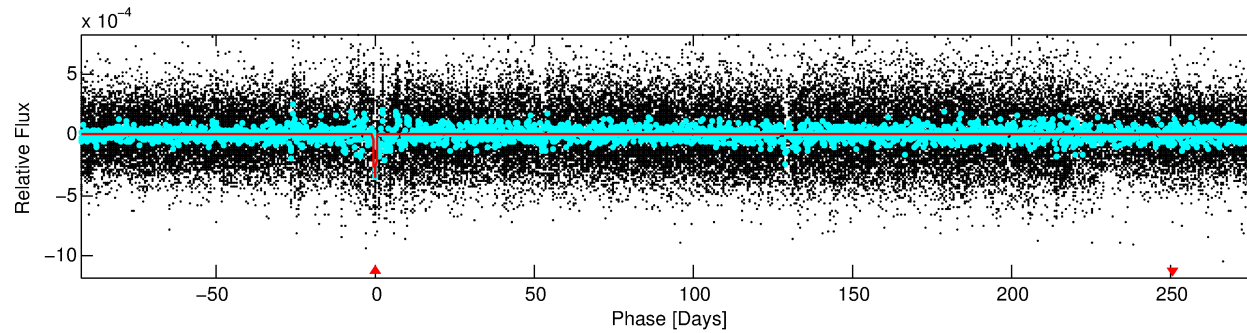
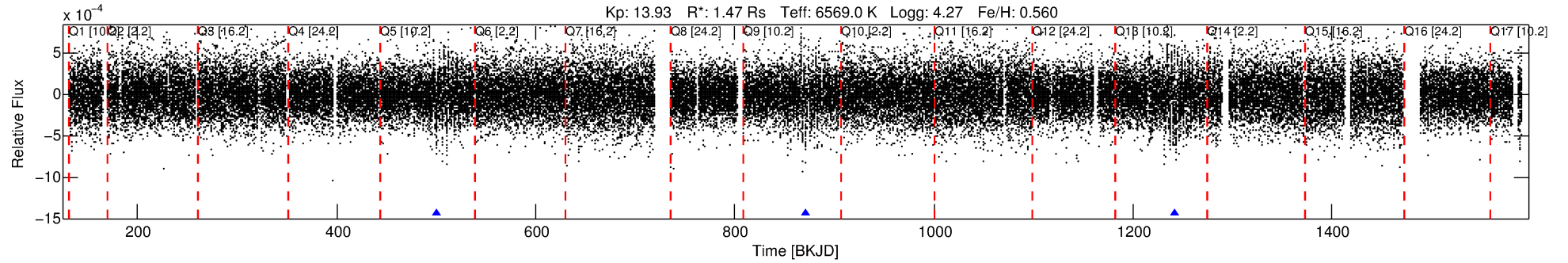
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 004466676-01

No Significant Match Found

DV One-Page Summary

KIC: 4466676 Candidate: 1 of 1 Period: 370.770 d



DV Fit Results:

Period = 370.76994 [0.01121] d
Epoch = 500.8599 [0.0146] BKJD
Rp/R* = 0.0184 [0.0031]
a/R* = 118.81 [93.50]
b = 0.74 [0.48]
Seff = 2.74 [0.60]
Teq = 328 [18] K
Rp = 2.96 [0.70] Re
a = 1.1486 [0.1649] AU
Ag = 6551.06 [3362.16] [1.95 σ]
Teffp = 4562 [534] K [7.9 σ]

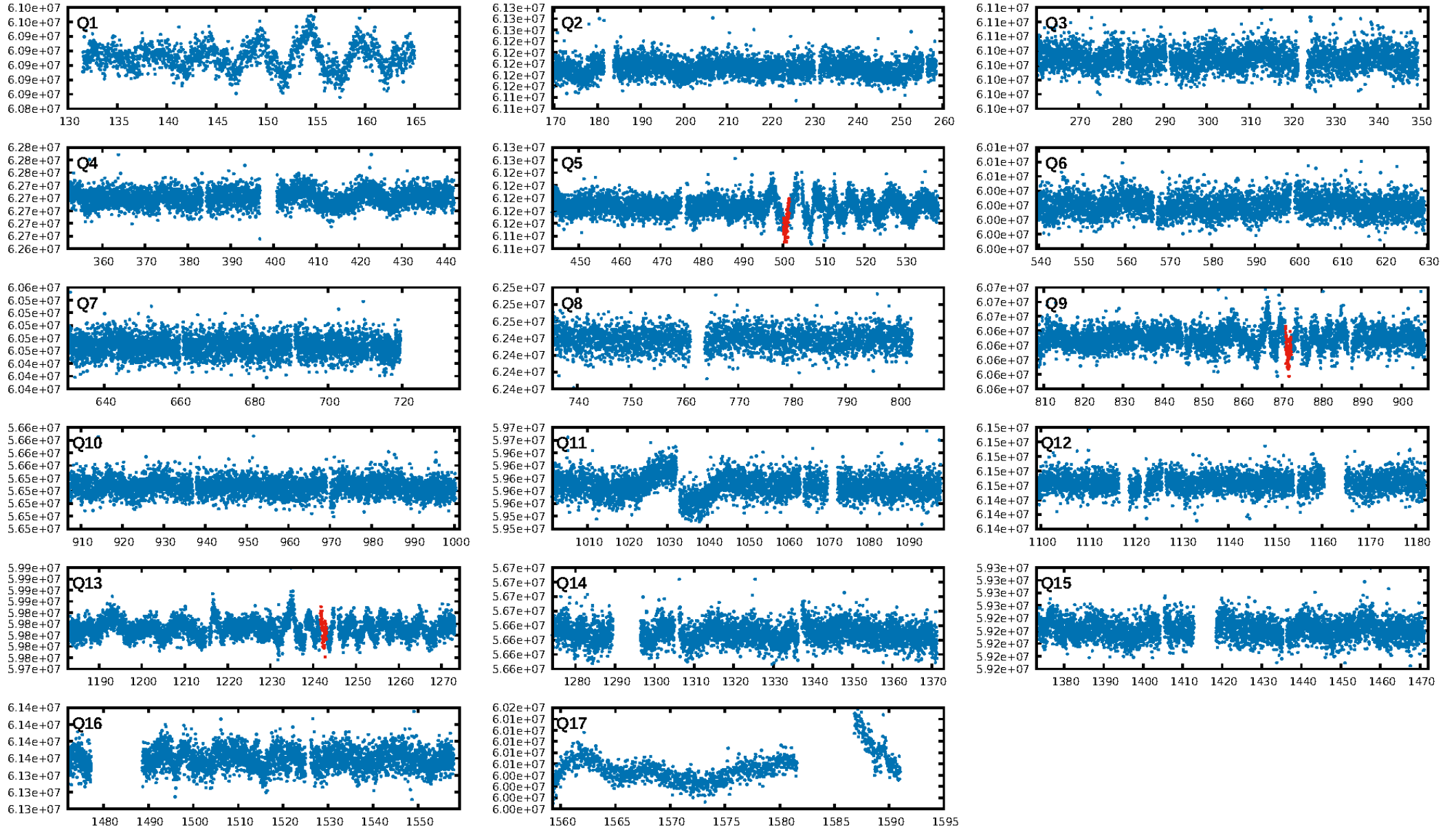
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 95.5%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 1.74e-09
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: -0.2972
Centroid-sig: 0.6%
Centroid-so: 3.095 arcsec [1.82 σ]
OotOffset-rm: N/A
OotOffset-st: 0/0/0 [0]
KicOffset-rm: N/A
KicOffset-st: 0/0/0 [0]
DiffImageQuality-fgm: N/A
DiffImageOverlap-fno: 1.00 [2/2]

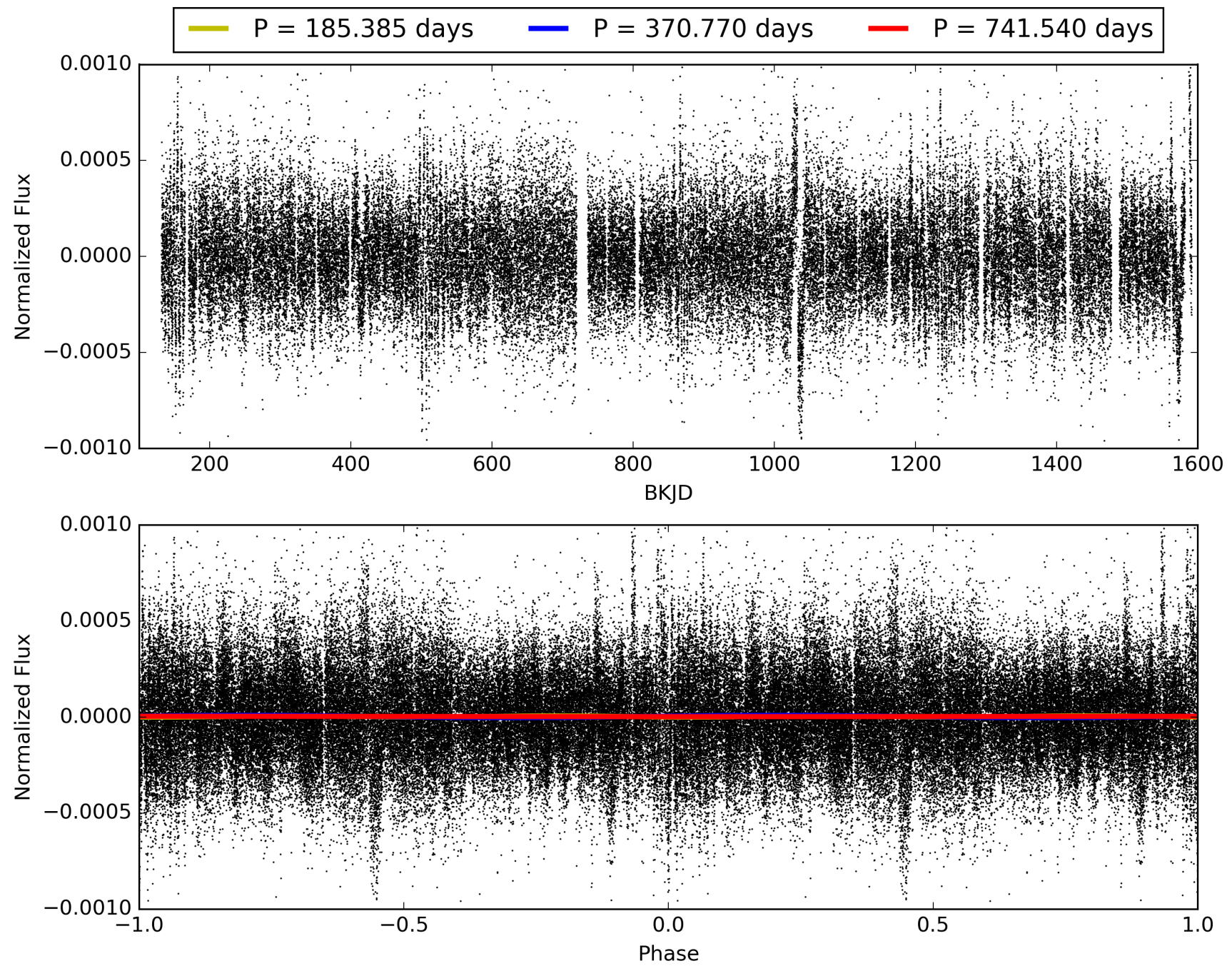
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 19:52:27 Z

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

TCE 004466676-01, PDC Light Curves

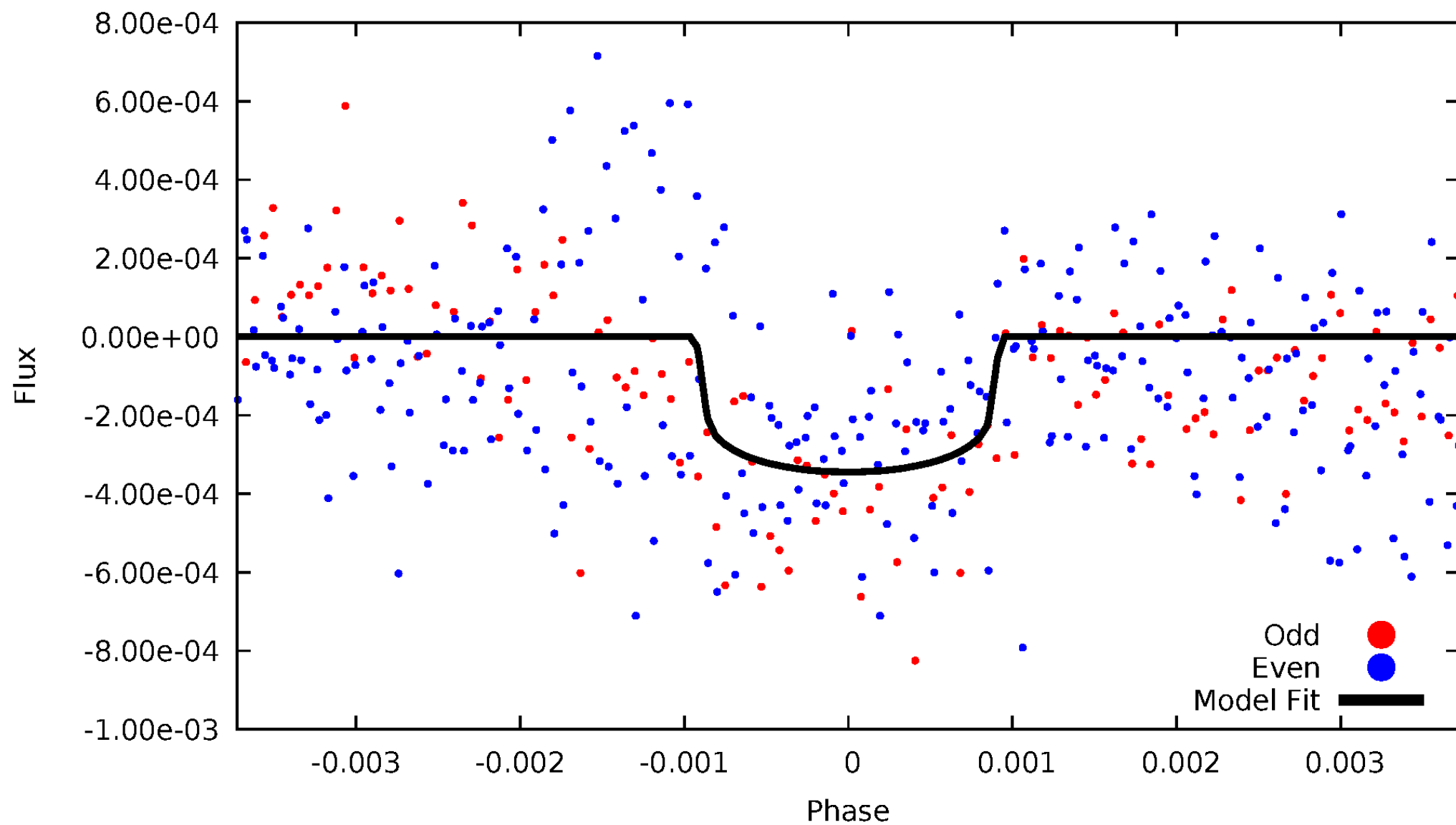


TCE 004466676-01



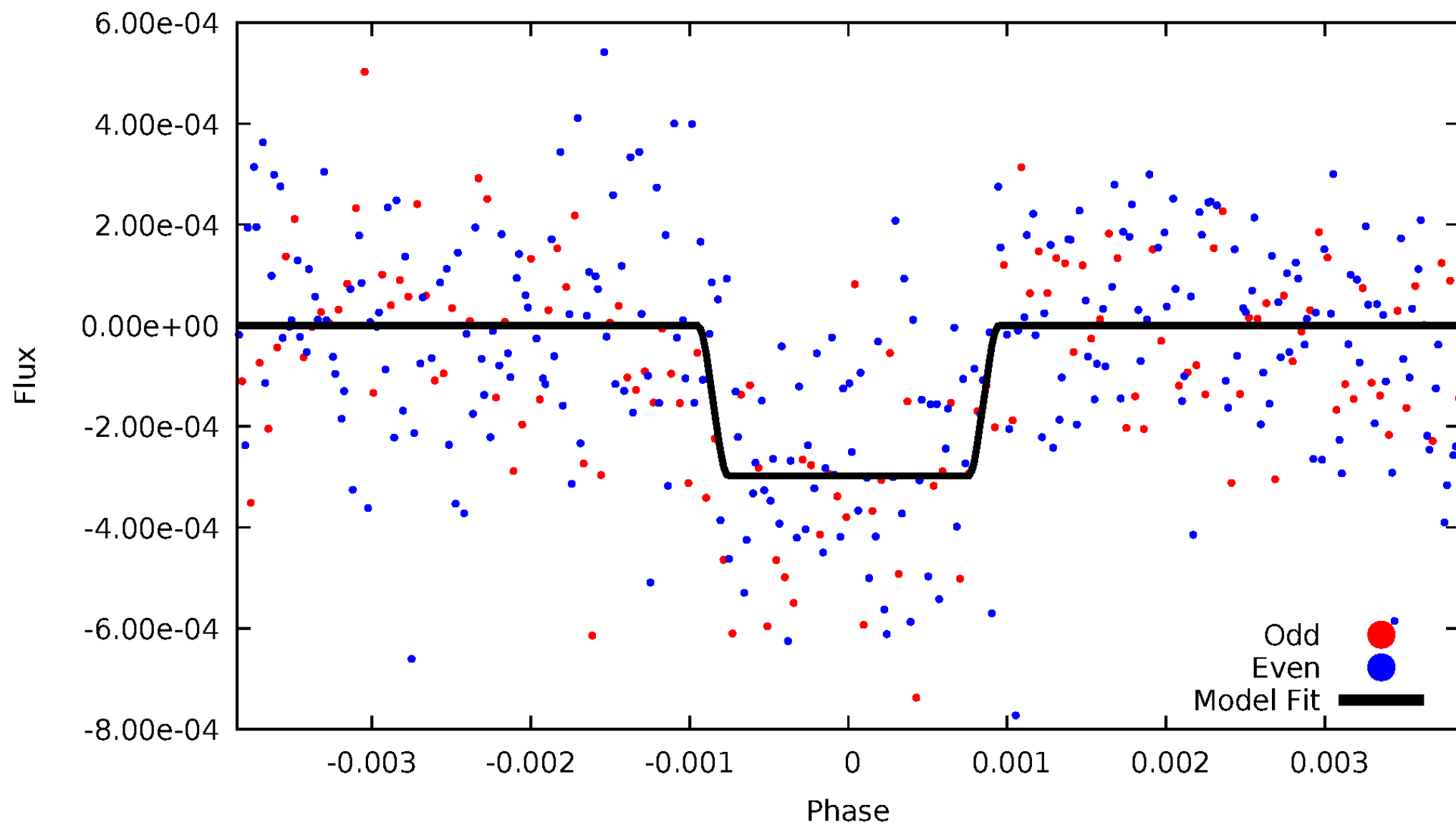
DV Odd/Even

TCE 004466676-01

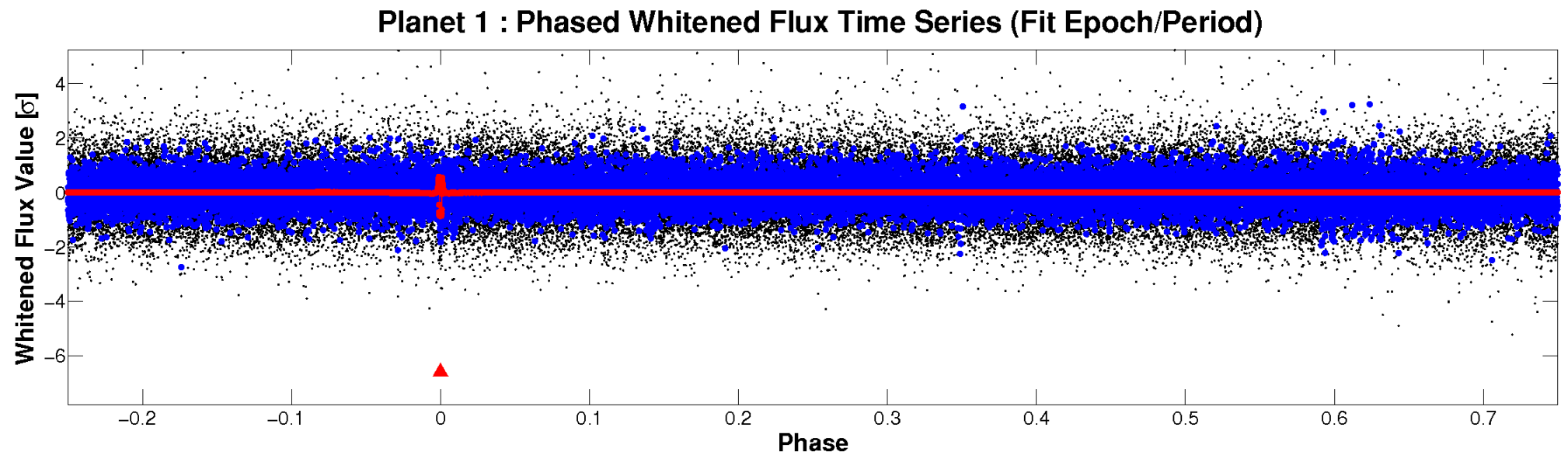
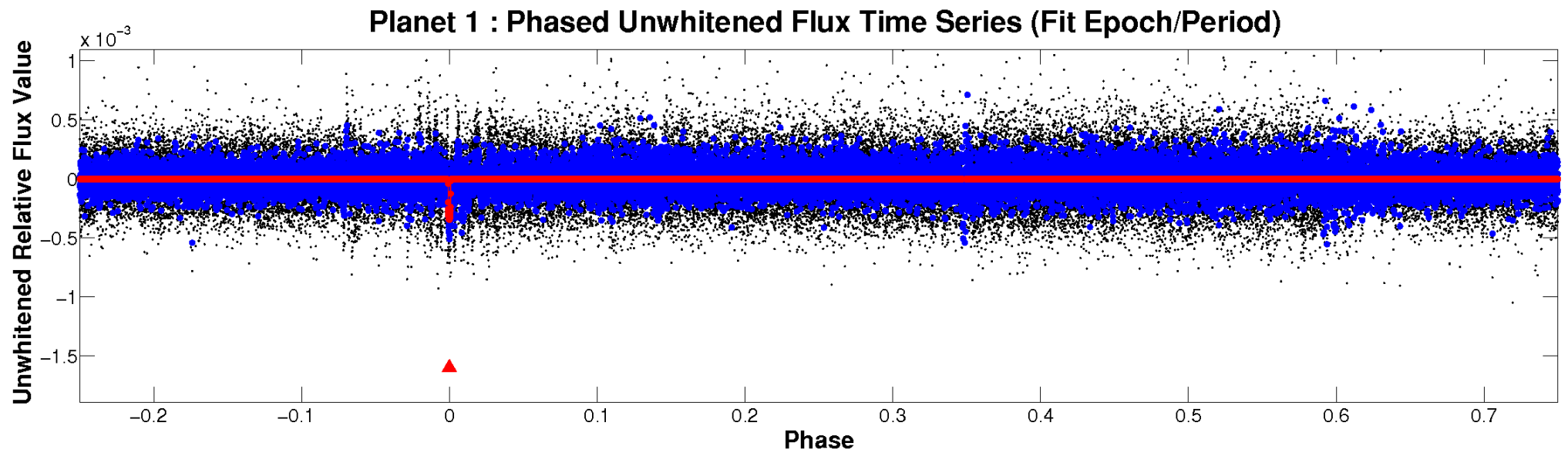


ALT Odd/Even

TCE 004466676-01

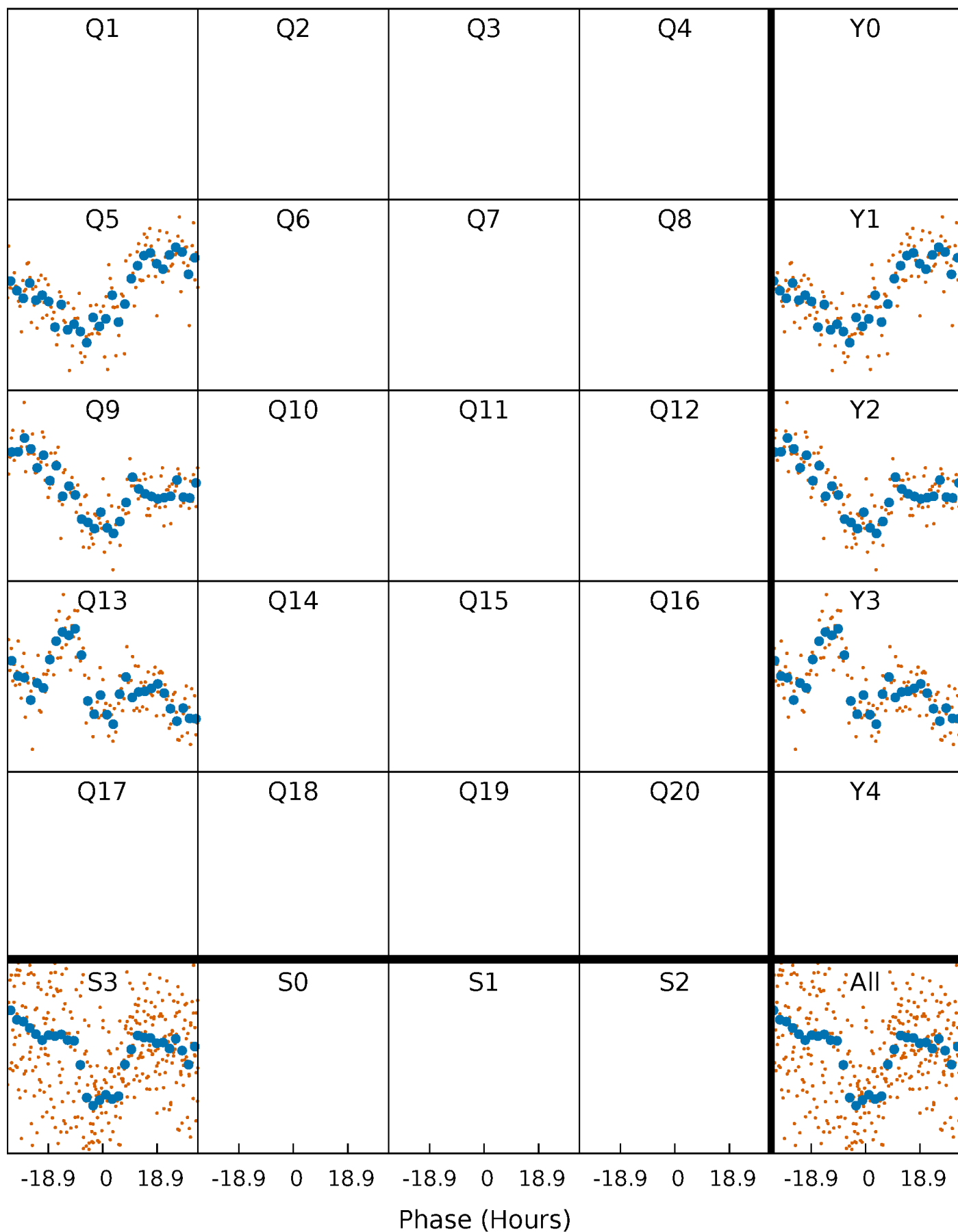


Non-Whitened Vs. Whitened Light Curve



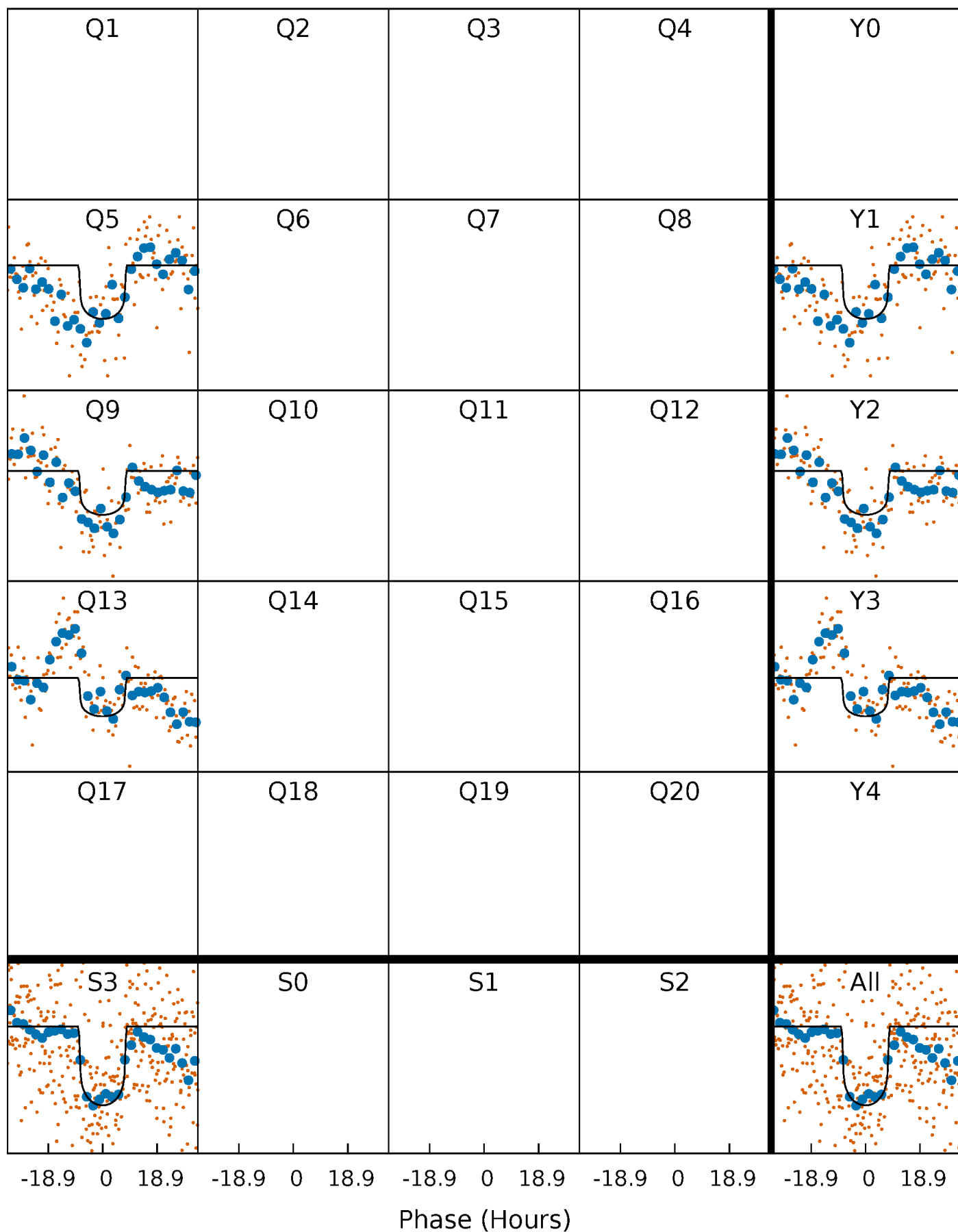
PDC Quarter-Phased Transit Curves

TCE 004466676-01 P=370.769941 Days $T_0=500.859943$ (BKJD)



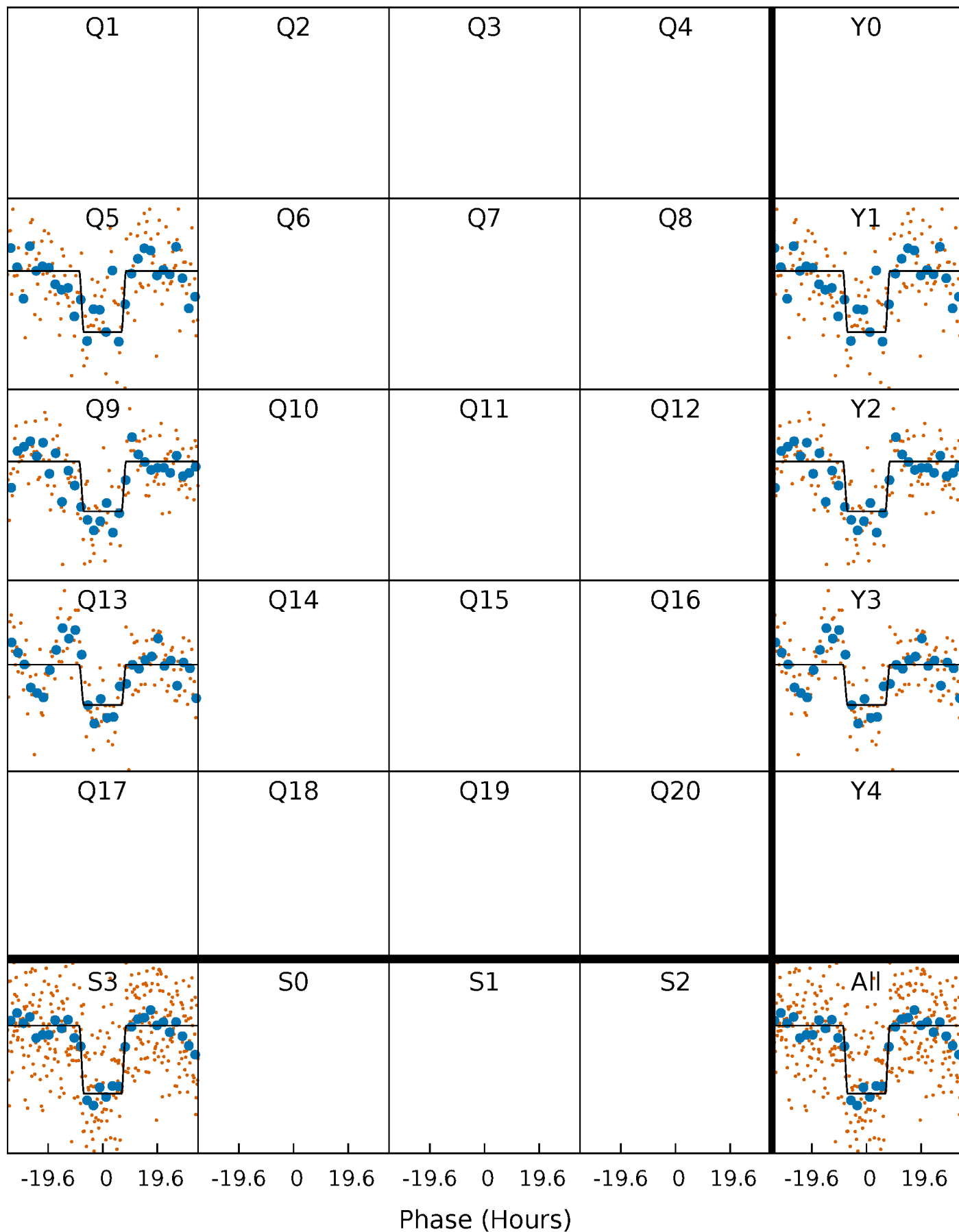
DV Quarter-Phased Transit Curves

TCE 004466676-01 P=370.769941 Days $T_0=500.859943$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

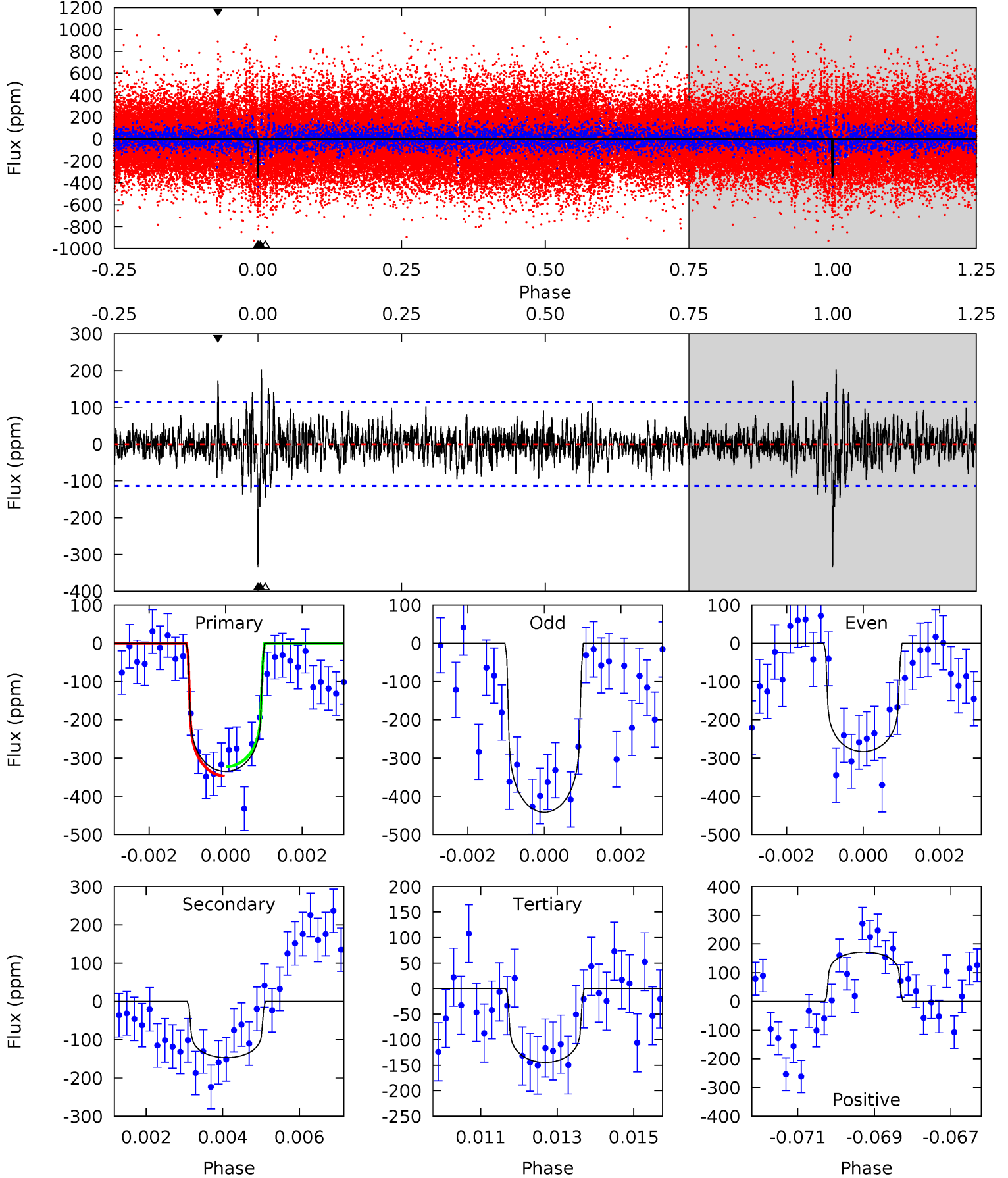
TCE 004466676-01 P=370.780569 Days $T_0=500.841801$ (BKJD)



DV Model-Shift Uniqueness Test

004466676-01, P = 370.769941 Days, E = 130.090002 Days

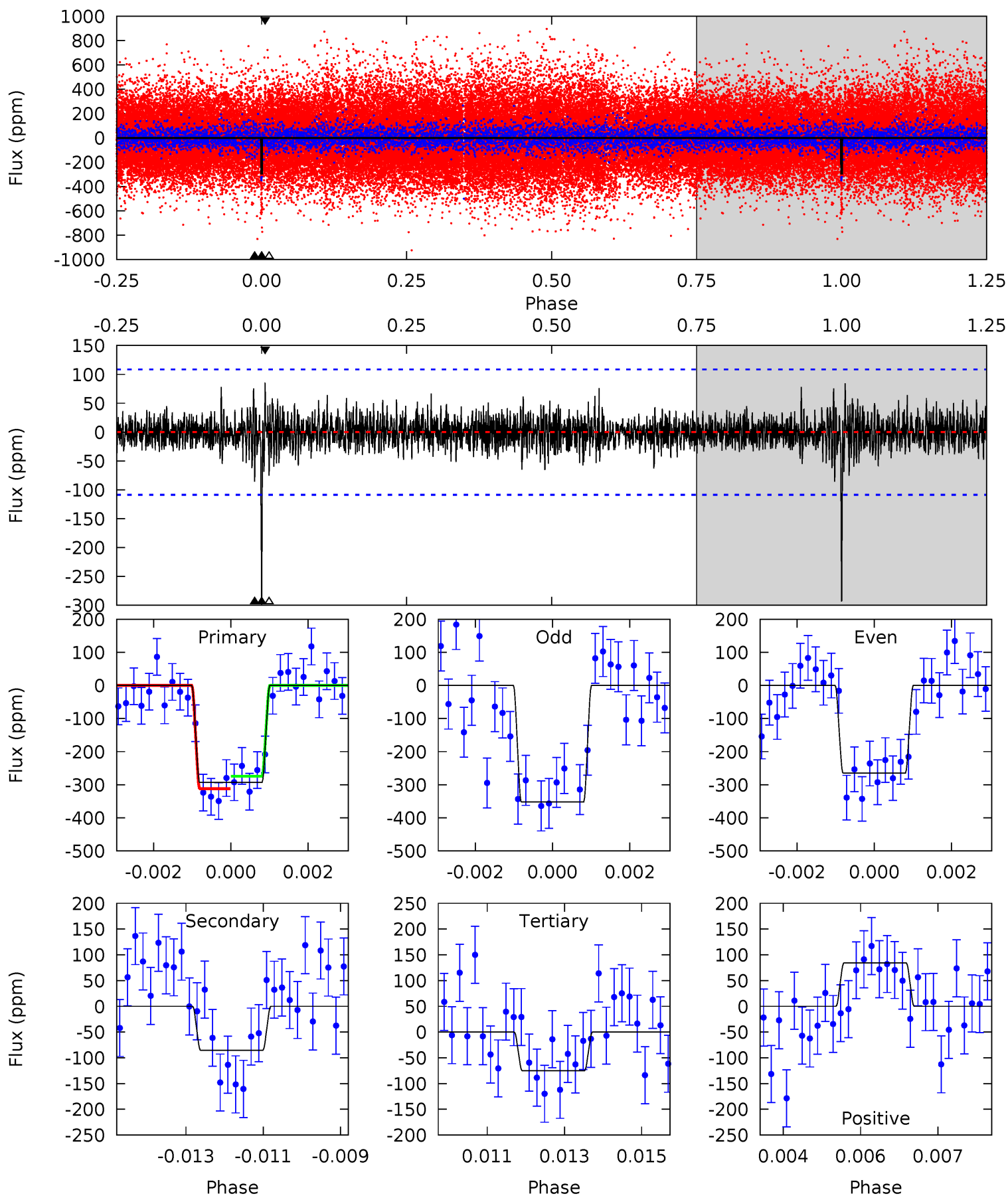
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
15.7	6.89	6.77	8.06	5.34	3.11	1.67	8.91	7.62	0.11	-1.18	3.48	0.91	0.38	0.57



Alt Model-Shift Uniqueness Test

004466676-01, P = 370.780569 Days, E = 130.061232 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14.4	4.20	3.69	4.14	5.34	3.11	0.95	10.7	10.3	0.51	0.06	2.02	0.97	0.22	0.92



Stellar Parameters For KIC 004466676

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (g \cdot \text{cm}^{-3})$
	6569^{+78}_{-78}	$4.270^{+0.023}_{-0.120}$	$0.560^{+0.050}_{-0.200}$	$1.471^{+0.243}_{-0.076}$	$1.470^{+0.075}_{-0.075}$	$0.651^{+0.073}_{-0.225}$
	+1%/-1%	+1%/-3%	+9%/-36%	+17%/-5%	+5%/-5%	+11%/-35%
Source	SPE68	SPE68	SPE68	DSEP		

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

Secondary Eclipse Parameters for KIC 004466676-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-147 ± 21	$3.04^{+0.58}_{-0.54}$	463^{+18}_{-10}	5348^{+514}_{-407}	11410^{+5438}_{-3641}
Alt.	-86 ± 20	$2.81^{+0.54}_{-0.50}$	464^{+17}_{-11}	4944^{+452}_{-428}	7740^{+4101}_{-2733}

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

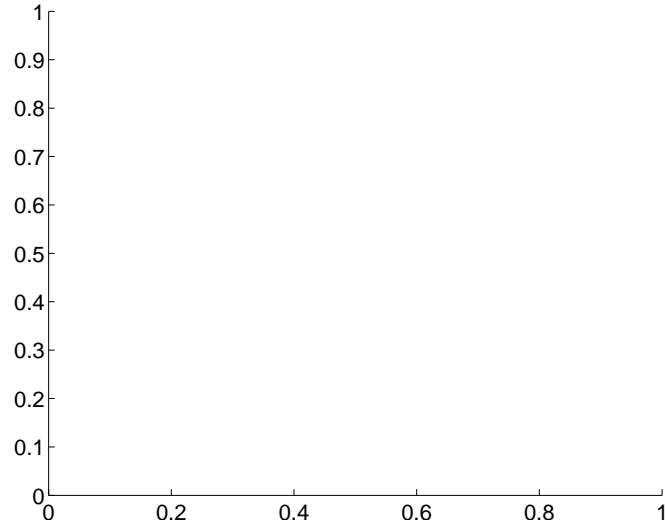
Supplemental centroid analysis for 004466676-01. Kepler magnitude: 13.93. Transit SNR 8.26

There are 0 quarters with good PRF difference image offsets

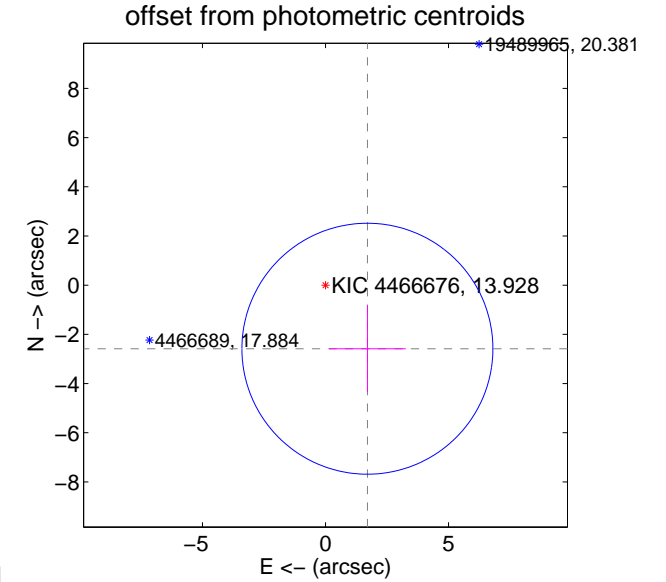
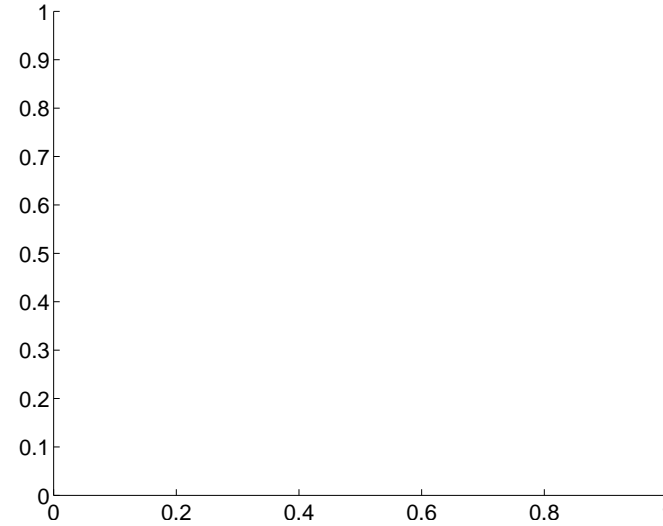
The direct PRF centroid is offset from the target star catalog position by about NaN arcsec

	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	3.10 ± 1.70	1.82	-1.70 ± 1.56	-2.58 ± 1.76

There is no PRF-fit offset from OOT-fit



There is no PRF-fit offset from KIC

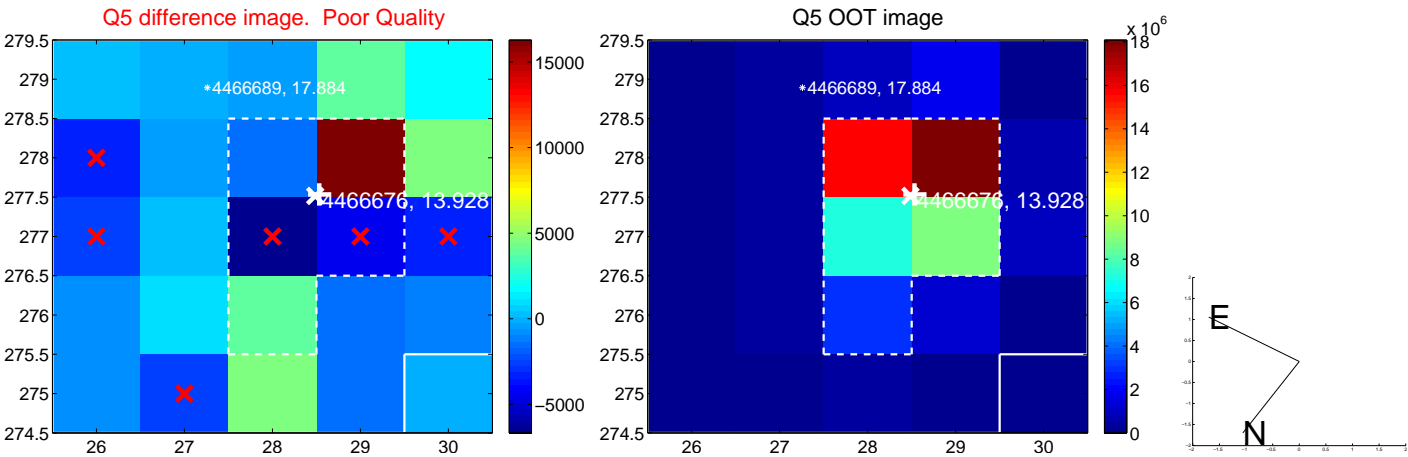


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

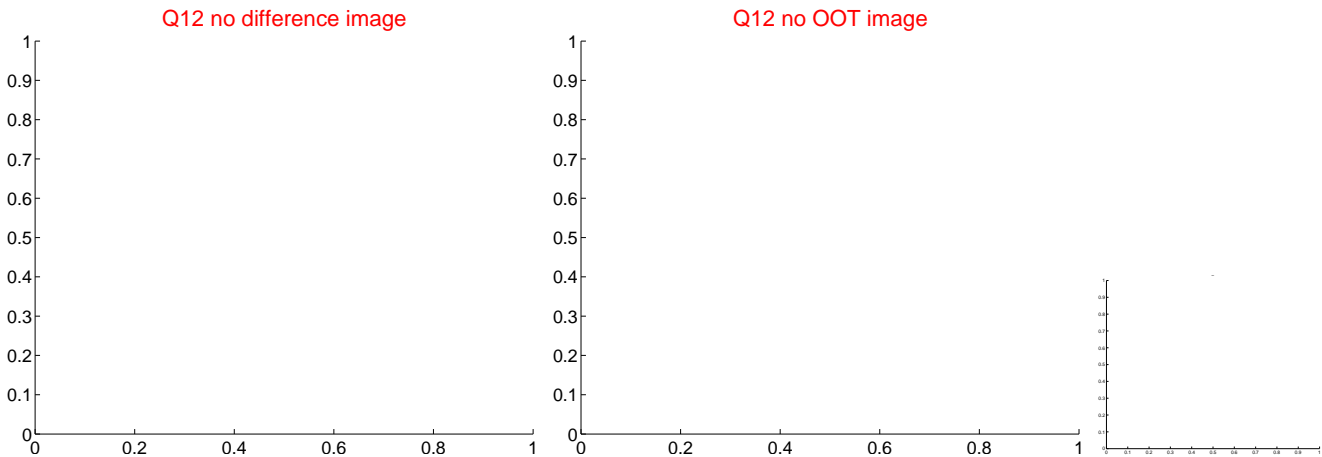
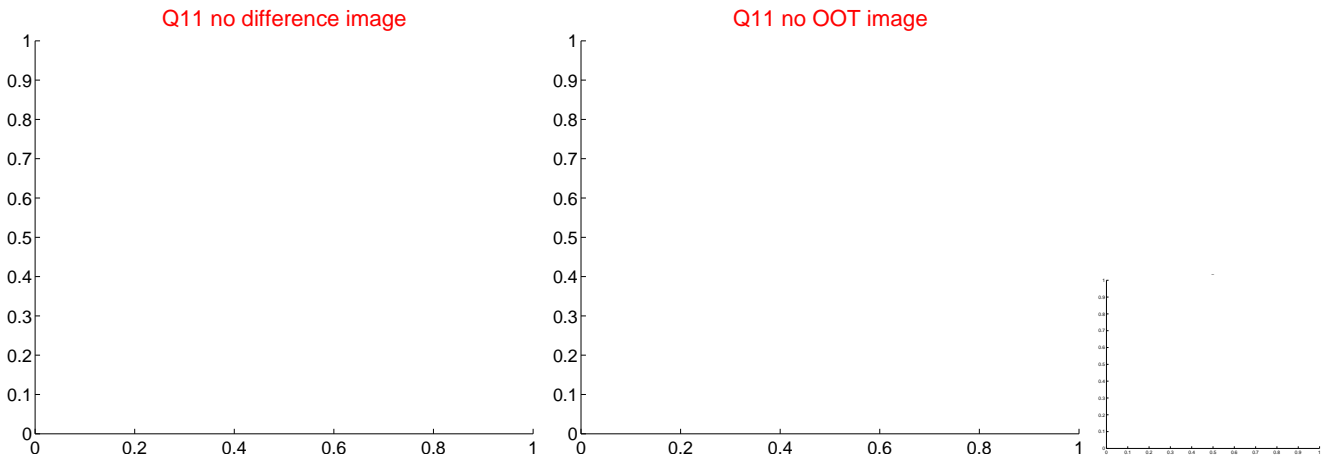
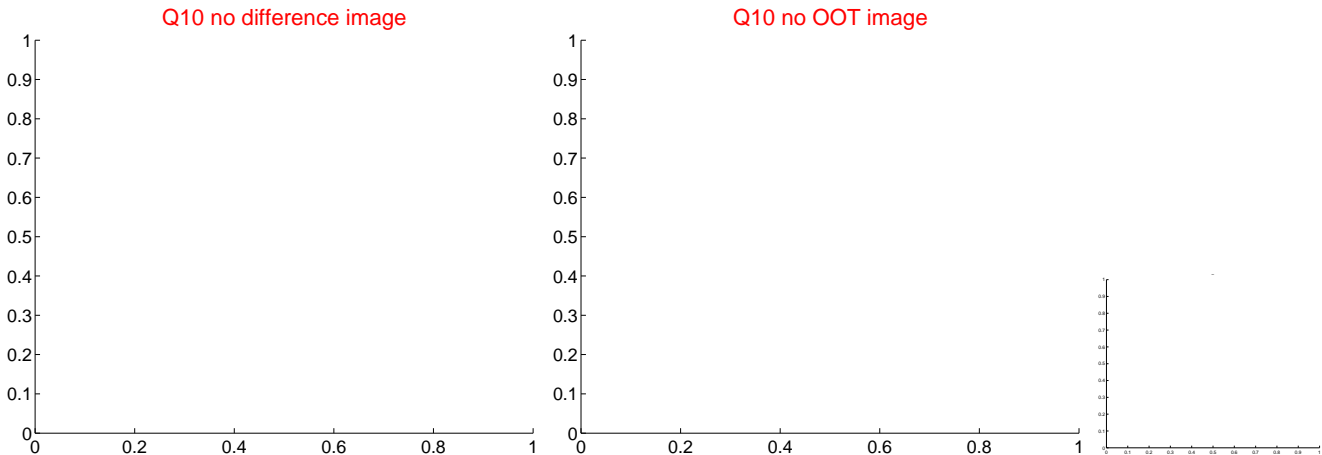
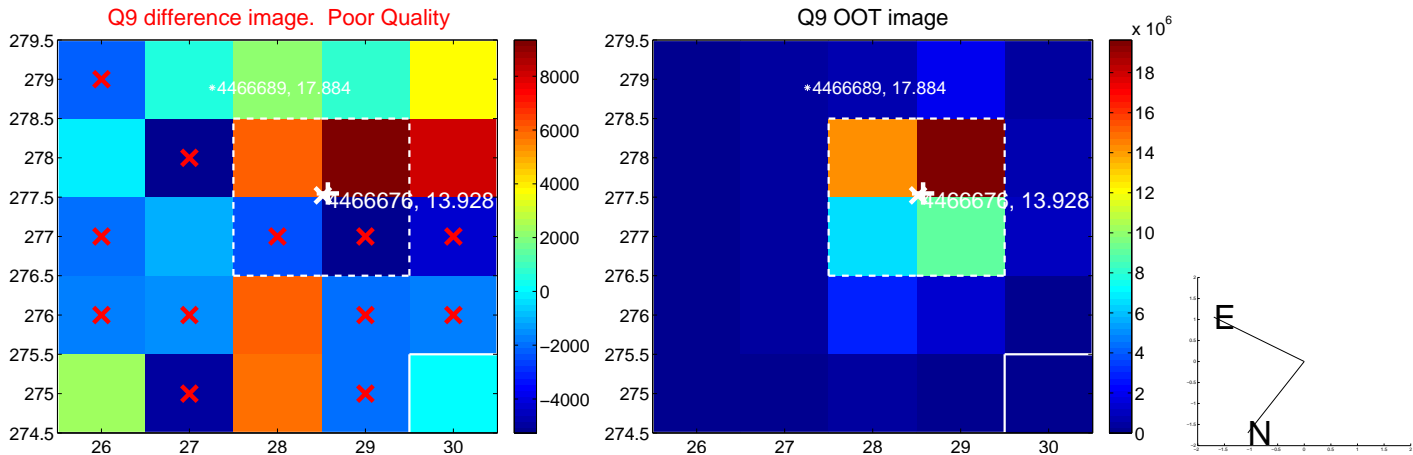
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



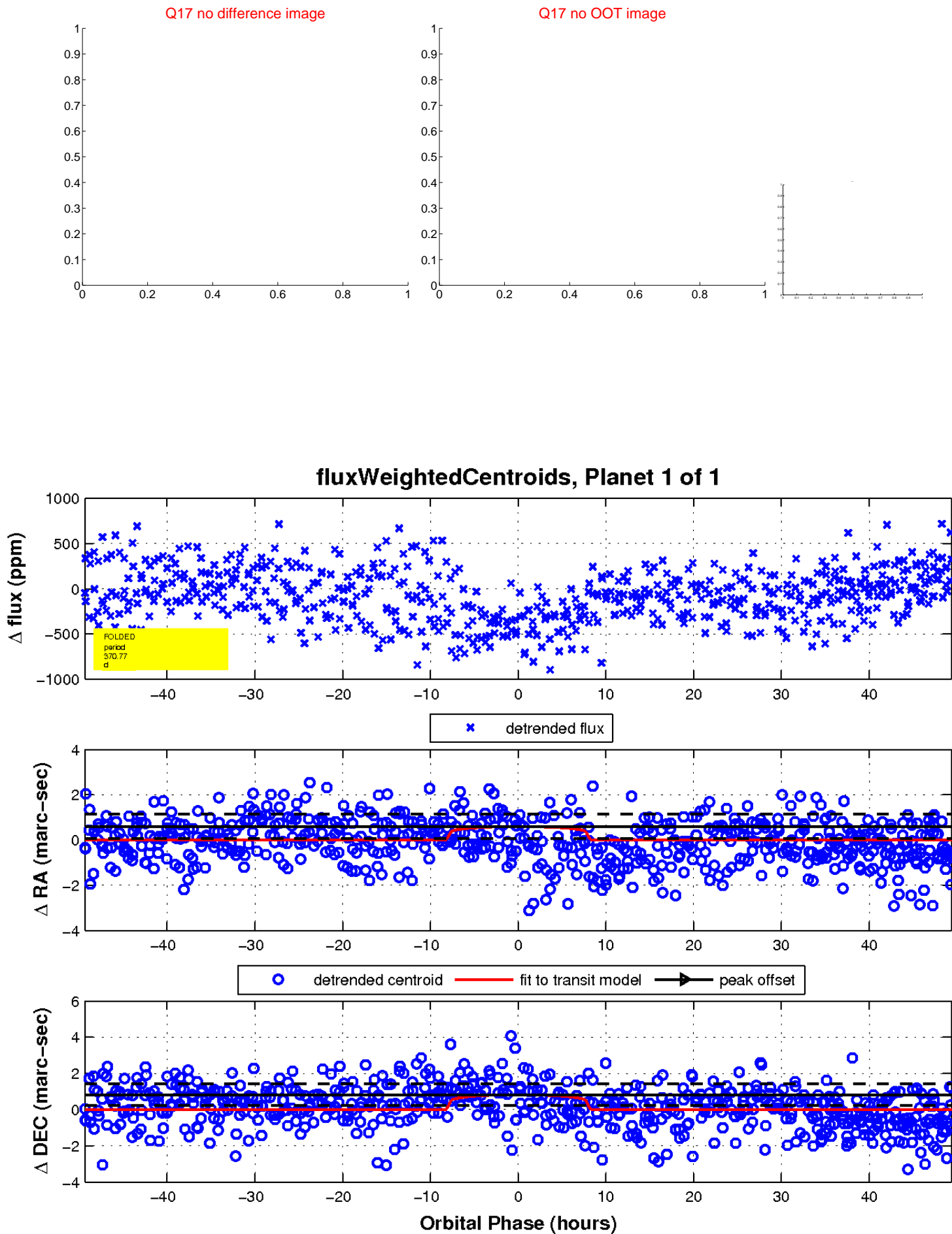
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



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



UKIRT Image

Declination

