

KIC 006766663

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})
006766663-01	OBS	No	399.012467	529.031103	680.4	3.925	13.8	7.9	0.50	3829	1.34	0.07

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006766663-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_TER_DV—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.

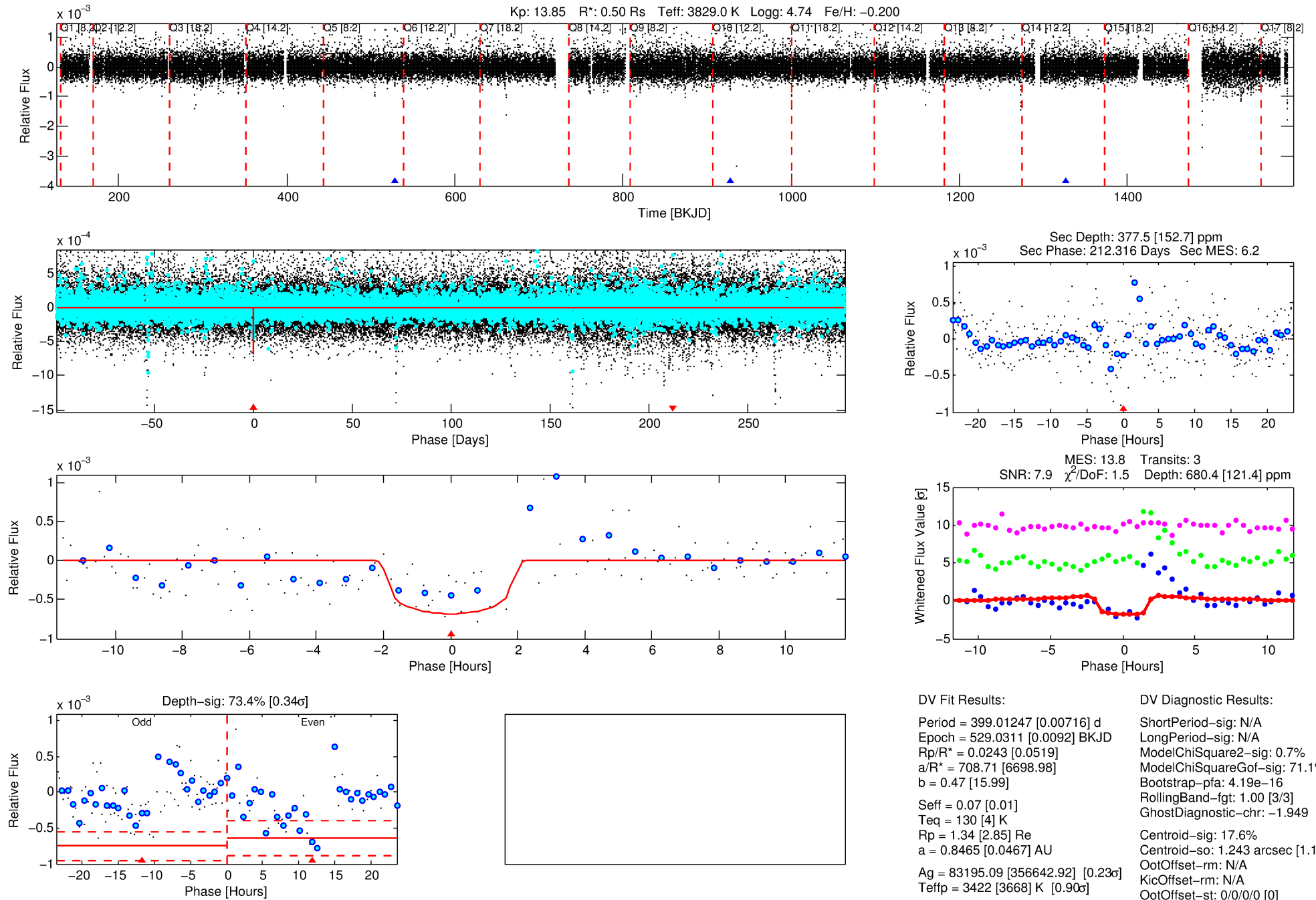
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006766663-01

No Significant Match Found

DV One-Page Summary

KIC: 6766663 Candidate: 1 of 1 Period: 399.012 d



DV Fit Results:

Period = 399.01247 [0.00716] d
Epoch = 529.0311 [0.0092] BKJD
Rp/R* = 0.0243 [0.0519]
a/R* = 708.71 [6698.98]
b = 0.47 [15.99]
Seff = 0.07 [0.01]
Teq = 130 [4] K
Rp = 1.34 [2.85] Re
a = 0.8465 [0.0467] AU
Ag = 83195.09 [356642.92] [0.23 σ]
Teffp = 3422 [3668] K [0.90 σ]

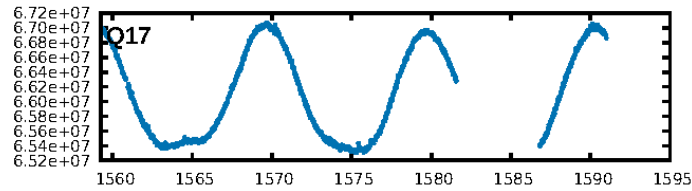
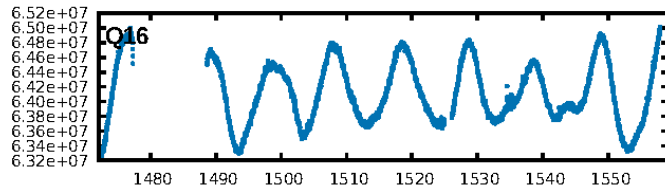
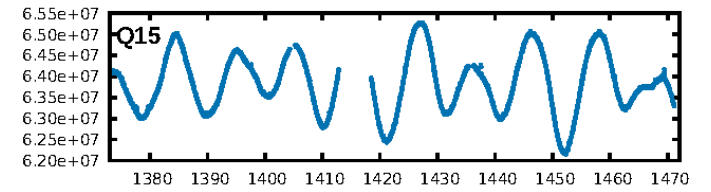
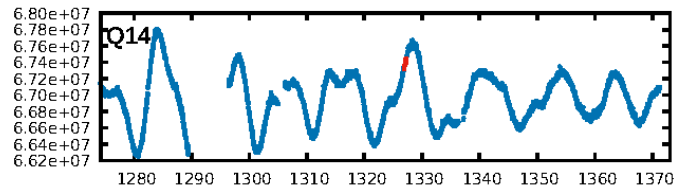
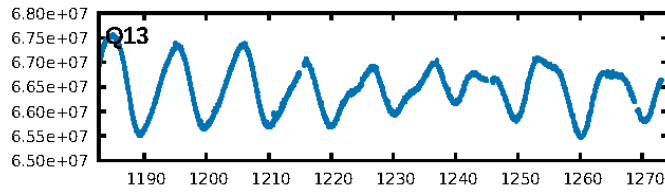
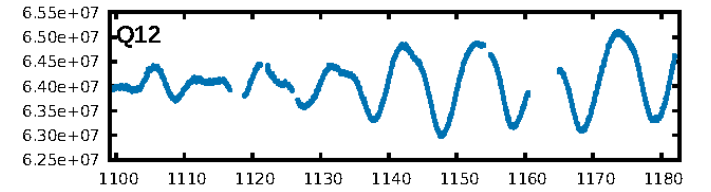
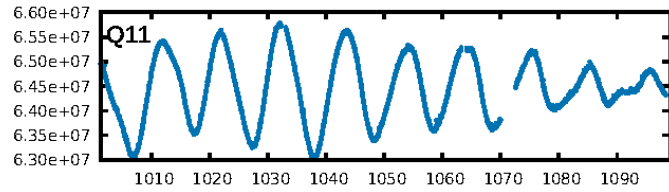
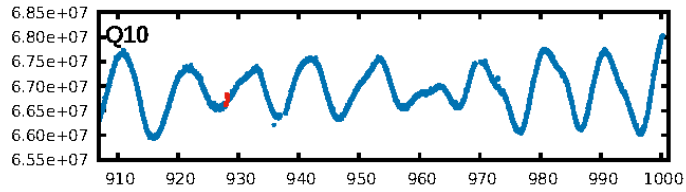
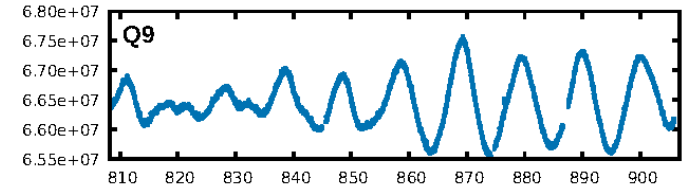
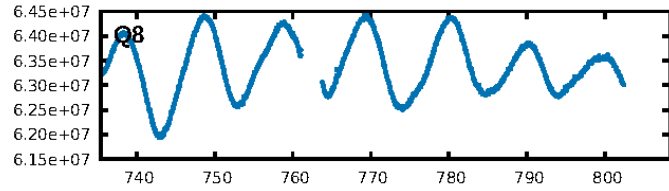
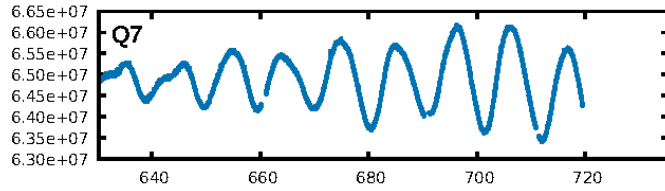
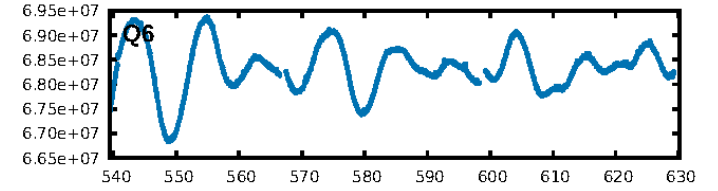
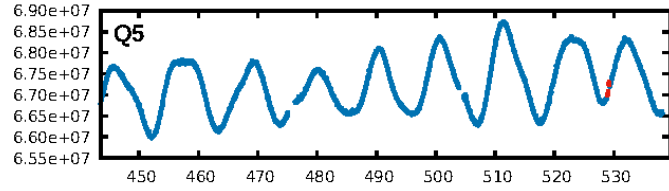
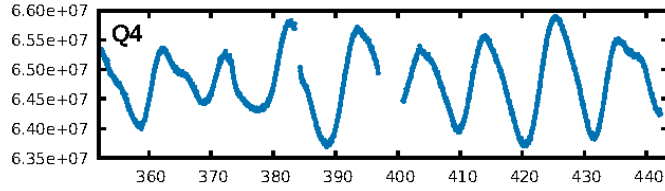
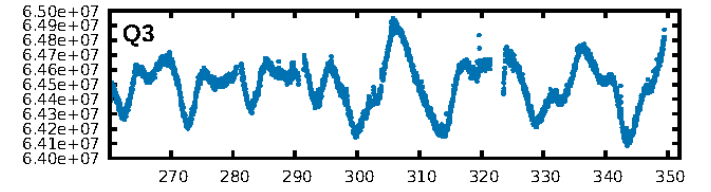
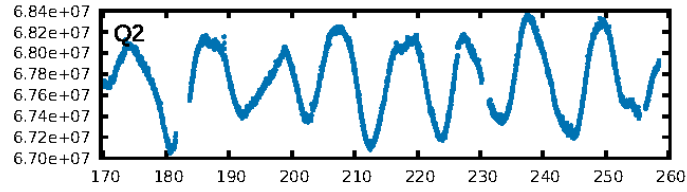
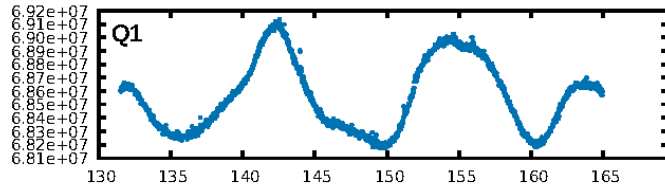
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.7%
ModelChiSquareGof-sig: 71.1%
Bootstrap-pfa: 4.19e-16
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: -1.949
Centroid-sig: 17.6%
Centroid-so: 1.243 arcsec [1.17 σ]
OotOffset-rm: N/A
KicOffset-rm: N/A
OotOffset-st: 0/0/0/0 [0]
KicOffset-st: 0/0/0/0 [0]
DiffImageQuality-fgm: N/A
DiffImageOverlap-fno: 1.00 [3/3]

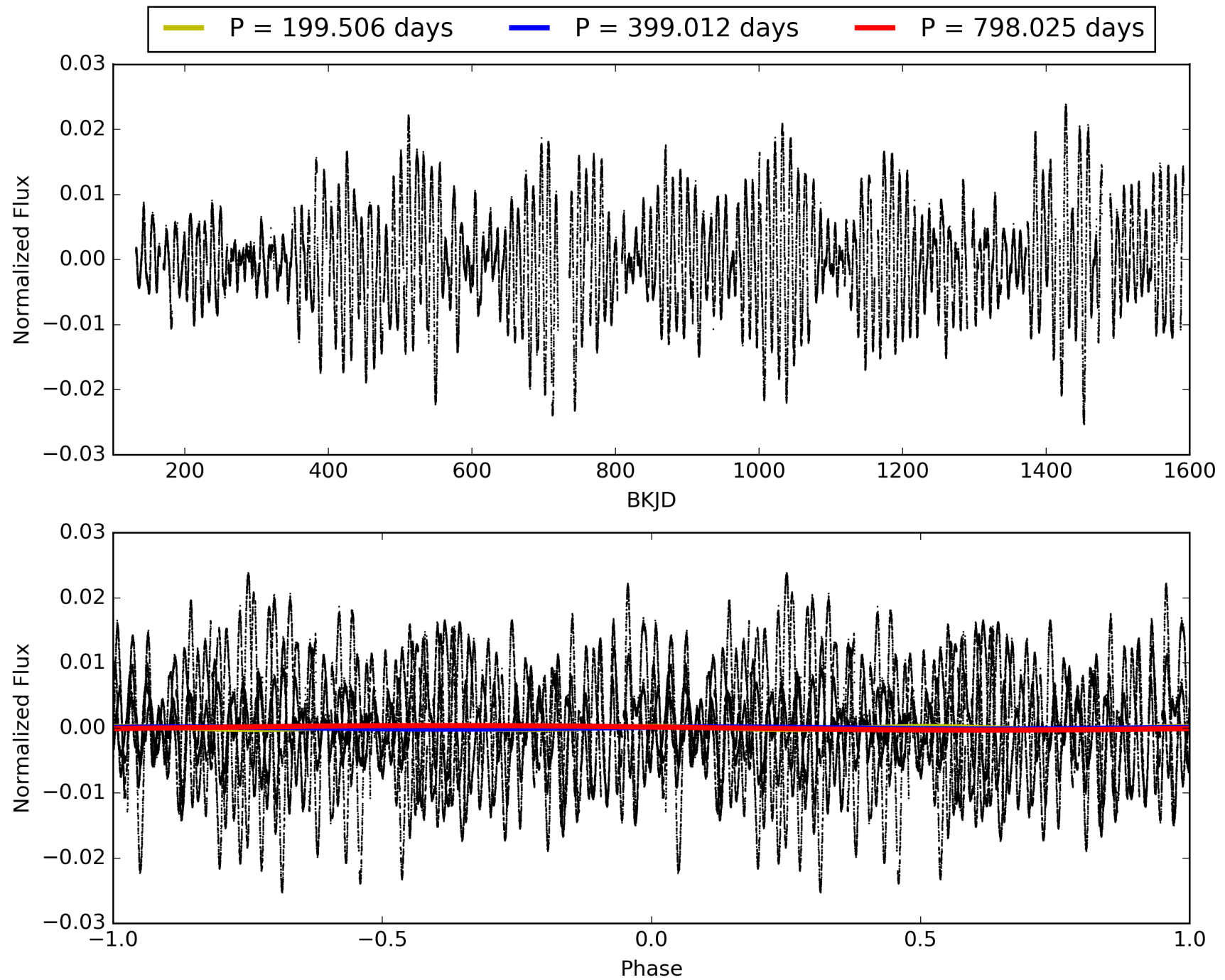
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 16:23:13 Z

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

TCE 006766663-01, PDC Light Curves

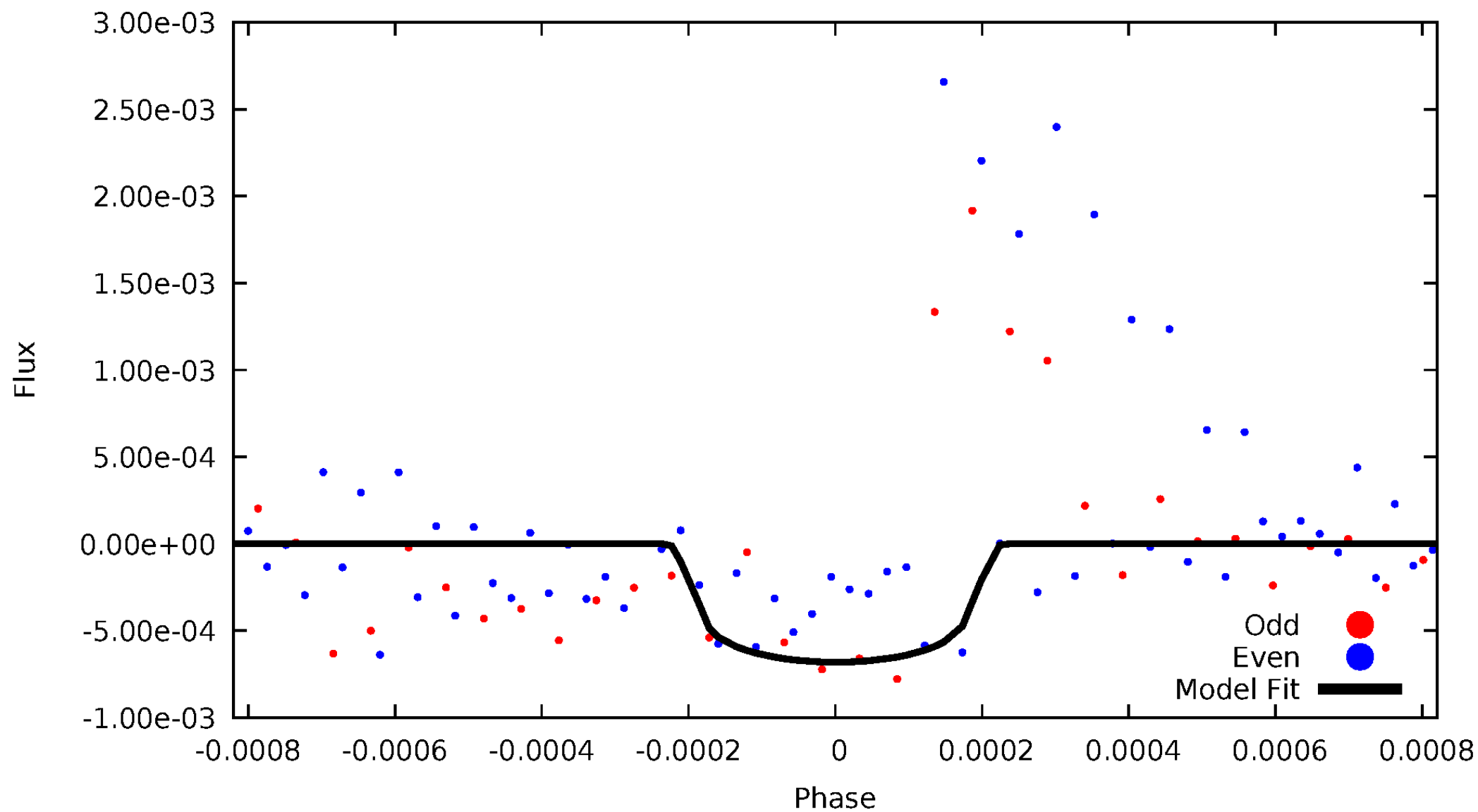


TCE 006766663-01



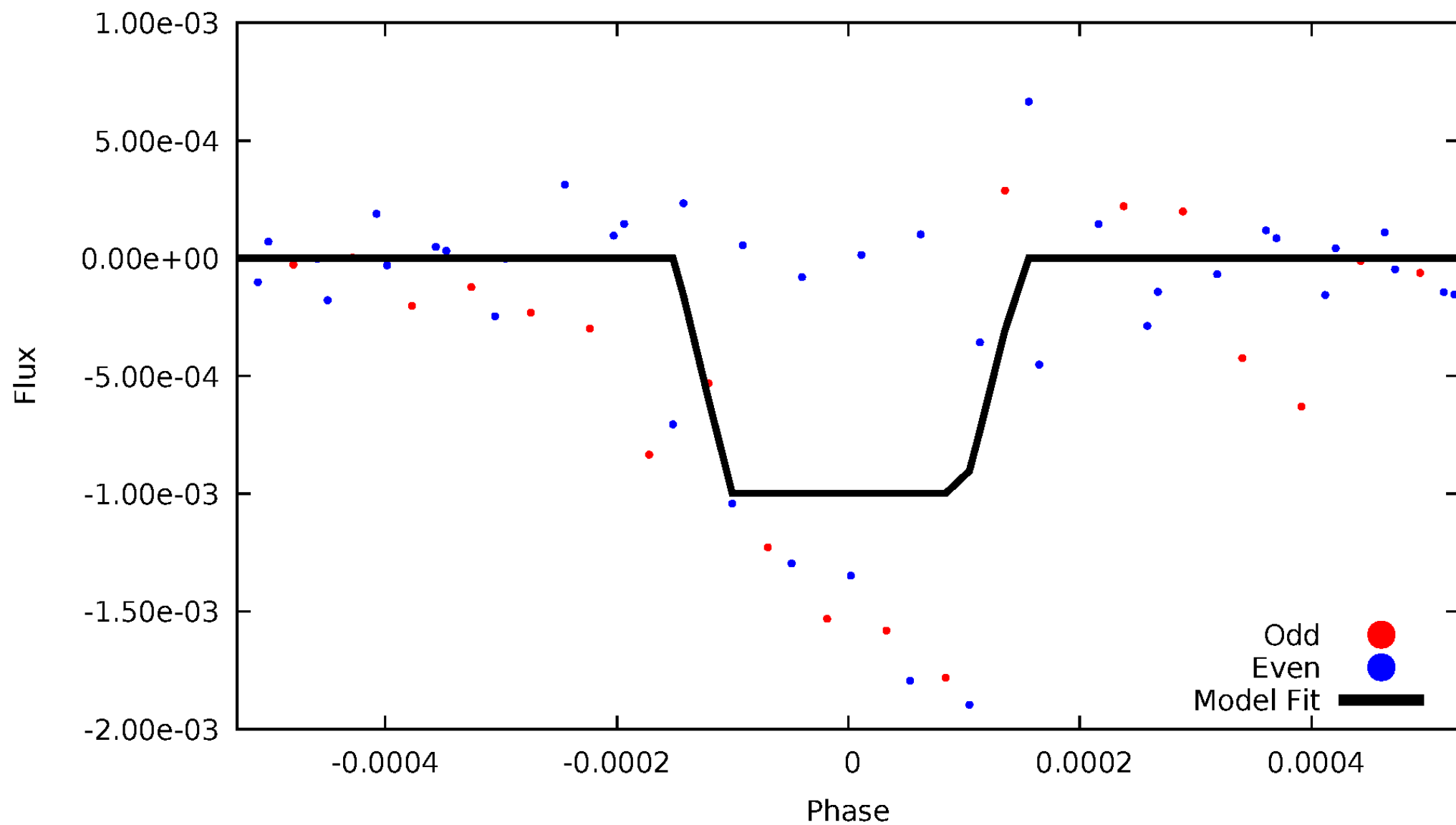
DV Odd/Even

TCE 006766663-01



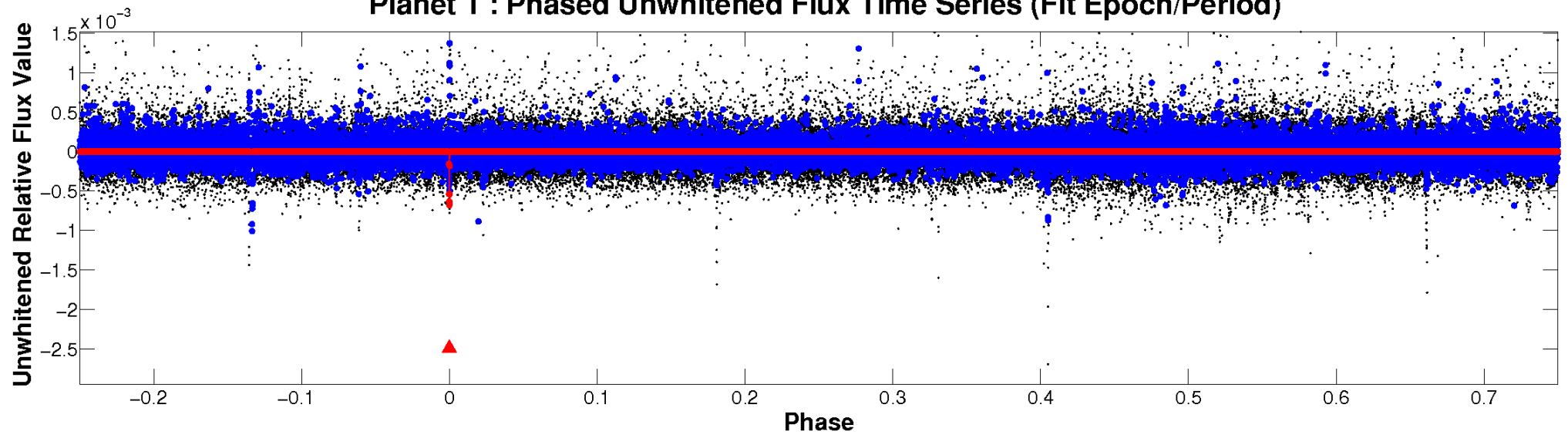
ALT Odd/Even

TCE 006766663-01

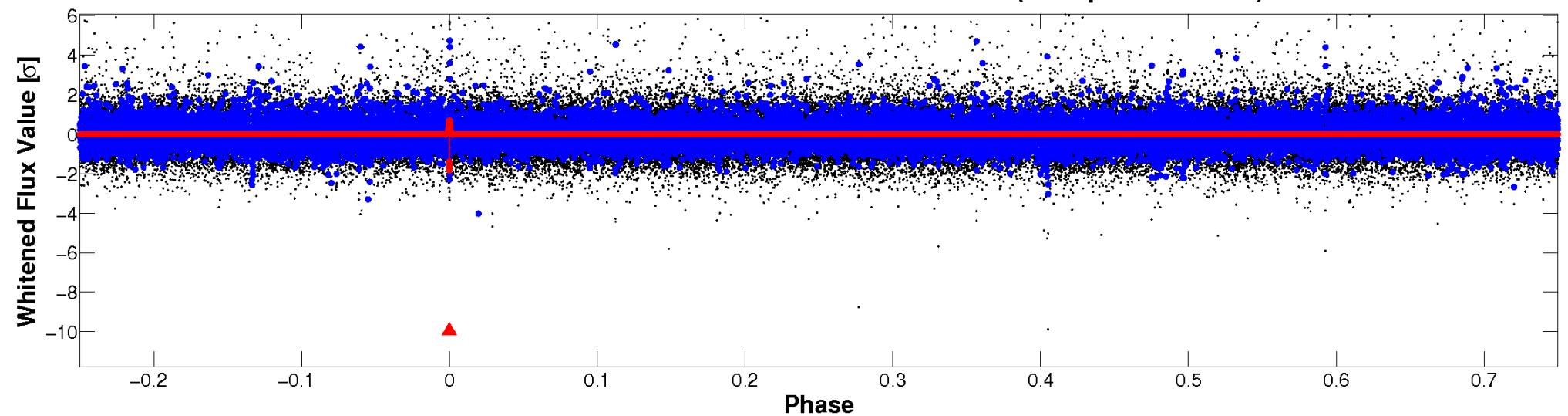


Non-Whitened Vs. Whitened Light Curve

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

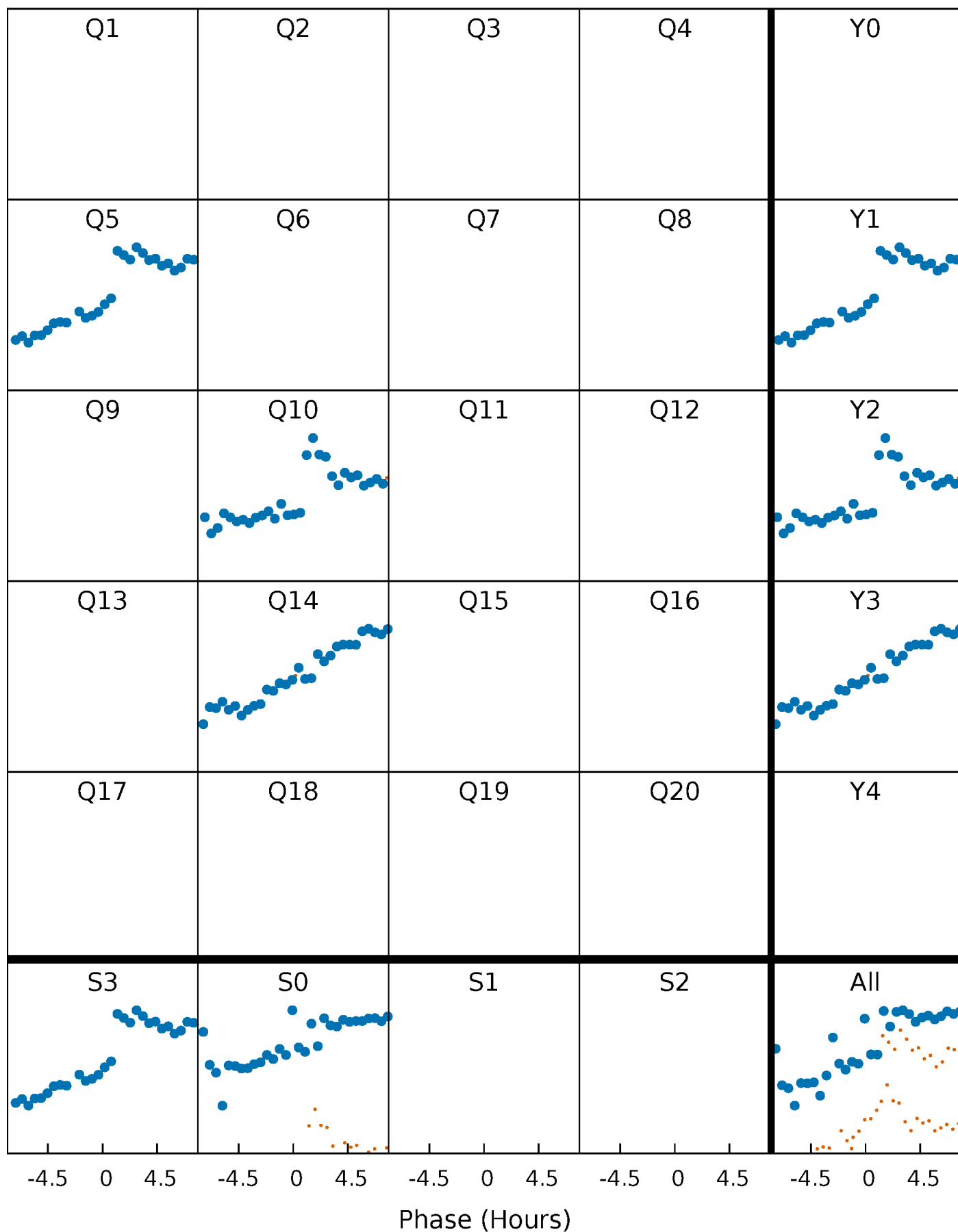


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



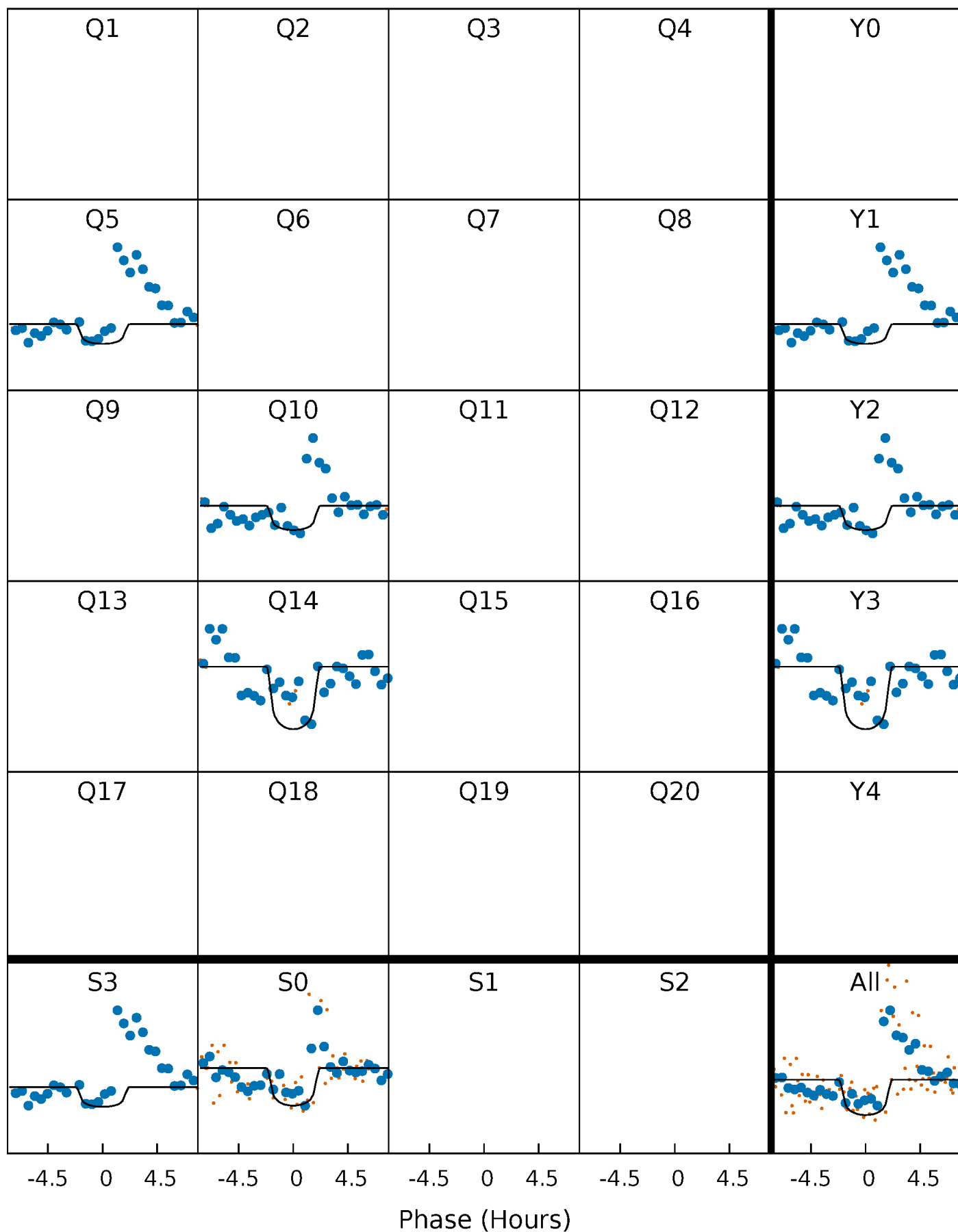
PDC Quarter-Phased Transit Curves

TCE 006766663-01 P=399.012467 Days $T_0=529.031103$ (BKJD)



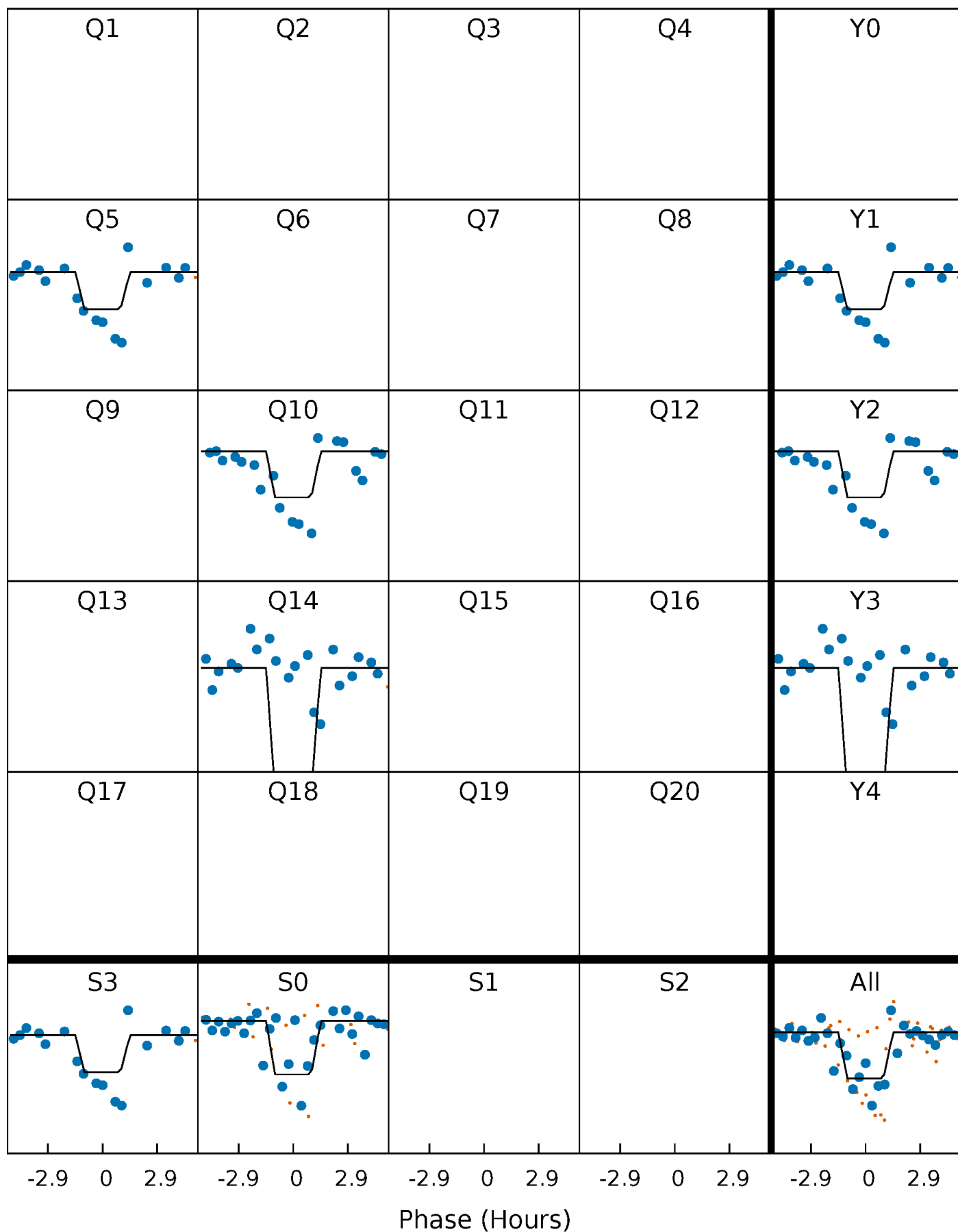
DV Quarter-Phased Transit Curves

TCE 006766663-01 P=399.012467 Days $T_0=529.031103$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

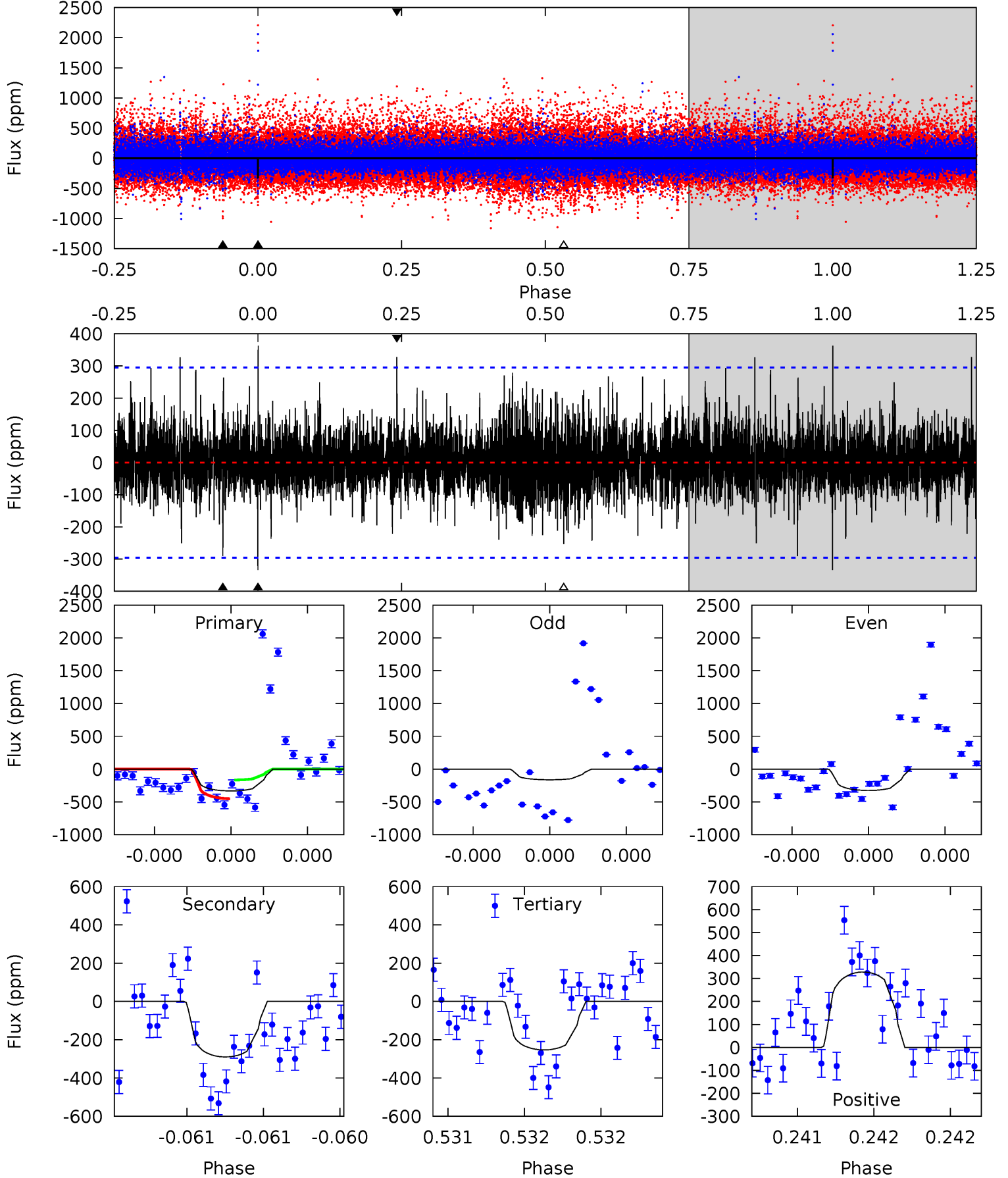
TCE 006766663-01 P=399.015695 Days $T_0=529.027943$ (BKJD)



DV Model-Shift Uniqueness Test

006766663-01, P = 399.012467 Days, E = 130.018636 Days

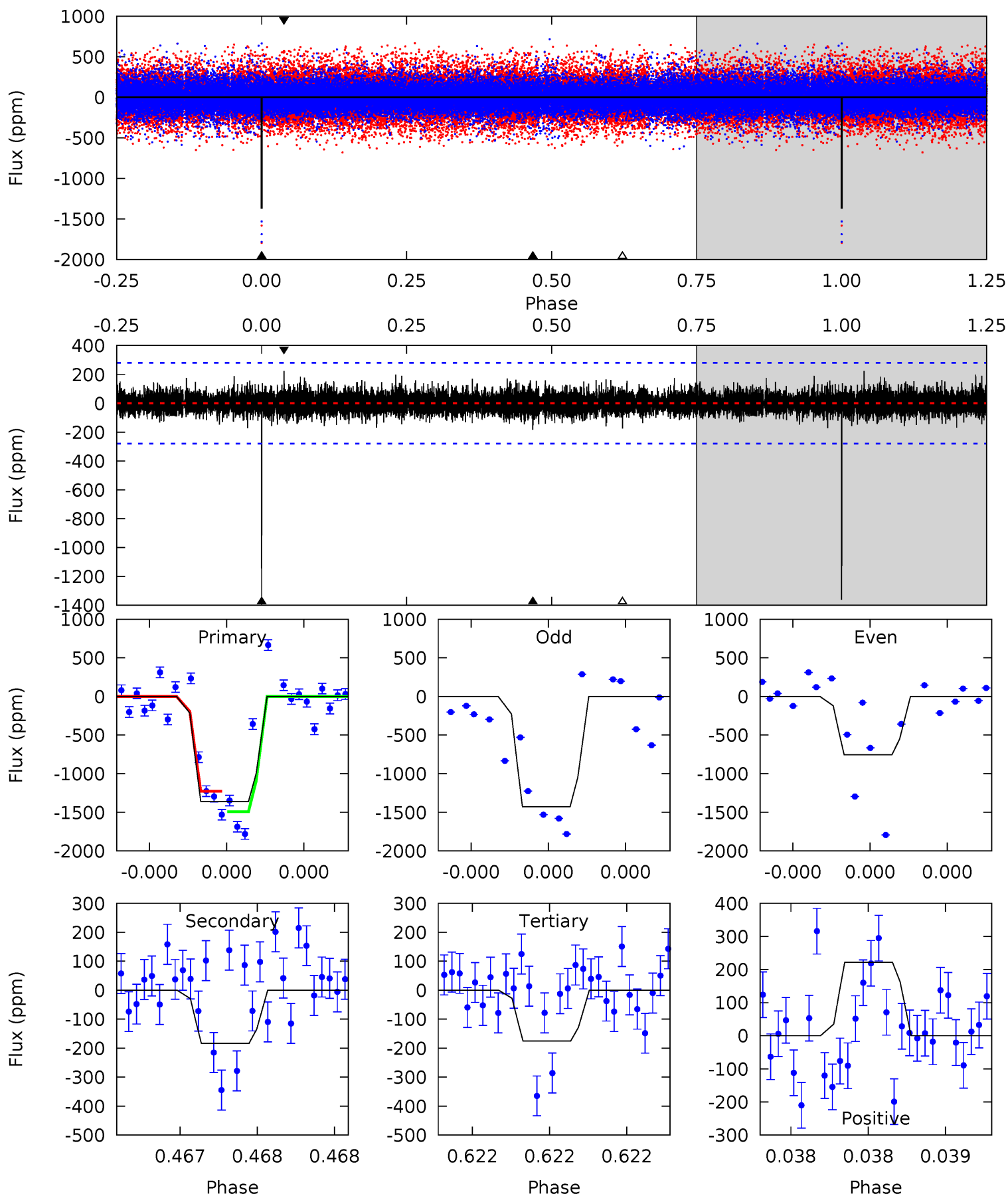
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.31	5.50	4.80	6.22	5.60	3.52	1.24	1.51	0.09	0.70	-0.72	1.49	0.85	0.52	2.69



Alt Model-Shift Uniqueness Test

006766663-01, P = 399.015695 Days, E = 130.012248 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
27.5	3.70	3.54	4.49	5.66	3.62	0.84	24.0	23.0	0.16	-0.78	7.84	0.69	0.14	2.70



Stellar Parameters For KIC 006766663

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	3829^{+77}_{-77}	$4.739^{+0.039}_{-0.024}$	$-0.200^{+0.100}_{-0.100}$	$0.504^{+0.028}_{-0.035}$	$0.508^{+0.032}_{-0.032}$	$5.591^{+1.079}_{-0.536}$
	+2%/-2%	+1%/-1%	+50%/-50%	+6%/-7%	+6%/-6%	+19%/-10%
Source	PHO2	PHO2	PHO2	DSEP		

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

Secondary Eclipse Parameters for KIC 006766663-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-290 ± 53	$2.61^{+2.25}_{-1.66}$	181^{+4}_{-4}	2813^{+992}_{-427}	$16914^{+116439}_{-12393}$
Alt.	-183 ± 49	$2.63^{+2.61}_{-1.61}$	182^{+4}_{-4}	2613^{+854}_{-371}	10104^{+59658}_{-7516}

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

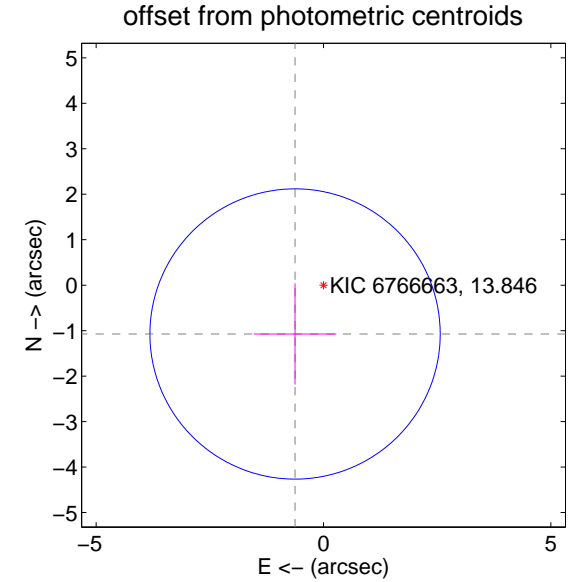
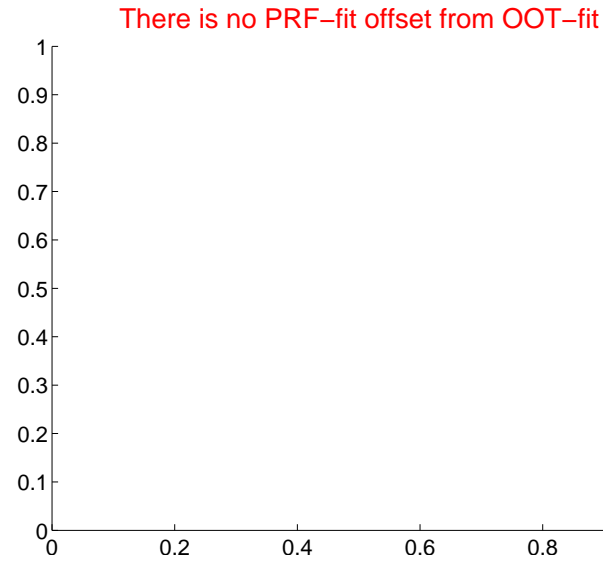
DV Centroid Data

Supplemental centroid analysis for 006766663-01. Kepler magnitude: 13.85. Transit SNR 7.86

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	1.24 ± 1.06	1.17	0.63 ± 0.91	-1.07 ± 1.11

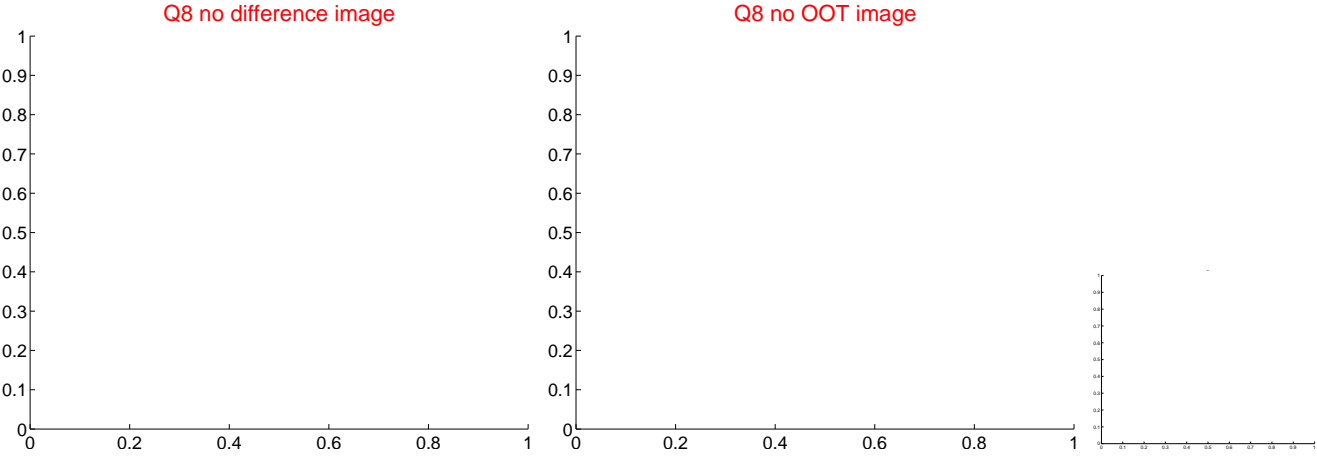
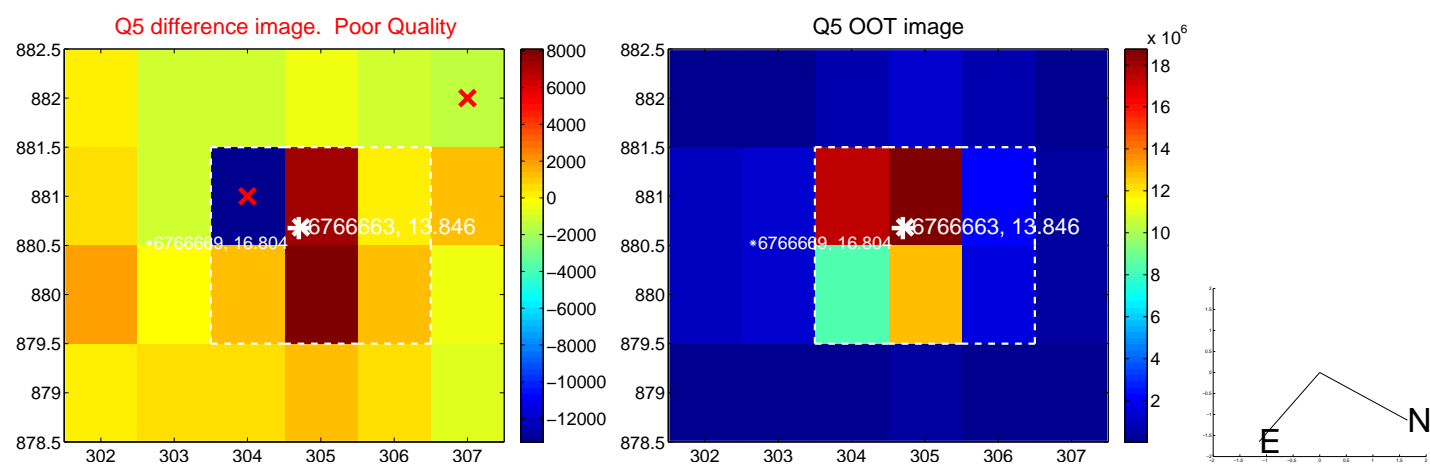


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

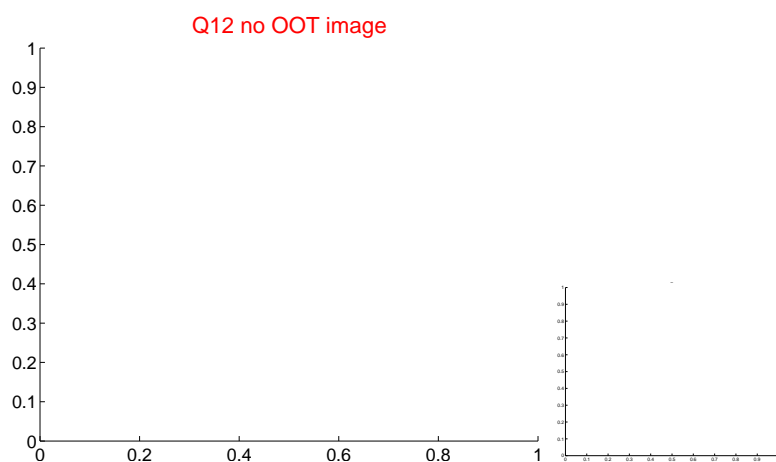
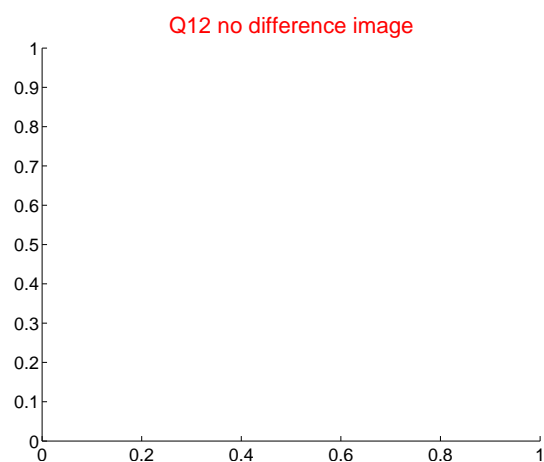
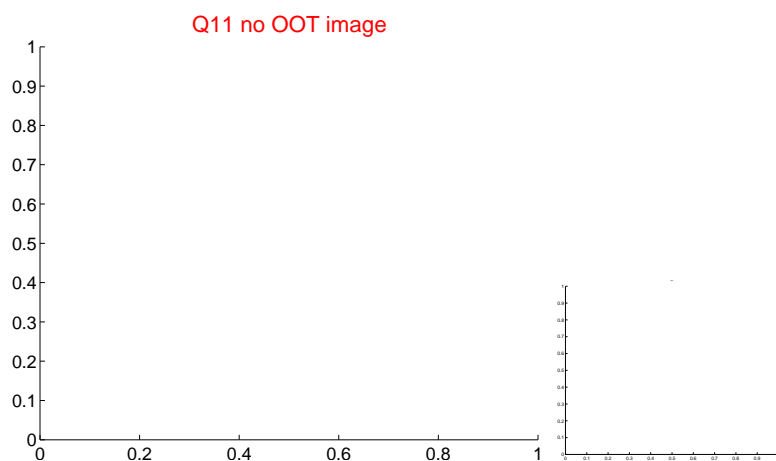
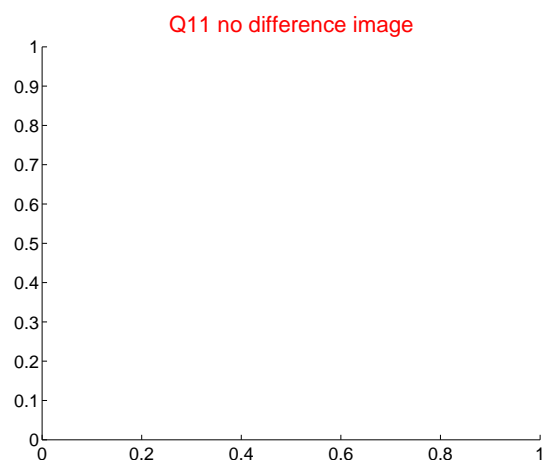
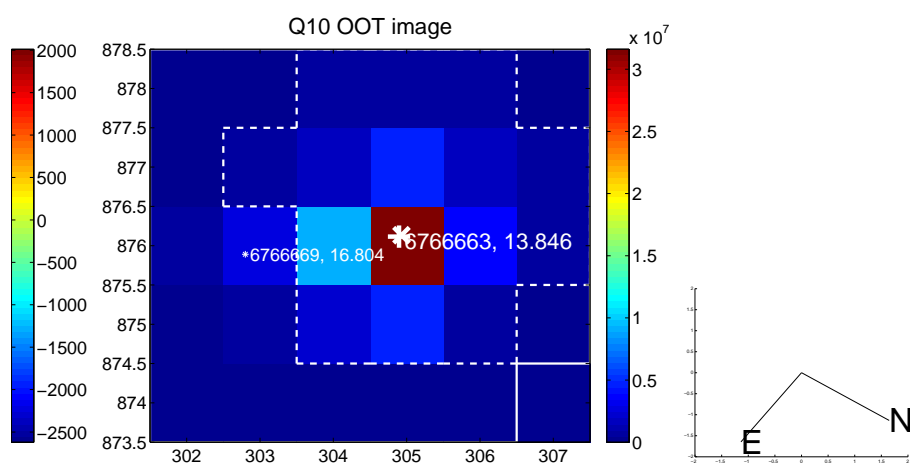
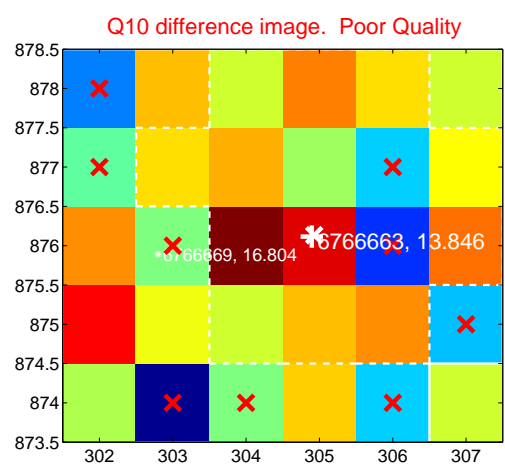
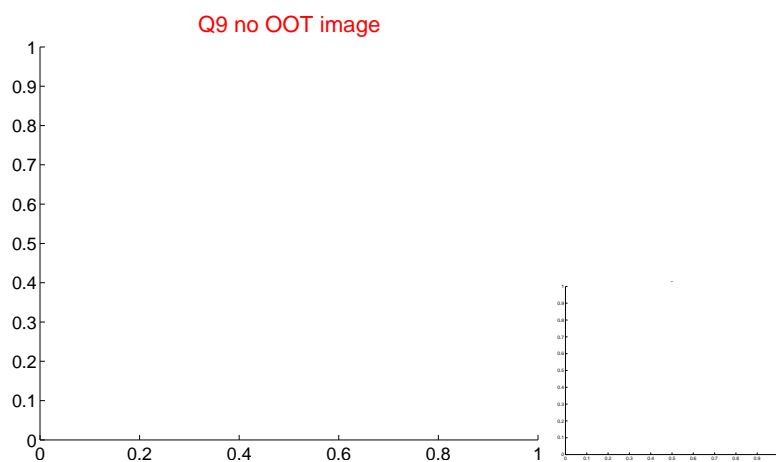
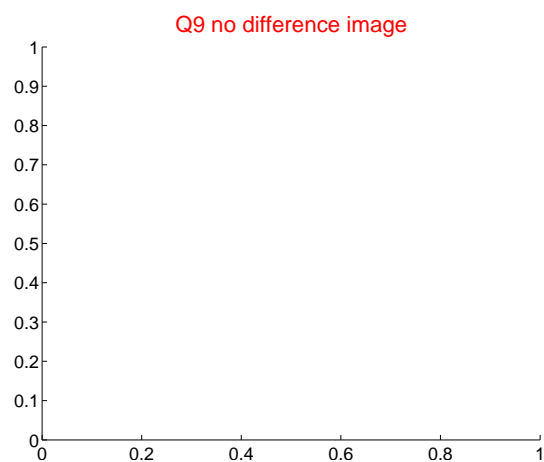
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



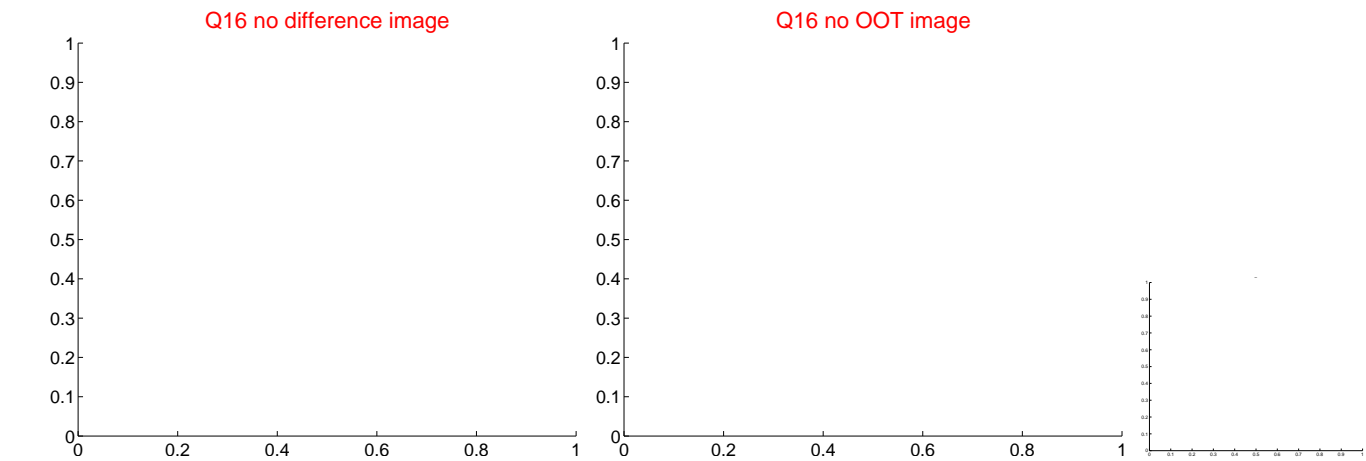
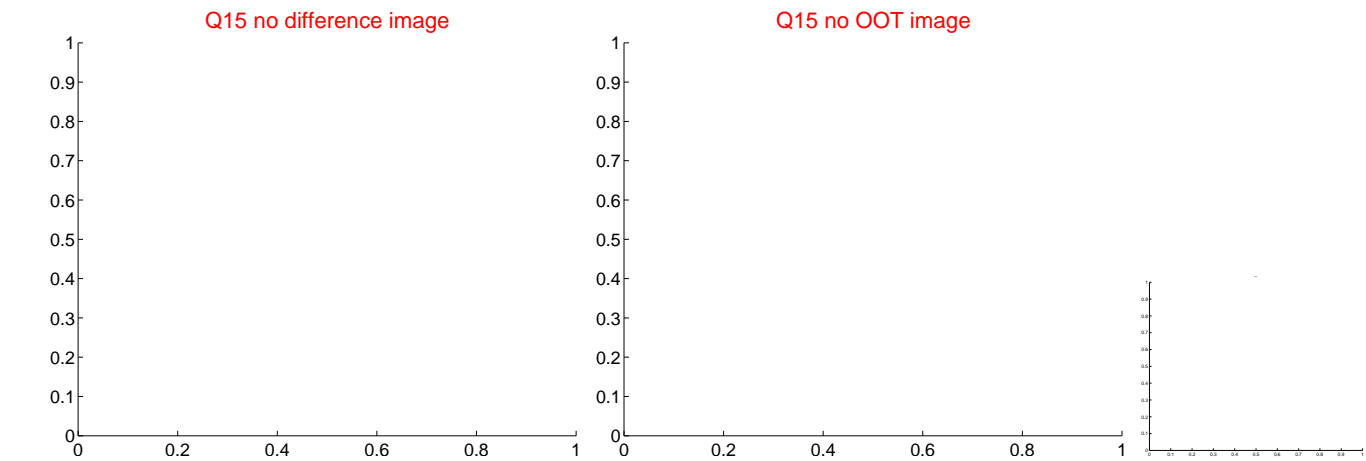
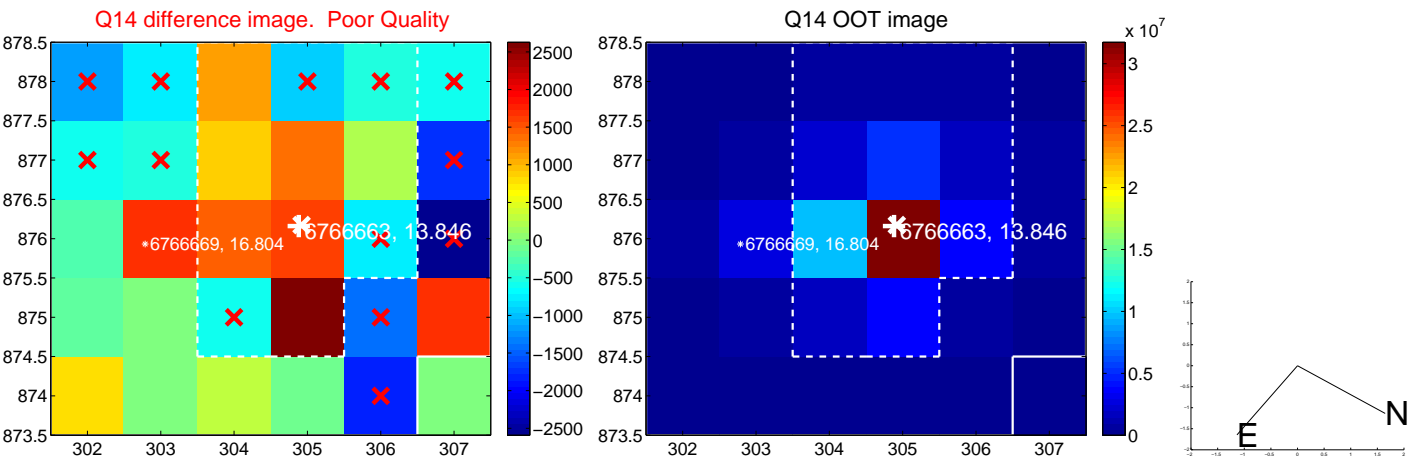
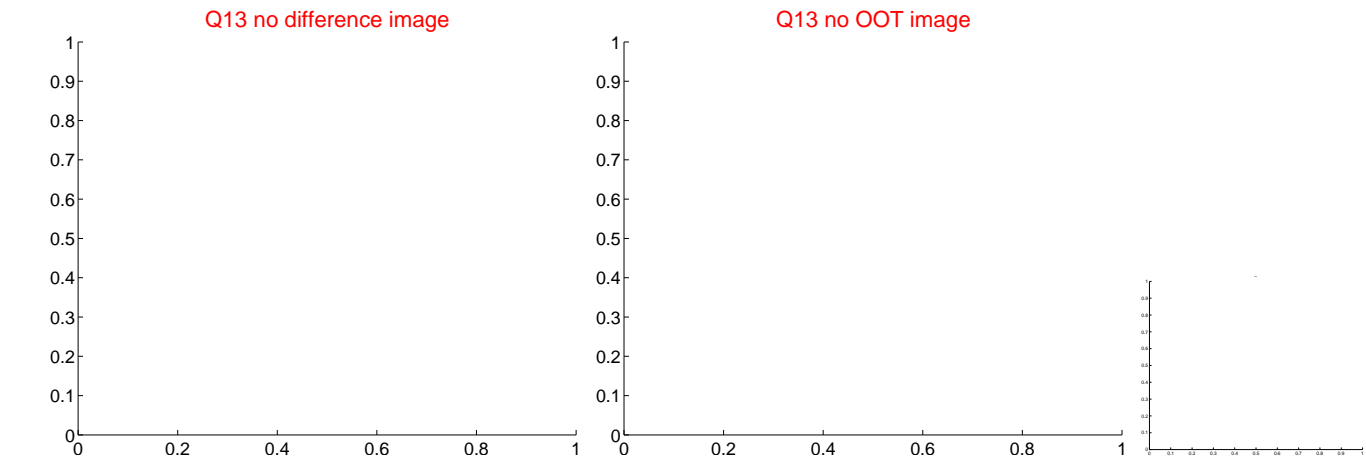
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



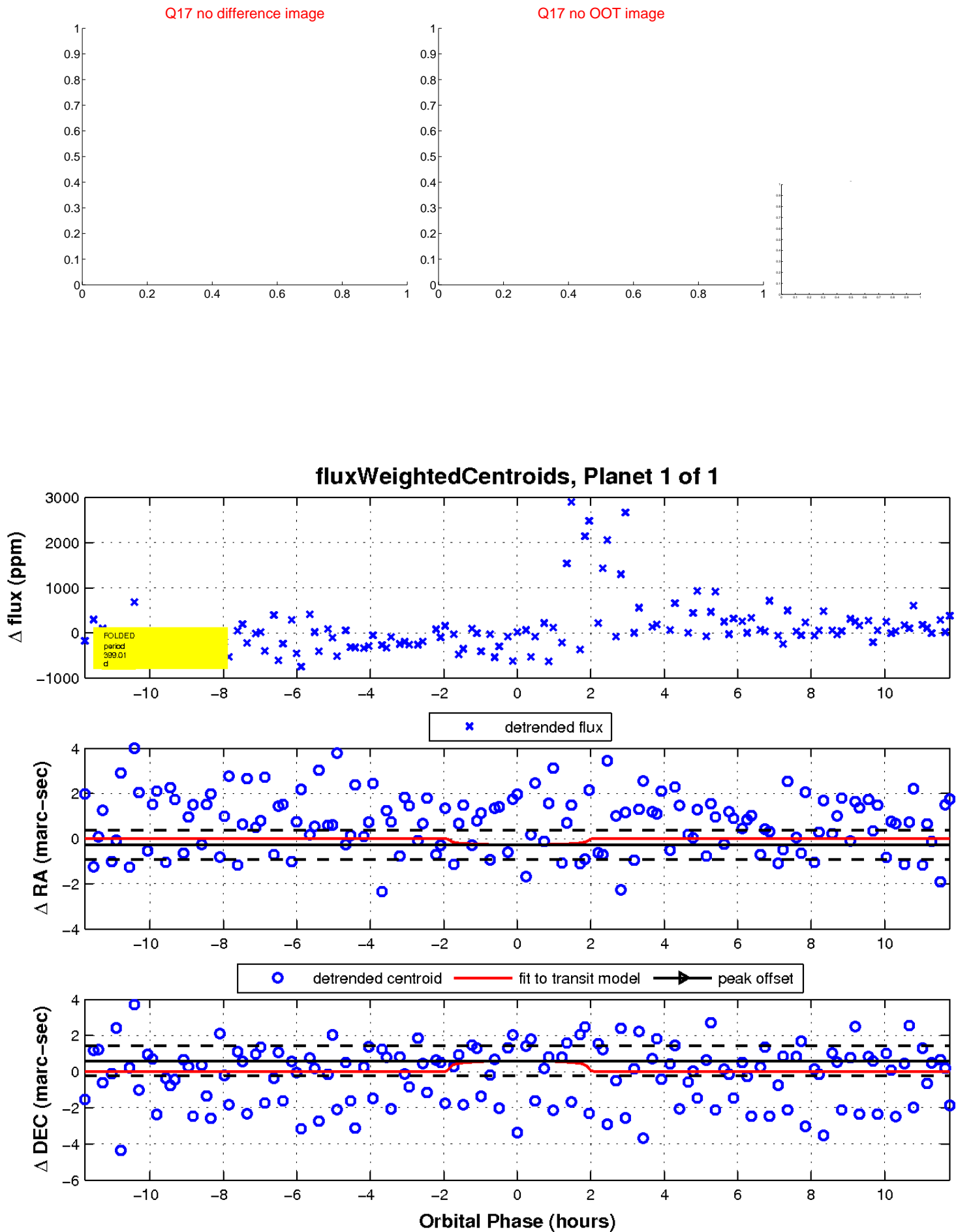
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



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



UKIRT Image

Declination

