

KIC 008561192

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})
008561192-01	OBS	5544.01	2.742598	132.692735	143239.5	6.000	3916.6	-1.0	1.71	7072	65.69	3494.06

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008561192-01	OBS	FP	0.00	0	1	0	0	SWEET_EB—MOD_SEC_ALT—CENT_NOFITS

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 008561192-01

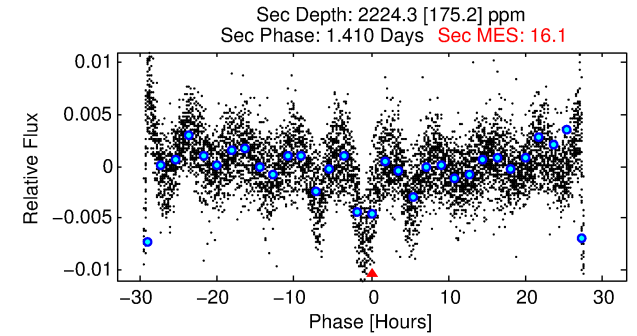
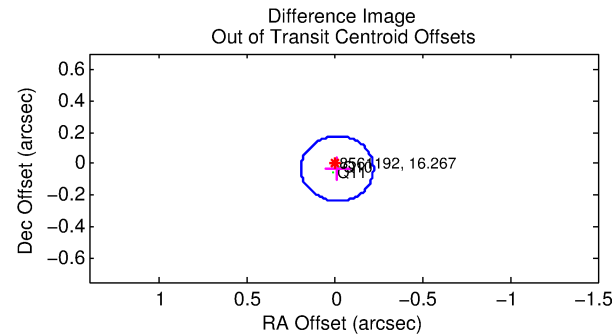
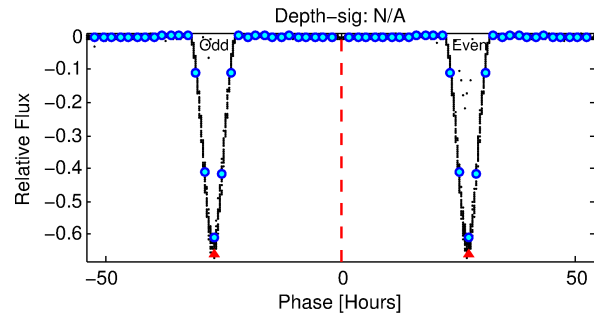
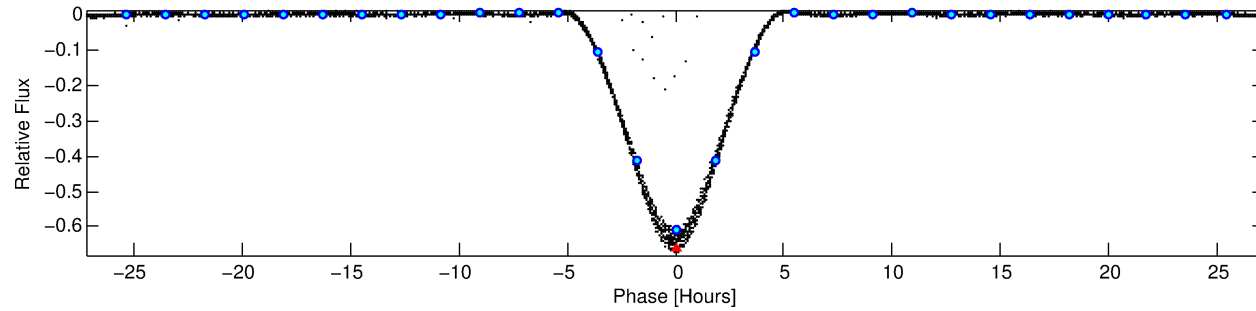
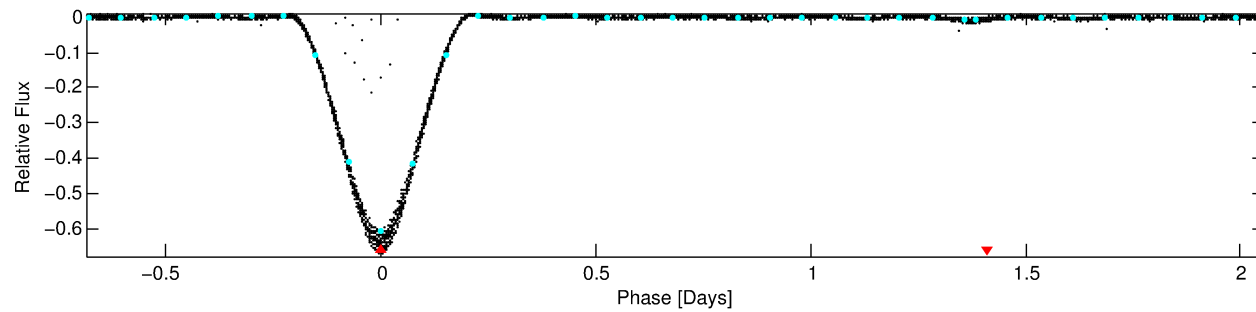
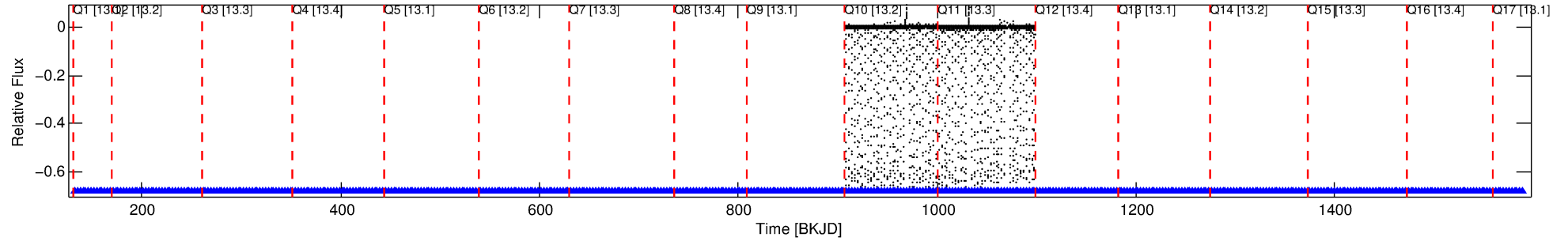
No Significant Match Found

DV One-Page Summary

KIC: 8561192 Candidate: 1 of 1 Period: 2.743 d

KOI: K05544.01 Corr: 0.789

Kp: 16.27 R*: 1.71 Rs Teff: 7072.0 K Logg: 4.13 Fe/H: -0.160



TPS TCE Results:

Period = 2.74260 d
Epoch = 132.6927 BKJD

DV fit results are unavailable

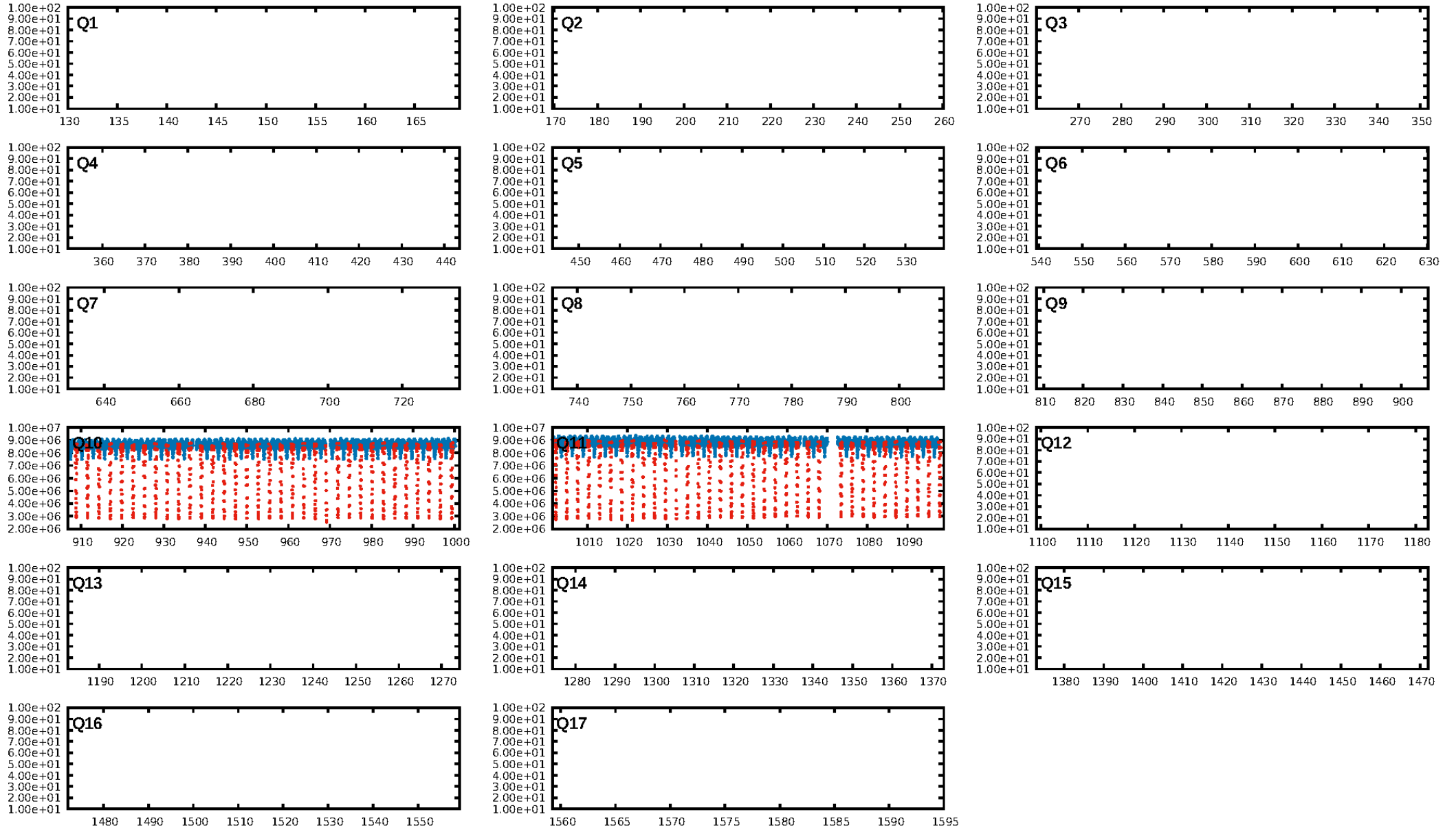
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [69/69]
GhostDiagnostic-chr: 1.475
Centroid-sig: 0.0%
Centroid-so: 0.121 arcsec [68.35σ]
OotOffset-rm: 0.034 arcsec [0.49σ]
KicOffset-rm: 0.125 arcsec [1.86σ]
OotOffset-st: 1/1/0/0 [2]
KicOffset-st: 1/1/0/0 [2]
DiffImageQuality-fgm: 1.00 [2/2]
DiffImageOverlap-fno: 1.00 [2/2]

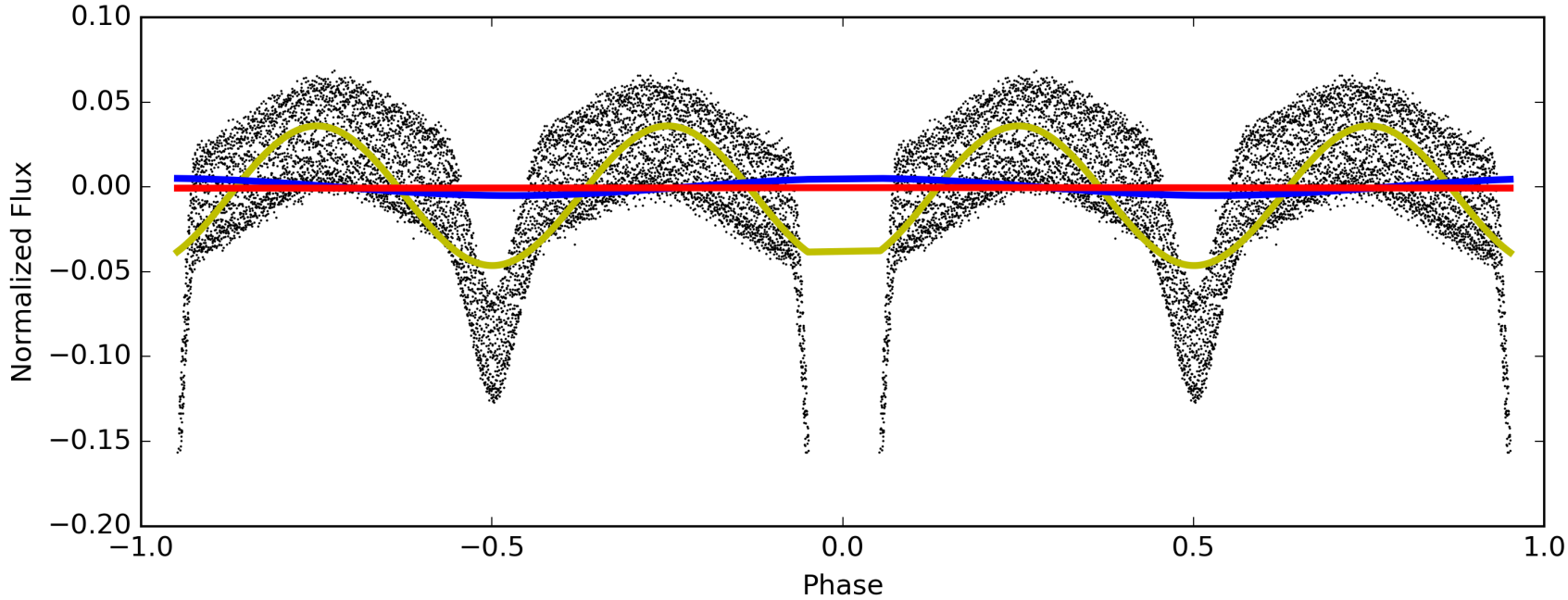
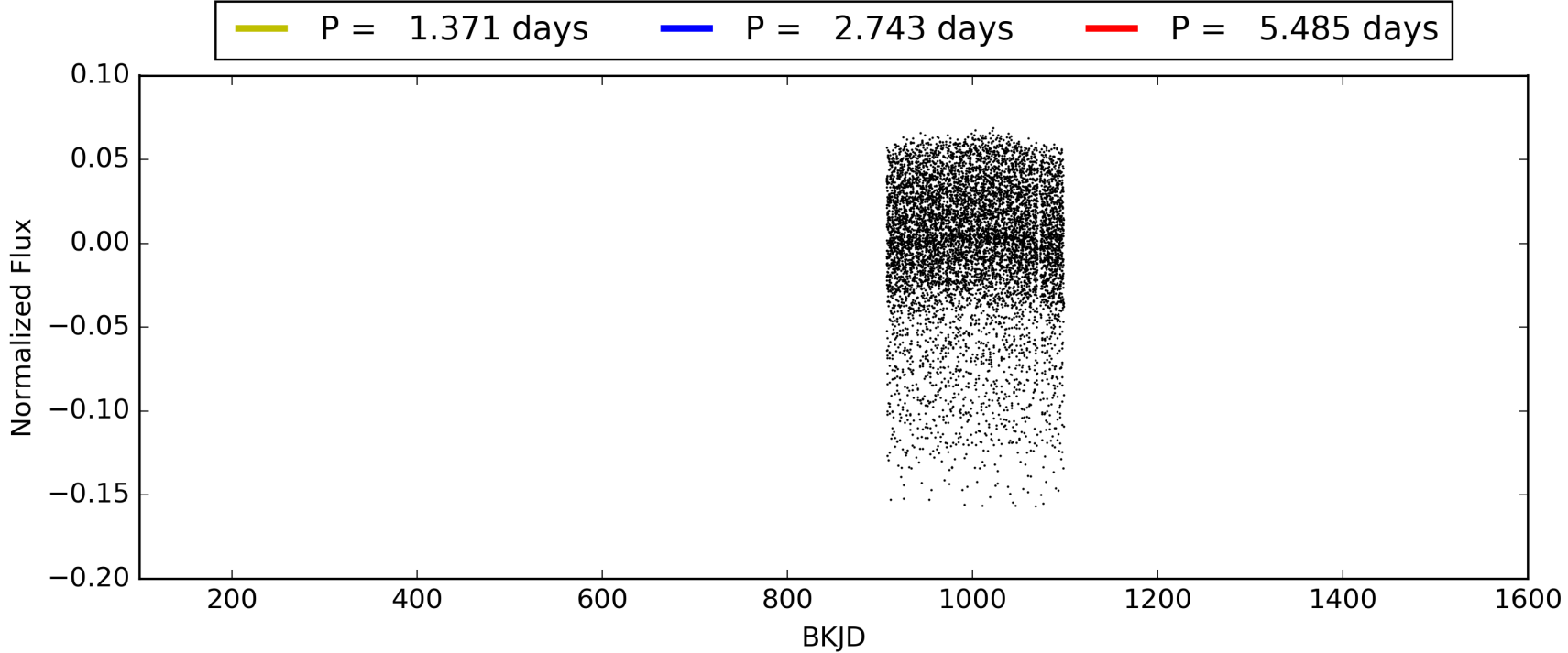
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 19:07:12 Z

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

TCE 008561192-01, PDC Light Curves

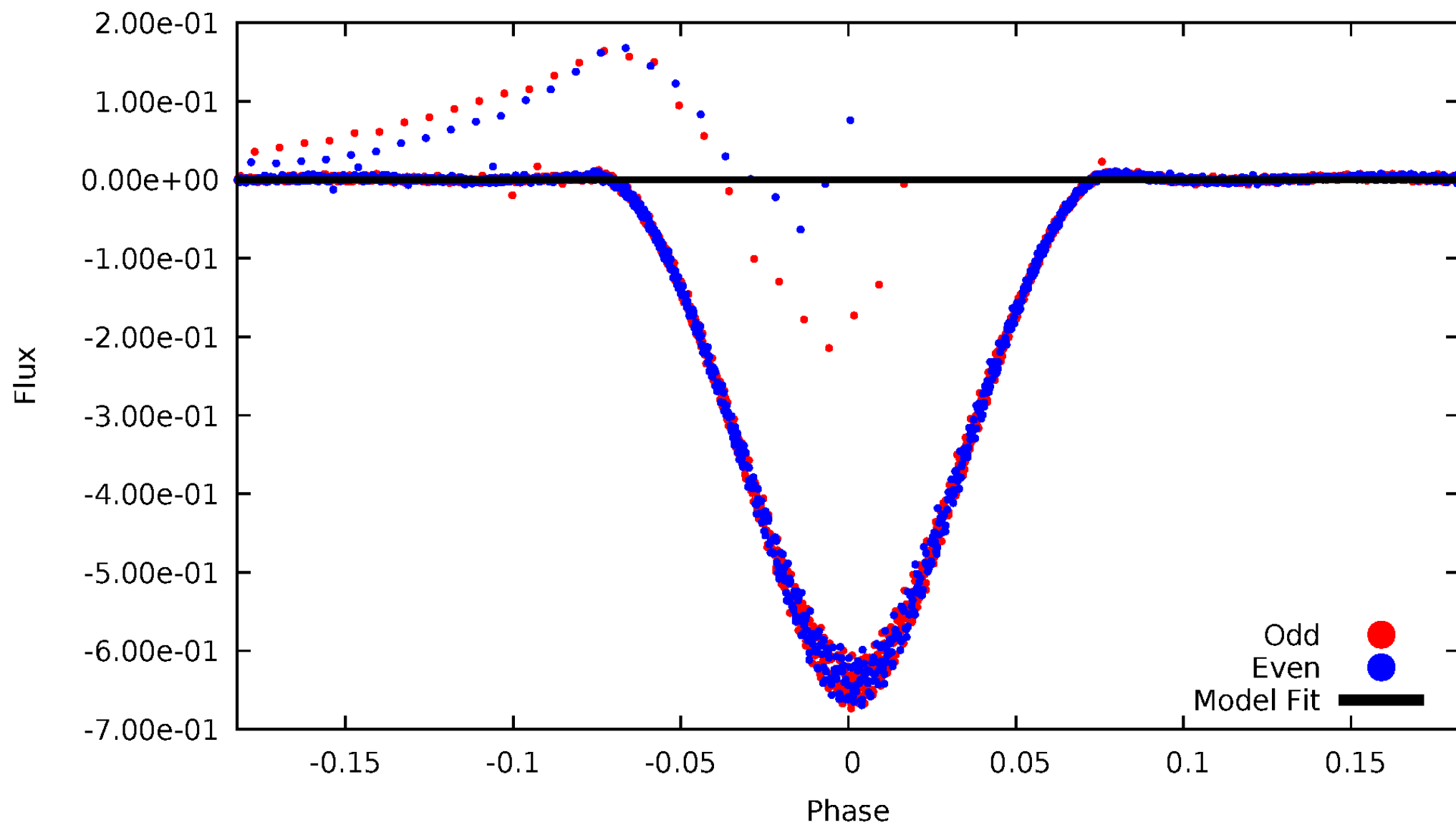


TCE 008561192-01



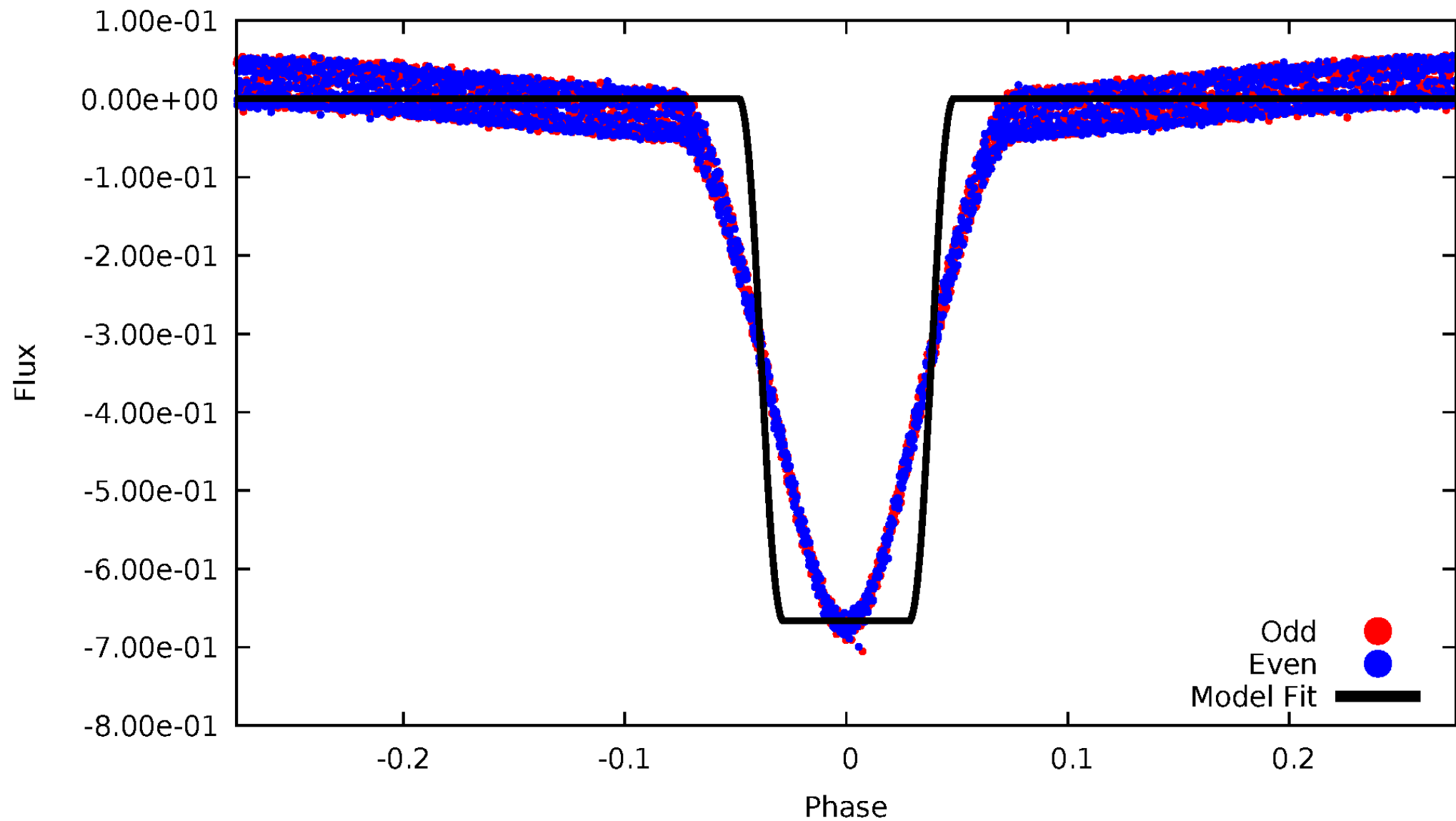
DV Odd/Even

TCE 008561192-01



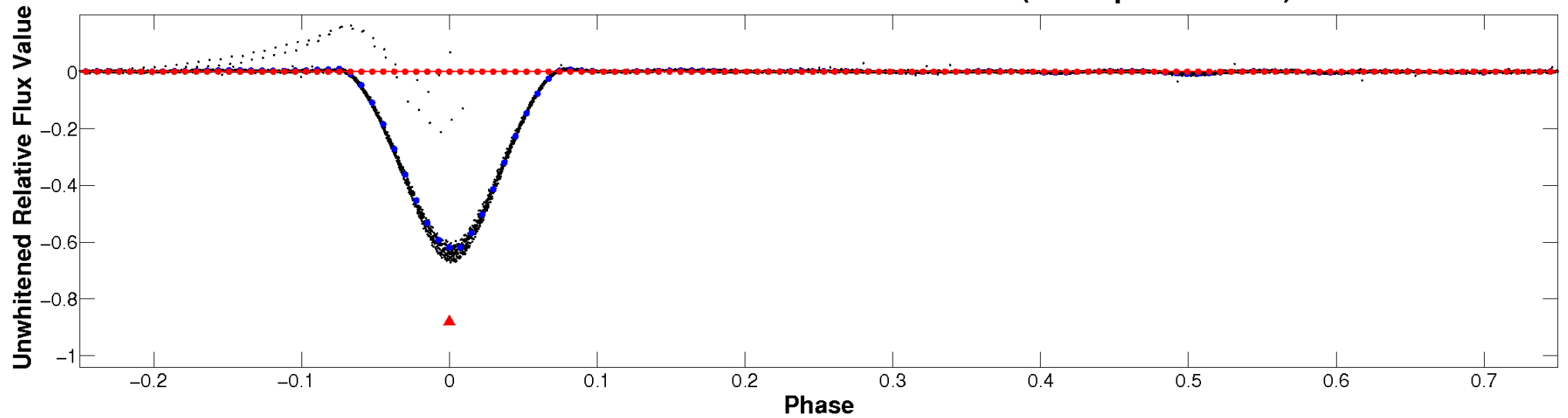
ALT Odd/Even

TCE 008561192-01



Non-Whitened Vs. Whitened Light Curve

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

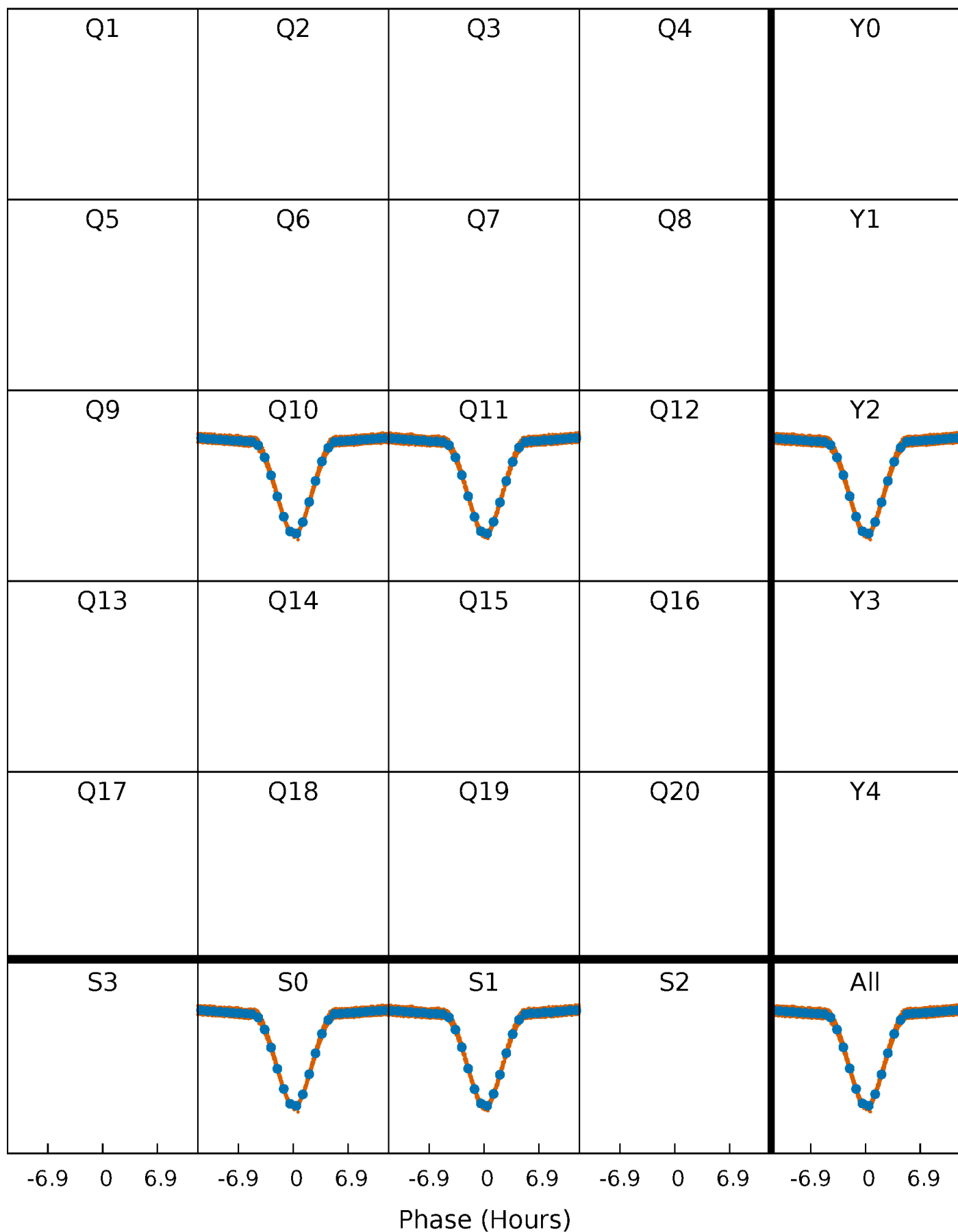


Planet 1 : Phased Whitened Flux Time Series (TPS Epoch/Period)



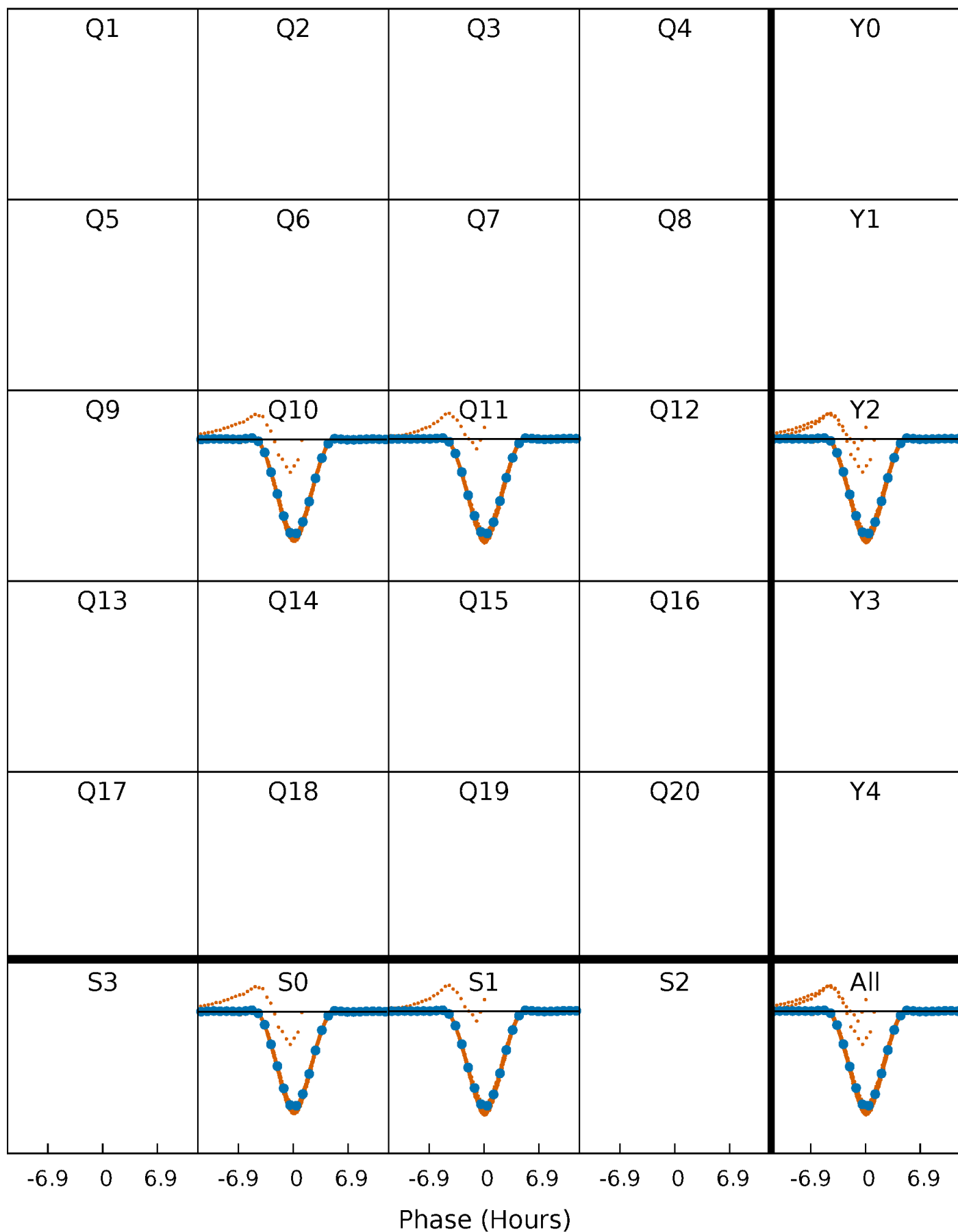
PDC Quarter-Phased Transit Curves

TCE 008561192-01 P= 2.742598 Days $T_0=132.692735$ (BKJD)



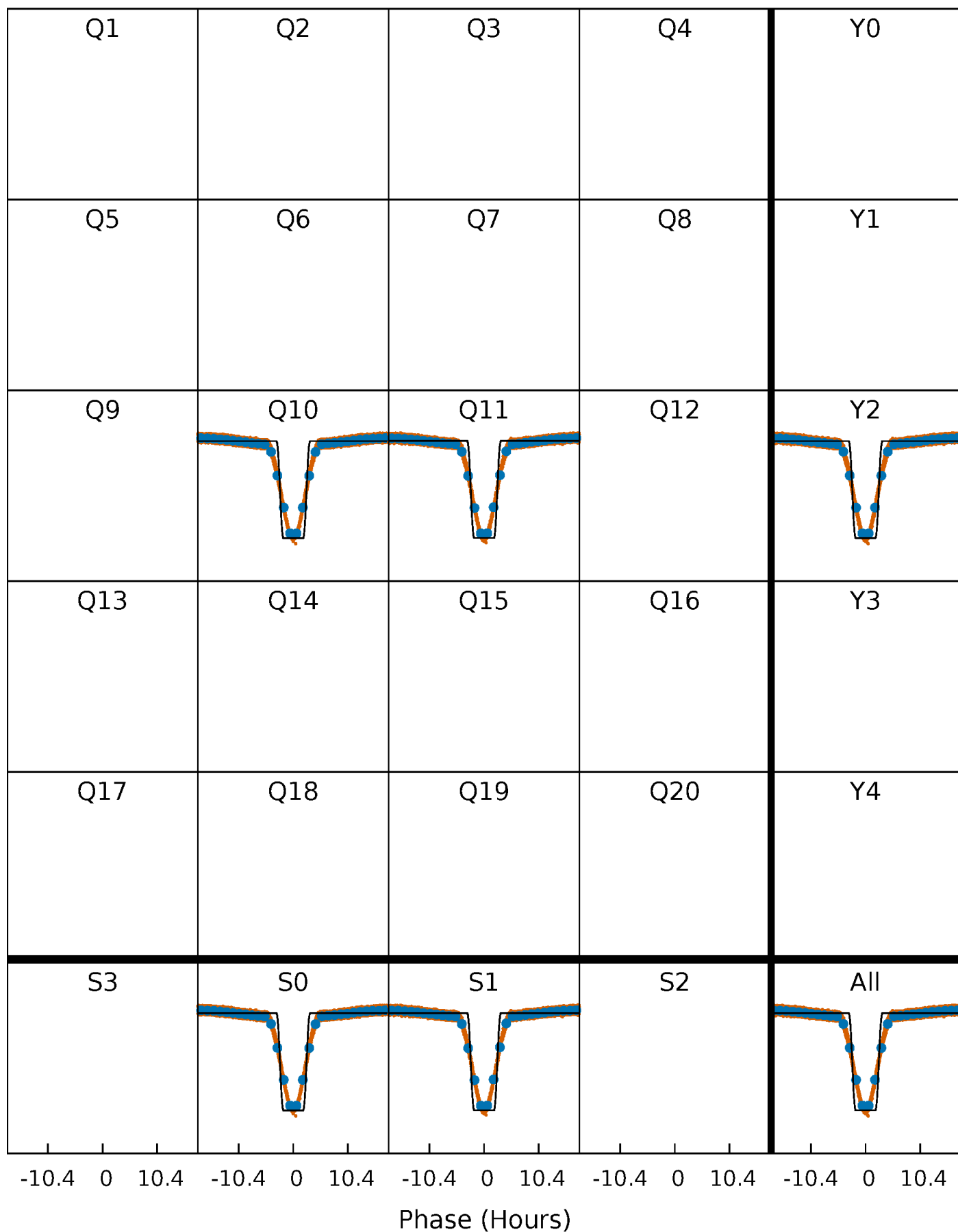
DV Quarter-Phased Transit Curves

TCE 008561192-01 P= 2.742598 Days $T_0=132.692735$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

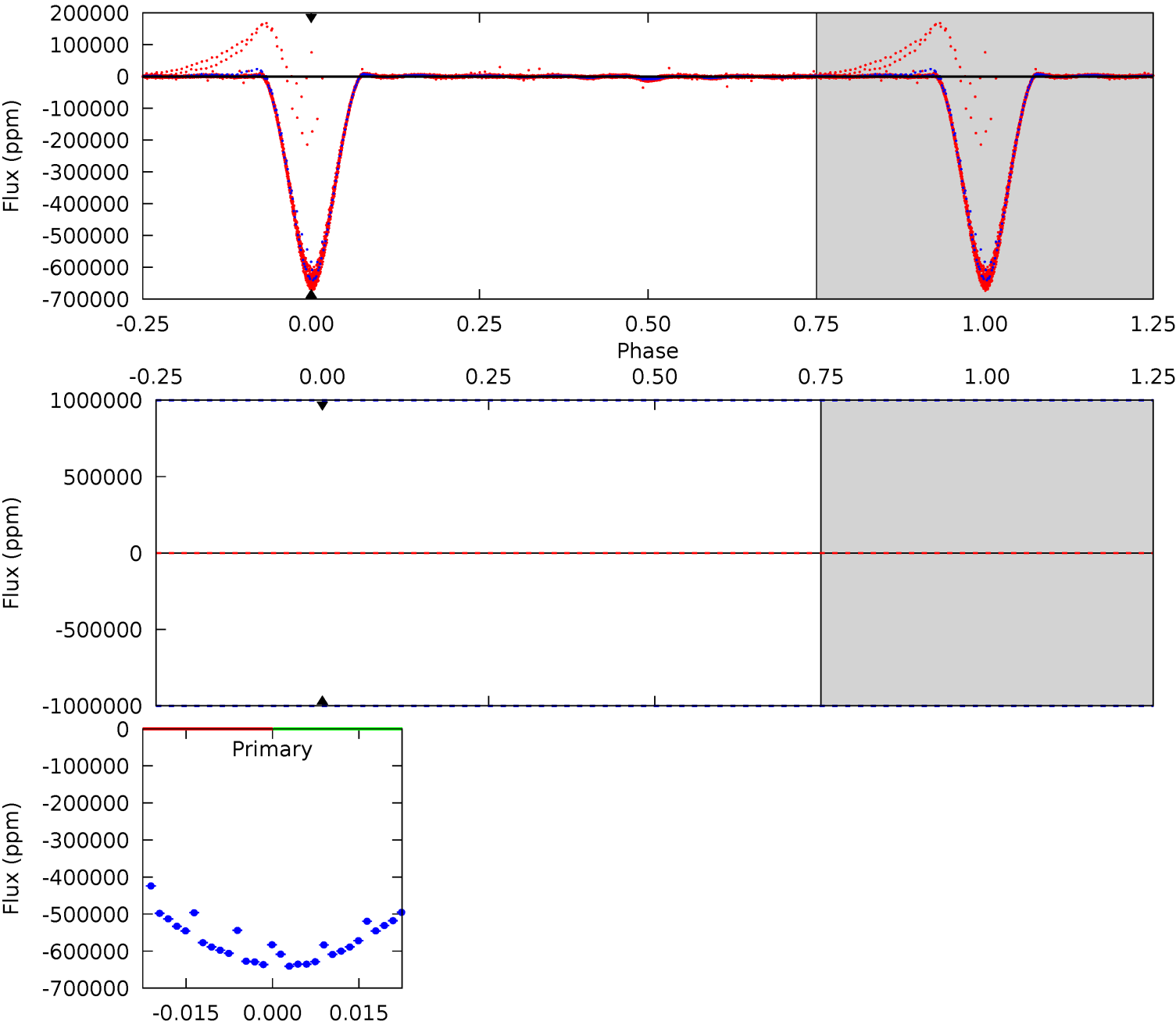
TCE 008561192-01 P= 2.742598 Days $T_0=132.697628$ (BKJD)



DV Model-Shift Uniqueness Test

008561192-01, P = 2.742598 Days, E = 132.692735 Days

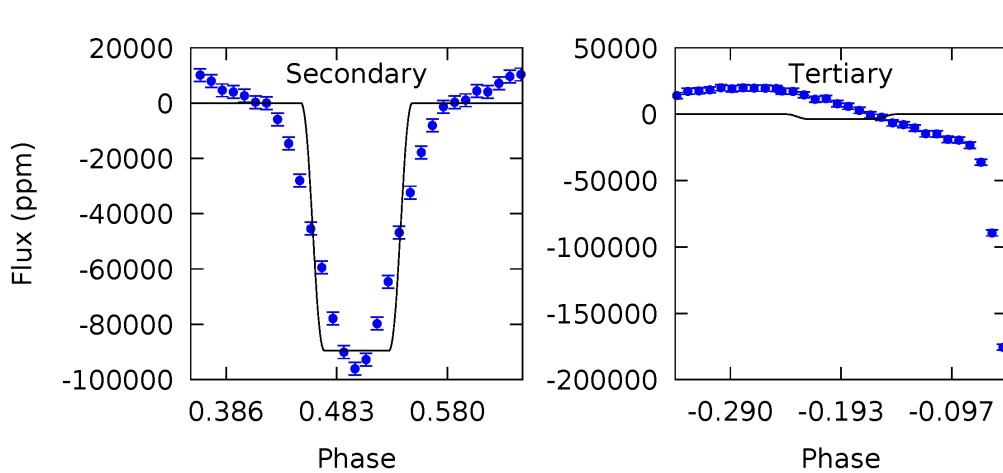
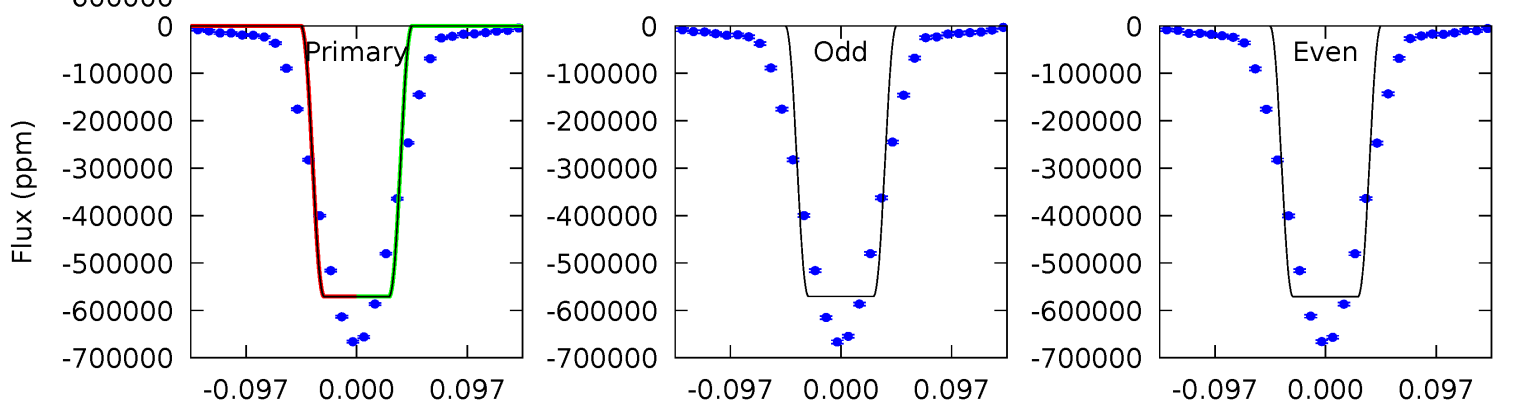
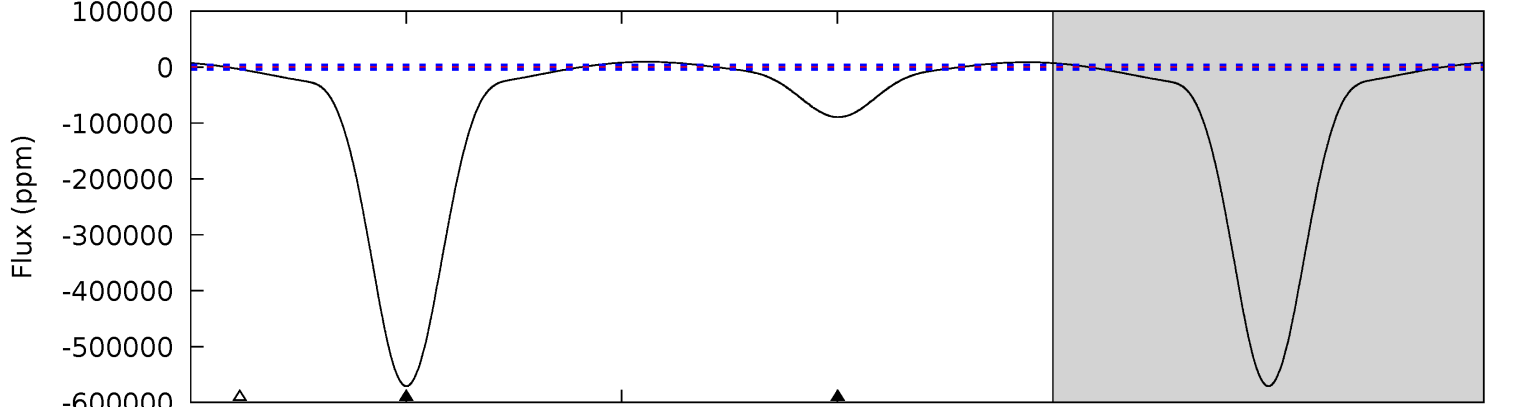
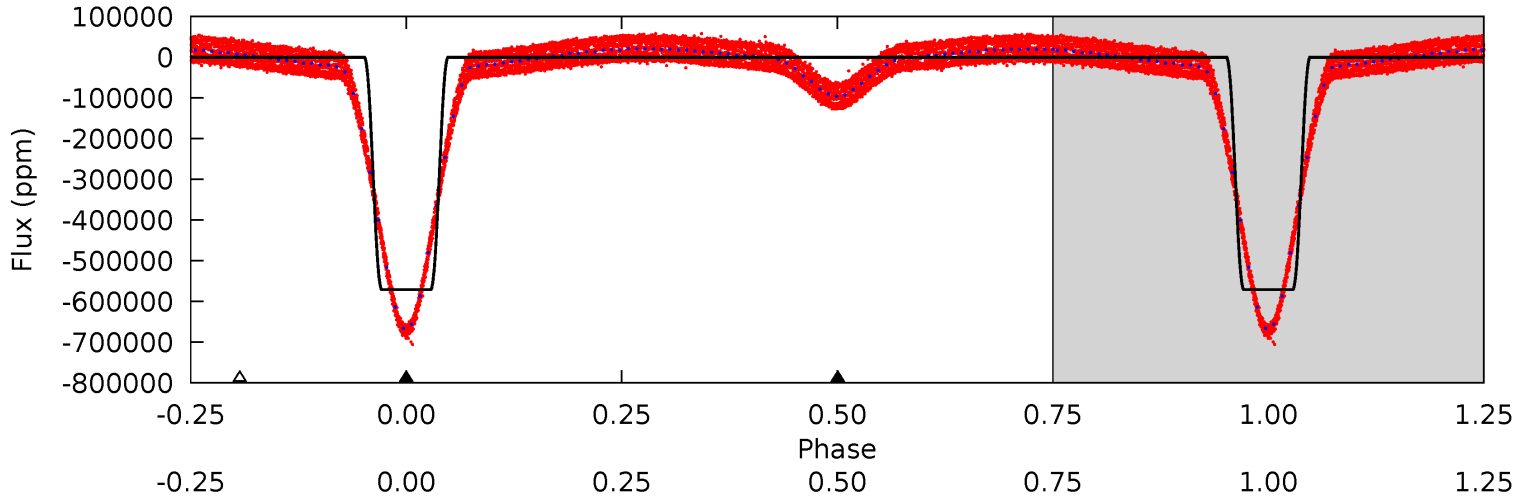
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

008561192-01, P = 2.742598 Days, E = 132.697628 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
668.8	104.8	4.30	0	4.57	1.66	13.6	664.5	668.8	100.5	104.8	0.35	1.00	0.02	0.03



Stellar Parameters For KIC 008561192

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7072^{+225}_{-310}	$4.129^{+0.157}_{-0.192}$	$-0.160^{+0.250}_{-0.350}$	$1.705^{+0.516}_{-0.375}$	$1.428^{+0.208}_{-0.255}$	$0.406^{+0.334}_{-0.211}$
	+3%/-4%	+4%/-5%	+156%/-219%	+30%/-22%	+15%/-18%	+82%/-52%
Source	KIC0	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 008561192-01 / KOI 5544.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	0 ± 1000000	$65.97^{+22.68}_{-20.67}$	2734^{+209}_{-195}	3453^{+3662}_{-10007}	$1.190^{+30.279}_{-23.875}$
Alt.	-89407 ± 853	$151.93^{+31.95}_{-26.08}$	2742^{+226}_{-195}	4461^{+256}_{-229}	$4.276^{+1.940}_{-1.275}$

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 $A_{obs} \gg 1.0$

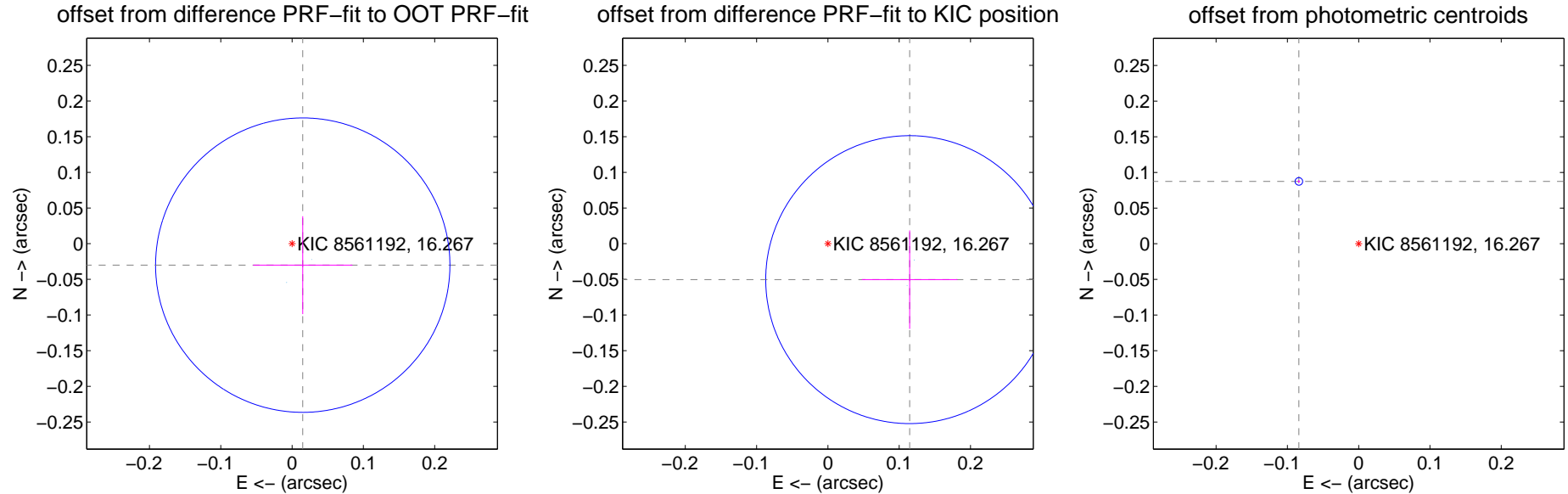
DV Centroid Data

Supplemental centroid analysis for 008561192-01. Kepler magnitude: 16.27. Transit SNR -1.00

There are 2 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.13 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.034 ± 0.069	0.49	-0.015 ± 0.070	-0.030 ± 0.069
PRF-fit source offset from KIC position	0.125 ± 0.067	1.86	-0.115 ± 0.067	-0.050 ± 0.069
photometric centroid source offset	0.12 ± 0.00	68.35	0.08 ± 0.00	0.09 ± 0.00



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.

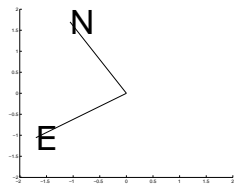
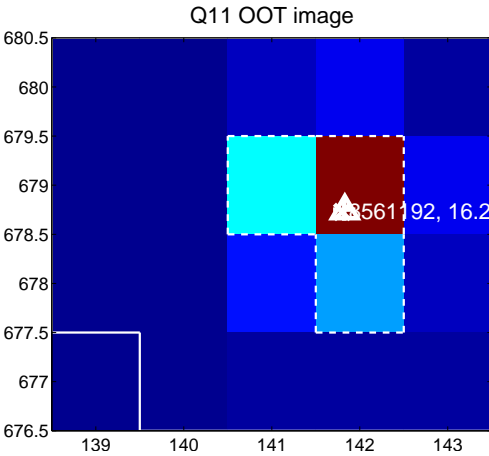
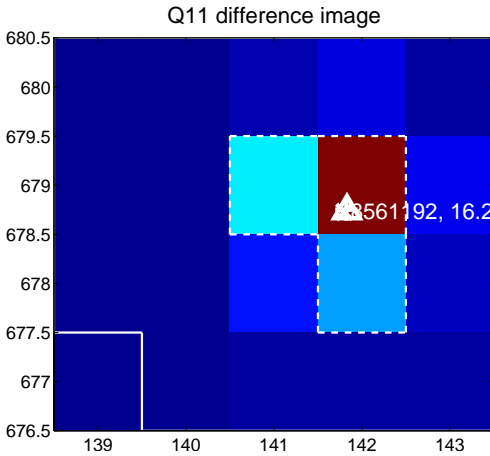
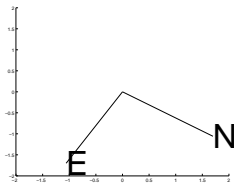
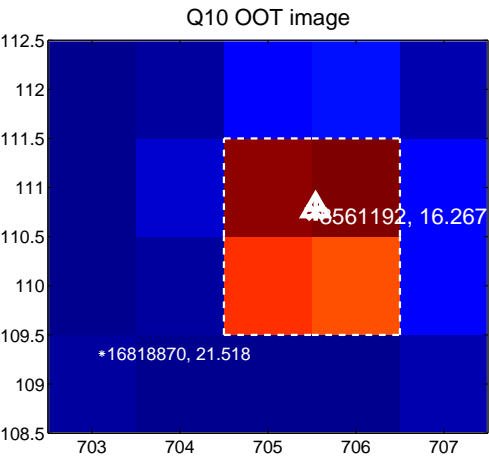
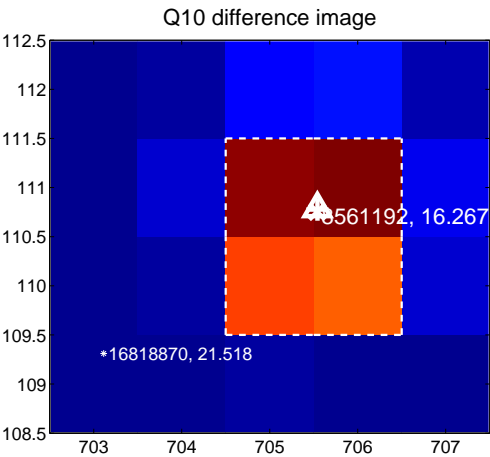


white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.

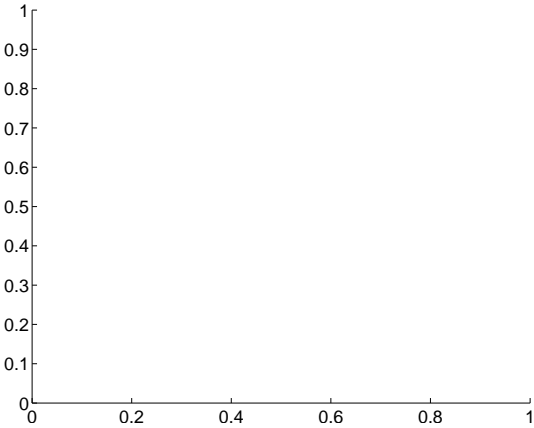
Q9 no difference image



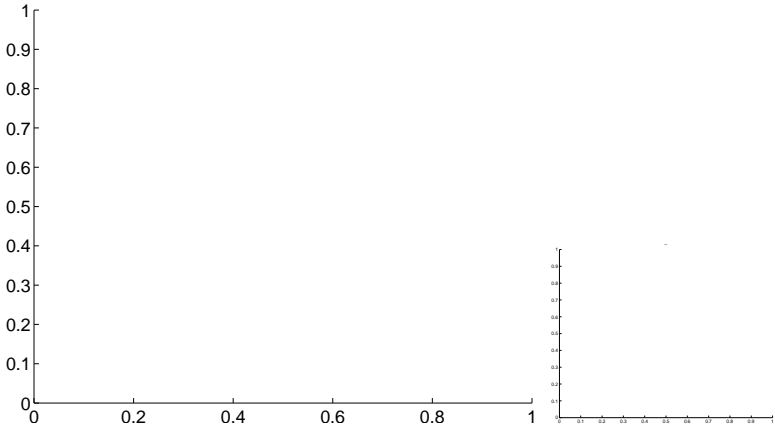
Q9 no OOT image



Q12 no difference image



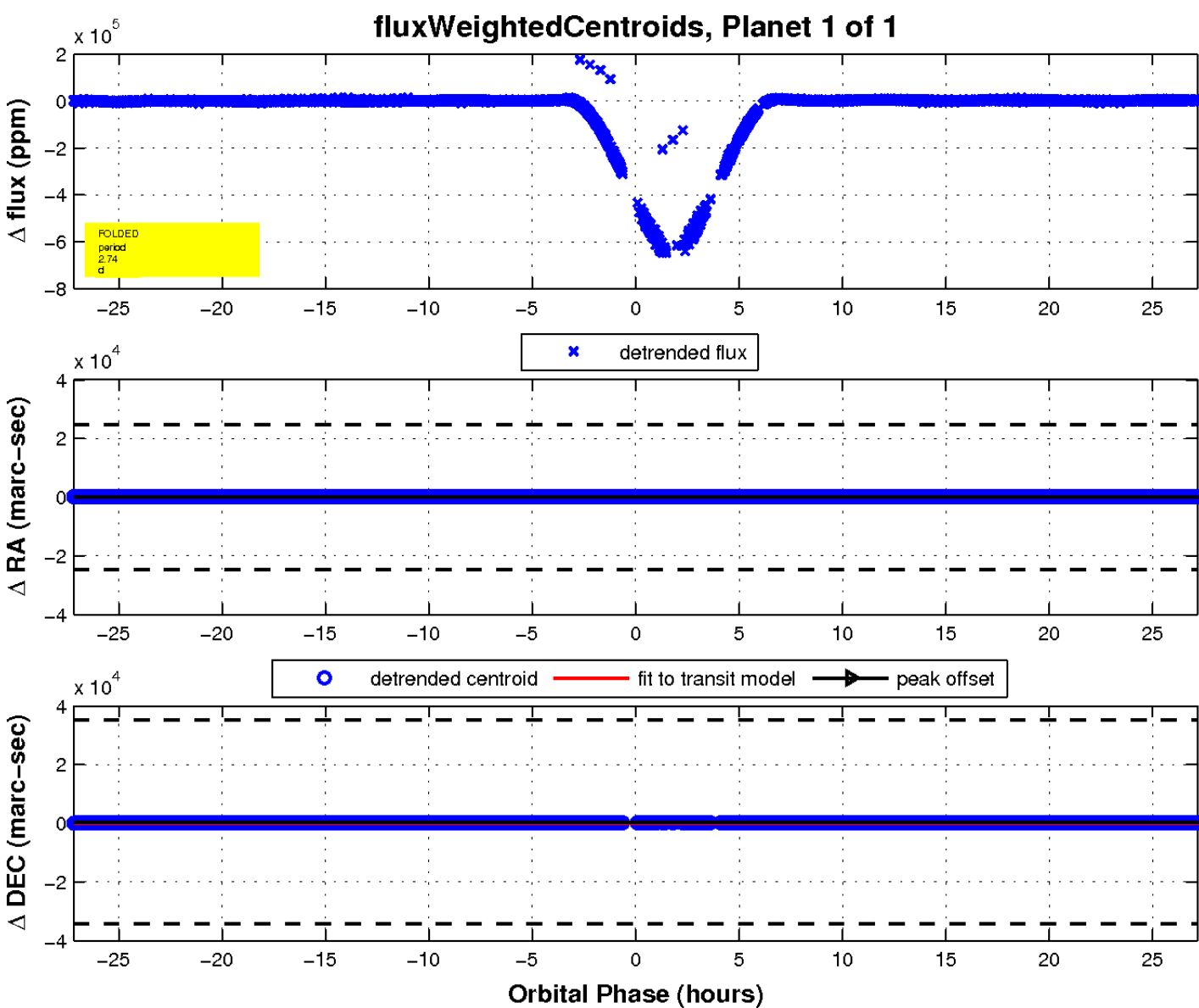
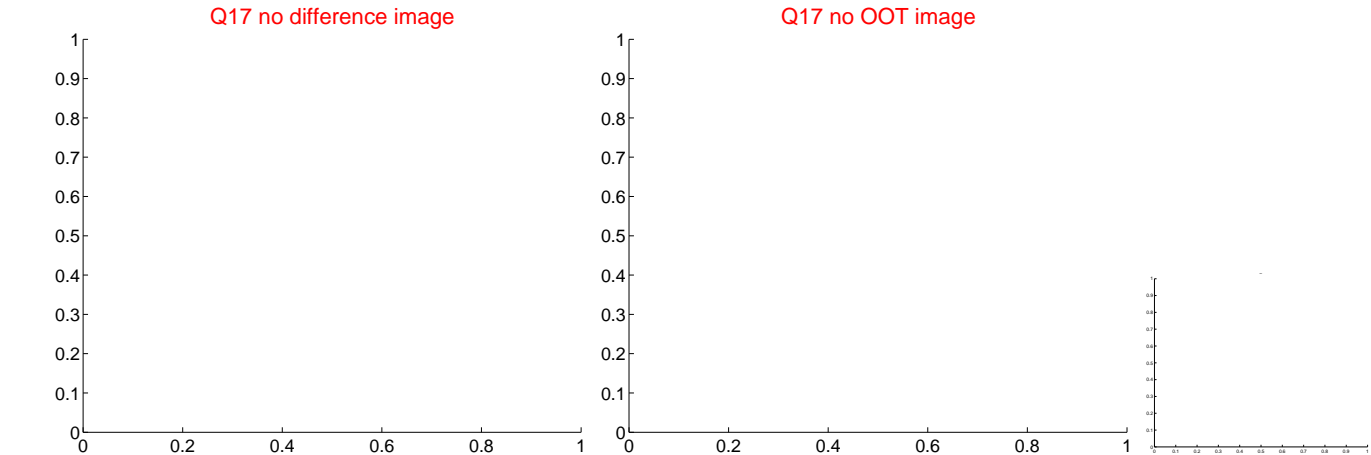
Q12 no OOT image



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



white \times : RRC target position, $+$: OOI centroid, Δ : difference centroid, red \times : large negative pixel value.



UKIRT Image

Declination

