

KIC 011200366

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})
011200366-01	OBS	No	484.933543	544.878999	2890.1	18.862	11.1	5.3	0.78	5274	4.09	0.33

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011200366-01	OBS	FP	0.00	1	0	0	0	LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_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.

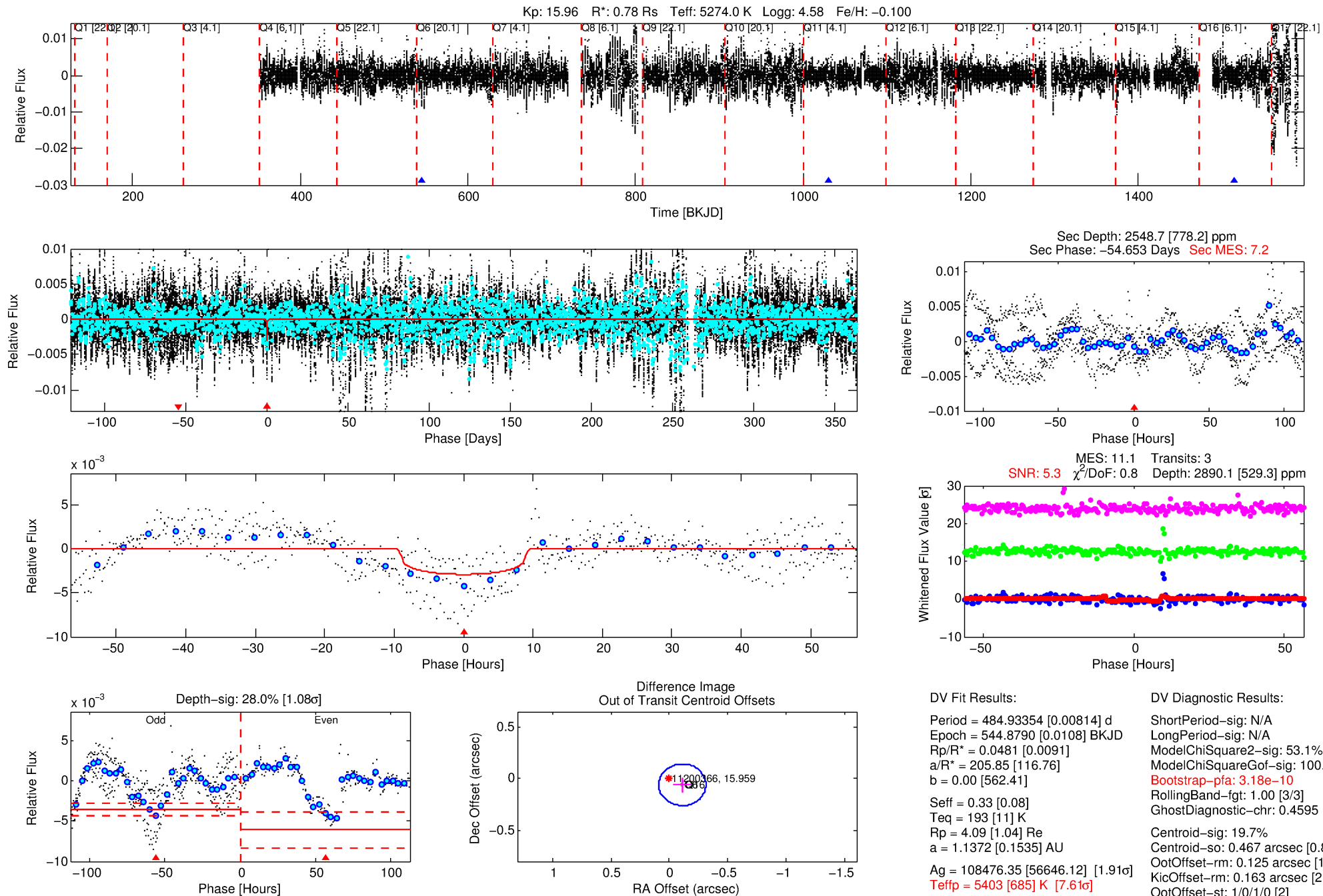
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011200366-01

No Significant Match Found

DV One-Page Summary

KIC: 11200366 Candidate: 1 of 1 Period: 484.934 d



DV Fit Results:

Period = 484.93354 [0.00814] d
Epoch = 544.8790 [0.0108] BKJD
Rp/R* = 0.0481 [0.0091]
a/R* = 205.85 [116.76]
b = 0.00 [562.41]
Seff = 0.33 [0.08]
Teq = 193 [11] K
Rp = 4.09 [1.04] Re
a = 1.1372 [0.1535] AU
Ag = 108476.35 [56646.12] [1.91σ]
Teff = 5403 [685] K [7.61σ]

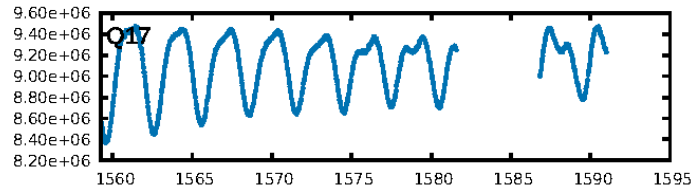
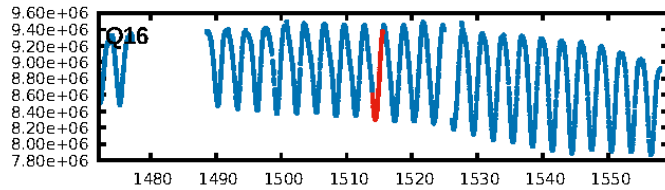
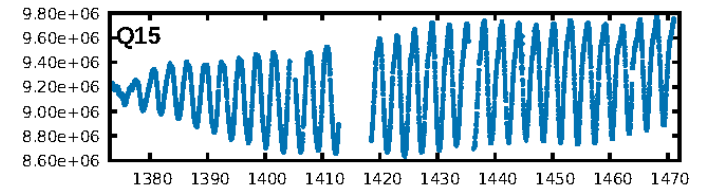
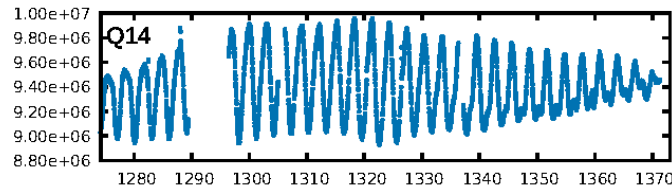
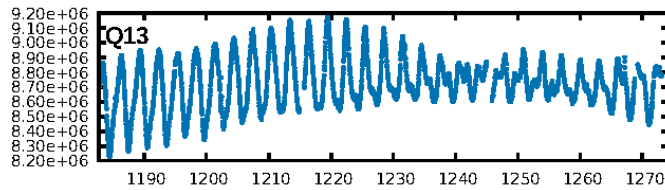
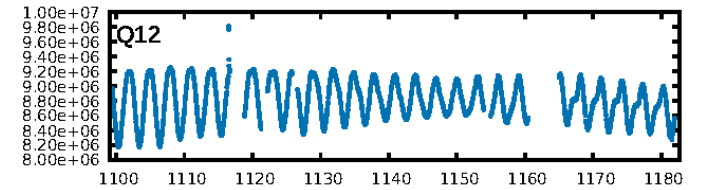
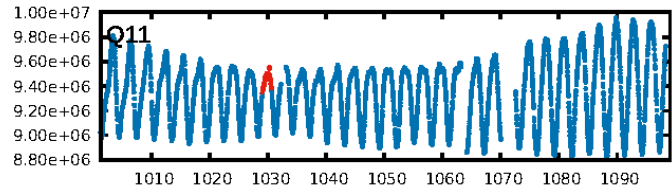
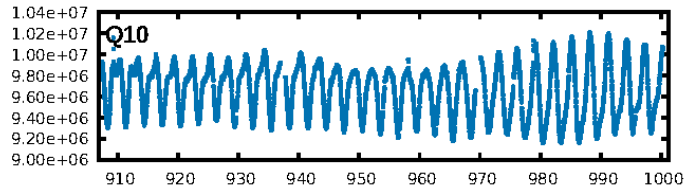
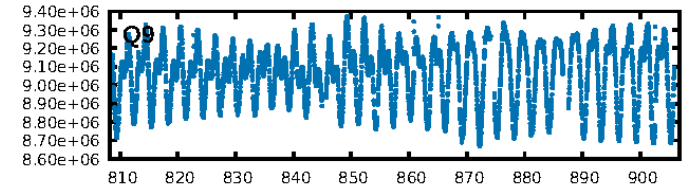
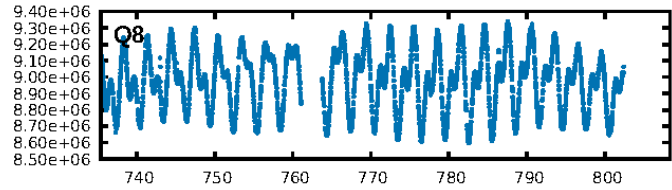
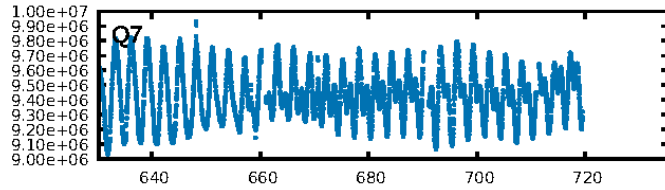
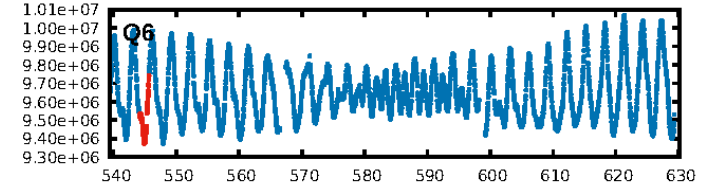
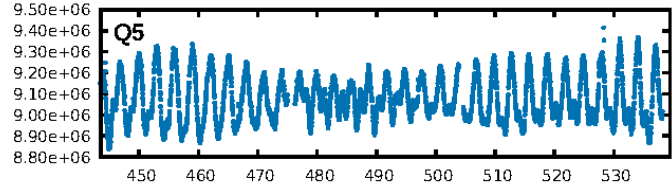
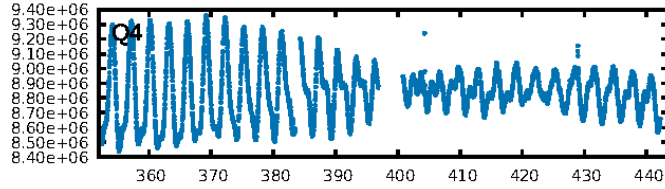
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 53.1%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 3.18e-10
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 0.4595
Centroid-sig: 19.7%
Centroid-so: 0.467 arcsec [0.89σ]
OotOffset-rm: 0.125 arcsec [1.86σ]
KicOffset-rm: 0.163 arcsec [2.29σ]
OotOffset-st: 1/0/1/0 [2]
KicOffset-st: 1/0/1/0 [2]
DiffImageQuality-fgm: 1.00 [2/2]
DiffImageOverlap-fno: 1.00 [2/2]

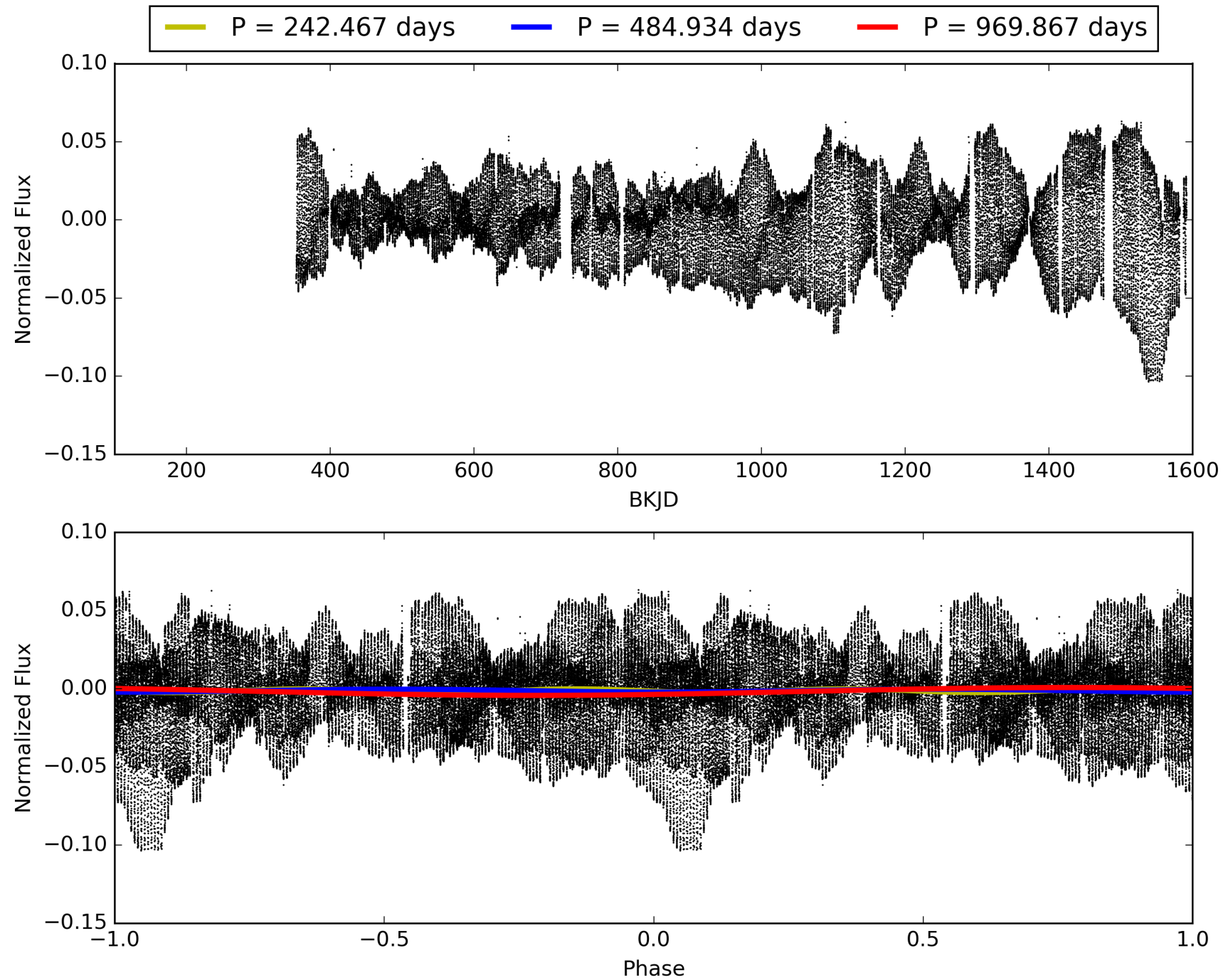
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 22:49:27 Z

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

TCE 011200366-01, PDC Light Curves

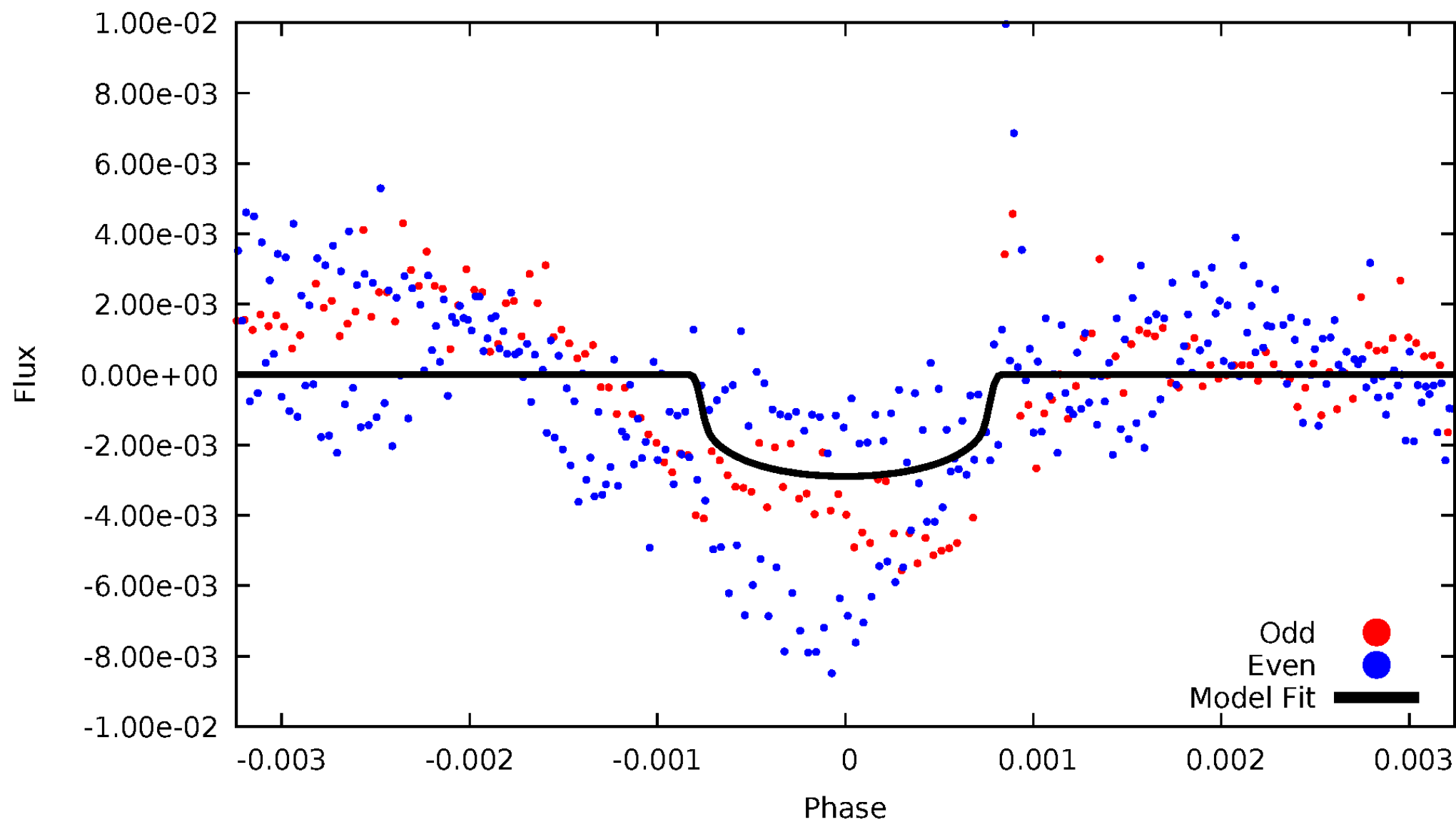


TCE 011200366-01



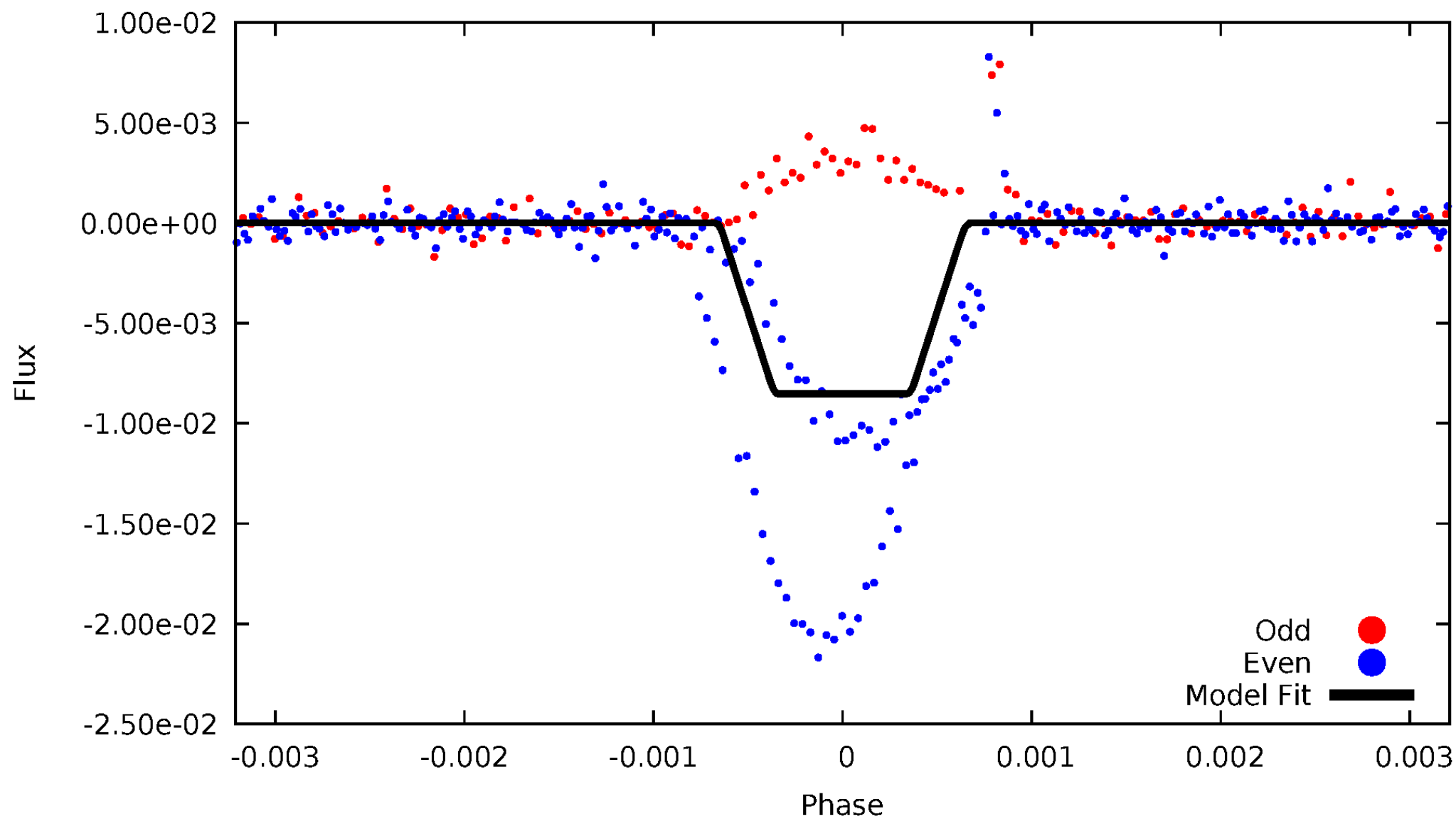
DV Odd/Even

TCE 011200366-01



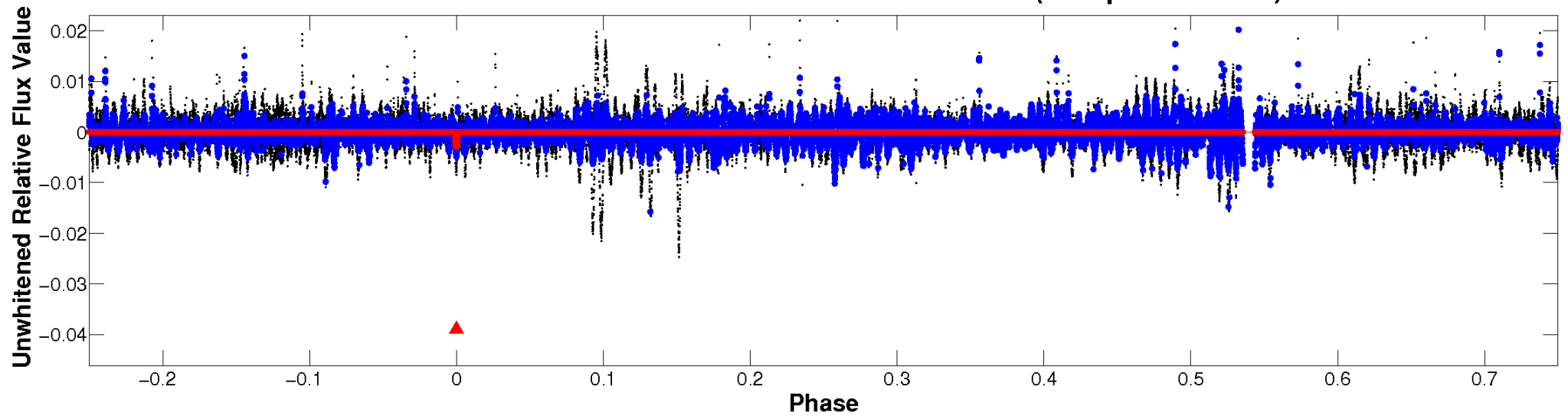
ALT Odd/Even

TCE 011200366-01

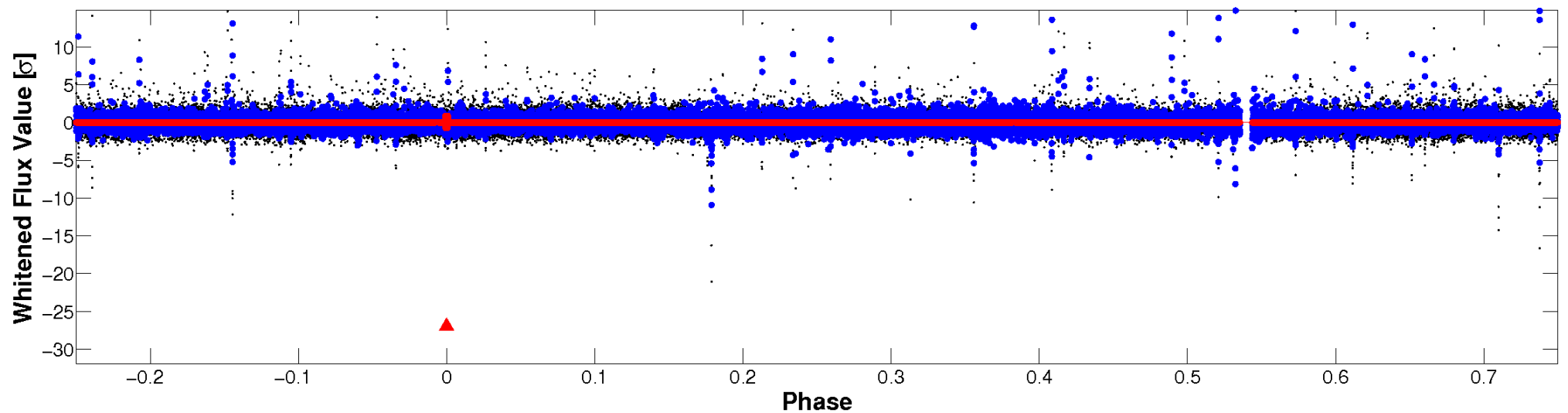


Non-Whitened Vs. Whitened Light Curve

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

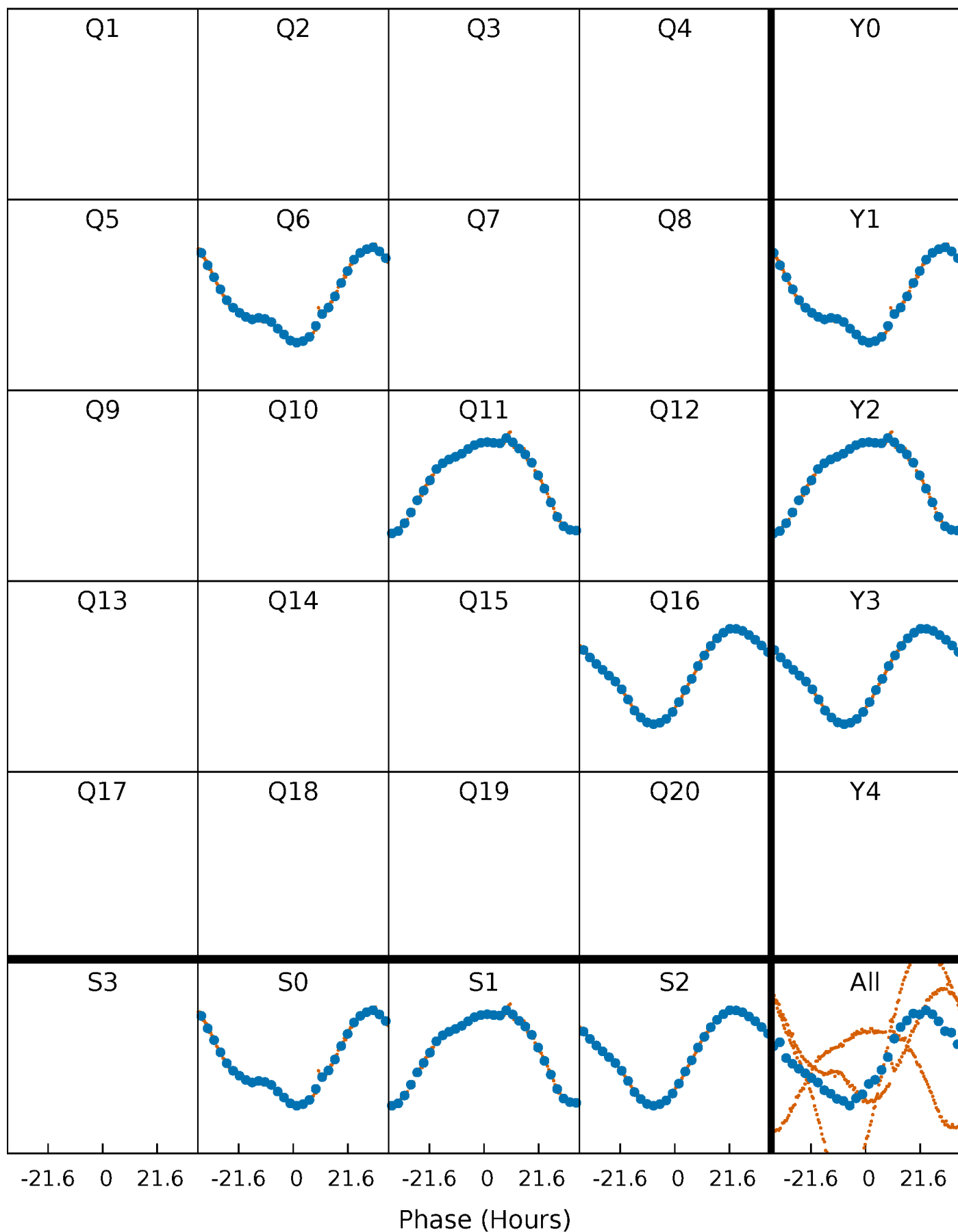


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



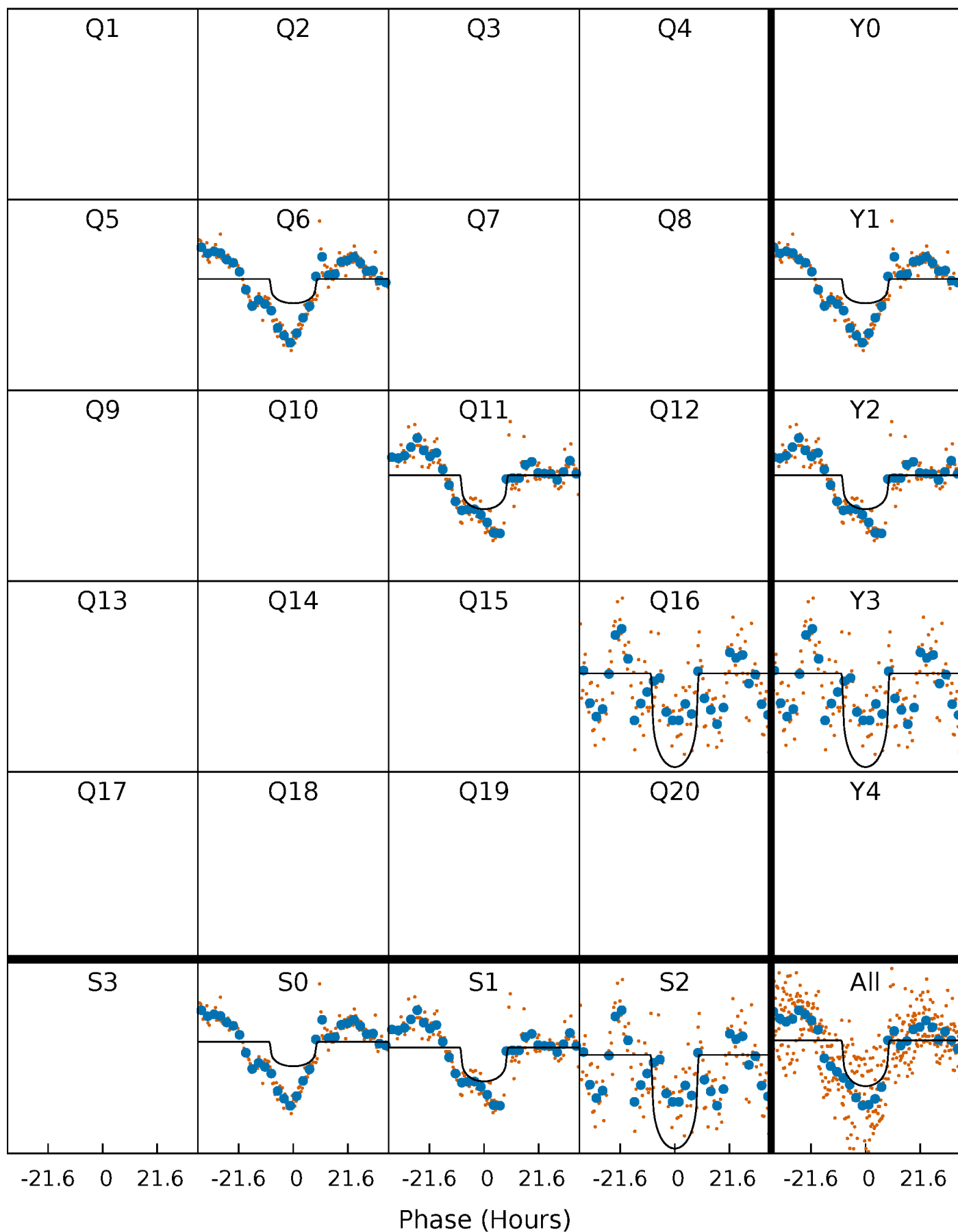
PDC Quarter-Phased Transit Curves

TCE 011200366-01 P=484.933543 Days $T_0=544.878999$ (BKJD)



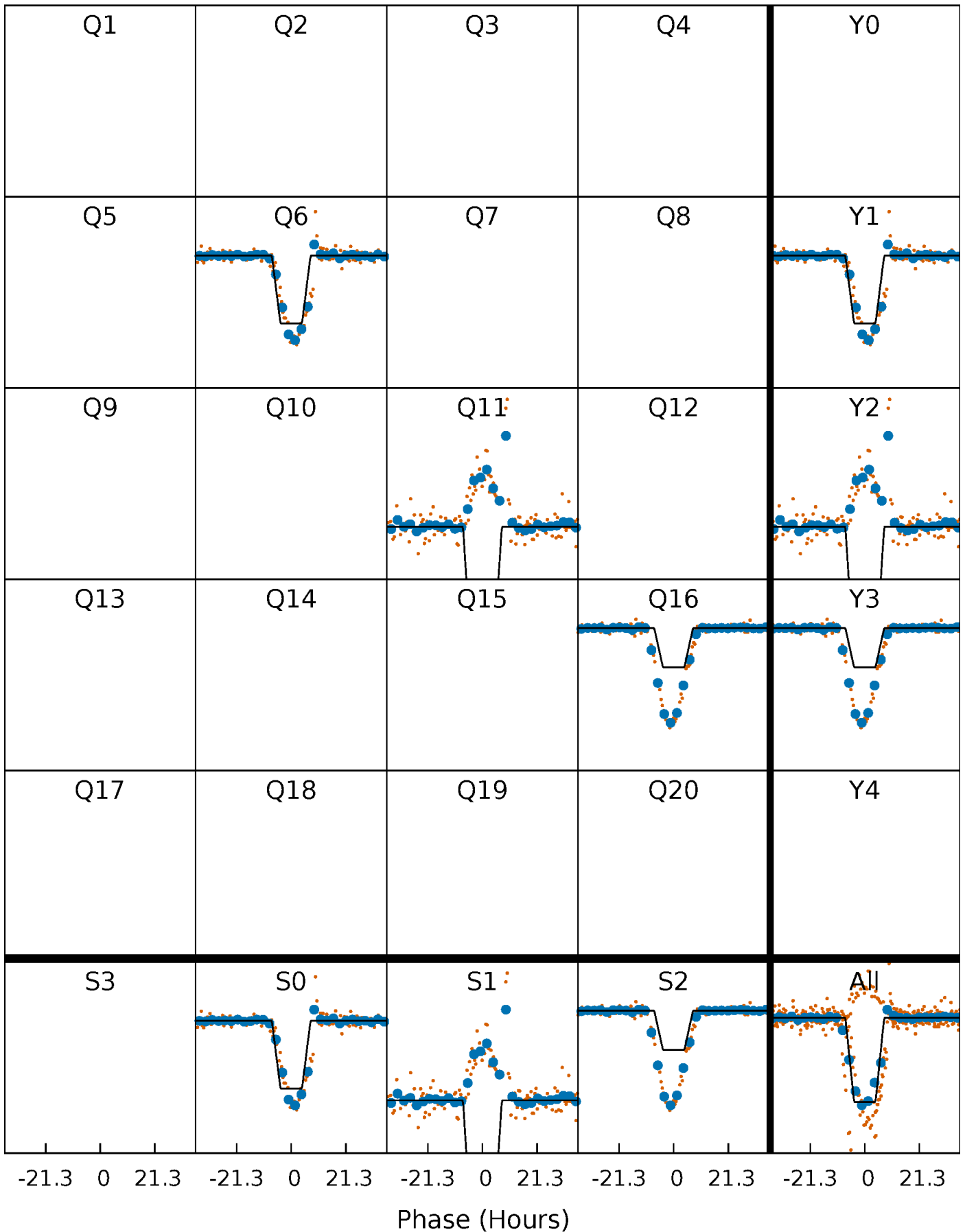
DV Quarter-Phased Transit Curves

TCE 011200366-01 P=484.933543 Days $T_0=544.878999$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

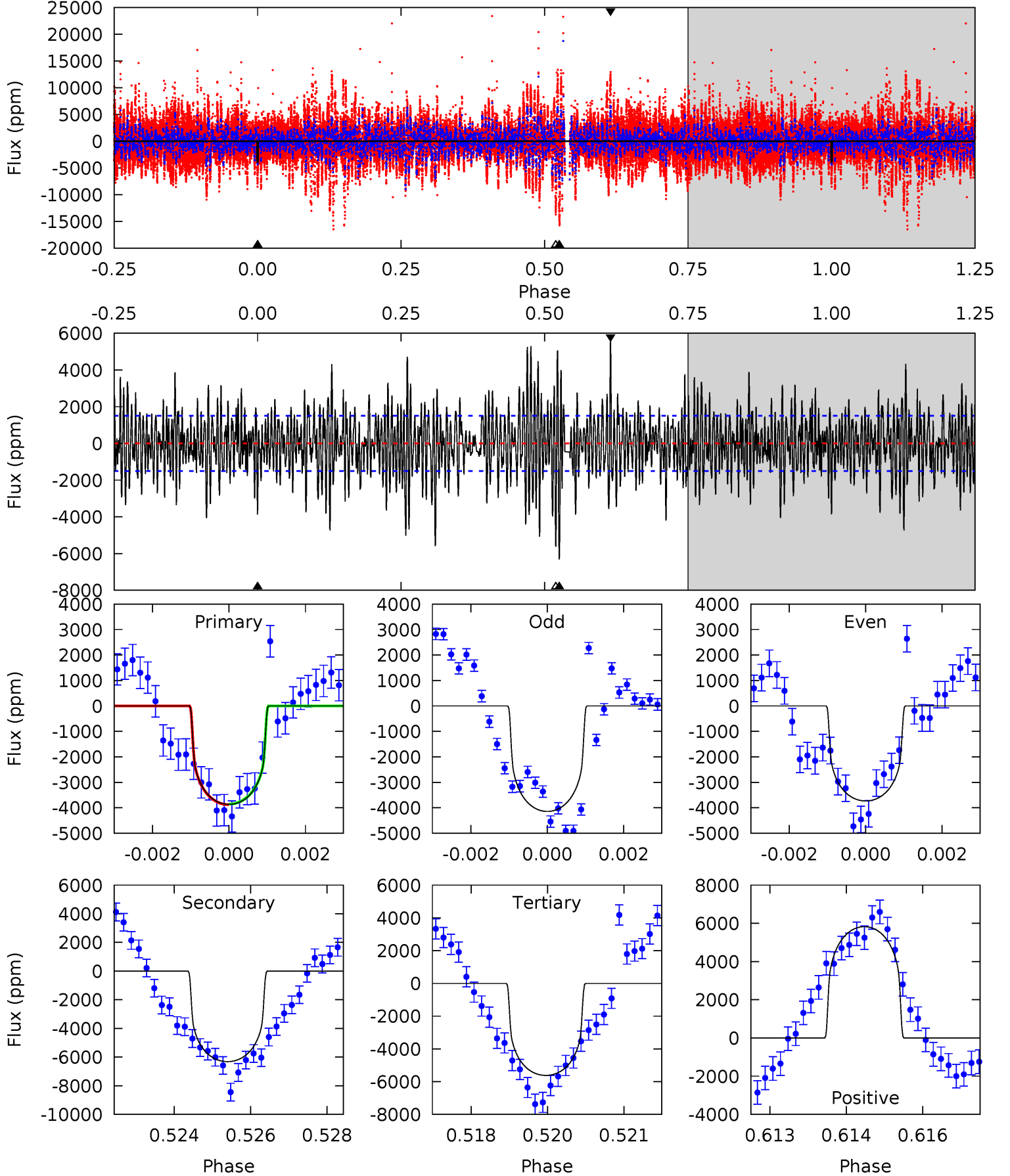
TCE 011200366-01 P=484.922435 Days $T_0=544.918062$ (BKJD)



DV Model-Shift Uniqueness Test

011200366-01, $P = 484.933543$ Days, $E = 59.945456$ Days

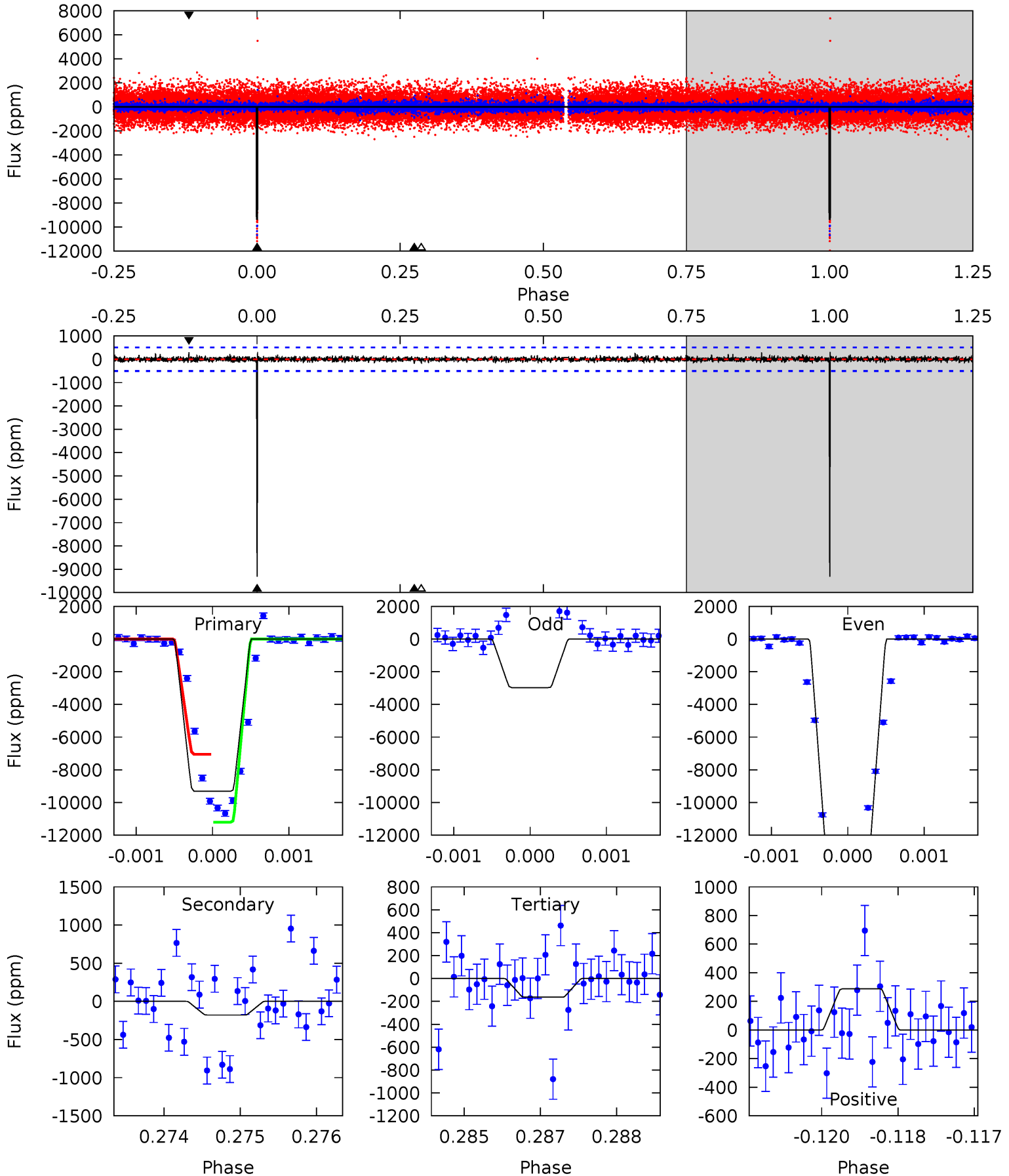
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.7	22.5	20.0	20.7	5.37	3.15	5.41	-6.24	-6.97	2.49	1.76	0.64	0.93	0.48	0.05



Alt Model-Shift Uniqueness Test

011200366-01, P = 484.922435 Days, E = 59.995627 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
99.5	1.91	1.74	3.07	5.40	3.21	0.50	97.7	96.4	0.17	-1.16	78.6	0.89	0.03	0



Stellar Parameters For KIC 011200366

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5274^{+184}_{-184}	$4.576^{+0.035}_{-0.098}$	$-0.100^{+0.300}_{-0.300}$	$0.779^{+0.131}_{-0.066}$	$0.835^{+0.078}_{-0.086}$	$2.485^{+0.534}_{-0.802}$
	+3%/-3%	+1%/-2%	+300%/-300%	+17%/-8%	+9%/-10%	+21%/-32%
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 011200366-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-6319 ± 281	$4.18^{+0.87}_{-0.81}$	272^{+13}_{-11}	6739^{+866}_{-676}	$256580^{+133961}_{-79928}$
Alt.	-179 ± 94	$8.02^{+1.02}_{-0.91}$	272^{+13}_{-12}	2734^{+191}_{-257}	1894^{+1128}_{-1019}

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

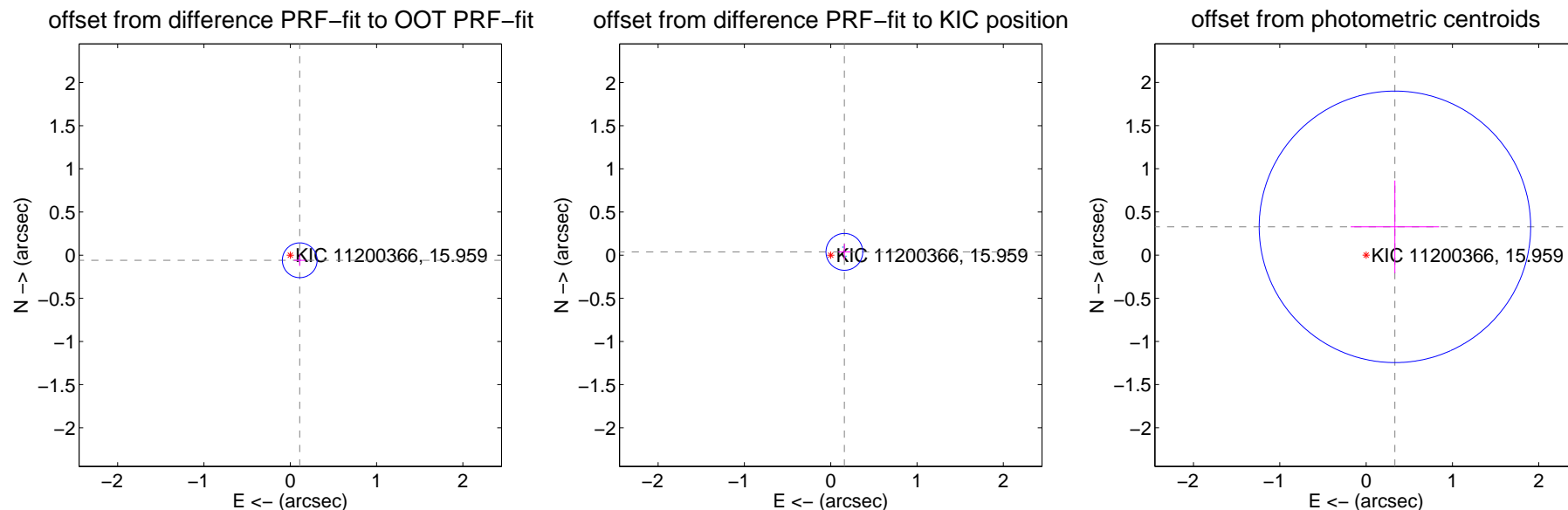
DV Centroid Data

Supplemental centroid analysis for 011200366-01. Kepler magnitude: 15.96. Transit SNR 5.34

There are 2 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.08 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.125 ± 0.067	1.86	-0.110 ± 0.067	-0.059 ± 0.067
PRF-fit source offset from KIC position	0.163 ± 0.071	2.29	-0.158 ± 0.070	0.038 ± 0.091
photometric centroid source offset	0.47 ± 0.52	0.89	-0.33 ± 0.51	0.33 ± 0.54

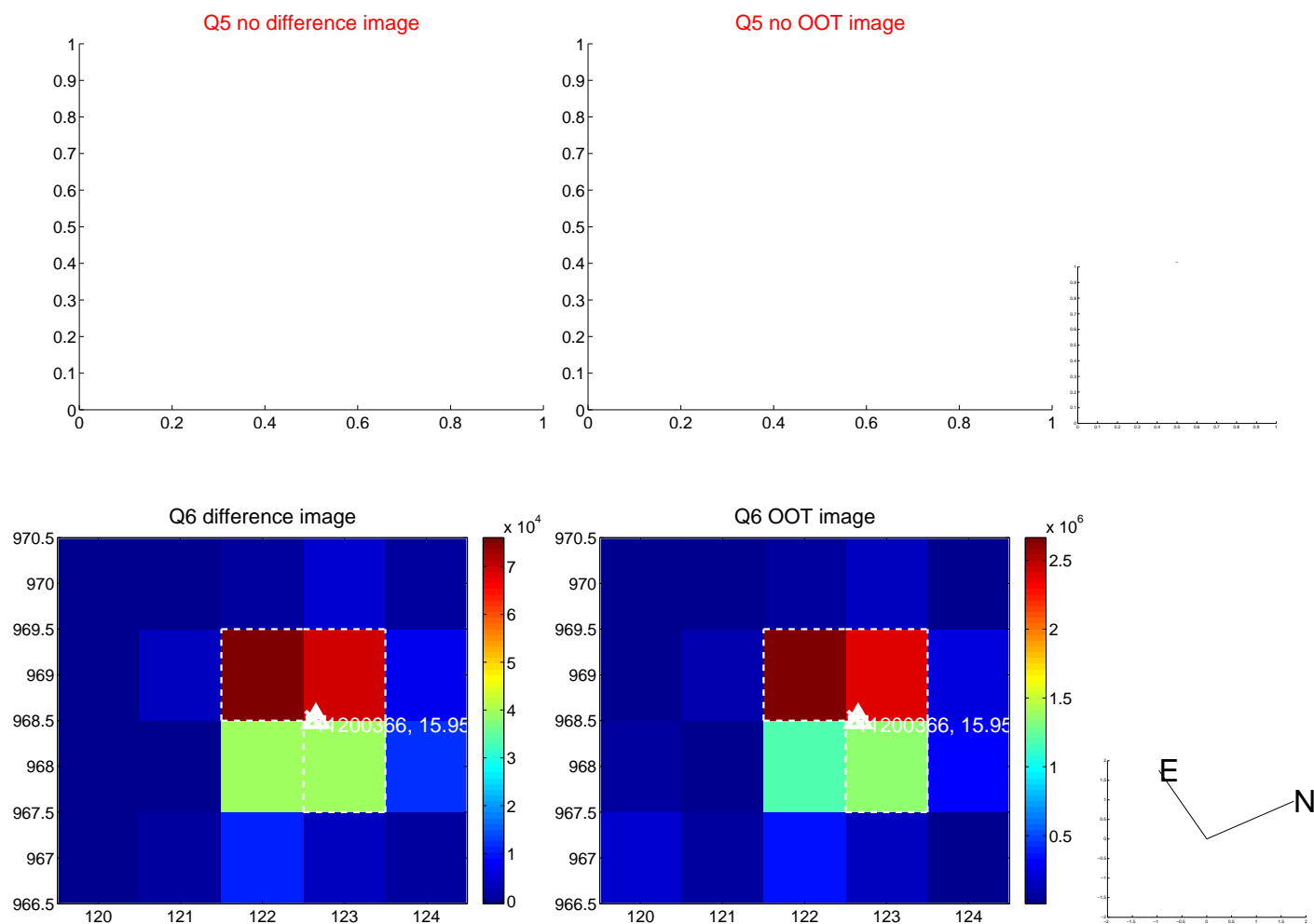


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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



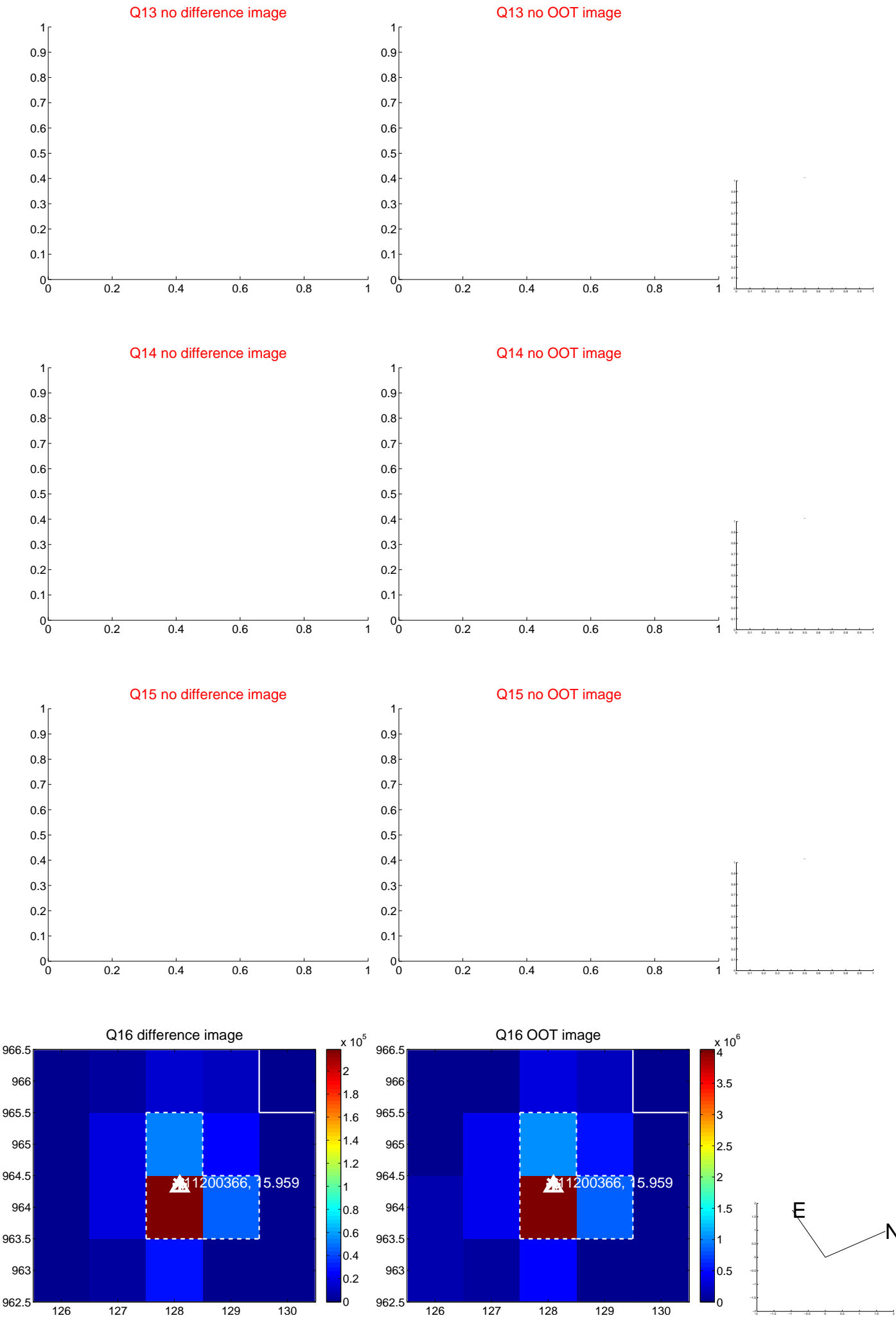
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



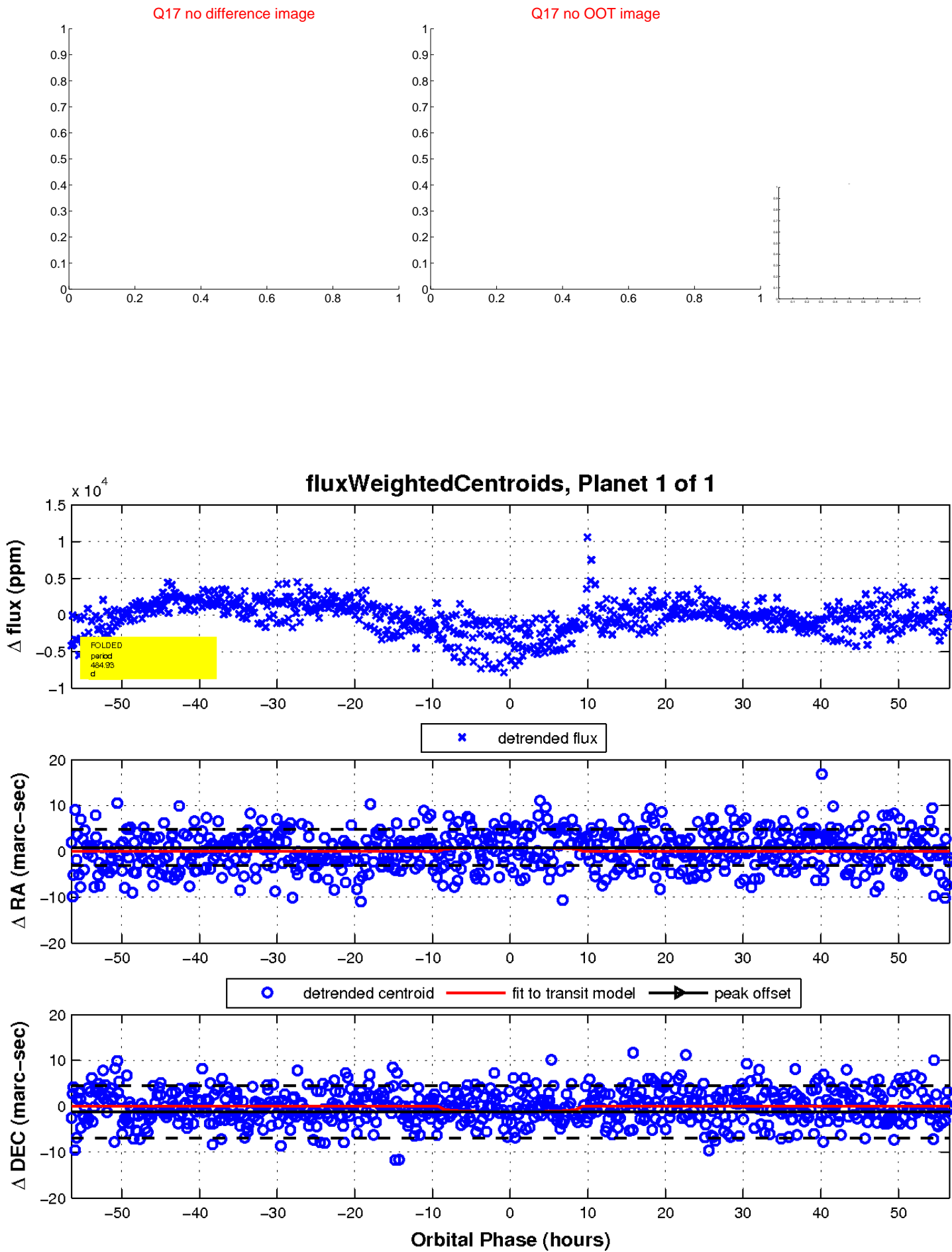
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

