

KIC 010196565

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})
010196565-01	OBS	No	0.924477	131.523325	3263.0	3.489	7.4	6.6	1.00	5780	8.75	2897.86

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010196565-01	OBS	FP	0.00	1	0	0	0	LPP_DV—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.

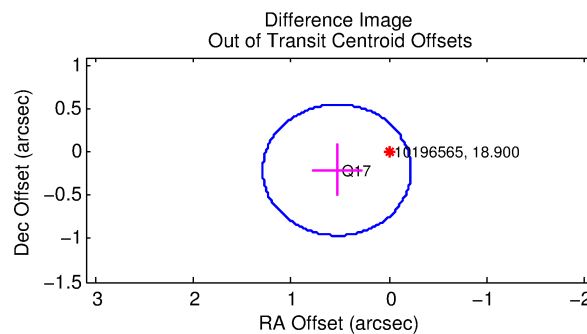
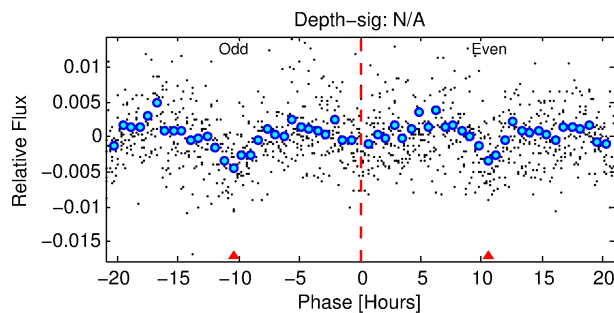
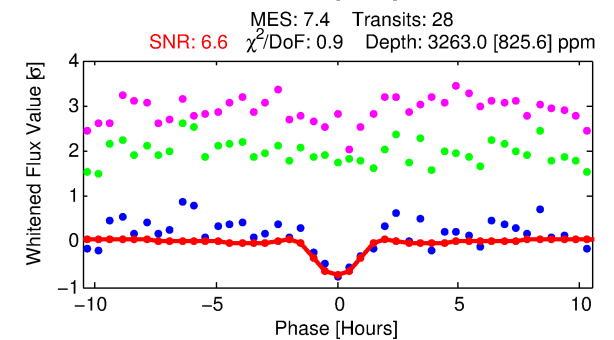
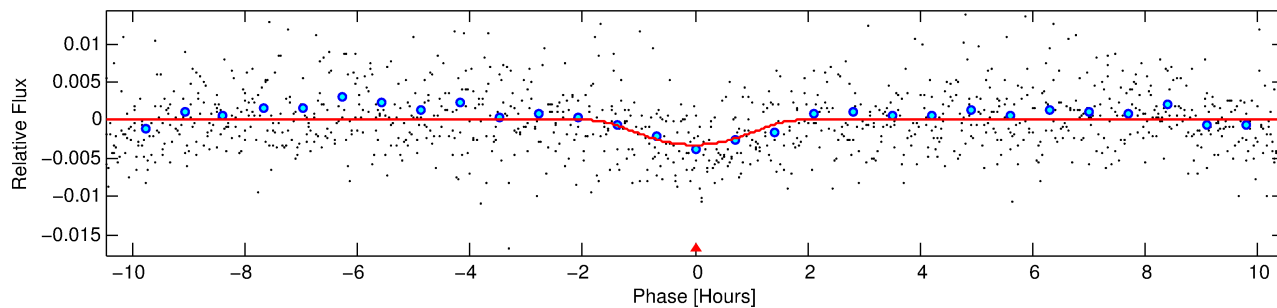
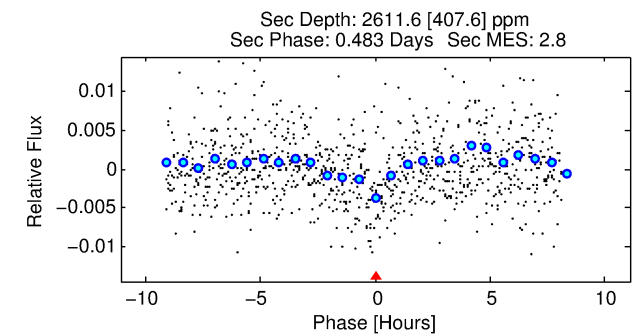
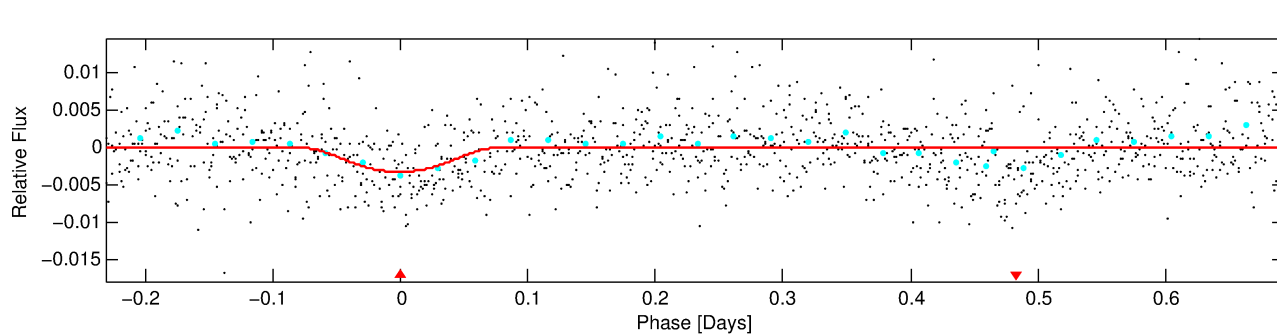
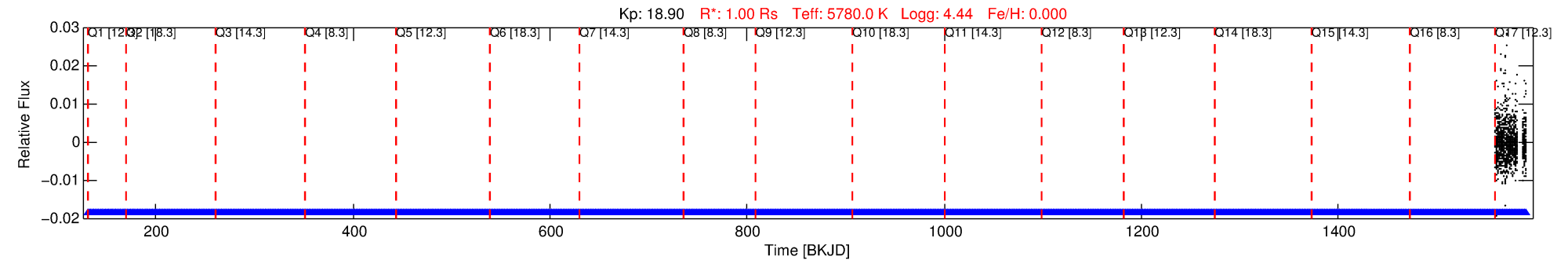
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 010196565-01

No Significant Match Found

DV One-Page Summary

KIC: 10196565 Candidate: 1 of 1 Period: 0.924 d



DV Fit Results:

Period = 0.92448 [0.00002] d
Epoch = 131.5233 [0.0062] BKJD
Rp/R* = 0.0802 [0.2144]
a/R* = 1.39 [0.34]
b = 0.97 [0.38]
Seff = 2897.86 [0.07]
Teq = 1871 [0] K
Rp = 8.75 [23.40] Re
a = 0.0186 [0.0000] AU
Ag = 6.47 [34.63] [0.16σ]
Teffp = 4614 [6171] K [0.44σ]

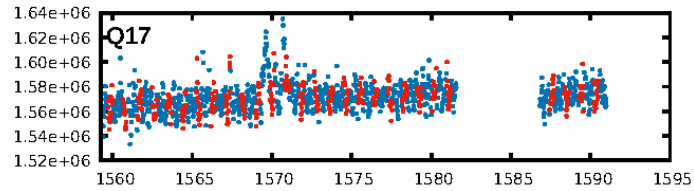
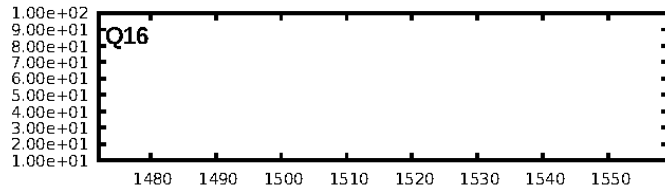
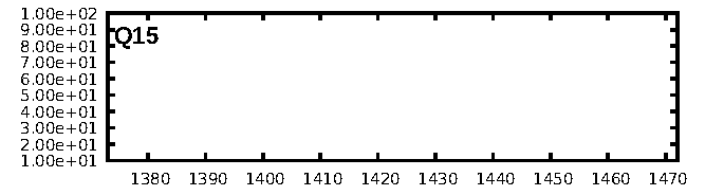
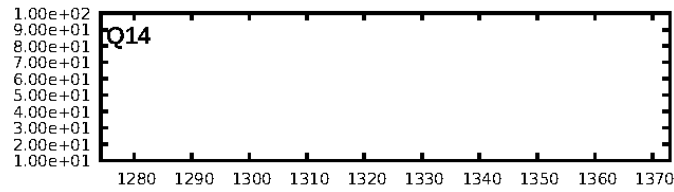
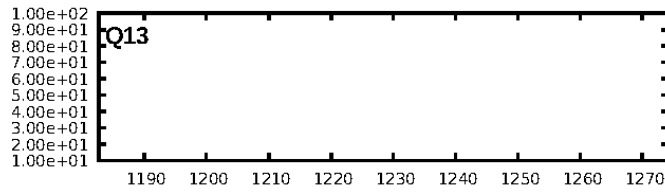
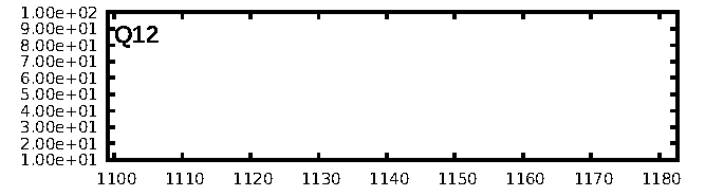
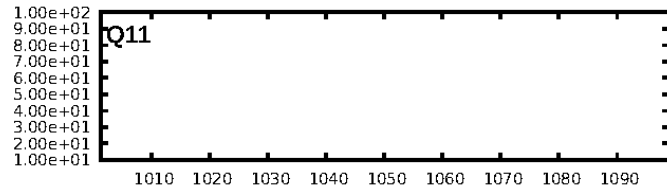
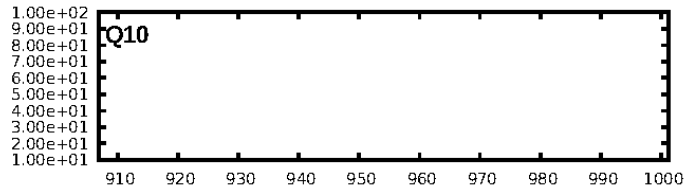
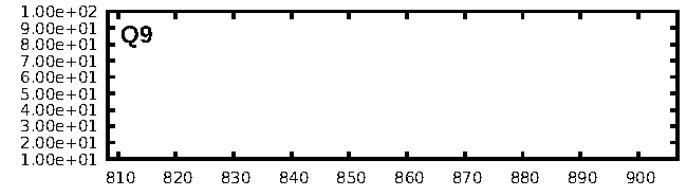
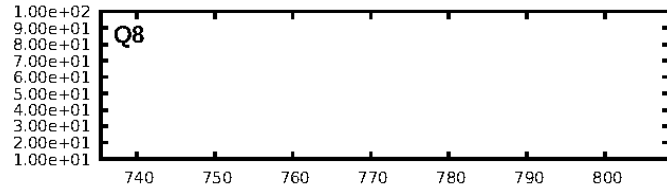
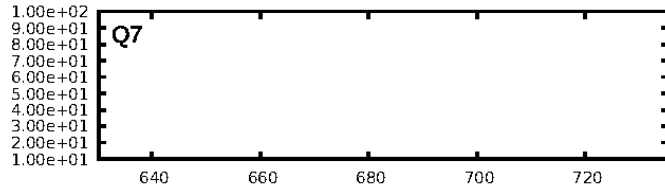
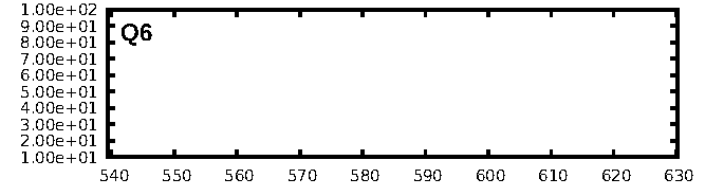
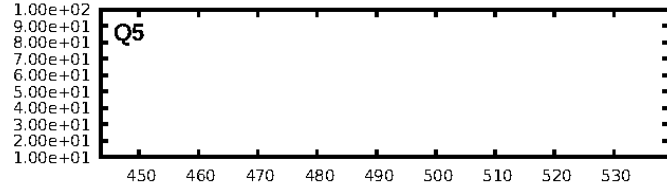
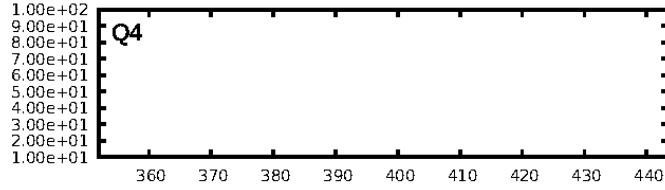
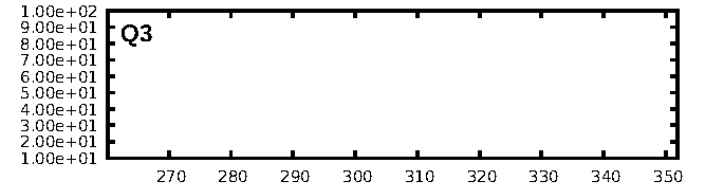
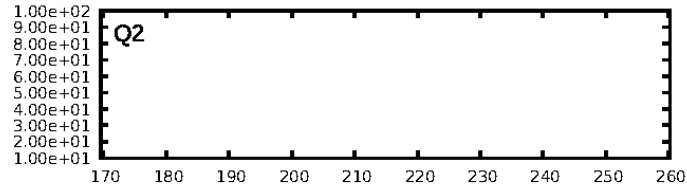
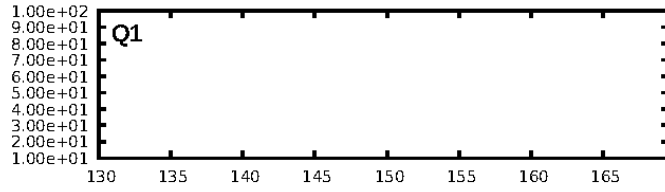
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 90.3%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: N/A
RollingBand-fgt: N/A
GhostDiagnostic-chr: 2.858
Centroid-sig: 1.1%
Centroid-so: 4.034 arcsec [2.05σ]
OotOffset-rm: 0.572 arcsec [2.26σ]
KicOffset-rm: 0.731 arcsec [2.88σ]
OotOffset-st: 0/0/0/1 [1]
KicOffset-st: 0/0/0/1 [1]
DiffImageQuality-fgm: 1.00 [1/1]
DiffImageOverlap-fno: 1.00 [1/1]

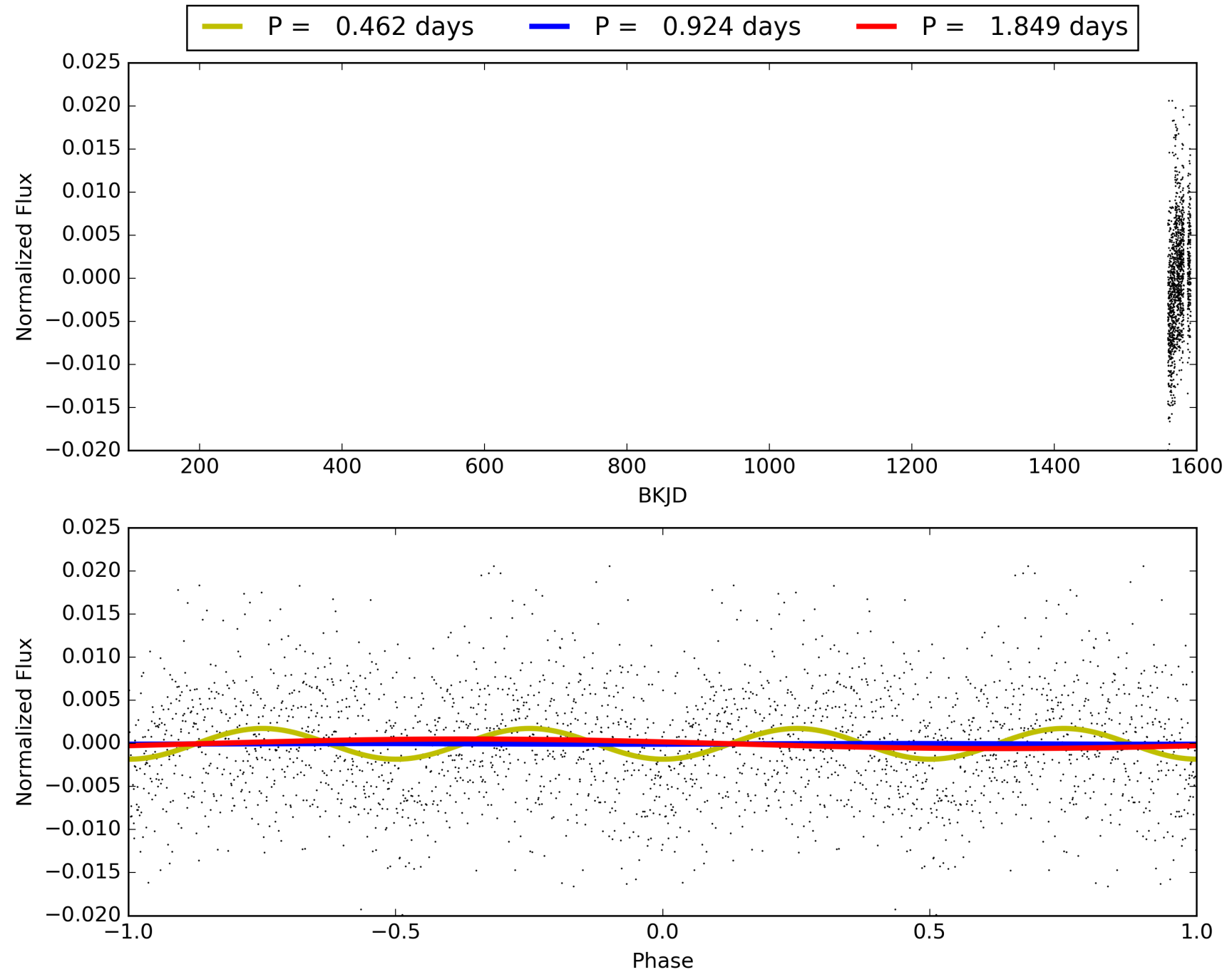
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 05:41:12 Z

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

TCE 010196565-01, PDC Light Curves

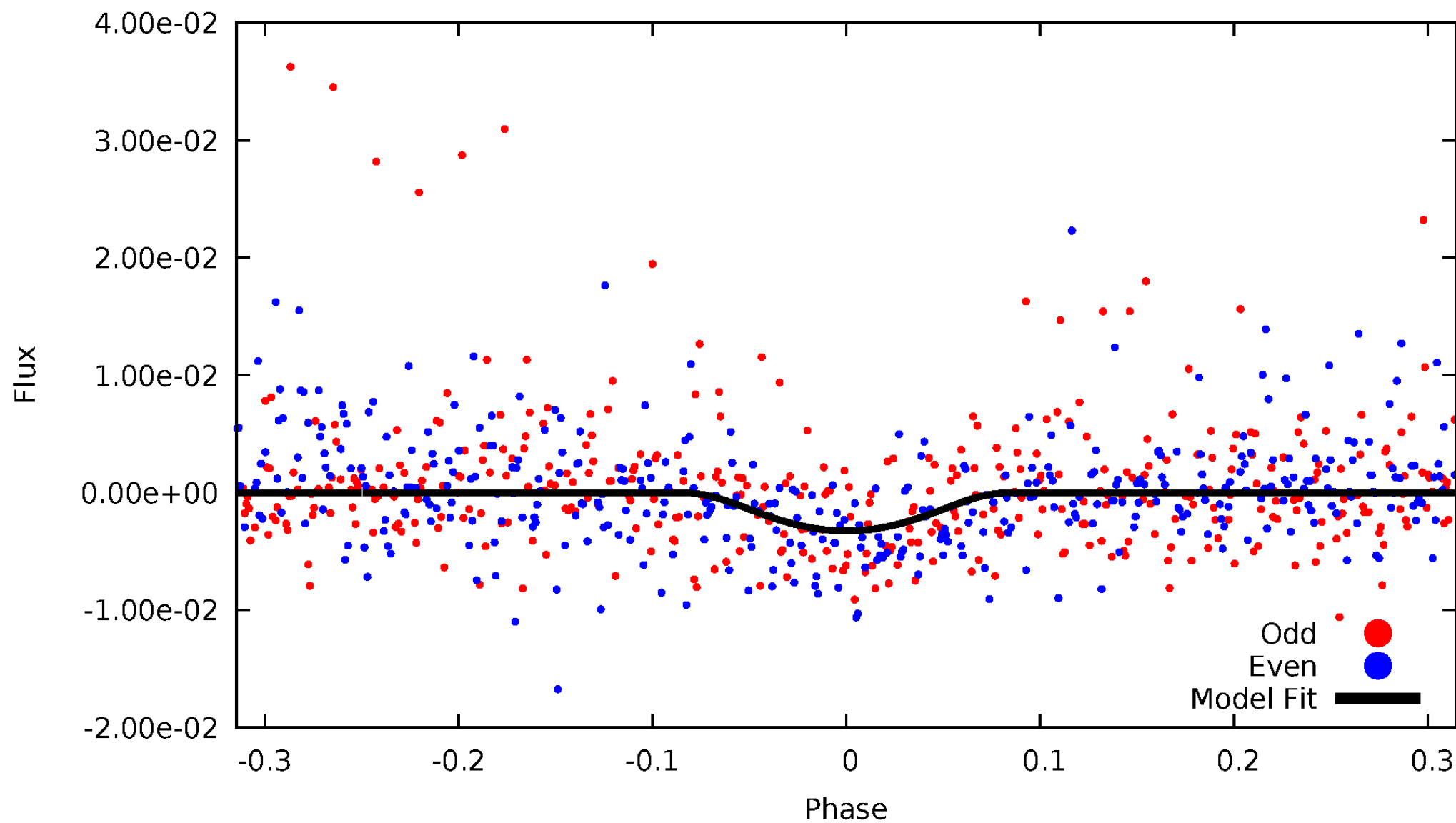


TCE 010196565-01



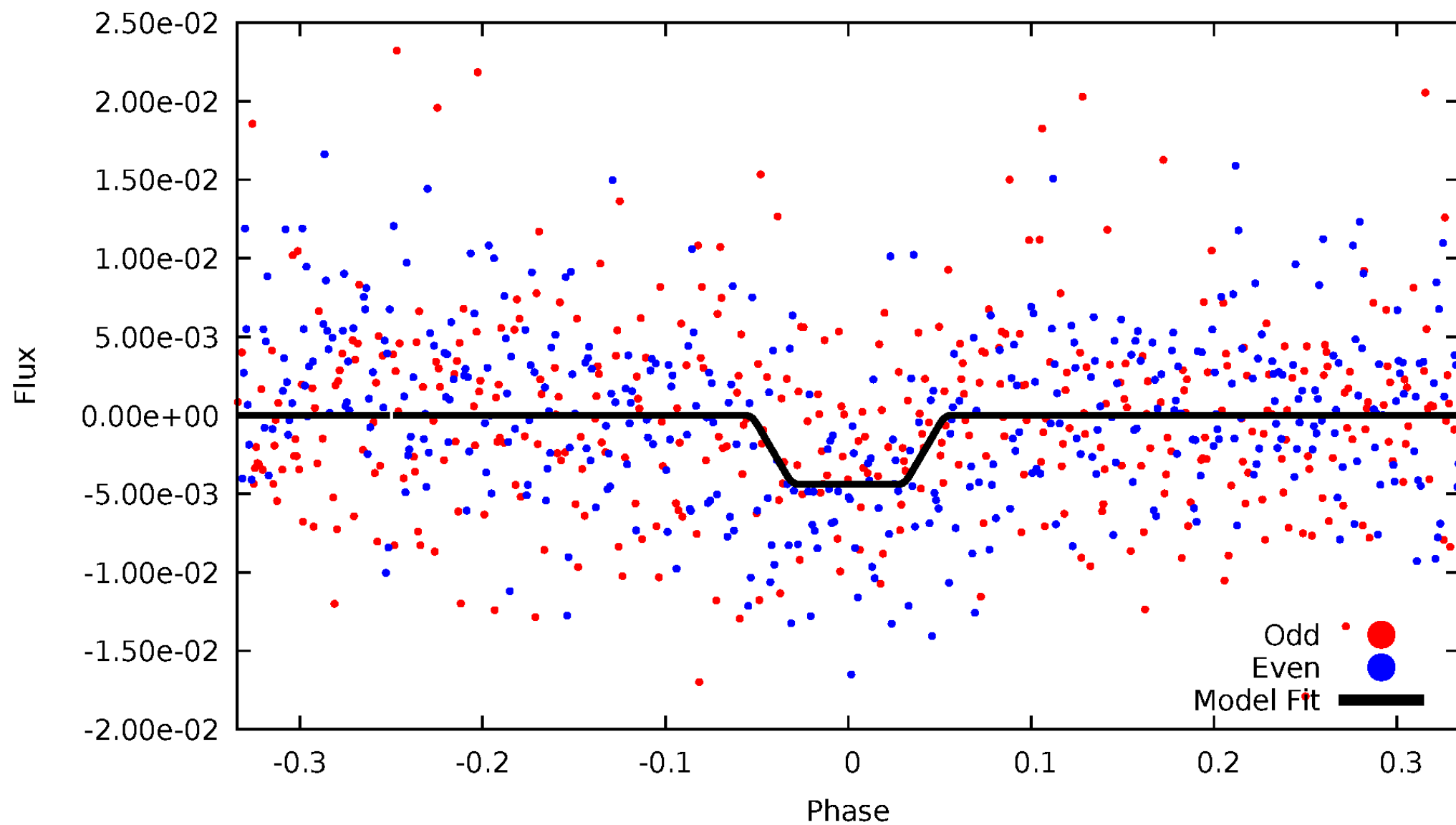
DV Odd/Even

TCE 010196565-01



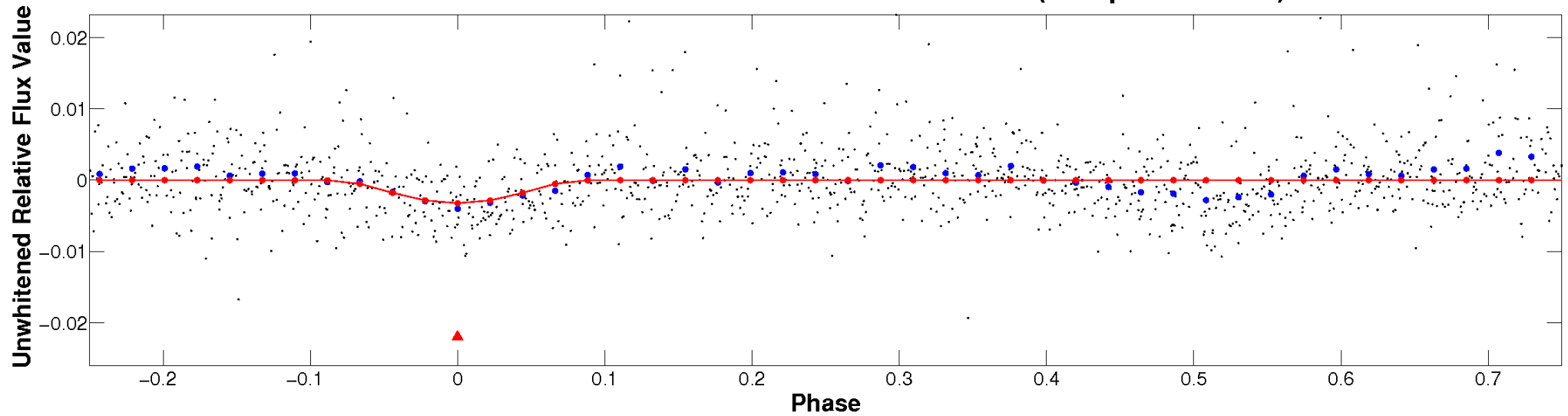
ALT Odd/Even

TCE 010196565-01

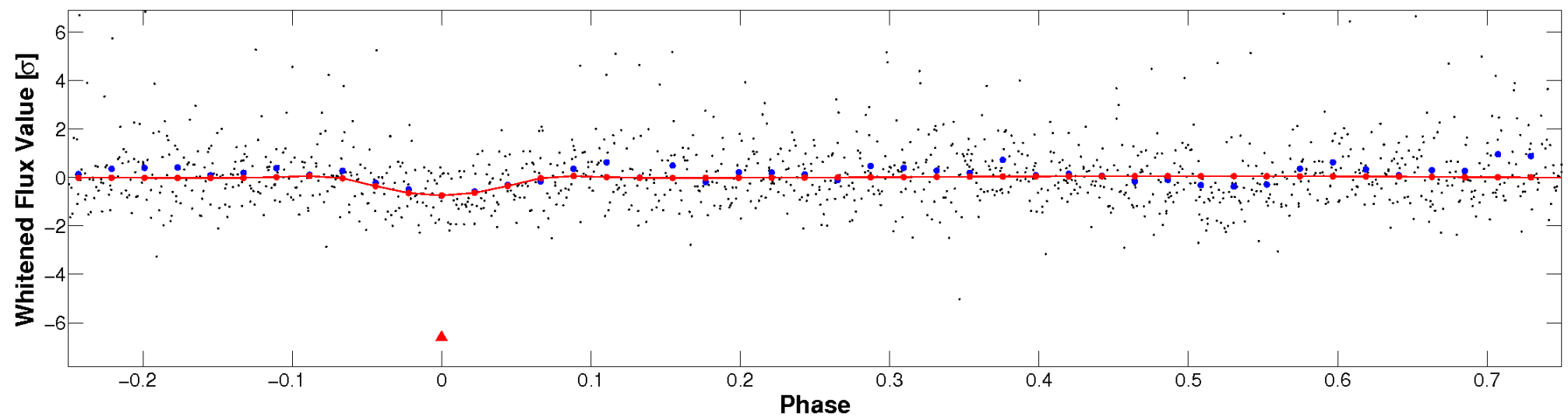


Non-Whitened Vs. Whitened Light Curve

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



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



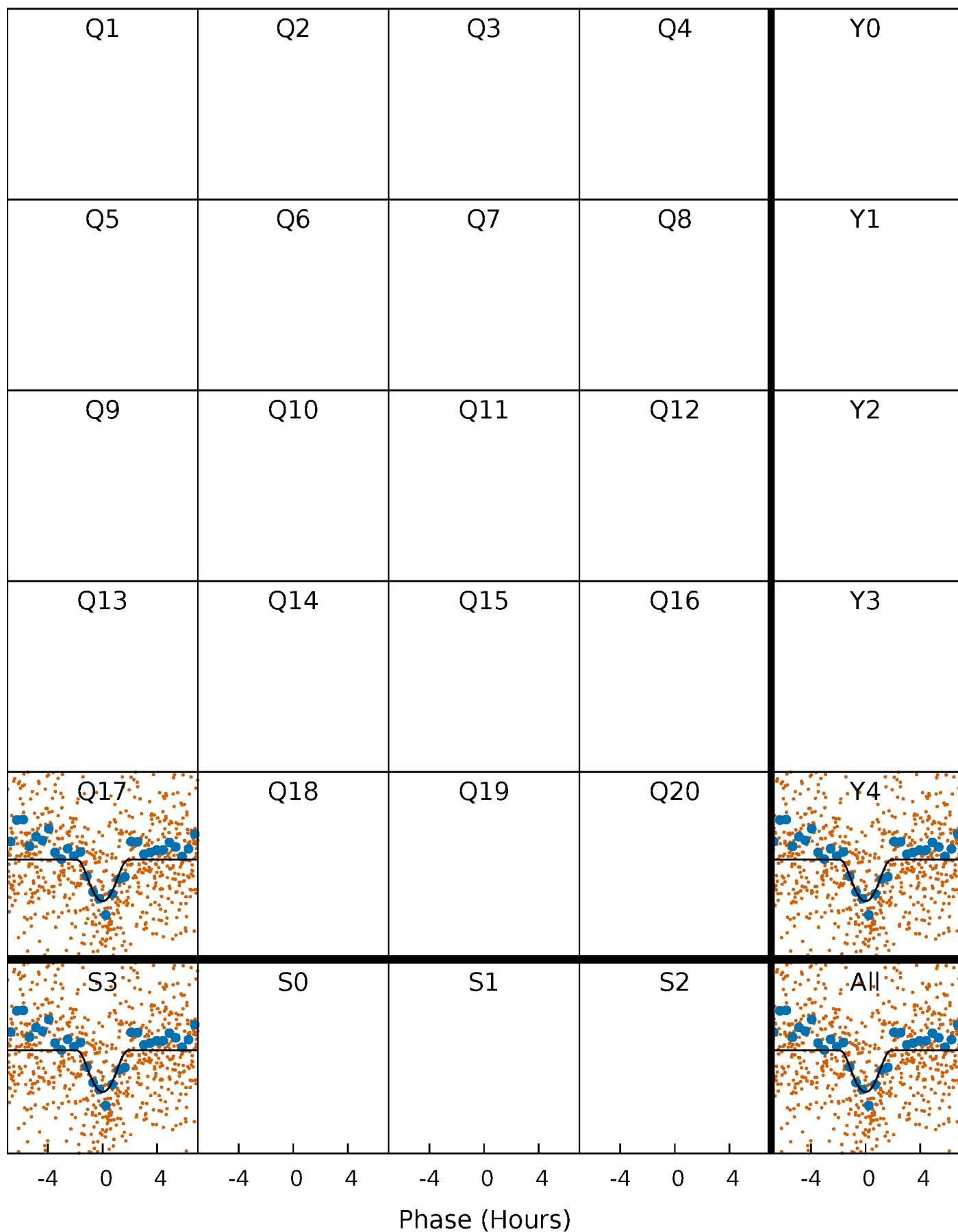
PDC Quarter-Phased Transit Curves

TCE 010196565-01 P= 0.924477 Days T₀=131.523325 (BKJD)



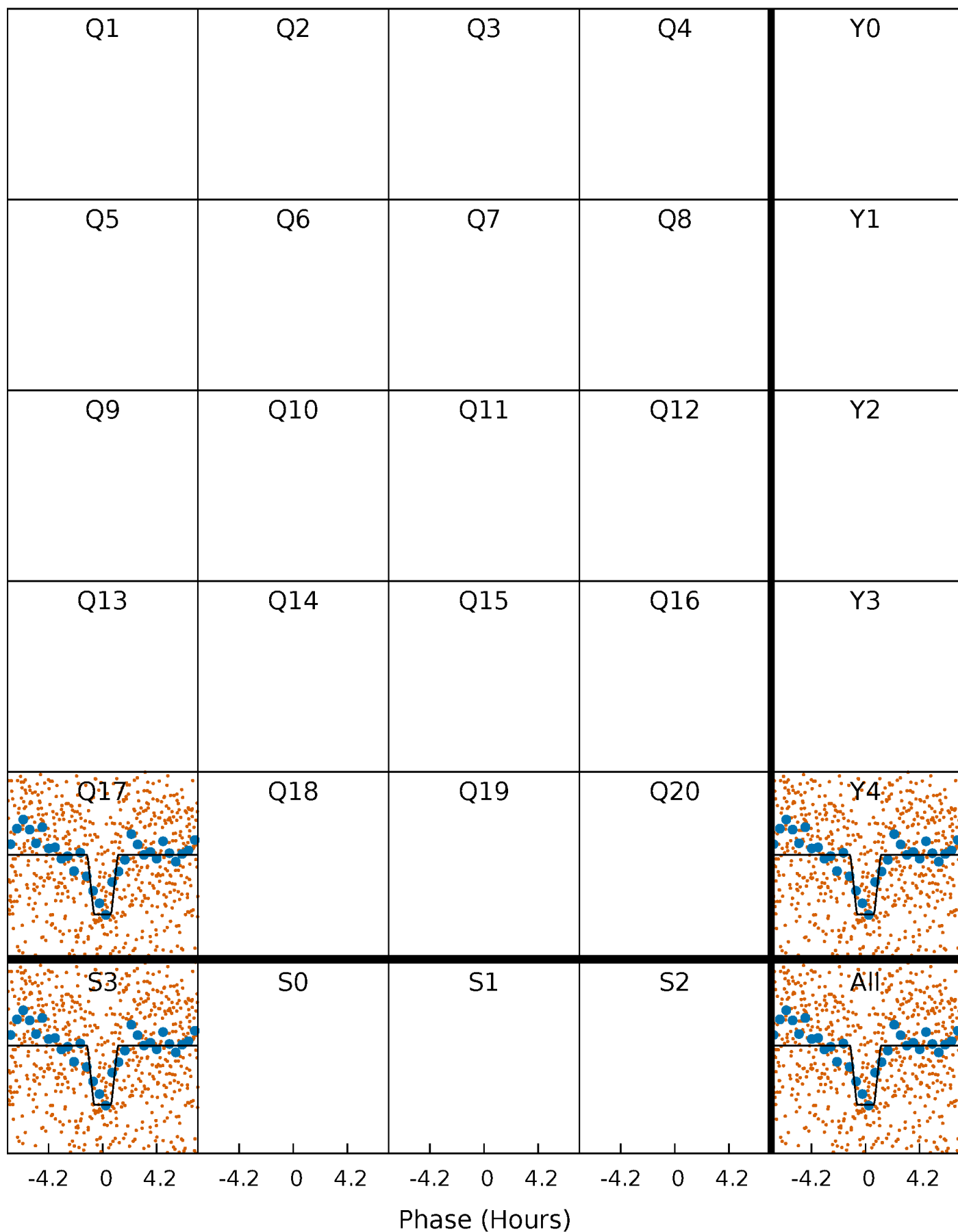
DV Quarter-Phased Transit Curves

TCE 010196565-01 P= 0.924477 Days $T_0=131.523325$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

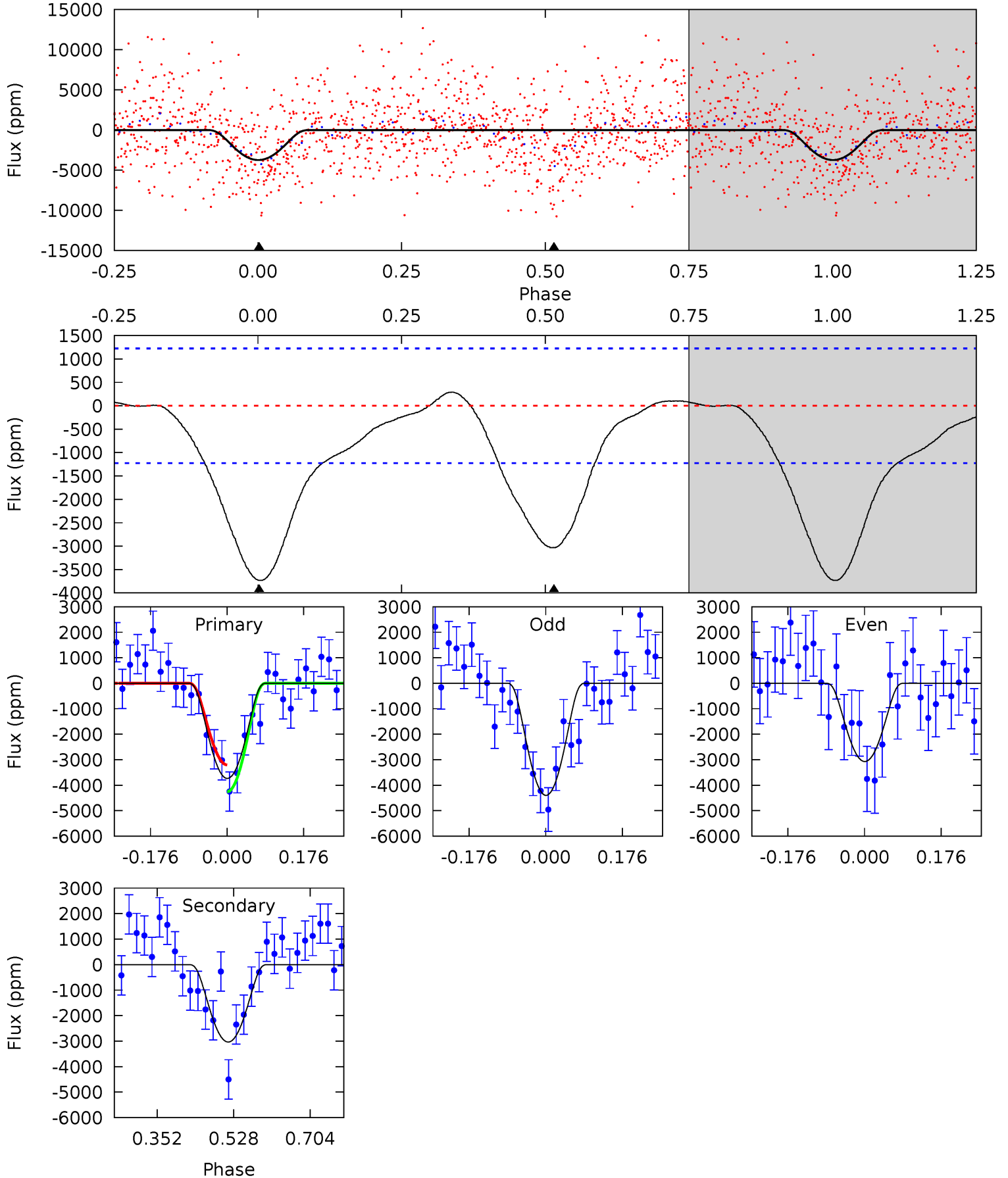
TCE 010196565-01 P= 0.924486 Days $T_0=131.513989$ (BKJD)



DV Model-Shift Uniqueness Test

010196565-01, P = 0.924477 Days, E = 131.523325 Days

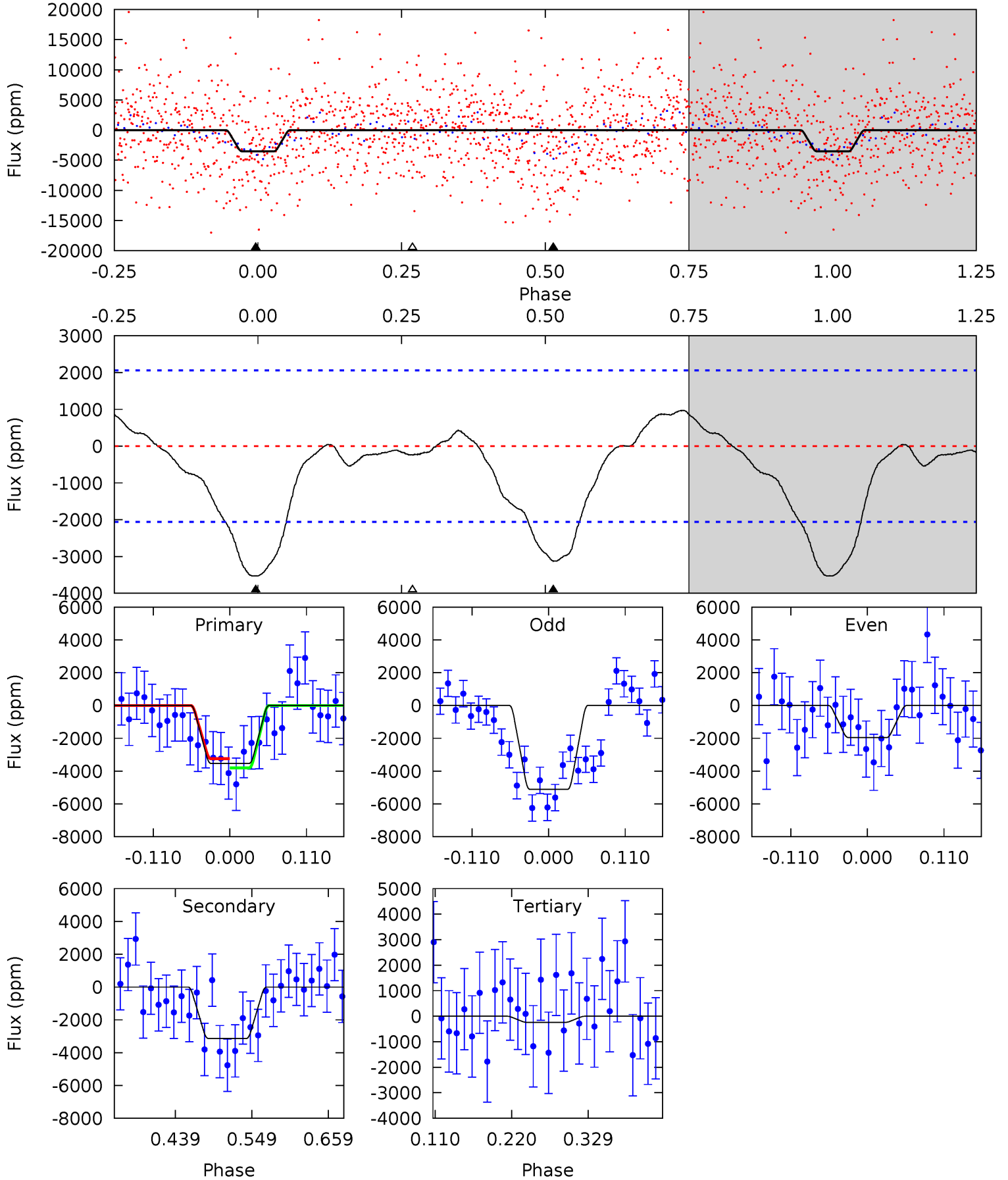
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.5	11.0	0	0	4.44	1.35	0.84	13.5	13.5	11.0	11.0	2.48	1.05	0.07	1.97



Alt Model-Shift Uniqueness Test

010196565-01, P = 0.924486 Days, E = 131.513989 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.79	6.91	0.53	0	4.55	1.60	0.95	7.26	7.79	6.38	6.91	3.54	0.91	0.22	0.62



Stellar Parameters For KIC 010196565

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5780^{+1}_{-1}	$4.438^{+1.000}_{-1.000}$	$0.000^{+1.000}_{-1.000}$	$1.000^{+1.000}_{-1.000}$	$-1.000^{+1.000}_{-1.000}$	$-1.000^{+1.000}_{-1.000}$
	+0%/-0%	+23%/-23%	+inf%/-inf%	+100%/-100%	+100%/-100%	+100%/-100%
Source	Solar	Solar	Solar	Solar		

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

Secondary Eclipse Parameters for KIC 010196565-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-3034 ± 276	$20.06^{+18.15}_{-14.24}$	2612^{+129}_{-119}	3505^{+2422}_{-1078}	$1.465^{+15.895}_{-1.083}$
Alt.	-3130 ± 453	$18.98^{+19.17}_{-13.72}$	2619^{+113}_{-127}	3584^{+2619}_{-1081}	$1.671^{+20.136}_{-1.265}$

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

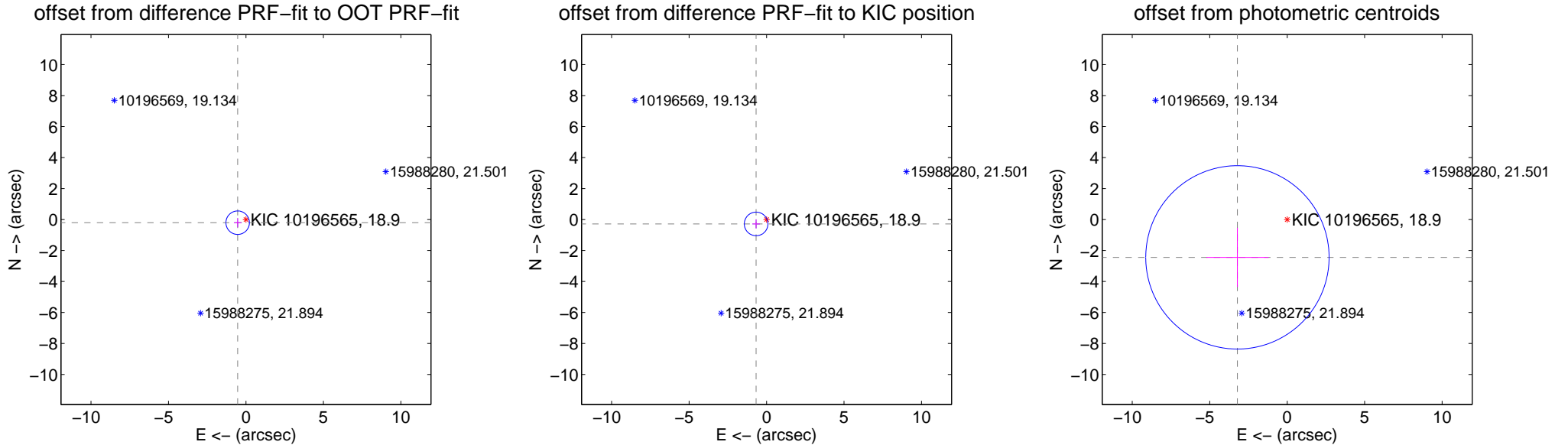
DV Centroid Data

Supplemental centroid analysis for 010196565-01. Kepler magnitude: 18.90. Transit SNR 6.64

There are 1 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.16 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.572 ± 0.253	2.26	0.534 ± 0.245	-0.205 ± 0.297
PRF-fit source offset from KIC position	0.731 ± 0.254	2.88	0.674 ± 0.245	-0.284 ± 0.297
photometric centroid source offset	4.03 ± 1.97	2.05	3.21 ± 2.01	-2.44 ± 1.91

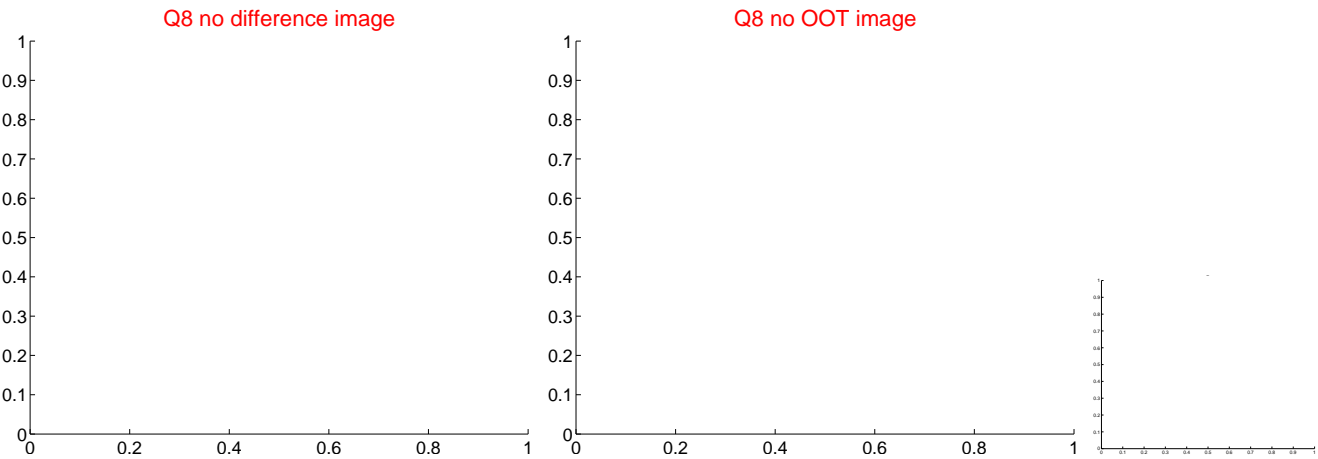
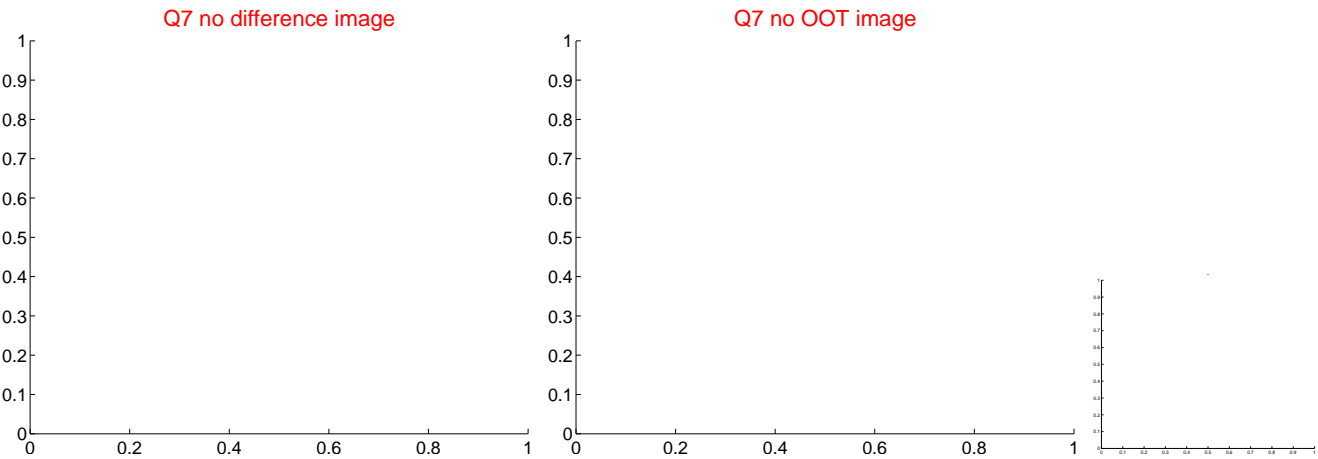
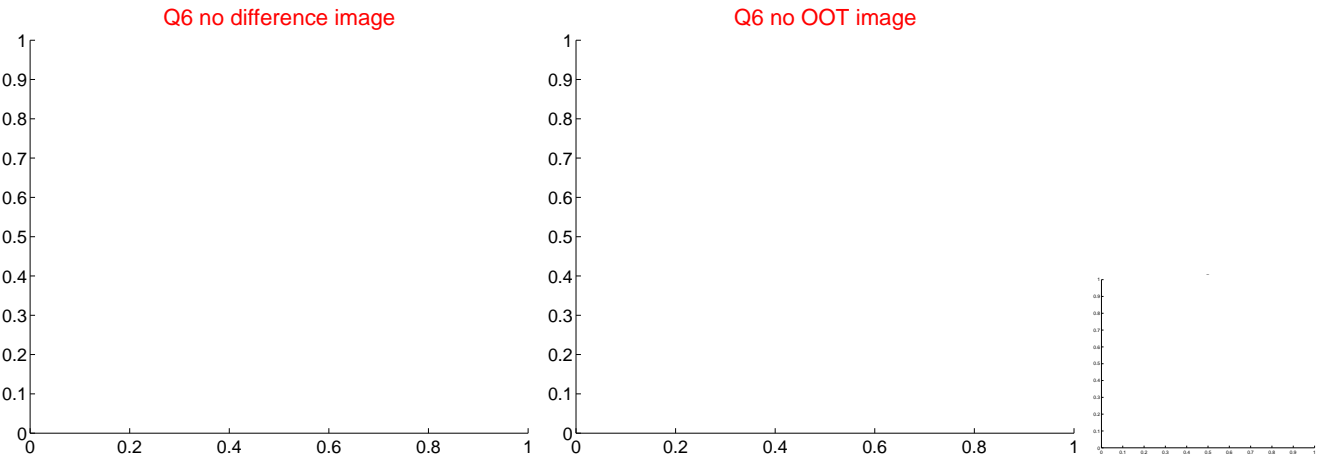
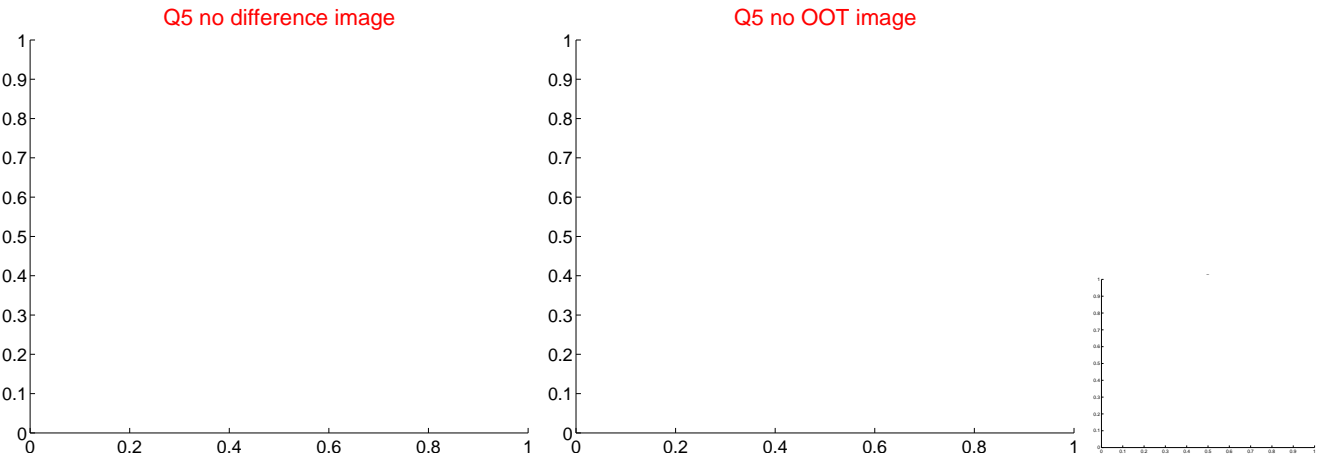


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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



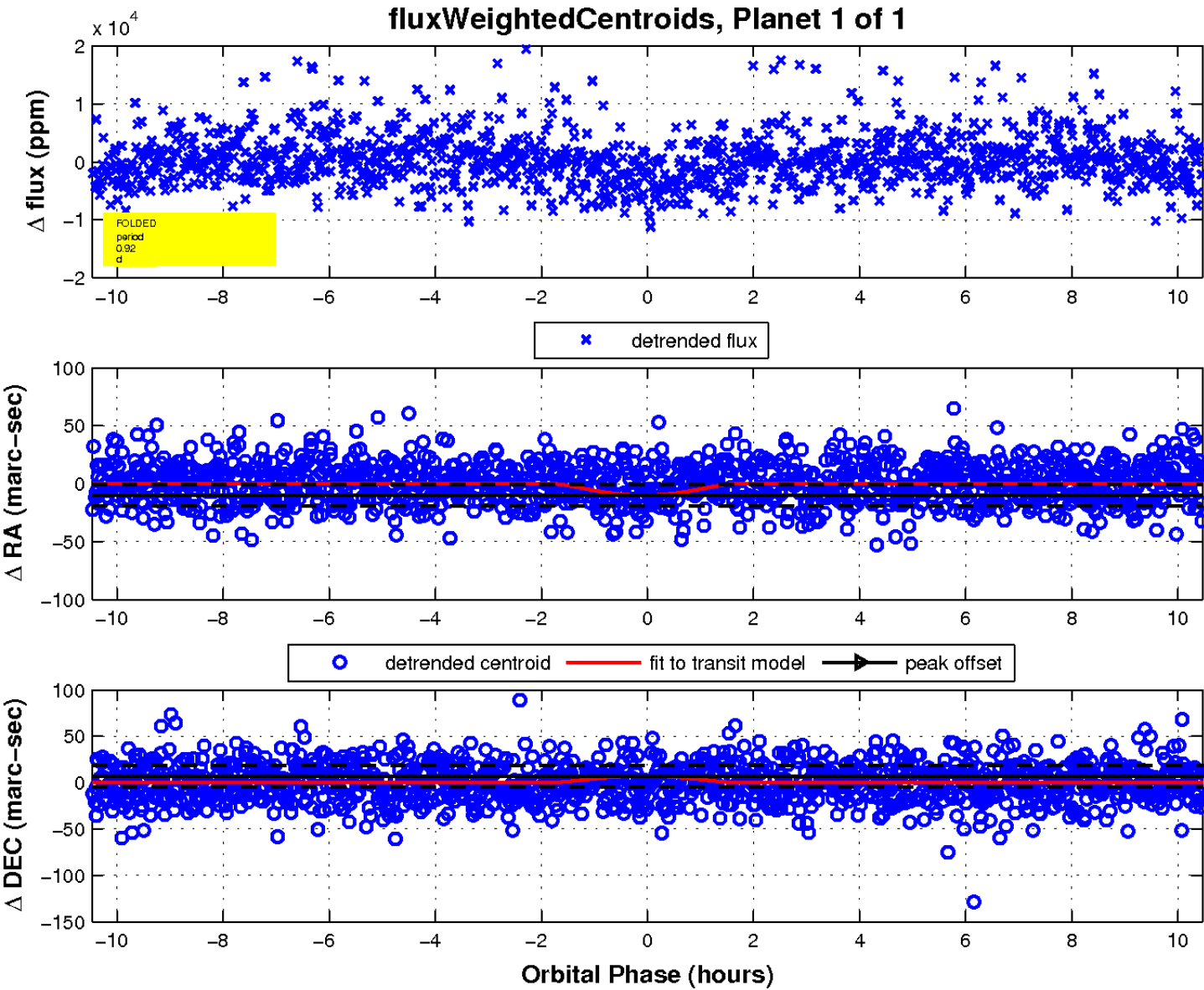
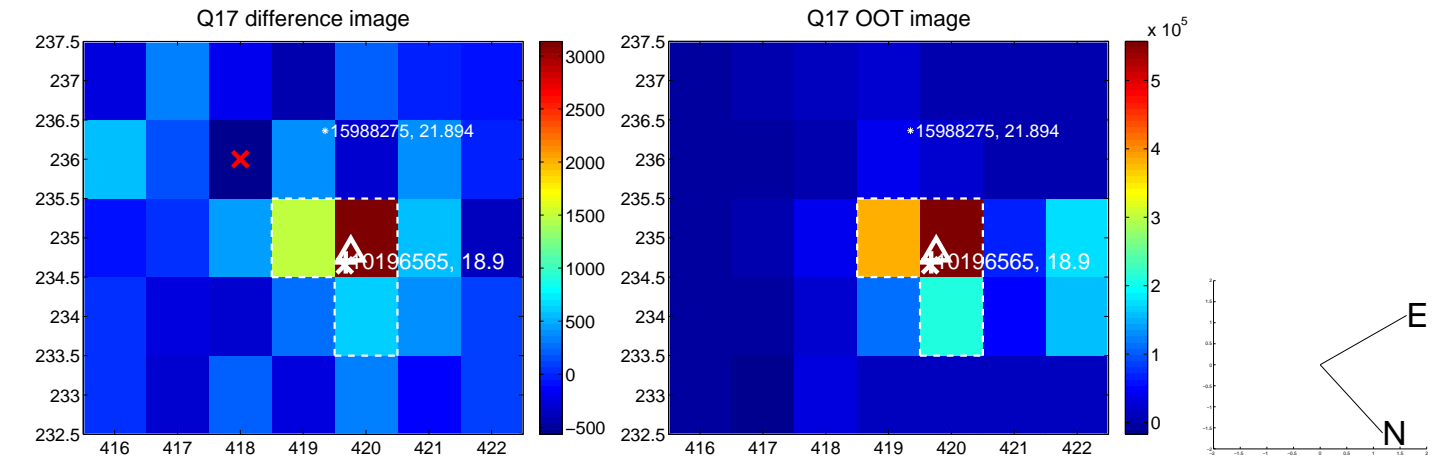
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

