

KIC 011128414

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})
011128414-01	OBS	No	449.212369	195.369498	781.3	7.417	9.1	7.8	0.67	4531	1.89	0.17

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011128414-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE—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.

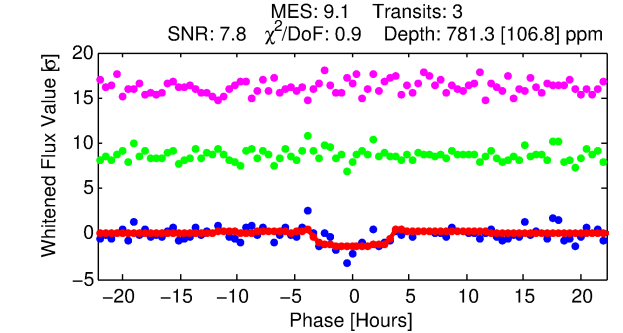
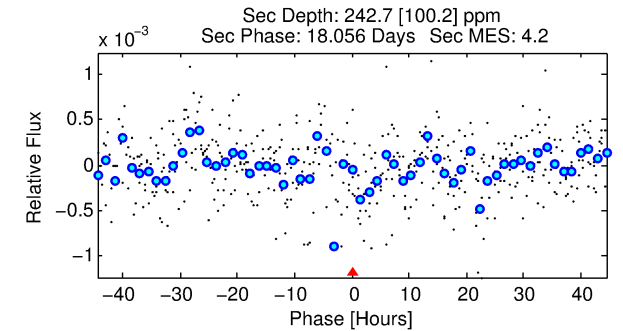
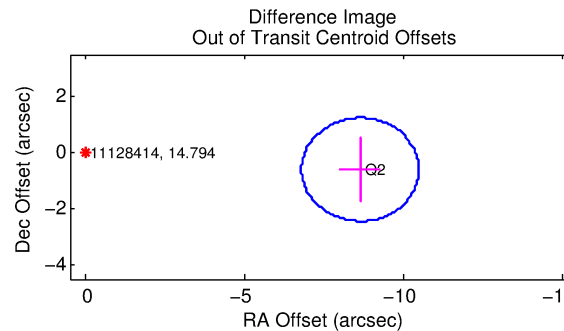
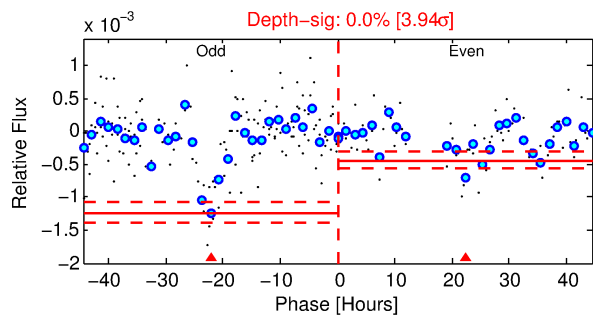
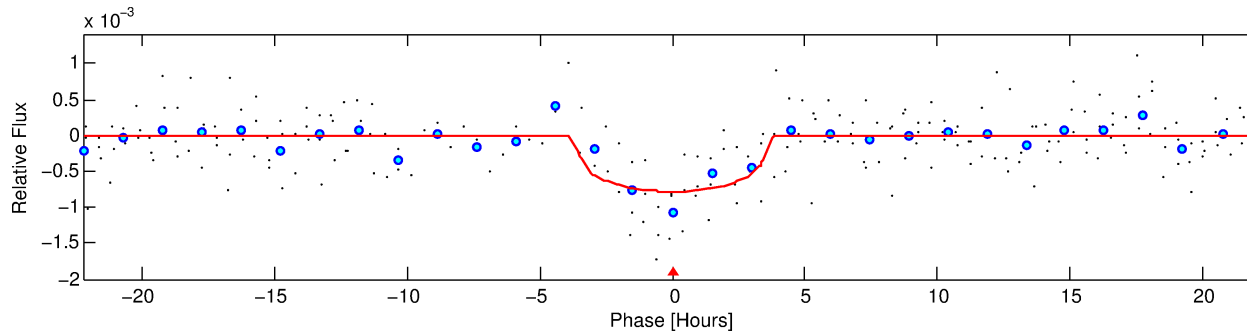
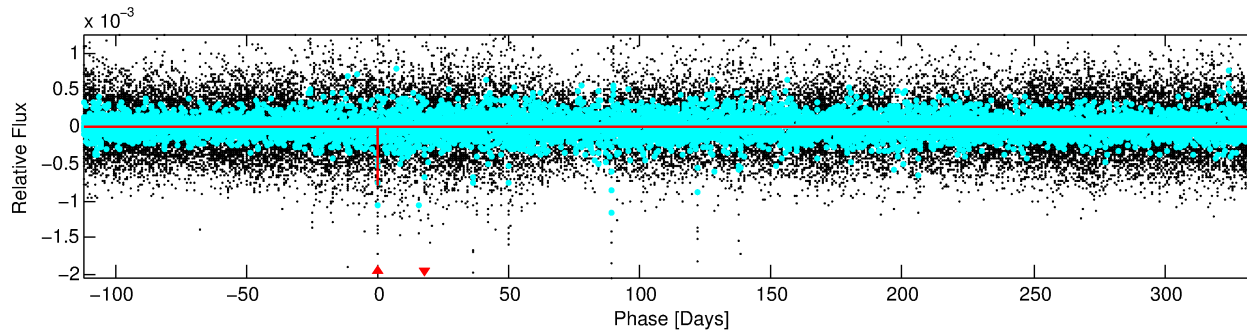
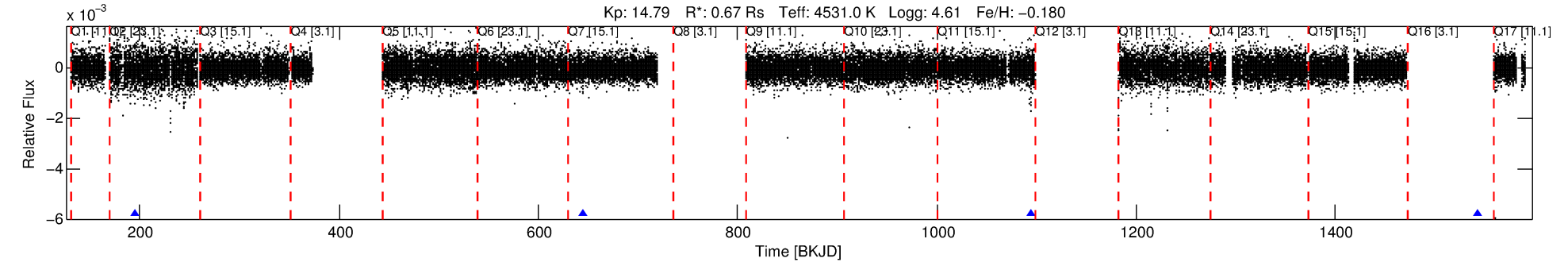
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011128414-01

No Significant Match Found

DV One-Page Summary

KIC: 11128414 Candidate: 1 of 1 Period: 449.212 d



DV Fit Results:

Period = 449.21237 [0.01198] d
Epoch = 195.3695 [0.0132] BKJD
Rp/R* = 0.0260 [0.0293]
a/R* = 398.71 [1368.63]
b = 0.56 [4.34]
Seff = 0.17 [0.03]
Teq = 164 [7] K
Rp = 1.89 [2.13] Re
a = 0.9954 [0.0735] AU
Ag = 36976.86 [84674.63] [0.44 σ]
Teffp = 3506 [2008] K [1.66 σ]

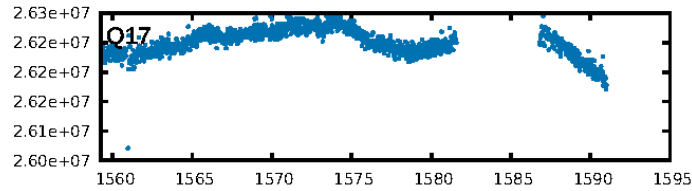
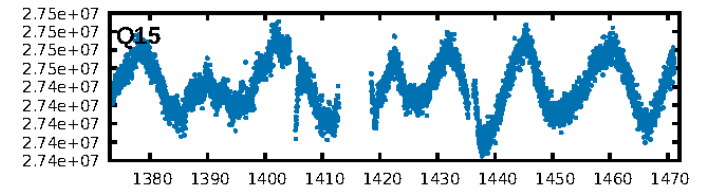
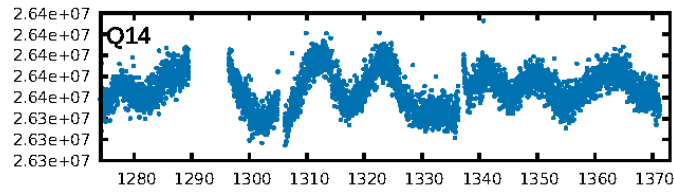
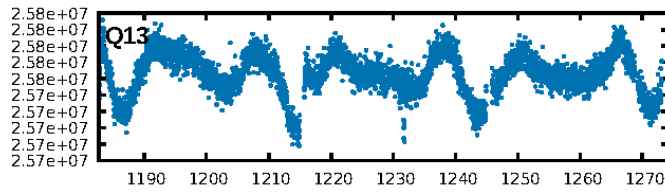
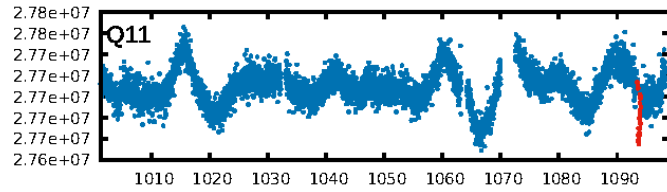
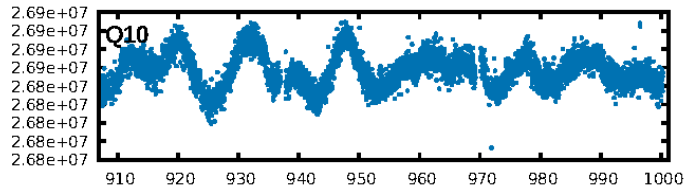
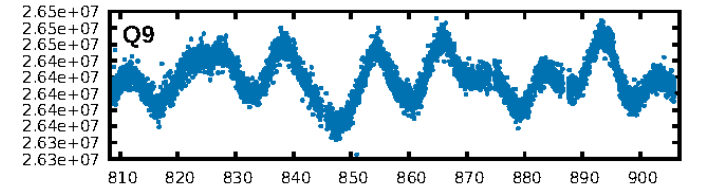
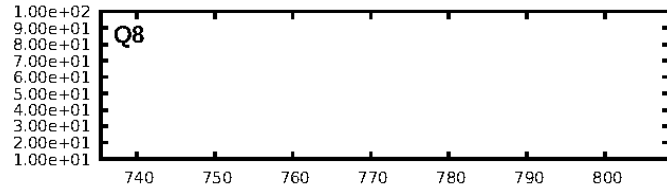
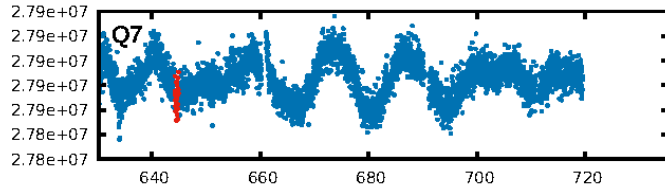
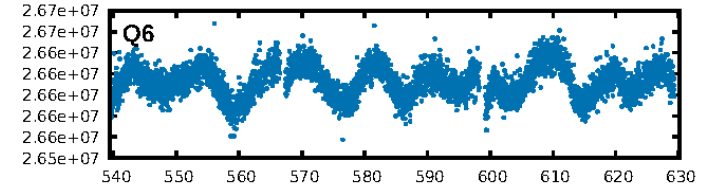
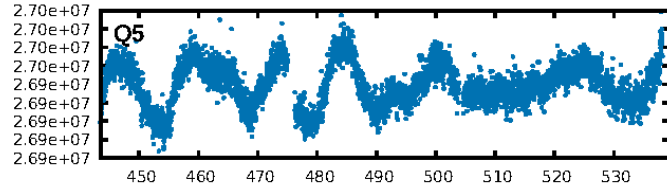
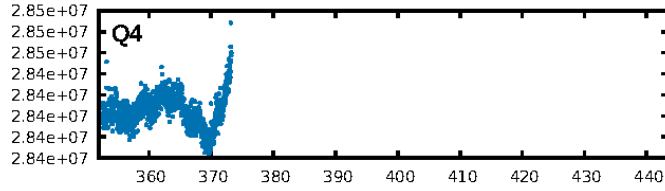
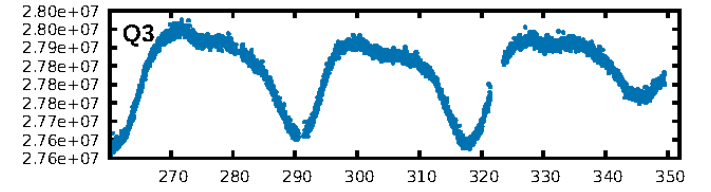
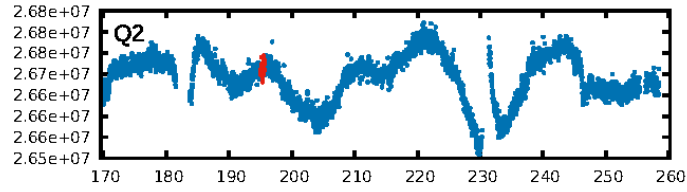
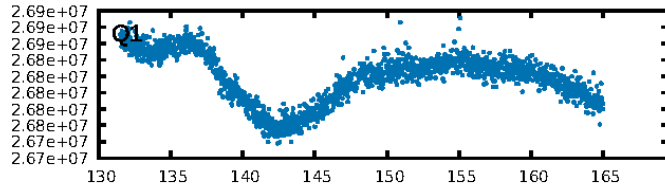
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.6%
ModelChiSquareGof-sig: 96.0%
Bootstrap-pfa: 1.58e-11
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: -1.953
Centroid-sig: 0.0%
Centroid-so: 2.214 arcsec [1.84 σ]
OotOffset-rm: 8.648 arcsec [14.10 σ]
KicOffset-rm: 8.586 arcsec [14.07 σ]
OotOffset-st: 1/0/0/0 [1]
KicOffset-st: 1/0/0/0 [1]
DiffImageQuality-fgm: 0.00 [0/1]
DiffImageOverlap-fno: 1.00 [1/1]

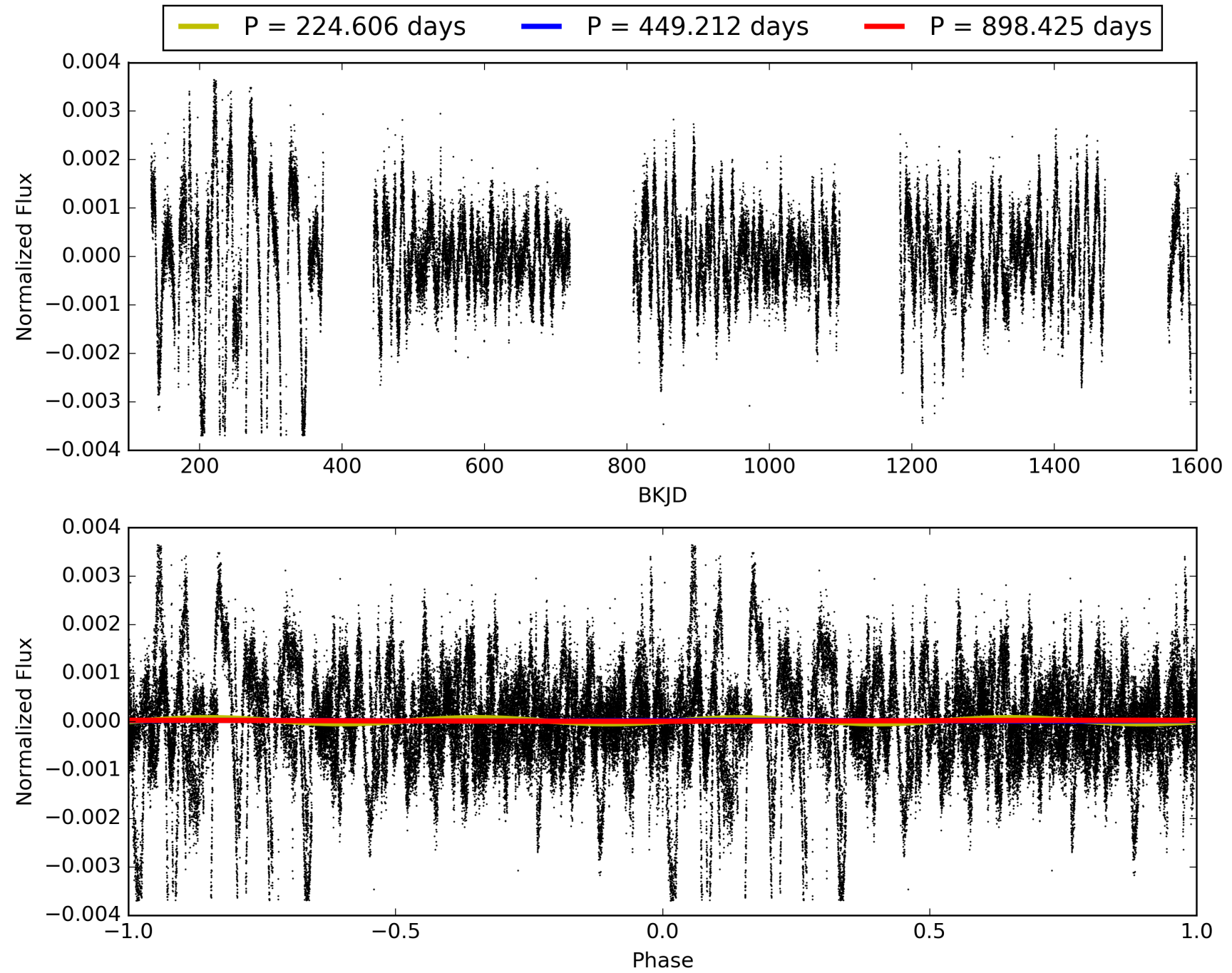
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 20:42:23 Z

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

TCE 011128414-01, PDC Light Curves

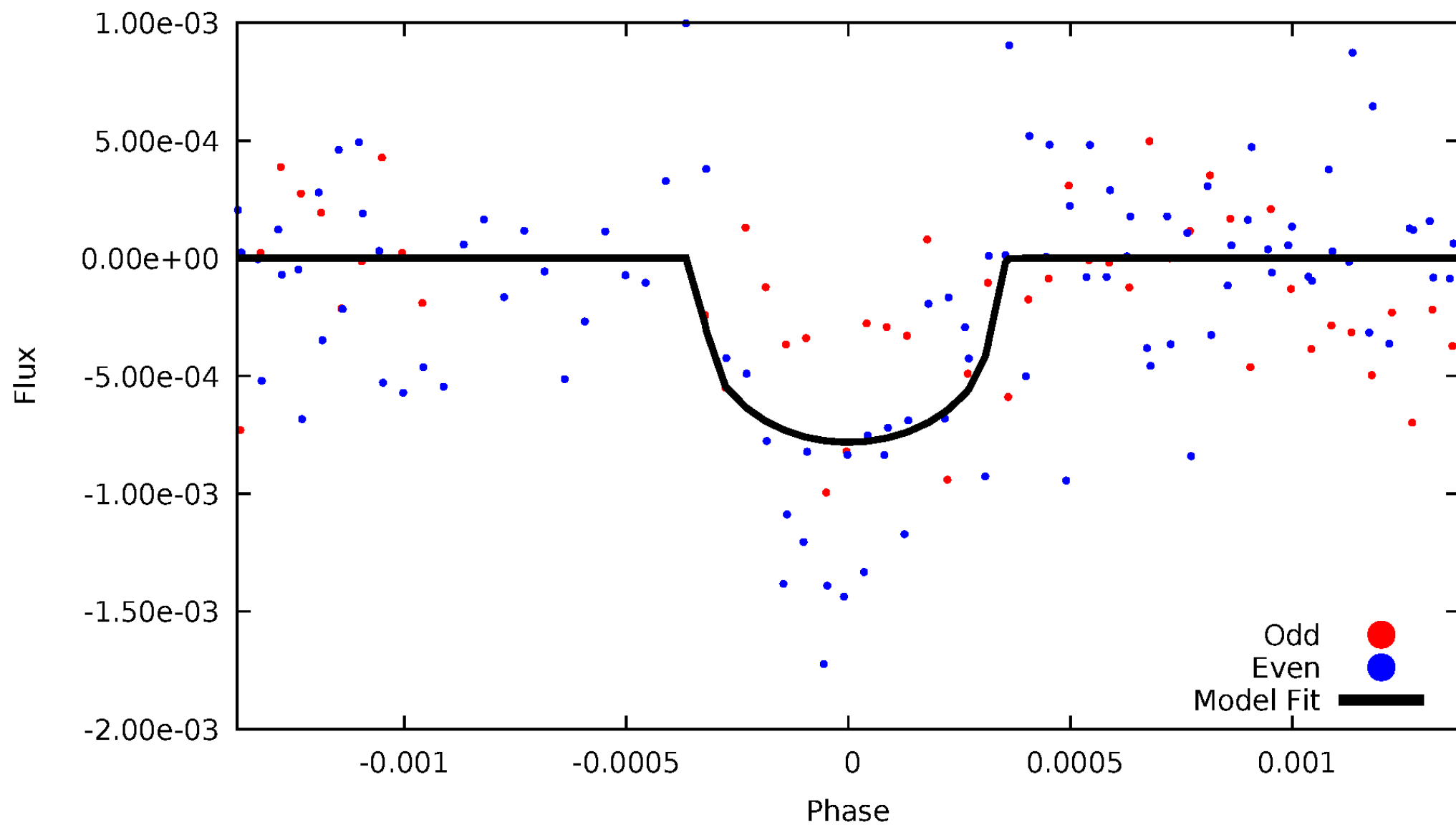


TCE 011128414-01



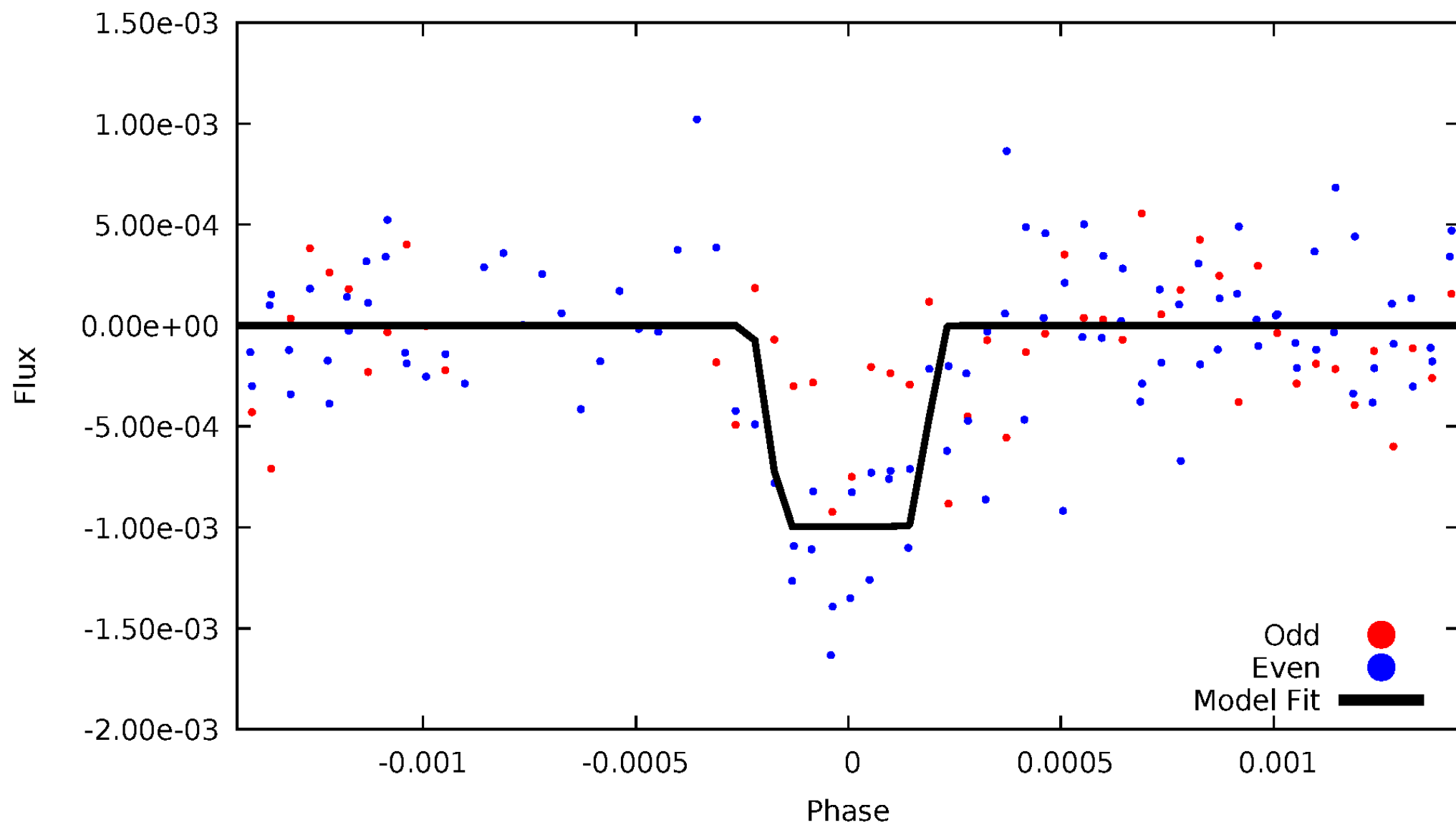
DV Odd/Even

TCE 011128414-01



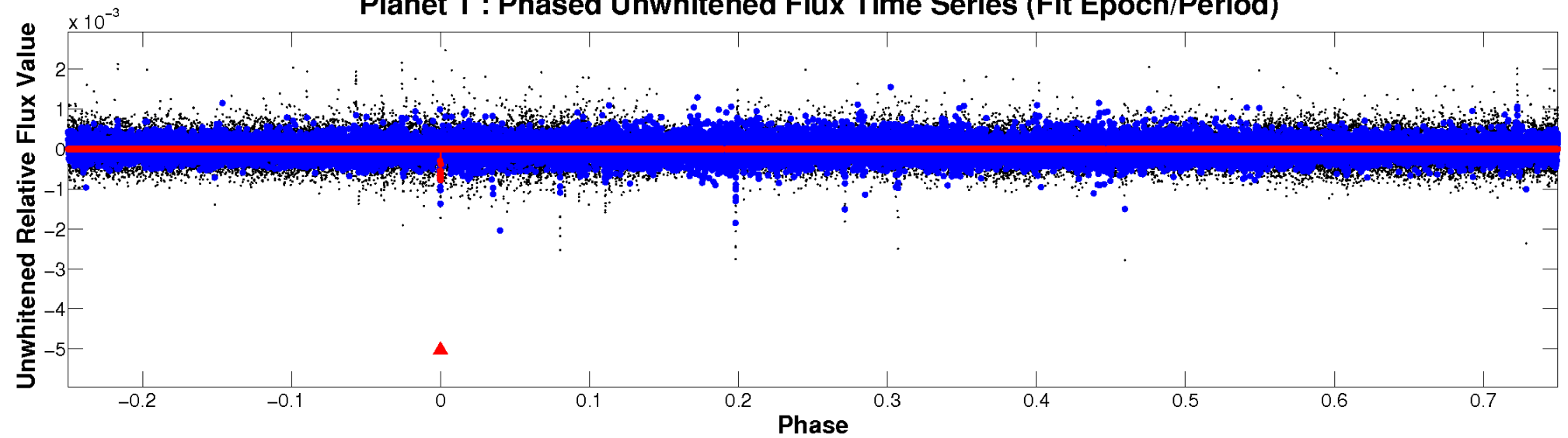
ALT Odd/Even

TCE 011128414-01

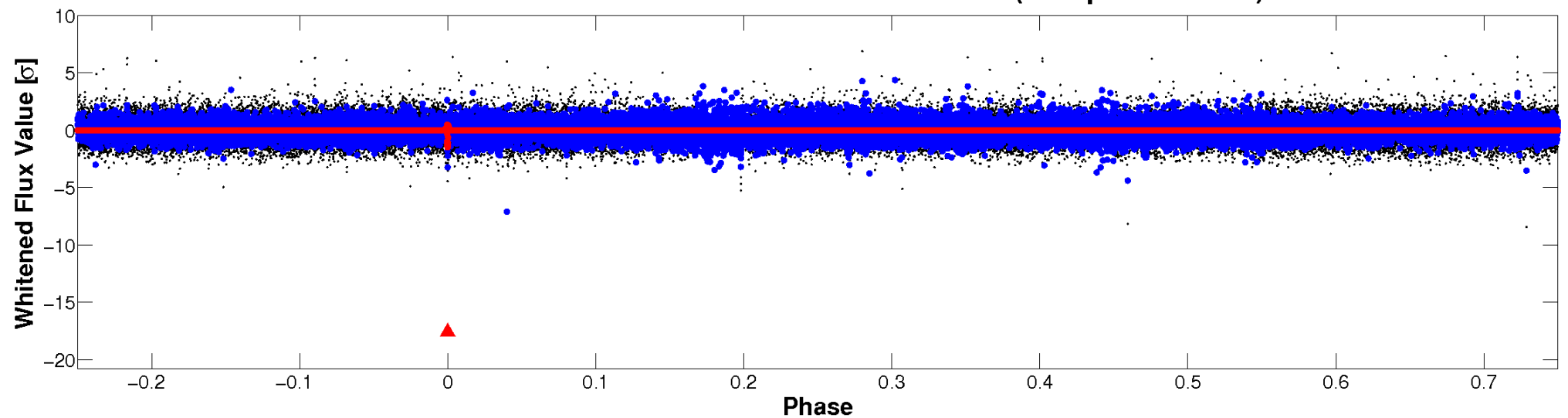


Non-Whitened Vs. Whitened Light Curve

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

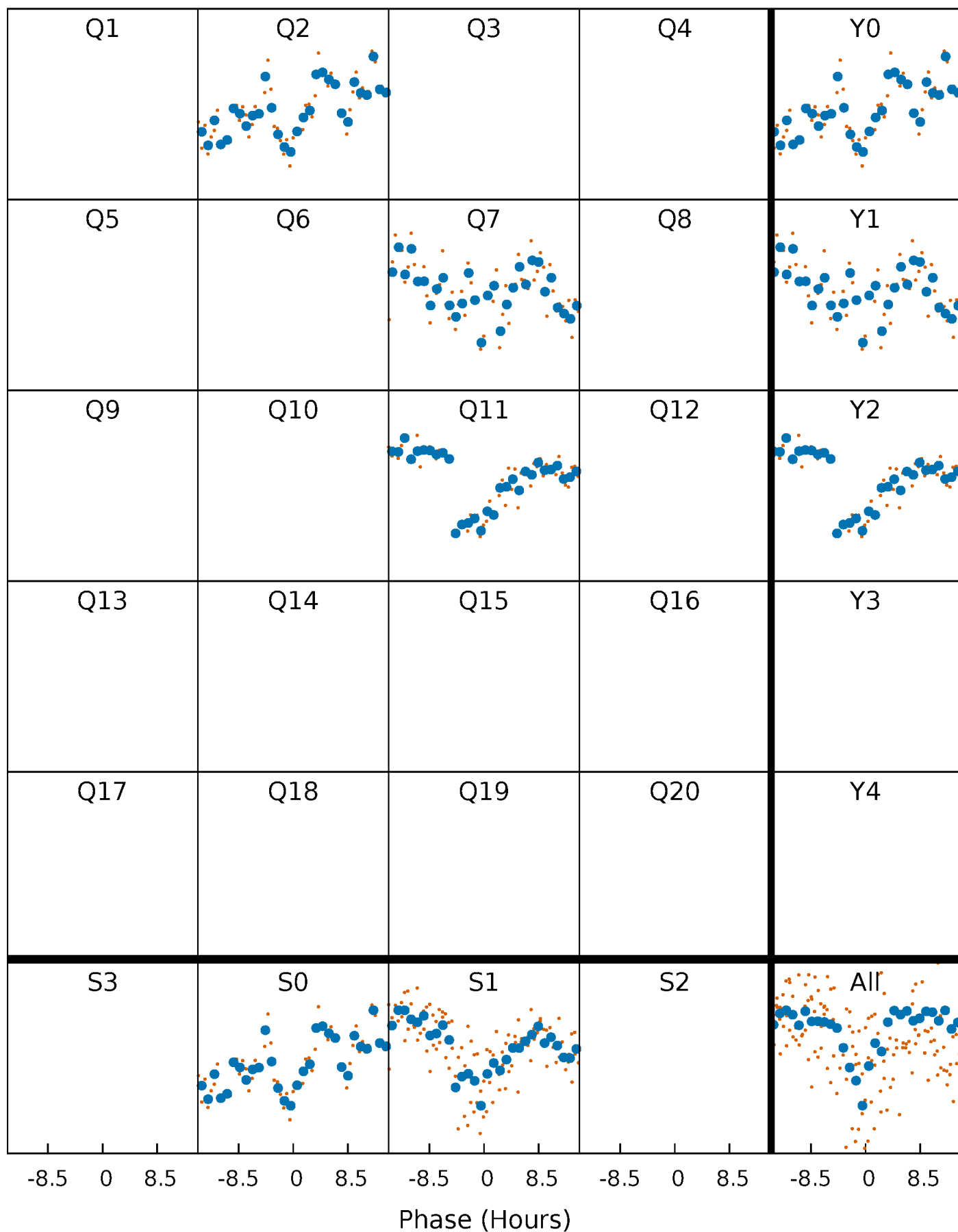


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



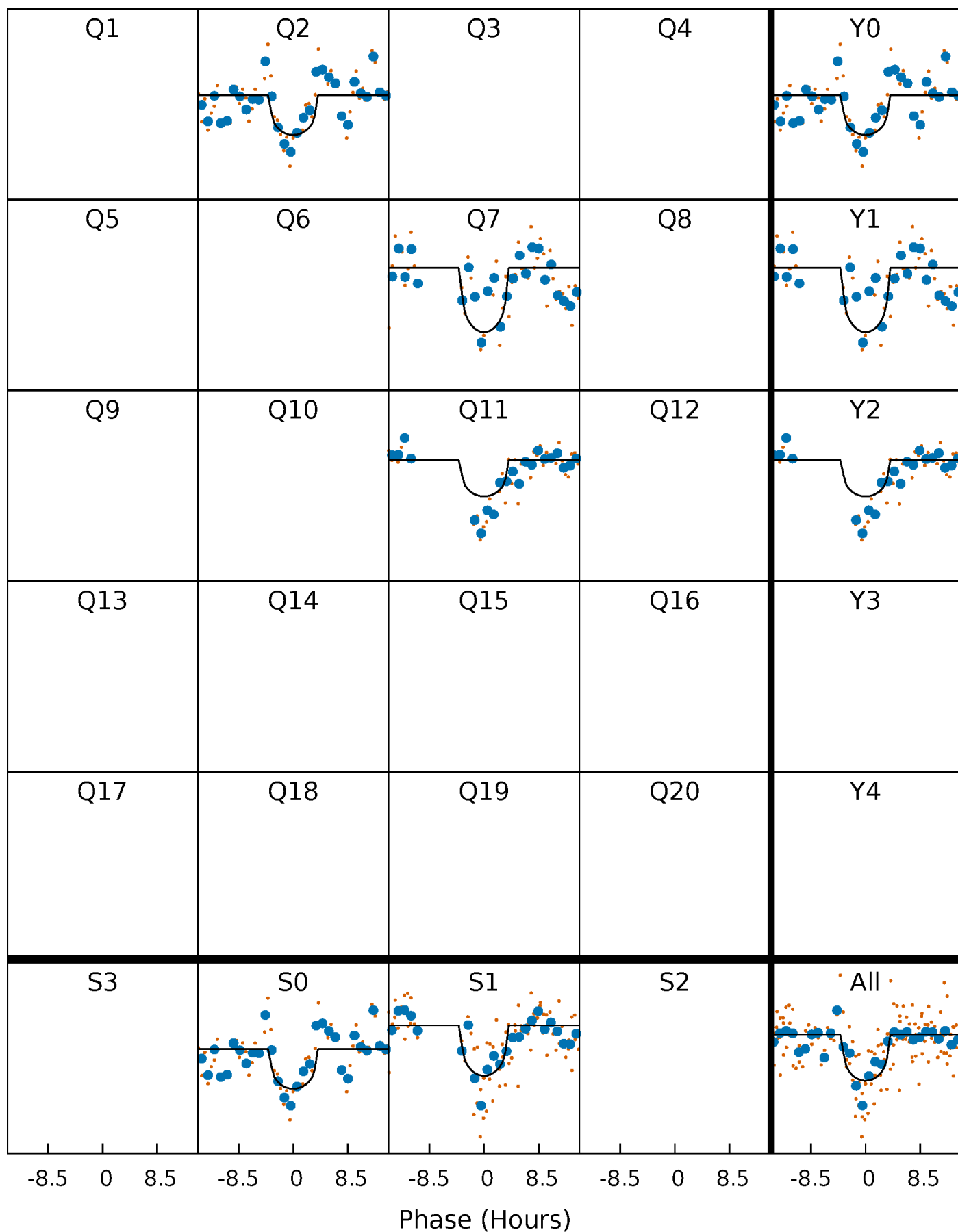
PDC Quarter-Phased Transit Curves

TCE 011128414-01 P=449.212369 Days $T_0=195.369498$ (BKJD)



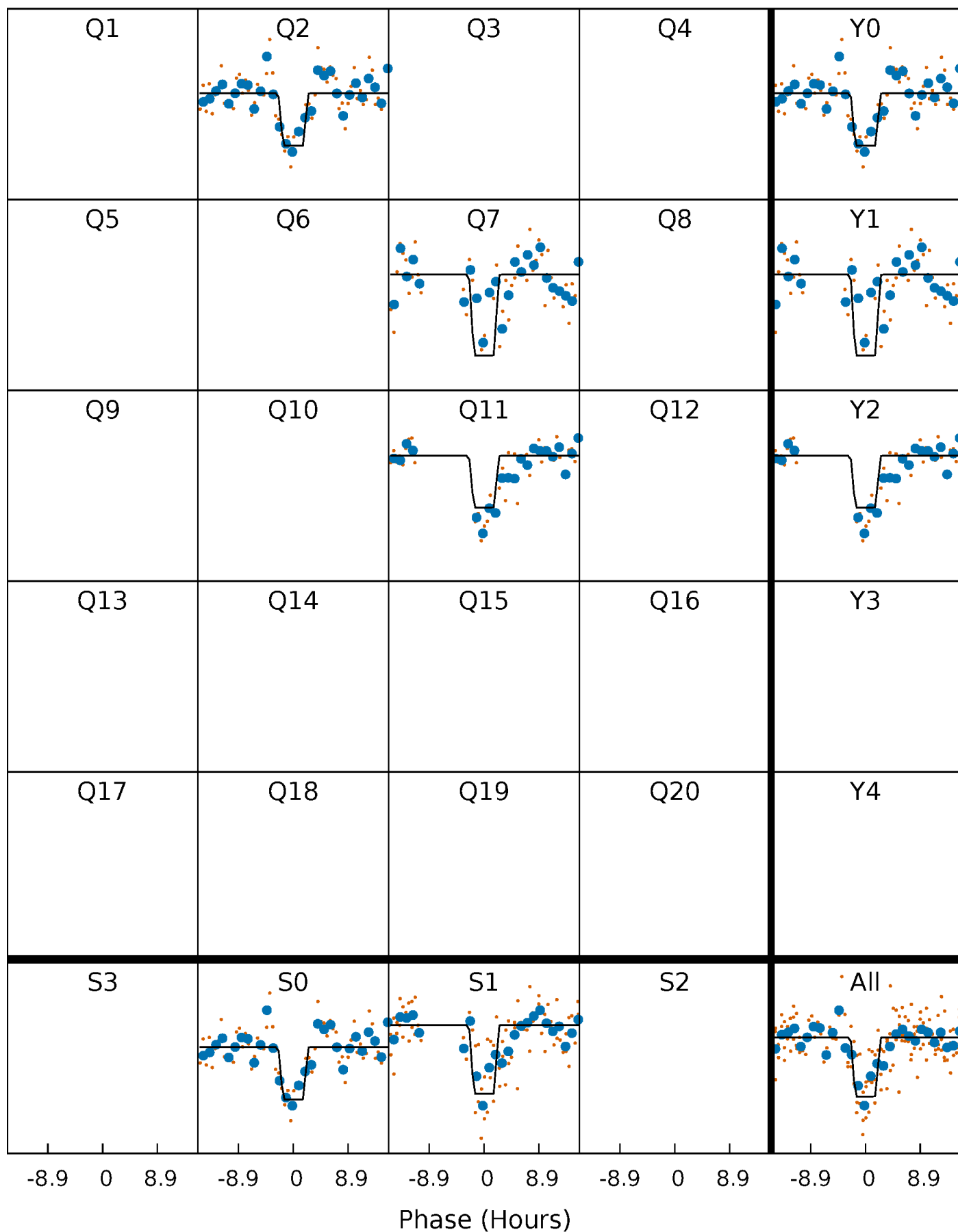
DV Quarter-Phased Transit Curves

TCE 011128414-01 P=449.212369 Days $T_0=195.369498$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

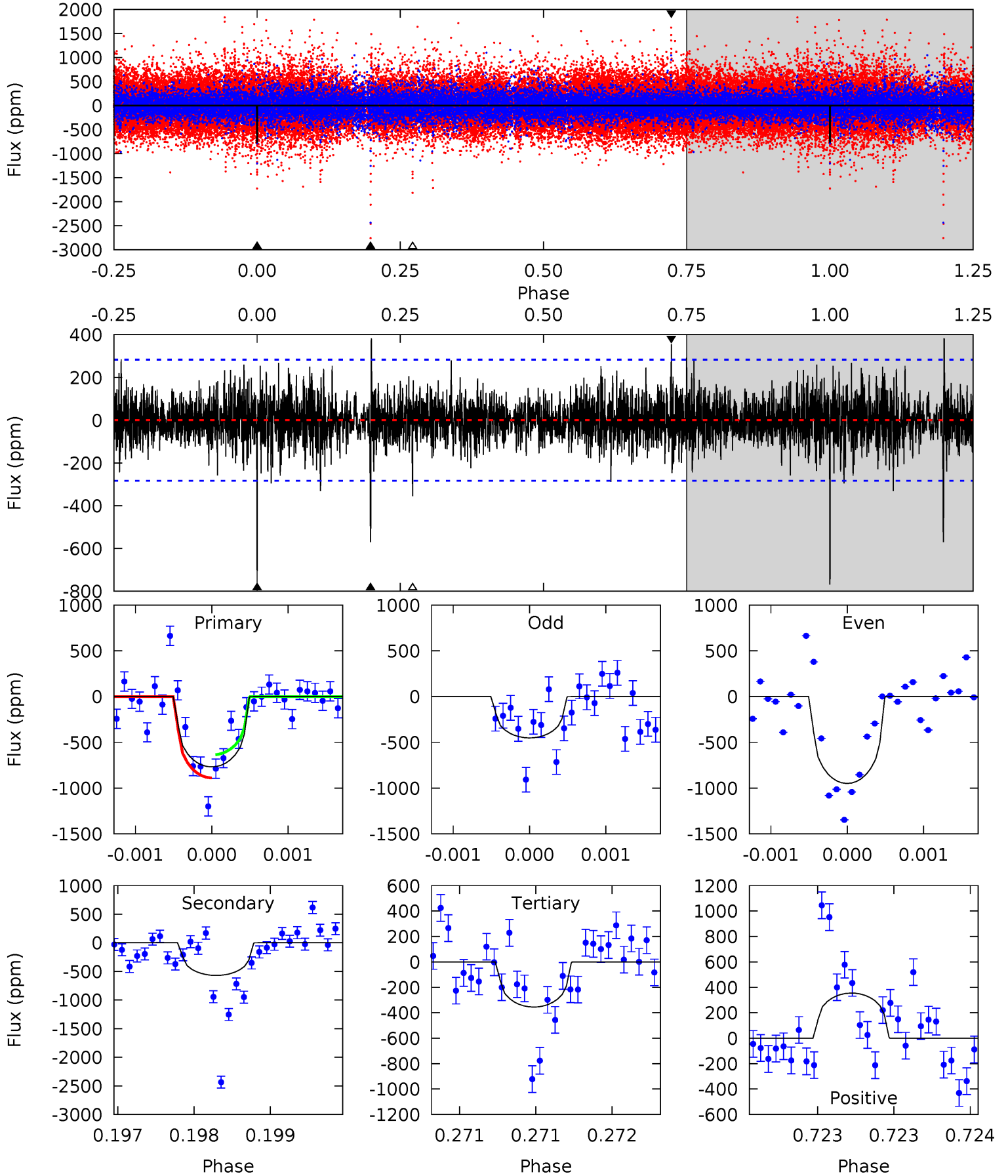
TCE 011128414-01 P=449.211383 Days $T_0=195.365039$ (BKJD)



DV Model-Shift Uniqueness Test

011128414-01, P = 449.212369 Days, E = 195.369498 Days

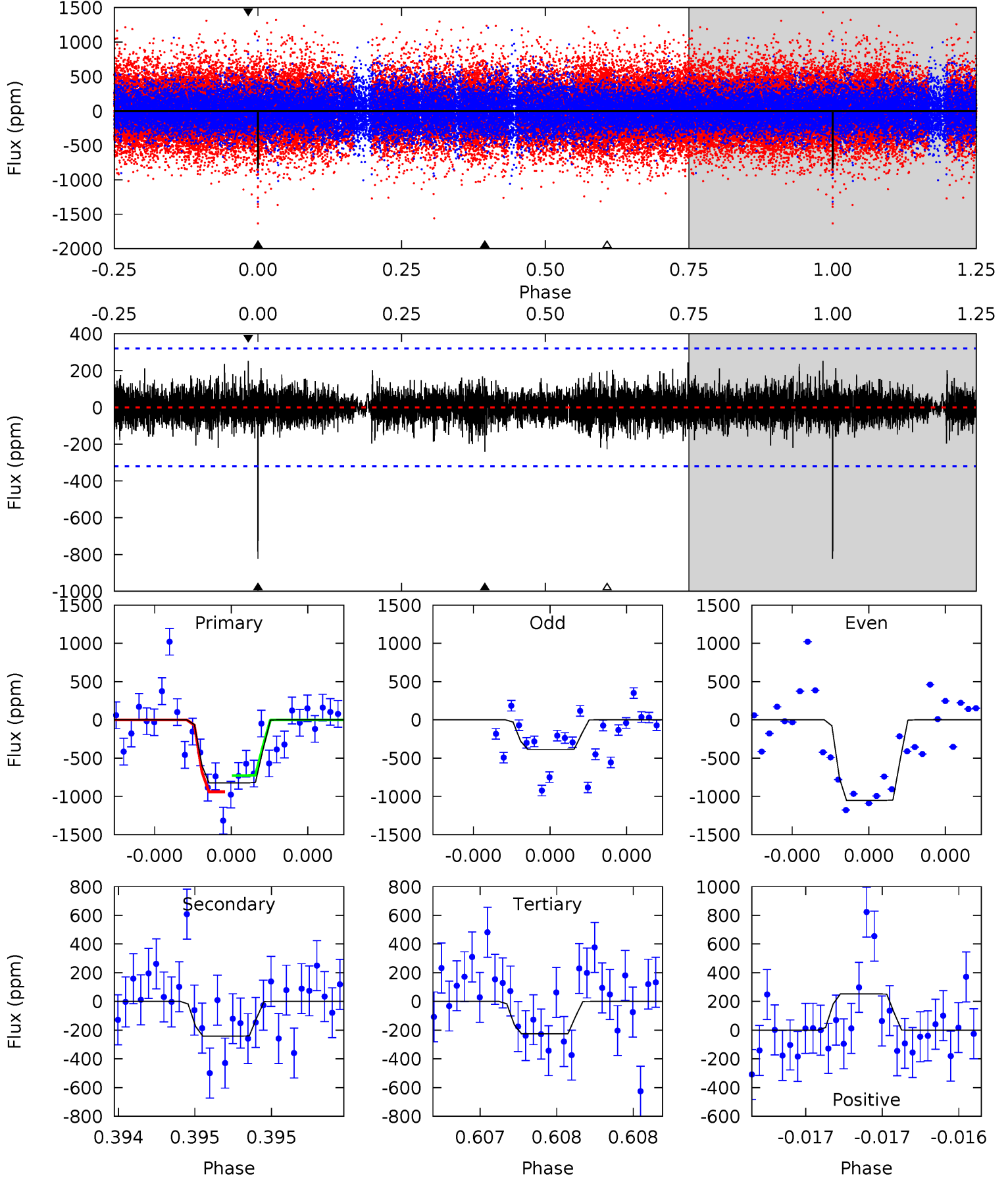
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14.9	11.1	6.91	6.90	5.51	3.38	1.51	8.04	8.04	4.18	4.18	4.69	1.11	0.33	2.44



Alt Model-Shift Uniqueness Test

011128414-01, P = 449.211383 Days, E = 195.365039 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14.3	4.21	3.94	4.40	5.59	3.51	0.98	10.4	9.93	0.27	-0.19	5.60	0.92	0.23	1.84



Stellar Parameters For KIC 011128414

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (g \cdot \text{cm}^{-3})$
	4531^{+122}_{-136}	$4.605^{+0.056}_{-0.025}$	$-0.180^{+0.300}_{-0.300}$	$0.666^{+0.048}_{-0.060}$	$0.653^{+0.073}_{-0.049}$	$3.111^{+0.728}_{-0.333}$
	+3%/-3%	+1%/-1%	+167%/-167%	+7%/-9%	+11%/-8%	+23%/-11%
Source	PHO1	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 011128414-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-570 ± 51	$2.54^{+1.89}_{-1.69}$	227^{+7}_{-8}	3917^{+2281}_{-640}	$48988^{+382135}_{-32950}$
Alt.	-241 ± 57	$2.67^{+1.92}_{-1.62}$	227^{+7}_{-8}	3318^{+1278}_{-456}	$17702^{+104559}_{-11465}$

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

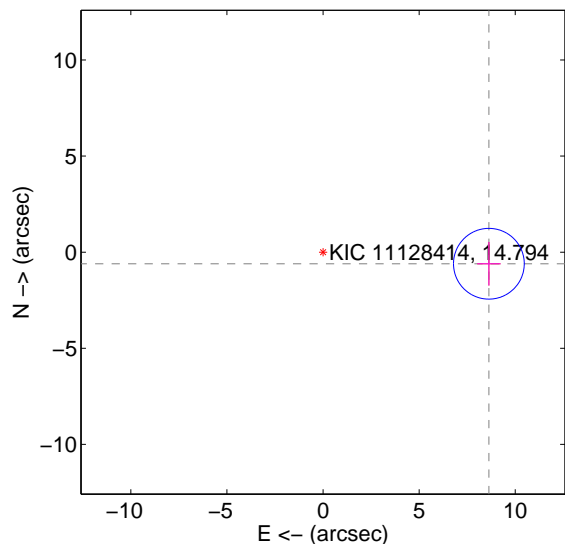
Supplemental centroid analysis for 011128414-01. Kepler magnitude: 14.79. Transit SNR 7.84

There are 0 quarters with good PRF difference image offsets

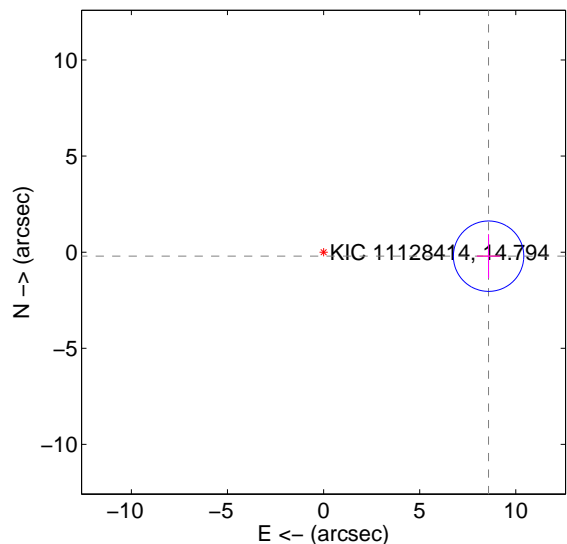
The direct PRF centroid is offset from the target star catalog position by about 0.40 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	8.648 ± 0.613	14.10	-8.627 ± 0.610	-0.602 ± 1.133
PRF-fit source offset from KIC position	8.586 ± 0.610	14.07	-8.583 ± 0.610	-0.208 ± 1.133
photometric centroid source offset	2.21 ± 1.20	1.84	-0.72 ± 1.24	-2.10 ± 1.20

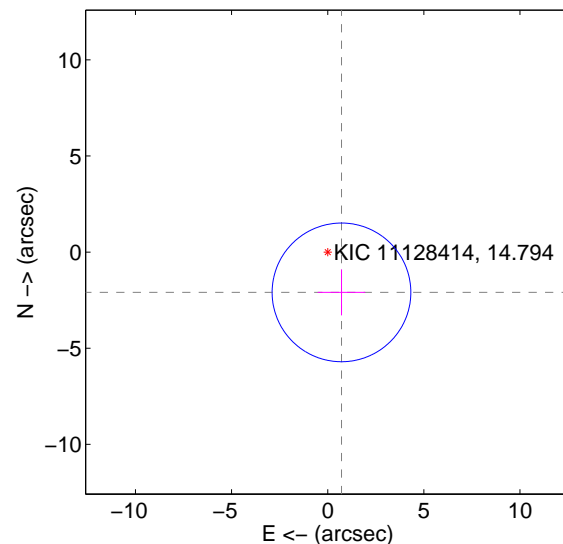
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

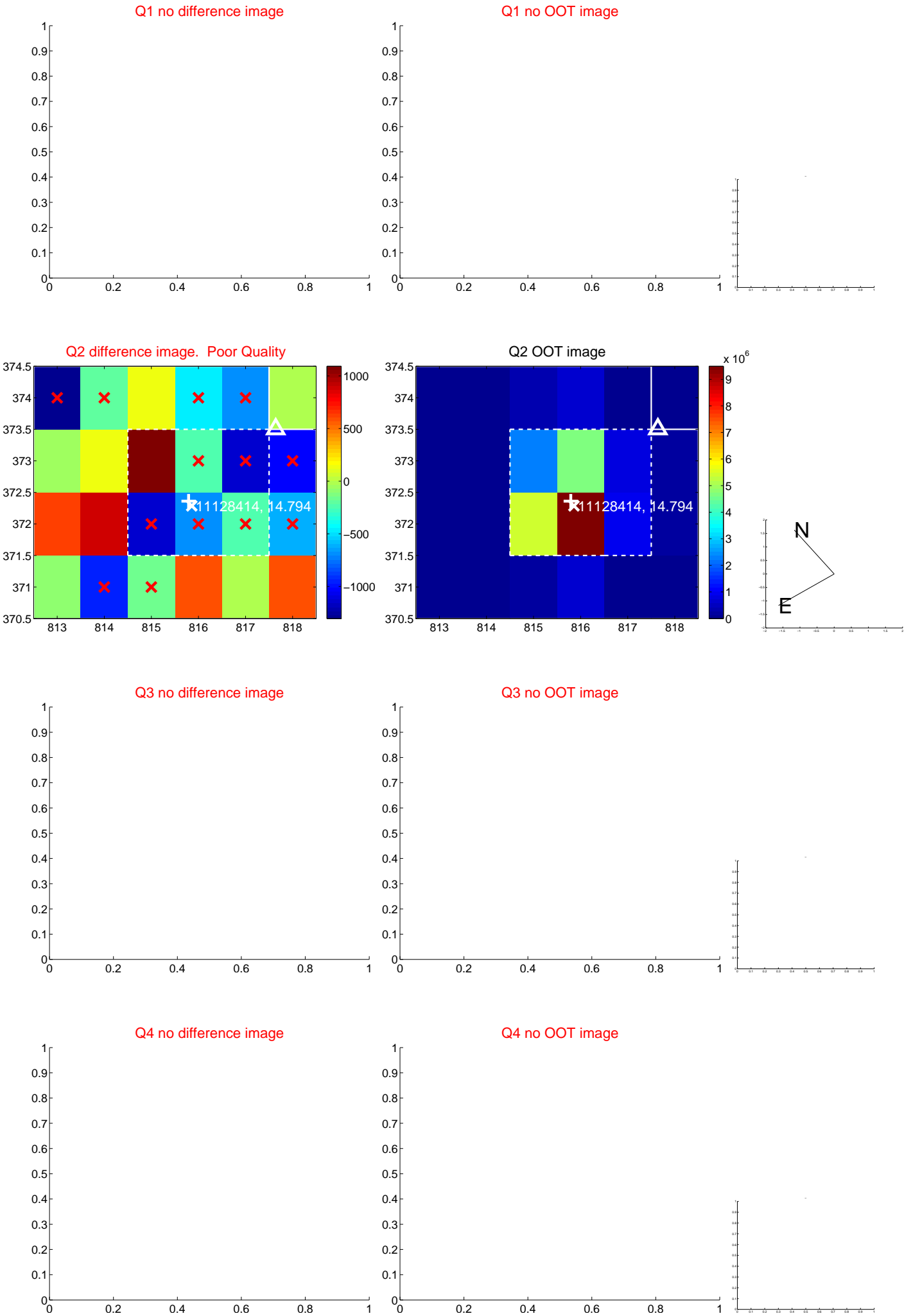


offset from photometric centroids



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.



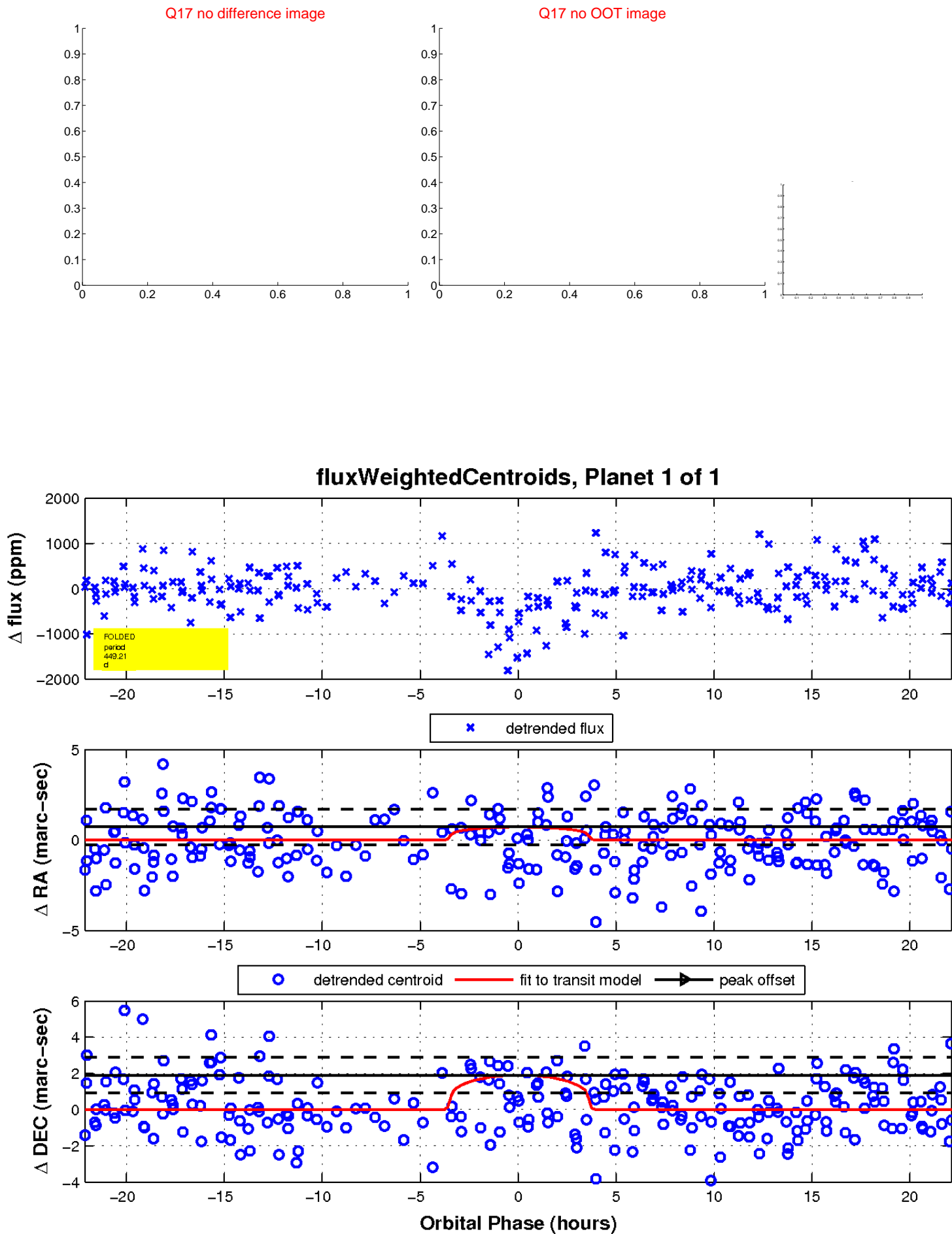
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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.



UKIRT Image

Declination

