

KIC 006928206

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})
006928206-01	OBS	No	419.509874	167.899833	472.4	8.006	10.2	5.2	0.47	3698	1.10	0.05

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006928206-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—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.

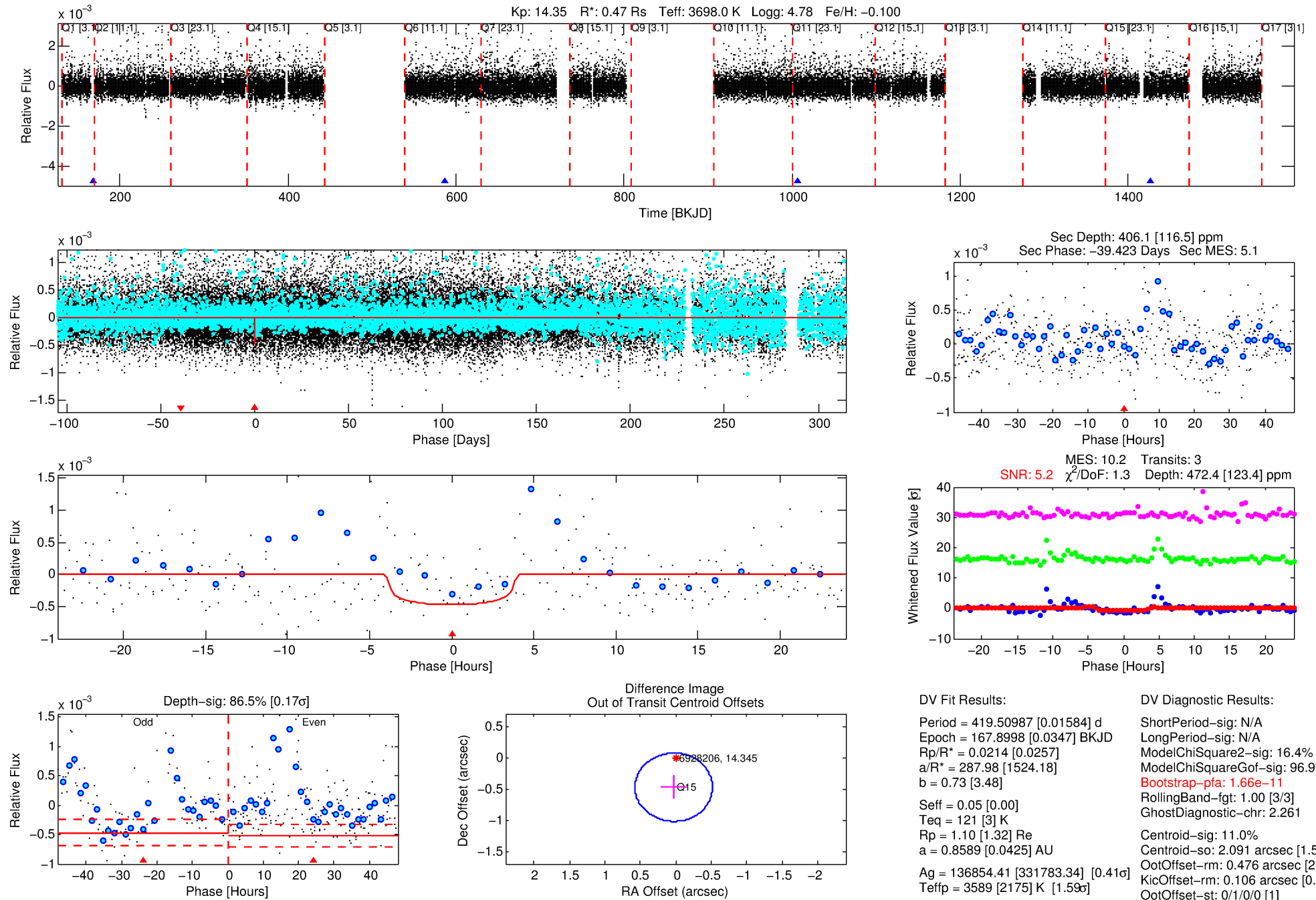
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006928206-01

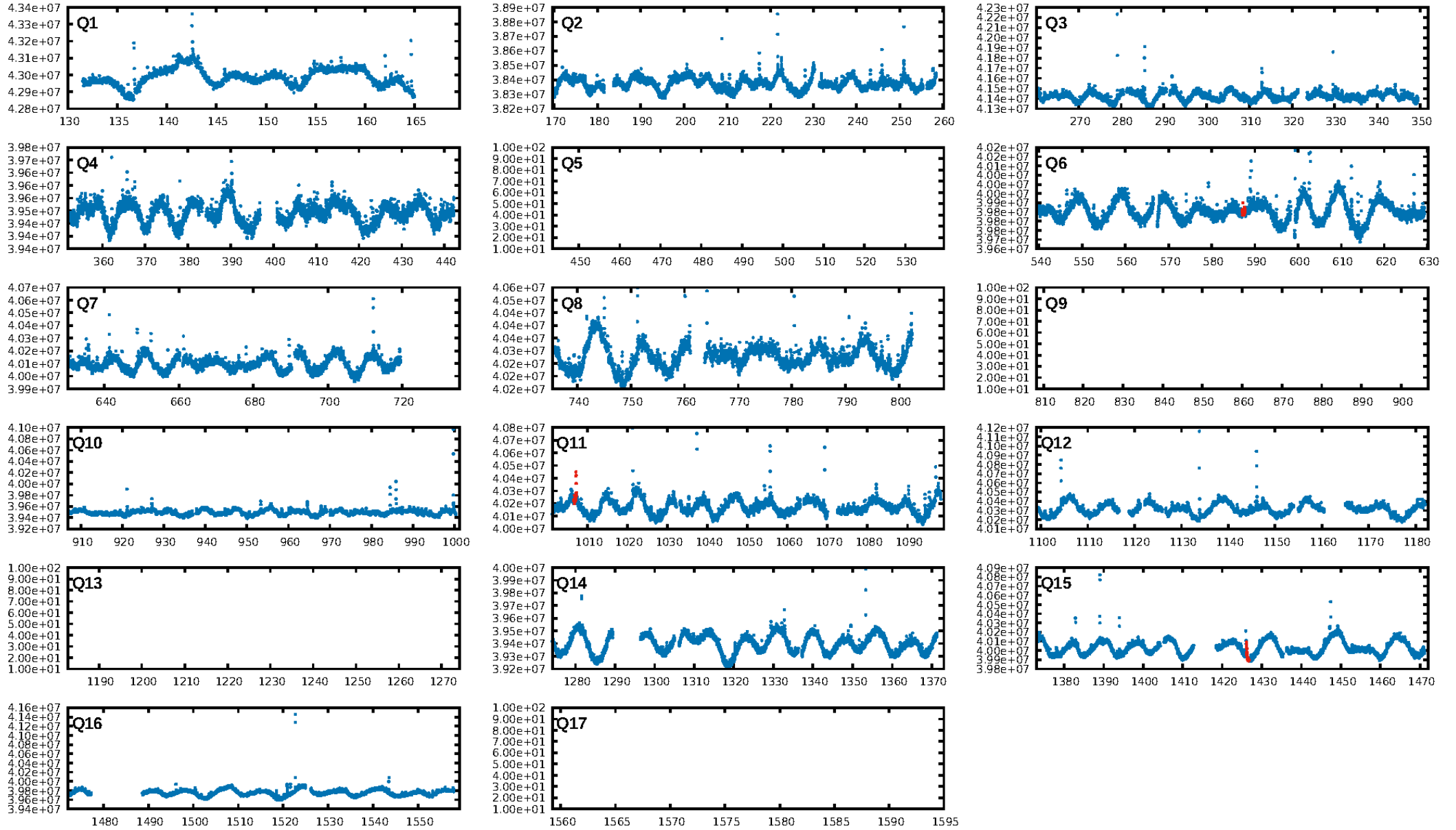
No Significant Match Found

DV One-Page Summary

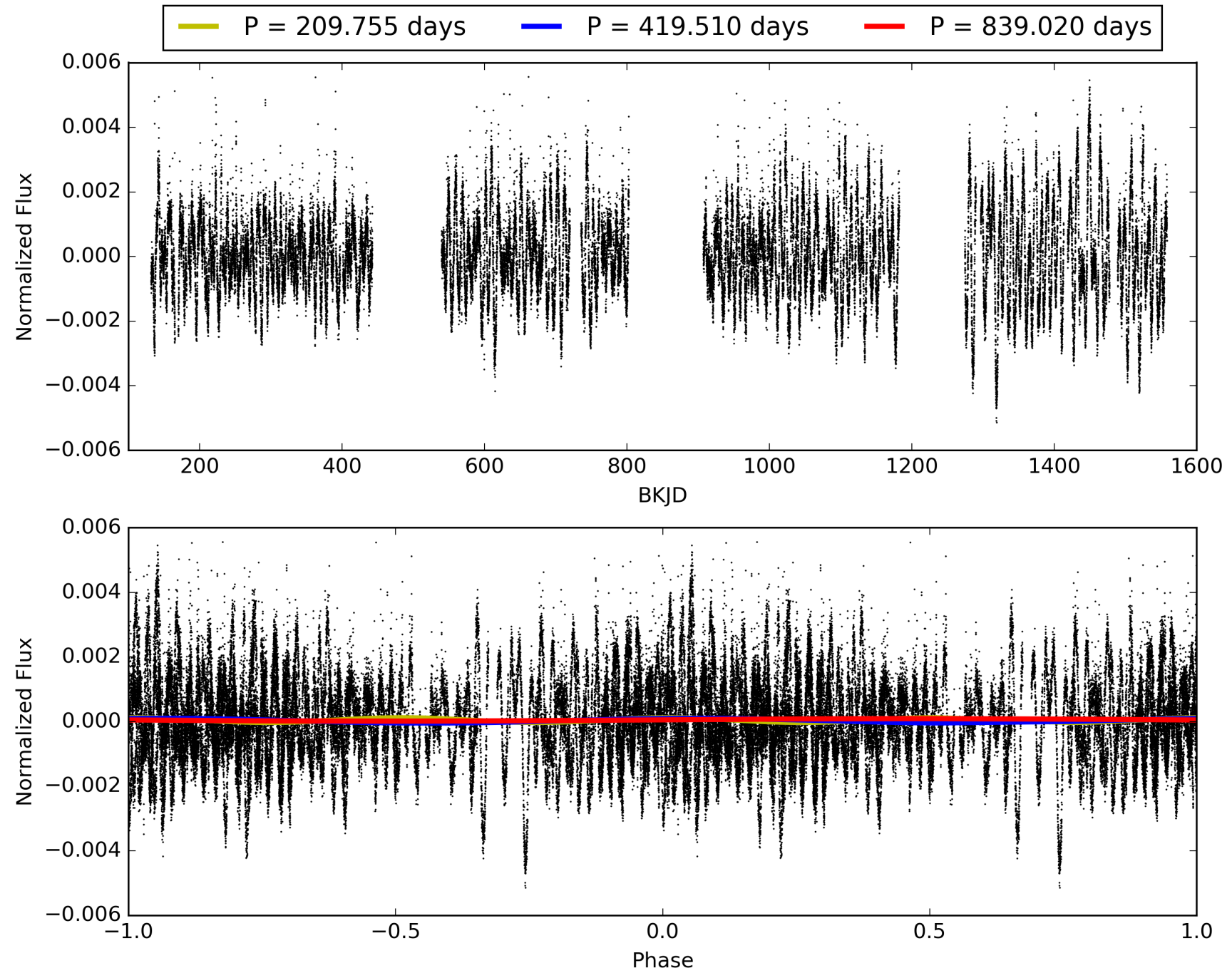
KIC: 6928206 Candidate: 1 of 1 Period: 419.510 d



TCE 006928206-01, PDC Light Curves

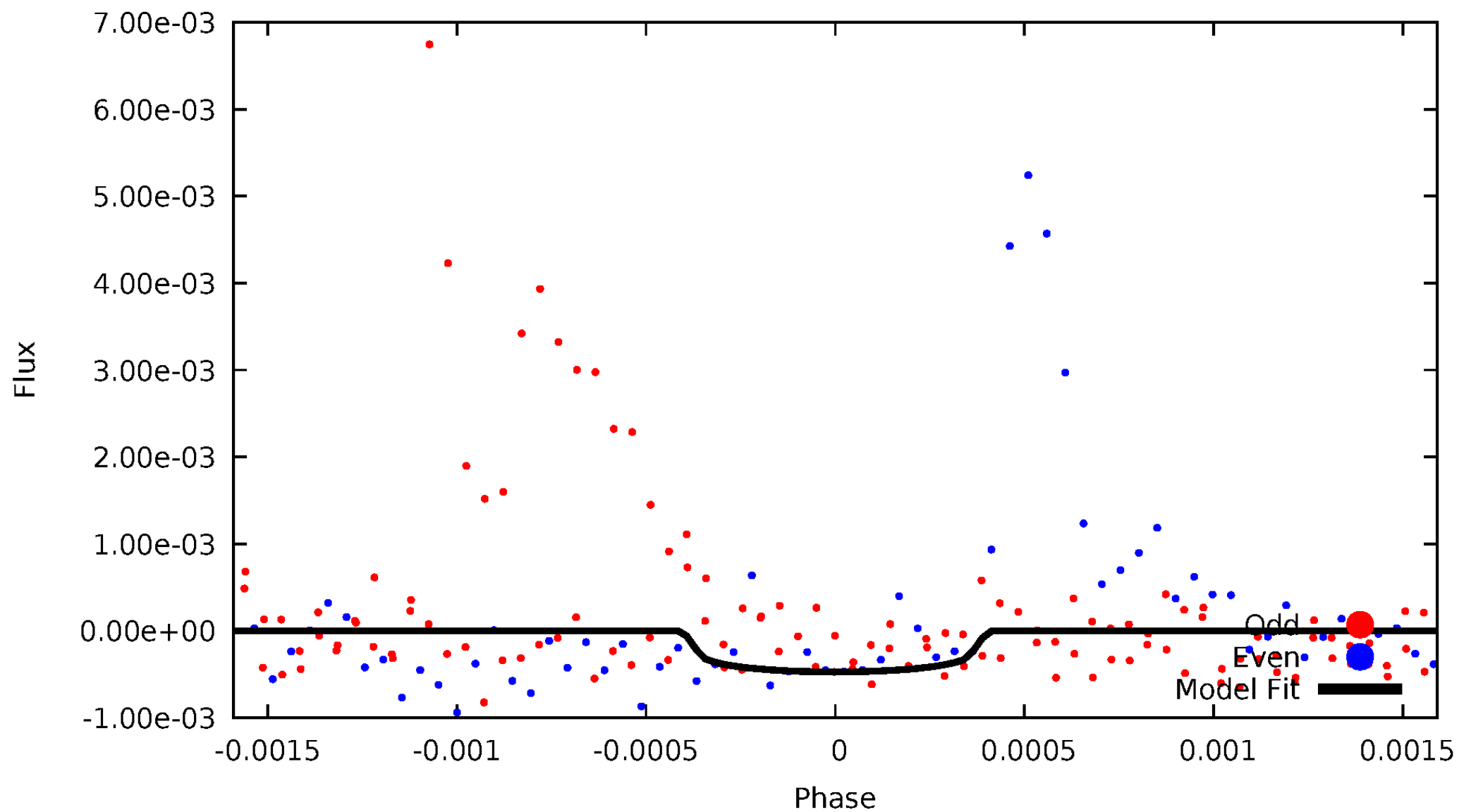


TCE 006928206-01



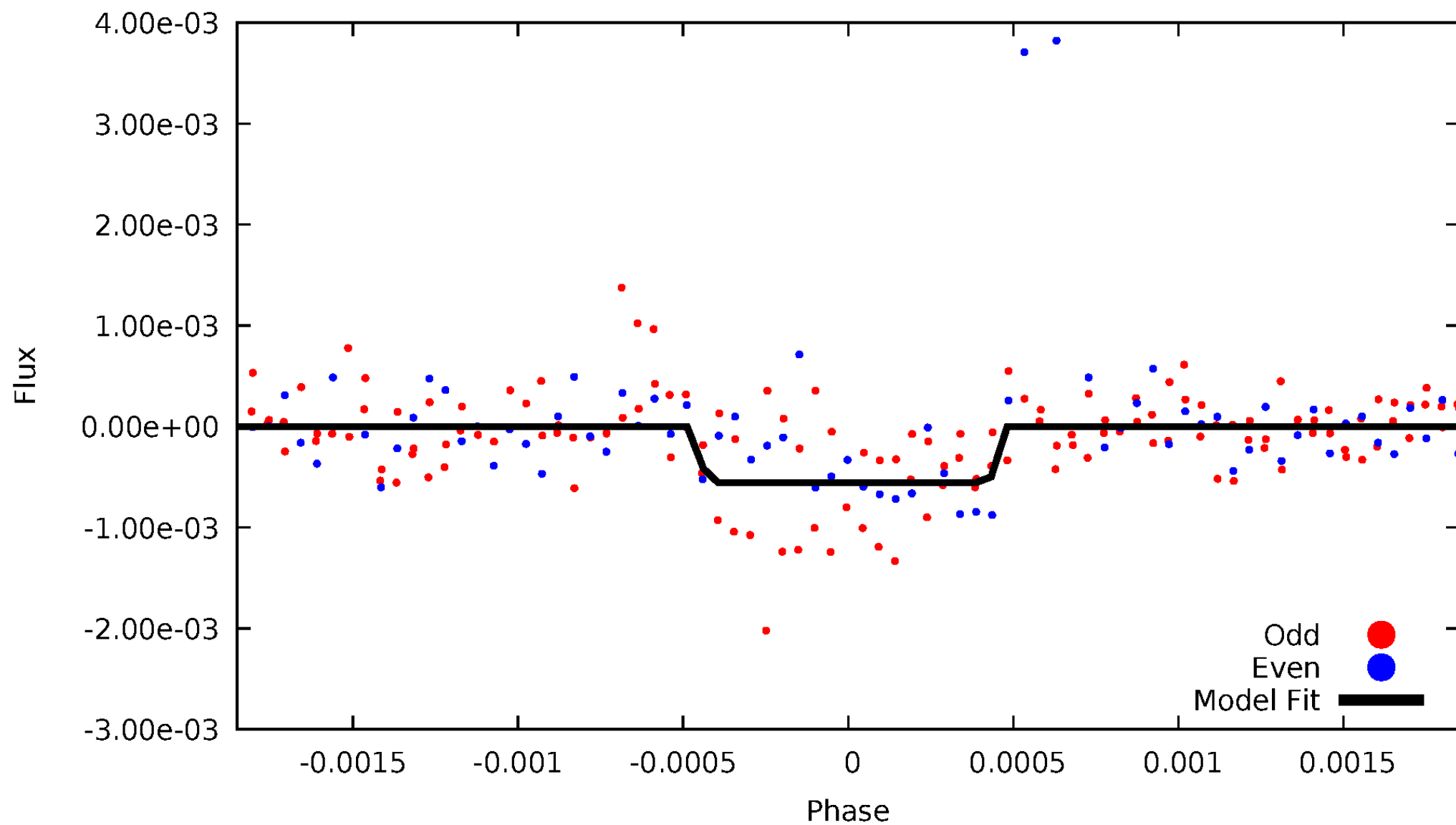
DV Odd/Even

TCE 006928206-01



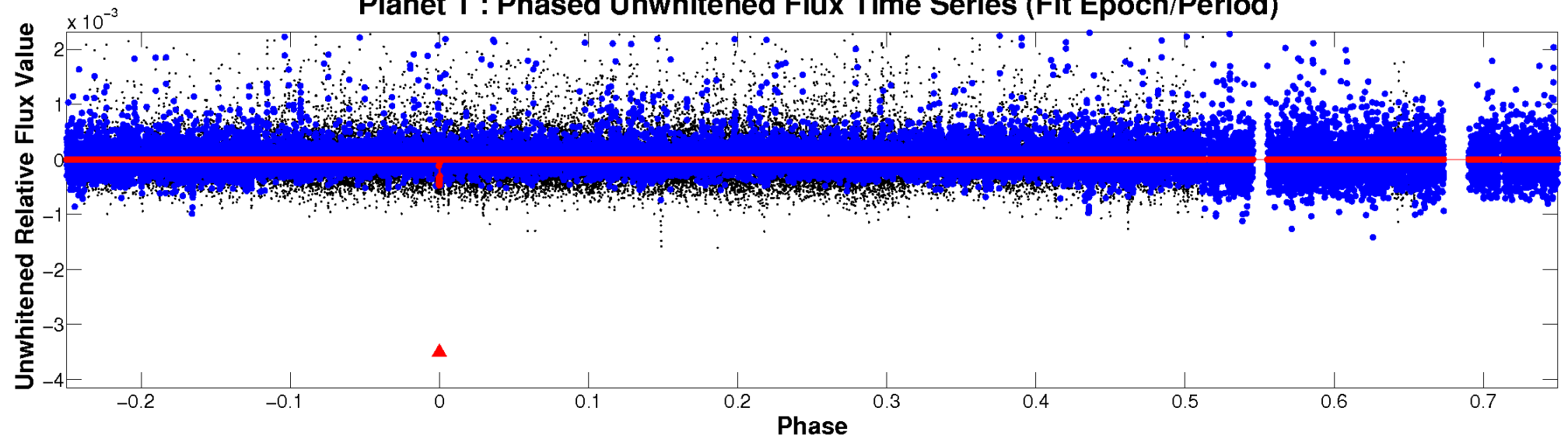
ALT Odd/Even

TCE 006928206-01

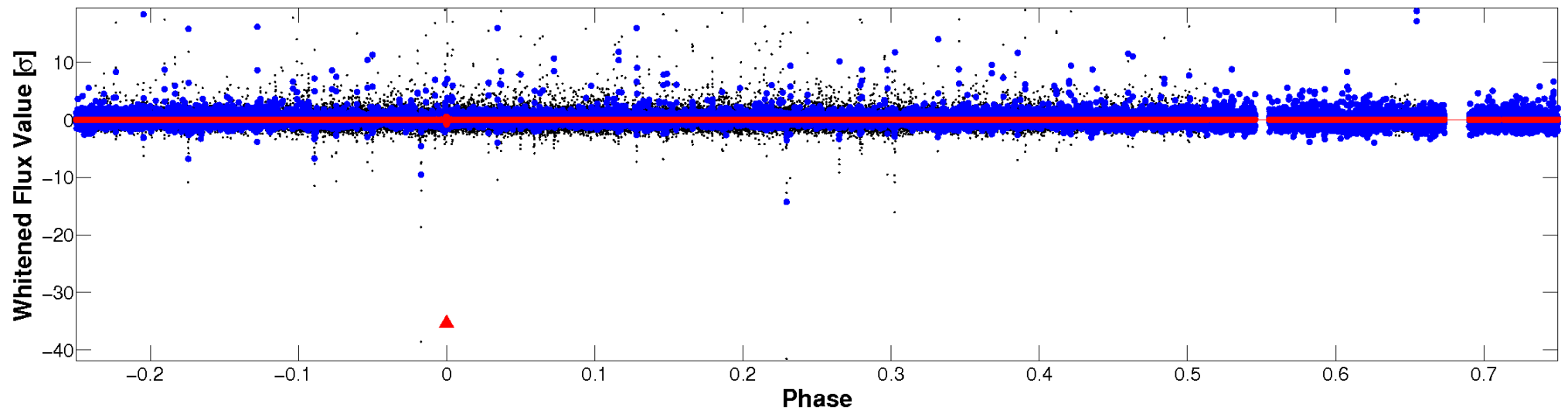


Non-Whitened Vs. Whitened Light Curve

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

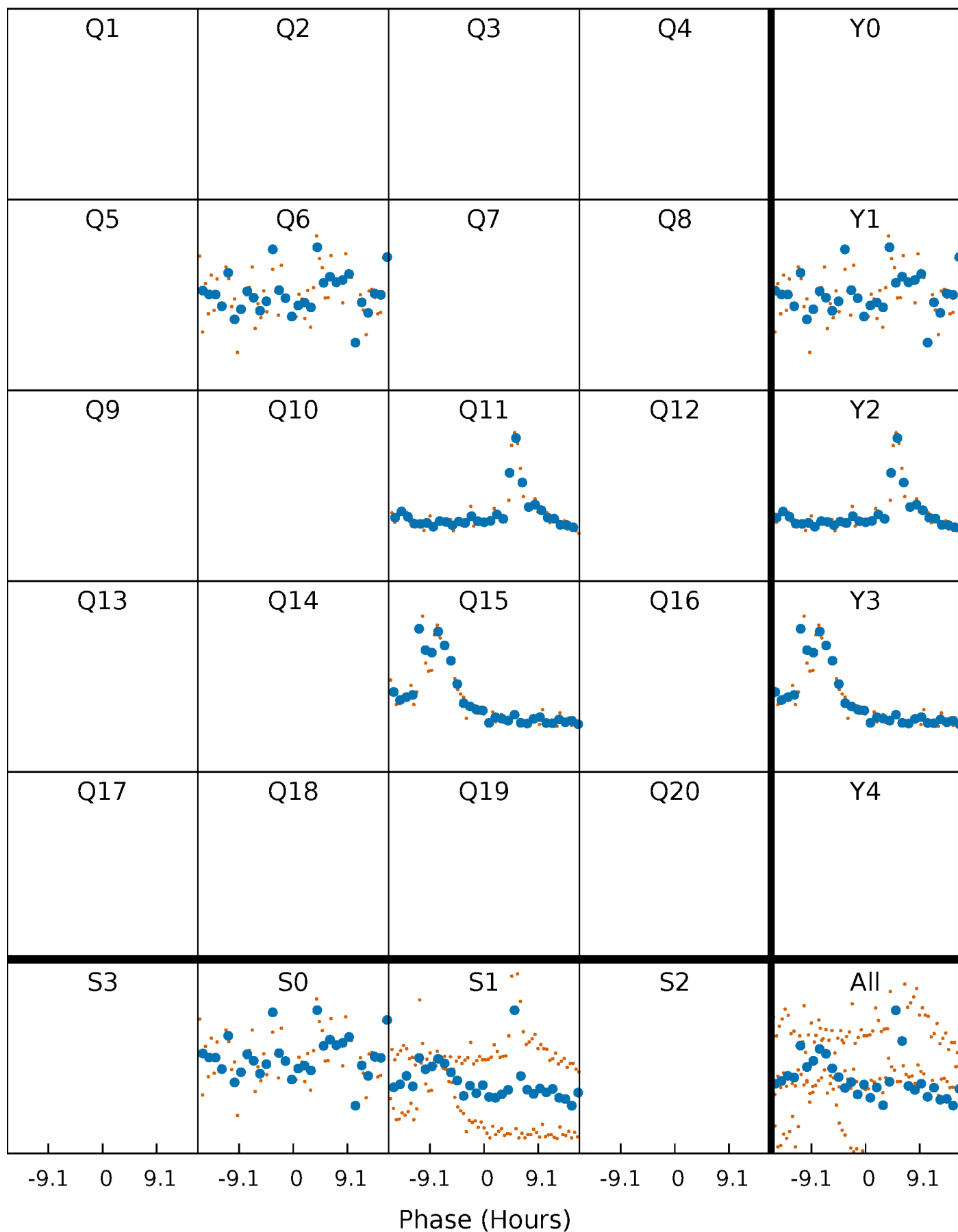


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



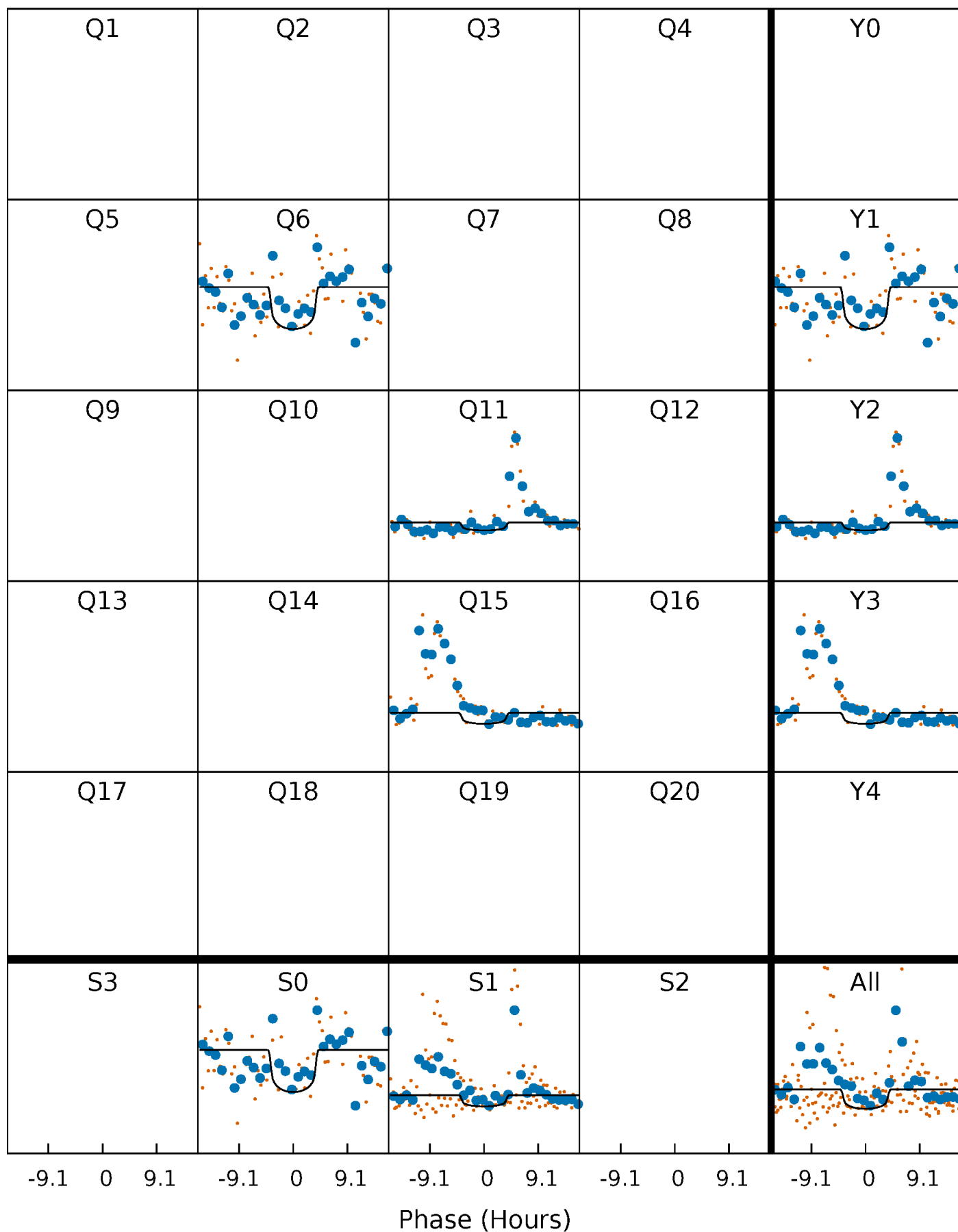
PDC Quarter-Phased Transit Curves

TCE 006928206-01 P=419.509874 Days $T_0=167.899833$ (BKJD)



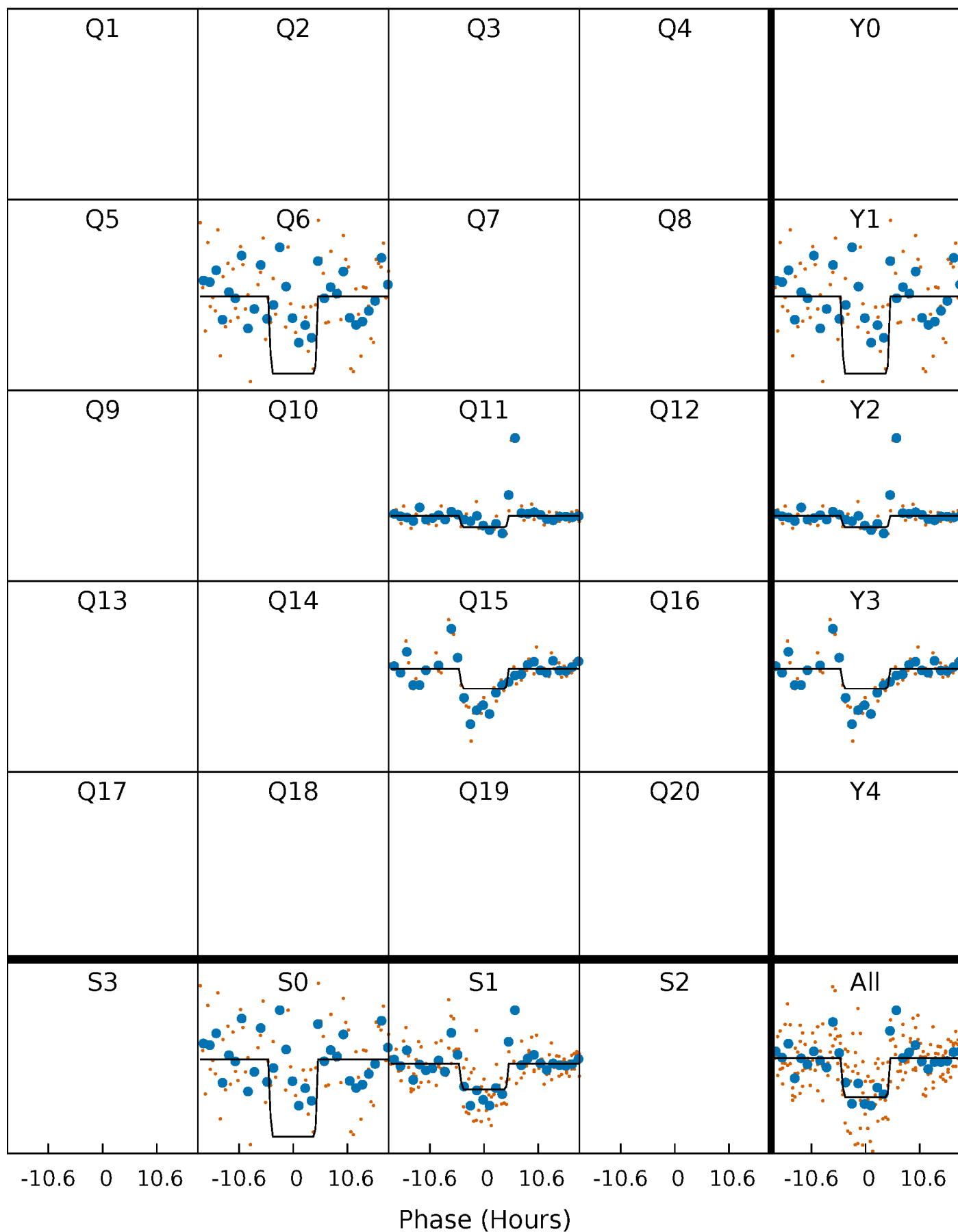
DV Quarter-Phased Transit Curves

TCE 006928206-01 P=419.509874 Days $T_0=167.899833$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

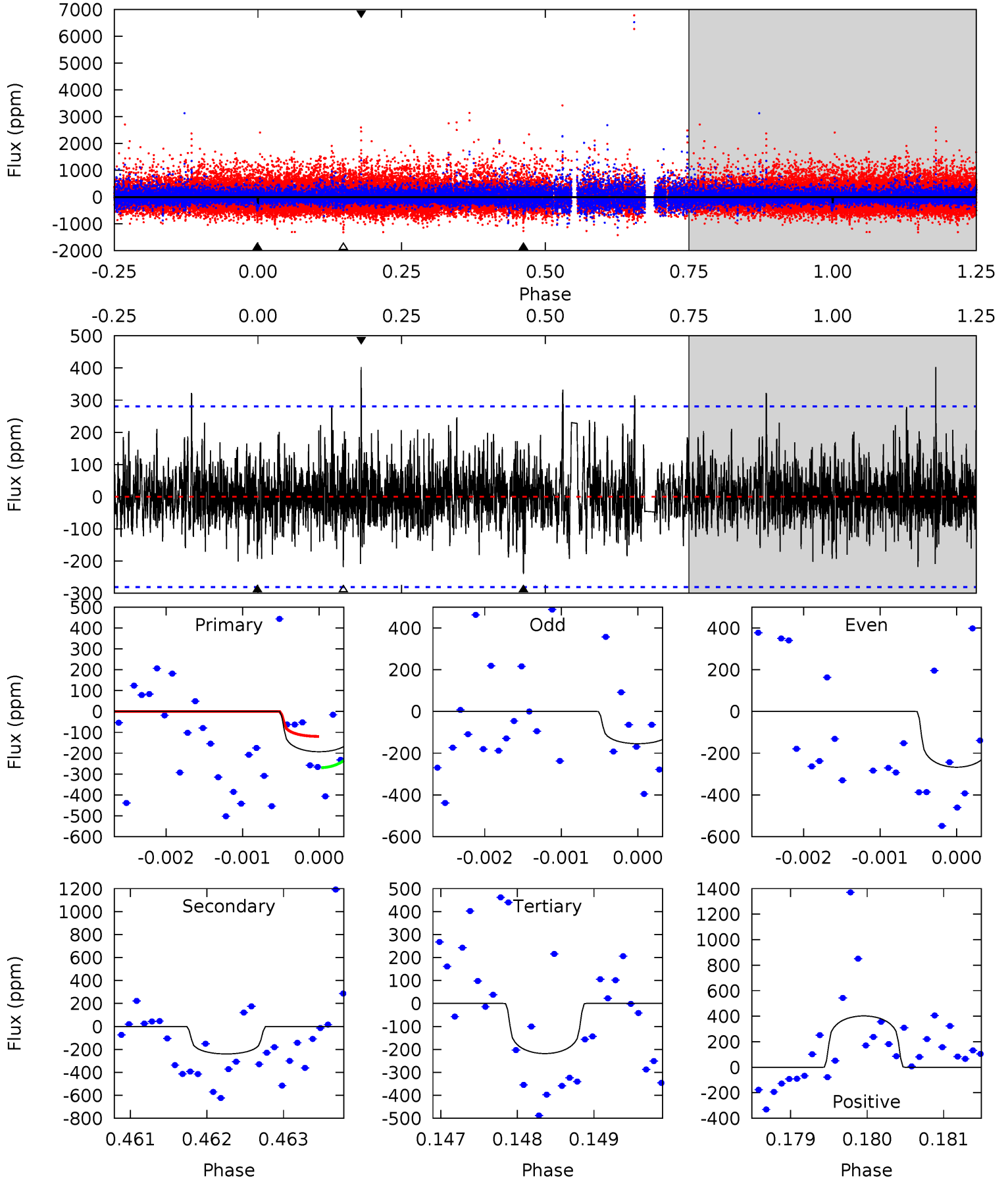
TCE 006928206-01 P=419.521420 Days $T_0=167.846681$ (BKJD)



DV Model-Shift Uniqueness Test

006928206-01, P = 419.509874 Days, E = 167.899833 Days

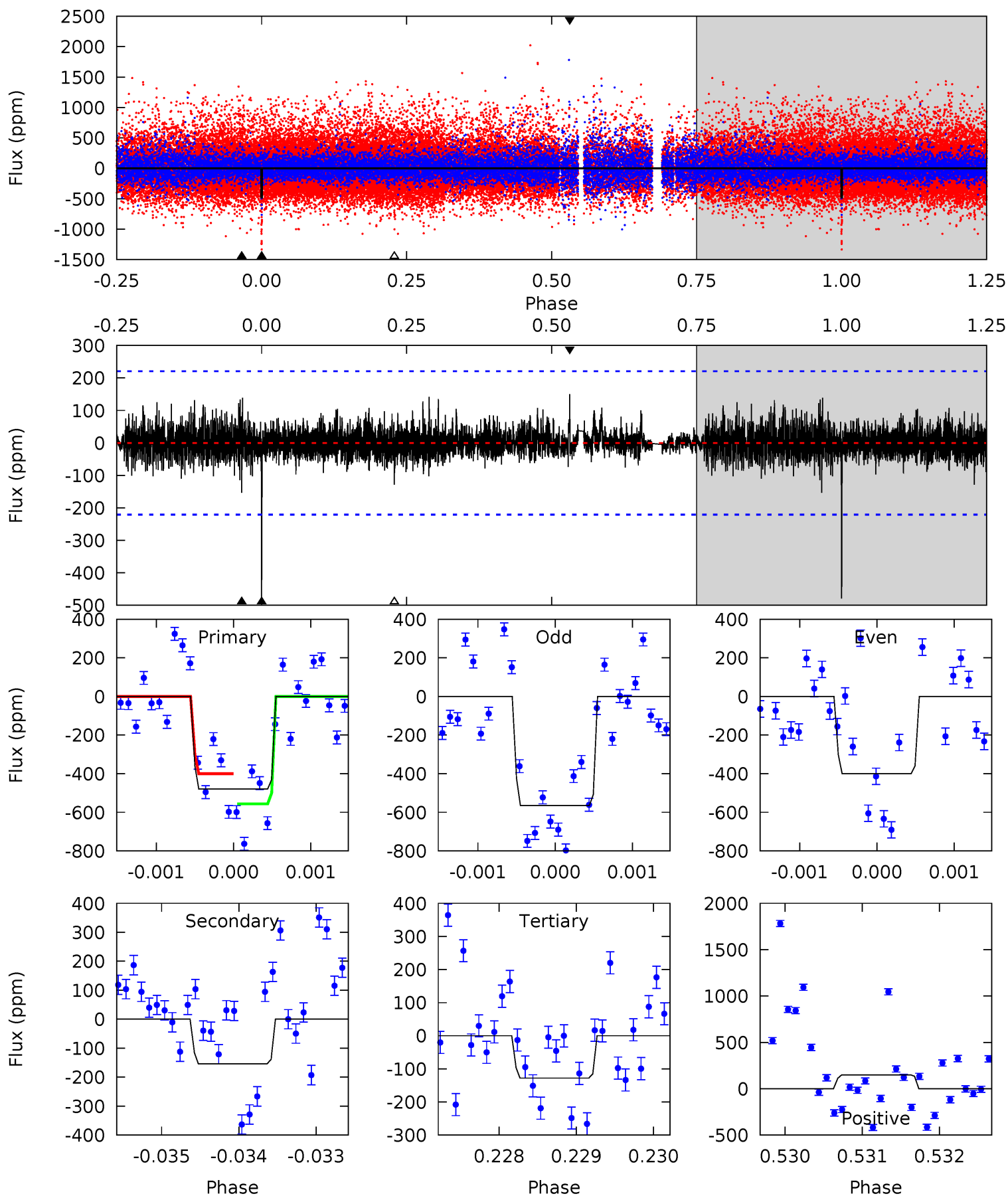
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.78	4.69	4.27	7.87	5.49	3.35	1.34	-0.49	-4.09	0.42	-3.18	0.94	0.77	0.63	1.47



Alt Model-Shift Uniqueness Test

006928206-01, P = 419.521420 Days, E = 167.846681 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.9	3.81	3.17	3.71	5.47	3.33	0.80	8.71	8.17	0.64	0.10	1.92	1.23	0.24	1.95



Stellar Parameters For KIC 006928206

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	3698^{+49}_{-49}	$4.775^{+0.033}_{-0.021}$	$-0.100^{+0.100}_{-0.100}$	$0.470^{+0.025}_{-0.030}$	$0.479^{+0.029}_{-0.026}$	$6.517^{+1.052}_{-0.573}$
	+1%/-1%	+1%/-0%	+100%/-100%	+5%/-6%	+6%/-5%	+16%/-9%
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 006928206-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-240 ± 51	$1.46^{+1.18}_{-0.99}$	168^{+3}_{-3}	3040^{+1387}_{-457}	$44456^{+395118}_{-31864}$
Alt.	-154 ± 40	$1.56^{+1.24}_{-1.00}$	168^{+3}_{-3}	2836^{+979}_{-403}	$26157^{+167161}_{-18438}$

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 $A_{obs} \gg 1.0$

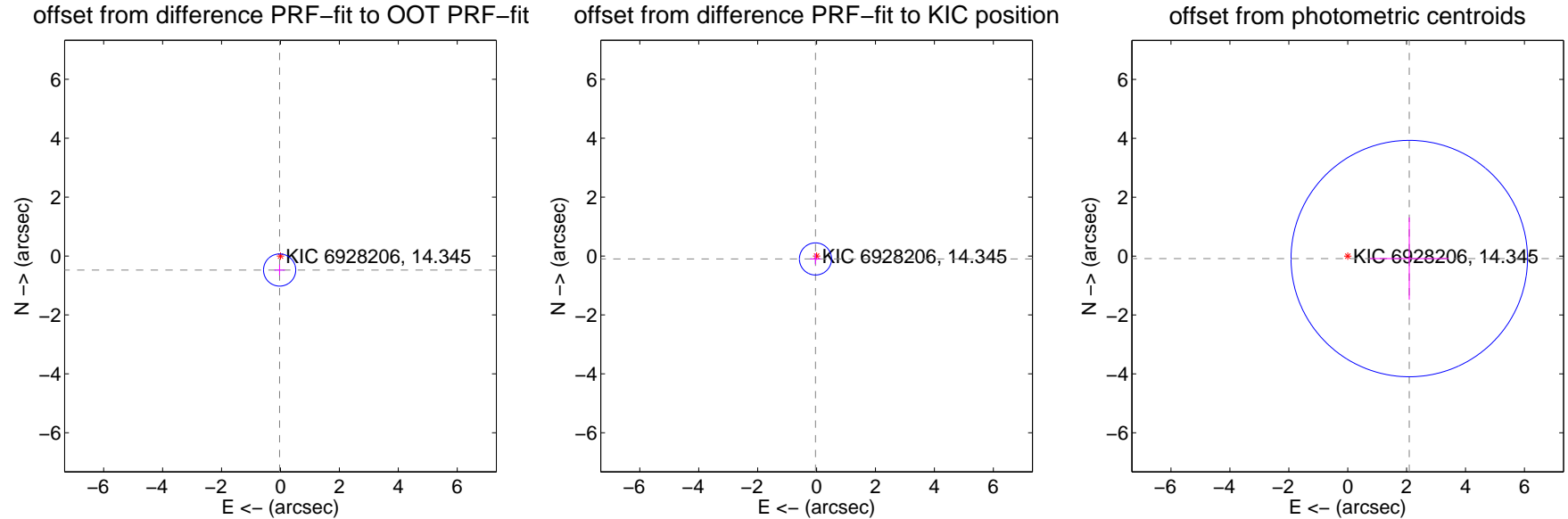
DV Centroid Data

Supplemental centroid analysis for 006928206-01. Kepler magnitude: 14.35. Transit SNR 5.18

There are 1 quarters with good PRF difference image offsets

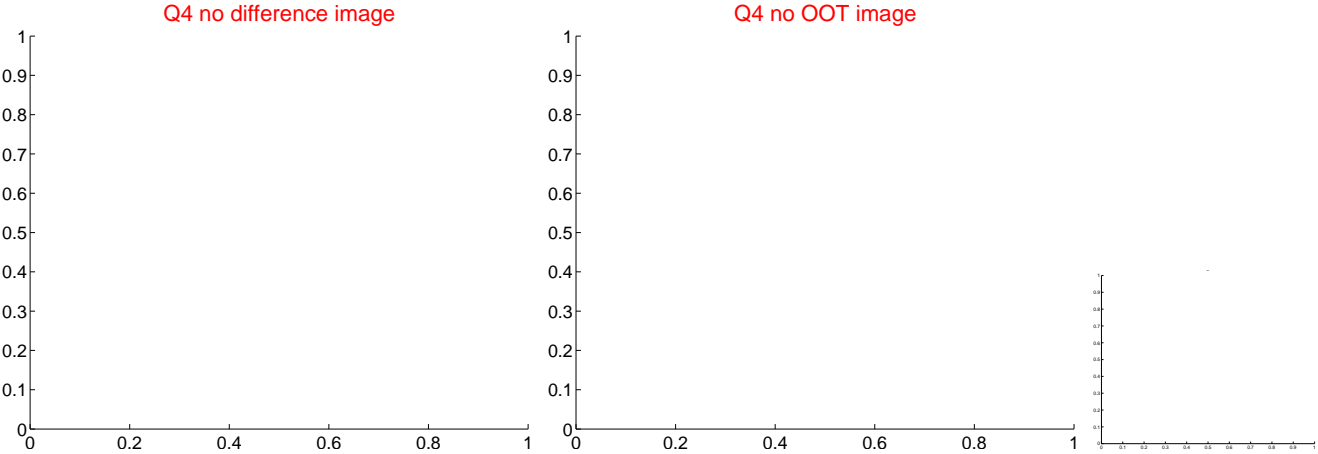
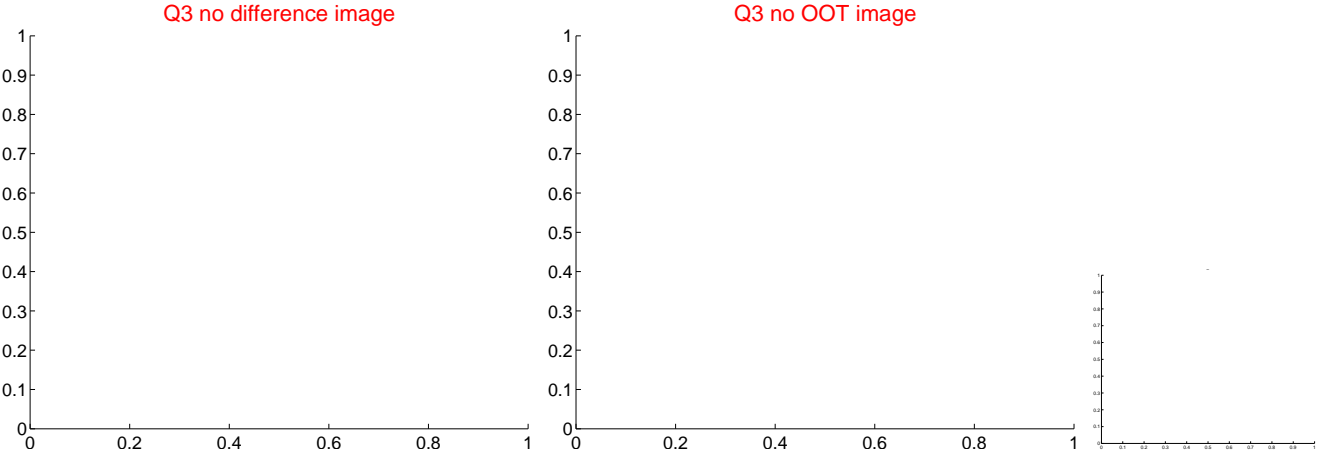
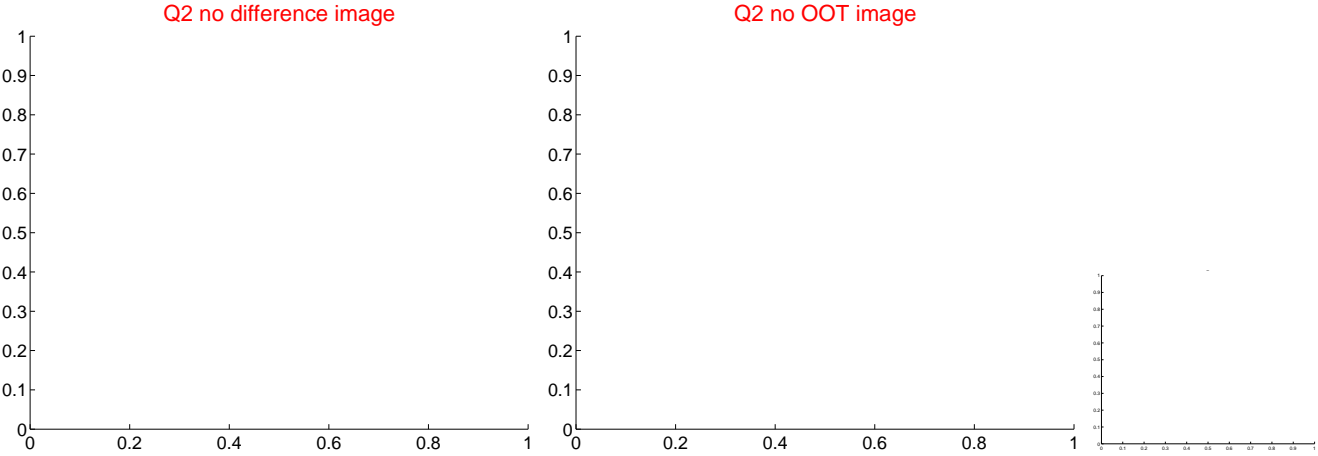
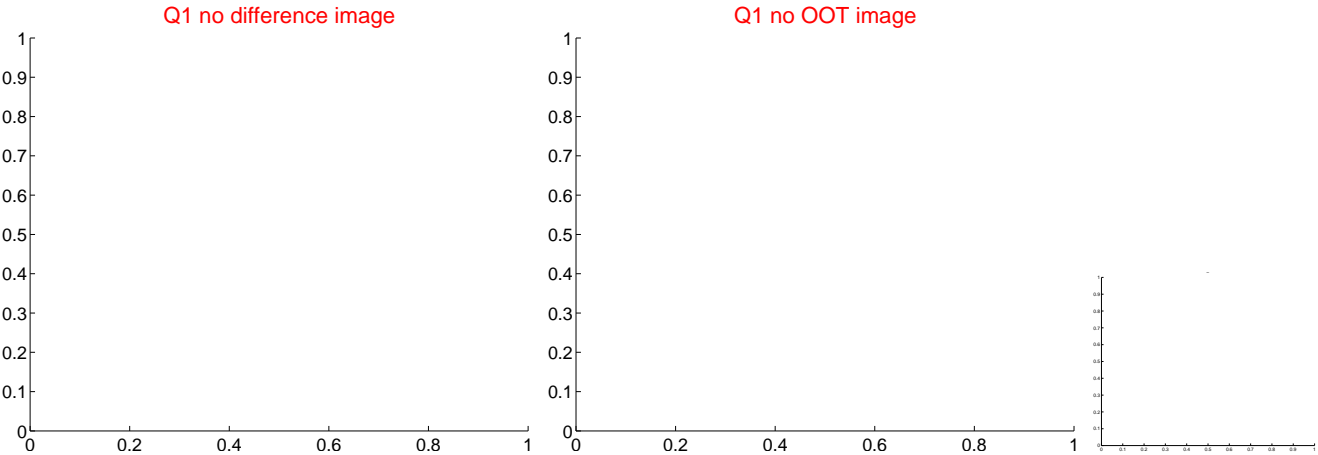
The direct PRF centroid is offset from the target star catalog position by about 0.38 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.476 ± 0.182	2.61	0.028 ± 0.179	-0.475 ± 0.182
PRF-fit source offset from KIC position	0.106 ± 0.182	0.58	0.037 ± 0.179	-0.099 ± 0.182
photometric centroid source offset	2.09 ± 1.34	1.56	-2.09 ± 1.34	-0.08 ± 1.40

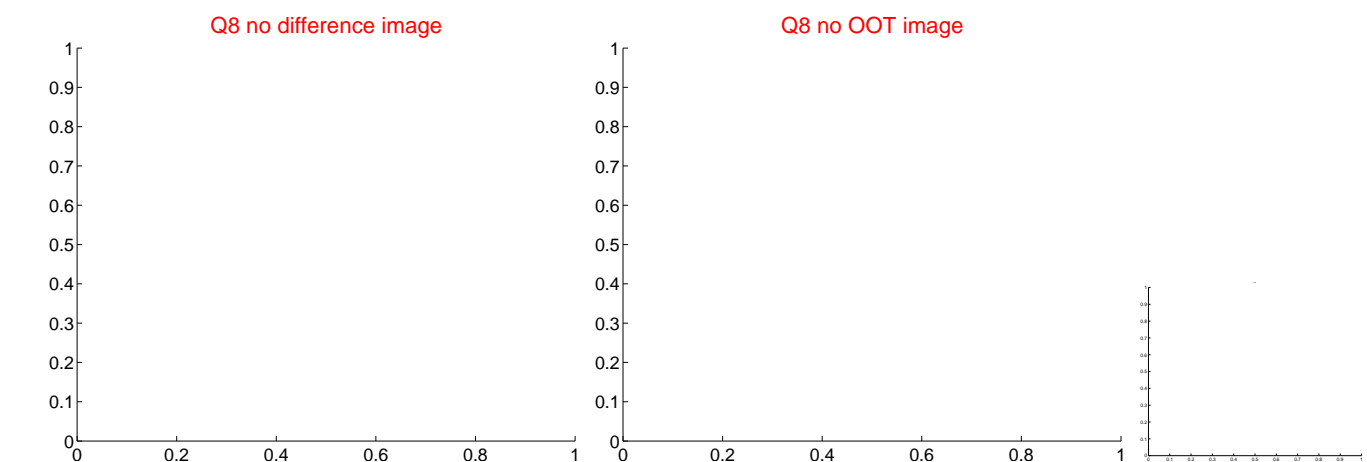
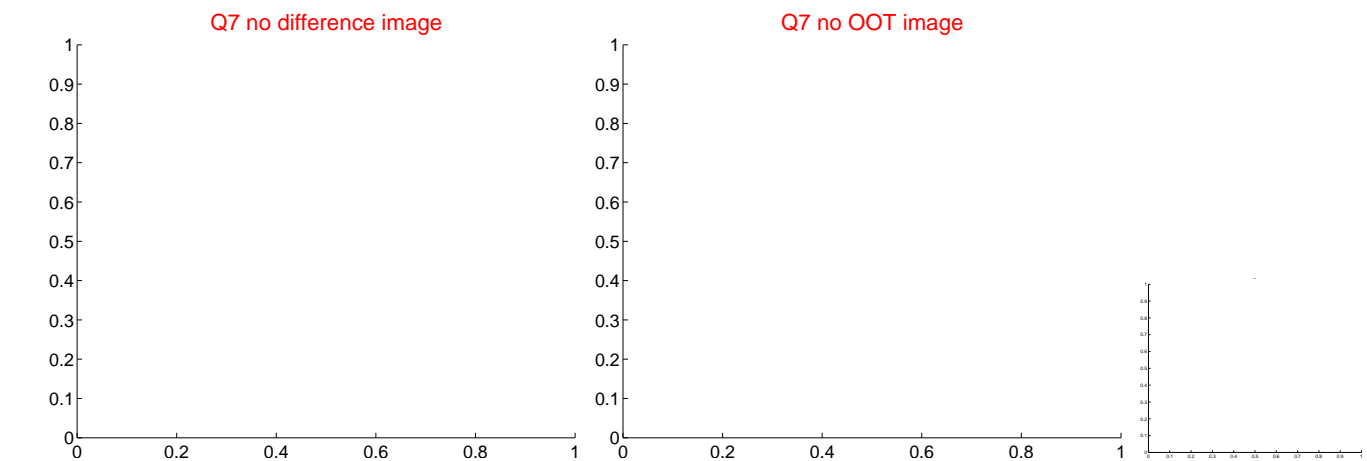
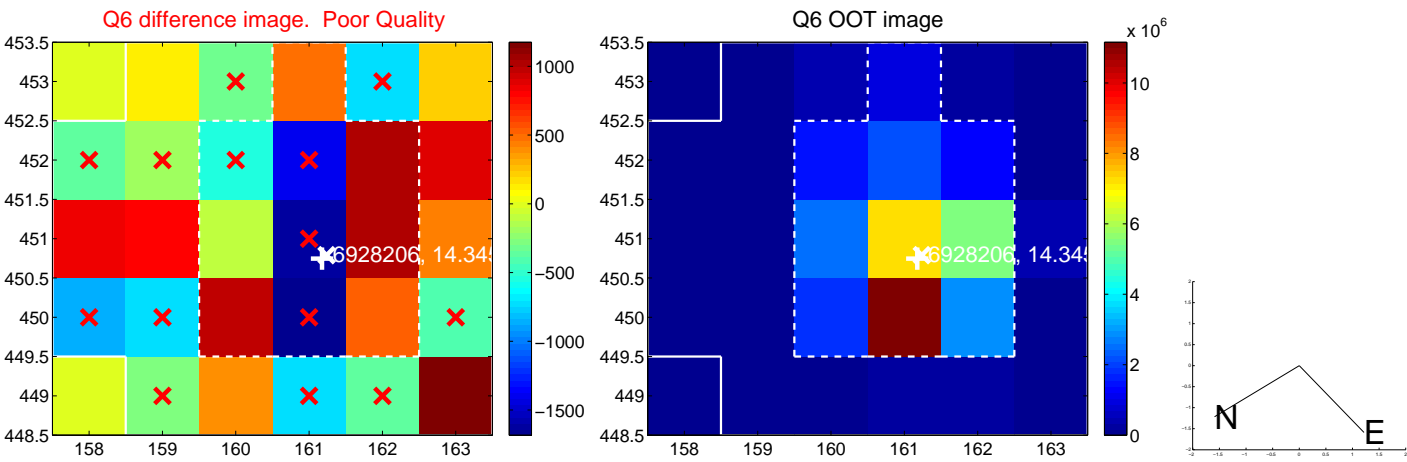
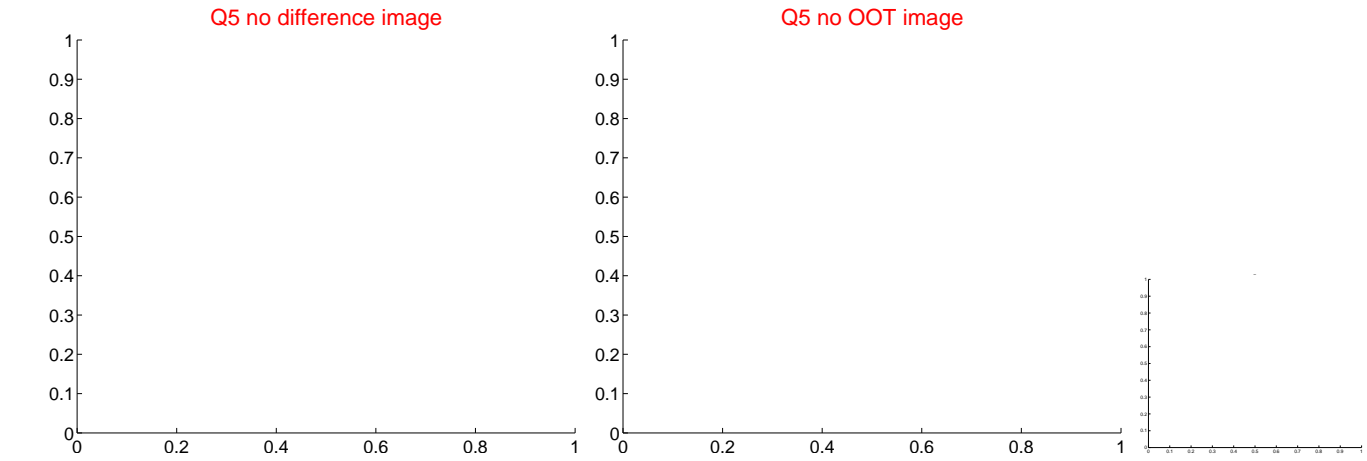


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

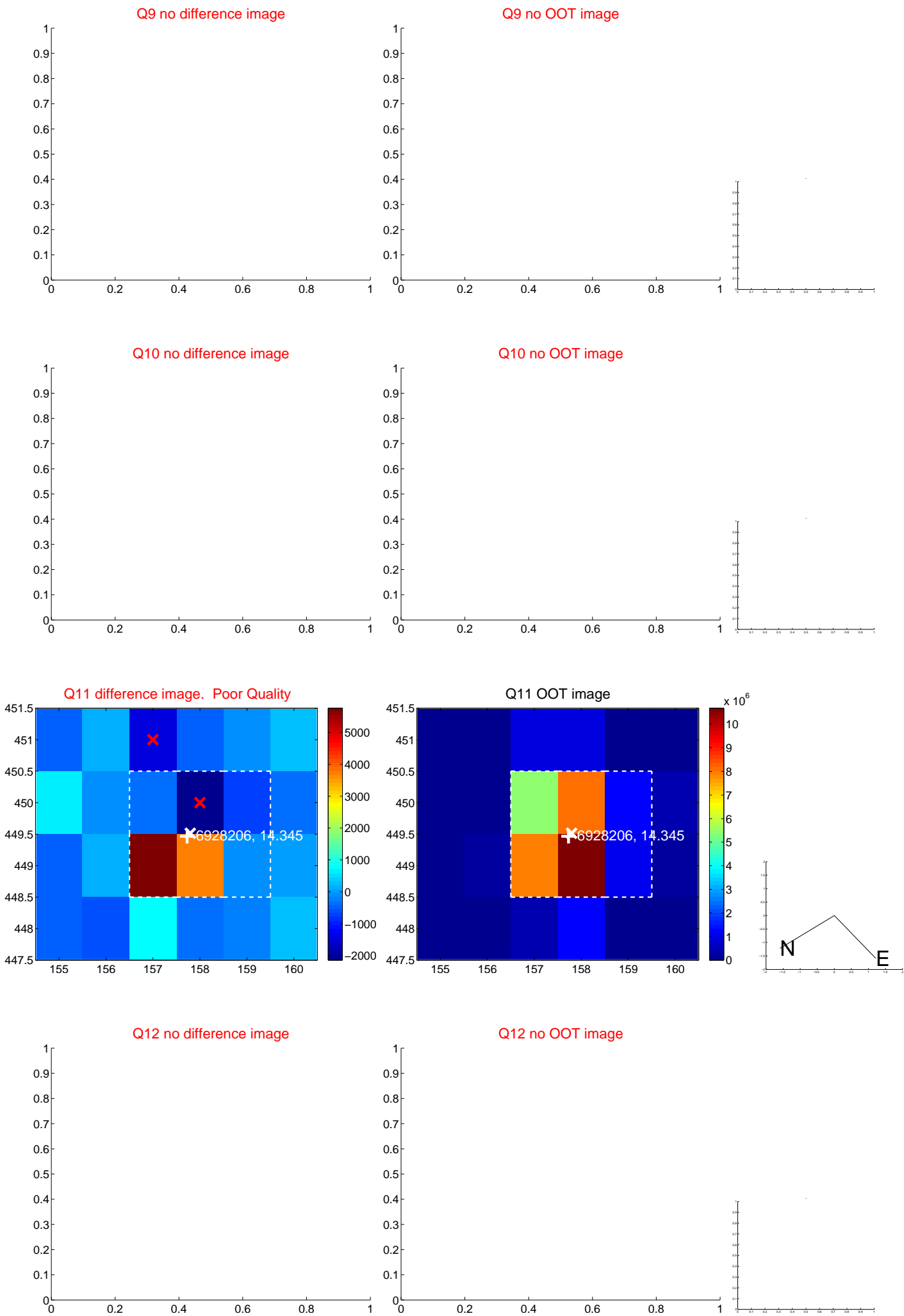
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



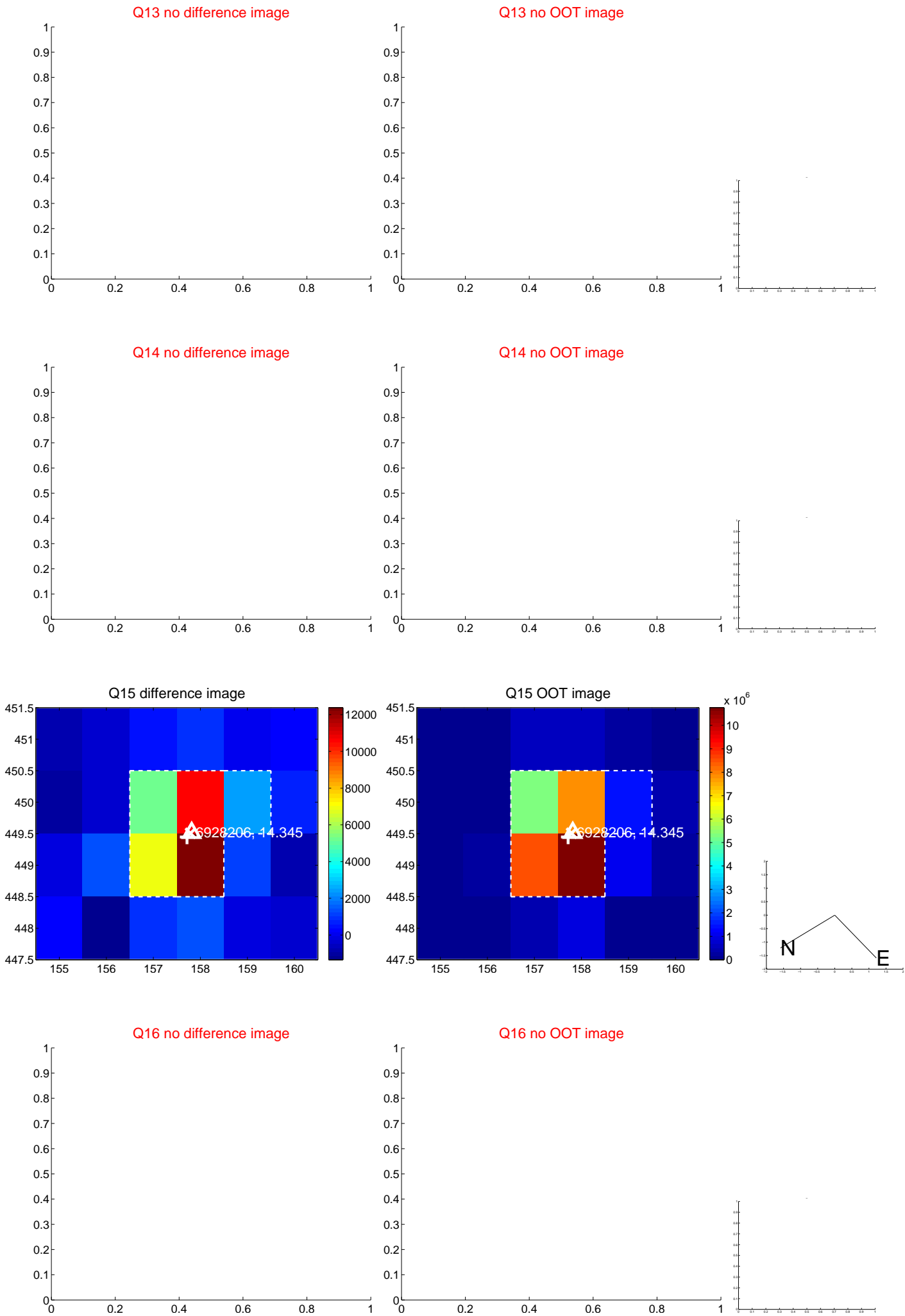
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



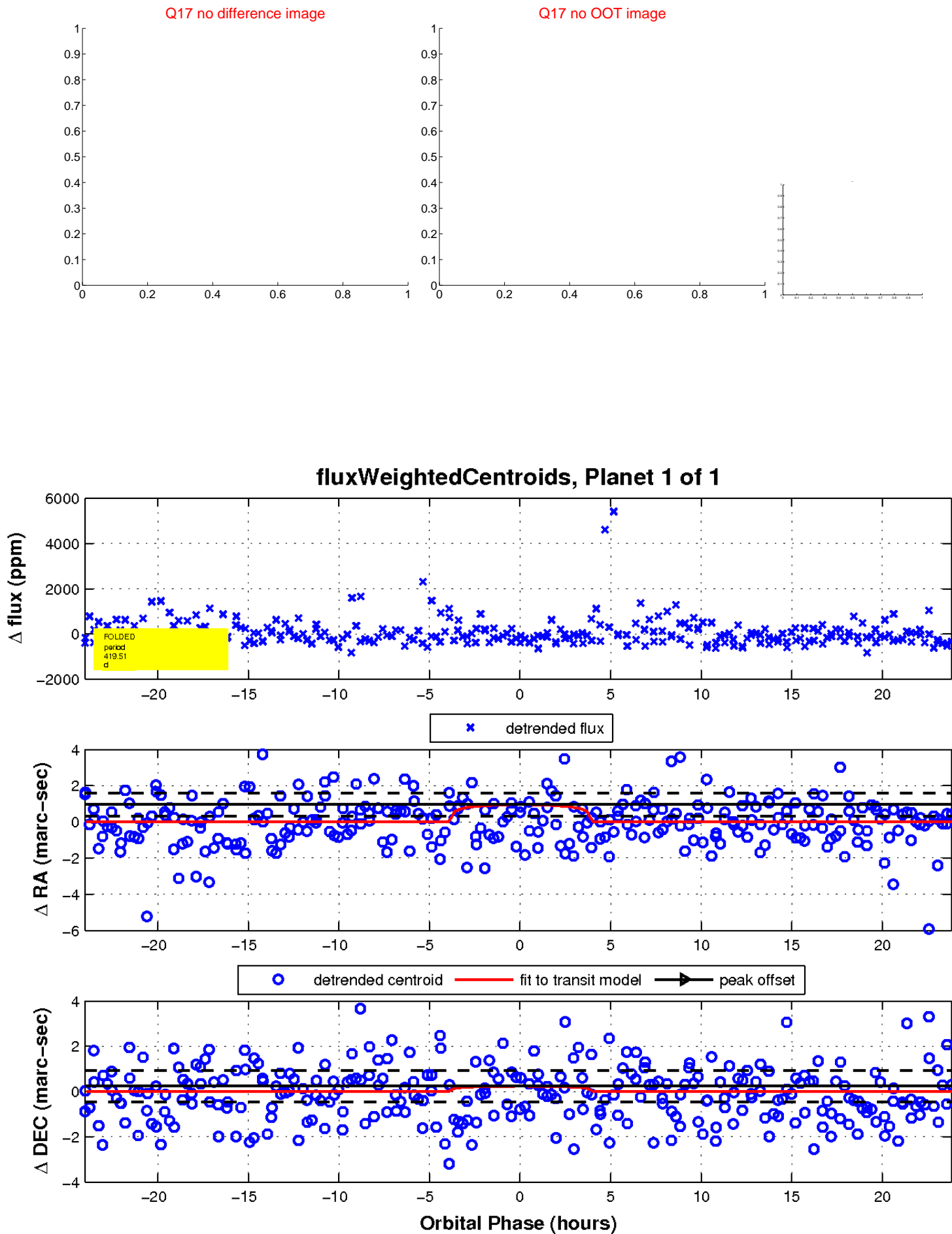
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



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



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



UKIRT Image

Declination

