

KIC 005265982

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})
005265982-01	OBS	No	294.191662	313.942761	426.8	3.757	7.3	7.6	4.65	5058	10.95	13.49

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005265982-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT

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.

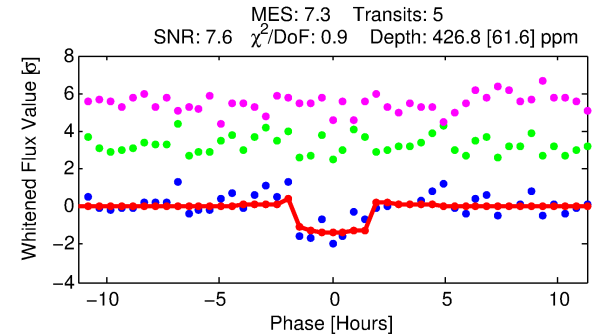
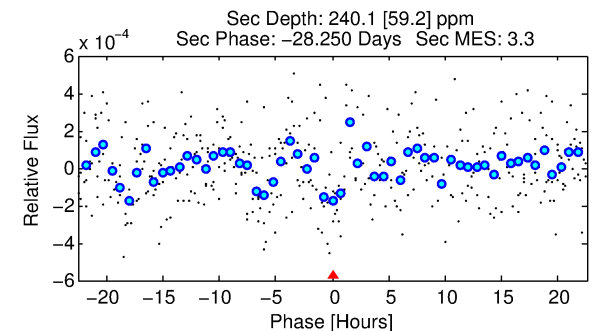
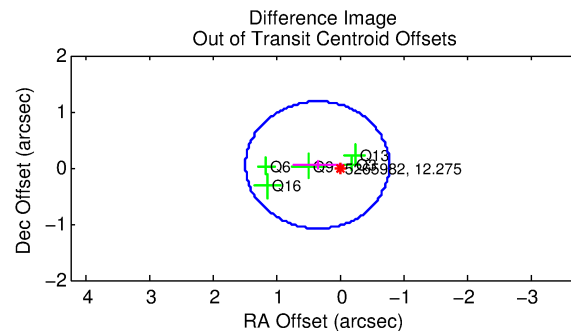
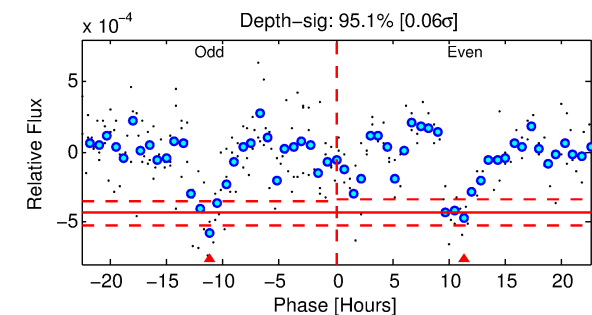
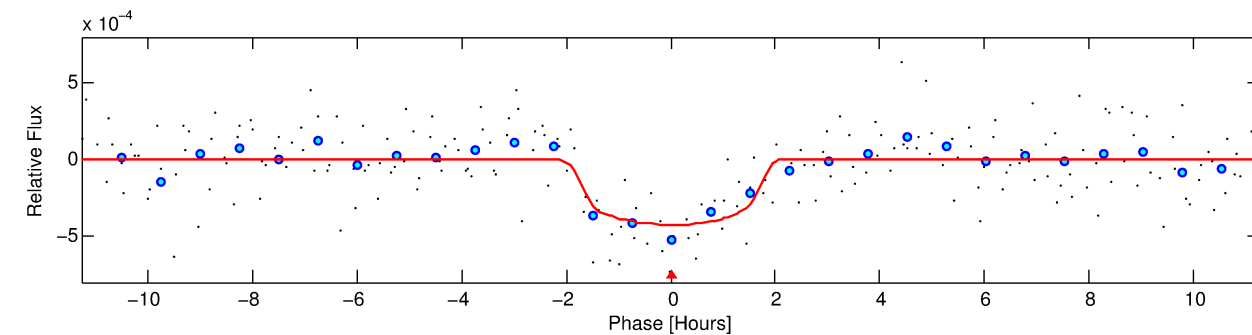
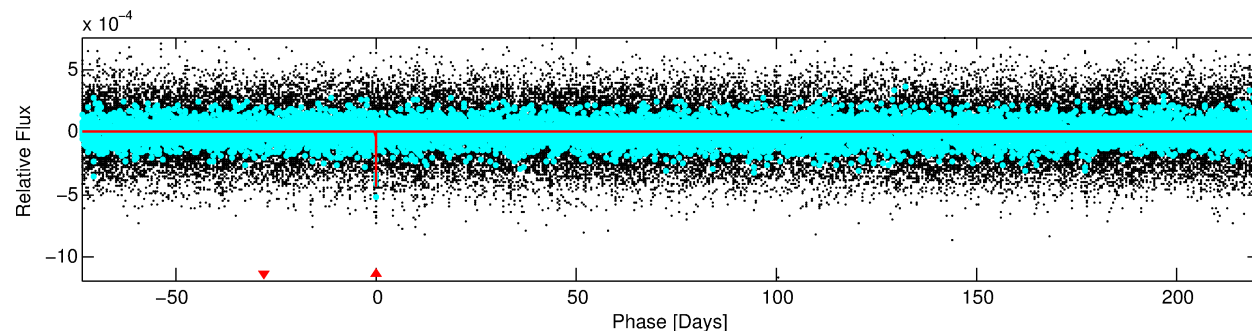
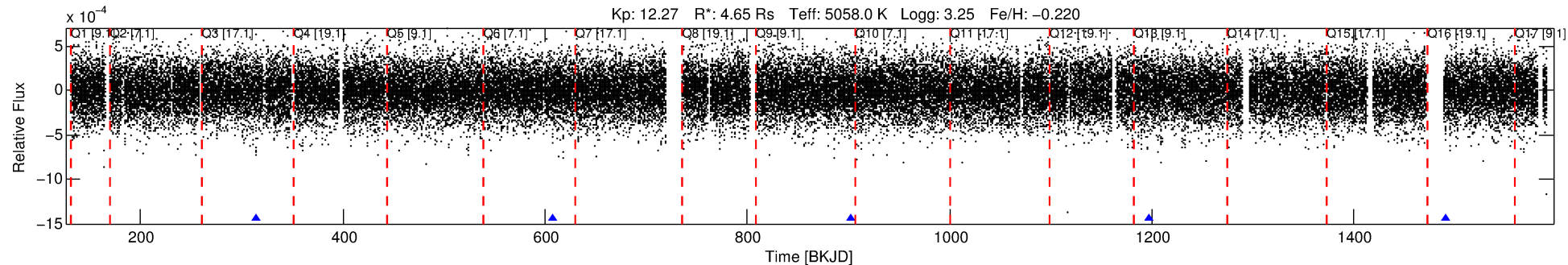
Ephemeris Match Information For 005265982-01

No Significant Match Found

DV One-Page Summary

KIC: 5265982 Candidate: 1 of 1 Period: 294.192 d
KOI: K05146 Corr: No Ephemeris Match

Kp: 12.27 R*: 4.65 Rs Teff: 5058.0 K Logg: 3.25 Fe/H: -0.220



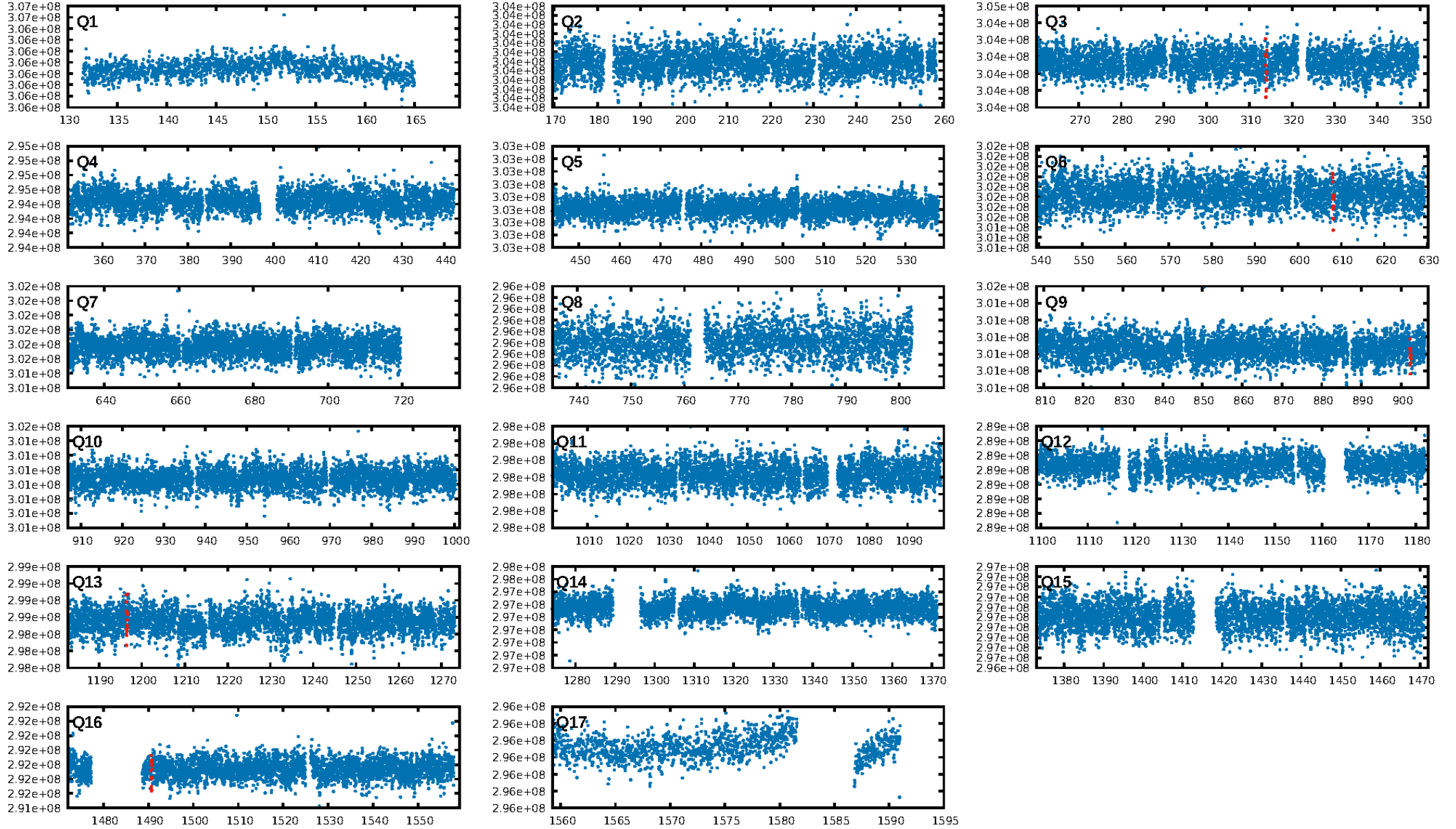
DV Fit Results:

Period = 294.19166 [0.00323] d
Epoch = 313.9428 [0.0075] BKJD
Rp/R* = 0.0216 [0.0127]
a/R* = 354.41 [797.16]
b = 0.83 [0.85]
Seff = 13.49 [5.52]
Teq = 489 [50] K
Rp = 10.95 [7.23] Re
a = 0.9688 [0.2568] AU
Ag = 1034.01 [1304.93] [0.79σ]
Teffp = 4285 [1288] K [2.95σ]

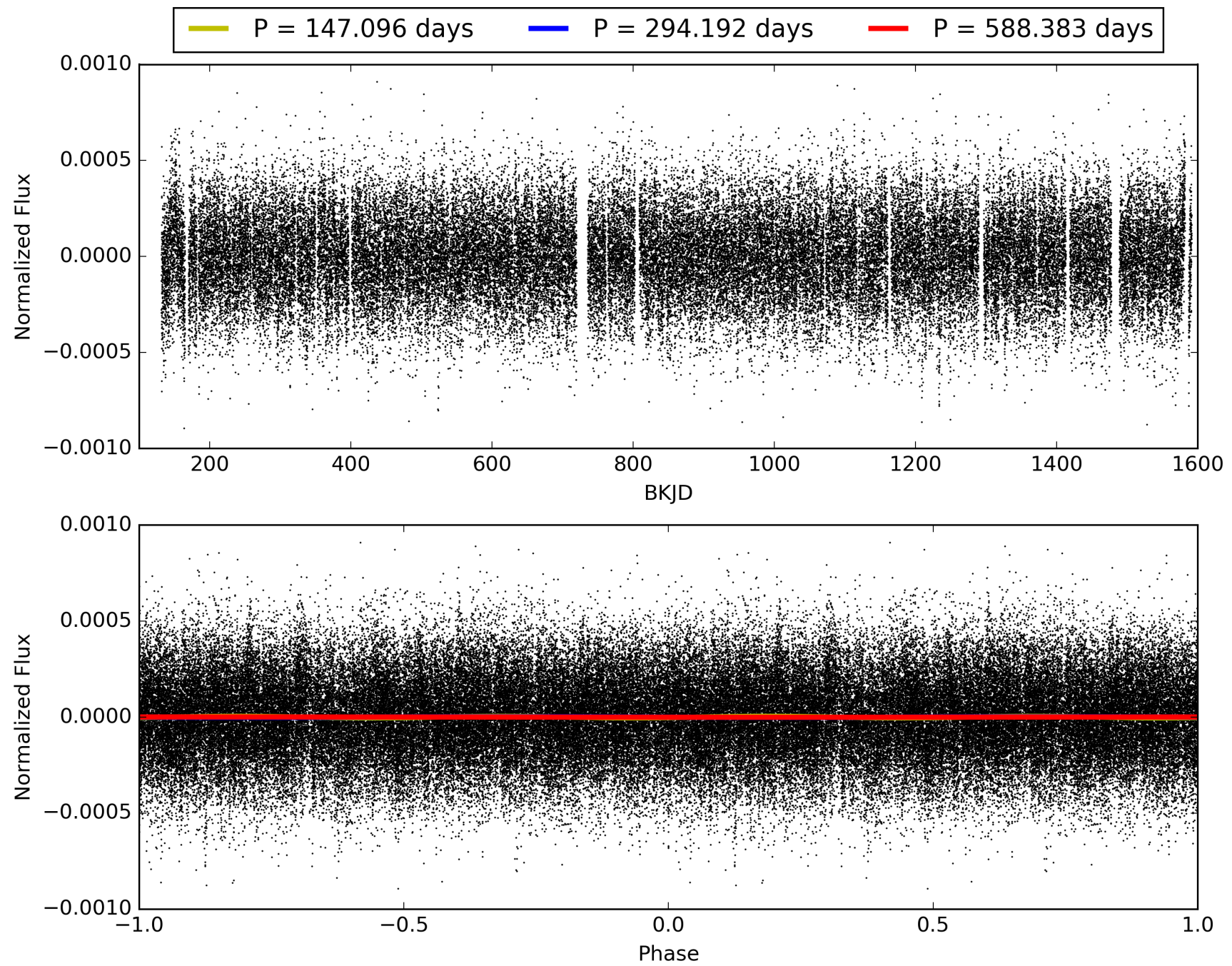
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 66.7%
ModelChiSquareGof-sig: 98.1%
Bootstrap-pfa: 3.46e-11
RollingBand-fgt: 1.00 [5/5]
GhostDiagnostic-chr: 14.5
Centroid-sig: 55.1%
Centroid-so: 0.368 arcsec [0.96σ]
OotOffset-rm: 0.366 arcsec [0.97σ]
KicOffset-rm: 0.183 arcsec [0.65σ]
OotOffset-st: 1/1/1/2 [5]
KicOffset-st: 1/1/1/2 [5]
DiffImageQuality-fgm: 1.00 [5/5]
DiffImageOverlap-fno: 1.00 [5/5]

TCE 005265982-01, PDC Light Curves

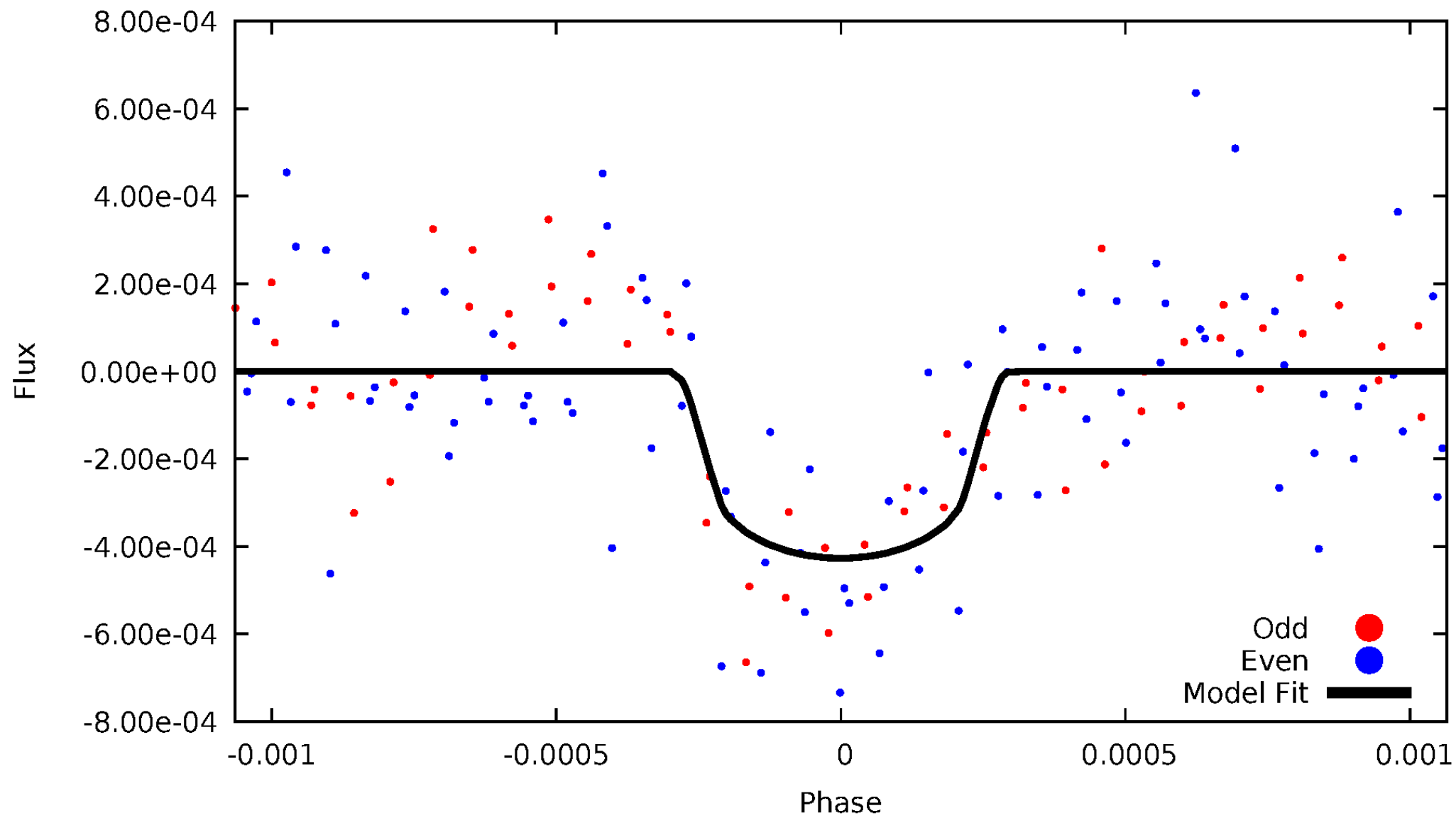


TCE 005265982-01



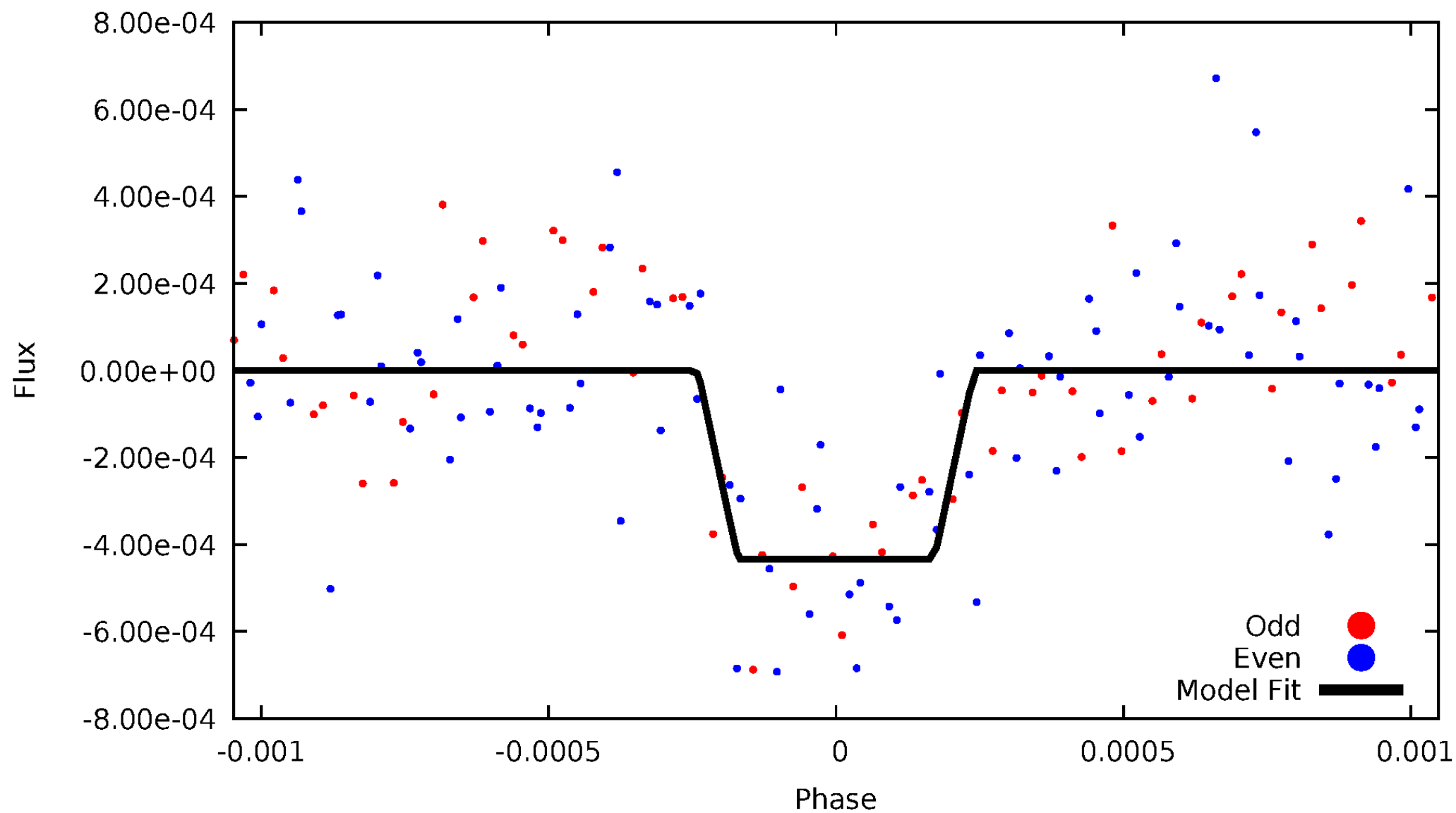
DV Odd/Even

TCE 005265982-01

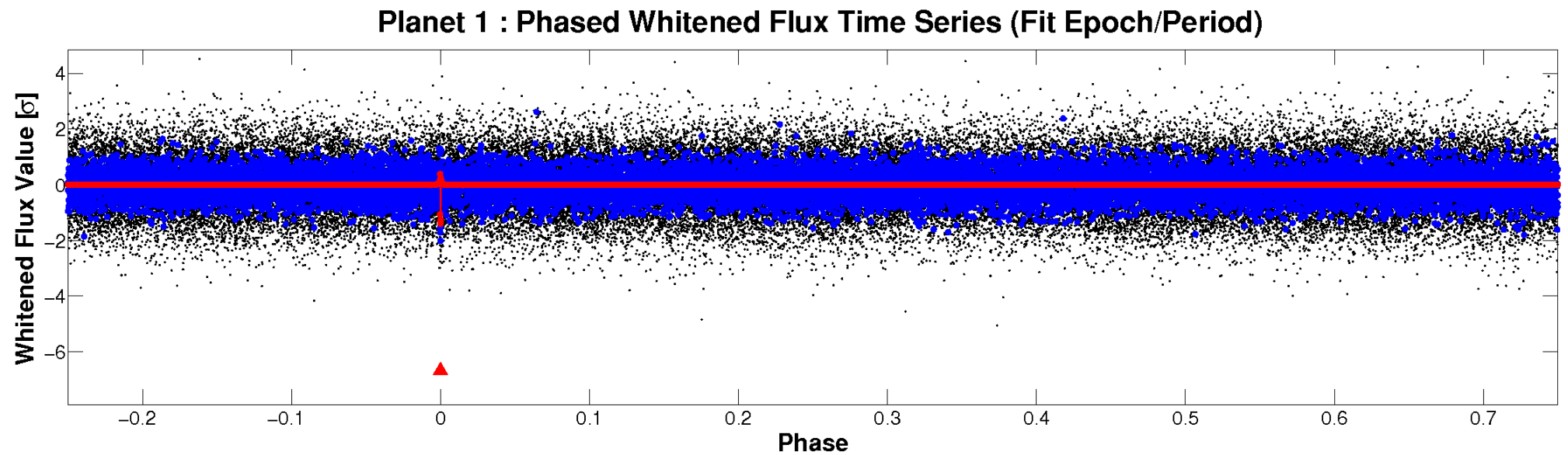
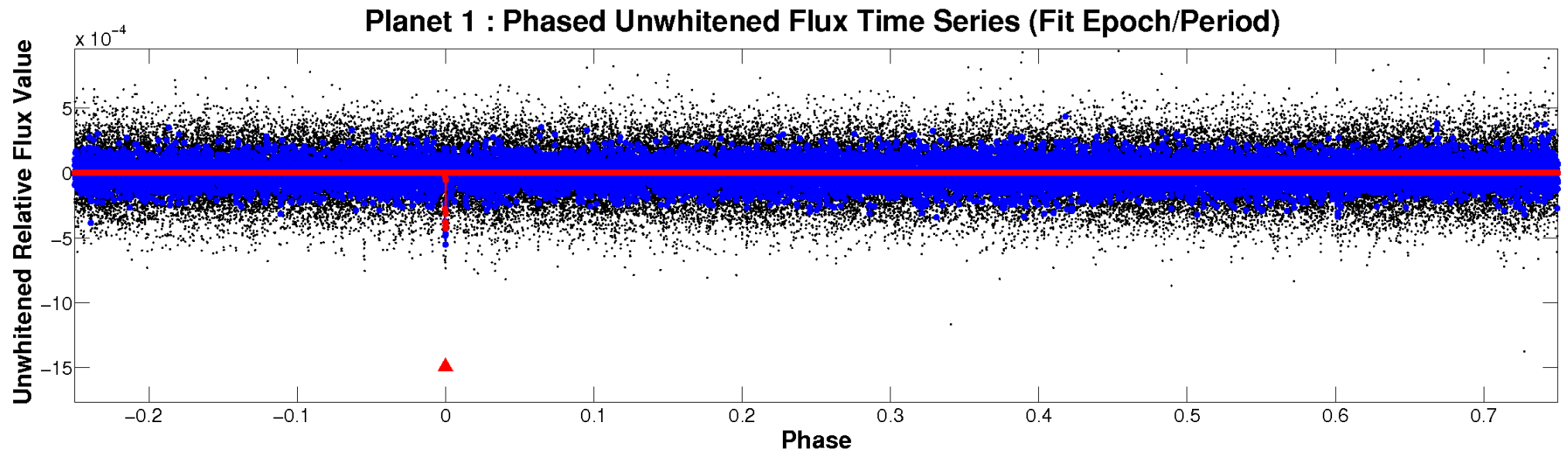


ALT Odd/Even

TCE 005265982-01

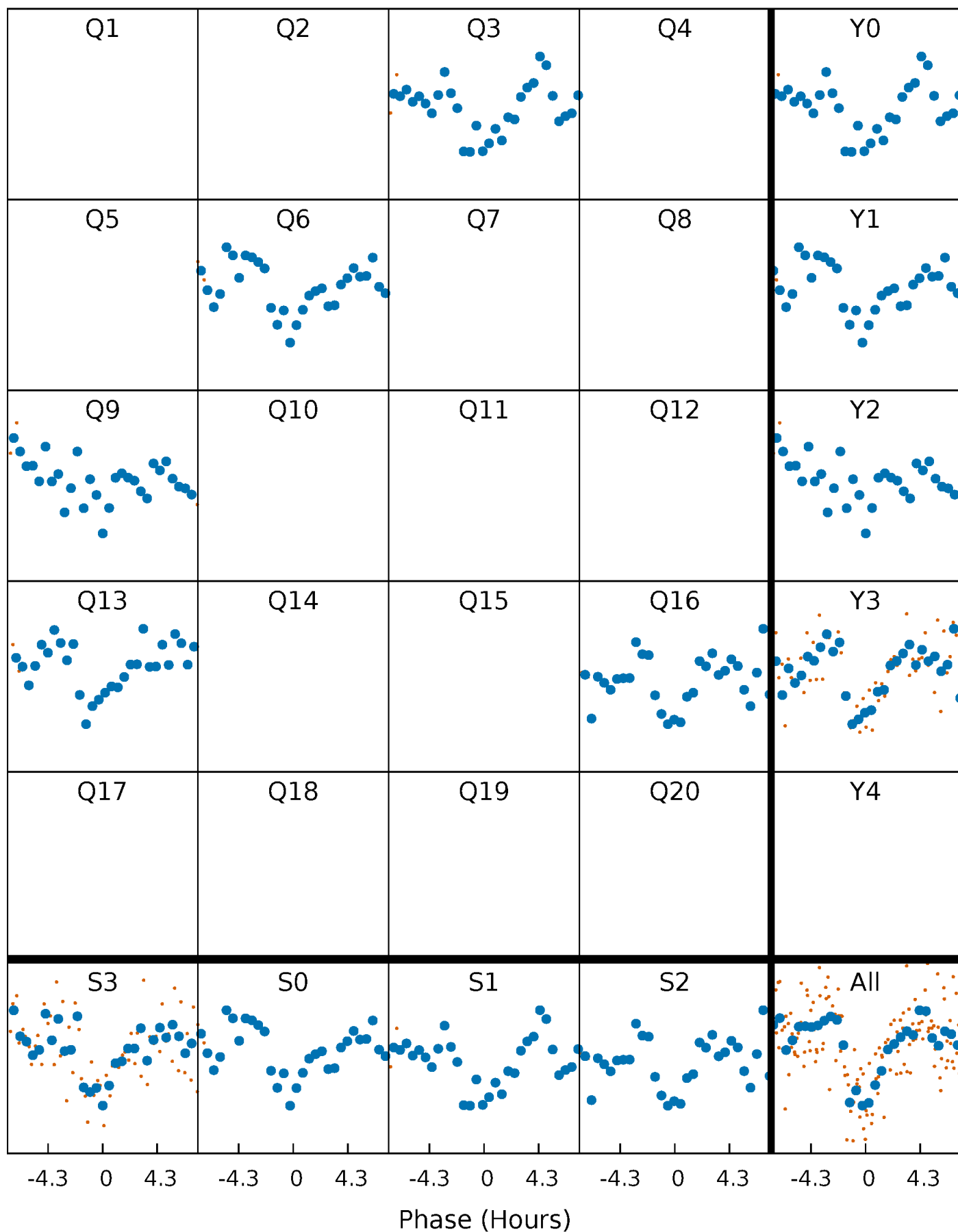


Non-Whitened Vs. Whitened Light Curve



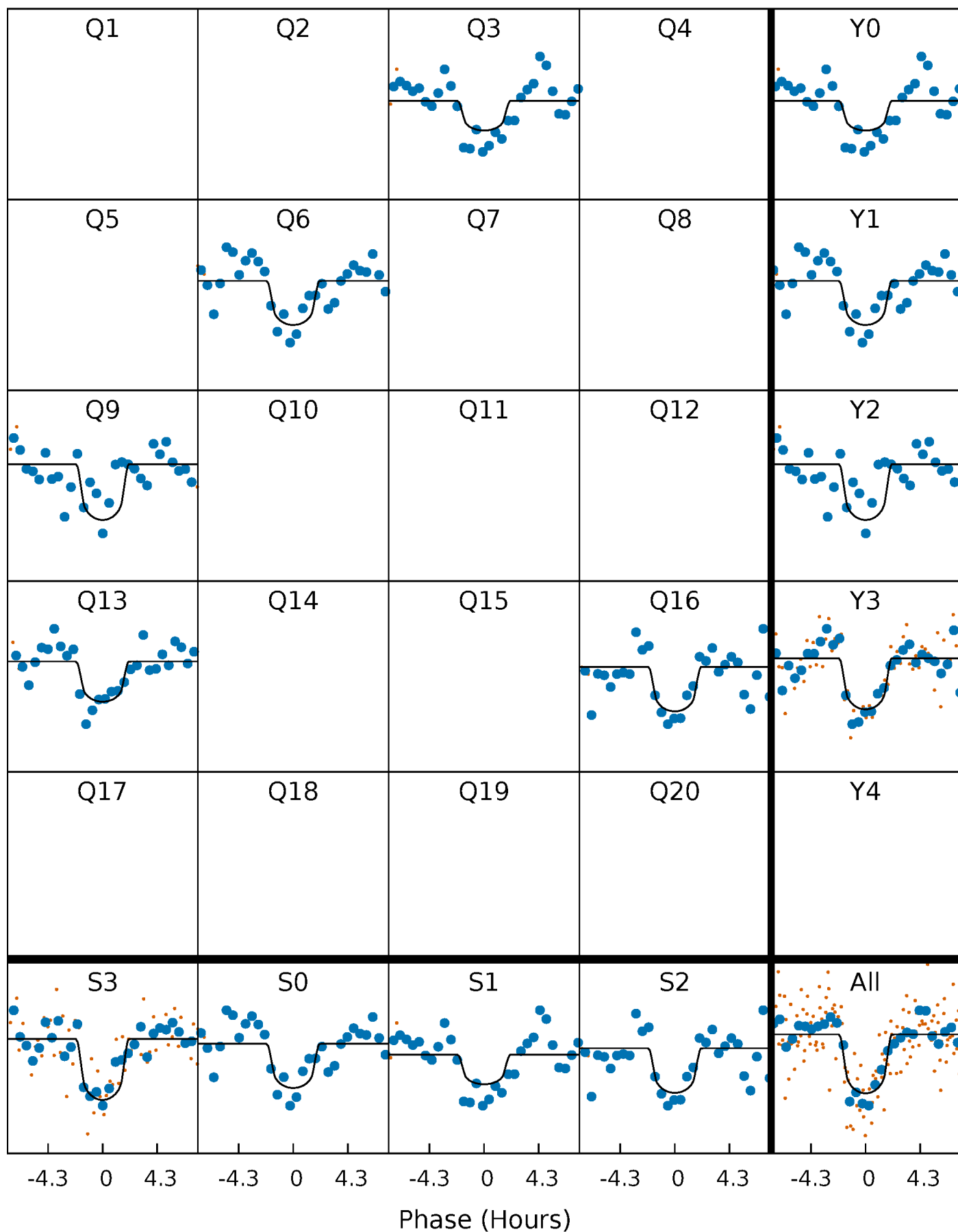
PDC Quarter-Phased Transit Curves

TCE 005265982-01 P=294.191662 Days $T_0=313.942761$ (BKJD)



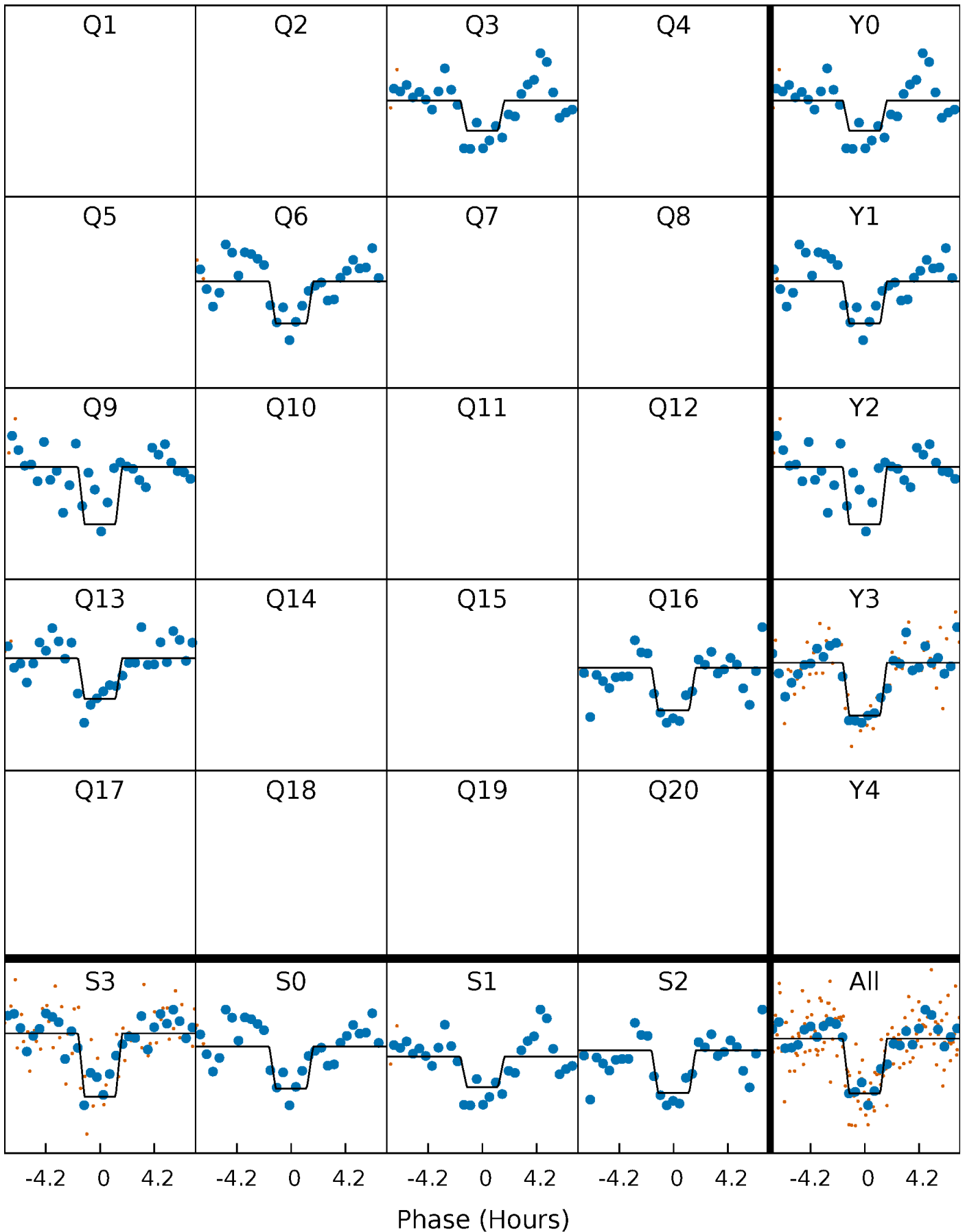
DV Quarter-Phased Transit Curves

TCE 005265982-01 P=294.191662 Days $T_0=313.942761$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

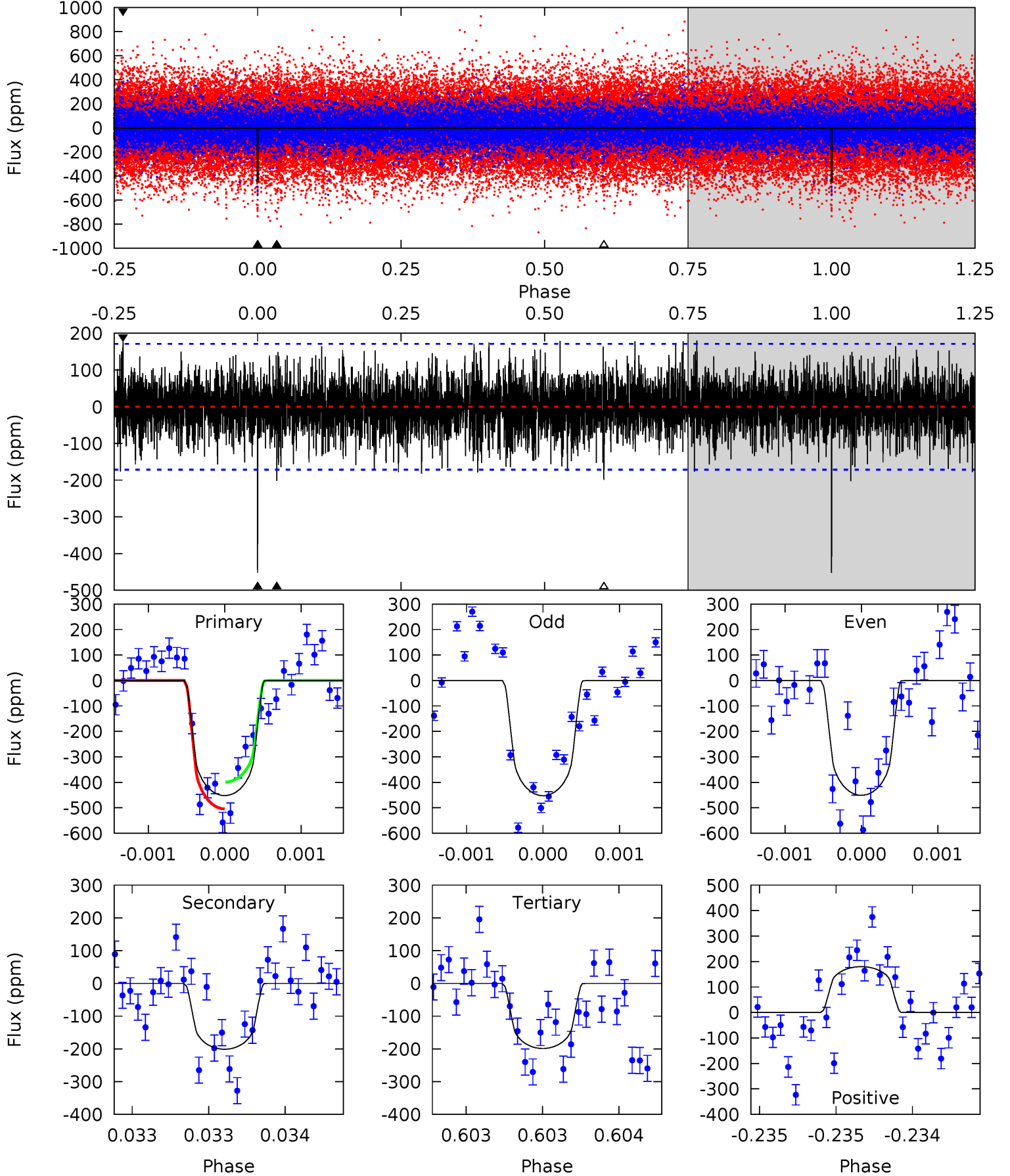
TCE 005265982-01 P=294.193170 Days $T_0=313.931670$ (BKJD)



DV Model-Shift Uniqueness Test

005265982-01, $P = 294.191662$ Days, $E = 19.751099$ Days

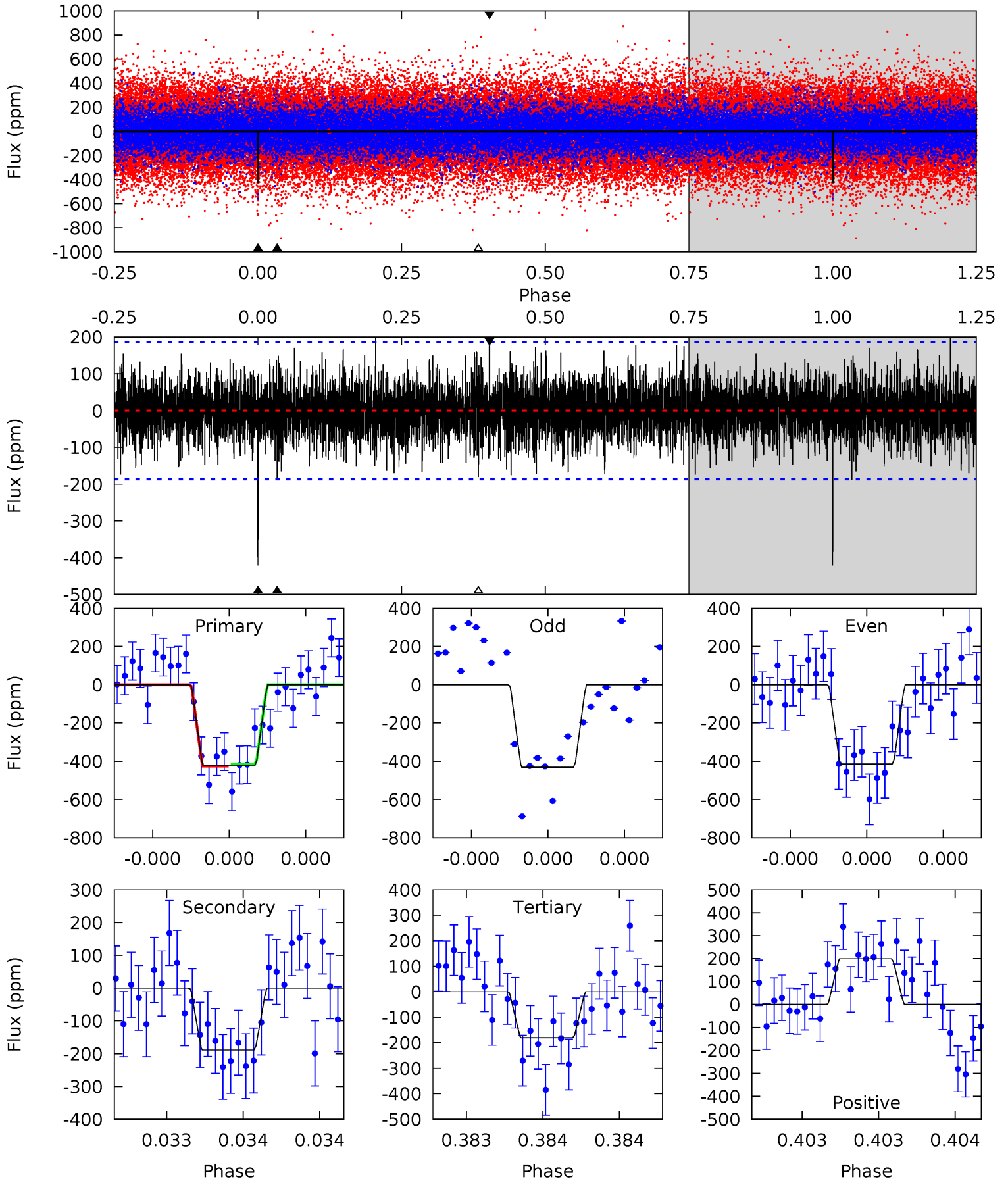
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14.6	6.52	6.45	5.83	5.55	3.45	1.76	8.20	8.82	0.07	0.69	0.02	1.03	0.28	1.70



Alt Model-Shift Uniqueness Test

005265982-01, $P = 294.193170$ Days, $E = 19.738500$ Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.6	5.64	5.39	5.95	5.58	3.49	1.56	7.18	6.62	0.24	-0.31	0.25	0.92	0.32	0.13



Stellar Parameters For KIC 005265982

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5058^{+100}_{-126}	$3.250^{+0.222}_{-0.167}$	$-0.220^{+0.200}_{-0.250}$	$4.647^{+0.943}_{-1.415}$	$1.401^{+0.188}_{-0.376}$	$0.020^{+0.025}_{-0.008}$
	+2%/-2%	+7%/-5%	+91%/-114%	+20%/-30%	+13%/-27%	+126%/-42%
Source	PHO1	FLK73	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 005265982-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-201 ± 31	$11.09^{+6.50}_{-5.74}$	681^{+45}_{-49}	4197^{+1446}_{-607}	796^{+2600}_{-471}
Alt.	-189 ± 34	$10.39^{+6.98}_{-5.46}$	683^{+47}_{-54}	4243^{+1581}_{-666}	862^{+2903}_{-552}

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

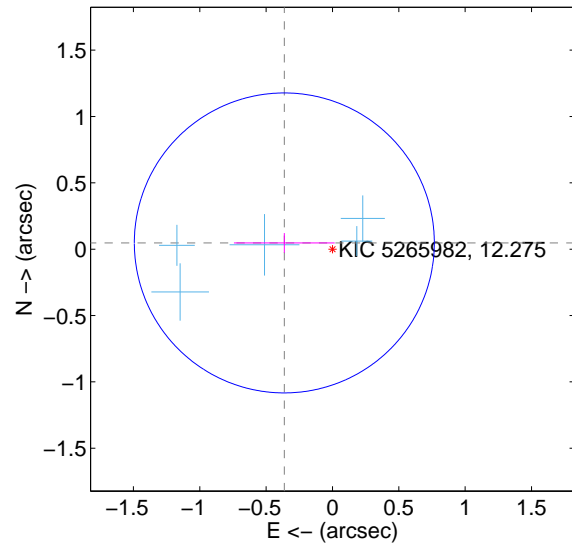
Supplemental centroid analysis for 005265982-01. Kepler magnitude: 12.28. Transit SNR 7.58

There are 5 quarters with good PRF difference image offsets

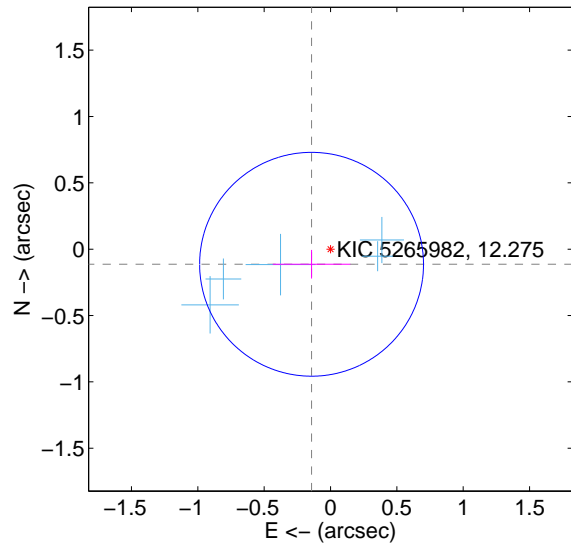
The direct PRF centroid is offset from the target star catalog position by about 0.26 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.366 ± 0.377	0.97	0.363 ± 0.380	0.047 ± 0.074
PRF-fit source offset from KIC position	0.183 ± 0.281	0.65	0.143 ± 0.293	-0.114 ± 0.108
photometric centroid source offset	0.37 ± 0.38	0.96	-0.34 ± 0.39	0.14 ± 0.33

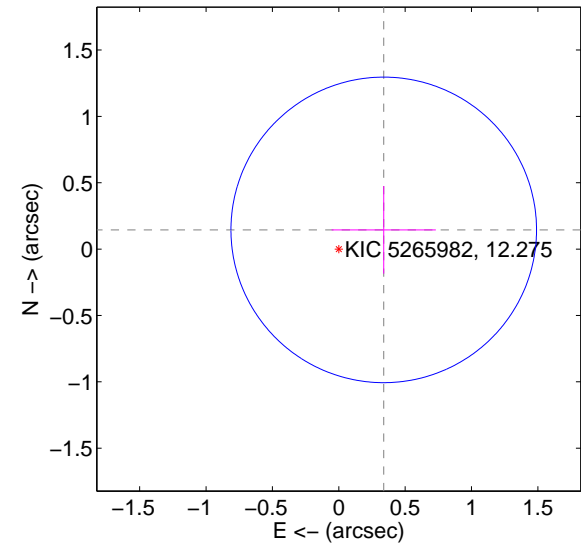
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

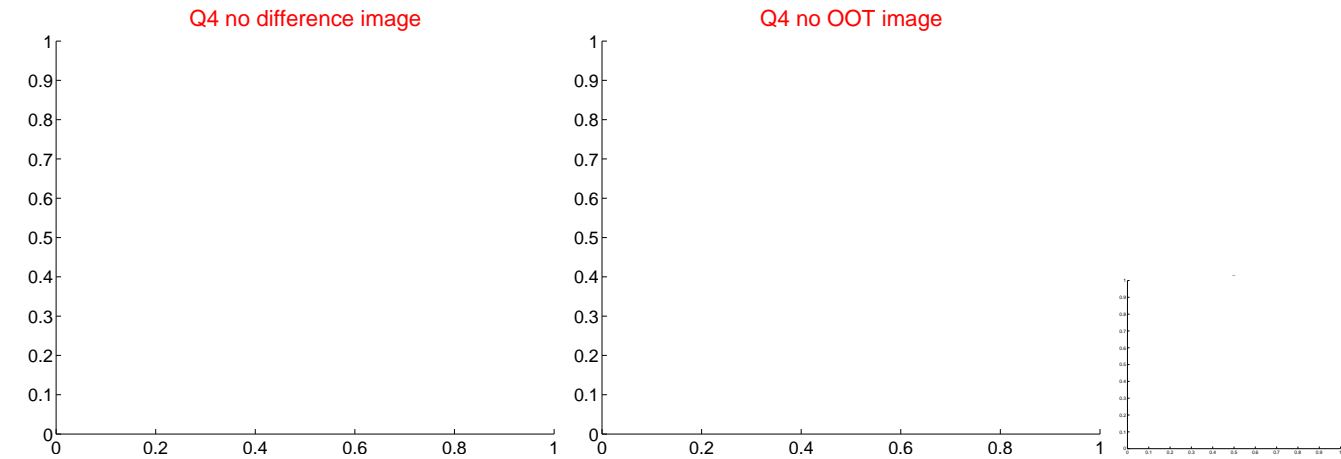
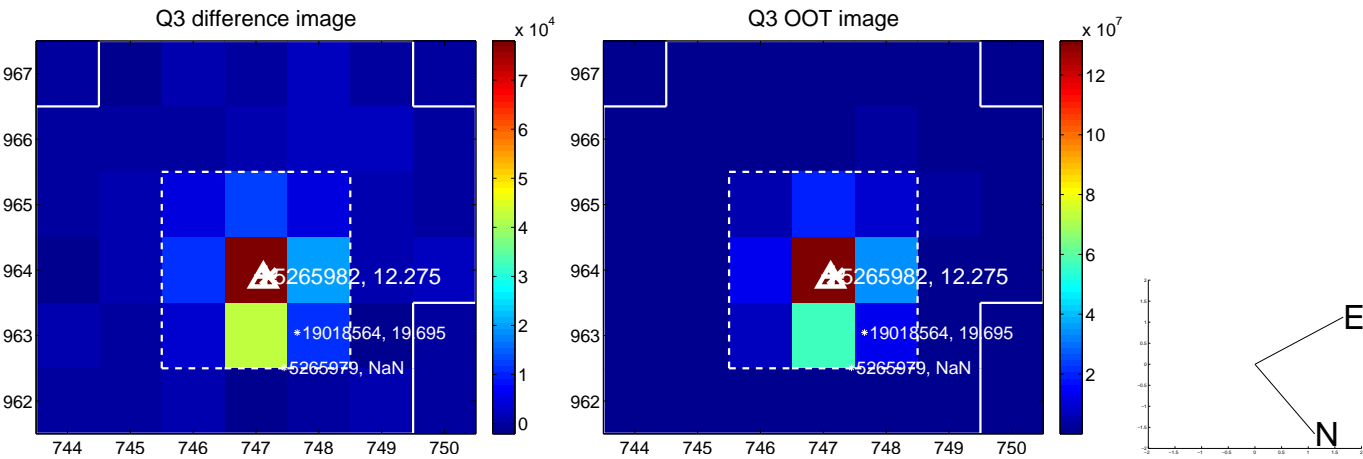
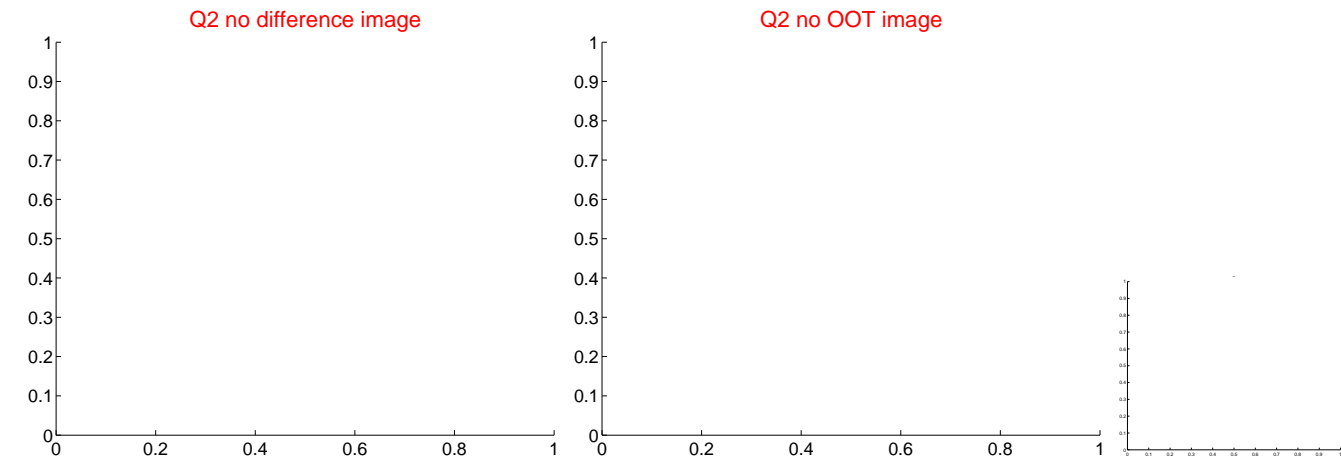
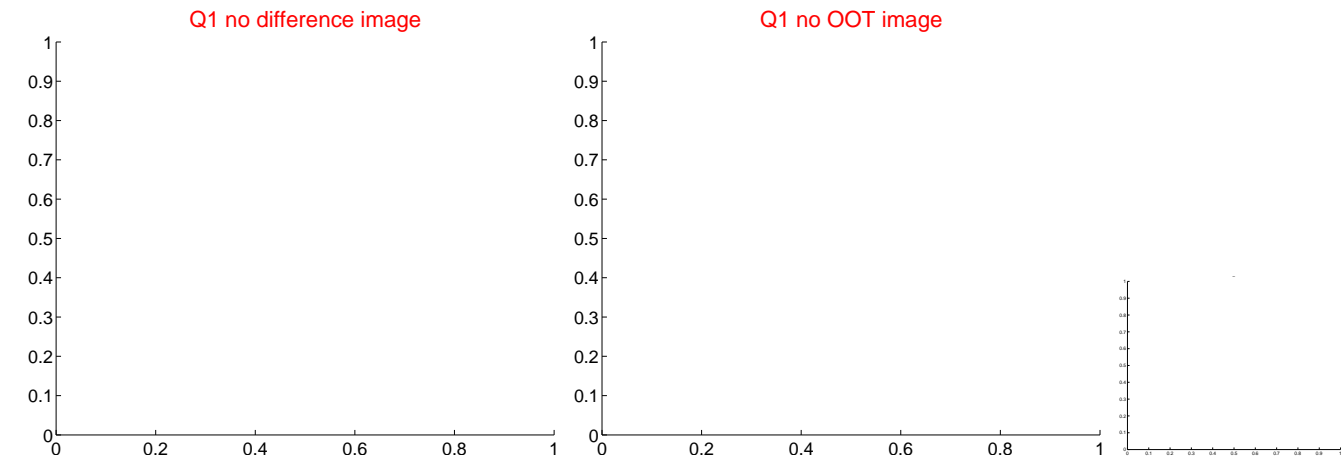


offset from photometric centroids



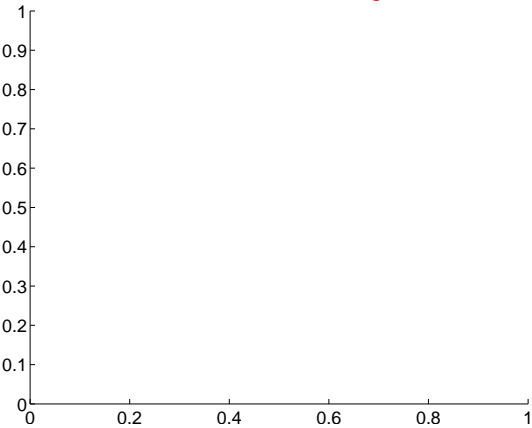
Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets**; **Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

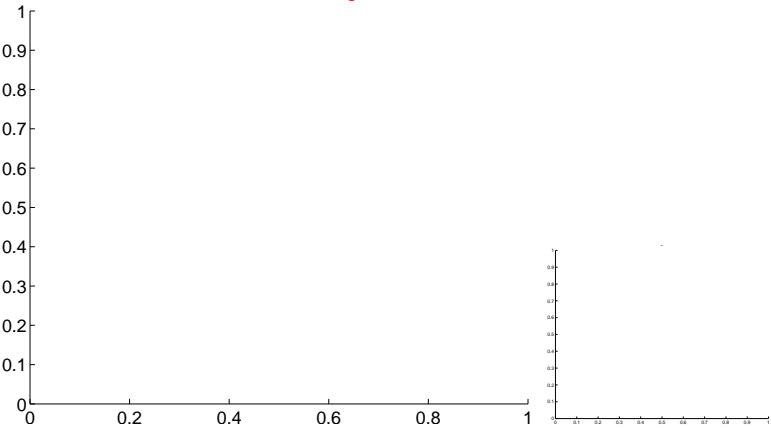


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.

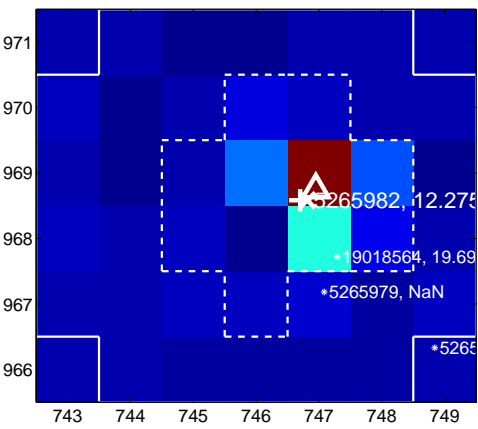
Q5 no difference image



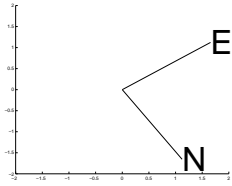
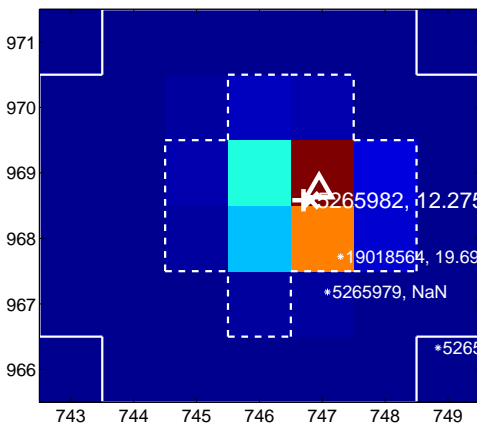
Q5 no OOT image



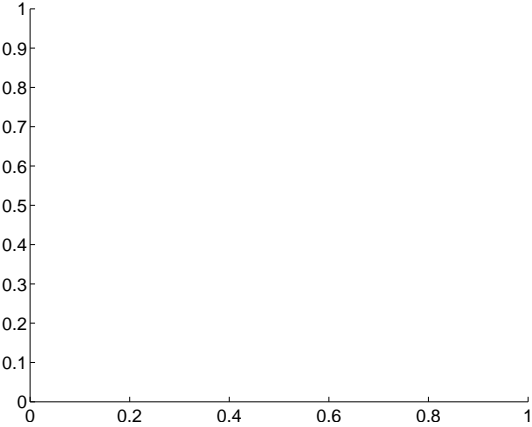
Q6 difference image



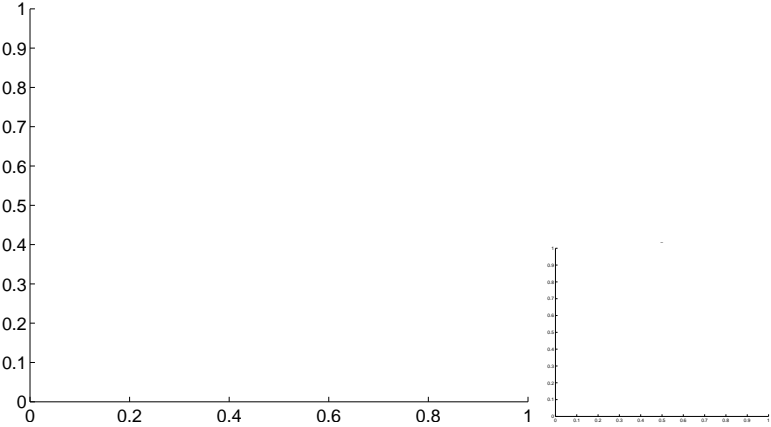
Q6 OOT image



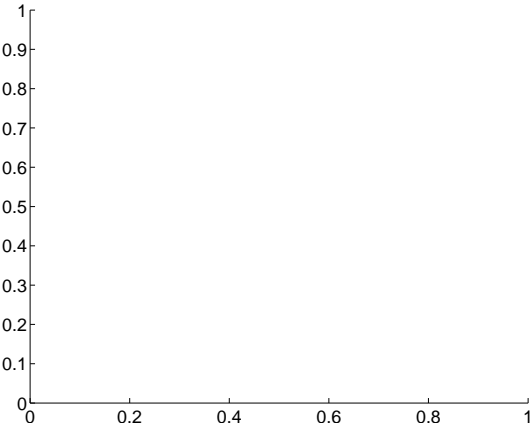
Q7 no difference image



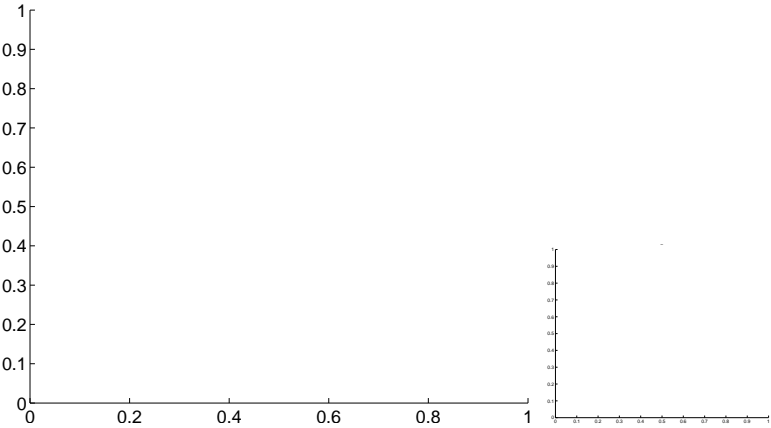
Q7 no OOT image



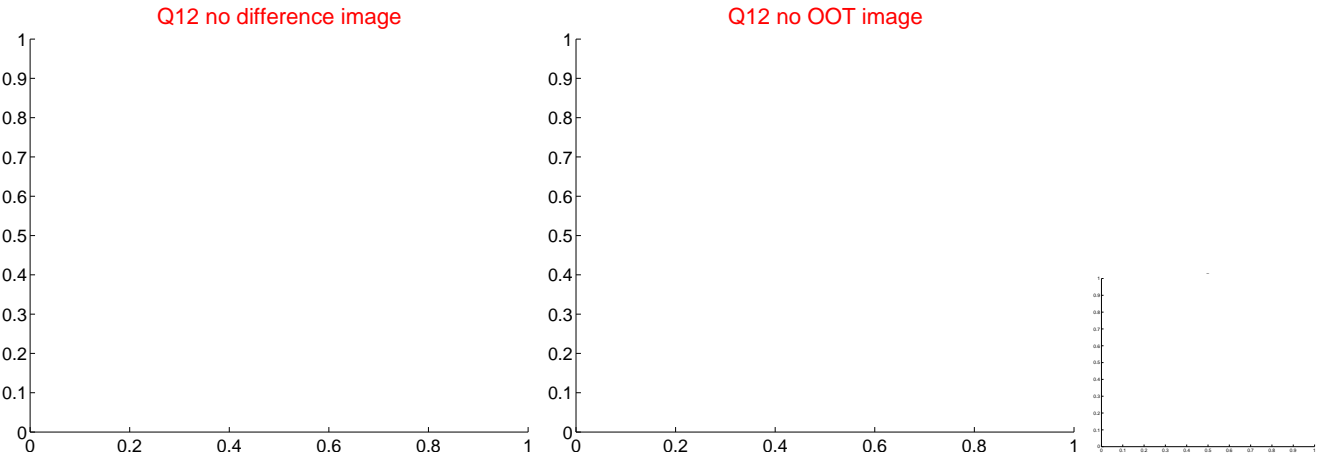
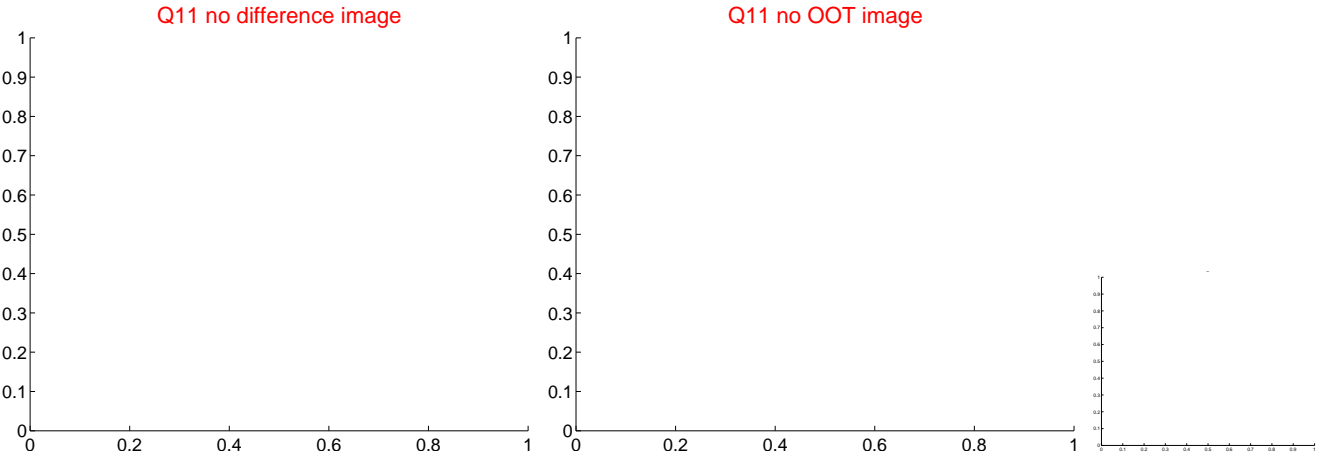
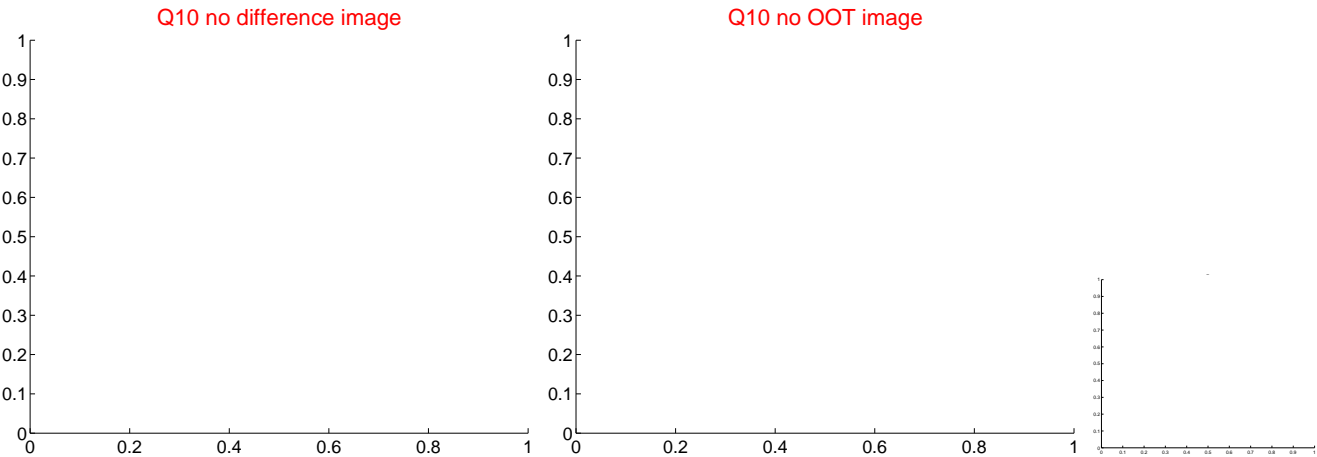
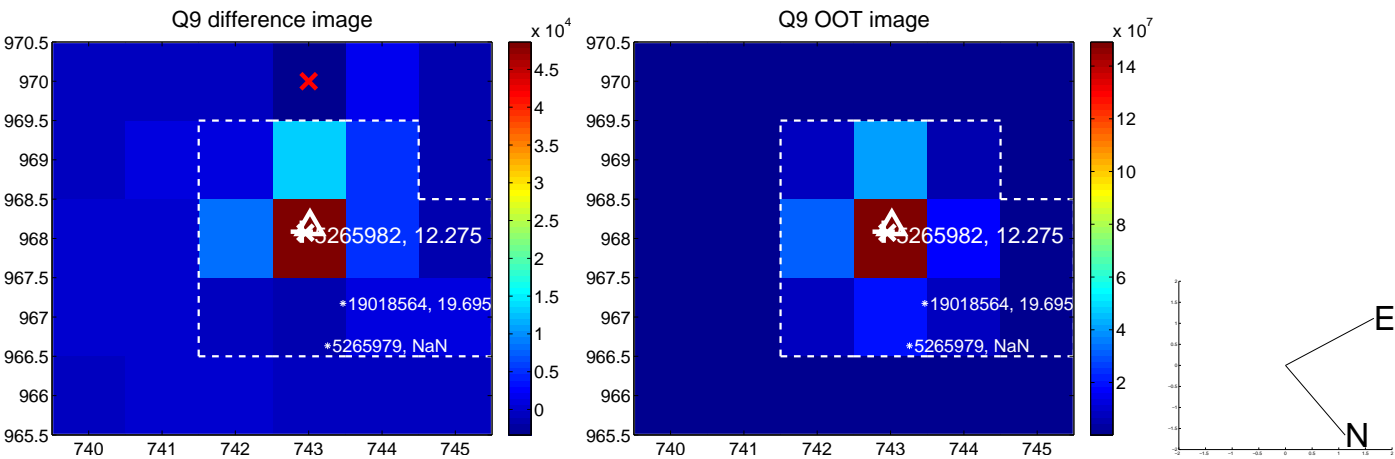
Q8 no difference image



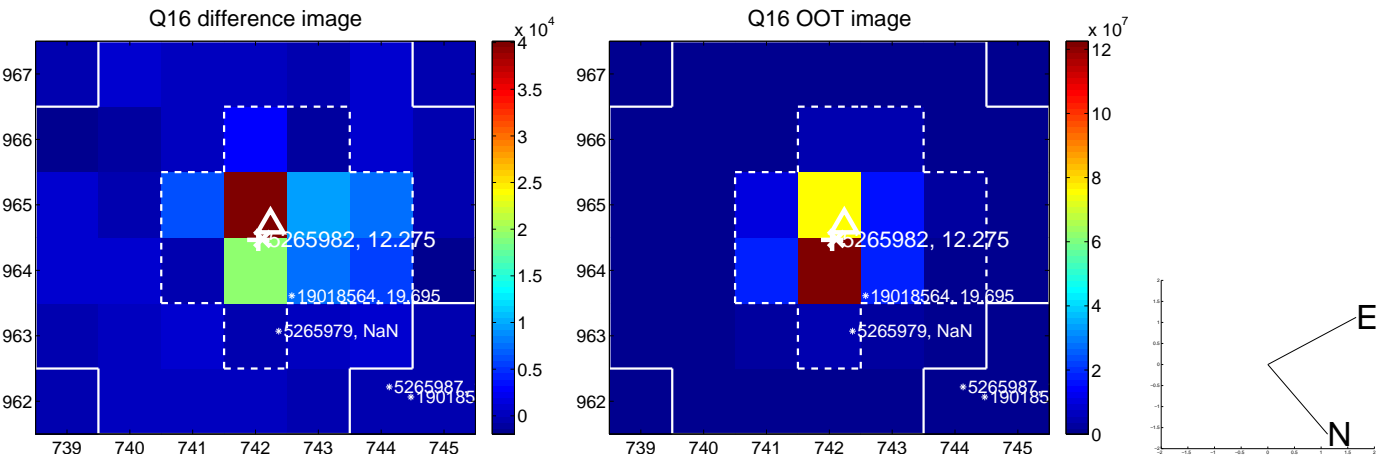
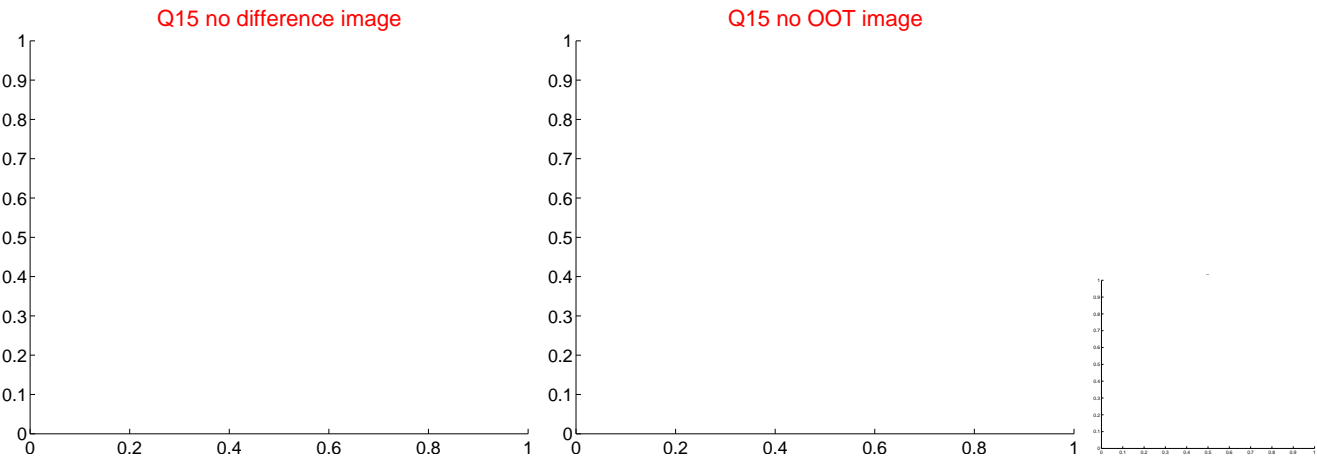
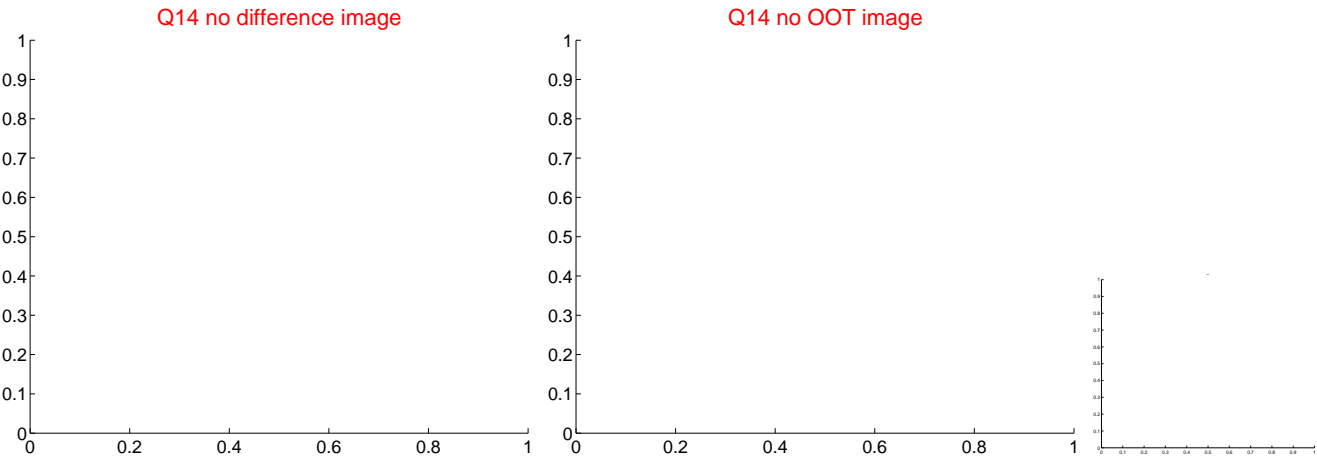
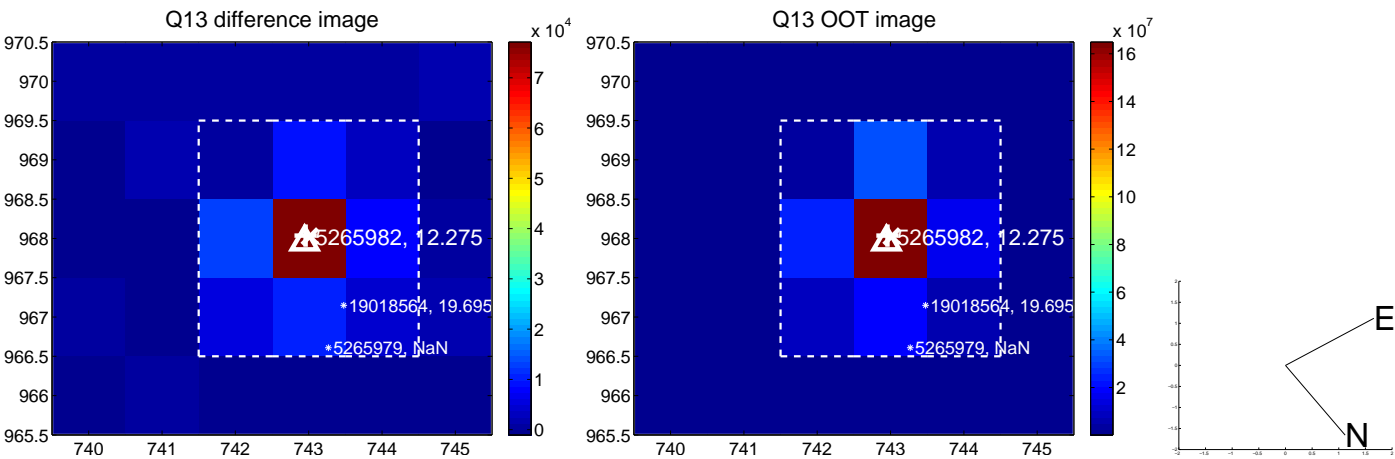
Q8 no OOT image



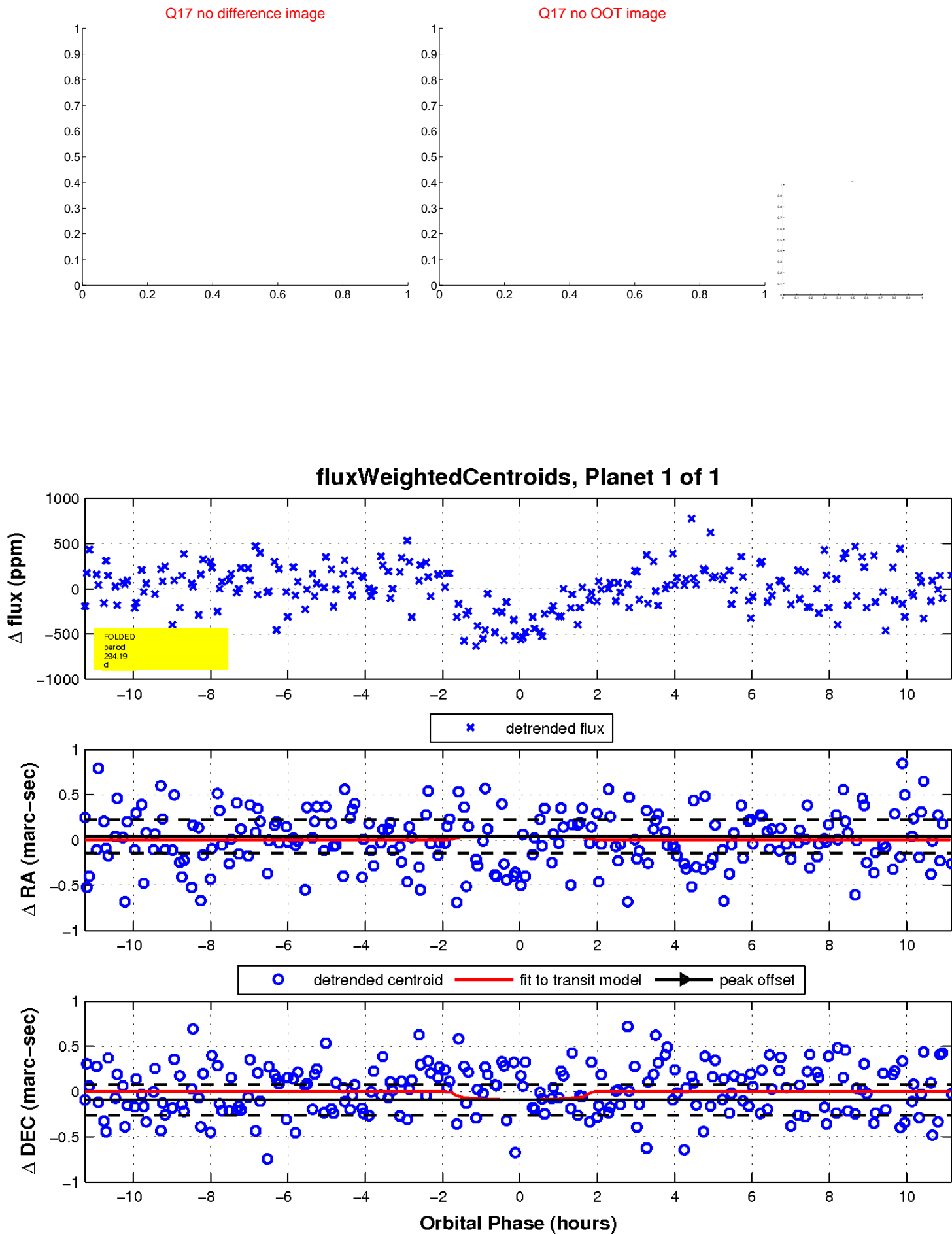
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

