

KIC 010232091

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})
010232091-01	OBS	No	0.675753	131.705005	2.4	6.166	8.1	2.6	3.02	8394	0.48	113564.88

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010232091-01	OBS	FP	0.00	1	0	0	0	LPP_DV

Notes: OBS = Observed. INJ = Injected. INV = Inverted. SCR = Scrambled.

N = Not Transit-Like. S = Stellar Eclipse. C = Centroid Offset. E = Ephemeris Match.

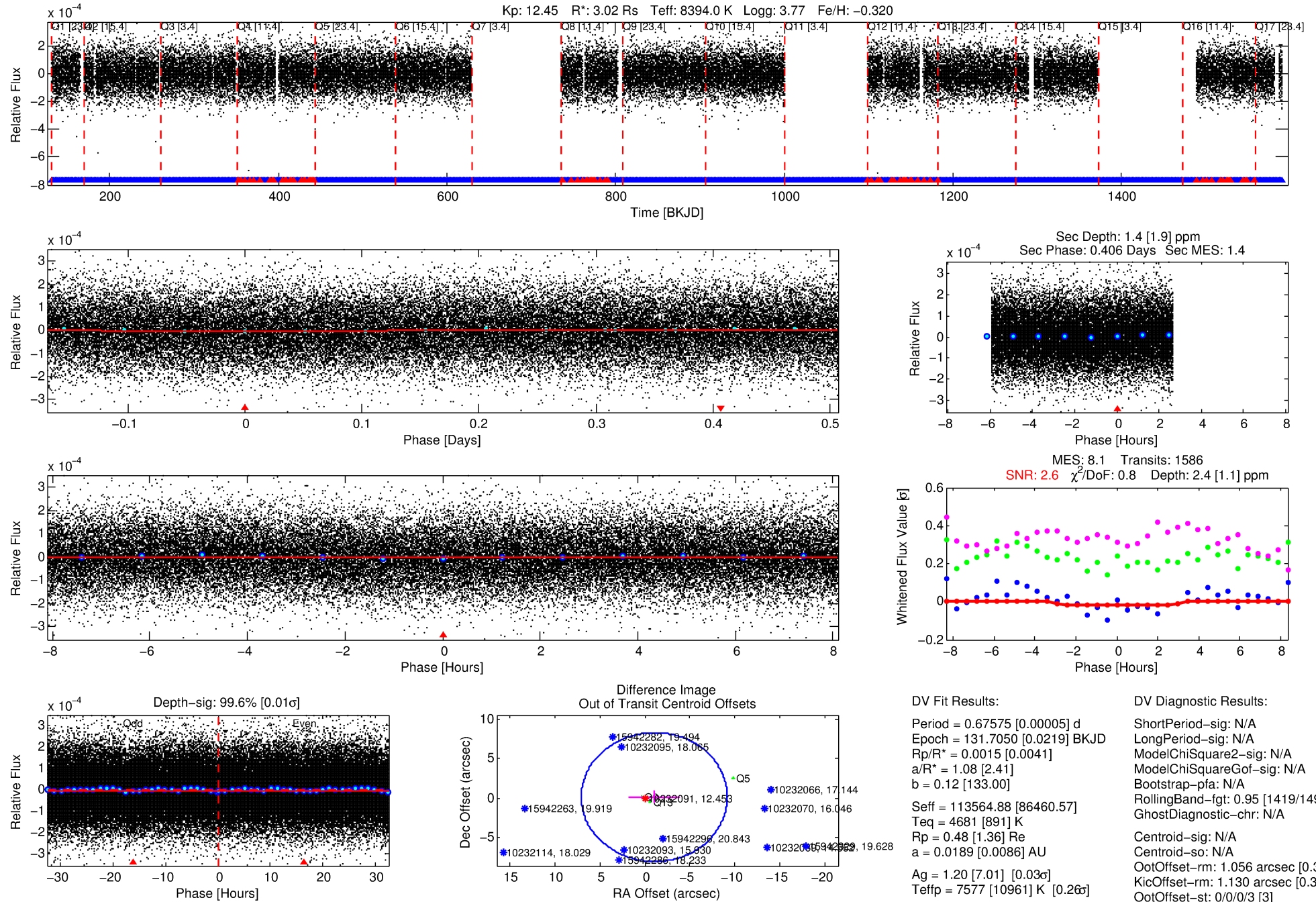
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 010232091-01

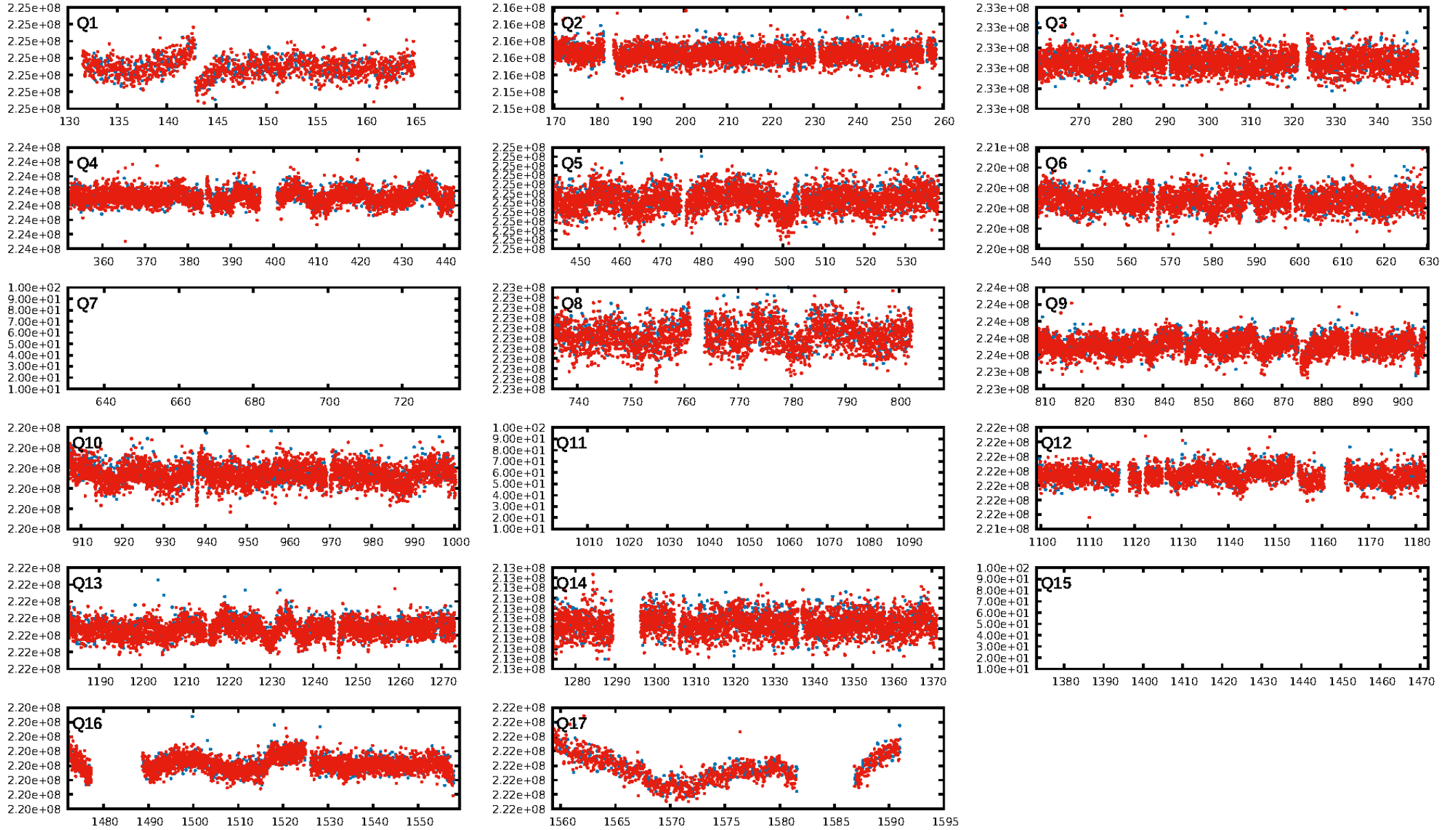
No Significant Match Found

DV One-Page Summary

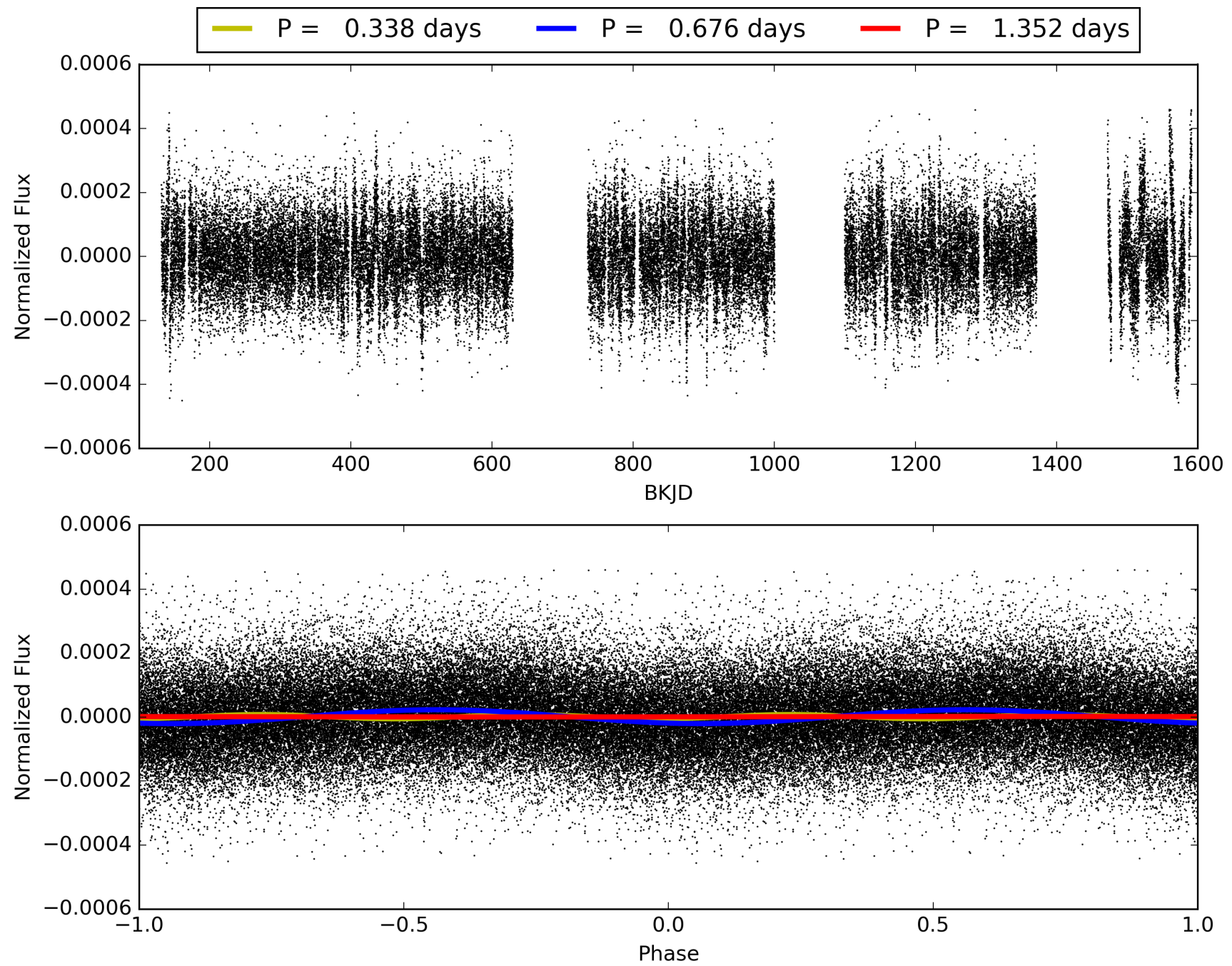
KIC: 10232091 Candidate: 1 of 1 Period: 0.676 d



TCE 010232091-01, PDC Light Curves

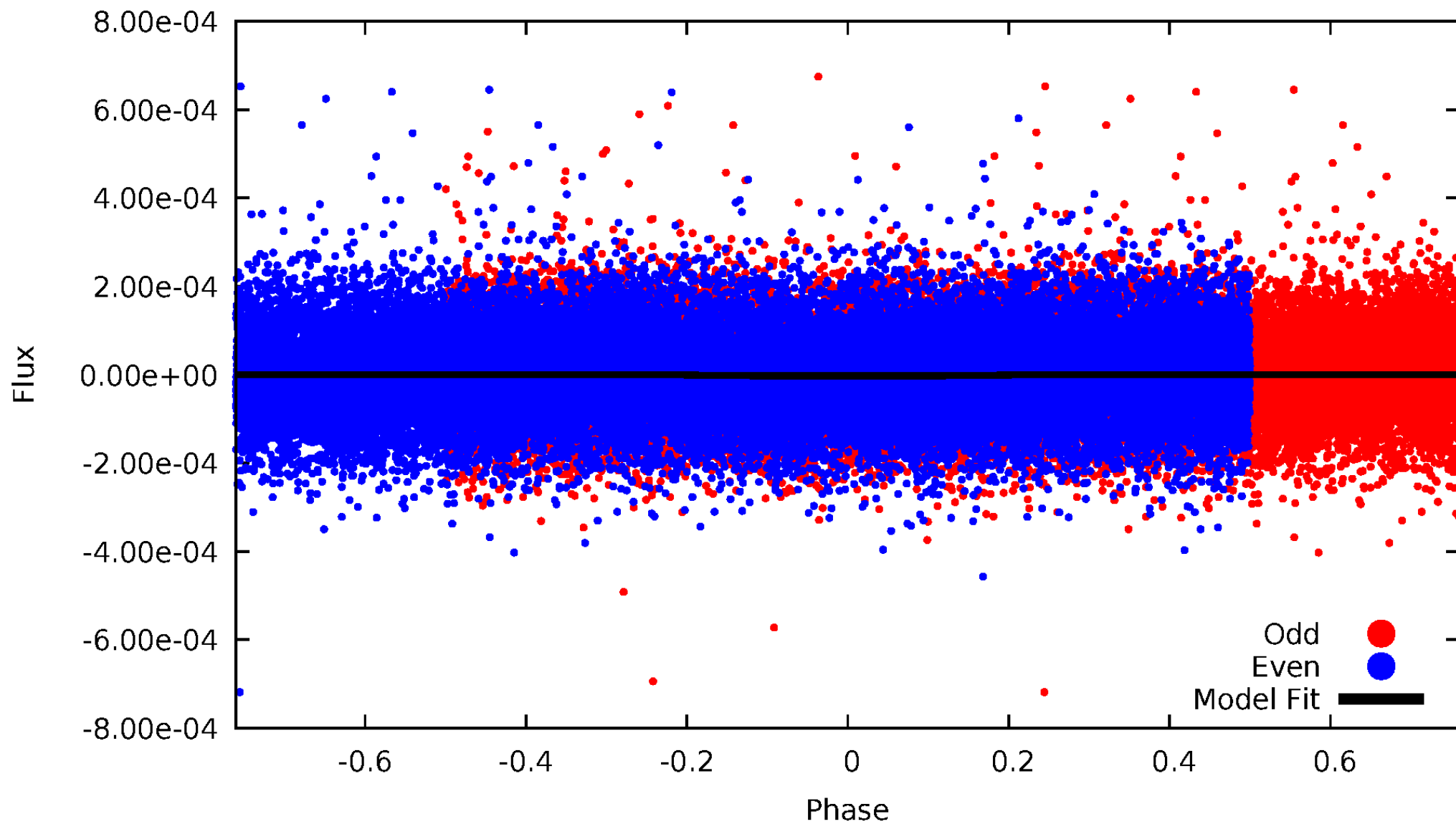


TCE 010232091-01



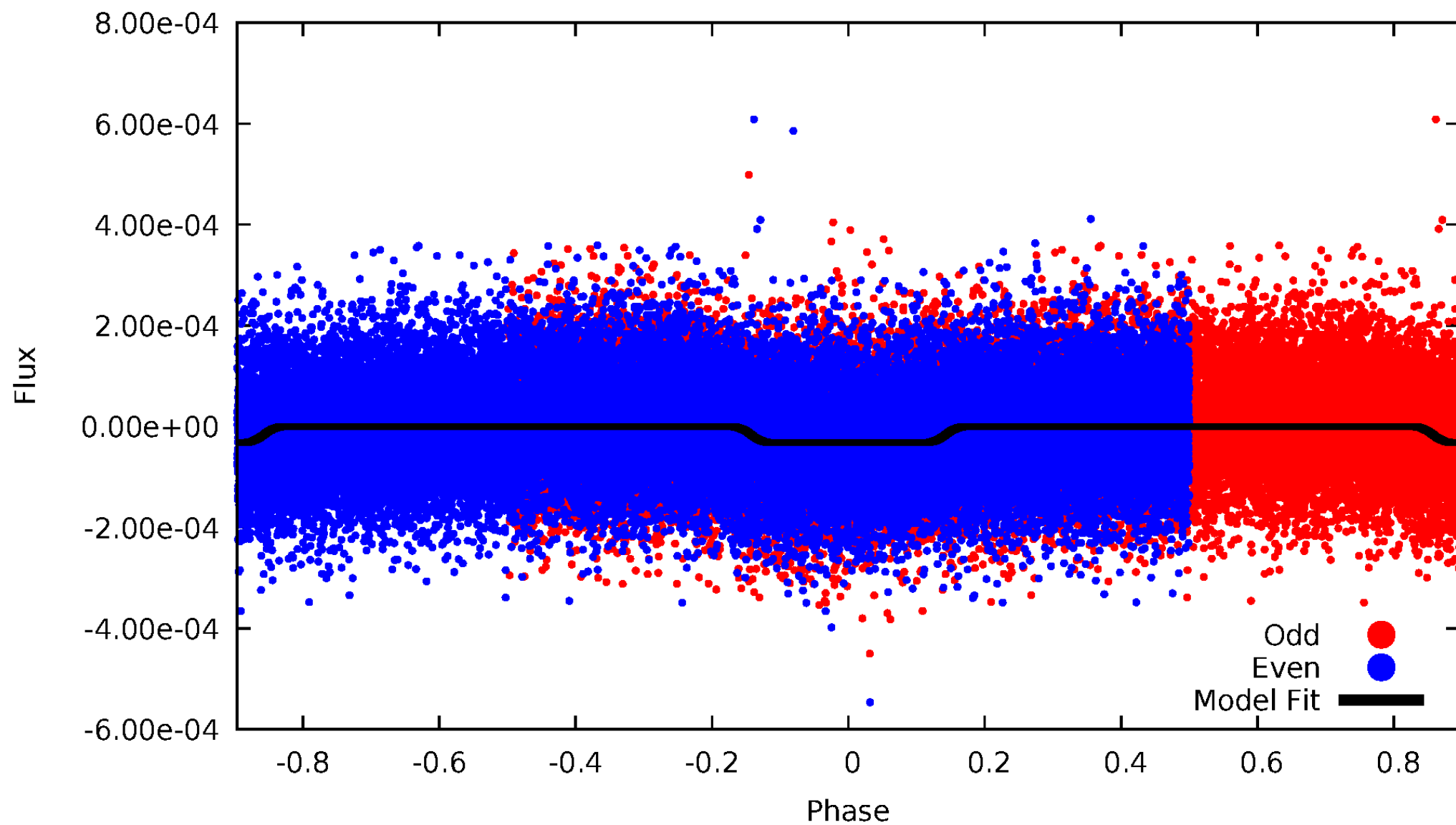
DV Odd/Even

TCE 010232091-01



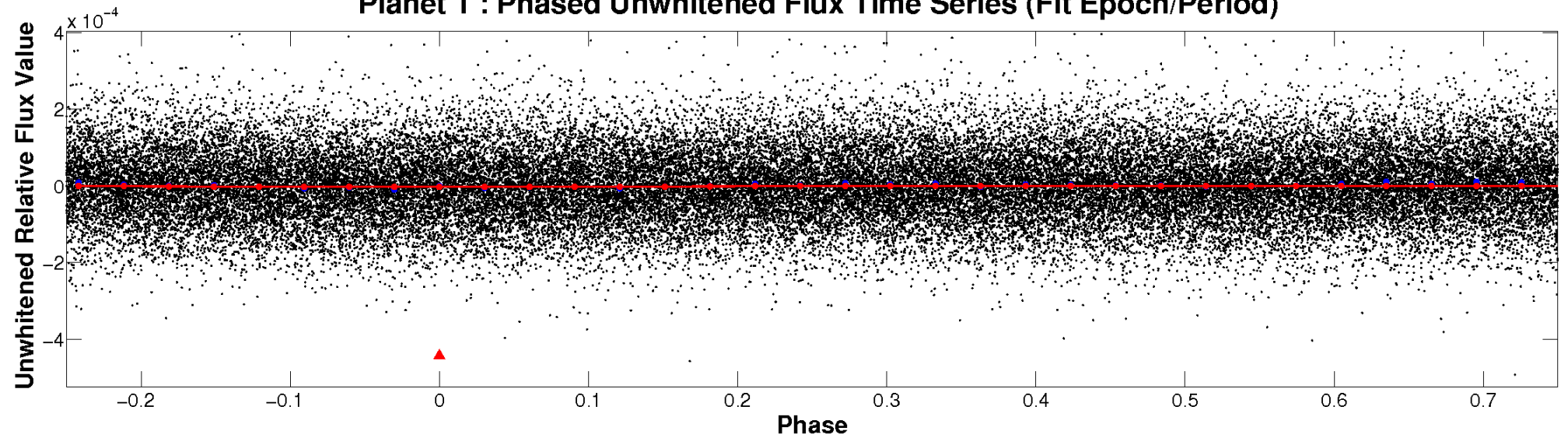
ALT Odd/Even

TCE 010232091-01

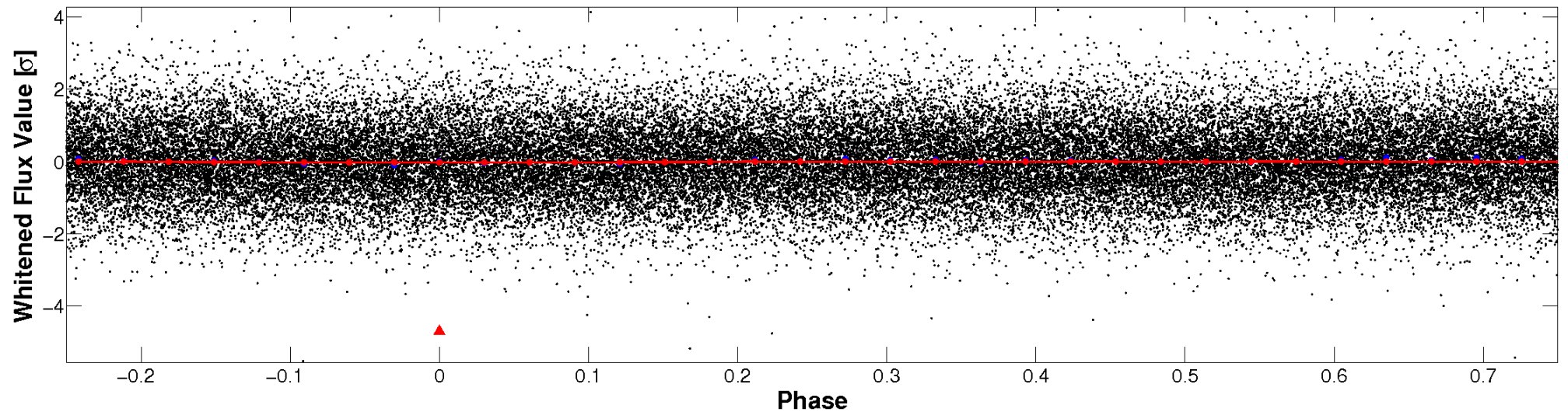


Non-Whitened Vs. Whitened Light Curve

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

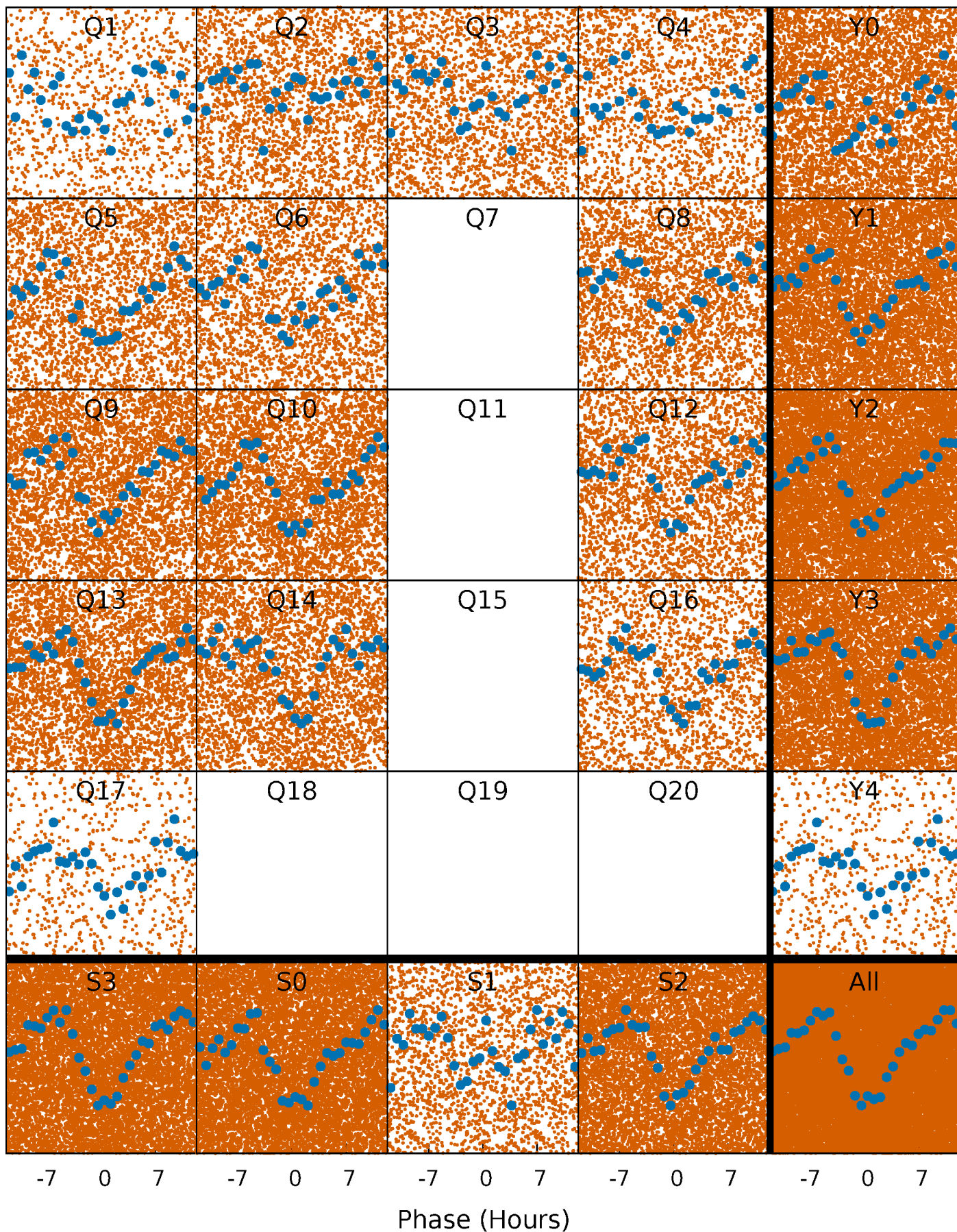


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



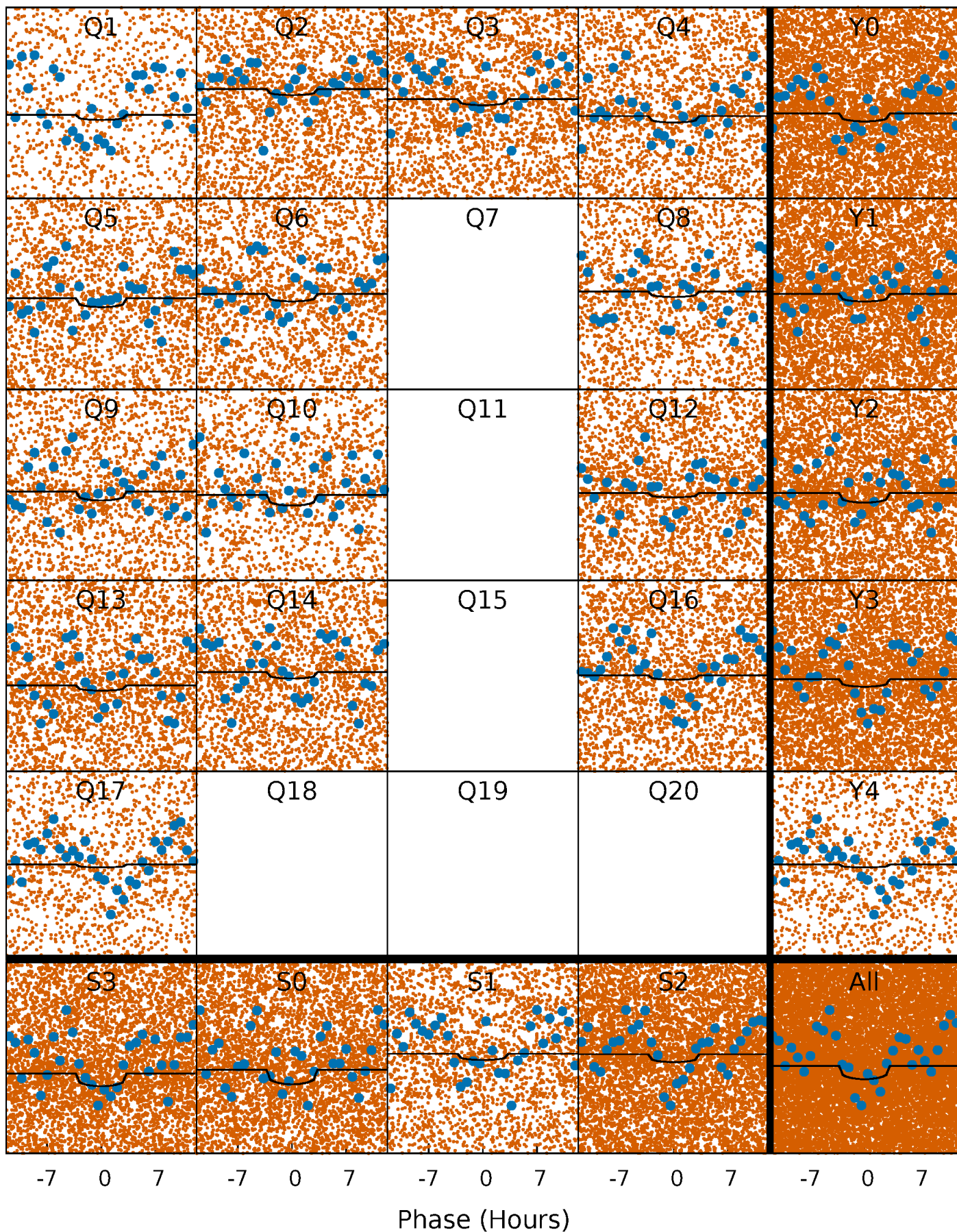
PDC Quarter-Phased Transit Curves

TCE 010232091-01 P= 0.675753 Days $T_0=131.705005$ (BKJD)



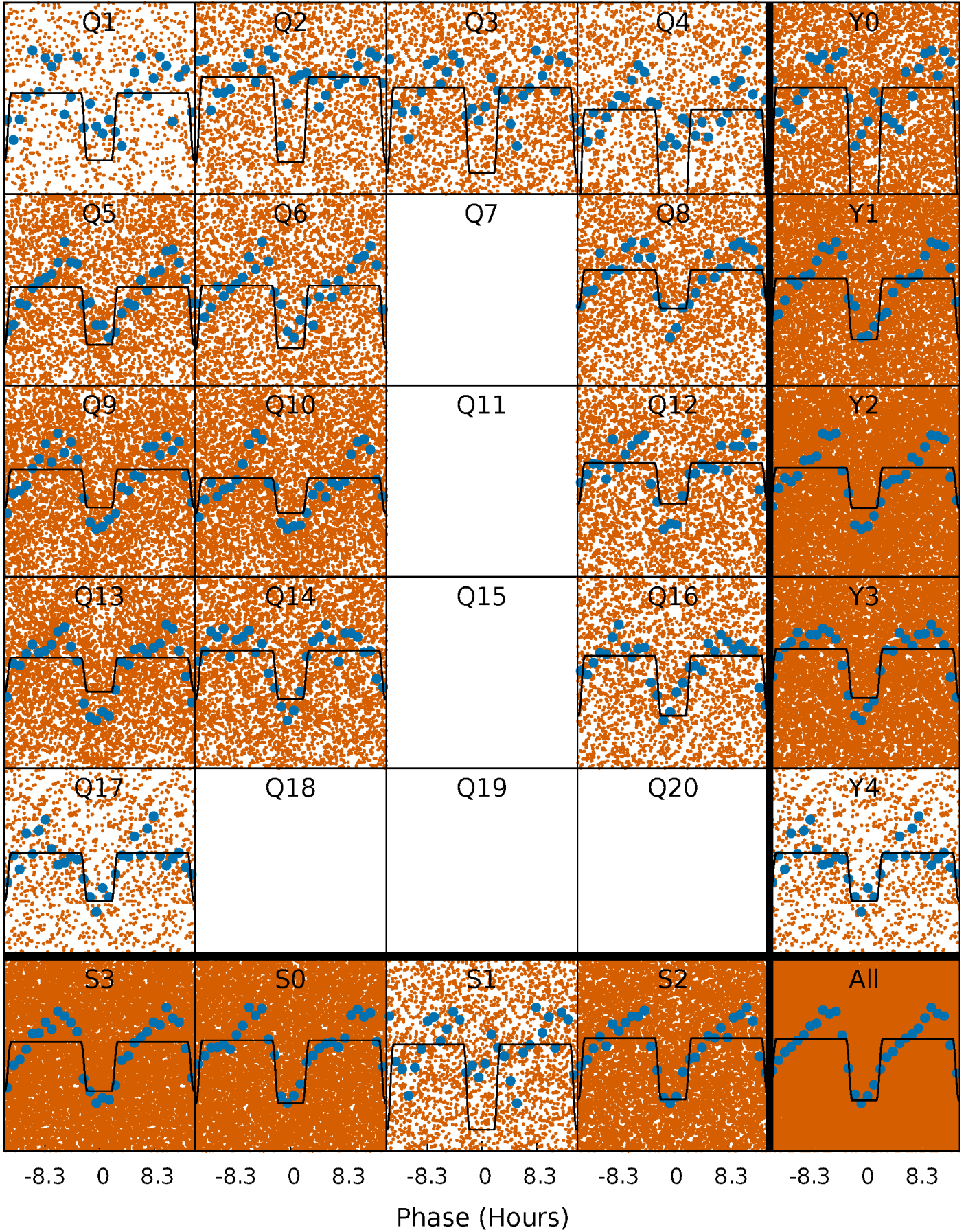
DV Quarter-Phased Transit Curves

TCE 010232091-01 P= 0.675753 Days $T_0=131.705005$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

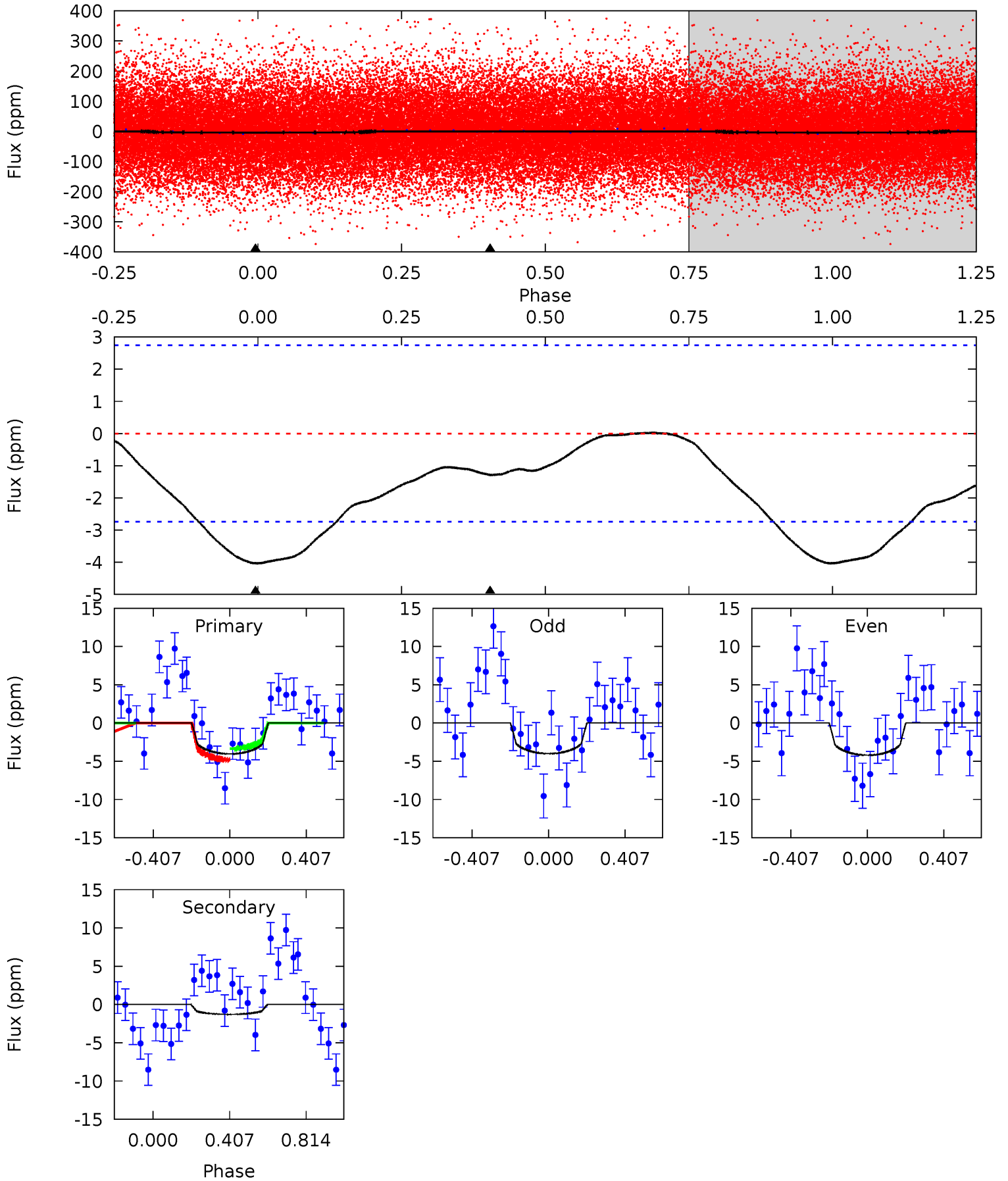
TCE 010232091-01 P= 0.675835 Days $T_0=131.615202$ (BKJD)



DV Model-Shift Uniqueness Test

010232091-01, P = 0.675753 Days, E = 131.029252 Days

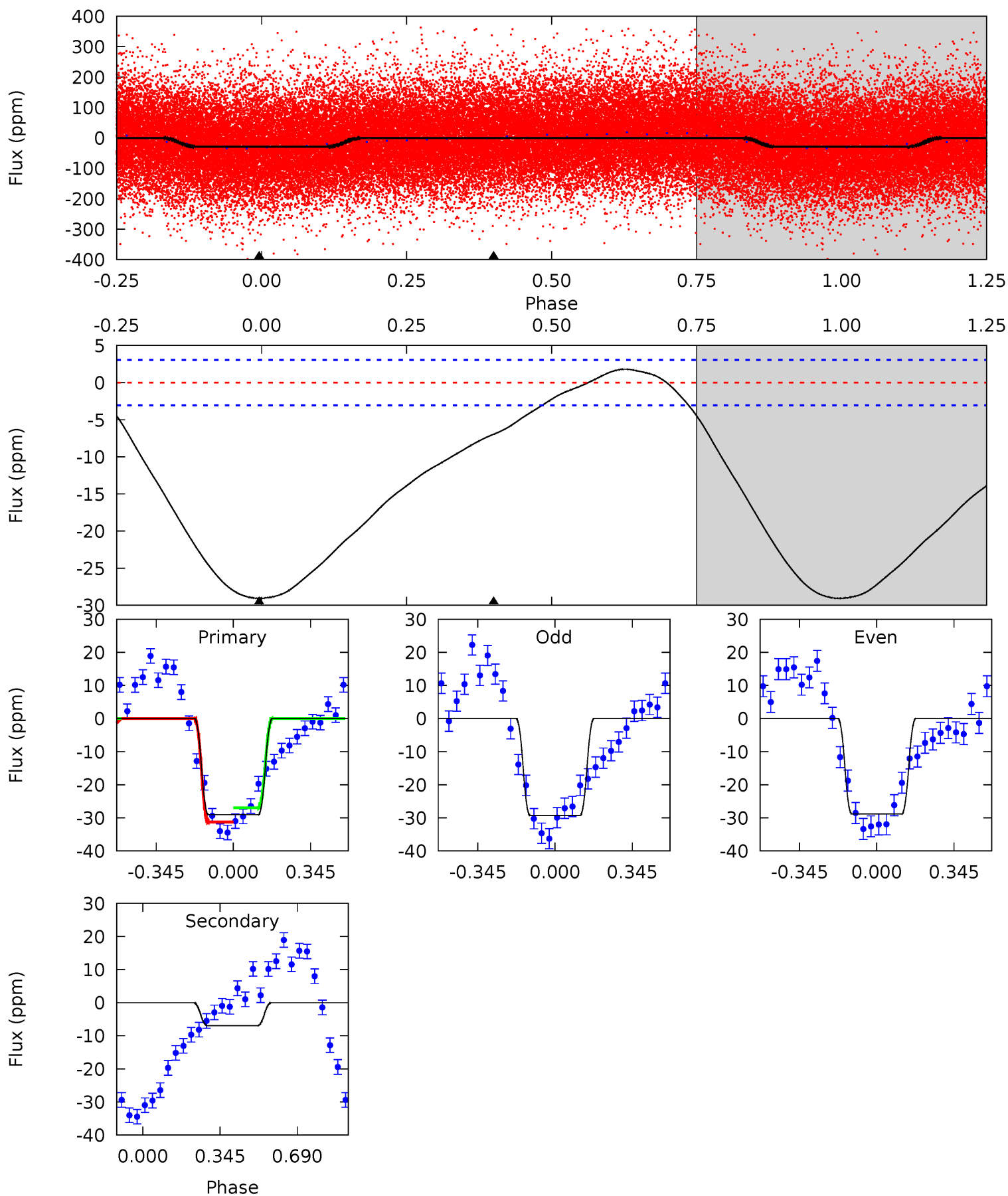
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.27	2.00	0	0	4.26	0.83	0.11	6.27	6.27	2.00	2.00	0.16	0.79	0.01	1.15



Alt Model-Shift Uniqueness Test

010232091-01, P = 0.675835 Days, E = 130.939367 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
40.9	9.79	0	0	4.30	0.94	2.52	40.9	40.9	9.79	9.79	0.29	1.01	0.06	3.05



Stellar Parameters For KIC 010232091

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	8394^{+207}_{-356}	$3.772^{+0.441}_{-0.074}$	$-0.320^{+0.150}_{-0.350}$	$3.015^{+0.459}_{-1.376}$	$1.963^{+0.326}_{-0.448}$	$0.101^{+0.394}_{-0.024}$
	+2%/-4%	+12%/-2%	+47%/-109%	+15%/-46%	+17%/-23%	+390%/-24%
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 010232091-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-1 ± 1	$0.92^{+1.09}_{-0.63}$	6234^{+490}_{-737}	-3270^{+11999}_{-1600}	$0.267^{+2.865}_{-0.218}$
Alt.	-7 ± 1	$1.70^{+1.29}_{-0.98}$	6239^{+459}_{-674}	4276^{+4013}_{-8641}	$0.439^{+2.333}_{-0.282}$

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 $A_{obs} \gg 1.0$

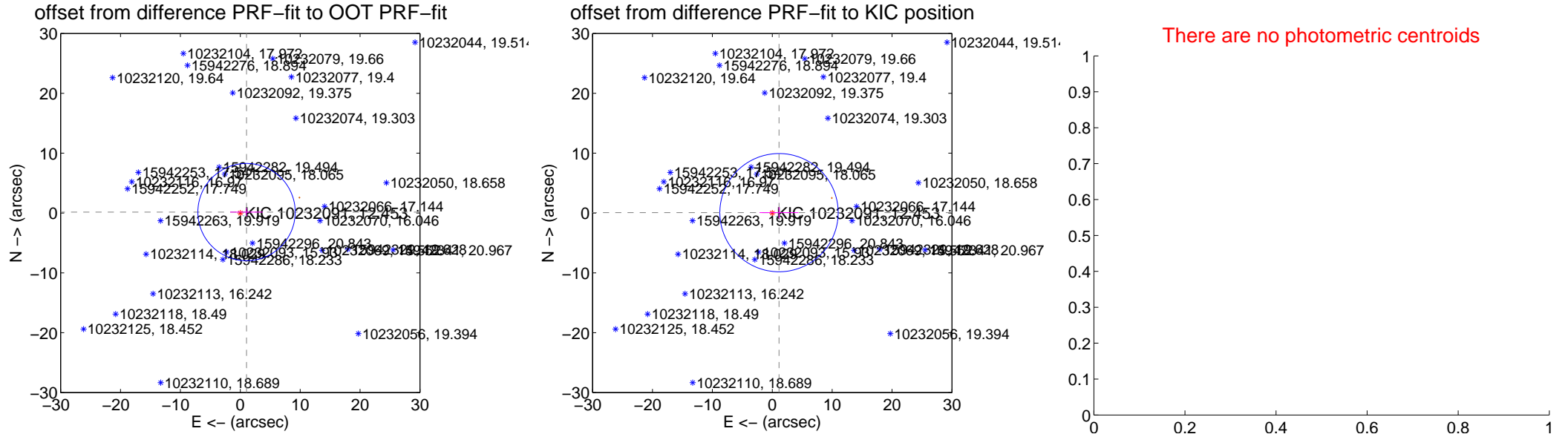
DV Centroid Data

Supplemental centroid analysis for 010232091-01. Kepler magnitude: 12.45. Transit SNR 2.63

There are 2 quarters with good PRF difference image offsets

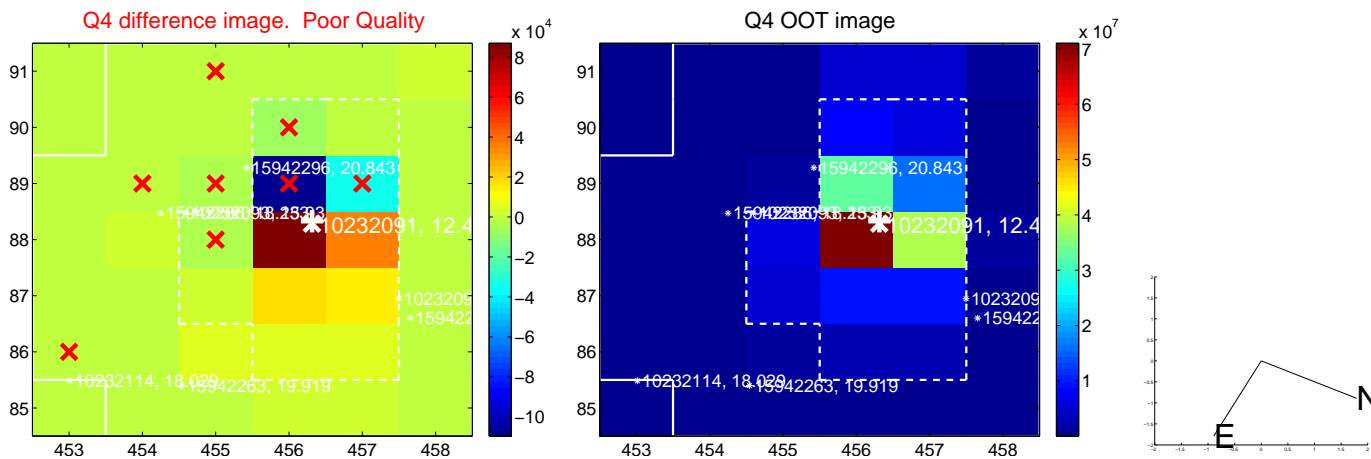
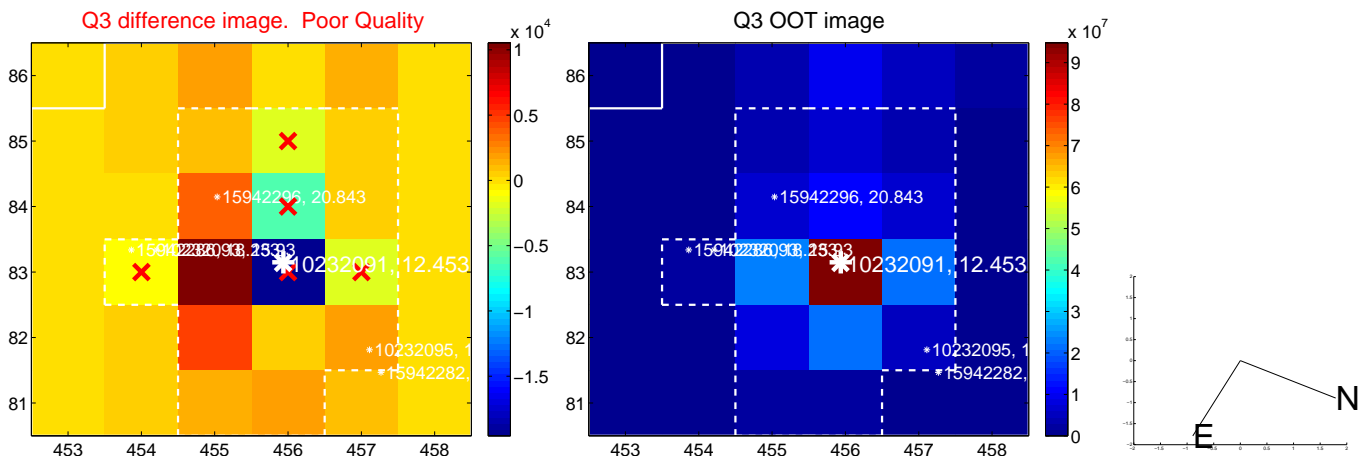
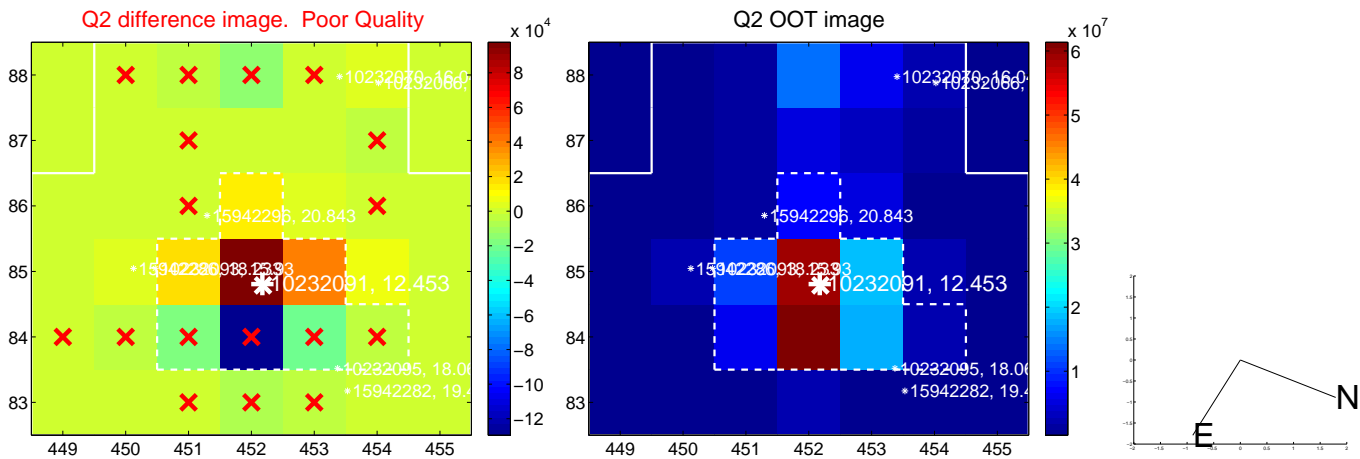
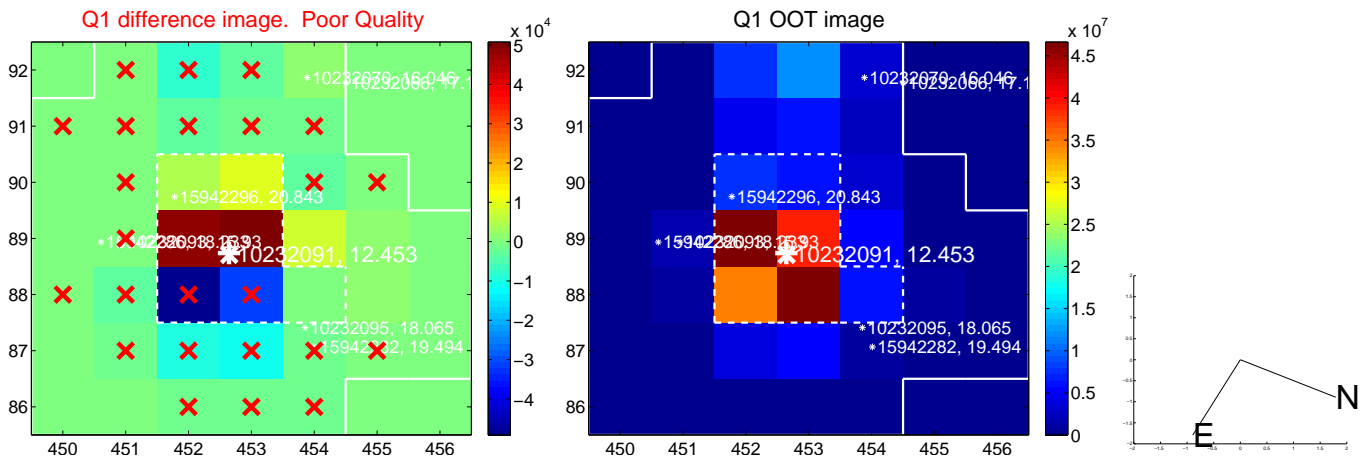
The direct PRF centroid is offset from the target star catalog position by about 0.13 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.056 ± 2.709	0.39	-1.045 ± 2.736	0.155 ± 0.689
PRF-fit source offset from KIC position	1.130 ± 3.292	0.34	-1.128 ± 3.250	0.059 ± 0.928
photometric centroid source offset	—	—	—	—

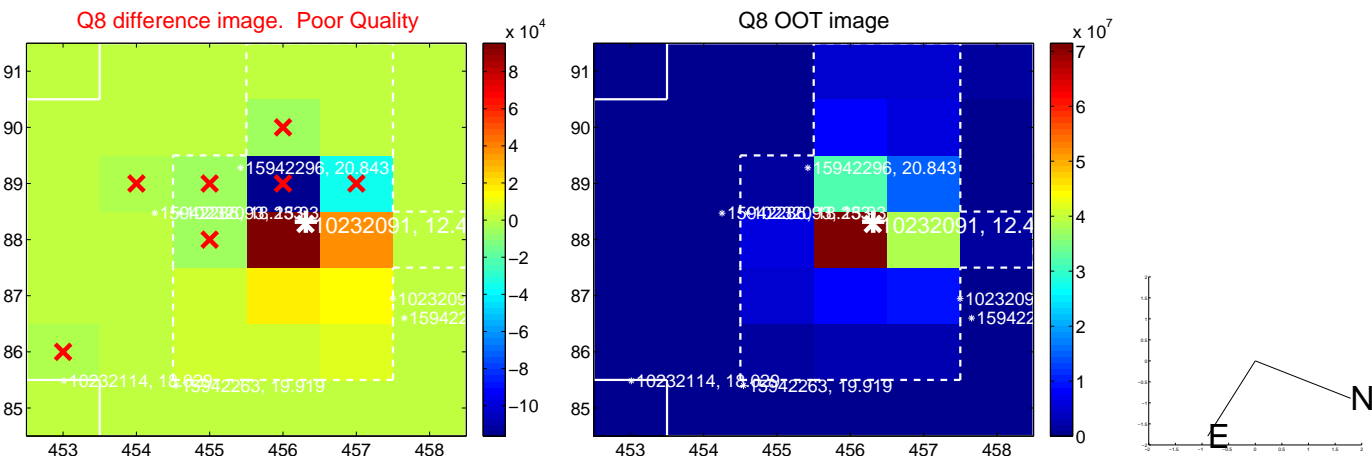
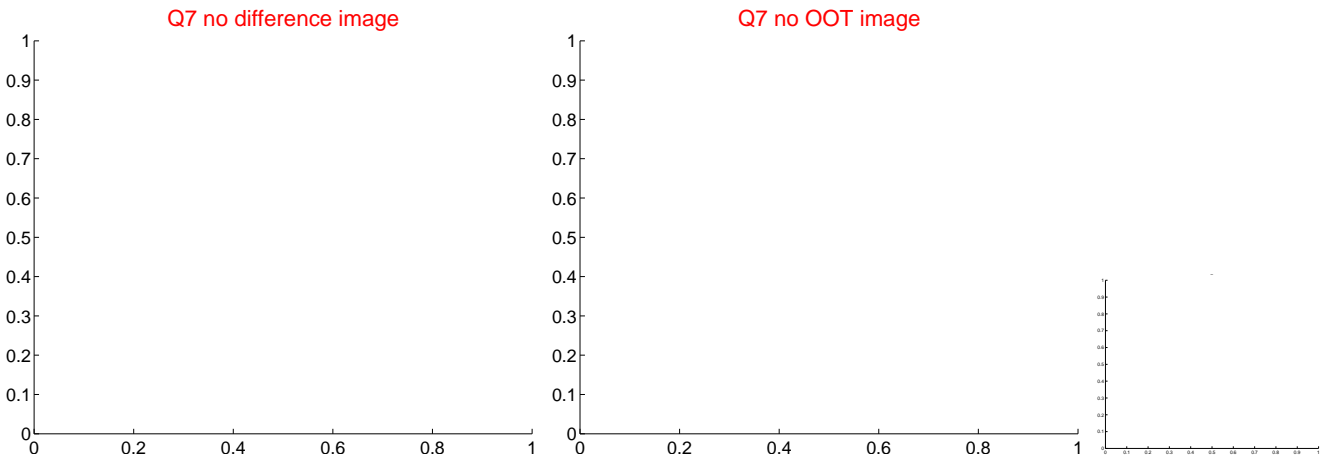
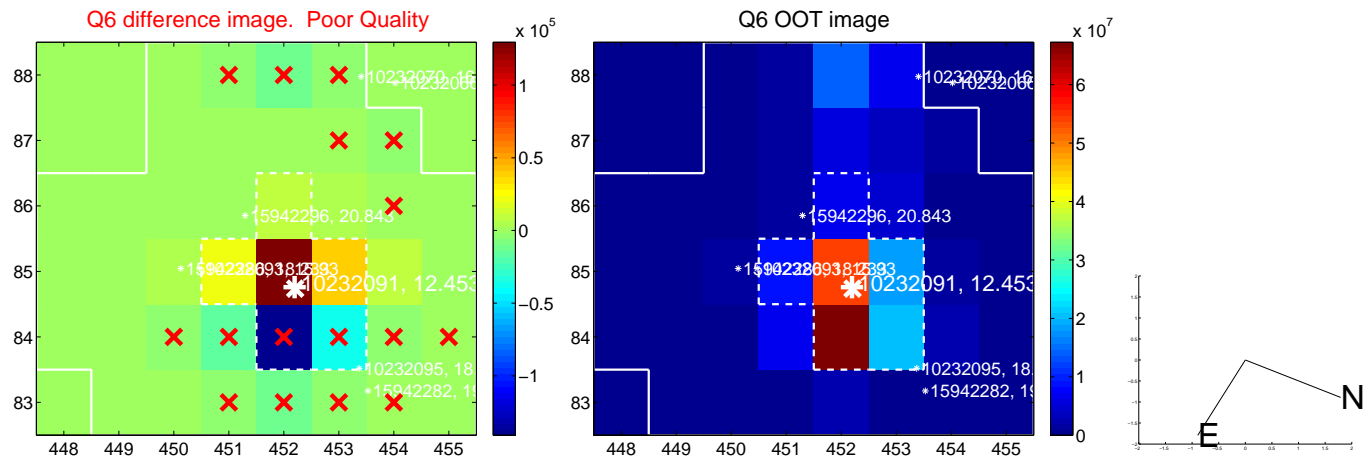
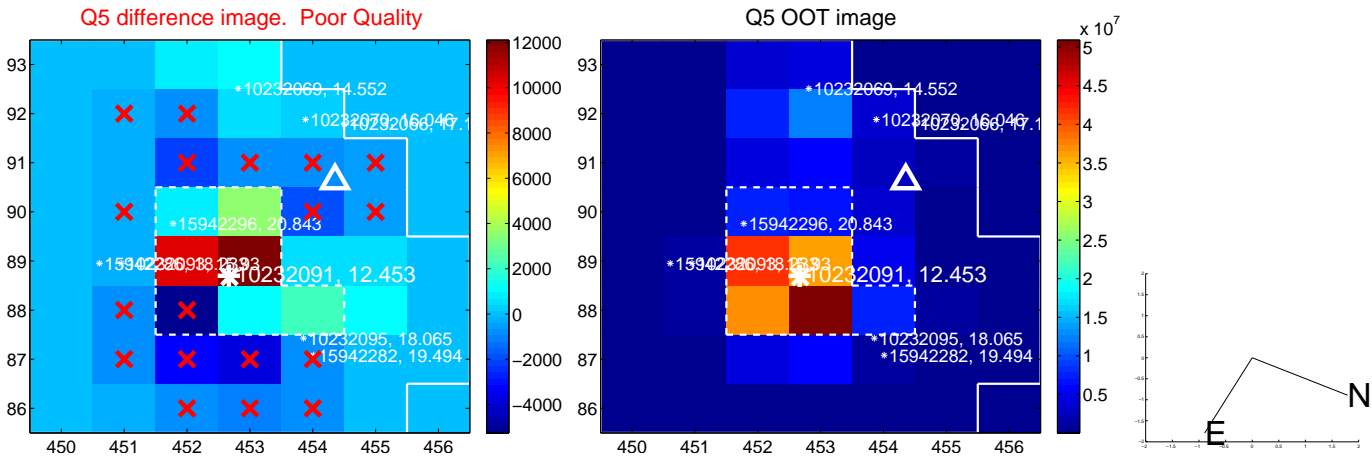


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

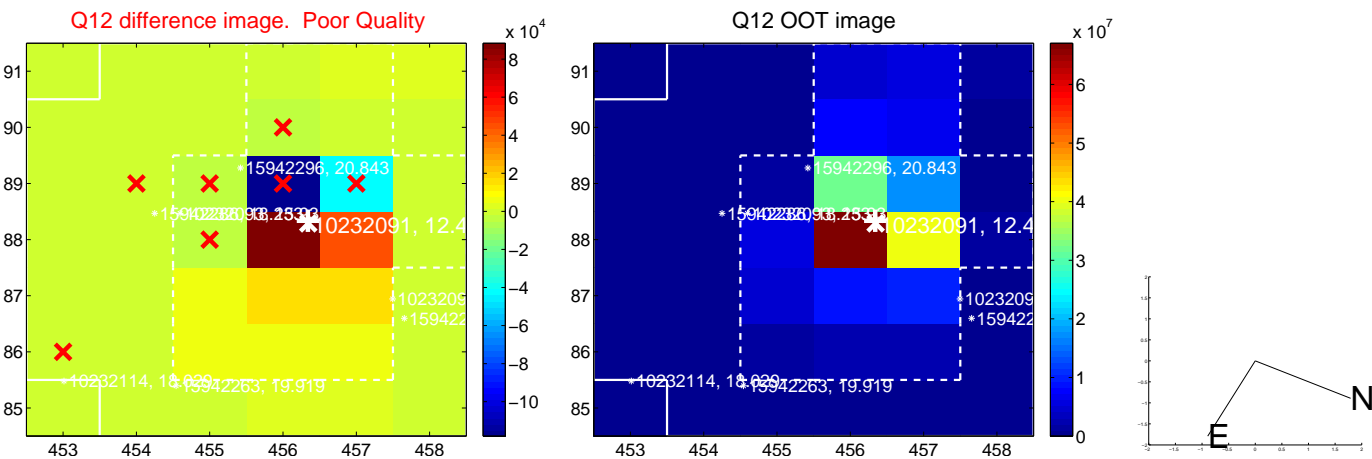
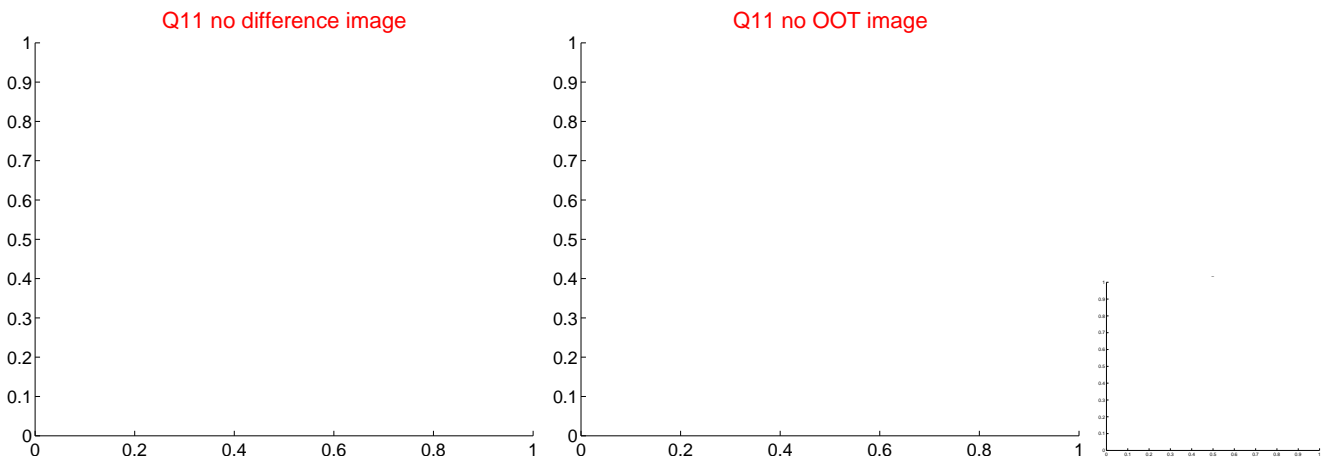
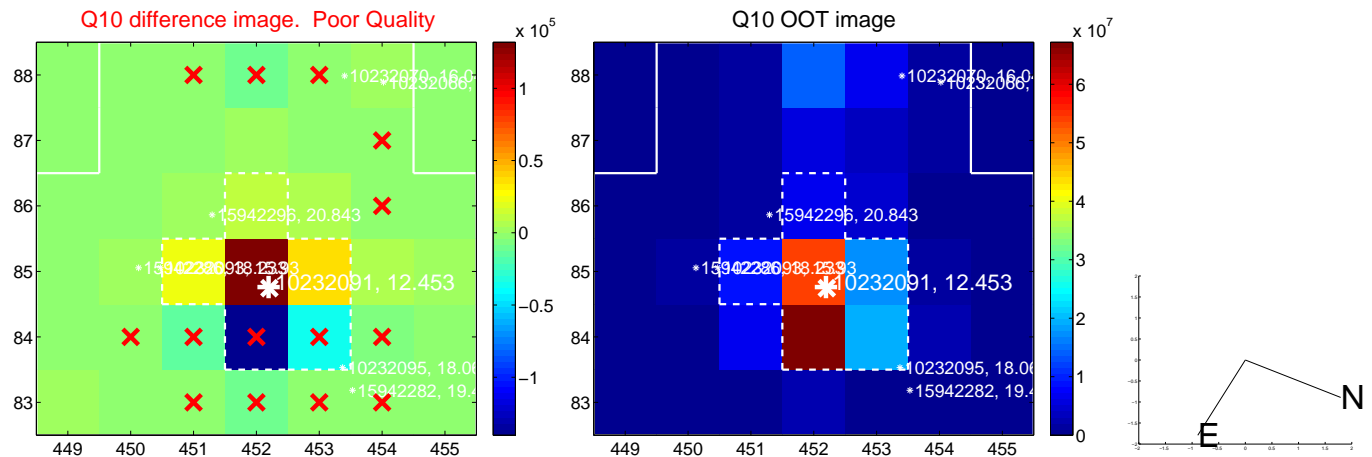
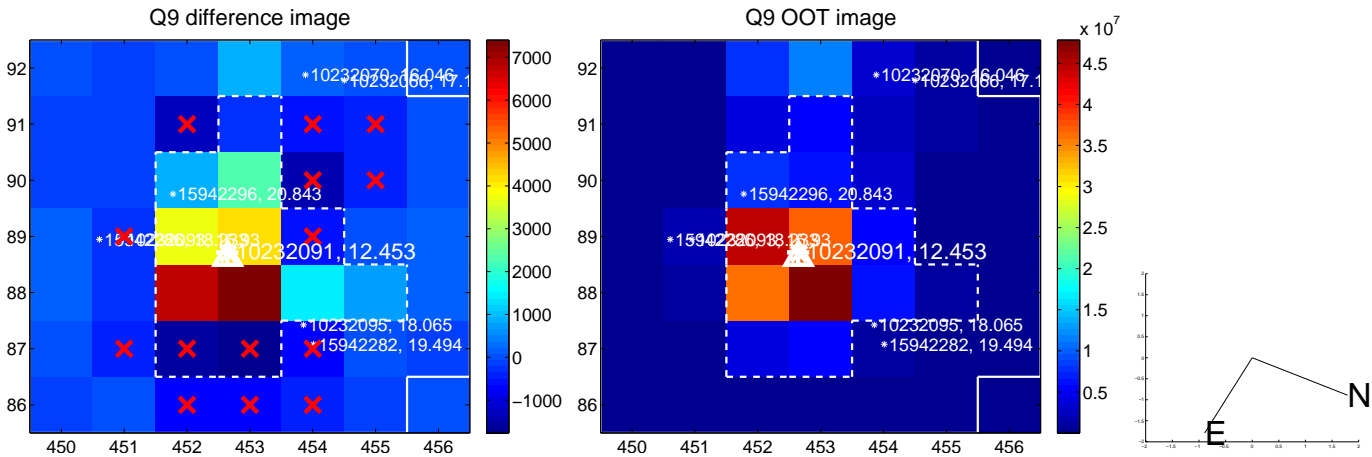
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



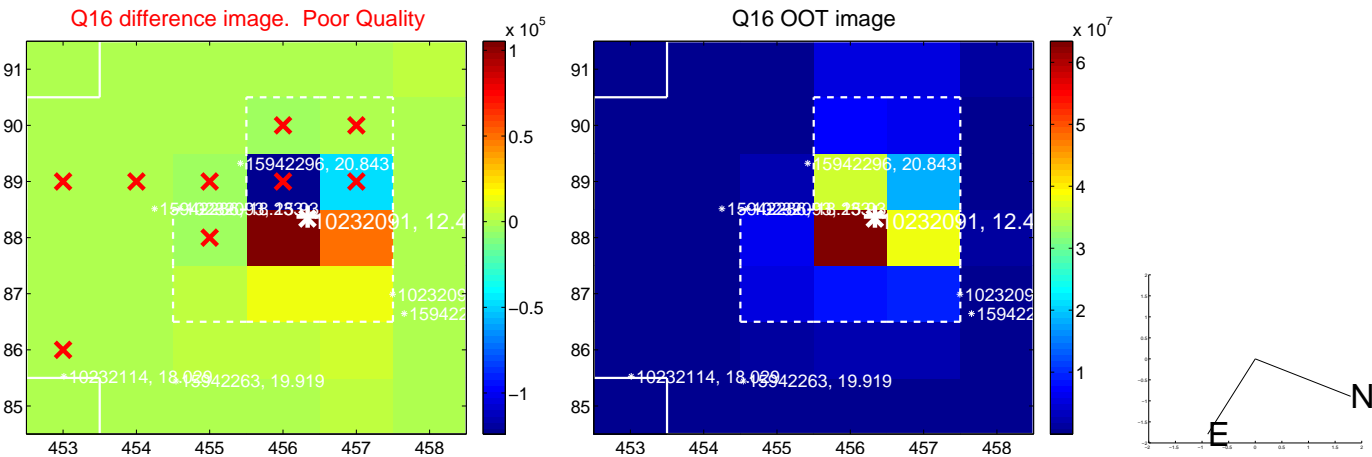
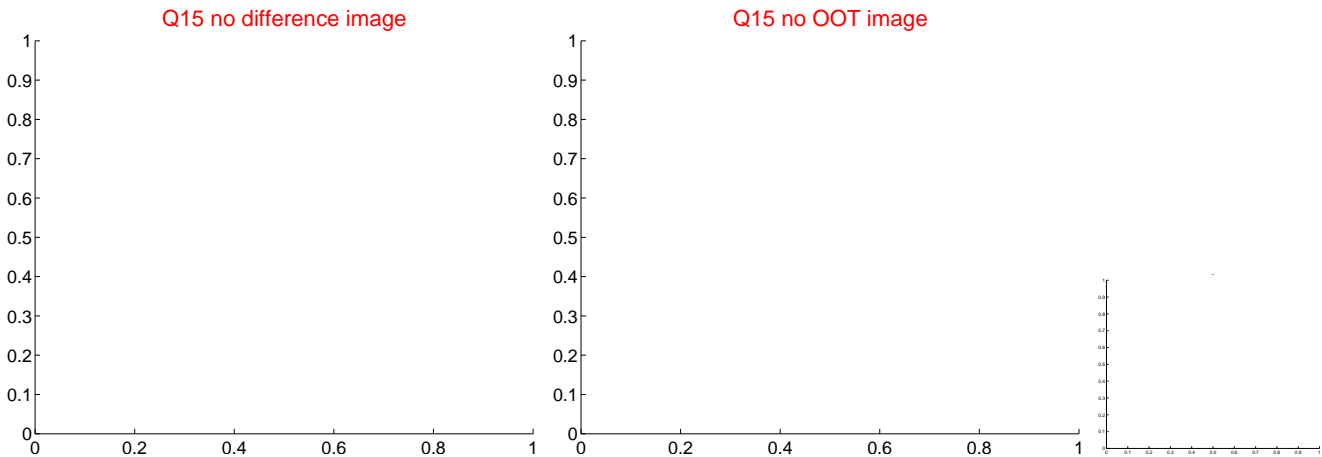
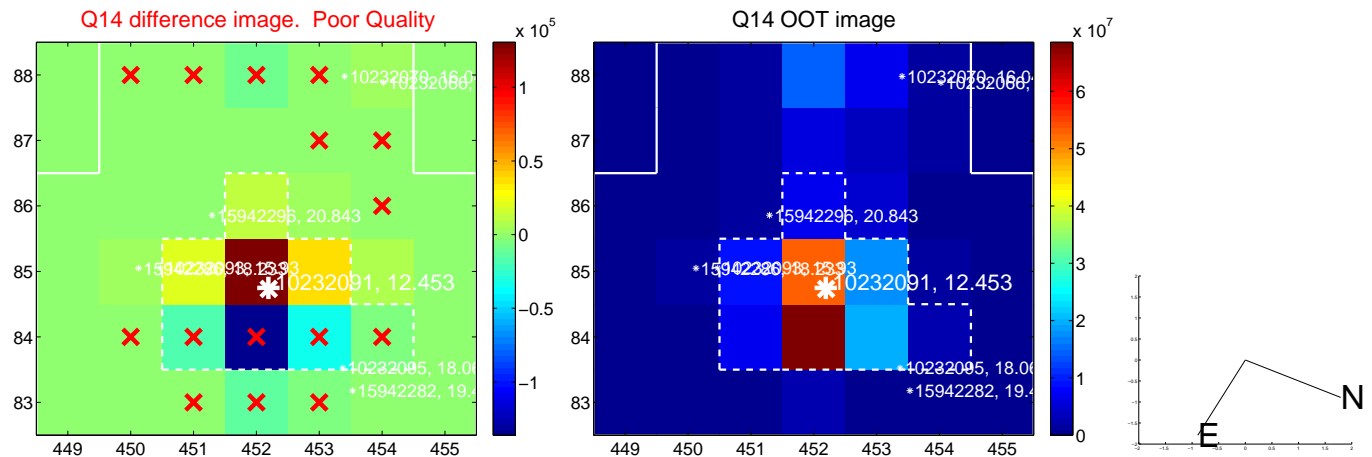
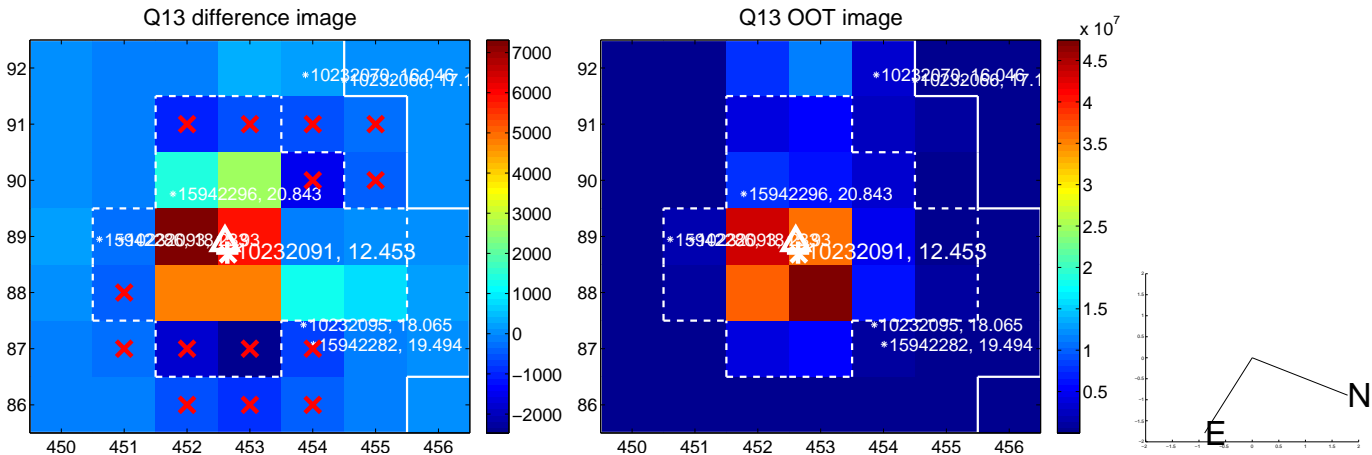
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



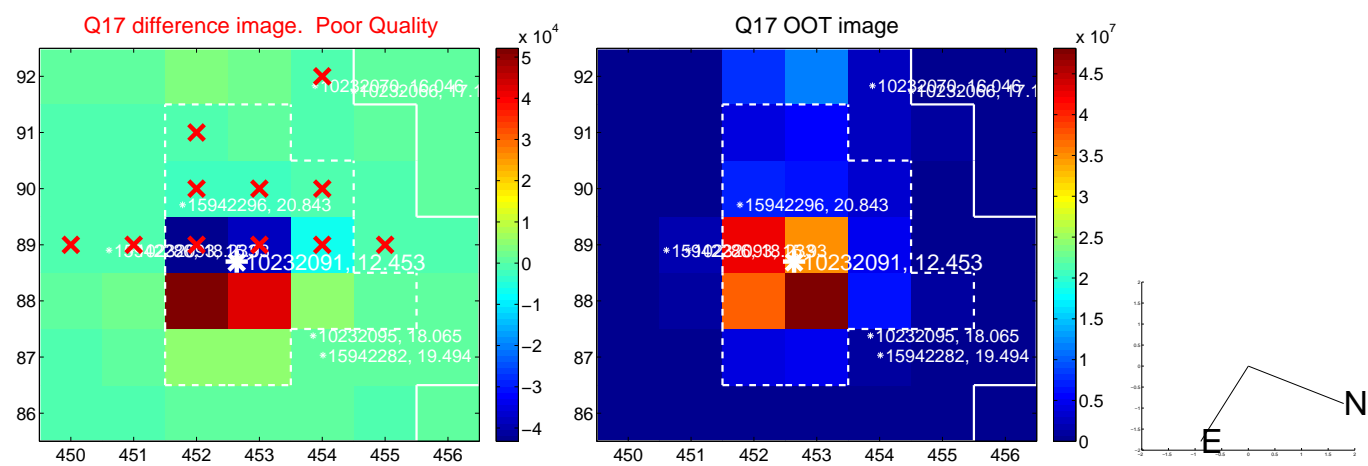
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folded centroid time series figure for this object.

UKIRT Image

Declination

