

KIC 011235536

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})
011235536-01	OBS	No	2.917136	133.601322	35.6	14.539	8.6	6.1	0.81	5631	0.48	398.89

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011235536-01	OBS	FP	0.00	1	0	0	0	LPP_DV

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

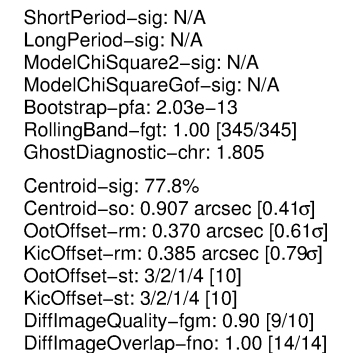
N = Not Transit-Like. S = Stellar Eclipse. C = Centroid Offset. E = Ephemeris Match.

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

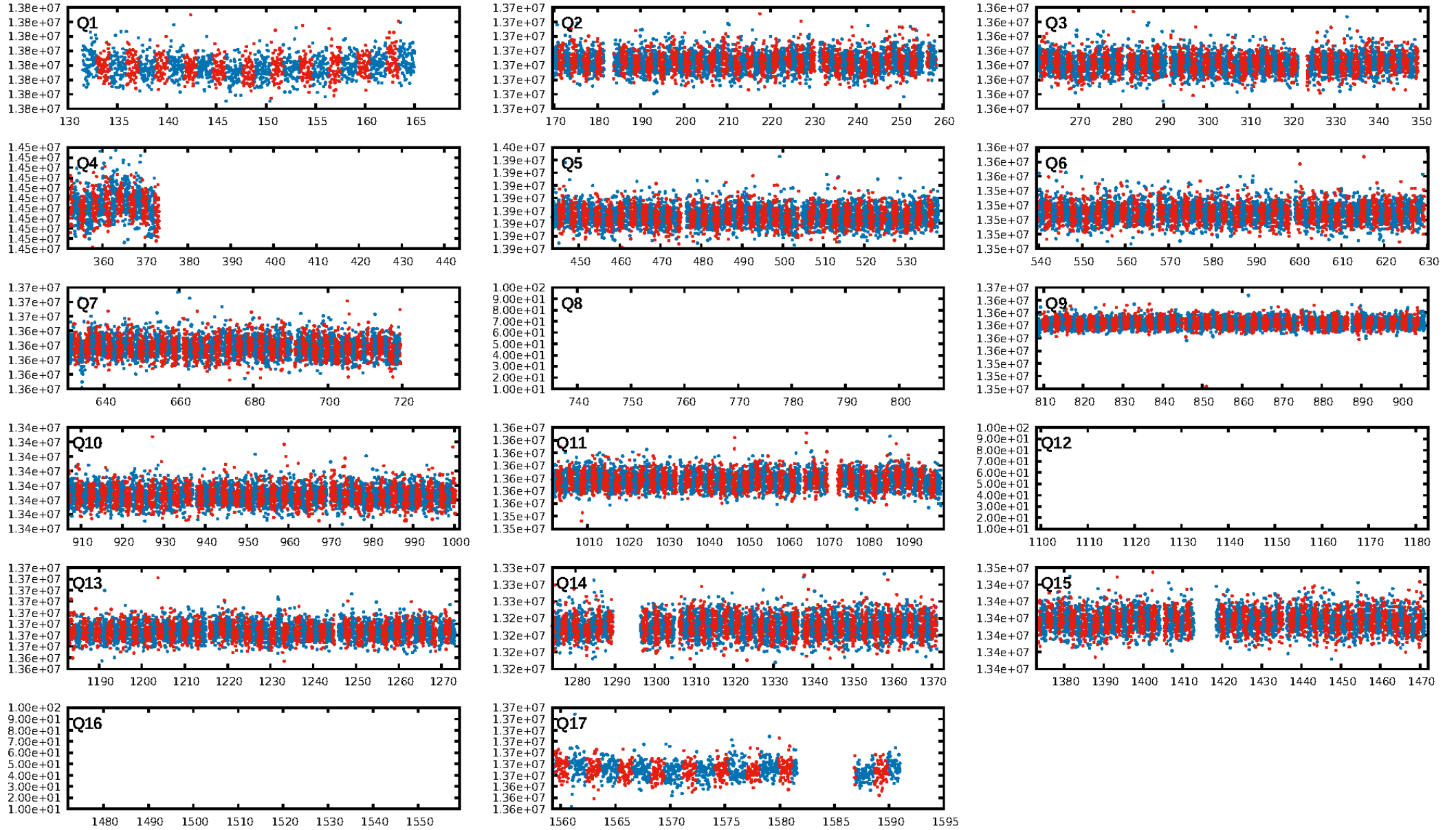
Ephemeris Match Information For 011235536-01

No Significant Match Found

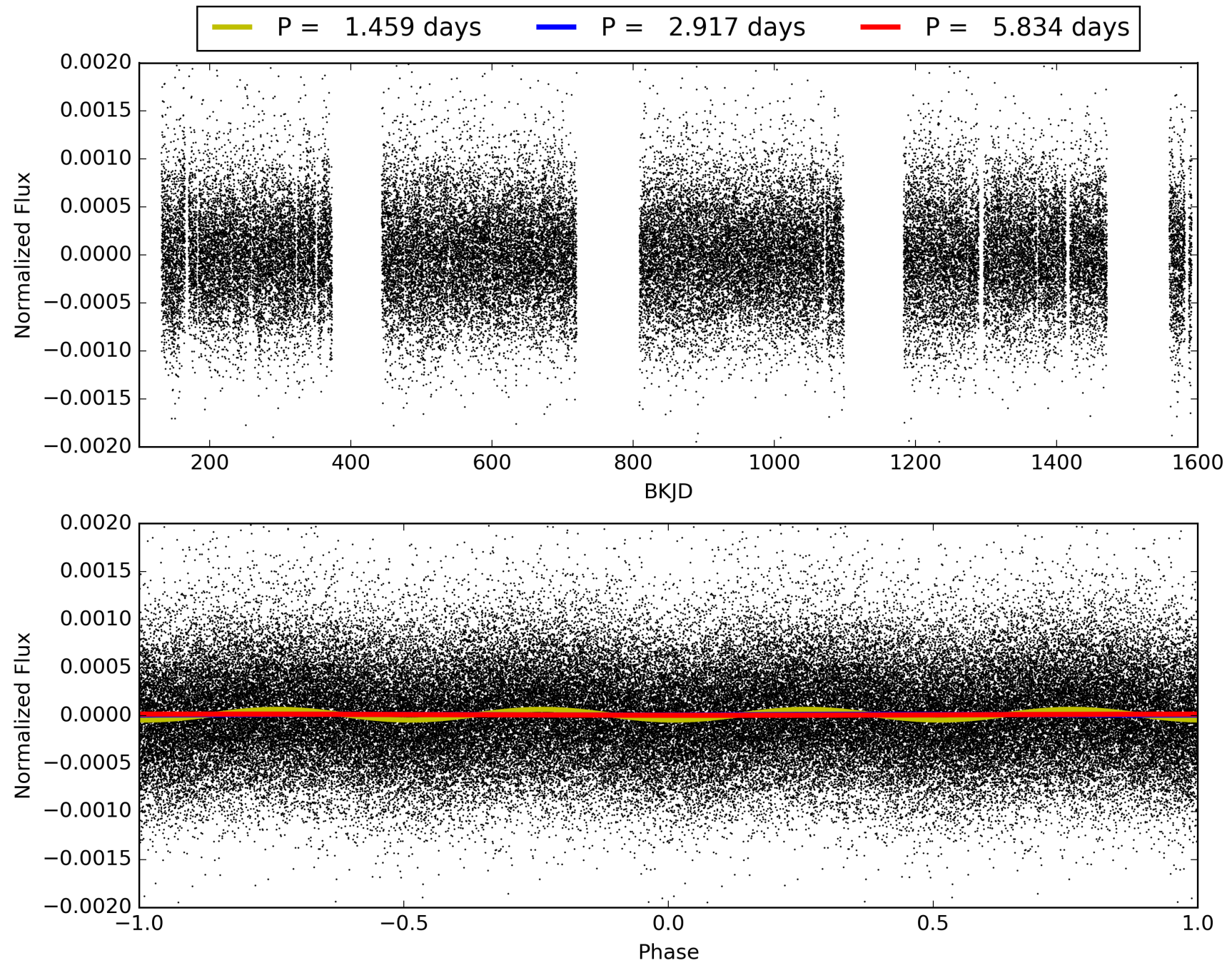
KIC: 11235536 Candidate: 1 of 1 Period: 2.917 d



TCE 011235536-01, PDC Light Curves

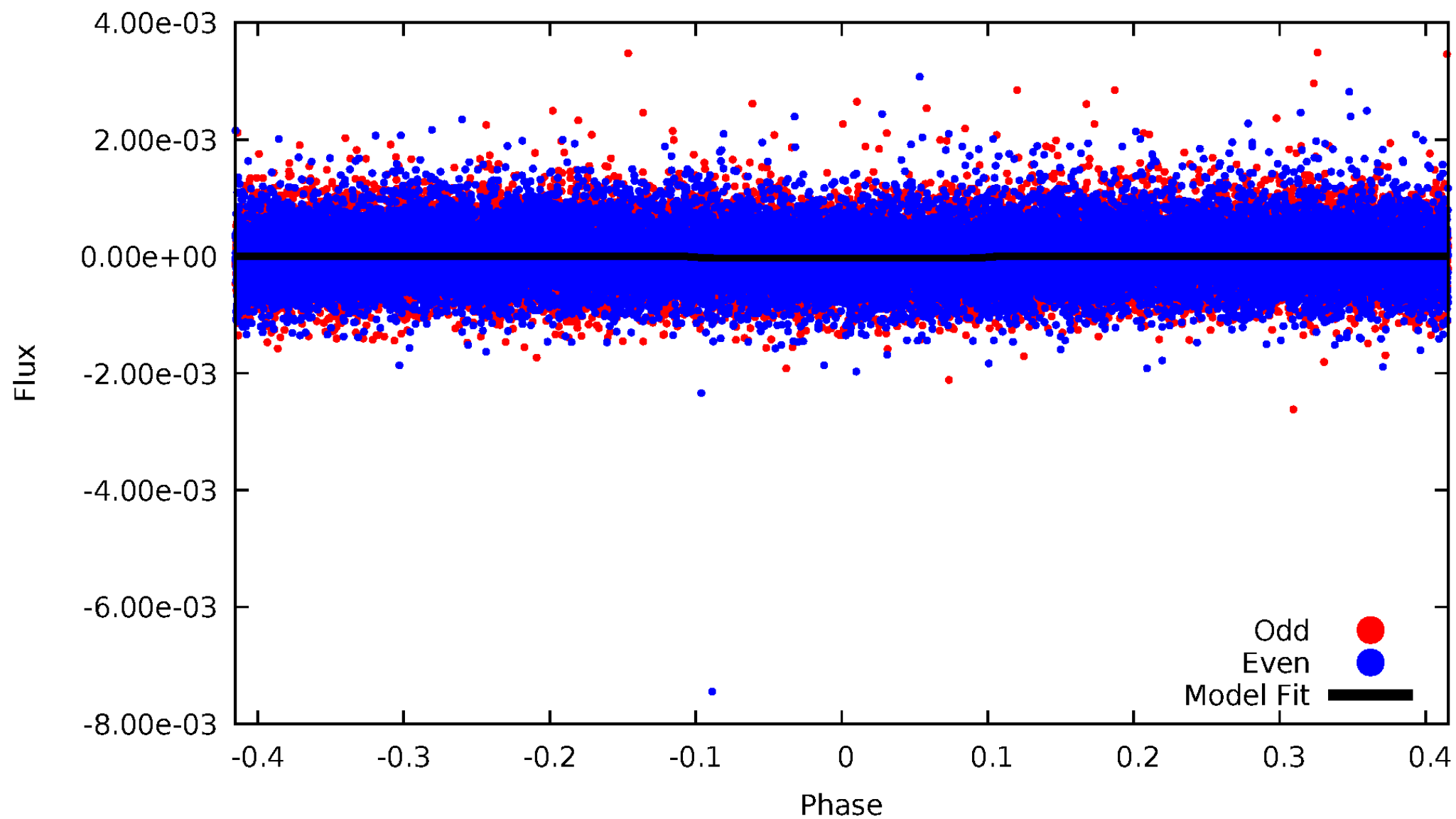


TCE 011235536-01



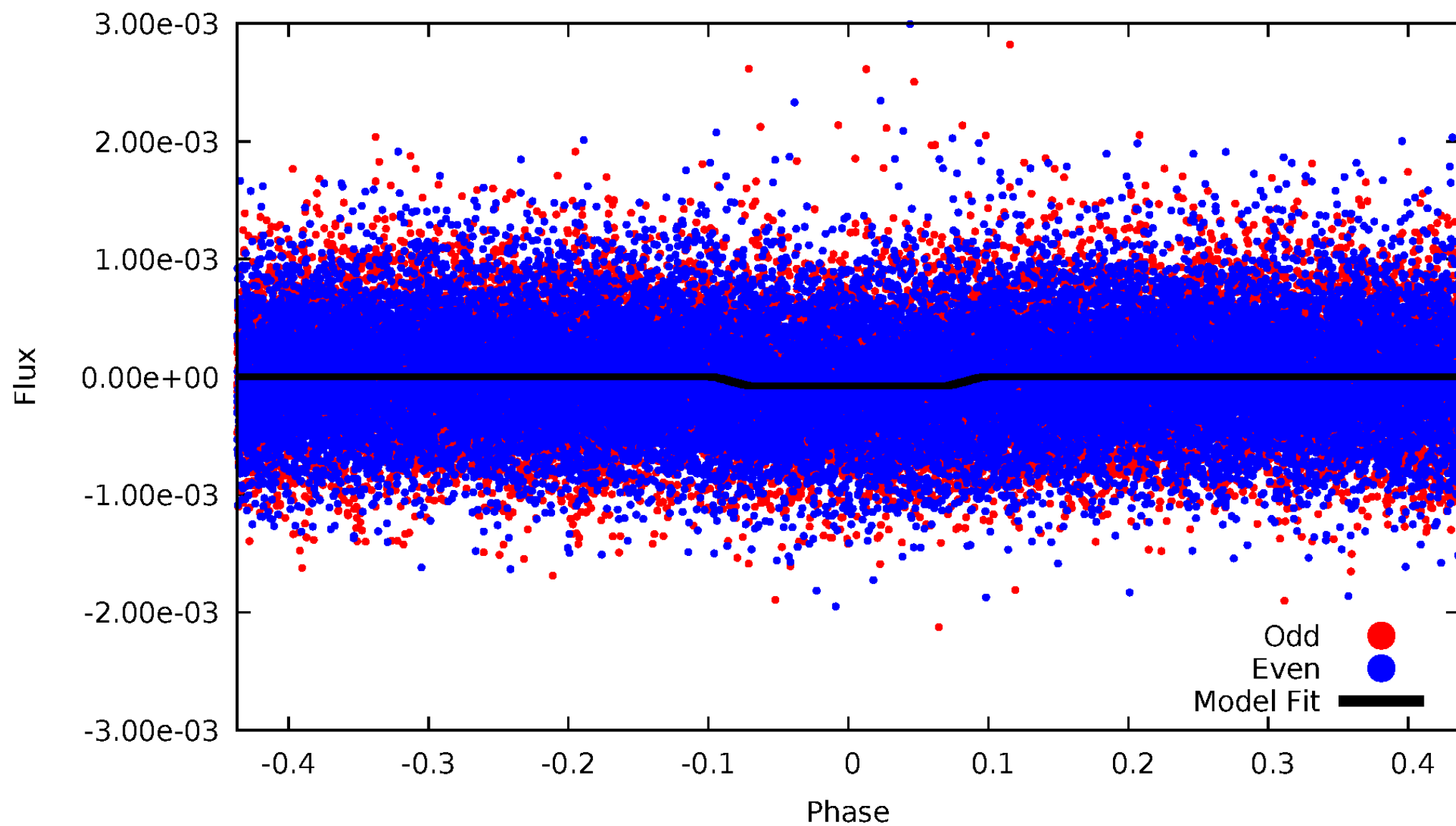
DV Odd/Even

TCE 011235536-01



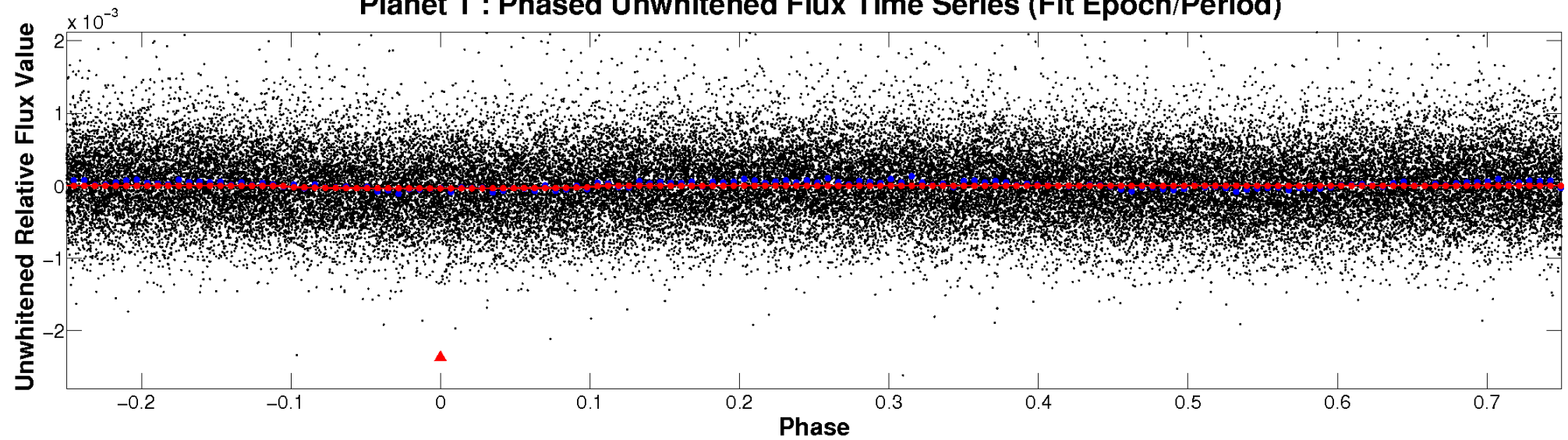
ALT Odd/Even

TCE 011235536-01

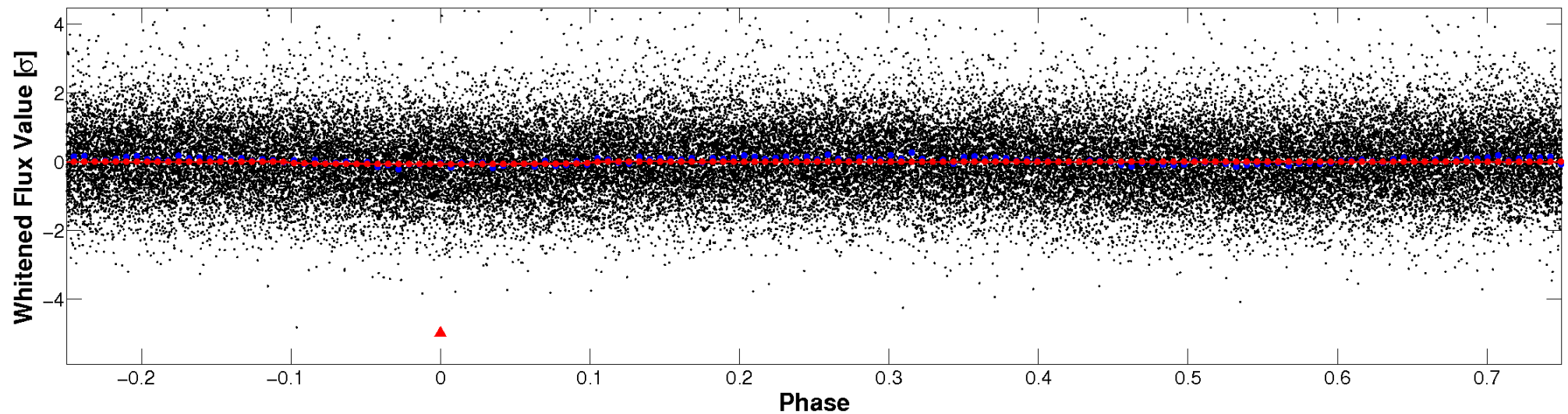


Non-Whitened Vs. Whitened Light Curve

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

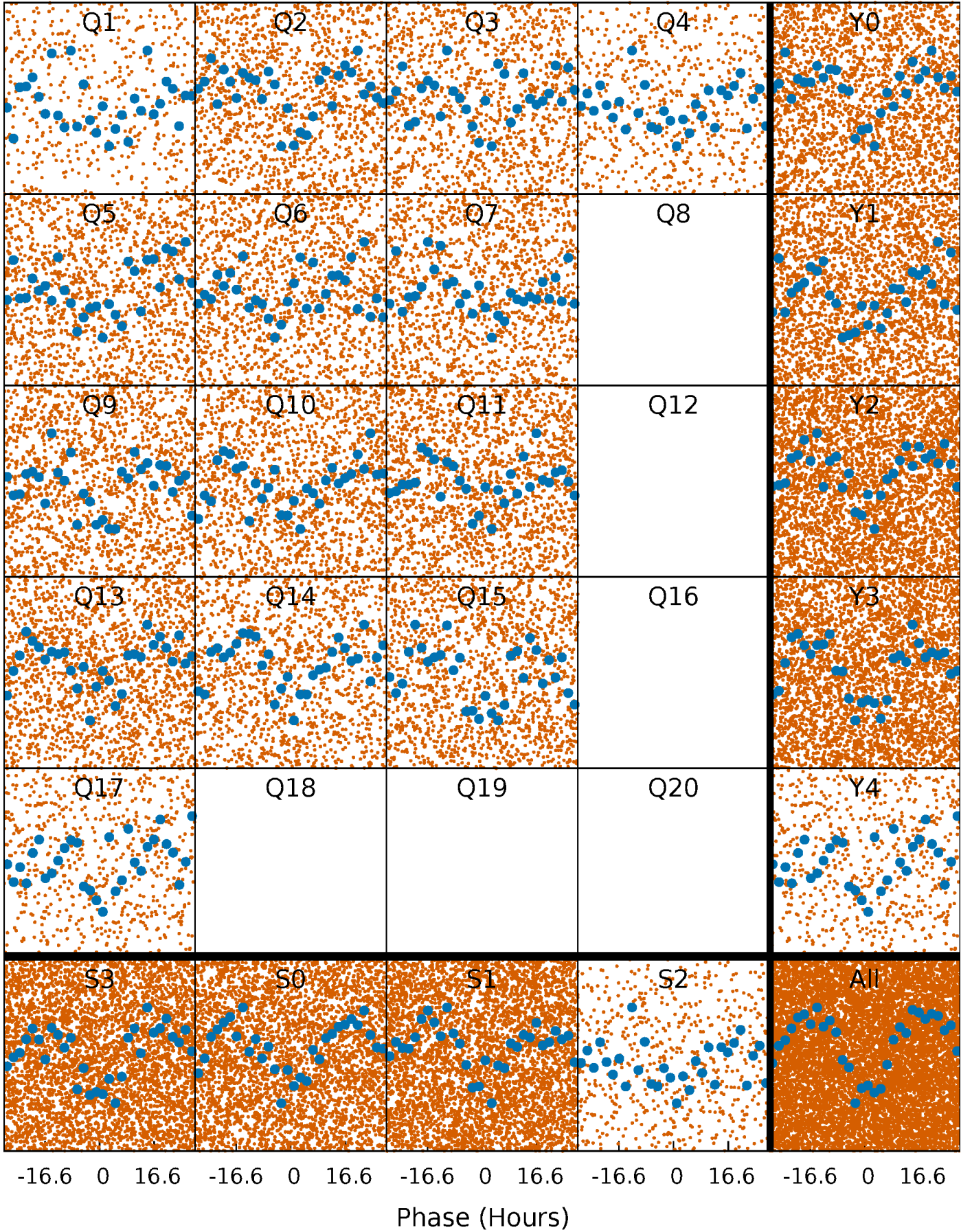


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



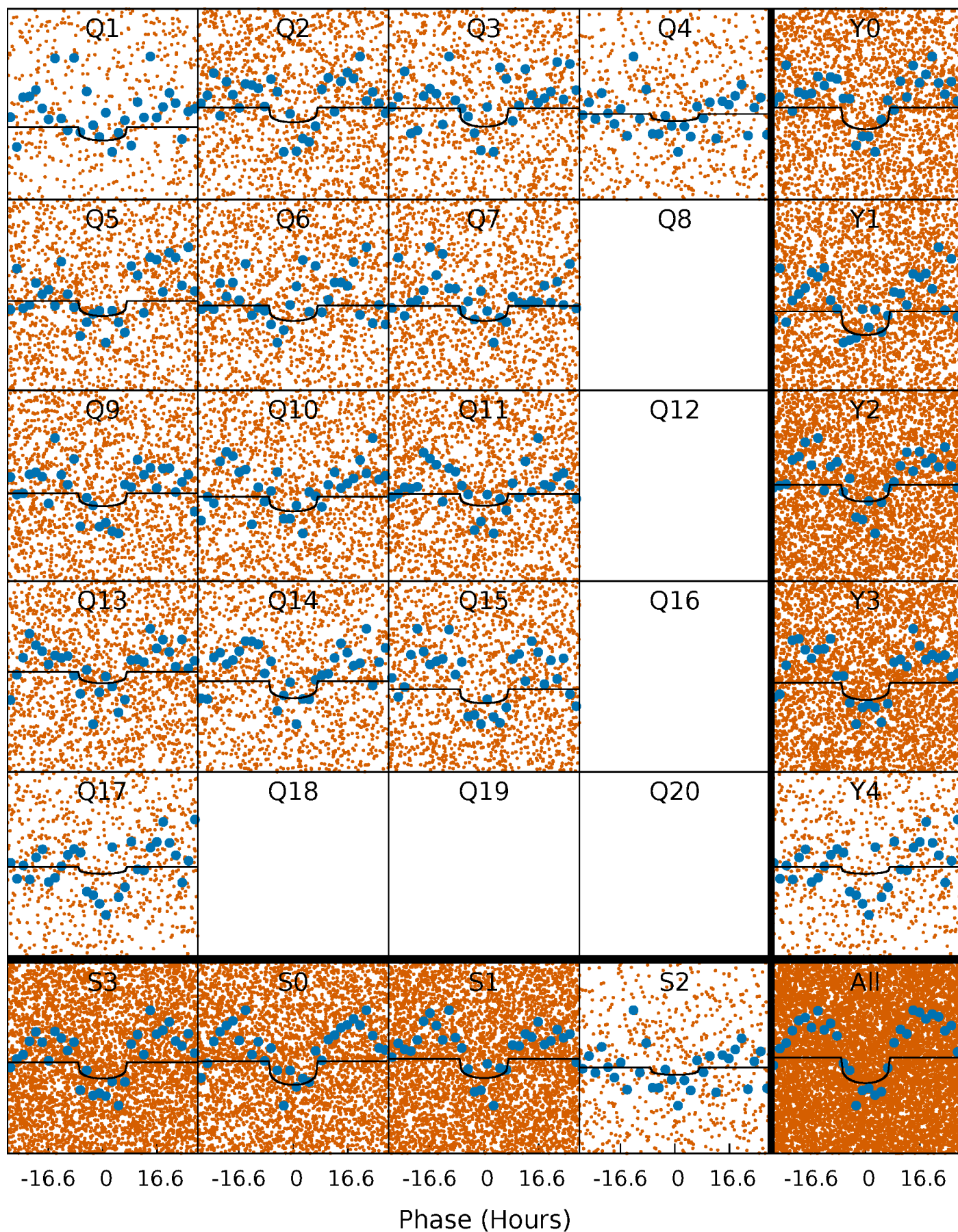
PDC Quarter-Phased Transit Curves

TCE 011235536-01 P= 2.917136 Days $T_0=133.601322$ (BKJD)



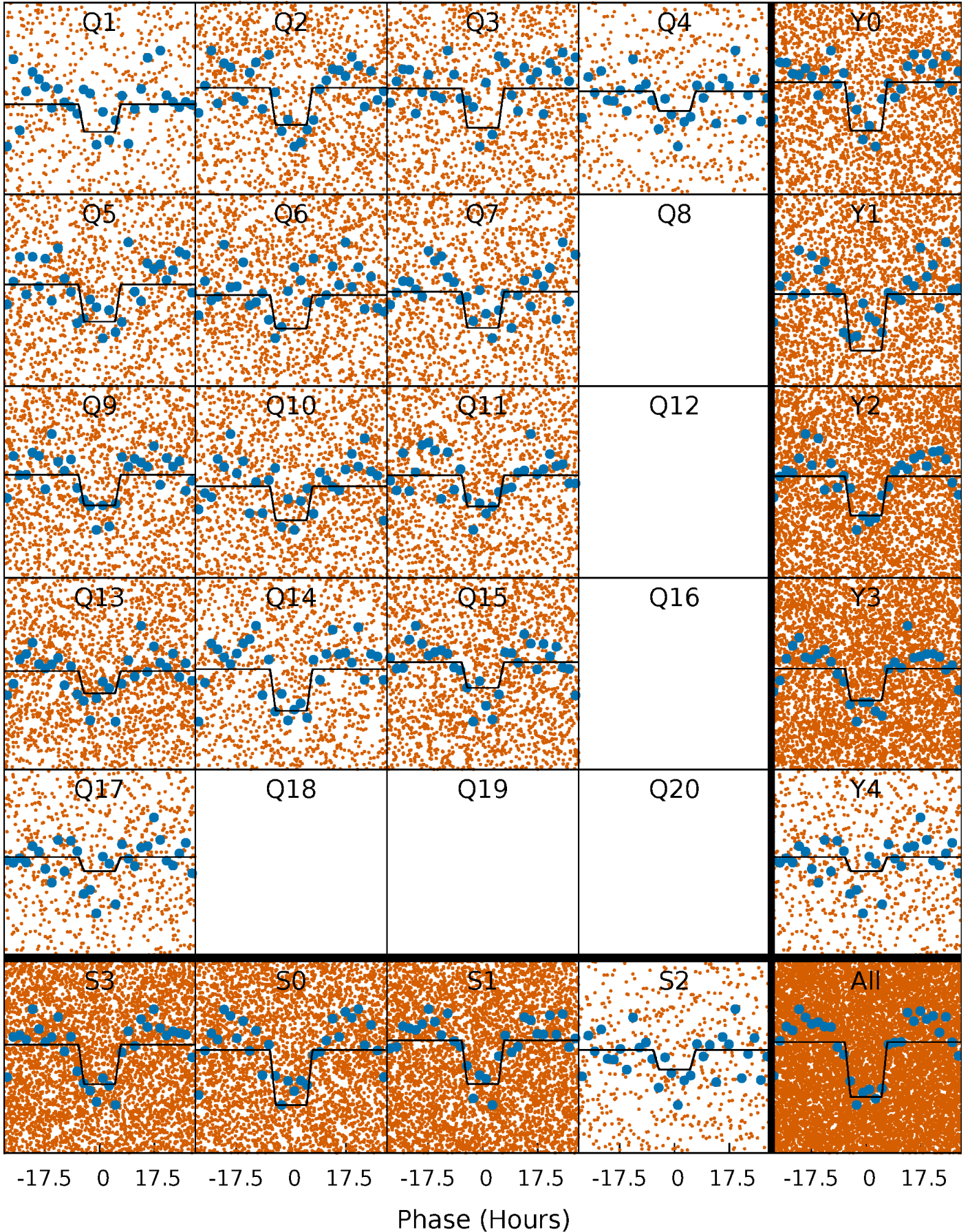
DV Quarter-Phased Transit Curves

TCE 011235536-01 P= 2.917136 Days $T_0=133.601322$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

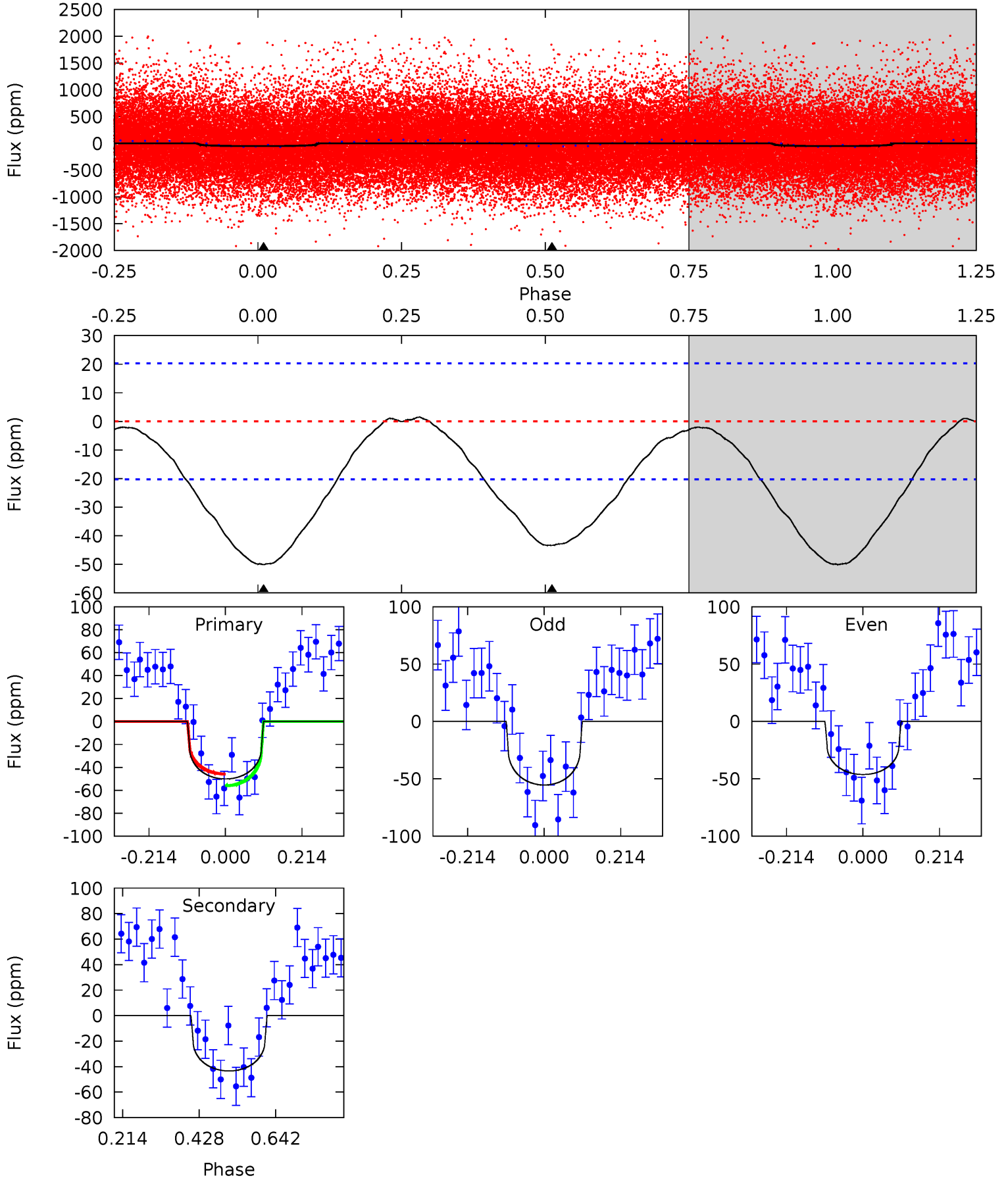
TCE 011235536-01 P= 2.917264 Days $T_0=133.594066$ (BKJD)



DV Model-Shift Uniqueness Test

011235536-01, P = 2.917136 Days, E = 130.684186 Days

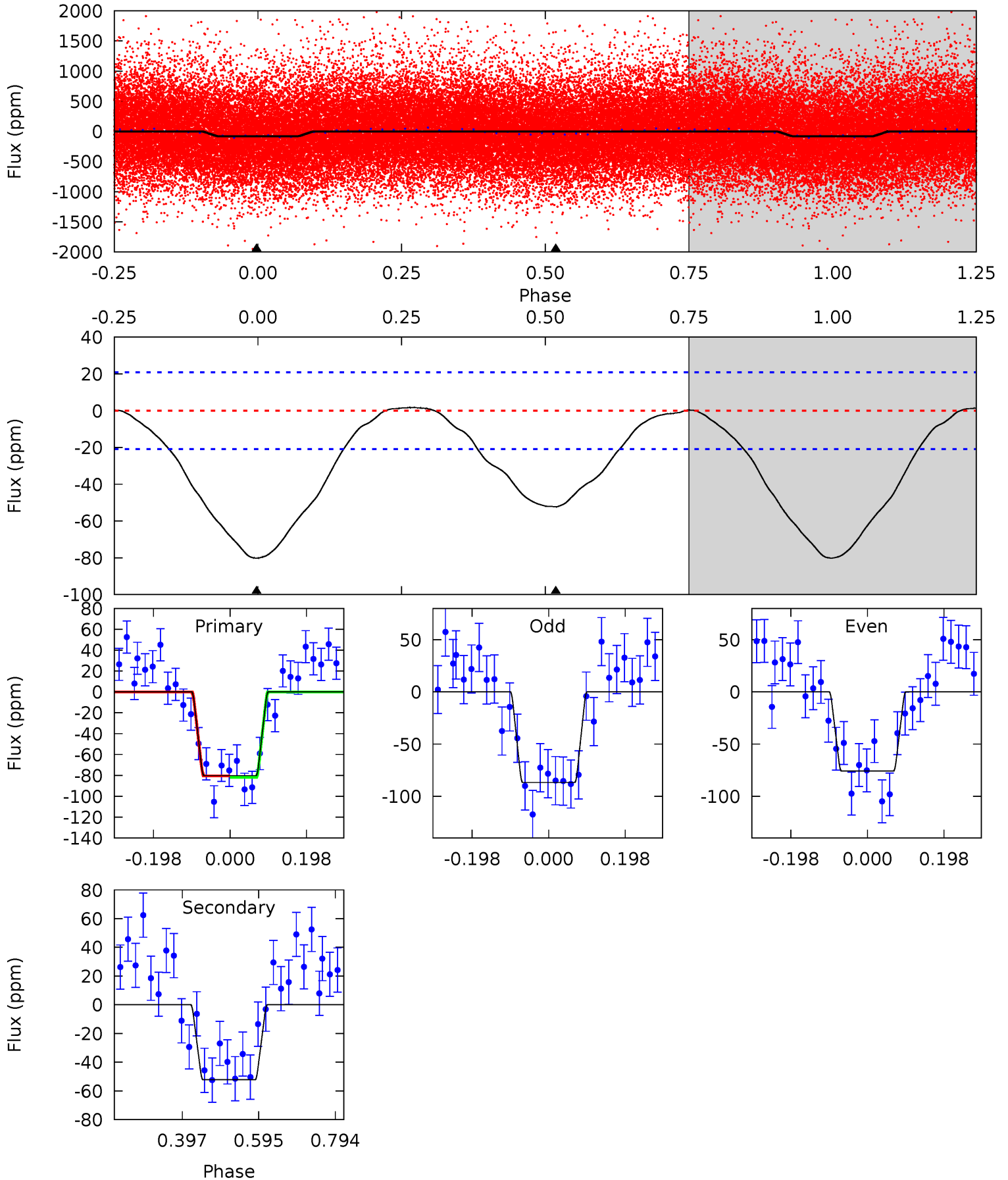
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.9	9.41	0	0	4.40	1.24	0.41	10.9	10.9	9.41	9.41	0.99	1.07	0.03	1.12



Alt Model-Shift Uniqueness Test

011235536-01, P = 2.917264 Days, E = 130.676802 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
17.0	11.1	0	0	4.42	1.29	0.46	17.0	17.0	11.1	11.1	1.16	1.06	0.02	0.15



Stellar Parameters For KIC 011235536

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5631^{+152}_{-152}	$4.570^{+0.042}_{-0.168}$	$-0.240^{+0.300}_{-0.300}$	$0.806^{+0.206}_{-0.069}$	$0.882^{+0.097}_{-0.097}$	$2.369^{+0.505}_{-1.038}$
	+3%/-3%	+1%/-4%	+125%/-125%	+26%/-9%	+11%/-11%	+21%/-44%
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 011235536-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-43 ± 5	$1.19^{+1.23}_{-0.79}$	1621^{+93}_{-66}	4224^{+2746}_{-901}	25^{+204}_{-19}
Alt.	-52 ± 5	$1.33^{+1.27}_{-0.88}$	1622^{+98}_{-65}	4202^{+2751}_{-853}	24^{+187}_{-18}

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

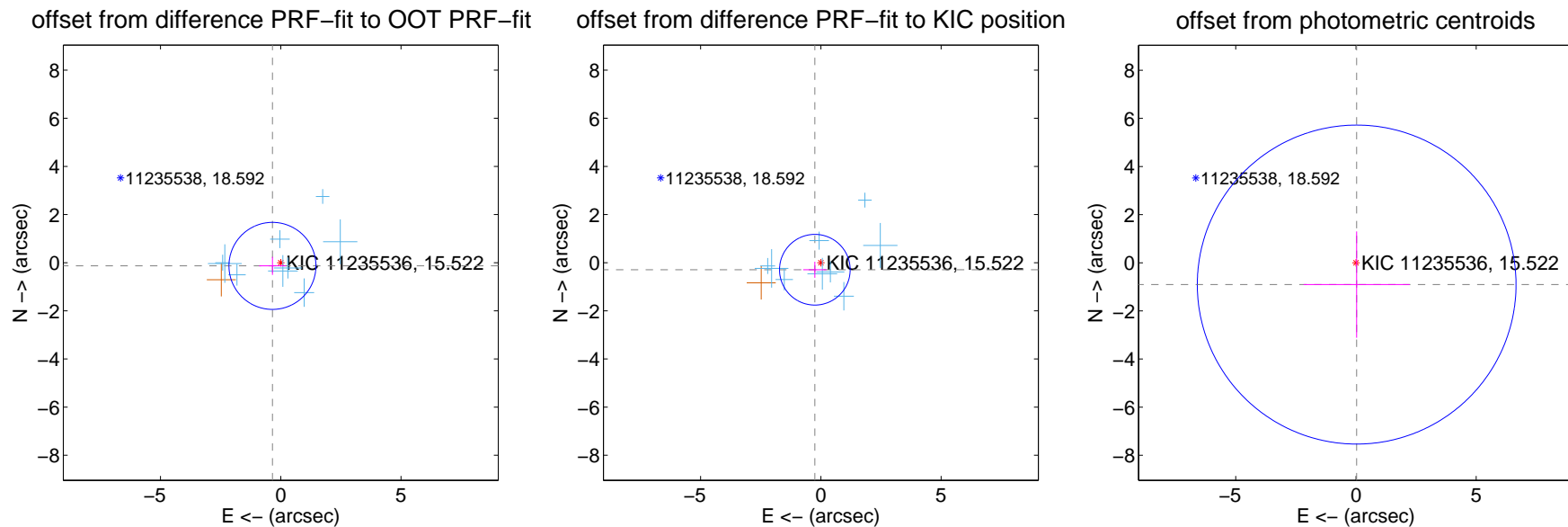
DV Centroid Data

Supplemental centroid analysis for 011235536-01. Kepler magnitude: 15.52. Transit SNR 6.07

There are 9 quarters with good PRF difference image offsets

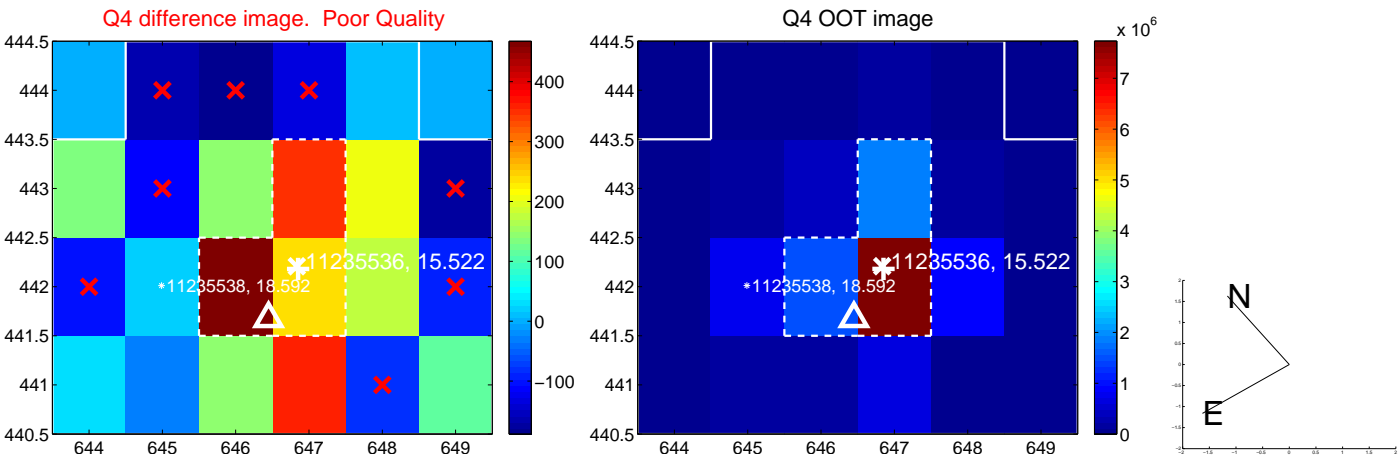
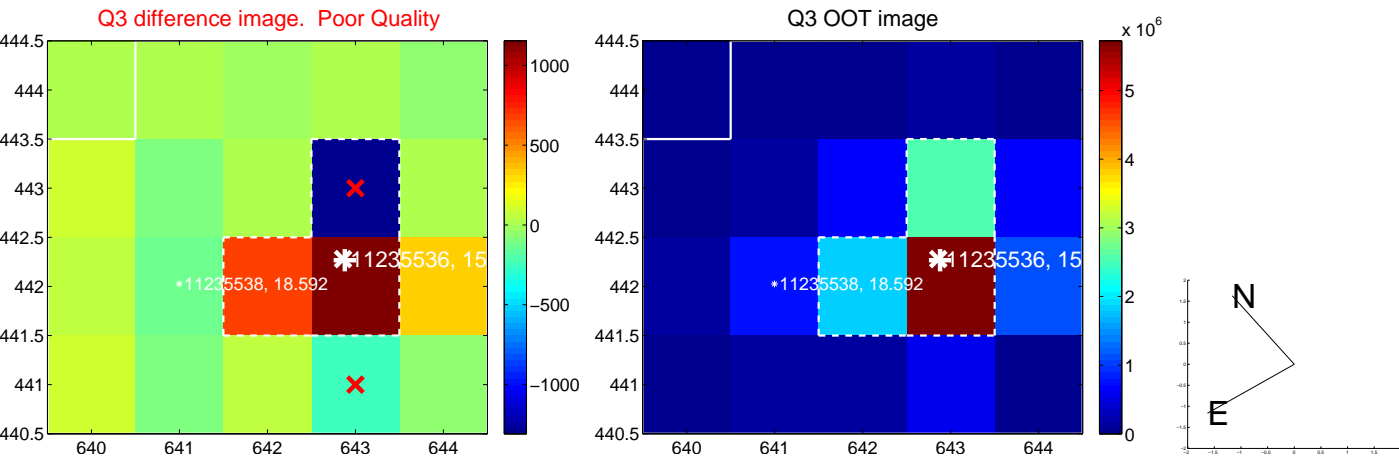
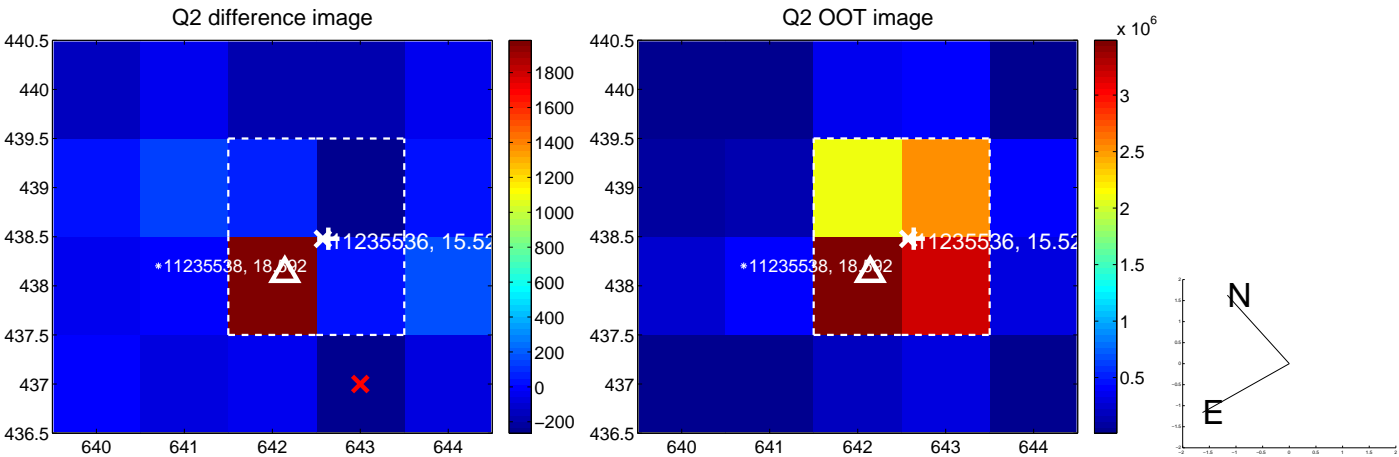
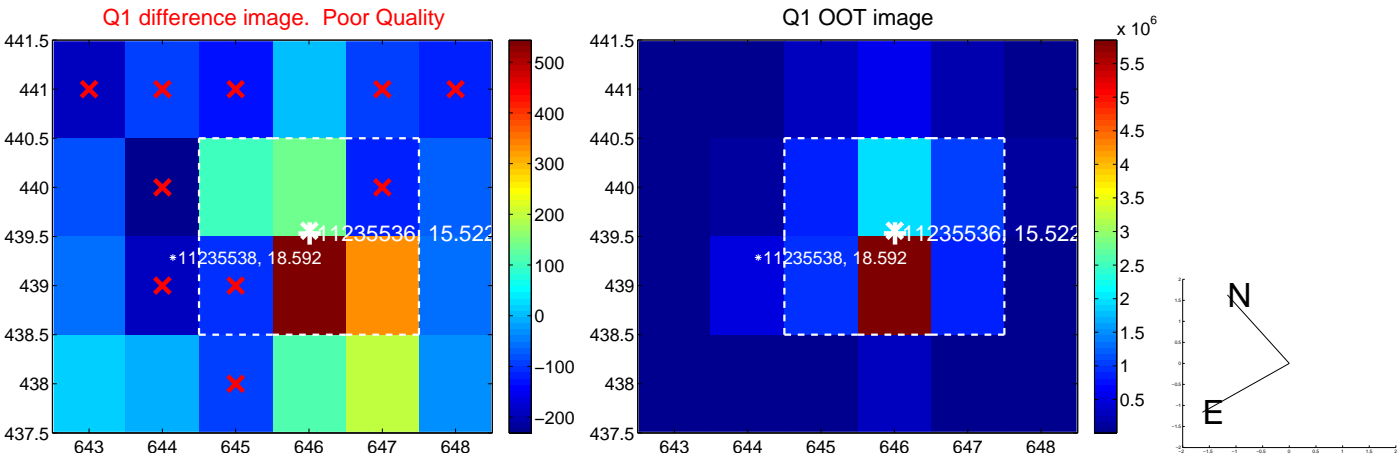
The direct PRF centroid is offset from the target star catalog position by about 0.15 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.370 ± 0.603	0.61	0.345 ± 0.557	-0.132 ± 0.374
PRF-fit source offset from KIC position	0.385 ± 0.490	0.79	0.250 ± 0.483	-0.292 ± 0.334
photometric centroid source offset	0.91 ± 2.21	0.41	-0.03 ± 2.21	-0.91 ± 2.21

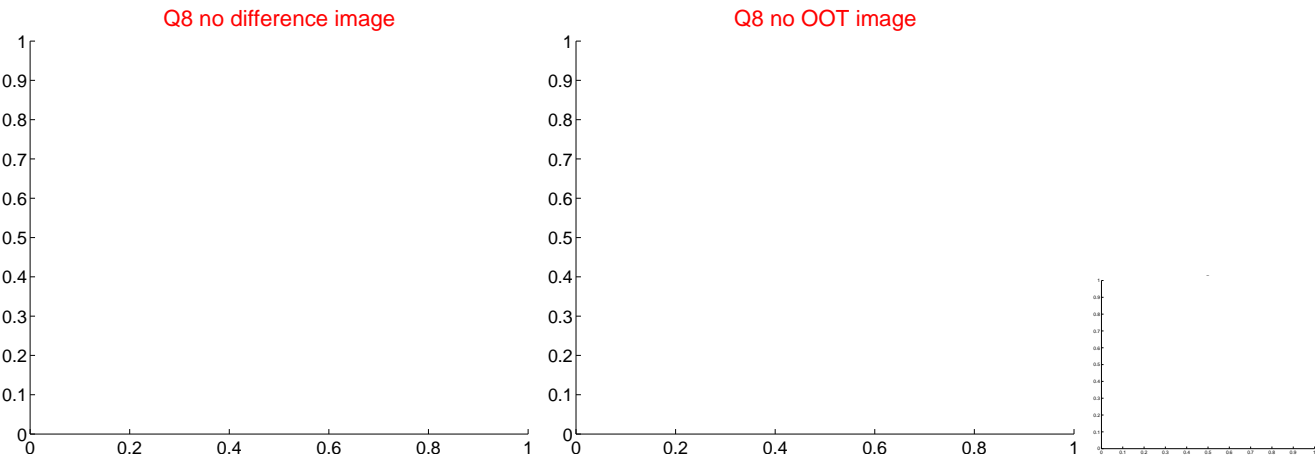
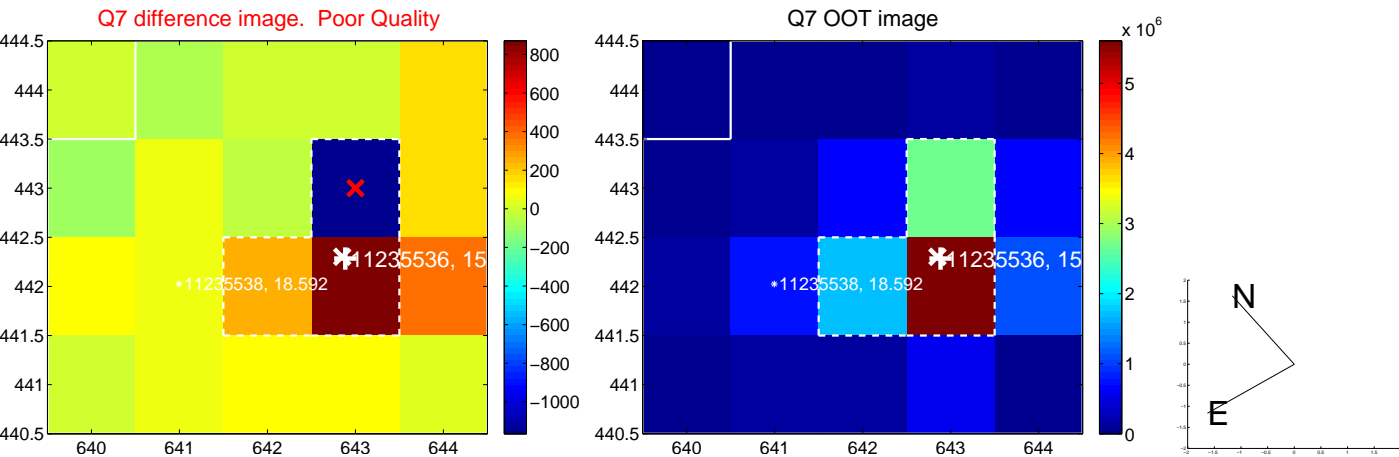
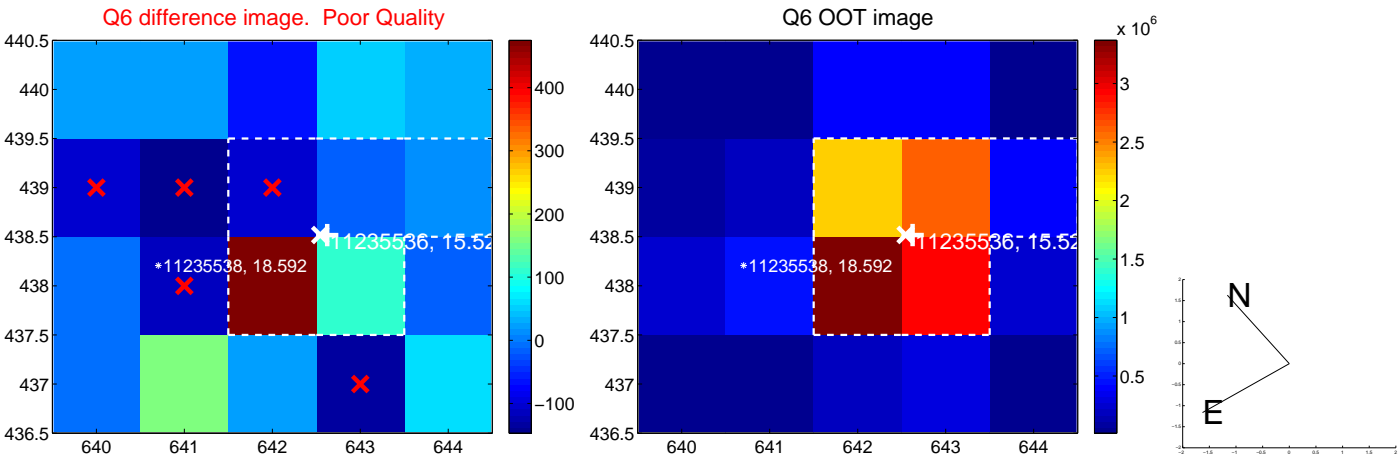
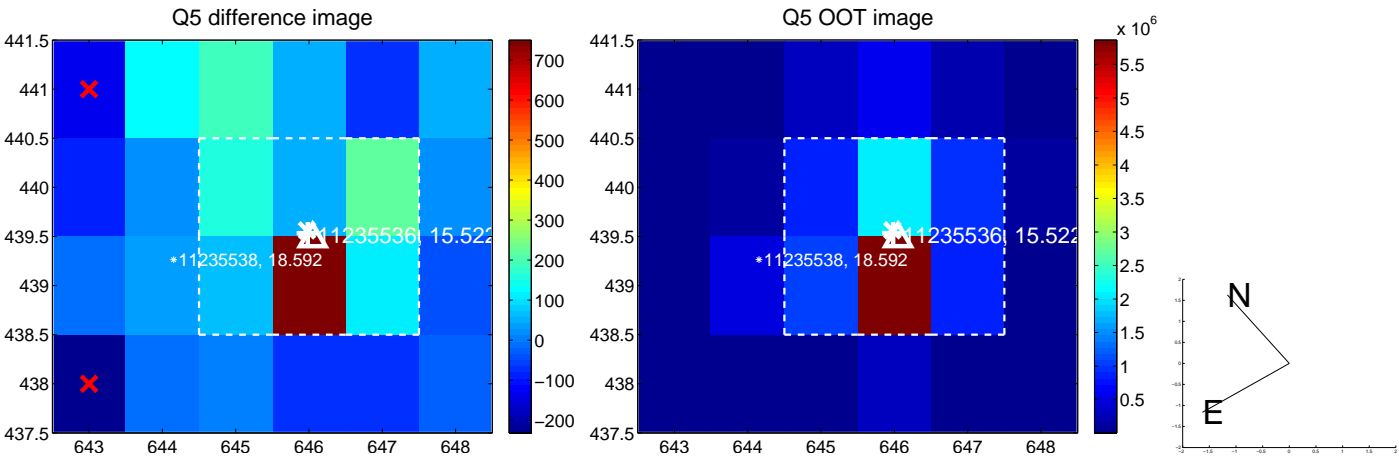


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets**; **Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

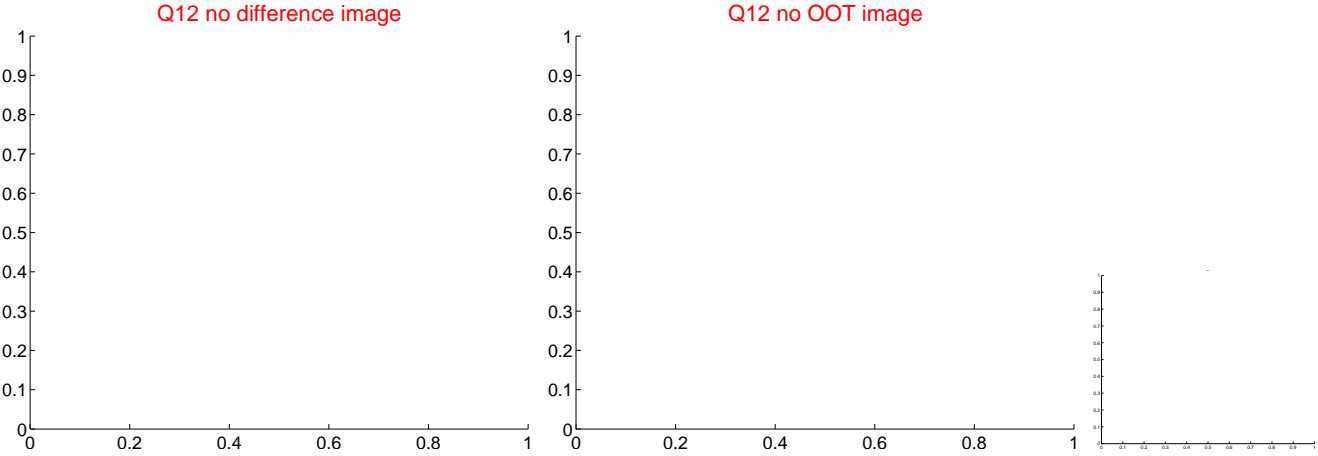
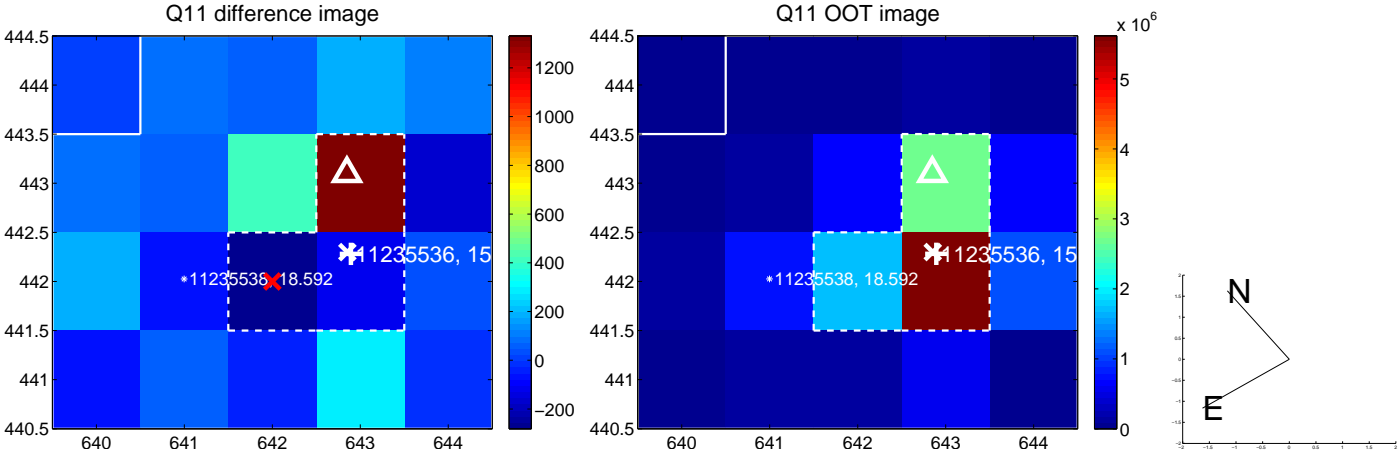
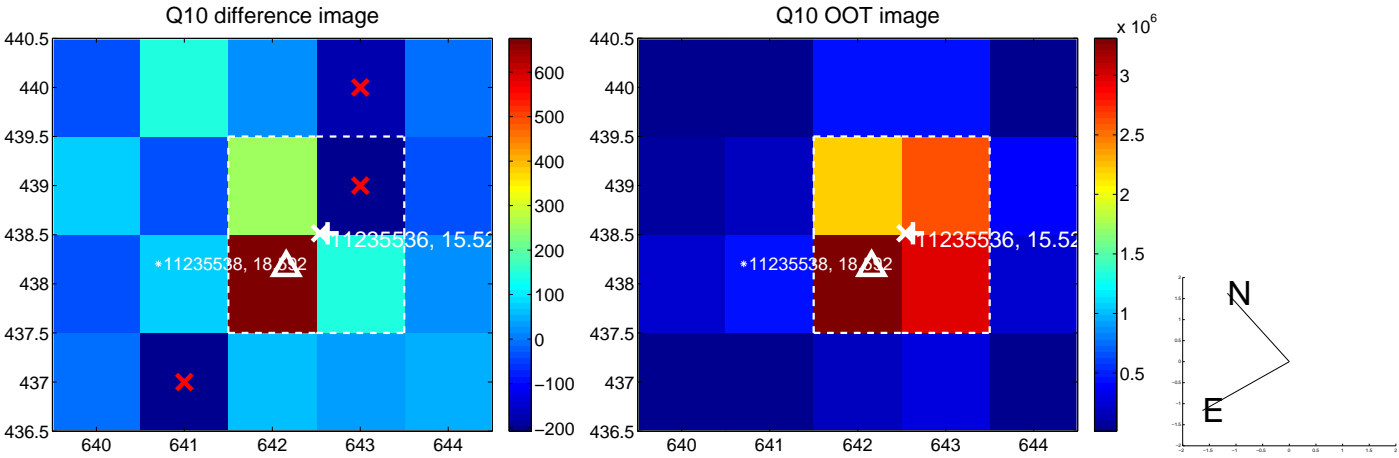
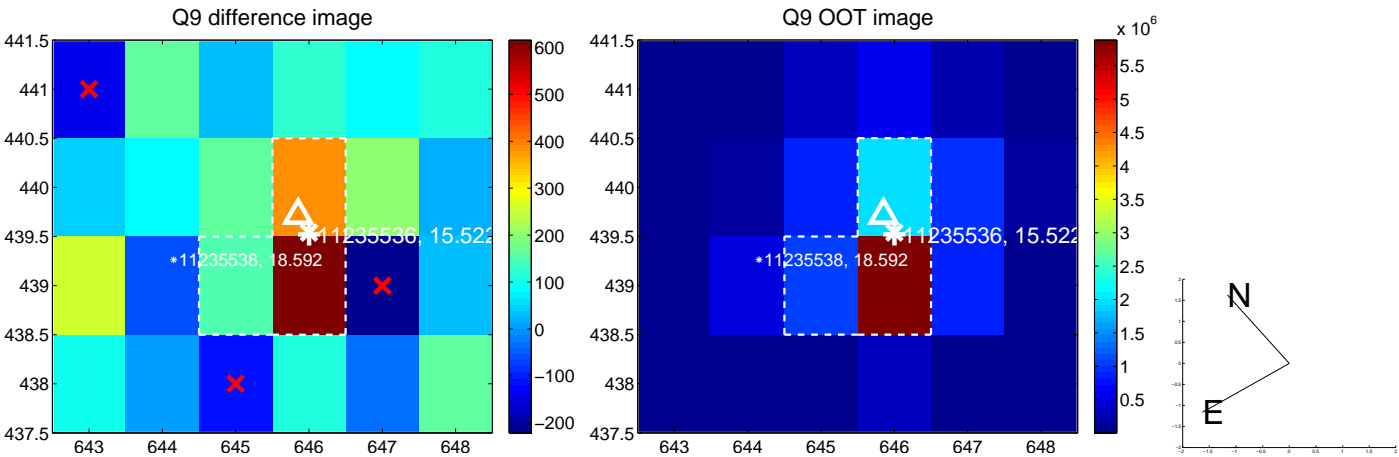
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



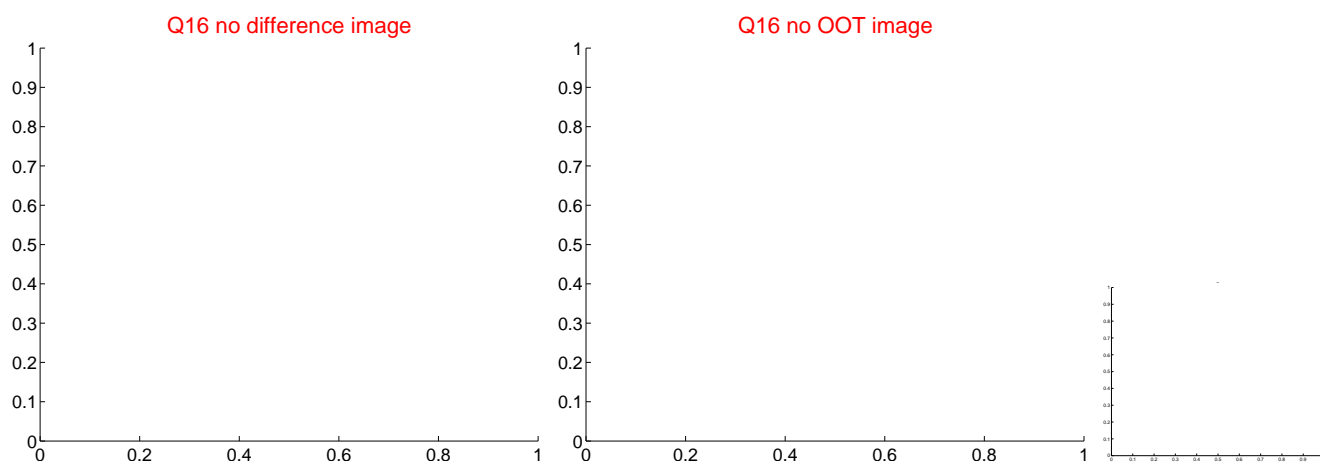
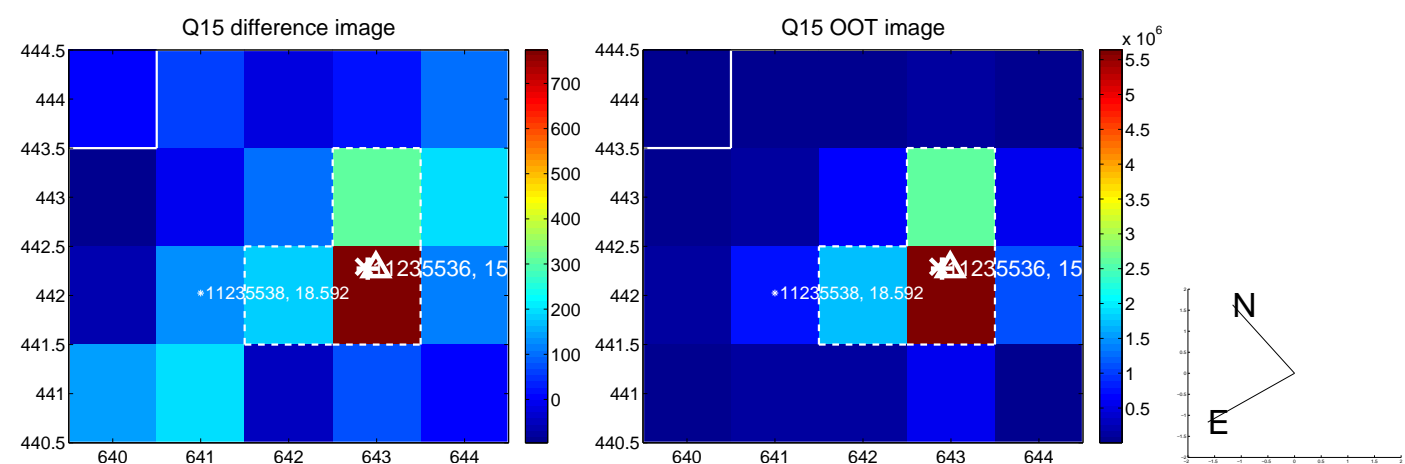
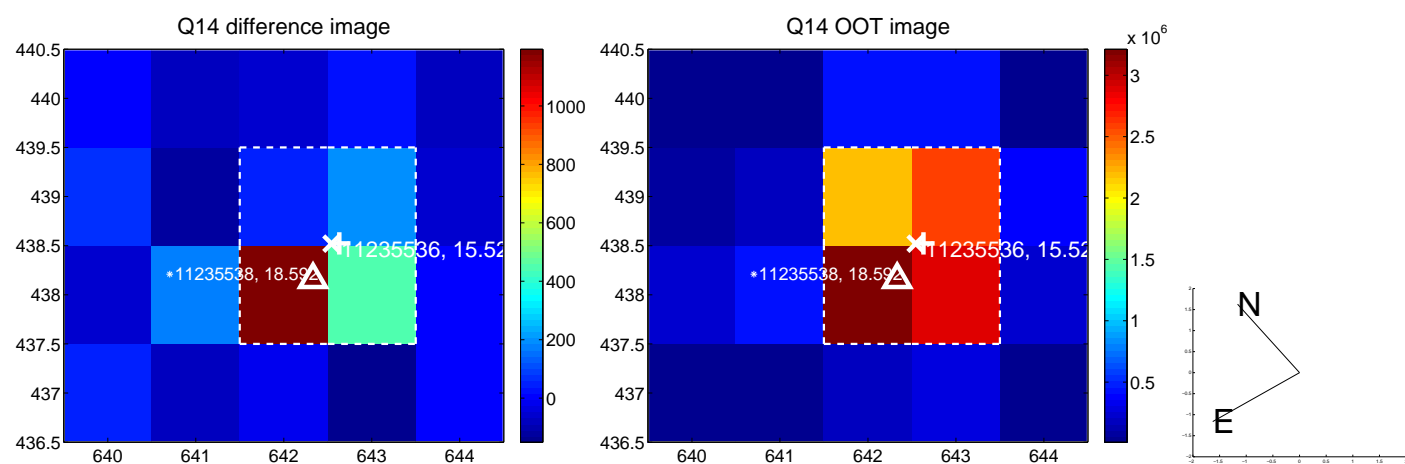
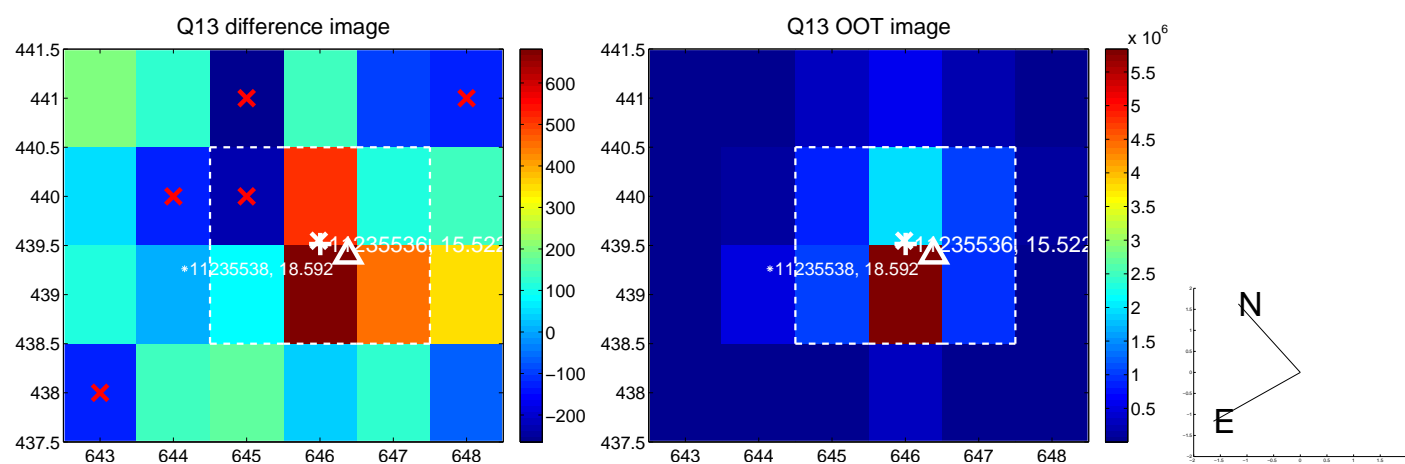
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



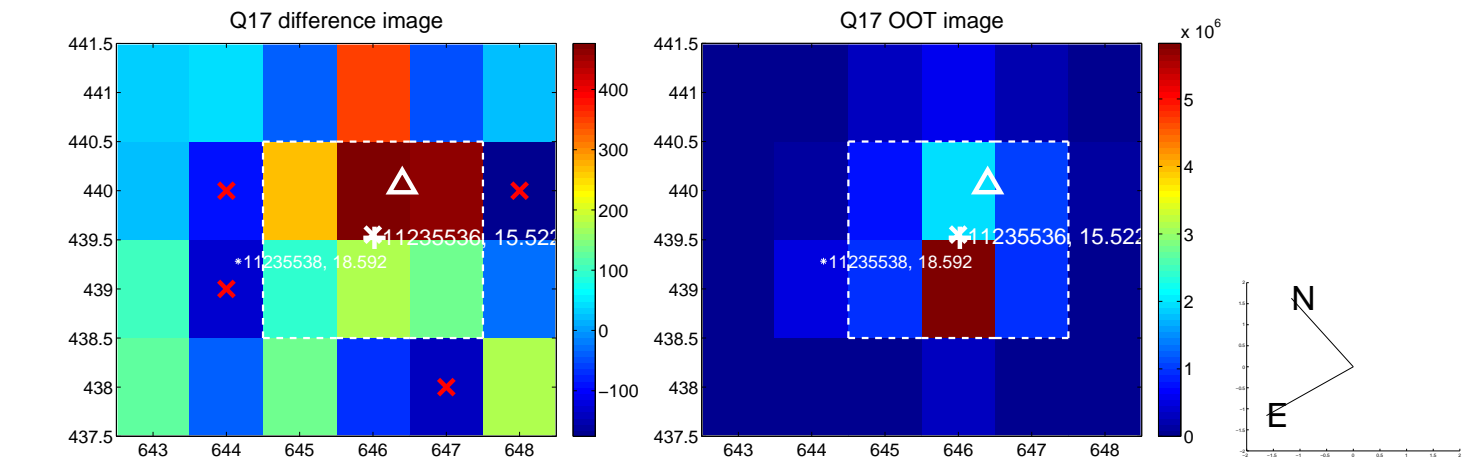
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



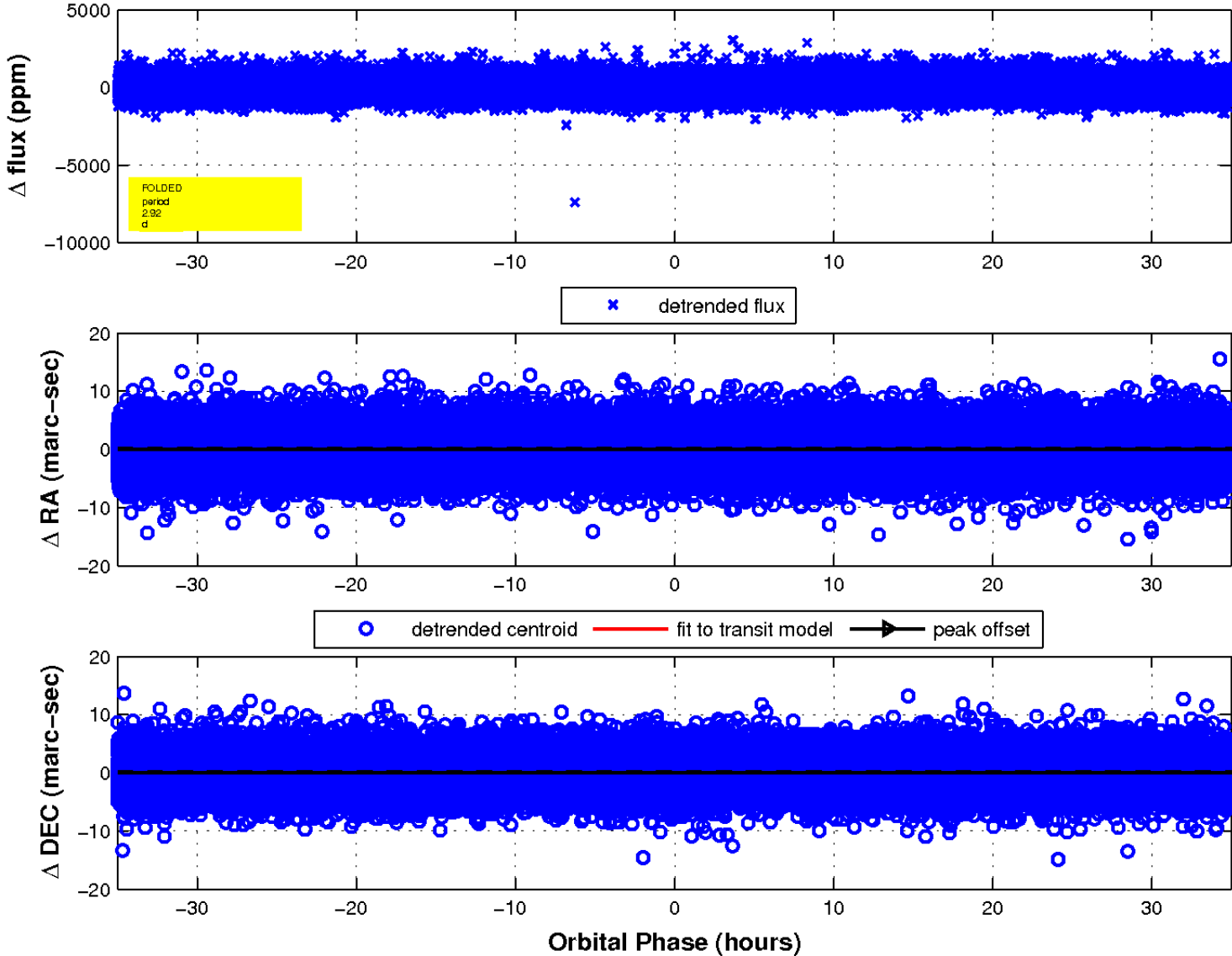
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

