

KIC 002696205

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})
002696205-01	OBS	7636.01	0.702744	131.531574	65.8	1.381	7.8	8.9	0.84	5269	0.67	2299.05

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
002696205-01	OBS	PC	0.99	0	0	0	0	NO_COMMENT

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

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

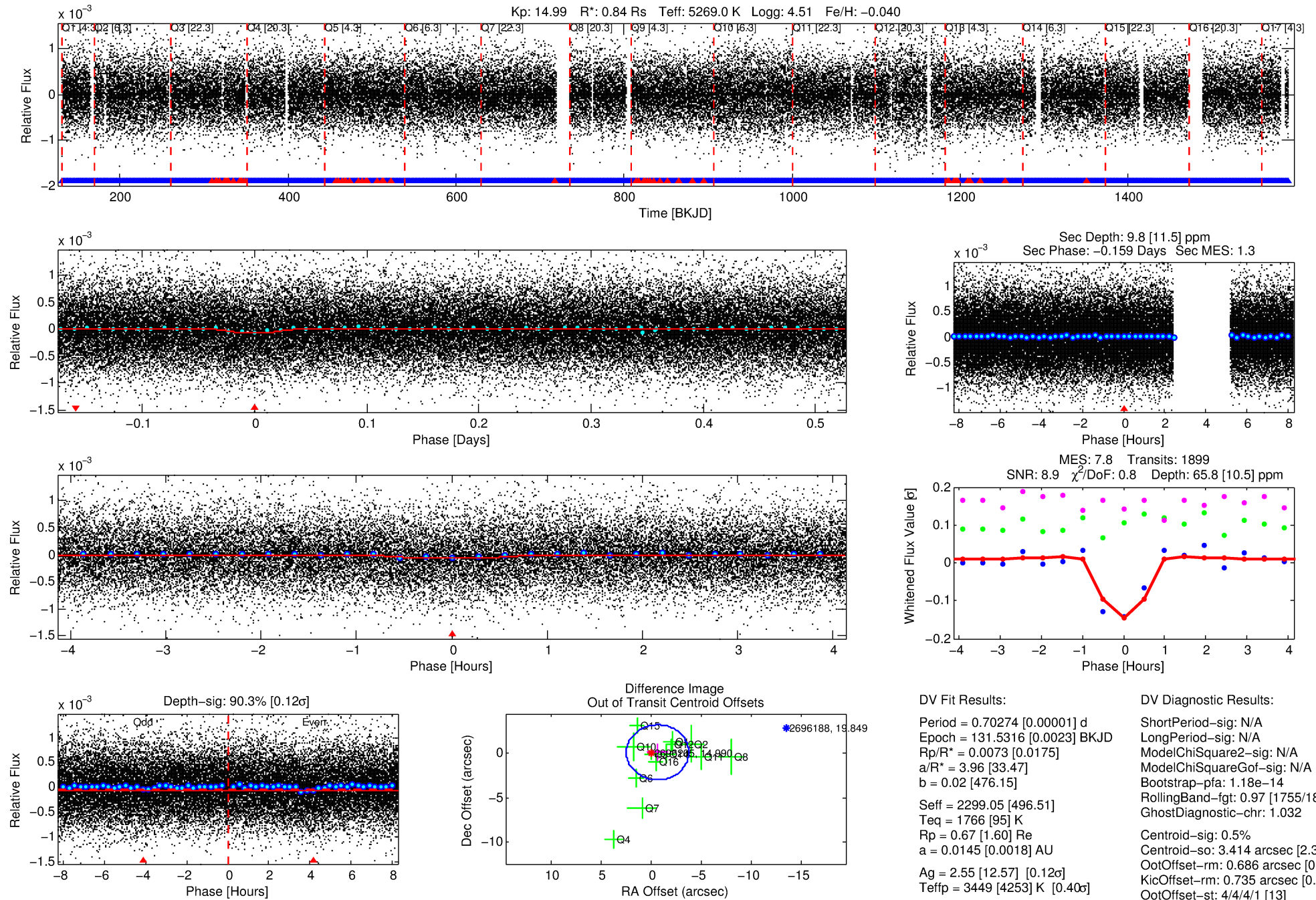
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 002696205-01

No Significant Match Found

DV One-Page Summary

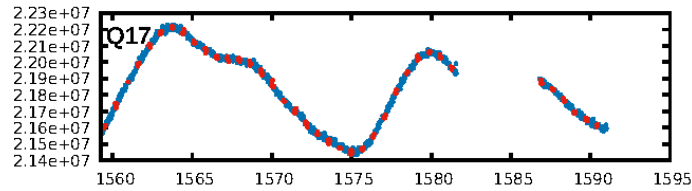
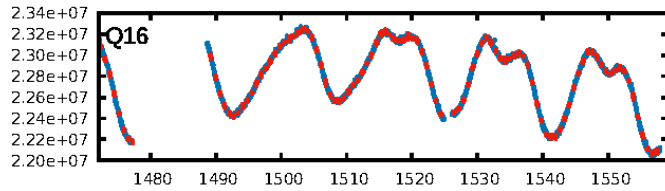
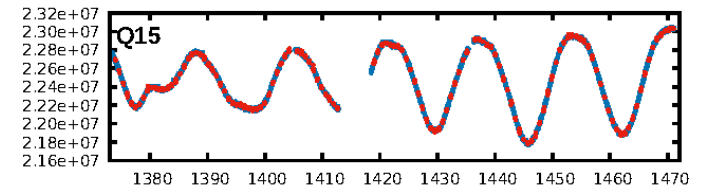
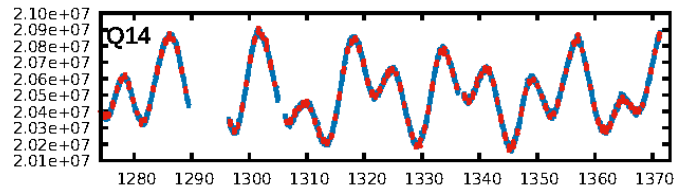
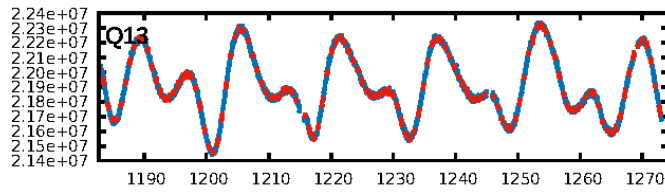
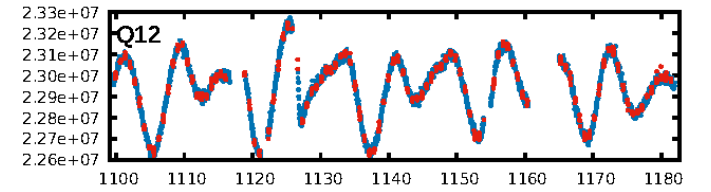
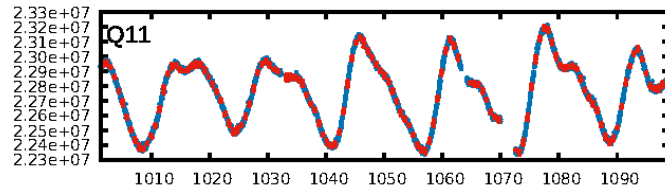
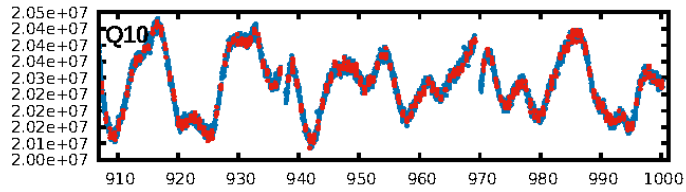
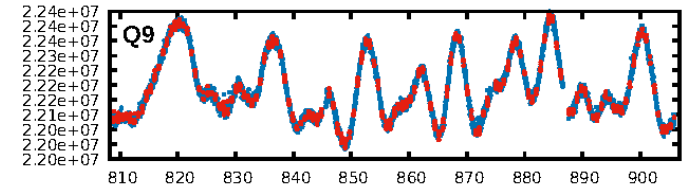
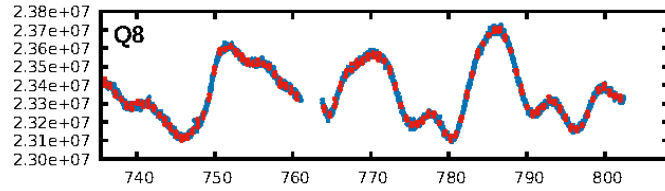
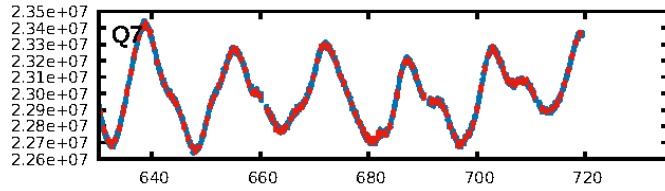
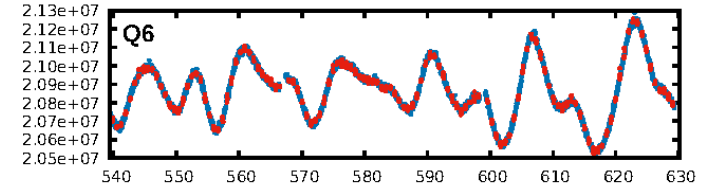
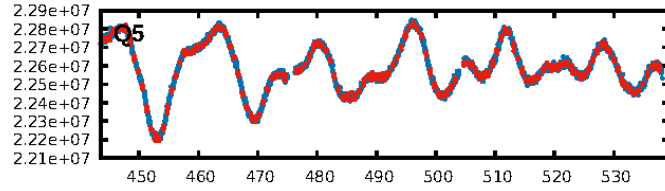
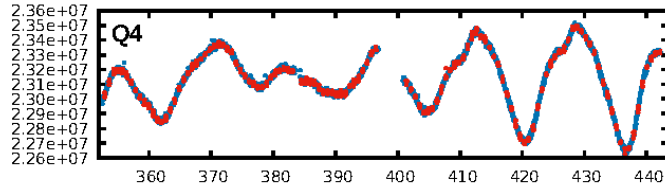
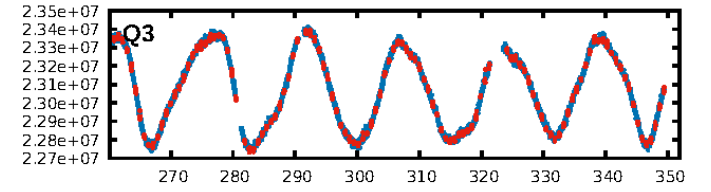
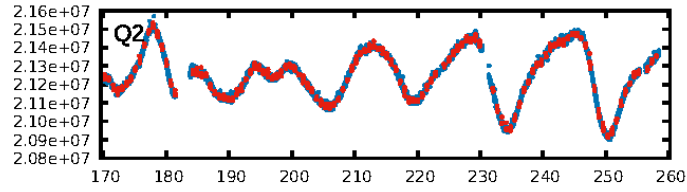
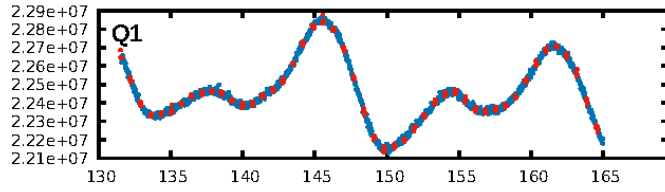
KIC: 2696205 Candidate: 1 of 1 Period: 0.703 d



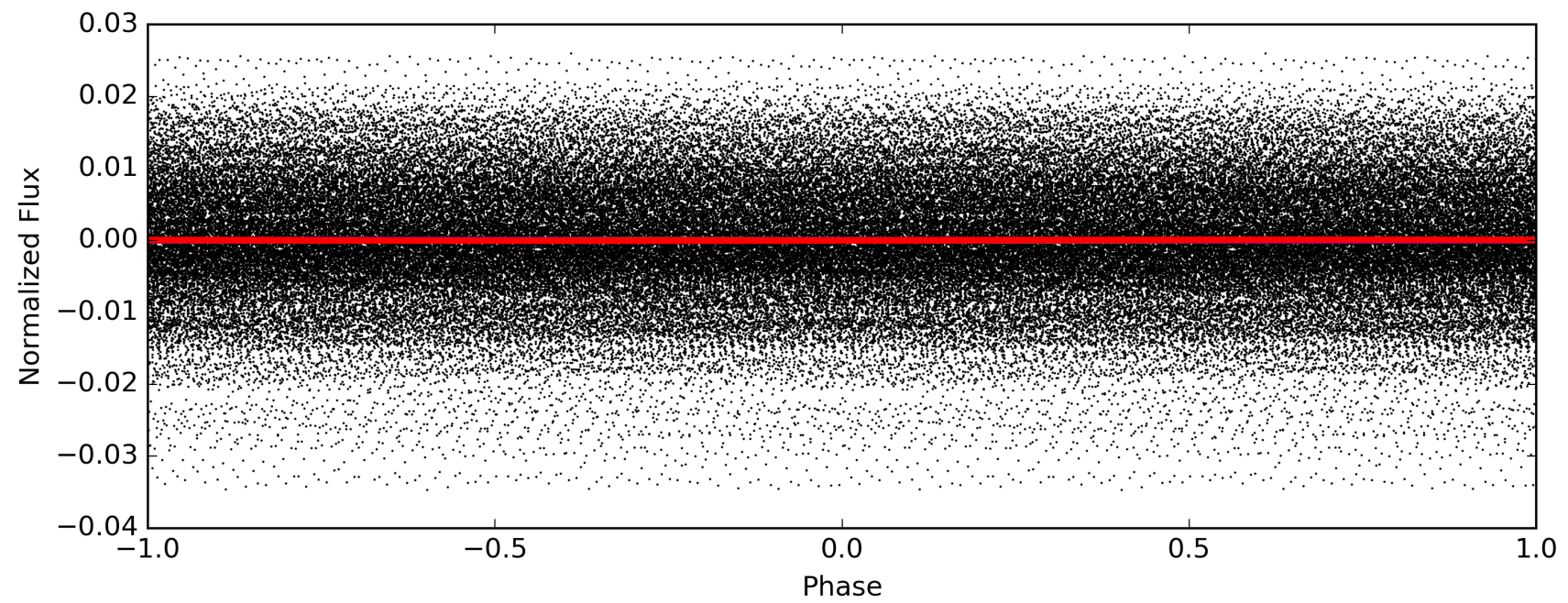
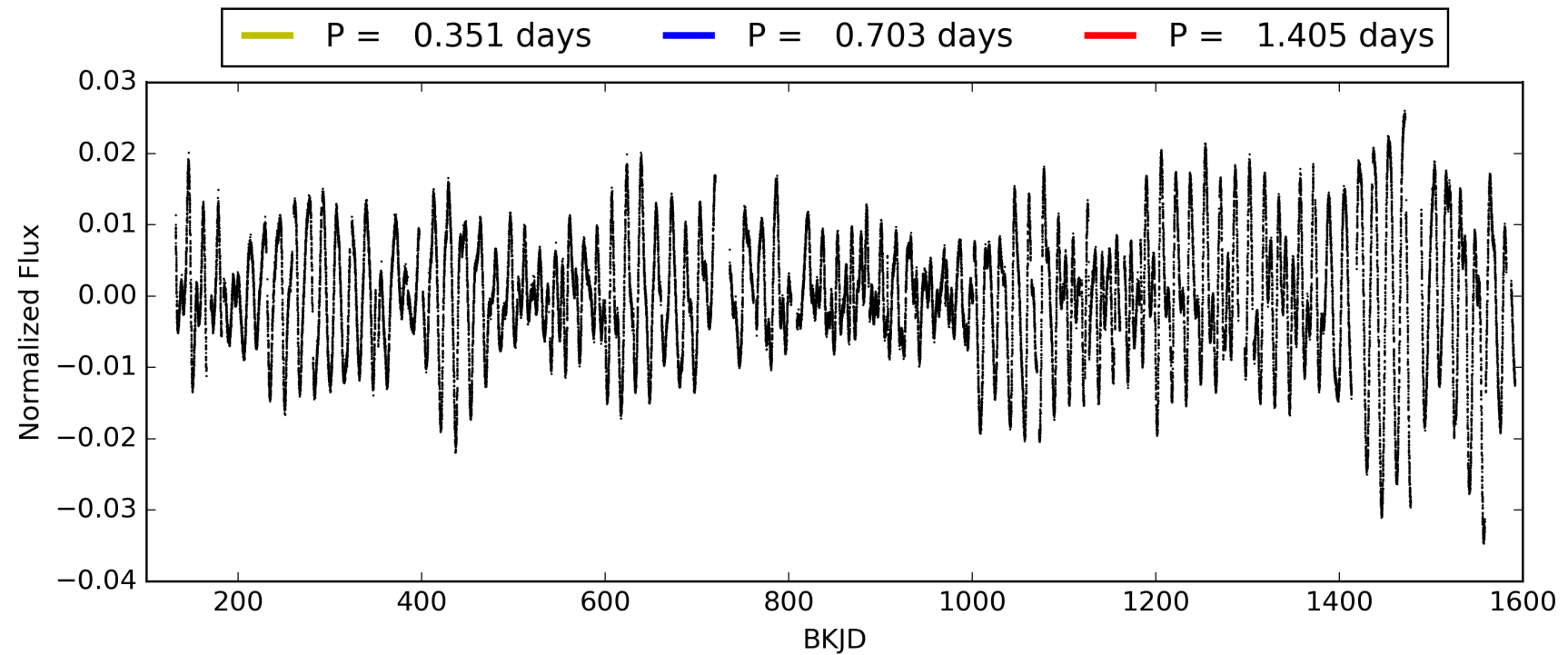
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 19:35:48 Z

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

TCE 002696205-01, PDC Light Curves

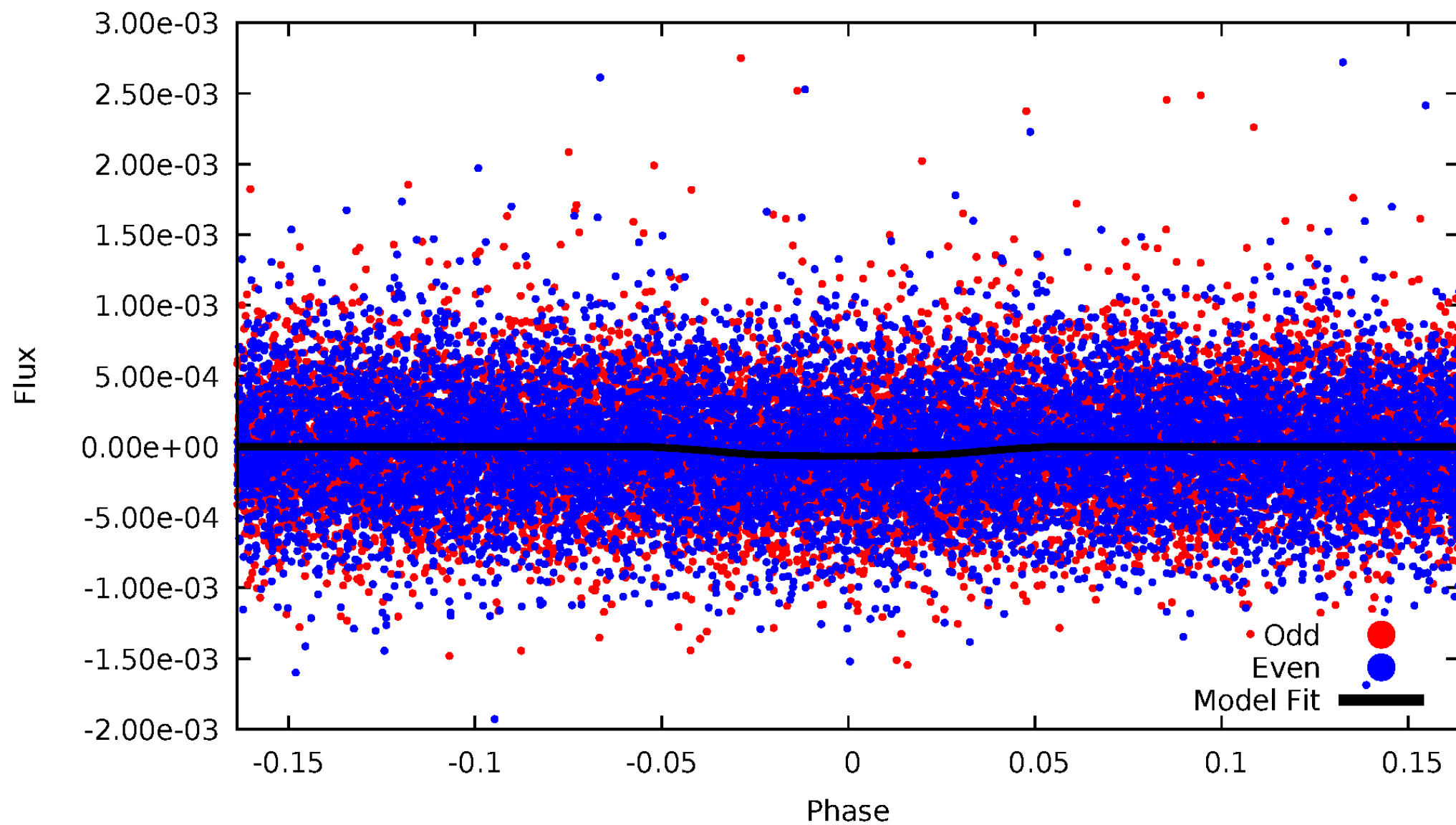


TCE 002696205-01



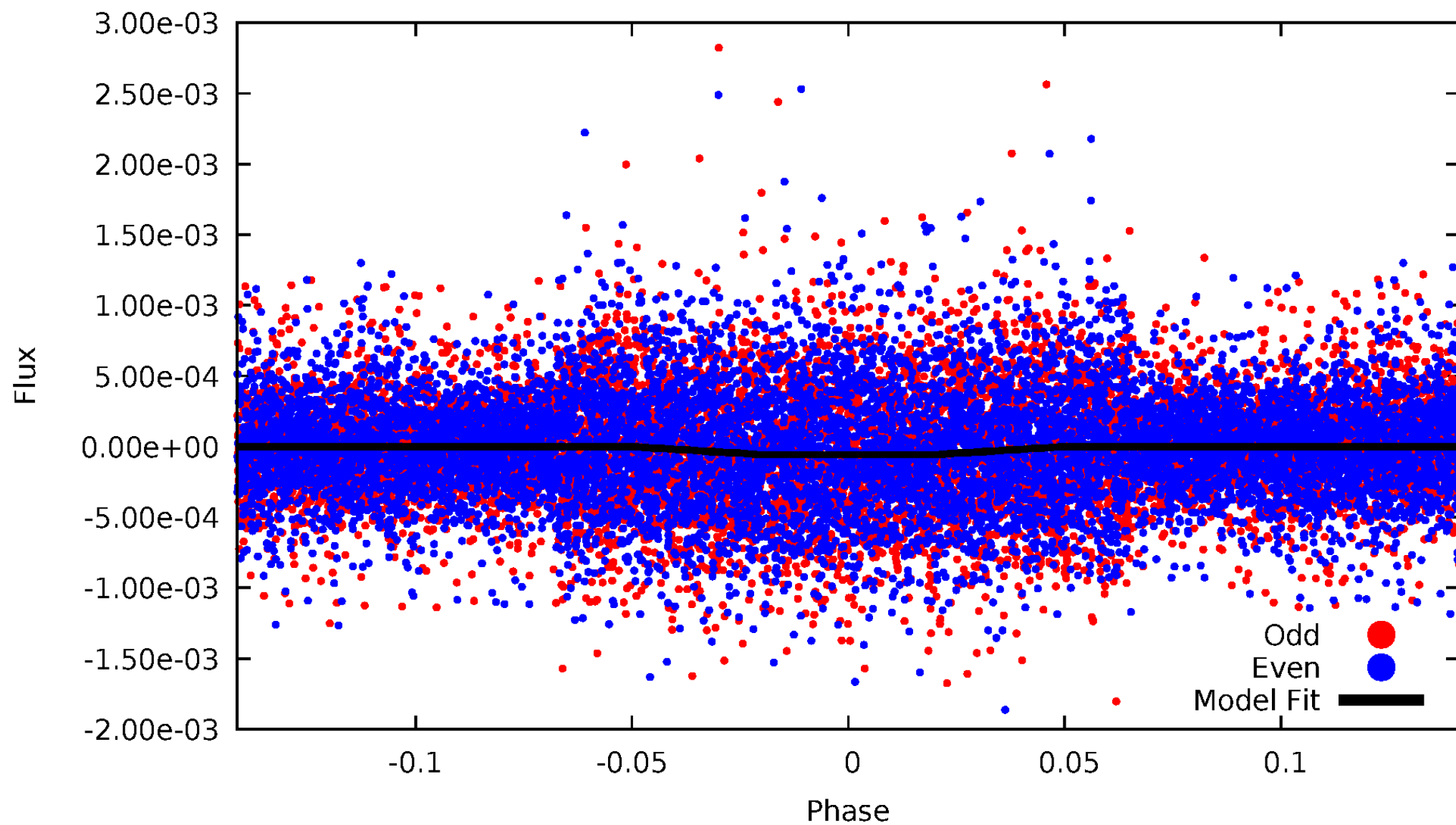
DV Odd/Even

TCE 002696205-01



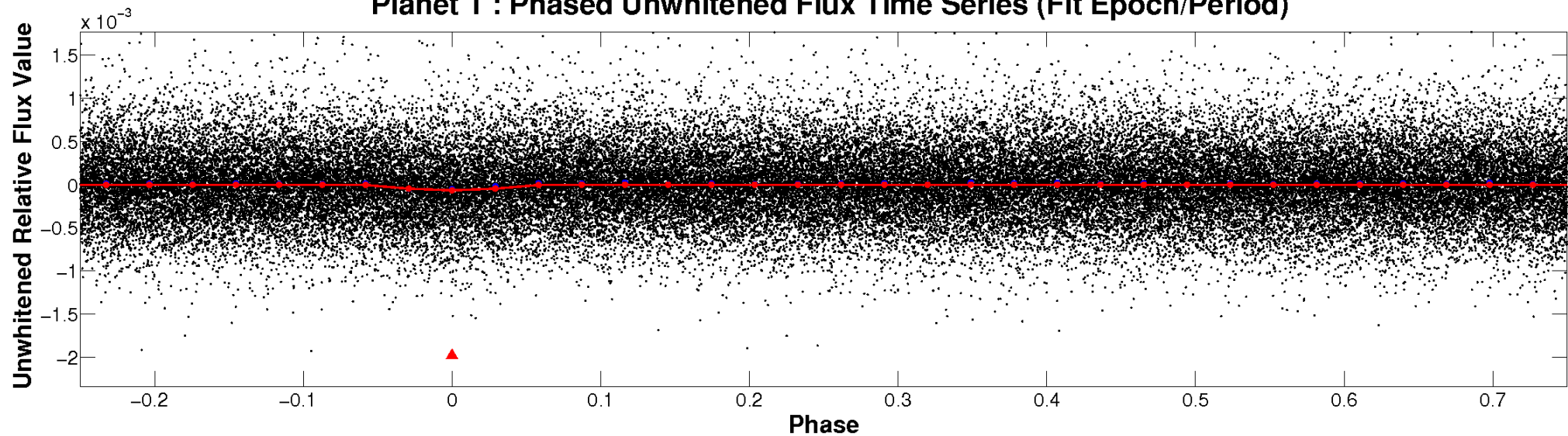
ALT Odd/Even

TCE 002696205-01

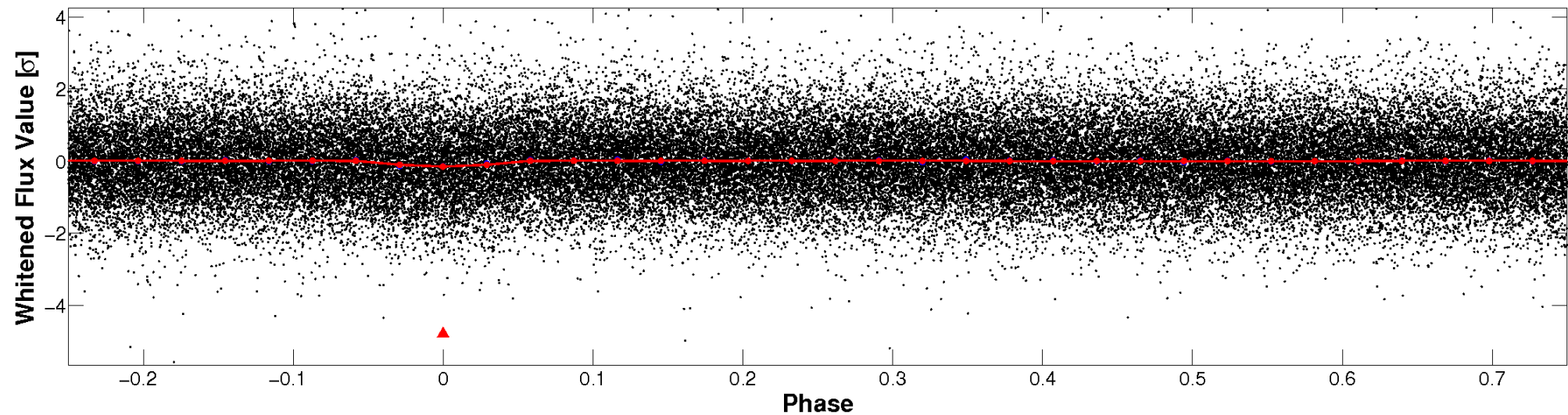


Non-Whitened Vs. Whitened Light Curve

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

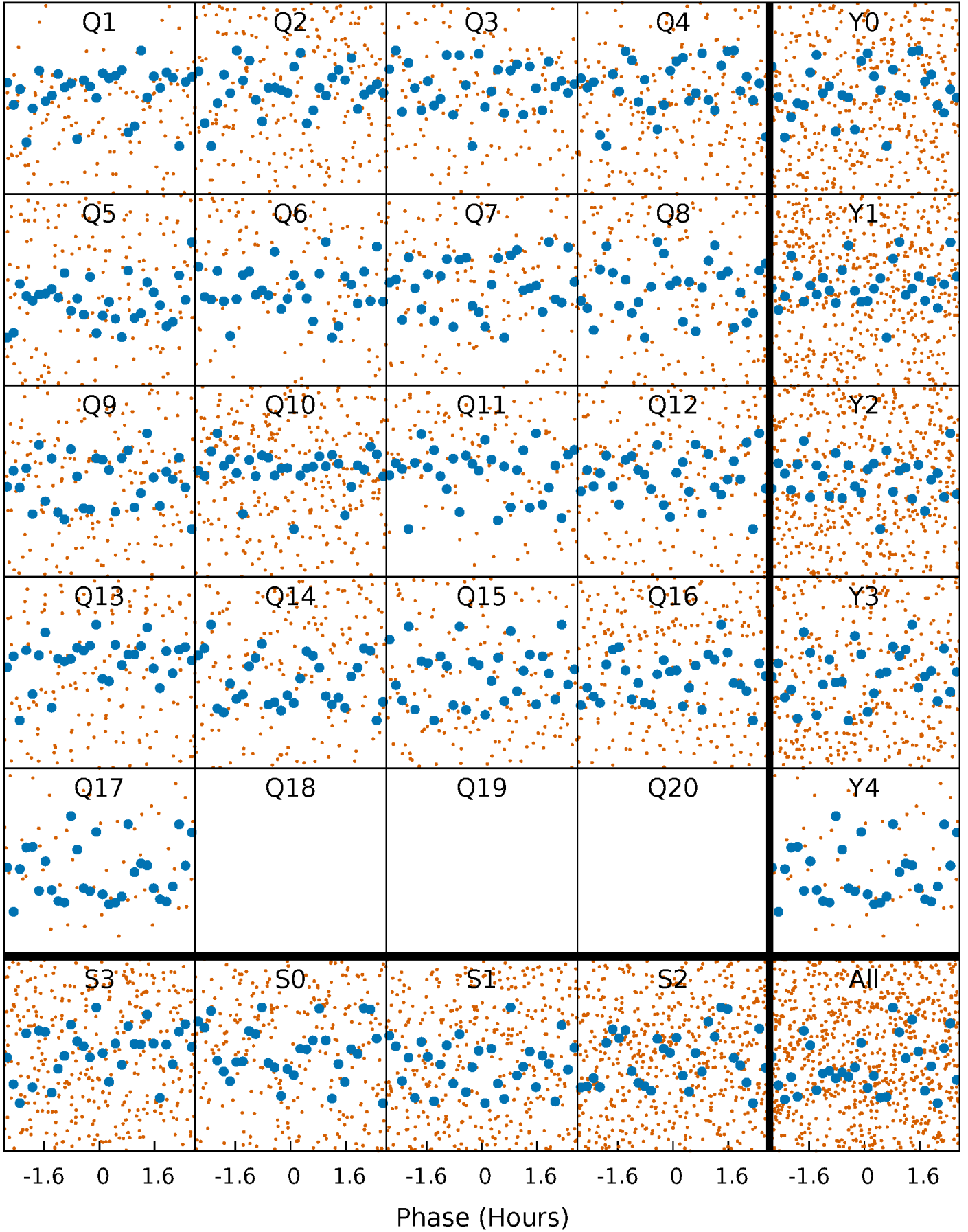


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



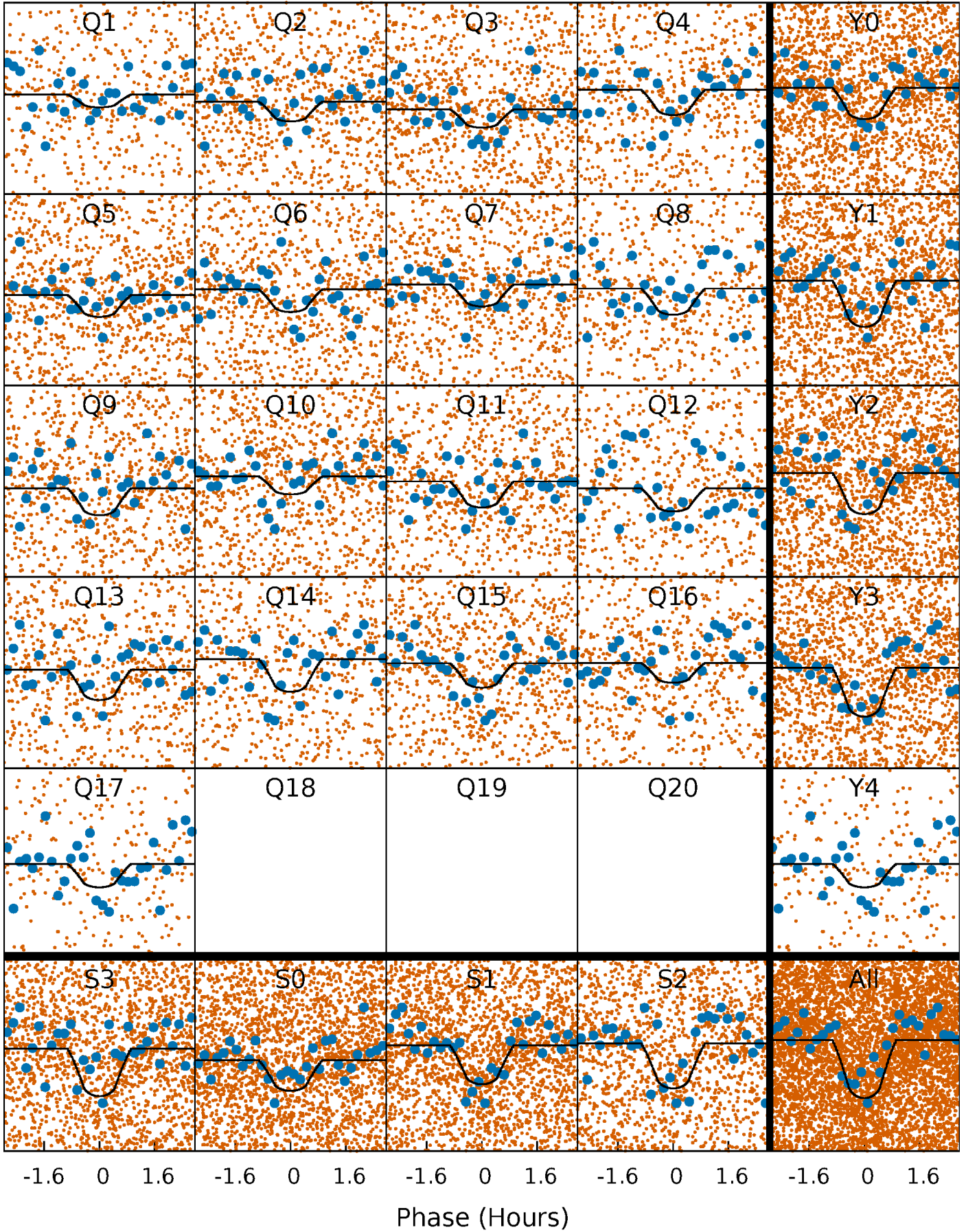
PDC Quarter-Phased Transit Curves

TCE 002696205-01 P= 0.702744 Days $T_0=131.531574$ (BKJD)



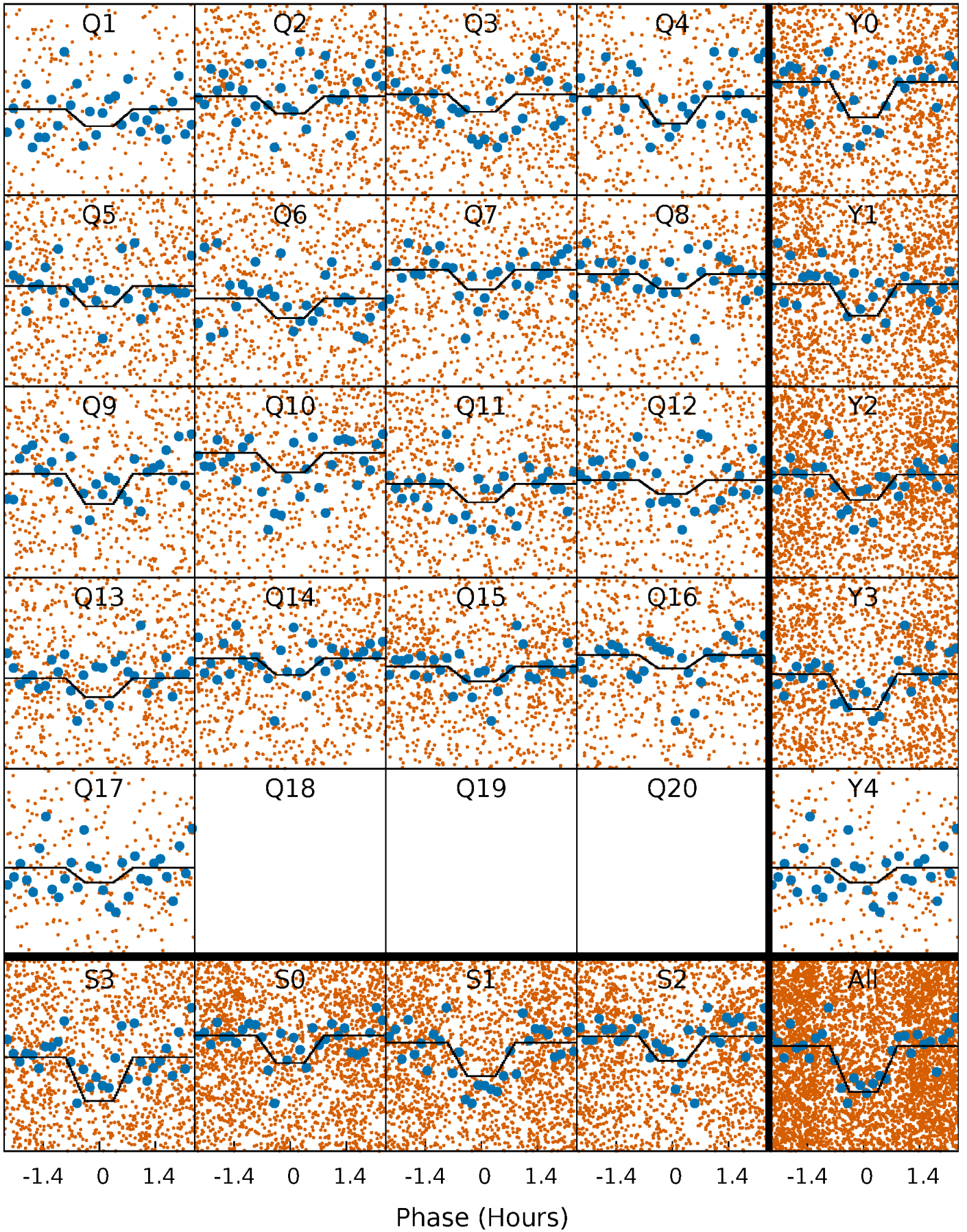
DV Quarter-Phased Transit Curves

TCE 002696205-01 P= 0.702744 Days $T_0=131.531574$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

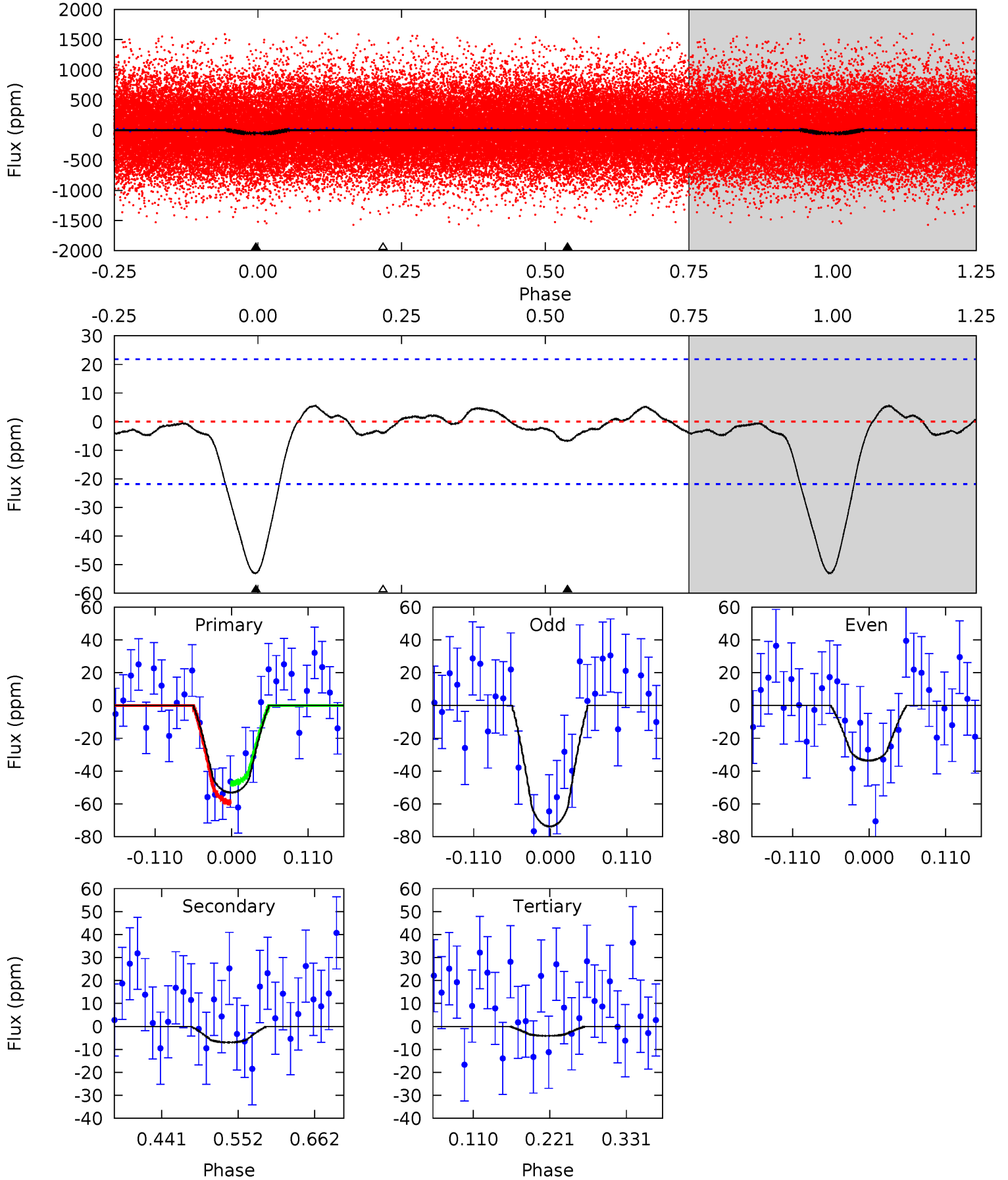
TCE 002696205-01 P= 0.702739 Days $T_0=131.534069$ (BKJD)



DV Model-Shift Uniqueness Test

002696205-01, P = 0.702744 Days, E = 130.828830 Days

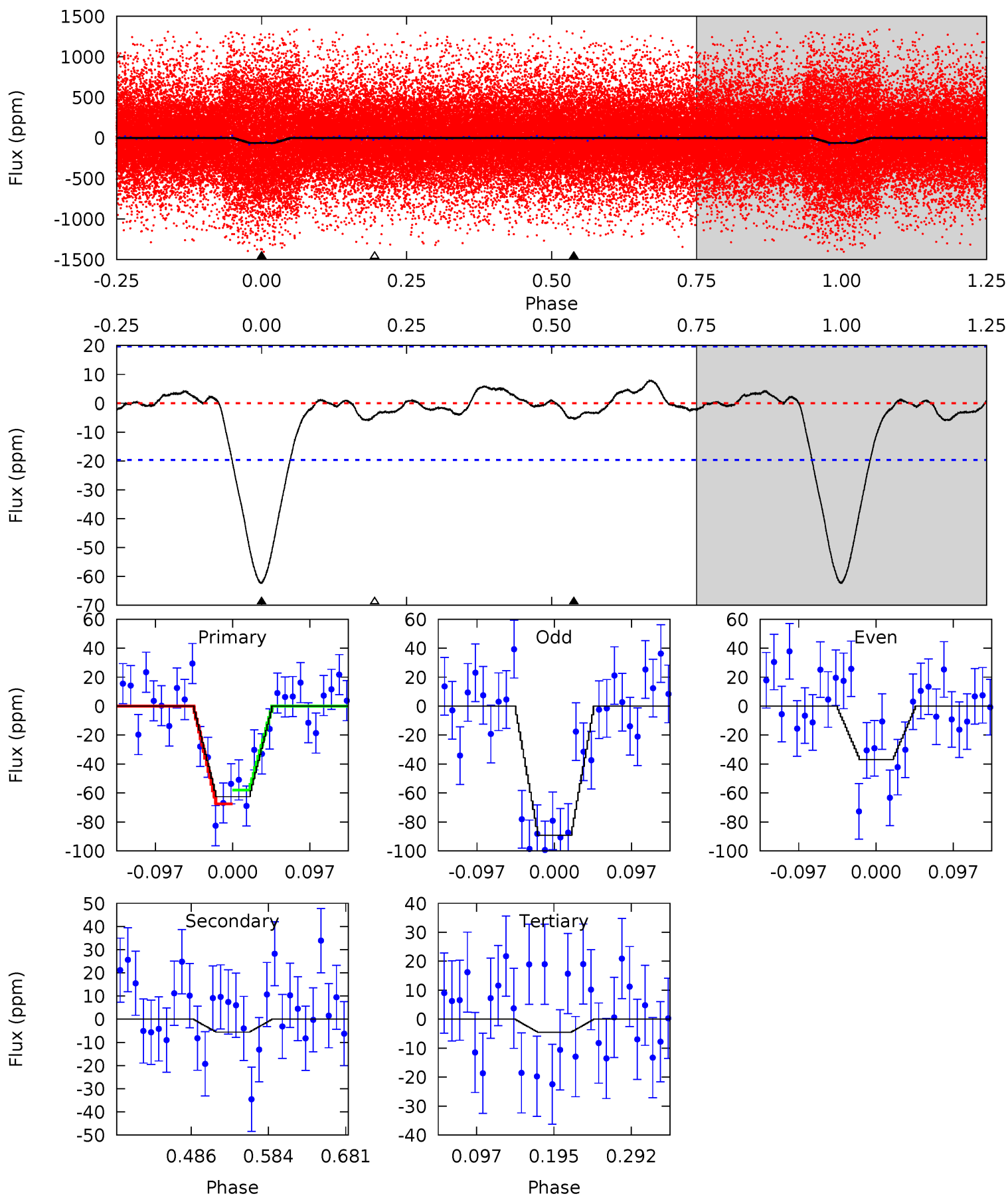
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.1	1.45	0.85	0	4.54	1.60	0.60	10.2	11.1	0.60	1.45	4.19	0.85	0.10	1.21



Alt Model-Shift Uniqueness Test

002696205-01, P = 0.702739 Days, E = 130.831330 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14.5	1.30	1.05	0	4.57	1.66	0.72	13.5	14.5	0.25	1.30	6.10	0.95	0.11	1.11



Stellar Parameters For KIC 002696205

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5269^{+158}_{-158}	$4.508^{+0.072}_{-0.099}$	$-0.040^{+0.300}_{-0.300}$	$0.836^{+0.120}_{-0.087}$	$0.819^{+0.095}_{-0.069}$	$1.978^{+0.642}_{-0.576}$
	+3%/-3%	+2%/-2%	+750%/-750%	+14%/-10%	+12%/-8%	+32%/-29%
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 002696205-01 / KOI 7636.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-7 ± 5	$1.38^{+1.37}_{-0.97}$	2479^{+108}_{-107}	2296^{+1824}_{-5010}	$0.365^{+3.829}_{-0.314}$
Alt.	-6 ± 4	$1.35^{+1.37}_{-0.98}$	2480^{+104}_{-99}	-1861^{+5905}_{-869}	$0.292^{+3.764}_{-0.254}$

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

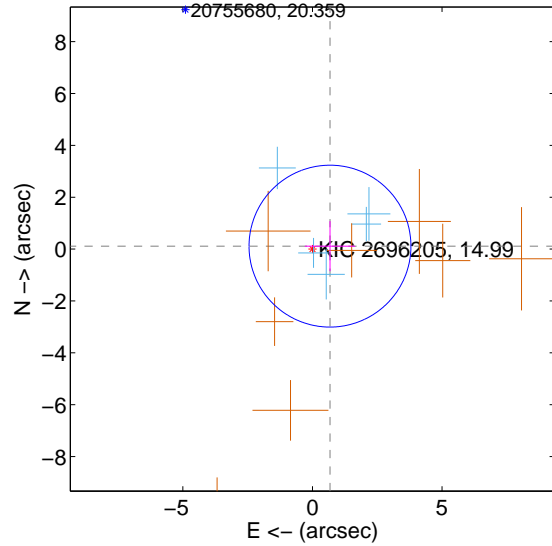
Supplemental centroid analysis for 002696205-01. Kepler magnitude: 14.99. Transit SNR 8.90

There are 5 quarters with good PRF difference image offsets

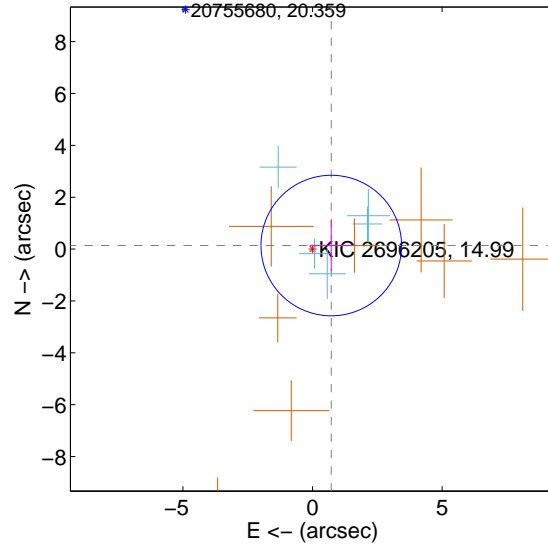
The direct PRF centroid is offset from the target star catalog position by about 0.04 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.686 ± 1.041	0.66	-0.677 ± 0.971	0.114 ± 0.965
PRF-fit source offset from KIC position	0.735 ± 0.904	0.81	-0.723 ± 0.834	0.137 ± 0.992
photometric centroid source offset	3.41 ± 1.45	2.35	-2.79 ± 1.42	-1.96 ± 1.52

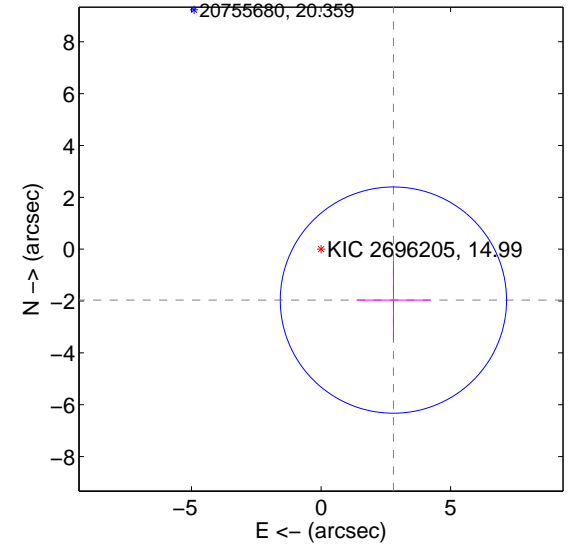
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

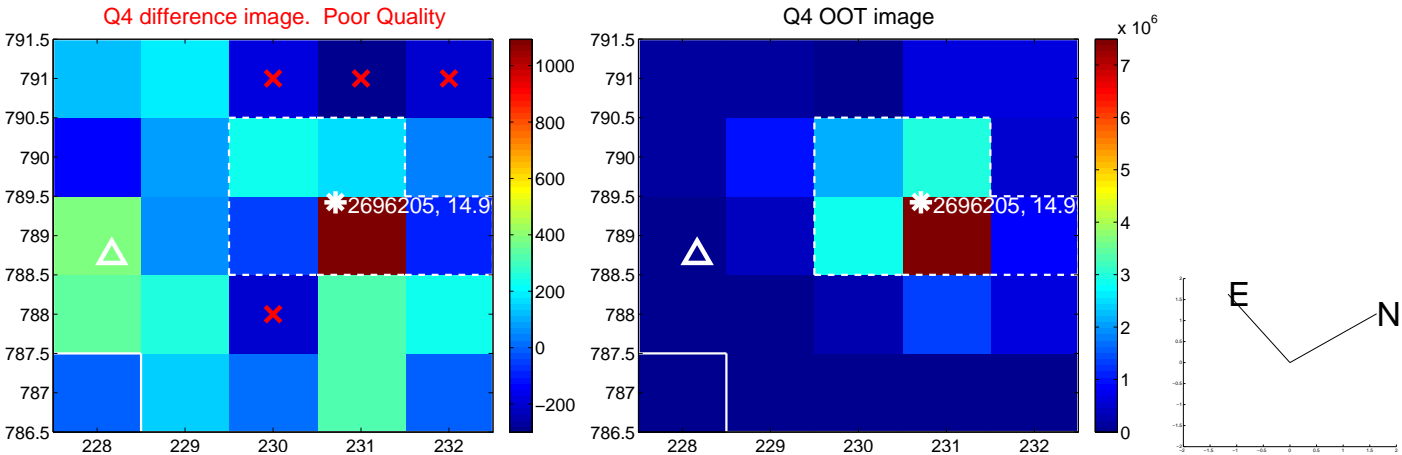
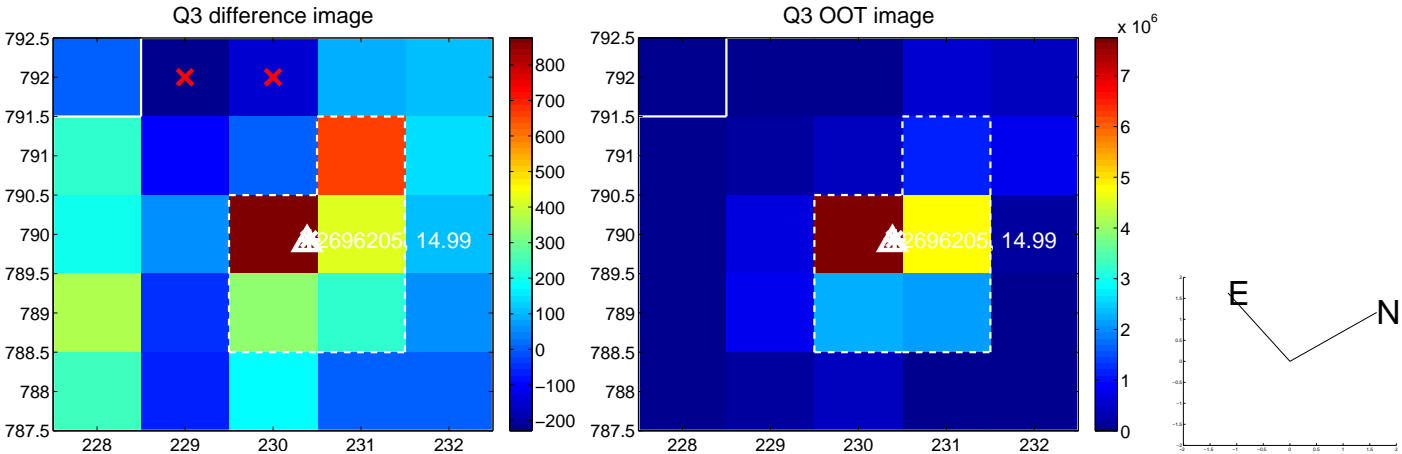
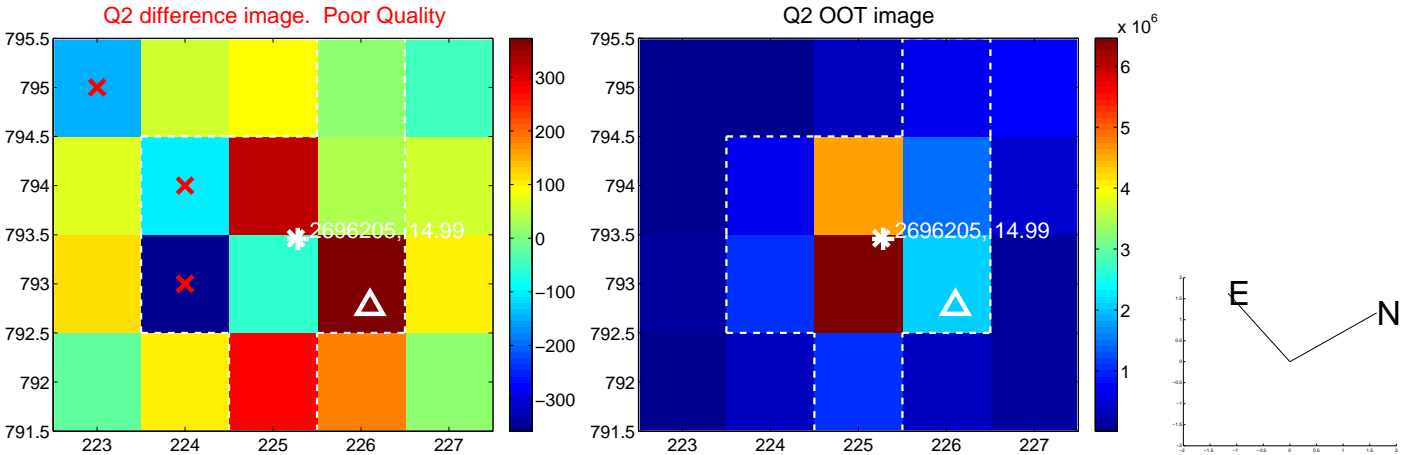
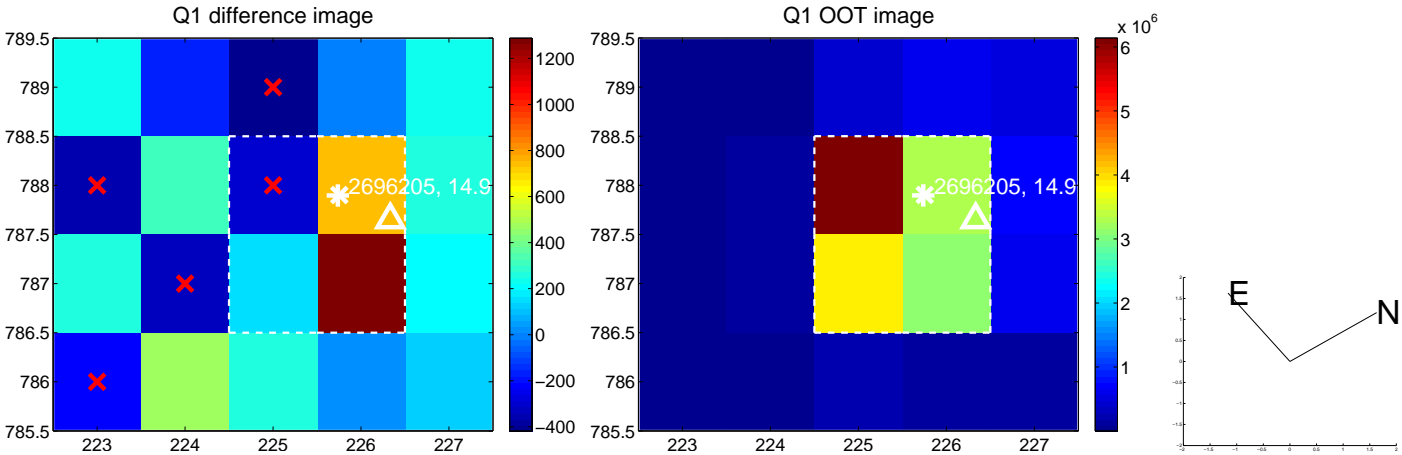


offset from photometric centroids

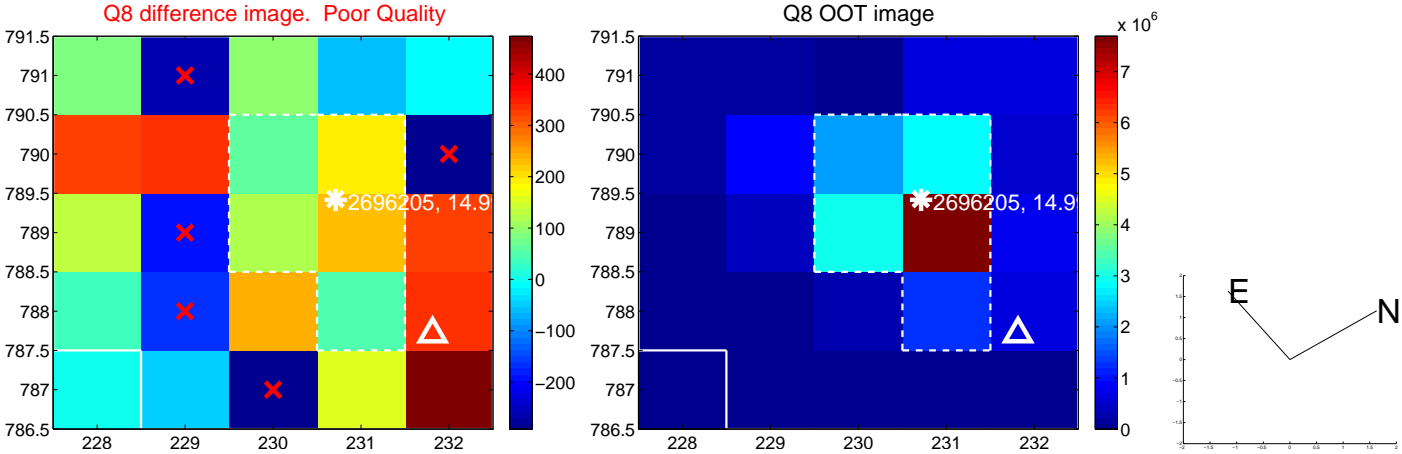
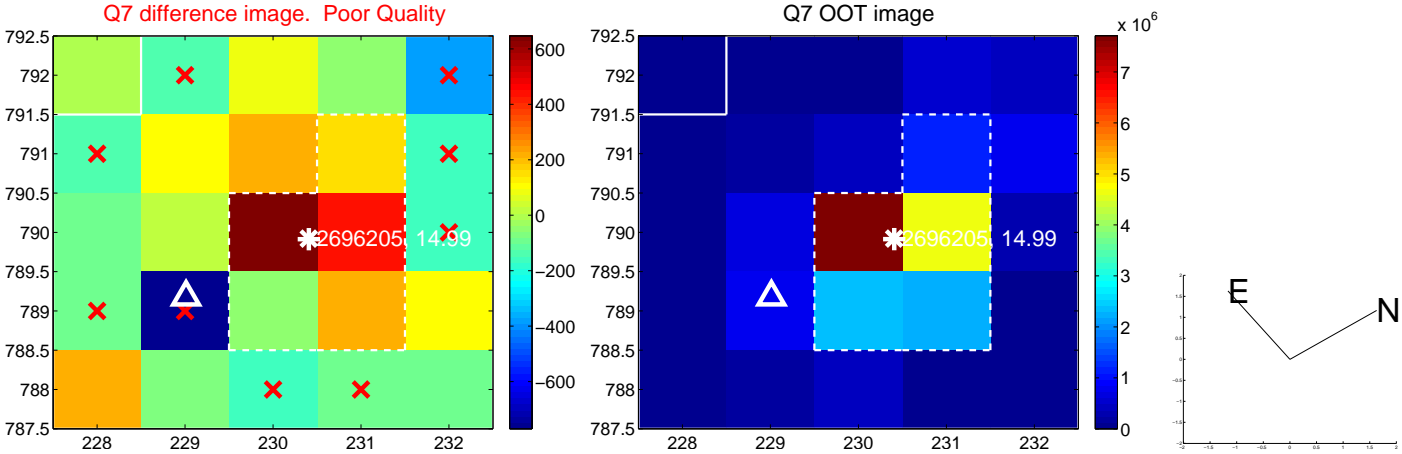
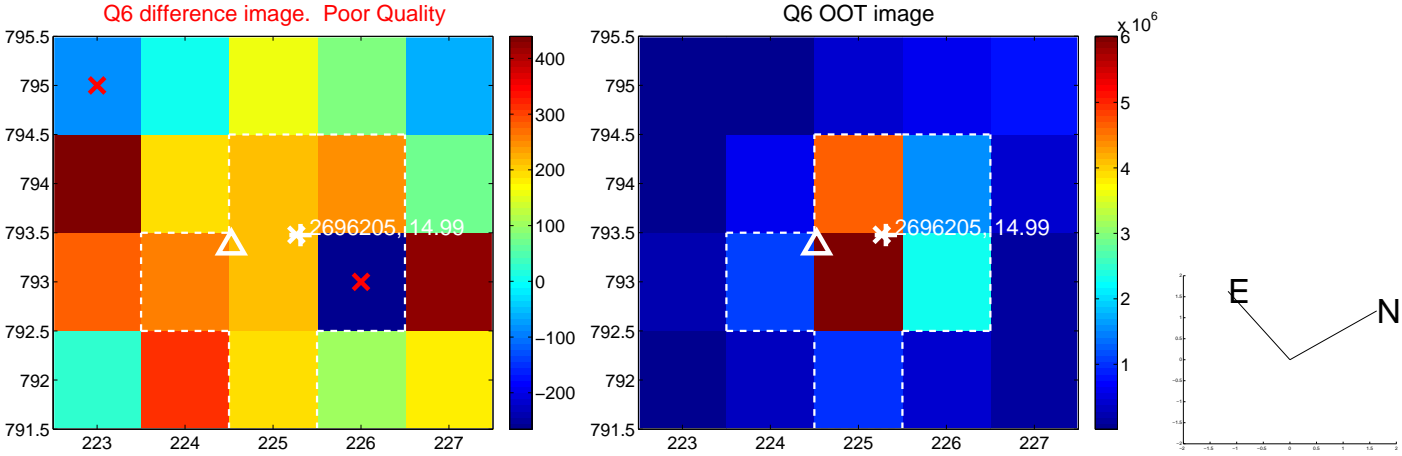
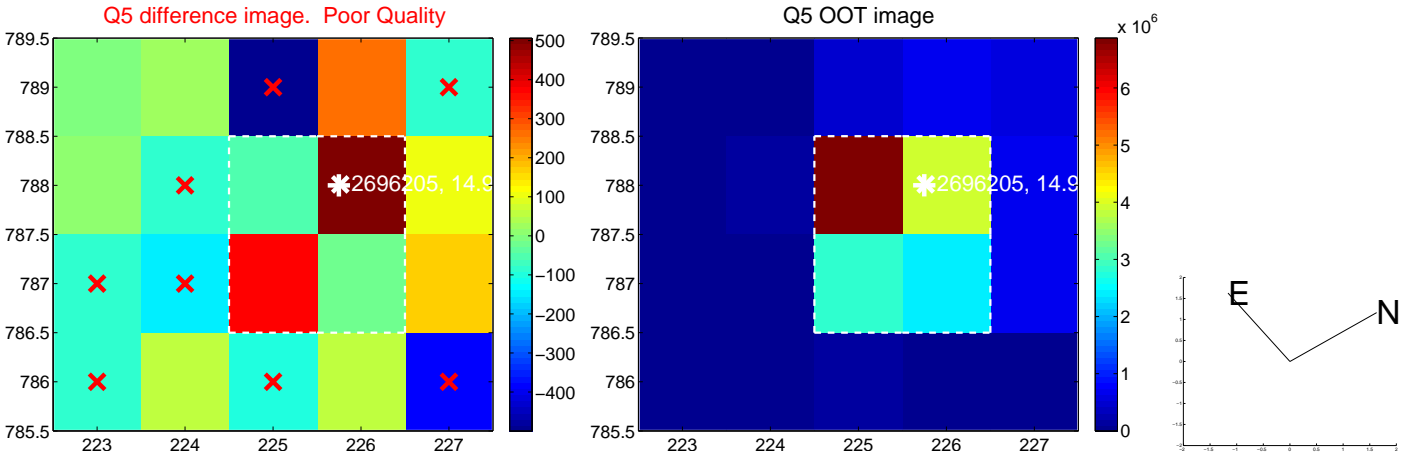


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets**; **Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

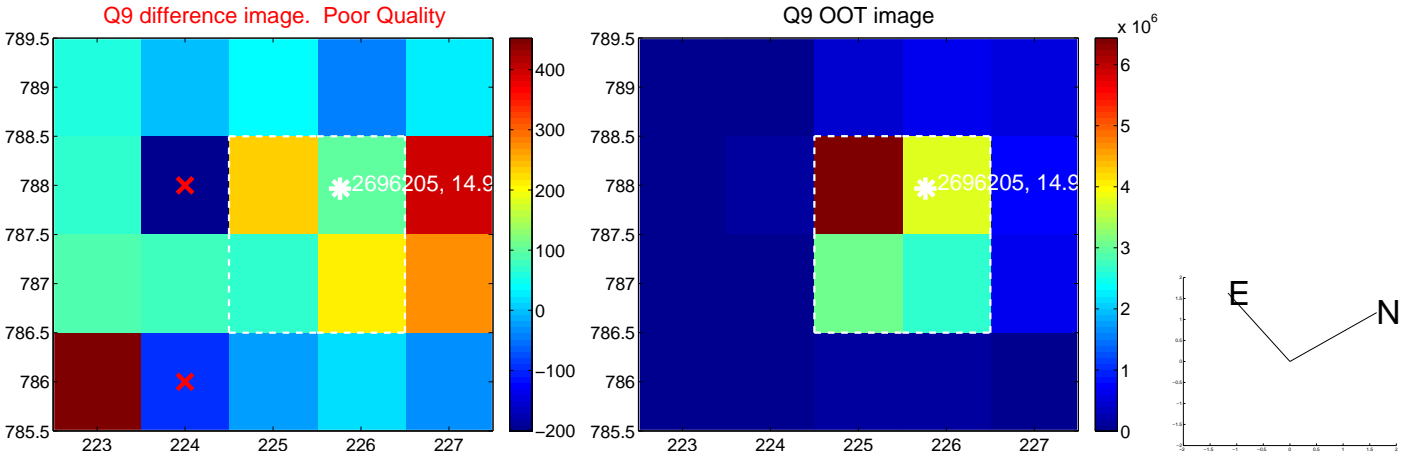
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



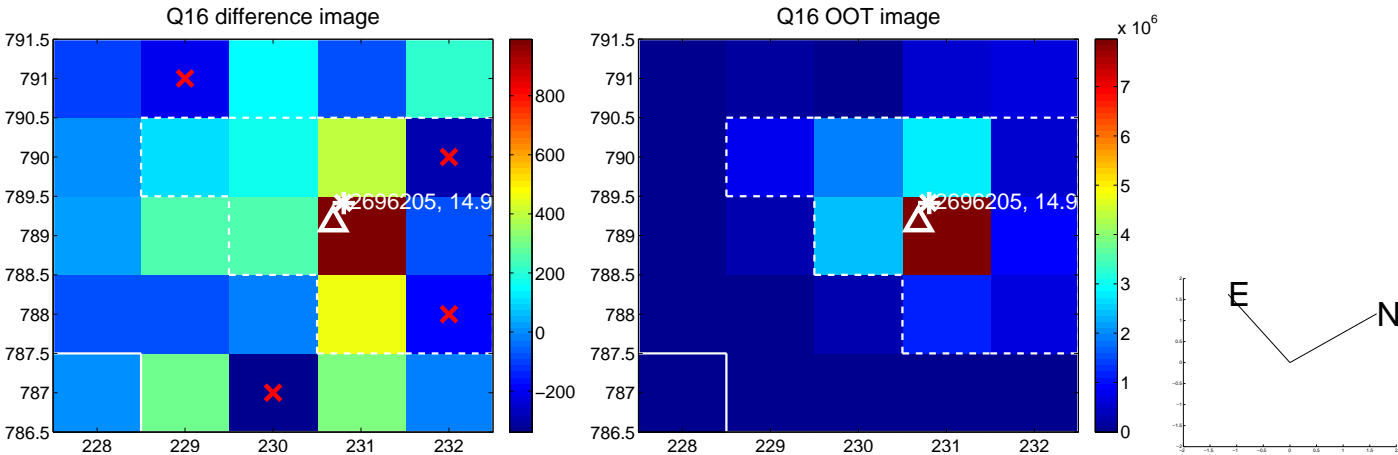
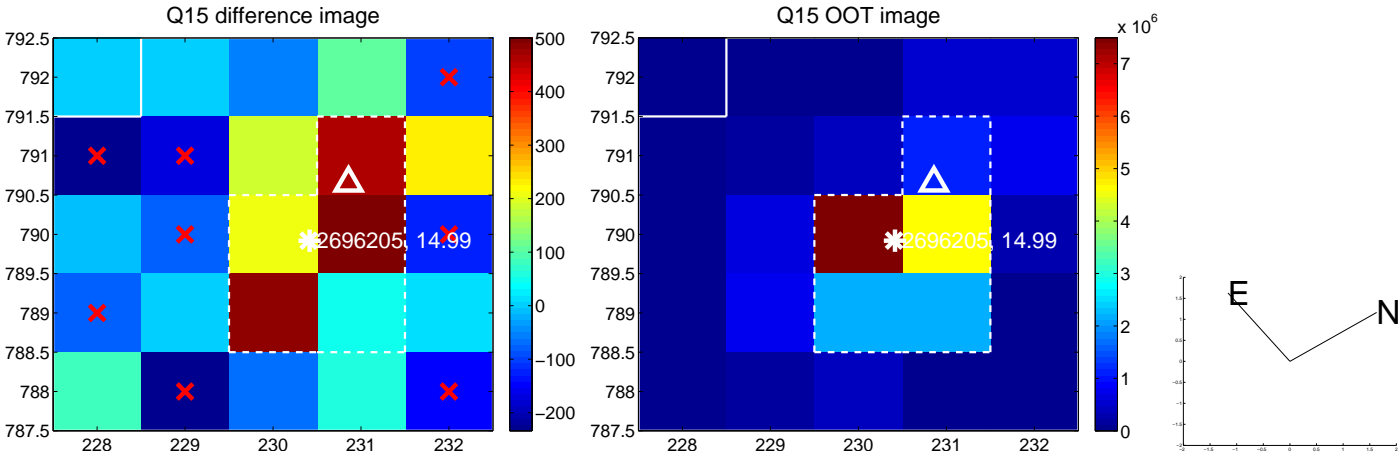
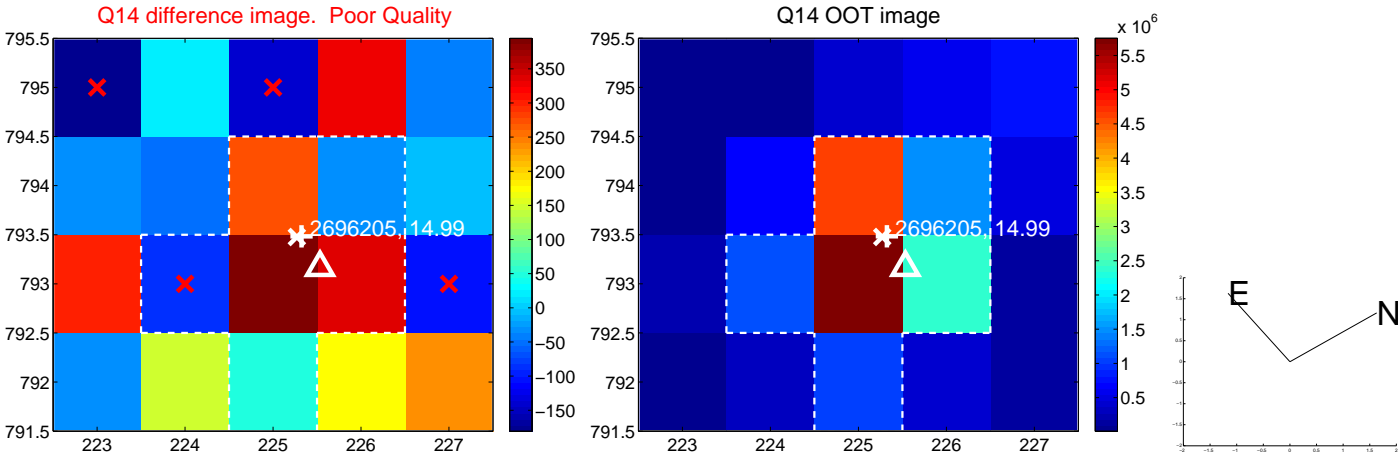
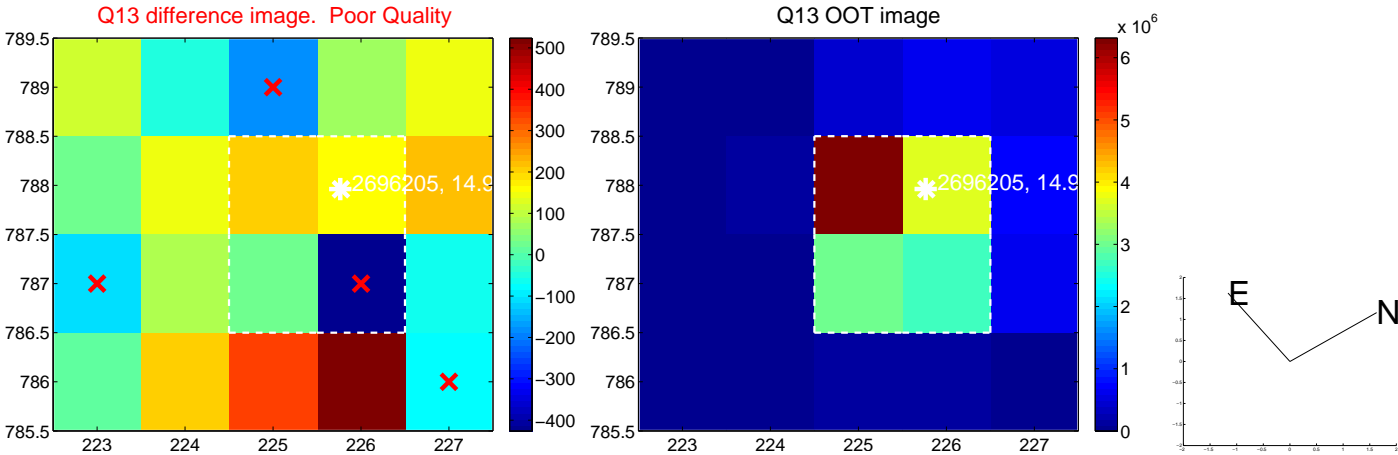
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



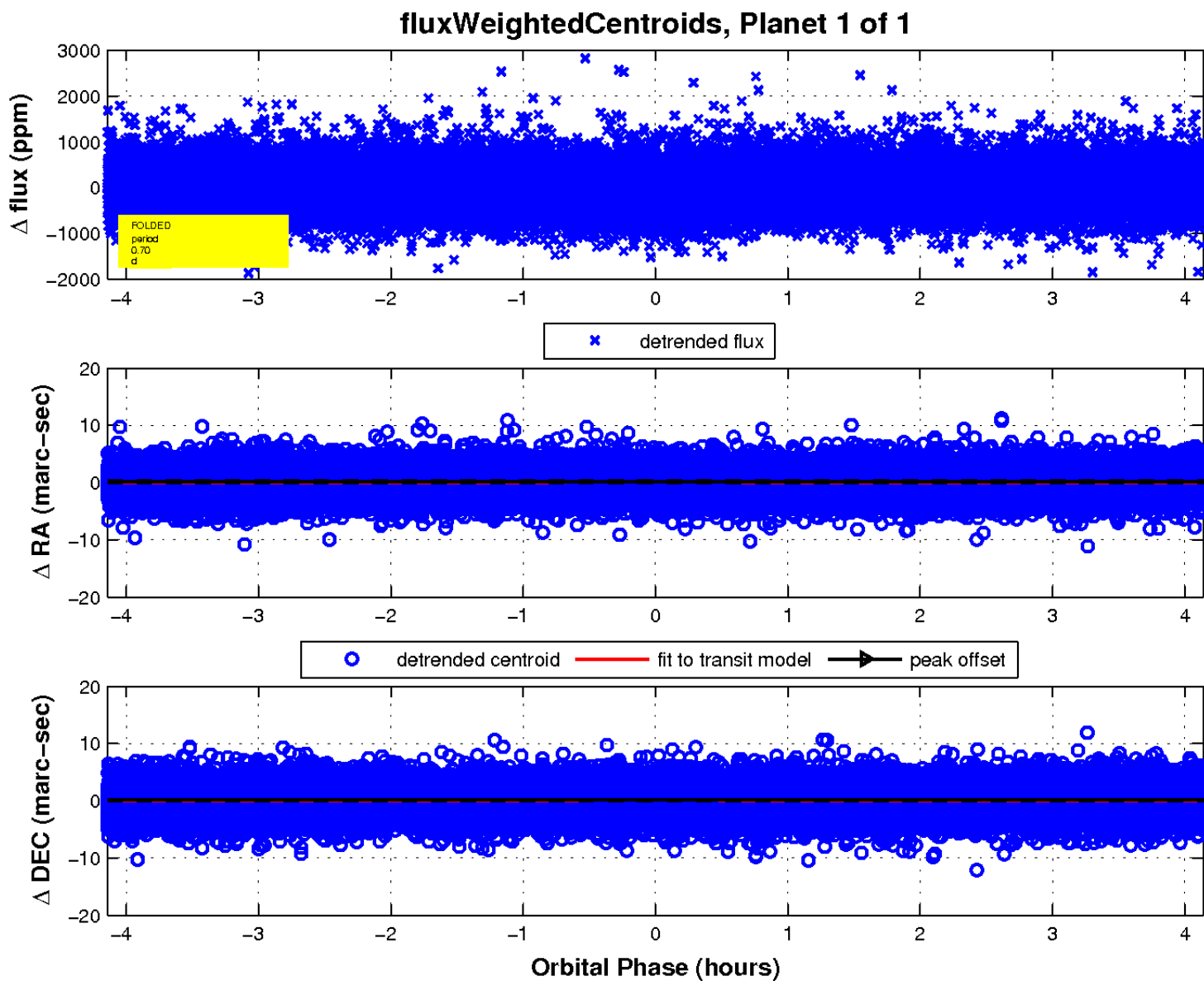
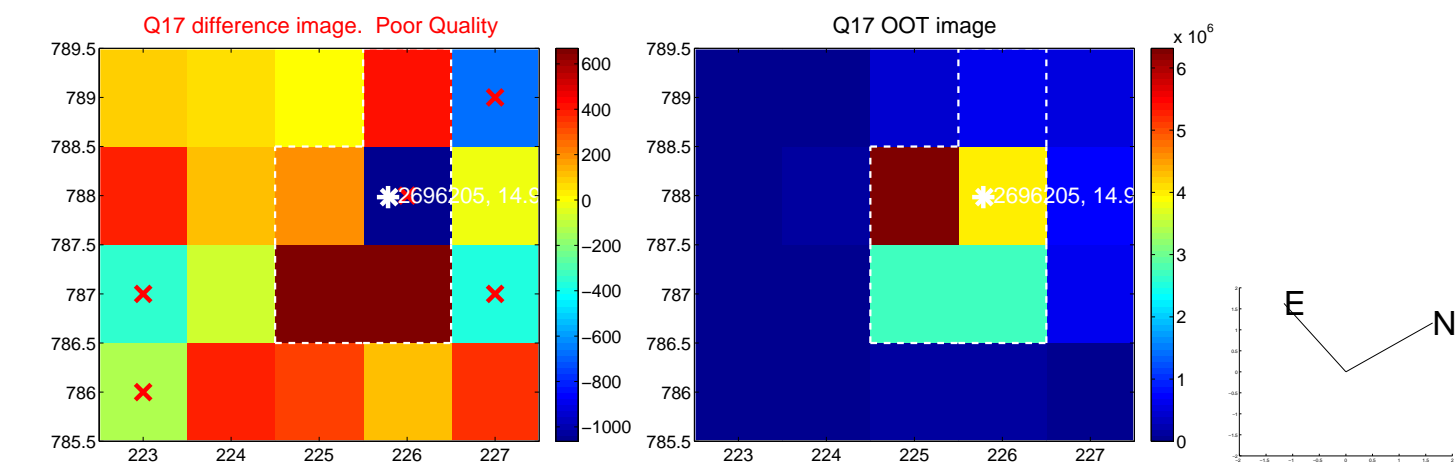
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white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination

