

KIC 011296437

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})
011296437-01	OBS	No	7.125113	136.041658	24.5	21.152	9.8	9.2	3.07	7112	1.78	2794.96

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011296437-01	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.

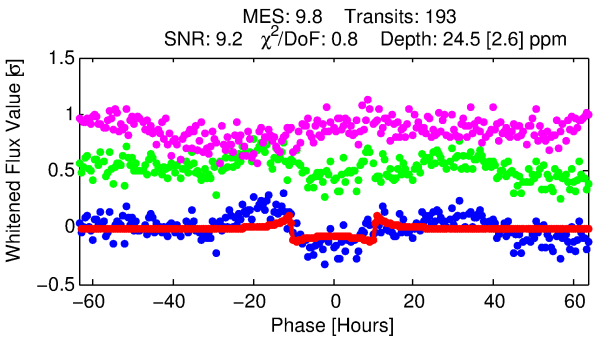
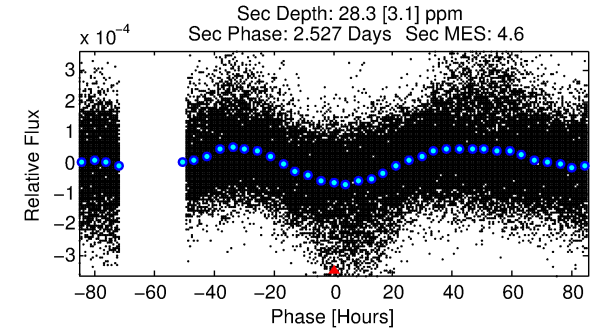
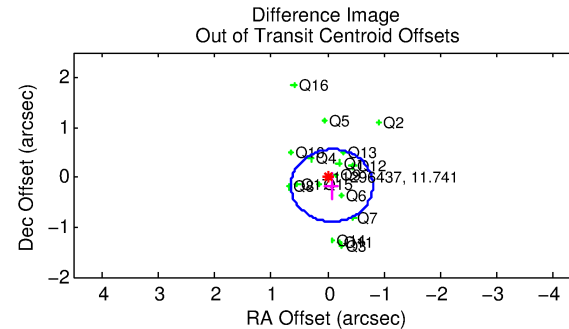
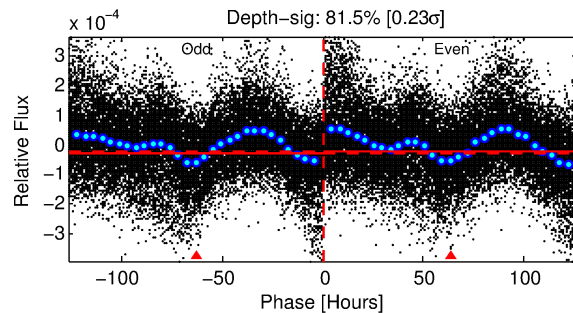
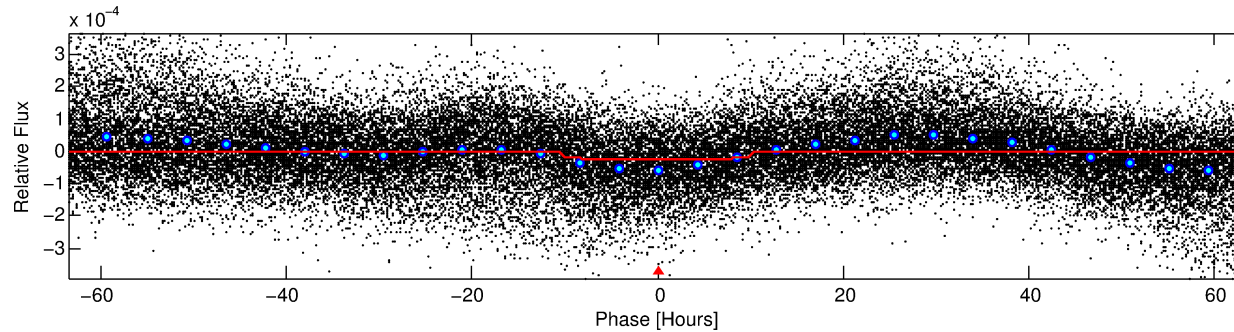
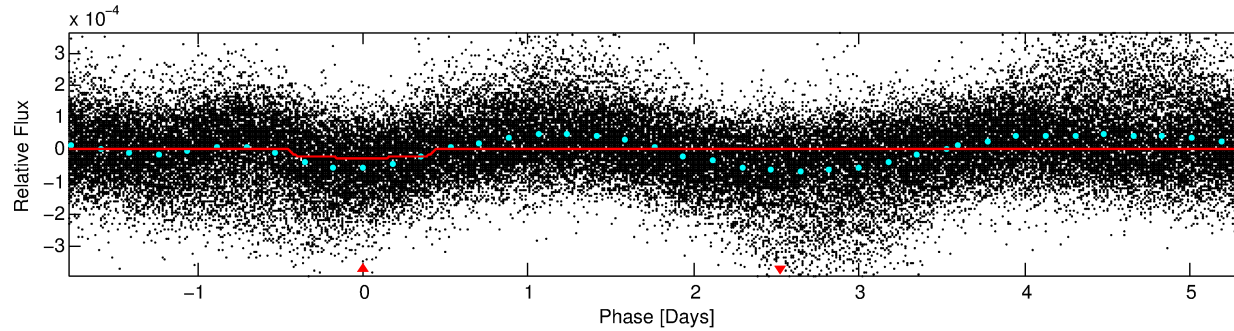
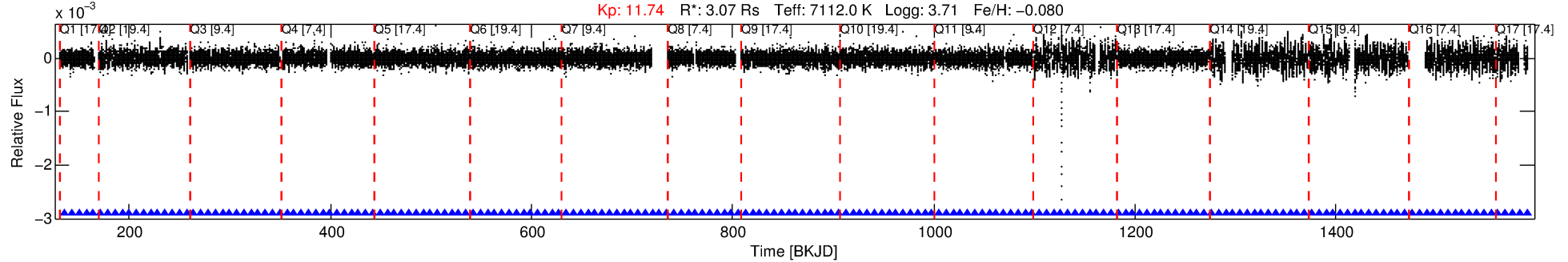
Ephemeris Match Information For 011296437-01

No Significant Match Found

DV One-Page Summary

KIC: 11296437 Candidate: 1 of 1 Period: 7.125 d
KOI: K06237 Corr: No Ephemeris Match

Kp: 11.74 R*: 3.07 Rs Teff: 7112.0 K Logg: 3.71 Fe/H: -0.080



DV Fit Results:

Period = 7.12511 [0.00009] d
Epoch = 136.0417 [0.0096] BKJD
Rp/R* = 0.0053 [0.0004]
a/R* = 1.44 [0.19]
b = 0.91 [0.05]
Seff = 2794.96 [1403.01]
Teff = 1854 [233] K
Rp = 1.78 [0.63] Re
a = 0.0879 [0.0277] AU
Ag = 37.86 [19.56] [1.88σ]
Teffp = 7111 [396] K [11.45σ]

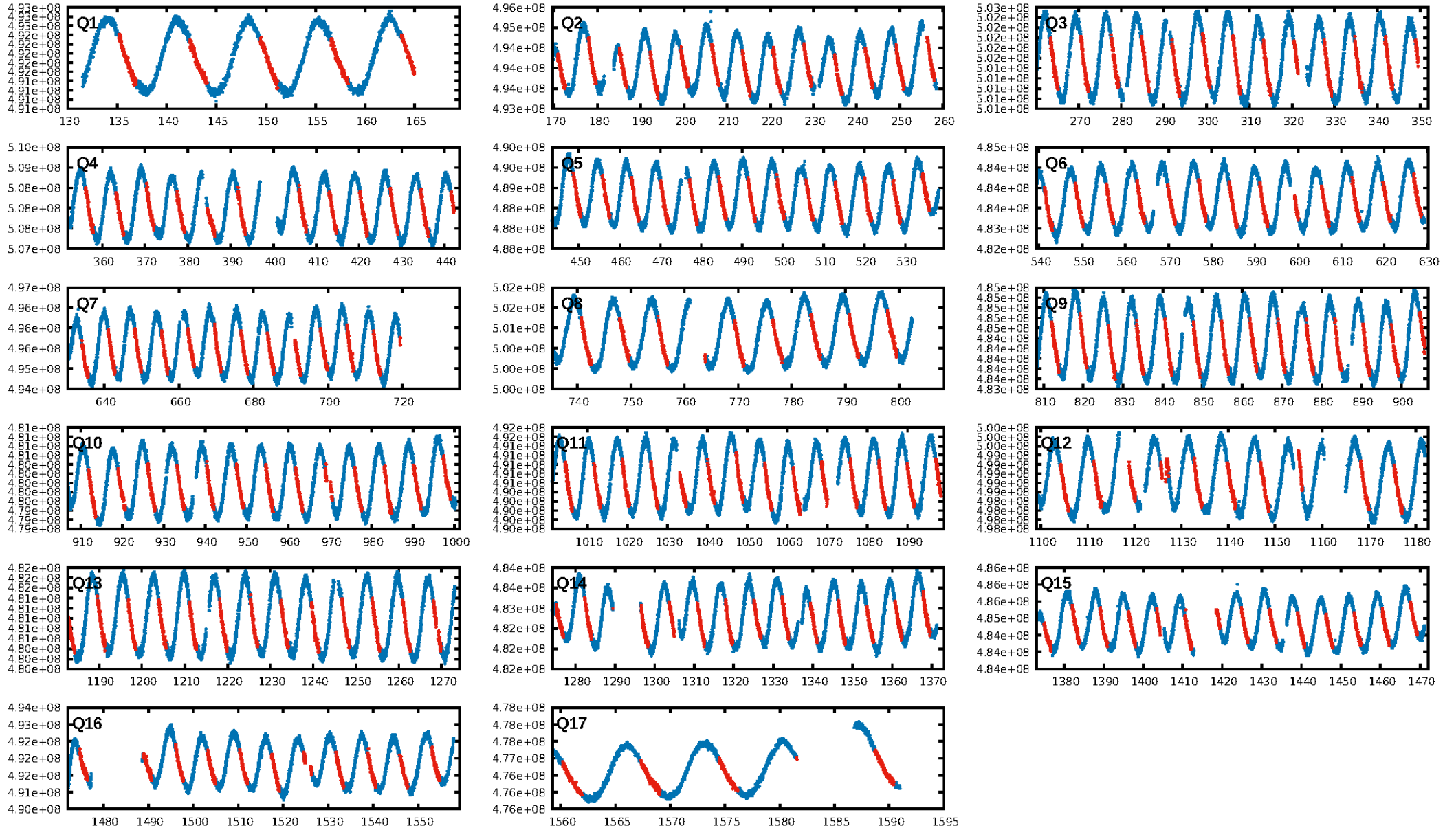
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 99.5%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 7.52e-22
RollingBand-fgt: 1.00 [184/184]
GhostDiagnostic-chr: 0.3924
Centroid-sig: 15.3%
Centroid-so: 0.532 arcsec [1.19σ]
OotOffset-rm: 0.185 arcsec [0.77σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-rm: 0.313 arcsec [1.25σ]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 1.00 [17/17]
DiffImageOverlap-fno: 1.00 [17/17]

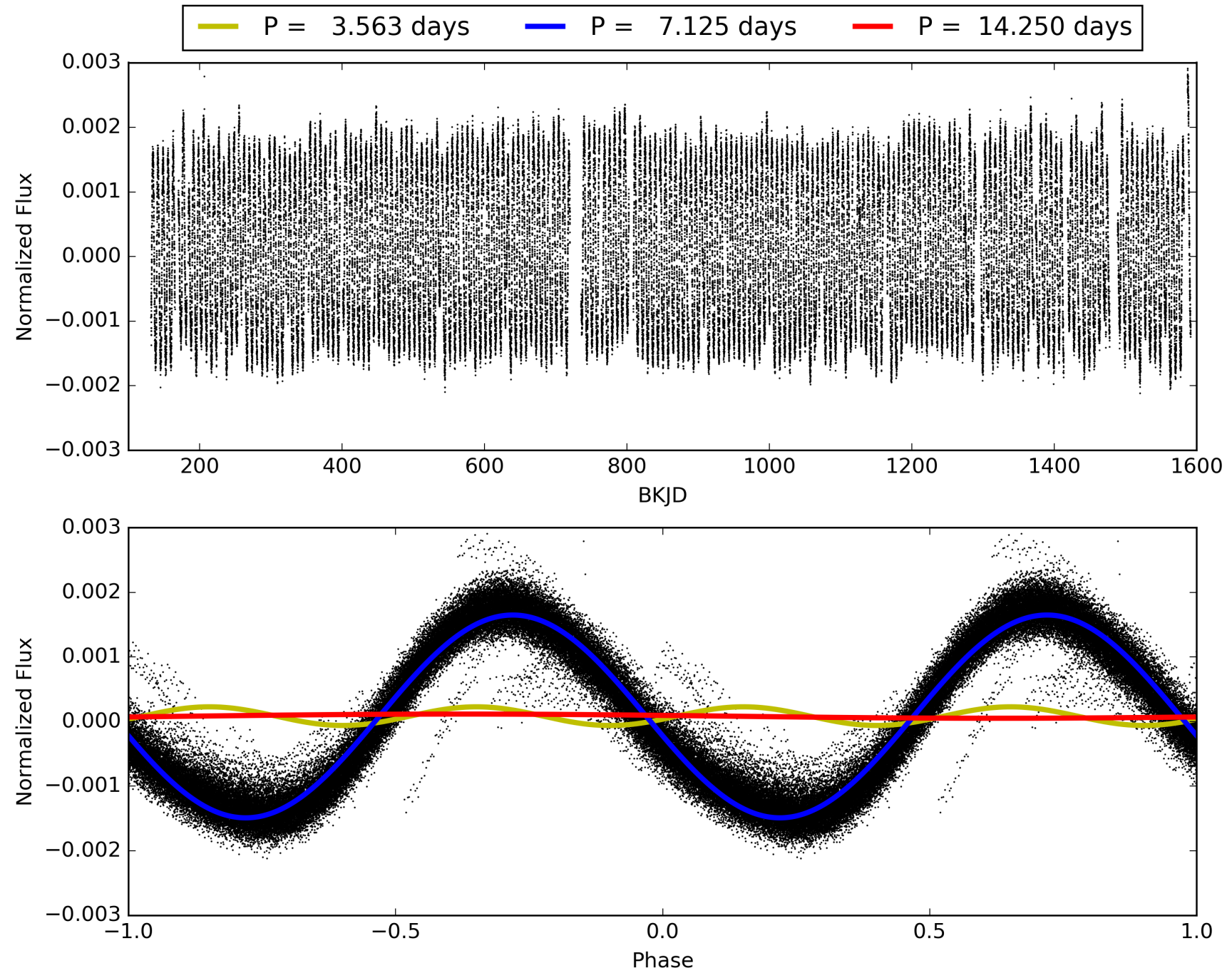
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 22:59:31 Z

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

TCE 011296437-01, PDC Light Curves

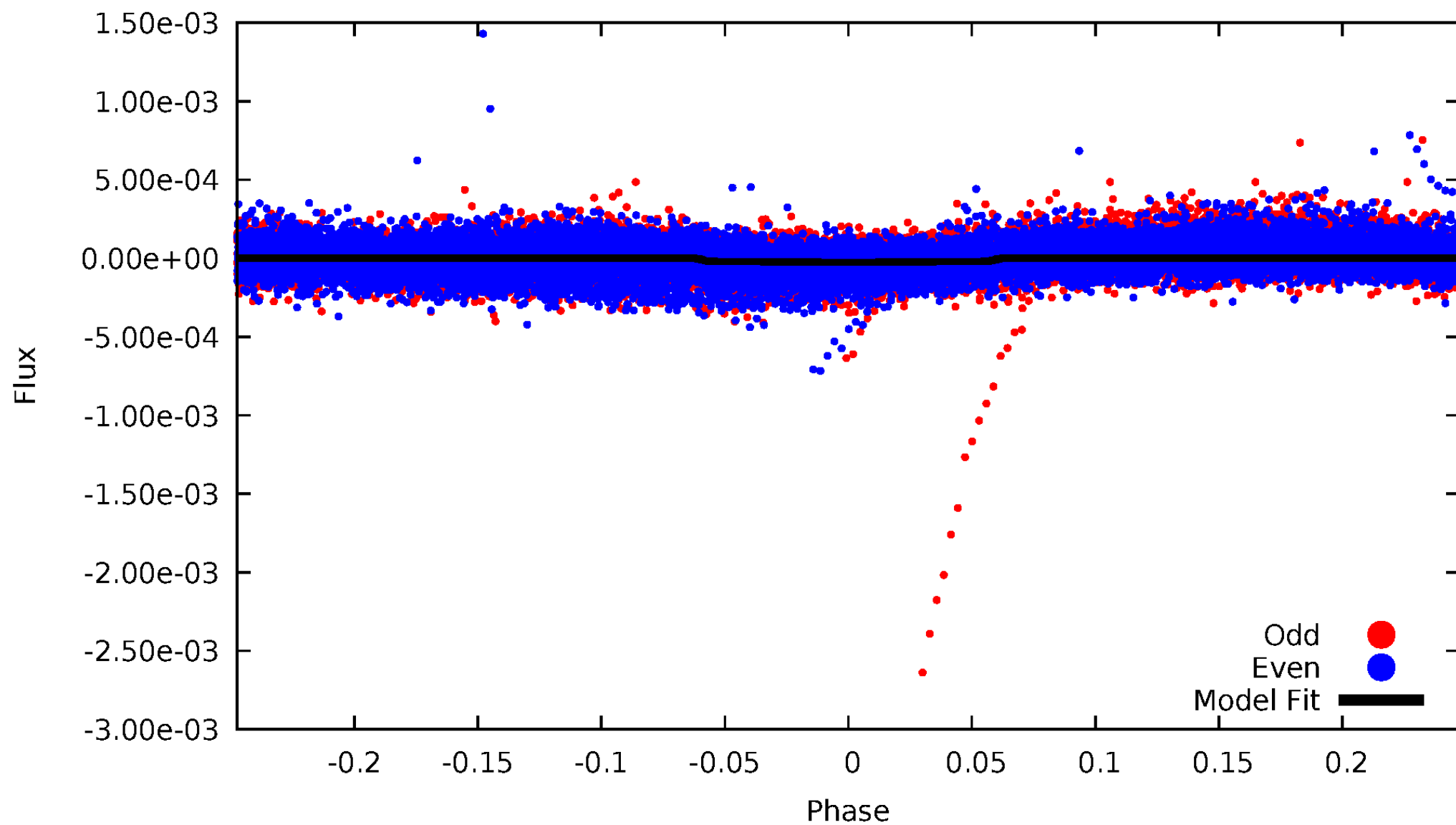


TCE 011296437-01



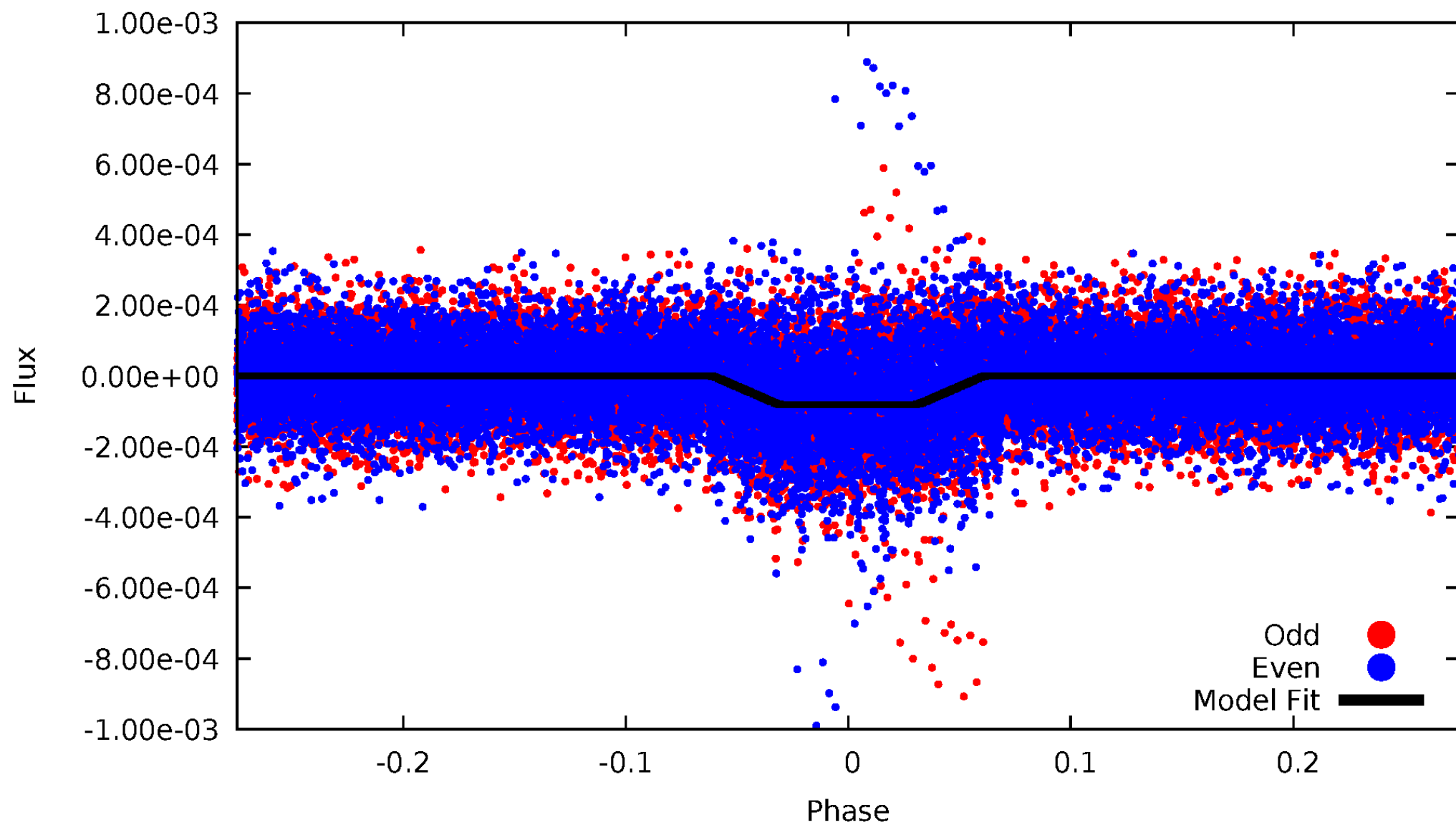
DV Odd/Even

TCE 011296437-01

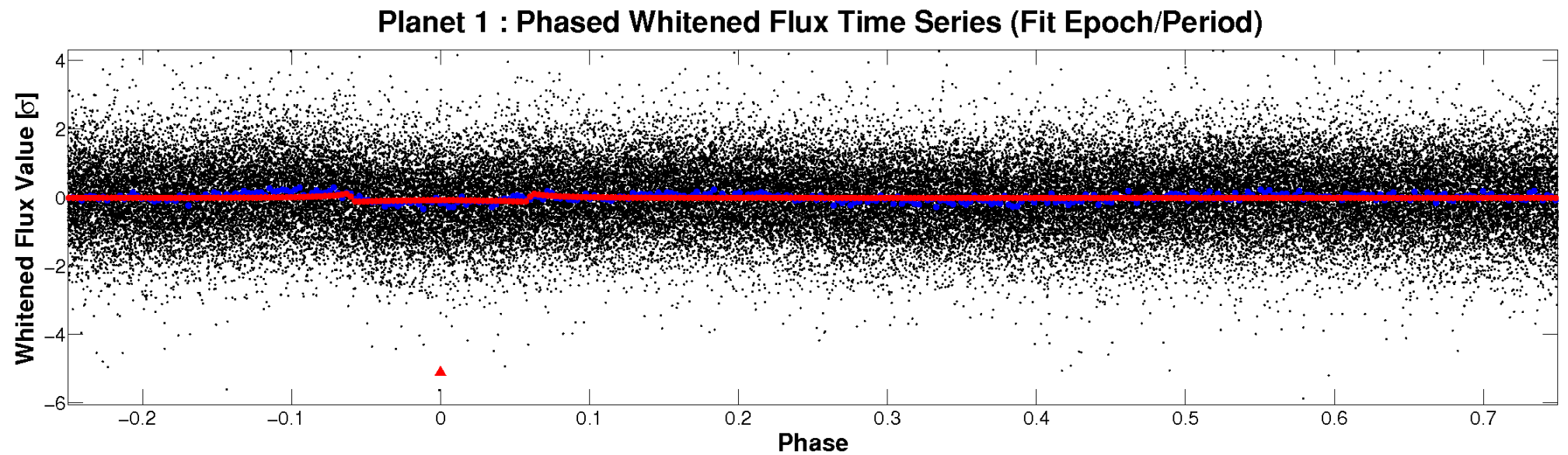
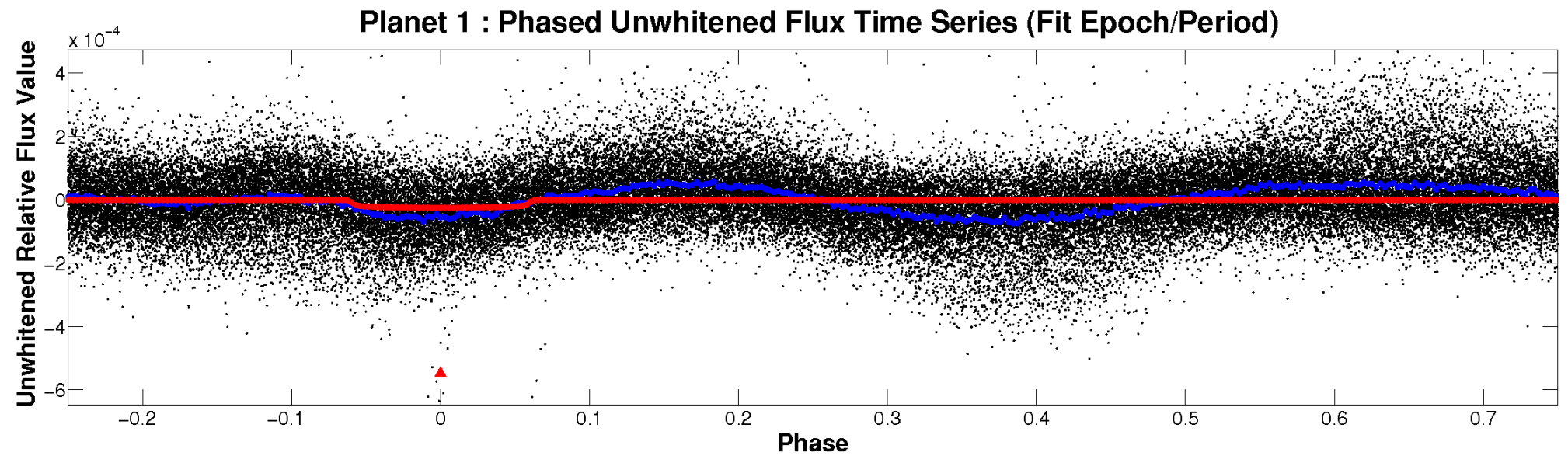


ALT Odd/Even

TCE 011296437-01

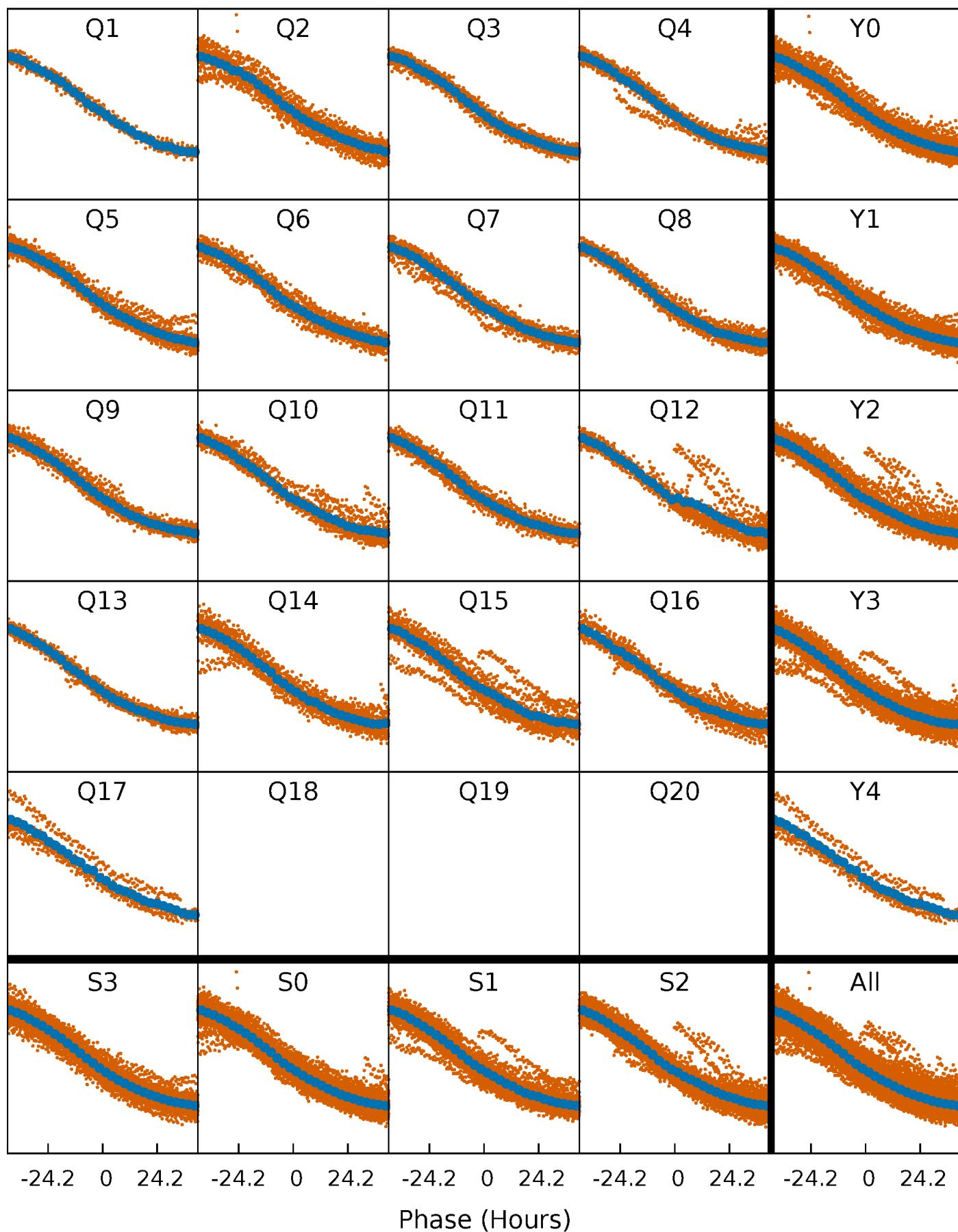


Non-Whitened Vs. Whitened Light Curve



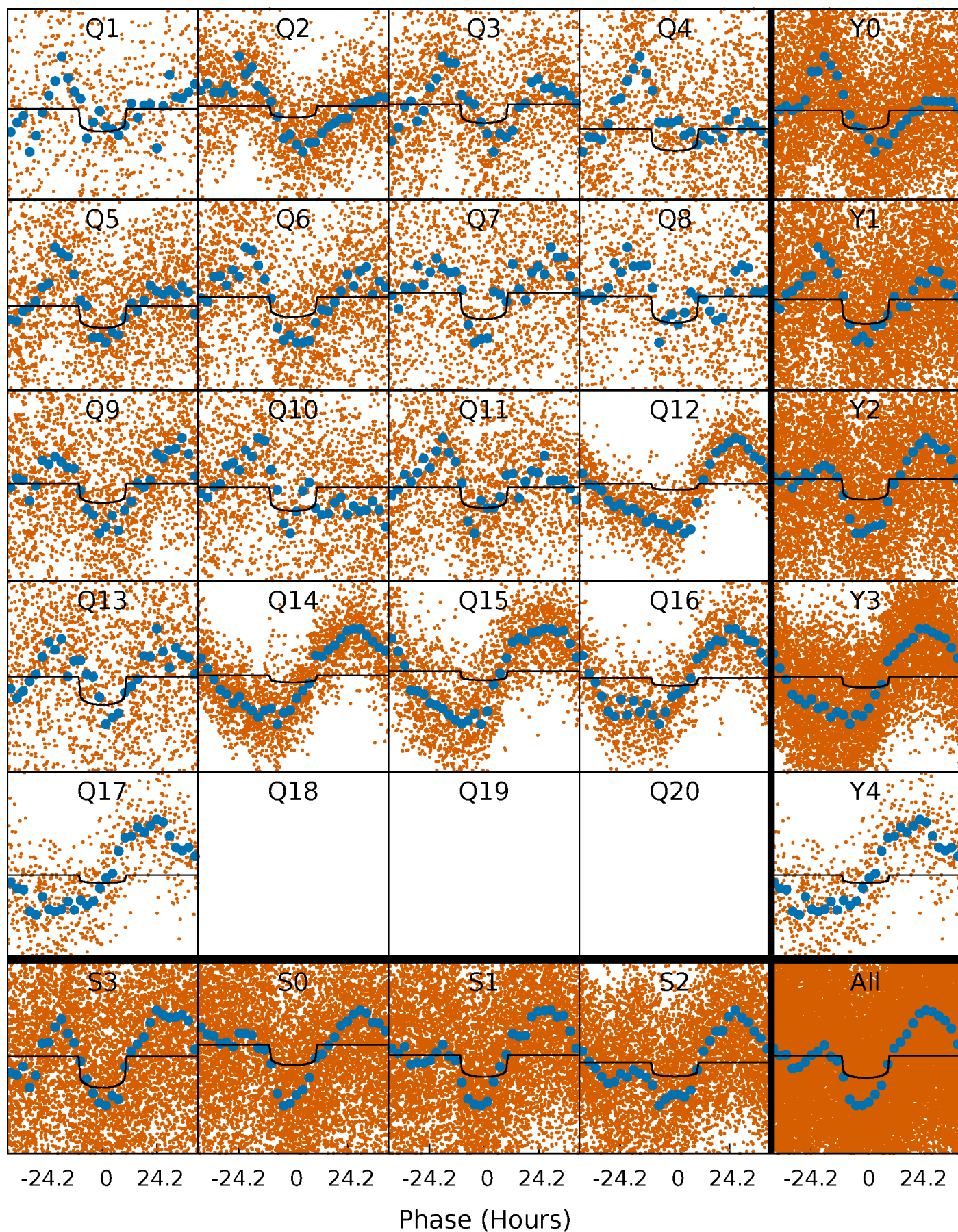
PDC Quarter-Phased Transit Curves

TCE 011296437-01 P= 7.125113 Days $T_0=136.041658$ (BKJD)



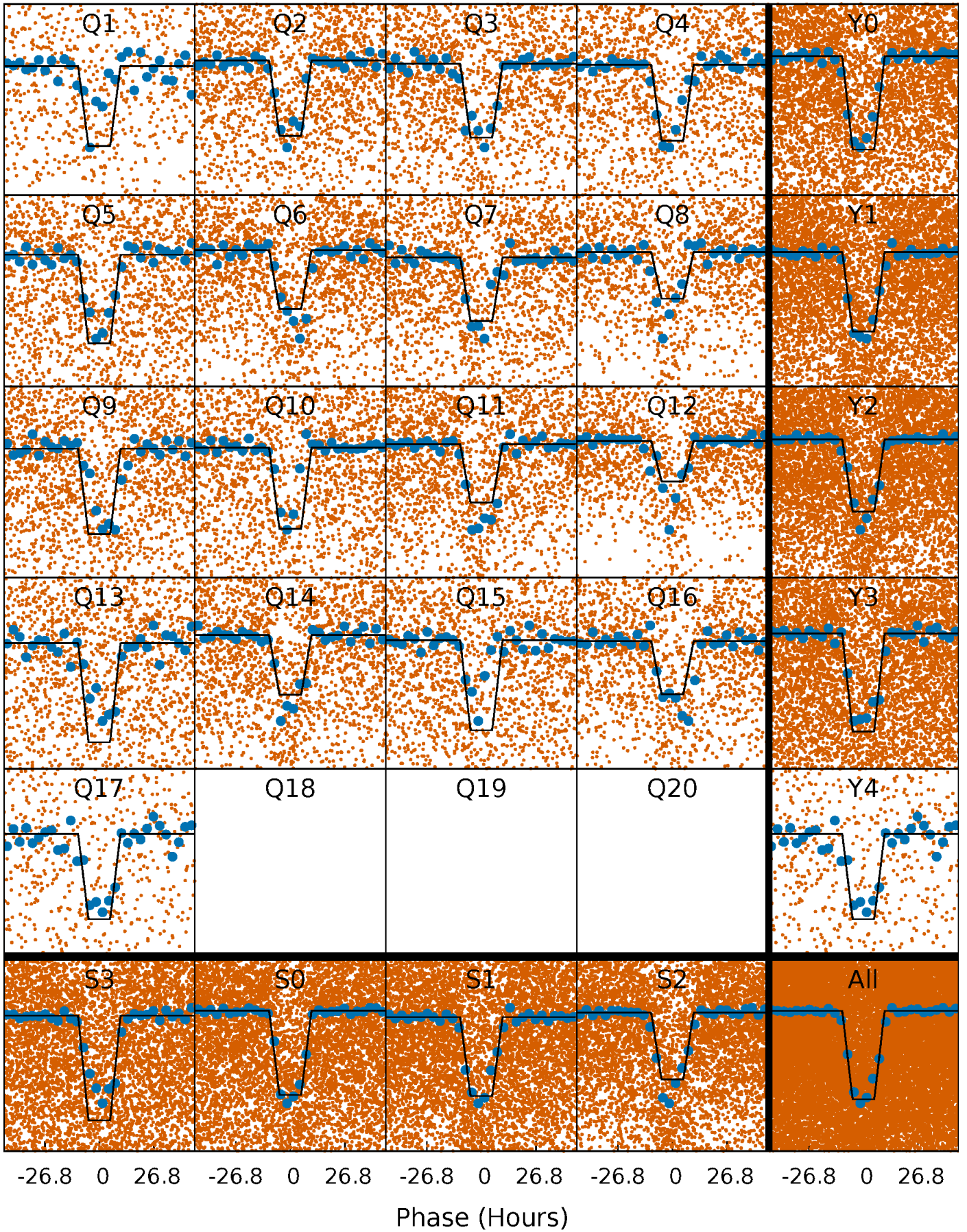
DV Quarter-Phased Transit Curves

TCE 011296437-01 P= 7.125113 Days $T_0=136.041658$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

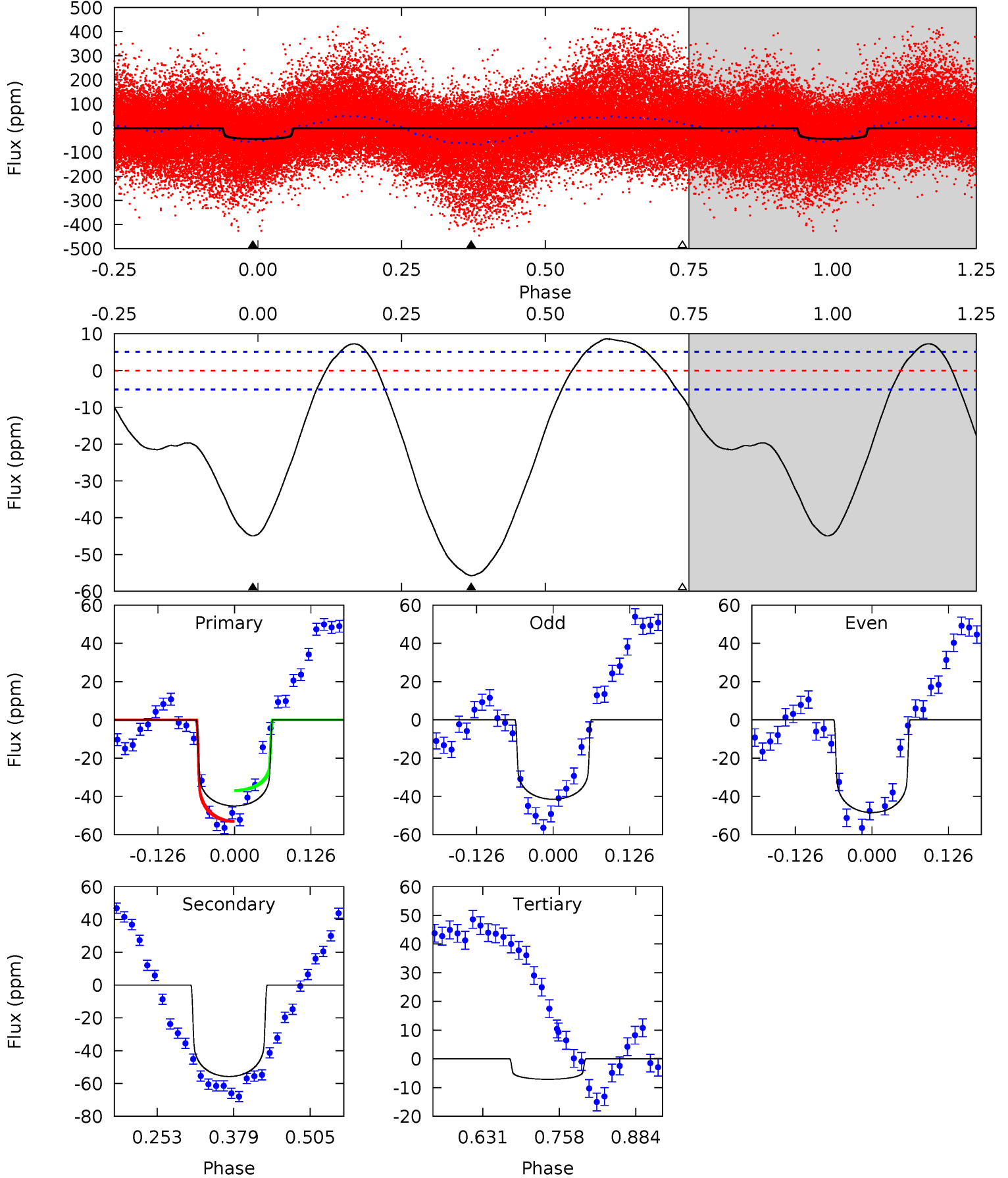
TCE 011296437-01 P= 7.125083 Days $T_0=135.988238$ (BKJD)



DV Model-Shift Uniqueness Test

011296437-01, P = 7.125113 Days, E = 128.916545 Days

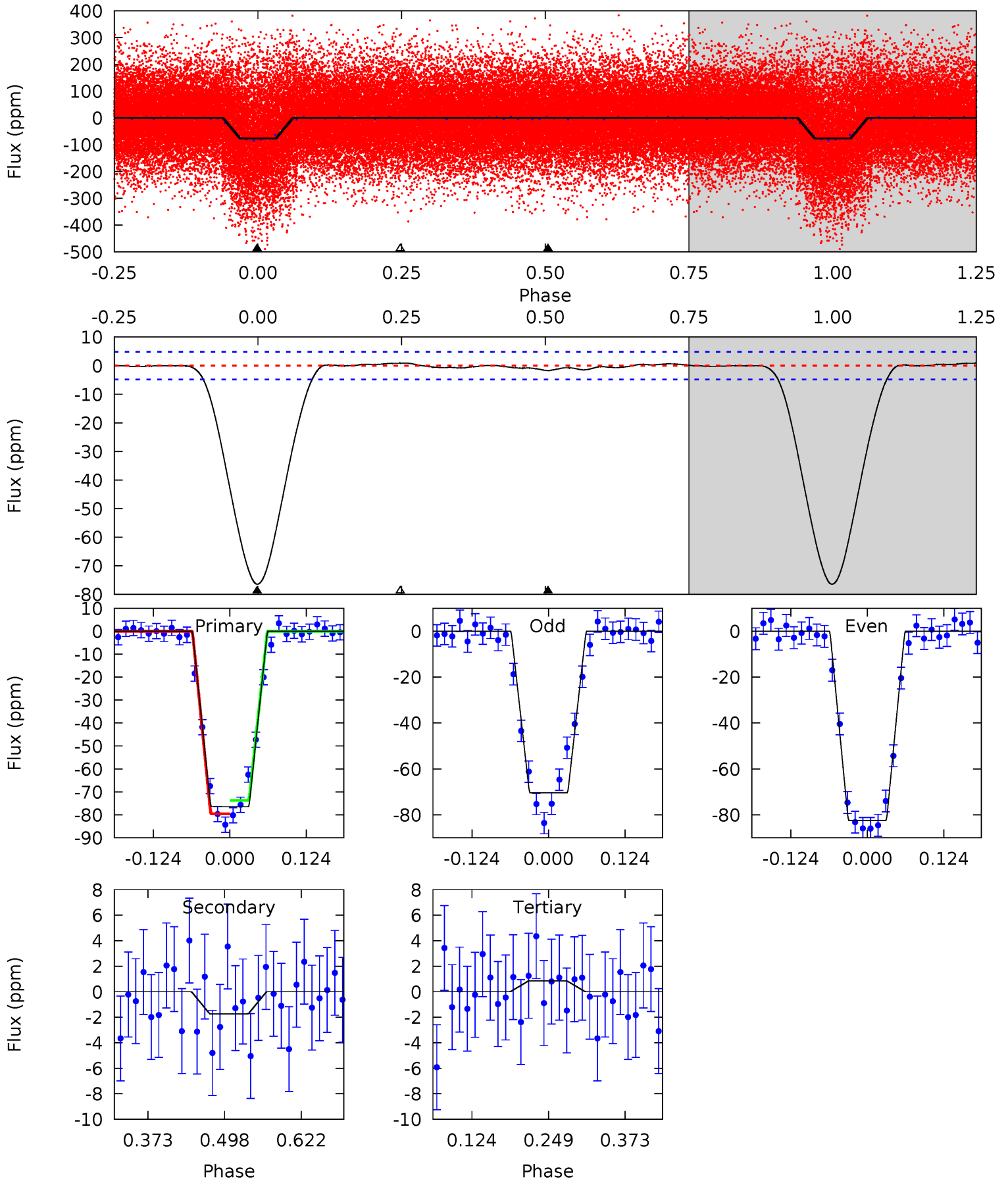
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
39.5	49.0	6.25	0	4.52	1.53	9.10	33.3	39.5	42.7	49.0	3.06	1.34	0.13	7.10



Alt Model-Shift Uniqueness Test

011296437-01, P = 7.125083 Days, E = 128.863155 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
70.9	1.62	-0.79	0	4.52	1.54	0.41	71.7	70.9	2.41	1.62	5.59	0.83	0.01	2.71



Stellar Parameters For KIC 011296437

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	7112^{+170}_{-234}	$3.715^{+0.277}_{-0.074}$	$-0.080^{+0.250}_{-0.300}$	$3.068^{+0.427}_{-1.068}$	$1.780^{+0.189}_{-0.325}$	$0.087^{+0.179}_{-0.021}$
	+2%/-3%	+7%/-2%	+312%/-375%	+14%/-35%	+11%/-18%	+206%/-25%
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 011296437-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-56 ± 1	$1.69^{+0.24}_{-0.31}$	2529^{+138}_{-211}	8705^{+597}_{-475}	82^{+36}_{-17}
Alt.	-2 ± 1	$2.93^{+0.35}_{-0.51}$	2534^{+141}_{-189}	3063^{+330}_{-1049}	$0.880^{+0.694}_{-0.565}$

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 $A_{obs} \gg 1.0$

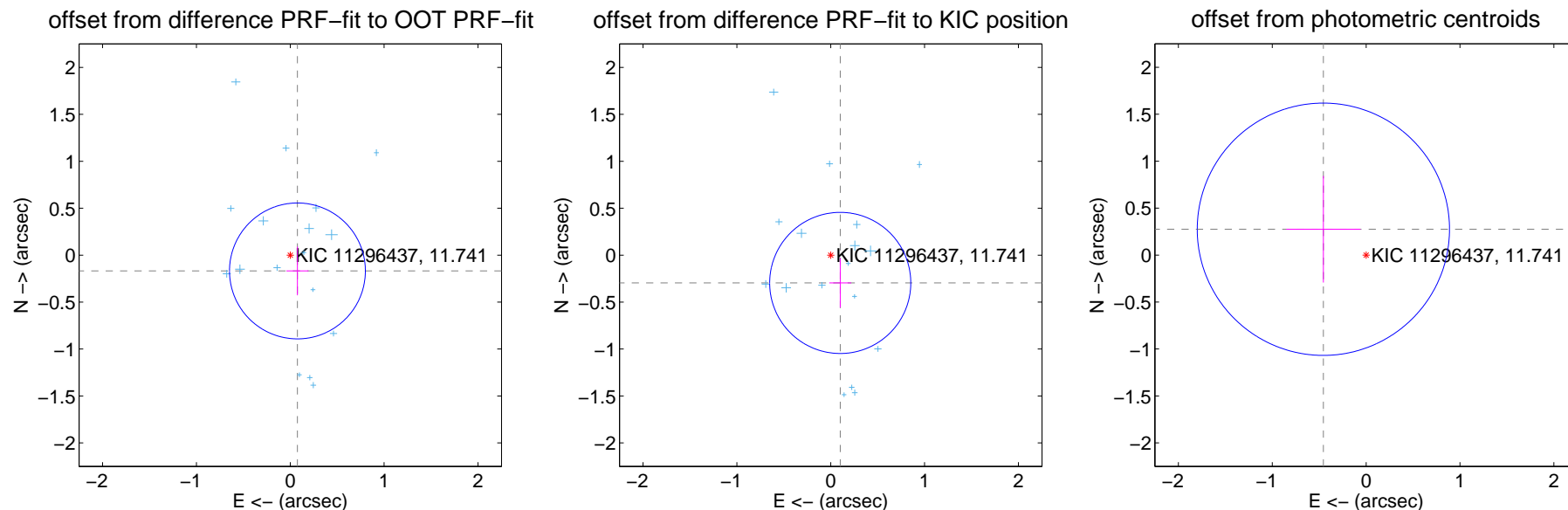
DV Centroid Data

Supplemental centroid analysis for 011296437-01. **Kepler magnitude: 11.74.** Transit SNR 9.15

There are 17 quarters with good PRF difference image offsets

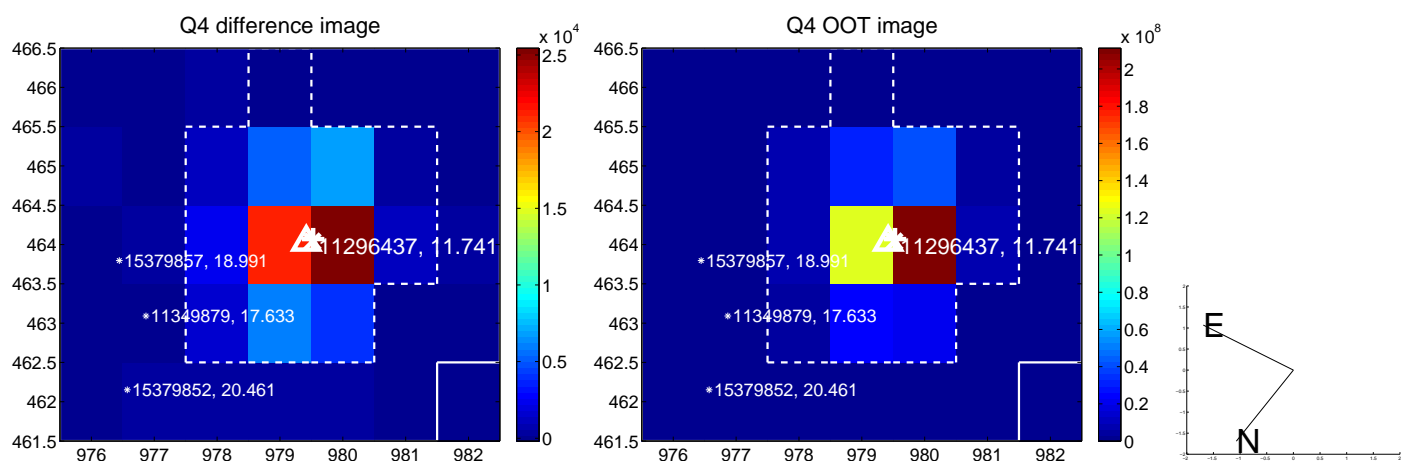
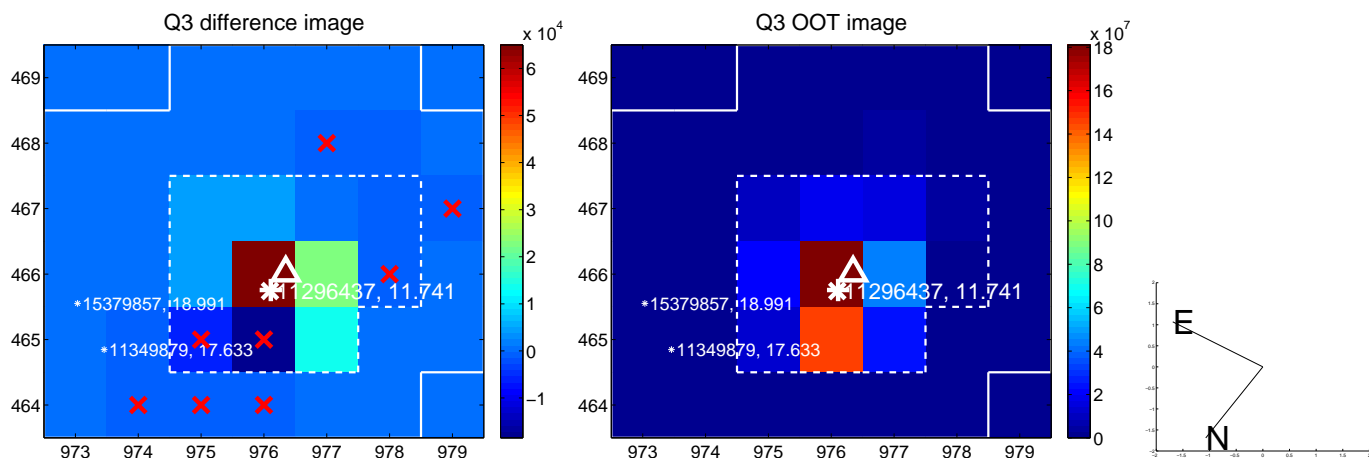
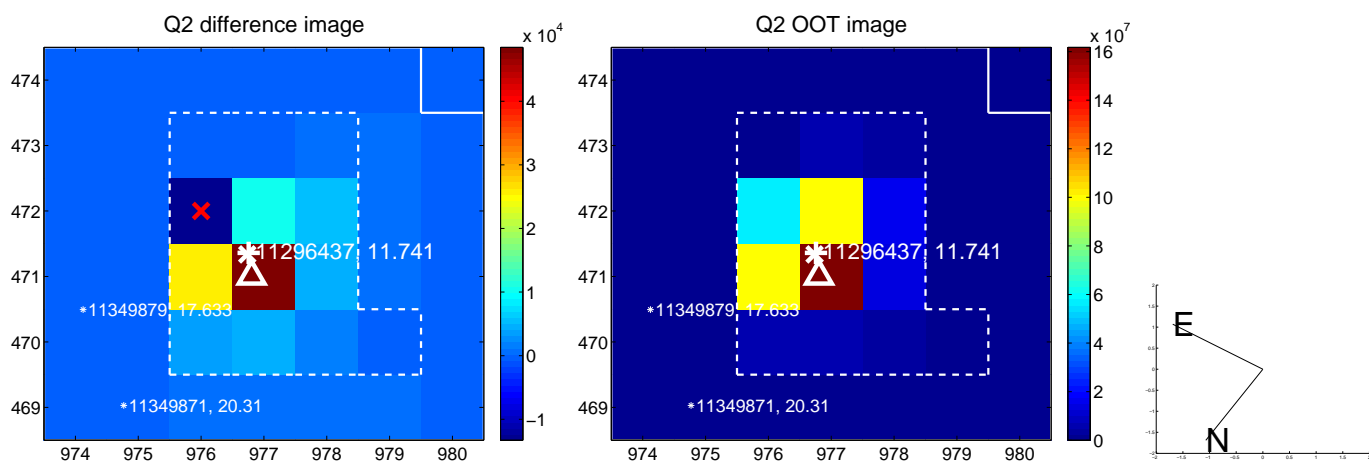
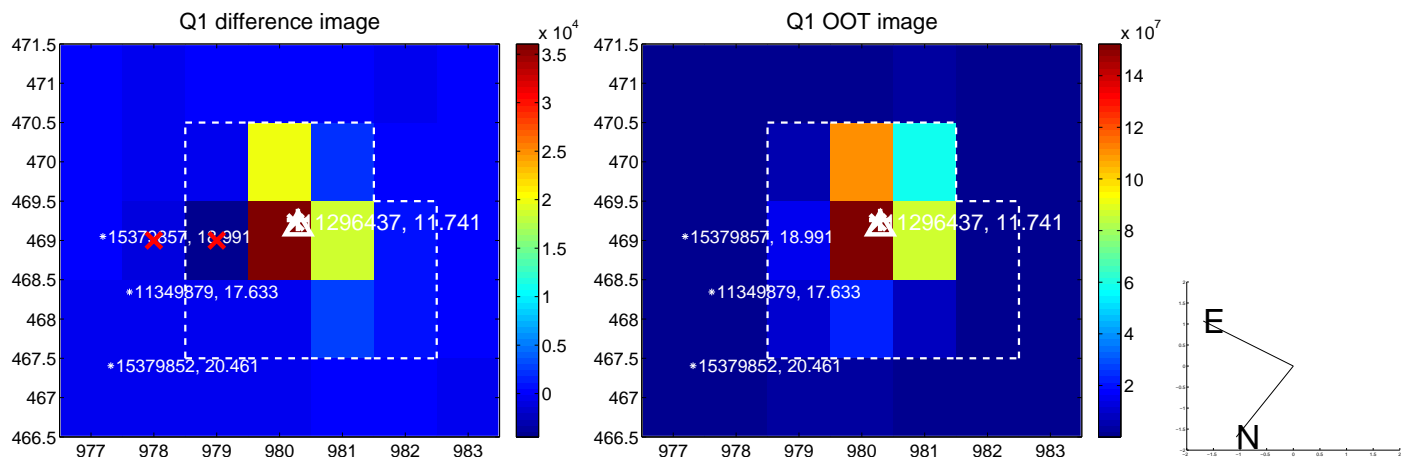
The direct PRF centroid is offset from the target star catalog position by about 0.21 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.185 ± 0.241	0.77	-0.076 ± 0.118	-0.168 ± 0.260
PRF-fit source offset from KIC position	0.313 ± 0.251	1.25	-0.101 ± 0.117	-0.296 ± 0.262
photometric centroid source offset	0.53 ± 0.45	1.19	0.46 ± 0.40	0.28 ± 0.57

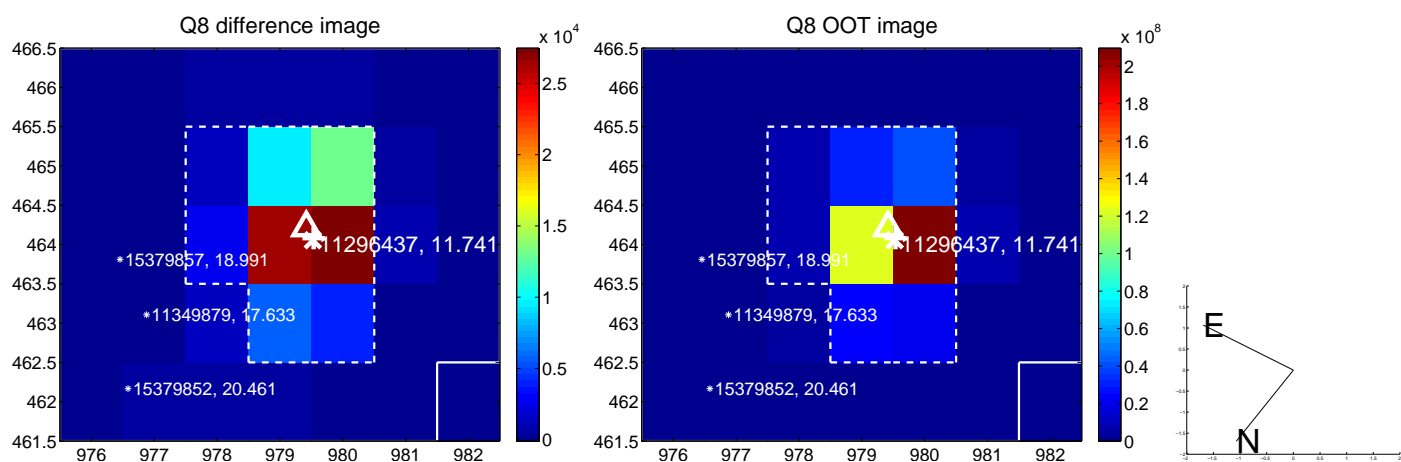
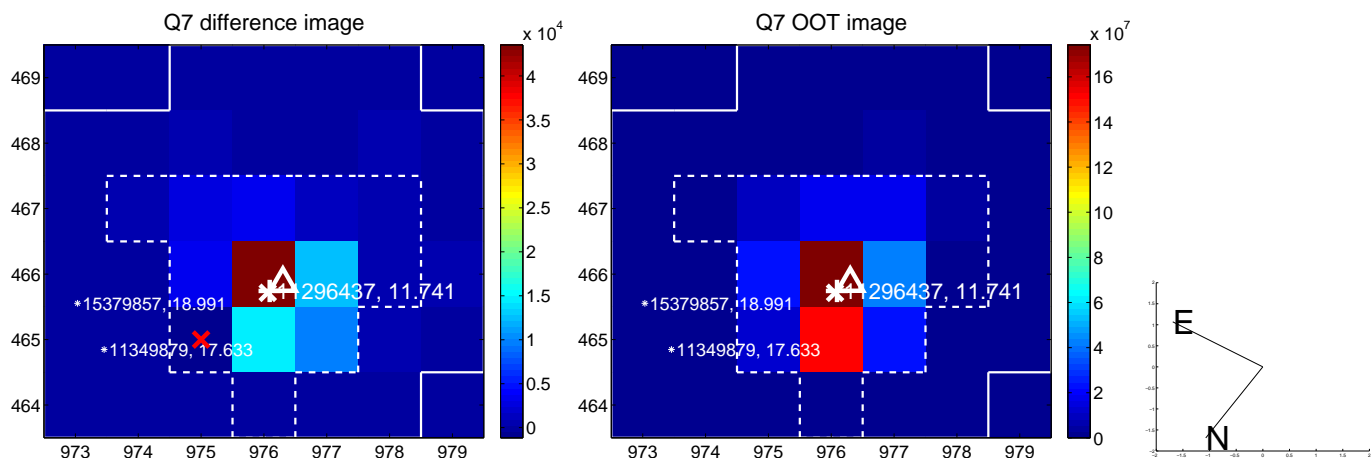
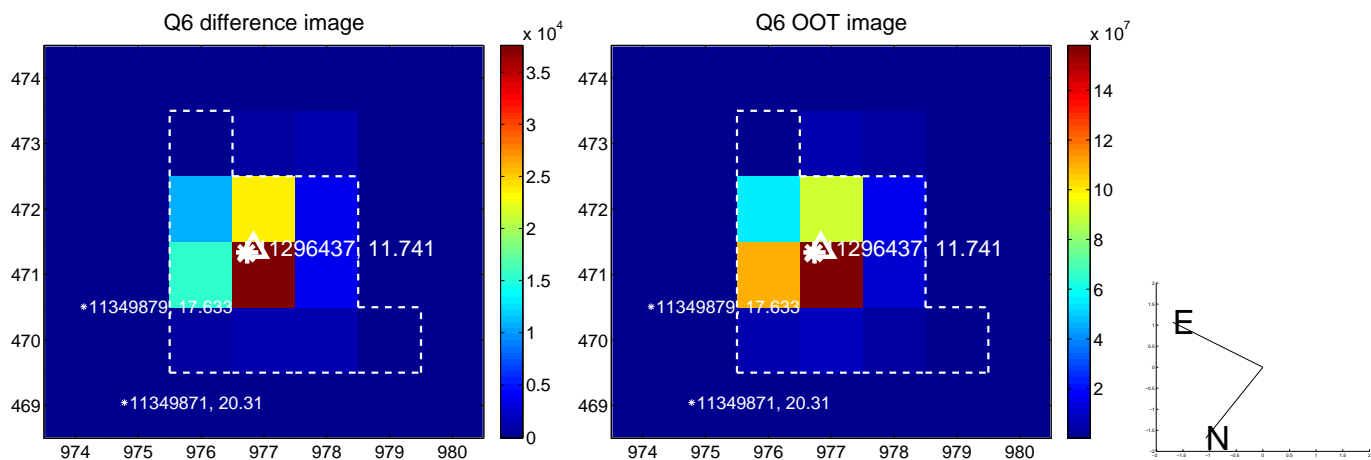
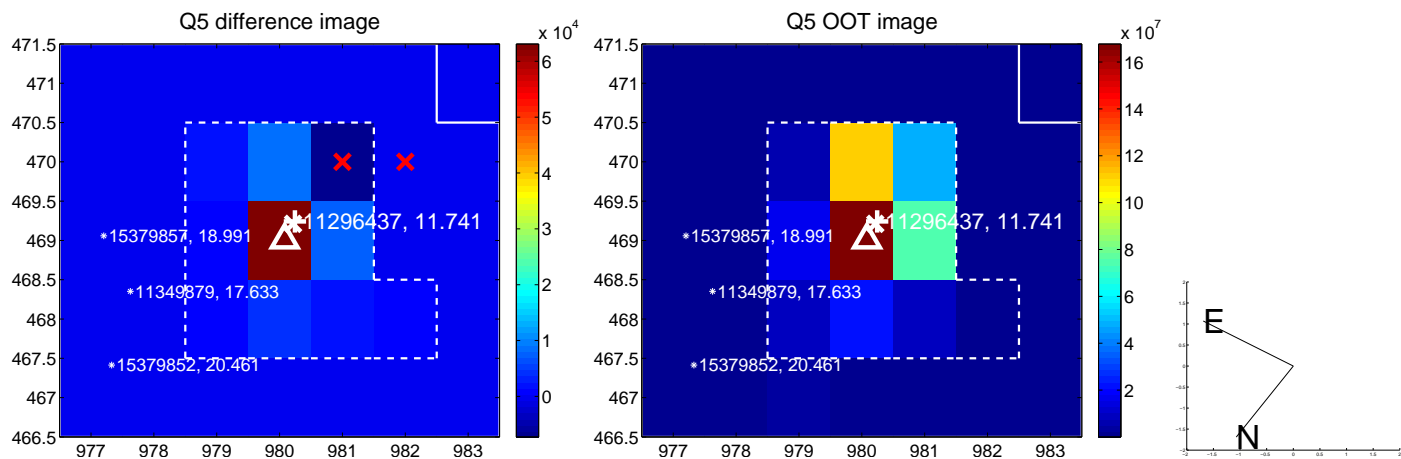


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

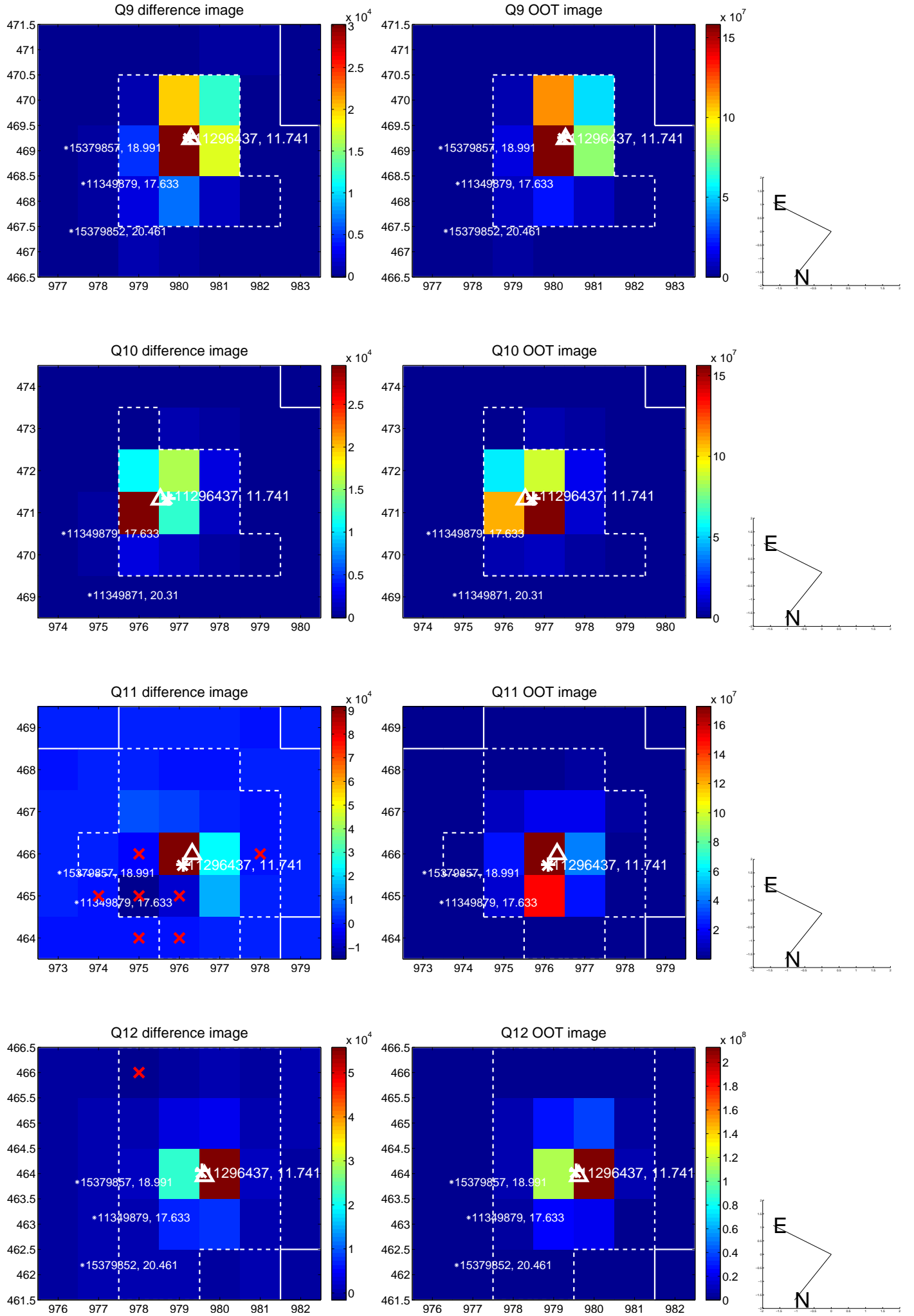
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



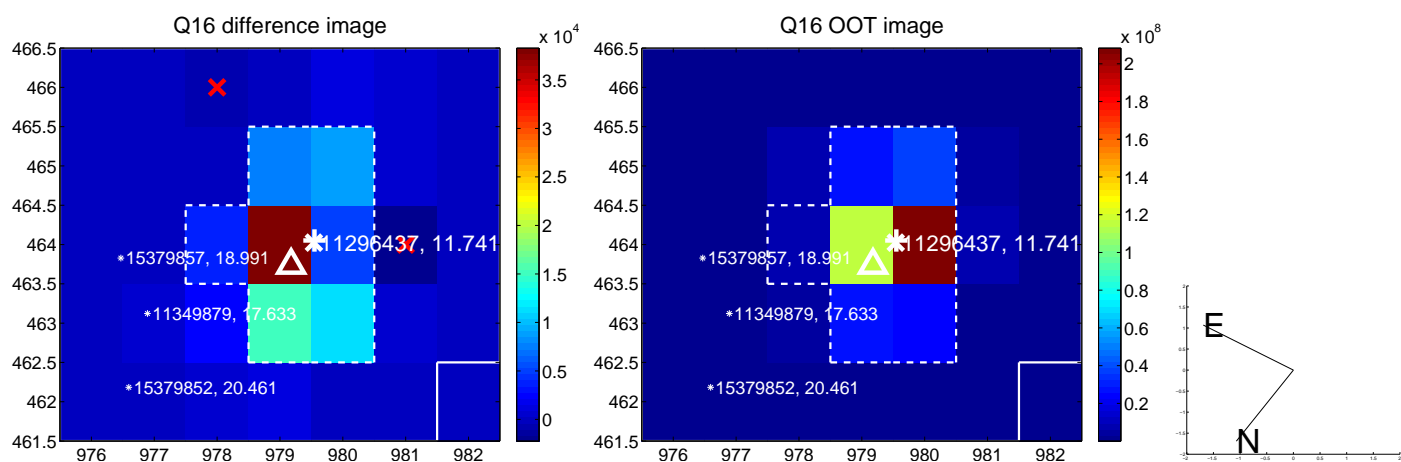
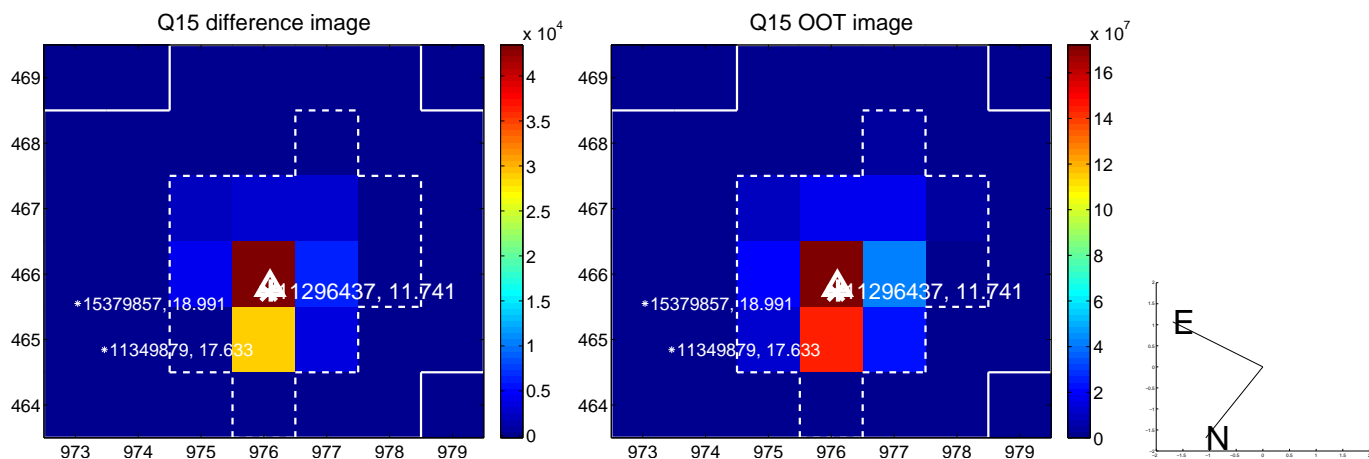
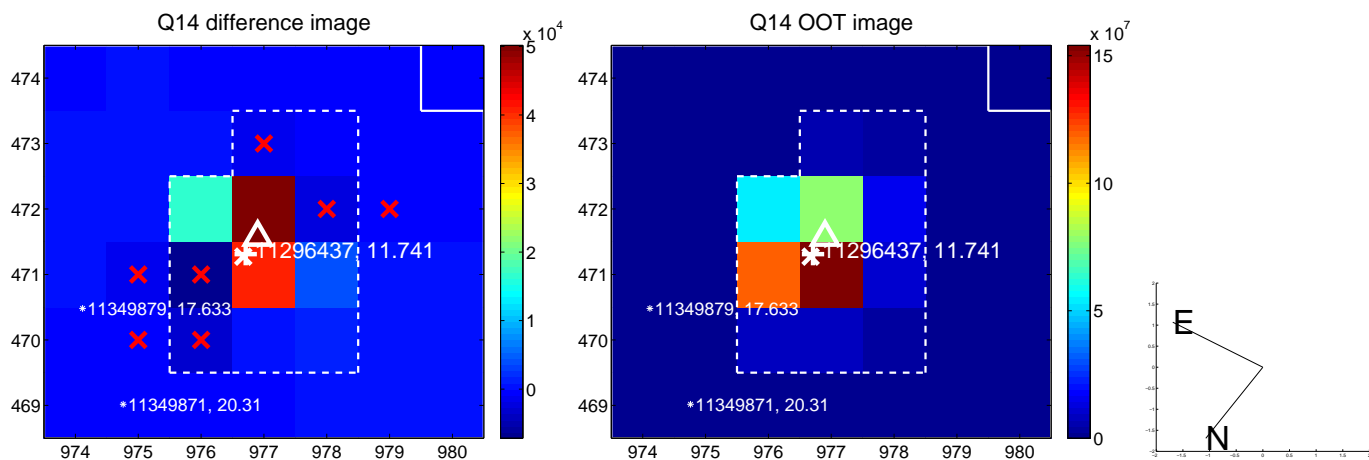
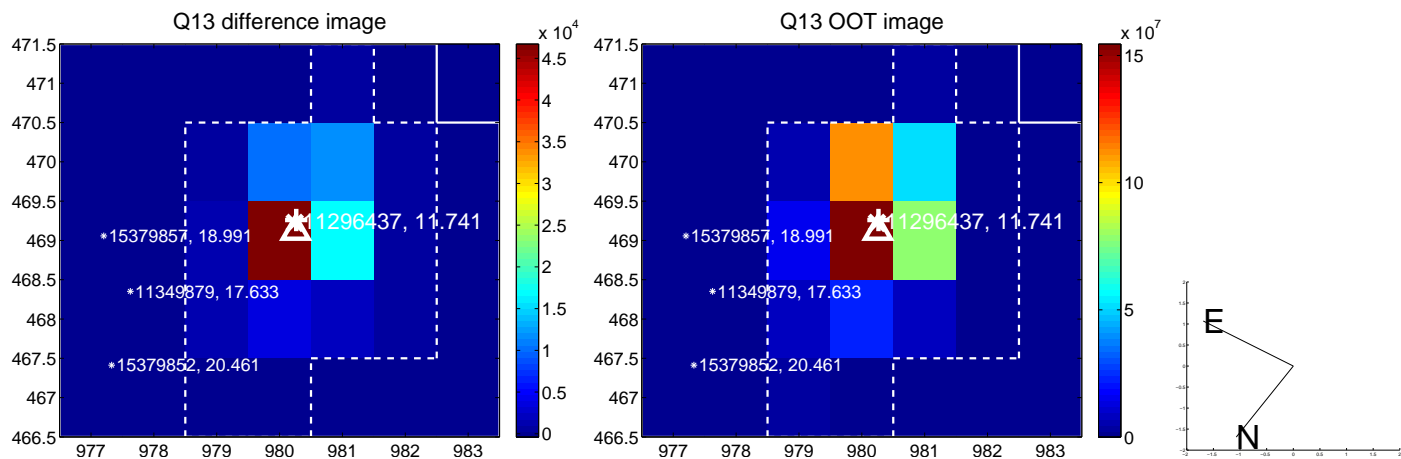
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



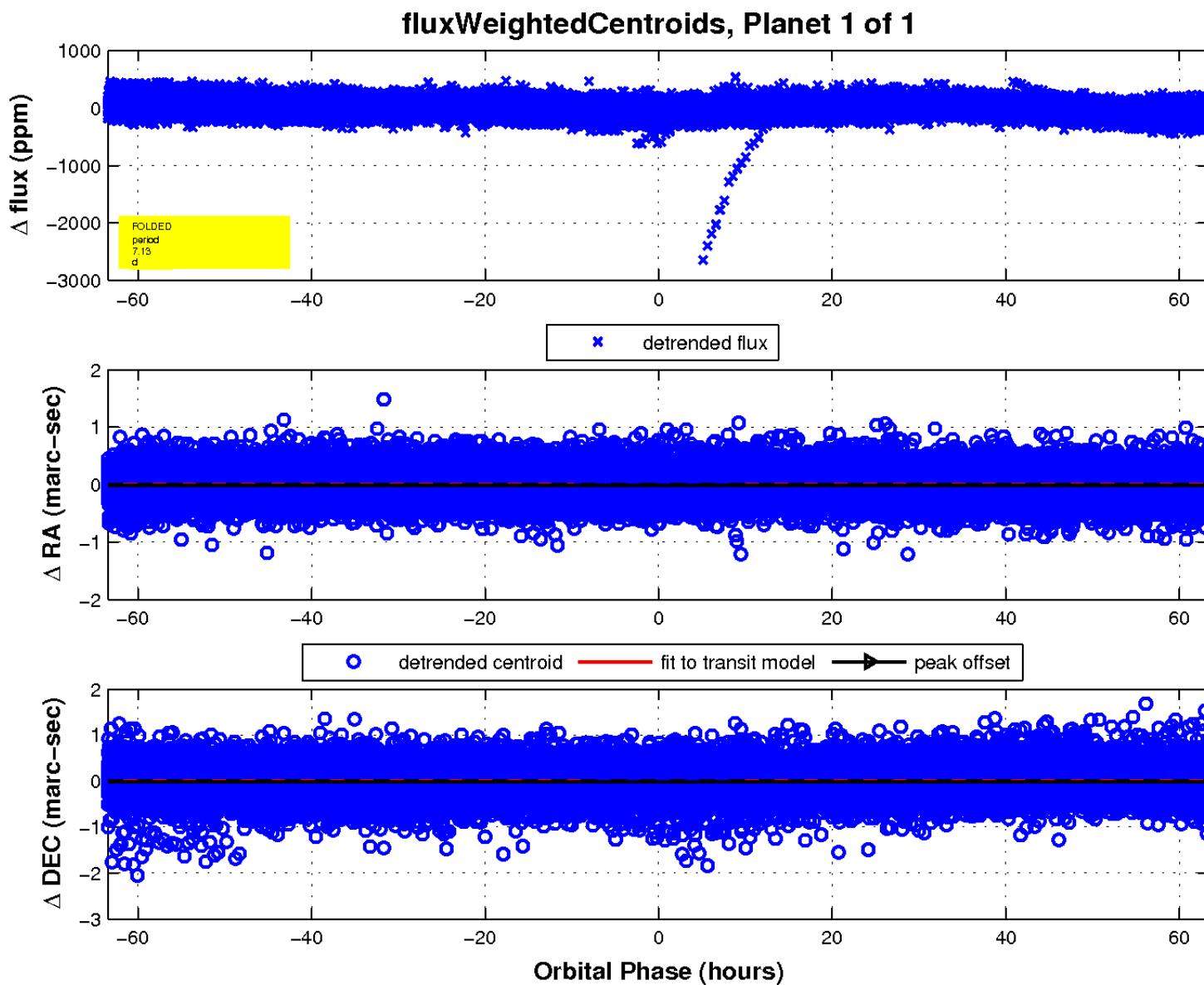
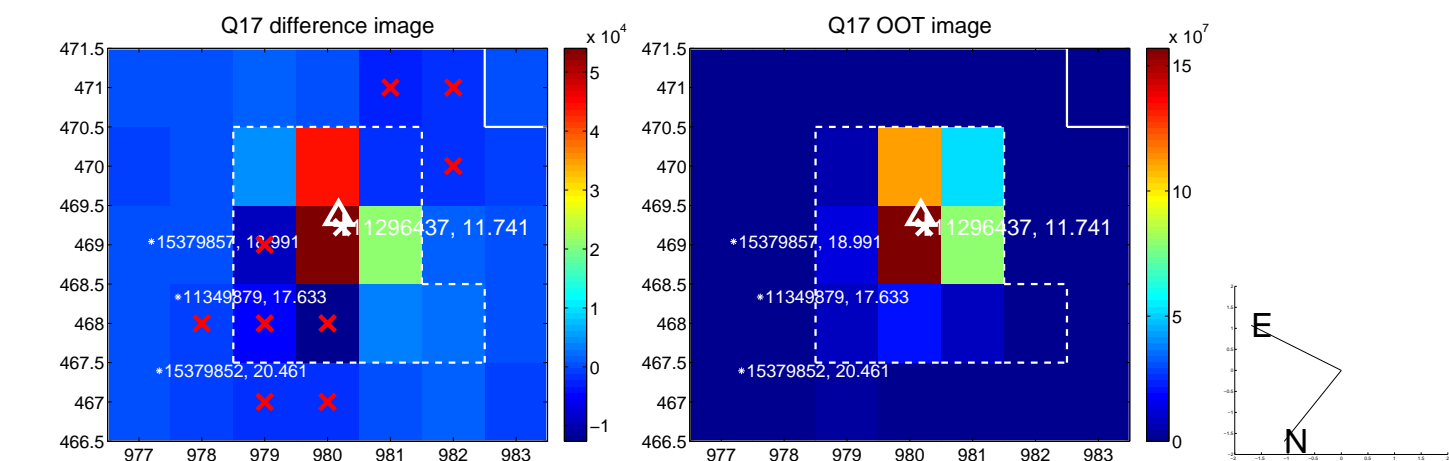
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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.



UKIRT Image

Declination

