

KIC 011145726

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})
011145726-01	OBS	8044.01	0.619617	131.756288	45.8	1.377	7.5	8.8	4.72	5180	3.87	0.00

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011145726-01	OBS	FP	0.00	0	0	1	0	PLANET_IN_STAR—CENT_RESOLVED_OFFSET—HALO_GHOST

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

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

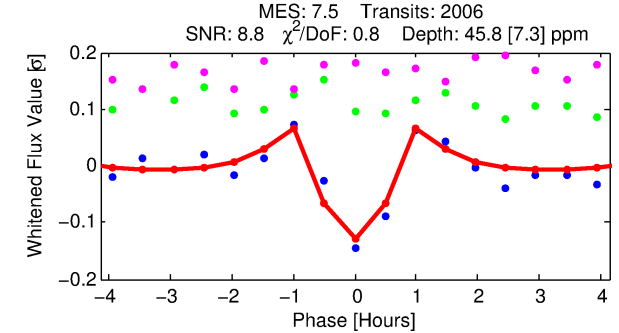
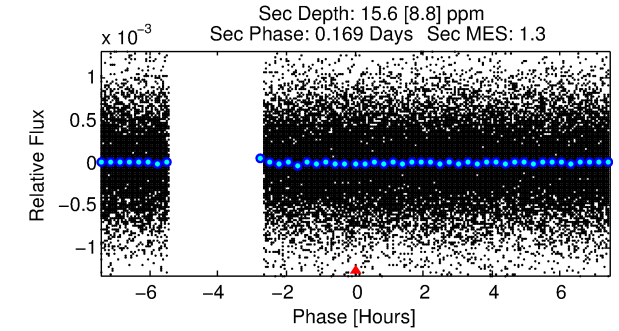
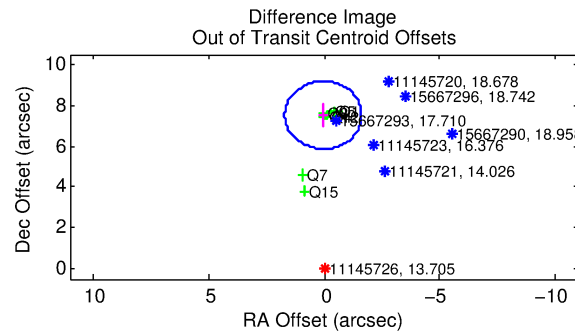
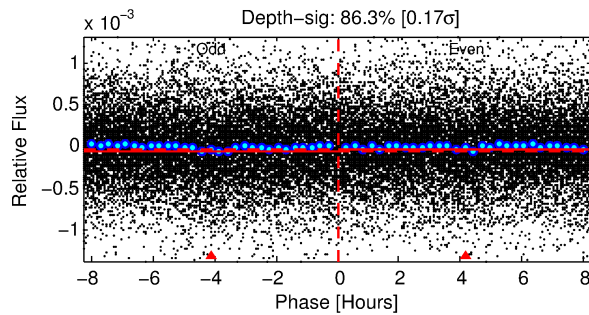
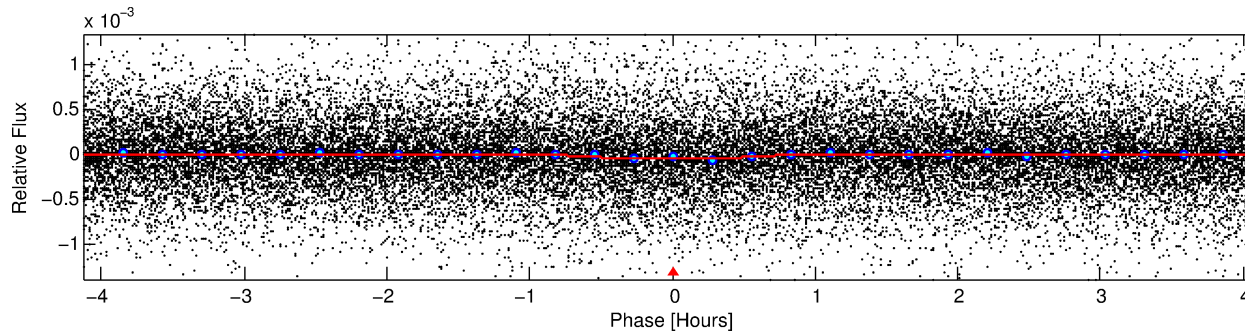
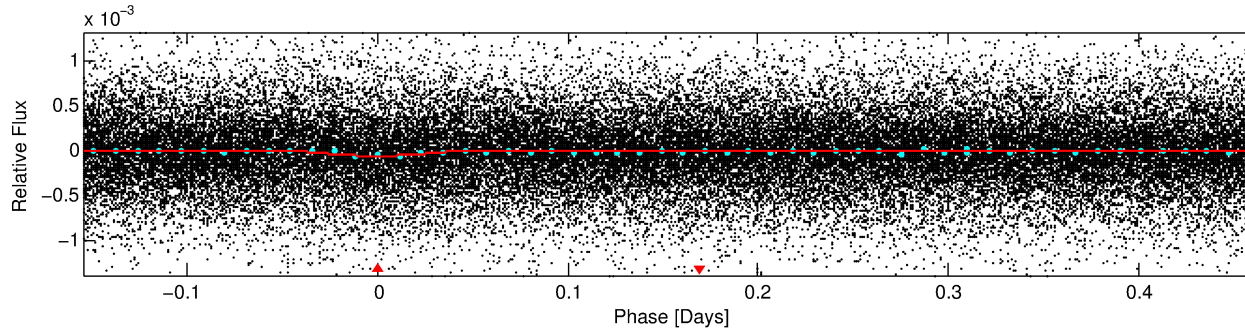
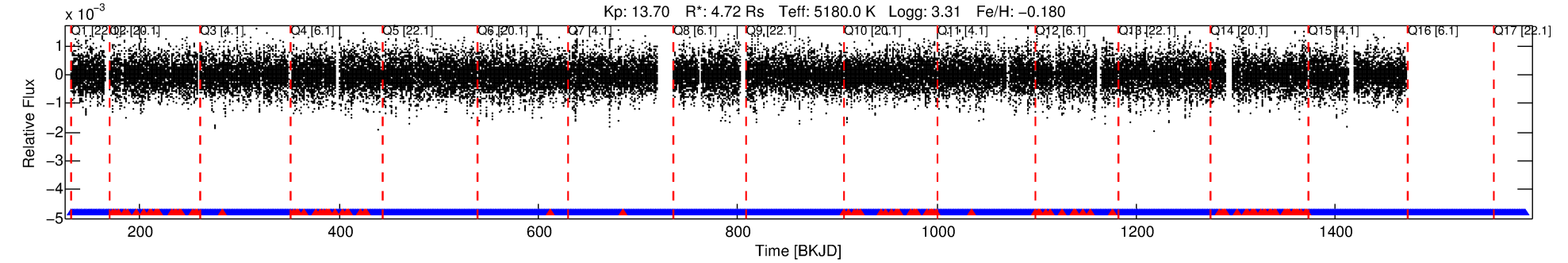
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011145726-01

No Significant Match Found

DV One-Page Summary

KIC: 11145726 Candidate: 1 of 1 Period: 0.620 d



DV Fit Results:

Period = 0.61962 [0.00001] d
Epoch = 131.7563 [0.0015] BKJD
Rp/R* = 0.0075 [0.0034]
a/R* = 1.82 [2.42]
b = 0.90 [0.42]
Seff = N/A
Teq = N/A
Rp = 3.87 [2.59] Re
a = N/A
Ag = N/A
Teffp = N/A

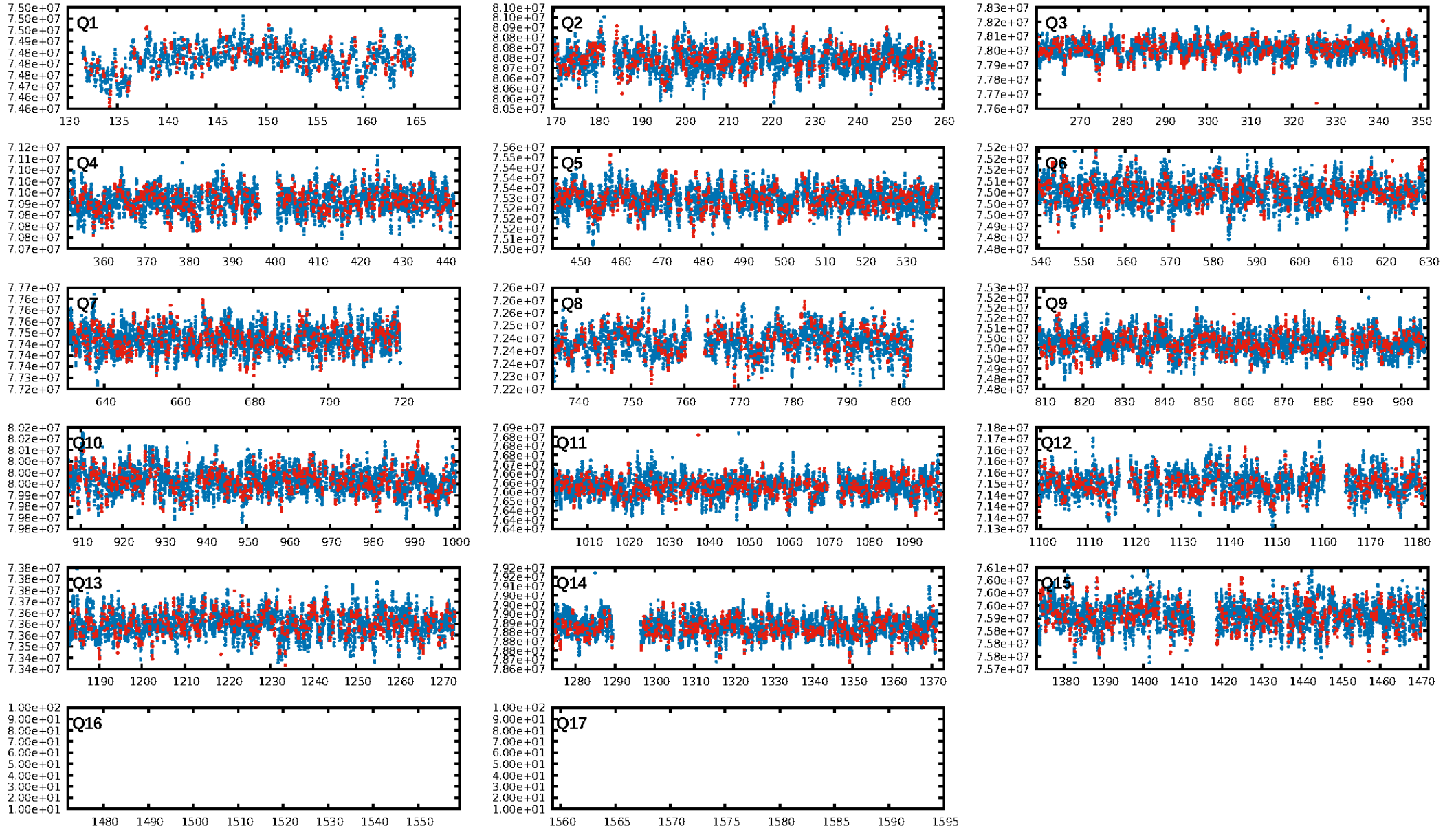
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 3.47e-17
RollingBand-fgt: 0.94 [1840/1952]
GhostDiagnostic-chr: 0.0324
Centroid-sig: 0.0%
Centroid-so: 8.238 arcsec [12.41 σ]
OotOffset-rm: 7.524 arcsec [13.61 σ]
KicOffset-rm: 7.657 arcsec [12.87 σ]
OotOffset-st: 0/2/3/2 [7]
KicOffset-st: 0/2/3/2 [7]
DiffImageQuality-fgm: 1.00 [7/7]
DiffImageOverlap-fno: 1.00 [15/15]

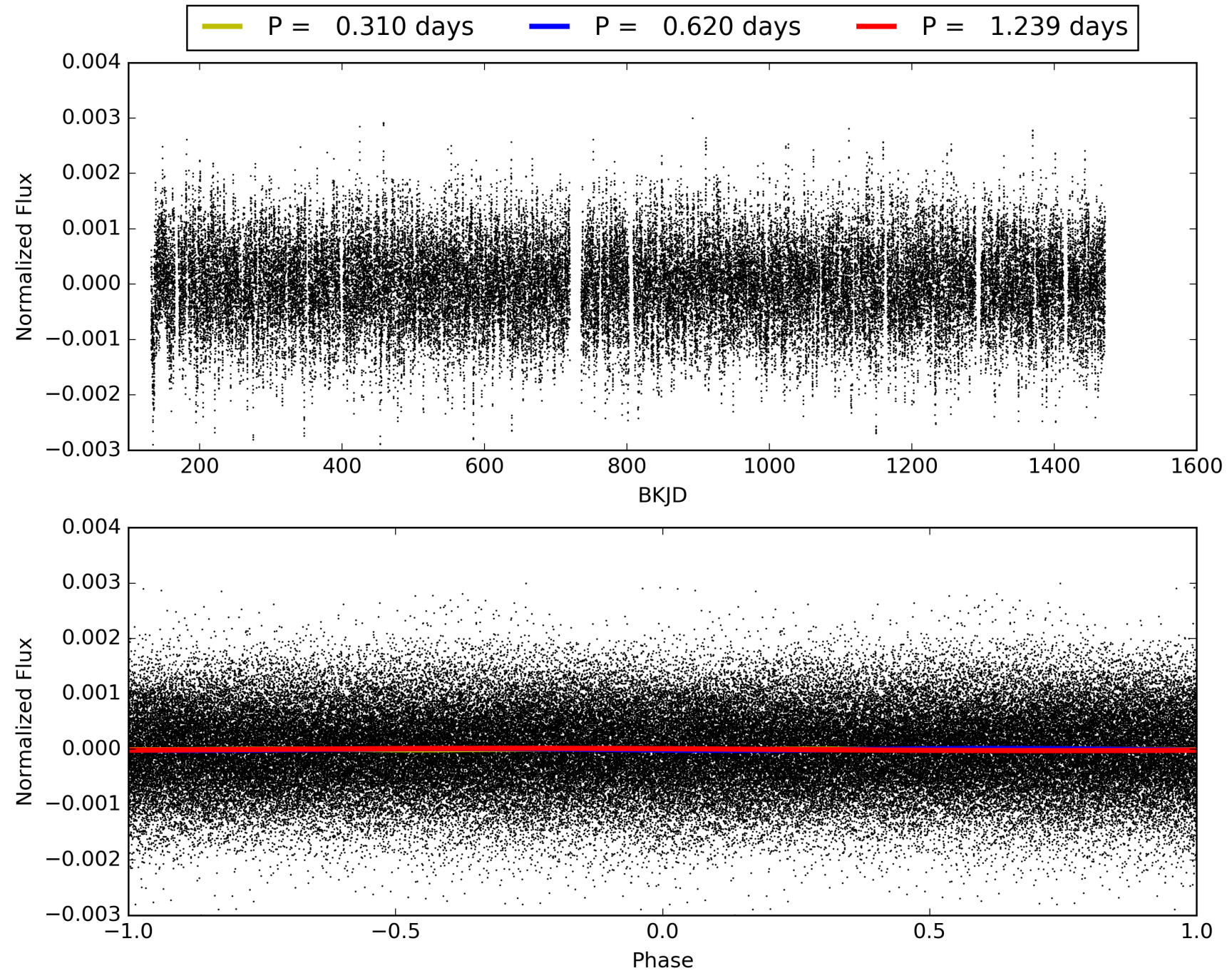
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 03:19:19 Z

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

TCE 011145726-01, PDC Light Curves

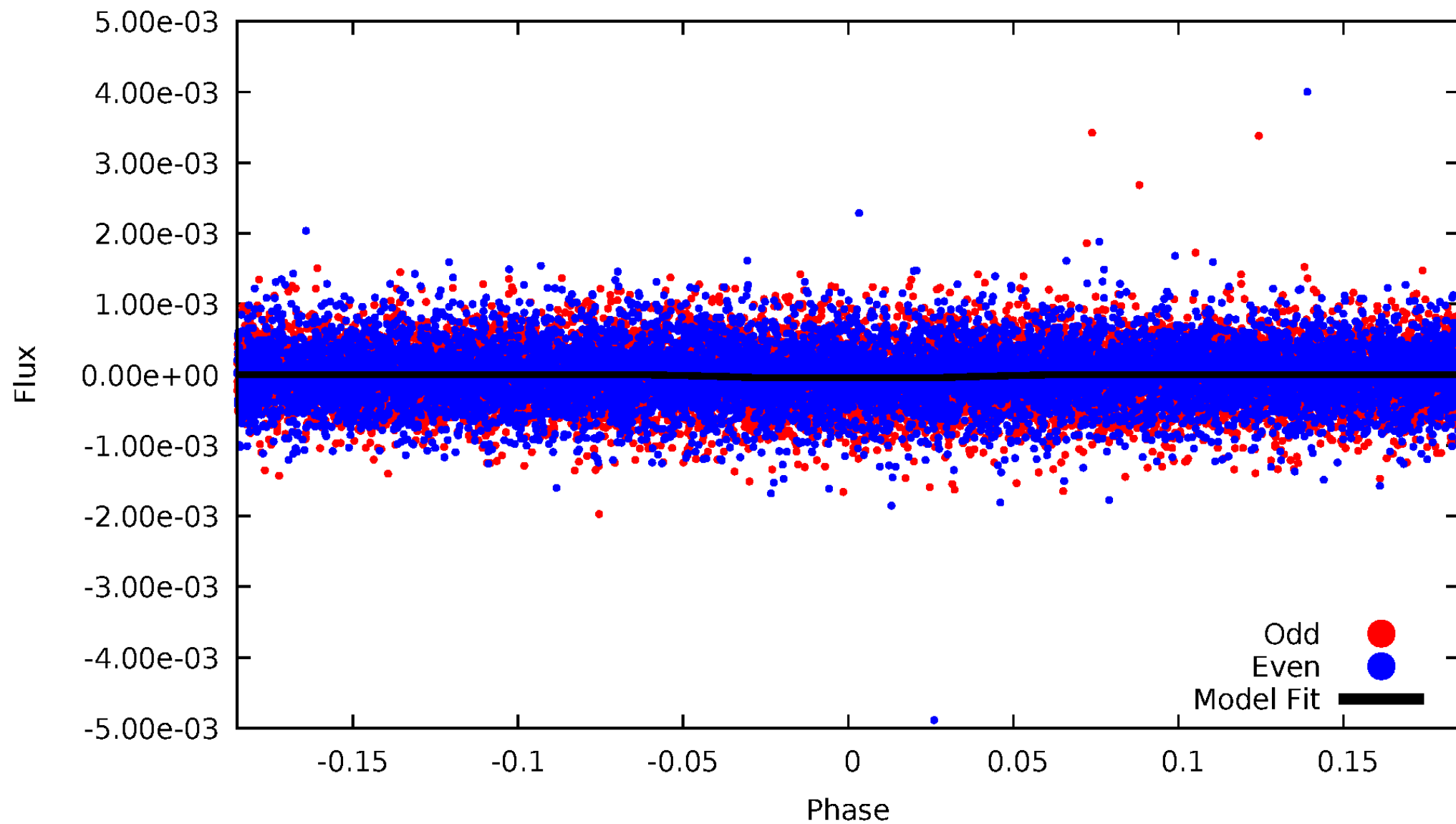


TCE 011145726-01



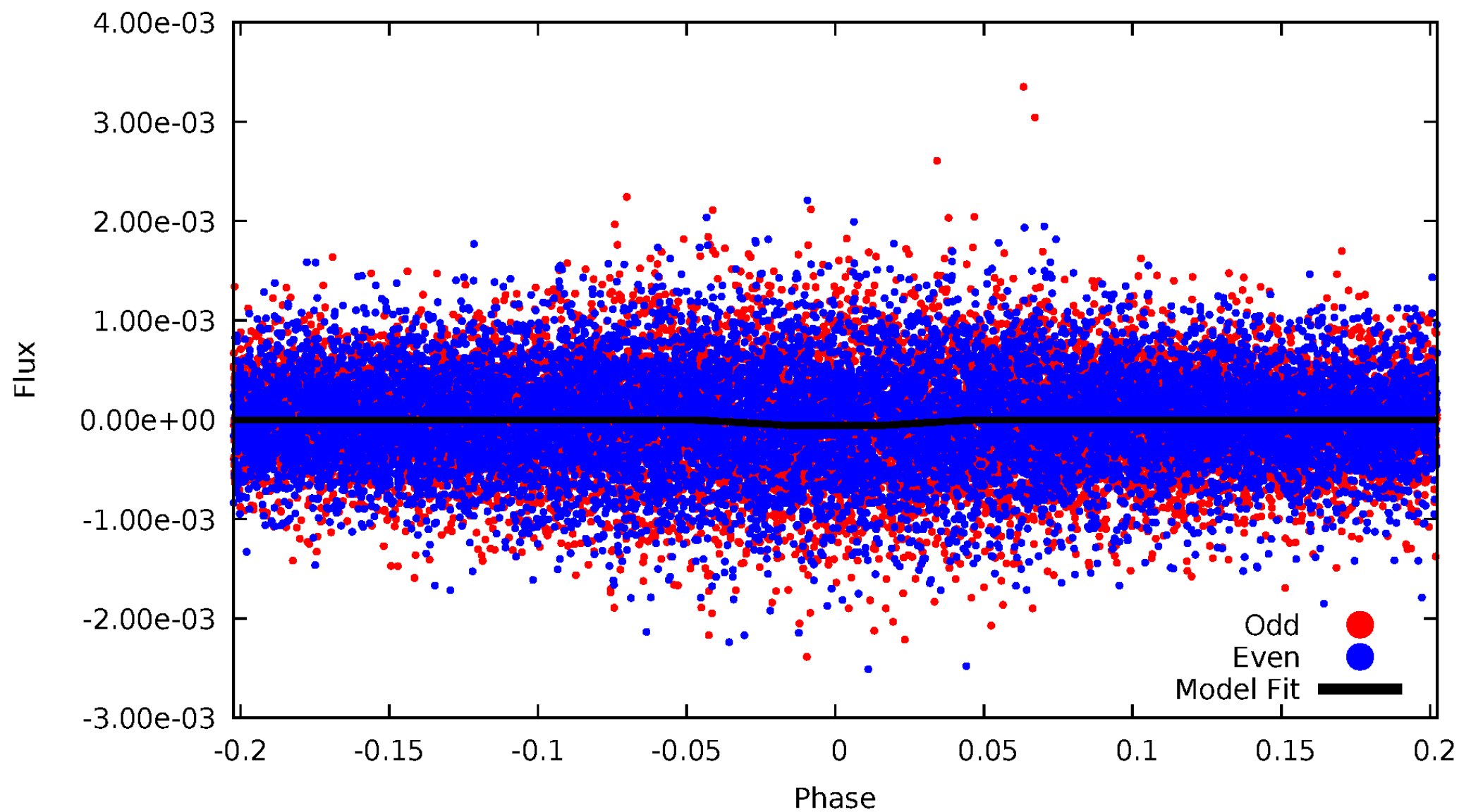
DV Odd/Even

TCE 011145726-01

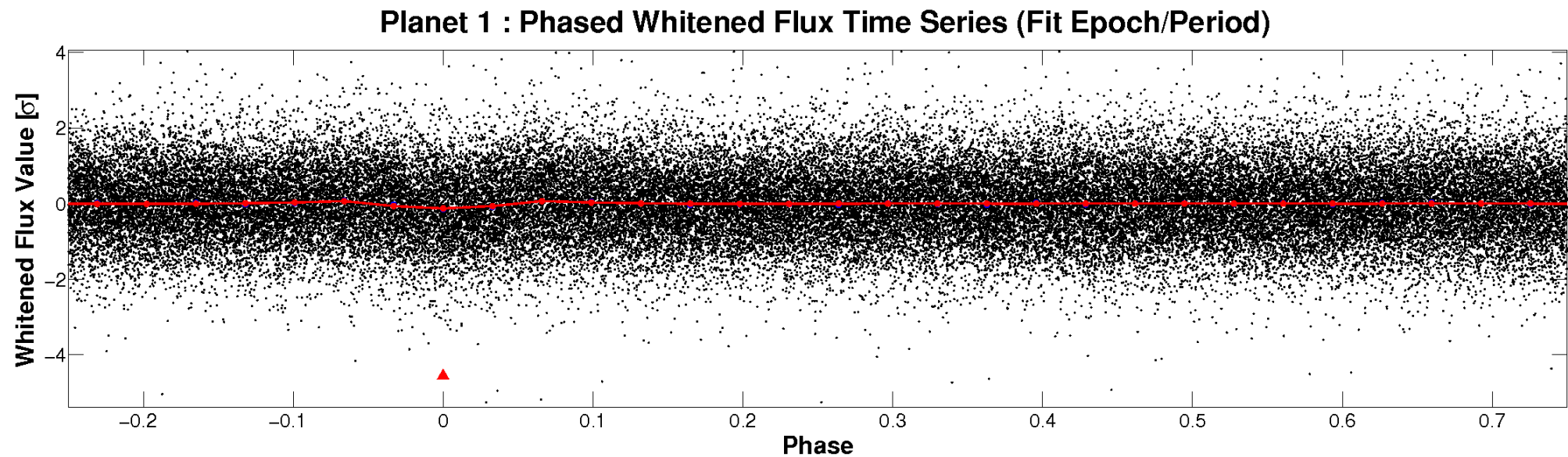
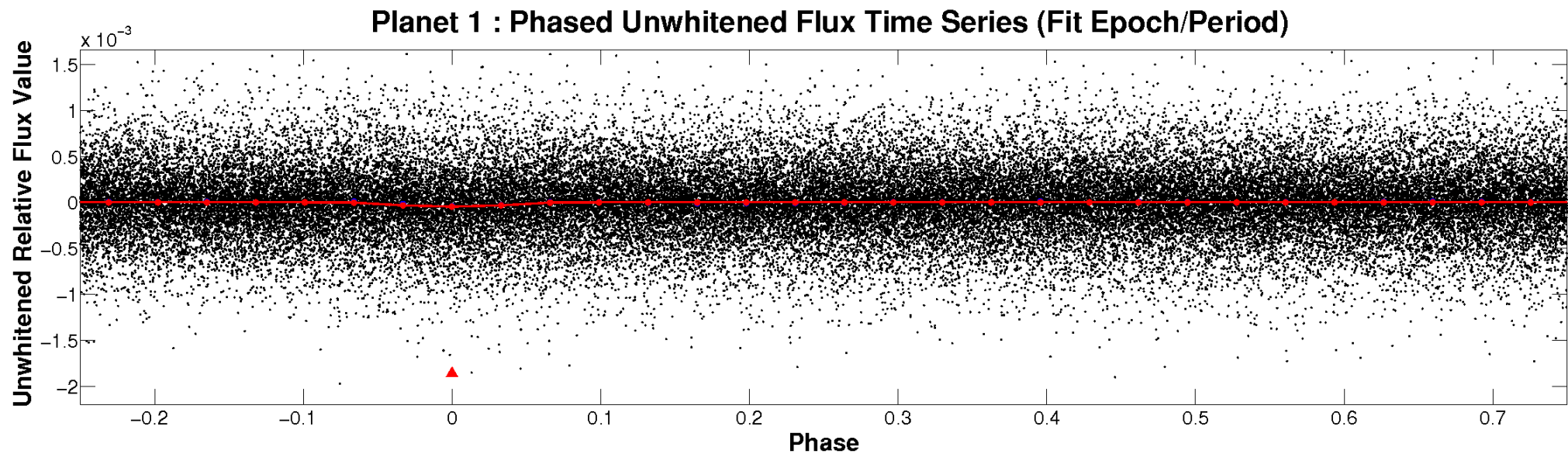


ALT Odd/Even

TCE 011145726-01

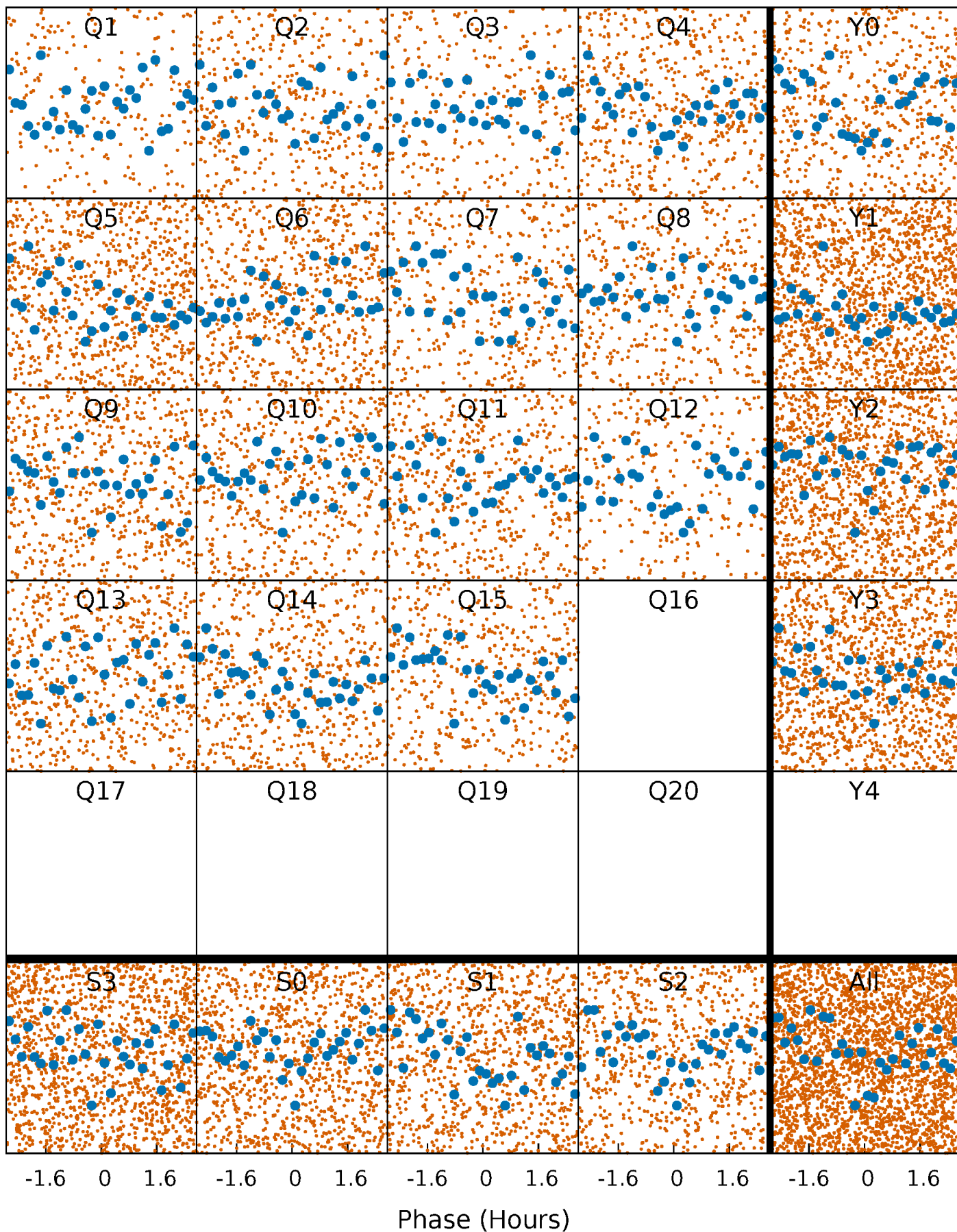


Non-Whitened Vs. Whitened Light Curve



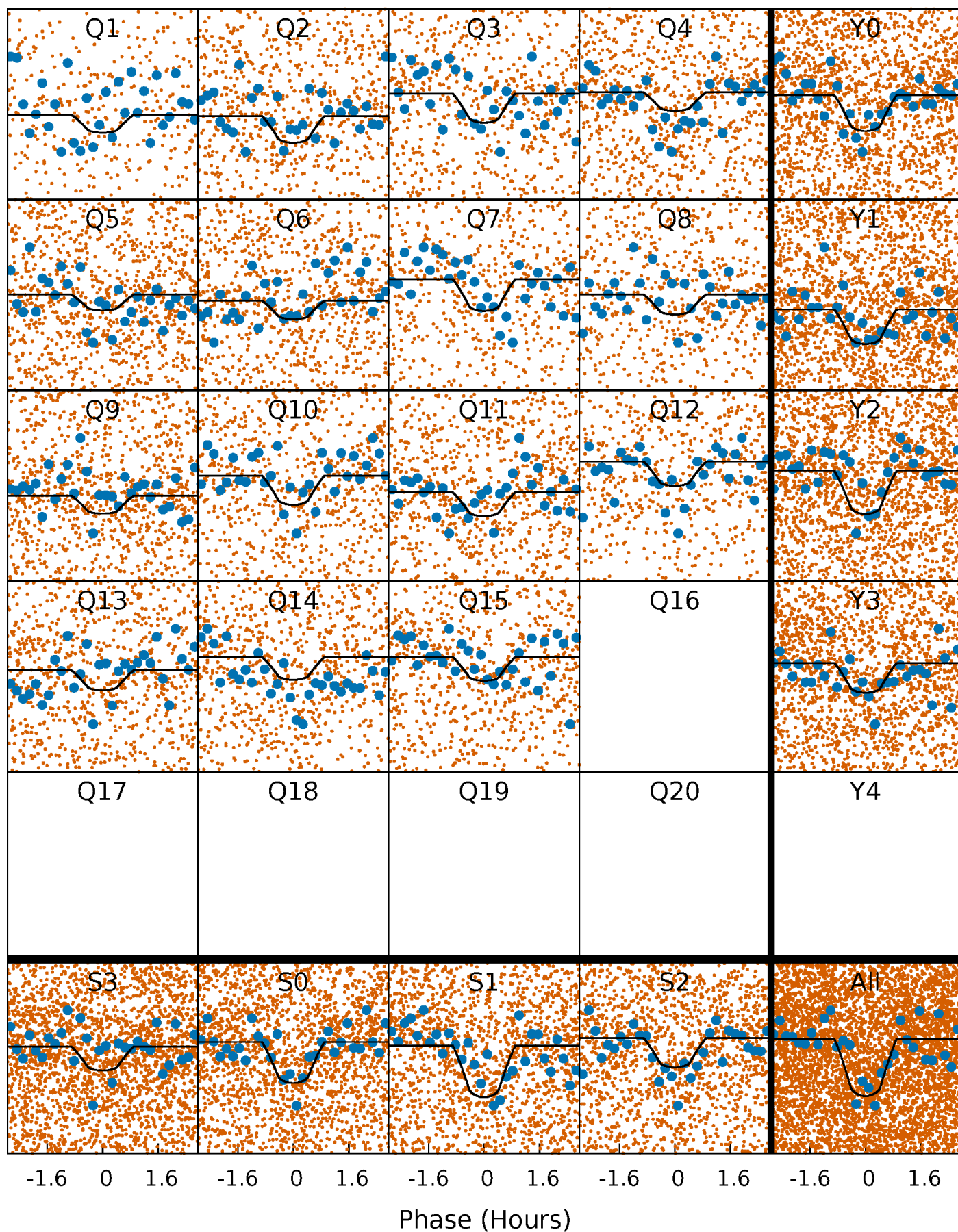
PDC Quarter-Phased Transit Curves

TCE 011145726-01 P= 0.619617 Days $T_0=131.756288$ (BKJD)



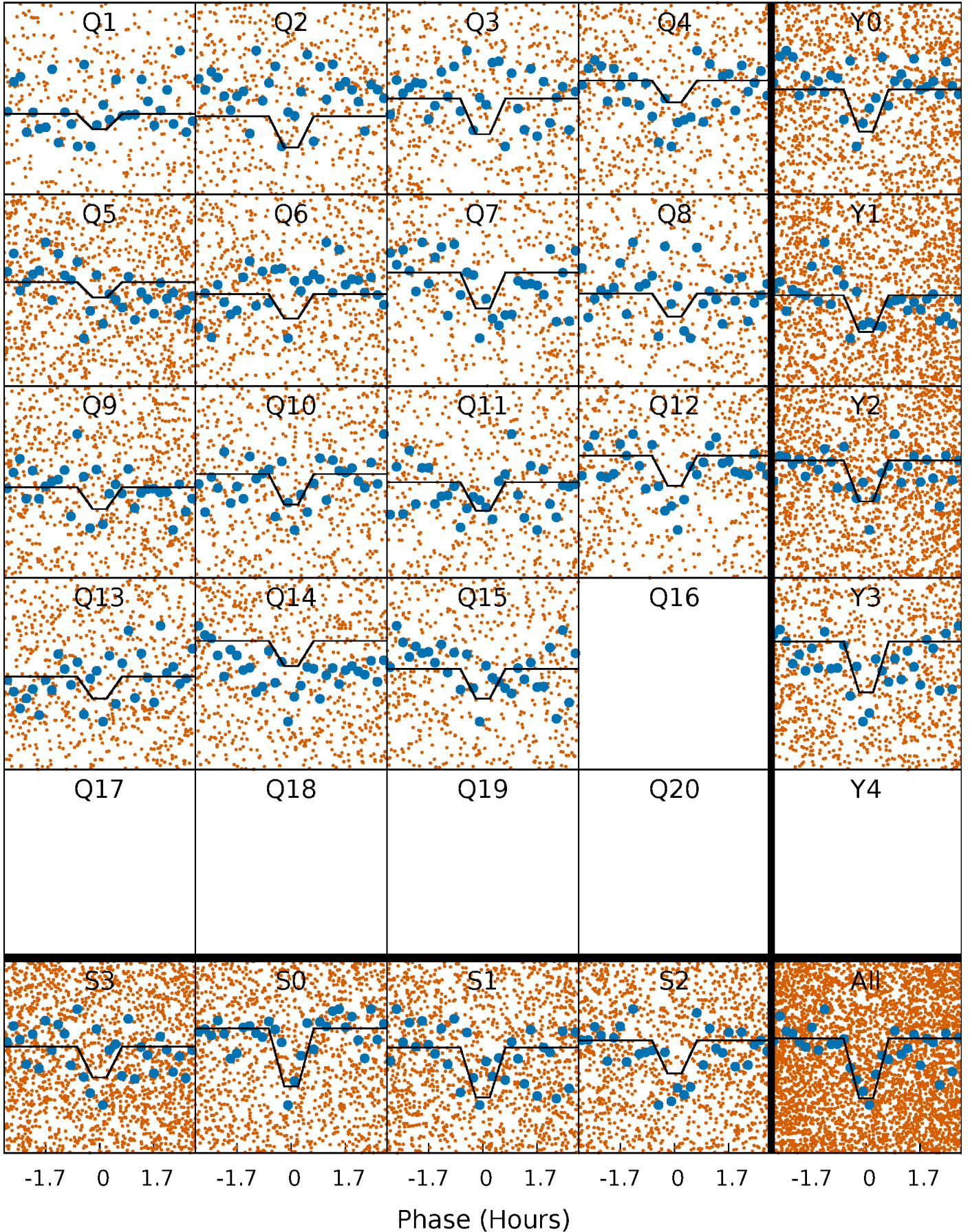
DV Quarter-Phased Transit Curves

TCE 011145726-01 P= 0.619617 Days $T_0=131.756288$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

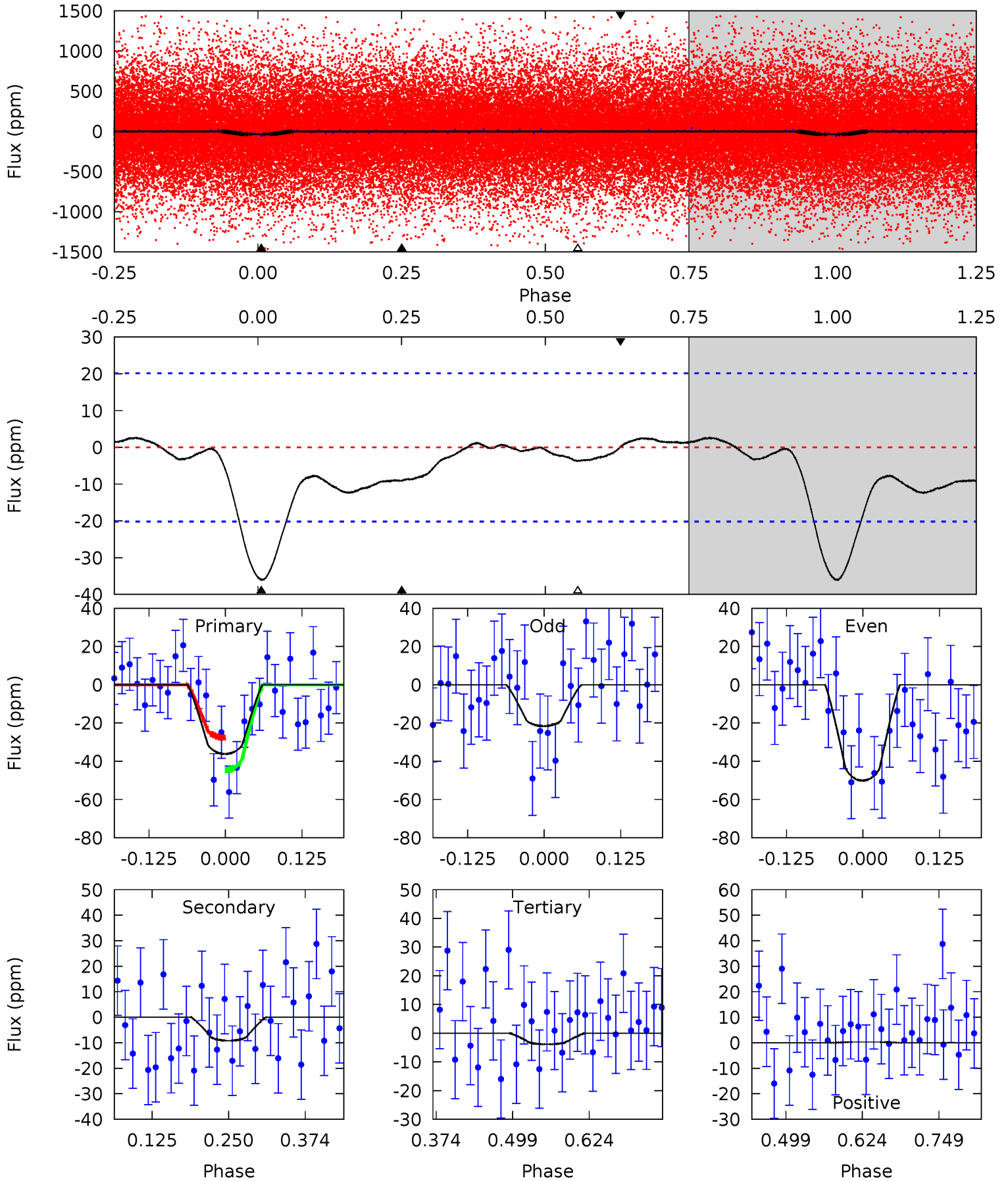
TCE 011145726-01 P= 0.619621 Days $T_0=131.756515$ (BKJD)



DV Model-Shift Uniqueness Test

011145726-01, P = 0.619617 Days, E = 131.136671 Days

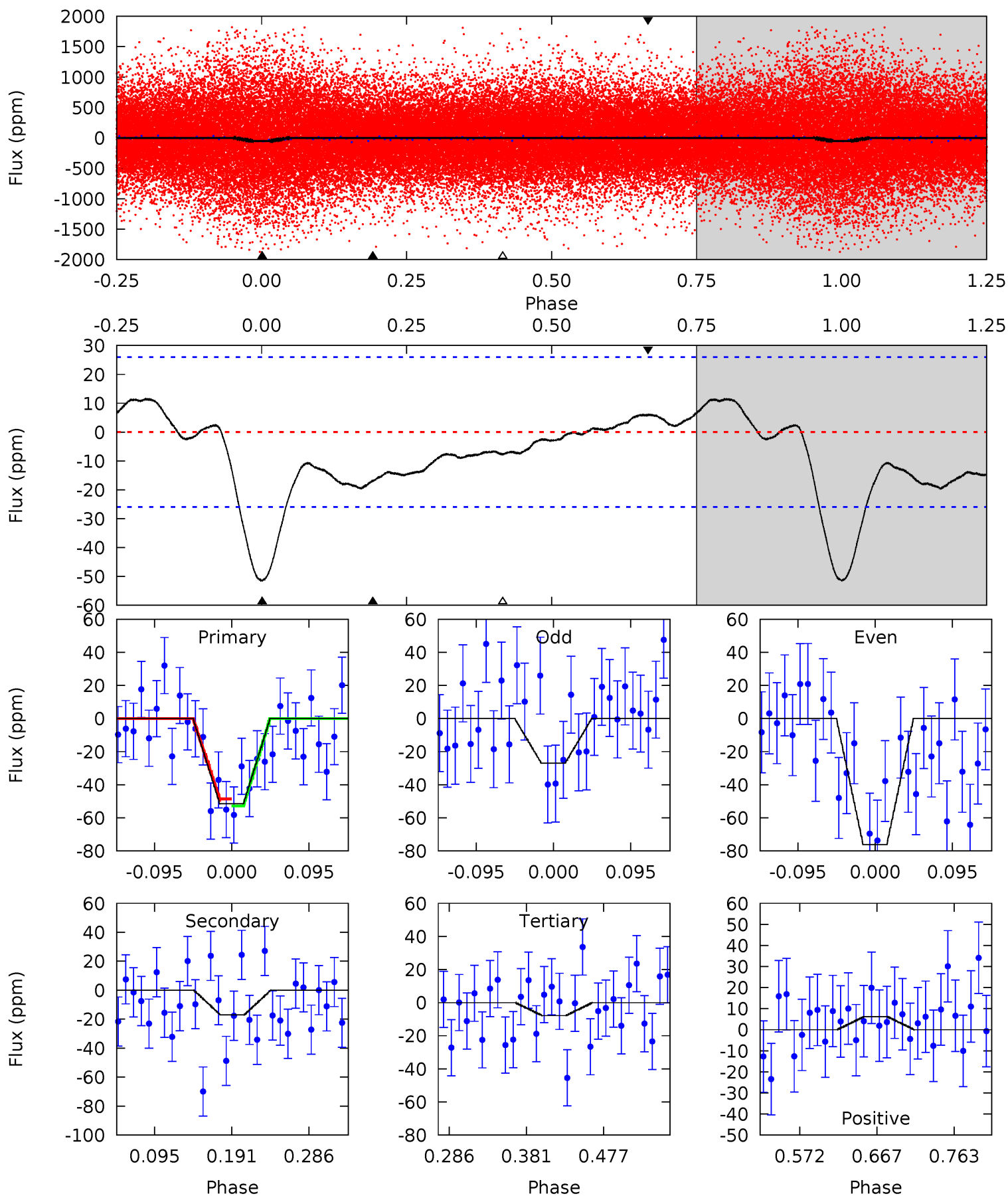
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.11	2.05	0.86	0.07	4.52	1.53	0.43	7.24	8.04	1.19	1.99	3.20	1.09	0.07	1.90



Alt Model-Shift Uniqueness Test

011145726-01, P = 0.619621 Days, E = 131.136894 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.08	3.01	1.38	1.08	4.57	1.67	1.08	7.70	8.00	1.63	1.93	4.33	0.97	0.18	0.38



Stellar Parameters For KIC 011145726

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5180^{+145}_{-163}	$3.314^{+0.409}_{-0.220}$	$-0.180^{+0.250}_{-0.300}$	$4.717^{+1.431}_{-2.325}$	$1.673^{+0.229}_{-0.686}$	$0.022^{+0.082}_{-0.013}$
	+3%/-3%	+12%/-7%	+139%/-167%	+30%/-49%	+14%/-41%	+365%/-58%
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 011145726-01 / KOI 8044.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-9 ± 4	$3.71^{+2.03}_{-1.81}$	5292^{+514}_{-647}	-4086^{+7258}_{-504}	$0.096^{+0.267}_{-0.062}$
Alt.	-17 ± 6	$3.68^{+1.91}_{-1.72}$	5289^{+486}_{-624}	-3633^{+7990}_{-749}	$0.189^{+0.478}_{-0.114}$

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

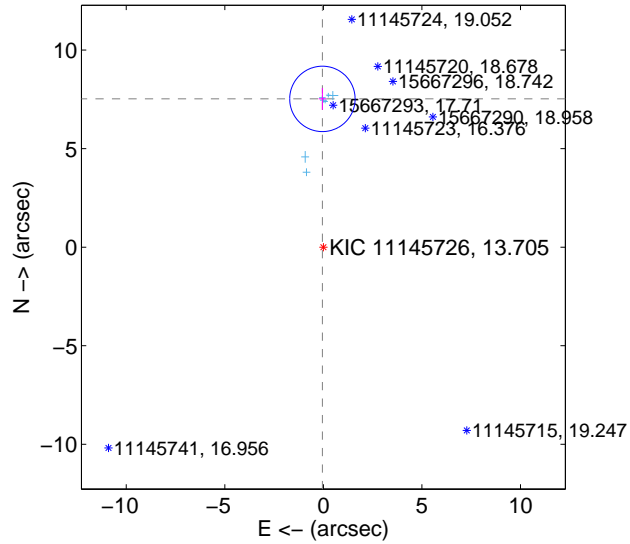
Supplemental centroid analysis for 011145726-01. Kepler magnitude: 13.71. Transit SNR 8.78

There are 7 quarters with good PRF difference image offsets

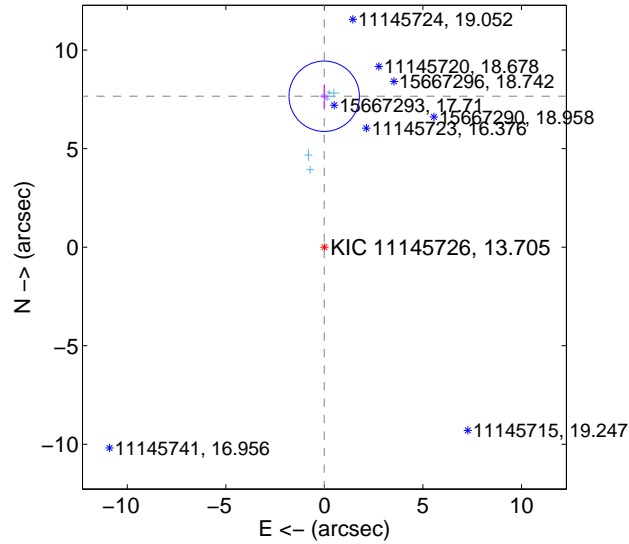
The direct PRF centroid is offset from the target star catalog position by about 0.18 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	7.524 ± 0.553	13.61	0.049 ± 0.191	7.524 ± 0.554
PRF-fit source offset from KIC position	7.657 ± 0.595	12.87	0.011 ± 0.194	7.657 ± 0.595
photometric centroid source offset	8.24 ± 0.66	12.41	0.82 ± 0.72	8.20 ± 0.66

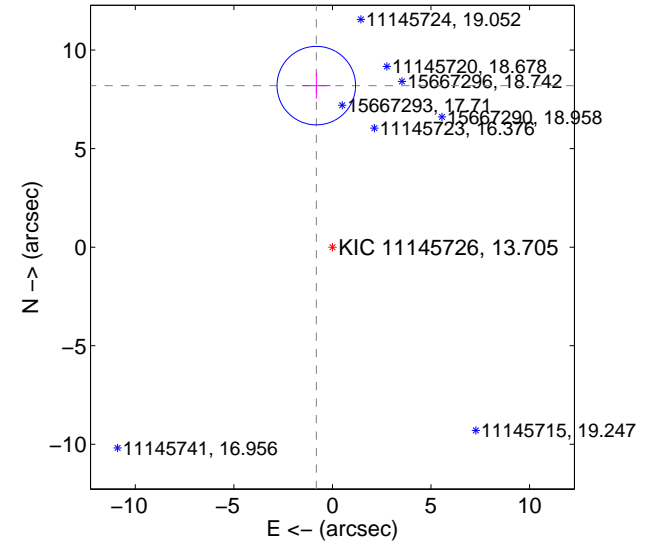
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

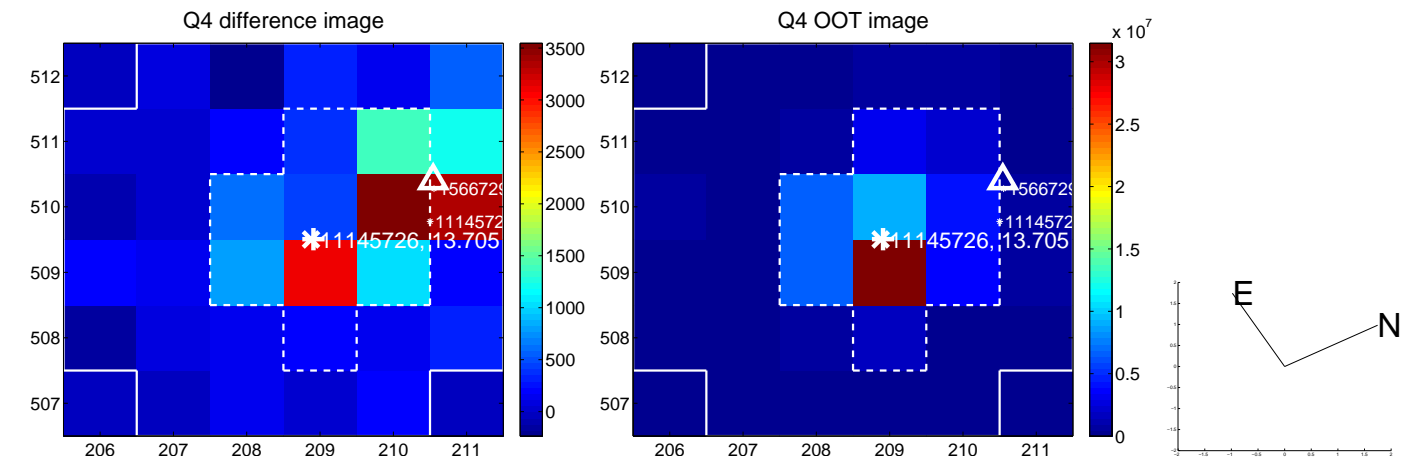
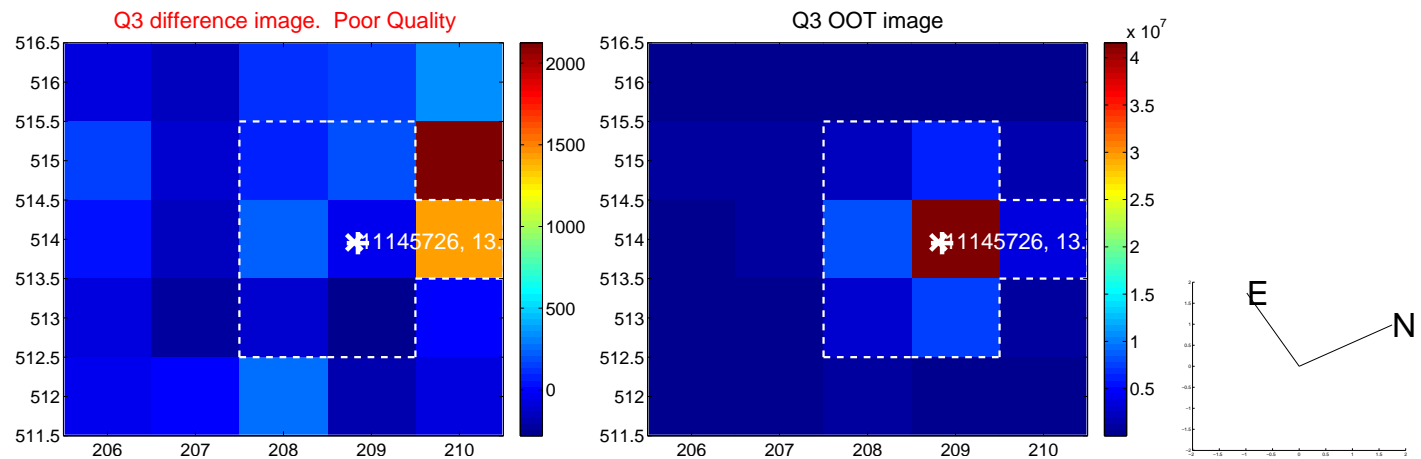
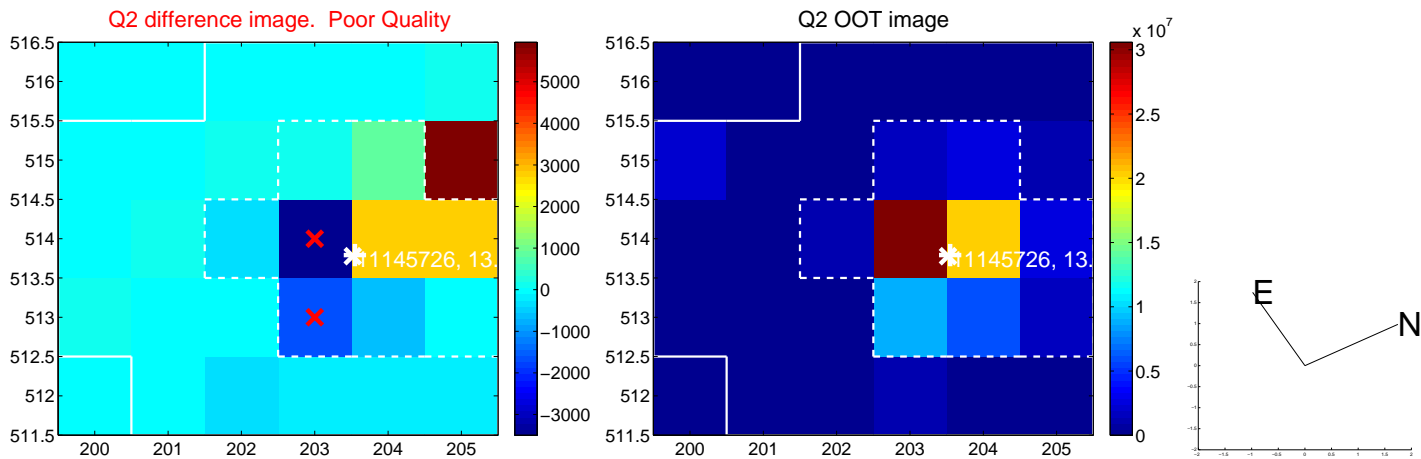
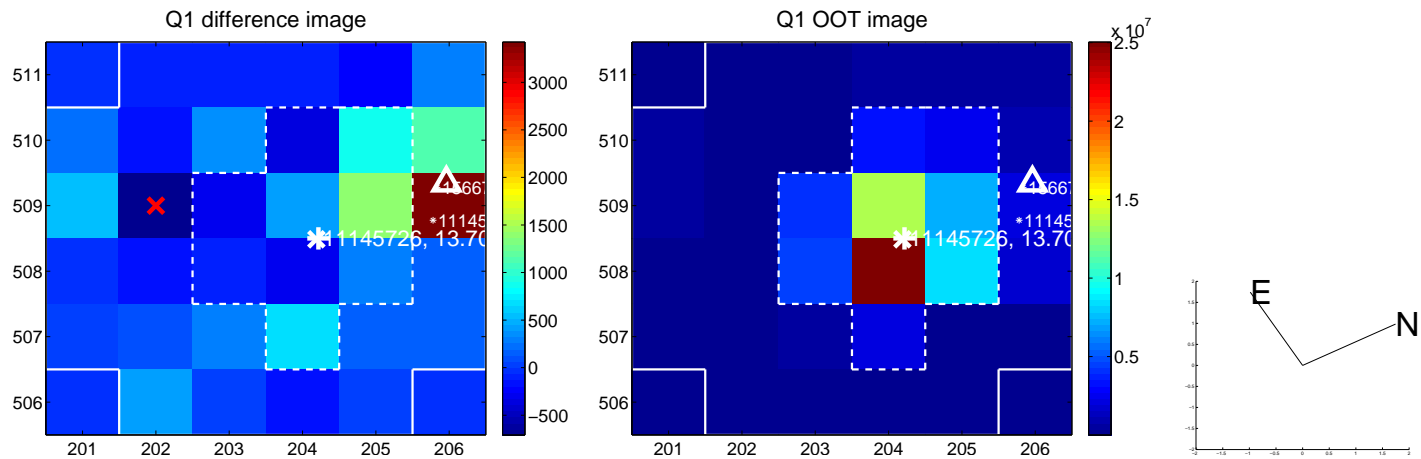


offset from photometric centroids

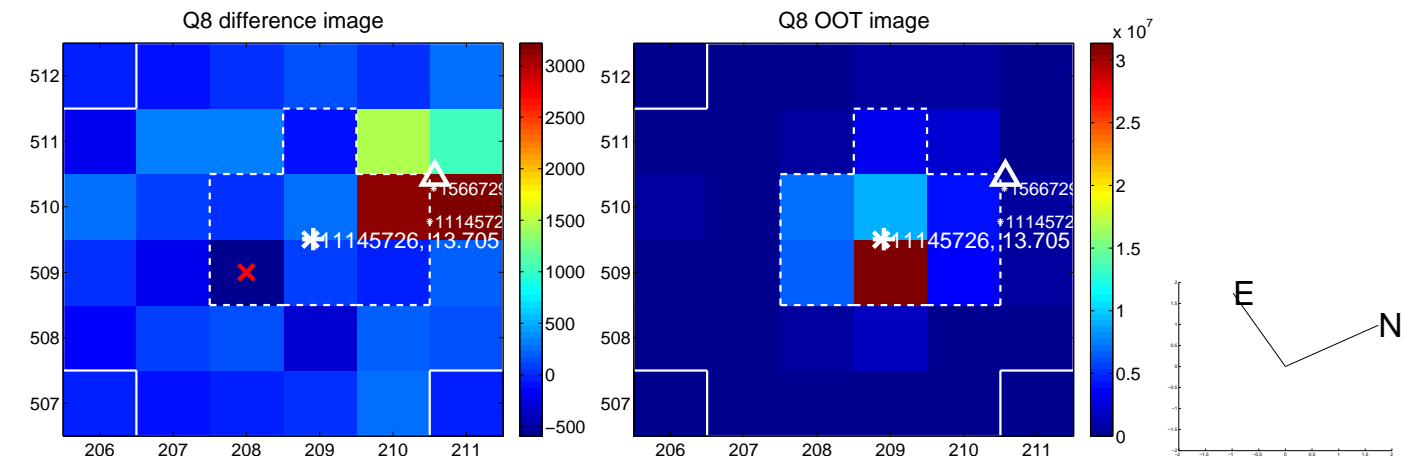
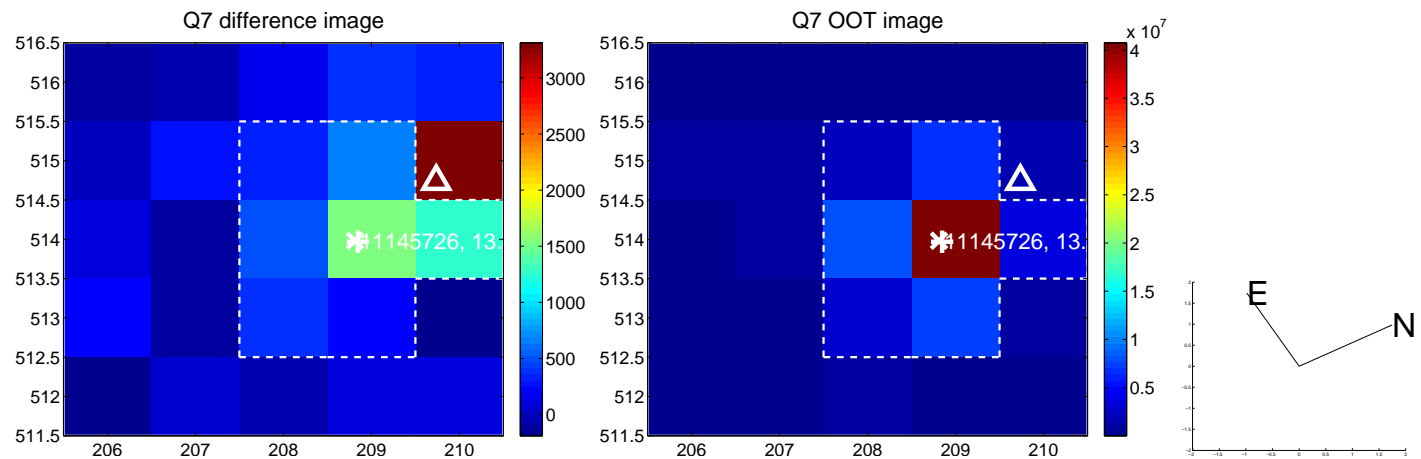
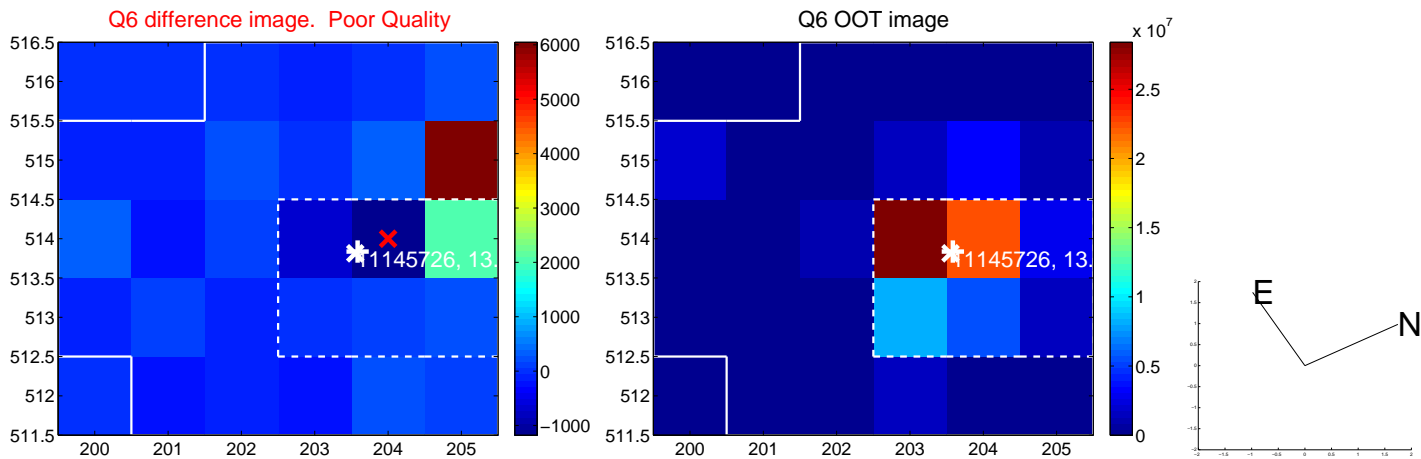
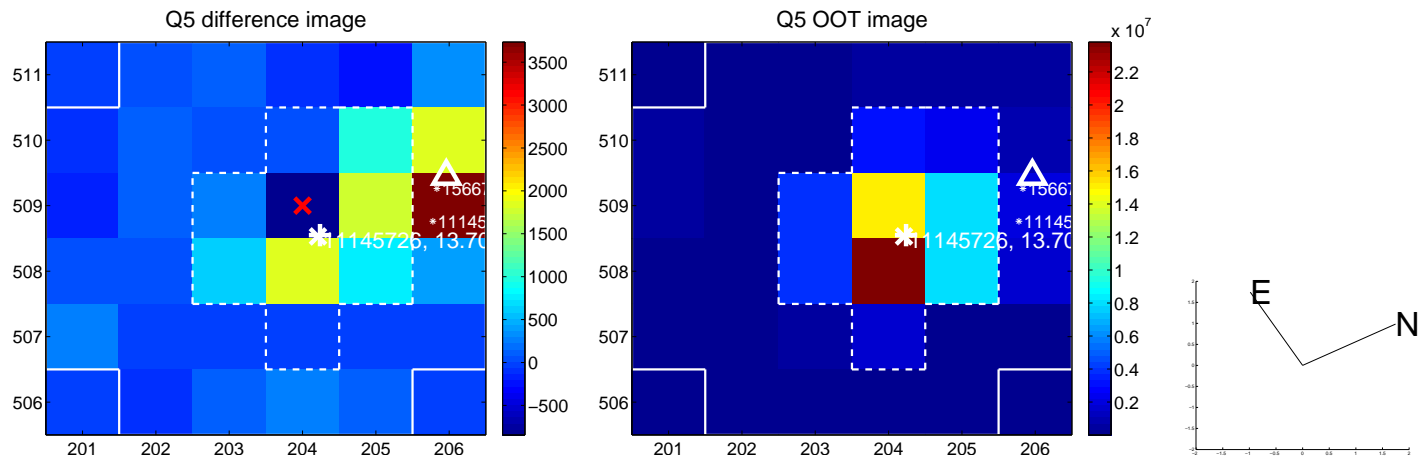


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

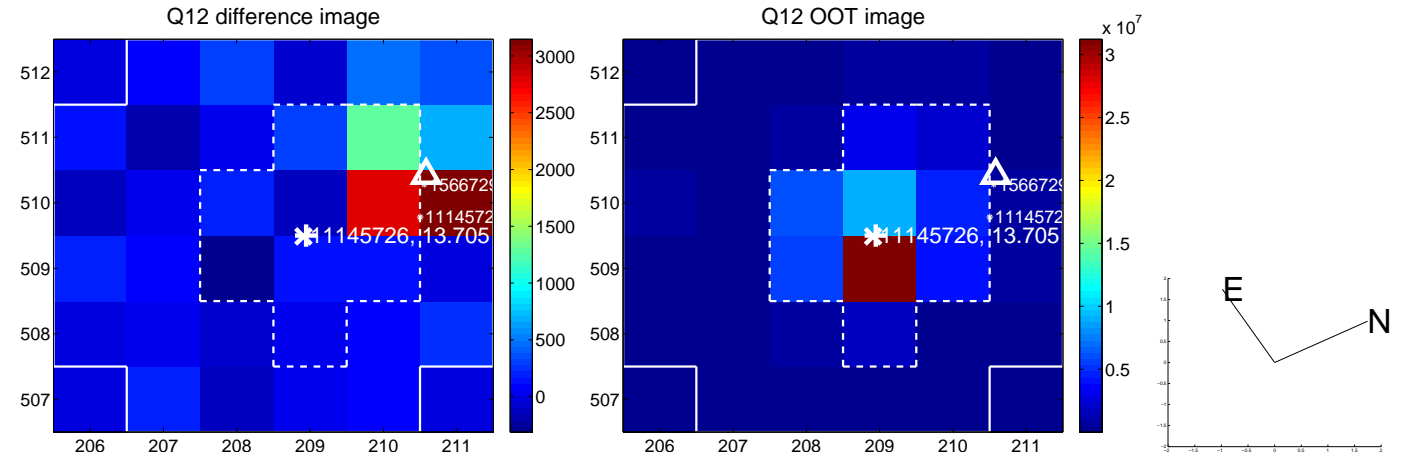
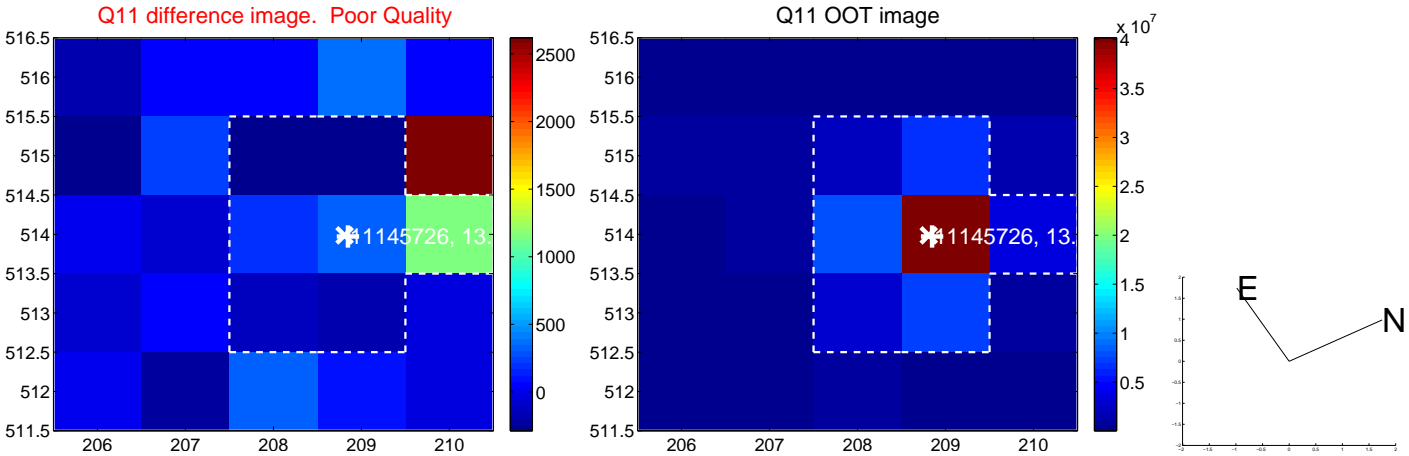
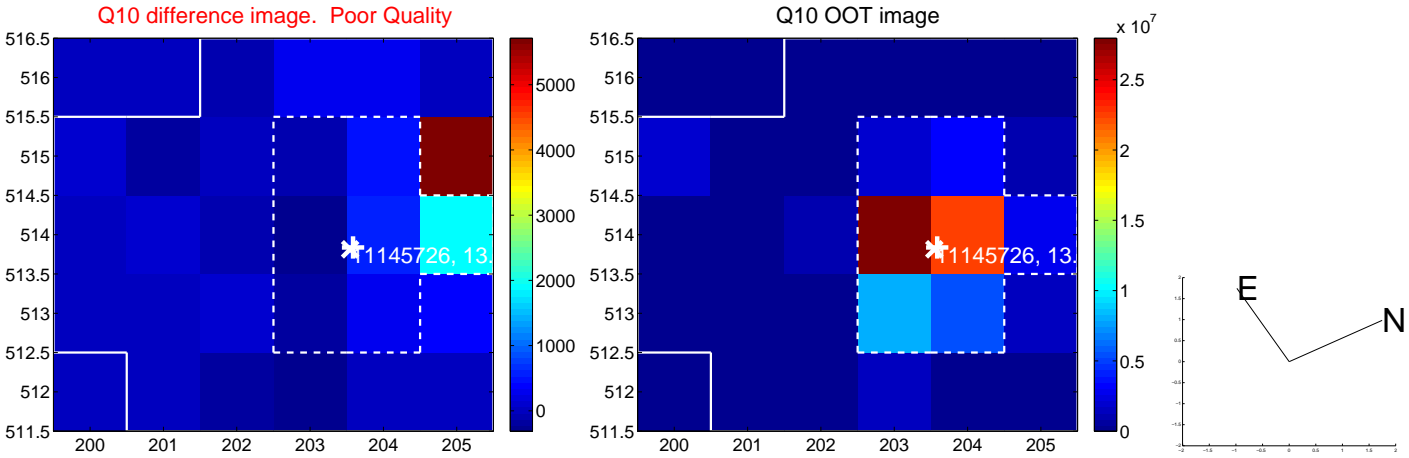
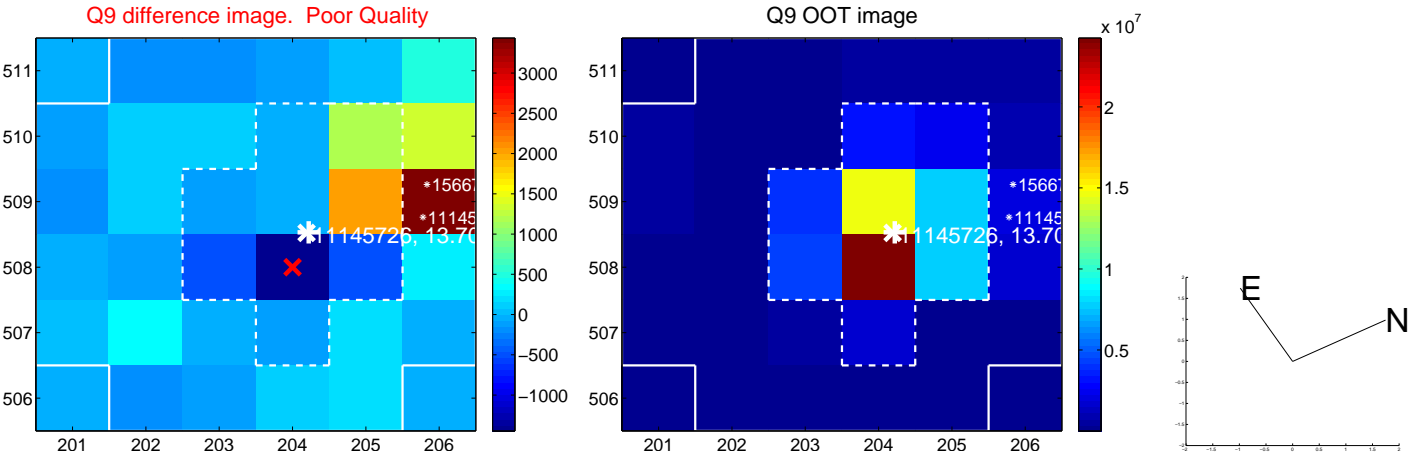
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



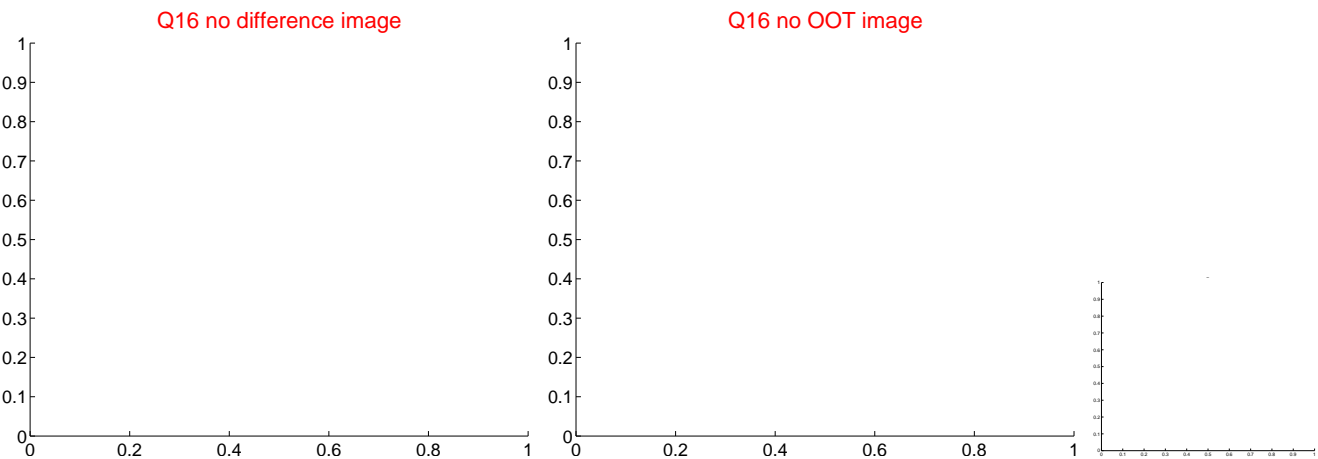
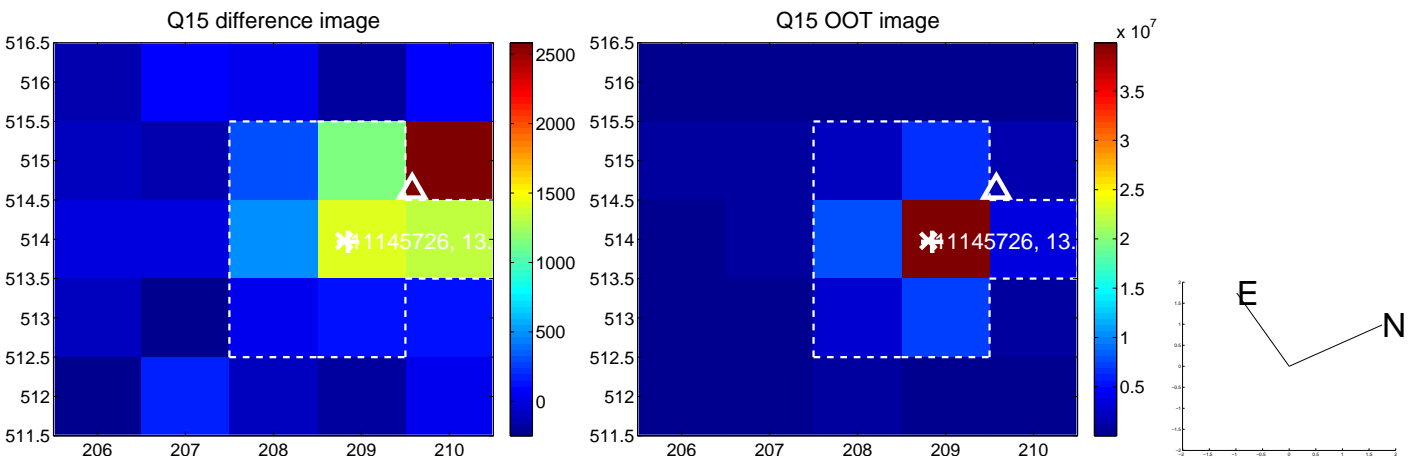
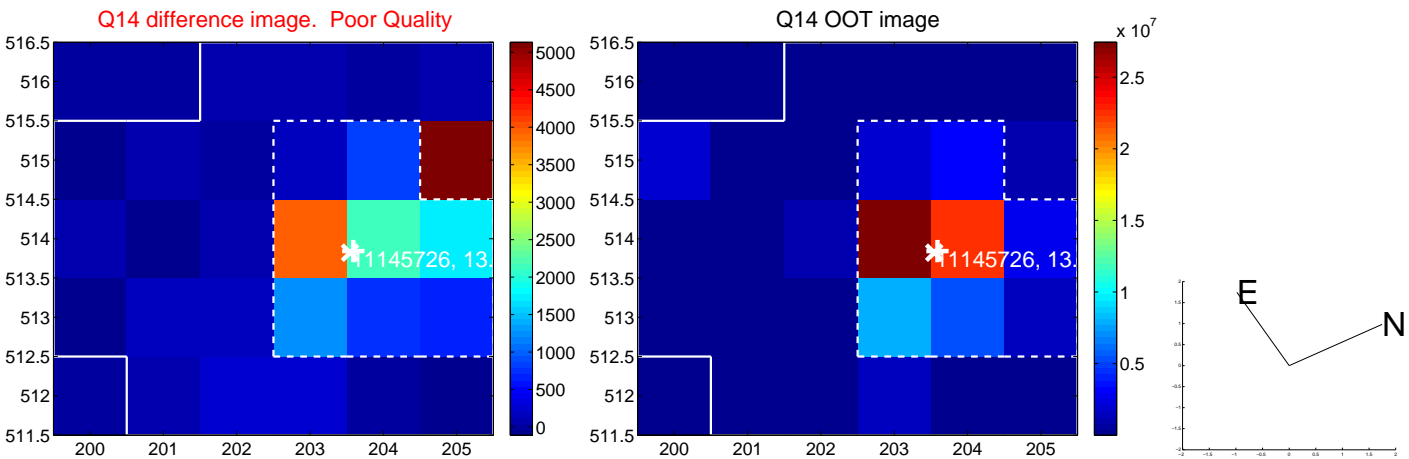
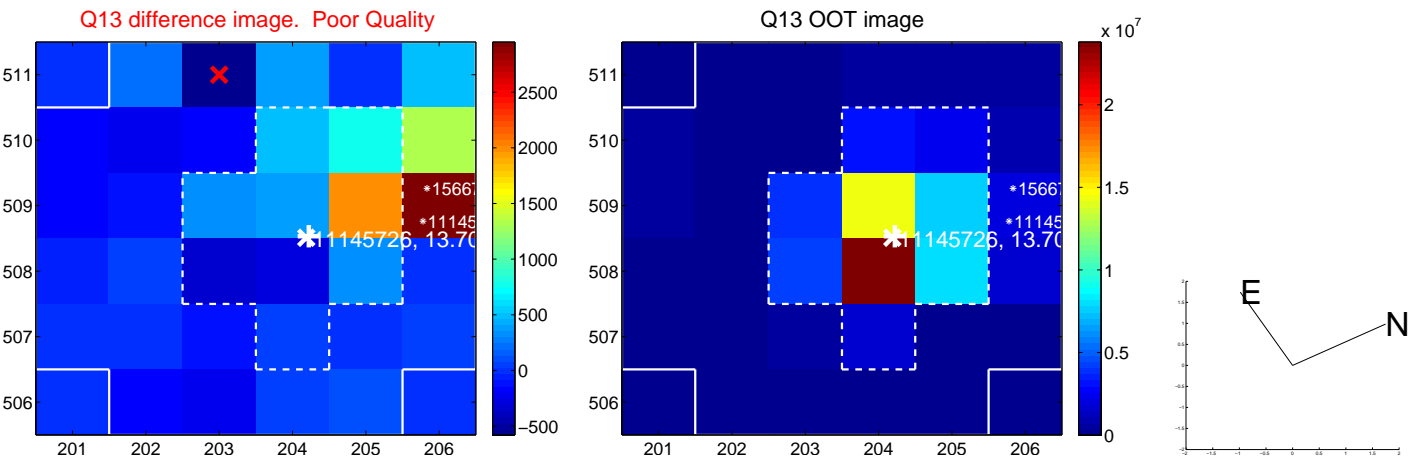
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



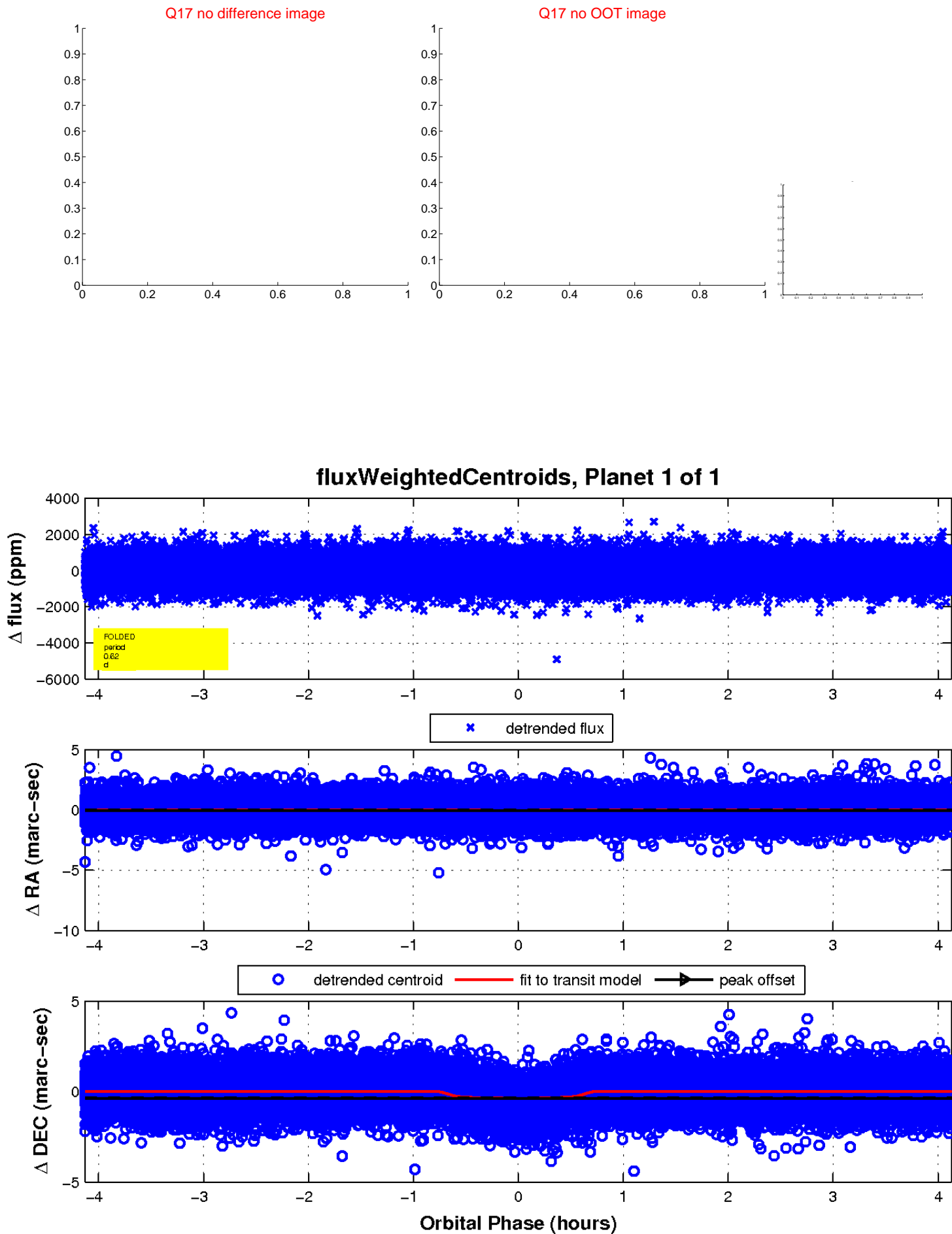
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.



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

