

KIC 010611450

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})
010611450-01	OBS	No	11.657767	139.833398	70.8	26.058	9.3	10.9	1.14	6452	1.02	178.66

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010611450-01	OBS	FP	0.00	1	0	0	0	LPP_DV—MOD_NONUNIQ_DV—CENT_FEW_DIFFS

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

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

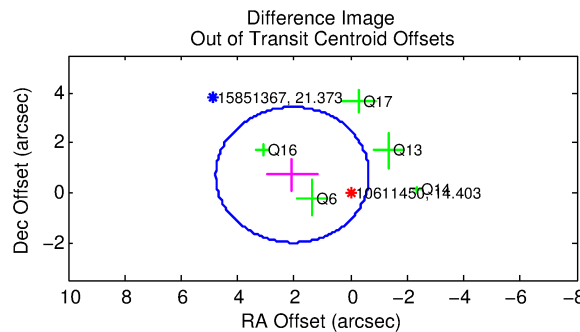
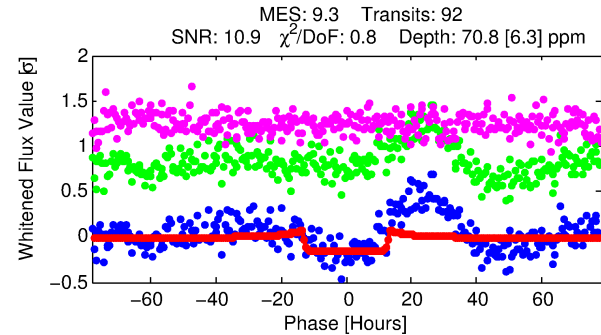
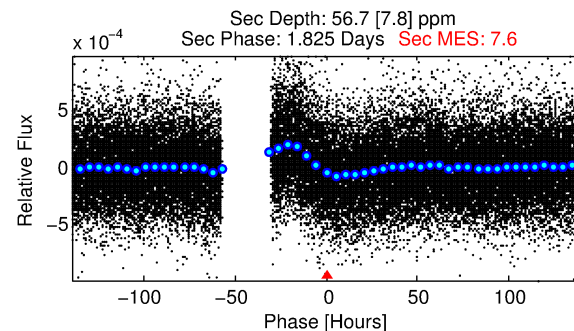
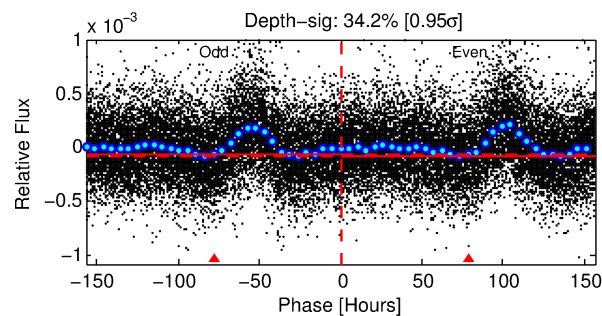
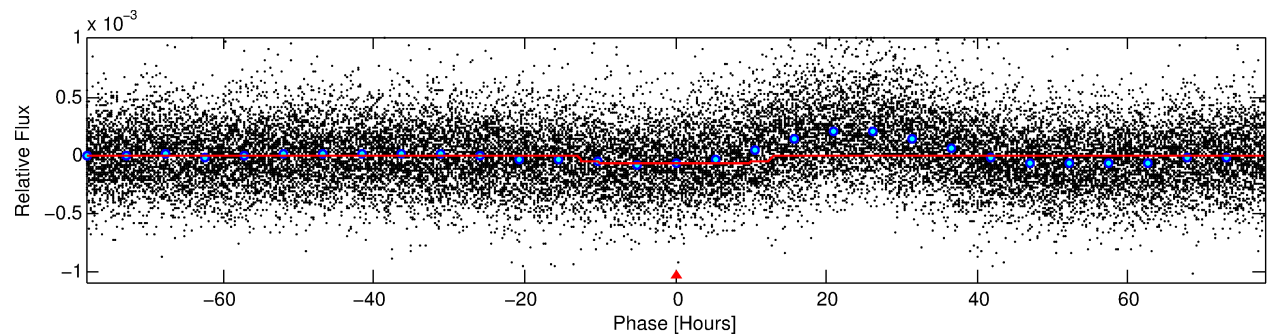
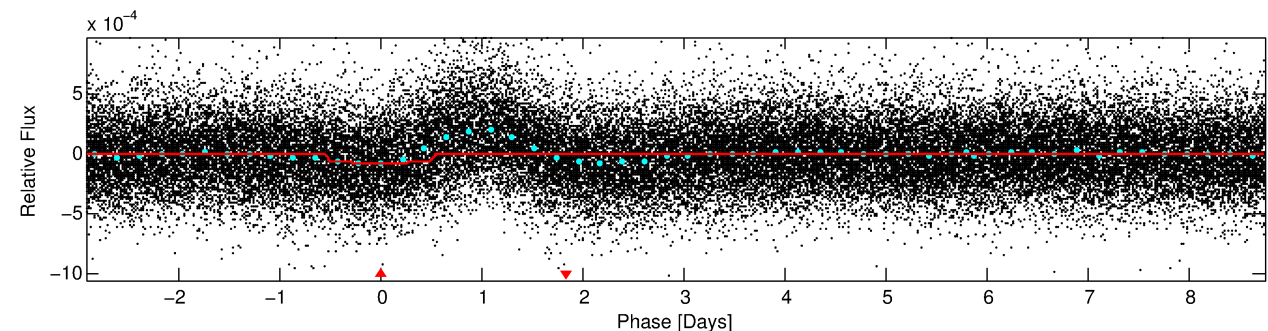
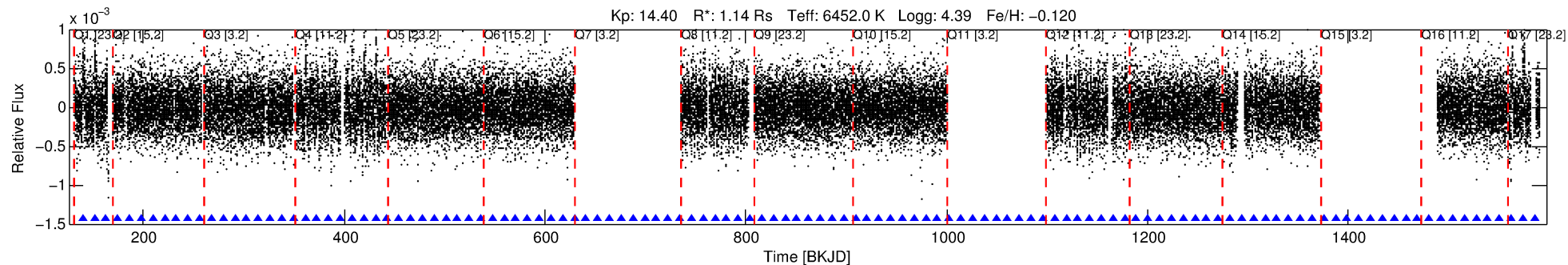
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 010611450-01

No Significant Match Found

DV One-Page Summary

KIC: 10611450 Candidate: 1 of 1 Period: 11.658 d



DV Fit Results:

Period = 11.65777 [0.00028] d
Epoch = 139.8334 [0.0181] BKJD
Rp/R* = 0.0082 [0.0015]
a/R* = 2.62 [2.07]
b = 0.70 [0.68]
Seff = 178.66 [71.54]
Teff = 932 [93] K
Rp = 1.02 [0.38] Re
a = 0.1060 [0.0283] AU
Ag = 334.51 [179.84] [1.85 σ]
Teffp = 6164 [622] K [8.32 σ]

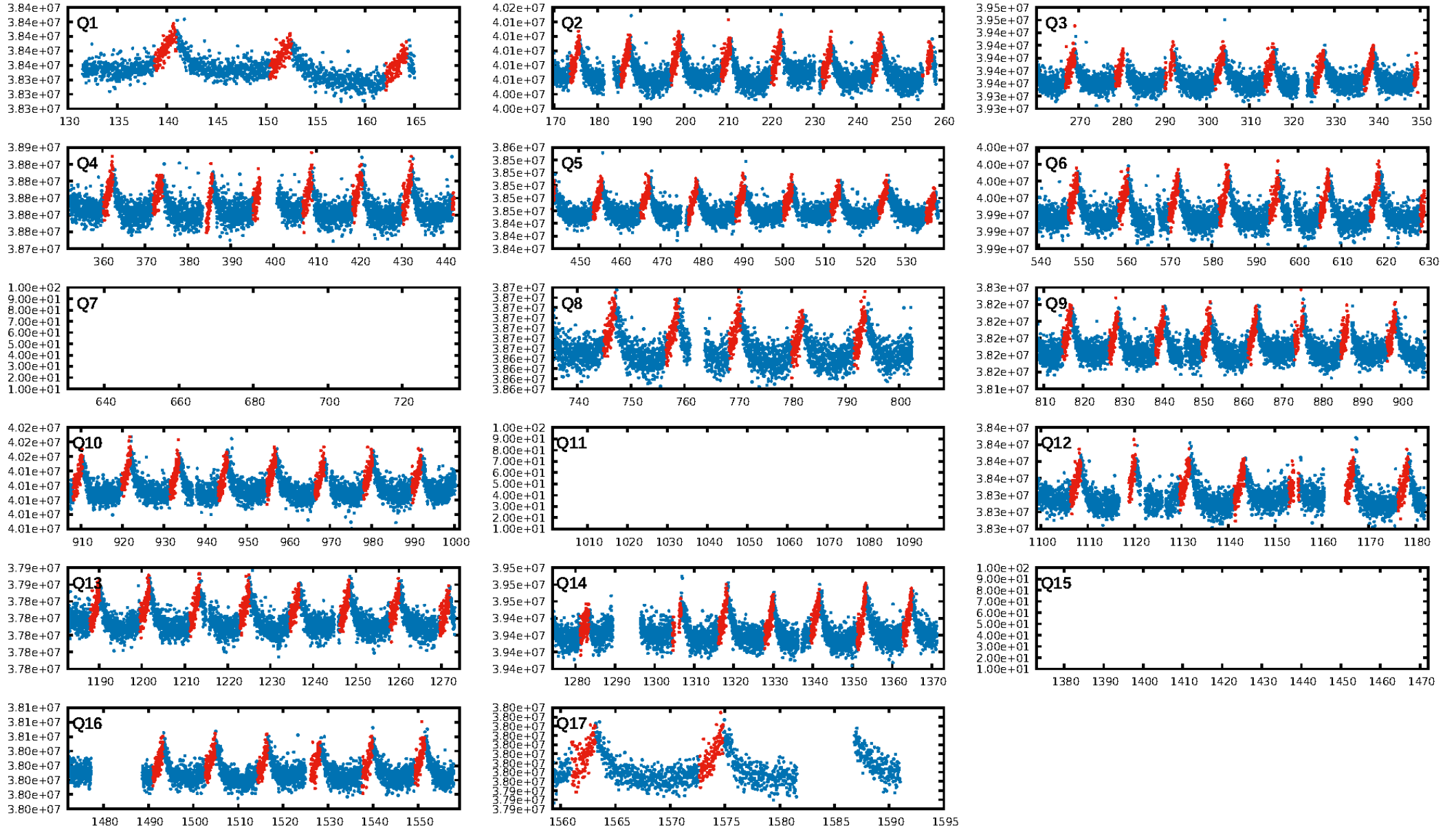
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 99.8%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 3.14e-22
RollingBand-fgt: 1.00 [87/87]
GhostDiagnostic-chr: 0.3778
Centroid-sig: 79.7%
Centroid-so: 1.034 arcsec [1.02 σ]
OotOffset-rm: 2.181 arcsec [2.41 σ]
KicOffset-rm: 2.162 arcsec [2.66 σ]
OotOffset-st: 2/0/1/2 [5]
KicOffset-st: 2/0/1/2 [5]
DiffImageQuality-fgm: 0.20 [1/5]
DiffImageOverlap-fno: 1.00 [14/14]

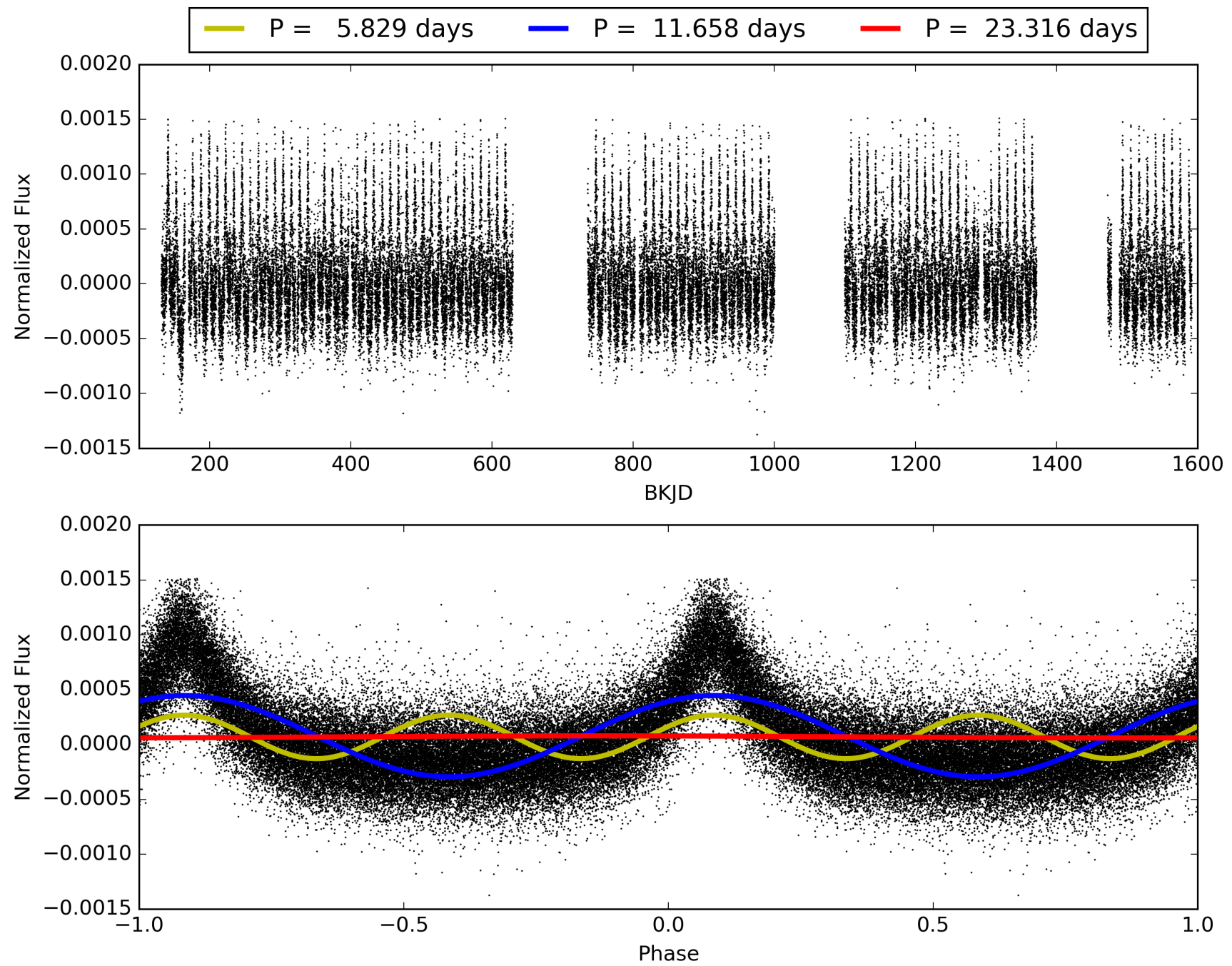
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 20:44:33 Z

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

TCE 010611450-01, PDC Light Curves

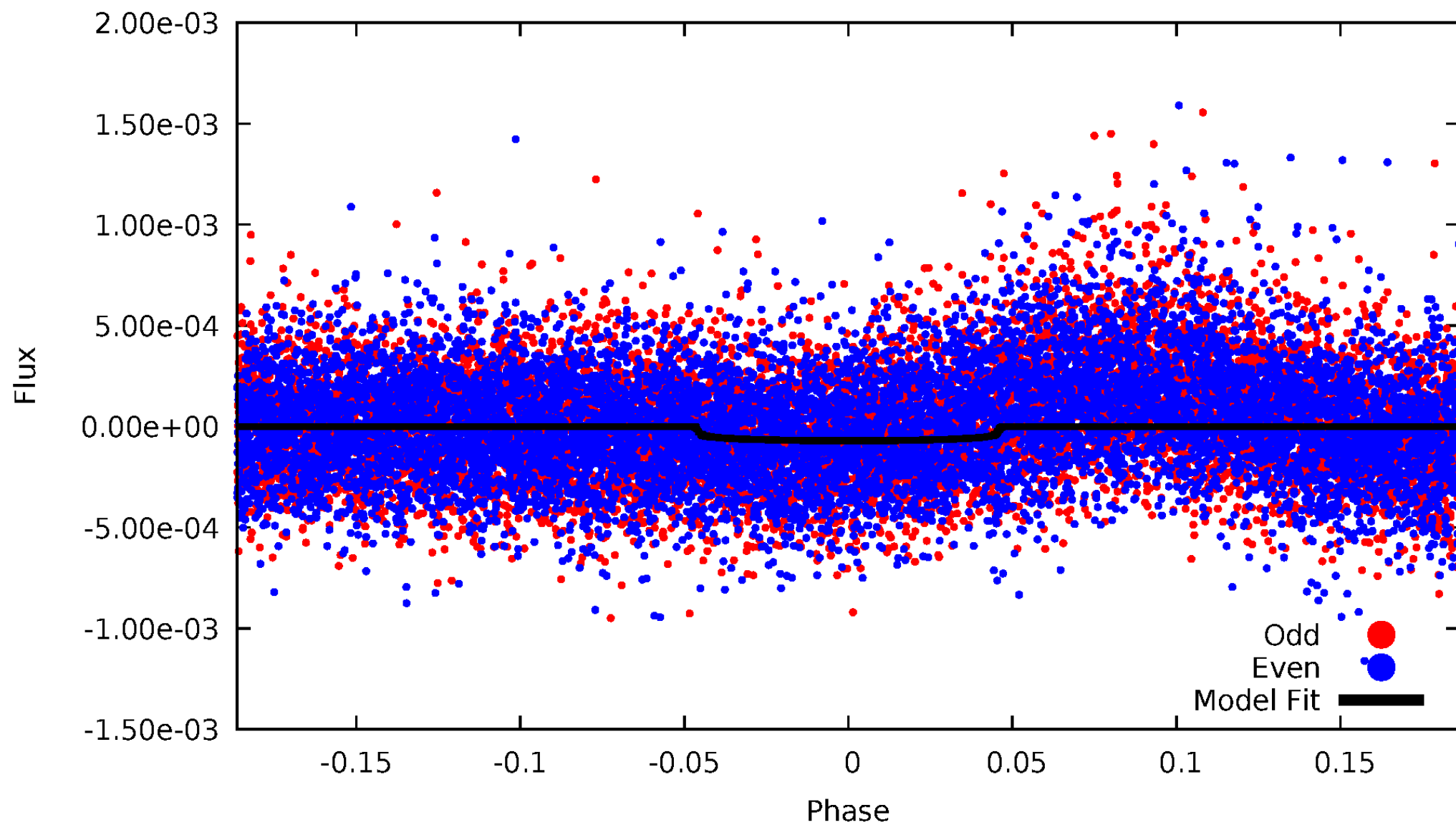


TCE 010611450-01



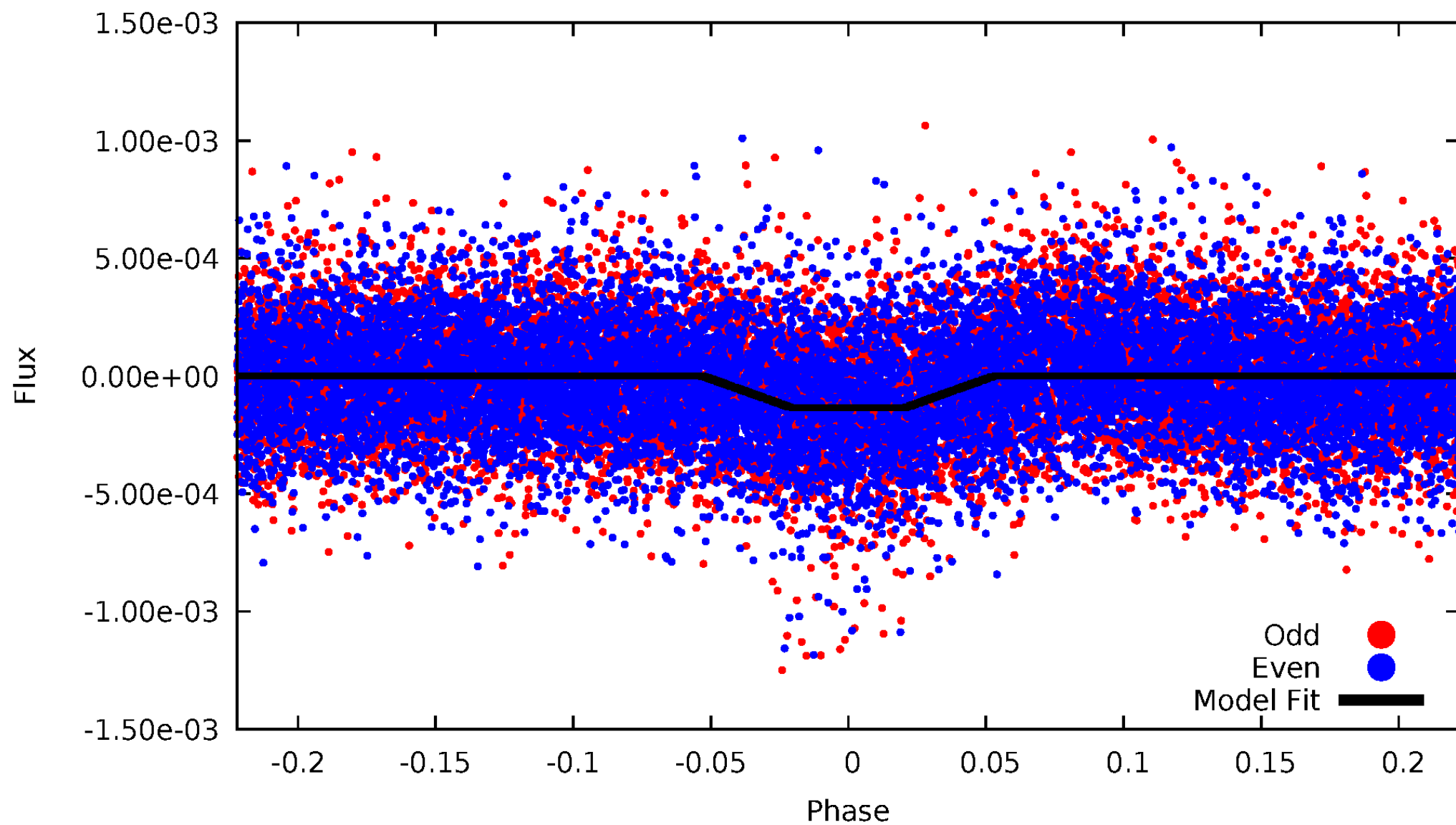
DV Odd/Even

TCE 010611450-01



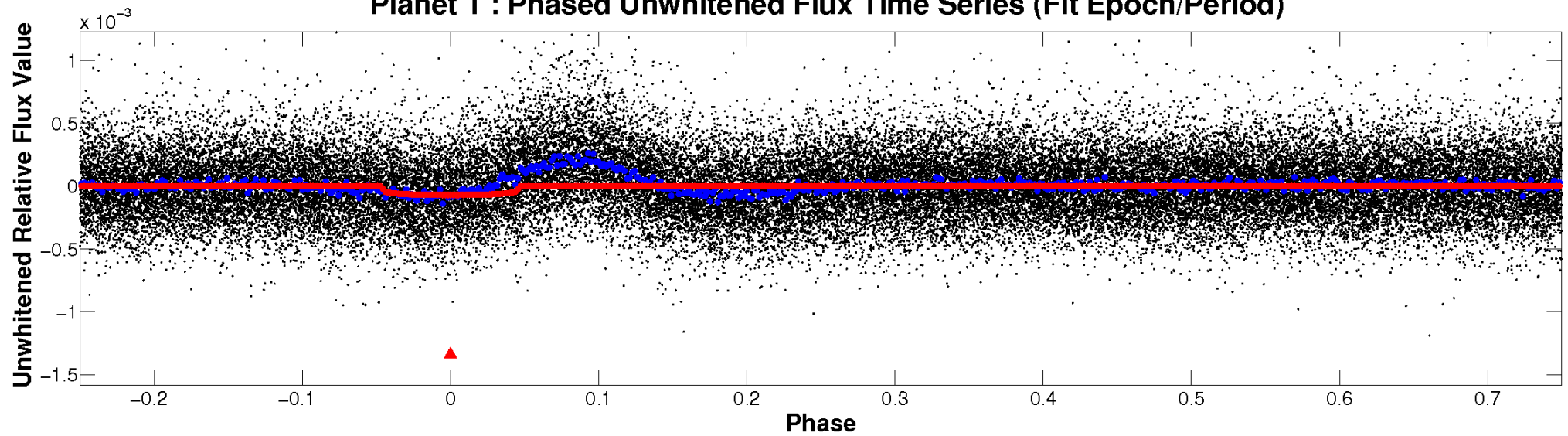
ALT Odd/Even

TCE 010611450-01

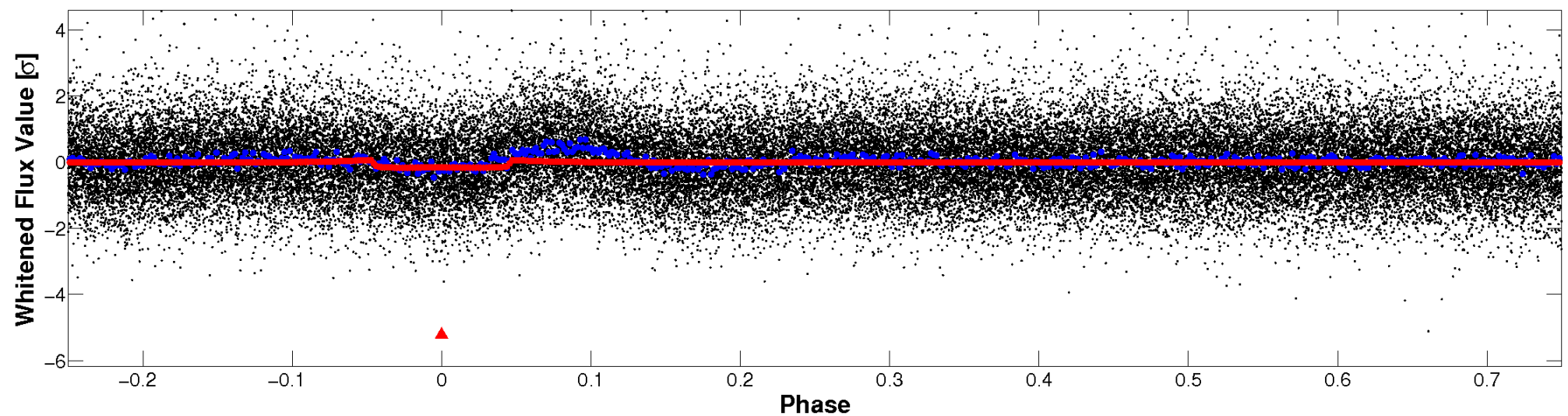


Non-Whitened Vs. Whitened Light Curve

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

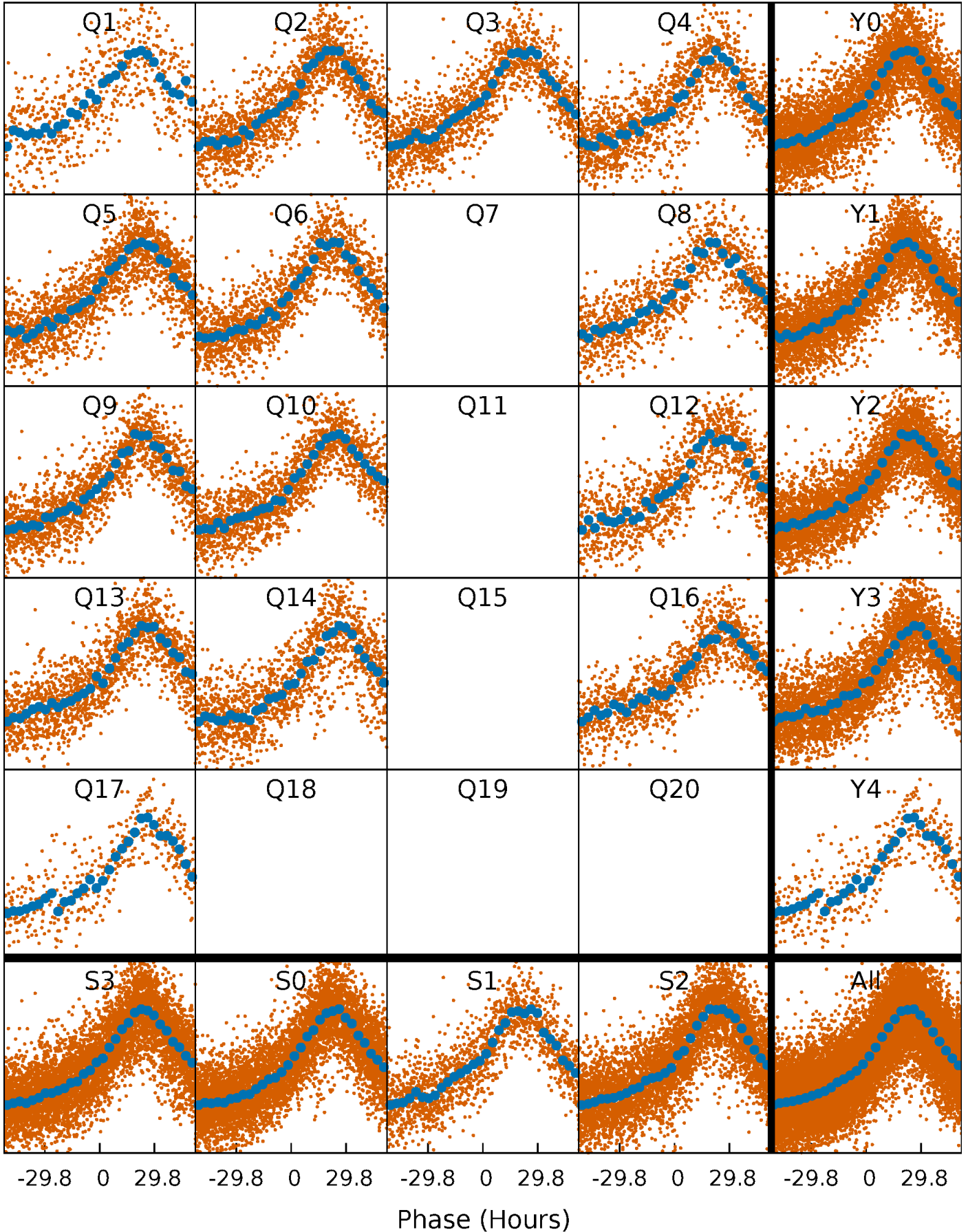


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



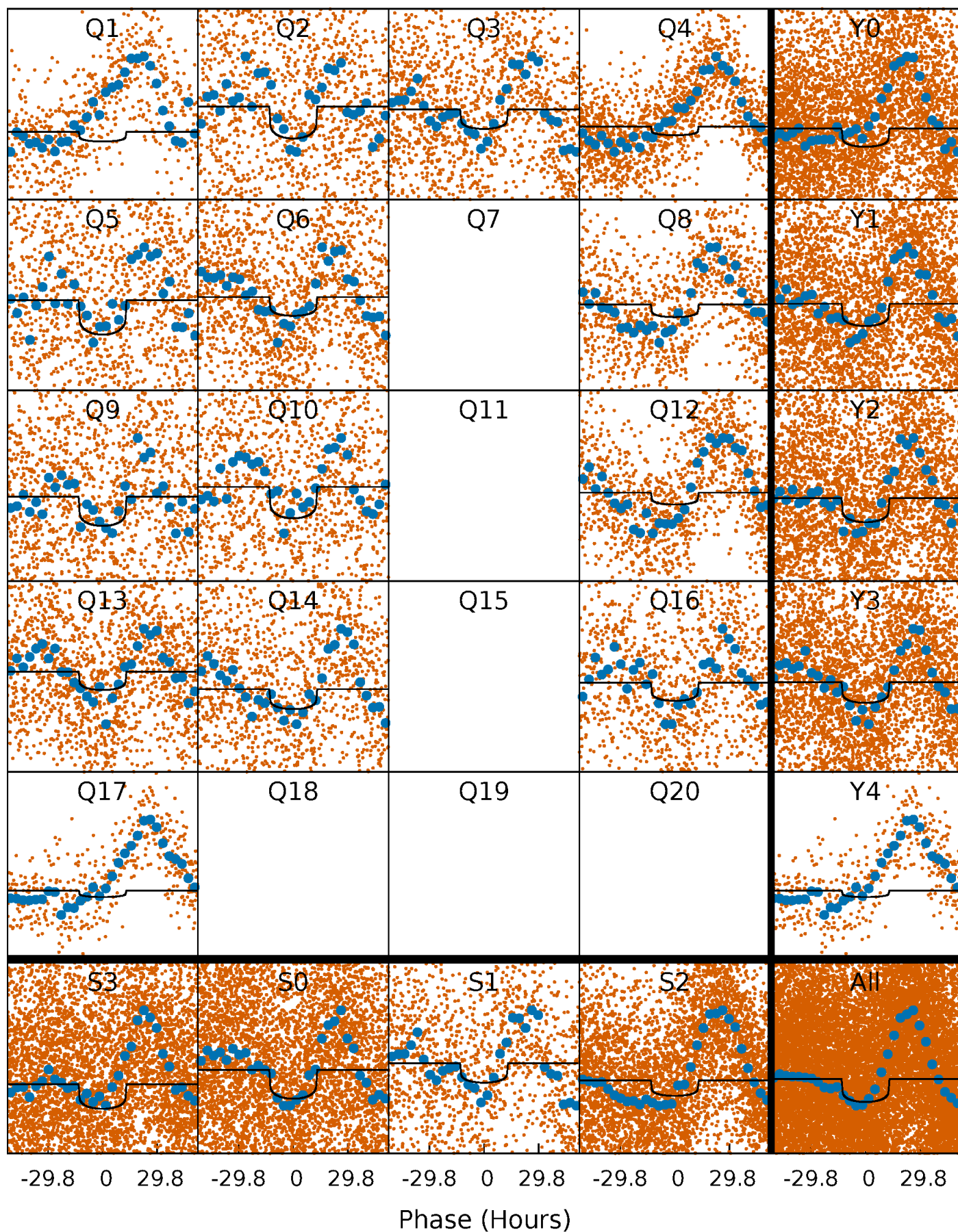
PDC Quarter-Phased Transit Curves

TCE 010611450-01 P= 11.657767 Days $T_0=139.833398$ (BKJD)



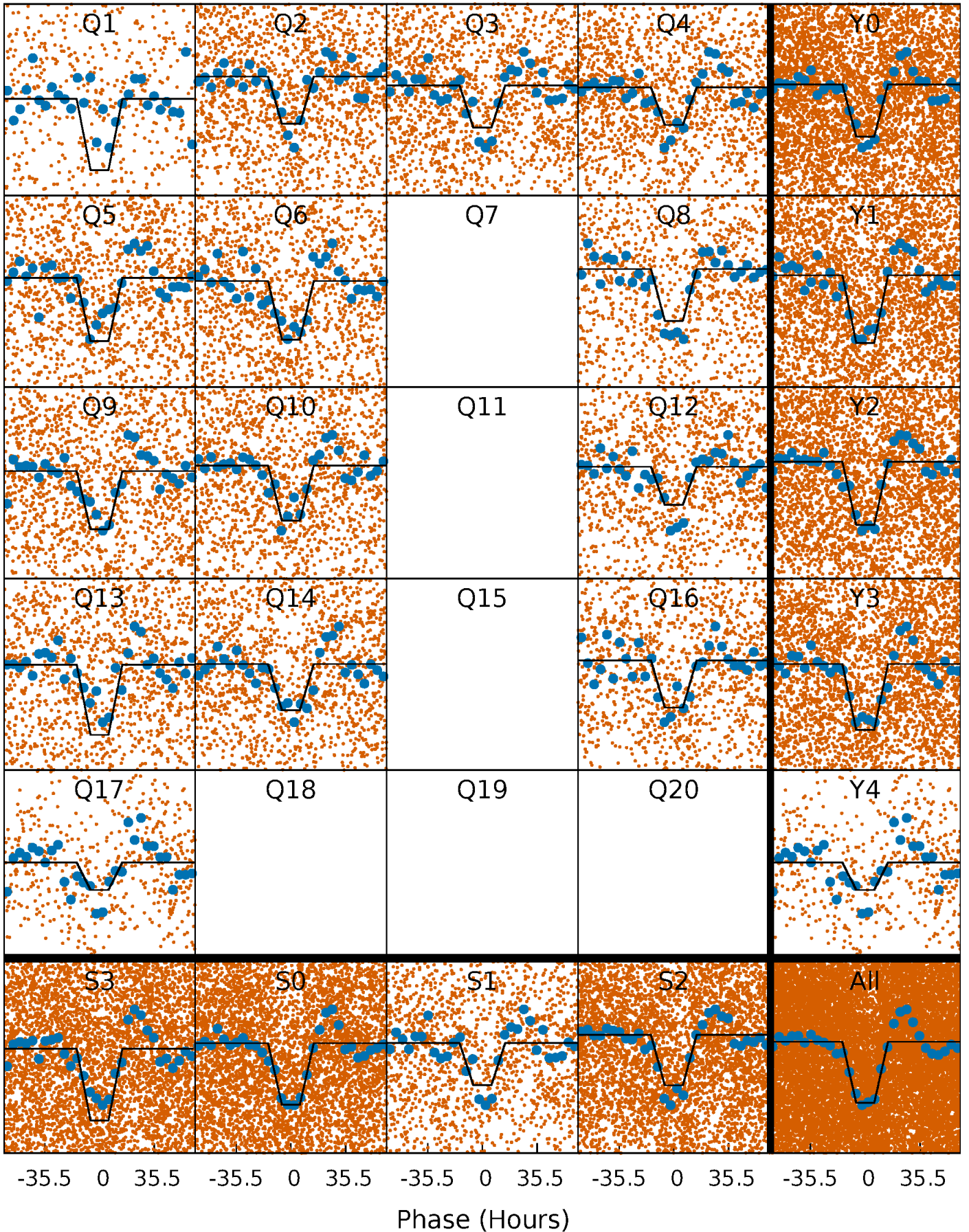
DV Quarter-Phased Transit Curves

TCE 010611450-01 P= 11.657767 Days $T_0=139.833398$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

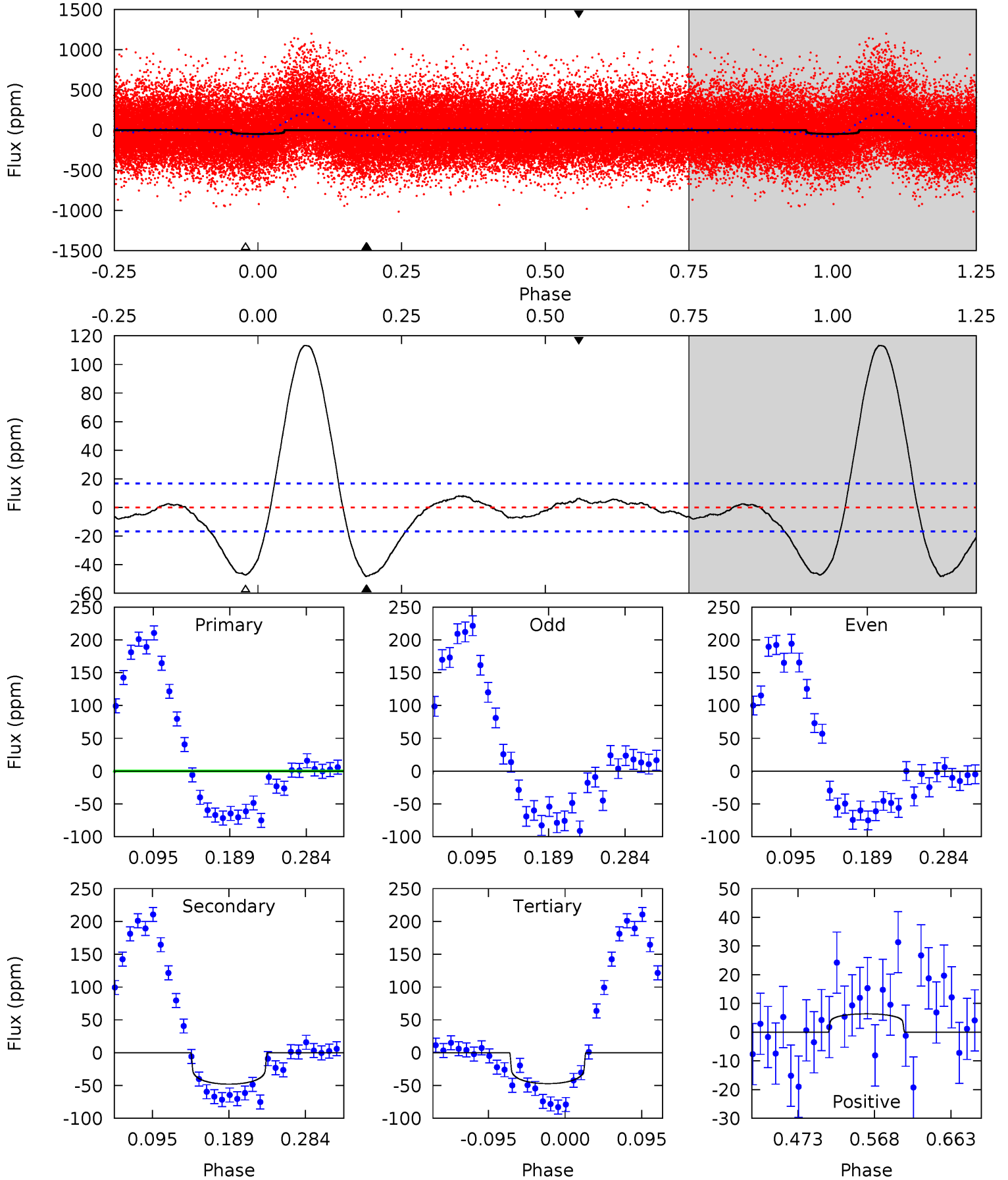
TCE 010611450-01 P= 11.658668 Days $T_0=139.802885$ (BKJD)



DV Model-Shift Uniqueness Test

010611450-01, $P = 11.657767$ Days, $E = 128.175631$ Days

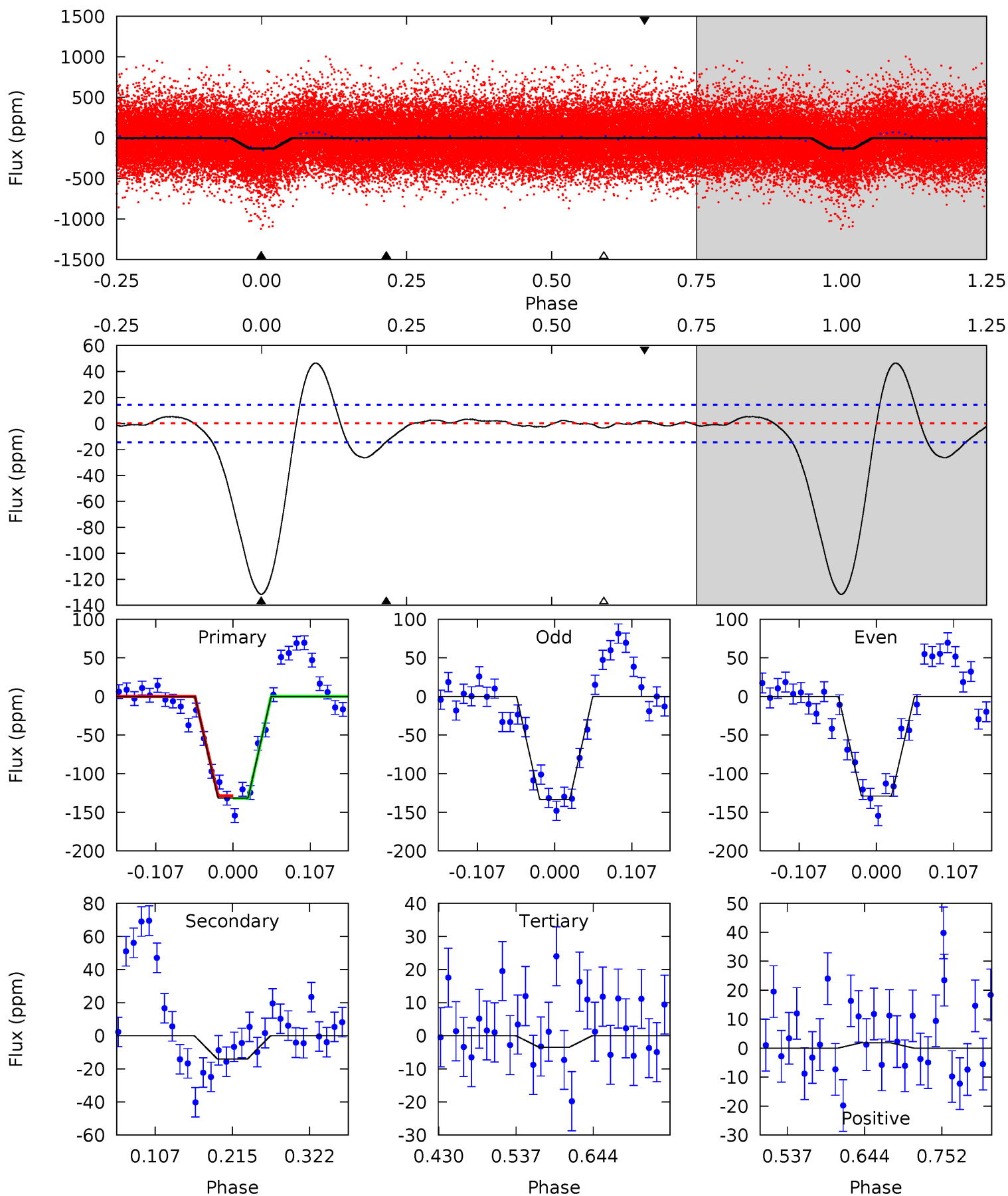
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.2	13.2	12.9	1.75	4.58	1.67	7.60	0.28	11.5	0.21	11.4	0.49	0.73	0.70	8.98



Alt Model-Shift Uniqueness Test

010611450-01, P = 11.658668 Days, E = 128.144217 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
41.5	4.44	1.10	0.58	4.55	1.61	0.83	40.4	40.9	3.33	3.86	0.68	1.83	0.26	0.56



Stellar Parameters For KIC 010611450

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6452^{+153}_{-211}	$4.394^{+0.067}_{-0.202}$	$-0.120^{+0.250}_{-0.300}$	$1.137^{+0.370}_{-0.148}$	$1.167^{+0.172}_{-0.157}$	$1.120^{+0.320}_{-0.591}$
	+2%/-3%	+2%/-5%	+208%/-250%	+33%/-13%	+15%/-13%	+29%/-53%
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 010611450-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-48 ± 4	$1.07^{+0.23}_{-0.20}$	1320^{+91}_{-65}	5875^{+632}_{-468}	255^{+135}_{-84}
Alt.	-14 ± 3	$1.48^{+0.32}_{-0.23}$	1326^{+98}_{-64}	3986^{+271}_{-237}	39^{+18}_{-14}

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 $A_{obs} \gg 1.0$

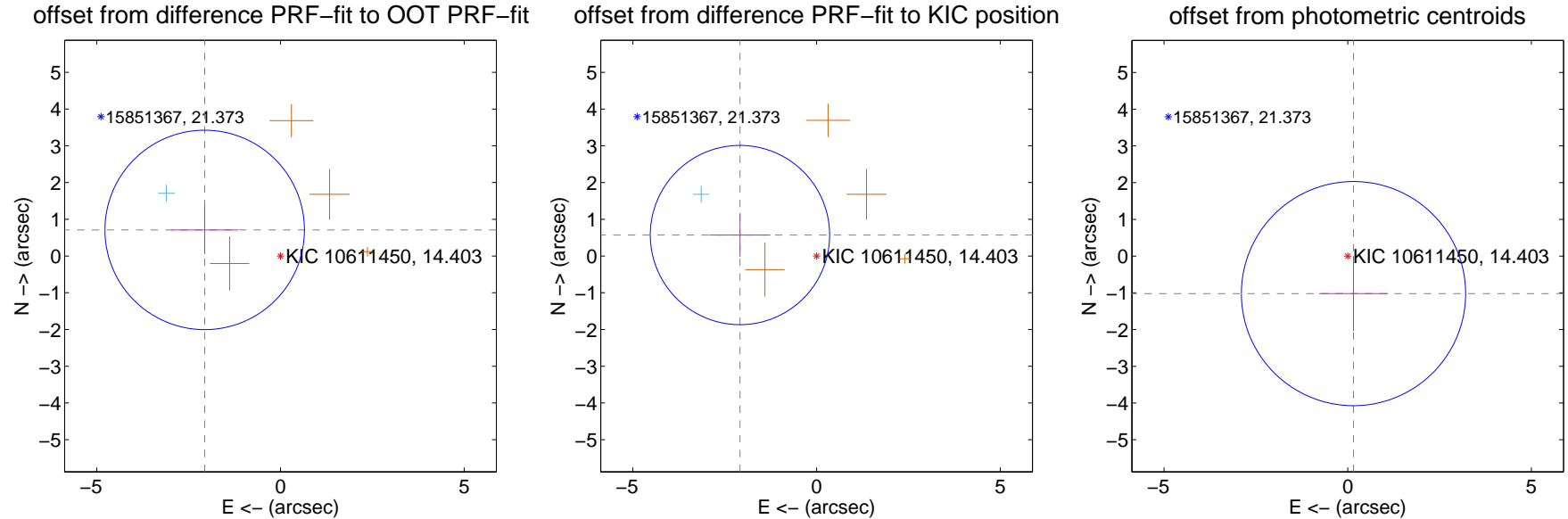
DV Centroid Data

Supplemental centroid analysis for 010611450-01. Kepler magnitude: 14.40. Transit SNR 10.90

There are 1 quarters with good PRF difference image offsets

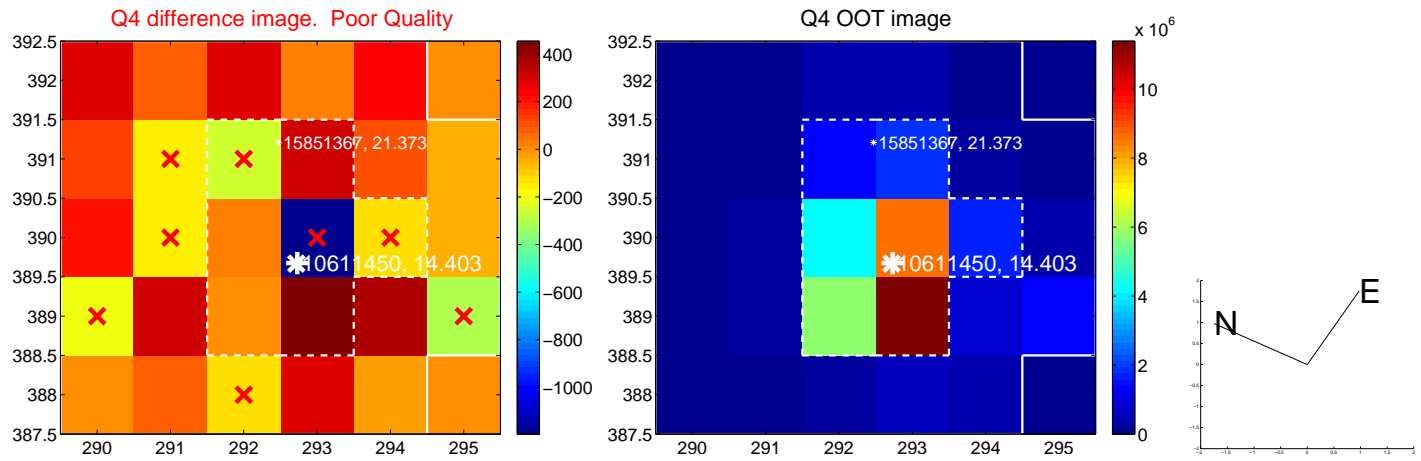
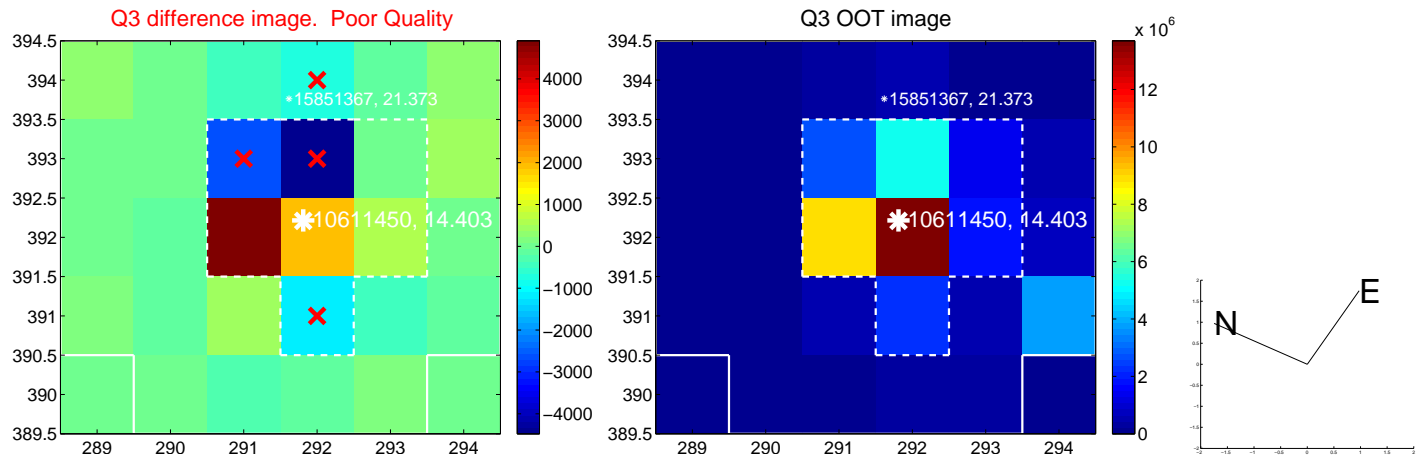
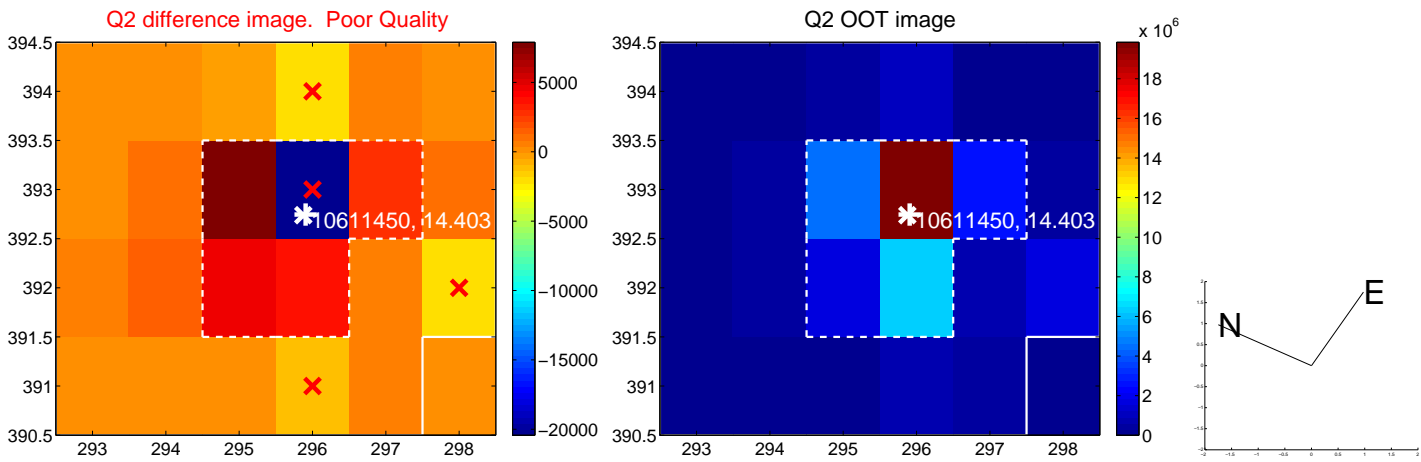
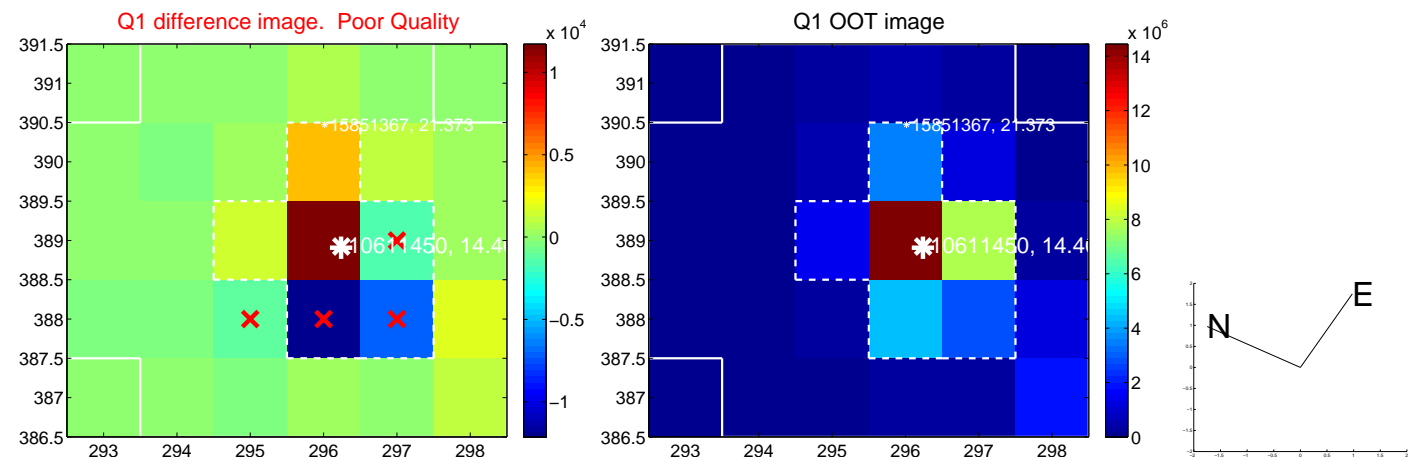
The direct PRF centroid is offset from the target star catalog position by about 0.02 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.181 ± 0.905	2.41	2.062 ± 0.914	0.710 ± 0.655
PRF-fit source offset from KIC position	2.162 ± 0.813	2.66	2.085 ± 0.827	0.571 ± 0.595
photometric centroid source offset	1.03 ± 1.02	1.02	-0.16 ± 0.94	-1.02 ± 1.02

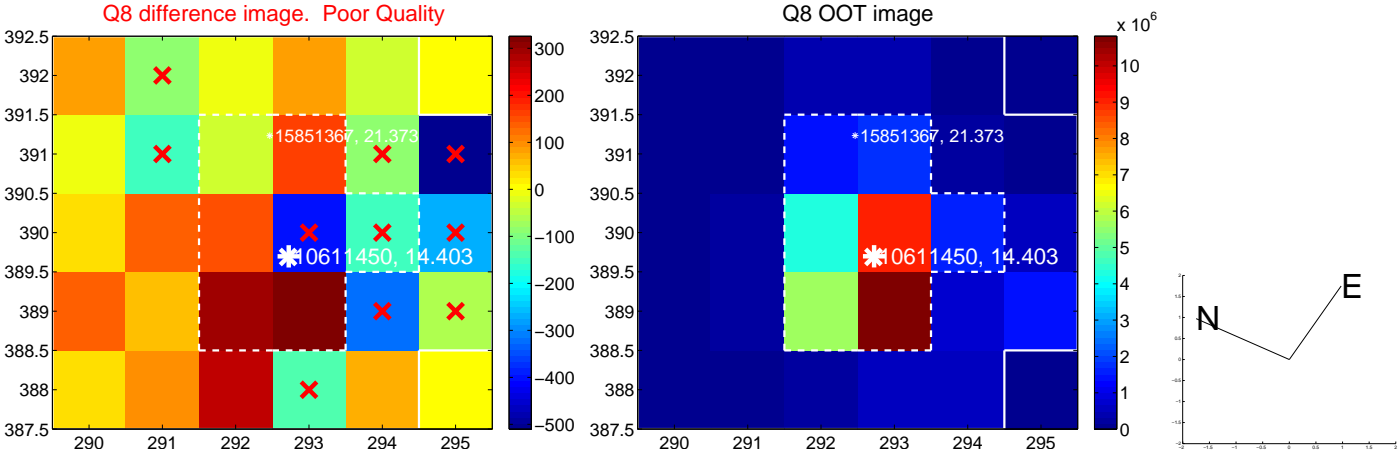
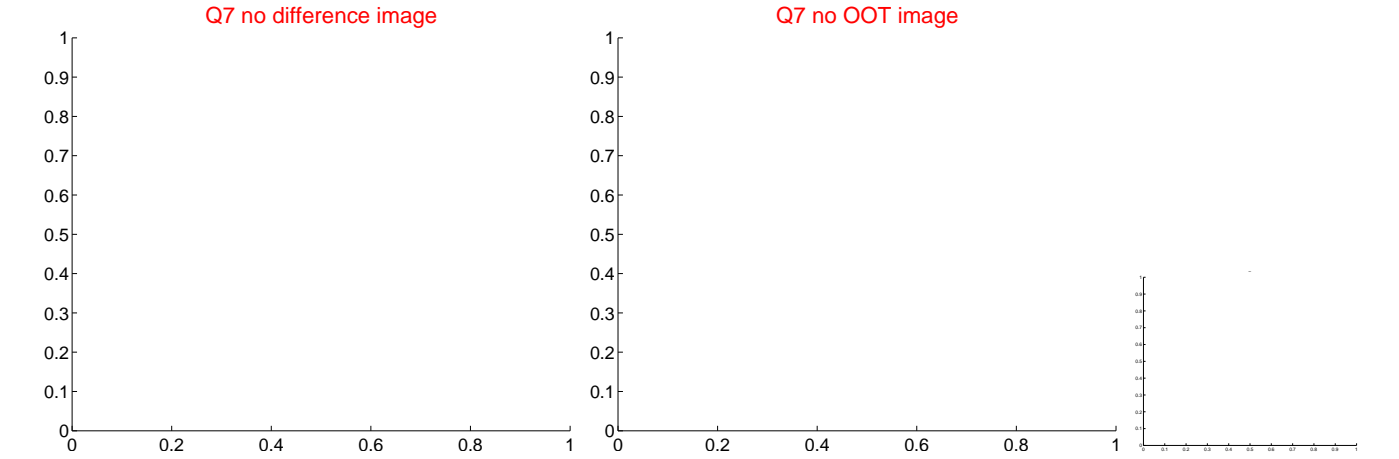
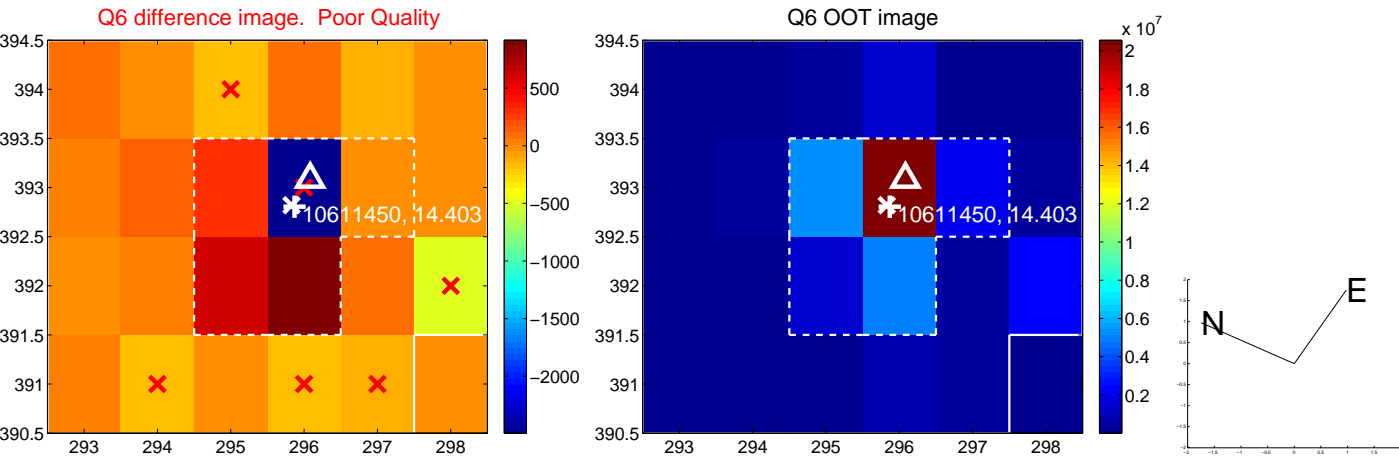
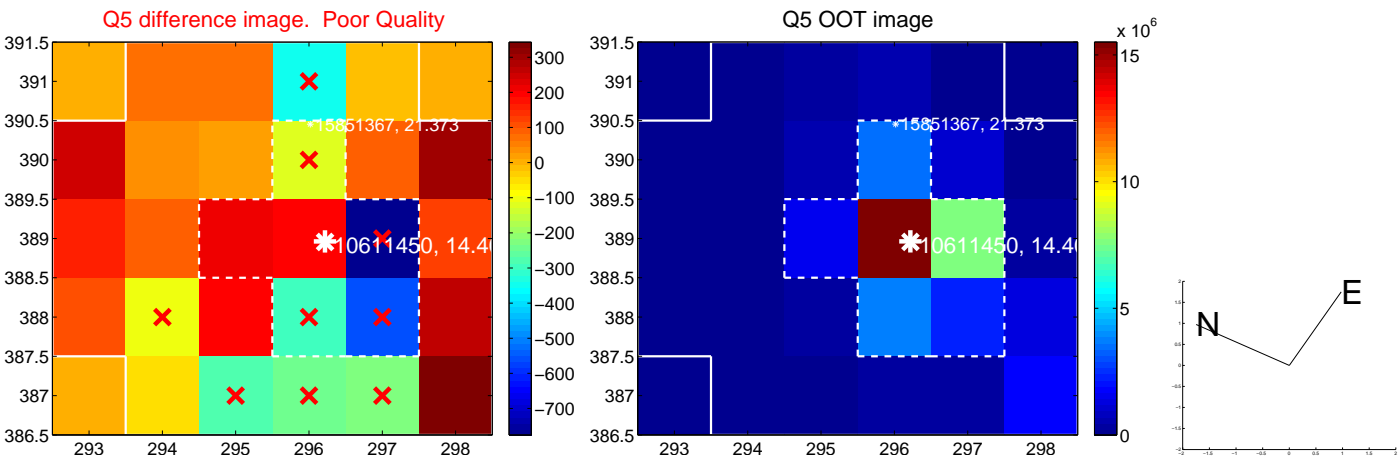


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

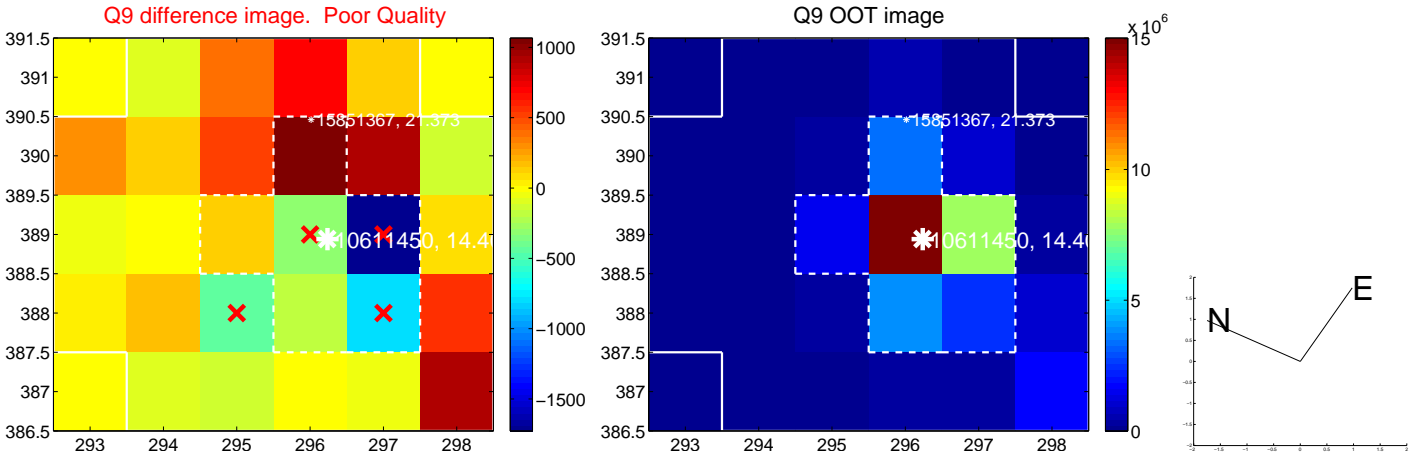
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



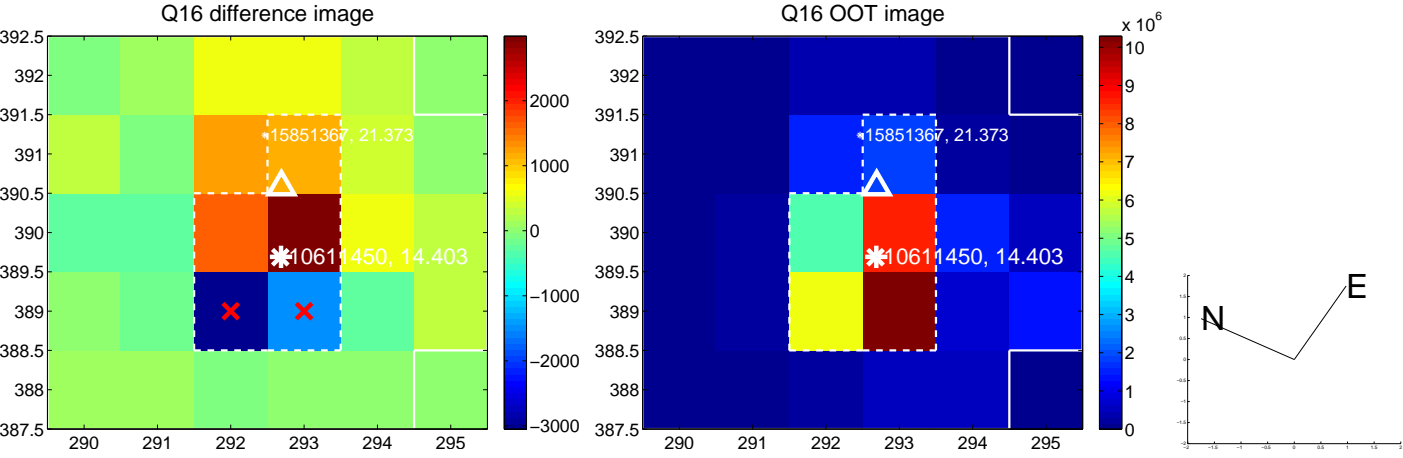
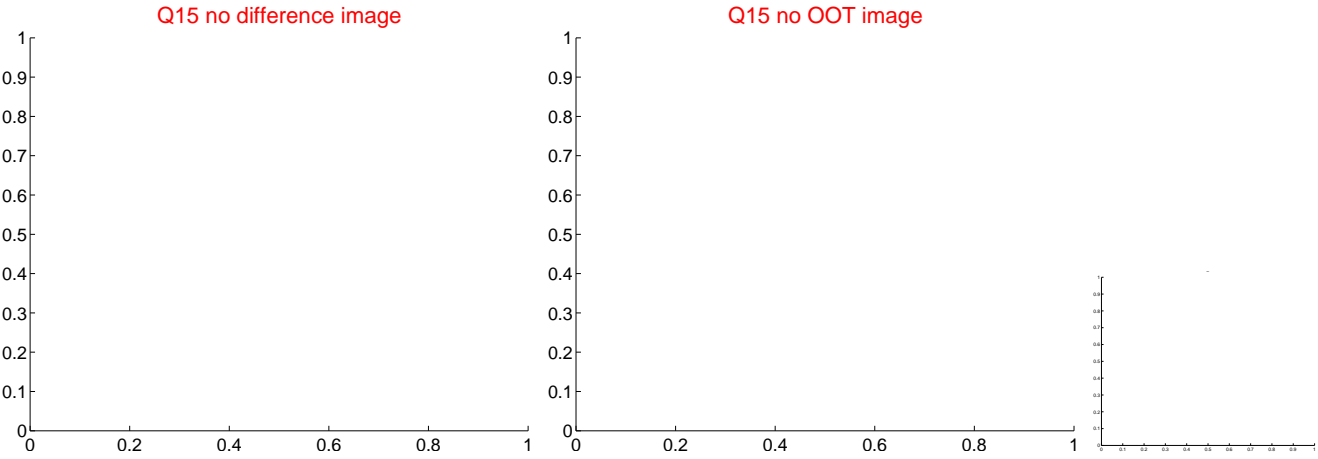
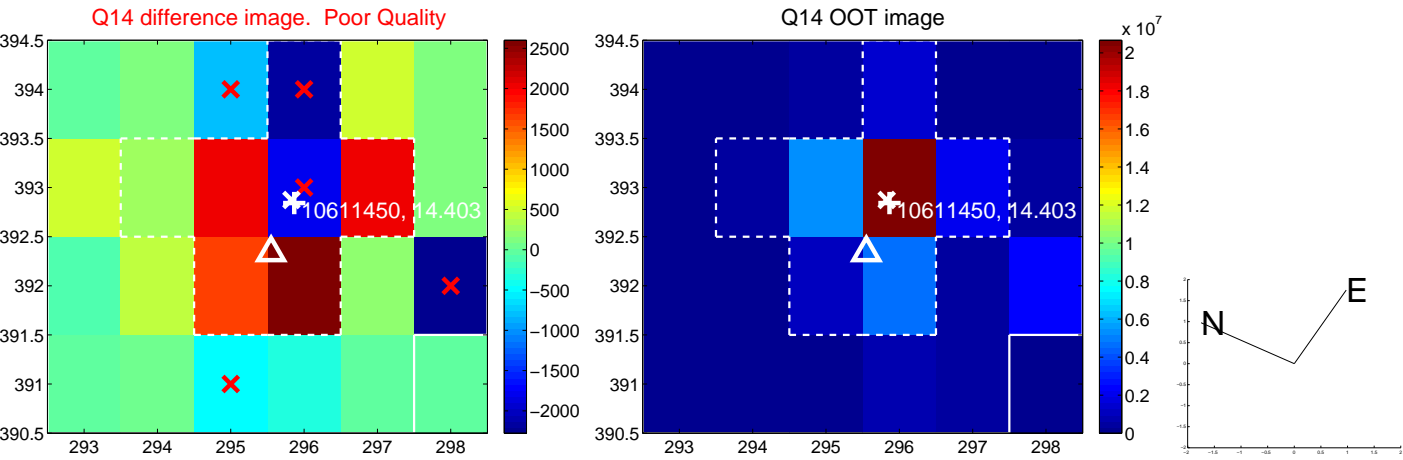
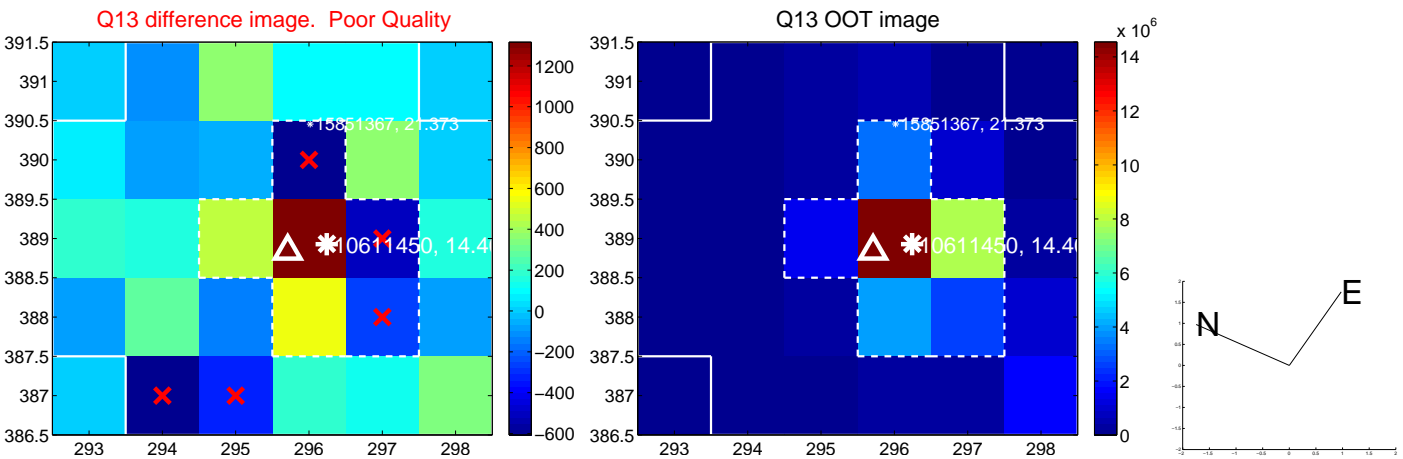
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



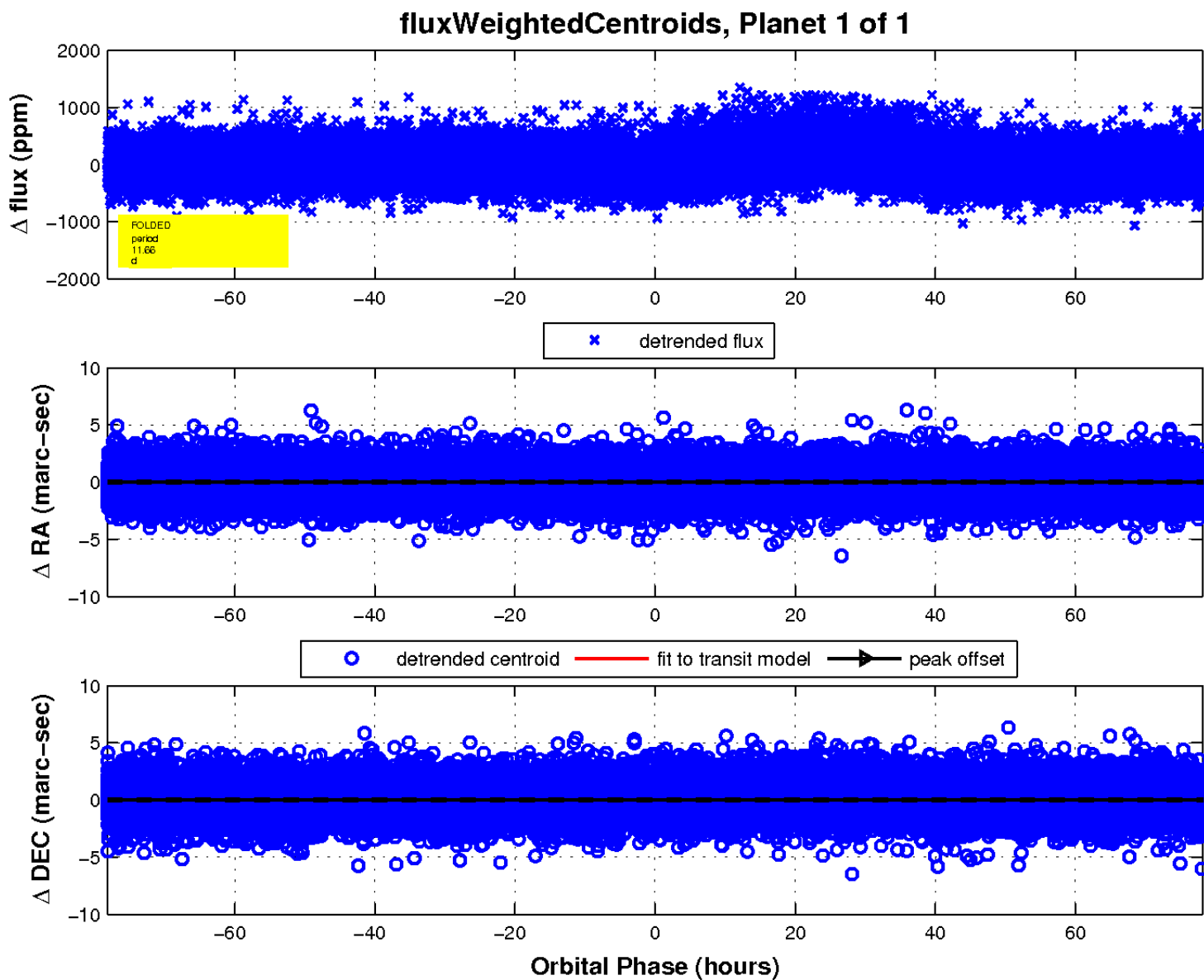
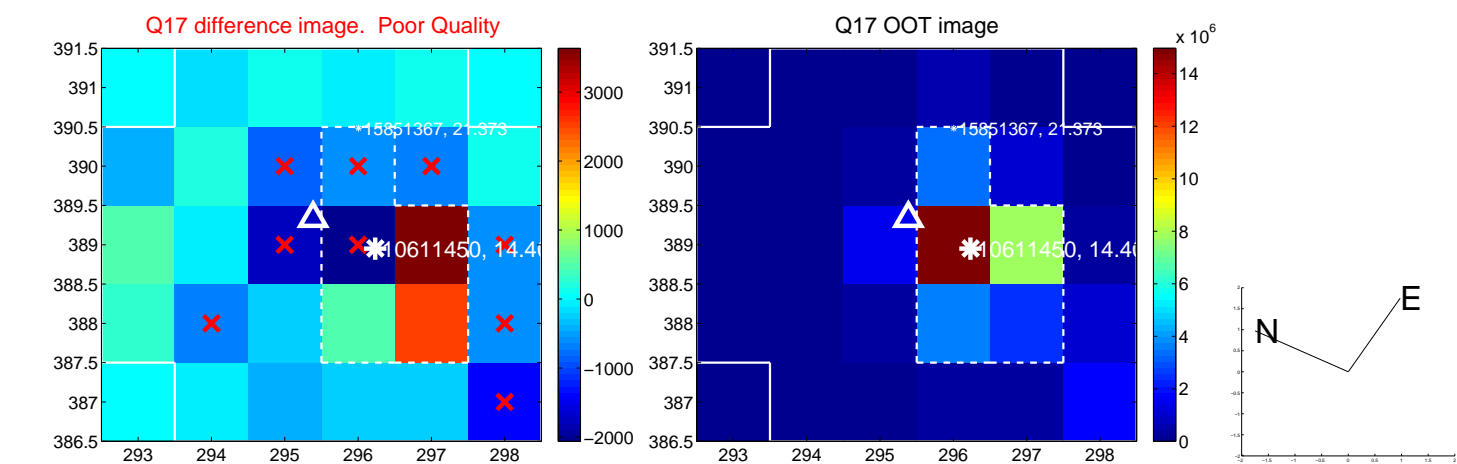
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

