

KIC 003236385

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})
003236385-01	OBS	No	8.495141	139.850475	46.9	14.672	7.2	7.9	3.09	6614	2.44	1802.70

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003236385-01	OBS	FP	0.00	1	0	0	0	LPP_DV—CENT_KIC_POS

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

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

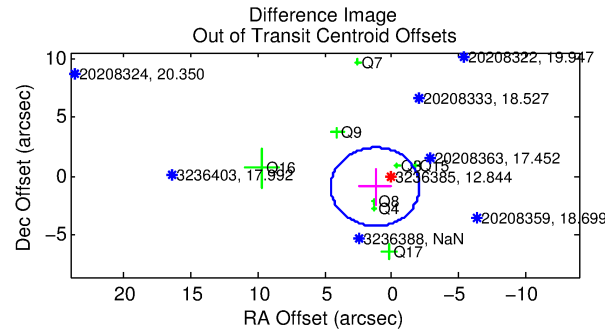
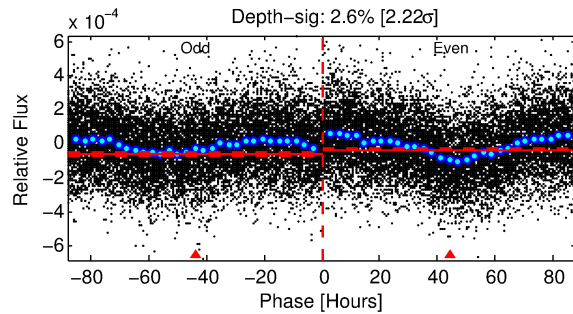
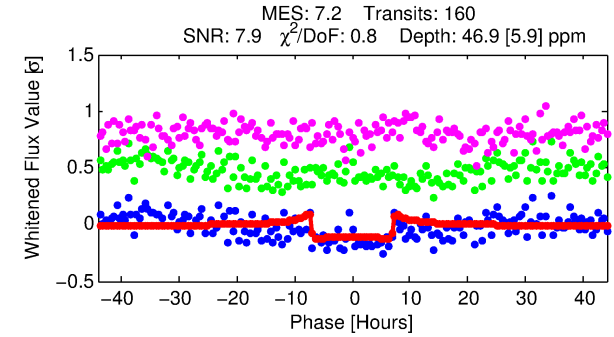
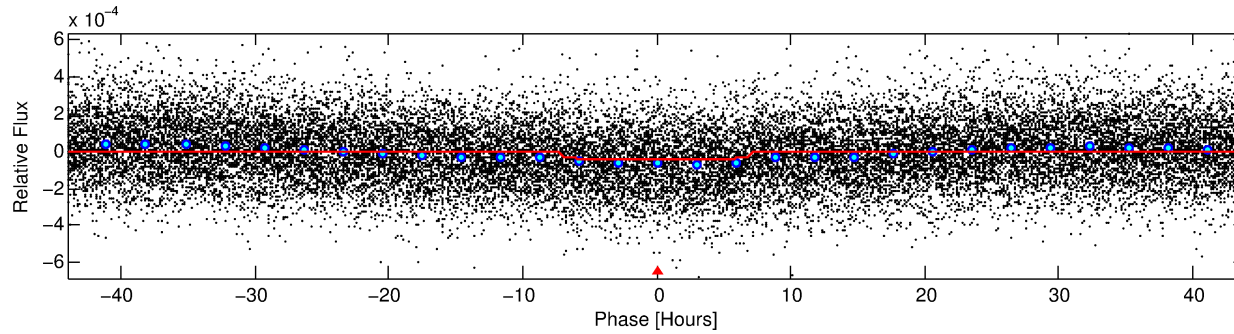
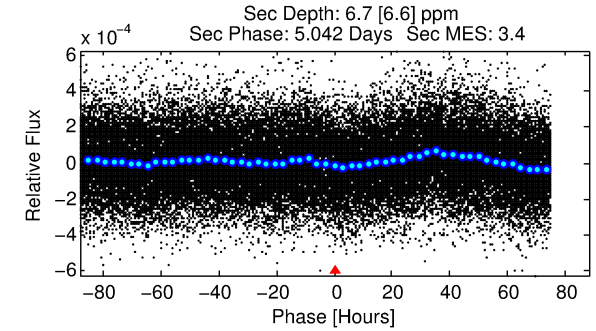
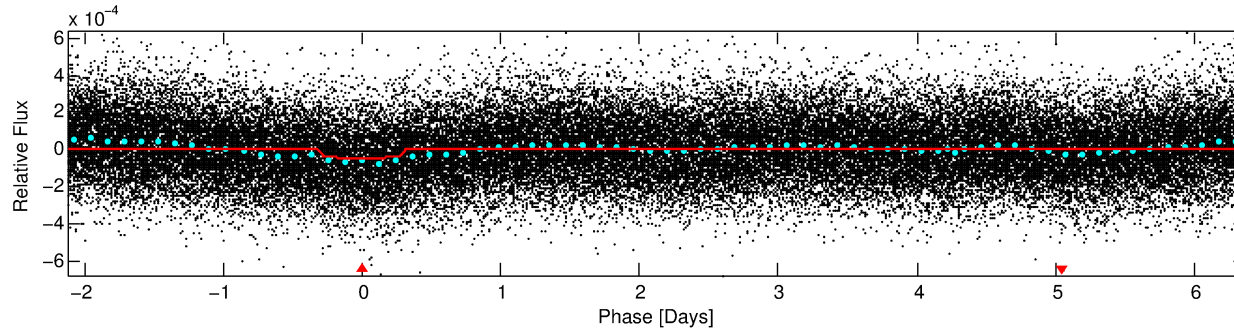
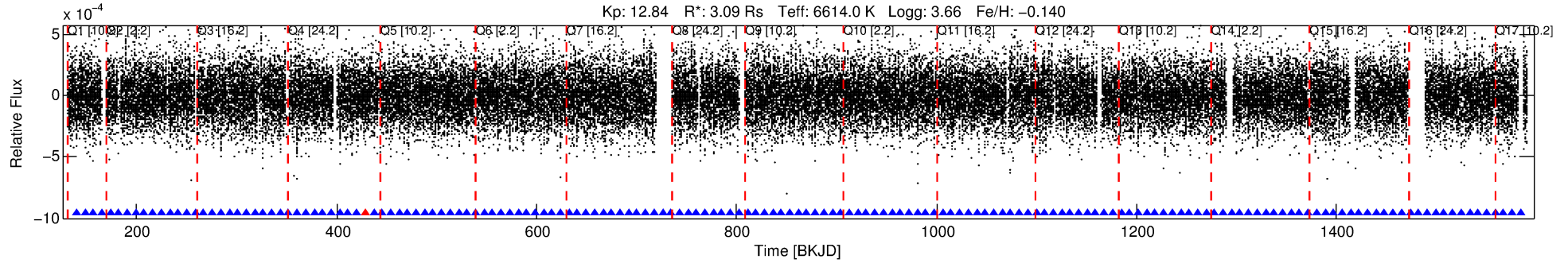
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 003236385-01

No Significant Match Found

DV One-Page Summary

KIC: 3236385 Candidate: 1 of 1 Period: 8.495 d



DV Fit Results:

Period = 8.49514 [0.00013] d
Epoch = 139.8505 [0.0112] BKJD
Rp/R* = 0.0072 [0.0009]
a/R* = 2.33 [1.09]
b = 0.88 [0.14]
Seff = 1802.70 [1005.75]
Teq = 1662 [232] K
Rp = 2.44 [0.97] Re
a = 0.0953 [0.0333] AU
Ag = 5.61 [6.45] [0.71σ]
Teffp = 3953 [1010] K [2.21σ]

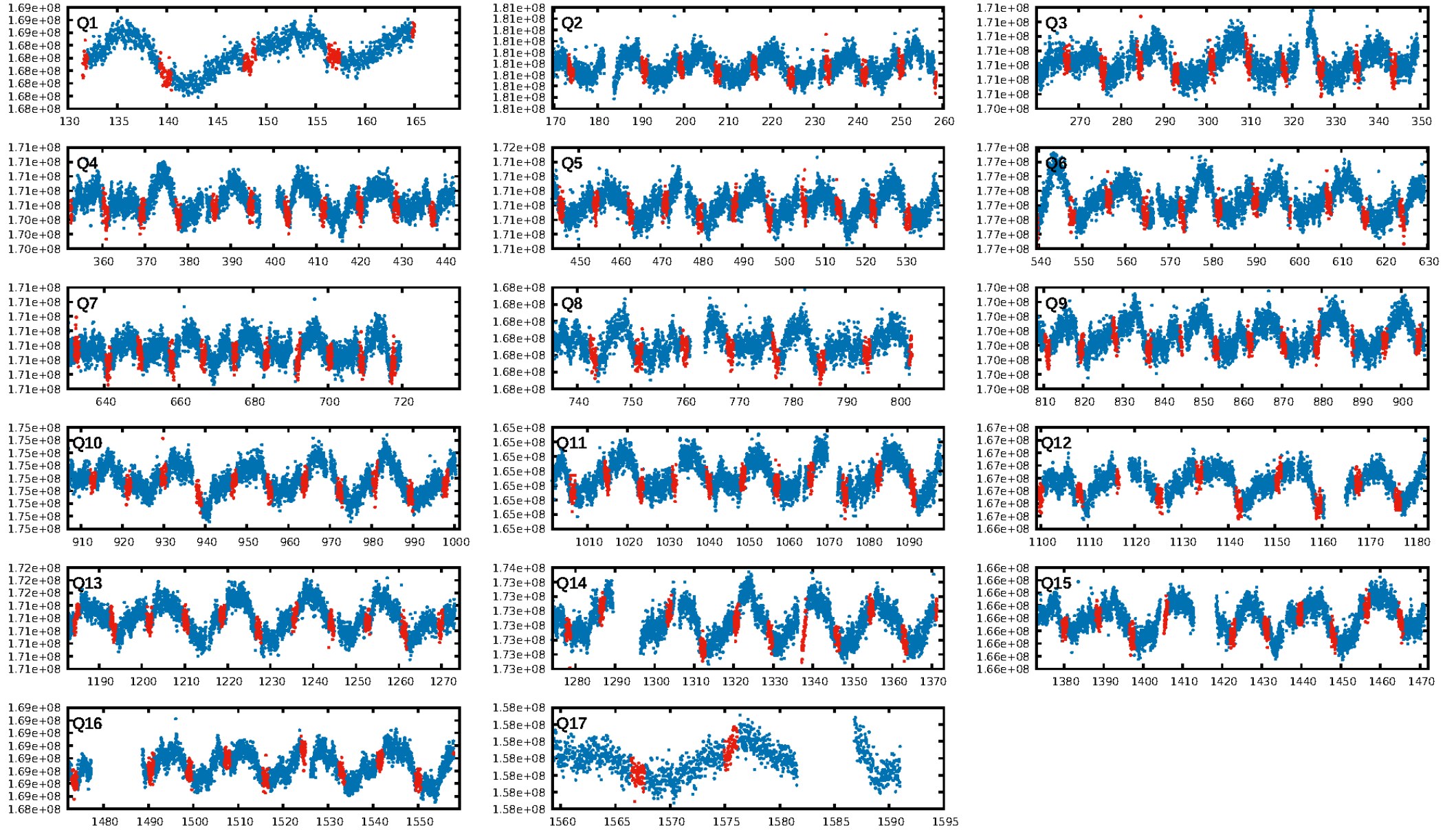
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 100.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 1.58e-11
RollingBand-fgt: 0.99 [153/154]
GhostDiagnostic-chr: 0.7639
Centroid-sig: 48.1%
Centroid-so: 0.692 arcsec [0.86σ]
OotOffset-rm: 1.507 arcsec [1.36σ]
OotOffset-st: 0/3/3/2 [8]
KicOffset-rm: 1.232 arcsec [1.04σ]
KicOffset-st: 0/3/3/2 [8]
DiffImageQuality-fgm: 0.62 [5/8]
DiffImageOverlap-fno: 1.00 [17/17]

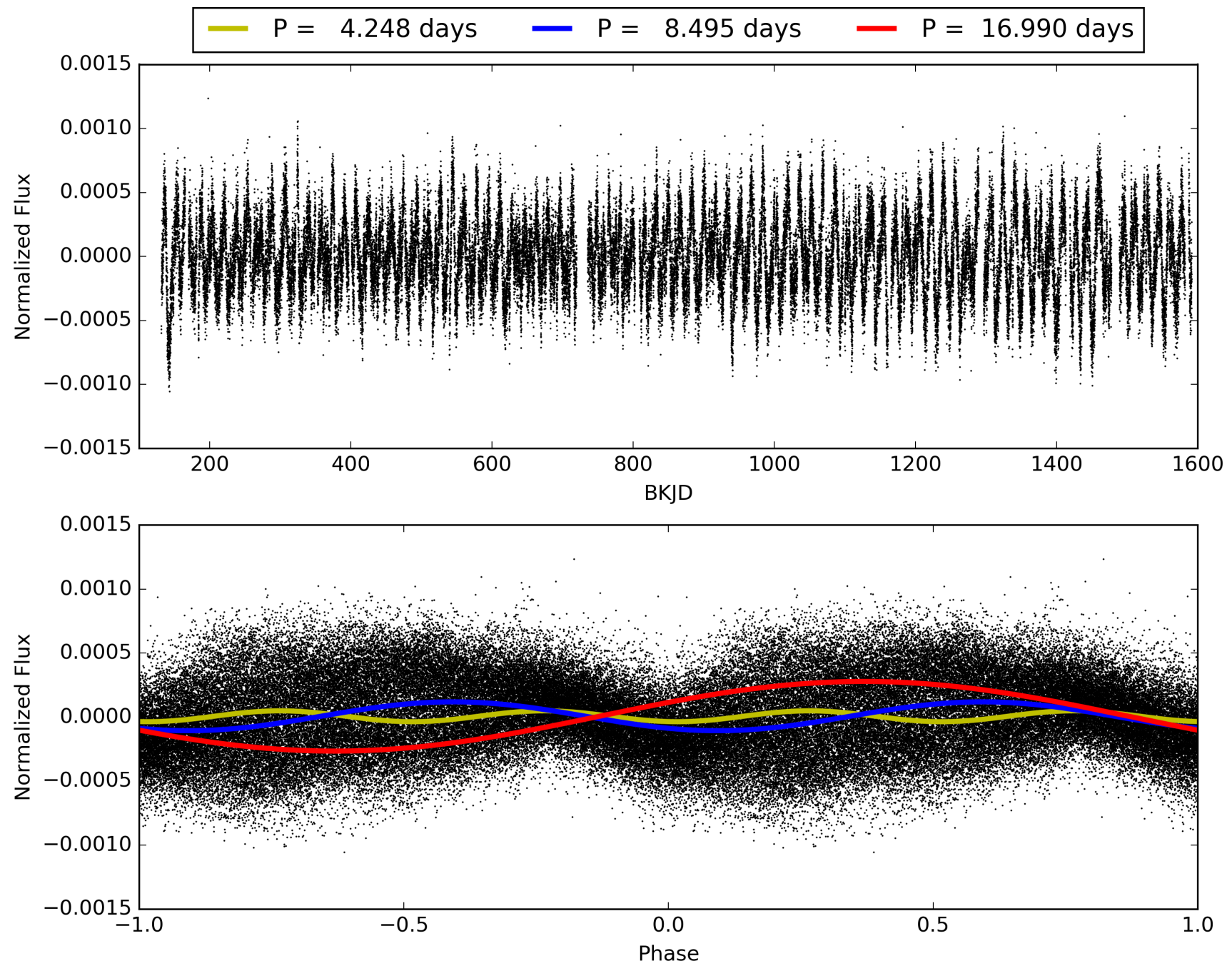
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 20:32:40 Z

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

TCE 003236385-01, PDC Light Curves

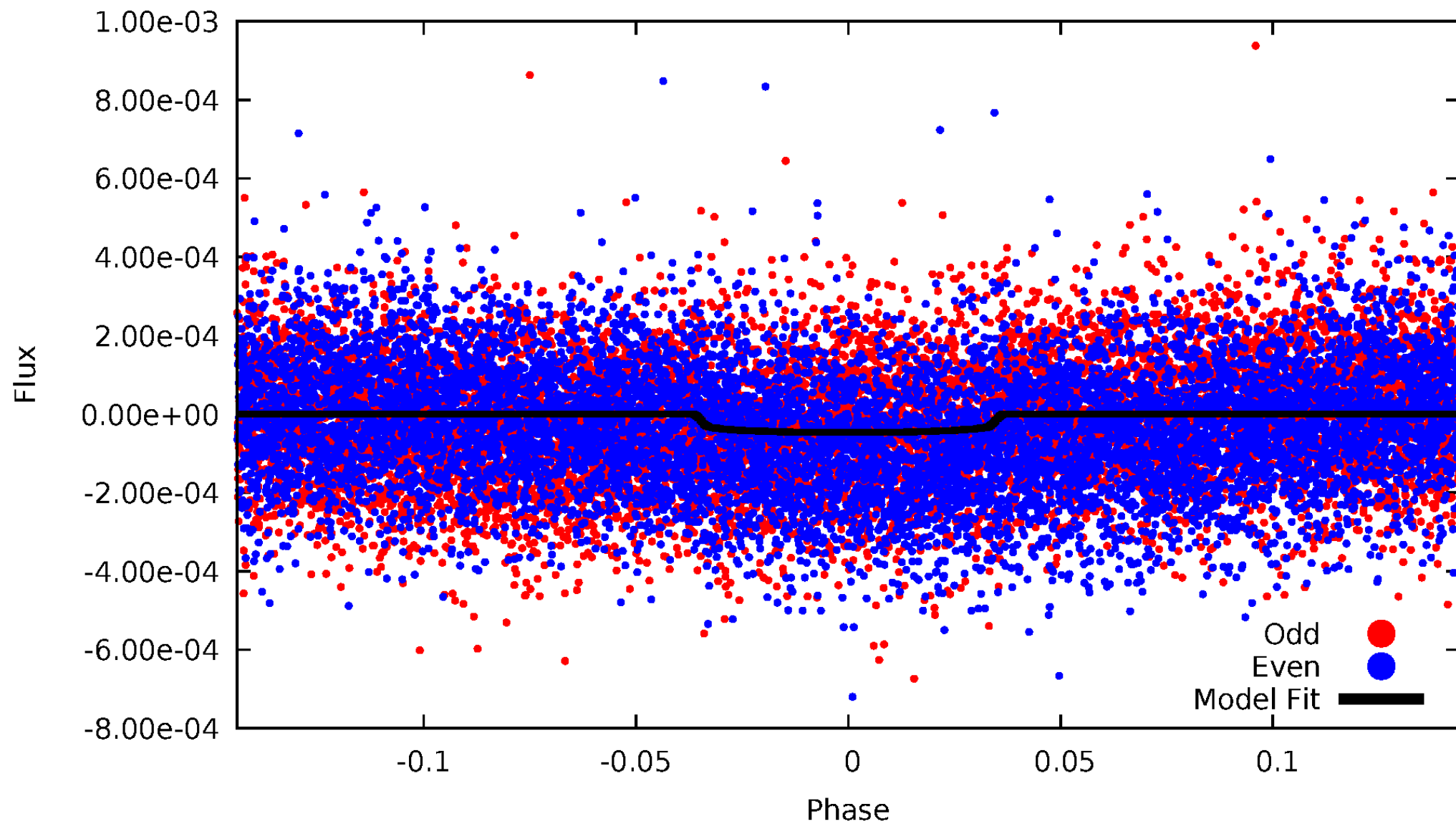


TCE 003236385-01



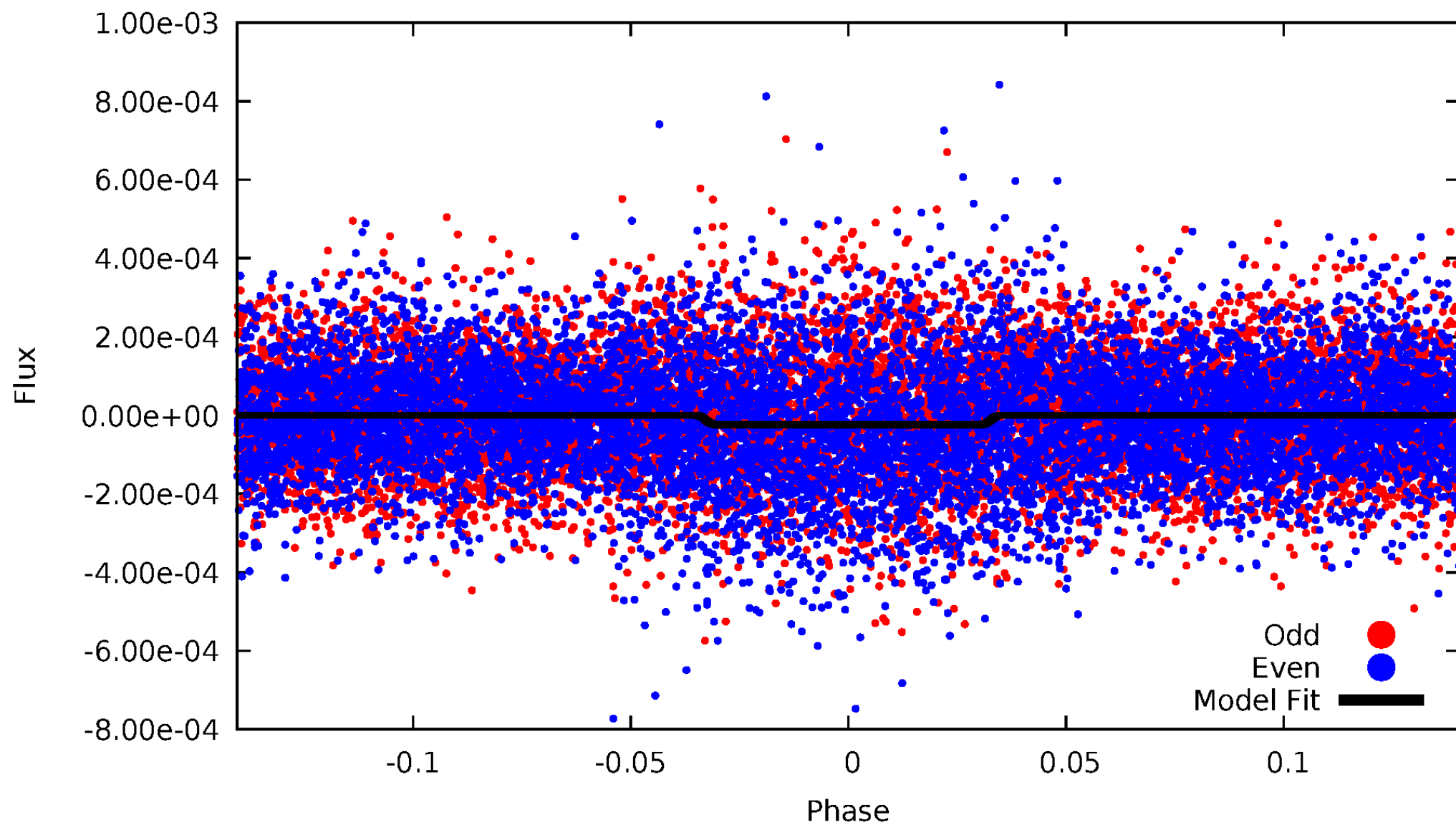
DV Odd/Even

TCE 003236385-01



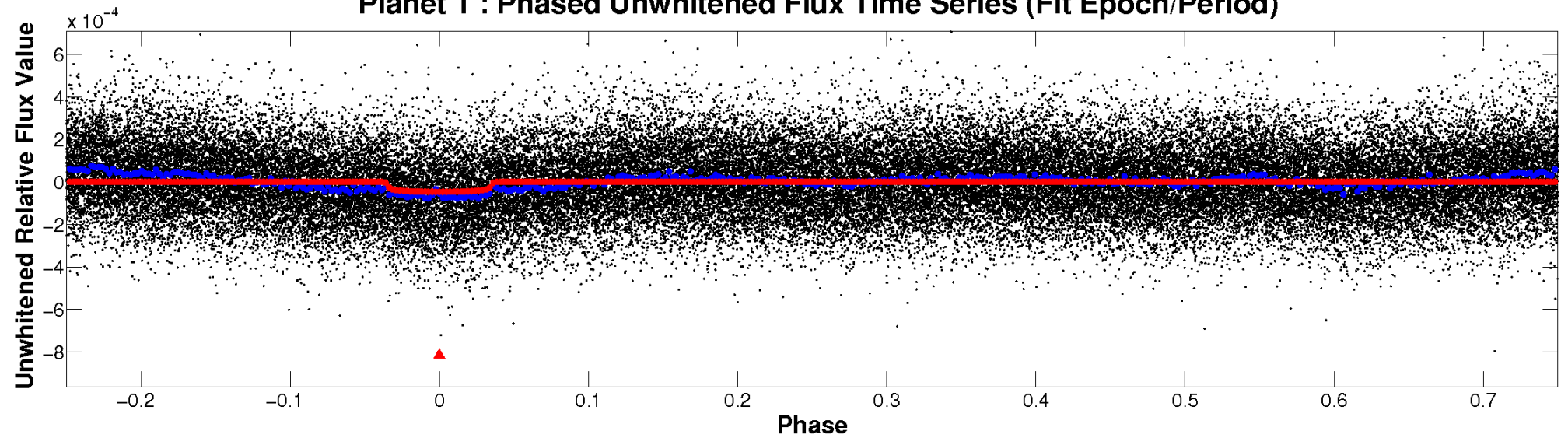
ALT Odd/Even

TCE 003236385-01

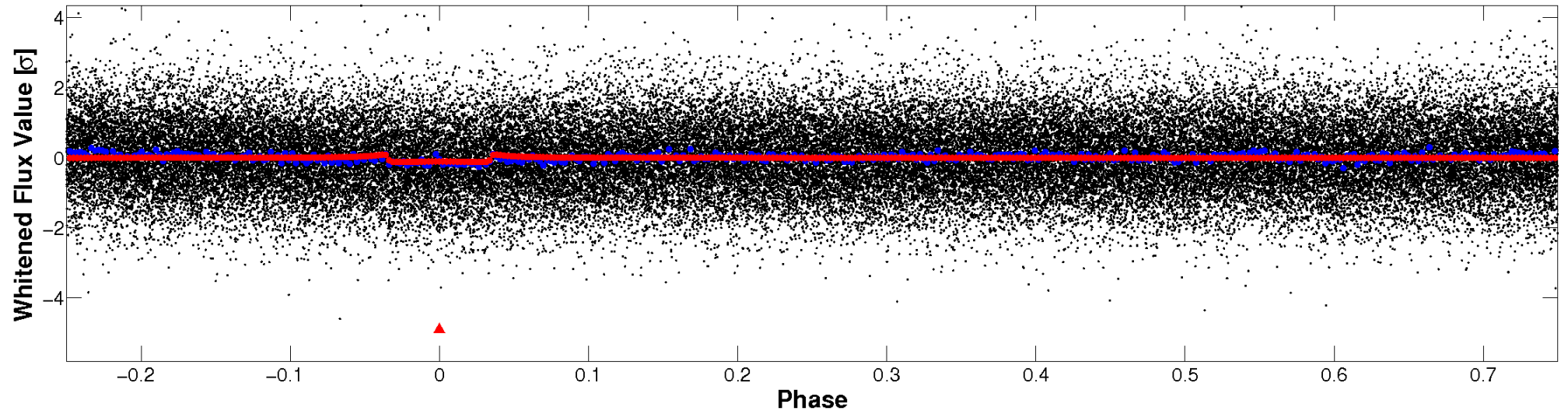


Non-Whitened Vs. Whitened Light Curve

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

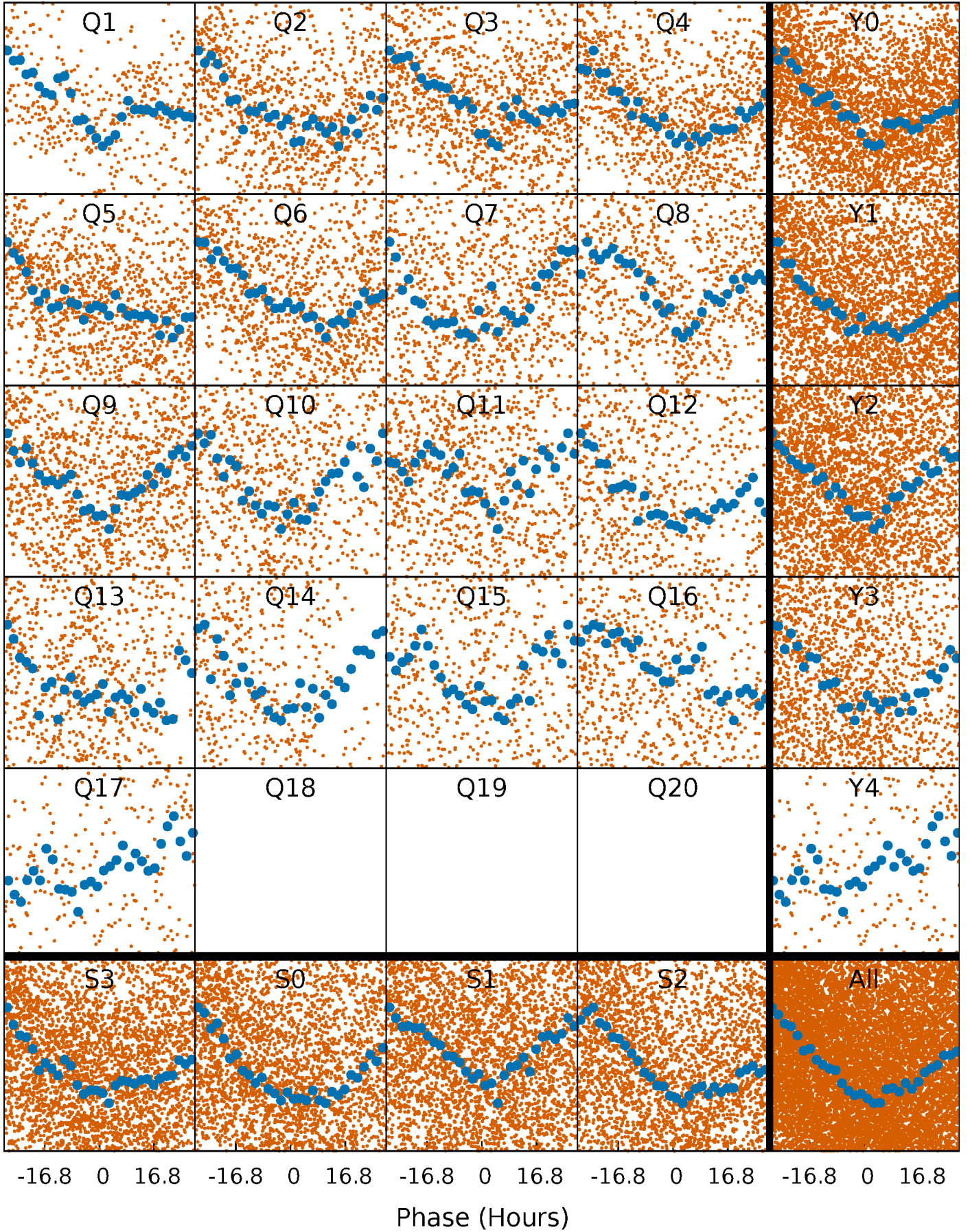


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



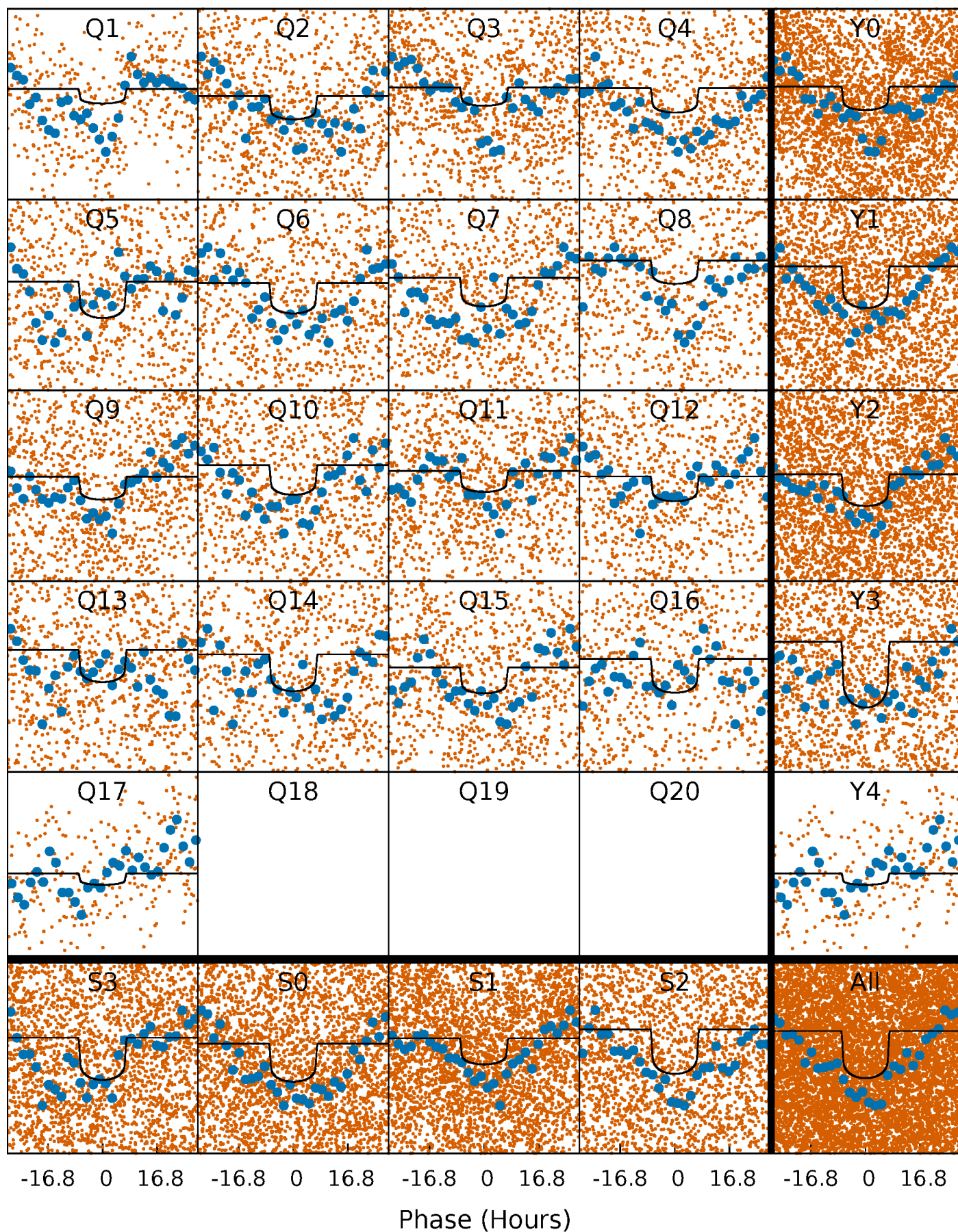
PDC Quarter-Phased Transit Curves

TCE 003236385-01 P= 8.495141 Days $T_0=139.850475$ (BKJD)



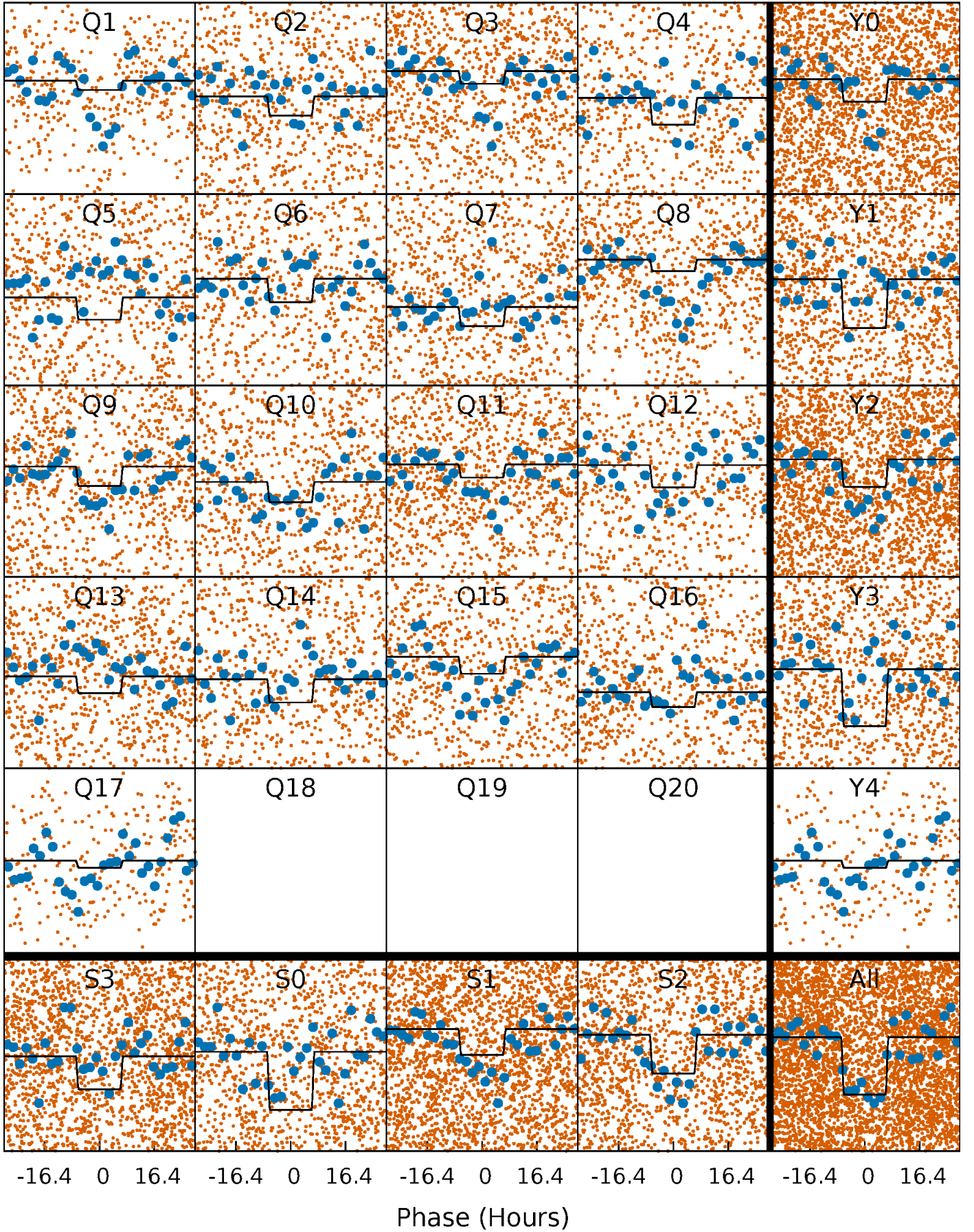
DV Quarter-Phased Transit Curves

TCE 003236385-01 P= 8.495141 Days $T_0=139.850475$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

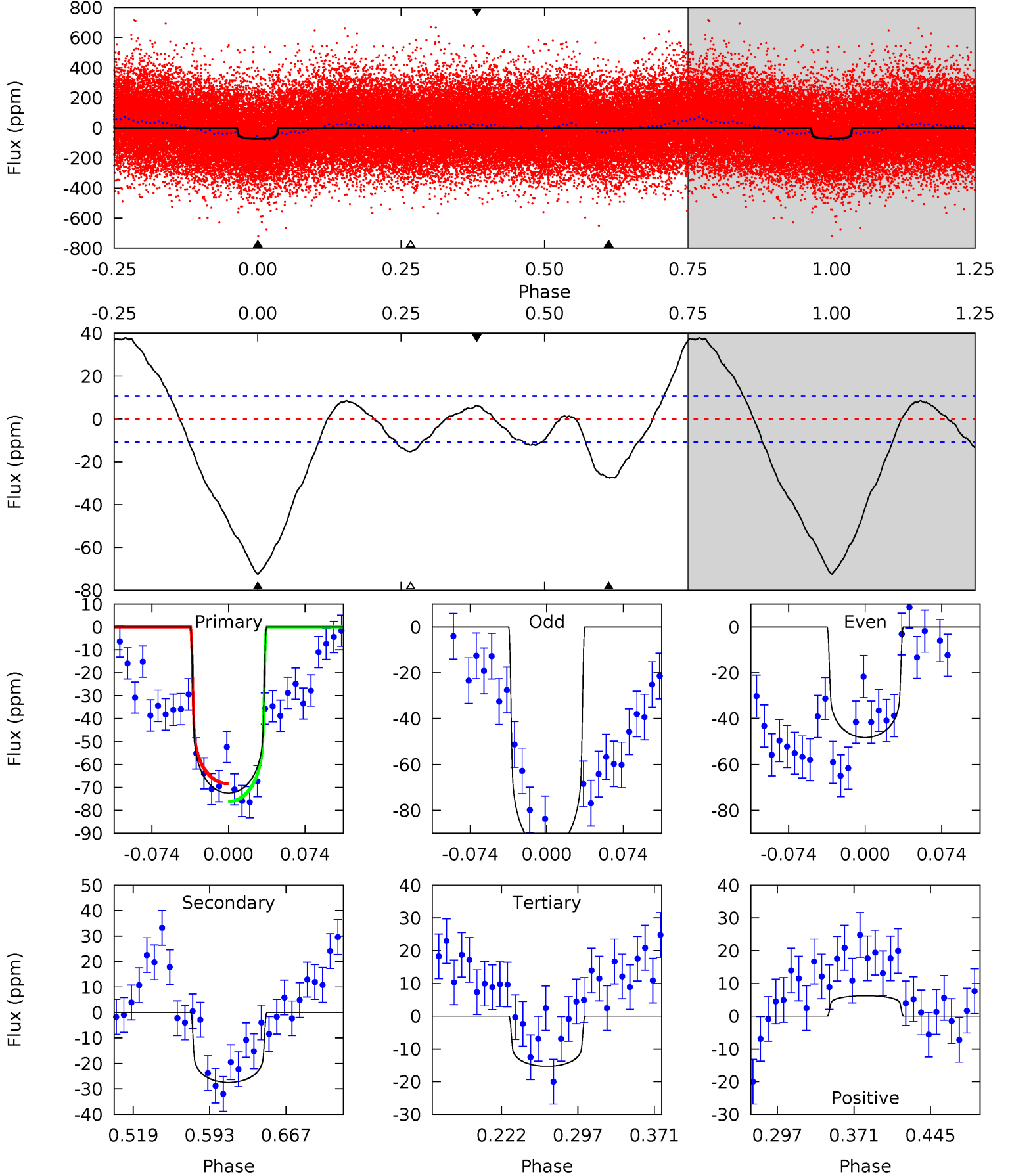
TCE 003236385-01 P= 8.495095 Days $T_0=139.849335$ (BKJD)



DV Model-Shift Uniqueness Test

003236385-01, P = 8.495141 Days, E = 131.355334 Days

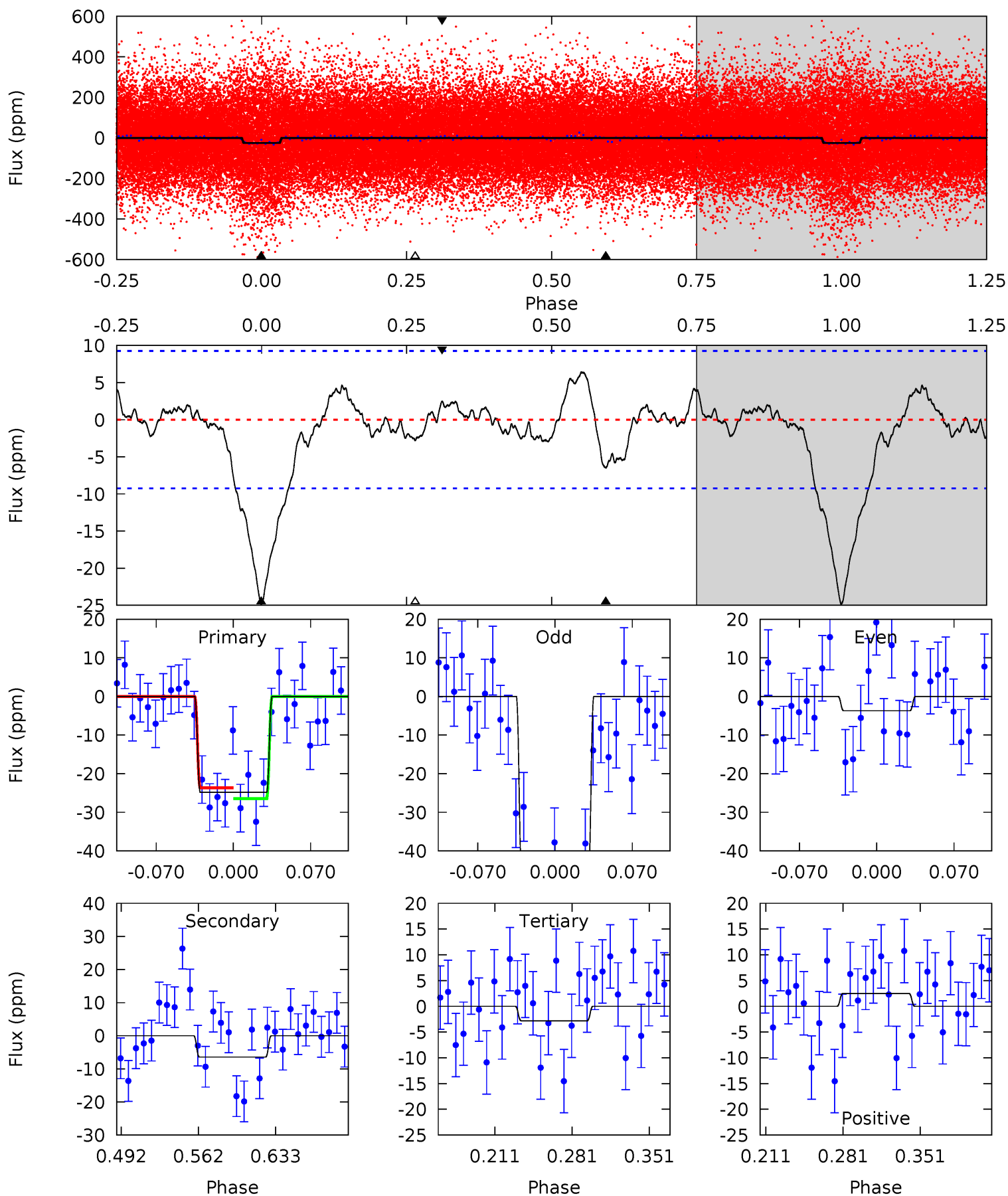
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
31.1	11.8	6.57	2.67	4.63	1.79	7.02	24.5	28.4	5.20	9.10	10.6	1.07	0.34	1.66



Alt Model-Shift Uniqueness Test

003236385-01, P = 8.495095 Days, E = 131.354240 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.4	3.23	1.40	1.25	4.64	1.81	0.86	11.0	11.2	1.82	1.98	10.7	1.02	0.20	0.70



Stellar Parameters For KIC 003236385

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6614^{+177}_{-217}	$3.662^{+0.312}_{-0.078}$	$-0.140^{+0.300}_{-0.250}$	$3.091^{+0.472}_{-1.179}$	$1.601^{+0.227}_{-0.340}$	$0.076^{+0.171}_{-0.019}$
	+3%/-3%	+9%/-2%	+214%/-179%	+15%/-38%	+14%/-21%	+224%/-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 003236385-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-27 ± 2	$2.30^{+0.45}_{-0.47}$	2266^{+136}_{-195}	5616^{+409}_{-321}	26^{+14}_{-7}
Alt.	-6 ± 2	$1.56^{+0.38}_{-0.39}$	2266^{+142}_{-216}	4828^{+540}_{-477}	13^{+11}_{-6}

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 $A_{obs} \gg 1.0$

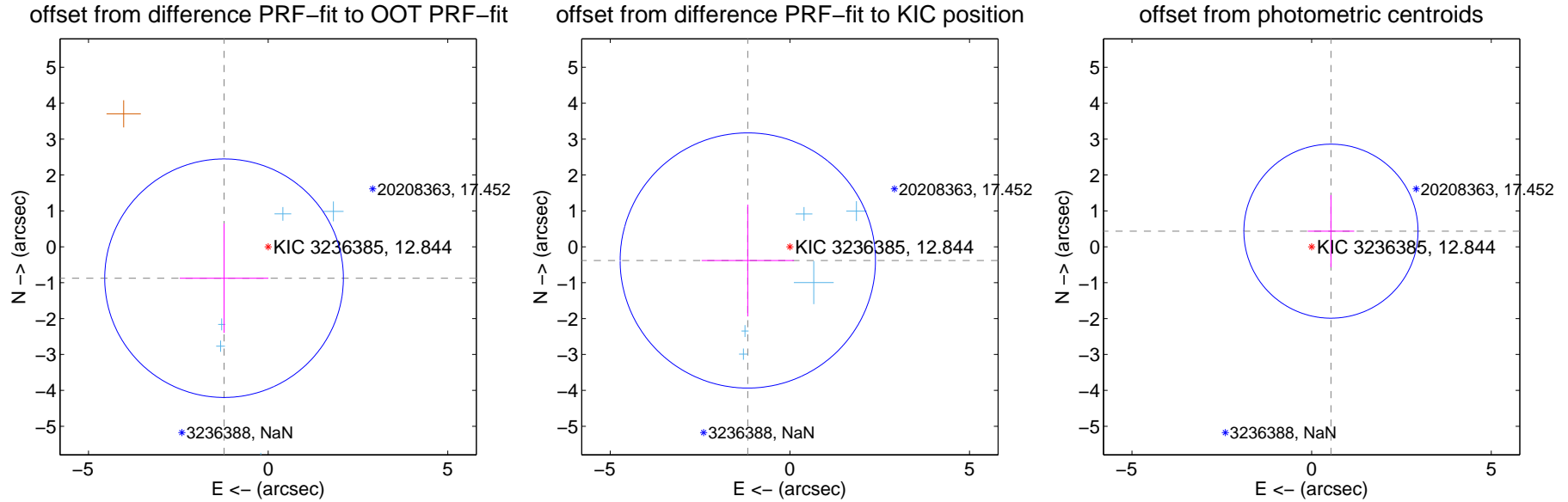
DV Centroid Data

Supplemental centroid analysis for 003236385-01. Kepler magnitude: 12.84. Transit SNR 7.89

There are 5 quarters with good PRF difference image offsets

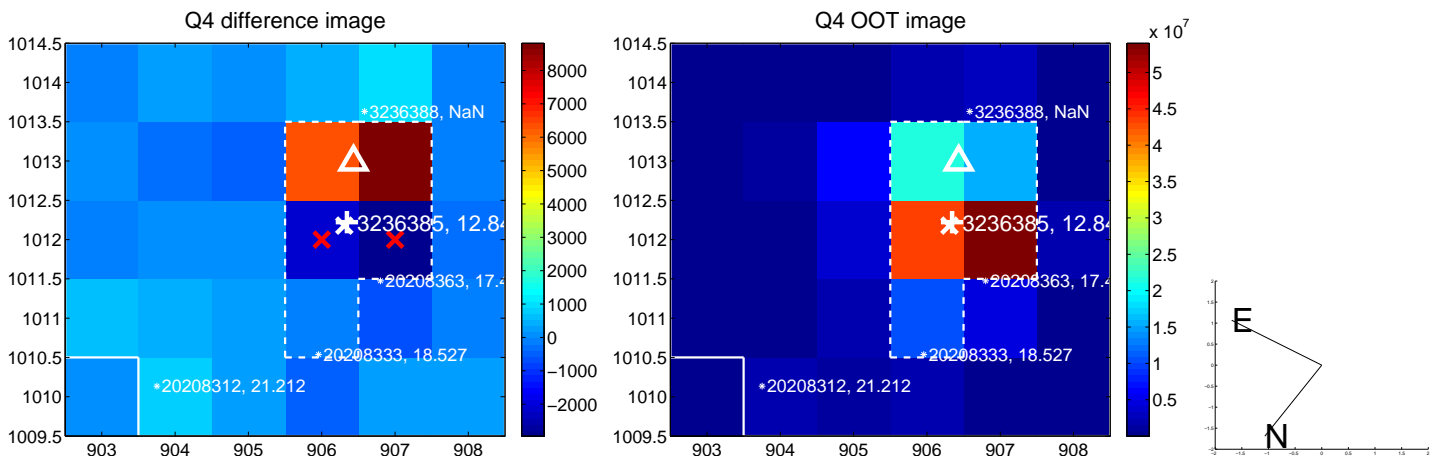
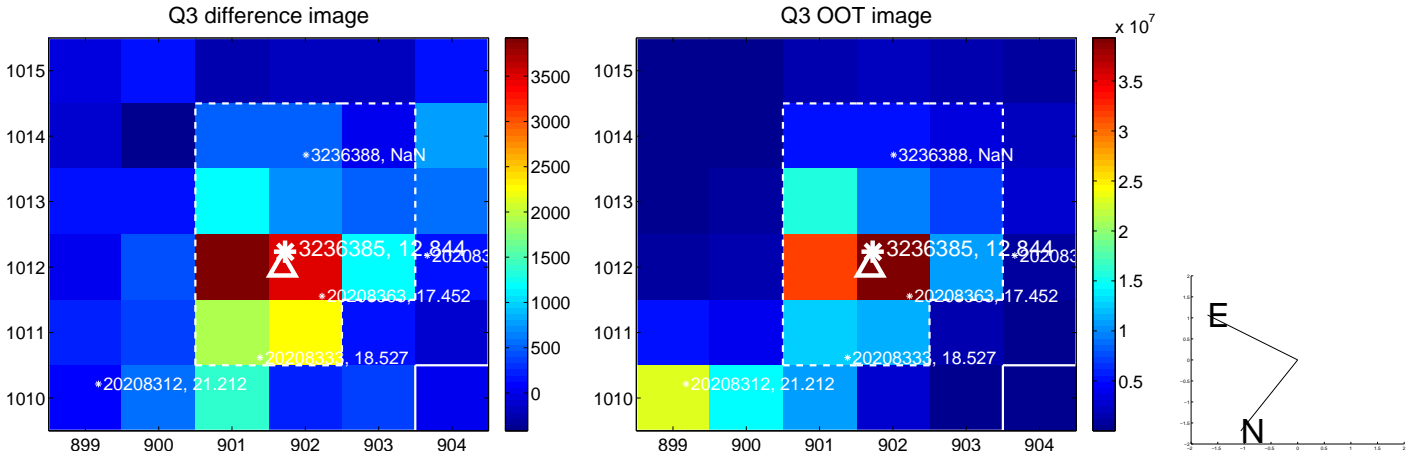
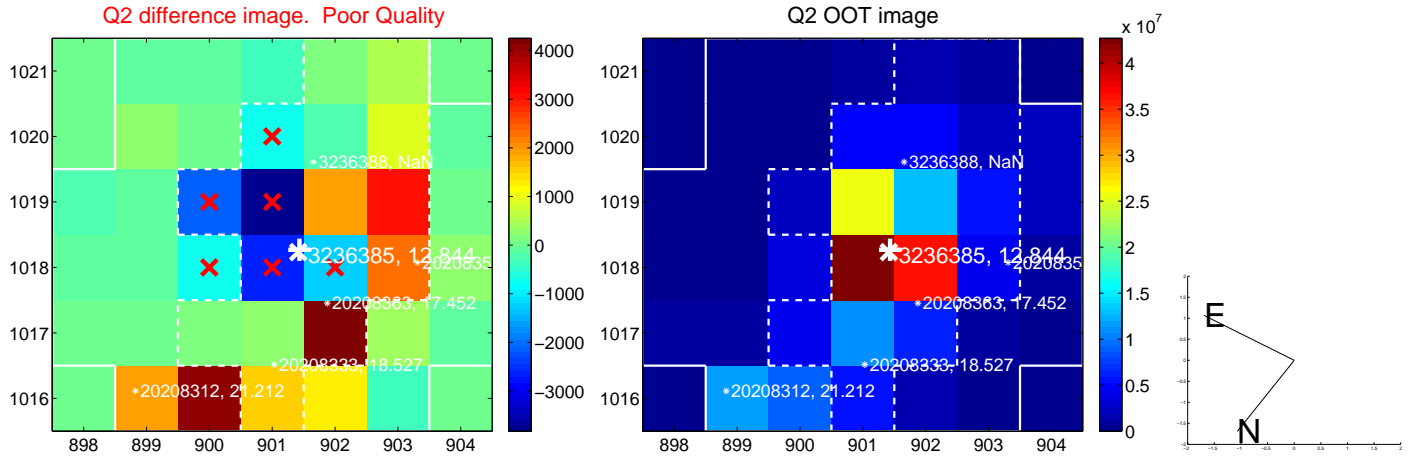
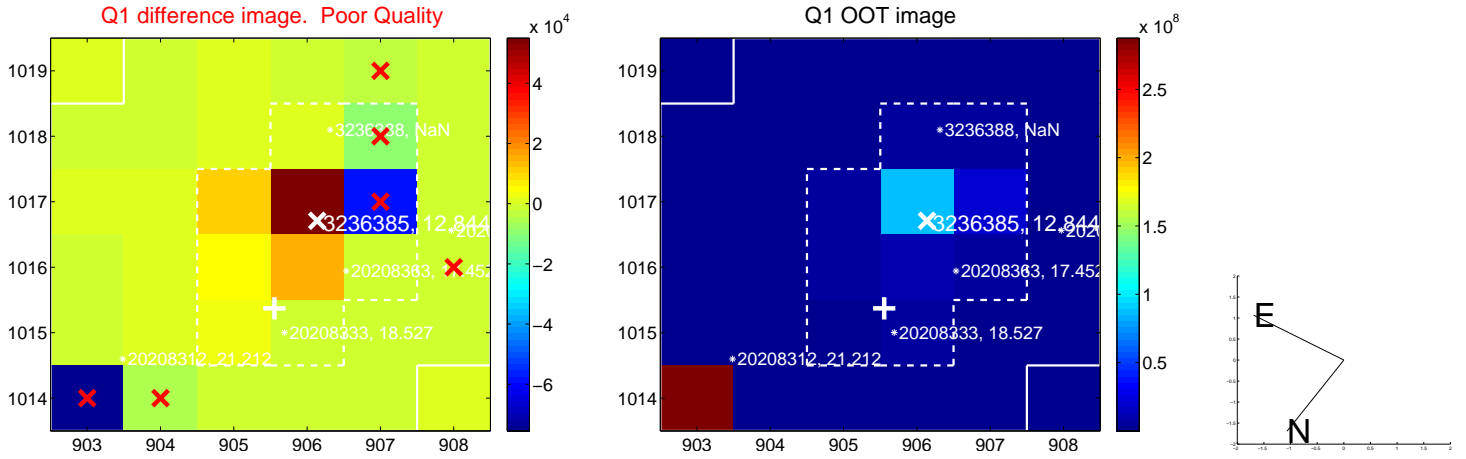
The OOT PRF centroid is offset from the target star catalog position by about 5.42 arcsec so the offset from difference PRF-fit to OOT-fit may be invalid.

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.507 ± 1.107	1.36	1.227 ± 1.233	-0.875 ± 1.524
PRF-fit source offset from KIC position	1.232 ± 1.185	1.04	1.171 ± 1.285	-0.382 ± 1.558
photometric centroid source offset	0.69 ± 0.81	0.86	-0.54 ± 0.65	0.43 ± 1.01

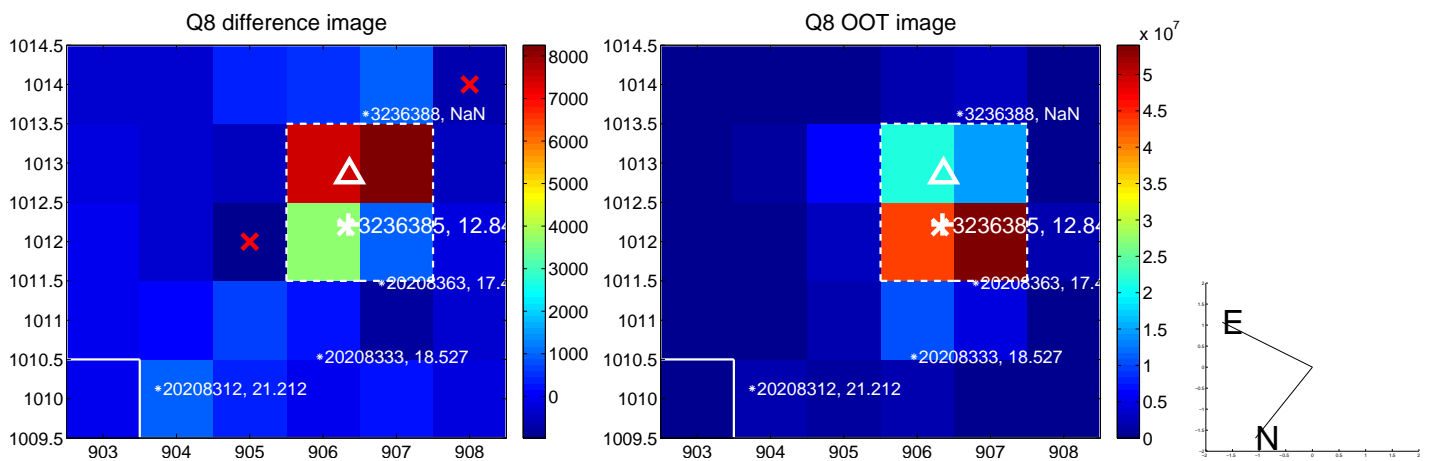
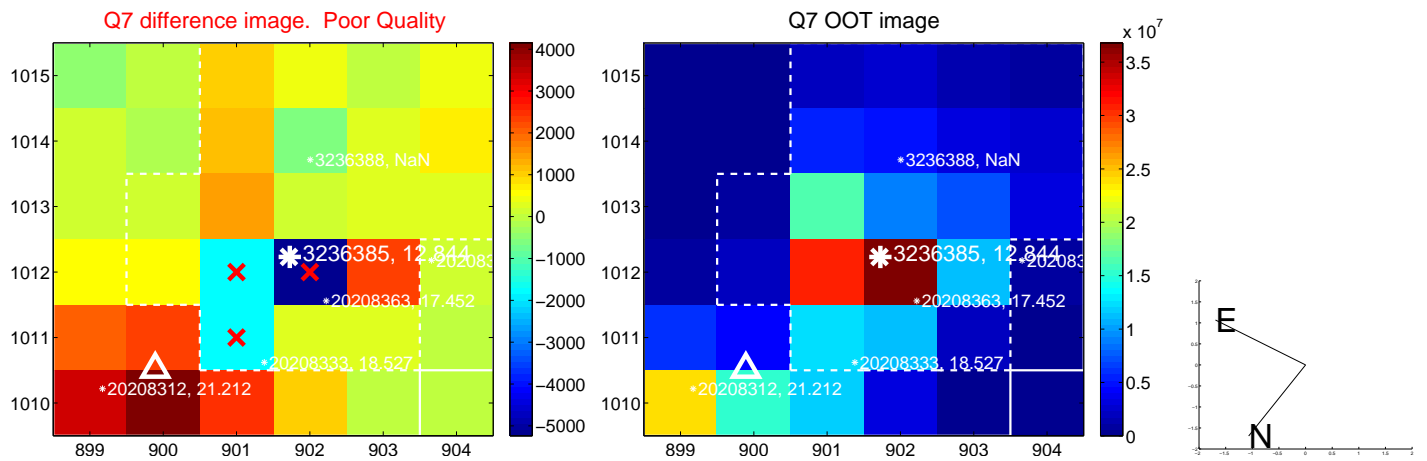
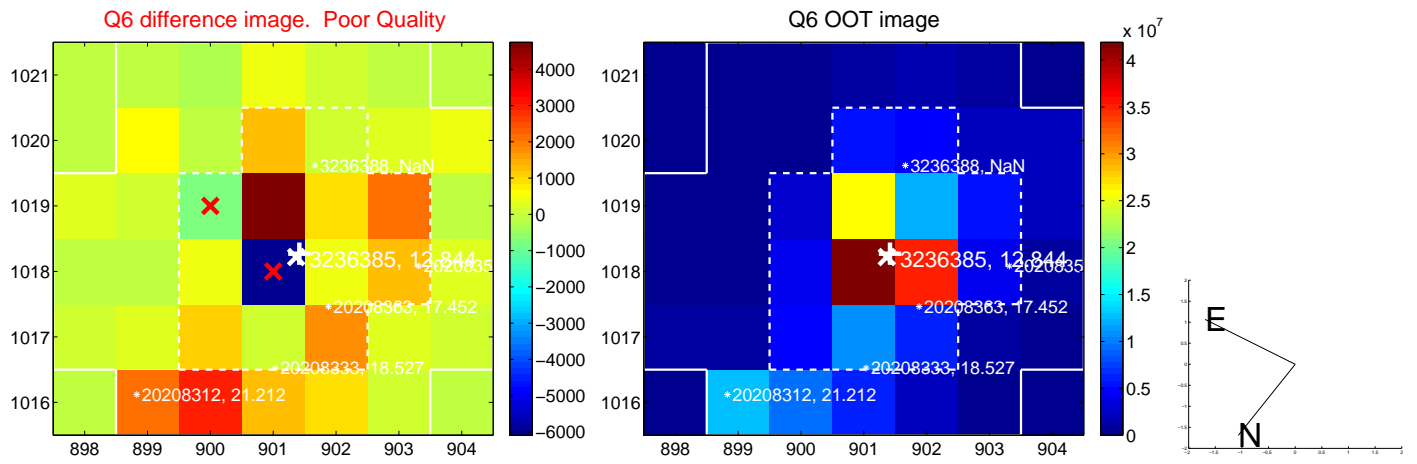
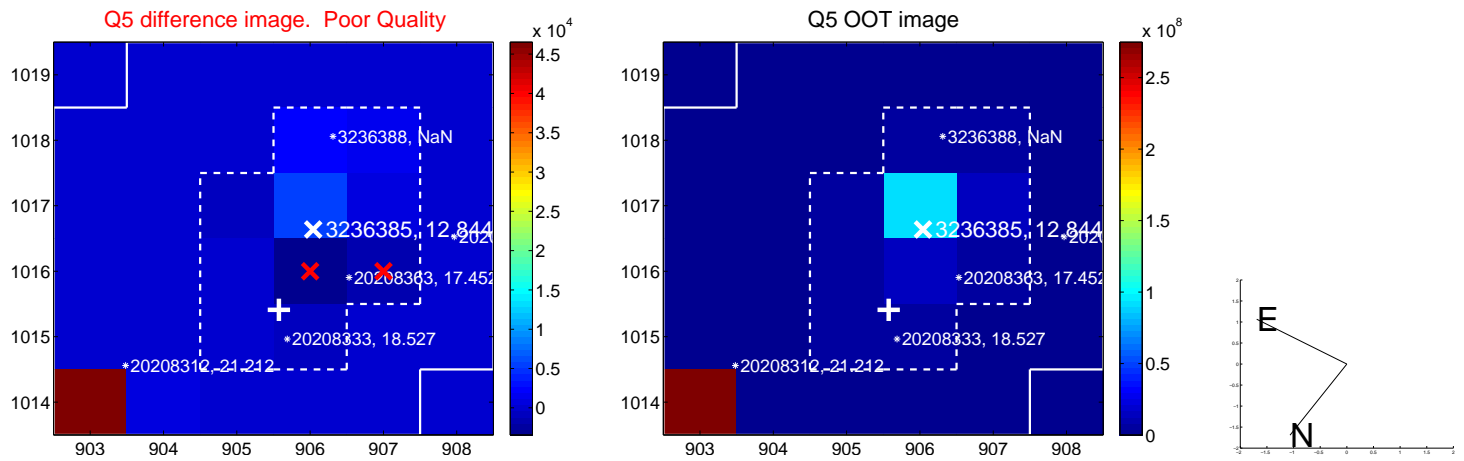


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

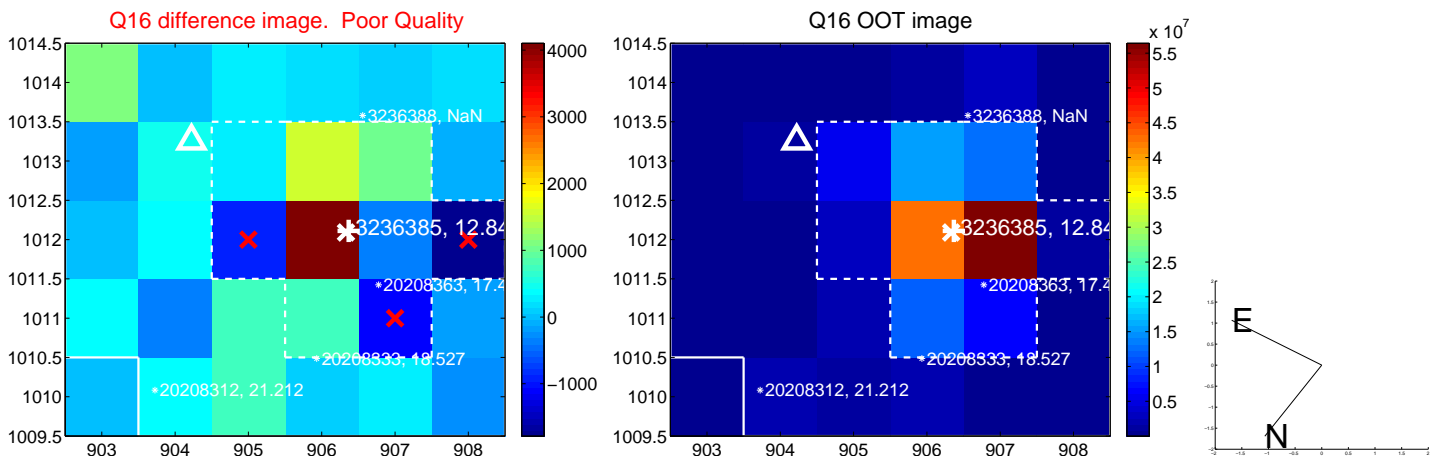
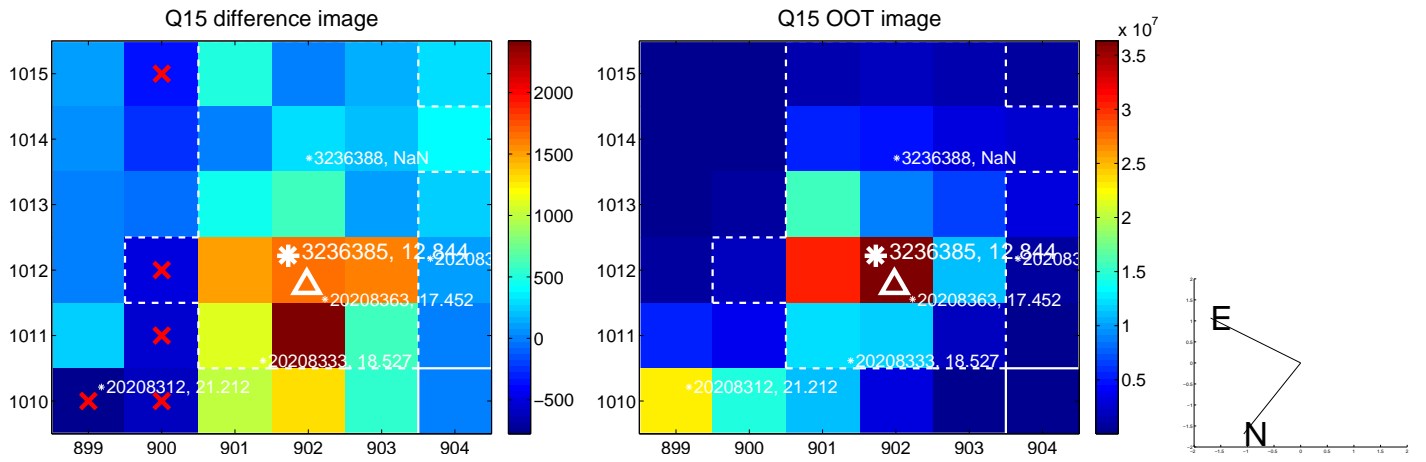
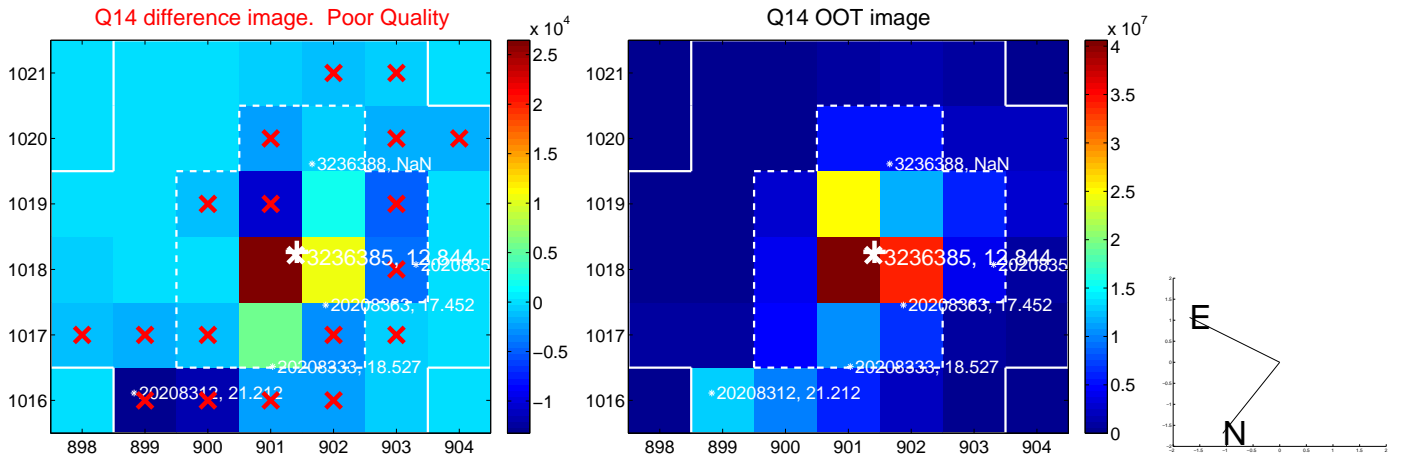
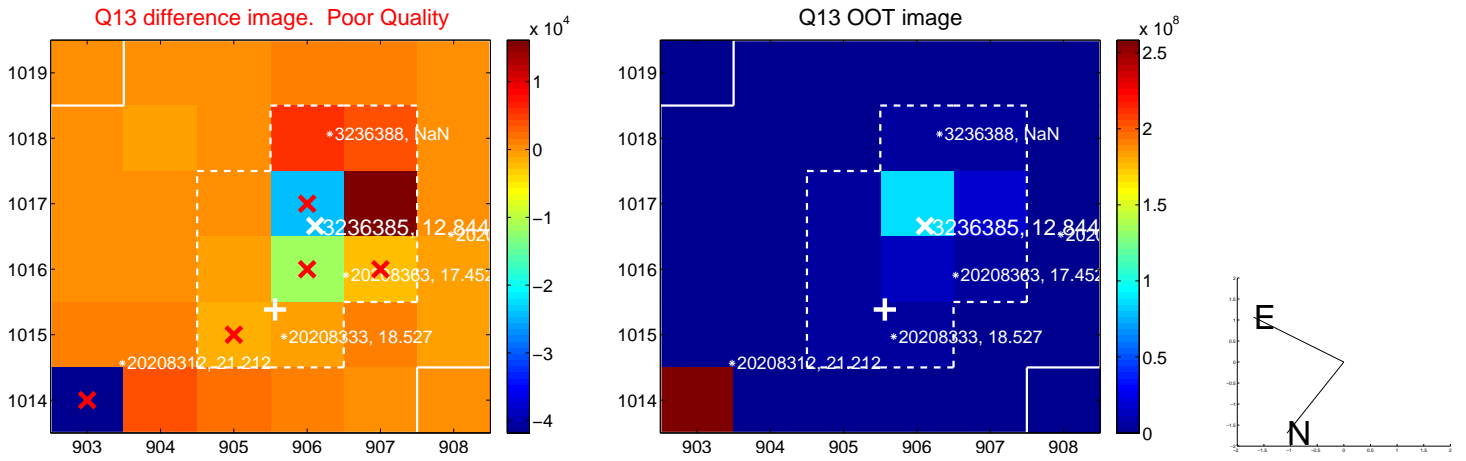
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



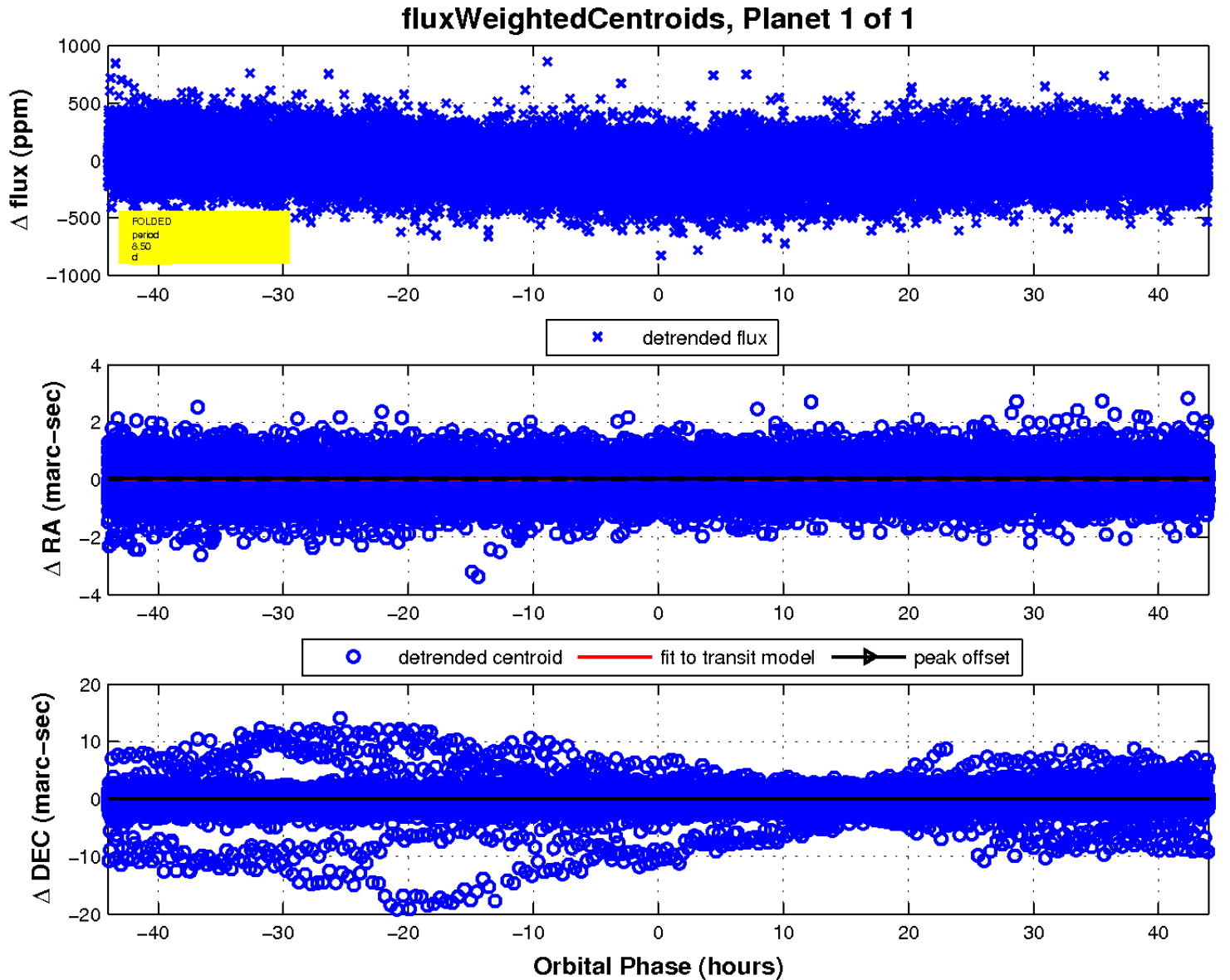
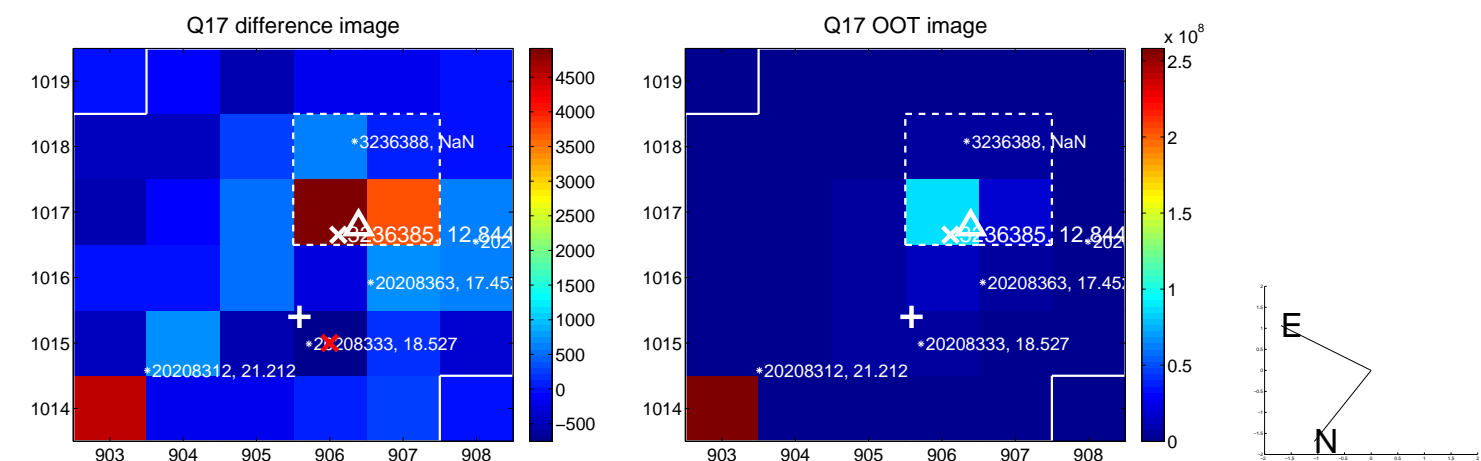
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

