

KIC 003346543

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})
003346543-01	OBS	6329.01	12.470027	143.729213	91.8	3.493	7.9	8.9	2.11	5623	2.28	314.53

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003346543-01	OBS	PC	0.71	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.

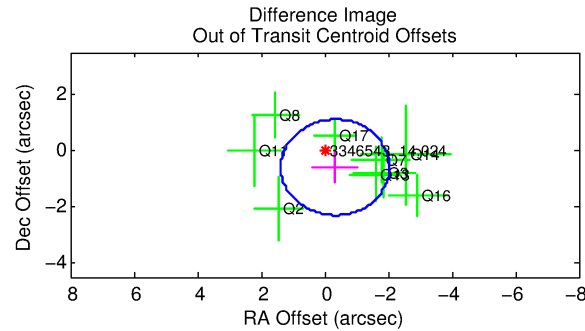
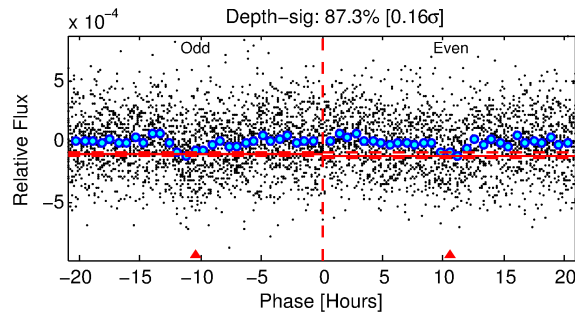
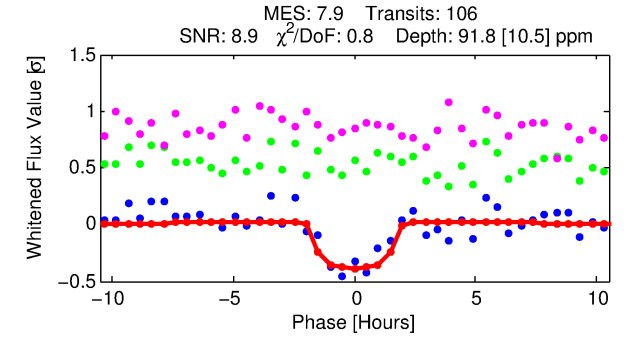
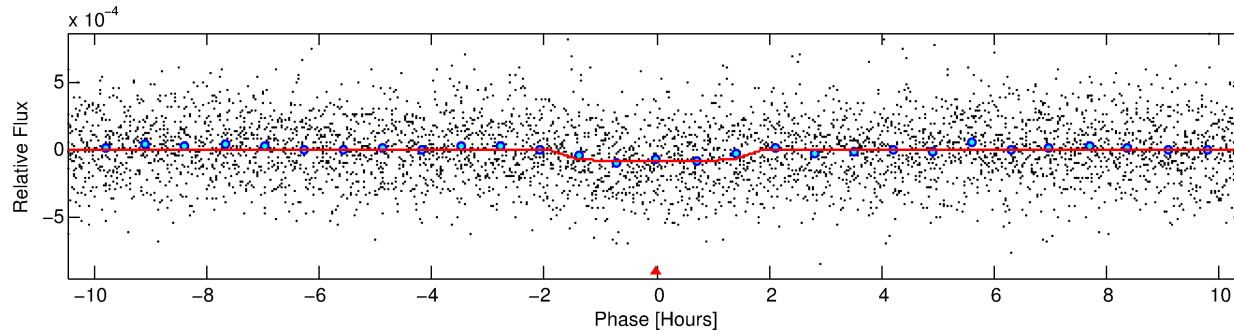
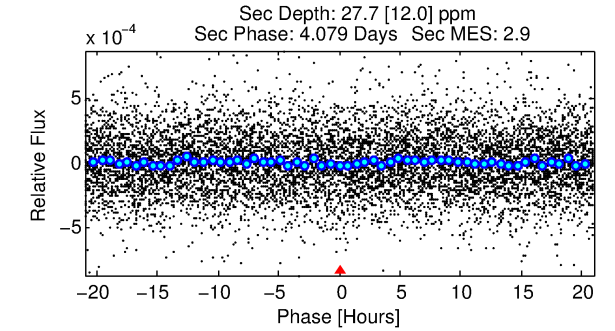
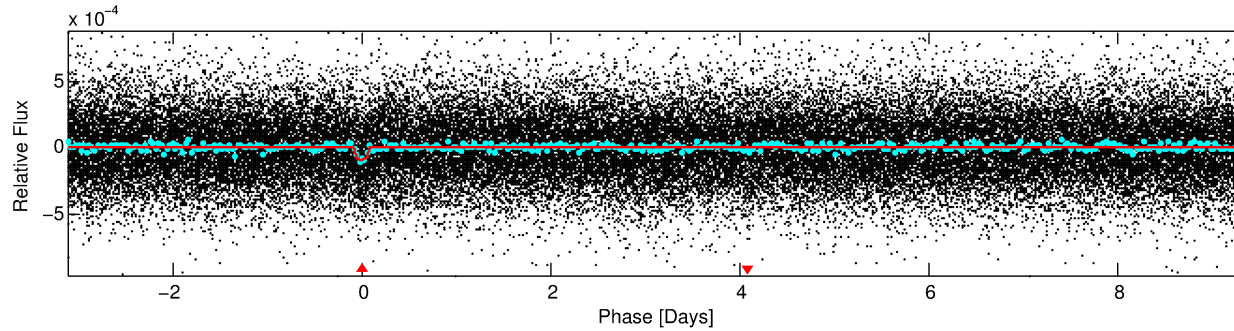
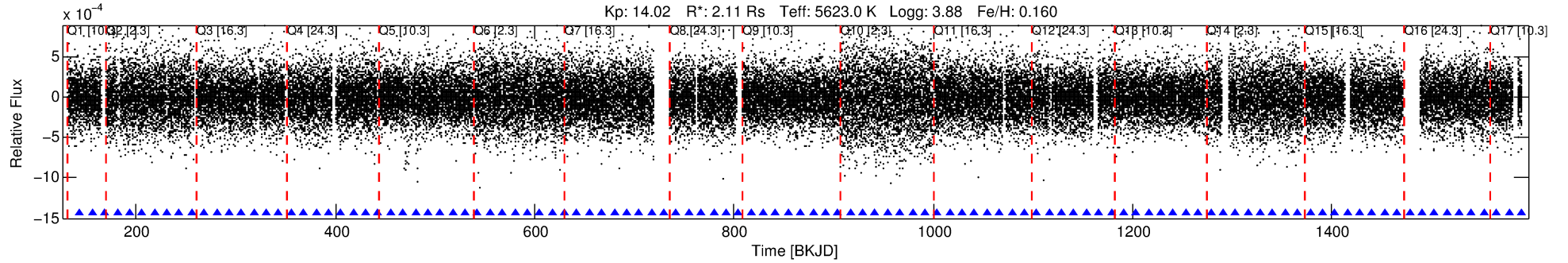
Ephemeris Match Information For 003346543-01

No Significant Match Found

DV One-Page Summary

KIC: 3346543 Candidate: 1 of 1 Period: 12.470 d

KOI: K06329.01 Corr: 0.925



DV Fit Results:

Period = 12.47003 [0.00013] d
Epoch = 143.7292 [0.0087] BKJD
Rp/R* = 0.0099 [0.0073]
a/R* = 15.84 [50.56]
b = 0.83 [1.25]
Seff = 314.53 [130.29]
Teq = 1074 [111] K
Rp = 2.28 [1.82] Re
a = 0.1125 [0.0300] AU
Ag = 37.07 [59.05] [0.61σ]
Teffp = 4097 [1578] K [1.91σ]

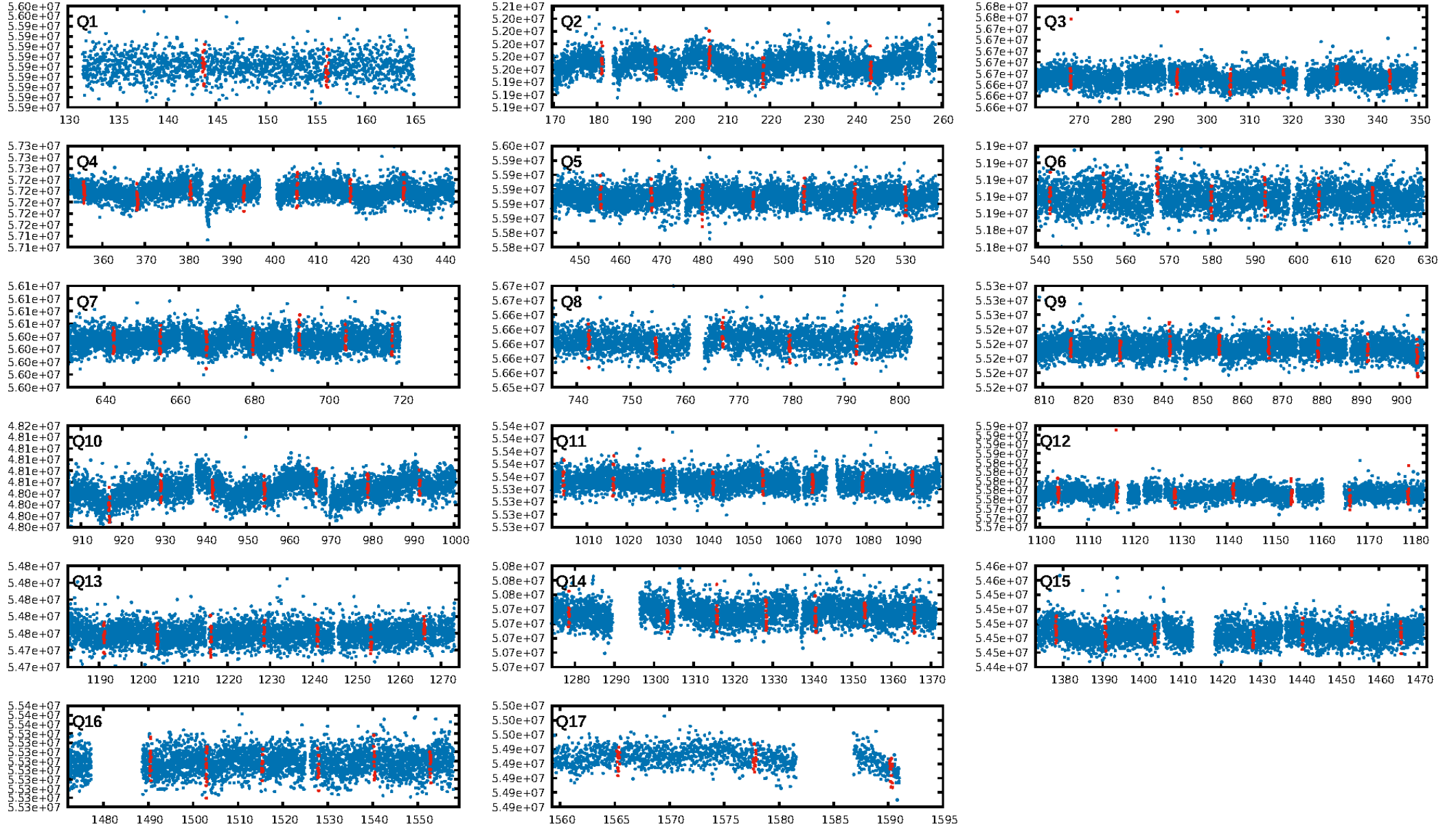
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 98.8%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 3.26e-15
RollingBand-fgt: 1.00 [101/101]
GhostDiagnostic-chr: -5.168
Centroid-sig: 77.3%
Centroid-so: 0.540 arcsec [0.36σ]
OotOffset-rm: 0.680 arcsec [1.20σ]
OotOffset-st: 2/3/2/2 [9]
KicOffset-rm: 0.722 arcsec [1.30σ]
KicOffset-st: 2/3/2/2 [9]
DiffImageQuality-fgm: 0.78 [7/9]
DiffImageOverlap-fno: 1.00 [17/17]

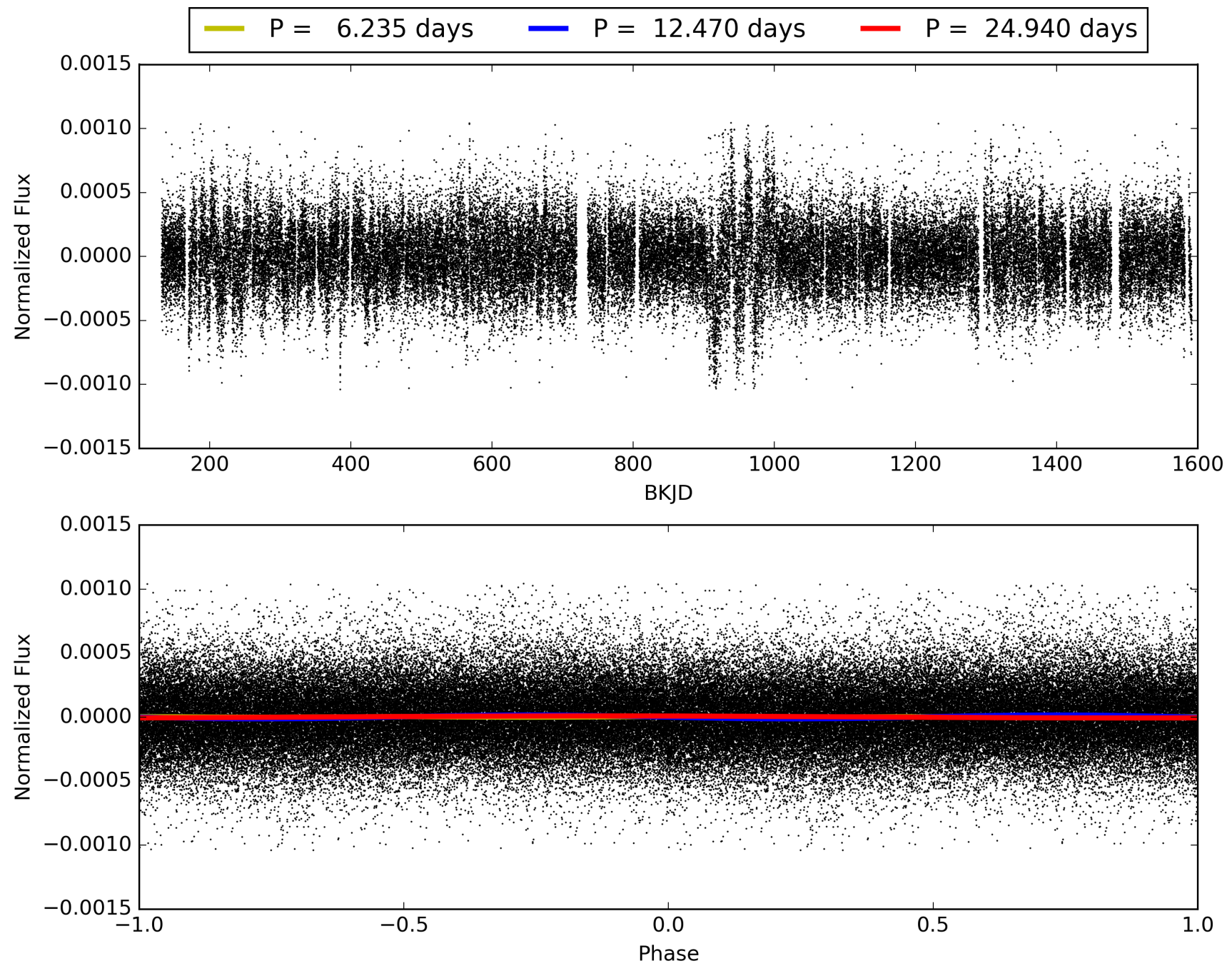
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 20:23:35 Z

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

TCE 003346543-01, PDC Light Curves

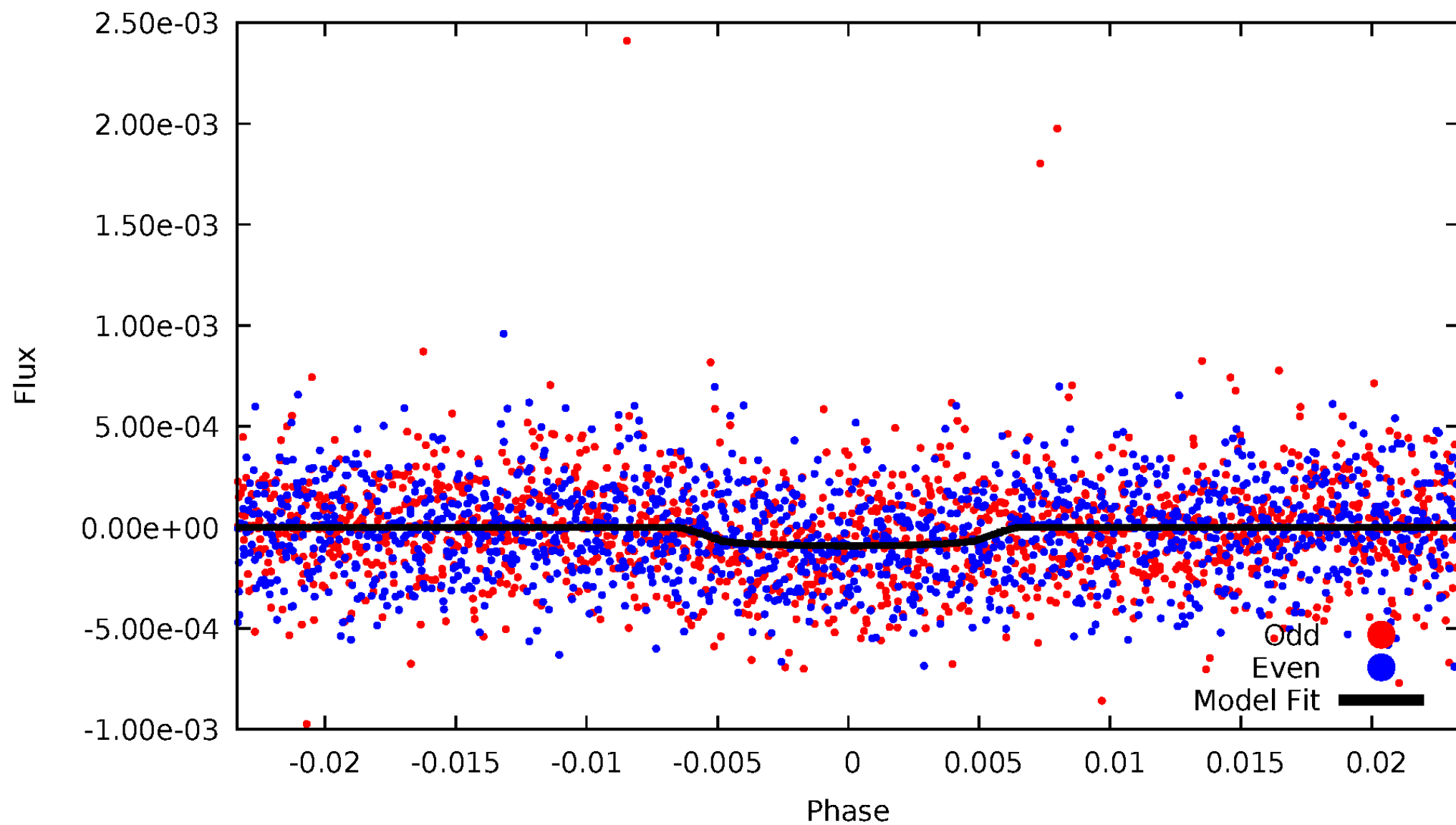


TCE 003346543-01



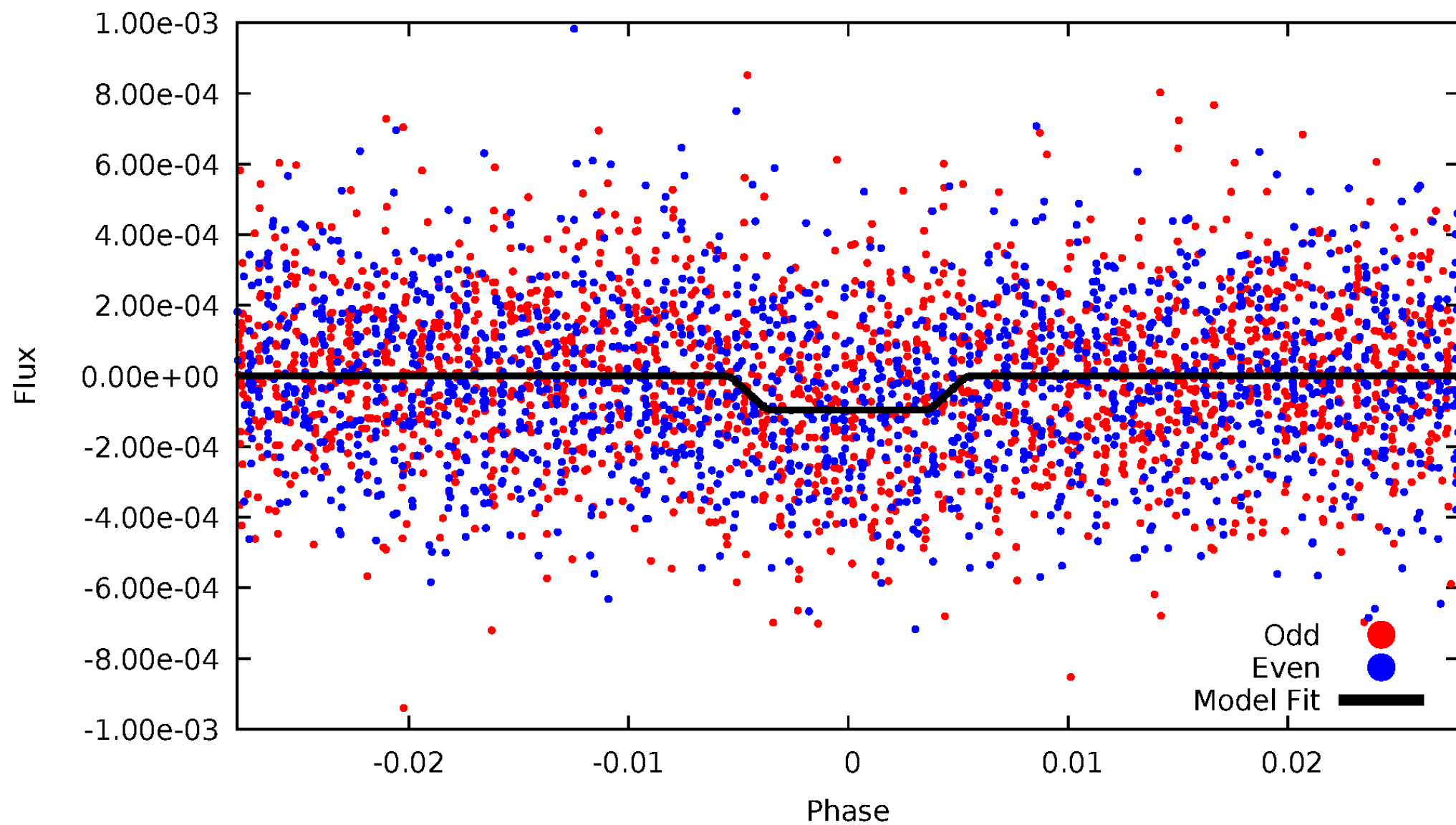
DV Odd/Even

TCE 003346543-01



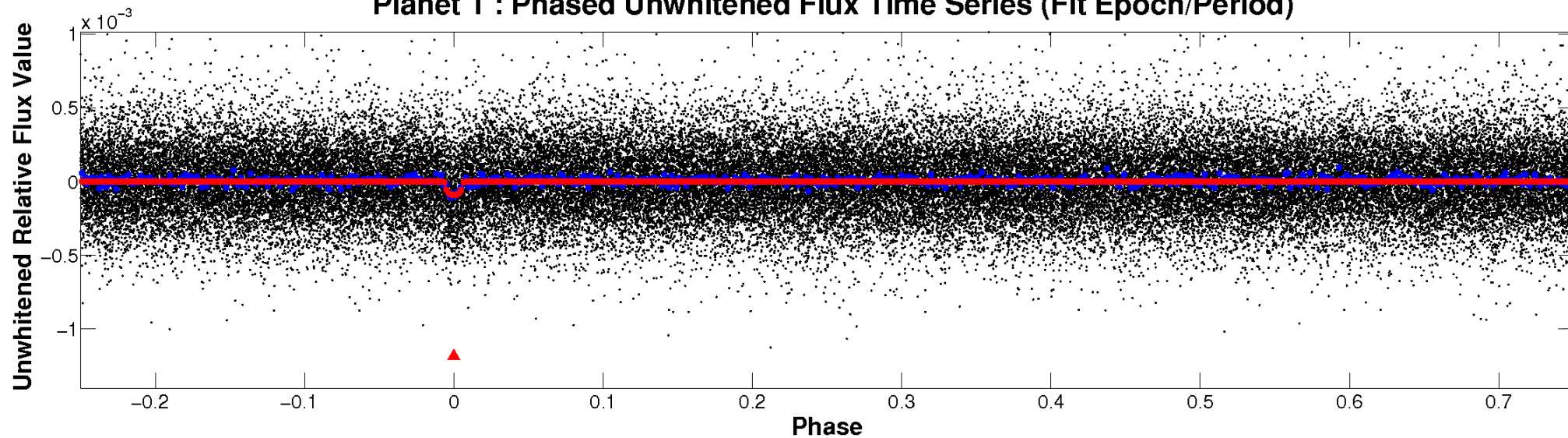
ALT Odd/Even

TCE 003346543-01

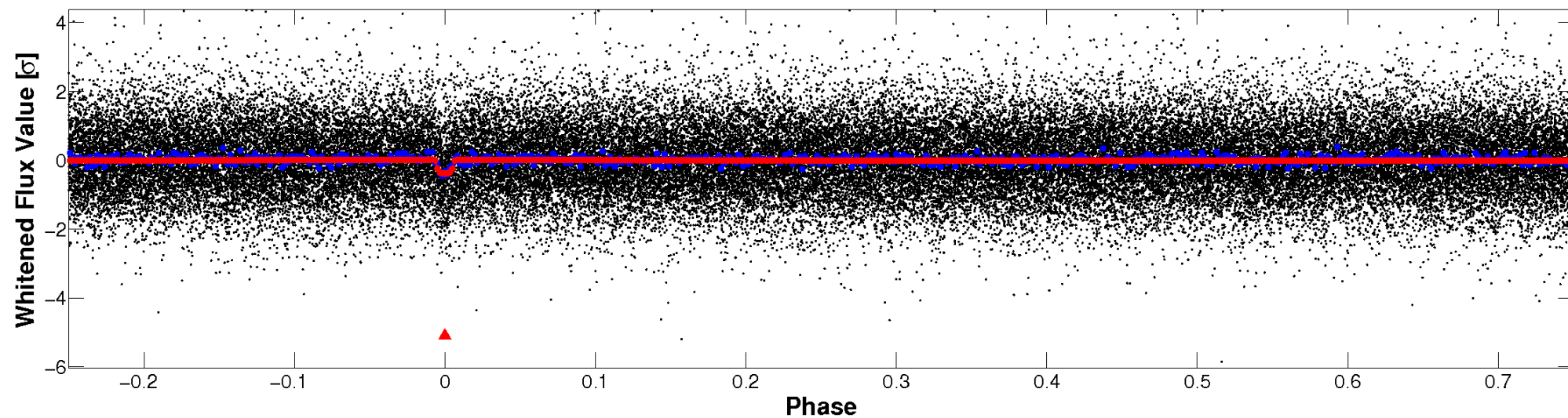


Non-Whitened Vs. Whitened Light Curve

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

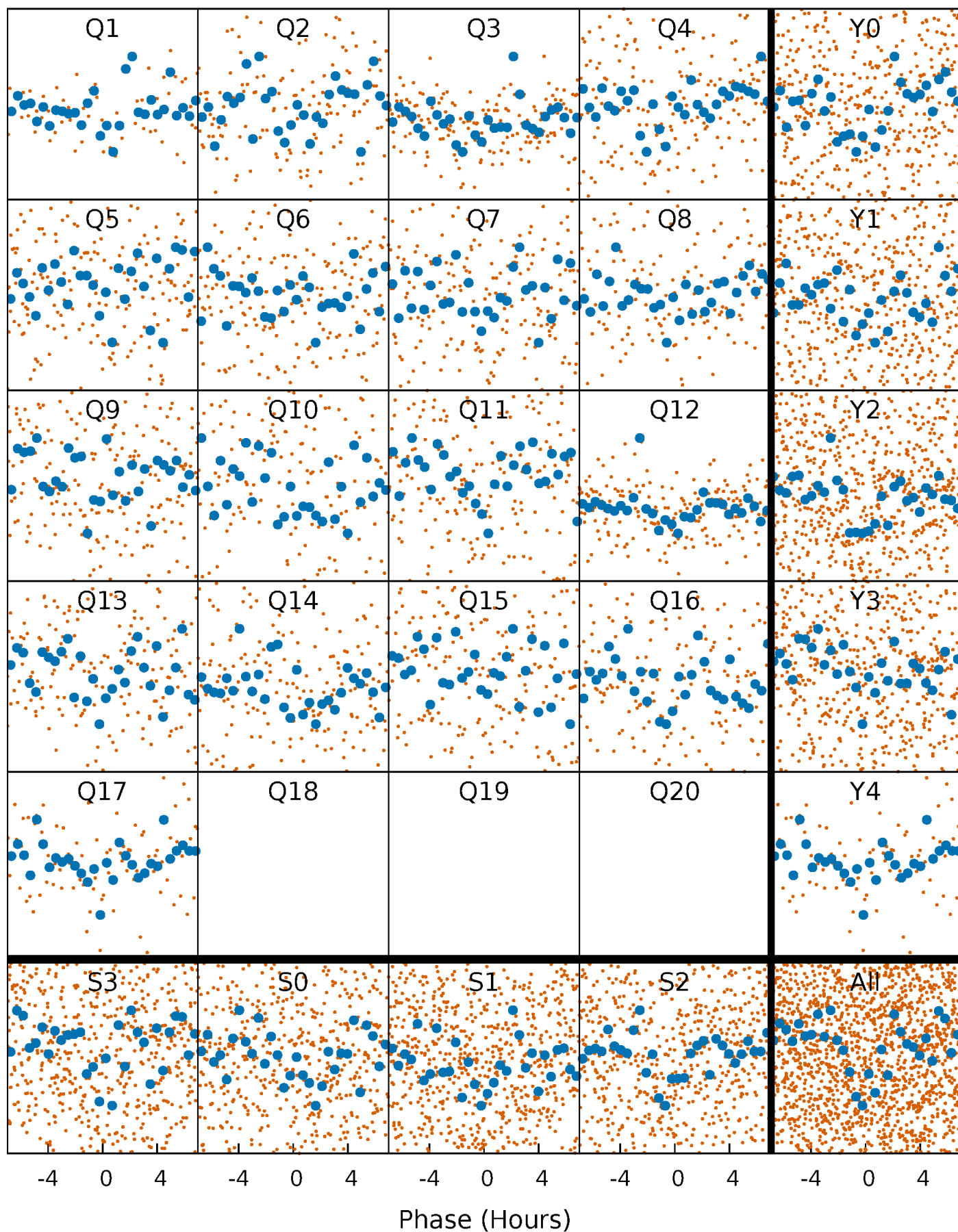


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



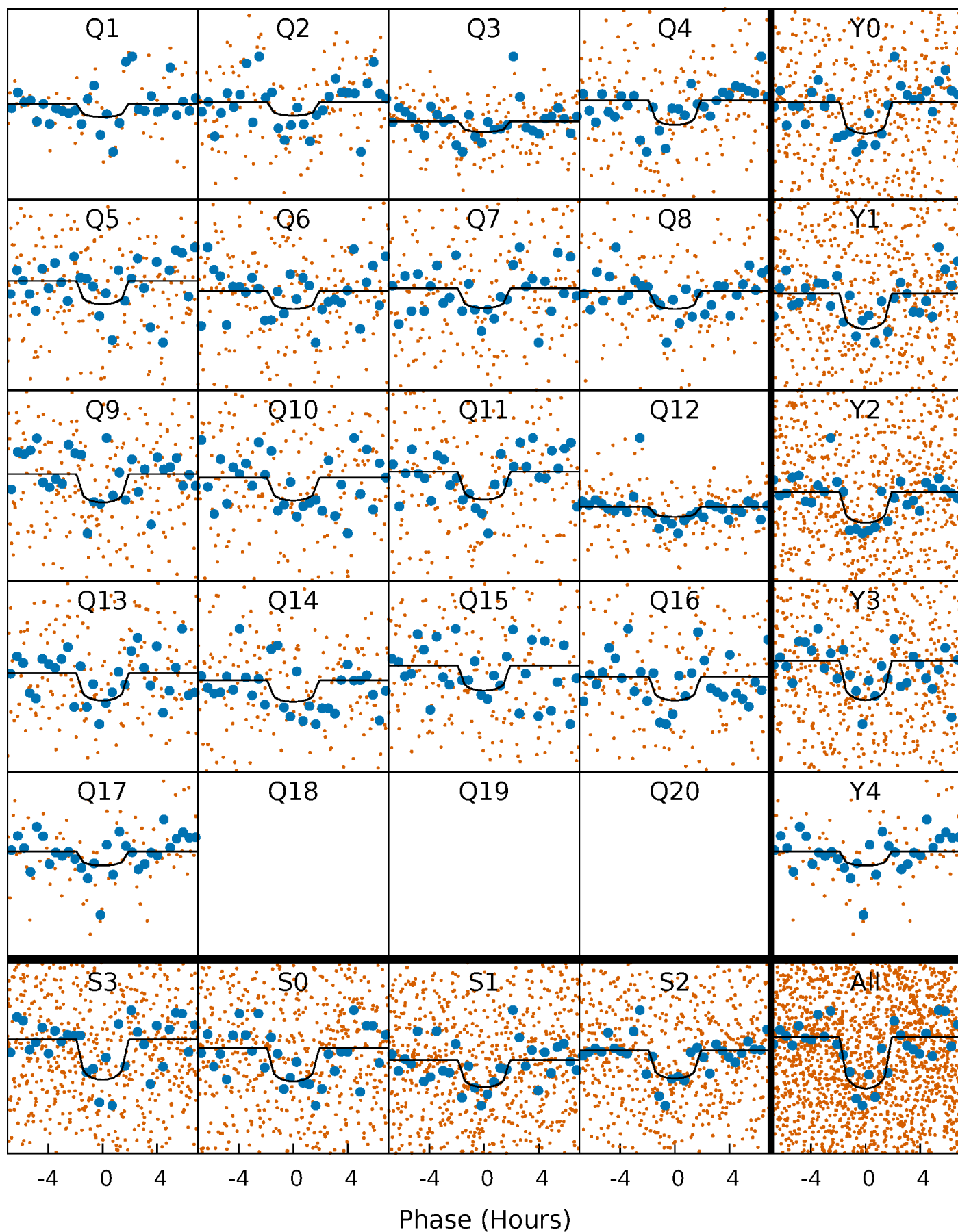
PDC Quarter-Phased Transit Curves

TCE 003346543-01 P= 12.470027 Days $T_0=143.729213$ (BKJD)



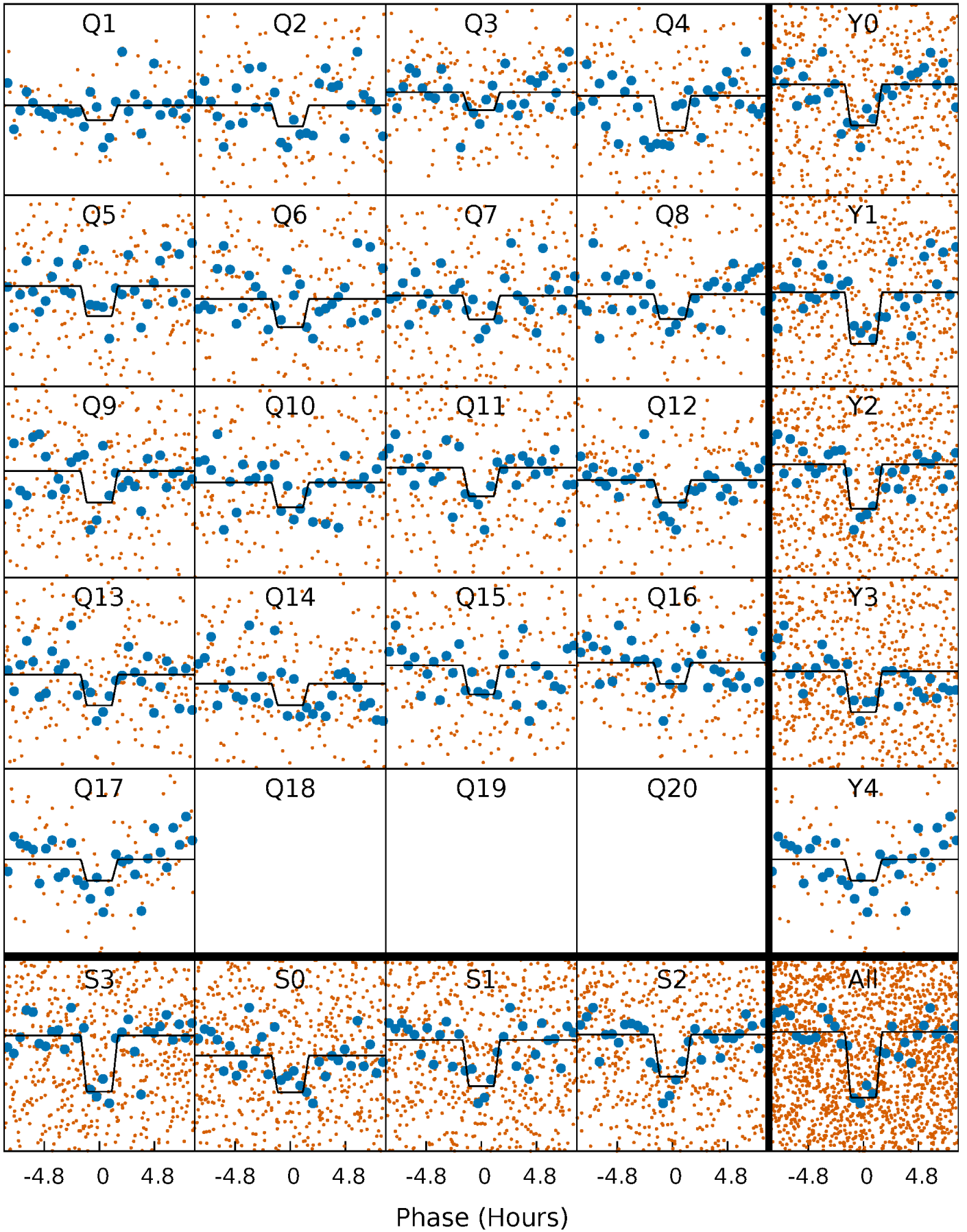
DV Quarter-Phased Transit Curves

TCE 003346543-01 P= 12.470027 Days $T_0=143.729213$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

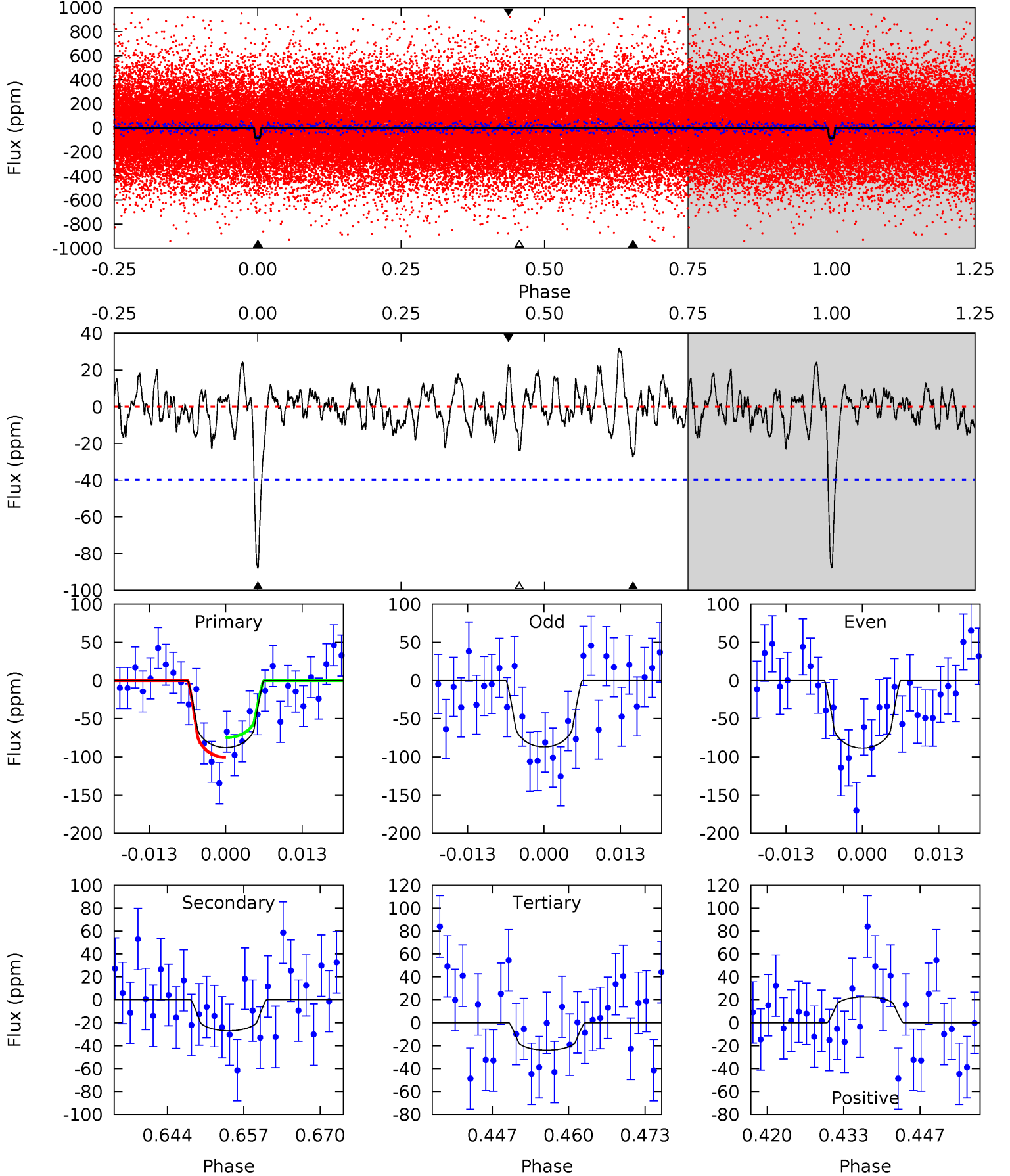
TCE 003346543-01 P= 12.469934 Days $T_0=143.729666$ (BKJD)



DV Model-Shift Uniqueness Test

003346543-01, P = 12.470027 Days, E = 131.259186 Days

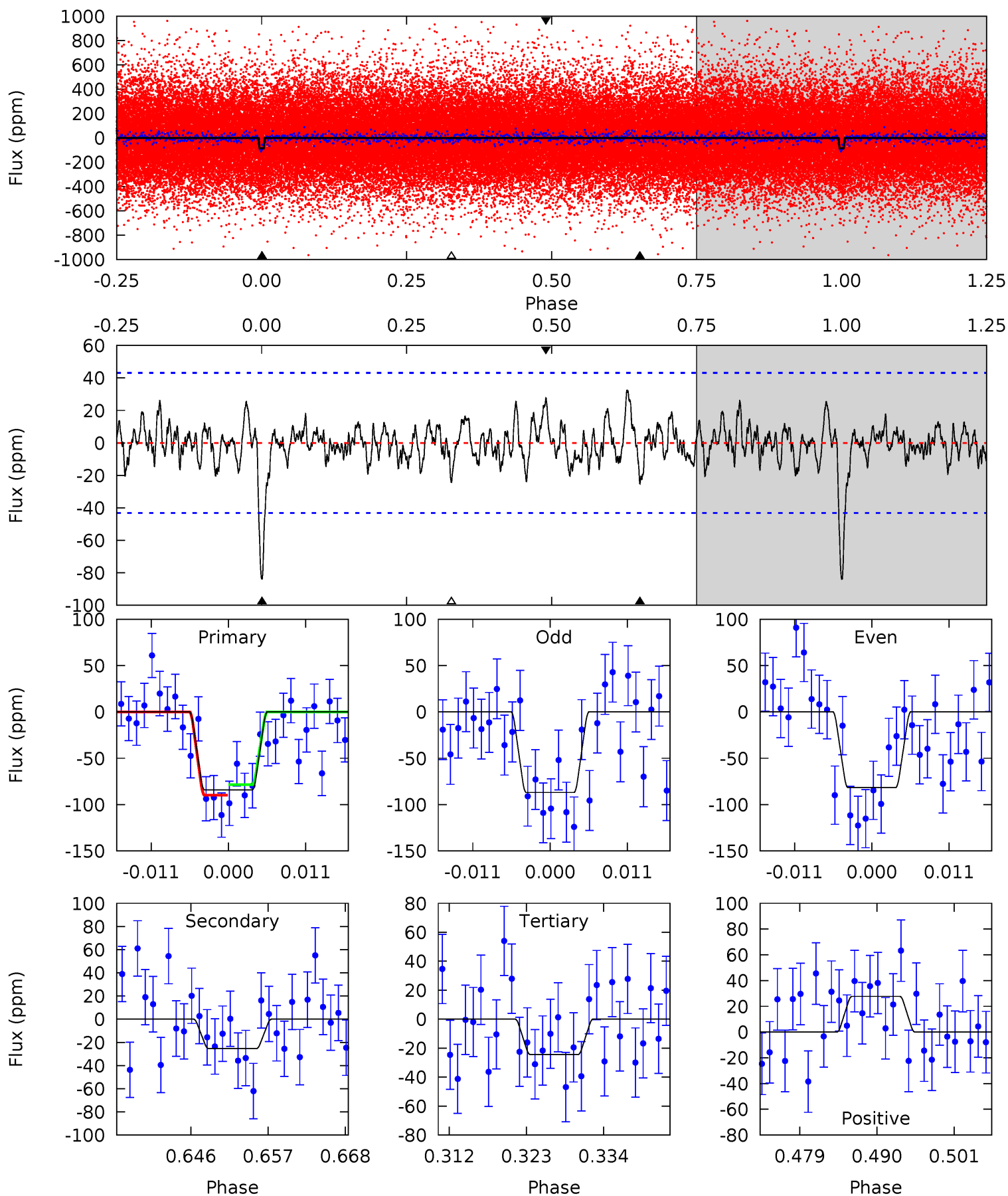
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.0	3.37	2.99	2.81	4.97	2.48	1.15	7.97	8.15	0.39	0.56	0.10	0.95	0.27	1.61



Alt Model-Shift Uniqueness Test

003346543-01, P = 12.469934 Days, E = 131.259732 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.75	2.94	2.83	3.21	5.01	2.54	1.11	6.92	6.54	0.11	-0.27	0.31	0.97	0.28	0.65



Stellar Parameters For KIC 003346543

	$T_{\text{eff}} (K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5623^{+93}_{-67}	$3.877^{+0.233}_{-0.078}$	$0.160^{+0.150}_{-0.150}$	$2.109^{+0.314}_{-0.627}$	$1.221^{+0.104}_{-0.193}$	$0.183^{+0.263}_{-0.047}$
	+2%/-1%	+6%/-2%	+94%/-94%	+15%/-30%	+9%/-16%	+143%/-25%
Source	SPE90	SPE90	SPE90	DSEP		

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

Secondary Eclipse Parameters for KIC 003346543-01 / KOI 6329.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-27 ± 8	$2.32^{+1.69}_{-1.42}$	1481^{+62}_{-111}	4124^{+2048}_{-678}	32^{+178}_{-21}
Alt.	-25 ± 9	$2.39^{+1.66}_{-1.39}$	1488^{+66}_{-109}	4077^{+1879}_{-689}	30^{+149}_{-20}

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 $T_{\text{obs}} \gg T_{\text{max}}$ AND $A_{\text{obs}} \gg 1.0$

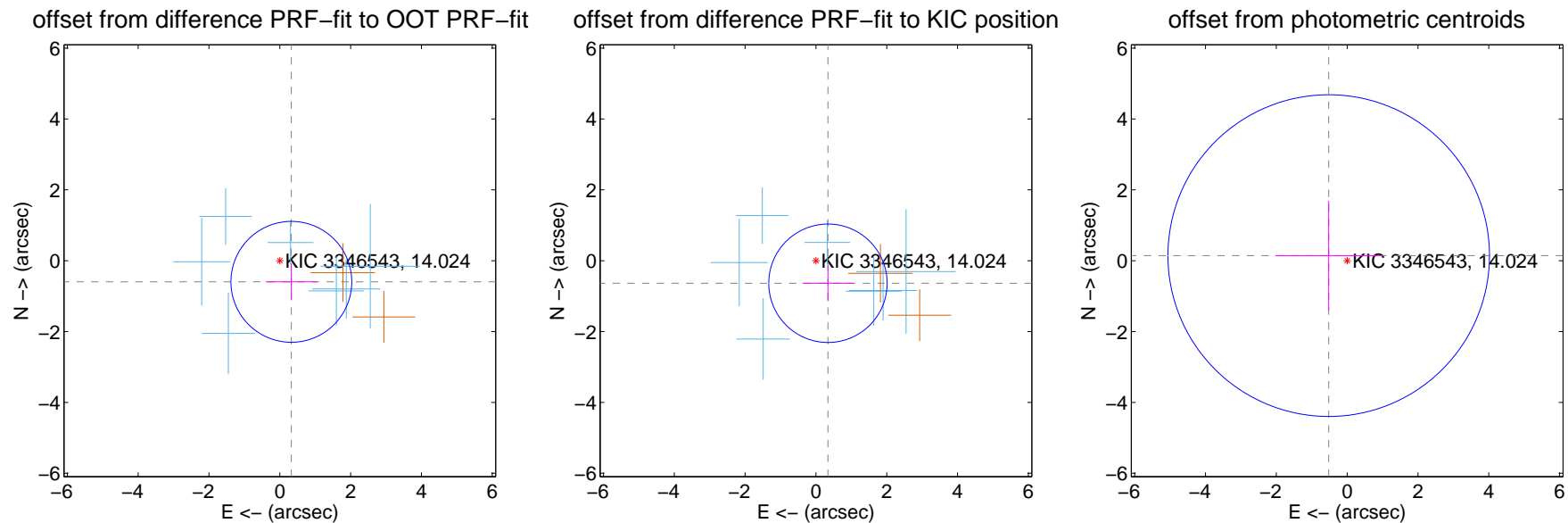
DV Centroid Data

Supplemental centroid analysis for 003346543-01. Kepler magnitude: 14.02. Transit SNR 8.92

There are 7 quarters with good PRF difference image offsets

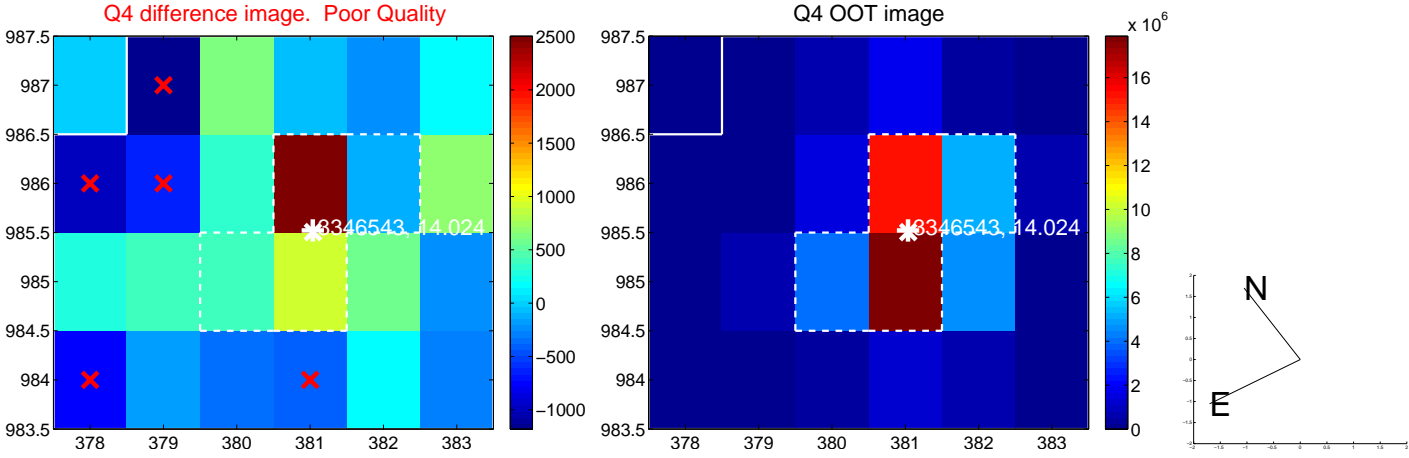
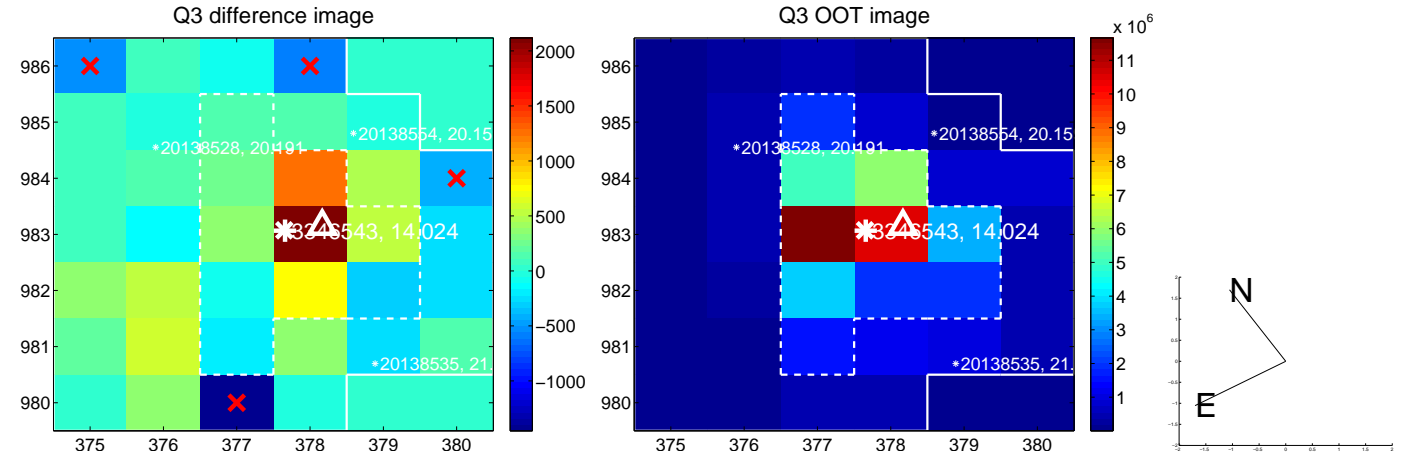
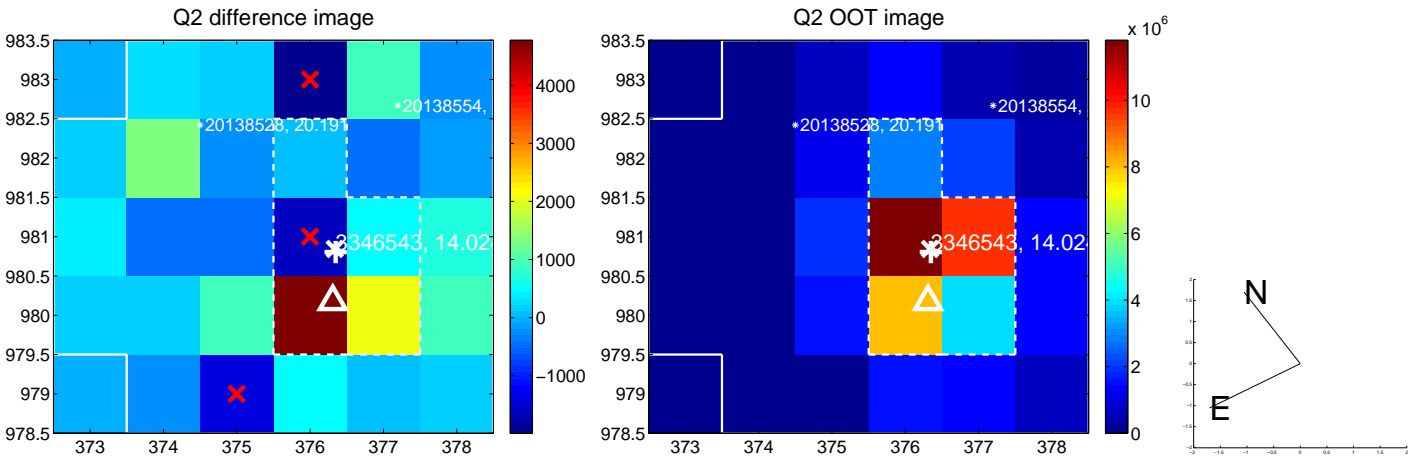
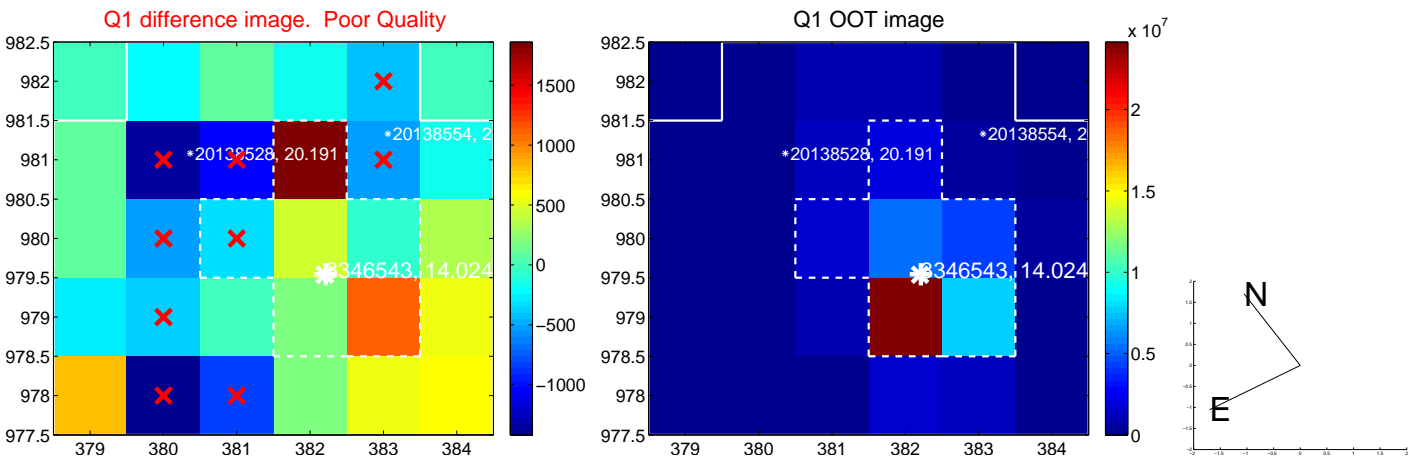
The direct PRF centroid is offset from the target star catalog position by about 0.02 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.680 ± 0.569	1.20	-0.326 ± 0.722	-0.597 ± 0.514
PRF-fit source offset from KIC position	0.722 ± 0.557	1.30	-0.340 ± 0.721	-0.637 ± 0.501
photometric centroid source offset	0.54 ± 1.51	0.36	0.52 ± 1.51	0.14 ± 1.55

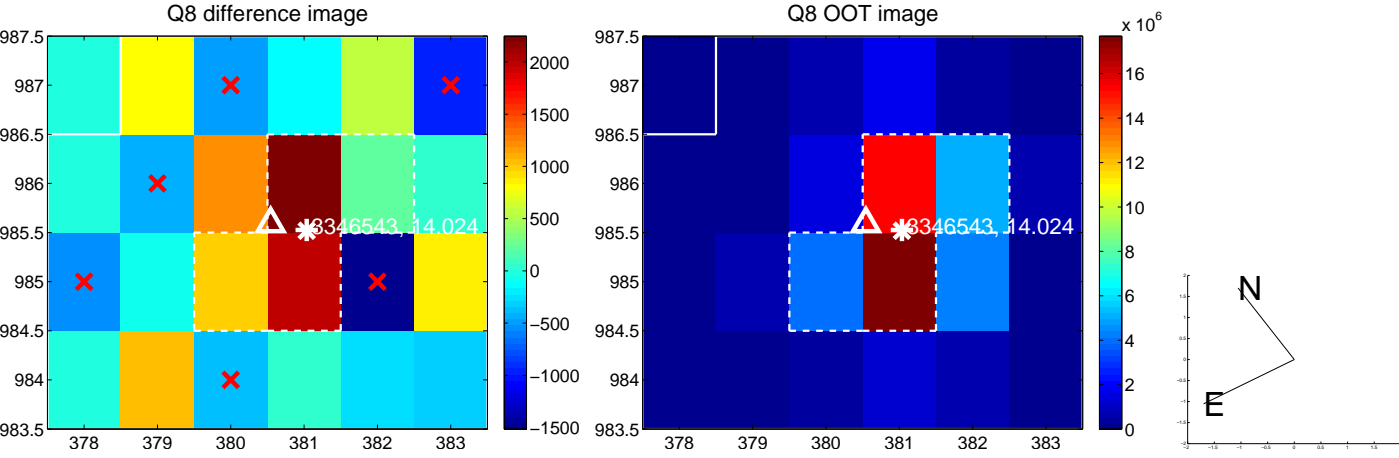
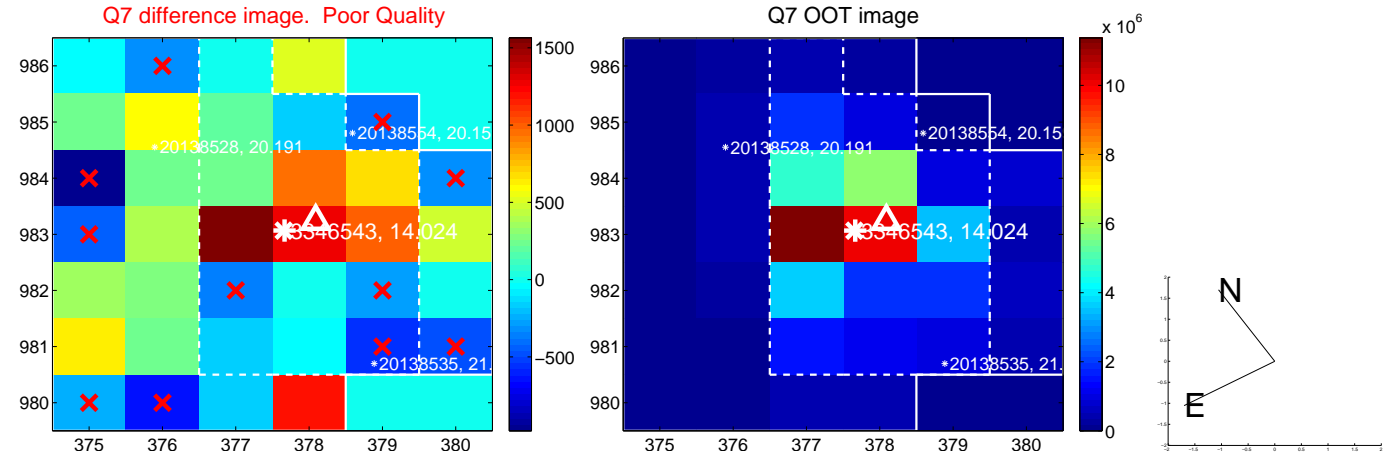
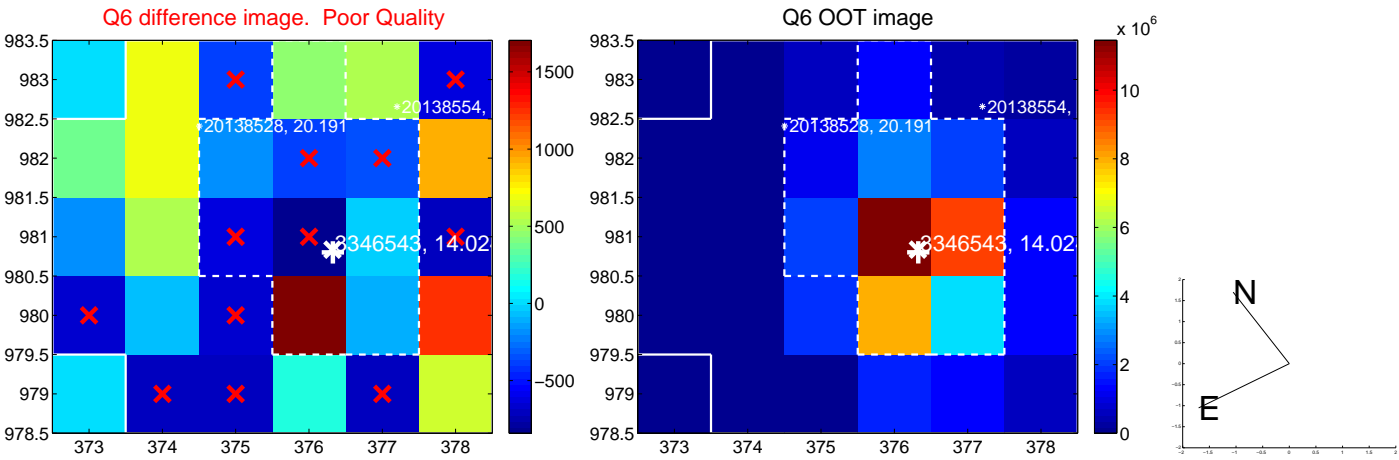
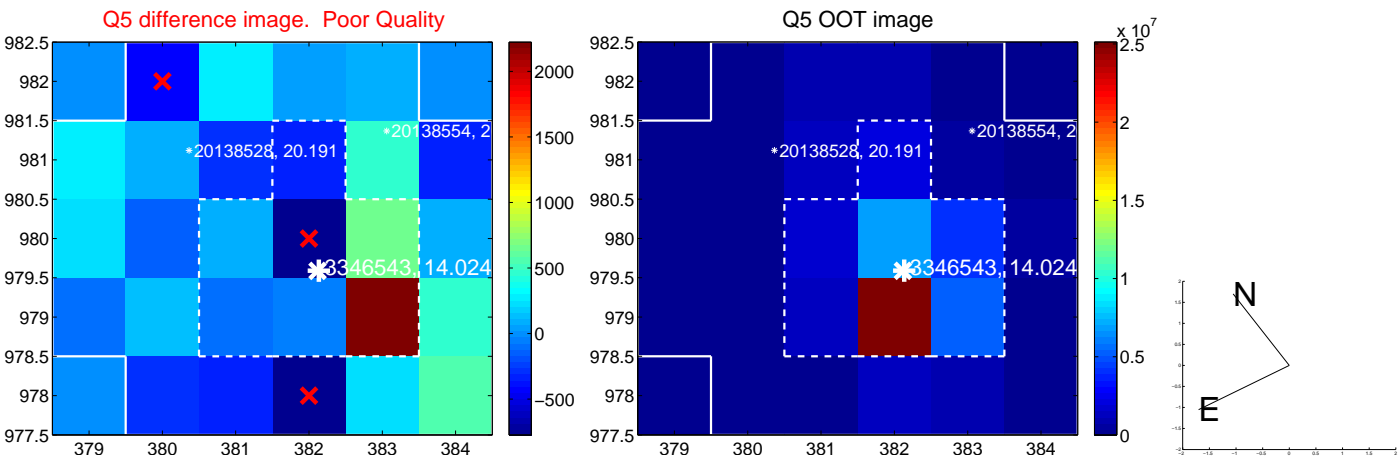


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

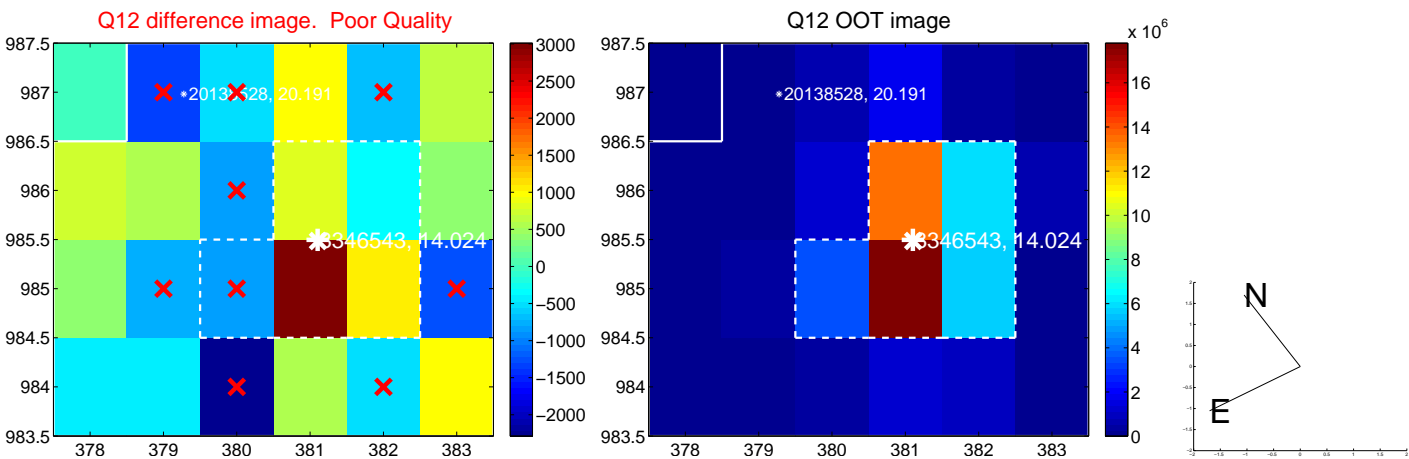
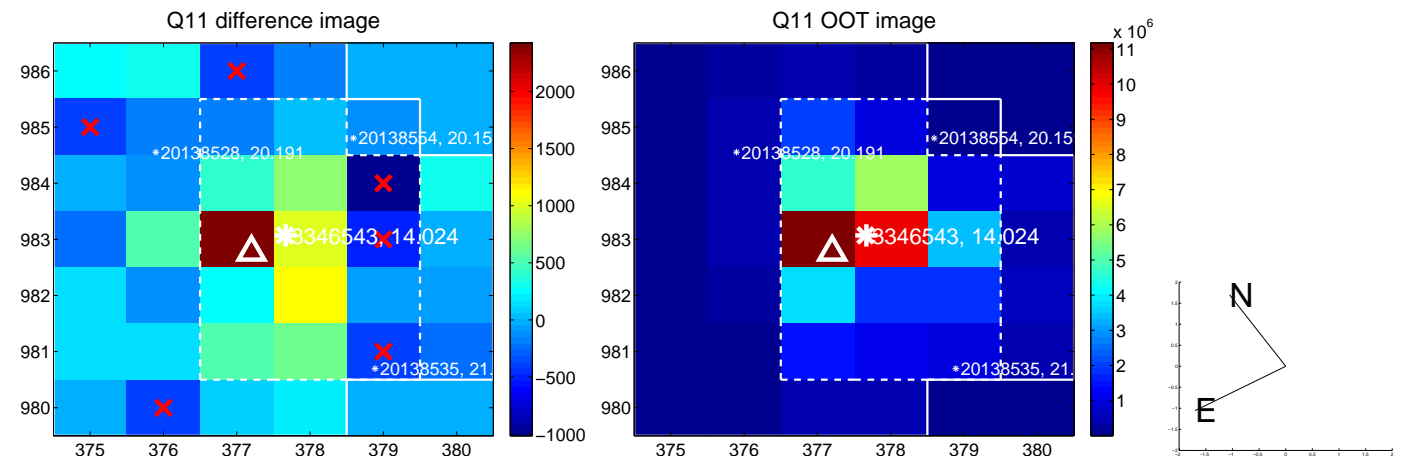
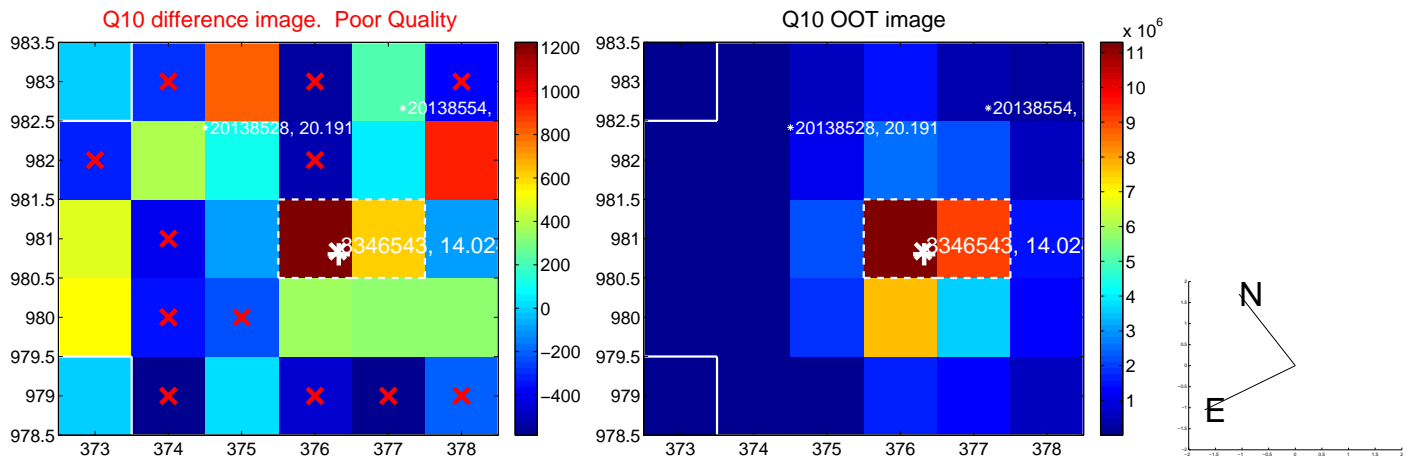
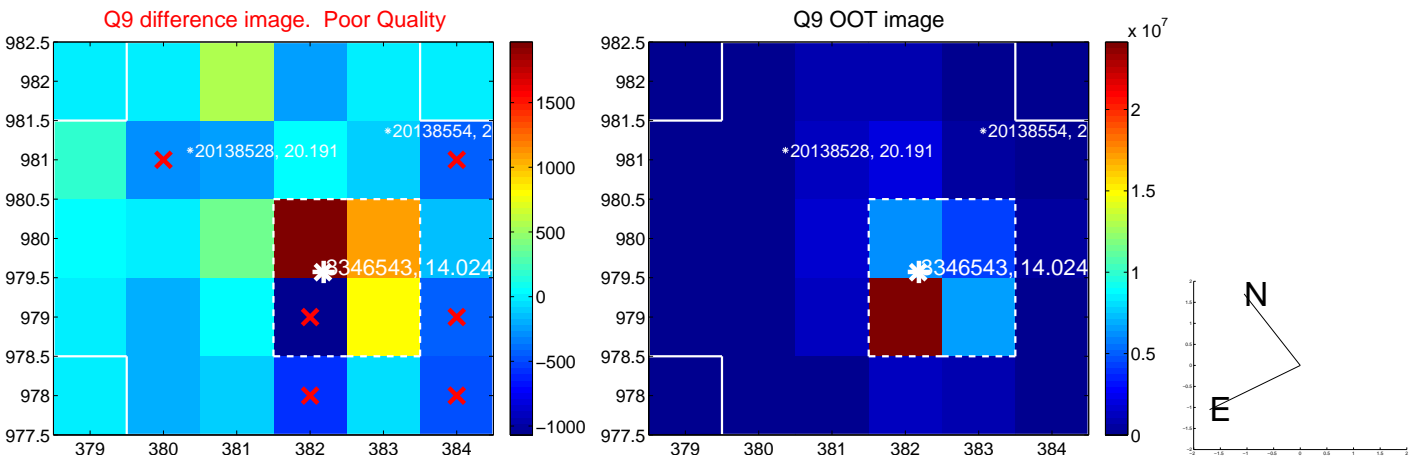
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



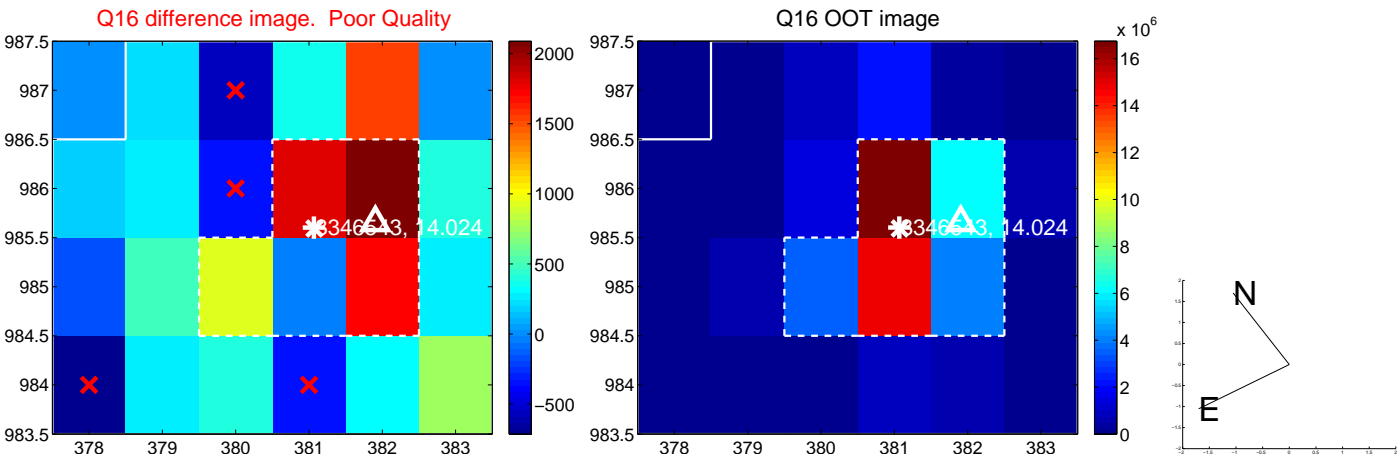
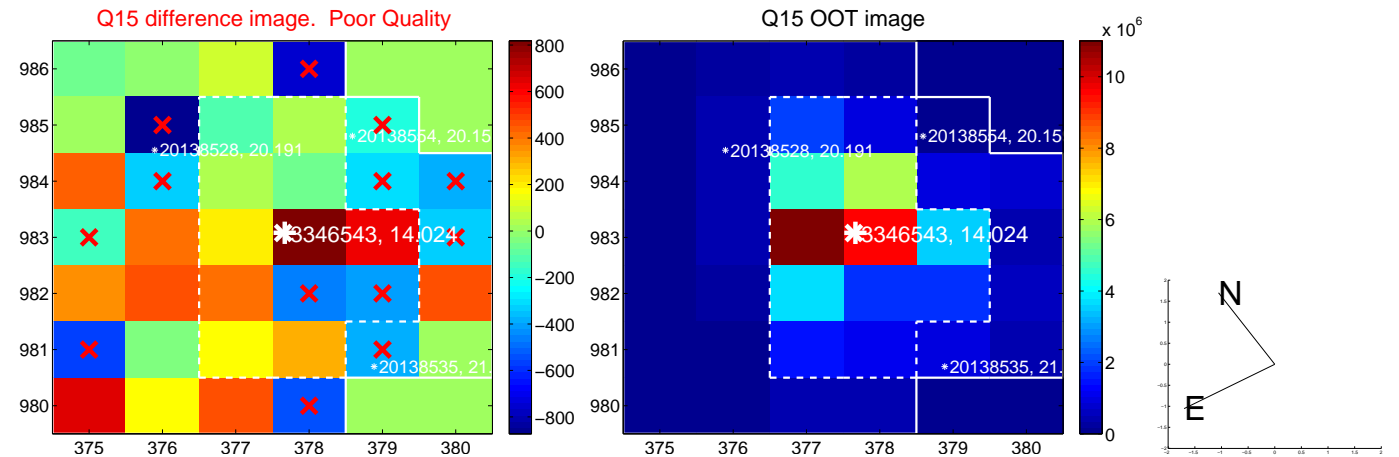
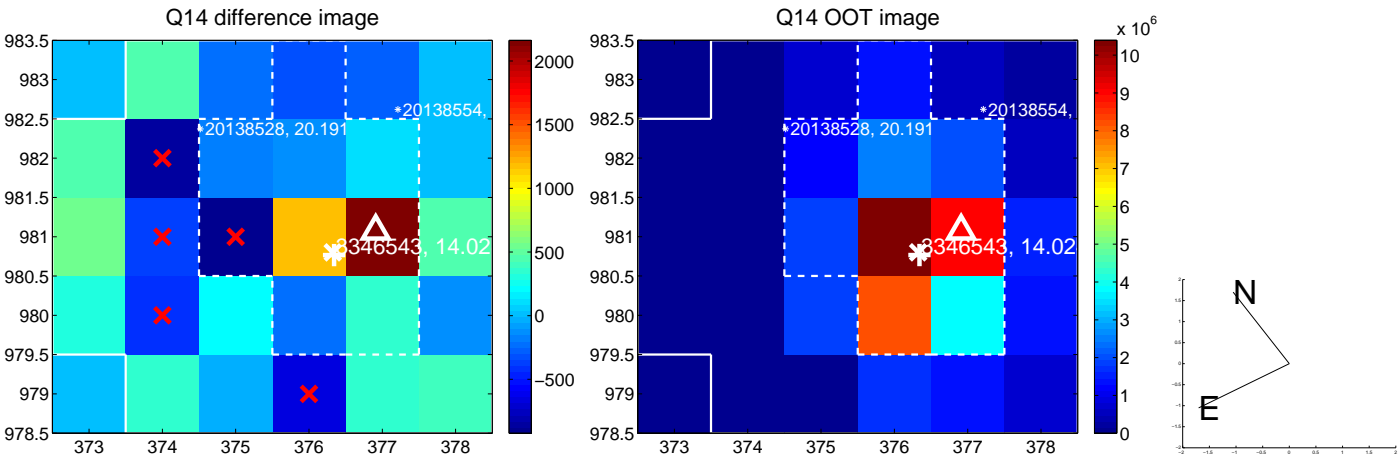
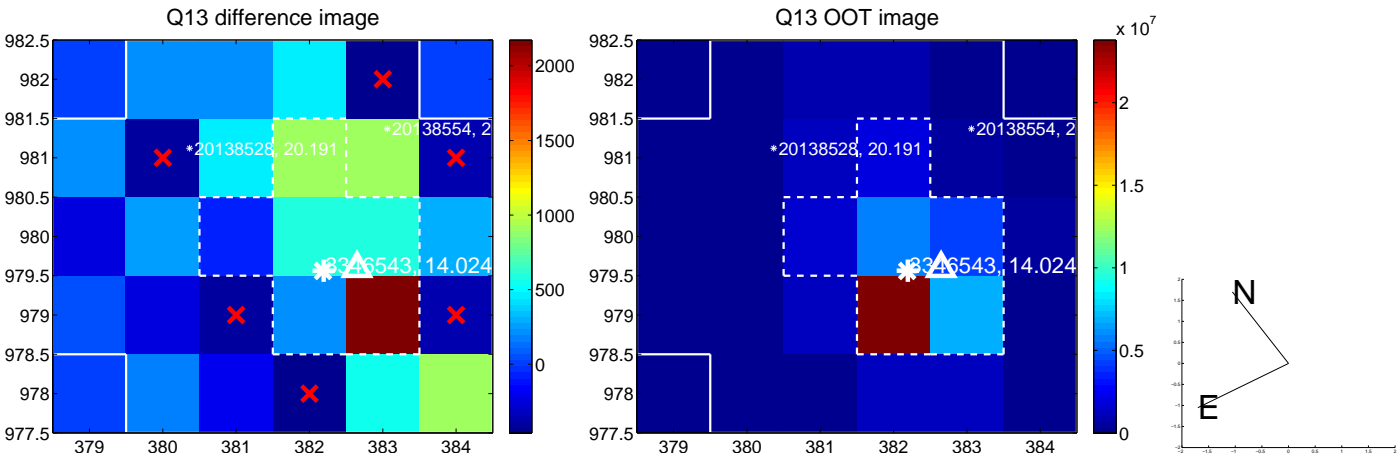
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



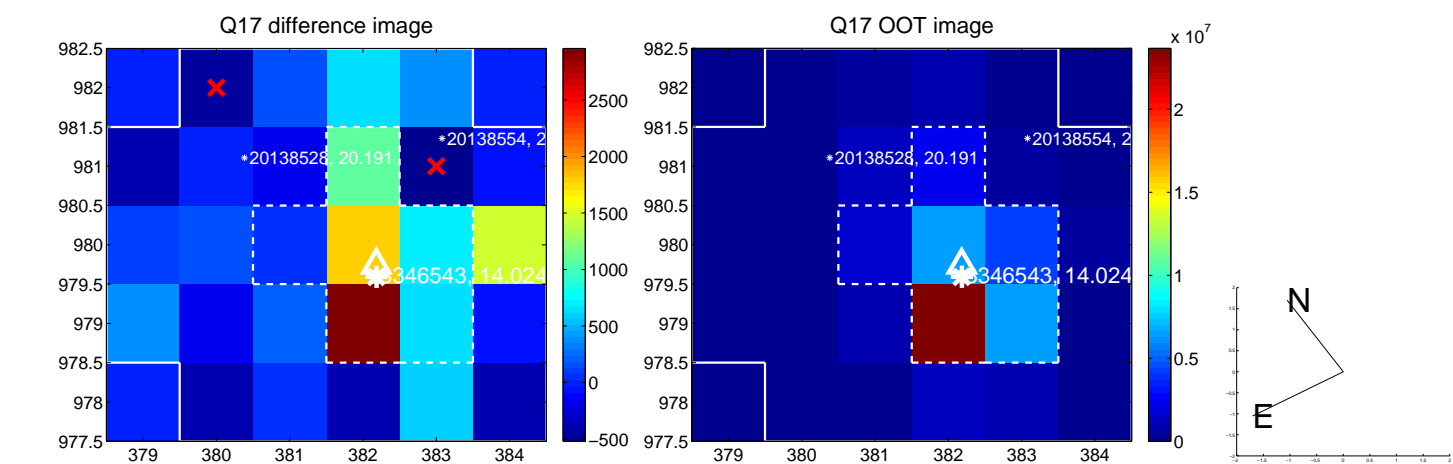
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



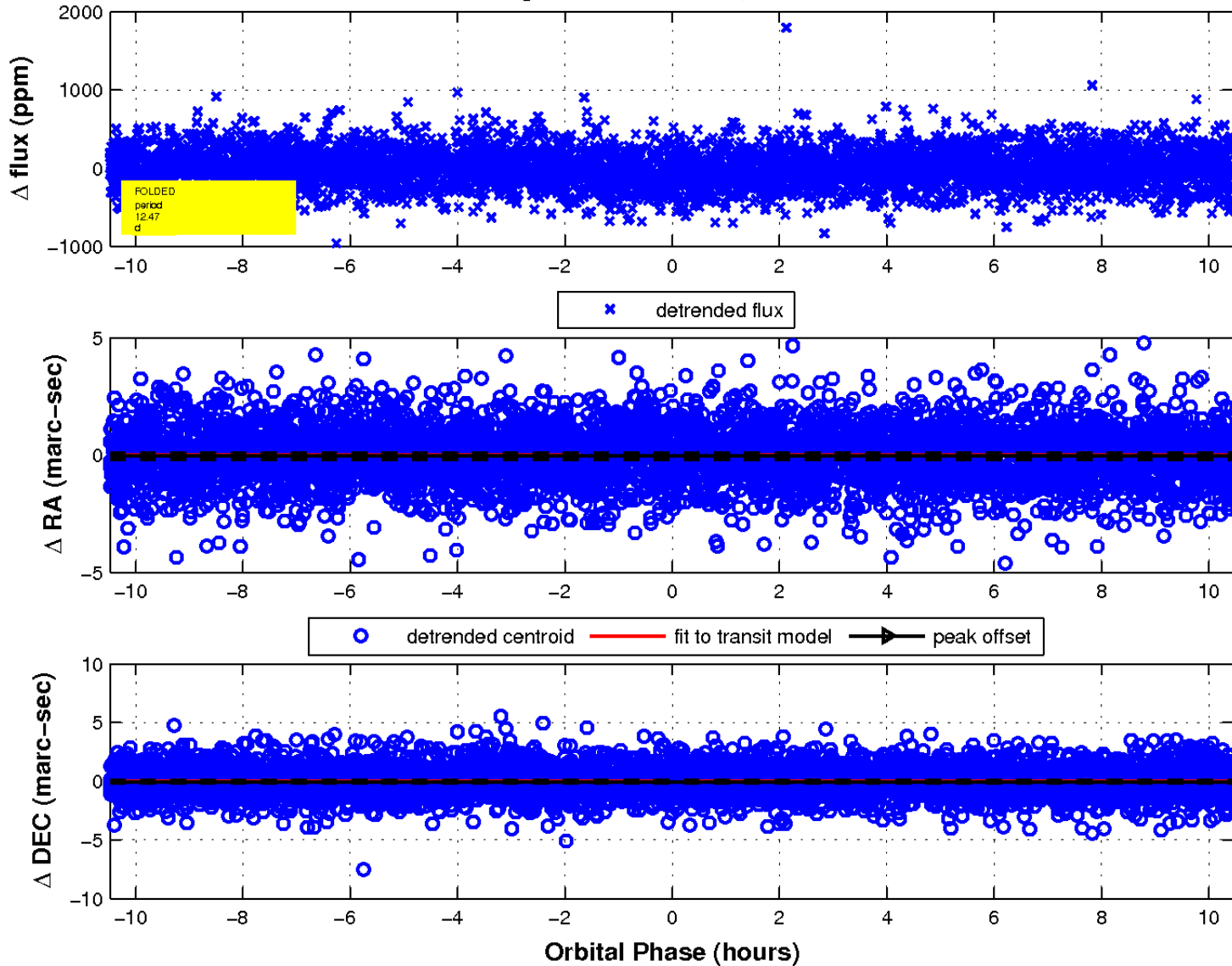
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white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

