

KIC 009268902

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})
009268902-01	OBS	No	0.793306	132.636897	47.5	4.458	8.7	1.7	0.87	5853	0.62	2889.57

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
009268902-01	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.

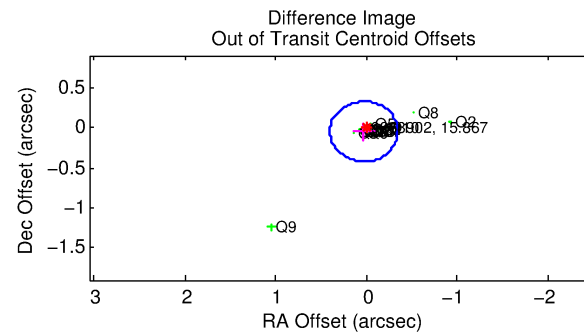
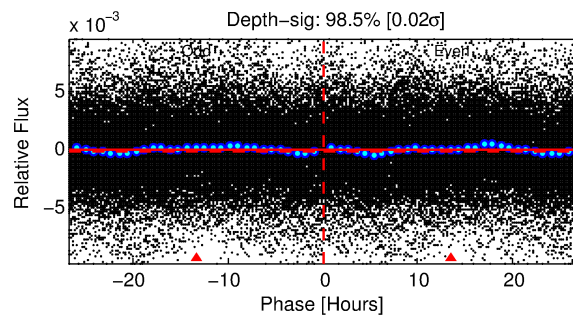
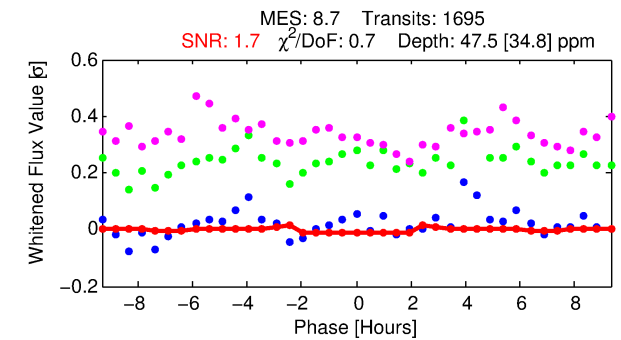
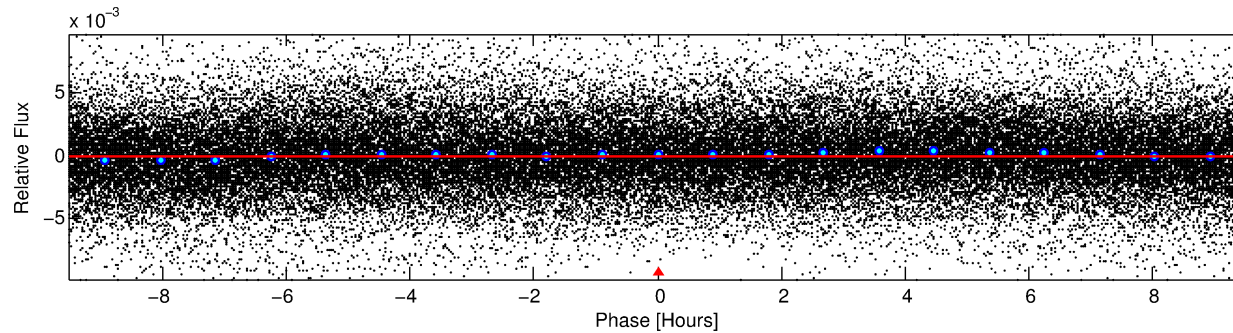
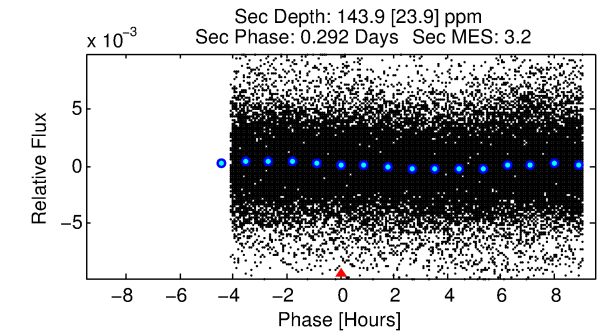
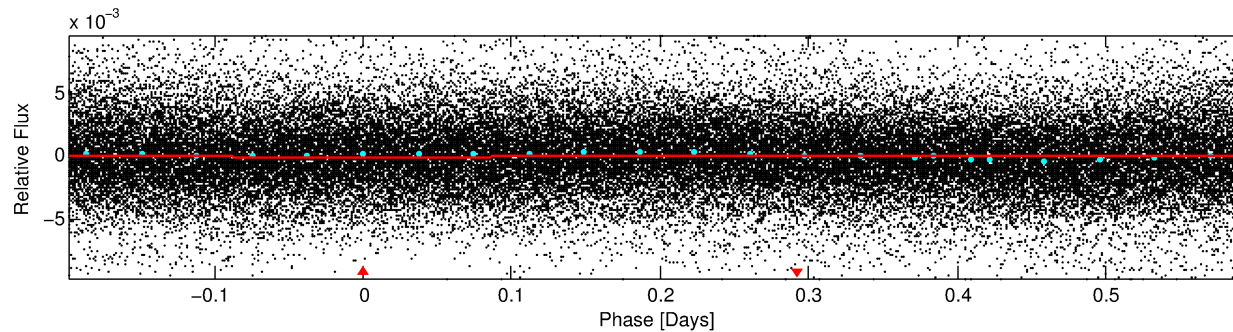
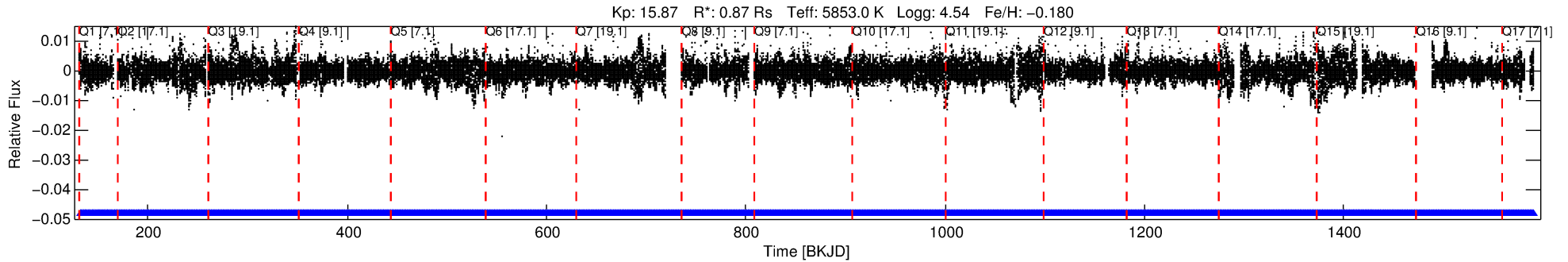
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 009268902-01

No Significant Match Found

DV One-Page Summary

KIC: 9268902 Candidate: 1 of 1 Period: 0.793 d



DV Fit Results:

Period = 0.79331 [0.00005] d
Epoch = 132.6369 [0.0085] BKJD
Rp/R* = 0.0065 [0.0102]
a/R* = 1.37 [4.64]
b = 0.56 [9.17]
Seff = 2889.57 [1081.41]
Teff = 1870 [175] K
Rp = 0.62 [0.98] Re
a = 0.0166 [0.0040] AU
Ag = 56.73 [178.53] [0.31σ]
Teffp = 7933 [6206] K [0.98σ]

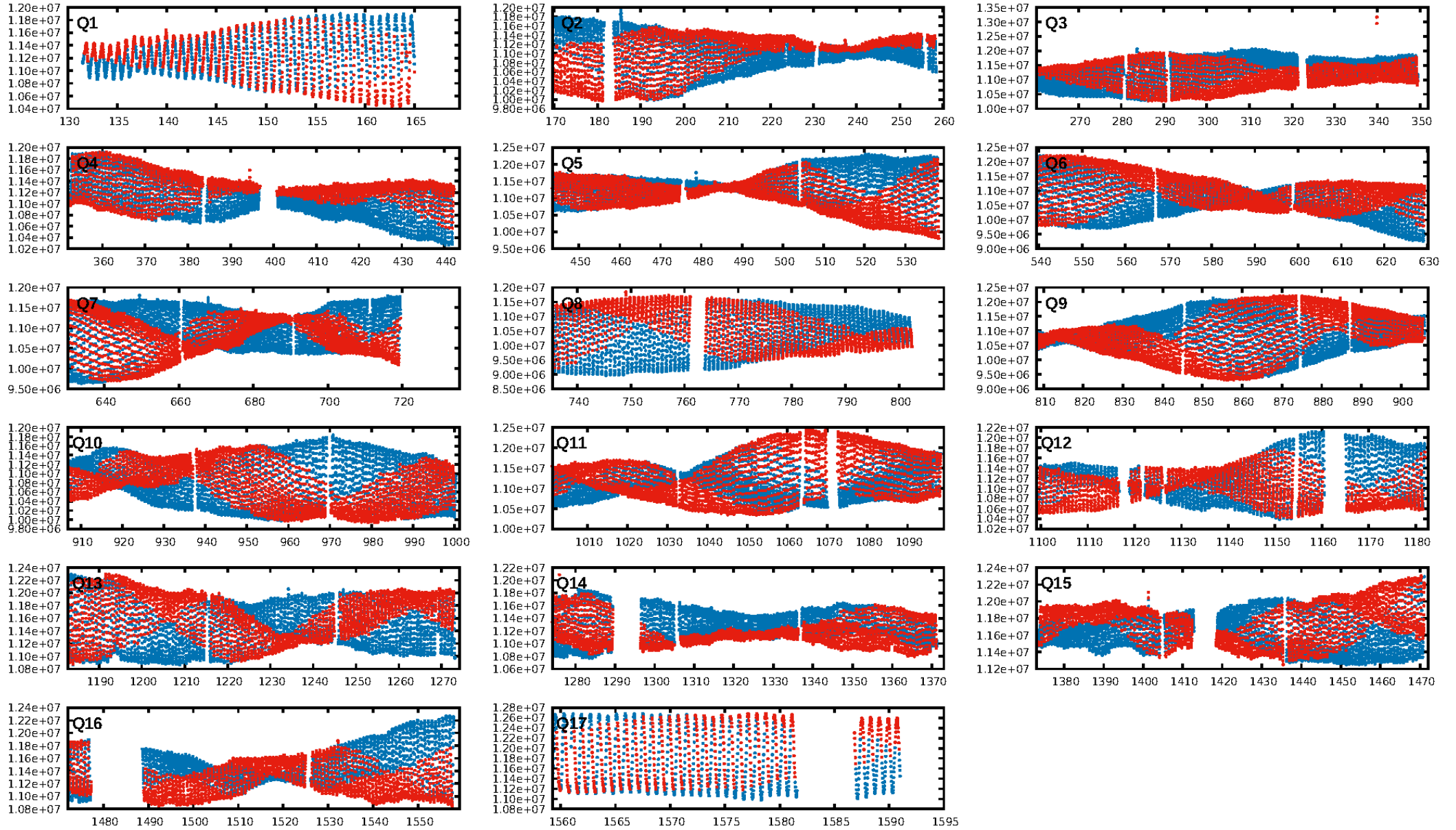
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 8.50e-16
RollingBand-fgt: 1.00 [1619/1619]
GhostDiagnostic-chr: -0.3158
Centroid-sig: 71.5%
Centroid-so: 1.195 arcsec [0.65σ]
OotOffset-rm: 0.057 arcsec [0.46σ]
KicOffset-rm: 0.080 arcsec [0.62σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 0.53 [9/17]
DiffImageOverlap-fno: 1.00 [17/17]

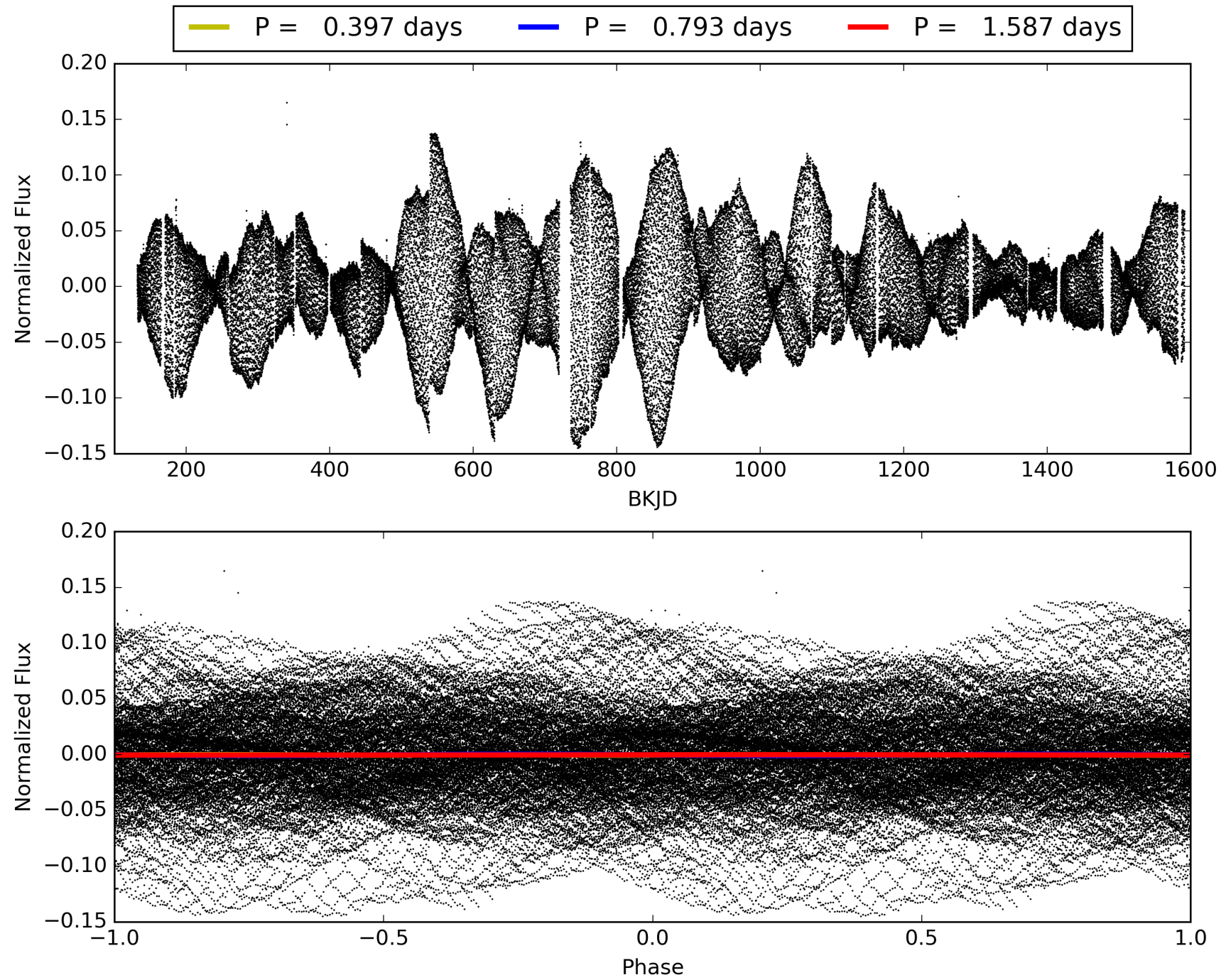
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 05:54:59 Z

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

TCE 009268902-01, PDC Light Curves

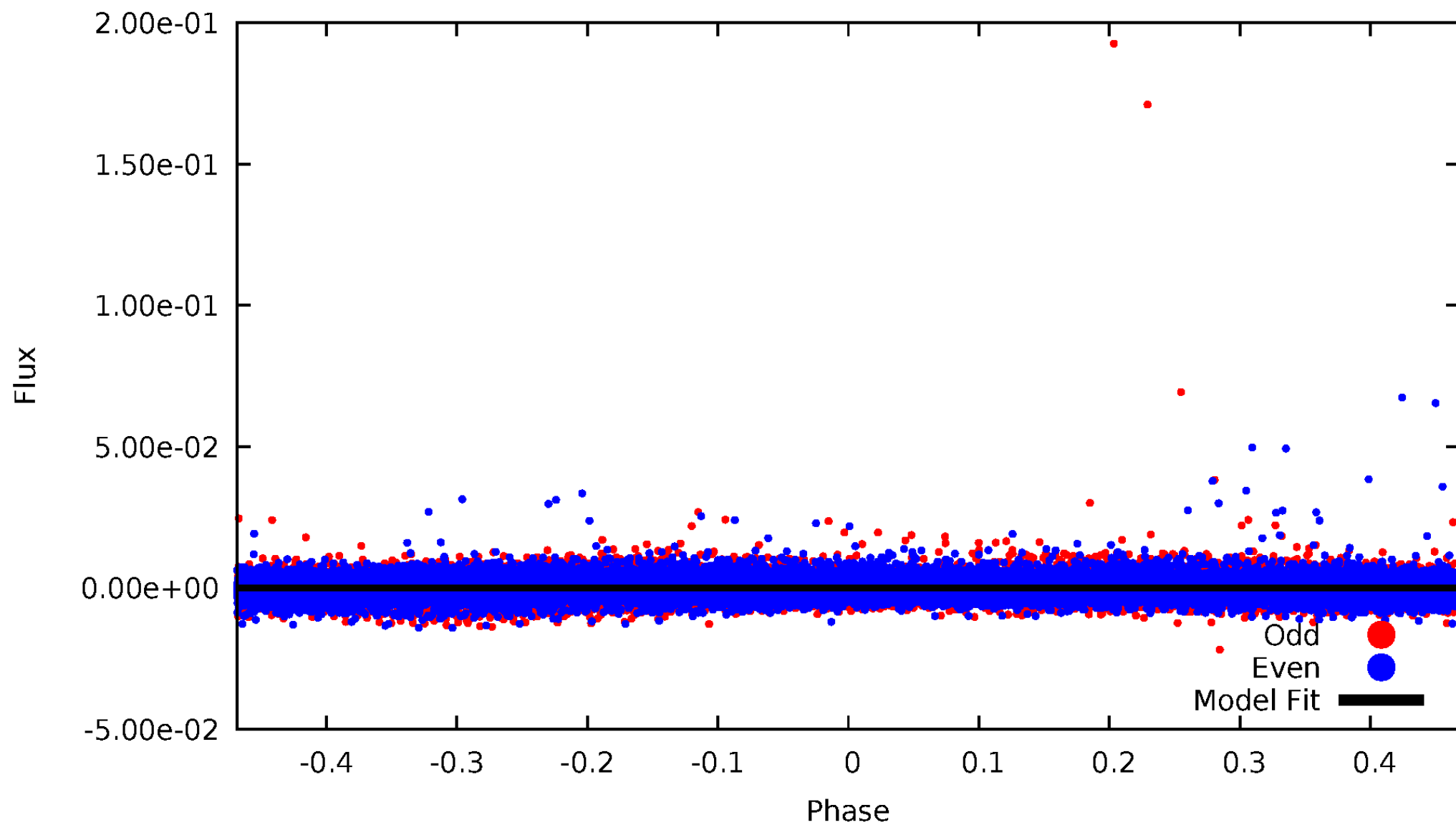


TCE 009268902-01



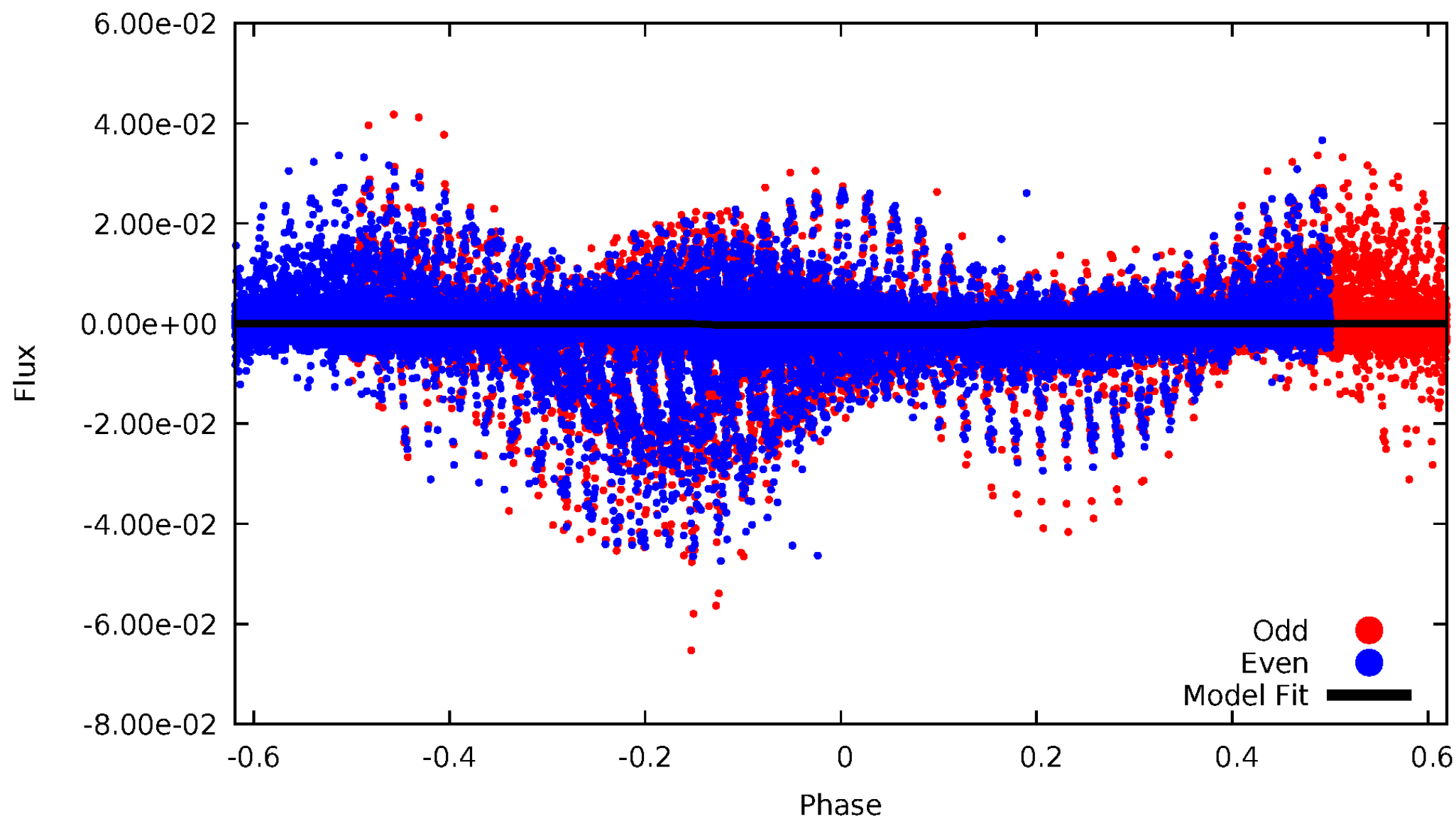
DV Odd/Even

TCE 009268902-01



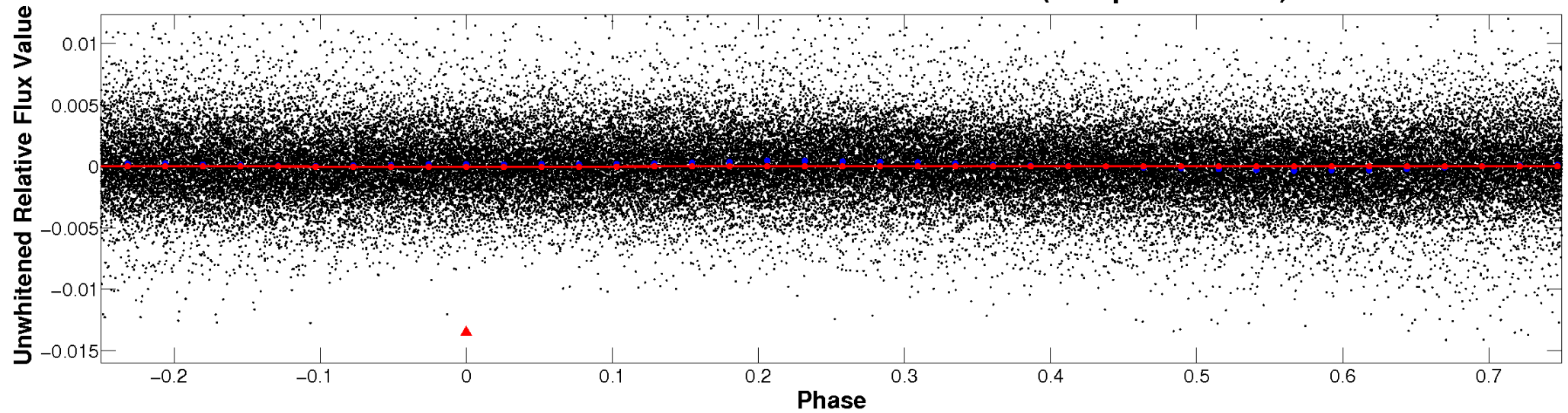
ALT Odd/Even

TCE 009268902-01

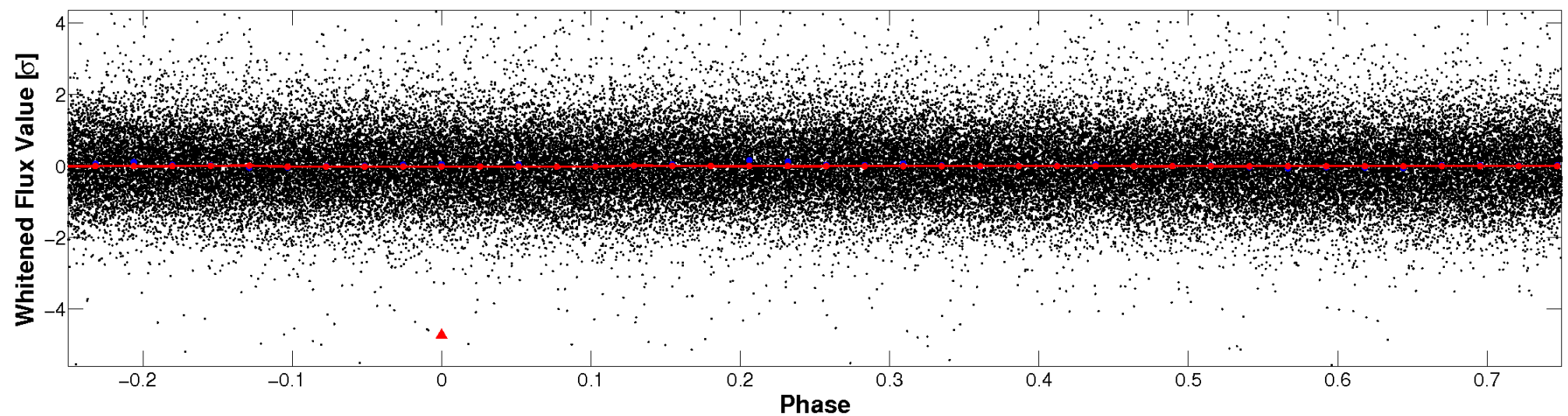


Non-Whitened Vs. Whitened Light Curve

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

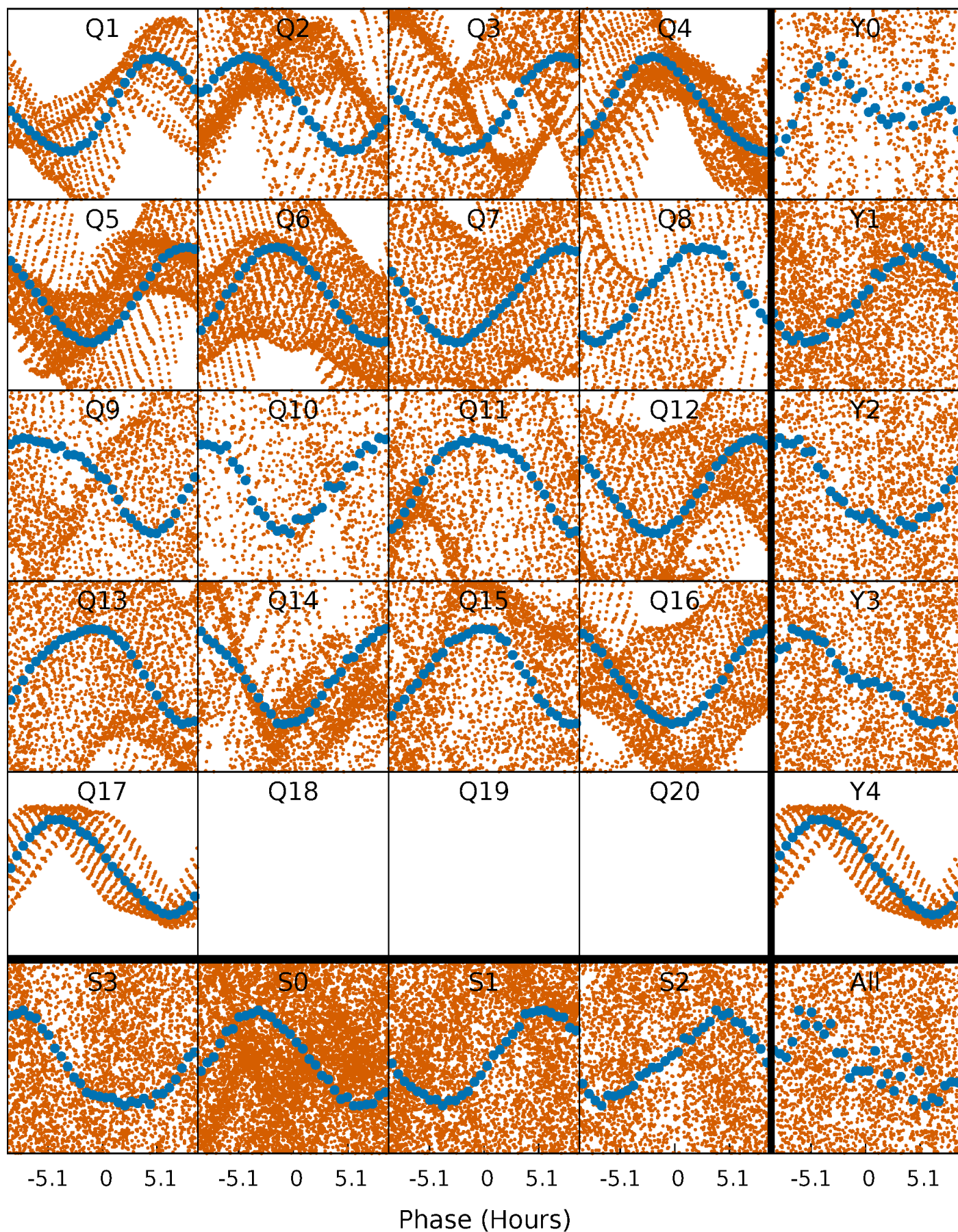


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



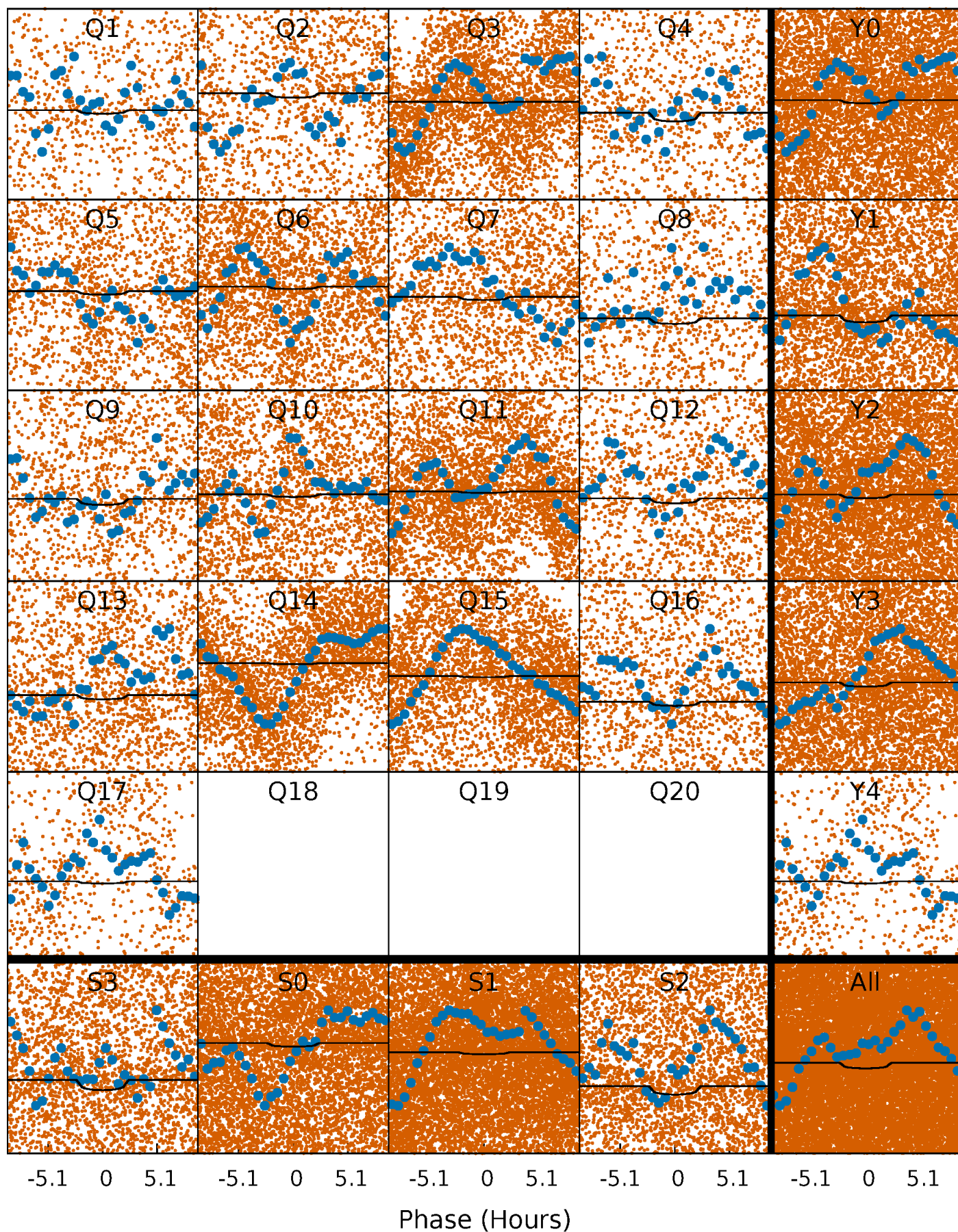
PDC Quarter-Phased Transit Curves

TCE 009268902-01 P= 0.793306 Days $T_0=132.636897$ (BKJD)



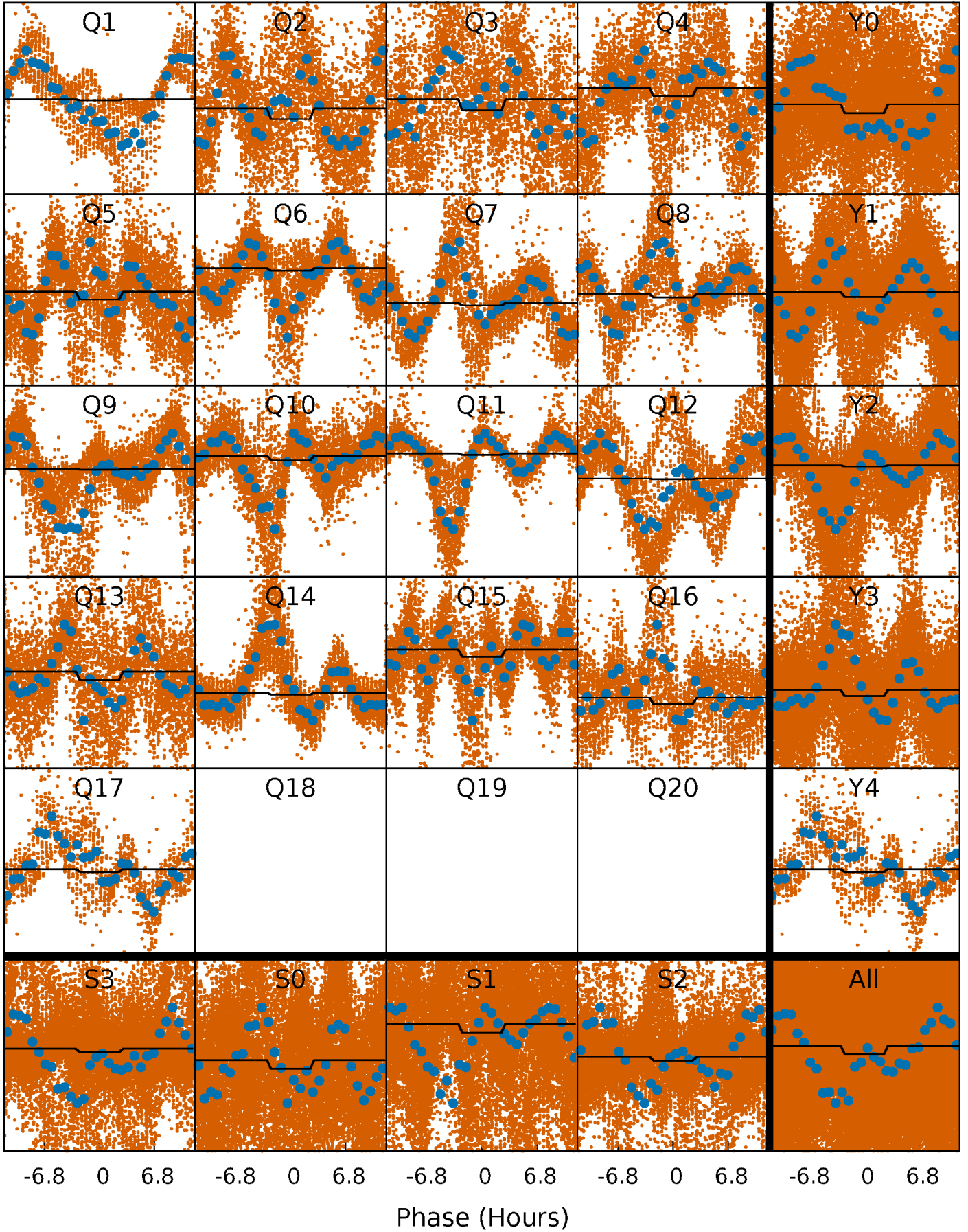
DV Quarter-Phased Transit Curves

TCE 009268902-01 $P = 0.793306$ Days $T_0 = 132.636897$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

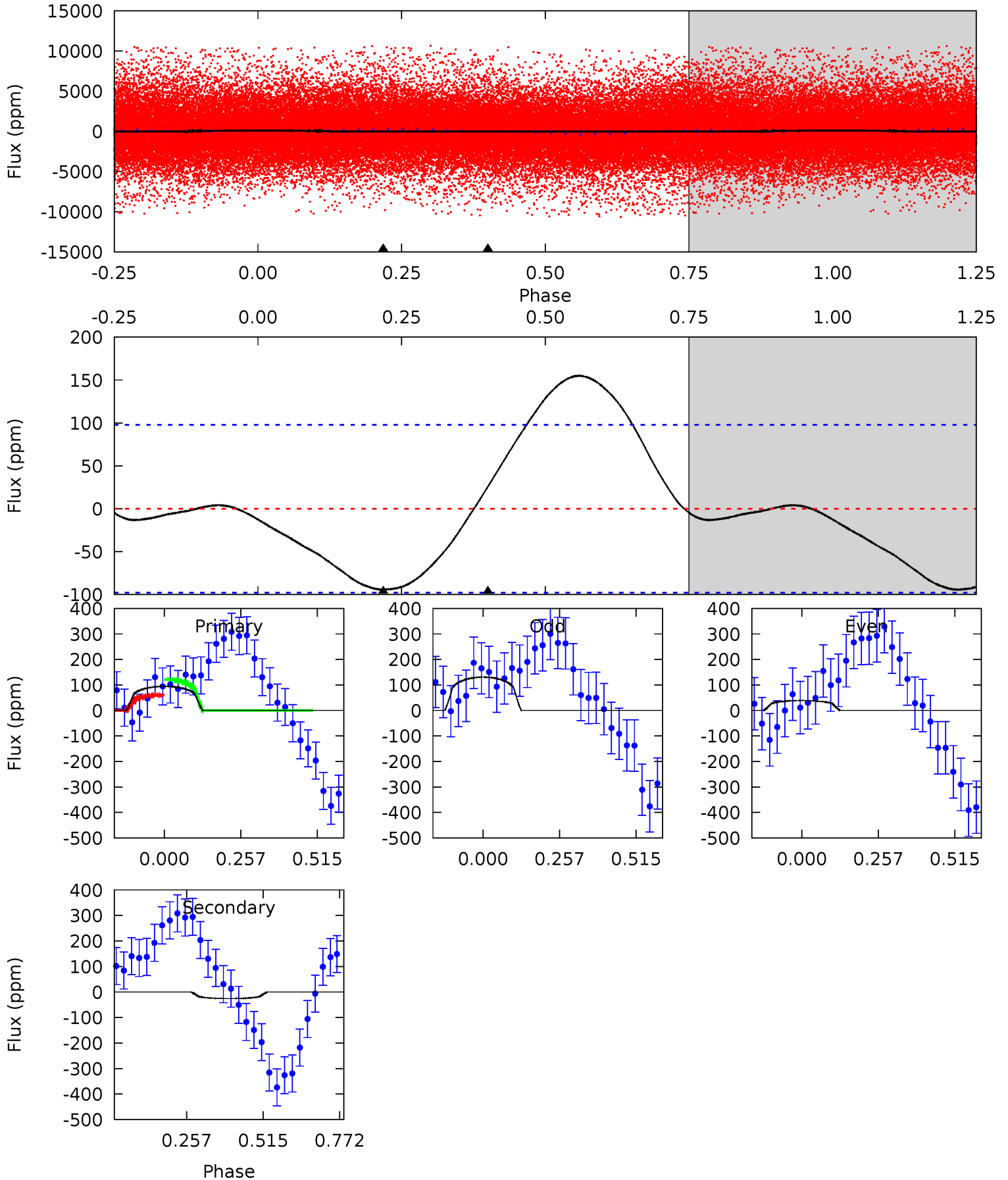
TCE 009268902-01 P= 0.796581 Days $T_0=132.302001$ (BKJD)



DV Model-Shift Uniqueness Test

009268902-01, P = 0.793306 Days, E = 131.050285 Days

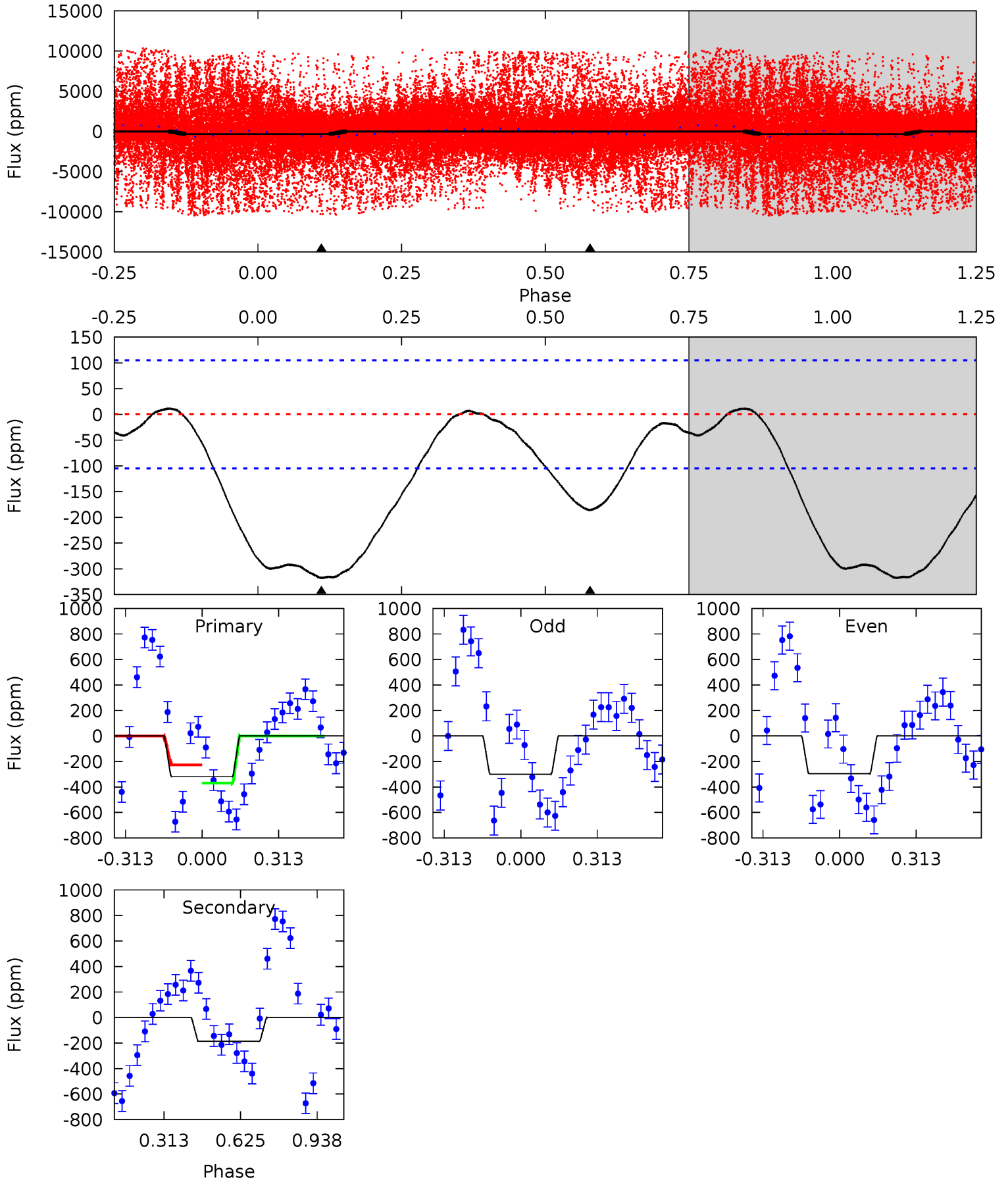
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
4.21	-1.15	0	0	4.36	1.13	1.14	4.21	4.21	-1.15	-1.15	2.06	1.53	0.62	1.45



Alt Model-Shift Uniqueness Test

009268902-01, P = 0.796581 Days, E = 131.505420 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.1	7.65	0	0	4.32	1.01	0.39	13.1	13.1	7.65	7.65	0.07	3.09	0.03	3.00



Stellar Parameters For KIC 009268902

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5853^{+158}_{-176}	$4.544^{+0.034}_{-0.195}$	$-0.180^{+0.300}_{-0.300}$	$0.868^{+0.247}_{-0.082}$	$0.961^{+0.110}_{-0.121}$	$2.069^{+0.404}_{-1.062}$
	+3%/-3%	+1%/-4%	+167%/-167%	+28%/-9%	+11%/-13%	+20%/-51%
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 009268902-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	26 ± 22	$1.02^{+0.94}_{-0.67}$	2683^{+179}_{-120}	-4251^{+1048}_{-2769}	$-2.906^{+2.632}_{-24.716}$
Alt.	-186 ± 24	$1.78^{+1.07}_{-0.97}$	2664^{+182}_{-118}	5178^{+2546}_{-967}	$9.073^{+33.412}_{-5.701}$

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

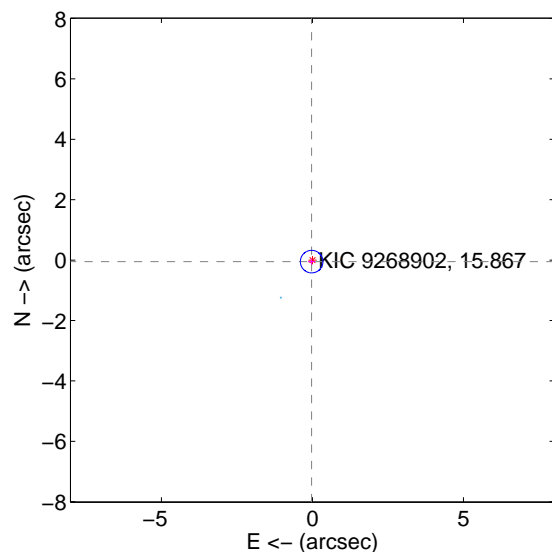
Supplemental centroid analysis for 009268902-01. Kepler magnitude: 15.87. Transit SNR 1.74

There are 9 quarters with good PRF difference image offsets

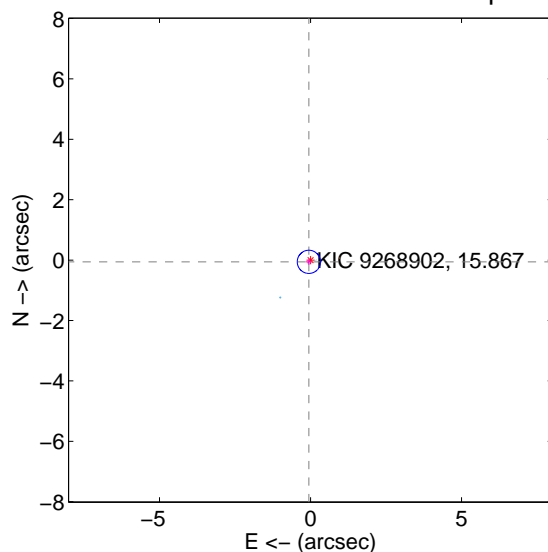
The direct PRF centroid is offset from the target star catalog position by about 0.07 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.057 ± 0.124	0.46	0.027 ± 0.114	-0.050 ± 0.101
PRF-fit source offset from KIC position	0.080 ± 0.128	0.62	0.055 ± 0.114	-0.057 ± 0.097
photometric centroid source offset	1.20 ± 1.83	0.65	1.17 ± 1.83	0.27 ± 1.84

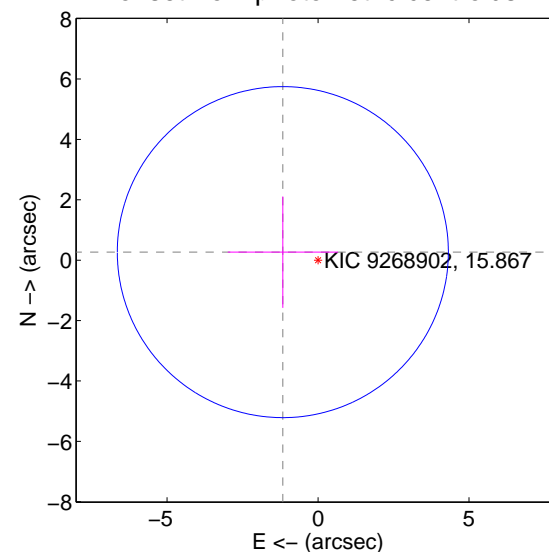
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

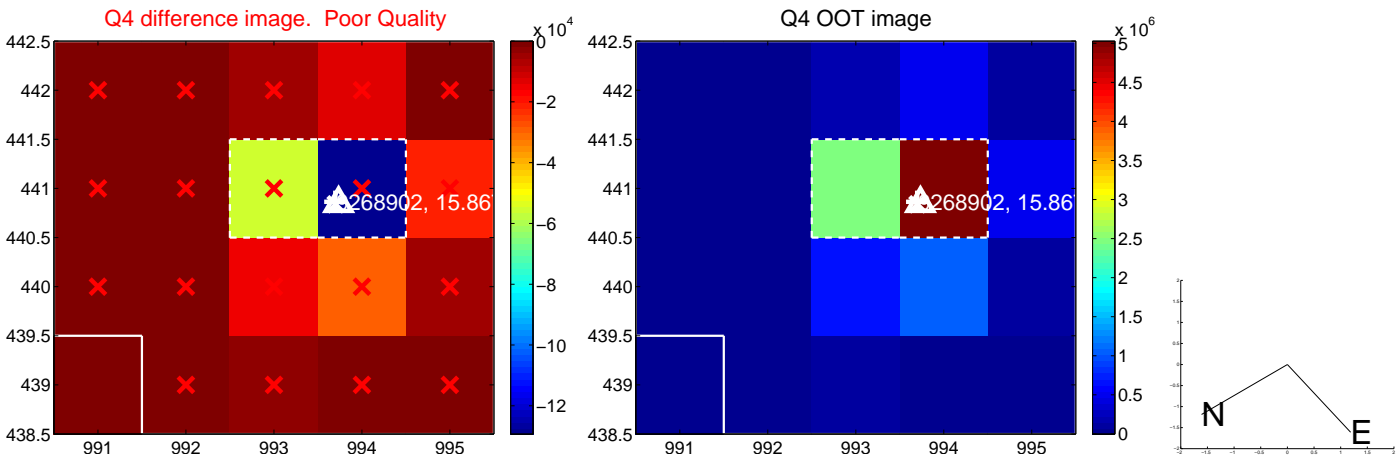
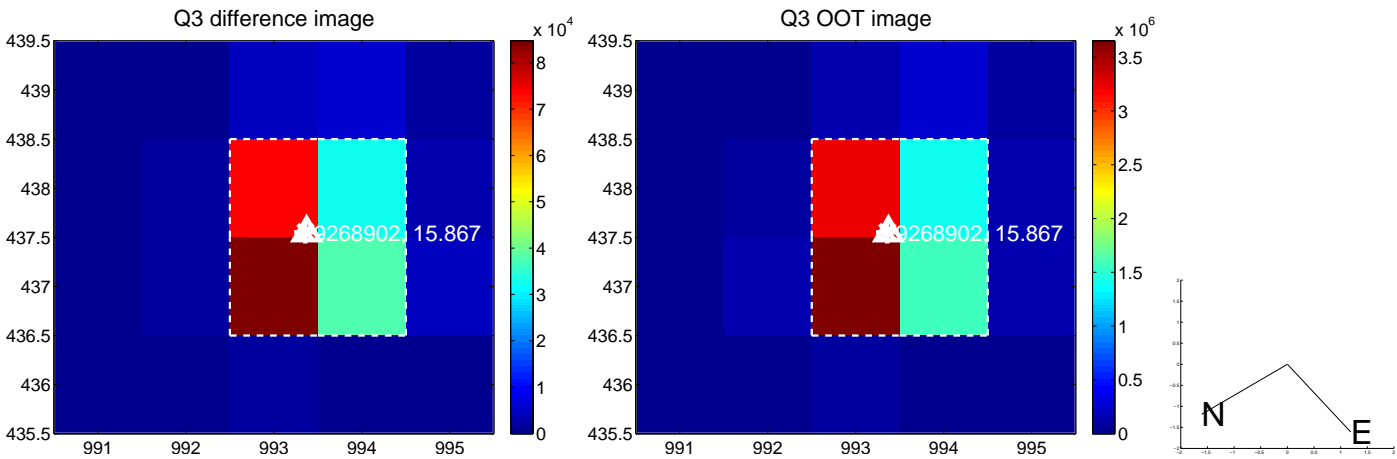
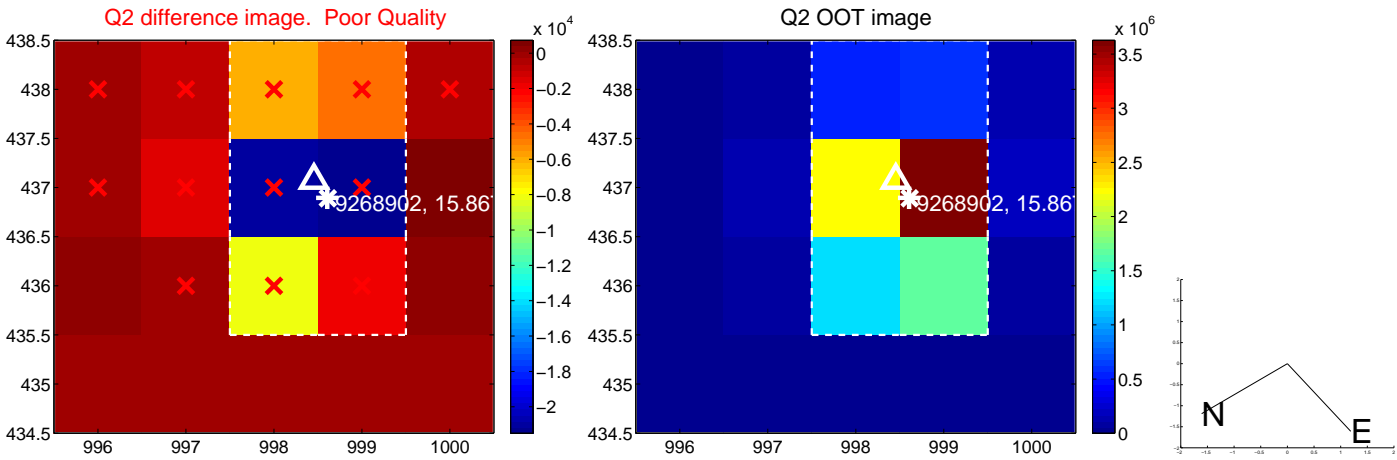
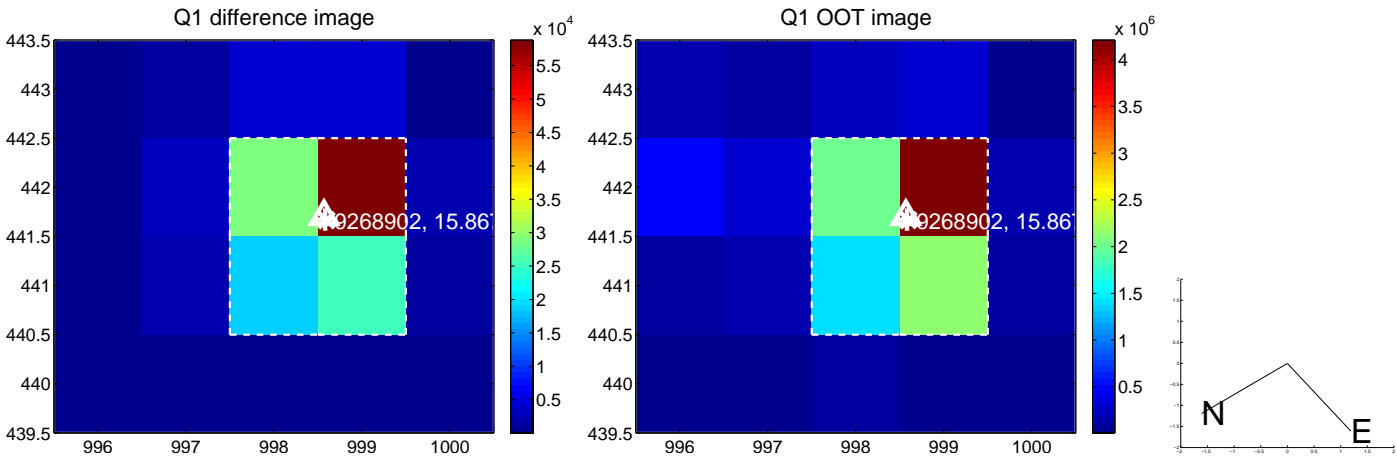


offset from photometric centroids

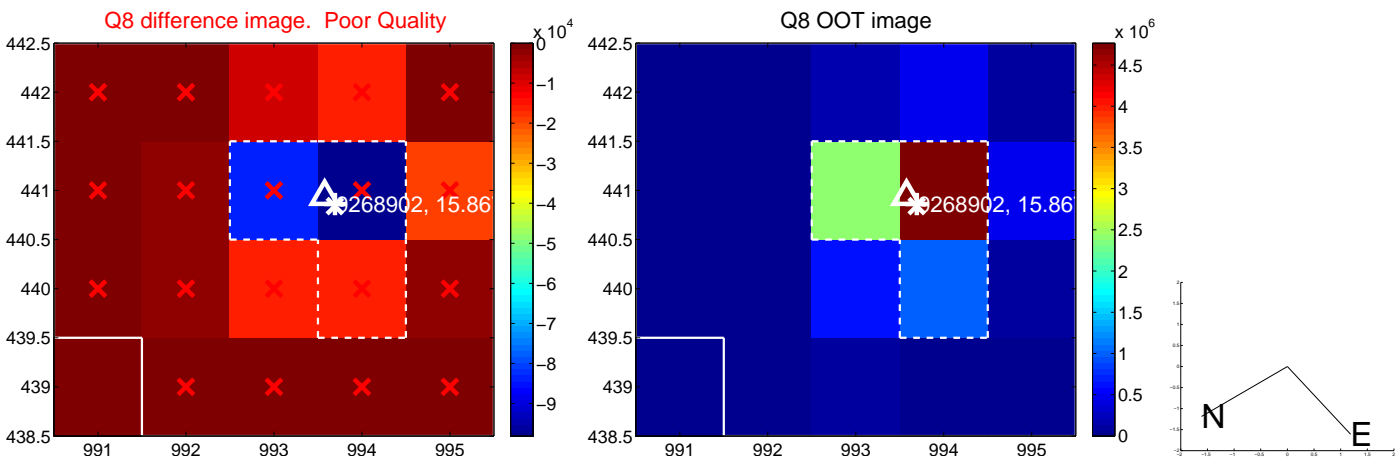
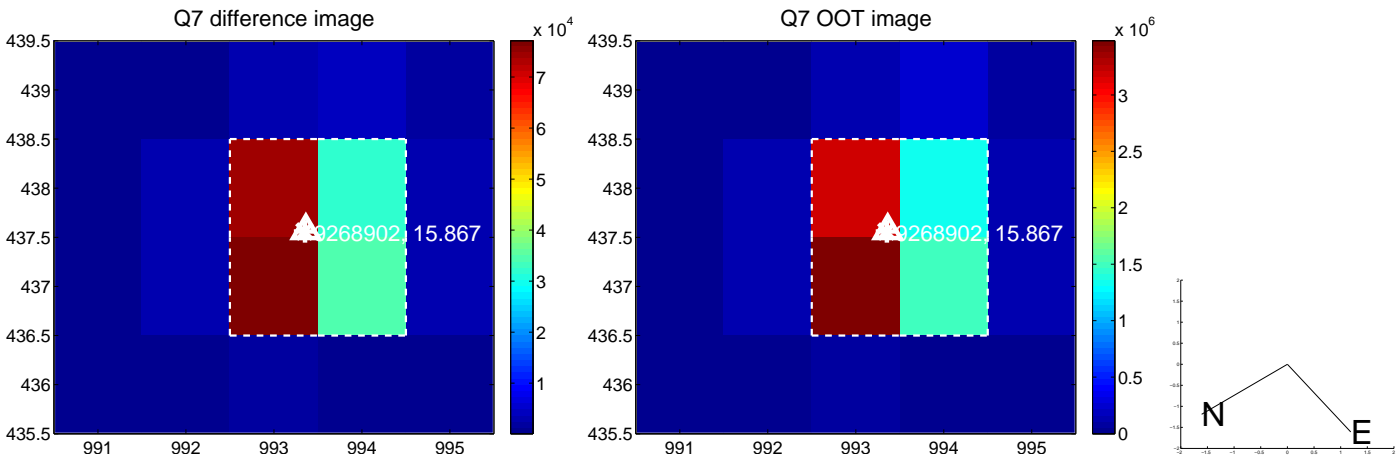
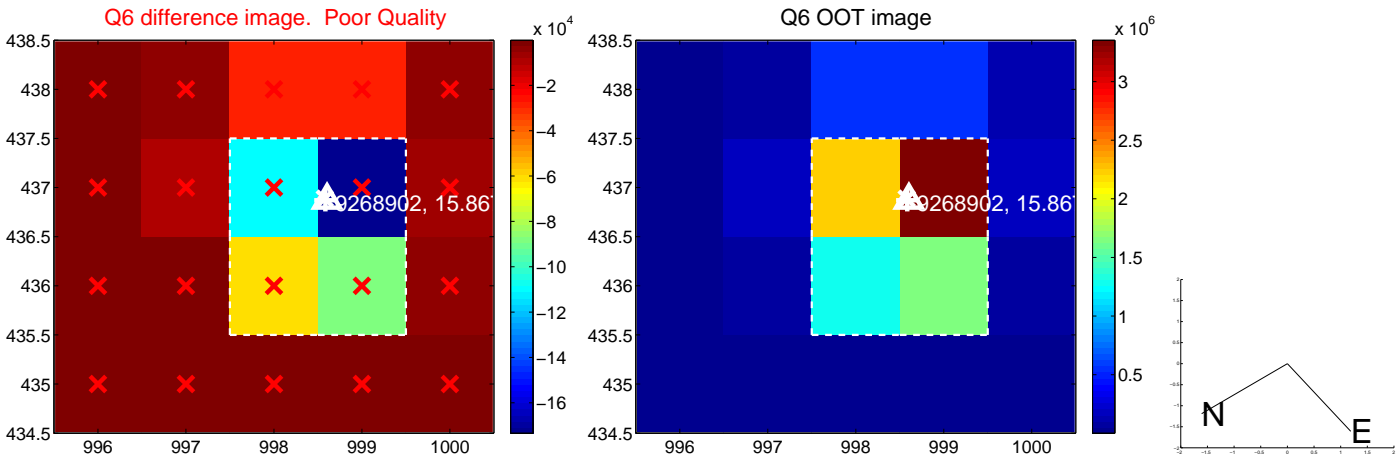
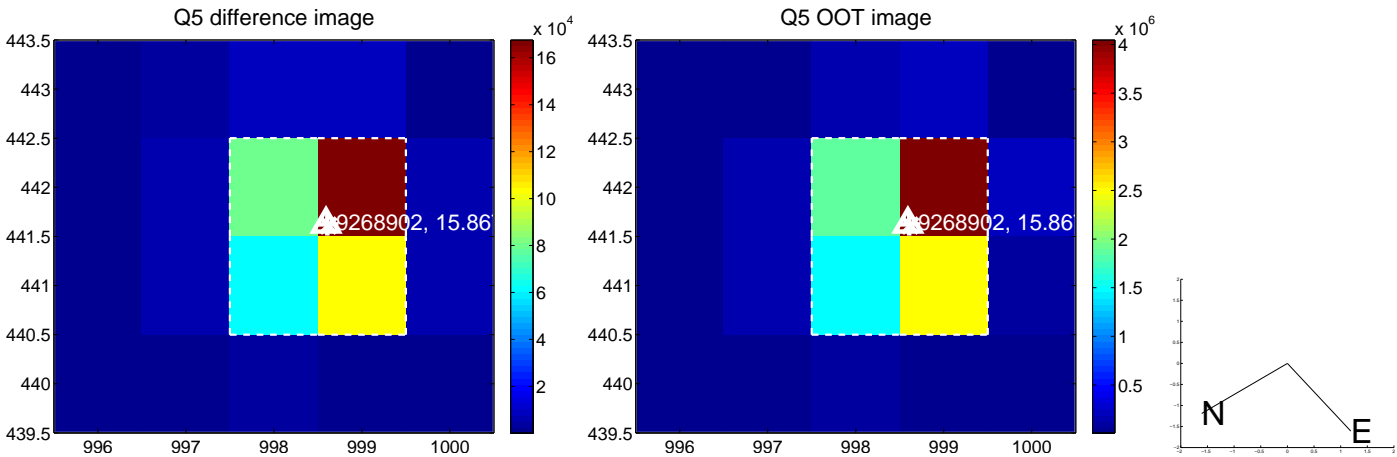


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets**; **Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

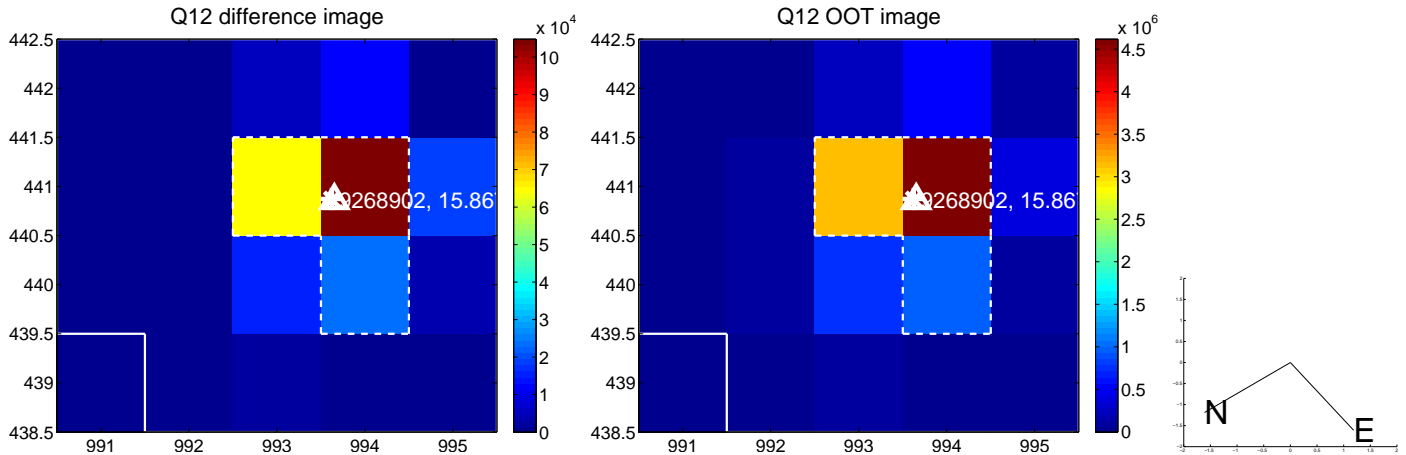
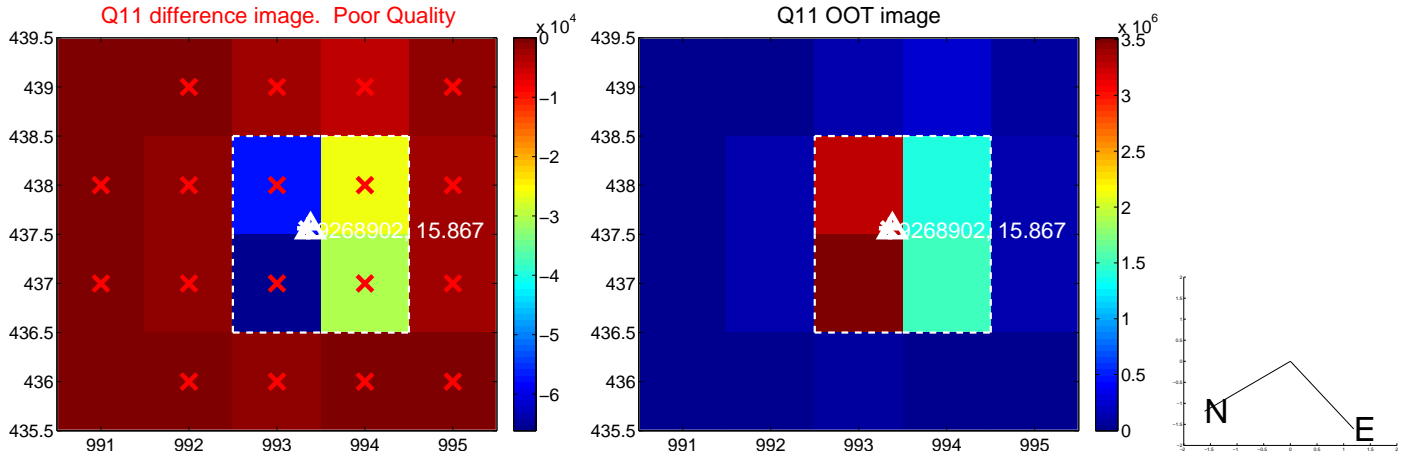
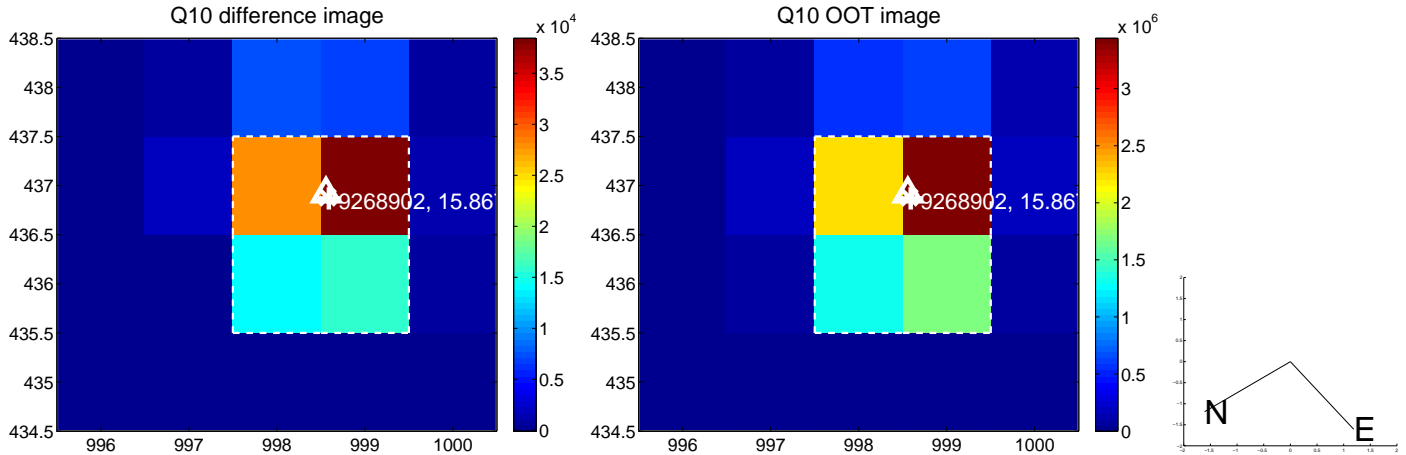
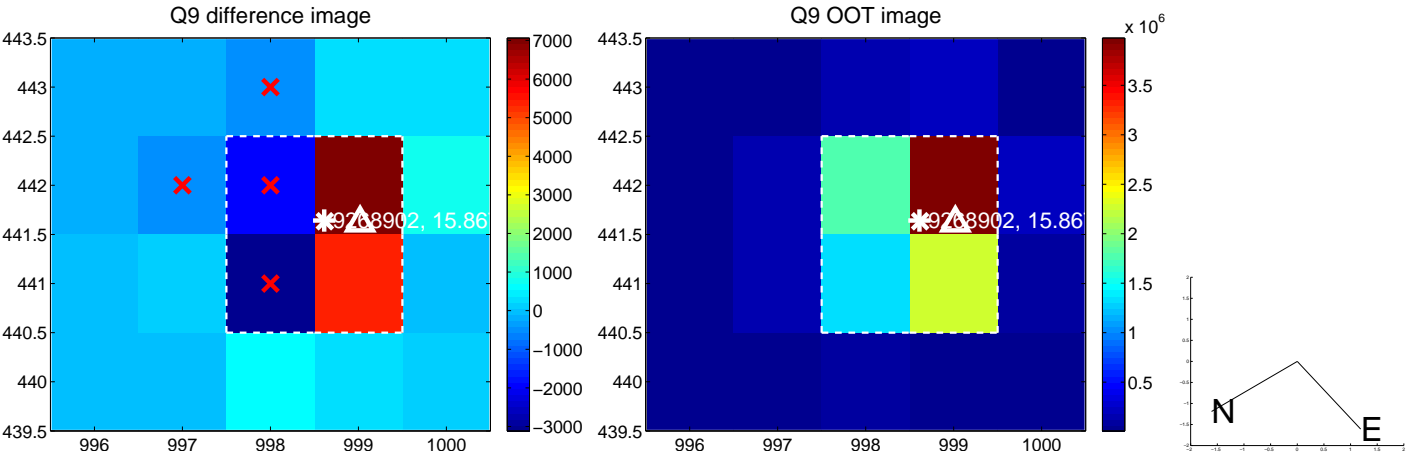
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



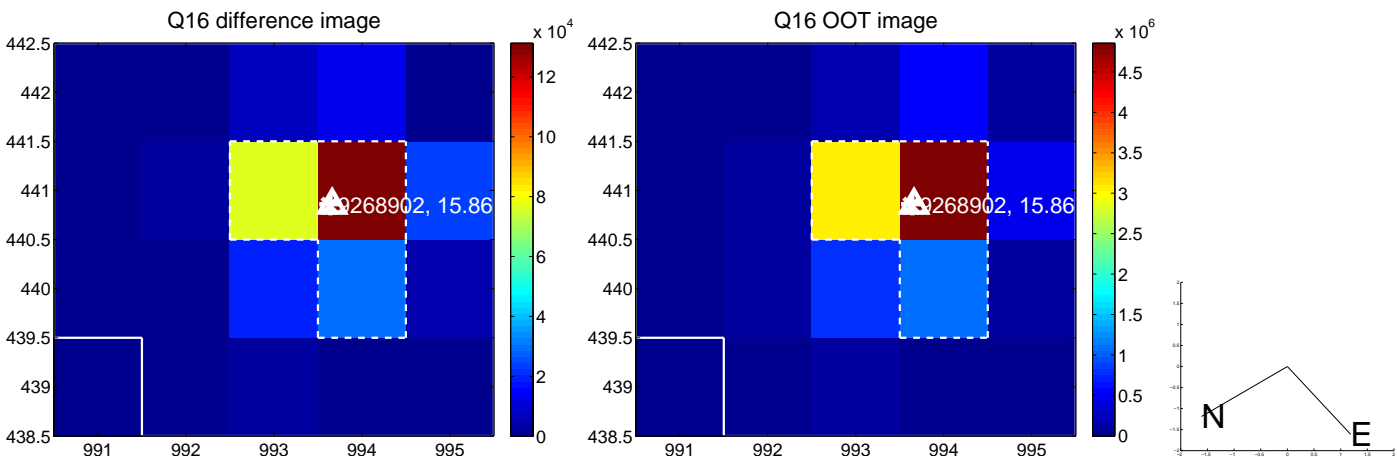
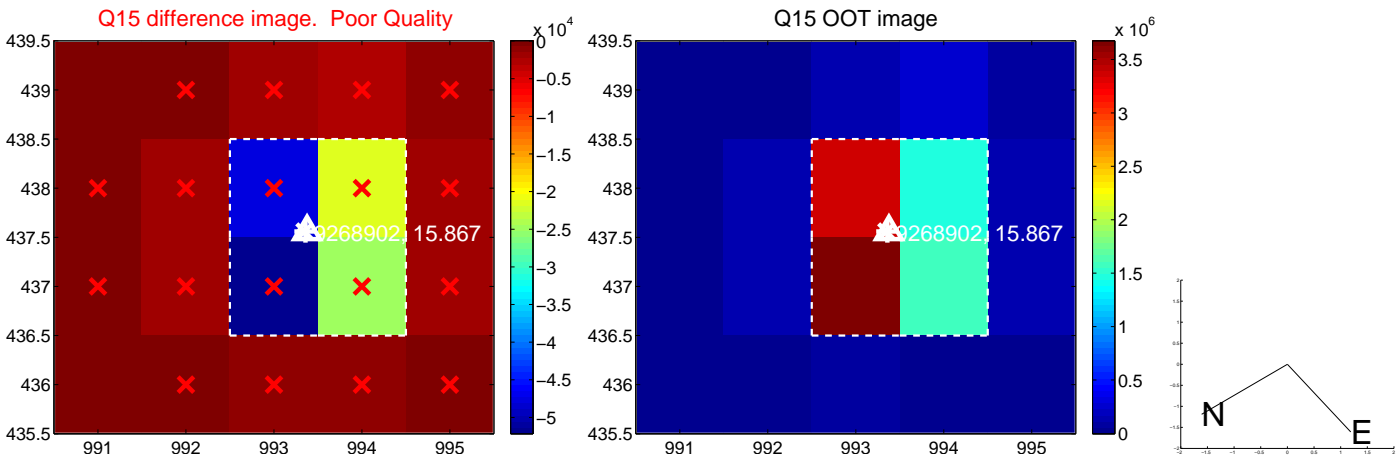
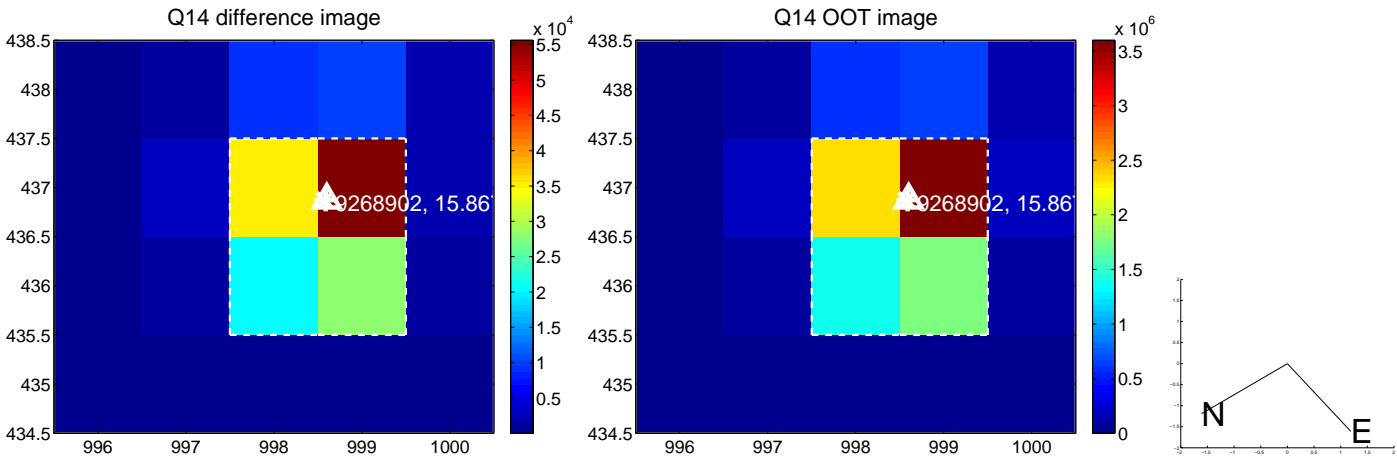
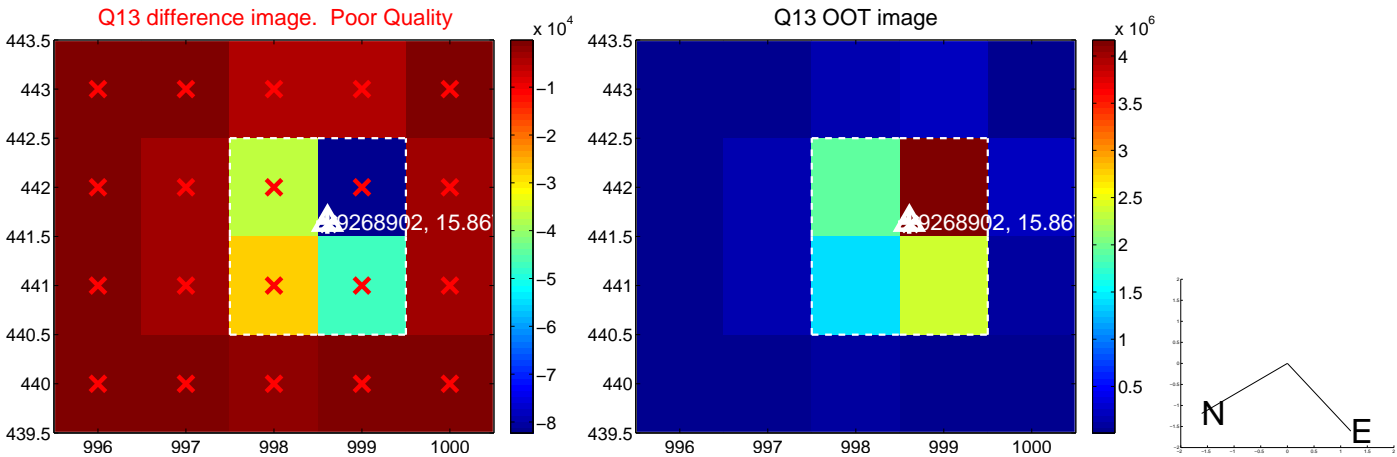
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



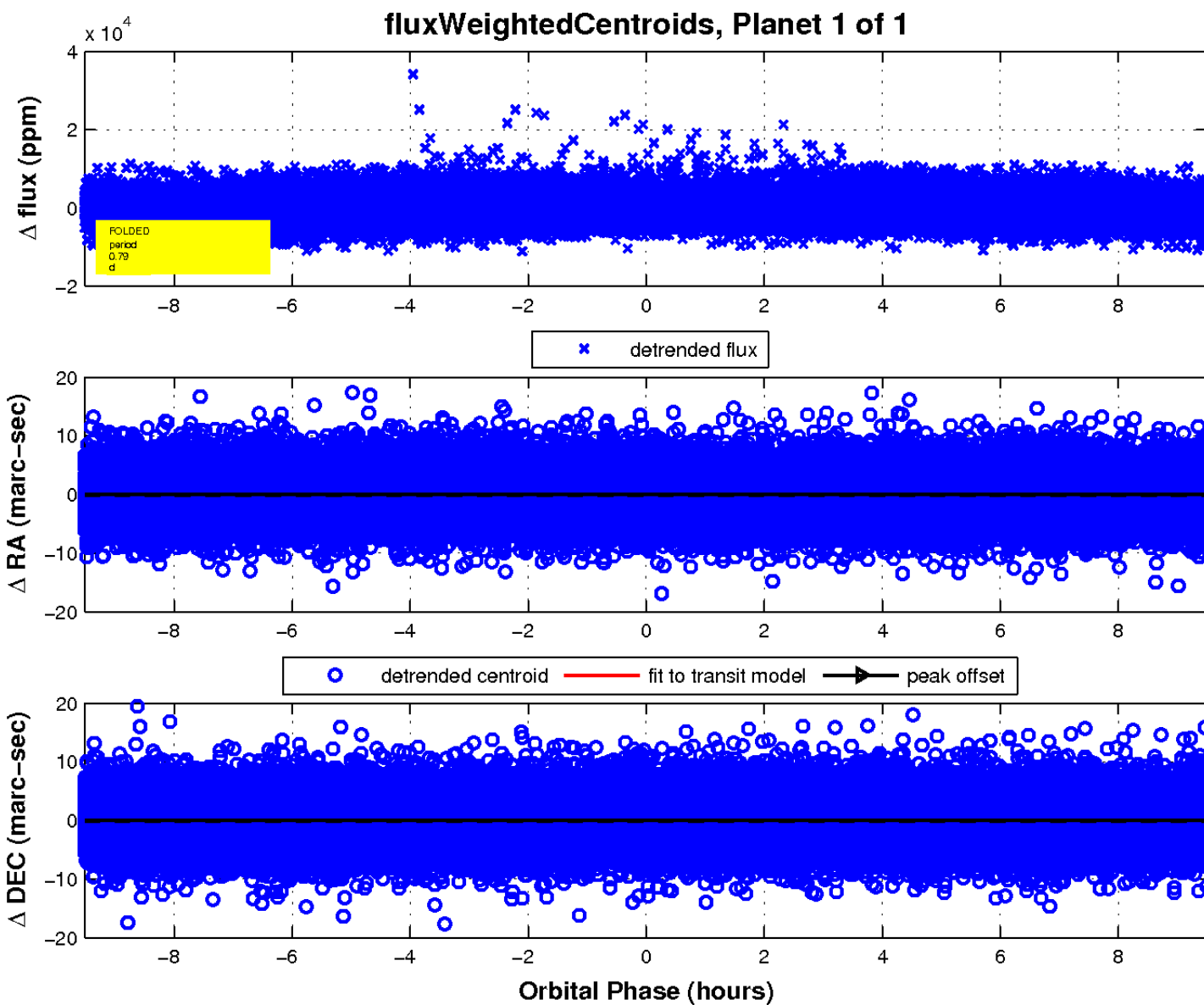
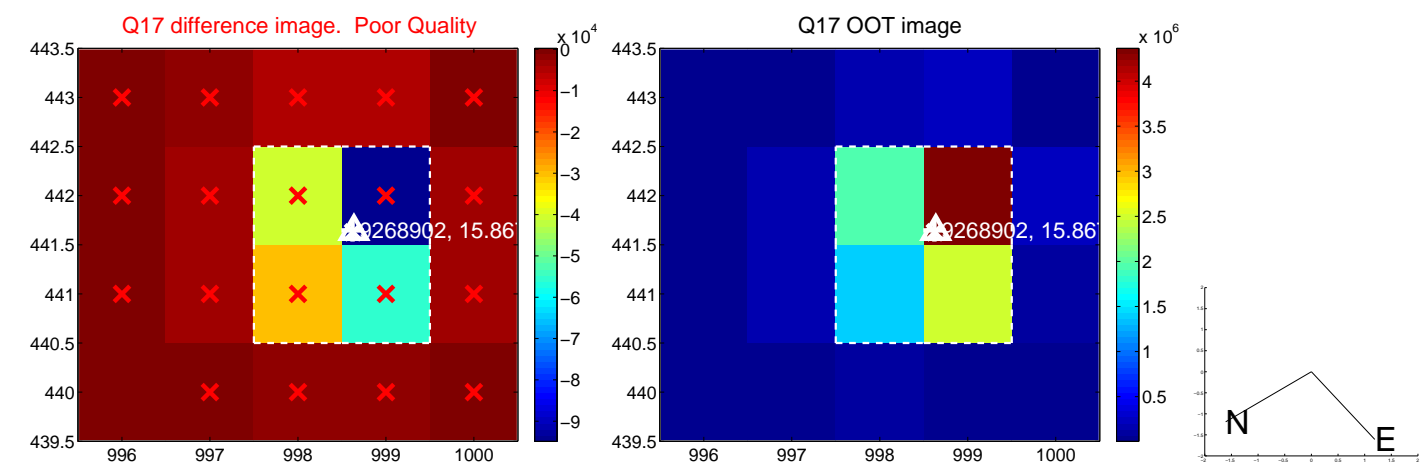
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

