

KIC 007908010

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})
007908010-01	OBS	No	0.913409	132.414594	49.7	4.708	141.1	9.7	0.91	5666	0.89	2622.96

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007908010-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT

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

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

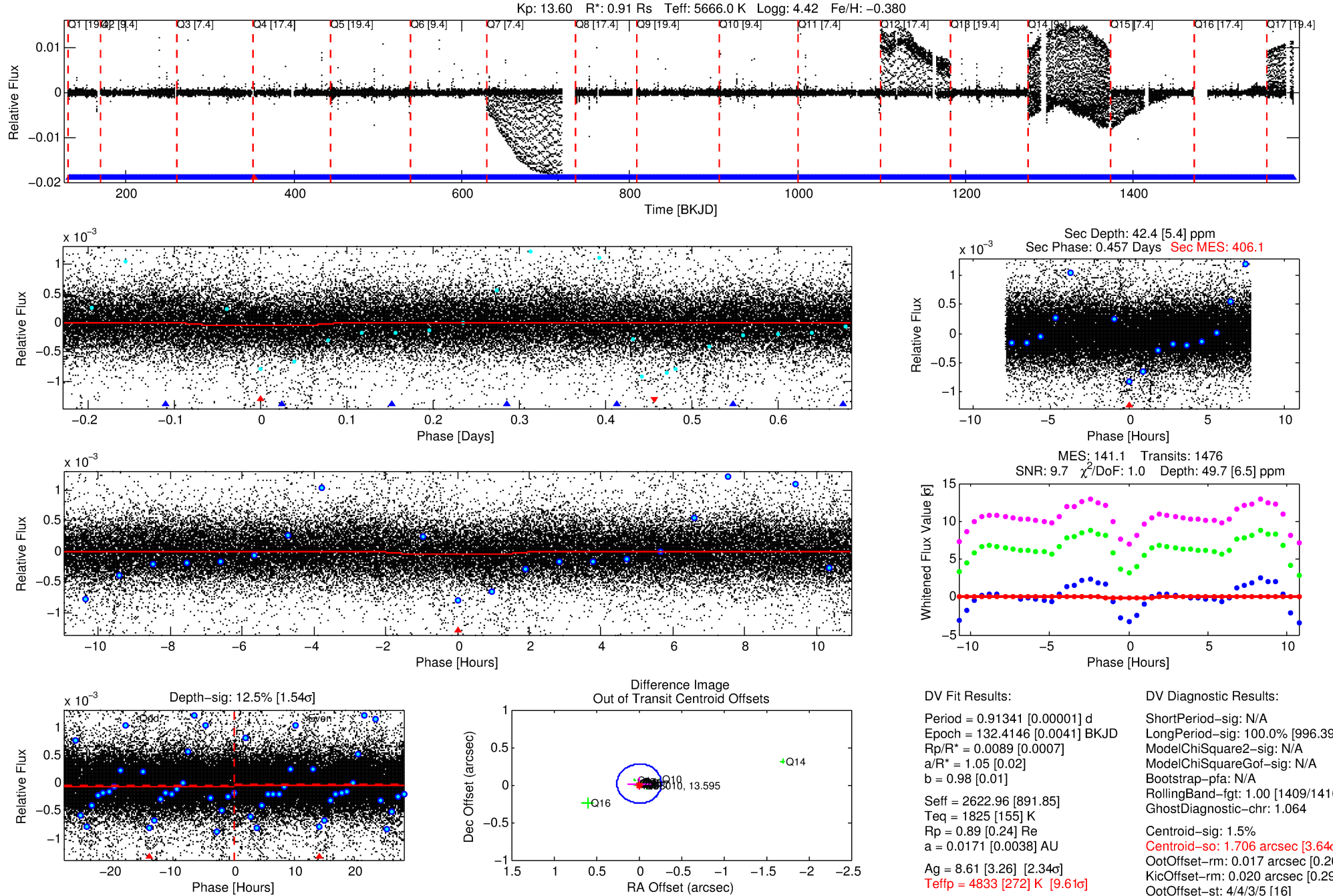
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007908010-01

No Significant Match Found

DV One-Page Summary

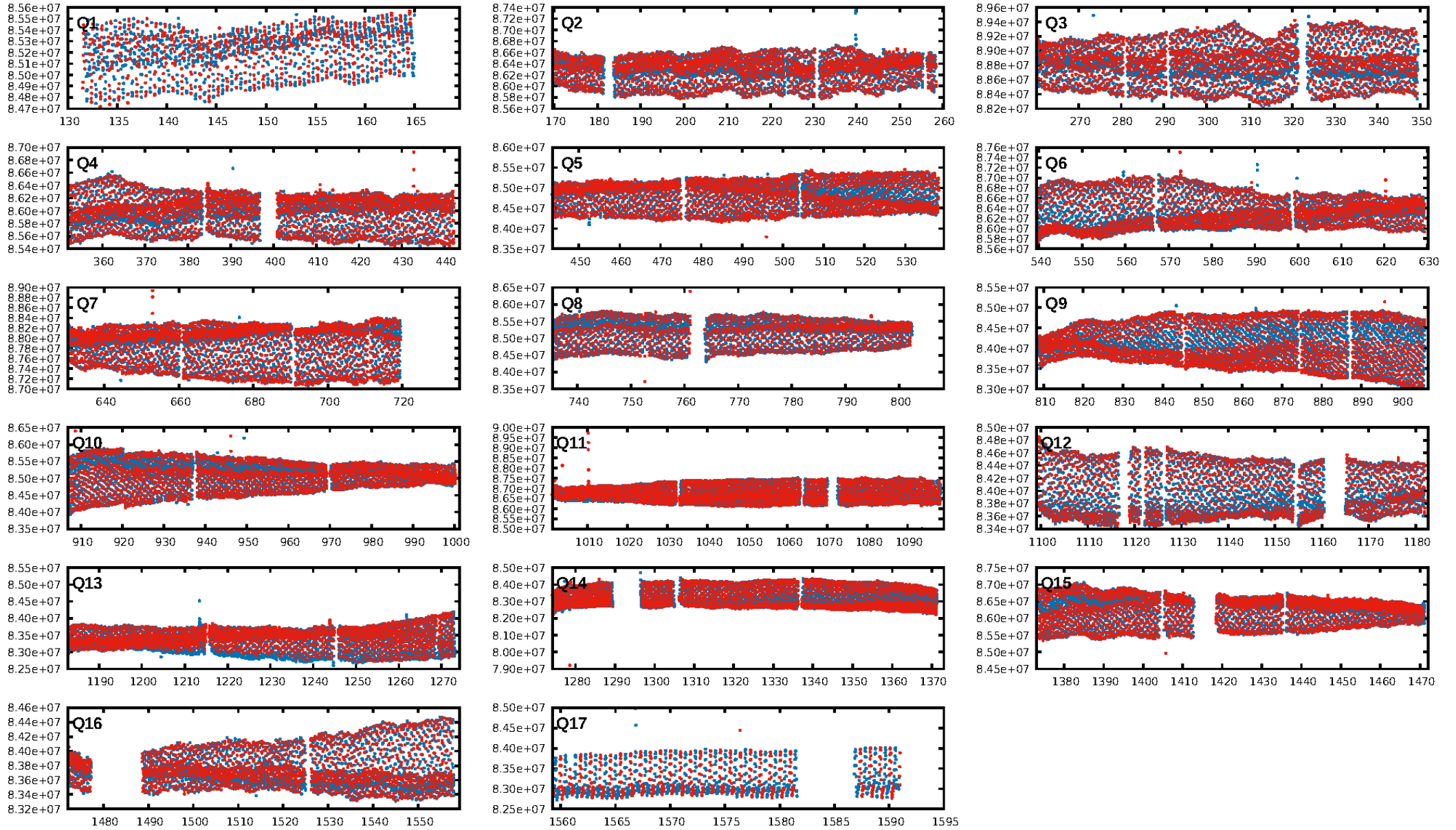
KIC: 7908010 Candidate: 1 of 2 Period: 0.913 d



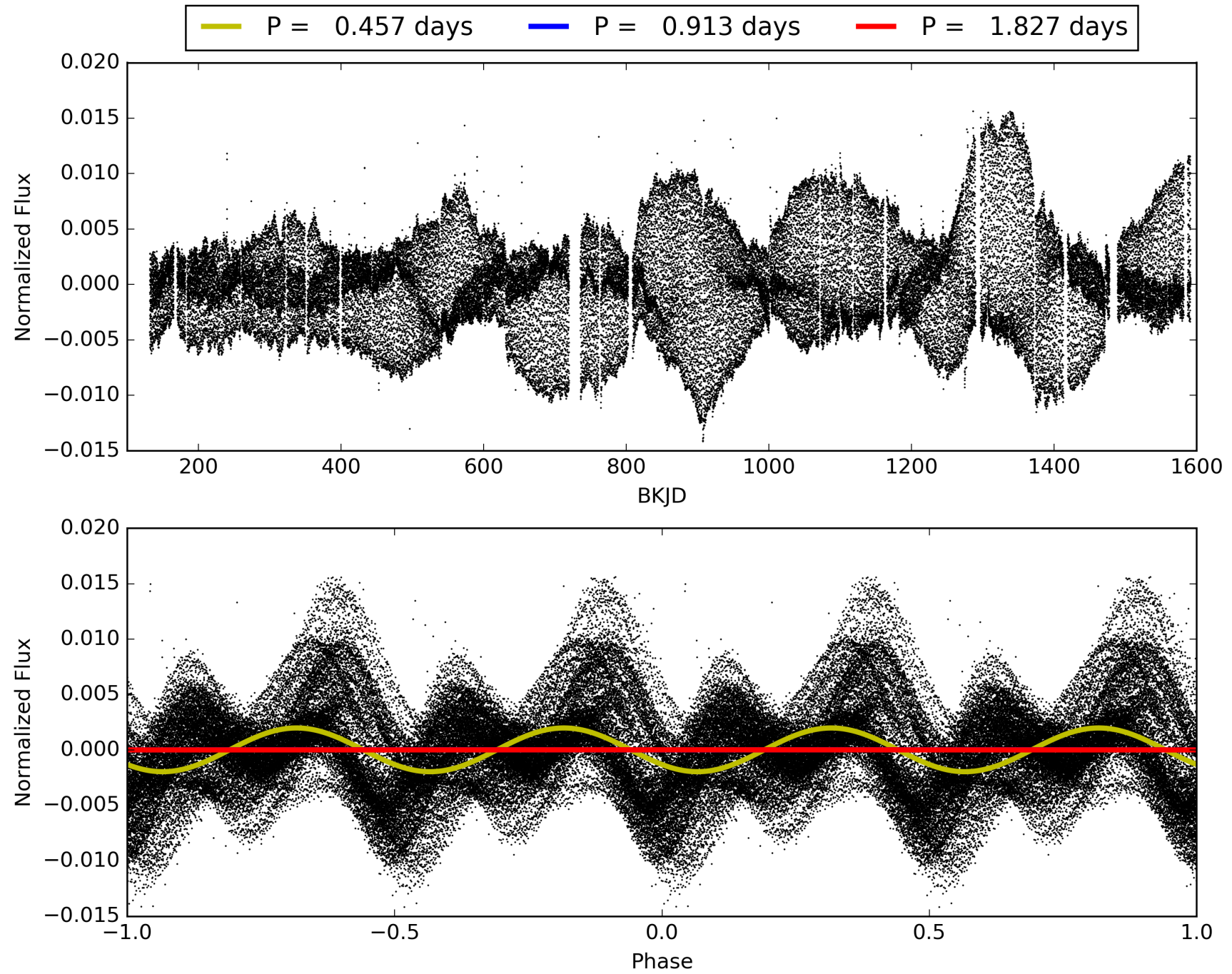
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 06:20:13 Z

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

TCE 007908010-01, PDC Light Curves

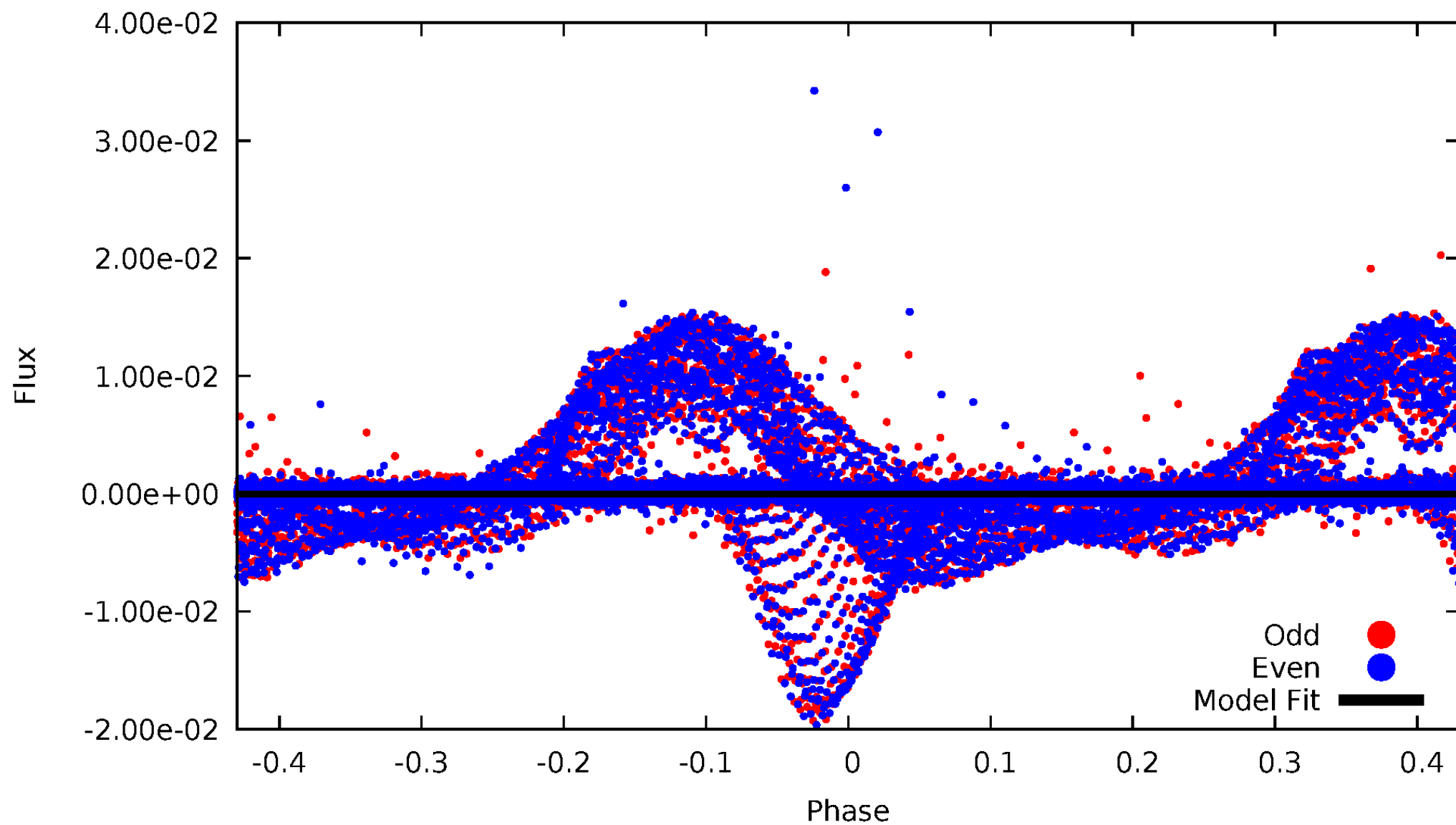


TCE 007908010-01



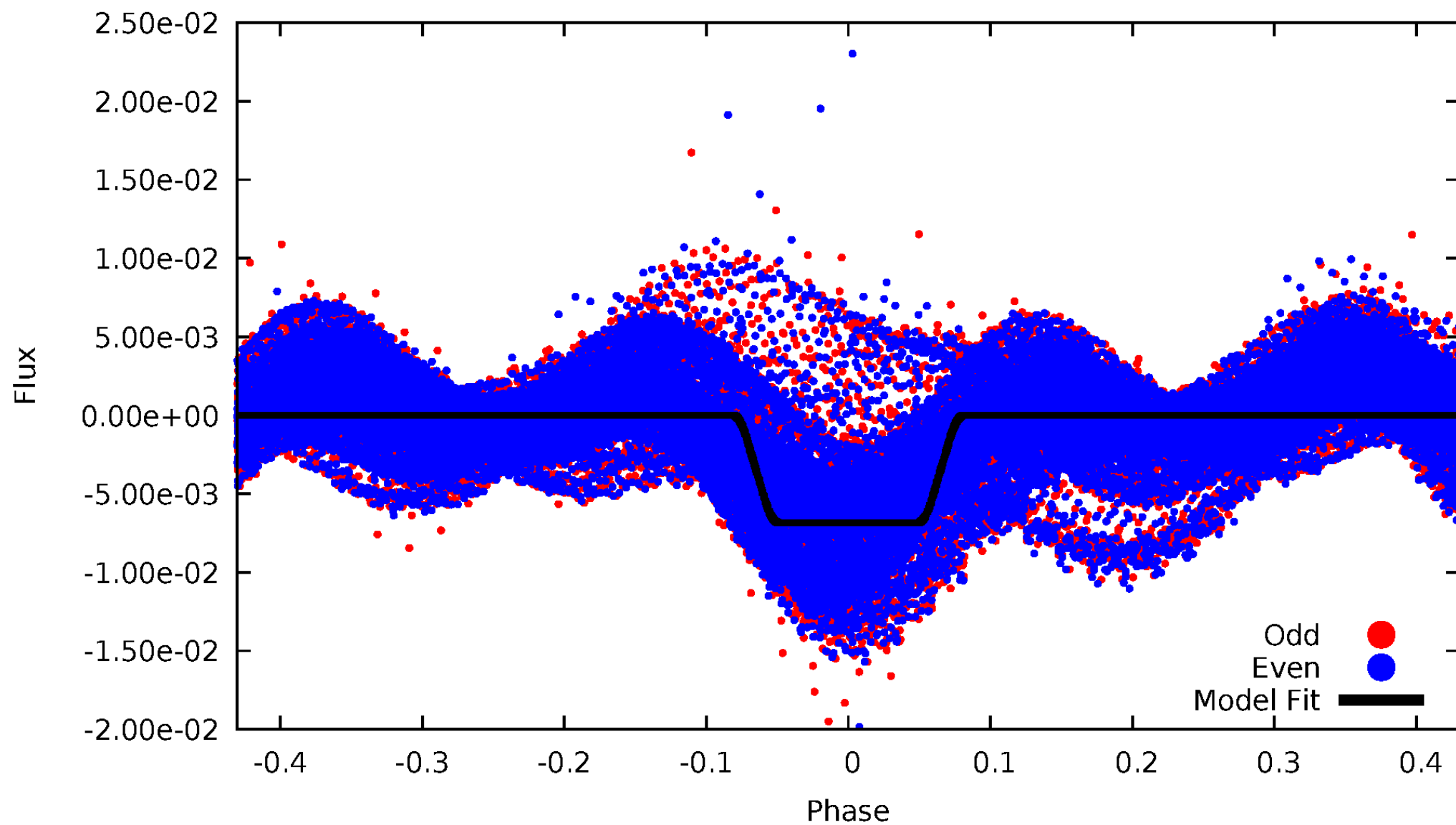
DV Odd/Even

TCE 007908010-01



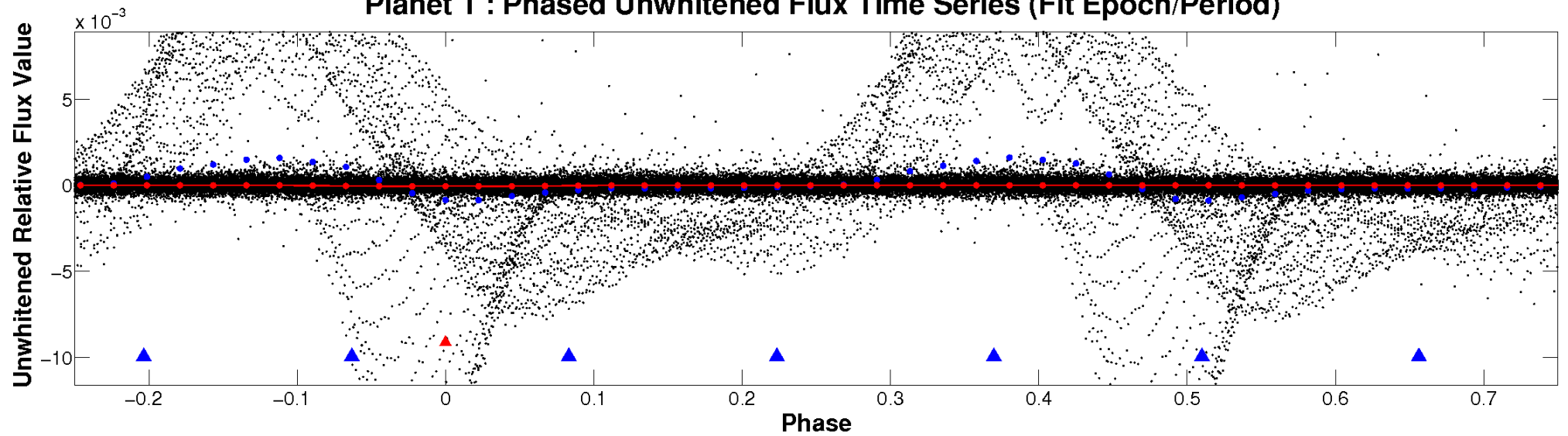
ALT Odd/Even

TCE 007908010-01

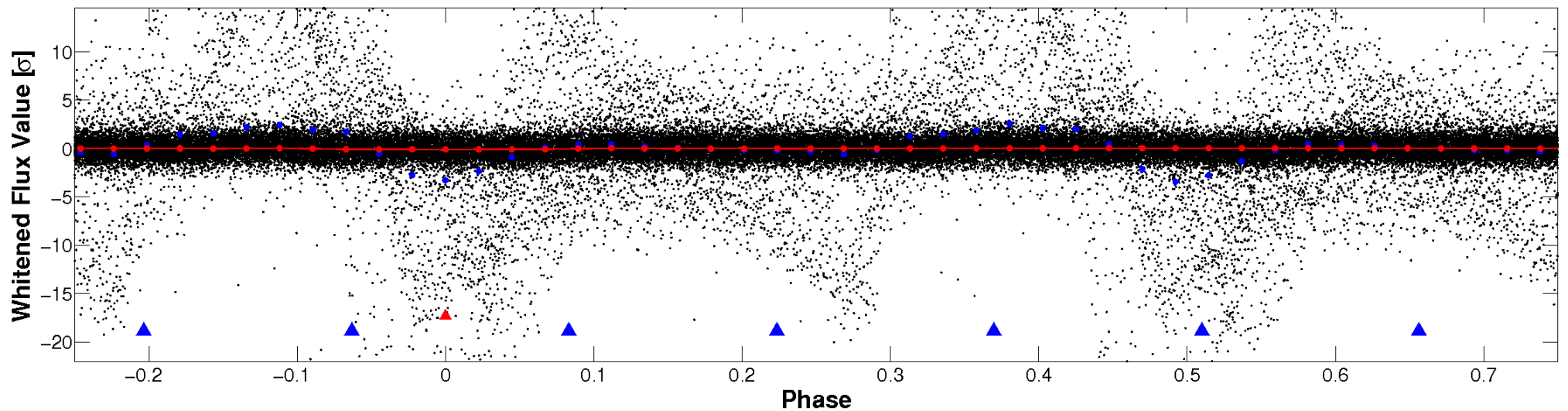


Non-Whitened Vs. Whitened Light Curve

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

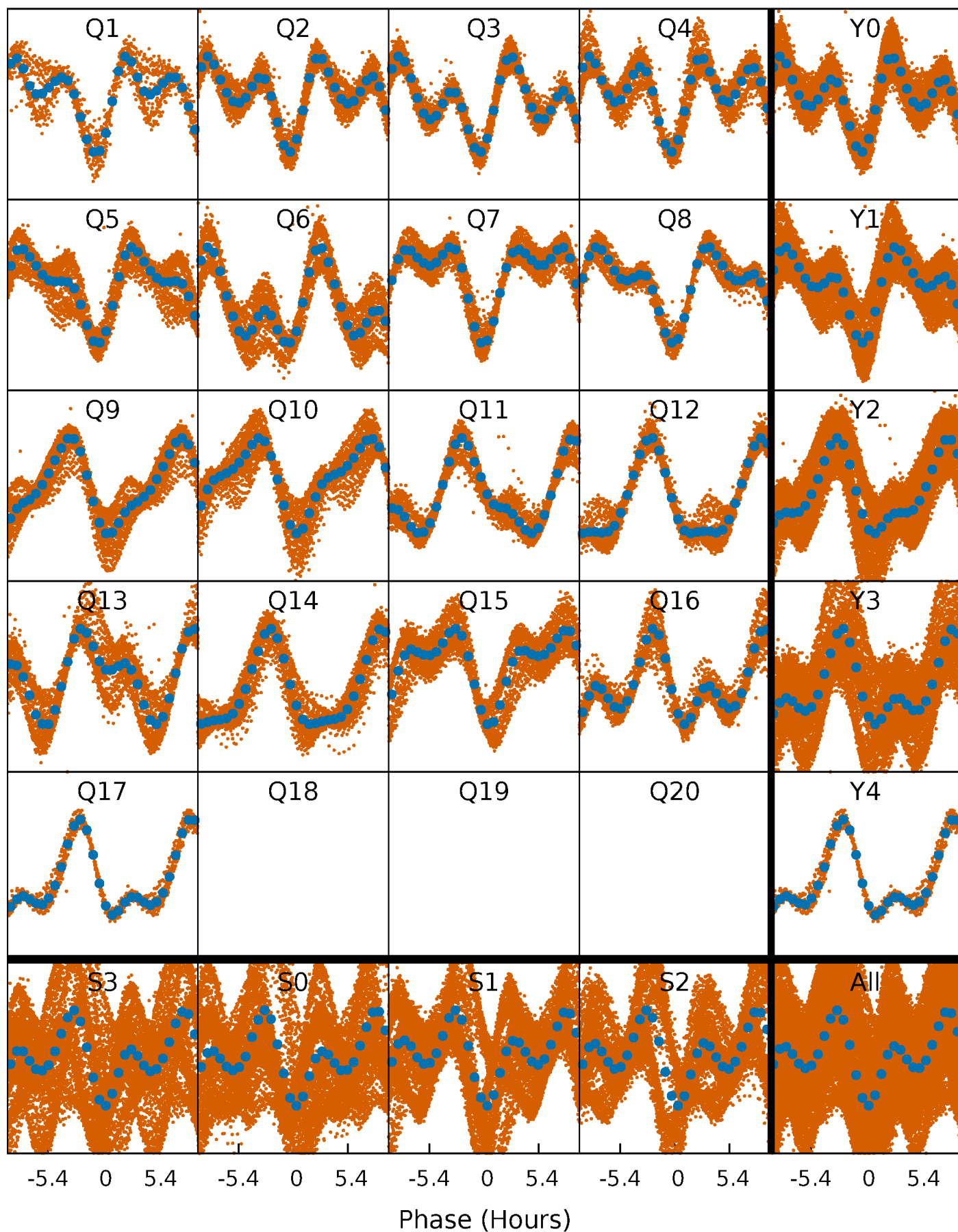


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



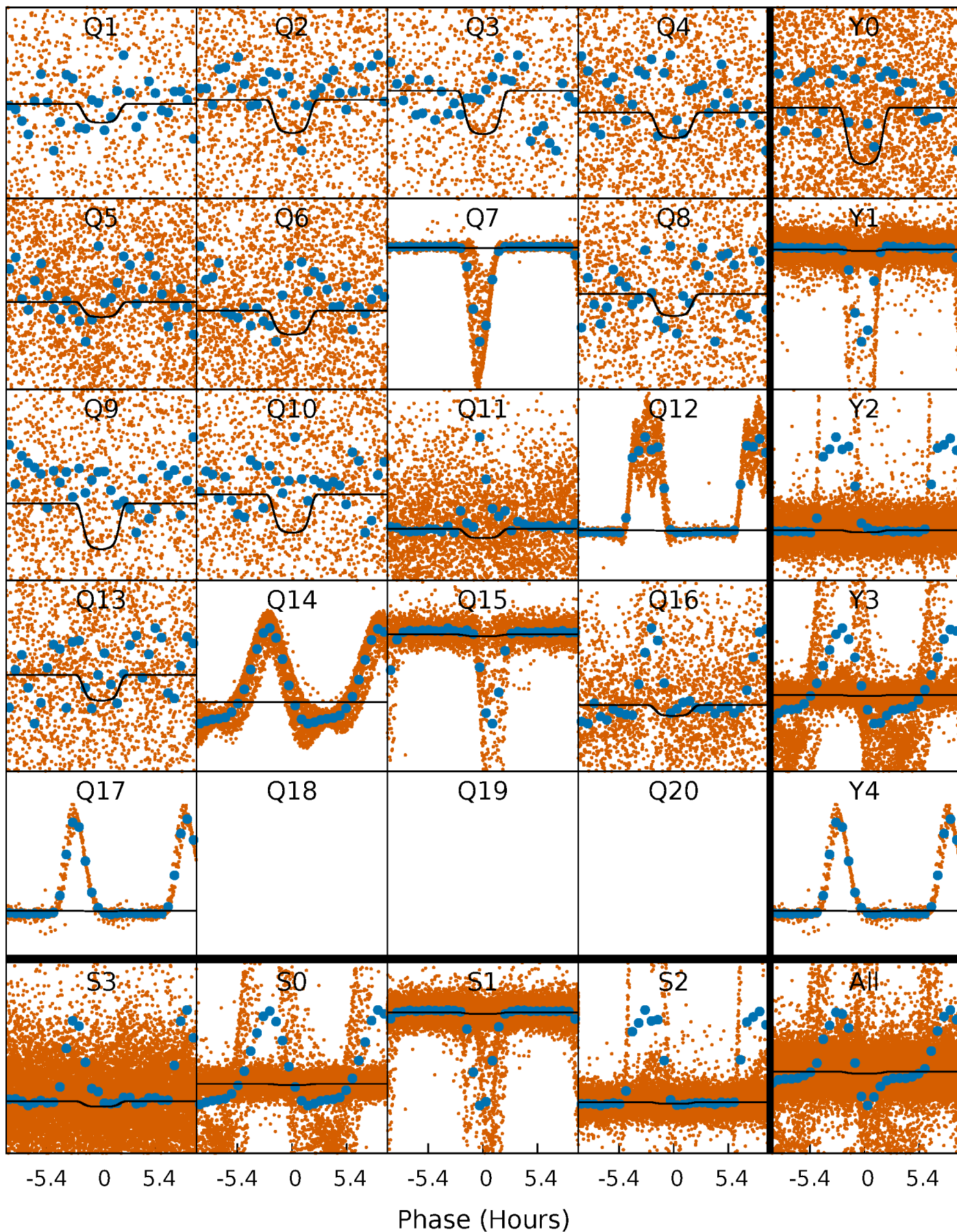
PDC Quarter-Phased Transit Curves

TCE 007908010-01 P= 0.913409 Days $T_0=132.414594$ (BKJD)



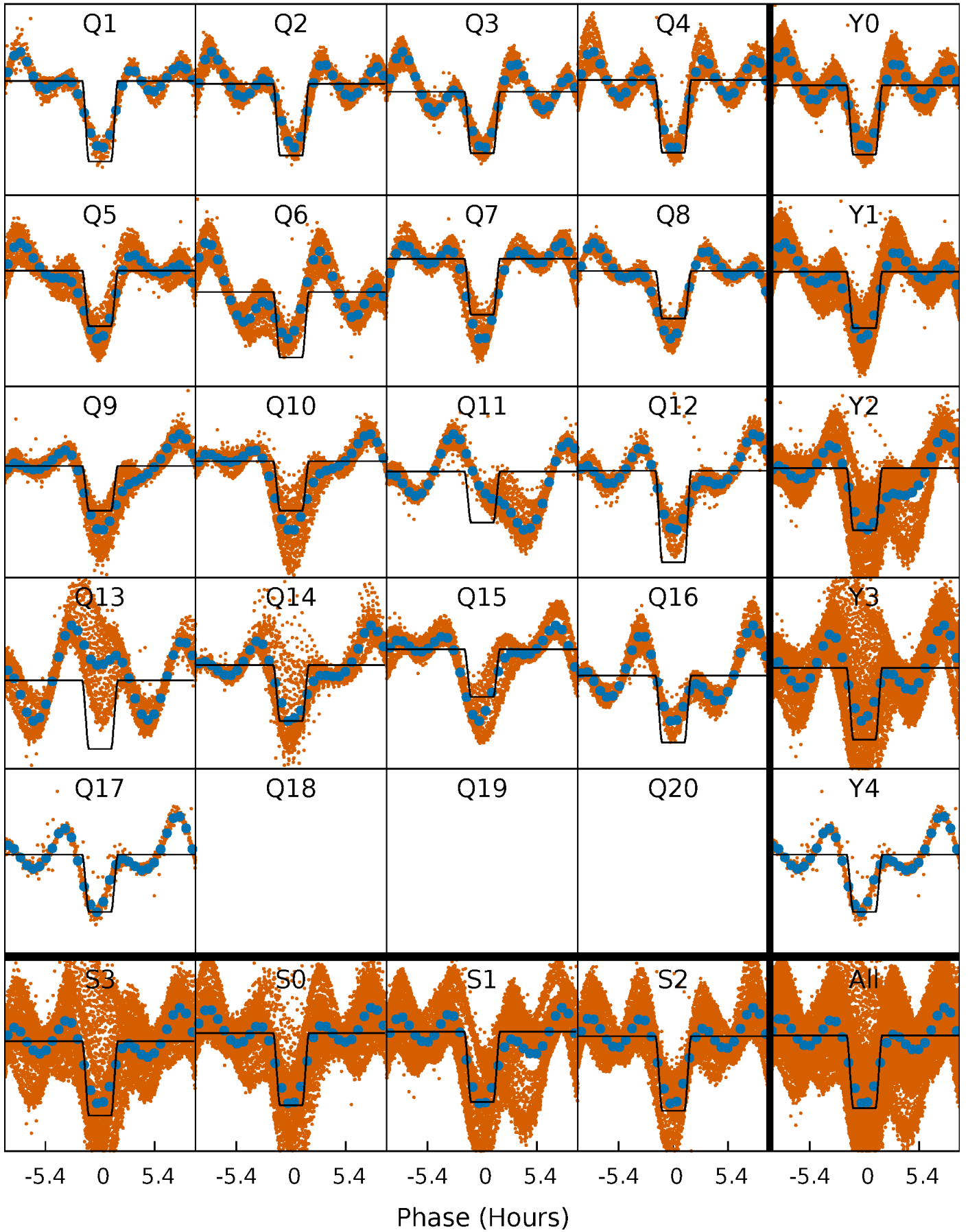
DV Quarter-Phased Transit Curves

TCE 007908010-01 P= 0.913409 Days $T_0=132.414594$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

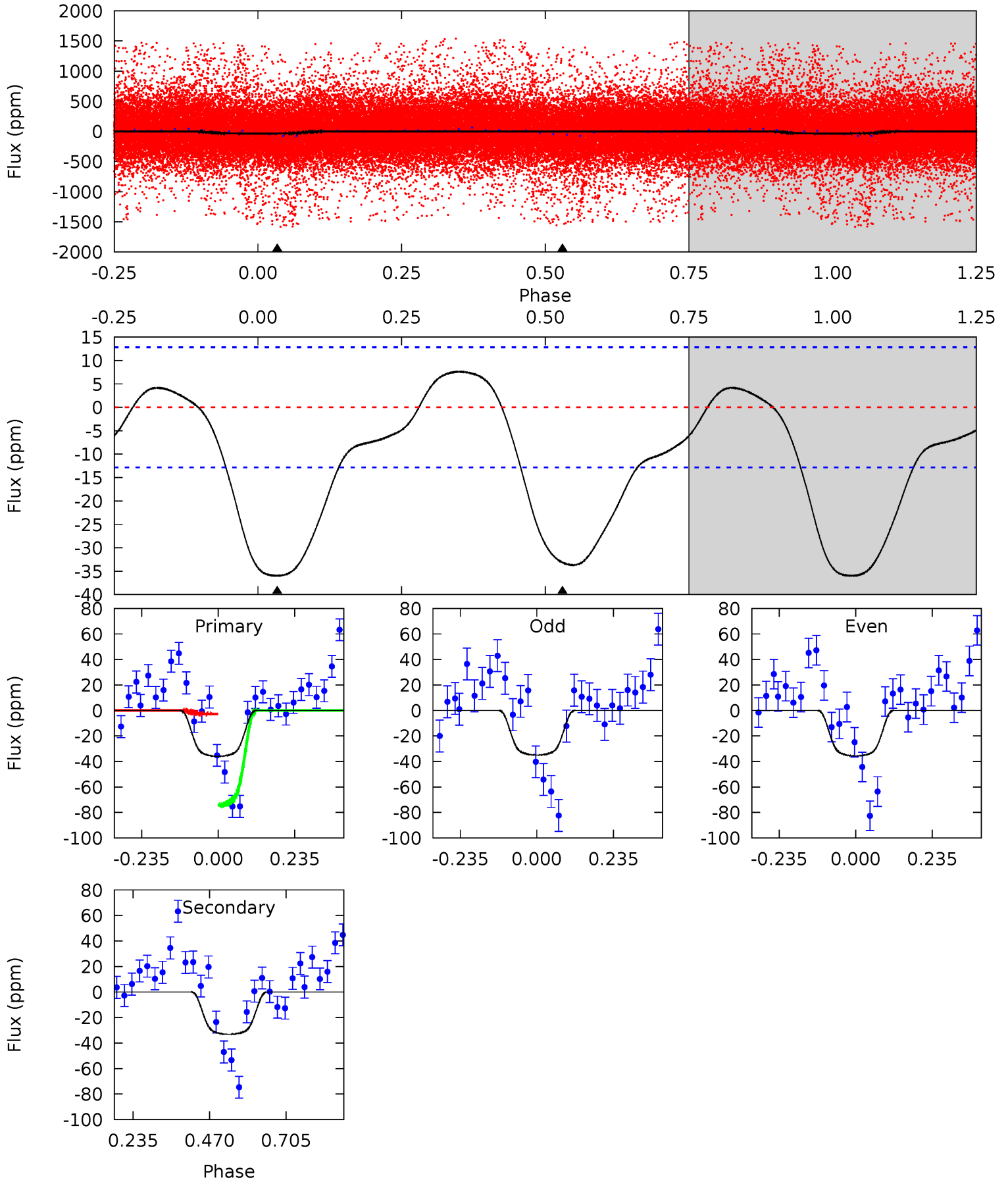
TCE 007908010-01 P= 0.913458 Days $T_0=132.384506$ (BKJD)



DV Model-Shift Uniqueness Test

007908010-01, P = 0.913409 Days, E = 131.501185 Days

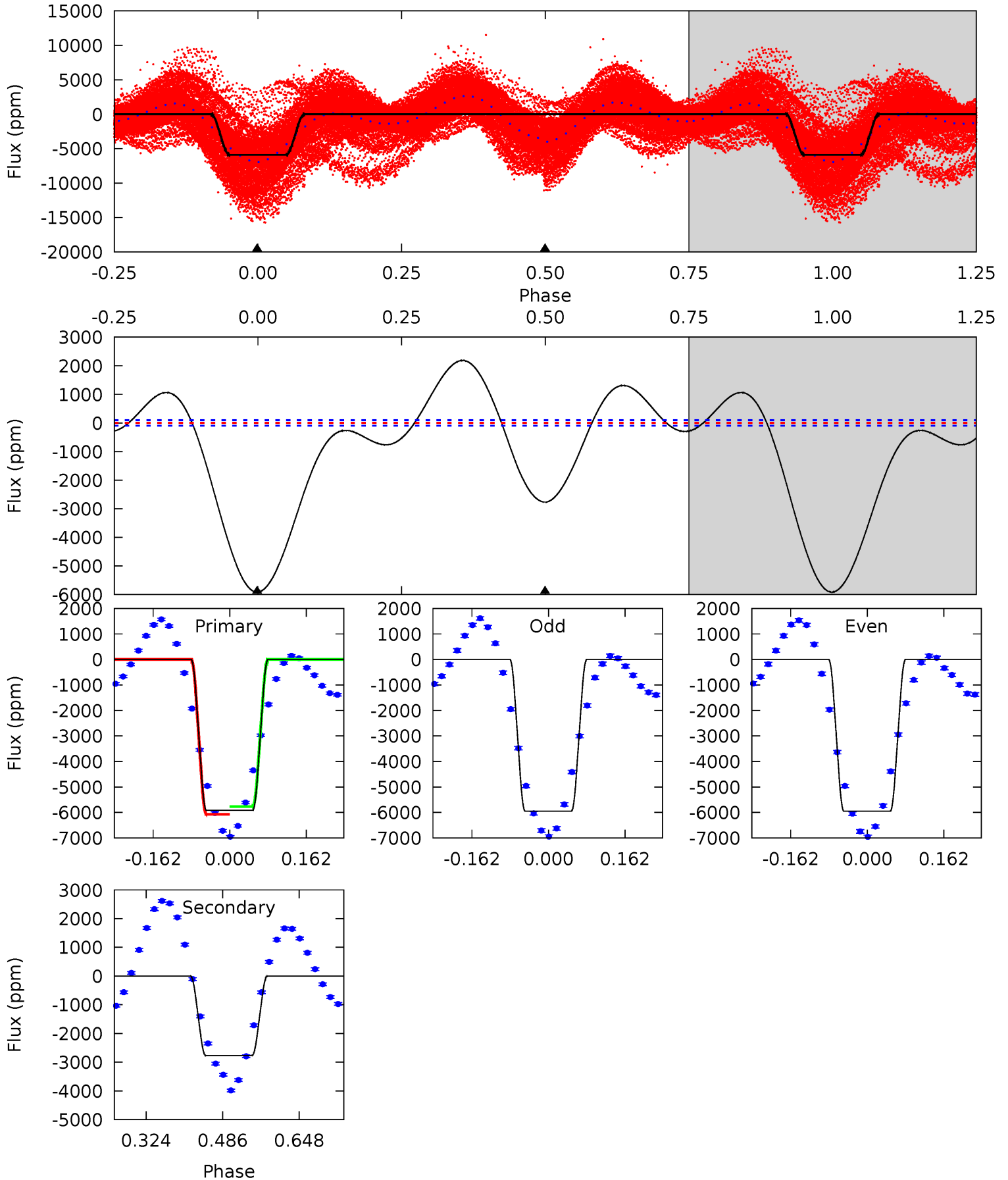
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.3	11.3	0	0	4.38	1.19	0.93	12.3	12.3	11.3	11.3	0.12	40.0	0.17	0



Alt Model-Shift Uniqueness Test

007908010-01, P = 0.913458 Days, E = 131.471048 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
278.6	130.4	0	0	4.46	1.40	33.1	278.6	278.6	130.4	130.4	0.14	1.05	0.27	7.09



Stellar Parameters For KIC 007908010

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5666^{+152}_{-152}	$4.421^{+0.144}_{-0.176}$	$-0.380^{+0.300}_{-0.300}$	$0.911^{+0.241}_{-0.148}$	$0.799^{+0.124}_{-0.053}$	$1.487^{+0.858}_{-0.696}$
	+3%/-3%	+3%/-4%	+79%/-79%	+26%/-16%	+16%/-7%	+58%/-47%
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 007908010-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-33 ± 3	$0.90^{+0.14}_{-0.11}$	2557^{+185}_{-151}	4626^{+193}_{-202}	$6.455^{+2.273}_{-1.603}$
Alt.	-2767 ± 21	$8.27^{+1.23}_{-0.79}$	2558^{+166}_{-153}	4618^{+108}_{-108}	$6.609^{+1.446}_{-1.530}$

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

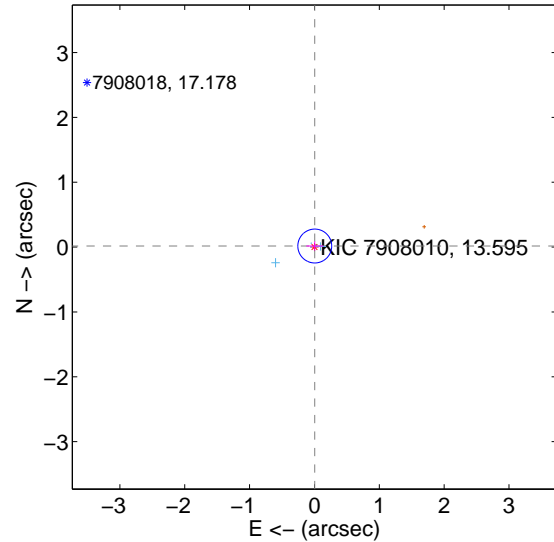
Supplemental centroid analysis for 007908010-01. Kepler magnitude: 13.60. Transit SNR 9.65

There are 13 quarters with good PRF difference image offsets

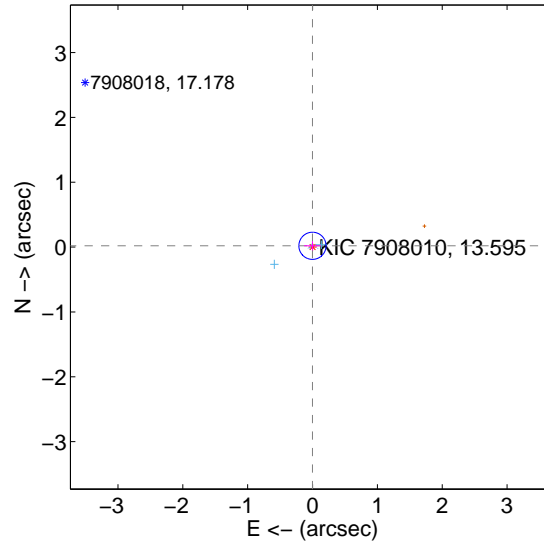
The direct PRF centroid is offset from the target star catalog position by about 0.05 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.017 ± 0.087	0.20	-0.005 ± 0.132	0.017 ± 0.071
PRF-fit source offset from KIC position	0.020 ± 0.070	0.29	0.001 ± 0.129	0.020 ± 0.072
photometric centroid source offset	1.71 ± 0.47	3.64	1.67 ± 0.47	-0.35 ± 0.42

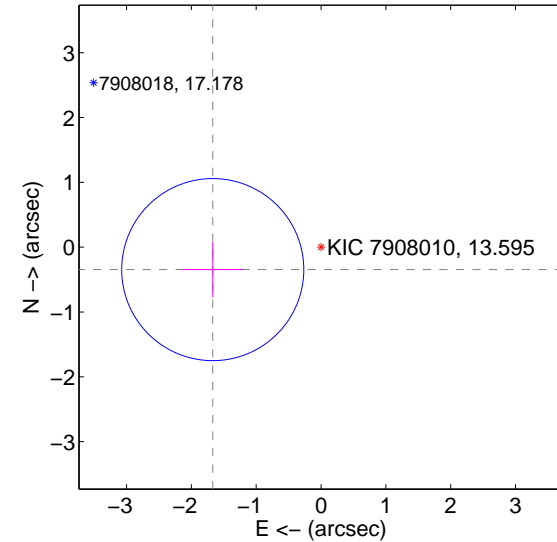
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

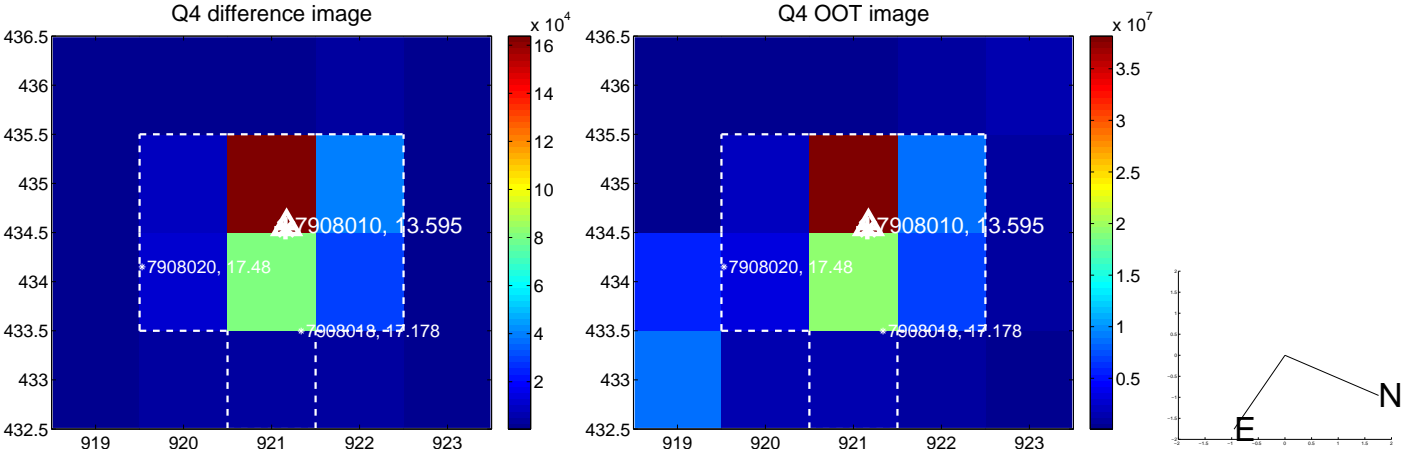
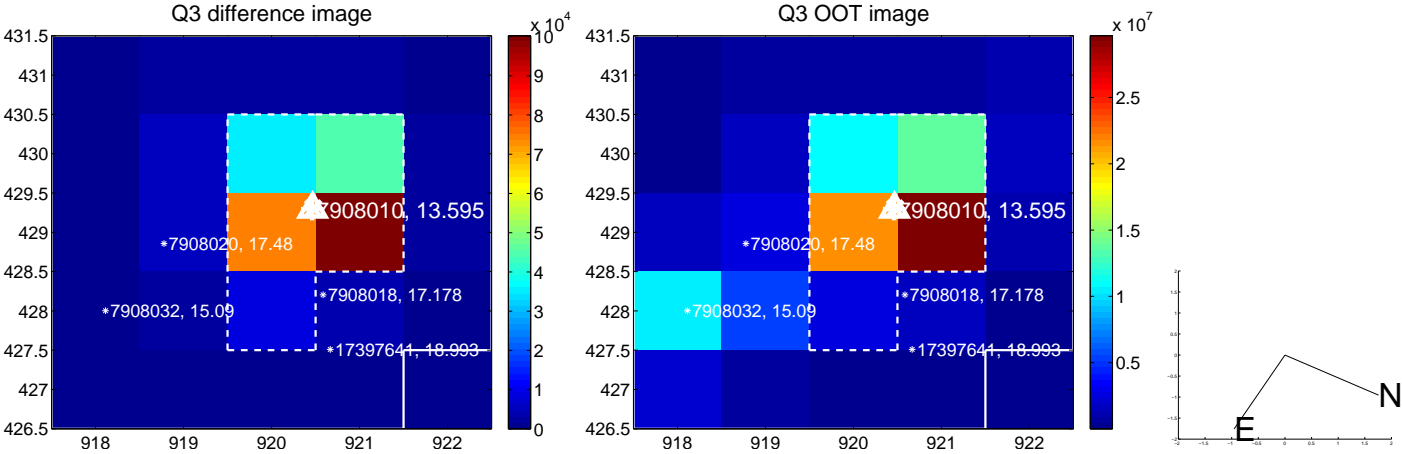
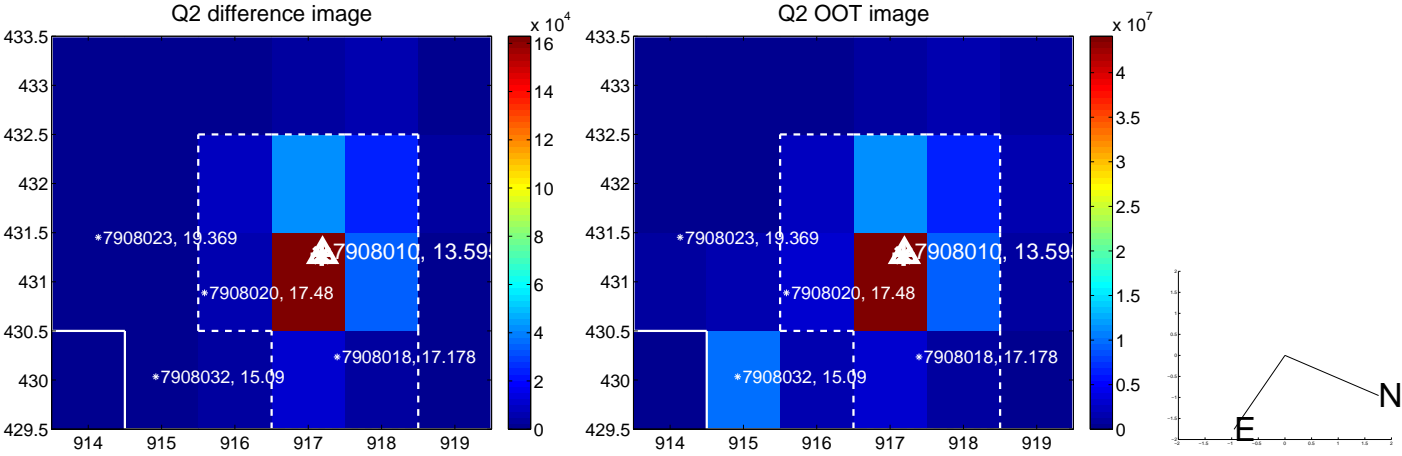
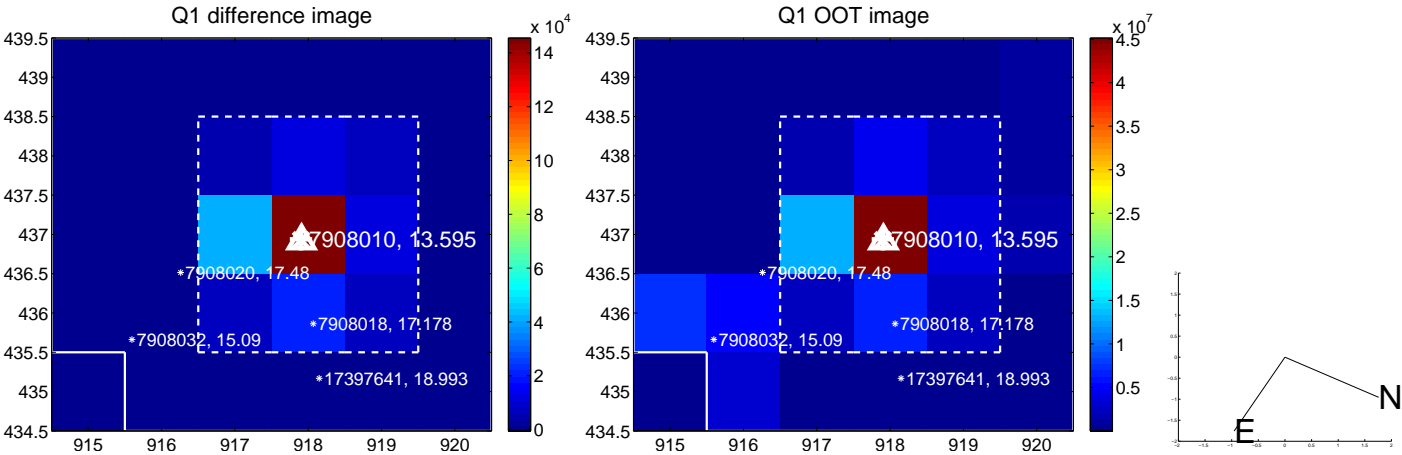


offset from photometric centroids

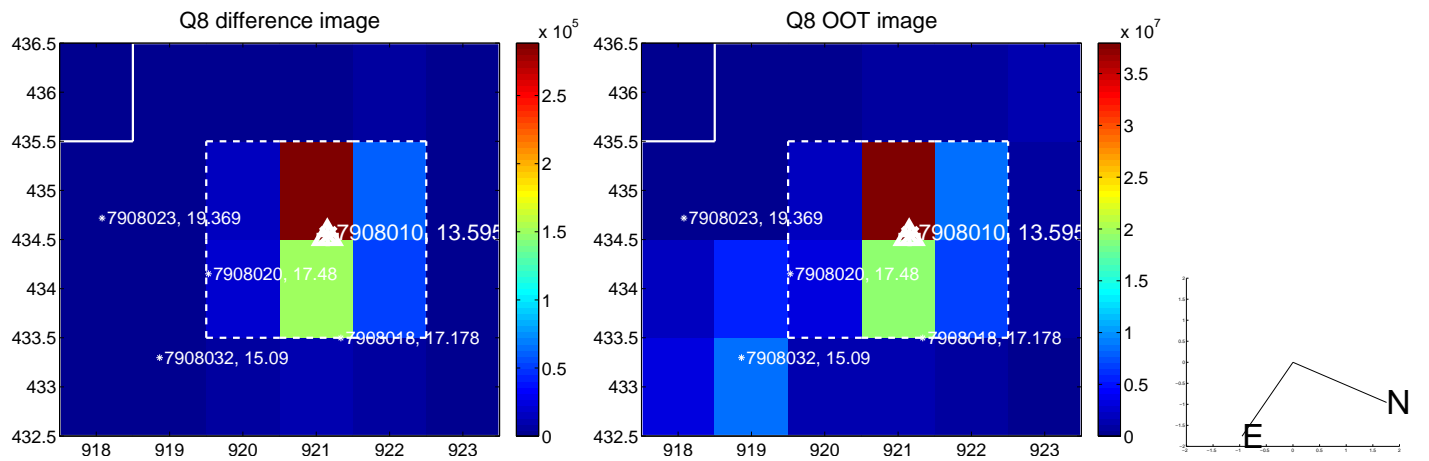
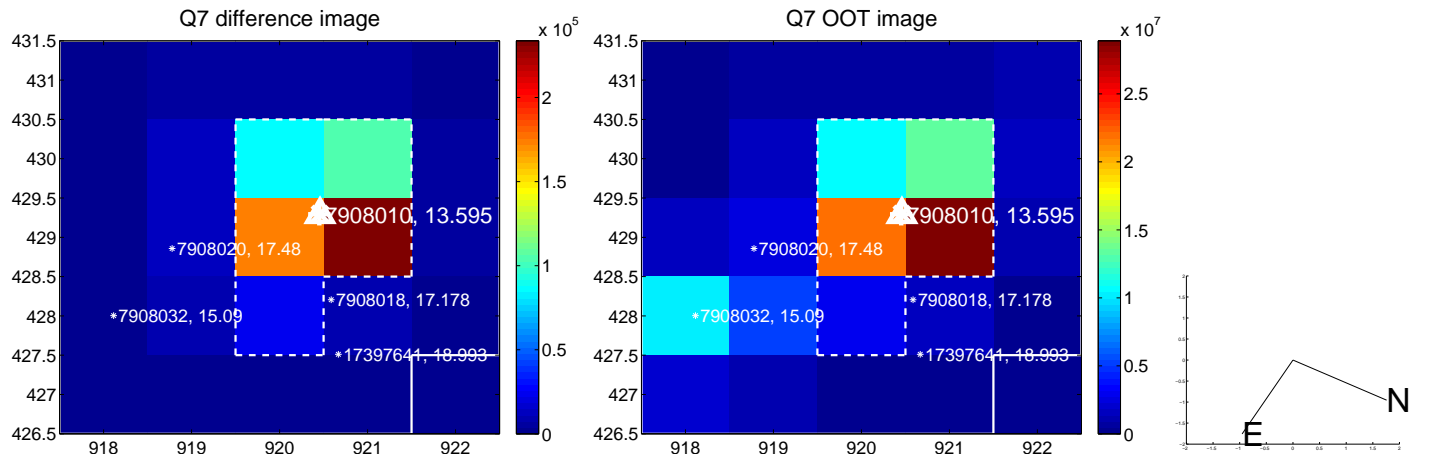
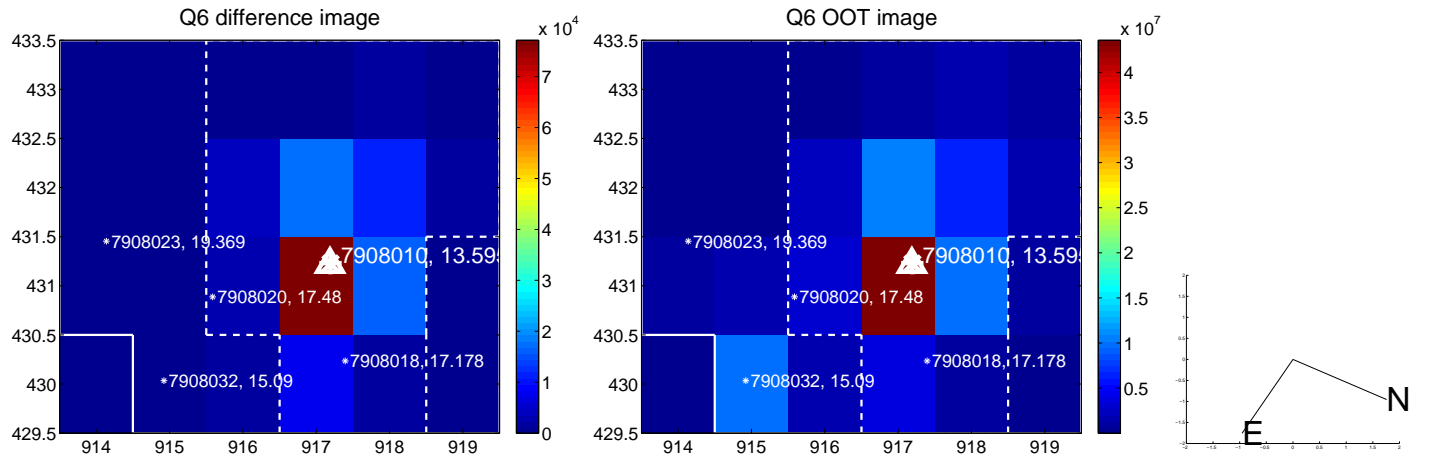
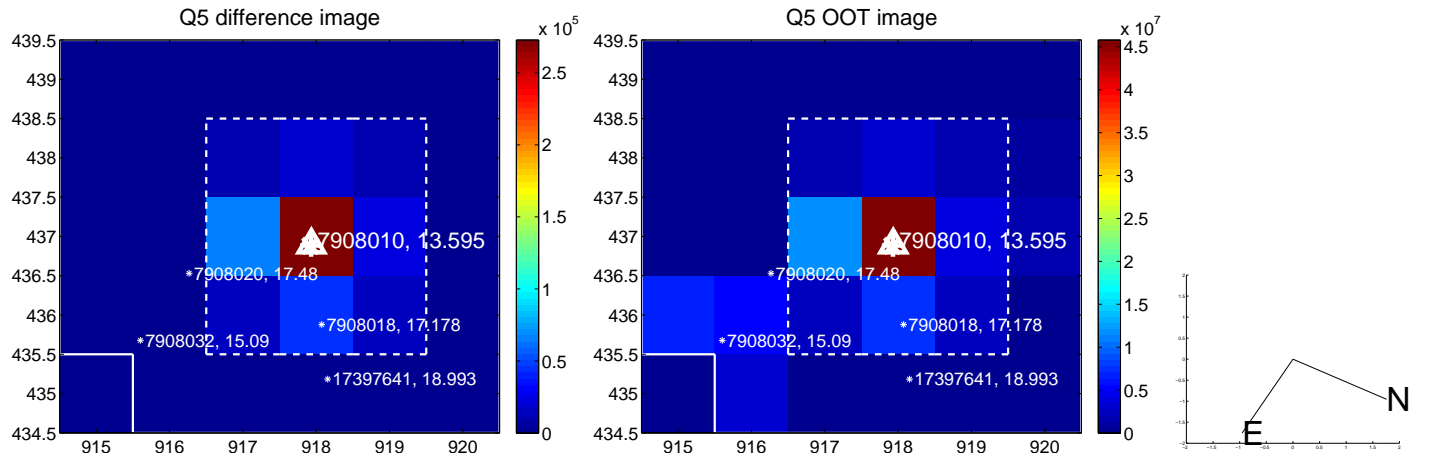


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

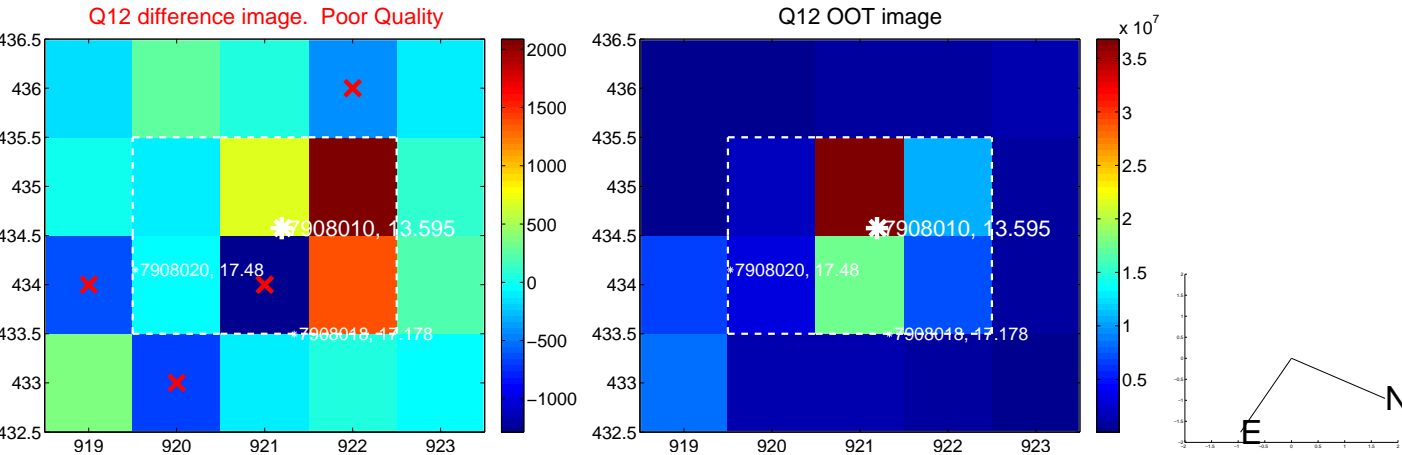
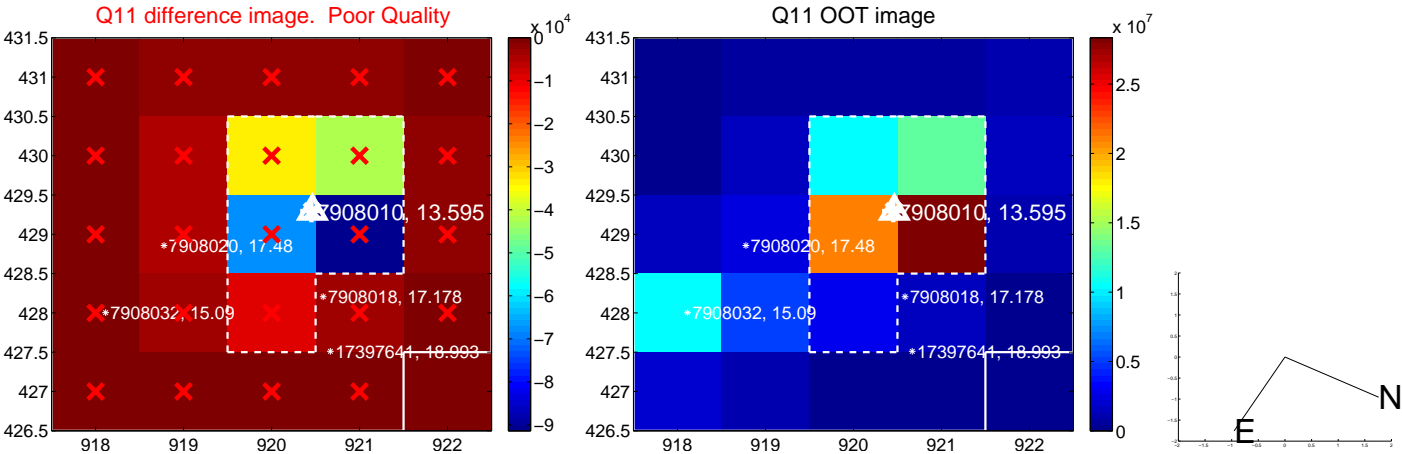
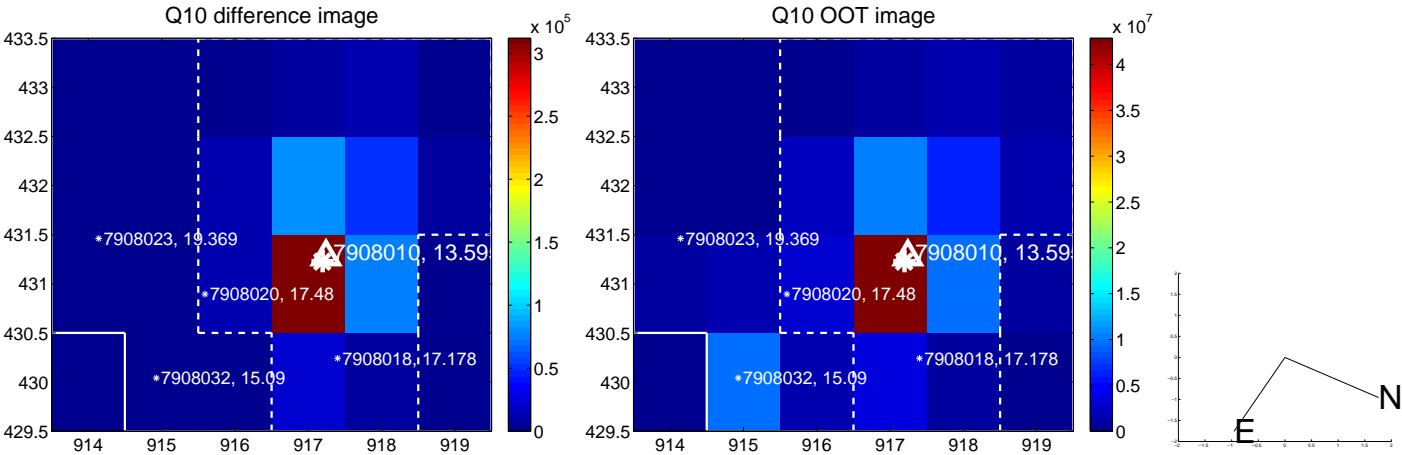
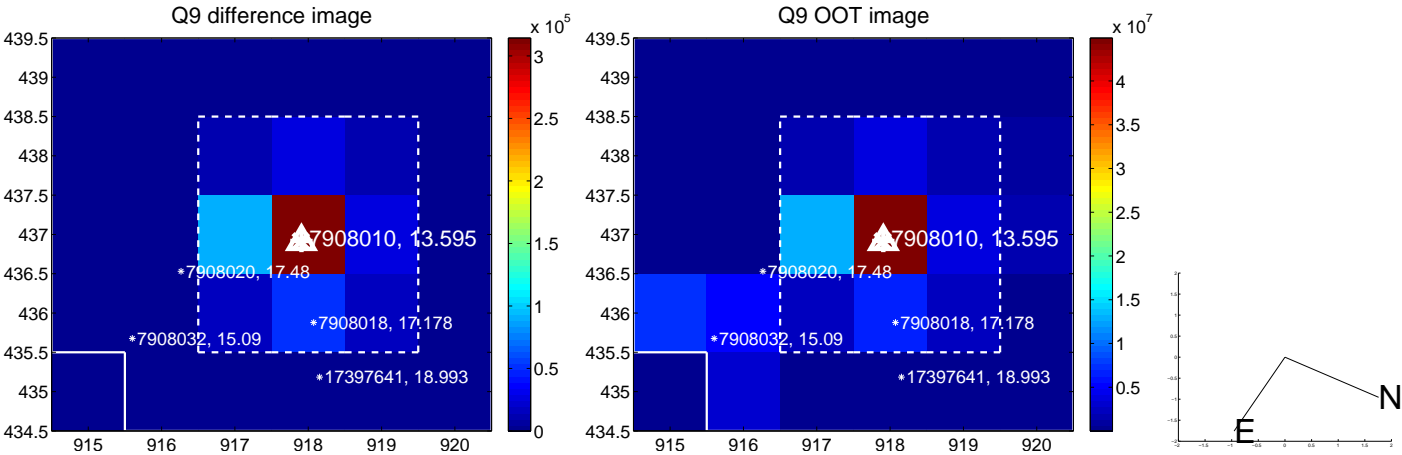
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



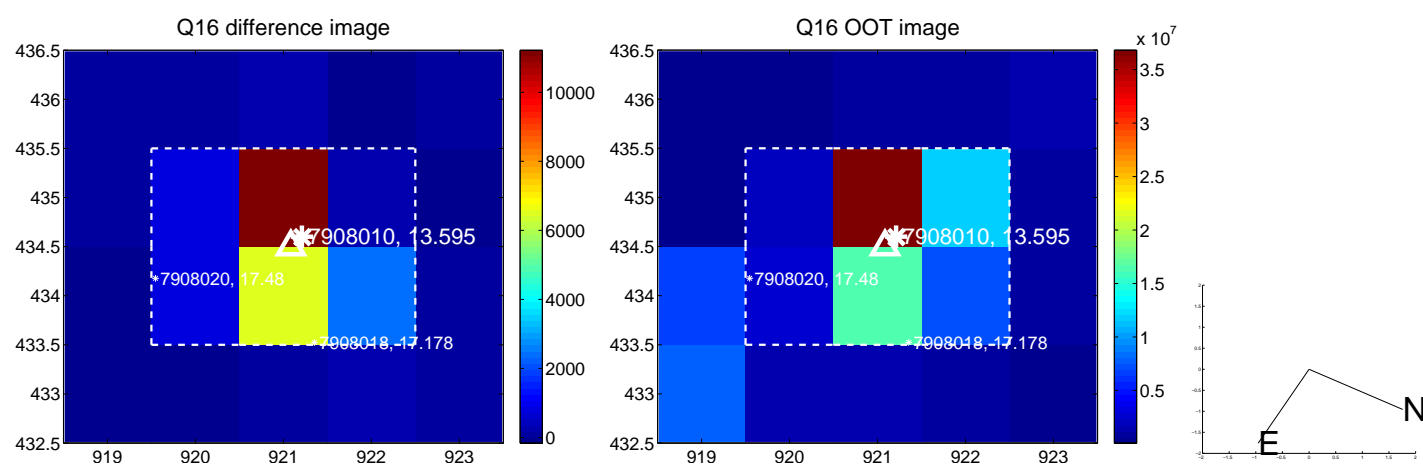
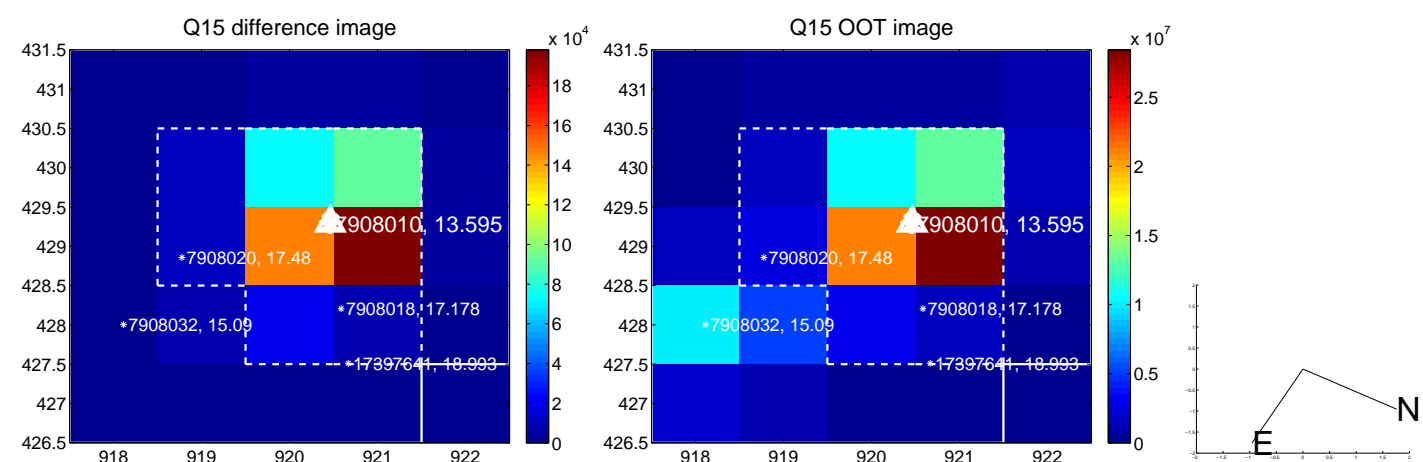
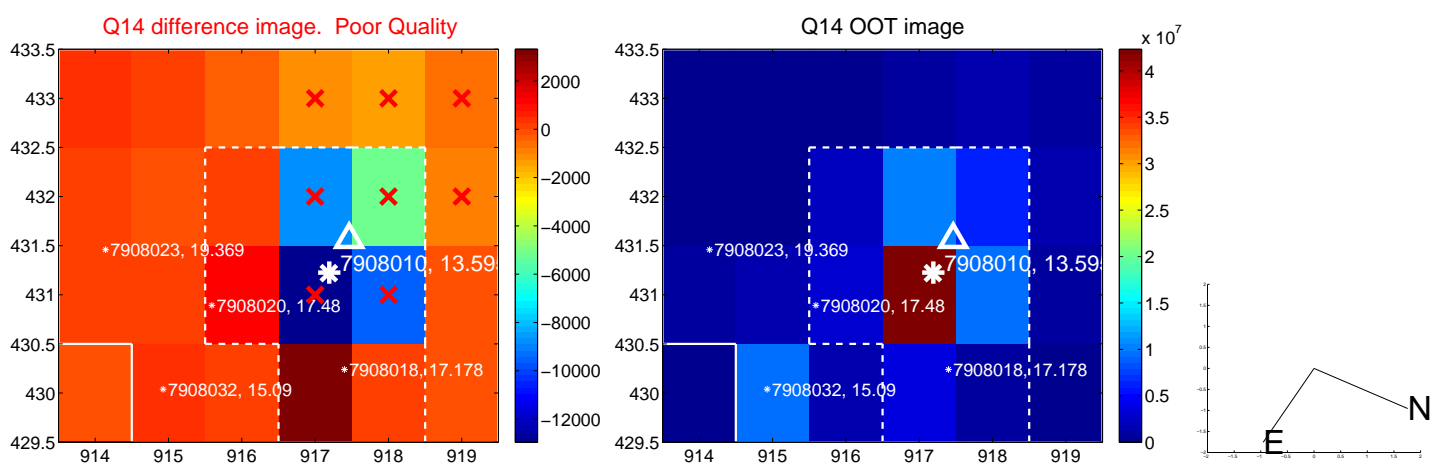
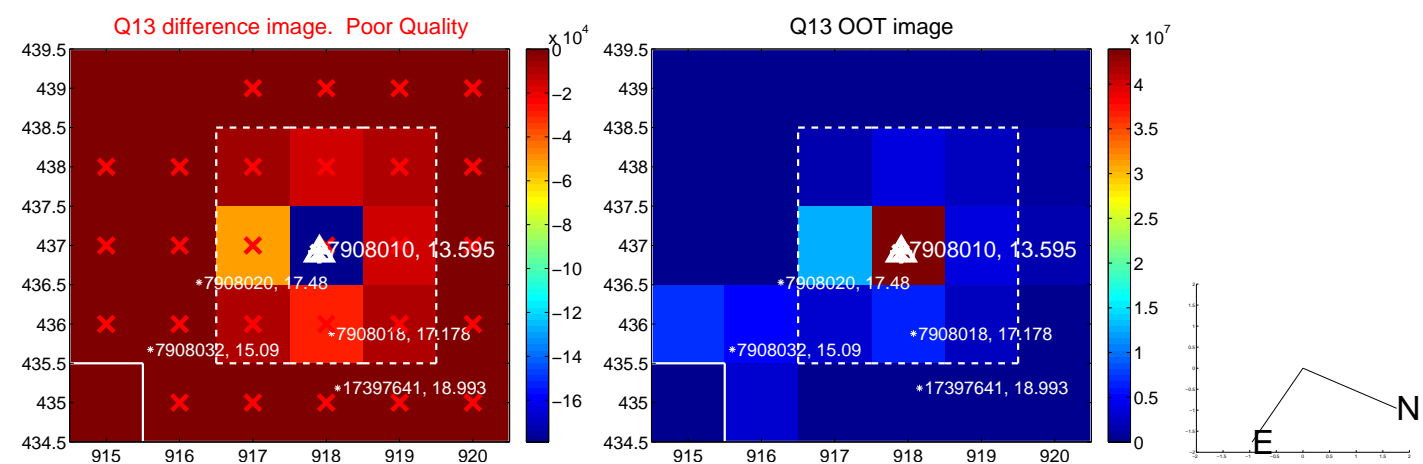
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



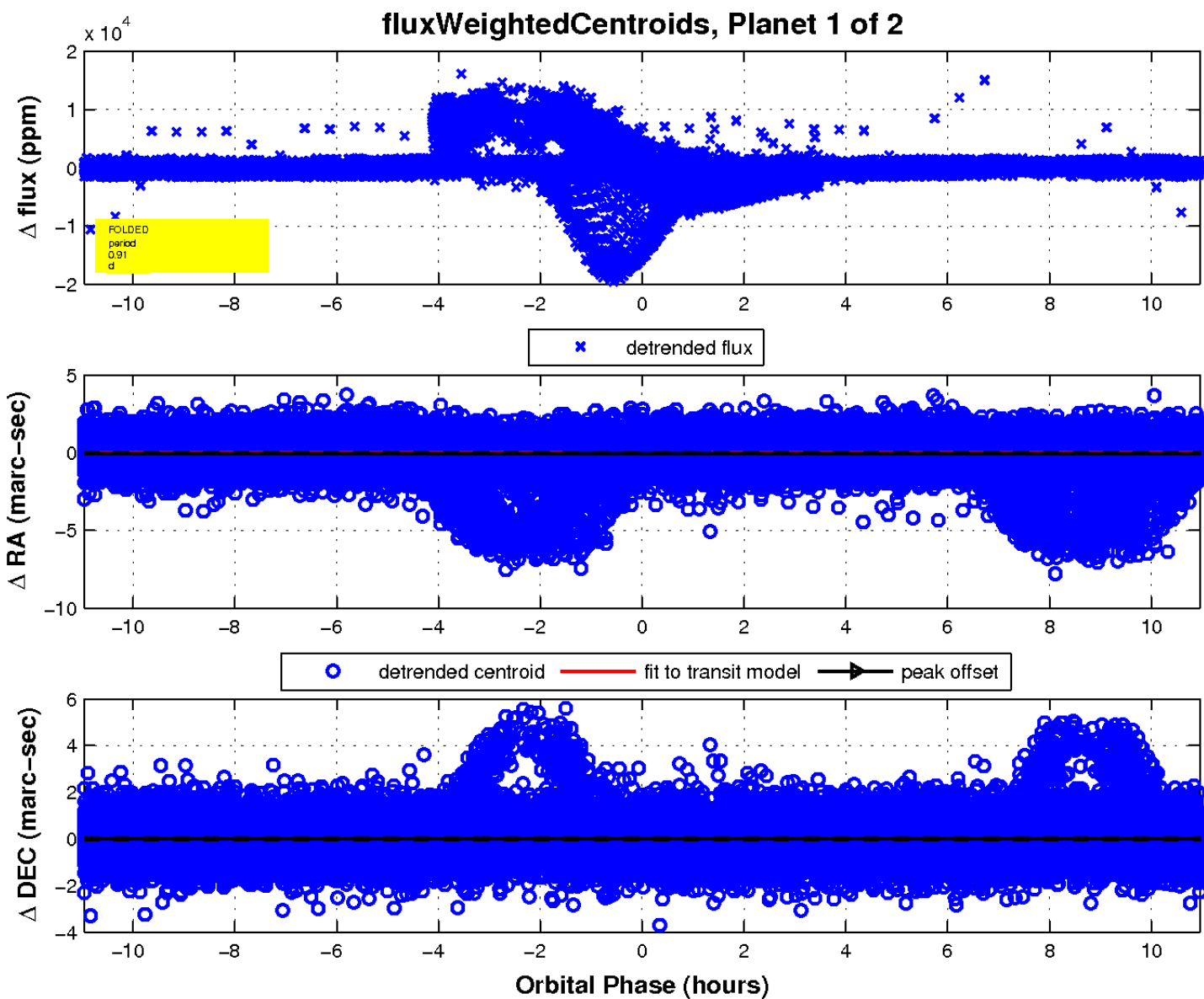
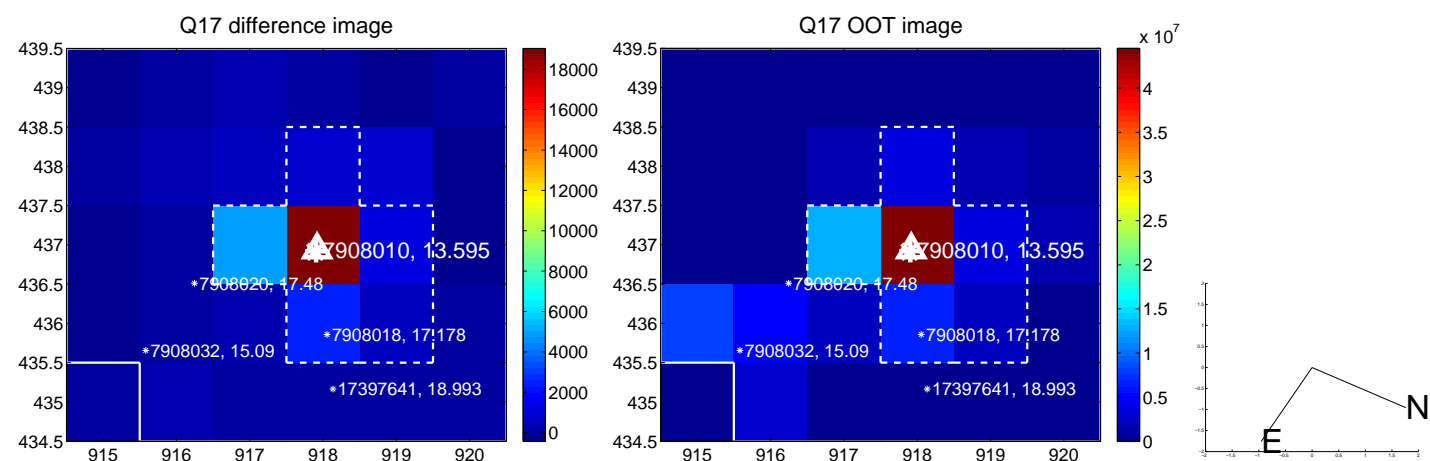
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

