

KIC 007032807

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})
007032807-01	OBS	No	0.566797	131.812517	36.9	1.443	7.6	4.8	0.69	5391	0.49	2390.84

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007032807-01	OBS	FP	0.00	1	0	1	1	LPP_DV—HALO_GHOST—EPHEM_MATCH

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.

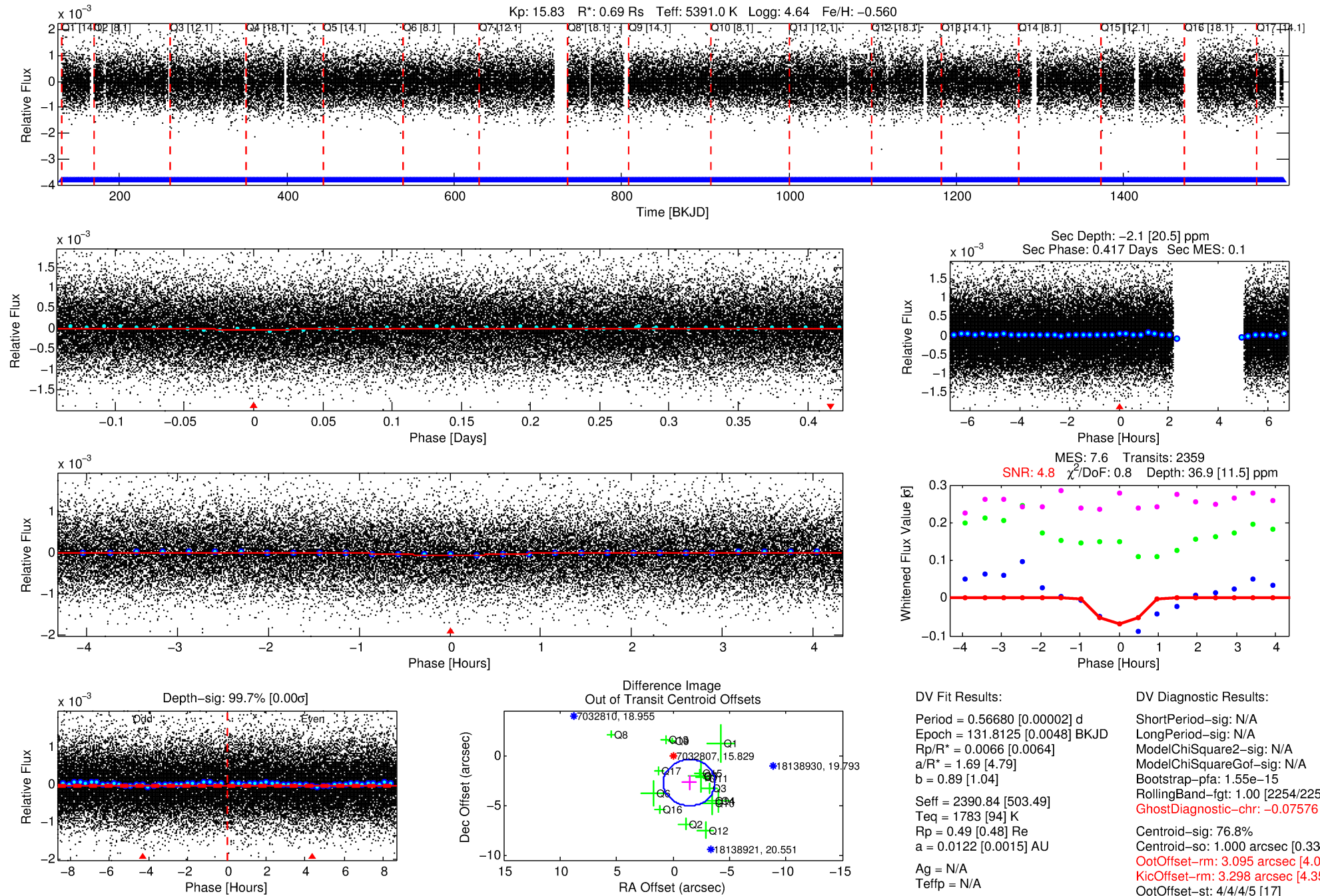
Ephemeris Match Information For 007032807-01

TCE (1)	KIC	Parent (2)	Parent KIC	P ₁ :P ₂	Dist ($''$)	Δ Row	Δ Col	m ₂	m ₁	D ₂ /D ₁	Mechanism	Flag	σ_P	σ_T
007032807-01	7032807	RR-Lyr-pri	7198959	1:1	1072.4	266	-43	7.86	15.83	16846.00	Direct-PRF	0	0.22	20.23

Notes: P₁:P₂ is the period ratio. Dist is the distance in arcseconds. Δ Row and Δ Col are the number of pixels apart in row and column. m₂ and m₁ are the magnitudes of the parent and child. D₂/D₁ is the parent's transit depth divided by the child's. σ_P and σ_T are the significance of the match in period and epoch. For a match to be considered significant $\sigma_P < 5.0$ and $\sigma_T < 5.0$. Matches which have σ_P and σ_T very close to this cutoff should receive extra scrutiny, especially if the period ratio is very large.

DV One-Page Summary

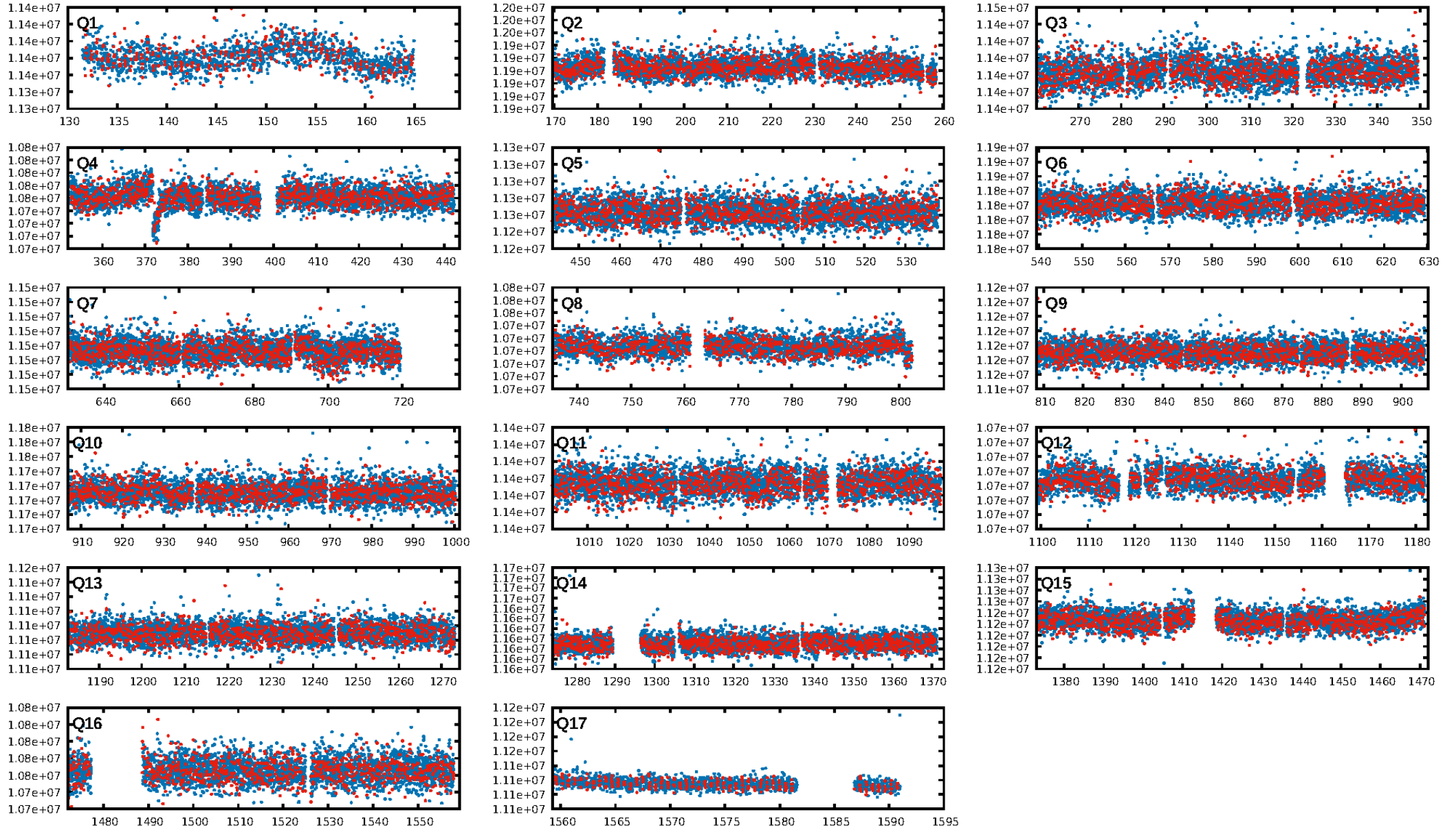
KIC: 7032807 Candidate: 1 of 1 Period: 0.567 d



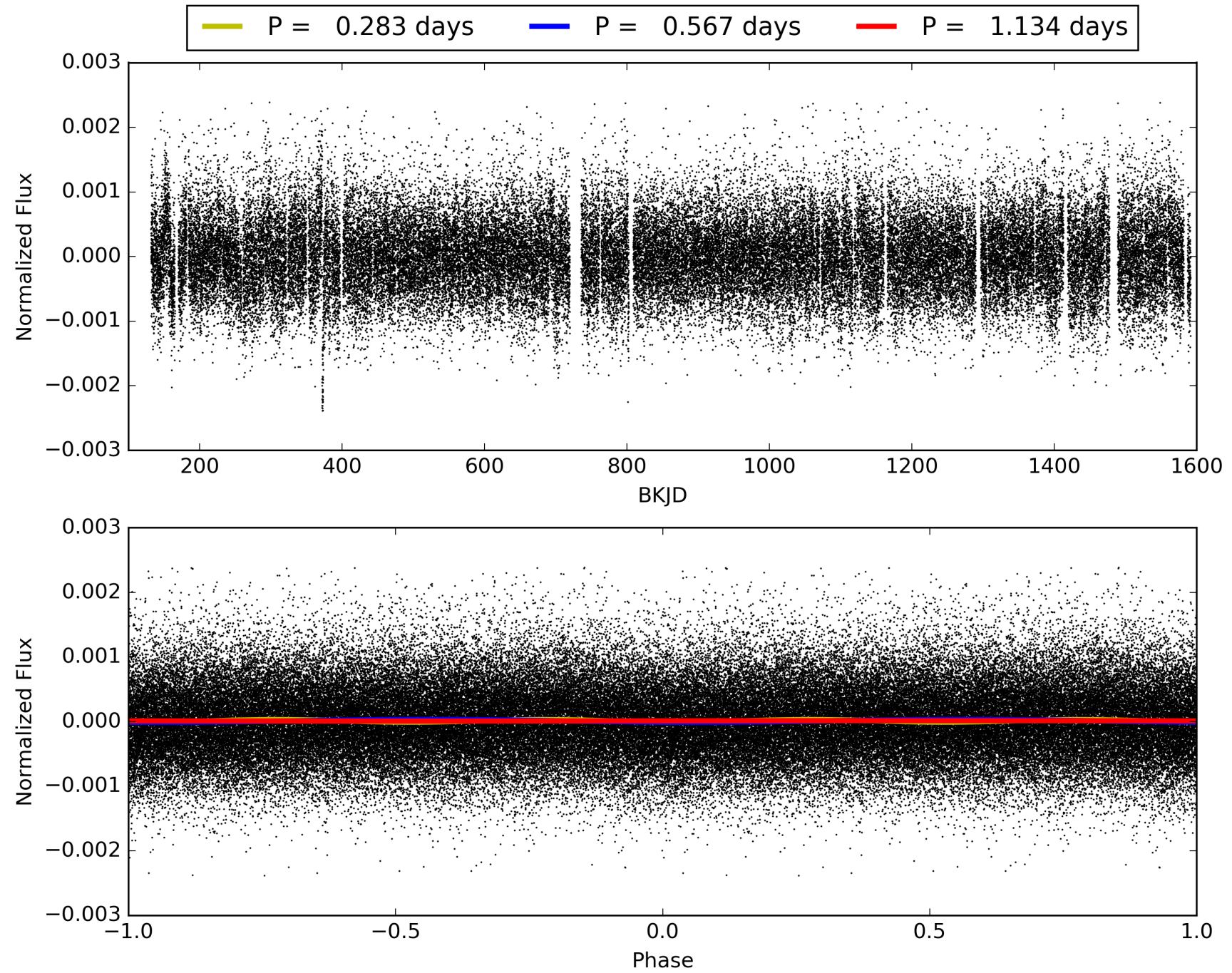
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 09:26:23 Z

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

TCE 007032807-01, PDC Light Curves

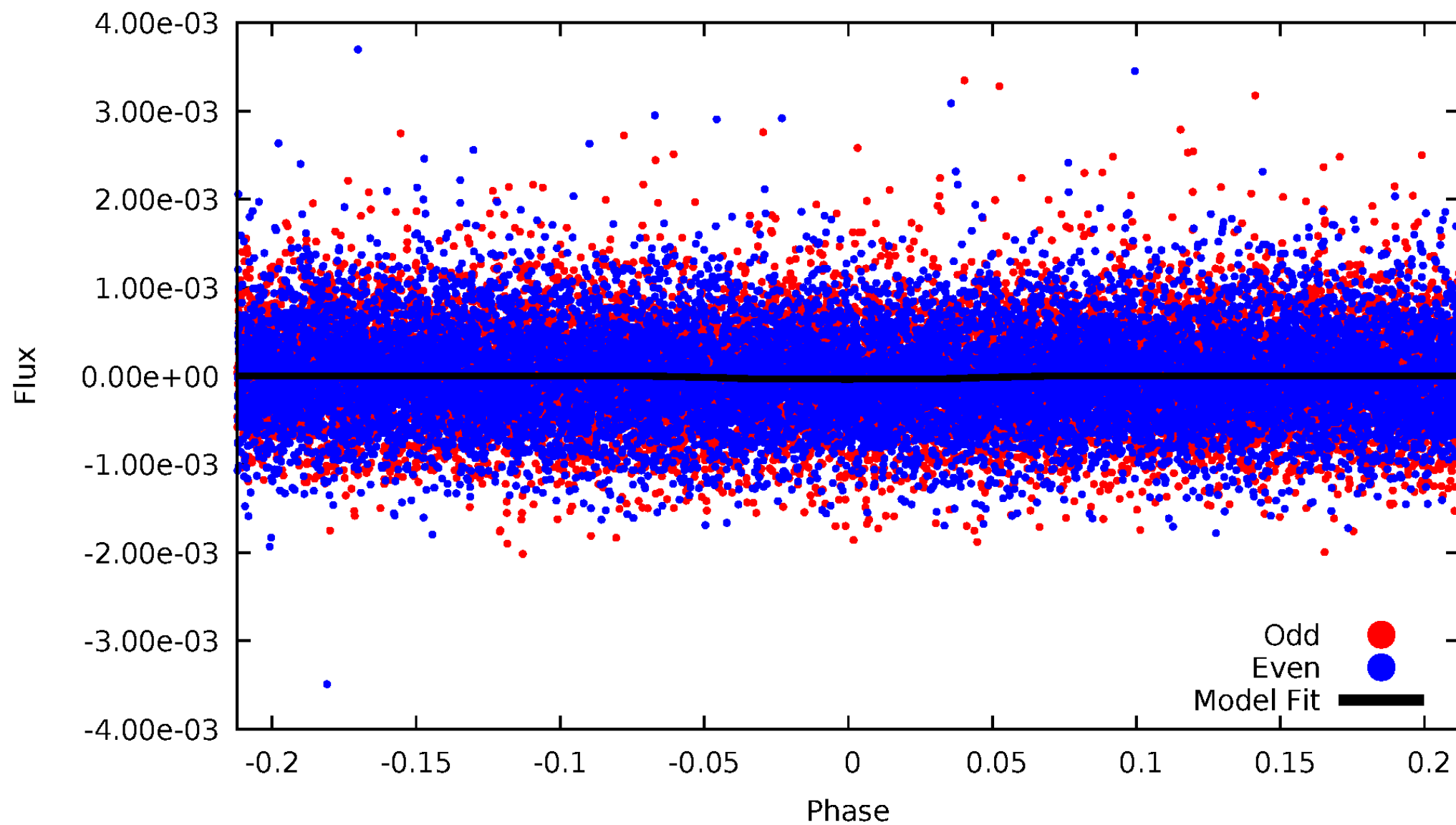


TCE 007032807-01



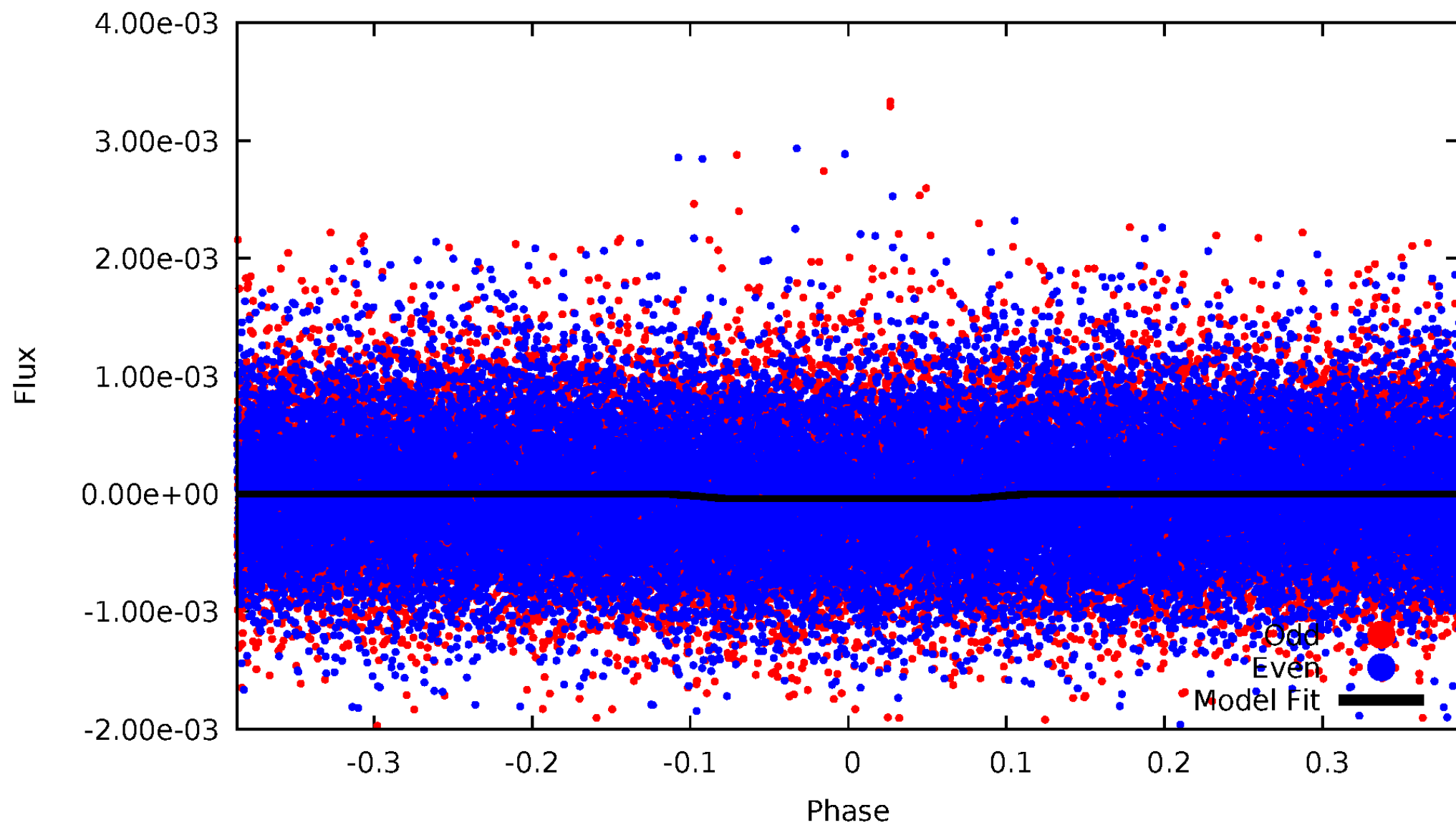
DV Odd/Even

TCE 007032807-01



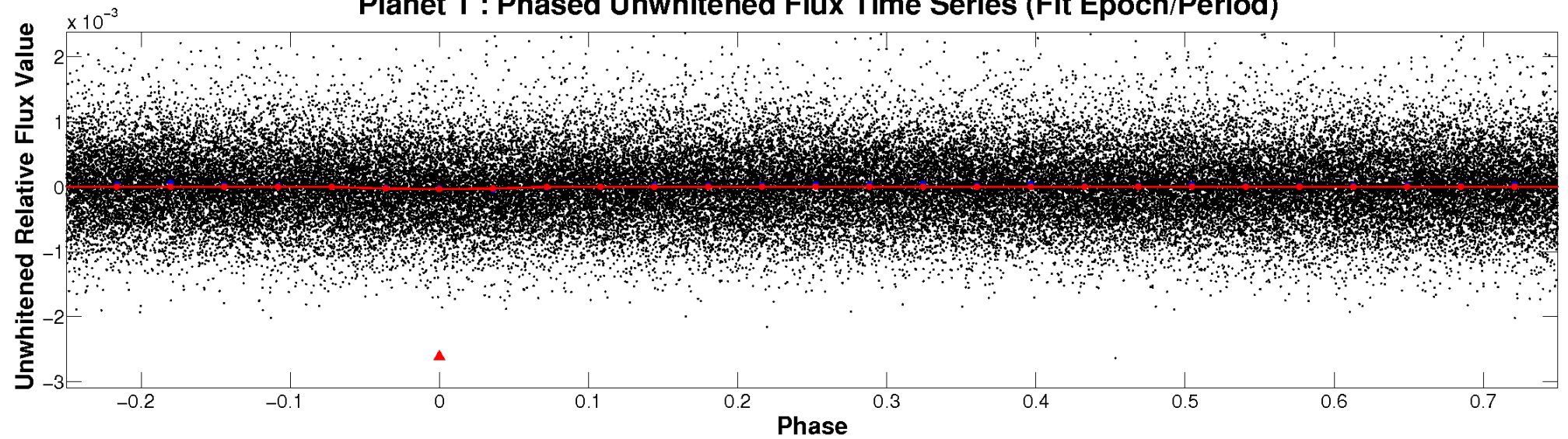
ALT Odd/Even

TCE 007032807-01

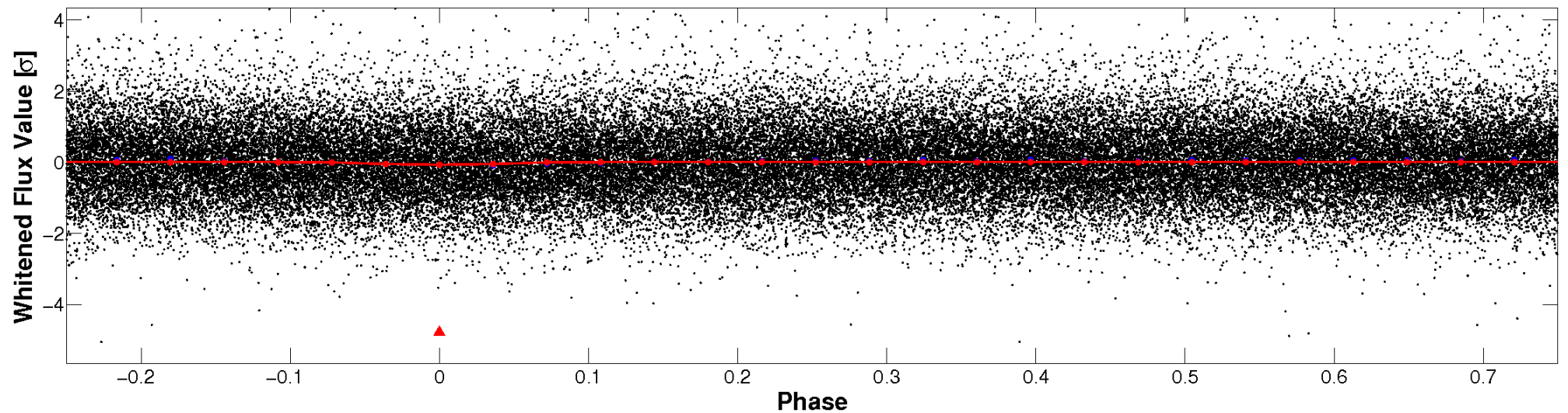


Non-Whitened Vs. Whitened Light Curve

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

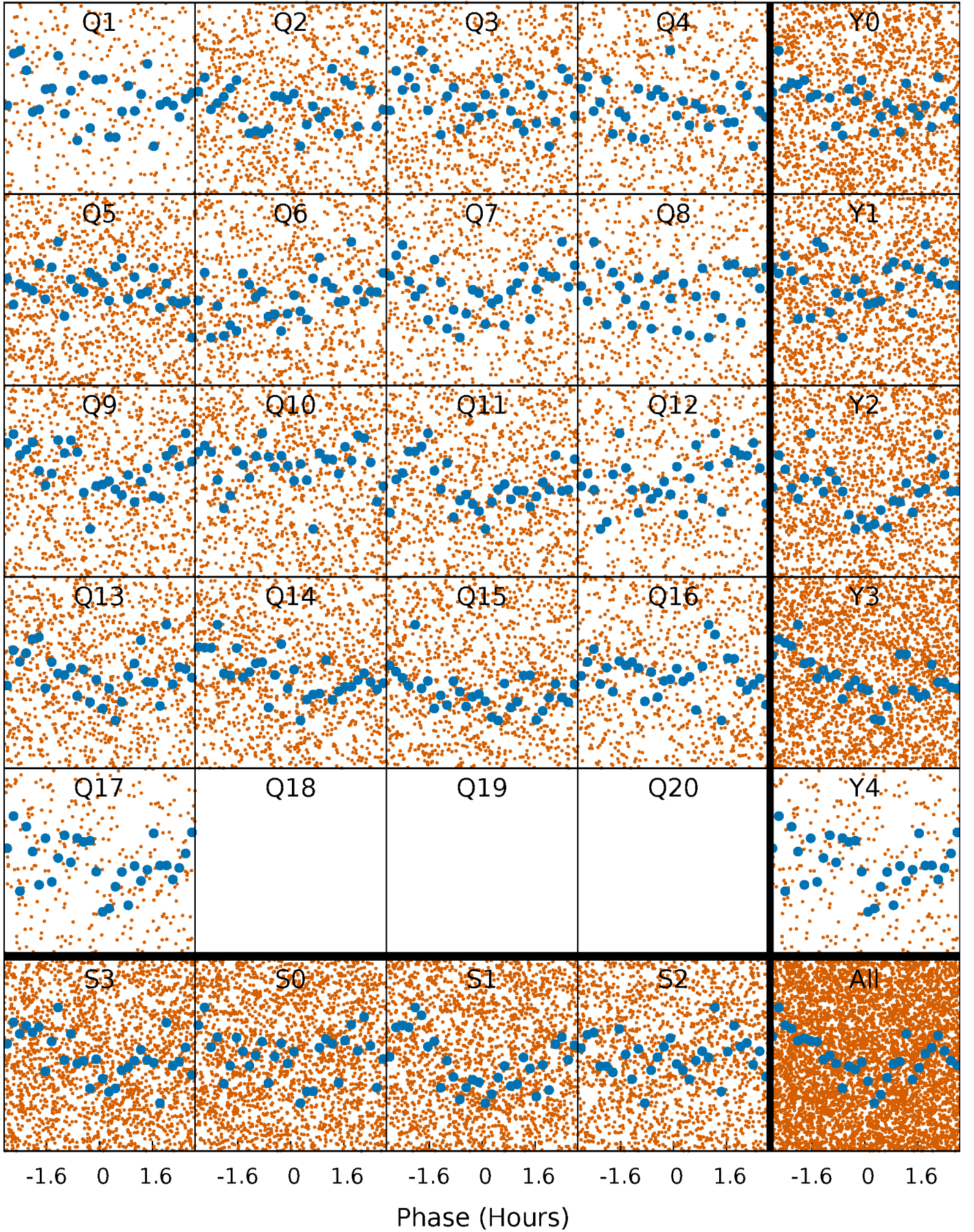


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



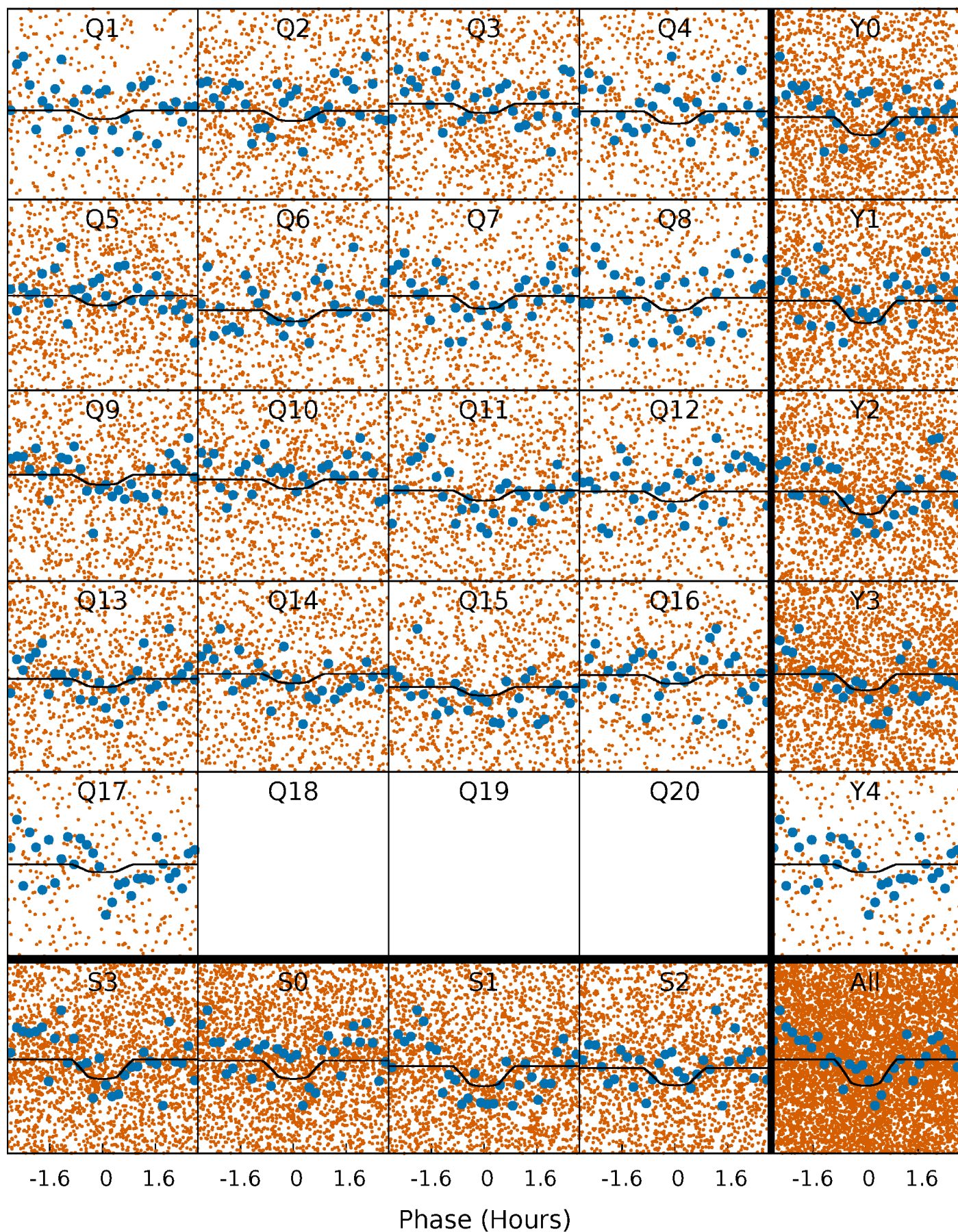
PDC Quarter-Phased Transit Curves

TCE 007032807-01 P= 0.566797 Days $T_0=131.812517$ (BKJD)



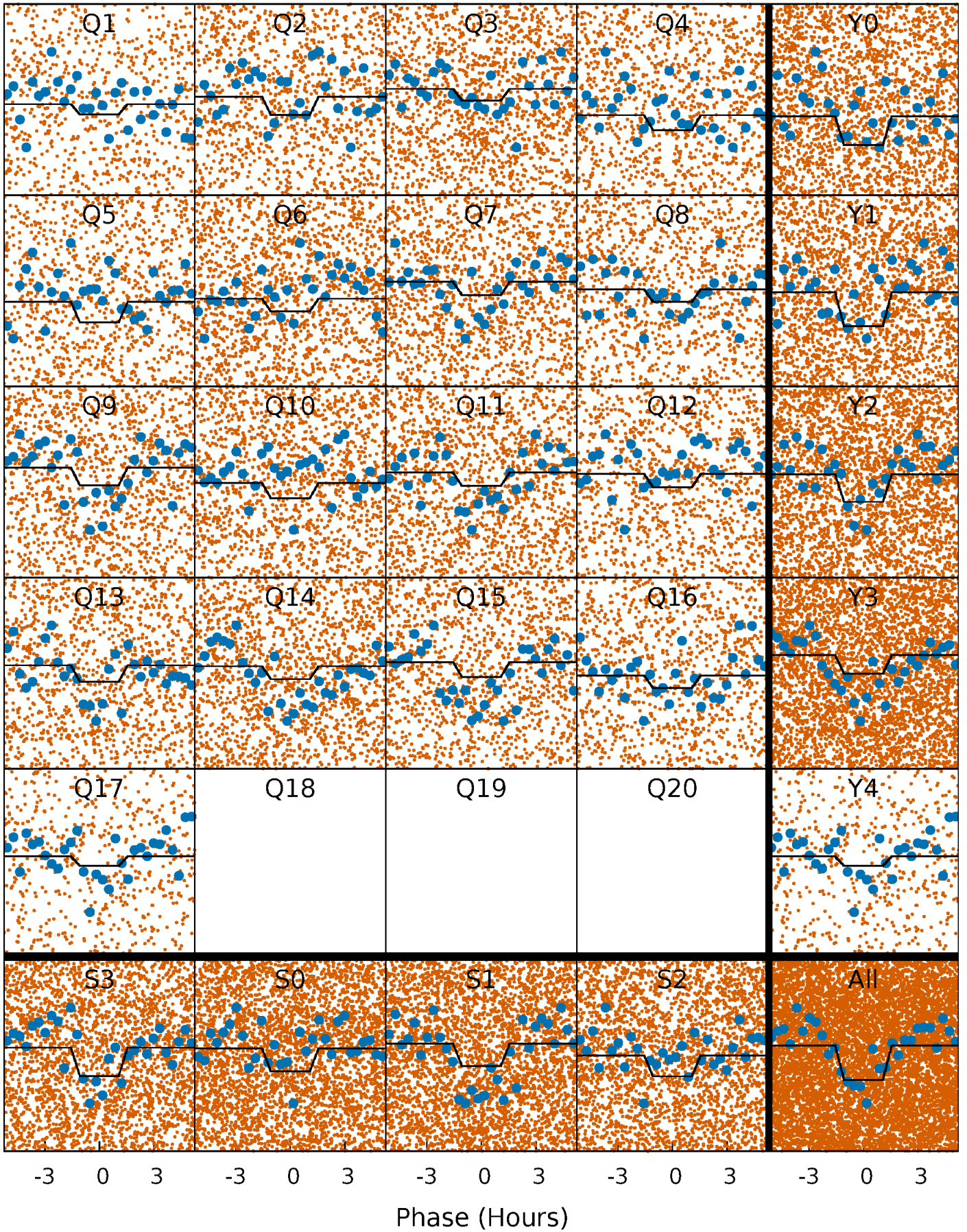
DV Quarter-Phased Transit Curves

TCE 007032807-01 P= 0.566797 Days $T_0=131.812517$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

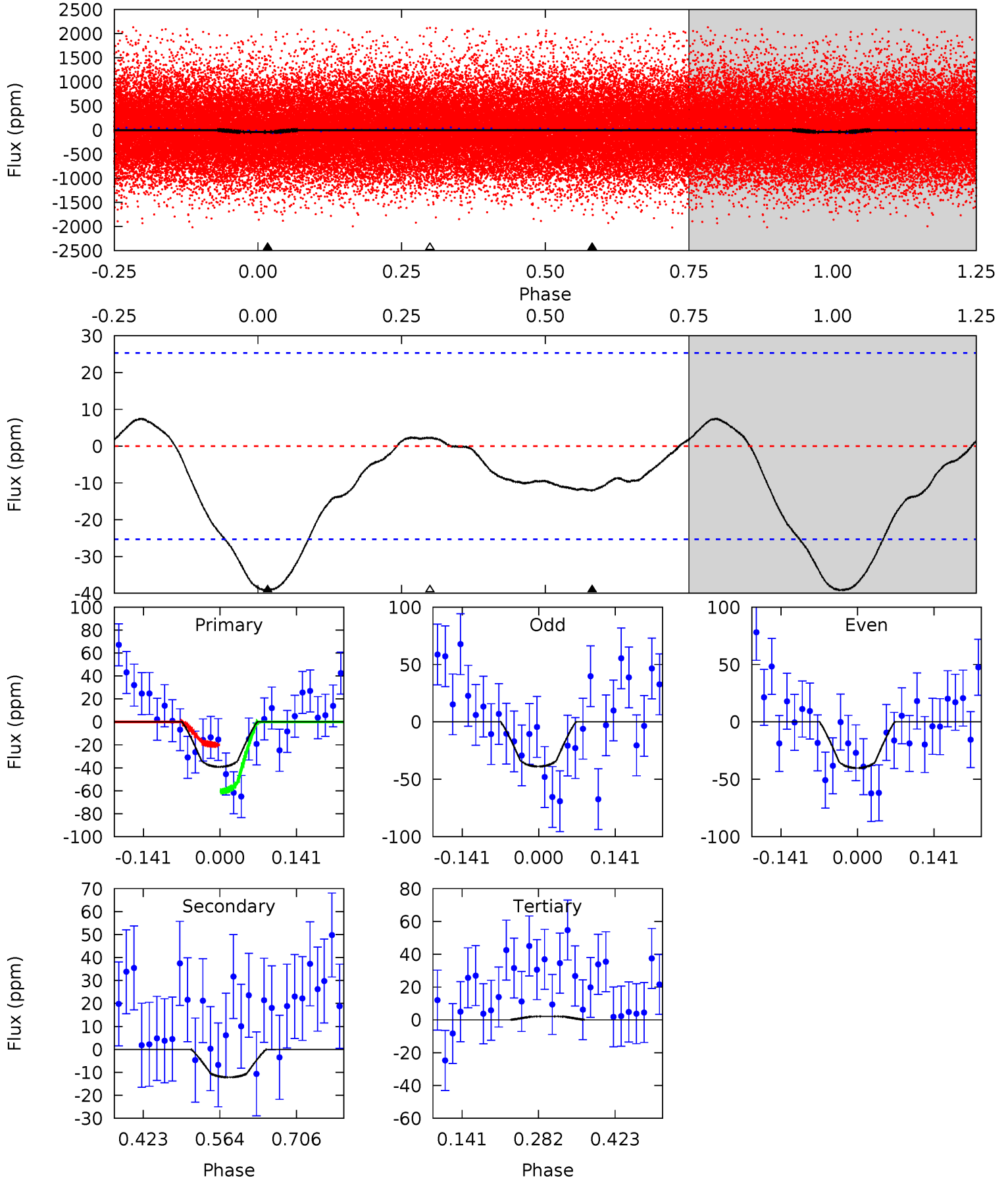
TCE 007032807-01 P= 0.566808 Days $T_0=131.813545$ (BKJD)



DV Model-Shift Uniqueness Test

007032807-01, P = 0.566797 Days, E = 131.245720 Days

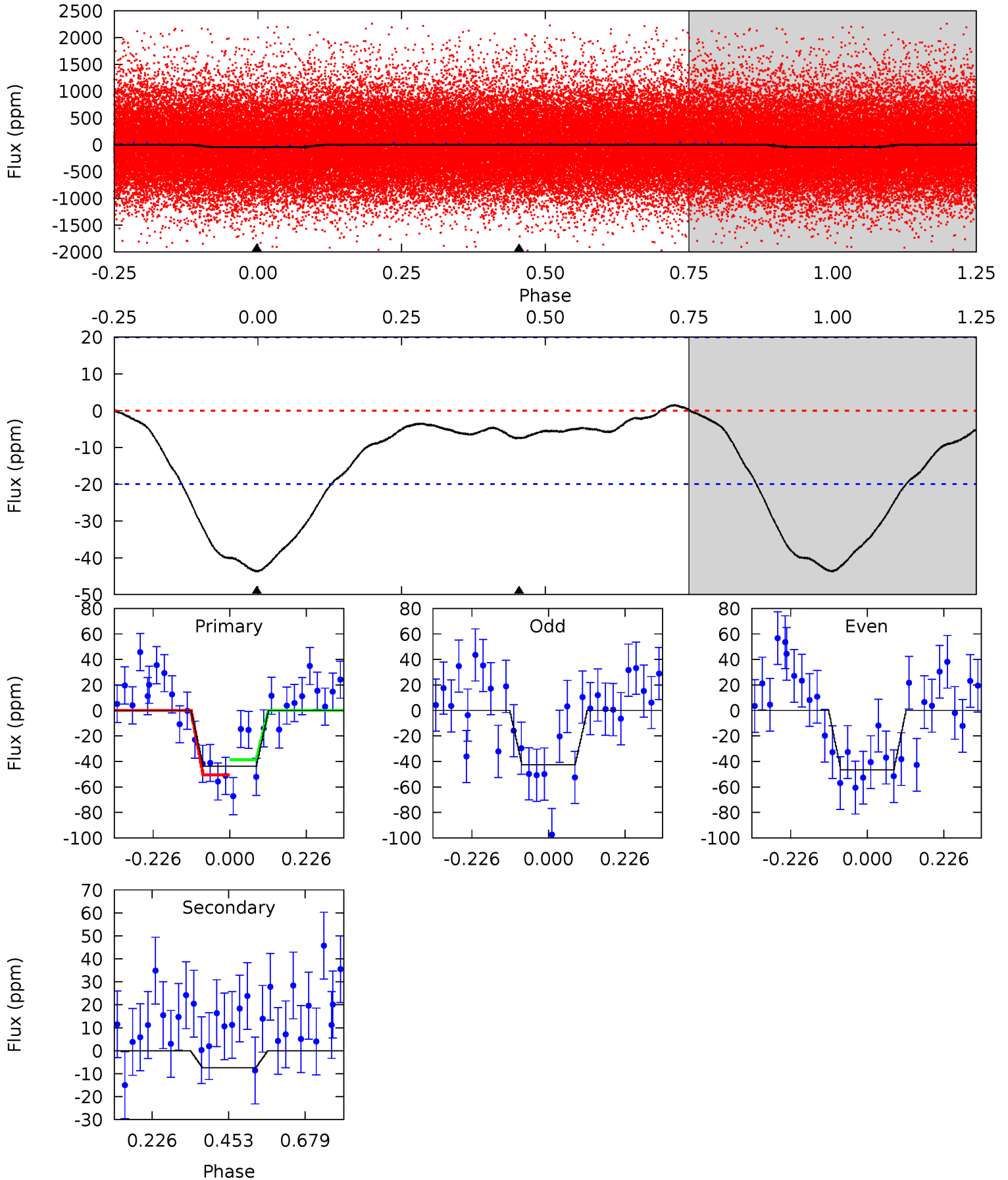
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.95	2.15	-0.38	0	4.49	1.47	0.84	7.33	6.95	2.53	2.15	0.12	0.78	0.16	3.60



Alt Model-Shift Uniqueness Test

007032807-01, P = 0.566808 Days, E = 131.246737 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.63	1.65	0	0	4.39	1.21	0.50	9.63	9.63	1.65	1.65	0.43	0.92	0.04	1.33



Stellar Parameters For KIC 007032807

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$\rho_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5391^{+162}_{-162}	$4.643^{+0.030}_{-0.090}$	$-0.560^{+0.300}_{-0.300}$	$0.686^{+0.107}_{-0.050}$	$0.760^{+0.075}_{-0.075}$	$3.321^{+0.452}_{-0.999}$
	+3%/-3%	+1%/-2%	+54%/-54%	+16%/-7%	+10%/-10%	+14%/-30%
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 007032807-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-12 ± 6	$0.59^{+0.43}_{-0.37}$	2515^{+98}_{-94}	3825^{+1971}_{-949}	$2.784^{+16.988}_{-2.134}$
Alt.	-7 ± 5	$0.57^{+0.48}_{-0.36}$	2522^{+103}_{-86}	3472^{+1708}_{-1107}	$1.678^{+9.529}_{-1.311}$

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 $A_{\text{obs}} \gg 1.0$

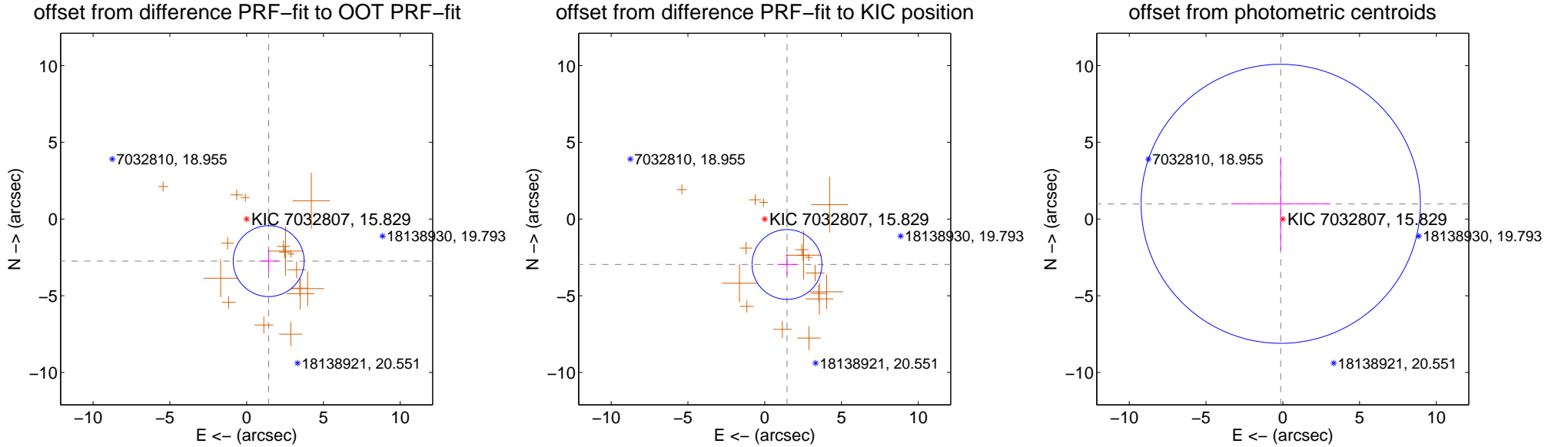
DV Centroid Data

Supplemental centroid analysis for 007032807-01. Kepler magnitude: 15.83. Transit SNR 4.79

There are 0 quarters with good PRF difference image offsets

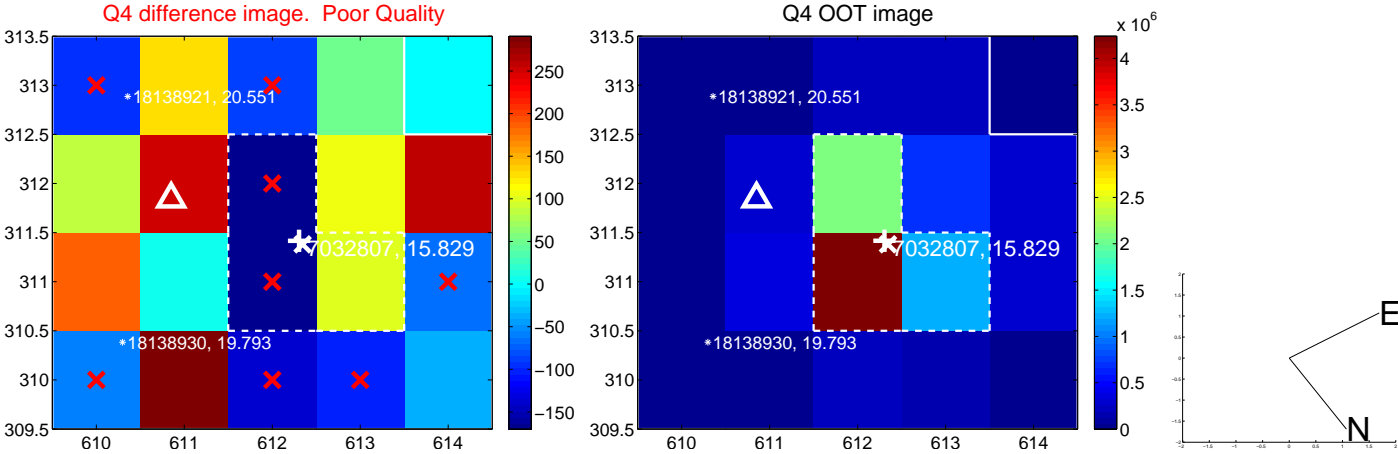
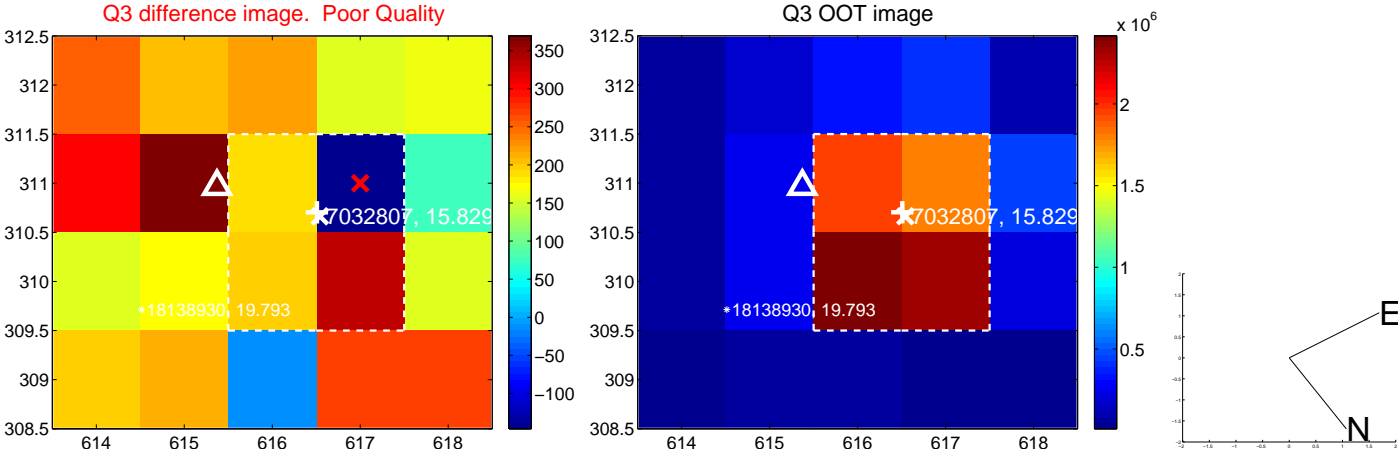
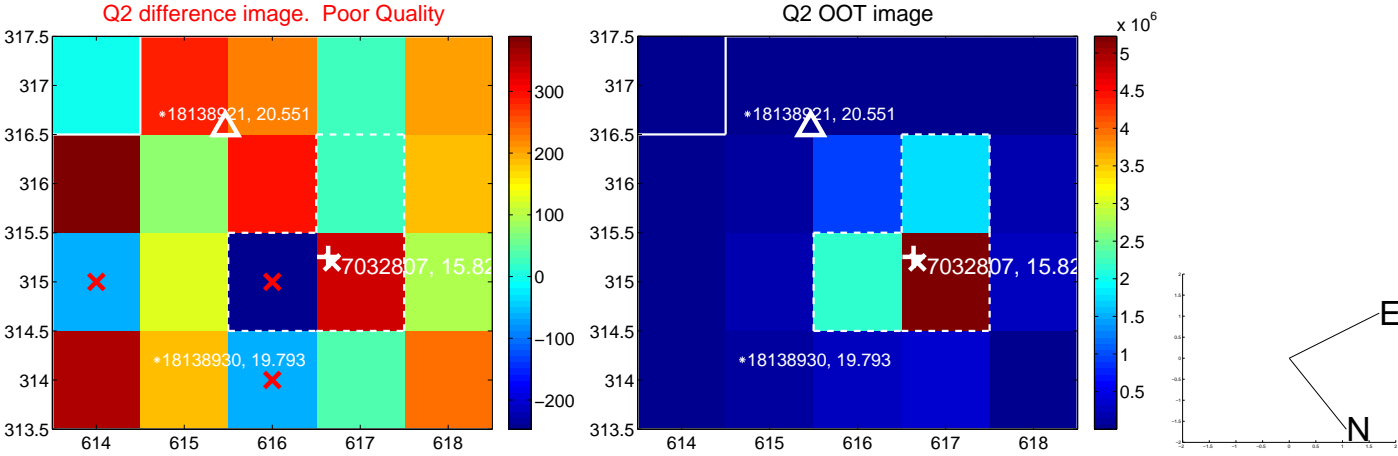
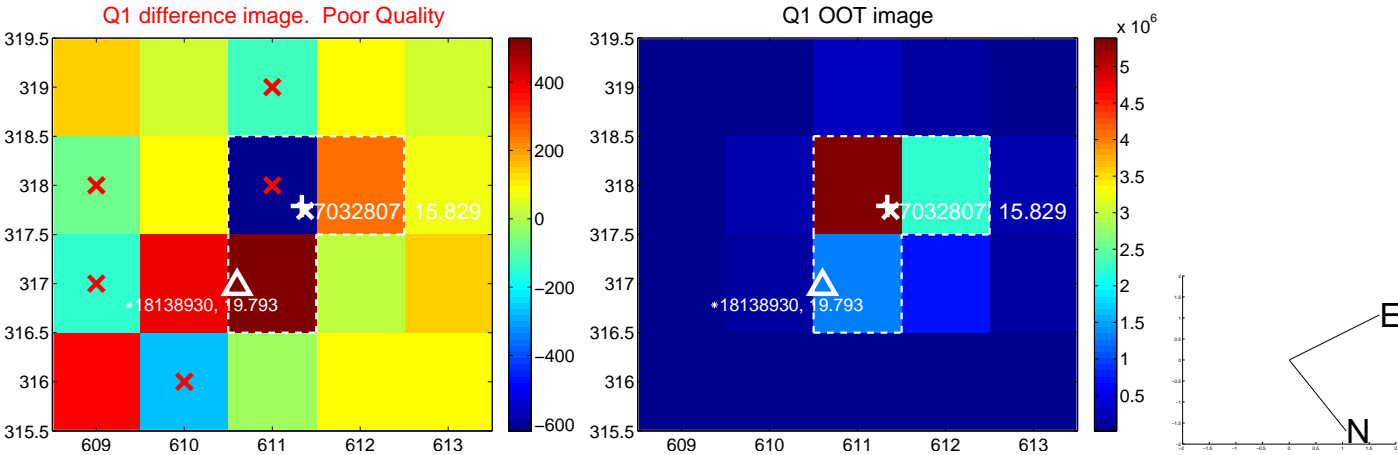
The direct PRF centroid is offset from the target star catalog position by about 0.32 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	3.095 ± 0.770	4.02	-1.435 ± 0.614	-2.742 ± 0.719
PRF-fit source offset from KIC position	3.298 ± 0.759	4.35	-1.451 ± 0.628	-2.962 ± 0.683
photometric centroid source offset	1.00 ± 3.03	0.33	0.13 ± 3.23	0.99 ± 3.03

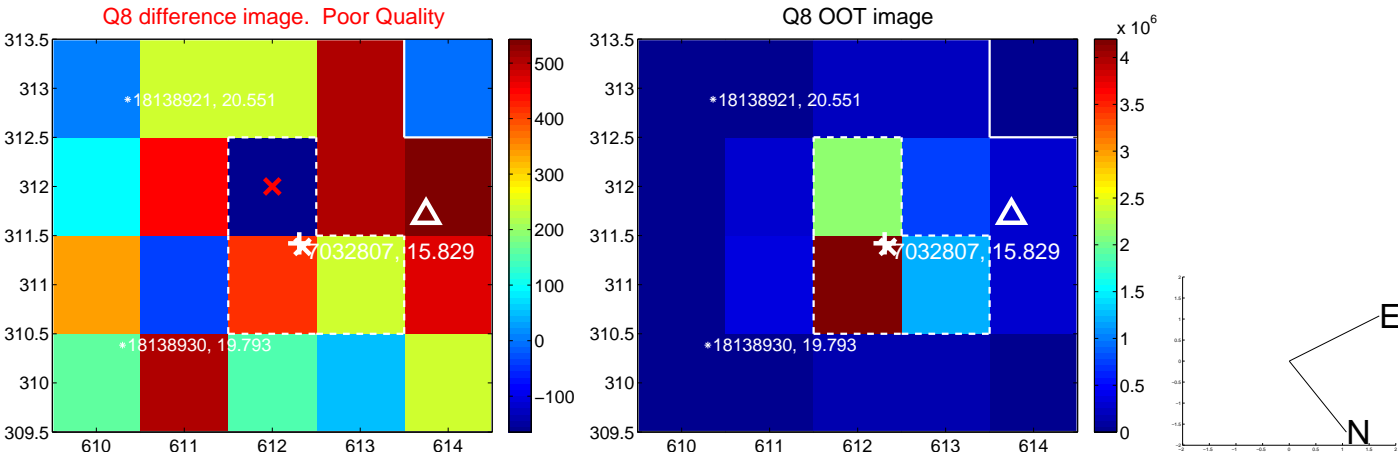
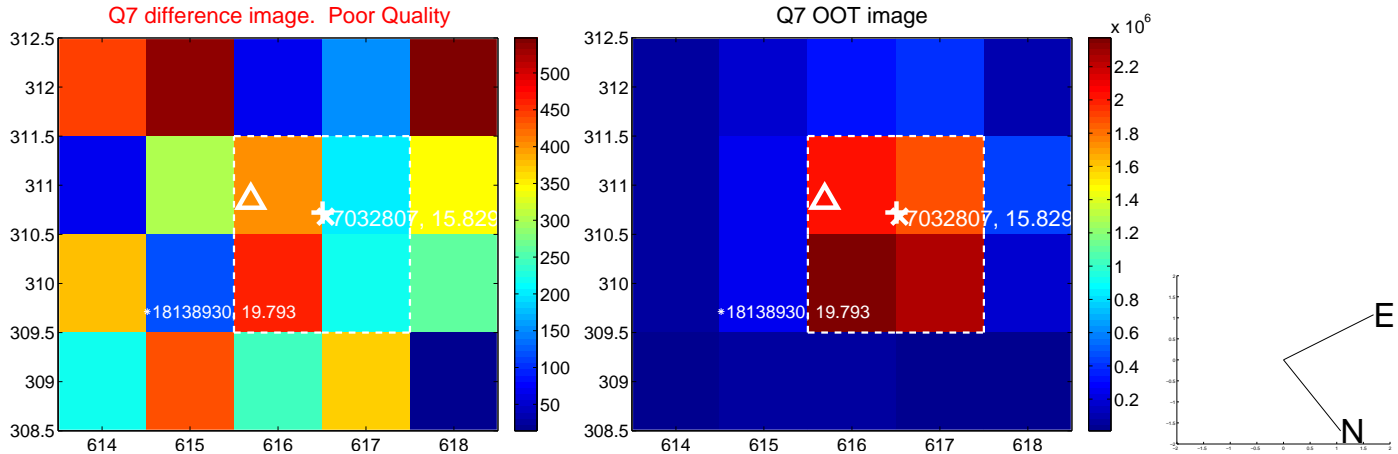
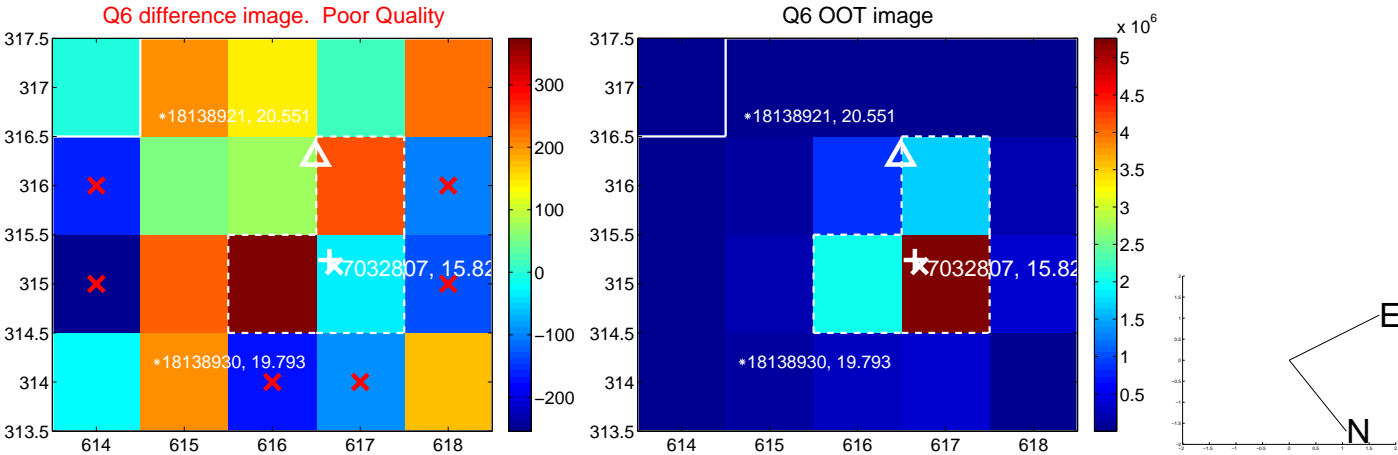
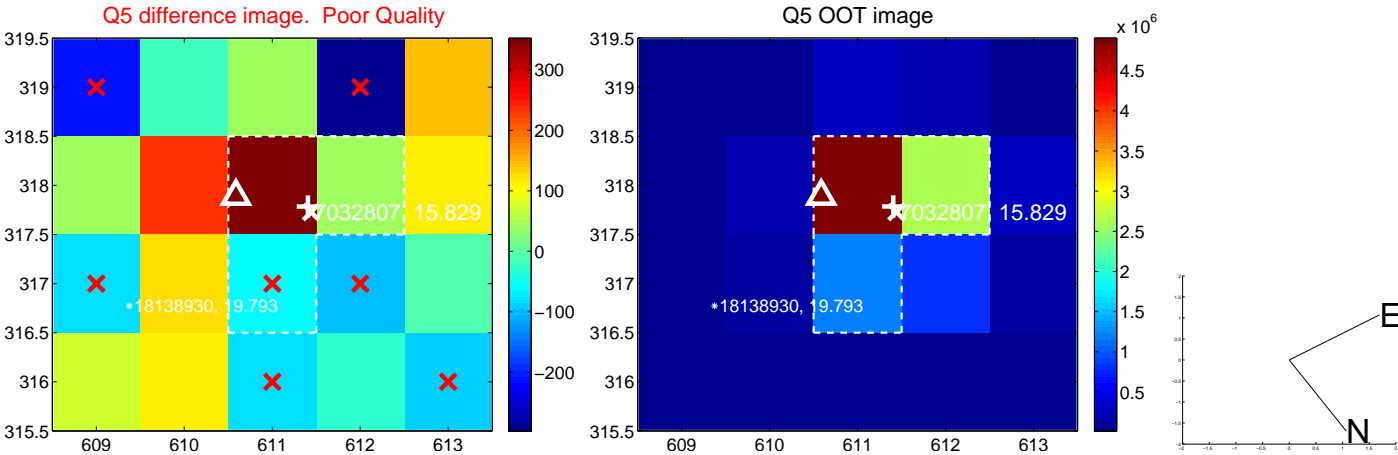


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

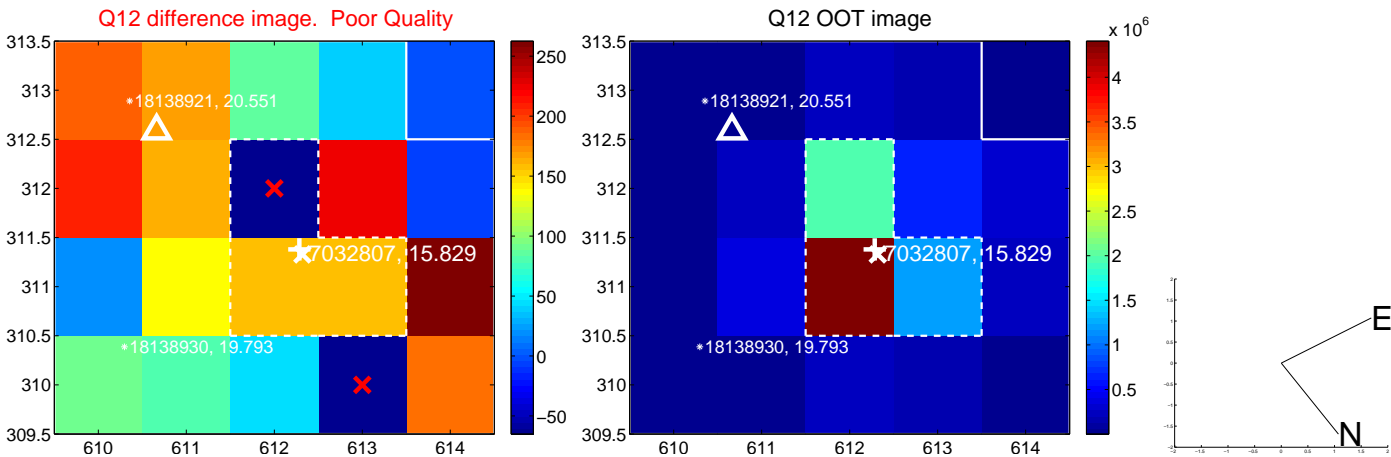
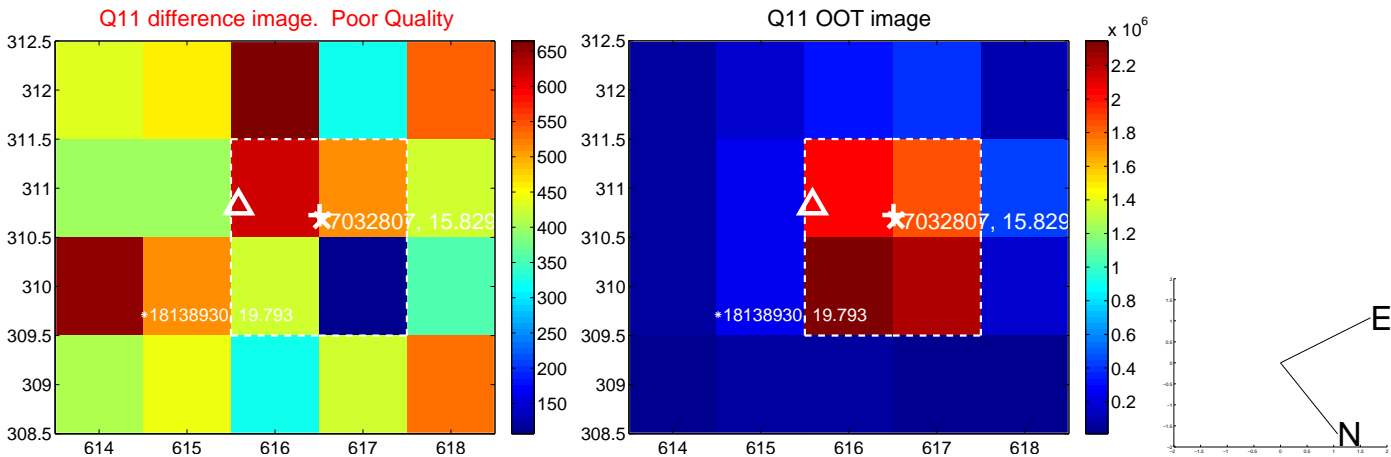
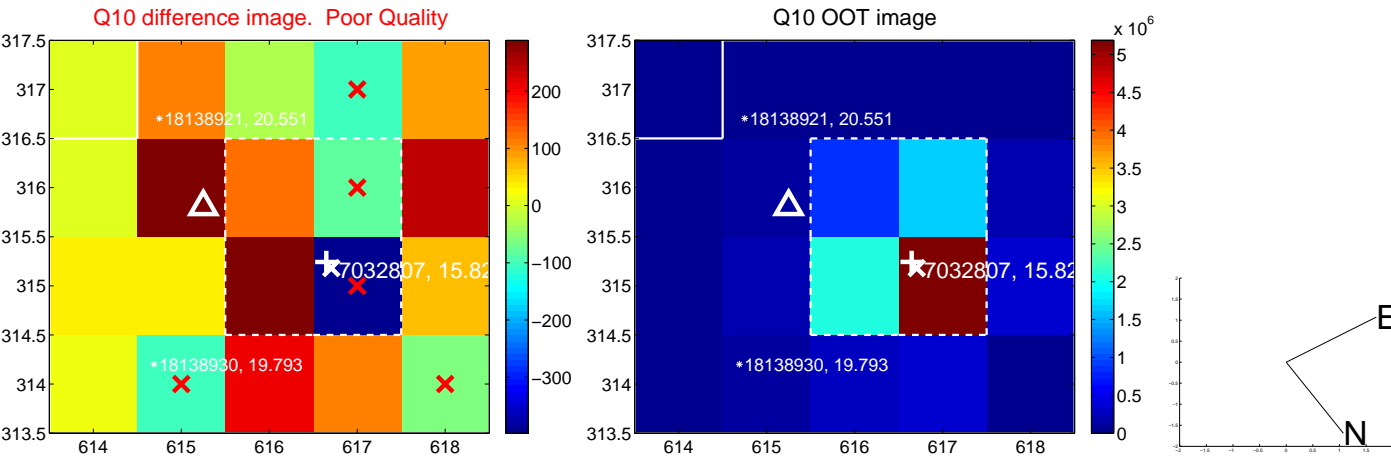
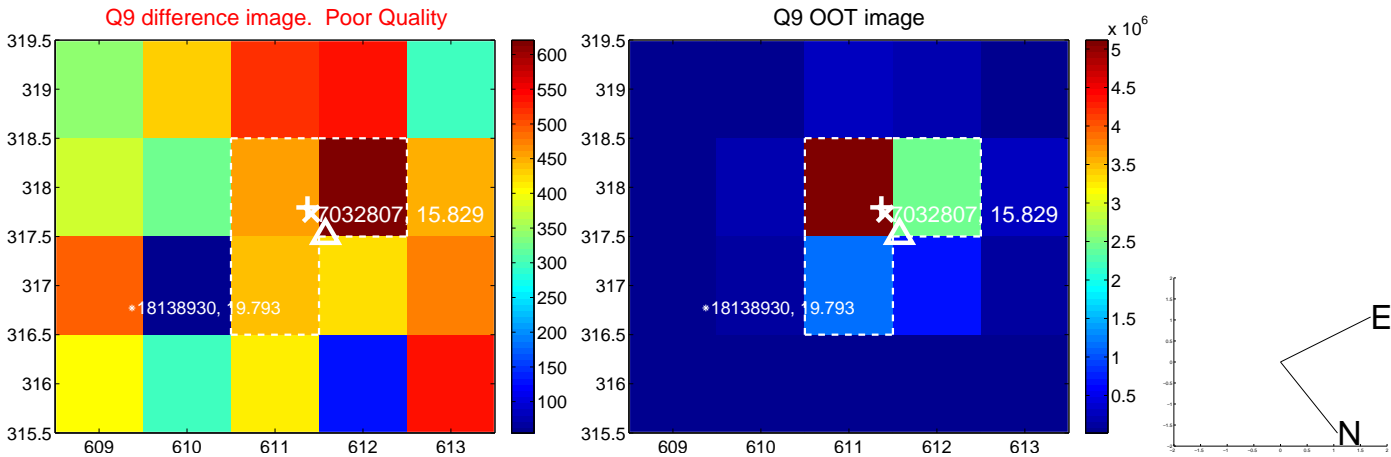
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



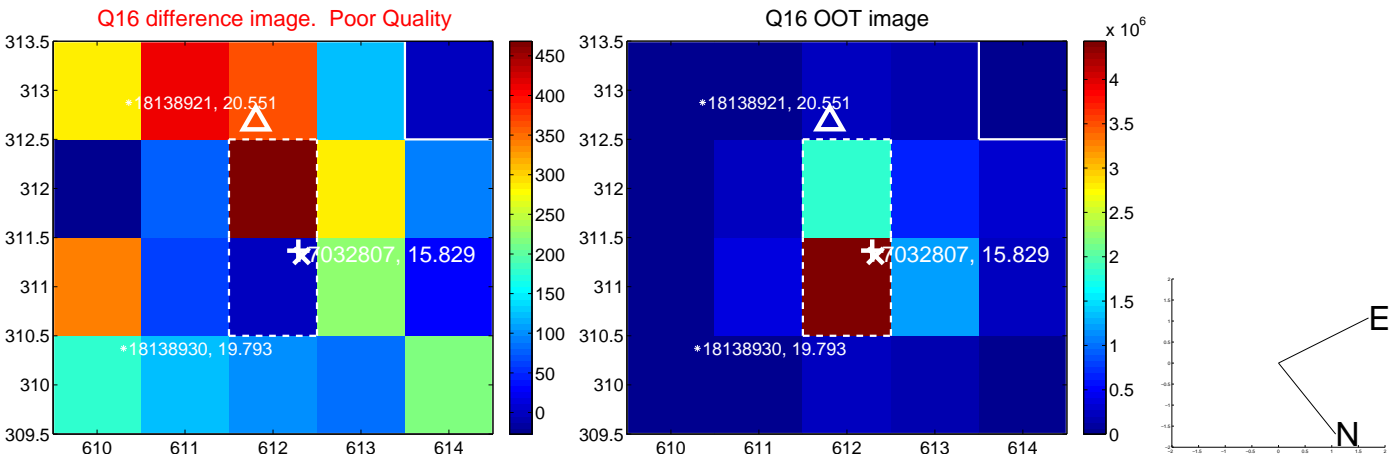
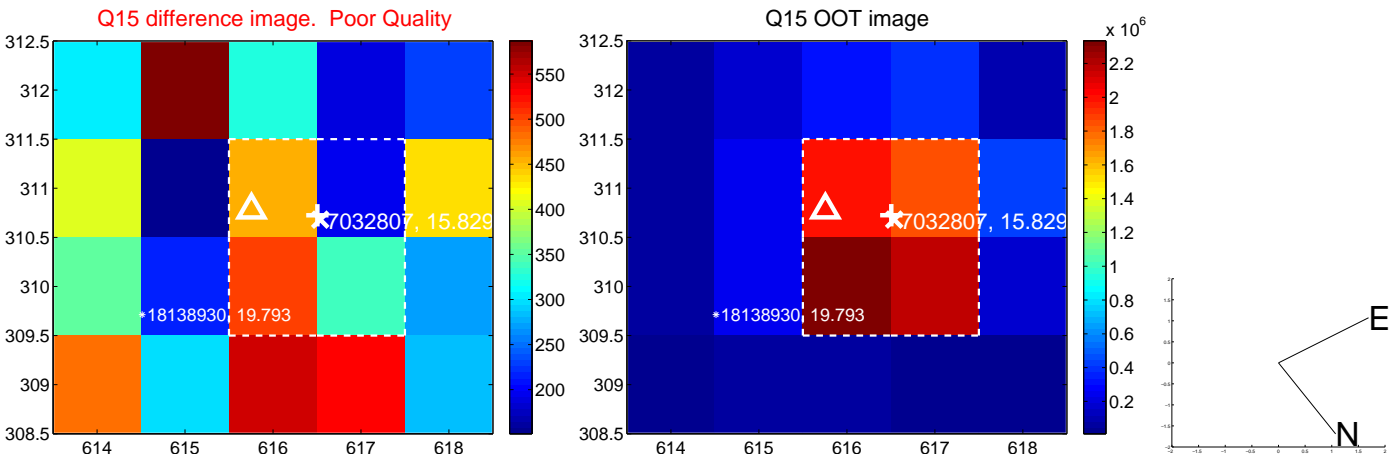
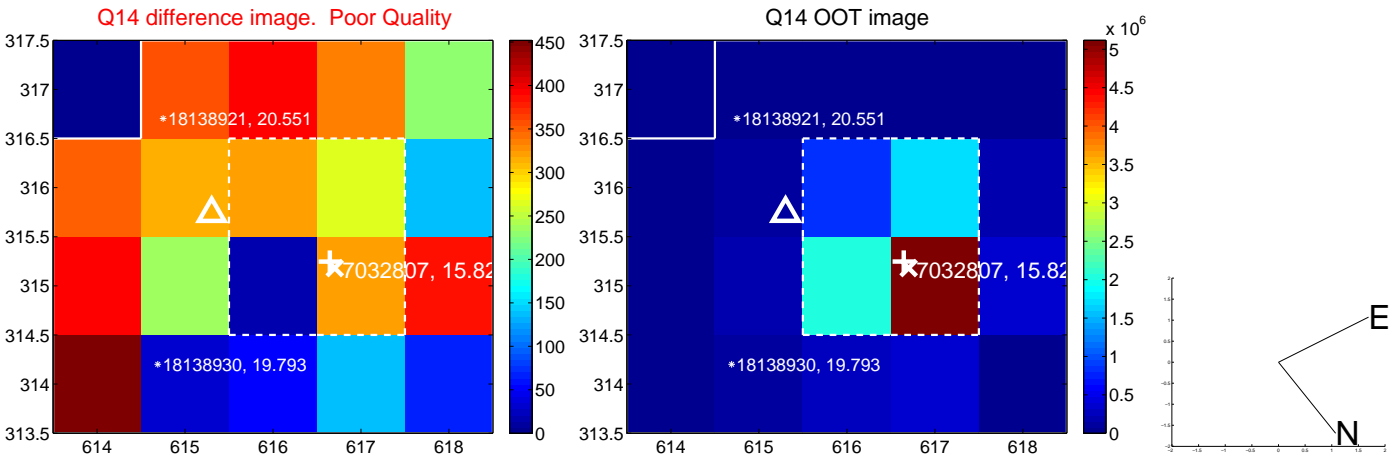
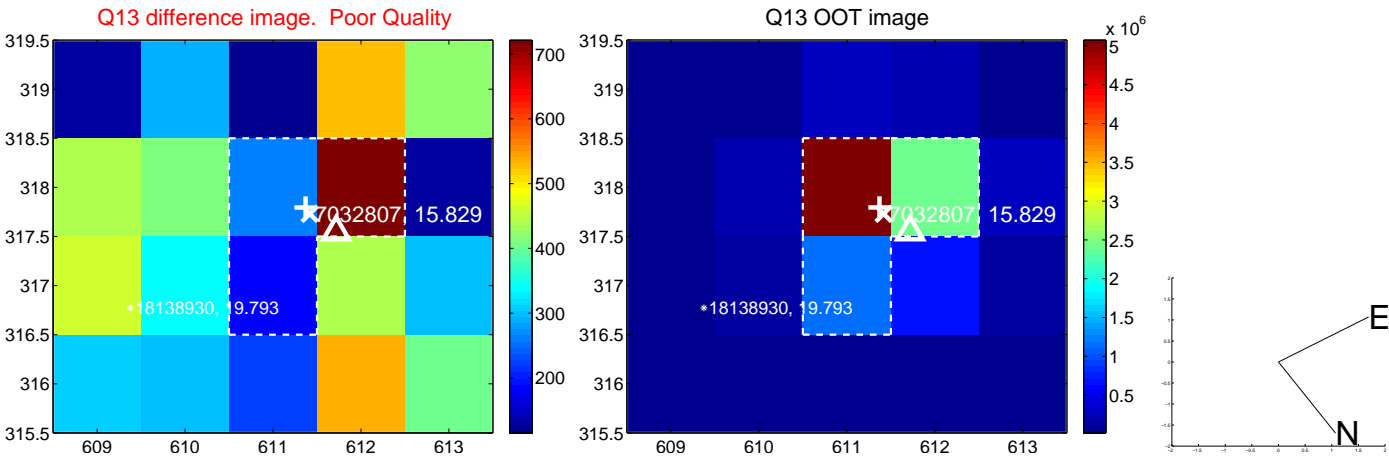
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



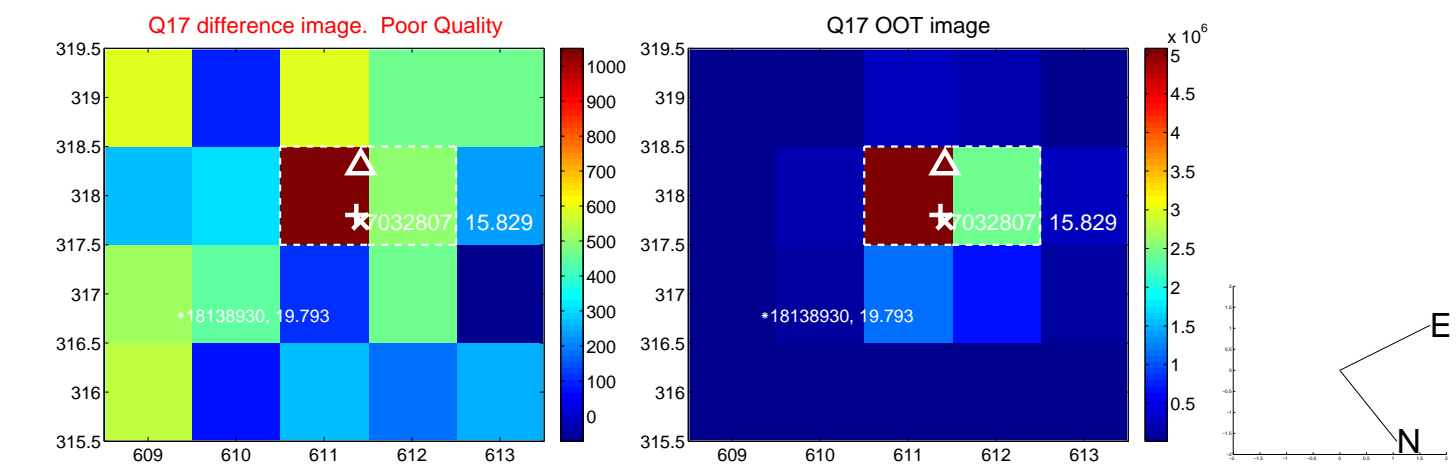
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



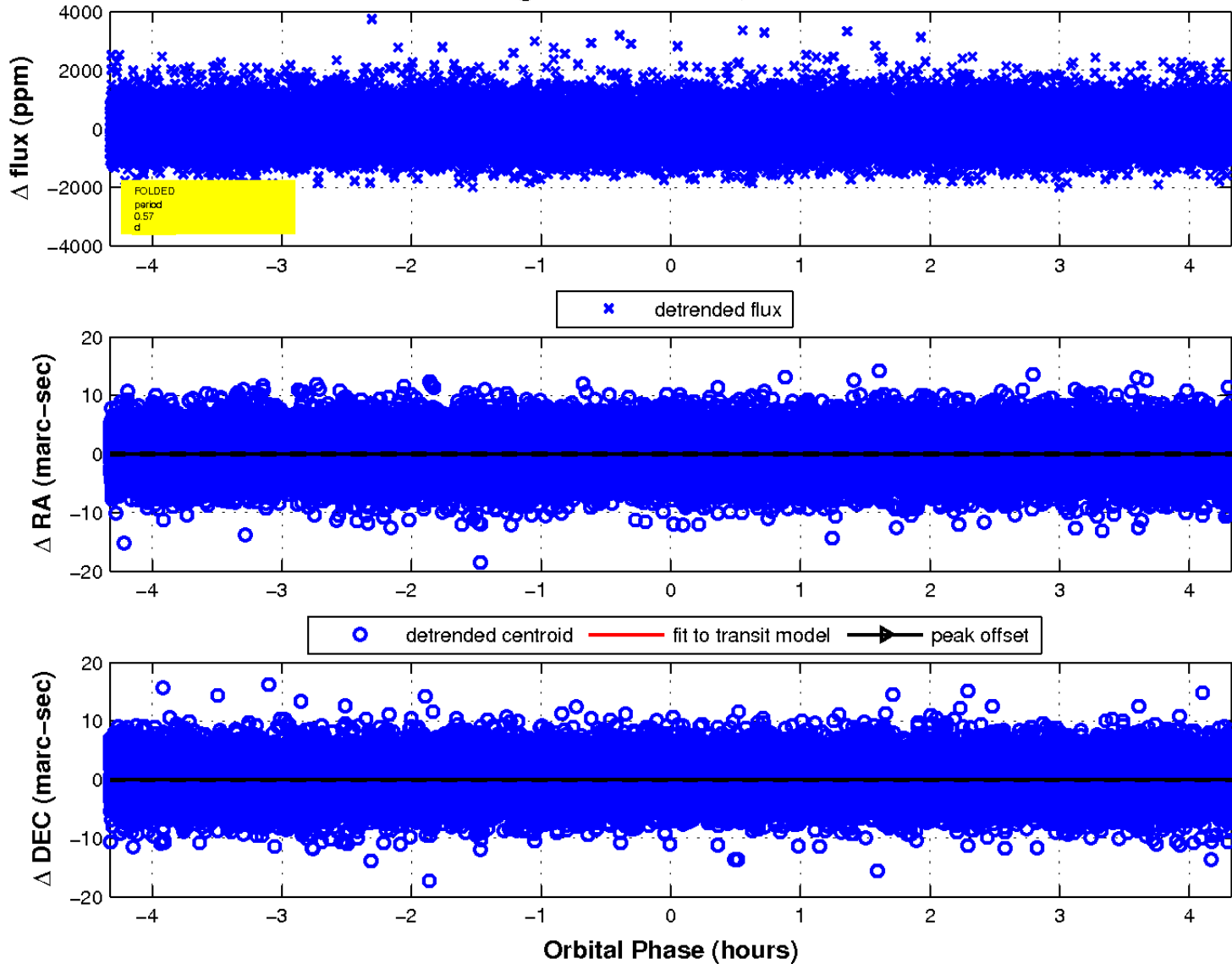
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

