

KIC 005392514

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})
005392514-01	OBS	No	0.536789	131.840578	11.5	3.324	8.7	2.4	0.81	5818	0.28	4612.19

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005392514-01	OBS	FP	0.00	1	0	1	0	LPP_DV—CENT_RESOLVED_OFFSET

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

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

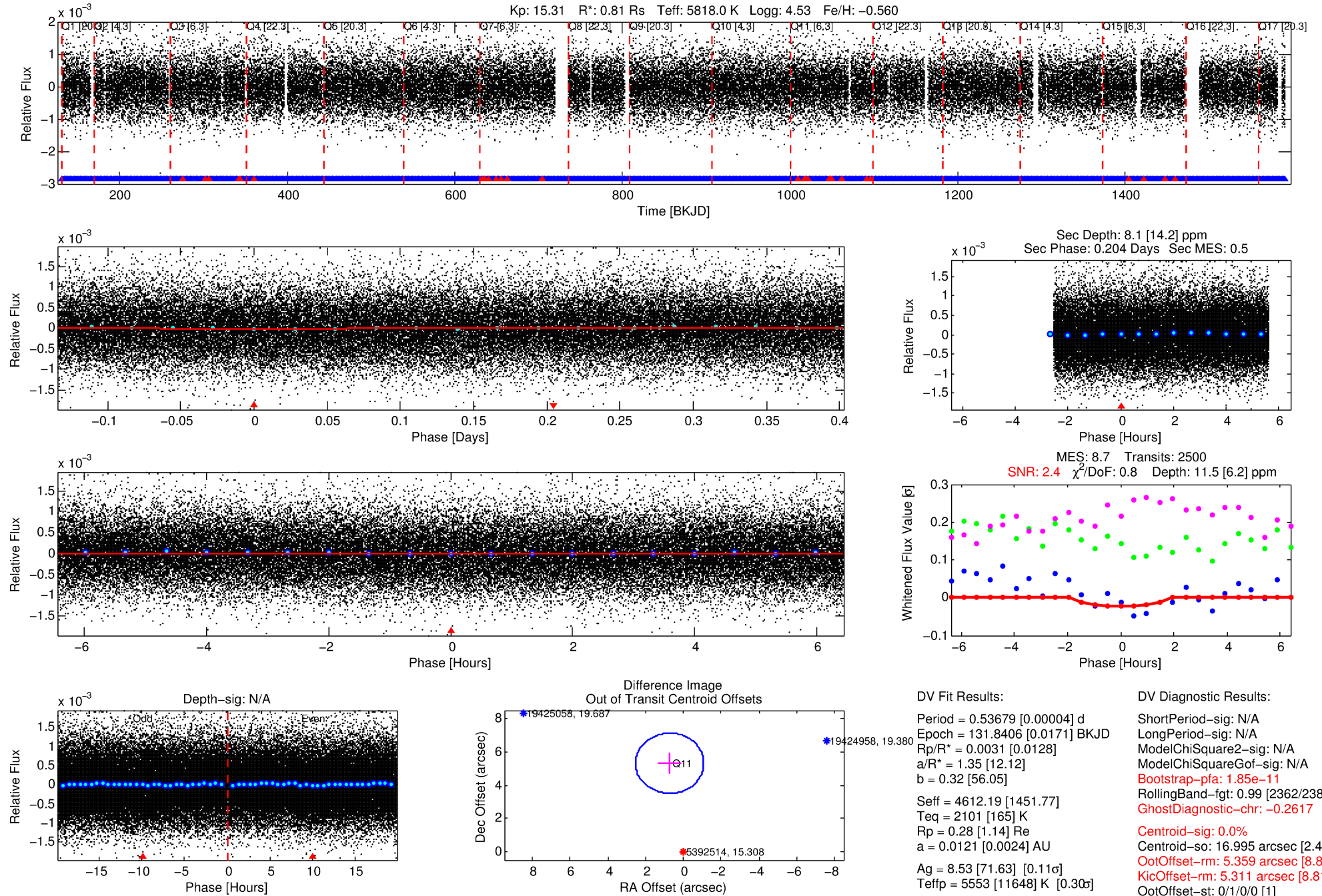
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005392514-01

No Significant Match Found

DV One-Page Summary

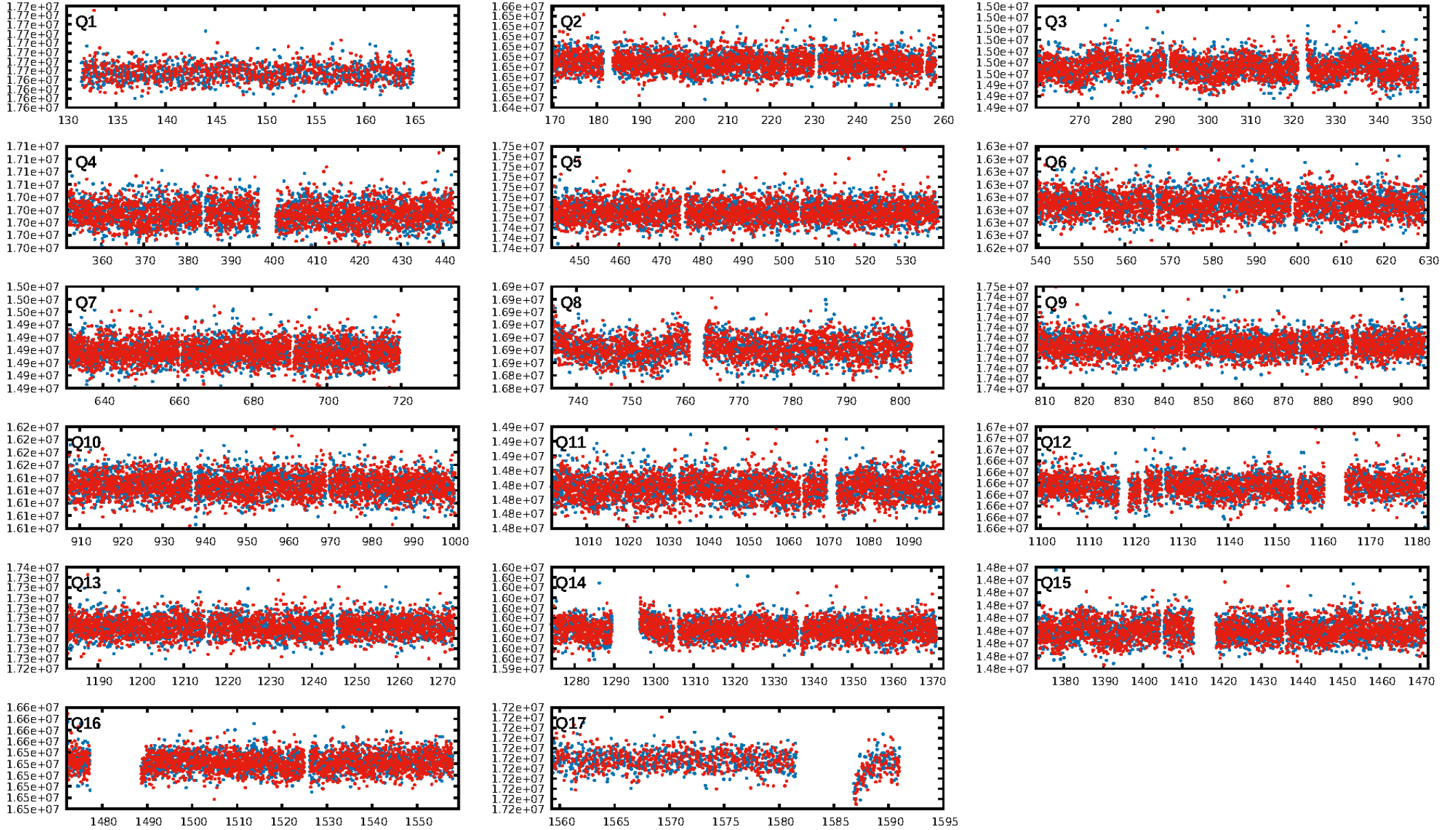
KIC: 5392514 Candidate: 1 of 1 Period: 0.537 d



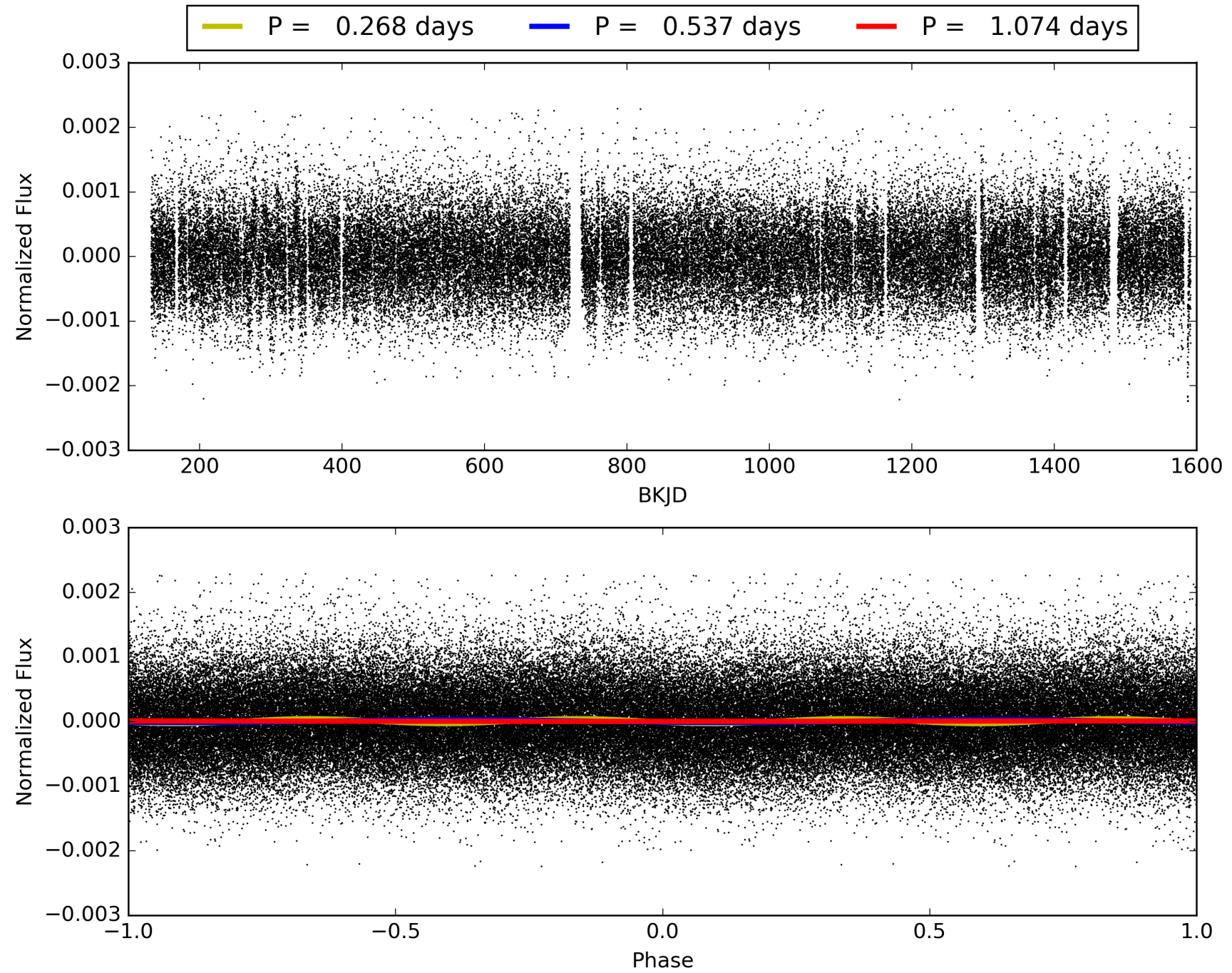
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 14:26:09 Z

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

TCE 005392514-01, PDC Light Curves

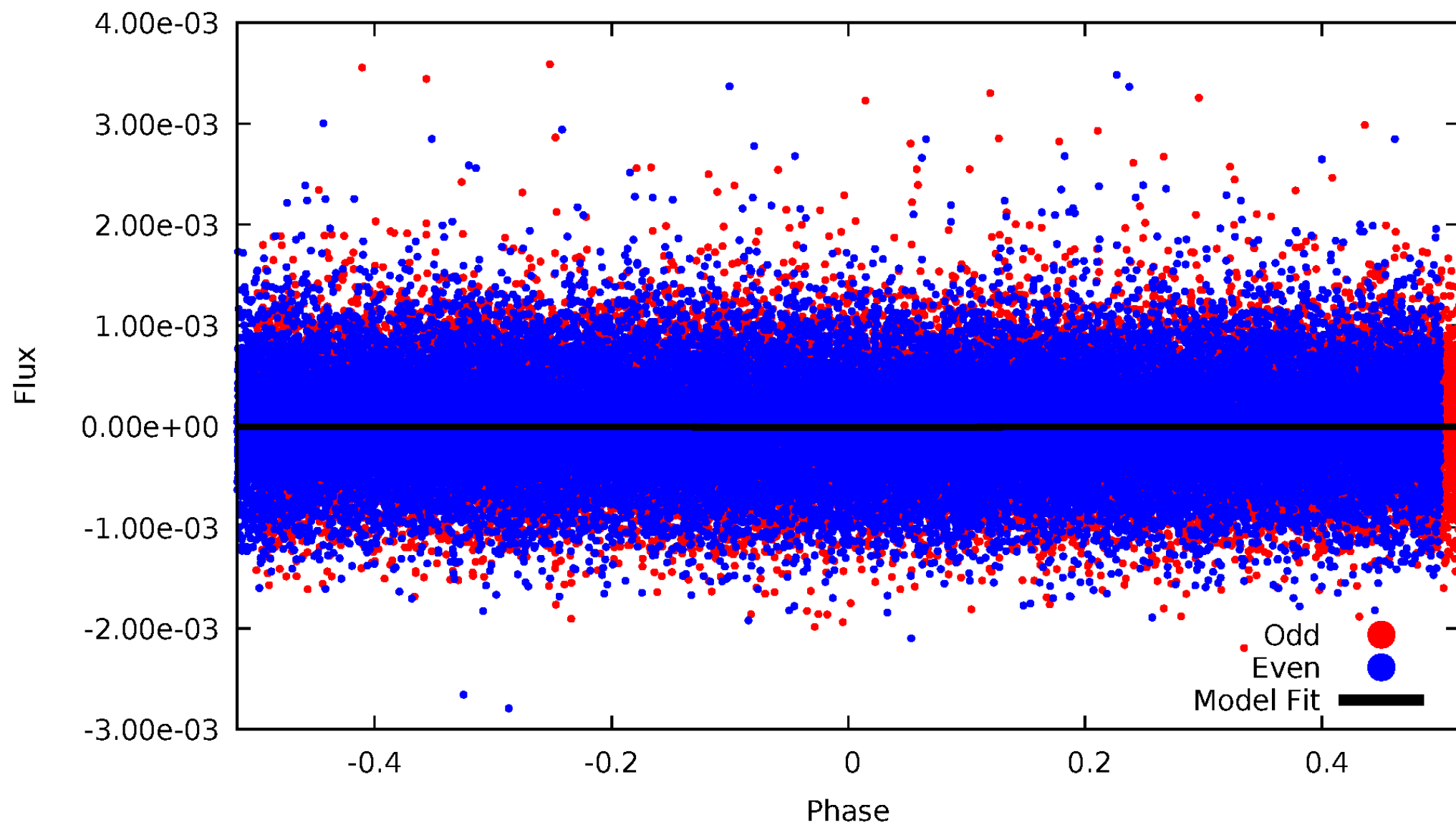


TCE 005392514-01



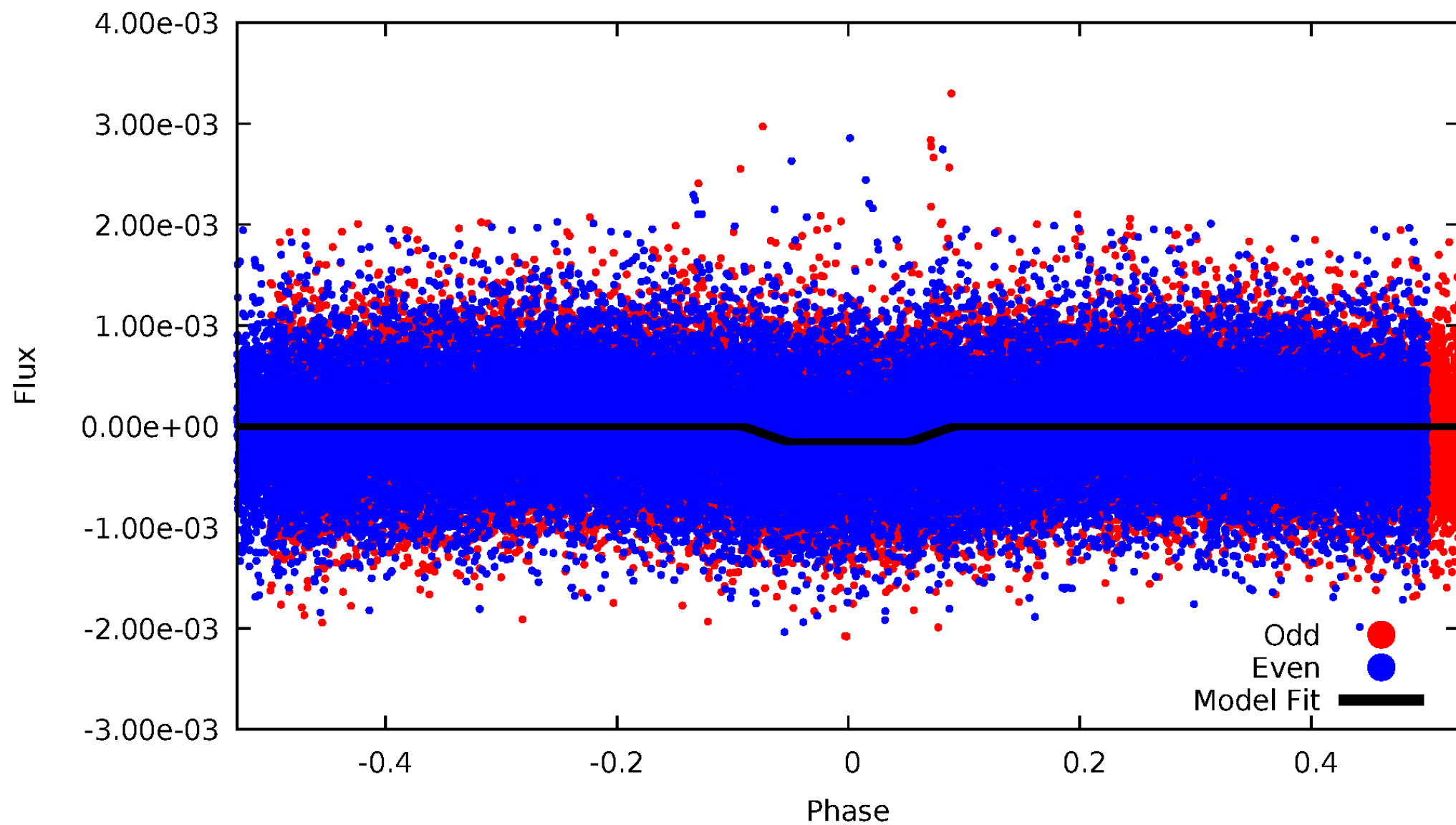
DV Odd/Even

TCE 005392514-01



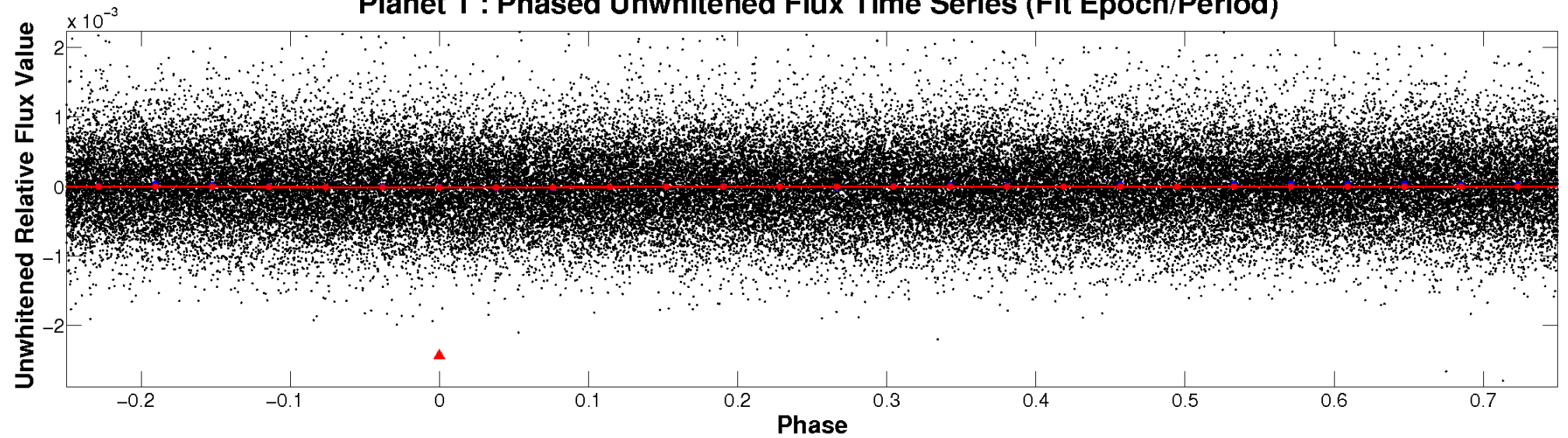
ALT Odd/Even

TCE 005392514-01

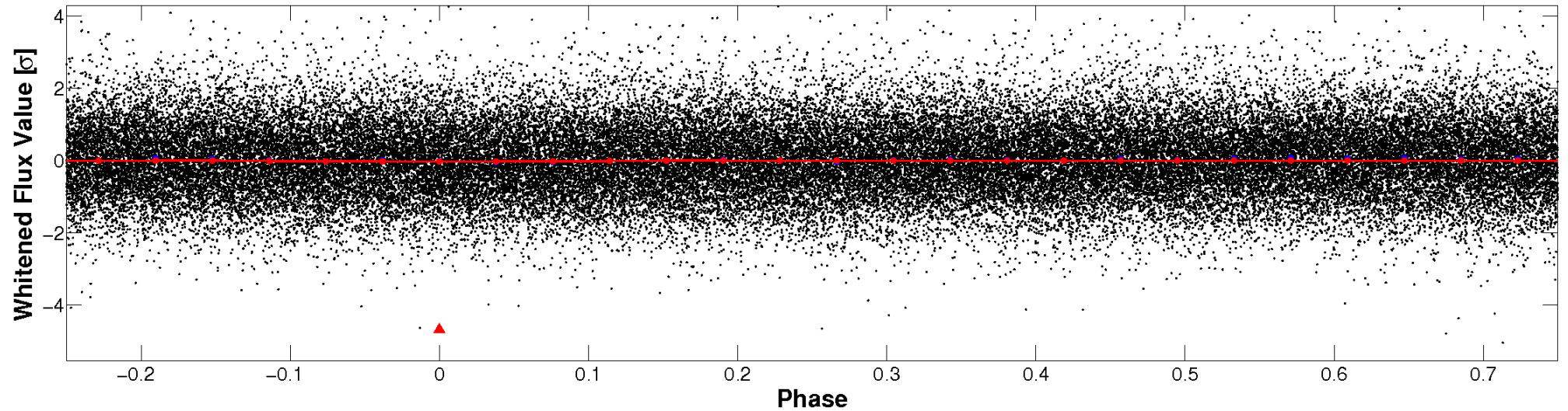


Non-Whitened Vs. Whitened Light Curve

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

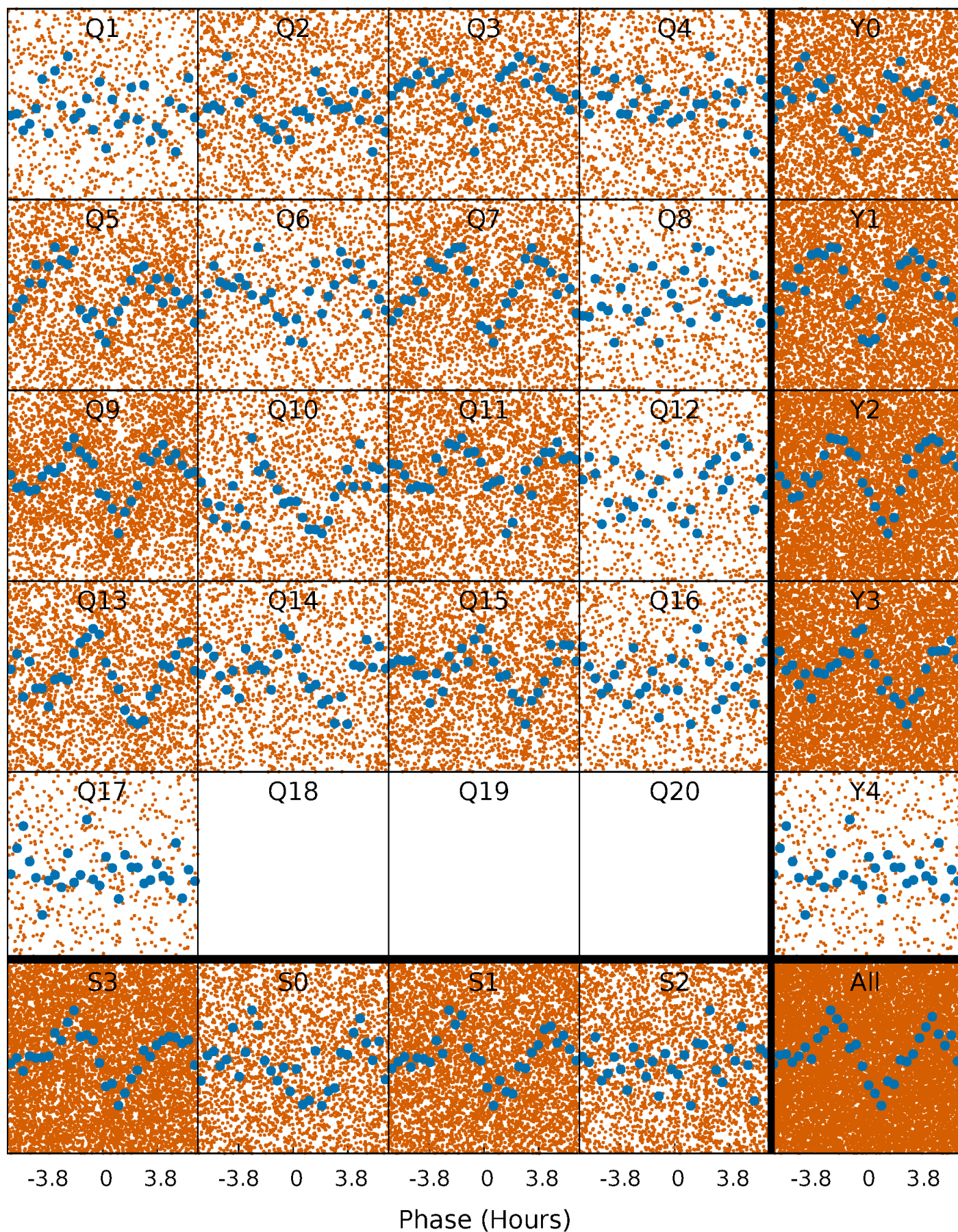


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



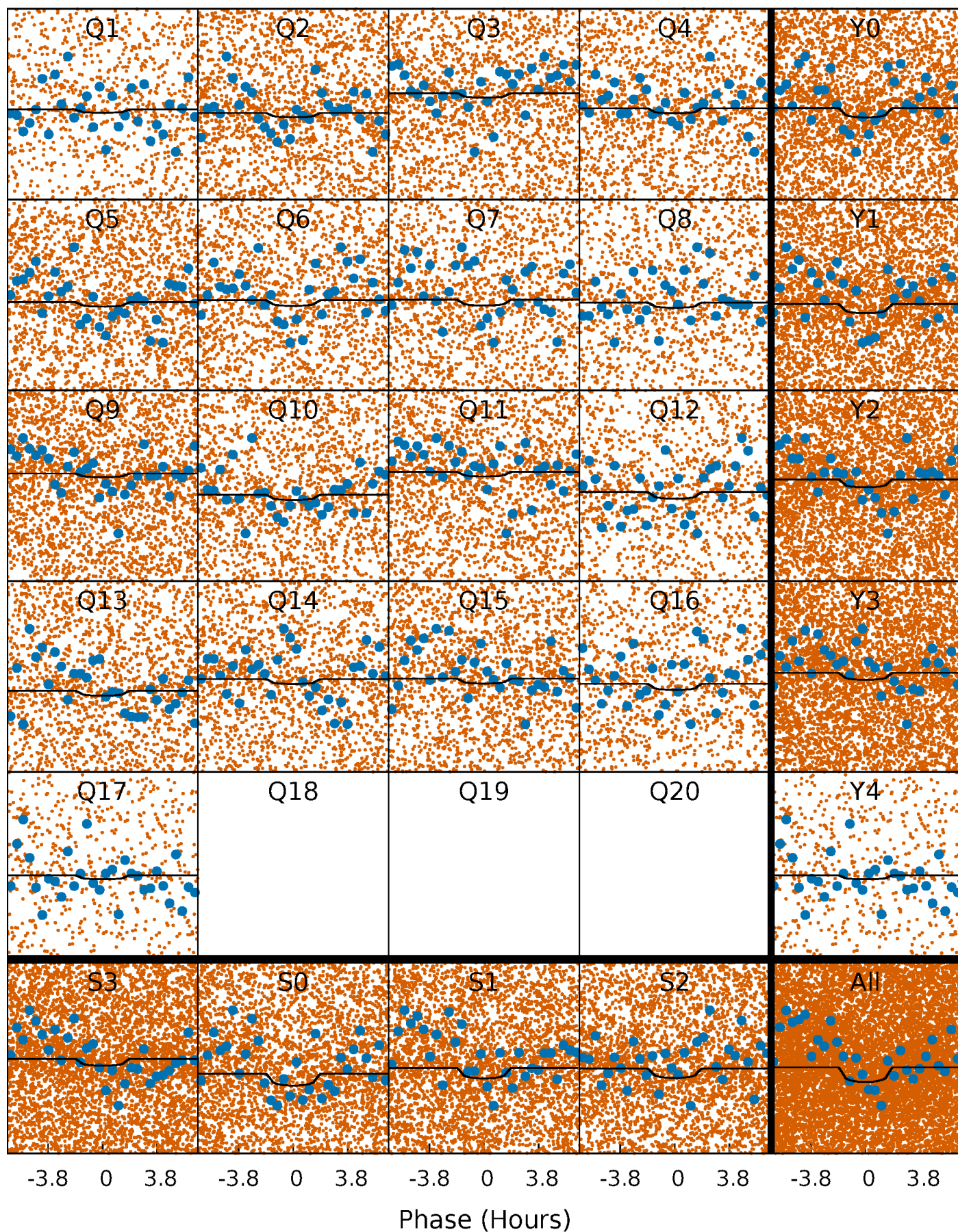
PDC Quarter-Phased Transit Curves

TCE 005392514-01 P= 0.536789 Days $T_0=131.840578$ (BKJD)



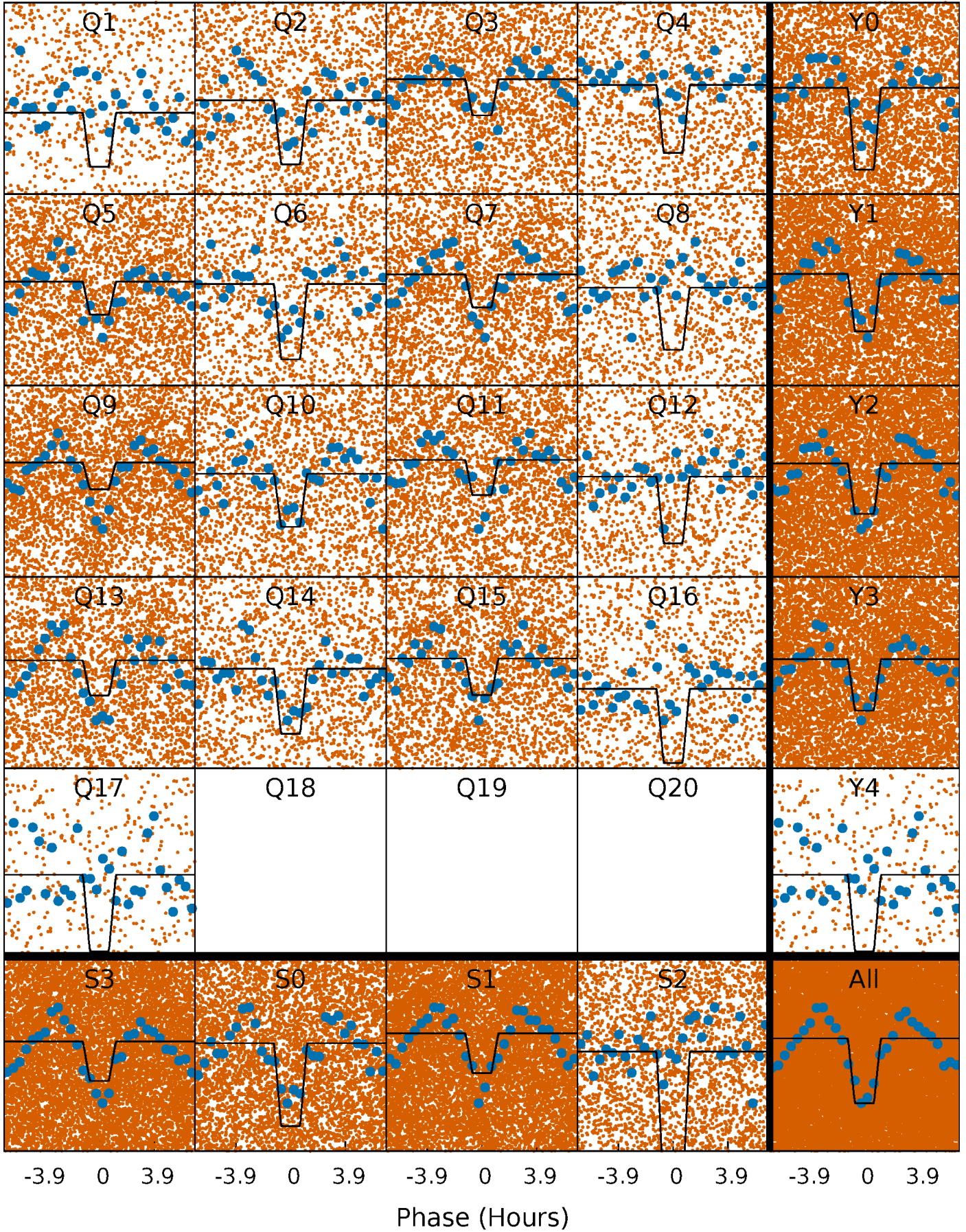
DV Quarter-Phased Transit Curves

TCE 005392514-01 P= 0.536789 Days $T_0=131.840578$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

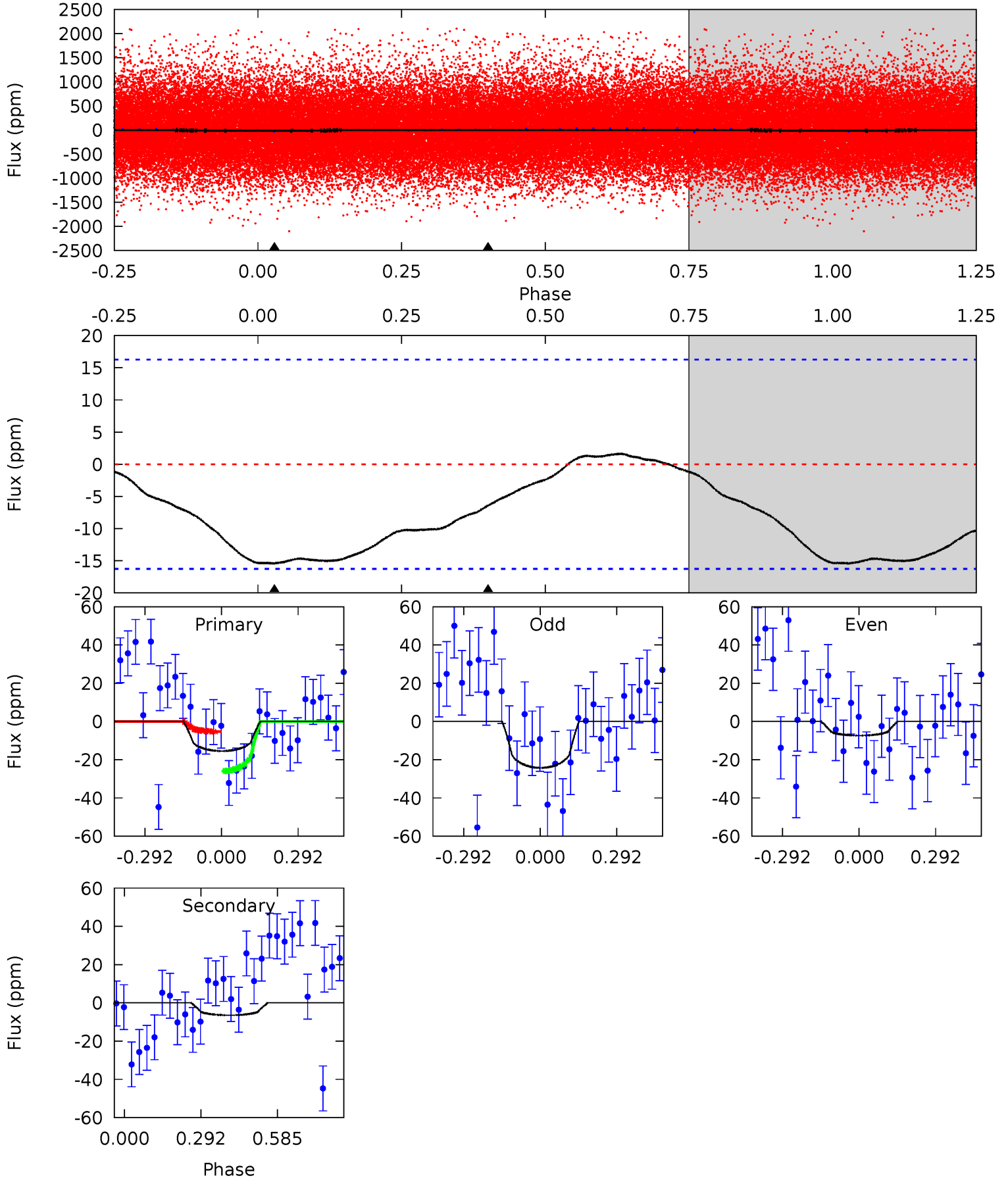
TCE 005392514-01 P= 0.536863 Days $T_0=131.788511$ (BKJD)



DV Model-Shift Uniqueness Test

005392514-01, P = 0.536789 Days, E = 131.303789 Days

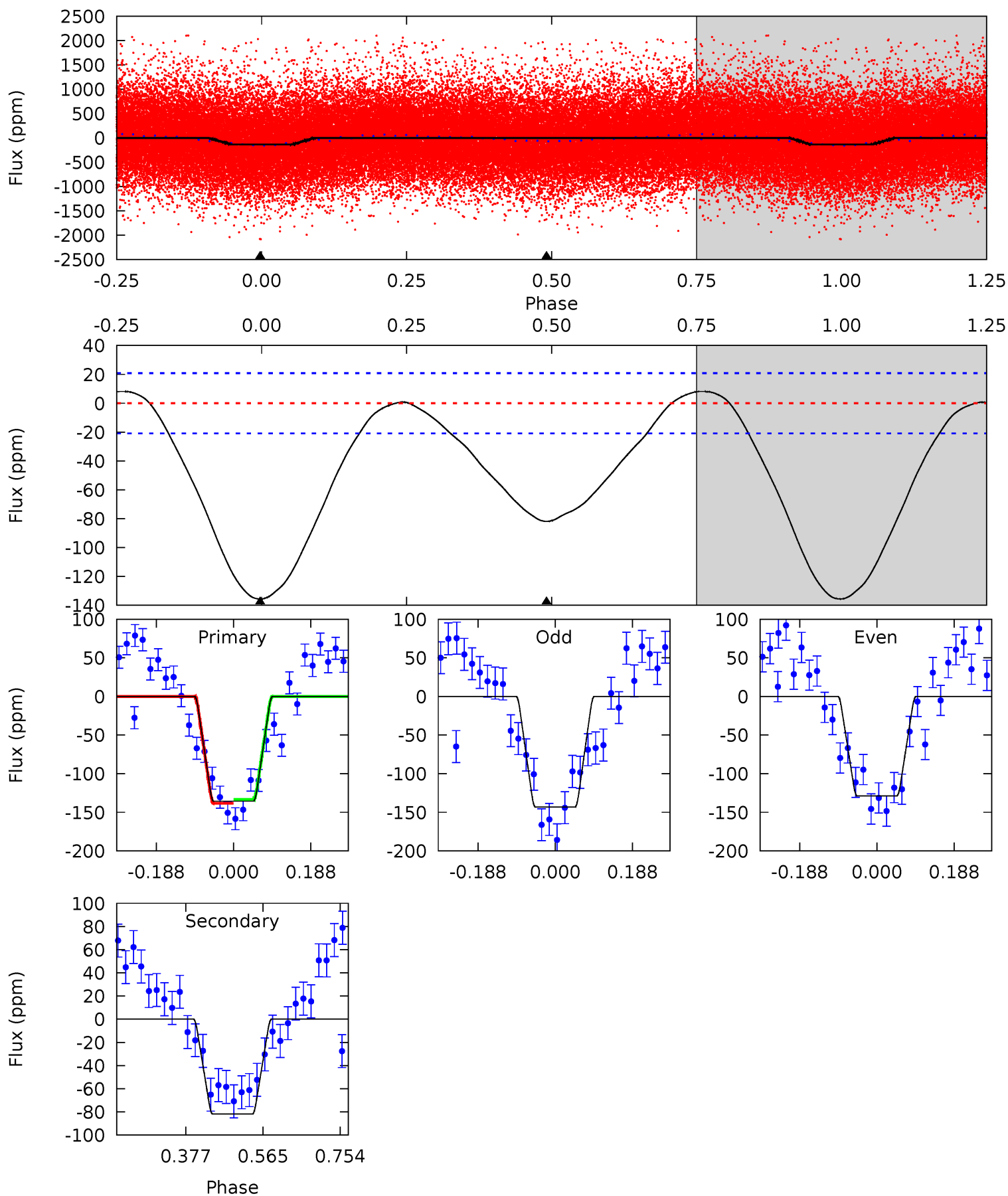
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
4.11	1.72	0	0	4.33	1.05	0.21	4.11	4.11	1.72	1.72	2.25	0.84	0.10	2.74



Alt Model-Shift Uniqueness Test

005392514-01, P = 0.536863 Days, E = 131.251648 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
28.8	17.4	0	0	4.43	1.32	1.24	28.8	28.8	17.4	17.4	1.53	0.97	0.06	0.53



Stellar Parameters For KIC 005392514

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5818^{+174}_{-174}	$4.533^{+0.069}_{-0.161}$	$-0.560^{+0.300}_{-0.300}$	$0.810^{+0.187}_{-0.093}$	$0.817^{+0.093}_{-0.069}$	$2.162^{+0.602}_{-0.938}$
	+3%/-3%	+2%/-4%	+54%/-54%	+23%/-11%	+11%/-8%	+28%/-43%
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 005392514-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-6 ± 4	$0.95^{+0.86}_{-0.68}$	2978^{+173}_{-139}	2951^{+2238}_{-5865}	$0.513^{+5.768}_{-0.409}$
Alt.	-82 ± 5	$1.33^{+1.19}_{-0.85}$	2975^{+179}_{-140}	4621^{+3147}_{-1102}	$3.700^{+25.175}_{-2.682}$

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 $A_{obs} \gg 1.0$

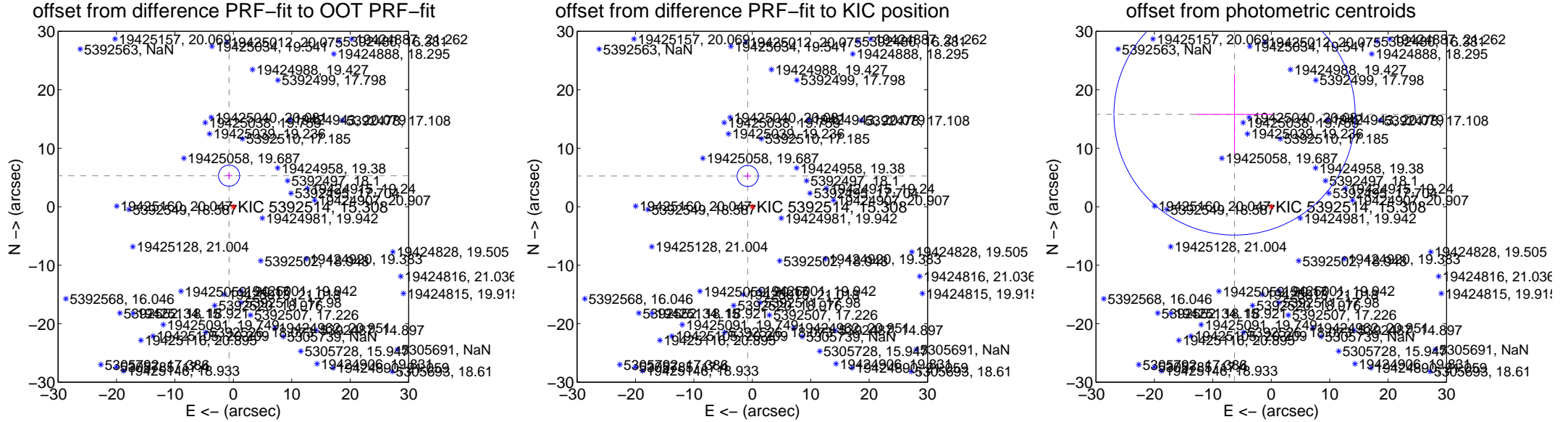
DV Centroid Data

Supplemental centroid analysis for 005392514-01. Kepler magnitude: 15.31. Transit SNR 2.37

There are 1 quarters with good PRF difference image offsets

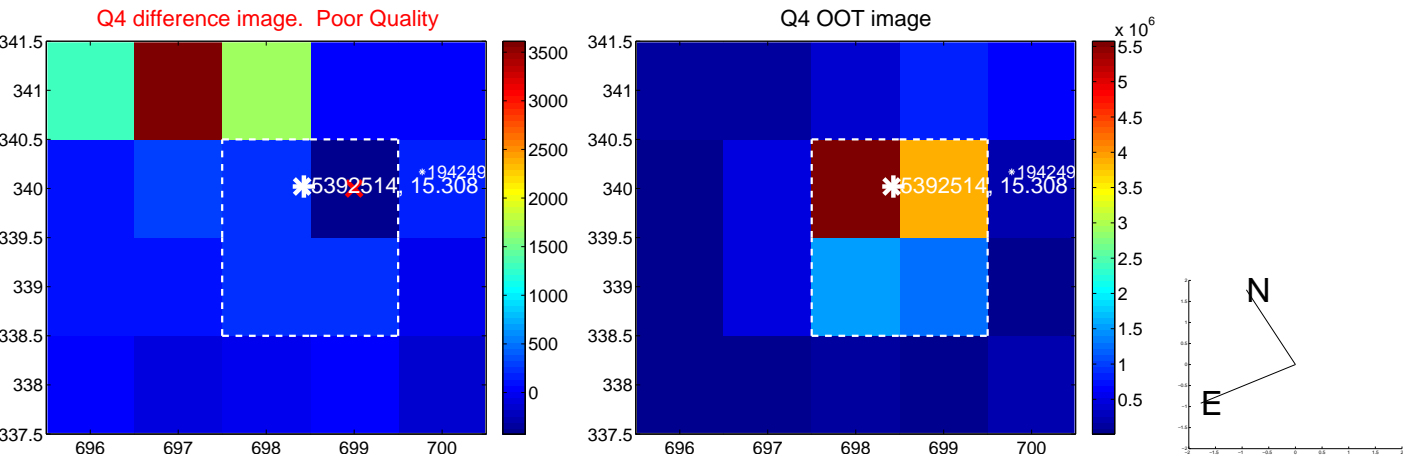
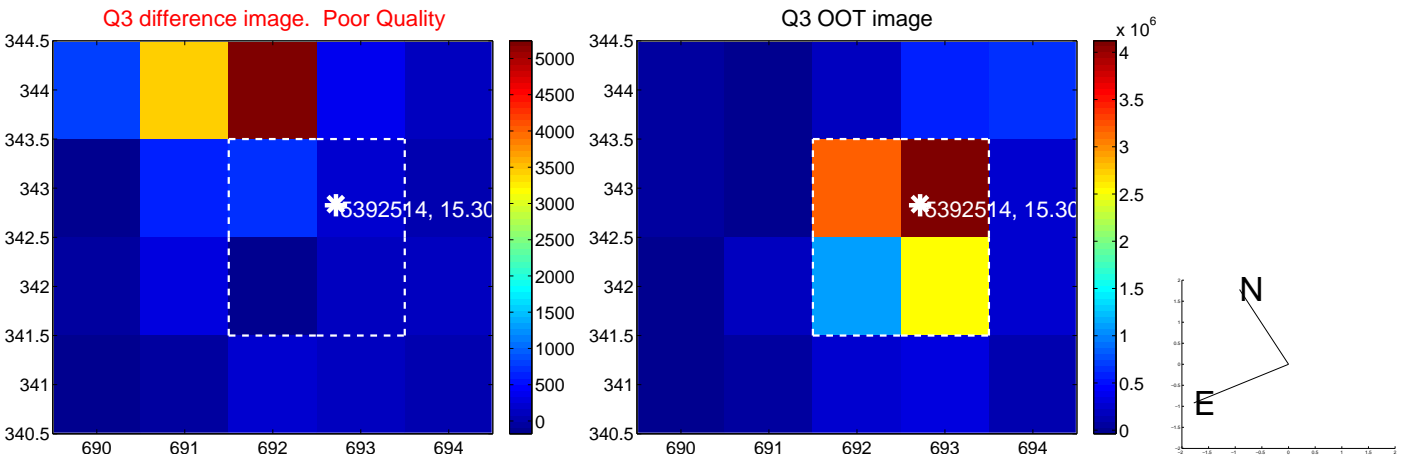
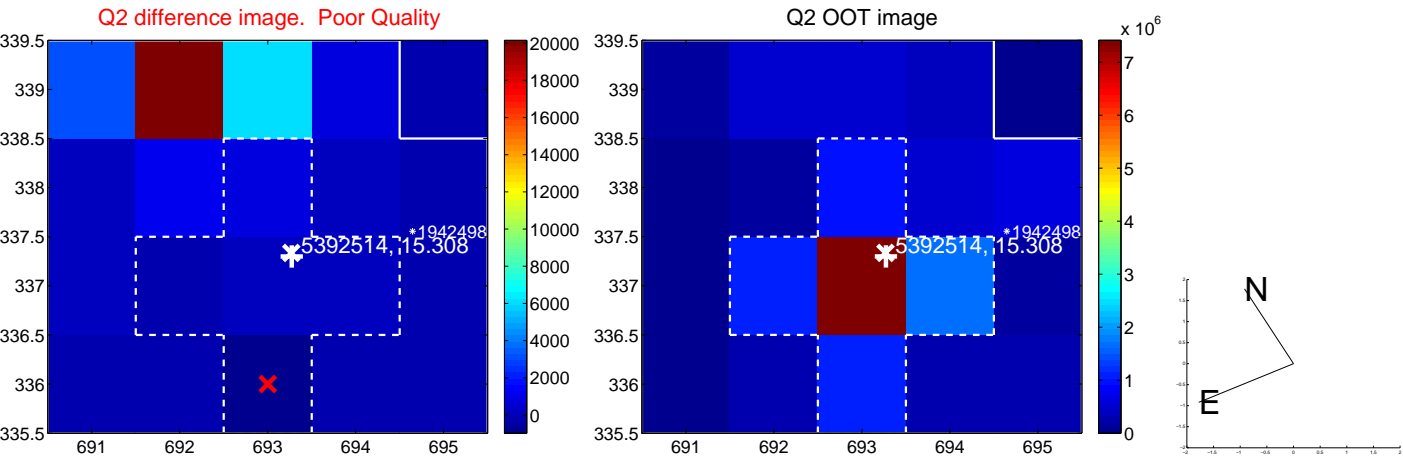
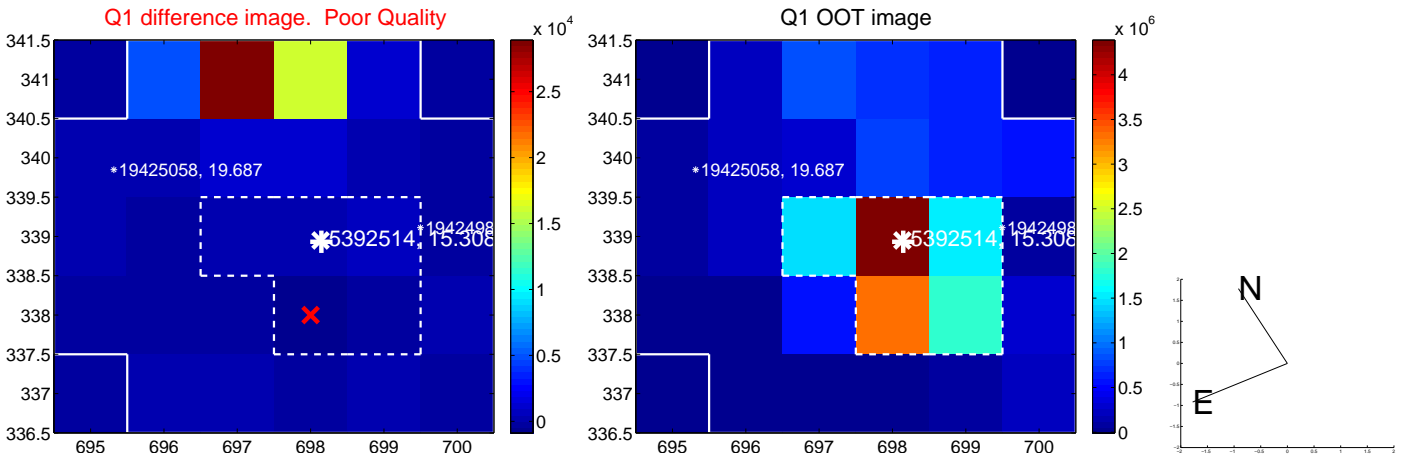
The direct PRF centroid is offset from the target star catalog position by about 0.08 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	5.359 \pm 0.603	8.89	0.730 \pm 0.578	5.309 \pm 0.603
PRF-fit source offset from KIC position	5.311 \pm 0.603	8.81	0.788 \pm 0.578	5.253 \pm 0.603
photometric centroid source offset	17.00 \pm 6.88	2.47	6.28 \pm 6.69	15.79 \pm 6.91

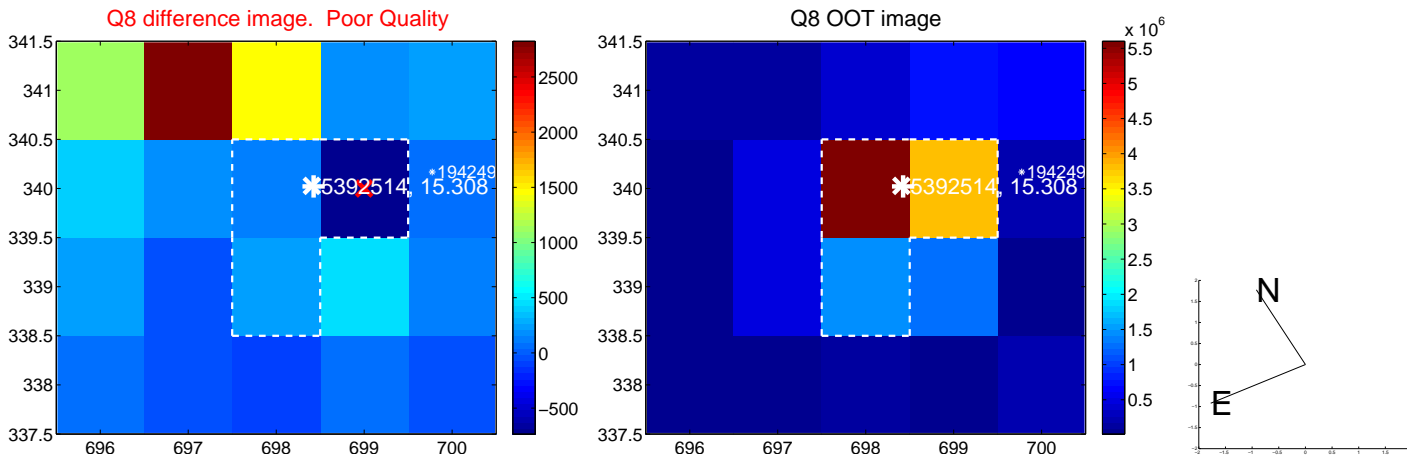
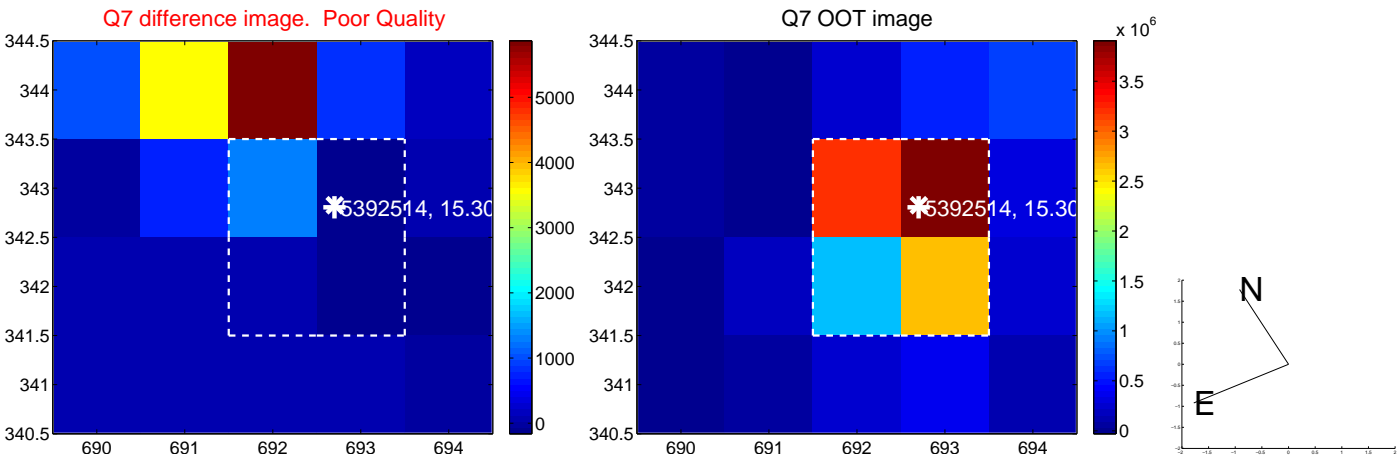
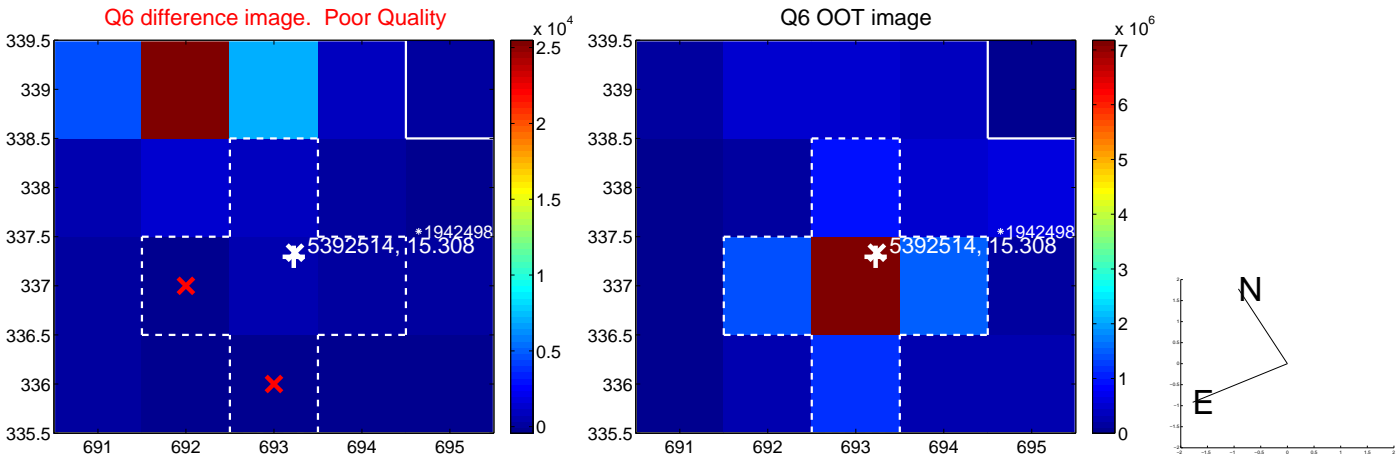
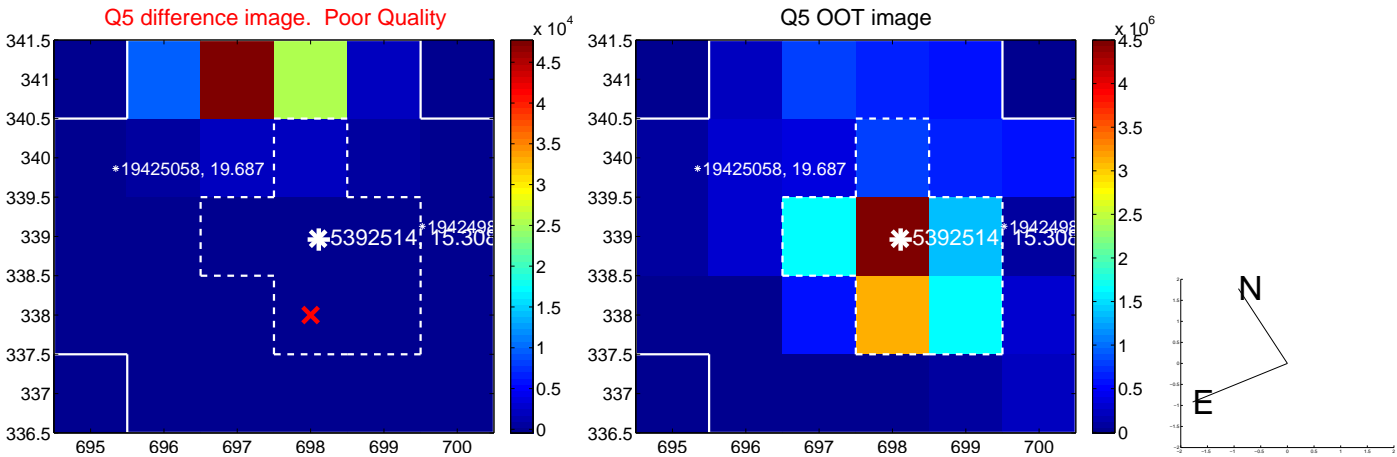


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

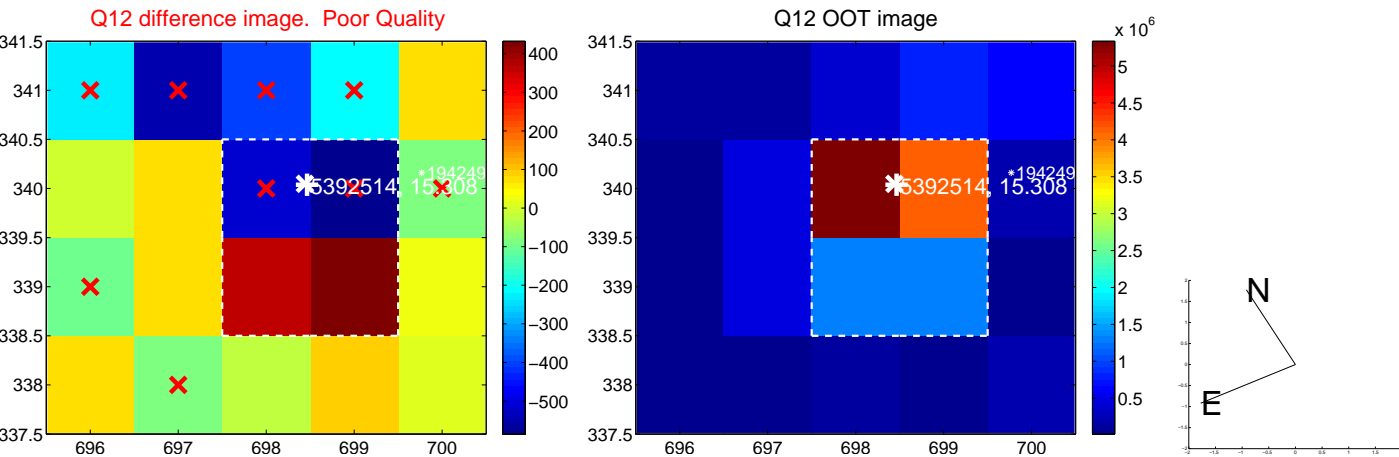
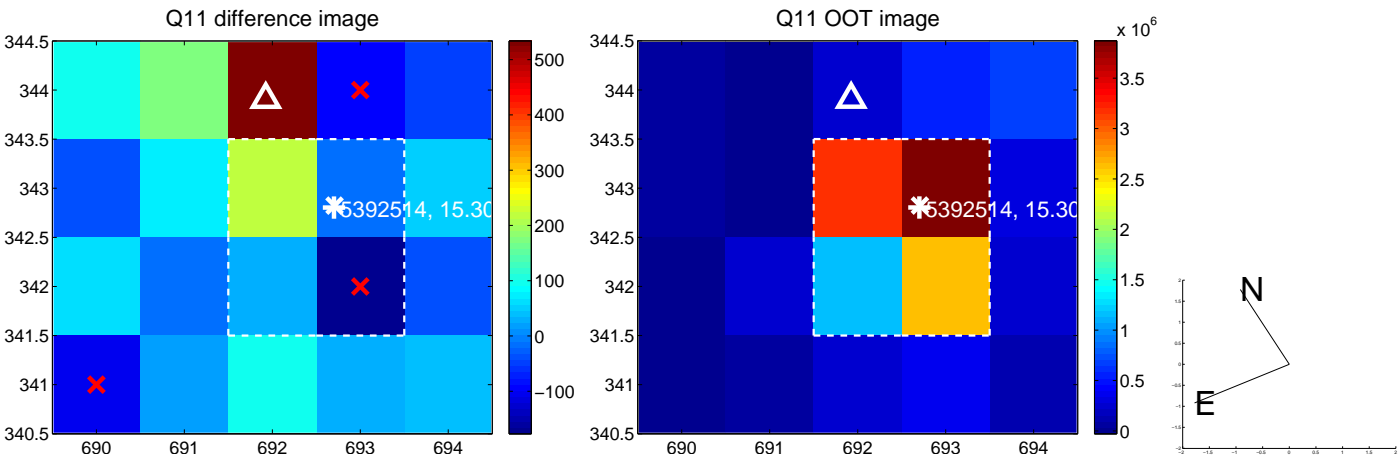
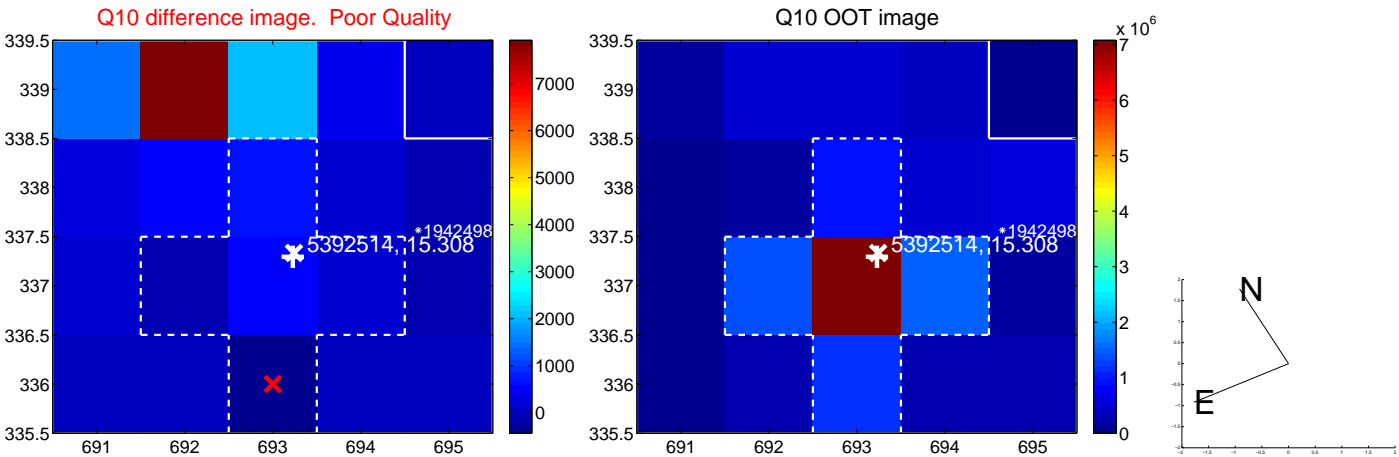
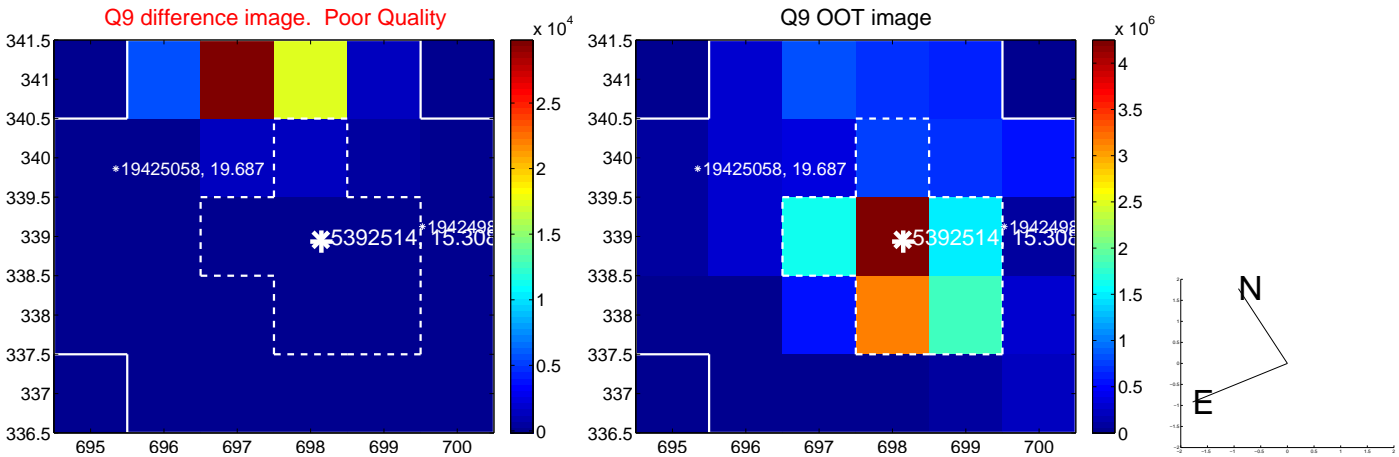
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



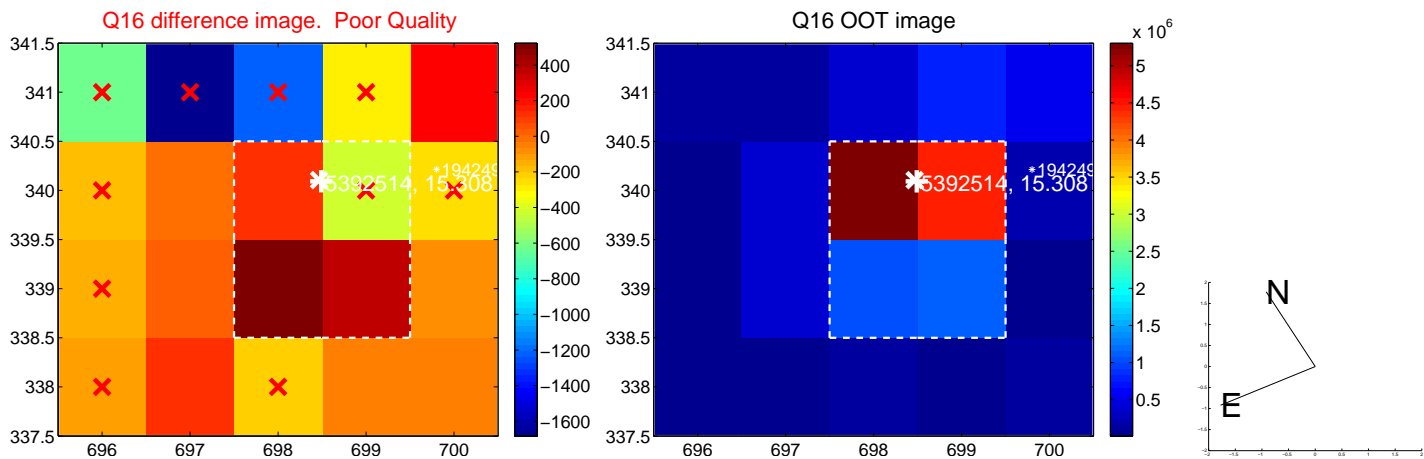
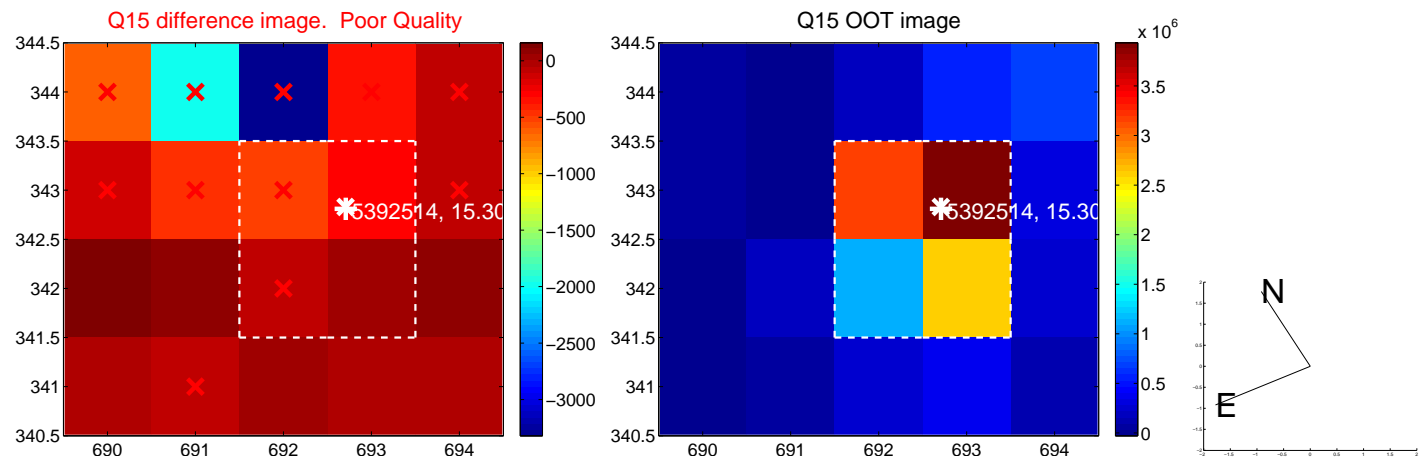
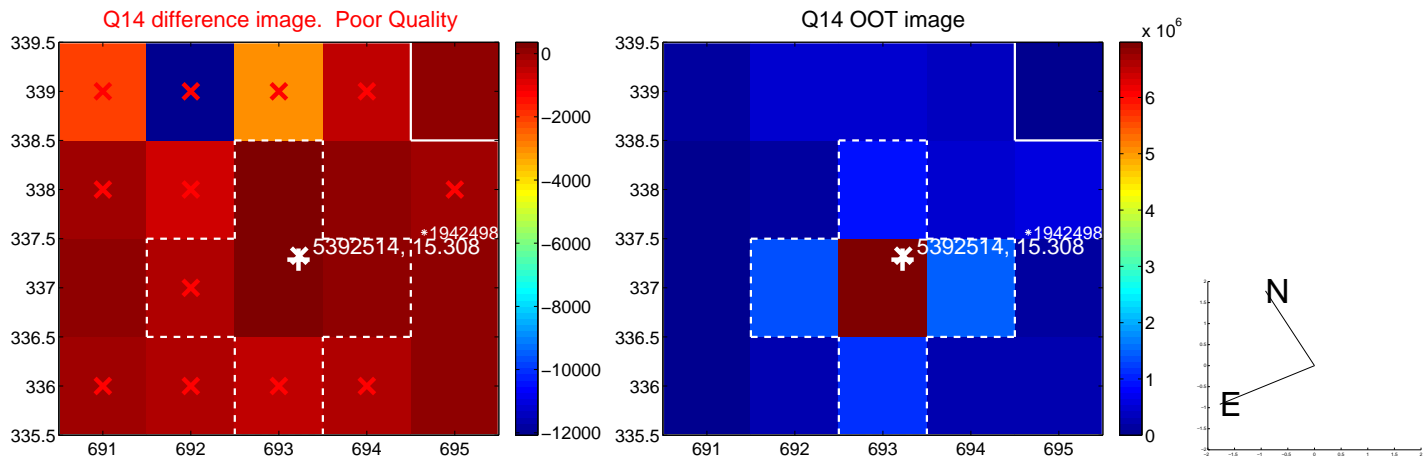
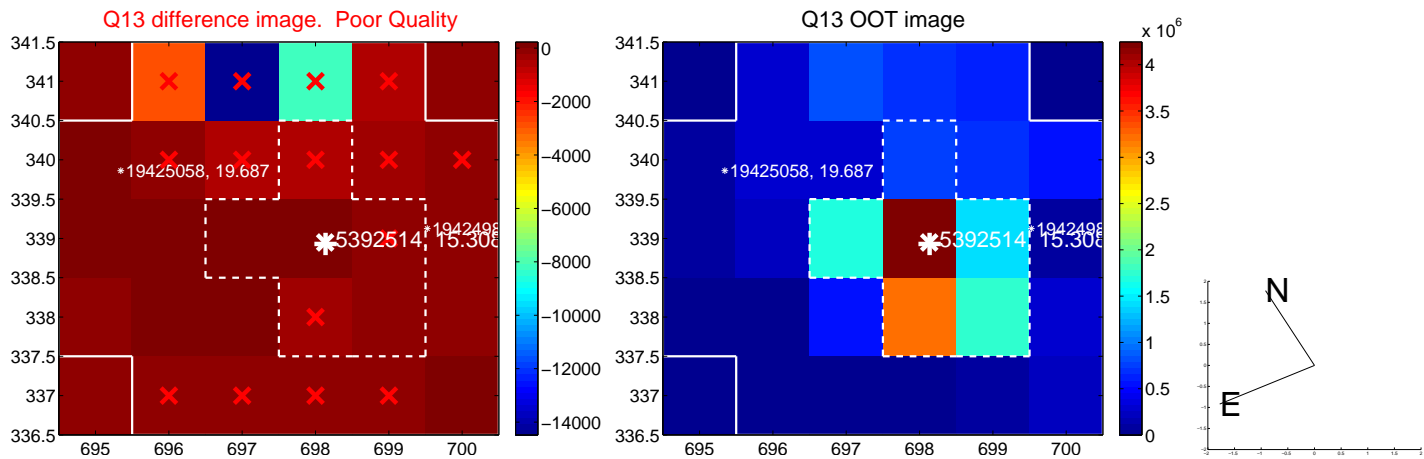
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



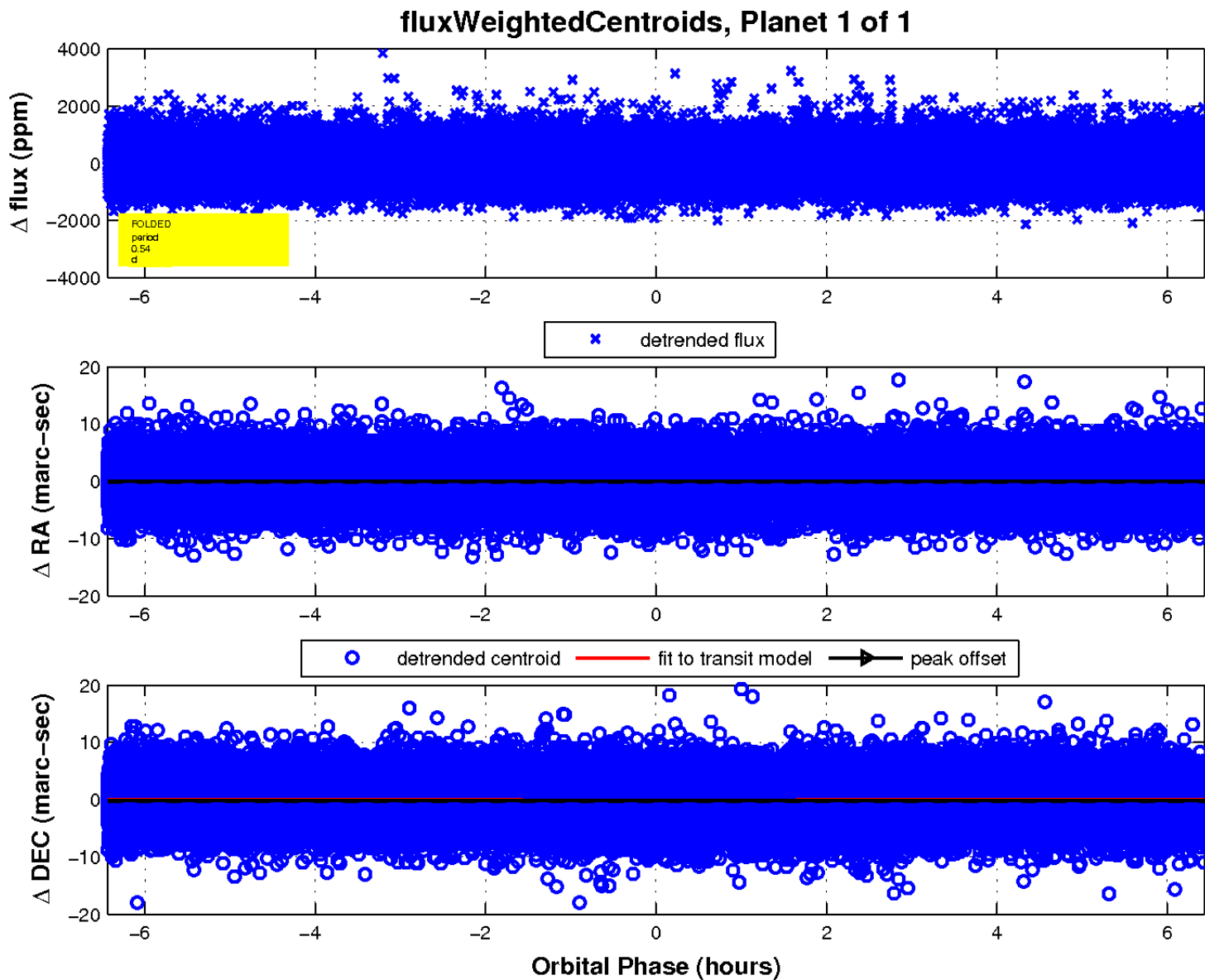
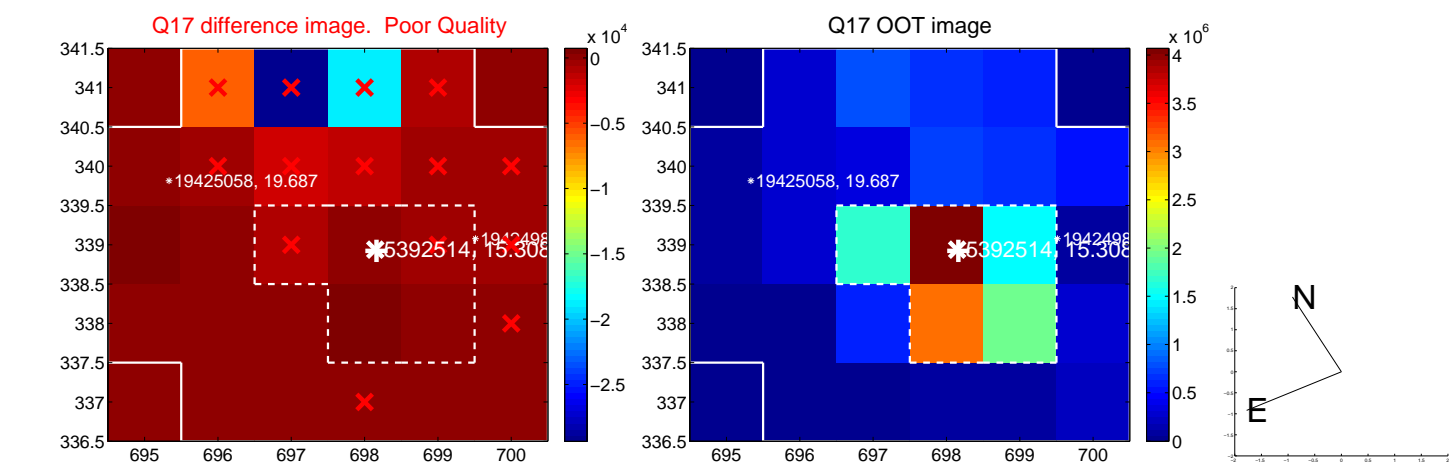
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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.



UKIRT Image

Declination

