

KIC 010536006

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})
010536006-01	OBS	No	0.933658	131.599519	31.4	4.296	8.6	6.8	1.02	6334	0.58	4113.74

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010536006-01	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.

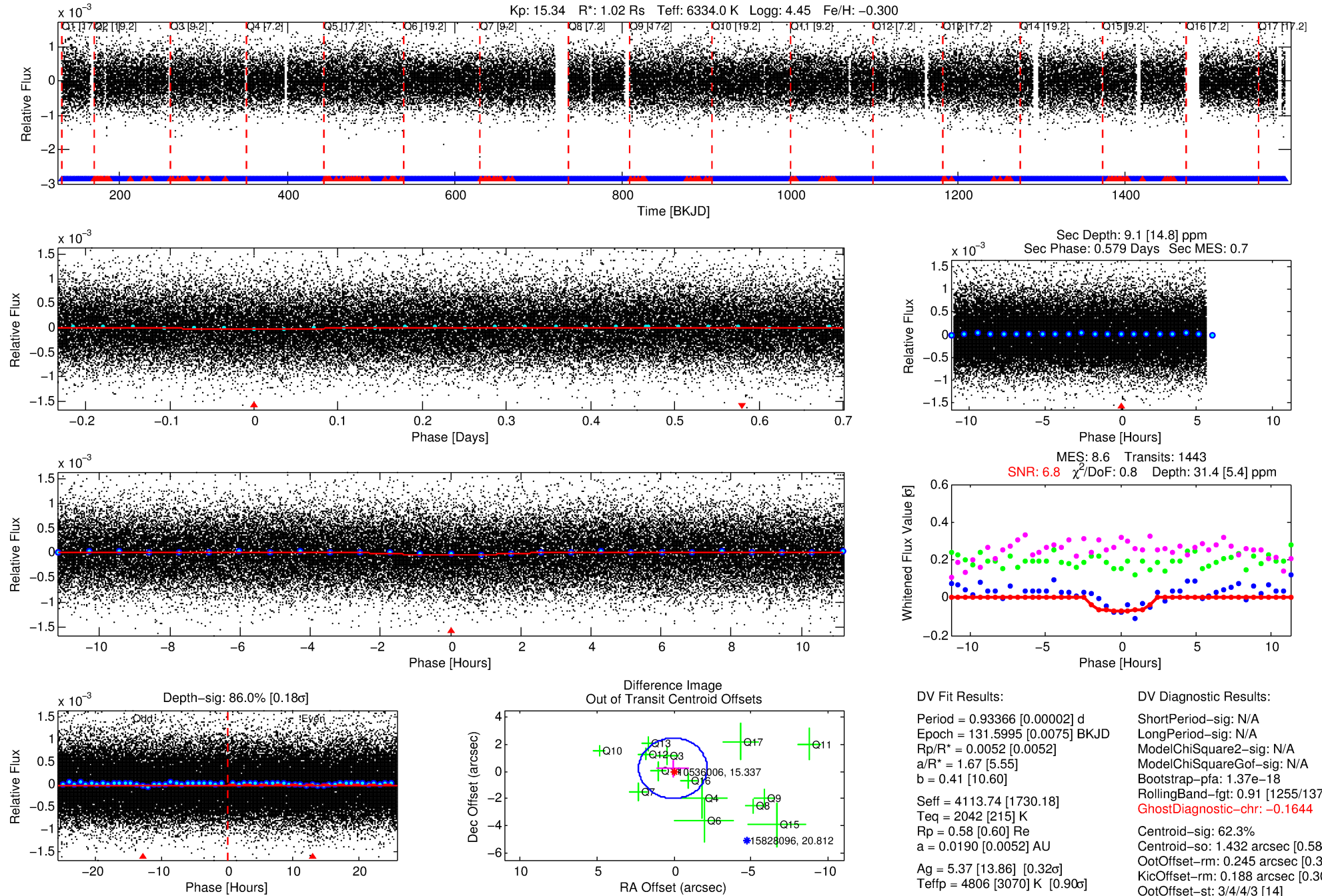
Ephemeris Match Information For 010536006-01

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
010536006-01	10536006	V2083-Cyg-pri	10342012	1:2	1686.0	384	-181	6.90	15.33	6397.50	Direct-PRF	0	2.97	0.66

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

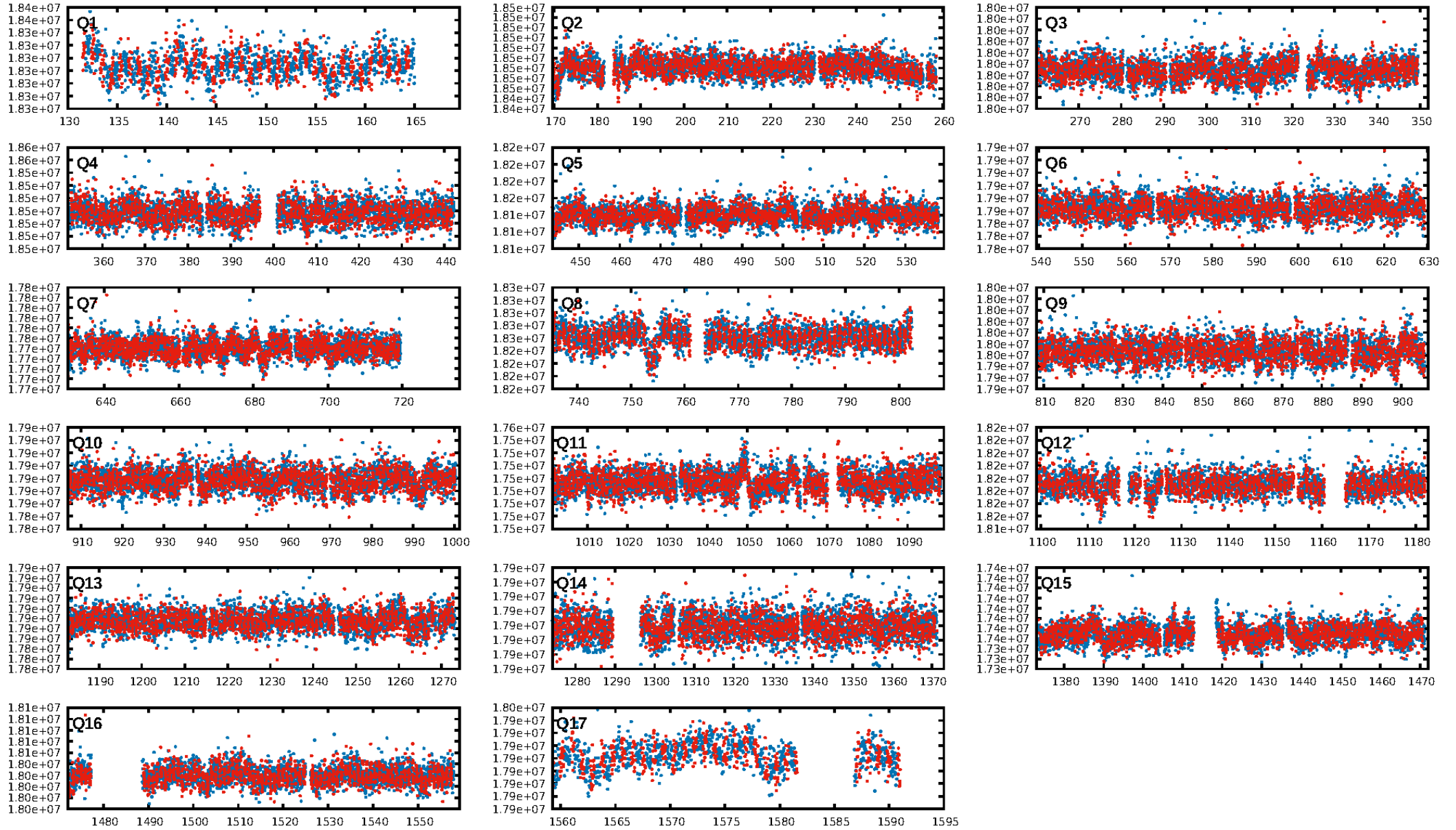
KIC: 10536006 Candidate: 1 of 1 Period: 0.934 d



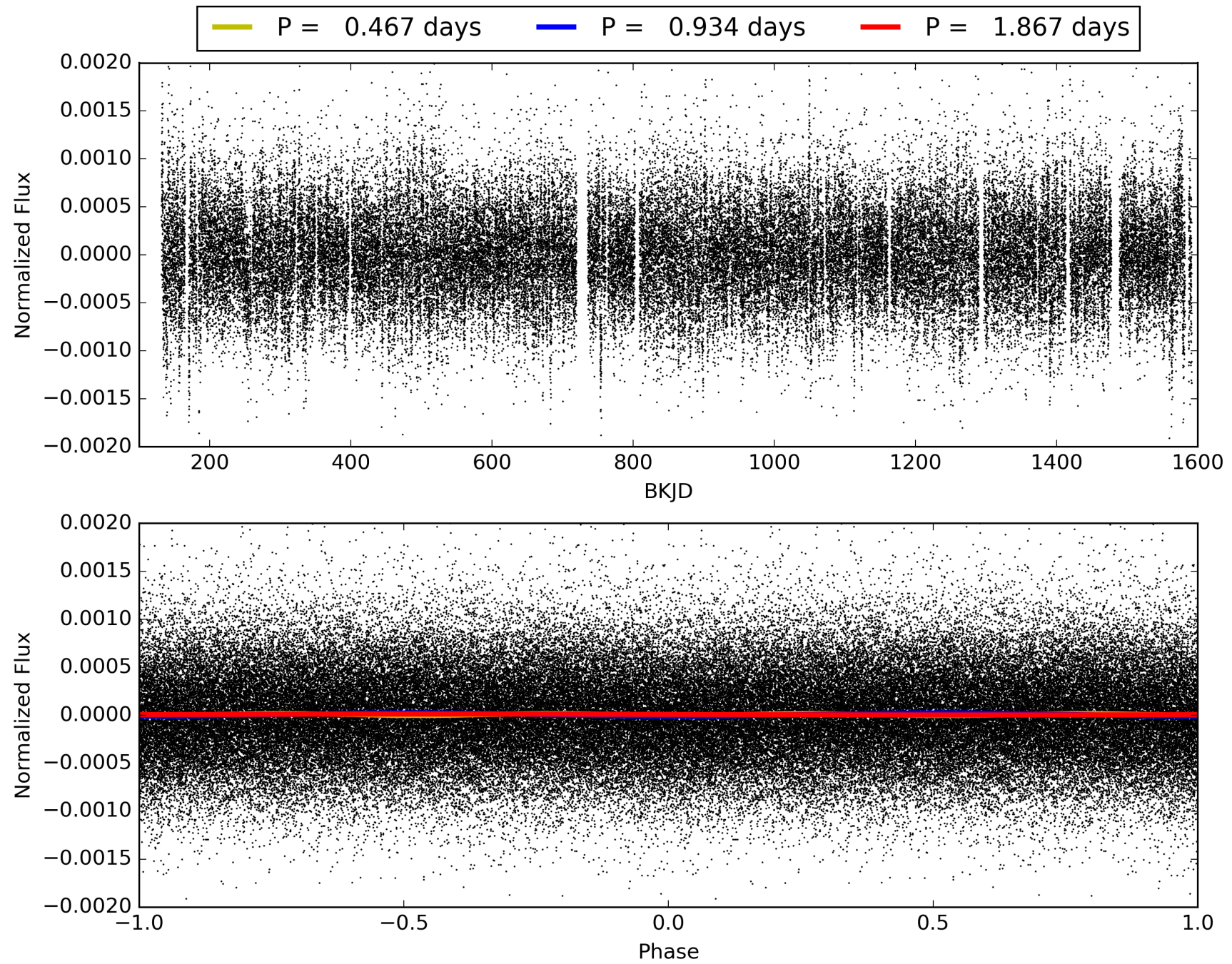
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 00:59:20 Z

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

TCE 010536006-01, PDC Light Curves

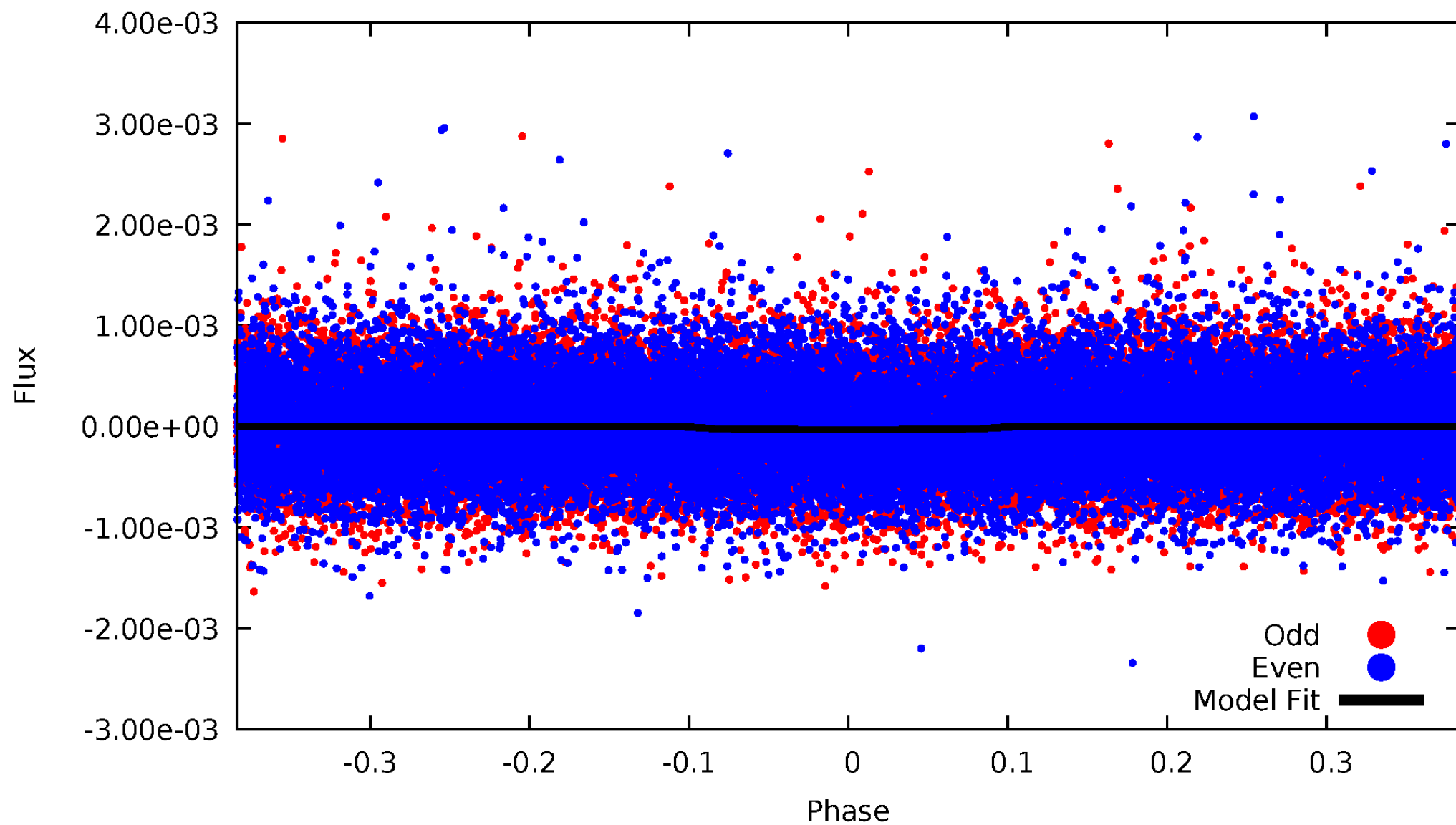


TCE 010536006-01



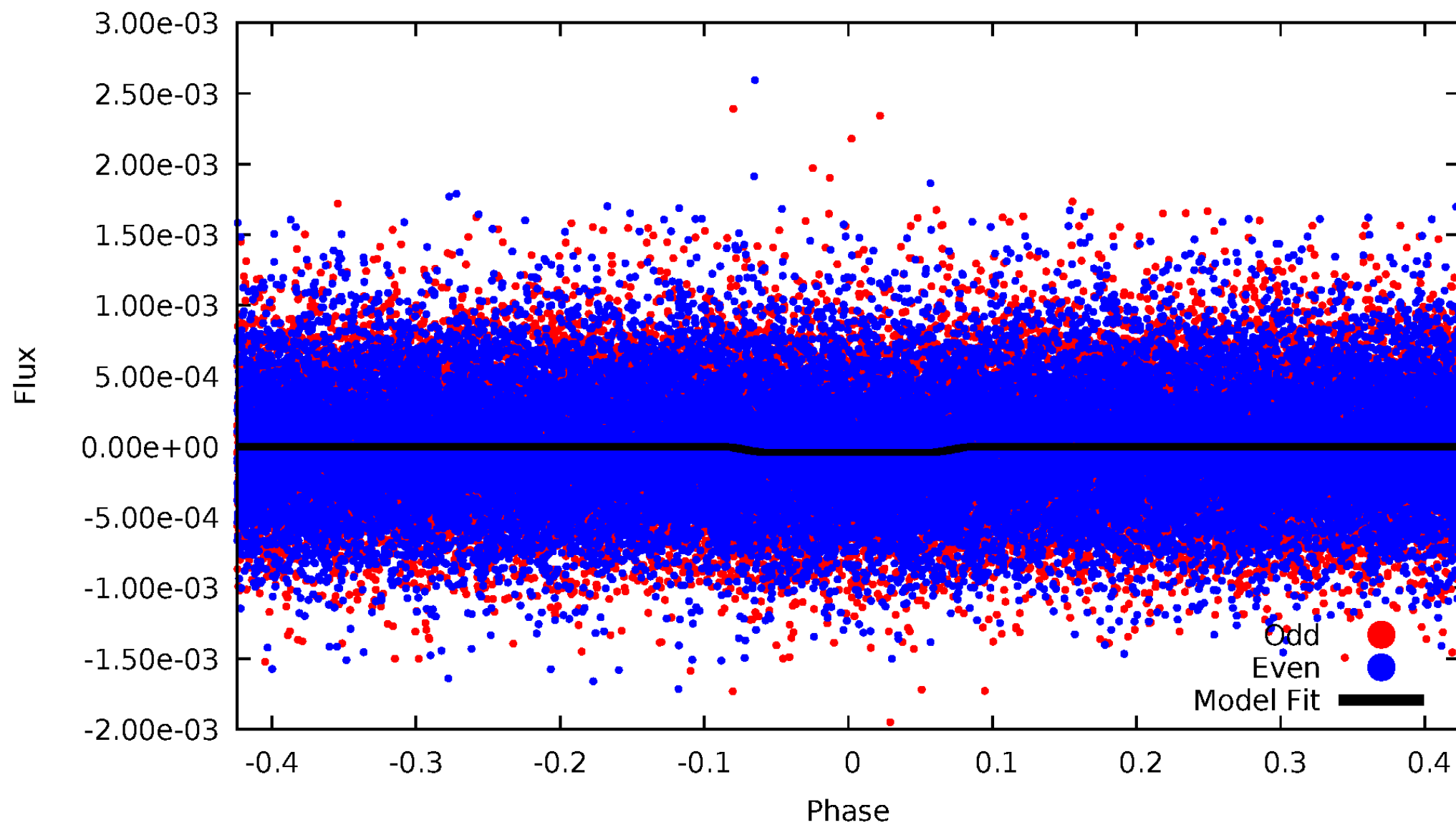
DV Odd/Even

TCE 010536006-01



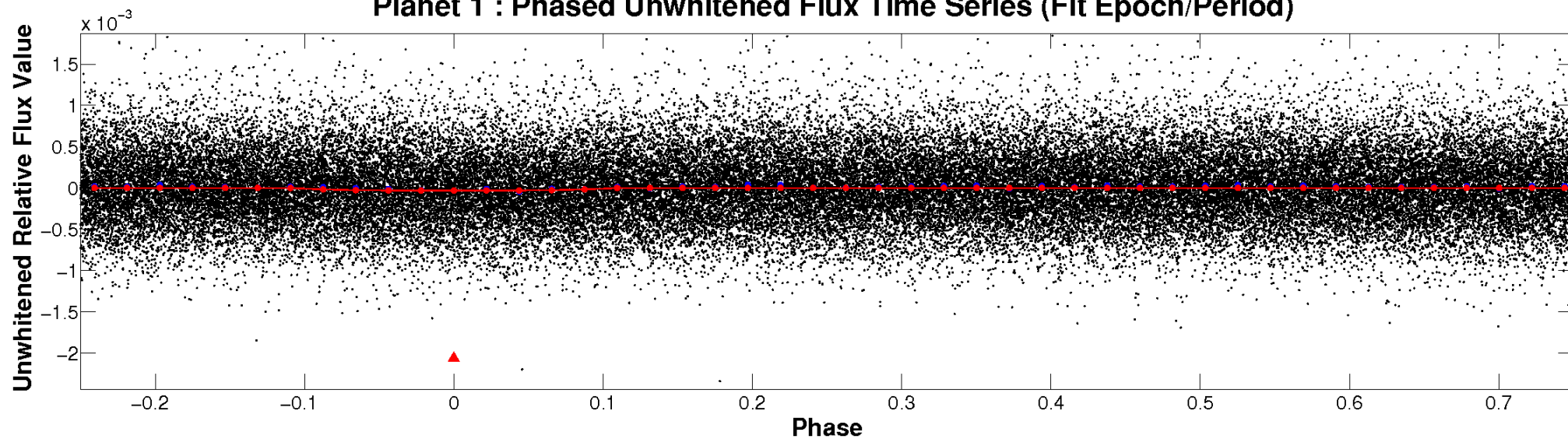
ALT Odd/Even

TCE 010536006-01

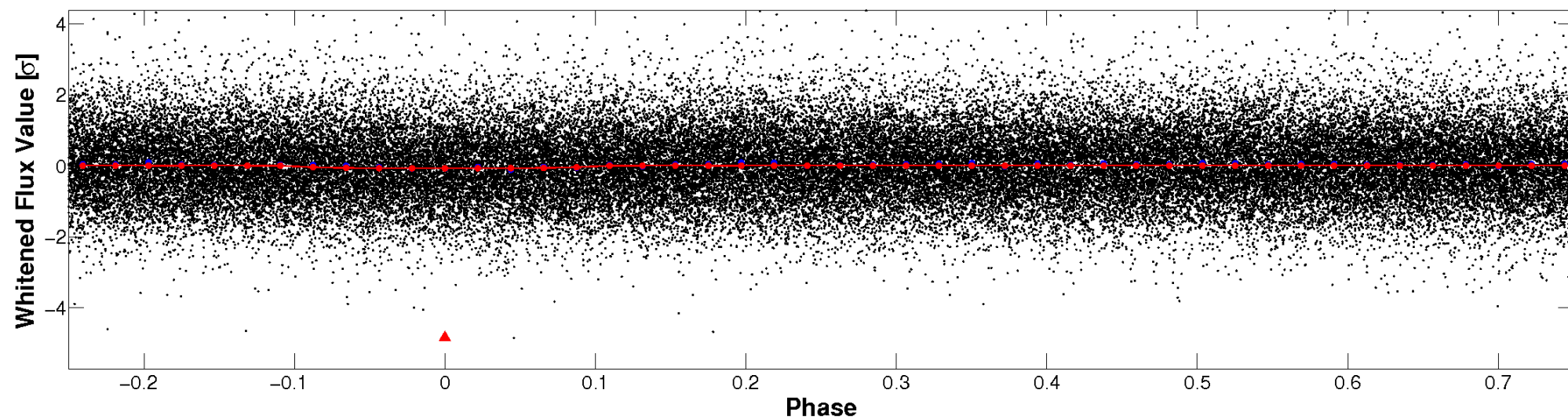


Non-Whitened Vs. Whitened Light Curve

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

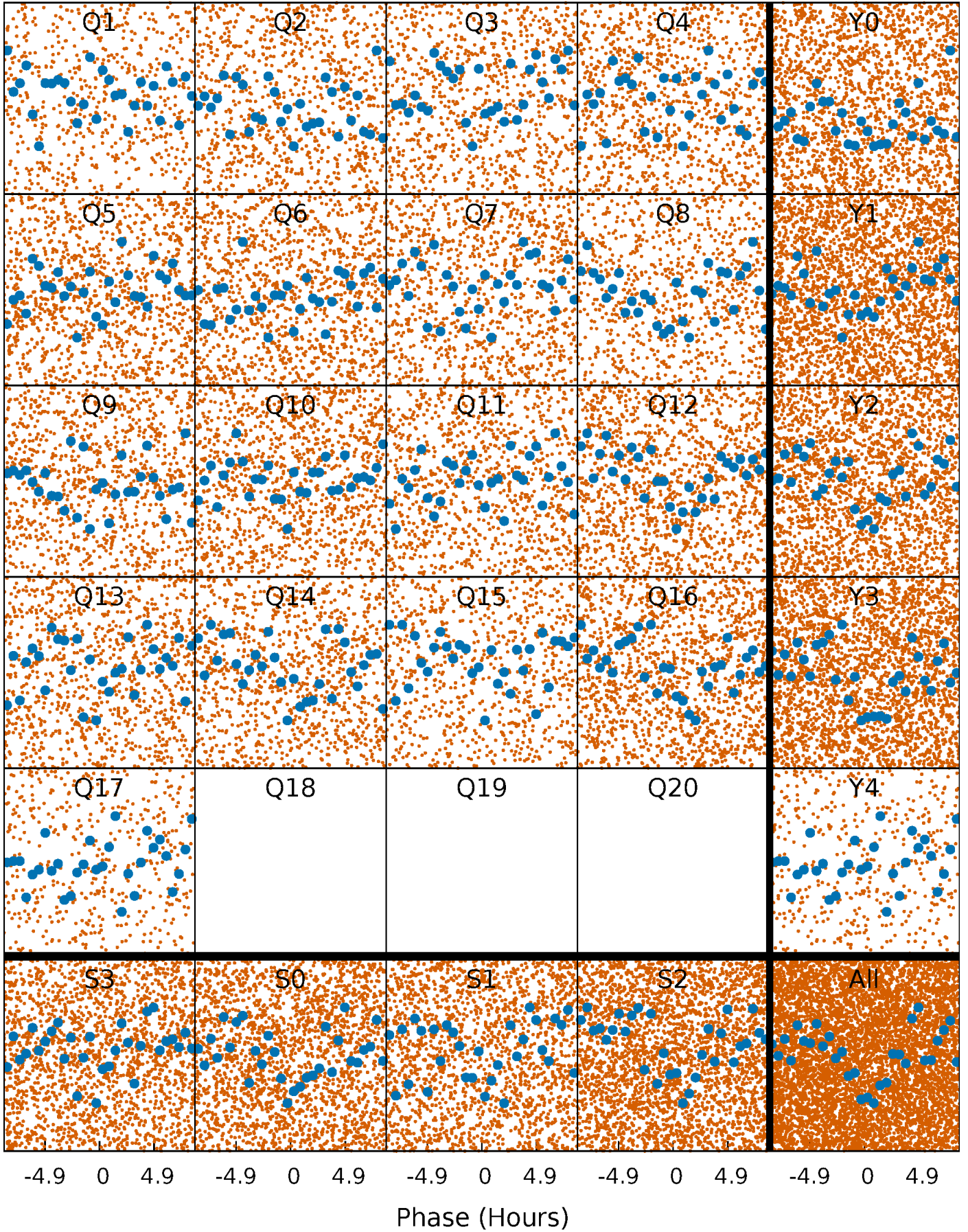


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



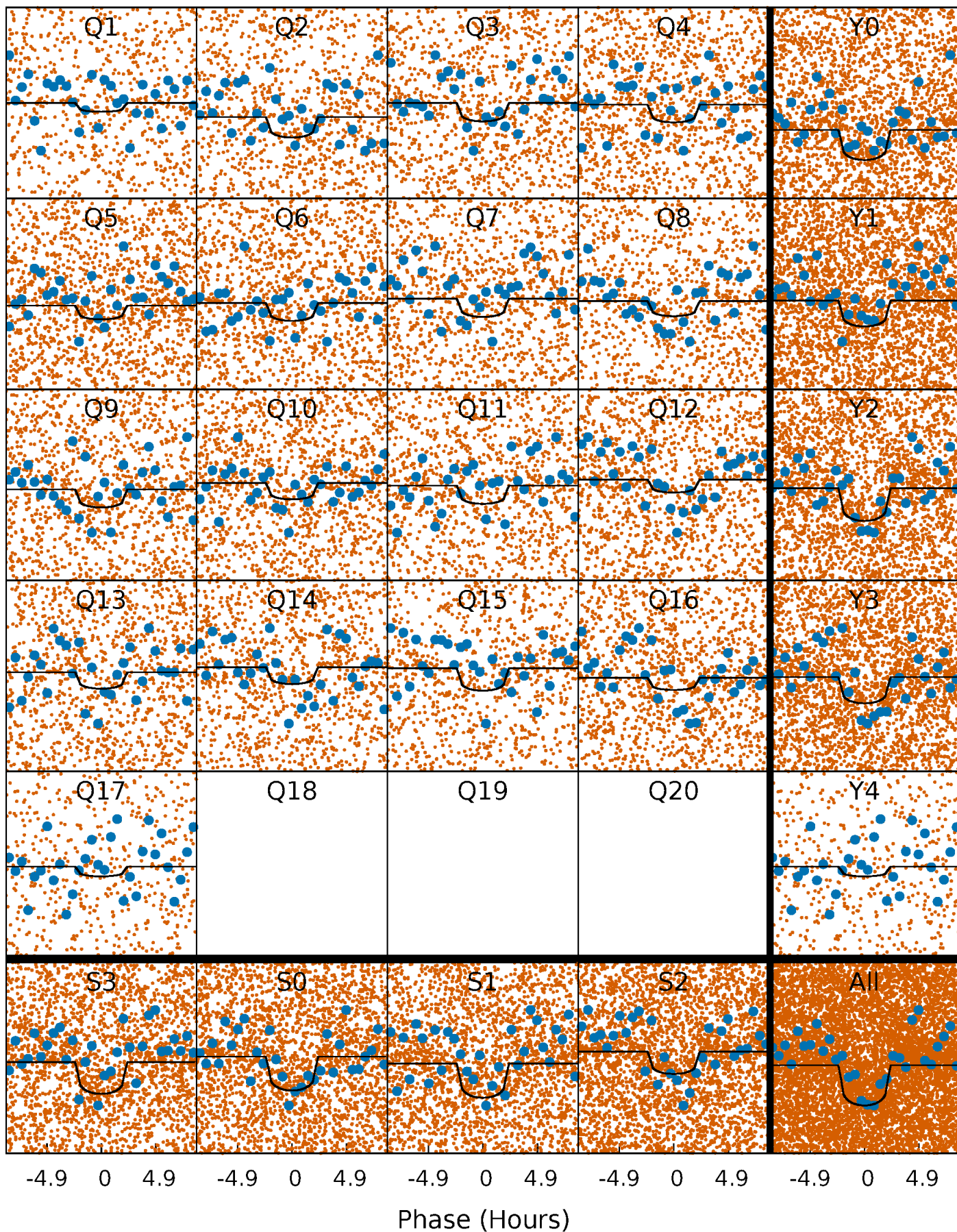
PDC Quarter-Phased Transit Curves

TCE 010536006-01 P= 0.933658 Days $T_0=131.599519$ (BKJD)



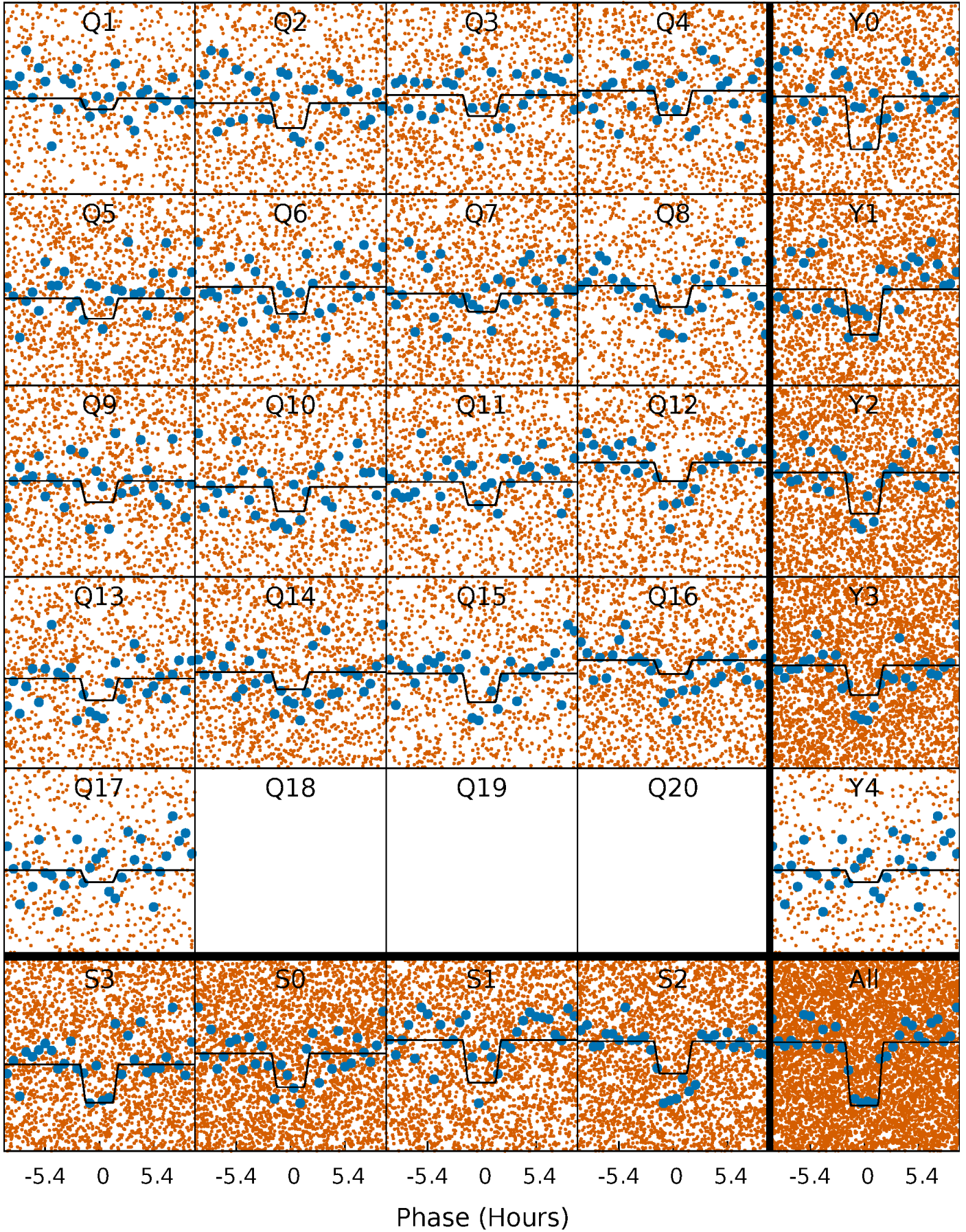
DV Quarter-Phased Transit Curves

TCE 010536006-01 P= 0.933658 Days $T_0=131.599519$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

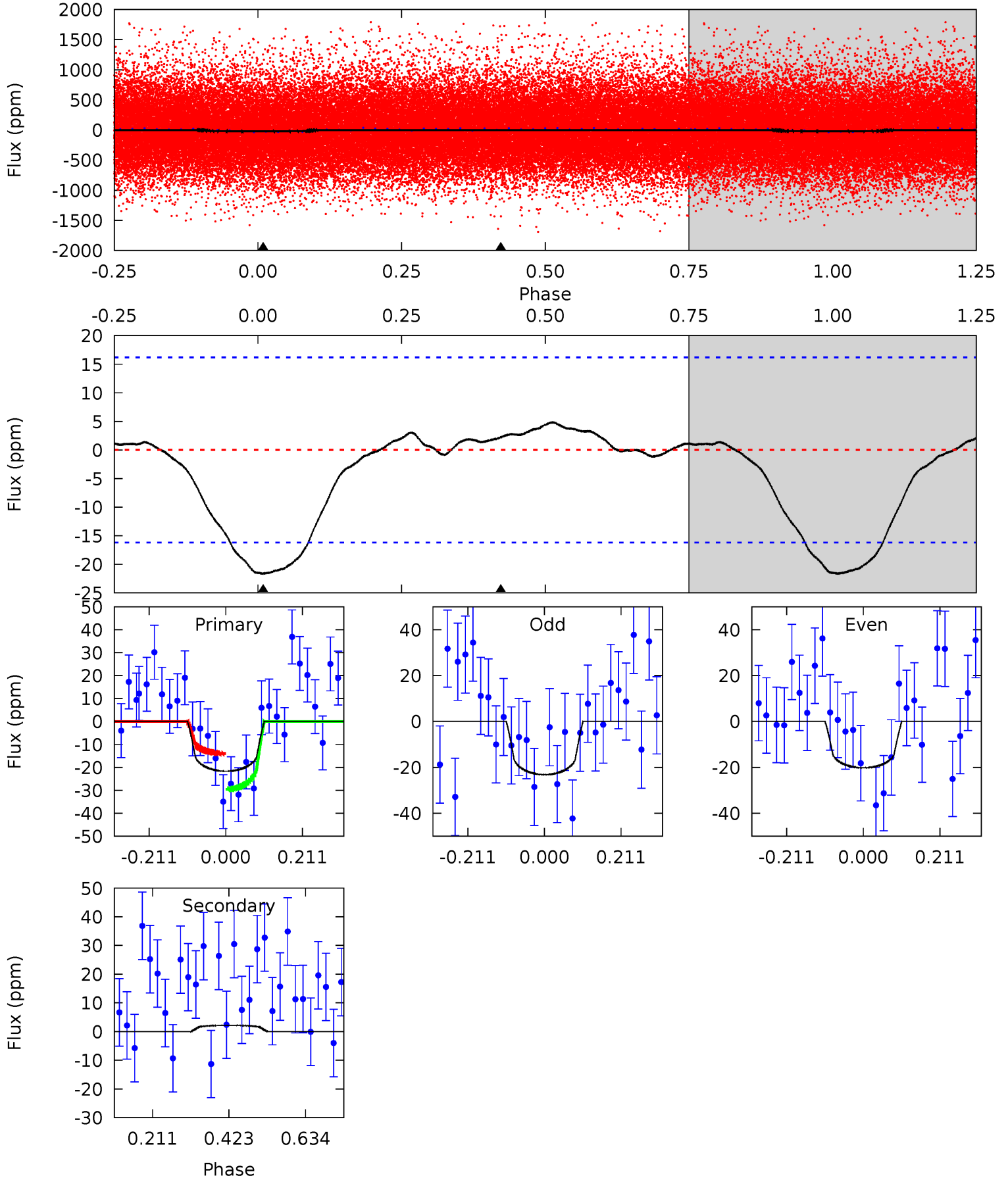
TCE 010536006-01 P= 0.933722 Days $T_0=131.555128$ (BKJD)



DV Model-Shift Uniqueness Test

010536006-01, P = 0.933658 Days, E = 130.665861 Days

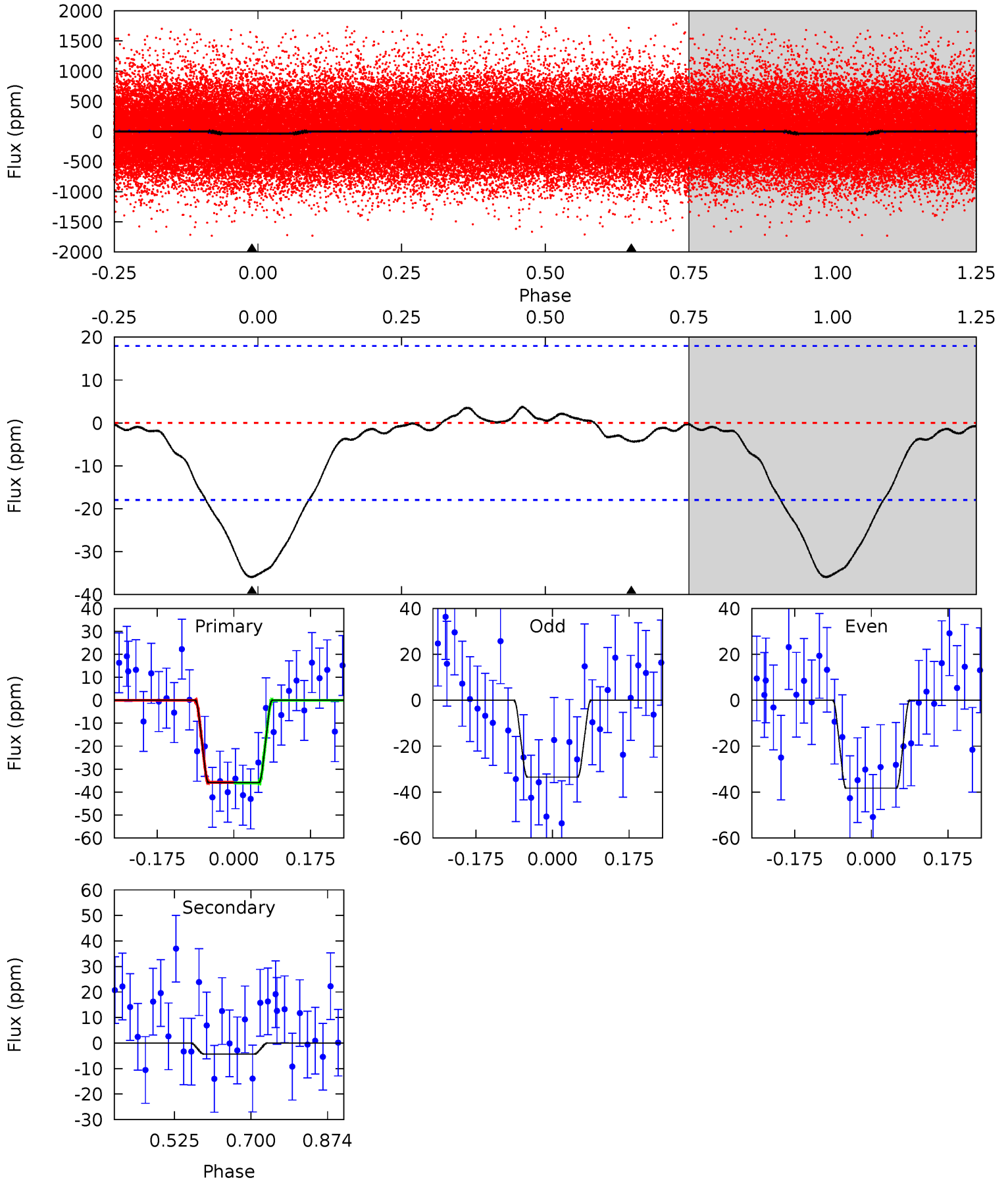
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5.90	-0.59	0	0	4.41	1.25	0.21	5.90	5.90	-0.59	-0.59	0.40	0.95	0.18	2.12



Alt Model-Shift Uniqueness Test

010536006-01, P = 0.933722 Days, E = 130.621406 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.90	1.06	0	0	4.45	1.36	0.47	8.90	8.90	1.06	1.06	0.60	0.95	0.09	0.03



Stellar Parameters For KIC 010536006

	$T_{\text{eff}}(K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6334^{+176}_{-220}	$4.447^{+0.067}_{-0.216}$	$-0.300^{+0.250}_{-0.300}$	$1.017^{+0.333}_{-0.111}$	$1.052^{+0.157}_{-0.129}$	$1.408^{+0.408}_{-0.746}$
	+3%/-3%	+2%/-5%	+83%/-100%	+33%/-11%	+15%/-12%	+29%/-53%
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 010536006-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	2 ± 4	$0.70^{+0.54}_{-0.43}$	2905^{+200}_{-145}	-3640^{+6449}_{-1463}	$-0.625^{+1.113}_{-4.951}$
Alt.	-4 ± 4	$0.82^{+0.60}_{-0.45}$	2896^{+211}_{-141}	3520^{+1632}_{-6443}	$1.067^{+5.598}_{-0.988}$

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 $A_{obs} \gg 1.0$

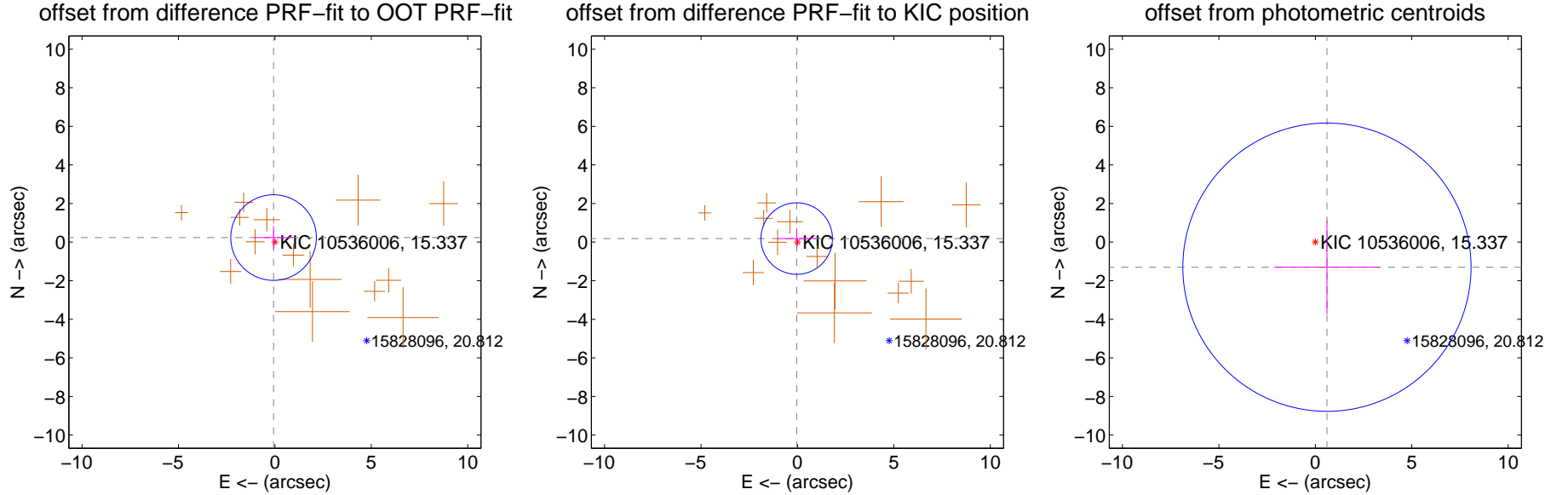
DV Centroid Data

Supplemental centroid analysis for 010536006-01. Kepler magnitude: 15.34. Transit SNR 6.81

There are 0 quarters with good PRF difference image offsets

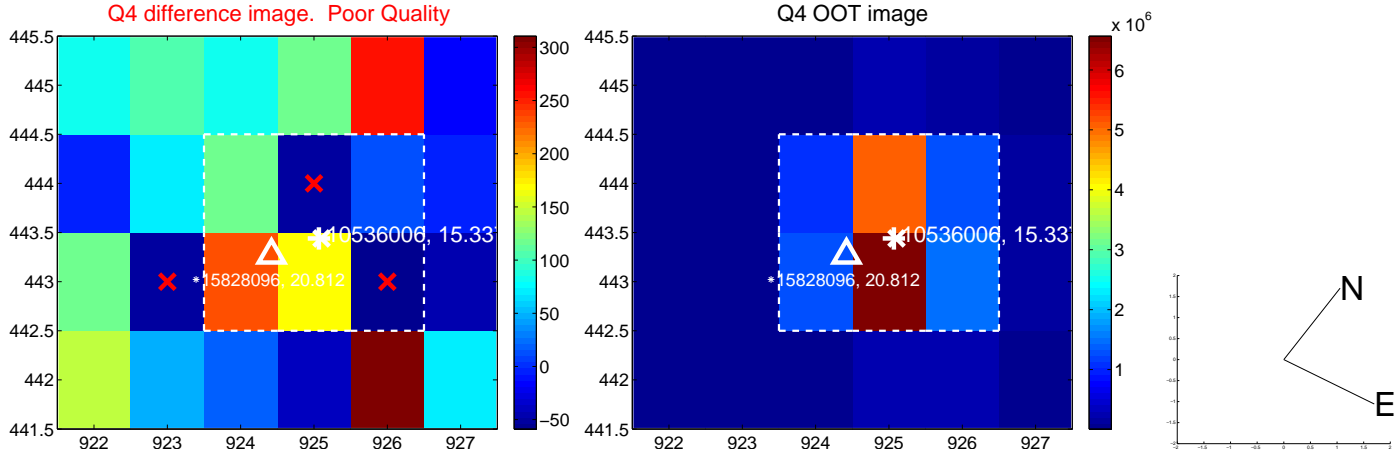
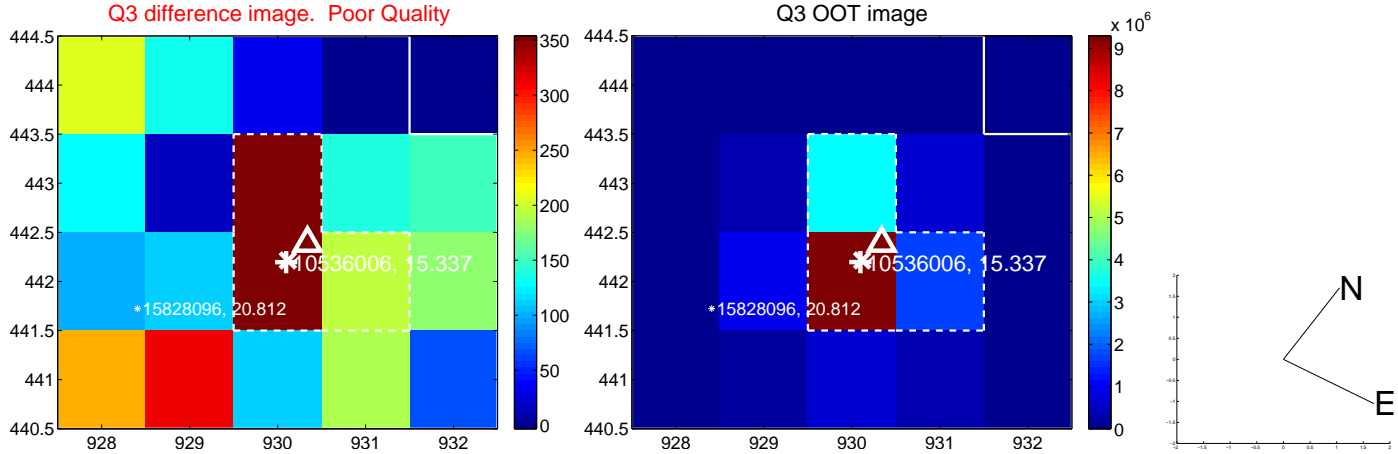
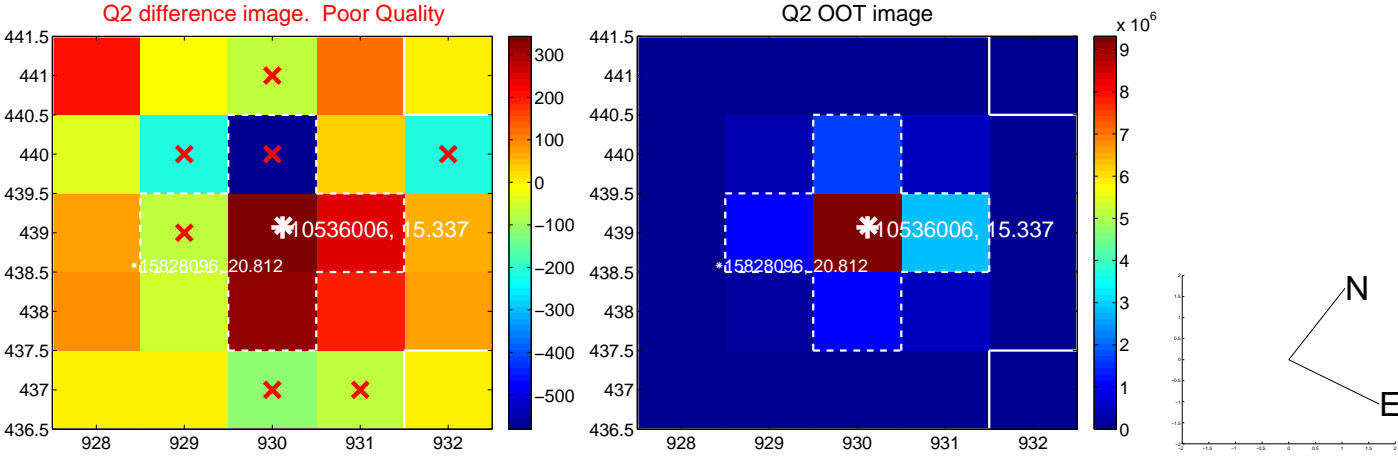
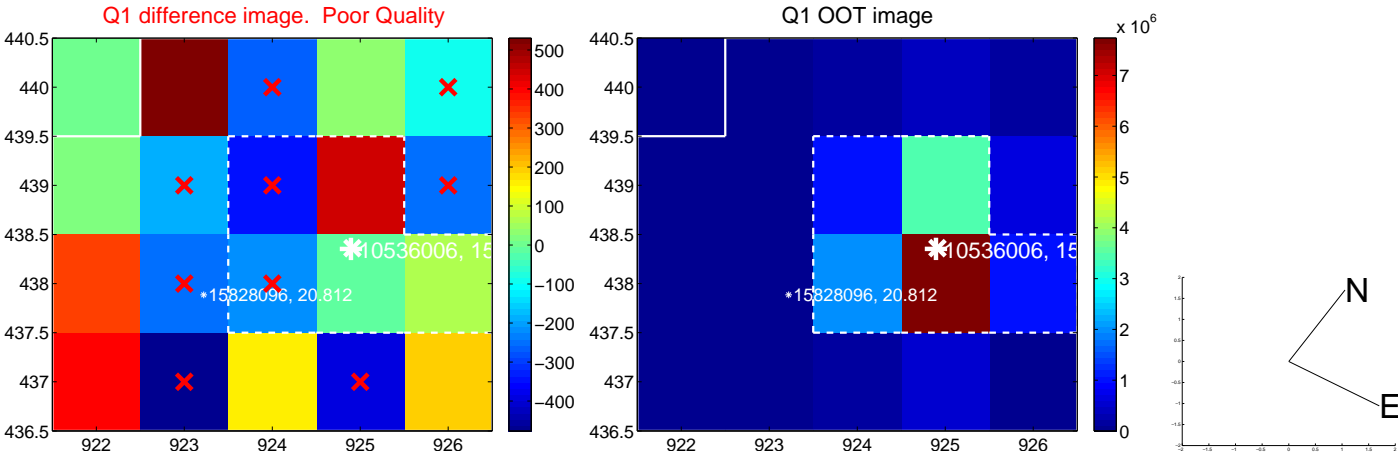
The direct PRF centroid is offset from the target star catalog position by about 0.09 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.245 ± 0.739	0.33	0.068 ± 1.022	0.235 ± 0.596
PRF-fit source offset from KIC position	0.188 ± 0.618	0.30	0.039 ± 1.022	0.184 ± 0.530
photometric centroid source offset	1.43 ± 2.49	0.58	-0.60 ± 2.73	-1.30 ± 2.43

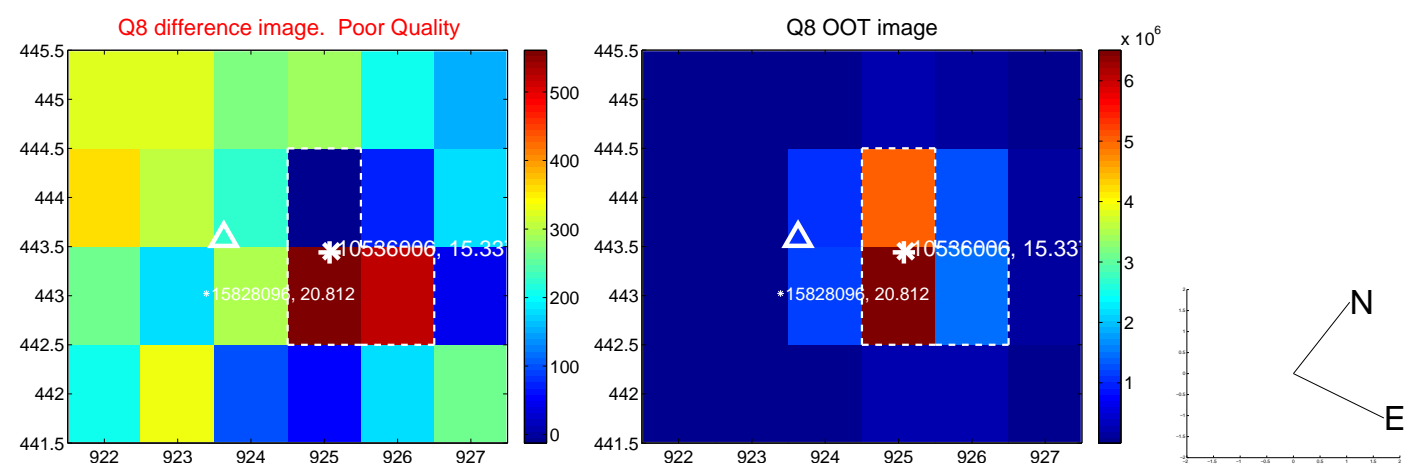
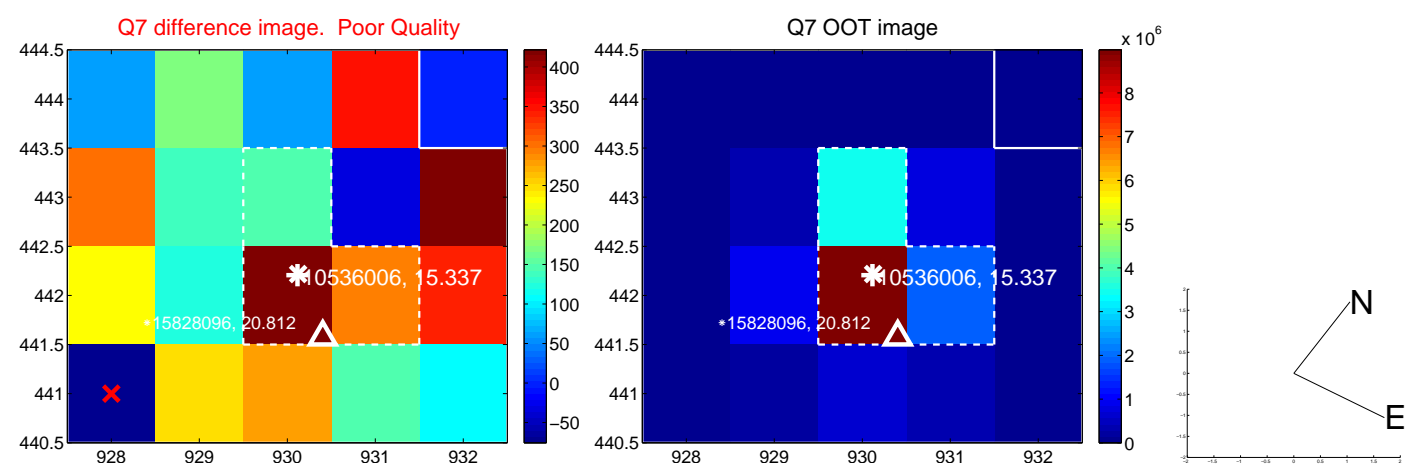
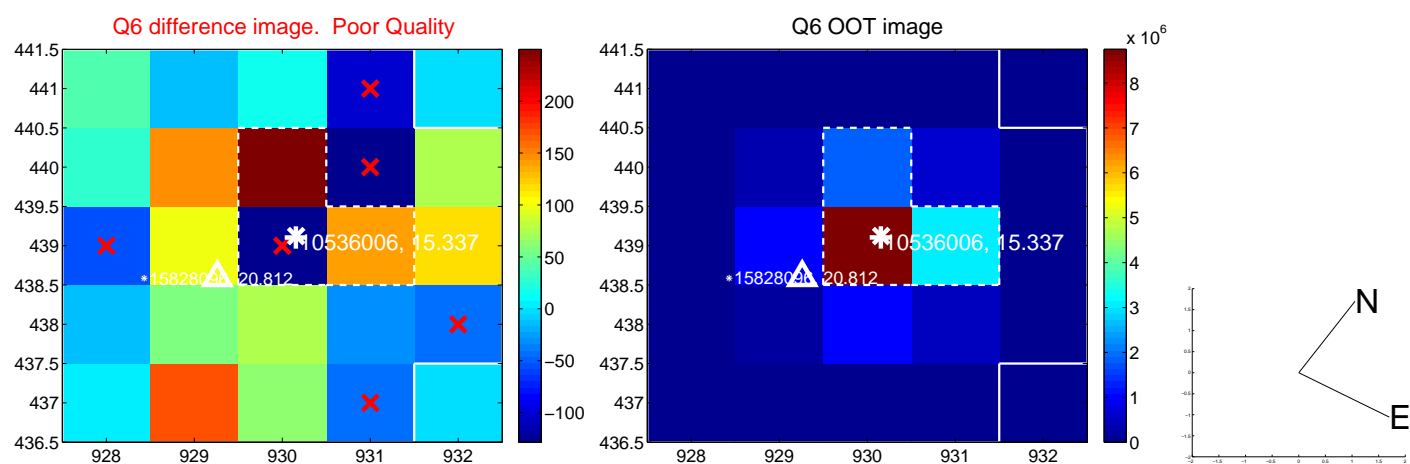
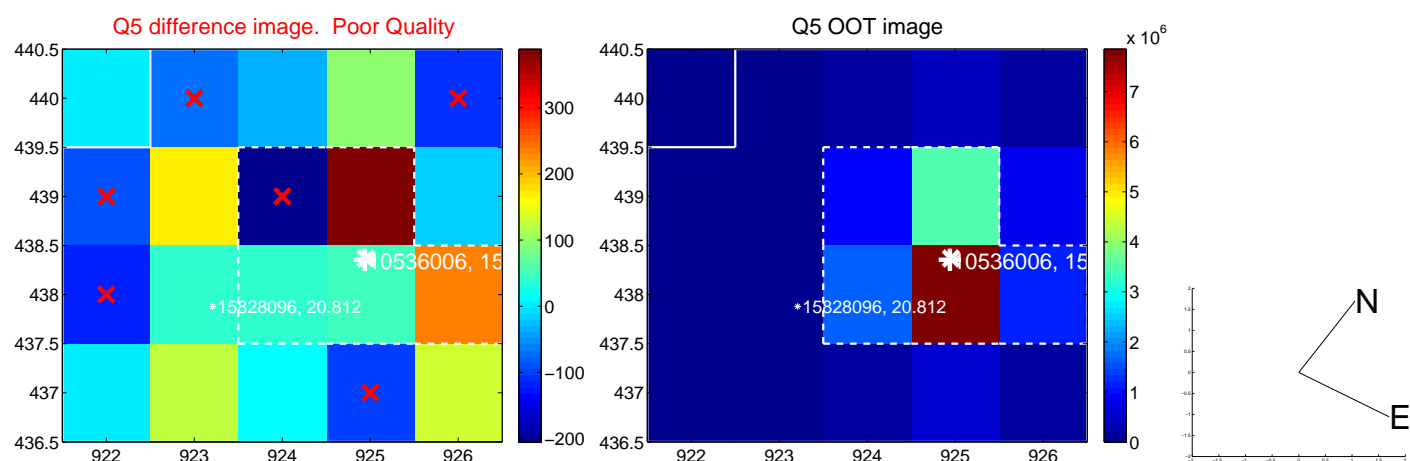


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

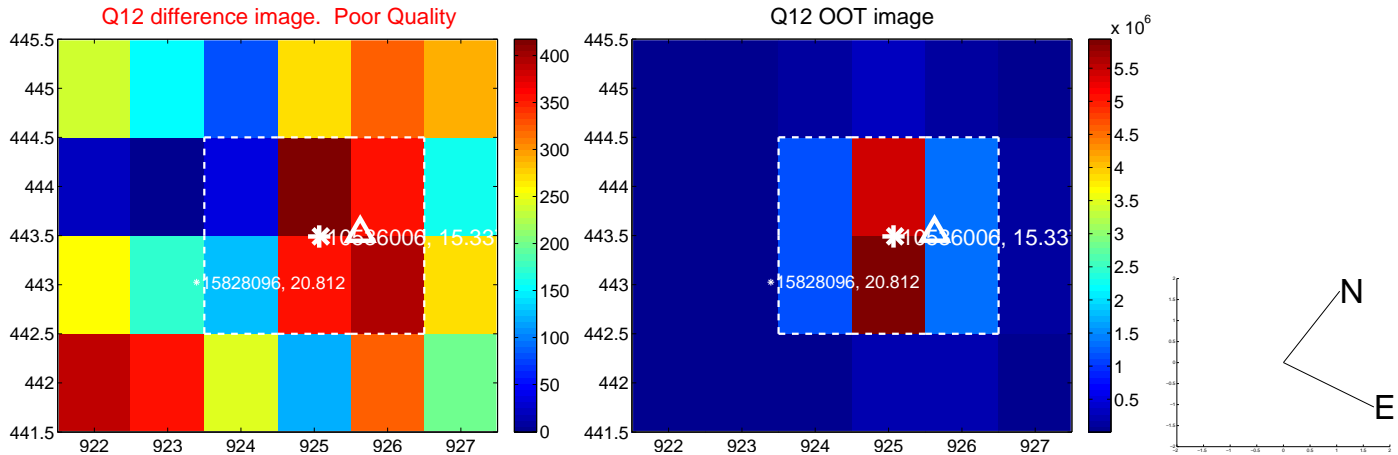
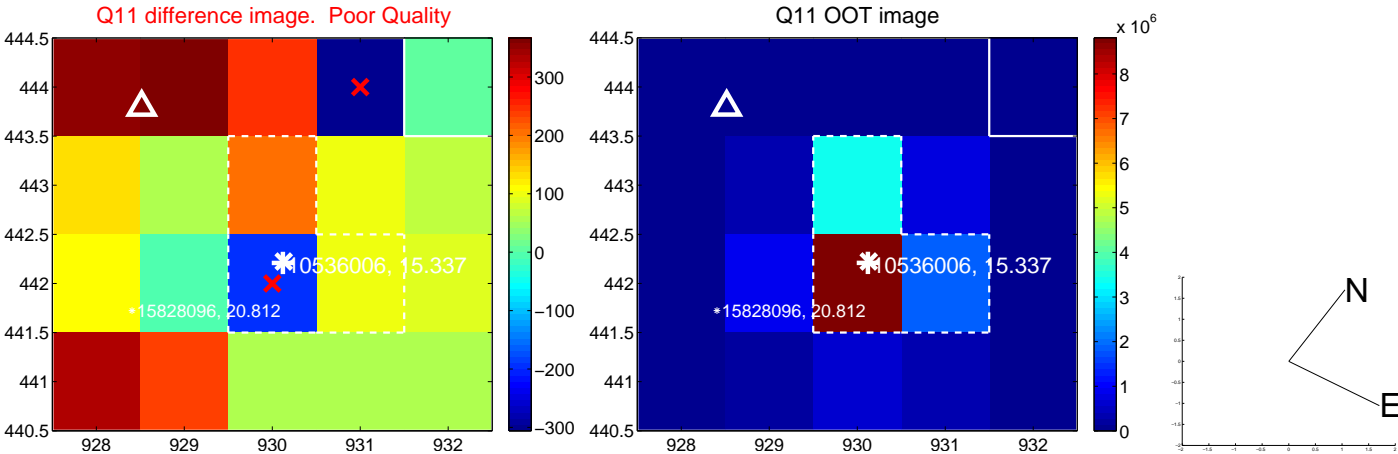
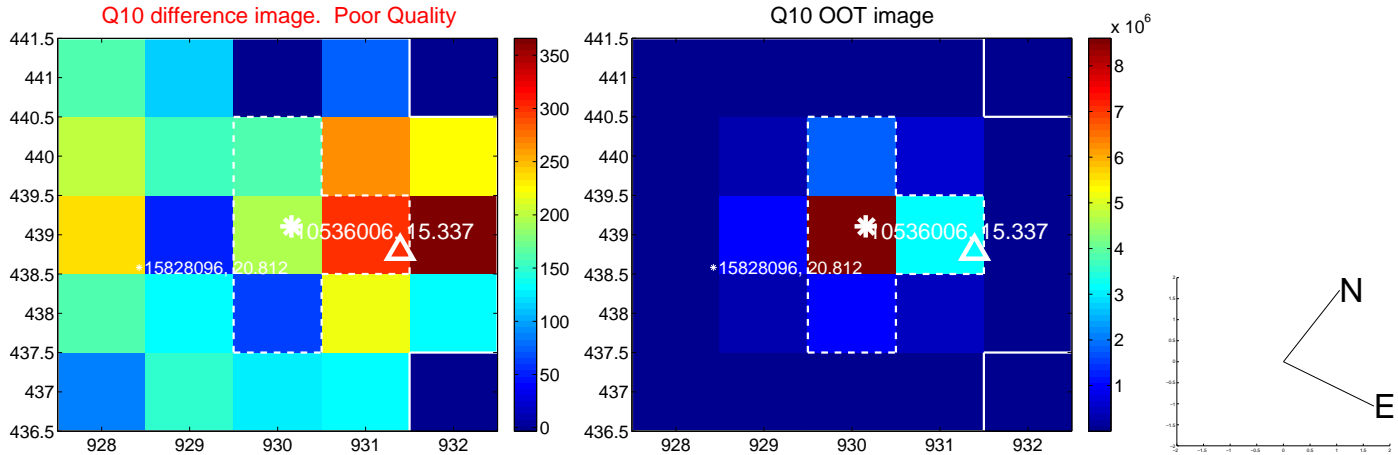
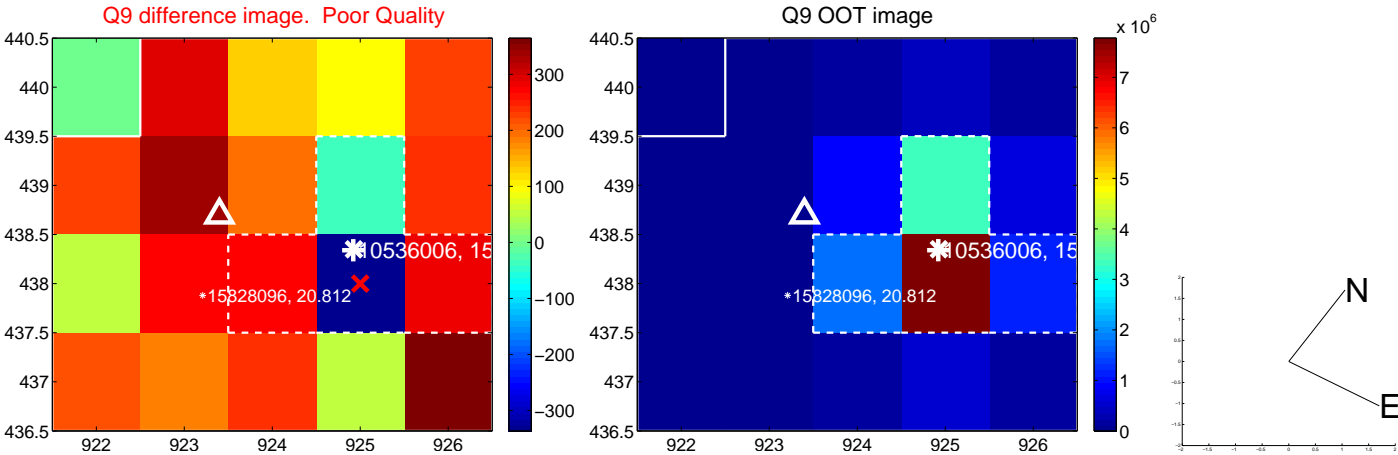
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



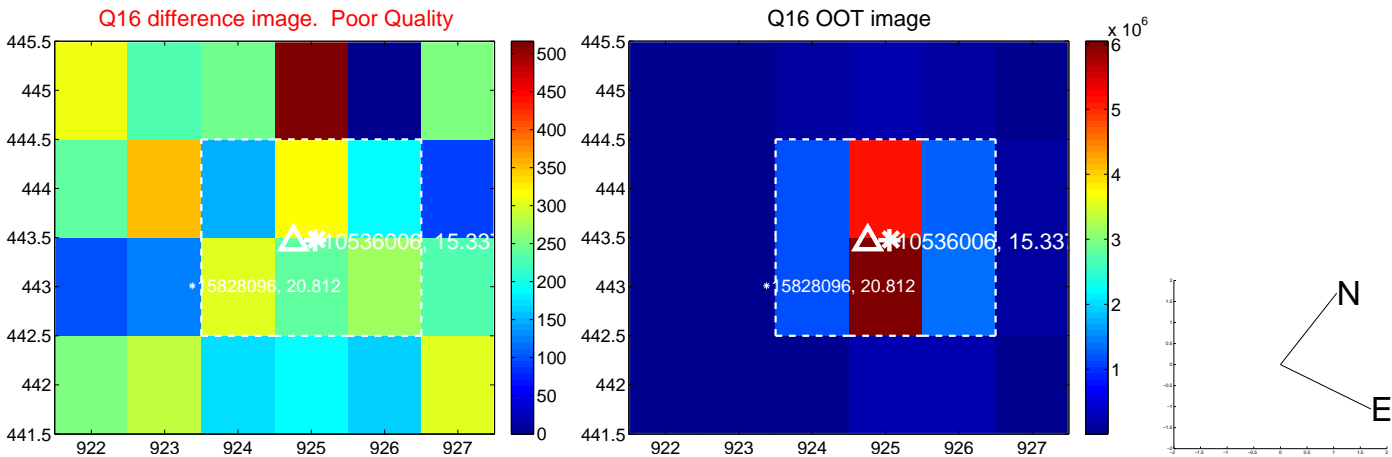
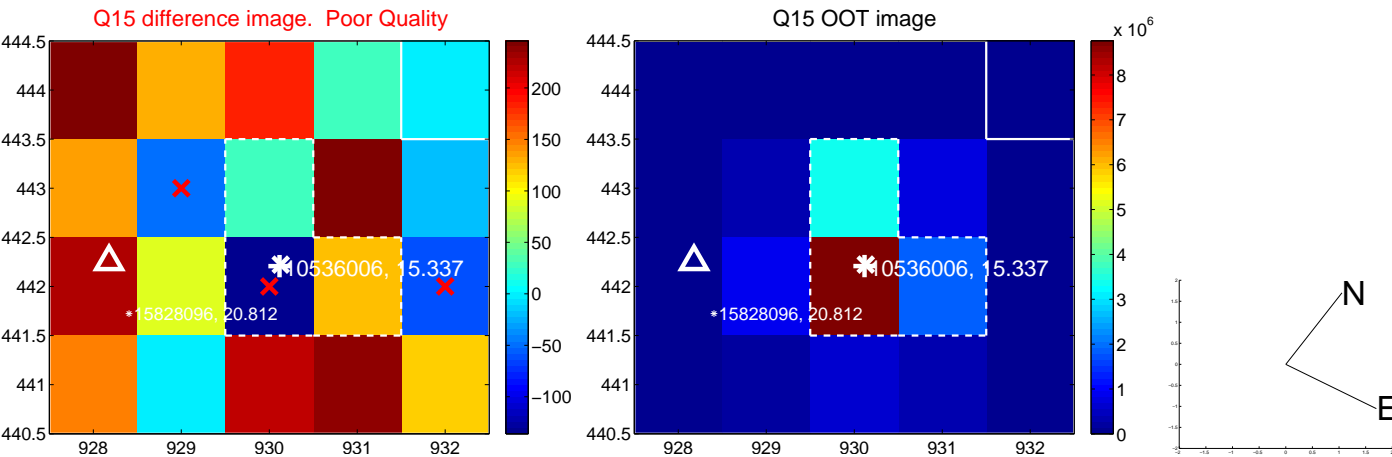
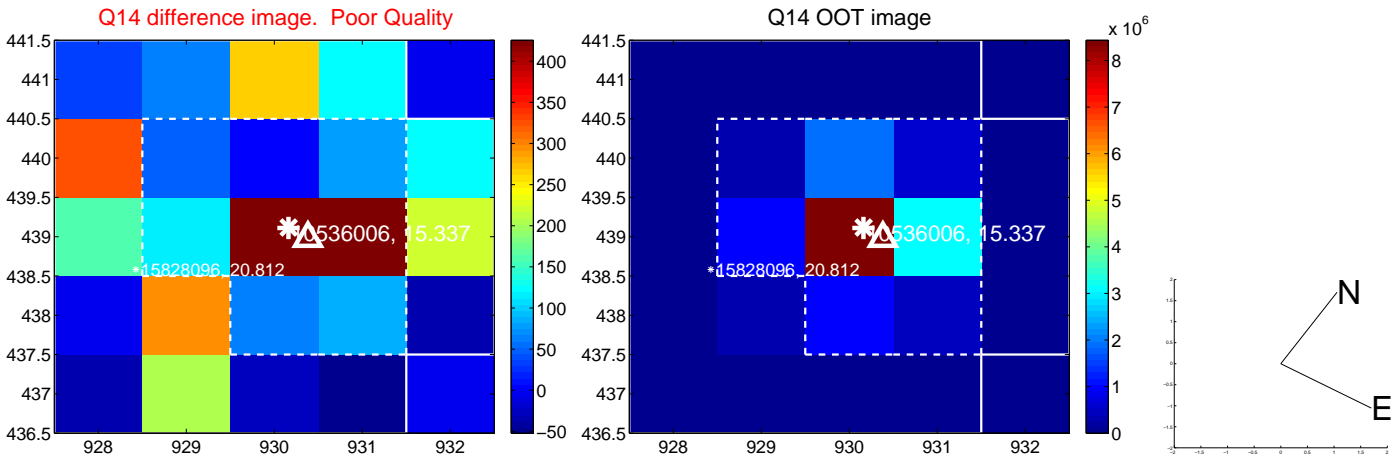
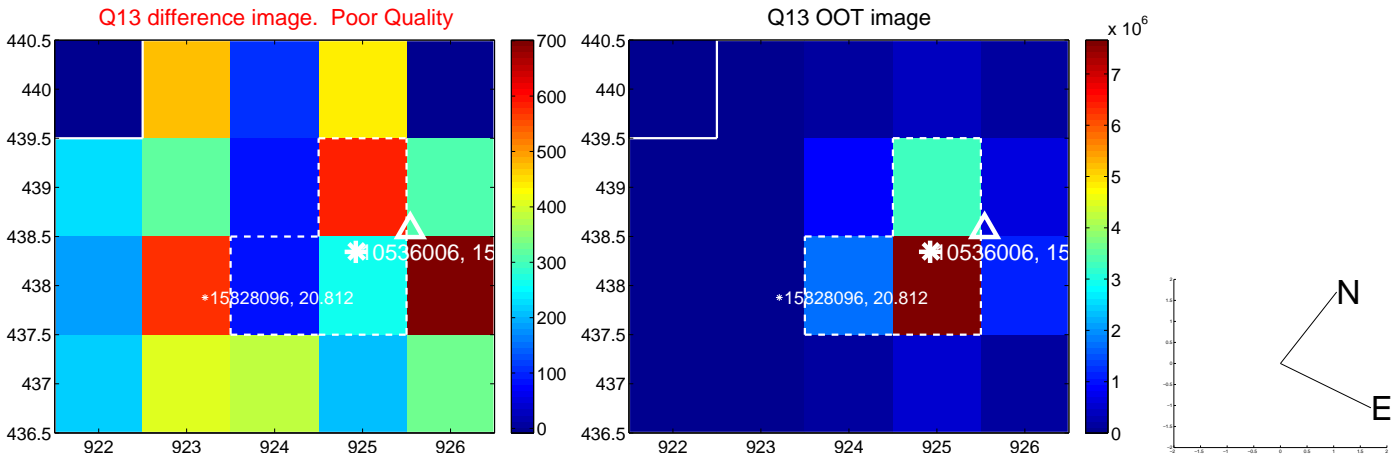
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



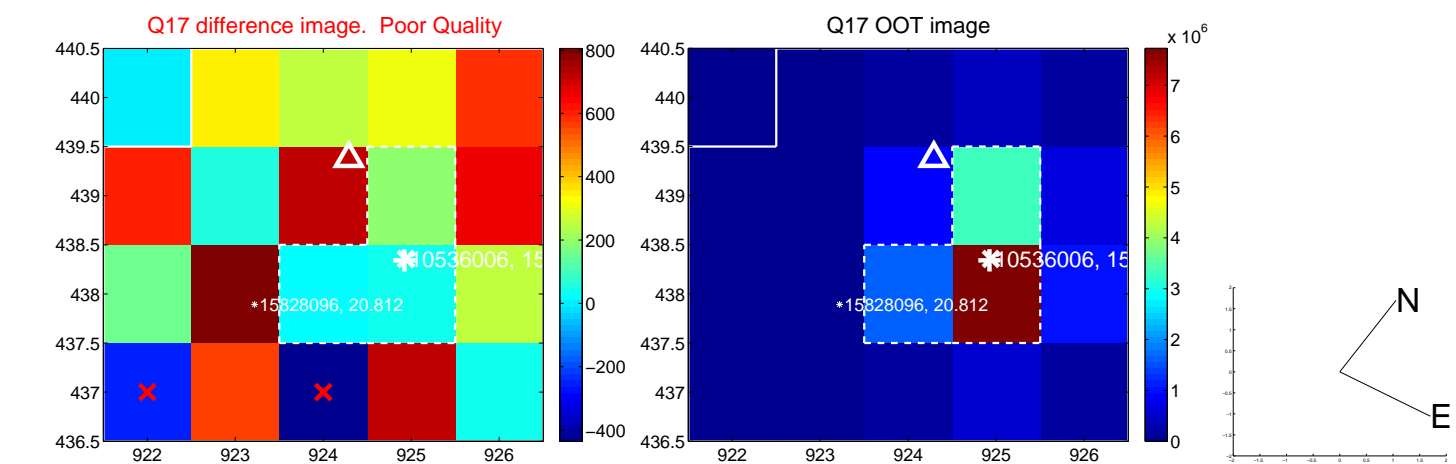
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



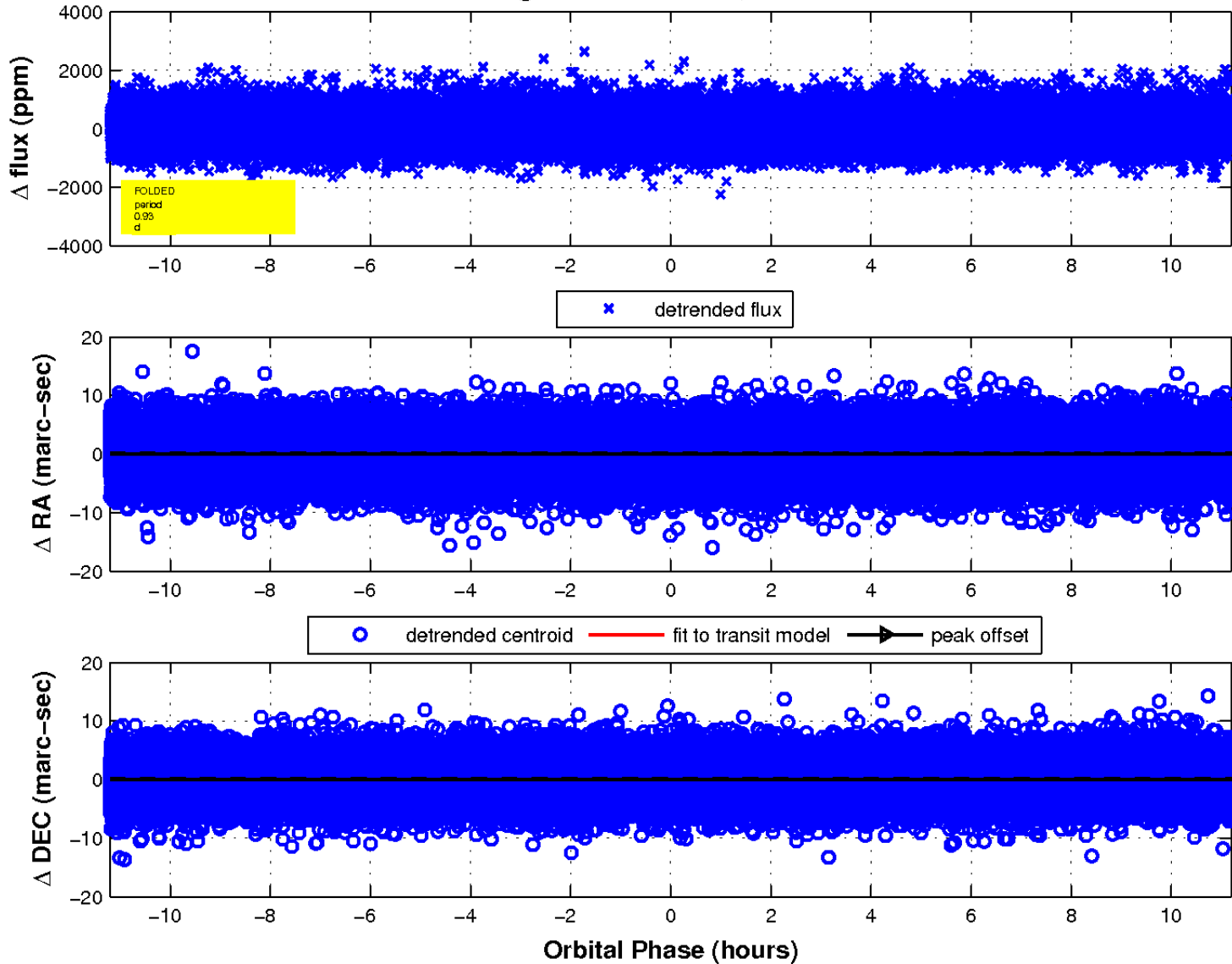
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fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

