

KIC 005984615

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})
005984615-01	OBS	No	5.381235	132.228277	51.5	12.750	8.0	4.7	1.57	7447	1.30	1385.77

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005984615-01	OBS	FP	0.00	1	0	0	0	LPP_DV—MOD_NONUNIQ_DV

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

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

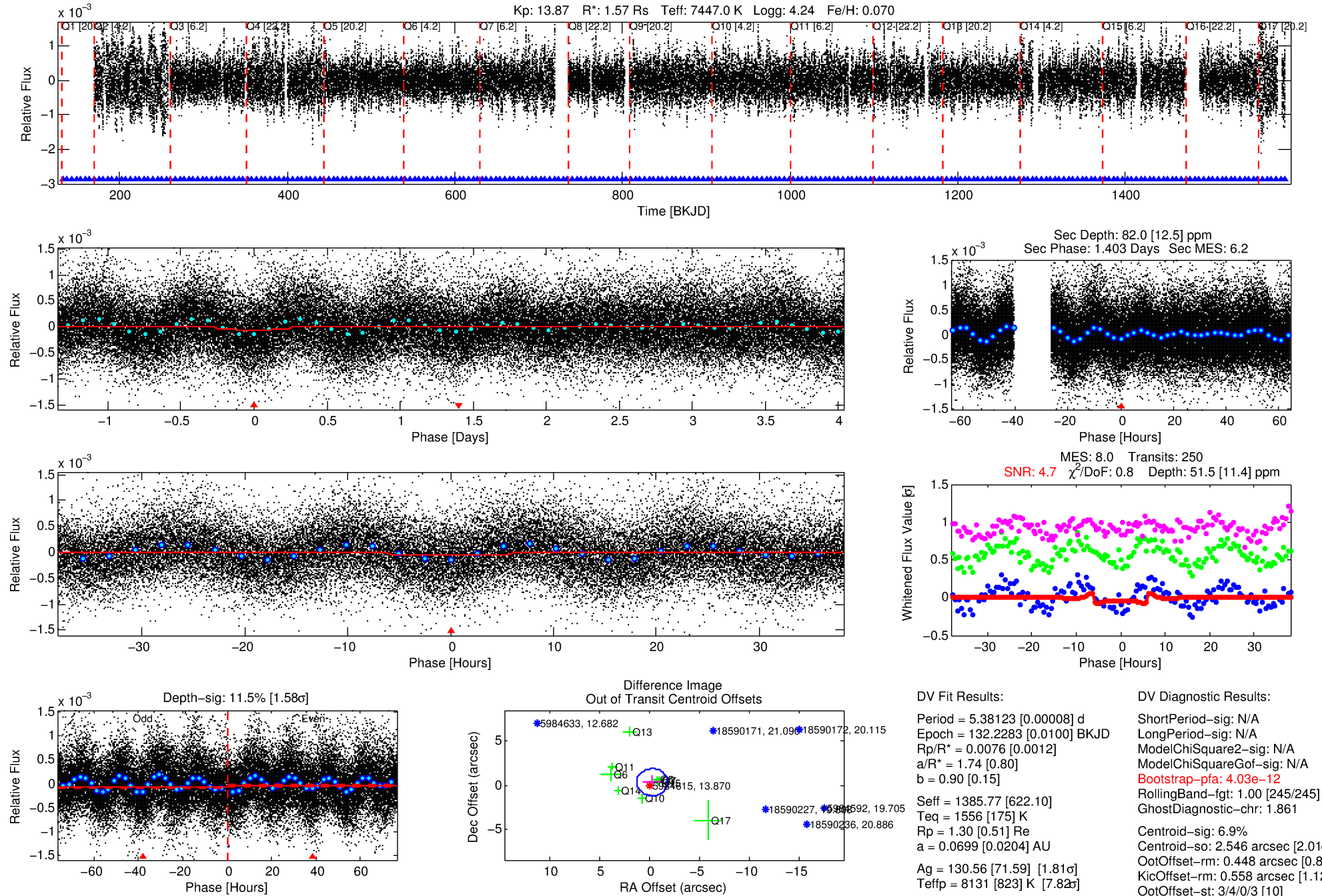
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005984615-01

No Significant Match Found

DV One-Page Summary

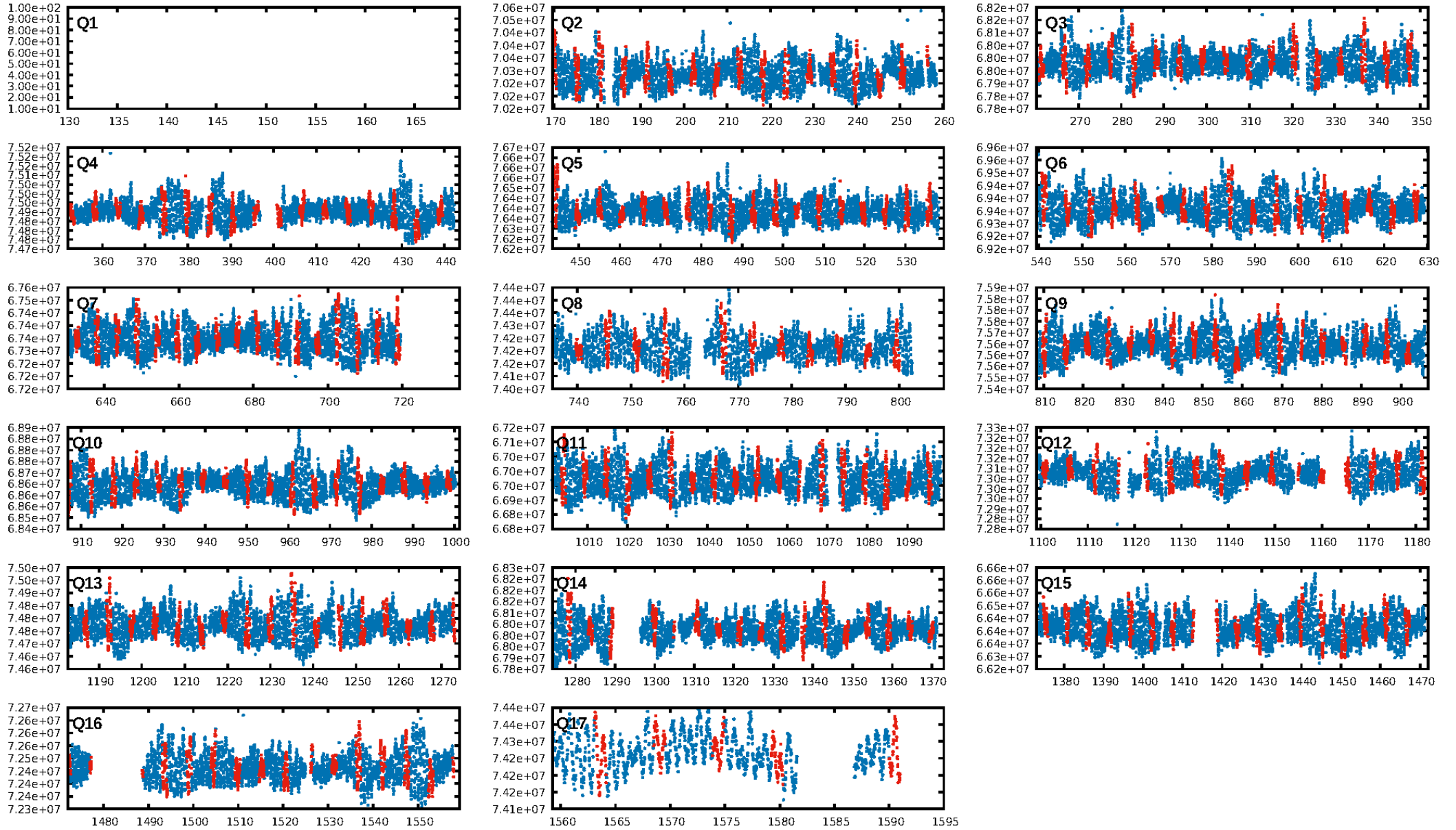
KIC: 5984615 Candidate: 1 of 1 Period: 5.381 d



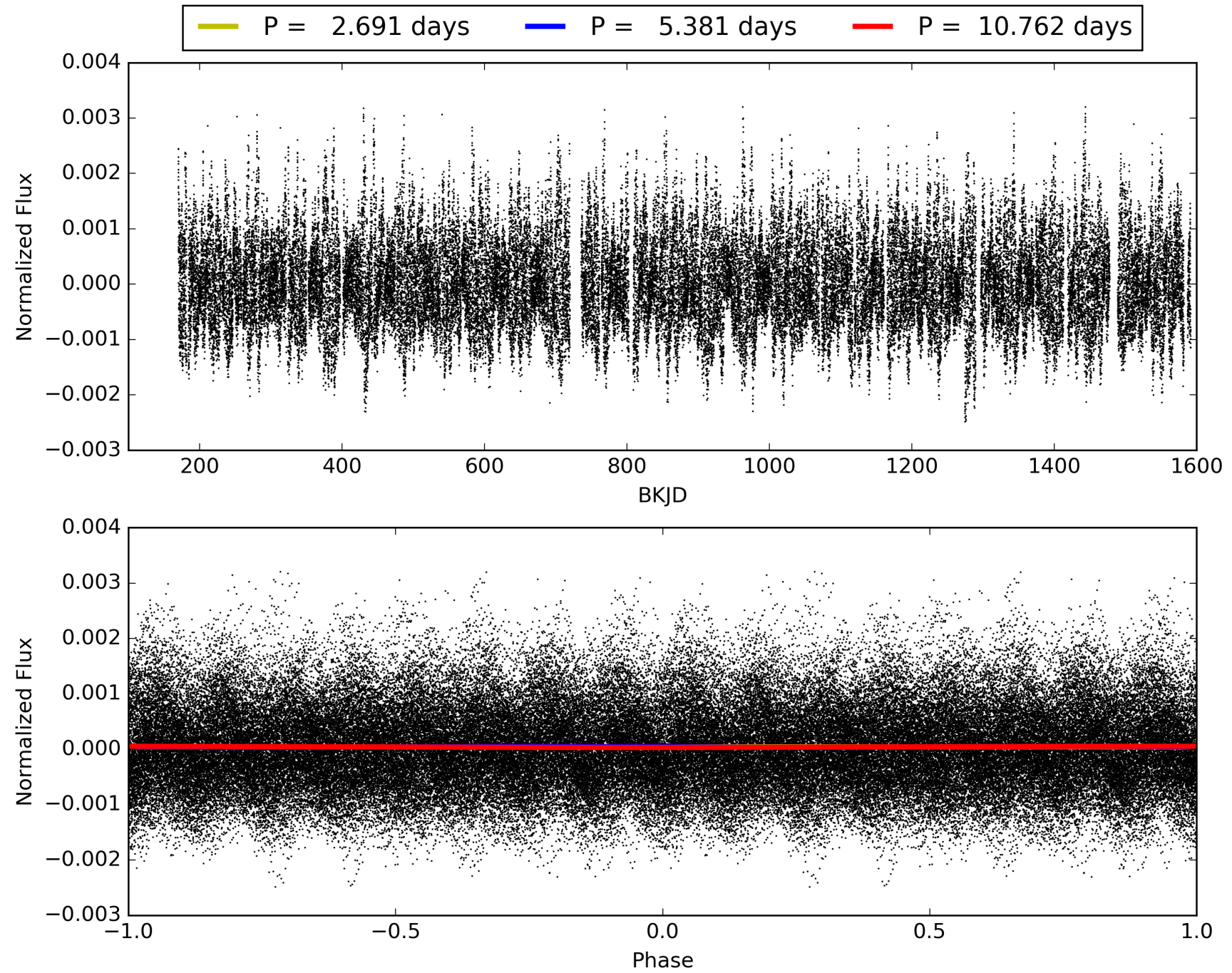
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 21:08:13 Z

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

TCE 005984615-01, PDC Light Curves

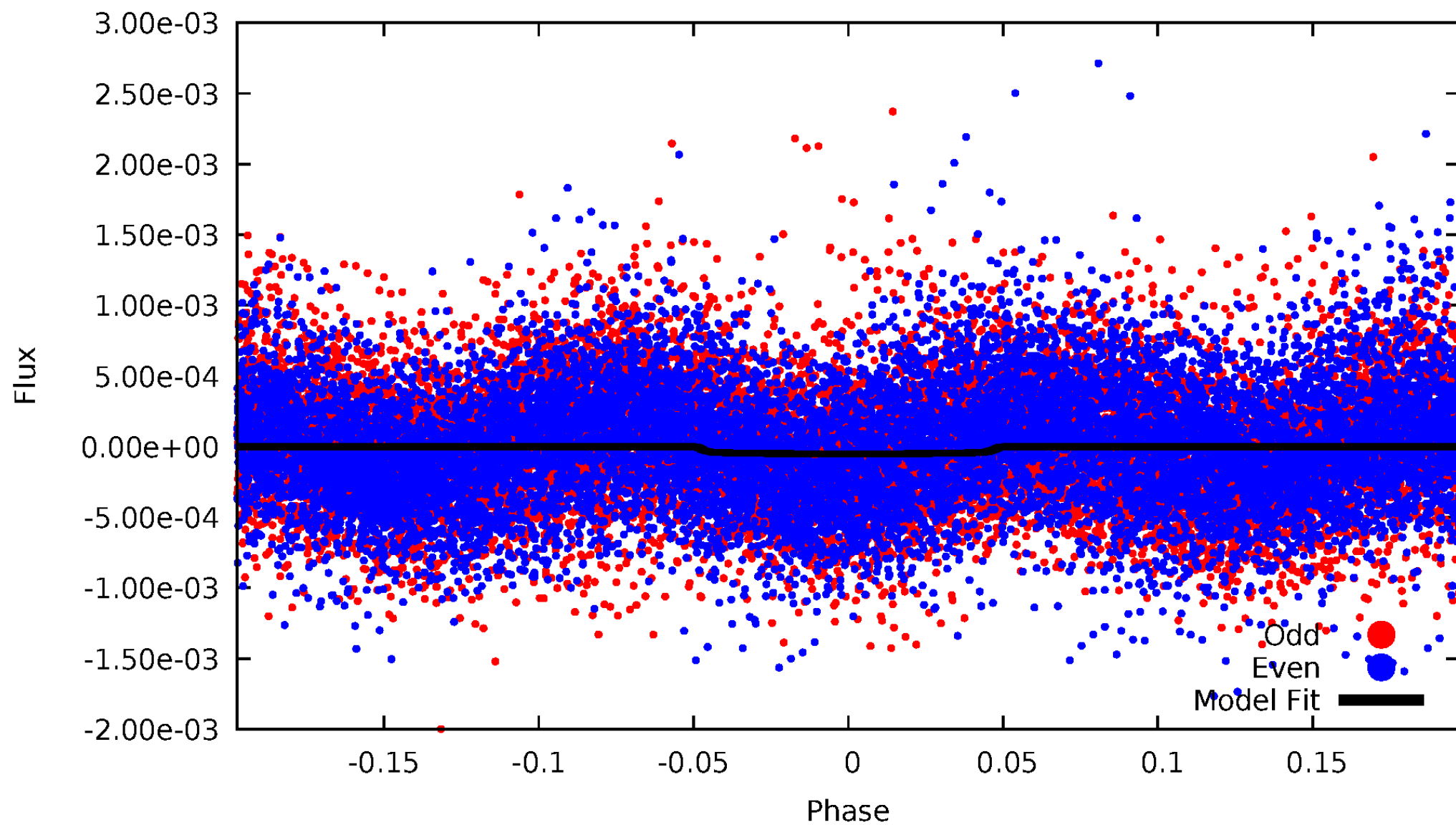


TCE 005984615-01



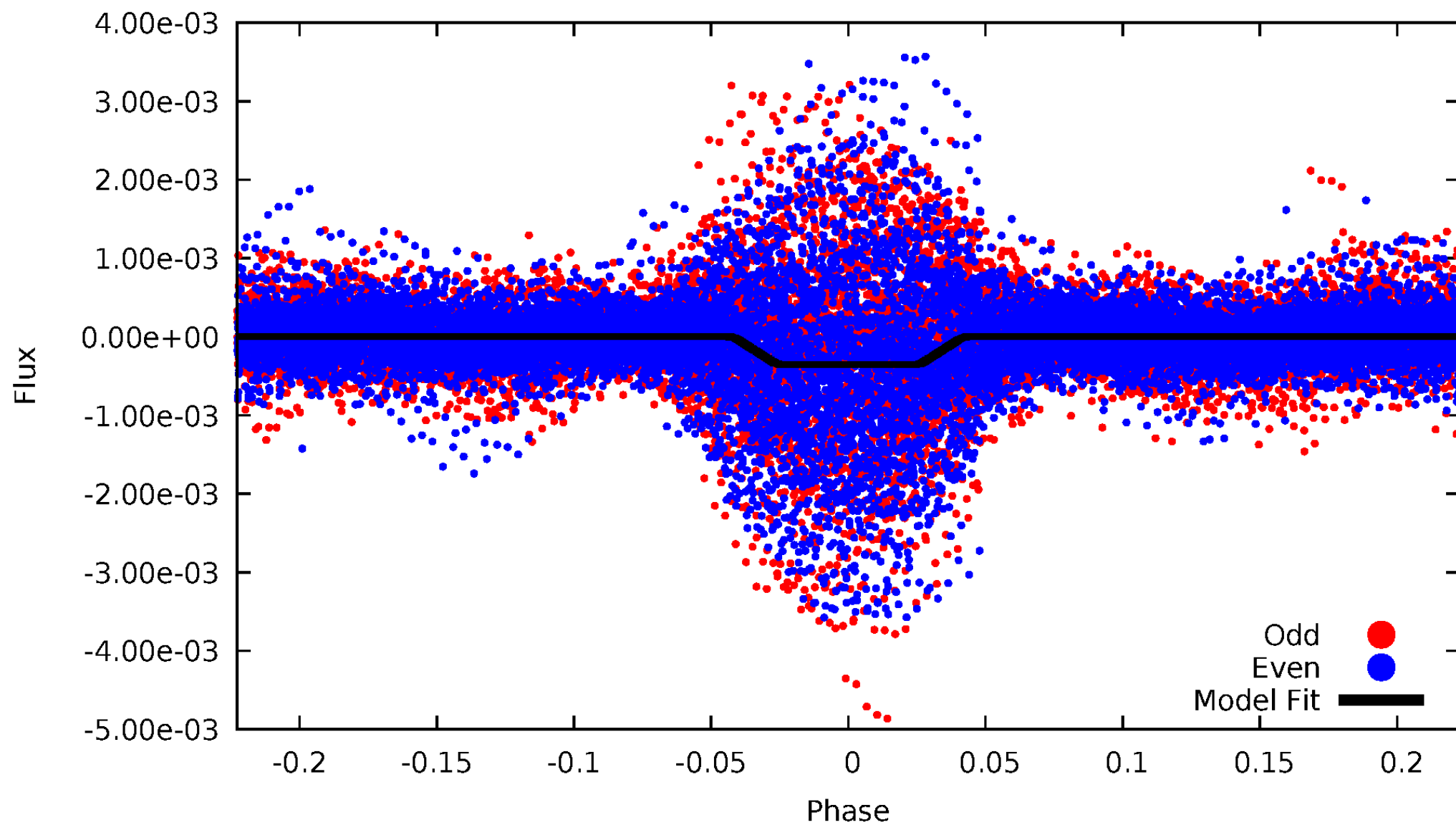
DV Odd/Even

TCE 005984615-01



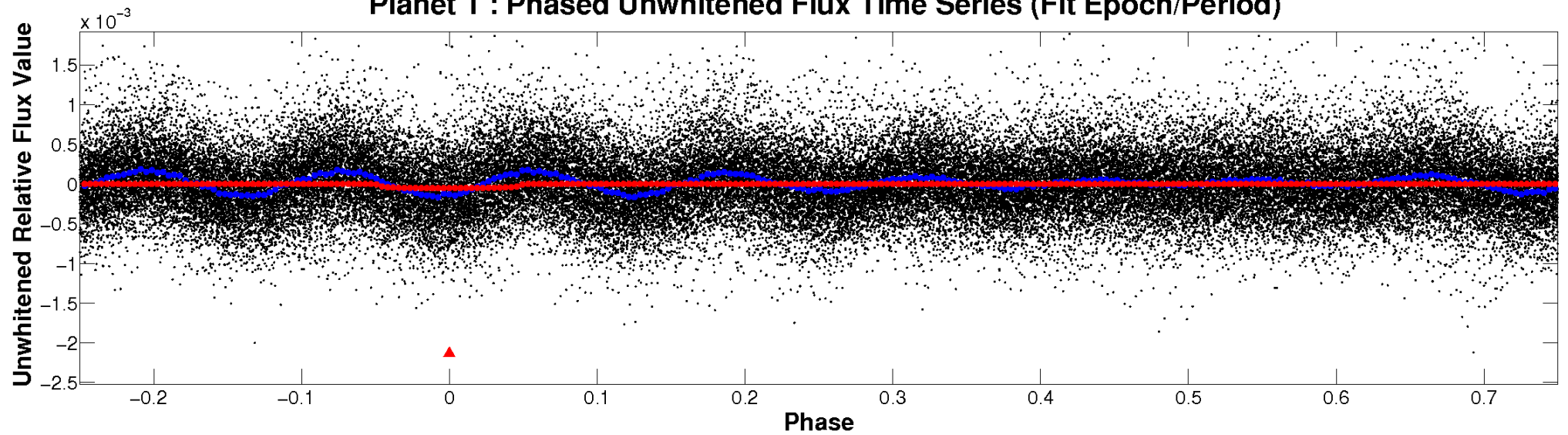
ALT Odd/Even

TCE 005984615-01

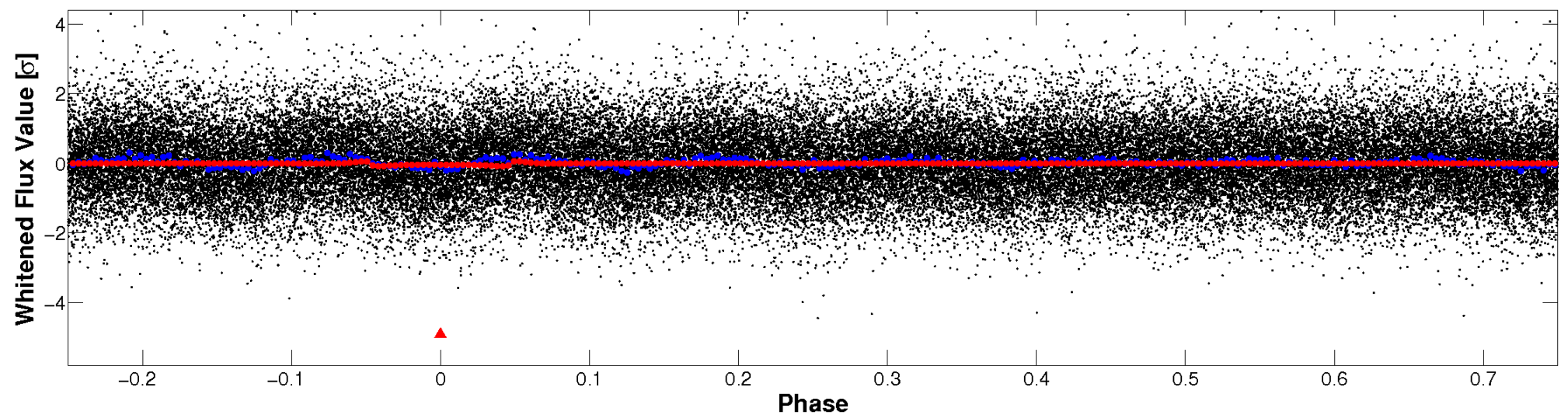


Non-Whitened Vs. Whitened Light Curve

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

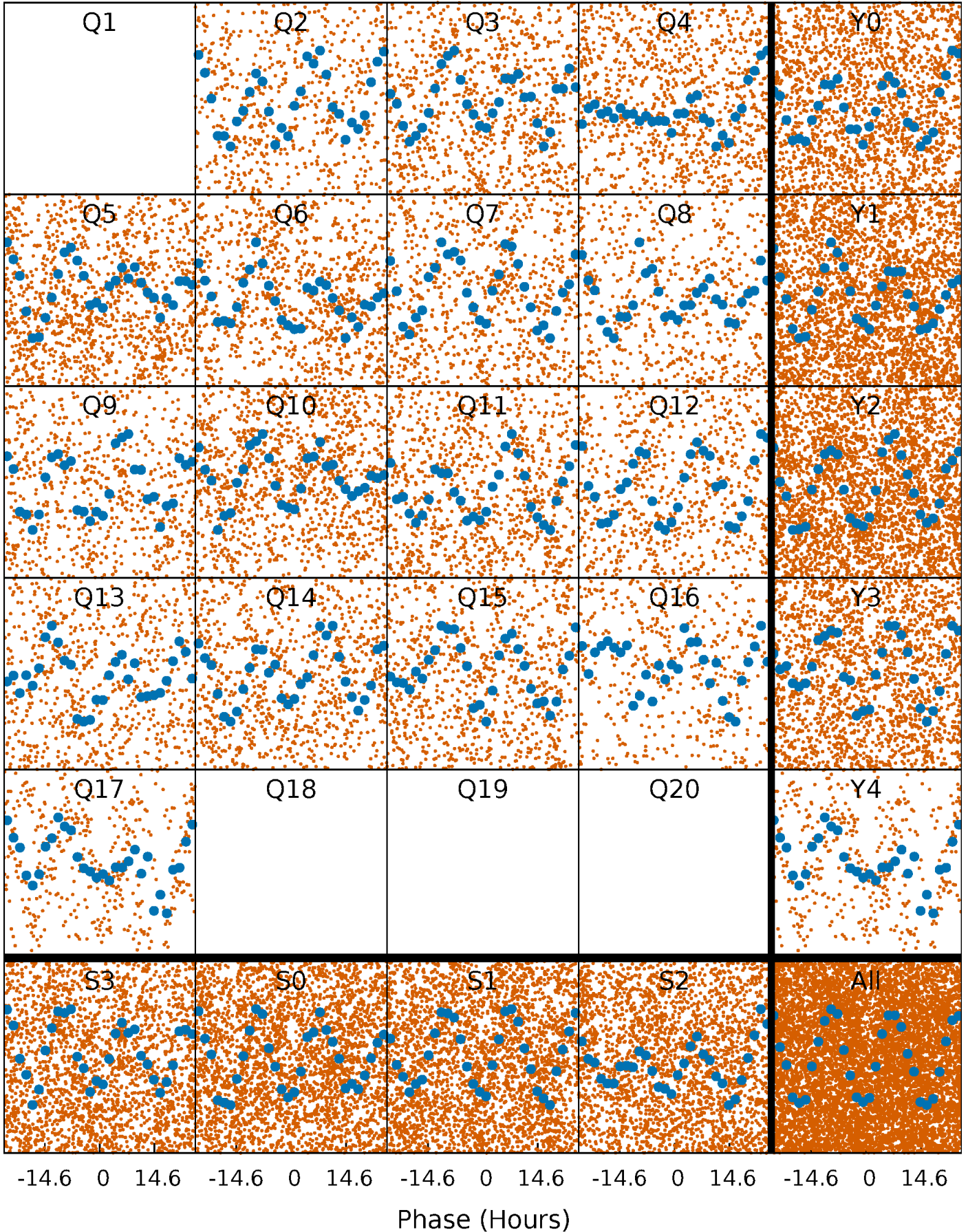


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



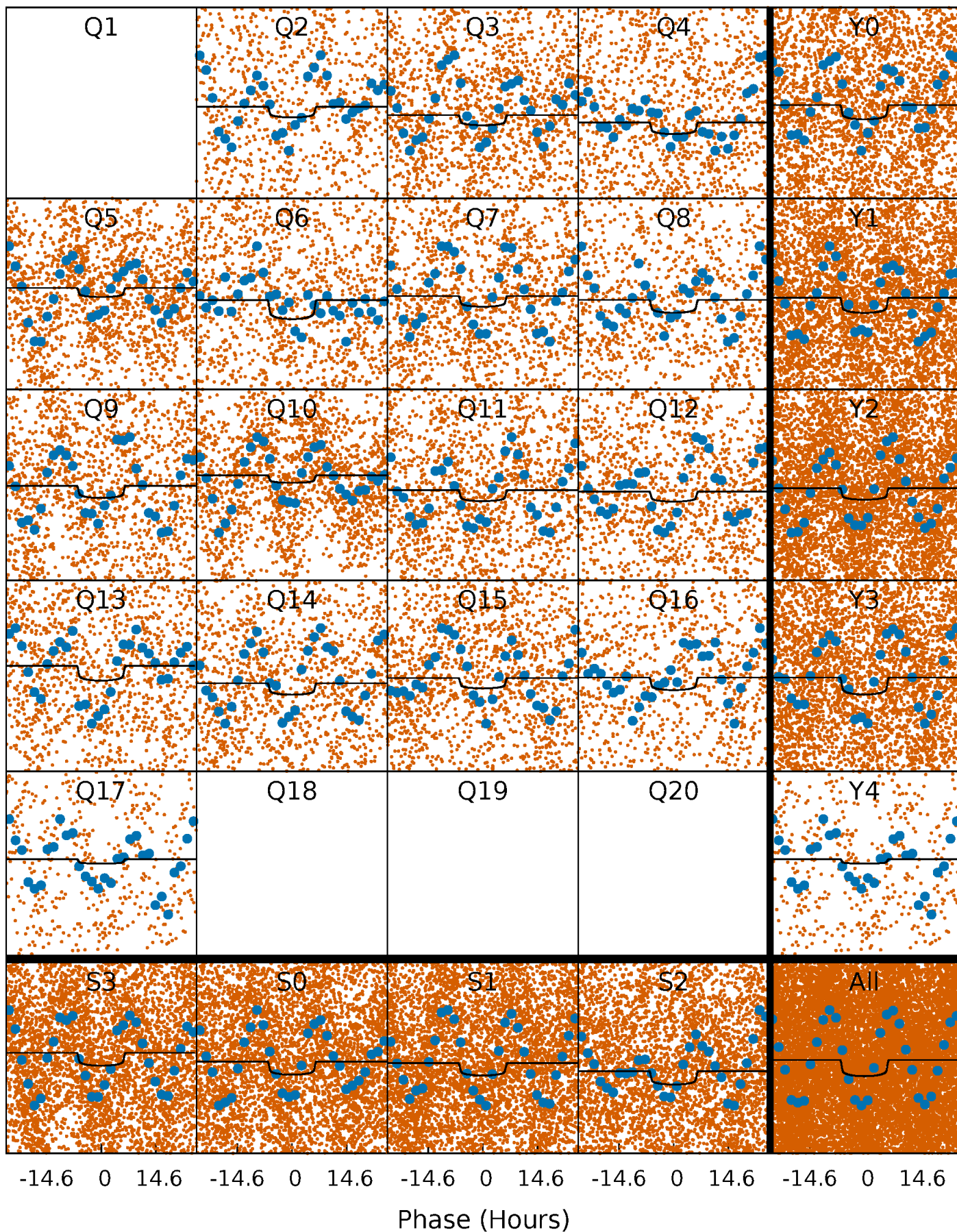
PDC Quarter-Phased Transit Curves

TCE 005984615-01 P= 5.381235 Days $T_0=132.228277$ (BKJD)



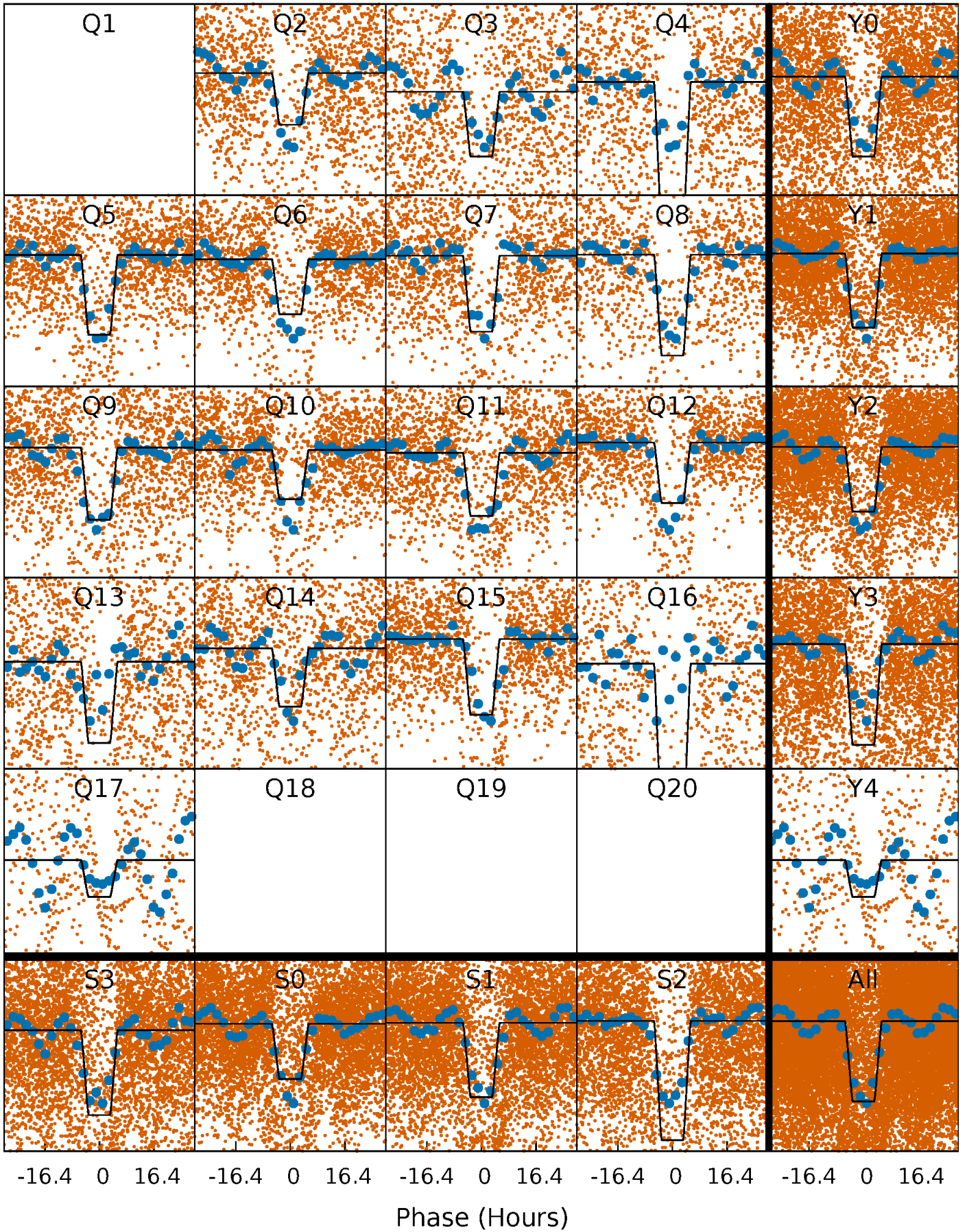
DV Quarter-Phased Transit Curves

TCE 005984615-01 P= 5.381235 Days $T_0=132.228277$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

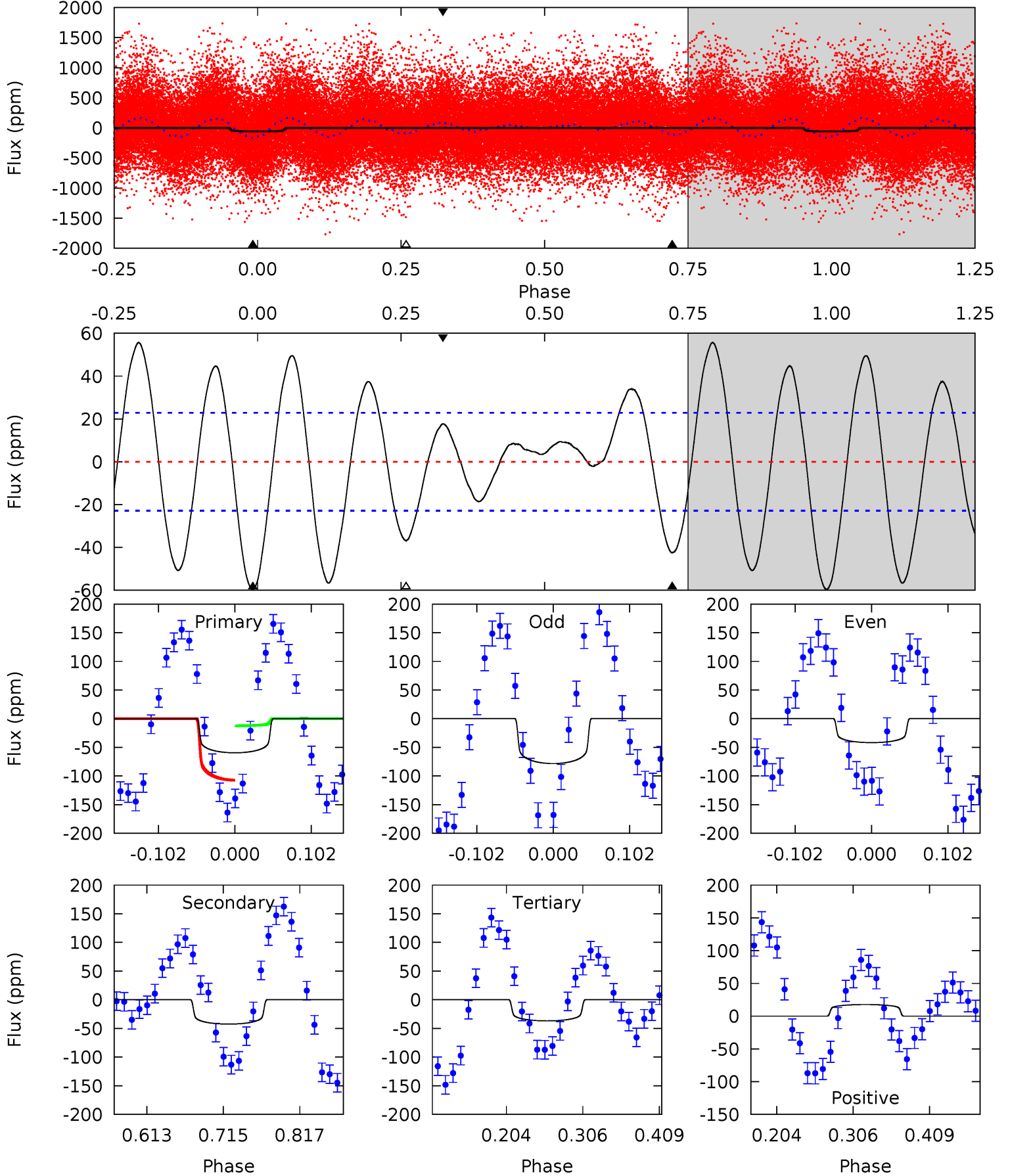
TCE 005984615-01 P= 5.381166 Days $T_0=132.186130$ (BKJD)



DV Model-Shift Uniqueness Test

005984615-01, P = 5.381235 Days, E = 132.228277 Days

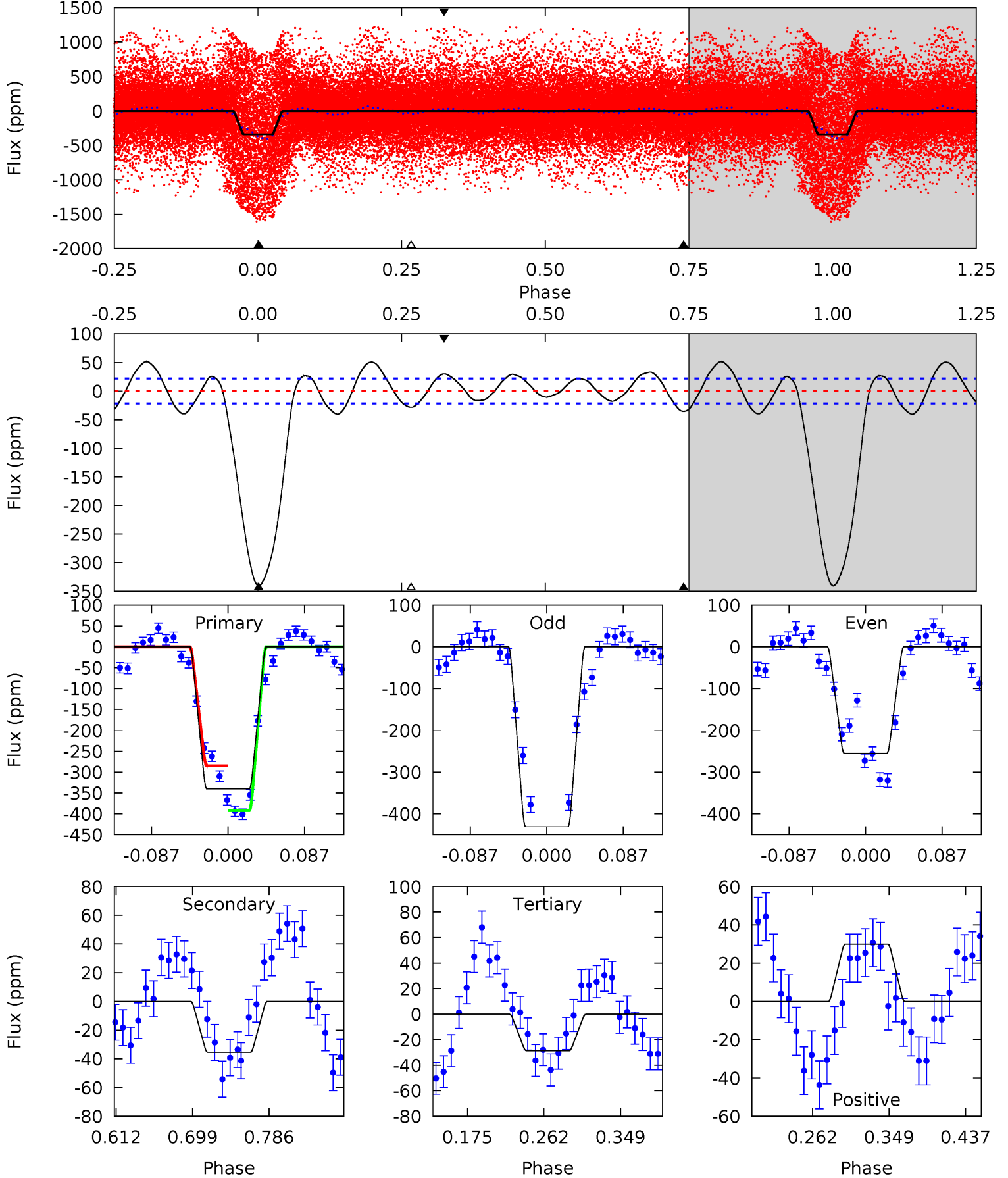
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.9	8.48	7.34	3.53	4.56	1.63	4.41	4.53	8.35	1.13	4.95	3.62	0.87	0.48	9.68



Alt Model-Shift Uniqueness Test

005984615-01, P = 5.381166 Days, E = 132.186130 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
71.6	7.46	6.01	6.29	4.59	1.71	4.54	65.5	65.3	1.45	1.16	18.2	0.93	0.13	11.2



Stellar Parameters For KIC 005984615

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7447^{+232}_{-335}	$4.244^{+0.073}_{-0.218}$	$0.070^{+0.200}_{-0.350}$	$1.567^{+0.562}_{-0.201}$	$1.573^{+0.214}_{-0.214}$	$0.576^{+0.184}_{-0.309}$
	+3%/-4%	+2%/-5%	+286%/-500%	+36%/-13%	+14%/-14%	+32%/-54%
Source	PHO54	PHO54	PHO54	DSEP		

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

Secondary Eclipse Parameters for KIC 005984615-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-42 ± 5	$1.34^{+0.31}_{-0.24}$	2198^{+184}_{-127}	6749^{+831}_{-573}	62^{+30}_{-21}
Alt.	-35 ± 5	$3.30^{+0.60}_{-0.36}$	2214^{+181}_{-131}	4306^{+189}_{-176}	$8.461^{+2.464}_{-2.471}$

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 $A_{obs} \gg 1.0$

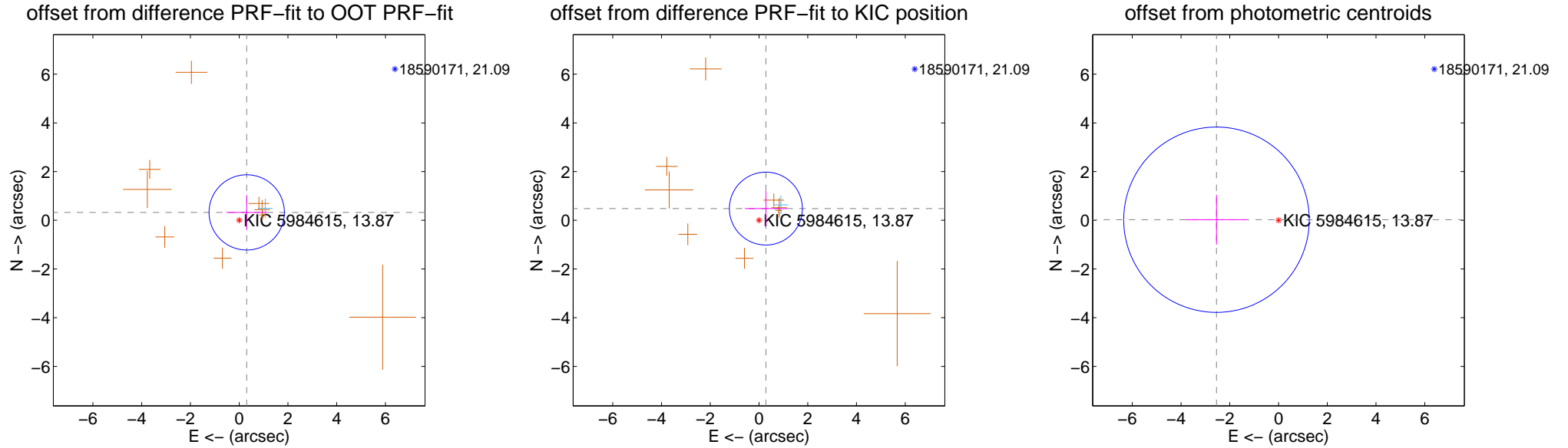
DV Centroid Data

Supplemental centroid analysis for 005984615-01. Kepler magnitude: 13.87. Transit SNR 4.65

There are 1 quarters with good PRF difference image offsets

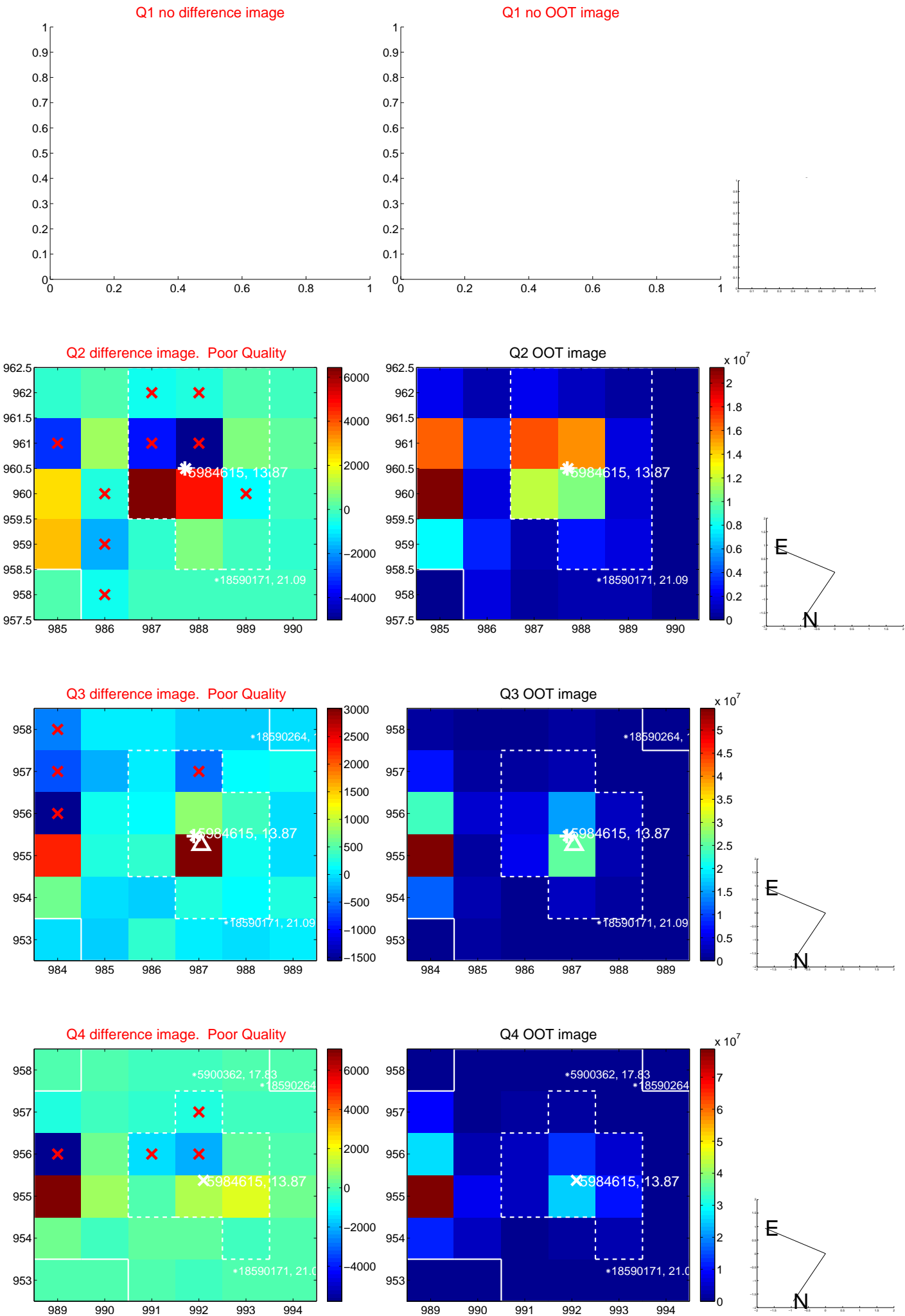
The direct PRF centroid is offset from the target star catalog position by about 0.26 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.448 ± 0.515	0.87	-0.308 ± 0.836	0.324 ± 0.721
PRF-fit source offset from KIC position	0.558 ± 0.499	1.12	-0.282 ± 0.865	0.481 ± 0.720
photometric centroid source offset	2.55 ± 1.27	2.01	2.55 ± 1.27	0.02 ± 1.02

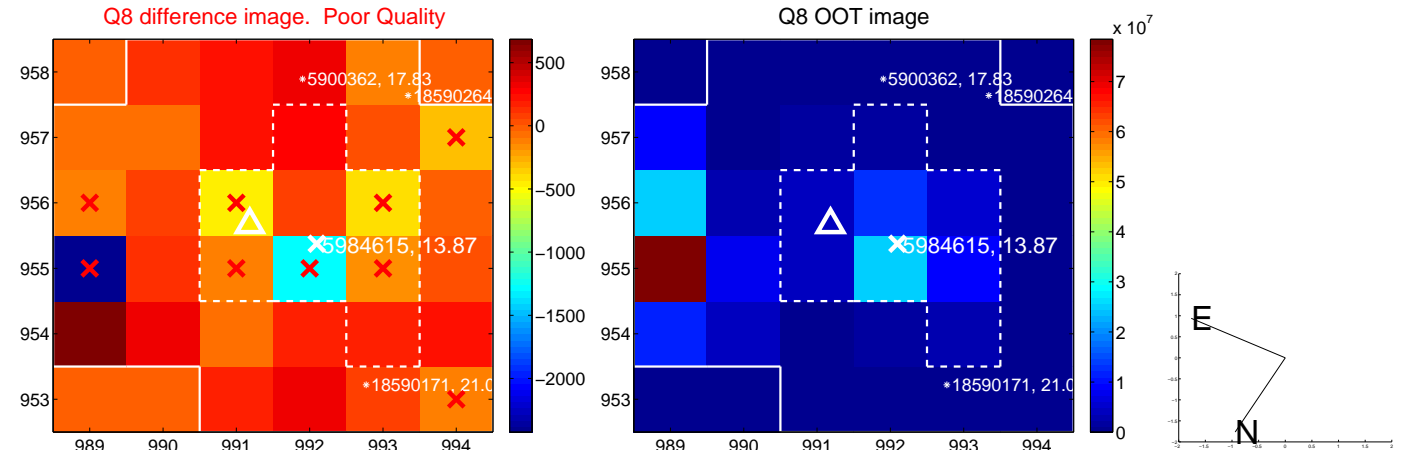
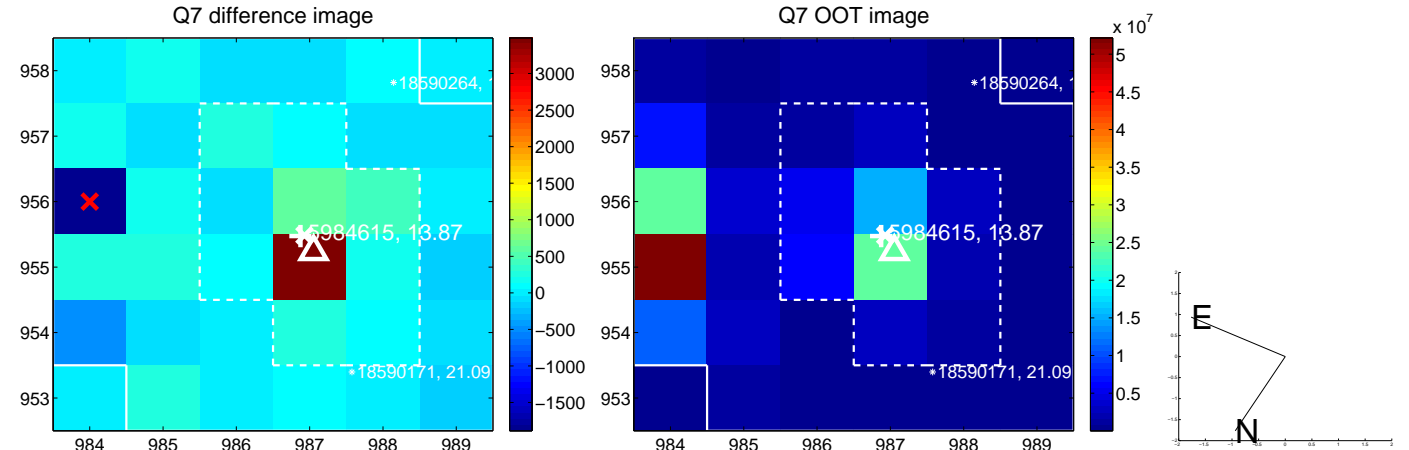
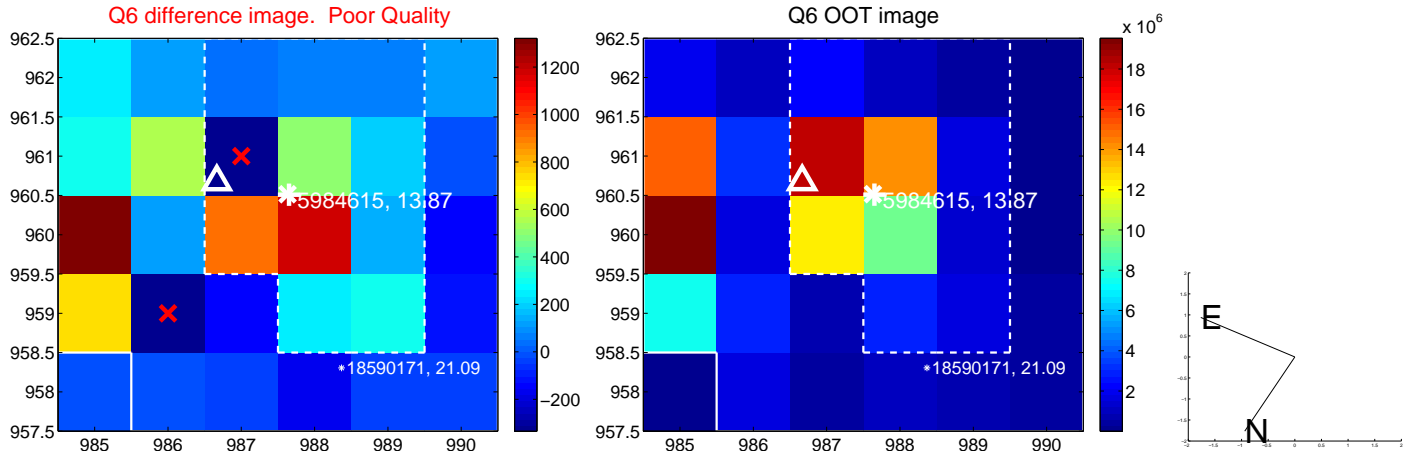
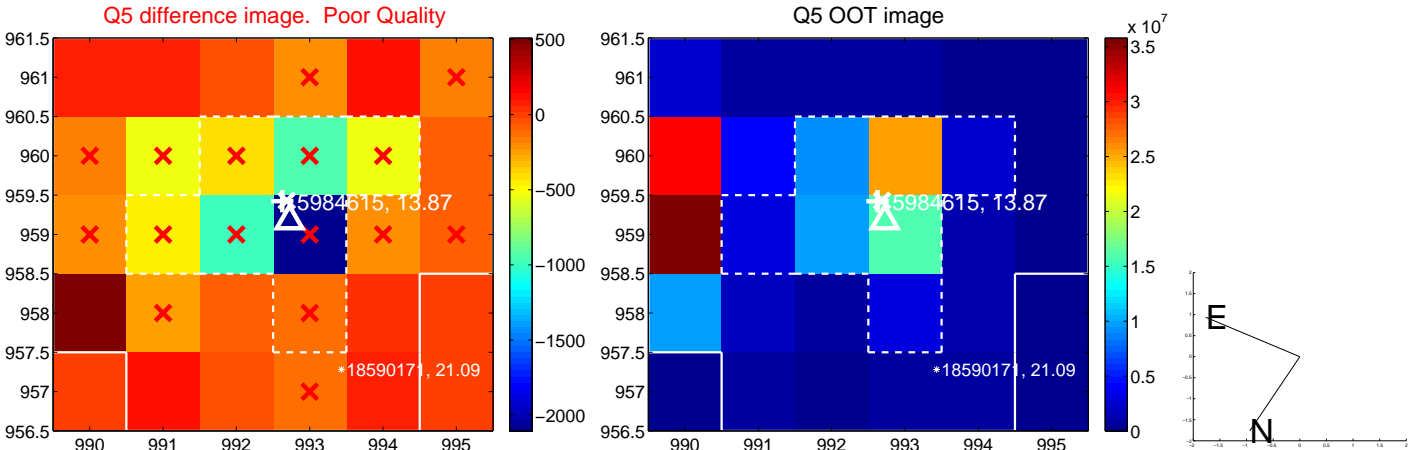


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

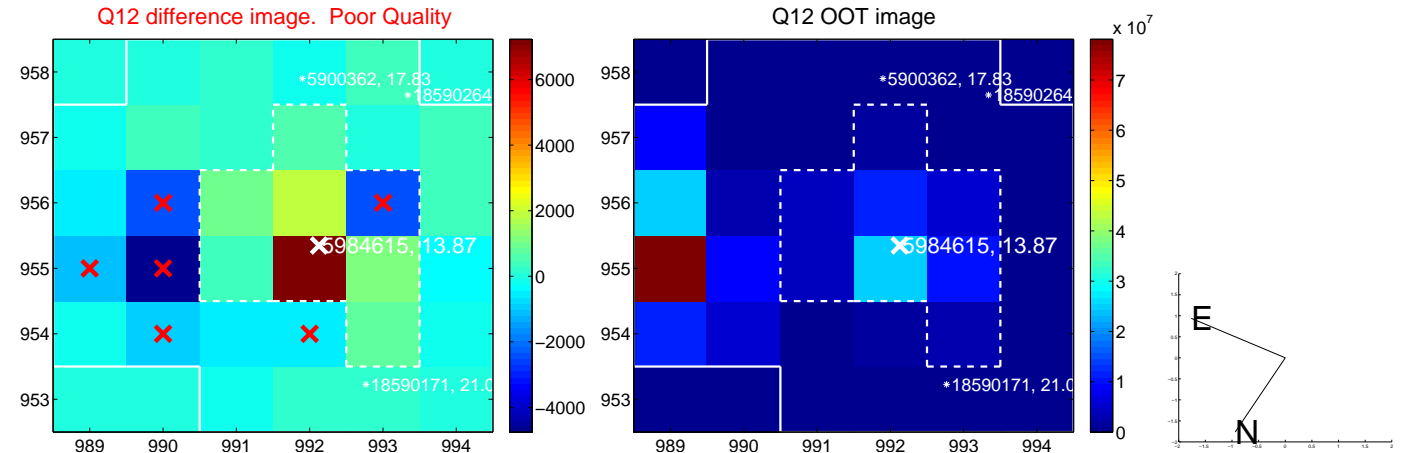
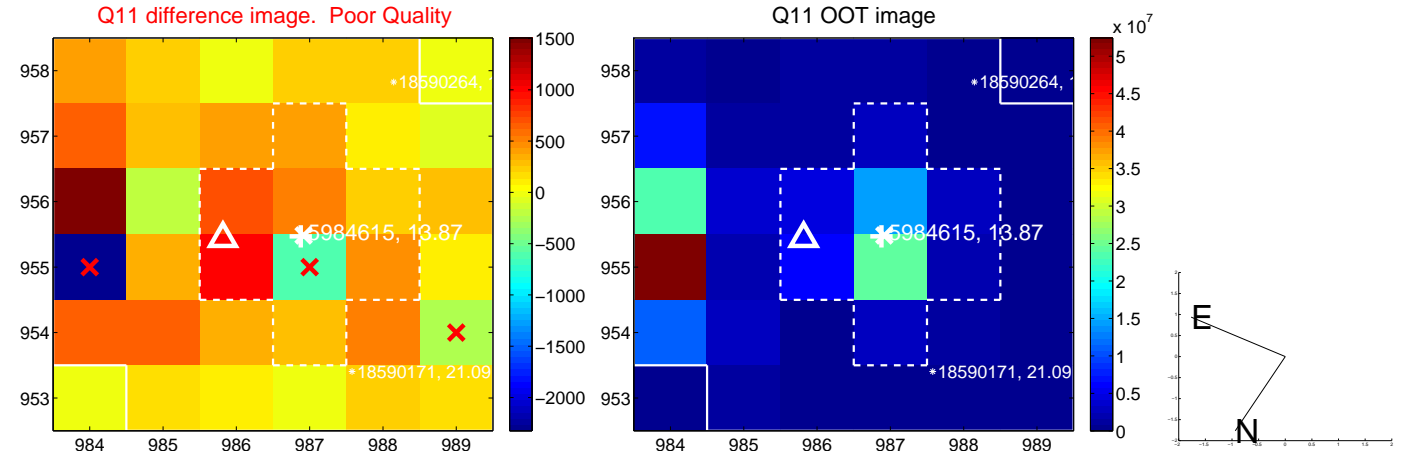
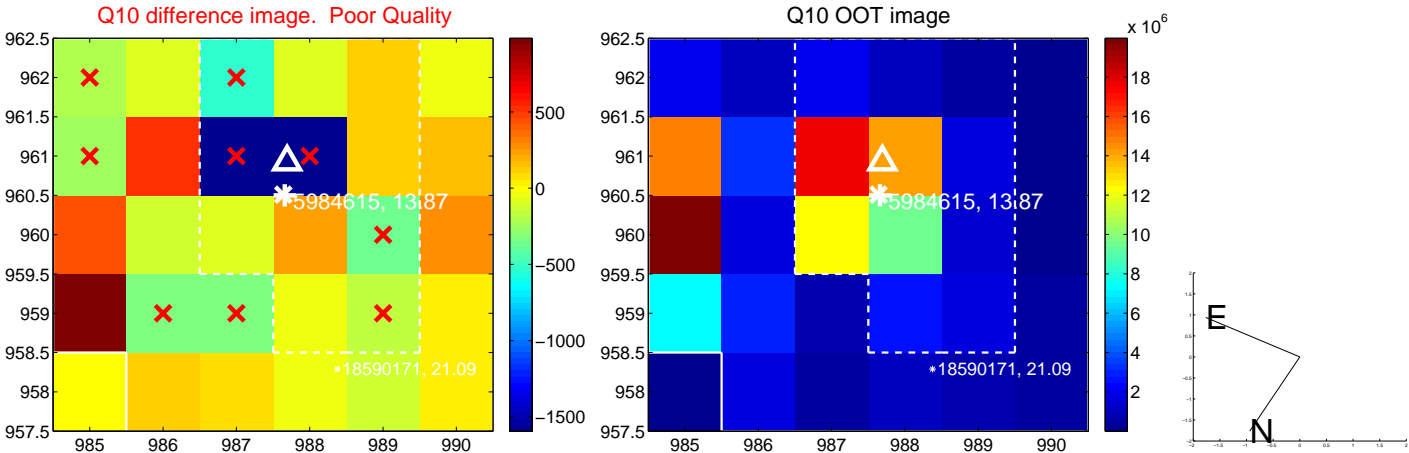
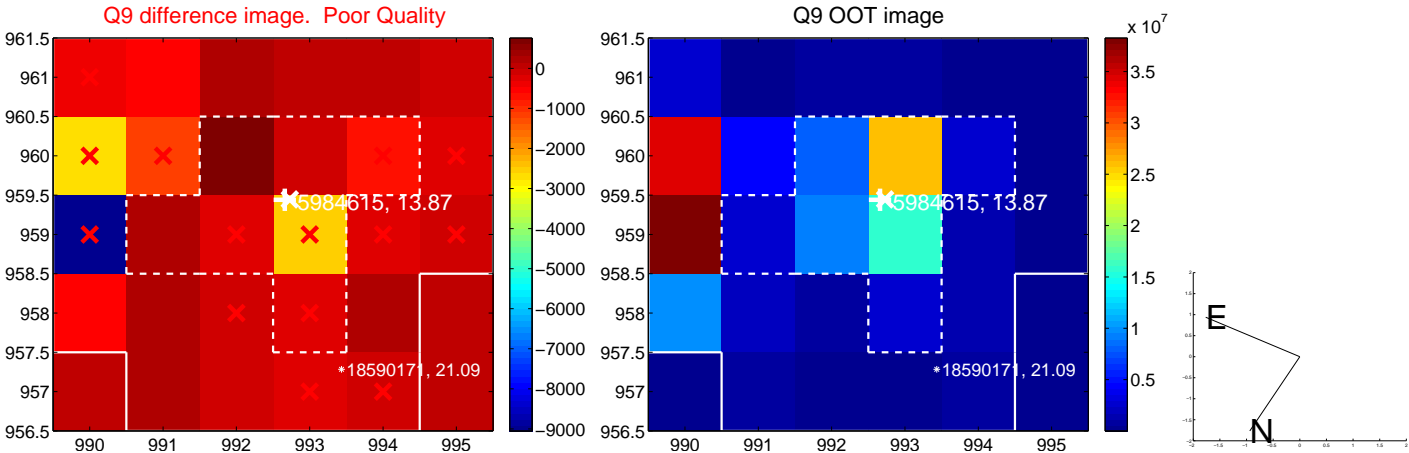
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



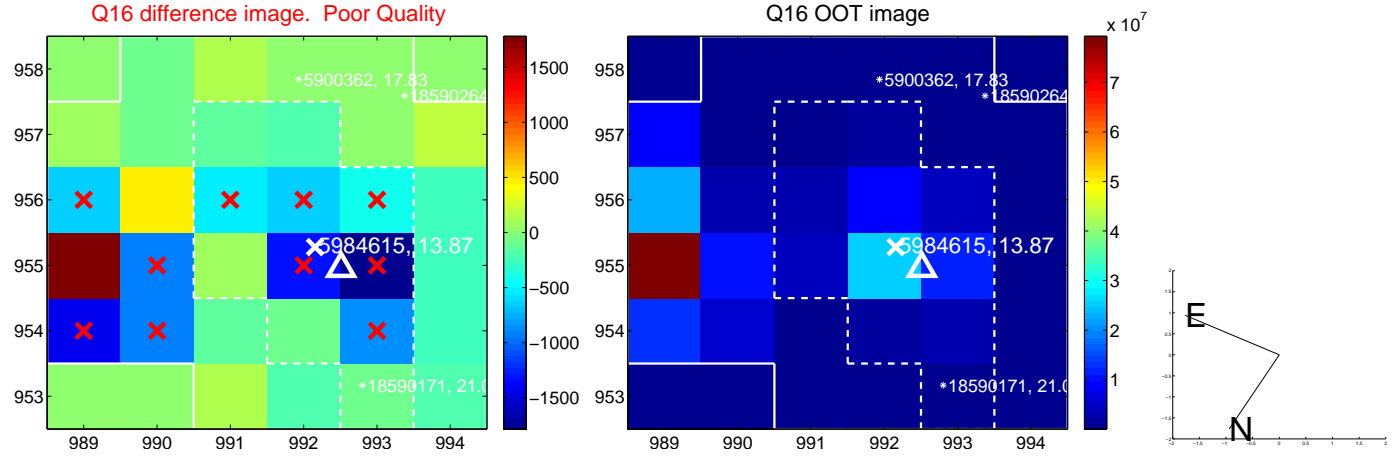
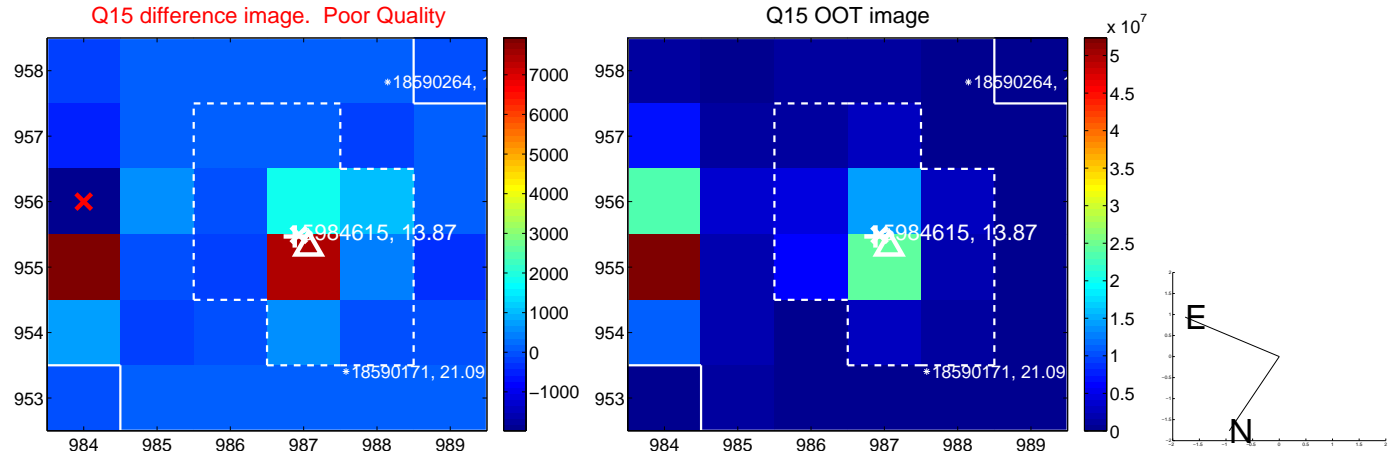
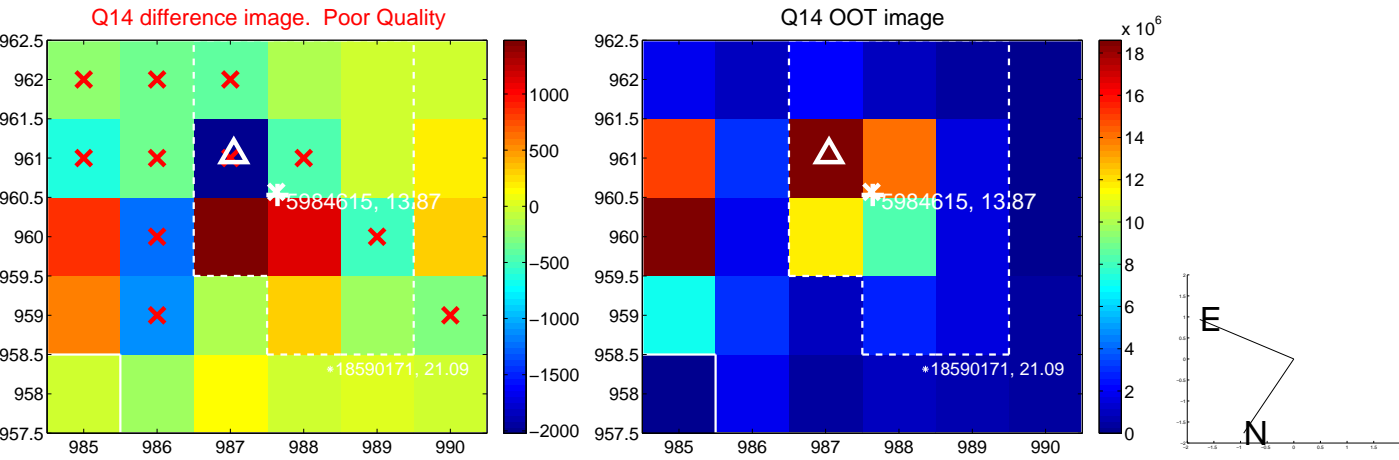
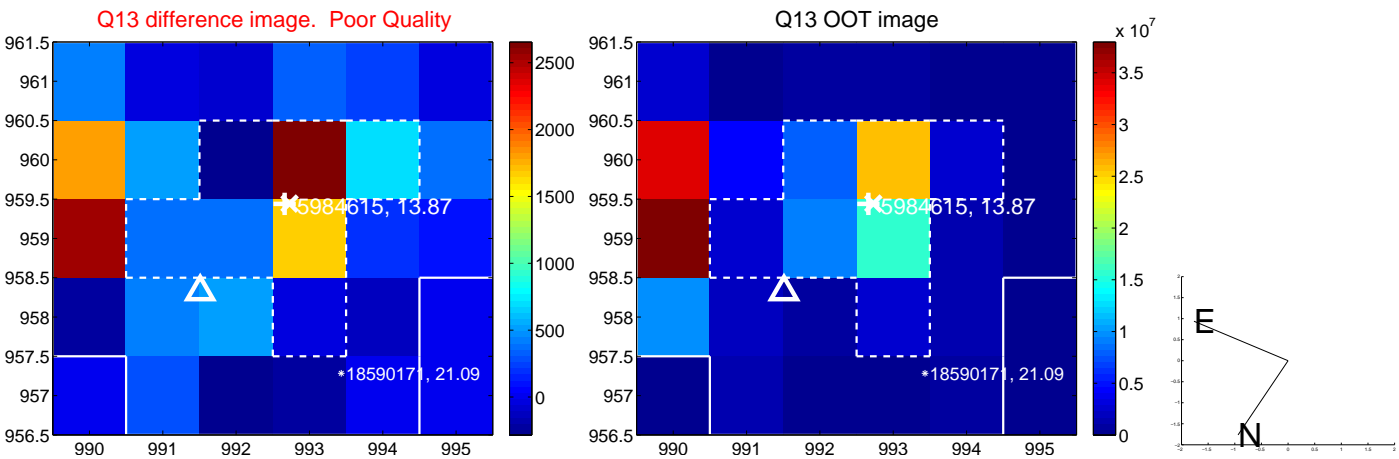
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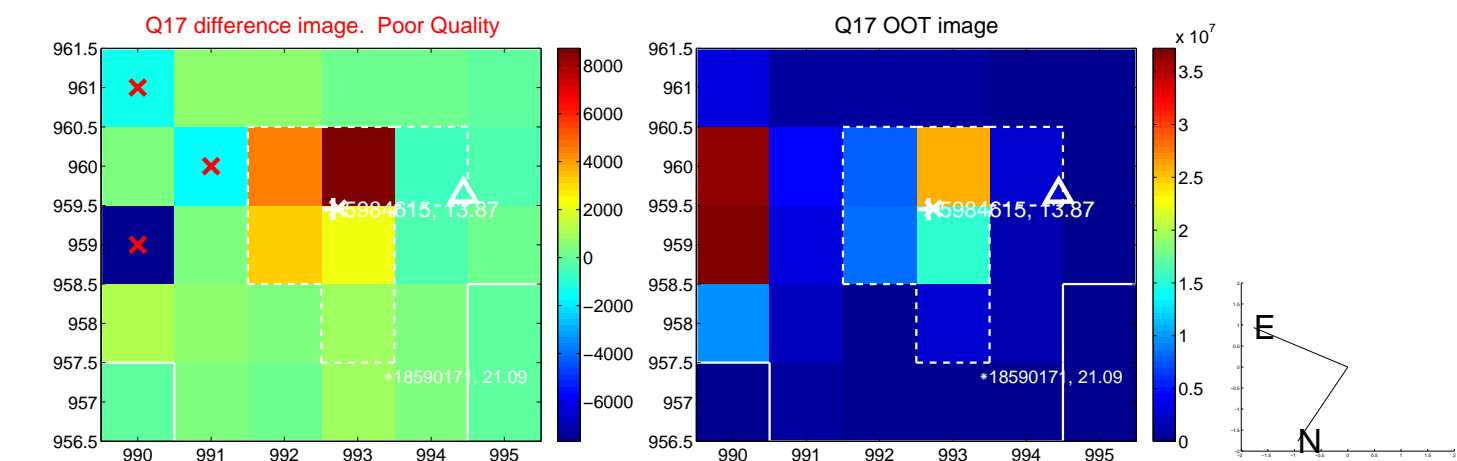
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



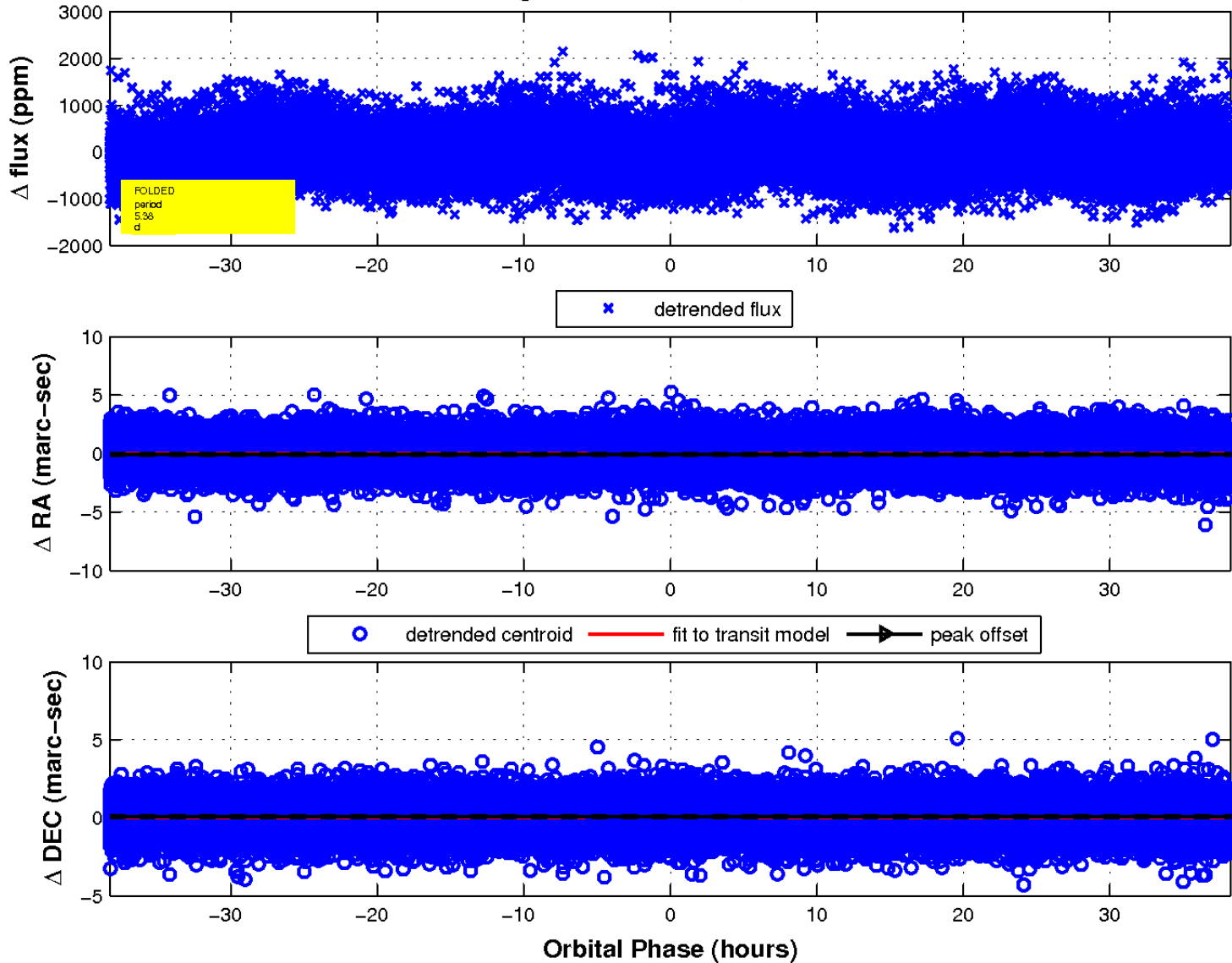
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

