

KIC 001293046

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})
001293046-01	OBS	7622.01	36.267169	155.081337	563.8	1.963	7.5	7.9	0.62	4264	1.58	3.45

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
001293046-01	OBS	FP	0.00	0	0	1	0	CENT_RESOLVED_OFFSET—HALO_GHOST

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

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

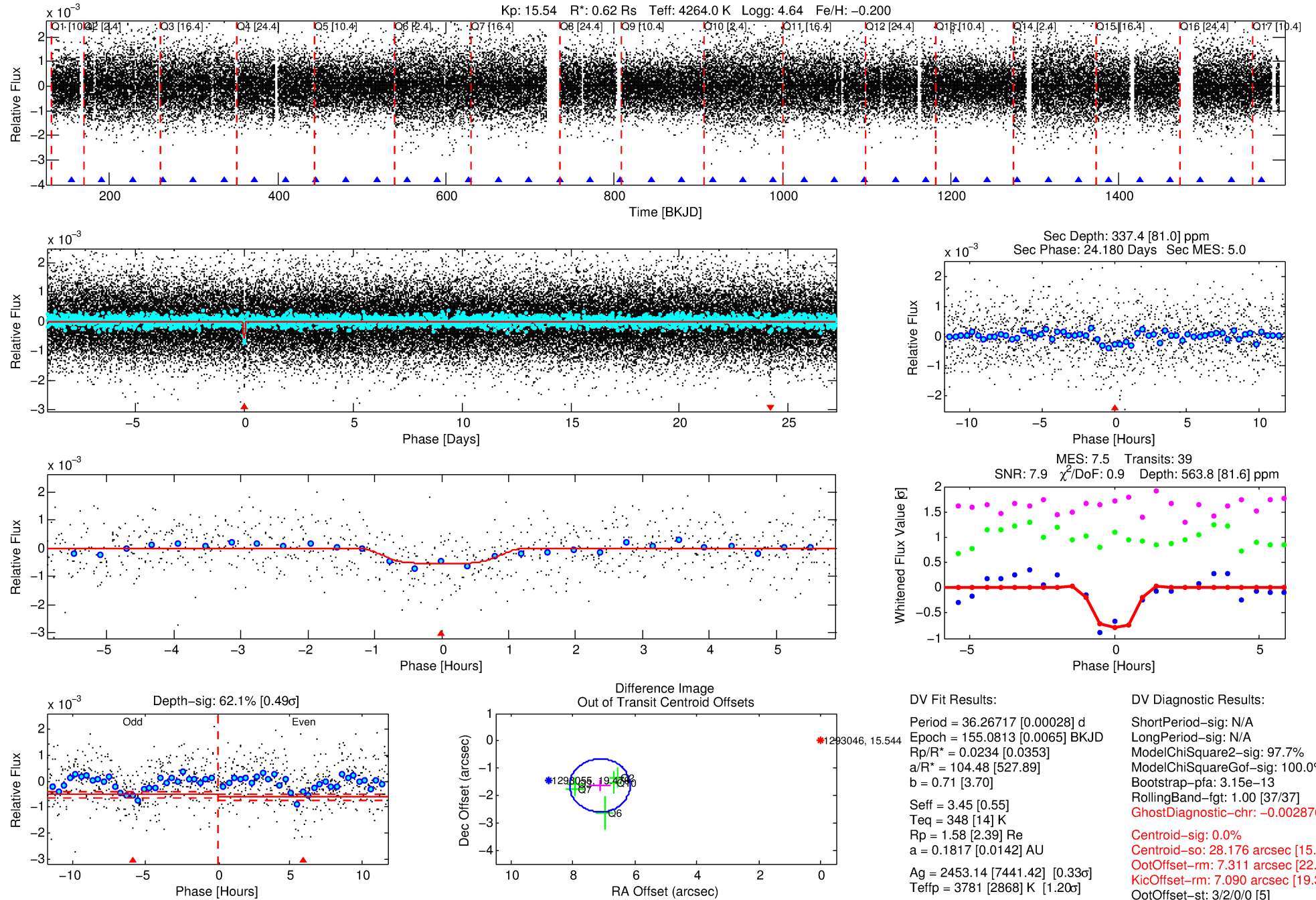
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 001293046-01

No Significant Match Found

DV One-Page Summary

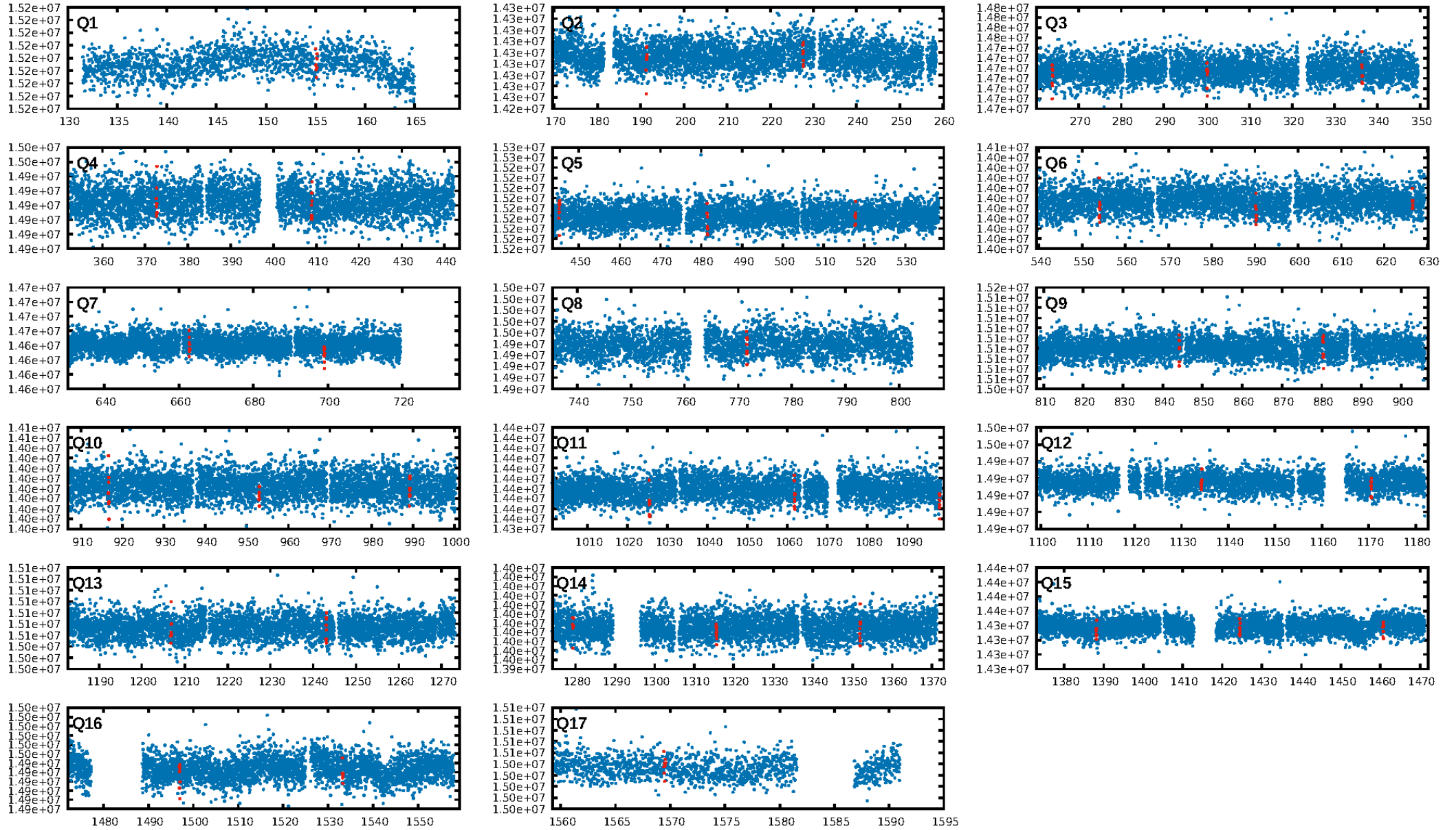
KIC: 1293046 Candidate: 1 of 1 Period: 36.267 d



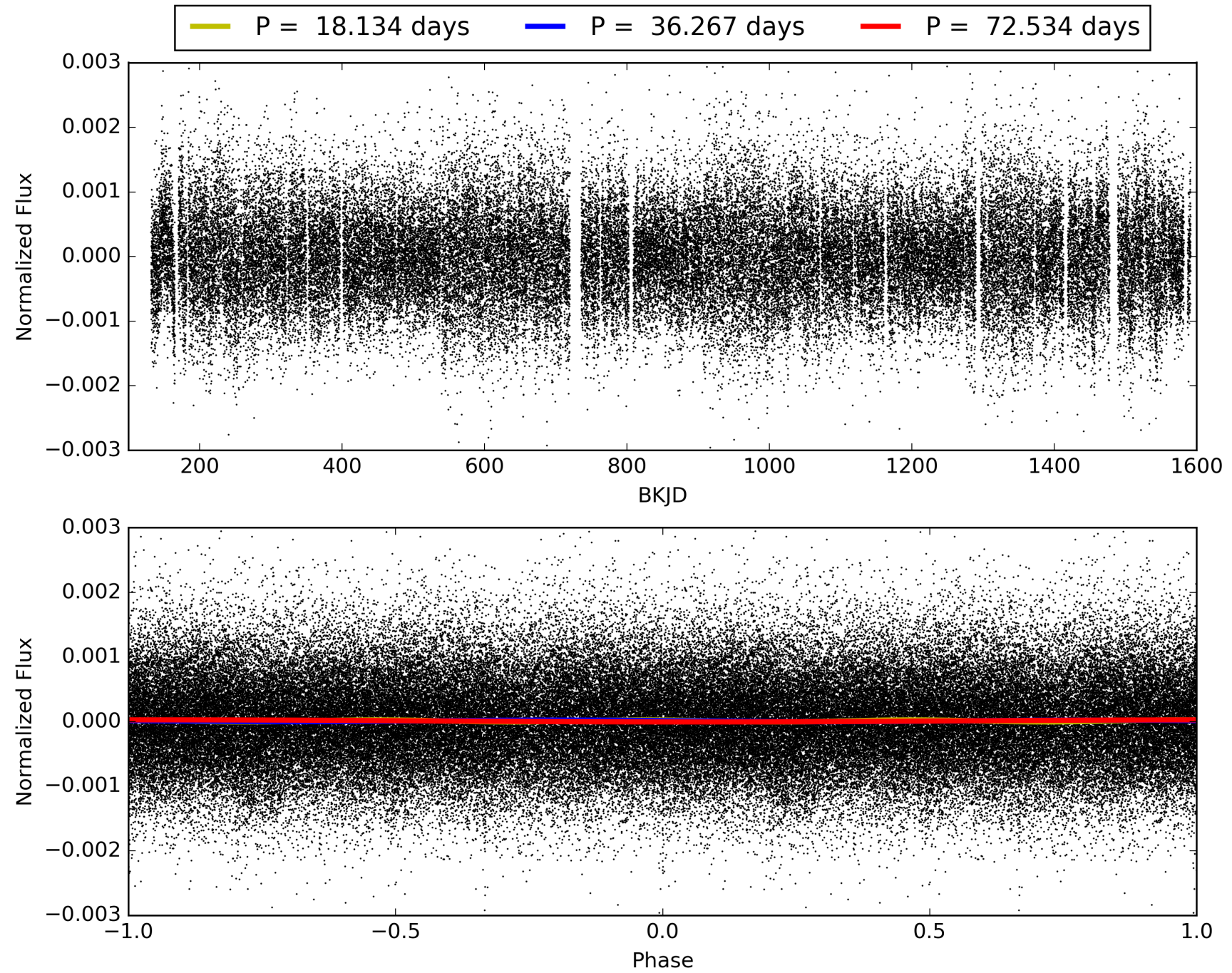
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 14:08:48 Z

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

TCE 001293046-01, PDC Light Curves

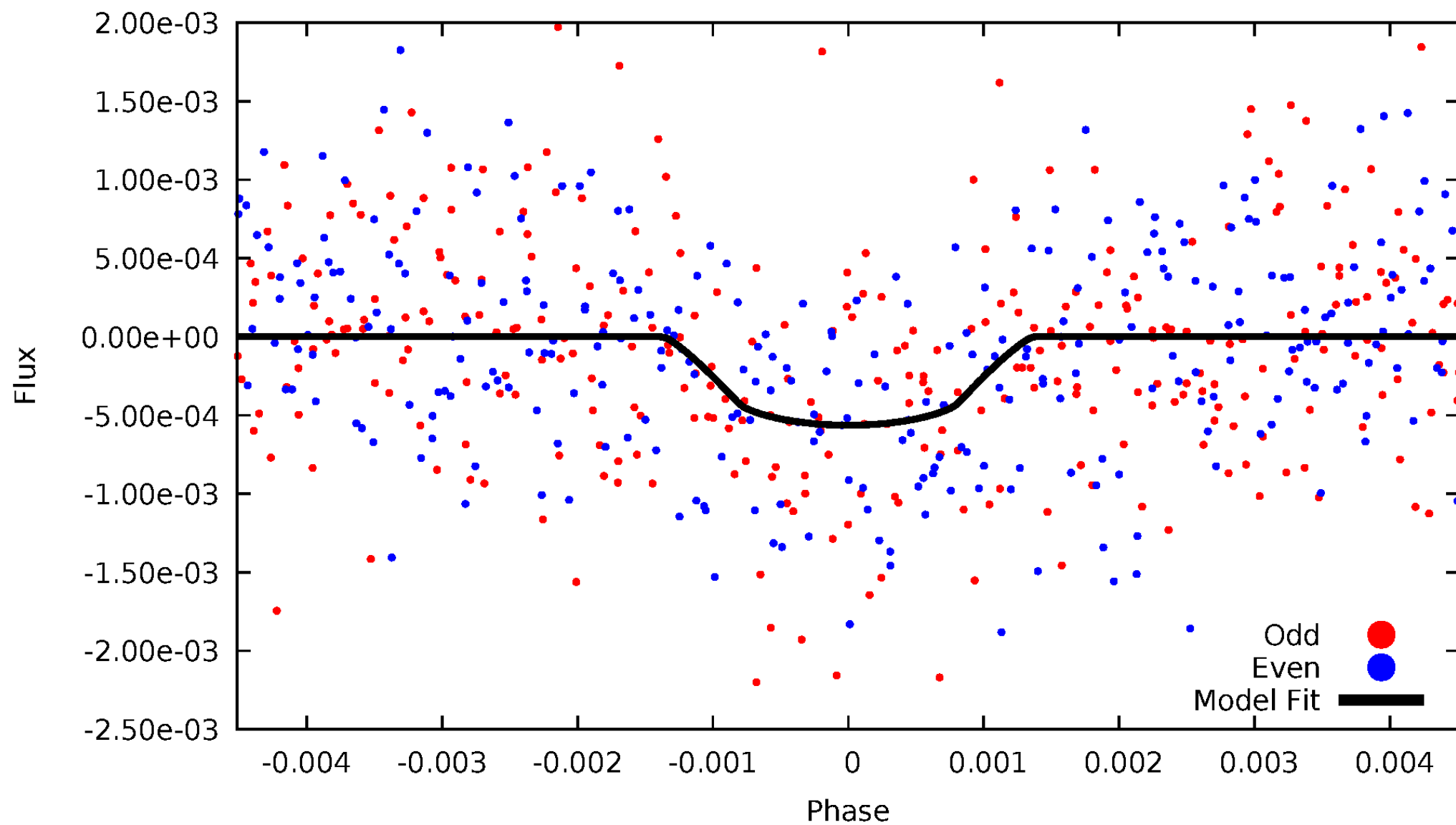


TCE 001293046-01



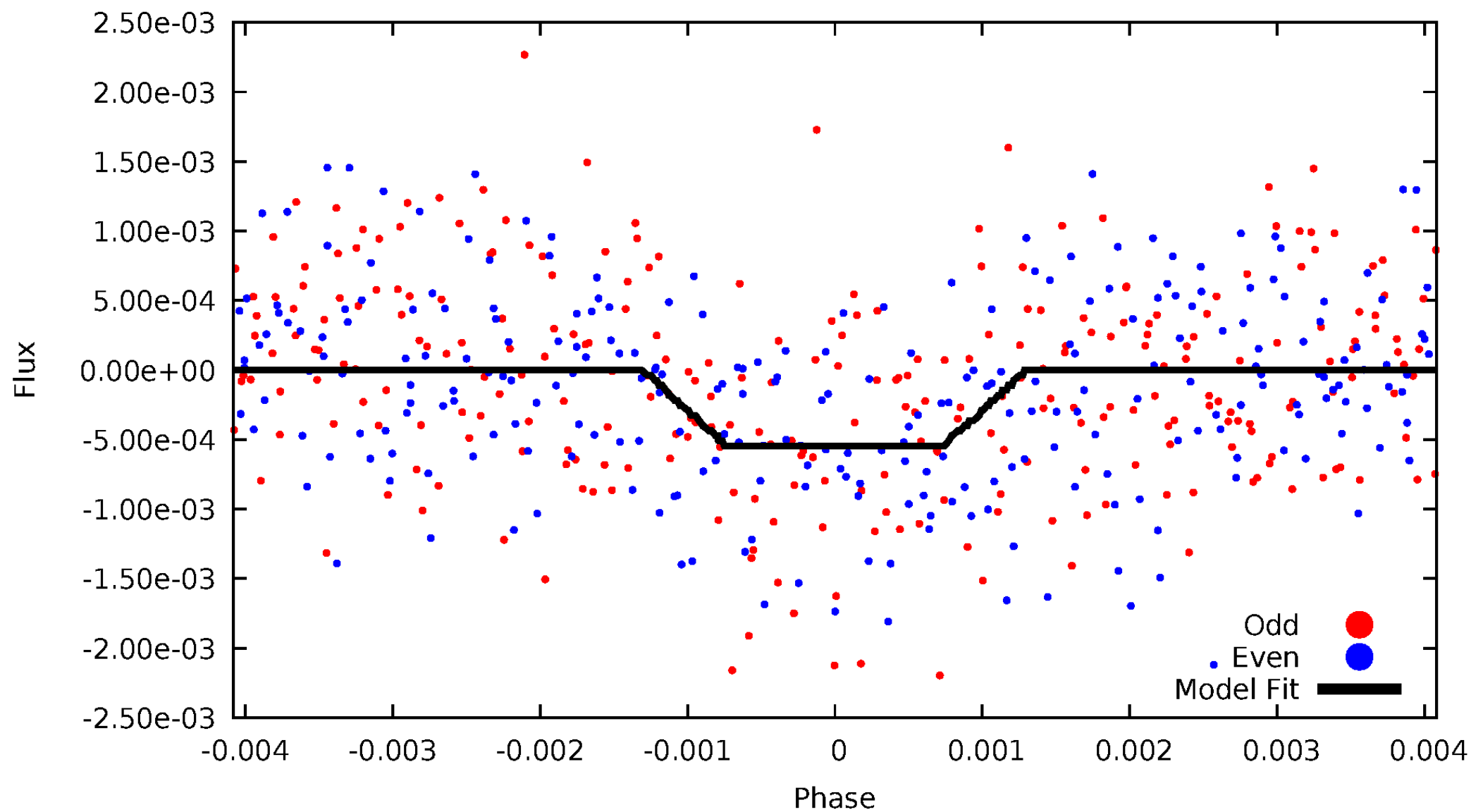
DV Odd/Even

TCE 001293046-01



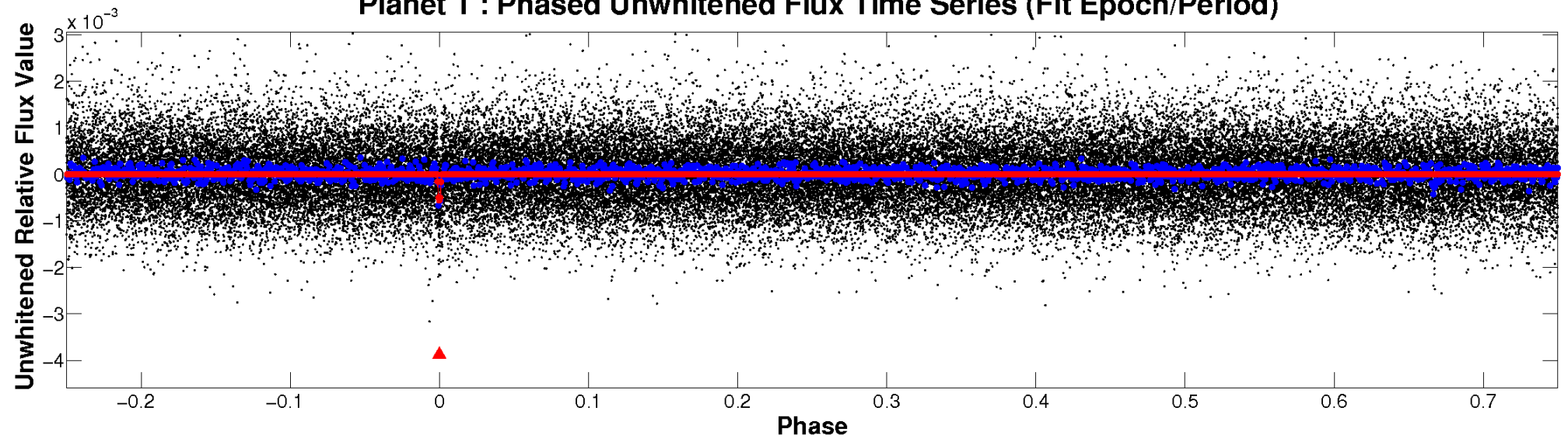
ALT Odd/Even

TCE 001293046-01

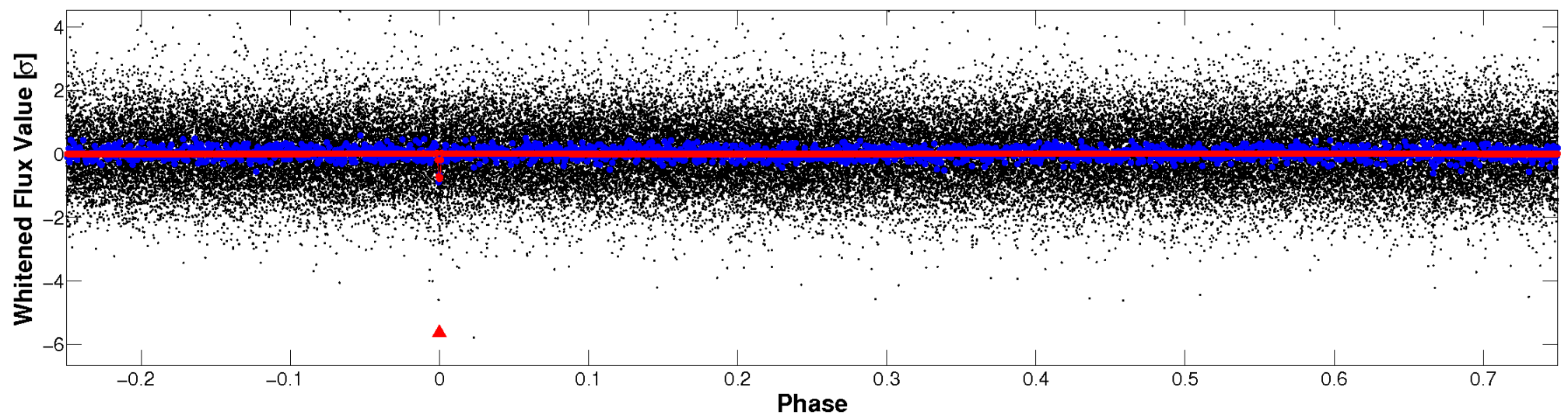


Non-Whitened Vs. Whitened Light Curve

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

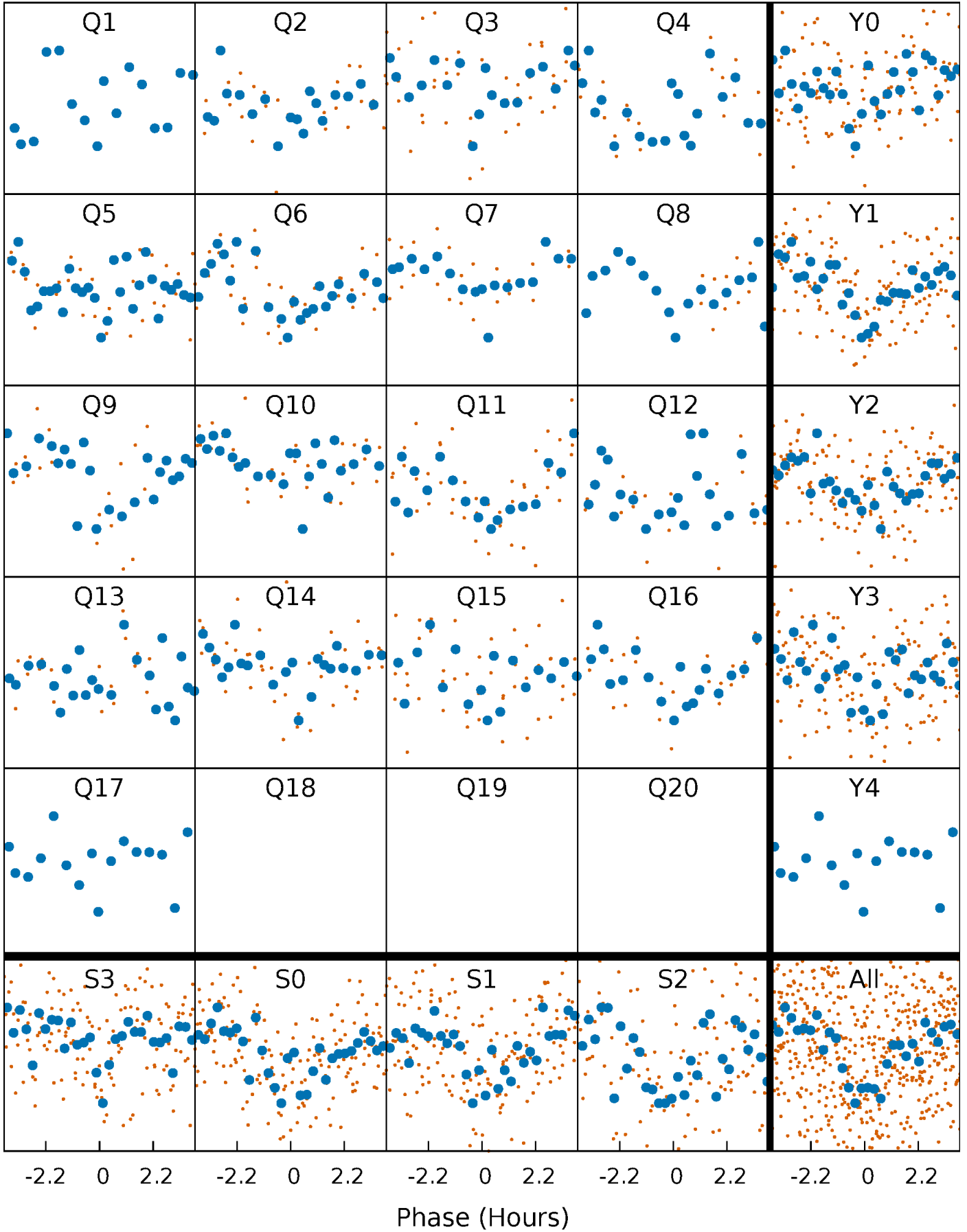


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



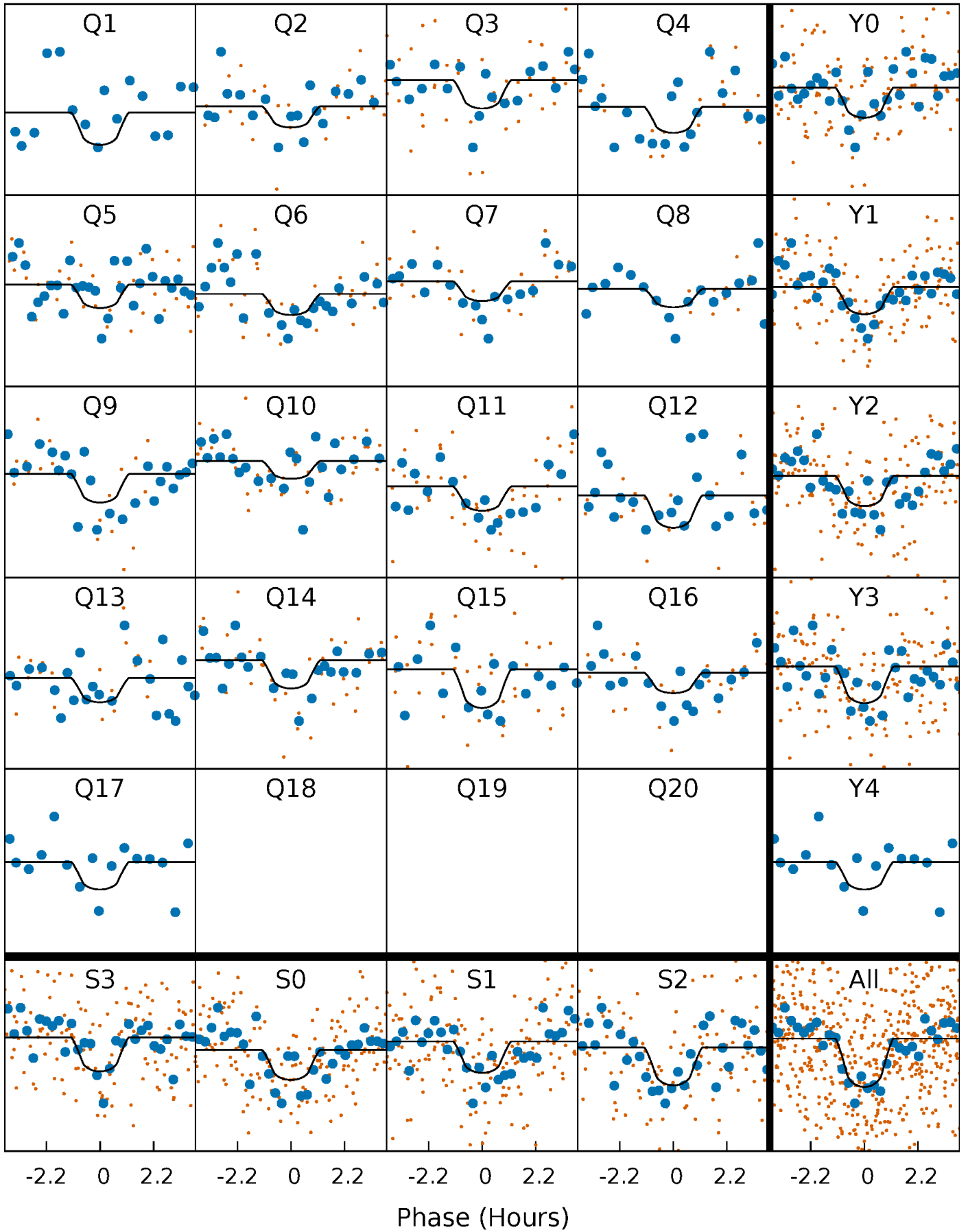
PDC Quarter-Phased Transit Curves

TCE 001293046-01 P= 36.267169 Days $T_0=155.081337$ (BKJD)



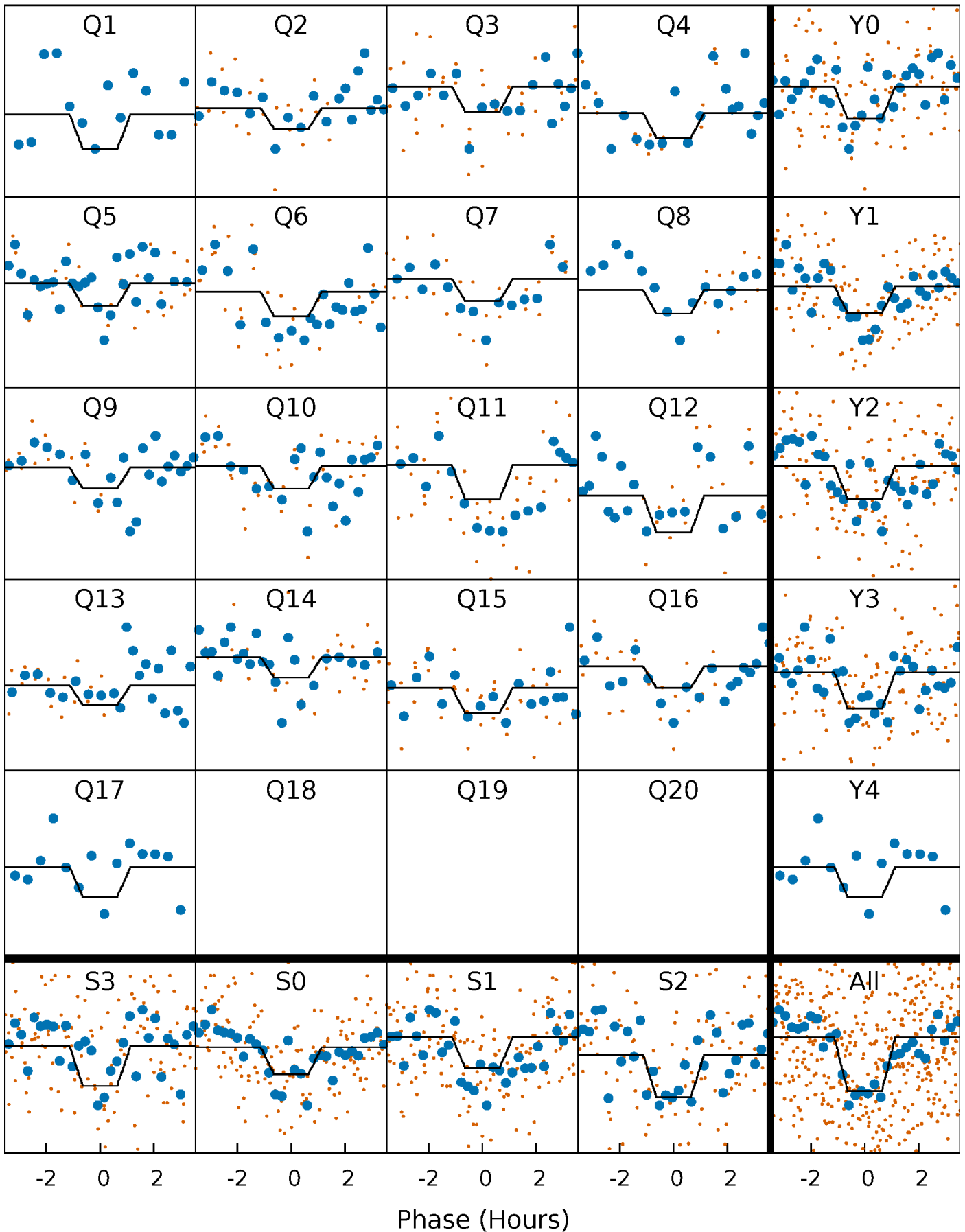
DV Quarter-Phased Transit Curves

TCE 001293046-01 P= 36.267169 Days $T_0=155.081337$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

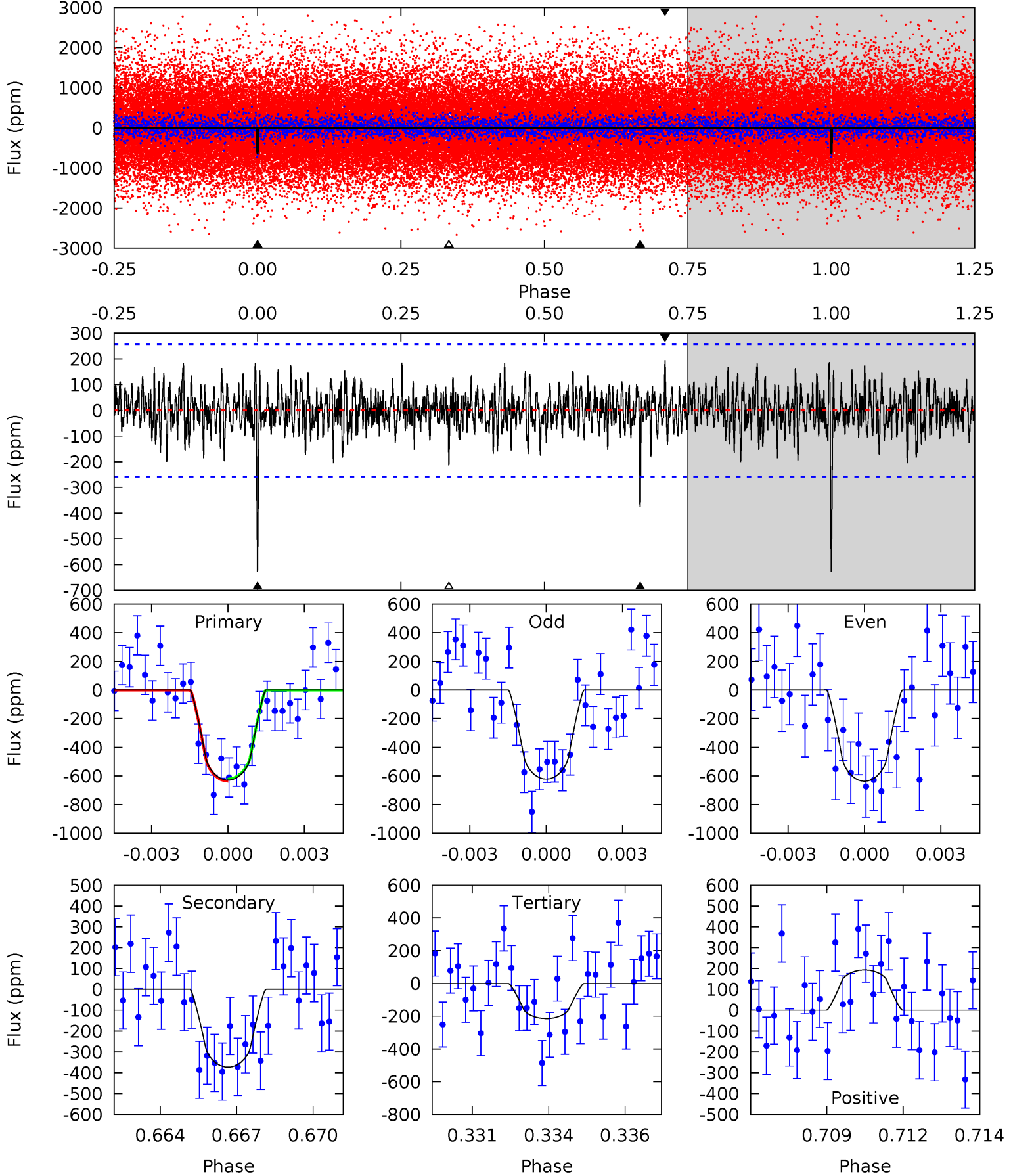
TCE 001293046-01 P= 36.267068 Days $T_0=155.082097$ (BKJD)



DV Model-Shift Uniqueness Test

001293046-01, P = 36.267169 Days, E = 118.814168 Days

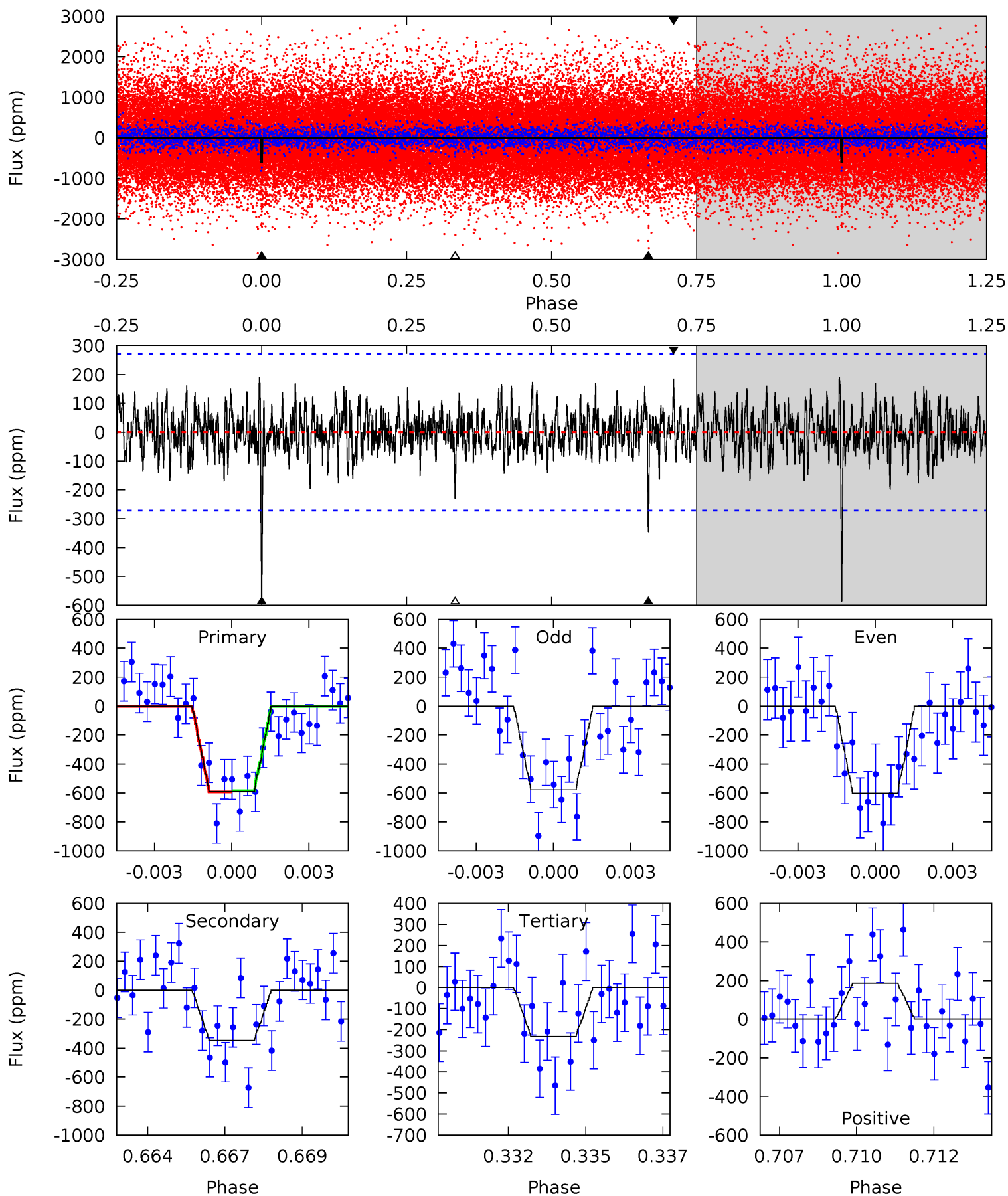
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.8	7.63	4.39	3.94	5.27	2.99	1.29	8.45	8.90	3.23	3.69	0.15	0.99	0.23	0.15



Alt Model-Shift Uniqueness Test

001293046-01, P = 36.267068 Days, E = 118.815029 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.5	6.72	4.51	3.60	5.28	3.02	1.18	6.94	7.85	2.22	3.12	0.23	1.07	0.25	0.07



Stellar Parameters For KIC 001293046

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	4264^{+128}_{-128}	$4.637^{+0.053}_{-0.021}$	$-0.200^{+0.300}_{-0.300}$	$0.620^{+0.039}_{-0.062}$	$0.607^{+0.067}_{-0.050}$	$3.592^{+0.833}_{-0.381}$
	+3%/-3%	+1%/-0%	+150%/-150%	+6%/-10%	+11%/-8%	+23%/-11%
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 001293046-01 / KOI 7622.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-373 ± 49	$2.34^{+2.15}_{-1.44}$	482^{+17}_{-17}	3450^{+1431}_{-573}	1234^{+7409}_{-897}
Alt.	-346 ± 51	$2.33^{+2.13}_{-1.44}$	482^{+17}_{-17}	3426^{+1447}_{-572}	1152^{+7168}_{-829}

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

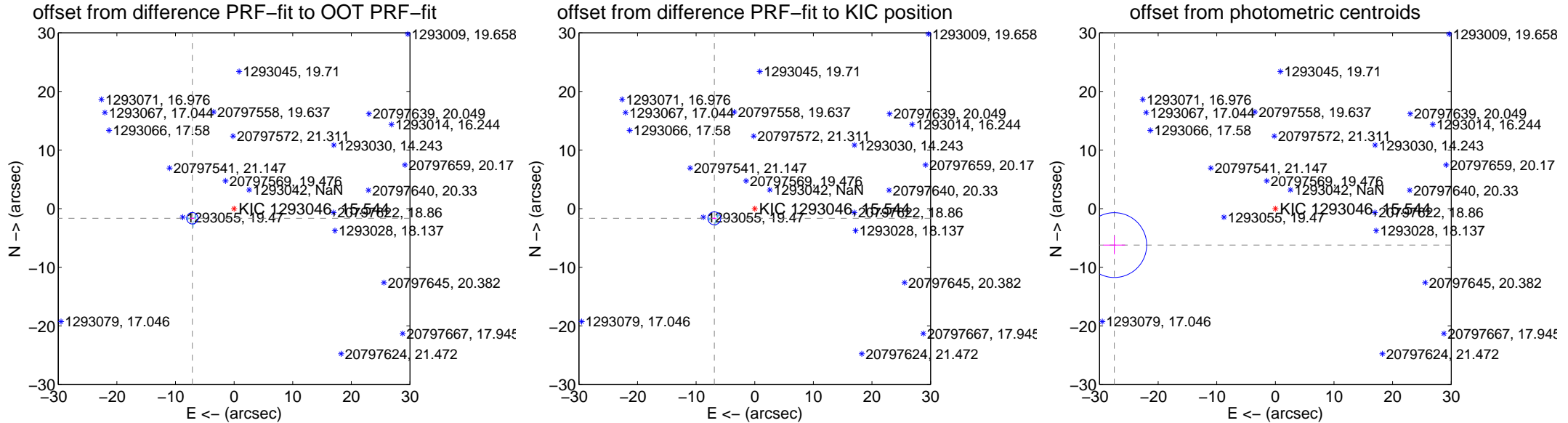
DV Centroid Data

Supplemental centroid analysis for 001293046-01. Kepler magnitude: 15.54. Transit SNR 7.94

There are 5 quarters with good PRF difference image offsets

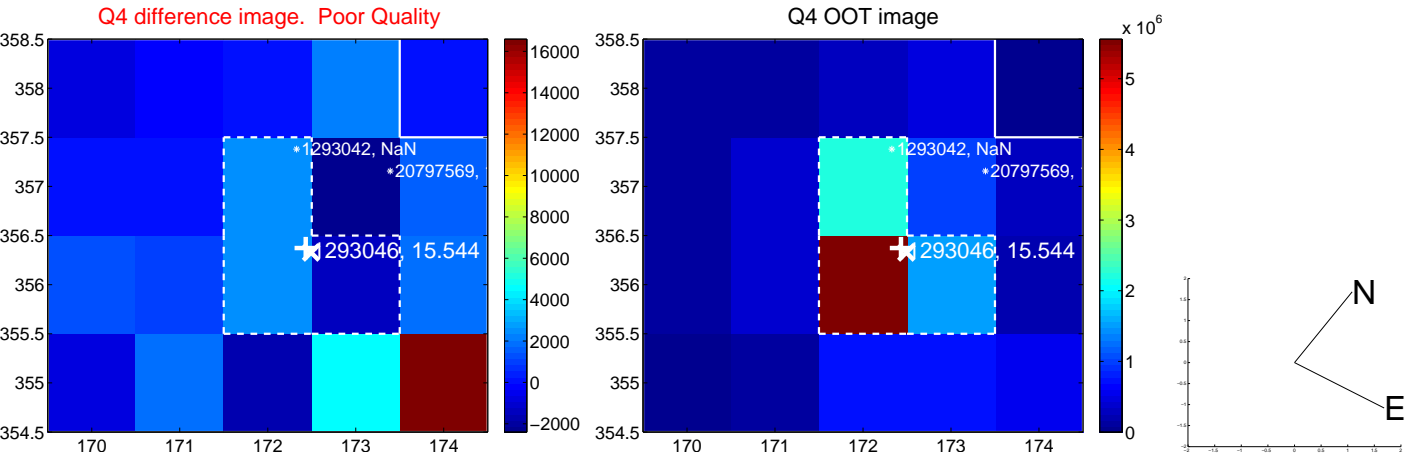
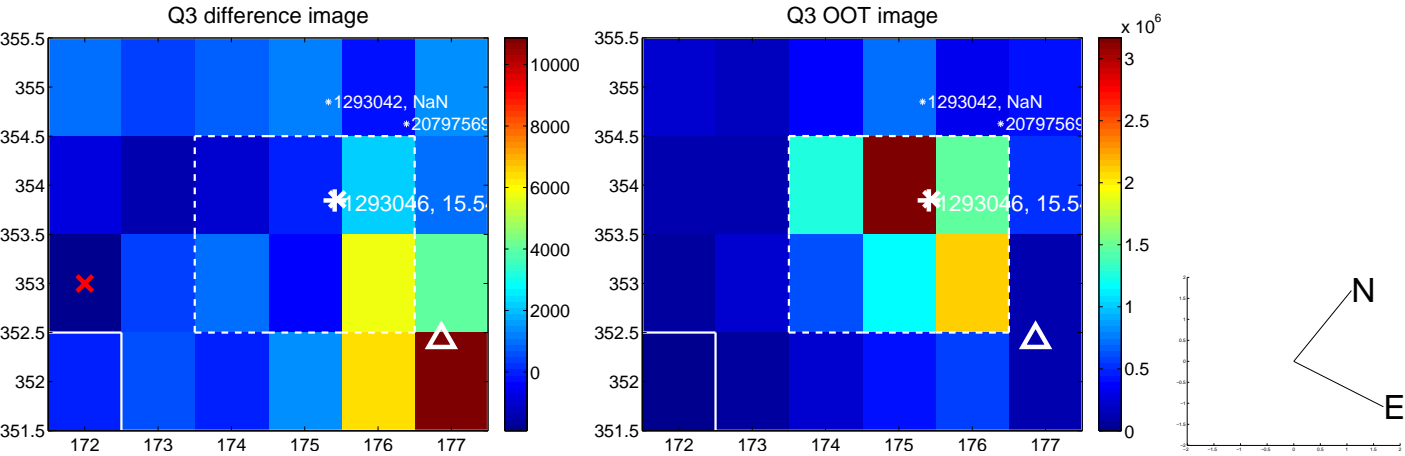
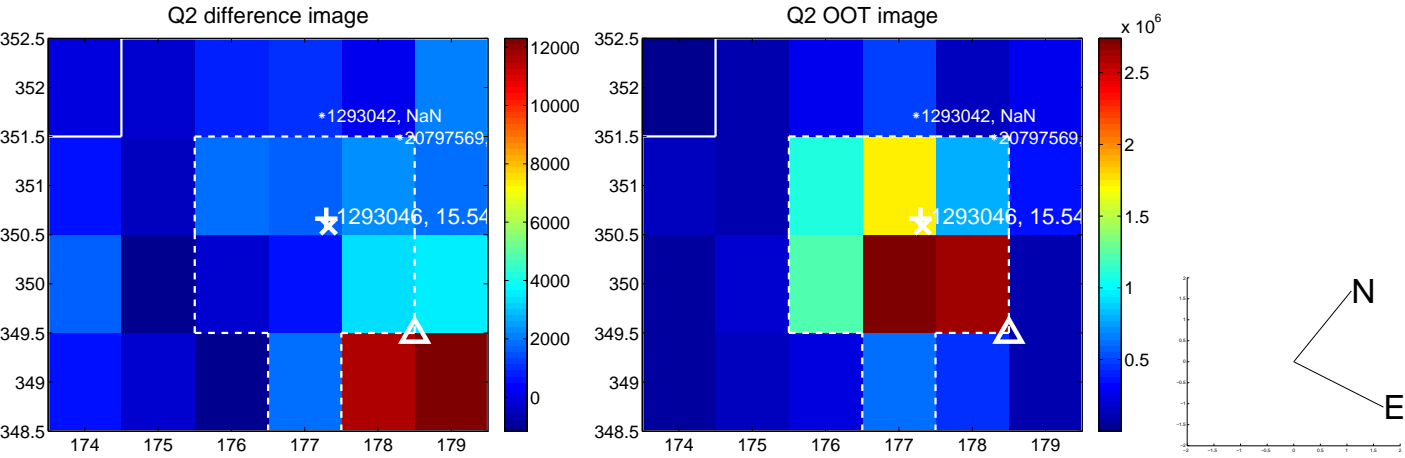
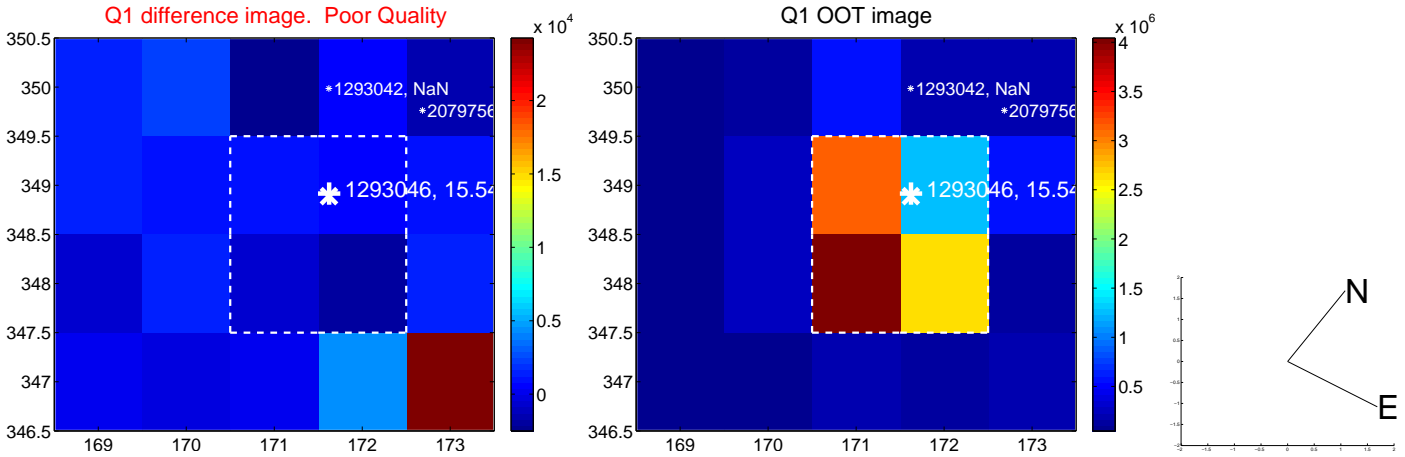
The direct PRF centroid is offset from the target star catalog position by about 0.38 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	7.311 \pm 0.324	22.54	7.126 \pm 0.331	-1.635 \pm 0.168
PRF-fit source offset from KIC position	7.090 \pm 0.367	19.34	6.897 \pm 0.374	-1.643 \pm 0.189
photometric centroid source offset	28.18 \pm 1.84	15.30	27.48 \pm 1.85	-6.21 \pm 1.58

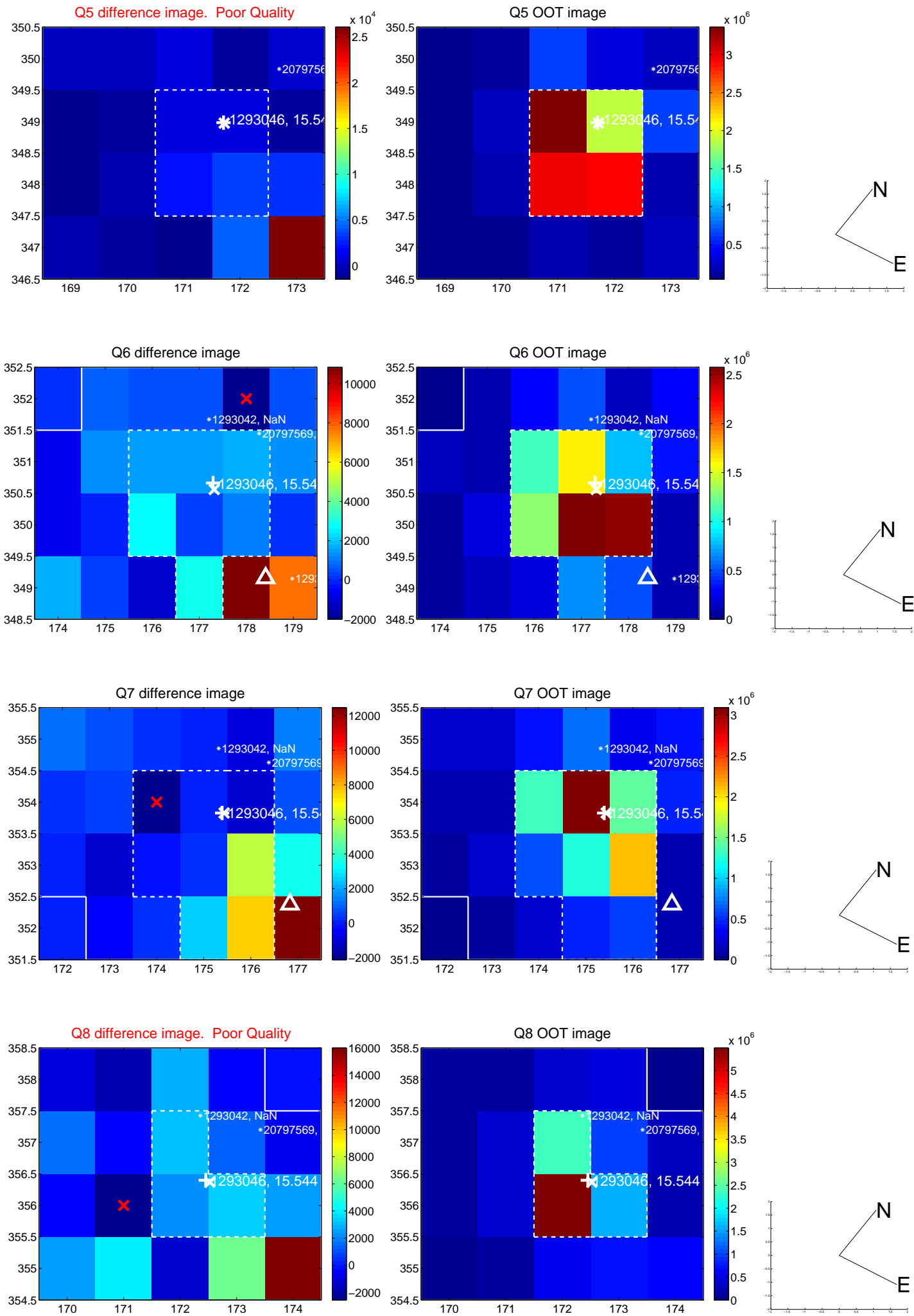


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

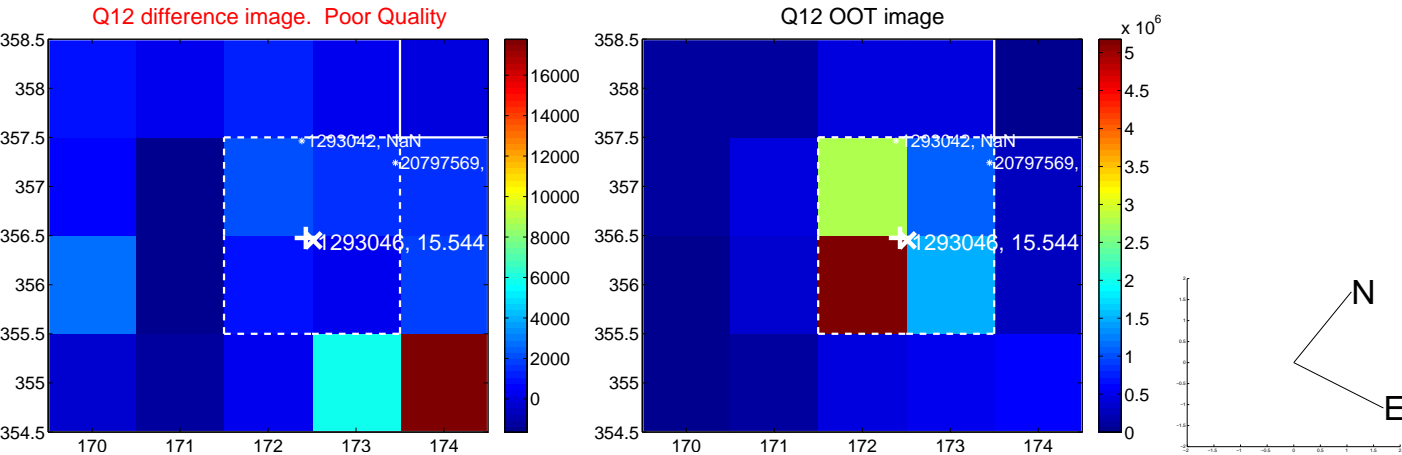
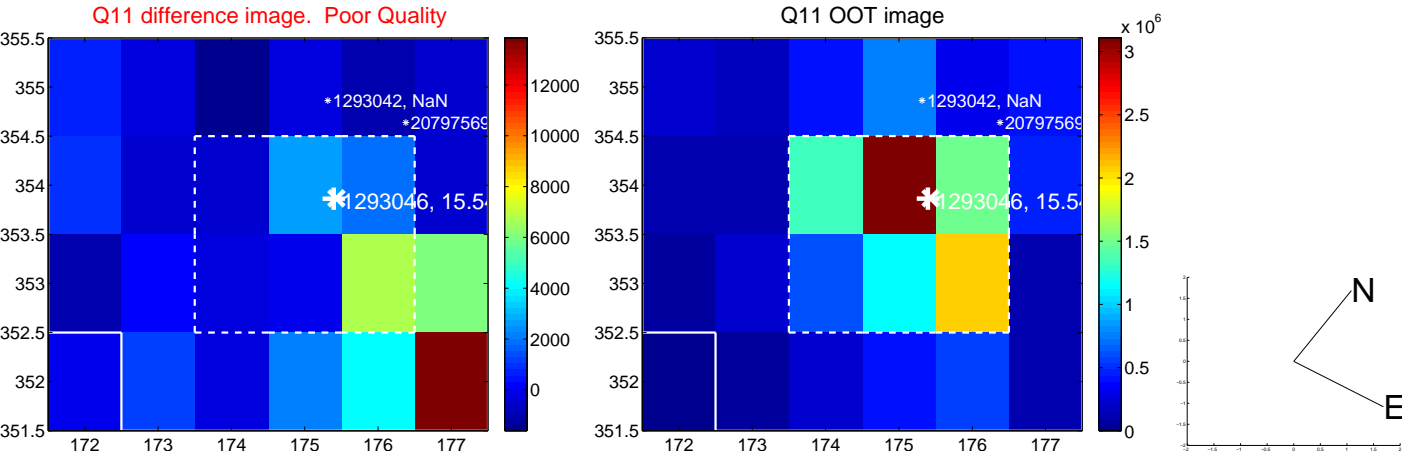
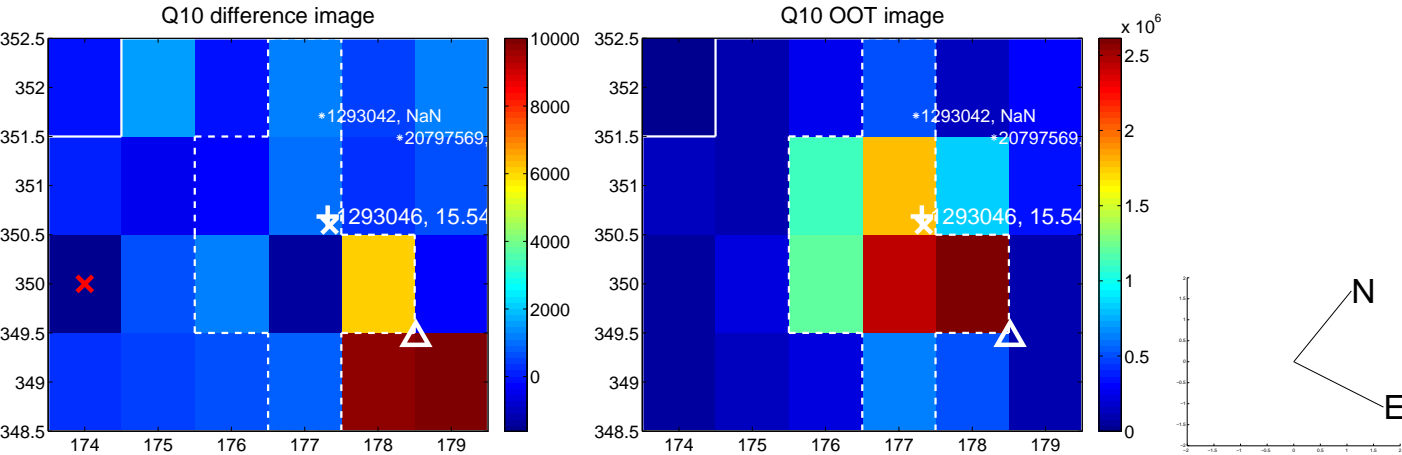
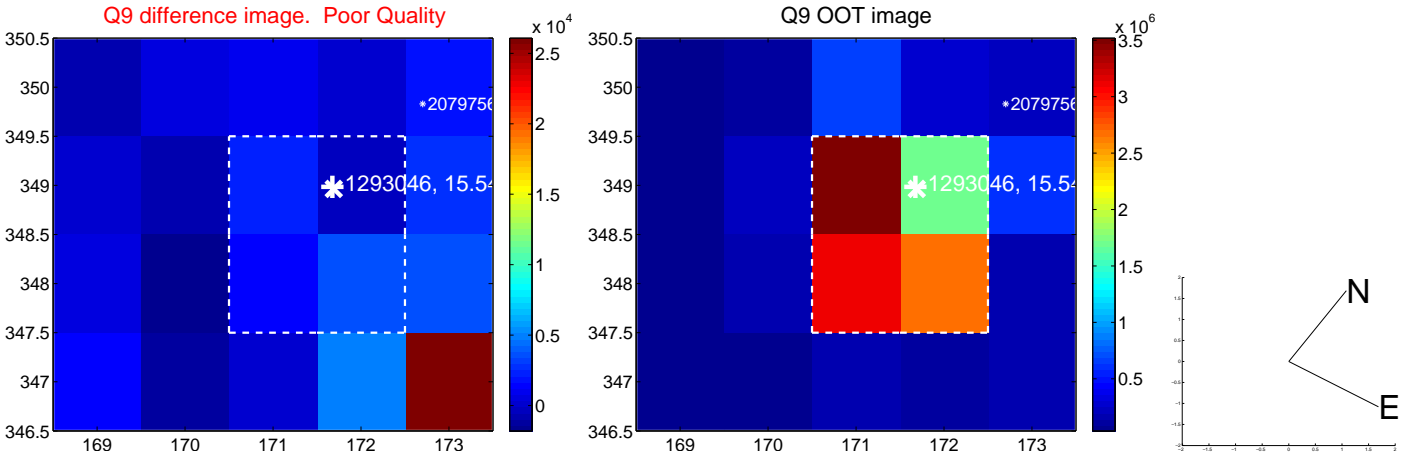
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



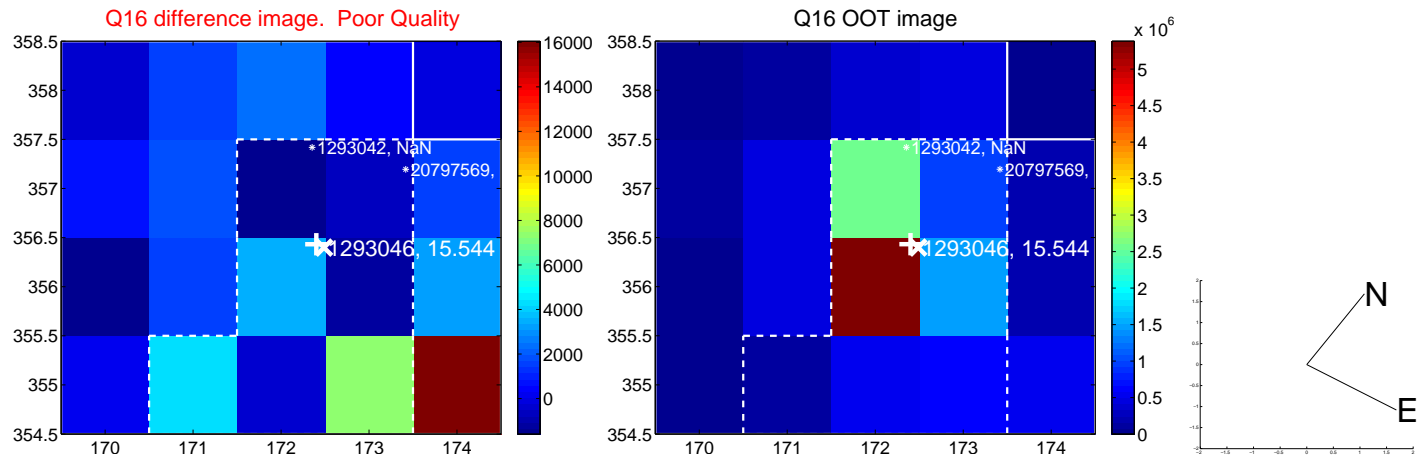
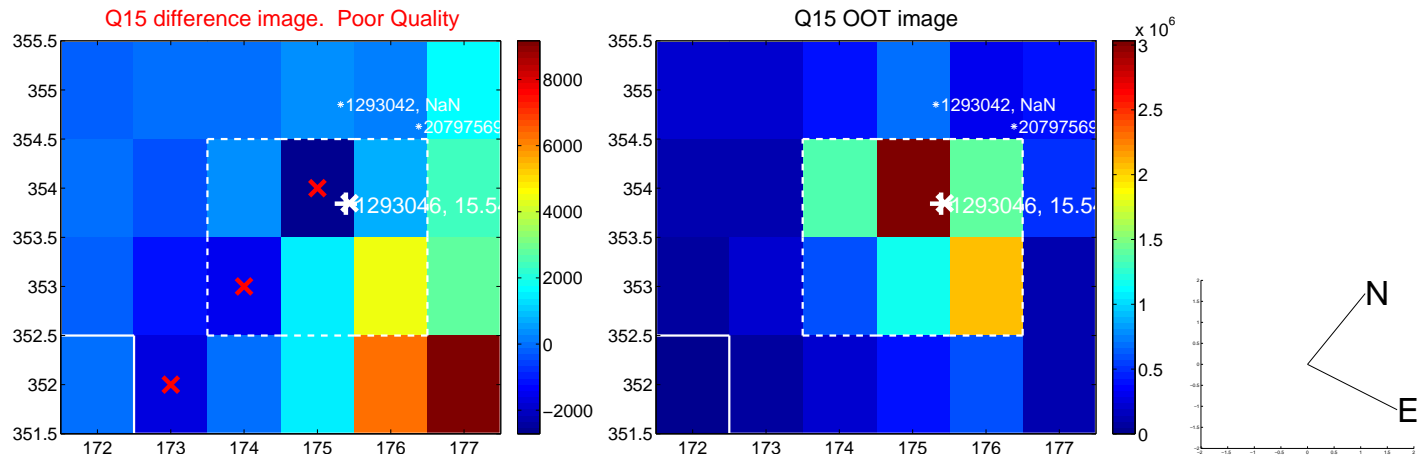
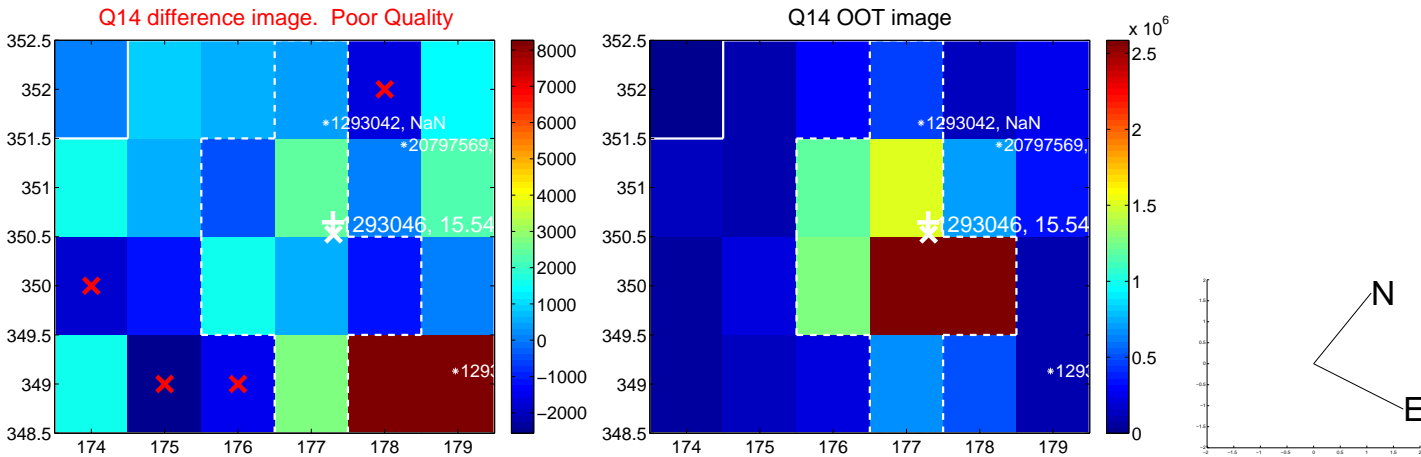
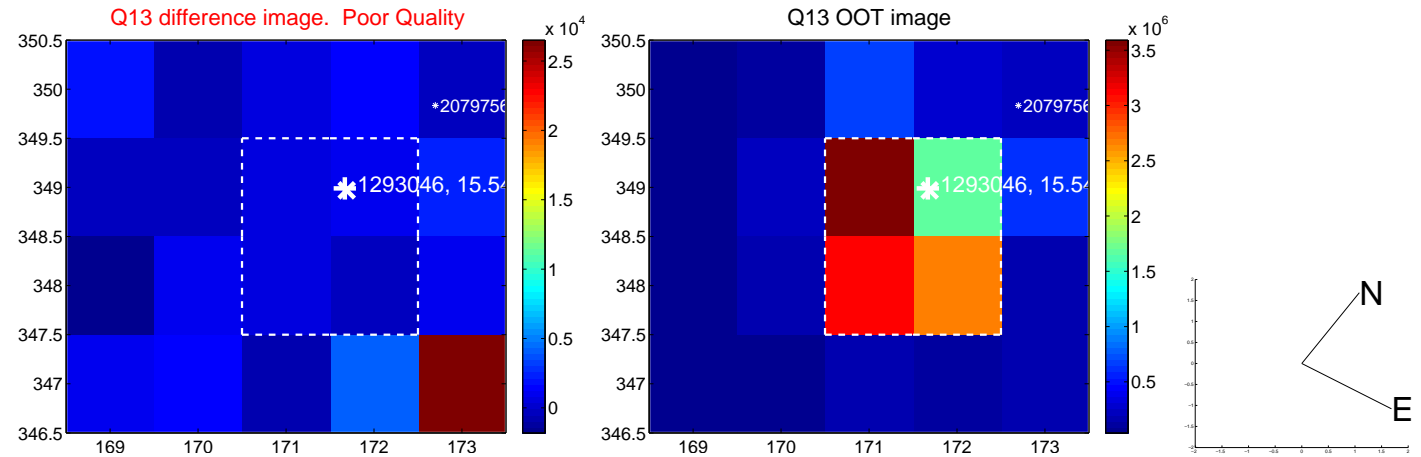
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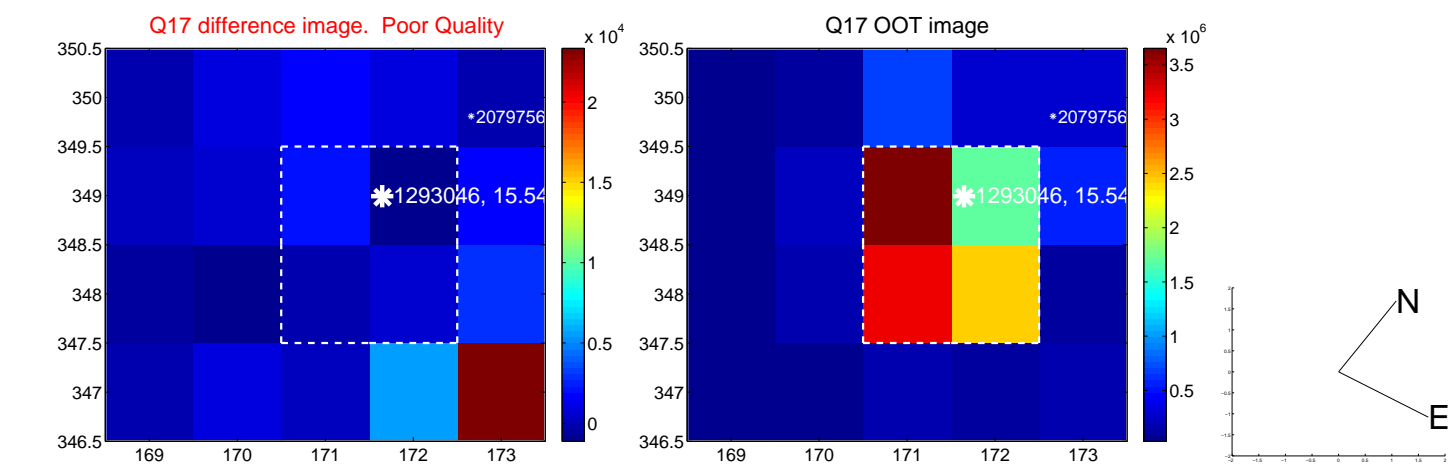
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



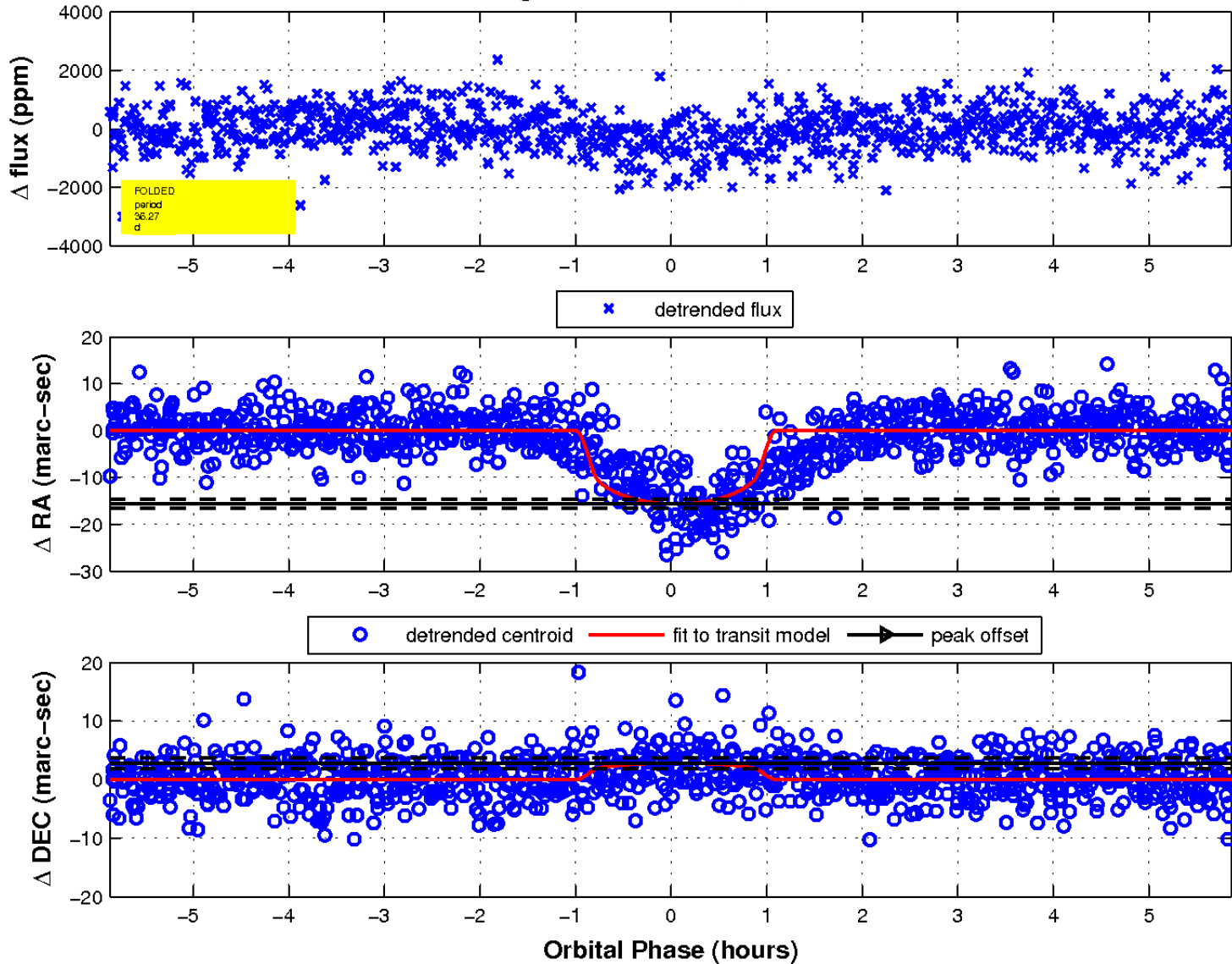
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fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

