

KIC 002308411

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})
002308411-01	OBS	7631.01	0.983288	132.504131	76.9	2.015	8.5	10.4	1.20	6363	1.23	4789.30

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
002308411-01	OBS	FP	0.01	0	0	1	0	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.

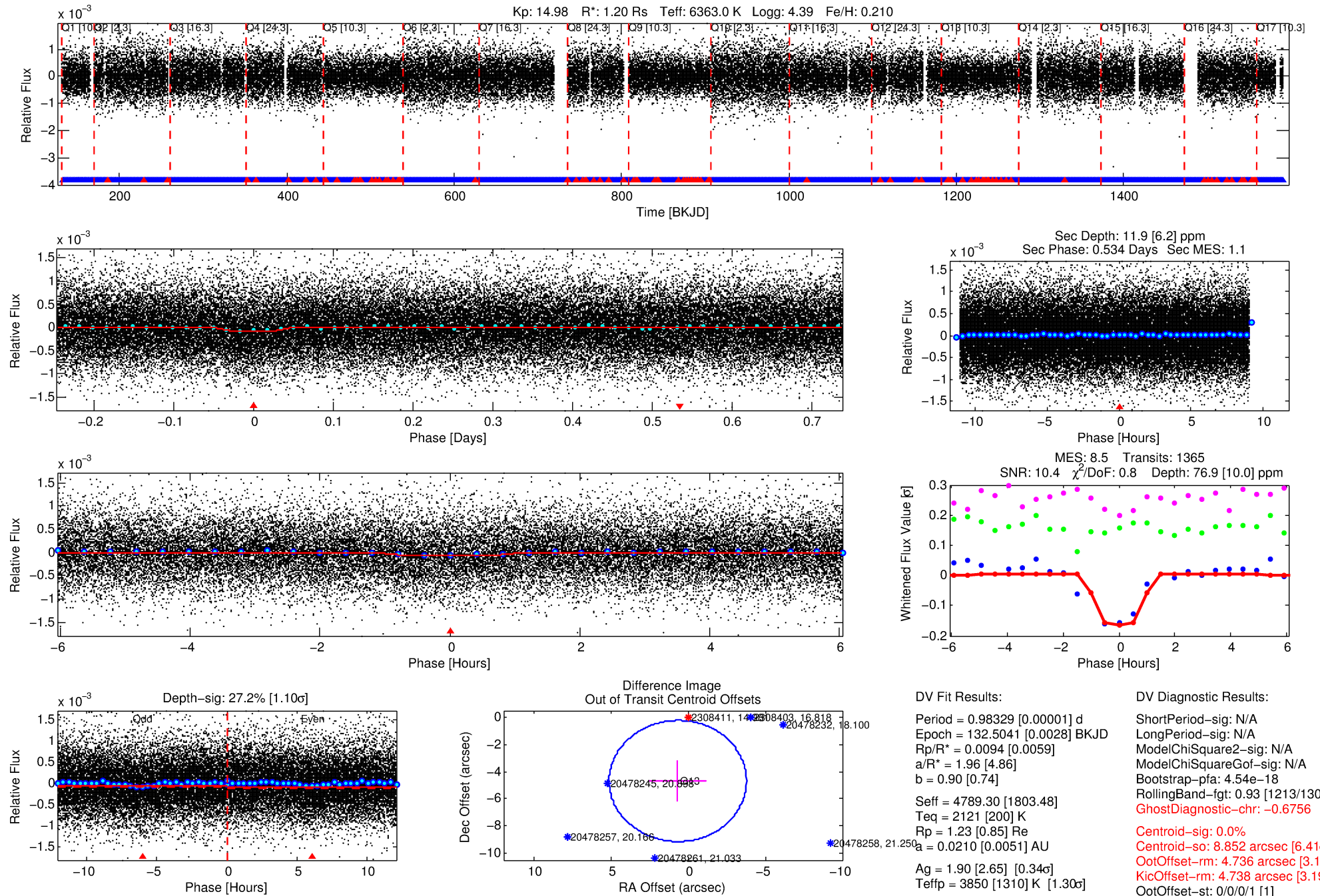
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 002308411-01

No Significant Match Found

DV One-Page Summary

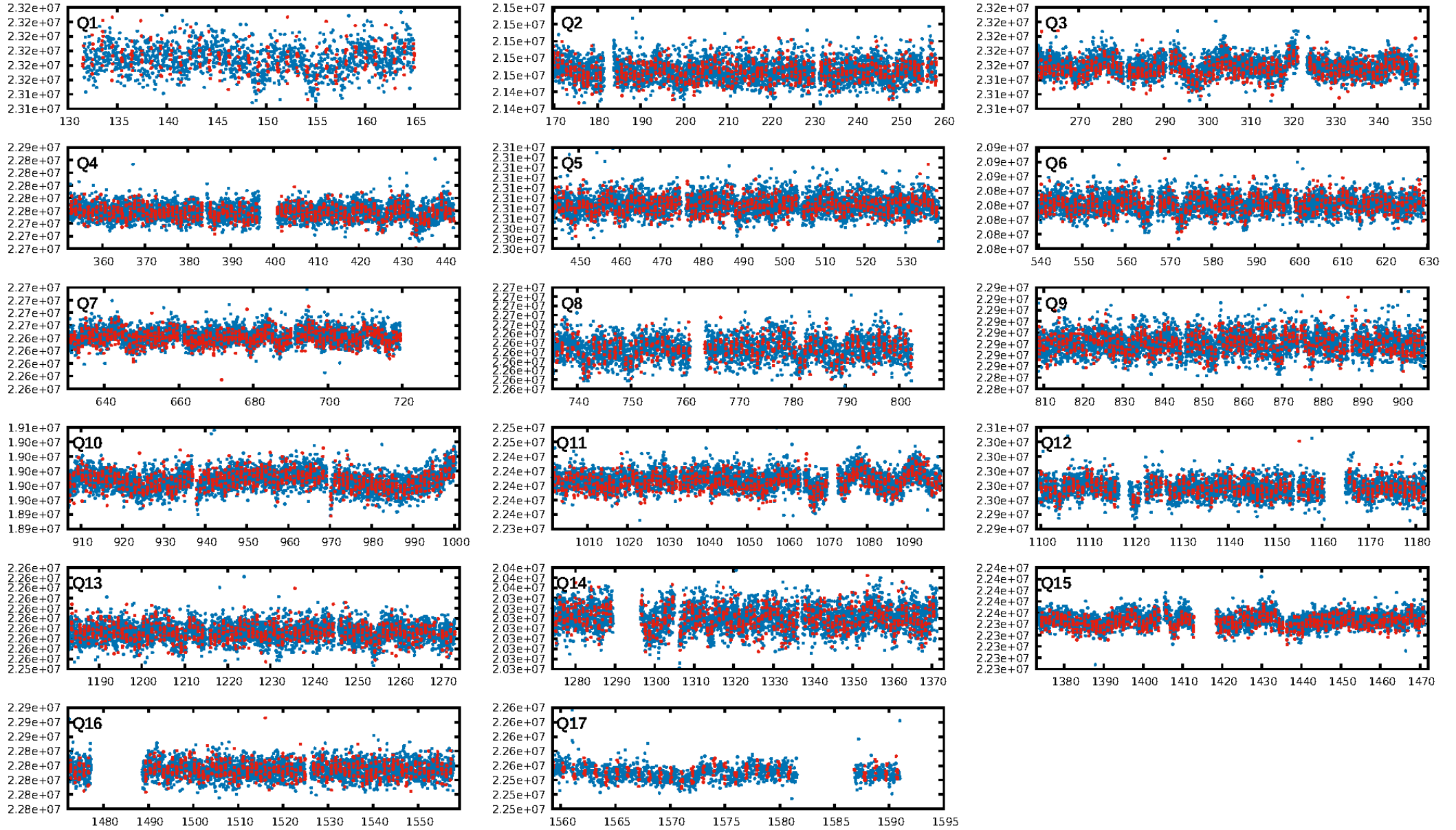
KIC: 2308411 Candidate: 1 of 1 Period: 0.983 d



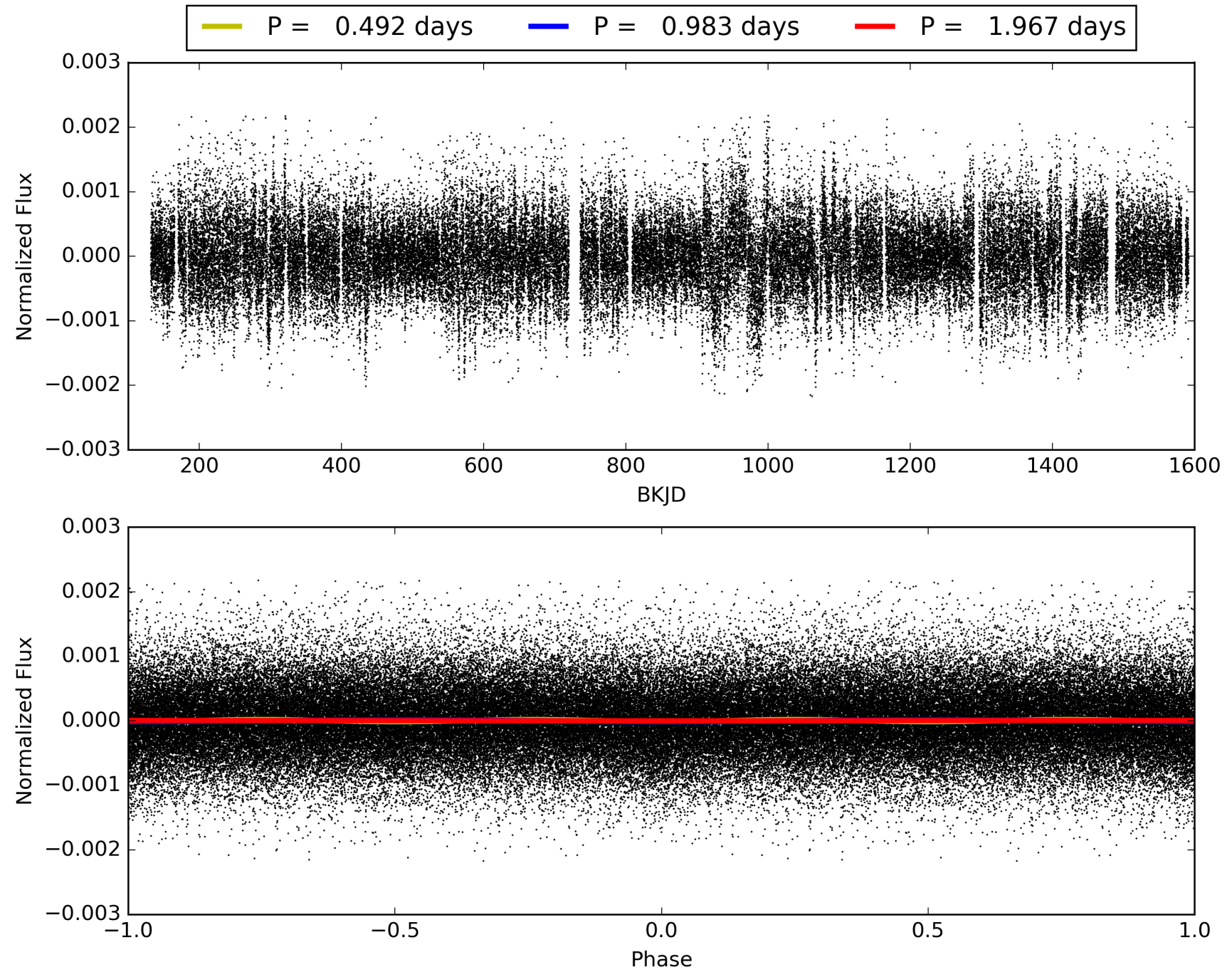
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 00:15:01 Z

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

TCE 002308411-01, PDC Light Curves

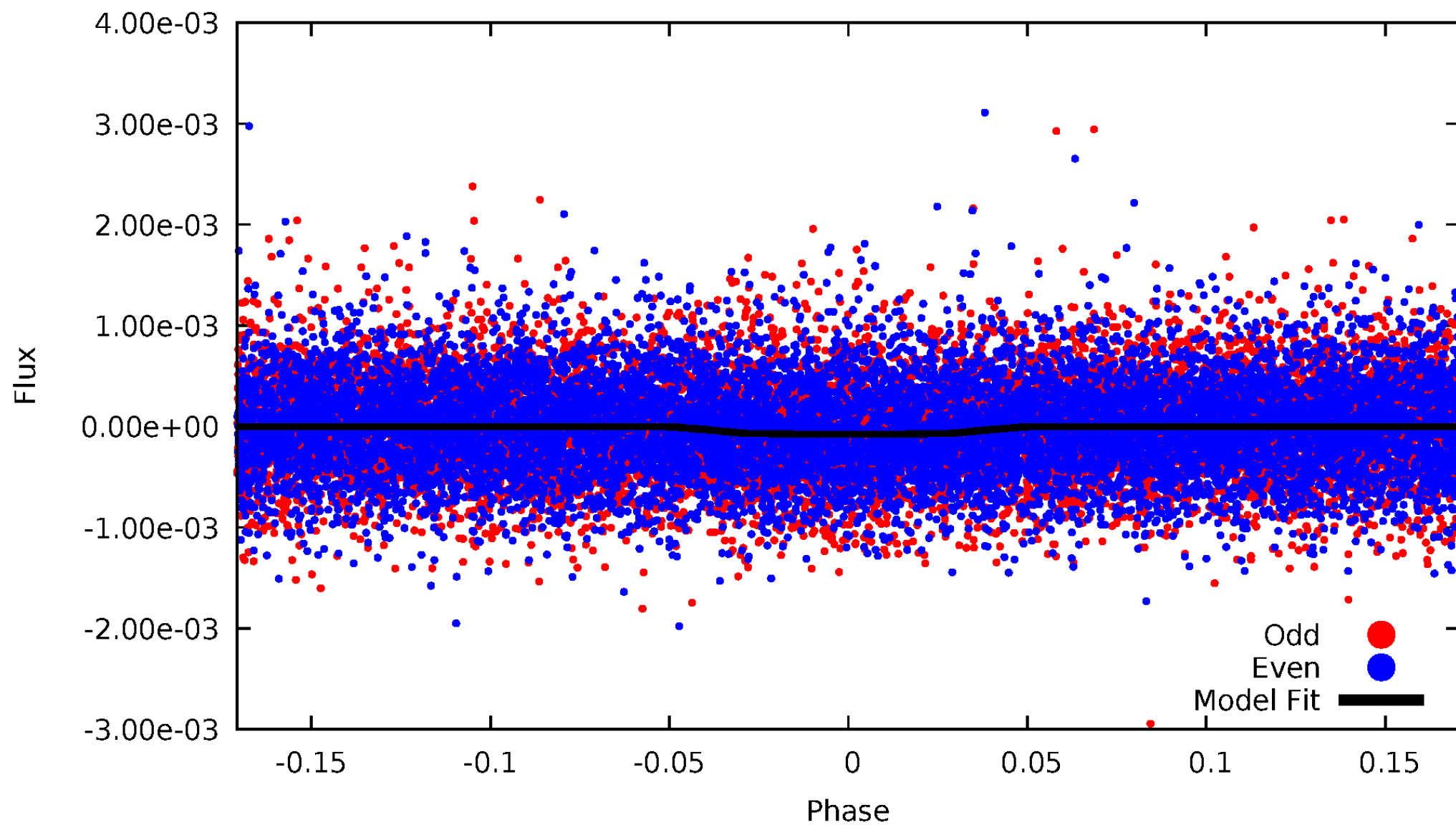


TCE 002308411-01



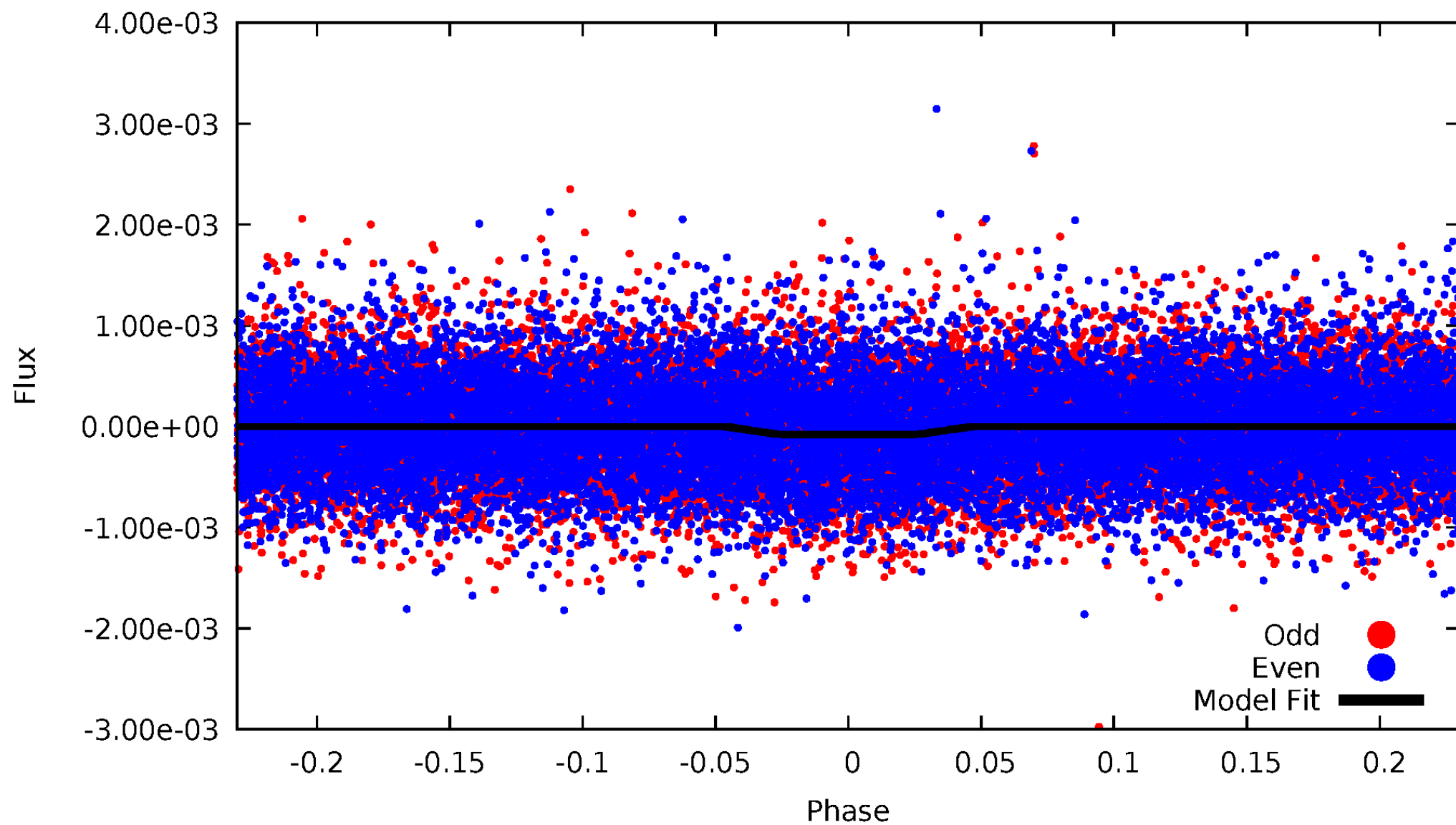
DV Odd/Even

TCE 002308411-01



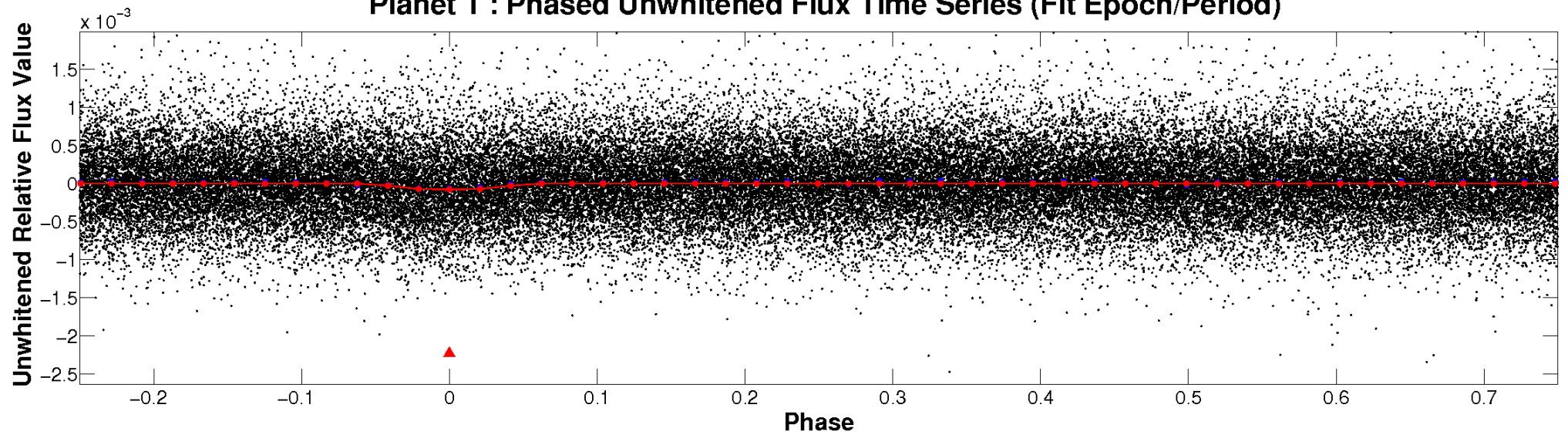
ALT Odd/Even

TCE 002308411-01

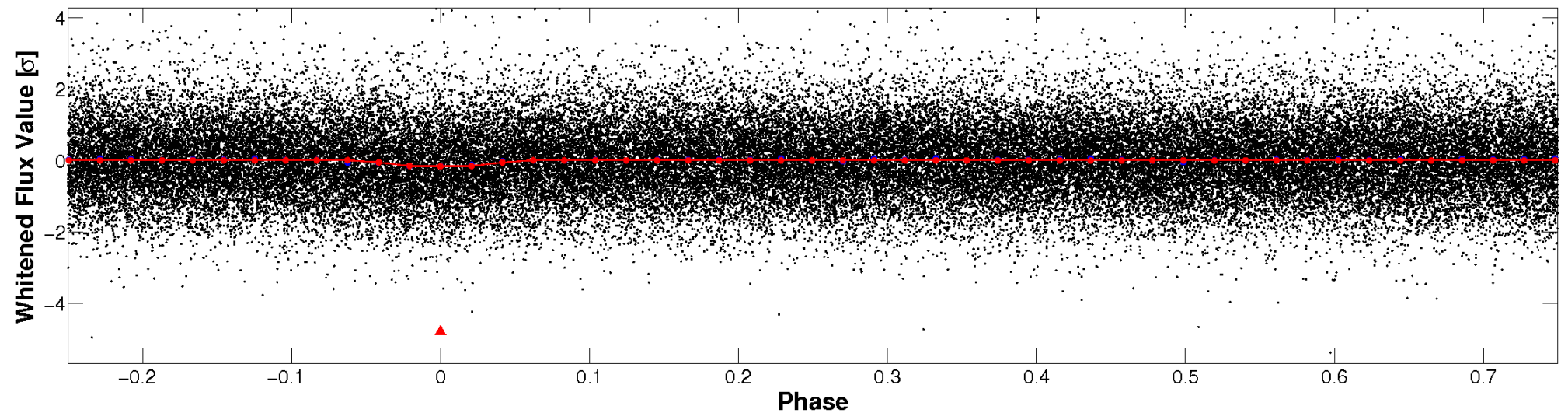


Non-Whitened Vs. Whitened Light Curve

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

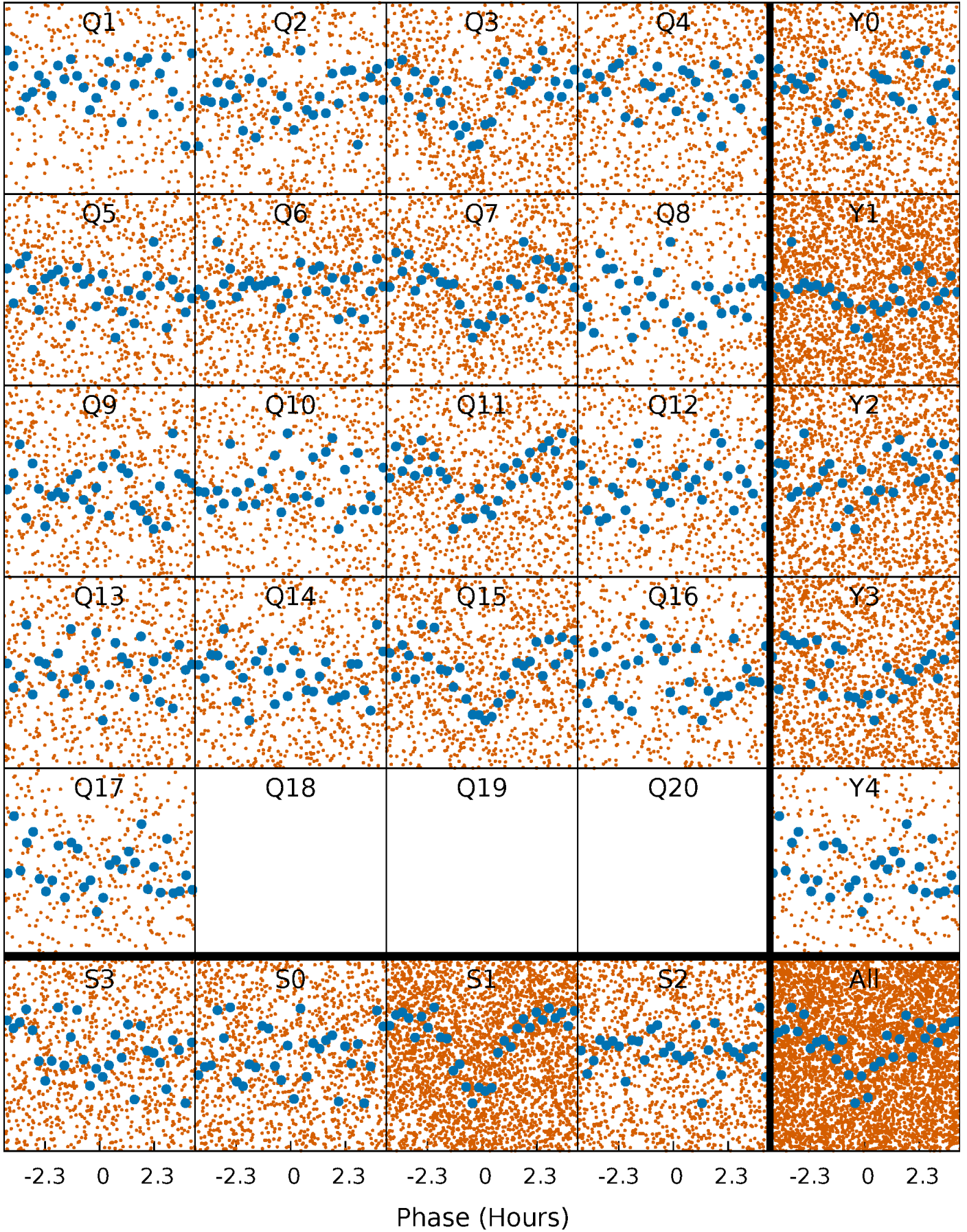


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



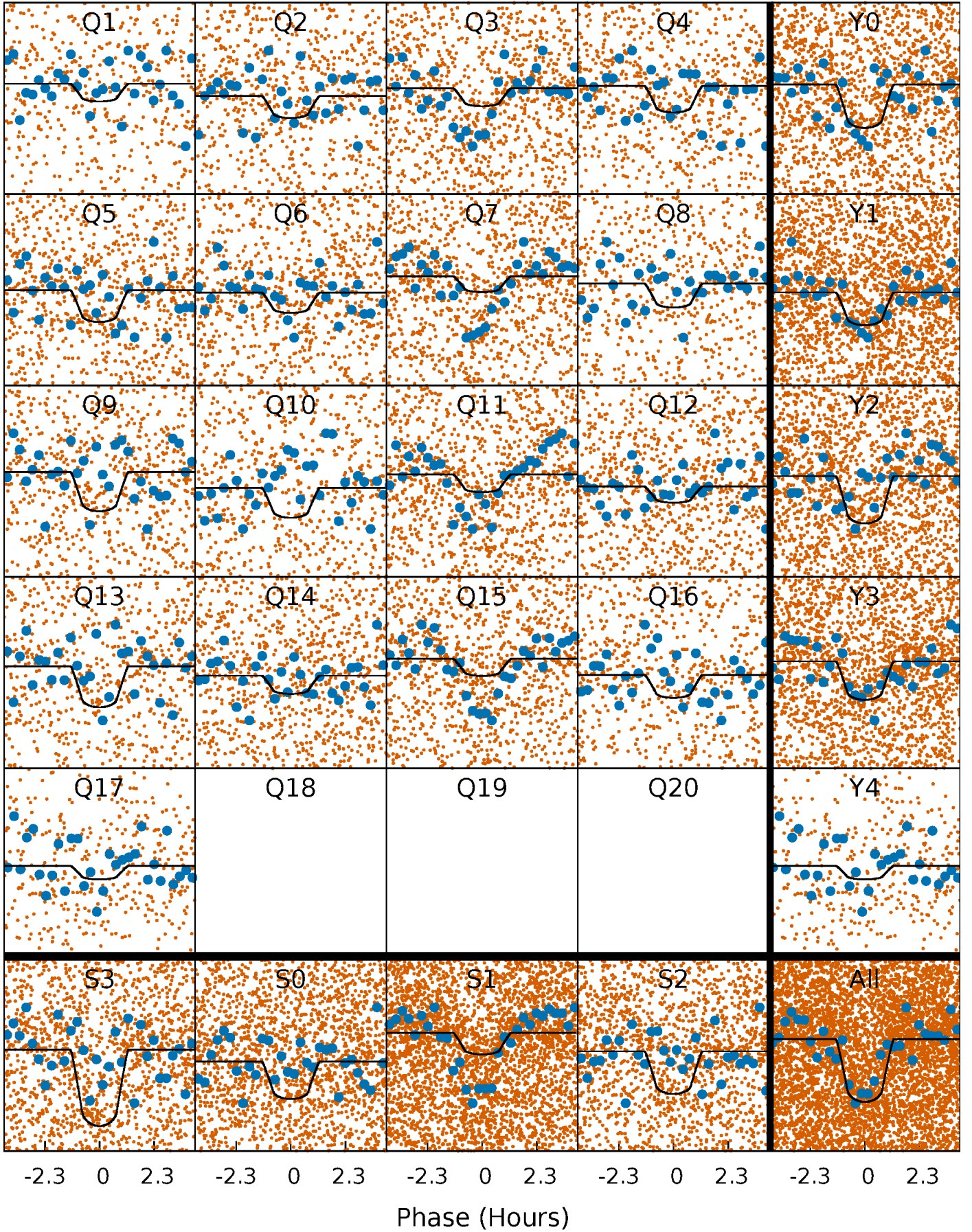
PDC Quarter-Phased Transit Curves

TCE 002308411-01 P= 0.983288 Days $T_0=132.504131$ (BKJD)



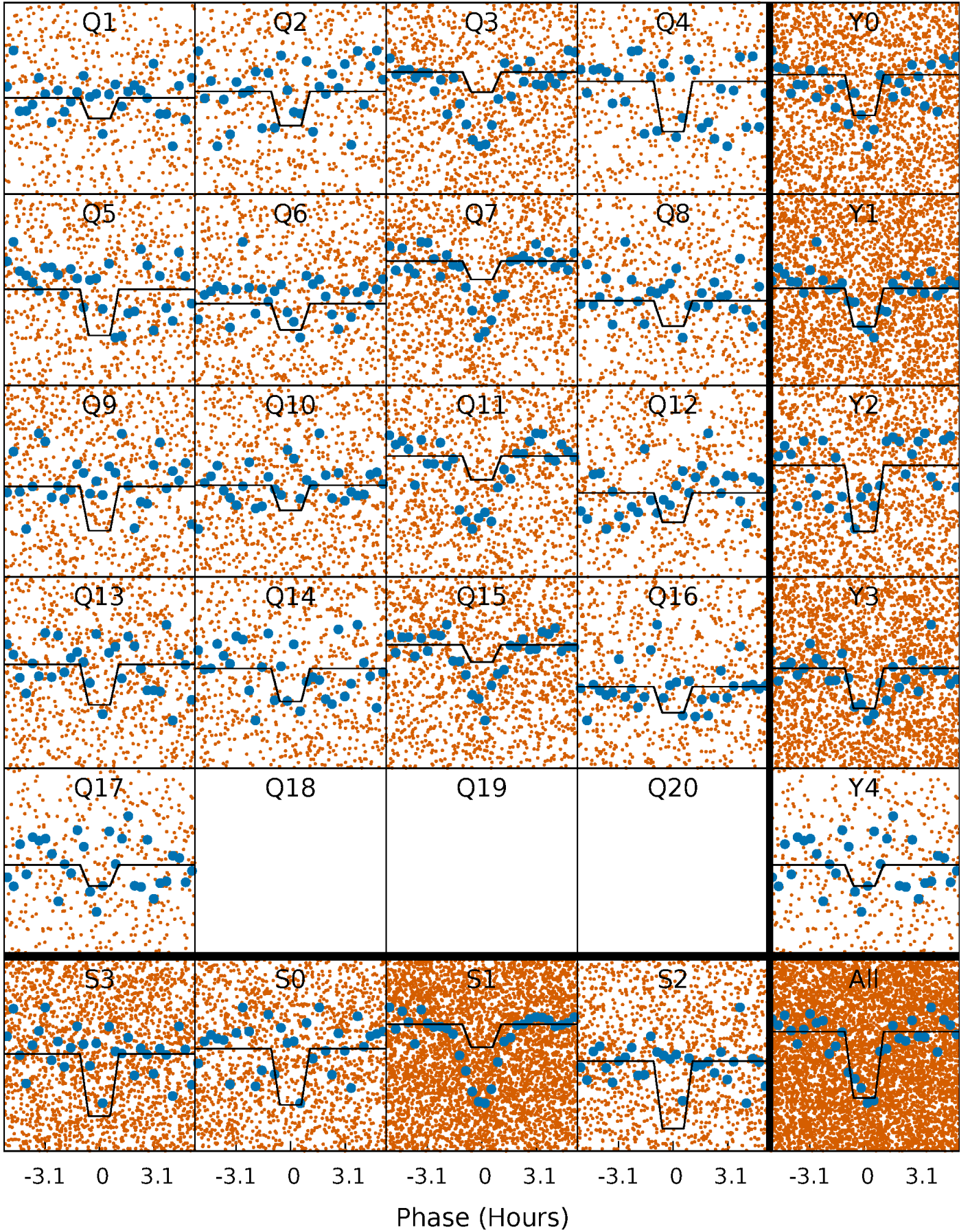
DV Quarter-Phased Transit Curves

TCE 002308411-01 P= 0.983288 Days $T_0=132.504131$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

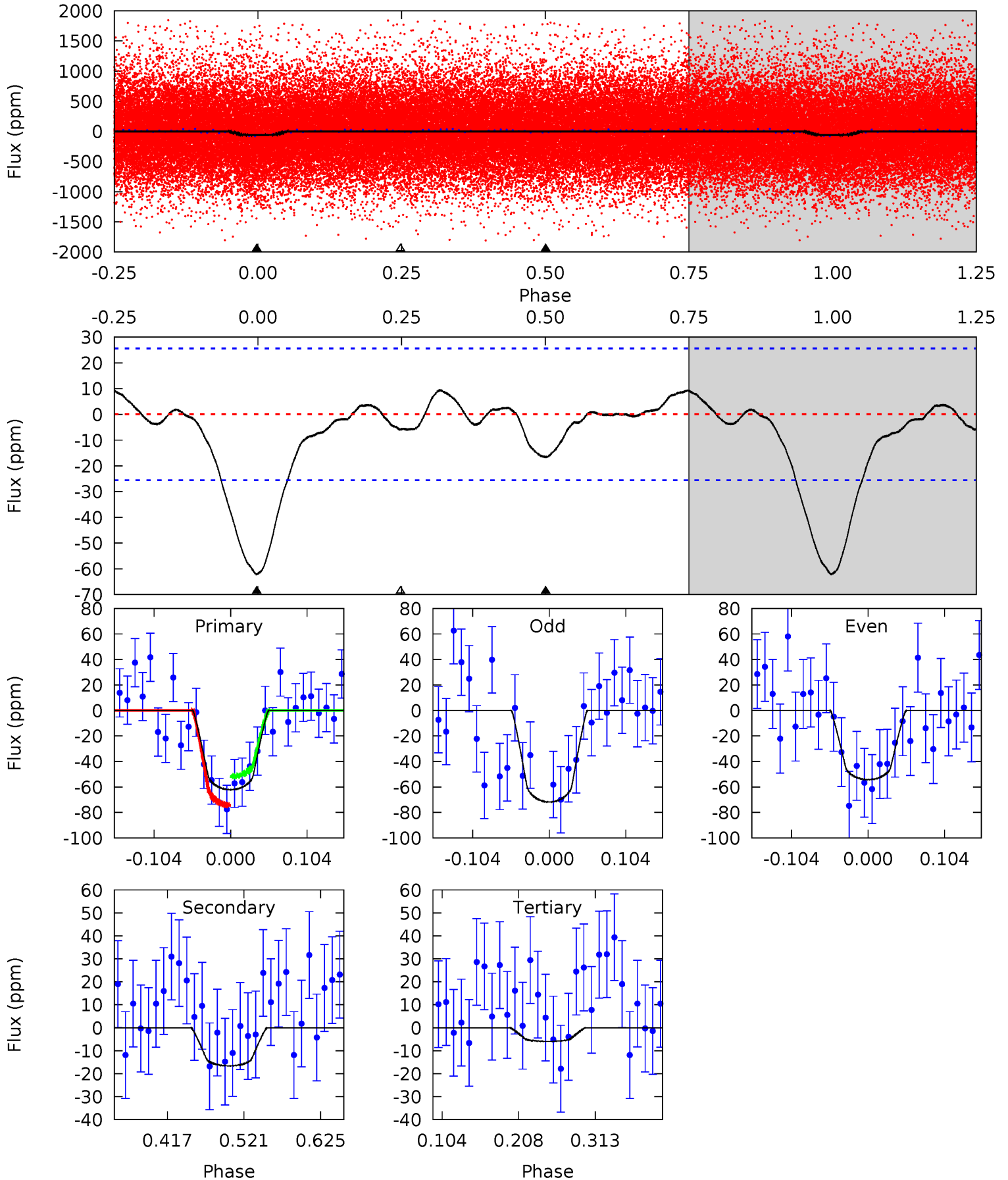
TCE 002308411-01 P= 0.983305 Days $T_0=132.485050$ (BKJD)



DV Model-Shift Uniqueness Test

002308411-01, P = 0.983288 Days, E = 130.537555 Days

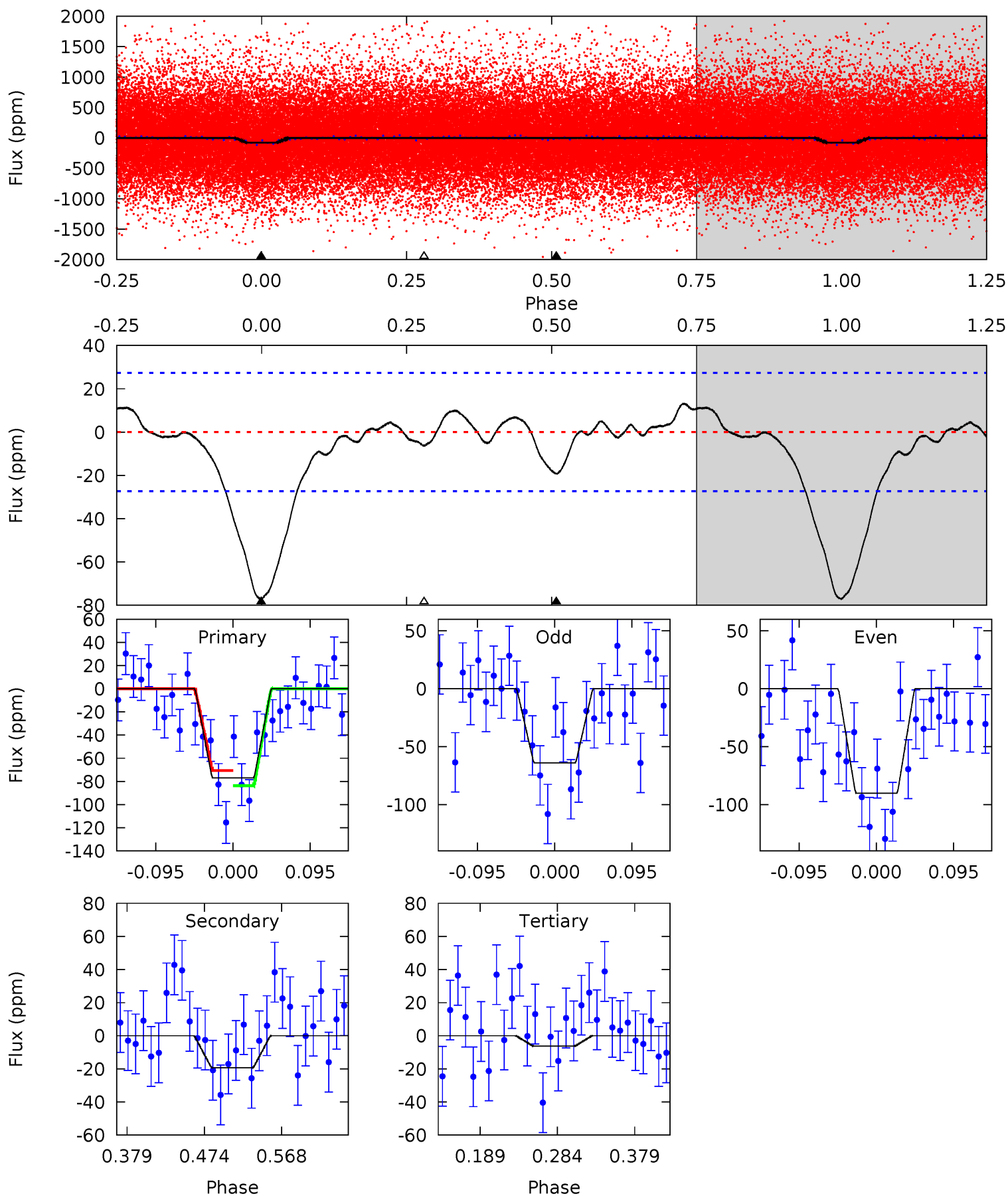
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.1	2.95	1.06	0	4.56	1.62	0.77	10.00	11.1	1.89	2.95	1.57	0.88	0.13	2.02



Alt Model-Shift Uniqueness Test

002308411-01, P = 0.983305 Days, E = 131.501745 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.9	3.23	1.05	0	4.58	1.67	0.91	11.9	12.9	2.18	3.23	2.19	1.17	0.15	1.09



Stellar Parameters For KIC 002308411

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6363^{+151}_{-227}	$4.386^{+0.062}_{-0.188}$	$0.210^{+0.200}_{-0.350}$	$1.198^{+0.351}_{-0.150}$	$1.273^{+0.134}_{-0.184}$	$1.044^{+0.281}_{-0.510}$
	+2%/-4%	+1%/-4%	+95%/-167%	+29%/-13%	+11%/-14%	+27%/-49%
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 002308411-01 / KOI 7631.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-17 ± 6	$1.36^{+0.79}_{-0.67}$	3016^{+196}_{-162}	4109^{+1412}_{-778}	$2.044^{+5.796}_{-1.288}$
Alt.	-19 ± 6	$1.31^{+0.79}_{-0.69}$	3016^{+203}_{-153}	4326^{+1875}_{-805}	$2.558^{+9.665}_{-1.616}$

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 $A_{obs} \gg 1.0$

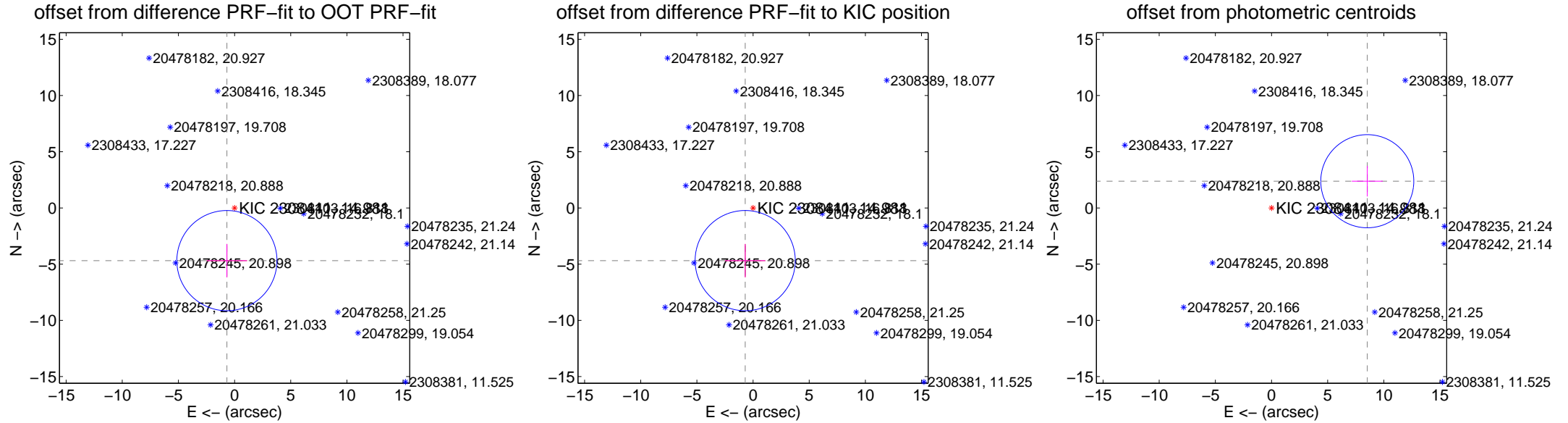
DV Centroid Data

Supplemental centroid analysis for 002308411-01. Kepler magnitude: 14.98. Transit SNR 10.41

There are 0 quarters with good PRF difference image offsets

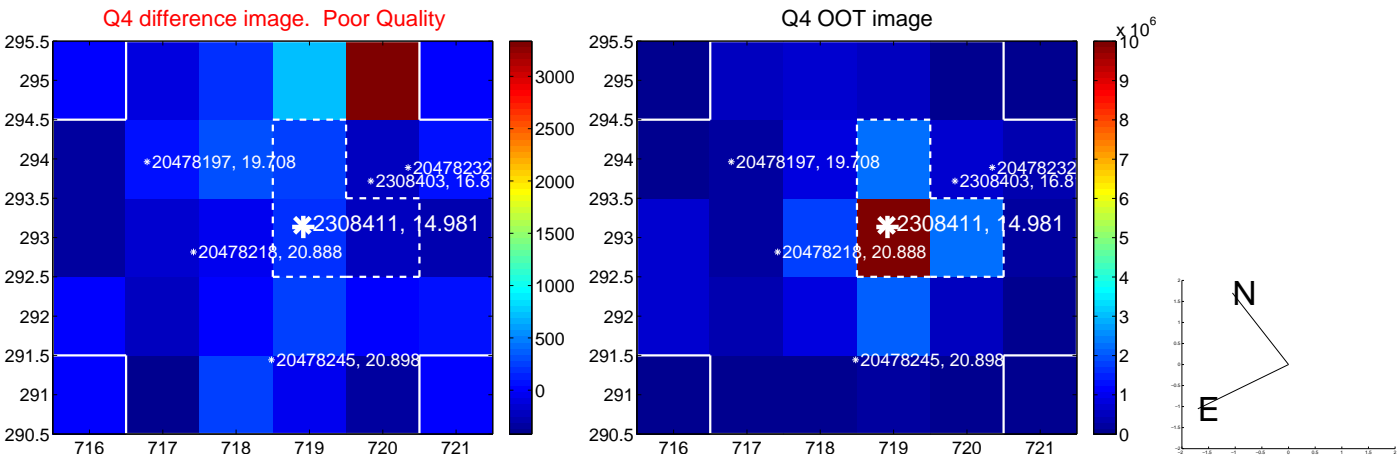
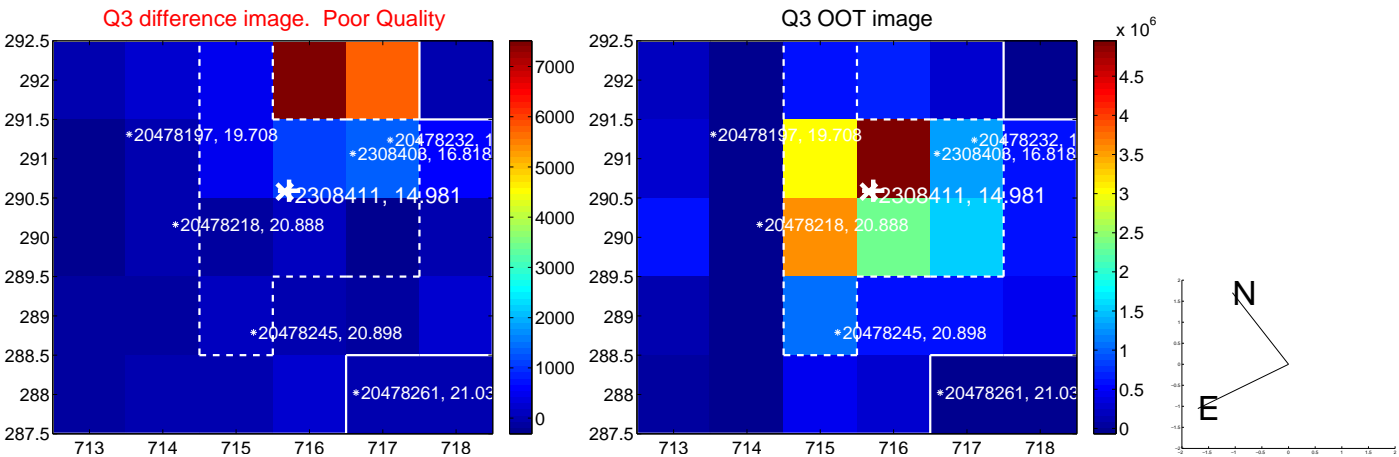
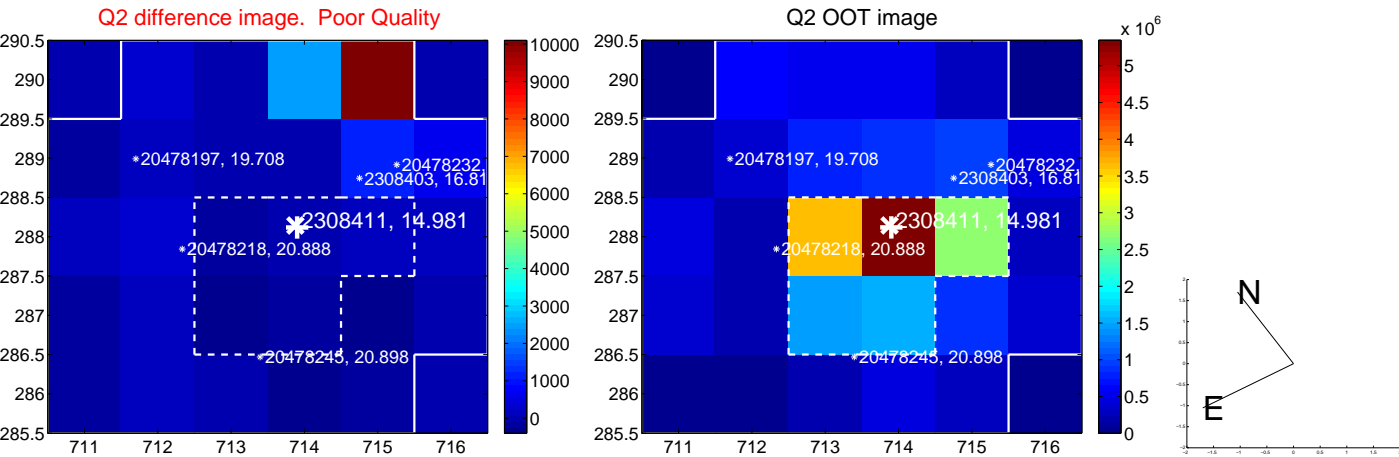
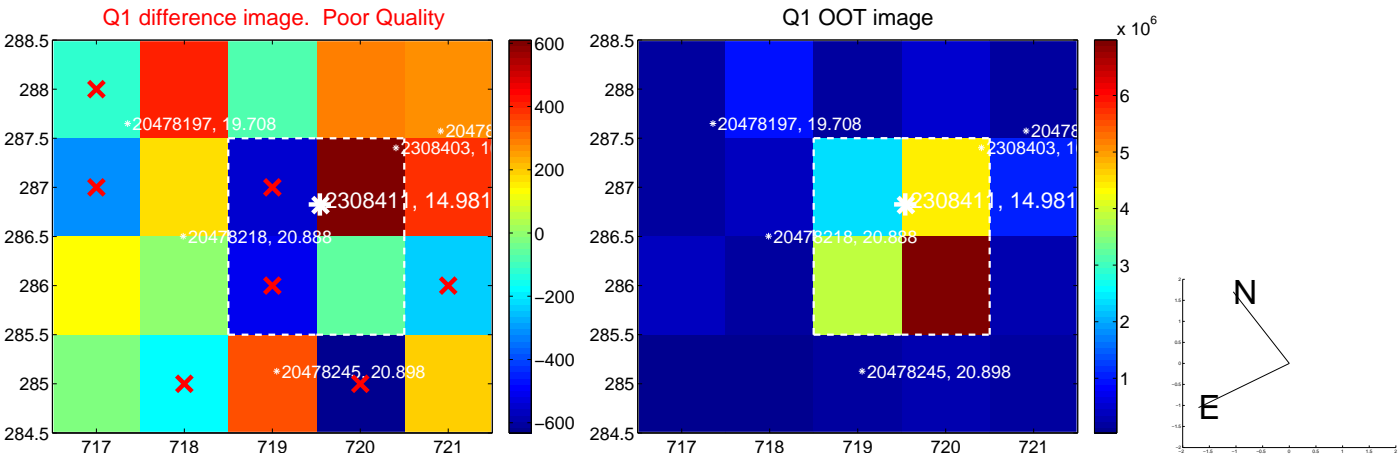
The direct PRF centroid is offset from the target star catalog position by about 0.02 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	4.736 \pm 1.486	3.19	0.683 \pm 1.796	-4.686 \pm 1.479
PRF-fit source offset from KIC position	4.738 \pm 1.486	3.19	0.699 \pm 1.796	-4.686 \pm 1.479
photometric centroid source offset	8.85 \pm 1.38	6.41	-8.53 \pm 1.38	2.38 \pm 1.36

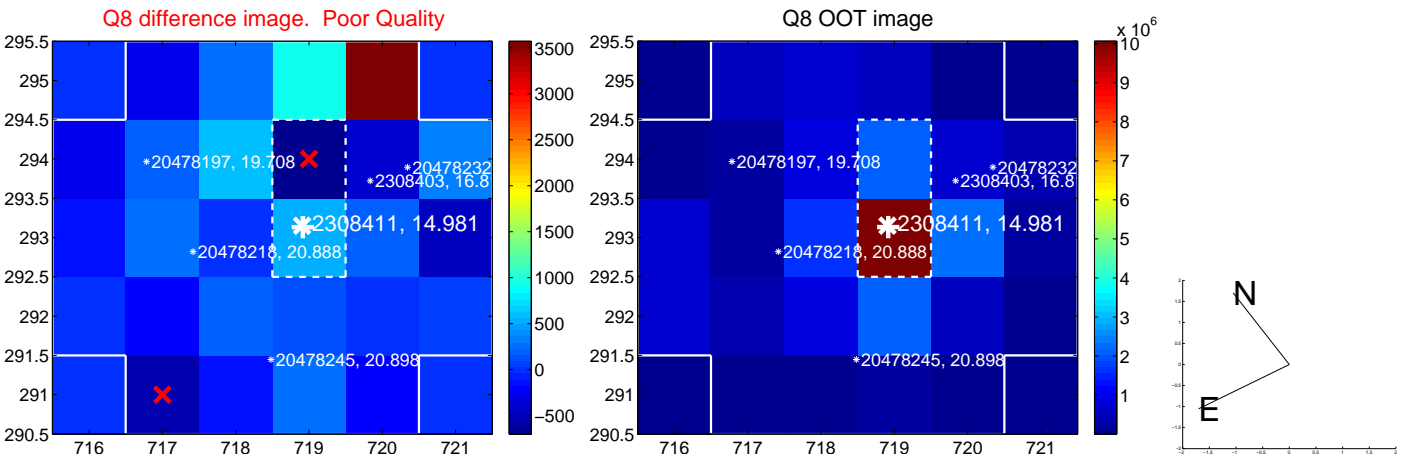
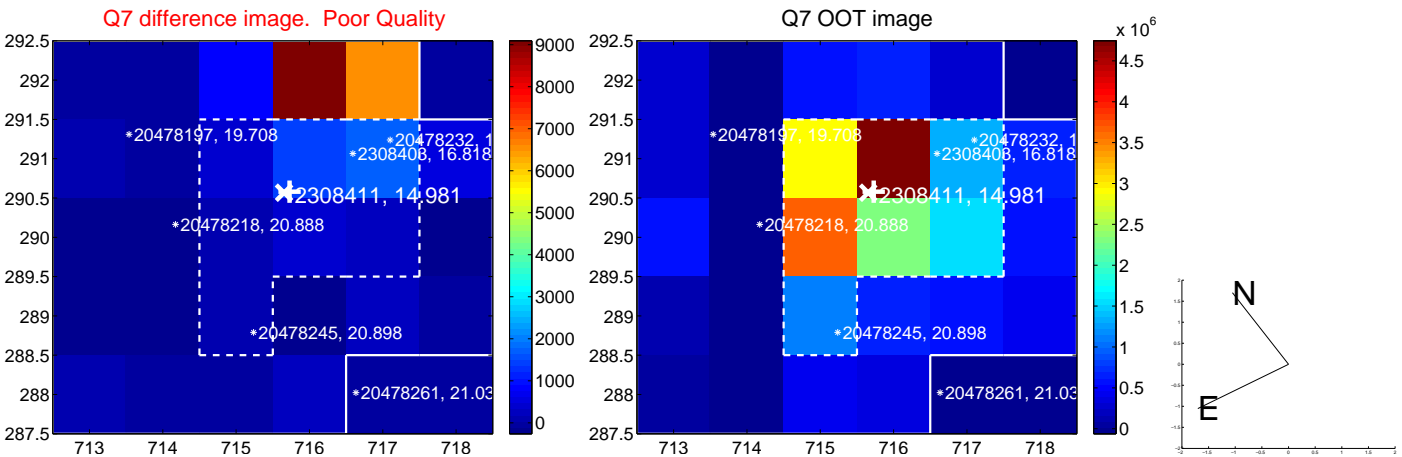
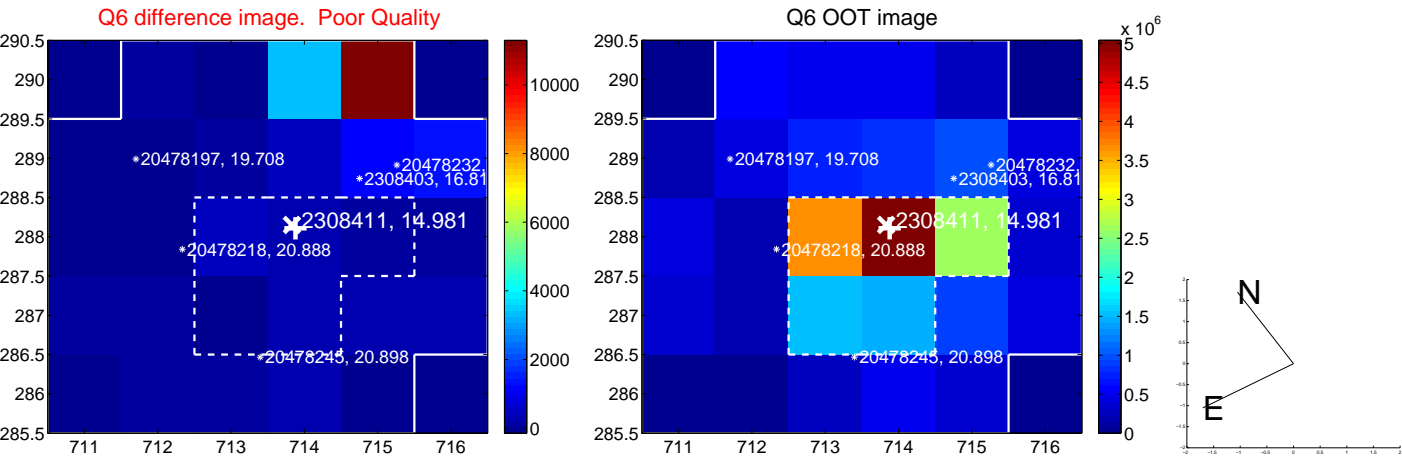
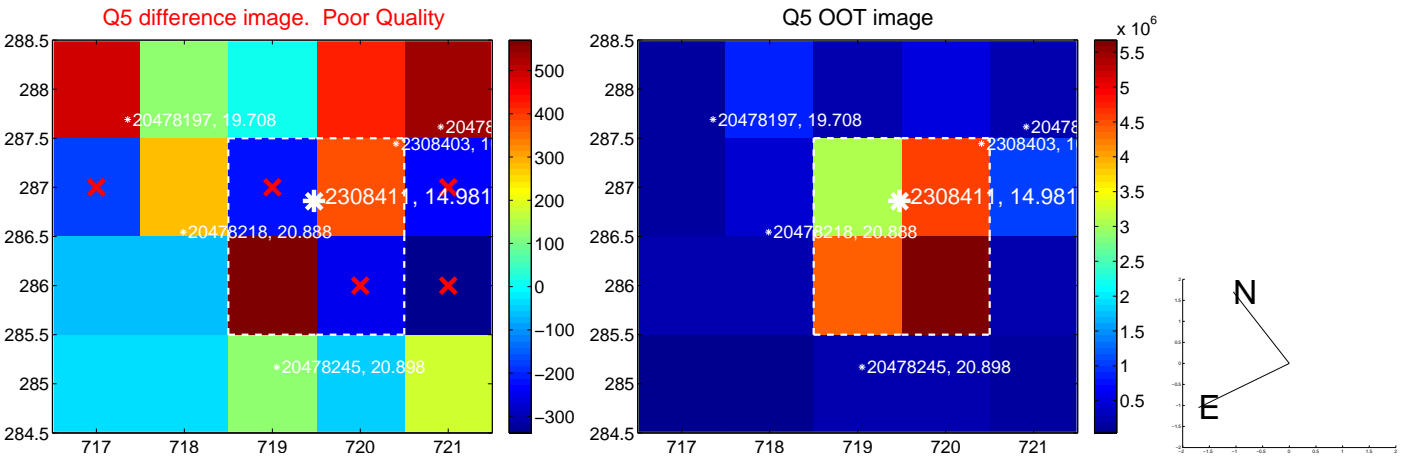


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

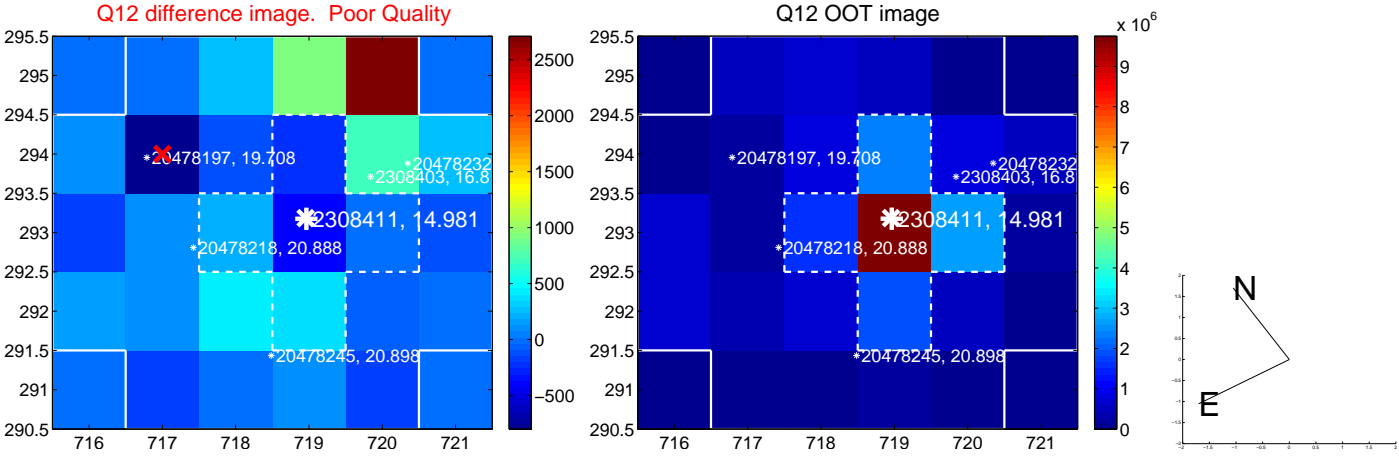
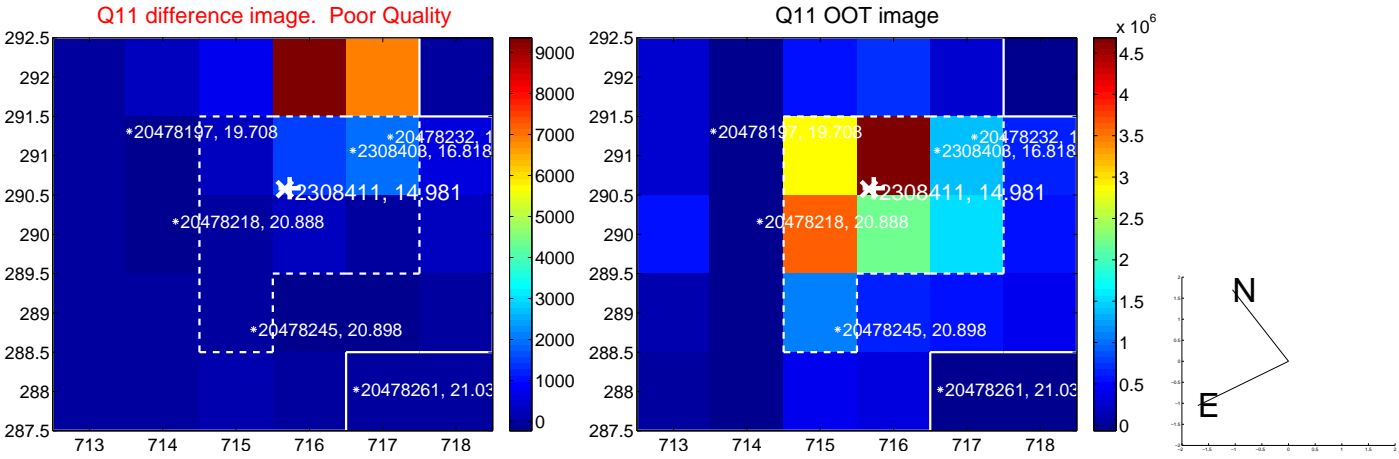
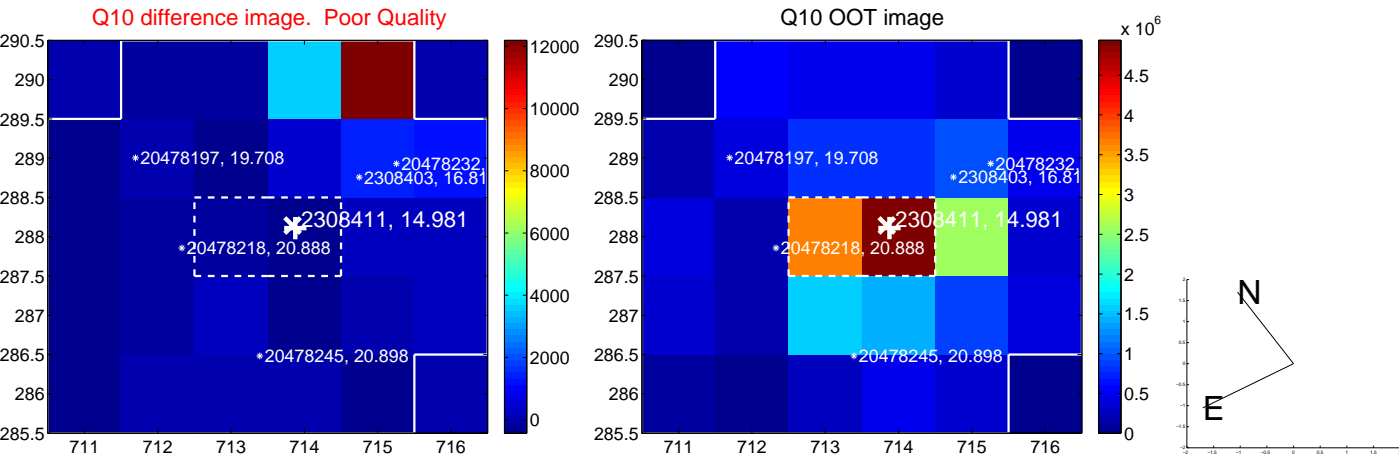
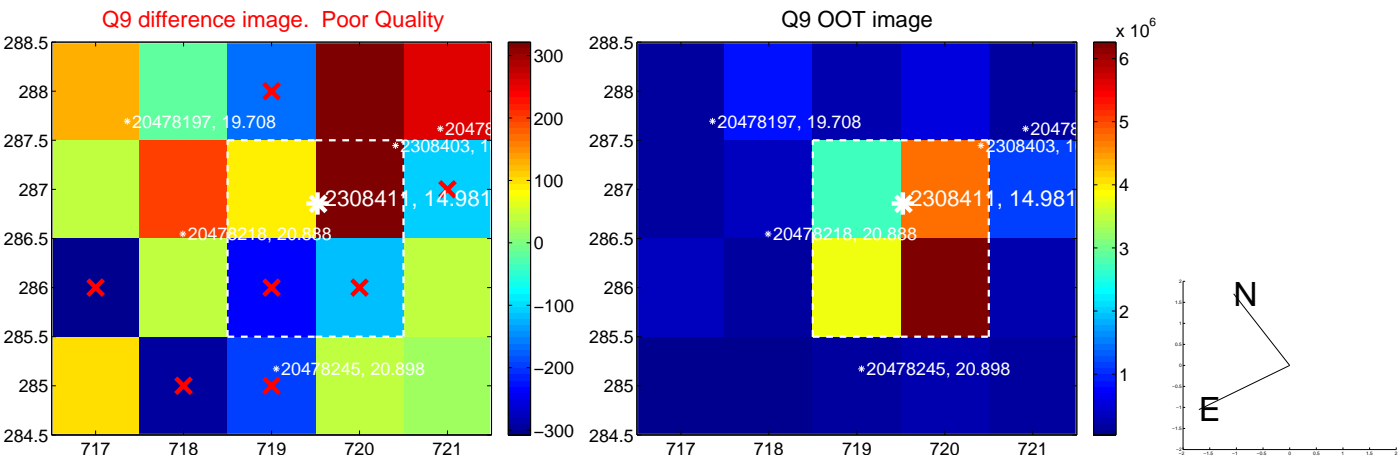
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



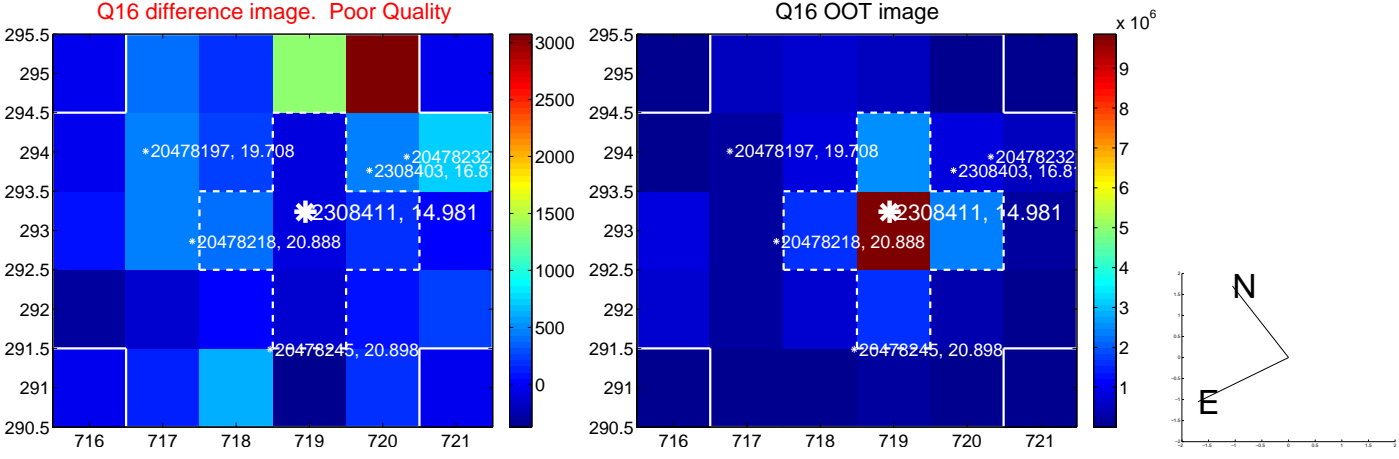
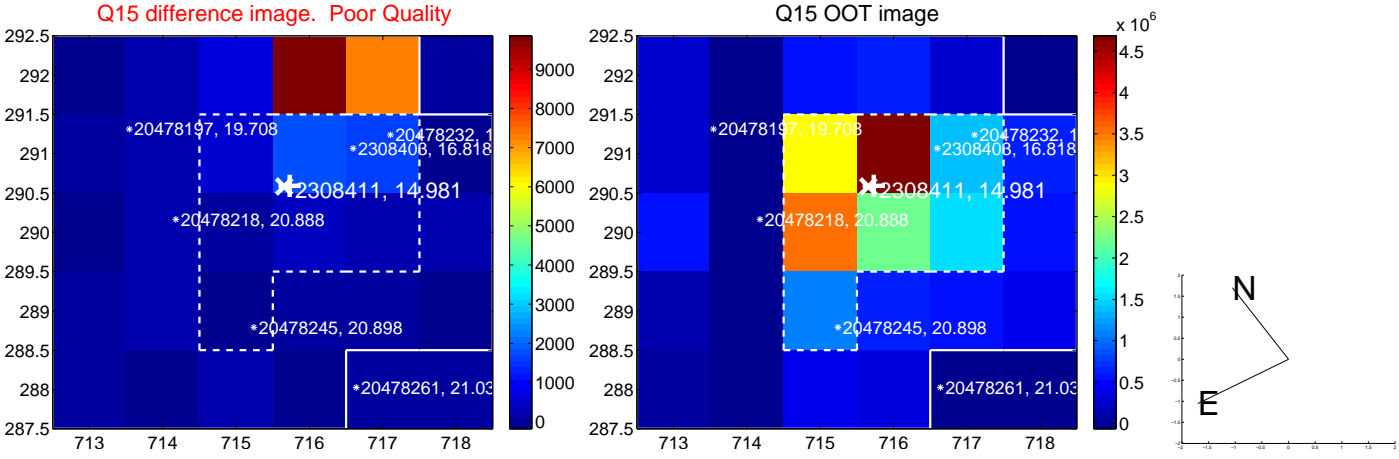
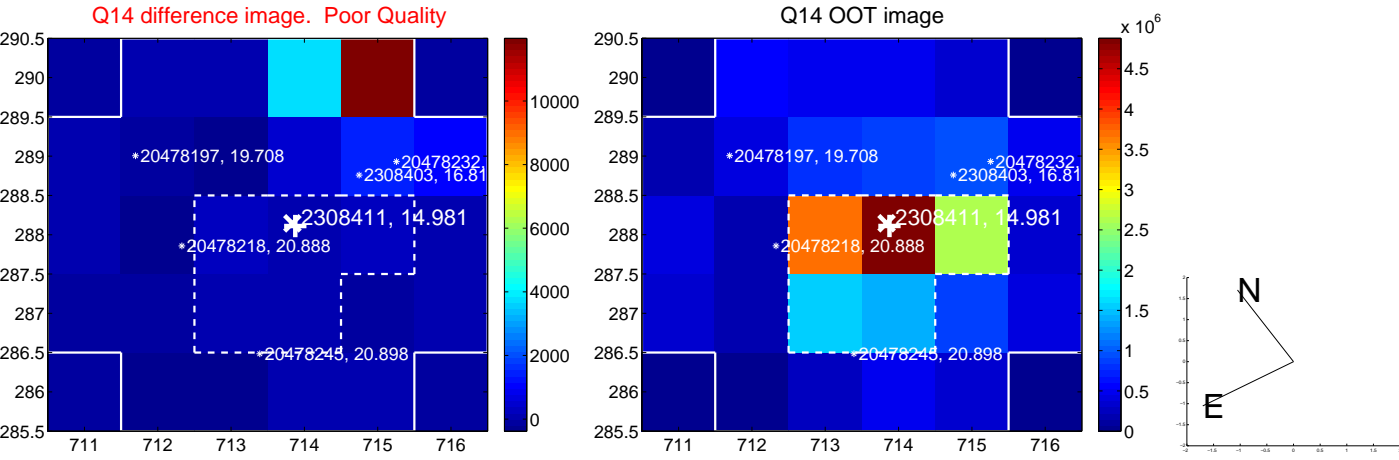
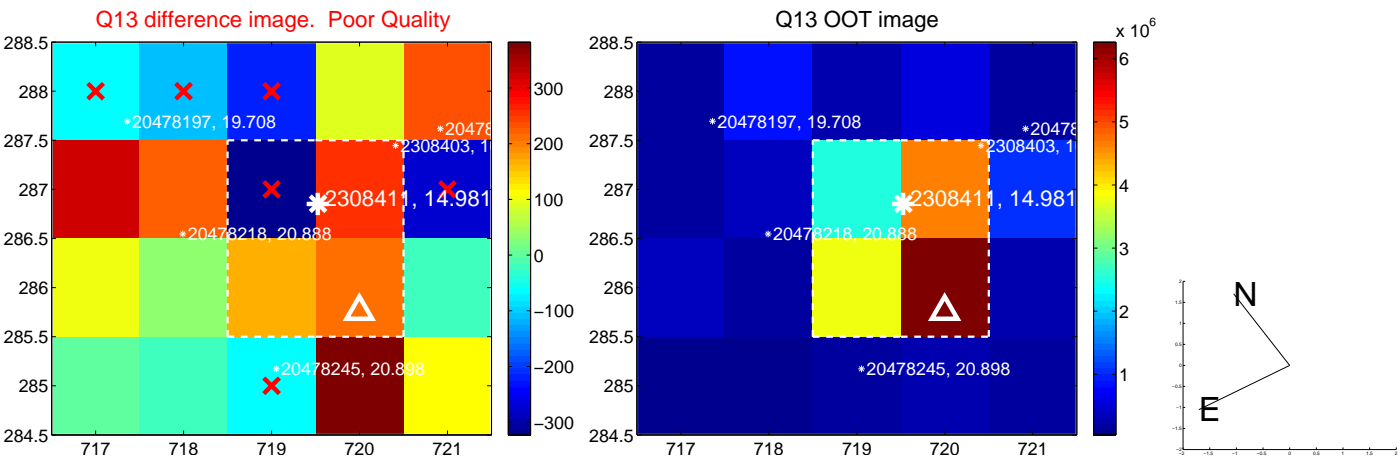
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



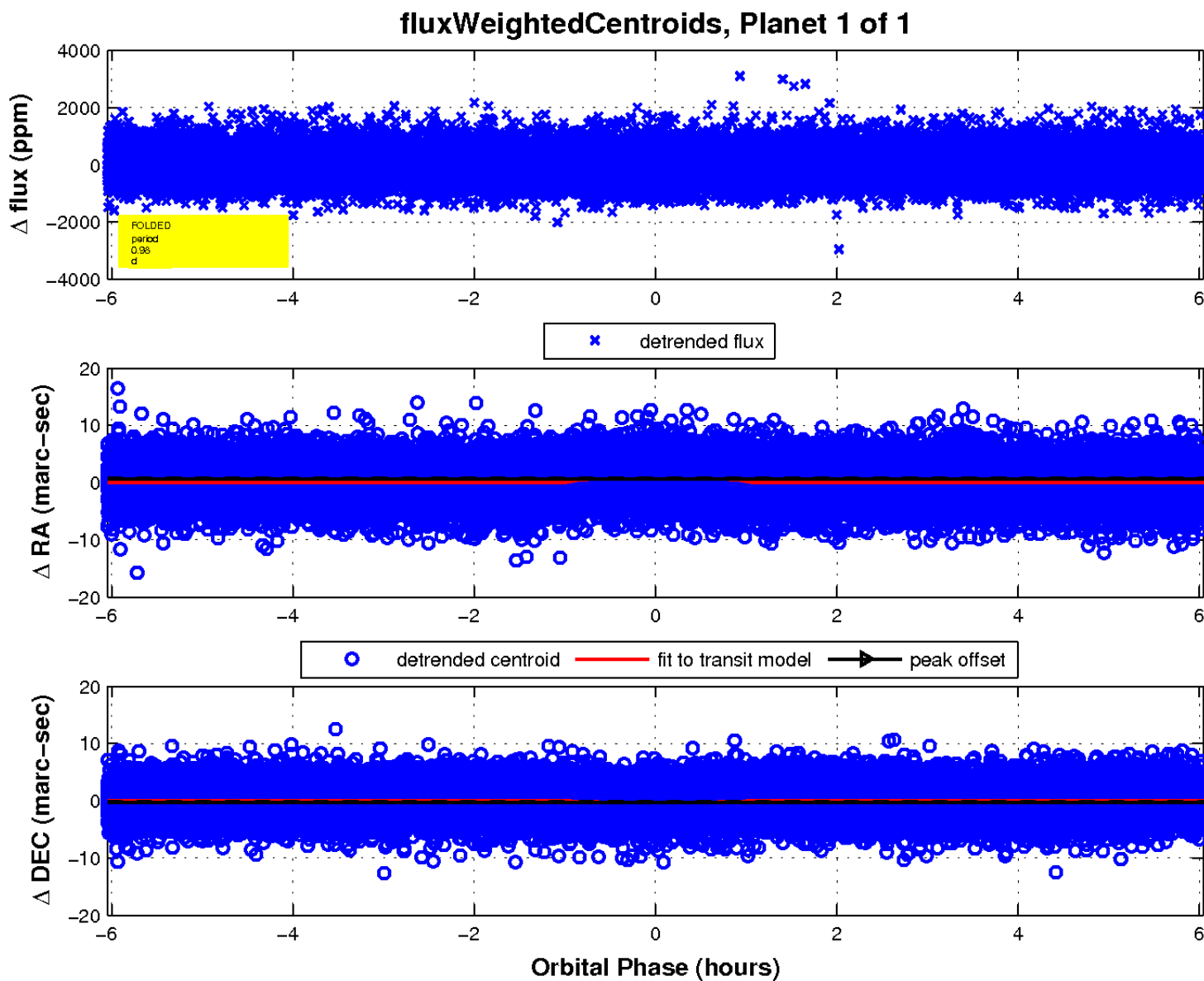
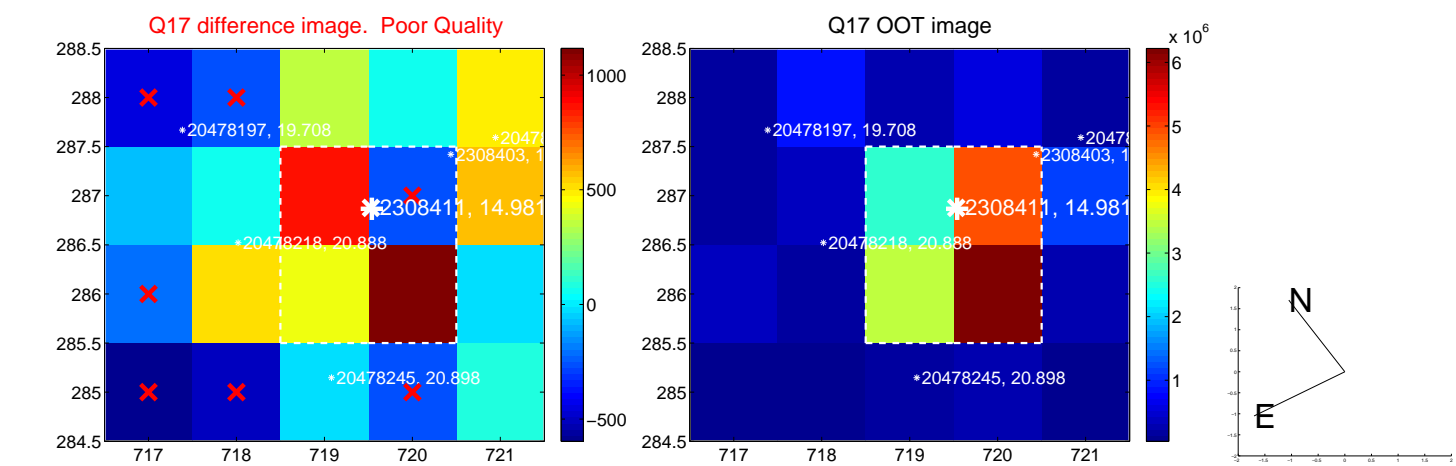
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UKIRT Image

Declination

