

KIC 008413996

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})
008413996-01	OBS	No	1.637973	132.806085	6.2	5.115	9.6	9.9	3.18	8327	0.92	36615.41

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008413996-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—CENT_SATURATED

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

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

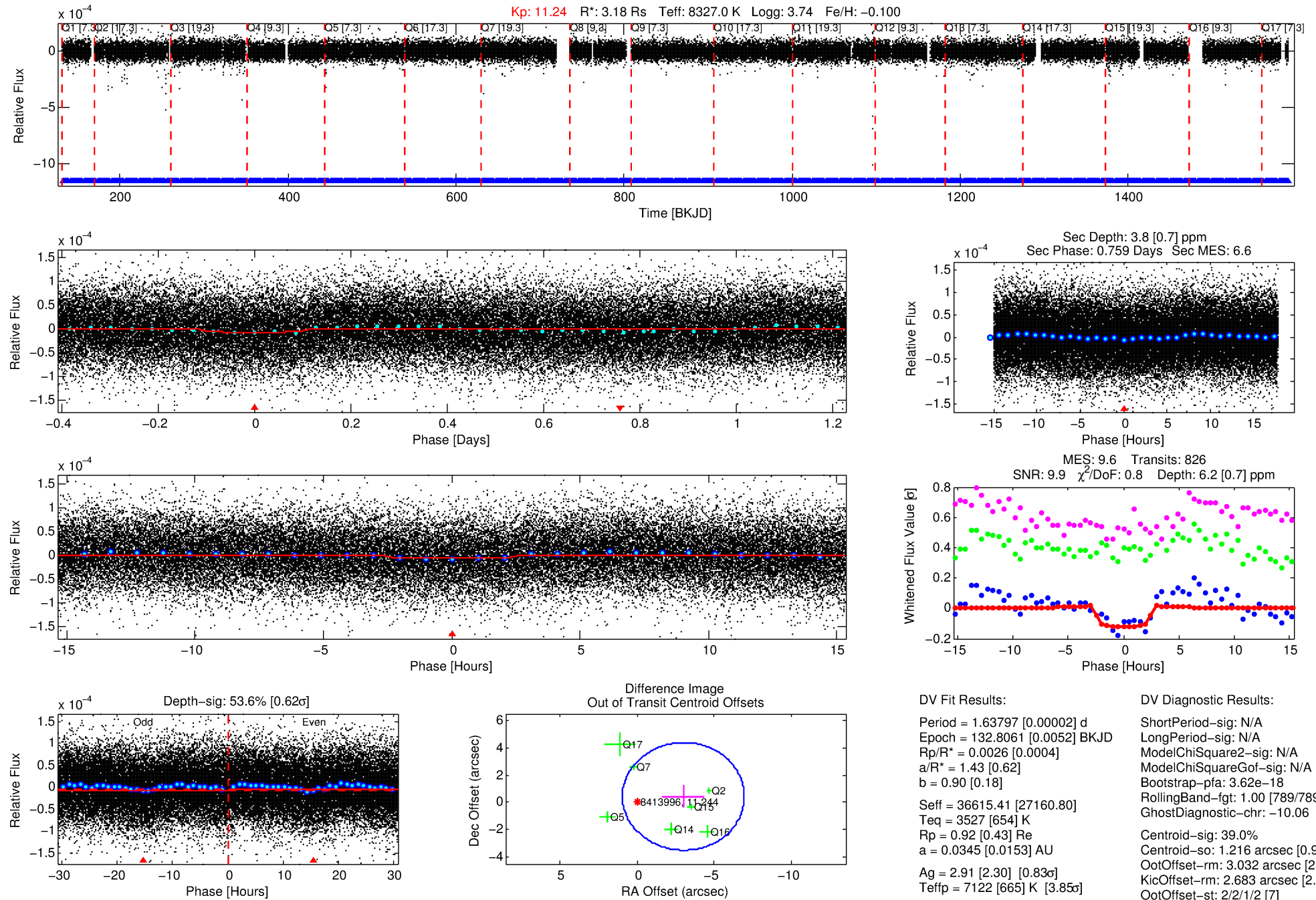
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008413996-01

No Significant Match Found

DV One-Page Summary

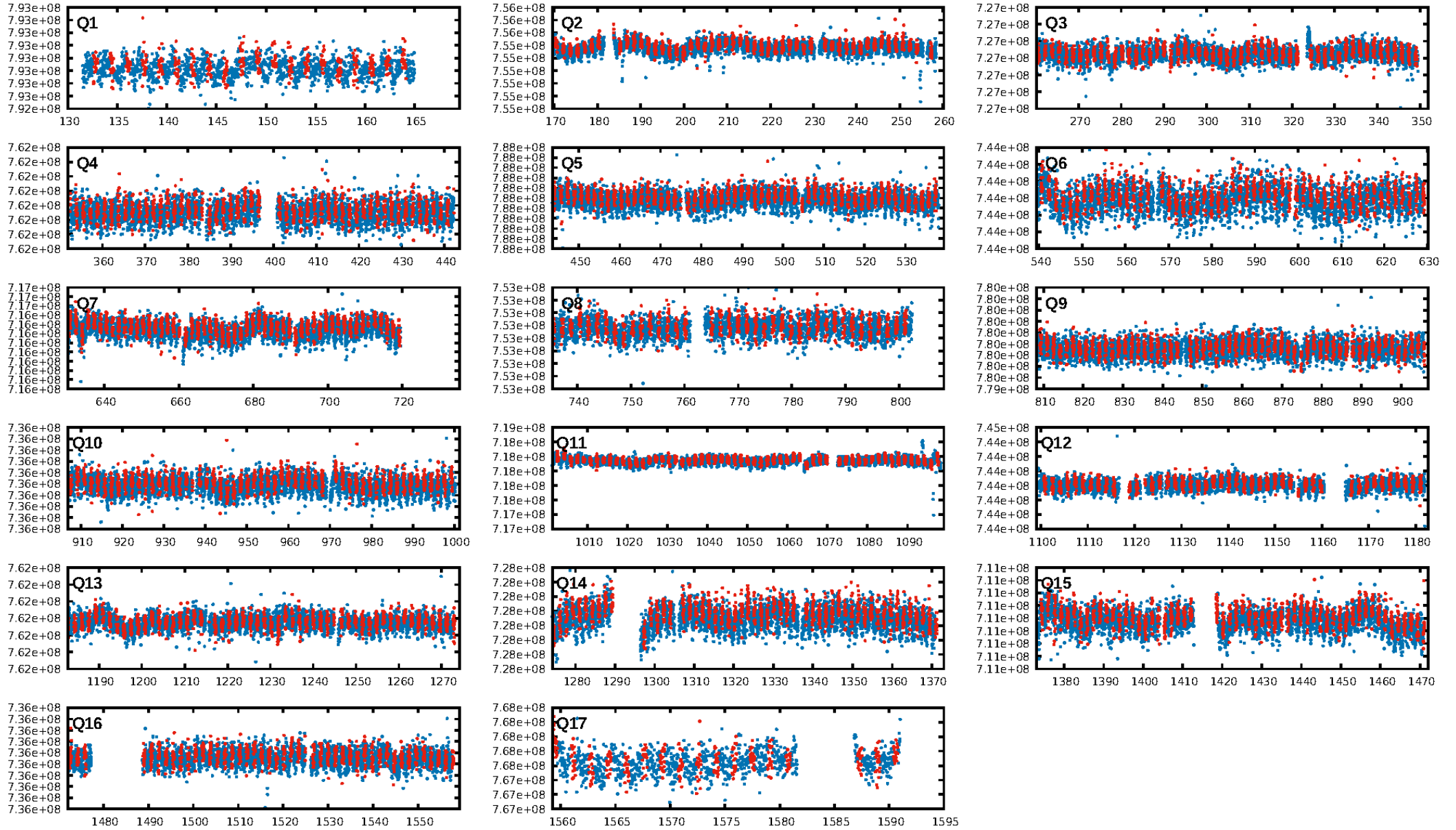
KIC: 8413996 Candidate: 1 of 1 Period: 1.638 d



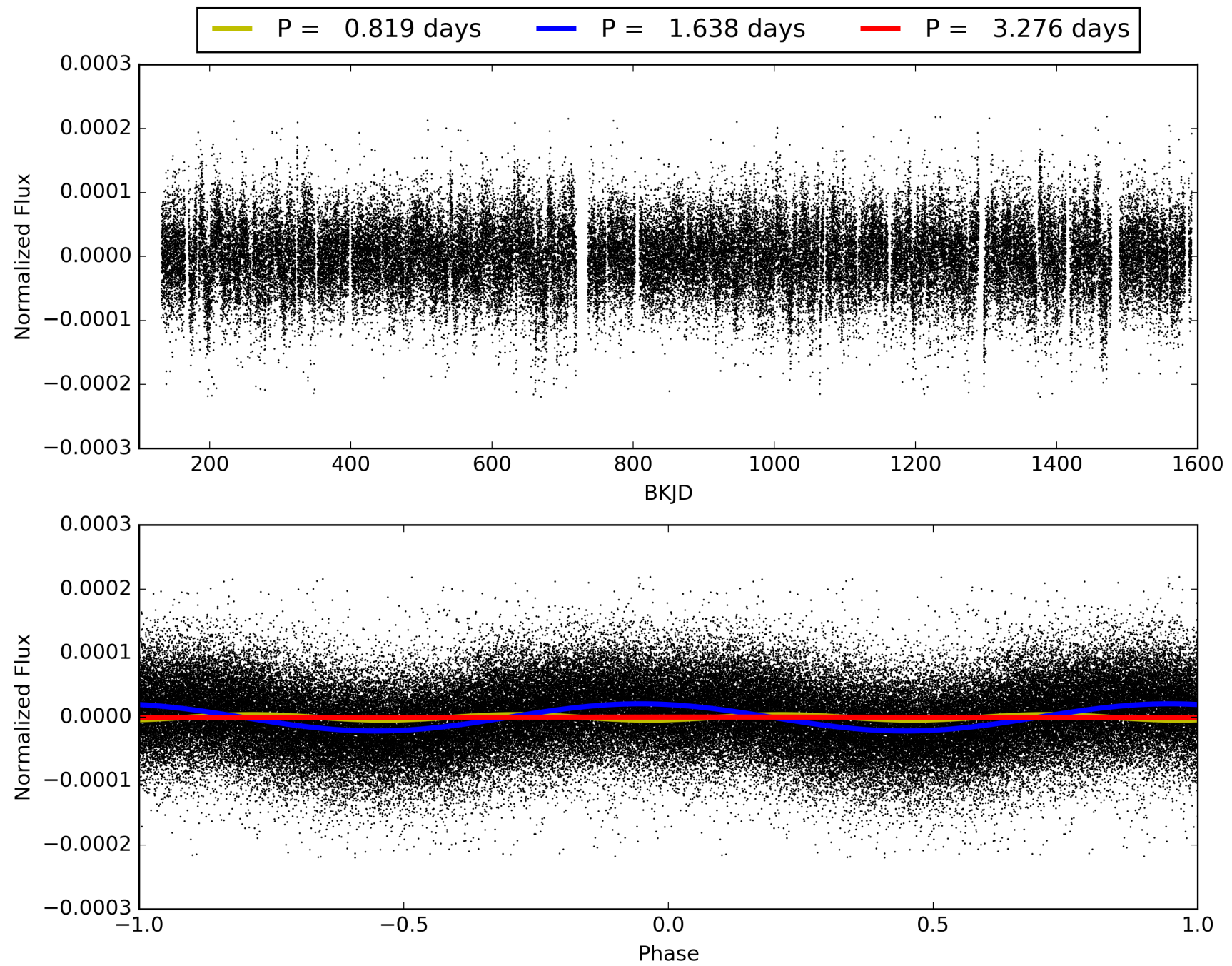
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 04:56:14 Z

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

TCE 008413996-01, PDC Light Curves

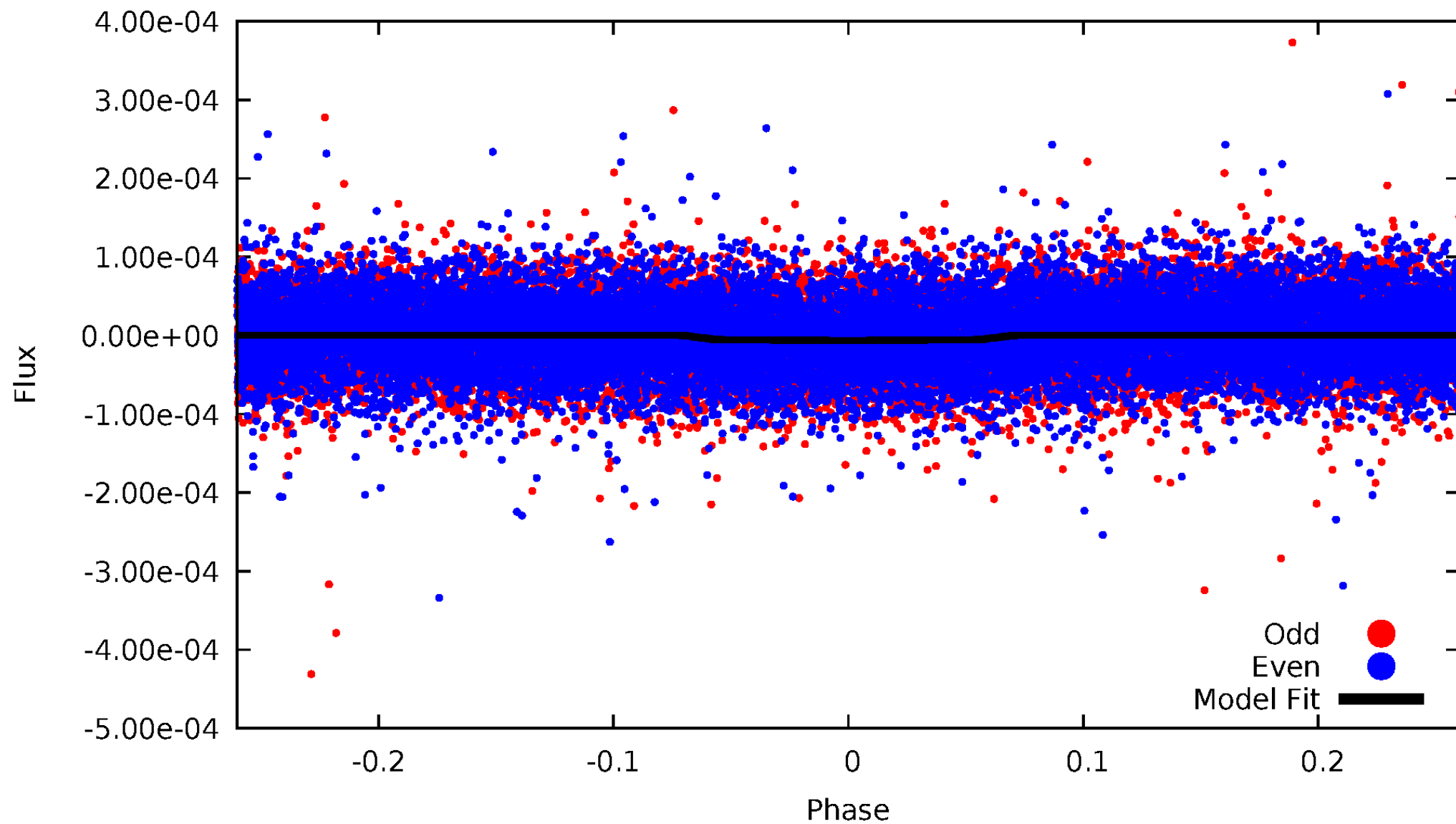


TCE 008413996-01



DV Odd/Even

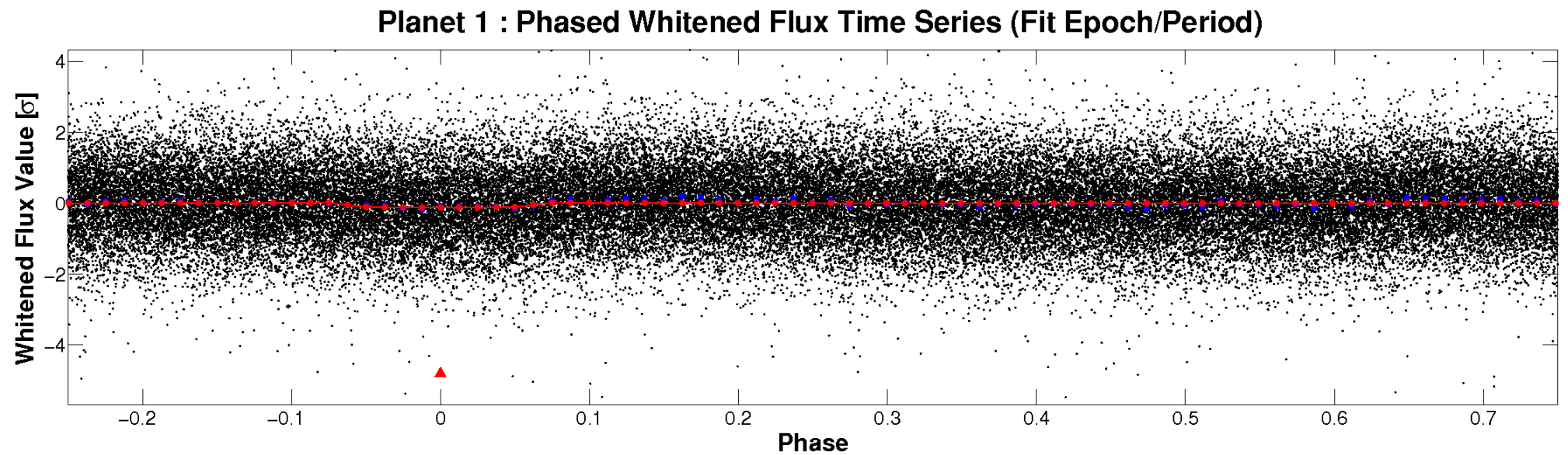
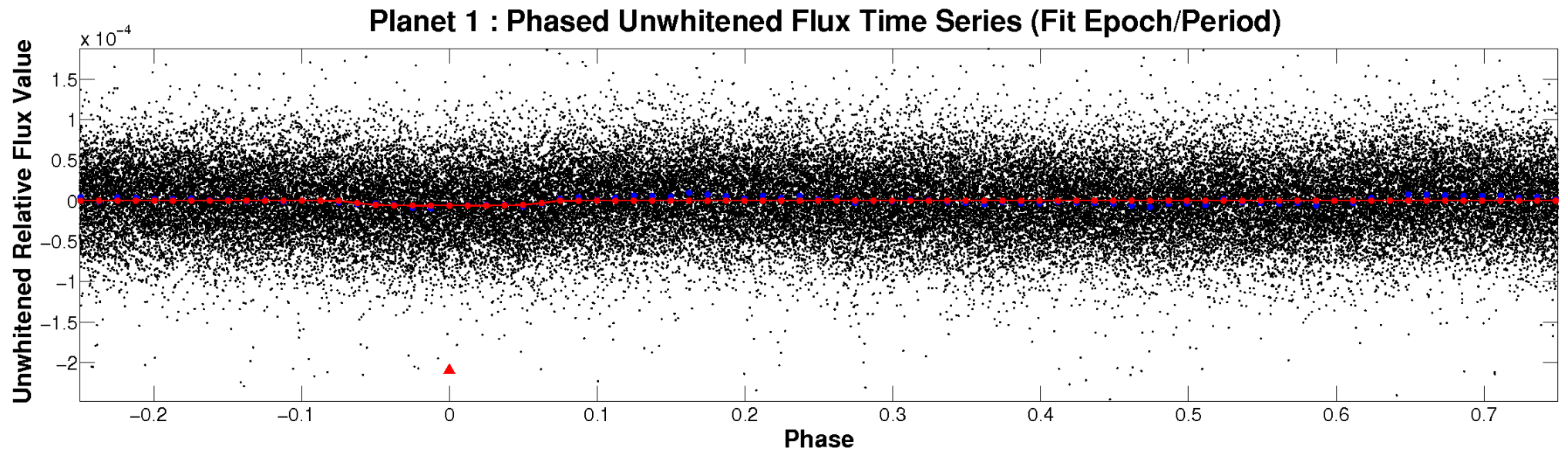
TCE 008413996-01



ALT Odd/Even

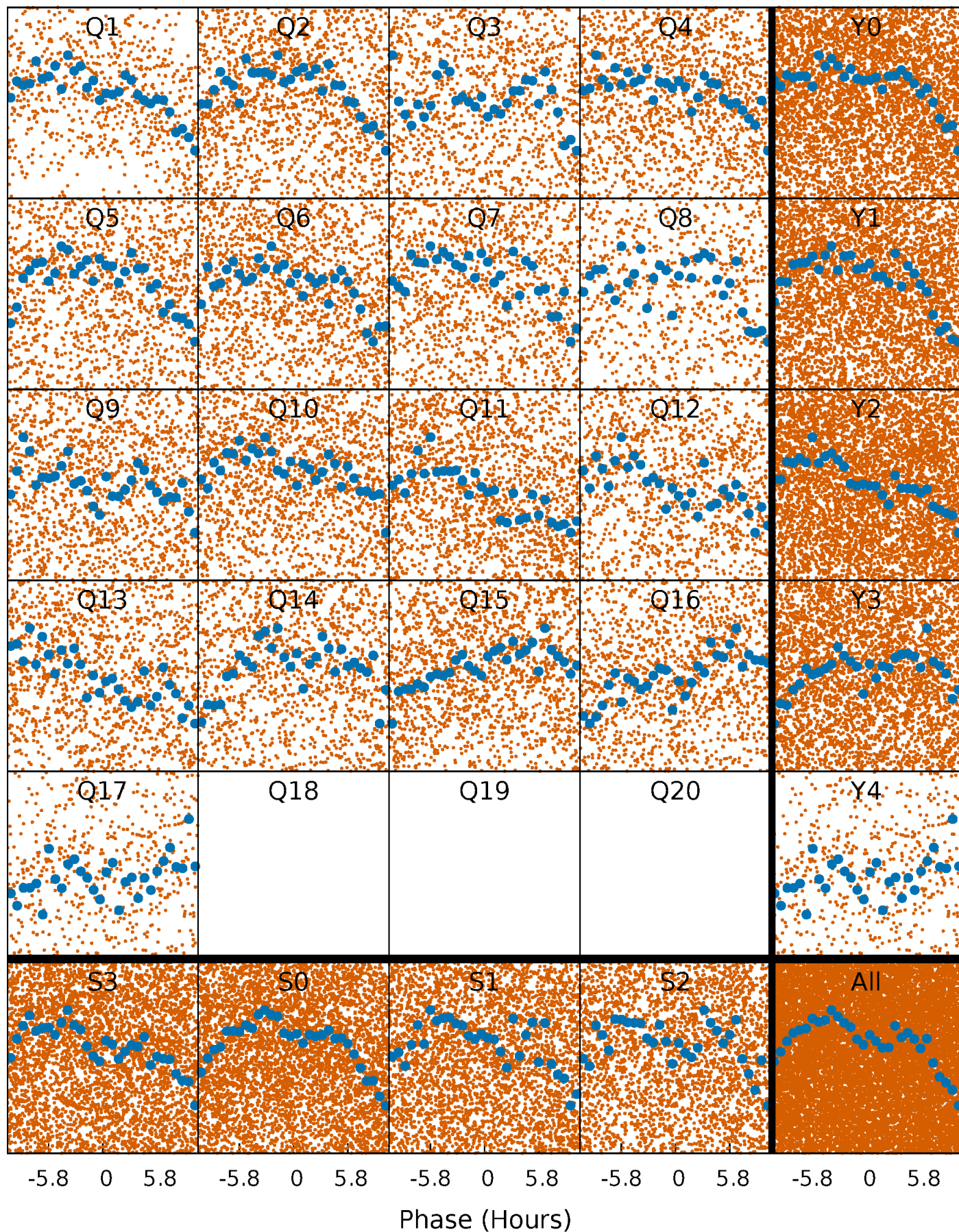
This plot does not exist for this TCE.

Non-Whitened Vs. Whitened Light Curve



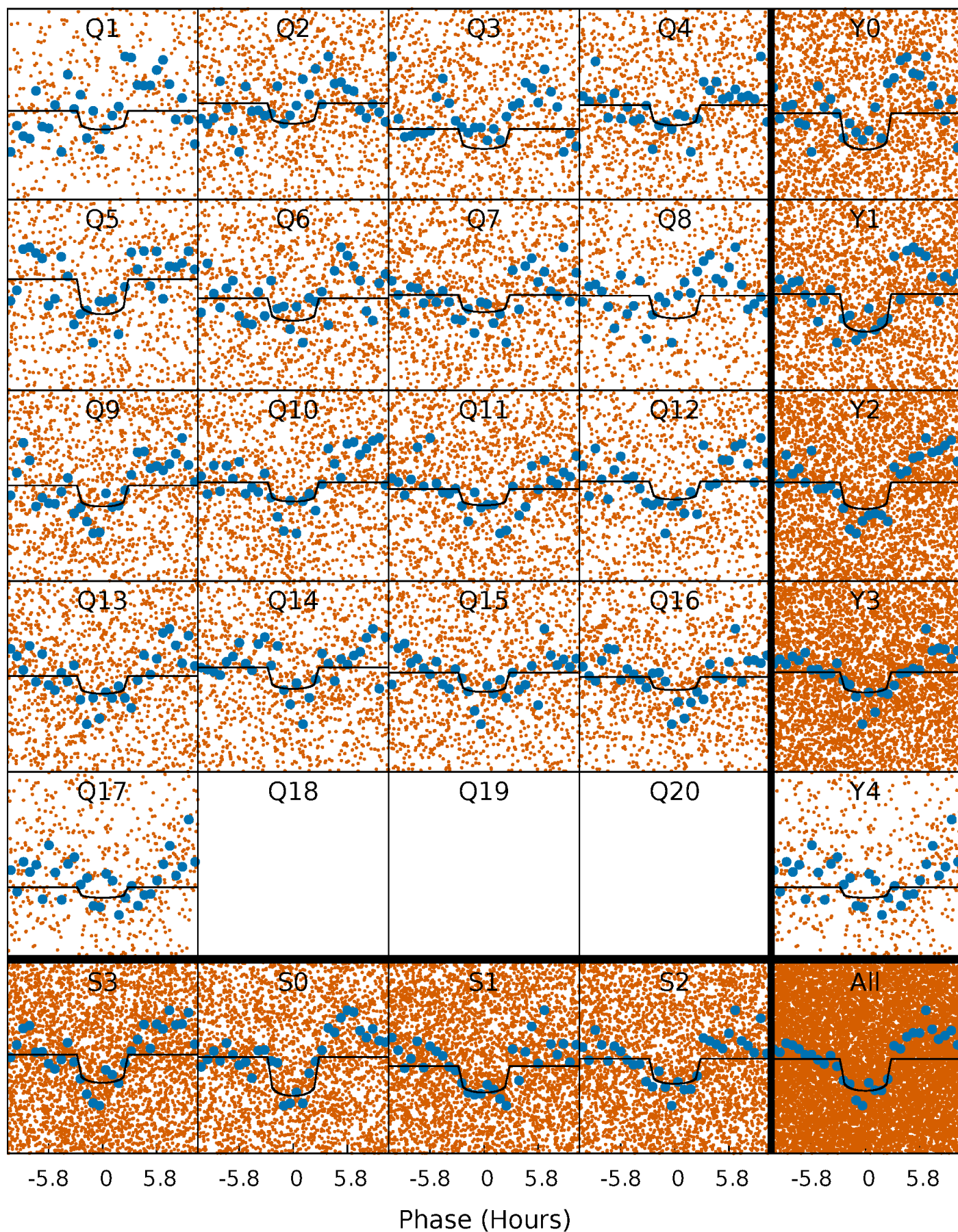
PDC Quarter-Phased Transit Curves

TCE 008413996-01 P= 1.637973 Days $T_0=132.806085$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 008413996-01 P= 1.637973 Days $T_0=132.806085$ (BKJD)

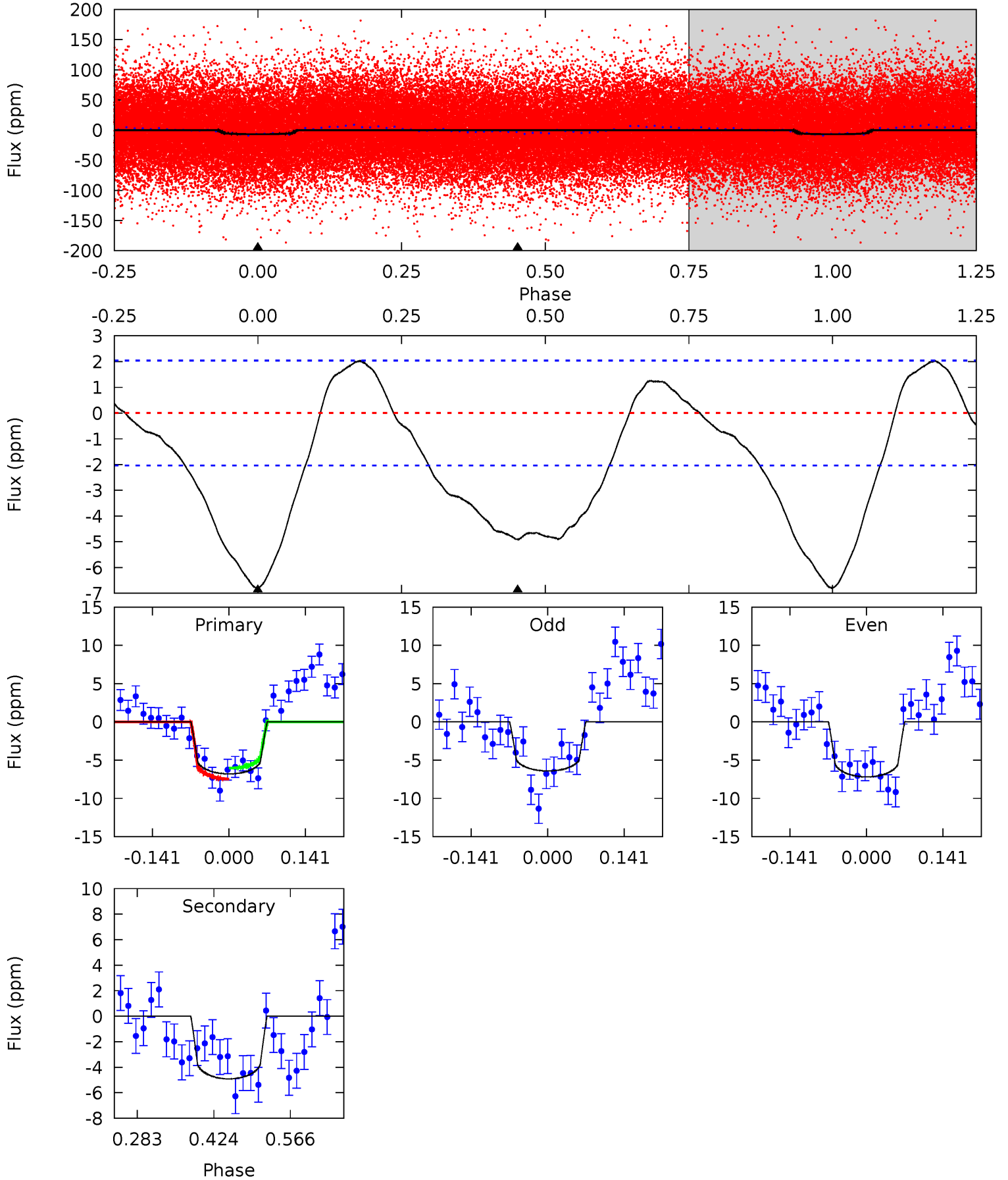


This plot does not exist for this TCE.

DV Model-Shift Uniqueness Test

008413996-01, P = 1.637973 Days, E = 131.168112 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
15.0	10.8	0	0	4.49	1.47	2.82	15.0	15.0	10.8	10.8	0.85	1.03	0.23	1.56



Alt Model-Shift Uniqueness Test

This plot does not exist for this TCE.

Stellar Parameters For KIC 008413996

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	8327^{+201}_{-374}	$3.743^{+0.427}_{-0.114}$	$-0.100^{+0.300}_{-0.350}$	$3.183^{+0.828}_{-1.419}$	$2.046^{+0.328}_{-0.491}$	$0.089^{+0.349}_{-0.036}$
	+2%/-4%	+11%/-3%	+300%/-350%	+26%/-45%	+16%/-24%	+390%/-40%
Source	KIC0	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 008413996-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-5 ± 0	$0.85^{+0.20}_{-0.23}$	4751^{+370}_{-587}	7281^{+743}_{-648}	$4.443^{+3.485}_{-1.498}$
Alt.	N/A	N/A	N/A	N/A	N/A

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 $A_{obs} \gg 1.0$

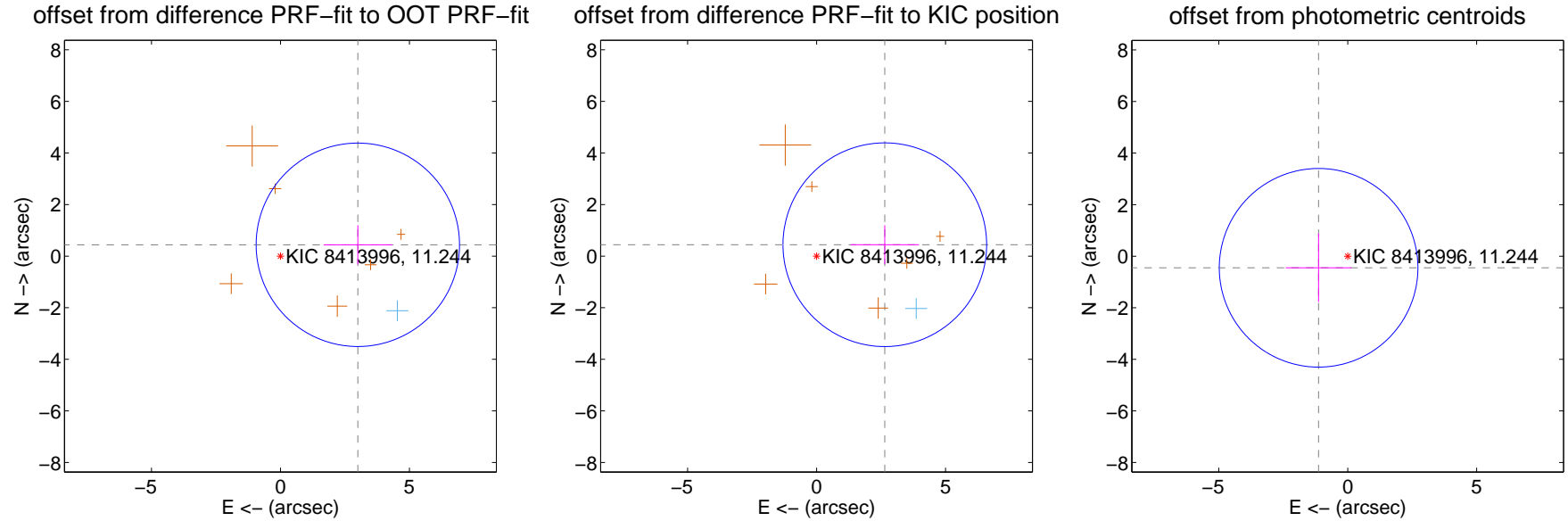
DV Centroid Data

Supplemental centroid analysis for 008413996-01. **Kepler magnitude: 11.24.** Transit SNR 9.89

There are 1 quarters with good PRF difference image offsets

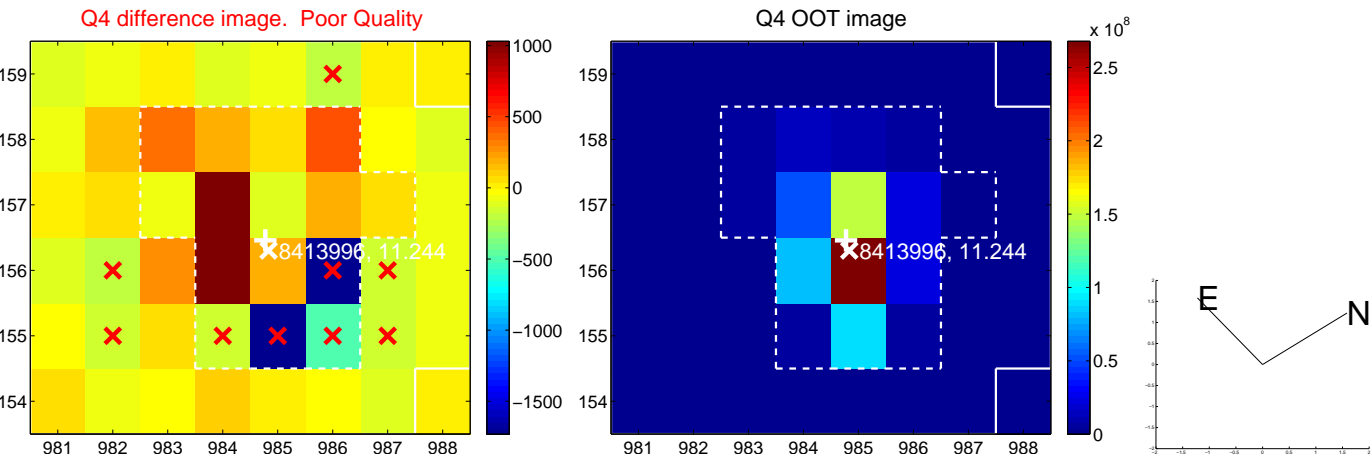
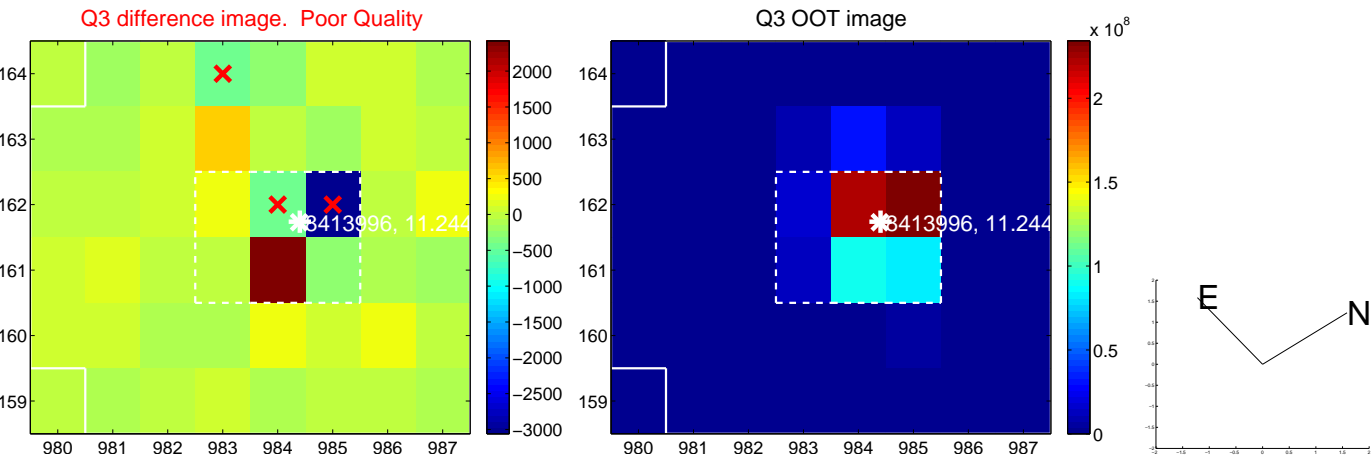
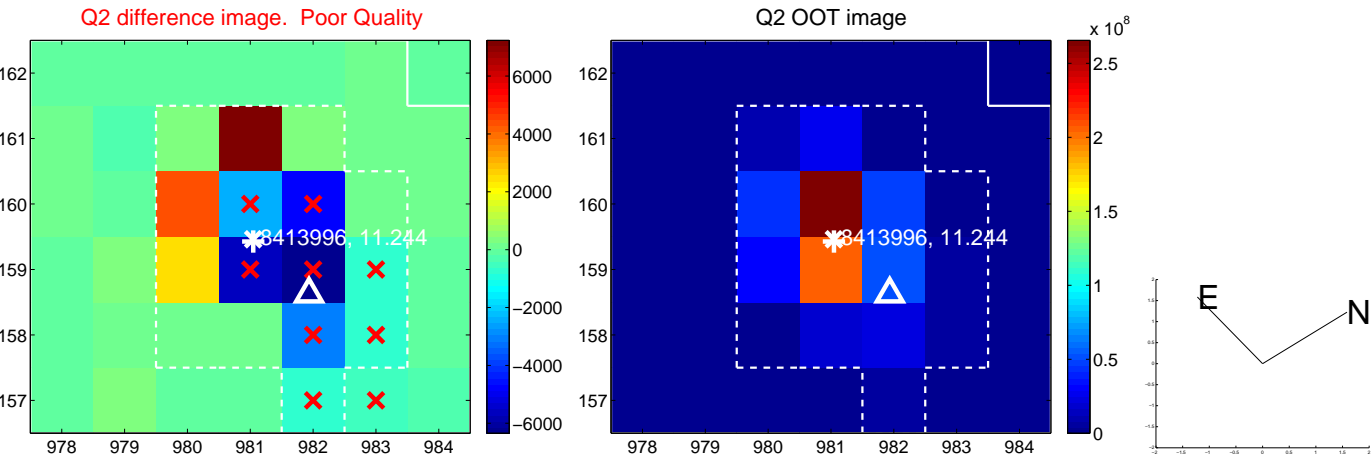
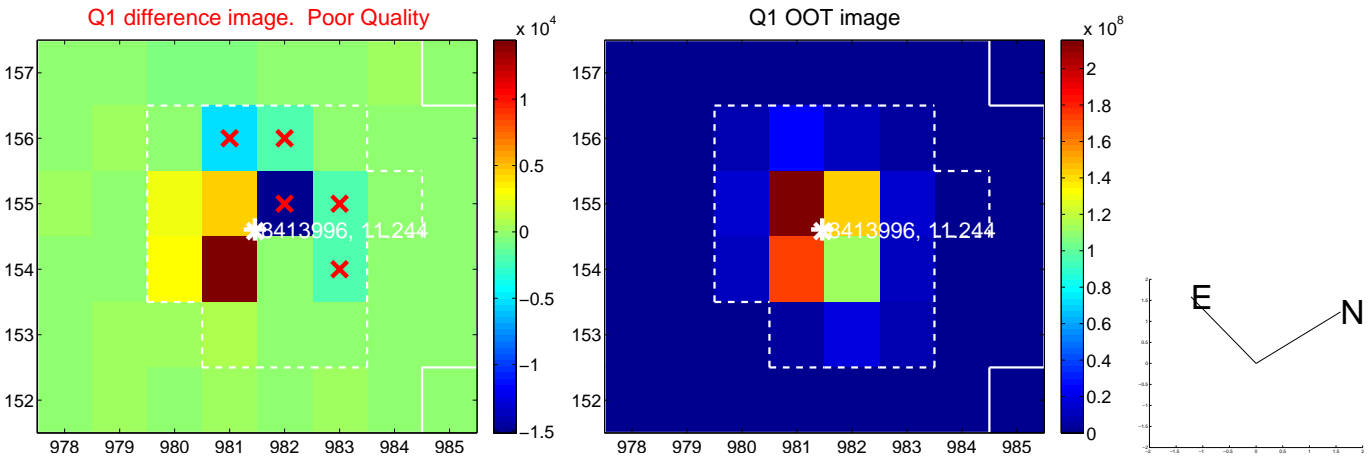
The direct PRF centroid is offset from the target star catalog position by about 0.12 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	3.032 ± 1.314	2.31	-3.000 ± 1.324	0.439 ± 0.757
PRF-fit source offset from KIC position	2.683 ± 1.316	2.04	-2.646 ± 1.328	0.442 ± 0.757
photometric centroid source offset	1.22 ± 1.28	0.95	1.13 ± 1.28	-0.45 ± 1.33

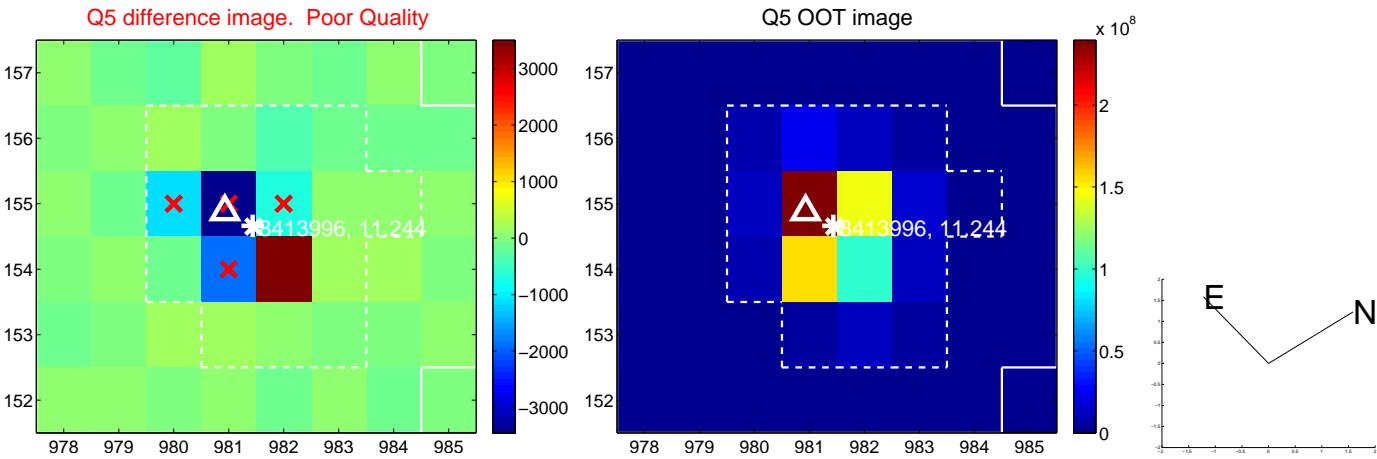


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

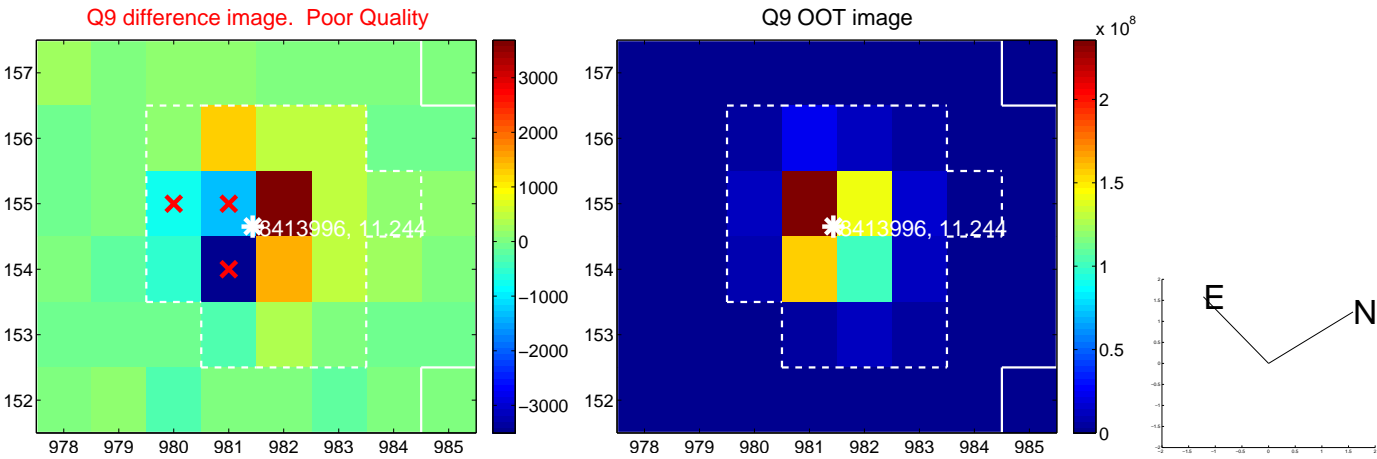
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



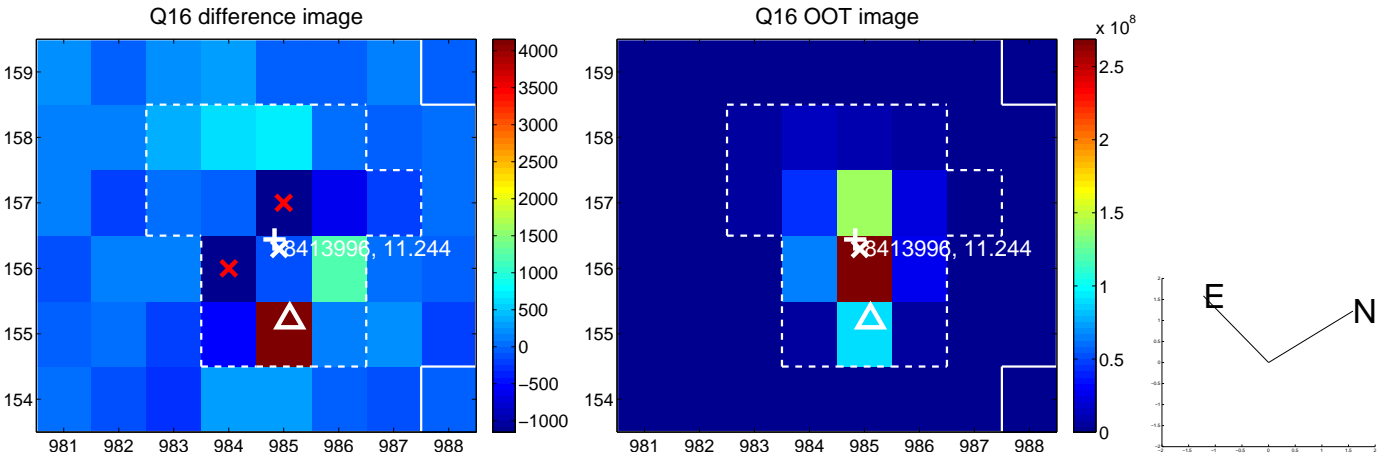
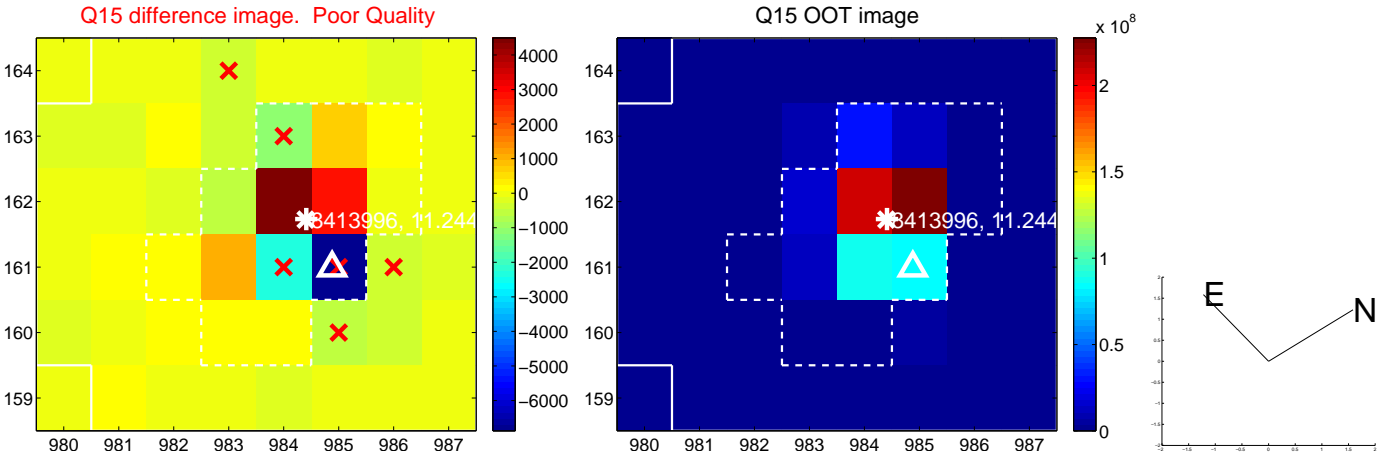
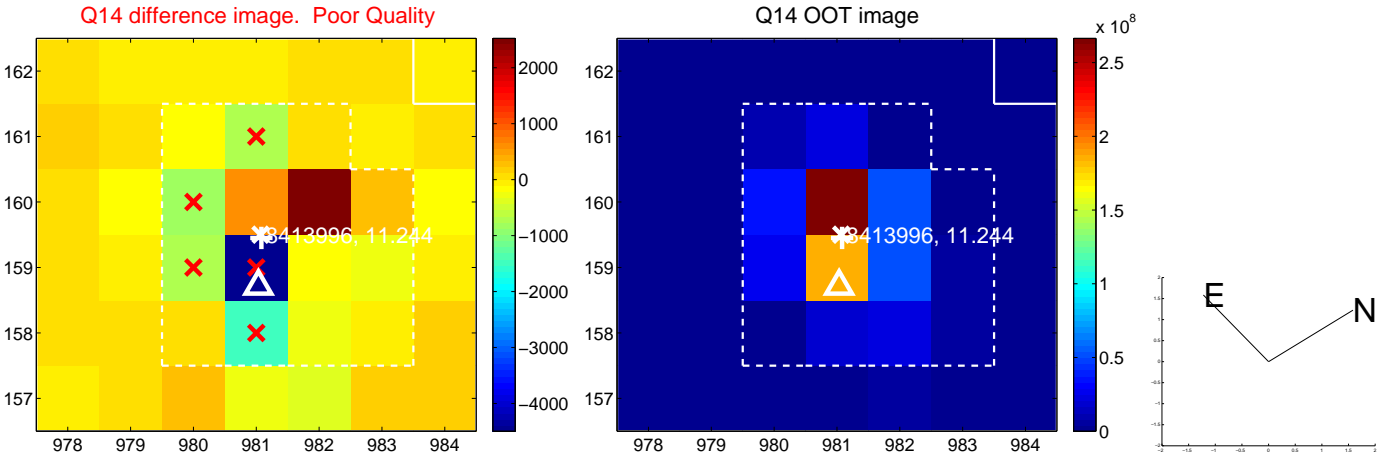
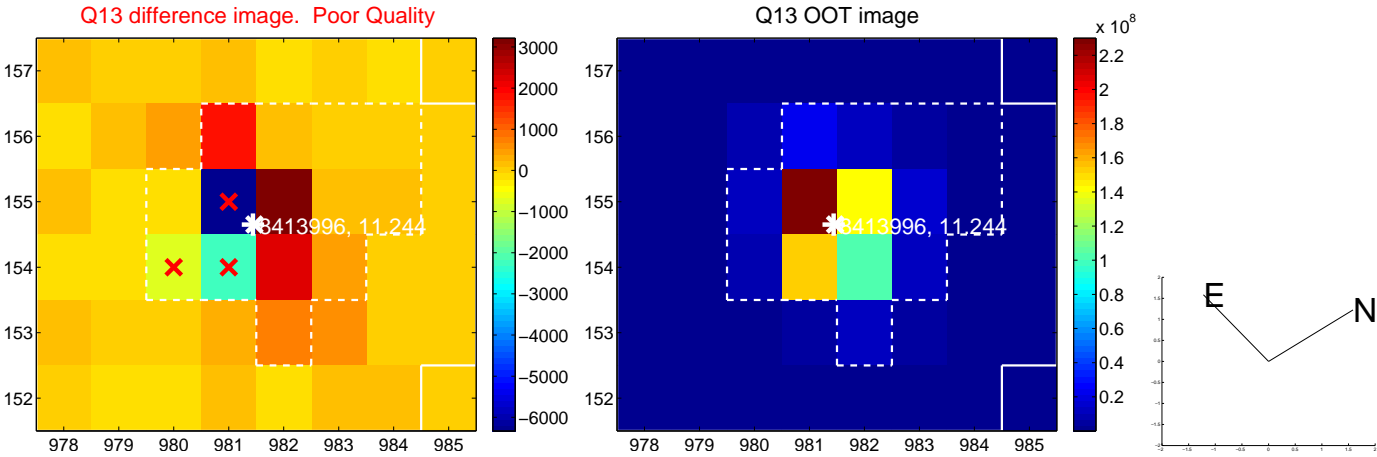
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



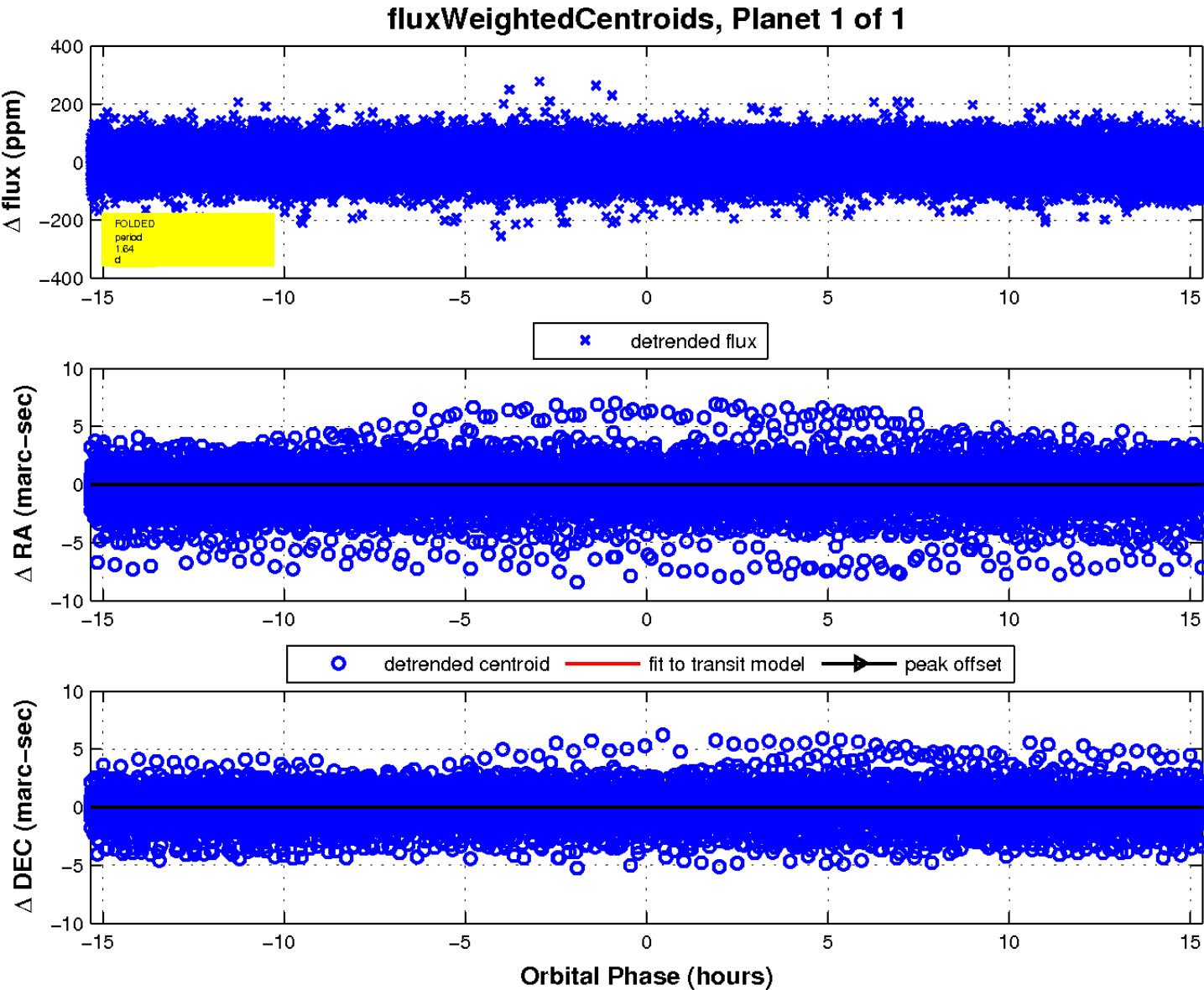
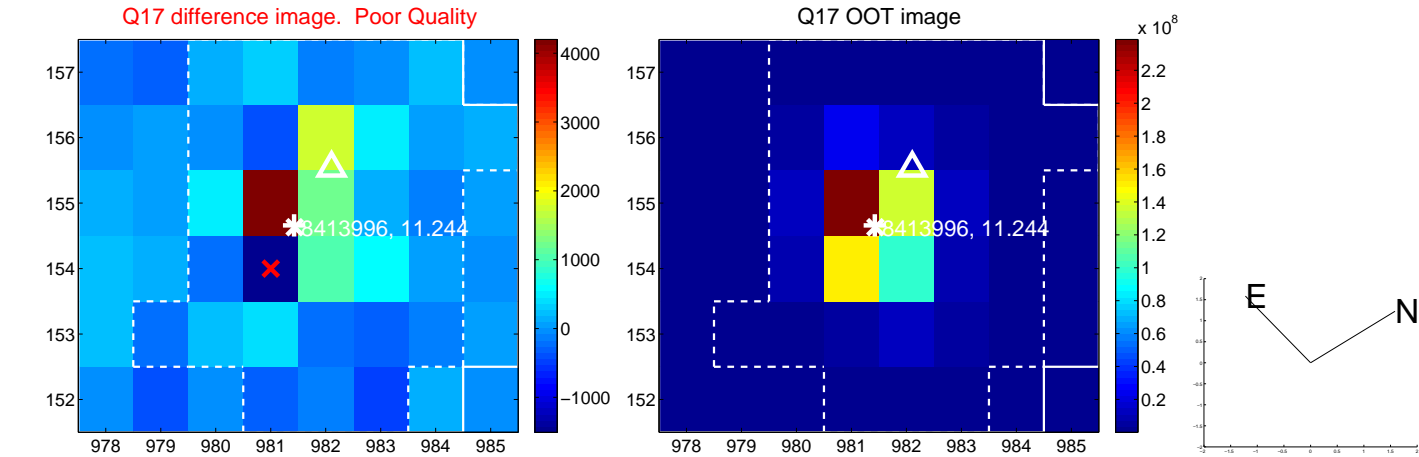
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UKIRT Image

Declination

