

KIC 007918401

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})
007918401-01	OBS	No	0.793014	131.952631	5.3	1.972	9.2	11.2	5.01	10604	1.20	440673.56

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007918401-01	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.

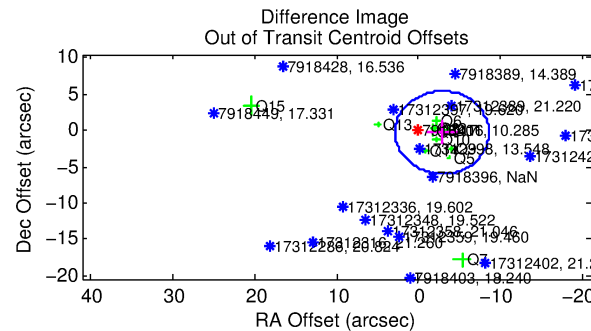
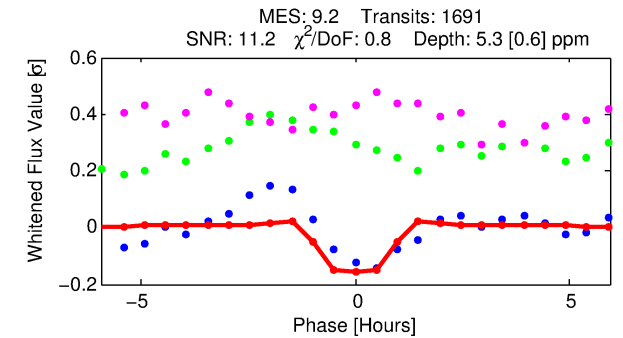
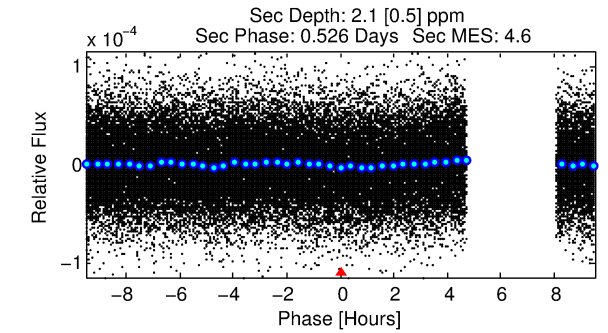
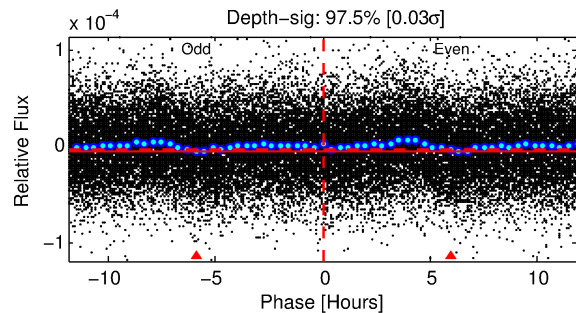
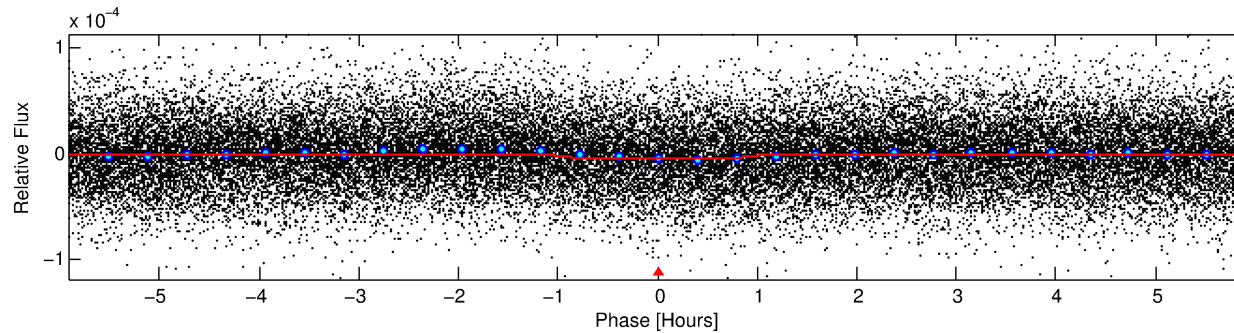
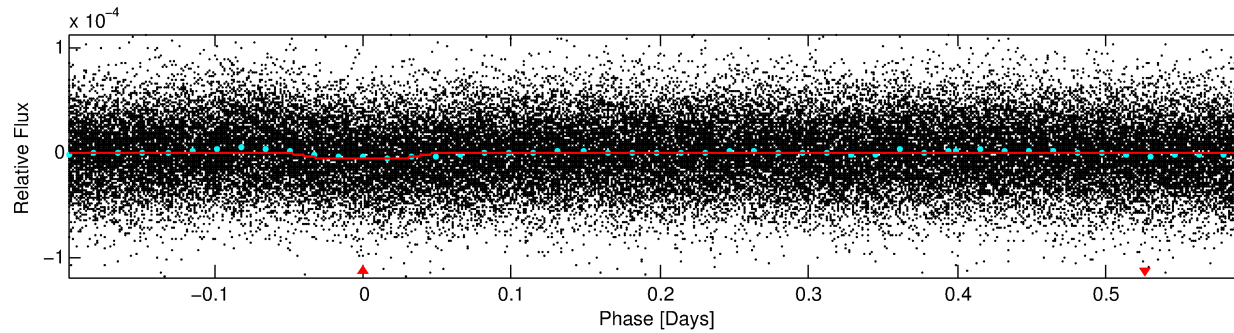
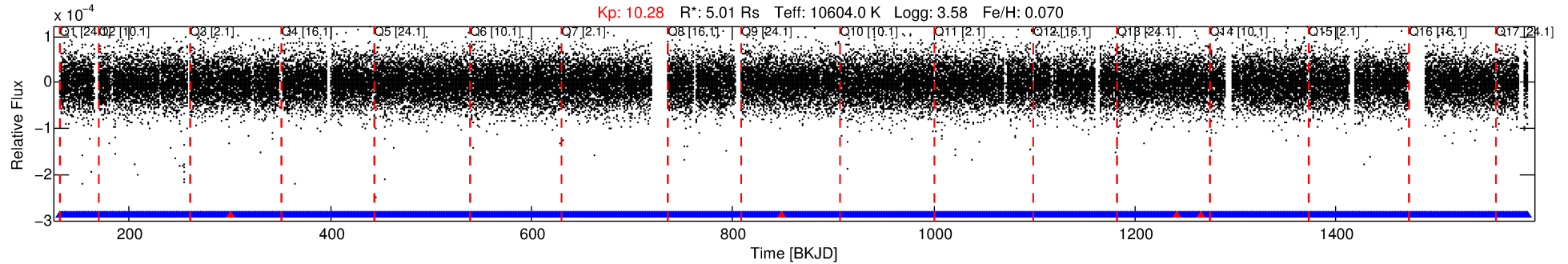
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007918401-01

No Significant Match Found

DV One-Page Summary

KIC: 7918401 Candidate: 1 of 1 Period: 0.793 d



DV Fit Results:

Period = 0.79301 [0.00001] d
Epoch = 131.9526 [0.0022] BKJD
Rp/R* = 0.0022 [0.0003]
a/R* = 2.99 [2.61]
b = 0.32 [2.78]
Seff = 440673.56 [350868.42]
Teq = 6570 [1308] K
Rp = 1.20 [0.62] Re
a = 0.0254 [0.0123] AU
Ag = 0.53 [0.45] [-1.05 σ]
Teffp = 8647 [871] K [1.32 σ]

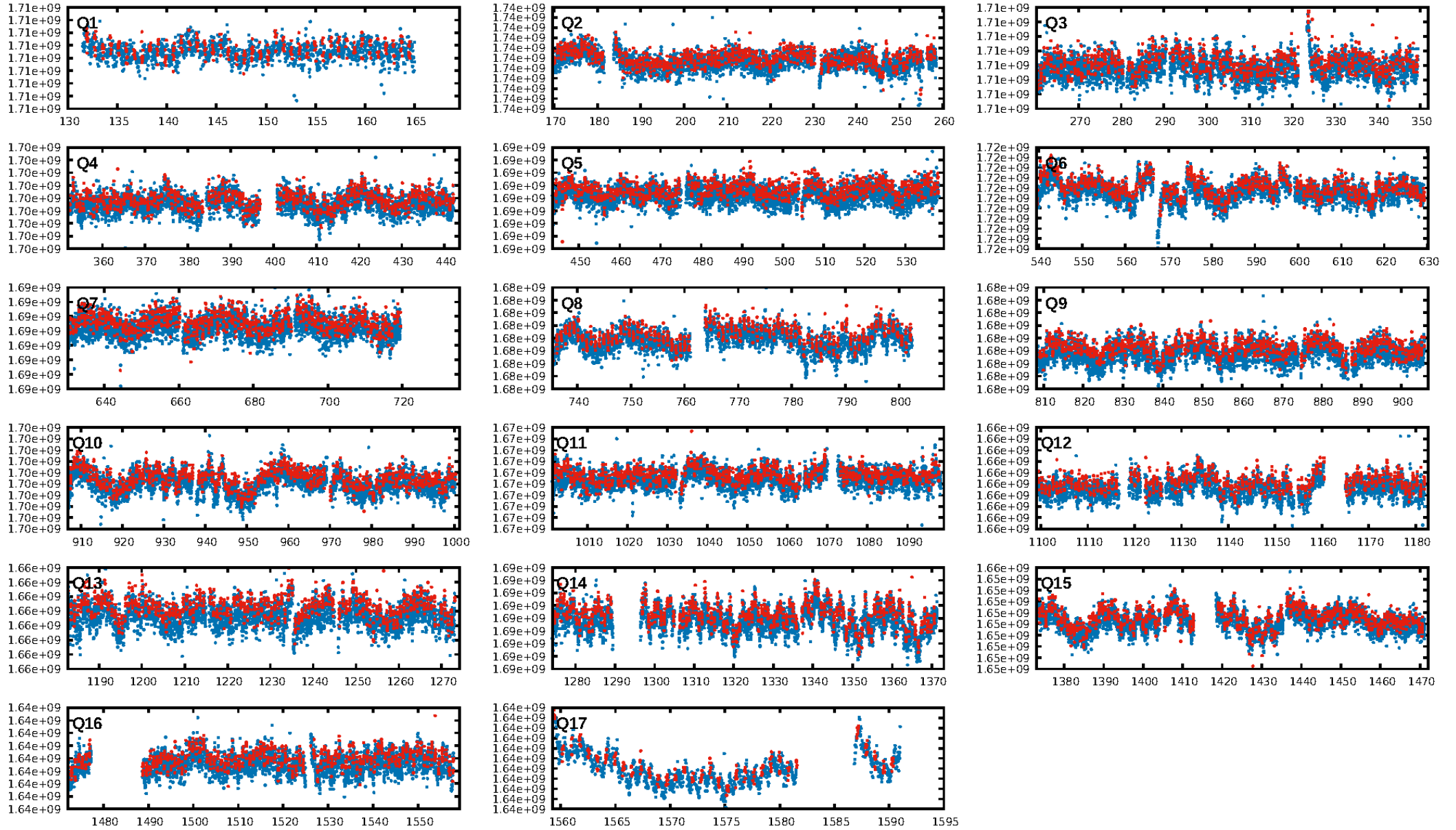
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 2.14e-17
RollingBand-fgt: 1.00 [1611/1615]
GhostDiagnostic-chr: N/A
Centroid-sig: 80.8%
Centroid-so: 1.556 arcsec [0.65 σ]
OotOffset-rm: 2.866 arcsec [1.50 σ]
KicOffset-rm: 3.368 arcsec [1.68 σ]
OotOffset-st: 3/2/4/4 [13]
KicOffset-st: 3/2/4/4 [13]
DiffImageQuality-fgm: 0.00 [0/13]
DiffImageOverlap-fno: 1.00 [17/17]

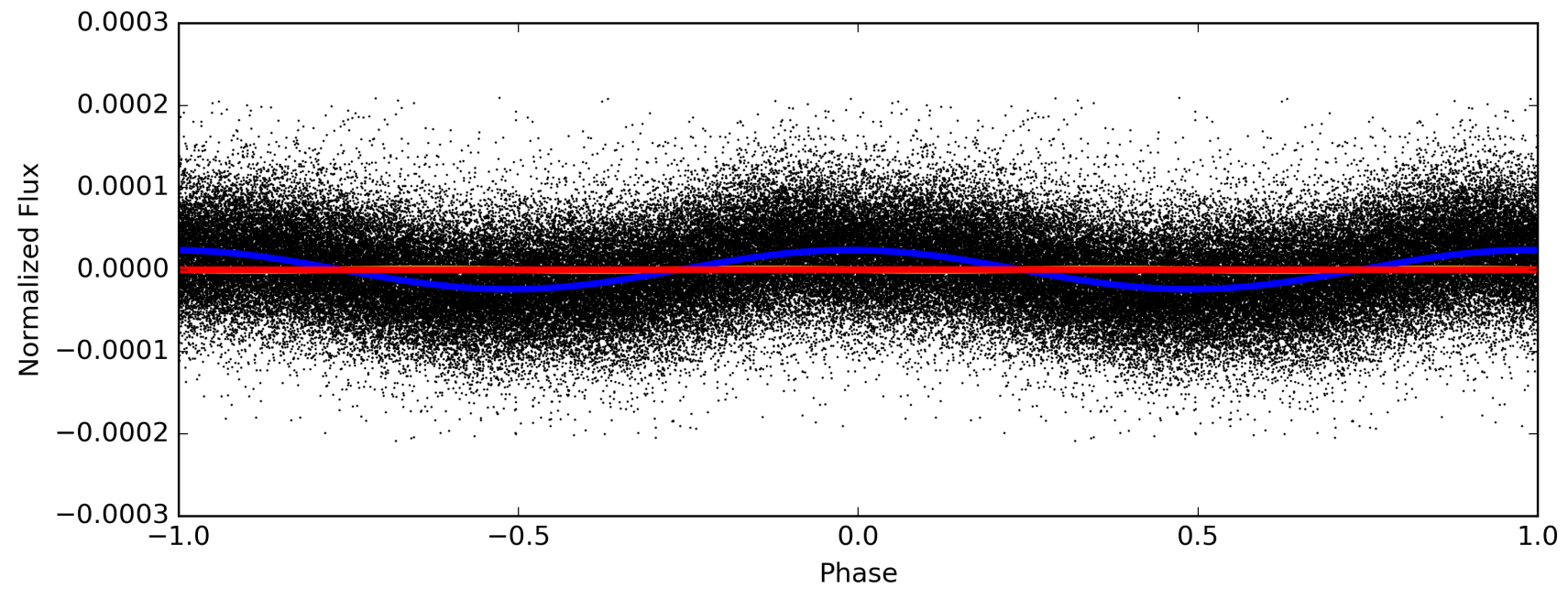
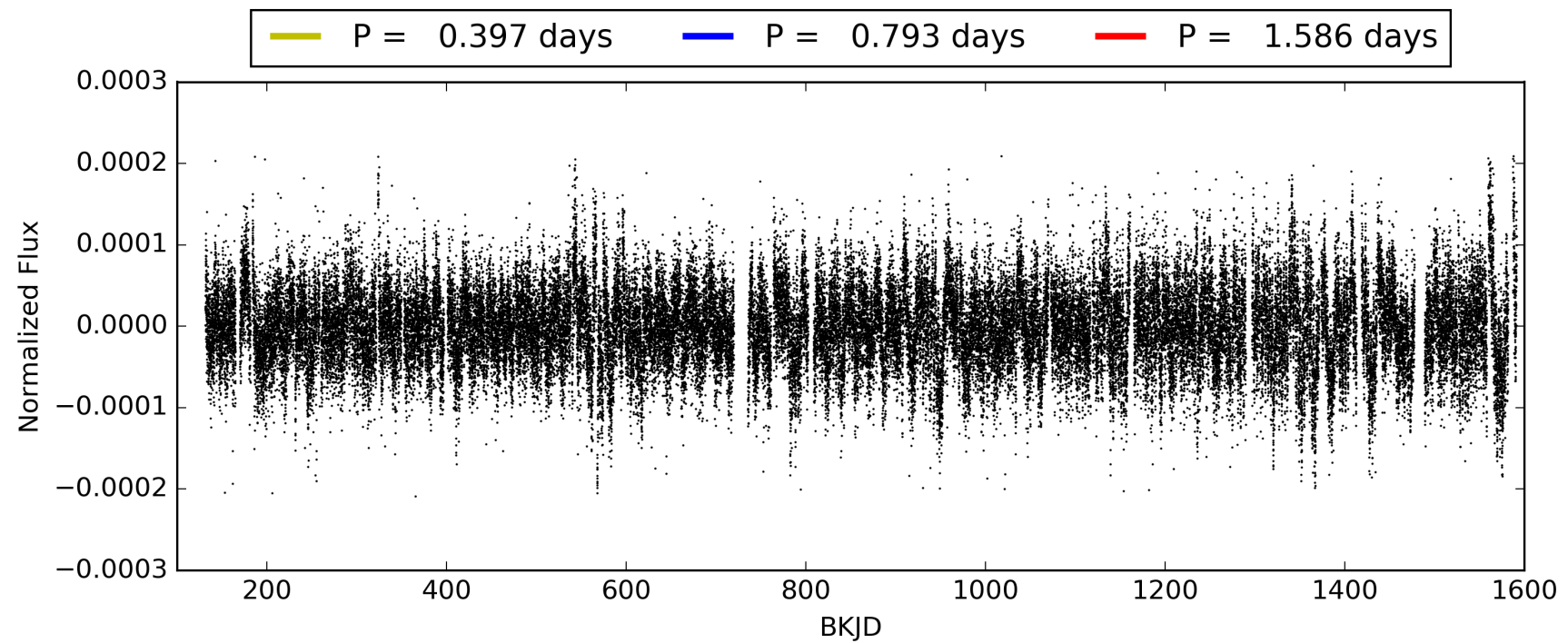
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 18:18:36 Z

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

TCE 007918401-01, PDC Light Curves

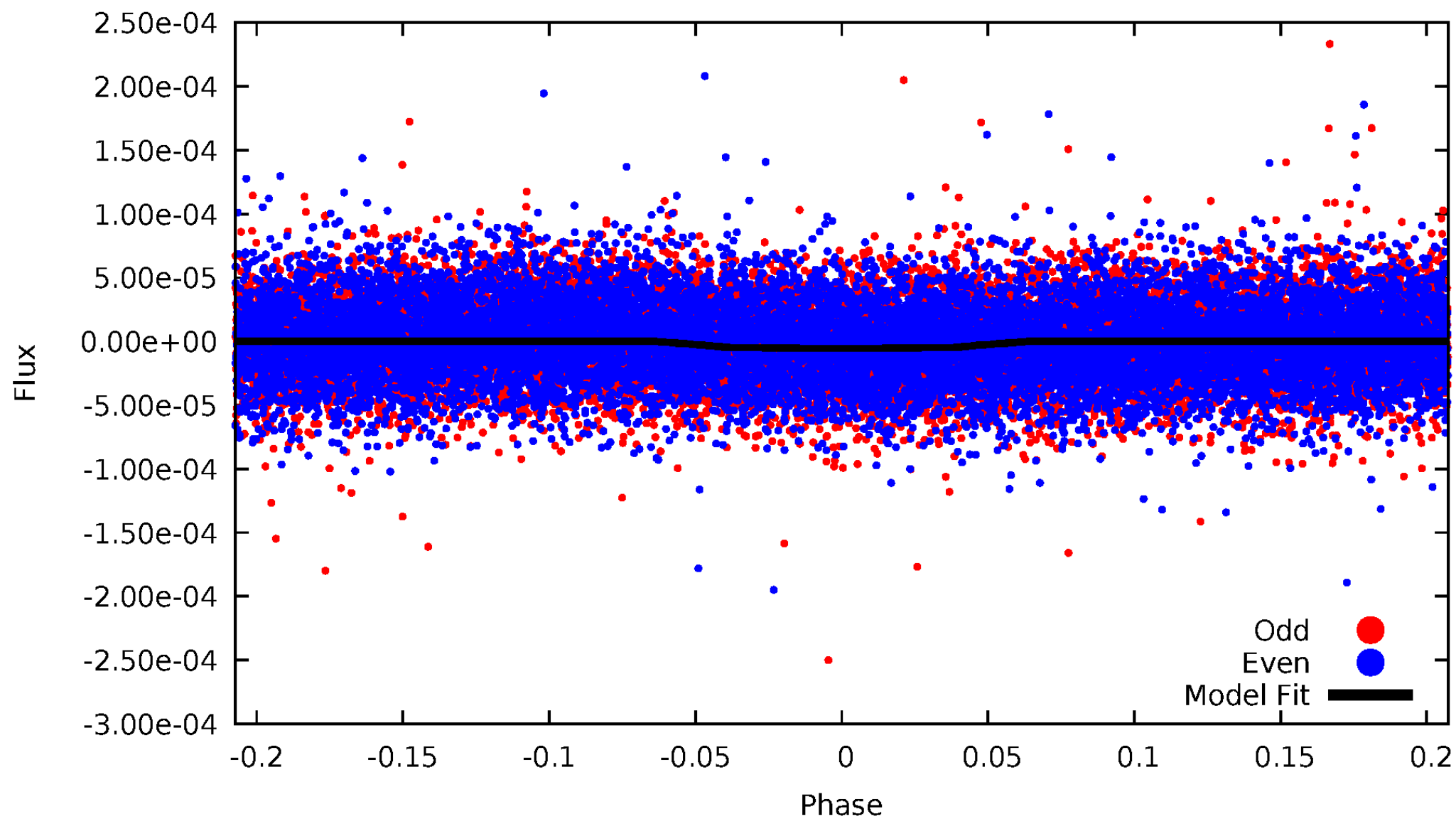


TCE 007918401-01



DV Odd/Even

TCE 007918401-01

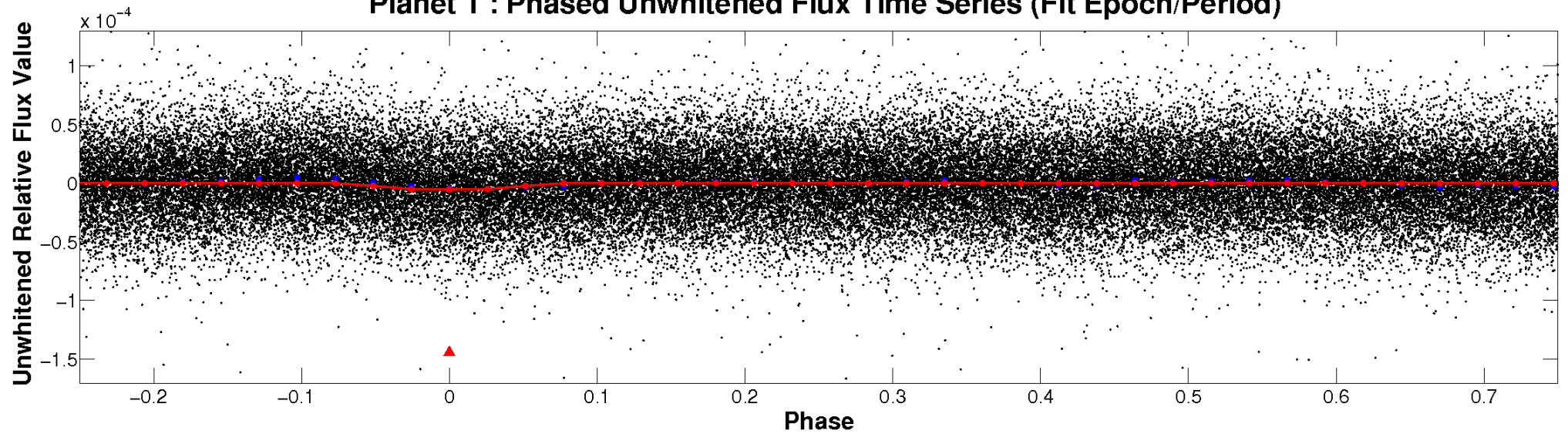


ALT Odd/Even

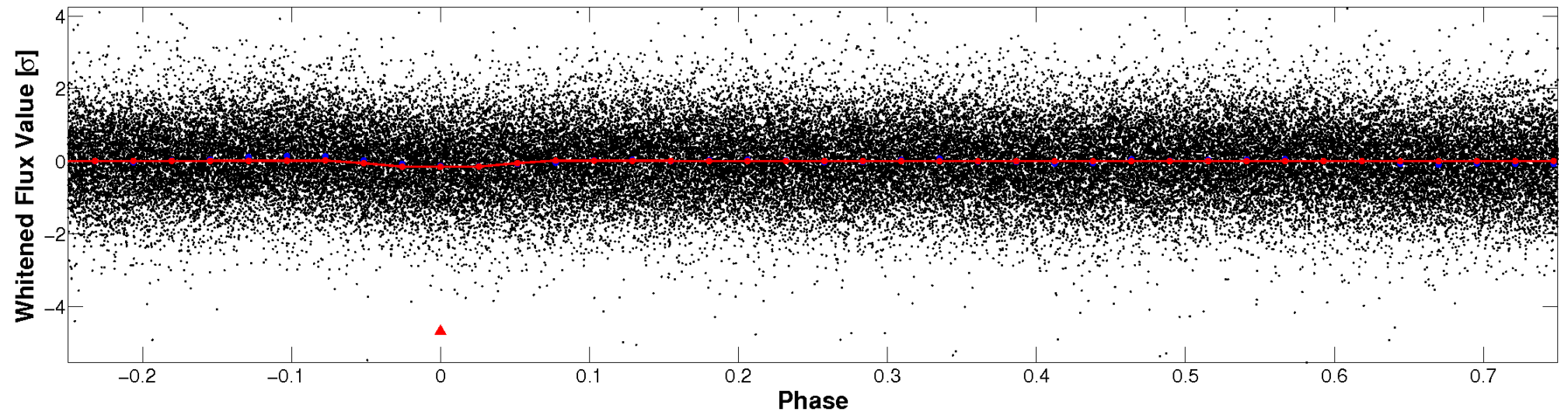
This plot does not exist for this TCE.

Non-Whitened Vs. Whitened Light Curve

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

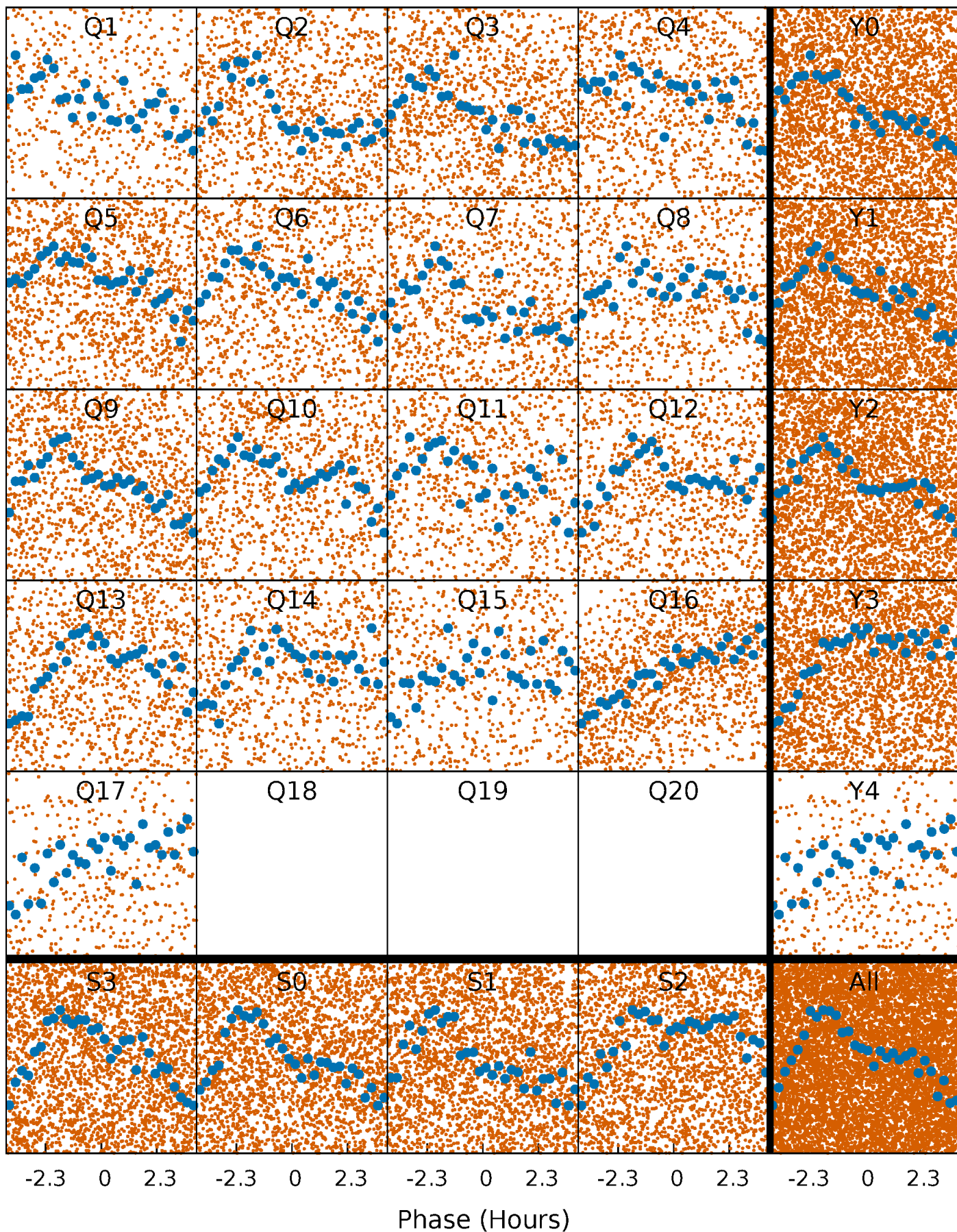


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



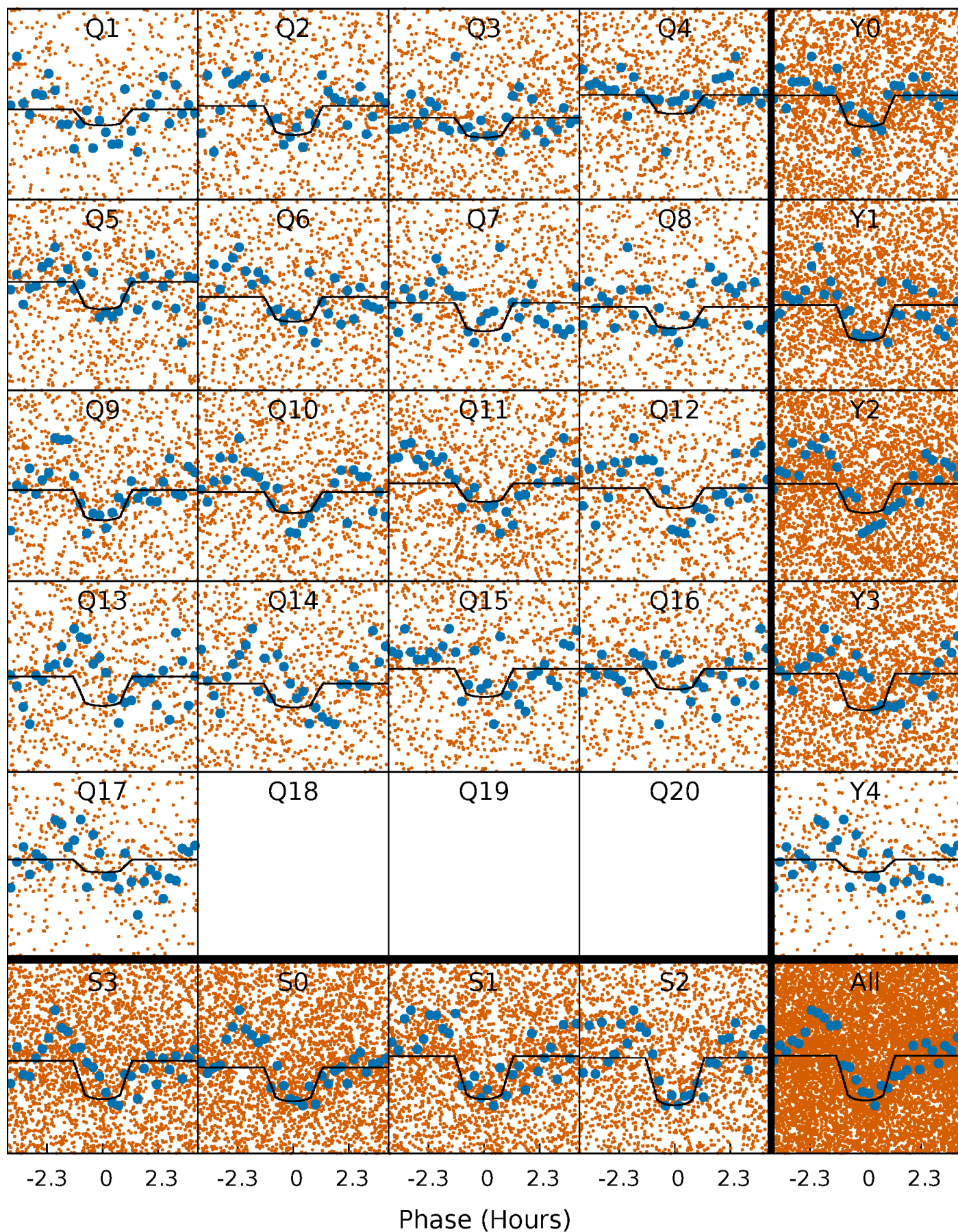
PDC Quarter-Phased Transit Curves

TCE 007918401-01 P= 0.793014 Days $T_0=131.952631$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 007918401-01 P= 0.793014 Days $T_0=131.952631$ (BKJD)

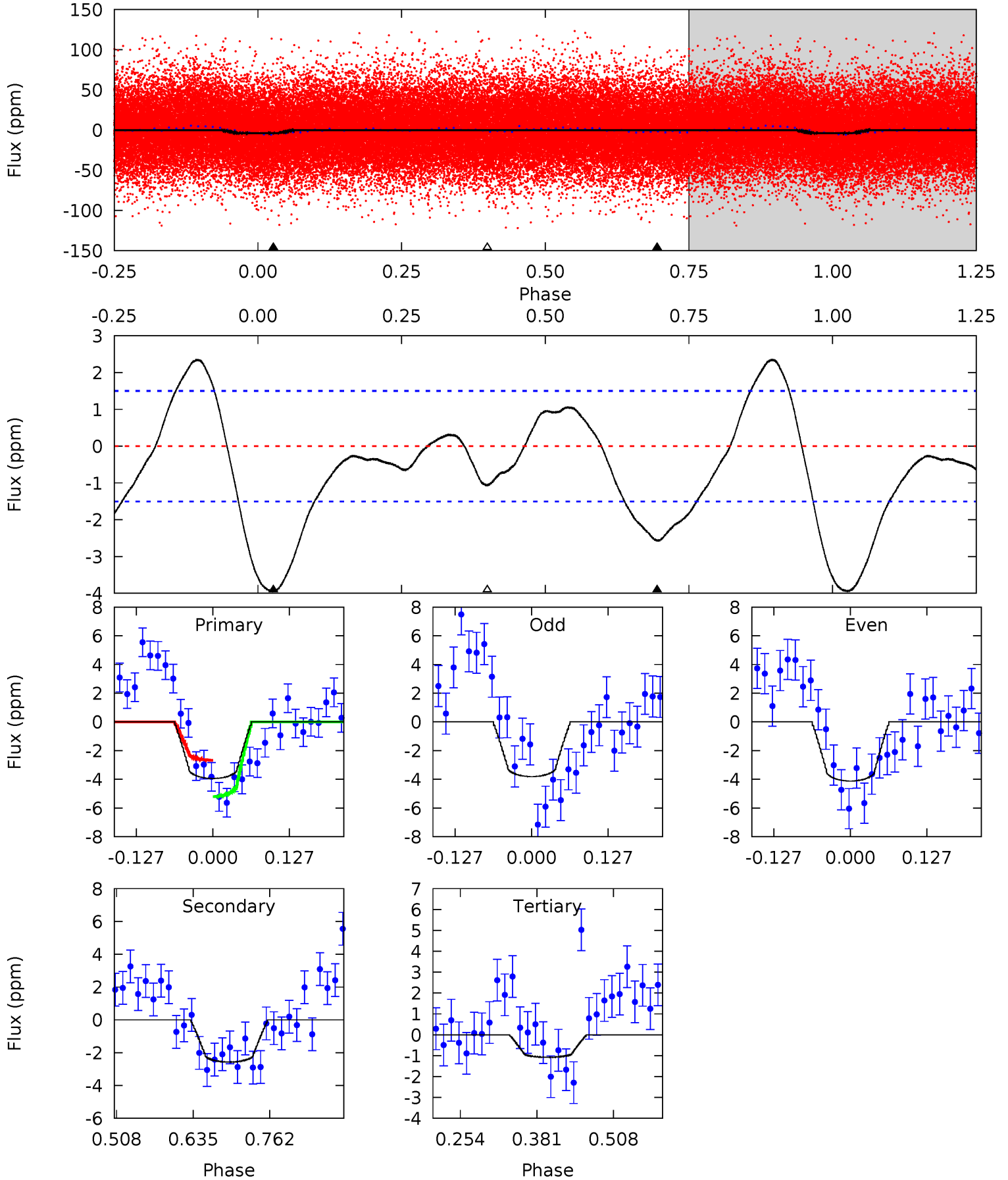


This plot does not exist for this TCE.

DV Model-Shift Uniqueness Test

007918401-01, P = 0.793014 Days, E = 131.159617 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.8	7.72	3.23	0	4.51	1.53	2.53	8.62	11.8	4.49	7.72	0.47	1.05	0.37	3.83



Alt Model-Shift Uniqueness Test

This plot does not exist for this TCE.

Stellar Parameters For KIC 007918401

	$T_{\text{eff}} (K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	10604^{+331}_{-441}	$3.579^{+0.459}_{-0.051}$	$0.070^{+0.150}_{-0.550}$	$5.007^{+0.277}_{-2.489}$	$3.468^{+0.069}_{-1.006}$	$0.039^{+0.197}_{-0.007}$
	+3%/-4%	+13%/-1%	+214%/-786%	+6%/-50%	+2%/-29%	+505%/-17%
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 007918401-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-3 ± 0	$1.07^{+0.25}_{-0.28}$	8809^{+589}_{-1108}	7249^{+1383}_{-1118}	$0.767^{+0.573}_{-0.251}$
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 $A_{obs} \gg 1.0$

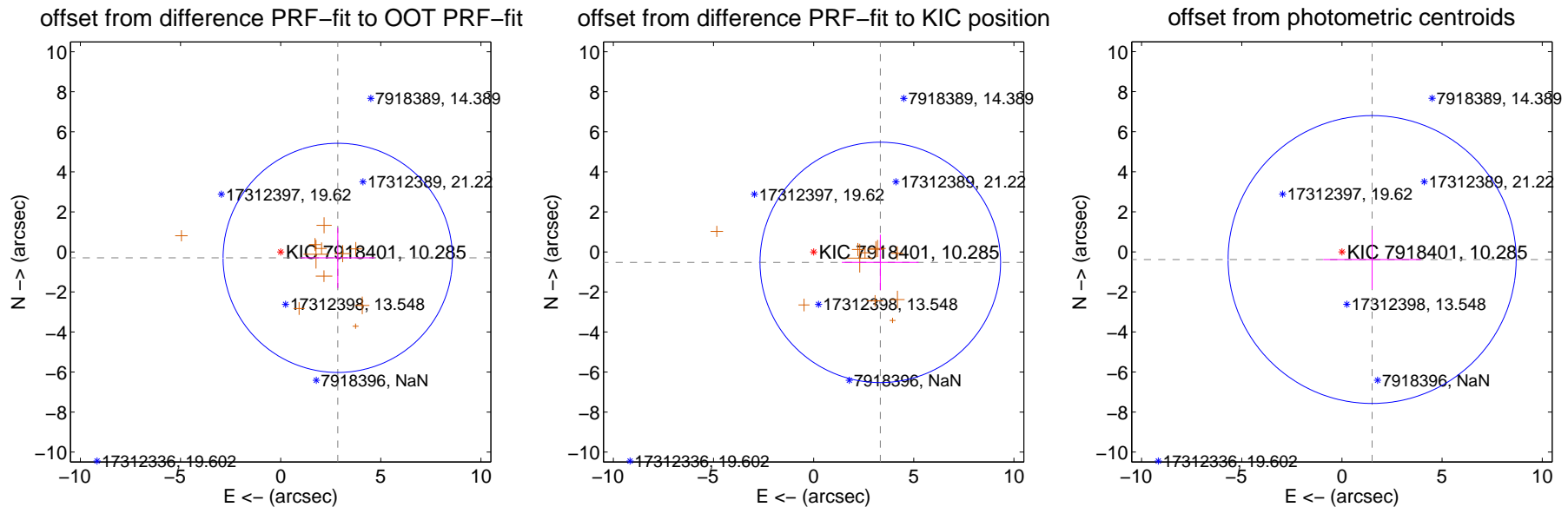
DV Centroid Data

Supplemental centroid analysis for 007918401-01. **Kepler magnitude: 10.29.** Transit SNR 11.17

There are 0 quarters with good PRF difference image offsets

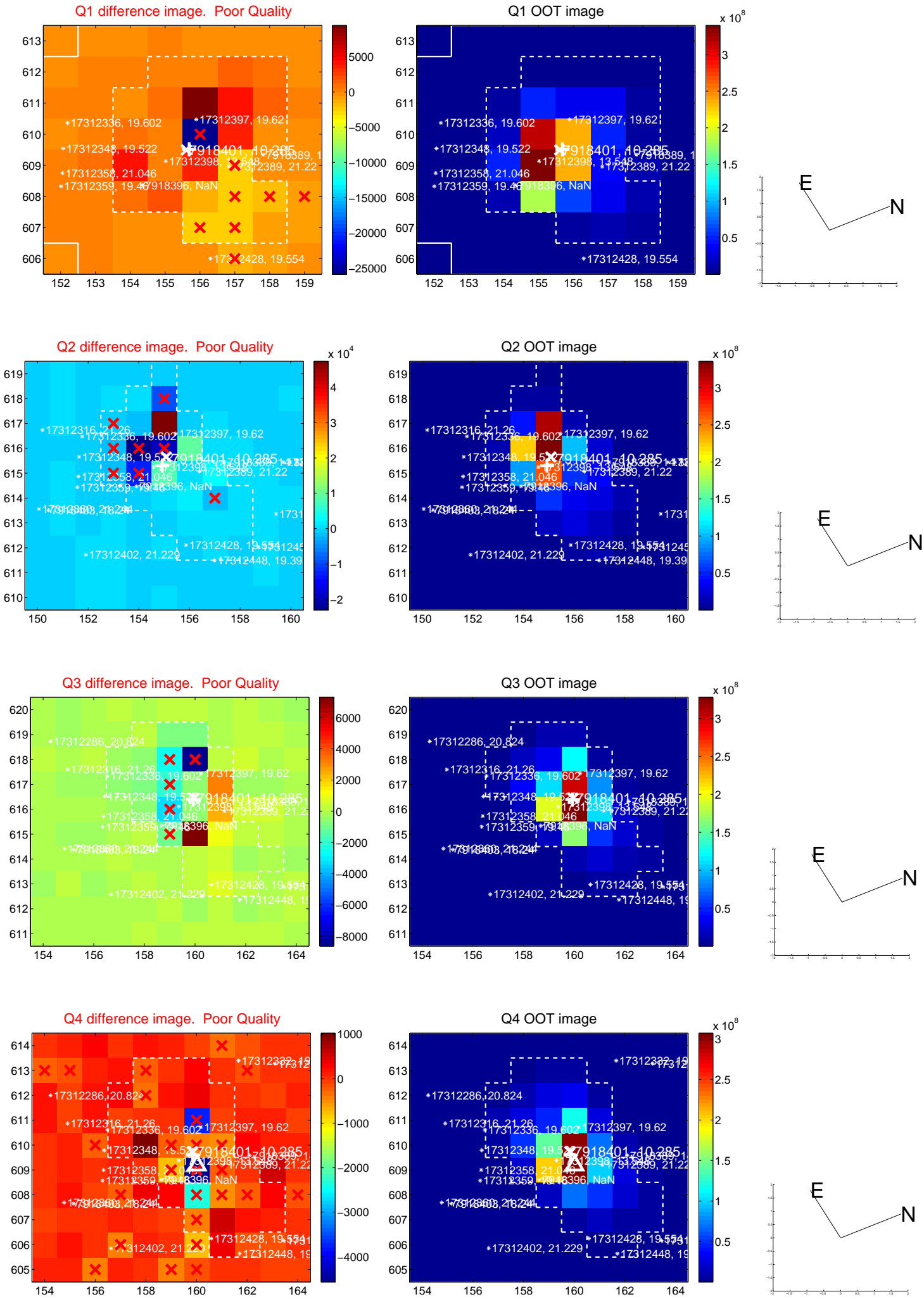
The direct PRF centroid is offset from the target star catalog position by about 0.28 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.866 ± 1.908	1.50	-2.850 ± 1.852	-0.298 ± 1.506
PRF-fit source offset from KIC position	3.368 ± 2.001	1.68	-3.327 ± 1.921	-0.523 ± 1.386
photometric centroid source offset	1.56 ± 2.40	0.65	-1.51 ± 2.44	-0.38 ± 1.48

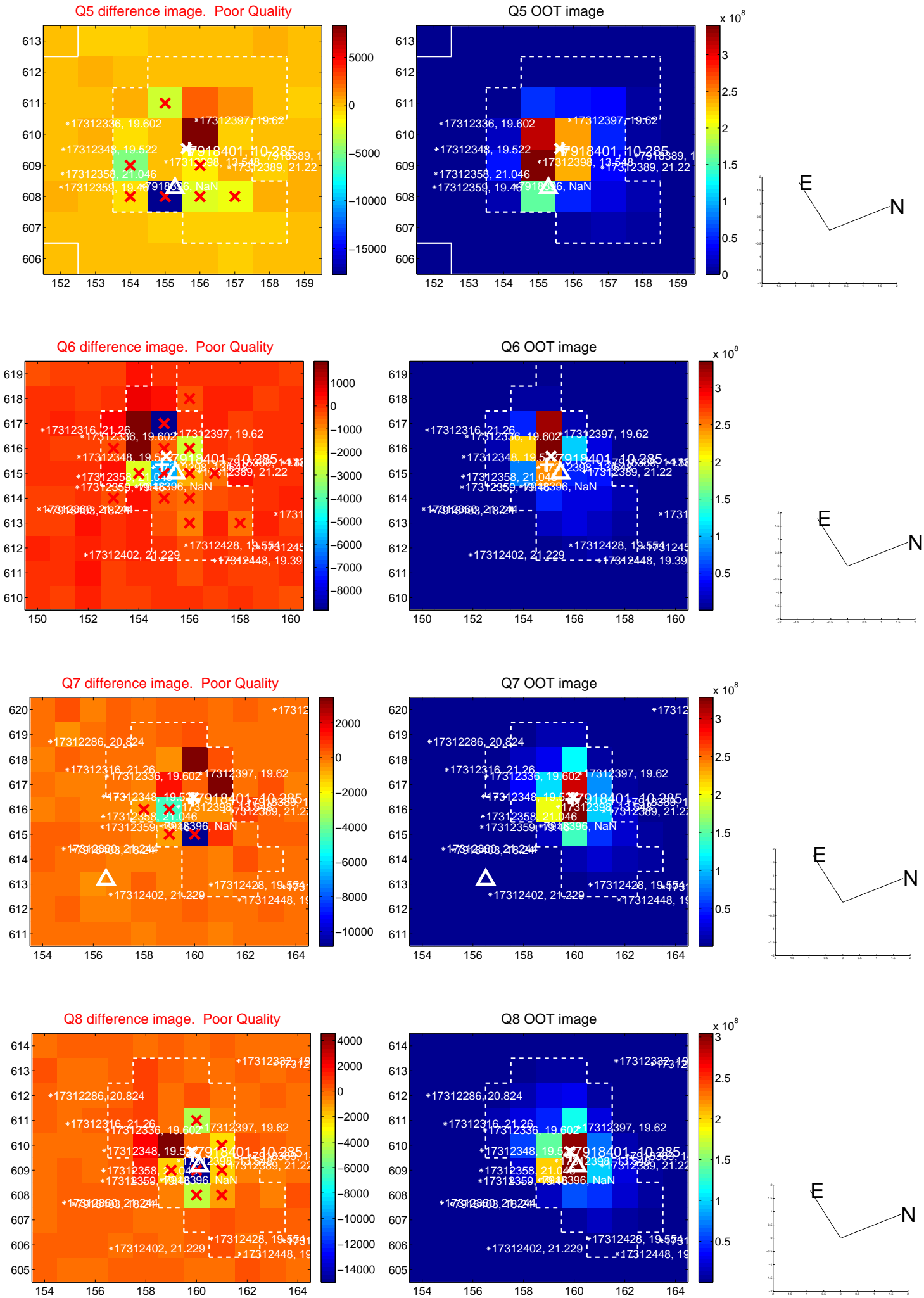


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

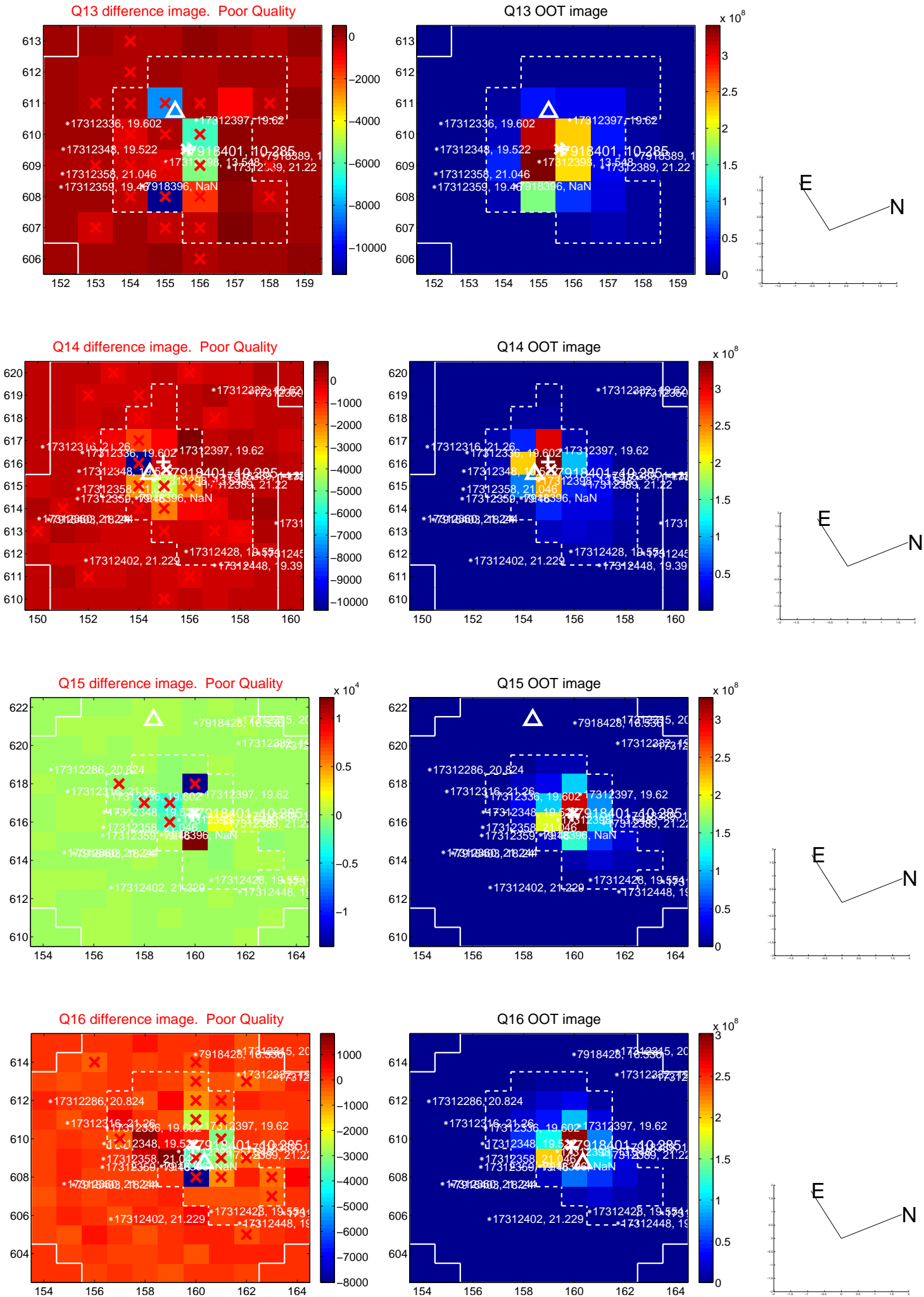
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



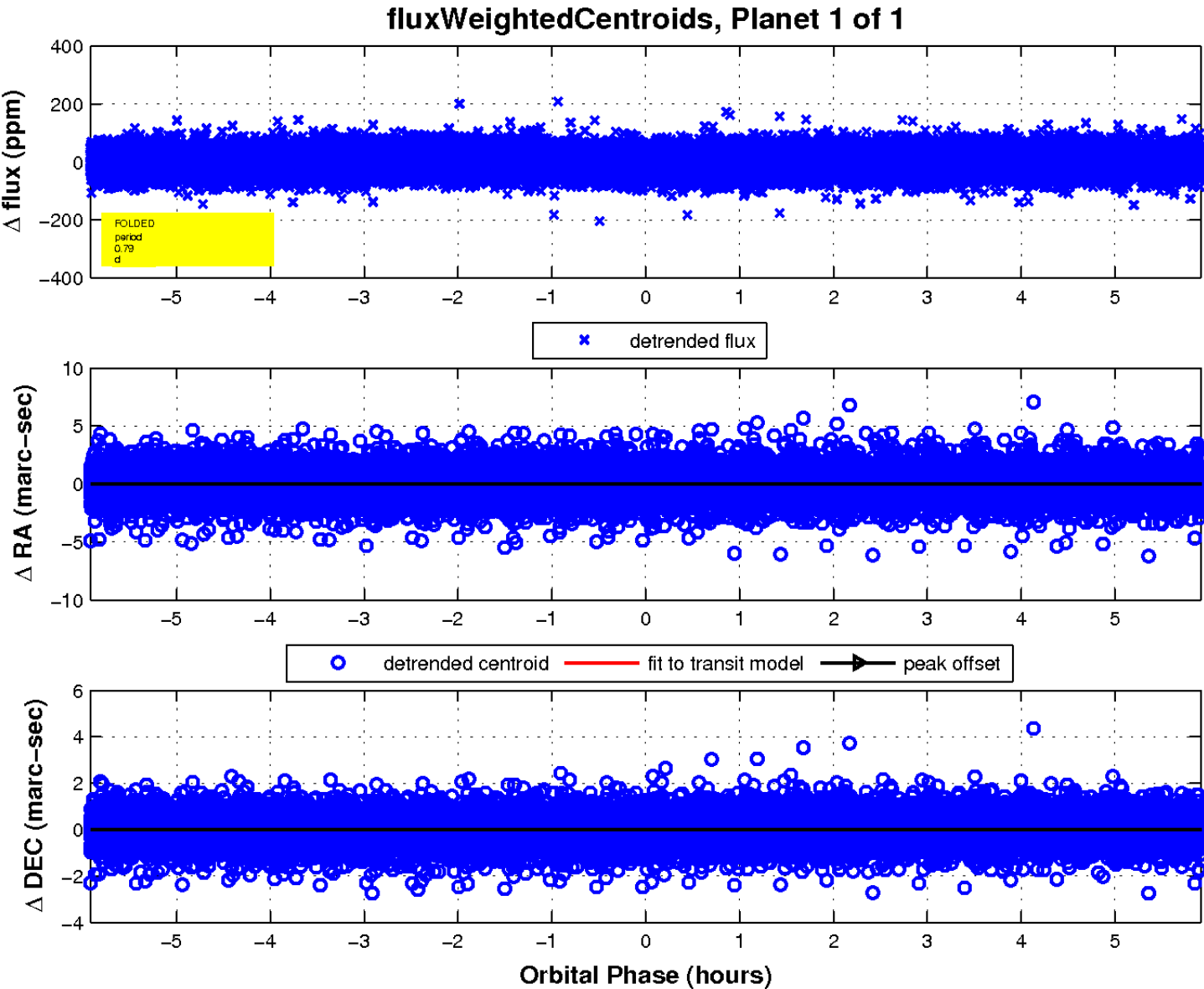
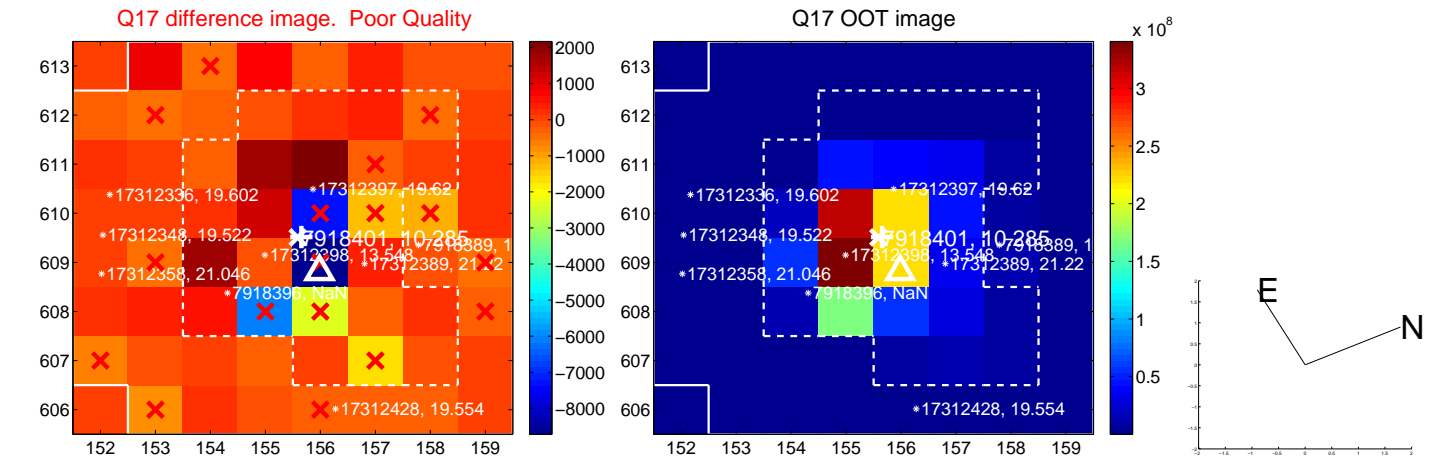
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

