KIC 008976195

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 ($S_\oplus$)
008976195-01	OBS	No	1.113143	132.567444	249.3	2.000	7.6	-1.0	4.99	6608	7.95	60427.09

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008976195-01	OBS	FP	0.00	1	0	1	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—CENT_NOFITS—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.

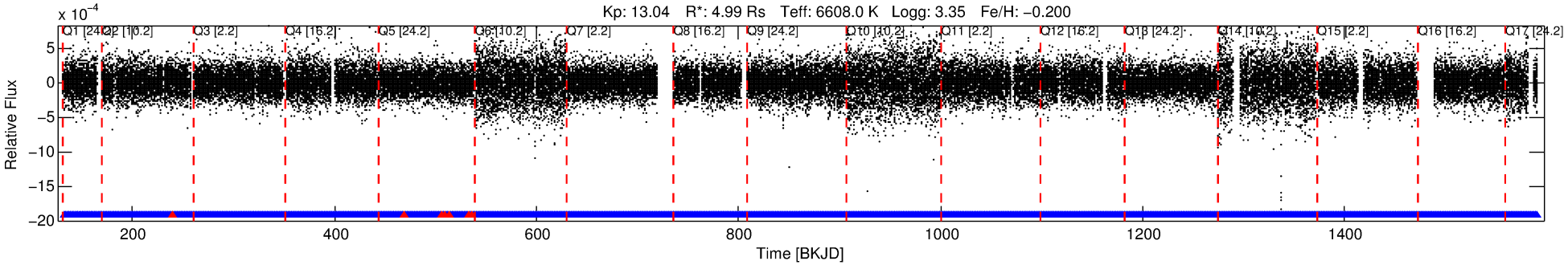
Ephemeris Match Information For 008976195-01

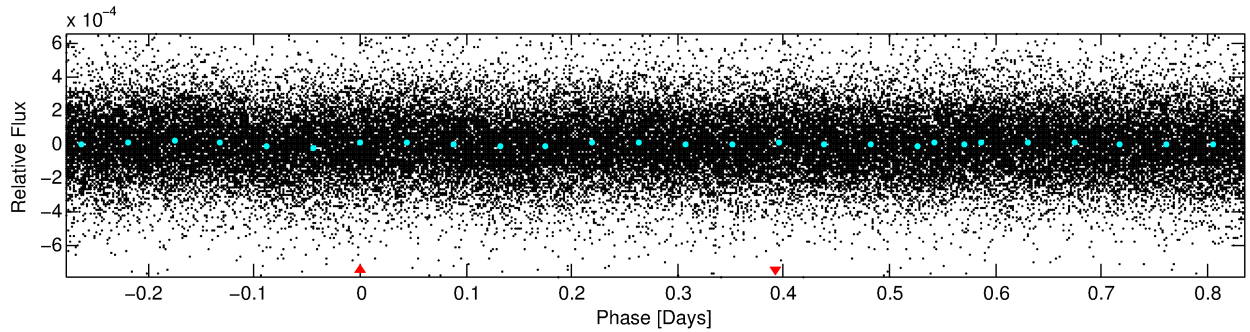
No Significant Match Found

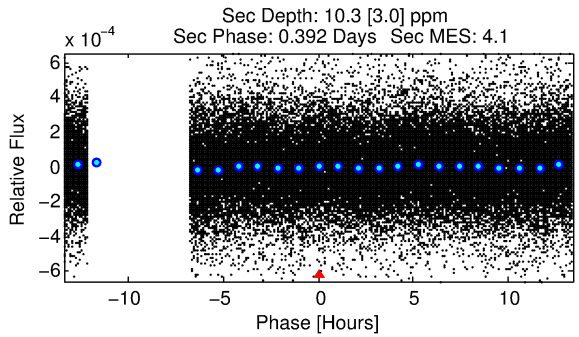
DV One-Page Summary

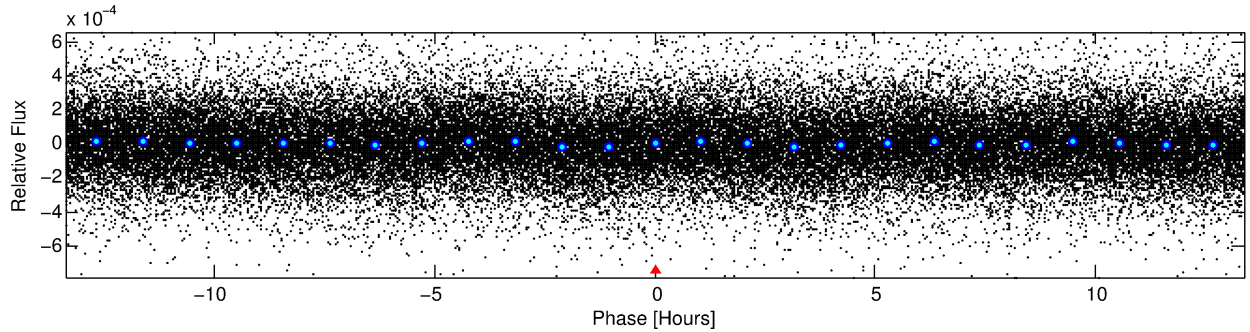
KIC: 8976195 Candidate: 1 of 1 Period: 1.113 d

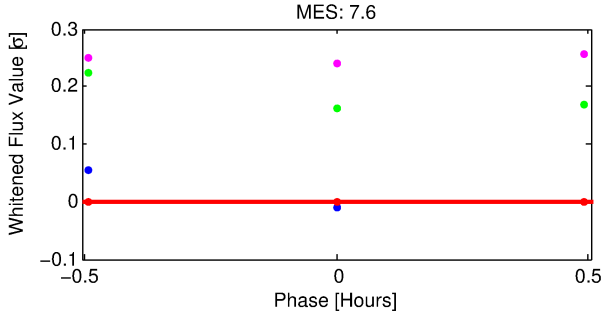
Kp: 13.04 R*: 4.99 Rs Teff: 6608.0 K Logg: 3.35 Fe/H: −0.200

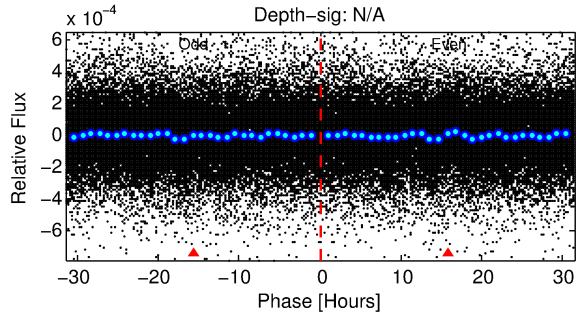


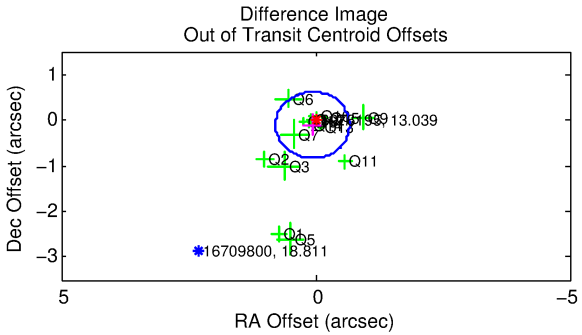












TPS TCE Results:

Period = 1.11314 d
Epoch = 132.5674 BKJD

DV fit results are unavailable

DV Diagnostic Results:

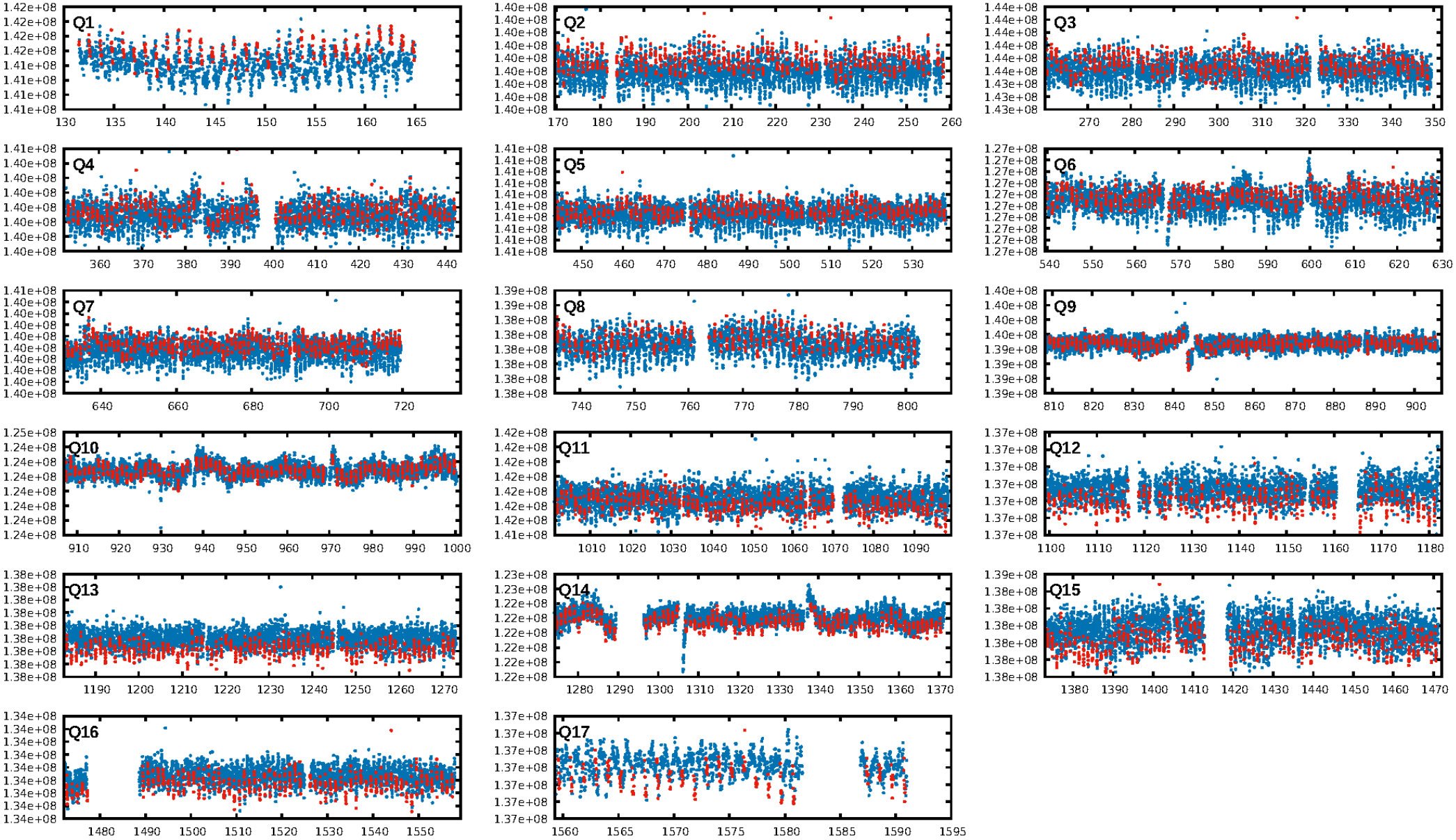
ShortPeriod−sig: N/A
LongPeriod−sig: N/A
ModelChiSquare2−sig: N/A
ModelChiSquareGof−sig: N/A
Bootstrap−pfa: 7.37e−13
RollingBand−fgt: 0.99 [1146/1154]
GhostDiagnostic−chr: −0.139

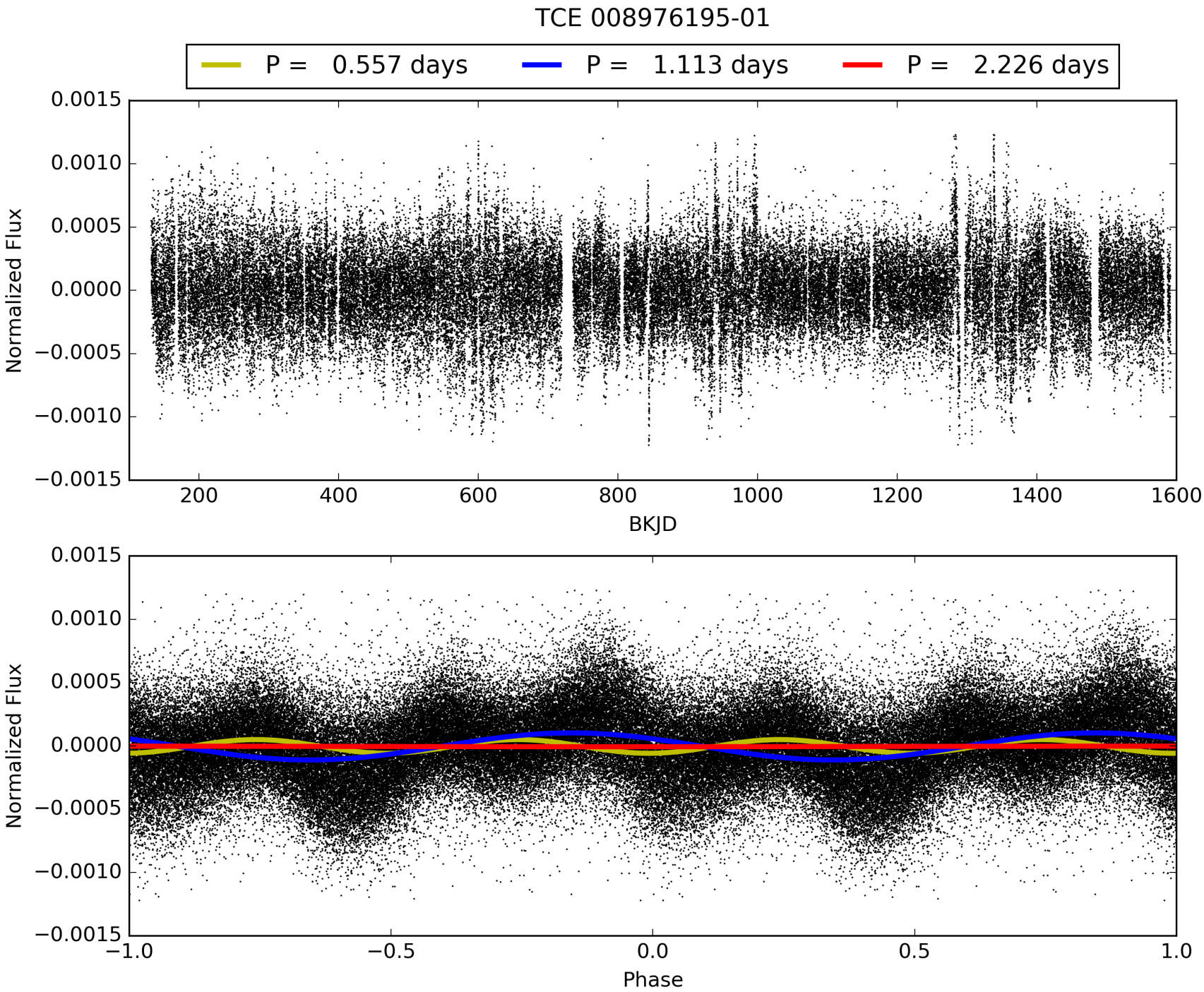
Centroid−sig: 1.2%
Centroid−so: 0.197 arcsec [1.42σ]
OotOffset−rm: 0.125 arcsec [0.51σ]
KicOffset−rm: 0.102 arcsec [0.43σ]
OotOffset−st: 4/4/2/5 [15]
KicOffset−st: 4/4/2/5 [15]
DiffImageQuality−fgm: 0.60 [9/15]
DiffImageOverlap−fno: 1.00 [17/17]

Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 −− Date Generated: 31−Jan−2016 15:47:32 Z

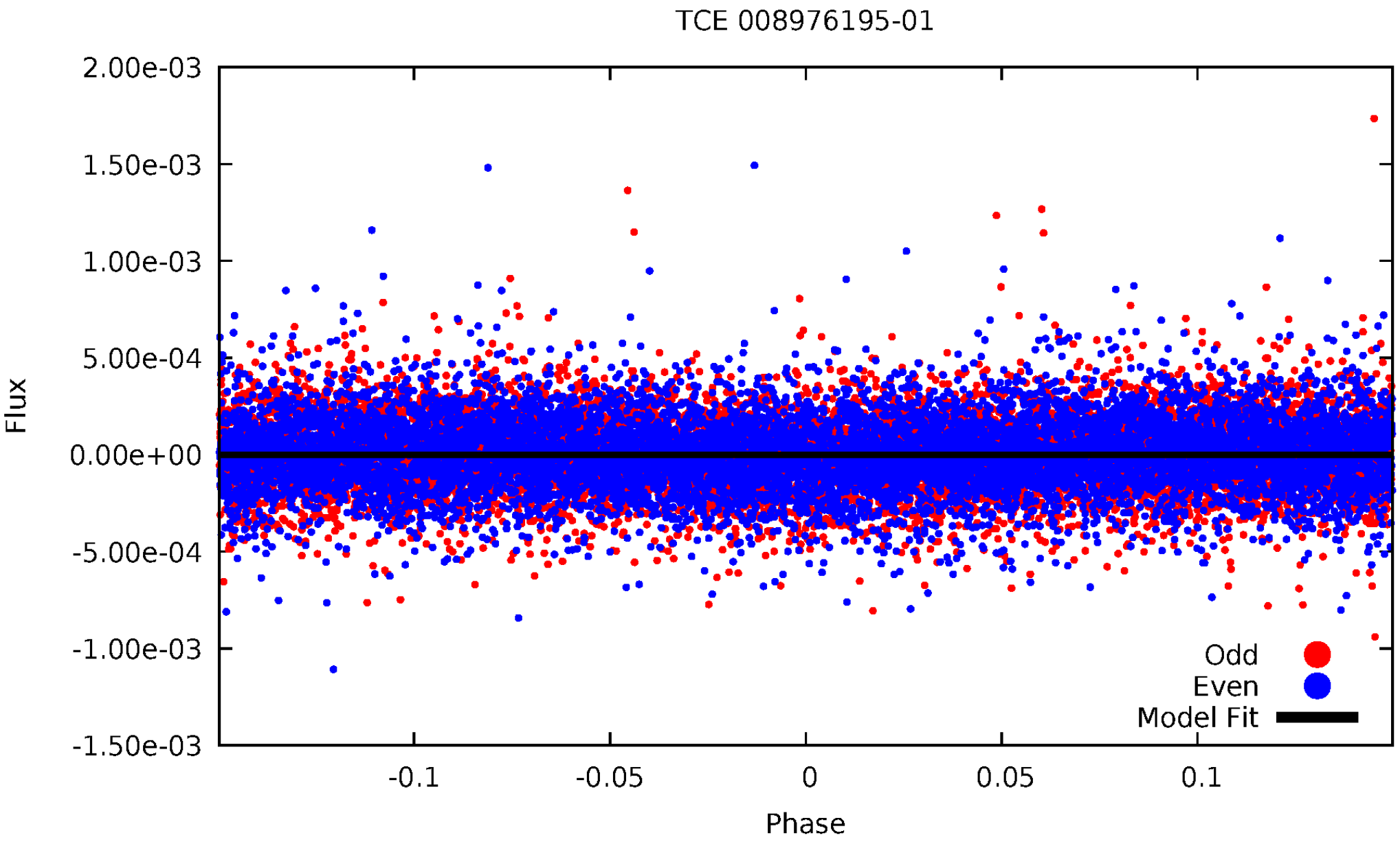
This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

TCE 008976195-01, PDC Light Curves

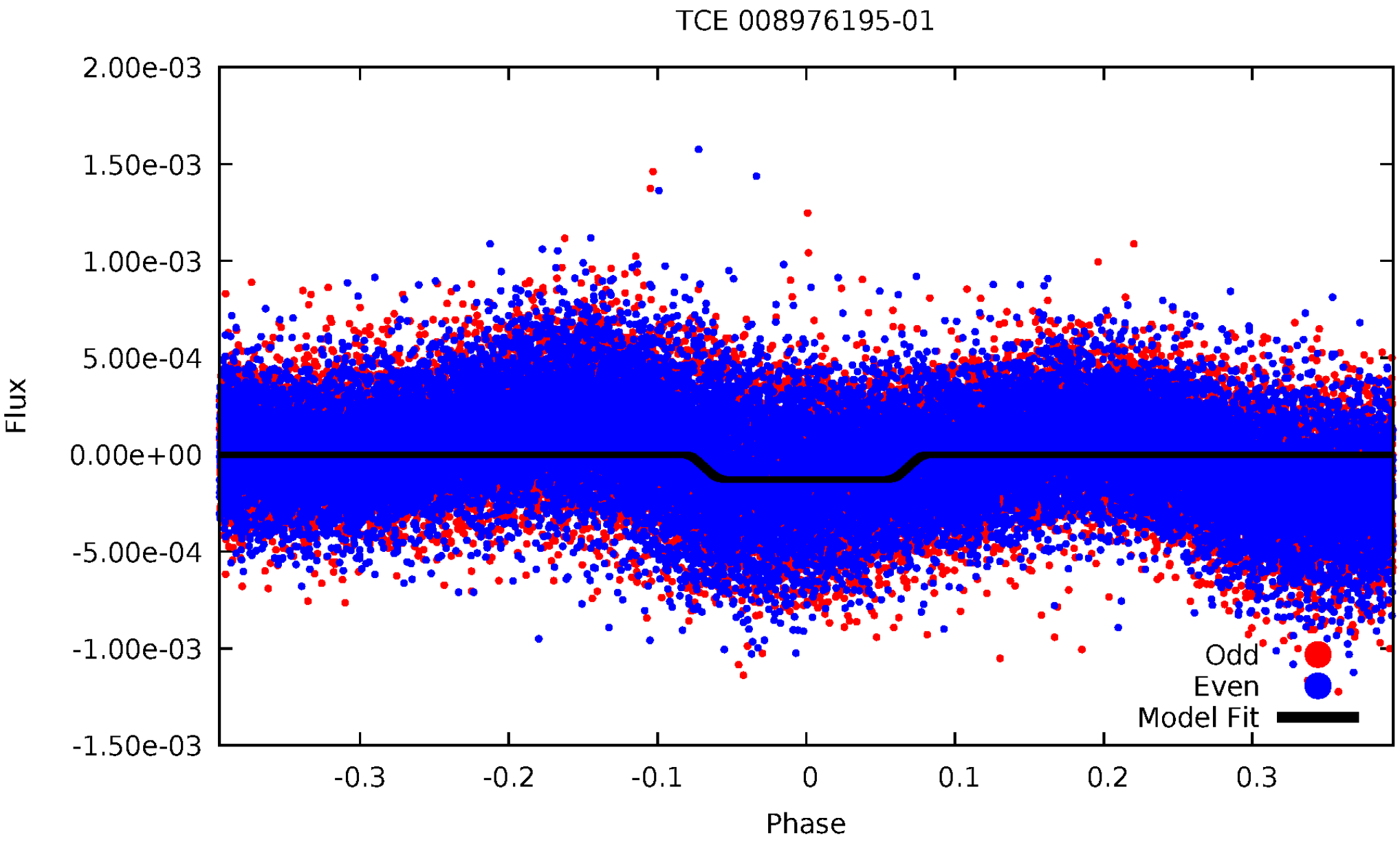



TCE 008976195-01
P = 0.557 days
P = 1.113 days
P = 2.226 days
Normalized Flux
BKJD
Phase

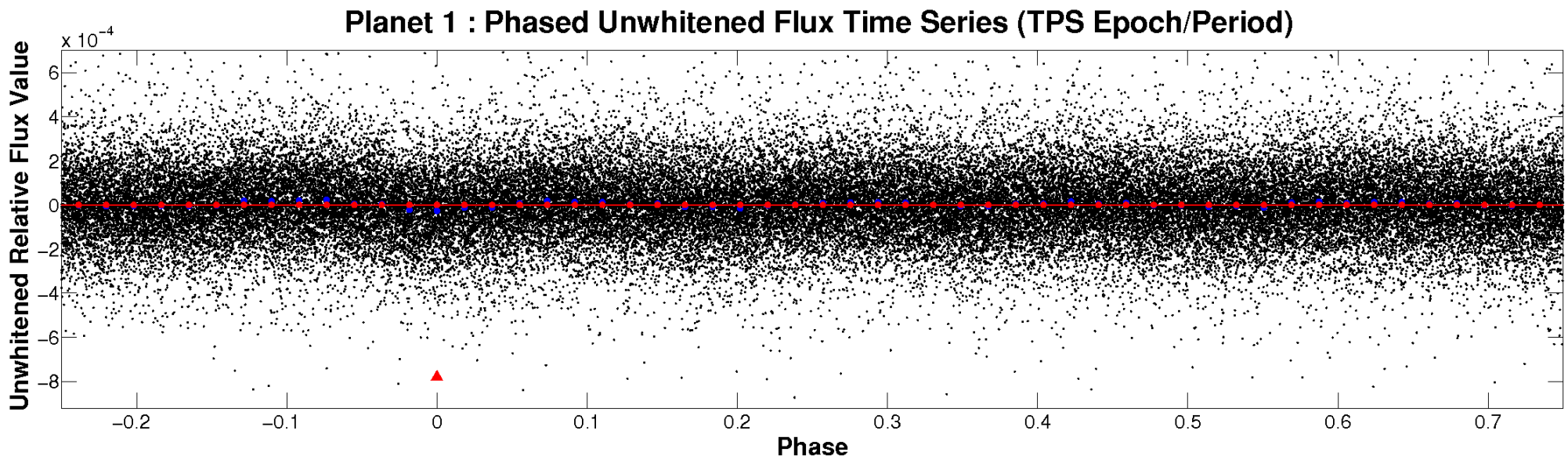
DV Odd/Even

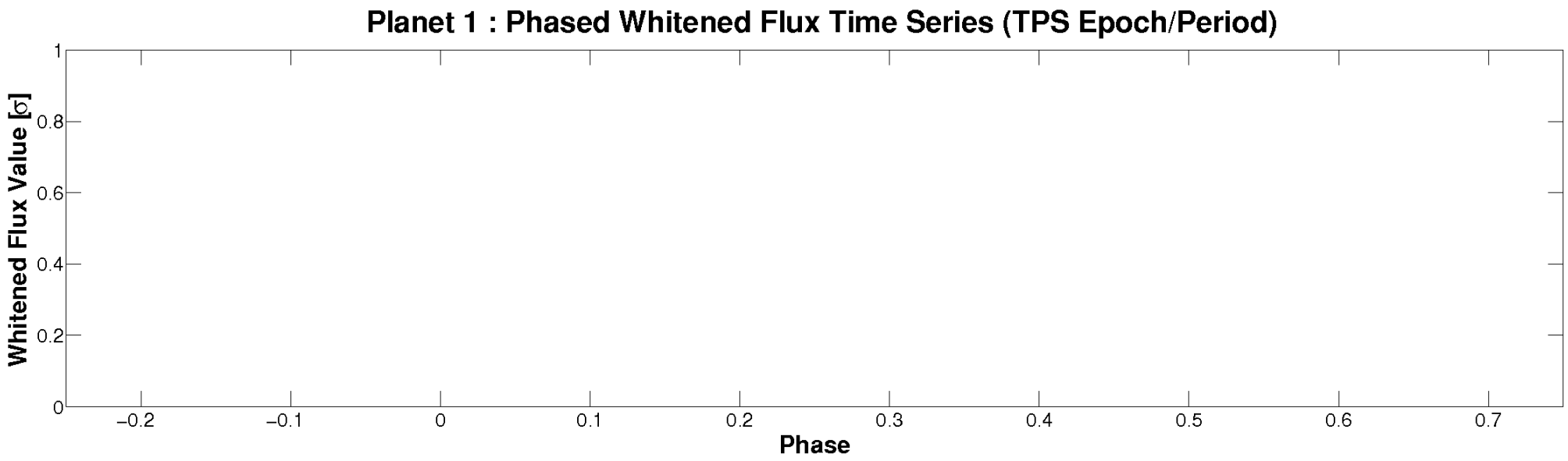

TCE 008976195-01
2.00e-03
1.50e-03
1.00e-03
5.00e-04
0.00e+00
-5.00e-04
-1.00e-03
-1.50e-03
Flux
-0.1
-0.05
0
0.05
0.1
Phase
Odd
Even
Model Fit

ALT Odd/Even


TCE 008976195-01
2.00e-03
1.50e-03
1.00e-03
5.00e-04
0.00e+00
-5.00e-04
-1.00e-03
-1.50e-03
Flux
-0.3
-0.2
-0.1
0
0.1
0.2
0.3
Phase
Odd
Even
Model Fit

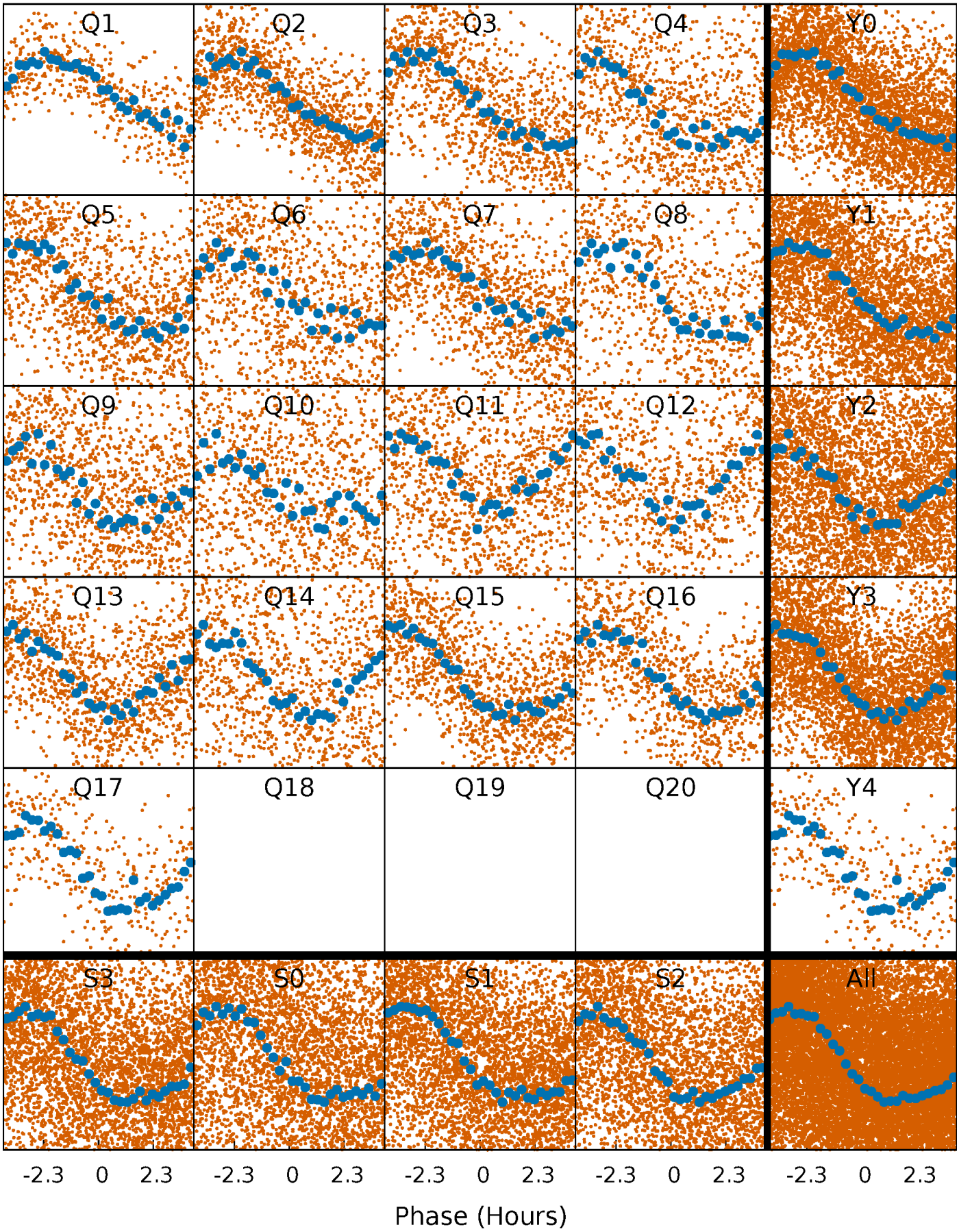
Non-Whitened Vs. Whitened Light Curve





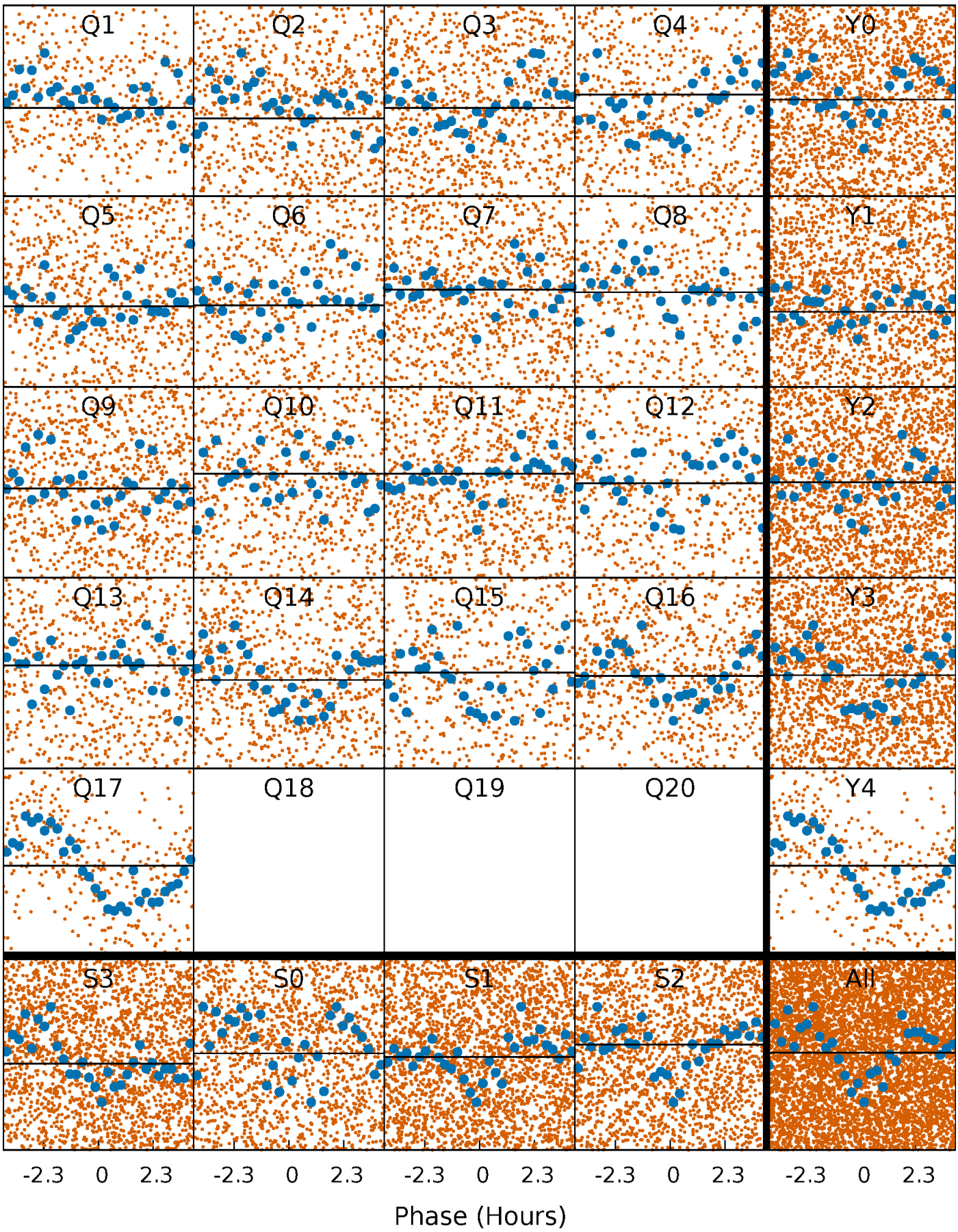
PDC Quarter-Phased Transit Curves

TCE 008976195-01 P= 1.113143 Days T_0=132.567444 (BKJD)



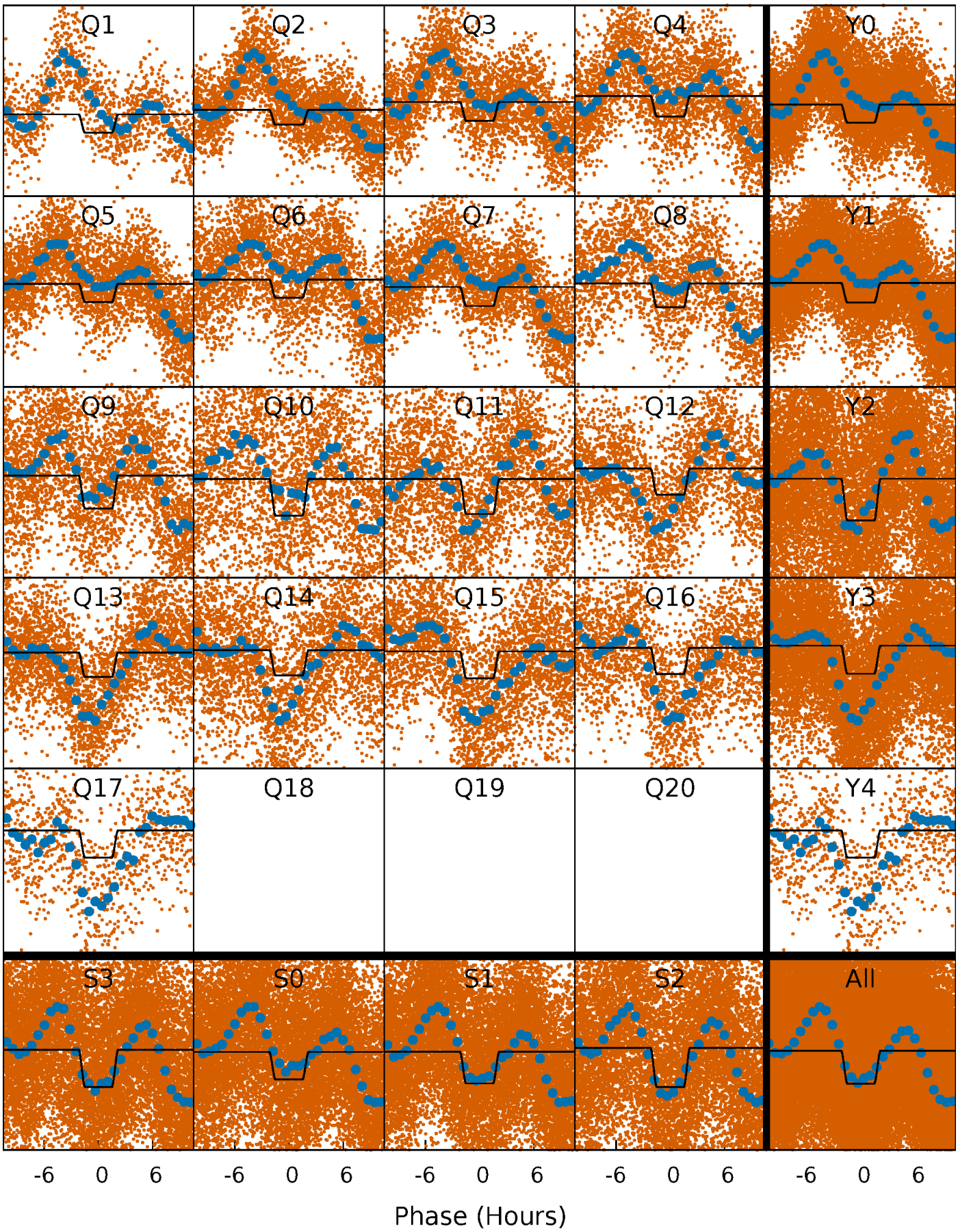
DV Quarter-Phased Transit Curves

TCE 008976195-01 P= 1.113143 Days T_0=132.567444 (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

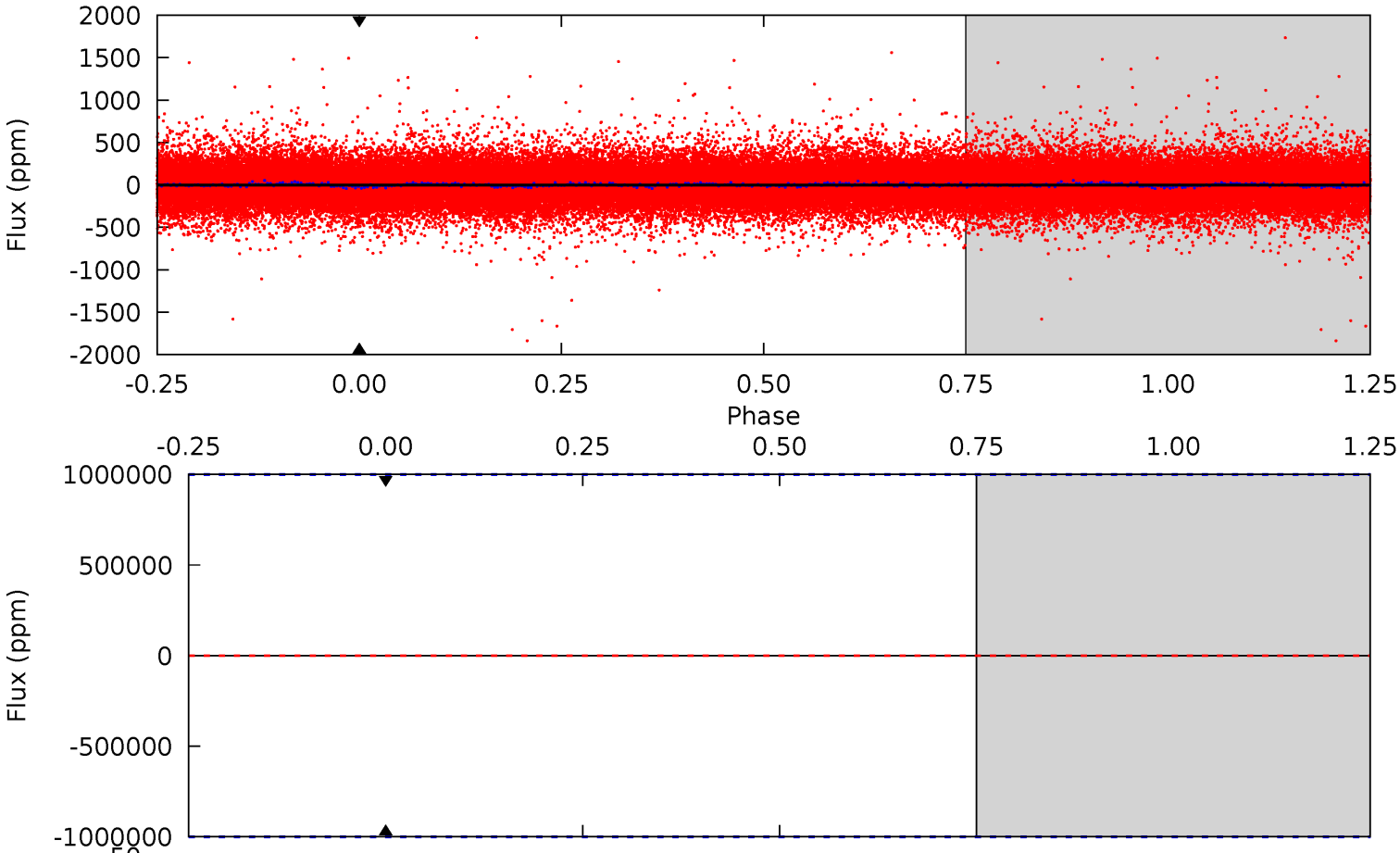
TCE 008976195-01 P= 1.113143 Days T_0=132.633381 (BKJD)

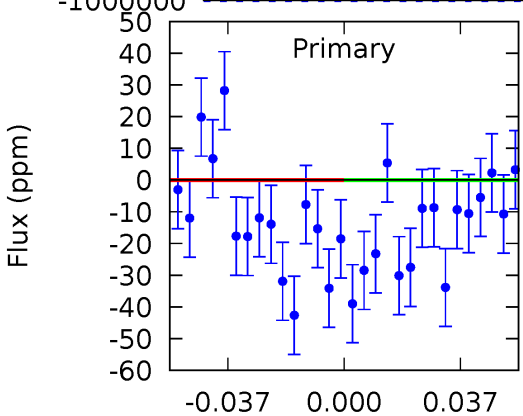


DV Model-Shift Uniqueness Test

008976195-01, P = 1.113143 Days, E = 131.454301 Days

Pri	Sec	Ter	Pos	FA_1	FA_2	F_{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0

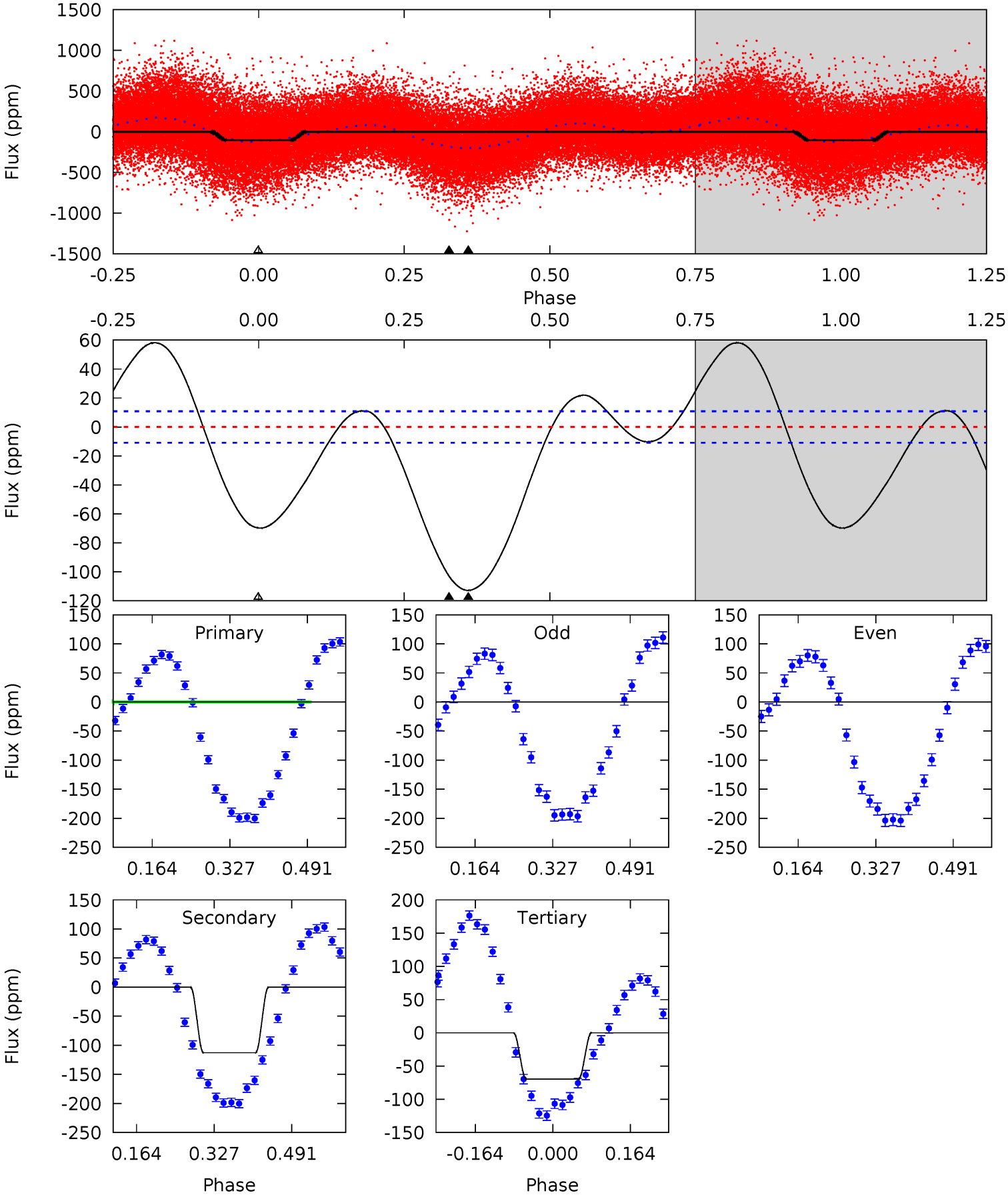




Alt Model-Shift Uniqueness Test

008976195-01, P = 1.113143 Days, E = 130.407095 Days

Pri	Sec	Ter	Pos	FA_1	FA_2	F_{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
42.2	46.2	28.6	0	4.46	1.39	15.1	13.6	42.2	17.7	46.2	1.49	1.12	0.34	2.59



Stellar Parameters For KIC 008976195

	$T_{\rm eff}(K)$	$\log(g)$	[Fe/H]	R ($R_\odot$)	$M(M_\odot)$	$p_\star$ (g·cm^{-3})
	6608^{+200}_{-220}	$3.345^{+0.441}_{-0.049}$	$-0.200^{+0.350}_{-0.300}$	$4.991^{+0.265}_{-2.384}$	$2.013^{+0.114}_{-0.457}$	$0.023^{+0.095}_{-0.004}$
	+3%/-3%	+13%/-1%	+175%/-150%	+5%/-48%	+6%/-23%	+416%/-17%
Source	PHO1	FLK73	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 008976195-01 / KOI

Detrend	Depth (ppm)	R_p ($R_\oplus$)	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	0±1000000	$35.76^{+35.80}_{-25.69}$	5456^{+275}_{-626}	3396^{+25557}_{-30129}	$0.377^{+54.116}_{-42.954}$
Alt.	-113±2	$34.58^{+38.66}_{-24.78}$	5471^{+263}_{-573}	-4388^{+8282}_{-297}	$0.036^{+0.422}_{-0.028}$

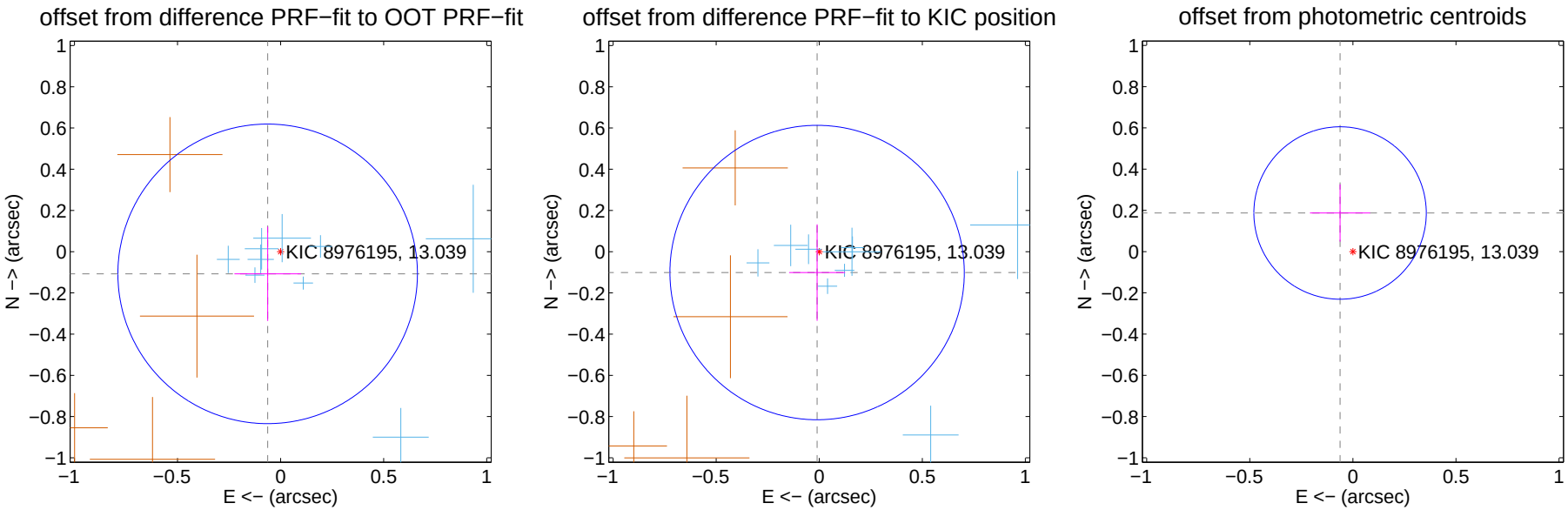
T_{max} = Theoretical Maximum Planetary Temperature
T_{obs} = Observed Planetary Temperature (Assuming A=0.3)
A_{obs} = Observed Albedo (Assuming T=0)

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

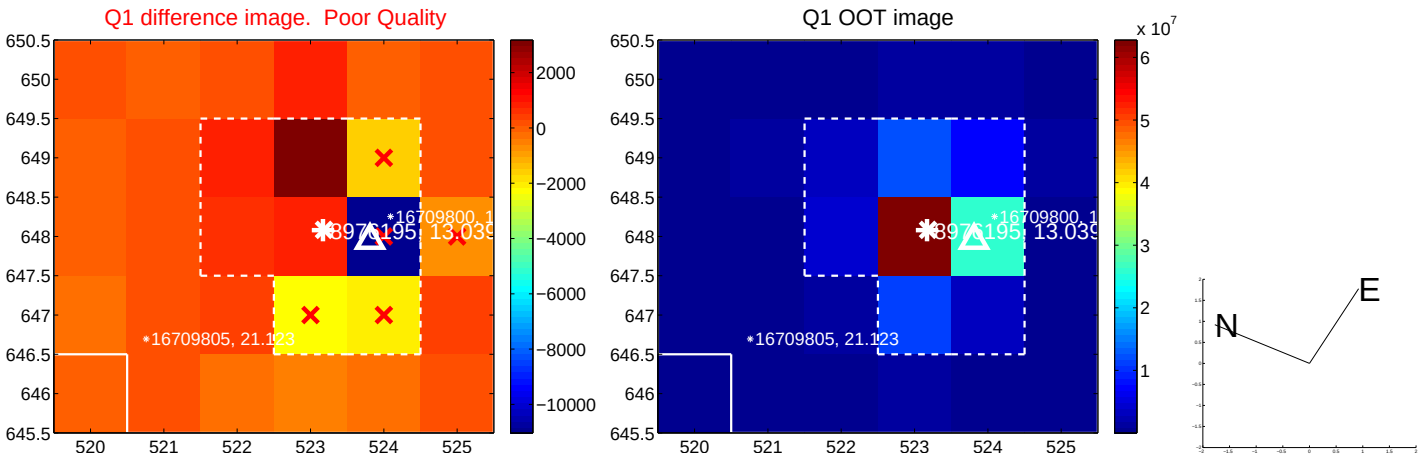
Supplemental centroid analysis for 008976195-01. Kepler magnitude: 13.04. Transit SNR -1.00
There are 9 quarters with good PRF difference image offsets
The direct PRF centroid is offset from the target star catalog position by about 0.07 arcsec

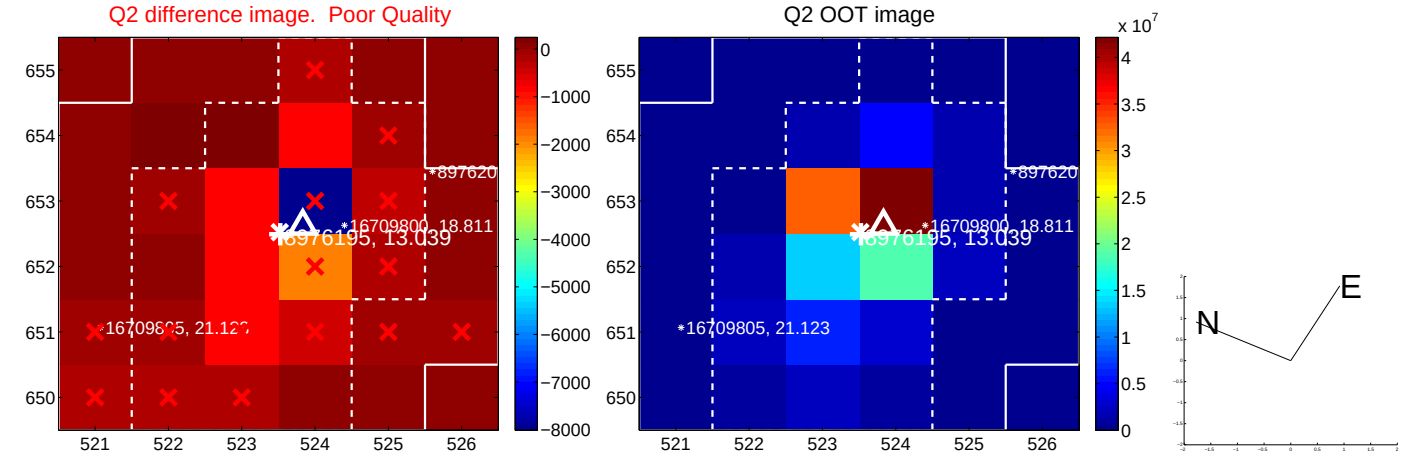
	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.125 ± 0.242	0.51	0.063 ± 0.161	-0.108 ± 0.229
PRF-fit source offset from KIC position	0.102 ± 0.238	0.43	0.010 ± 0.136	-0.101 ± 0.234
photometric centroid source offset	0.20 ± 0.14	1.42	0.06 ± 0.15	0.19 ± 0.14

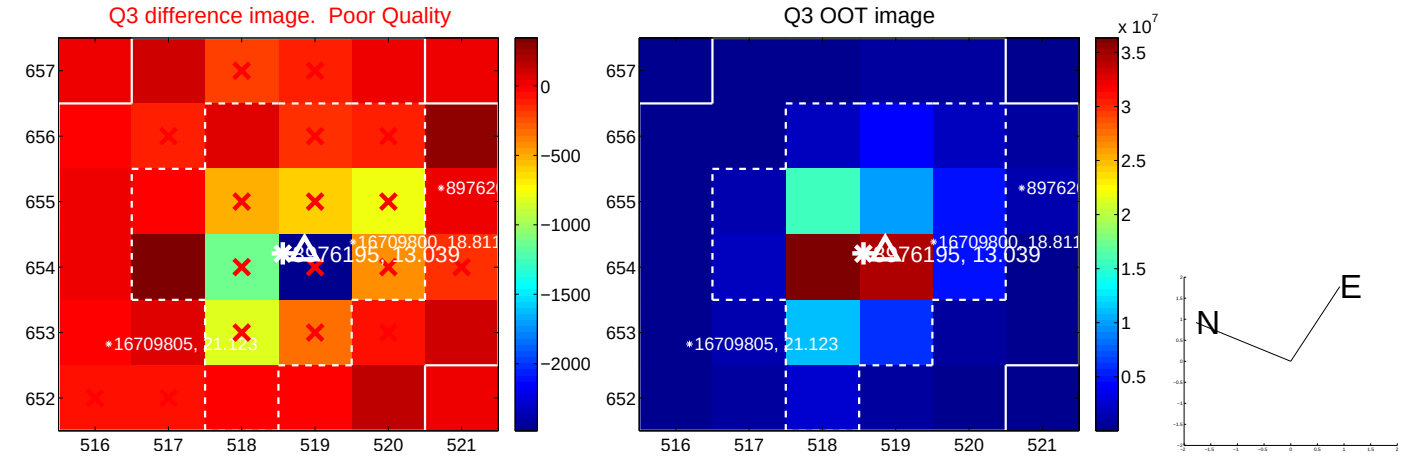


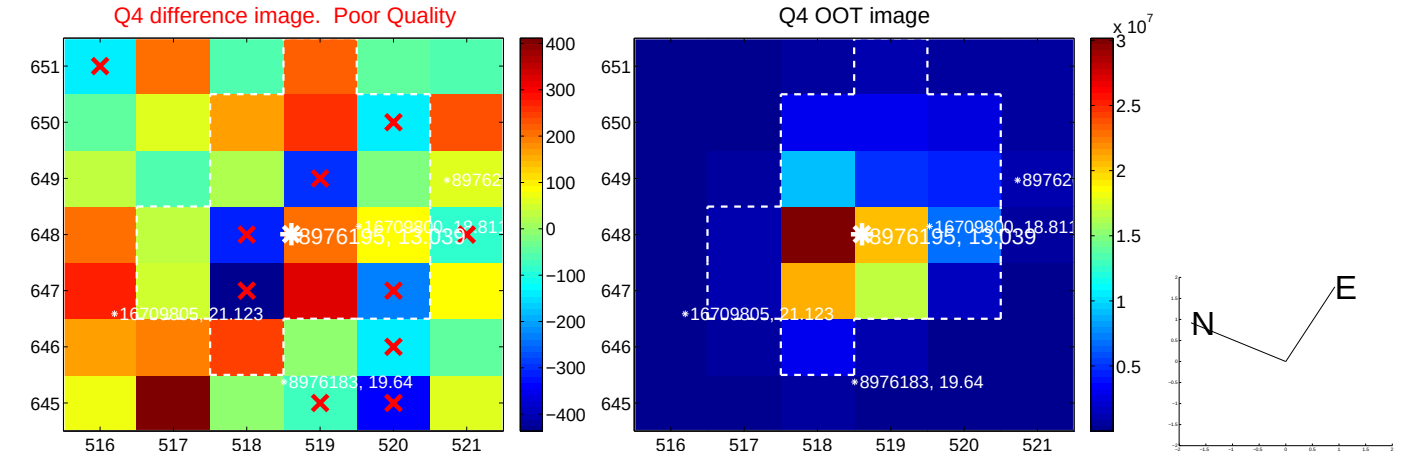
Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one-σ uncertainty. Blue circle: three-σ. Red *: 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 ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.

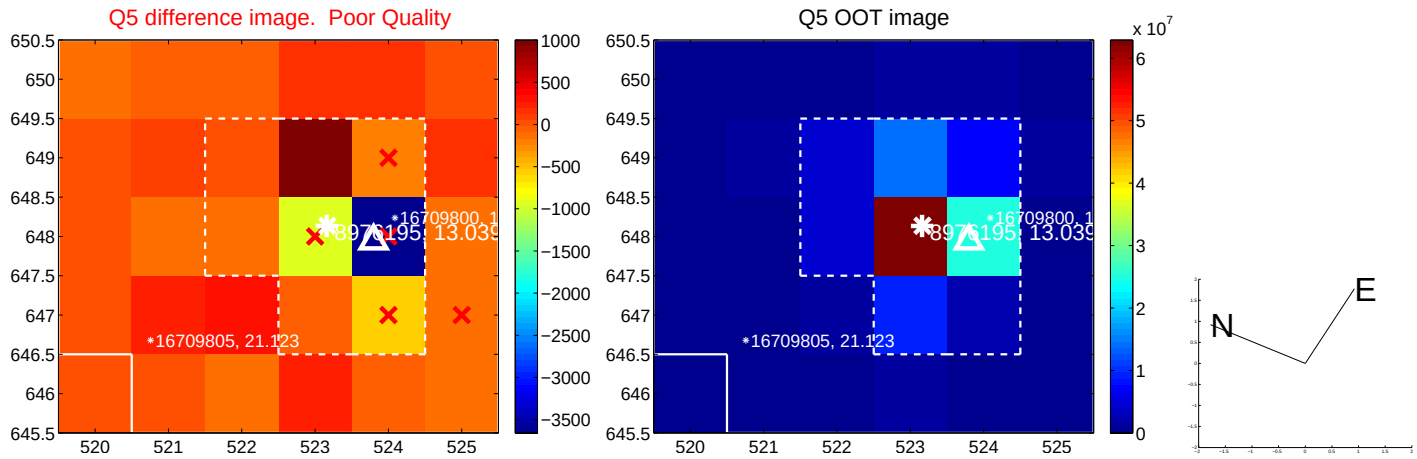


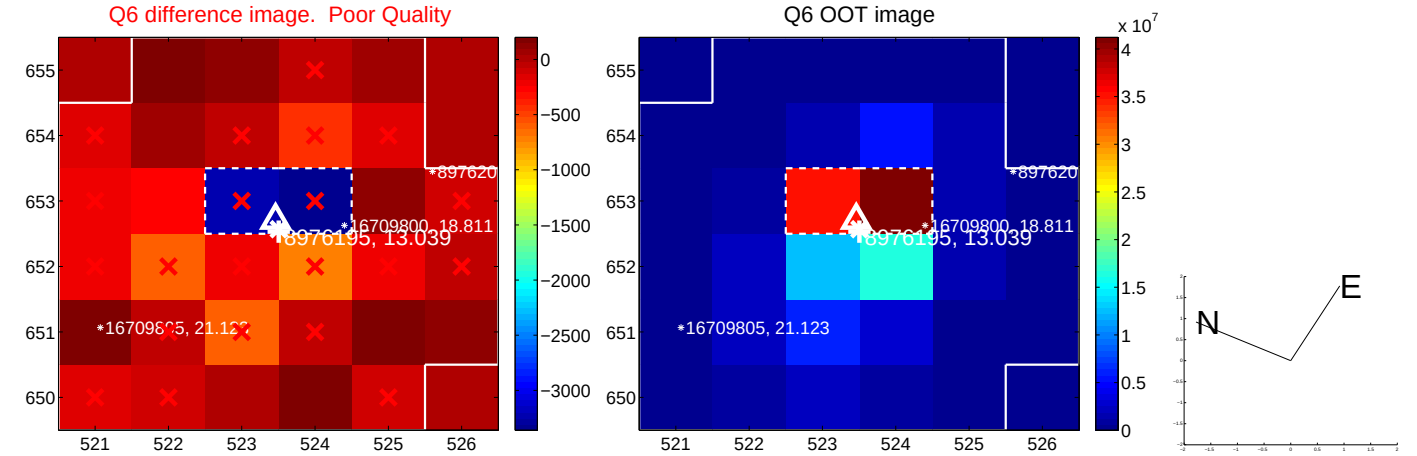


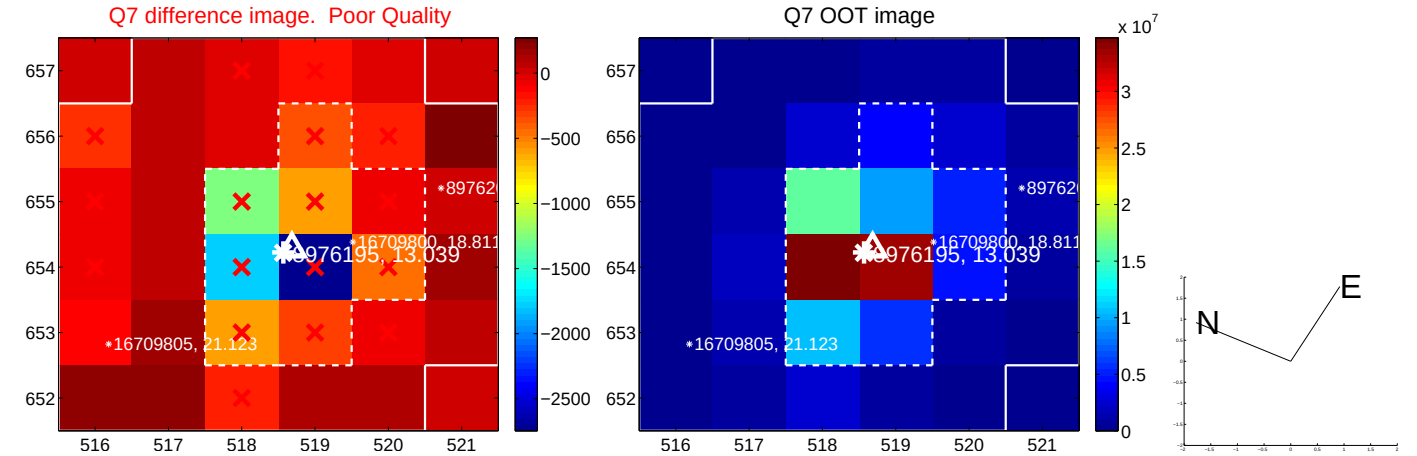


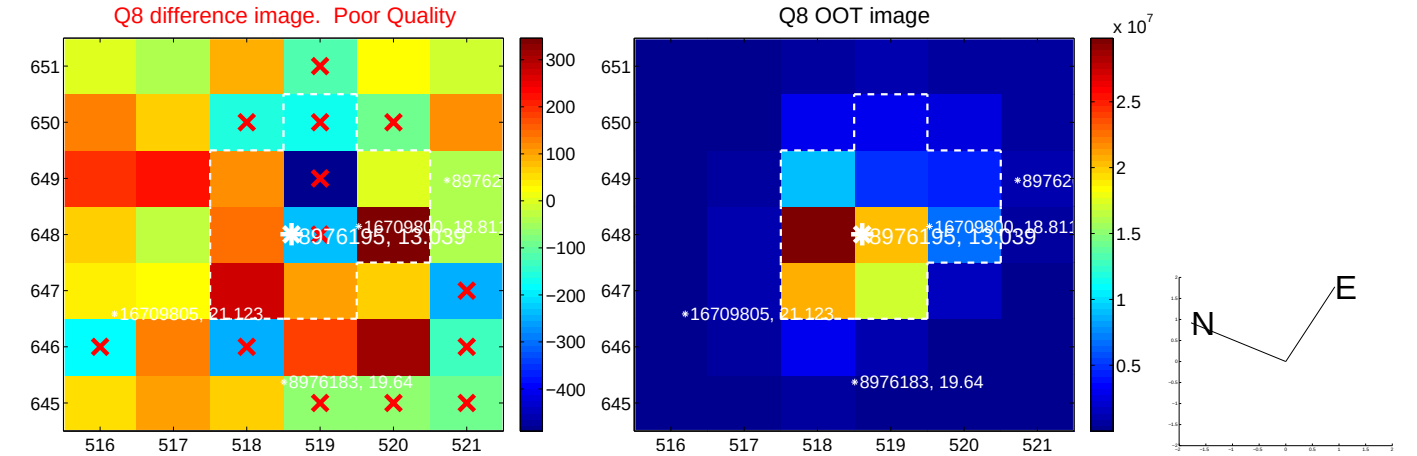


white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.

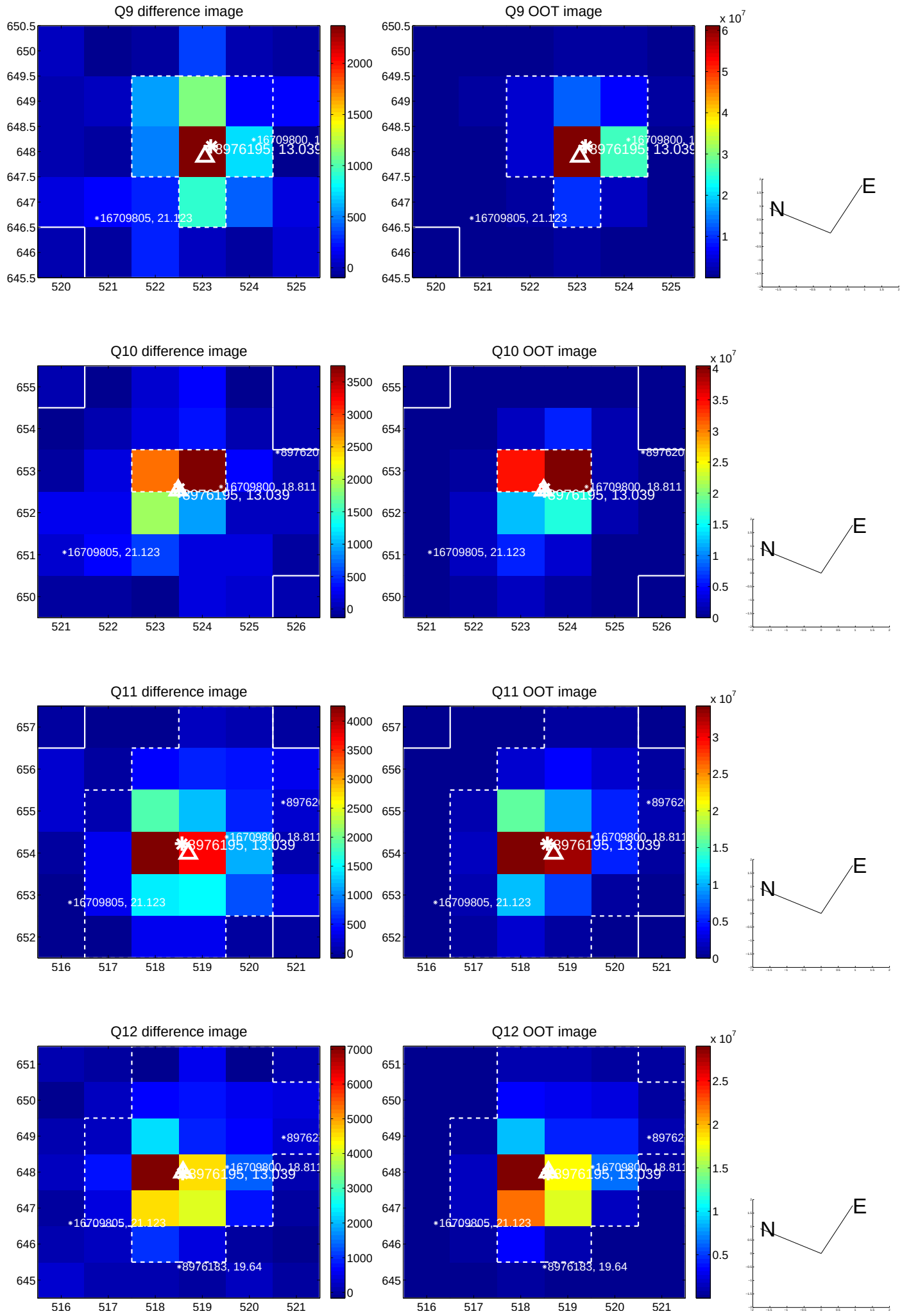




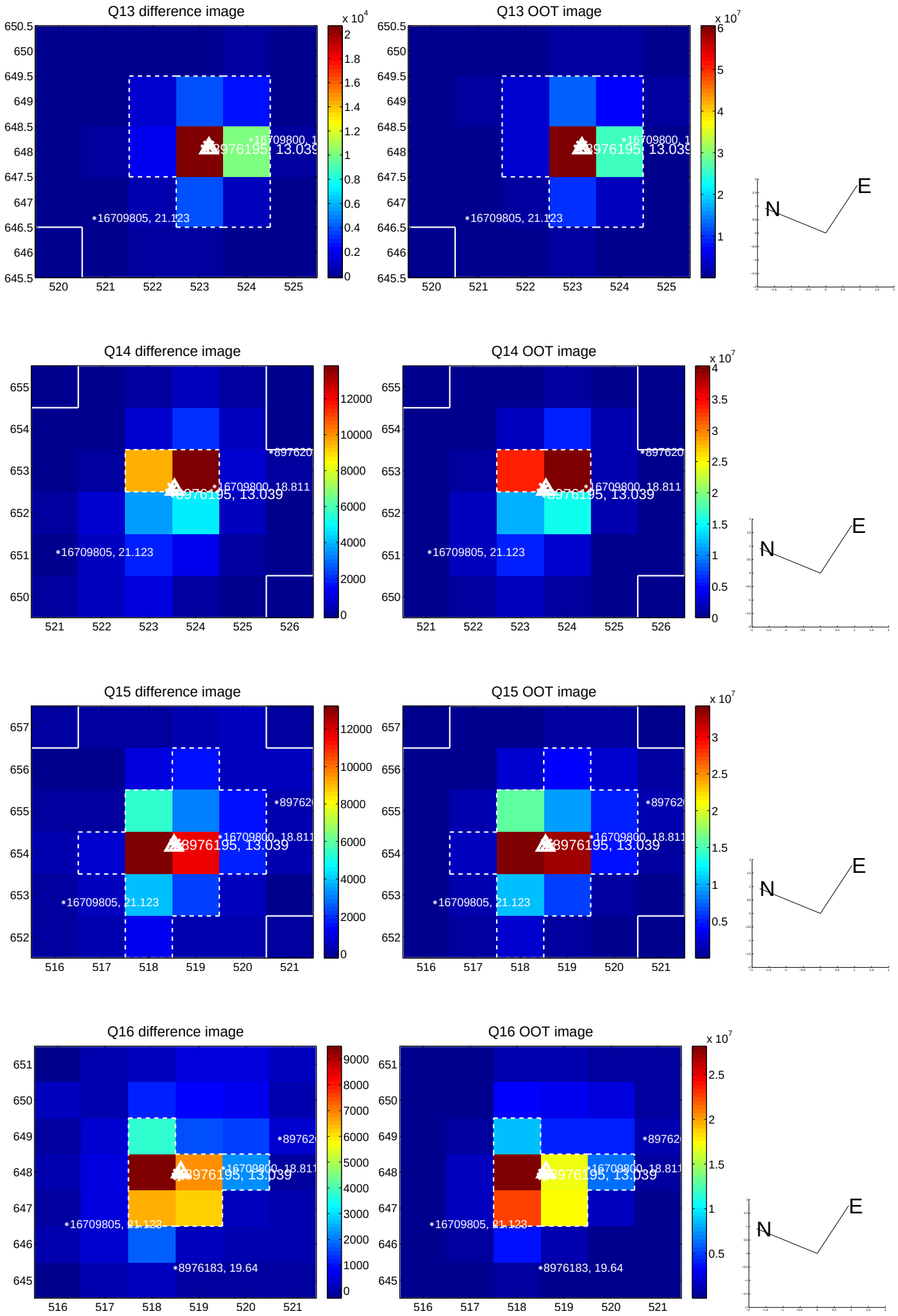




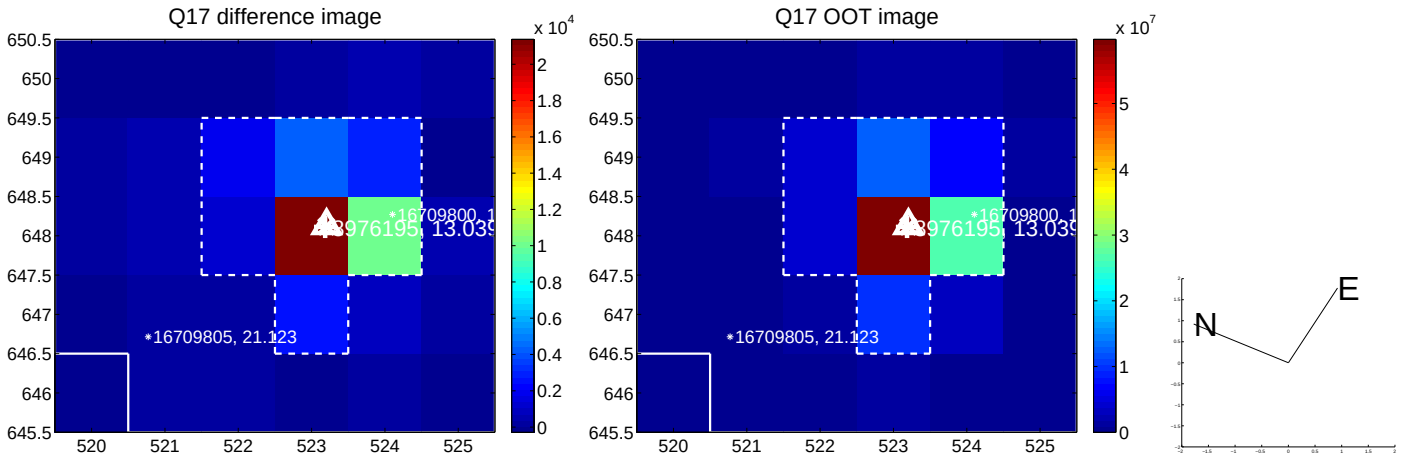
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.

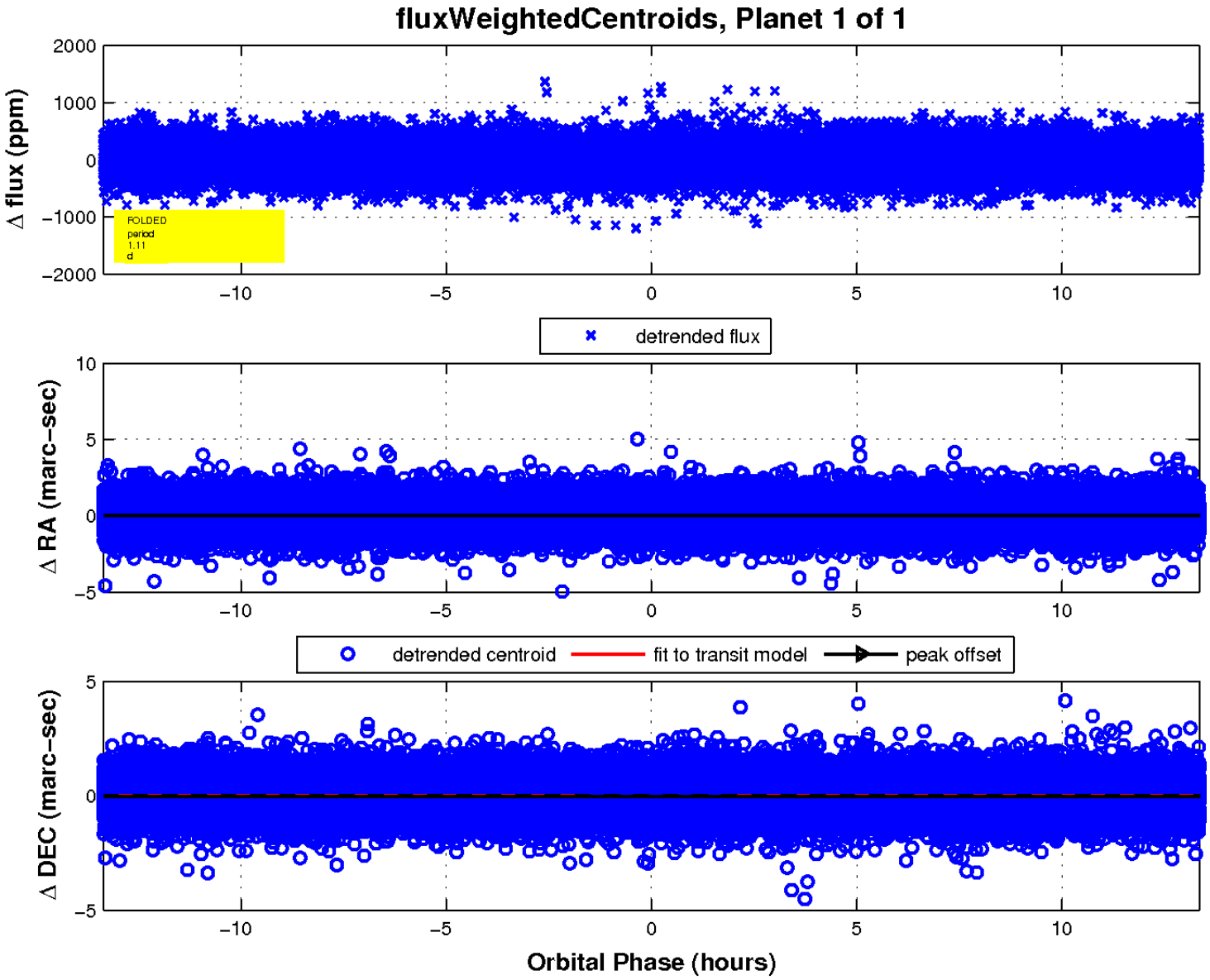


white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.

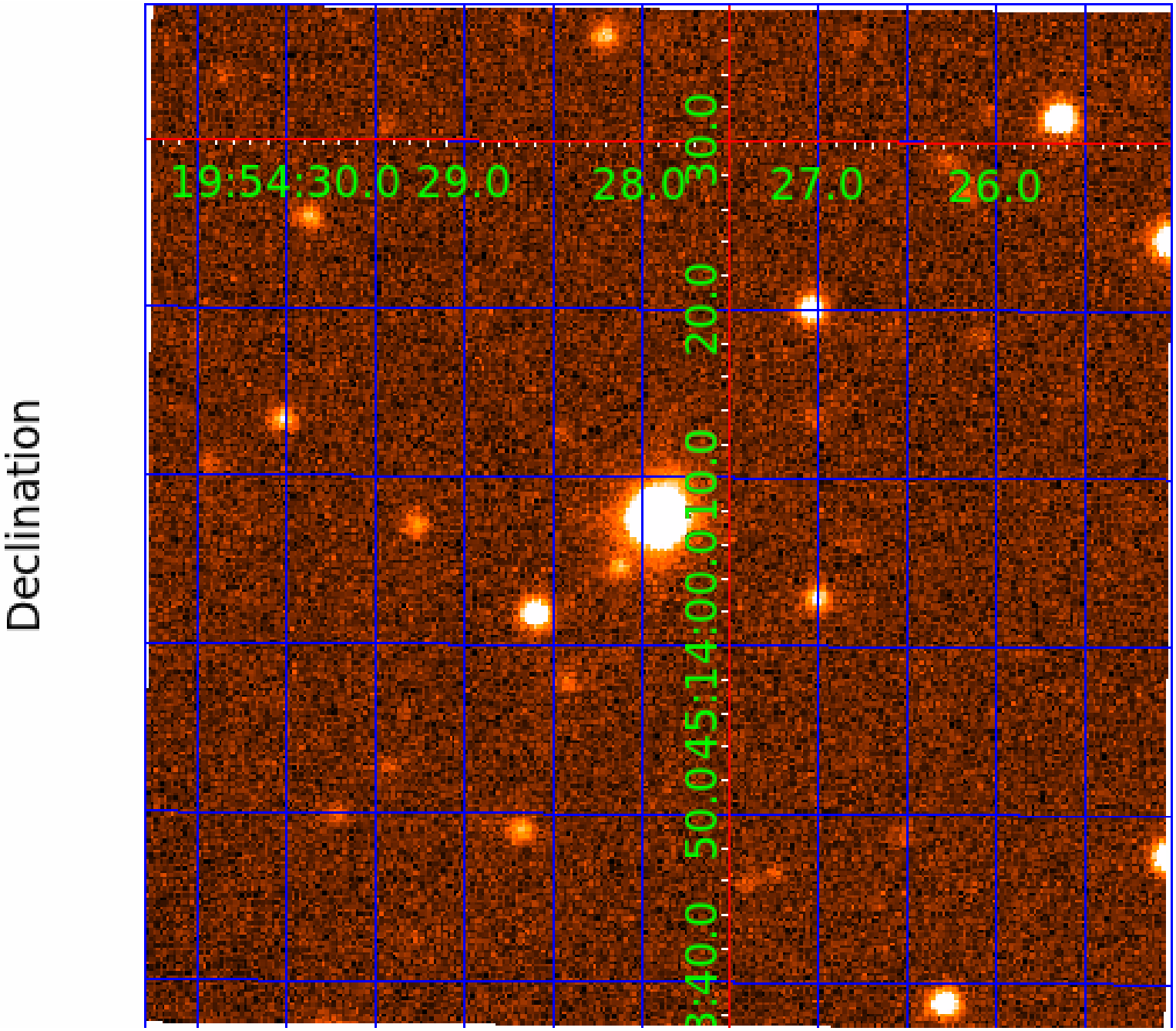


white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.





UKIRT Image


19:54:30.0
29.0
28.0
27.0
26.0
30.0
20.0
10.0
14:00.0
45.0
50.0
40.0
Declination