

KIC 010274244

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})
010274244-01	OBS	7303.01	13.683715	135.207028	122221.0	3.000	31861.9	-1.0	0.71	5359	24.68	38.46

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010274244-01	OBS	FP	0.00	0	1	0	0	MOD_SEC_ALT—CENT_NOFITS

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.

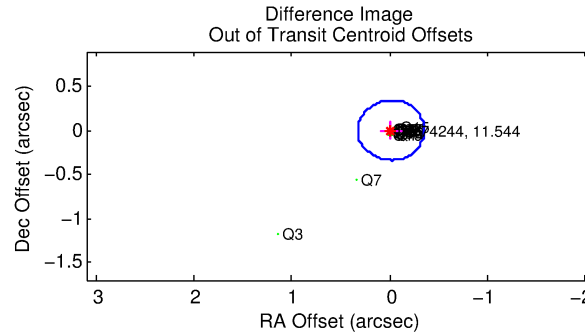
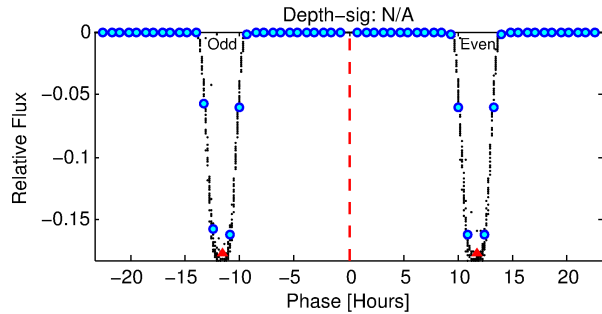
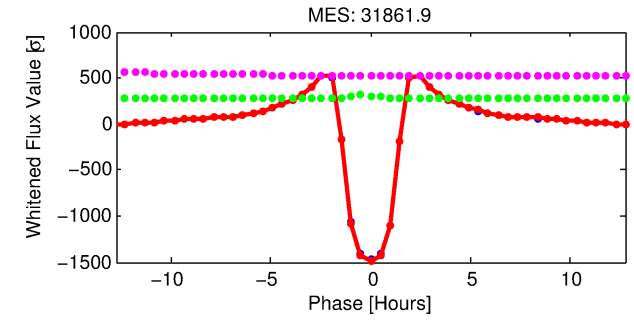
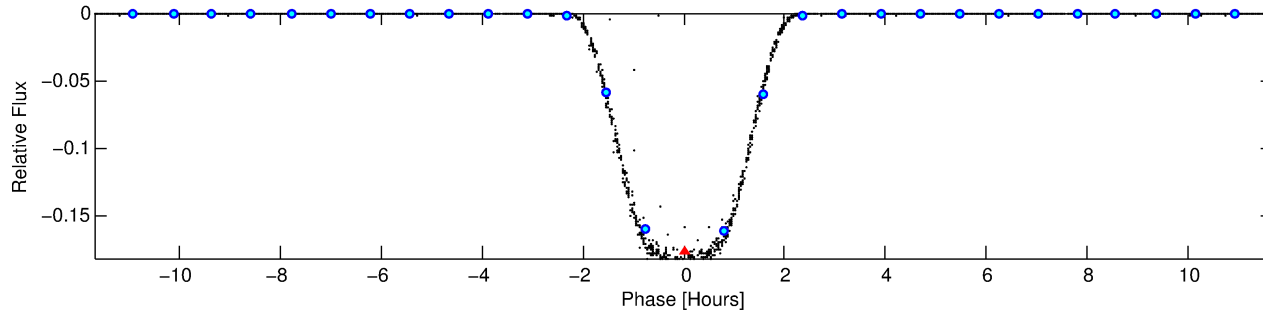
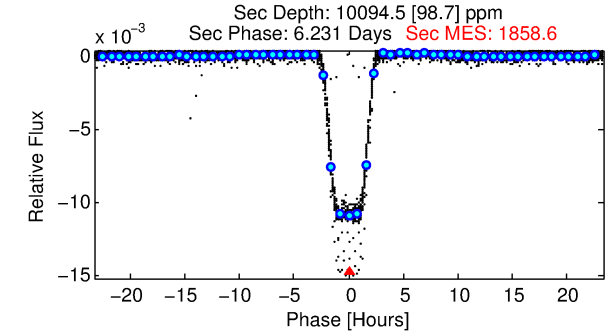
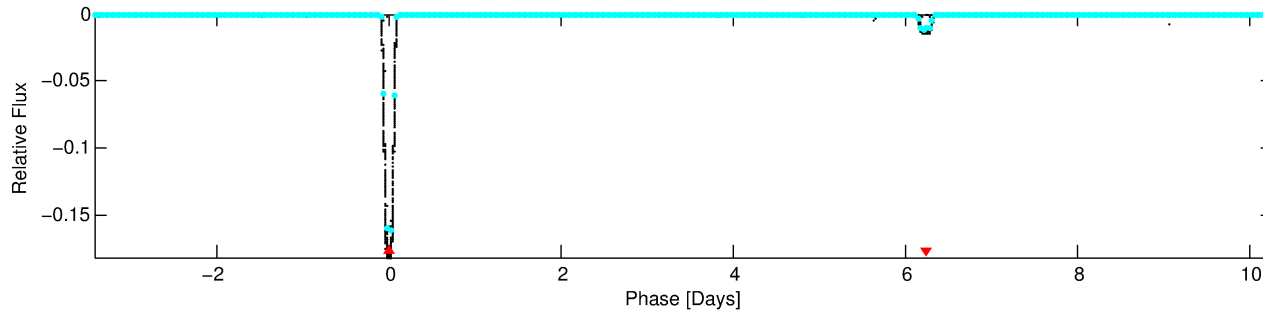
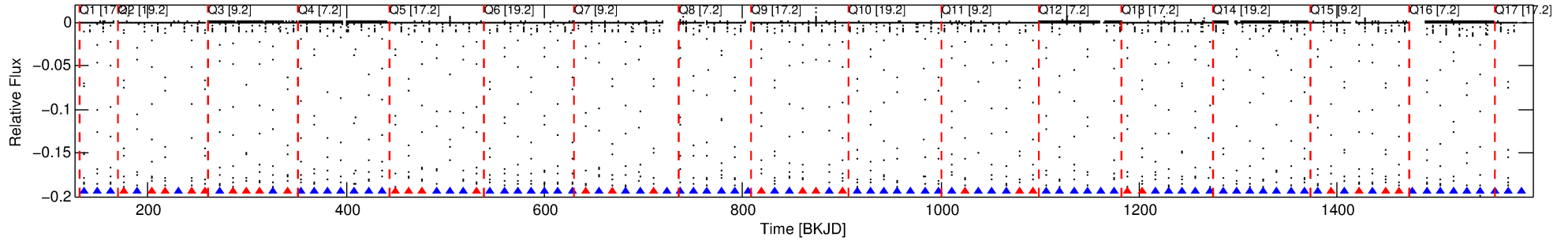
Ephemeris Match Information For 010274244-01

No Significant Match Found

DV One-Page Summary

KIC: 10274244 Candidate: 1 of 1 Period: 13.684 d
KOI: K07303.01 Corr: 0.843

Kp: 11.54 R*: 0.71 Rs Teff: 5359.0 K Logg: 4.57 Fe/H: -0.720



TPS TCE Results:

Period = 13.68371 d
Epoch = 135.2070 BKJD

DV fit results are unavailable

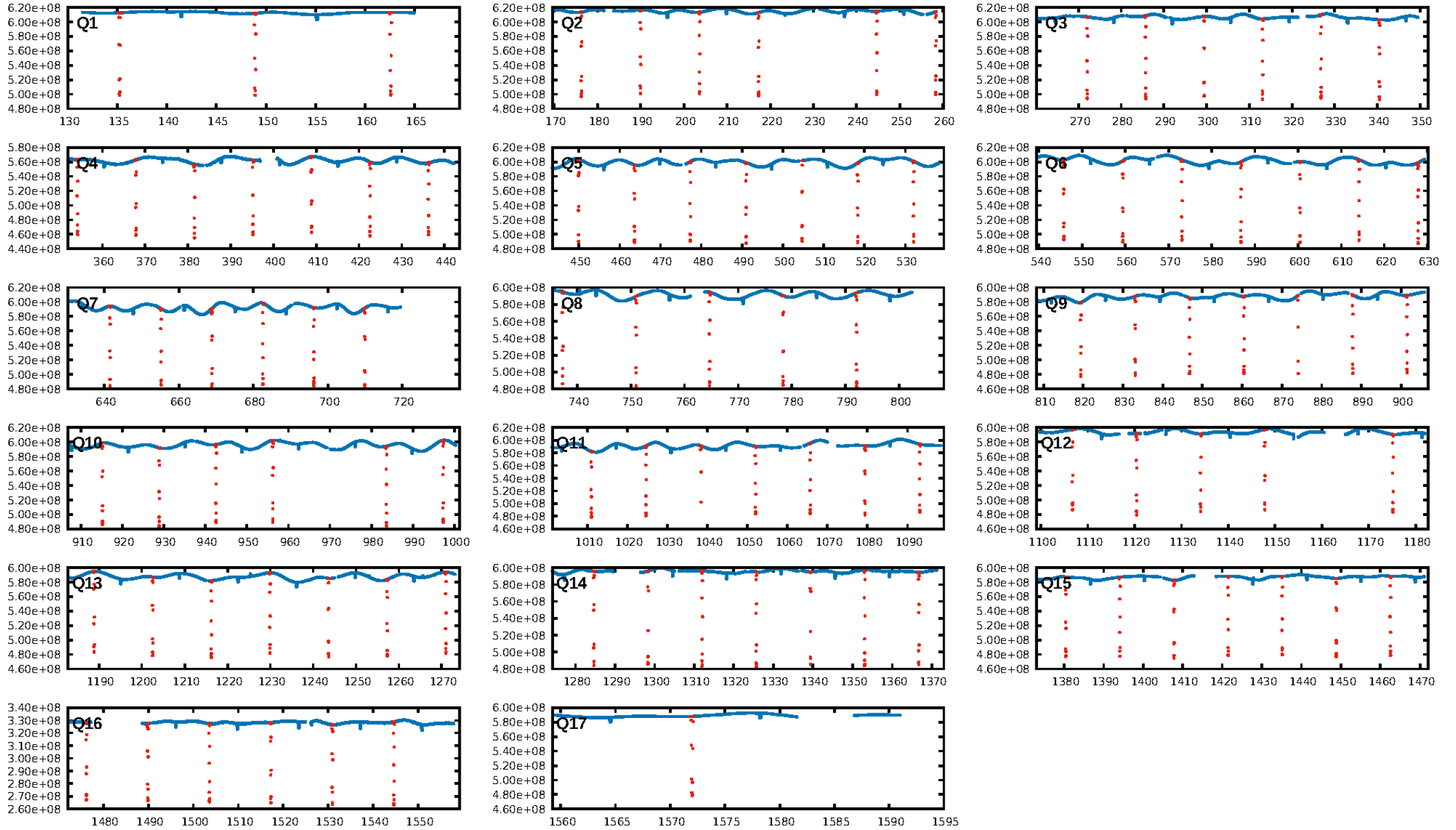
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 0.69 [66/95]
GhostDiagnostic-chr: 1.047
Centroid-sig: 0.0%
Centroid-so: 1.721 arcsec [7596.20σ]
OotOffset-rm: 0.016 arcsec [0.14σ]
KicOffset-rm: 1.851 arcsec [13.71σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 1.00 [17/17]
DiffImageOverlap-fno: 1.00 [17/17]

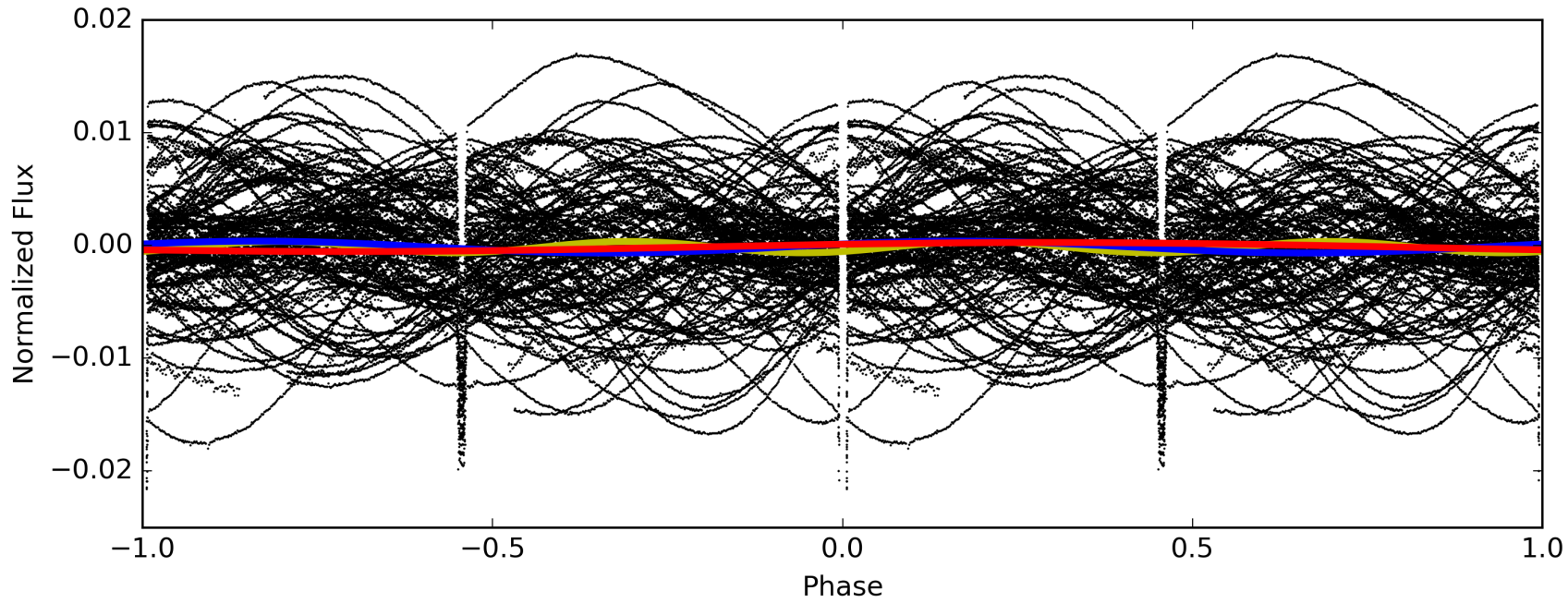
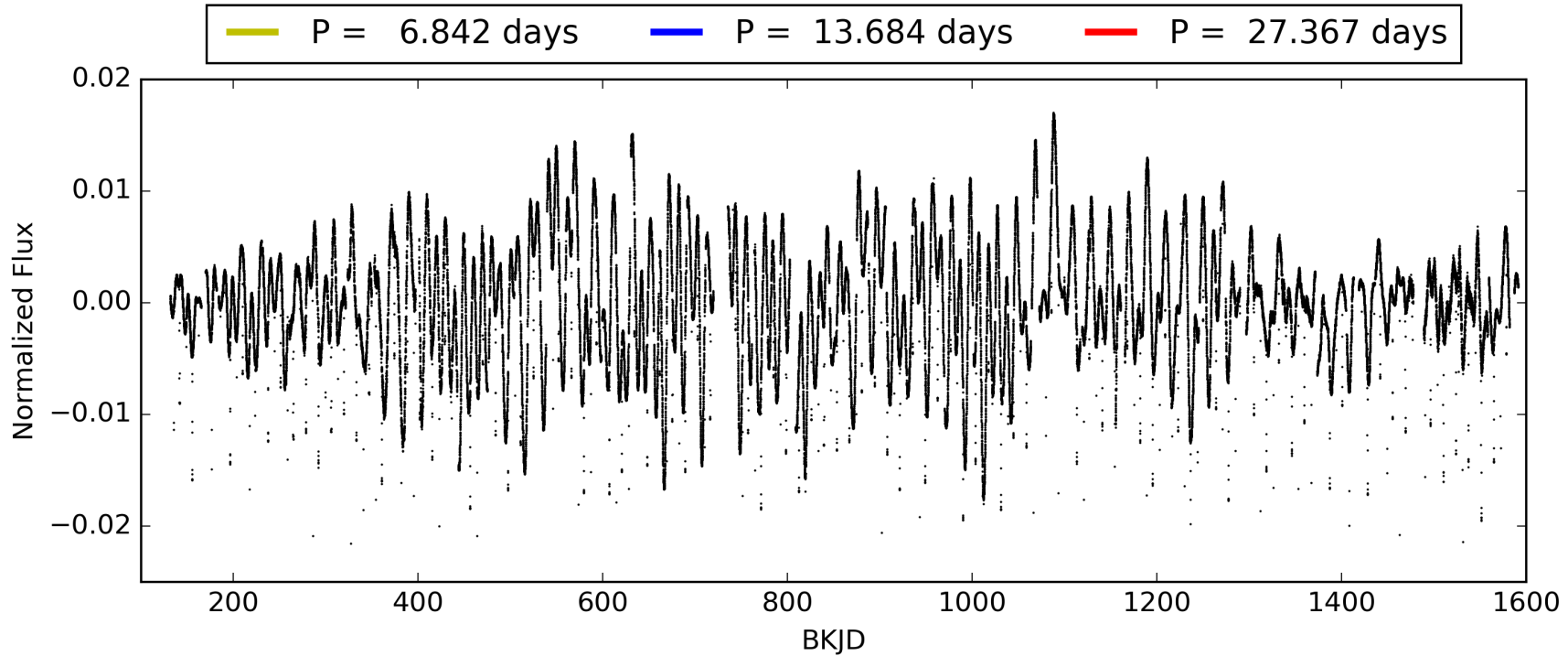
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 06:26:23 Z

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

TCE 010274244-01, PDC Light Curves

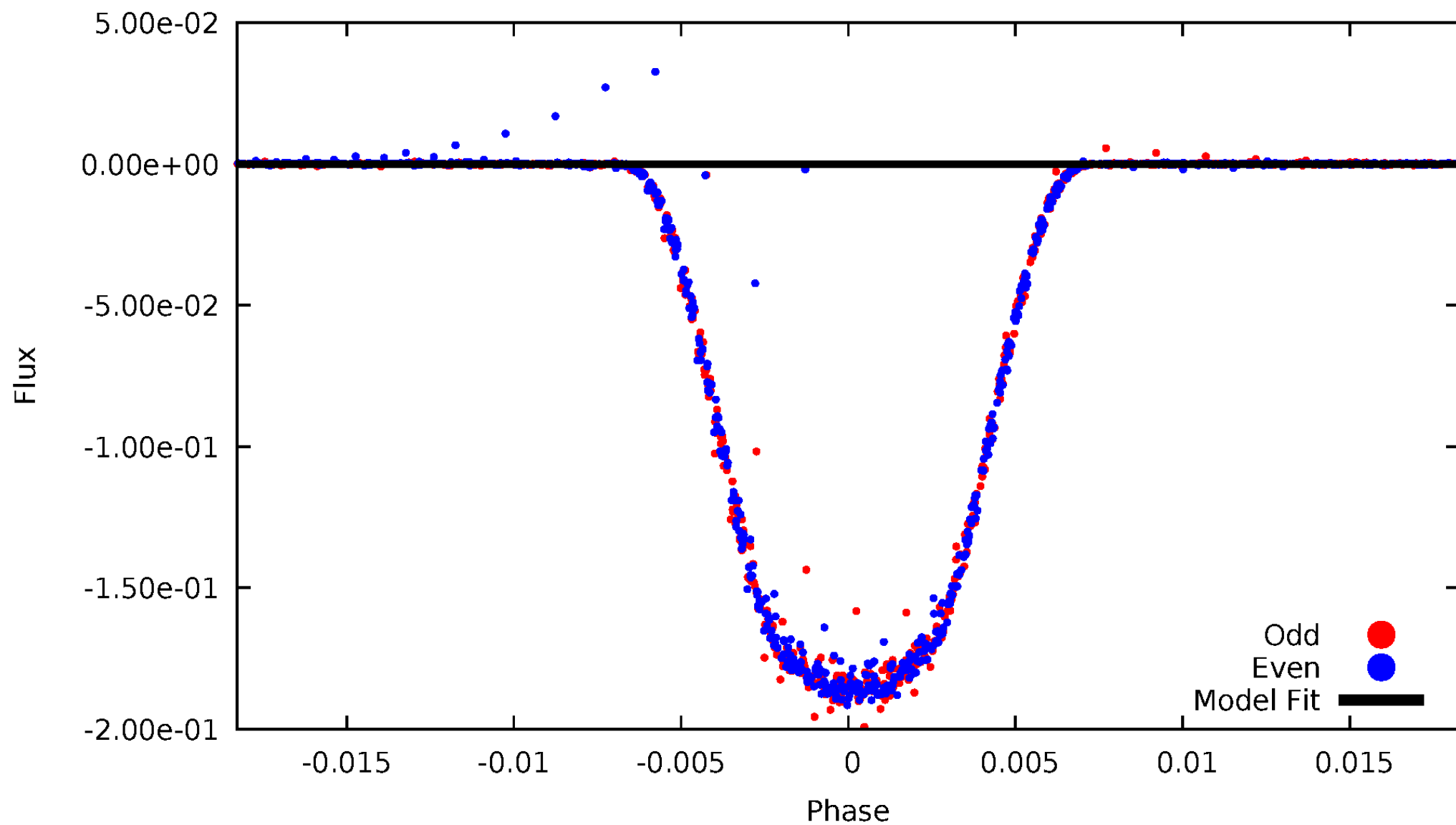


TCE 010274244-01



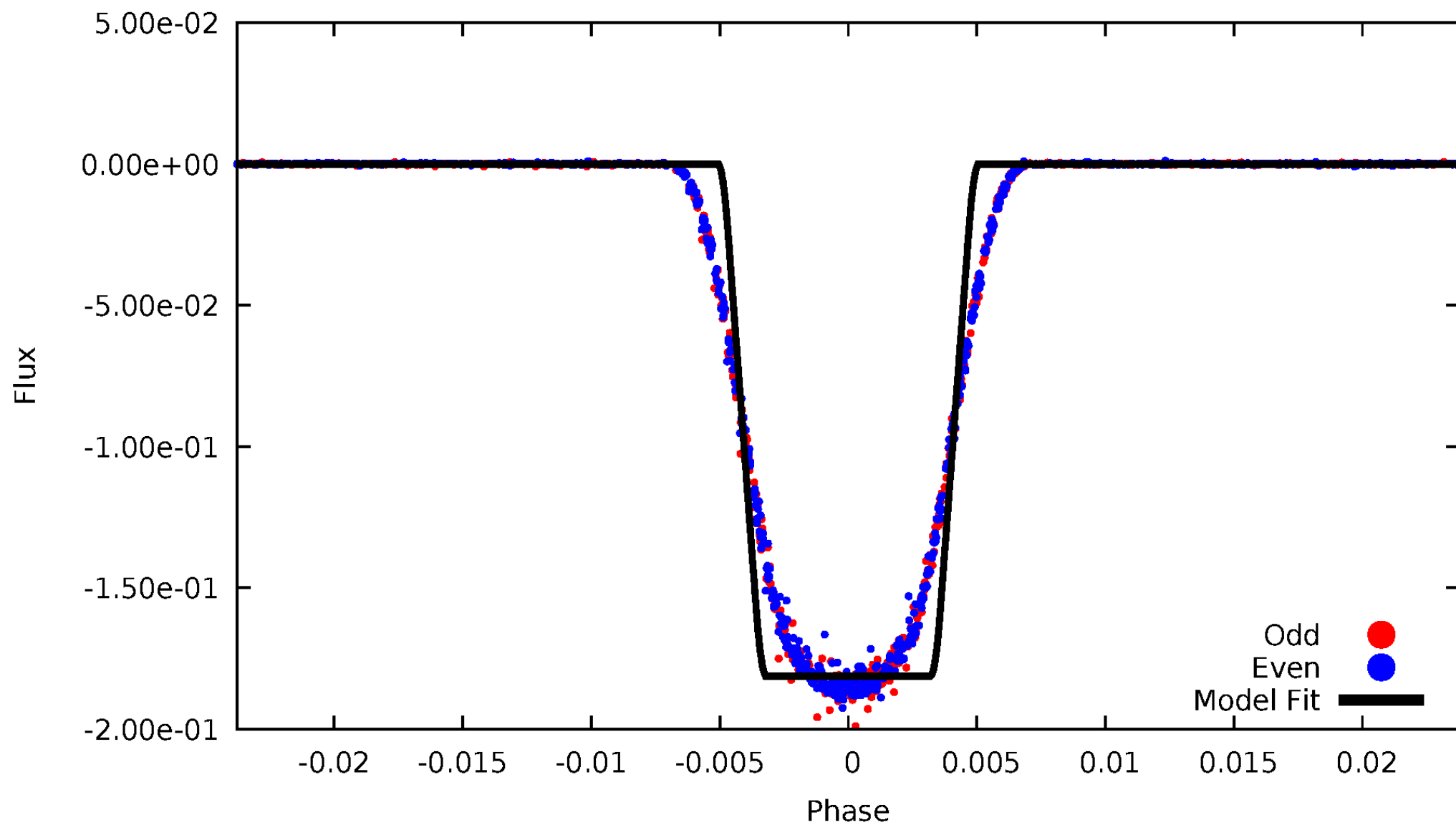
DV Odd/Even

TCE 010274244-01



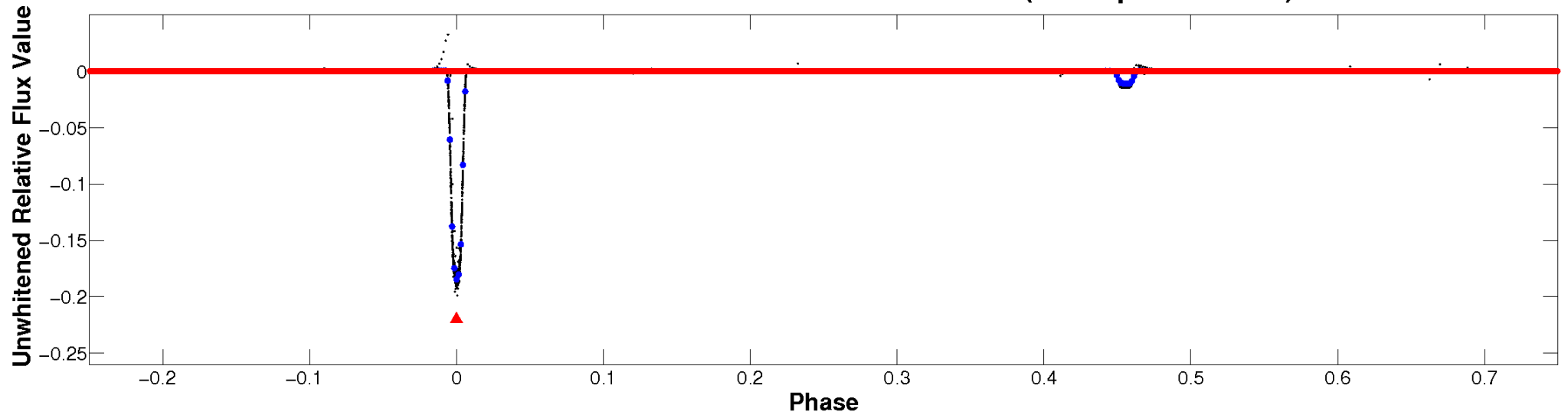
ALT Odd/Even

TCE 010274244-01



Non-Whitened Vs. Whitened Light Curve

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

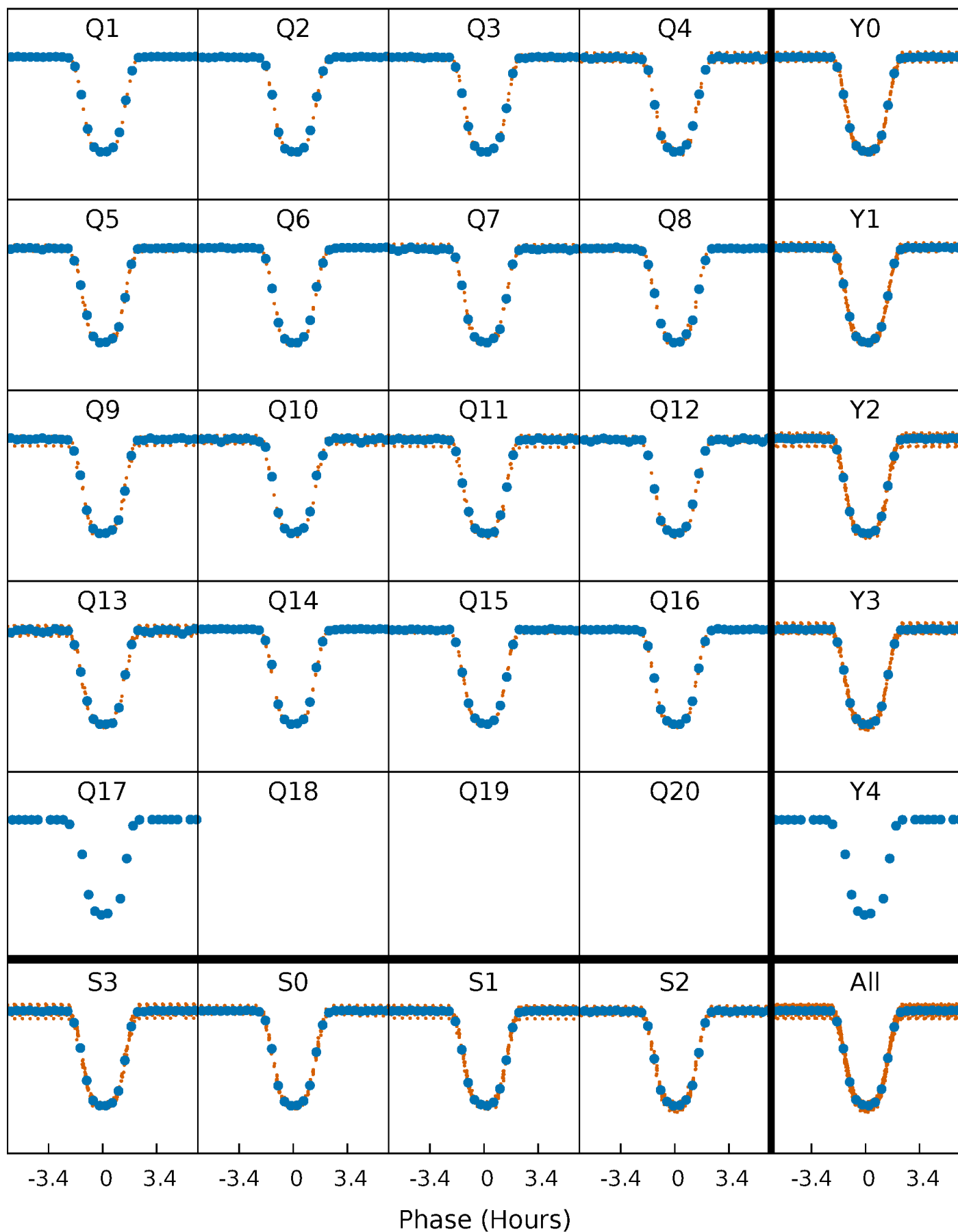


Planet 1 : Phased Whitened Flux Time Series (TPS Epoch/Period)



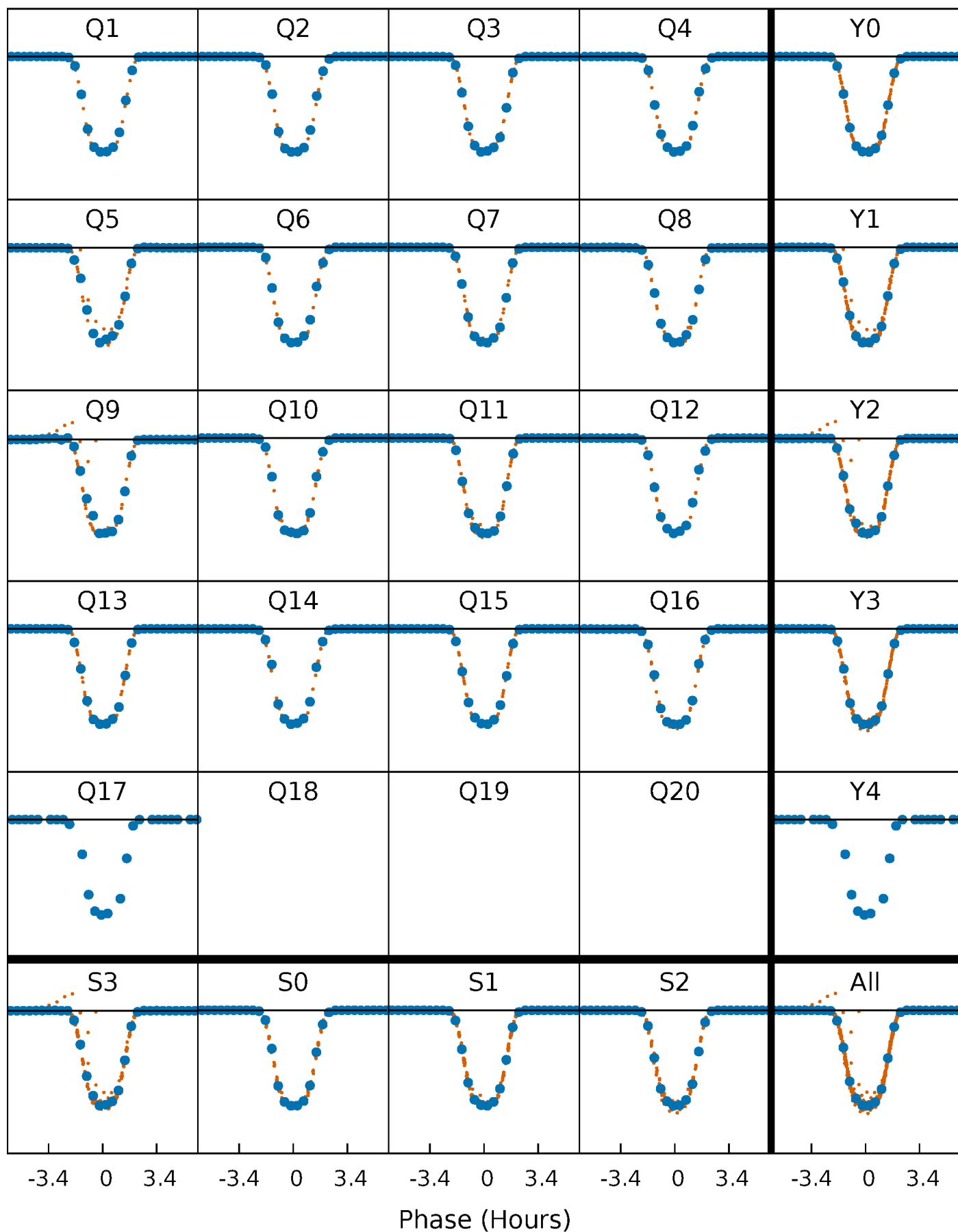
PDC Quarter-Phased Transit Curves

TCE 010274244-01 P= 13.683715 Days $T_0=135.207028$ (BKJD)



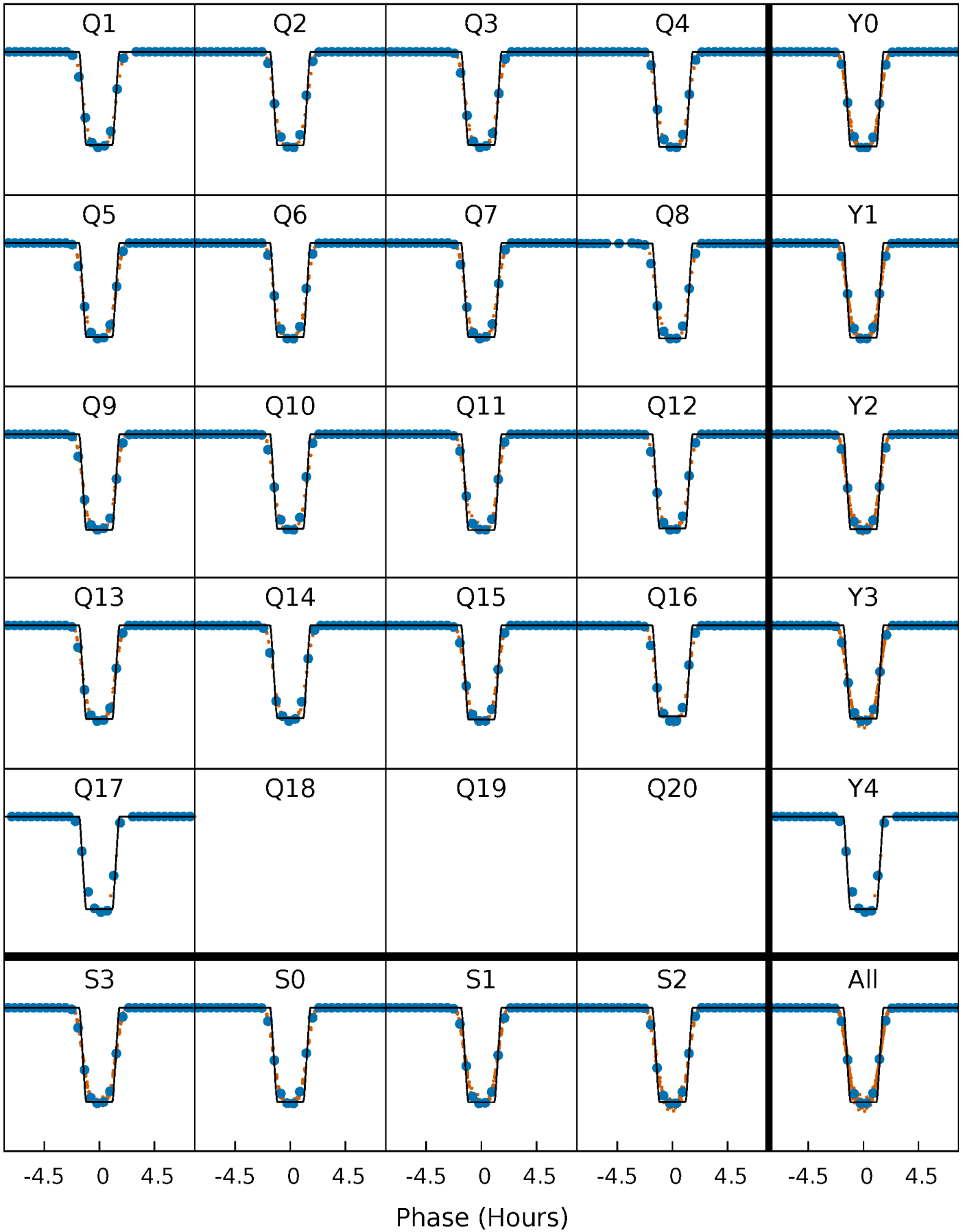
DV Quarter-Phased Transit Curves

TCE 010274244-01 P= 13.683715 Days $T_0=135.207028$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

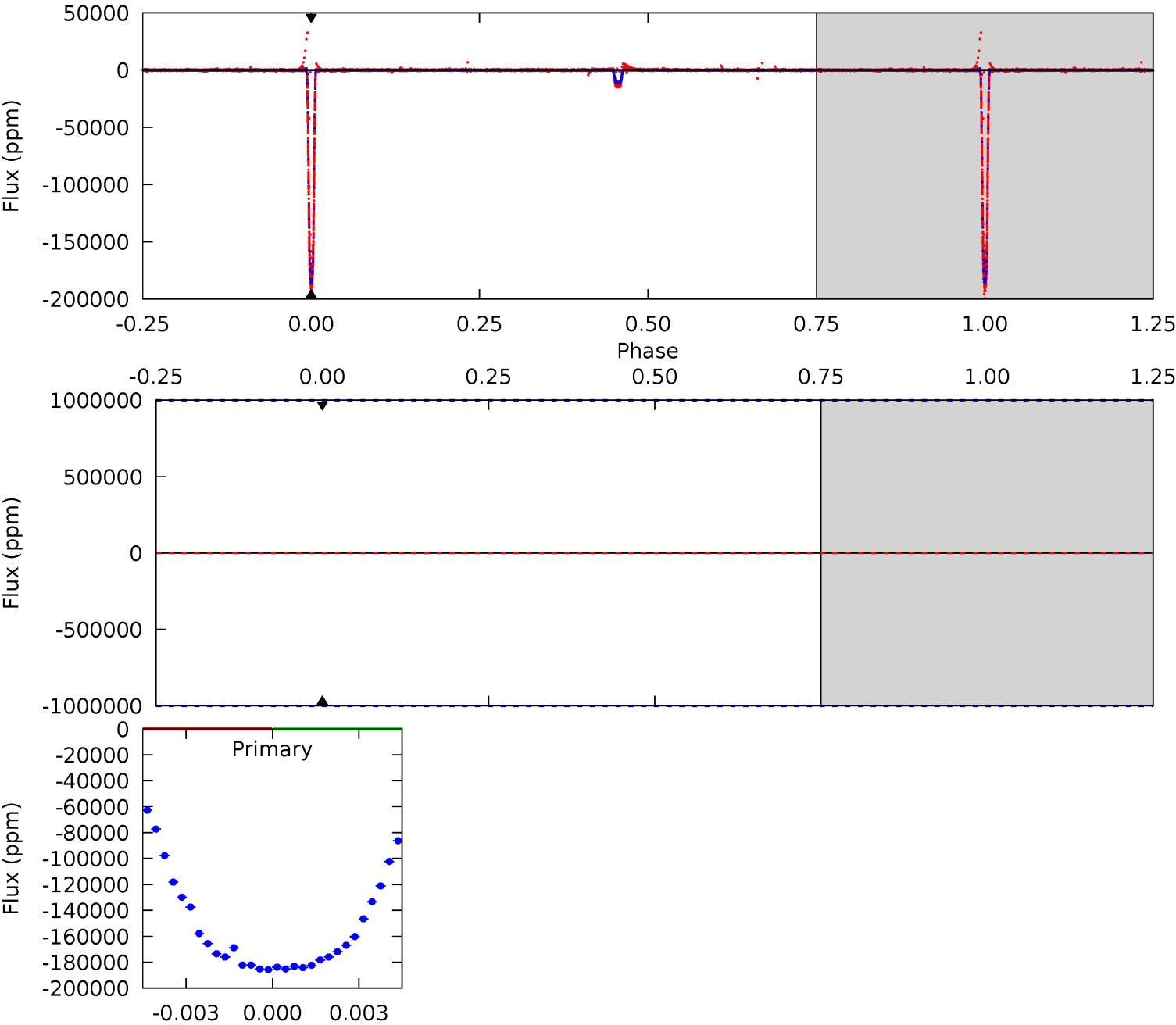
TCE 010274244-01 P= 13.683715 Days $T_0=135.209719$ (BKJD)



DV Model-Shift Uniqueness Test

010274244-01, P = 13.683715 Days, E = 121.523313 Days

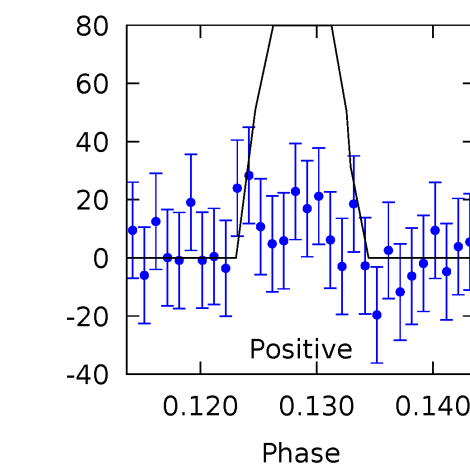
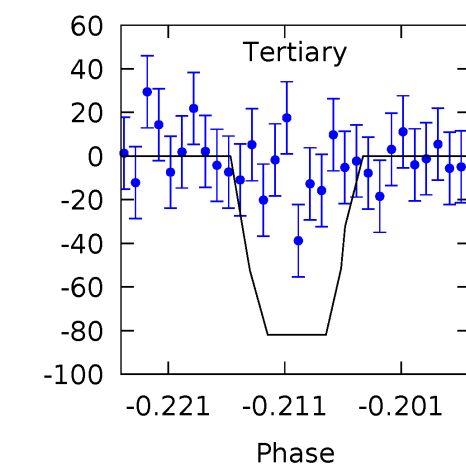
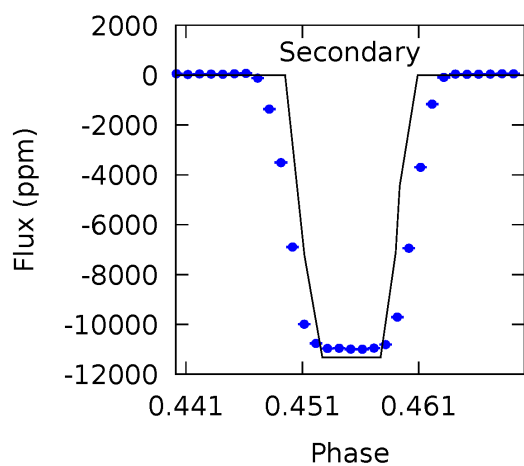
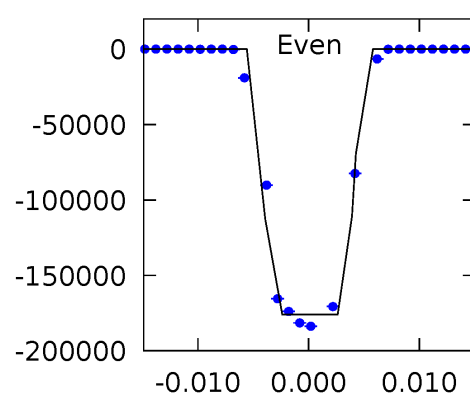
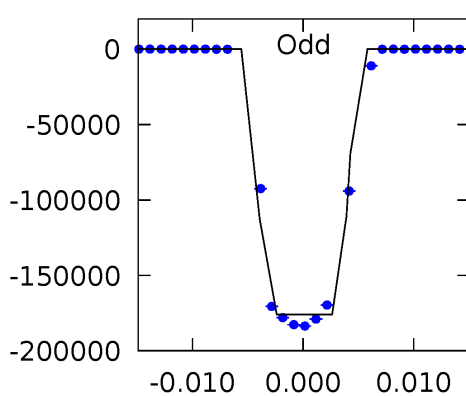
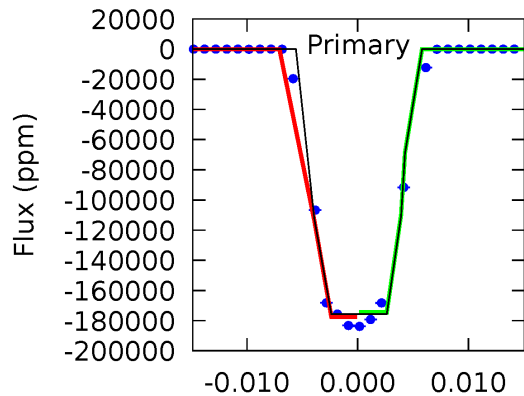
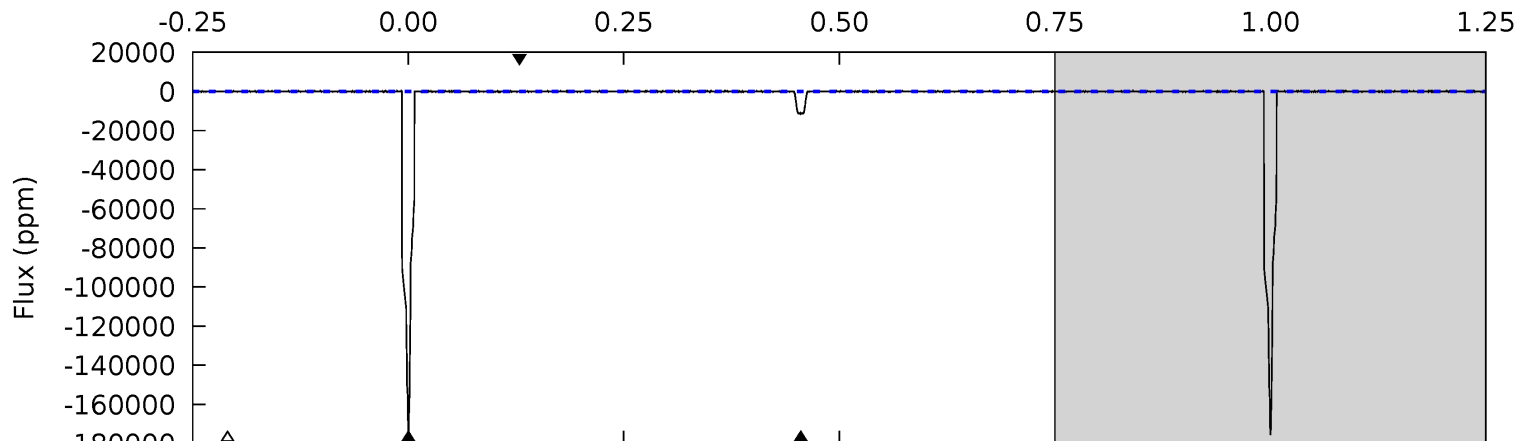
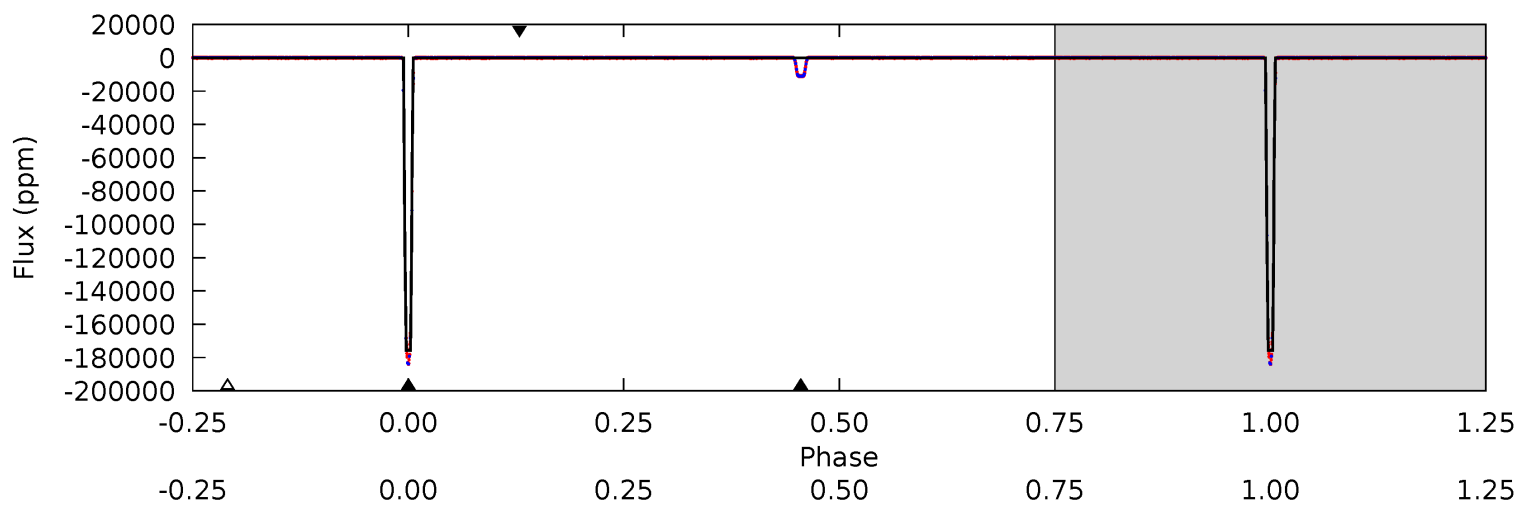
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

010274244-01, P = 13.683715 Days, E = 121.526004 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9416	606.9	4.39	4.28	5.03	2.57	1.14	9411	9411	602.5	602.6	0.13	1.00	0.00	0



Stellar Parameters For KIC 010274244

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5359^{+144}_{-144}	$4.566^{+0.090}_{-0.060}$	$-0.720^{+0.300}_{-0.300}$	$0.708^{+0.075}_{-0.075}$	$0.673^{+0.075}_{-0.030}$	$2.670^{+1.036}_{-0.522}$
	+3%/-3%	+2%/-1%	+42%/-42%	+11%/-11%	+11%/-4%	+39%/-20%
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 010274244-01 / KOI 7303.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	0 ± 1000000	$24.56^{+7.38}_{-8.05}$	882^{+36}_{-35}	-3192^{+8674}_{-2247}	$-52.632^{+1051.885}_{-922.030}$
Alt.	-11320 ± 19	$32.89^{+7.89}_{-7.68}$	885^{+34}_{-36}	3236^{+287}_{-195}	57^{+40}_{-20}

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 $A_{obs} \gg 1.0$

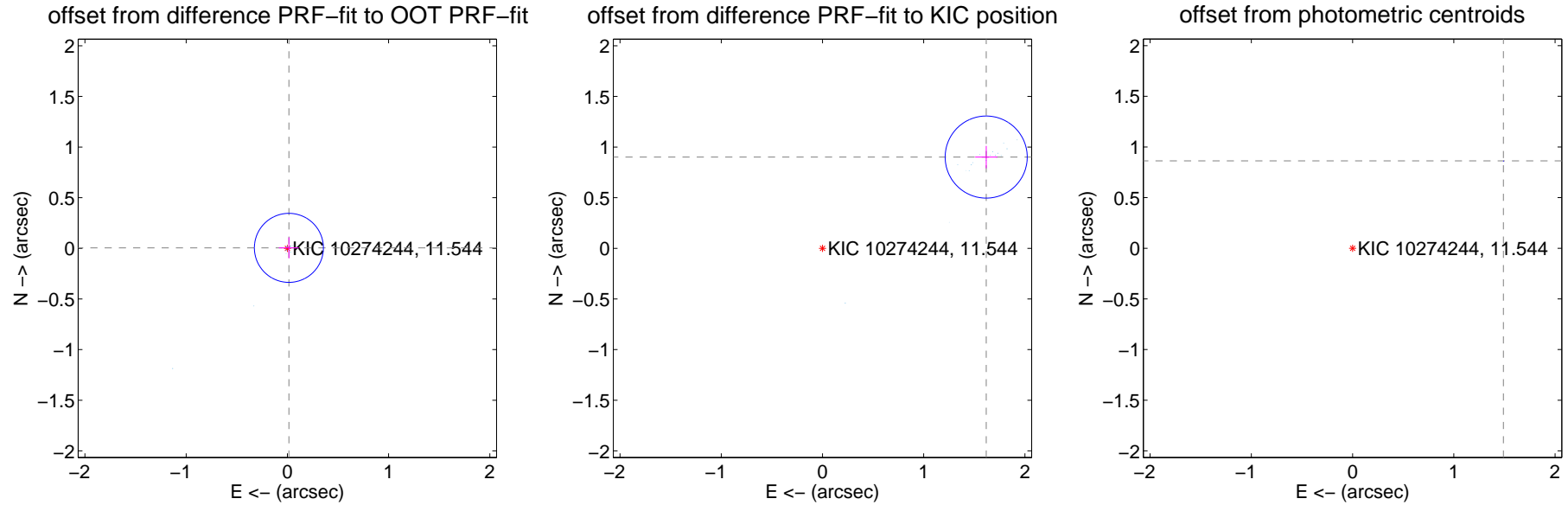
DV Centroid Data

Supplemental centroid analysis for 010274244-01. **Kepler magnitude: 11.54.** Transit SNR -1.00

There are 17 quarters with good PRF difference image offsets

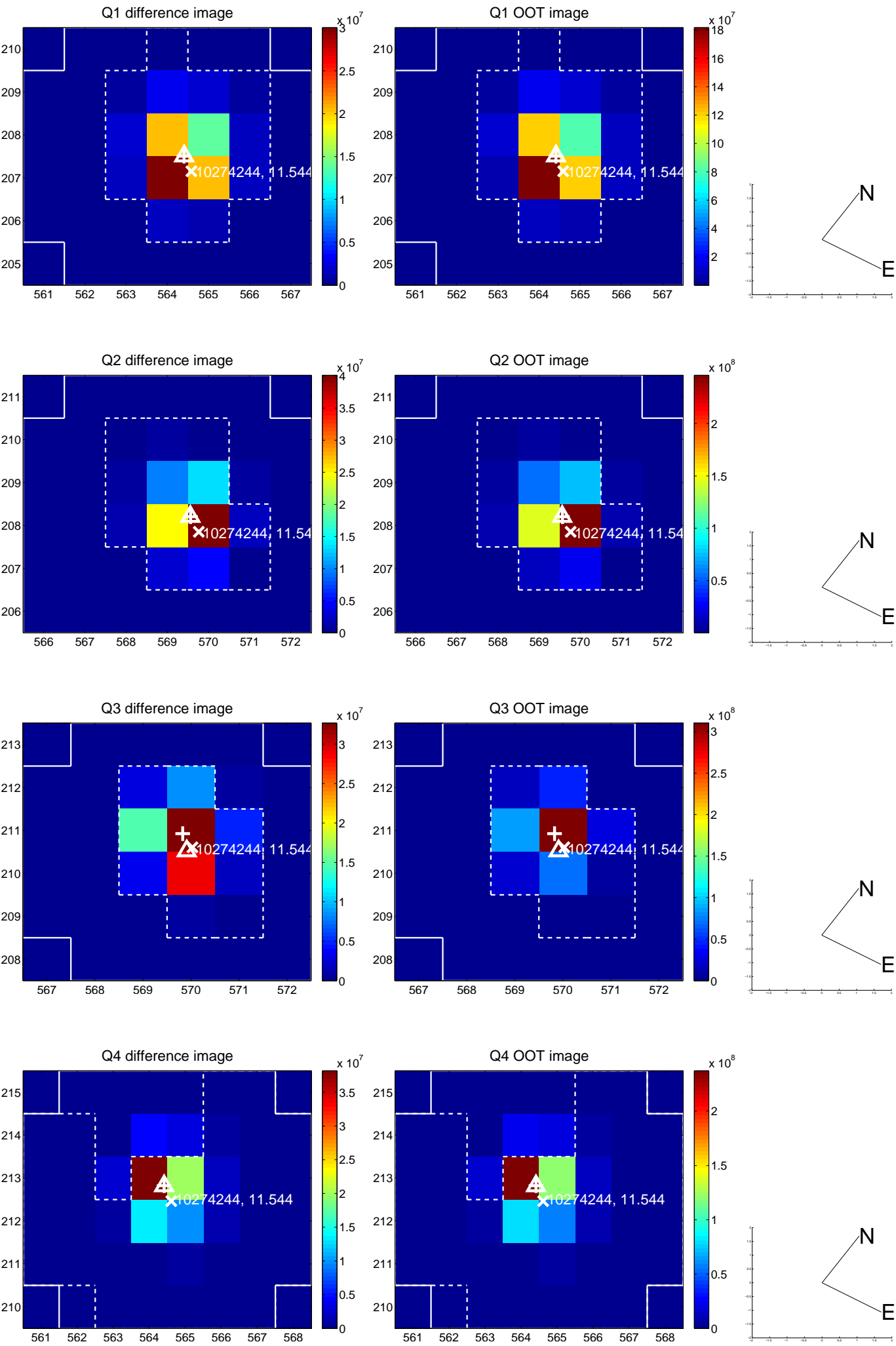
The OOT PRF centroid is offset from the target star catalog position by about 2.07 arcsec so the offset from difference PRF-fit to OOT-fit may be invalid.

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.016 ± 0.114	0.14	-0.015 ± 0.098	0.005 ± 0.103
PRF-fit source offset from KIC position	1.851 ± 0.135	13.71	-1.617 ± 0.110	0.901 ± 0.110
photometric centroid source offset	1.72 ± 0.00	7596.20	-1.49 ± 0.00	0.86 ± 0.00

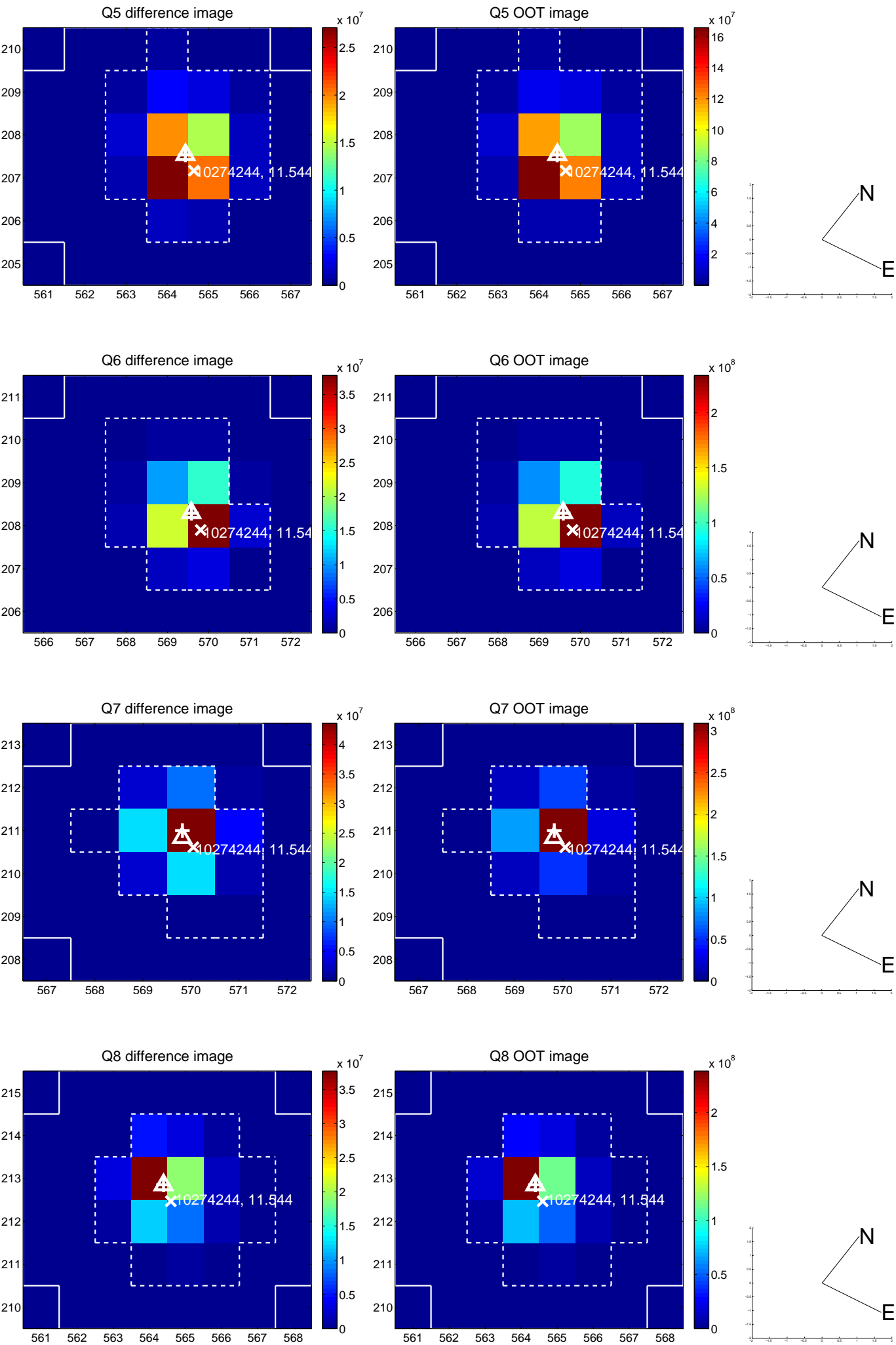


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

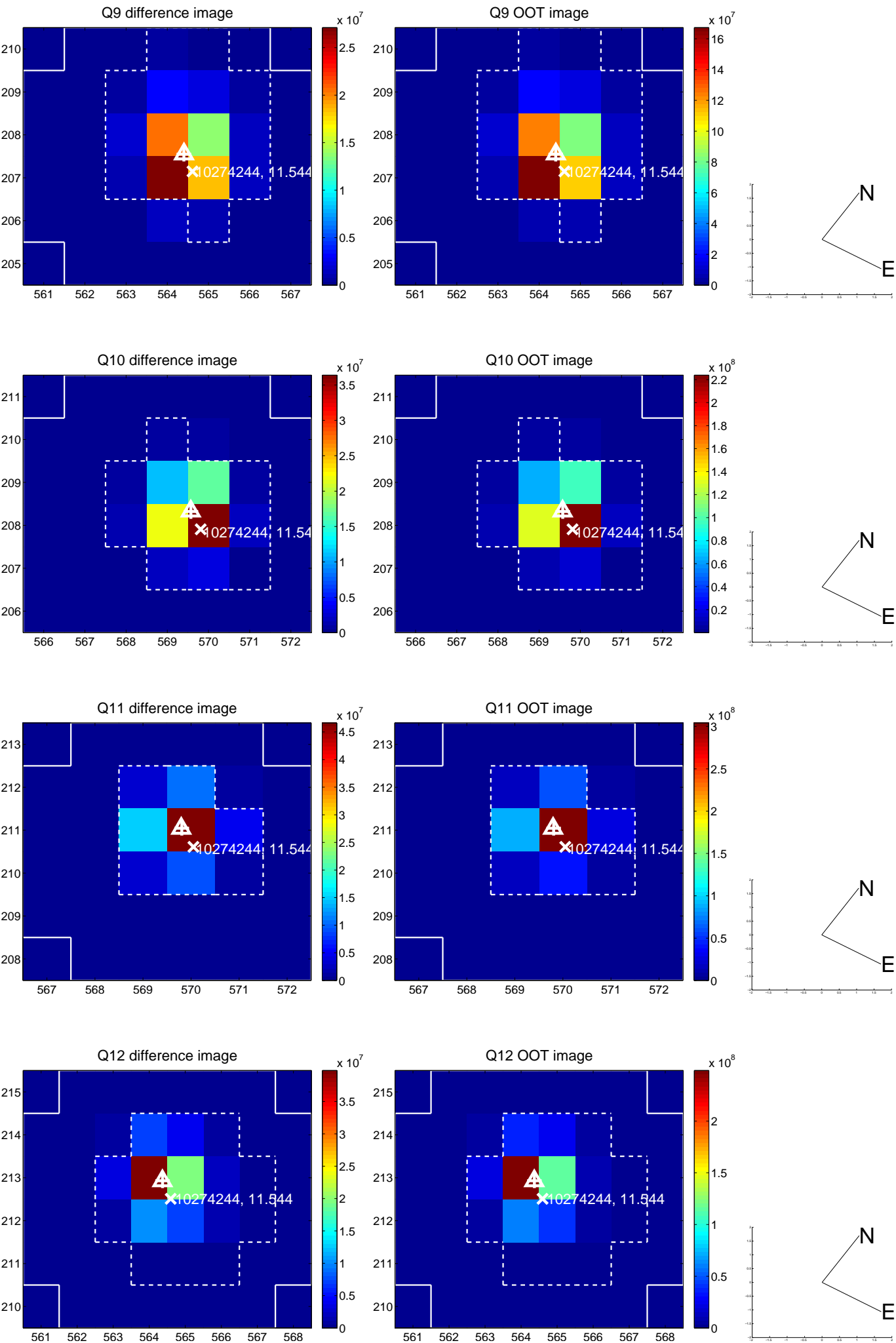
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



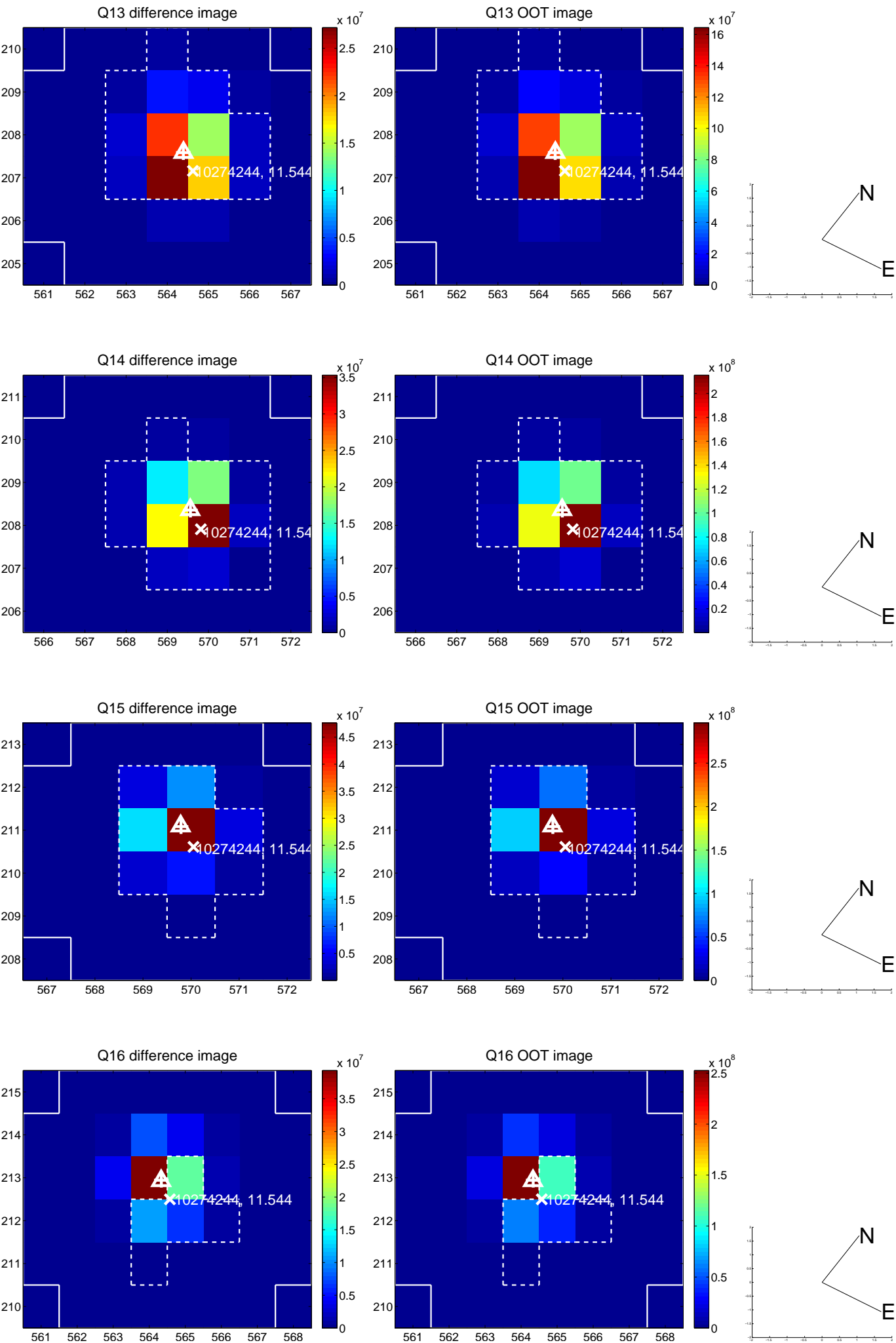
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



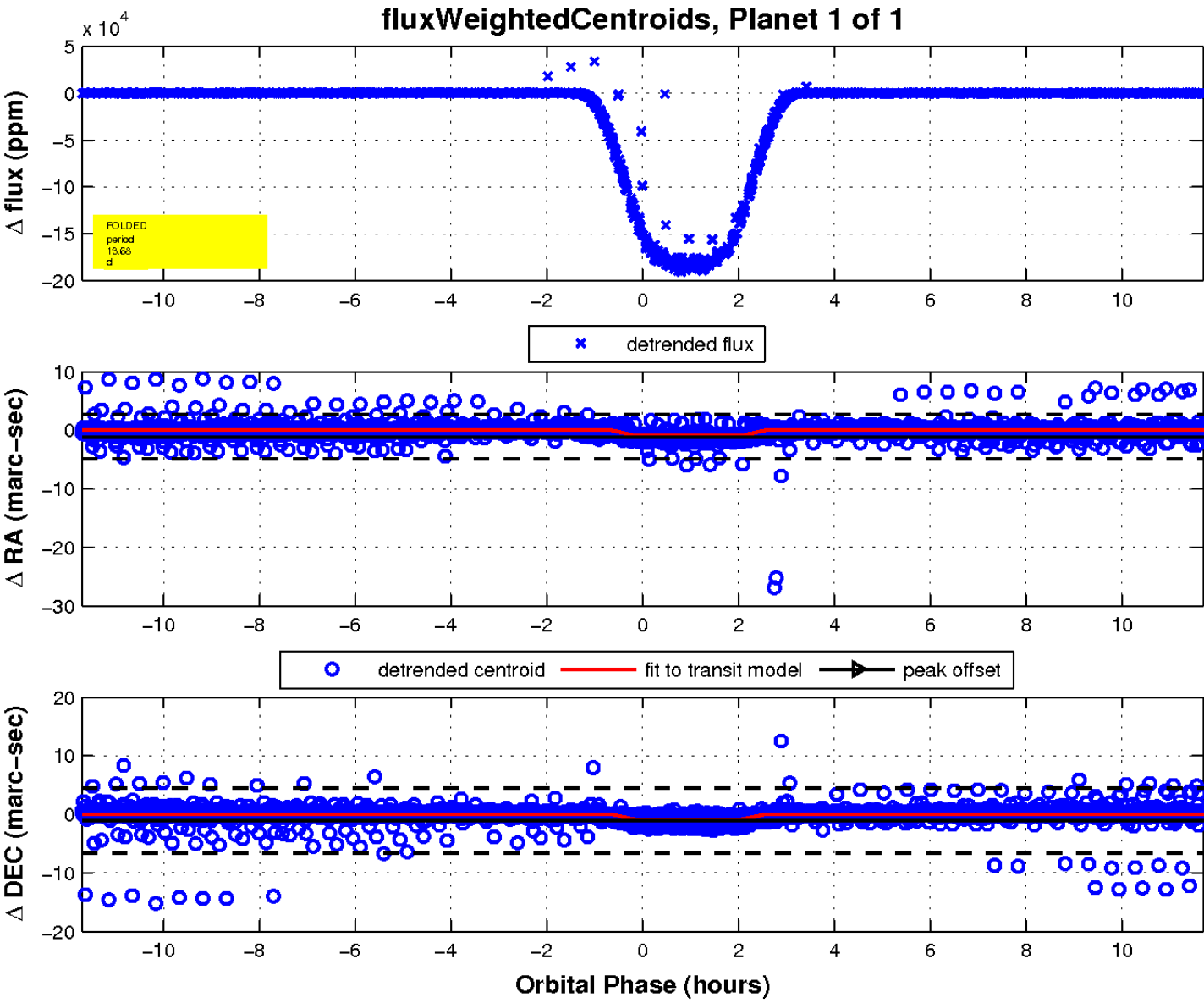
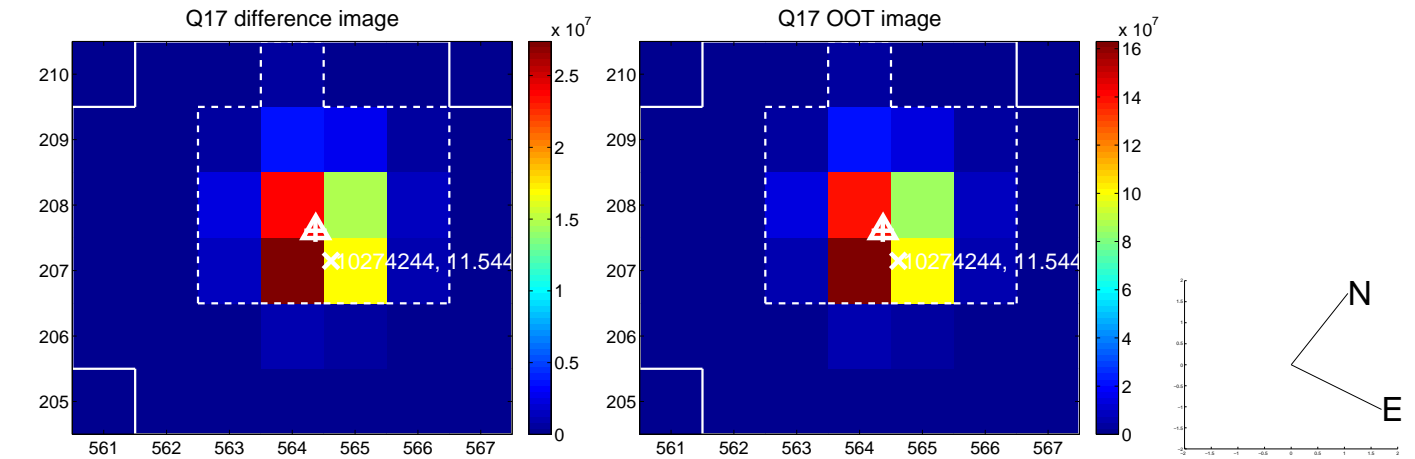
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

