

KIC 005534702

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})
005534702-01	OBS	6596.01	2.050921	131.647218	15523.0	4.500	2188.5	-1.0	1.88	6700	23.66	5071.80

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005534702-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_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.

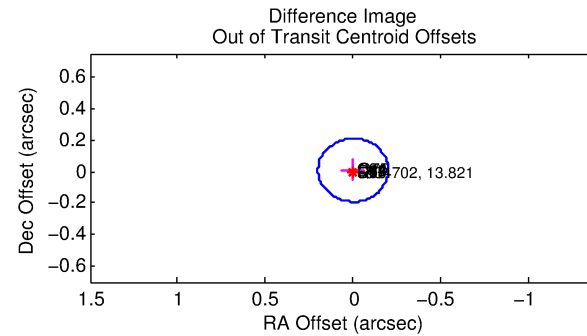
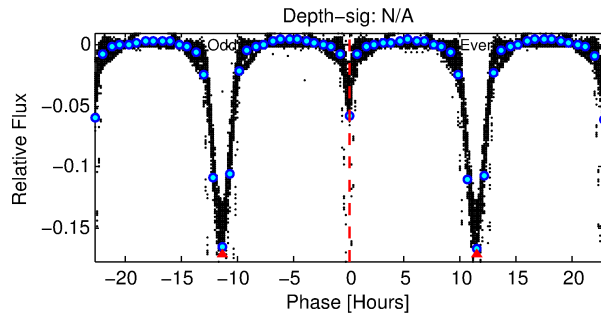
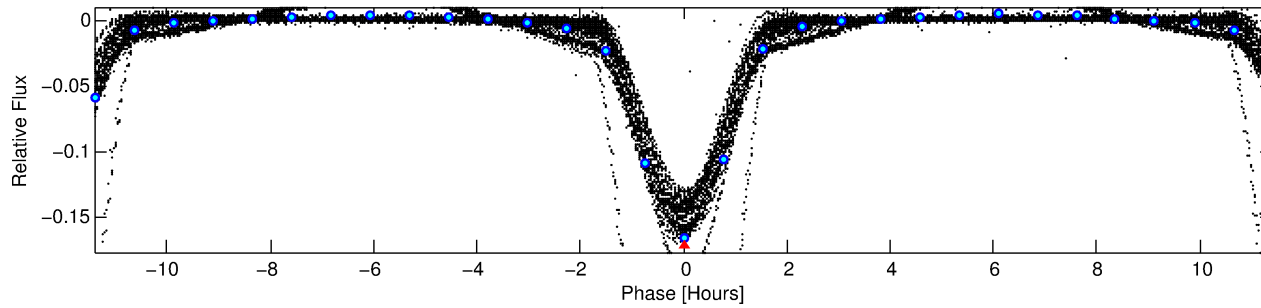
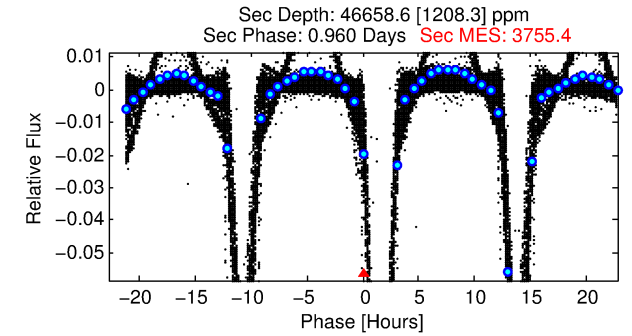
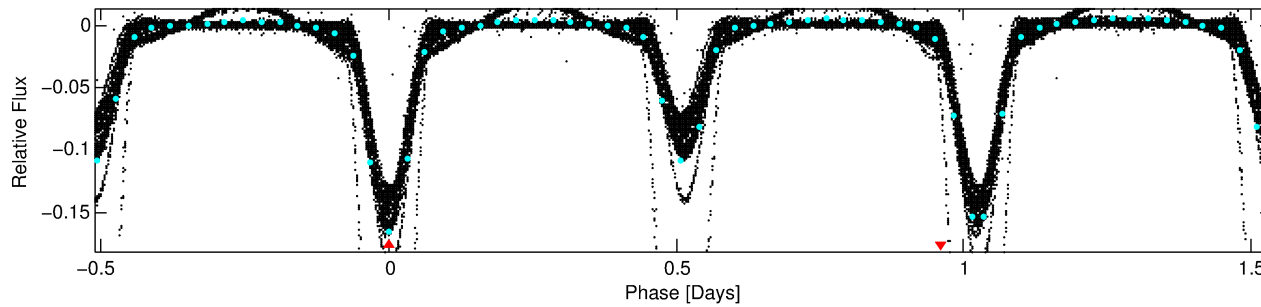
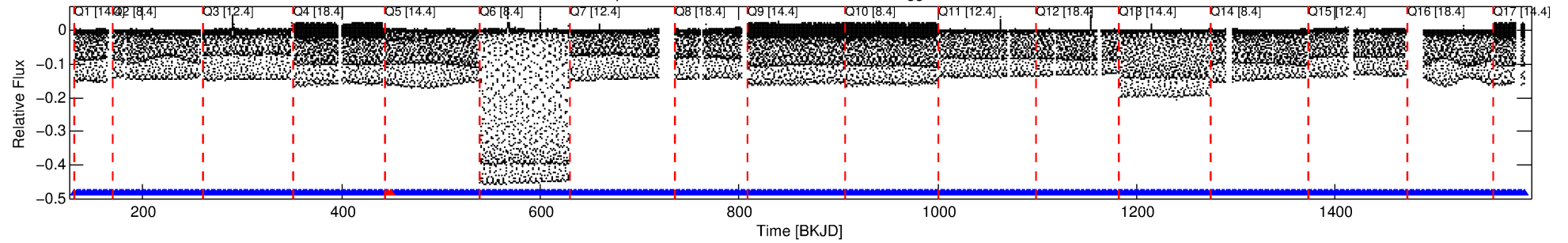
Ephemeris Match Information For 005534702-01

No Significant Match Found

DV One-Page Summary

KIC: 5534702 Candidate: 1 of 1 Period: 2.051 d
KOI: K06596 Corr: No Ephemeris Match

Kp: 13.82 R*: 1.88 Rs Teff: 6700.0 K Logg: 4.04 Fe/H: -0.080



TPS TCE Results:

Period = 2.05092 d
Epoch = 131.6472 BKJD

DV fit results are unavailable

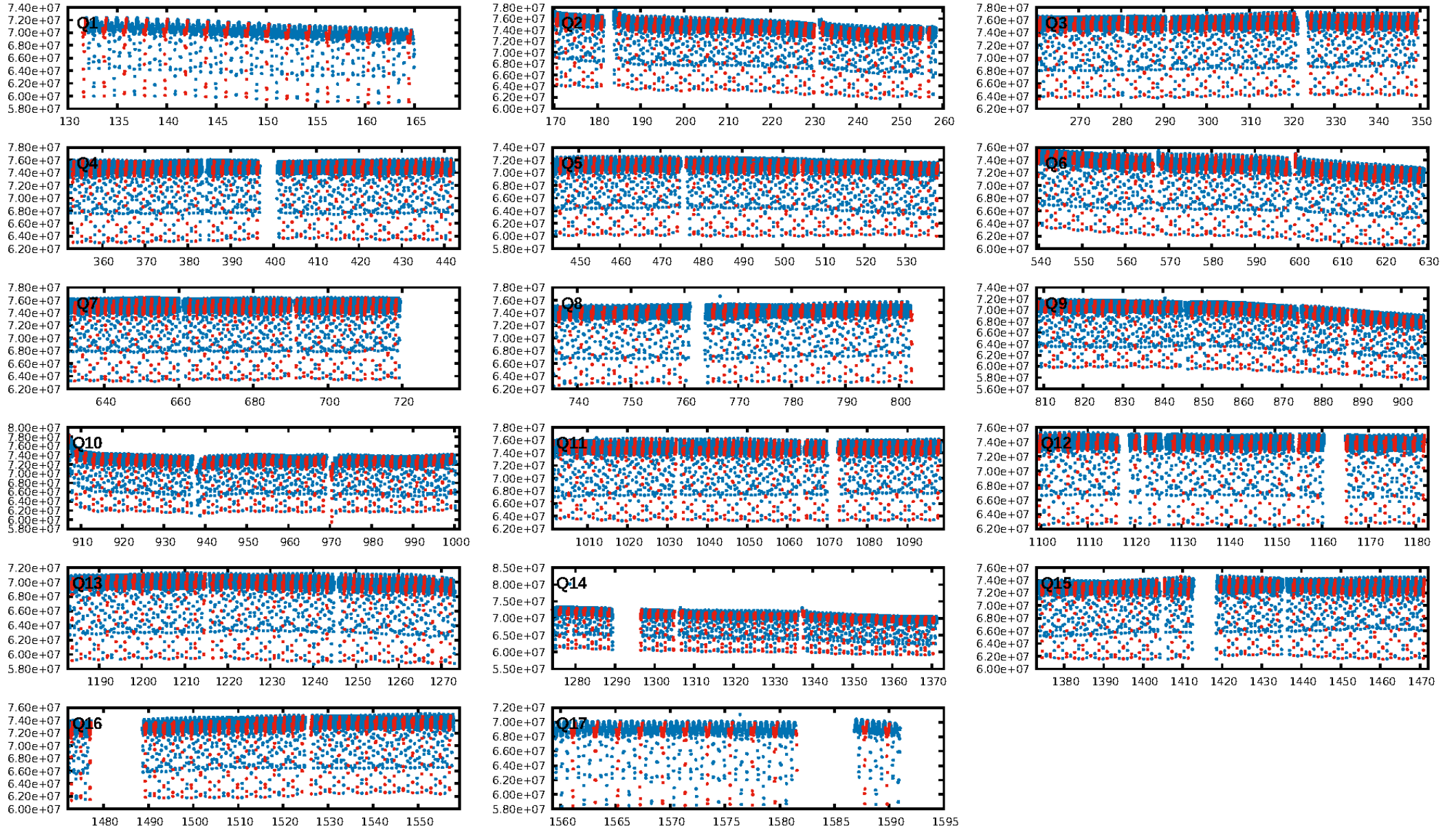
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [624/626]
GhostDiagnostic-chr: 0.7563
Centroid-sig: 0.0%
Centroid-so: 0.126 arcsec [343.27σ]
OotOffset-rm: 0.009 arcsec [0.14σ]
KicOffset-rm: 0.063 arcsec [0.93σ]
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]

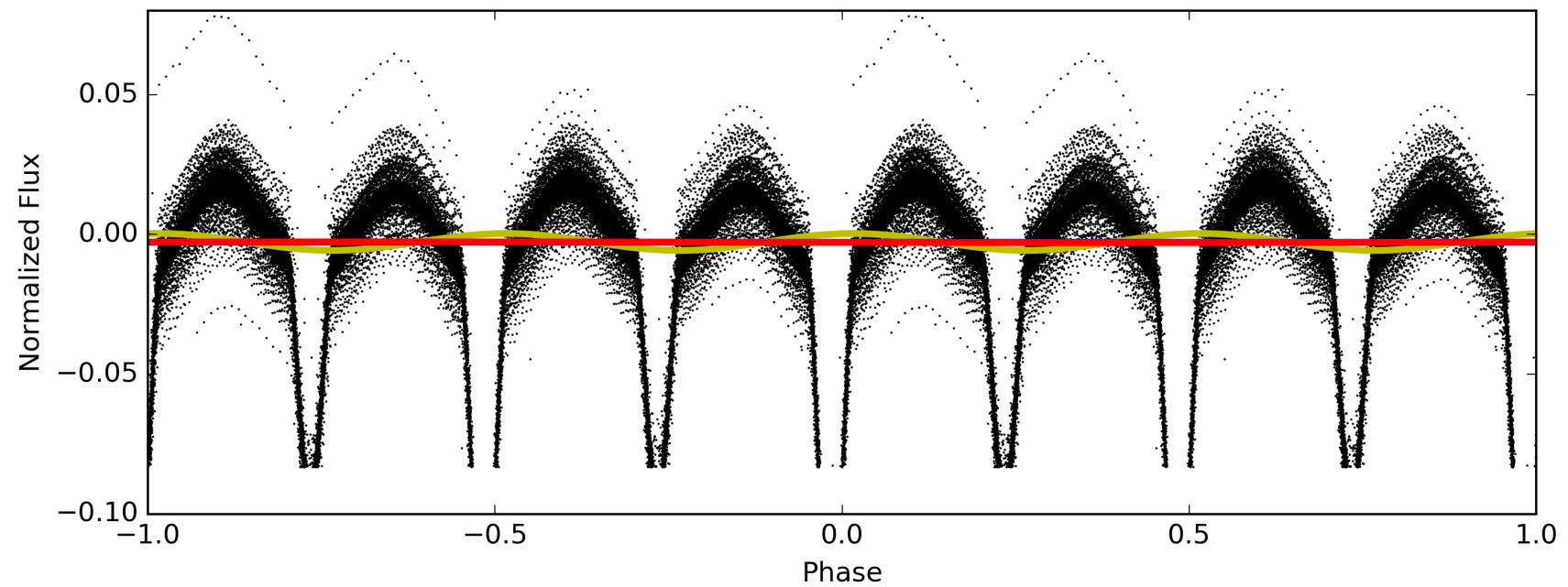
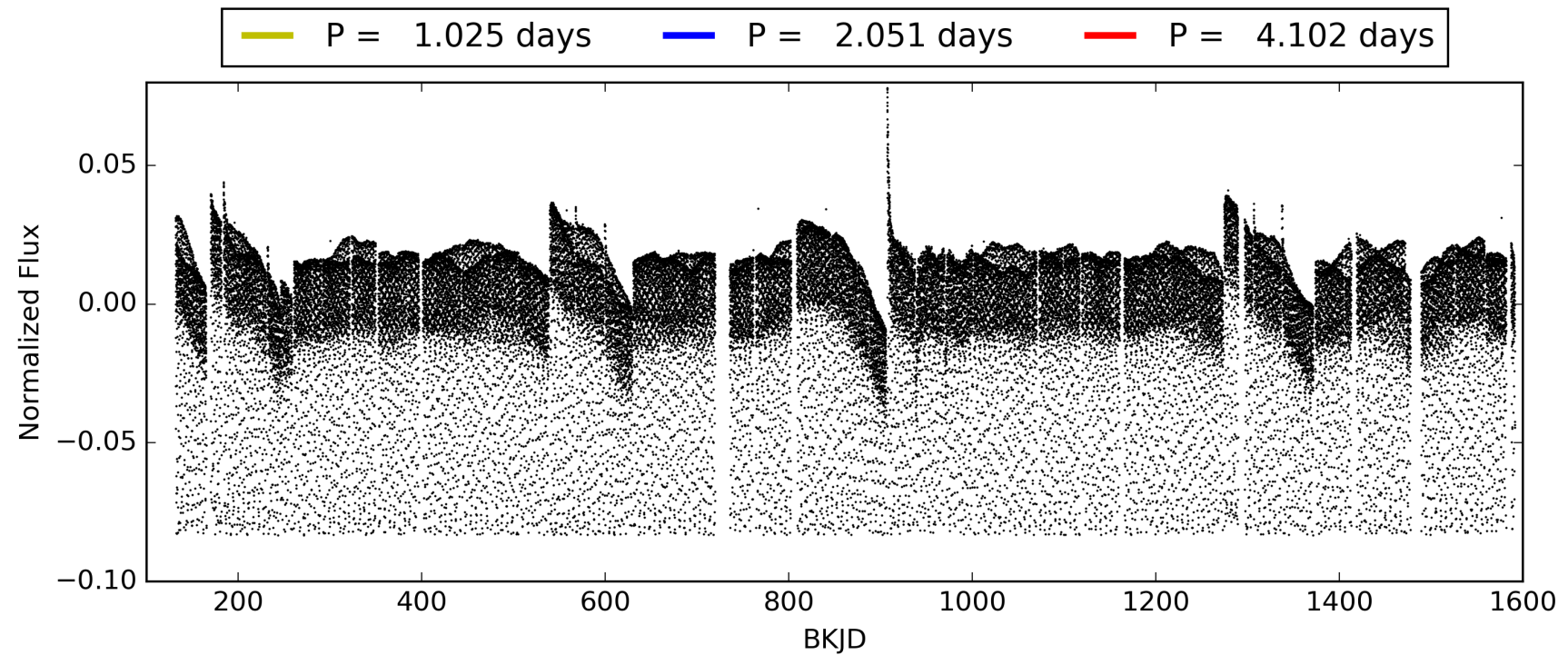
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 03-Feb-2016 09:15:47 Z

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

TCE 005534702-01, PDC Light Curves

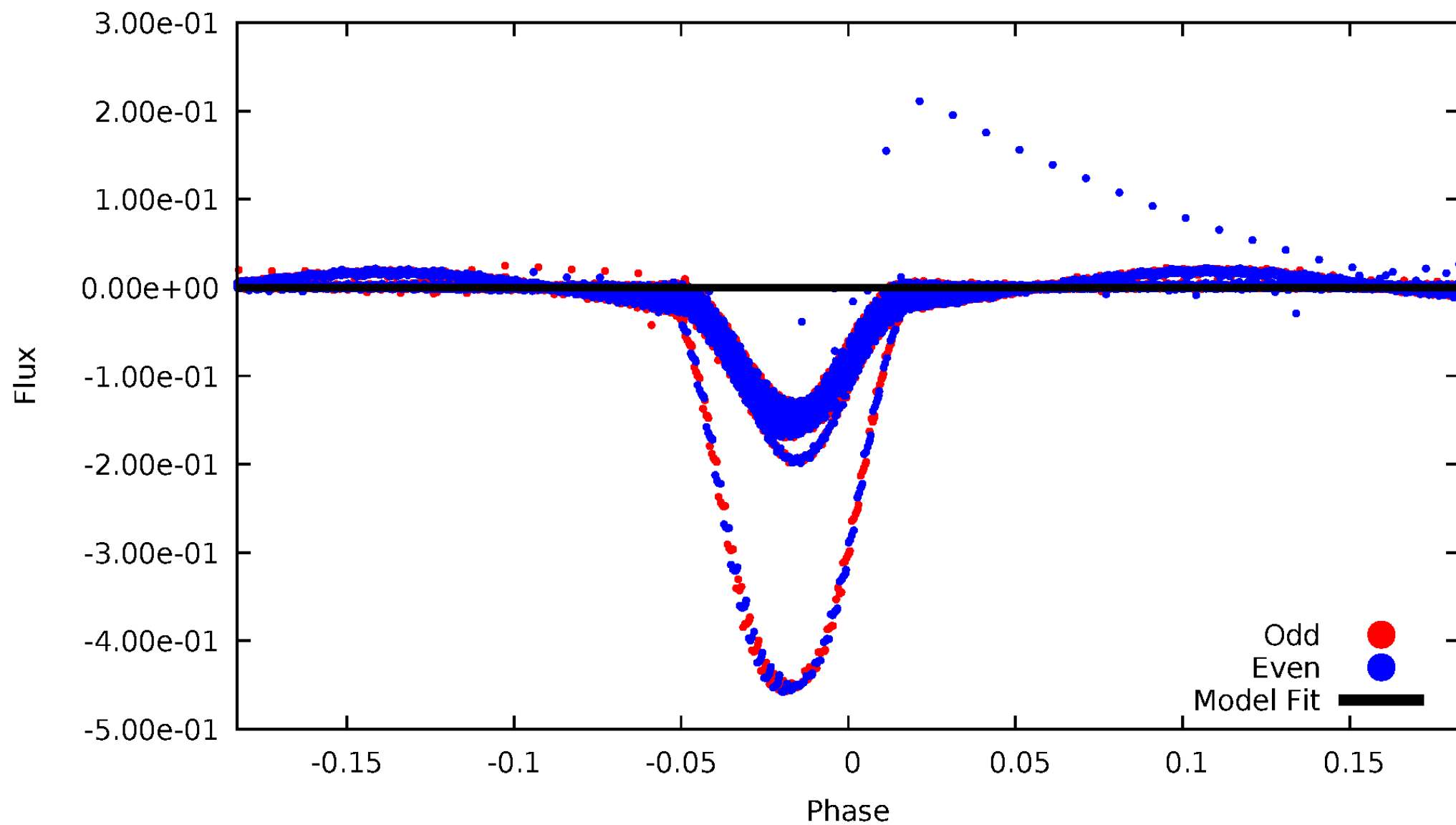


TCE 005534702-01



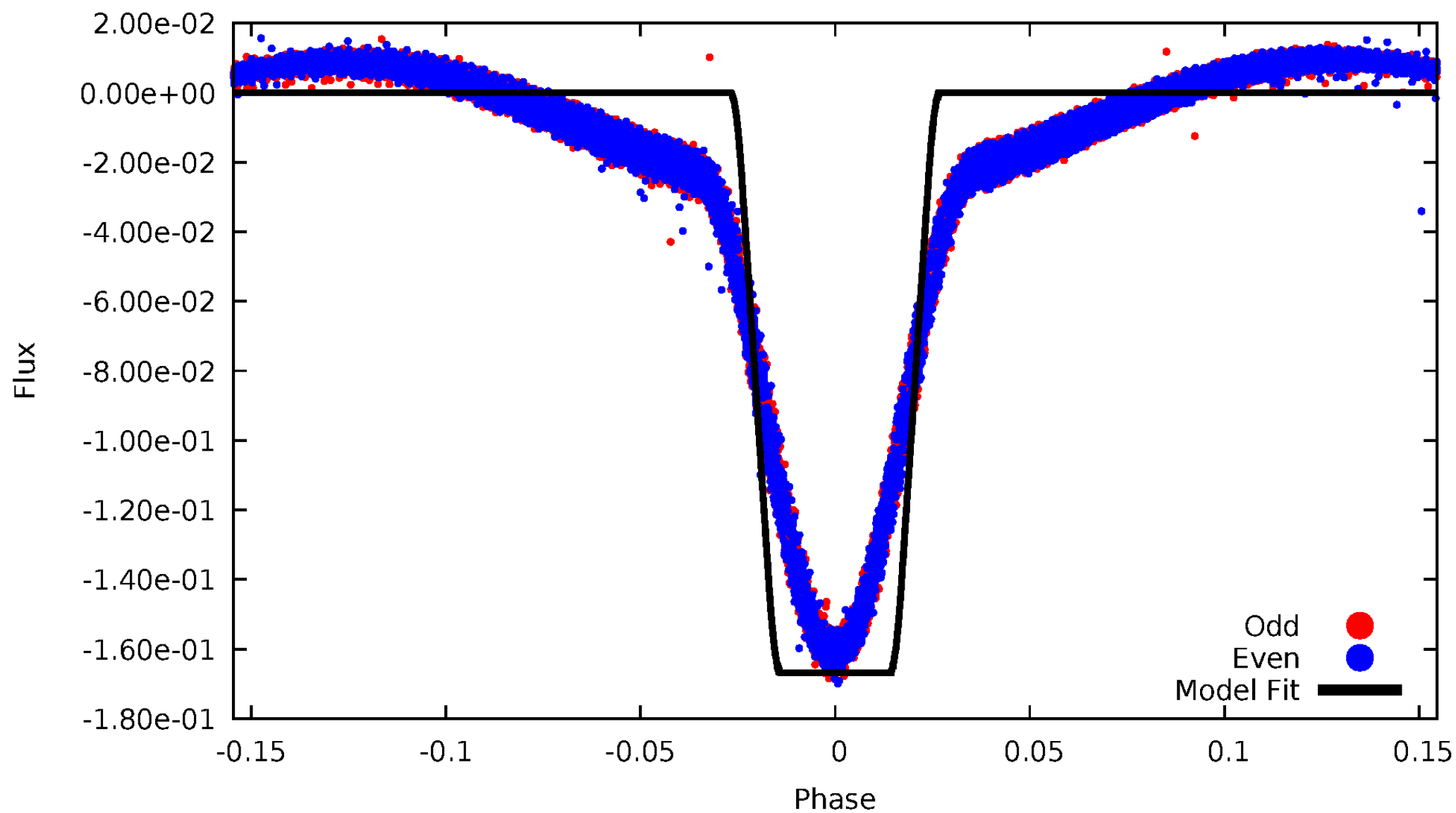
DV Odd/Even

TCE 005534702-01



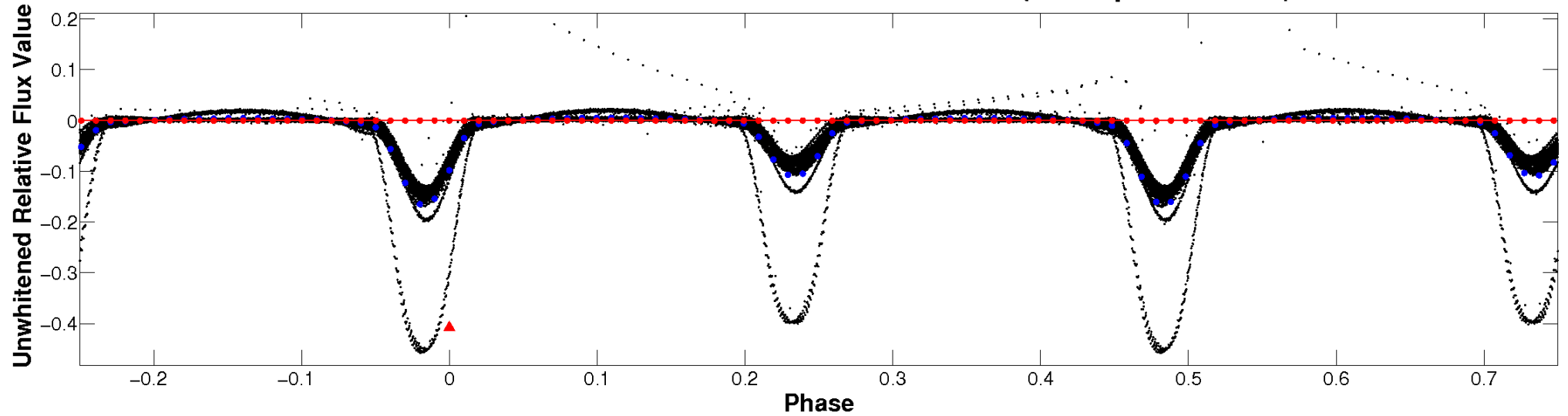
ALT Odd/Even

TCE 005534702-01



Non-Whitened Vs. Whitened Light Curve

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

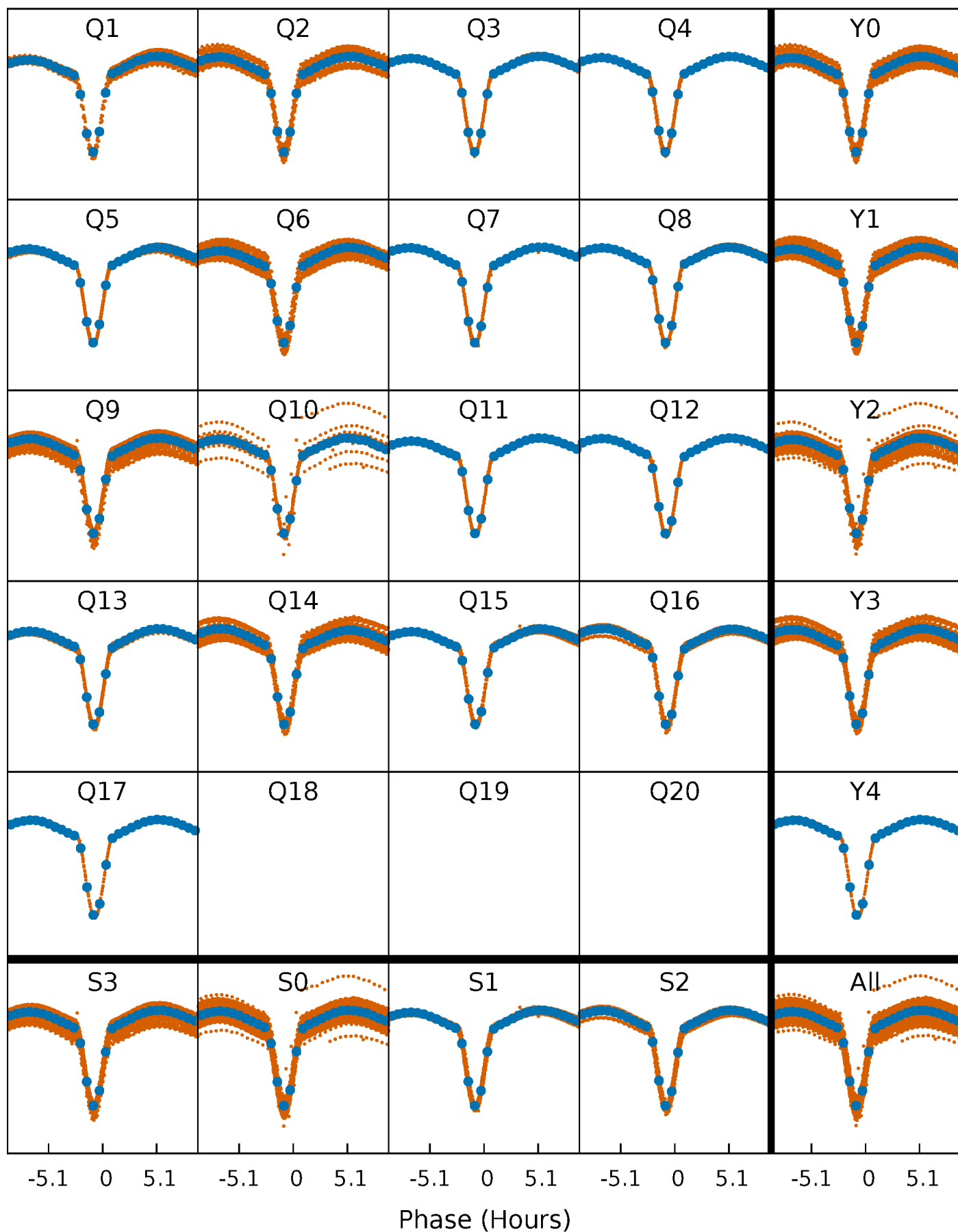


Planet 1 : Phased Whitened Flux Time Series (TPS Epoch/Period)



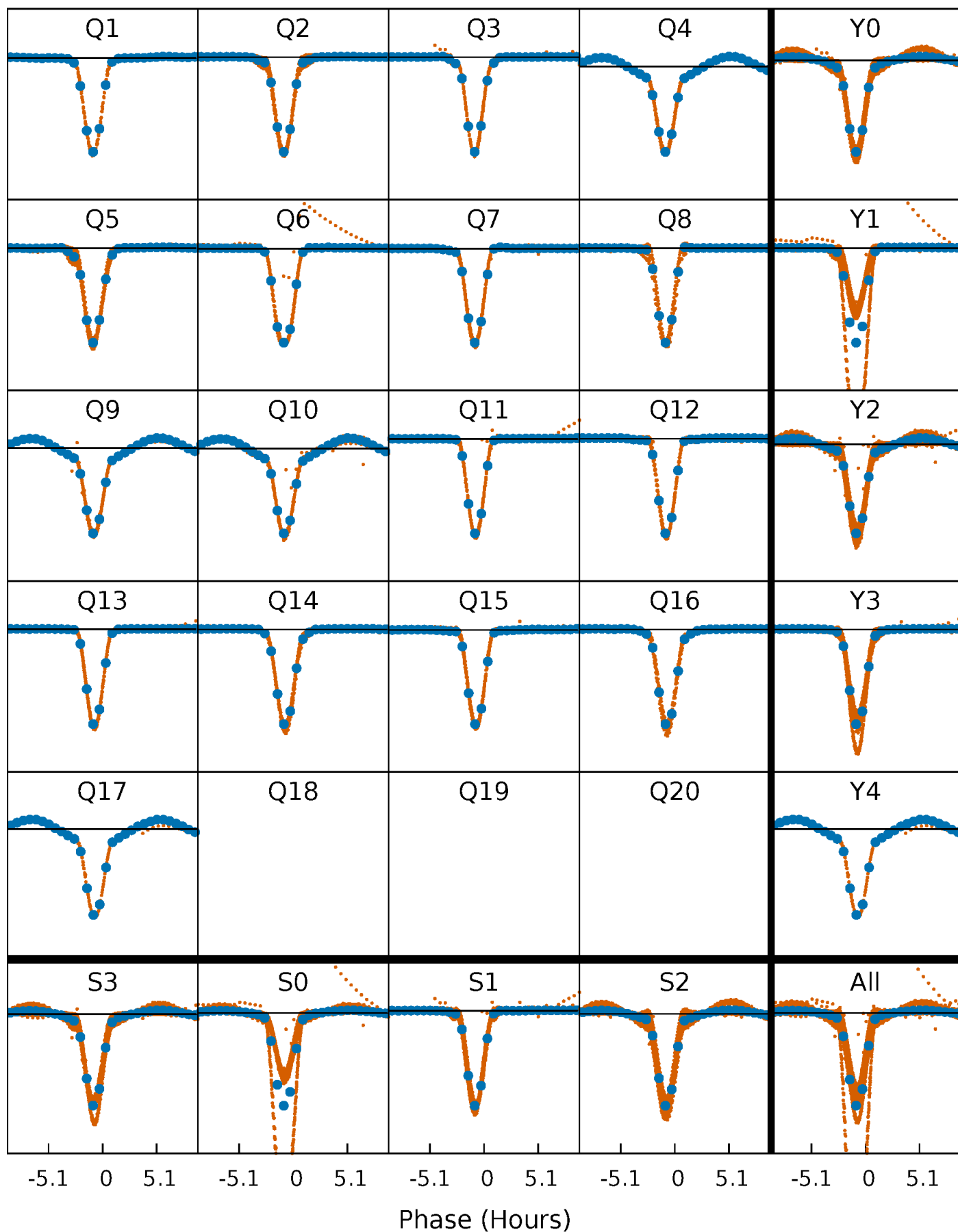
PDC Quarter-Phased Transit Curves

TCE 005534702-01 P= 2.050921 Days $T_0=131.647218$ (BKJD)



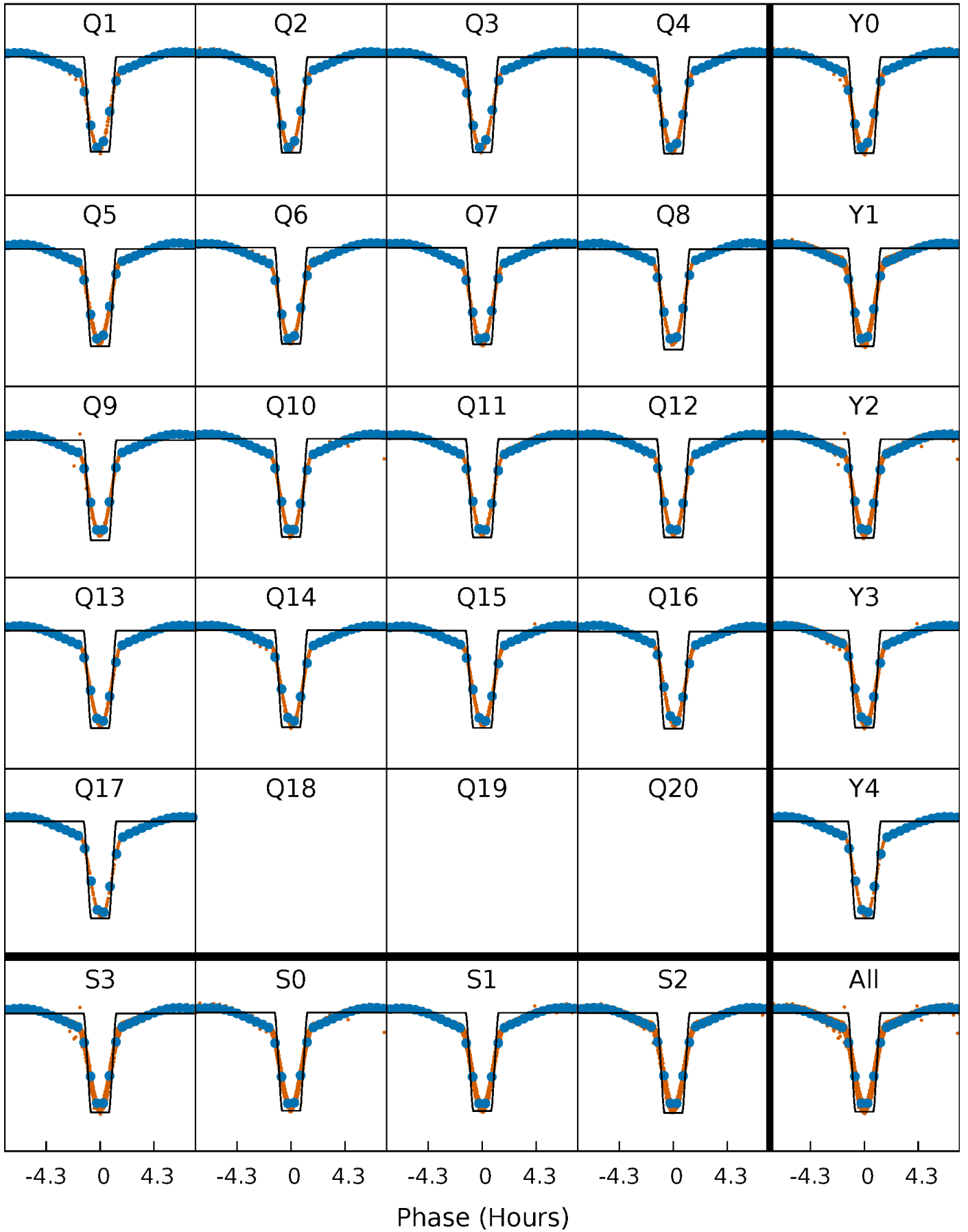
DV Quarter-Phased Transit Curves

TCE 005534702-01 P= 2.050921 Days $T_0=131.647218$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

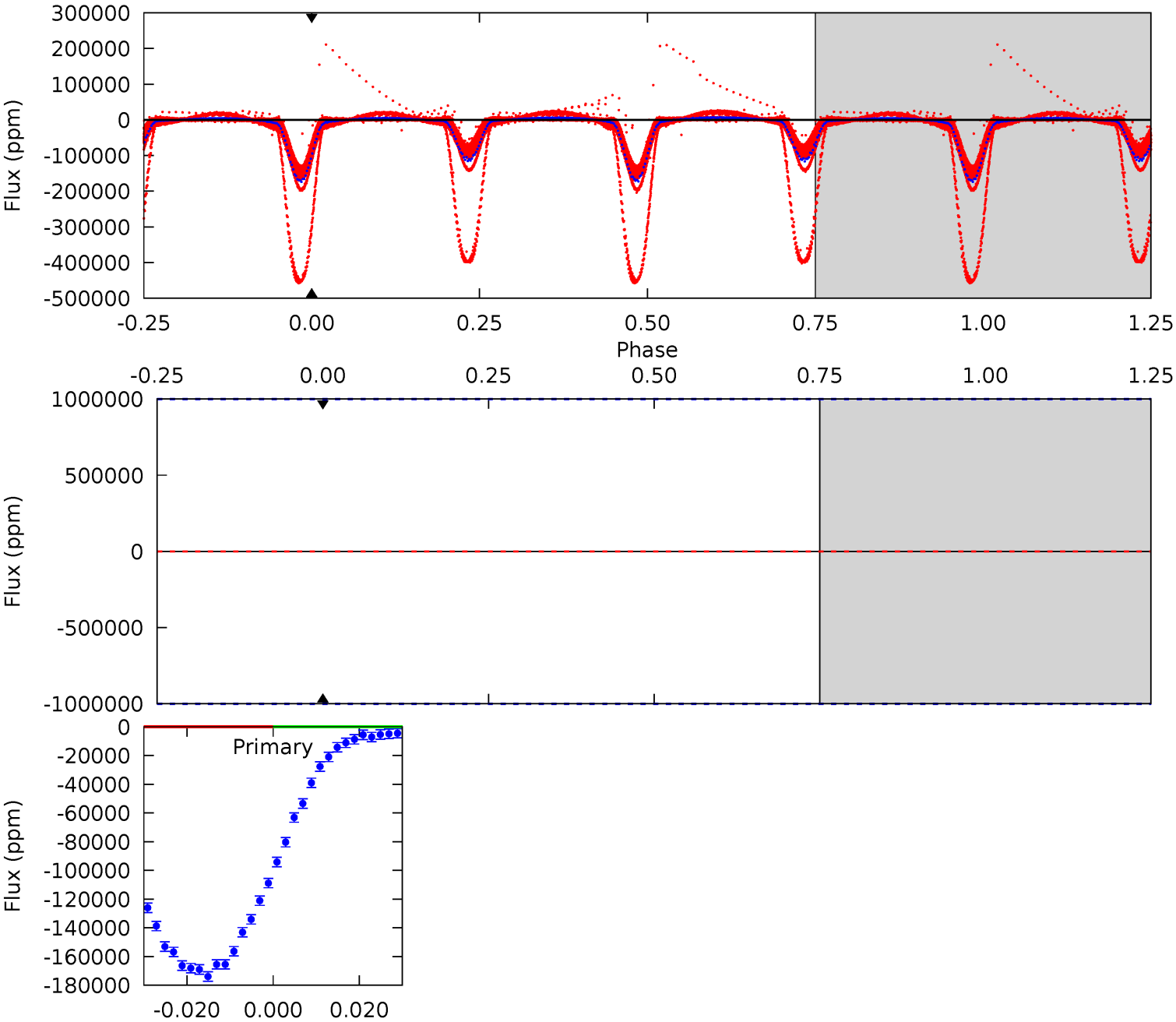
TCE 005534702-01 P= 2.050921 Days $T_0=131.613167$ (BKJD)



DV Model-Shift Uniqueness Test

005534702-01, P = 2.050921 Days, E = 129.596297 Days

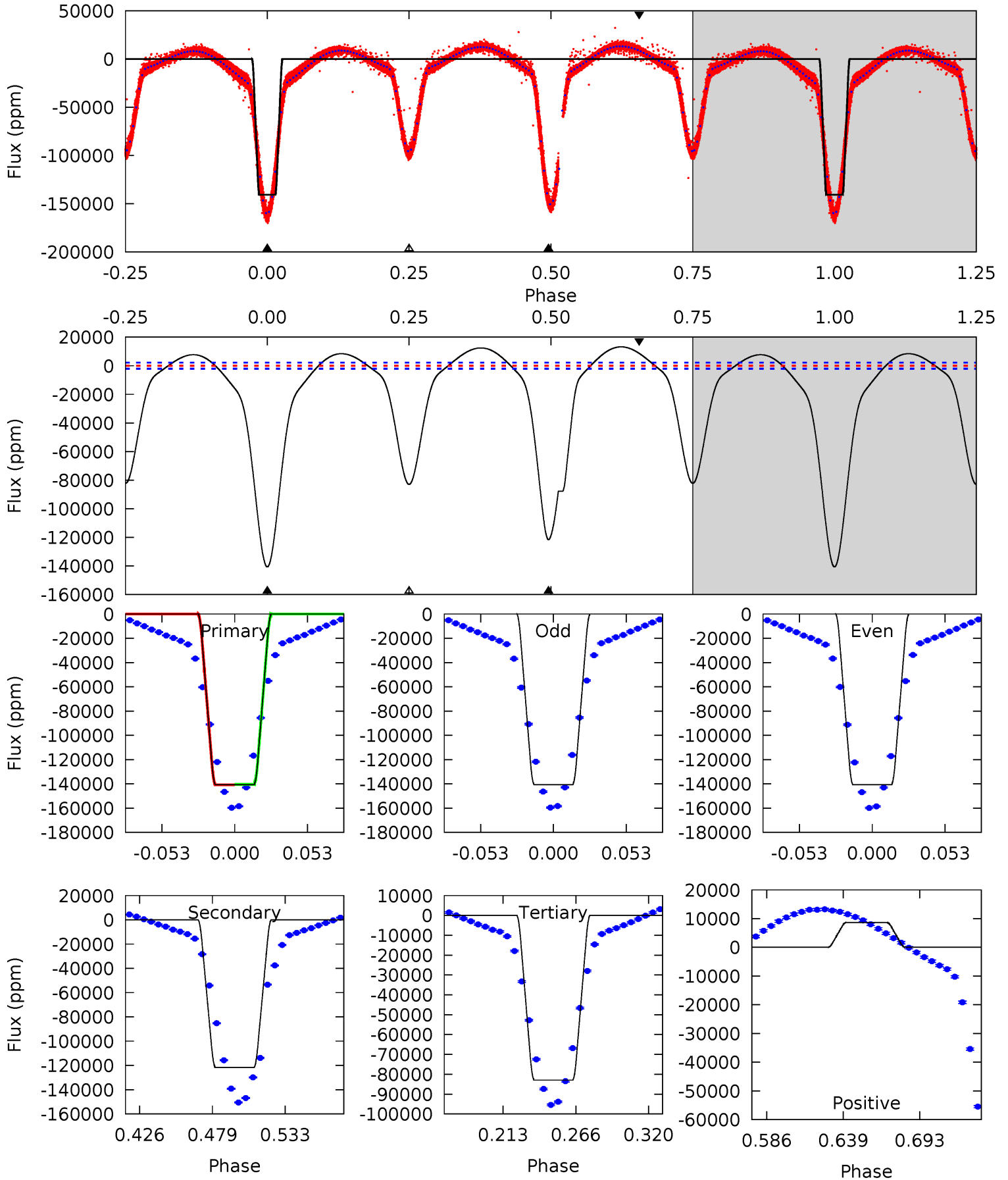
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

005534702-01, P = 2.050921 Days, E = 129.562246 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
305.7	264.4	180.2	18.8	4.70	1.93	53.8	125.5	286.9	84.2	245.6	0.08	1.00	0.09	0.38



Stellar Parameters For KIC 005534702

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6700^{+73}_{-87}	$4.041^{+0.174}_{-0.116}$	$-0.080^{+0.150}_{-0.150}$	$1.883^{+0.337}_{-0.412}$	$1.424^{+0.115}_{-0.144}$	$0.300^{+0.284}_{-0.108}$
	+1%/-1%	+4%/-3%	+188%/-188%	+18%/-22%	+8%/-10%	+94%/-36%
Source	SPE68	SPE68	SPE68	DSEP		

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

Secondary Eclipse Parameters for KIC 005534702-01 / KOI 6596.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	0 ± 1000000	$25.76^{+18.81}_{-15.59}$	2984^{+155}_{-161}	-1931^{+18019}_{-12177}	$0.295^{+194.550}_{-131.123}$
Alt.	-121642 ± 460	$82.25^{+22.19}_{-20.69}$	2992^{+146}_{-168}	6312^{+1063}_{-641}	14^{+11}_{-6}

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 $A_{obs} \gg 1.0$

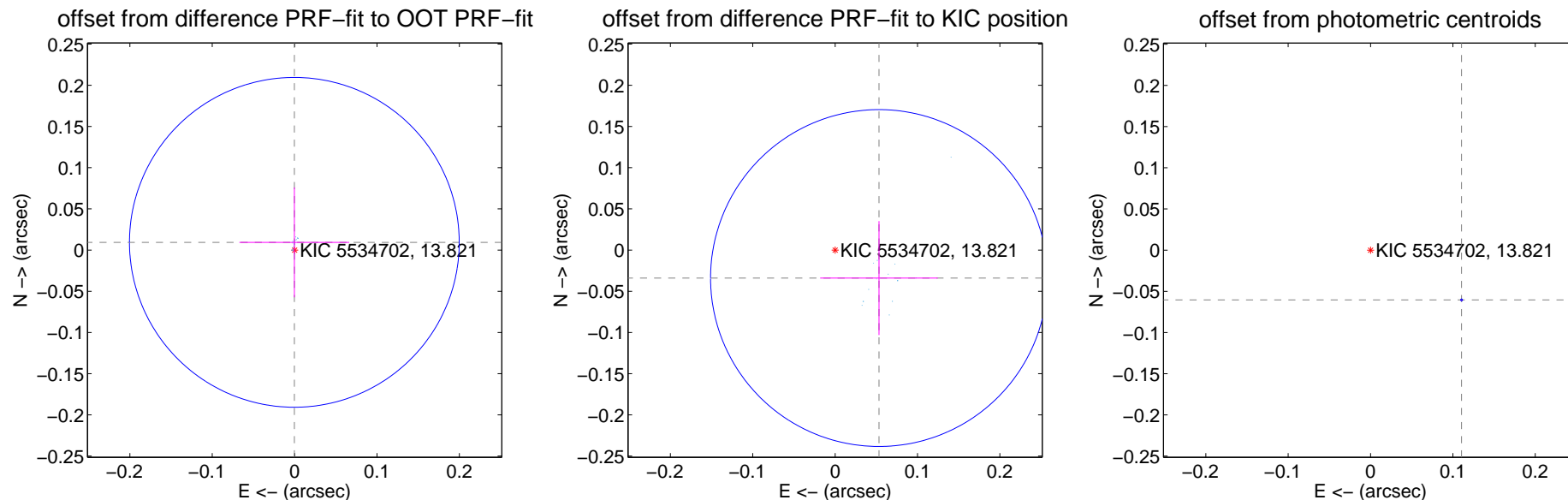
DV Centroid Data

Supplemental centroid analysis for 005534702-01. Kepler magnitude: 13.82. Transit SNR -1.00

There are 17 quarters with good PRF difference image offsets

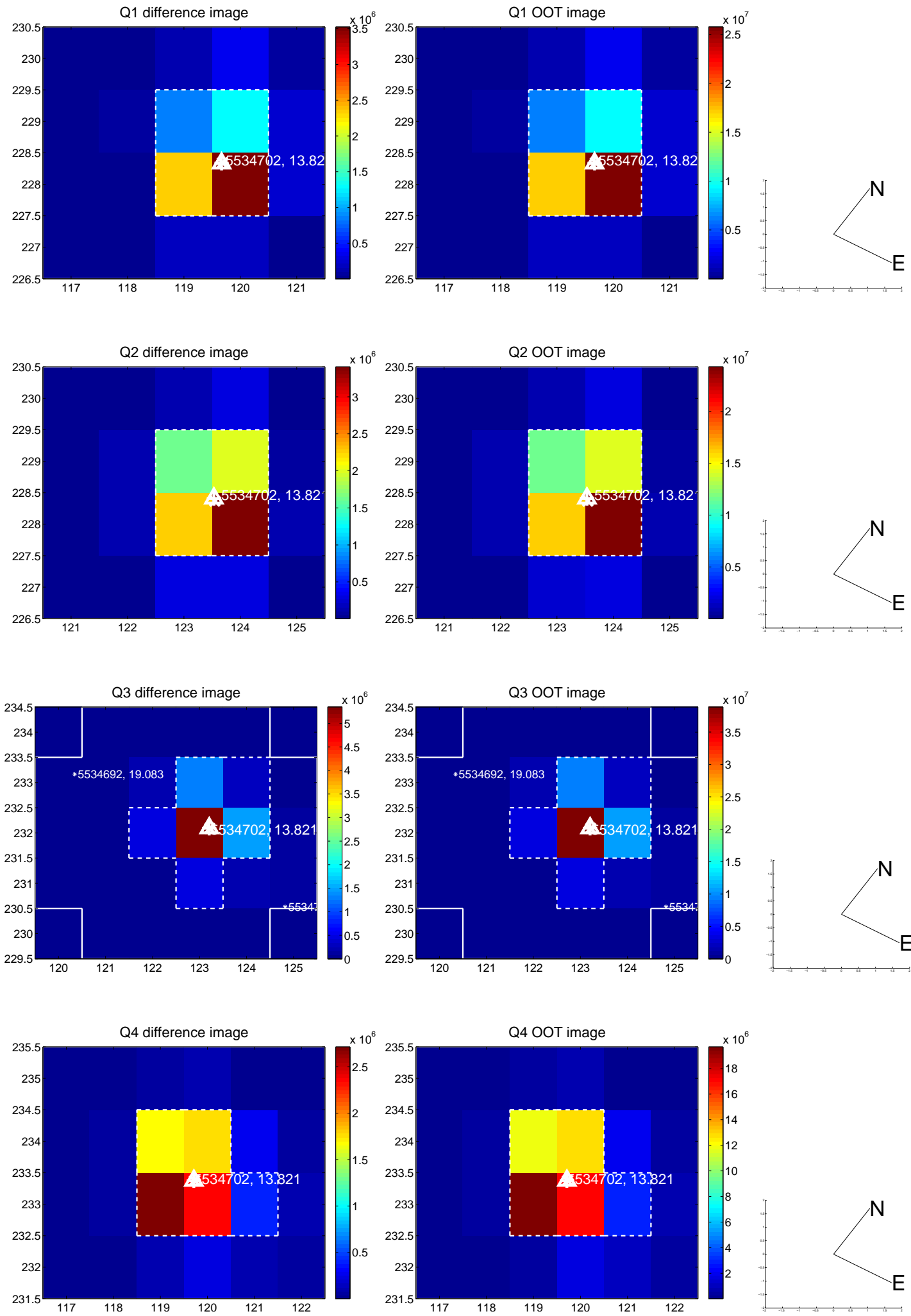
The direct PRF centroid is offset from the target star catalog position by about 0.09 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.009 ± 0.067	0.14	0.000 ± 0.067	0.009 ± 0.067
PRF-fit source offset from KIC position	0.063 ± 0.068	0.93	-0.053 ± 0.071	-0.034 ± 0.069
photometric centroid source offset	0.13 ± 0.00	343.27	-0.11 ± 0.00	-0.06 ± 0.00

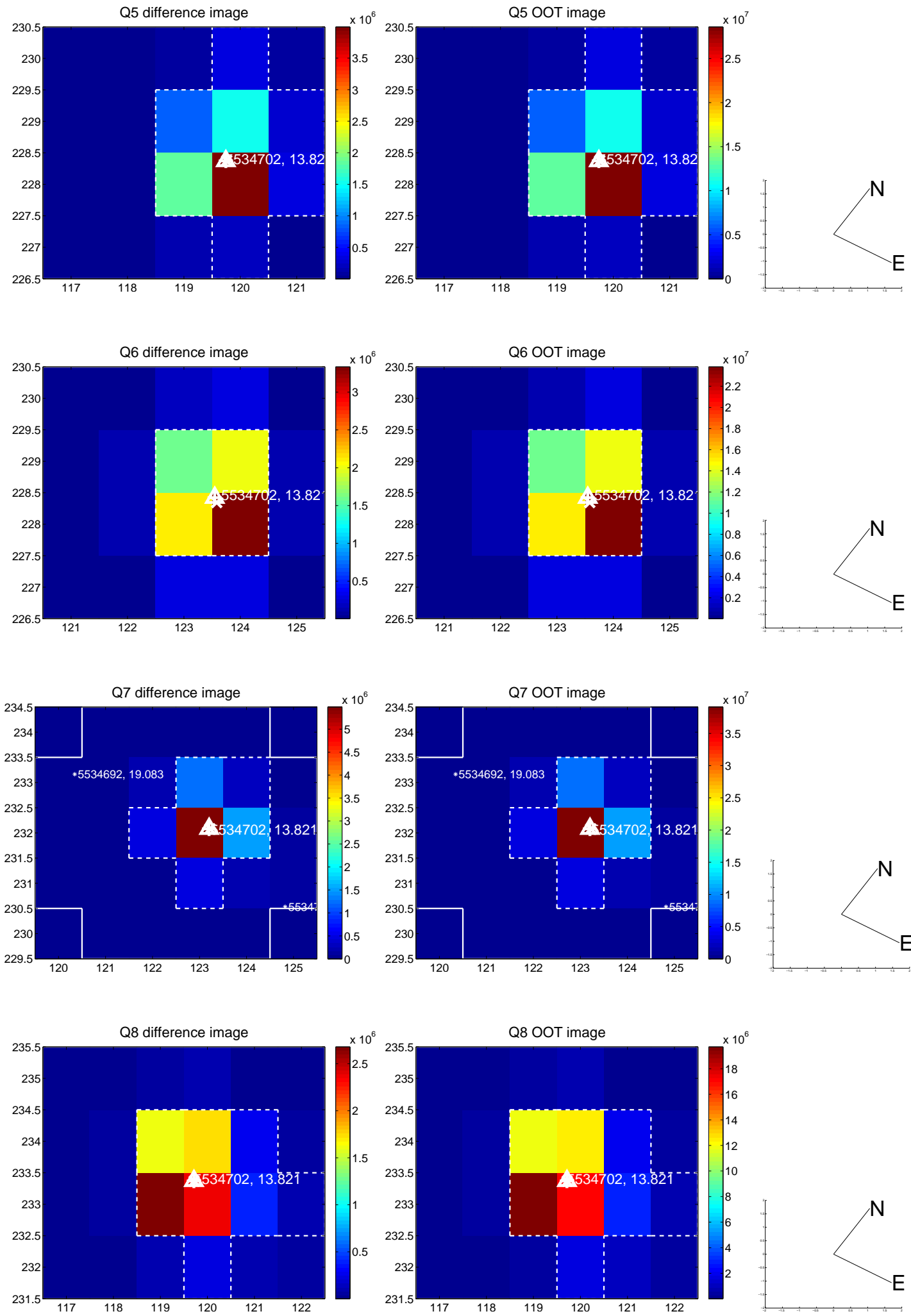


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

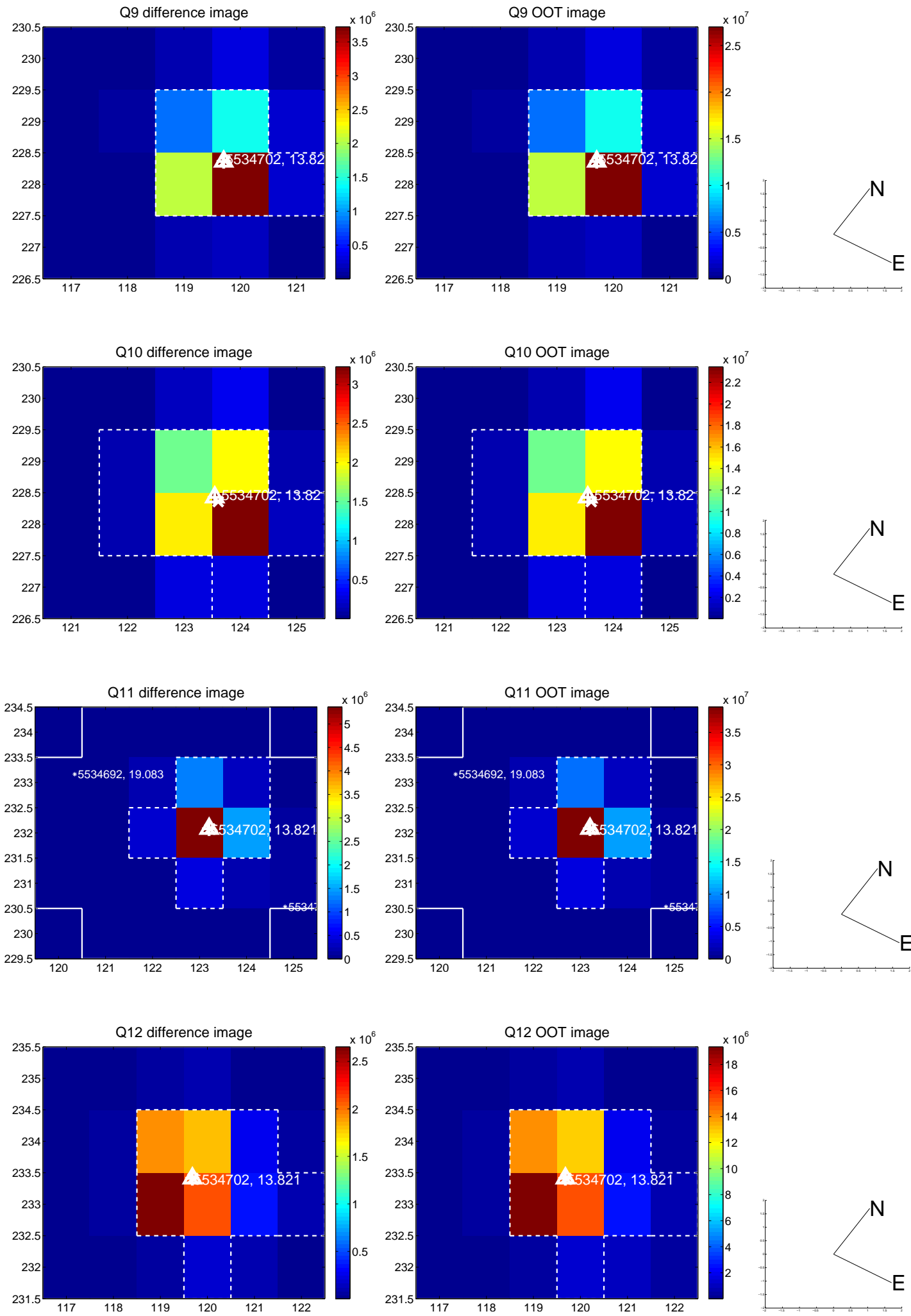
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



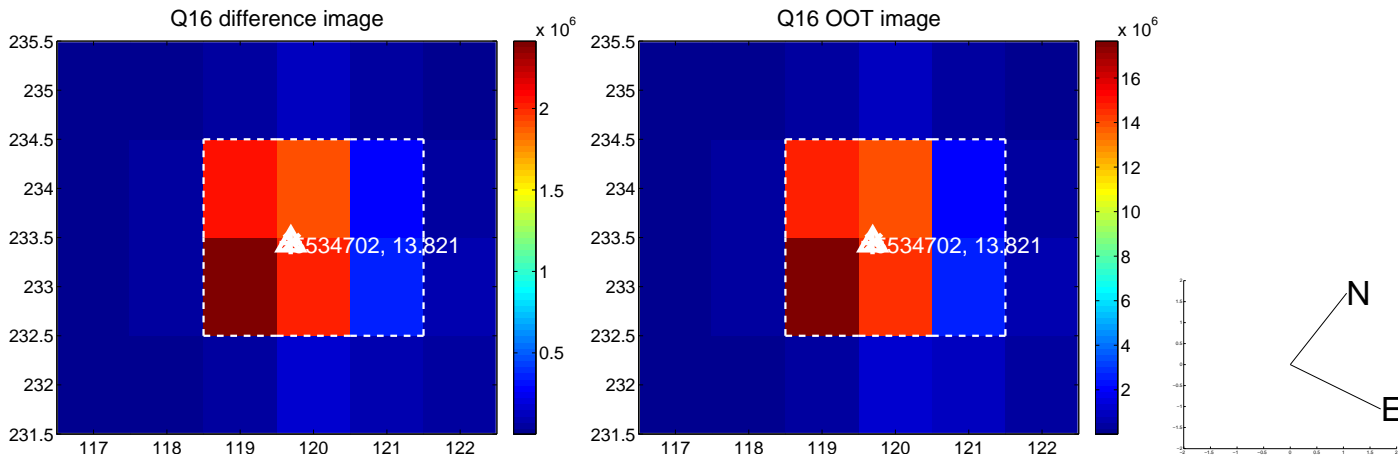
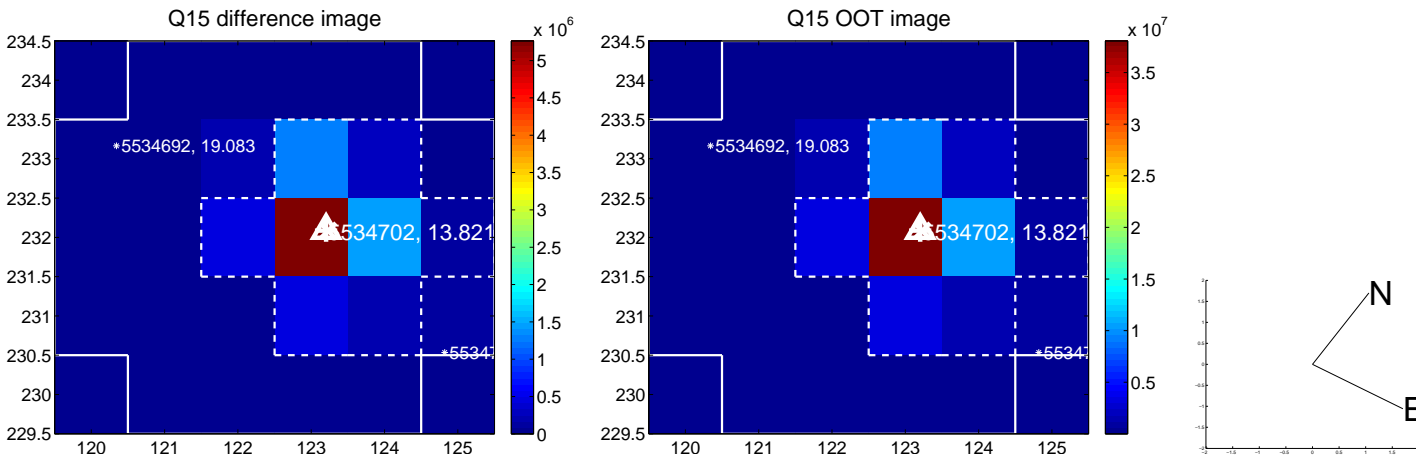
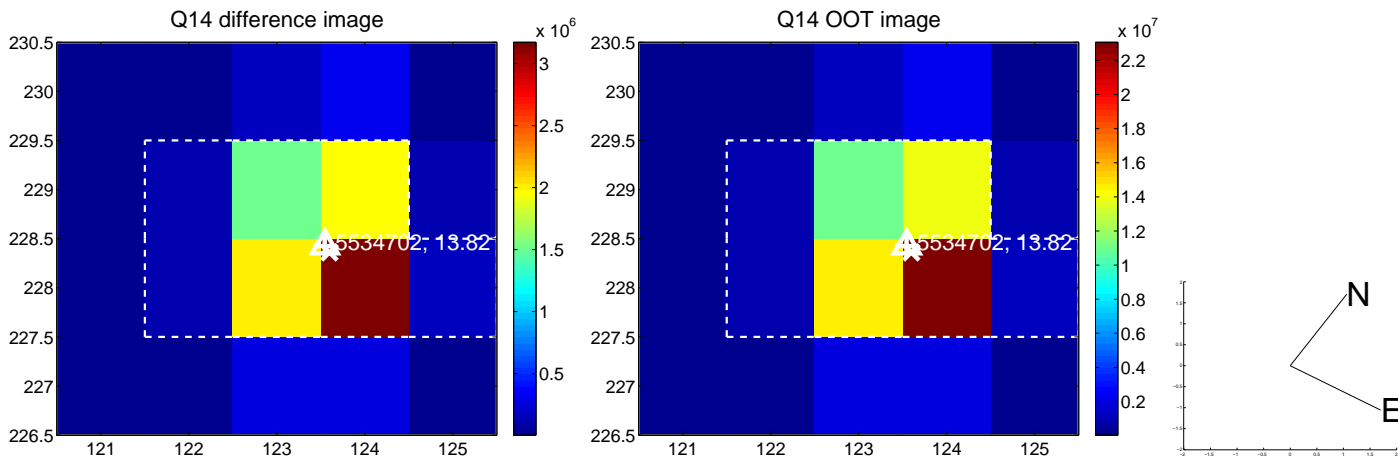
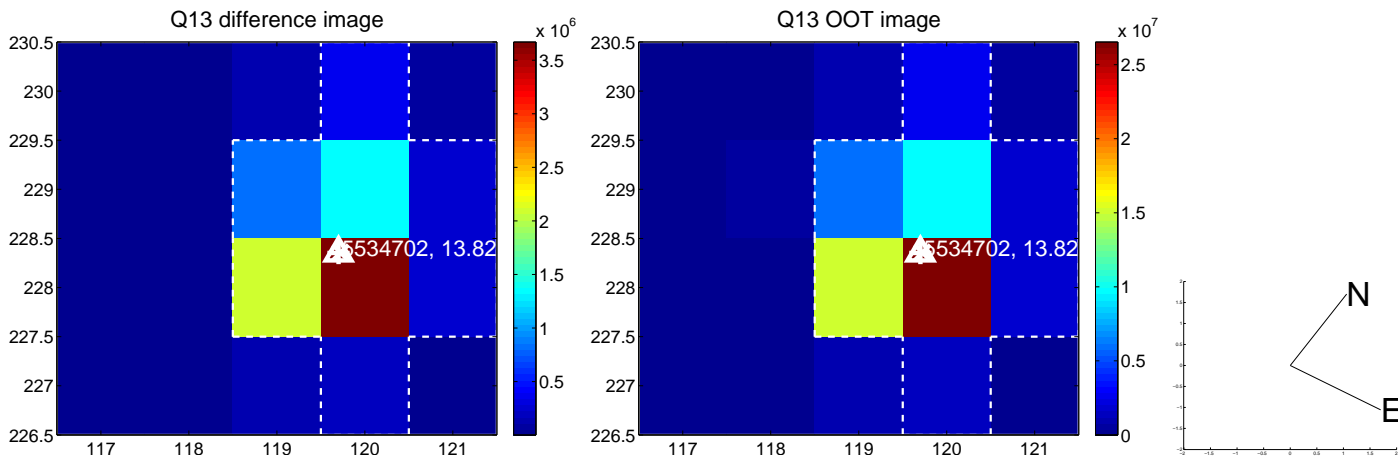
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



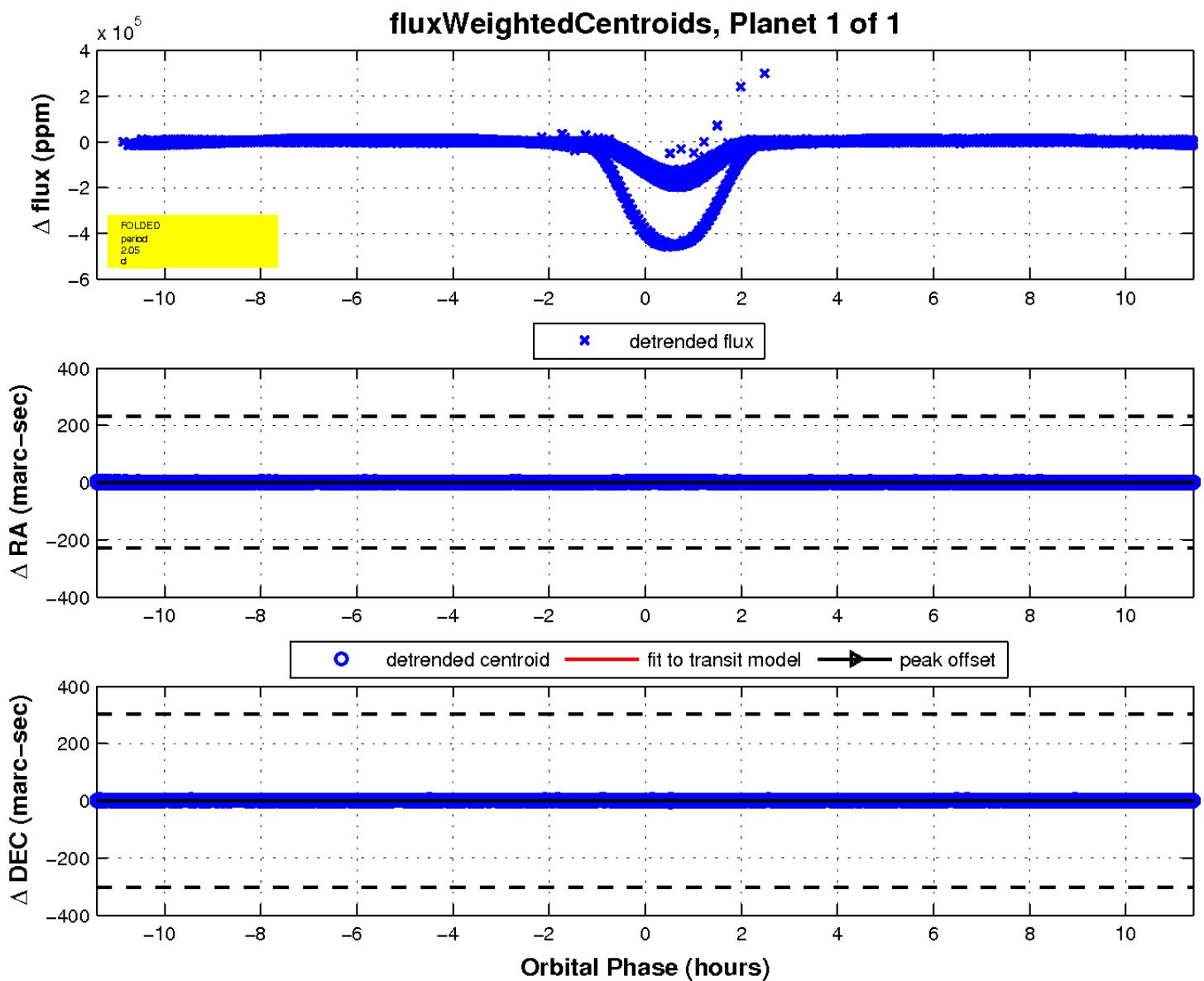
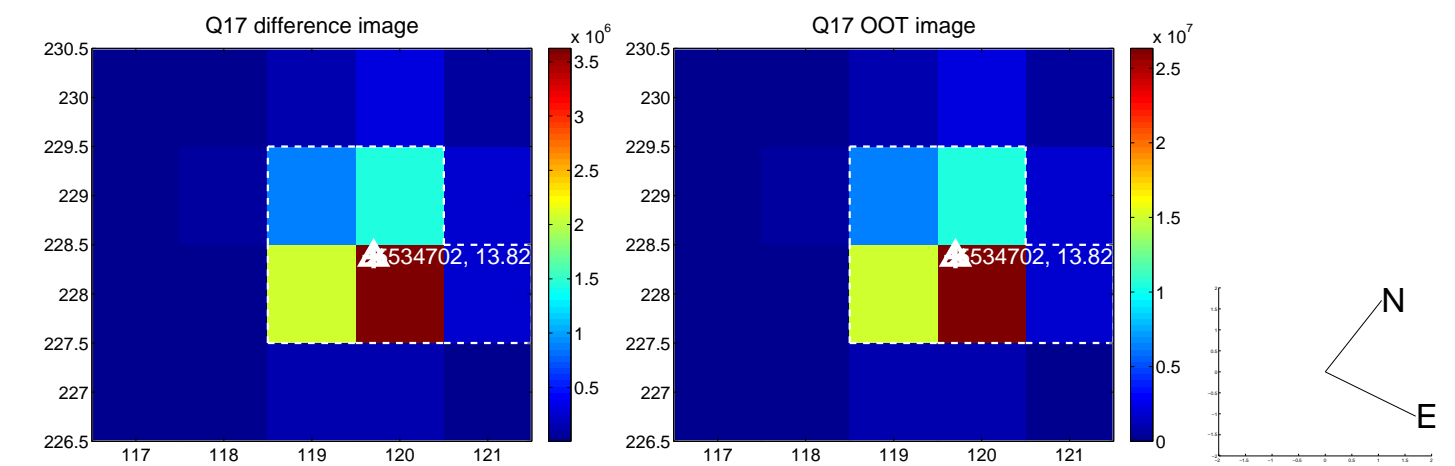
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white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination

