

KIC 007199774

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})
007199774-01	OBS	1346.01	4.708127	132.364141	54504.2	2.982	5284.7	4205.8	0.89	5868	29.48	283.11

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007199774-01	OBS	FP	0.00	0	1	0	0	MOD_SEC_DV—MOD_SEC_ALT—MOD_ODDEVEN_DV—DEEP_V_SHAPED

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.

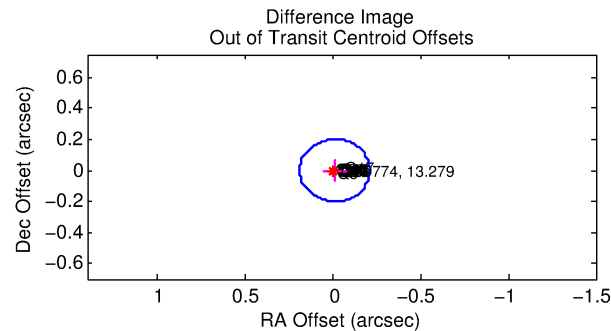
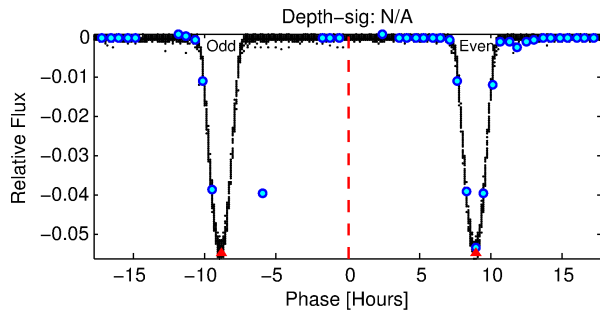
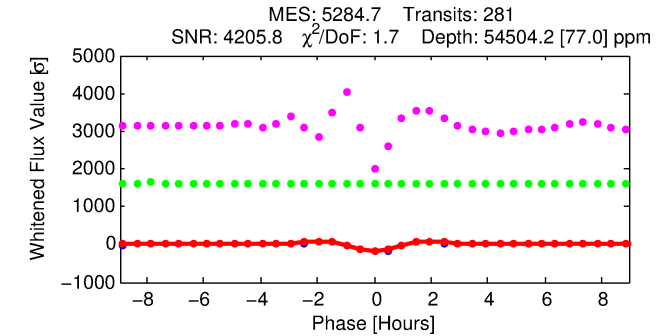
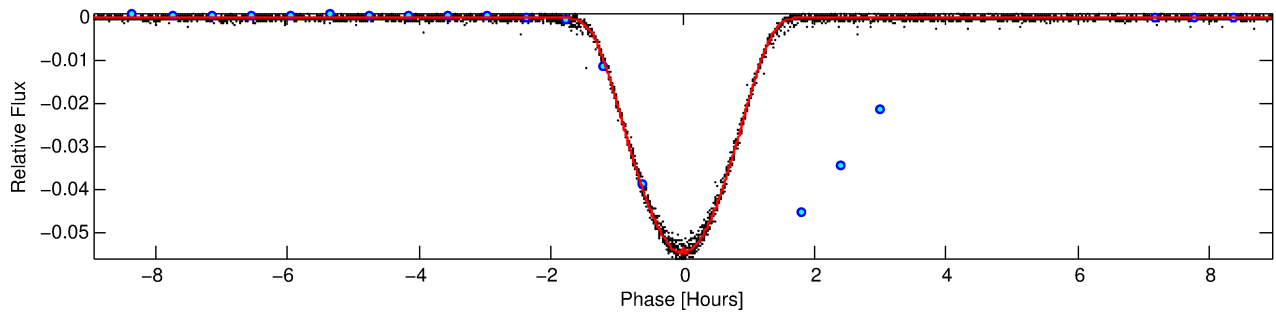
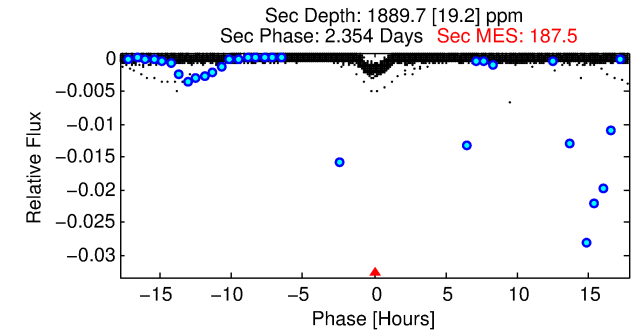
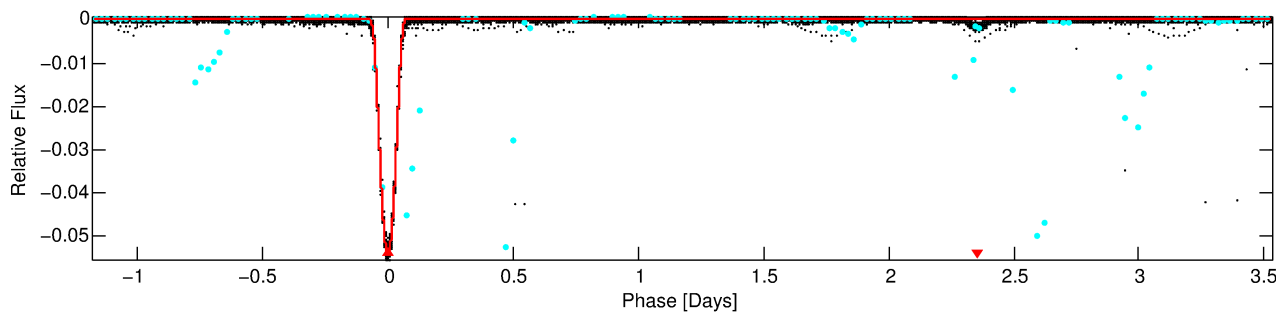
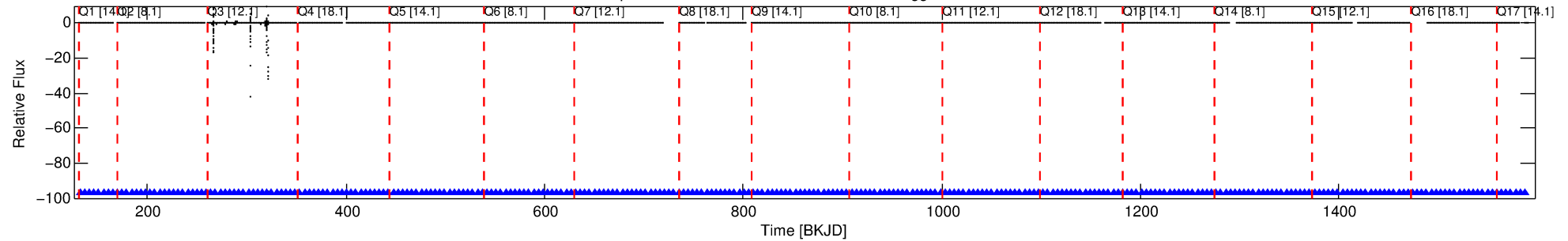
Ephemeris Match Information For 007199774-01

No Significant Match Found

DV One-Page Summary

KIC: 7199774 Candidate: 1 of 1 Period: 4.708 d
KOI: K01346.01 Corr: 0.998

Kp: 13.28 R*: 0.89 Rs Teff: 5868.0 K Logg: 4.53 Fe/H: -0.120



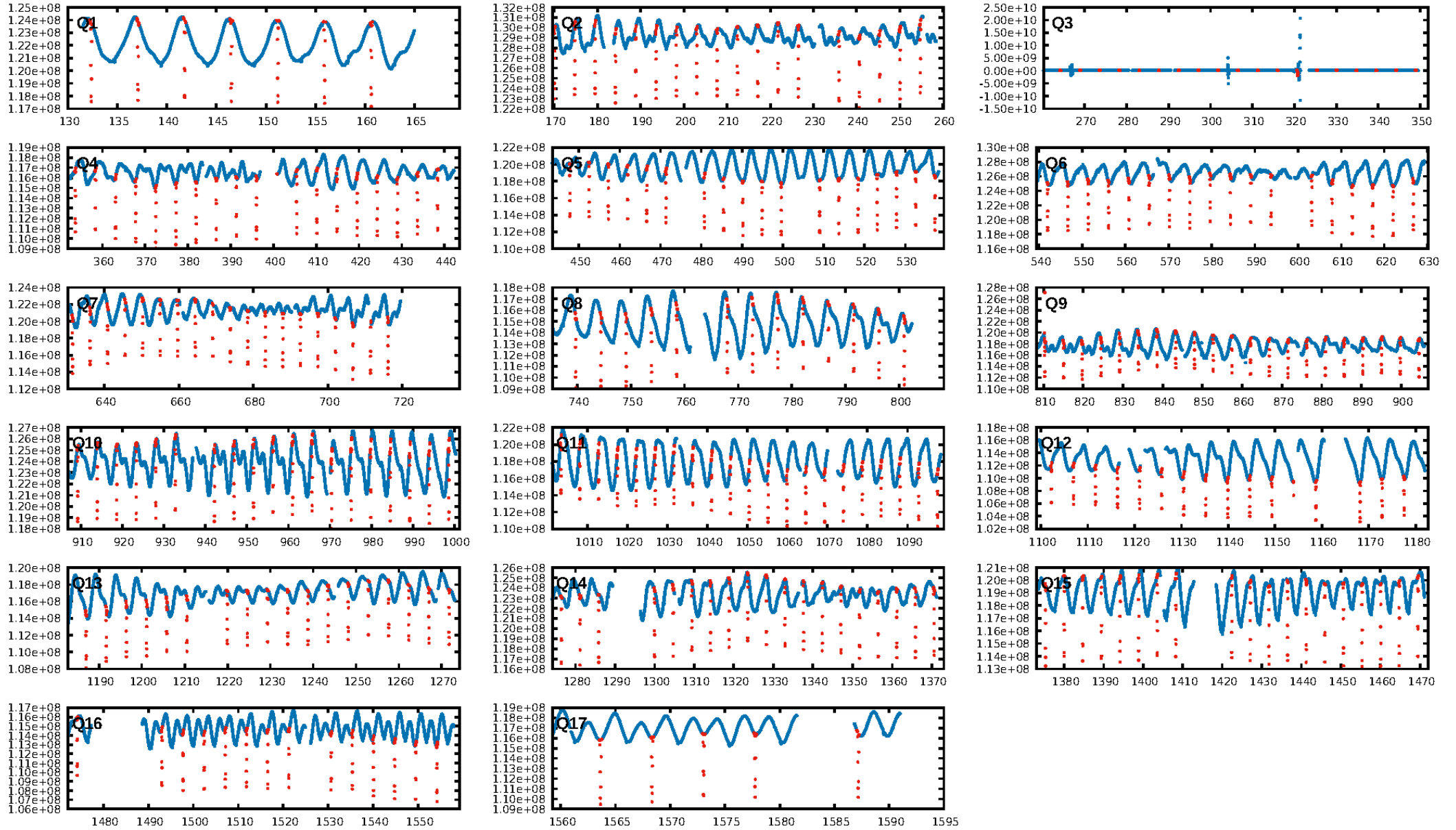
DV Fit Results:

Period = 4.70813 [0.00000] d
Epoch = 132.3641 [0.0001] BKJD
Rp/R* = 0.3022 [0.0123]
a/R* = 11.38 [0.04]
b = 0.90 [0.02]
Seff = 283.11 [113.41]
Teq = 1046 [105] K
Rp = 29.48 [9.24] Re
a = 0.0548 [0.0144] AU
Ag = 3.59 [1.42] [1.83σ]
Teffp = 2226 [75] K [9.14σ]

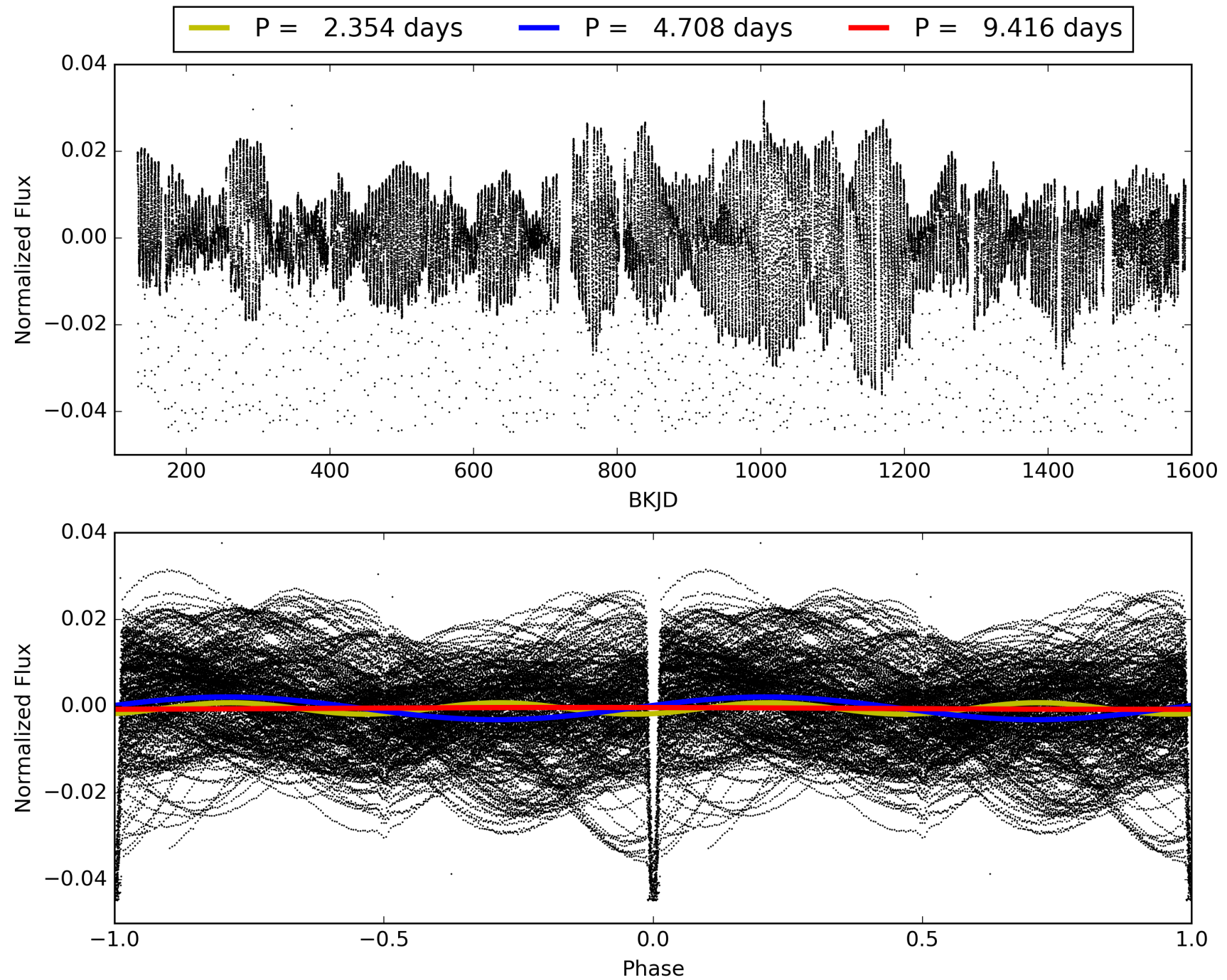
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [269/269]
GhostDiagnostic-chr: 2.293
Centroid-sig: 0.0%
Centroid-so: 0.106 arcsec [93.73σ]
OotOffset-rm: 0.011 arcsec [0.16σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-rm: 0.136 arcsec [2.03σ]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 1.00 [17/17]
DiffImageOverlap-fno: 1.00 [17/17]

TCE 007199774-01, PDC Light Curves

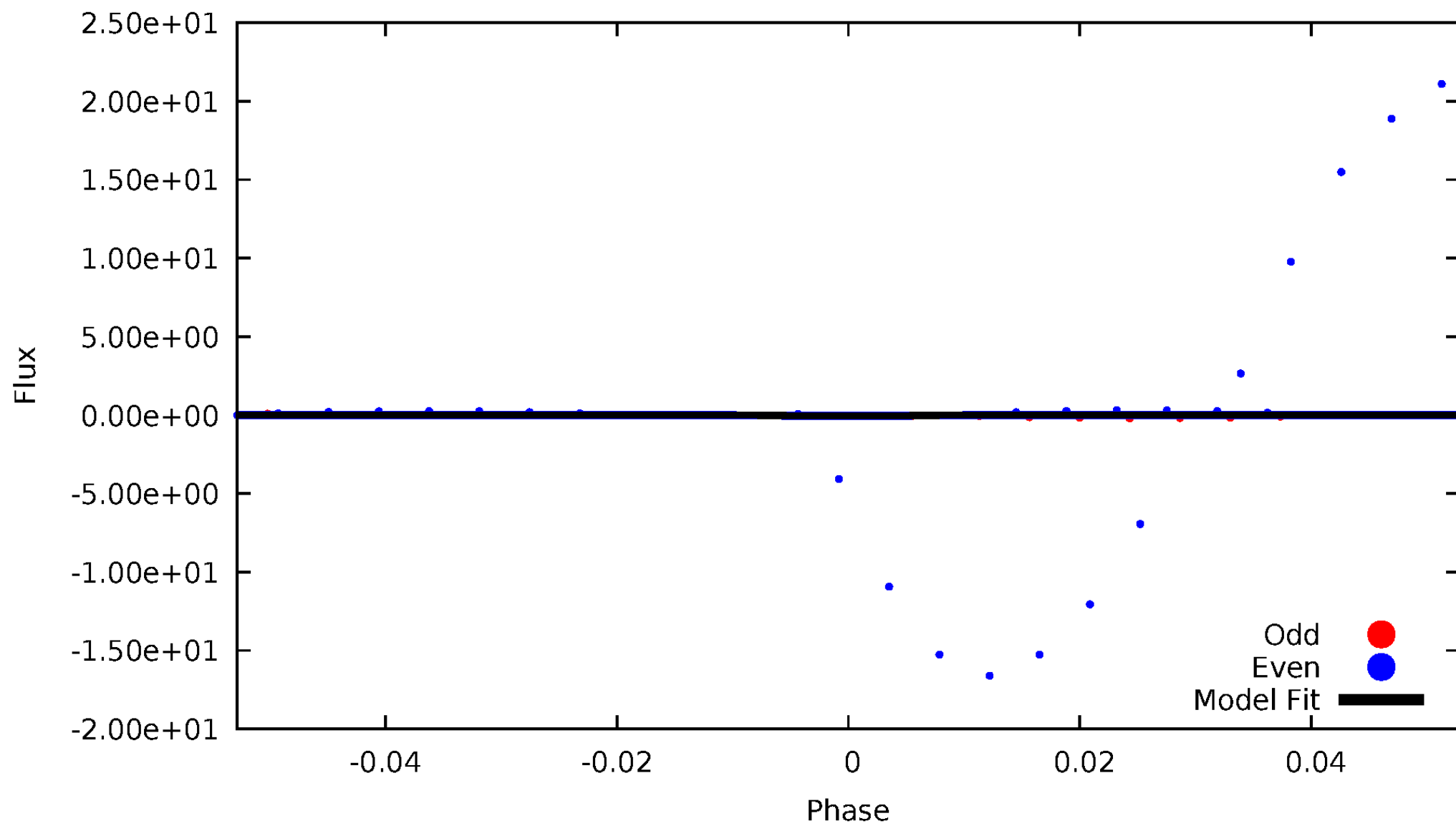


TCE 007199774-01



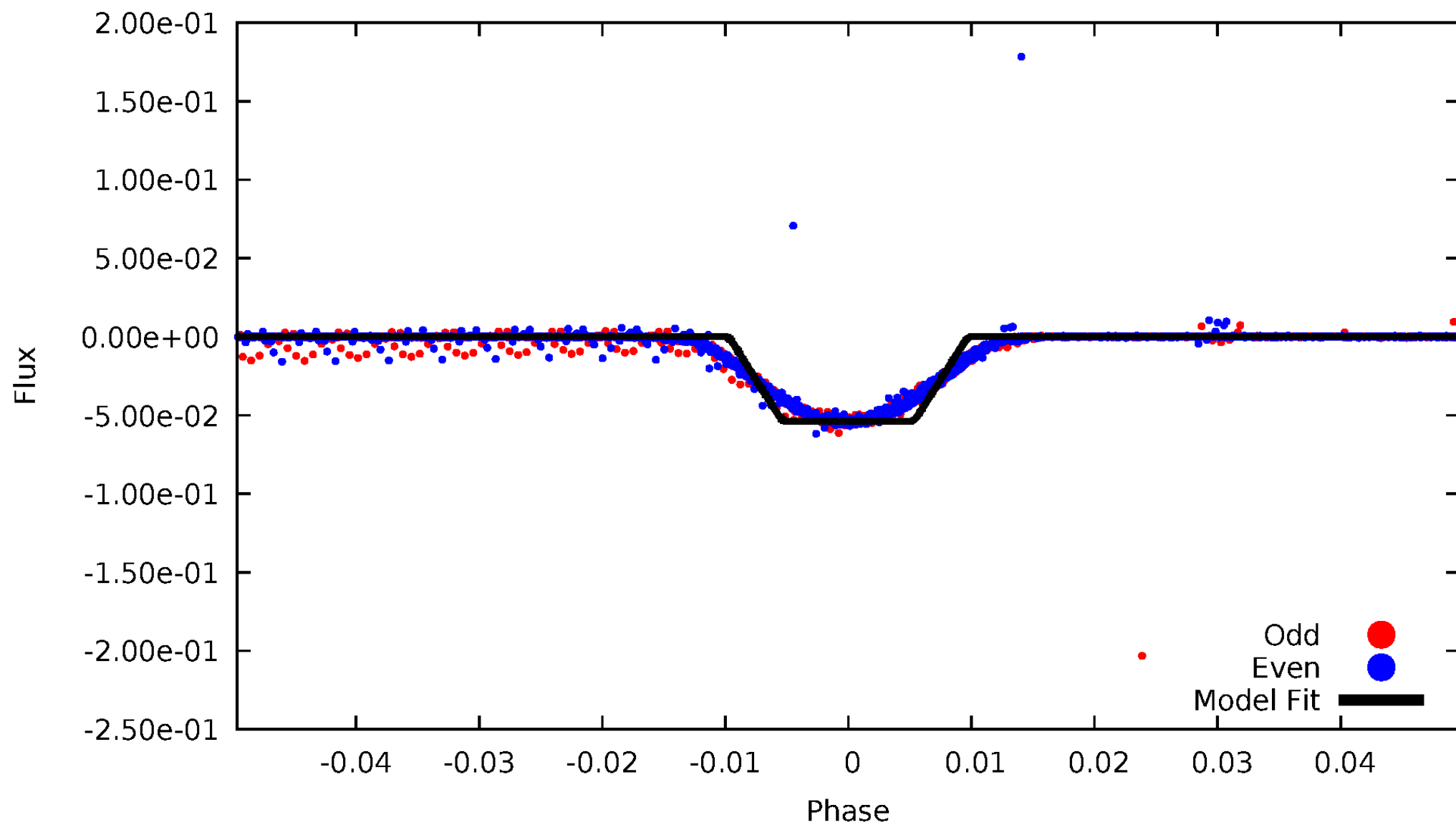
DV Odd/Even

TCE 007199774-01



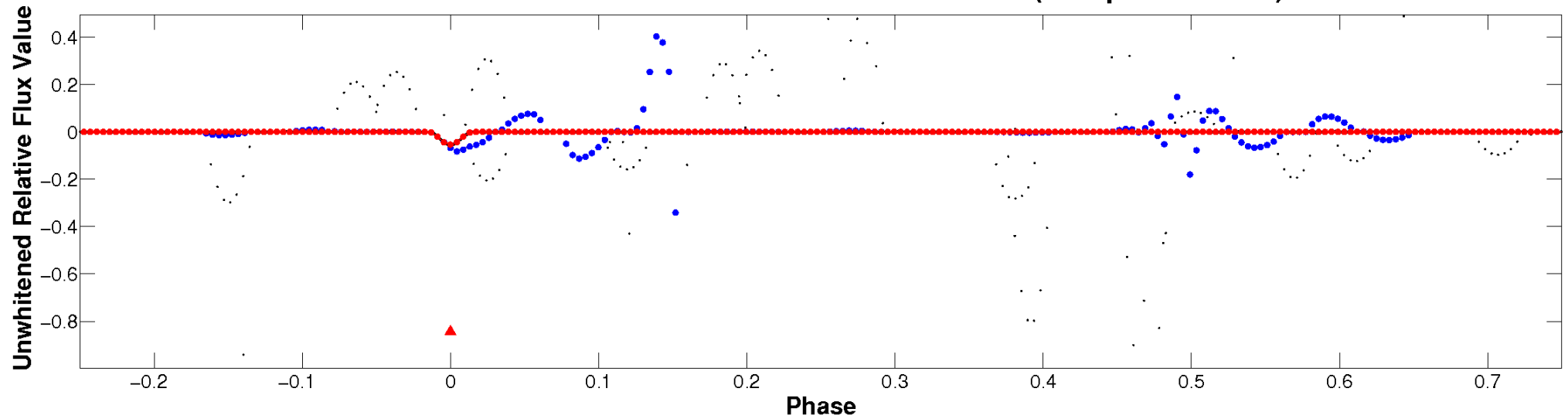
ALT Odd/Even

TCE 007199774-01

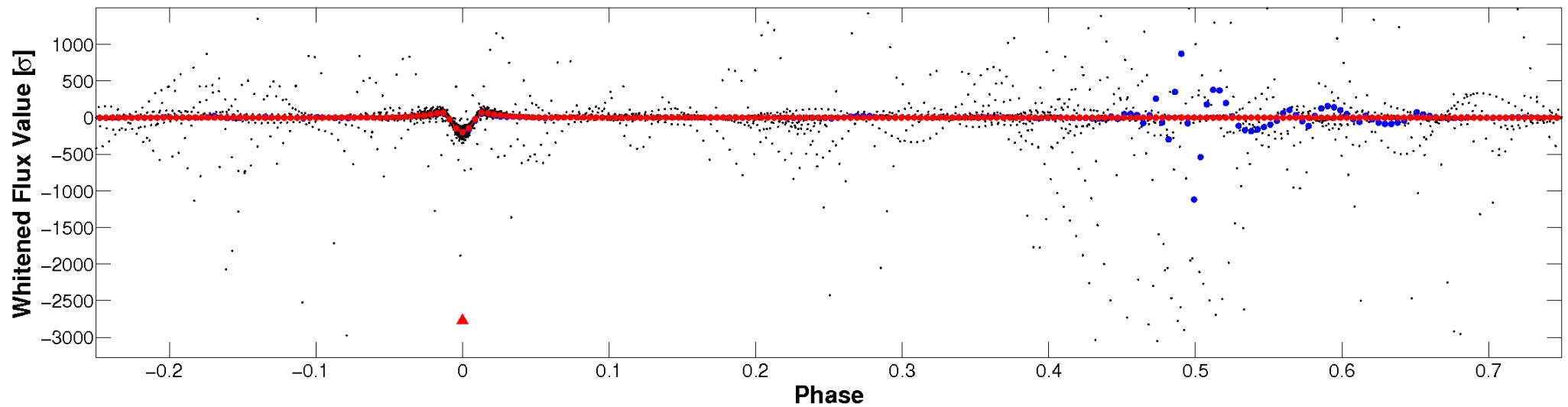


Non-Whitened Vs. Whitened Light Curve

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

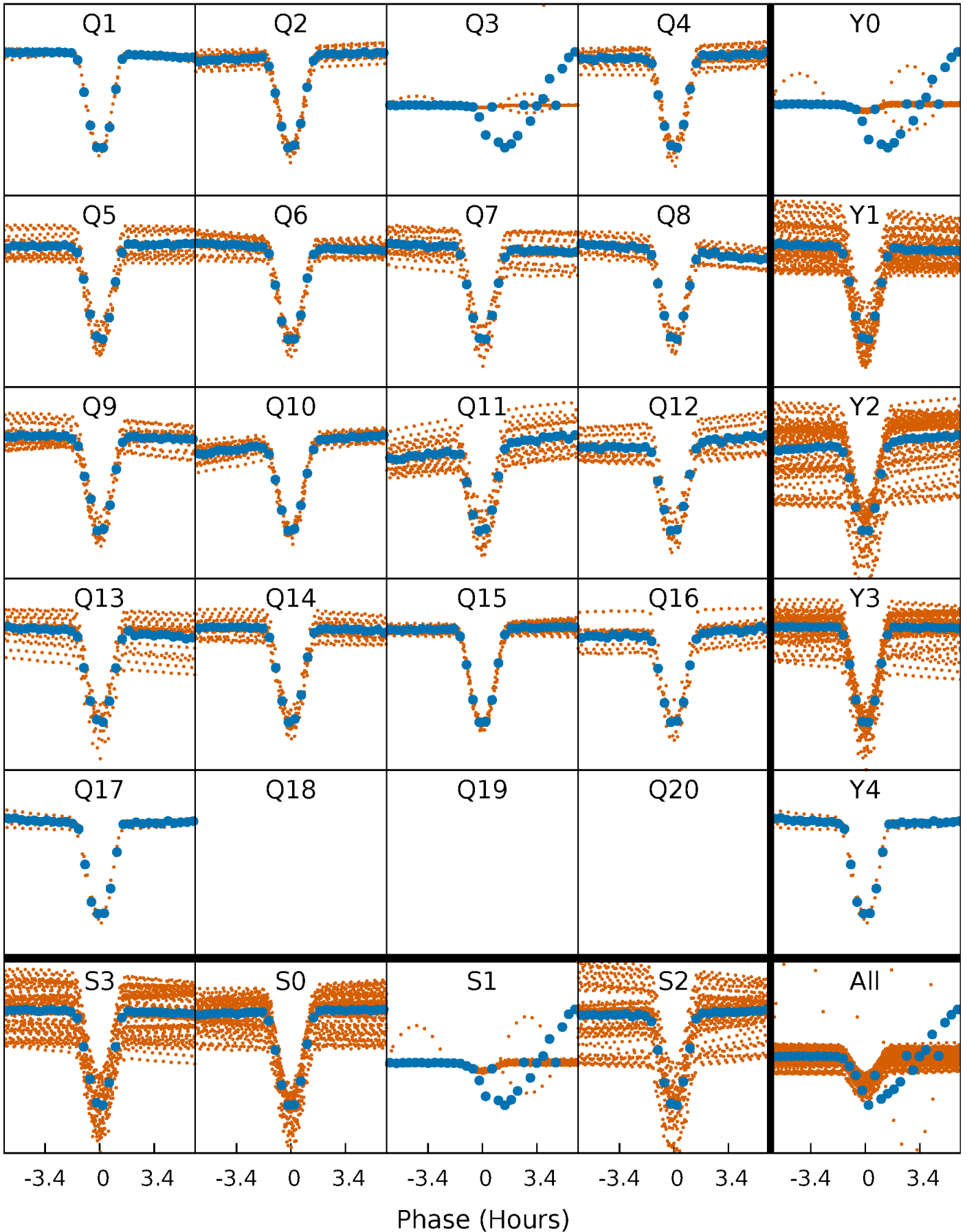


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



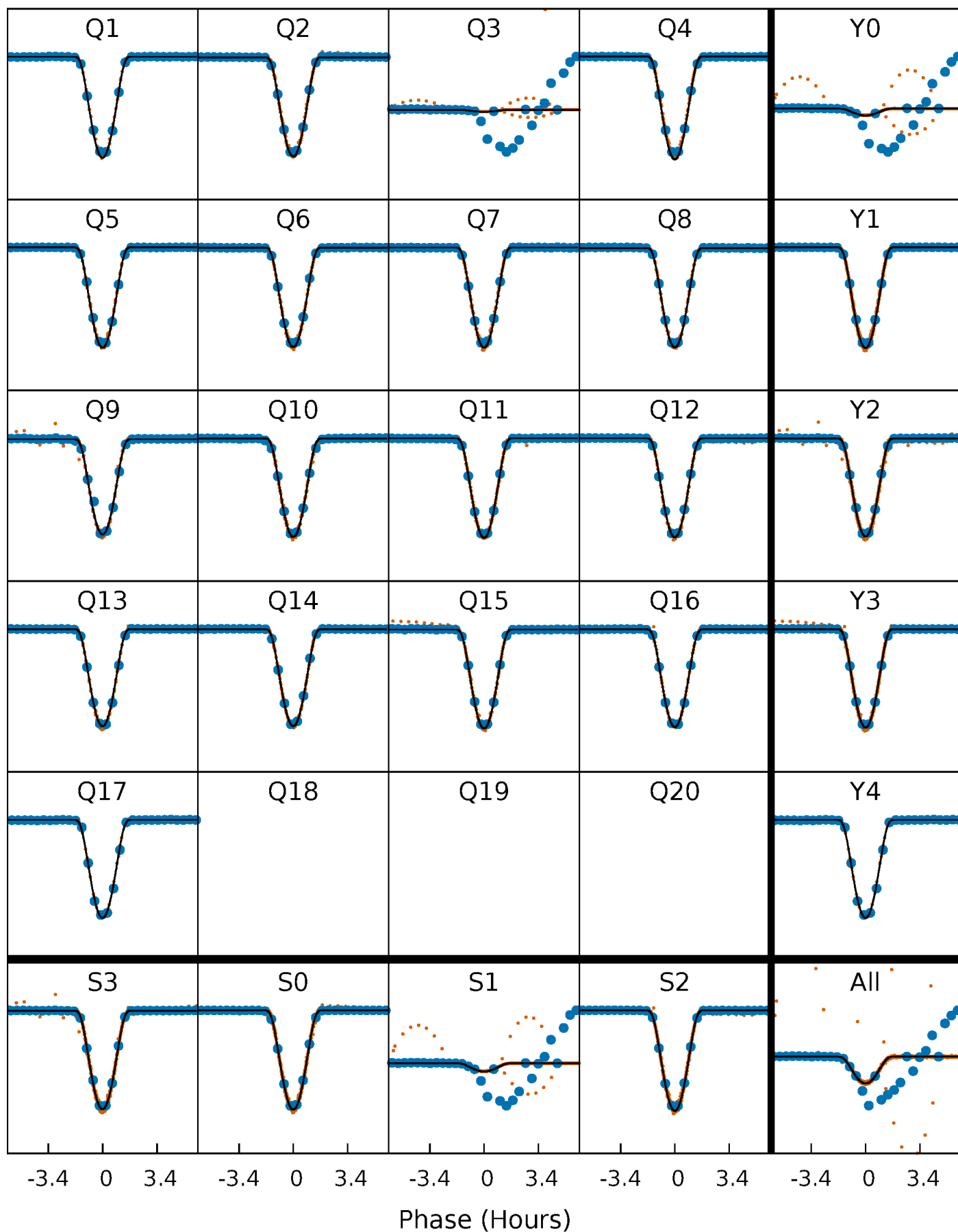
PDC Quarter-Phased Transit Curves

TCE 007199774-01 P= 4.708127 Days $T_0=132.364141$ (BKJD)



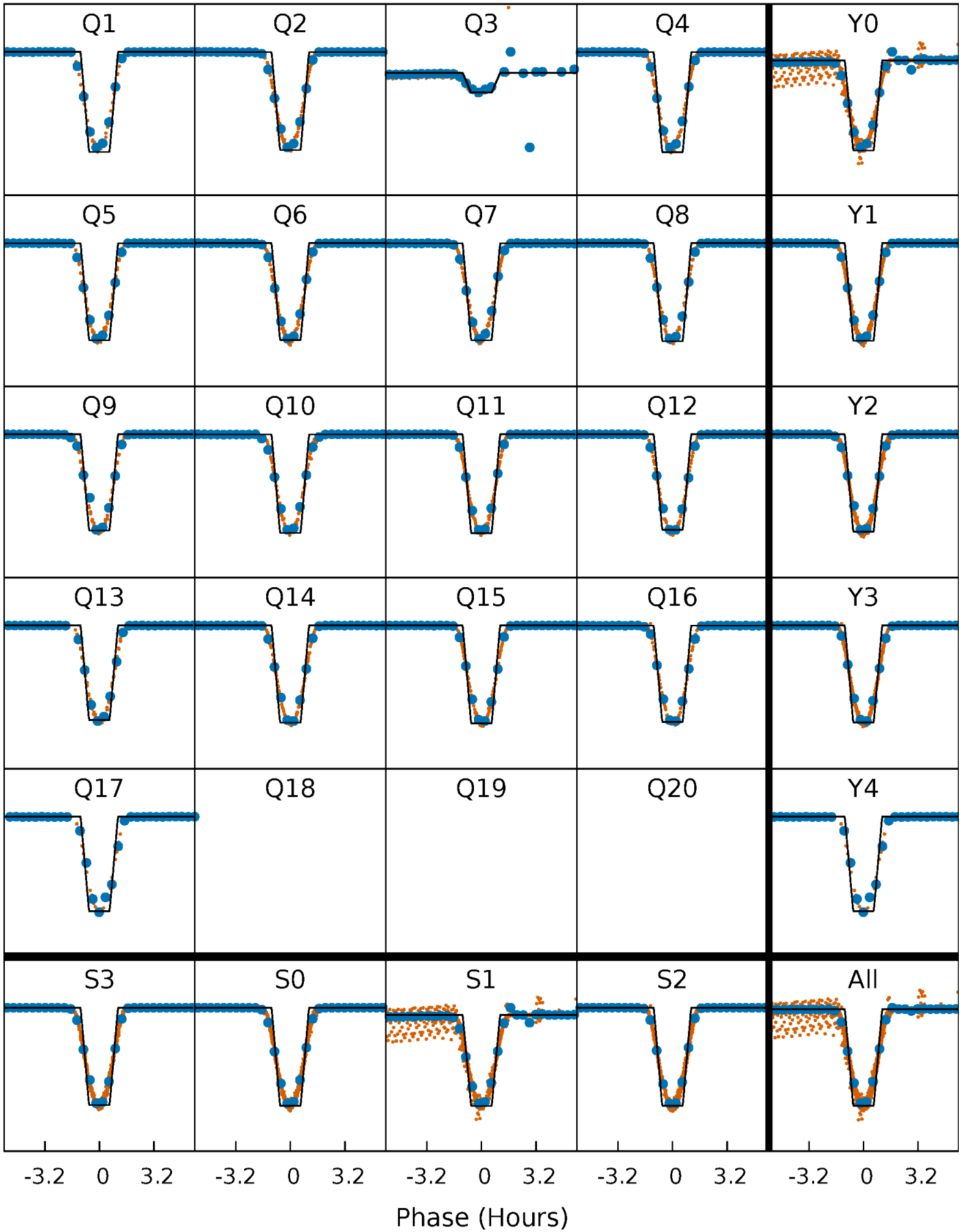
DV Quarter-Phased Transit Curves

TCE 007199774-01 P= 4.708127 Days $T_0=132.364141$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

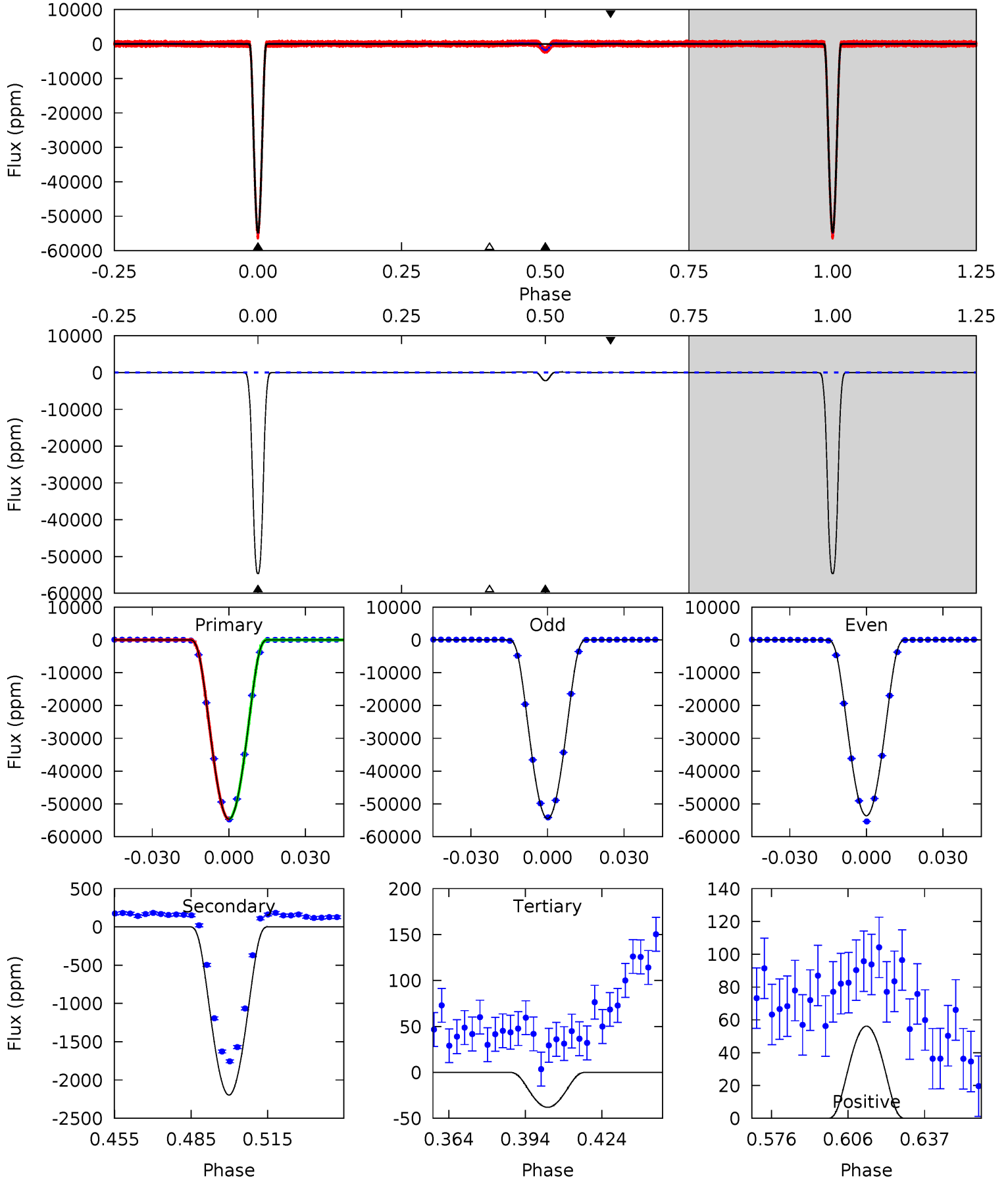
TCE 007199774-01 P= 4.708114 Days $T_0=132.366657$ (BKJD)



DV Model-Shift Uniqueness Test

007199774-01, P = 4.708127 Days, E = 127.656014 Days

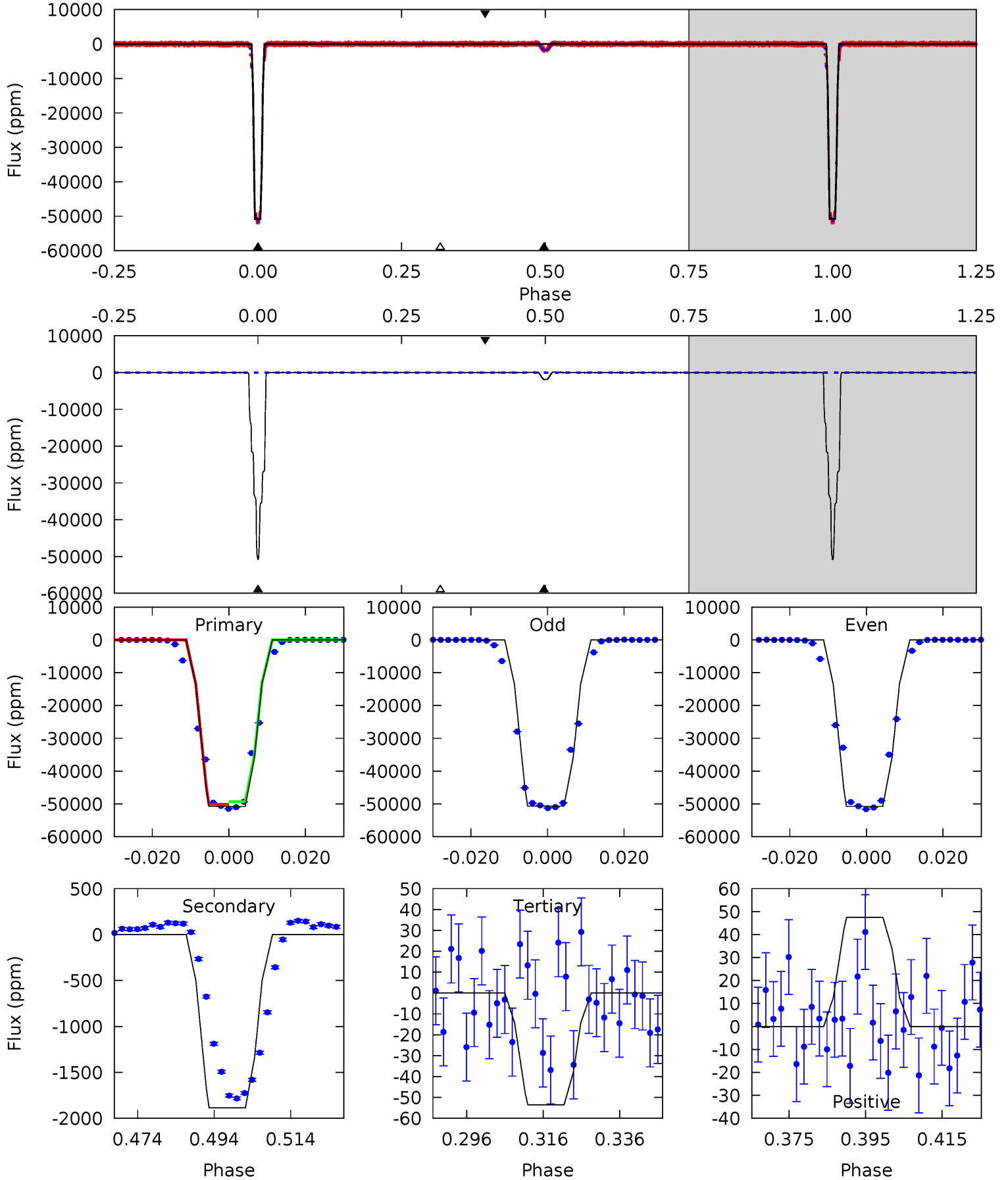
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8470	340.5	5.90	8.71	4.81	2.17	5.63	8464	8461	334.6	331.7	67.5	1.54	0.00	3.85



Alt Model-Shift Uniqueness Test

007199774-01, P = 4.708114 Days, E = 127.658543 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3644	135.3	3.84	3.41	4.89	2.33	1.52	3640	3640	131.5	131.9	3.06	1.00	0.00	0



Stellar Parameters For KIC 007199774

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5868^{+141}_{-158}	$4.530^{+0.037}_{-0.212}$	$-0.120^{+0.300}_{-0.300}$	$0.894^{+0.278}_{-0.087}$	$0.987^{+0.120}_{-0.120}$	$1.946^{+0.398}_{-1.027}$
	+2%/-3%	+1%/-5%	+250%/-250%	+31%/-10%	+12%/-12%	+20%/-53%
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 007199774-01 / KOI 1346.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-2196 ± 6	$30.94^{+5.04}_{-3.01}$	1502^{+107}_{-70}	2945^{+56}_{-57}	$3.721^{+0.679}_{-0.884}$
Alt.	-1886 ± 14	$23.78^{+3.75}_{-2.47}$	1500^{+100}_{-64}	3121^{+74}_{-66}	$5.428^{+1.108}_{-1.209}$

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 $A_{obs} \gg 1.0$

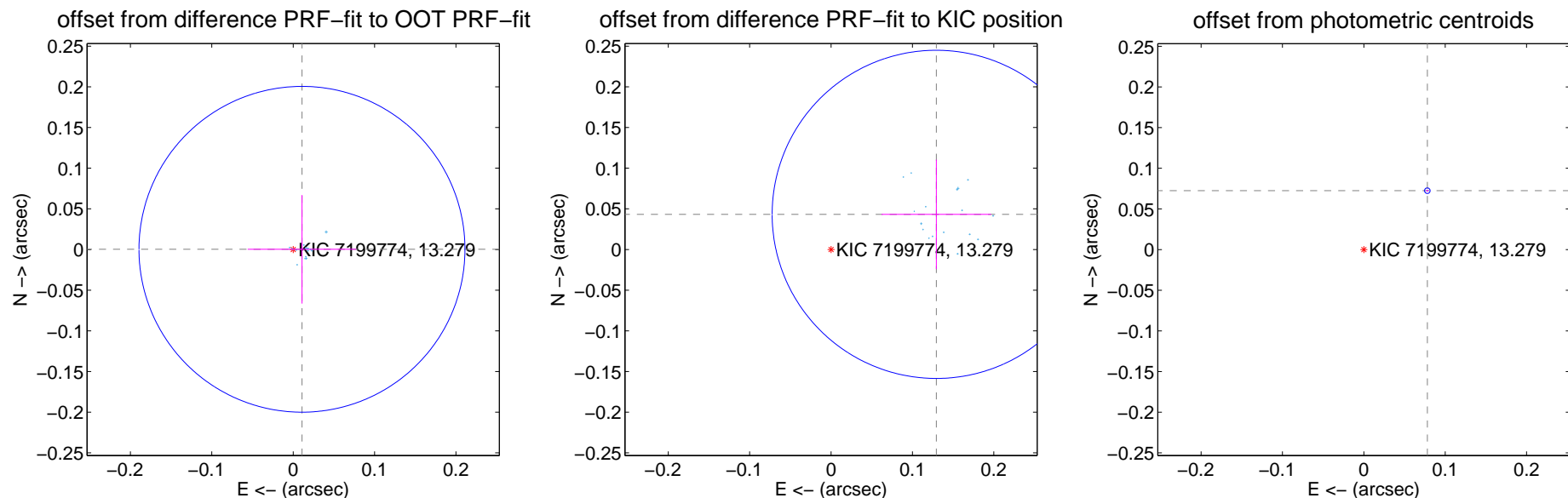
DV Centroid Data

Supplemental centroid analysis for 007199774-01. Kepler magnitude: 13.28. Transit SNR 4205.80

There are 17 quarters with good PRF difference image offsets

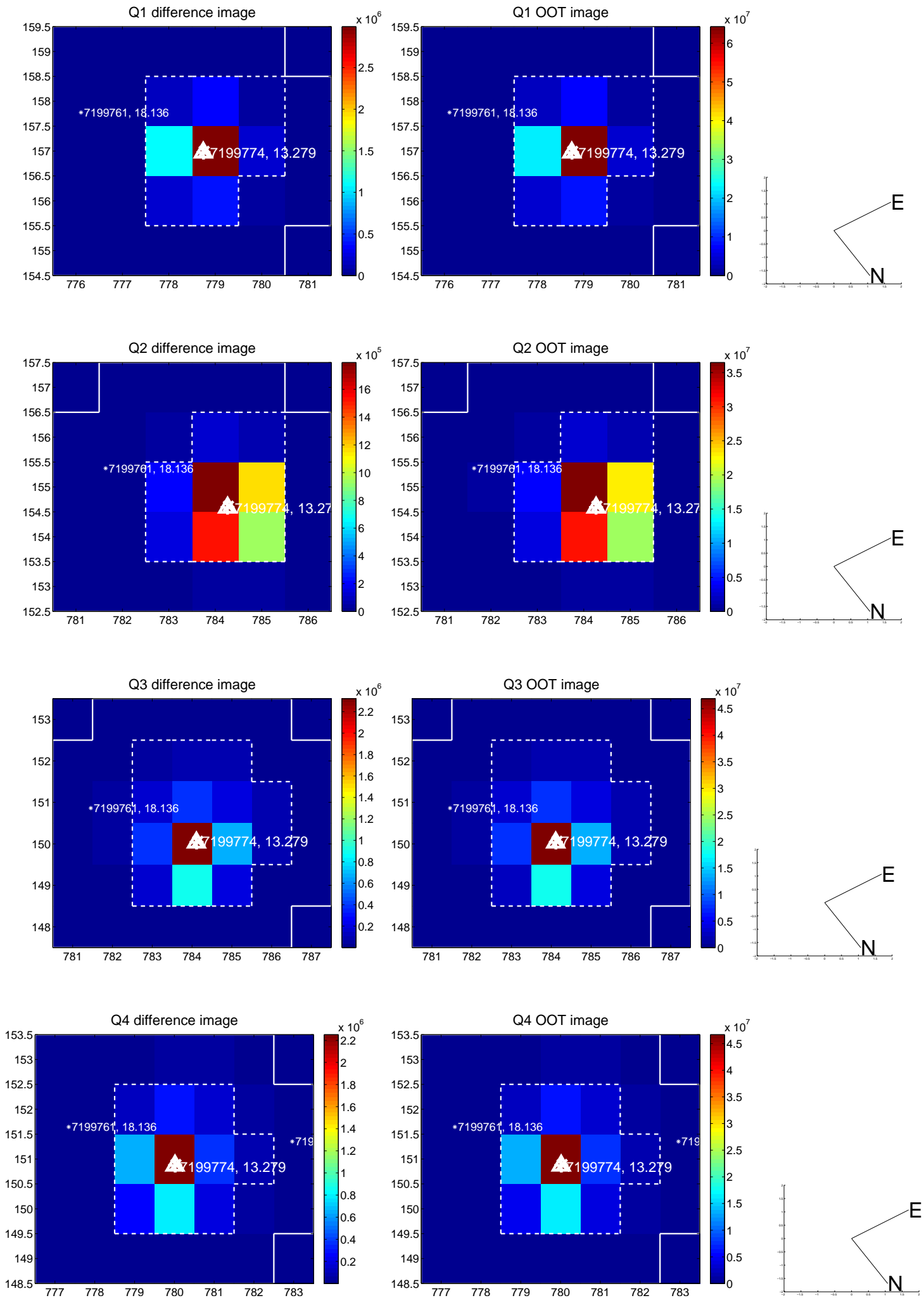
The direct PRF centroid is offset from the target star catalog position by about 0.13 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.011 ± 0.067	0.16	-0.011 ± 0.067	0.000 ± 0.067
PRF-fit source offset from KIC position	0.136 ± 0.067	2.03	-0.129 ± 0.067	0.043 ± 0.067
photometric centroid source offset	0.11 ± 0.00	93.73	-0.08 ± 0.00	0.07 ± 0.00

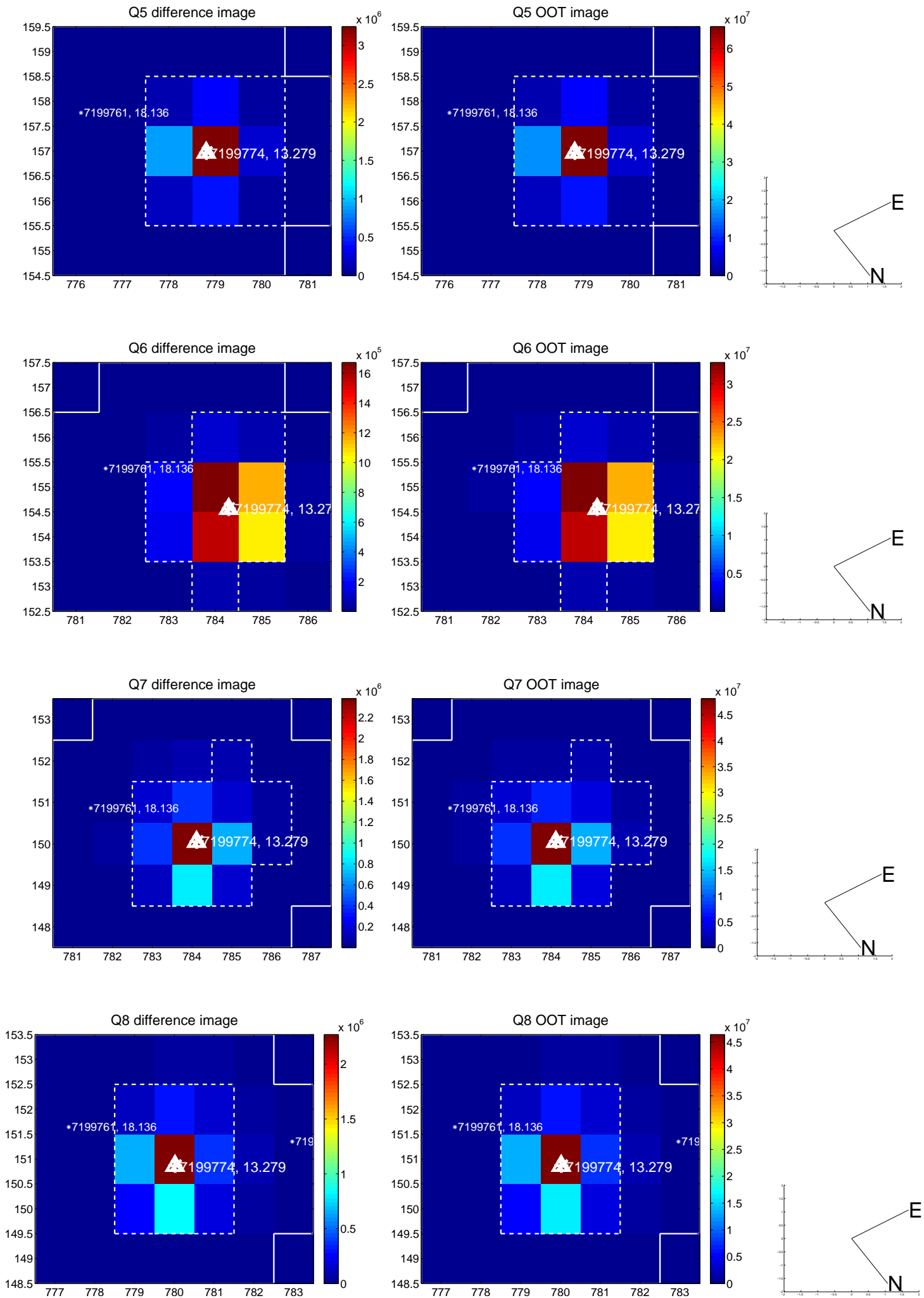


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

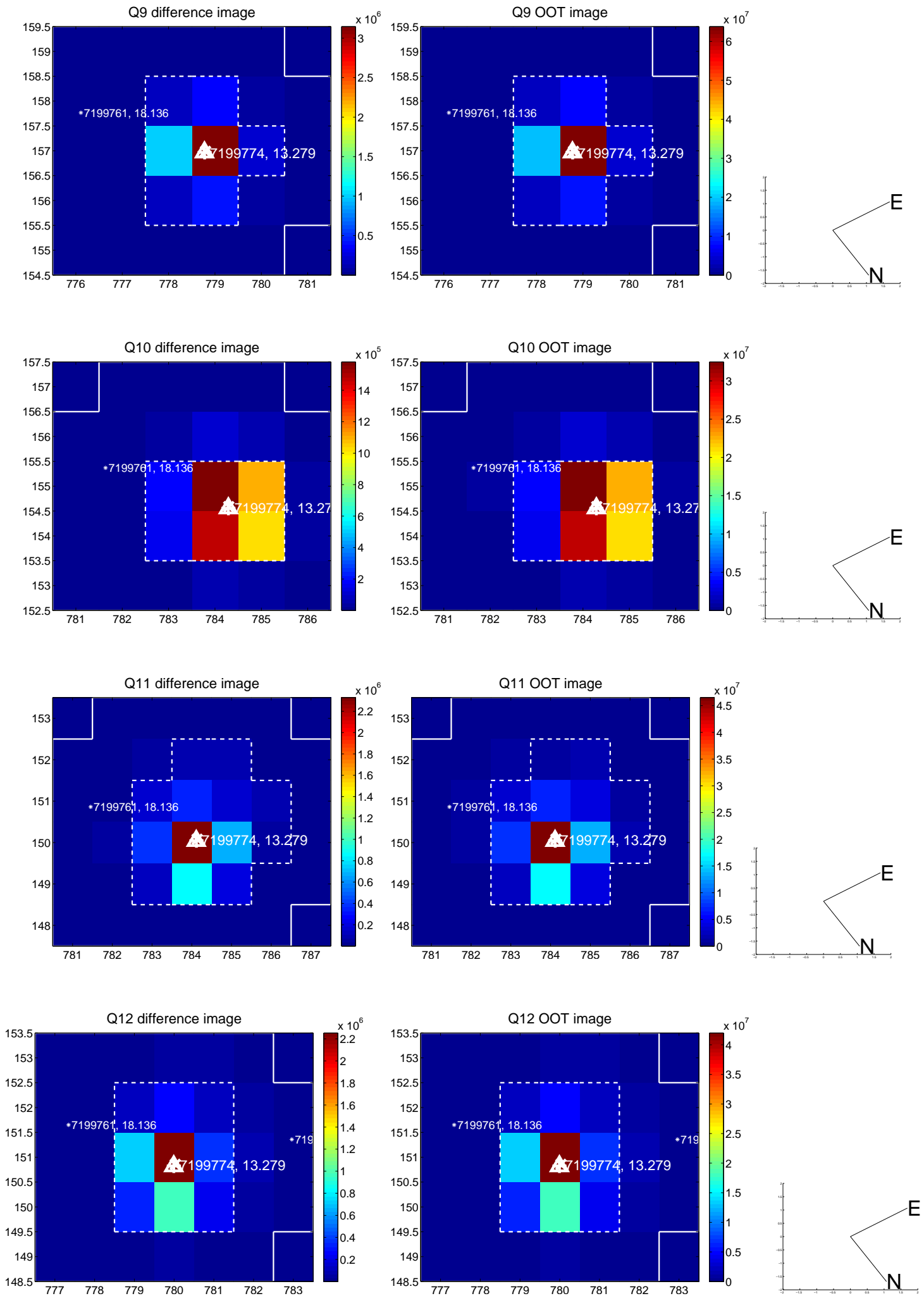
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



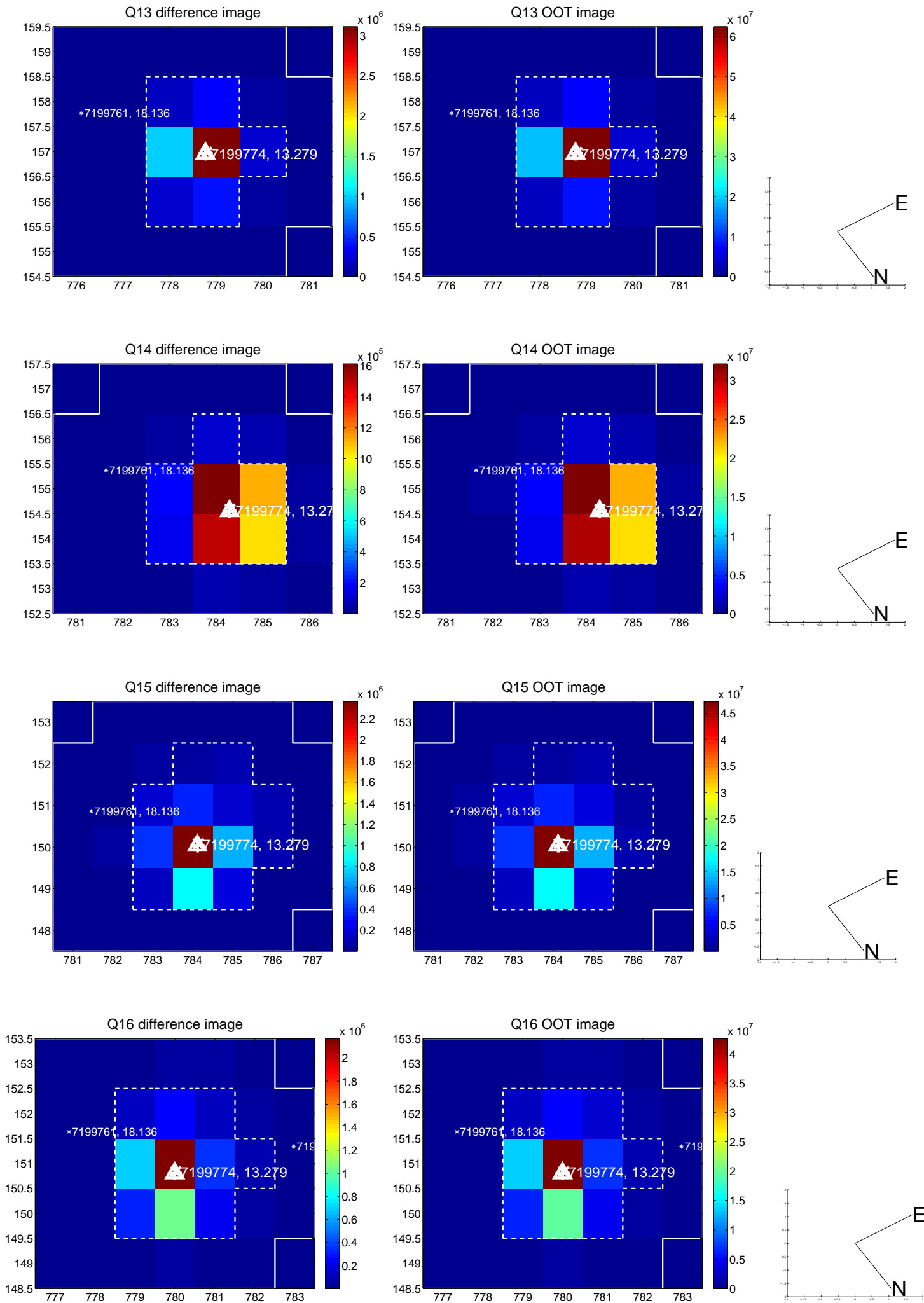
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



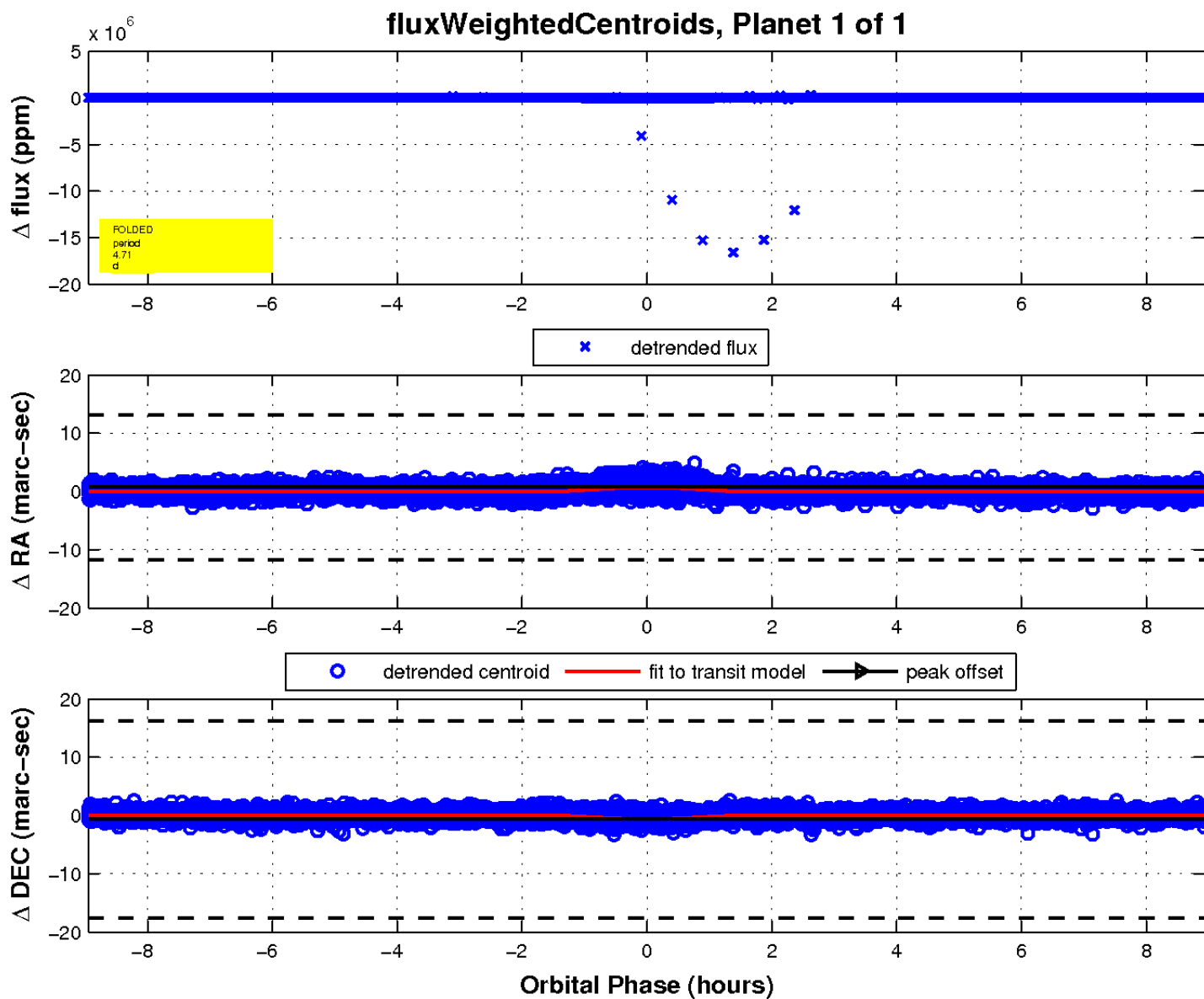
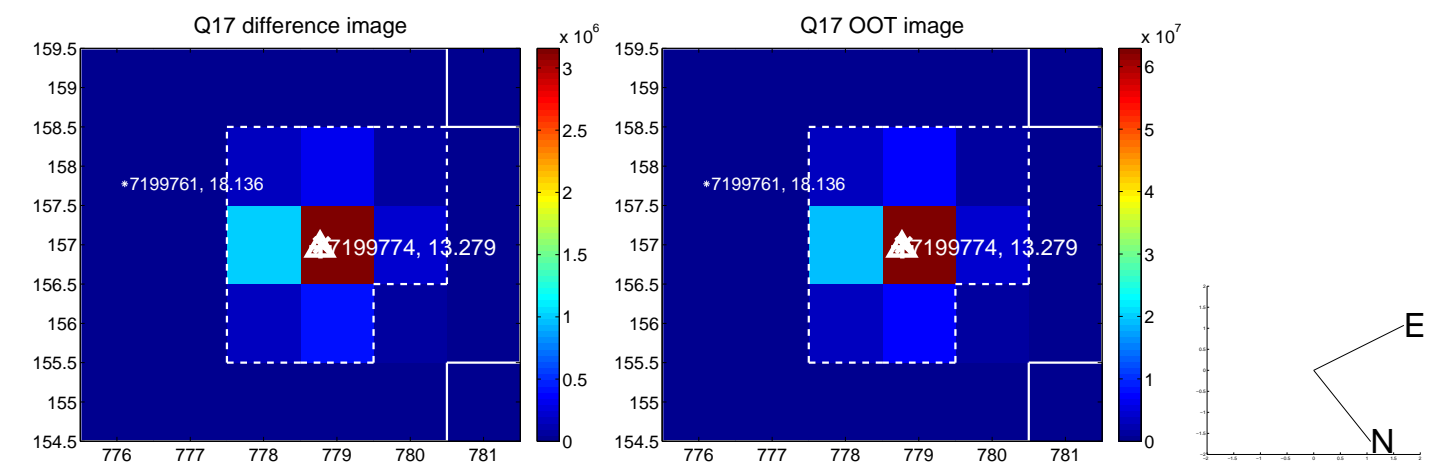
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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.



UKIRT Image

Declination

