

KIC 003954798

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})
003954798-01	OBS	No	0.918483	131.857869	169459.5	1.500	10202.6	-1.0	1.32	6269	55.17	6623.63

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003954798-01	OBS	FP	0.00	1	0	0	0	LPP_DV—CENT_NOFITS

Notes: OBS = Observed. INJ = Injected. INV = Inverted. SCR = Scrambled.

N = Not Transit-Like. S = Stellar Eclipse. C = Centroid Offset. E = Ephemeris Match.

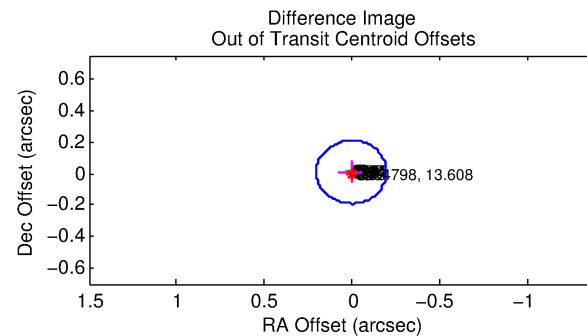
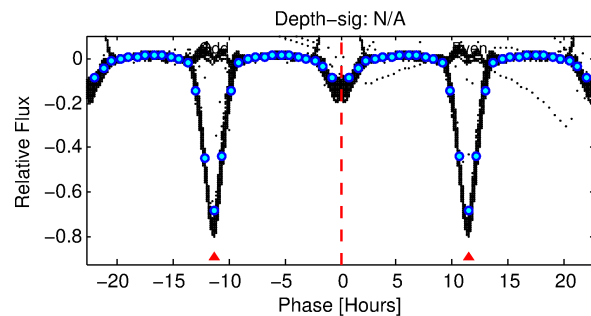
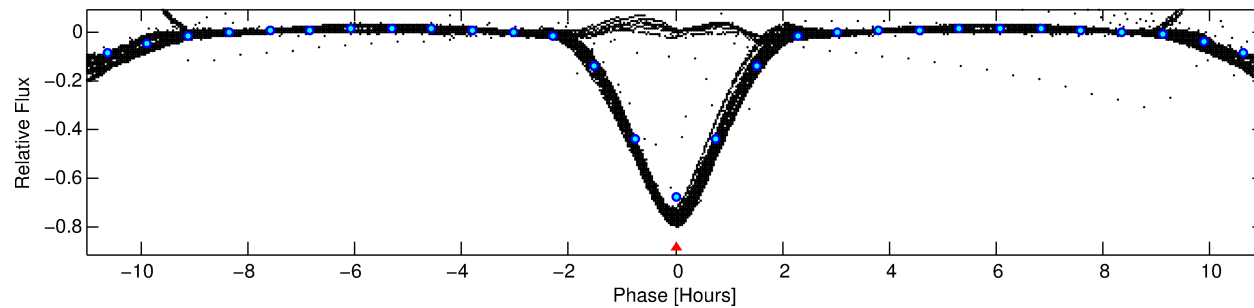
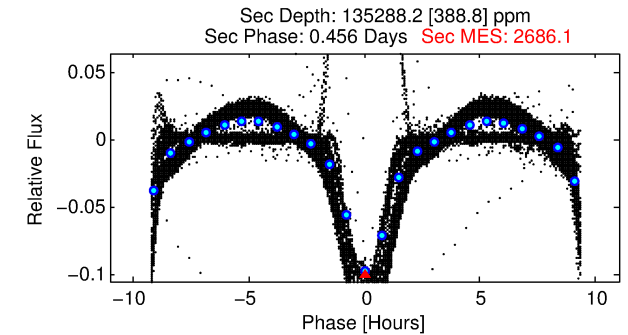
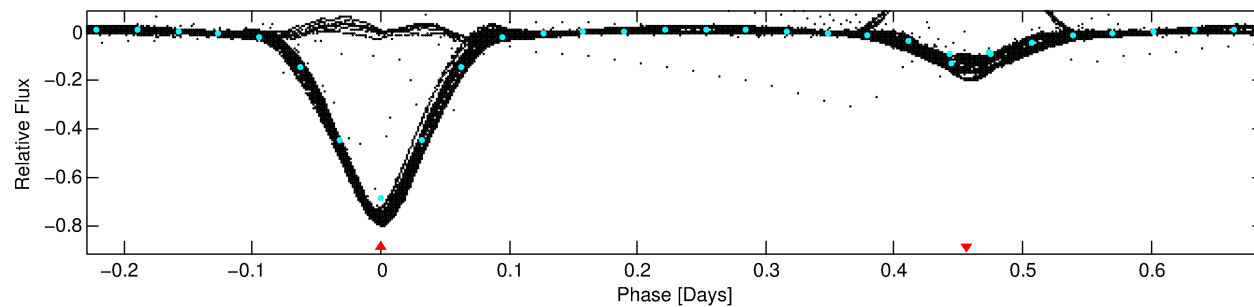
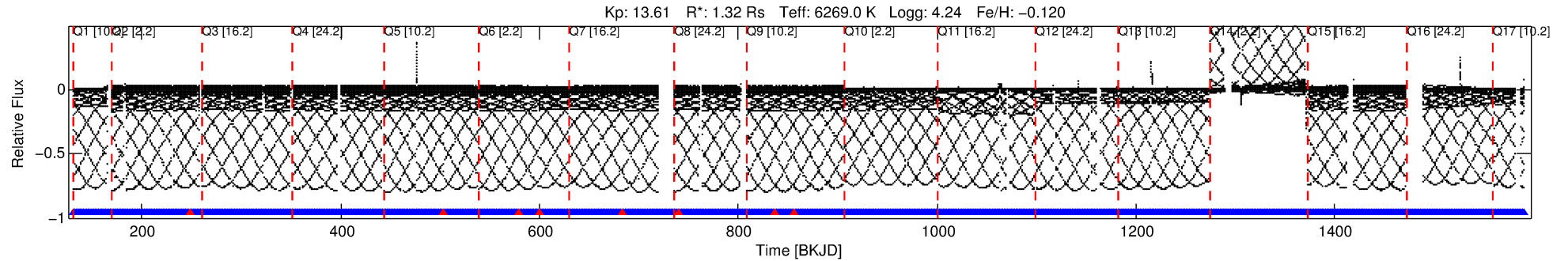
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 003954798-01

No Significant Match Found

DV One-Page Summary

KIC: 3954798 Candidate: 1 of 1 Period: 0.918 d



TPS TCE Results:

Period = 0.91848 d
Epoch = 131.8579 BKJD

DV fit results are unavailable

DV Diagnostic Results:

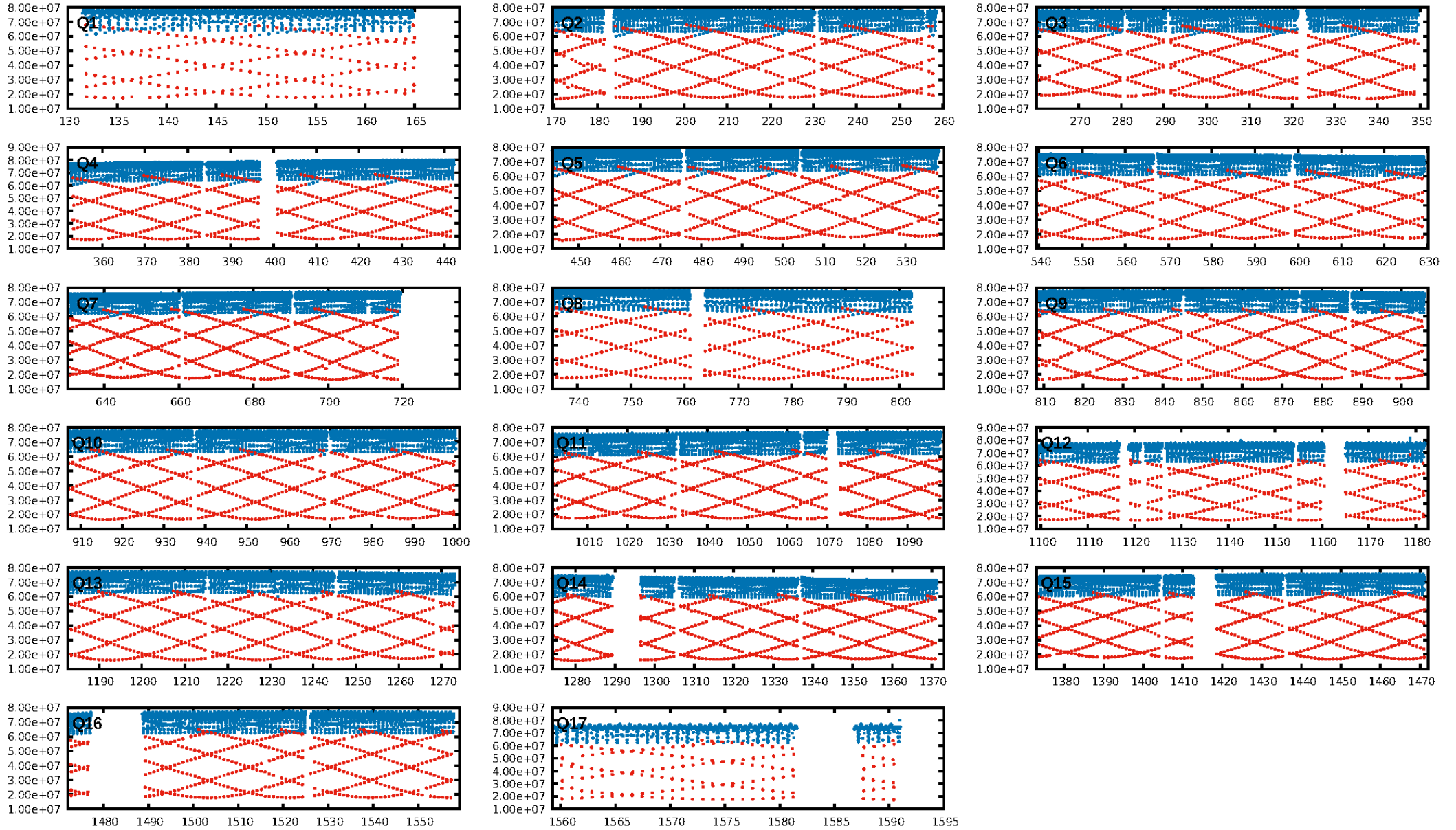
ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 0.99 [1386/1394]
GhostDiagnostic-chr: N/A

Centroid-sig: 0.0%
Centroid-so: 0.015 arcsec [51.87 σ]
OotOffset-rm: 0.012 arcsec [0.18 σ]
KicOffset-rm: 0.080 arcsec [1.18 σ]
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]

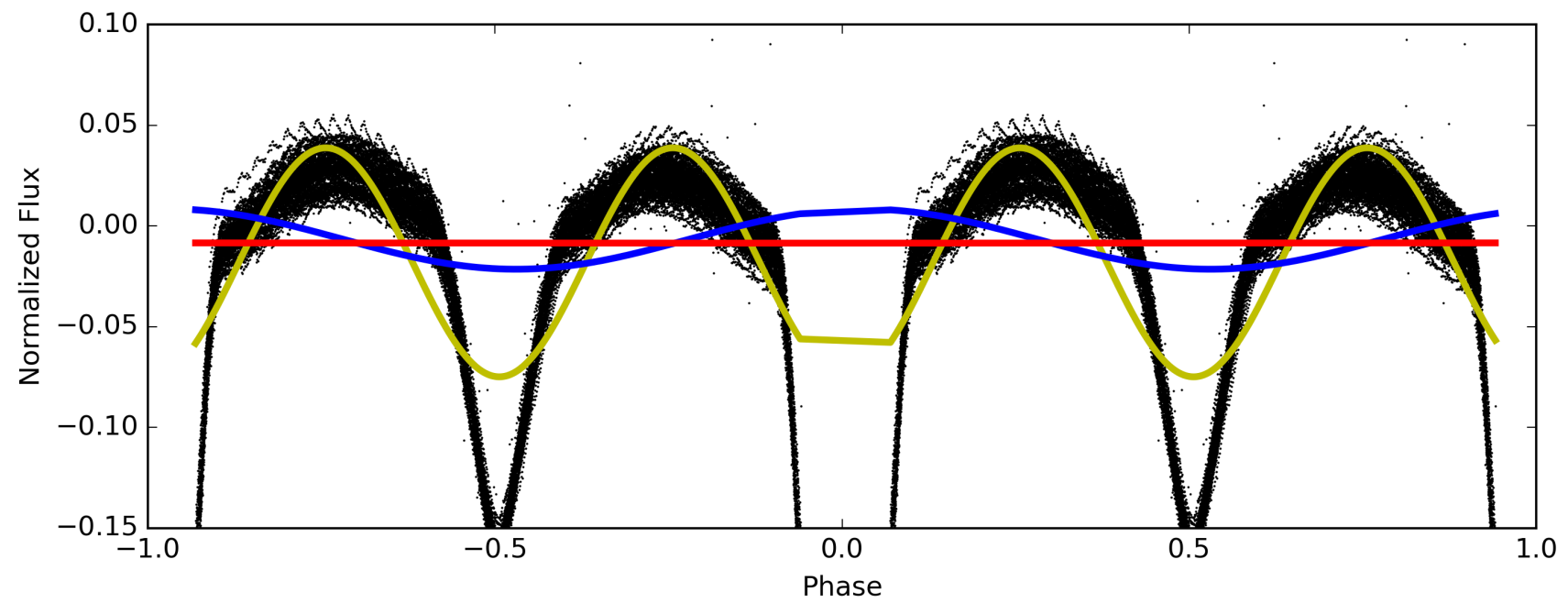
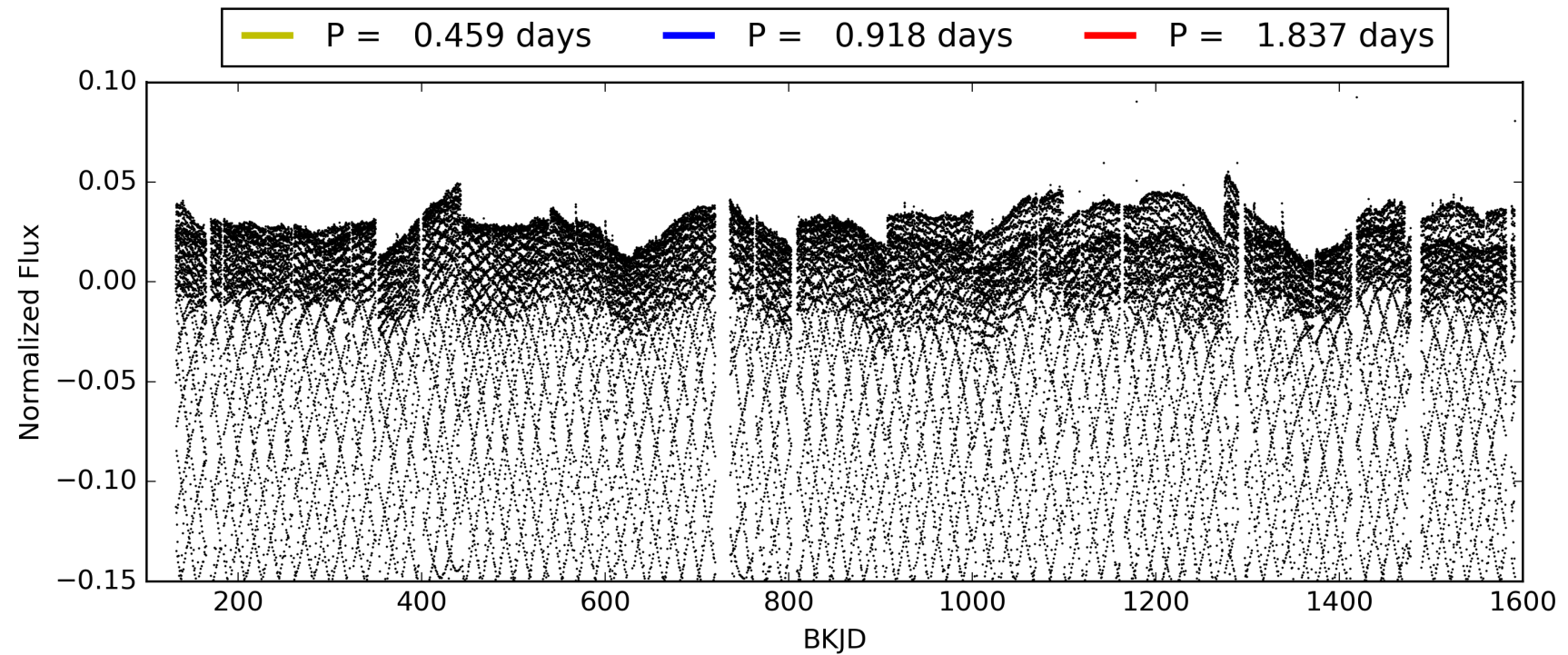
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 08:38:26 Z

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

TCE 003954798-01, PDC Light Curves

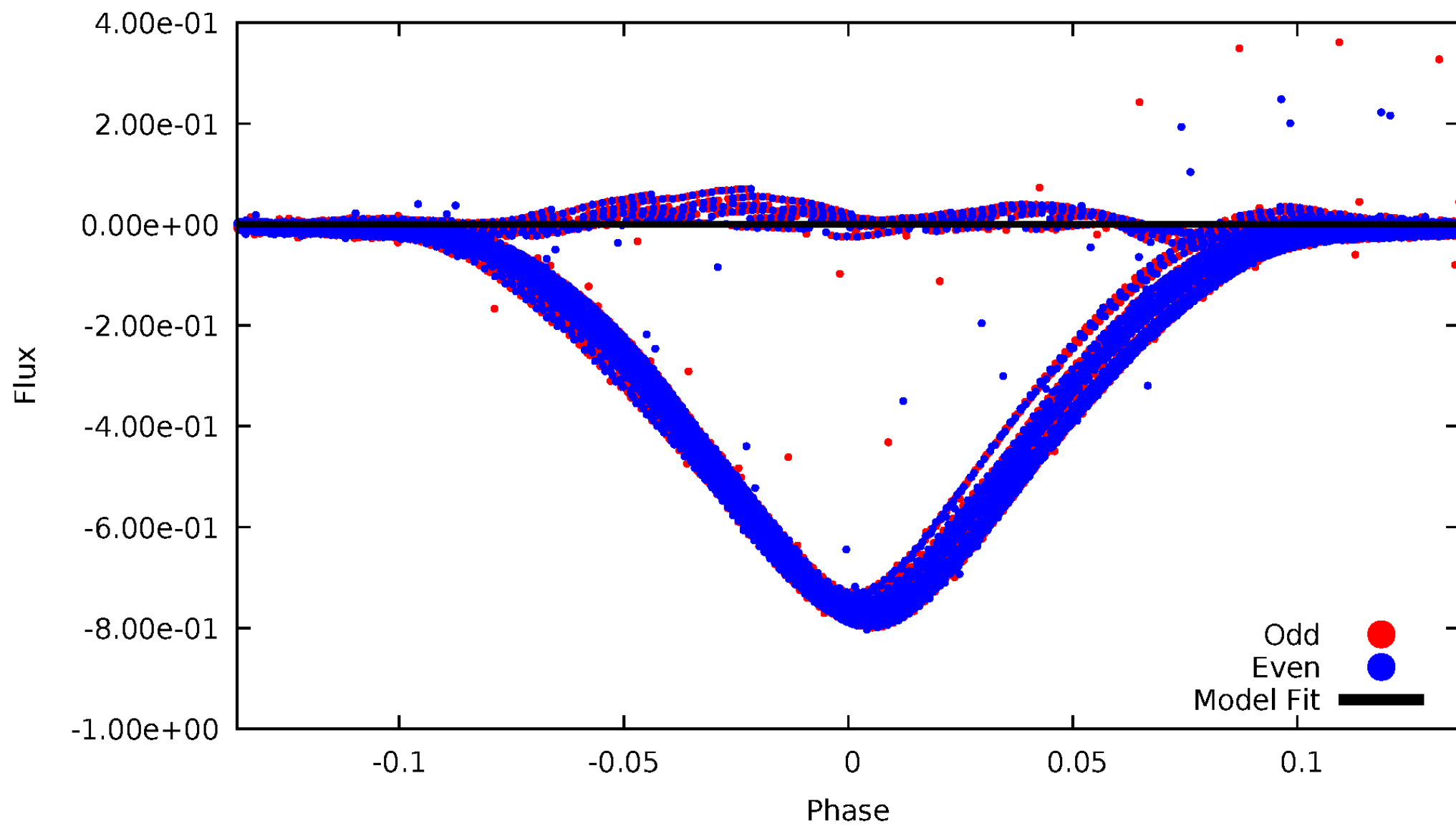


TCE 003954798-01



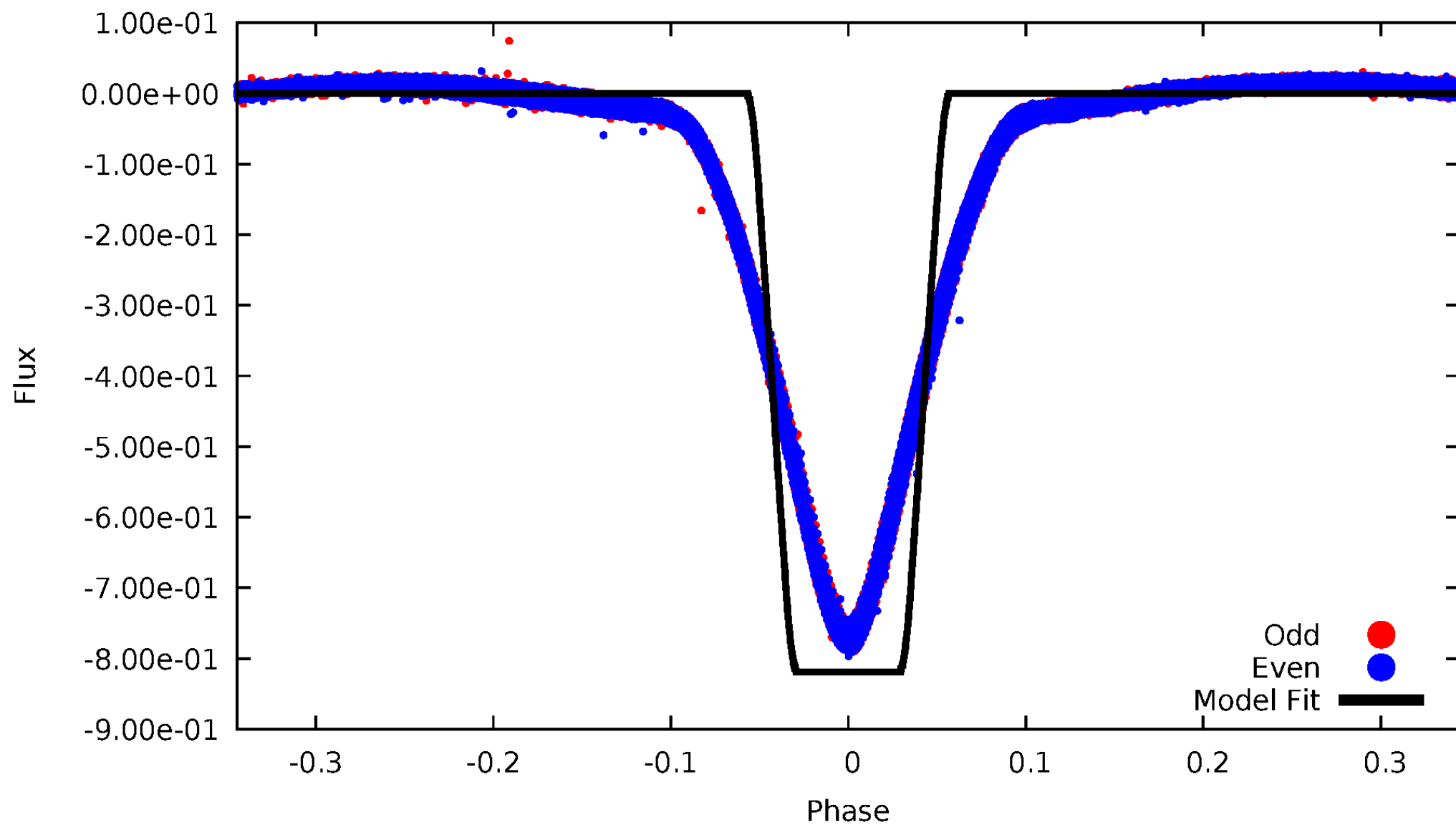
DV Odd/Even

TCE 003954798-01



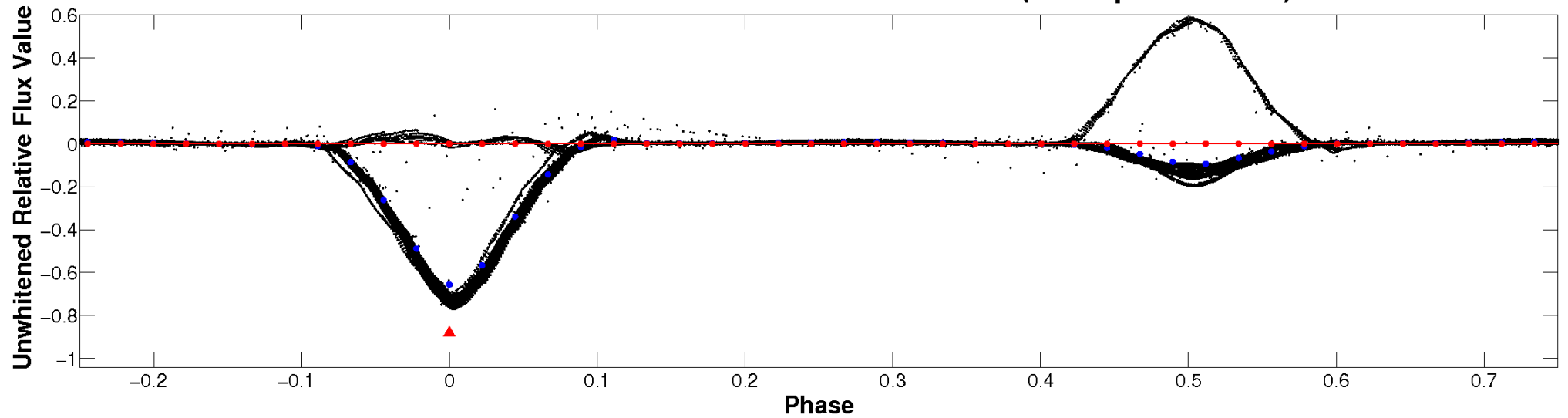
ALT Odd/Even

TCE 003954798-01

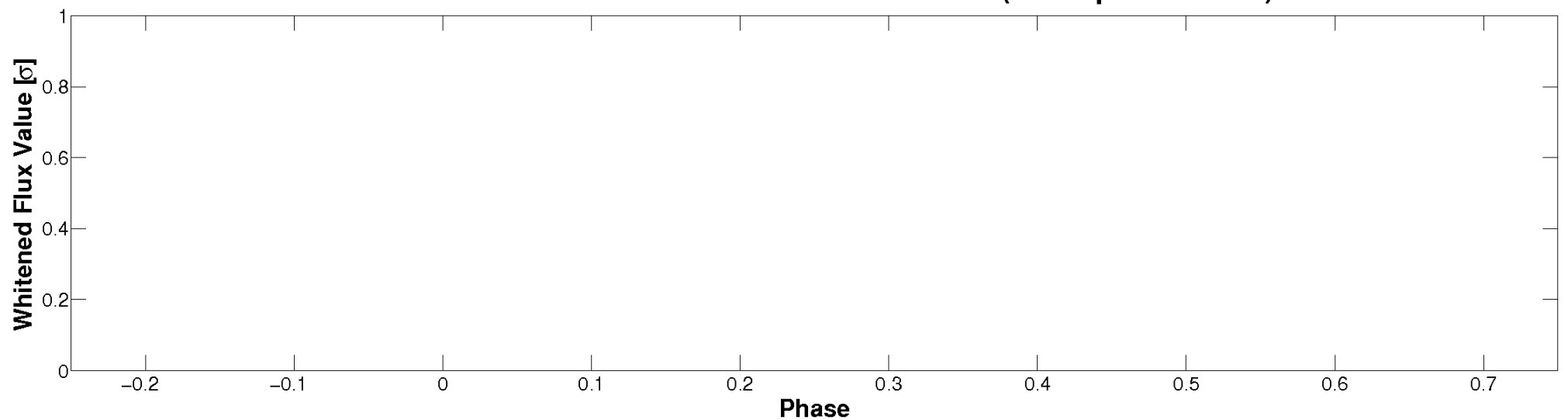


Non-Whitened Vs. Whitened Light Curve

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

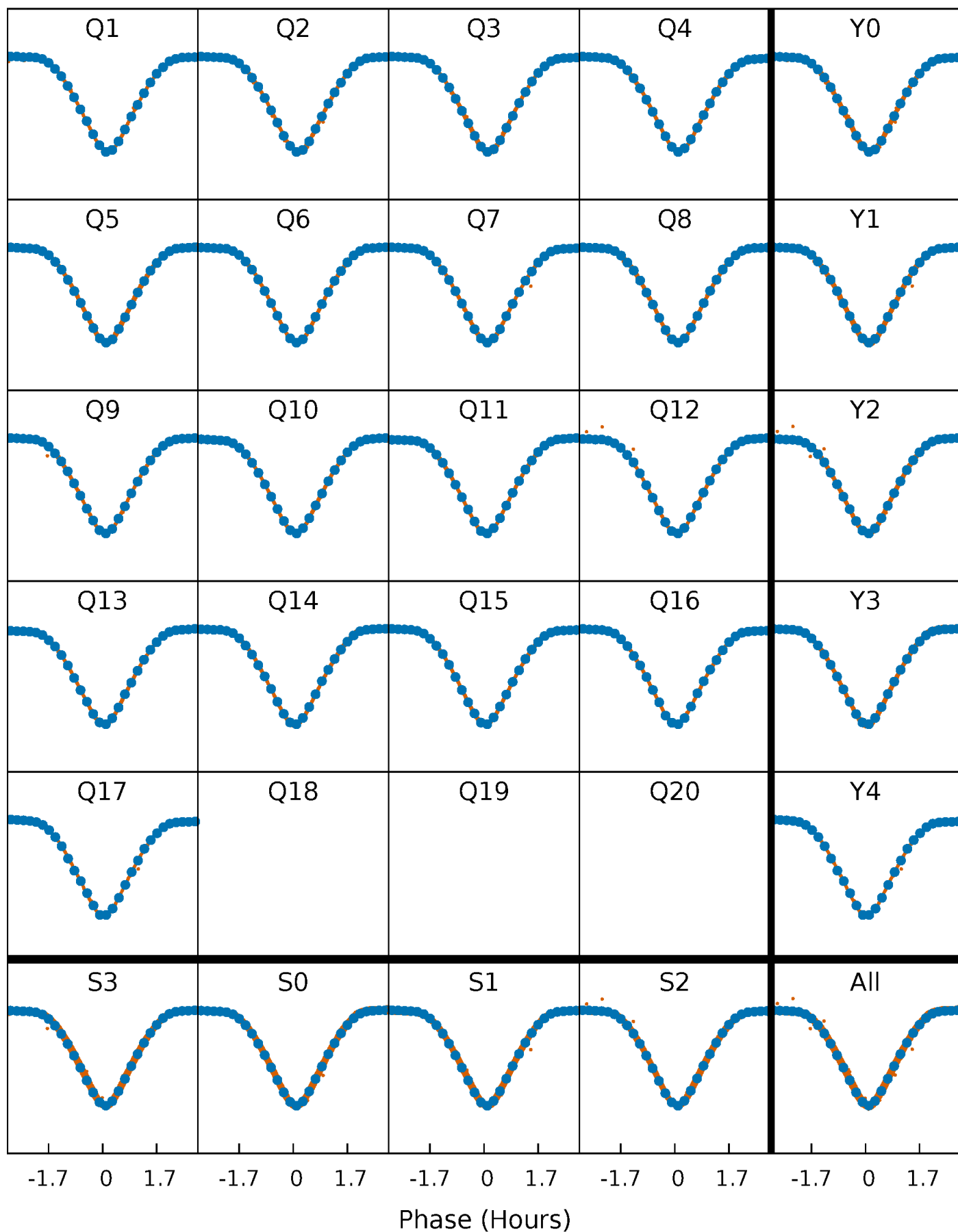


Planet 1 : Phased Whitened Flux Time Series (TPS Epoch/Period)



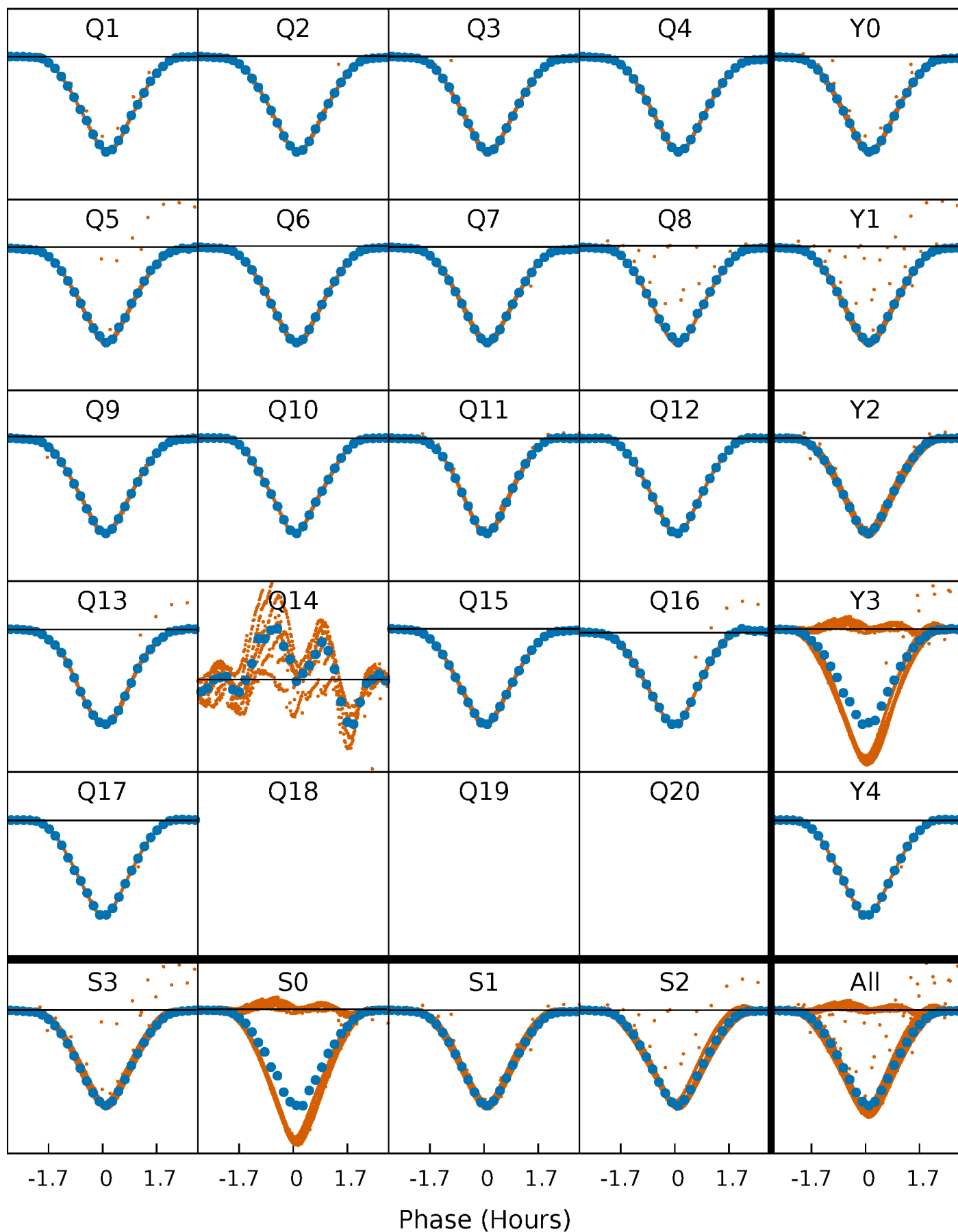
PDC Quarter-Phased Transit Curves

TCE 003954798-01 P= 0.918483 Days $T_0=131.857869$ (BKJD)



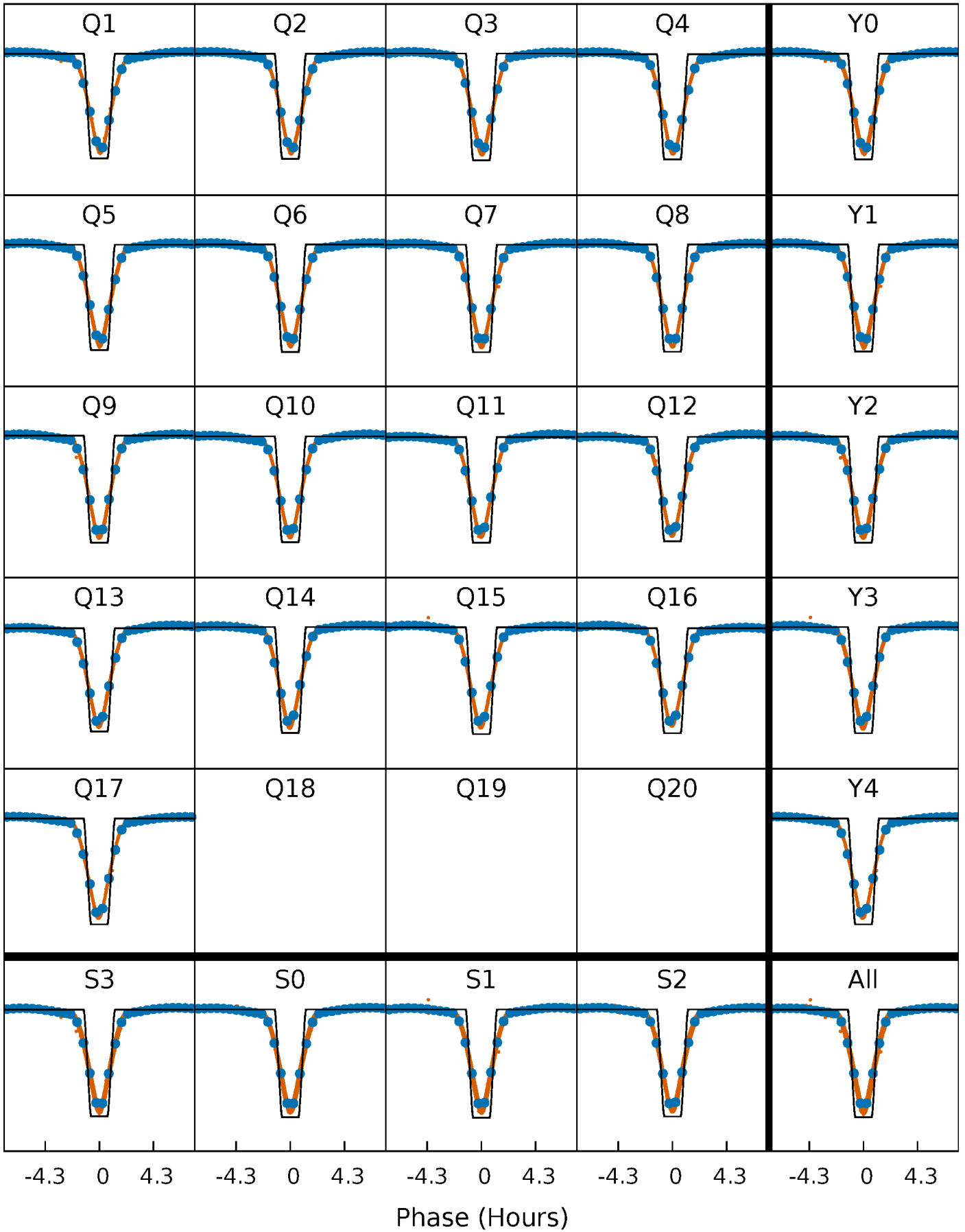
DV Quarter-Phased Transit Curves

TCE 003954798-01 P= 0.918483 Days $T_0=131.857869$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

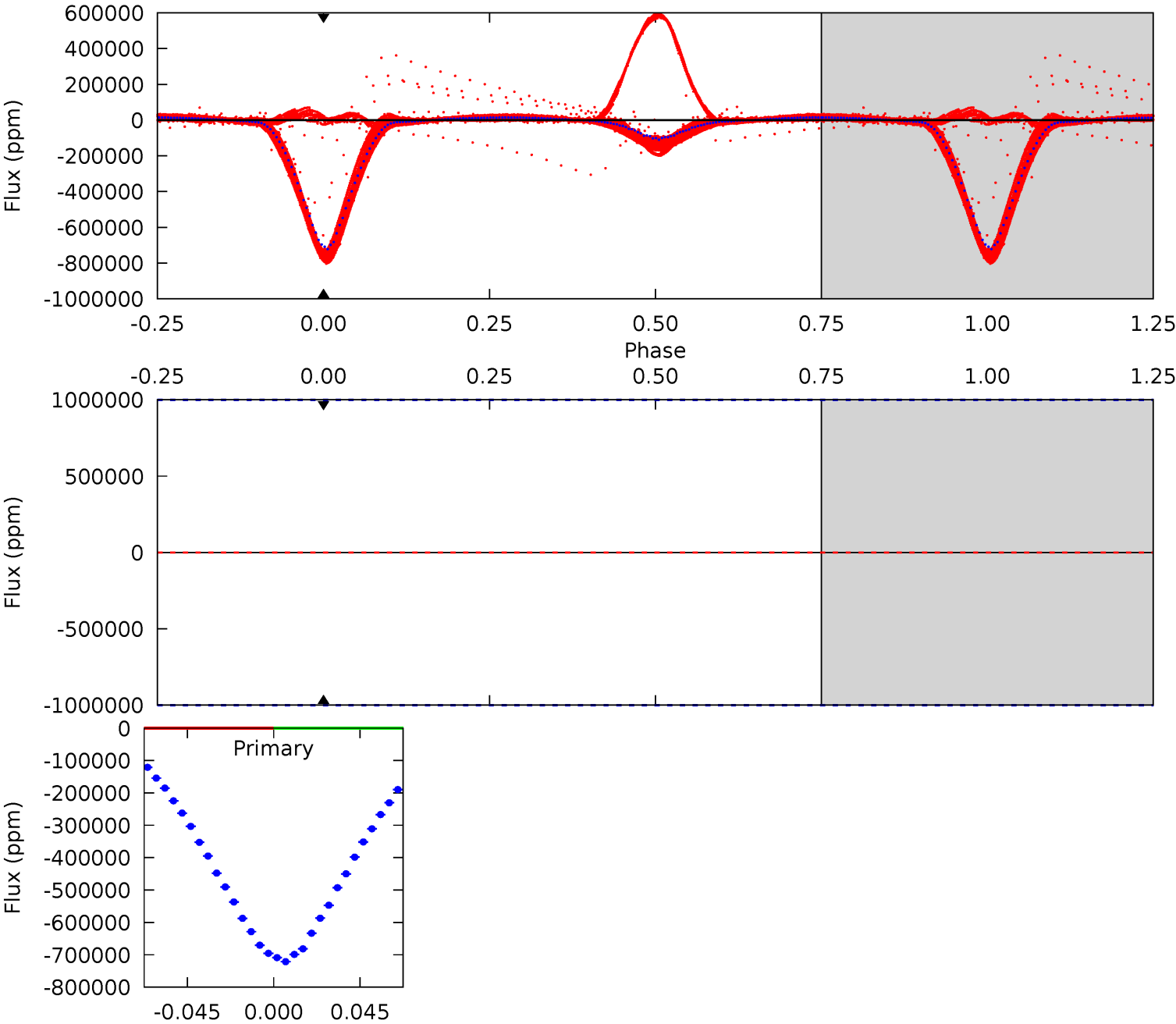
TCE 003954798-01 P= 0.918483 Days $T_0=131.861559$ (BKJD)



DV Model-Shift Uniqueness Test

003954798-01, P = 0.918483 Days, E = 130.939386 Days

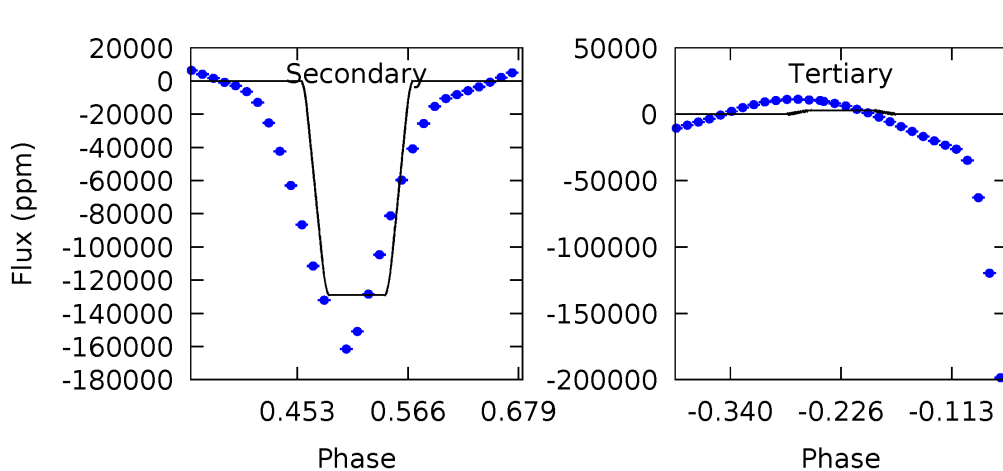
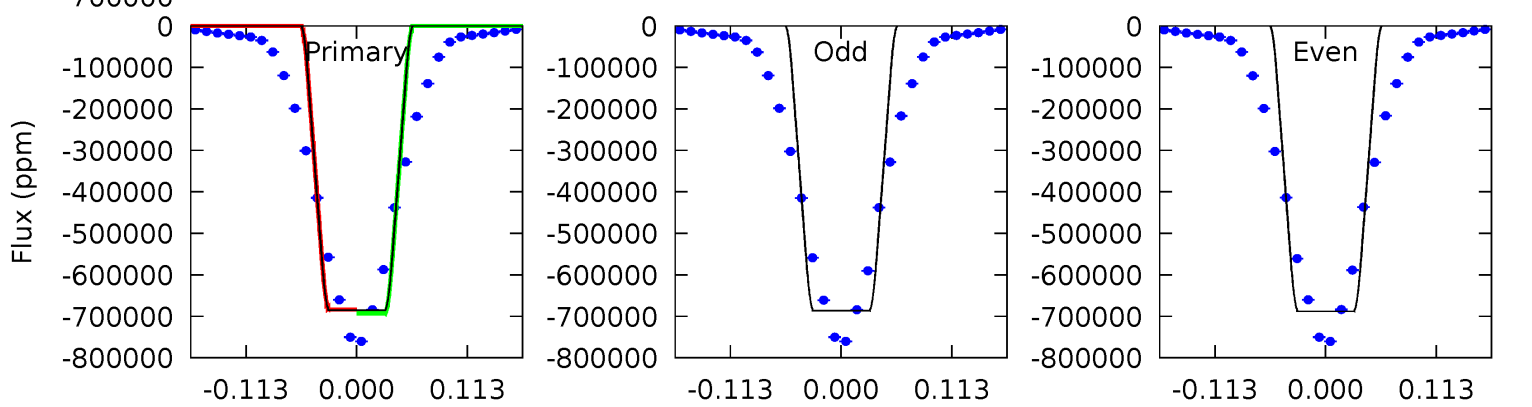
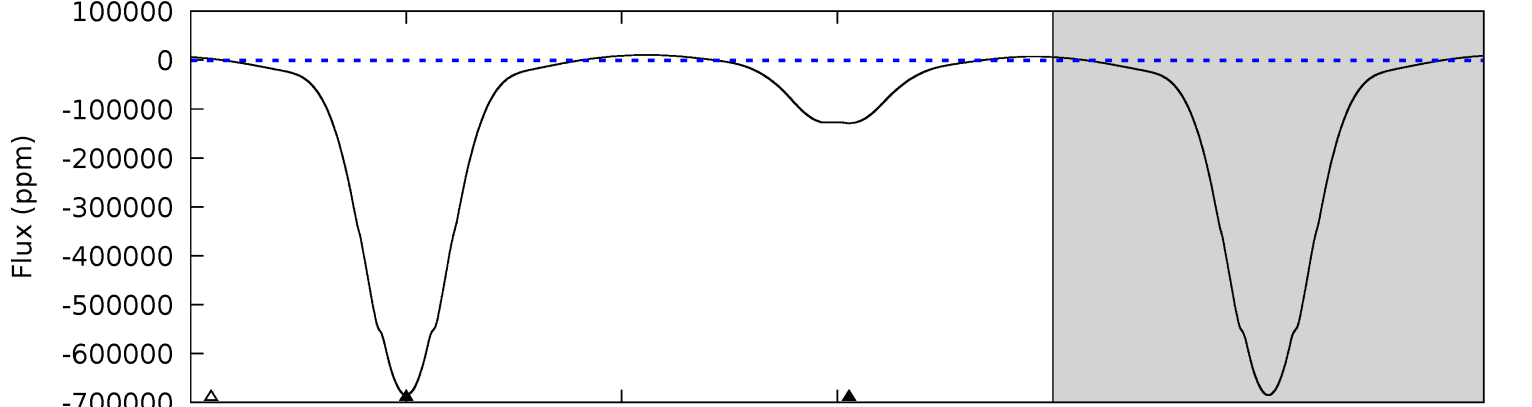
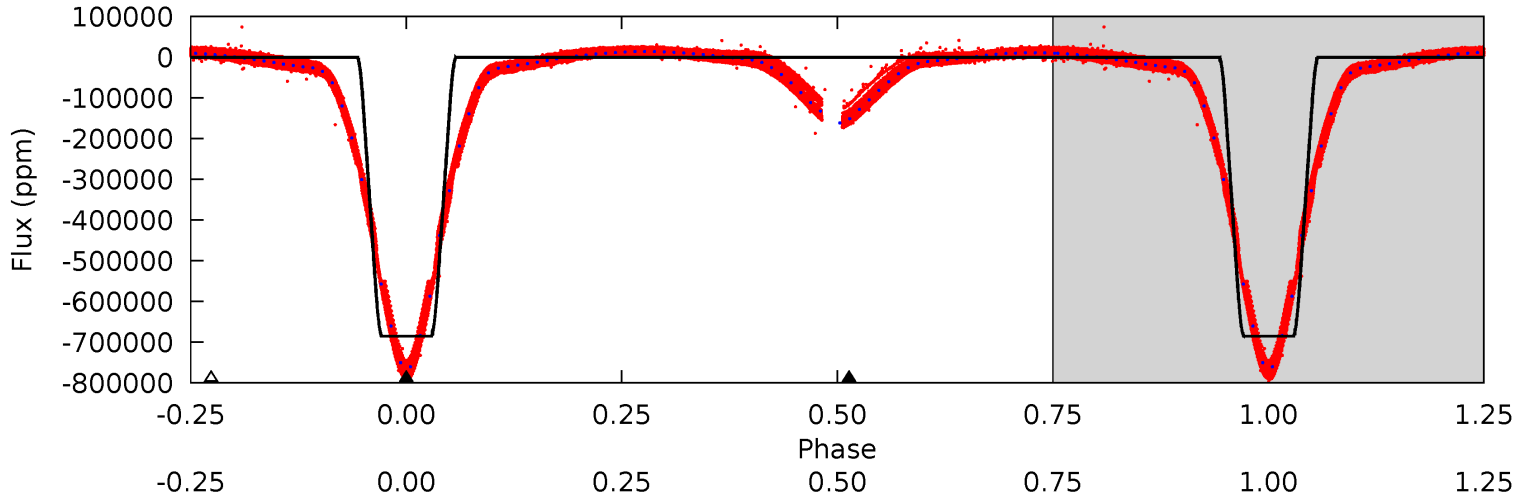
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

003954798-01, P = 0.918483 Days, E = 130.943076 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
4555	856.8	-19.4	0	4.54	1.58	81.7	4574	4555	876.2	856.8	3.41	1.00	0.02	30.8



Stellar Parameters For KIC 003954798

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$\rho_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6269^{+177}_{-221}	$4.236^{+0.167}_{-0.185}$	$-0.120^{+0.250}_{-0.300}$	$1.316^{+0.409}_{-0.273}$	$1.086^{+0.181}_{-0.148}$	$0.671^{+0.644}_{-0.326}$
	+3%/-4%	+4%/-4%	+208%/-250%	+31%/-21%	+17%/-14%	+96%/-49%
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 003954798-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	0 ± 1000000	$55.16^{+17.25}_{-15.61}$	3209^{+238}_{-201}	-3200^{+9015}_{-2581}	$0.015^{+7.392}_{-5.835}$
Alt.	-128876 ± 150	$130.36^{+27.14}_{-21.58}$	3205^{+259}_{-216}	4147^{+222}_{-219}	$1.736^{+0.686}_{-0.527}$

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 $A_{obs} \gg 1.0$

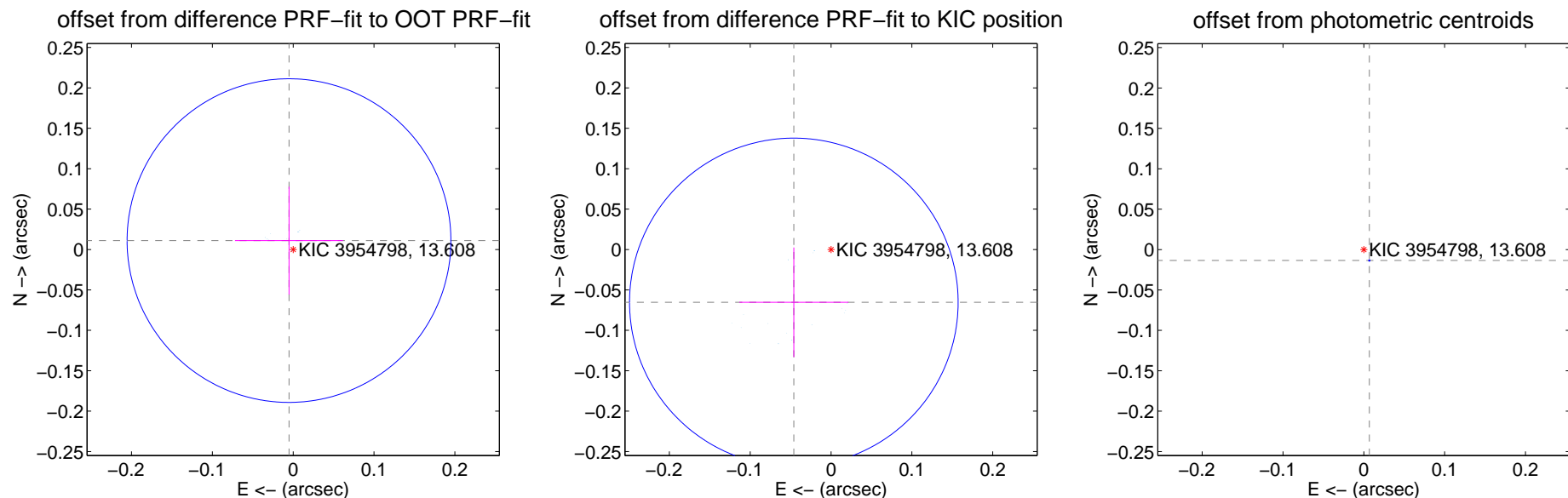
DV Centroid Data

Supplemental centroid analysis for 003954798-01. Kepler magnitude: 13.61. Transit SNR -1.00

There are 17 quarters with good PRF difference image offsets

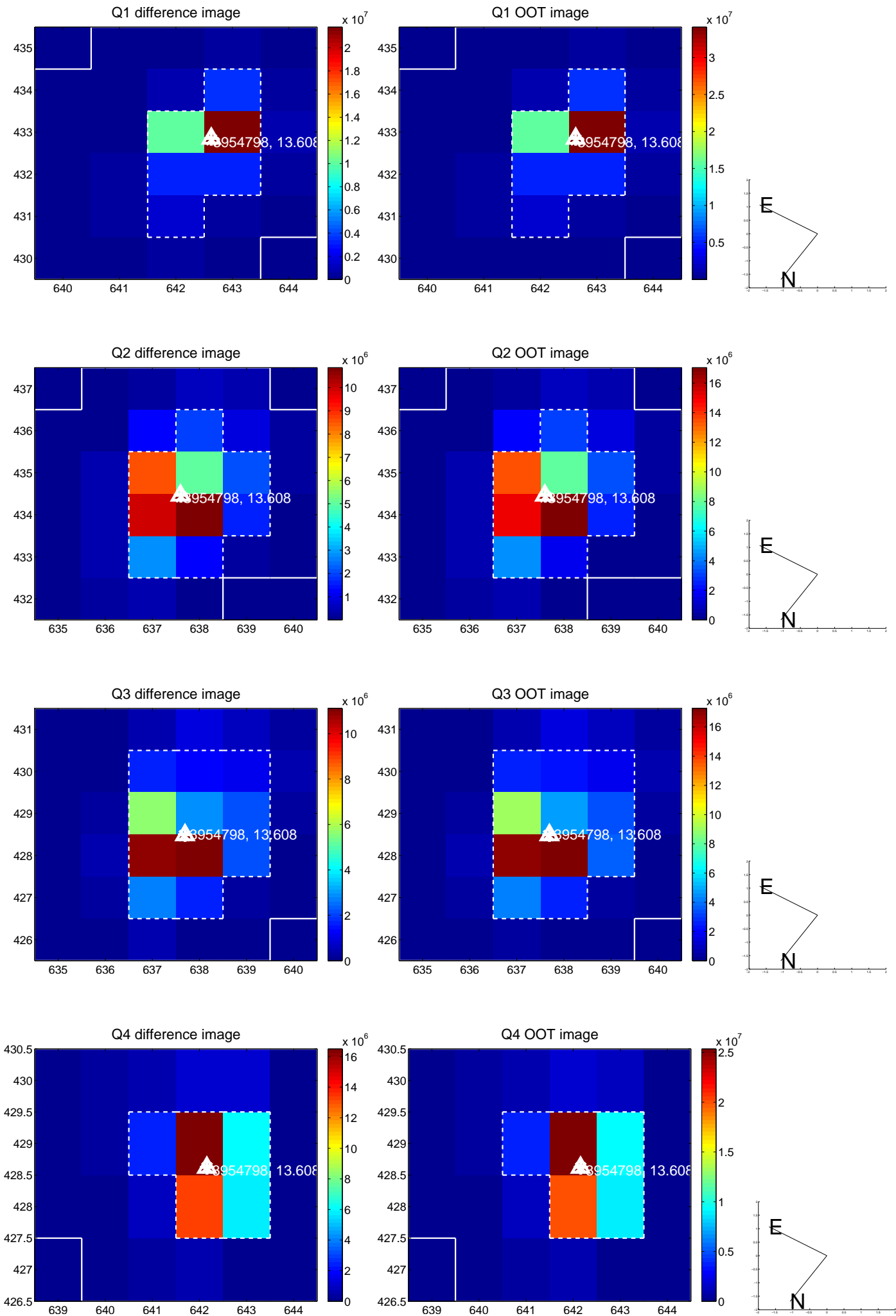
The direct PRF centroid is offset from the target star catalog position by about 0.09 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.012 ± 0.067	0.18	0.005 ± 0.067	0.011 ± 0.067
PRF-fit source offset from KIC position	0.080 ± 0.068	1.18	0.046 ± 0.068	-0.065 ± 0.068
photometric centroid source offset	0.02 ± 0.00	51.87	-0.01 ± 0.00	-0.01 ± 0.00

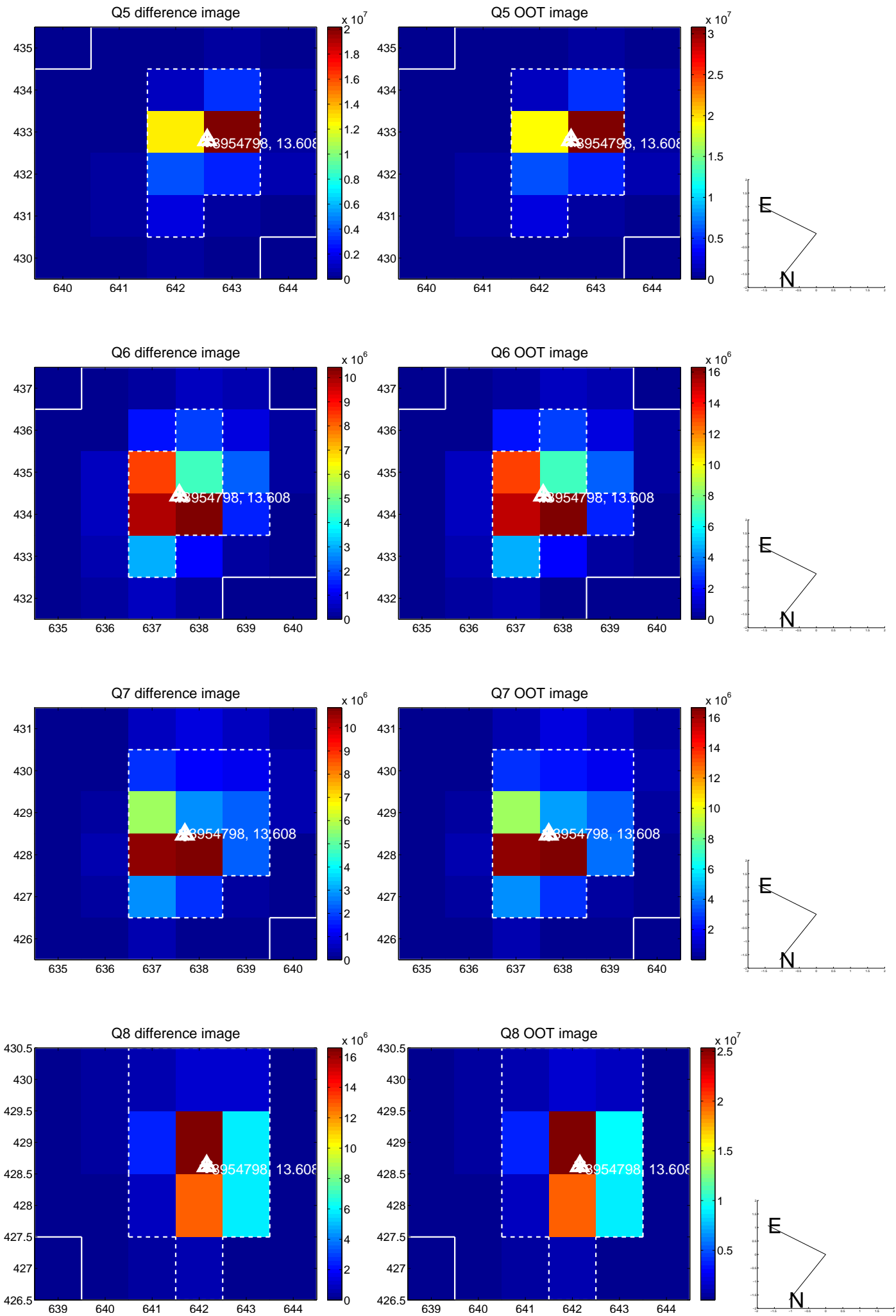


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

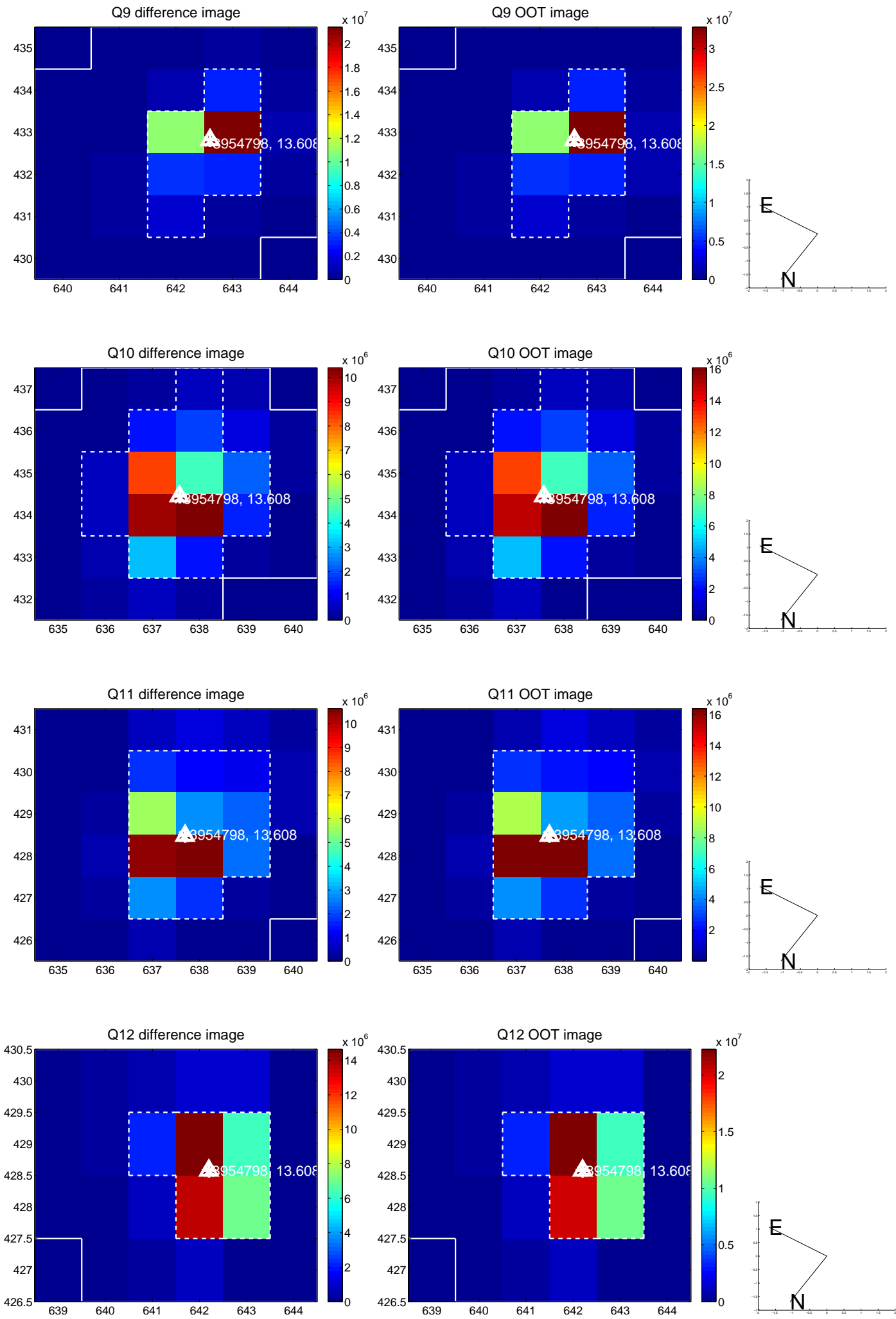
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



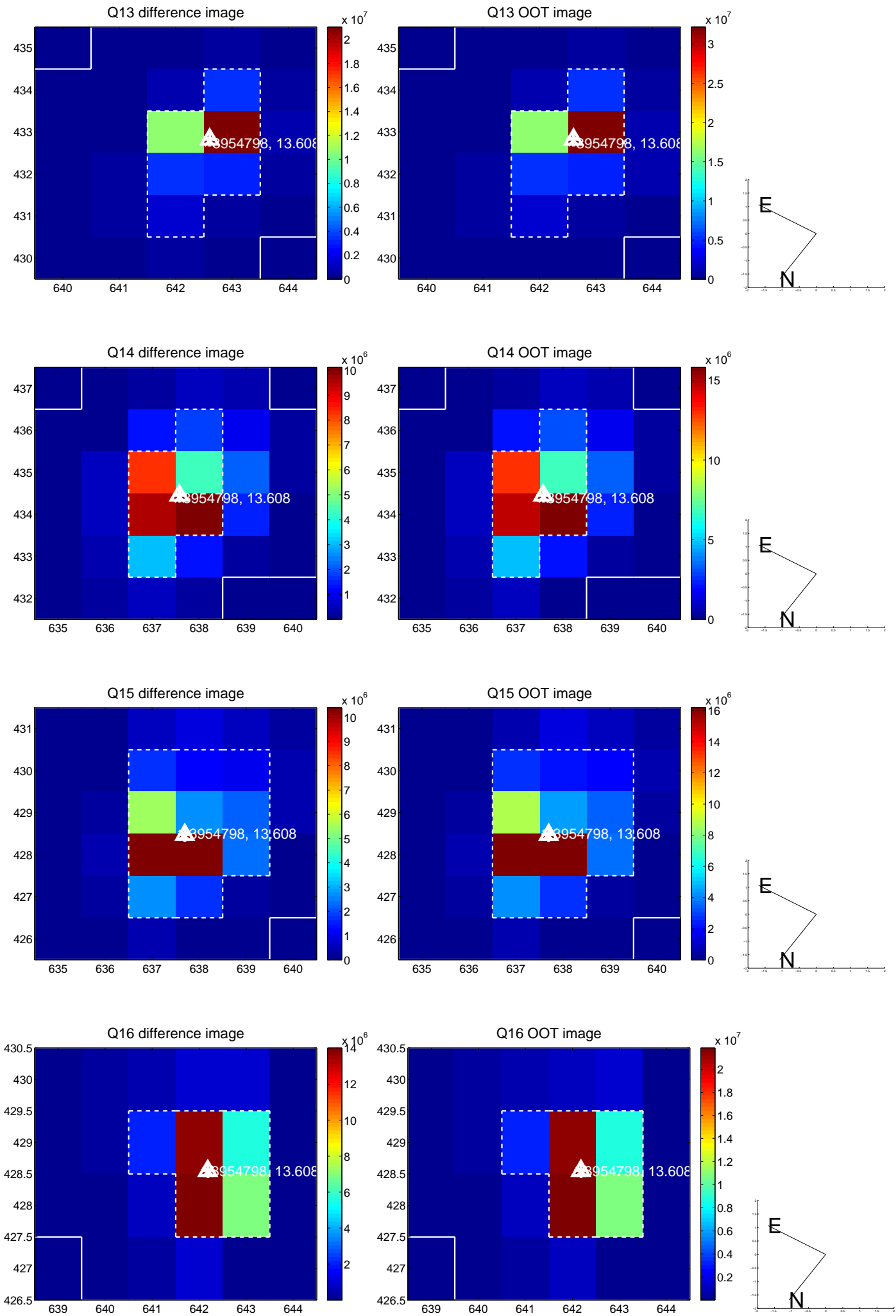
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



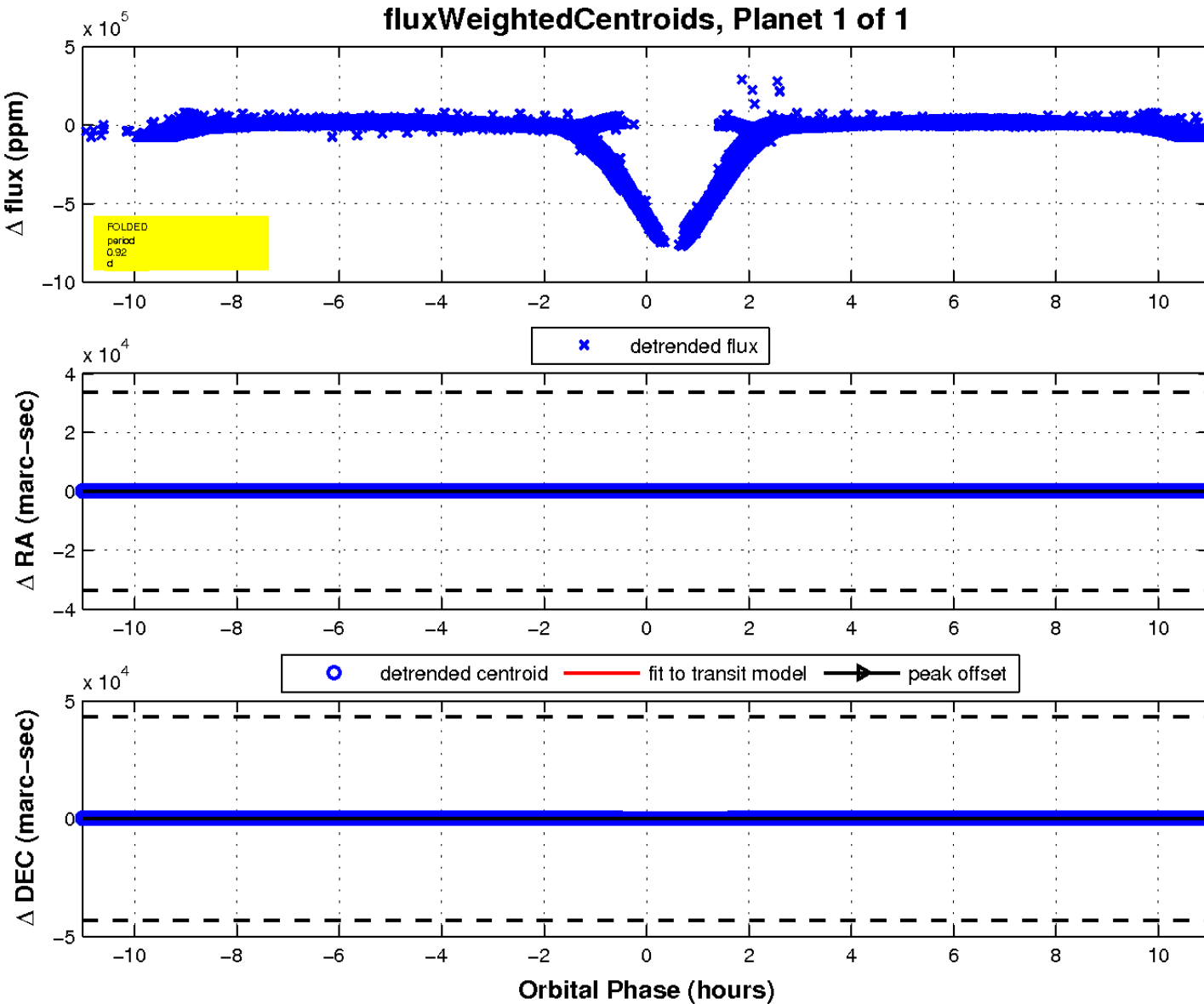
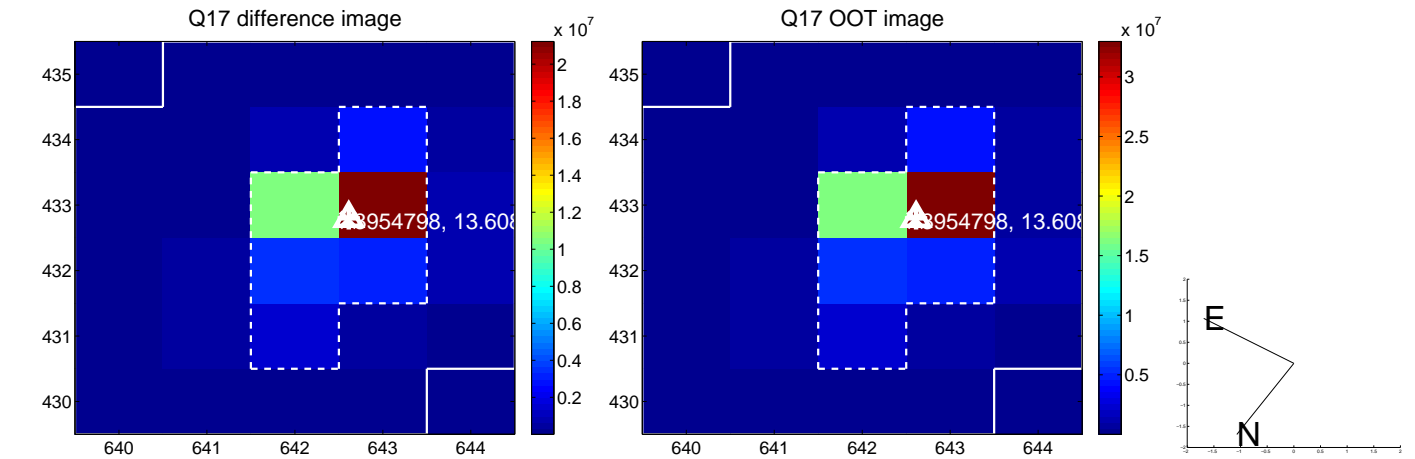
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white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination

