

KIC 007599132

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})
007599132-01	OBS	No	0.651888	132.013293	4.8	5.145	7.7	2.6	4.67	10449	1.18	0.00

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007599132-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—LPP_ALT—CENT_SATURATED

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

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

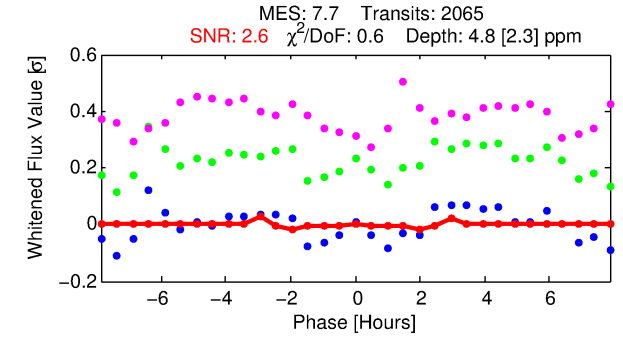
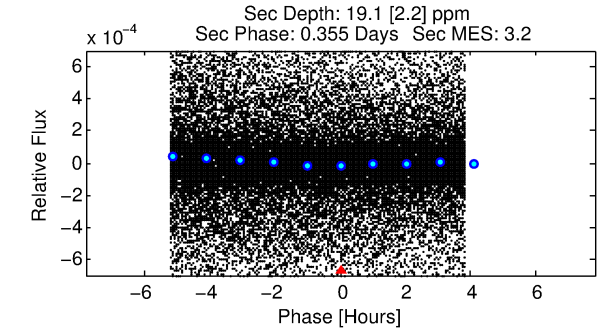
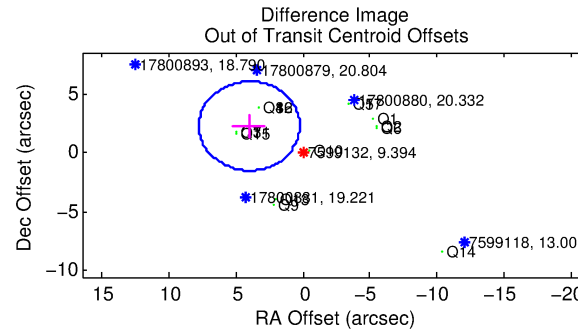
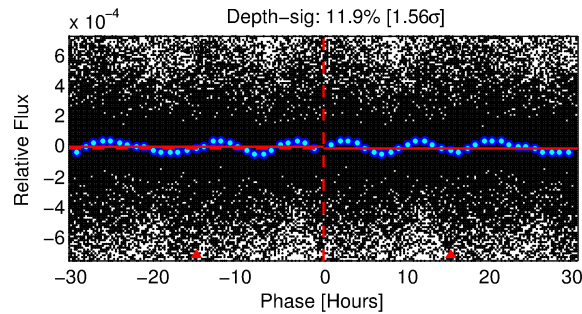
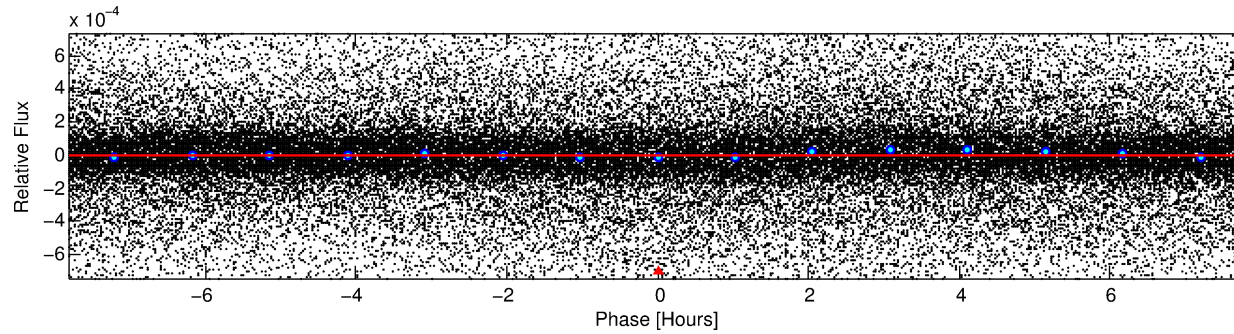
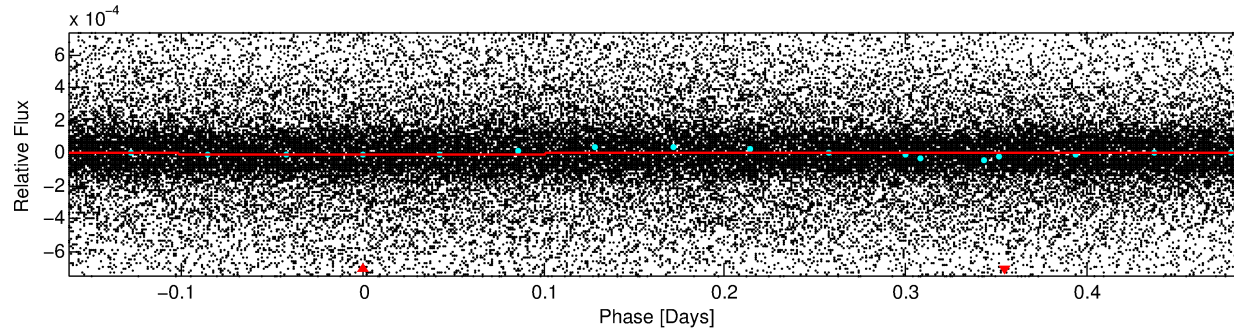
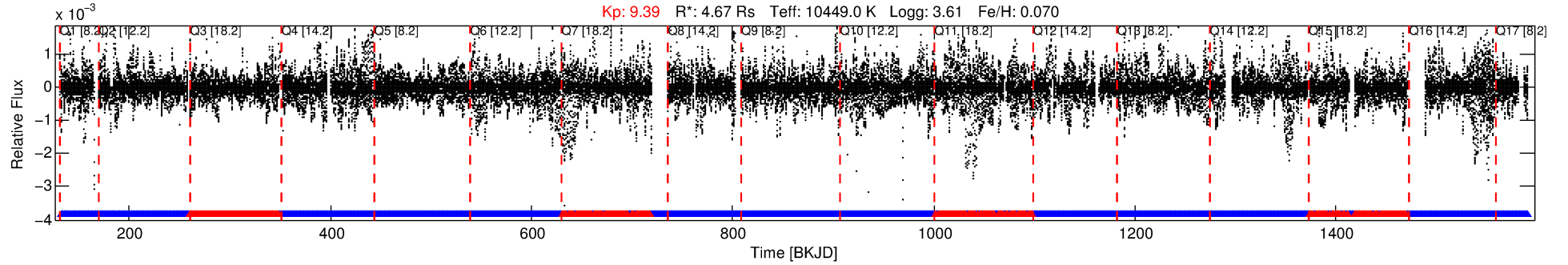
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007599132-01

No Significant Match Found

DV One-Page Summary

KIC: 7599132 Candidate: 1 of 1 Period: 0.652 d



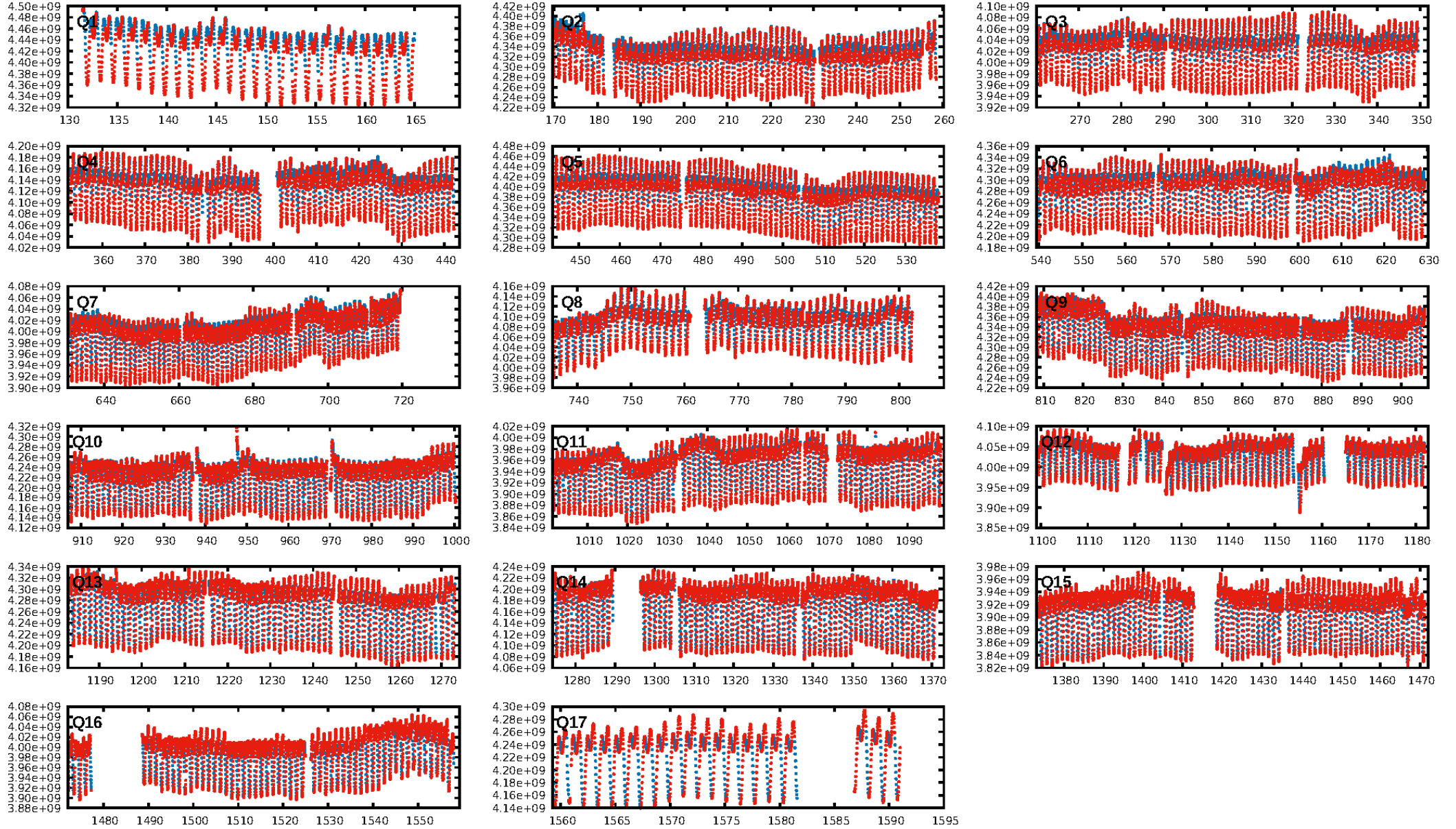
DV Fit Results:

Period = 0.65189 [0.00003] d
Epoch = 132.0133 [0.0037] BKJD
 $R_p/R^* = 0.0023$ [0.0009]
 $a/R^* = 1.03$ [0.20]
 $b = 0.90$ [0.59]
 $\text{Seff} = \text{N/A}$
 $\text{Teq} = \text{N/A}$
 $R_p = 1.18$ [0.74] R_e
 $a = \text{N/A}$
 $\text{Ag} = \text{N/A}$
 $\text{Teffp} = \text{N/A}$

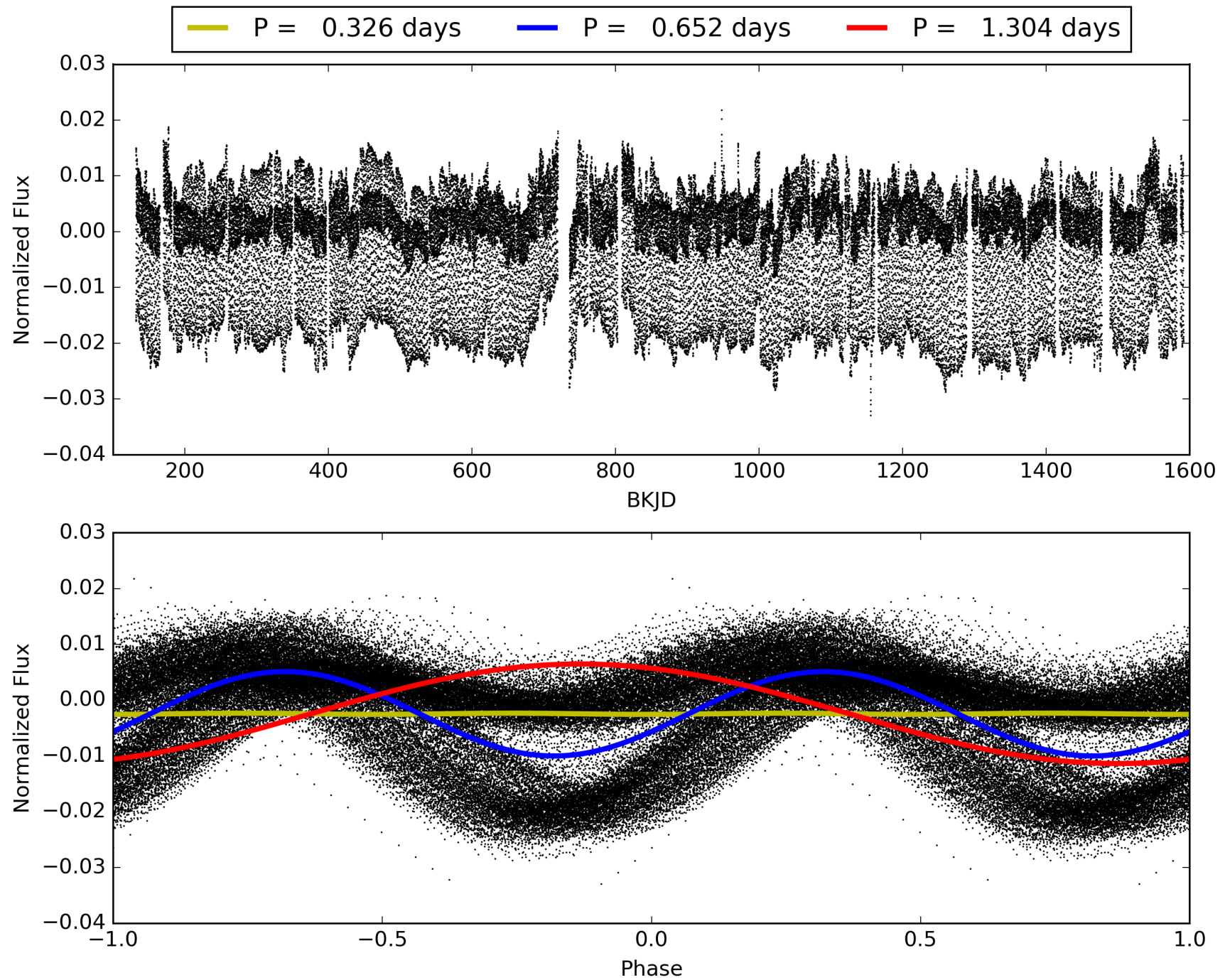
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 0.82 [1610/1973]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 4.615 arcsec [3.67 σ]
KicOffset-rm: 5.338 arcsec [5.19 σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 0.00 [0/17]
DiffImageOverlap-fno: 1.00 [17/17]

TCE 007599132-01, PDC Light Curves

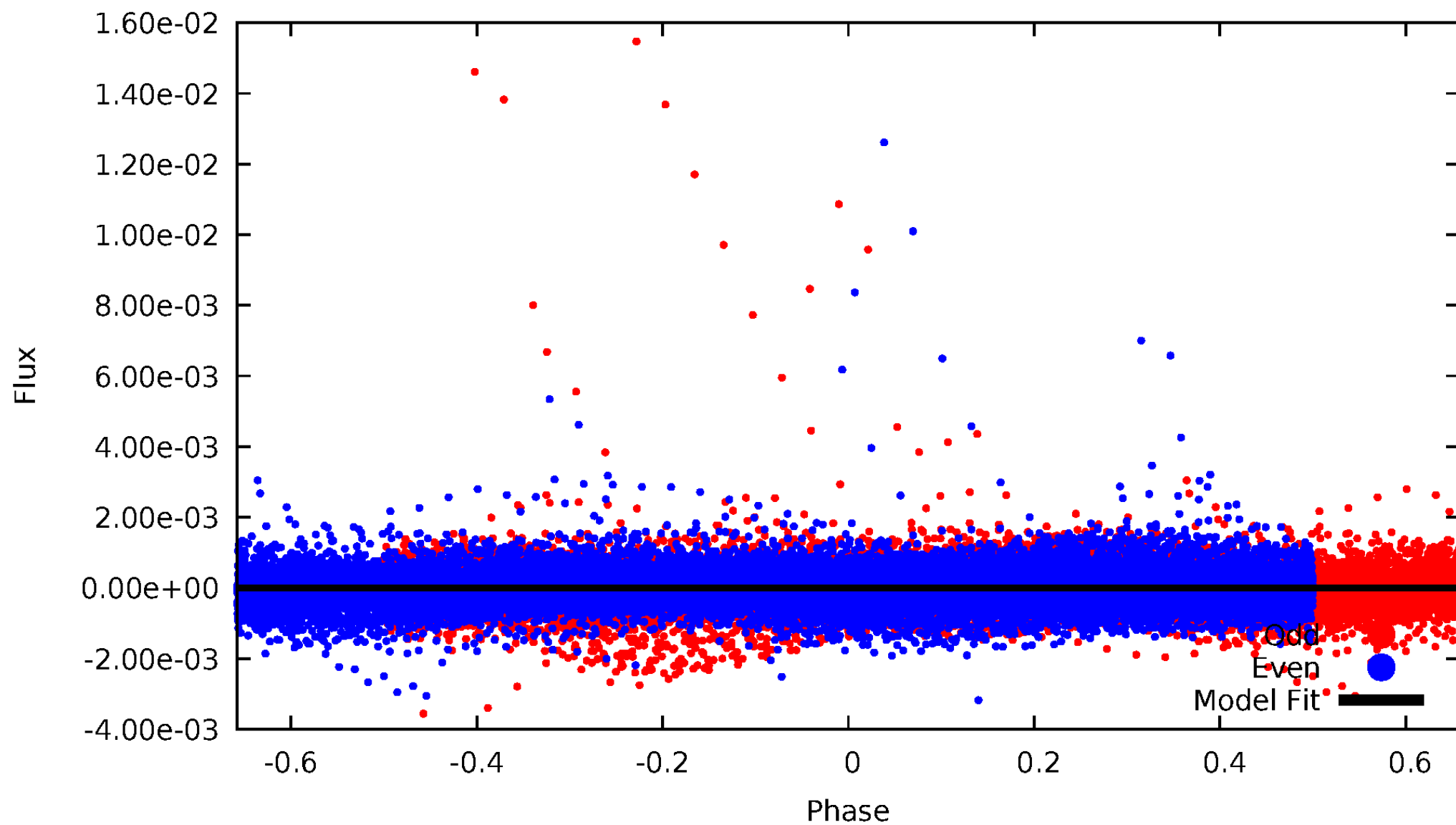


TCE 007599132-01



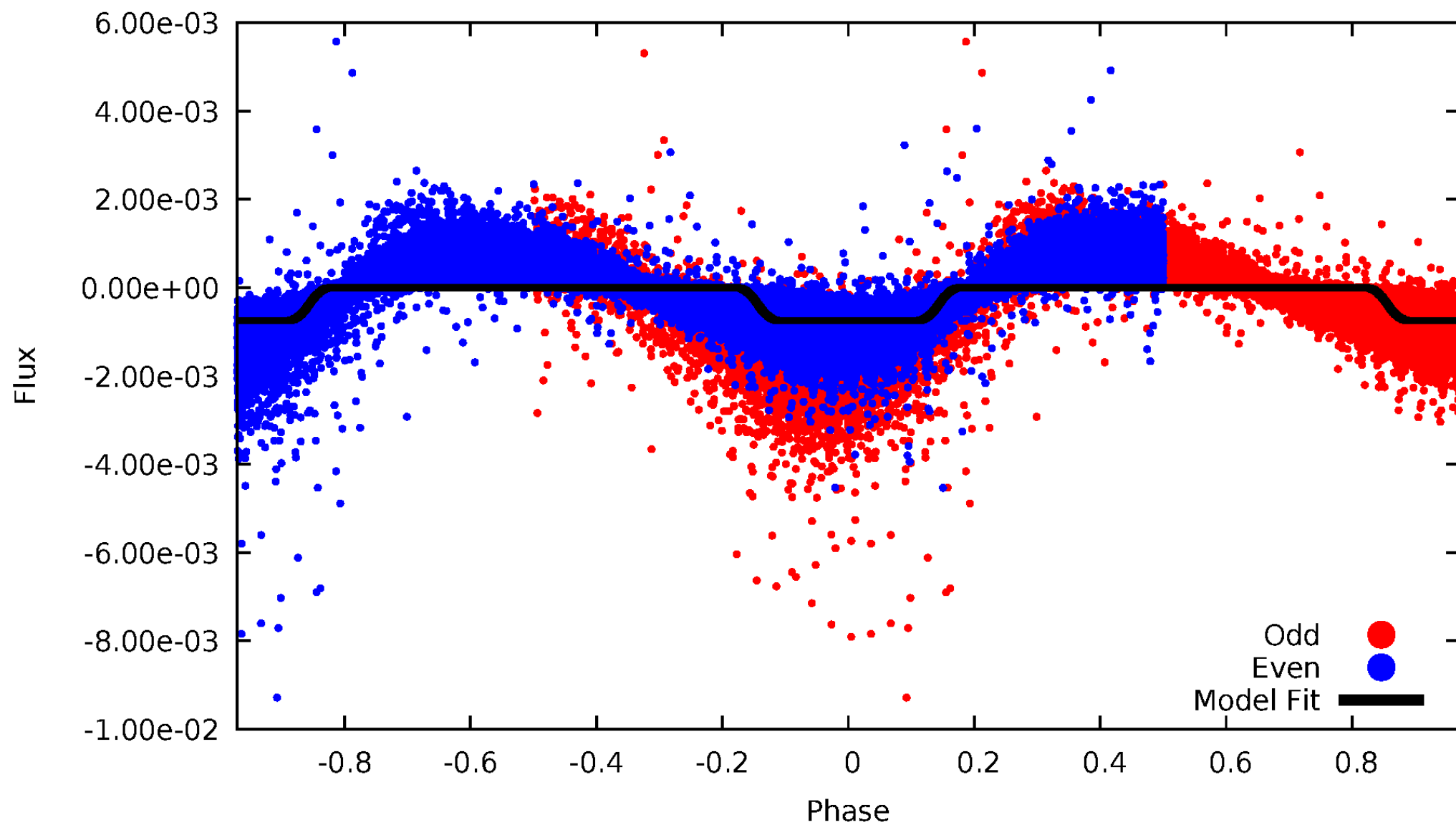
DV Odd/Even

TCE 007599132-01



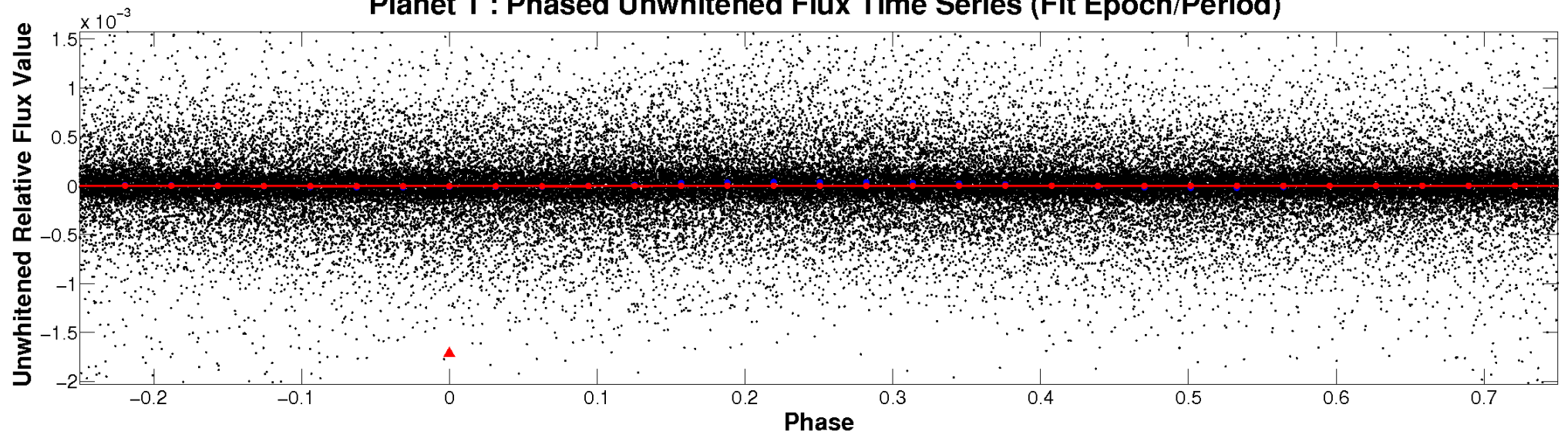
ALT Odd/Even

TCE 007599132-01

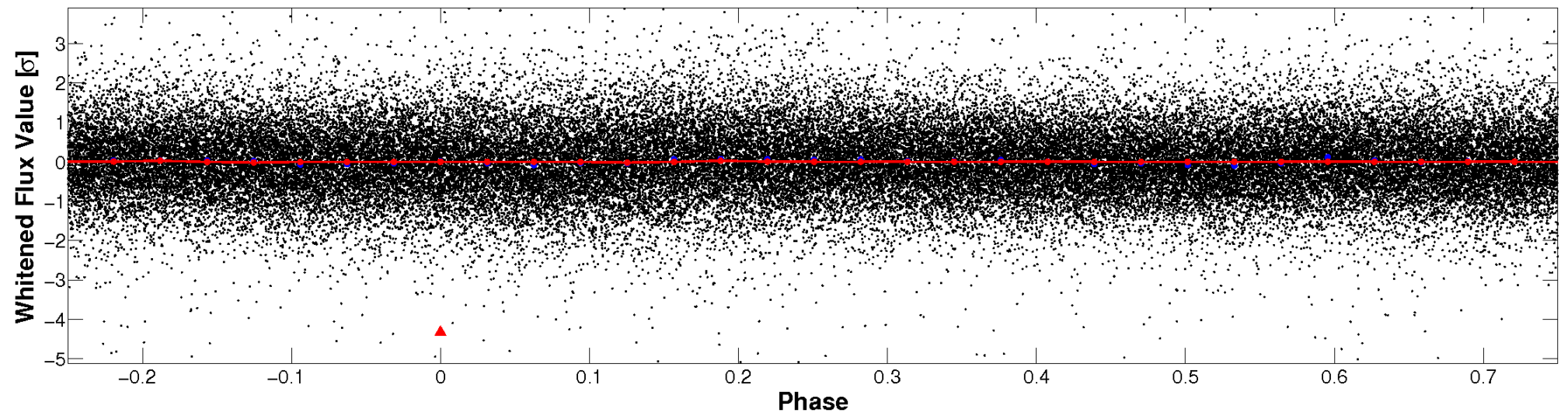


Non-Whitened Vs. Whitened Light Curve

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

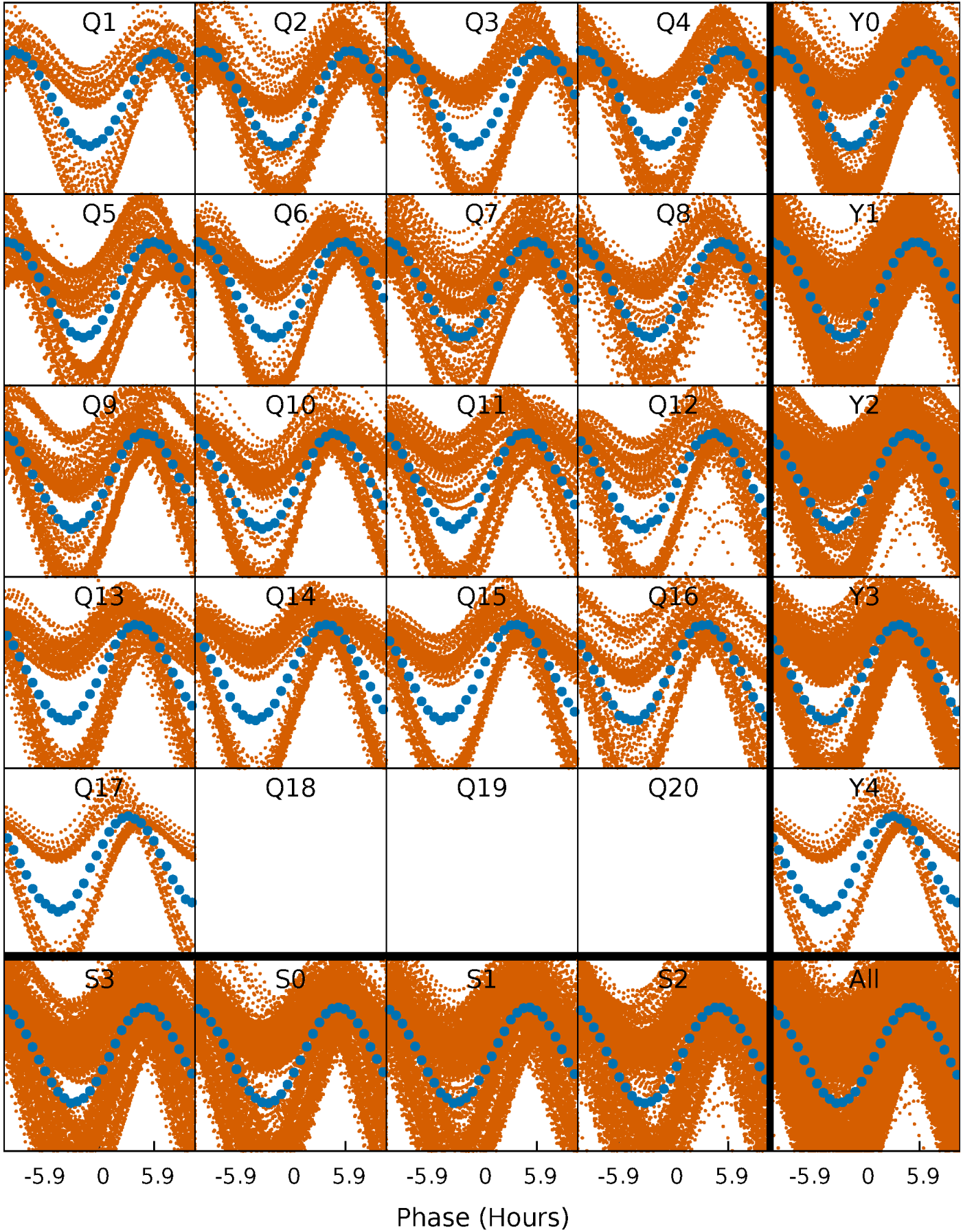


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



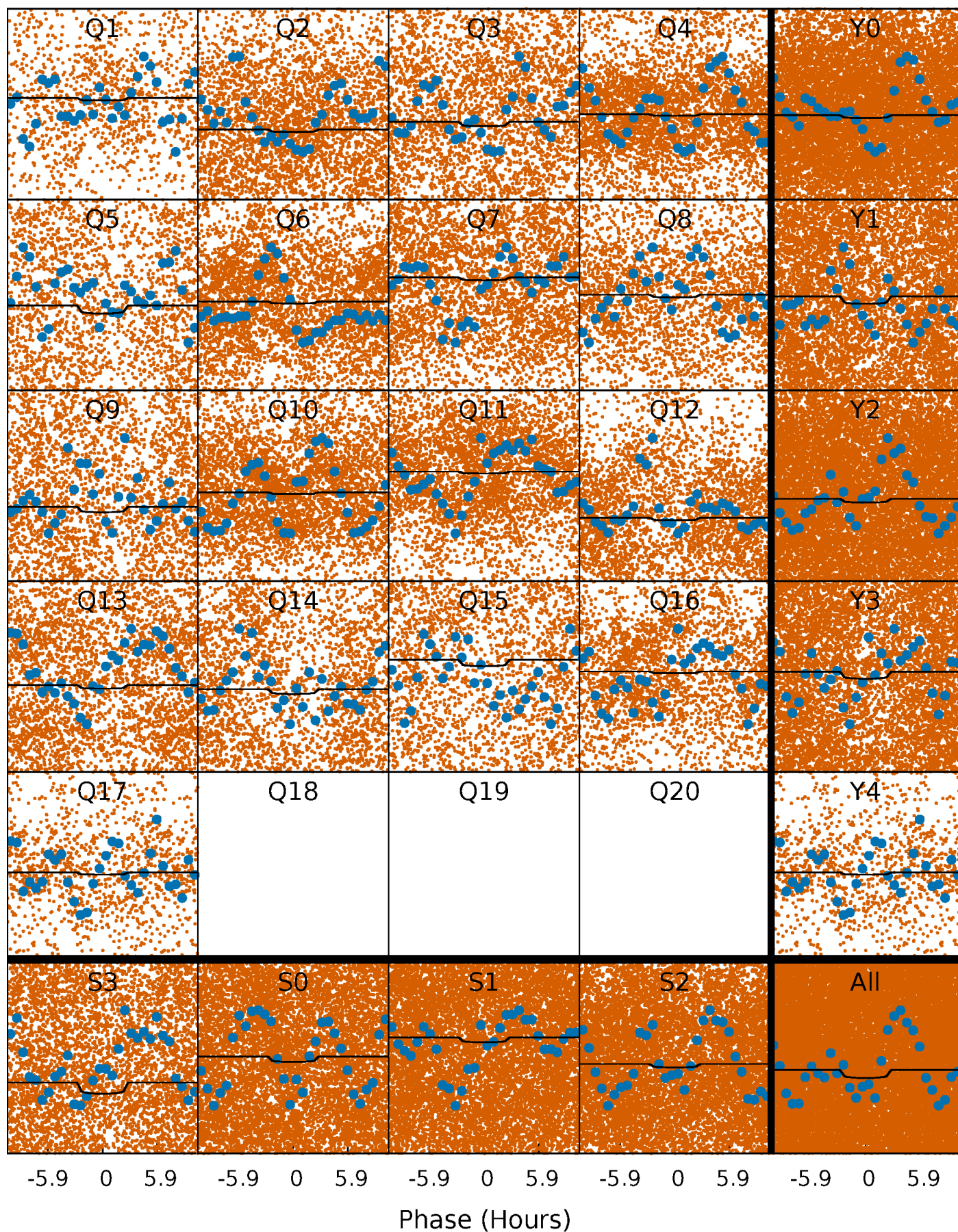
PDC Quarter-Phased Transit Curves

TCE 007599132-01 P= 0.651888 Days $T_0=132.013293$ (BKJD)



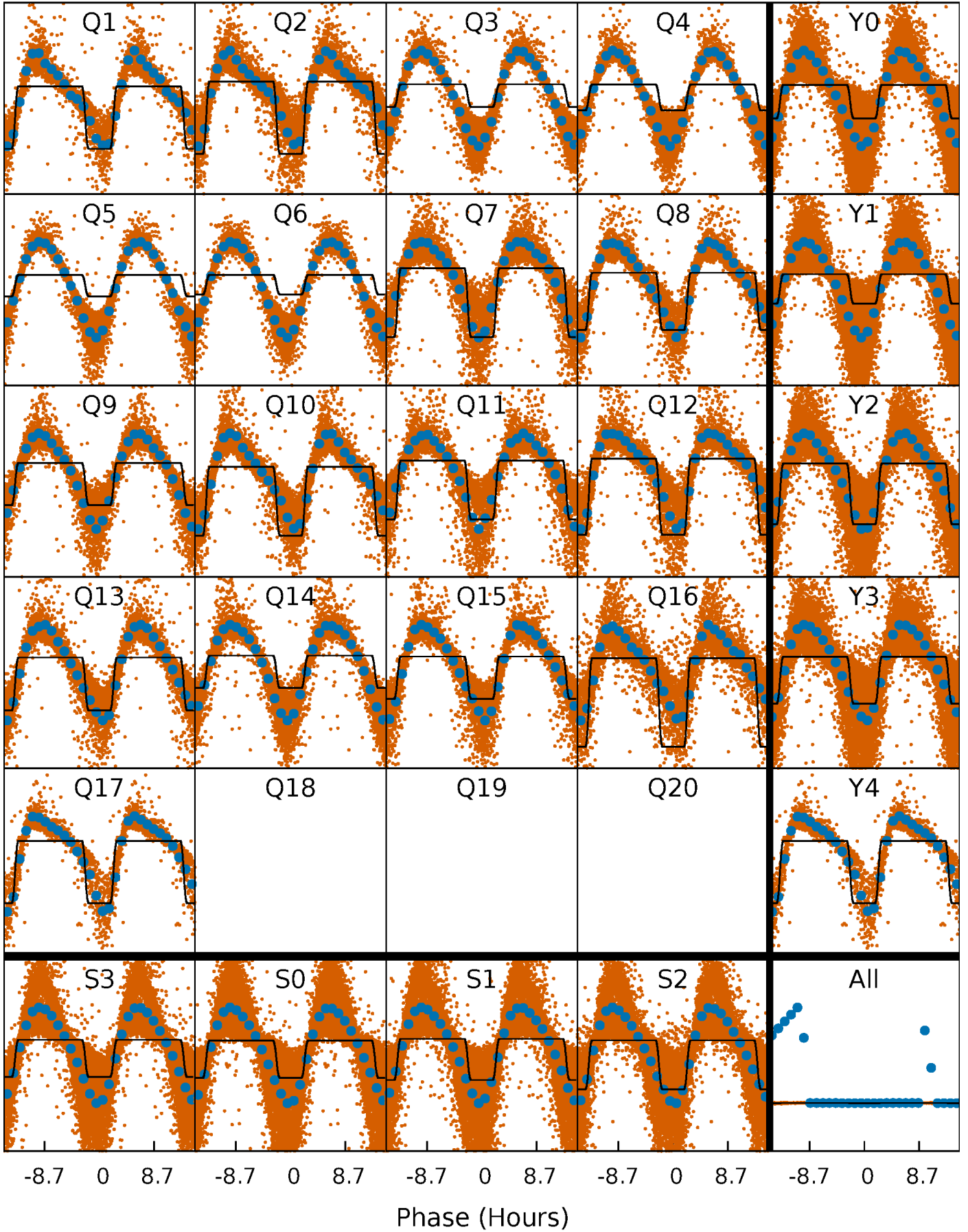
DV Quarter-Phased Transit Curves

TCE 007599132-01 P= 0.651888 Days $T_0=132.013293$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

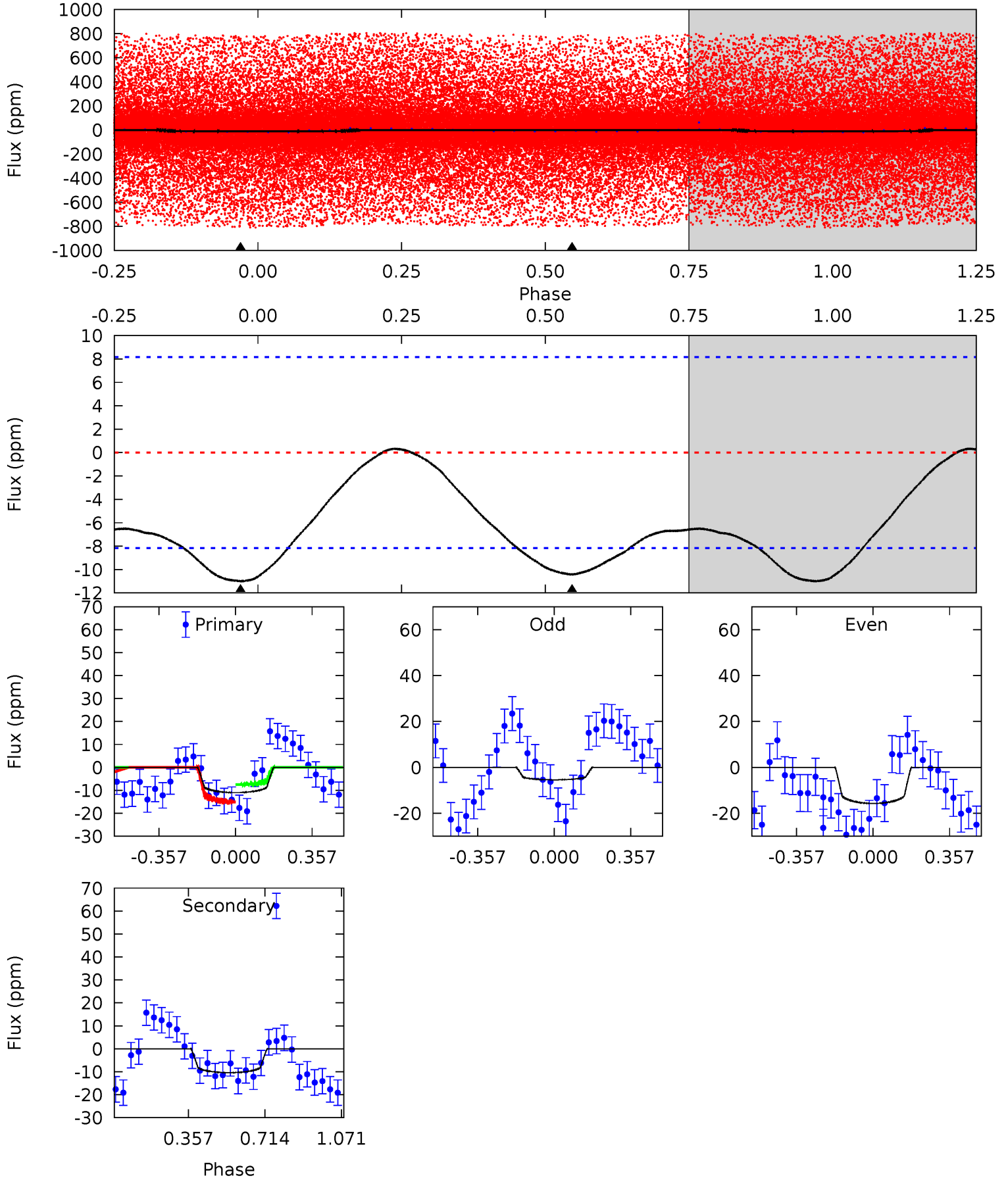
TCE 007599132-01 P= 0.651817 Days $T_0=132.022498$ (BKJD)



DV Model-Shift Uniqueness Test

007599132-01, P = 0.651888 Days, E = 131.361405 Days

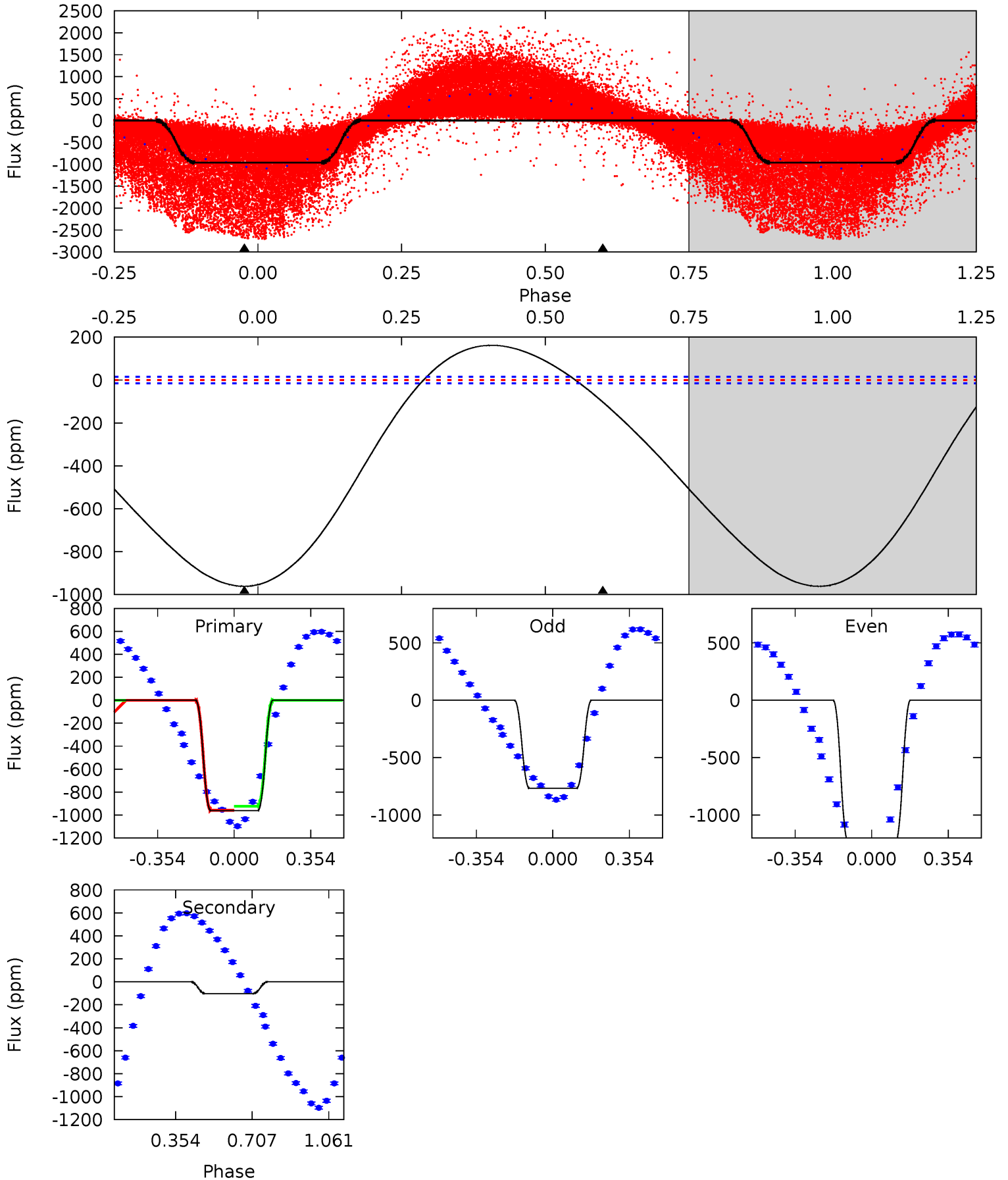
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5.78	5.48	0	0	4.29	0.92	0.23	5.78	5.78	5.48	5.48	2.81	1.03	0.03	2.04



Alt Model-Shift Uniqueness Test

007599132-01, P = 0.651817 Days, E = 131.370681 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
265.8	28.3	0	0	4.29	0.93	22.7	265.8	265.8	28.3	28.3	64.7	1.24	0.14	6.42



Stellar Parameters For KIC 007599132

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	10449^{+294}_{-404}	$3.610^{+0.459}_{-0.051}$	$0.070^{+0.150}_{-0.550}$	$4.673^{+0.402}_{-2.279}$	$3.248^{+0.152}_{-0.860}$	$0.045^{+0.210}_{-0.008}$
	+3%/-4%	+13%/-1%	+214%/-786%	+9%/-49%	+5%/-26%	+469%/-18%
Source	KIC0	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 007599132-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-10 ± 2	$1.03^{+0.50}_{-0.42}$	9119^{+556}_{-1027}	12986^{+9441}_{-3663}	$2.469^{+4.581}_{-1.316}$
Alt.	-103 ± 4	$13.27^{+1.38}_{-3.44}$	9096^{+589}_{-1150}	-5768^{+1769}_{-456}	$0.151^{+0.106}_{-0.025}$

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 $A_{obs} \gg 1.0$

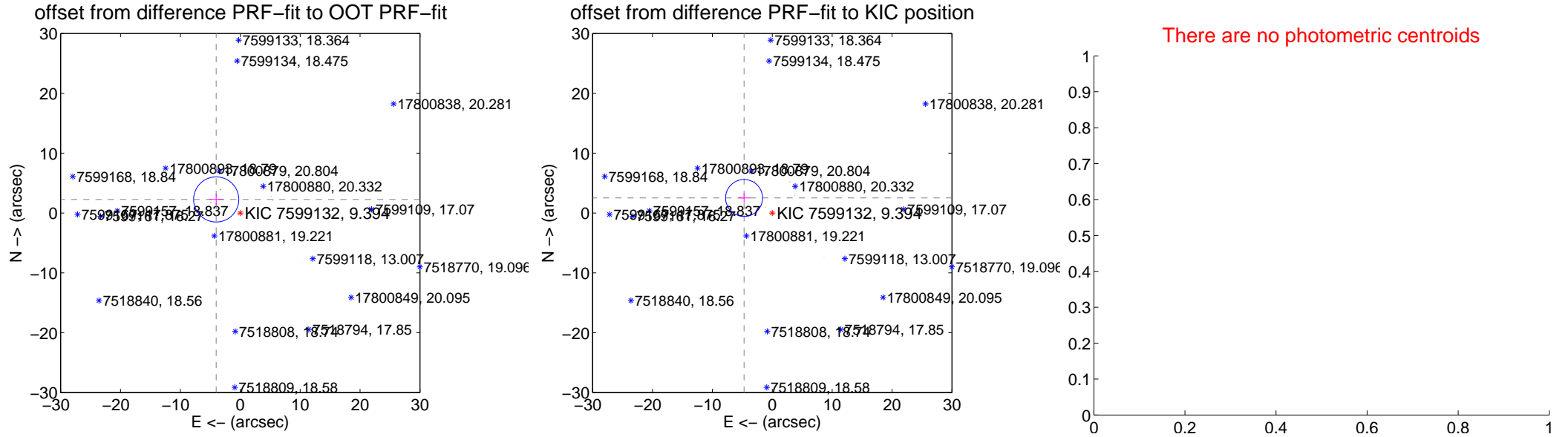
DV Centroid Data

Supplemental centroid analysis for 007599132-01. **Kepler magnitude: 9.39.** Transit SNR 2.57

There are 0 quarters with good PRF difference image offsets

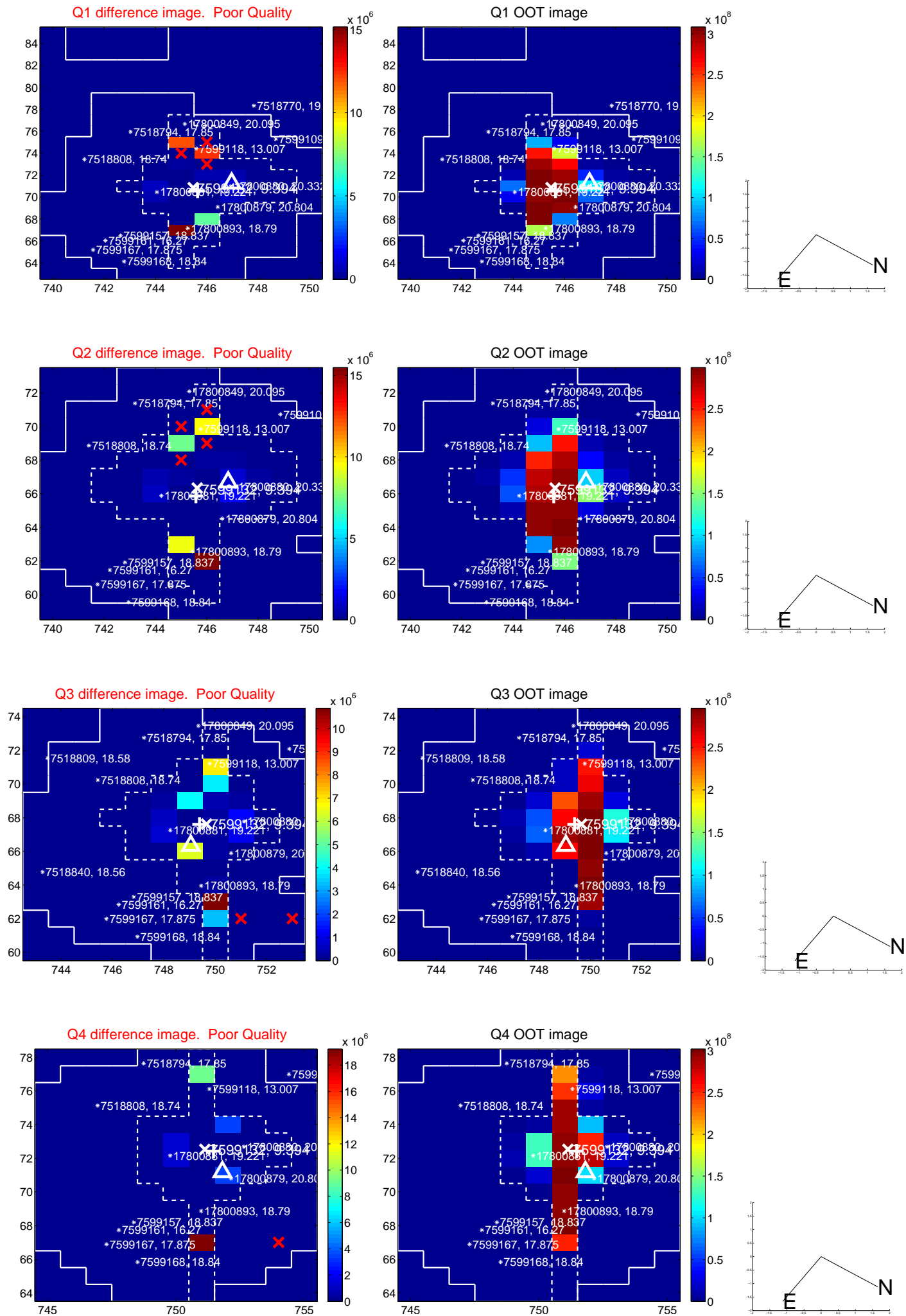
The direct PRF centroid is offset from the target star catalog position by about 1.25 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	4.615 ± 1.257	3.67	4.021 ± 1.168	2.266 ± 0.927
PRF-fit source offset from KIC position	5.338 ± 1.028	5.19	4.708 ± 0.997	2.515 ± 0.767
photometric centroid source offset	—	—	—	—

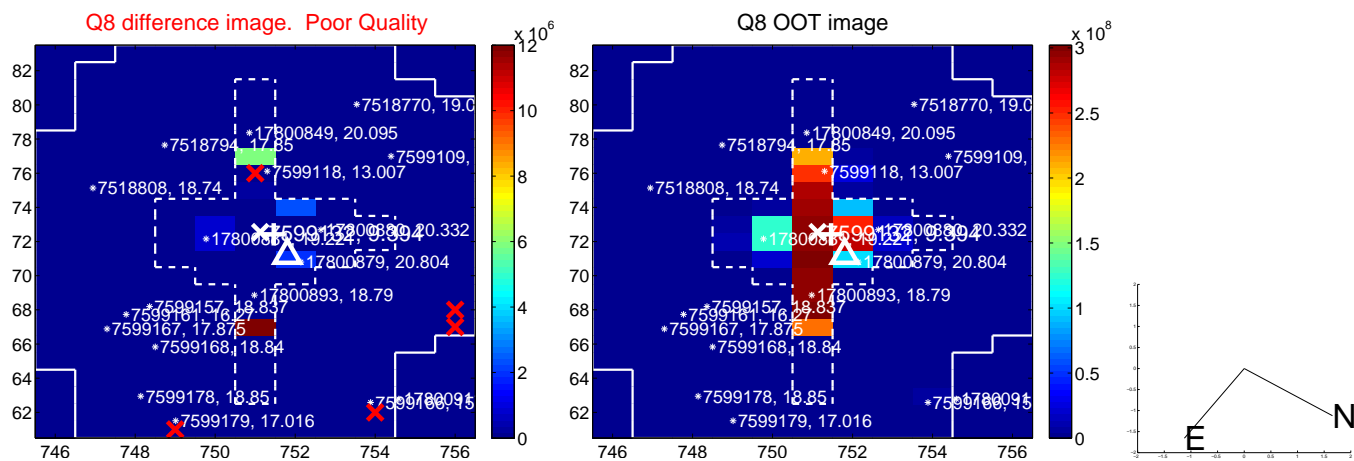
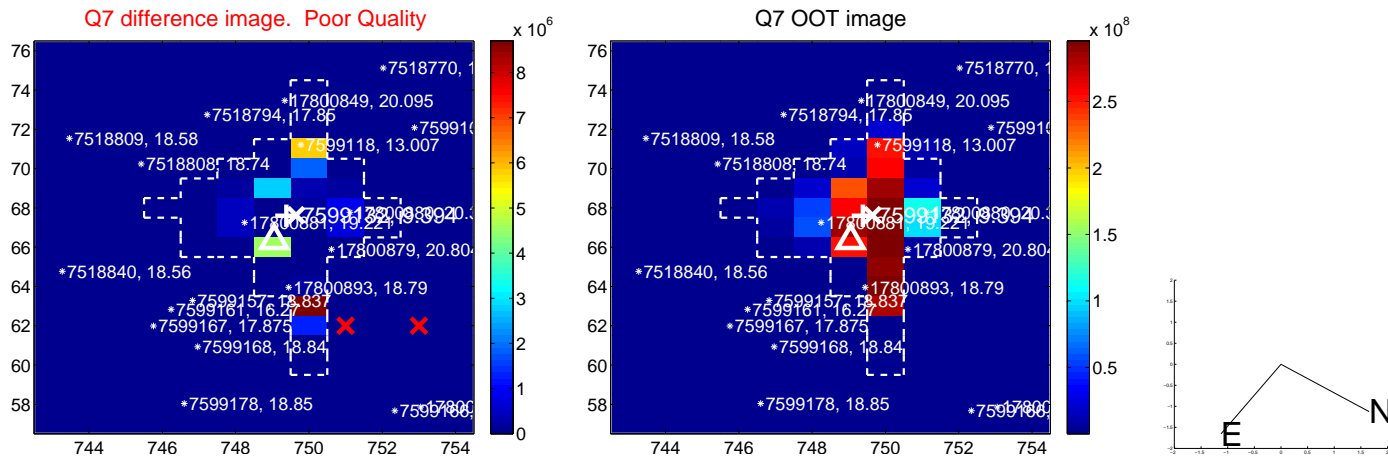
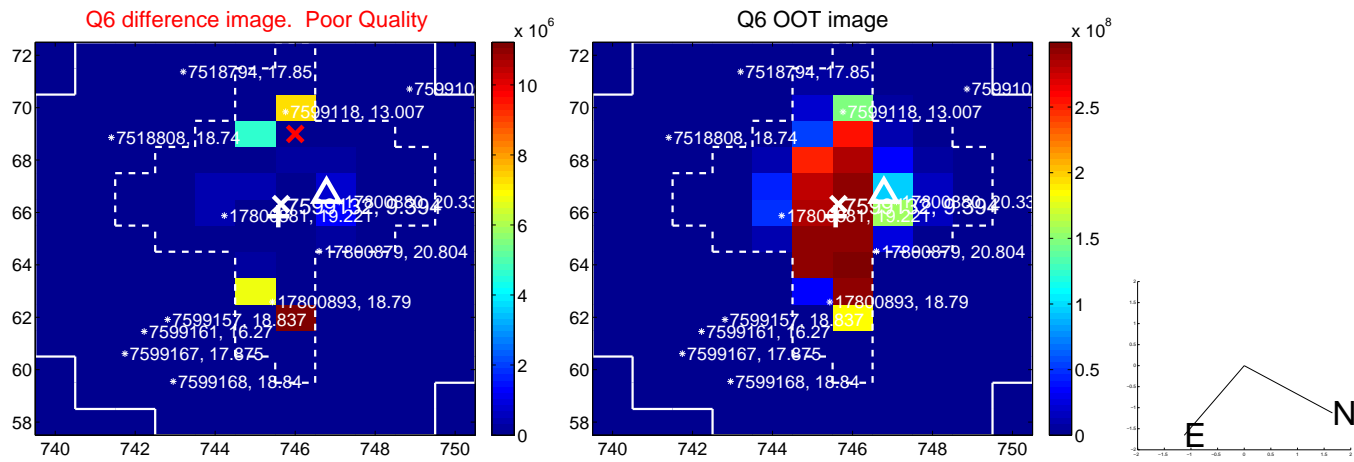
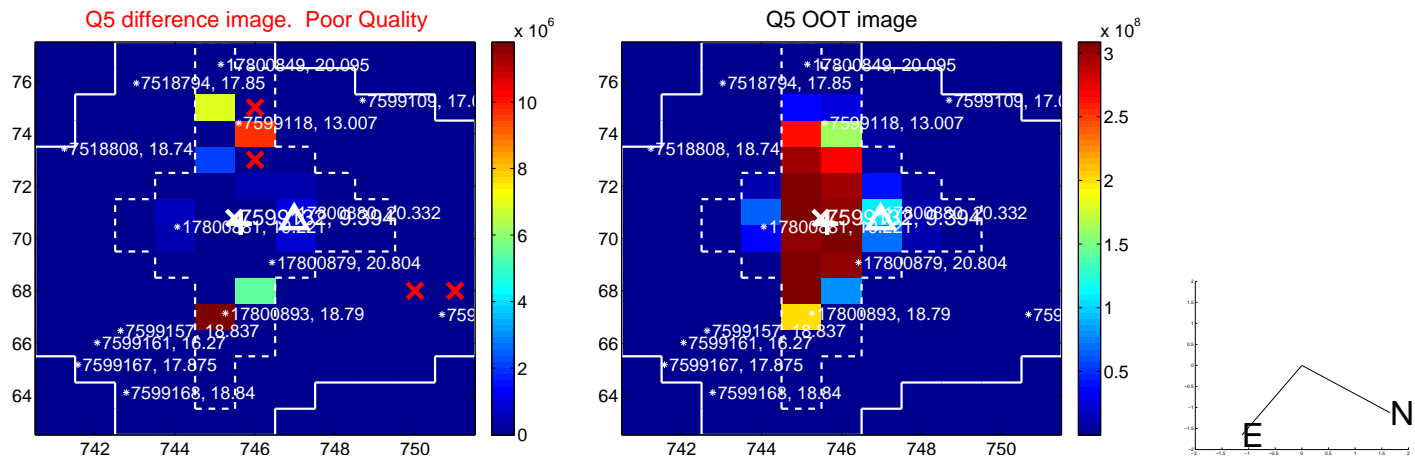


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

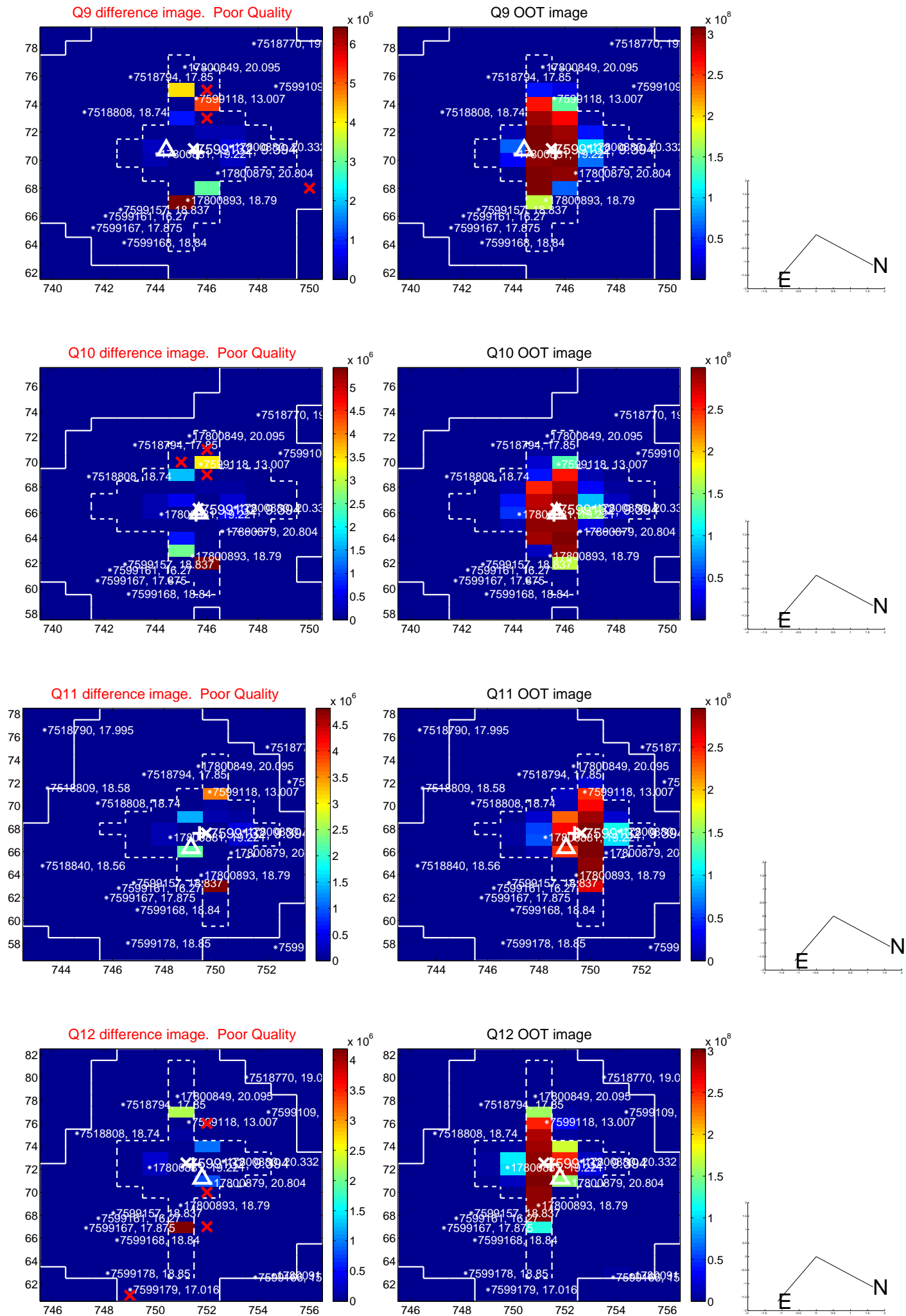
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



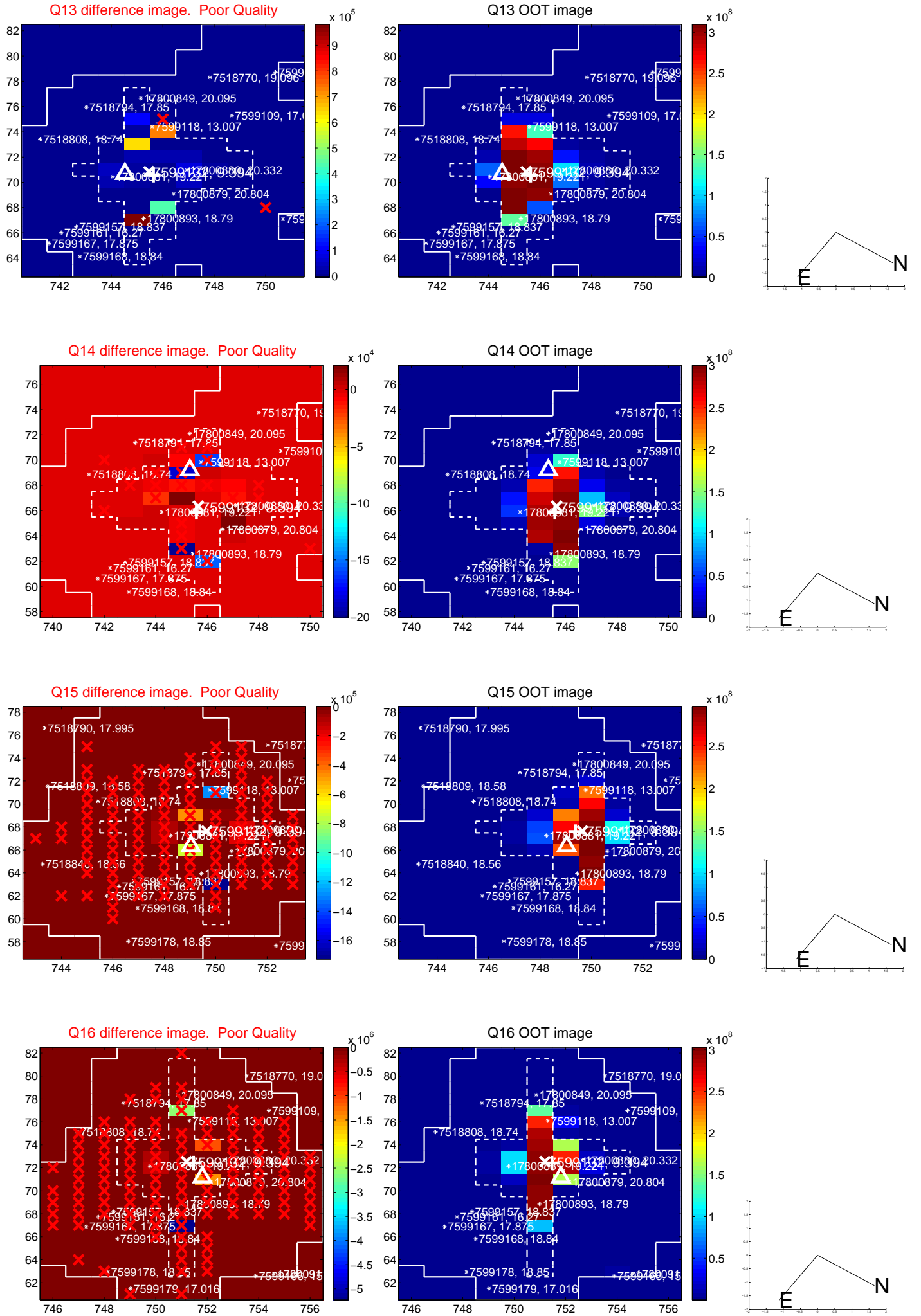
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

