

KIC 003848948

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})
003848948-01	OBS	5016.01	0.523607	131.777015	3.4	4.251	16.6	11.5	3.52	8277	0.66	188759.90

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003848948-01	OBS	PC	0.79	0	0	0	0	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 003848948-01

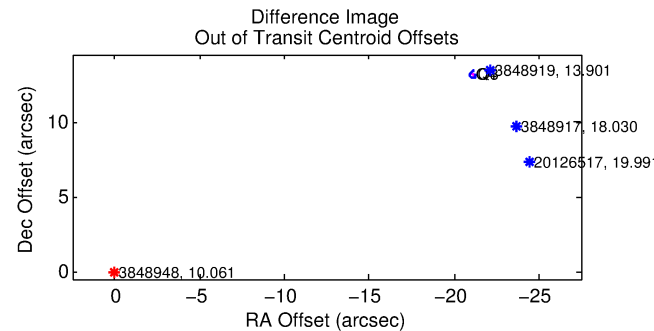
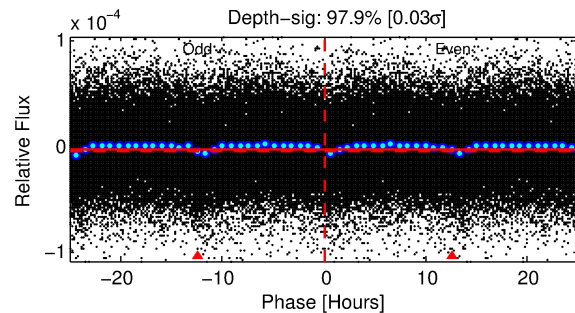
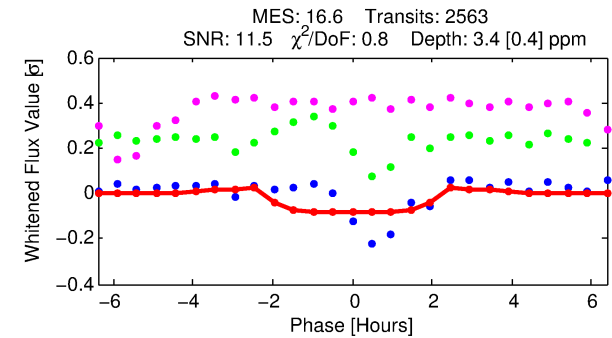
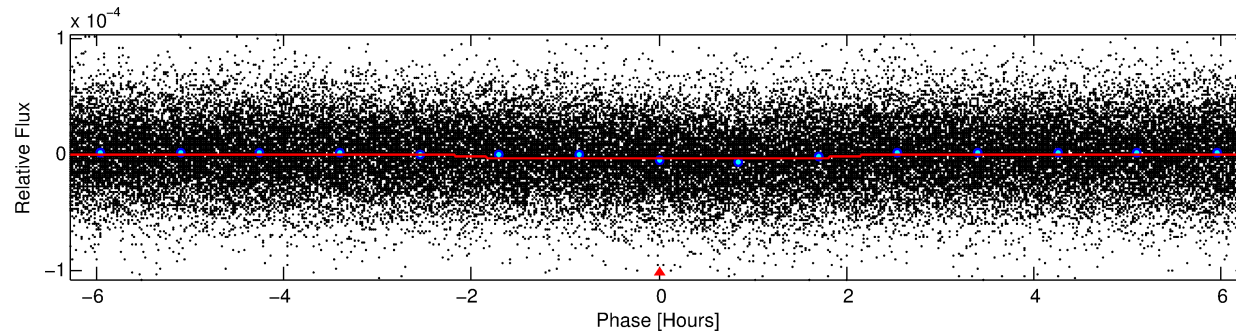
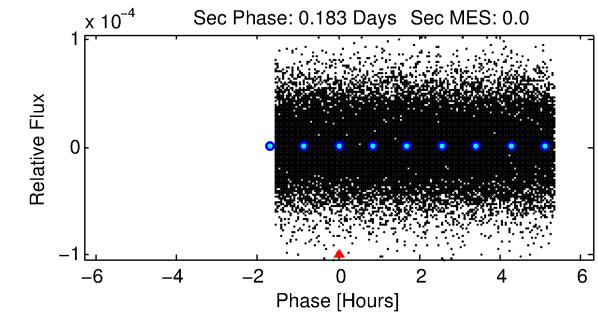
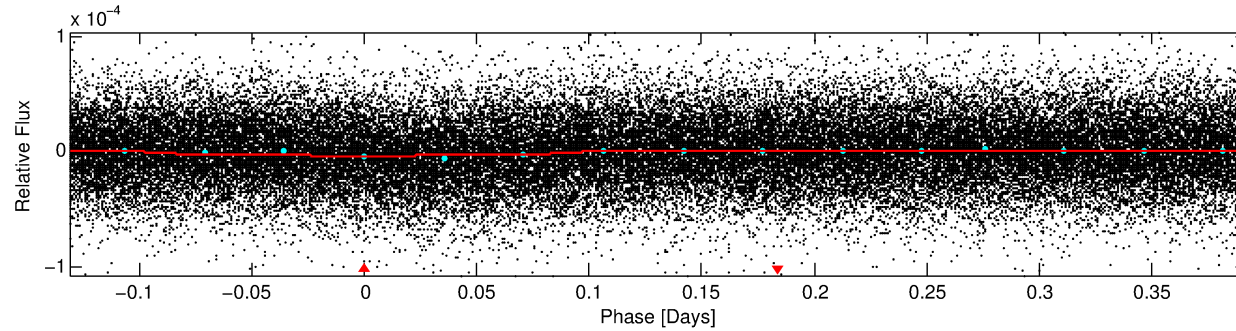
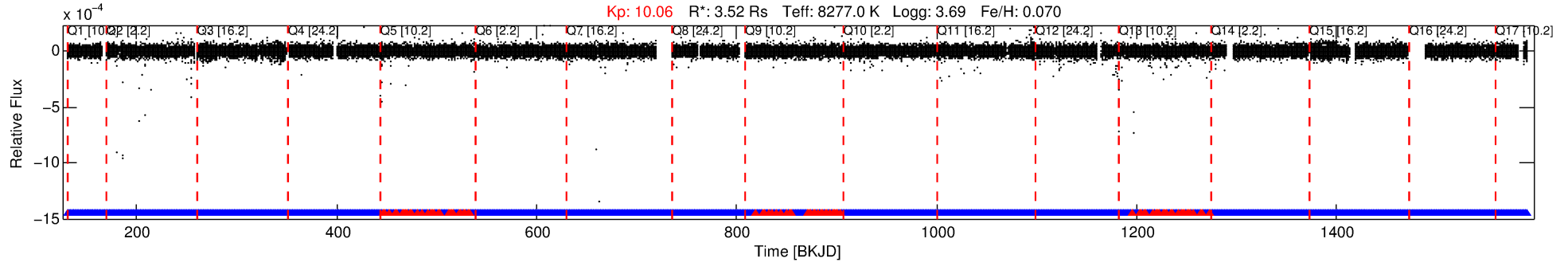
No Significant Match Found

DV One-Page Summary

KIC: 3848948 Candidate: 1 of 1 Period: 0.524 d

KOI: K05016 Corr: No Ephemeris Match

Kp: 10.06 R*: 3.52 Rs Teff: 8277.0 K Logg: 3.69 Fe/H: 0.070



DV Fit Results:

Period = 0.52361 [0.00001] d
Epoch = 131.7770 [0.0031] BKJD
Rp/R* = 0.0017 [0.0011]
a/R* = 1.14 [0.96]
b = 0.21 [16.42]
Seff = 188759.90 [143721.35]
Teq = 5315 [1012] K
Rp = 0.66 [0.52] Re
a = 0.0166 [0.0077] AU
Ag = N/A
Teff = N/A

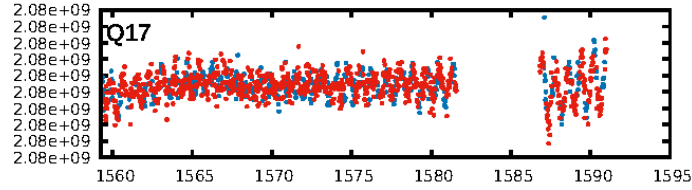
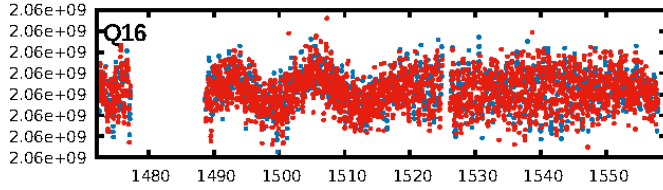
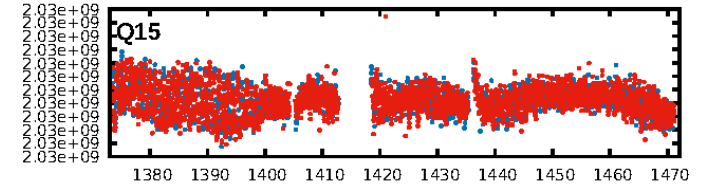
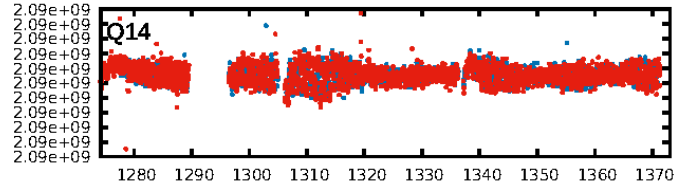
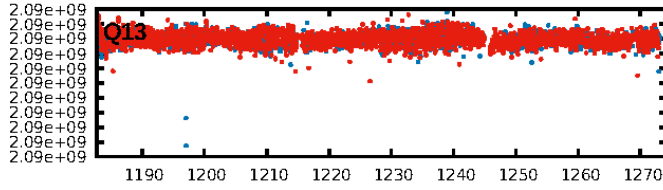
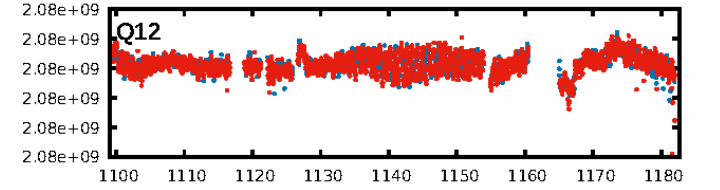
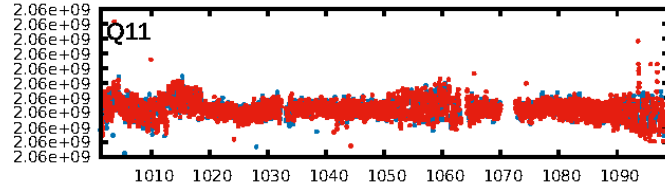
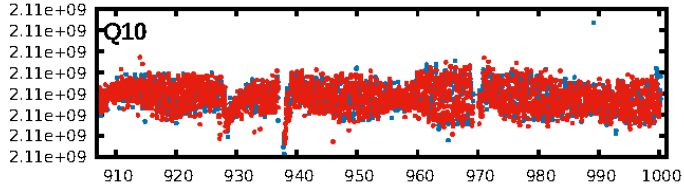
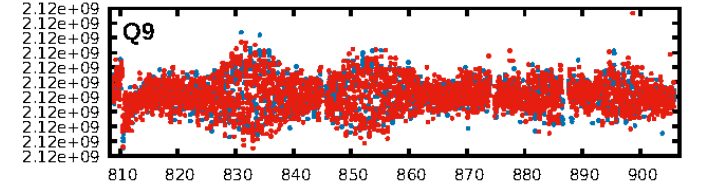
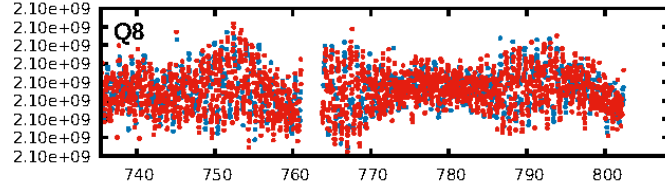
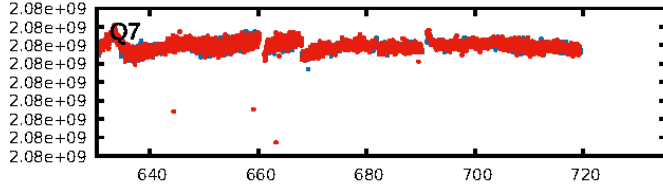
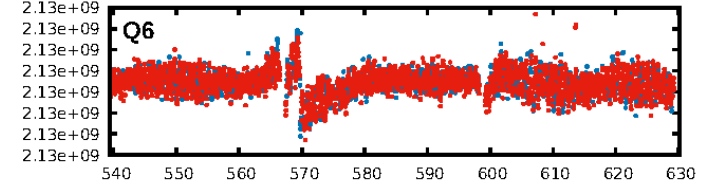
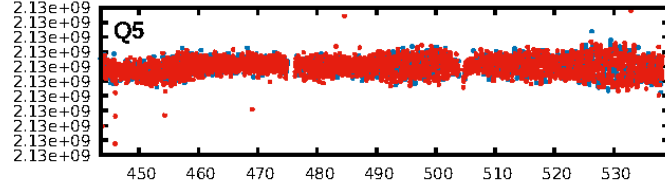
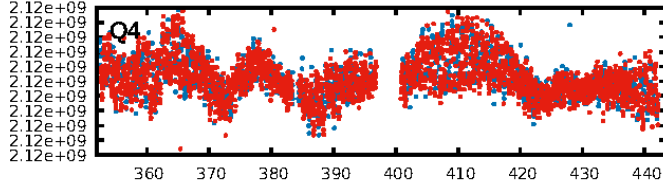
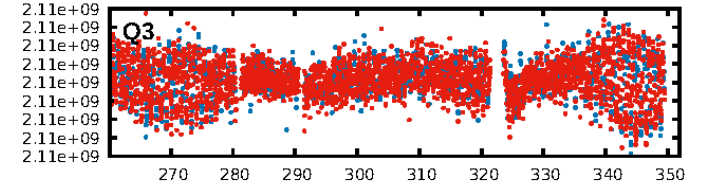
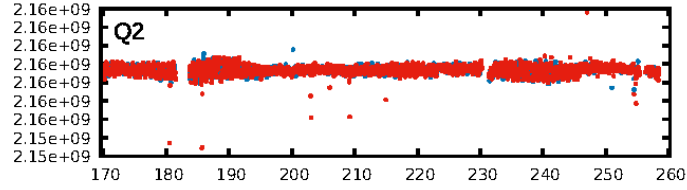
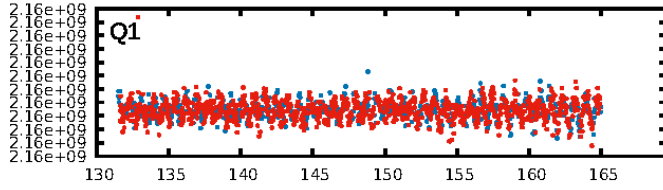
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 0.96 [2347/2447]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 24.876 arcsec [346.53σ]
KicOffset-rm: 26.046 arcsec [383.14σ]
OotOffset-st: 0/0/2/0 [2]
KicOffset-st: 0/0/2/0 [2]
DiffImageQuality-fgm: 1.00 [2/2]
DiffImageOverlap-fno: 1.00 [17/17]

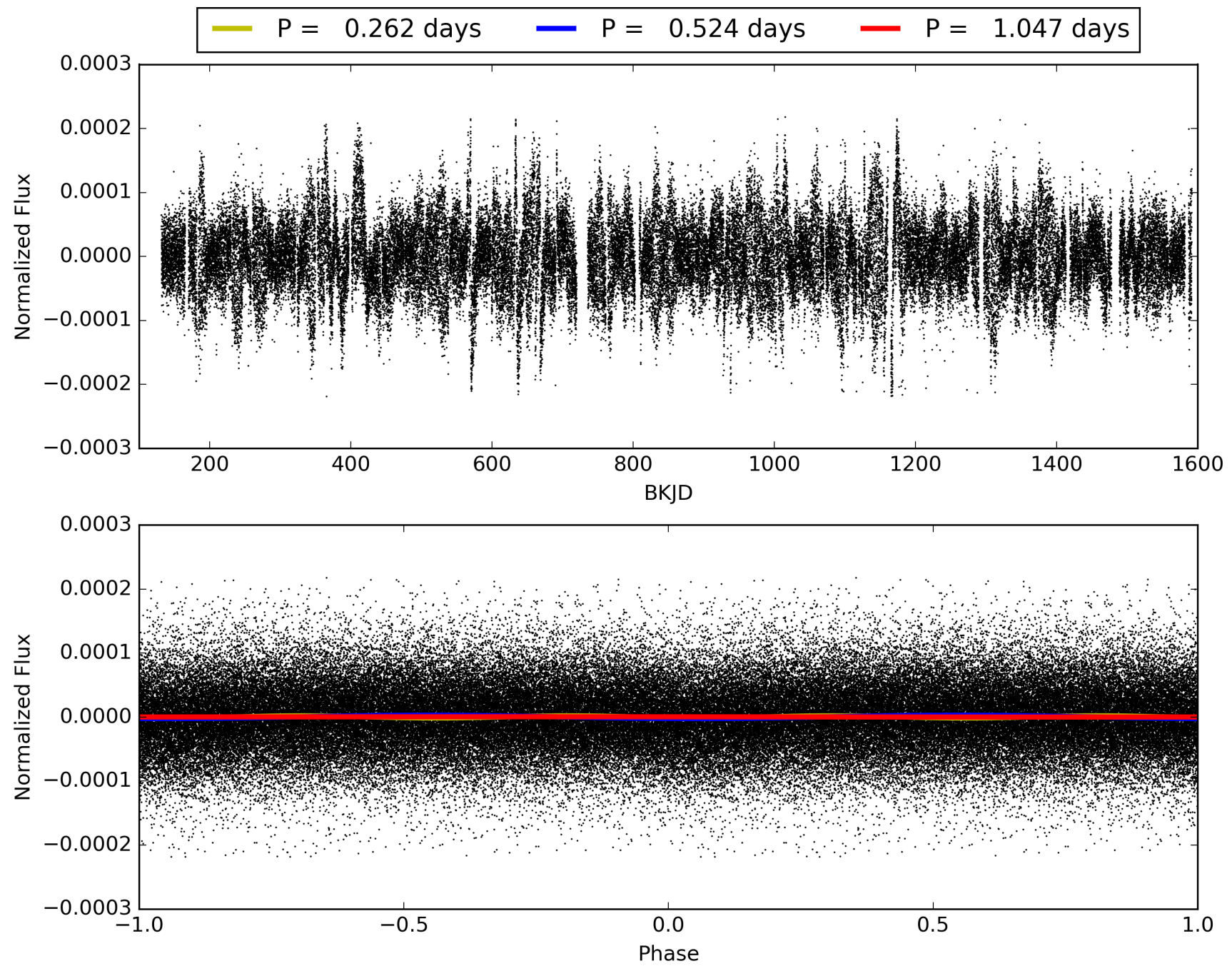
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 05:23:50 Z

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

TCE 003848948-01, PDC Light Curves

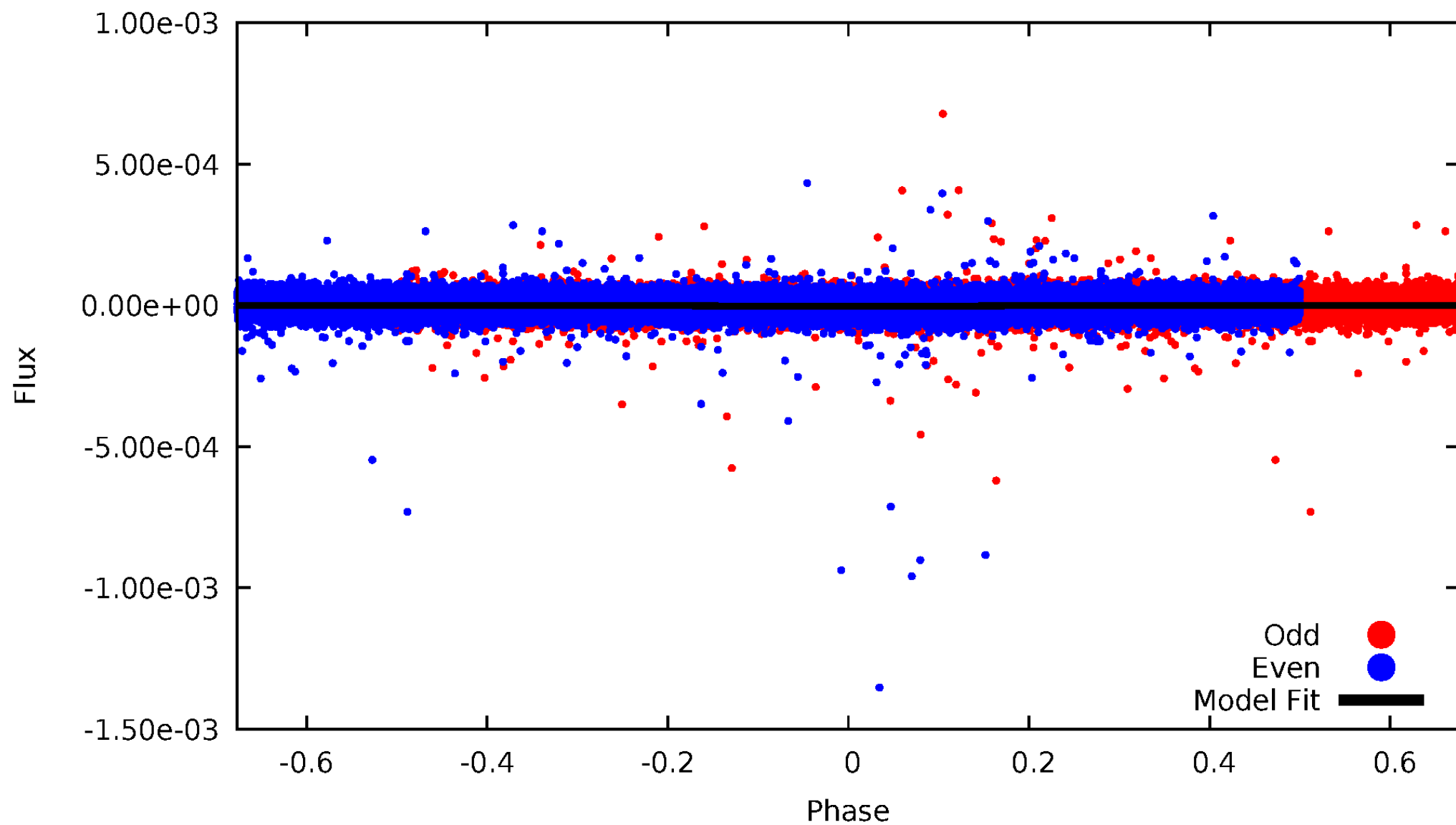


TCE 003848948-01



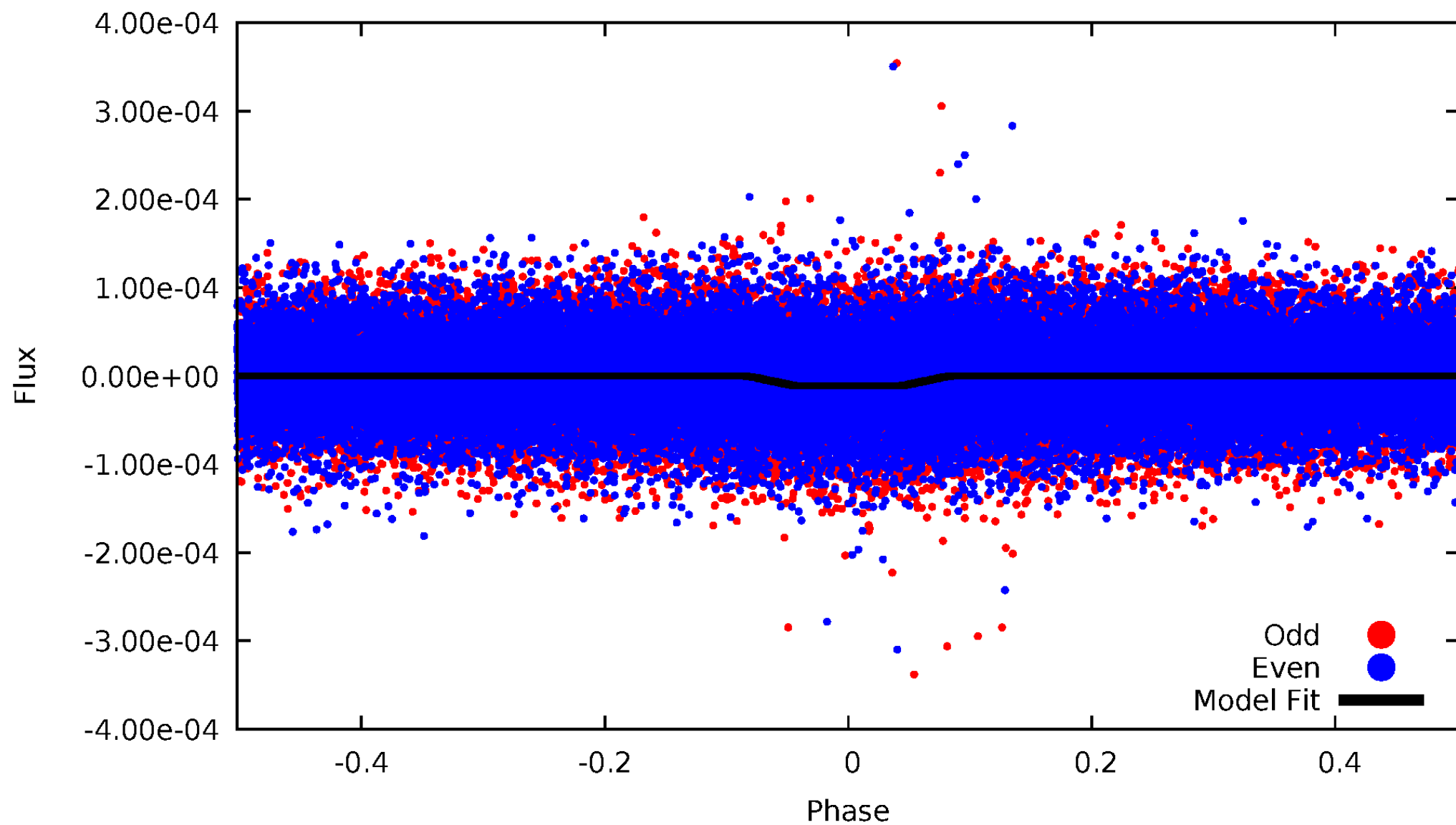
DV Odd/Even

TCE 003848948-01



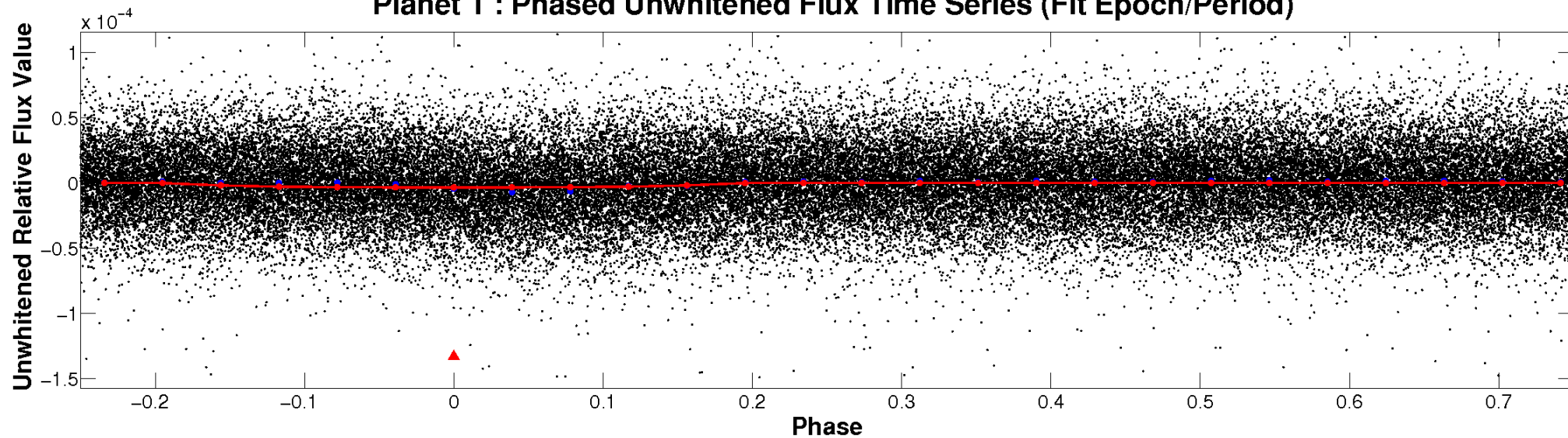
ALT Odd/Even

TCE 003848948-01

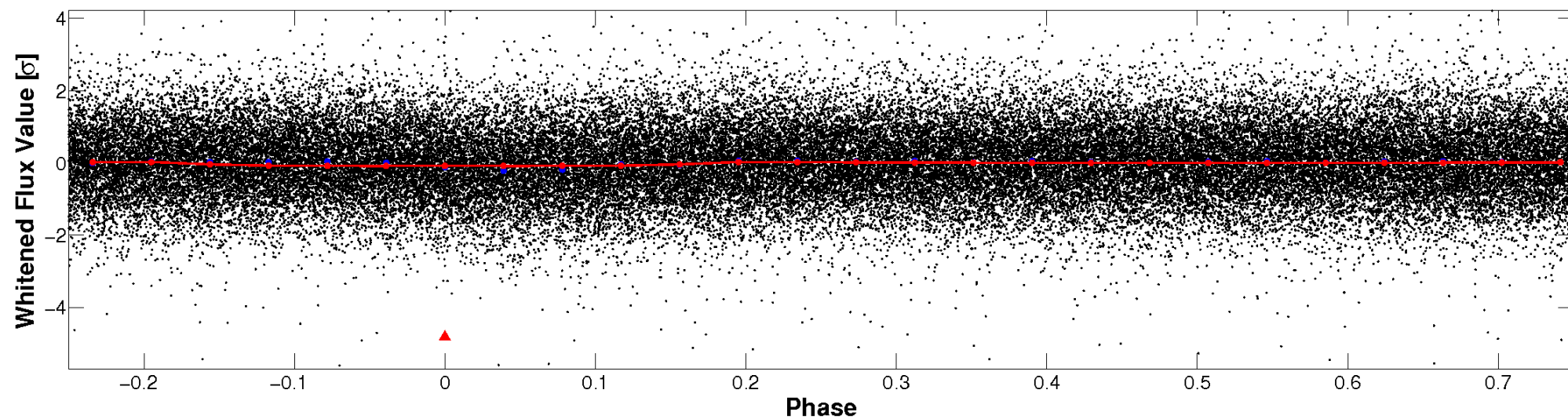


Non-Whitened Vs. Whitened Light Curve

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

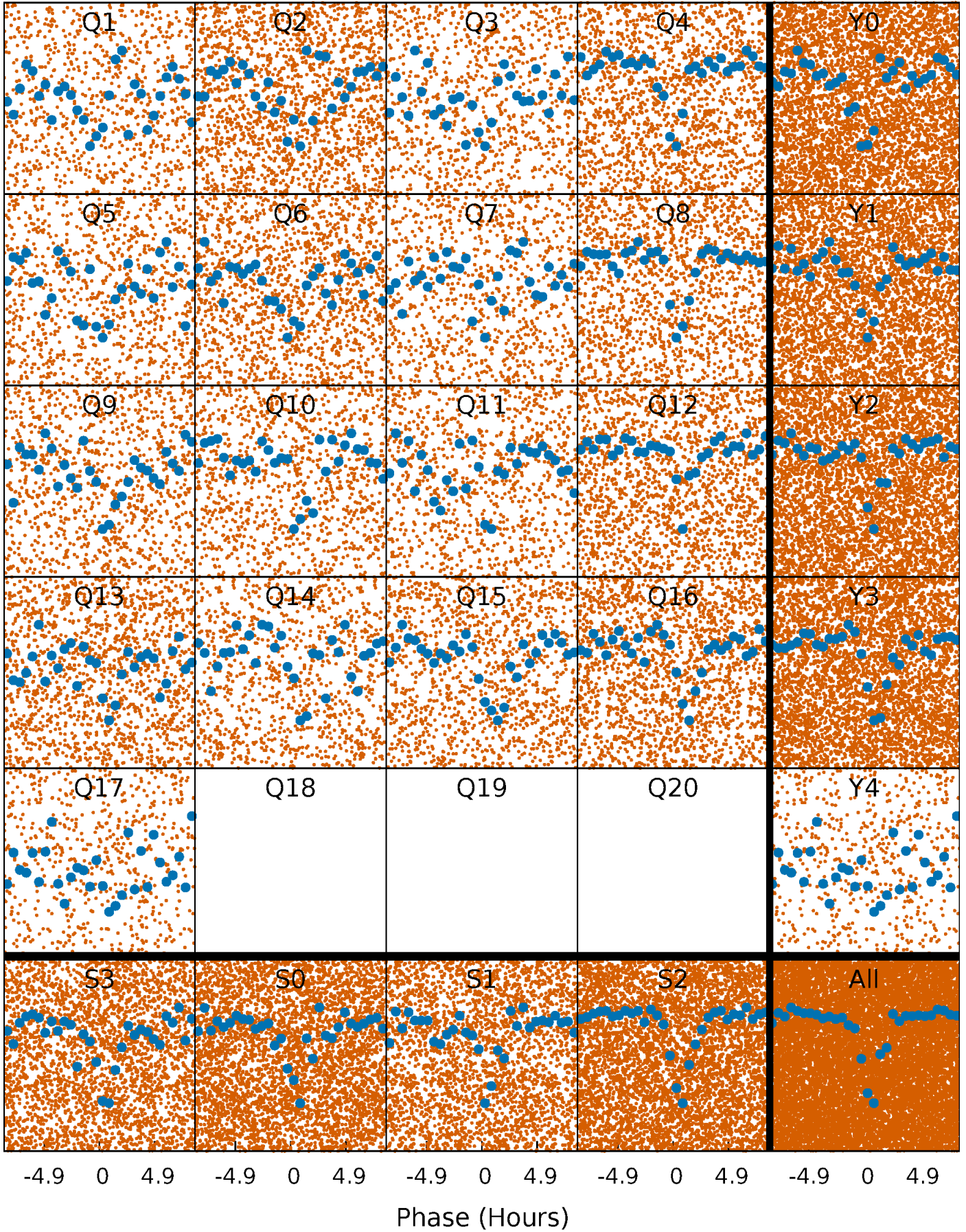


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



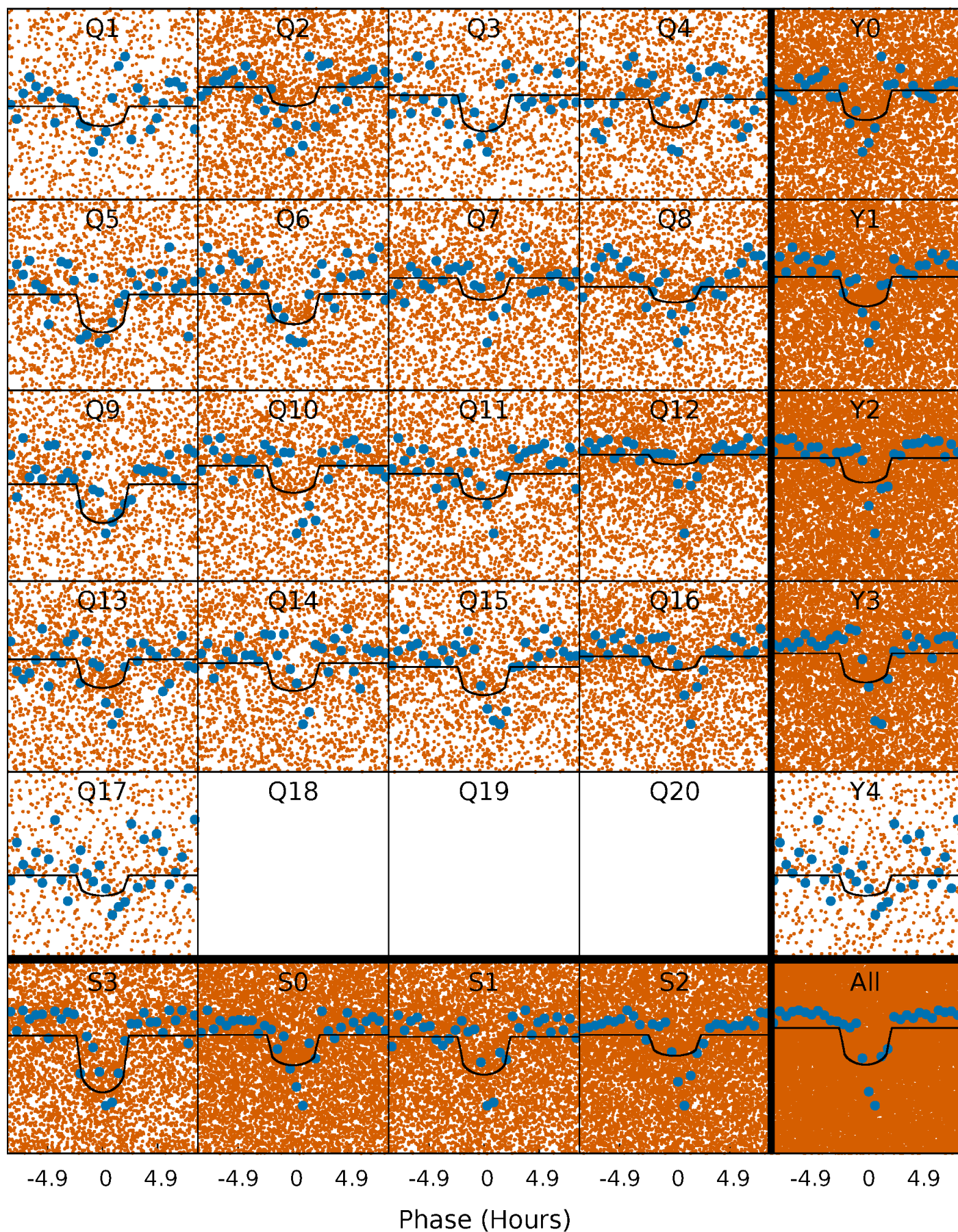
PDC Quarter-Phased Transit Curves

TCE 003848948-01 P= 0.523607 Days $T_0=131.777015$ (BKJD)



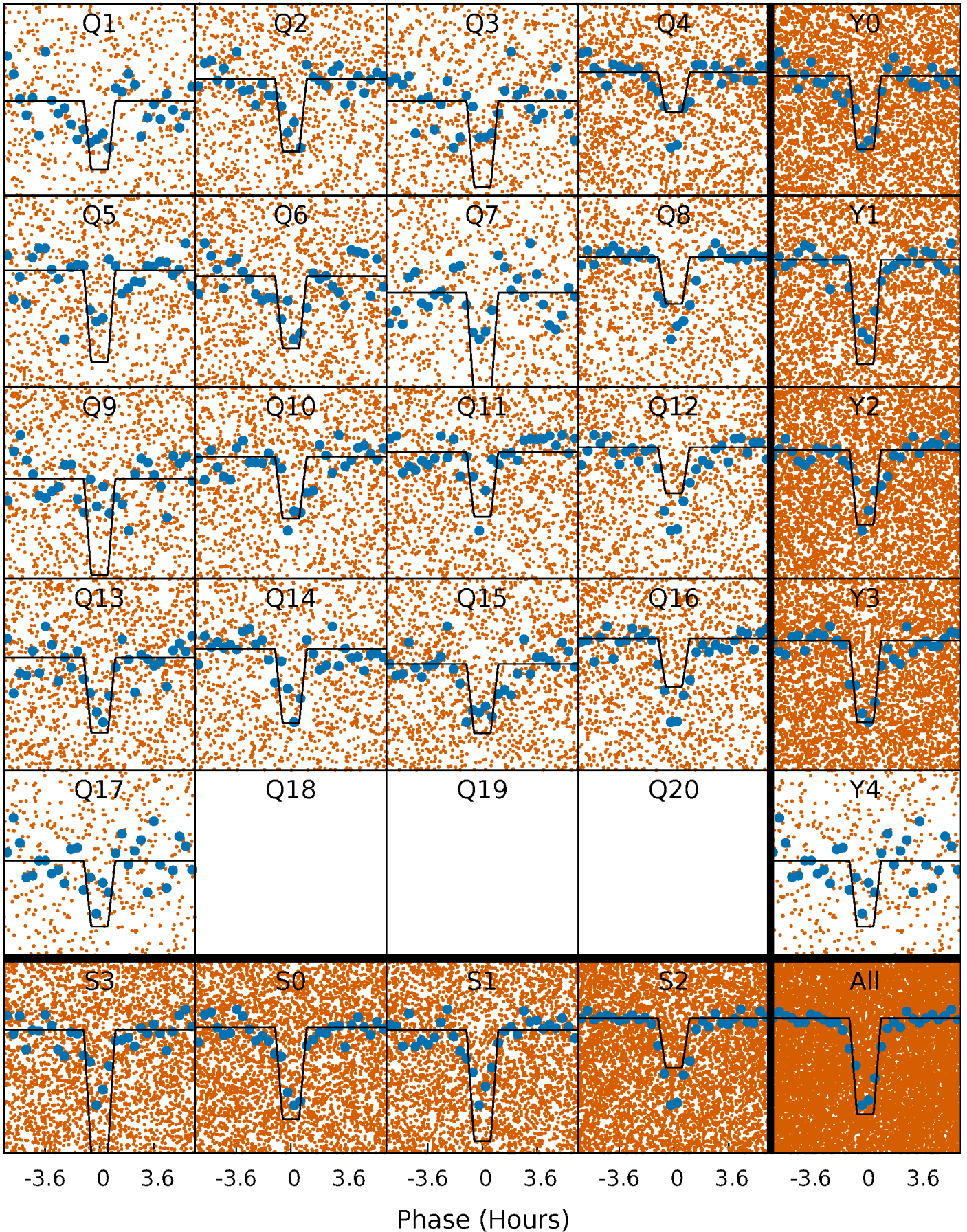
DV Quarter-Phased Transit Curves

TCE 003848948-01 P= 0.523607 Days $T_0=131.777015$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

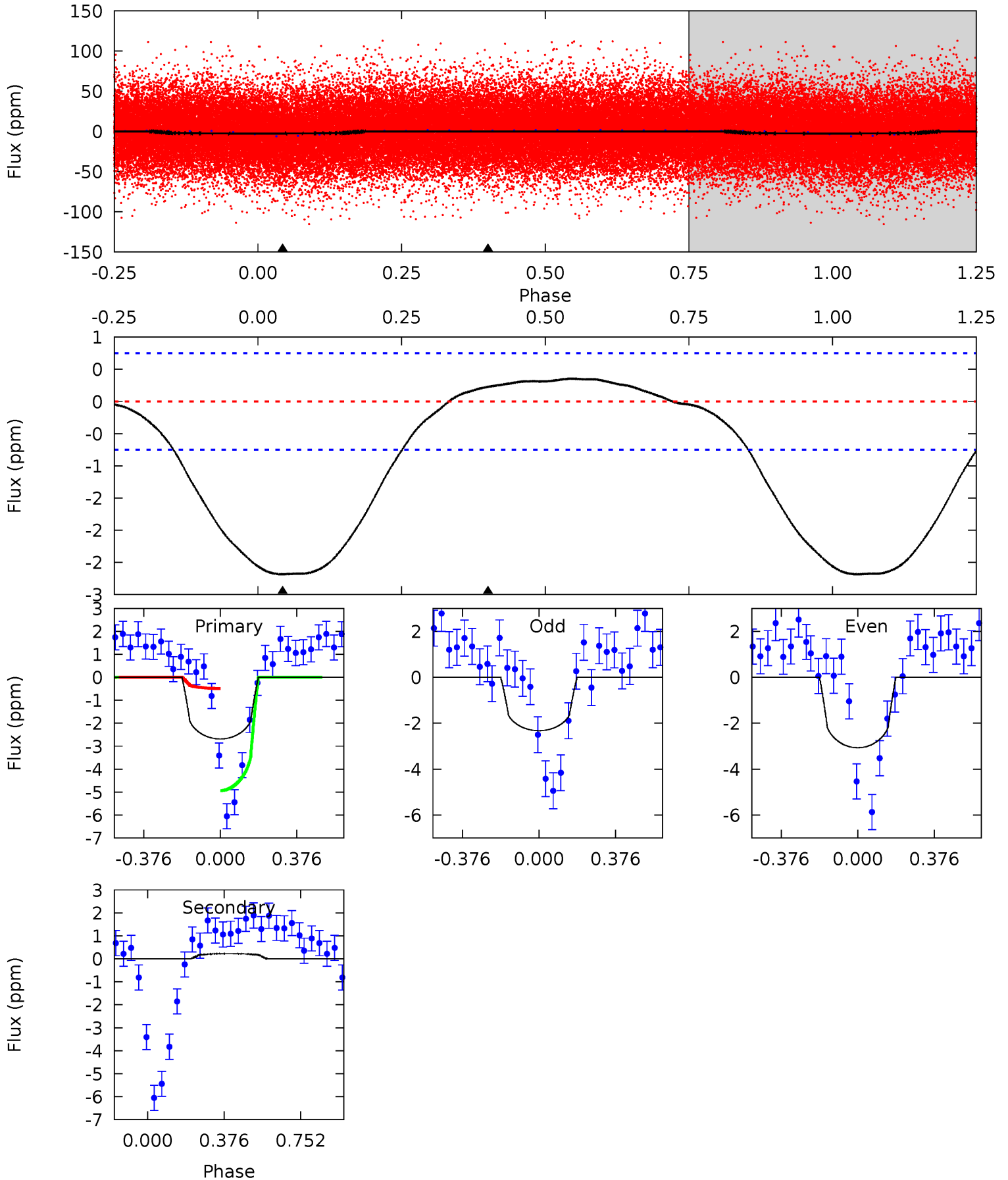
TCE 003848948-01 P= 0.523630 Days $T_0=131.769886$ (BKJD)



DV Model-Shift Uniqueness Test

003848948-01, P = 0.523607 Days, E = 131.253408 Days

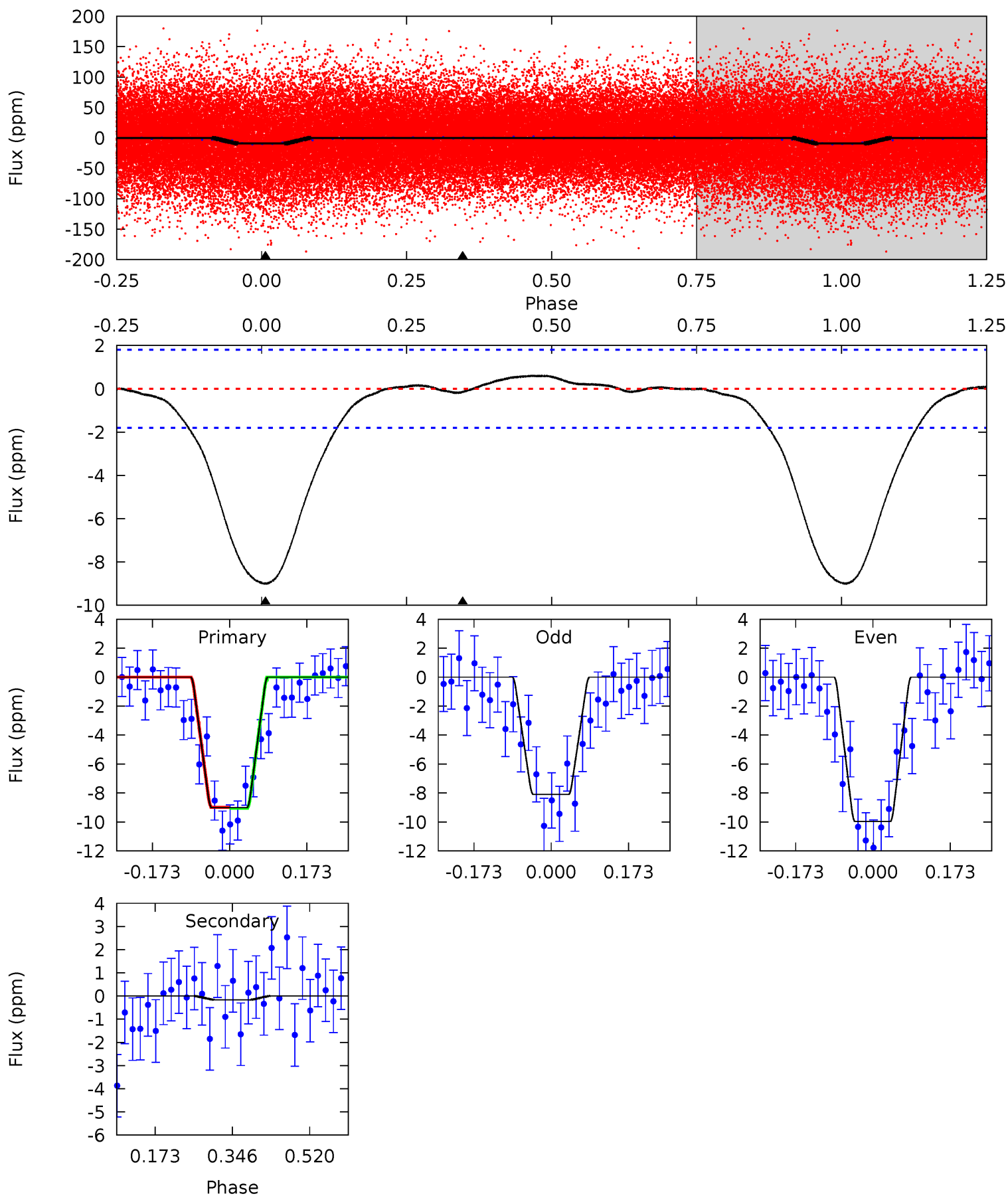
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
15.3	-1.30	0	0	4.28	0.89	0.44	15.3	15.3	-1.30	-1.30	2.16	1.15	0.12	12.7



Alt Model-Shift Uniqueness Test

003848948-01, P = 0.523630 Days, E = 131.246256 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
22.2	0.39	0	0	4.45	1.36	0.46	22.2	22.2	0.39	0.39	2.24	1.15	0.06	0.10



Stellar Parameters For KIC 003848948

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	8277^{+228}_{-358}	$3.693^{+0.435}_{-0.145}$	$0.070^{+0.250}_{-0.450}$	$3.518^{+0.916}_{-1.701}$	$2.225^{+0.361}_{-0.586}$	$0.072^{+0.314}_{-0.031}$
	+3%/-4%	+12%/-4%	+357%/-643%	+26%/-48%	+16%/-26%	+437%/-44%
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 003848948-01 / KOI 5016.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	0 ± 0	$0.64^{+0.40}_{-0.35}$	7244^{+639}_{-931}	-6135^{+659}_{-941}	$-0.075^{+0.062}_{-0.334}$
Alt.	-0 ± 0	$1.18^{+0.50}_{-0.42}$	7273^{+537}_{-887}	-5694^{+796}_{-505}	$0.015^{+0.068}_{-0.042}$

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 $A_{obs} \gg 1.0$

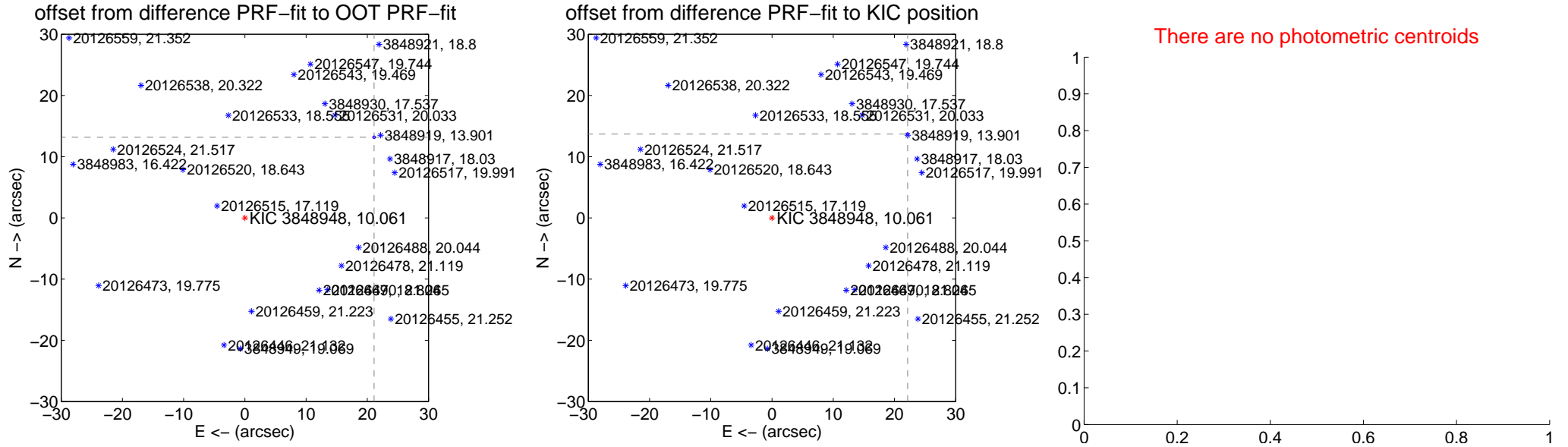
DV Centroid Data

Supplemental centroid analysis for 003848948-01. **Kepler magnitude: 10.06.** Transit SNR 11.52

There are 2 quarters with good PRF difference image offsets

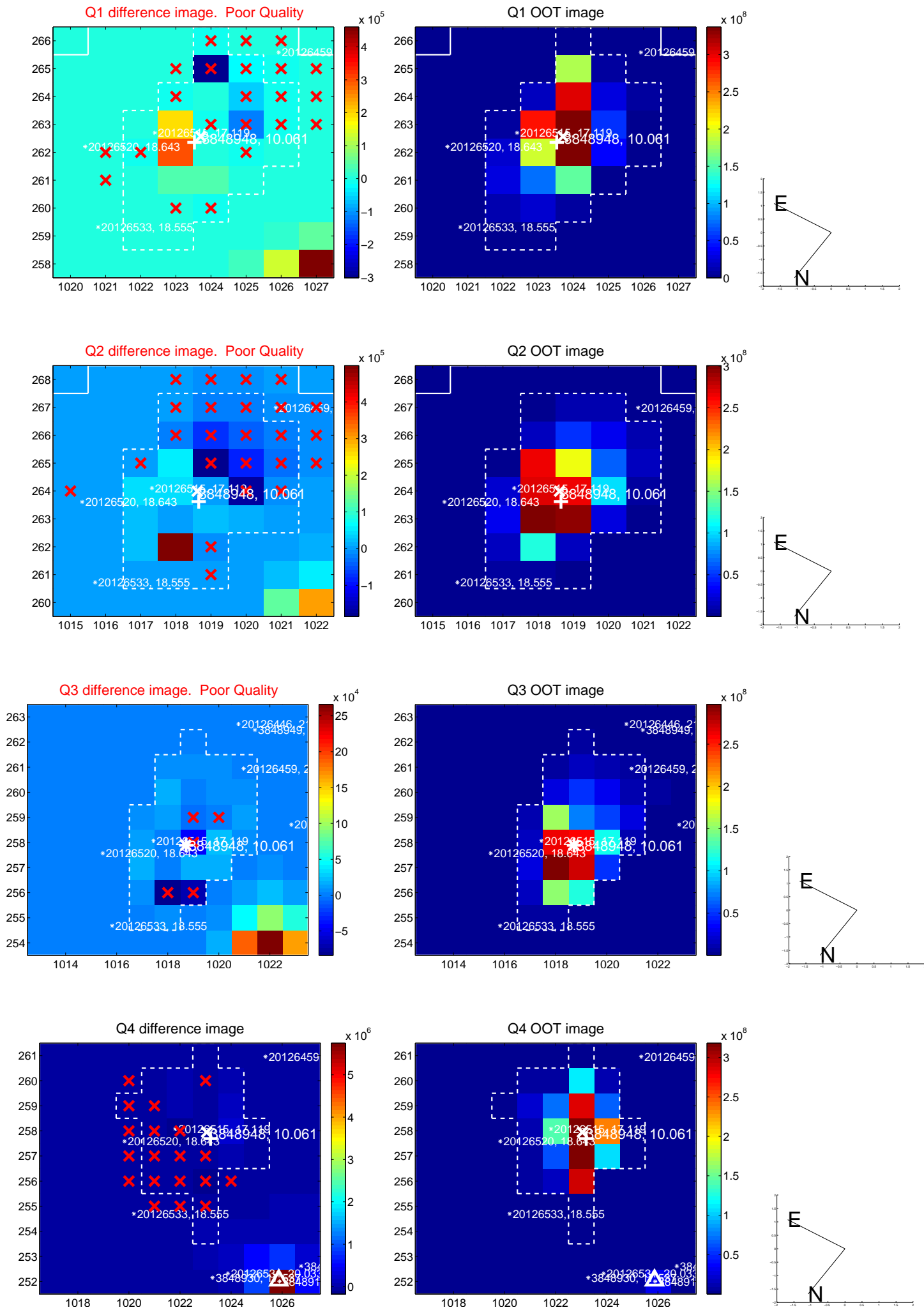
The direct PRF centroid is offset from the target star catalog position by about 1.16 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	24.876 \pm 0.072	346.53	-21.106 \pm 0.069	13.166 \pm 0.071
PRF-fit source offset from KIC position	26.046 \pm 0.068	383.14	-22.157 \pm 0.067	13.692 \pm 0.070
photometric centroid source offset	—	—	—	—

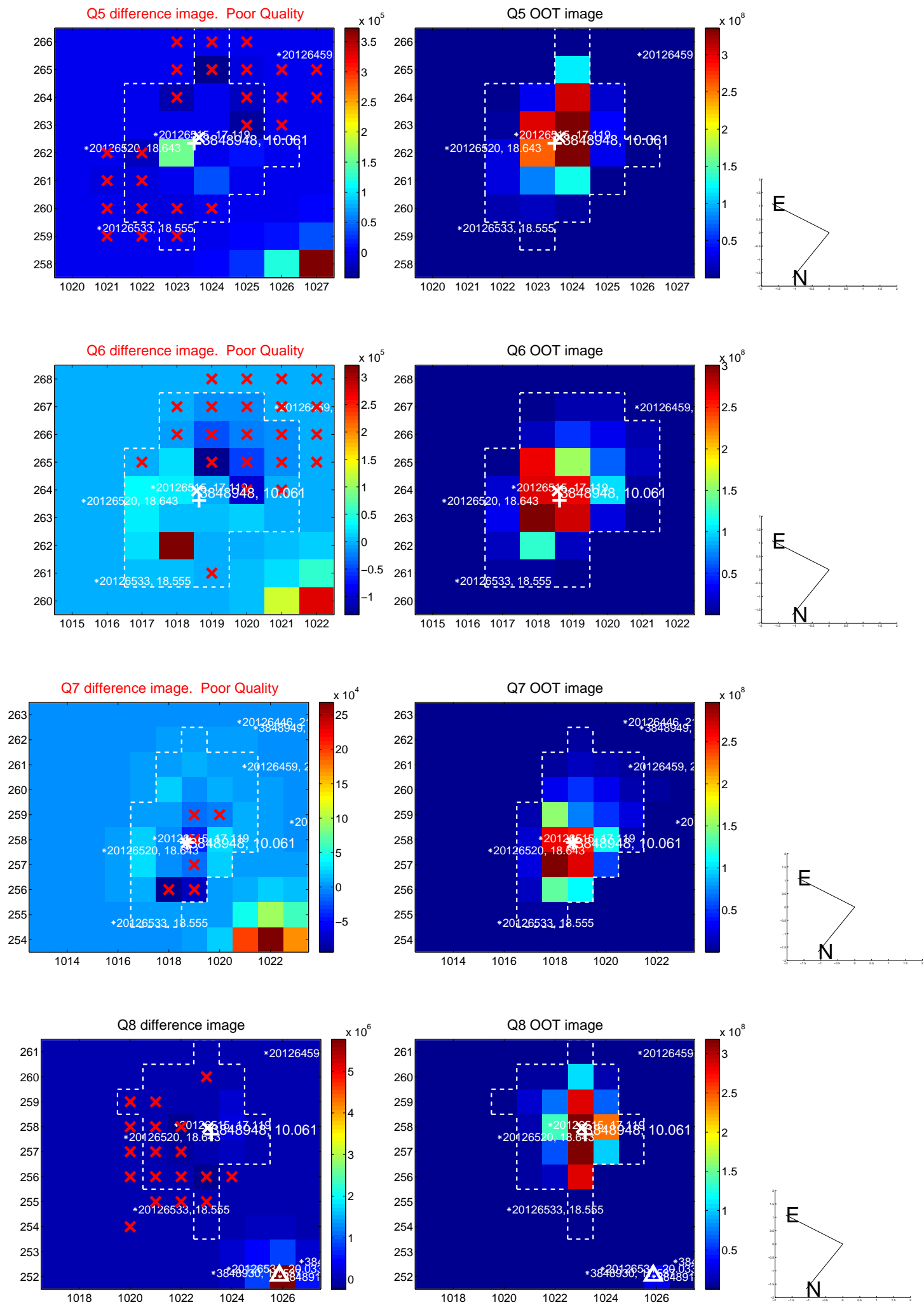


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

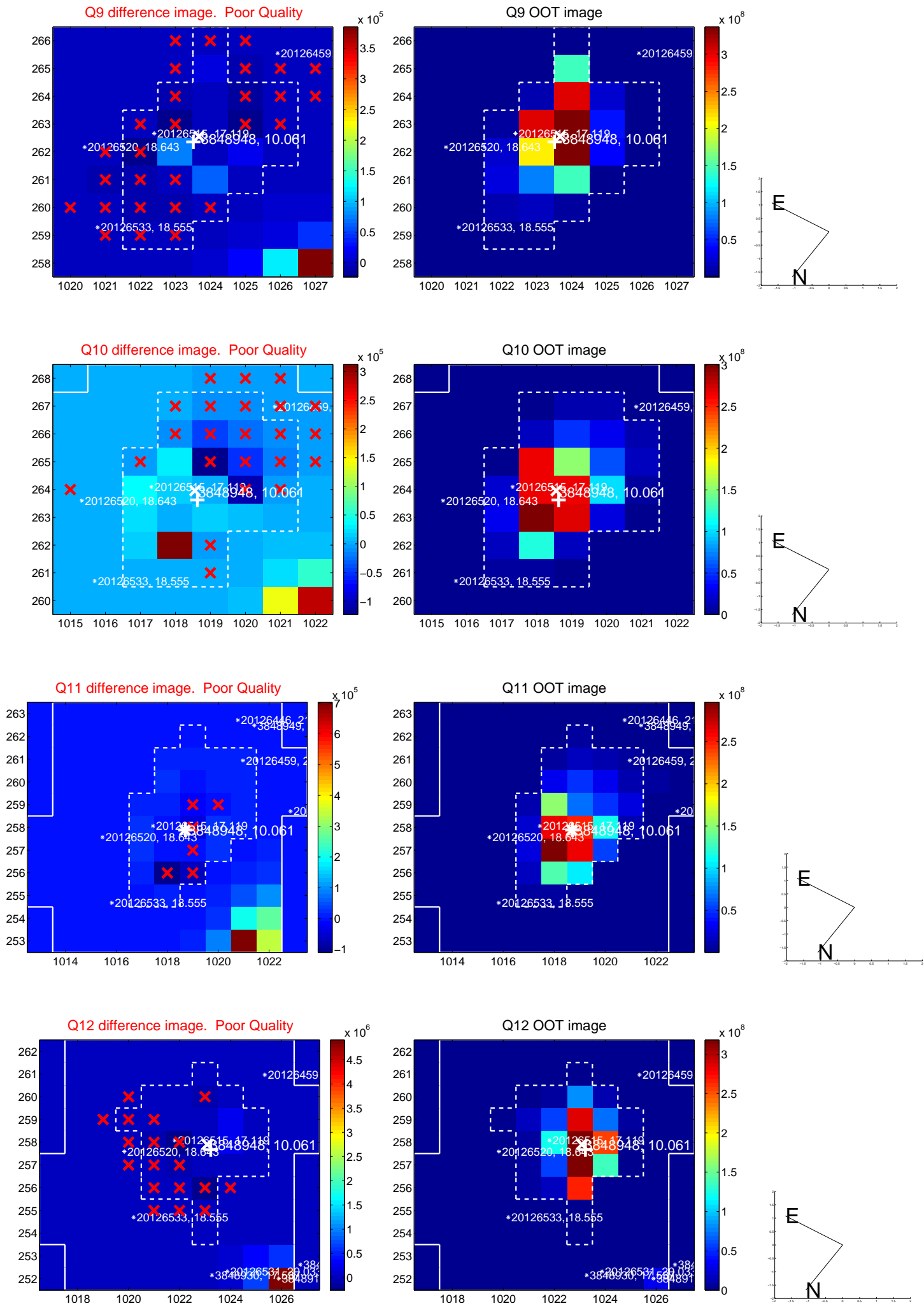
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



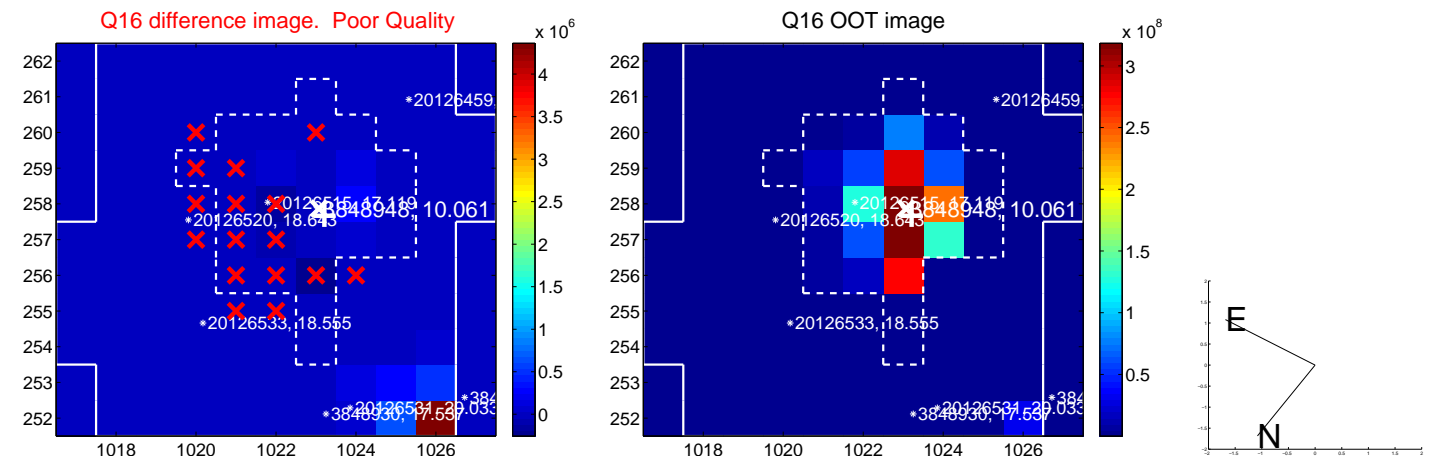
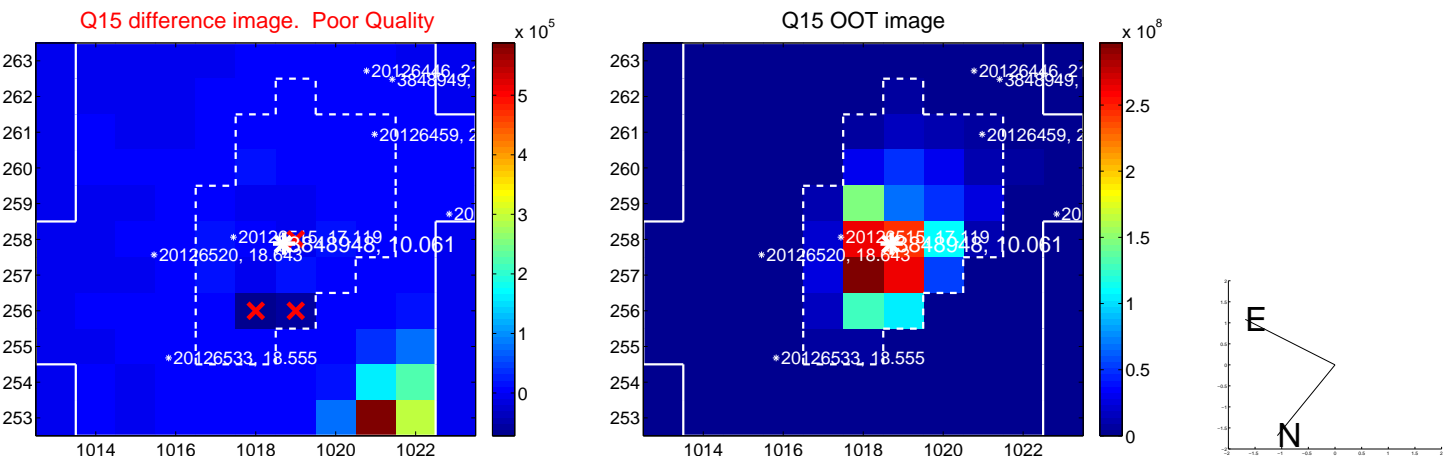
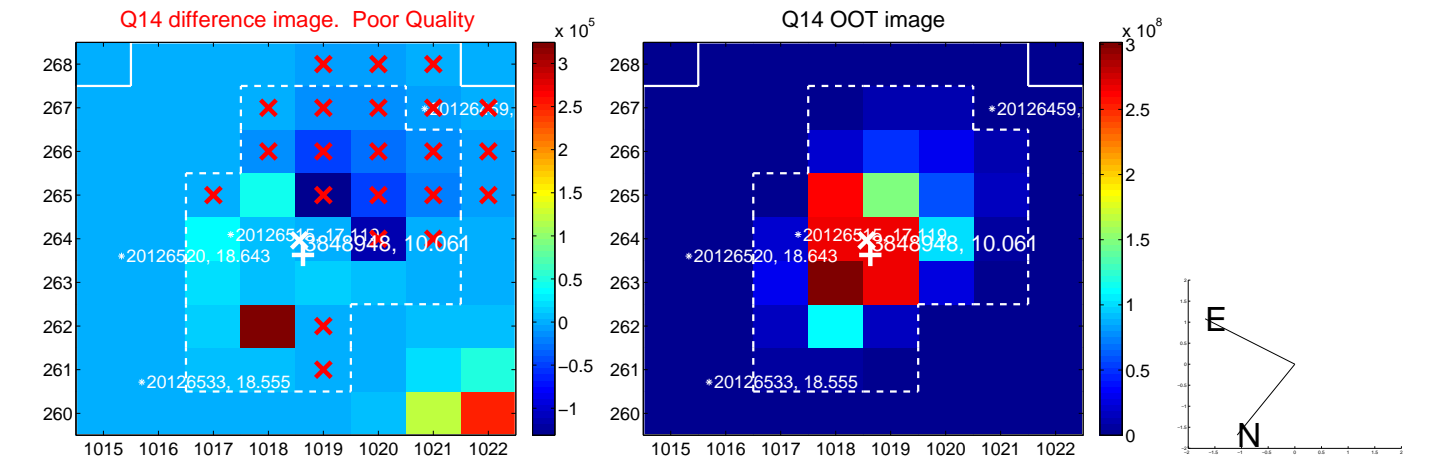
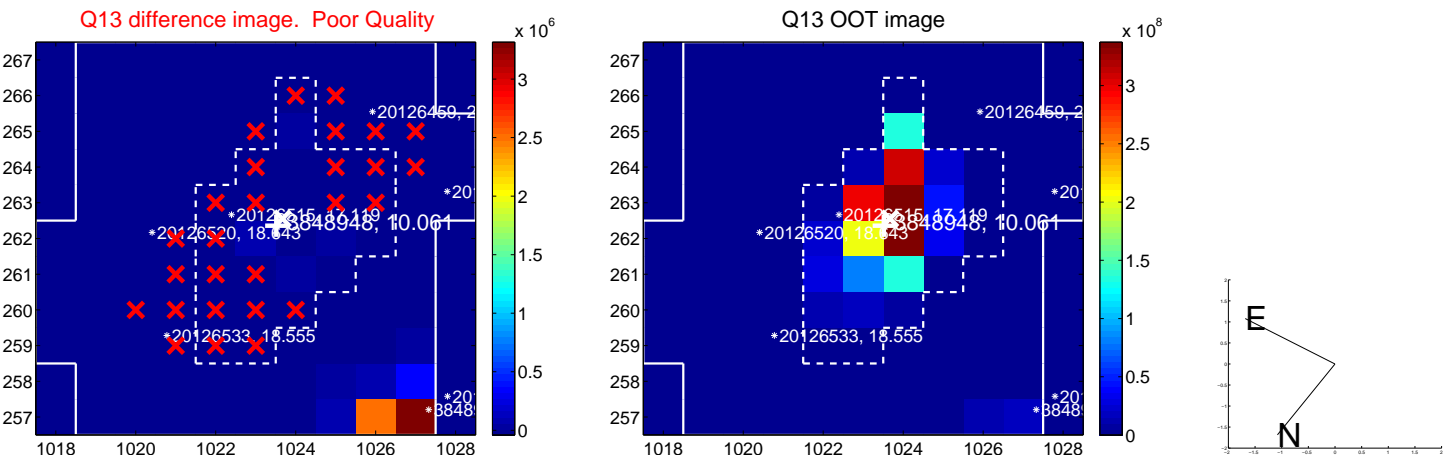
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



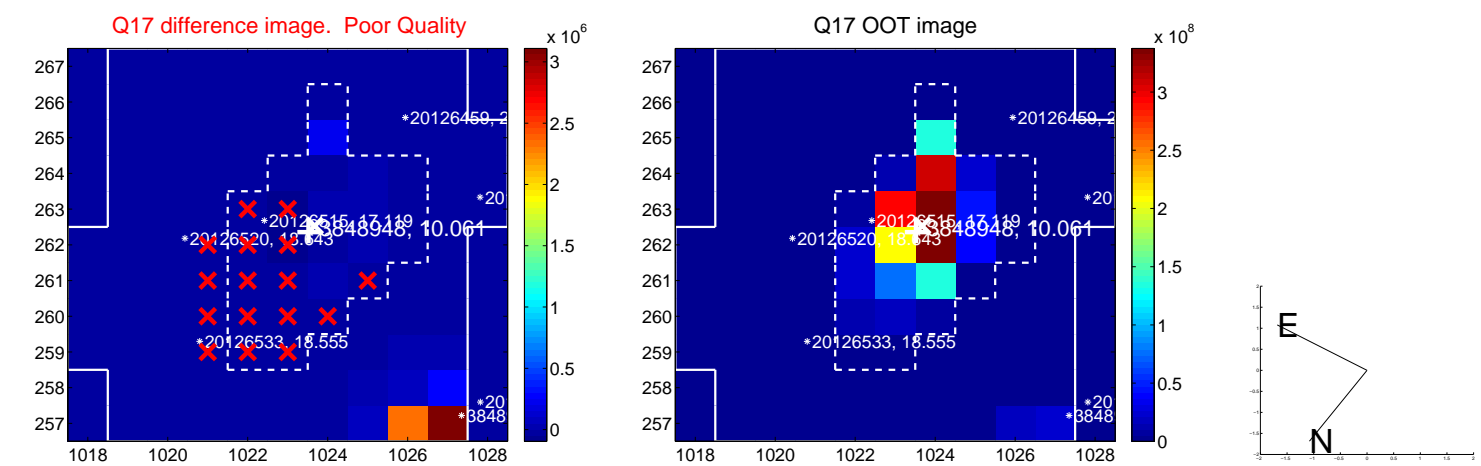
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



folded centroid time series figure for this object.

UKIRT Image

