

KIC 008326356

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})
008326356-01	OBS	No	2.132493	133.581807	30.4	20.942	9.3	10.3	2.33	7282	1.62	9320.67

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008326356-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—CENT_FEW_DIFFS

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

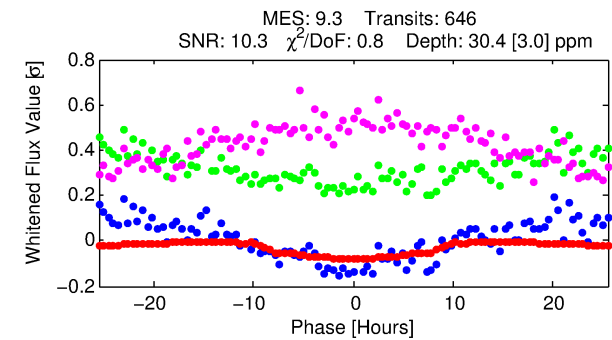
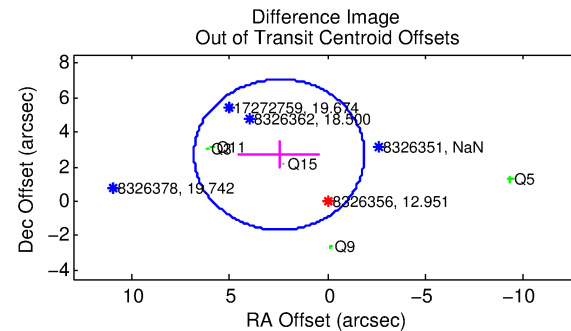
N = Not Transit-Like. S = Stellar Eclipse. C = Centroid Offset. E = Ephemeris Match.

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

Ephemeris Match Information For 008326356-01

No Significant Match Found

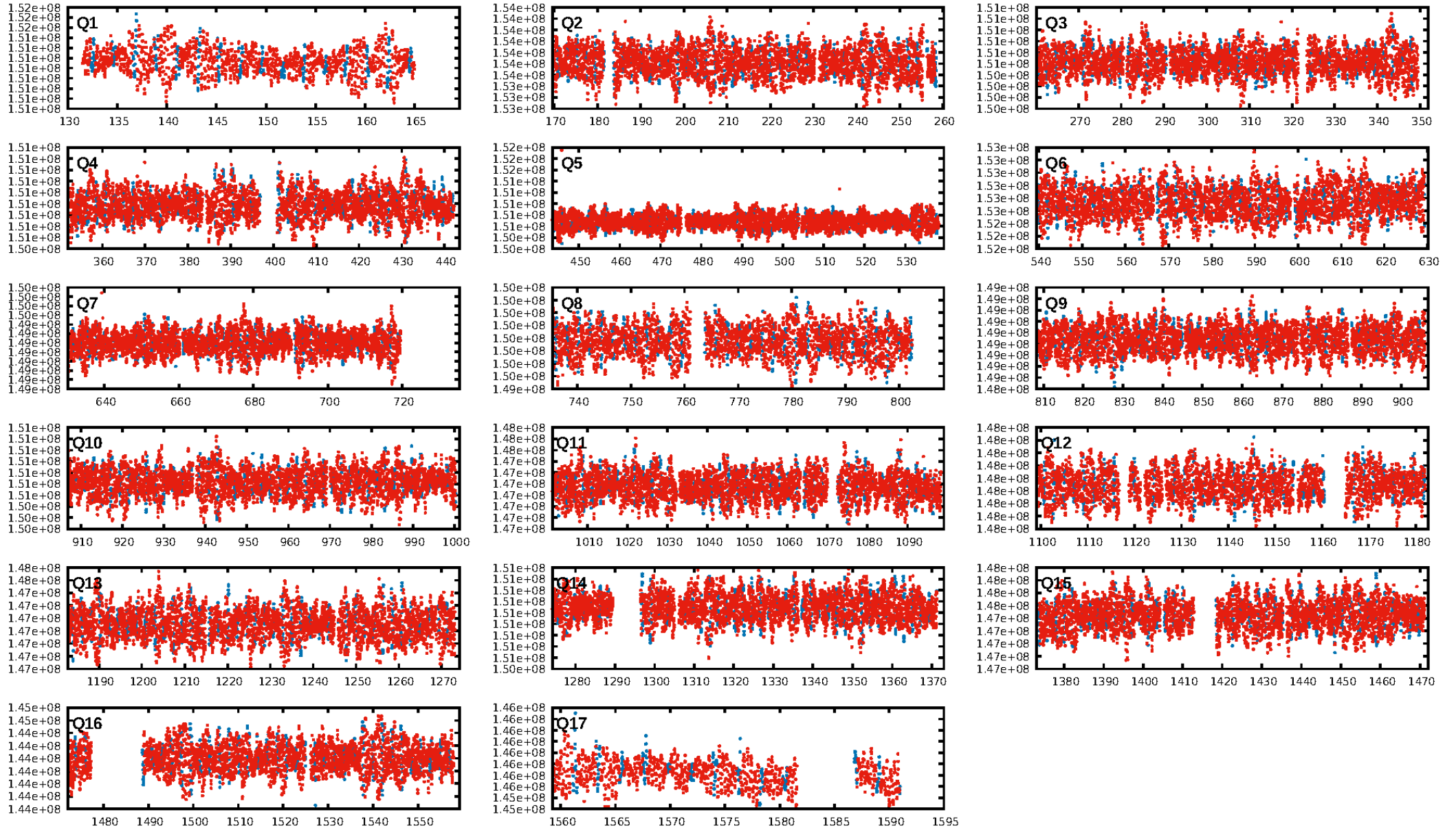
KIC: 8326356 Candidate: 1 of 1 Period: 2.132 d



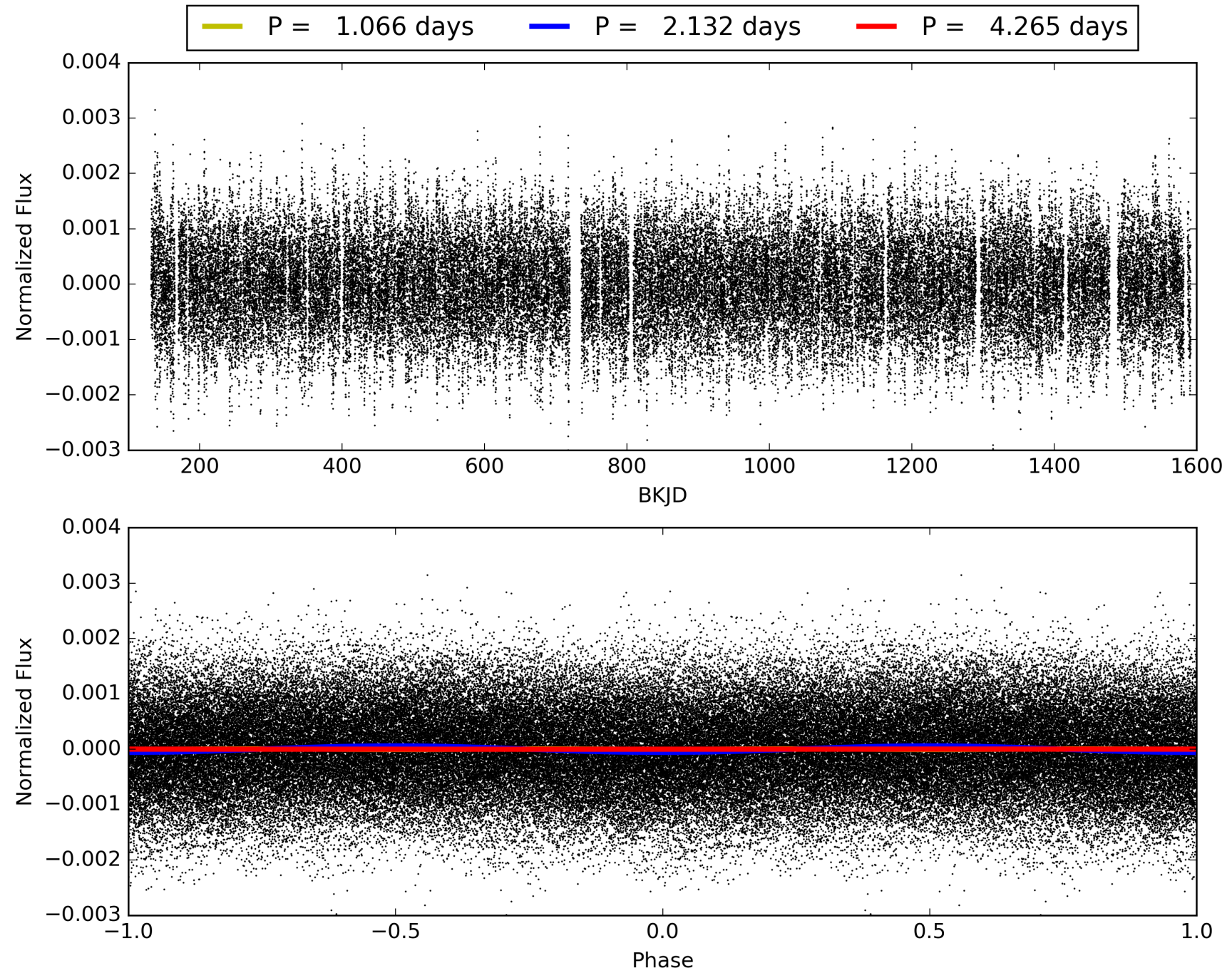
ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [617/617]
GhostDiagnostic-chr: 1.572

Centroid-sig: 0.0%
Centroid-so: 1.761 arcsec [3.04σ]
OotOffset-rm: 3.650 arcsec [2.51σ]
KicOffset-rm: 3.583 arcsec [1.54σ]
OotOffset-st: 0/3/0/2 [5]
KicOffset-st: 0/3/0/2 [5]
DiffImageQuality-fgm: 0.20 [1/5]
DiffImageOverlap-fno: 1.00 [17/17]

TCE 008326356-01, PDC Light Curves

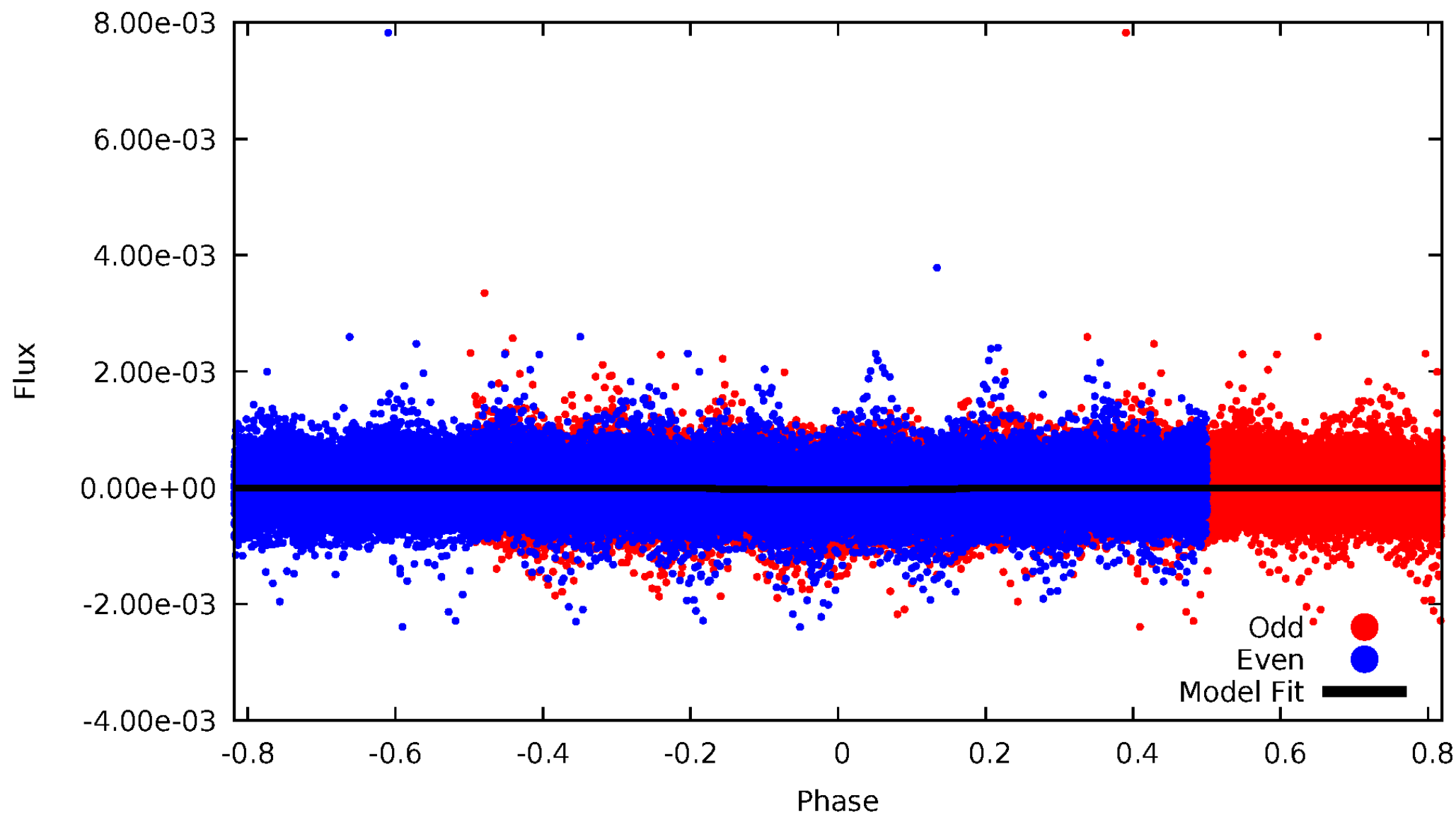


TCE 008326356-01



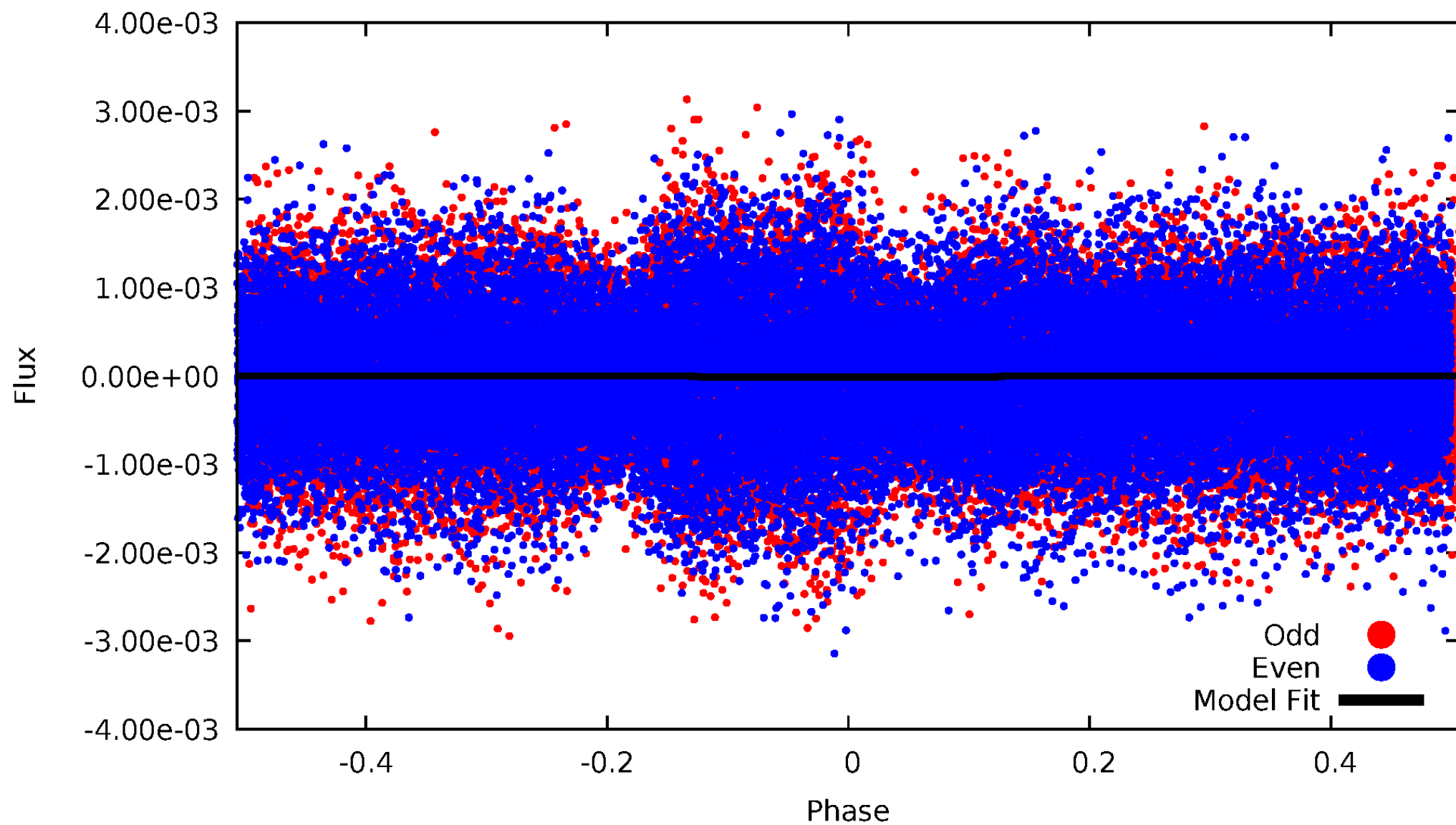
DV Odd/Even

TCE 008326356-01



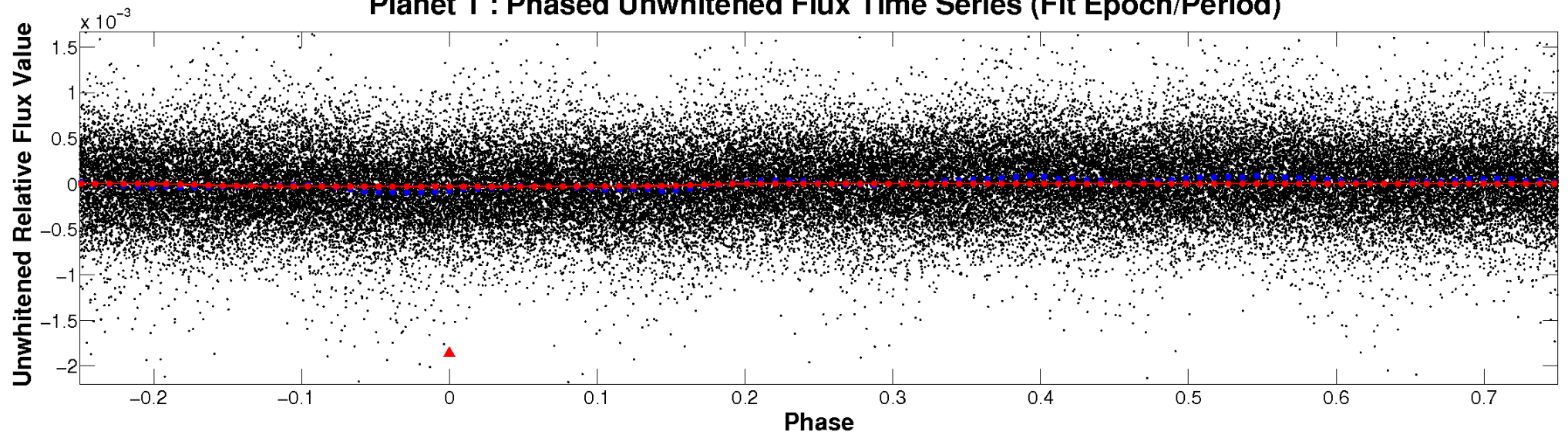
ALT Odd/Even

TCE 008326356-01

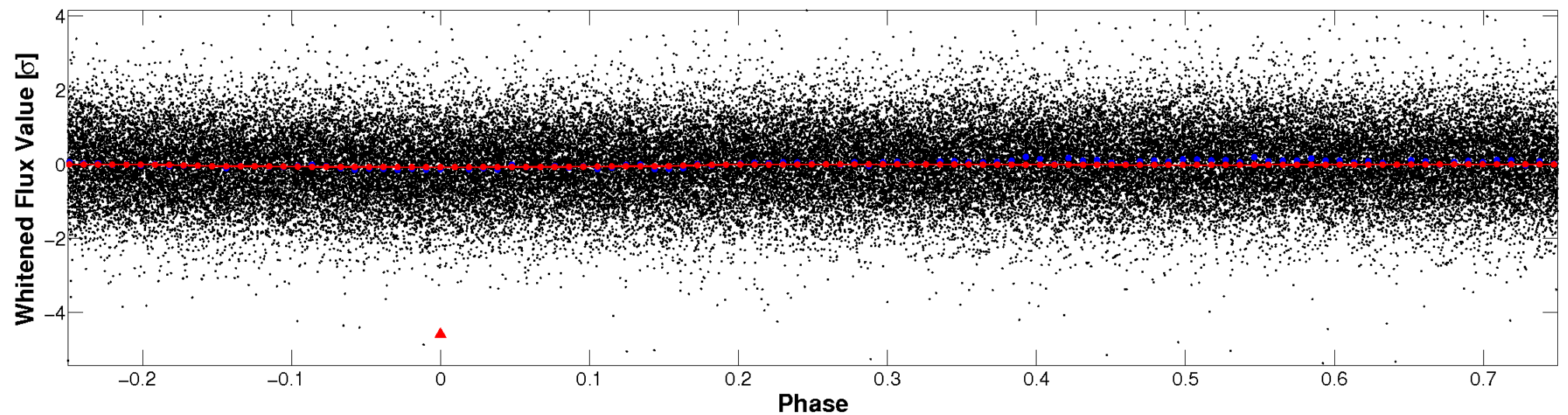


Non-Whitened Vs. Whitened Light Curve

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

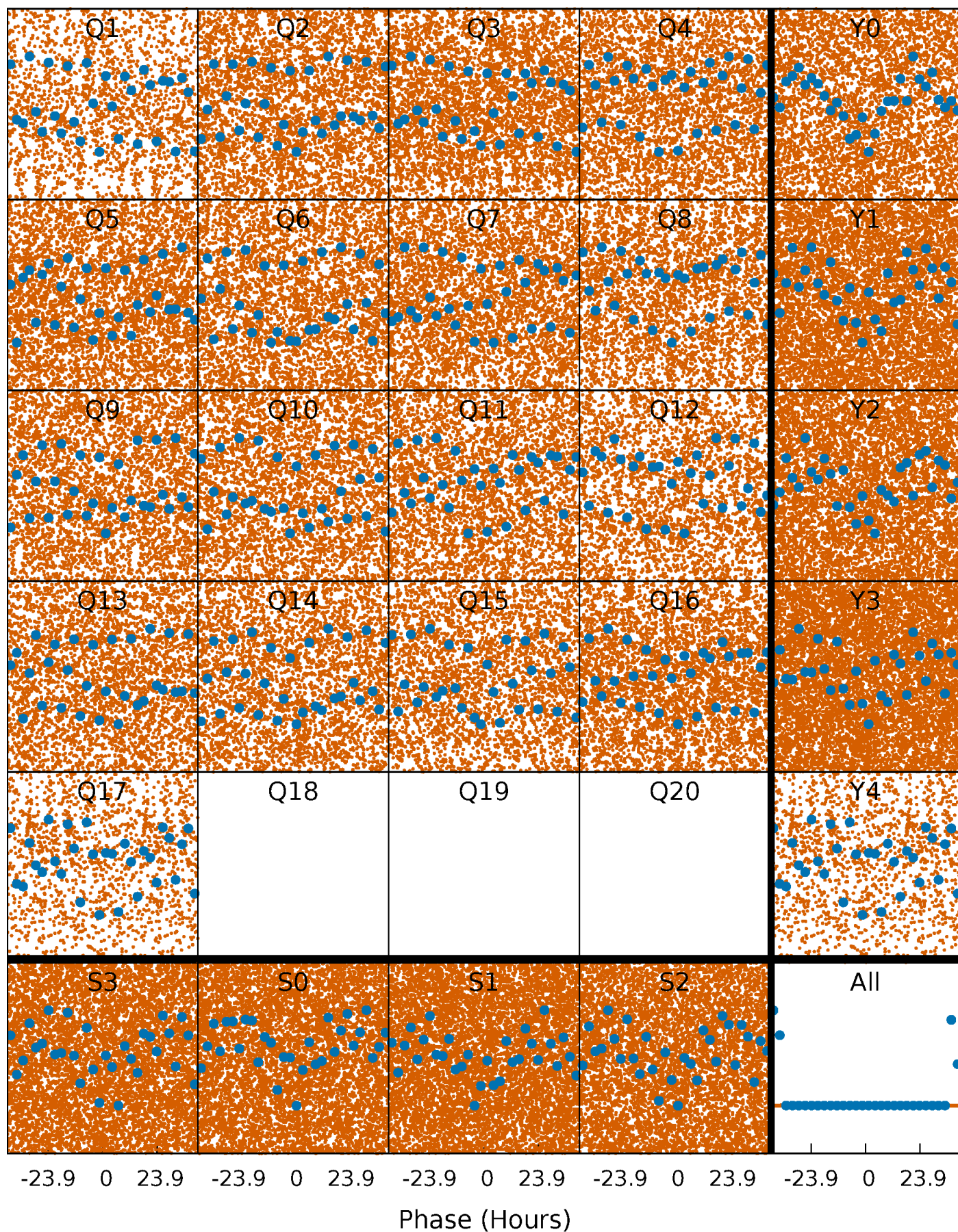


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



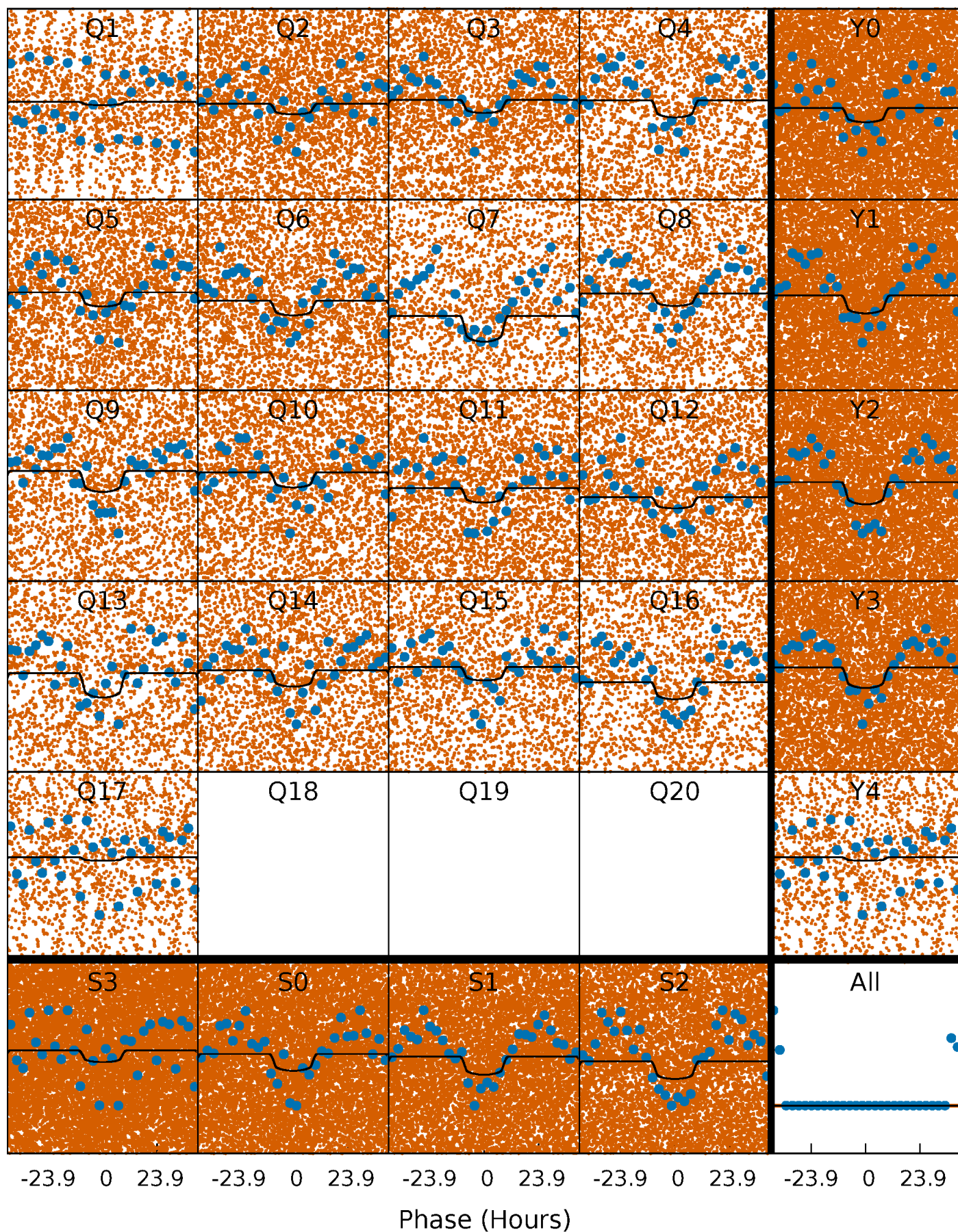
PDC Quarter-Phased Transit Curves

TCE 008326356-01 P= 2.132493 Days $T_0=133.581807$ (BKJD)



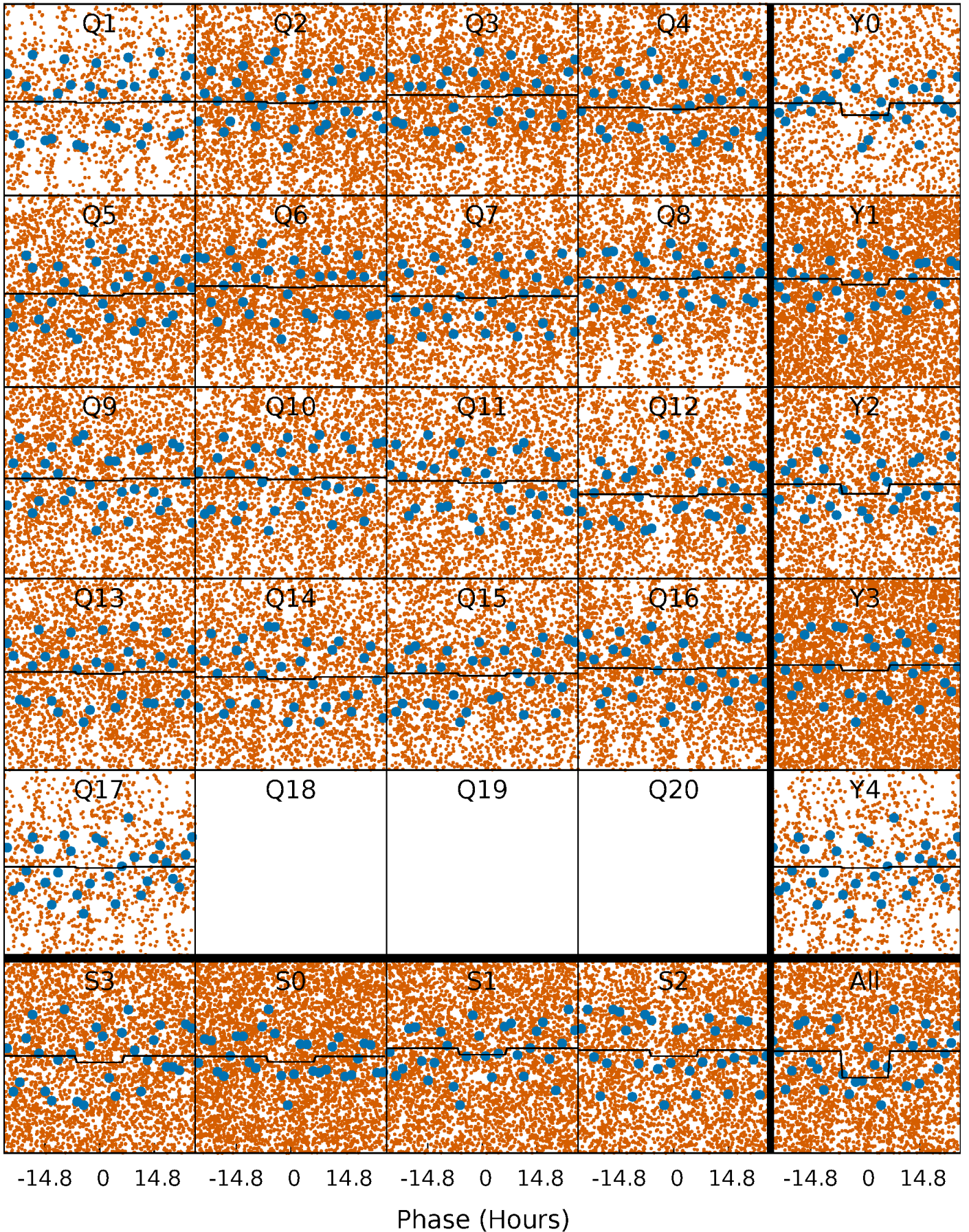
DV Quarter-Phased Transit Curves

TCE 008326356-01 P= 2.132493 Days $T_0=133.581807$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

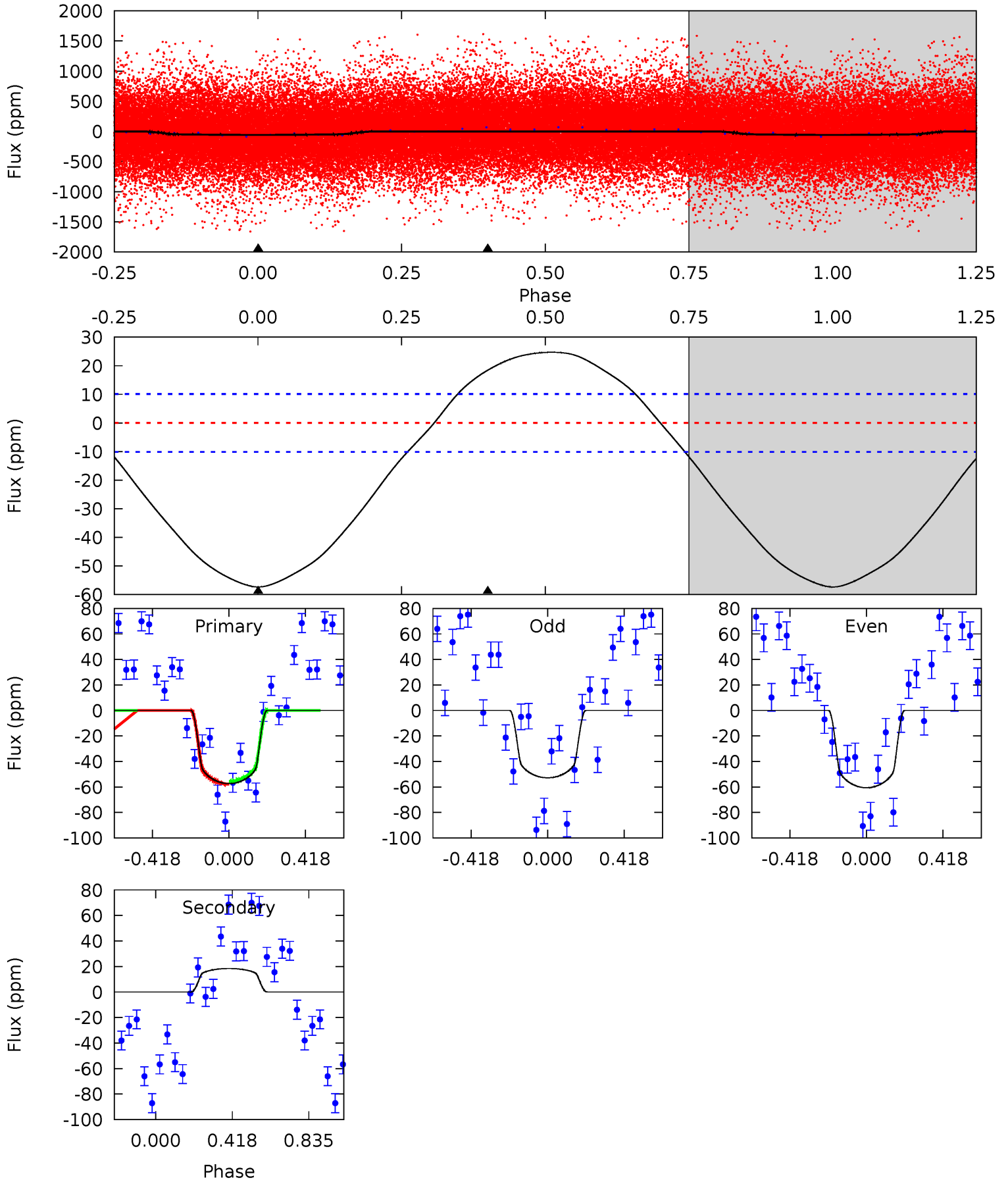
TCE 008326356-01 P= 2.132484 Days $T_0=133.712698$ (BKJD)



DV Model-Shift Uniqueness Test

008326356-01, P = 2.132493 Days, E = 131.449314 Days

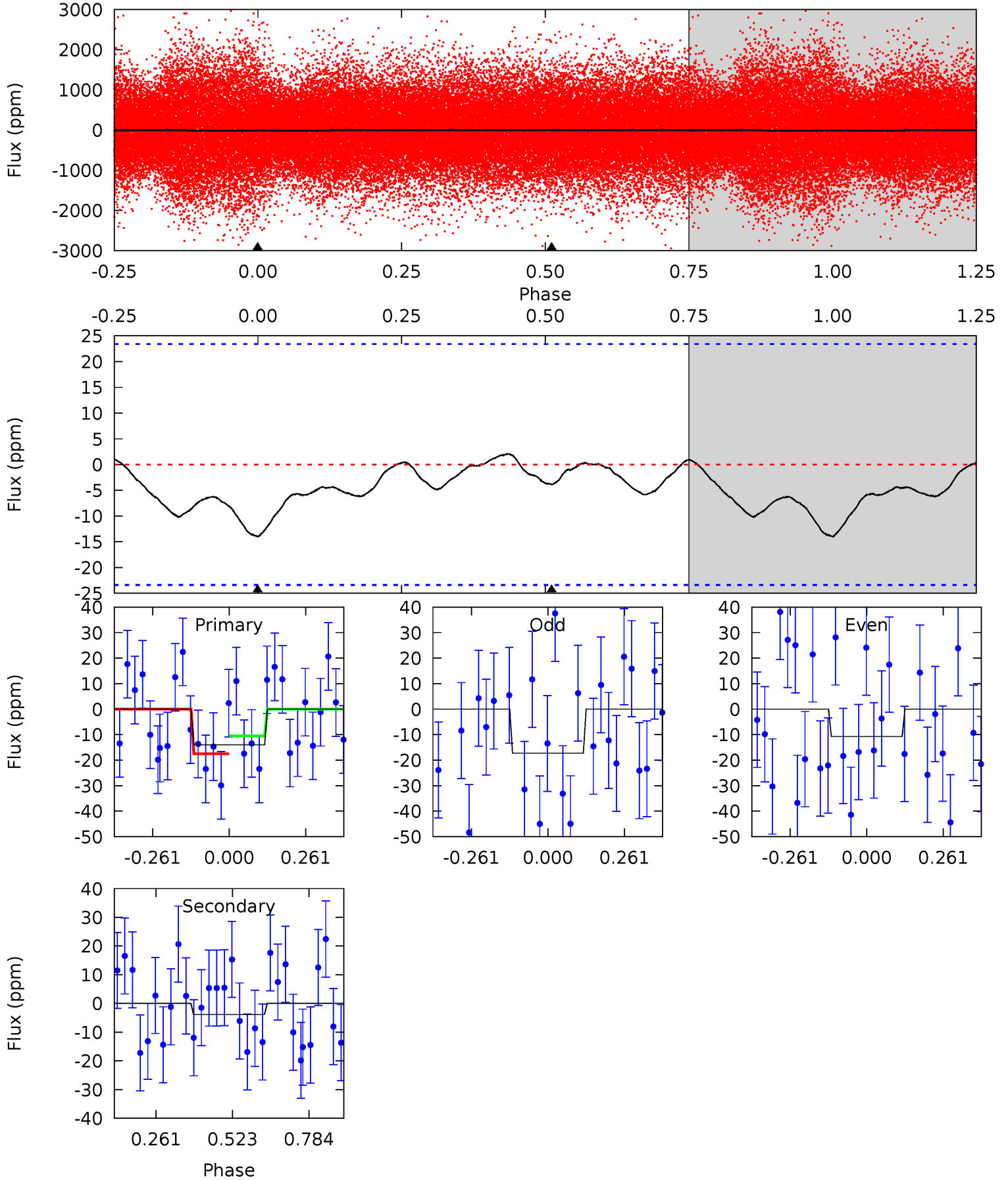
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
24.1	-7.75	0	0	4.26	0.81	2.94	24.1	24.1	-7.75	-7.75	1.67	1.01	0.30	0.43



Alt Model-Shift Uniqueness Test

008326356-01, P = 2.132484 Days, E = 129.447730 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2.61	0.72	0	0	4.36	1.12	0.17	2.61	2.61	0.72	0.72	0.60	0.95	0.13	0.65



Stellar Parameters For KIC 008326356

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7282^{+203}_{-330}	$3.921^{+0.308}_{-0.132}$	$-0.160^{+0.250}_{-0.350}$	$2.334^{+0.555}_{-0.832}$	$1.654^{+0.184}_{-0.368}$	$0.183^{+0.397}_{-0.070}$
	+3%/-5%	+8%/-3%	+156%/-219%	+24%/-36%	+11%/-22%	+216%/-38%
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 008326356-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	18 ± 2	$1.56^{+0.27}_{-0.28}$	3433^{+242}_{-340}	-5949^{+291}_{-355}	$-6.045^{+1.554}_{-2.932}$
Alt.	-4 ± 5	$0.86^{+0.18}_{-0.18}$	3420^{+257}_{-320}	5241^{+1367}_{-9499}	$4.079^{+6.793}_{-5.347}$

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 $T_{\text{obs}} \gg T_{\text{max}}$ AND $A_{\text{obs}} \gg 1.0$

DV Centroid Data

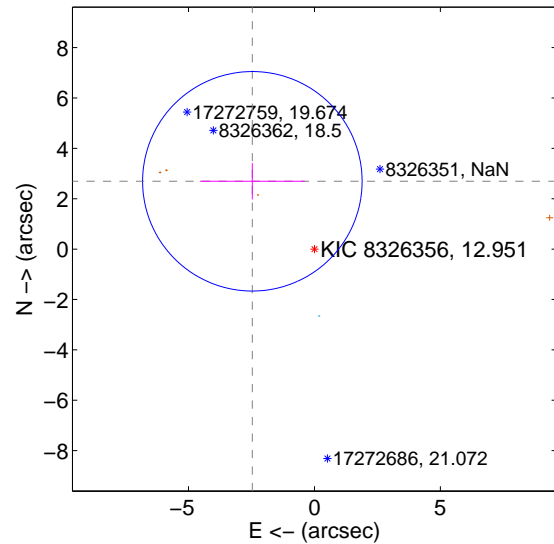
Supplemental centroid analysis for 008326356-01. Kepler magnitude: 12.95. Transit SNR 10.33

There are 1 quarters with good PRF difference image offsets

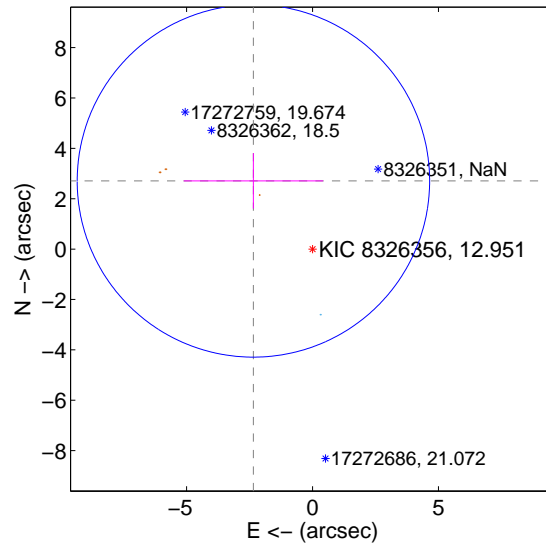
The direct PRF centroid is offset from the target star catalog position by about 0.14 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	3.650 ± 1.453	2.51	2.465 ± 2.081	2.692 ± 0.722
PRF-fit source offset from KIC position	3.583 ± 2.332	1.54	2.347 ± 2.767	2.707 ± 1.100
photometric centroid source offset	1.76 ± 0.58	3.04	-0.57 ± 0.70	1.67 ± 0.56

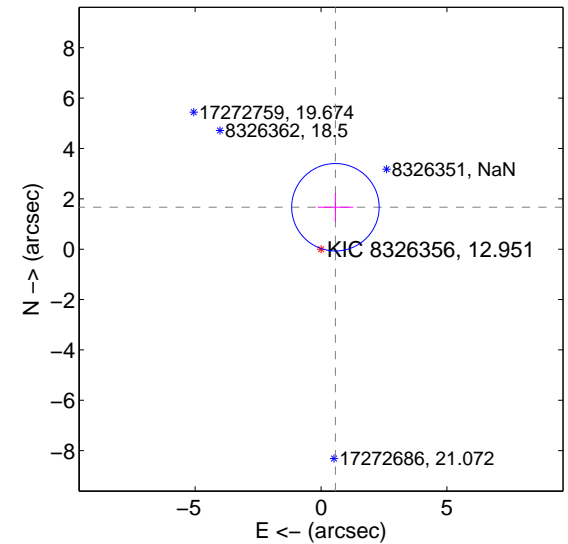
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

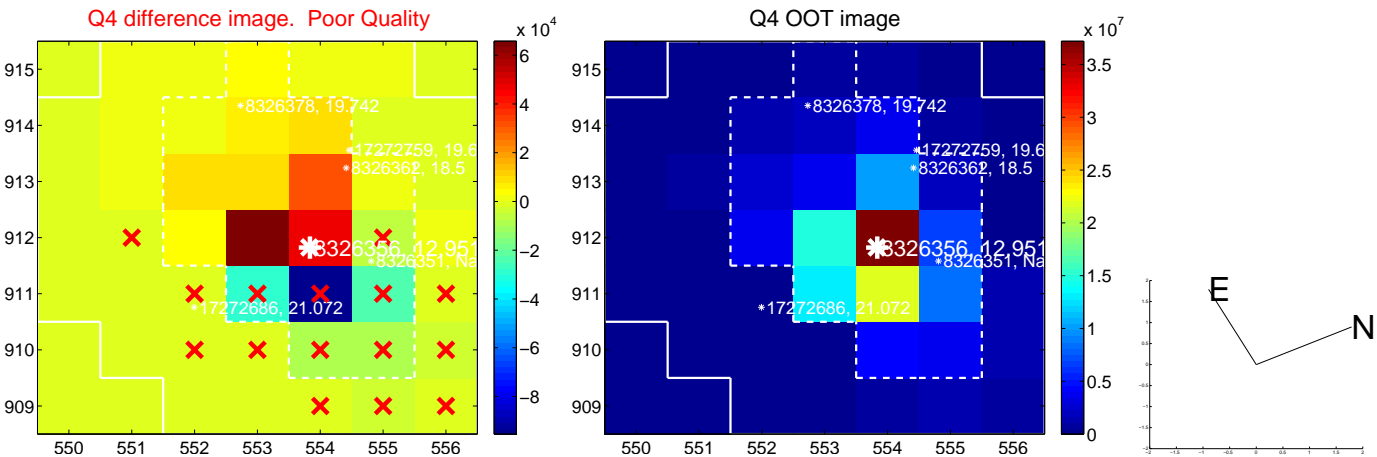
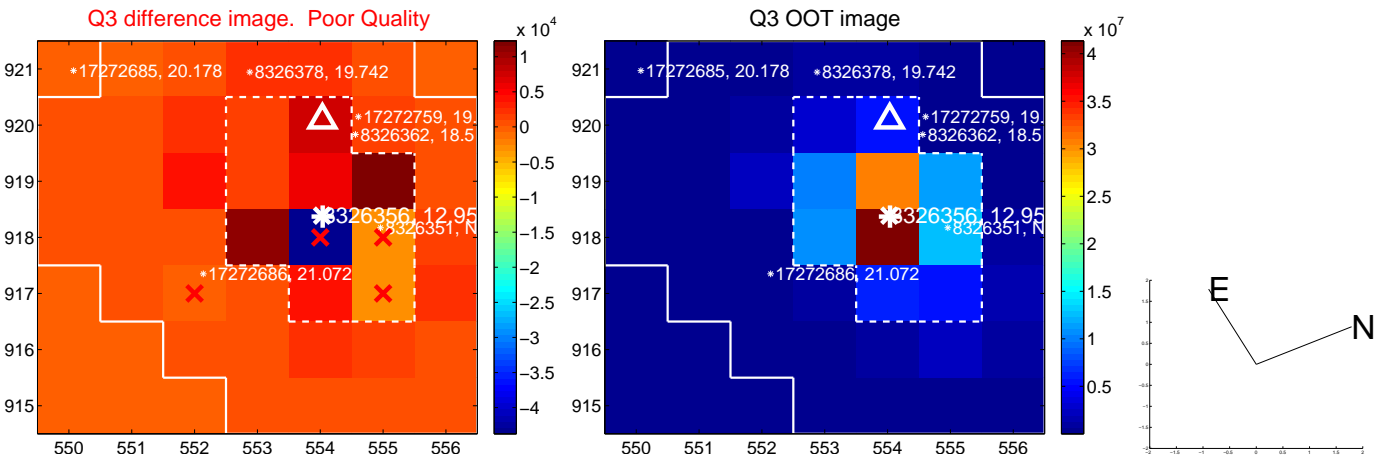
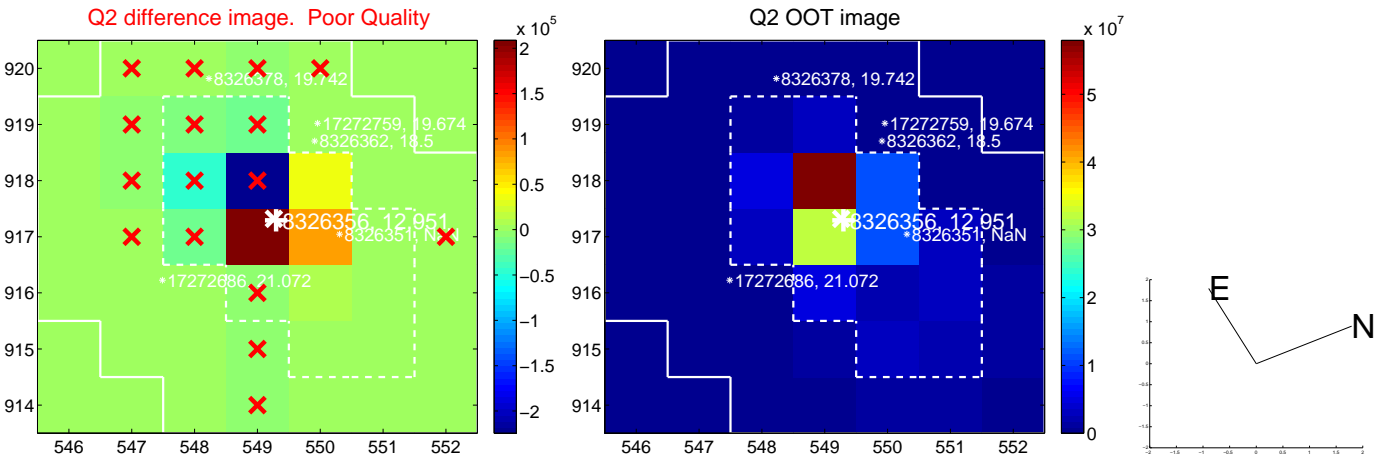
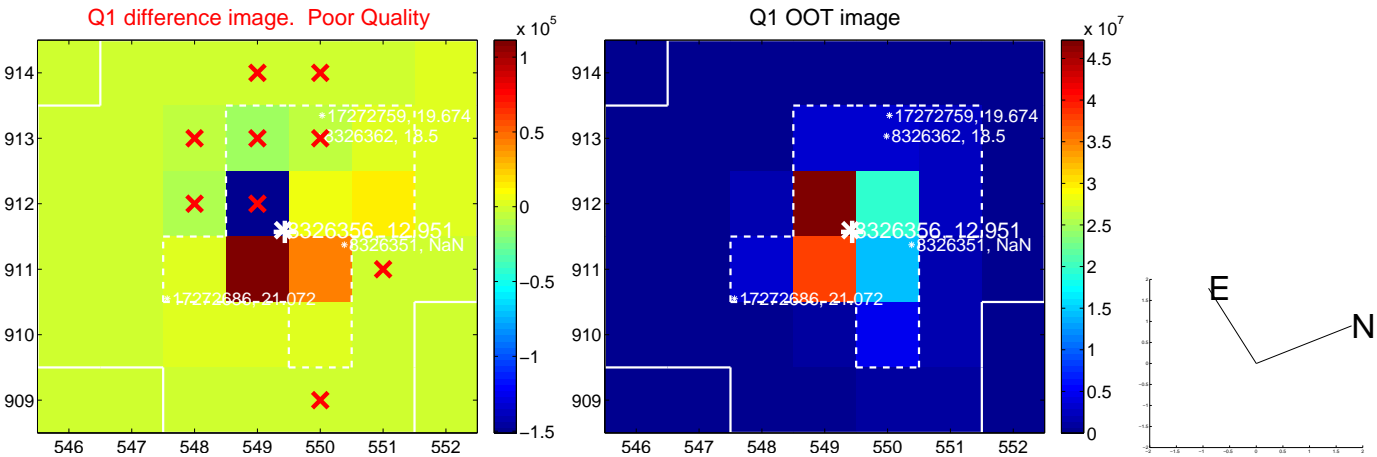


offset from photometric centroids

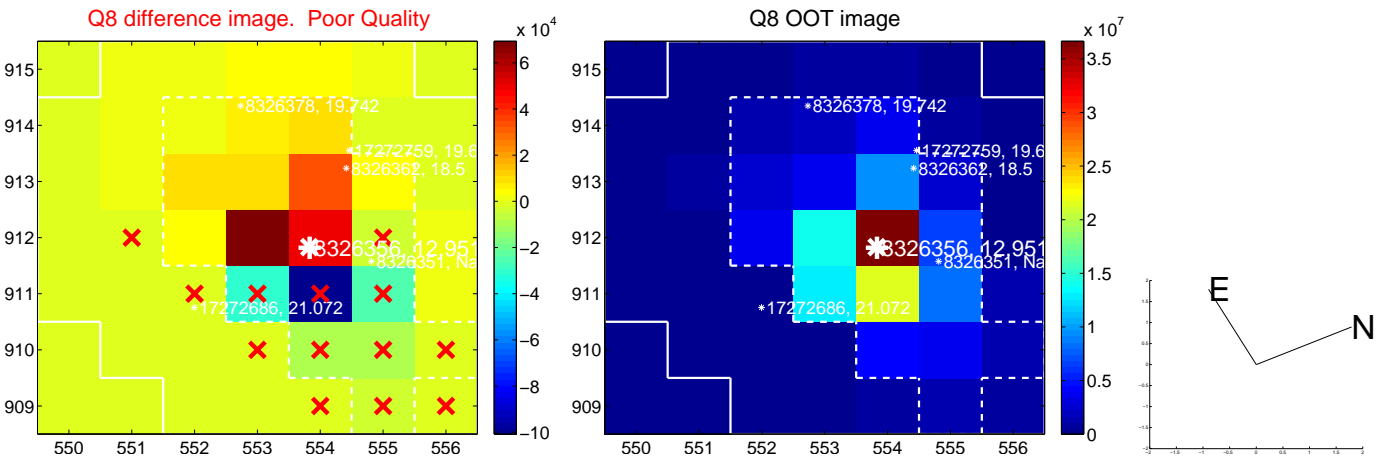
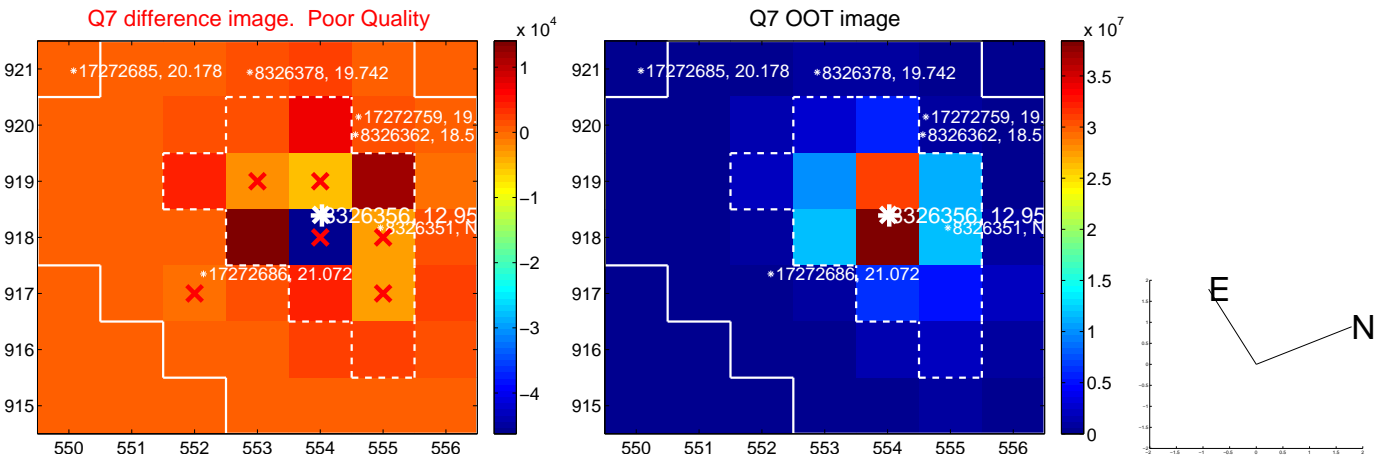
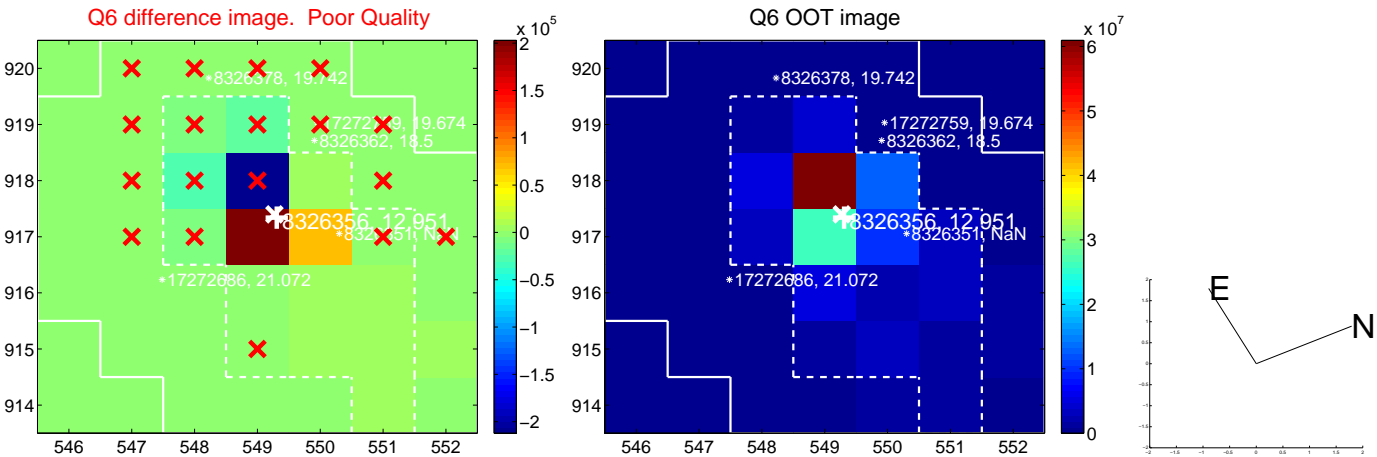
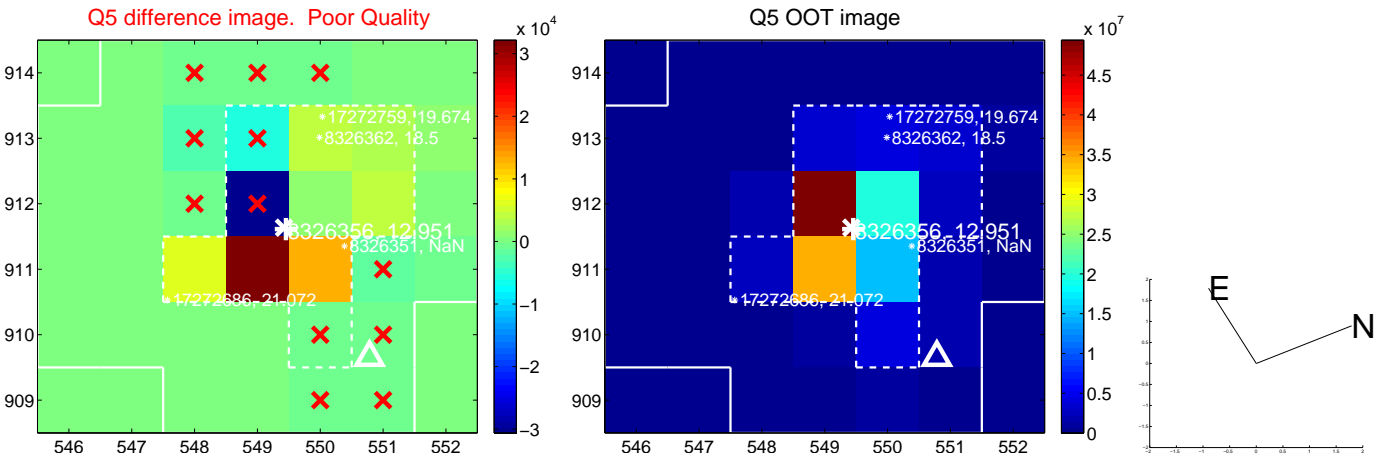


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

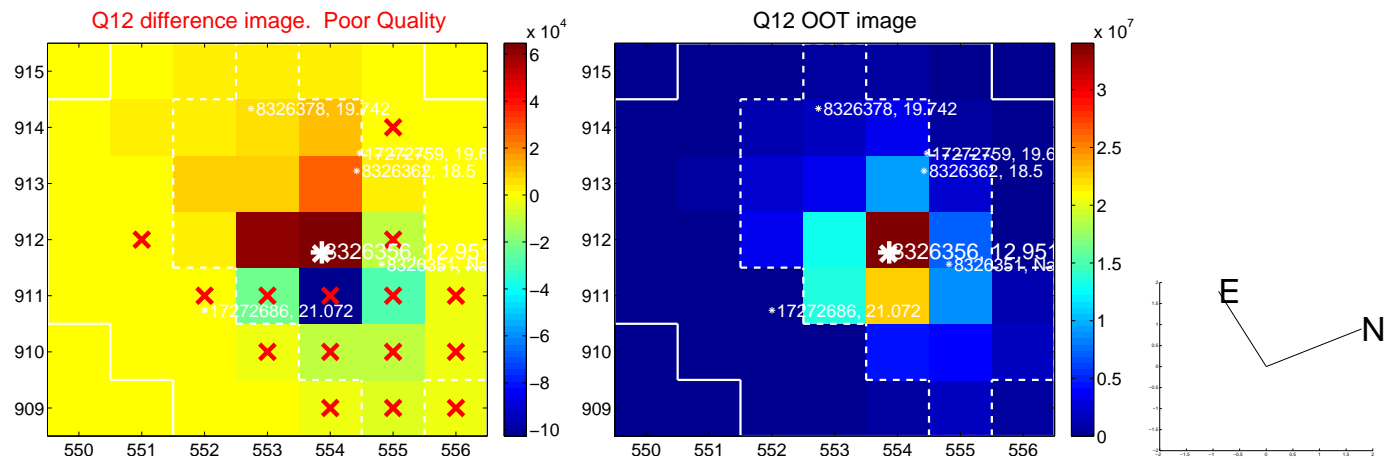
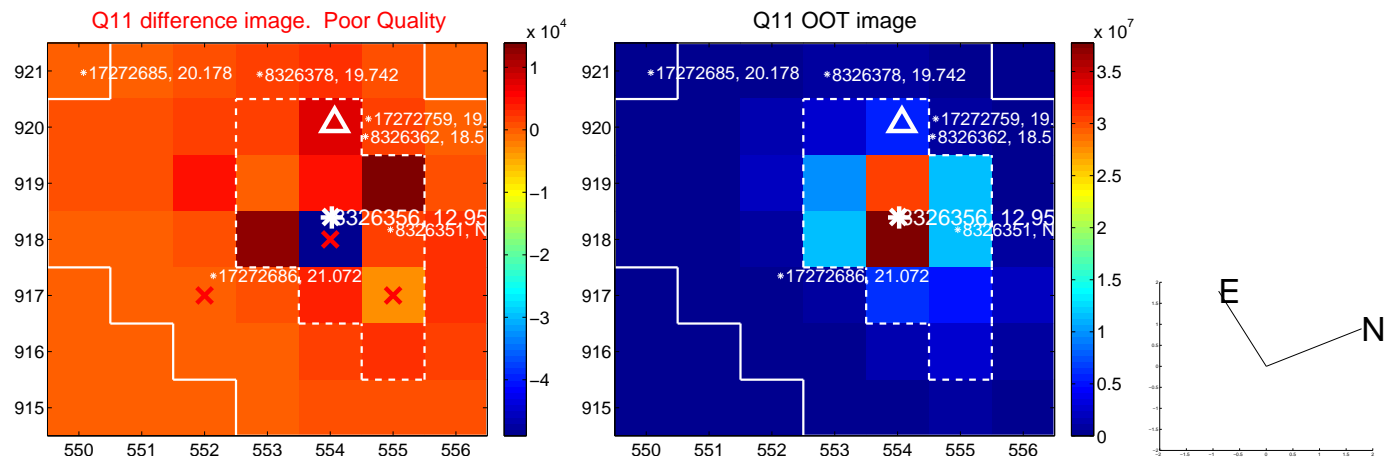
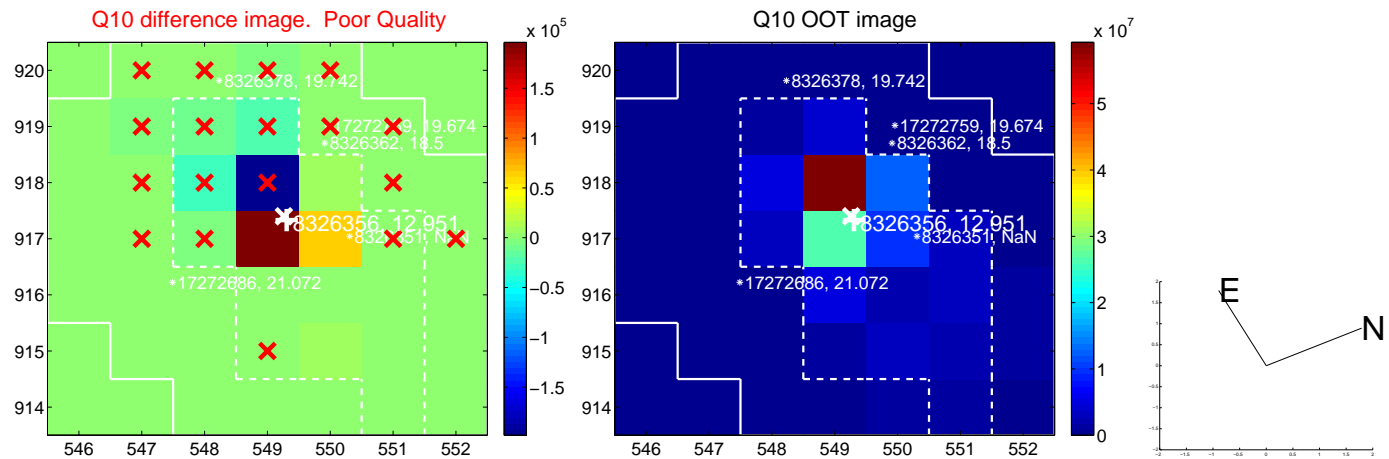
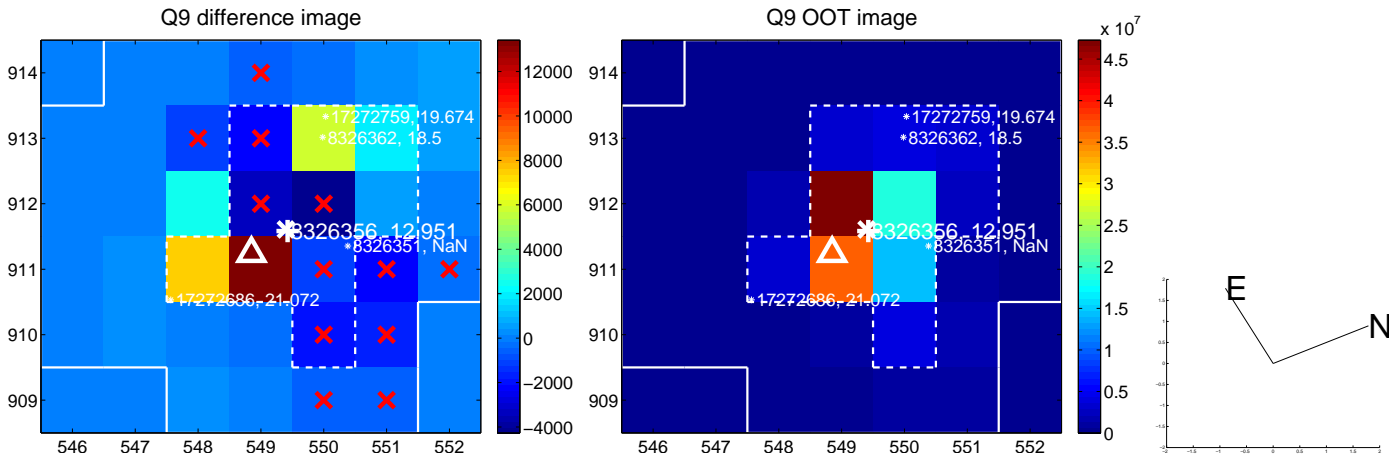
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



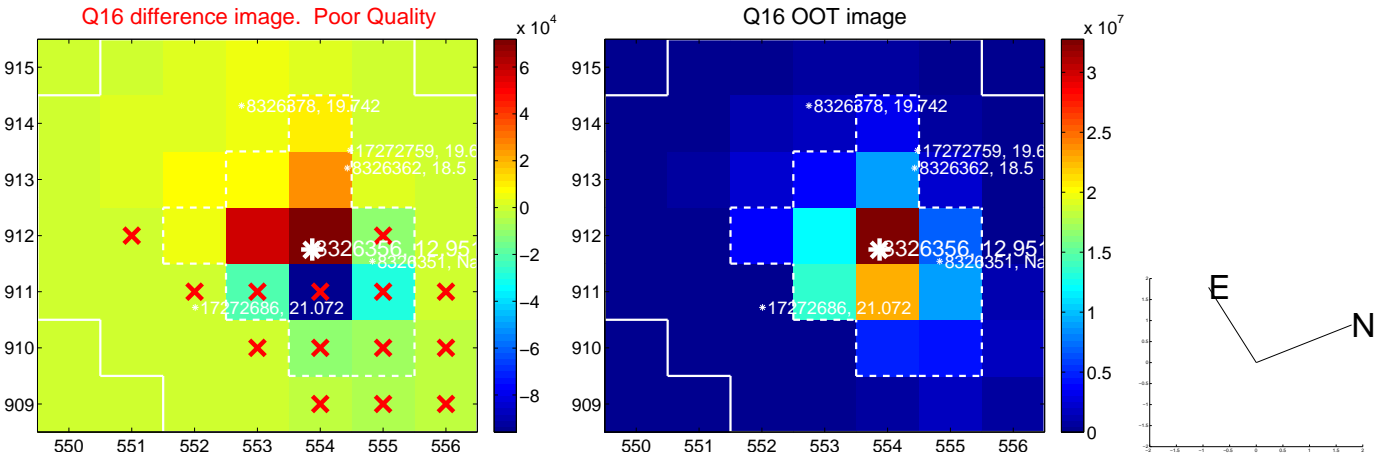
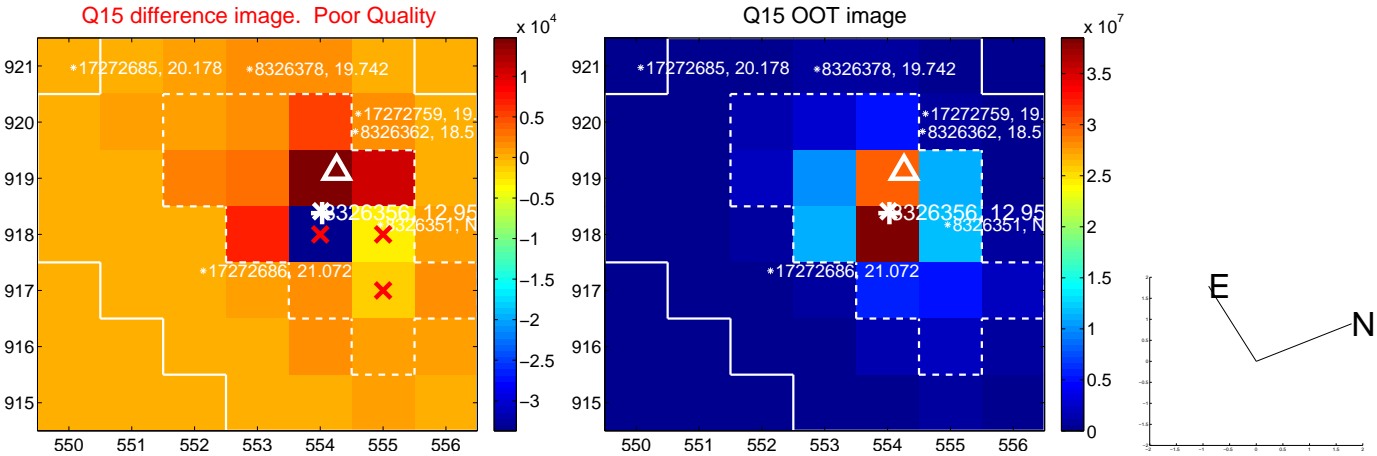
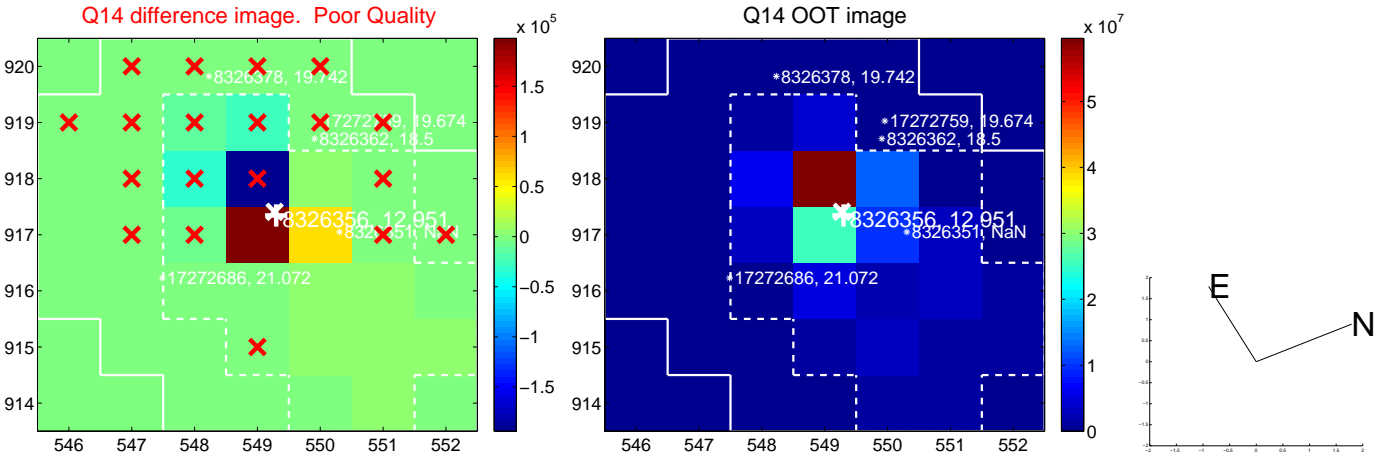
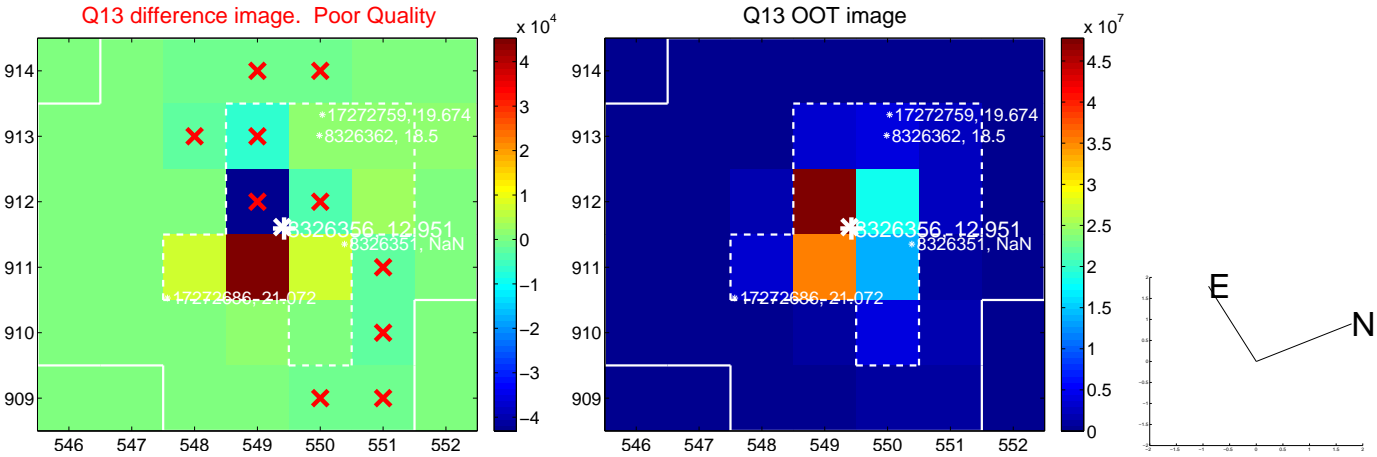
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



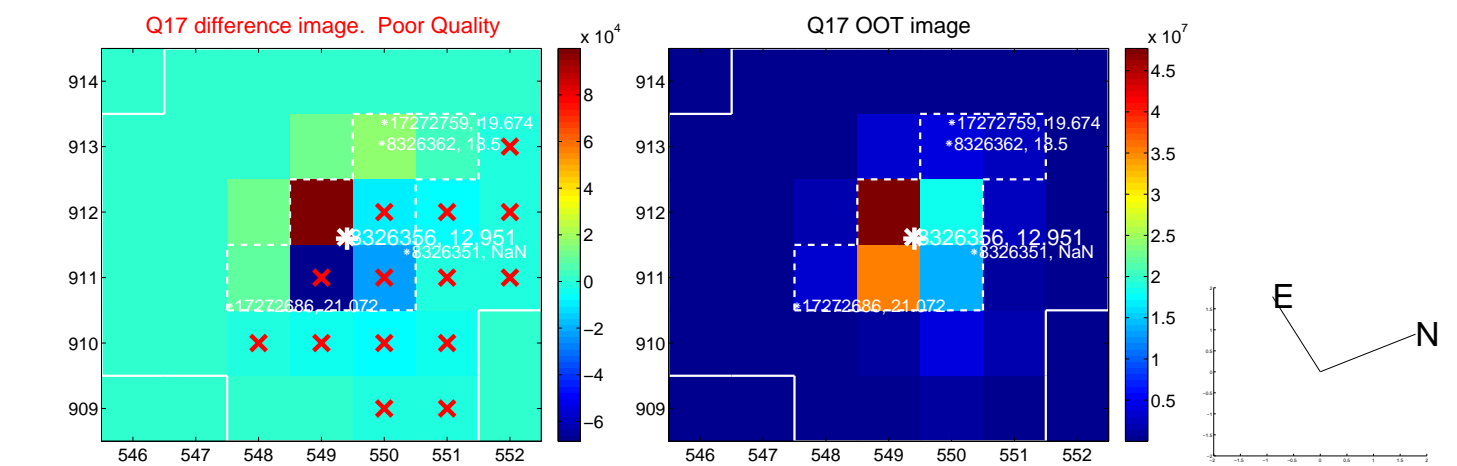
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



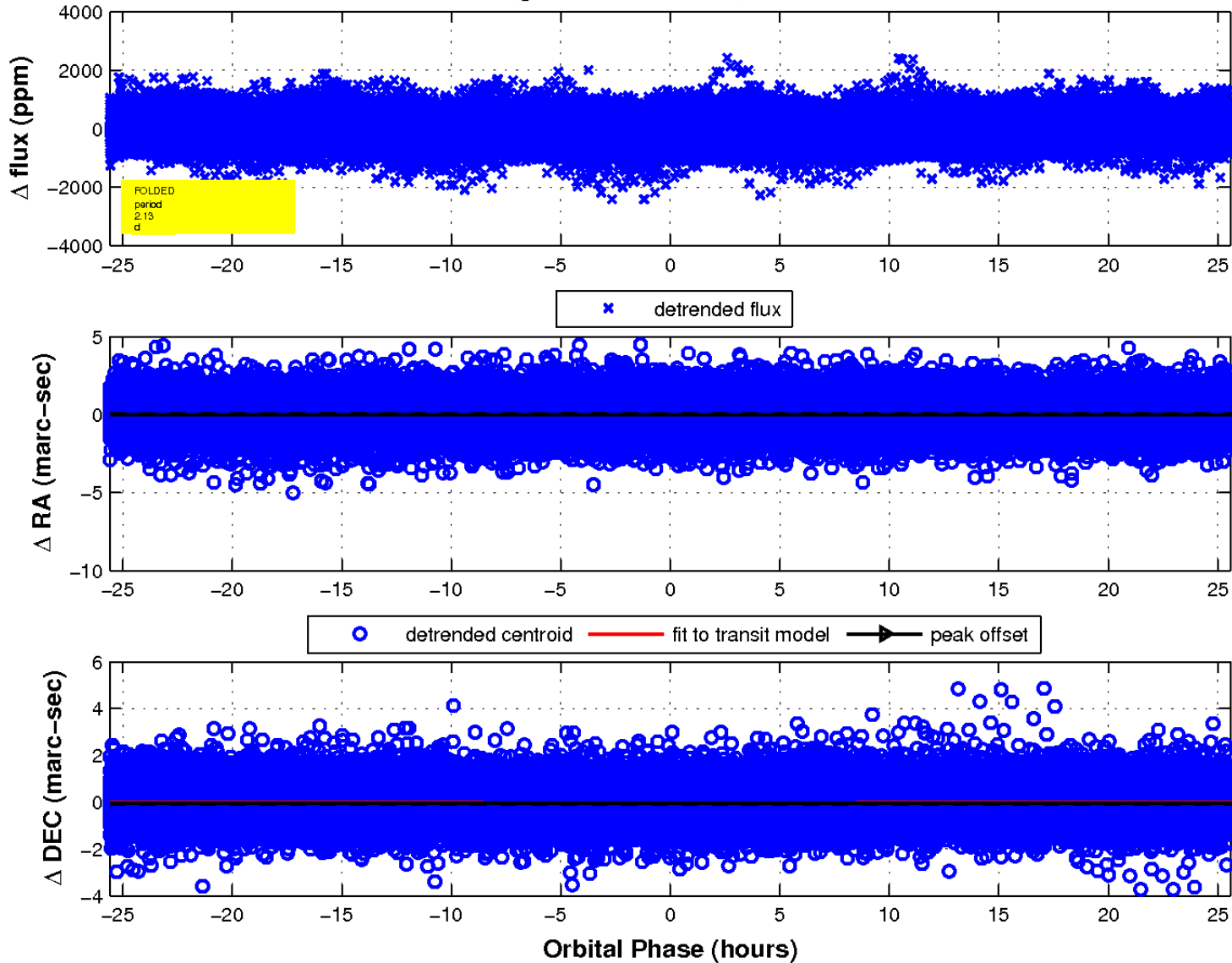
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

