

KIC 008293692

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})
008293692-01	OBS	No	0.717745	131.744952	13.4	5.665	10.5	4.7	2.65	7521	0.97	56029.79

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008293692-01	OBS	FP	0.00	1	0	0	0	LPP_DV

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

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

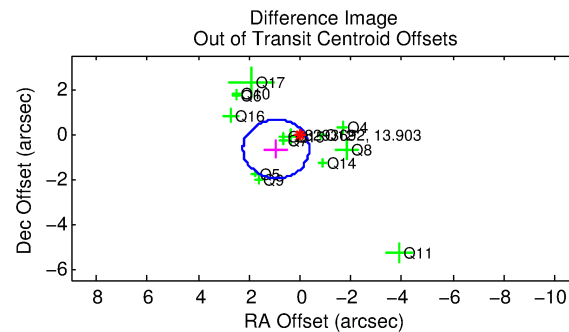
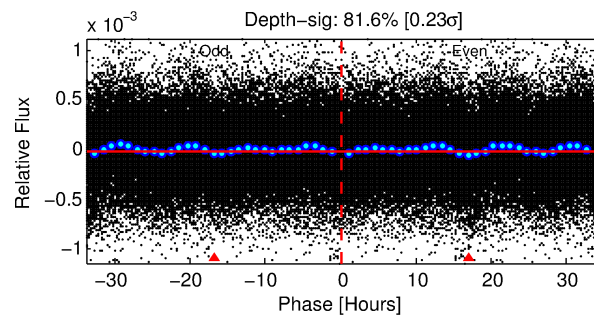
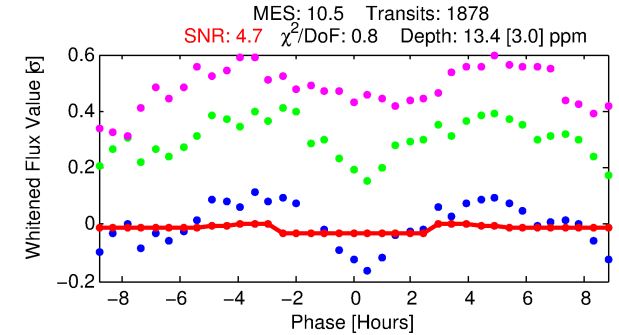
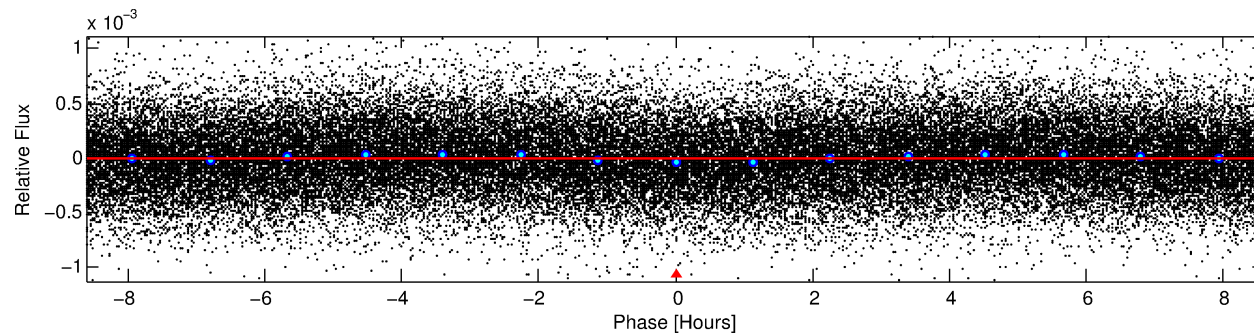
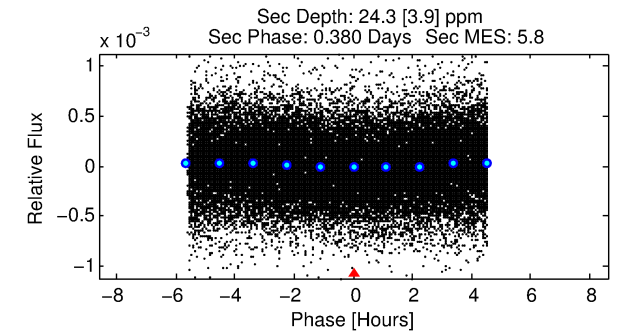
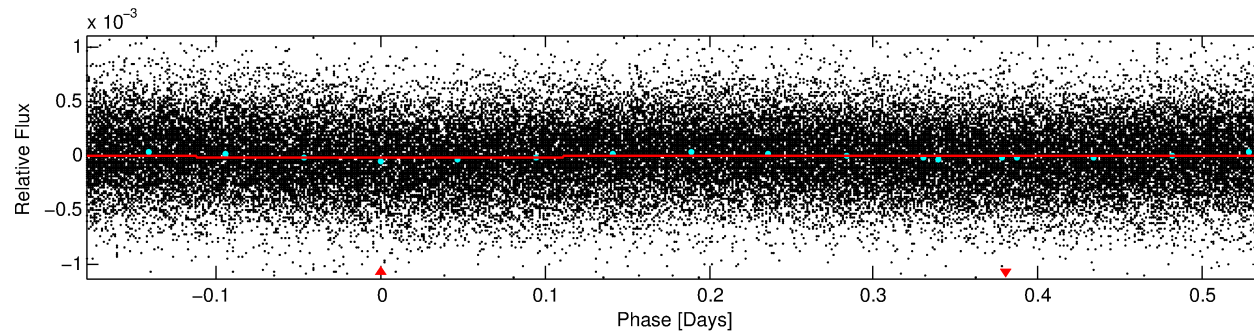
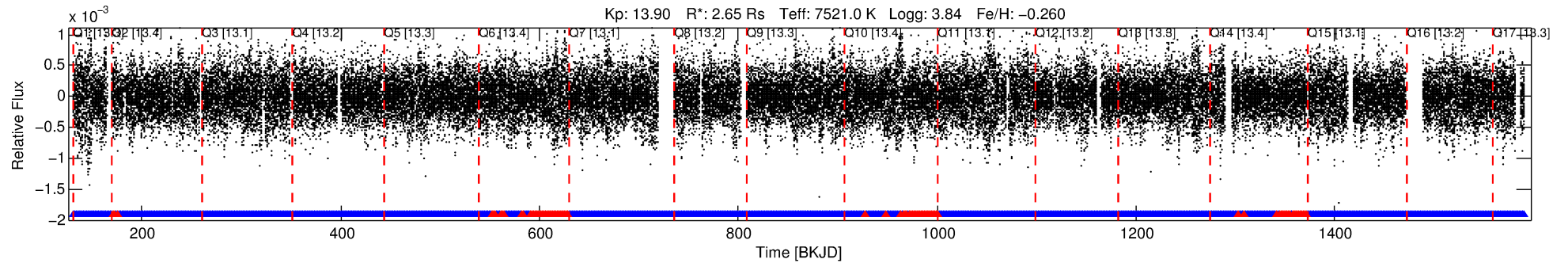
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008293692-01

No Significant Match Found

DV One-Page Summary

KIC: 8293692 Candidate: 1 of 1 Period: 0.718 d



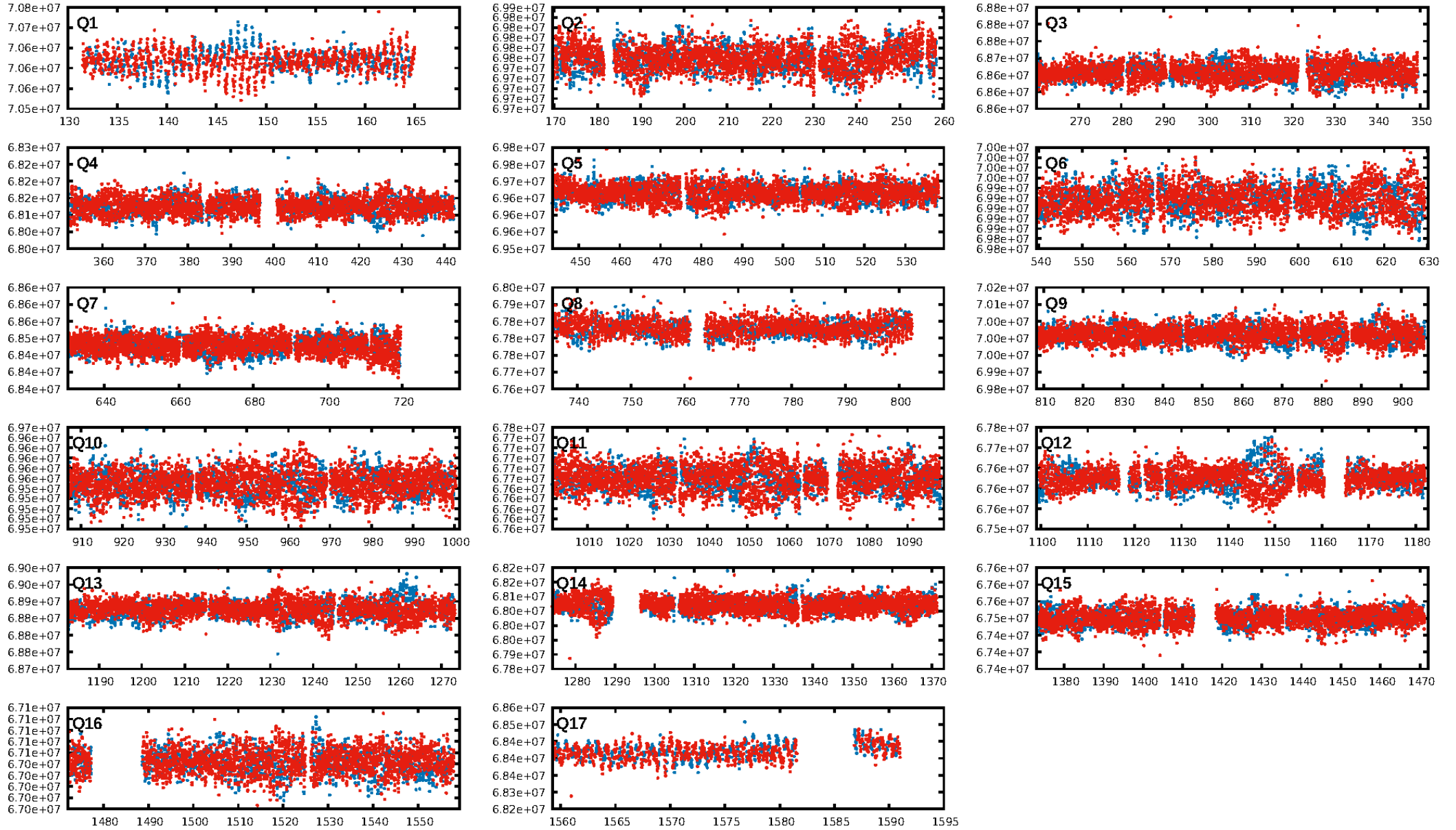
DV Fit Results:

Period = 0.71774 [0.00003] d
Epoch = 131.7450 [0.0084] BKJD
Rp/R* = 0.0034 [0.0052]
a/R* = 1.17 [2.55]
b = 0.11 [76.74]
Seff = 56029.79 [34839.58]
Teq = 3923 [610] K
Rp = 0.97 [1.57] Re
a = 0.0190 [0.0073] AU
Ag = 5.07 [16.09] [0.25 σ]
Teffp = 9100 [7106] K [0.73 σ]

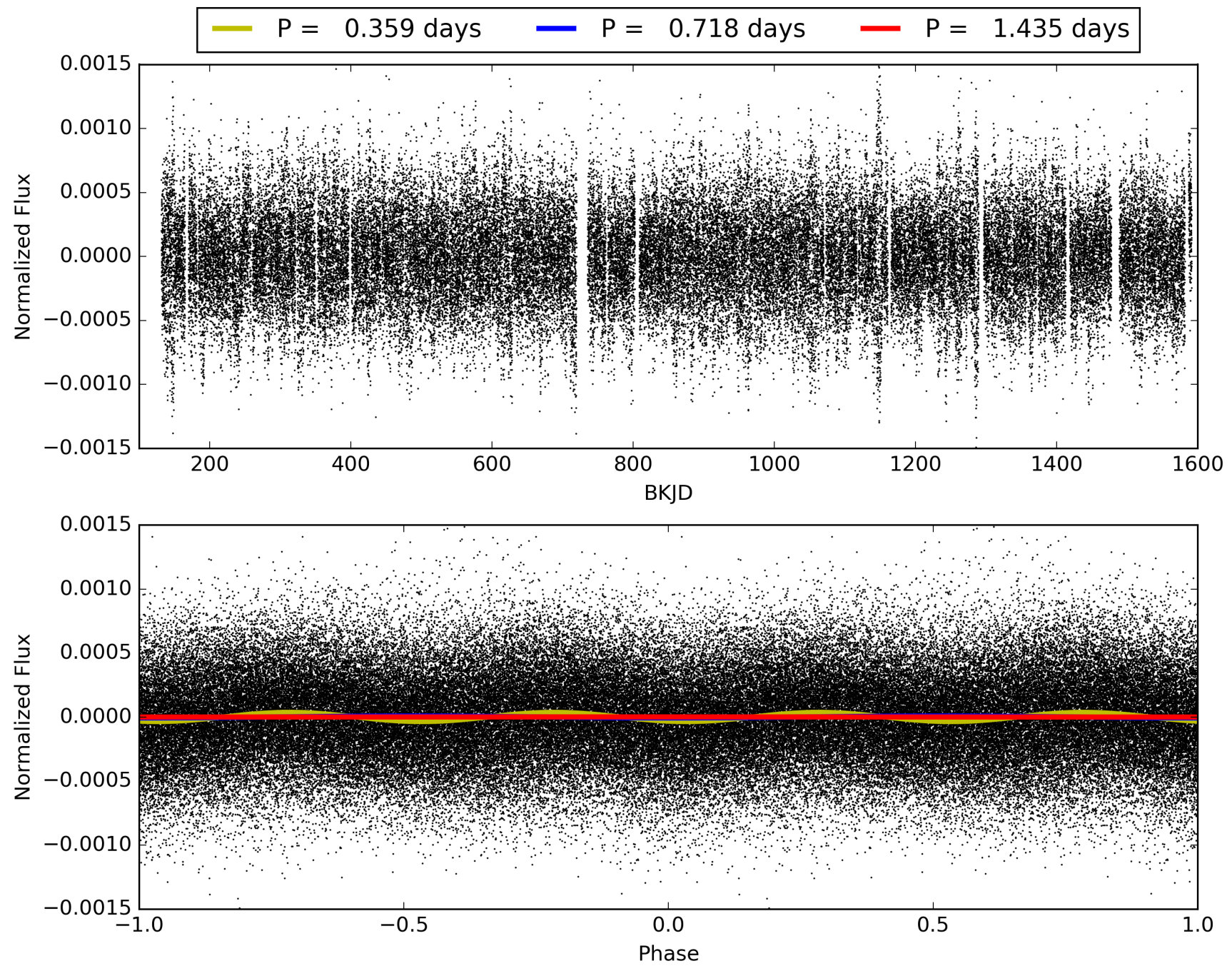
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 0.92 [1646/1793]
GhostDiagnostic-chr: 3.543
Centroid-sig: 7.2%
Centroid-so: 2.386 arcsec [1.48 σ]
OotOffset-rm: 1.153 arcsec [2.66 σ]
KicOffset-rm: 1.092 arcsec [2.52 σ]
OotOffset-st: 3/4/4/3 [14]
KicOffset-st: 3/4/4/3 [14]
DiffImageQuality-fgm: 0.43 [6/14]
DiffImageOverlap-fno: 1.00 [17/17]

TCE 008293692-01, PDC Light Curves

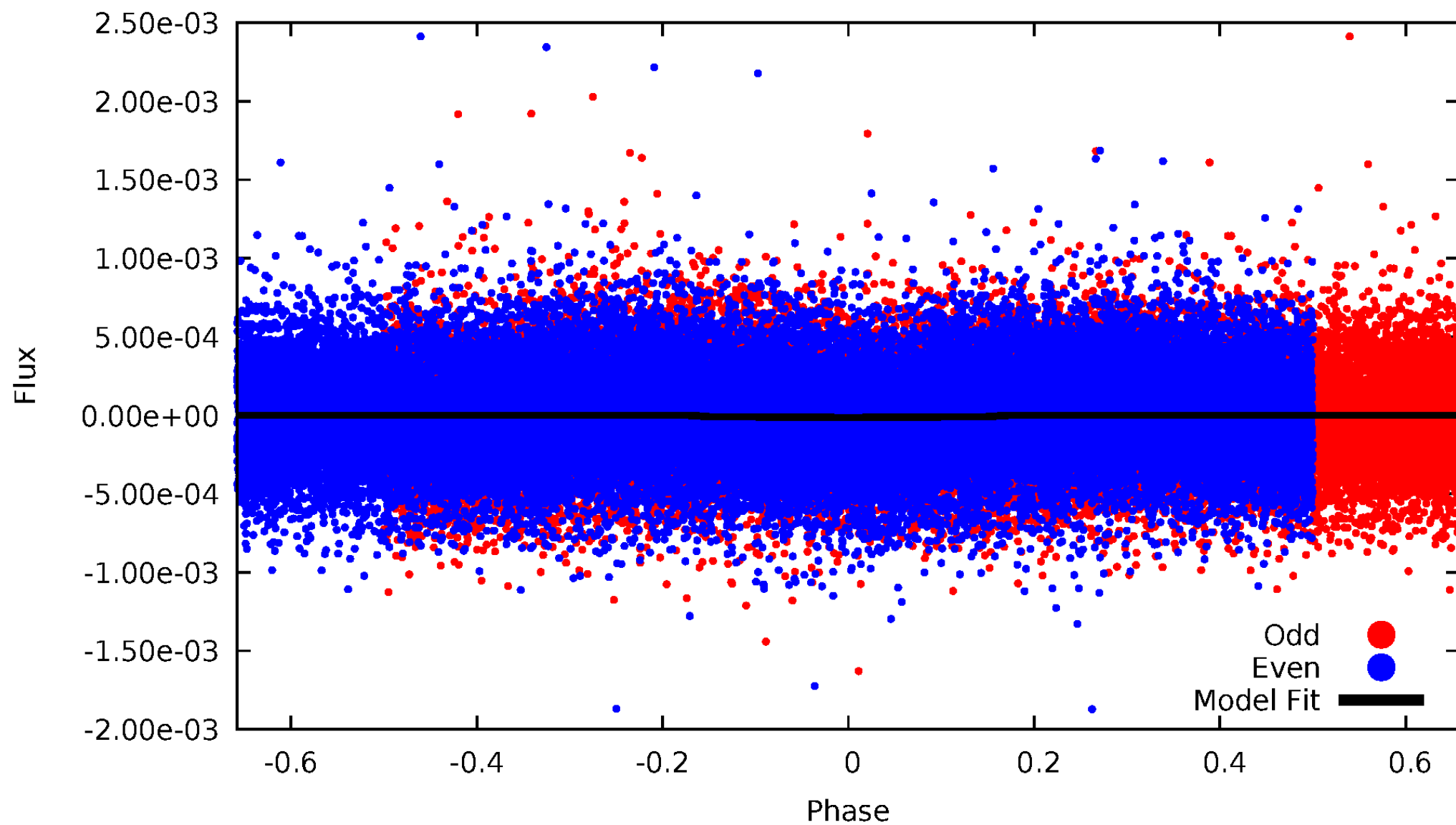


TCE 008293692-01



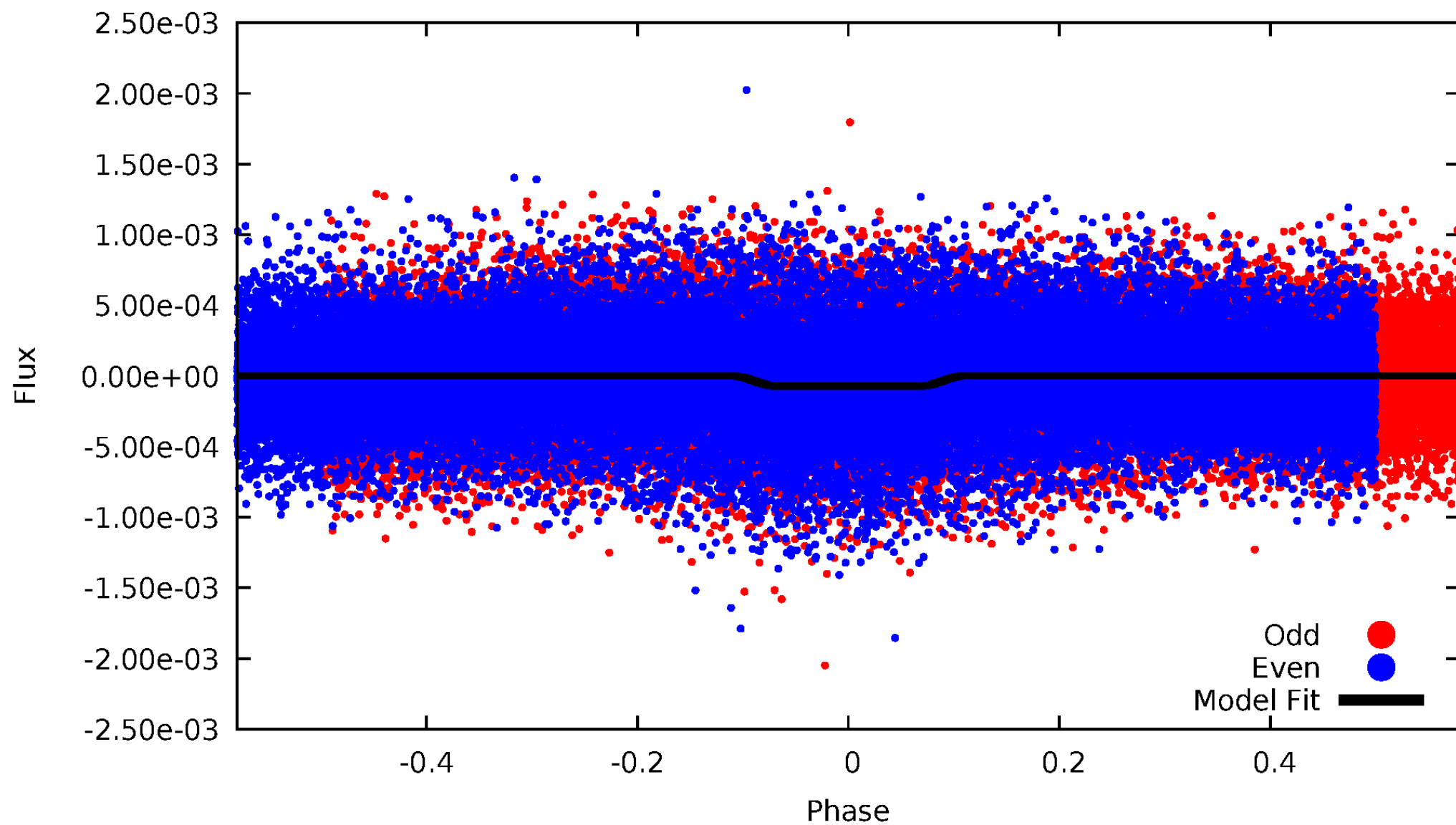
DV Odd/Even

TCE 008293692-01

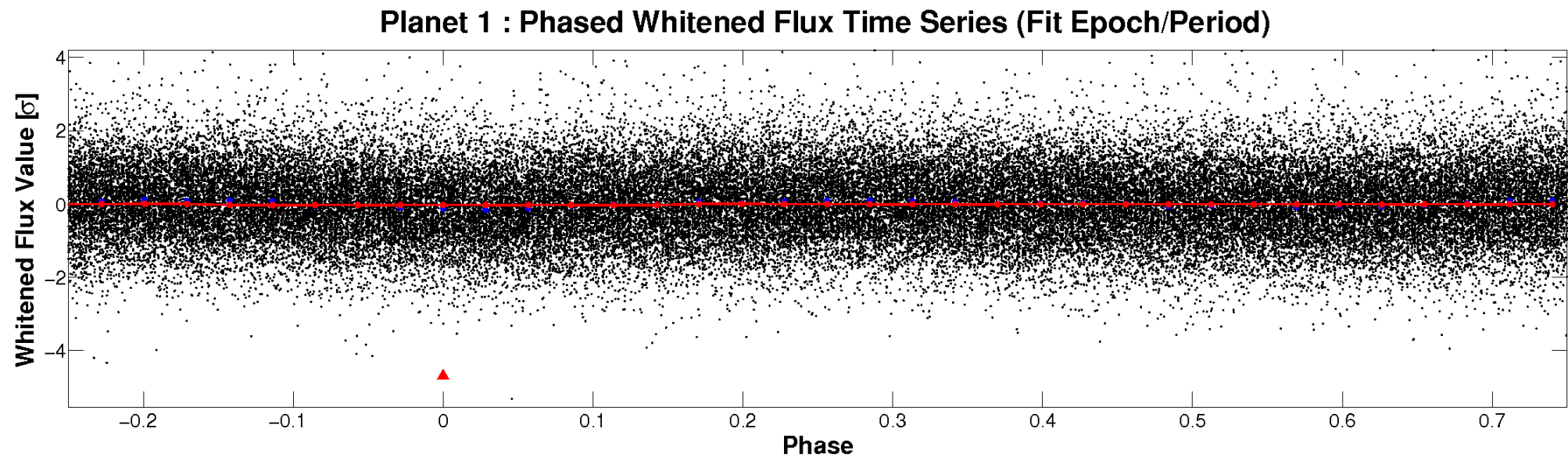
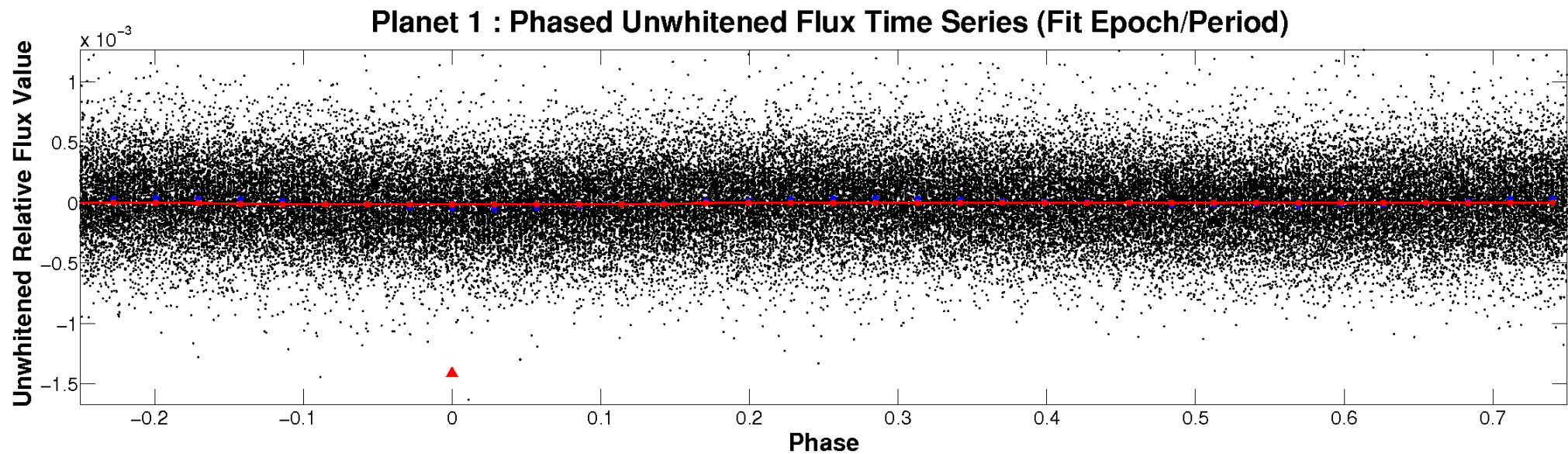


ALT Odd/Even

TCE 008293692-01

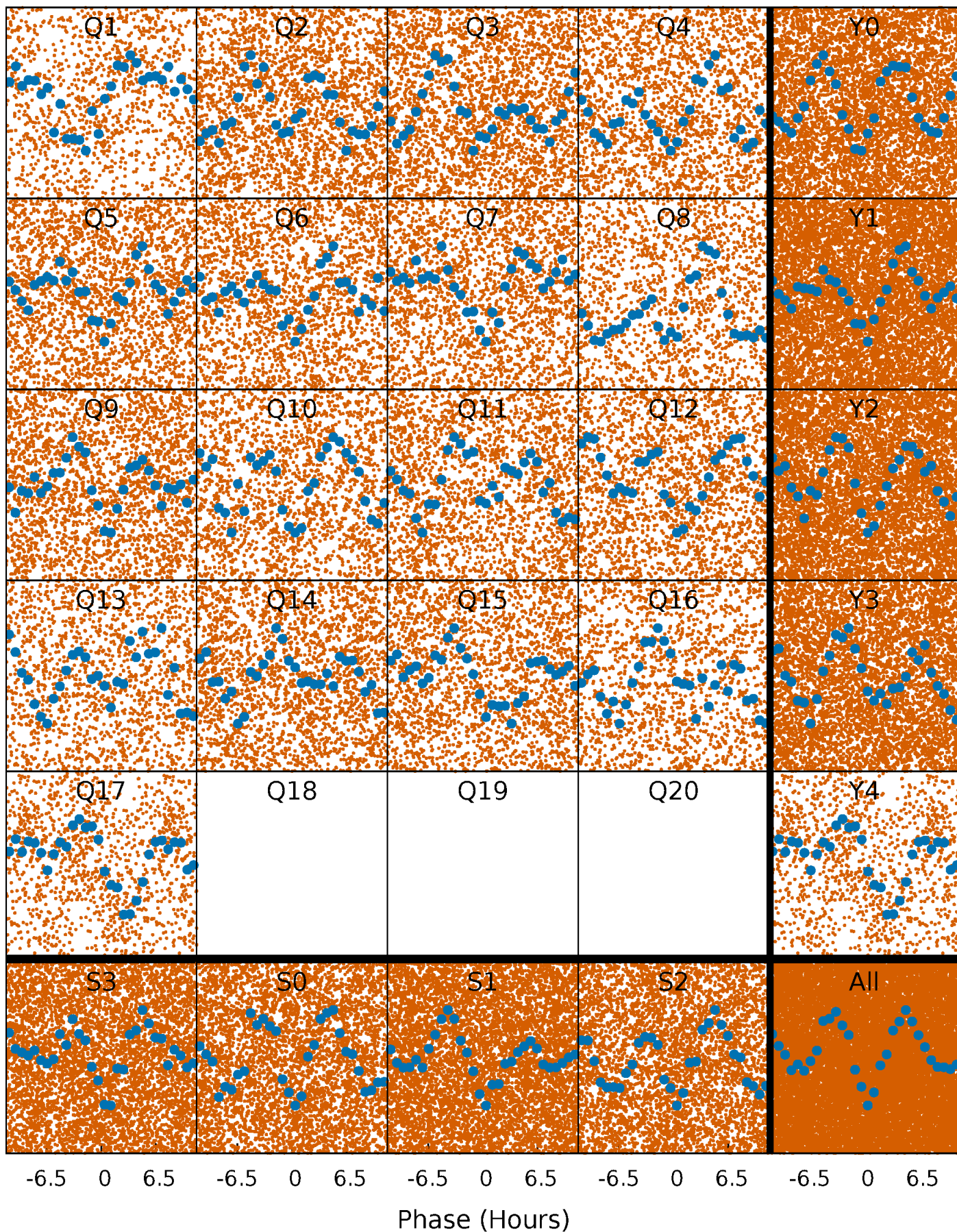


Non-Whitened Vs. Whitened Light Curve



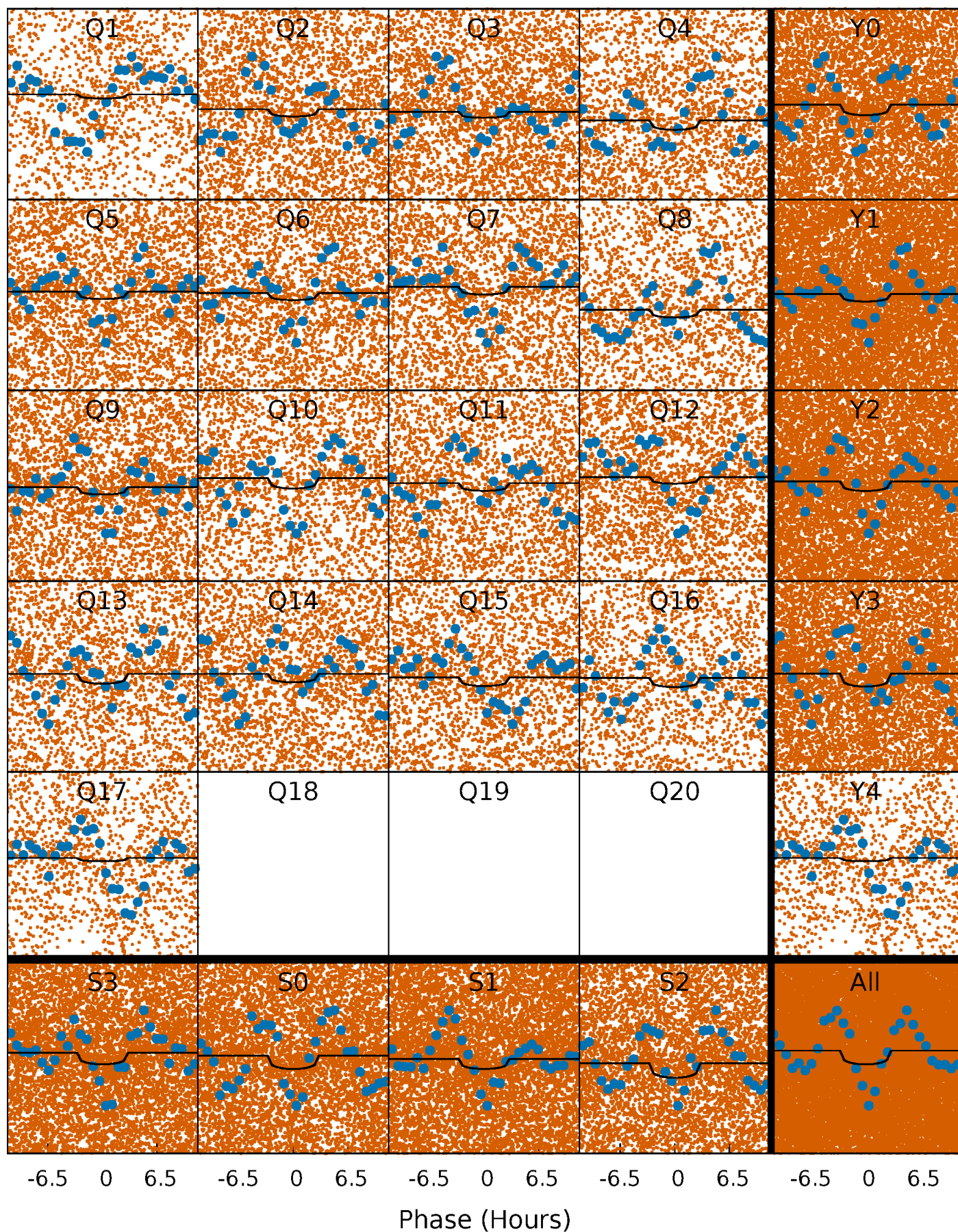
PDC Quarter-Phased Transit Curves

TCE 008293692-01 P= 0.717745 Days $T_0=131.744952$ (BKJD)



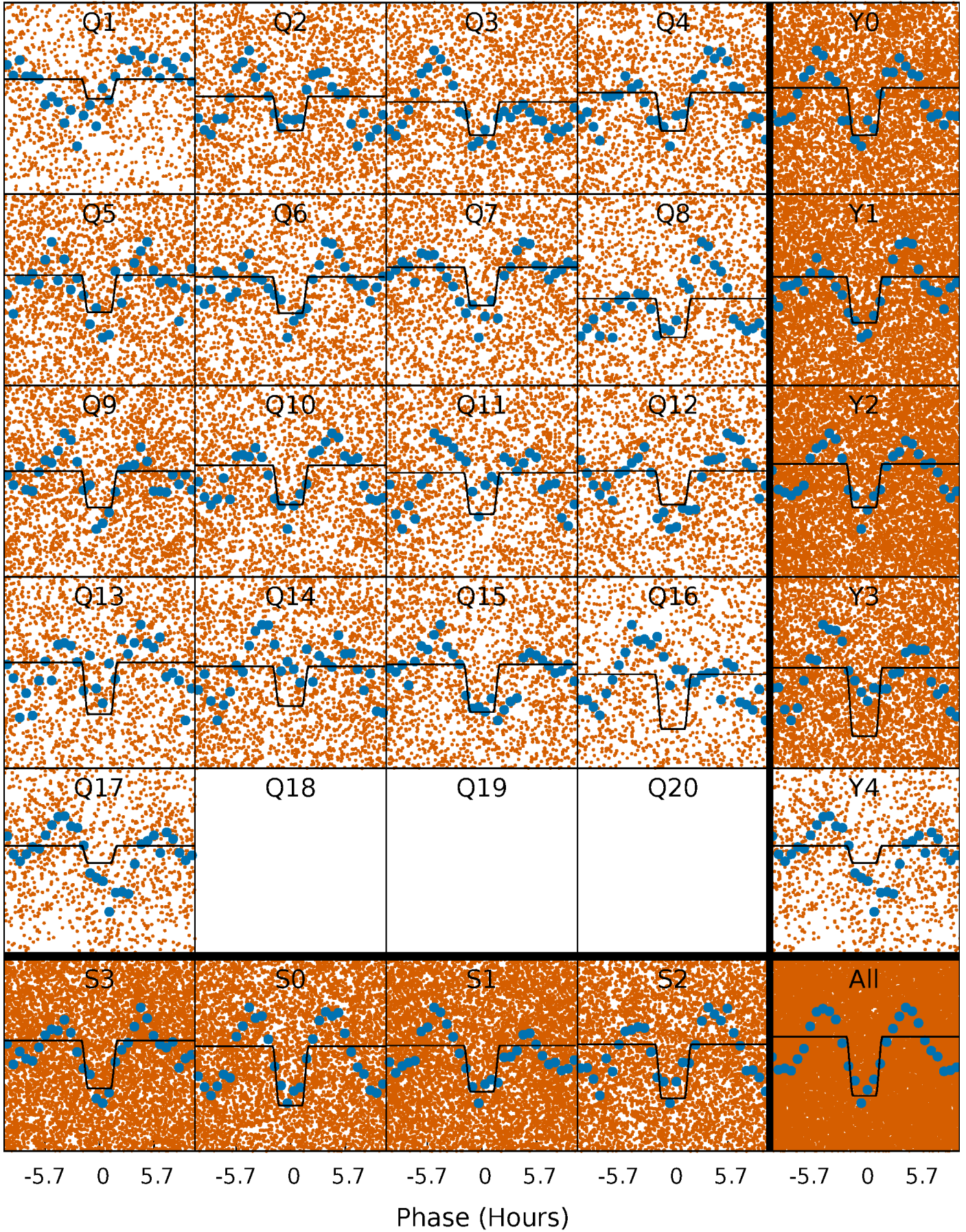
DV Quarter-Phased Transit Curves

TCE 008293692-01 P= 0.717745 Days $T_0=131.744952$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

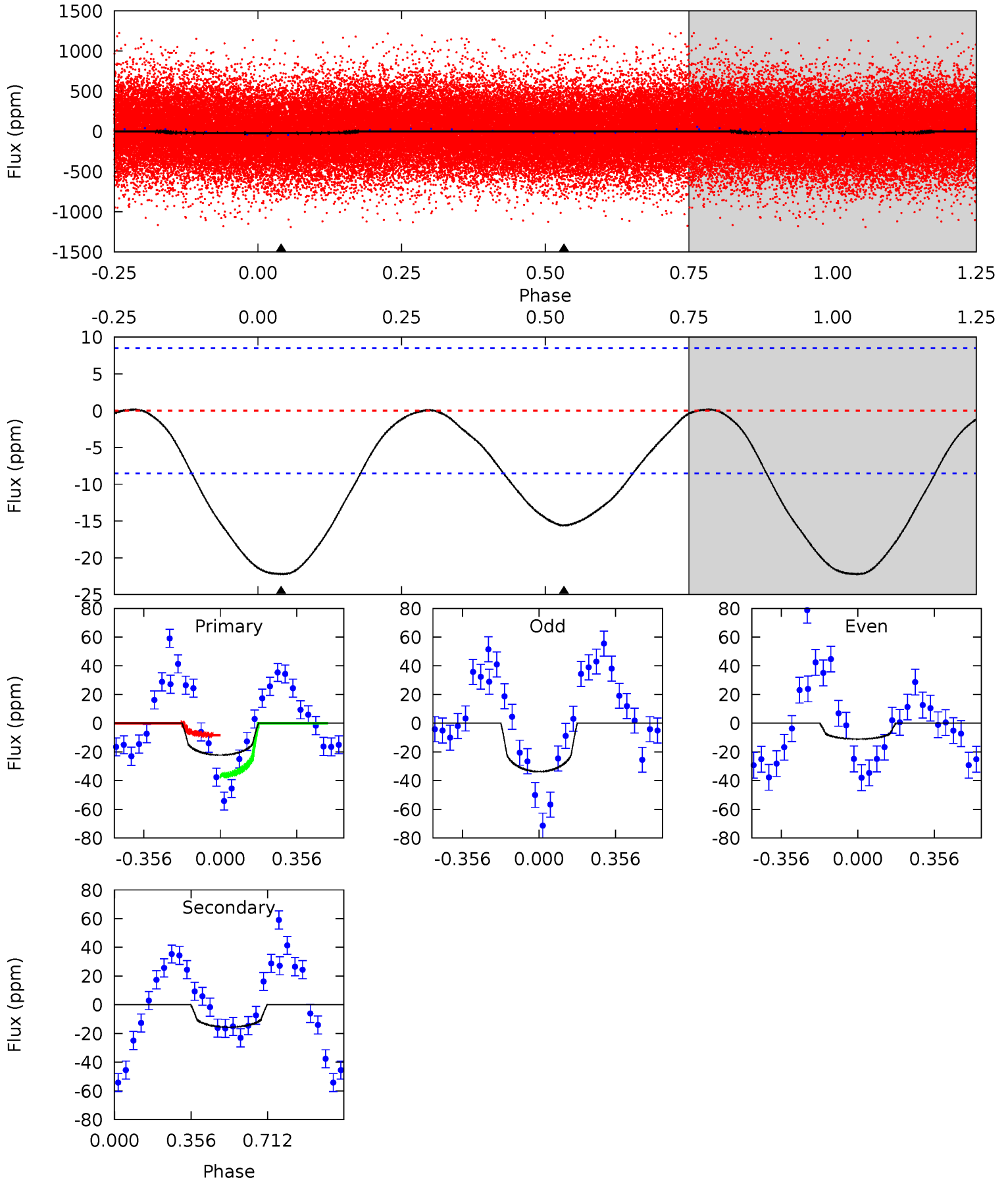
TCE 008293692-01 P= 0.717786 Days $T_0=131.725696$ (BKJD)



DV Model-Shift Uniqueness Test

008293692-01, P = 0.717745 Days, E = 131.027207 Days

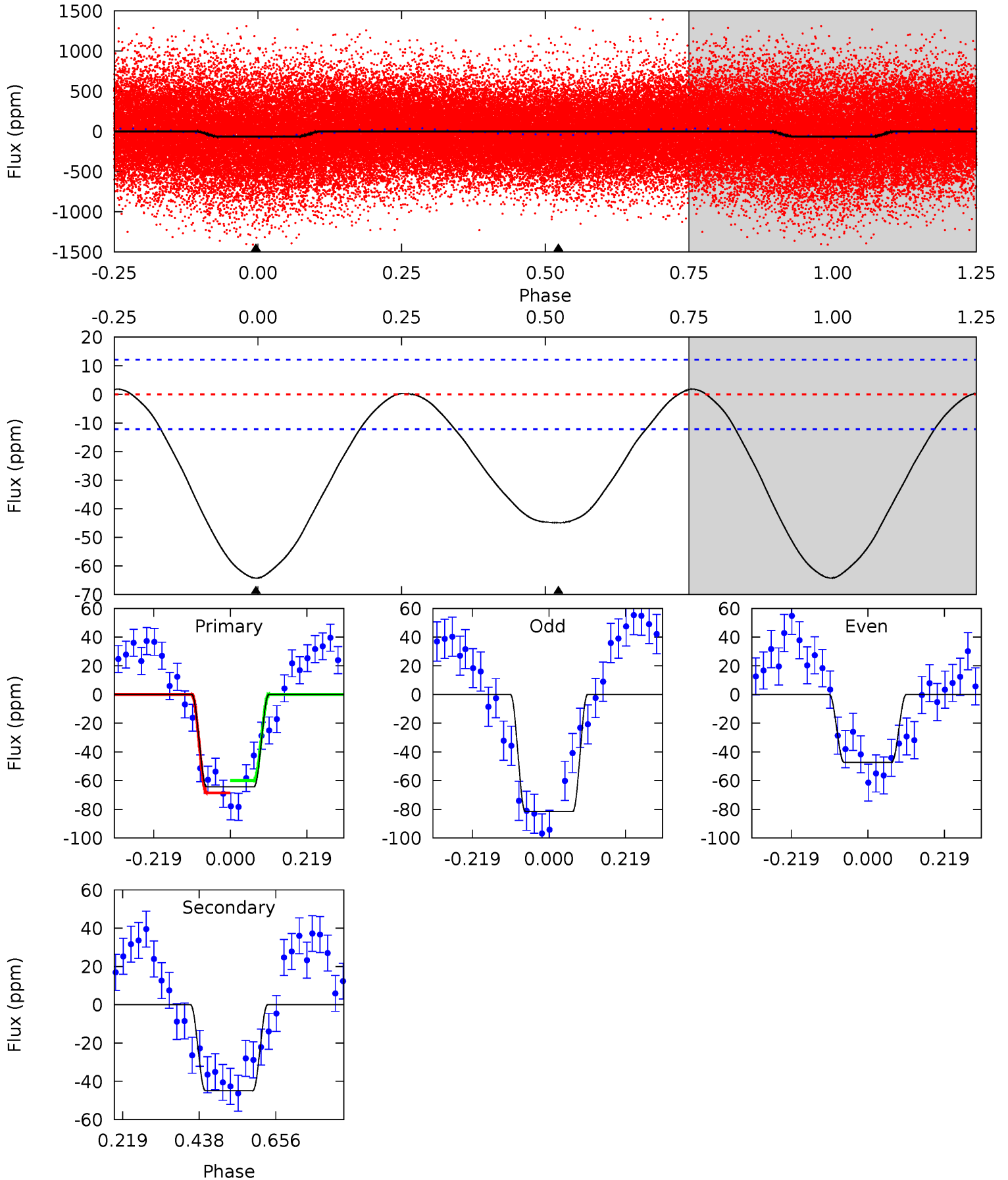
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.2	7.86	0	0	4.29	0.92	0.10	11.2	11.2	7.86	7.86	5.79	0.93	0.01	7.19



Alt Model-Shift Uniqueness Test

008293692-01, P = 0.717786 Days, E = 131.007910 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
23.3	16.3	0	0	4.40	1.23	0.53	23.3	23.3	16.3	16.3	5.95	0.99	0.03	1.52



Stellar Parameters For KIC 008293692

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7521^{+235}_{-314}	$3.838^{+0.345}_{-0.115}$	$-0.260^{+0.250}_{-0.350}$	$2.652^{+0.397}_{-1.113}$	$1.767^{+0.182}_{-0.424}$	$0.134^{+0.384}_{-0.049}$
	+3%/-4%	+9%/-3%	+96%/-135%	+15%/-42%	+10%/-24%	+288%/-37%
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 008293692-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-16 ± 2	$1.32^{+1.22}_{-0.86}$	5369^{+376}_{-542}	6280^{+6995}_{-2268}	$1.742^{+12.533}_{-1.280}$
Alt.	-45 ± 3	$2.35^{+1.61}_{-1.32}$	5398^{+368}_{-569}	6038^{+4813}_{-1587}	$1.579^{+6.555}_{-1.020}$

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 $A_{obs} \gg 1.0$

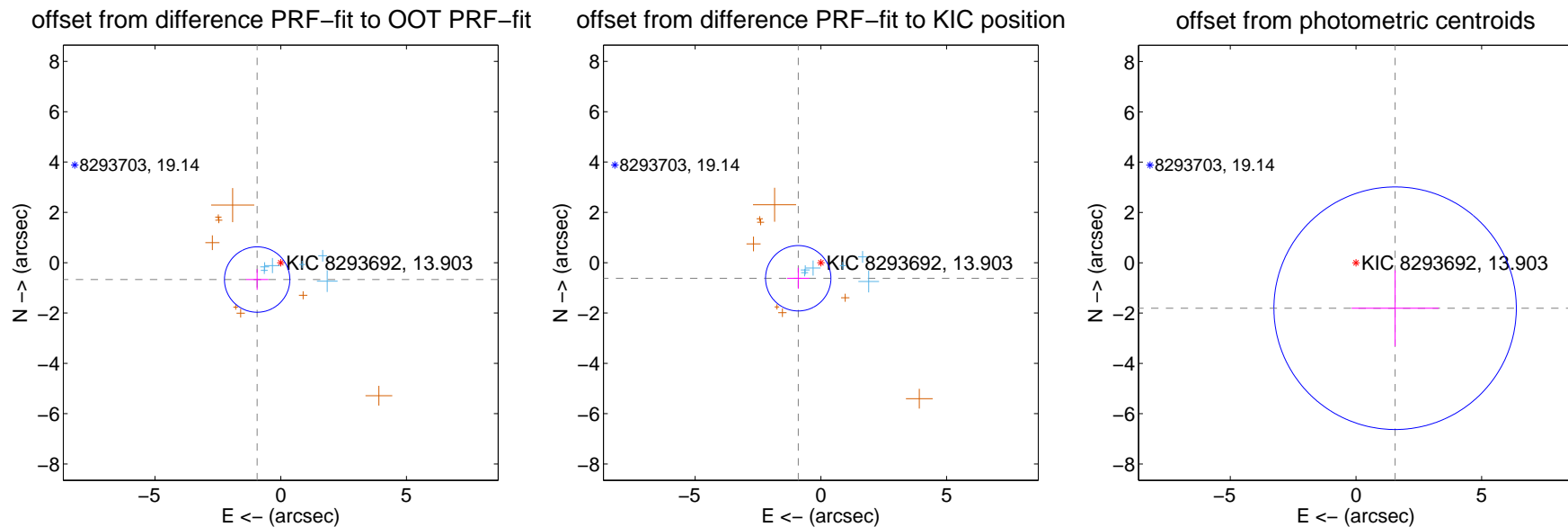
DV Centroid Data

Supplemental centroid analysis for 008293692-01. Kepler magnitude: 13.90. Transit SNR 4.71

There are 6 quarters with good PRF difference image offsets

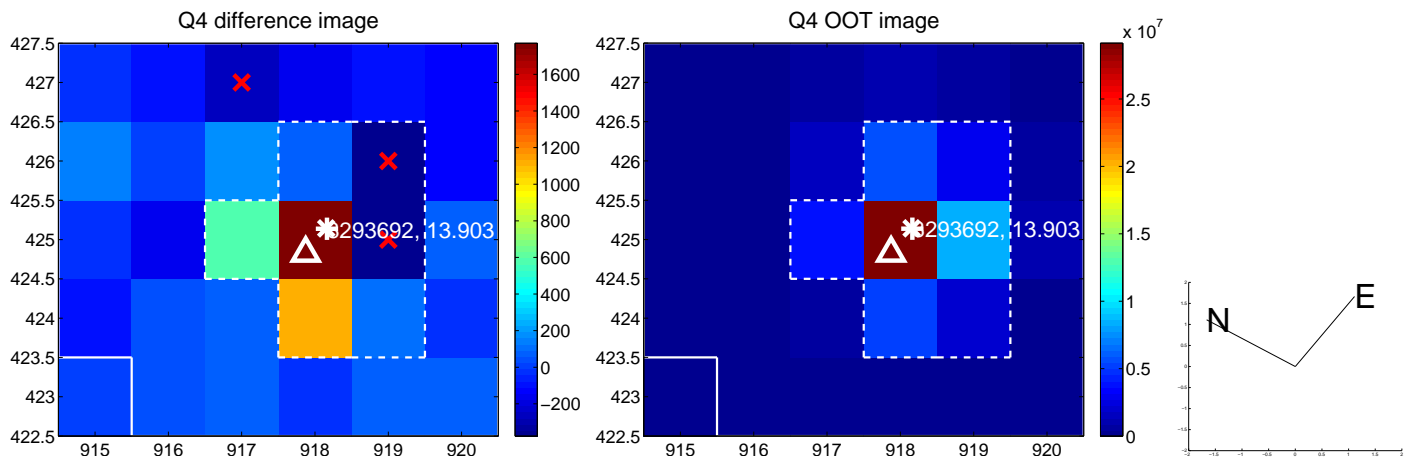
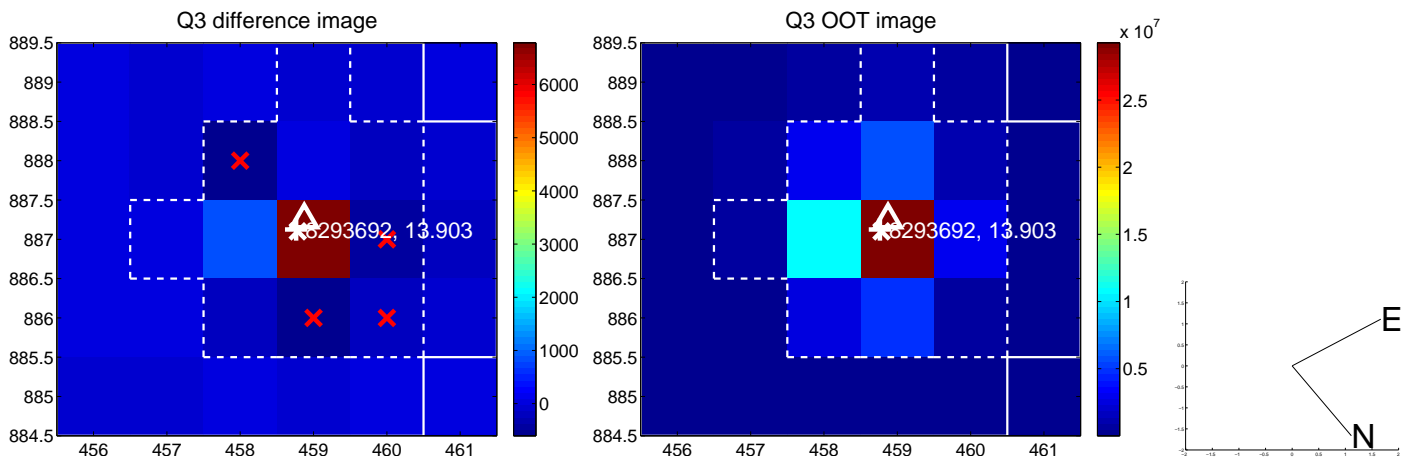
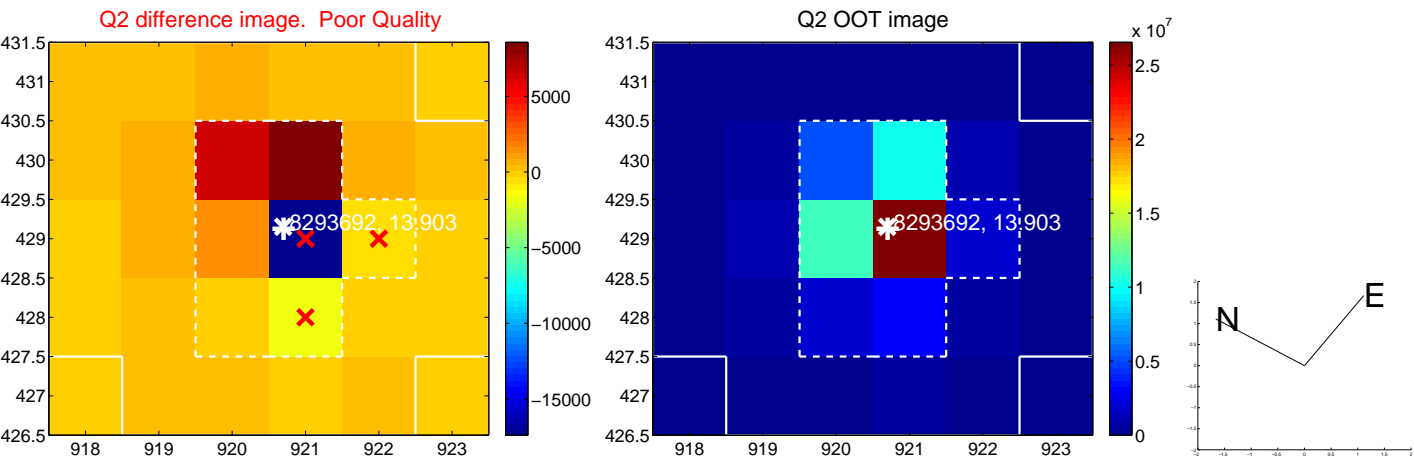
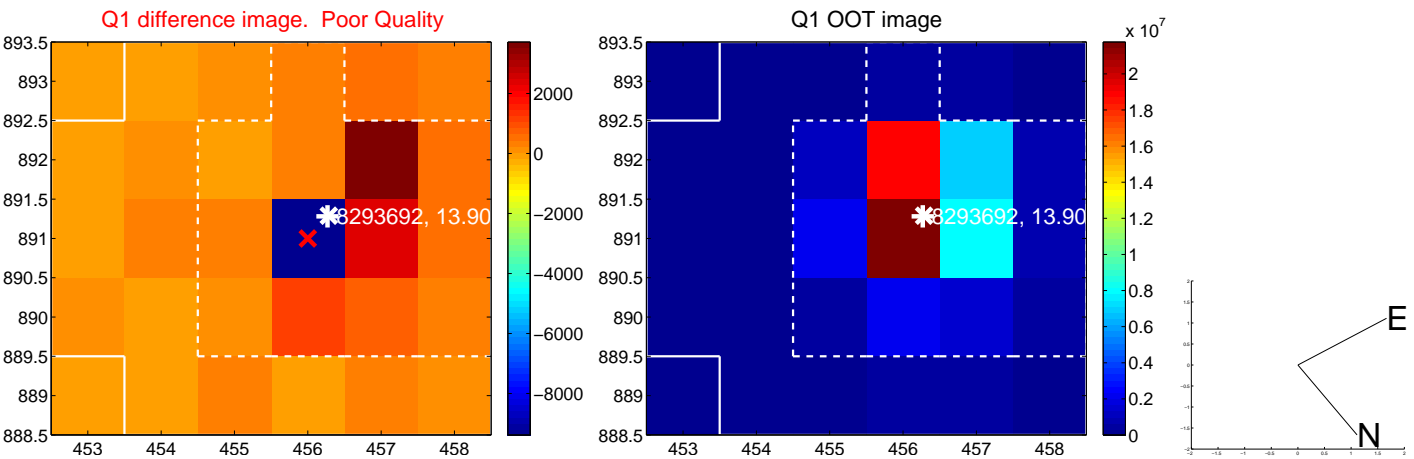
The direct PRF centroid is offset from the target star catalog position by about 0.07 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.153 ± 0.433	2.66	0.939 ± 0.445	-0.670 ± 0.410
PRF-fit source offset from KIC position	1.092 ± 0.433	2.52	0.900 ± 0.441	-0.619 ± 0.417
photometric centroid source offset	2.39 ± 1.61	1.48	-1.56 ± 1.73	-1.81 ± 1.51

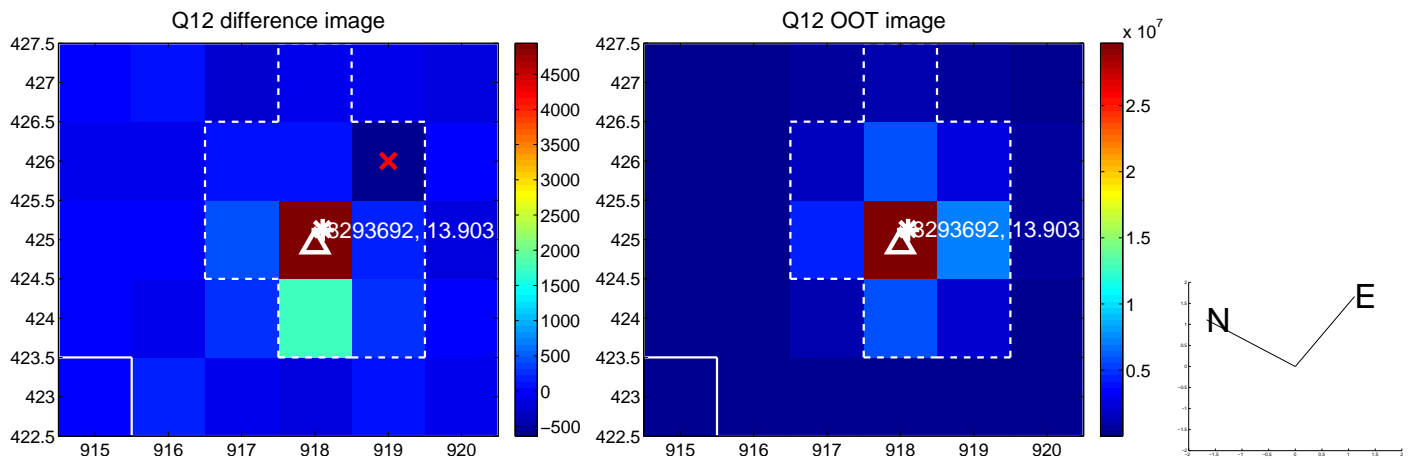
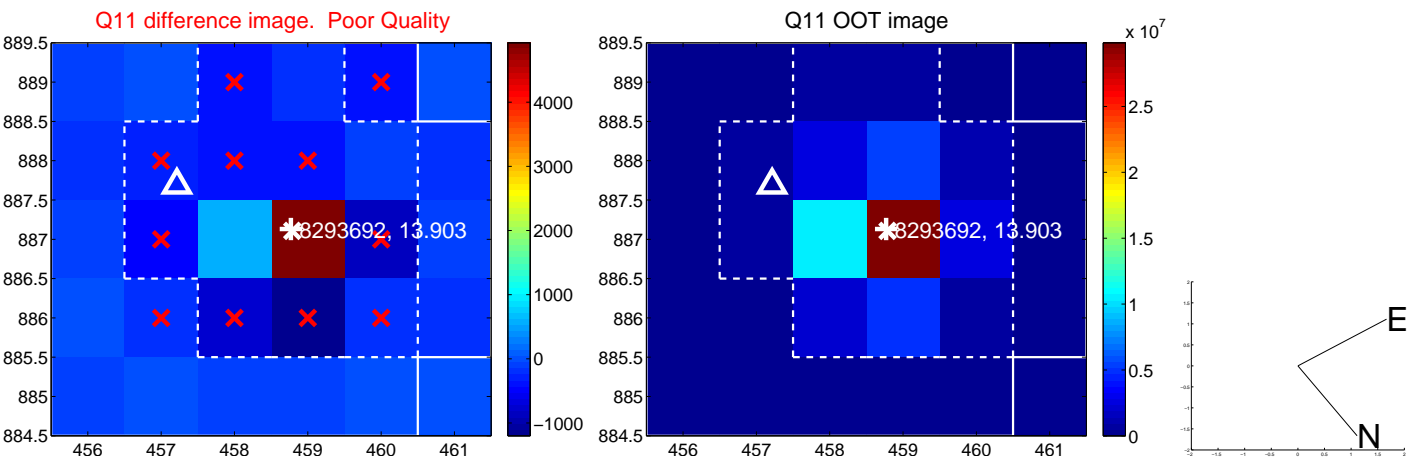
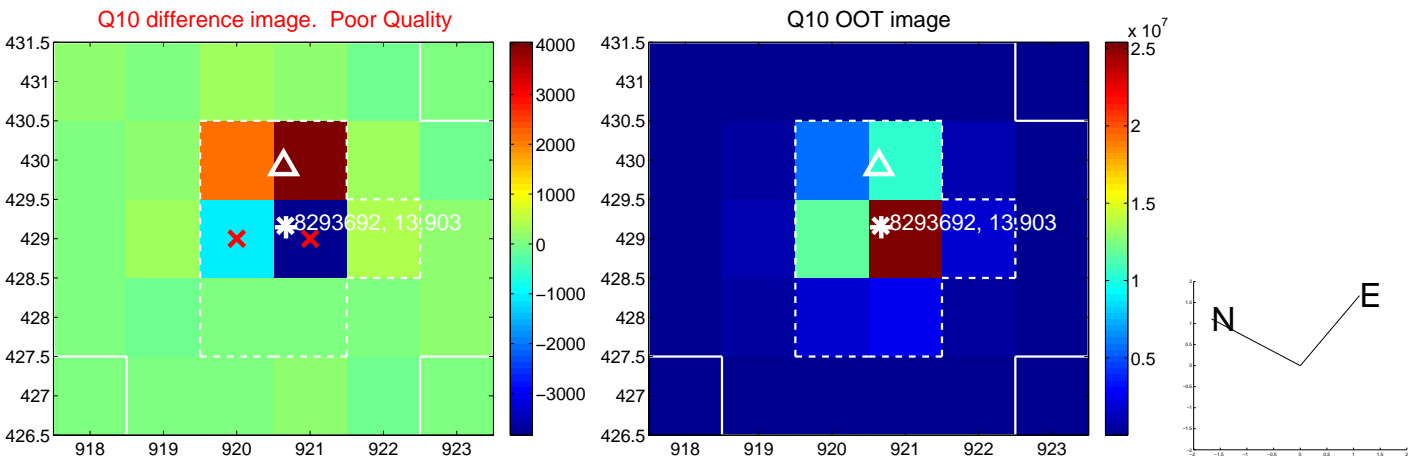
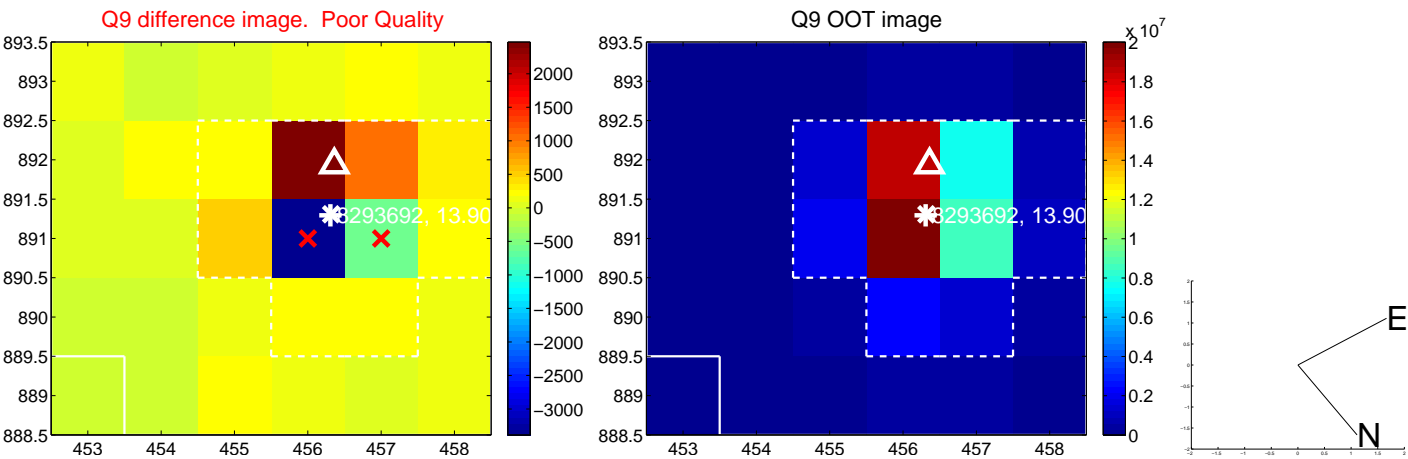


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets**; **Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

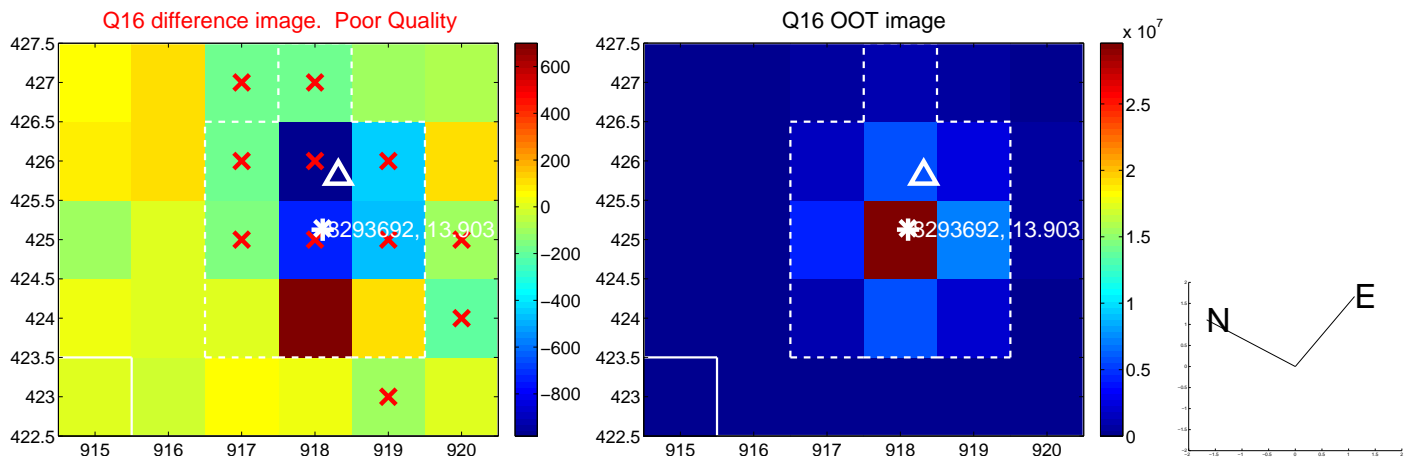
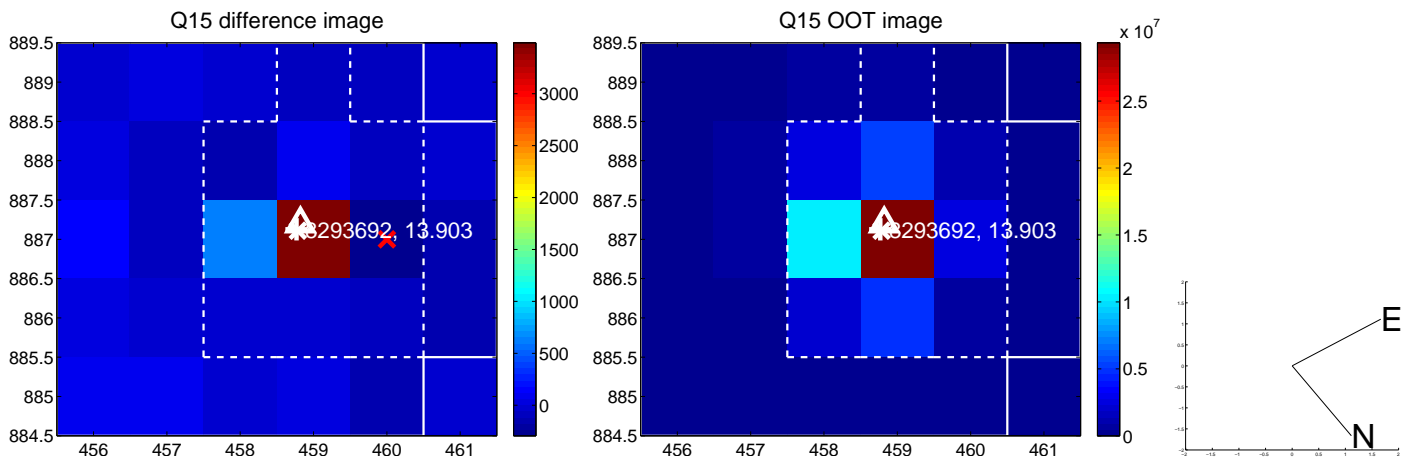
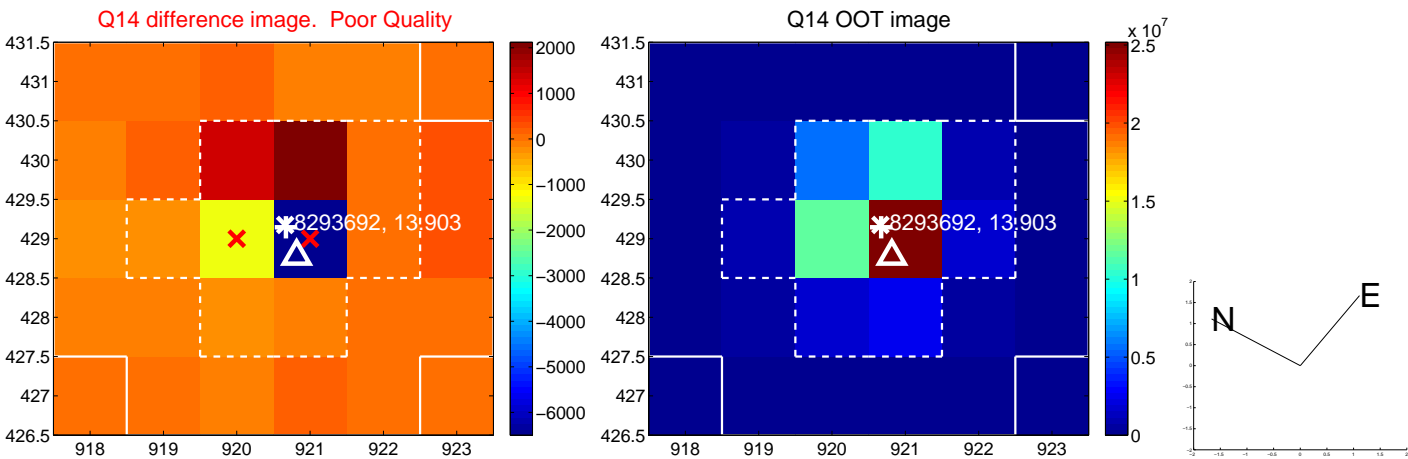
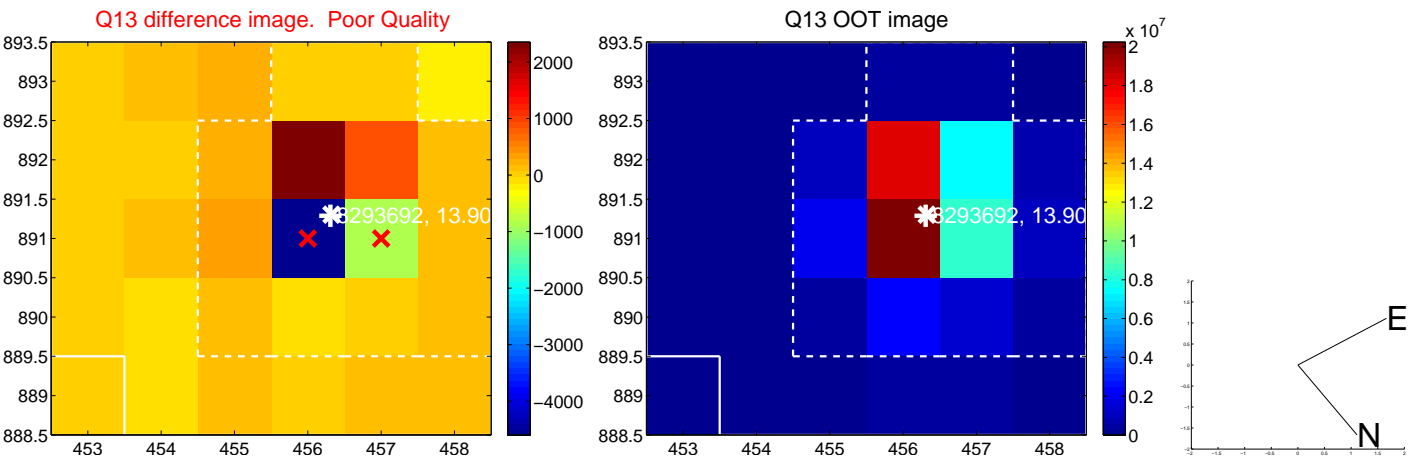
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



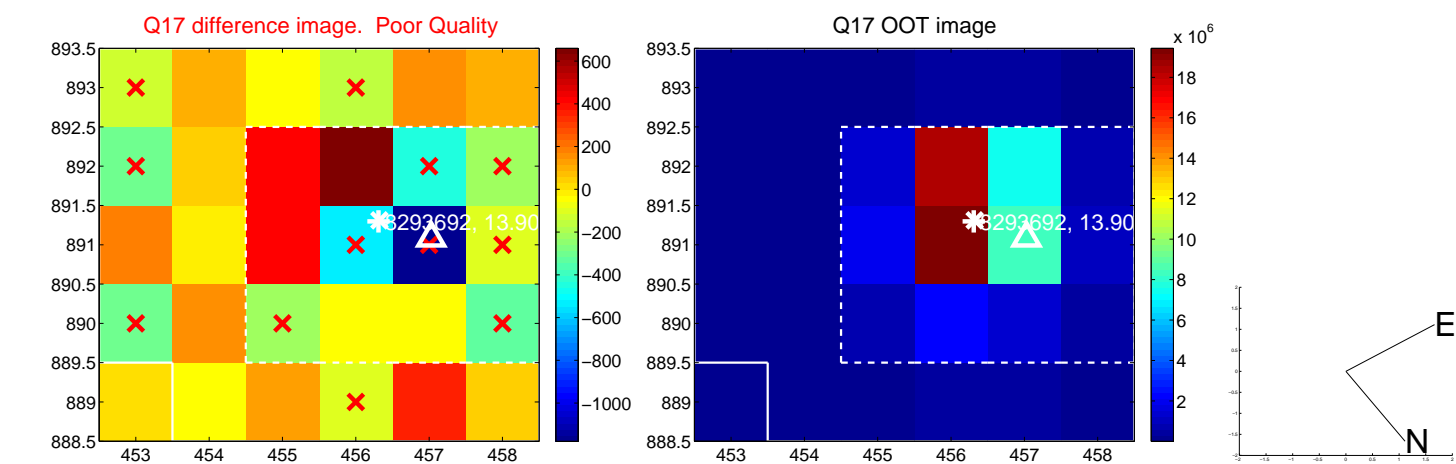
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



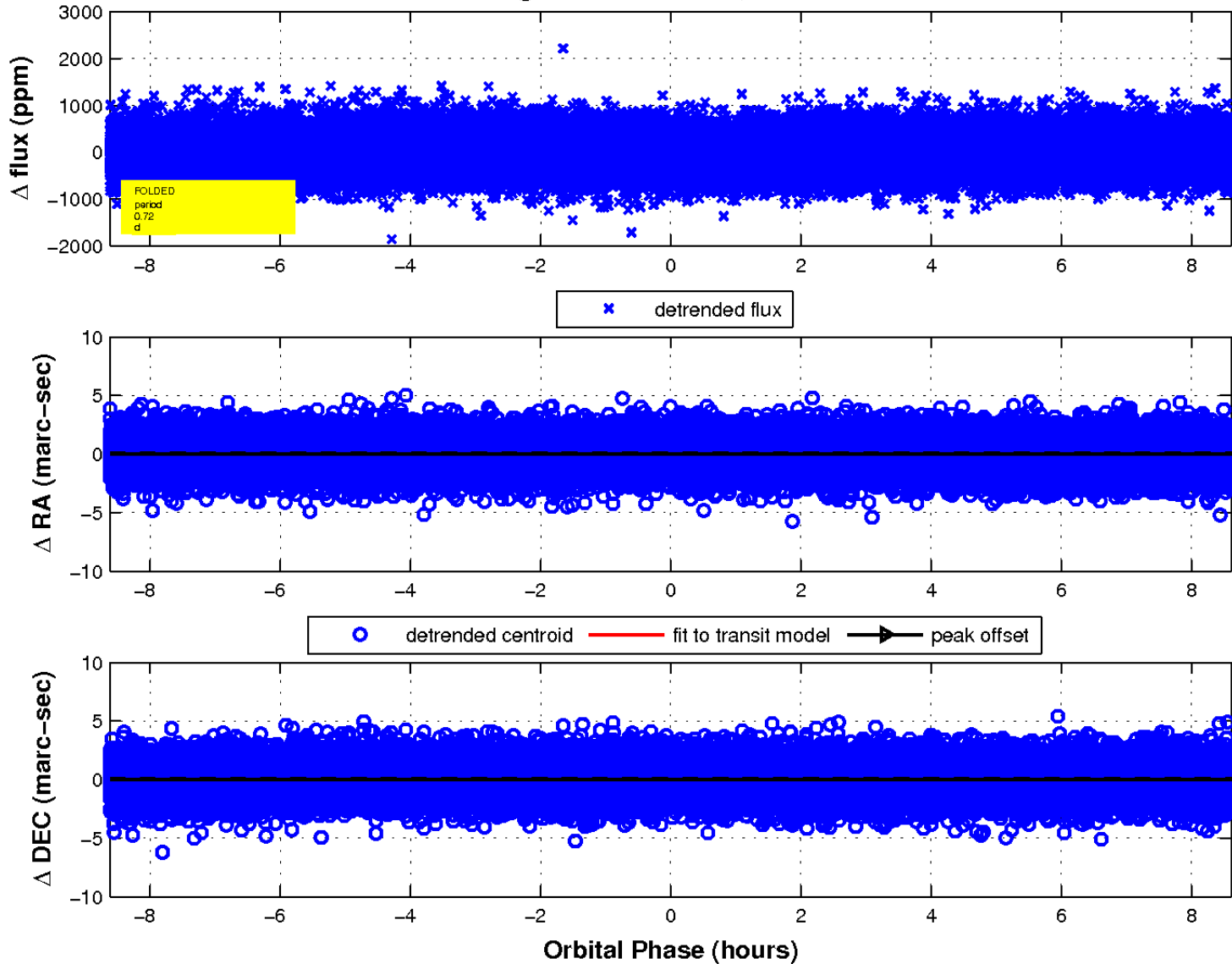
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

