

KIC 008037466

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})
008037466-01	OBS	No	0.798975	131.992136	33.6	9.588	7.2	9.9	0.99	5726	0.57	3458.12

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008037466-01	OBS	FP	0.00	1	0	0	0	LPP_DV—MOD_NONUNIQ_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.

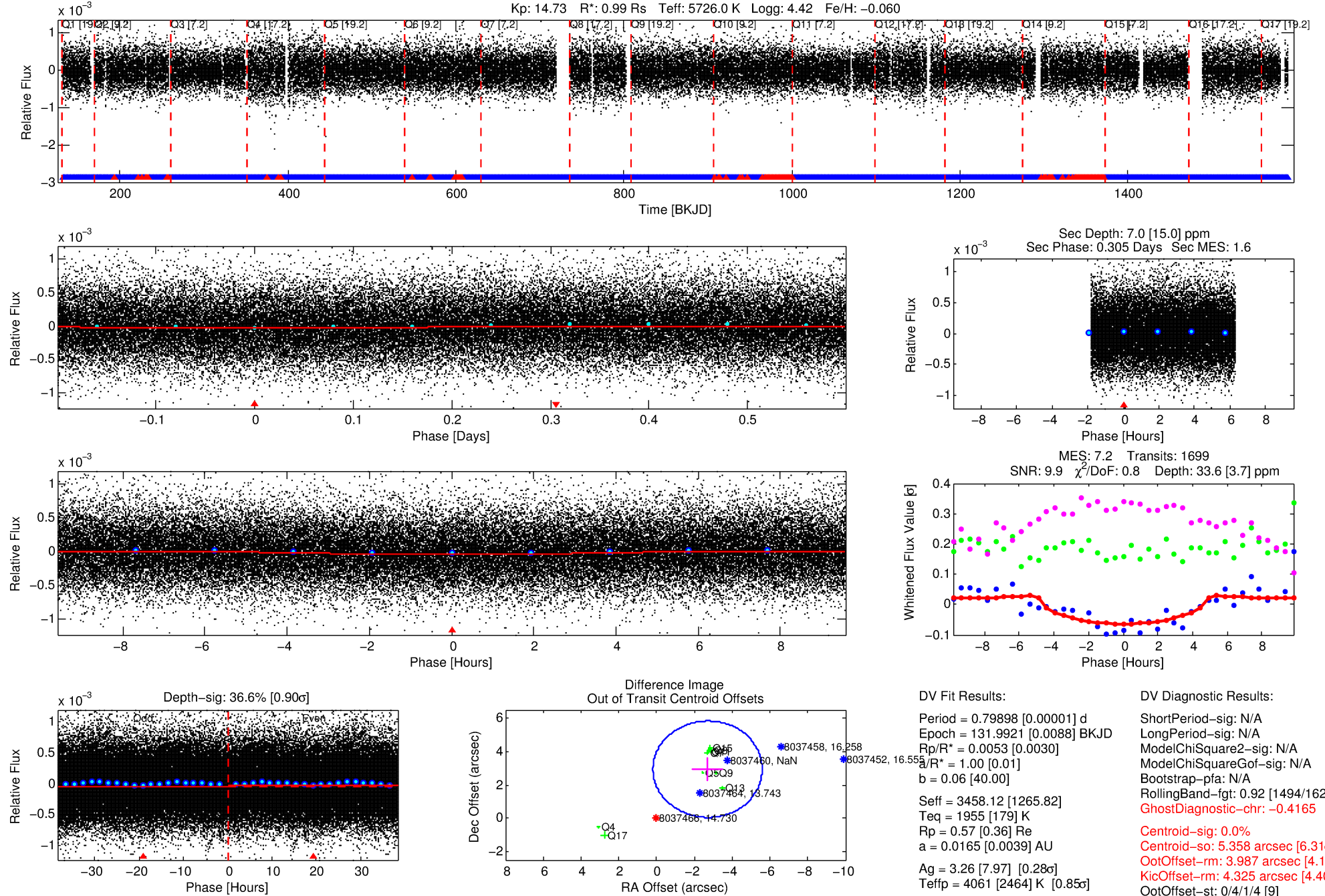
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008037466-01

No Significant Match Found

DV One-Page Summary

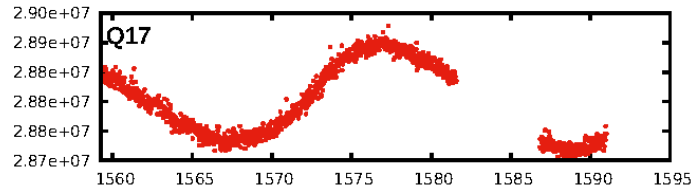
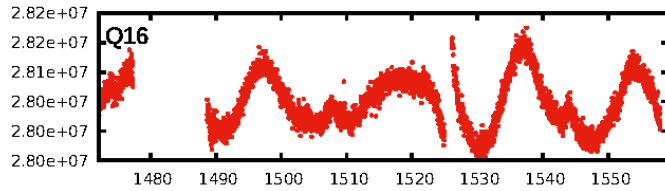
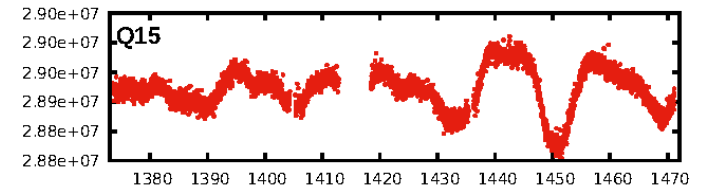
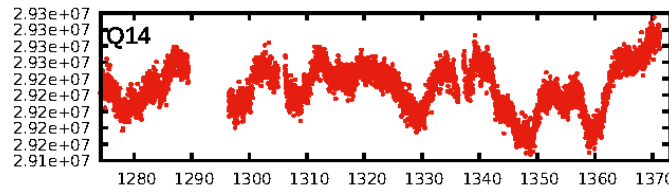
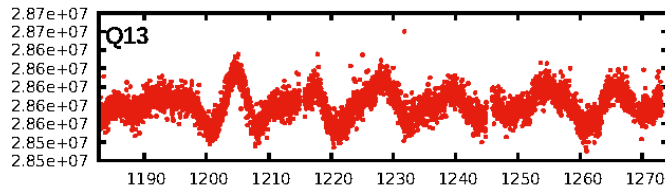
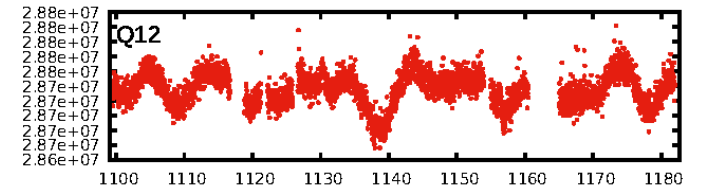
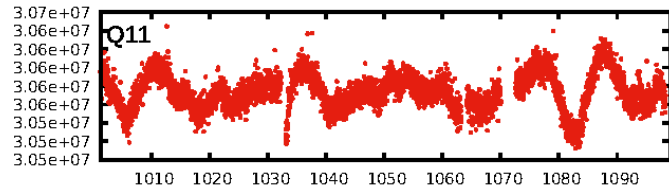
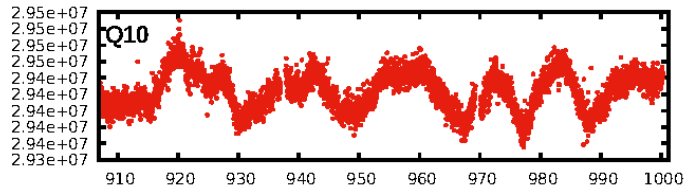
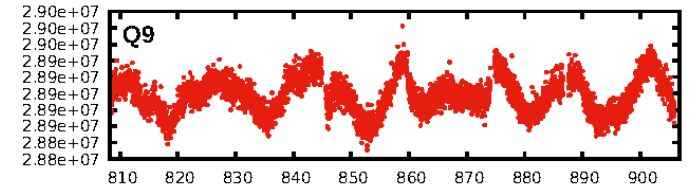
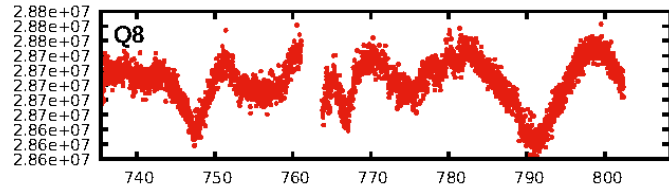
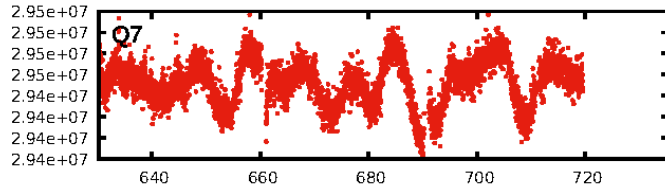
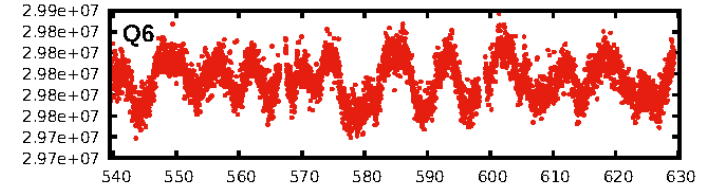
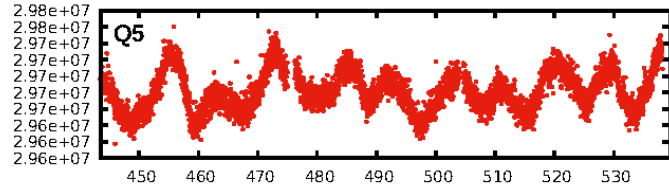
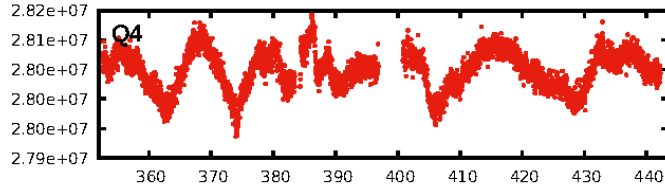
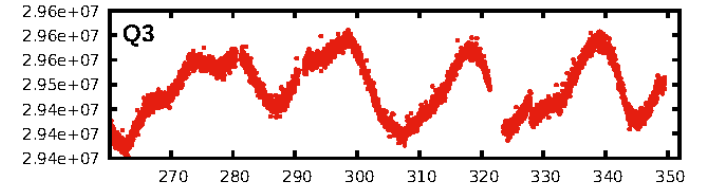
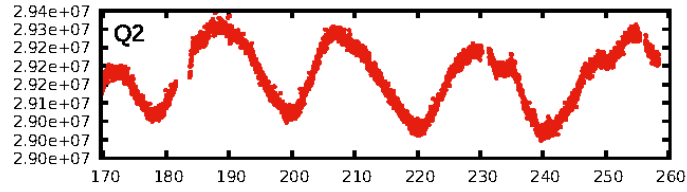
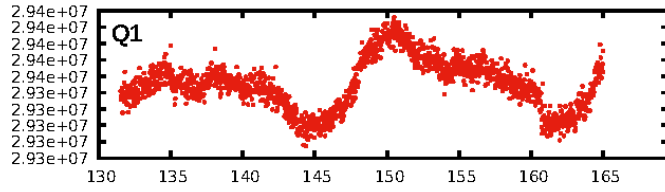
KIC: 8037466 Candidate: 1 of 1 Period: 0.799 d



Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 04:03:49 Z

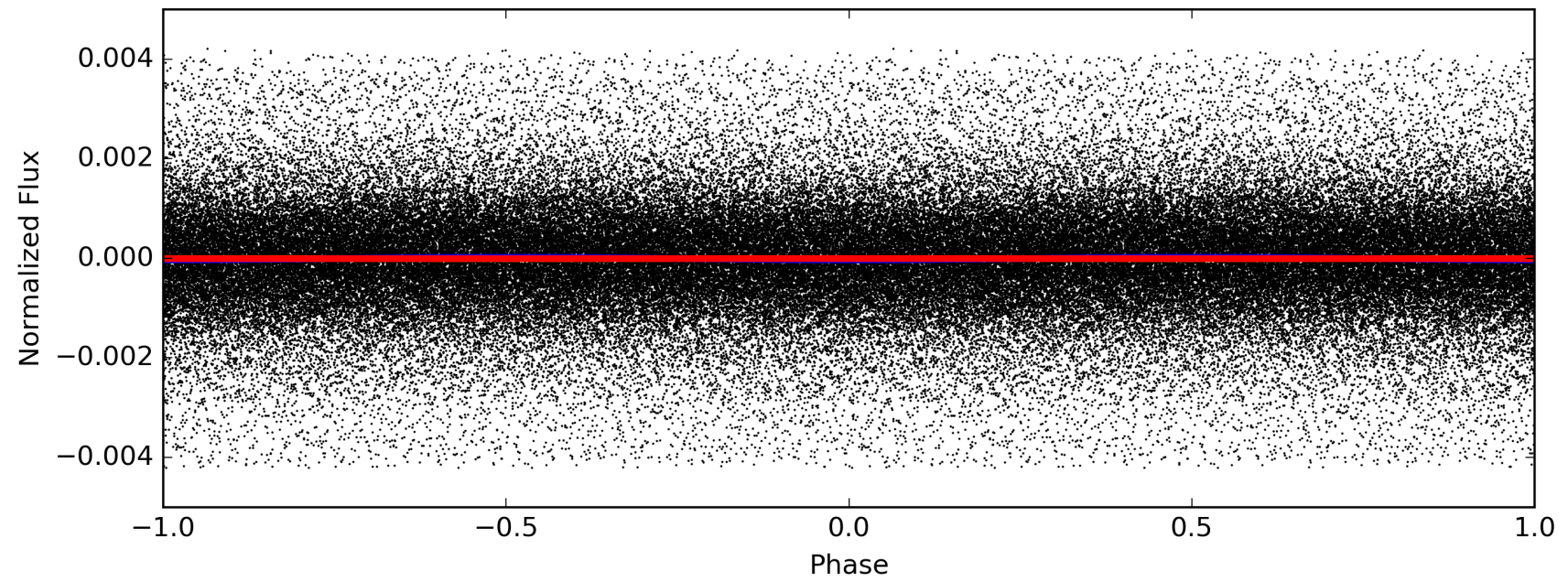
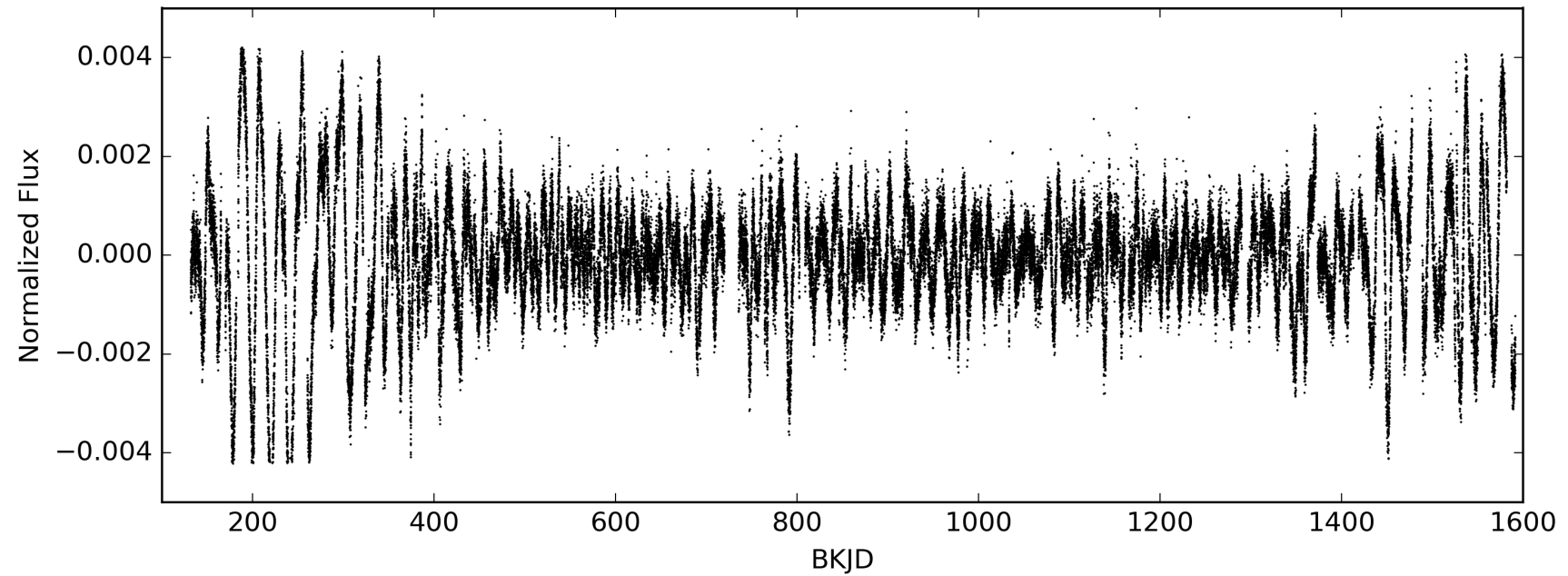
This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

TCE 008037466-01, PDC Light Curves



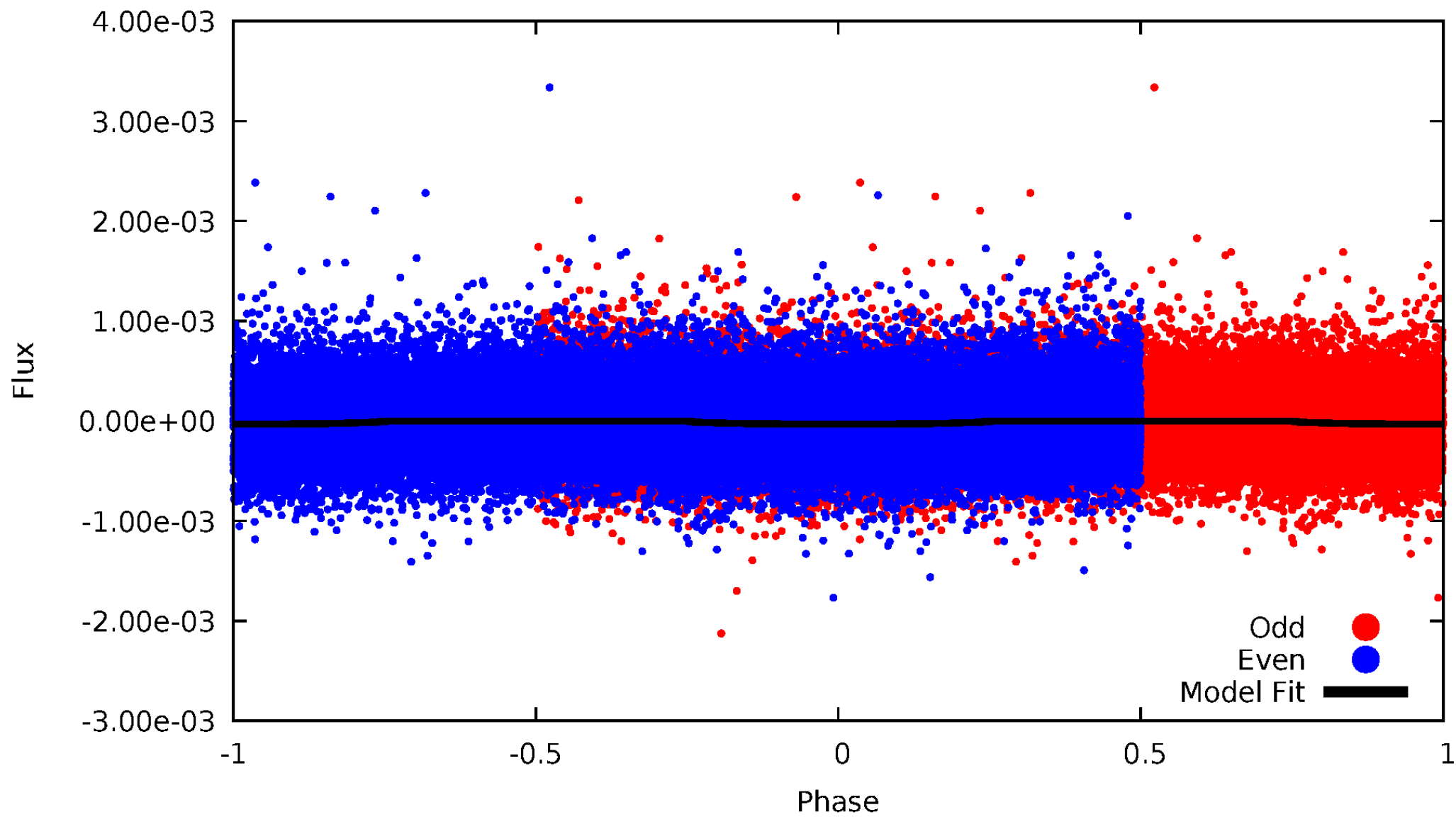
TCE 008037466-01

— P = 0.399 days — P = 0.799 days — P = 1.598 days



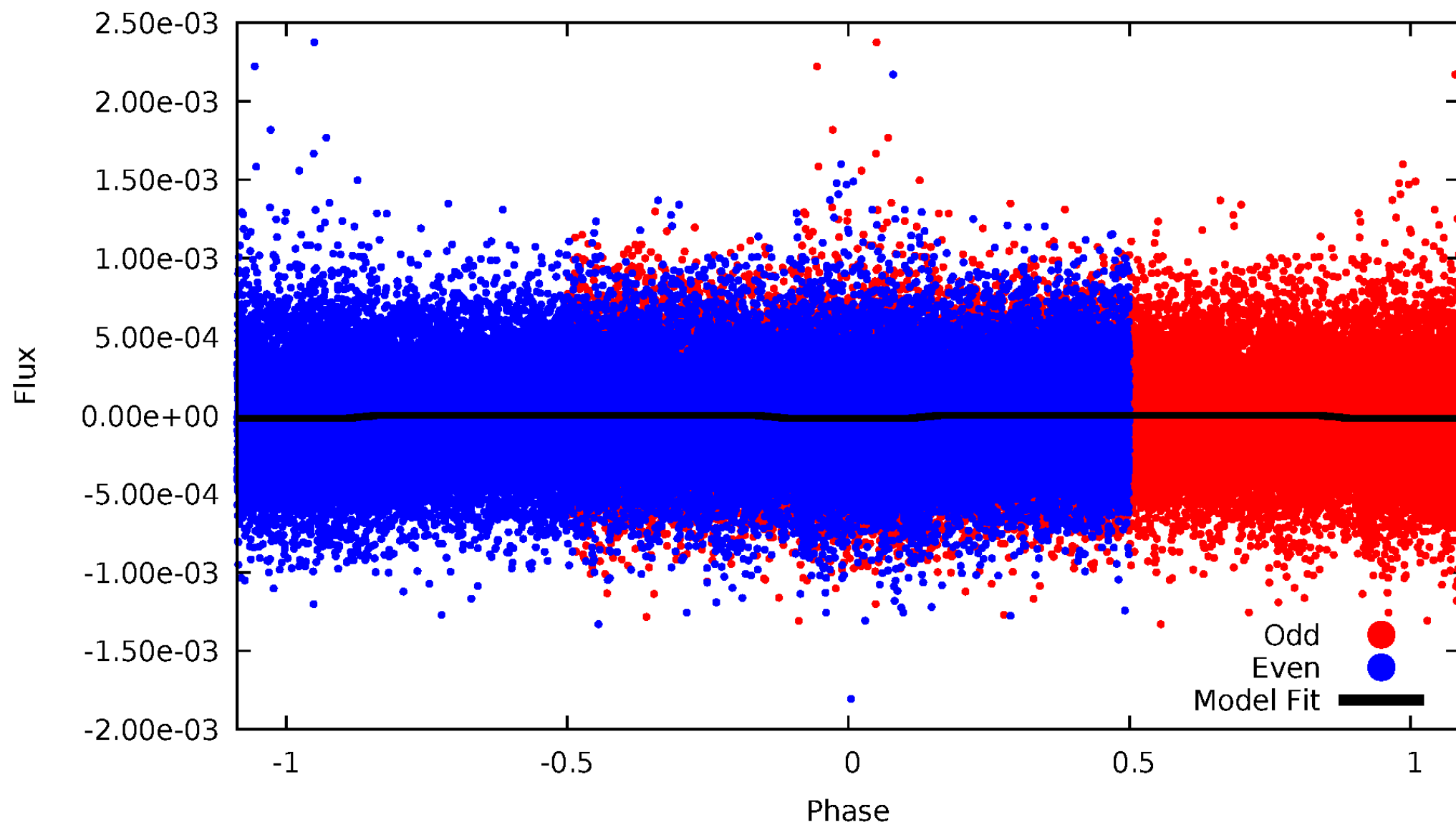
DV Odd/Even

TCE 008037466-01



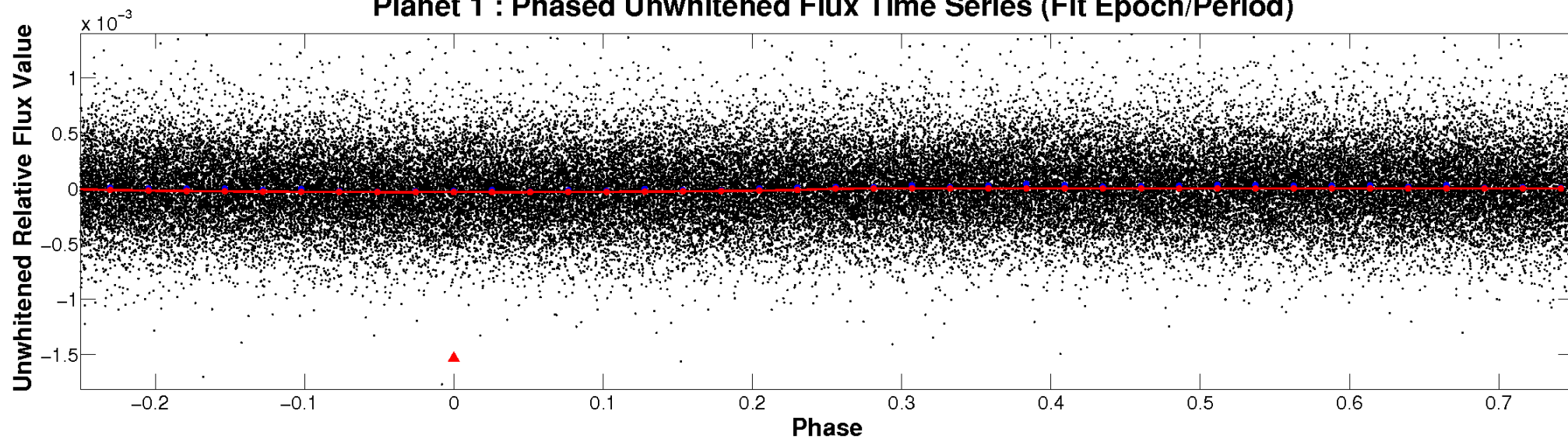
ALT Odd/Even

TCE 008037466-01

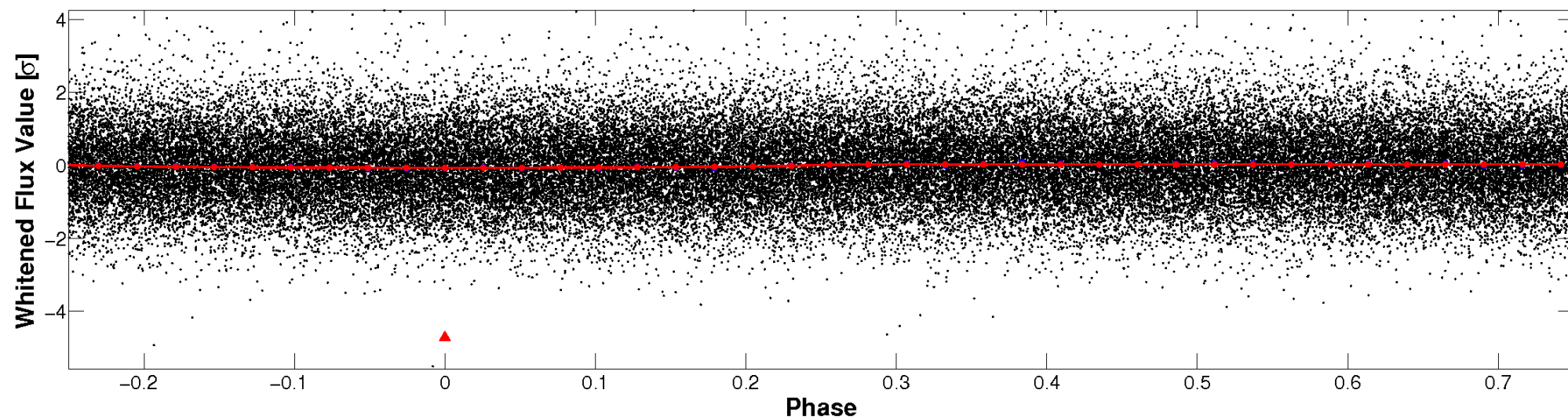


Non-Whitened Vs. Whitened Light Curve

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

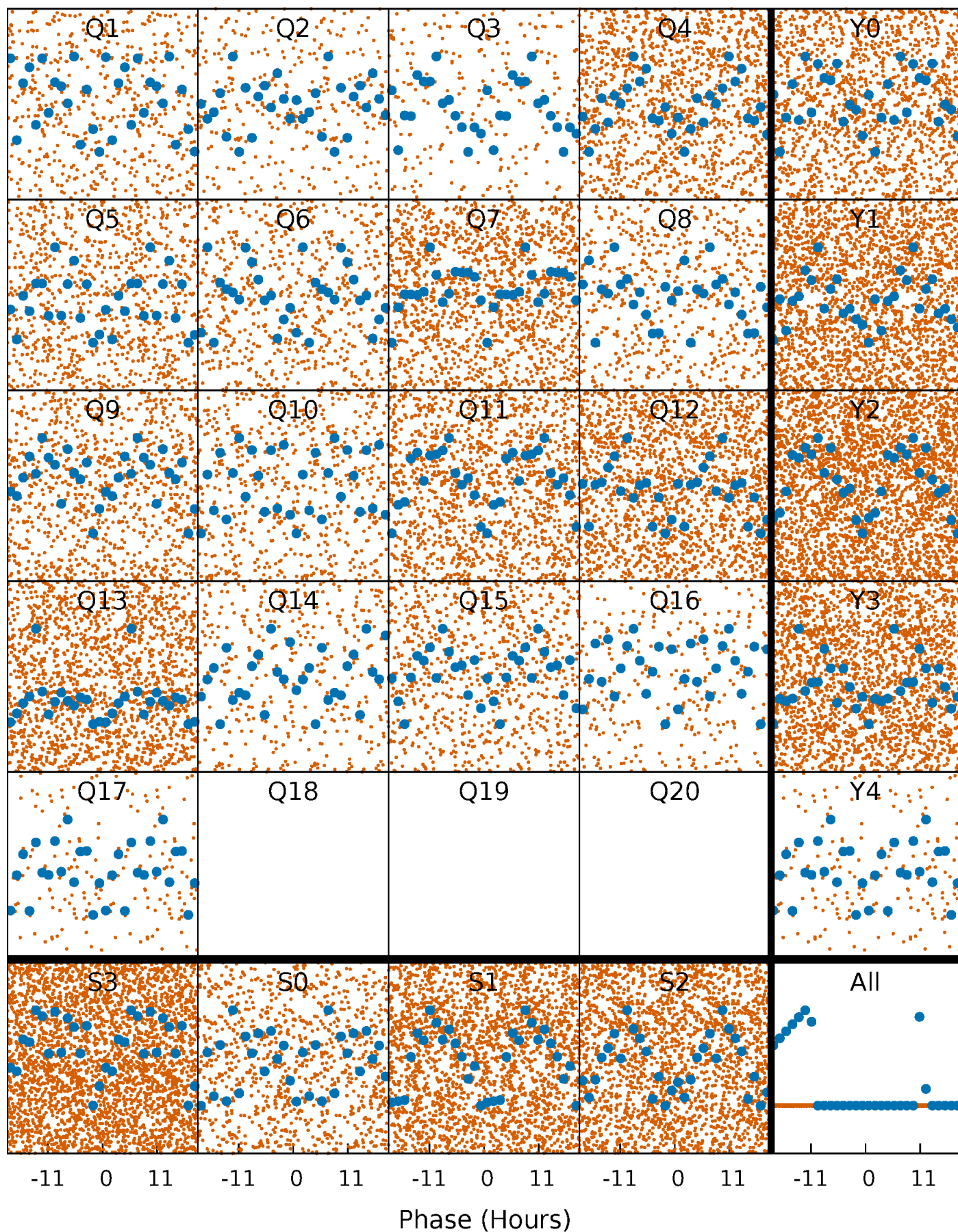


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



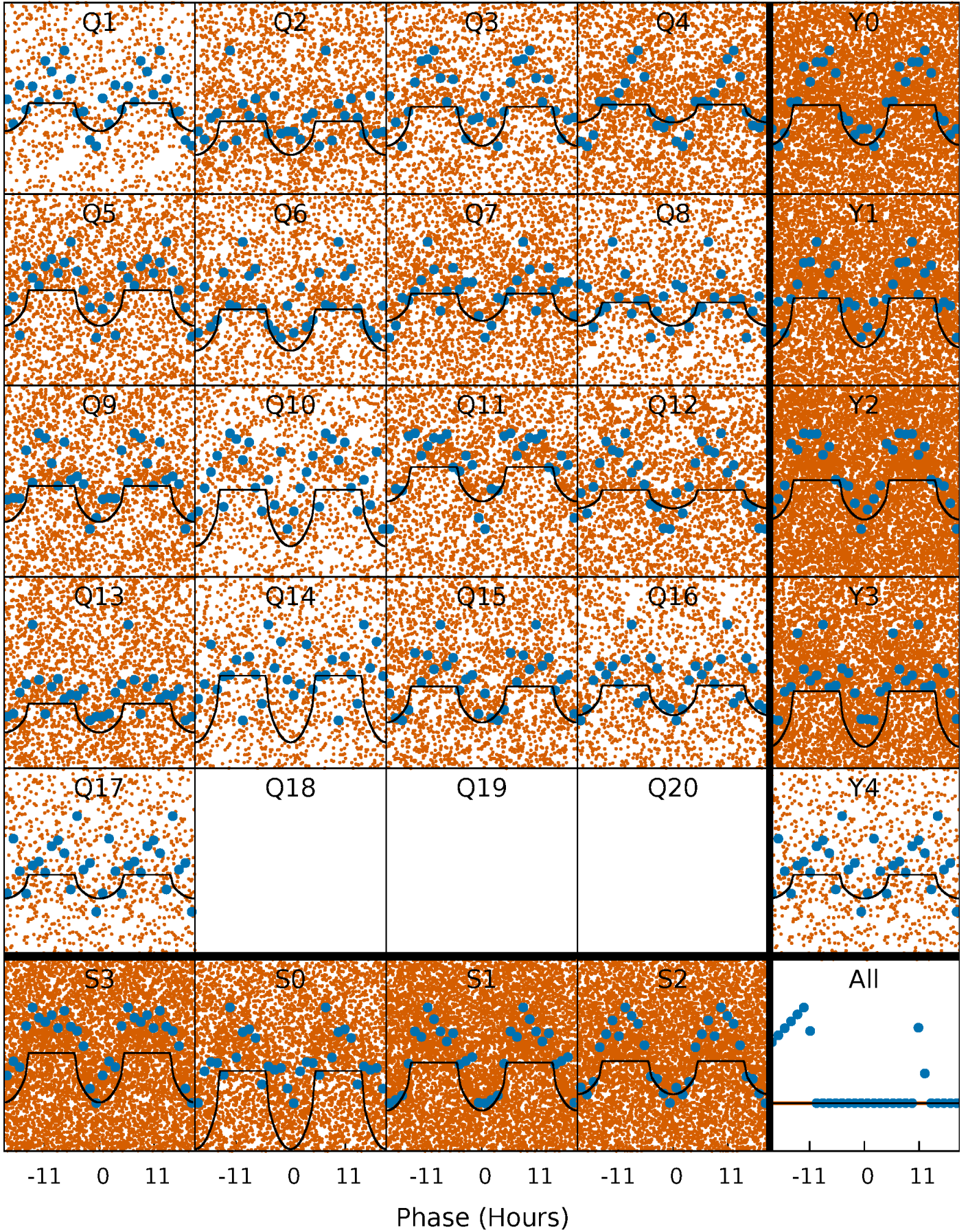
PDC Quarter-Phased Transit Curves

TCE 008037466-01 P= 0.798975 Days $T_0=131.992136$ (BKJD)



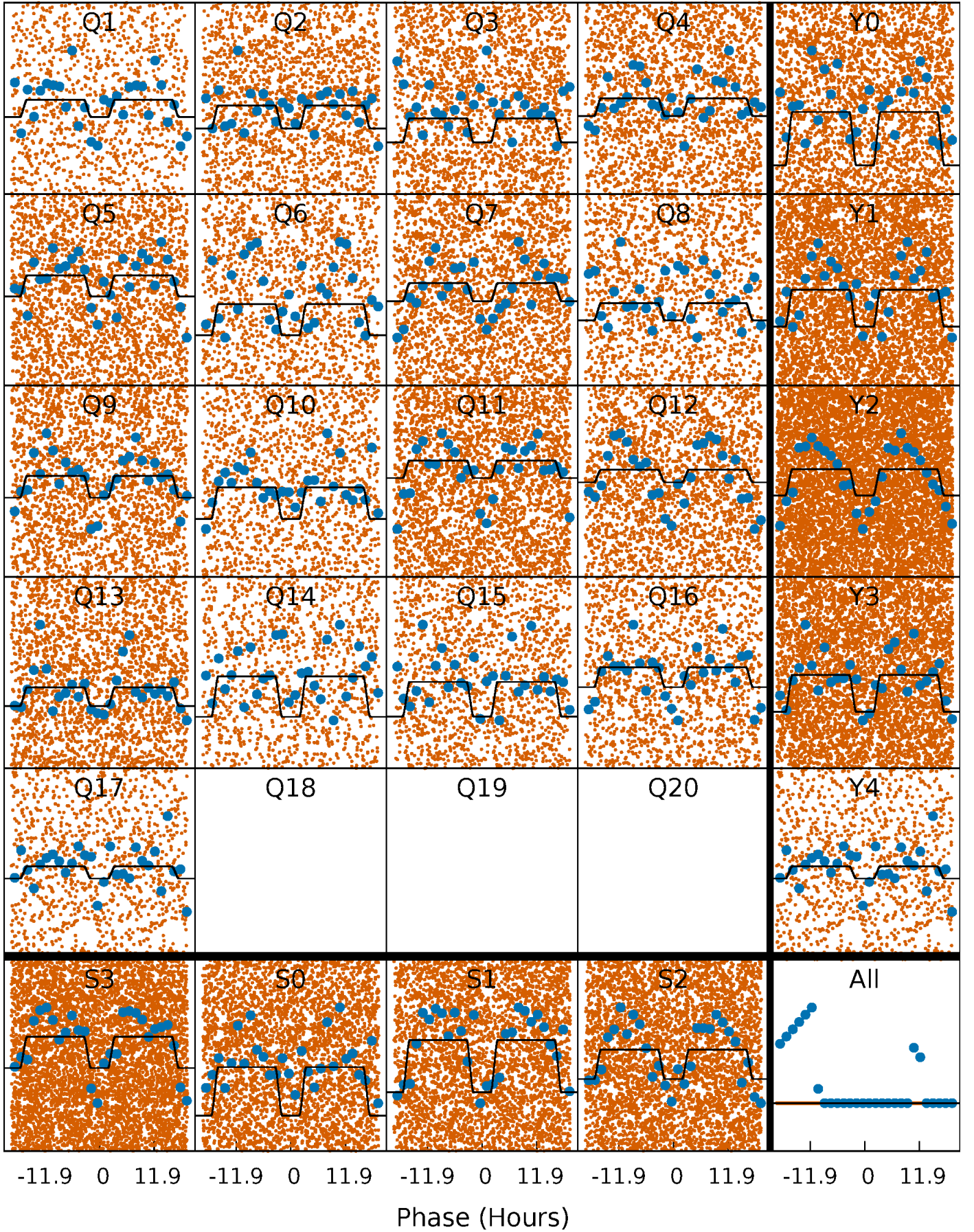
DV Quarter-Phased Transit Curves

TCE 008037466-01 P= 0.798975 Days $T_0=131.992136$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

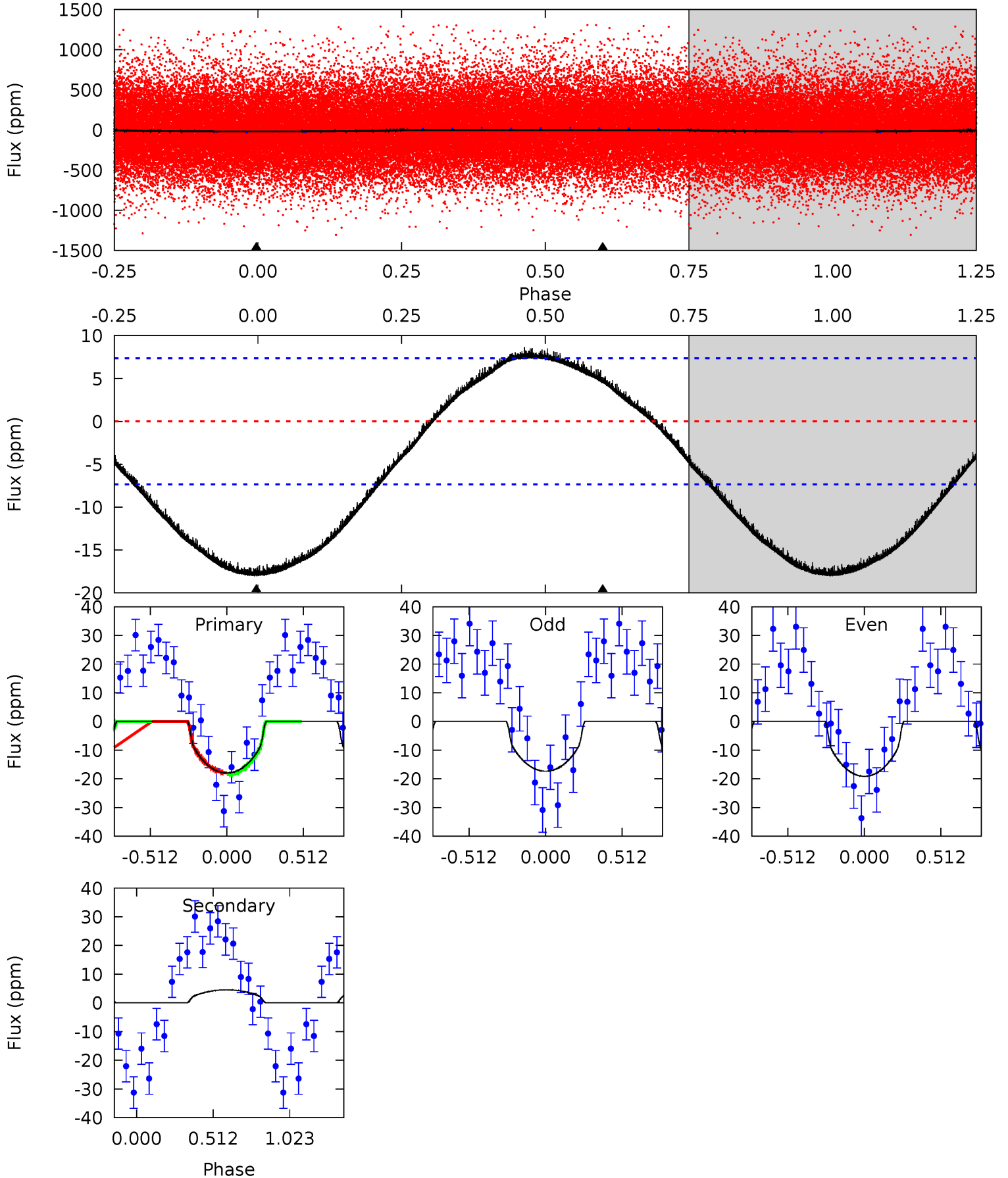
TCE 008037466-01 P= 0.798974 Days $T_0=131.982818$ (BKJD)



DV Model-Shift Uniqueness Test

008037466-01, P = 0.798975 Days, E = 131.193161 Days

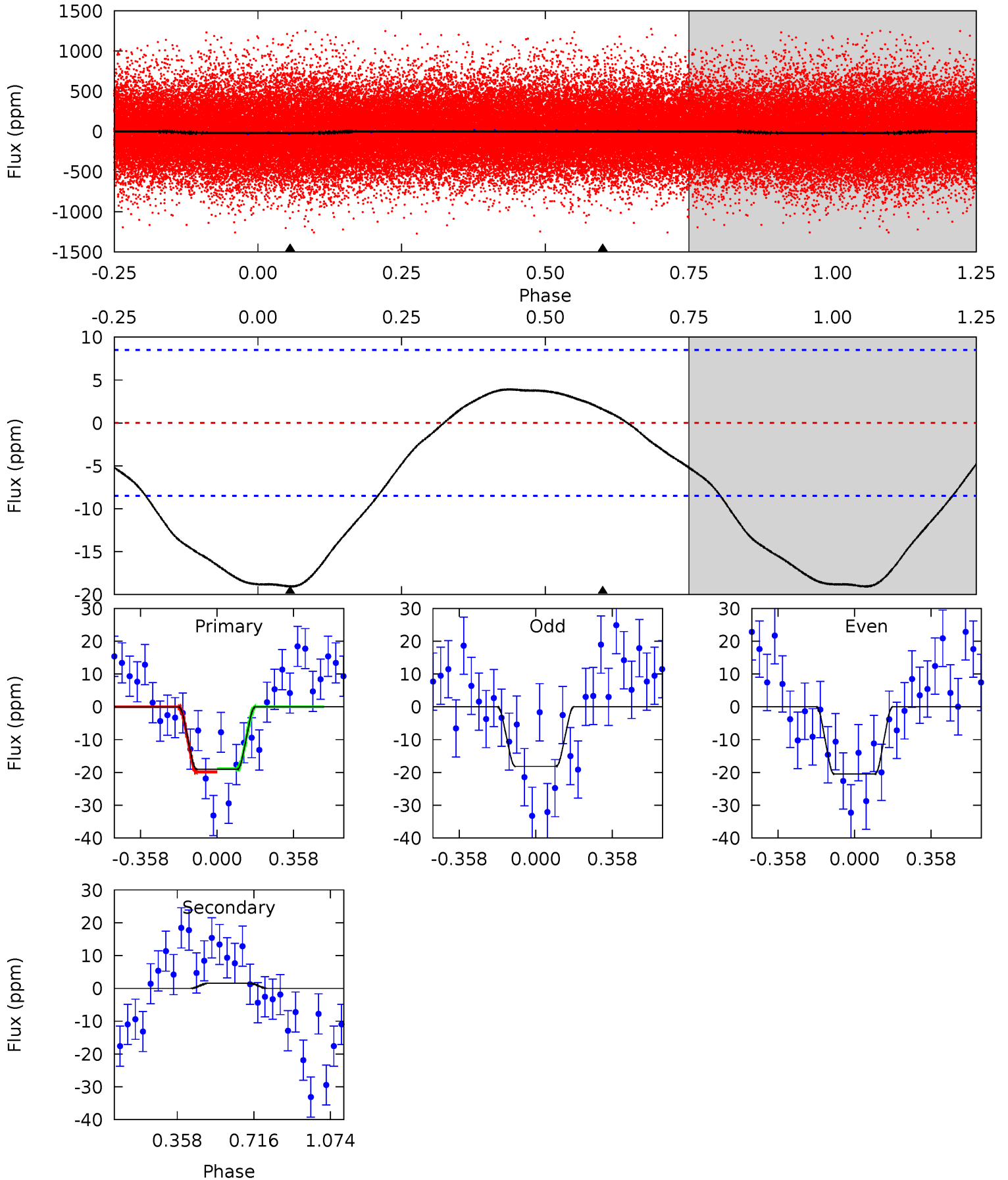
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.3	-2.60	0	0	4.21	0.66	1.27	10.3	10.3	-2.60	-2.60	0.51	0.69	0.33	0.20



Alt Model-Shift Uniqueness Test

008037466-01, P = 0.798974 Days, E = 131.183844 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.62	-0.80	0	0	4.29	0.92	1.67	9.62	9.62	-0.80	-0.80	0.59	0.62	0.17	0.23



Stellar Parameters For KIC 008037466

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5726^{+156}_{-173}	$4.419^{+0.101}_{-0.188}$	$-0.060^{+0.300}_{-0.300}$	$0.986^{+0.281}_{-0.141}$	$0.930^{+0.114}_{-0.091}$	$1.368^{+0.627}_{-0.695}$
	+3%/-3%	+2%/-4%	+500%/-500%	+28%/-14%	+12%/-10%	+46%/-51%
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 008037466-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	5 ± 2	$0.59^{+0.34}_{-0.30}$	2757^{+190}_{-150}	-4015^{+494}_{-1174}	$-1.883^{+1.196}_{-5.706}$
Alt.	2 ± 2	$0.51^{+0.35}_{-0.28}$	2760^{+196}_{-162}	-3527^{+898}_{-1247}	$-0.683^{+0.852}_{-4.269}$

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 $A_{obs} \gg 1.0$

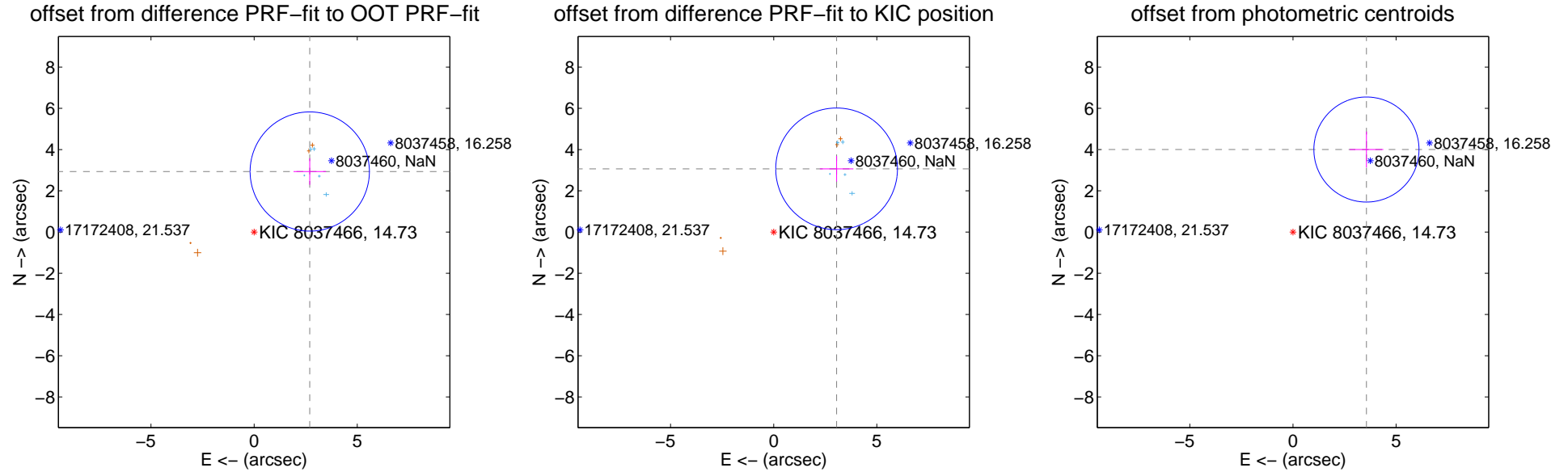
DV Centroid Data

Supplemental centroid analysis for 008037466-01. Kepler magnitude: 14.73. Transit SNR 9.91

There are 5 quarters with good PRF difference image offsets

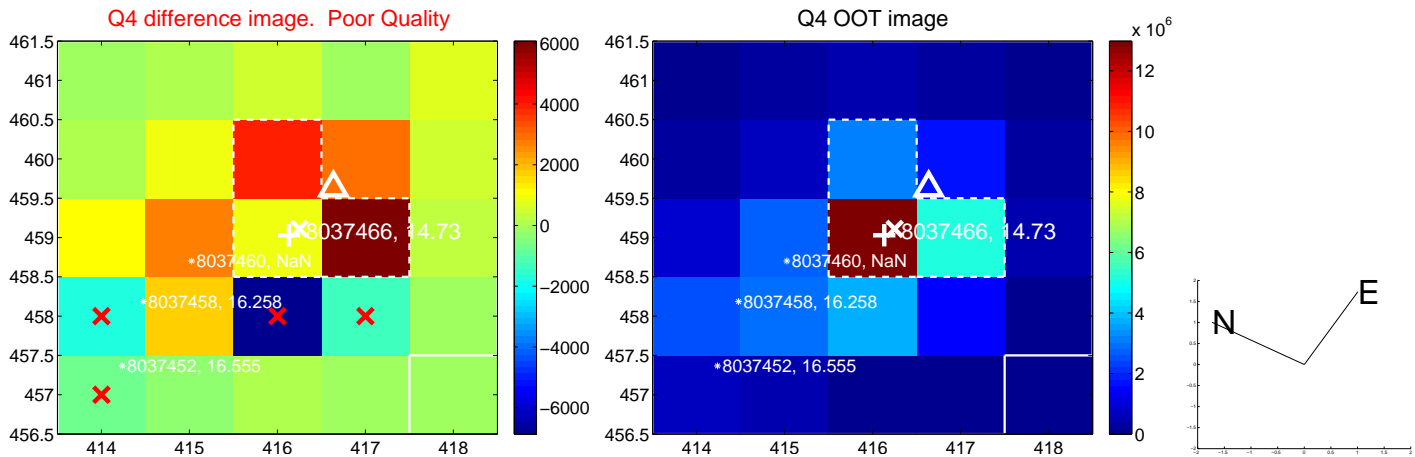
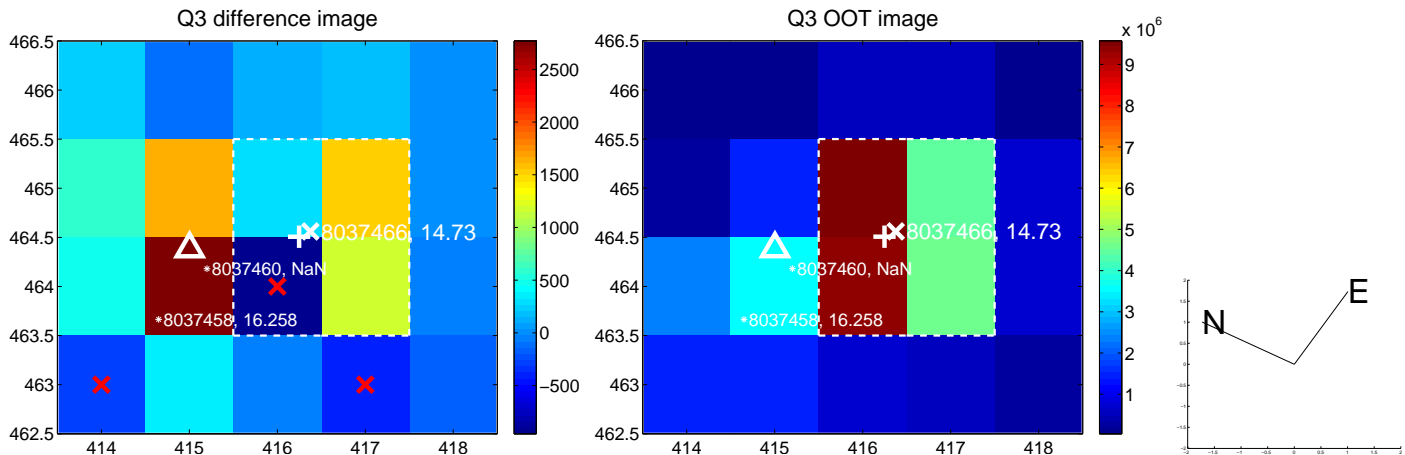
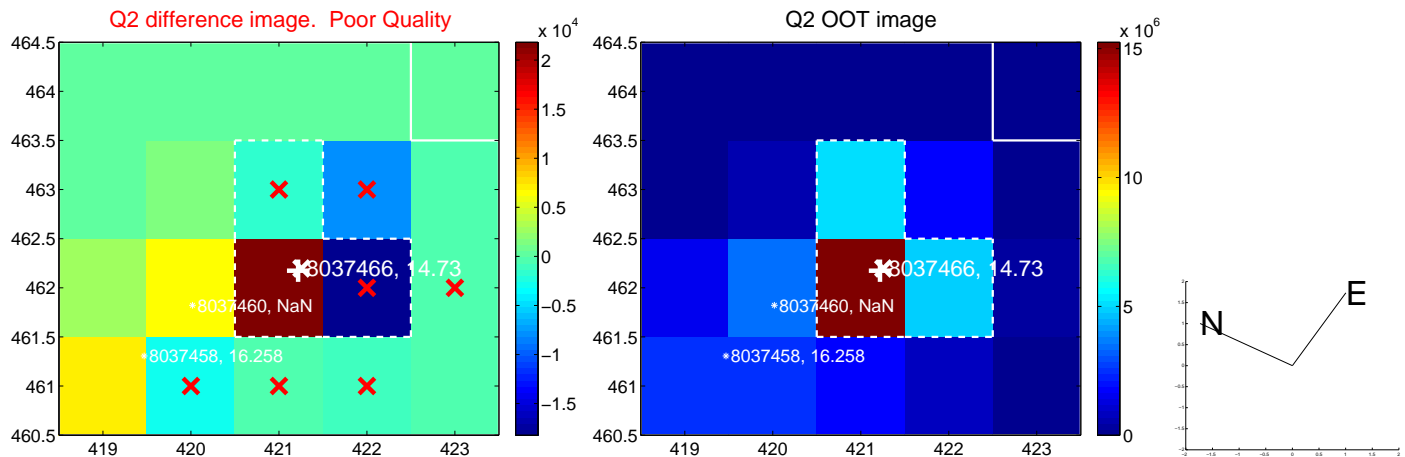
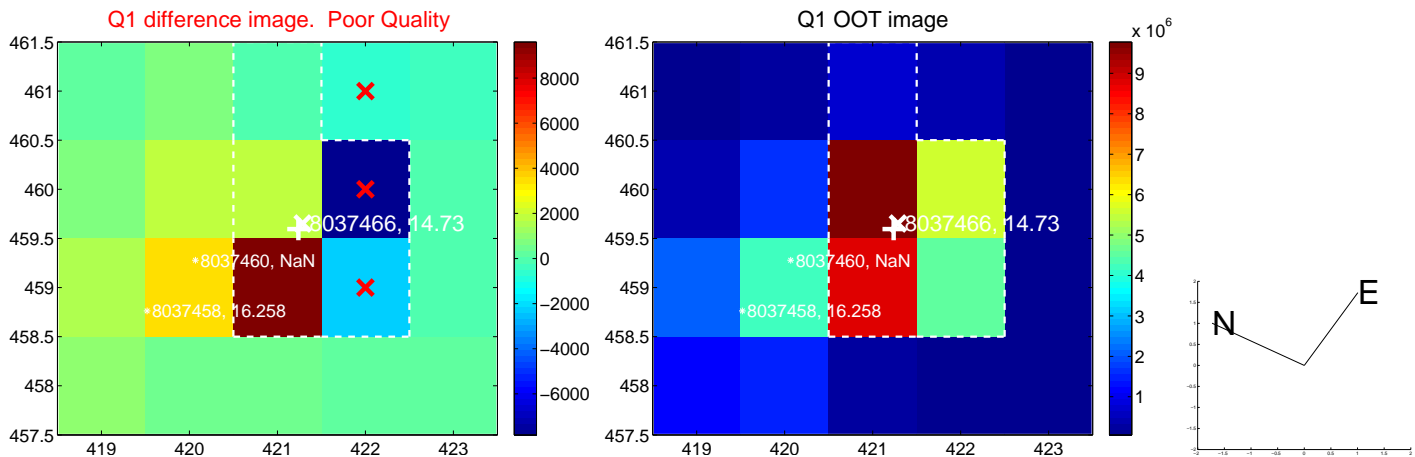
The direct PRF centroid is offset from the target star catalog position by about 0.29 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	3.987 ± 0.964	4.14	-2.697 ± 0.789	2.936 ± 0.644
PRF-fit source offset from KIC position	4.325 ± 0.984	4.40	-3.050 ± 0.813	3.066 ± 0.622
photometric centroid source offset	5.36 ± 0.85	6.31	-3.56 ± 0.82	4.00 ± 0.87

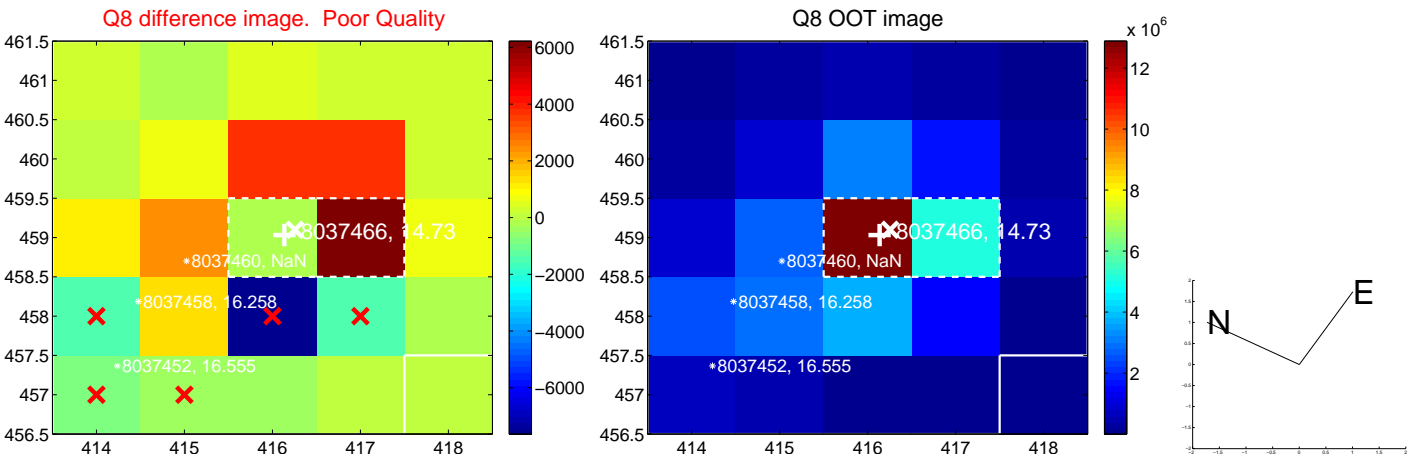
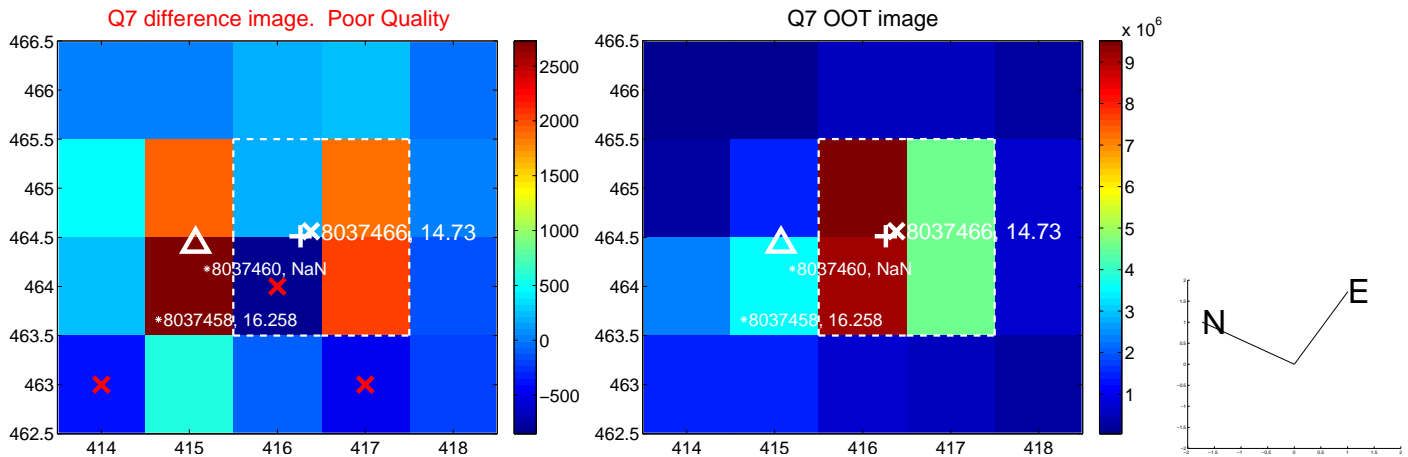
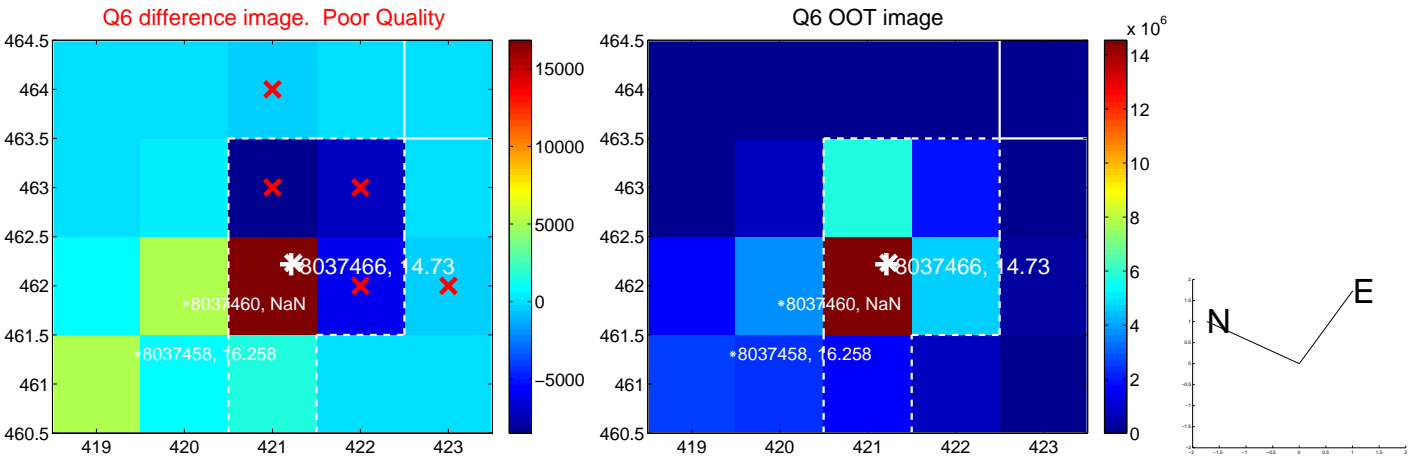
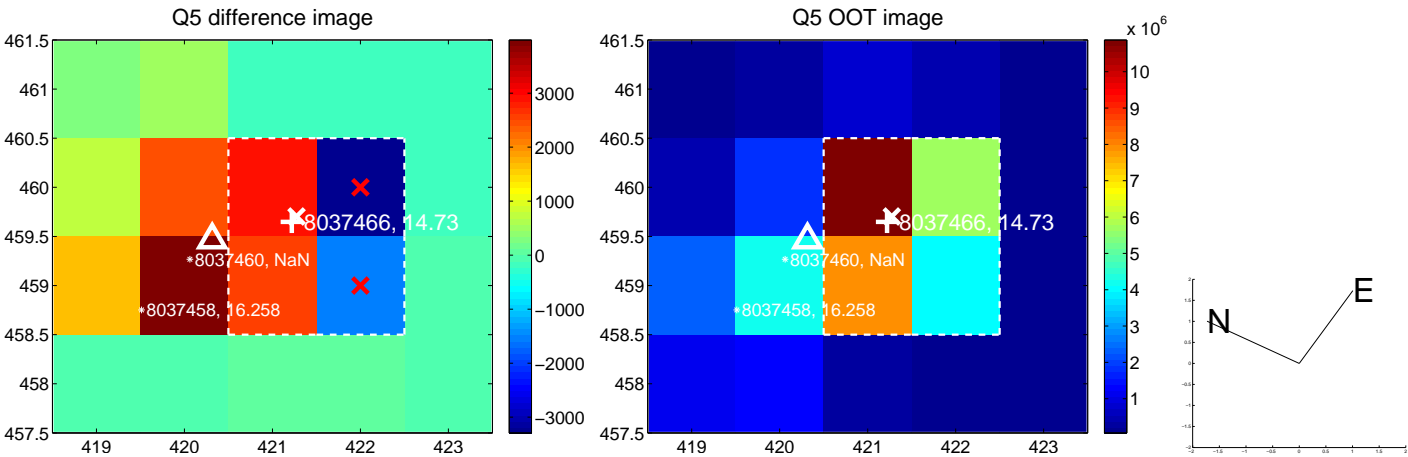


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

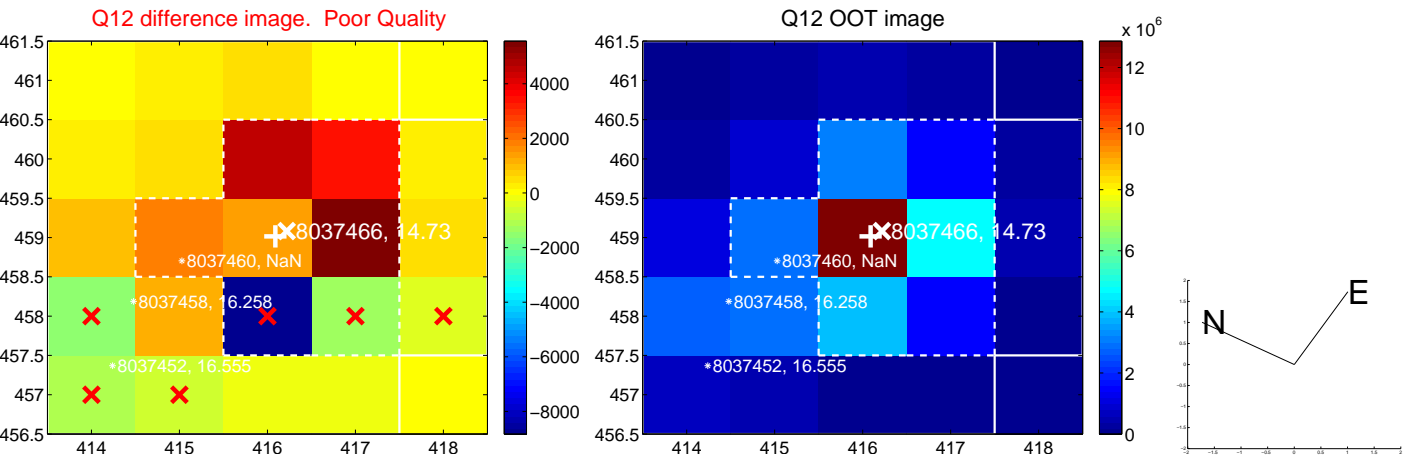
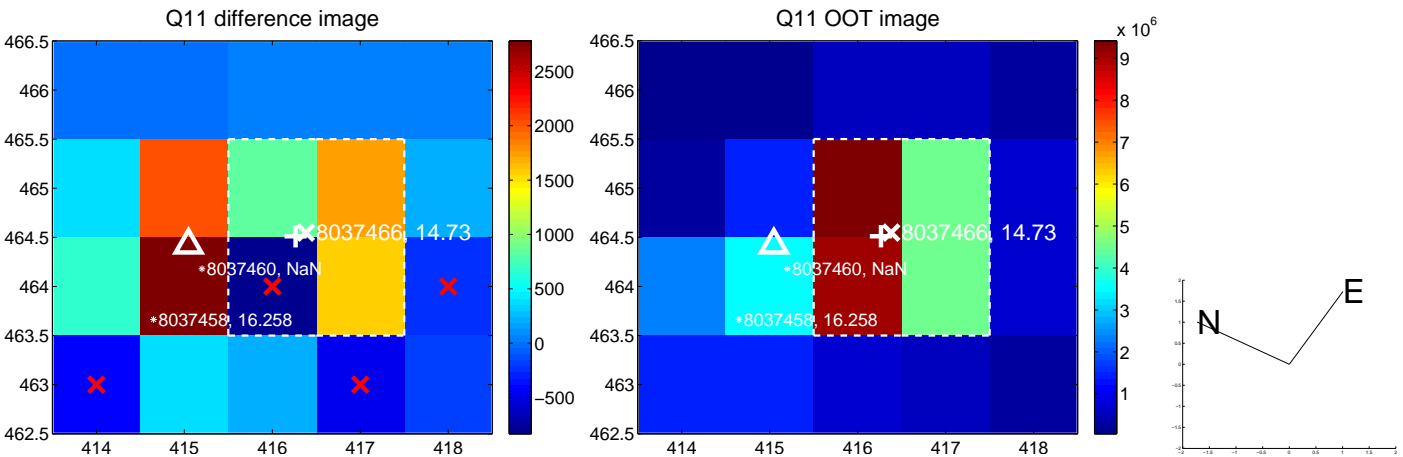
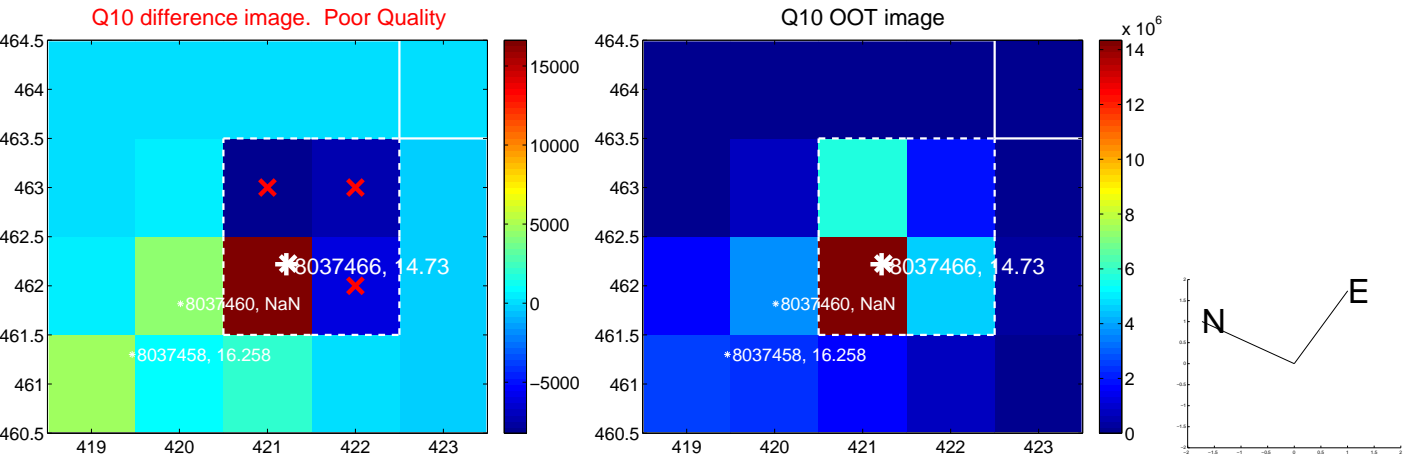
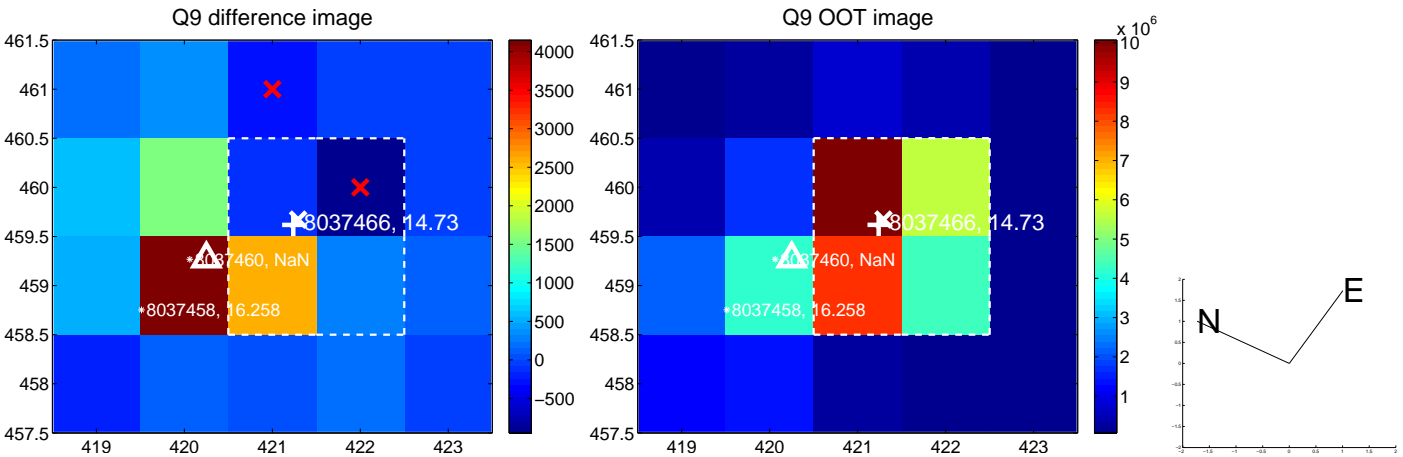
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



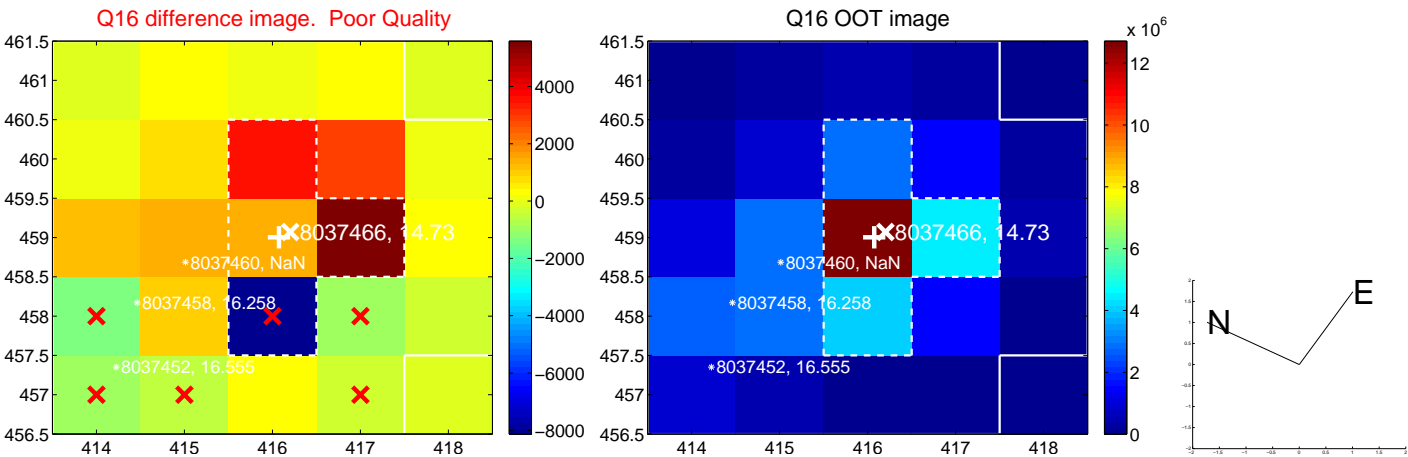
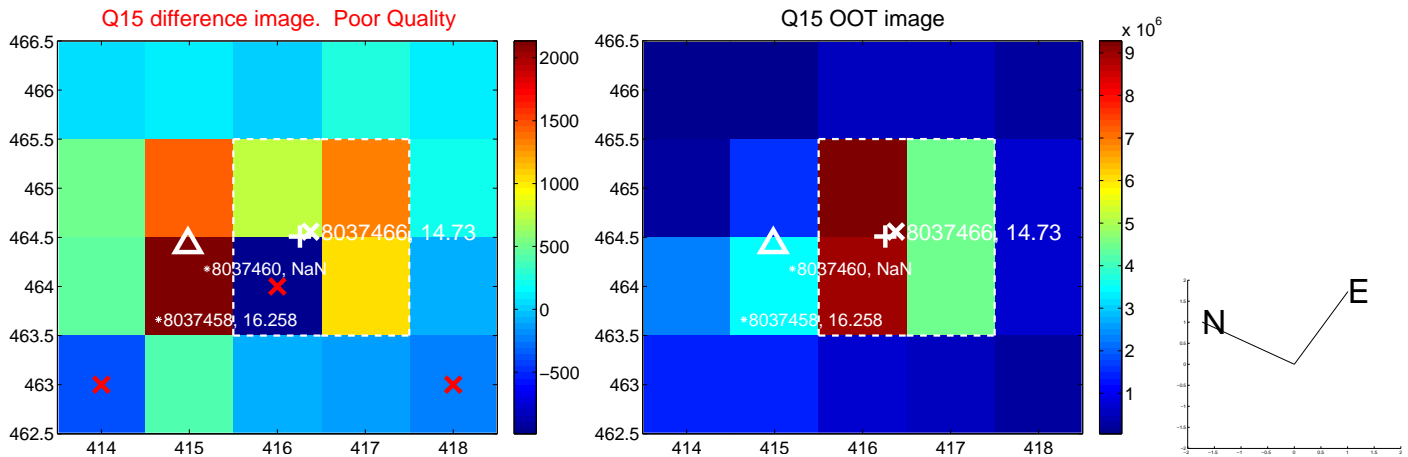
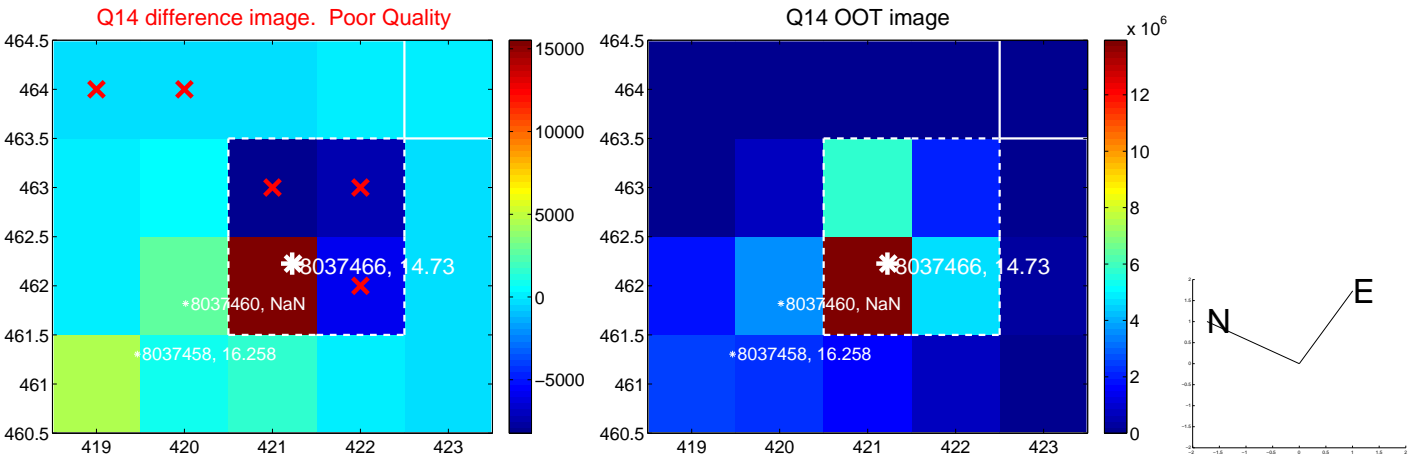
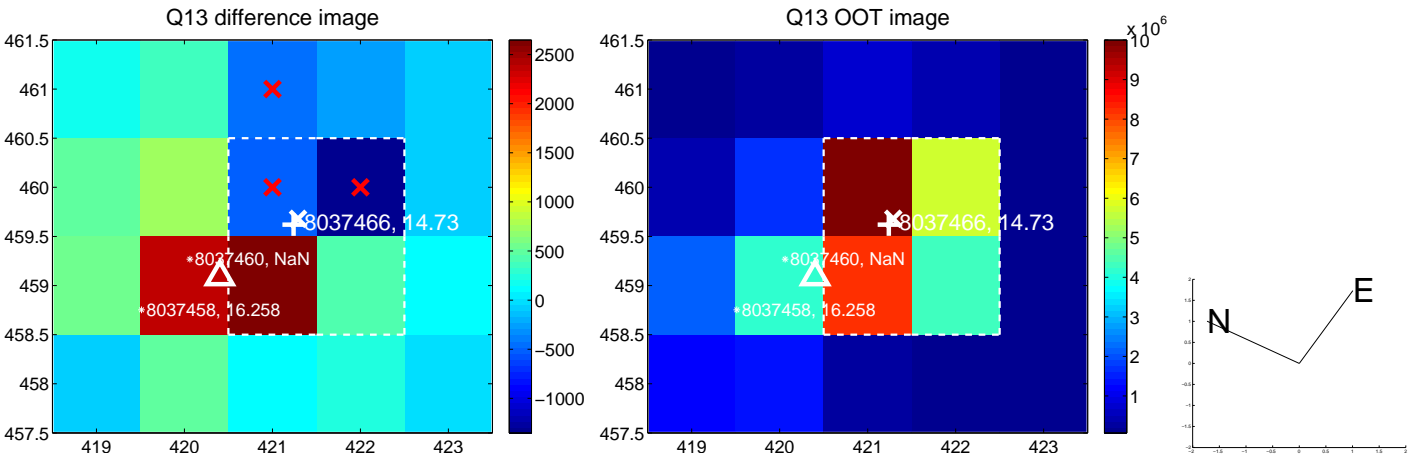
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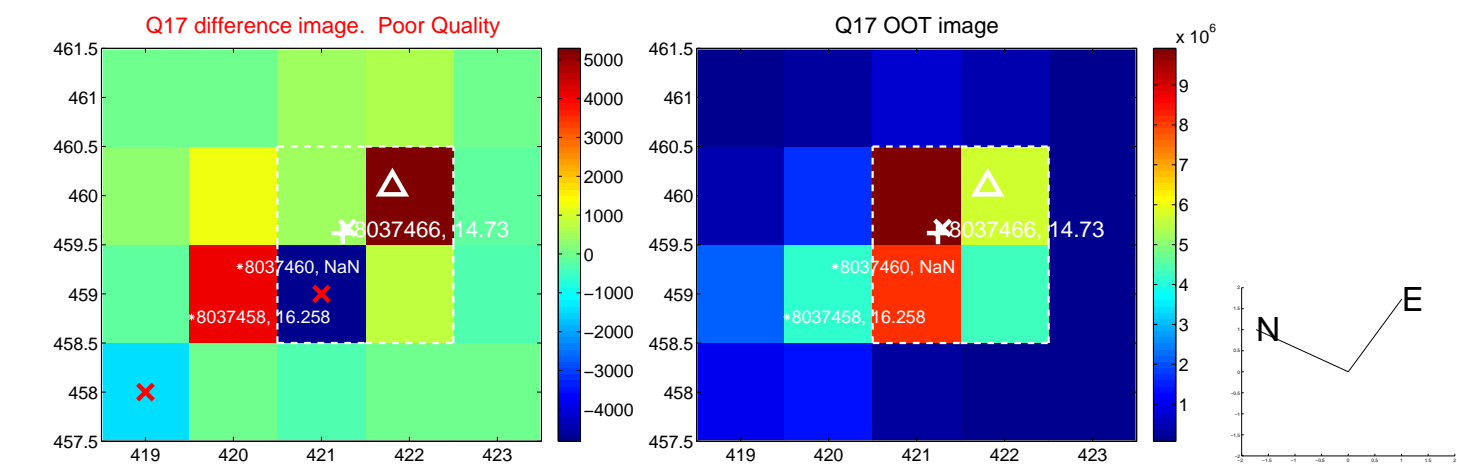
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



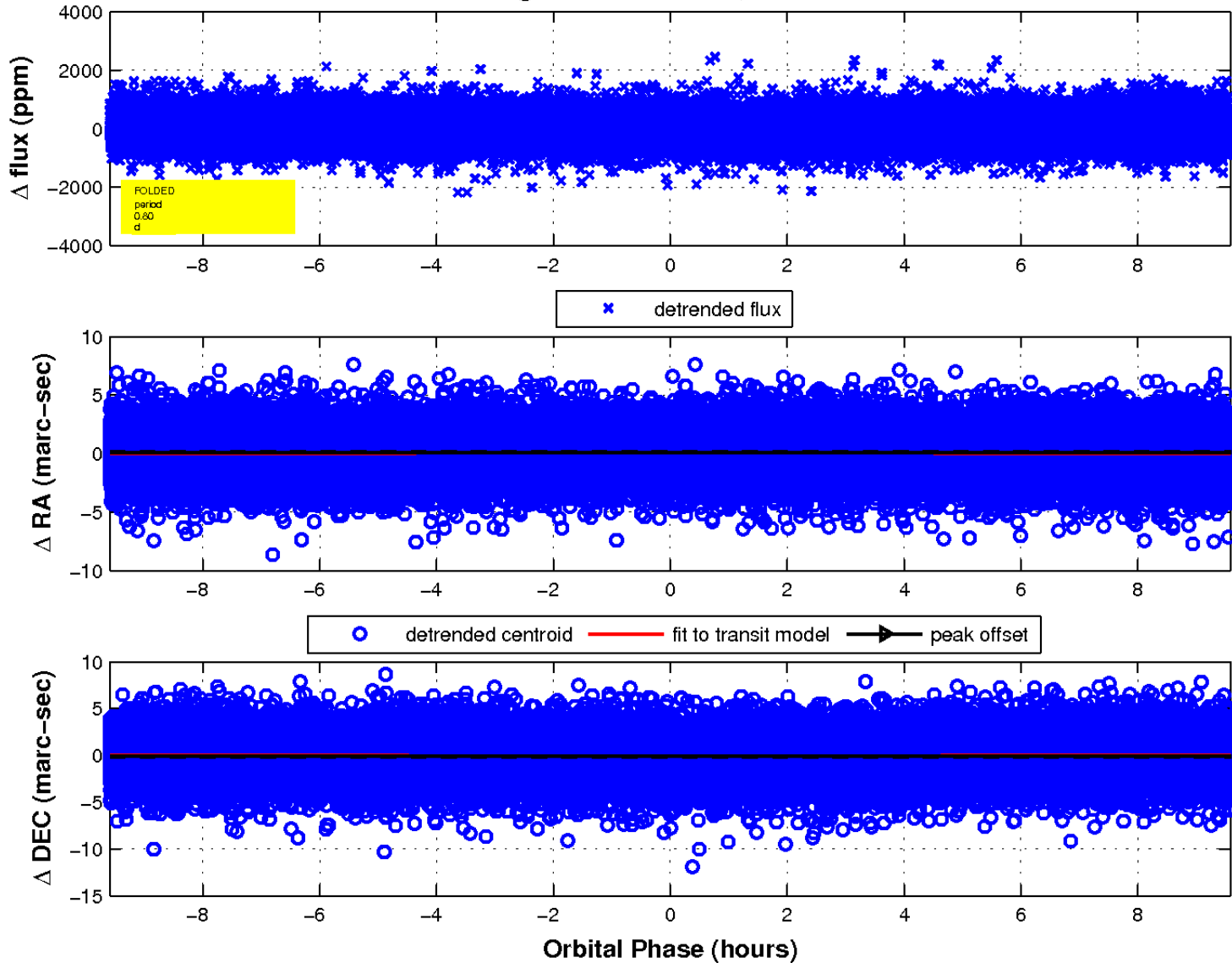
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

