

KIC 004851217

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})
004851217-01	OBS	6460.01	1.235132	132.001399	8857.0	4.500	7336.0	-1.0	2.67	7823	25.50	29761.34

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
004851217-01	OBS	FP	0.00	0	1	0	0	SWEET_EB—DEPTH_ODDEVEN_ALT—MOD_ODDEVEN_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.

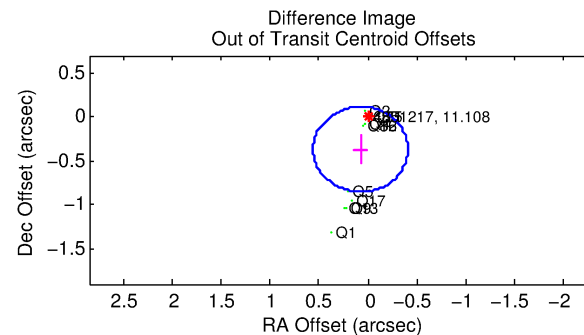
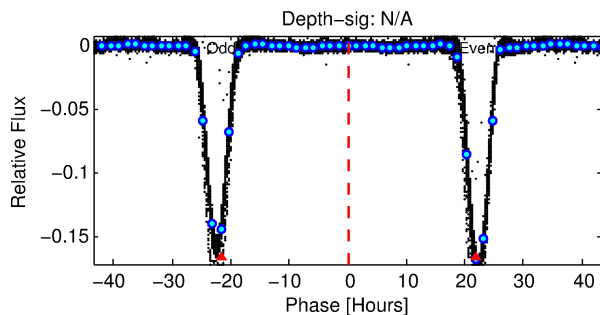
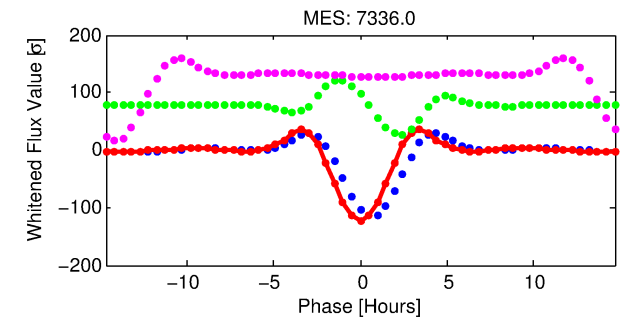
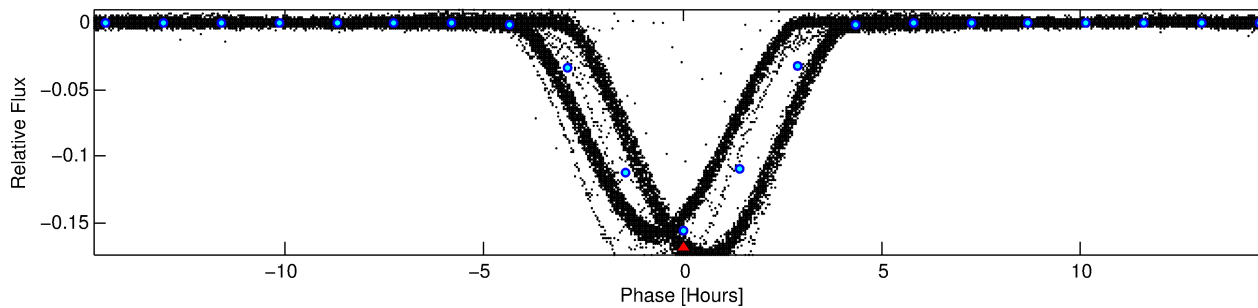
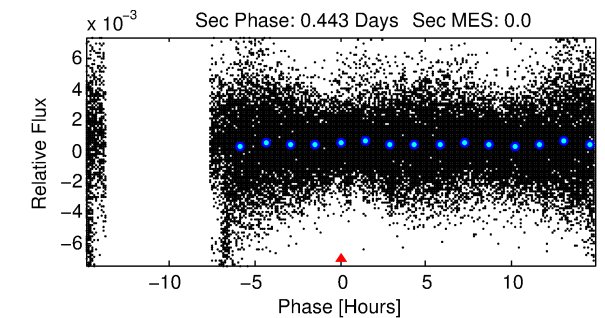
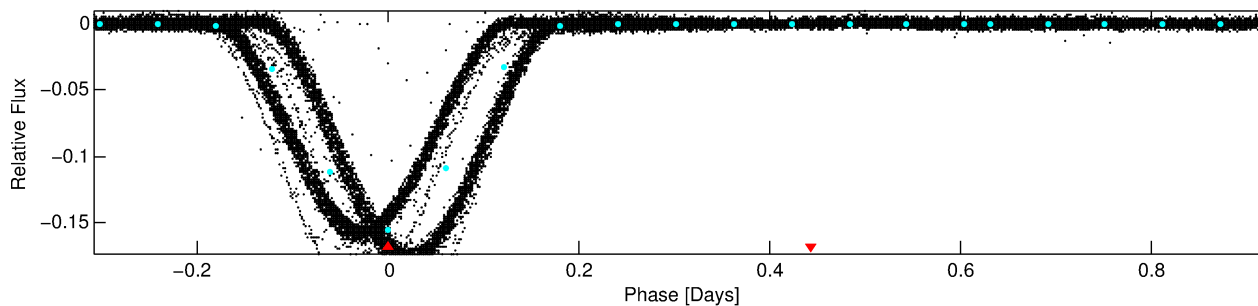
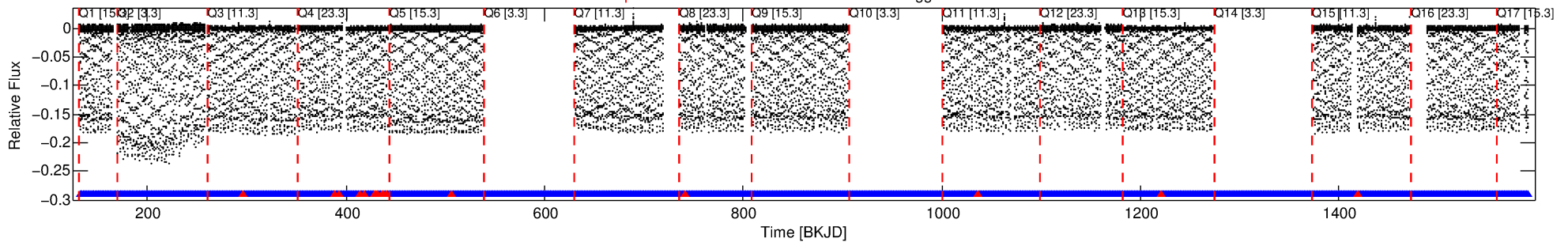
Ephemeris Match Information For 004851217-01

No Significant Match Found

DV One-Page Summary

KIC: 4851217 Candidate: 1 of 1 Period: 1.235 d
KOI: K06460 Corr: No Ephemeris Match

Kp: 11.11 R*: 2.67 Rs Teff: 7823.0 K Logg: 3.88 Fe/H: 0.070



TPS TCE Results:

Period = 1.23513 d
Epoch = 132.0014 BKJD

DV fit results are unavailable

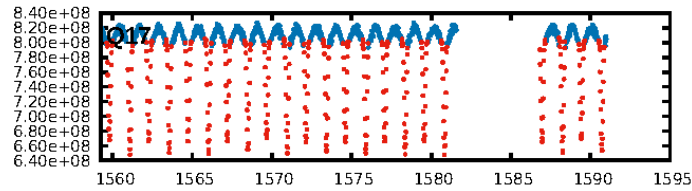
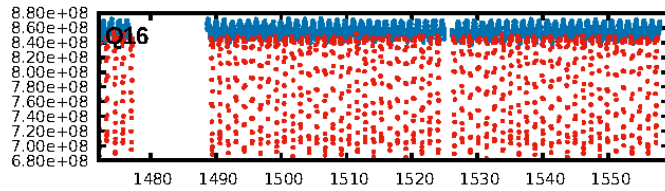
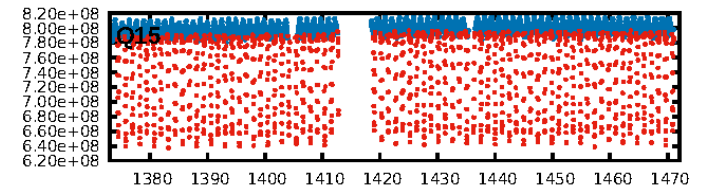
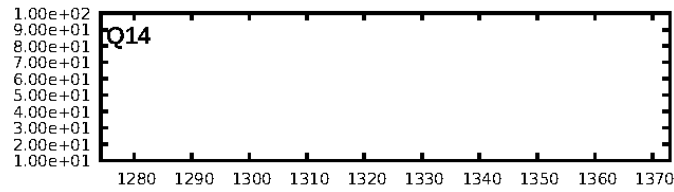
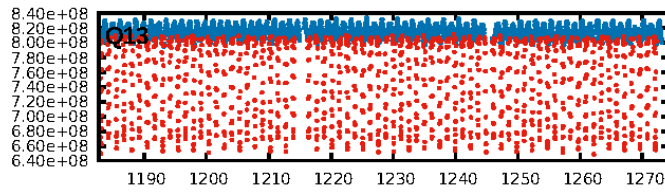
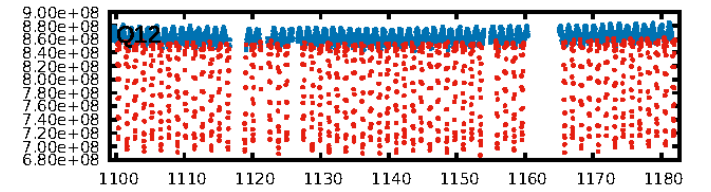
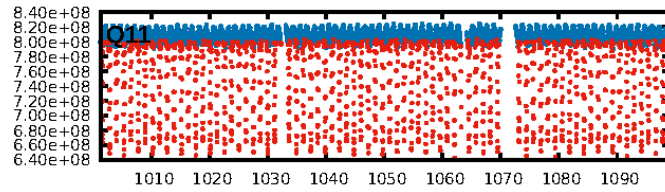
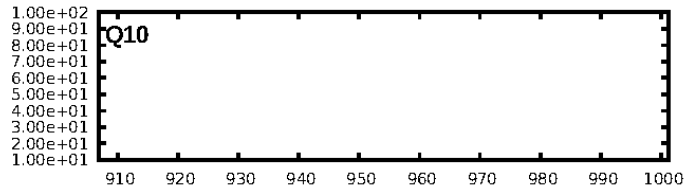
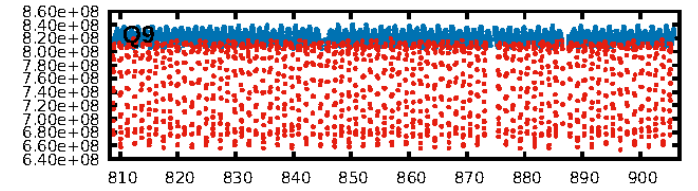
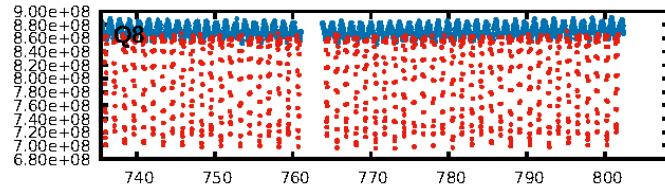
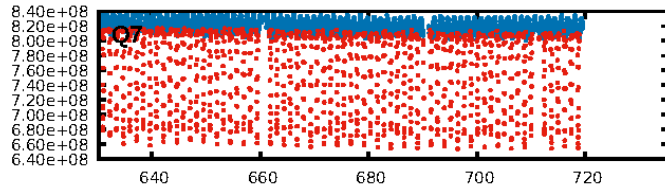
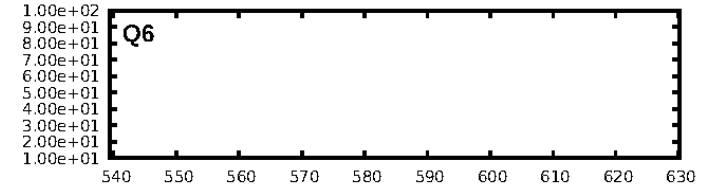
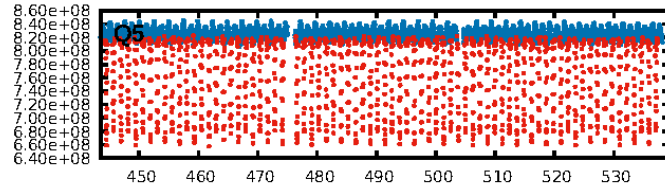
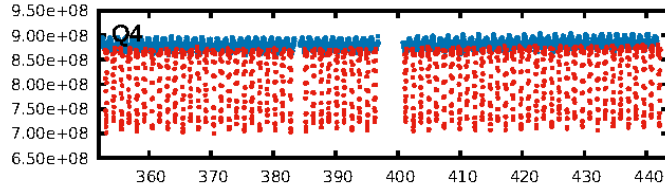
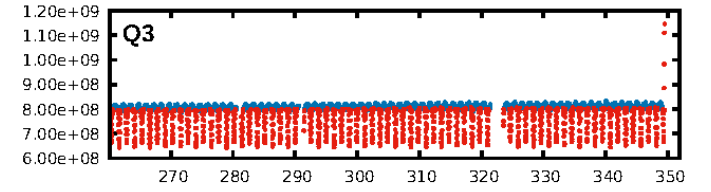
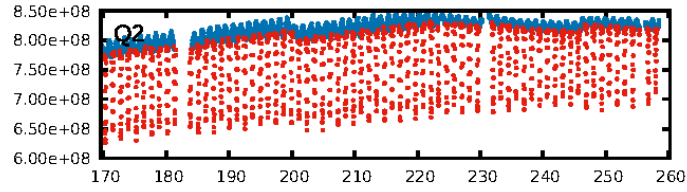
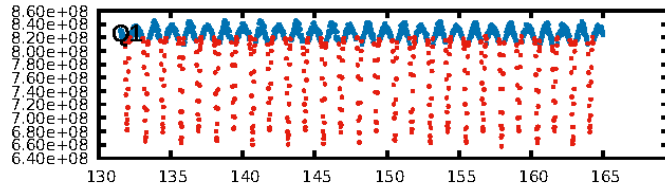
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 0.98 [809/826]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 0.375 arcsec [2.32σ]
KicOffset-rm: 0.190 arcsec [1.00σ]
OotOffset-st: 1/4/4/5 [14]
KicOffset-st: 1/4/4/5 [14]
DiffImageQuality-fgm: 1.00 [14/14]
DiffImageOverlap-fno: 1.00 [14/14]

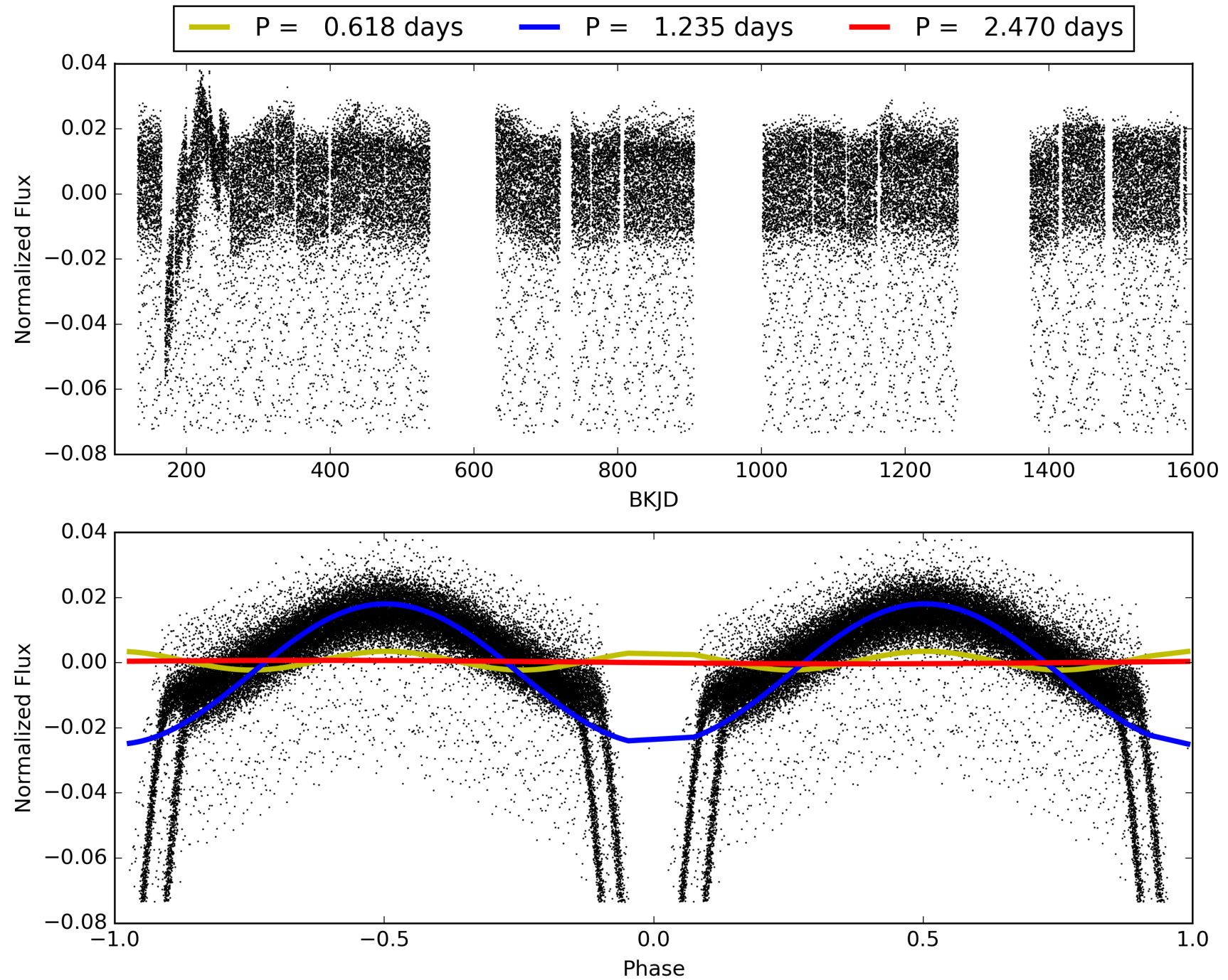
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 08:53:18 Z

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

TCE 004851217-01, PDC Light Curves

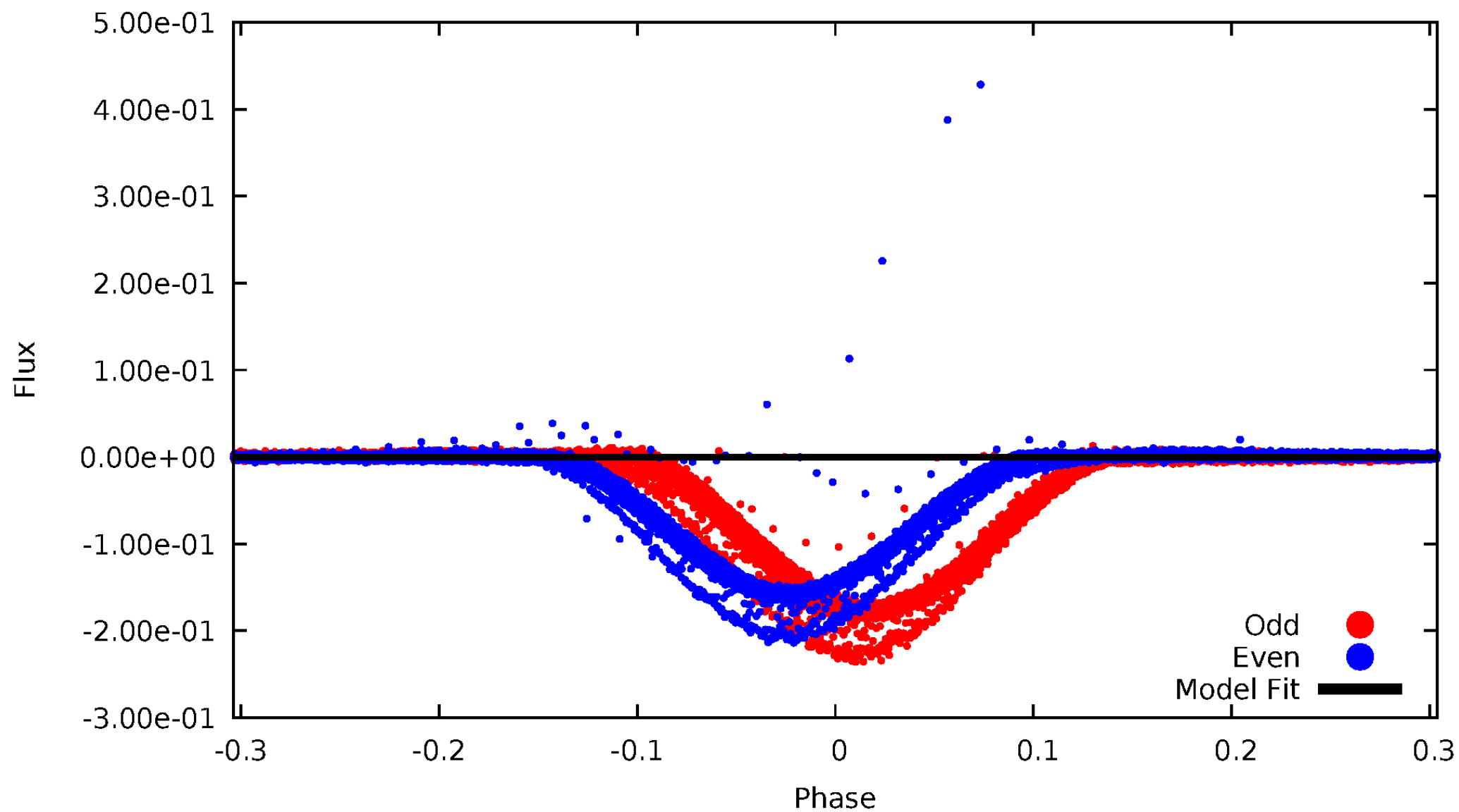


TCE 004851217-01



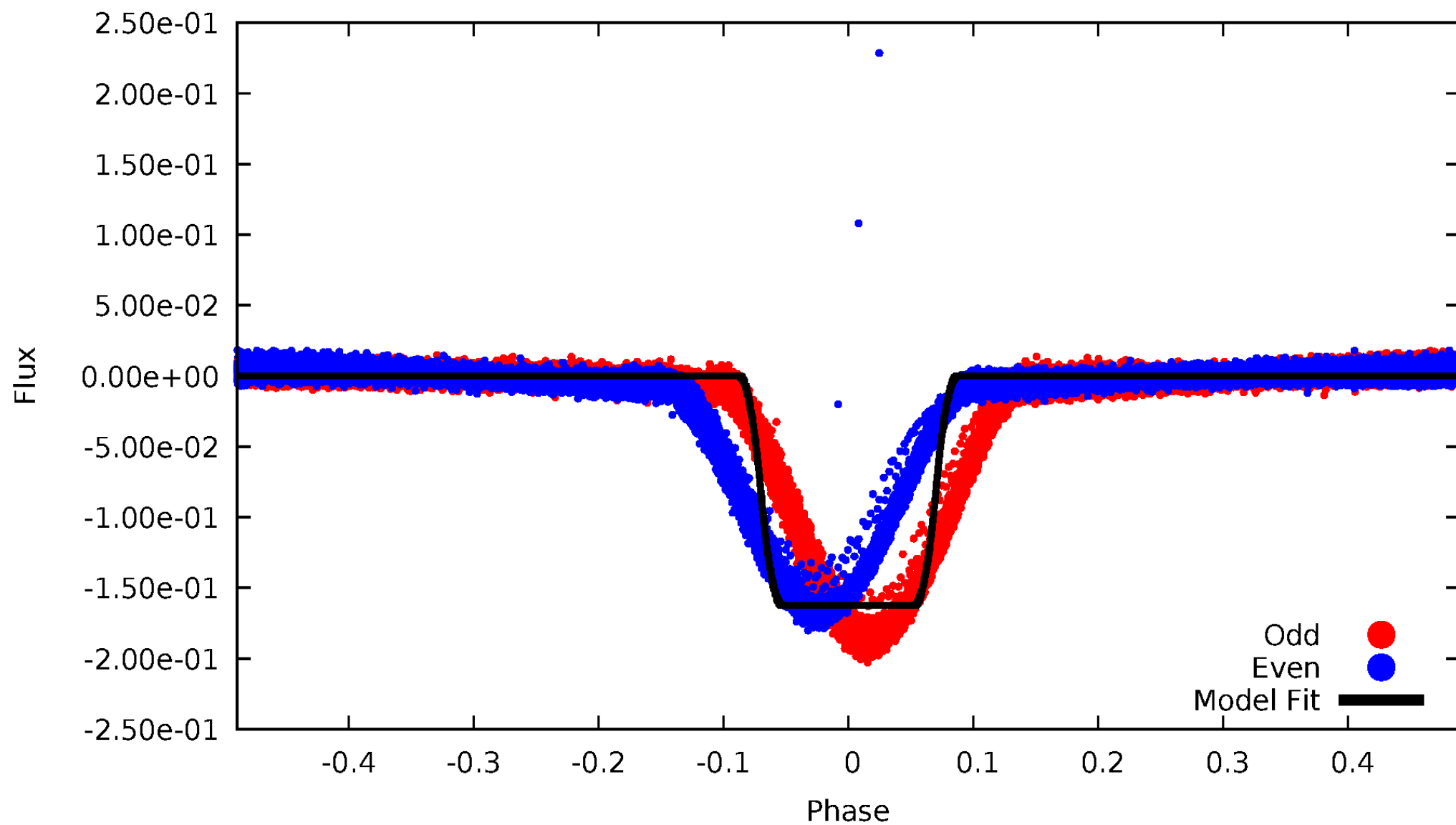
DV Odd/Even

TCE 004851217-01



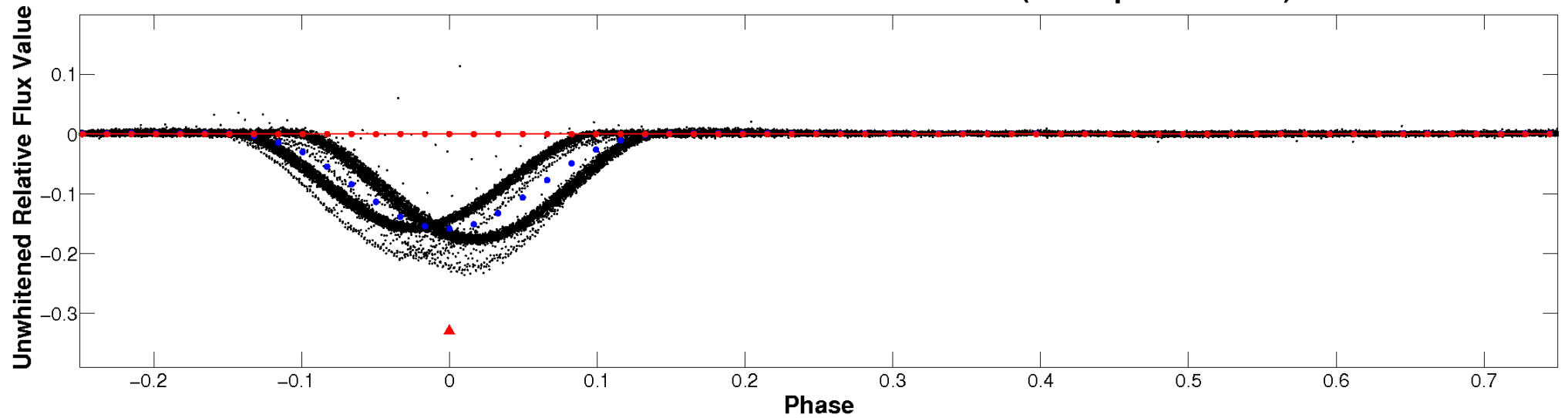
ALT Odd/Even

TCE 004851217-01

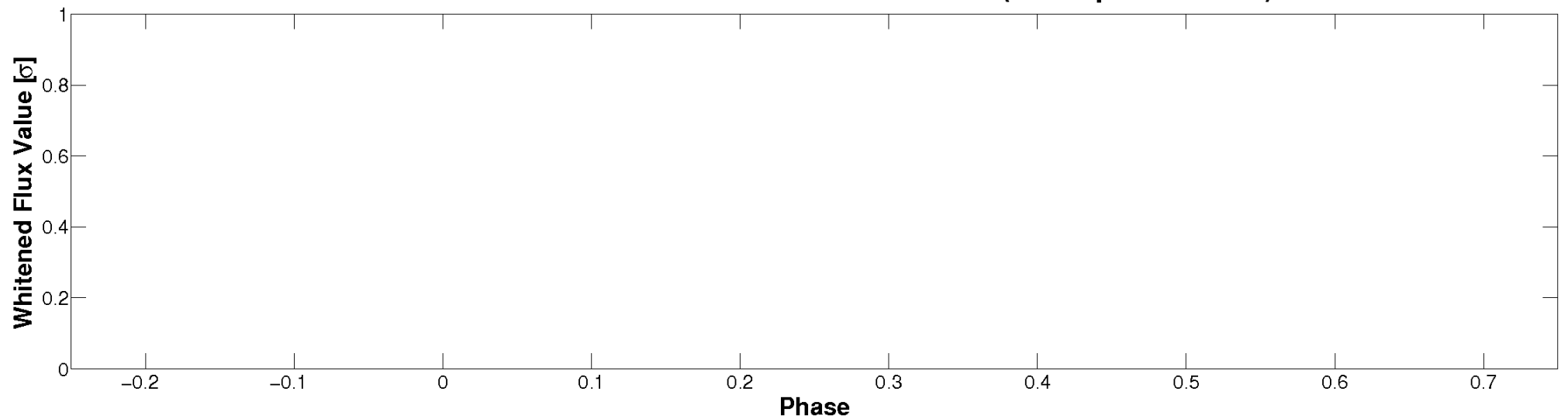


Non-Whitened Vs. Whitened Light Curve

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

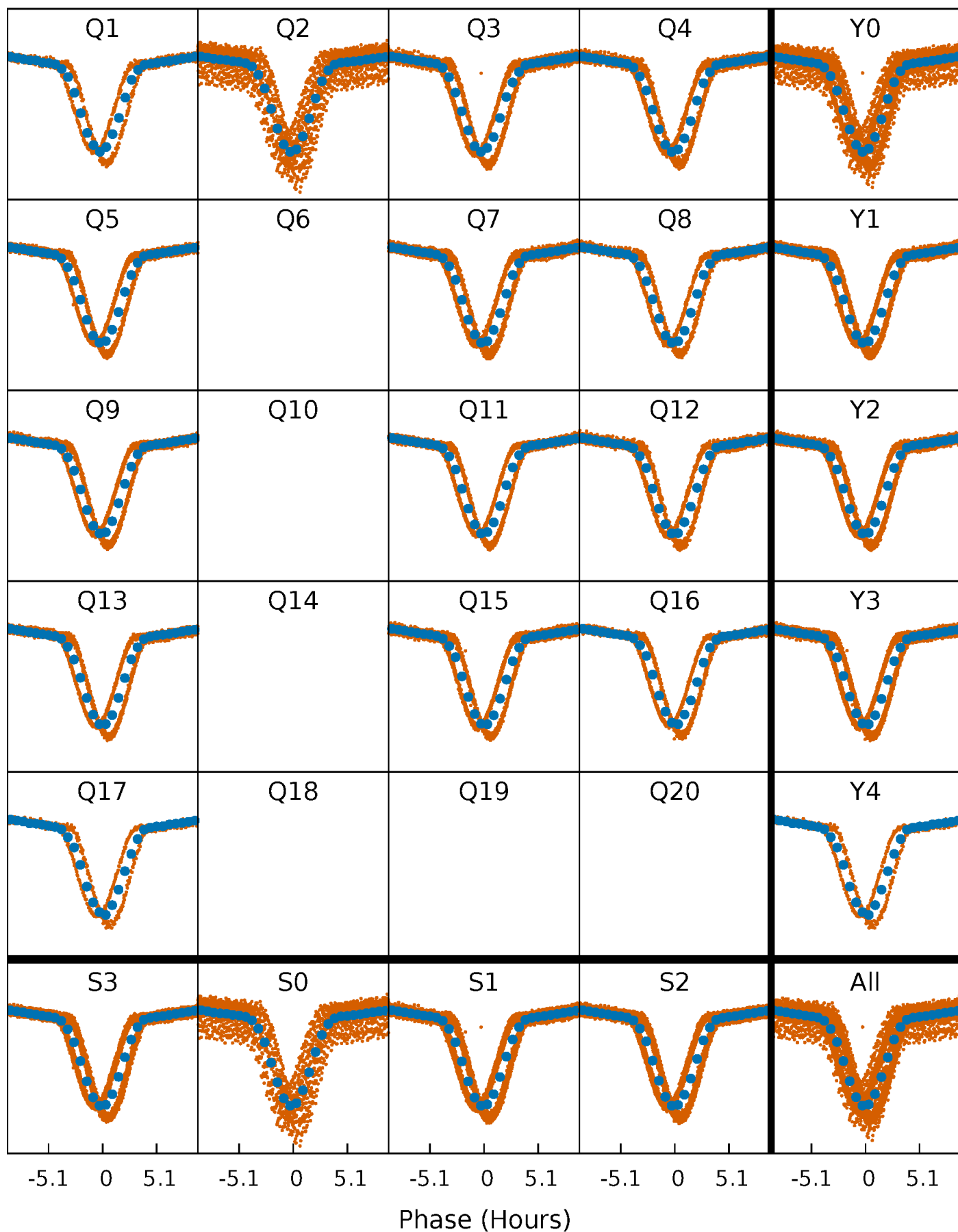


Planet 1 : Phased Whitened Flux Time Series (TPS Epoch/Period)



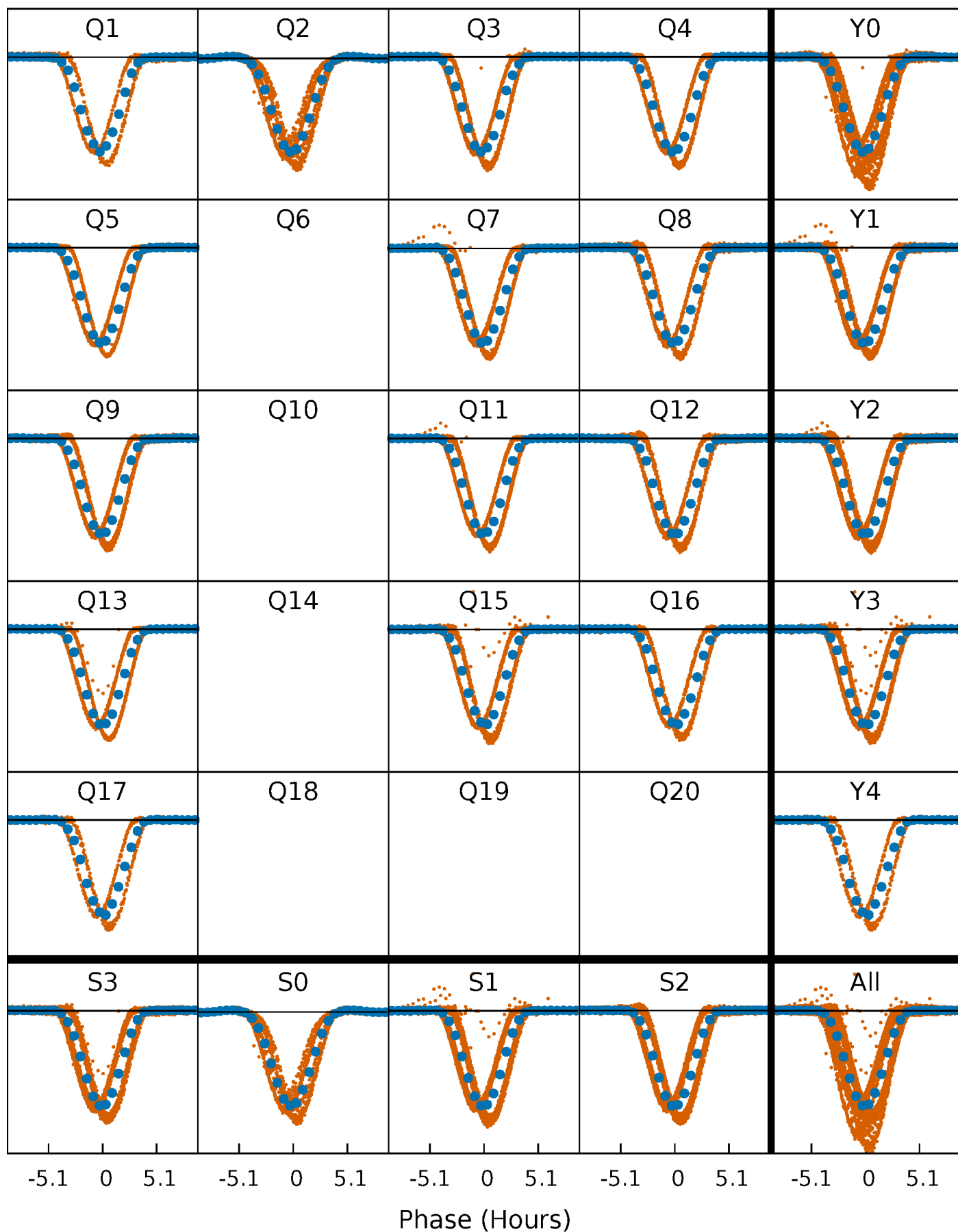
PDC Quarter-Phased Transit Curves

TCE 004851217-01 P= 1.235132 Days $T_0=132.001399$ (BKJD)



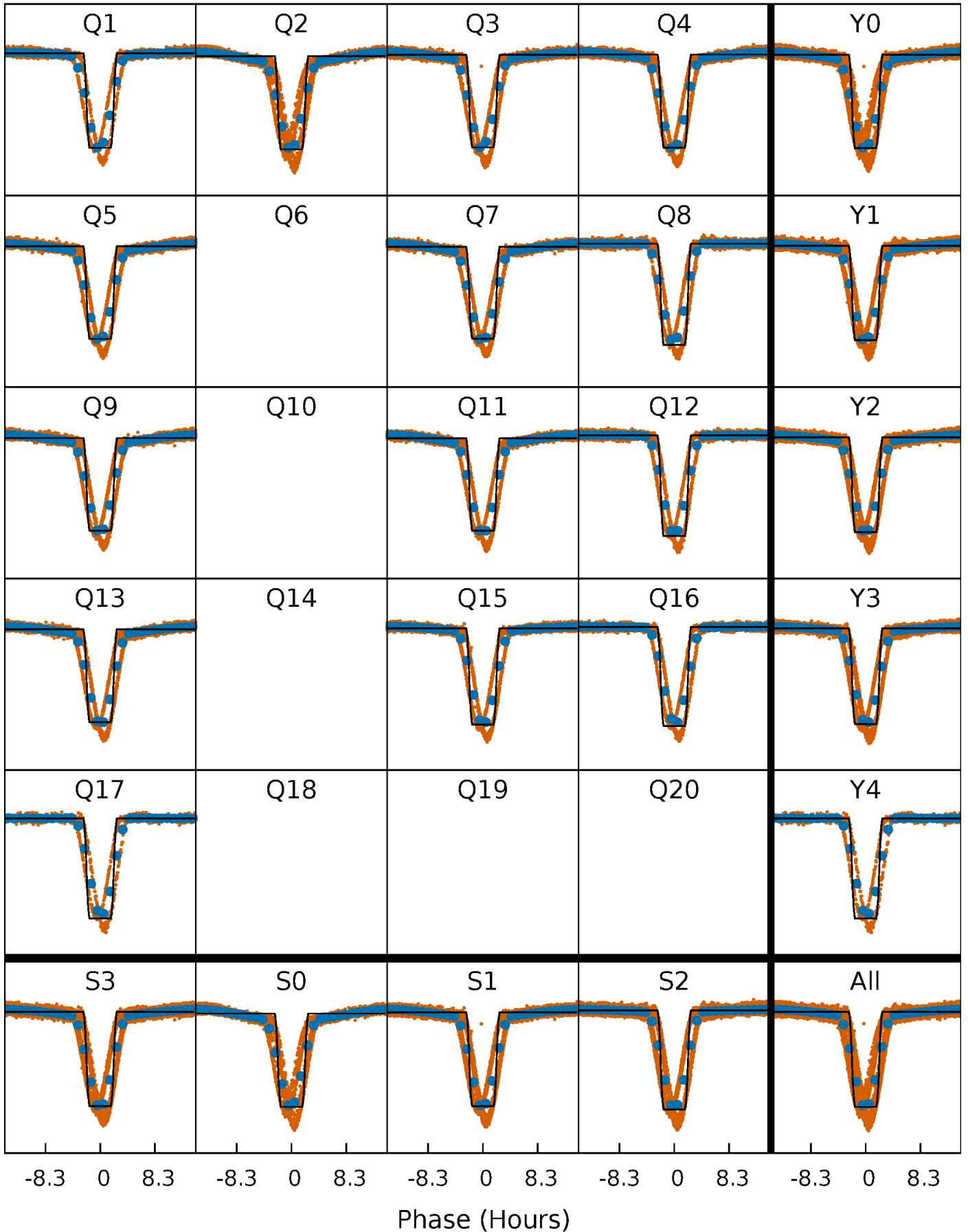
DV Quarter-Phased Transit Curves

TCE 004851217-01 P= 1.235132 Days $T_0=132.001399$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

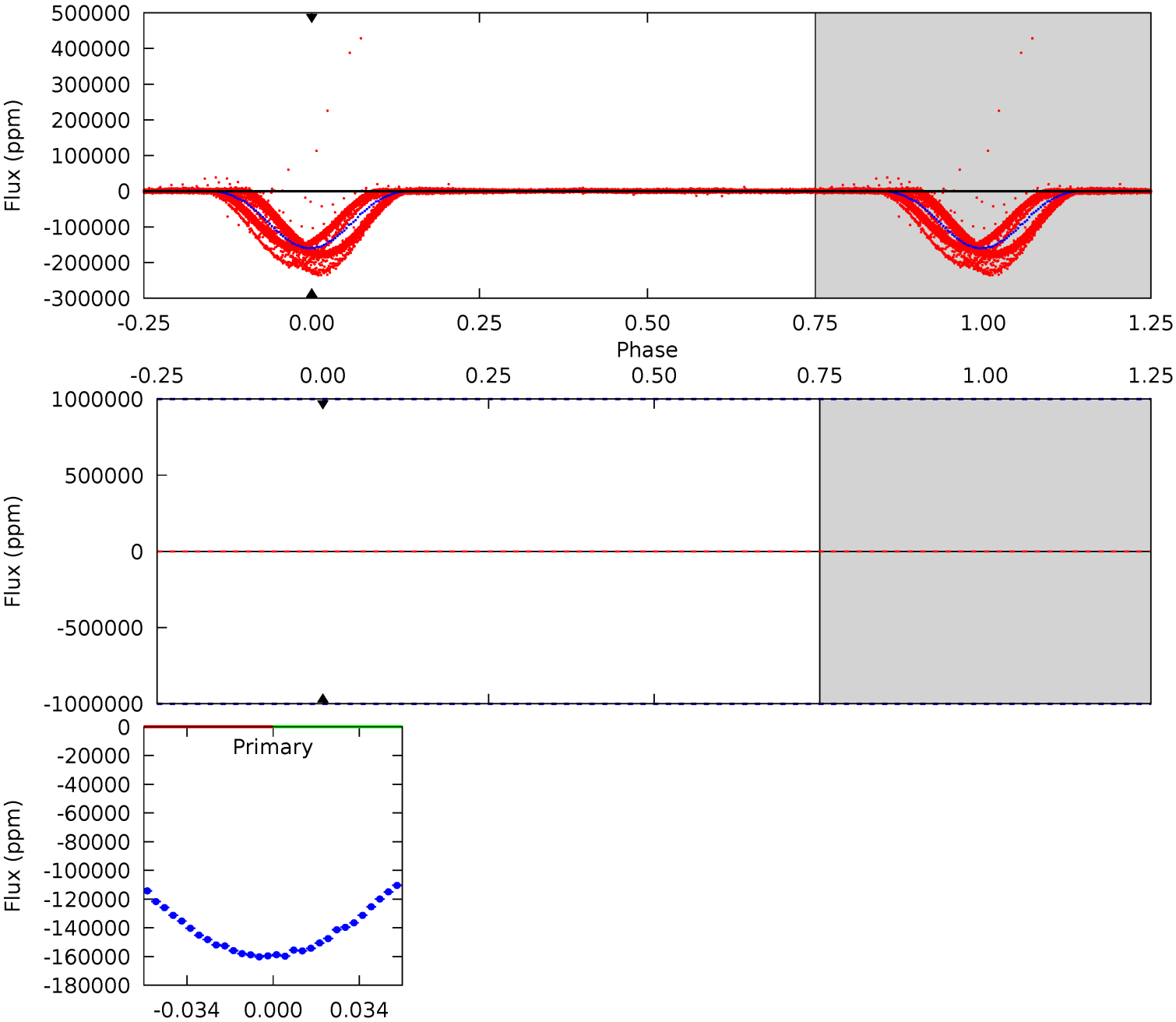
TCE 004851217-01 P= 1.235132 Days $T_0=132.000017$ (BKJD)



DV Model-Shift Uniqueness Test

004851217-01, P = 1.235132 Days, E = 130.766267 Days

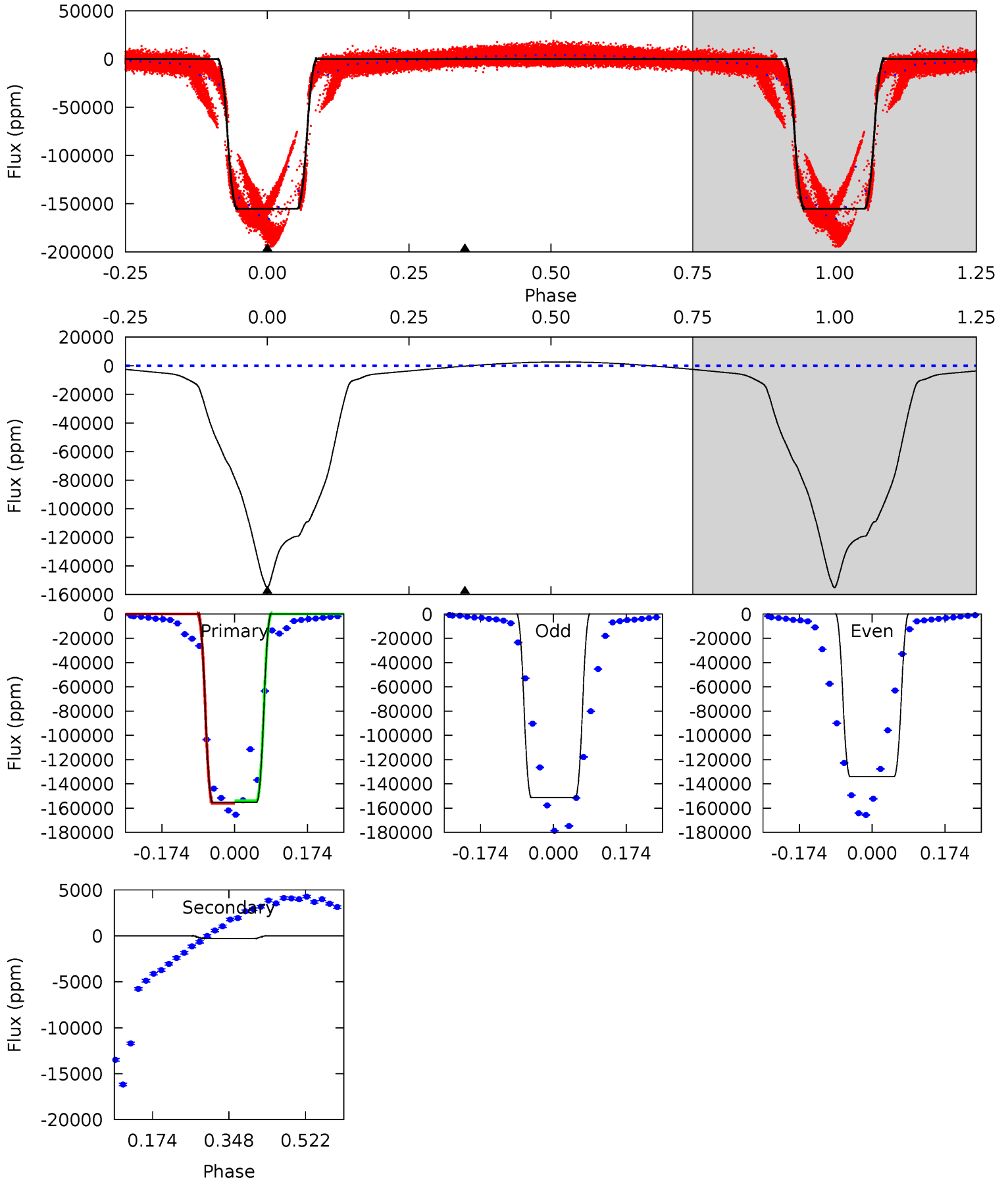
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

004851217-01, P = 1.235132 Days, E = 130.764885 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2263	4.45	0	0	4.45	1.36	36.5	2263	2263	4.45	4.45	165.9	1.02	0.02	16.1



Stellar Parameters For KIC 004851217

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7823^{+70}_{-93}	$3.885^{+0.154}_{-0.077}$	$0.070^{+0.150}_{-0.150}$	$2.675^{+0.299}_{-0.555}$	$2.002^{+0.185}_{-0.206}$	$0.147^{+0.116}_{-0.032}$
	+1%/-1%	+4%/-2%	+214%/-214%	+11%/-21%	+9%/-10%	+79%/-22%
Source	SPE68	SPE68	SPE68	DSEP		

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

Secondary Eclipse Parameters for KIC 004851217-01 / KOI 6460.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	0 ± 1000000	$31.70^{+27.48}_{-20.11}$	4663^{+155}_{-211}	-4681^{+28391}_{-19268}	$-0.330^{+70.615}_{-69.928}$
Alt.	-305 ± 69	$115.77^{+31.44}_{-30.06}$	4655^{+168}_{-236}	-4014^{+157}_{-109}	$0.010^{+0.009}_{-0.004}$

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 $A_{obs} \gg 1.0$

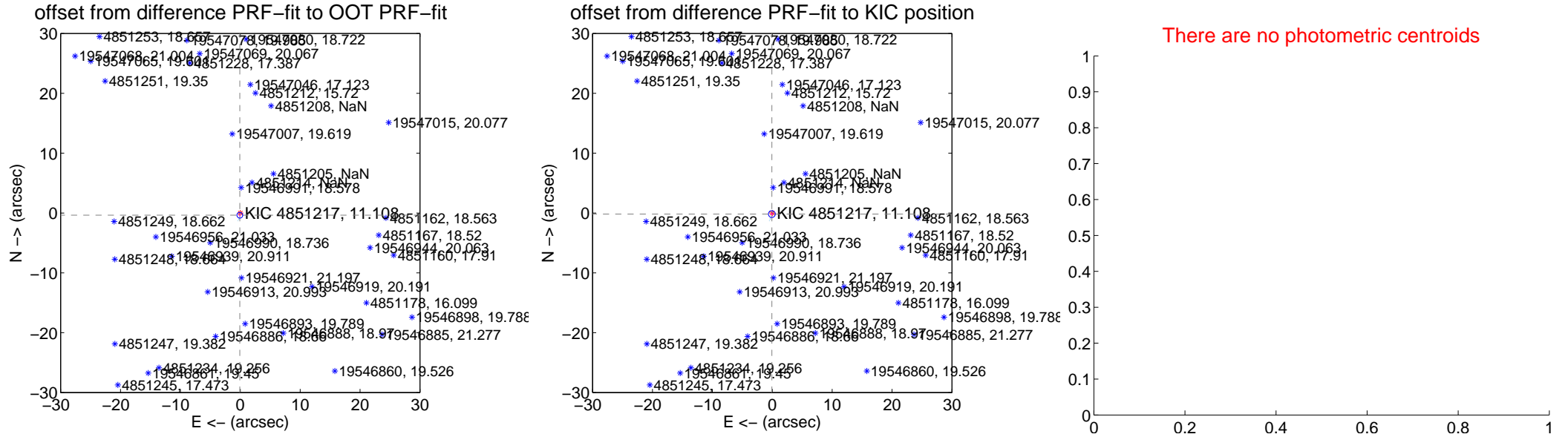
DV Centroid Data

Supplemental centroid analysis for 004851217-01. **Kepler magnitude: 11.11.** Transit SNR -1.00

There are 14 quarters with good PRF difference image offsets

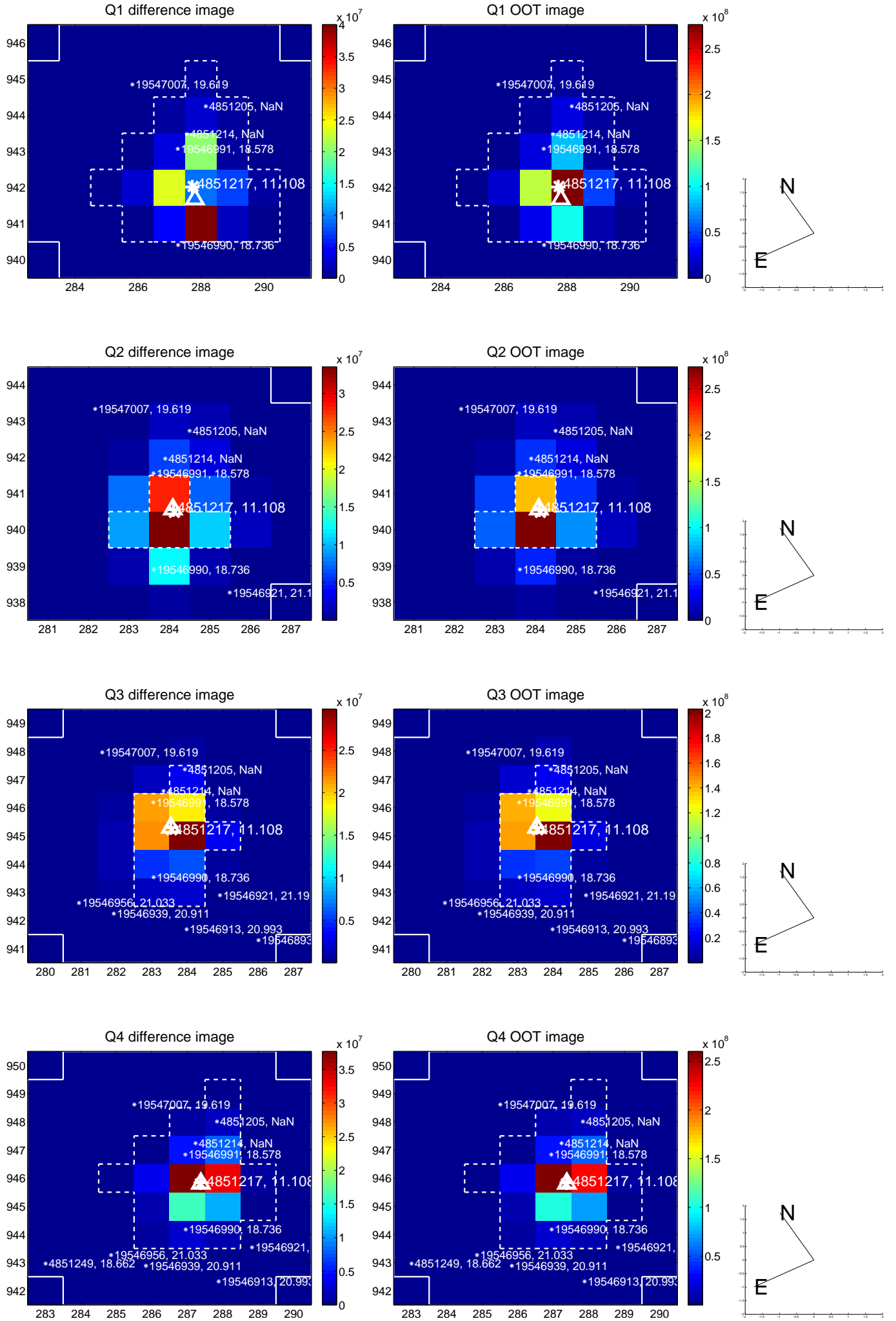
The direct PRF centroid is offset from the target star catalog position by about 0.12 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.375 ± 0.162	2.32	0.077 ± 0.074	-0.367 ± 0.164
PRF-fit source offset from KIC position	0.190 ± 0.190	1.00	0.067 ± 0.089	-0.177 ± 0.201
photometric centroid source offset	—	—	—	—

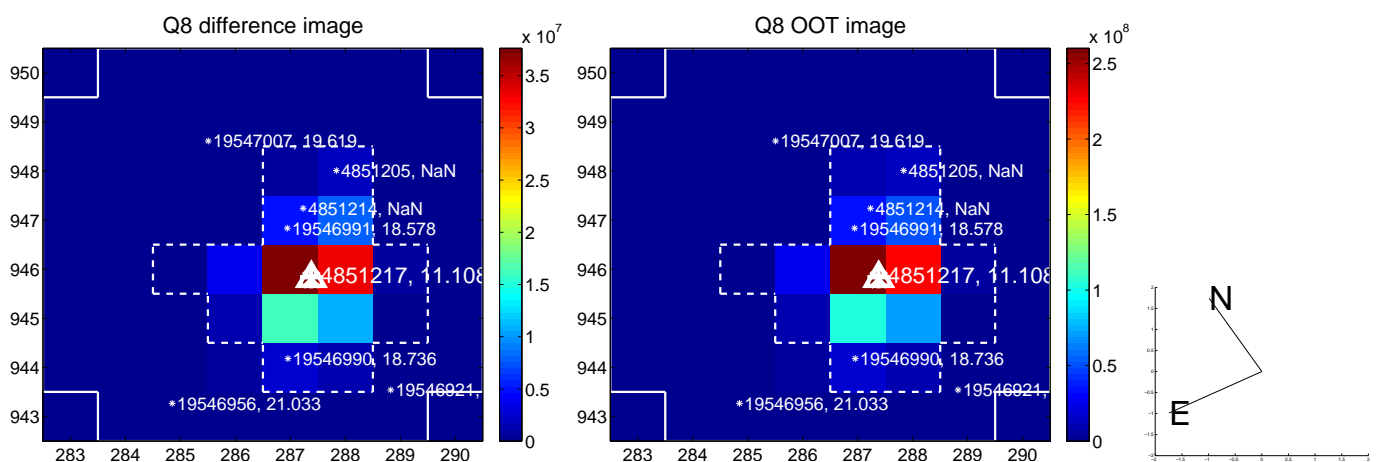
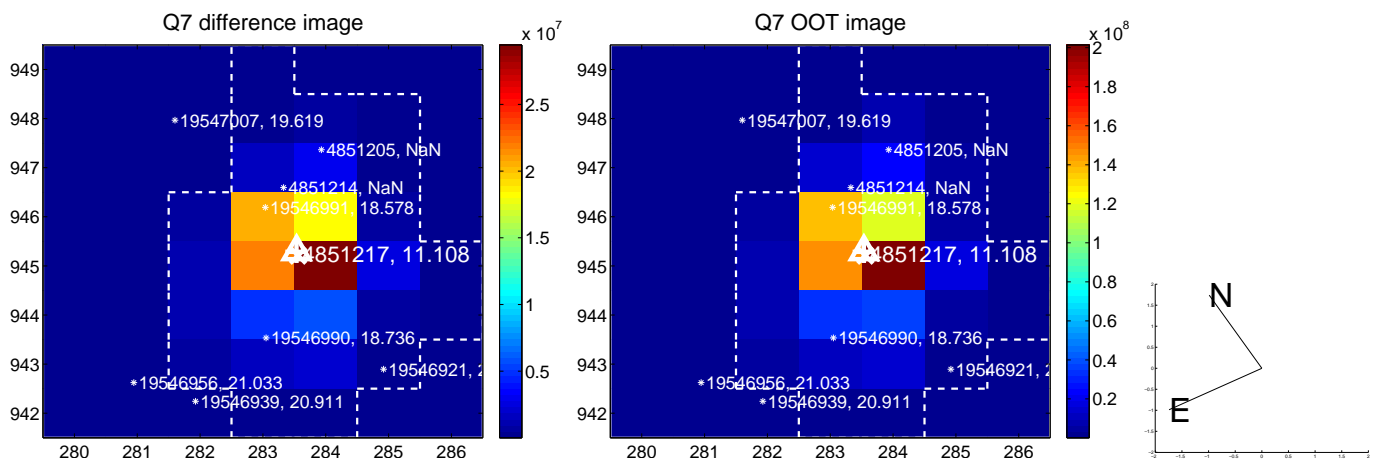
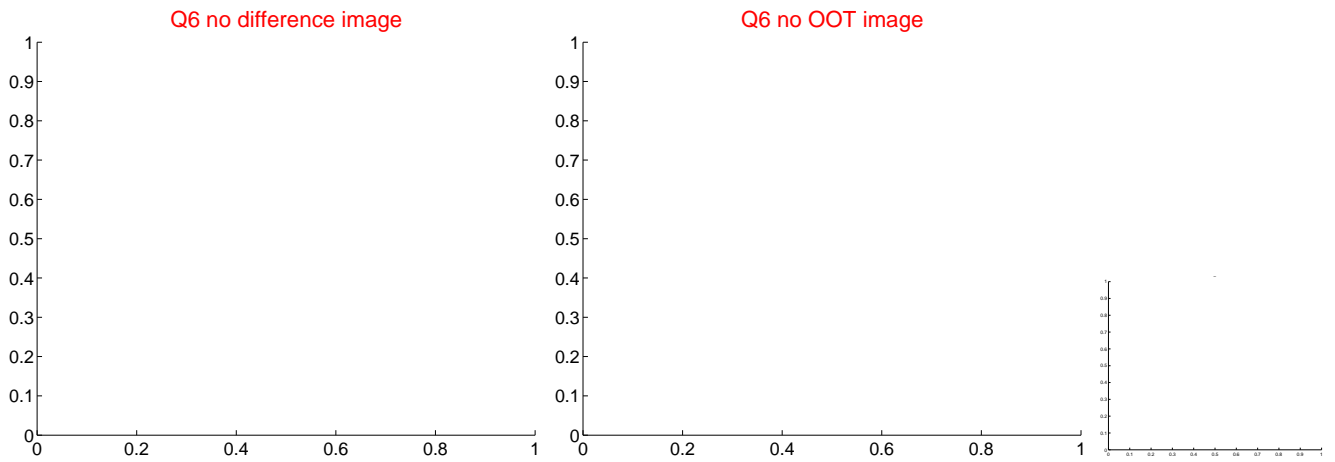
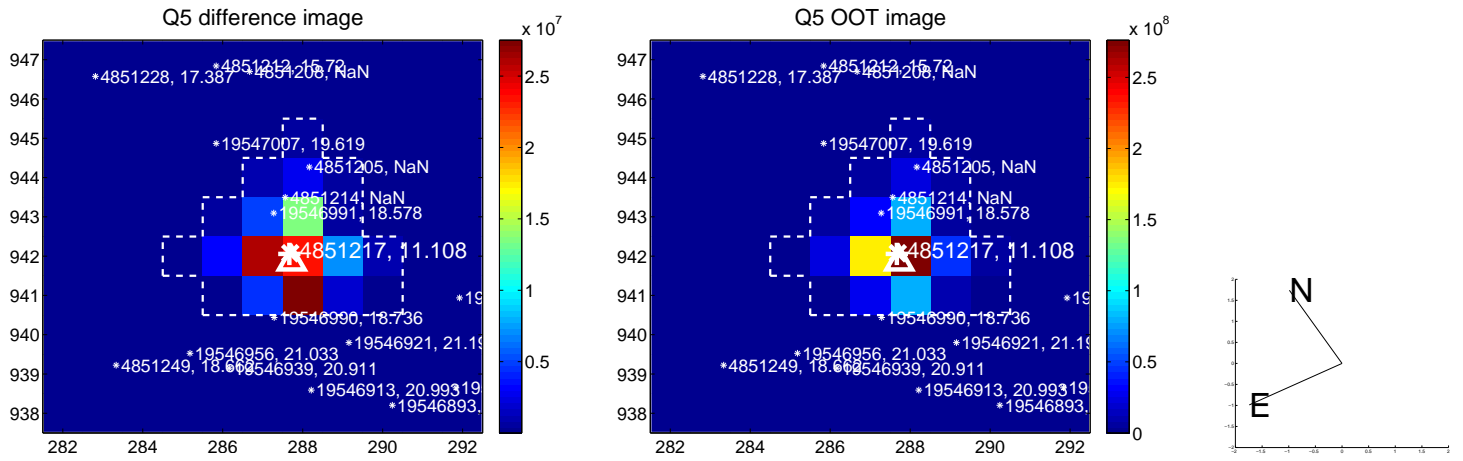


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

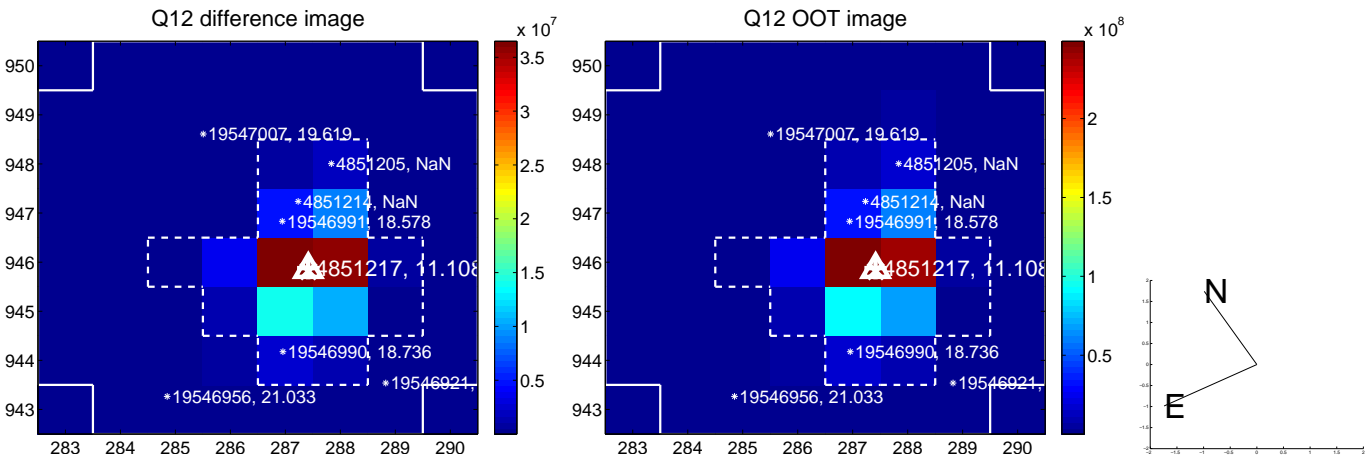
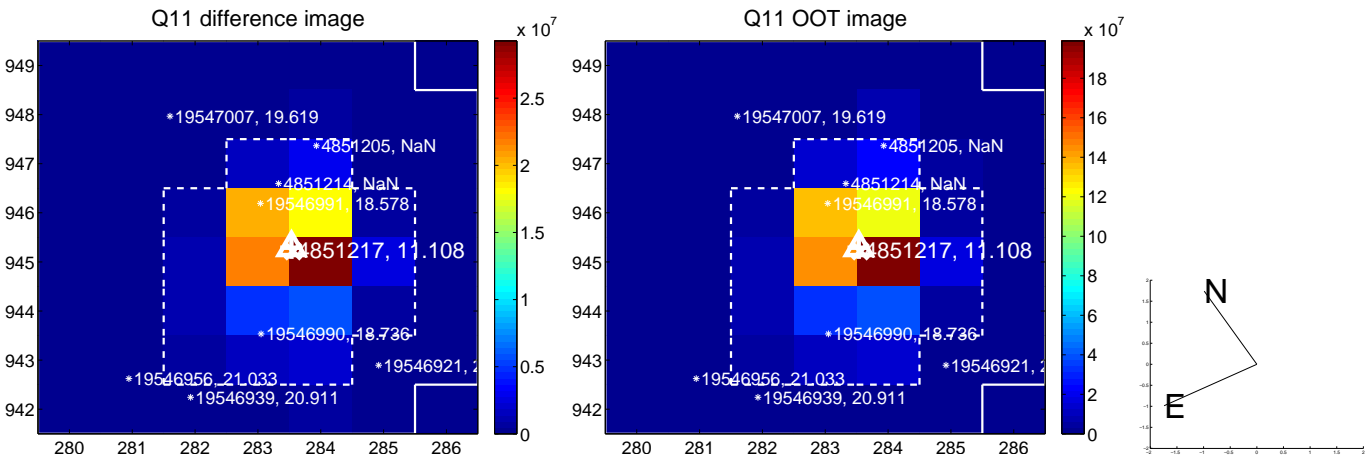
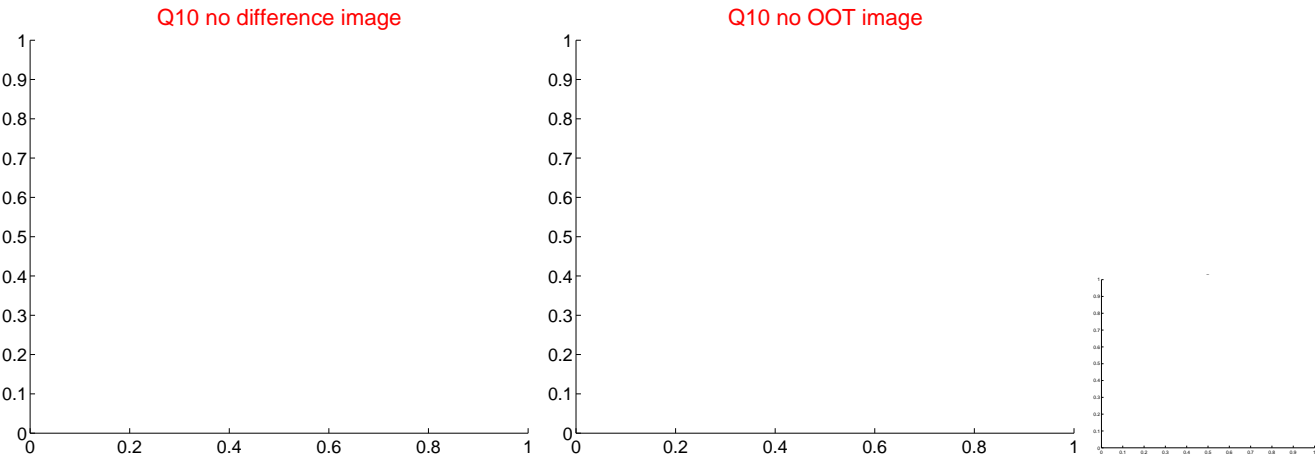
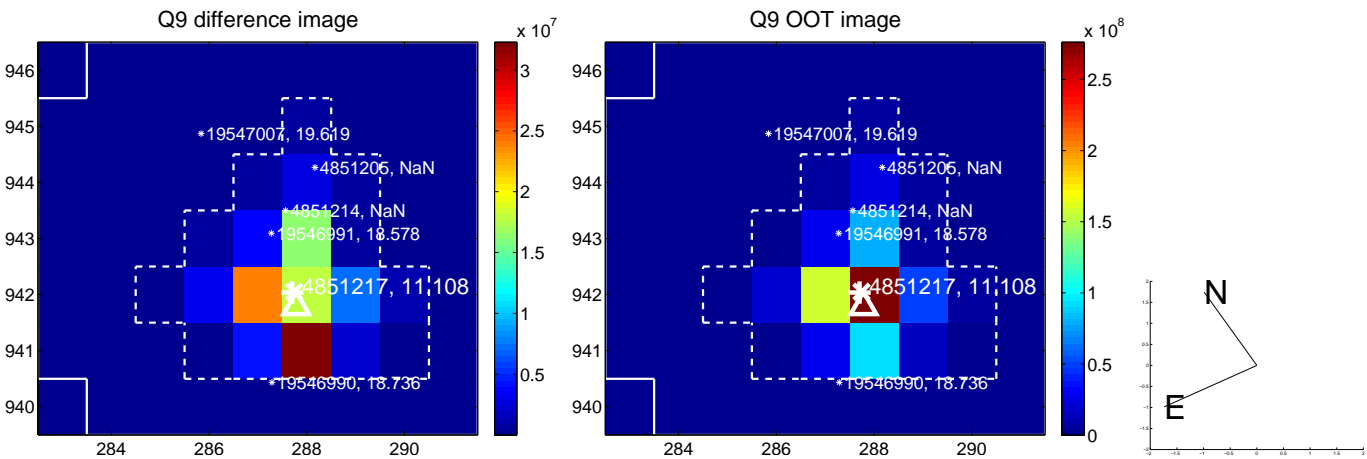
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



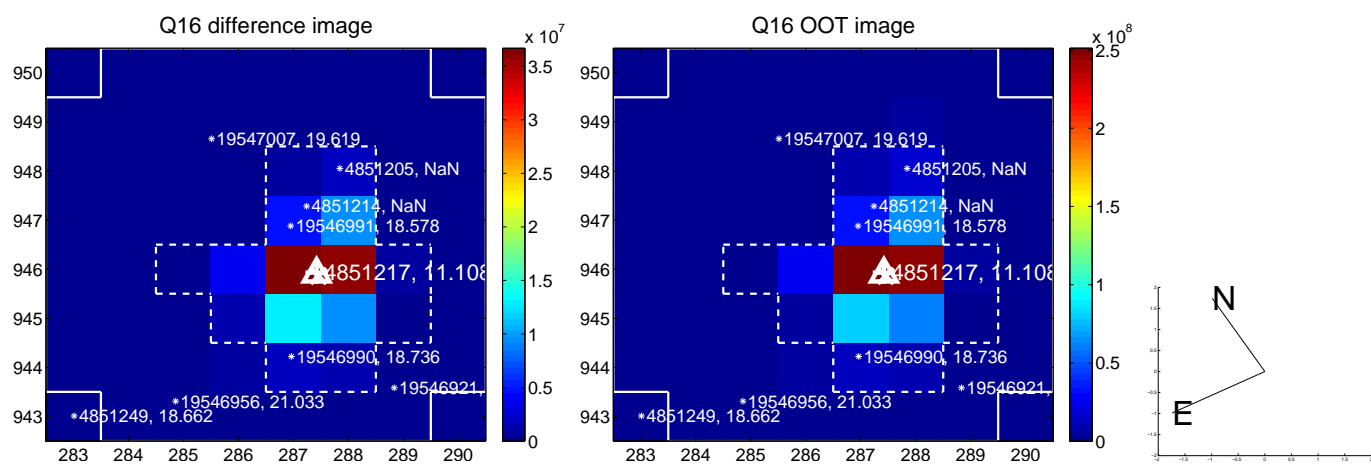
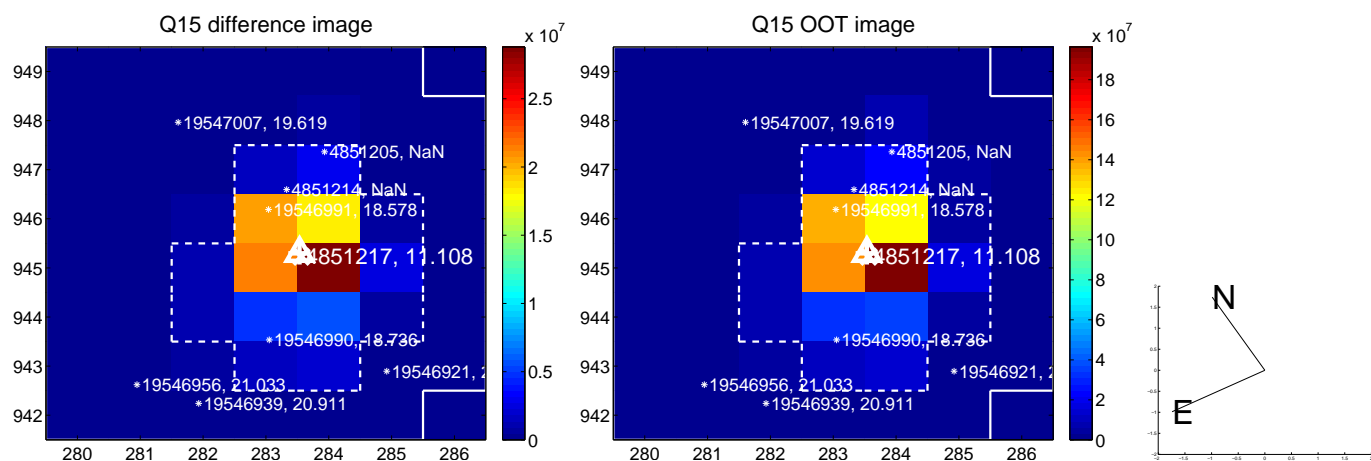
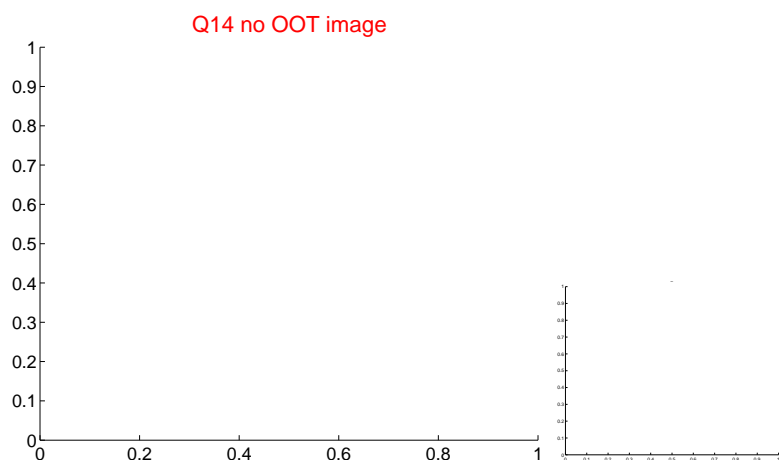
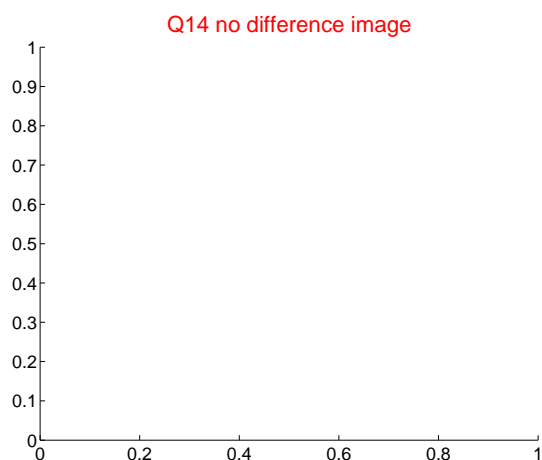
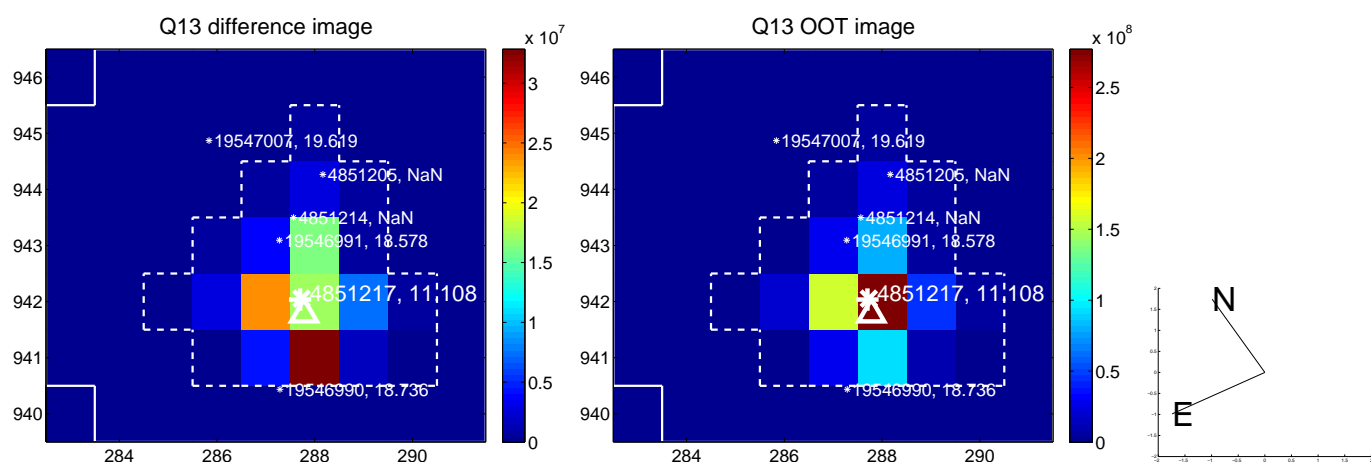
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



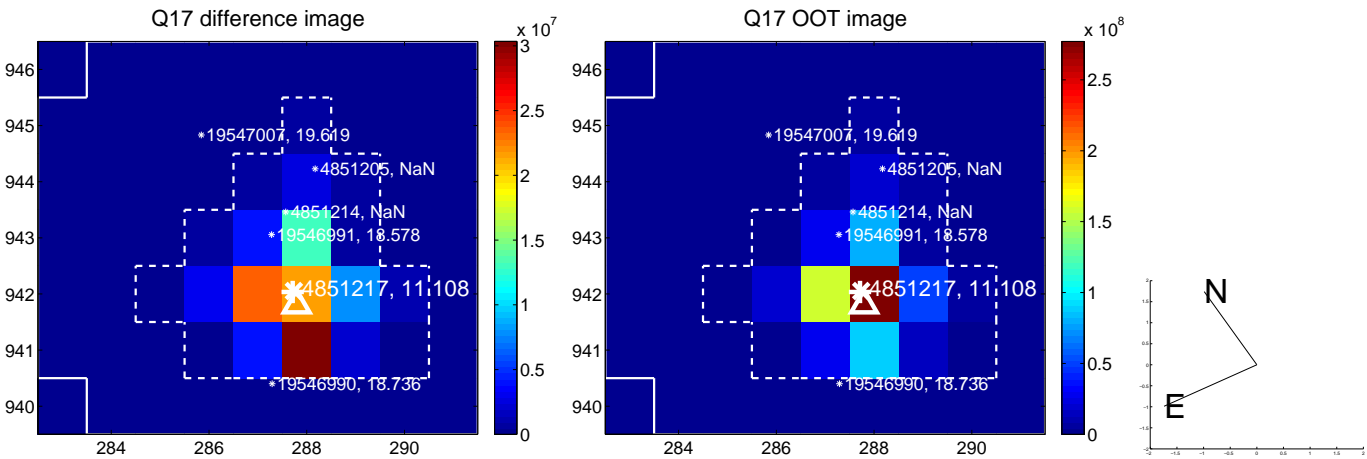
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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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

Declination

