

KIC 009602595

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})
009602595-01	OBS	5700.01	3.556482	133.533916	9793.8	7.500	4391.9	-1.0	2.43	8105	24.31	7255.05

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
009602595-01	OBS	FP	0.00	0	1	0	0	SWEET_EB—MOD_SEC_ALT—MOD_ODDEVEN_ALT—CENT_NOFITS

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 009602595-01

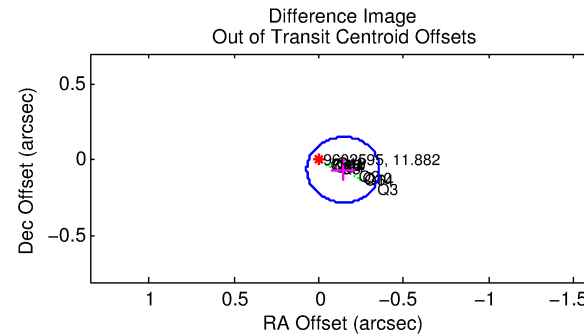
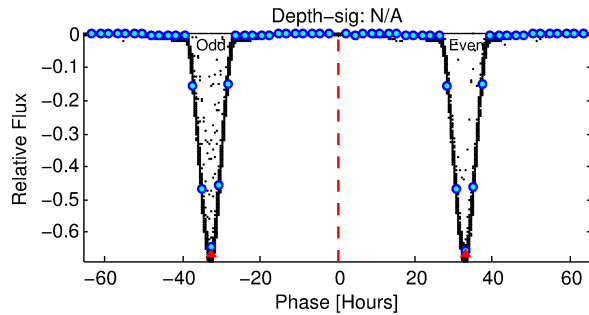
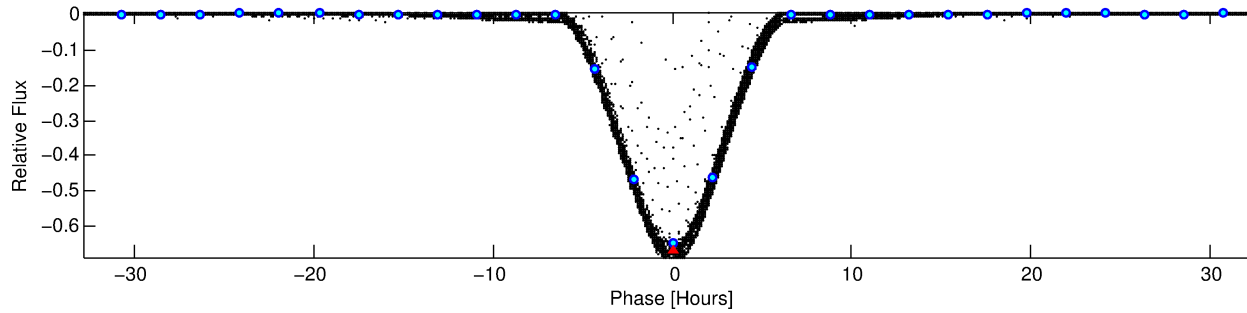
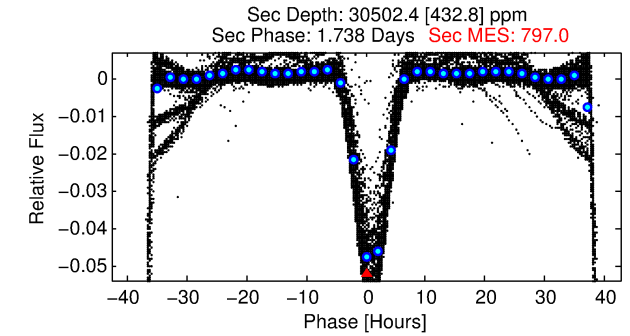
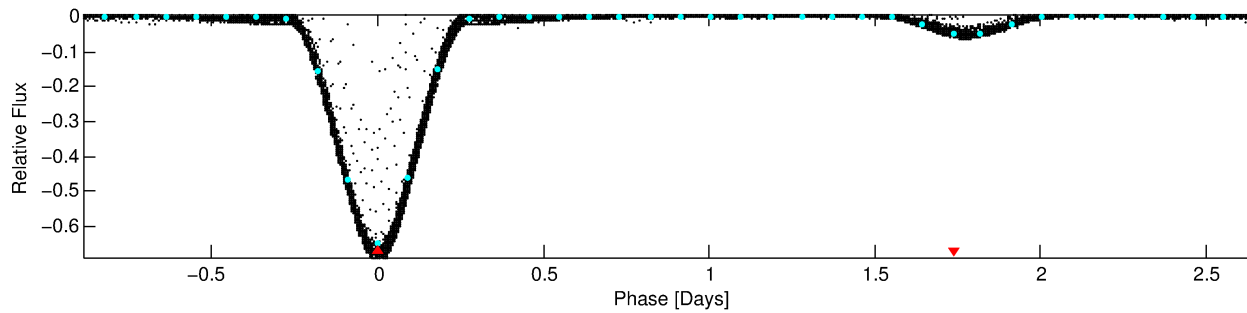
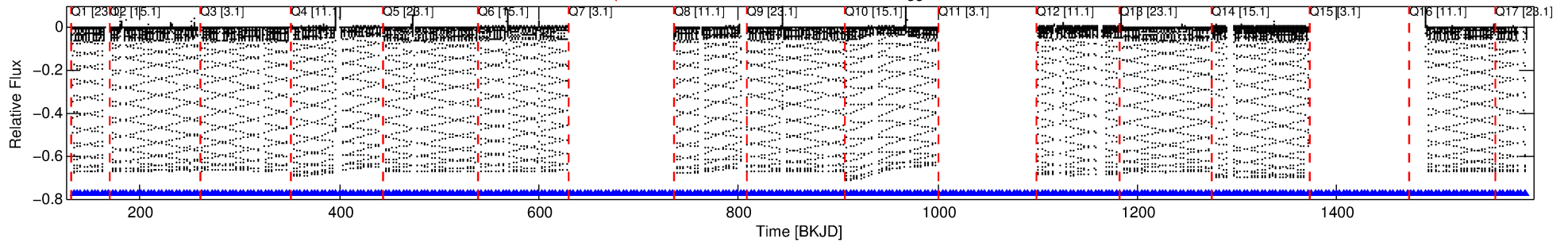
No Significant Match Found

DV One-Page Summary

KIC: 9602595 Candidate: 1 of 1 Period: 3.556 d

KOI: K05700.01 Corr: 0.814

Kp: 11.88 R*: 2.43 Rs Teff: 8105.0 K Logg: 3.94 Fe/H: -0.200



TPS TCE Results:

Period = 3.55648 d
Epoch = 133.5339 BKJD

DV fit results are unavailable

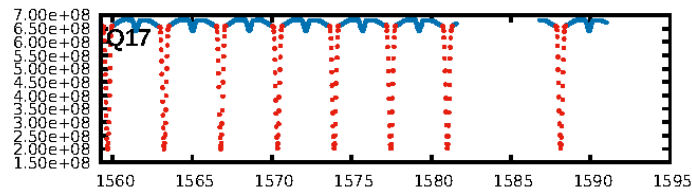
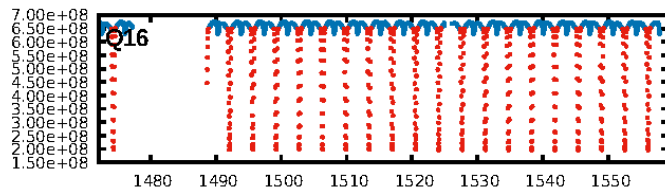
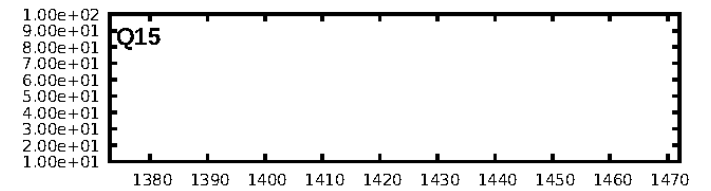
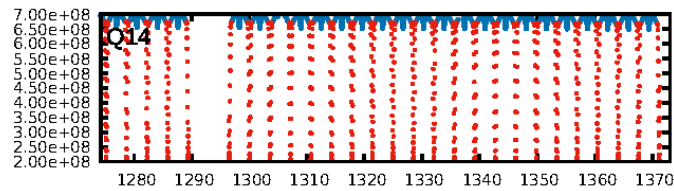
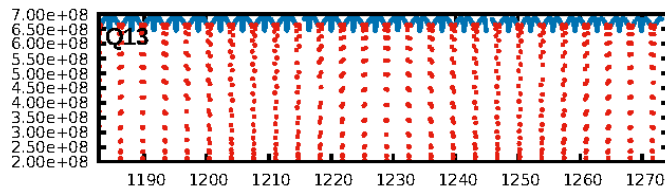
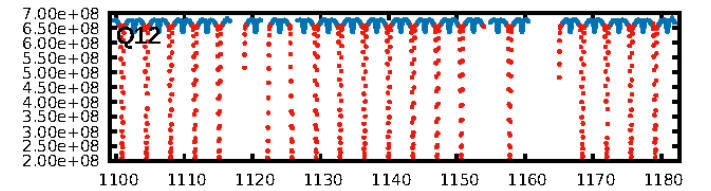
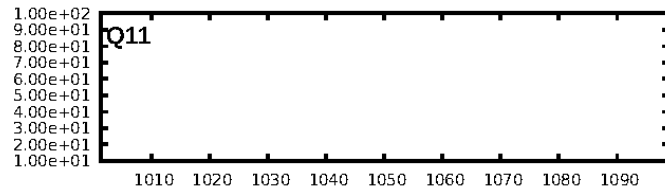
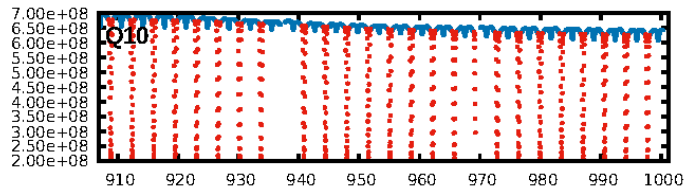
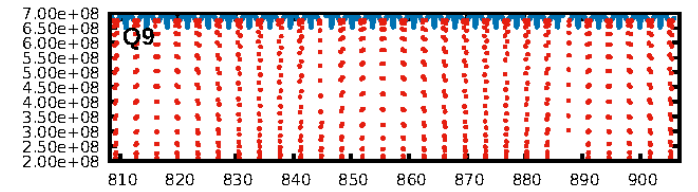
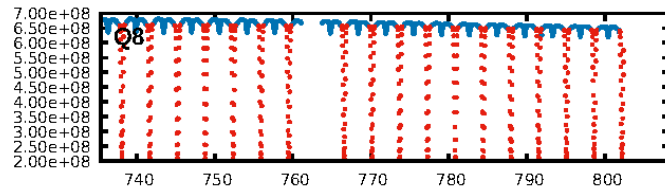
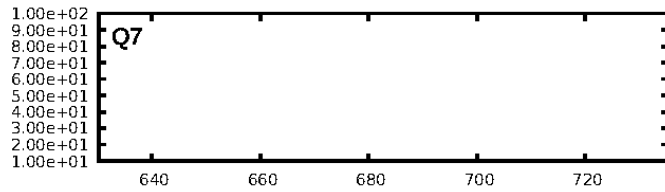
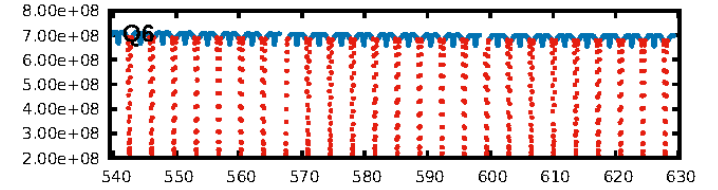
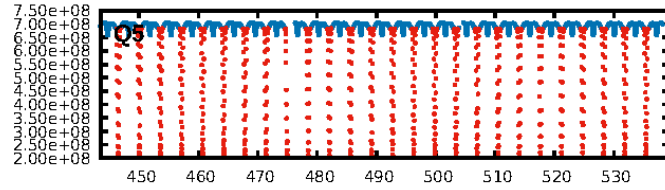
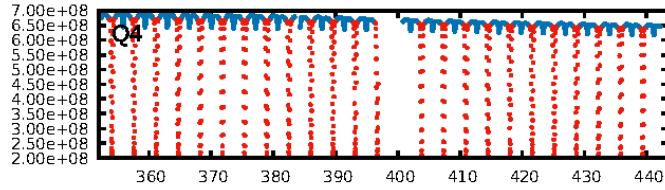
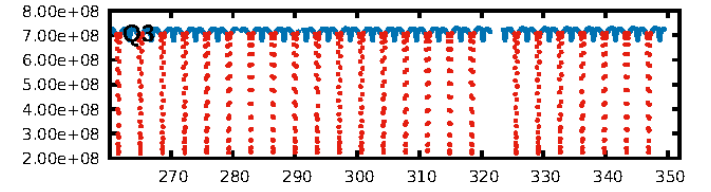
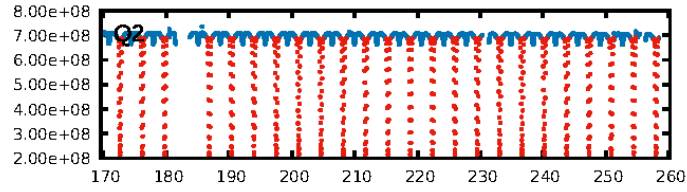
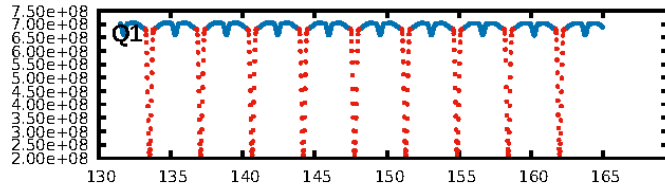
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [288/288]
GhostDiagnostic-chr: 1.134
Centroid-sig: N/A
Centroid-so: 0.104 arcsec [321.53σ]
OotOffset-rm: 0.157 arcsec [2.19σ]
KicOffset-rm: 0.351 arcsec [3.93σ]
OotOffset-st: 4/1/4/5 [14]
KicOffset-st: 4/1/4/5 [14]
DiffImageQuality-fgm: 1.00 [14/14]
DiffImageOverlap-fno: 1.00 [14/14]

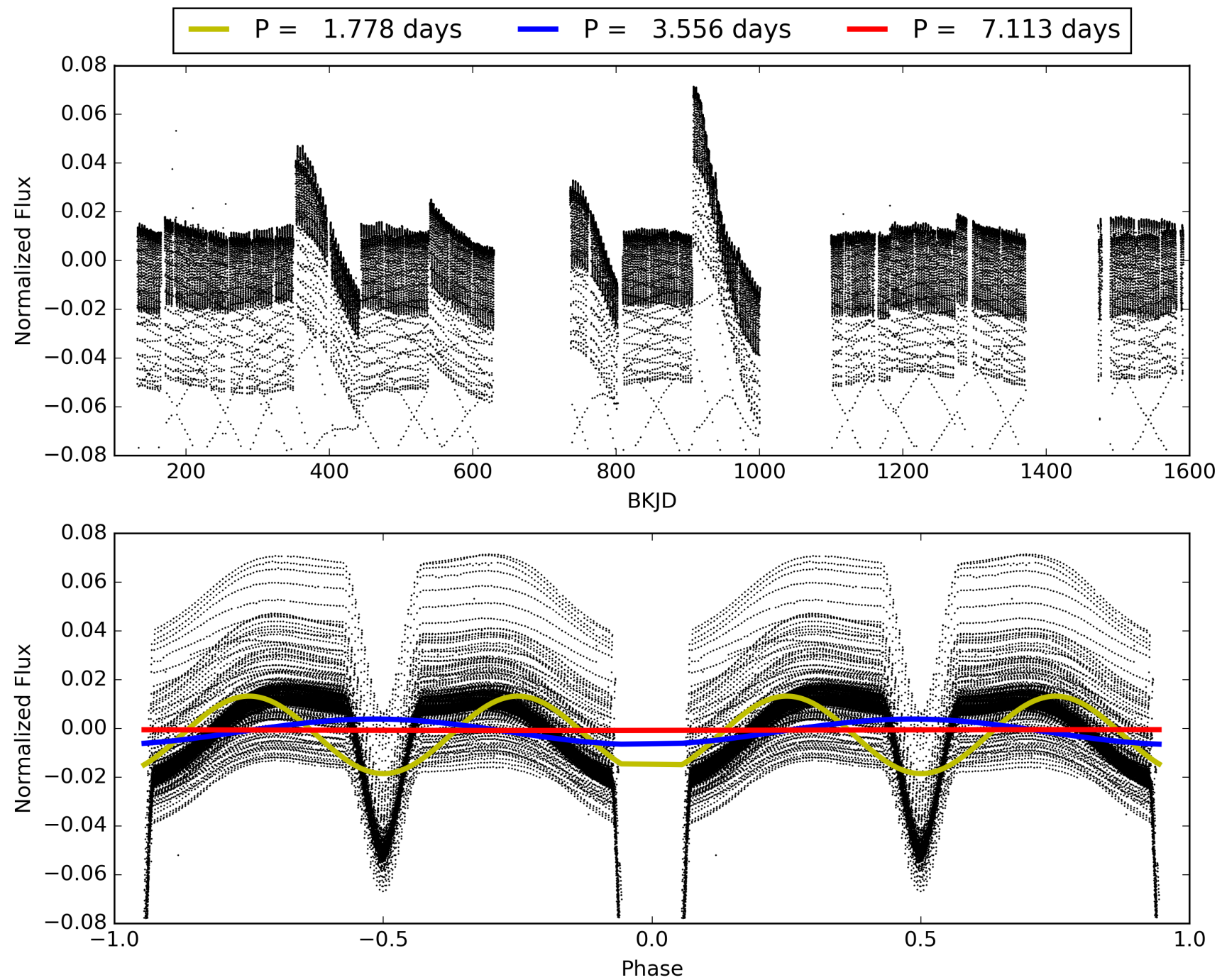
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 18:35:58 Z

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

TCE 009602595-01, PDC Light Curves

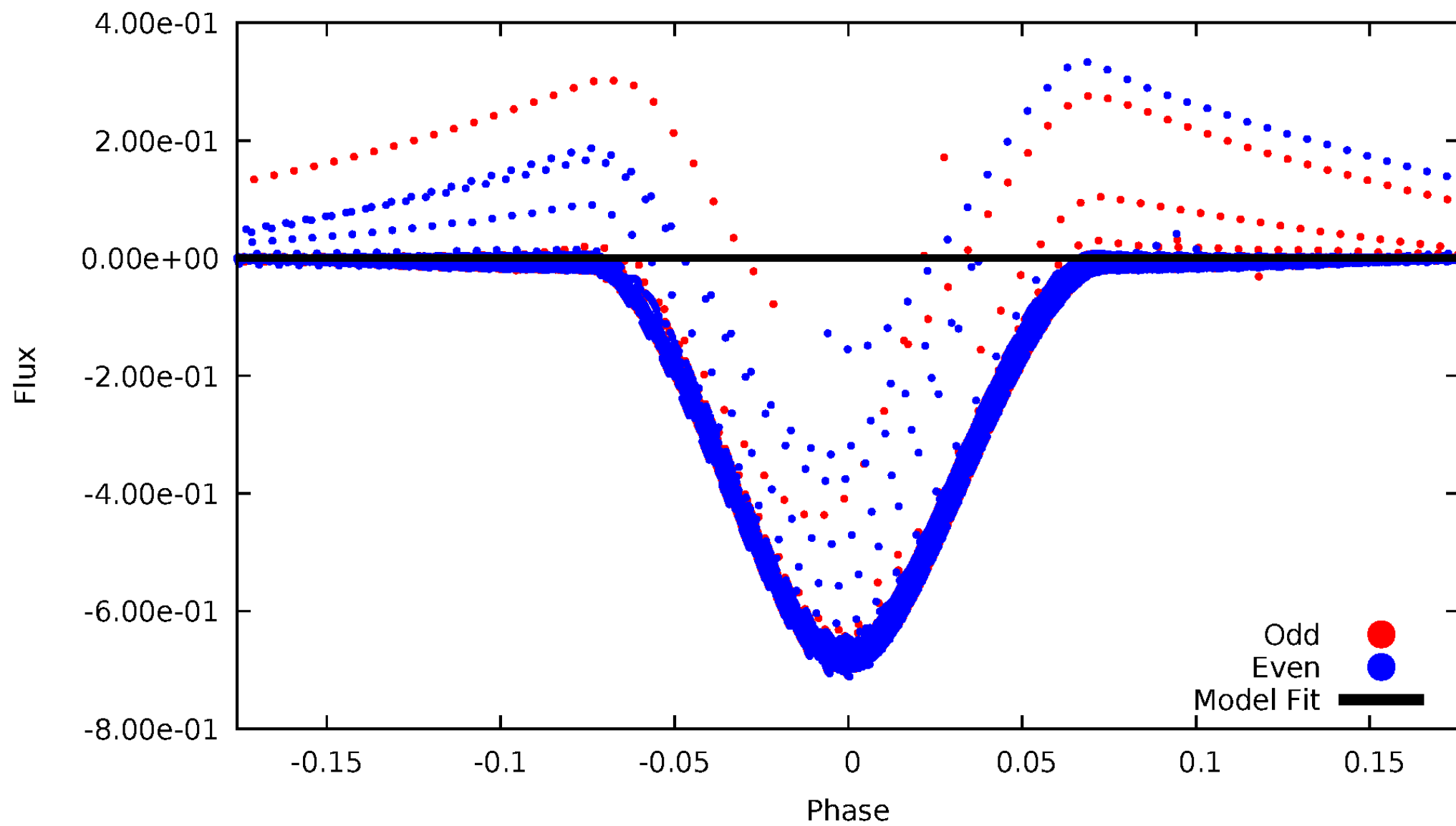


TCE 009602595-01



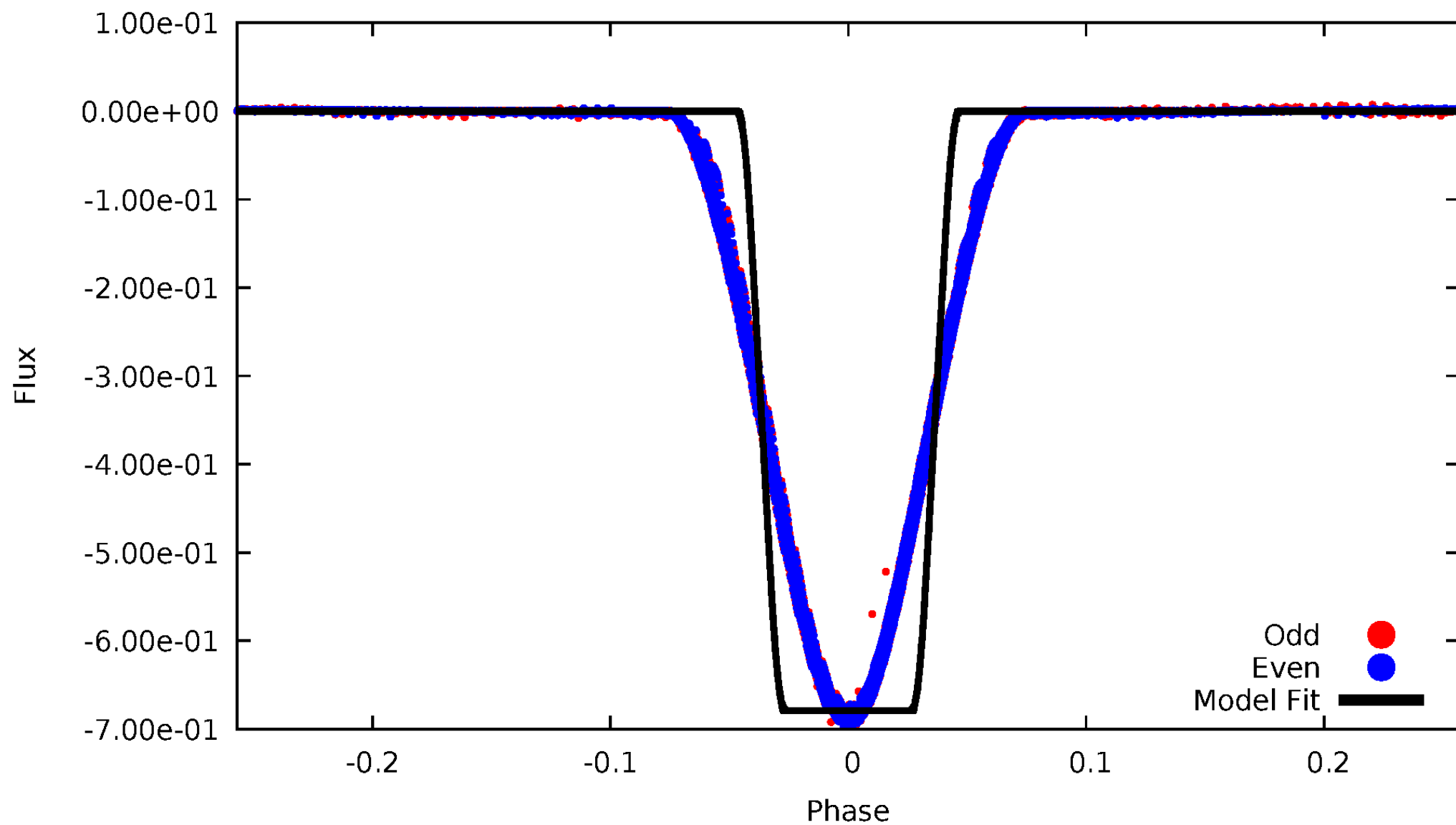
DV Odd/Even

TCE 009602595-01



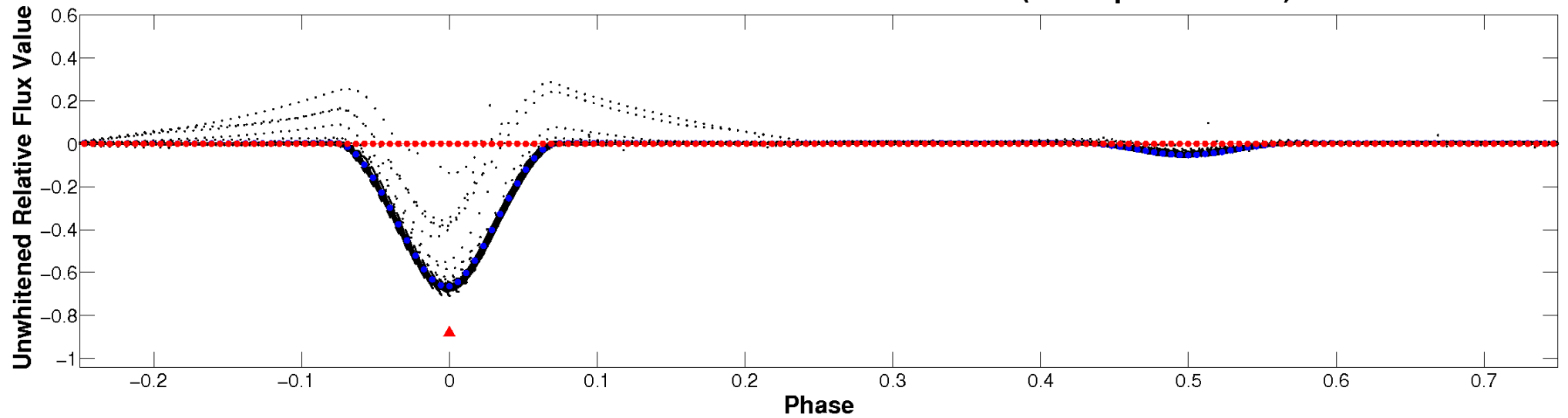
ALT Odd/Even

TCE 009602595-01

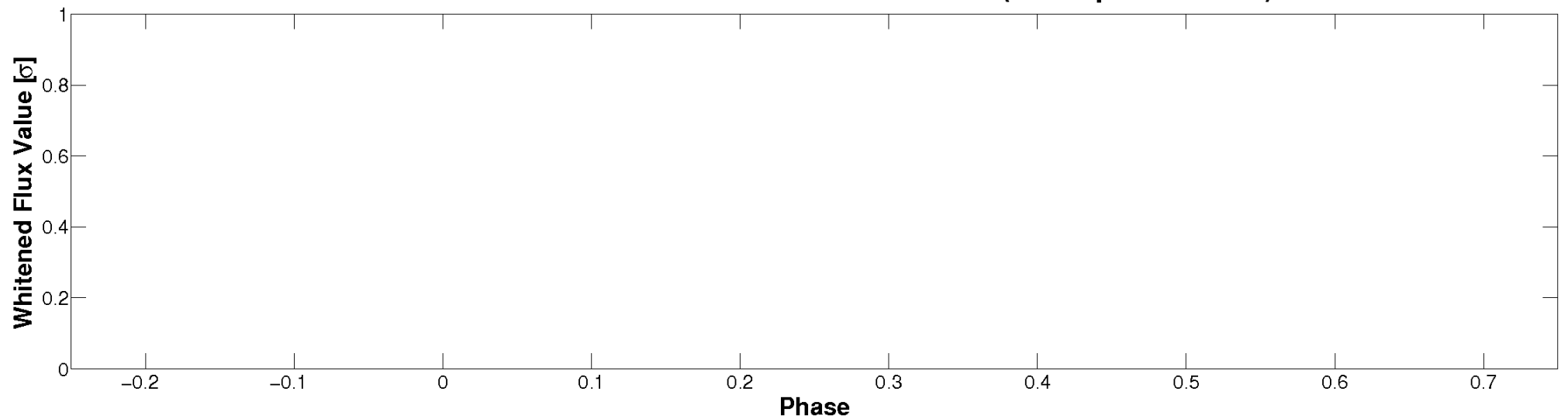


Non-Whitened Vs. Whitened Light Curve

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

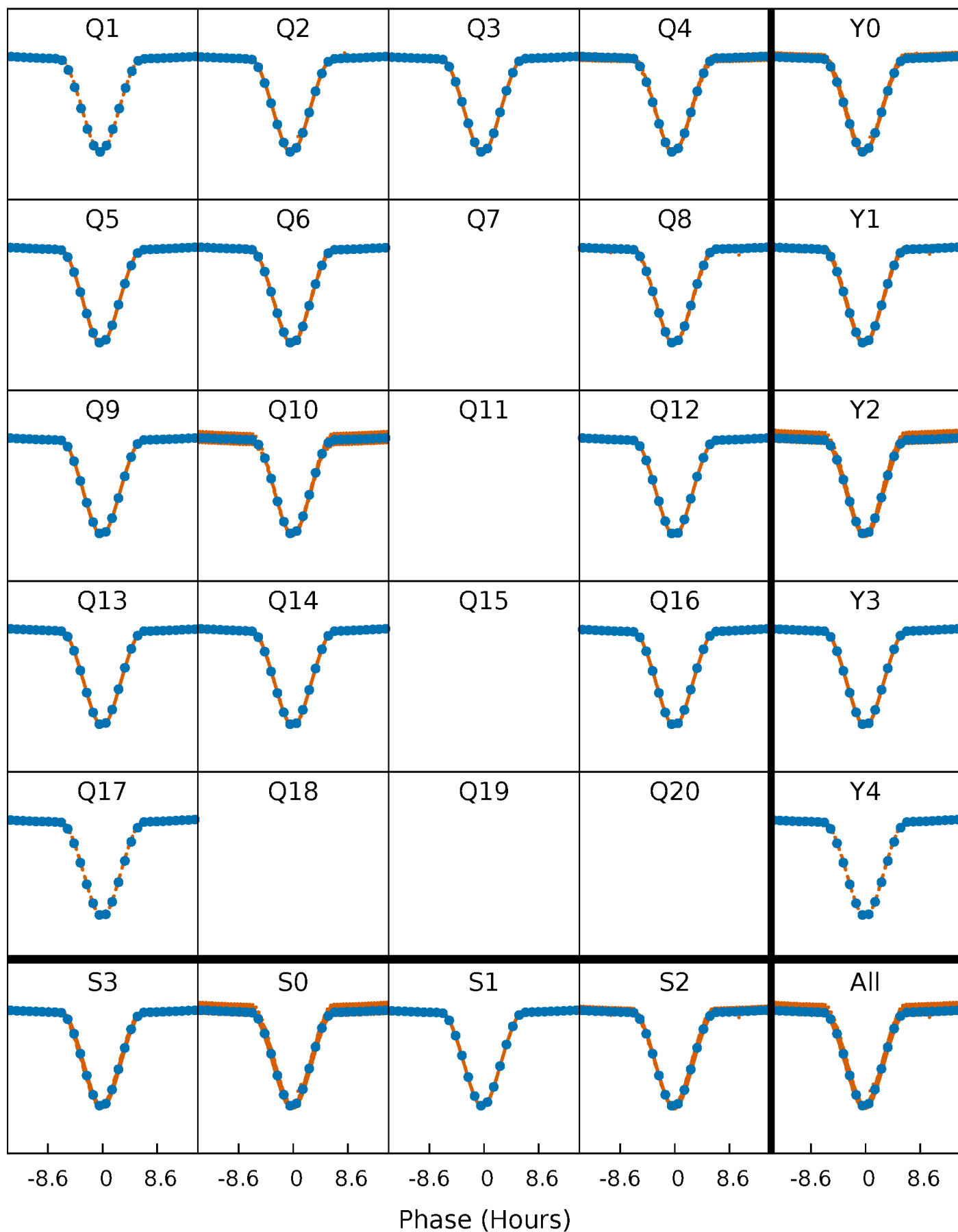


Planet 1 : Phased Whitened Flux Time Series (TPS Epoch/Period)



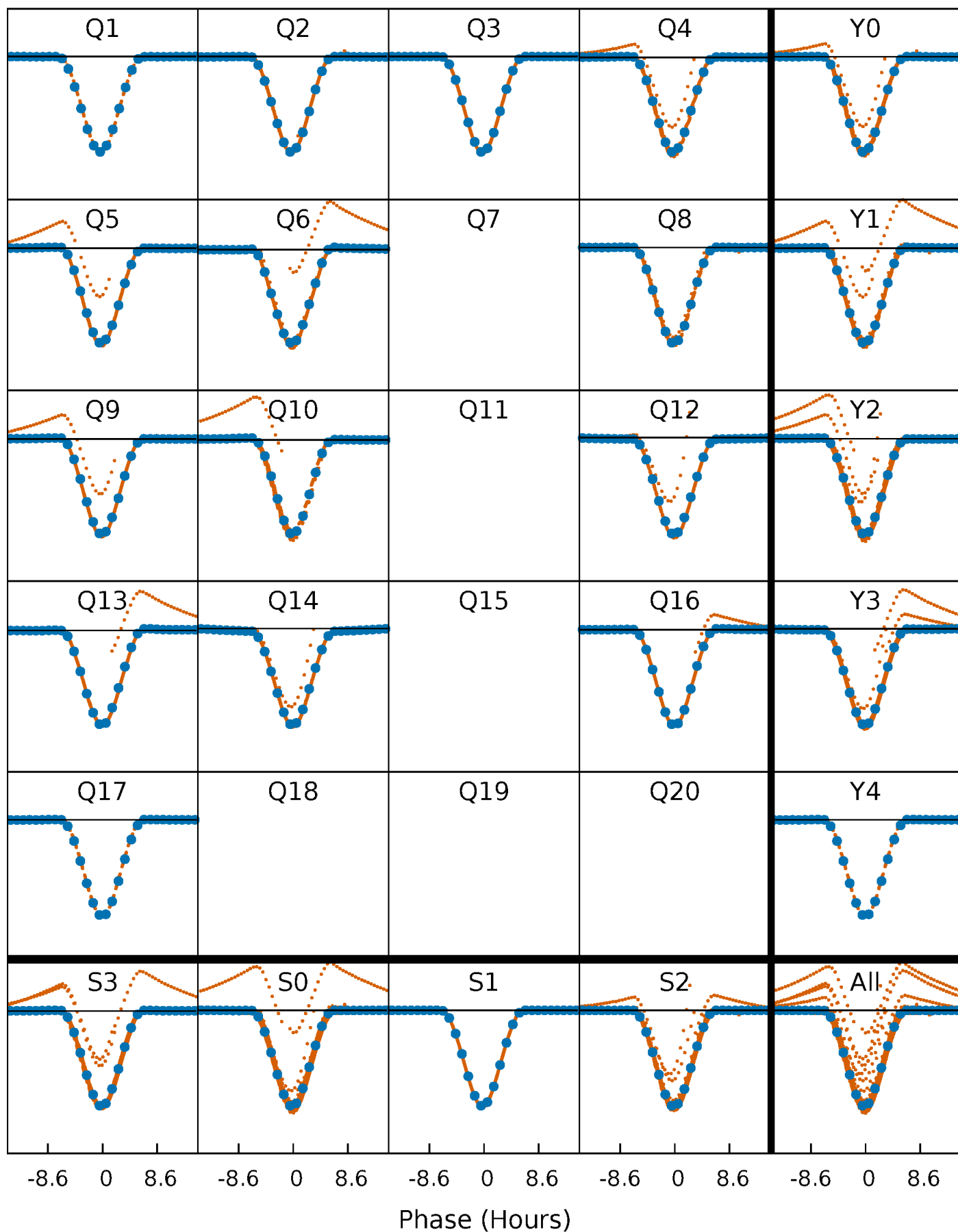
PDC Quarter-Phased Transit Curves

TCE 009602595-01 P= 3.556482 Days $T_0=133.533916$ (BKJD)



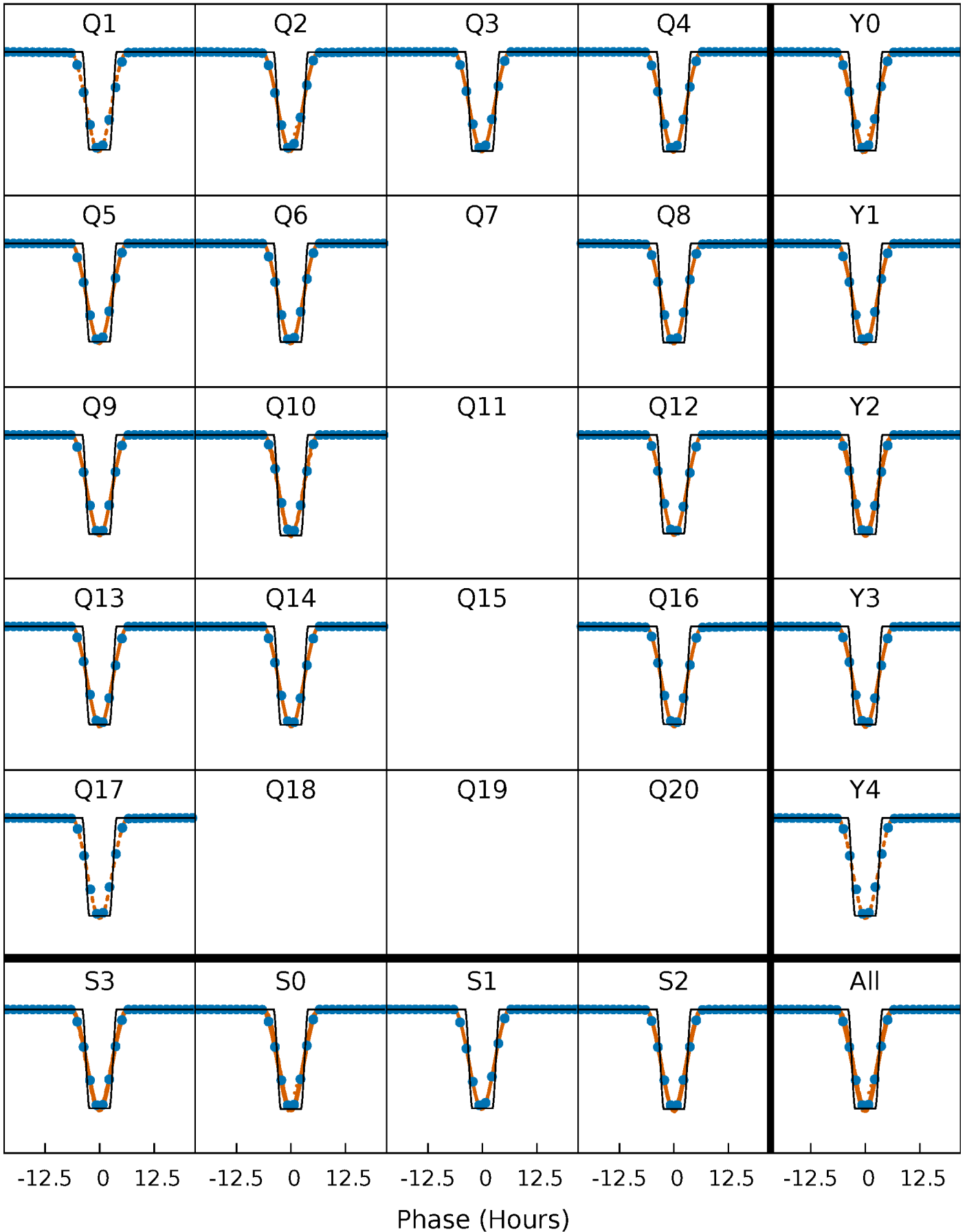
DV Quarter-Phased Transit Curves

TCE 009602595-01 P= 3.556482 Days $T_0=133.533916$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

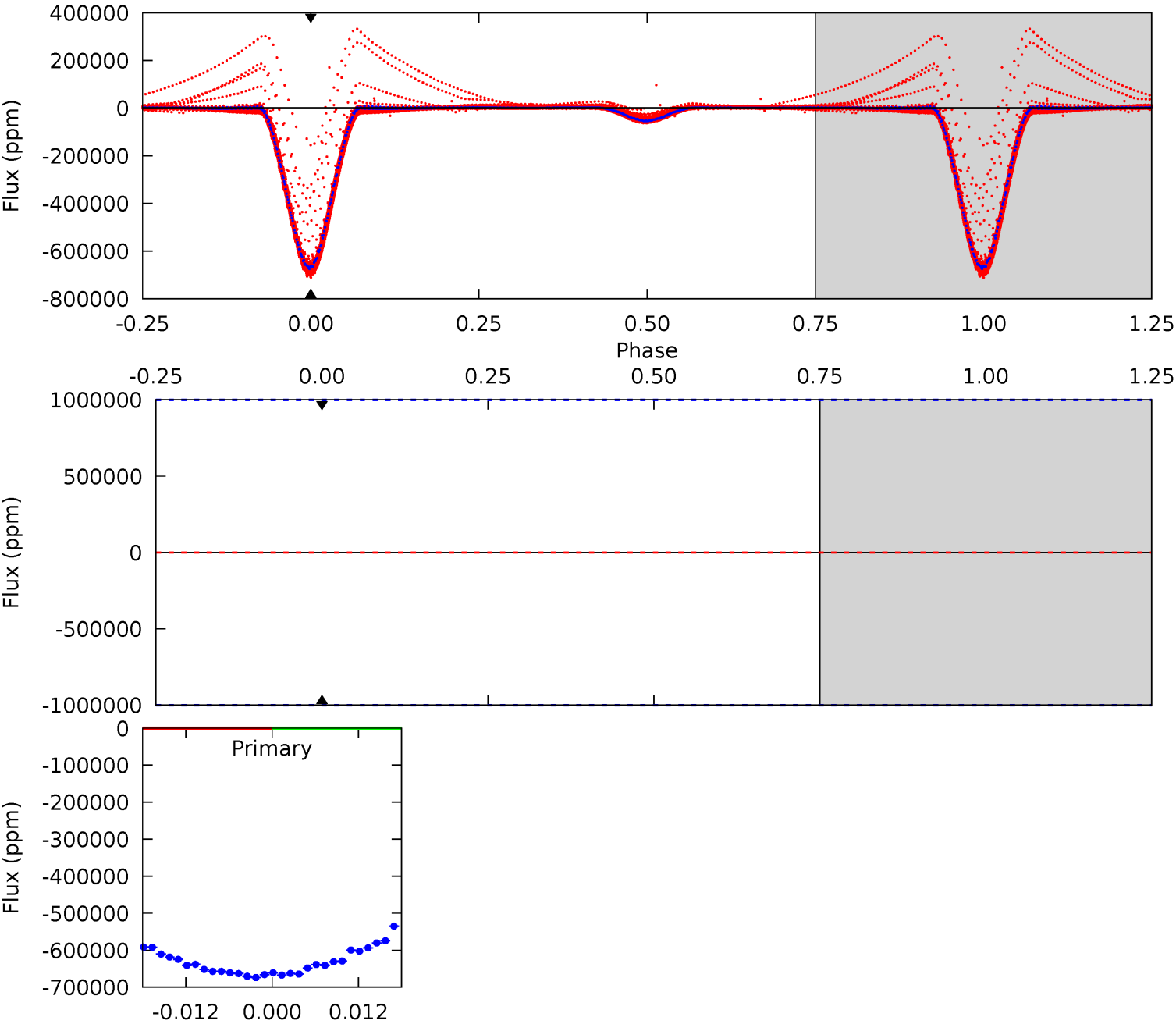
TCE 009602595-01 P= 3.556482 Days $T_0=133.528512$ (BKJD)



DV Model-Shift Uniqueness Test

009602595-01, P = 3.556482 Days, E = 129.977434 Days

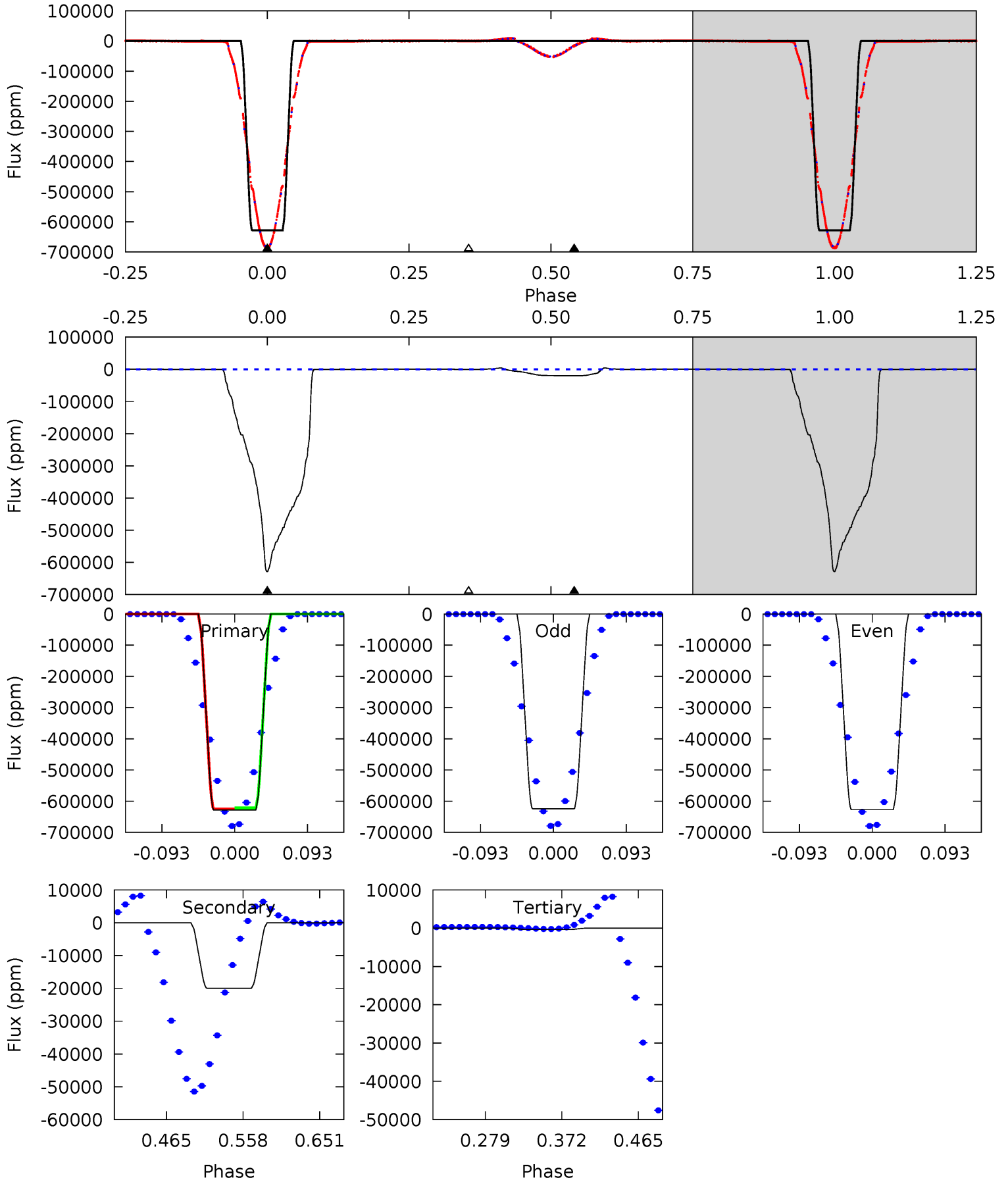
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

009602595-01, P = 3.556482 Days, E = 129.972030 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
17044	542.2	9.18	0	4.58	1.68	15.9	17035	17044	533.0	542.2	35.6	1.00	0.01	61.2



Stellar Parameters For KIC 009602595

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	8105^{+226}_{-340}	$3.937^{+0.266}_{-0.114}$	$-0.200^{+0.200}_{-0.300}$	$2.433^{+0.428}_{-0.794}$	$1.868^{+0.096}_{-0.384}$	$0.183^{+0.311}_{-0.063}$
	+3%/-4%	+7%/-3%	+100%/-150%	+18%/-33%	+5%/-21%	+170%/-35%
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 009602595-01 / KOI 5700.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	0 ± 1000000	$25.99^{+23.19}_{-17.05}$	3221^{+231}_{-270}	4649^{+23307}_{-30668}	$3.203^{+448.149}_{-363.760}$
Alt.	-19992 ± 37	$209.17^{+43.49}_{-42.53}$	3255^{+208}_{-312}	3400^{+254}_{-241}	$0.794^{+0.390}_{-0.245}$

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 $A_{obs} \gg 1.0$

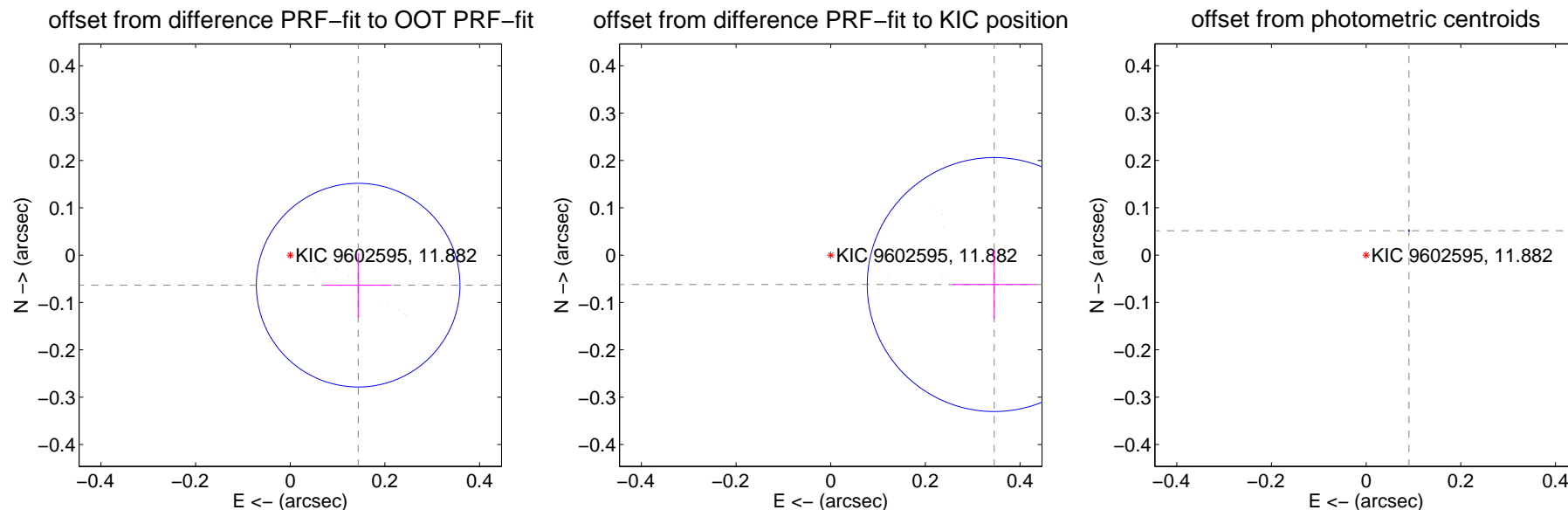
DV Centroid Data

Supplemental centroid analysis for 009602595-01. **Kepler magnitude: 11.88.** Transit SNR -1.00

There are 14 quarters with good PRF difference image offsets

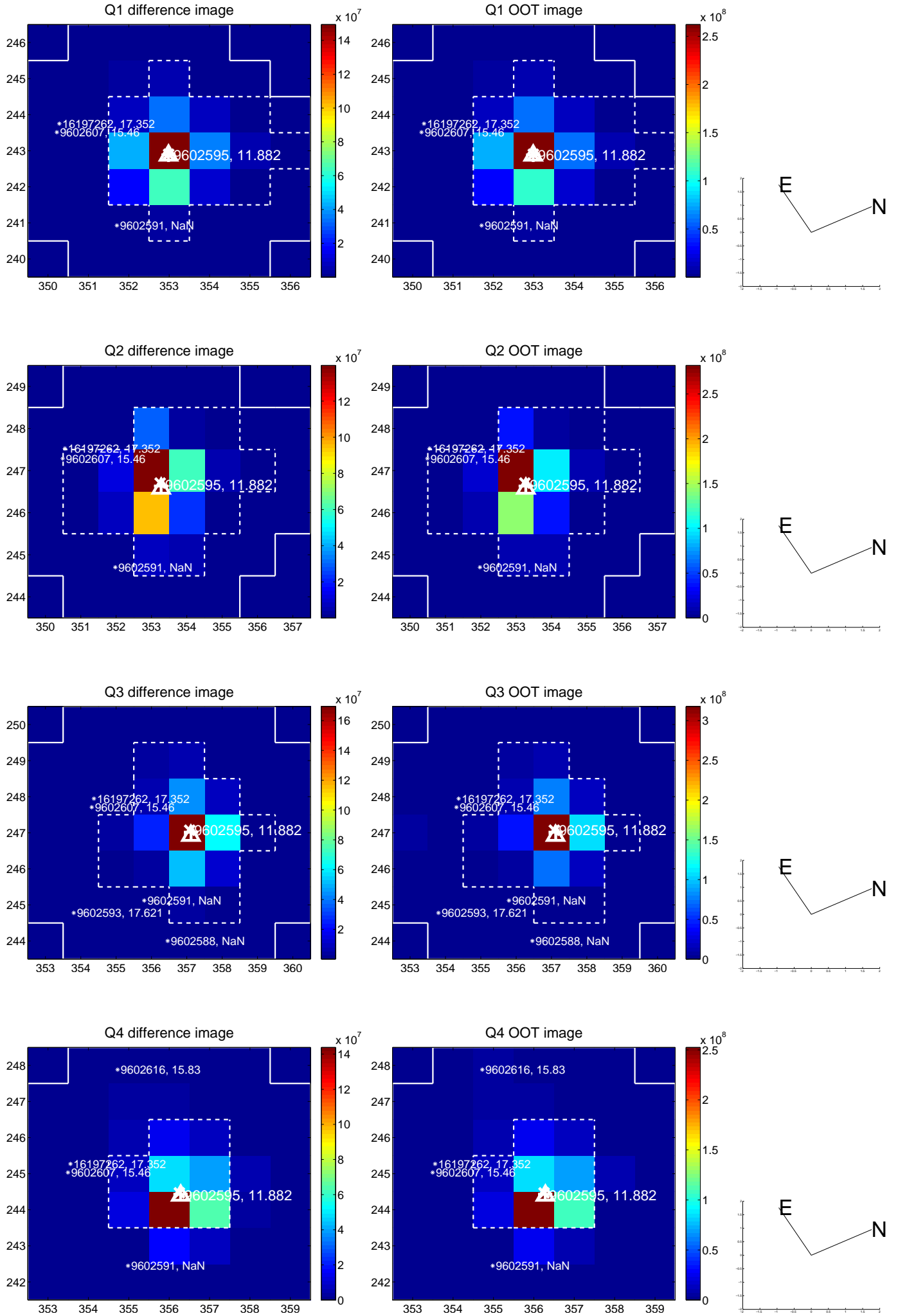
The direct PRF centroid is offset from the target star catalog position by about 0.07 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.157 ± 0.072	2.19	-0.143 ± 0.071	-0.063 ± 0.068
PRF-fit source offset from KIC position	0.351 ± 0.089	3.93	-0.345 ± 0.087	-0.062 ± 0.072
photometric centroid source offset	0.10 ± 0.00	321.53	-0.09 ± 0.00	0.05 ± 0.00

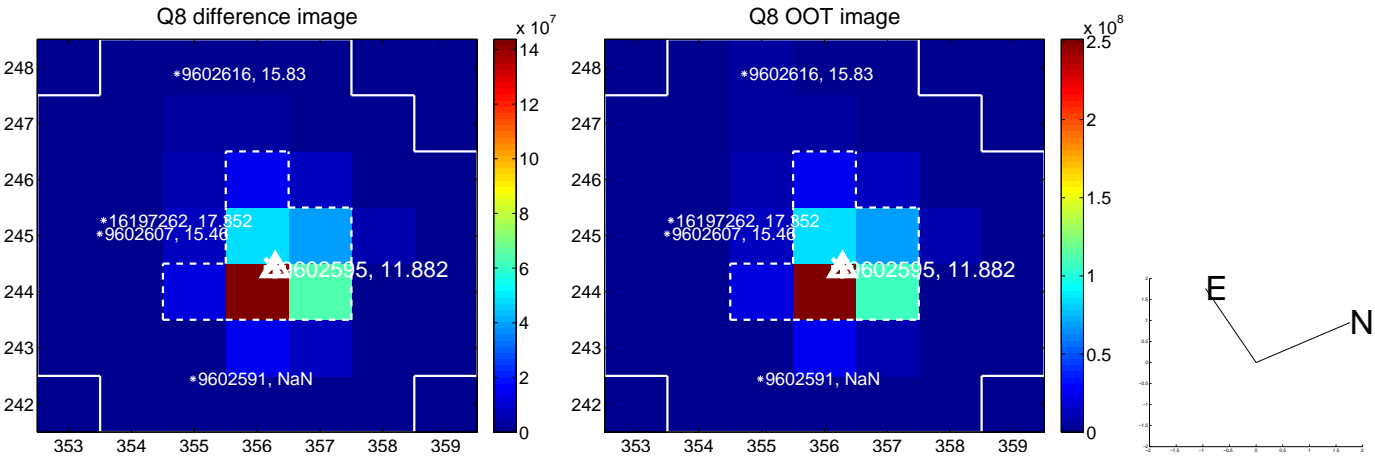
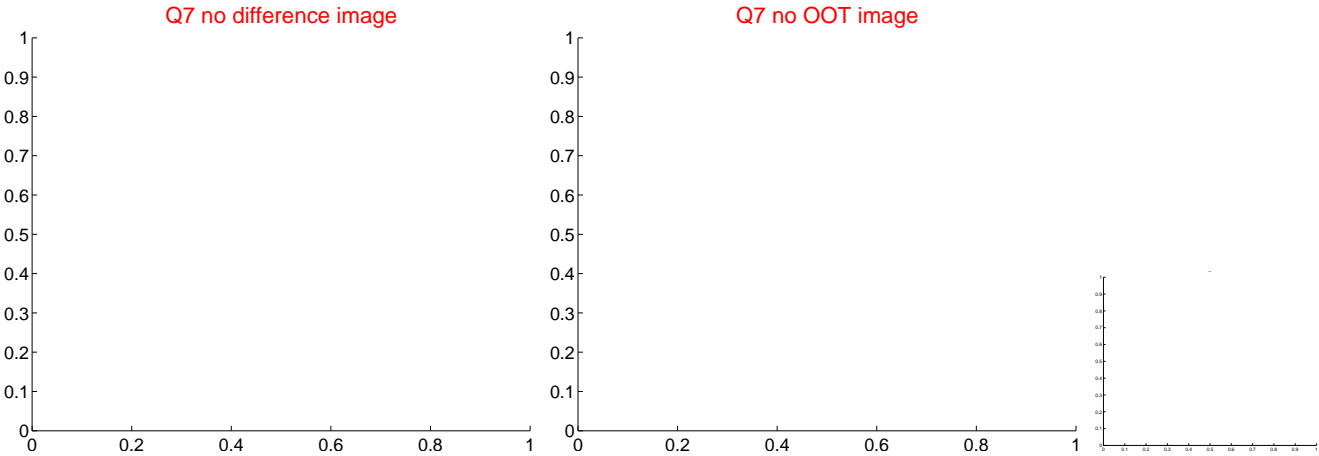
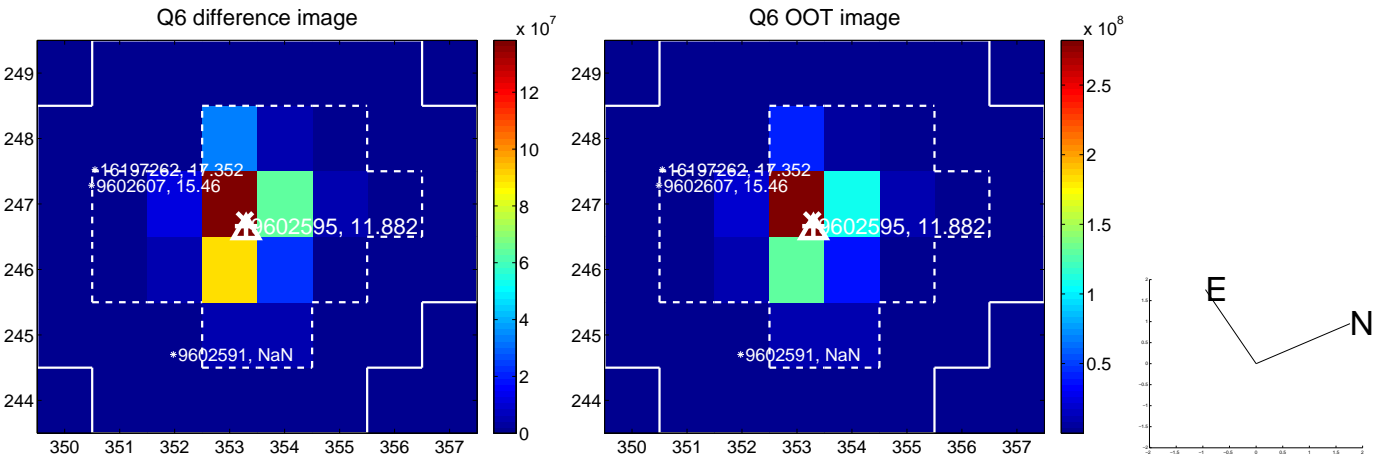
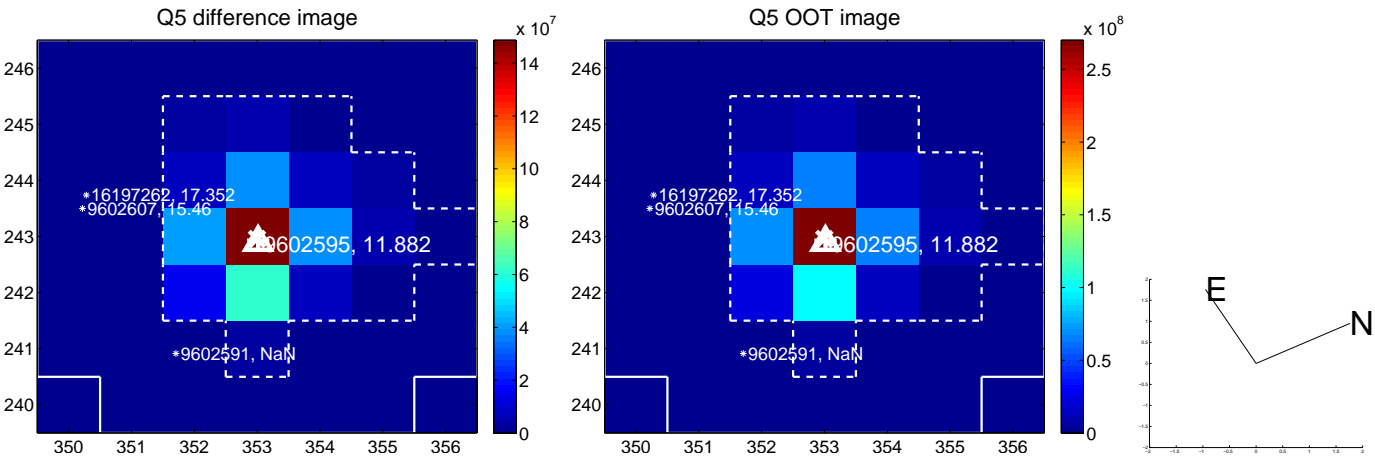


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

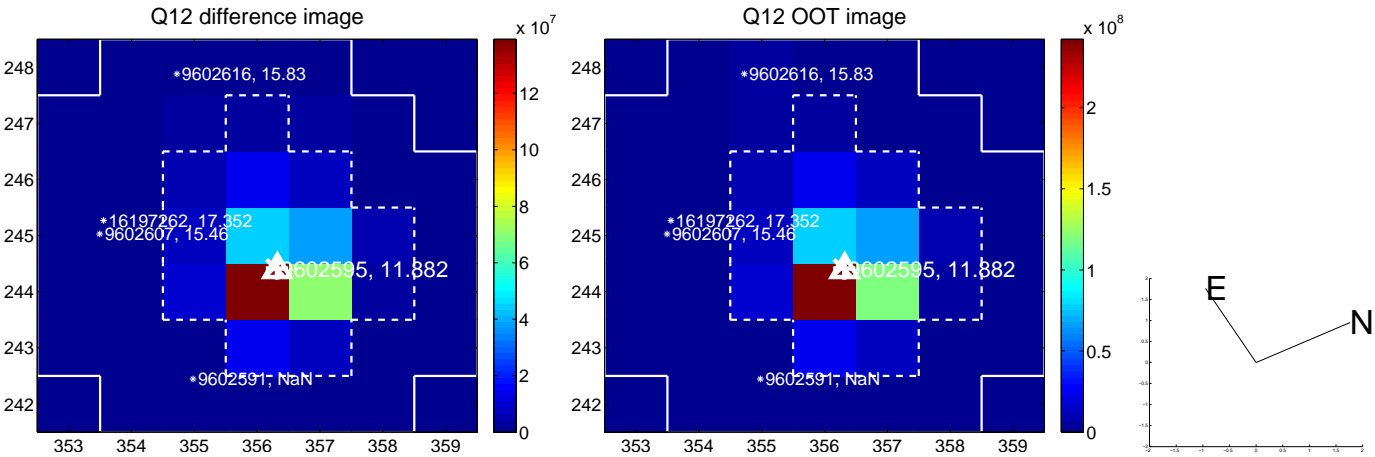
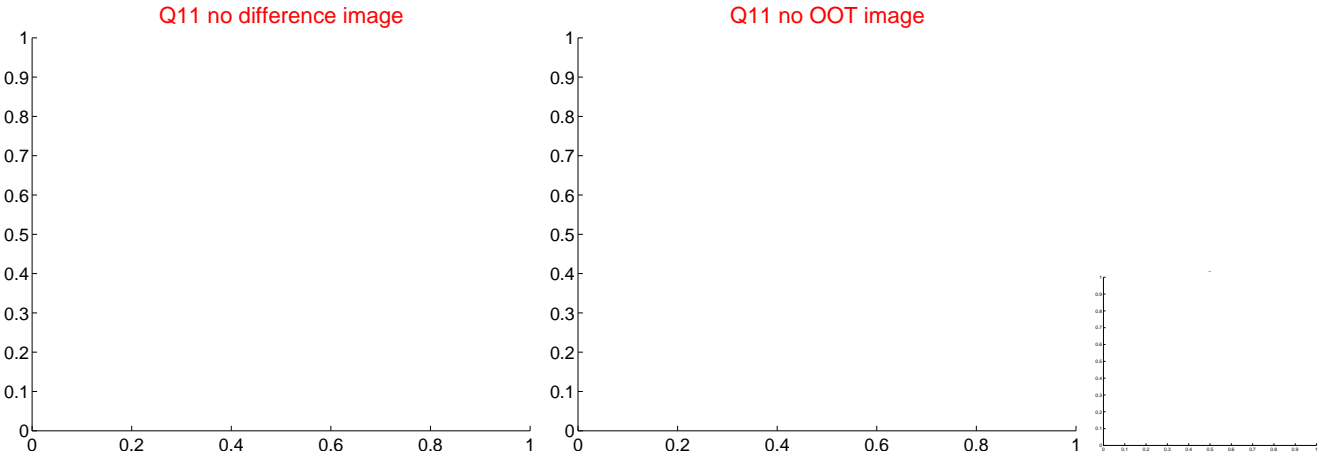
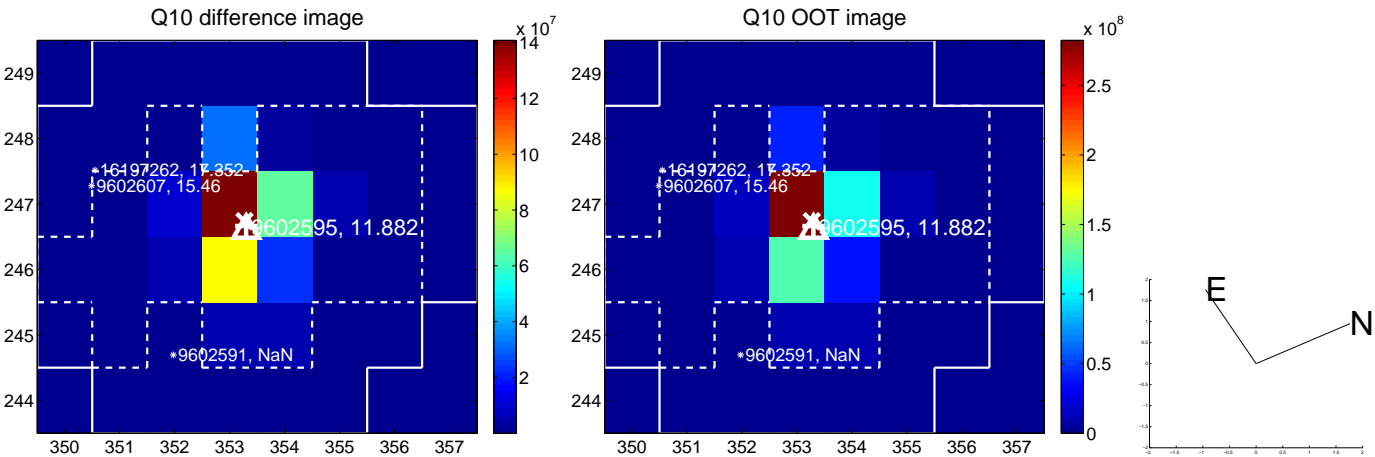
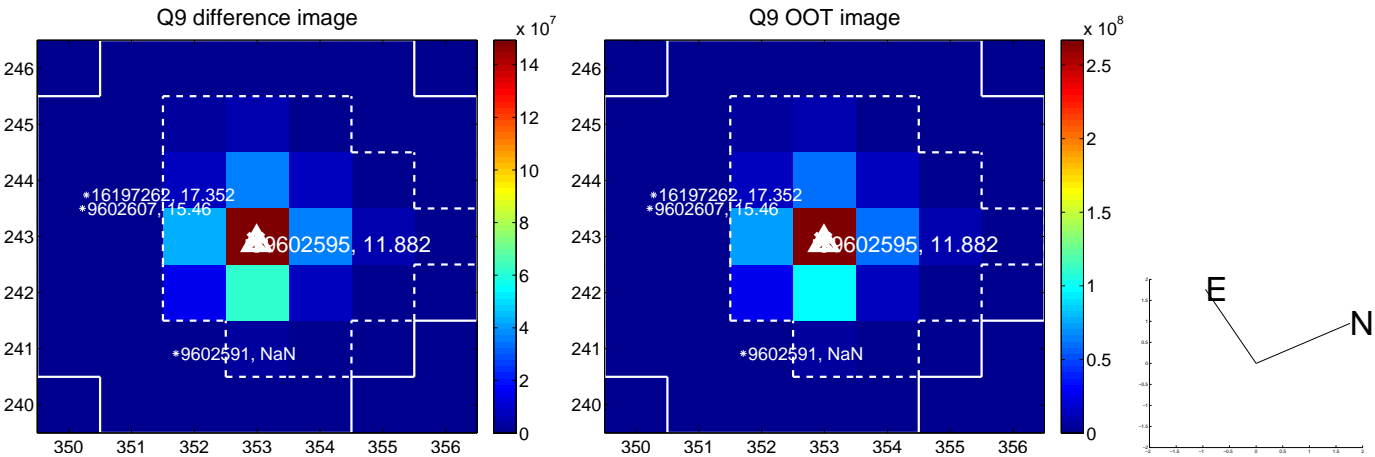
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



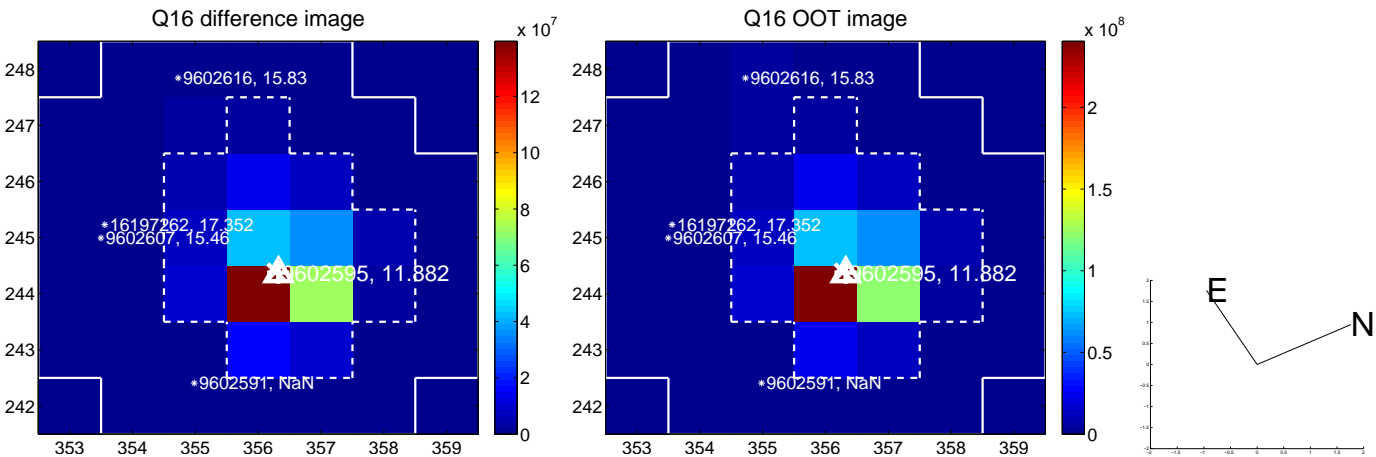
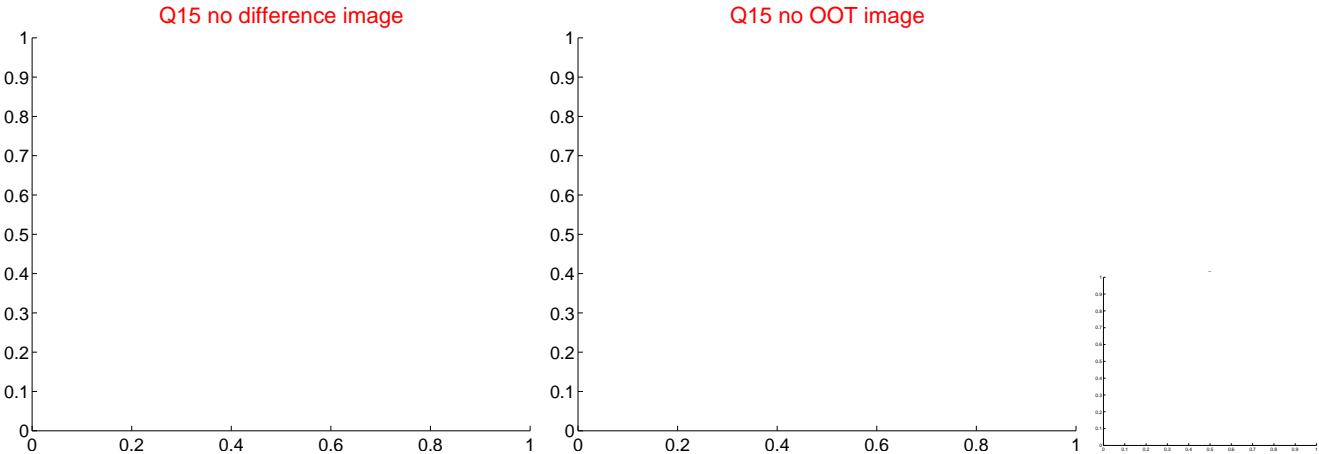
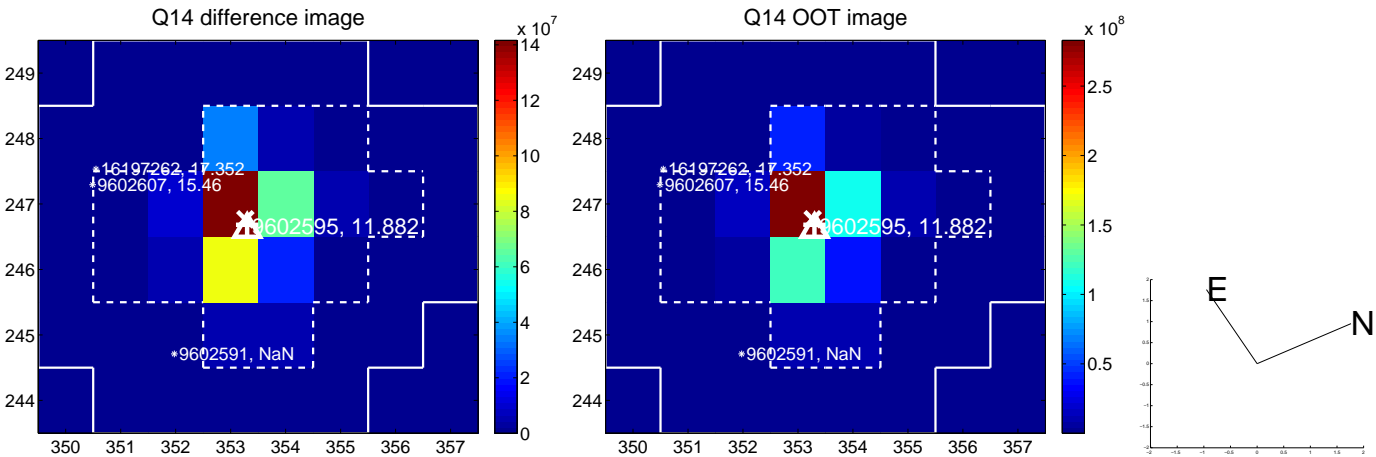
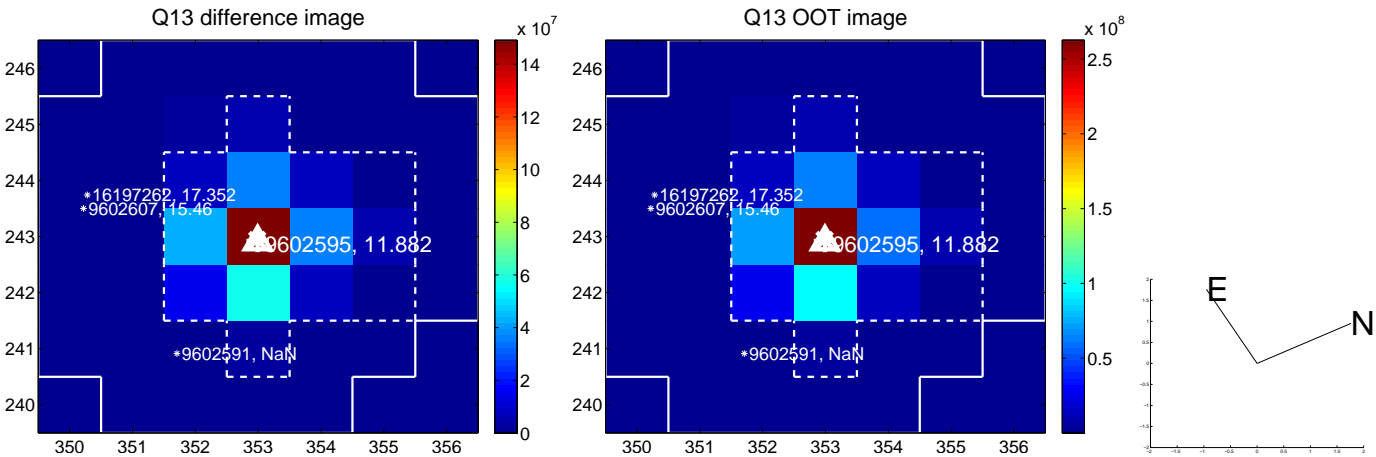
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



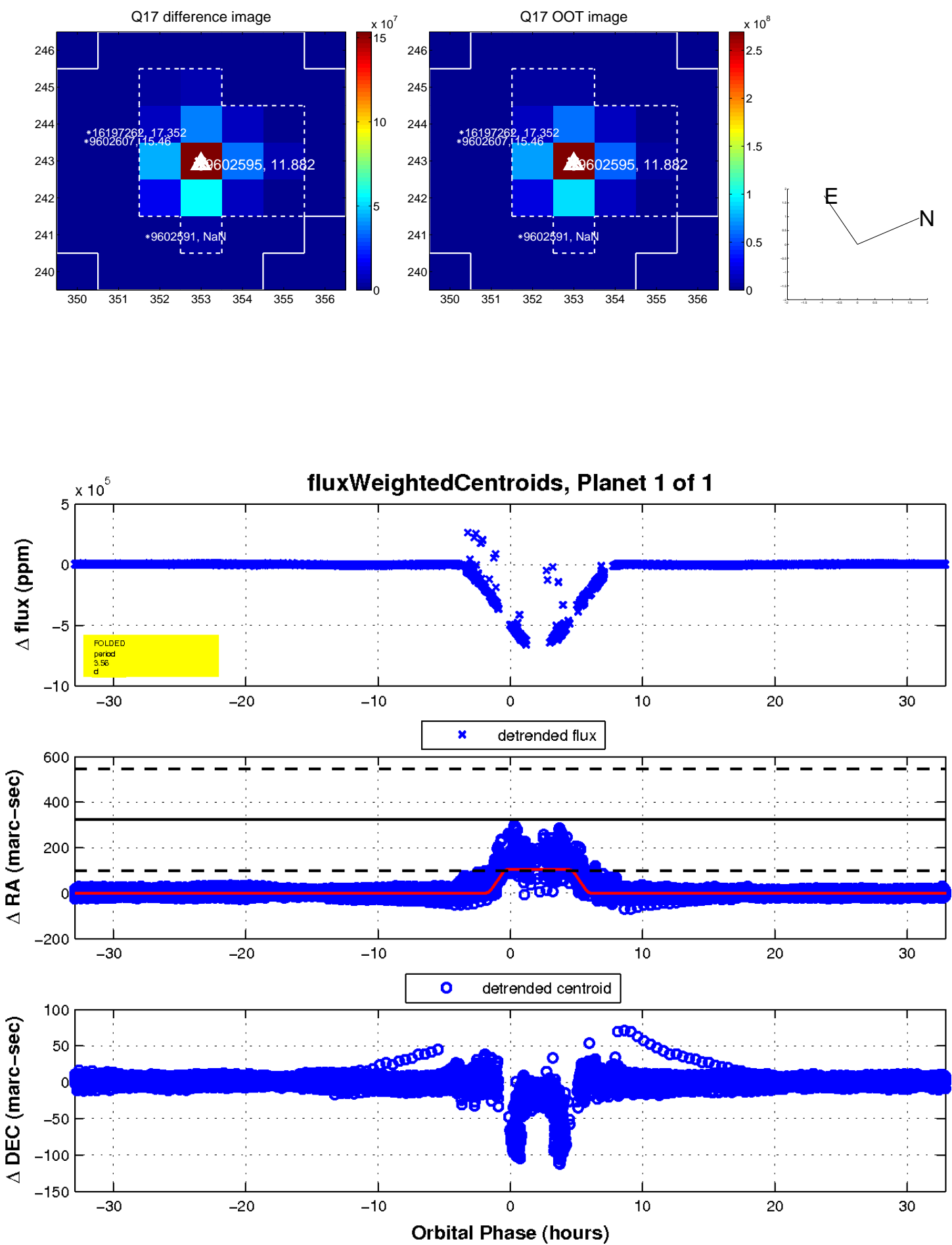
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

