

KIC 007919653

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})
007919653-01	OBS	6932.01	2.105239	132.675551	82613.7	5.215	4732.8	4669.3	1.89	5947	67.01	3536.38

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007919653-01	OBS	FP	0.00	0	1	0	0	DEPTH_ODDEVEN_DV—DEPTH_ODDEVEN_ALT—MOD_ODDEVEN_DV—MOD_ODDEVEN_ALT—DEEP_V_SHAPED

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.

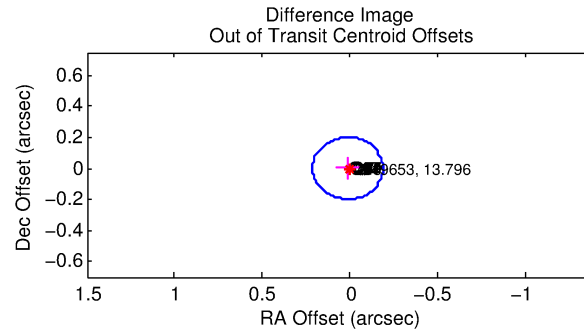
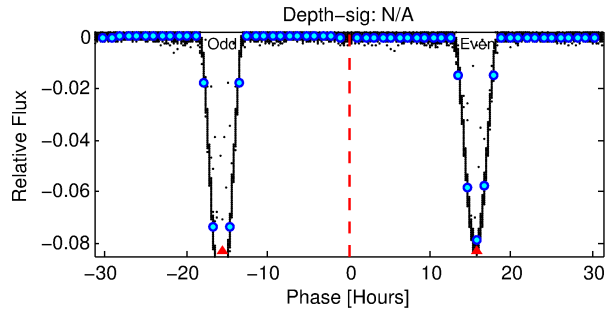
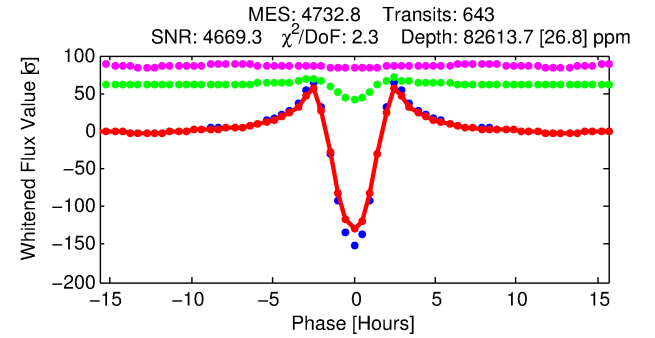
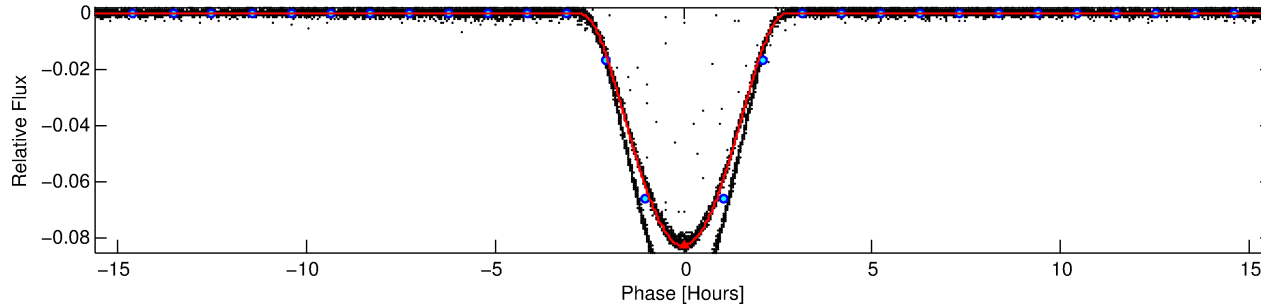
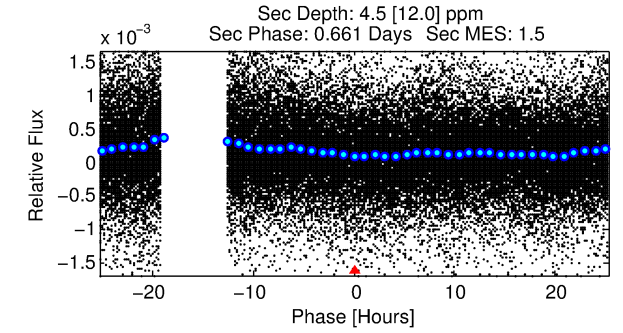
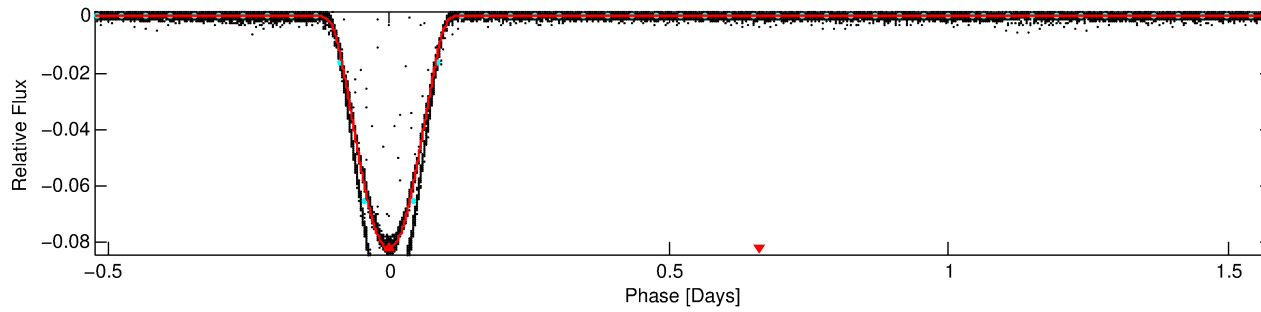
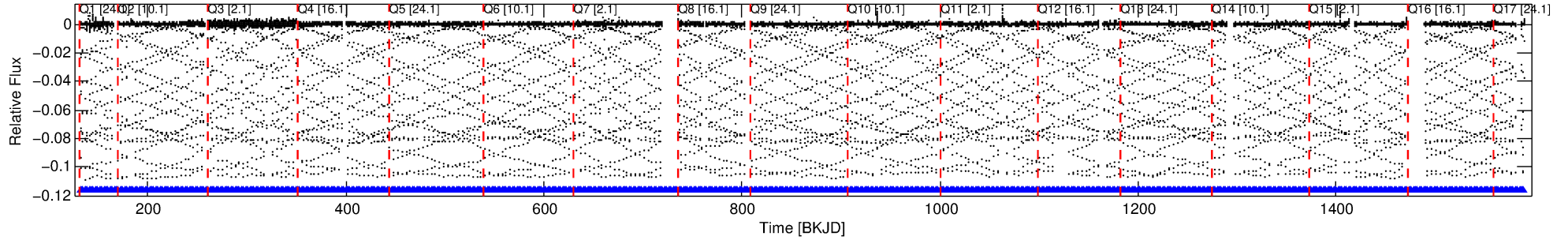
Ephemeris Match Information For 007919653-01

No Significant Match Found

DV One-Page Summary

KIC: 7919653 Candidate: 1 of 1 Period: 2.105 d
KOI: K06932.01 Corr: 0.998

Kp: 13.80 R*: 1.89 Rs Teff: 5947.0 K Logg: 3.94 Fe/H: -0.080



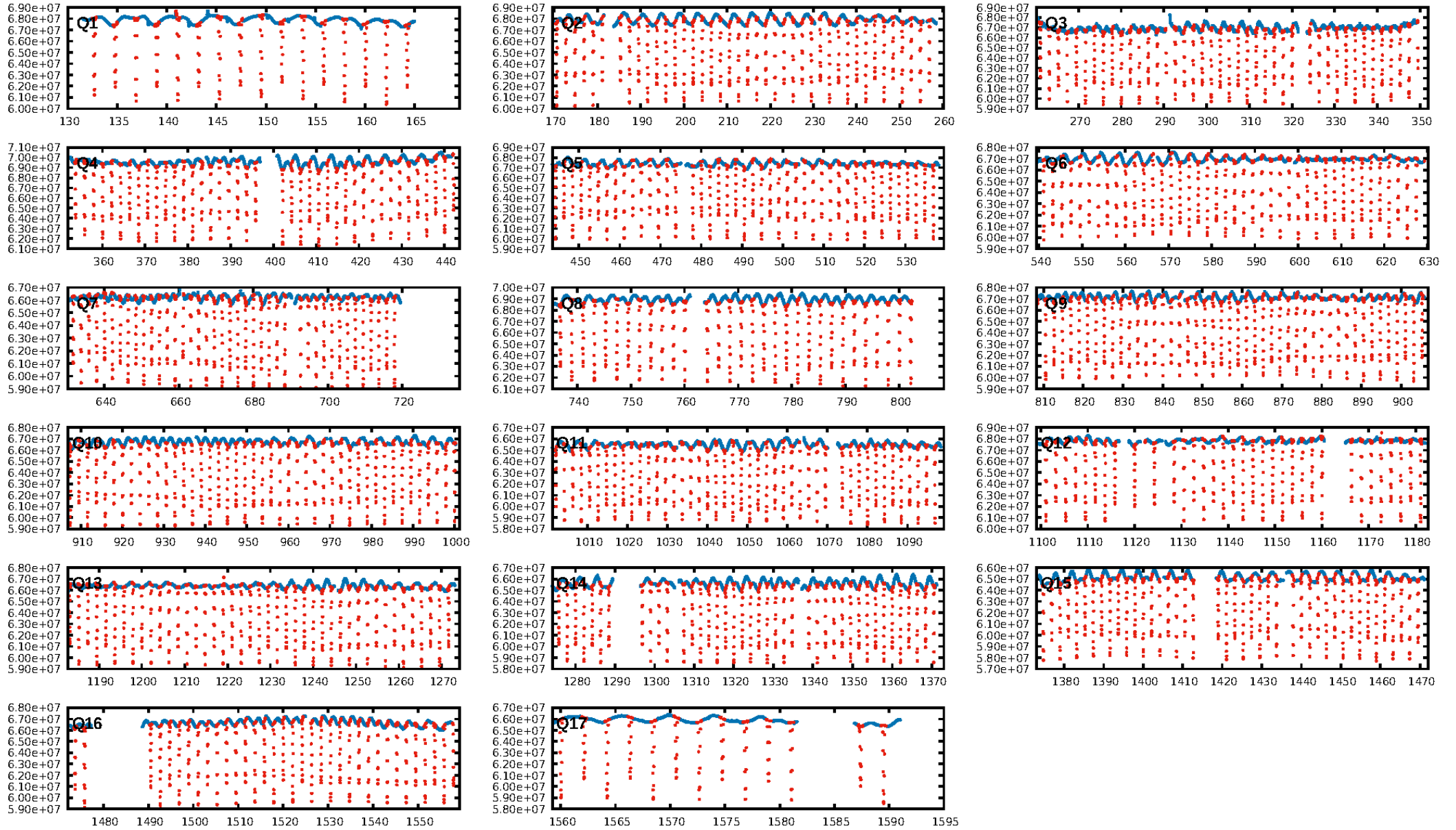
DV Fit Results:

Period = 2.10524 [0.00000] d
Epoch = 132.6756 [0.0000] BKJD
Rp/R* = 0.3258 [0.0007]
a/R* = 3.39 [0.00]
b = 0.81 [0.00]
Seff = 3536.38 [2636.59]
Teq = 1966 [367] K
Rp = 67.01 [29.22] Re
a = 0.0336 [0.0150] AU
Ag = 0.00 [0.00] [-583.72σ]
Teffp = 480 [319] K [-3.06σ]

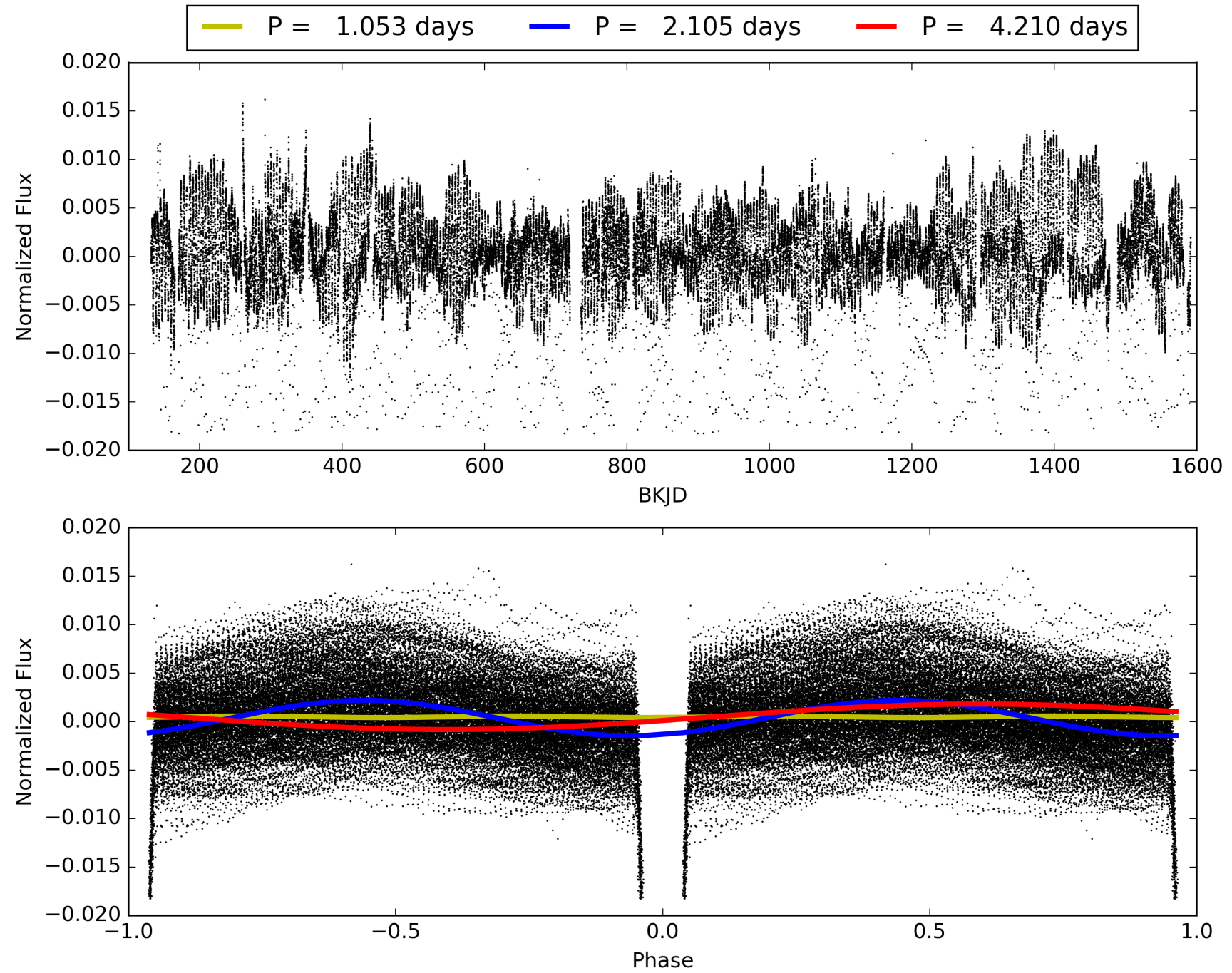
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [614/614]
GhostDiagnostic-chr: 1.985
Centroid-sig: N/A
Centroid-so: 0.137 arcsec [167.28σ]
OotOffset-rm: 0.013 arcsec [0.20σ]
KicOffset-rm: 0.052 arcsec [0.76σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 1.00 [17/17]
DiffImageOverlap-fno: 1.00 [17/17]

TCE 007919653-01, PDC Light Curves

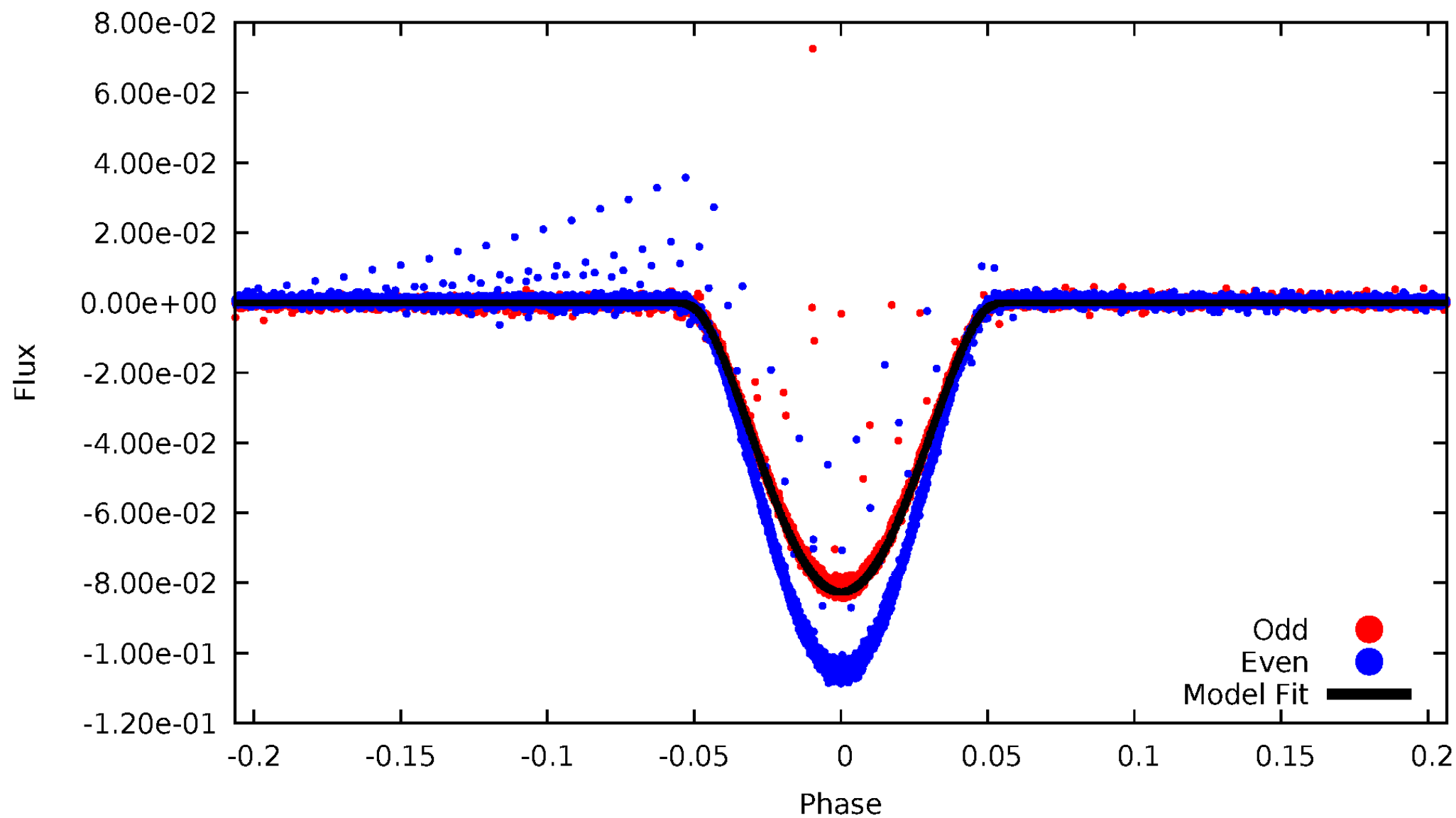


TCE 007919653-01



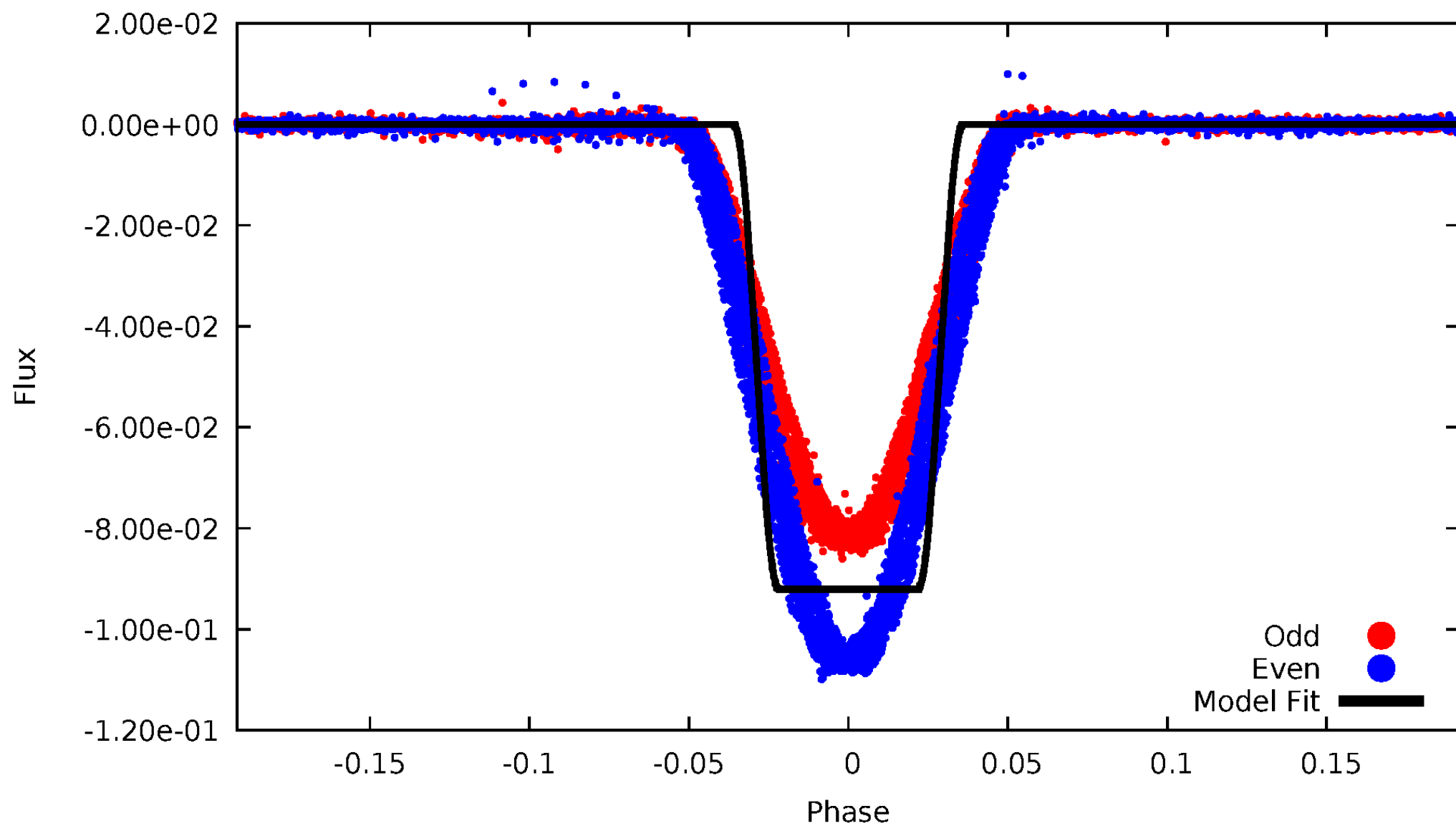
DV Odd/Even

TCE 007919653-01



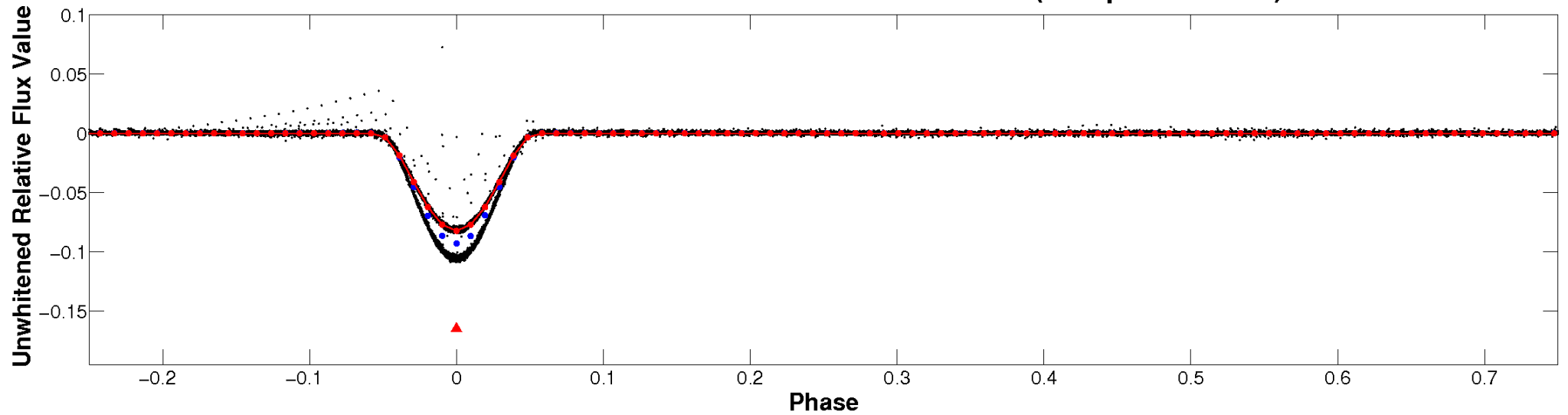
ALT Odd/Even

TCE 007919653-01

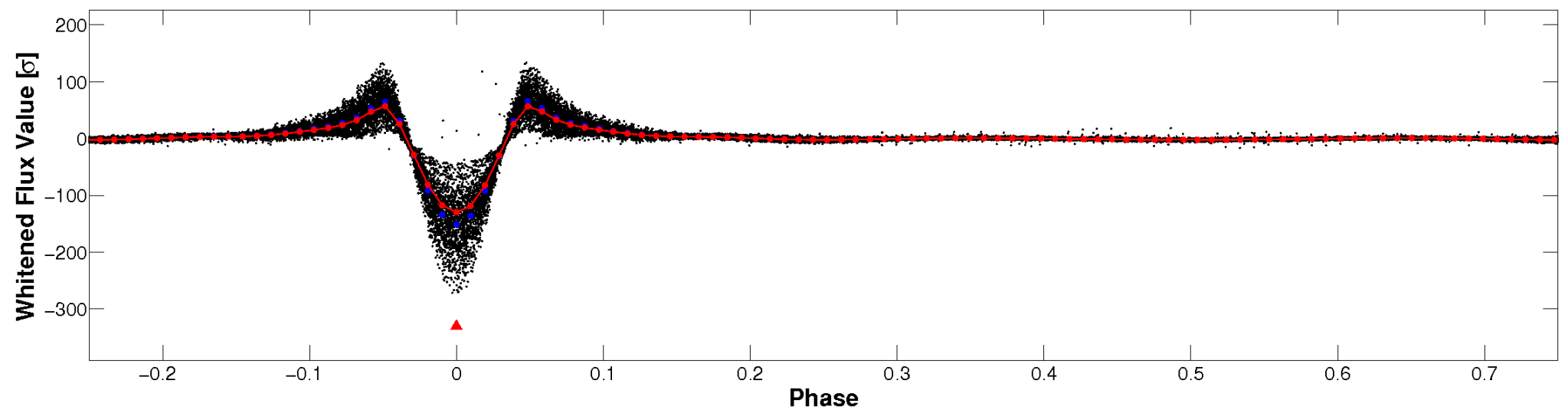


Non-Whitened Vs. Whitened Light Curve

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

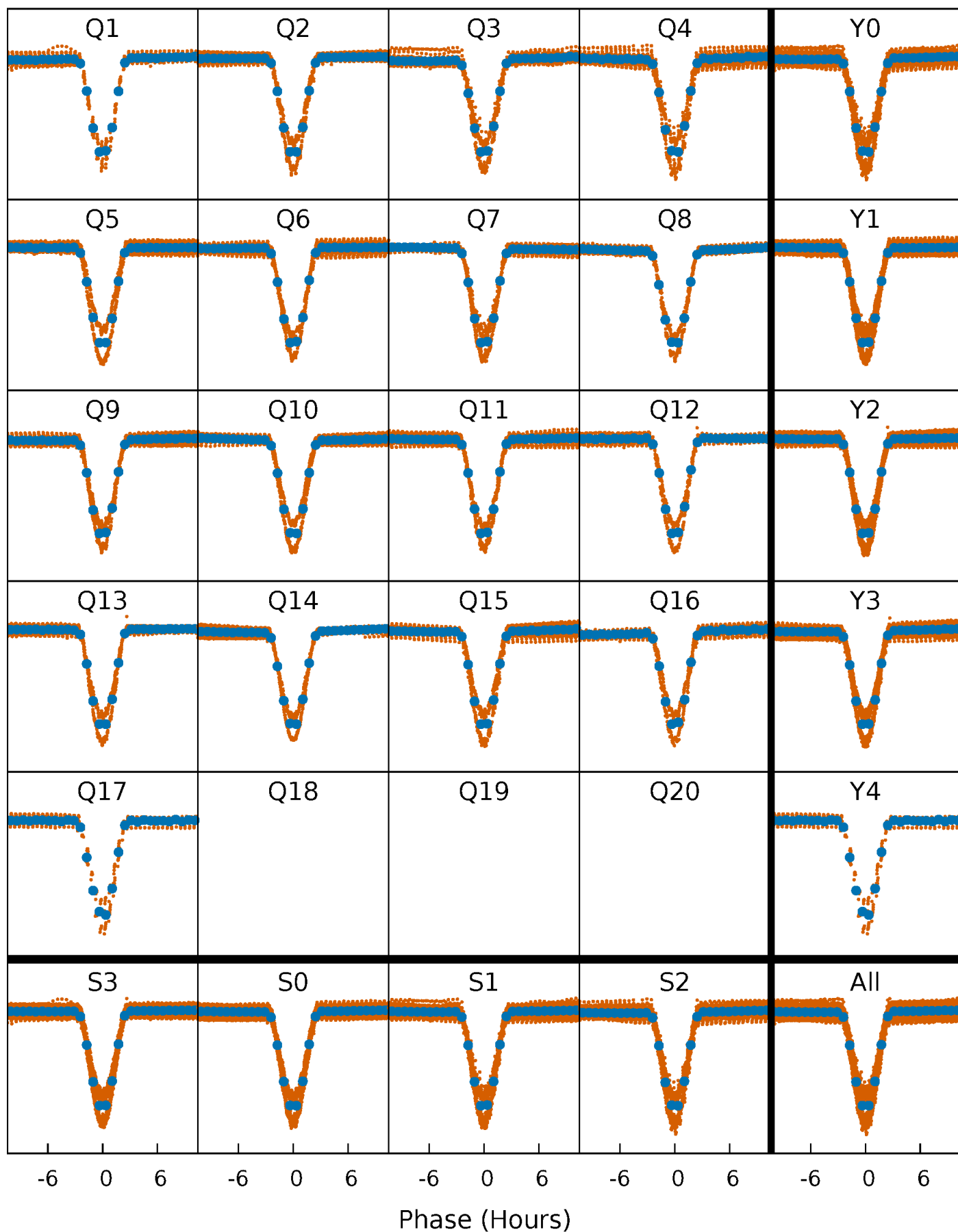


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



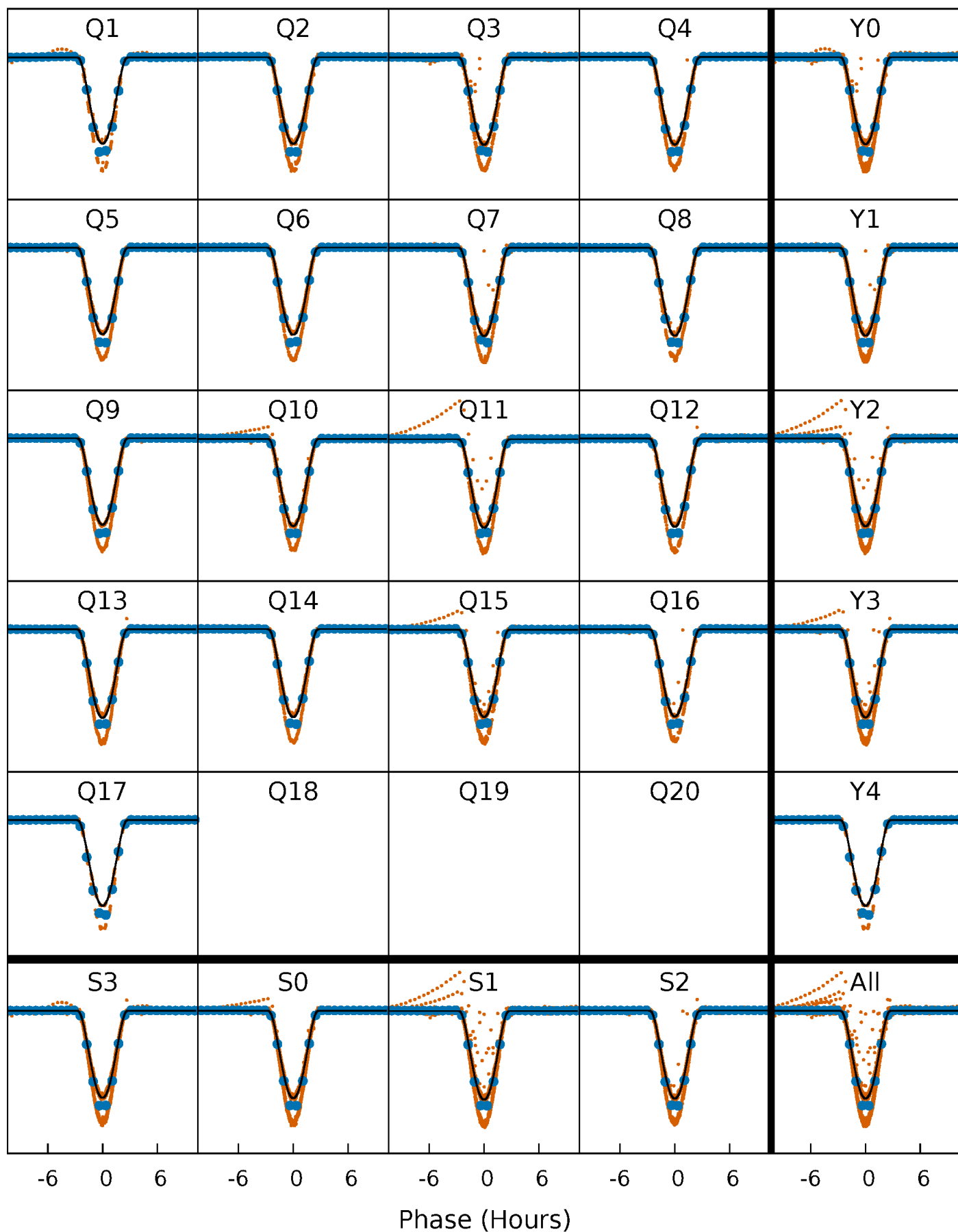
PDC Quarter-Phased Transit Curves

TCE 007919653-01 P= 2.105239 Days $T_0=132.675551$ (BKJD)



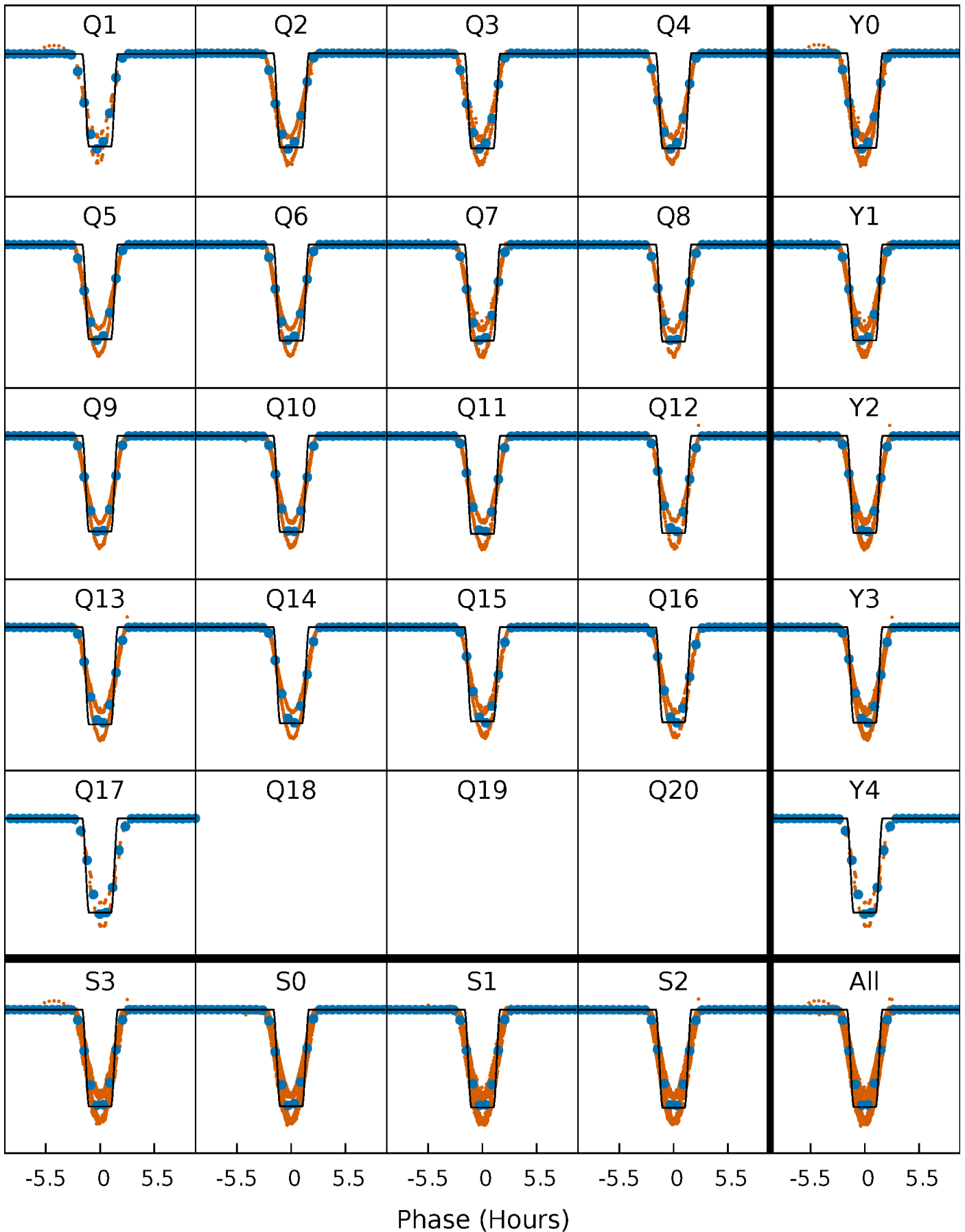
DV Quarter-Phased Transit Curves

TCE 007919653-01 P= 2.105239 Days $T_0=132.675551$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

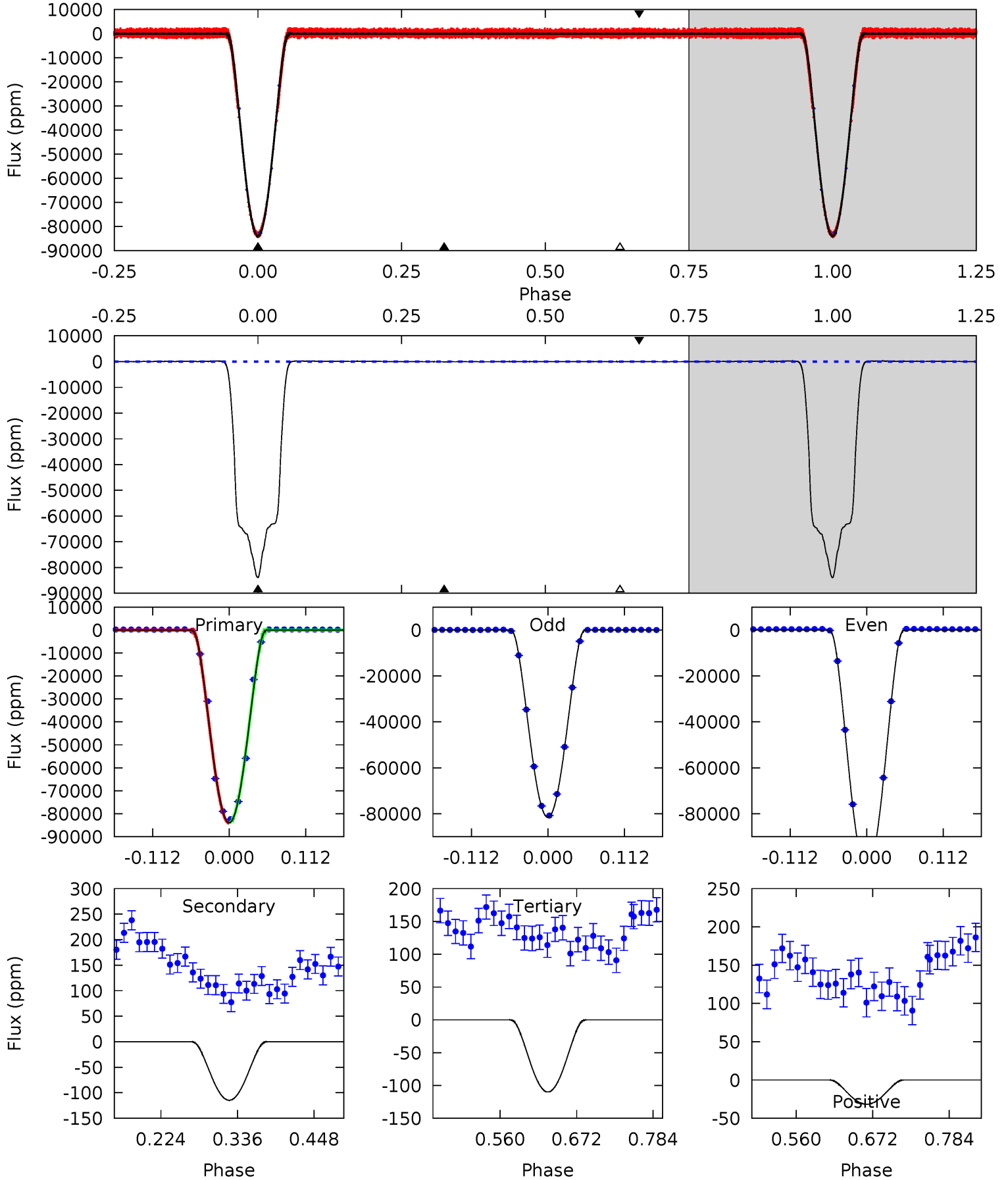
TCE 007919653-01 P= 2.105212 Days $T_0=132.684876$ (BKJD)



DV Model-Shift Uniqueness Test

007919653-01, P = 2.105239 Days, E = 130.570312 Days

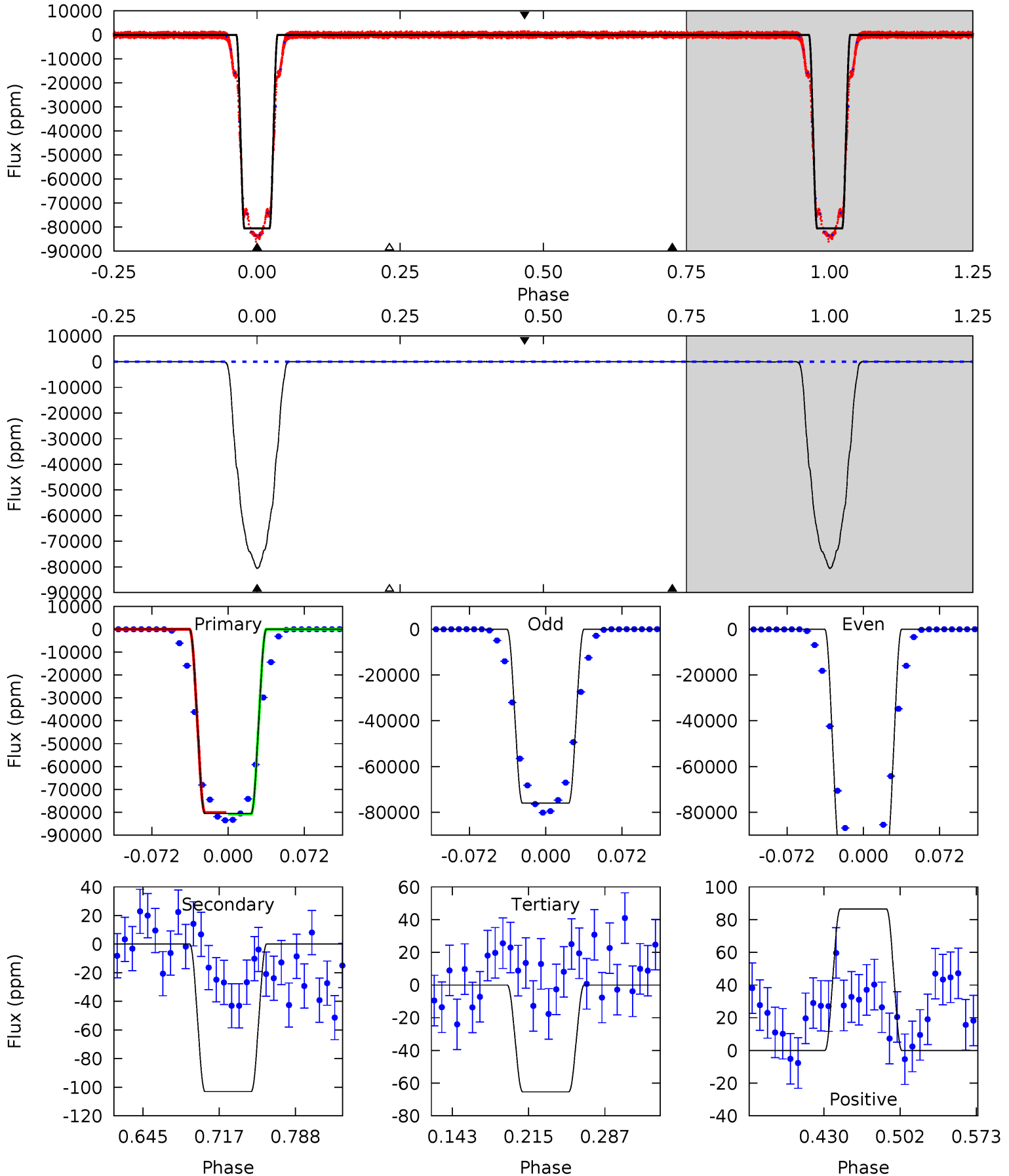
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7951	10.9	10.4	-3.00	4.54	1.59	5.59	7940	7954	0.46	13.9	1767	1.10	0.00	0



Alt Model-Shift Uniqueness Test

007919653-01, P = 2.105212 Days, E = 130.579664 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
4079	5.22	3.31	4.38	4.63	1.80	1.82	4076	4075	1.91	0.84	993.4	1.07	0.00	0



Stellar Parameters For KIC 007919653

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5947^{+183}_{-183}	$3.943^{+0.440}_{-0.110}$	$-0.080^{+0.300}_{-0.300}$	$1.885^{+0.443}_{-0.822}$	$1.137^{+0.172}_{-0.206}$	$0.239^{+0.908}_{-0.100}$
	+3%/-3%	+11%/-3%	+375%/-375%	+24%/-44%	+15%/-18%	+379%/-42%
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 007919653-01 / KOI 6932.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-115 ± 11	$64.22^{+9.65}_{-15.80}$	2678^{+189}_{-338}	-2875^{+212}_{-119}	$0.018^{+0.011}_{-0.004}$
Alt.	-103 ± 20	$59.24^{+8.93}_{-13.48}$	2664^{+211}_{-319}	-2866^{+206}_{-130}	$0.019^{+0.012}_{-0.006}$

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 $A_{obs} \gg 1.0$

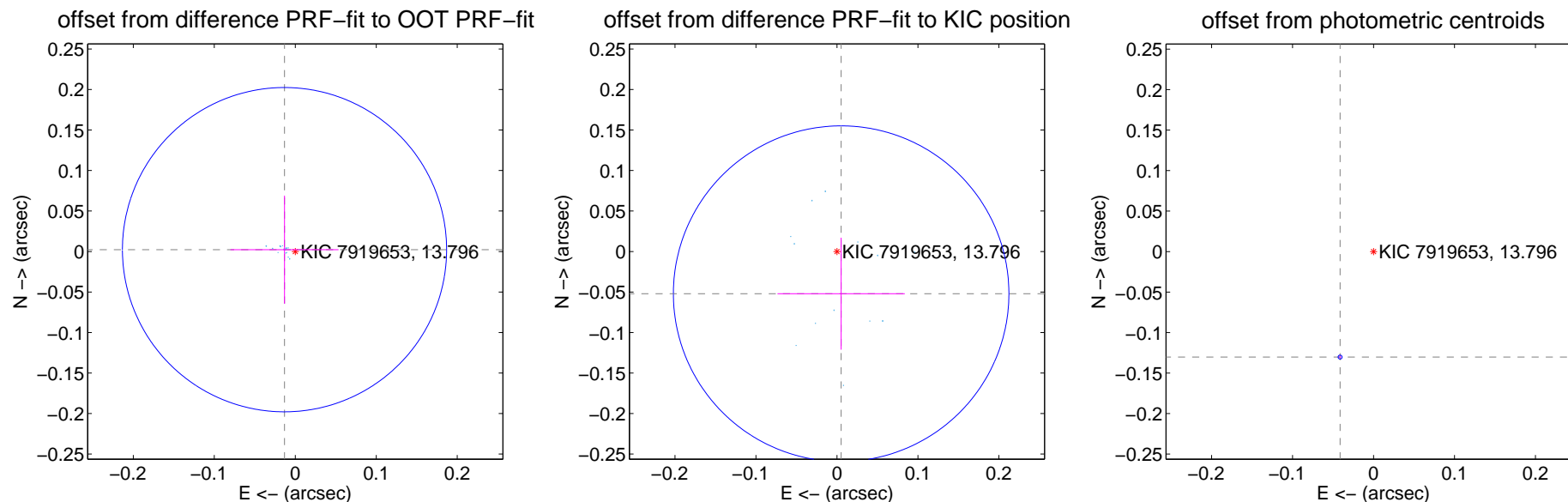
DV Centroid Data

Supplemental centroid analysis for 007919653-01. Kepler magnitude: 13.80. Transit SNR 4669.34

There are 17 quarters with good PRF difference image offsets

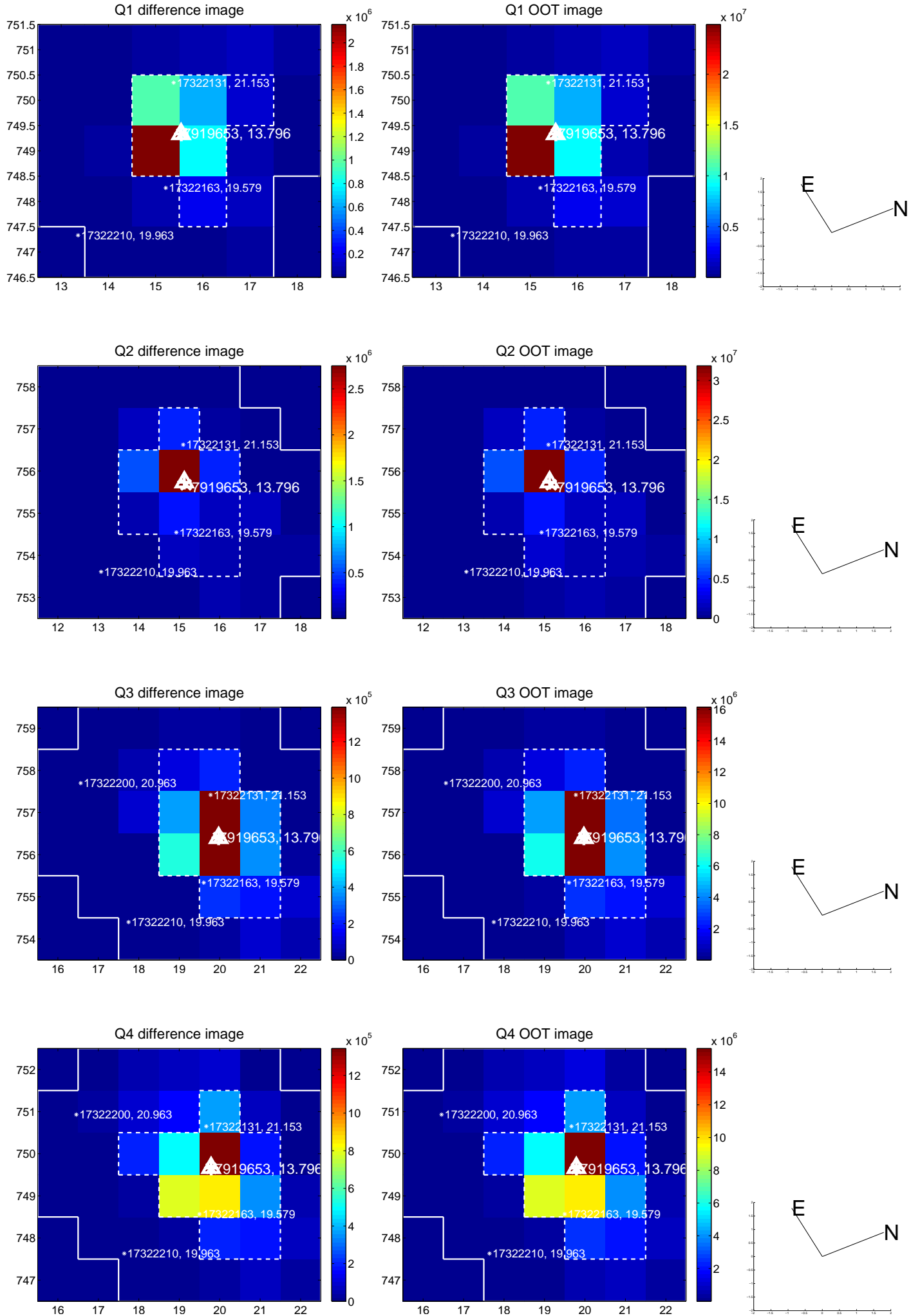
The direct PRF centroid is offset from the target star catalog position by about 0.11 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.013 ± 0.067	0.20	0.013 ± 0.067	0.002 ± 0.067
PRF-fit source offset from KIC position	0.052 ± 0.069	0.76	-0.005 ± 0.079	-0.052 ± 0.069
photometric centroid source offset	0.14 ± 0.00	167.28	0.04 ± 0.00	-0.13 ± 0.00

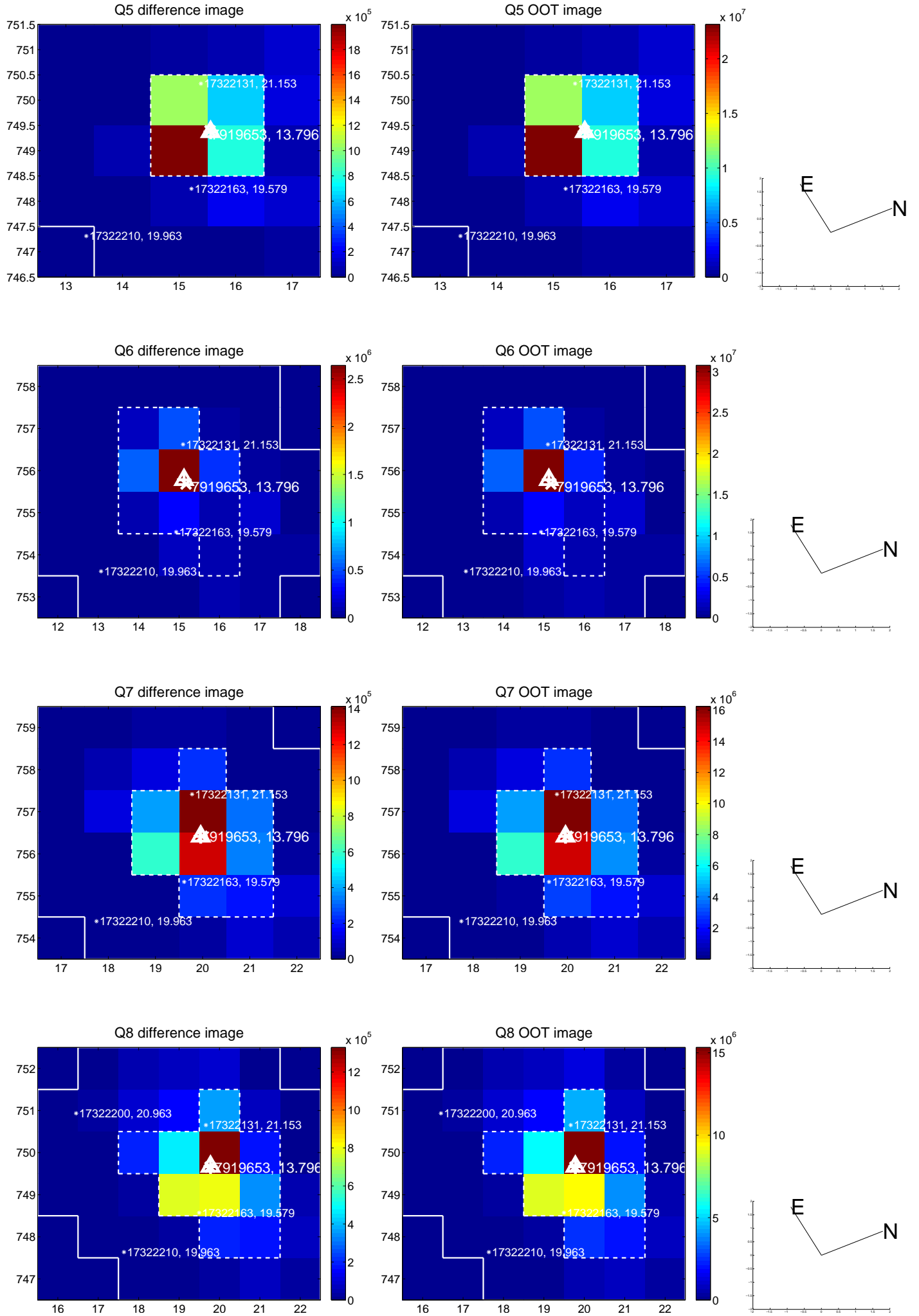


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

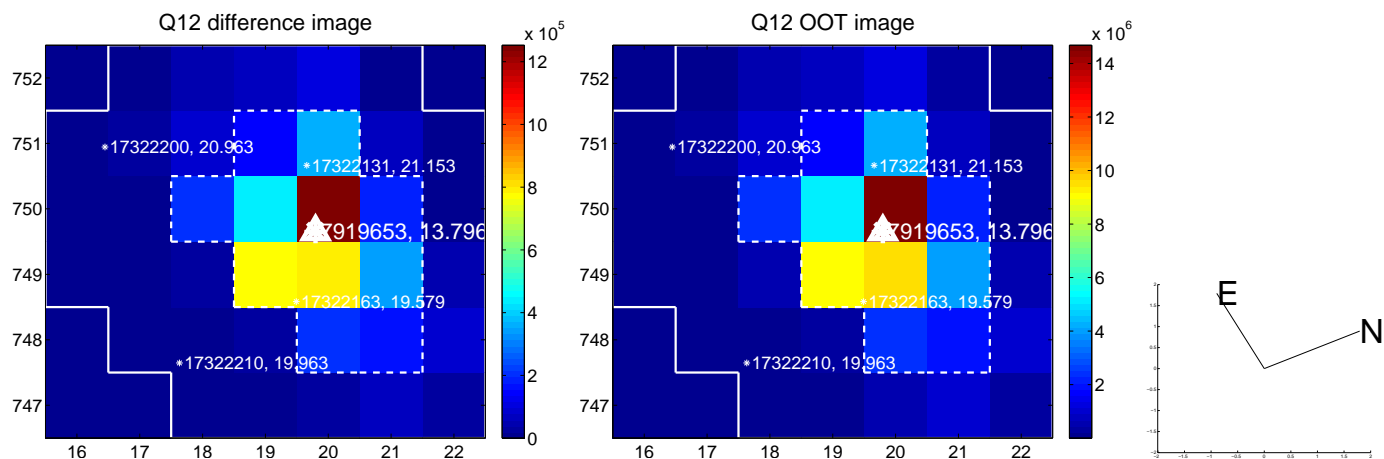
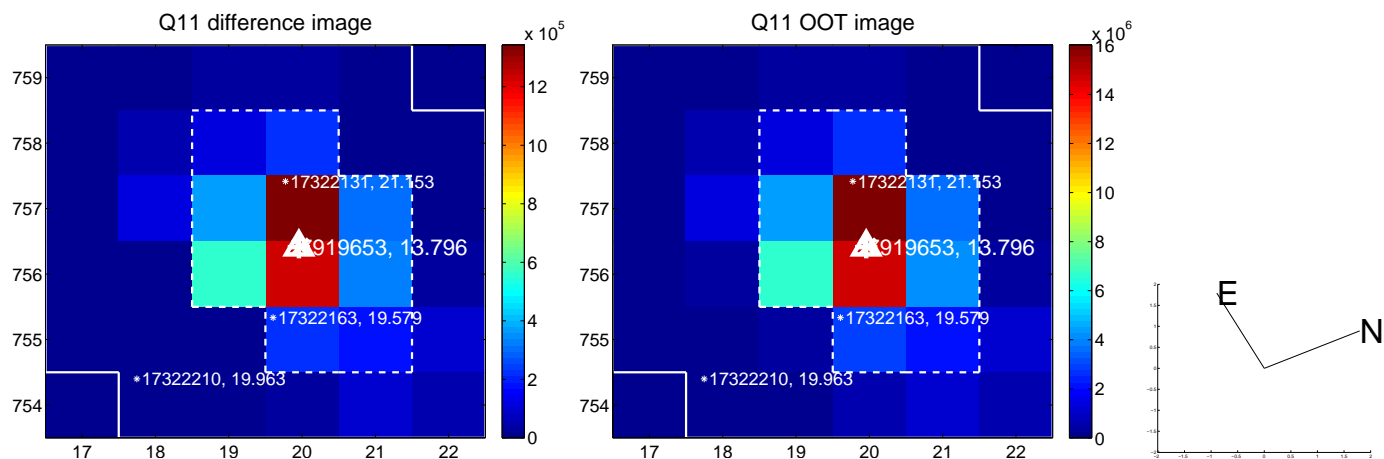
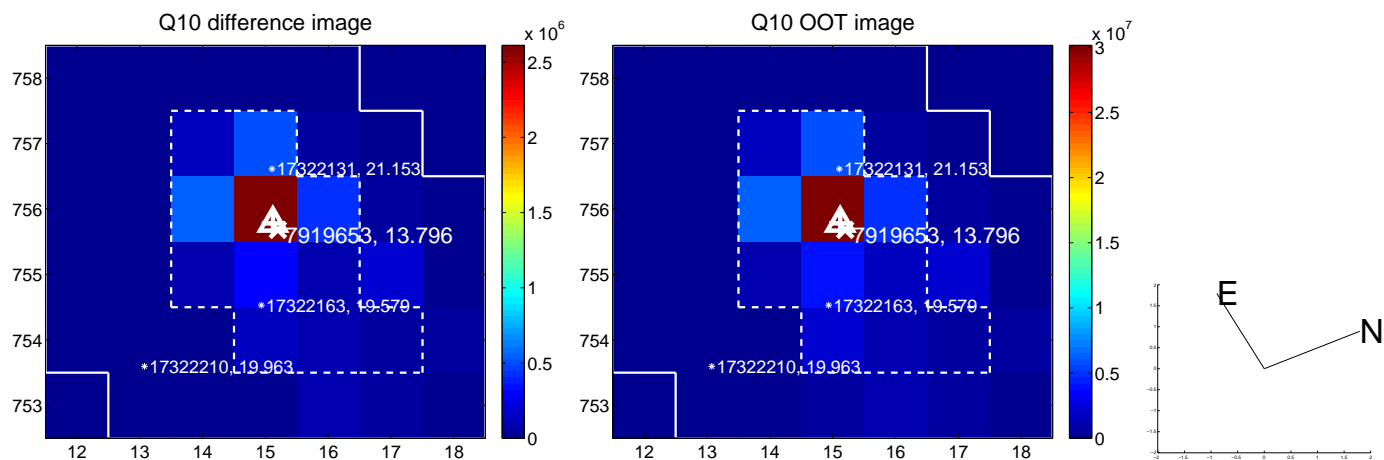
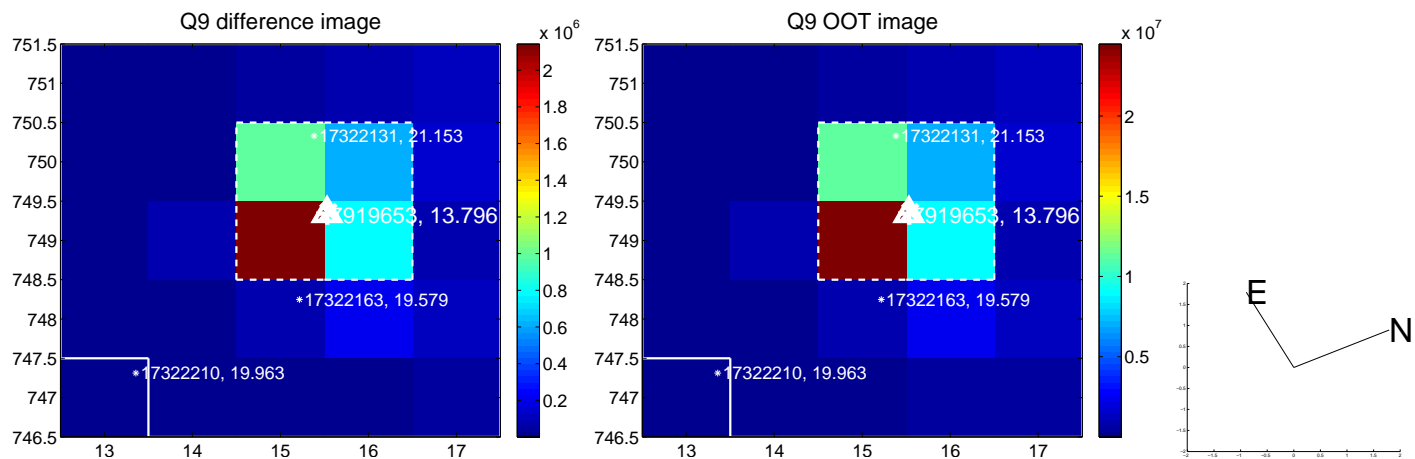
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



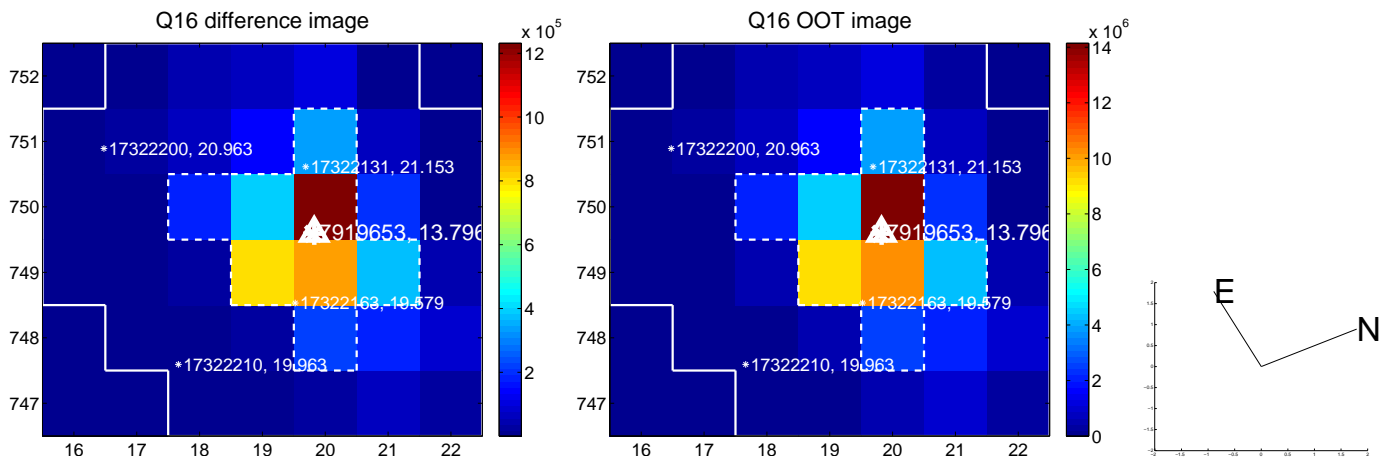
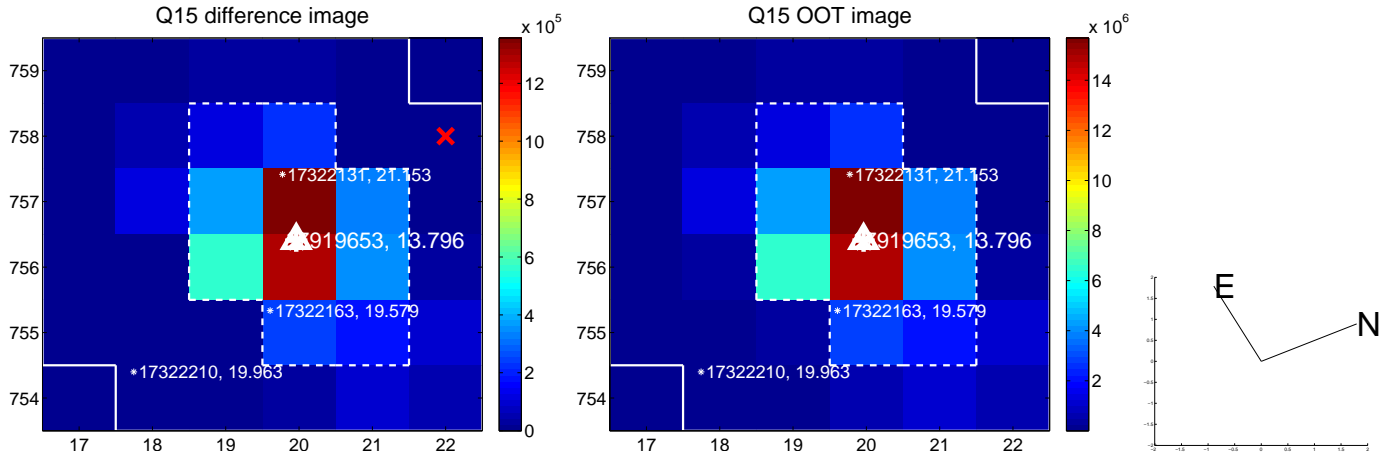
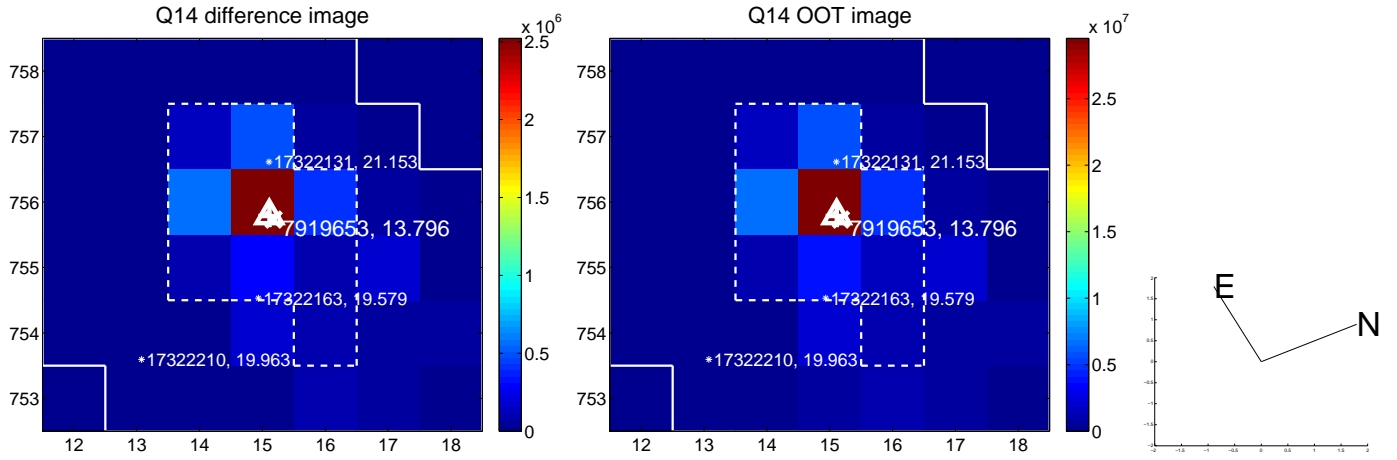
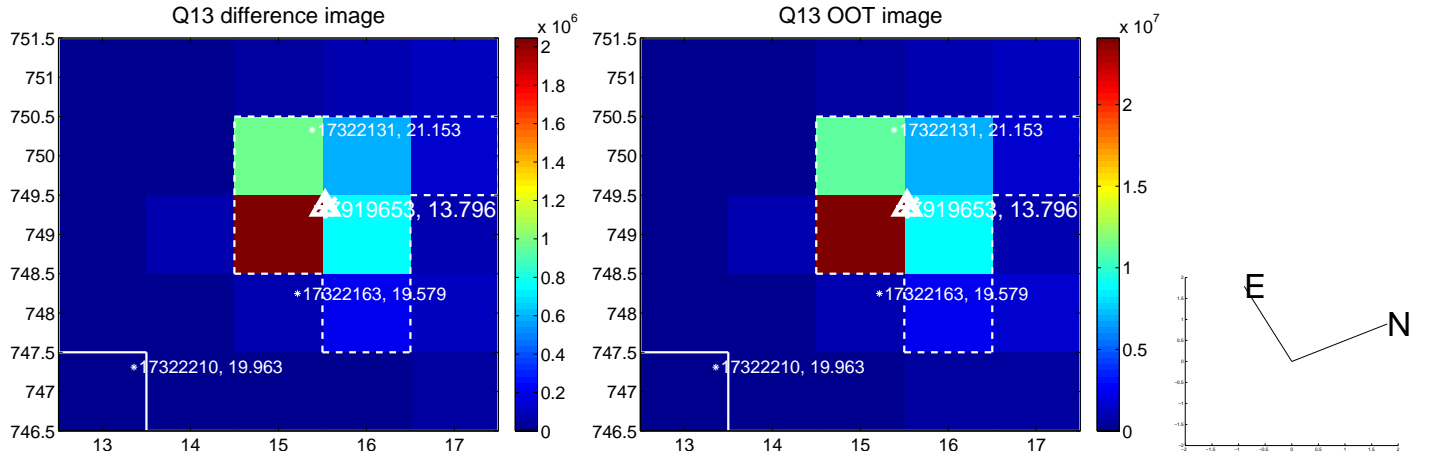
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



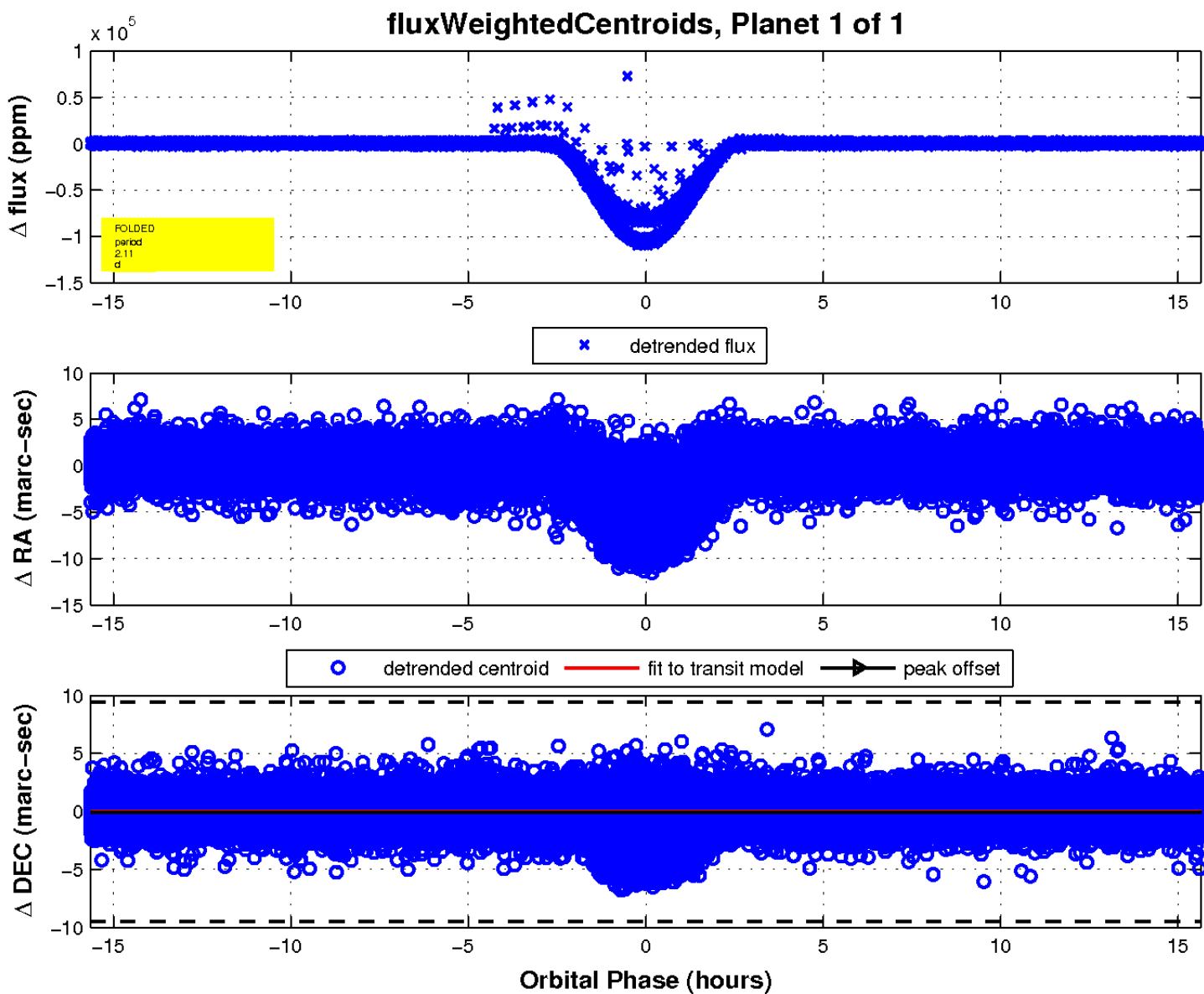
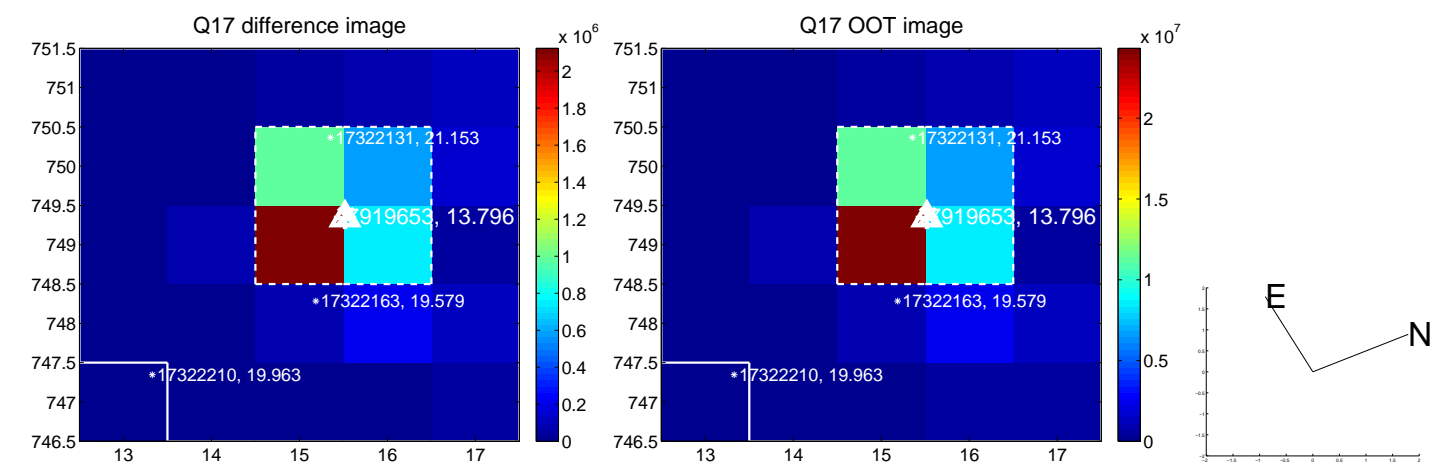
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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.



UKIRT Image

