

KIC 011819135

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})
011819135-01	OBS	8067.01	1.901739	132.792333	39151.6	3.512	1129.1	523.4	1.70	6929	36.70	5466.23

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011819135-01	OBS	FP	0.00	0	1	0	0	SWEET_EB—MOD_SEC_ALT—MOD_ODDEVEN_DV—SEASONAL_DEPTH_DV—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.

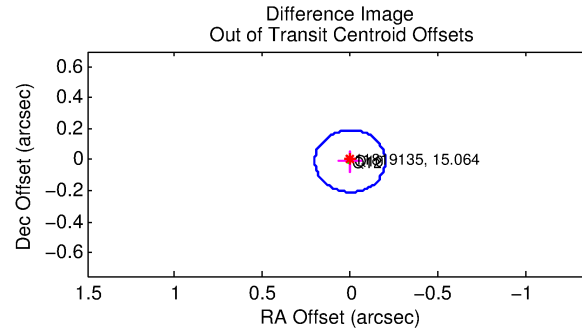
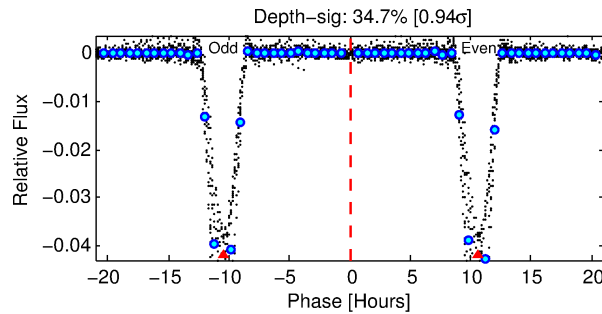
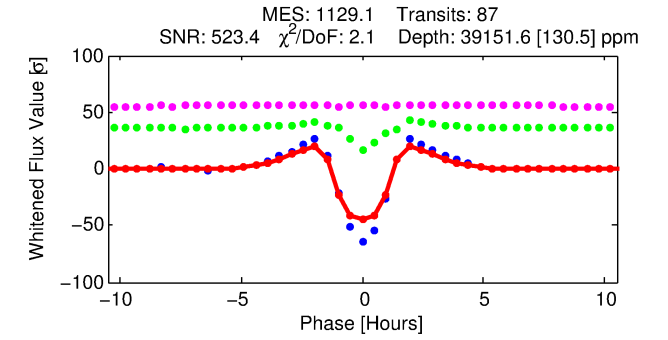
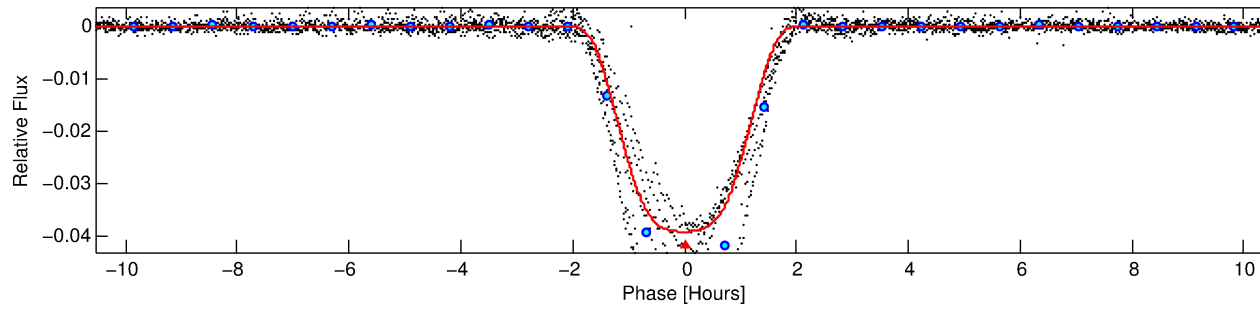
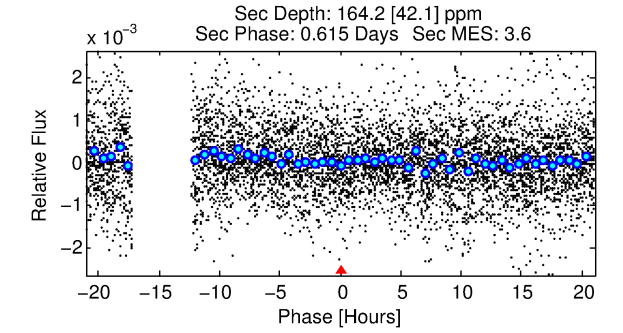
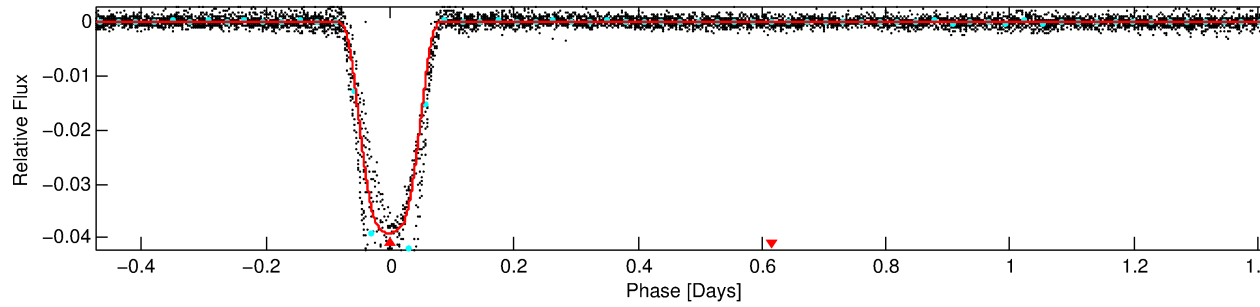
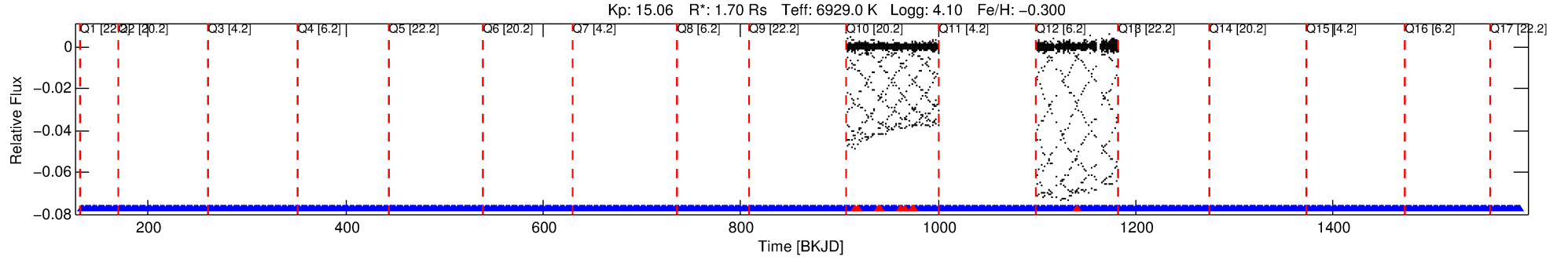
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011819135-01

No Significant Match Found

DV One-Page Summary

KIC: 11819135 Candidate: 1 of 1 Period: 1.902 d



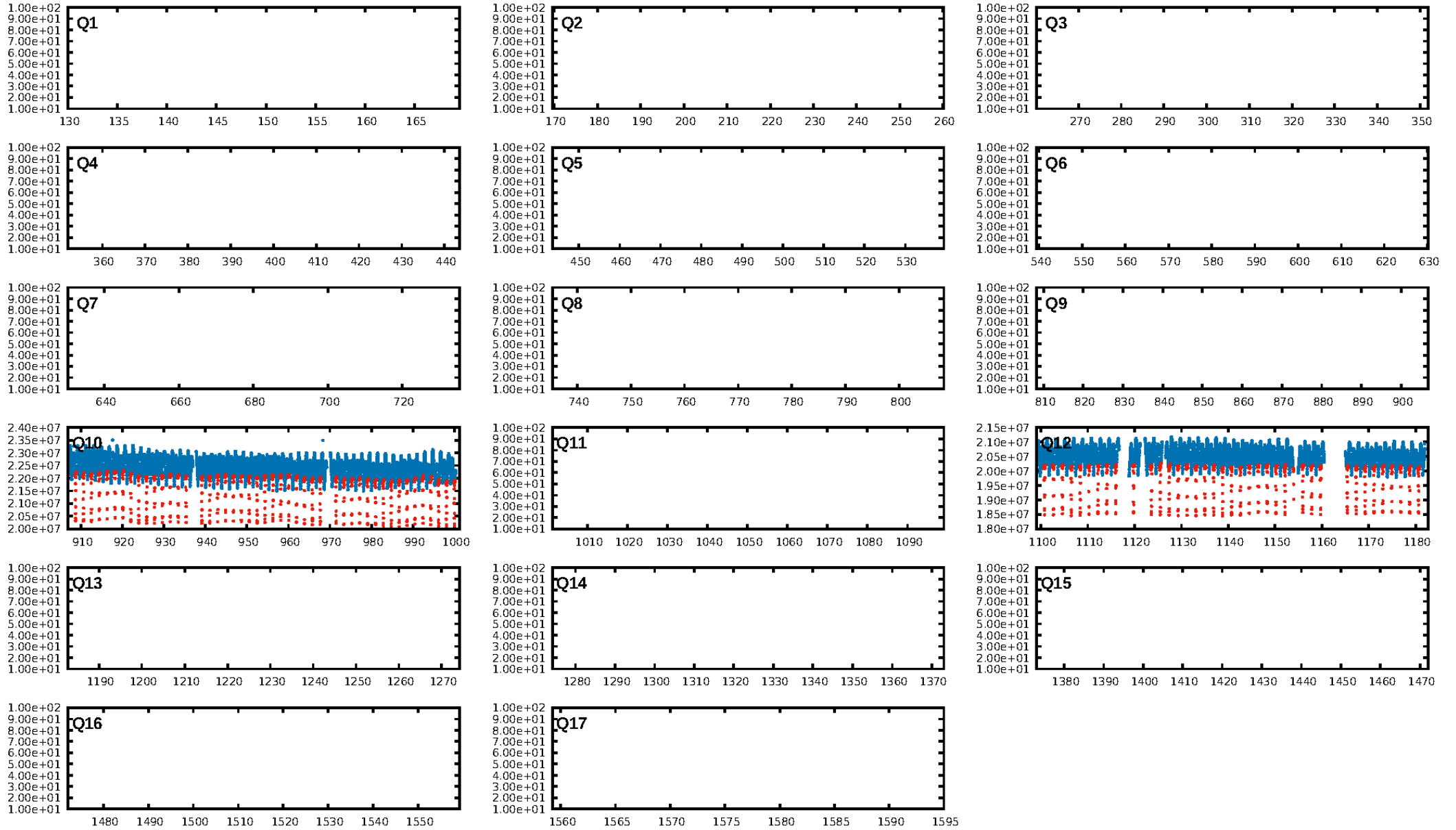
DV Fit Results:

Period = 1.90174 [0.00000] d
Epoch = 132.7923 [0.0001] BKJD
Rp/R* = 0.1973 [0.0004]
a/R* = 4.03 [0.02]
b = 0.73 [0.00]
Seff = 5466.23 [2306.28]
Teq = 2193 [231] K
Rp = 36.69 [10.68] Re
a = 0.0331 [0.0084] AU
Ag = 0.07 [0.03] [-27.39σ]
Teffp = 1766 [138] K [-1.58σ]

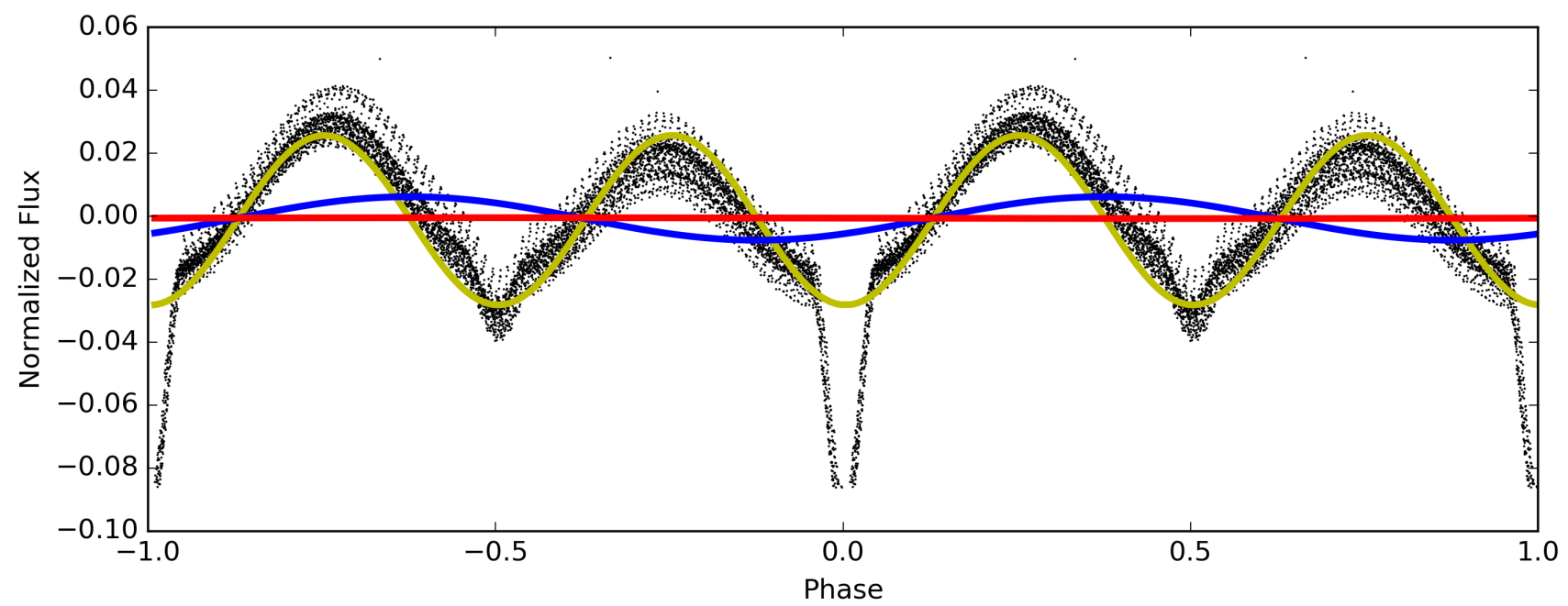
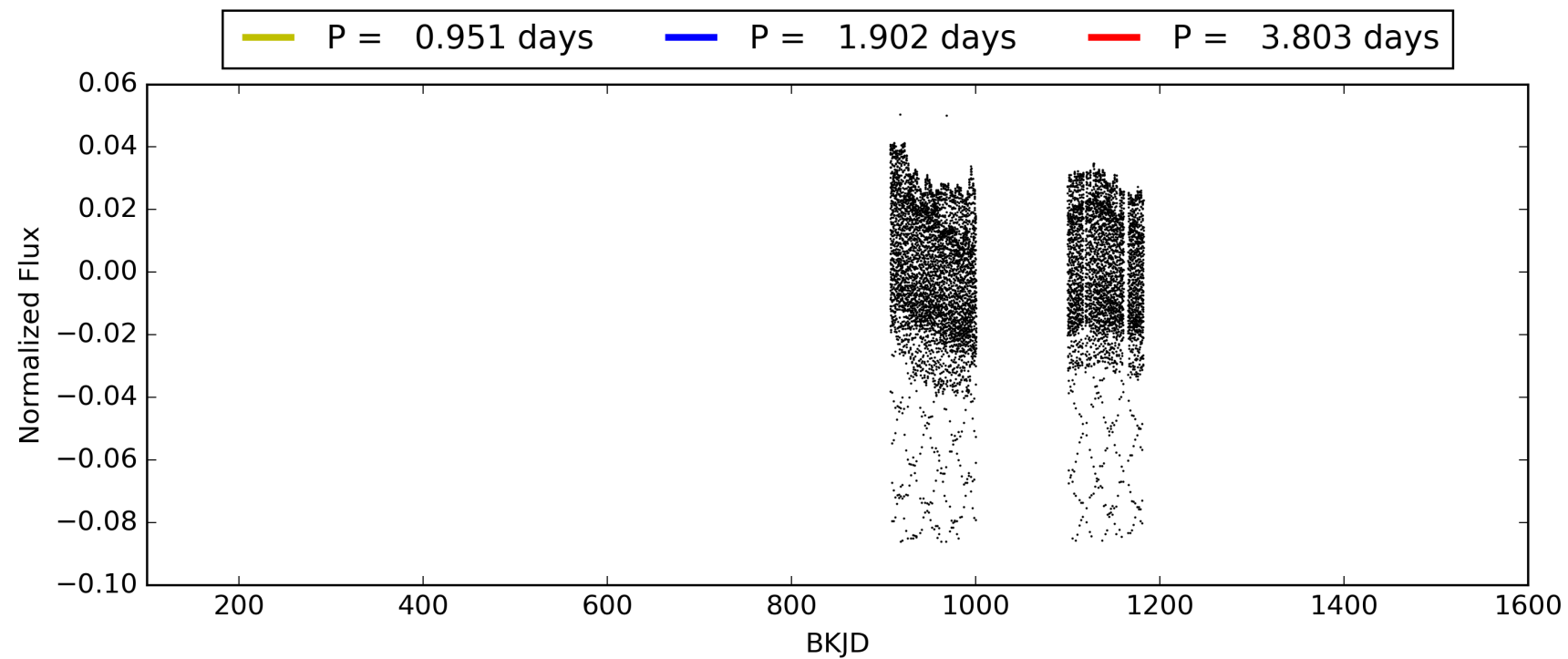
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 23.3%
Bootstrap-pfa: N/A
RollingBand-fgt: 0.90 [78/87]
GhostDiagnostic-chr: 1.032
Centroid-sig: 0.0%
Centroid-so: 0.176 arcsec [17.86σ]
OotOffset-rm: 0.009 arcsec [0.14σ]
OotOffset-st: 1/0/1/0 [2]
KicOffset-rm: 0.080 arcsec [1.13σ]
KicOffset-st: 1/0/1/0 [2]
DiffImageQuality-fgm: 1.00 [2/2]
DiffImageOverlap-fno: 1.00 [2/2]

TCE 011819135-01, PDC Light Curves

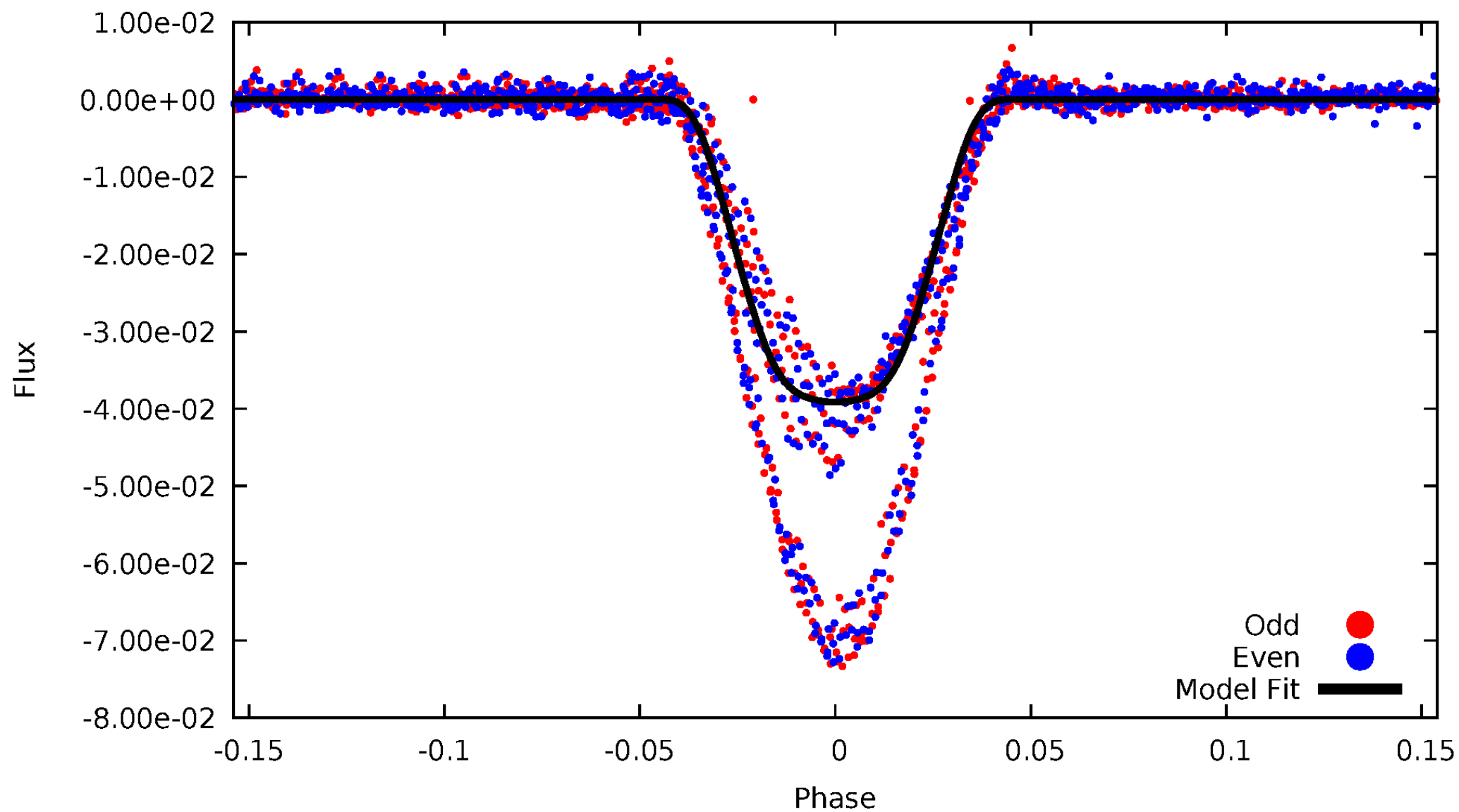


TCE 011819135-01



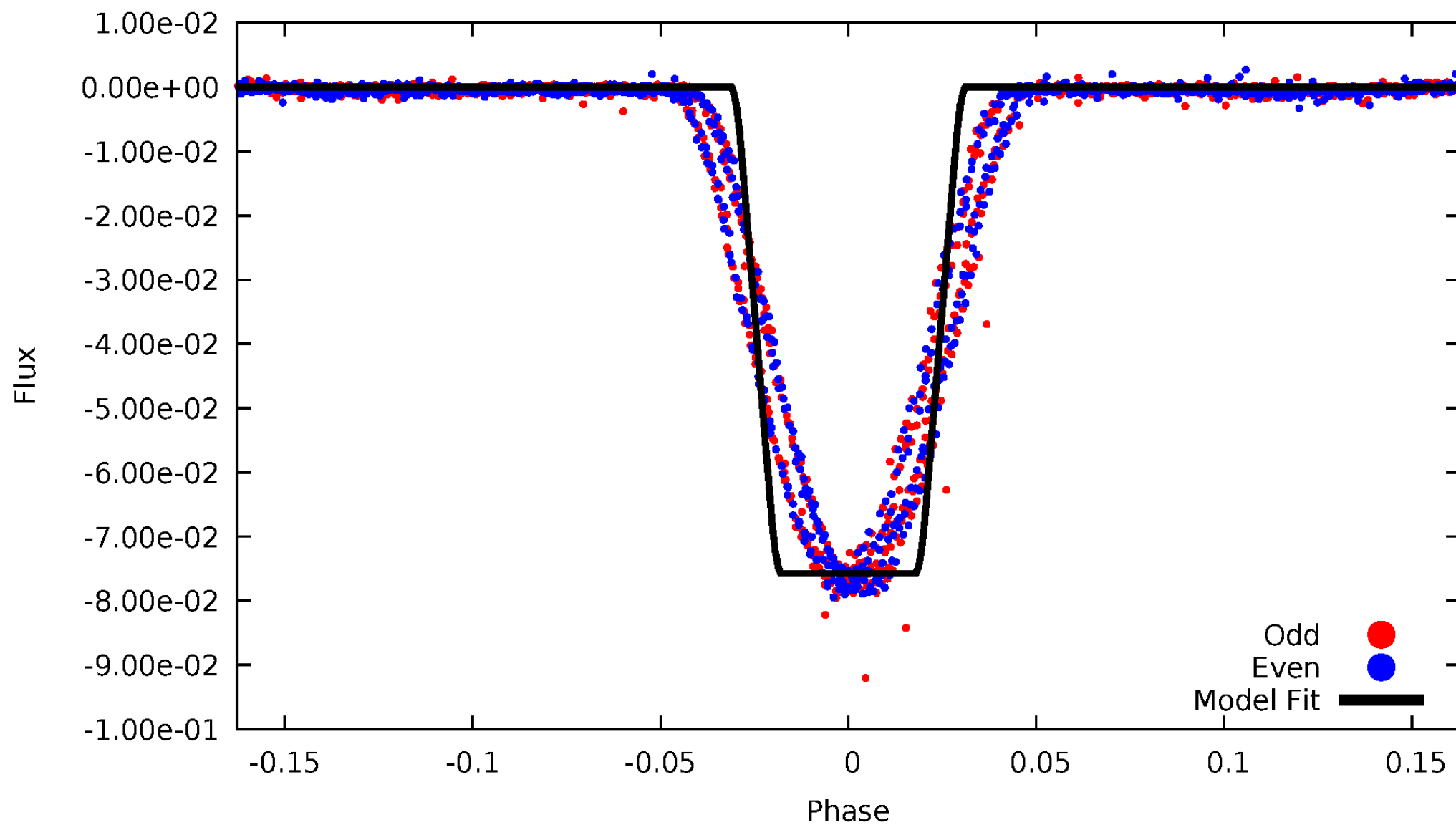
DV Odd/Even

TCE 011819135-01



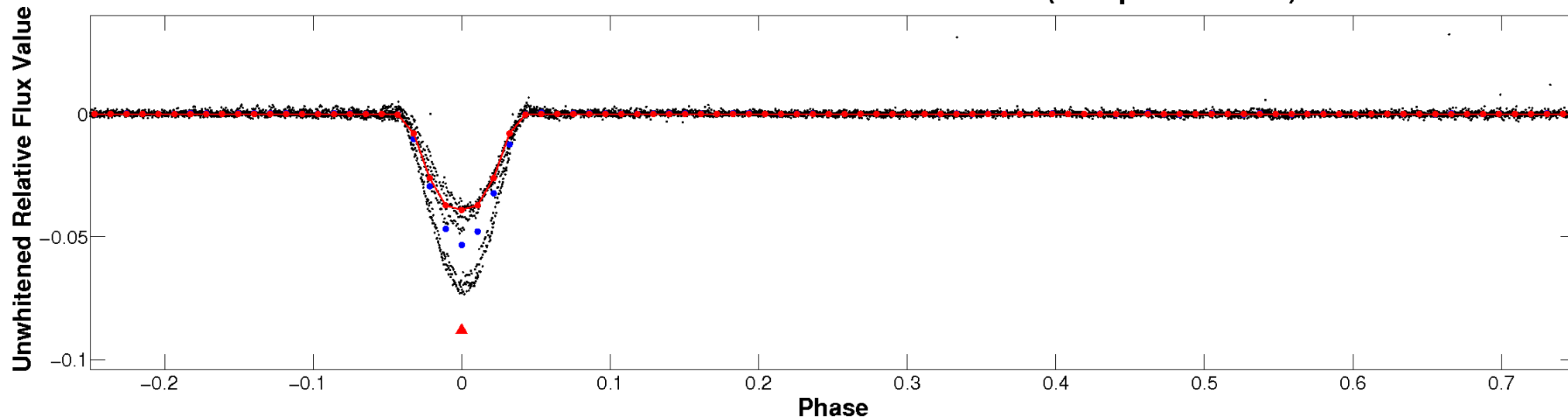
ALT Odd/Even

TCE 011819135-01

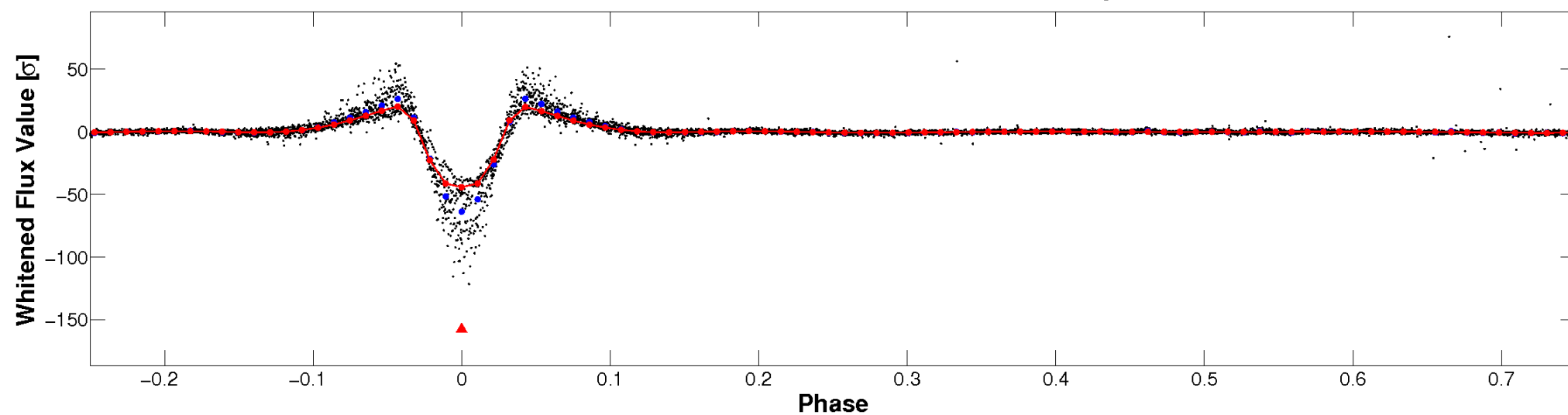


Non-Whitened Vs. Whitened Light Curve

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

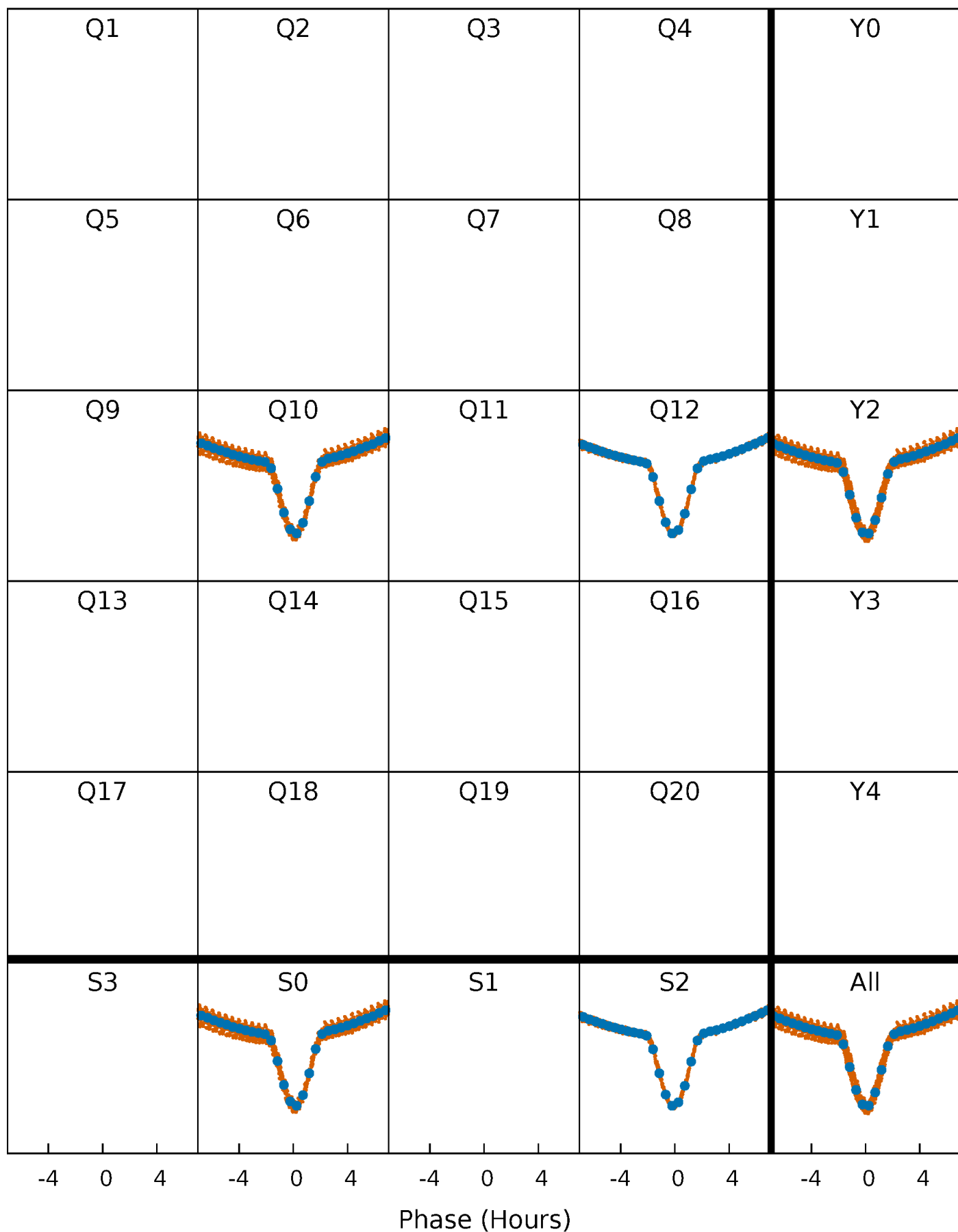


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



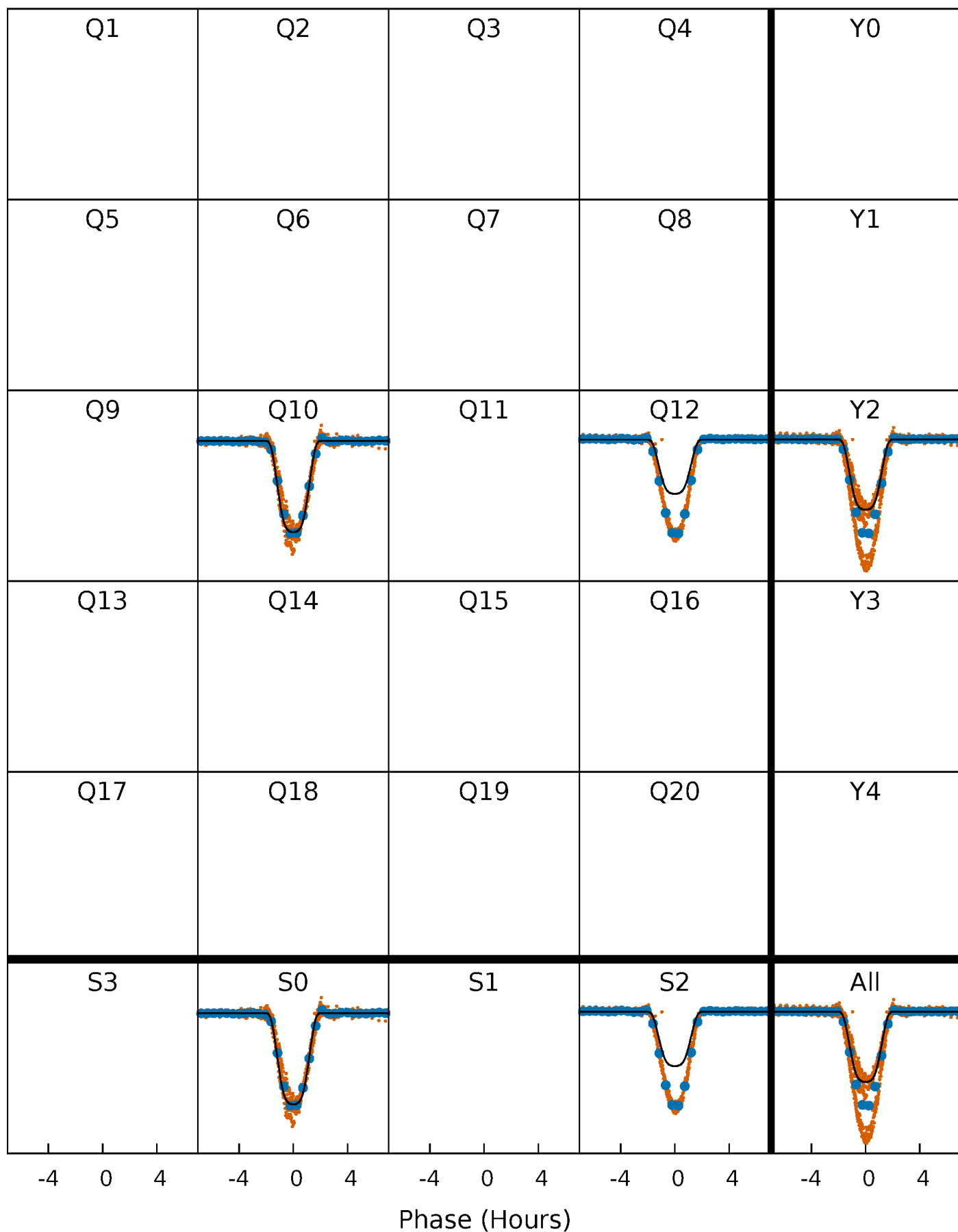
PDC Quarter-Phased Transit Curves

TCE 011819135-01 P= 1.901739 Days $T_0=132.792333$ (BKJD)



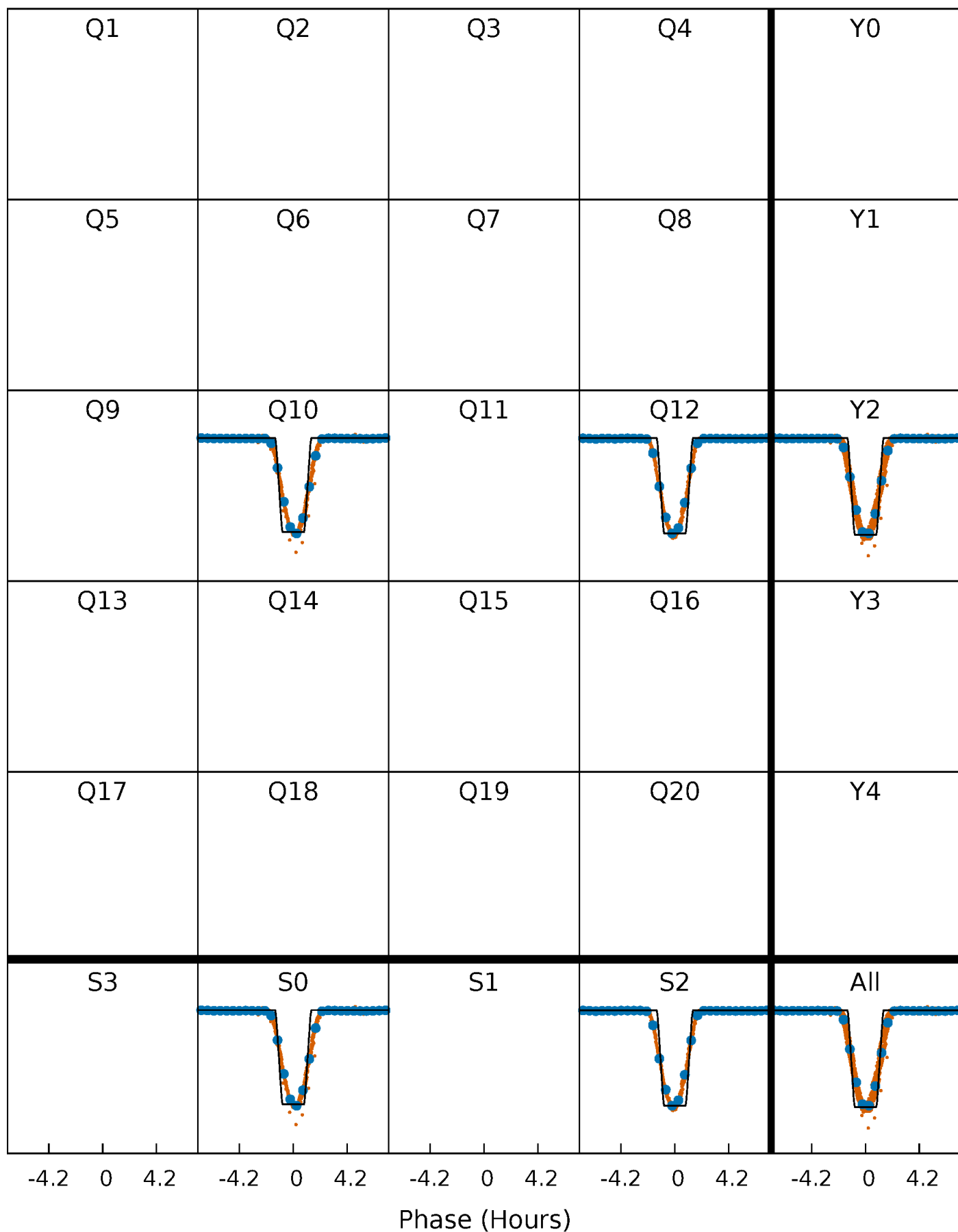
DV Quarter-Phased Transit Curves

TCE 011819135-01 P= 1.901739 Days $T_0=132.792333$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

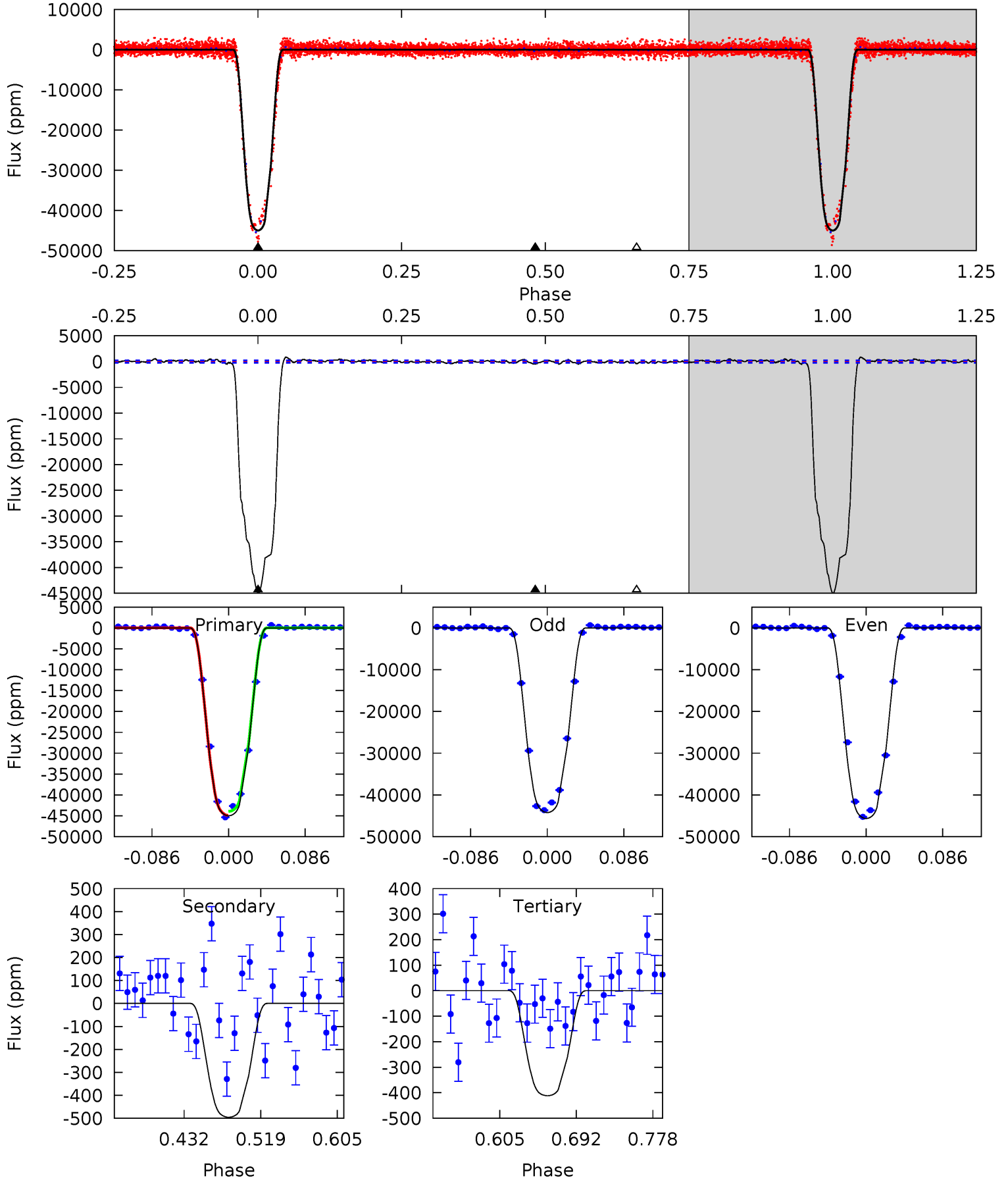
TCE 011819135-01 P= 1.901753 Days $T_0=132.786108$ (BKJD)



DV Model-Shift Uniqueness Test

011819135-01, P = 1.901739 Days, E = 132.792333 Days

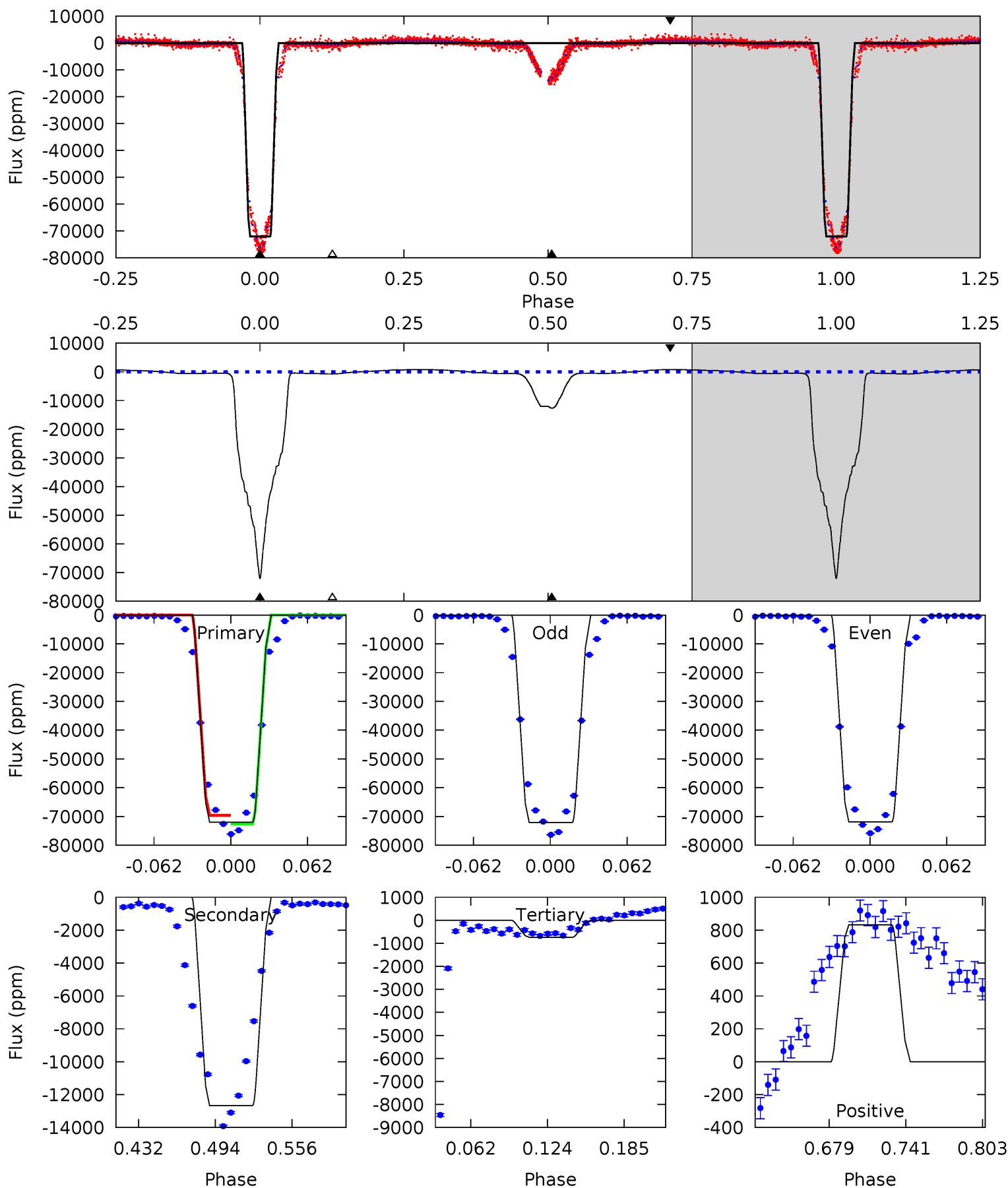
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
879.9	9.69	8.05	0	4.60	1.71	3.29	871.9	879.9	1.64	9.69	13.5	1.15	0.02	0



Alt Model-Shift Uniqueness Test

011819135-01, P = 1.901753 Days, E = 132.786108 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
1381	242.8	14.2	15.9	4.66	1.87	10.2	1366	1365	228.6	226.9	2.21	1.00	0.01	27.5



Stellar Parameters For KIC 011819135

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6929^{+216}_{-312}	$4.102^{+0.214}_{-0.175}$	$-0.300^{+0.300}_{-0.300}$	$1.704^{+0.496}_{-0.496}$	$1.343^{+0.190}_{-0.253}$	$0.383^{+0.474}_{-0.186}$
	+3%/-5%	+5%/-4%	+100%/-100%	+29%/-29%	+14%/-19%	+124%/-49%
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 011819135-01 / KOI 8067.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-495 ± 51	$36.71^{+6.20}_{-4.97}$	3060^{+268}_{-233}	-2609^{+662}_{-308}	$0.219^{+0.073}_{-0.058}$
Alt.	-12667 ± 52	$51.19^{+8.13}_{-7.72}$	3040^{+253}_{-238}	4480^{+115}_{-138}	$2.952^{+0.959}_{-0.701}$

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 $T_{\text{obs}} \gg T_{\text{max}}$ AND $A_{\text{obs}} \gg 1.0$

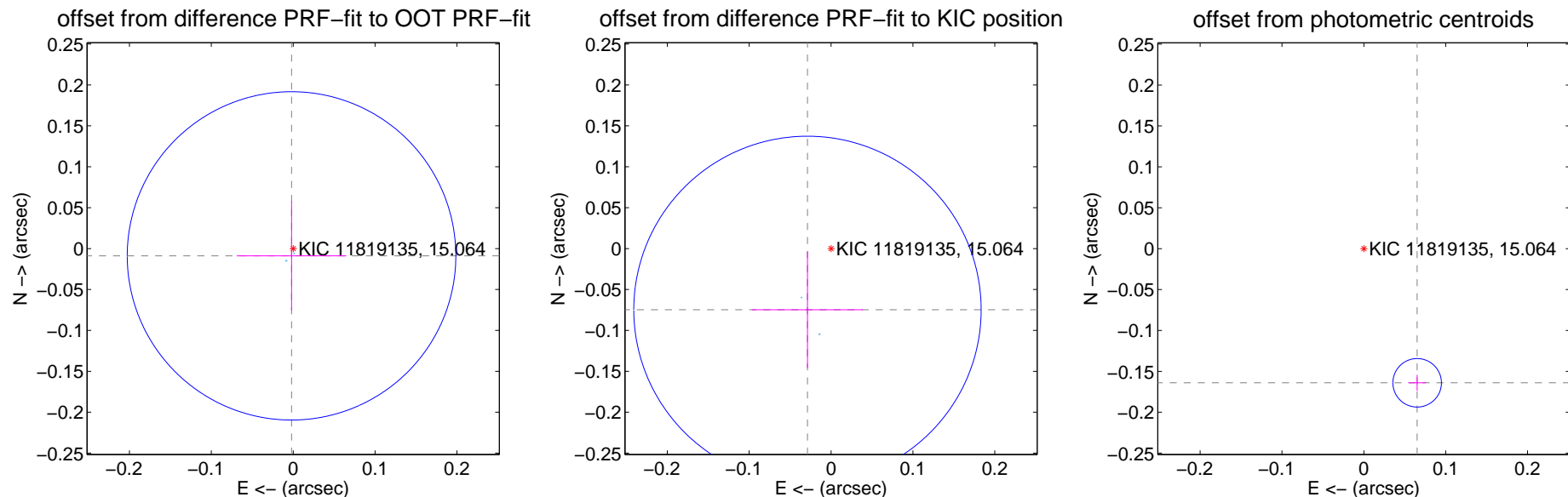
DV Centroid Data

Supplemental centroid analysis for 011819135-01. Kepler magnitude: 15.06. Transit SNR 523.41

There are 2 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.09 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.009 ± 0.067	0.14	0.002 ± 0.067	-0.009 ± 0.067
PRF-fit source offset from KIC position	0.080 ± 0.071	1.13	0.029 ± 0.068	-0.075 ± 0.071
photometric centroid source offset	0.18 ± 0.01	17.86	-0.07 ± 0.01	-0.16 ± 0.01



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.

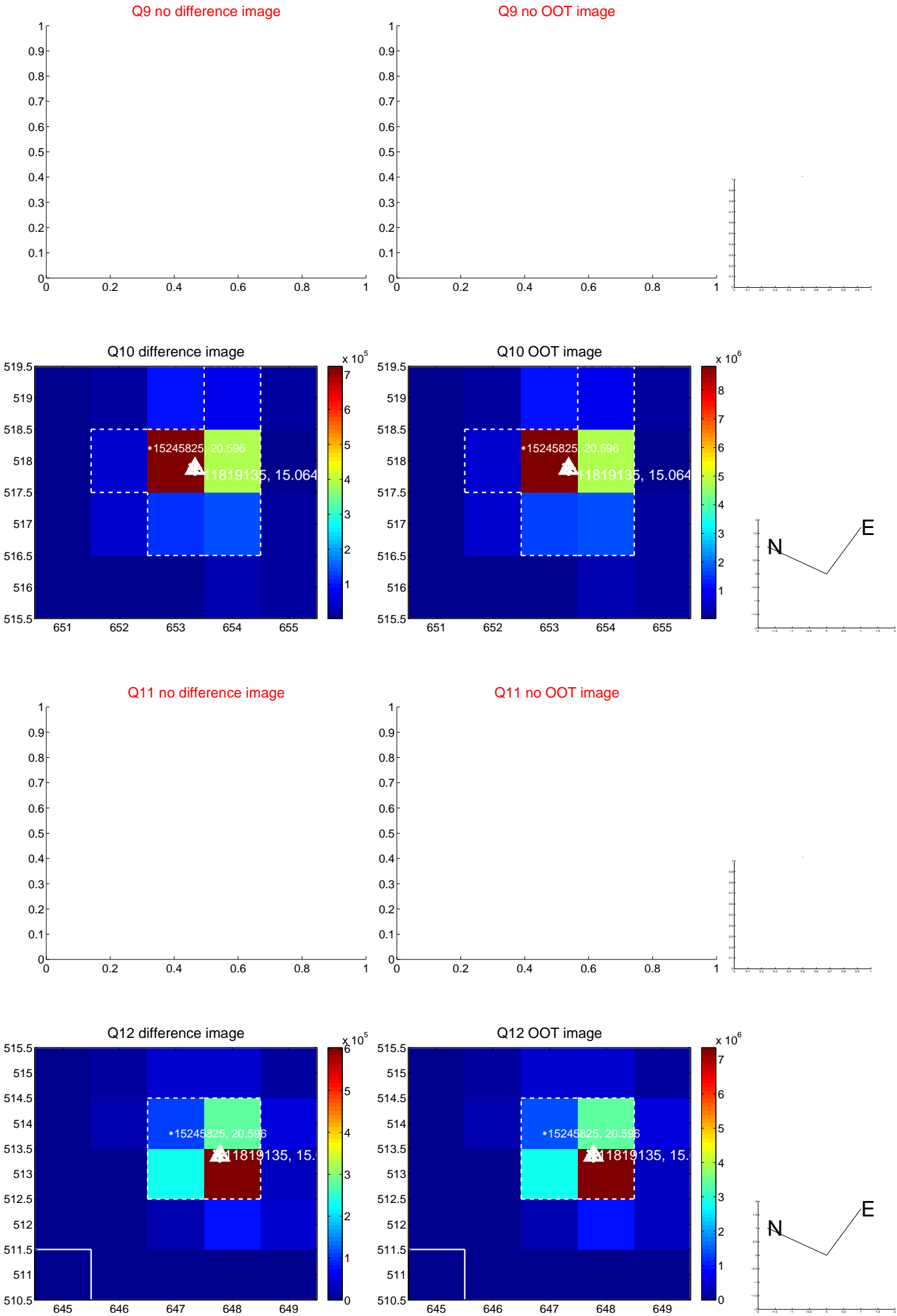
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



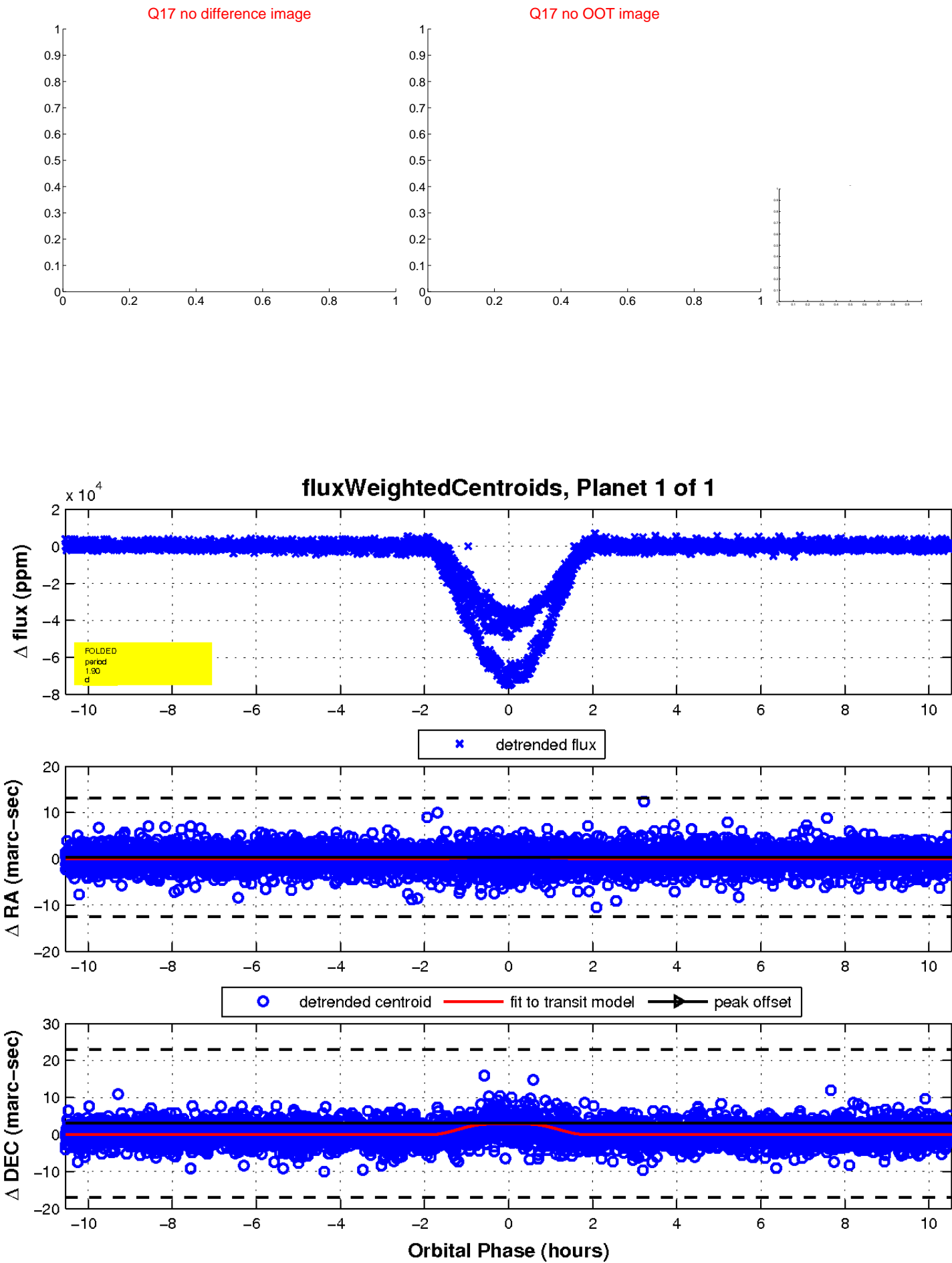
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

