

KIC 007819878

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})
007819878-01	OBS	No	81.813600	193.179478	2720.3	4.500	11.1	-1.0	1.97	7837	10.41	66.39

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007819878-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_SKYE—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_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.

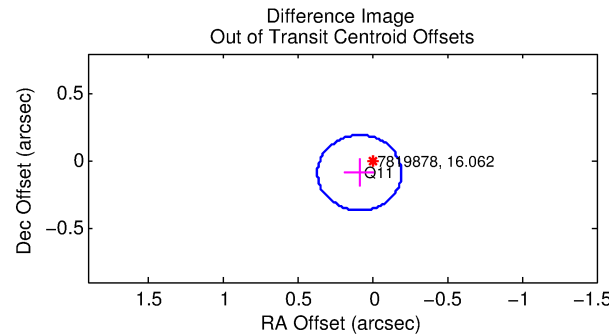
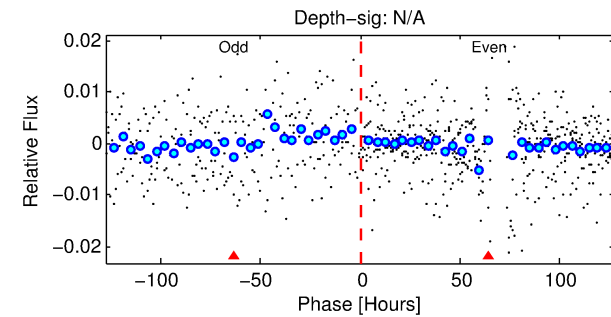
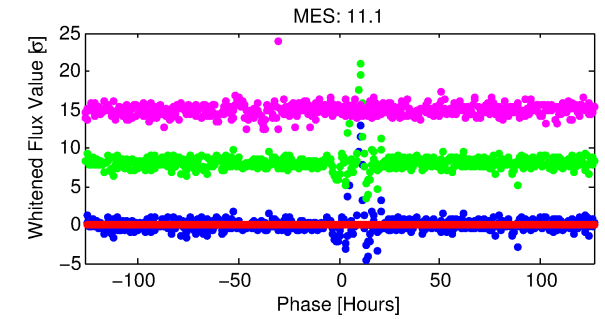
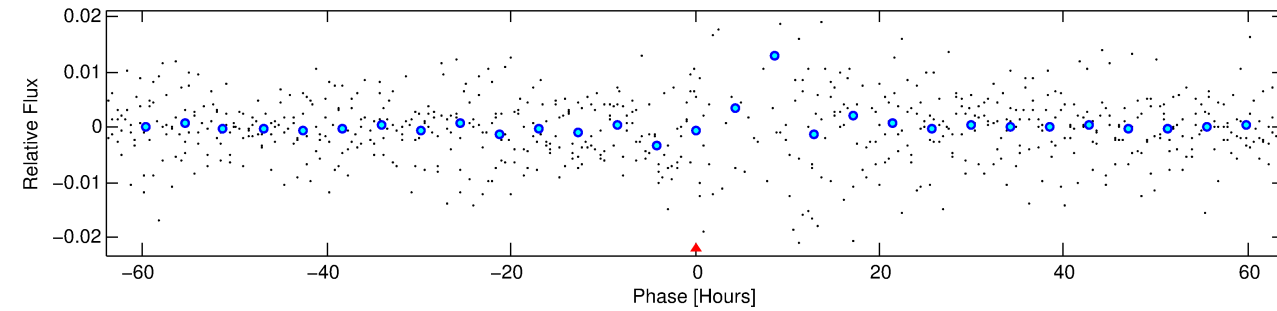
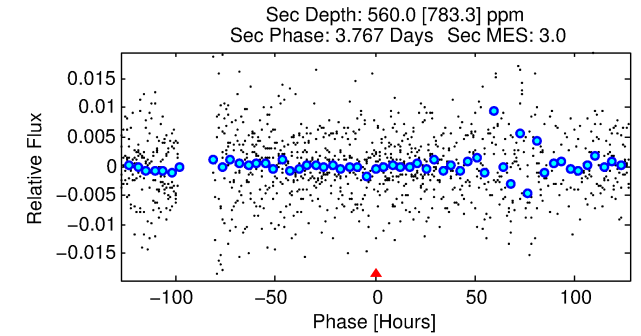
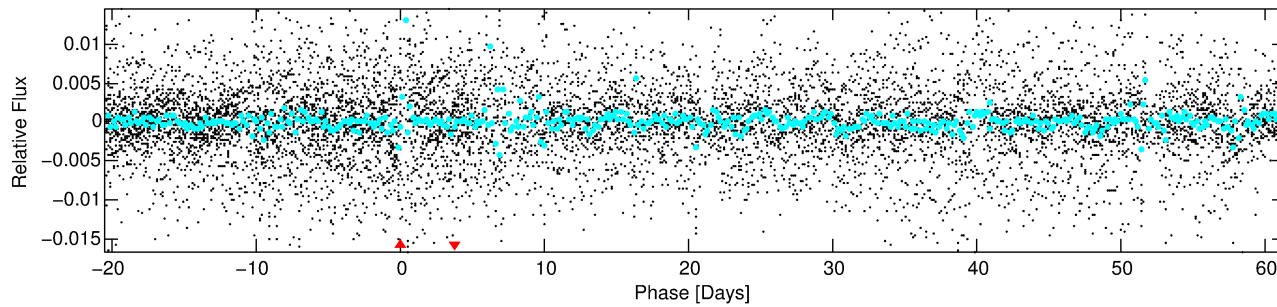
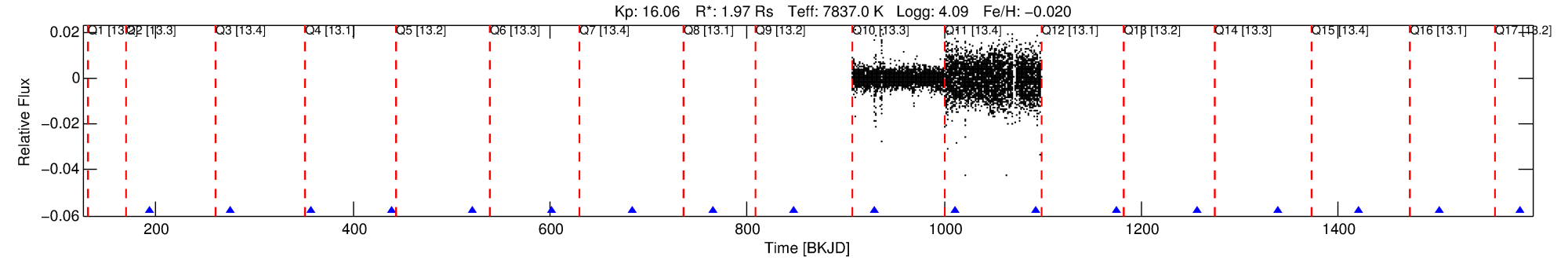
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007819878-01

No Significant Match Found

DV One-Page Summary

KIC: 7819878 Candidate: 1 of 1 Period: 81.814 d



TPS TCE Results:

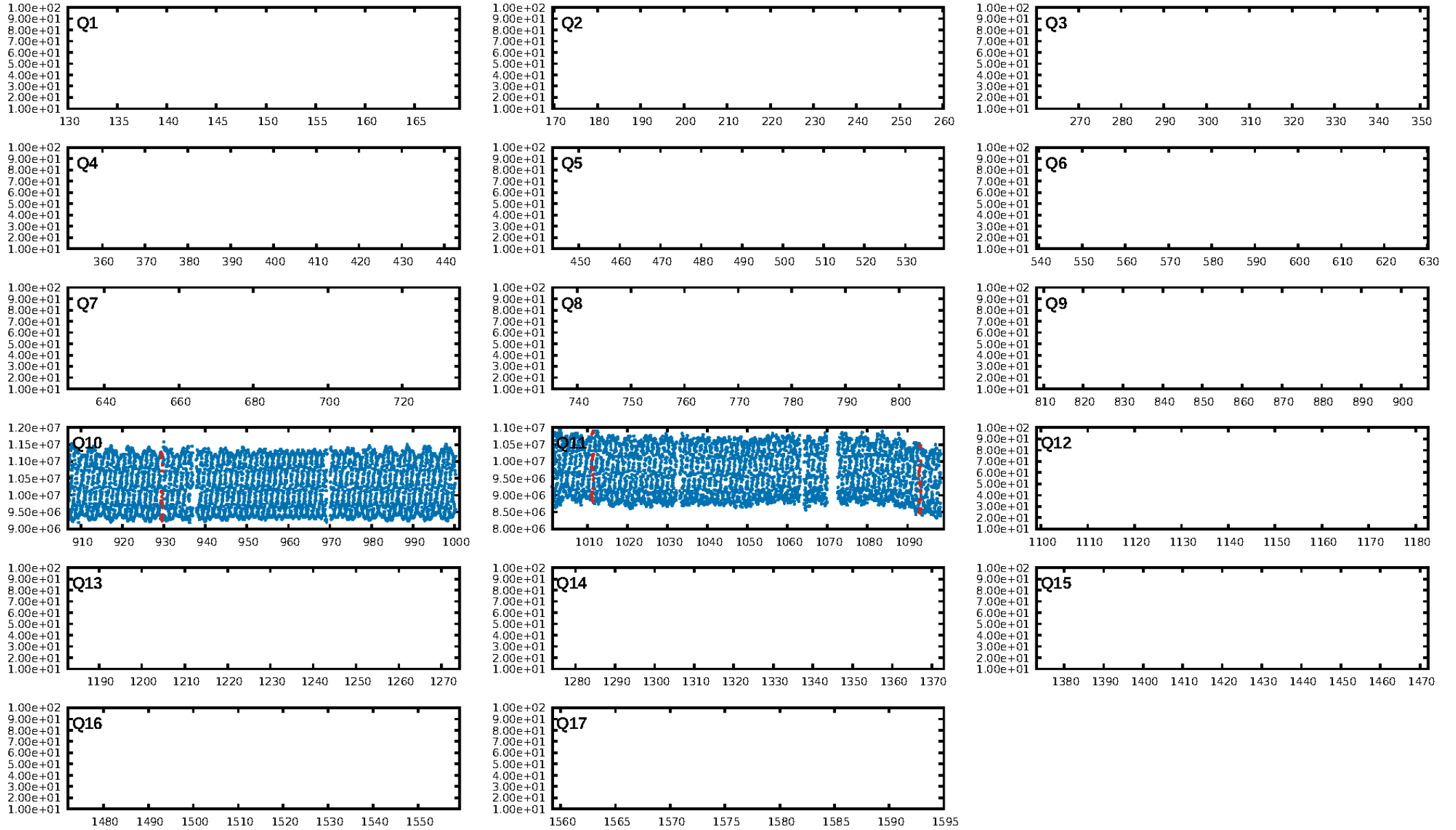
Period = 81.81360 d
Epoch = 193.1795 BKJD

DV fit results are unavailable

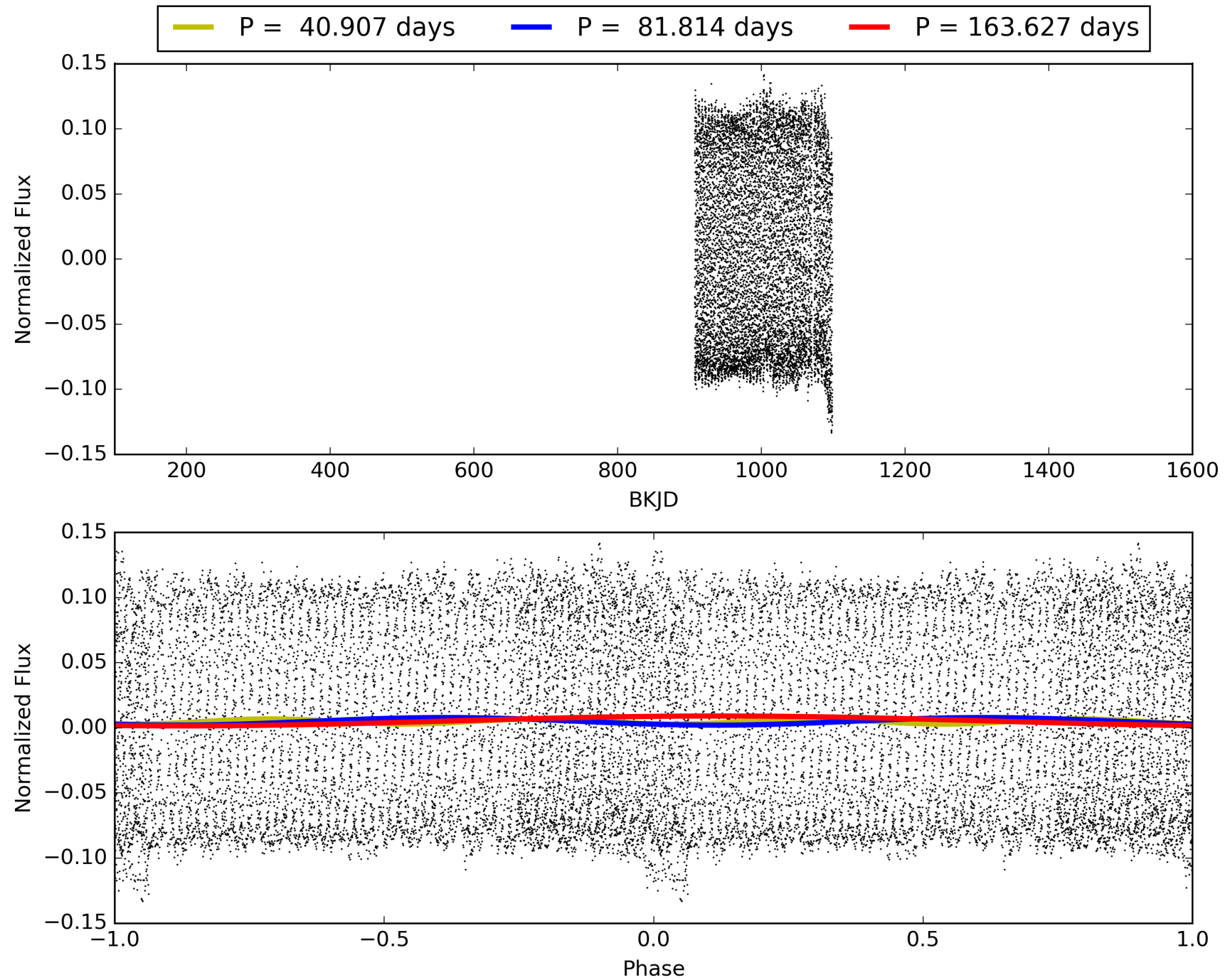
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 7.39e-16
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: -1.359
Centroid-sig: 3.5%
Centroid-so: 2.361 arcsec [1.70σ]
OotOffset-rm: 0.122 arcsec [1.31σ]
KicOffset-rm: 0.156 arcsec [1.69σ]
OotOffset-st: 0/1/0/0 [1]
KicOffset-st: 0/1/0/0 [1]
DiffImageQuality-fgm: 1.00 [1/1]
DiffImageOverlap-fno: 1.00 [1/1]

TCE 007819878-01, PDC Light Curves

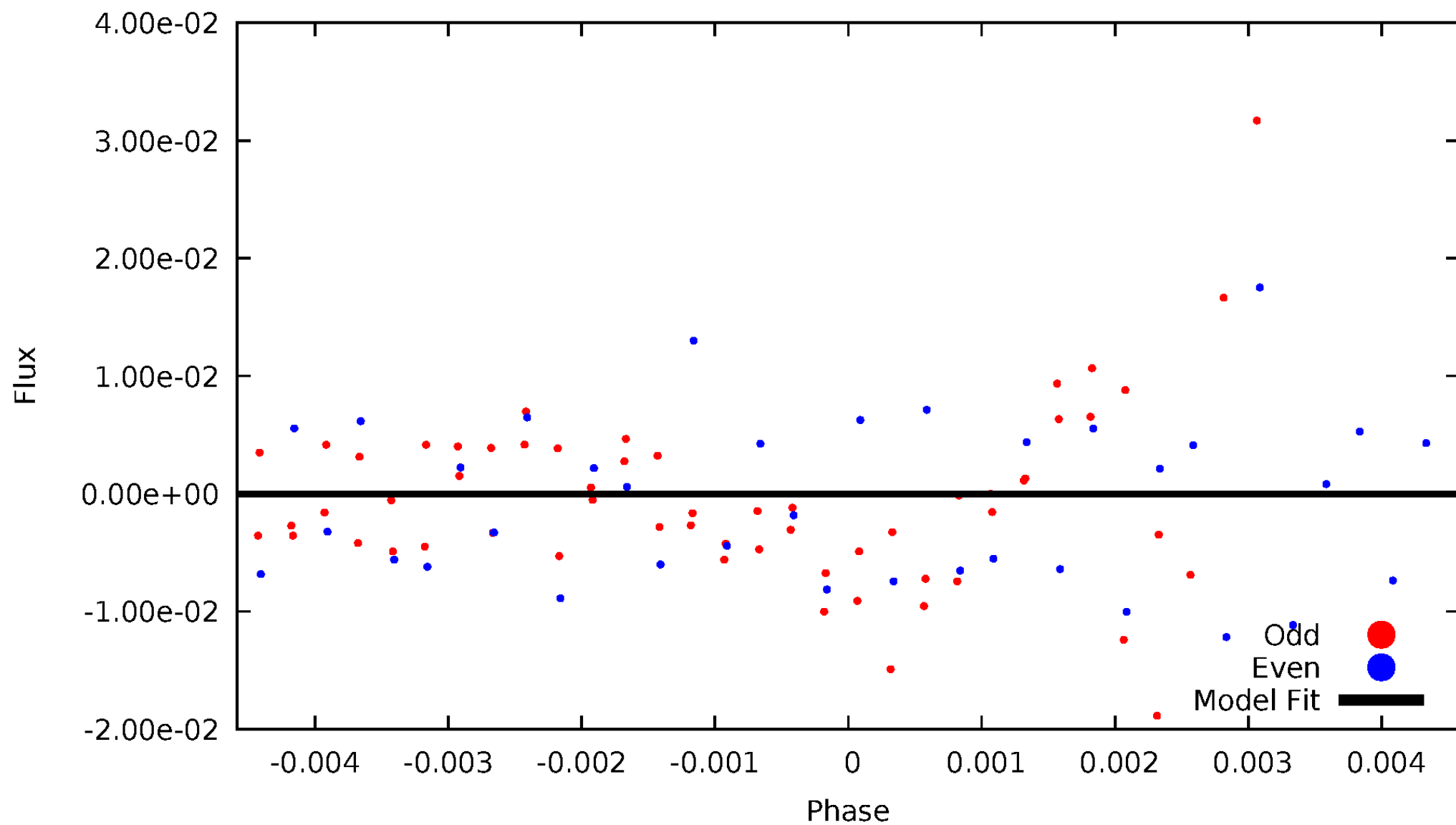


TCE 007819878-01



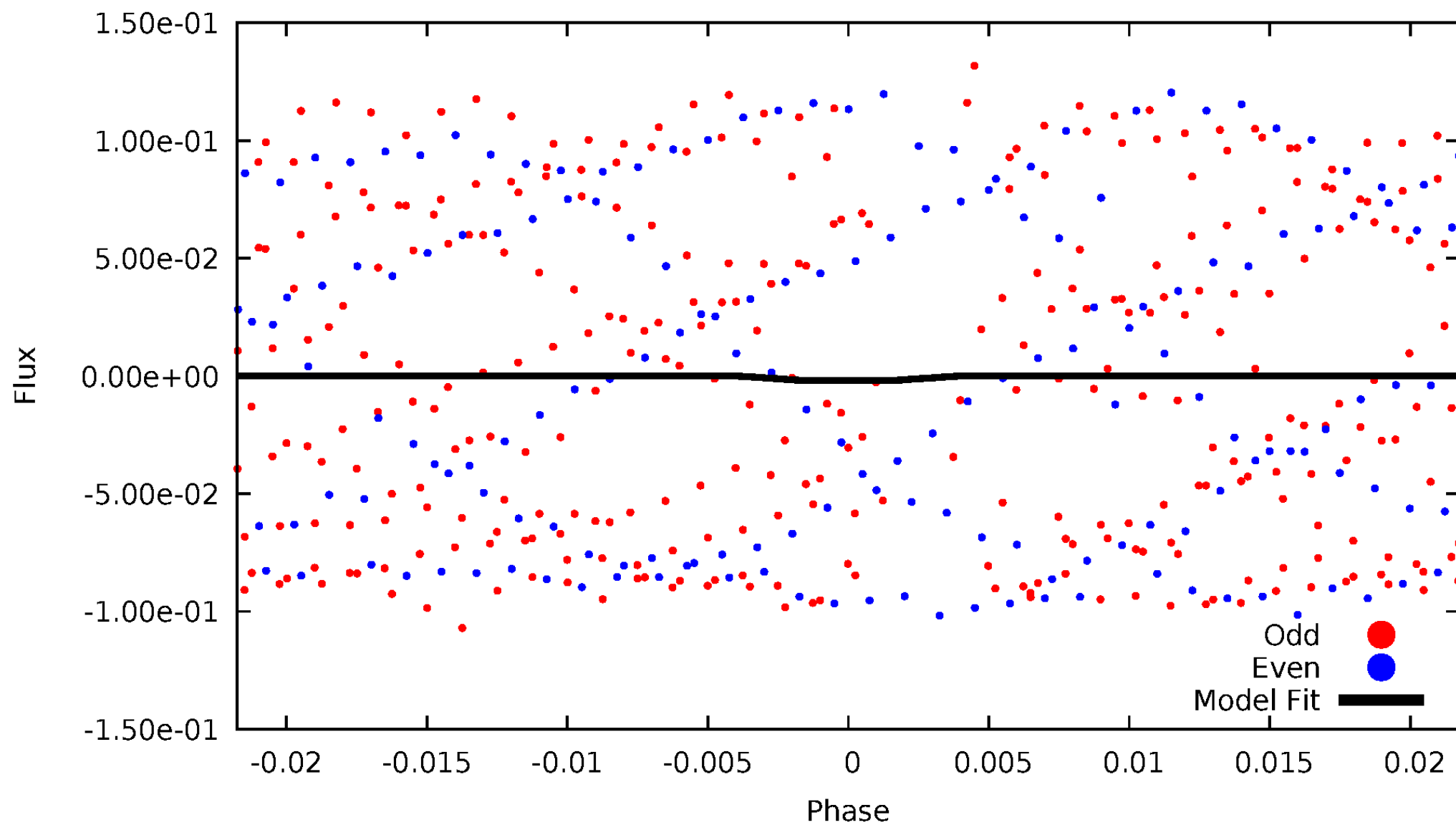
DV Odd/Even

TCE 007819878-01



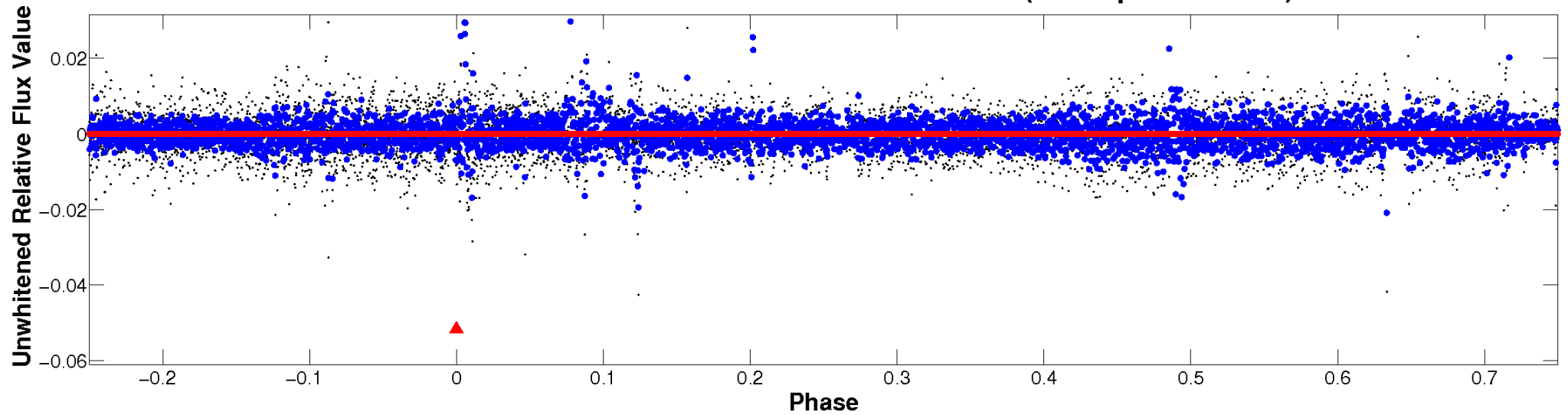
ALT Odd/Even

TCE 007819878-01



Non-Whitened Vs. Whitened Light Curve

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

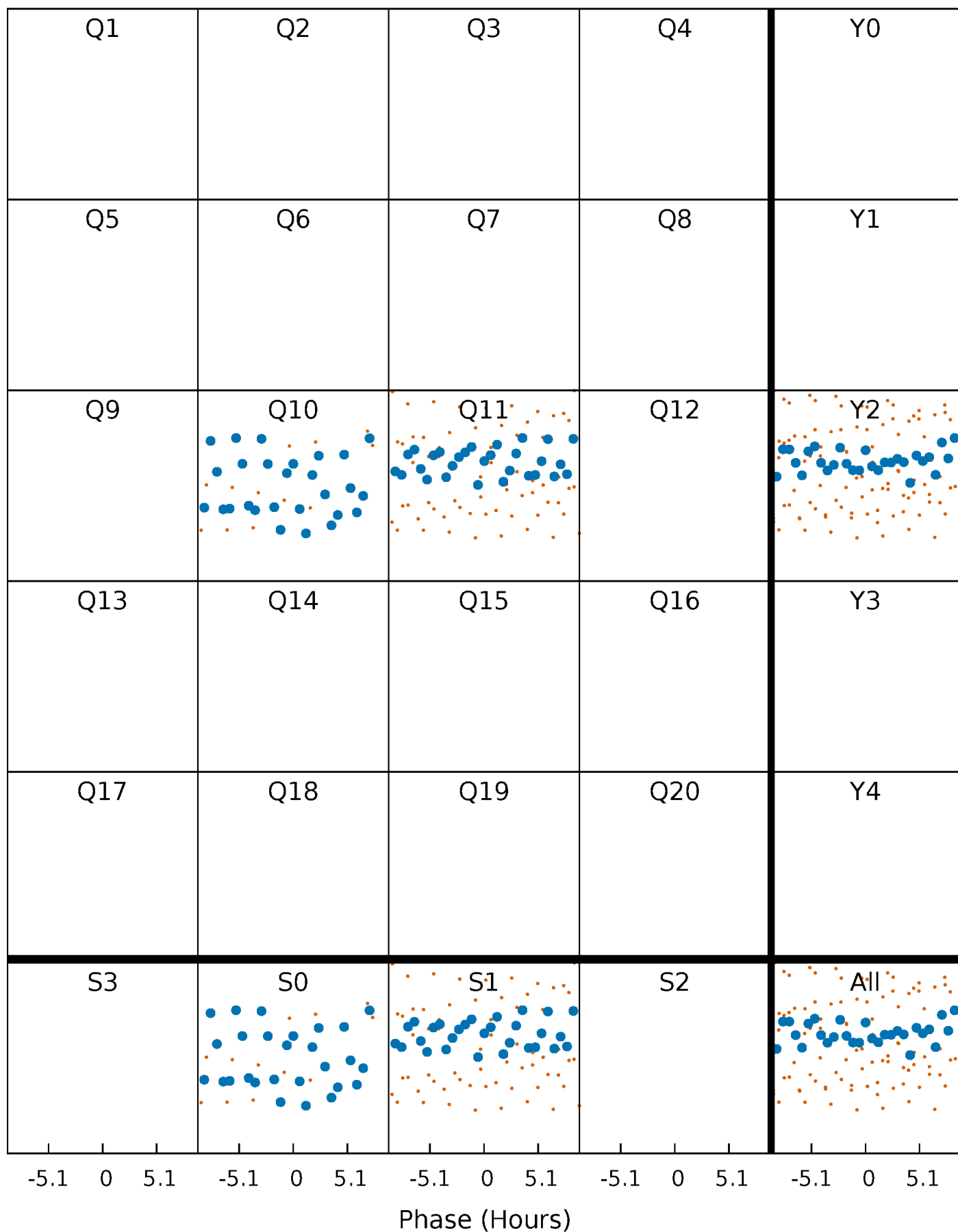


Planet 1 : Phased Whitened Flux Time Series (TPS Epoch/Period)



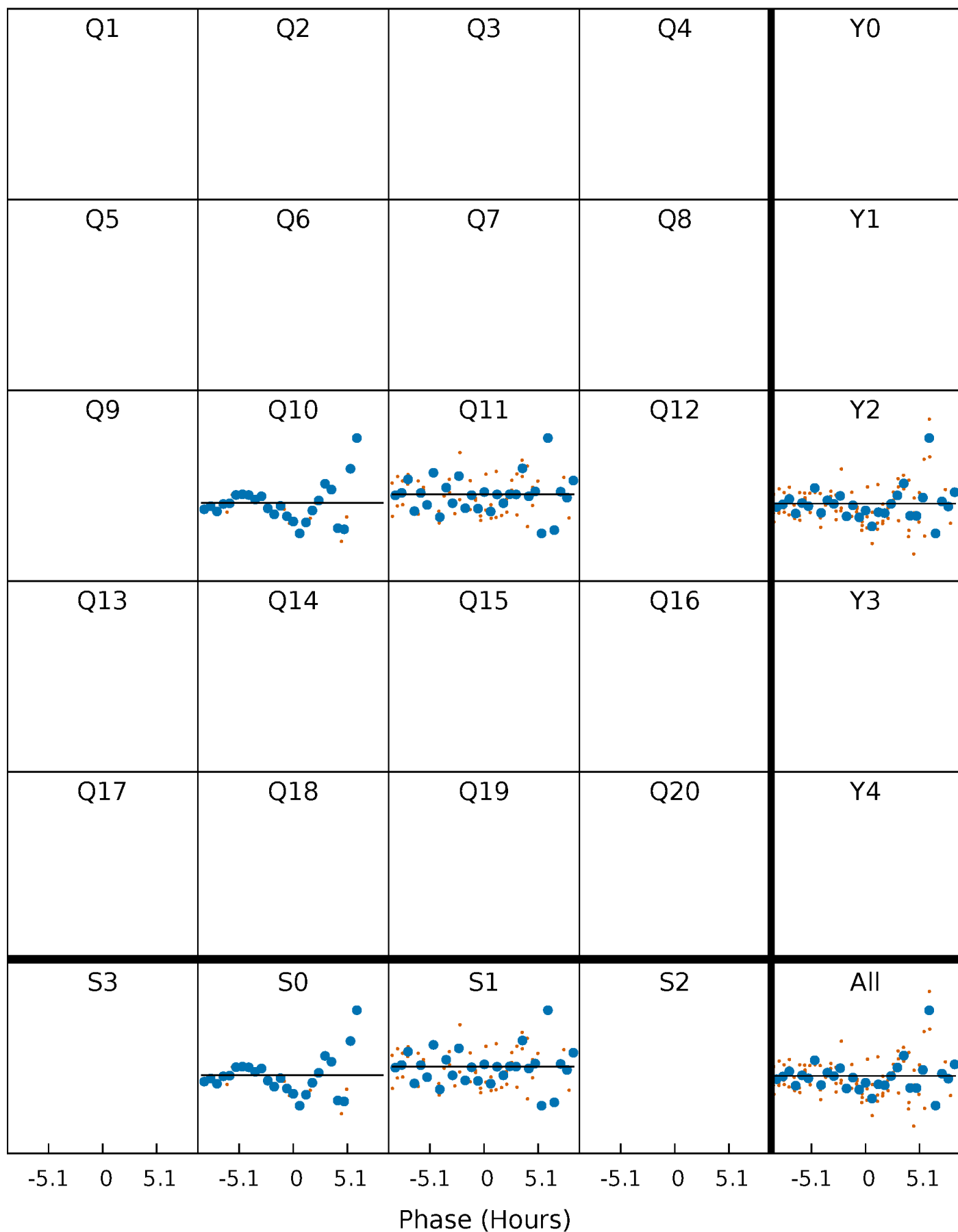
PDC Quarter-Phased Transit Curves

TCE 007819878-01 P= 81.813600 Days $T_0=193.179478$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 007819878-01 P= 81.813600 Days $T_0=193.179478$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

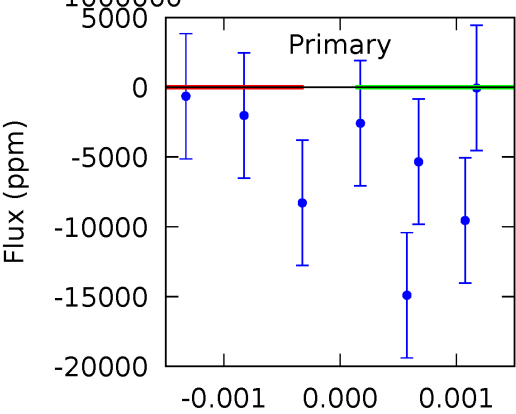
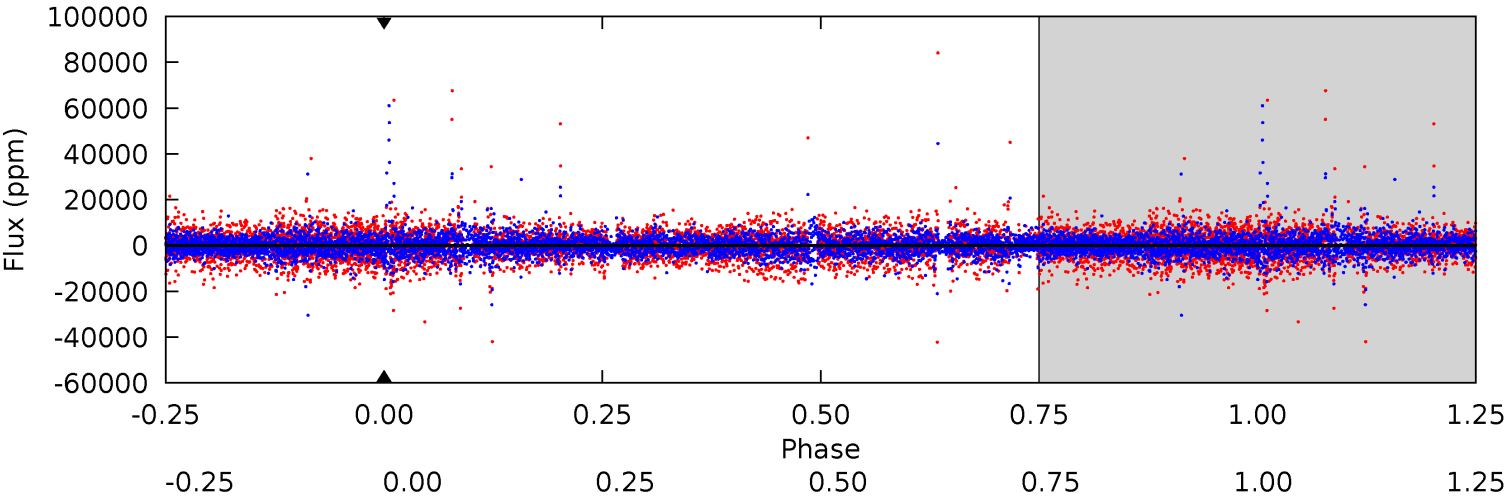
TCE 007819878-01 P= 81.813600 Days $T_0=193.329292$ (BKJD)



DV Model-Shift Uniqueness Test

007819878-01, P = 81.813600 Days, E = 193.179478 Days

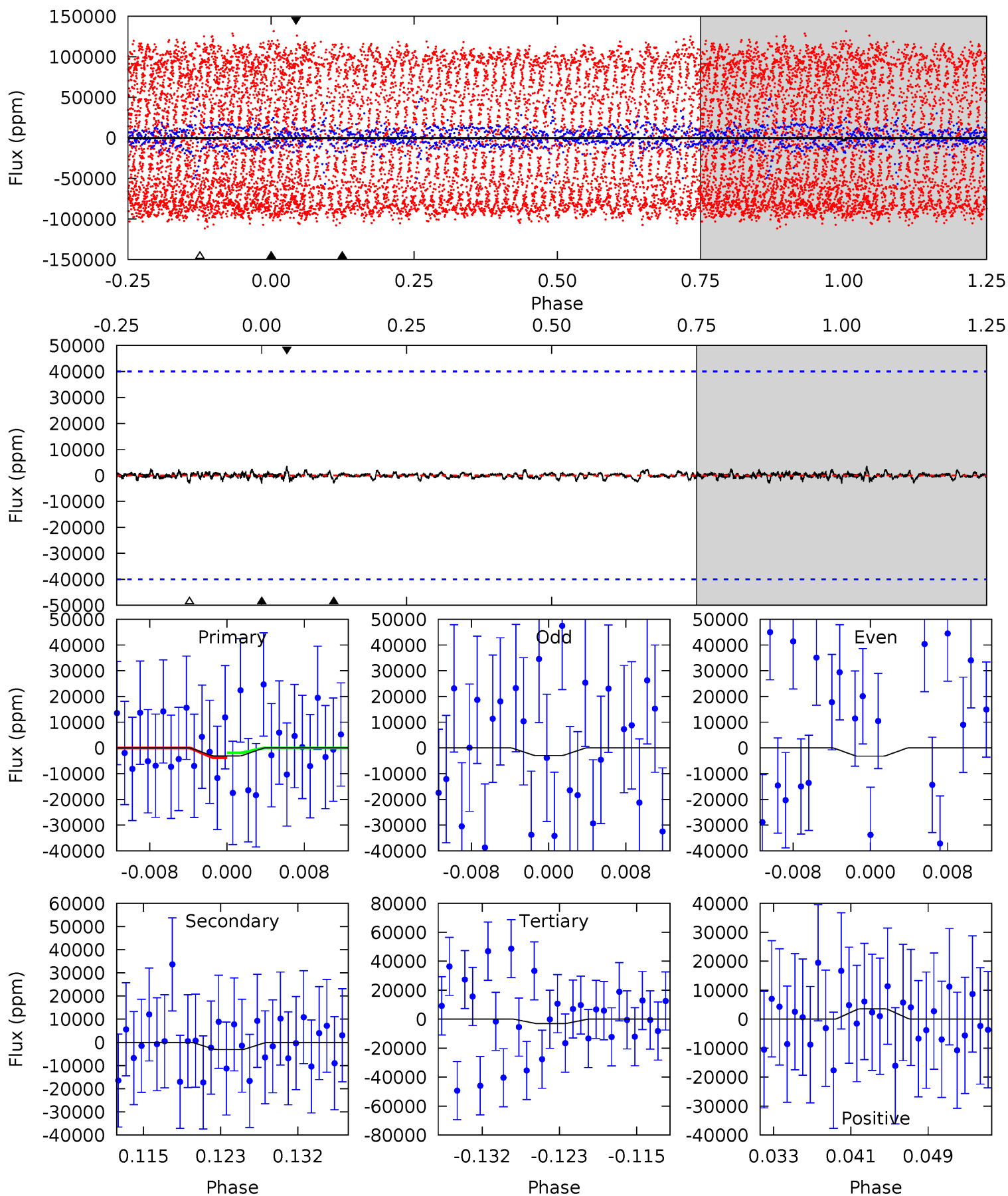
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

007819878-01, P = 81.813600 Days, E = 193.329292 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0.39	0.39	0.39	0.45	5.06	2.64	0.10	0.00	-0.06	0.00	-0.06	0.01	1.05	0.53	0.11



Stellar Parameters For KIC 007819878

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	7837^{+214}_{-322}	$4.091^{+0.135}_{-0.165}$	$-0.020^{+0.200}_{-0.400}$	$1.966^{+0.495}_{-0.405}$	$1.737^{+0.170}_{-0.291}$	$0.322^{+0.238}_{-0.135}$
	+3%/-4%	+3%/-4%	+1000%/-2000%	+25%/-21%	+10%/-17%	+74%/-42%
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 007819878-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	0 ± 1000000	$19.66^{+19.62}_{-13.00}$	1019^{+76}_{-59}	-4978^{+35889}_{-27521}	$-406.958^{+45385.830}_{-49929.840}$
Alt.	-3091 ± 7908	$19.96^{+18.14}_{-13.71}$	1016^{+72}_{-69}	4990^{+6563}_{-11754}	403^{+6788}_{-1922}

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 $A_{\text{obs}} \gg 1.0$

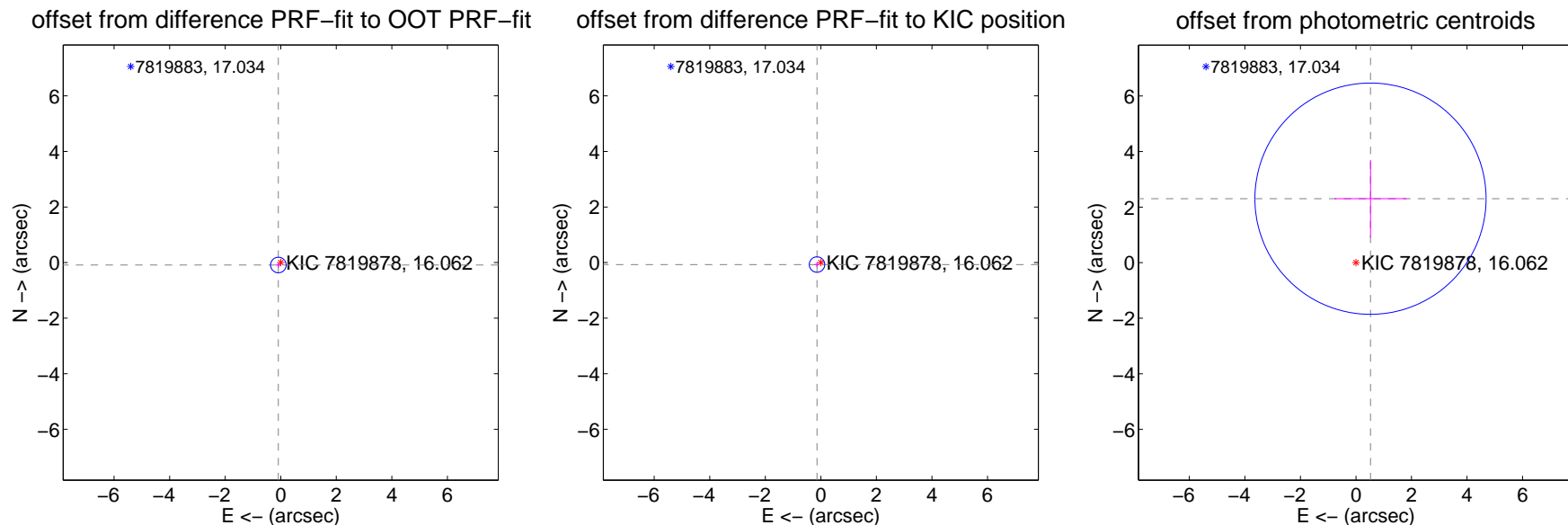
DV Centroid Data

Supplemental centroid analysis for 007819878-01. Kepler magnitude: 16.06. Transit SNR -1.00

There are 1 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.06 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.122 ± 0.093	1.31	0.085 ± 0.092	-0.087 ± 0.094
PRF-fit source offset from KIC position	0.156 ± 0.093	1.69	0.139 ± 0.092	-0.071 ± 0.094
photometric centroid source offset	2.36 ± 1.39	1.70	-0.52 ± 1.30	2.30 ± 1.39



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.

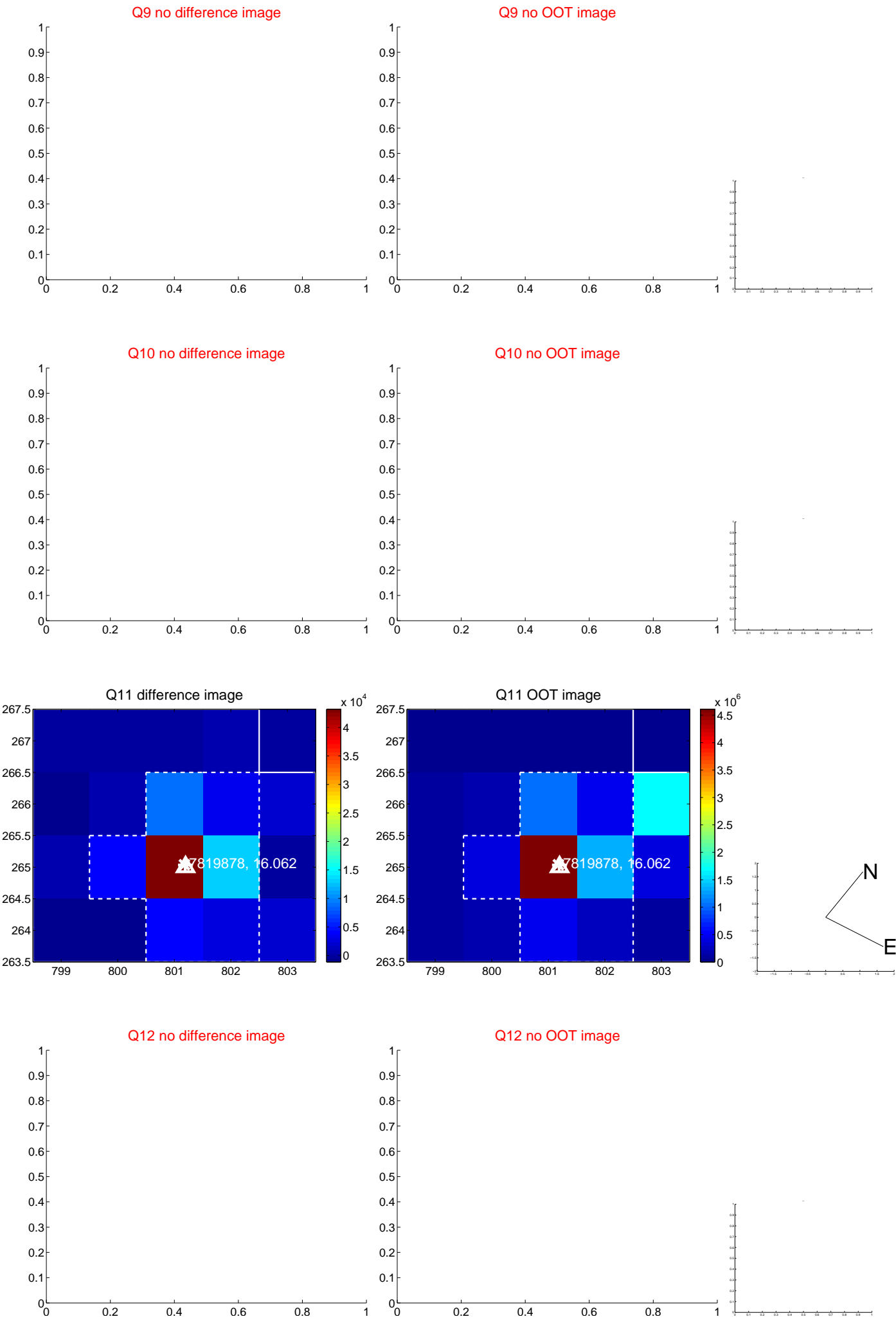
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



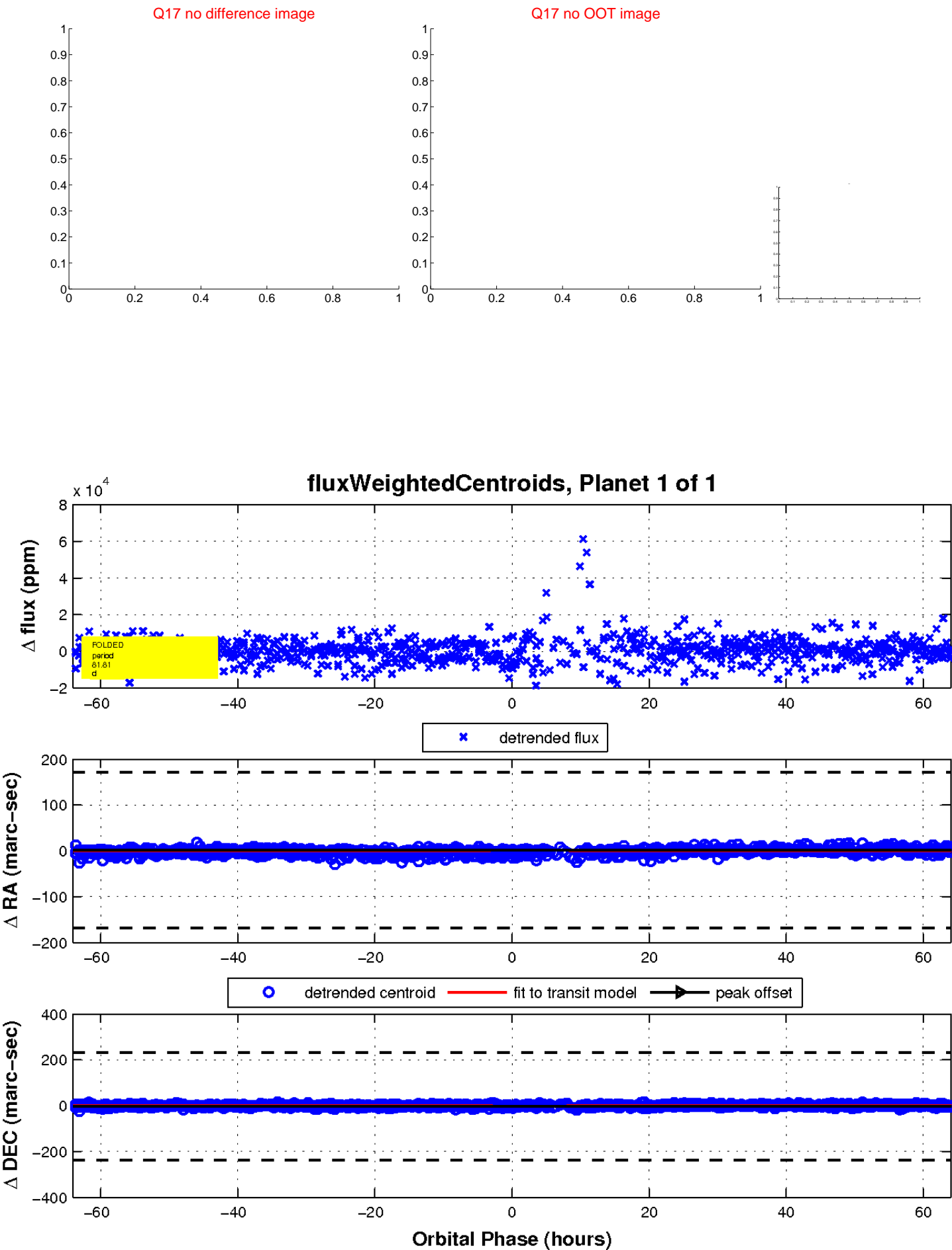
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

