

KIC 007879384

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})
007879384-01	OBS	No	474.083523	189.062473	795.0	7.678	10.8	5.8	0.70	4233	2.06	0.13

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007879384-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—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.

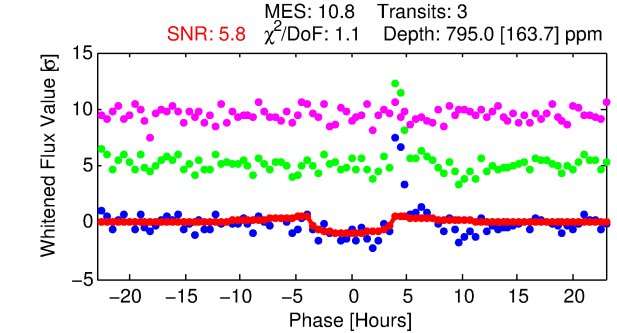
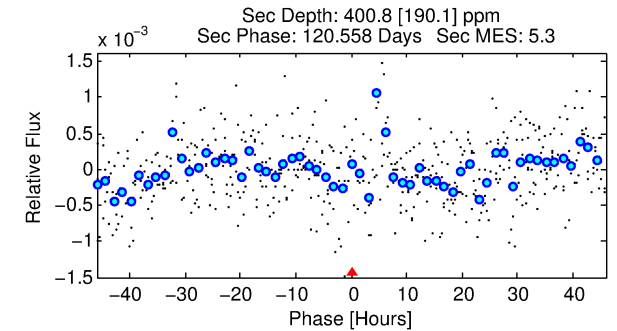
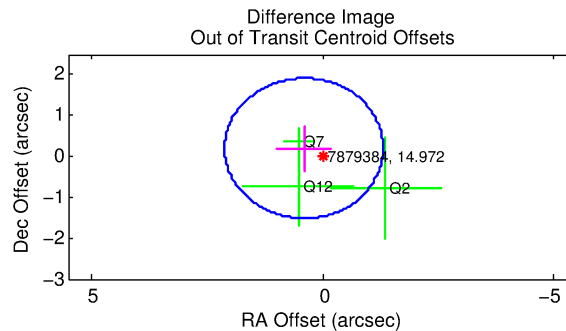
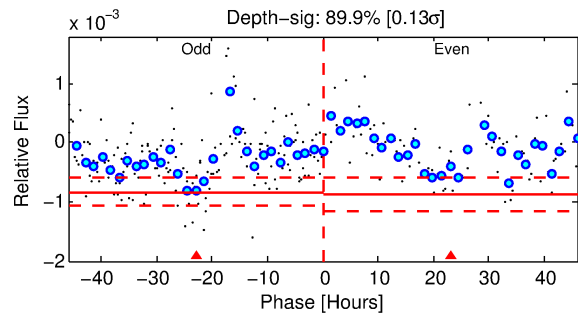
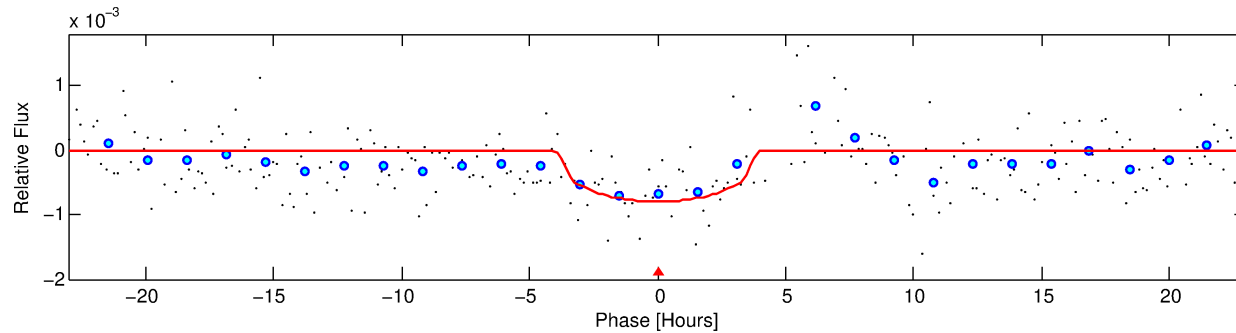
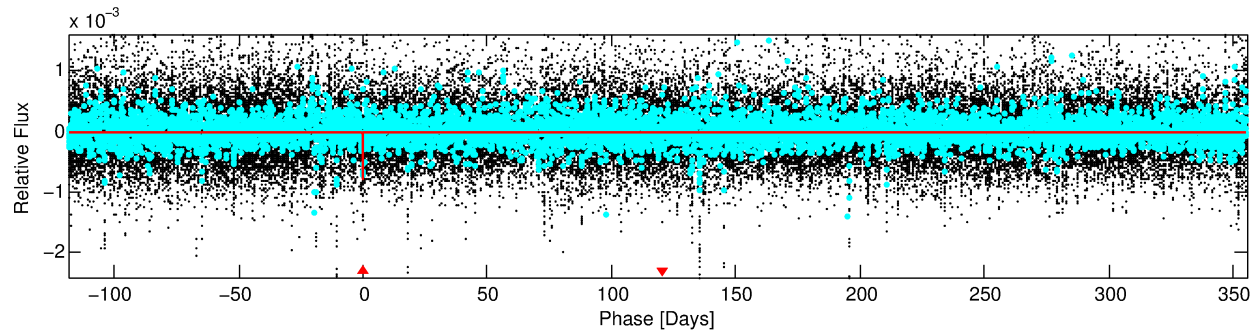
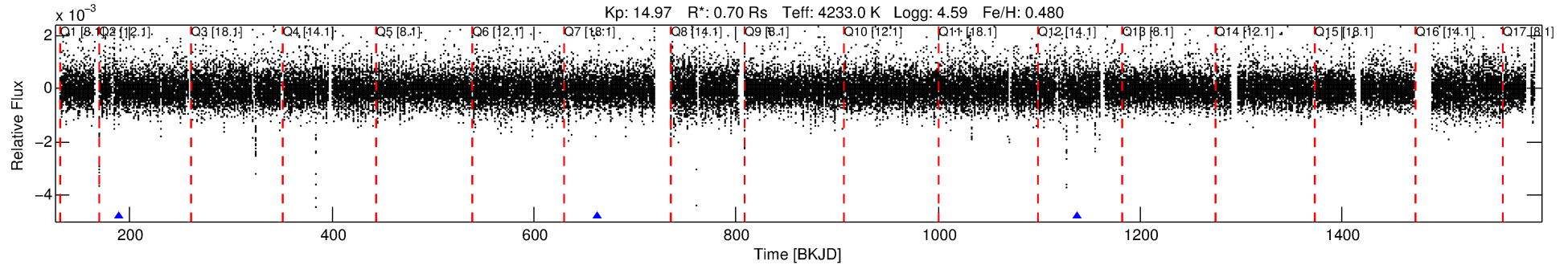
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007879384-01

No Significant Match Found

DV One-Page Summary

KIC: 7879384 Candidate: 1 of 1 Period: 474.084 d



DV Fit Results:

Period = 474.08352 [0.01123] d
Epoch = 189.0625 [0.0132] BKJD
Rp/R* = 0.0268 [0.0246]
a/R* = 380.52 [994.92]
b = 0.64 [2.51]
Seff = 0.13 [0.02]
Teq = 152 [7] K
Rp = 2.06 [1.89] Re
a = 1.0556 [0.0789] AU
Ag = 58134.66 [110115.53] [0.53 σ]
Teffp = 3656 [1735] K [2.02 σ]

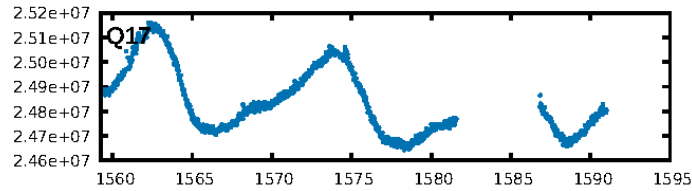
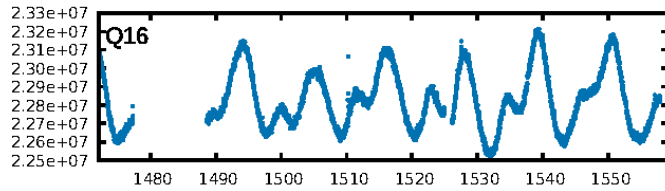
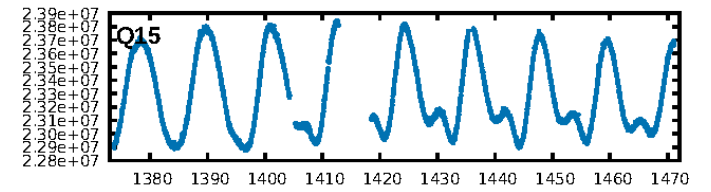
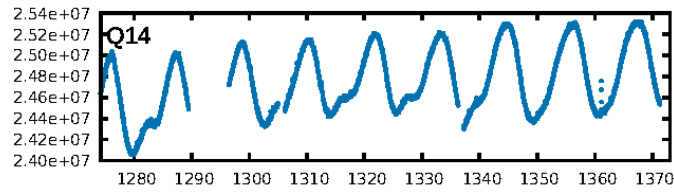
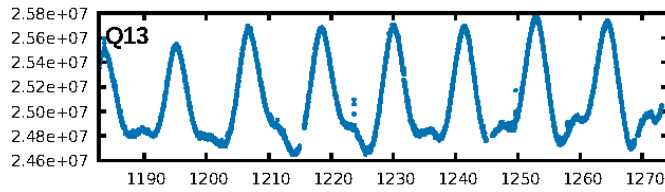
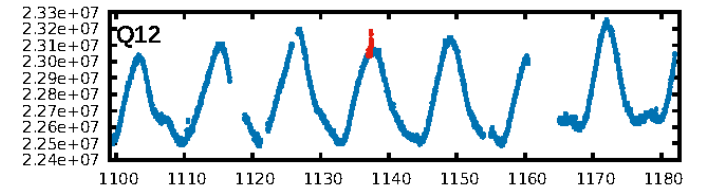
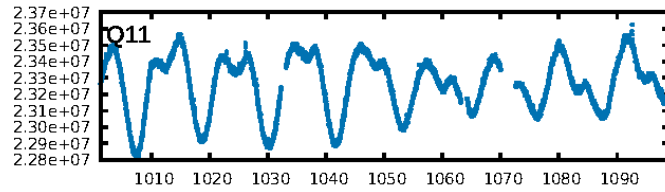
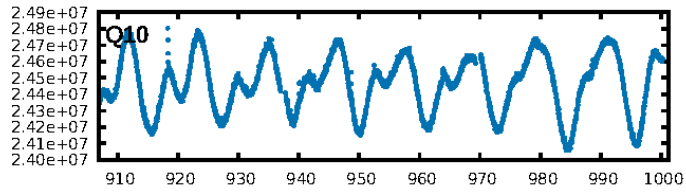
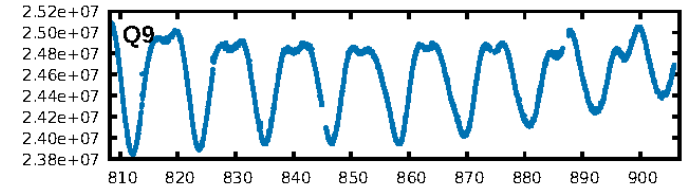
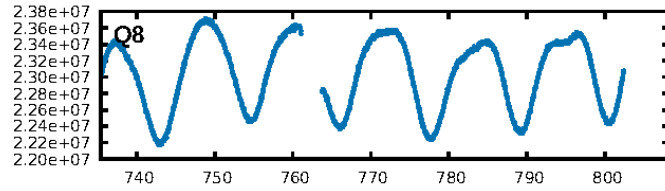
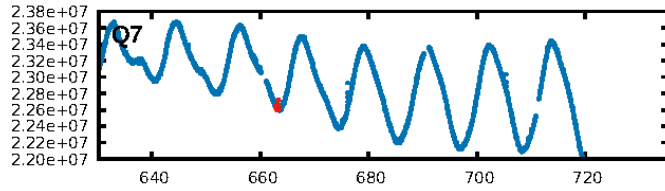
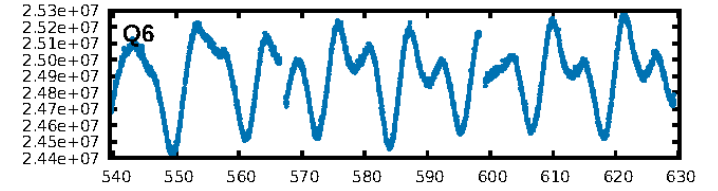
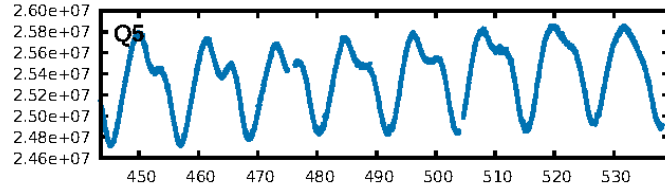
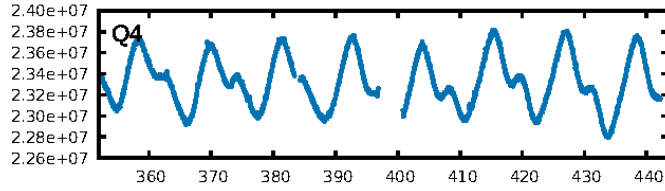
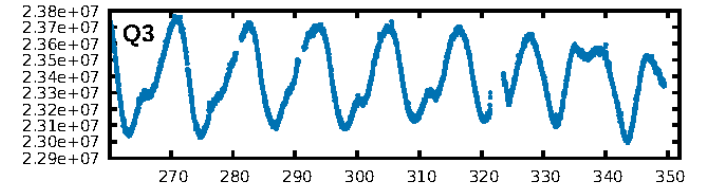
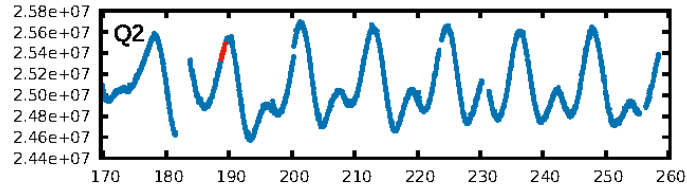
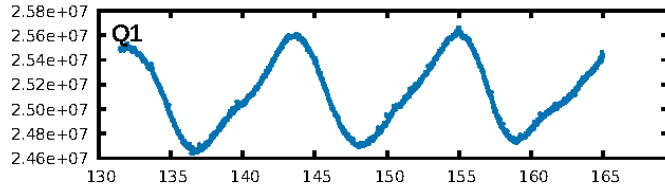
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 4.1%
ModelChiSquareGof-sig: 90.2%
Bootstrap-pfa: 4.19e-10
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: -0.9643
Centroid-sig: 4.1%
Centroid-so: 1.824 arcsec [1.48 σ]
OotOffset-rm: 0.449 arcsec [0.79 σ]
KicOffset-rm: 0.750 arcsec [1.34 σ]
OotOffset-st: 1/1/1/0 [3]
KicOffset-st: 1/1/1/0 [3]
DiffImageQuality-fgm: 0.33 [1/3]
DiffImageOverlap-fno: 1.00 [3/3]

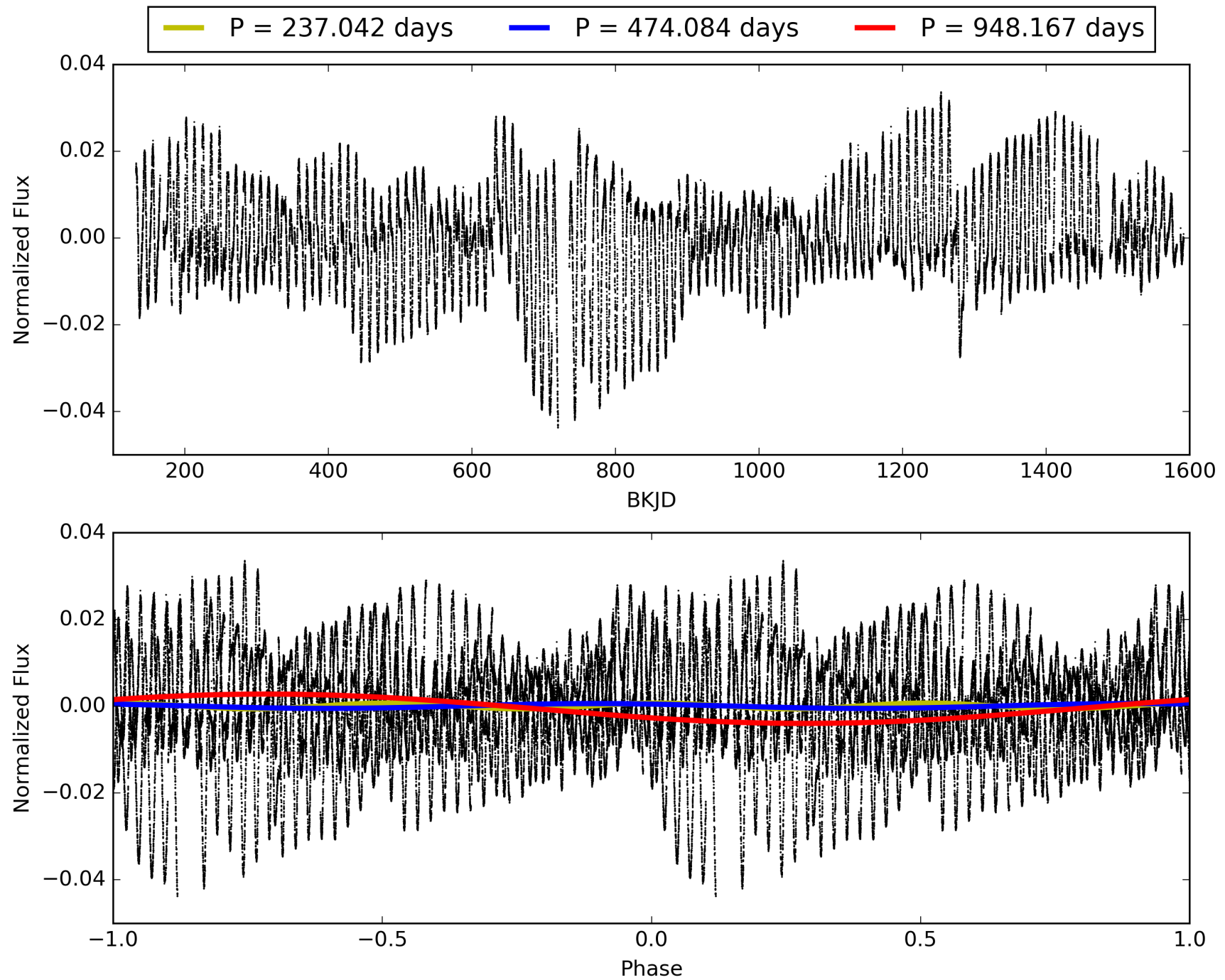
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 06:32:48 Z

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

TCE 007879384-01, PDC Light Curves

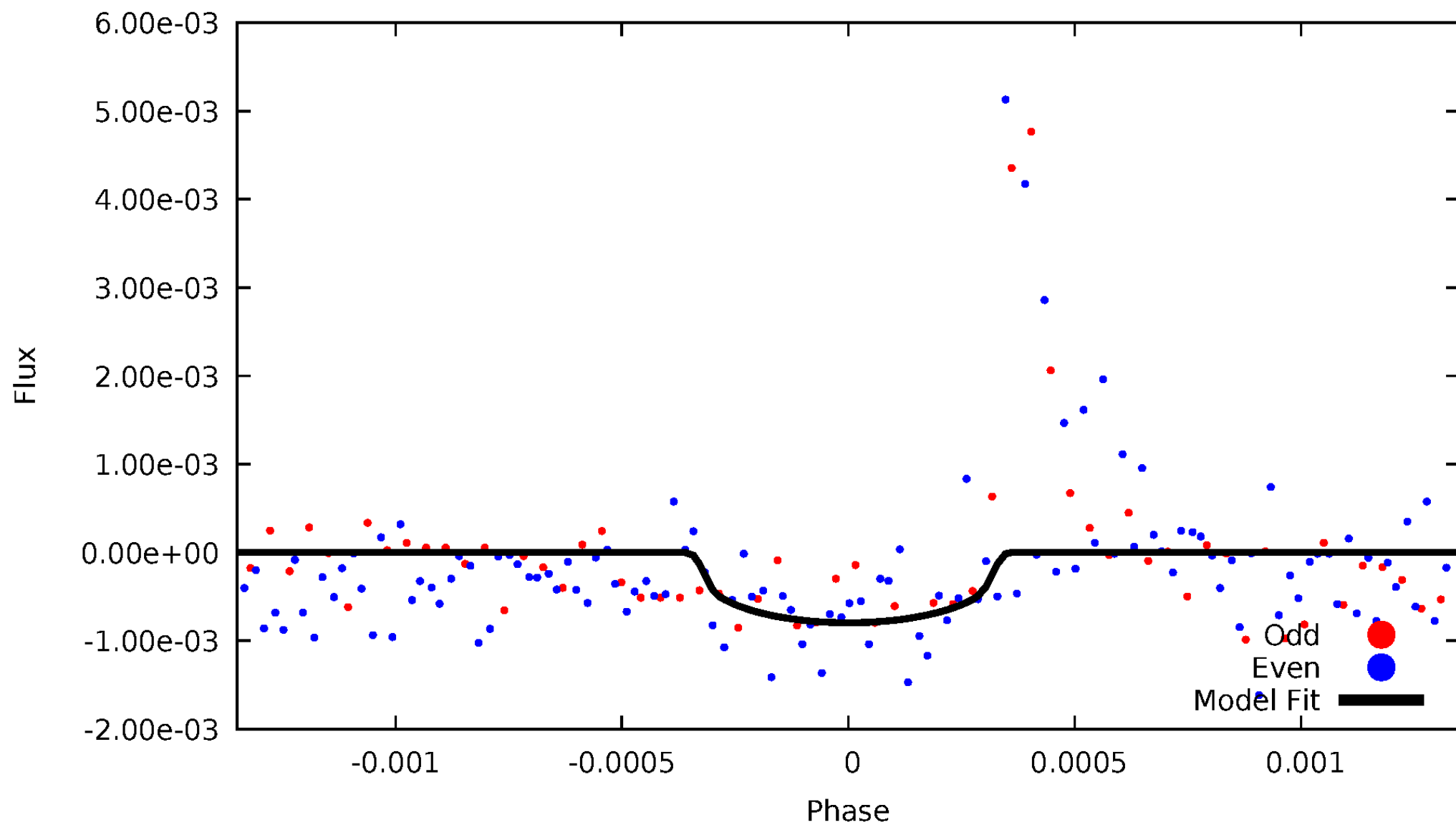


TCE 007879384-01



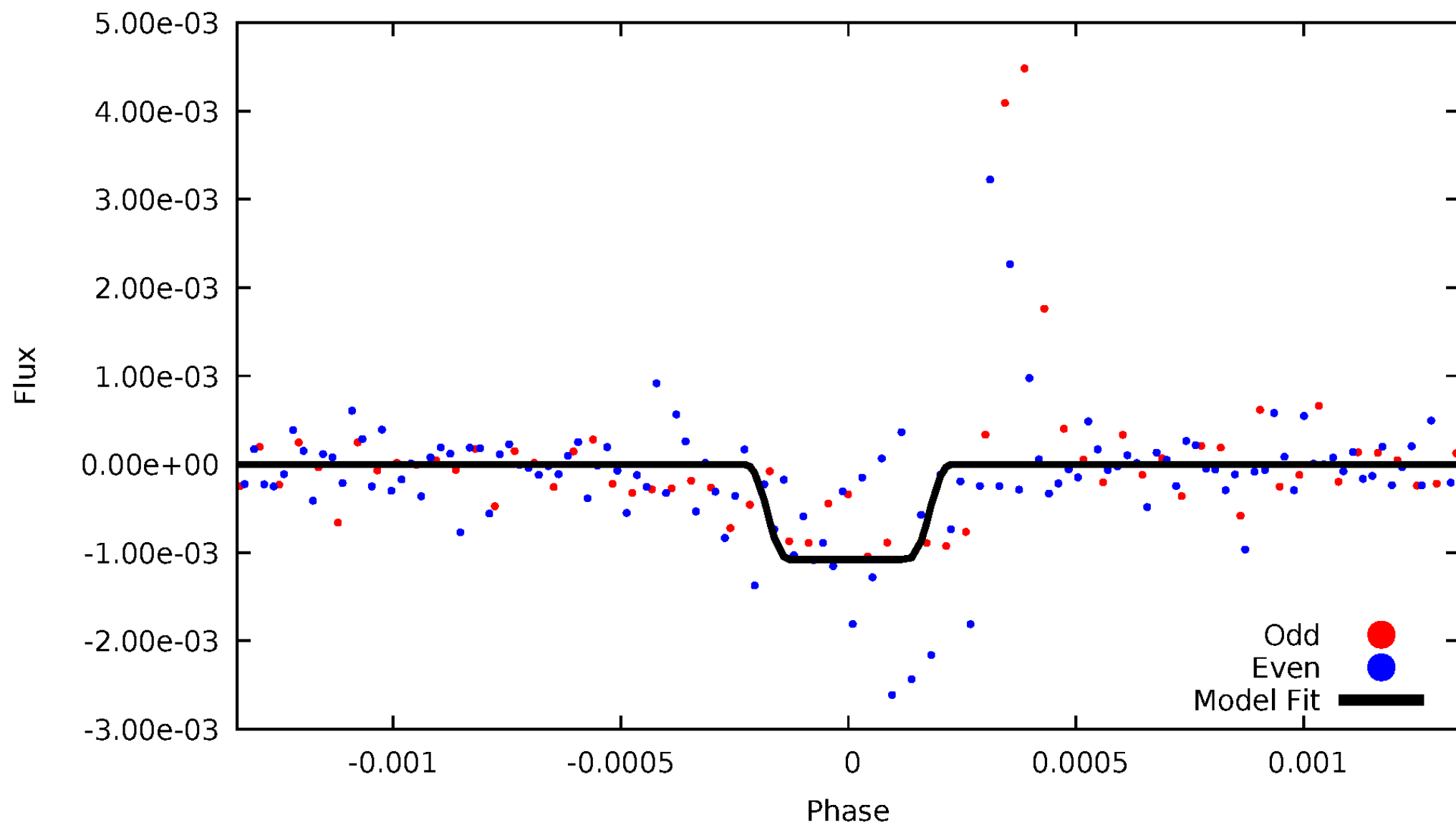
DV Odd/Even

TCE 007879384-01



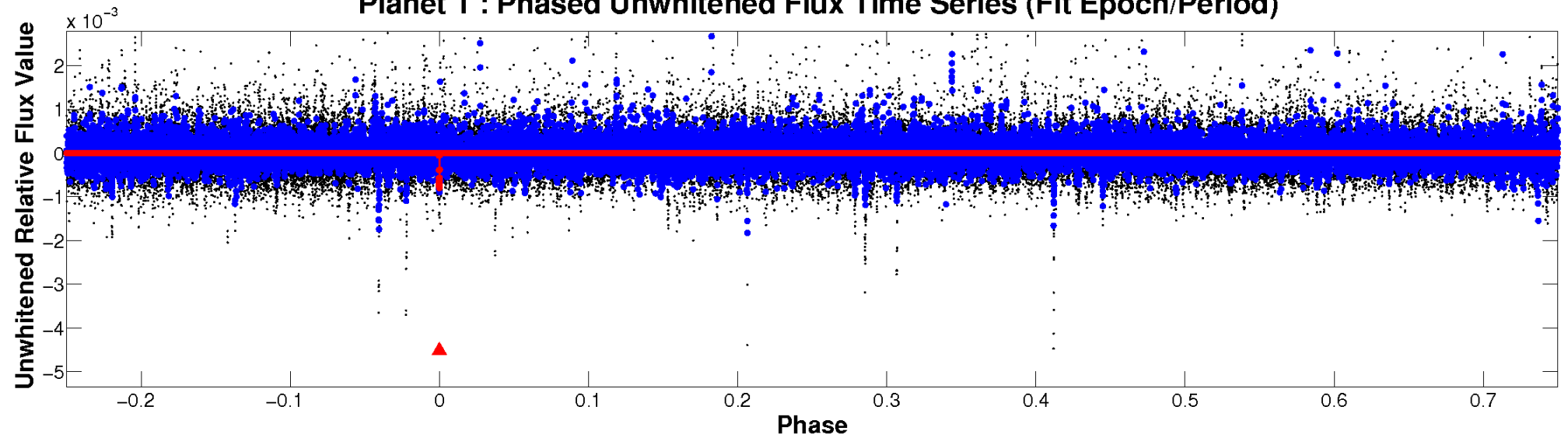
ALT Odd/Even

TCE 007879384-01

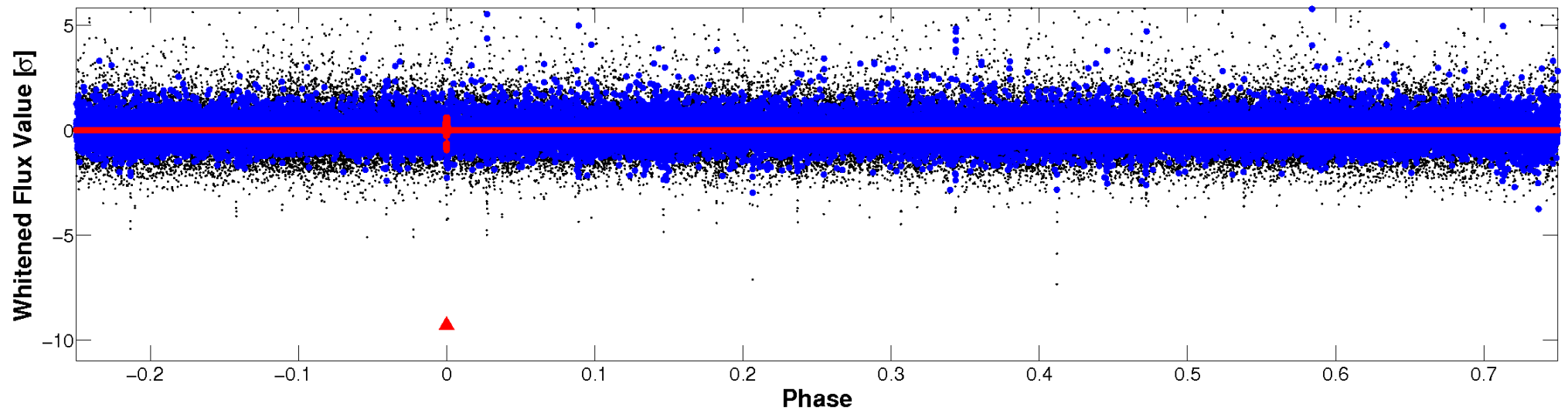


Non-Whitened Vs. Whitened Light Curve

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

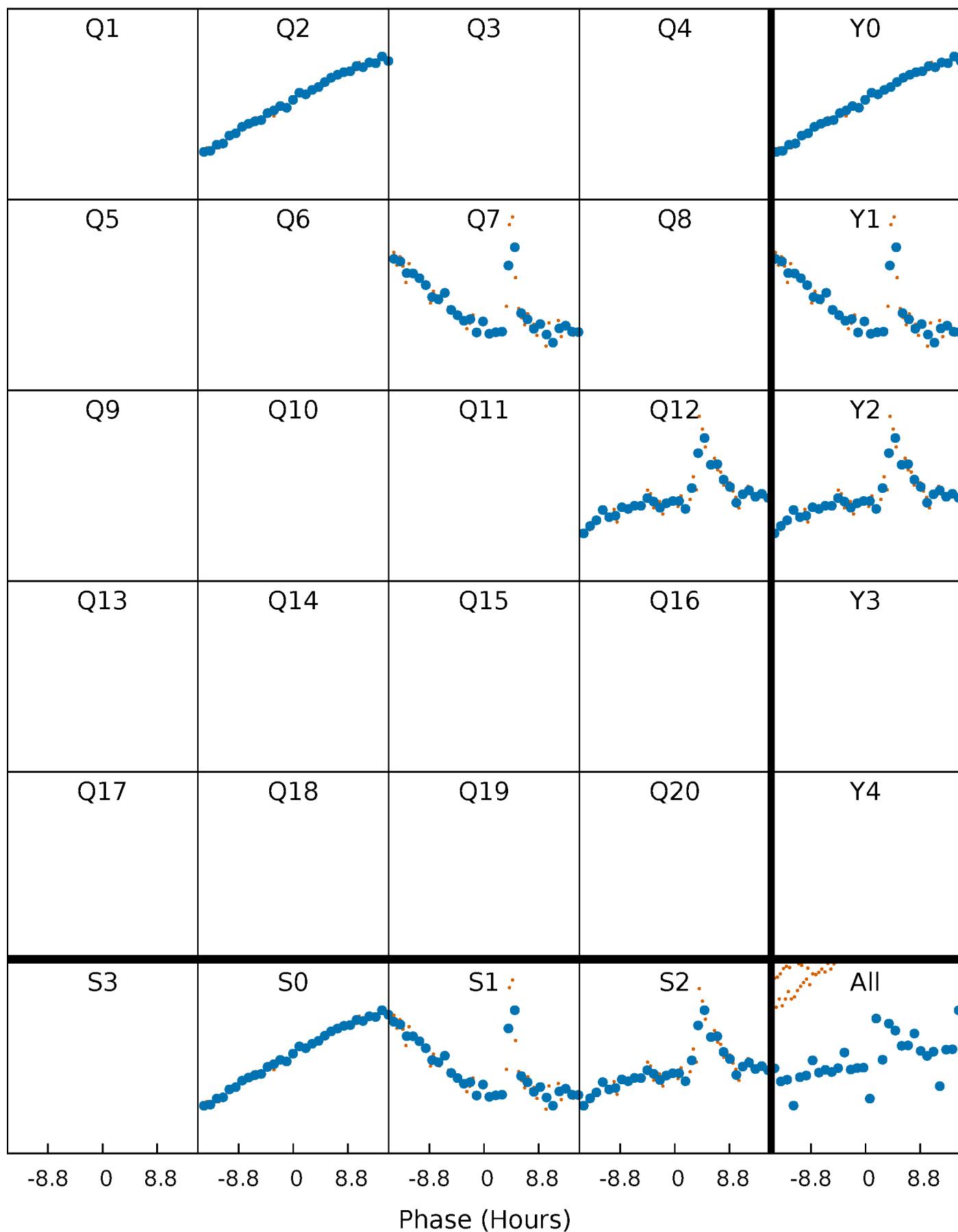


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



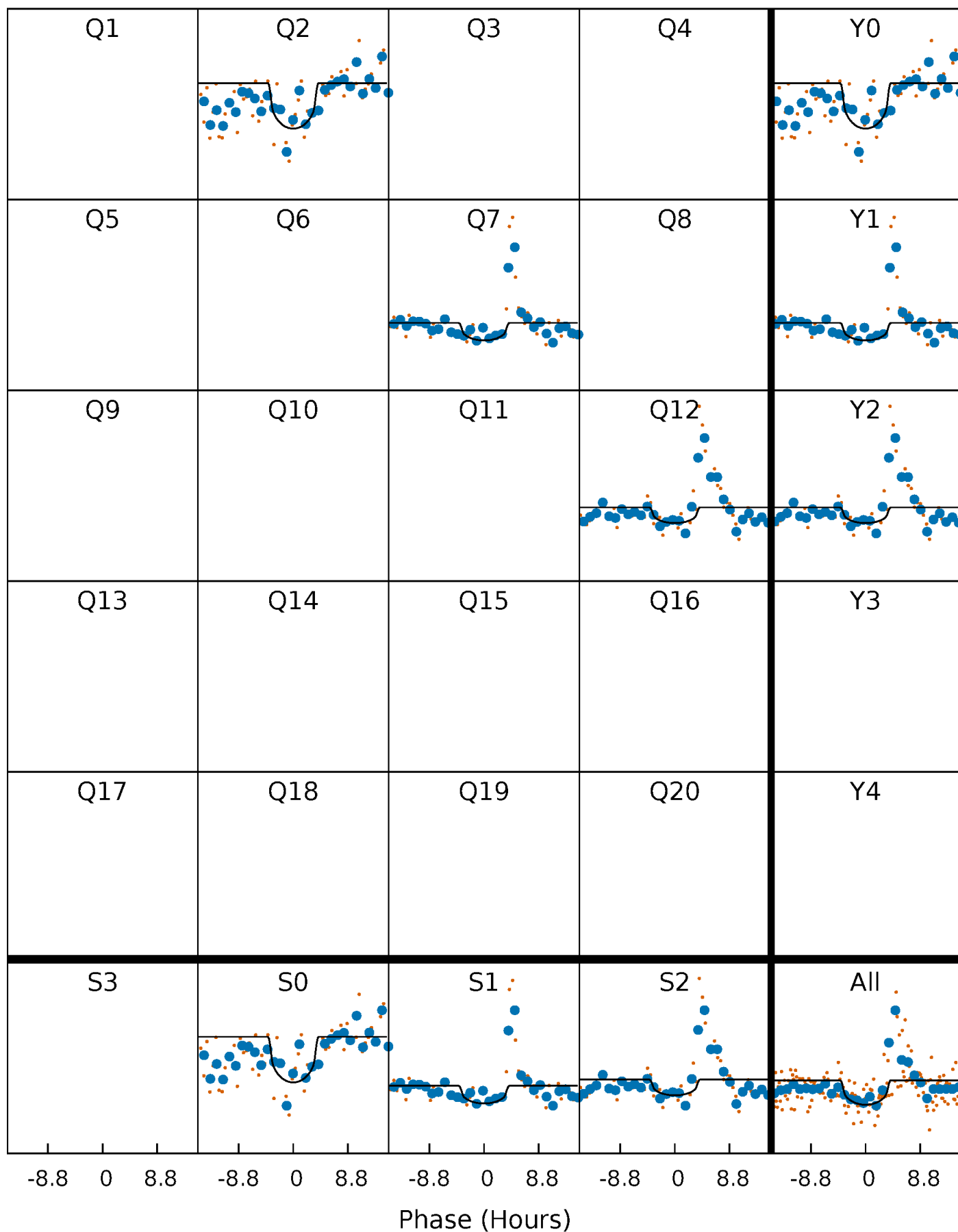
PDC Quarter-Phased Transit Curves

TCE 007879384-01 P=474.083523 Days $T_0=189.062473$ (BKJD)



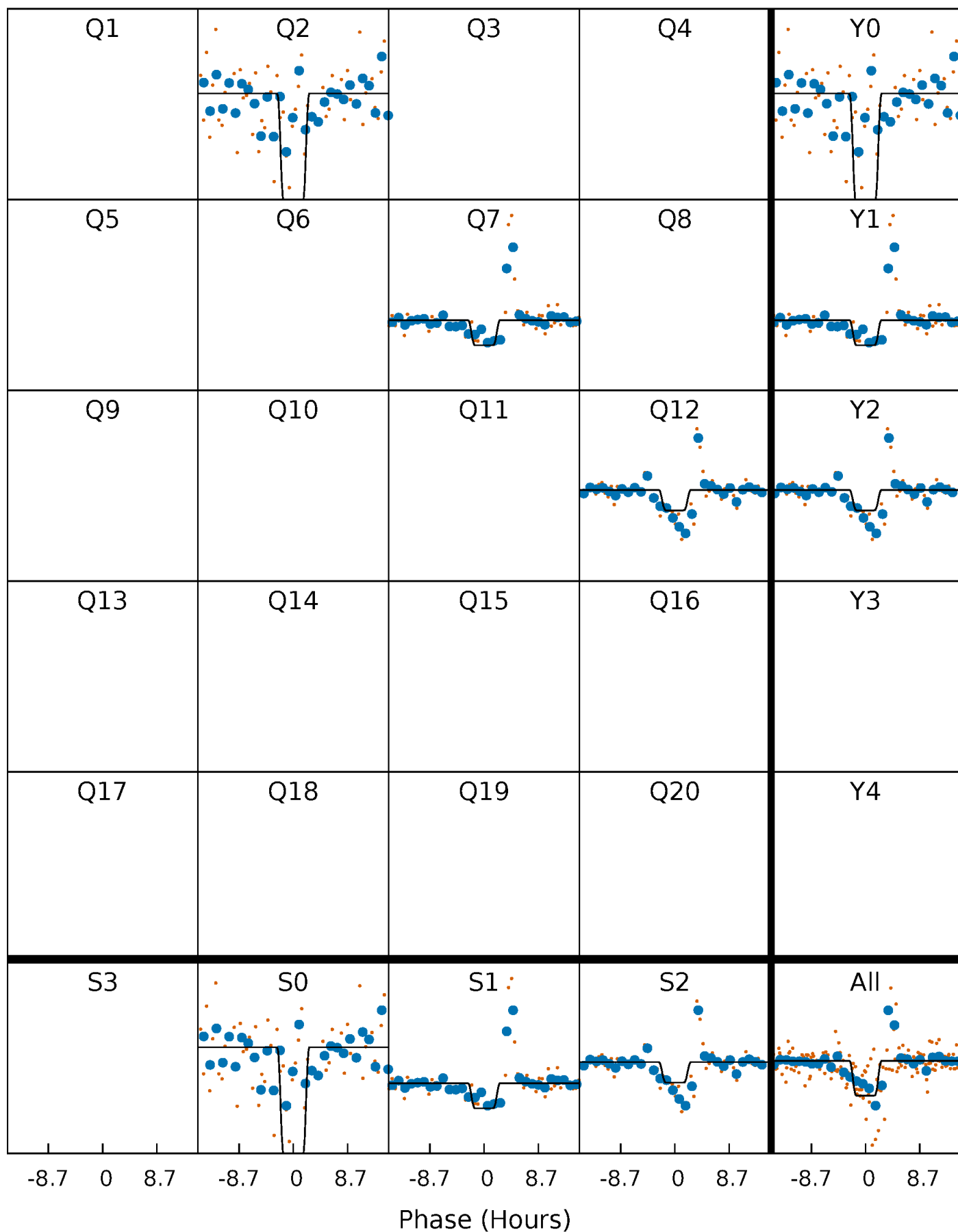
DV Quarter-Phased Transit Curves

TCE 007879384-01 P=474.083523 Days $T_0=189.062473$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

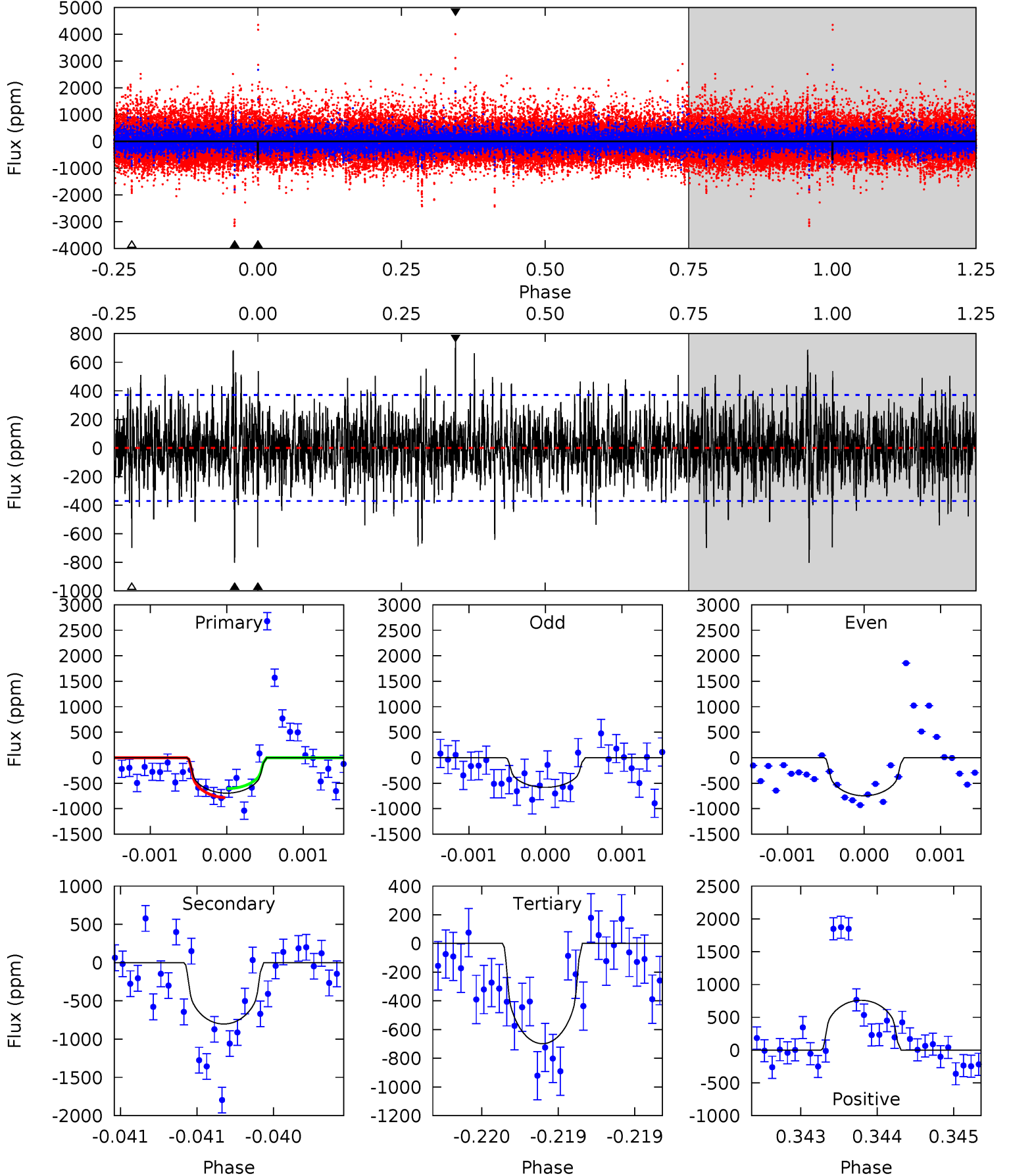
TCE 007879384-01 P=474.092648 Days $T_0=189.061114$ (BKJD)



DV Model-Shift Uniqueness Test

007879384-01, $P = 474.083523$ Days, $E = 189.062473$ Days

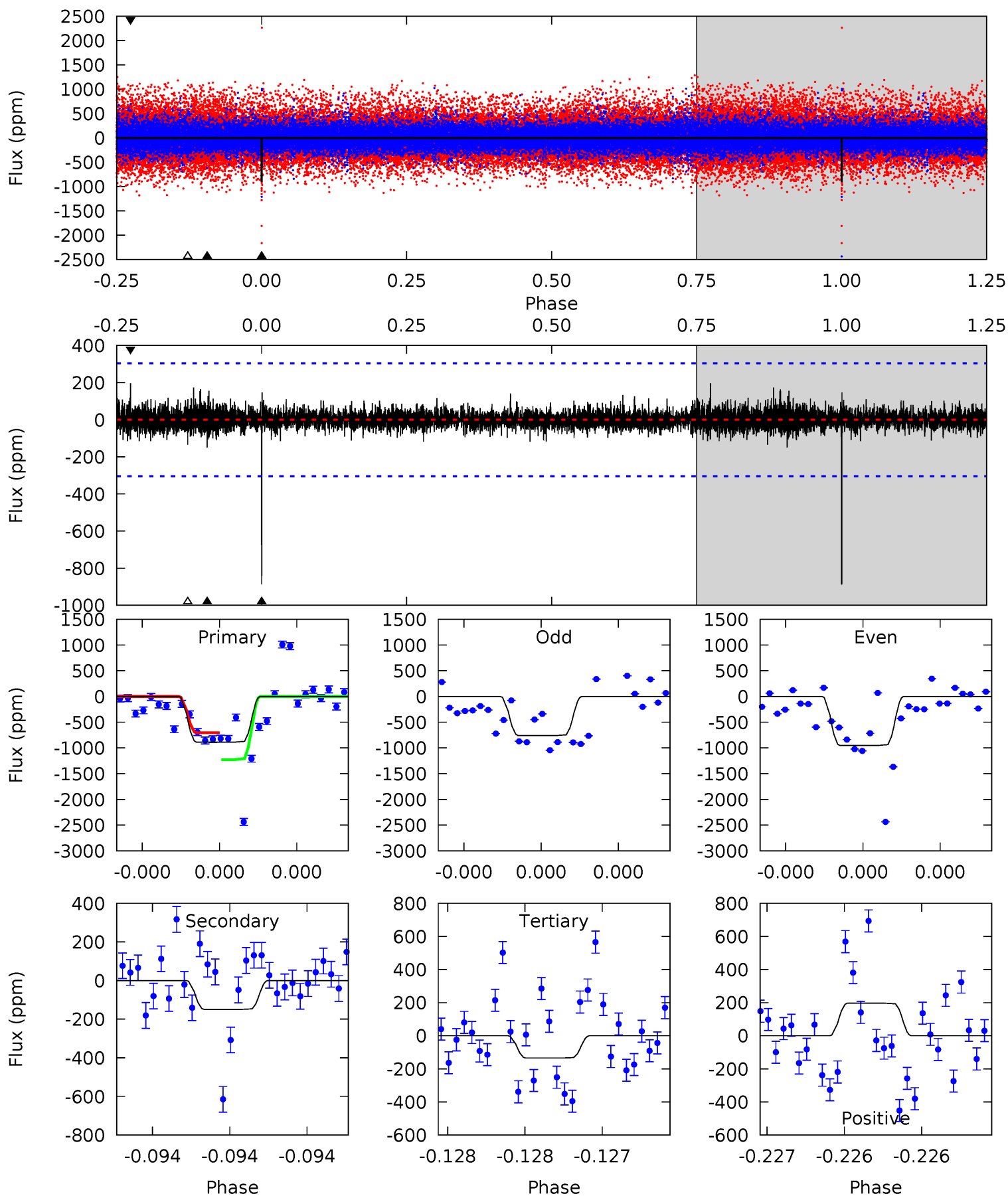
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.3	11.9	10.4	11.3	5.52	3.39	2.38	-0.06	-0.95	1.55	0.65	1.09	1.01	0.49	1.31



Alt Model-Shift Uniqueness Test

007879384-01, P = 474.092648 Days, E = 189.061114 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
16.3	2.74	2.47	3.61	5.60	3.52	0.55	13.9	12.7	0.27	-0.87	1.71	1.20	0.18	4.63



Stellar Parameters For KIC 007879384

	$T_{\text{eff}}(K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	4233^{+155}_{-172}	$4.589^{+0.060}_{-0.016}$	$0.480^{+0.050}_{-0.300}$	$0.702^{+0.024}_{-0.062}$	$0.698^{+0.037}_{-0.052}$	$2.842^{+0.717}_{-0.166}$
	+4%/-4%	+1%/-0%	+10%/-62%	+3%/-9%	+5%/-7%	+25%/-6%
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 007879384-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-802 ± 67	$2.30^{+1.65}_{-1.53}$	210^{+9}_{-9}	4105^{+2410}_{-704}	$94507^{+708075}_{-62726}$
Alt.	-149 ± 54	$2.69^{+1.66}_{-1.57}$	211^{+8}_{-9}	2989^{+960}_{-386}	12413^{+63448}_{-7860}

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

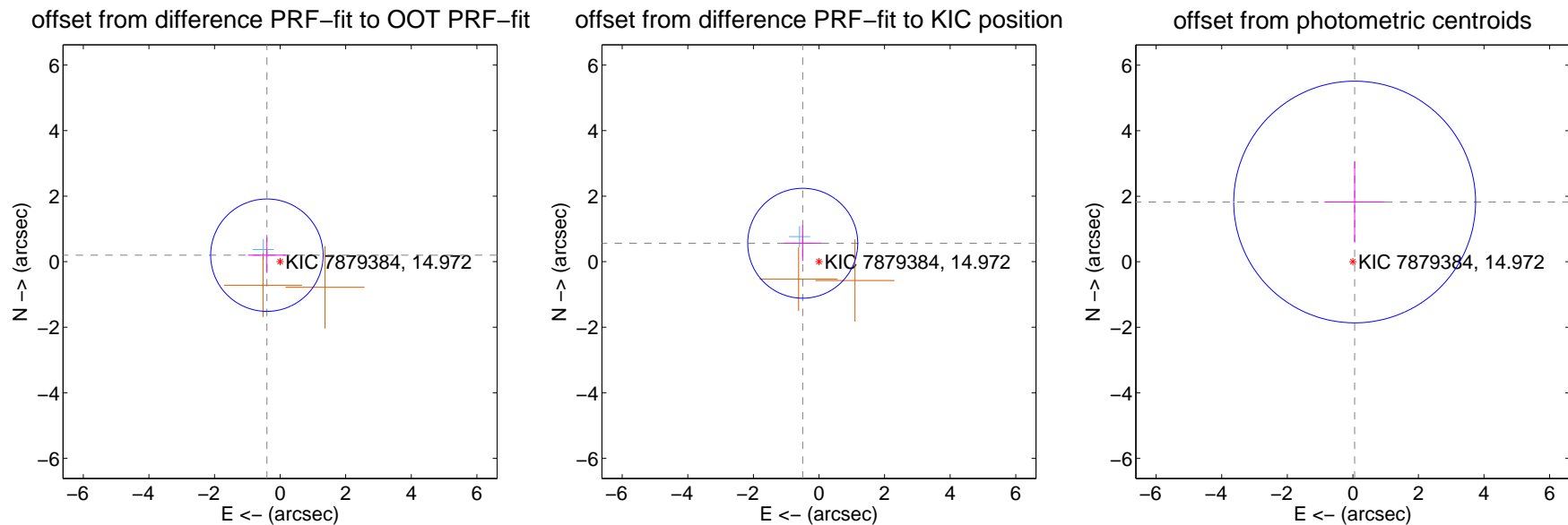
DV Centroid Data

Supplemental centroid analysis for 007879384-01. Kepler magnitude: 14.97. Transit SNR 5.81

There are 1 quarters with good PRF difference image offsets

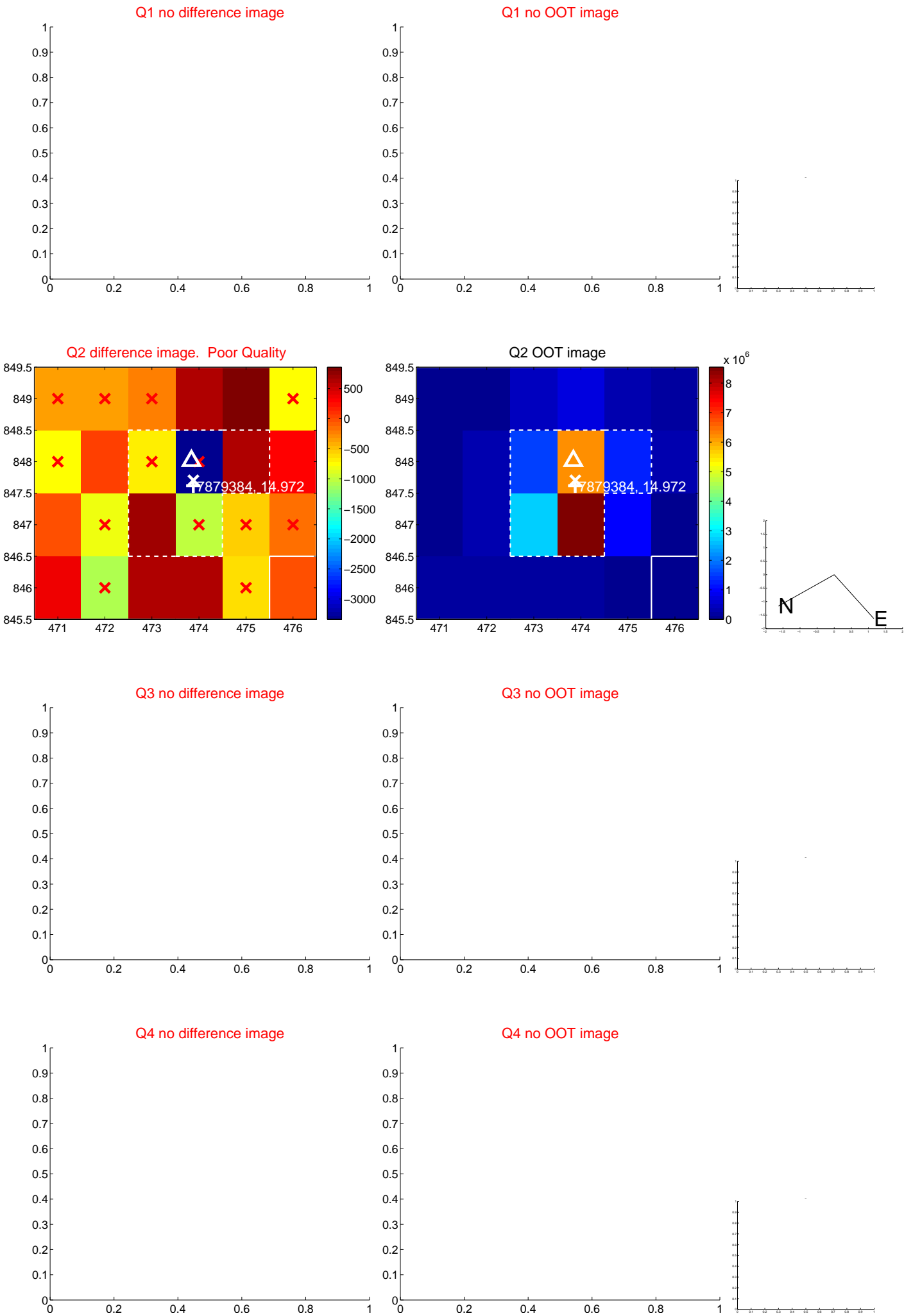
The direct PRF centroid is offset from the target star catalog position by about 0.21 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.449 ± 0.571	0.79	0.402 ± 0.578	0.199 ± 0.544
PRF-fit source offset from KIC position	0.750 ± 0.559	1.34	0.496 ± 0.578	0.563 ± 0.544
photometric centroid source offset	1.82 ± 1.23	1.48	-0.06 ± 0.92	1.82 ± 1.23

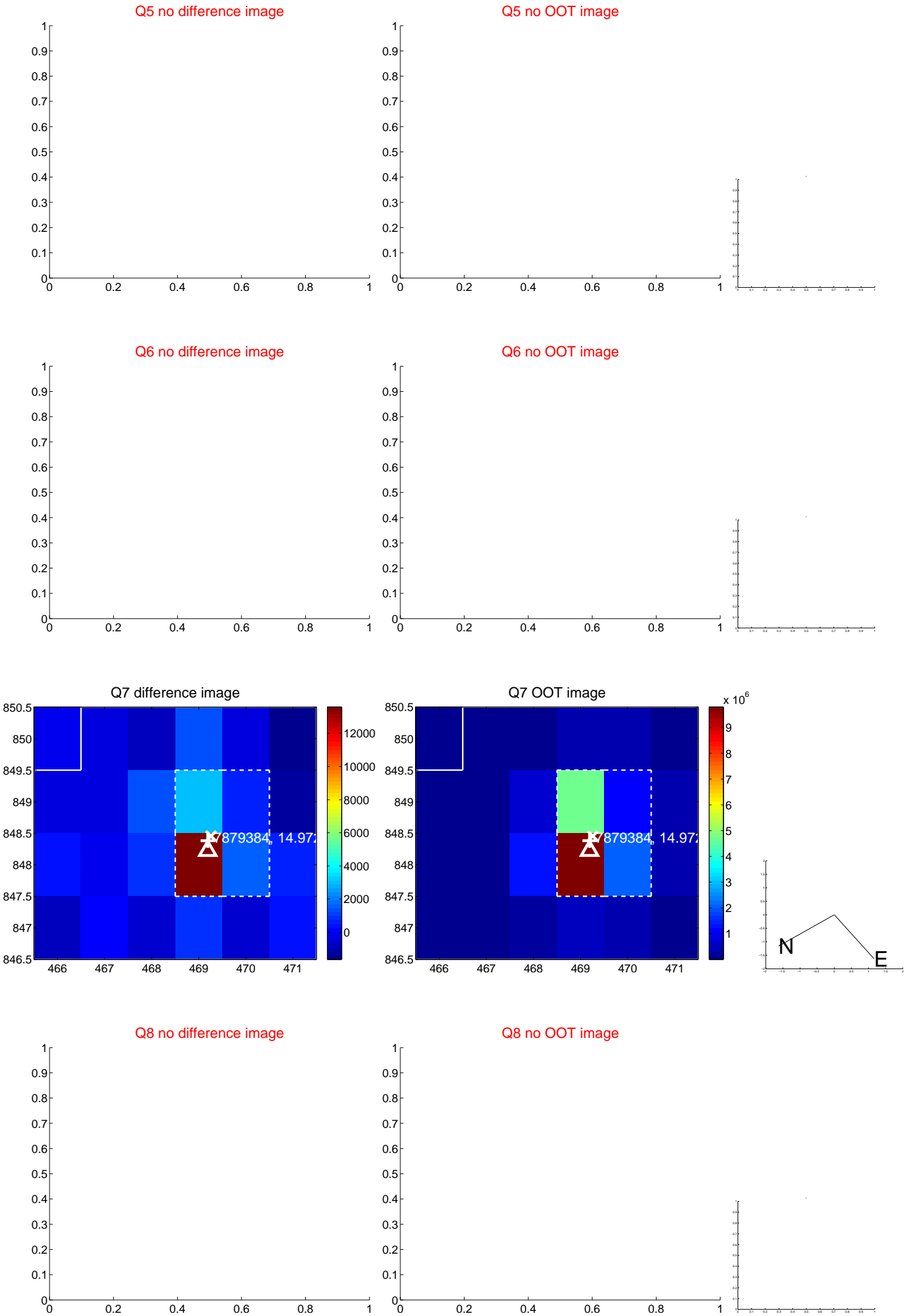


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

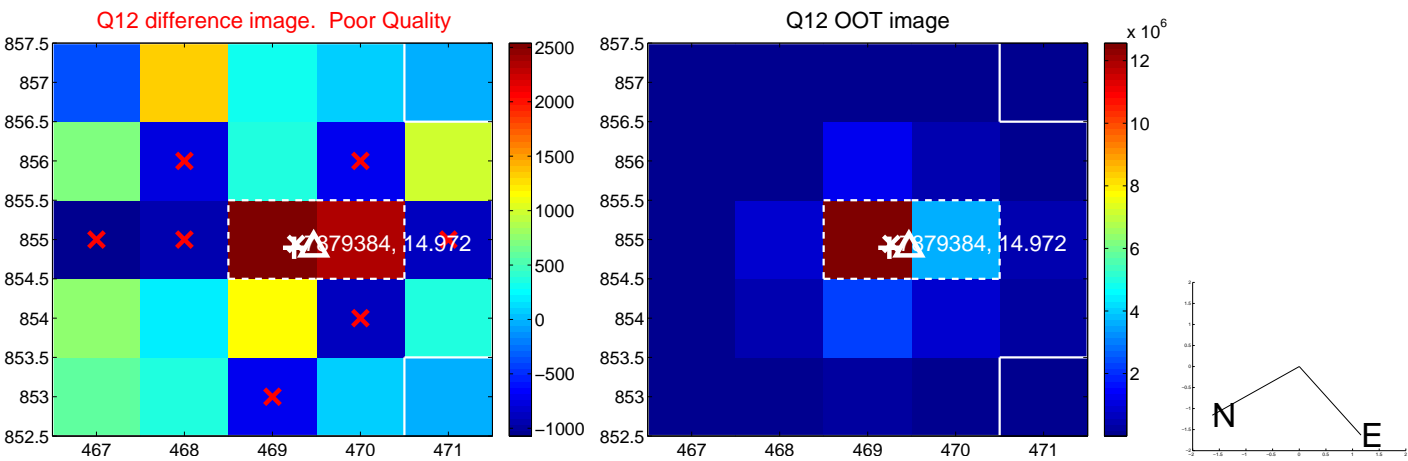
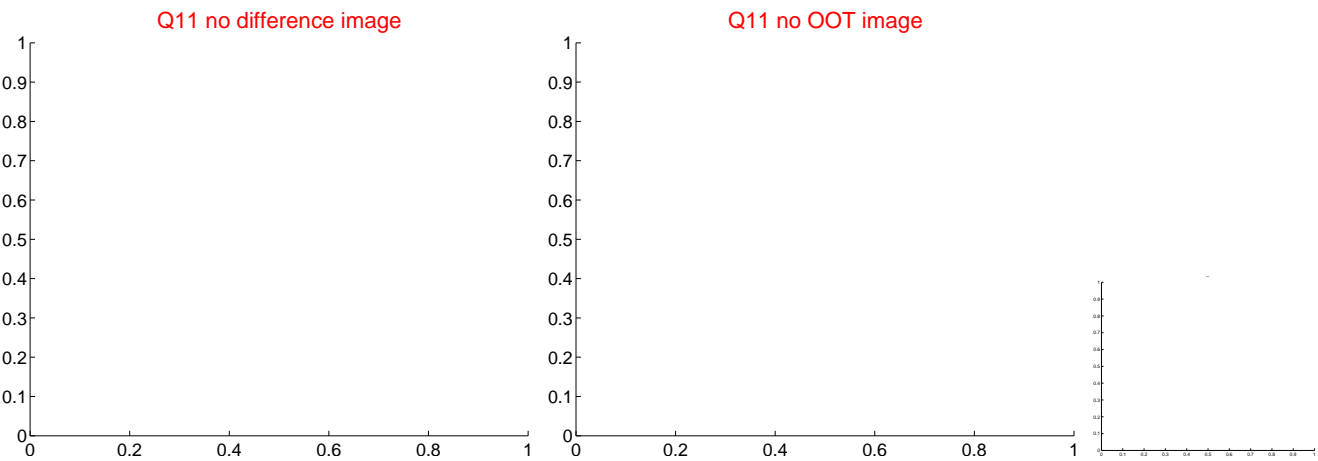
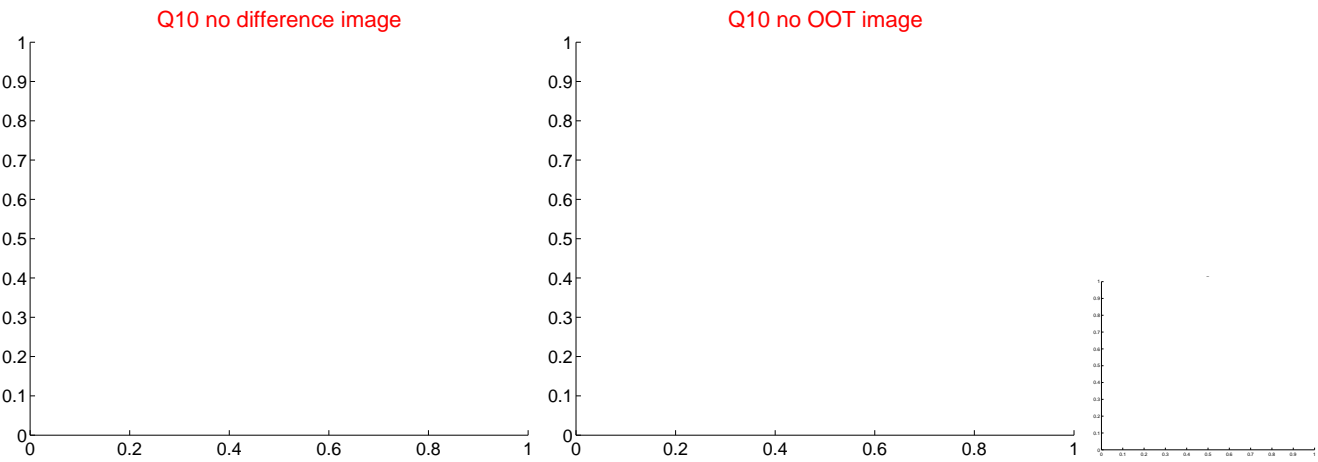
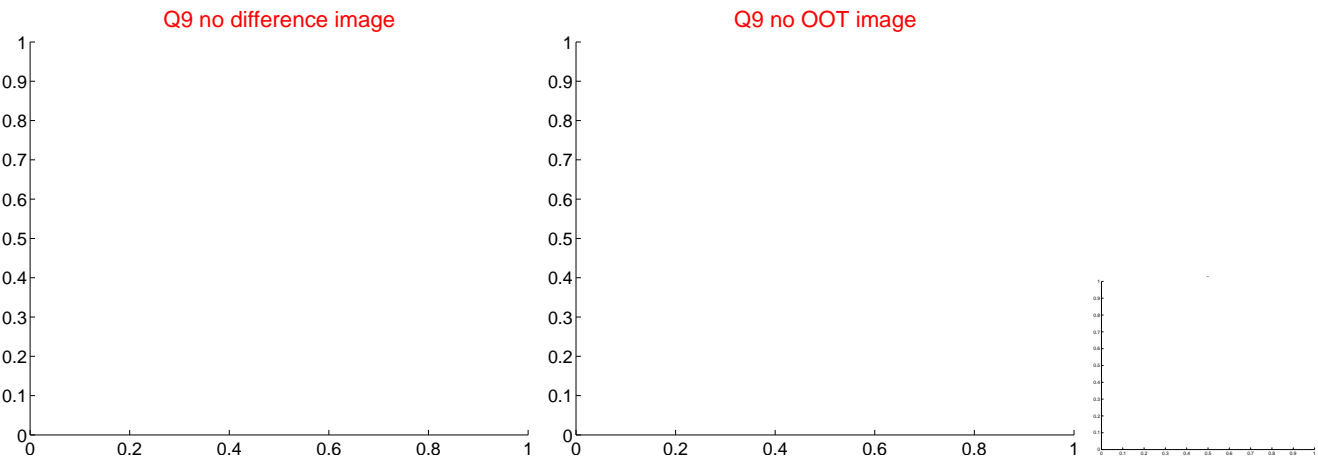
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



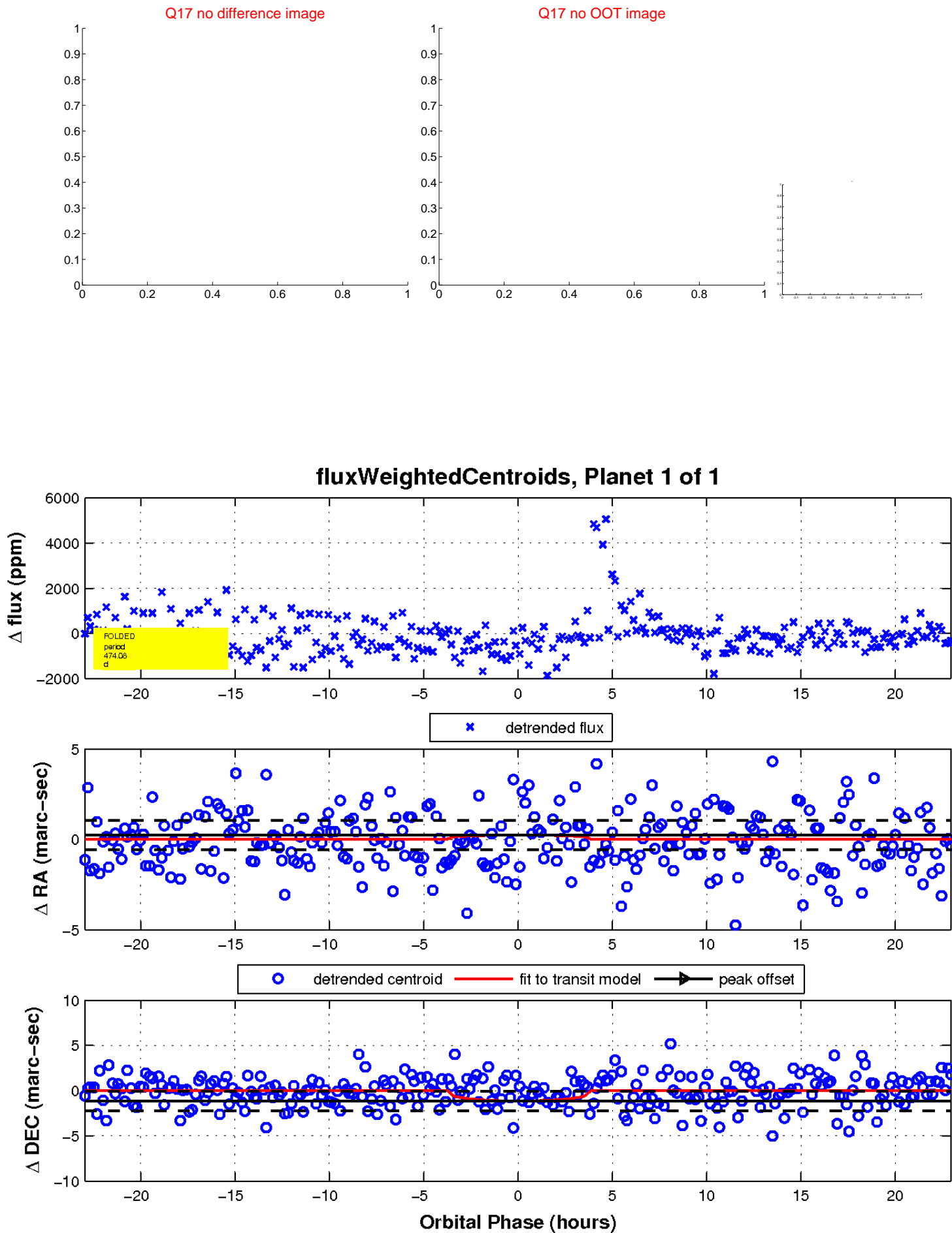
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



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

Declination

