

KIC 011393439

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})
011393439-01	OBS	No	460.886324	171.802560	5973.5	33.864	39.3	32.9	0.96	5949	13.57	0.74

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011393439-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE_ZUMA—LPP_DV—ALL_TRANS_CHASES—MOD_TER_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.

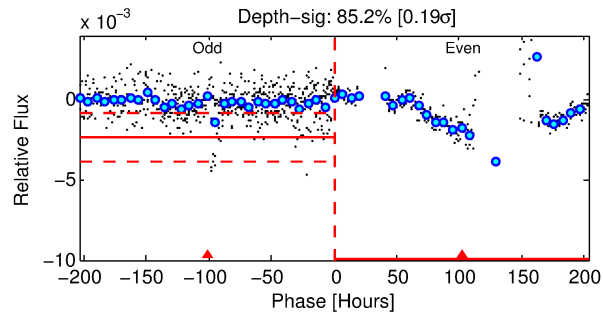
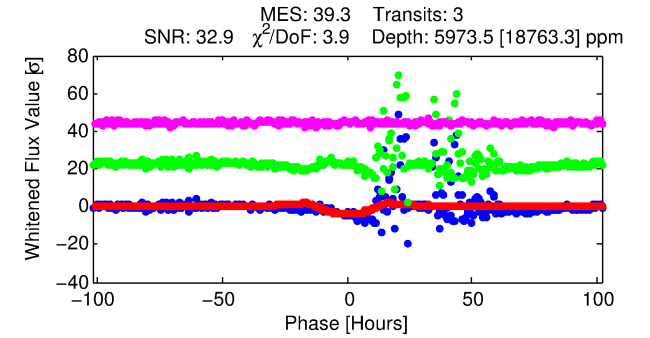
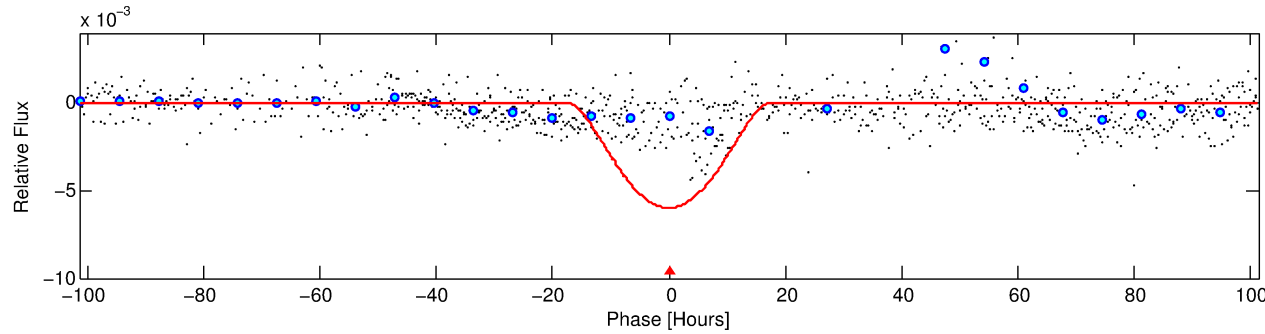
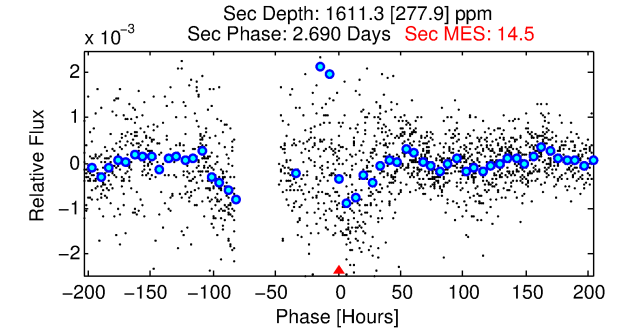
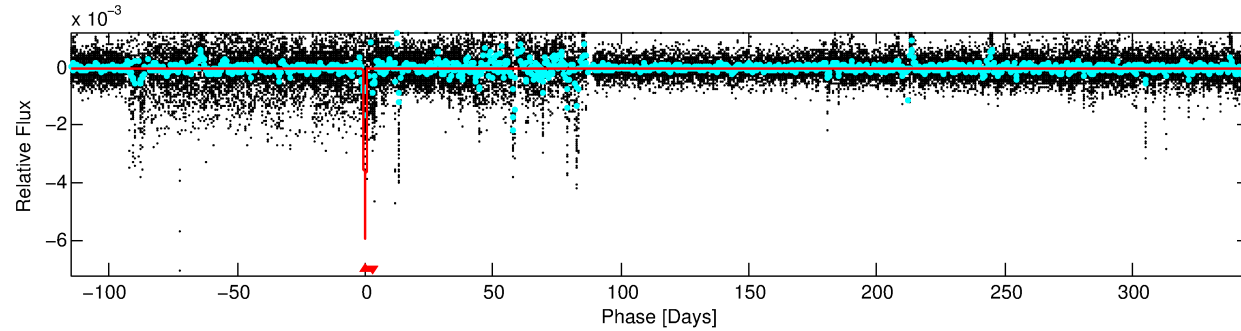
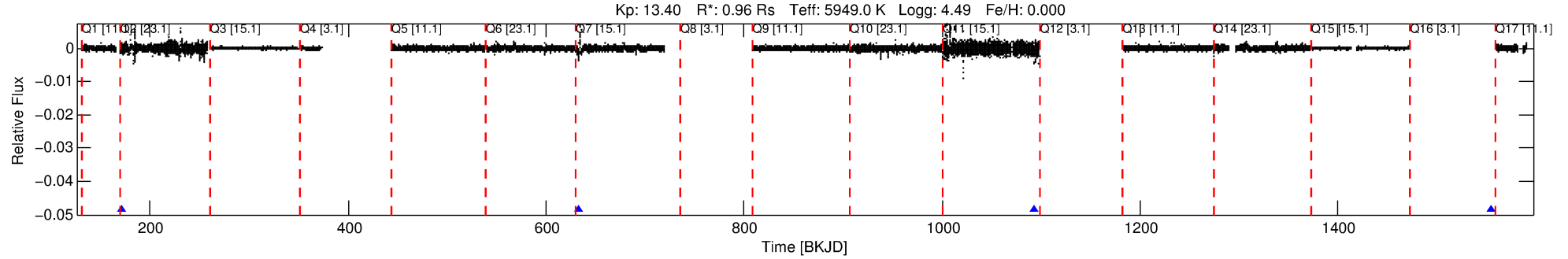
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011393439-01

No Significant Match Found

DV One-Page Summary

KIC: 11393439 Candidate: 1 of 1 Period: 460.886 d



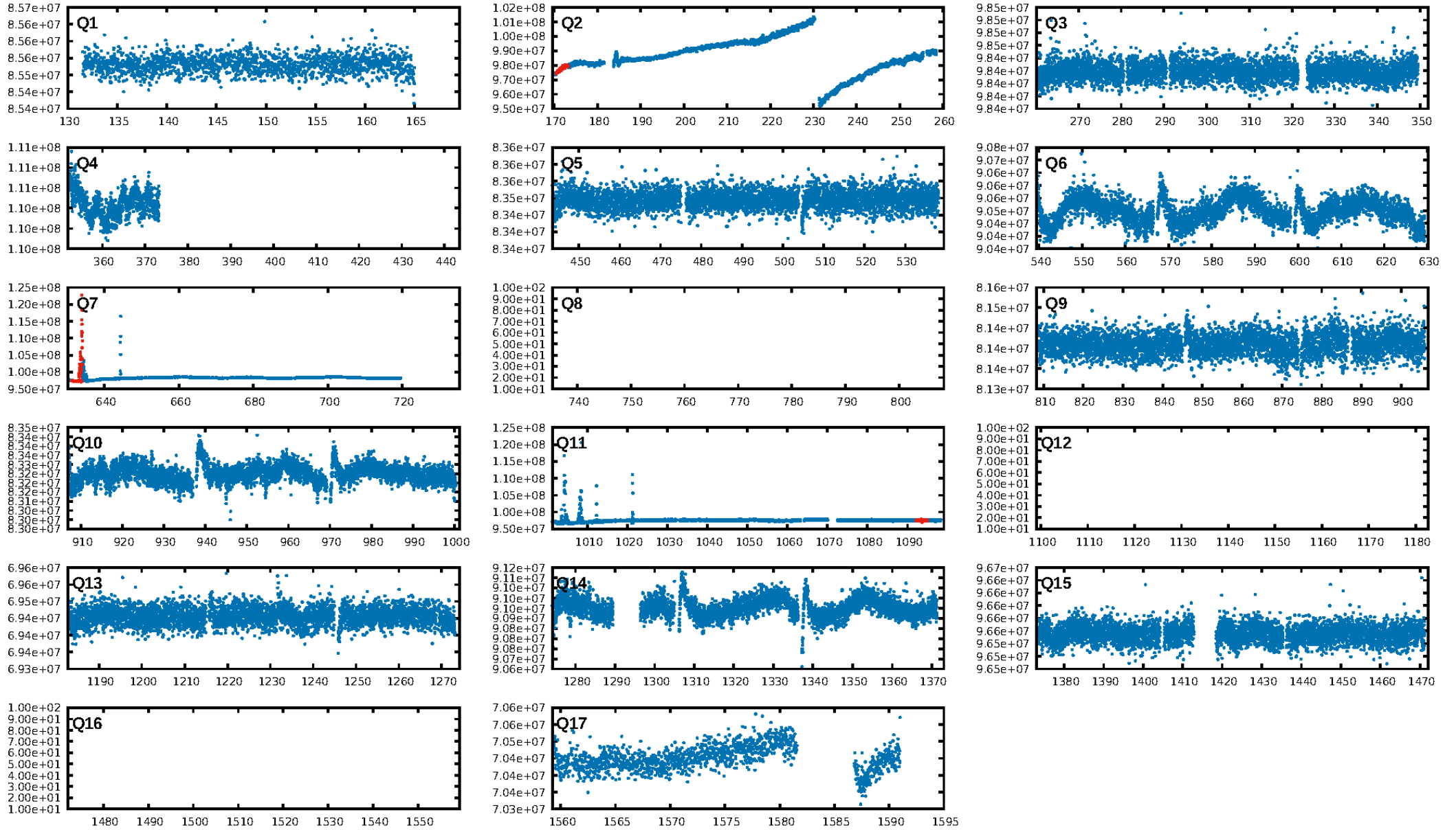
DV Fit Results:

Period = 460.88632 [0.02987] d
Epoch = 171.8026 [0.0453] BKJD
Rp/R* = 0.1292 [0.2700]
a/R* = 54.55 [19.28]
b = 1.00 [0.65]
Seff = 0.74 [0.28]
Teq = 236 [23] K
Rp = 13.57 [28.63] Re
a = 1.1873 [0.2963] AU
Ag = 6788.03 [28498.06] [0.24σ]
Teffp = 3315 [3468] K [0.89σ]

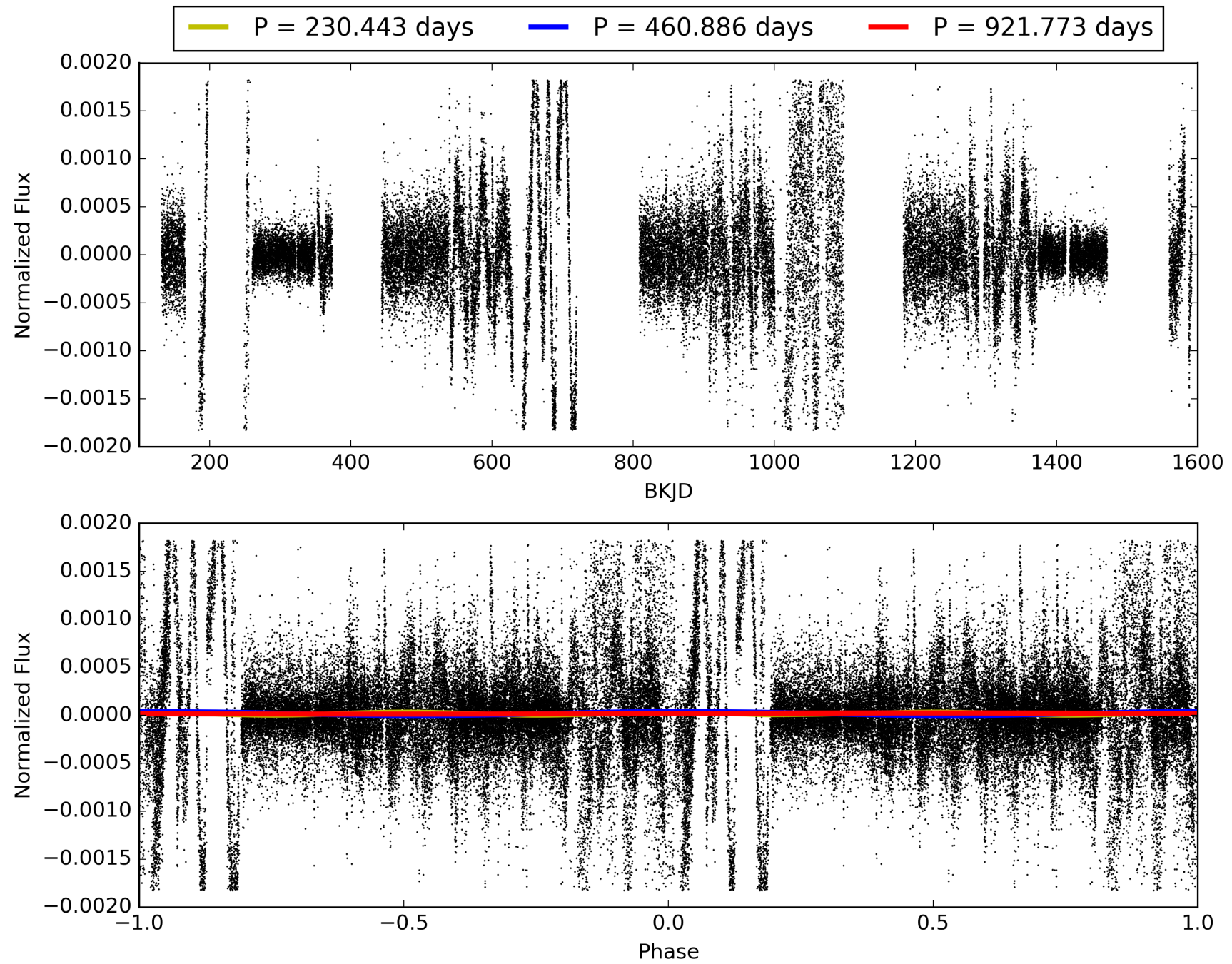
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 0.0%
Bootstrap-pfa: 9.22e-69
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 1.963
Centroid-sig: 22.5%
Centroid-so: 5.928 arcsec [5.11σ]
OotOffset-rm: N/A
KicOffset-rm: N/A
OotOffset-st: 0/0/0 [0]
KicOffset-st: 0/0/0 [0]
DiffImageQuality-fgm: N/A
DiffImageOverlap-fno: N/A

TCE 011393439-01, PDC Light Curves

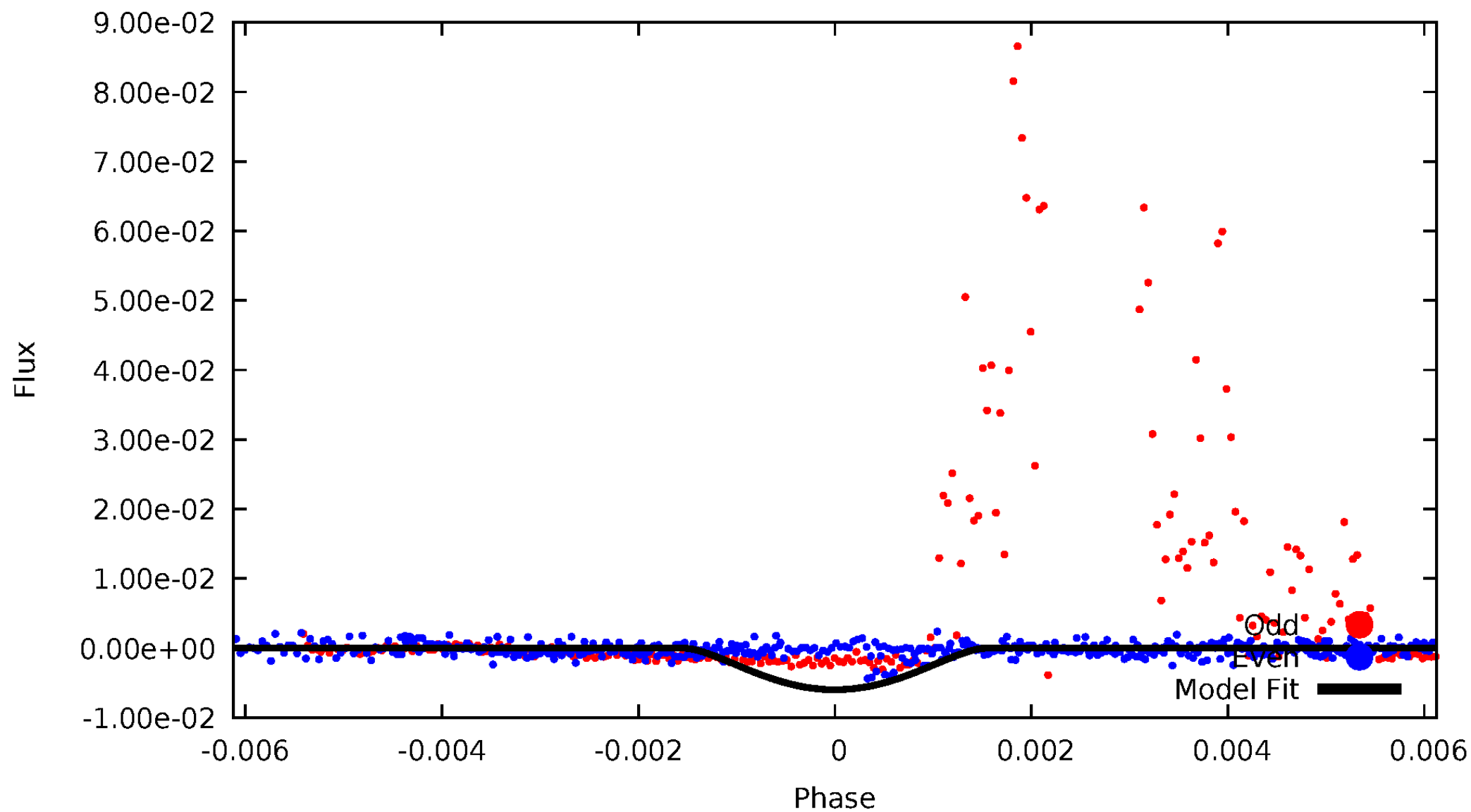


TCE 011393439-01



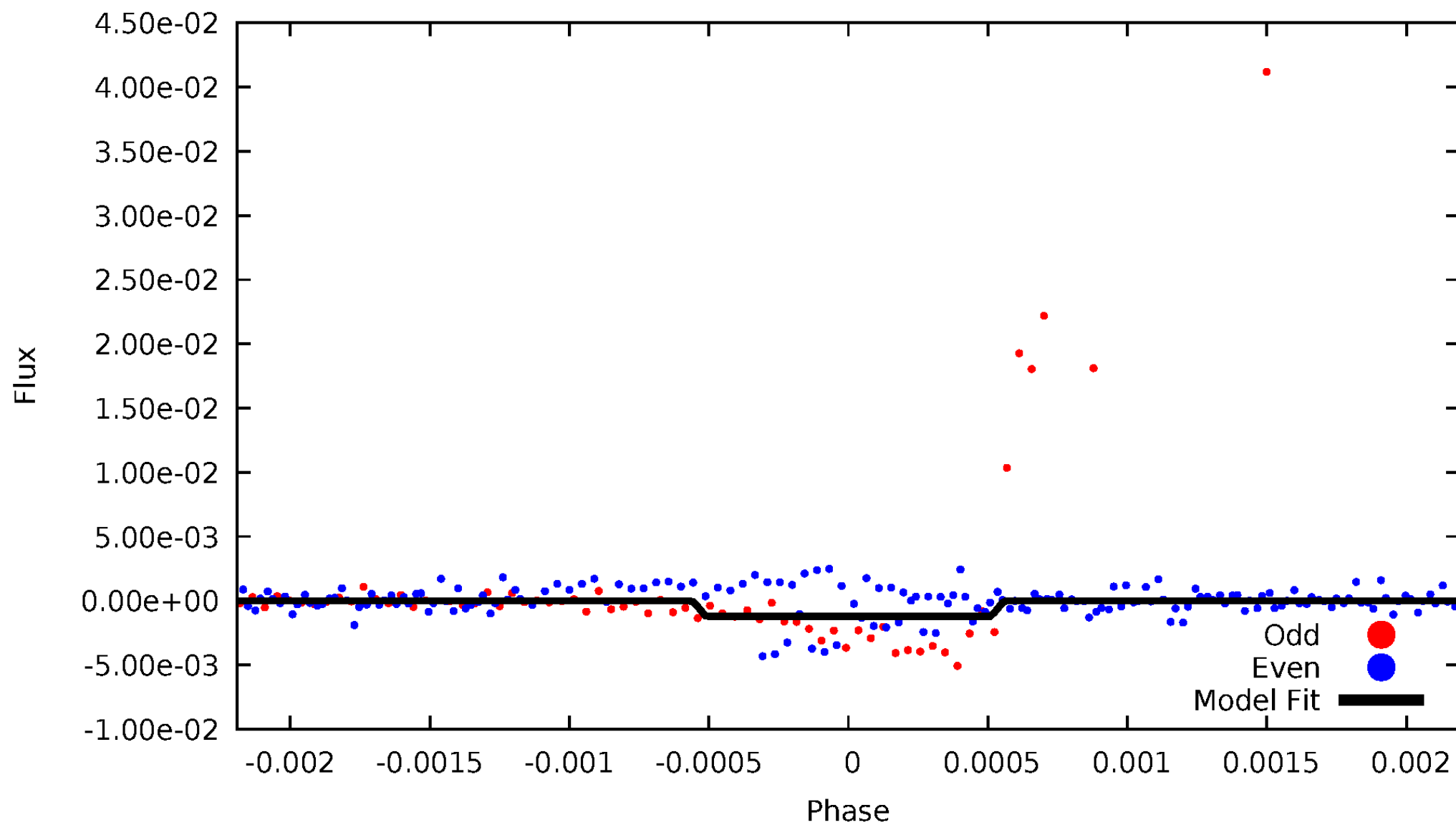
DV Odd/Even

TCE 011393439-01



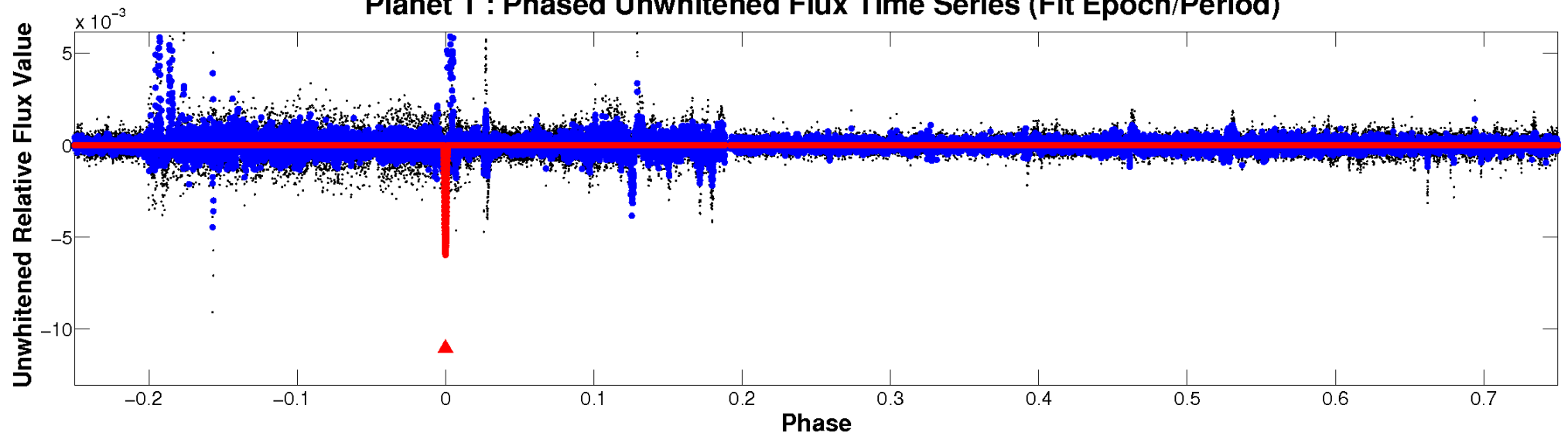
ALT Odd/Even

TCE 011393439-01

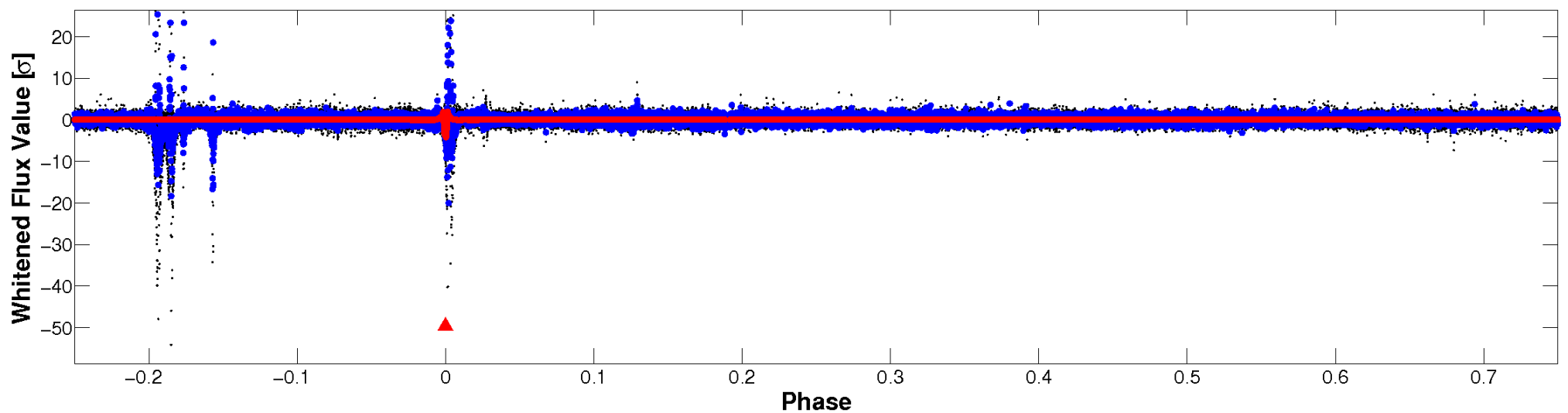


Non-Whitened Vs. Whitened Light Curve

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

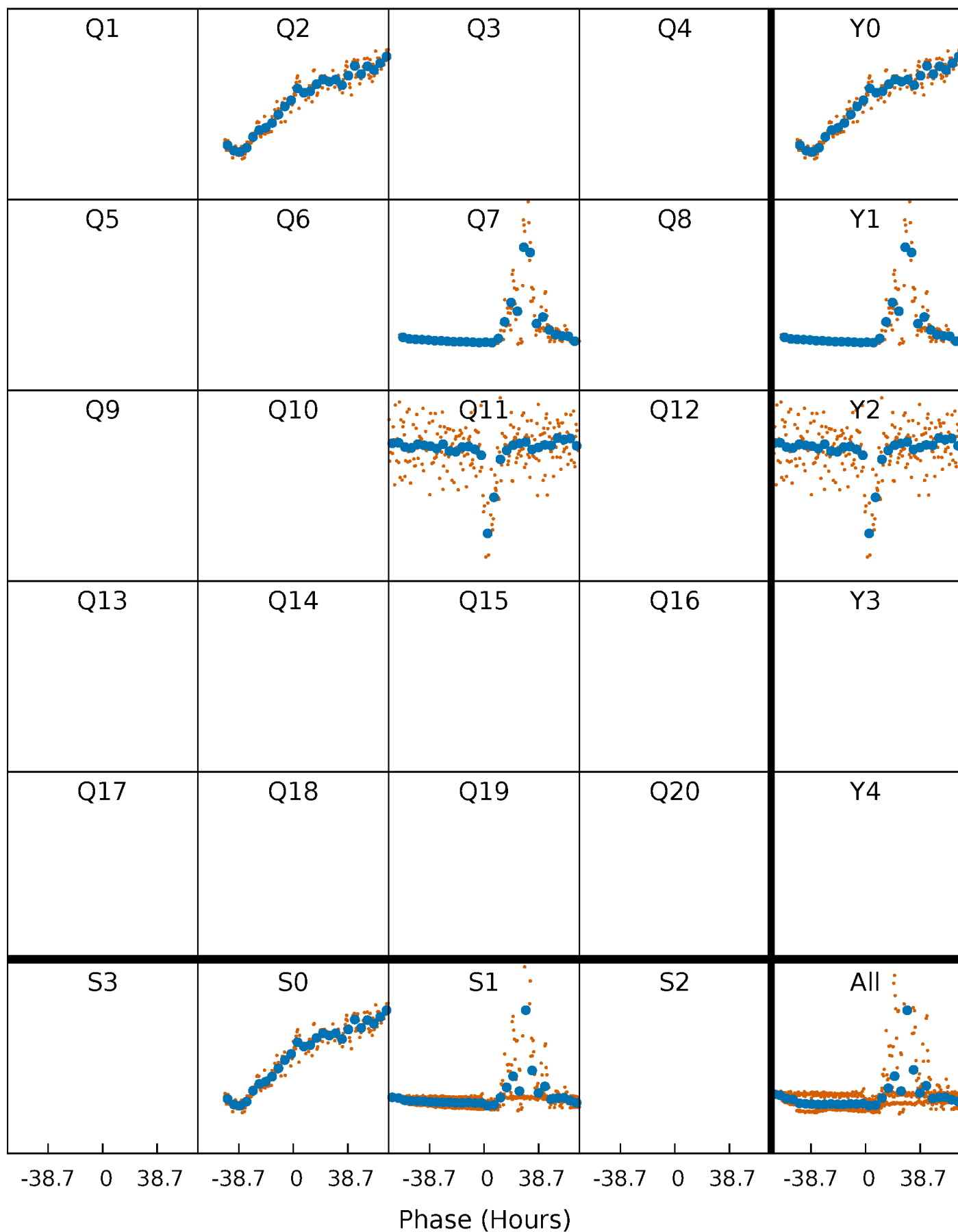


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



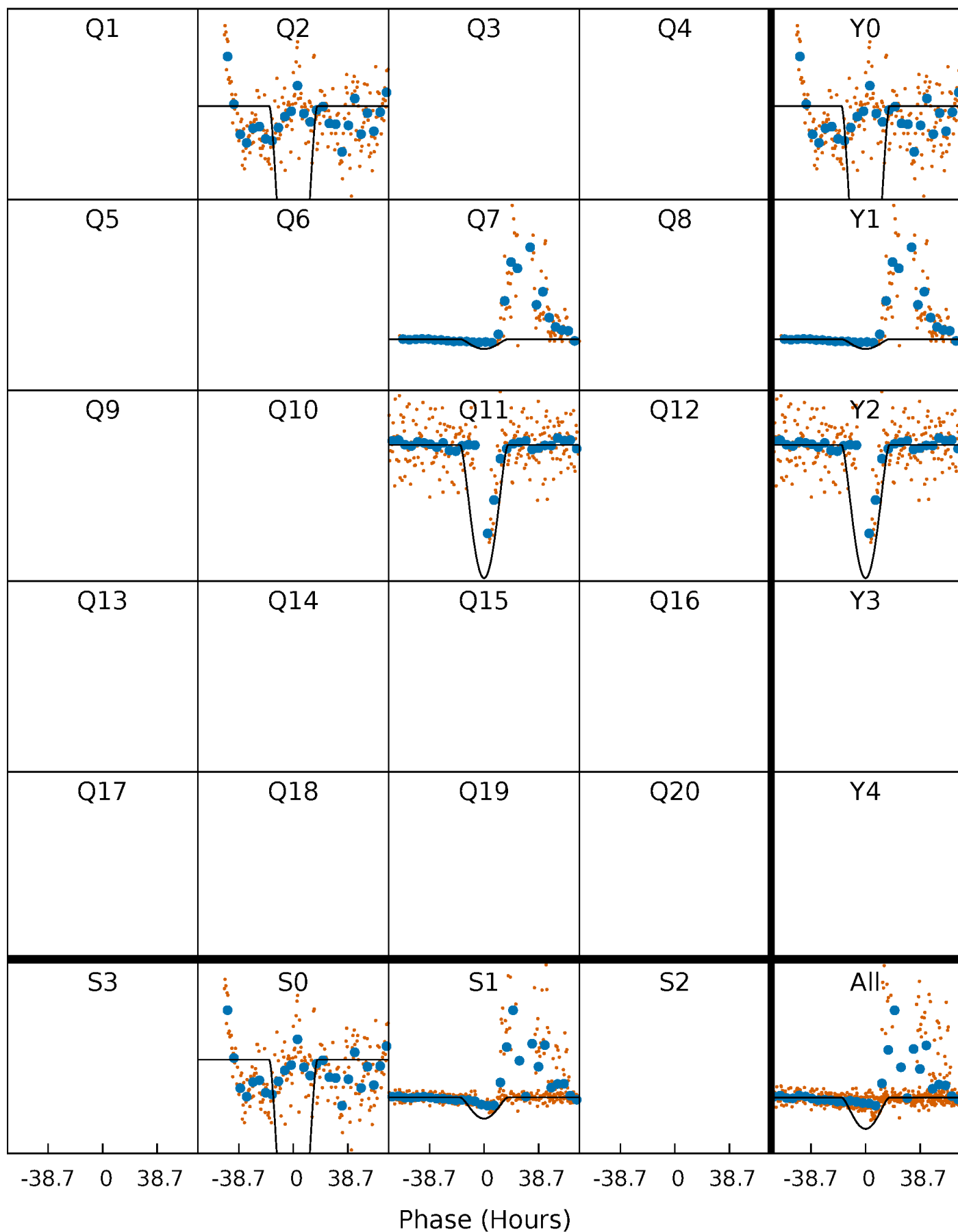
PDC Quarter-Phased Transit Curves

TCE 011393439-01 P=460.886324 Days $T_0=171.802560$ (BKJD)



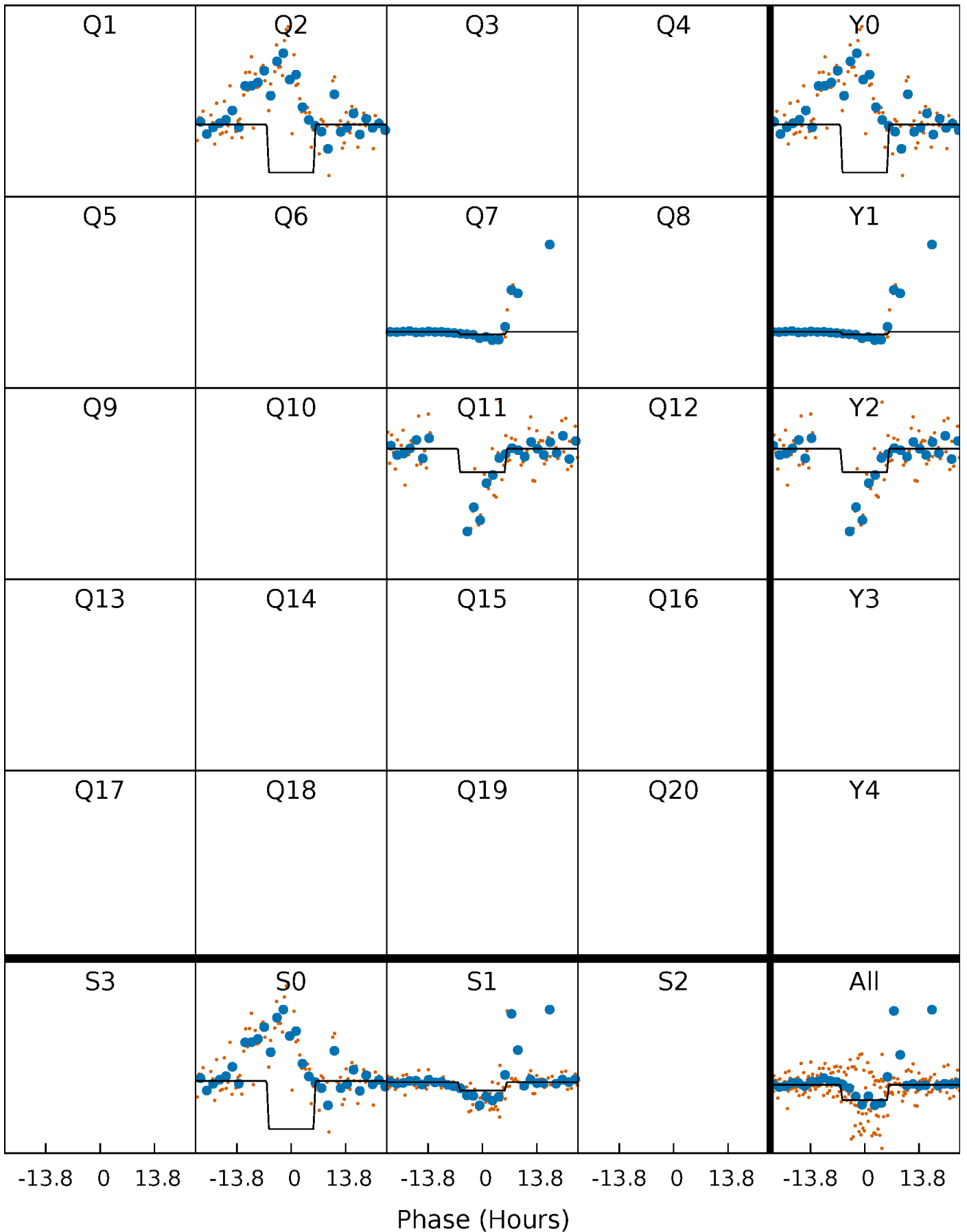
DV Quarter-Phased Transit Curves

TCE 011393439-01 P=460.886324 Days $T_0=171.802560$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

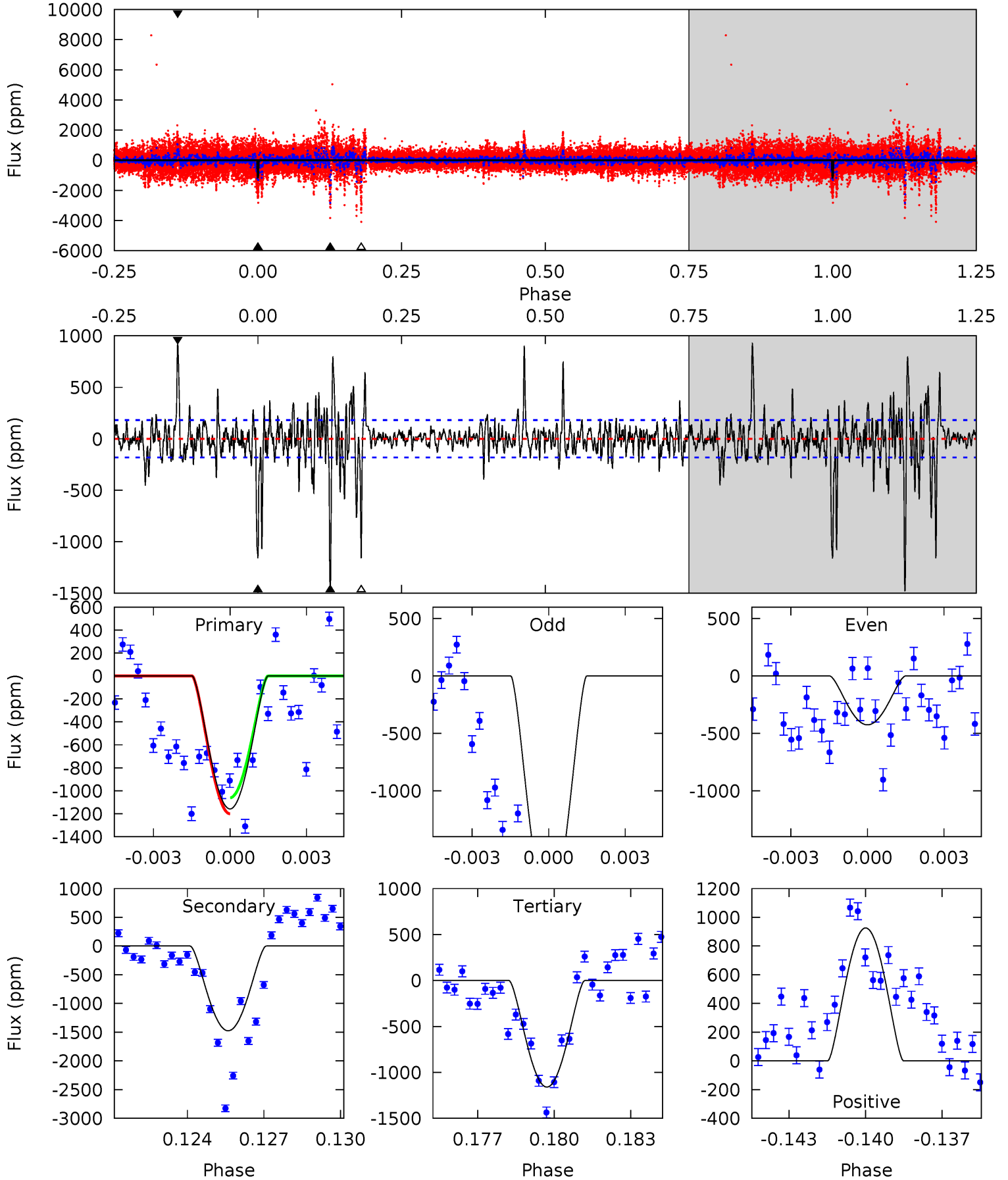
TCE 011393439-01 P=460.953869 Days $T_0=171.962500$ (BKJD)



DV Model-Shift Uniqueness Test

011393439-01, P = 460.886324 Days, E = 171.802560 Days

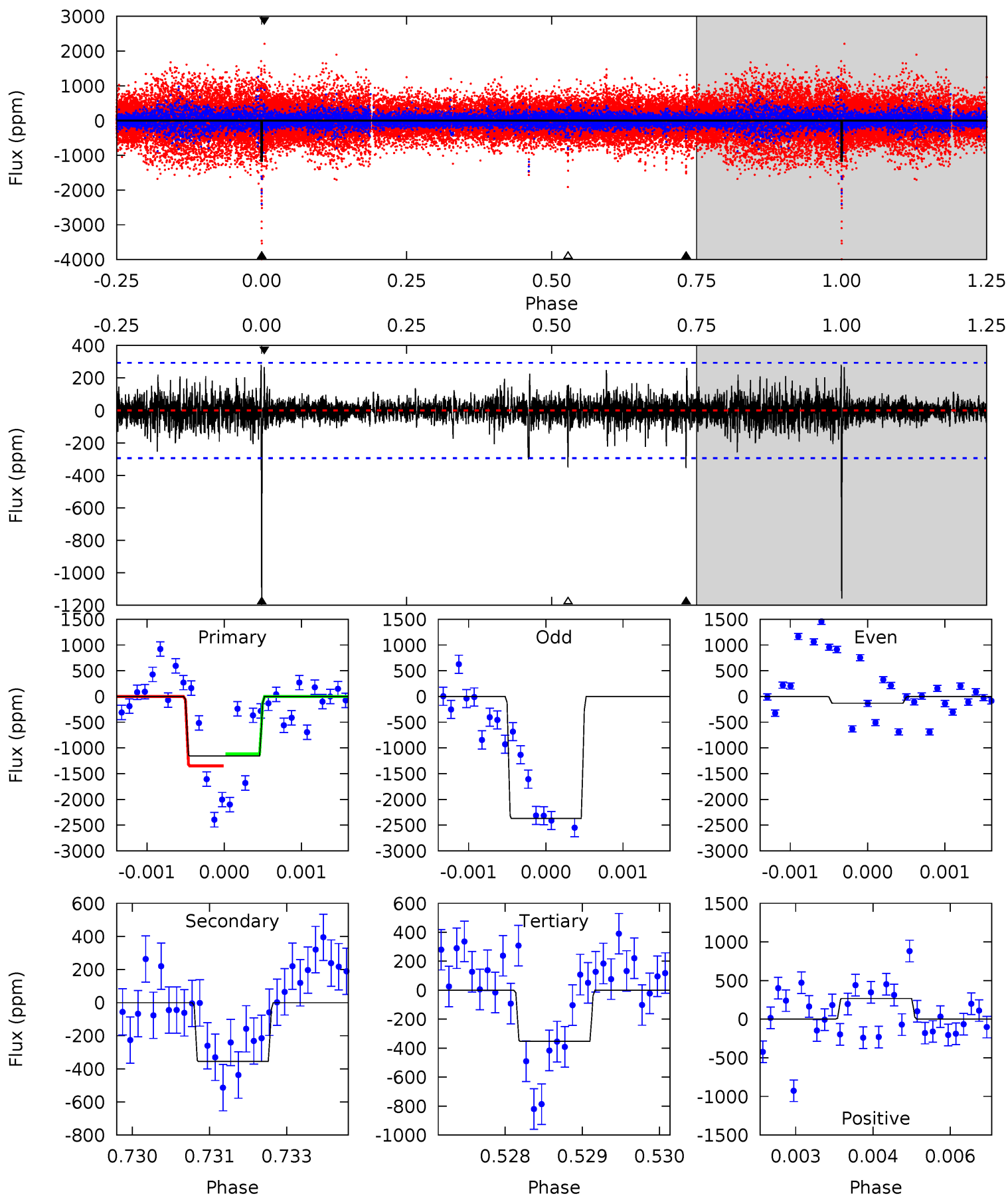
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
33.5	42.7	33.6	26.8	5.25	2.96	4.70	-0.05	6.73	9.15	15.9	7.17	0.97	0.39	1.99



Alt Model-Shift Uniqueness Test

011393439-01, P = 460.953869 Days, E = 171.962500 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
21.4	6.58	6.52	4.95	5.43	3.26	0.98	14.9	16.5	0.06	1.63	16.9	0.58	0.20	2.15



Stellar Parameters For KIC 011393439

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5949^{+160}_{-177}	$4.493^{+0.050}_{-0.200}$	$0.000^{+0.250}_{-0.300}$	$0.962^{+0.284}_{-0.095}$	$1.050^{+0.116}_{-0.142}$	$1.663^{+0.424}_{-0.816}$
	+3%/-3%	+1%/-4%	+inf%/-inf%	+30%/-10%	+11%/-14%	+25%/-49%
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 011393439-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-1476 ± 35	$25.08^{+26.58}_{-16.74}$	335^{+23}_{-14}	3090^{+1392}_{-529}	1805^{+15405}_{-1382}
Alt.	-355 ± 54	$20.12^{+21.24}_{-13.49}$	337^{+25}_{-17}	2686^{+1045}_{-439}	646^{+5731}_{-499}

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 $A_{obs} \gg 1.0$

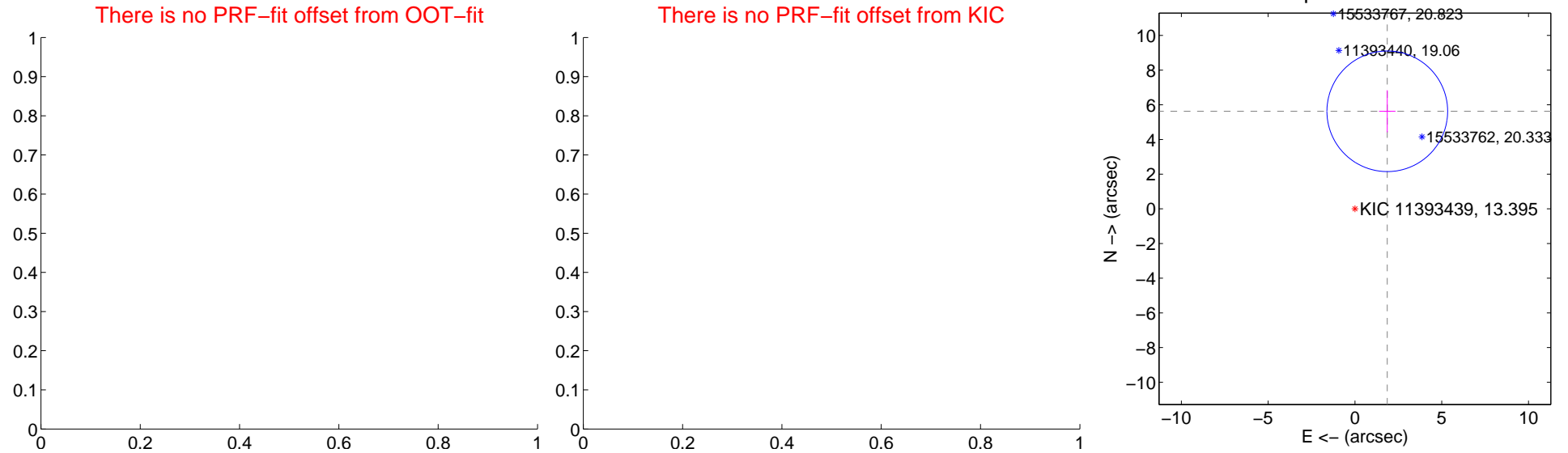
DV Centroid Data

Supplemental centroid analysis for 011393439-01. Kepler magnitude: 13.39. Transit SNR 32.94

There are 0 quarters with good PRF difference image offsets

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

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	—	—	—	—
PRF-fit source offset from KIC position	—	—	—	—
photometric centroid source offset	5.93 ± 1.16	5.11	-1.86 ± 0.47	5.63 ± 1.21



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.



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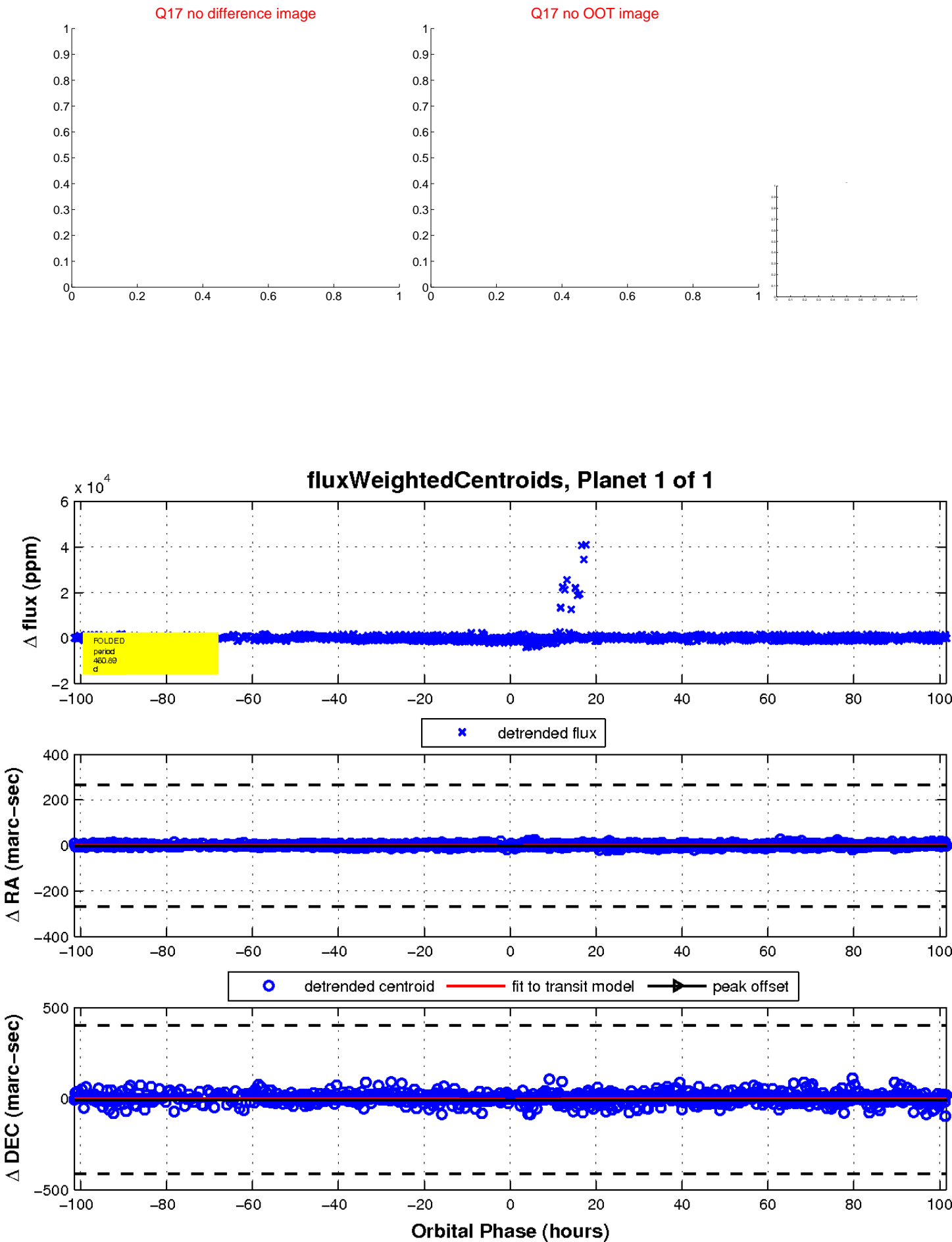
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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UKIRT Image

