

KIC 006762389

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})
006762389-01	OBS	No	0.769710	131.833267	23971.0	3.953	85.1	51.7	0.33	3415	8.66	103.20

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006762389-01	OBS	FP	0.00	1	0	0	0	LPP_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.

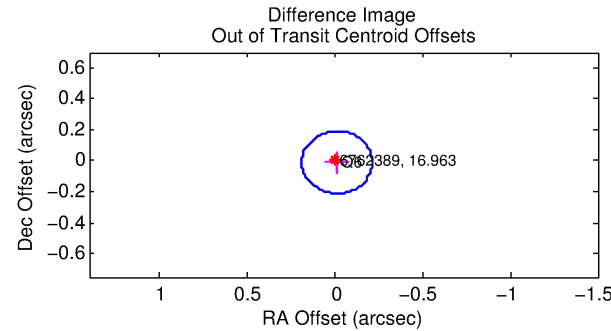
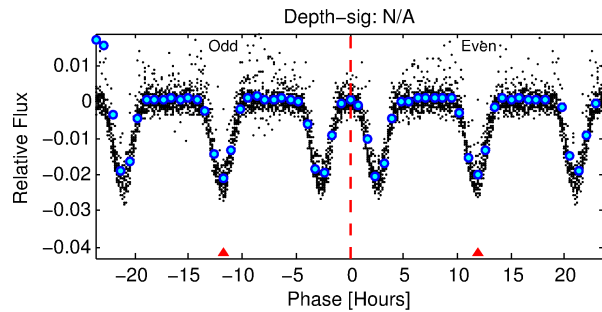
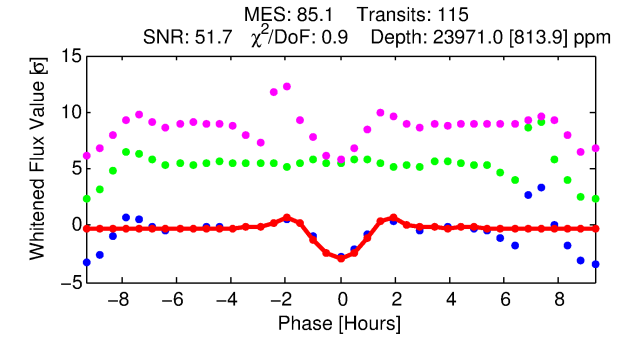
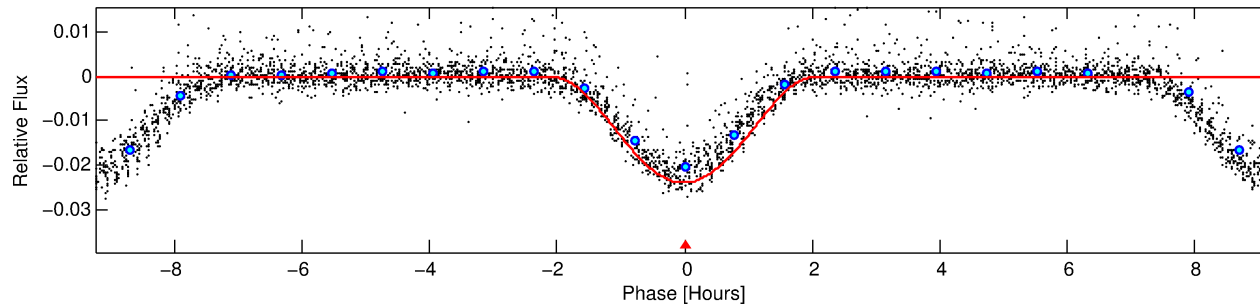
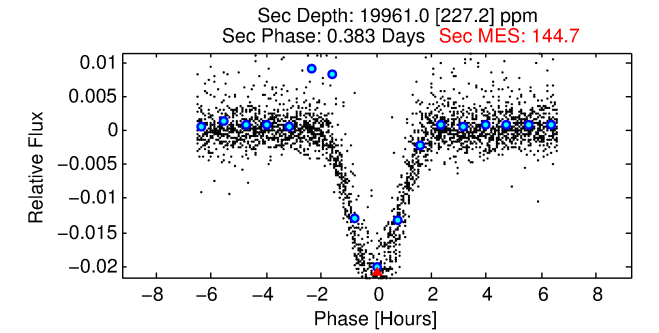
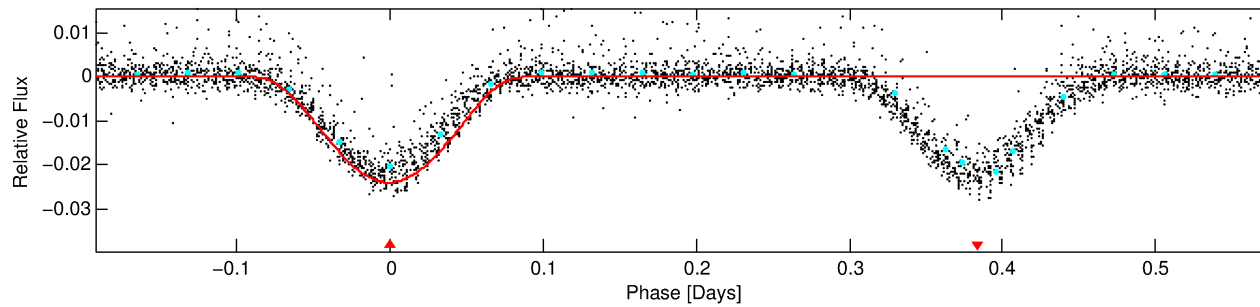
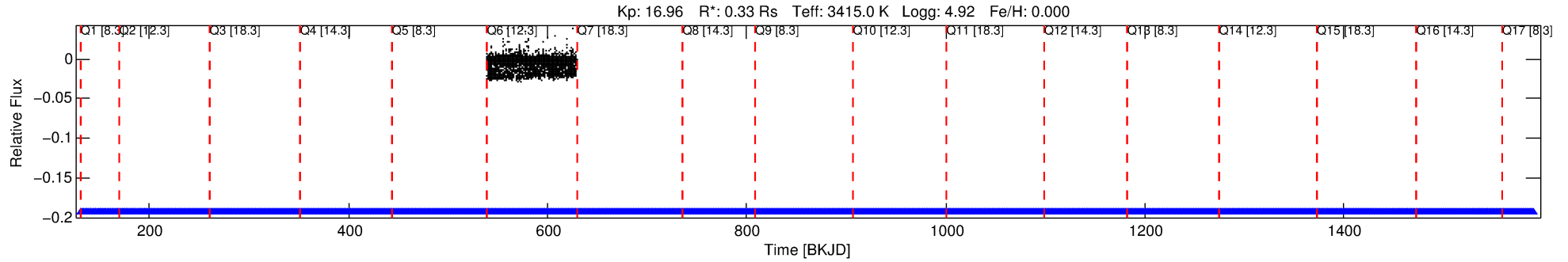
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006762389-01

No Significant Match Found

DV One-Page Summary

KIC: 6762389 Candidate: 1 of 1 Period: 0.770 d



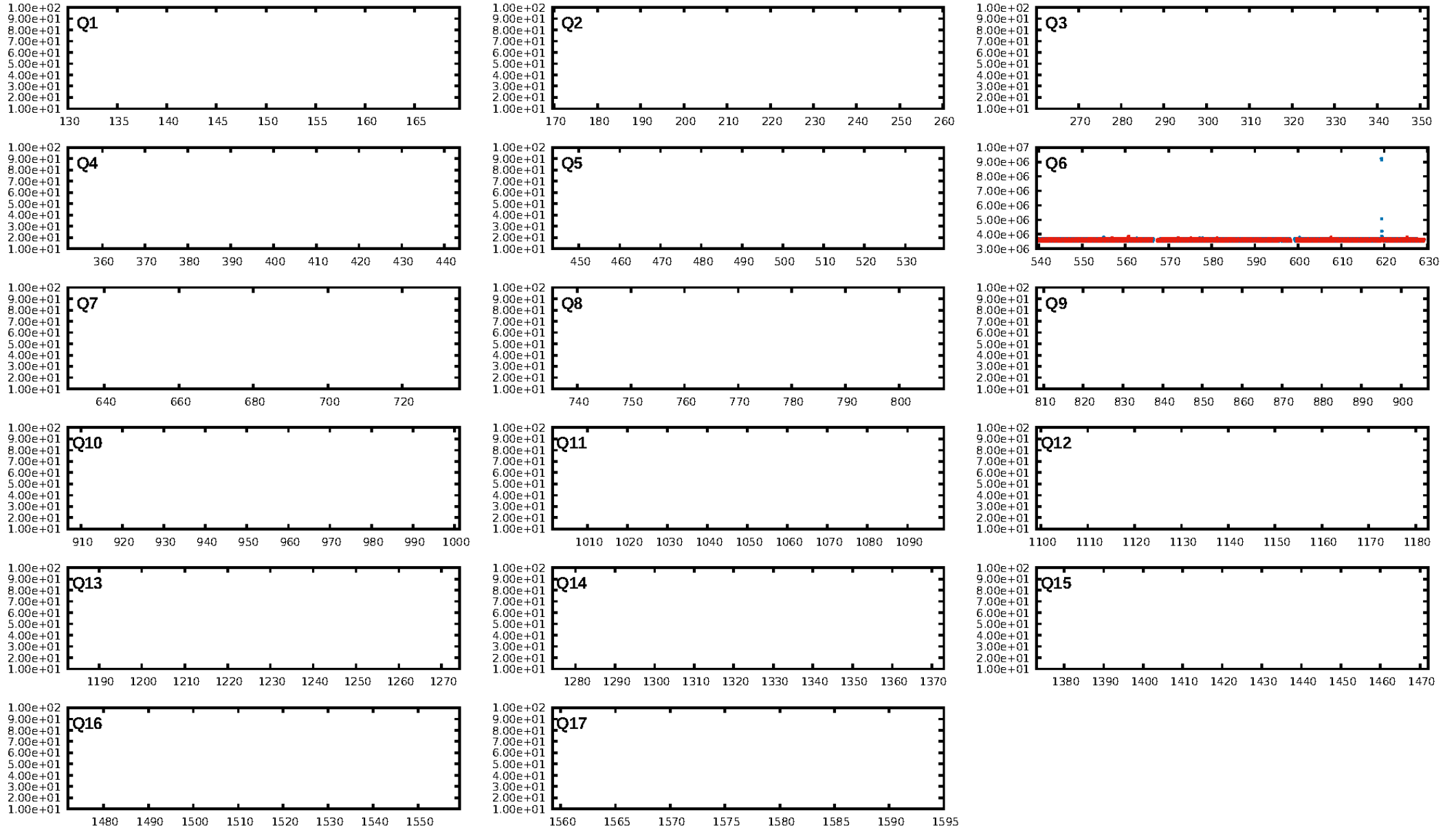
DV Fit Results:

Period = 0.76971 [0.00000] d
Epoch = 131.8333 [0.0008] BKJD
Rp/R* = 0.2404 [0.0921]
a/R* = 1.56 [0.05]
b = 0.98 [0.13]
Seff = 103.20 [11.08]
Teq = 813 [22] K
Rp = 8.66 [3.43] Re
a = 0.0113 [0.0009] AU
Ag = 18.84 [14.54] [1.23σ]
Teffp = 2618 [503] K [3.59σ]

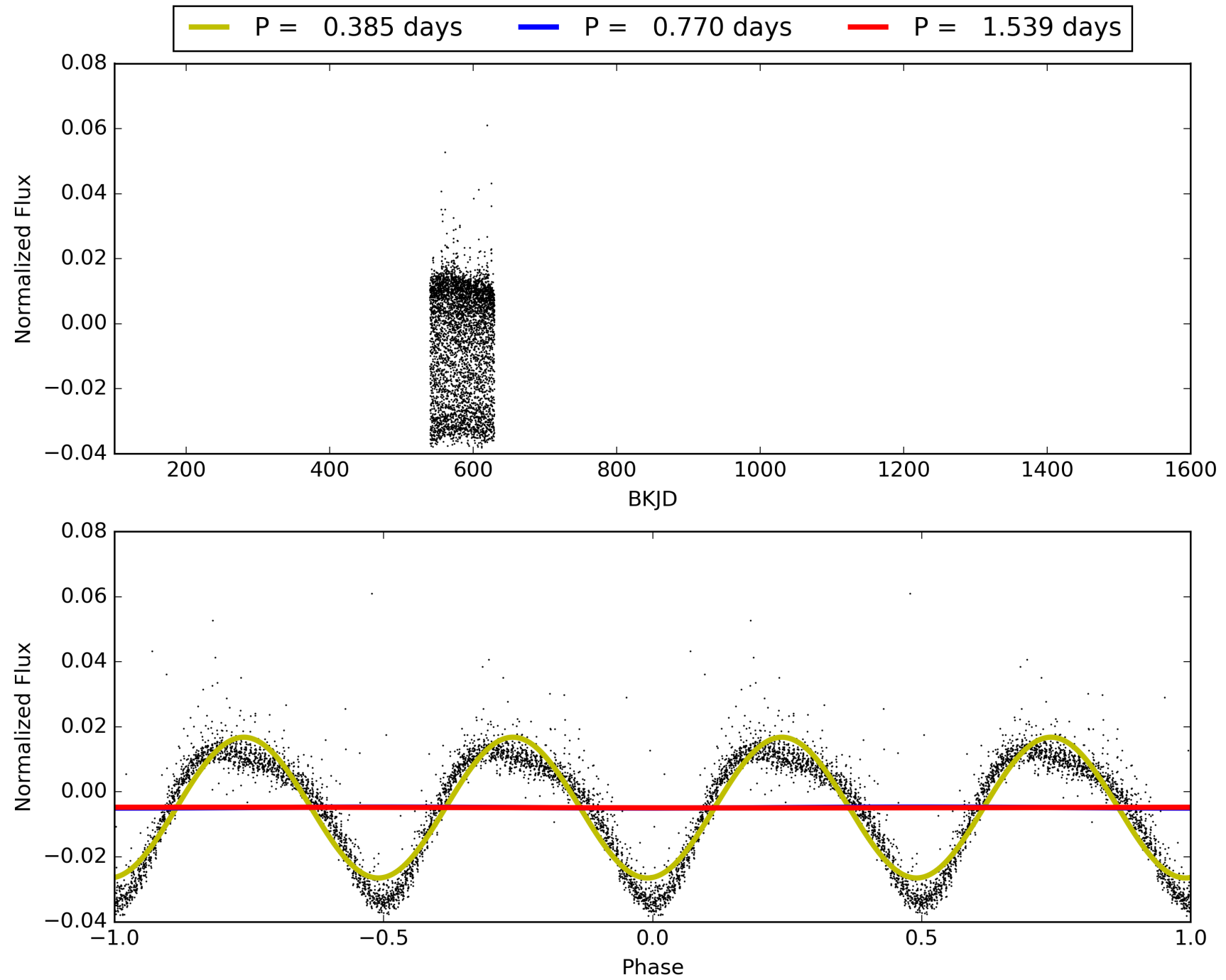
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 100.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [115/115]
GhostDiagnostic-chr: -109.2
Centroid-sig: N/A
Centroid-so: 0.126 arcsec [3.28σ]
OotOffset-rm: 0.016 arcsec [0.24σ]
KicOffset-rm: 0.186 arcsec [2.78σ]
OotOffset-st: 1/0/0/0 [1]
KicOffset-st: 1/0/0/0 [1]
DiffImageQuality-fgm: 1.00 [1/1]
DiffImageOverlap-fno: 1.00 [1/1]

TCE 006762389-01, PDC Light Curves

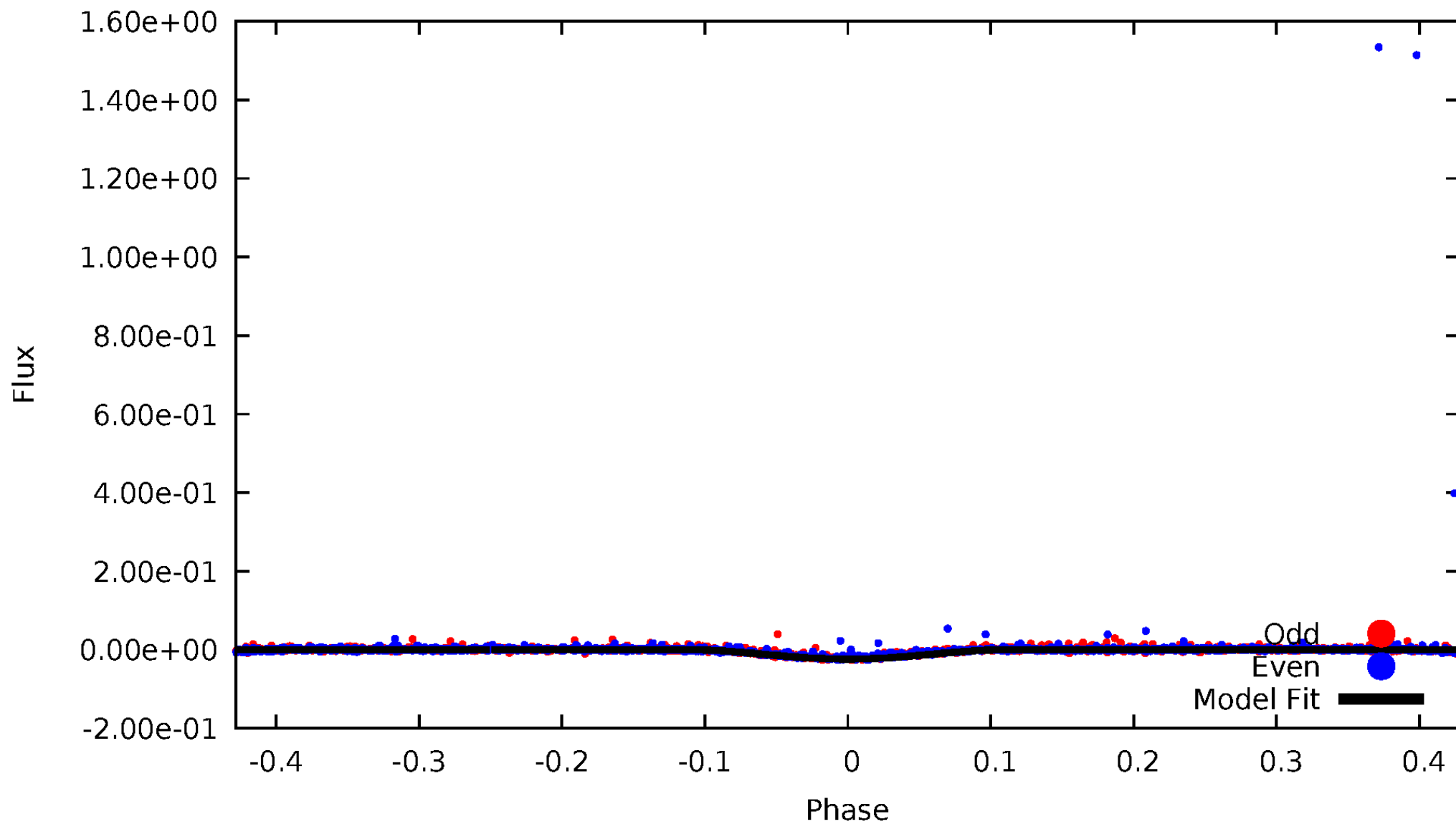


TCE 006762389-01



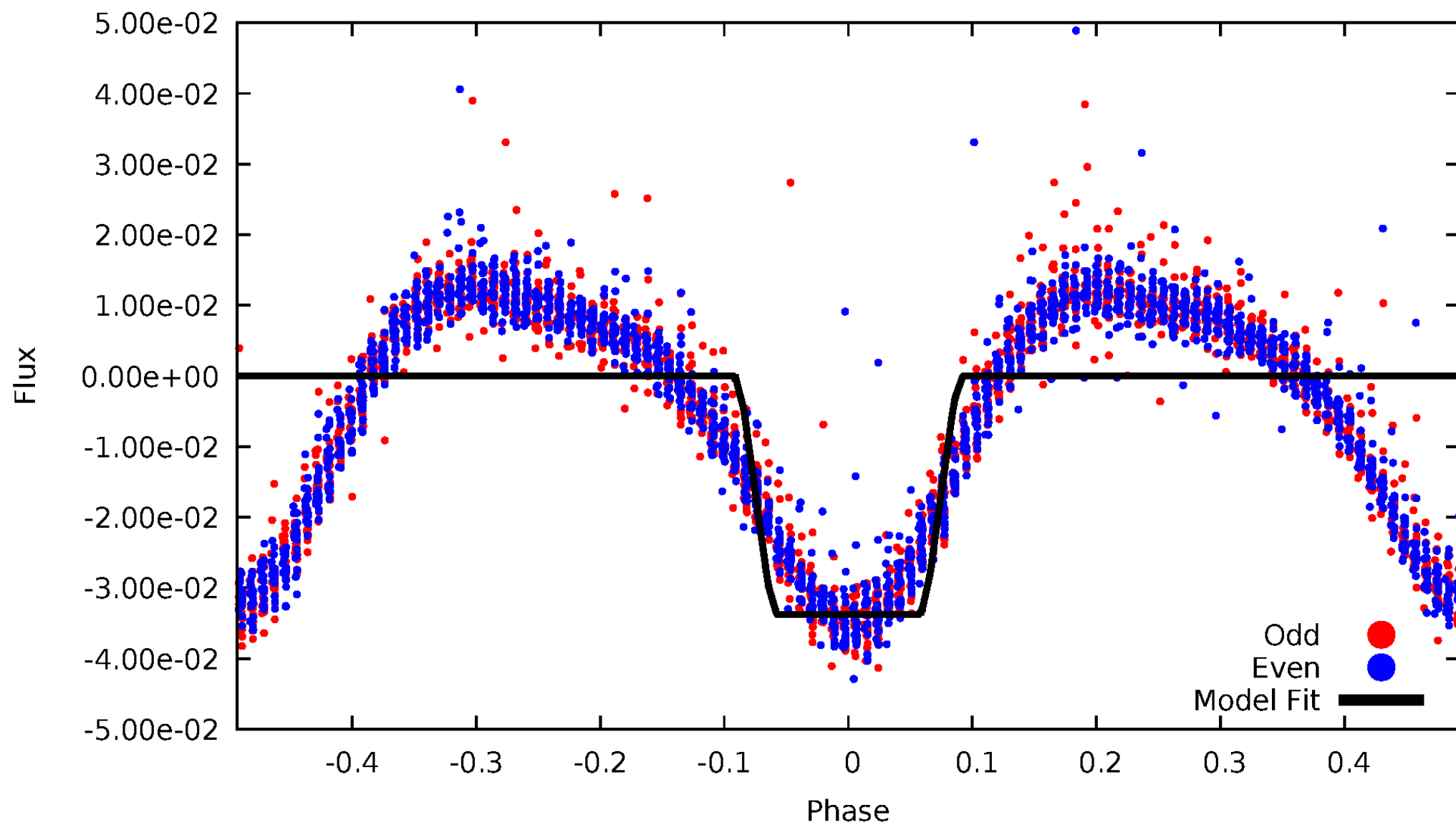
DV Odd/Even

TCE 006762389-01



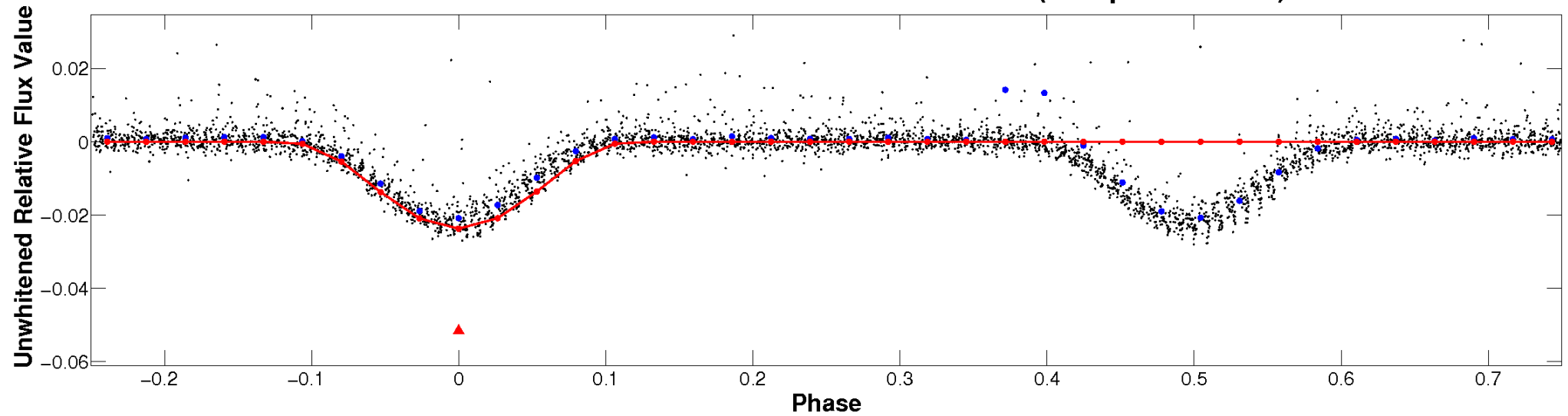
ALT Odd/Even

TCE 006762389-01

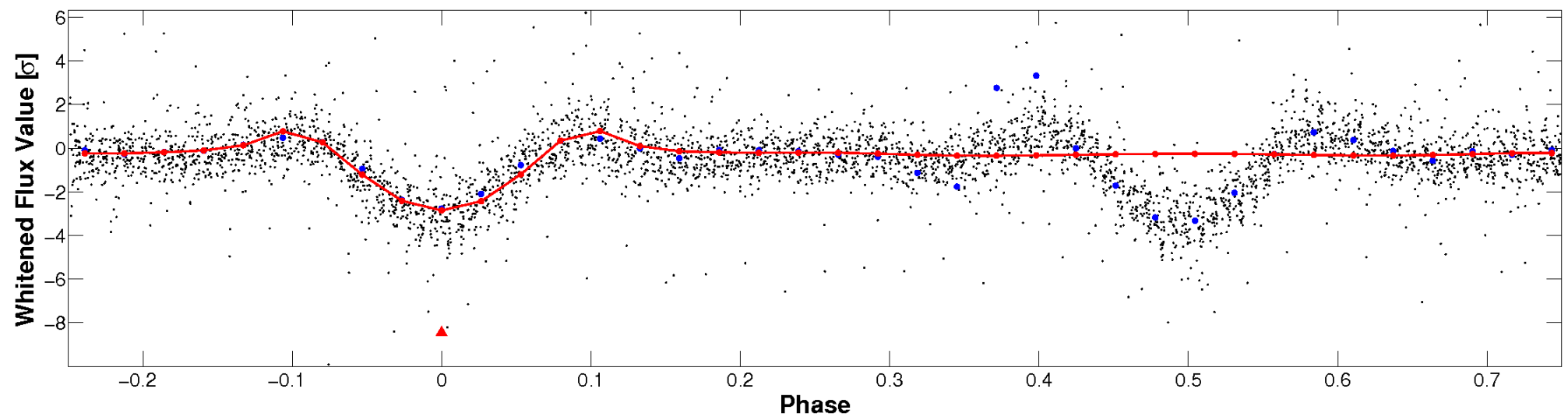


Non-Whitened Vs. Whitened Light Curve

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

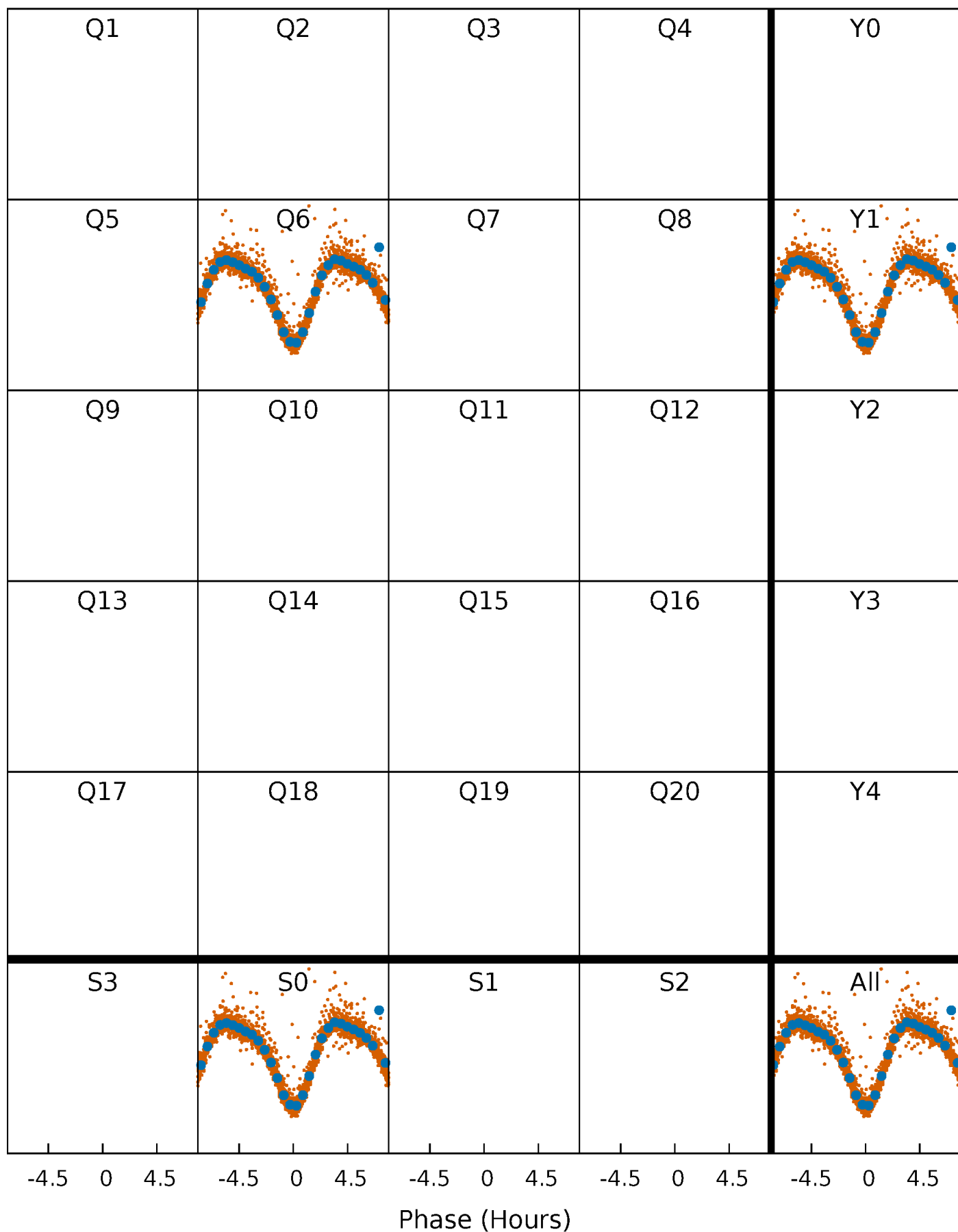


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



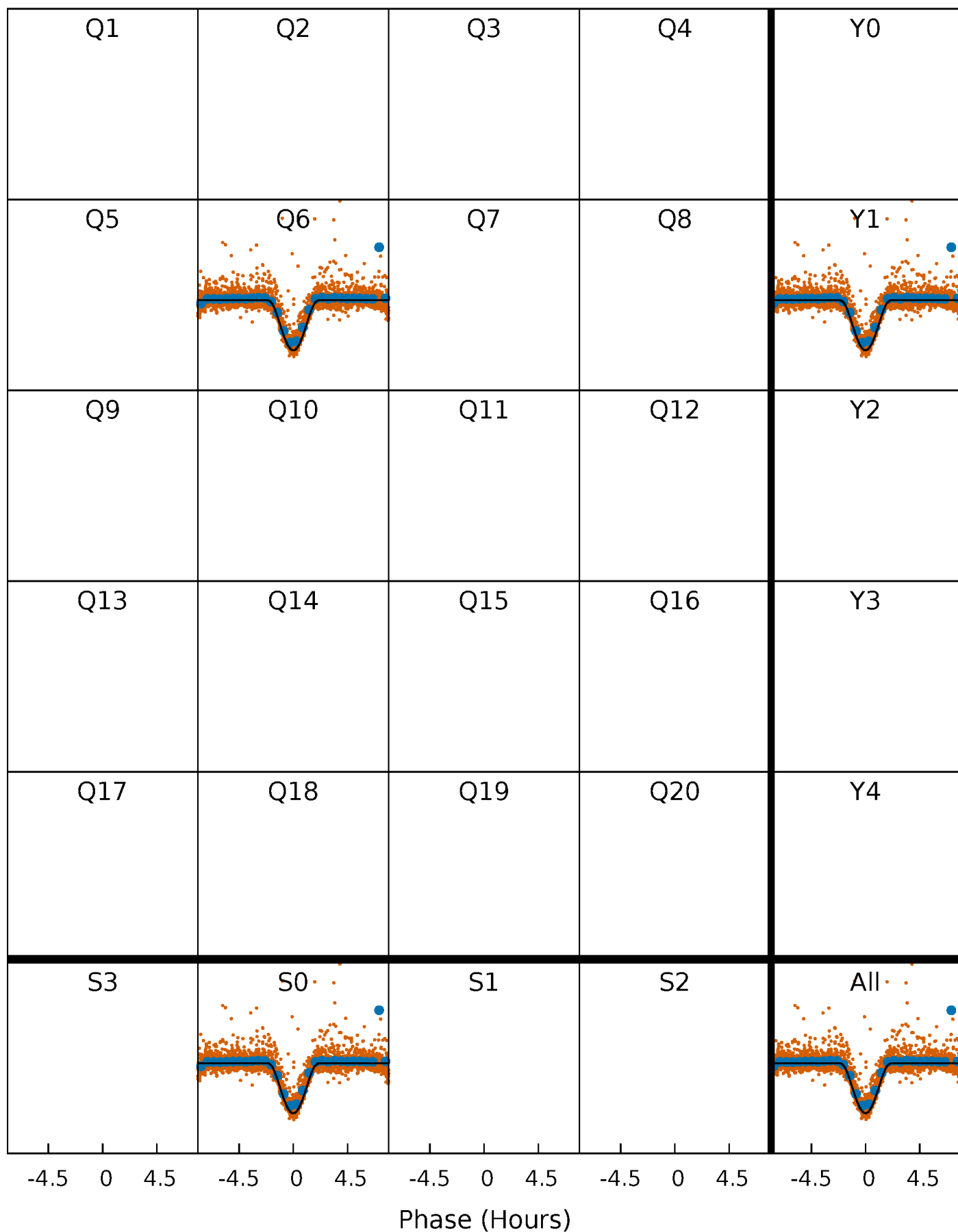
PDC Quarter-Phased Transit Curves

TCE 006762389-01 P= 0.769710 Days $T_0=131.833267$ (BKJD)



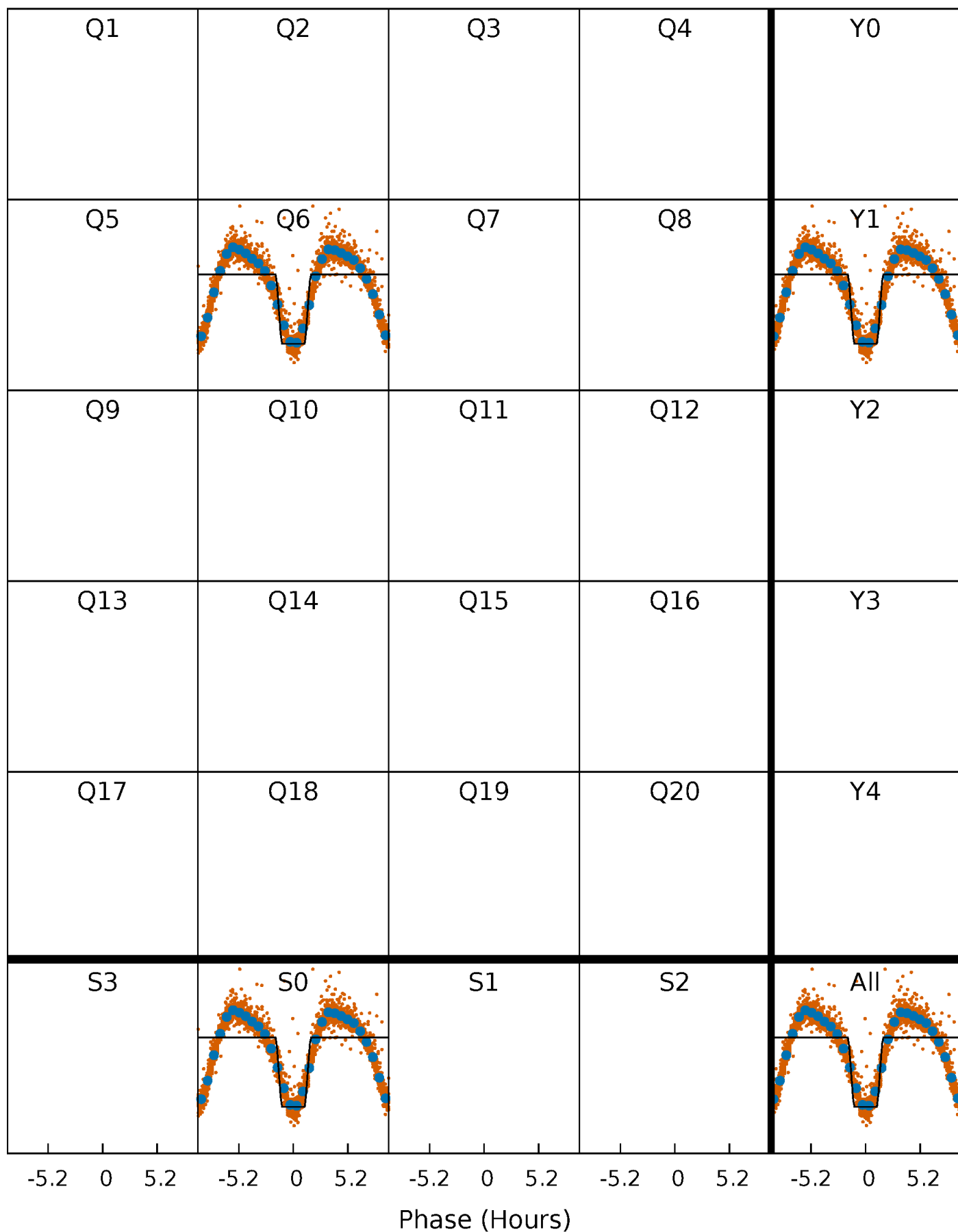
DV Quarter-Phased Transit Curves

TCE 006762389-01 P= 0.769710 Days $T_0=131.833267$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

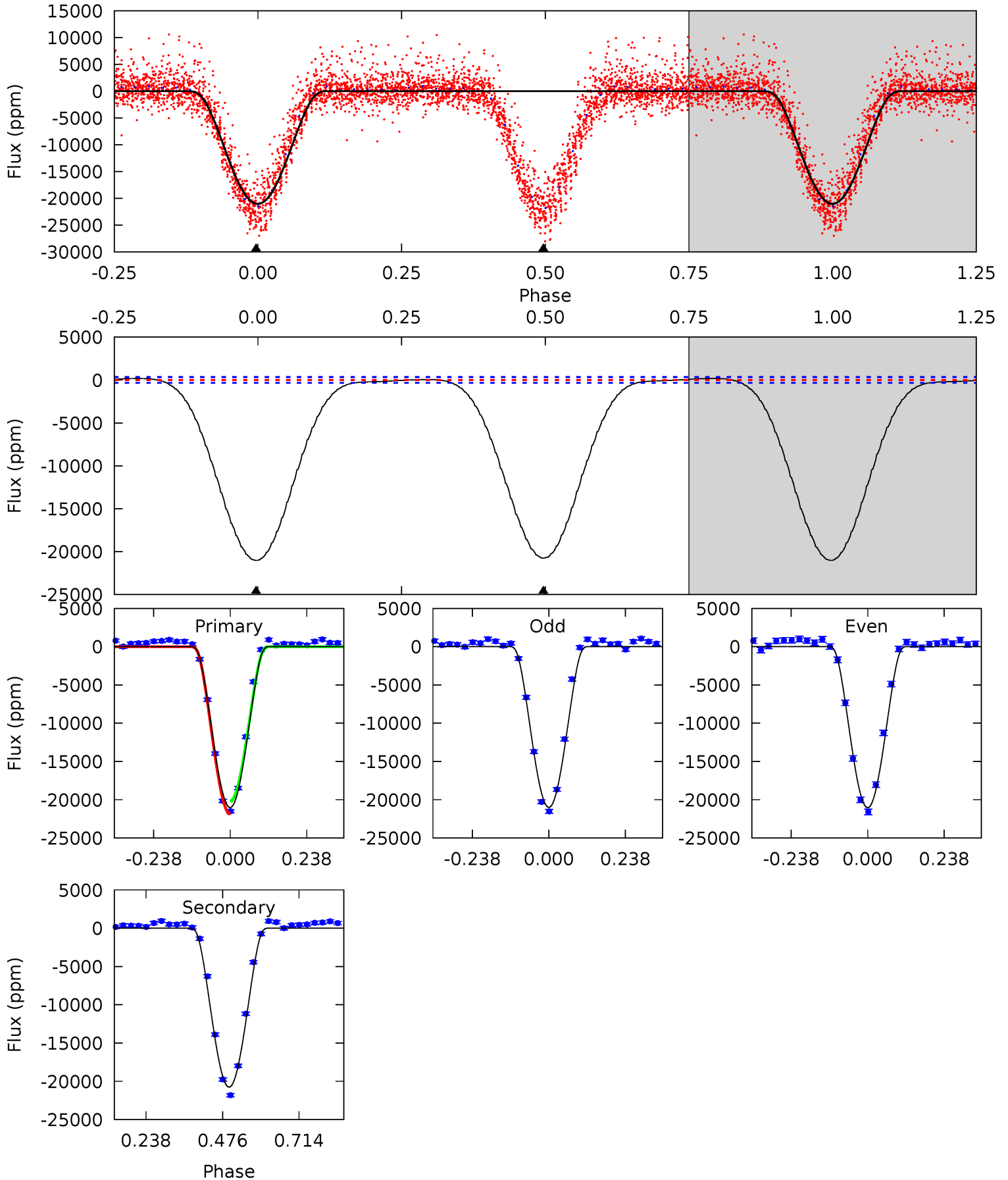
TCE 006762389-01 P= 0.769681 Days $T_0=131.847633$ (BKJD)



DV Model-Shift Uniqueness Test

006762389-01, P = 0.769710 Days, E = 131.833267 Days

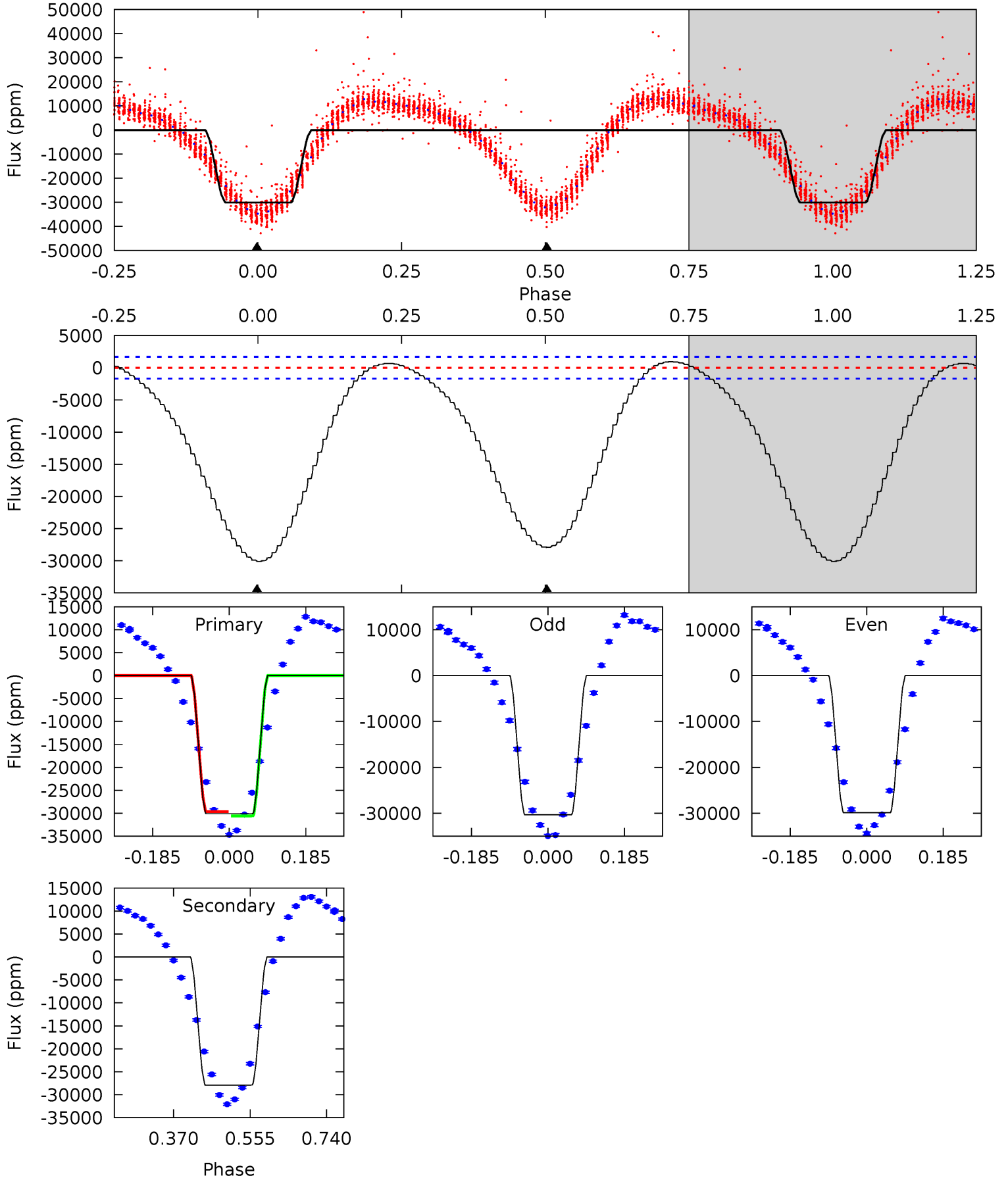
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
270.3	266.8	0	0	4.38	1.18	1.06	270.3	270.3	266.8	266.8	0.30	0.95	0.01	9.98



Alt Model-Shift Uniqueness Test

006762389-01, P = 0.769681 Days, E = 131.847633 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
78.8	73.0	0	0	4.43	1.33	3.52	78.8	78.8	73.0	73.0	0.58	0.99	0.03	1.22



Stellar Parameters For KIC 006762389

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (g \cdot \text{cm}^{-3})$
	3415^{+44}_{-41}	$4.917^{+0.042}_{-0.031}$	$0.000^{+0.100}_{-0.100}$	$0.330^{+0.030}_{-0.034}$	$0.328^{+0.041}_{-0.038}$	$12.860^{+2.887}_{-1.761}$
	+1%/-1%	+1%/-1%	+inf%/-inf%	+9%/-10%	+12%/-12%	+22%/-14%
Source	PHO2	PHO2	PHO2	DSEP		

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

Secondary Eclipse Parameters for KIC 006762389-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-20752 ± 78	$8.44^{+3.25}_{-3.08}$	1135^{+23}_{-25}	2958^{+429}_{-244}	21^{+31}_{-10}
Alt.	-27908 ± 382	$6.78^{+3.21}_{-3.38}$	1133^{+25}_{-20}	3301^{+877}_{-359}	44^{+132}_{-24}

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 $A_{obs} \gg 1.0$

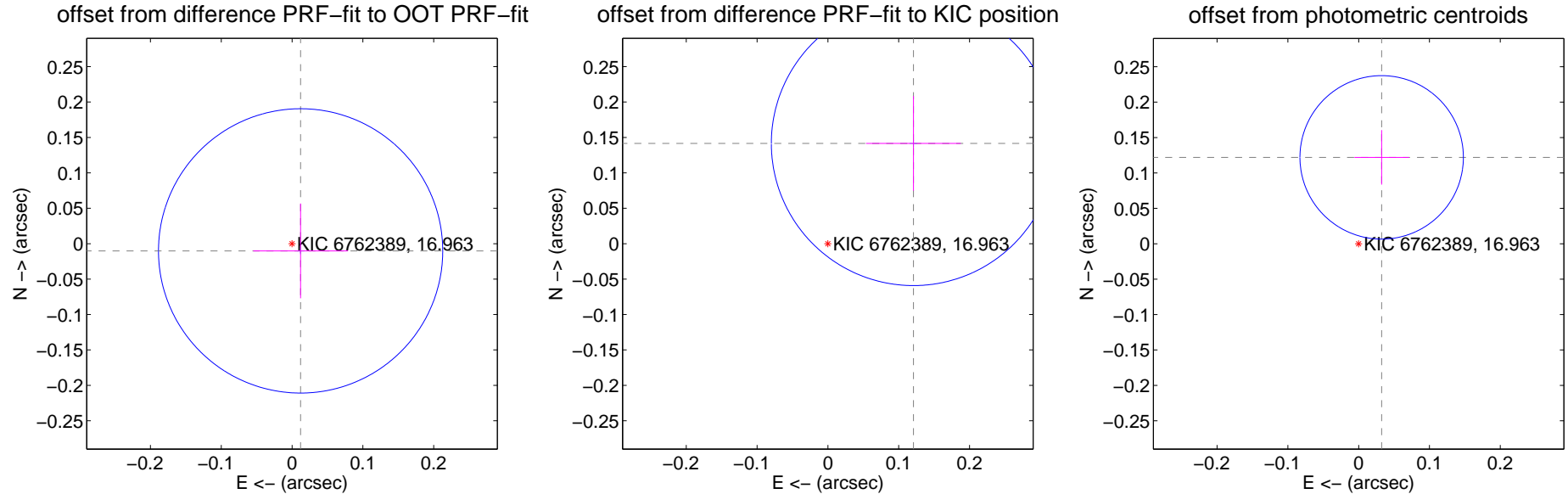
DV Centroid Data

Supplemental centroid analysis for 006762389-01. Kepler magnitude: 16.96. Transit SNR 51.66

There are 1 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.19 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.016 ± 0.067	0.24	-0.012 ± 0.067	-0.010 ± 0.067
PRF-fit source offset from KIC position	0.186 ± 0.067	2.78	-0.121 ± 0.067	0.142 ± 0.067
photometric centroid source offset	0.13 ± 0.04	3.28	-0.03 ± 0.04	0.12 ± 0.04

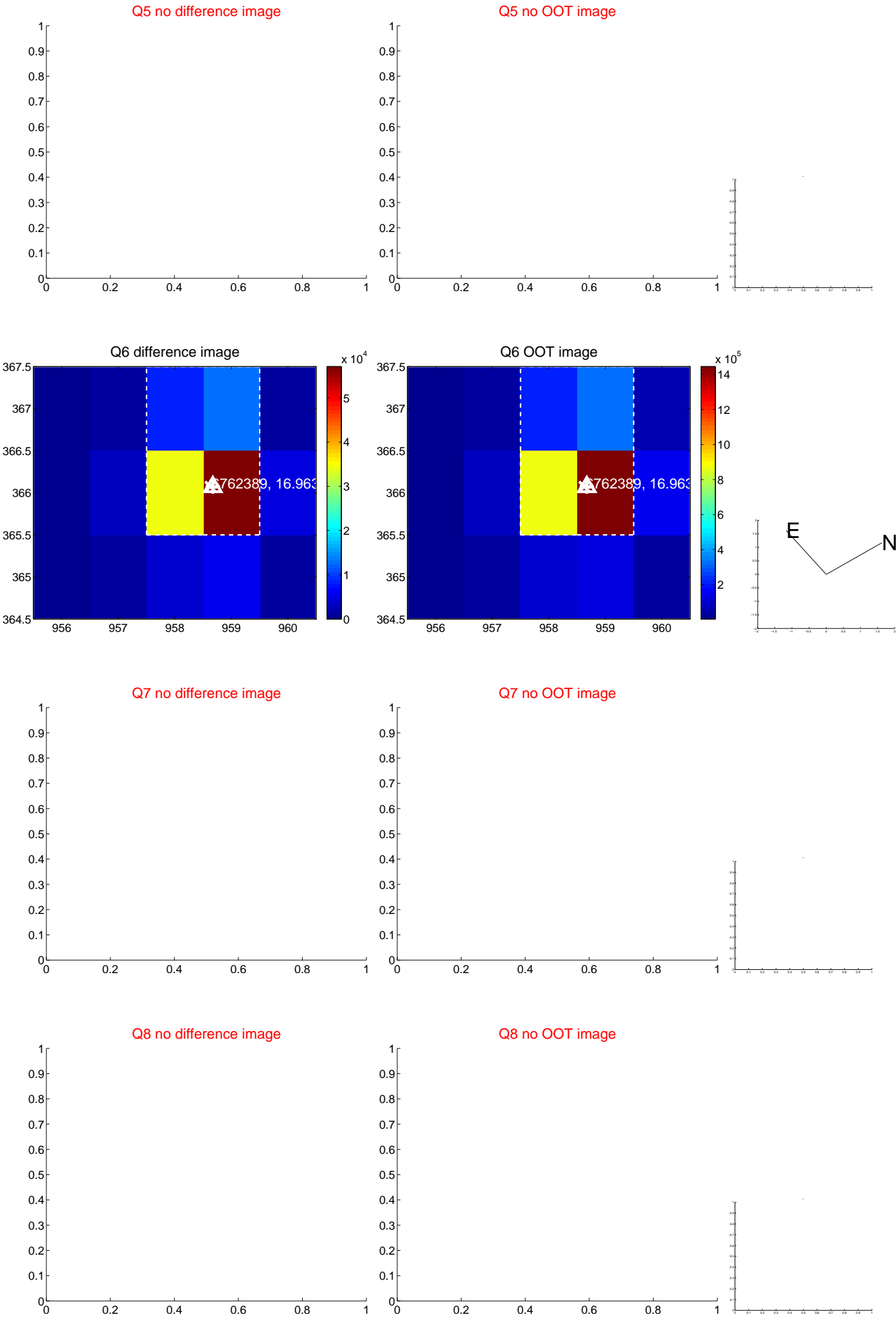


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ . 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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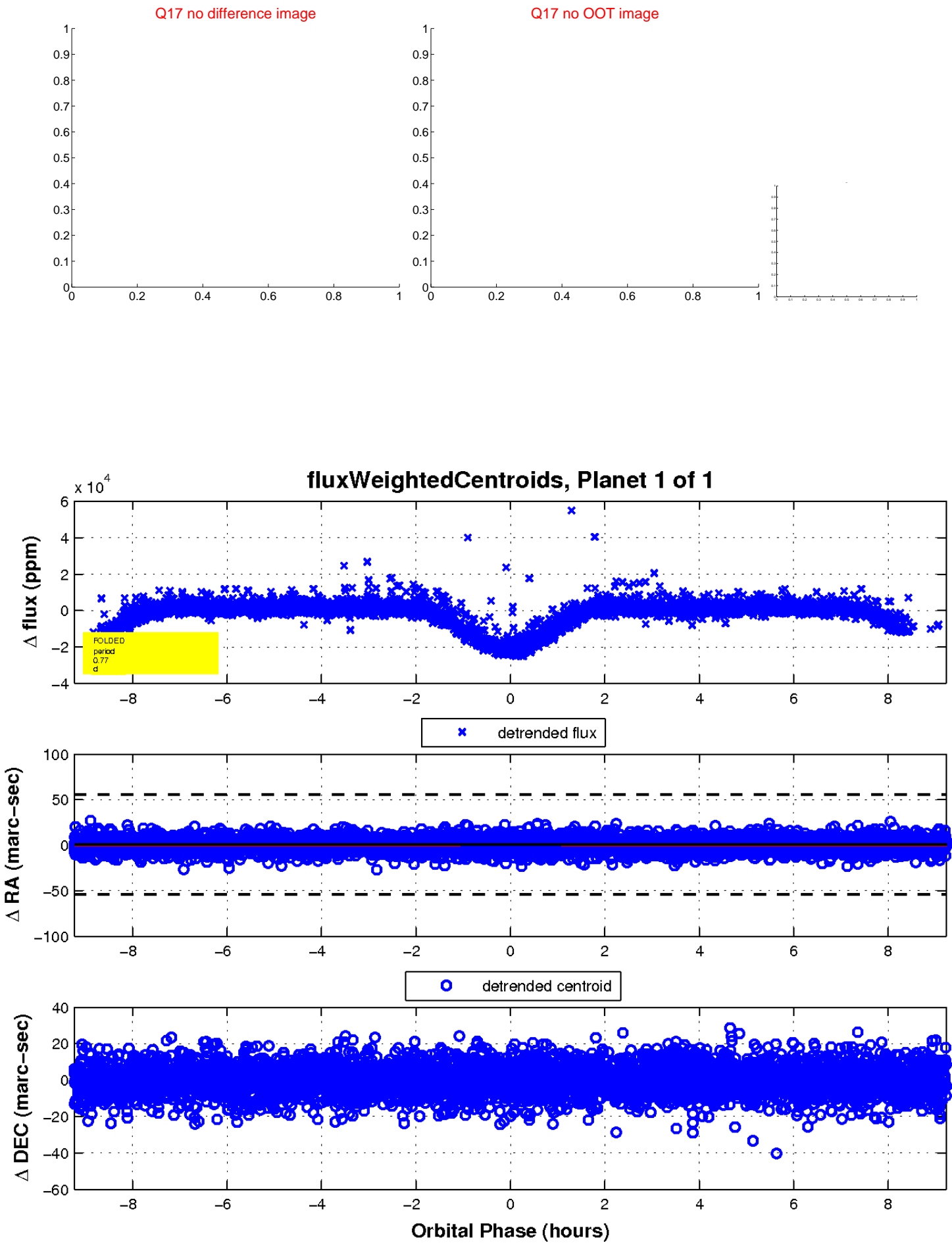
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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UKIRT Image

Declination

