

KIC 004769007

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})
004769007-01	OBS	No	1.809893	131.801695	0.0	15.997	10.0	0.0	2.38	6072	0.03	7686.62

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
004769007-01	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_SKYE_ZUMA_TRACKER—SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—CENT_UNRESOLVED_OFFSET

Notes: OBS = Observed. INJ = Injected. INV = Inverted. SCR = Scrambled.

N = Not Transit-Like. S = Stellar Eclipse. C = Centroid Offset. E = Ephemeris Match.

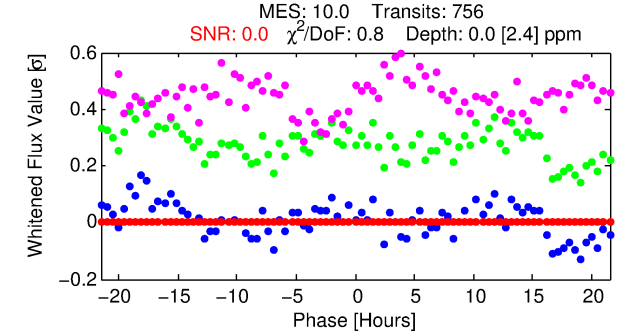
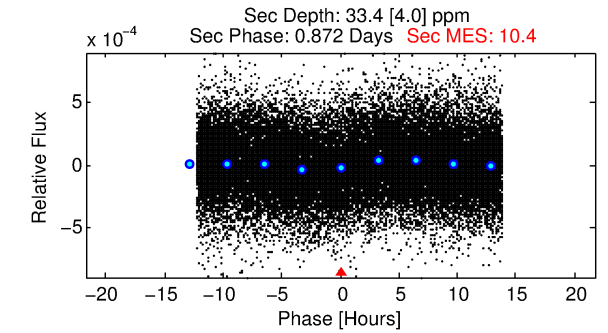
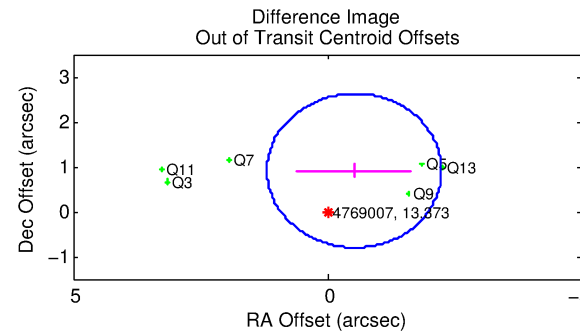
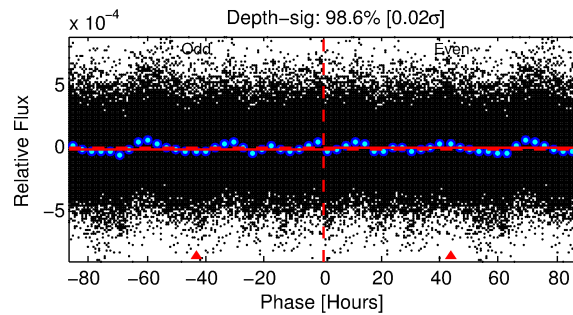
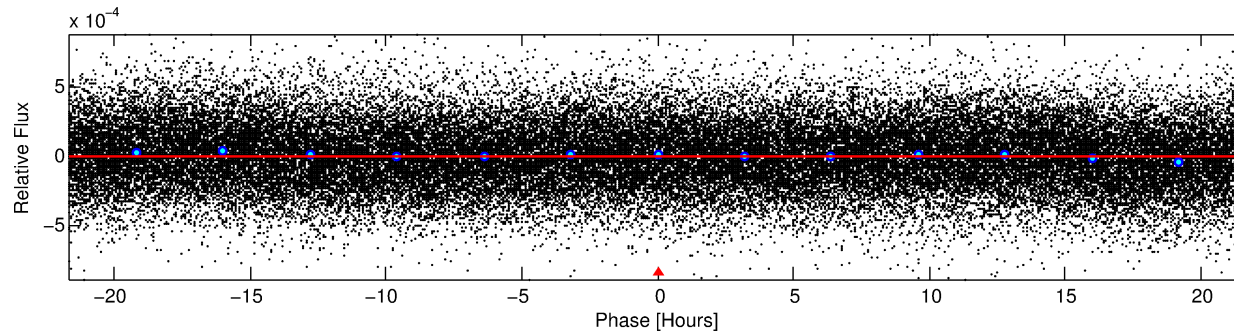
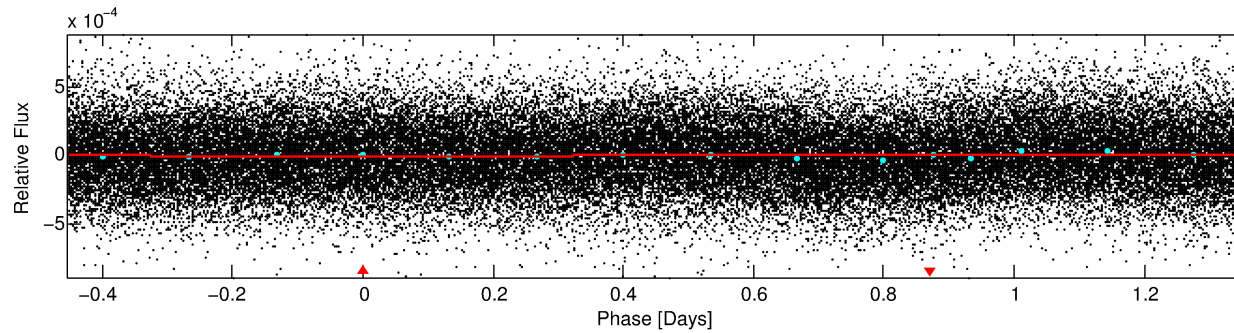
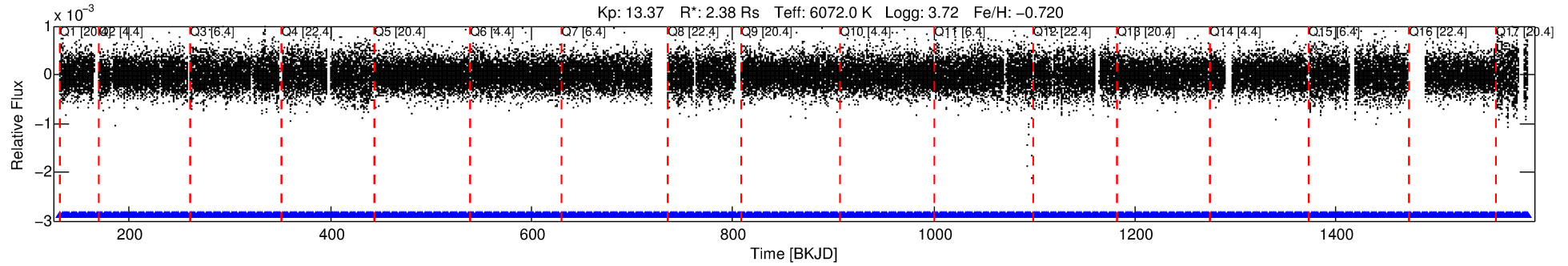
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 004769007-01

No Significant Match Found

DV One-Page Summary

KIC: 4769007 Candidate: 1 of 1 Period: 1.810 d



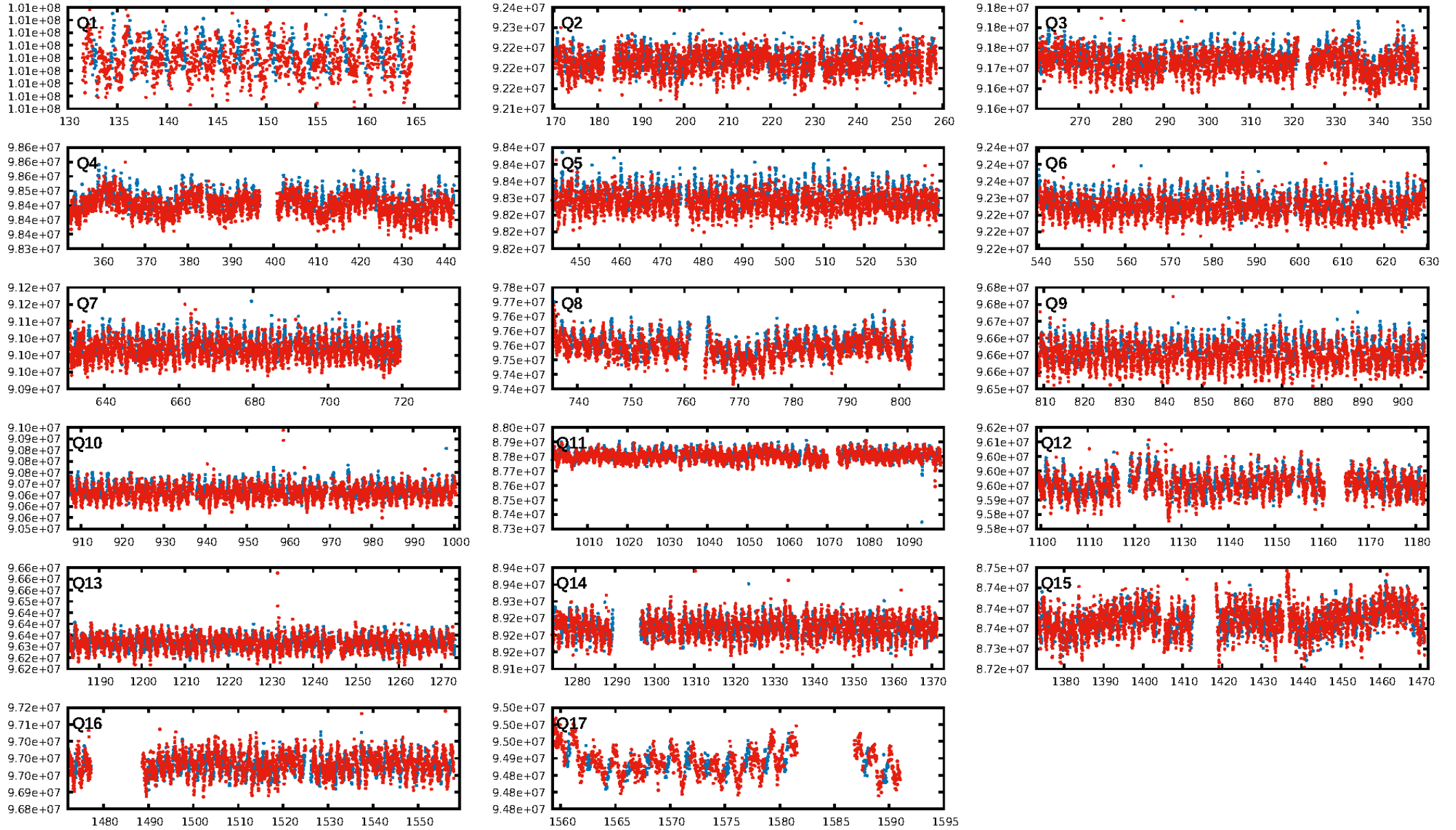
DV Fit Results:

Period = 1.80989 [0.04419] d
Epoch = 131.8017 [10.8968] BKJD
Rp/R* = 0.0001 [0.0114]
a/R* = 1.07 [45.50]
b = 0.46 [555.44]
Seff = 7686.62 [9060.38]
Teq = 2388 [704] K
Rp = 0.03 [2.96] Re
a = 0.0300 [0.0205] AU
Ag = 14215.83 [2470434.86] [0.01σ]
Teff = 40308 [1751204] K [0.02σ]

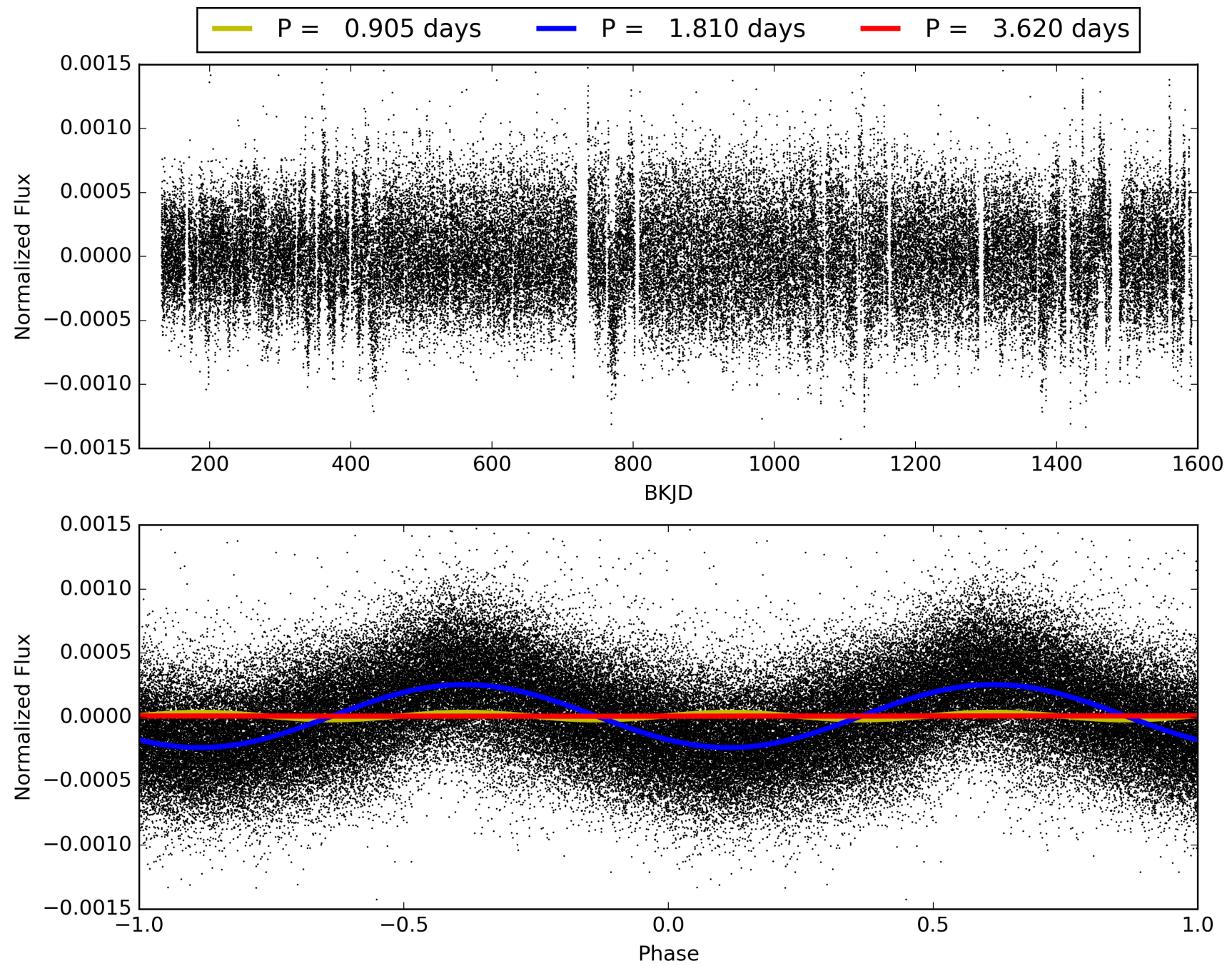
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [721/721]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 1.051 arcsec [1.84σ]
KicOffset-rm: 1.103 arcsec [1.95σ]
OotOffset-st: 0/3/0/3 [6]
KicOffset-st: 0/3/0/3 [6]
DiffImageQuality-fgm: 0.50 [3/6]
DiffImageOverlap-fno: 1.00 [17/17]

TCE 004769007-01, PDC Light Curves

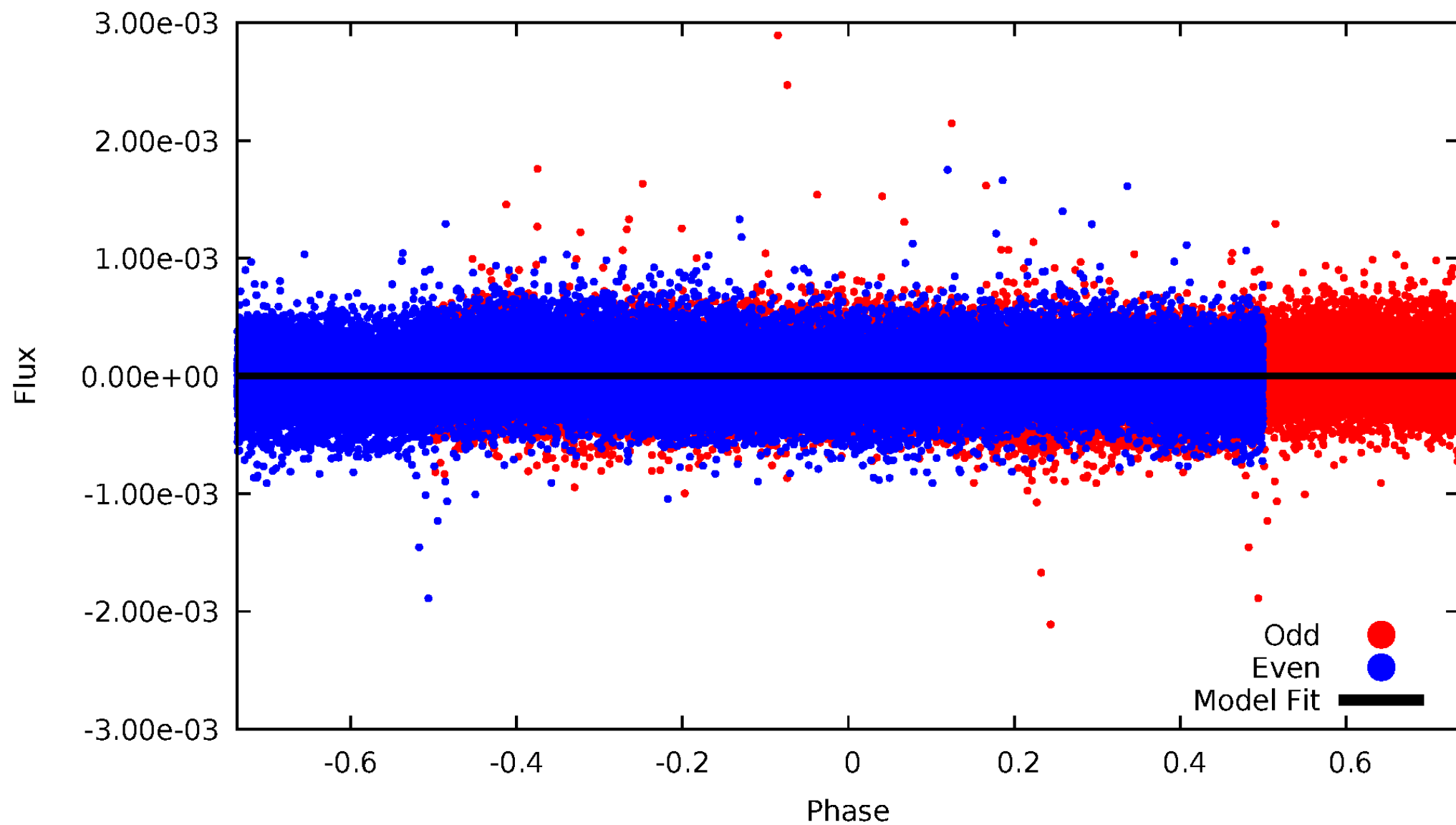


TCE 004769007-01



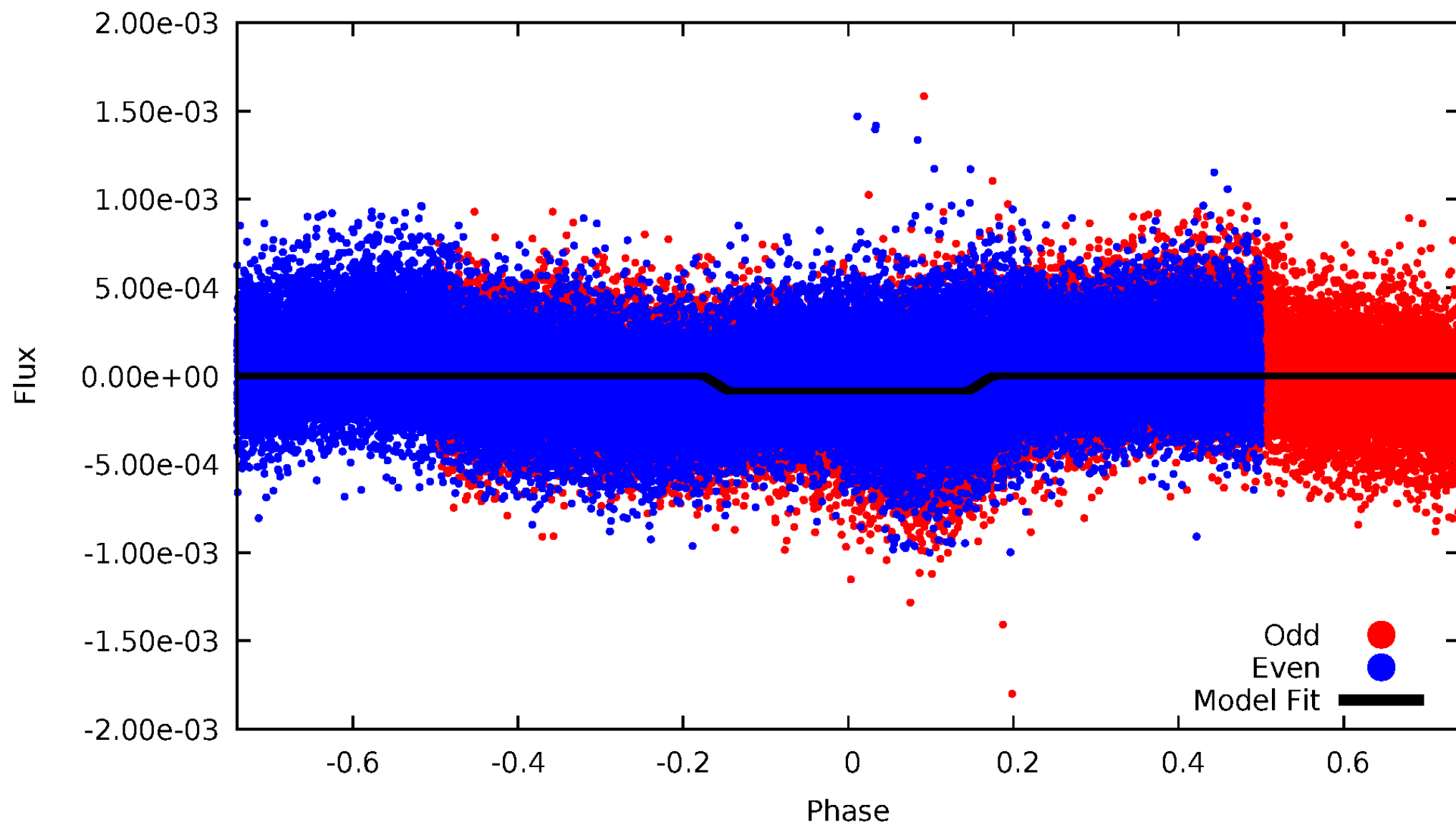
DV Odd/Even

TCE 004769007-01

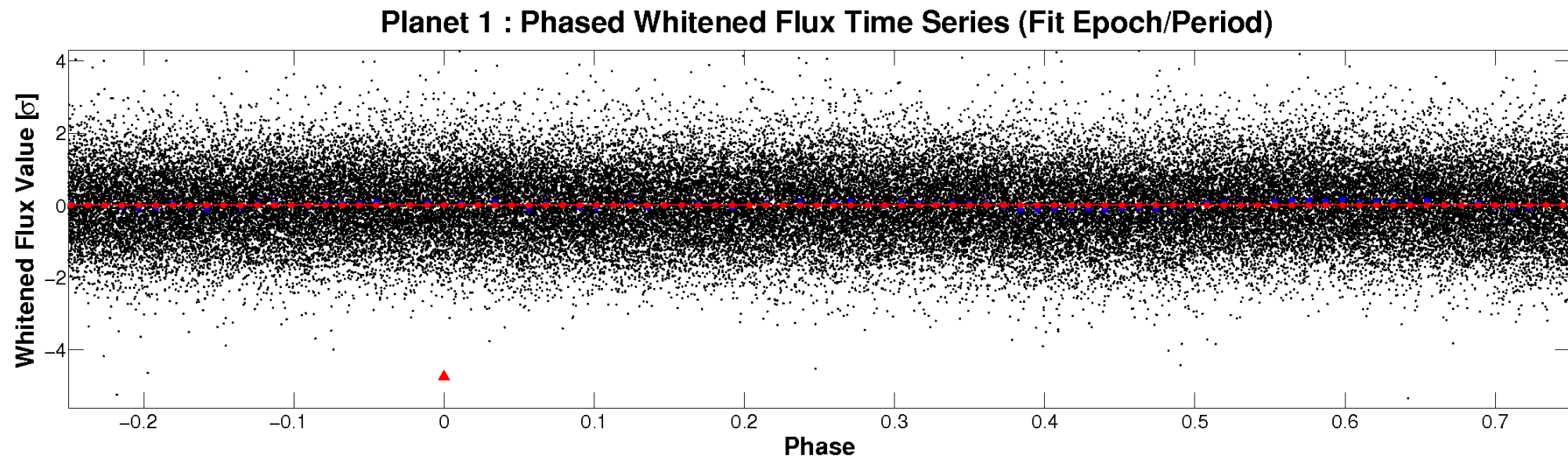
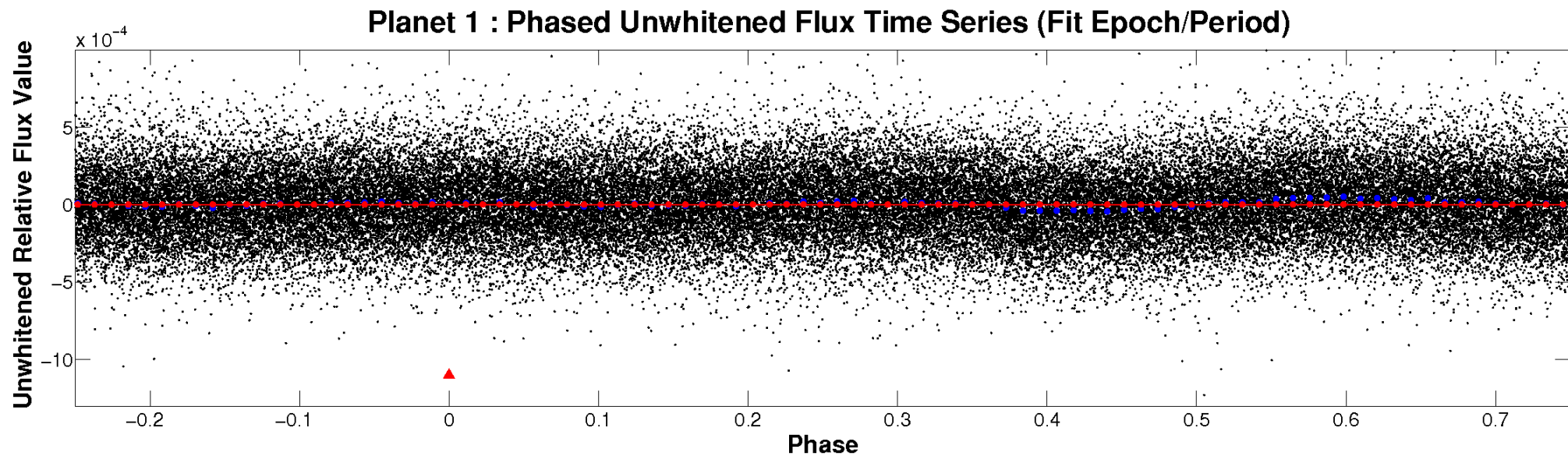


ALT Odd/Even

TCE 004769007-01

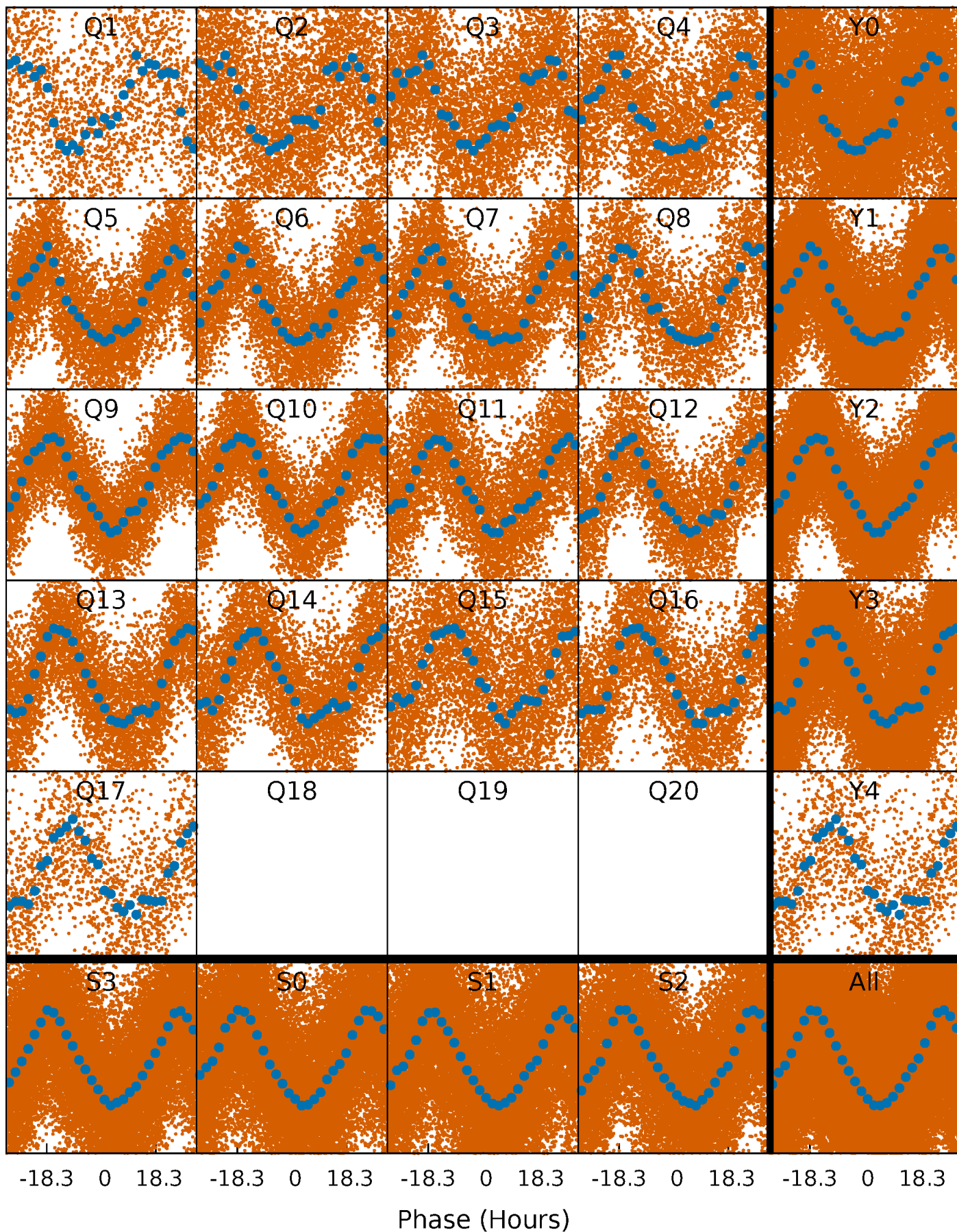


Non-Whitened Vs. Whitened Light Curve



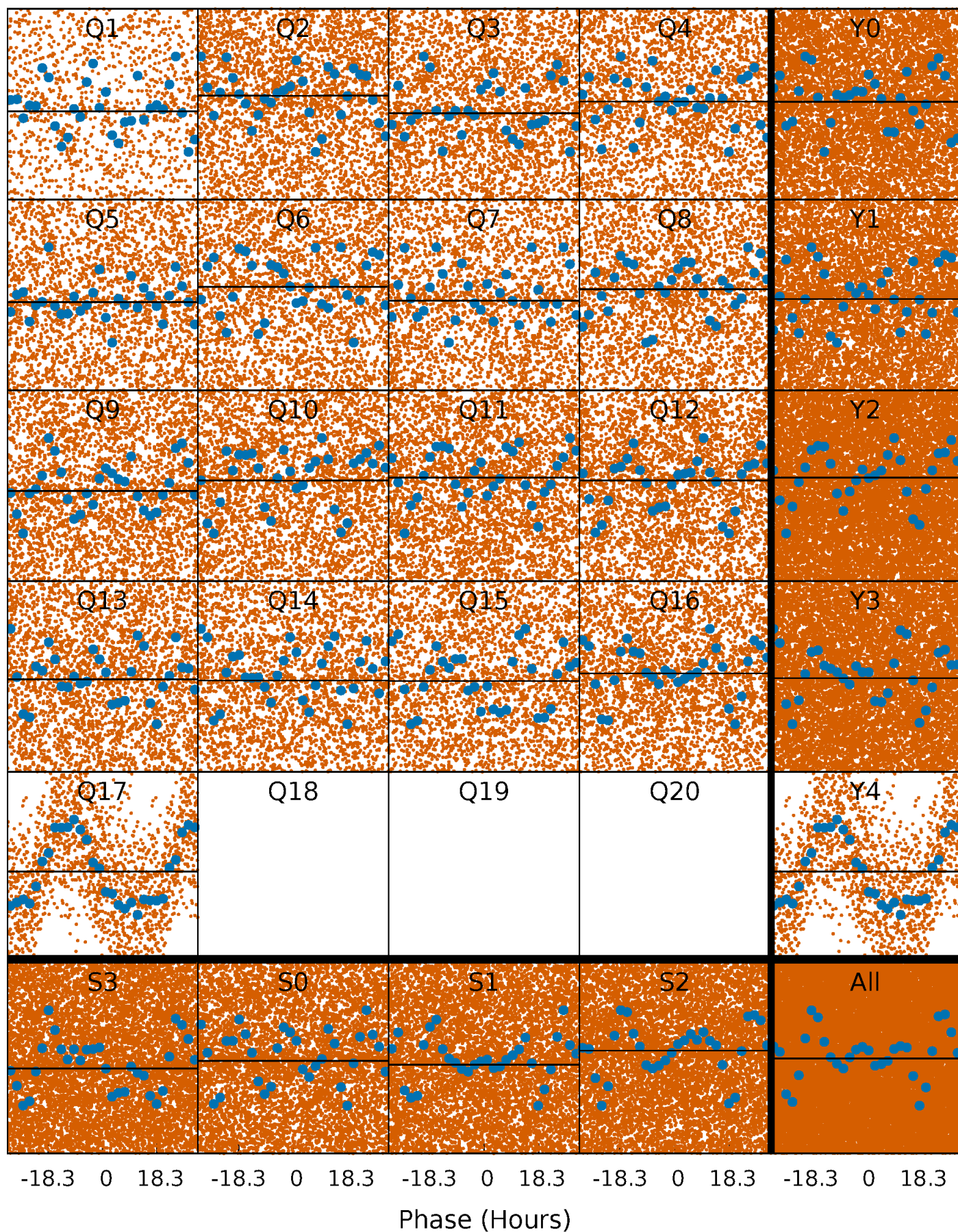
PDC Quarter-Phased Transit Curves

TCE 004769007-01 P= 1.809893 Days $T_0=131.801695$ (BKJD)



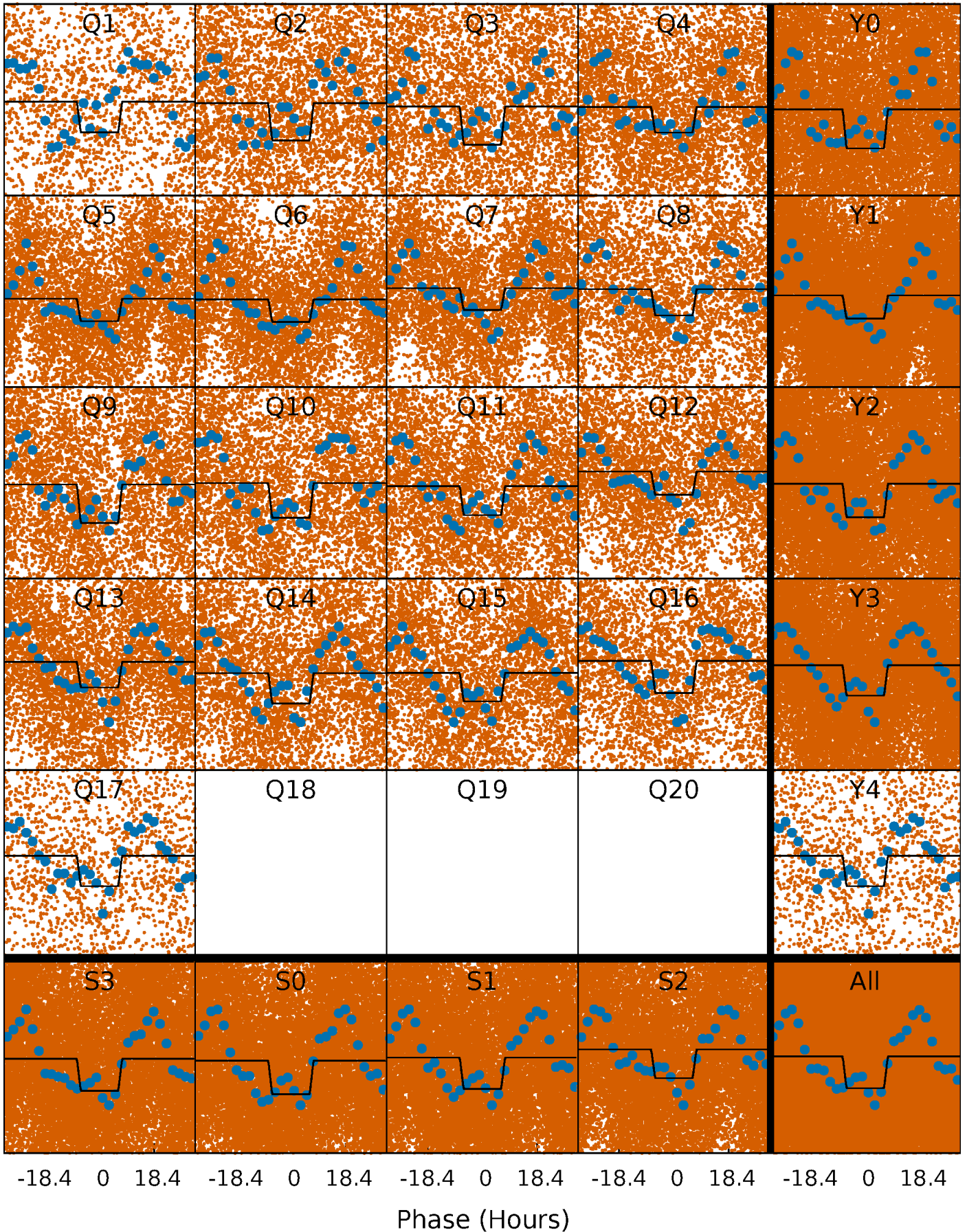
DV Quarter-Phased Transit Curves

TCE 004769007-01 P= 1.809893 Days $T_0=131.801695$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

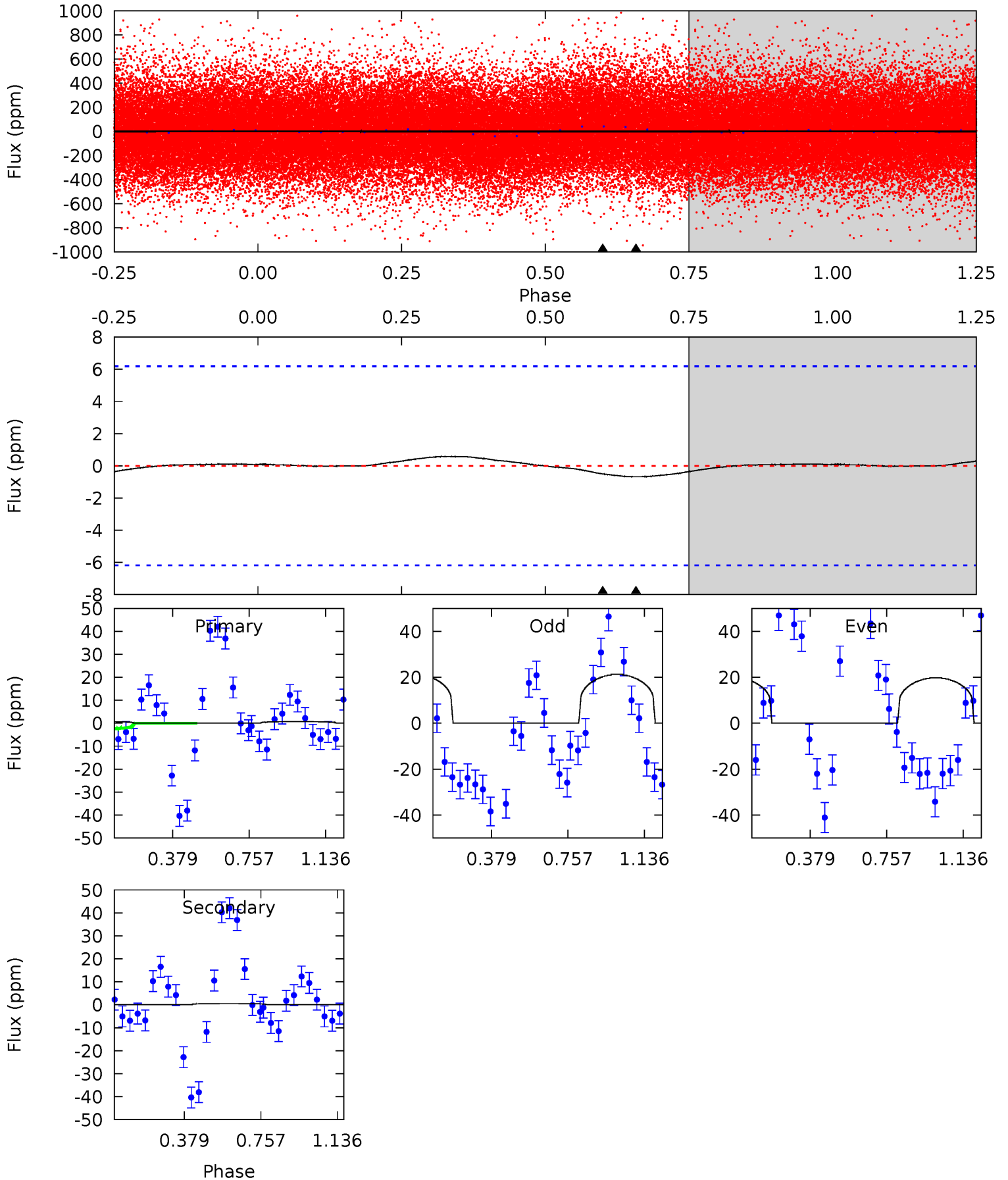
TCE 004769007-01 P= 1.810703 Days $T_0=131.906081$ (BKJD)



DV Model-Shift Uniqueness Test

004769007-01, P = 1.809893 Days, E = 129.991802 Days

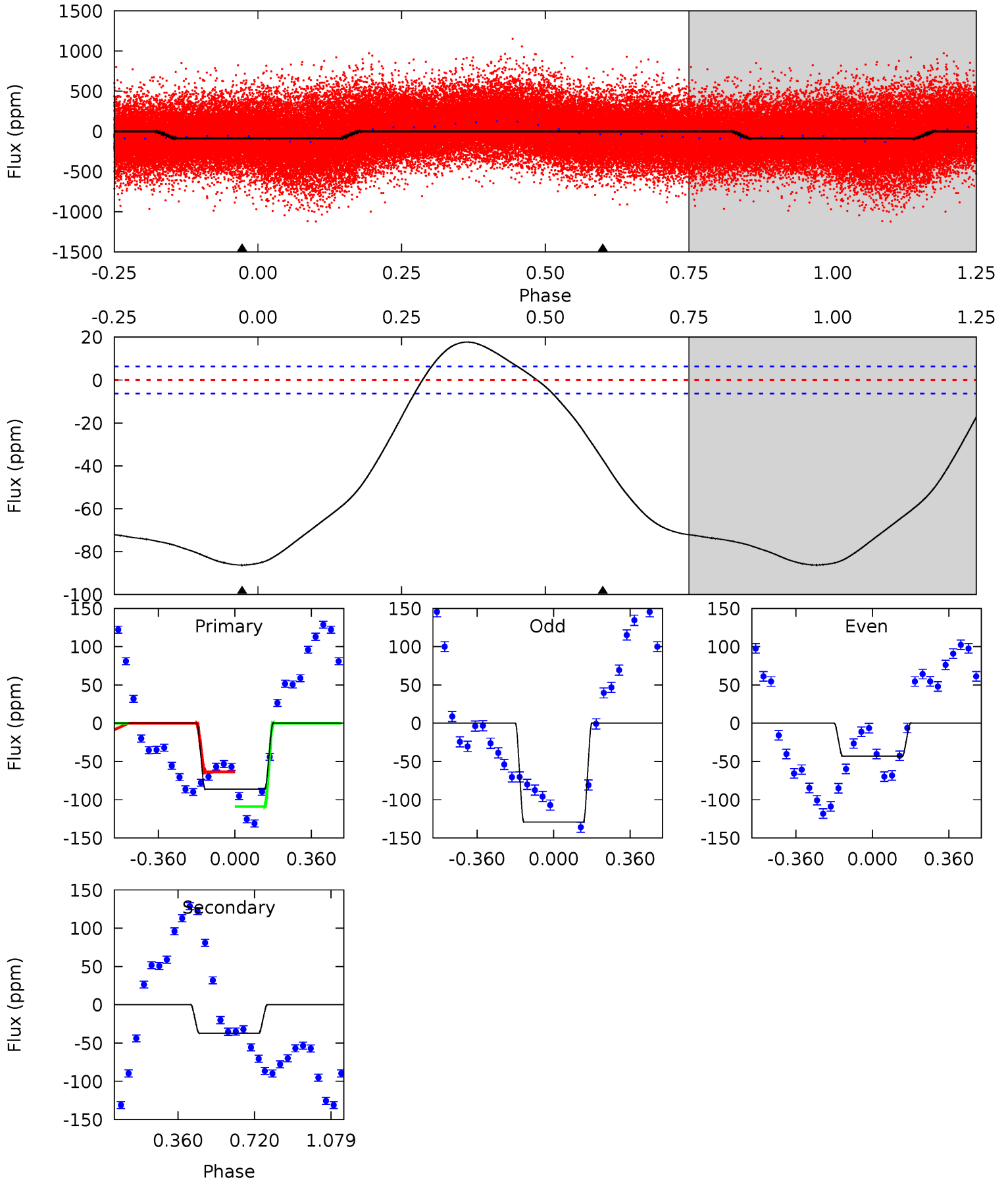
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0.47	0.34	0	0	4.28	0.88	0.03	0.47	0.47	0.34	0.34	0.48	1.41	0.46	0.40



Alt Model-Shift Uniqueness Test

004769007-01, P = 1.810703 Days, E = 130.095378 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
58.5	25.1	0	0	4.29	0.92	8.22	58.5	58.5	25.1	25.1	25.7	1.04	0.17	14.9



Stellar Parameters For KIC 004769007

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6072^{+216}_{-173}	$3.724^{+0.714}_{-0.168}$	$-0.720^{+0.300}_{-0.250}$	$2.380^{+0.625}_{-1.458}$	$1.093^{+0.152}_{-0.281}$	$0.114^{+1.349}_{-0.049}$
	+4%/-3%	+19%/-5%	+42%/-35%	+26%/-61%	+14%/-26%	+1181%/-43%
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 004769007-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-0 ± 1	$1.75^{+2.23}_{-1.21}$	3268^{+294}_{-503}	-3145^{+6434}_{-406}	$0.036^{+0.755}_{-0.191}$
Alt.	-37 ± 1	$2.70^{+2.65}_{-1.83}$	3244^{+312}_{-516}	4428^{+3018}_{-1191}	$2.517^{+21.817}_{-1.883}$

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 $A_{obs} \gg 1.0$

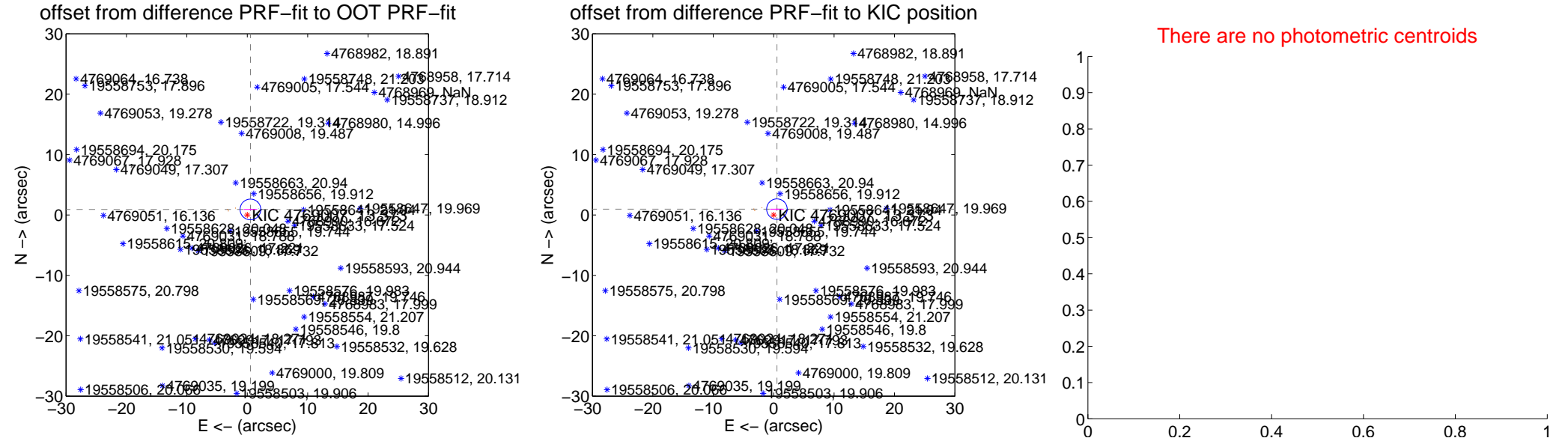
DV Centroid Data

Supplemental centroid analysis for 004769007-01. Kepler magnitude: 13.37. Transit SNR 0.01

There are 3 quarters with good PRF difference image offsets

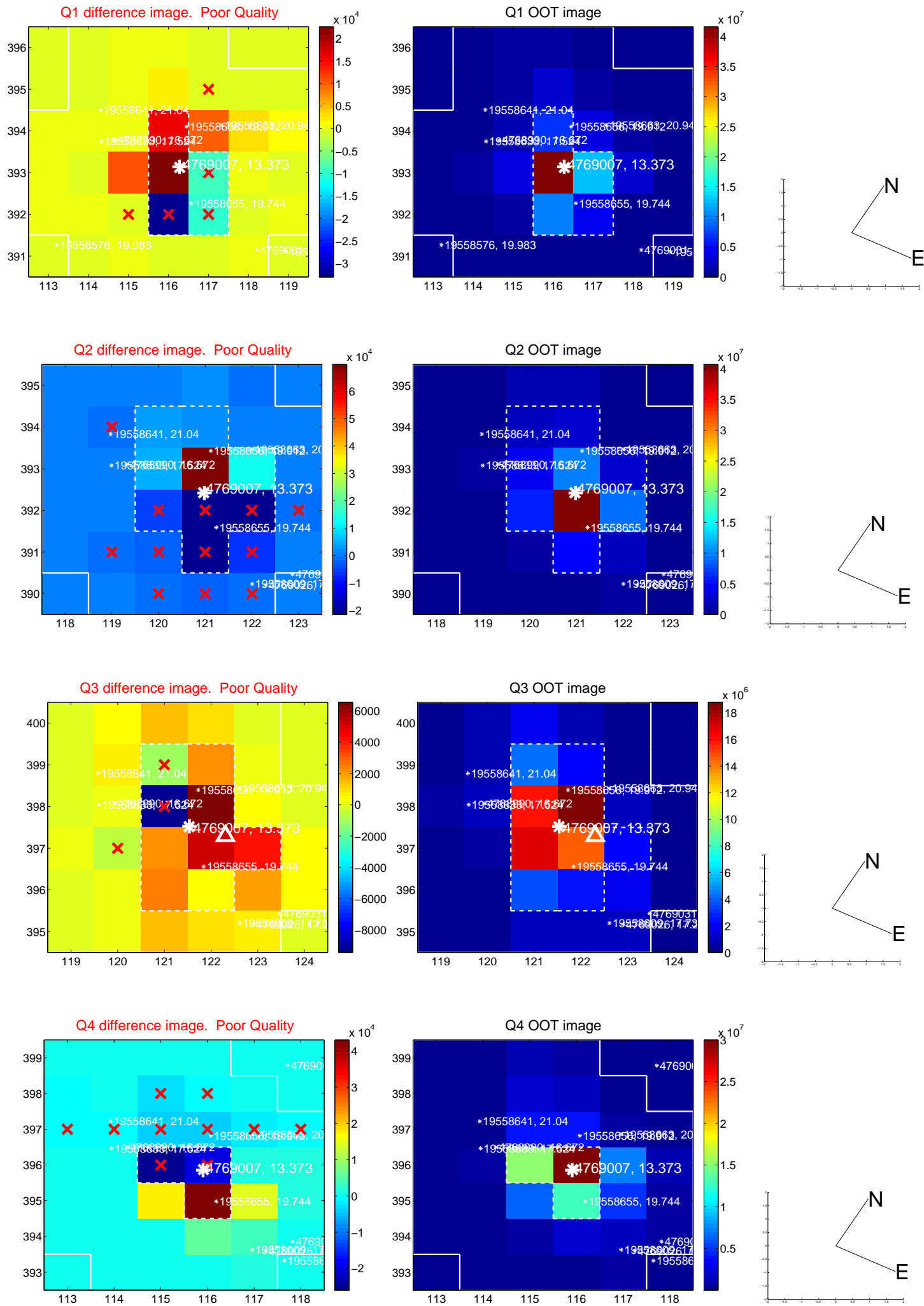
The direct PRF centroid is offset from the target star catalog position by about 0.08 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.051 ± 0.571	1.84	-0.526 ± 1.116	0.911 ± 0.140
PRF-fit source offset from KIC position	1.103 ± 0.566	1.95	-0.543 ± 1.125	0.961 ± 0.139
photometric centroid source offset	—	—	—	—

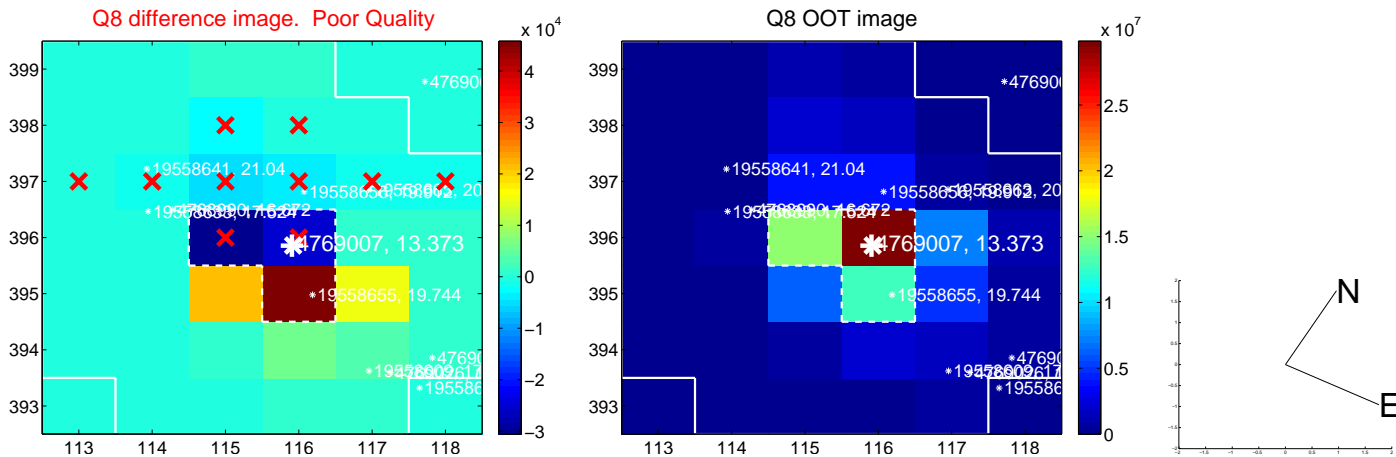
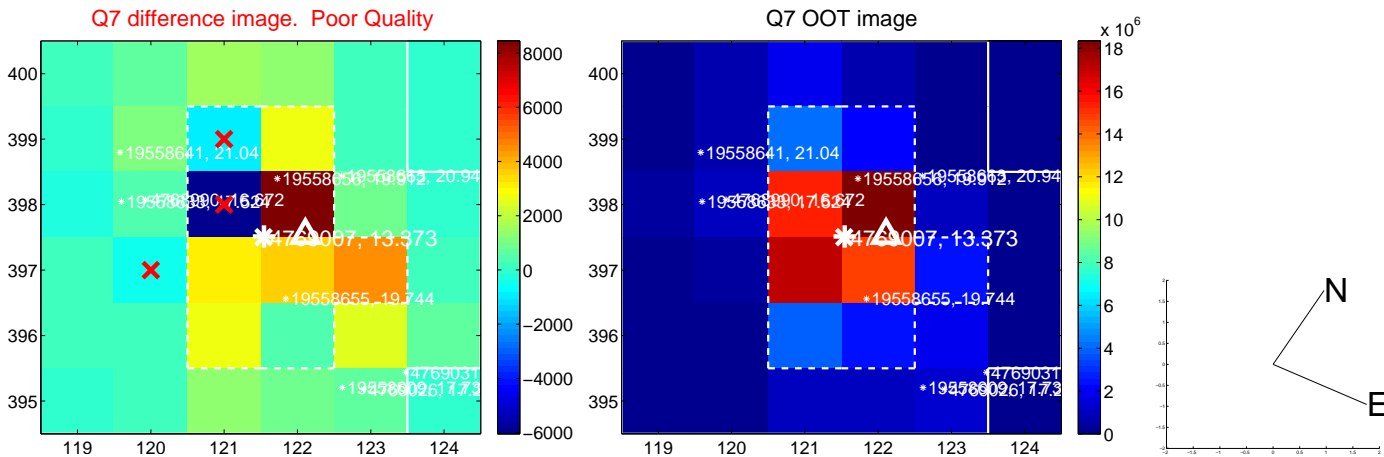
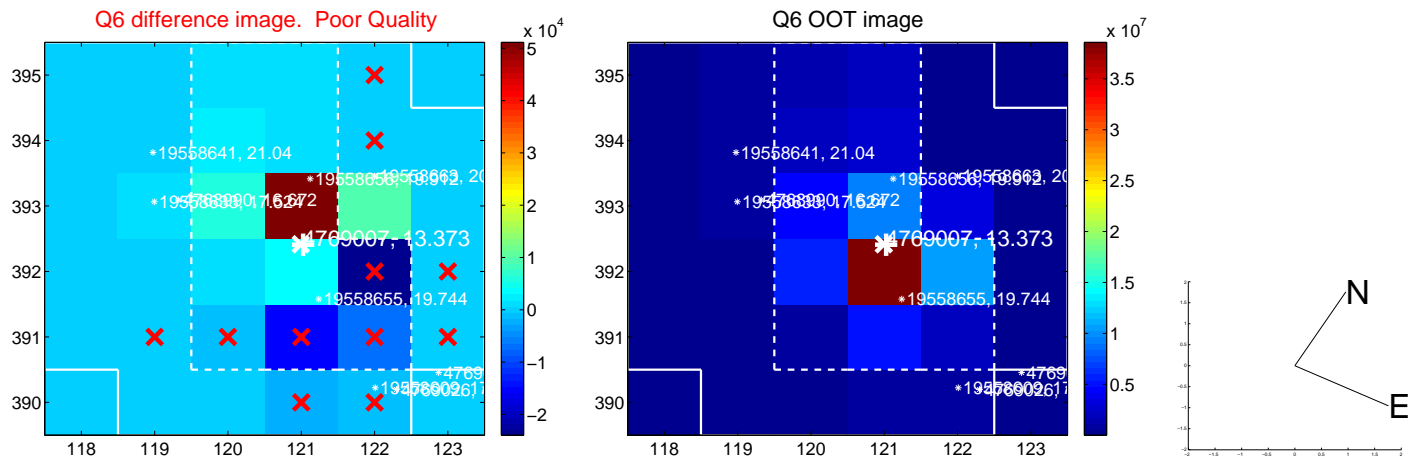
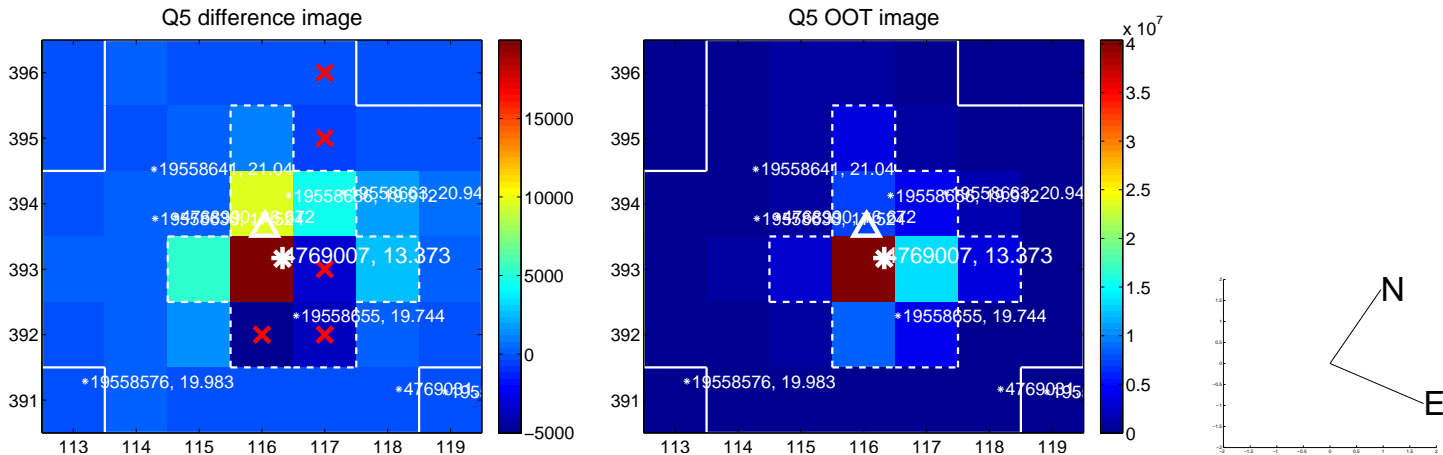


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

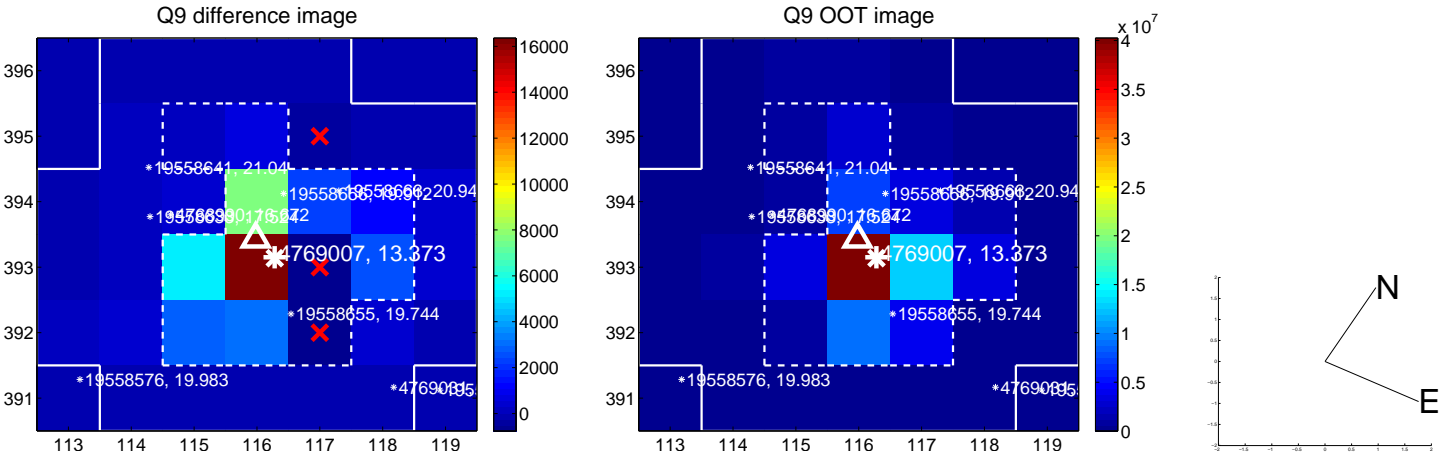
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



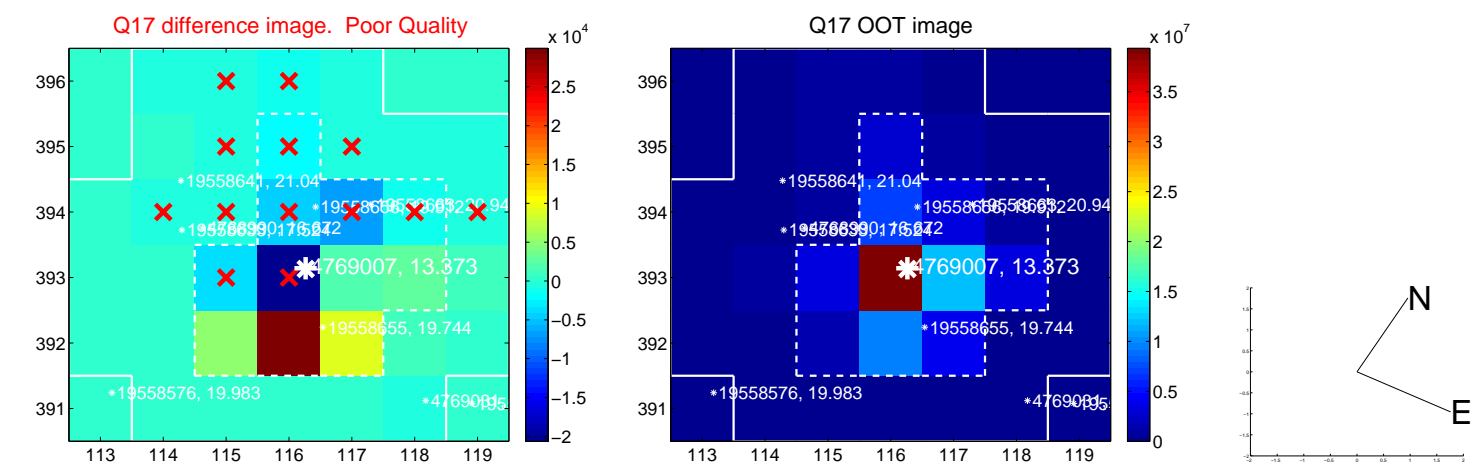
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



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



folded centroid time series figure for this object.

UKIRT Image

Declination

