

KIC 008748262

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})
008748262-01	OBS	No	378.554966	173.126601	261.2	27.526	8.2	6.2	0.92	6038	1.56	0.97

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008748262-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE—LPP_DV—ALL_TRANS_CHASES—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.

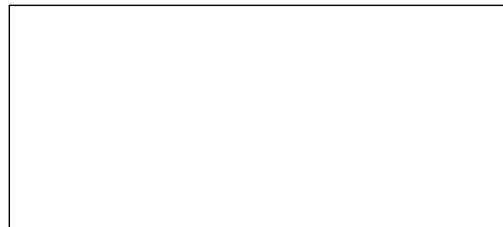
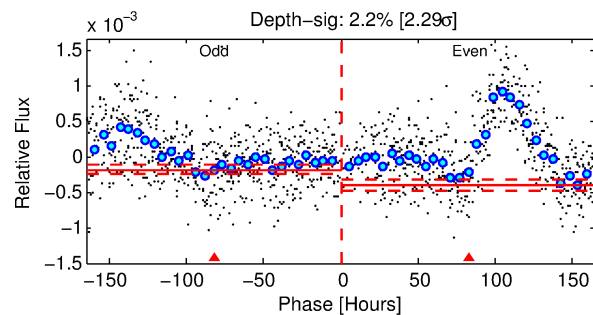
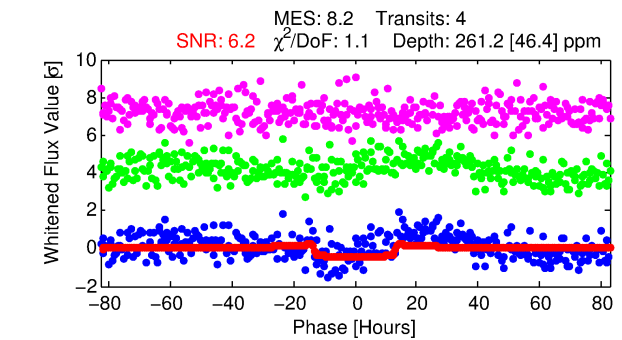
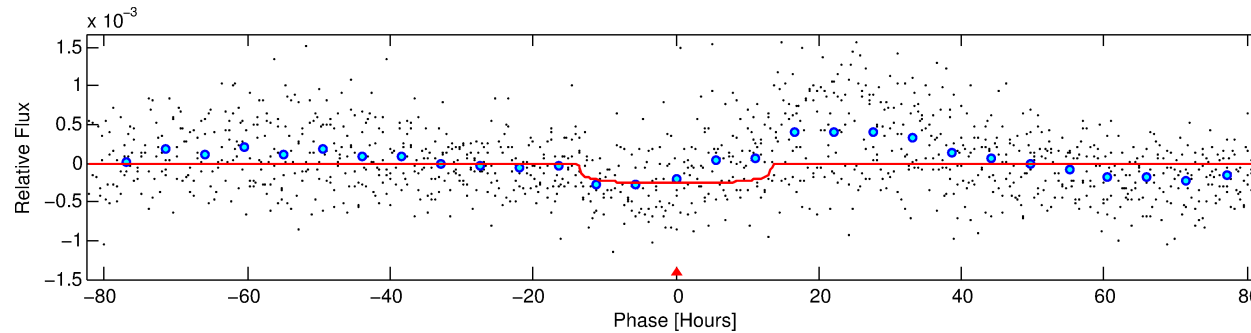
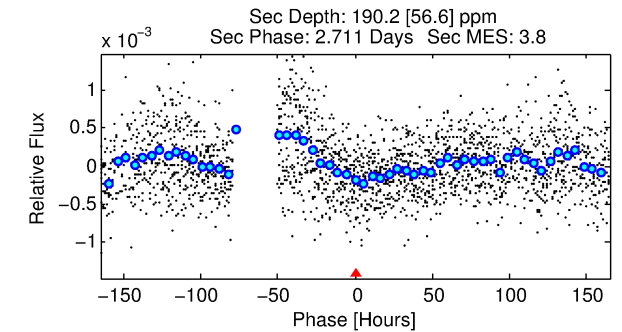
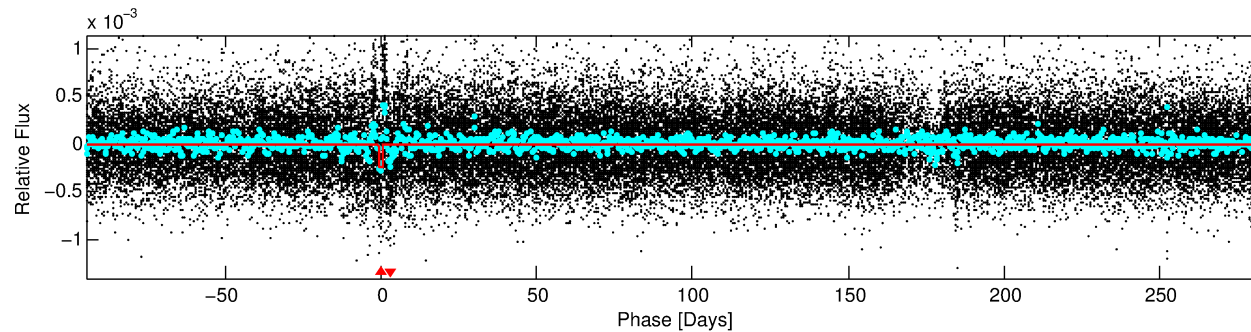
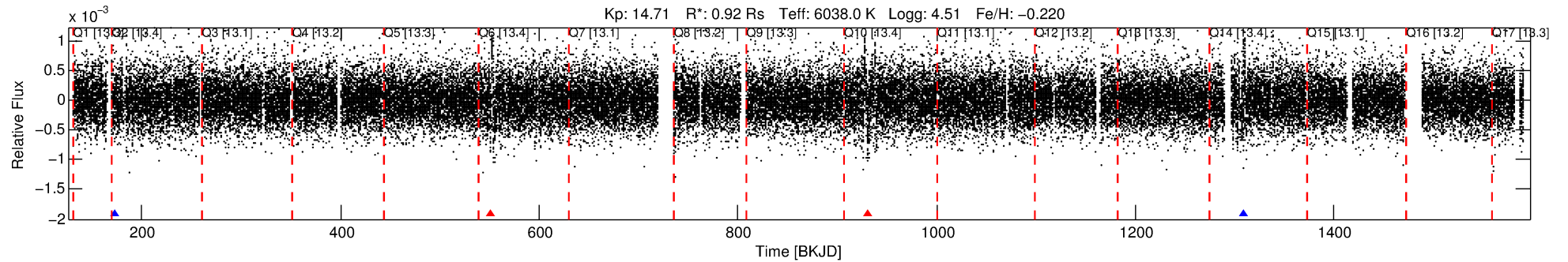
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008748262-01

No Significant Match Found

DV One-Page Summary

KIC: 8748262 Candidate: 1 of 1 Period: 378.555 d



DV Fit Results:

Period = 378.55497 [0.01966] d
Epoch = 173.1266 [0.0349] BKJD
Rp/R* = 0.0155 [0.0069]
a/R* = 85.11 [179.99]
b = 0.61 [2.18]
Seff = 0.97 [0.37]
Teq = 253 [24] K
Rp = 1.56 [0.84] Re
a = 1.0239 [0.2584] AU
Ag = 45089.28 [45561.01] [0.99σ]
Teffp = 5695 [1351] K [4.03σ]

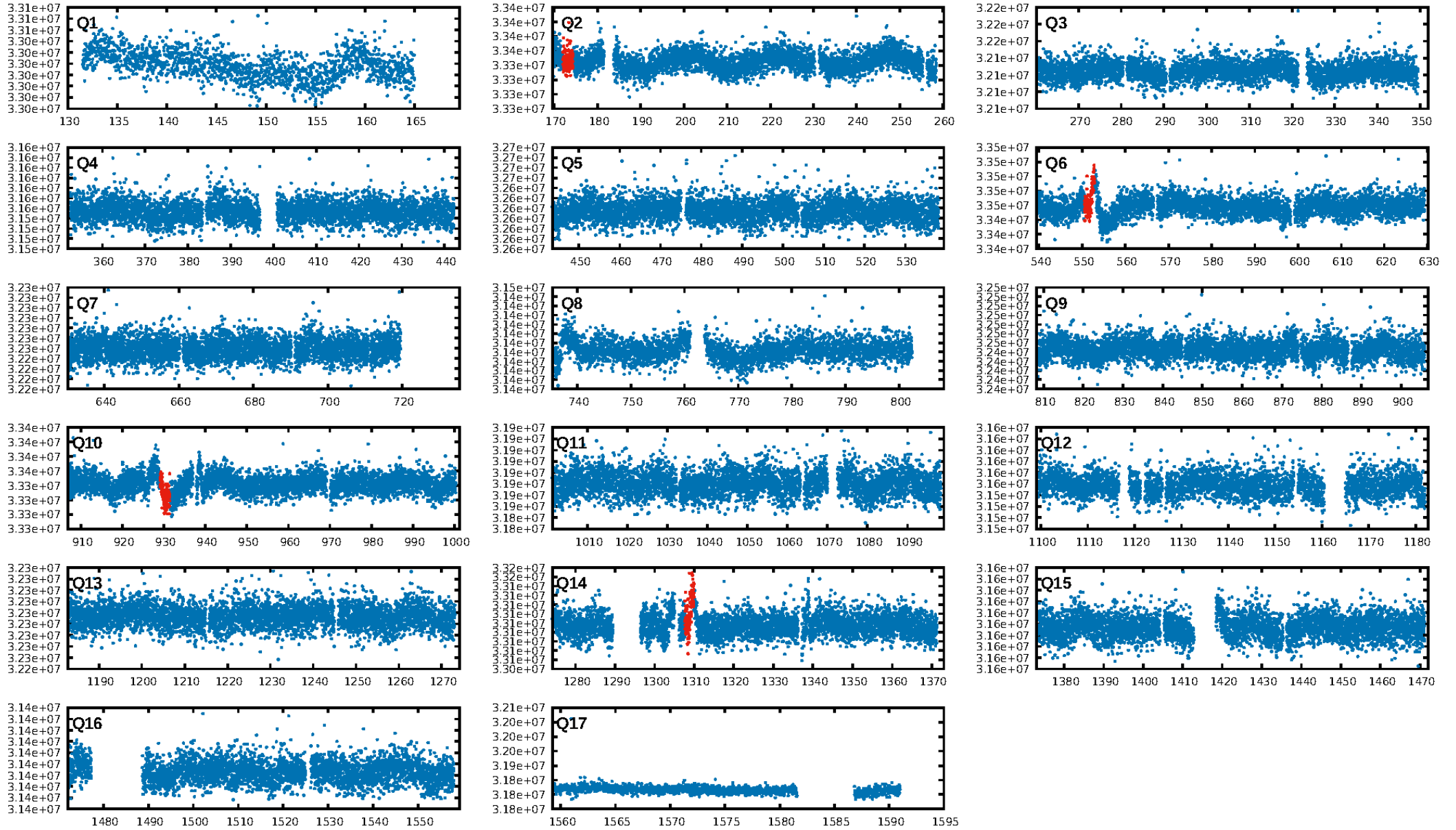
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 6.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 2.75e-10
RollingBand-fgt: 0.50 [2/4]
GhostDiagnostic-chr: -4.927
Centroid-sig: 1.2%
Centroid-so: 5.302 arcsec [2.46σ]
OotOffset-rm: N/A
KicOffset-rm: N/A
OotOffset-st: 0/0/0/0 [0]
KicOffset-st: 0/0/0/0 [0]
DiffImageQuality-fgm: N/A
DiffImageOverlap-fno: 1.00 [2/2]

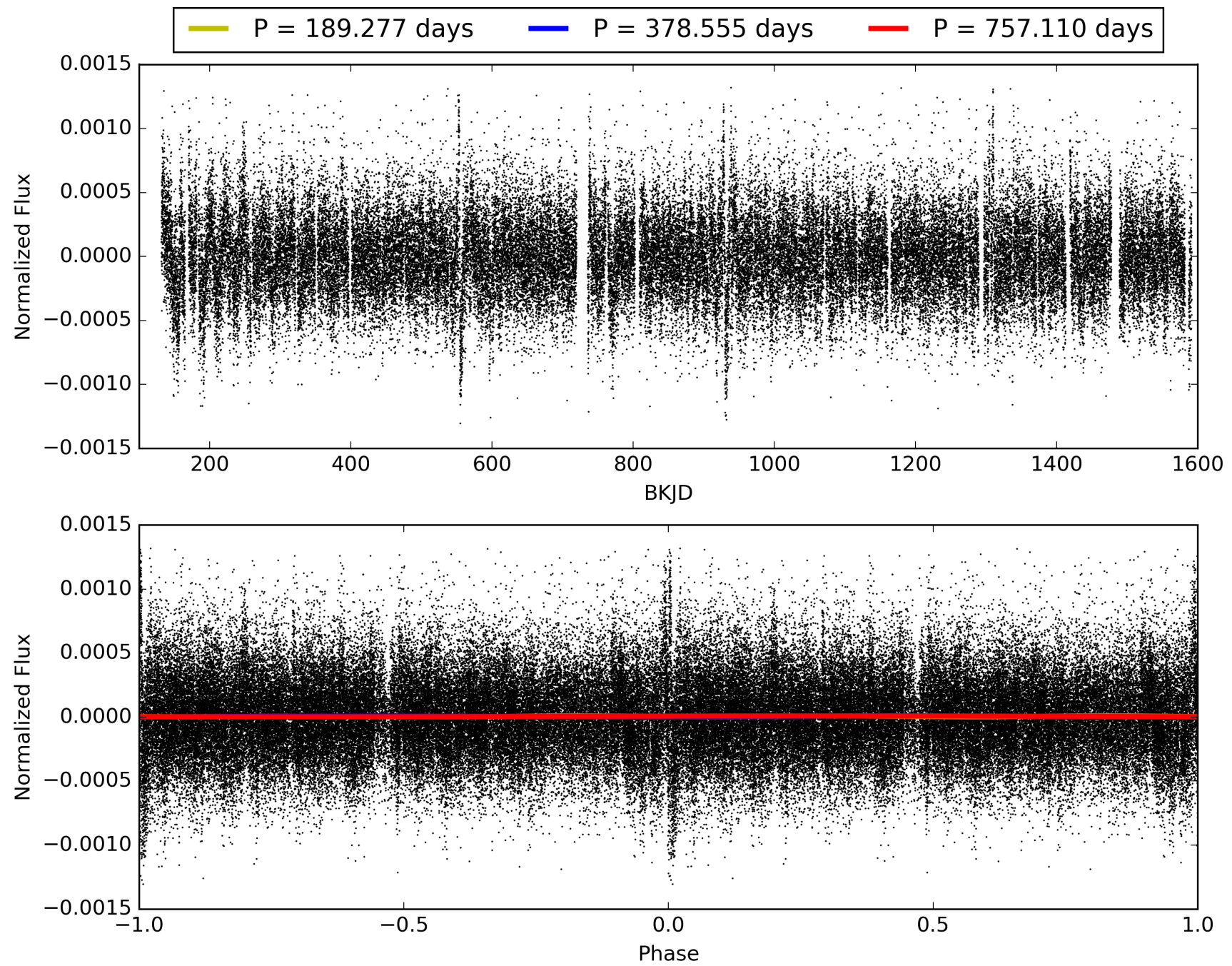
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 15:14:09 Z

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

TCE 008748262-01, PDC Light Curves

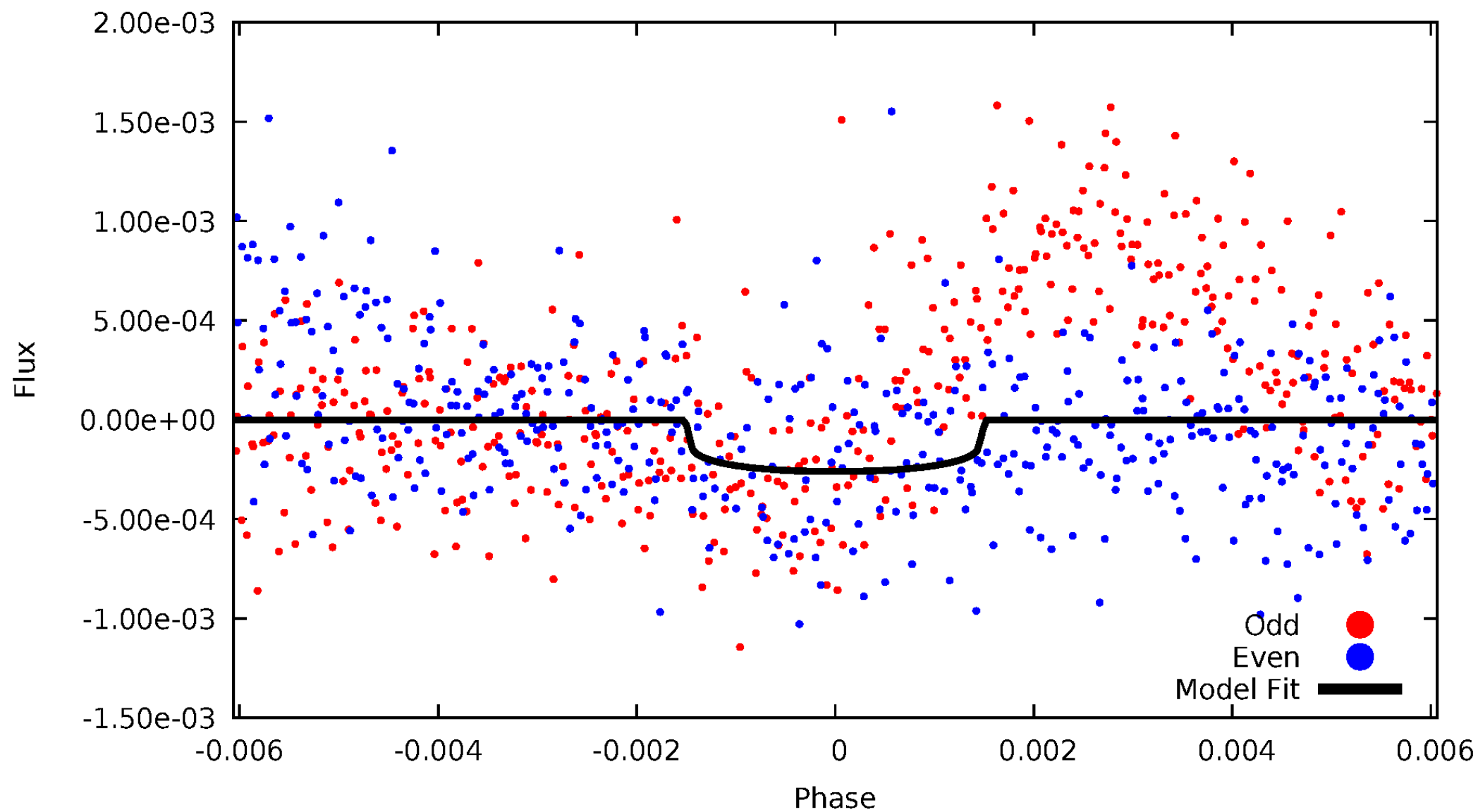


TCE 008748262-01



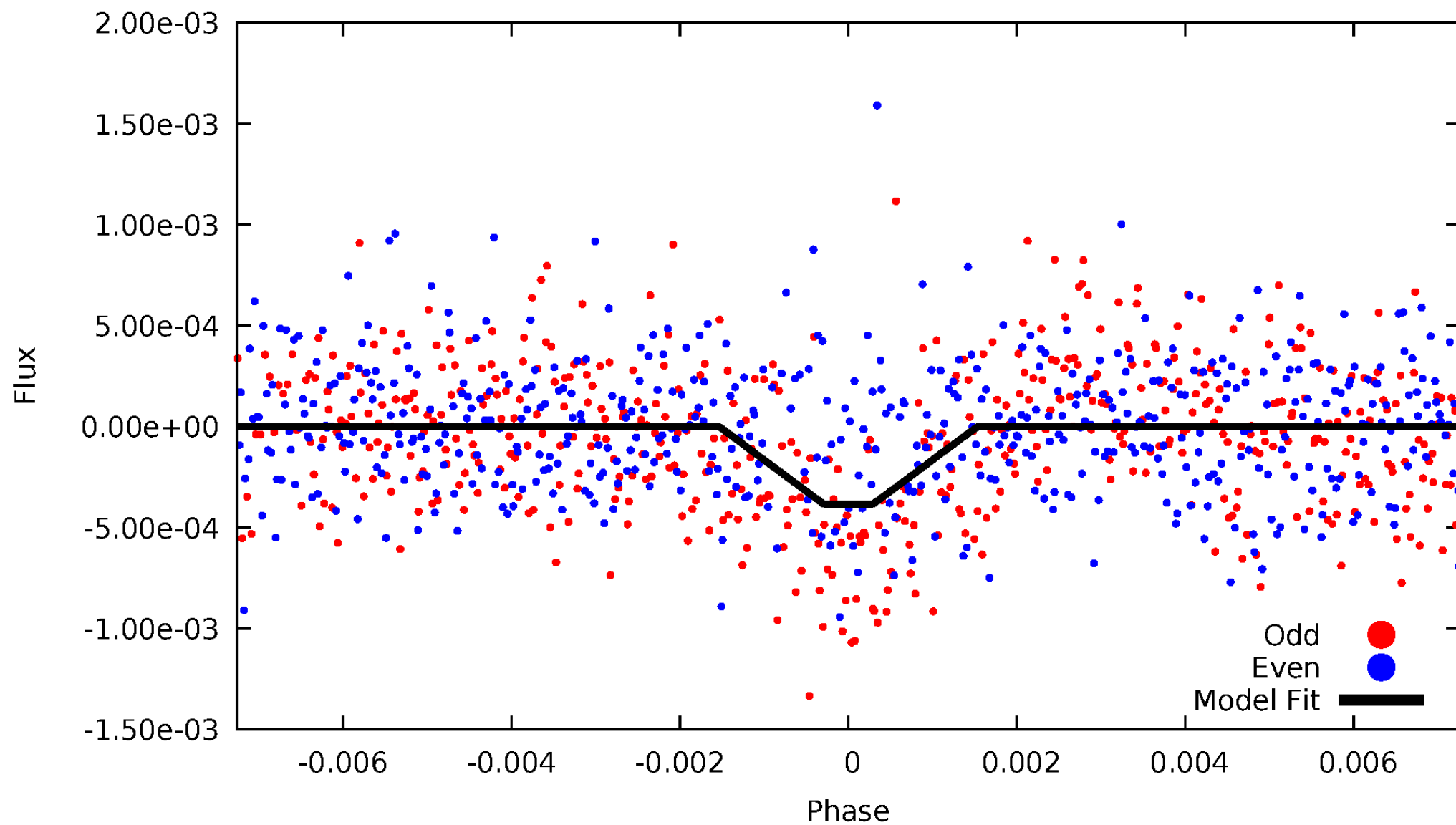
DV Odd/Even

TCE 008748262-01



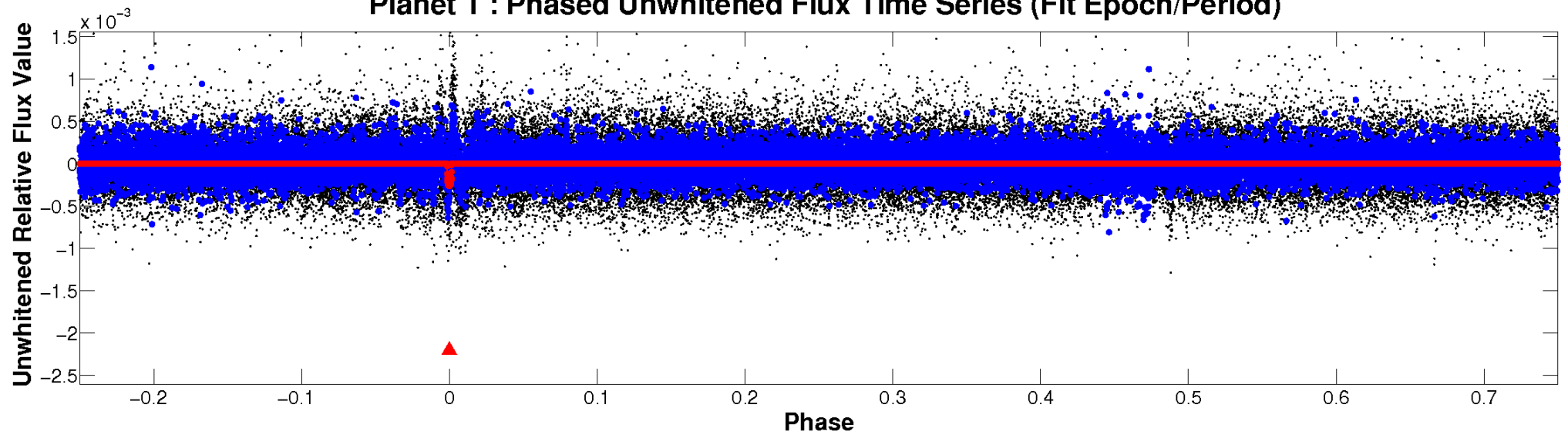
ALT Odd/Even

TCE 008748262-01

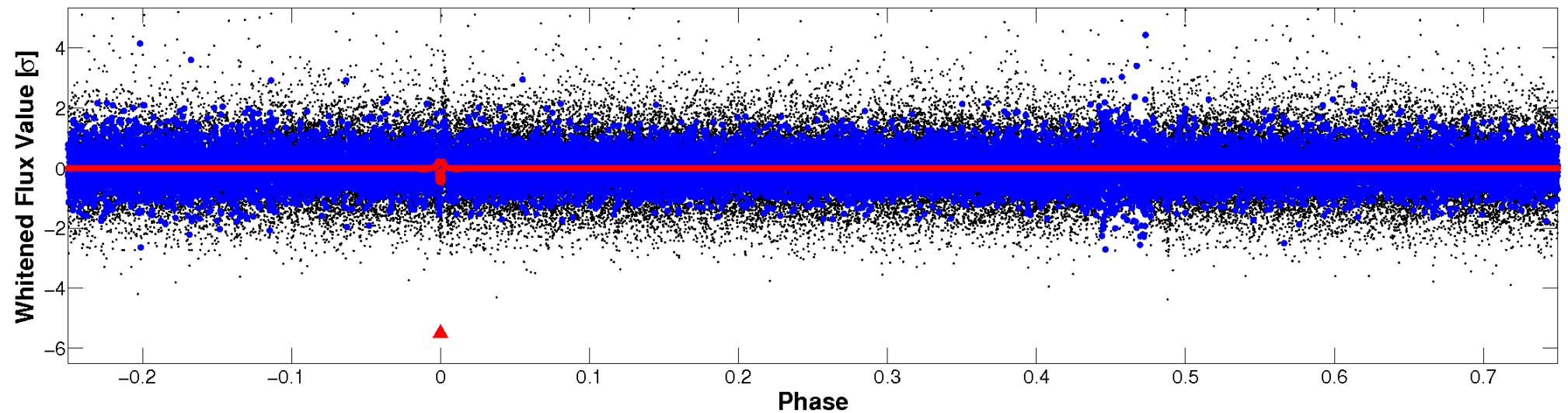


Non-Whitened Vs. Whitened Light Curve

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

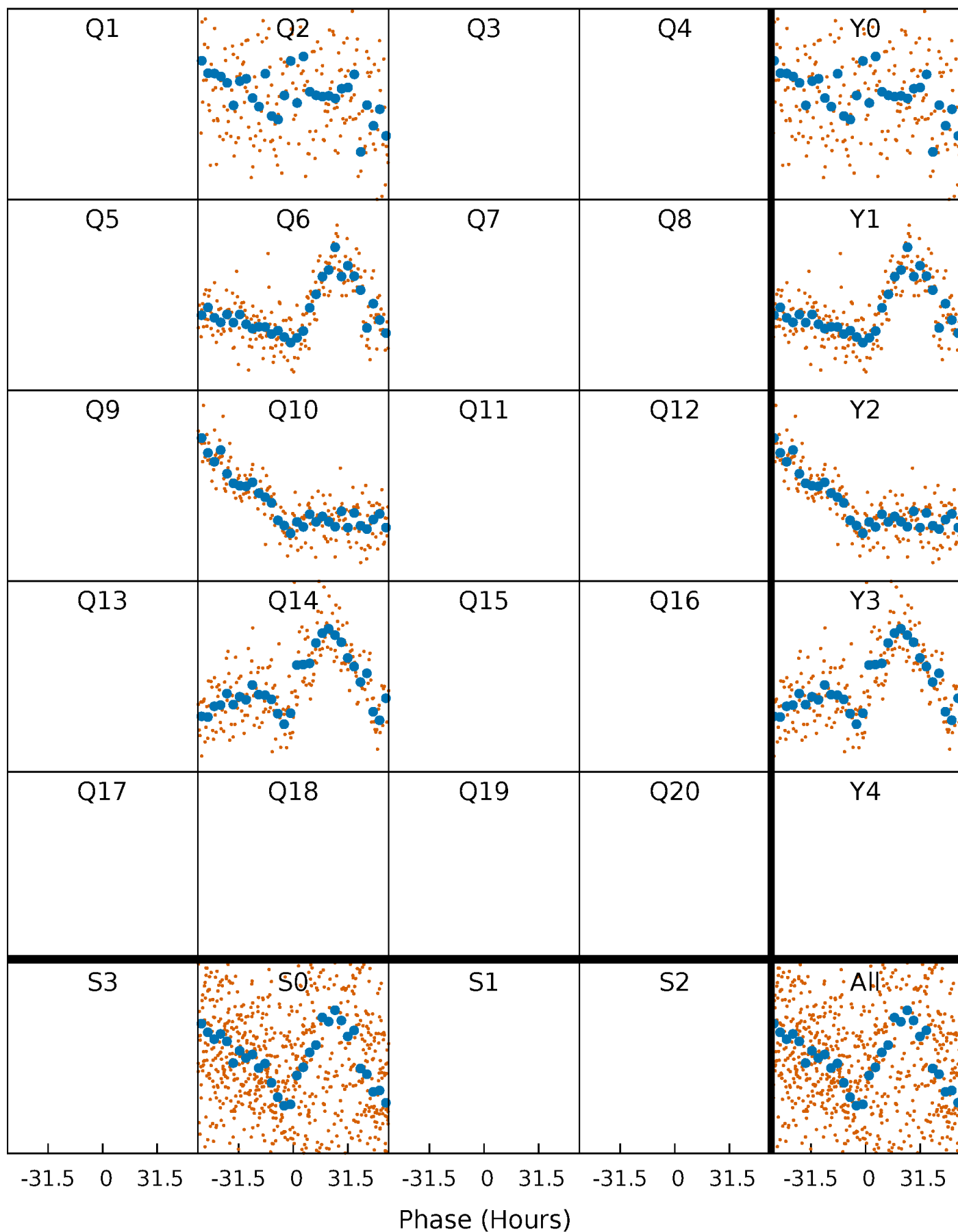


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



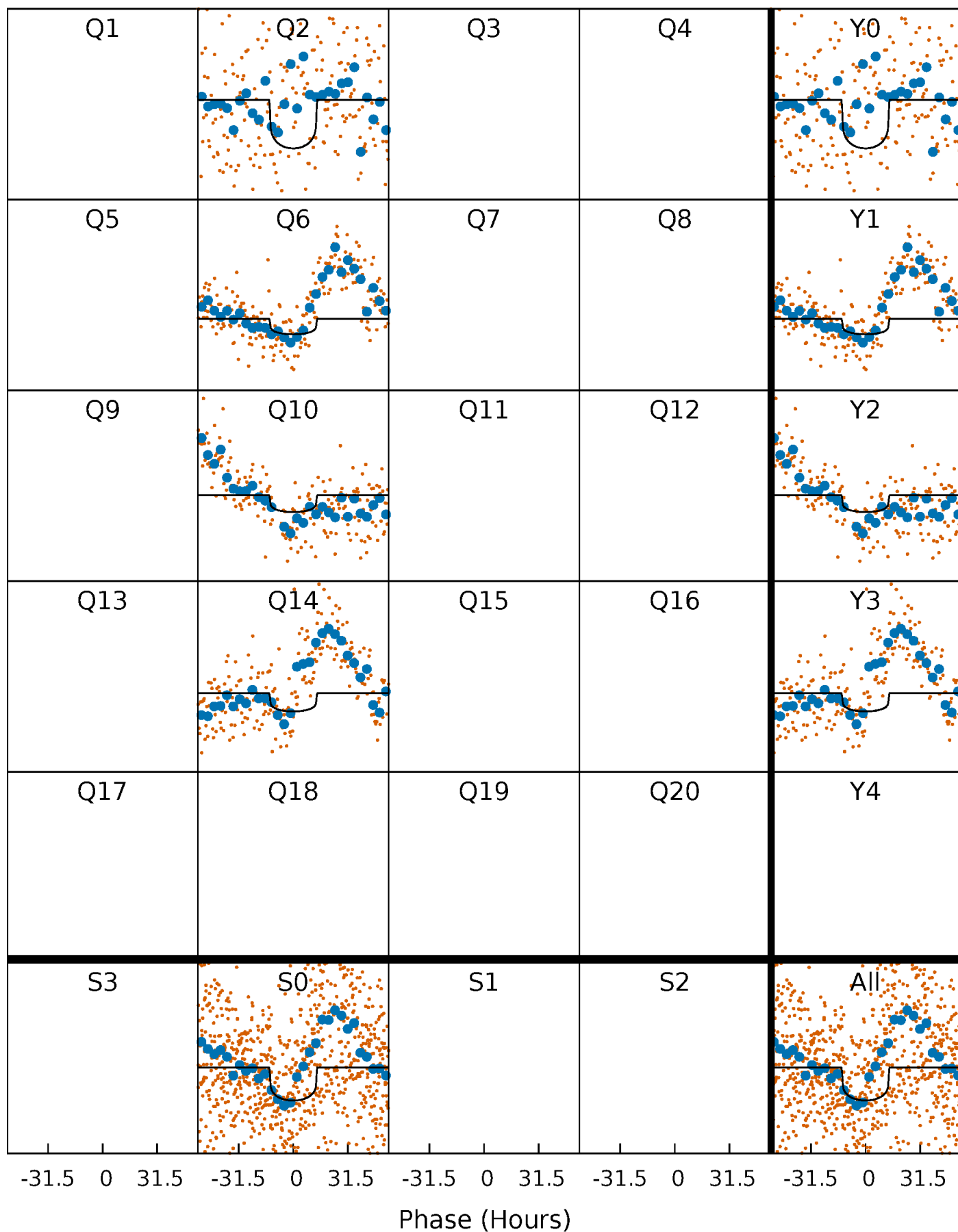
PDC Quarter-Phased Transit Curves

TCE 008748262-01 P=378.554966 Days $T_0=173.126601$ (BKJD)



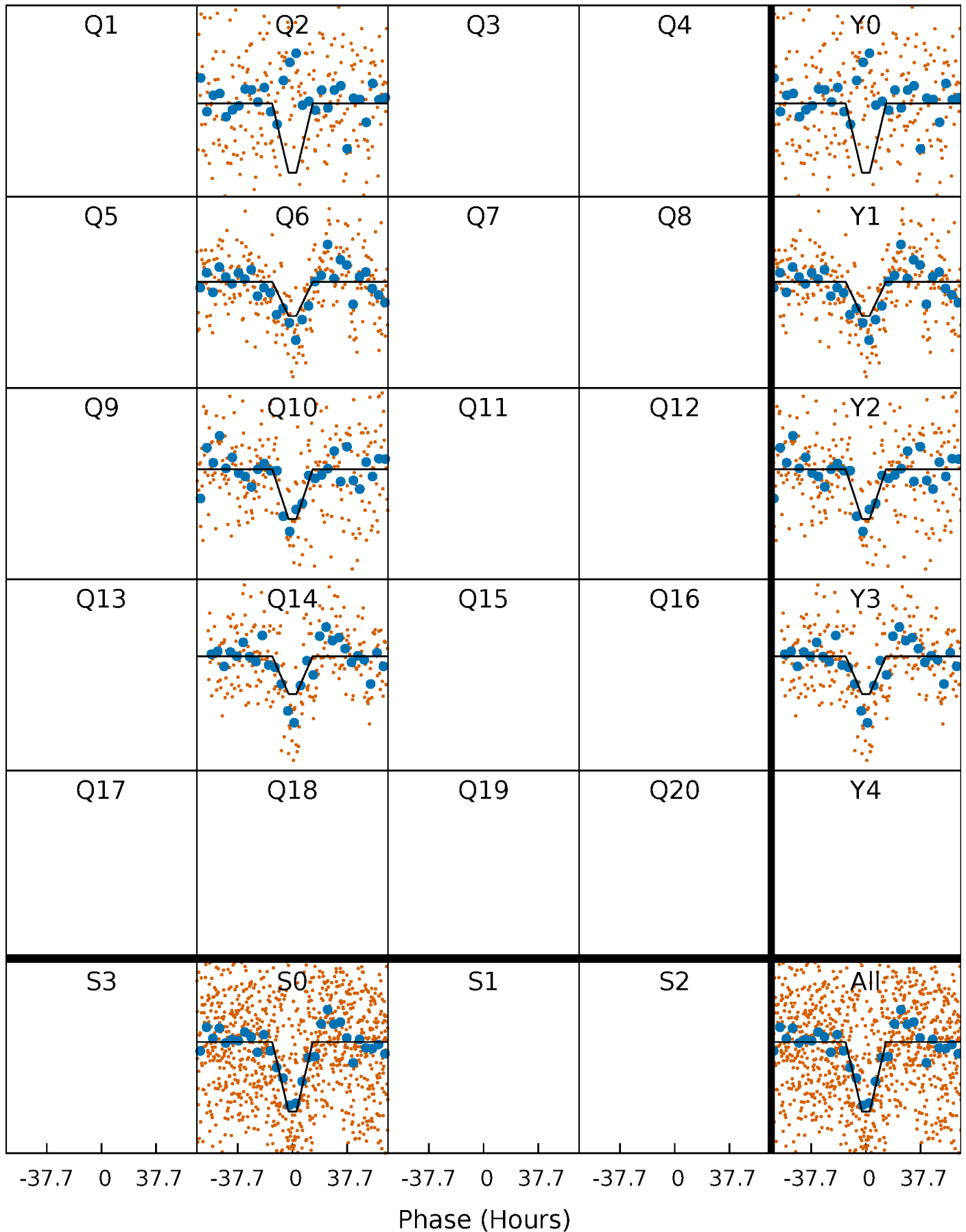
DV Quarter-Phased Transit Curves

TCE 008748262-01 P=378.554966 Days $T_0=173.126601$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

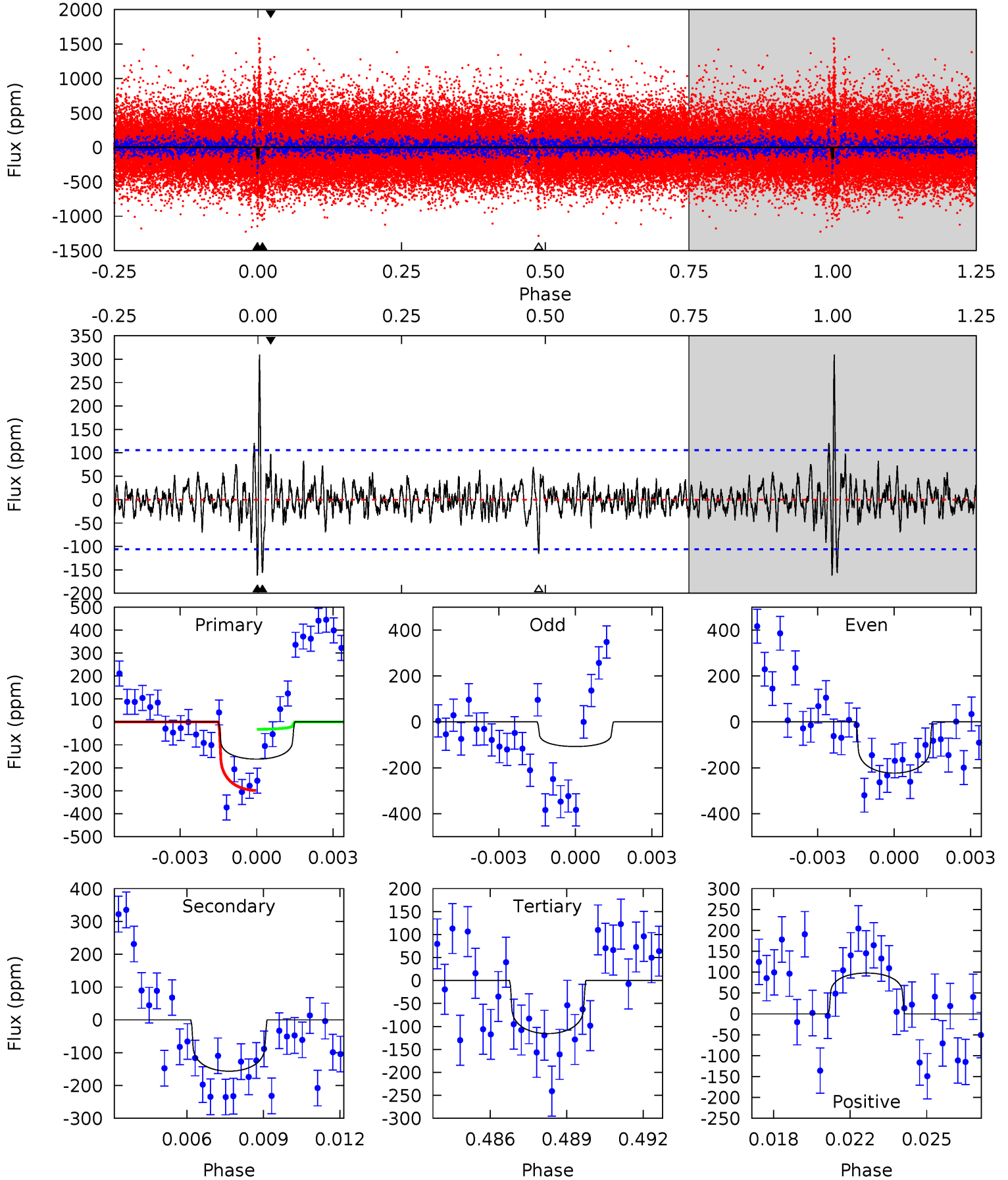
TCE 008748262-01 P=378.463587 Days $T_0=173.212159$ (BKJD)



DV Model-Shift Uniqueness Test

008748262-01, P = 378.554966 Days, E = 173.126601 Days

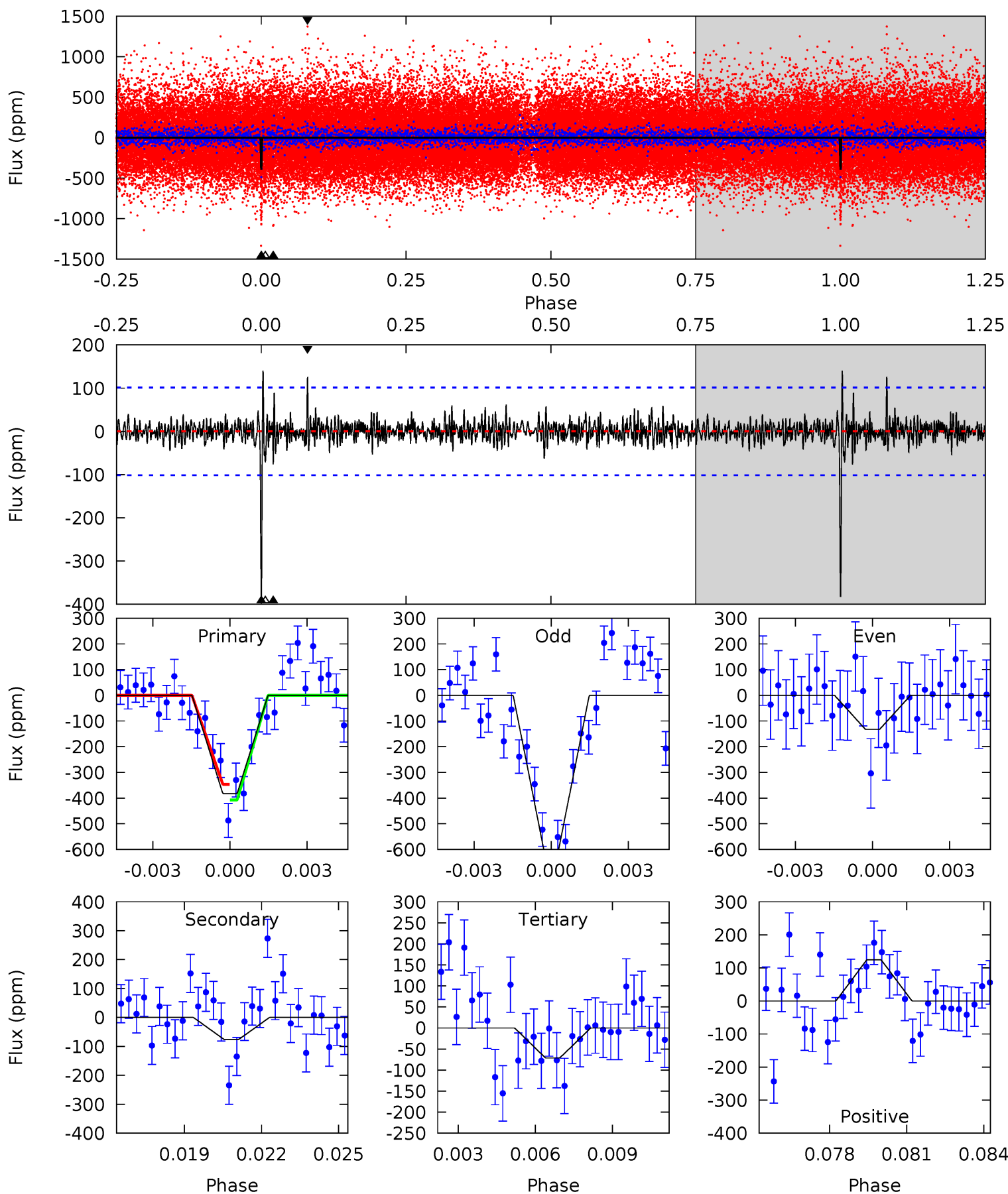
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.04	7.75	5.73	4.85	5.25	2.96	1.39	2.31	3.19	2.02	2.90	2.86	1.47	0.66	6.62



Alt Model-Shift Uniqueness Test

008748262-01, P = 378.463587 Days, E = 173.212159 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
19.7	3.94	3.67	6.42	5.25	2.96	0.97	16.1	13.3	0.27	-2.48	12.2	0.73	0.27	1.57



Stellar Parameters For KIC 008748262

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6038^{+163}_{-181}	$4.508^{+0.050}_{-0.200}$	$-0.220^{+0.300}_{-0.300}$	$0.922^{+0.277}_{-0.092}$	$1.000^{+0.130}_{-0.130}$	$1.795^{+0.471}_{-0.949}$
	+3%/-3%	+1%/-4%	+136%/-136%	+30%/-10%	+13%/-13%	+26%/-53%
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 008748262-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-156 ± 20	$1.72^{+0.77}_{-0.77}$	363^{+25}_{-18}	5347^{+1845}_{-725}	29855^{+70471}_{-15865}
Alt.	-76 ± 19	$2.09^{+0.79}_{-0.82}$	362^{+25}_{-17}	4253^{+897}_{-483}	9684^{+16151}_{-4787}

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

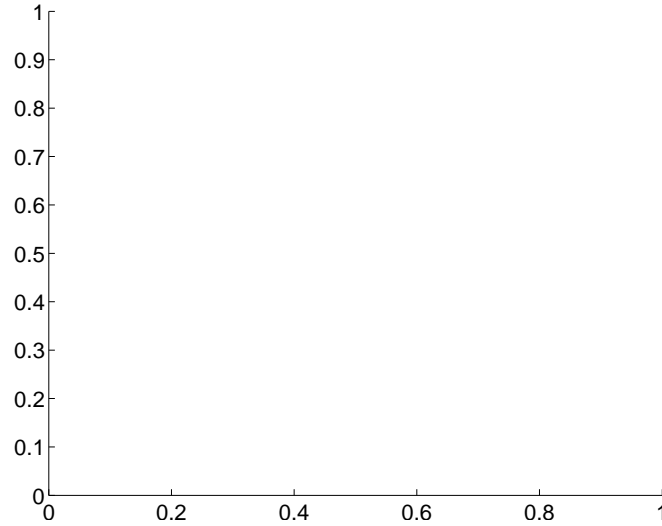
Supplemental centroid analysis for 008748262-01. Kepler magnitude: 14.71. Transit SNR 6.18

There are 0 quarters with good PRF difference image offsets

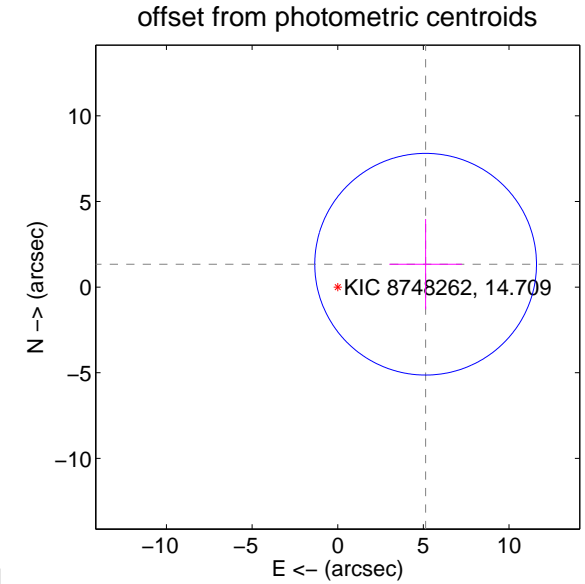
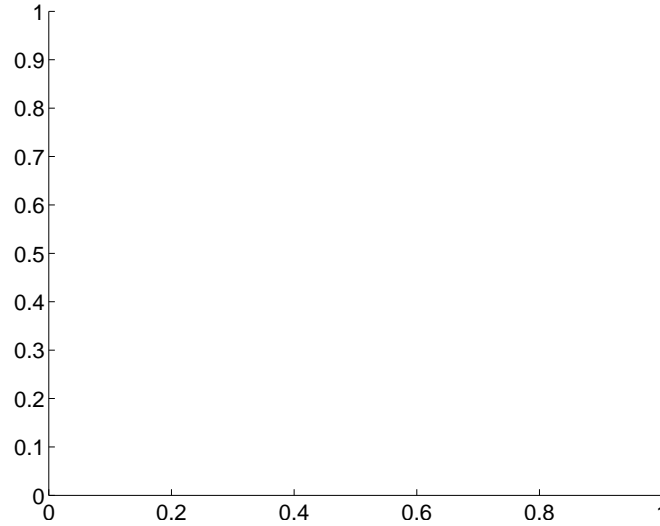
The direct PRF centroid is offset from the target star catalog position by about NaN arcsec

	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	5.30 ± 2.16	2.46	-5.13 ± 2.12	1.34 ± 2.64

There is no PRF-fit offset from OOT-fit

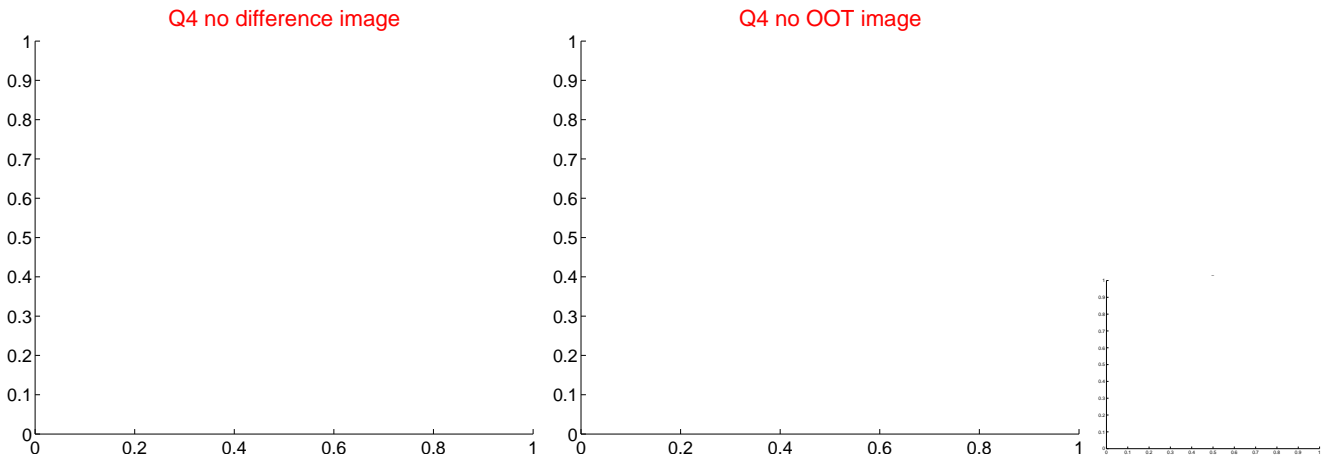
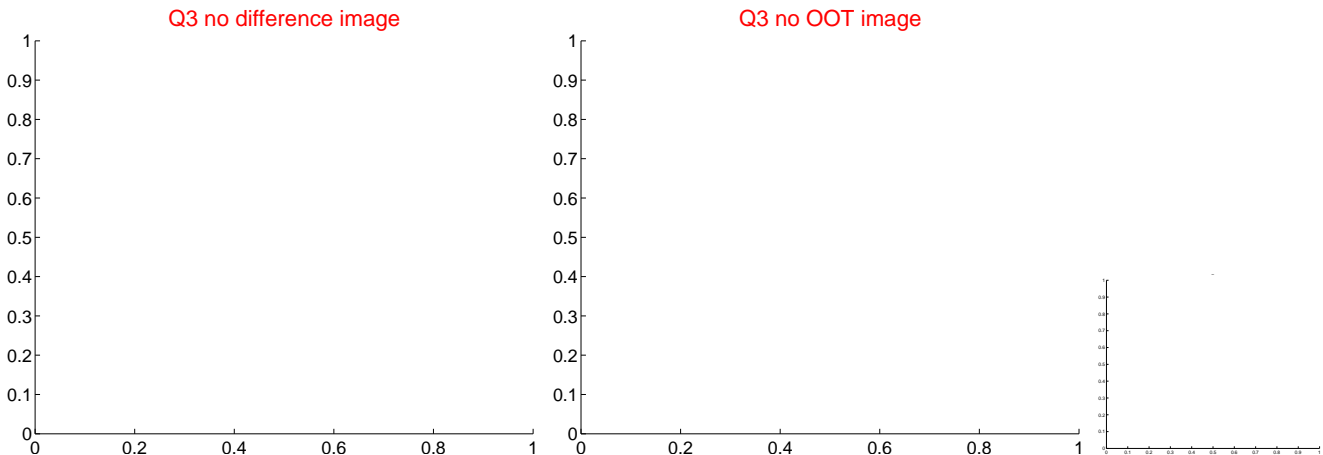
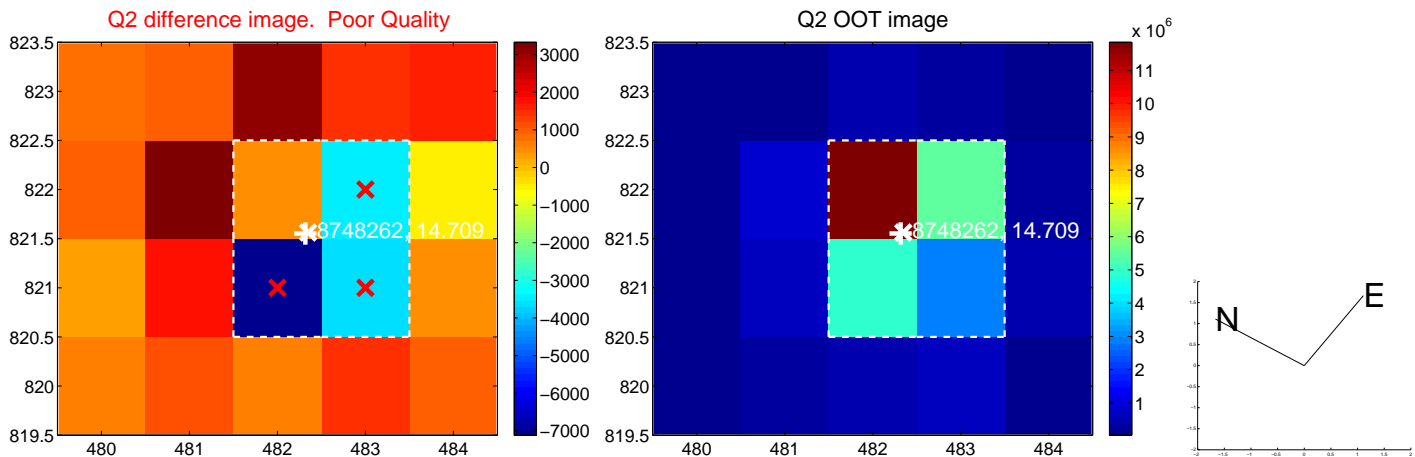


There is no PRF-fit offset from KIC

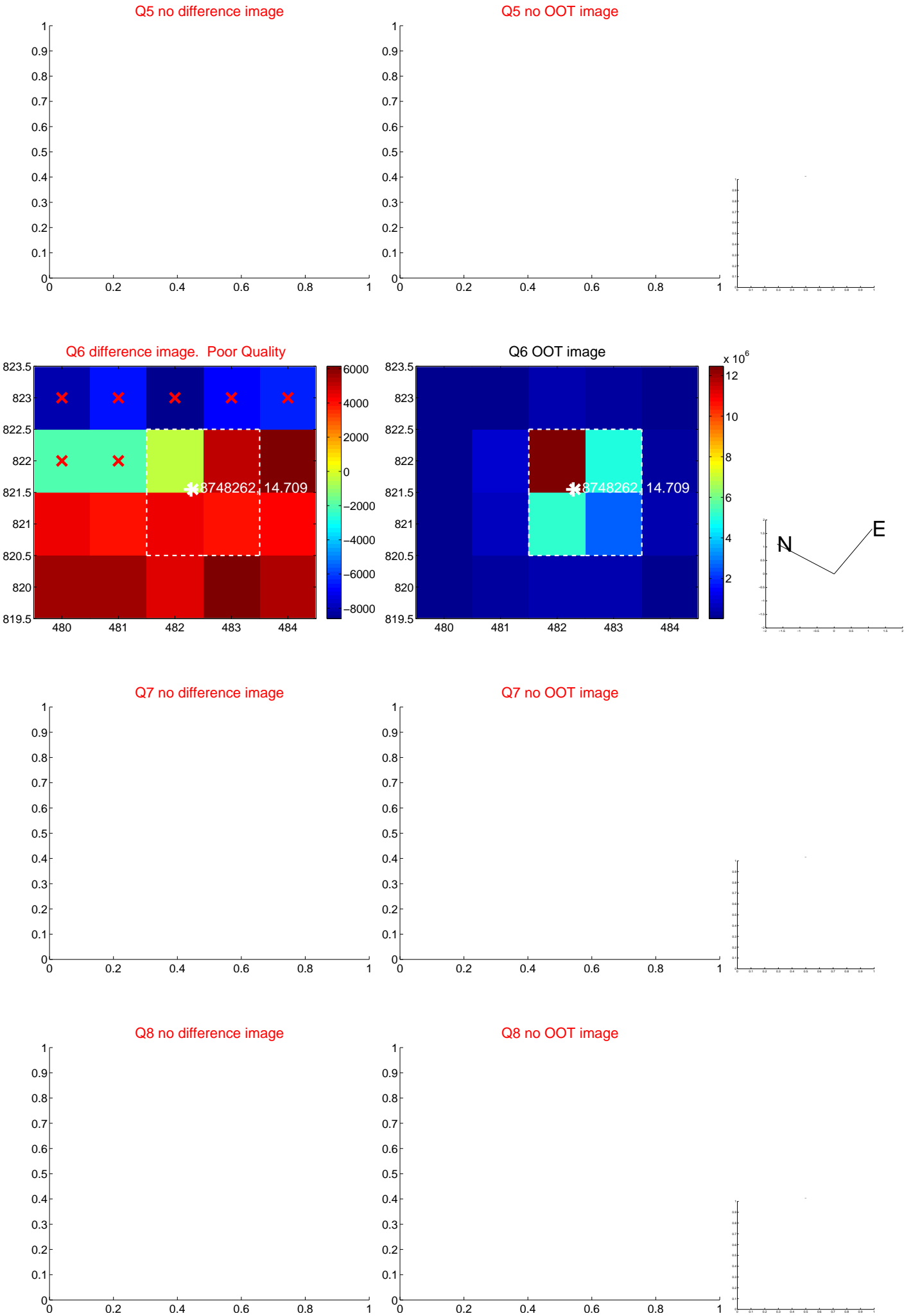


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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



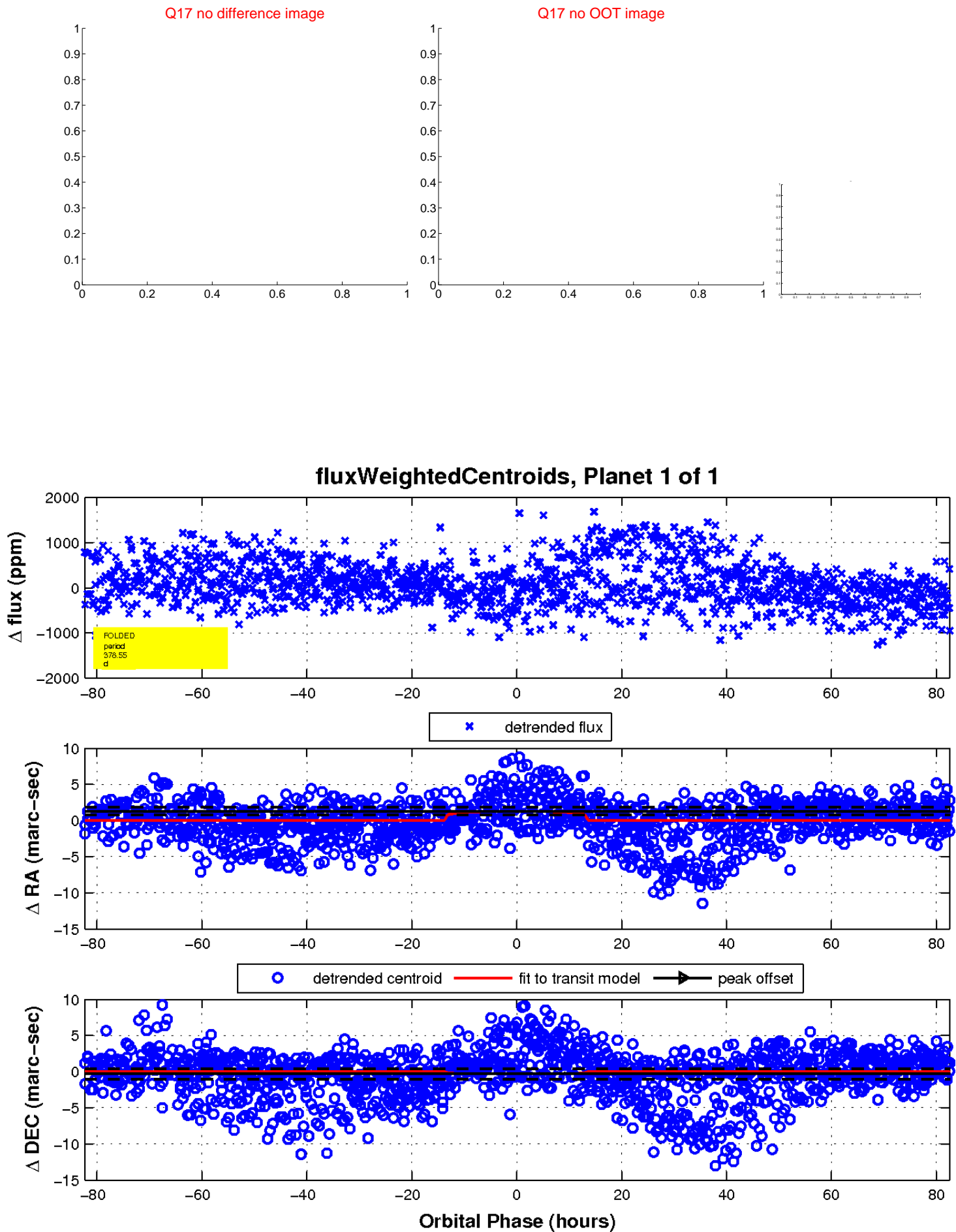
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

