

KIC 008229305

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})
008229305-01	OBS	No	374.458576	262.181087	2034.2	58.077	11.4	16.1	0.96	6137	6.80	1.11

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008229305-01	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.

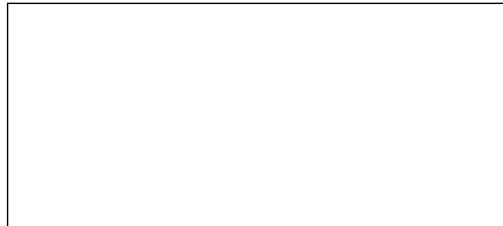
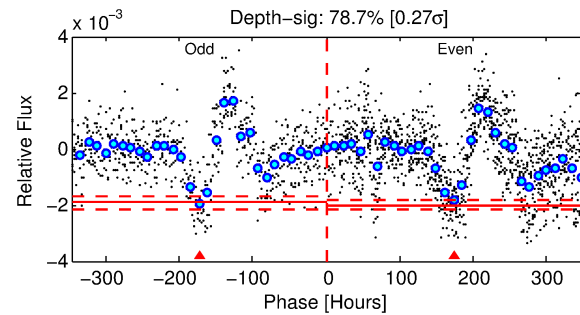
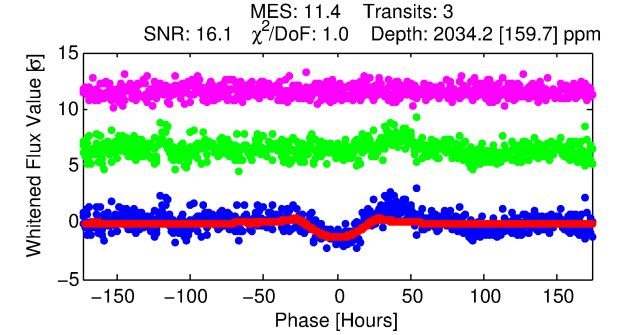
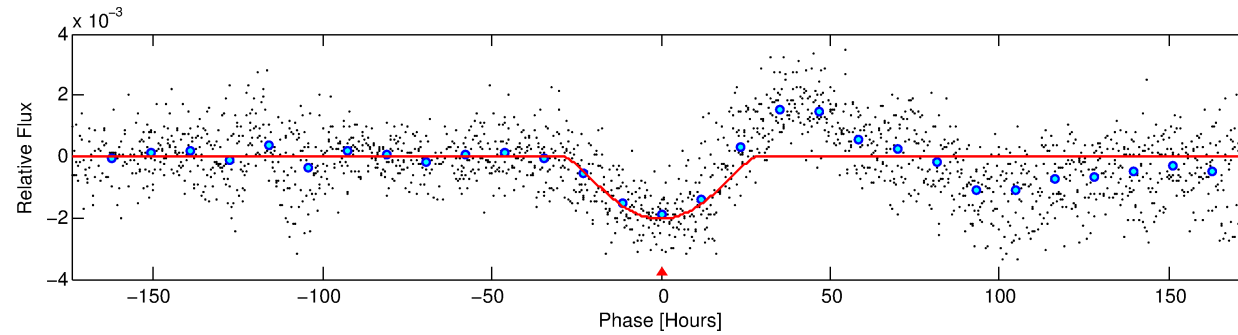
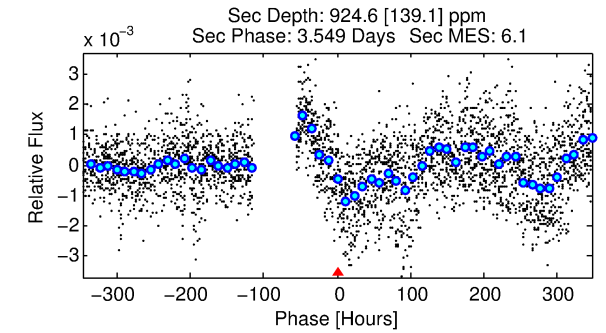
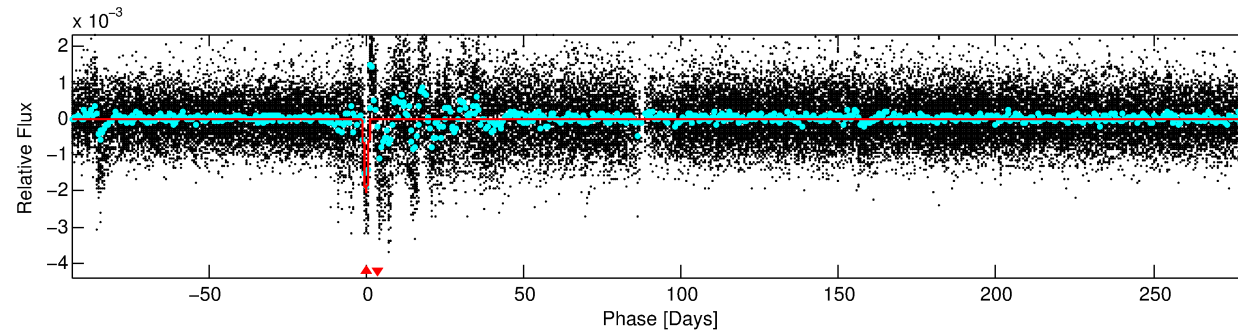
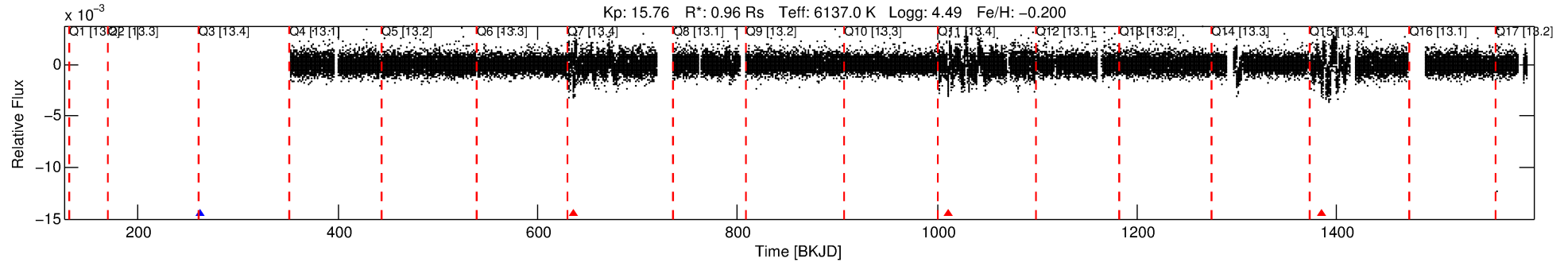
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008229305-01

No Significant Match Found

DV One-Page Summary

KIC: 8229305 Candidate: 1 of 1 Period: 374.459 d



DV Fit Results:

Period = 374.45858 [0.04806] d
Epoch = 262.1811 [0.0980] BKJD
Rp/R* = 0.0647 [0.0537]
a/R* = 20.51 [5.27]
b = 0.98 [0.09]
Seff = 1.11 [0.47]
Teq = 262 [28] K
Rp = 6.80 [6.07] Re
a = 1.0297 [0.2826] AU
Ag = 11668.26 [20001.37] [0.58σ]
Teffp = 4207 [1761] K [2.24σ]

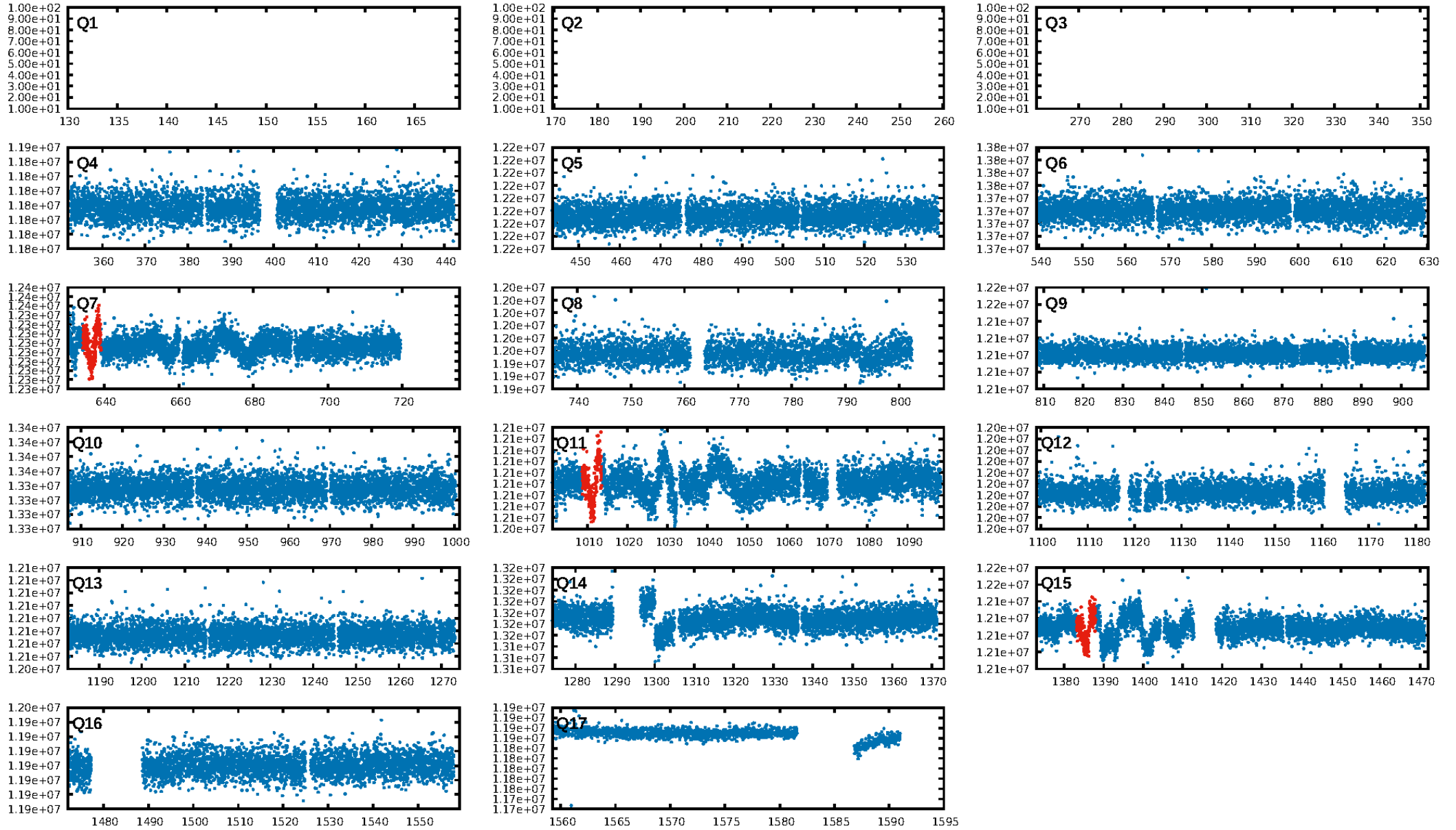
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 69.6%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 6.23e-18
RollingBand-fgt: 0.00 [0/3]
GhostDiagnostic-chr: -3.964
Centroid-sig: 0.2%
Centroid-so: 3.323 arcsec [3.14σ]
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: N/A

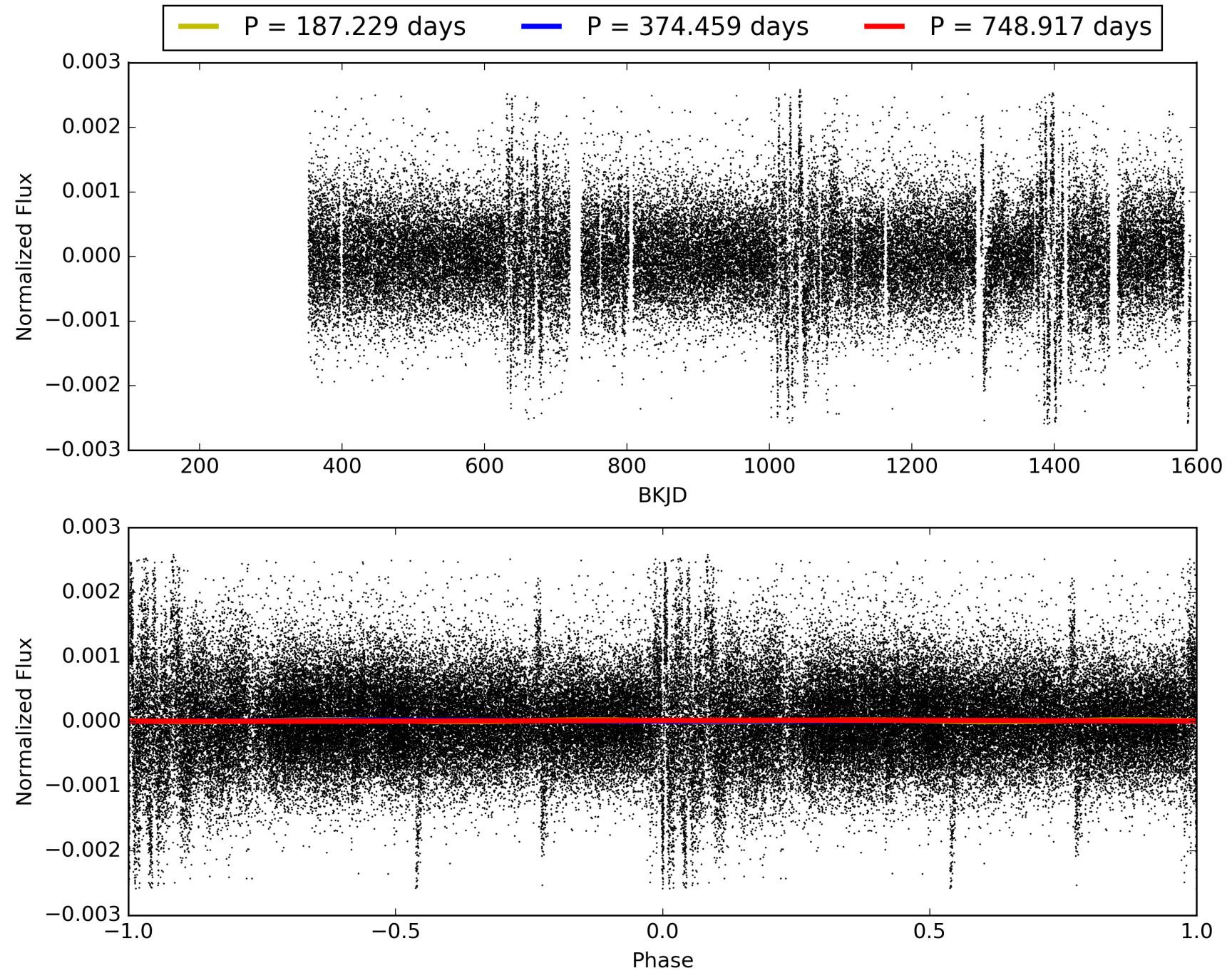
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 14:37:02 Z

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

TCE 008229305-01, PDC Light Curves

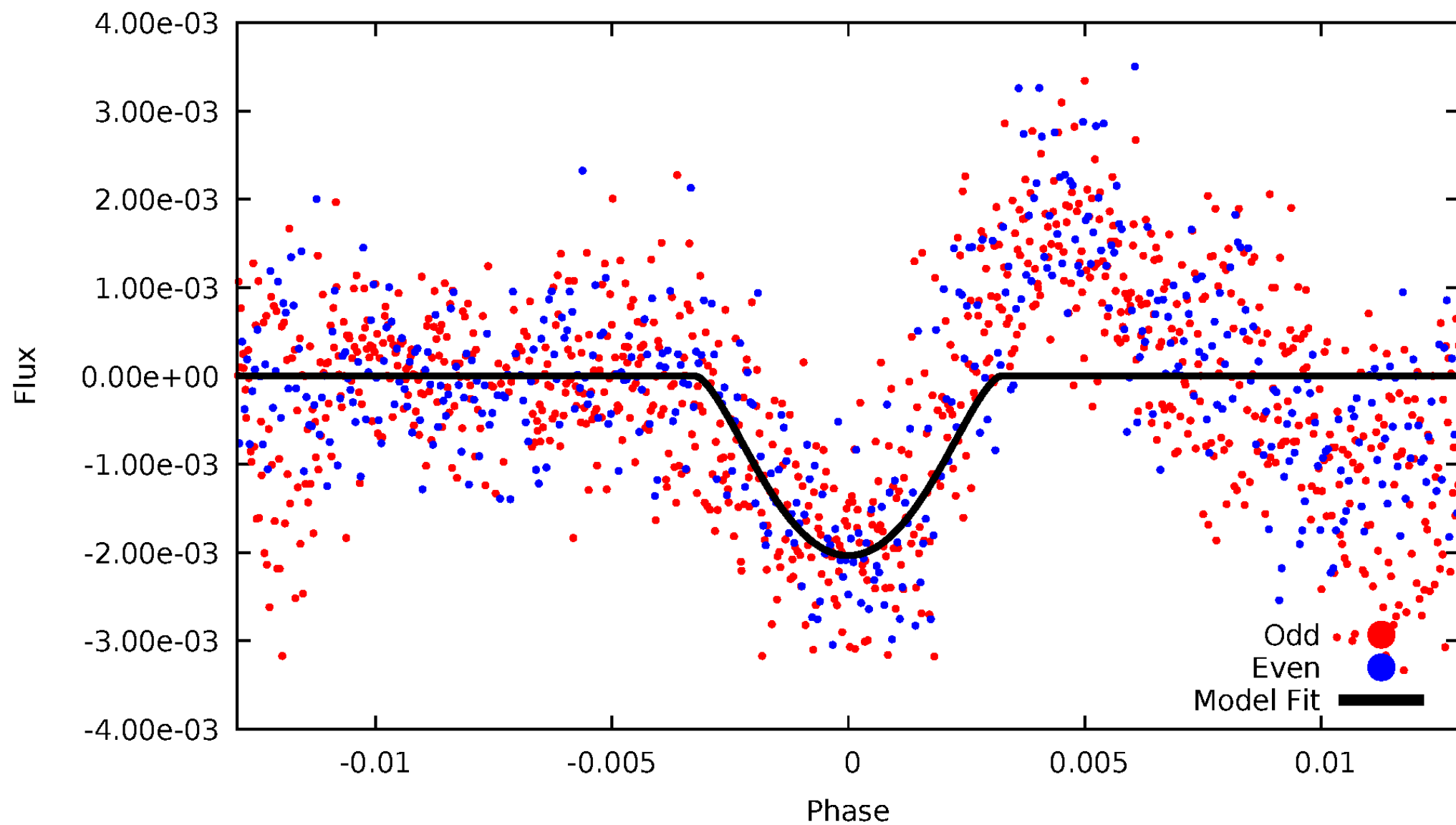


TCE 008229305-01



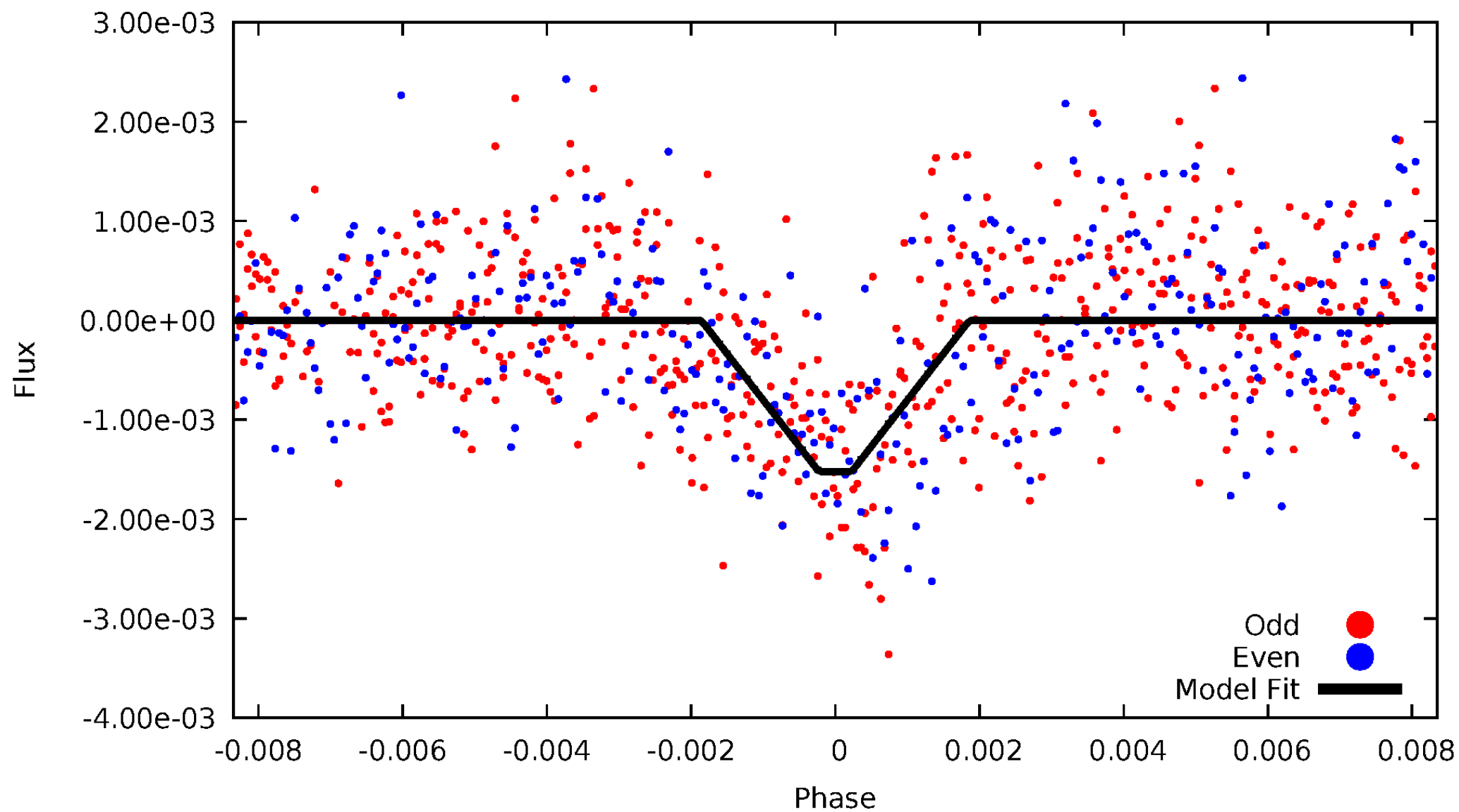
DV Odd/Even

TCE 008229305-01



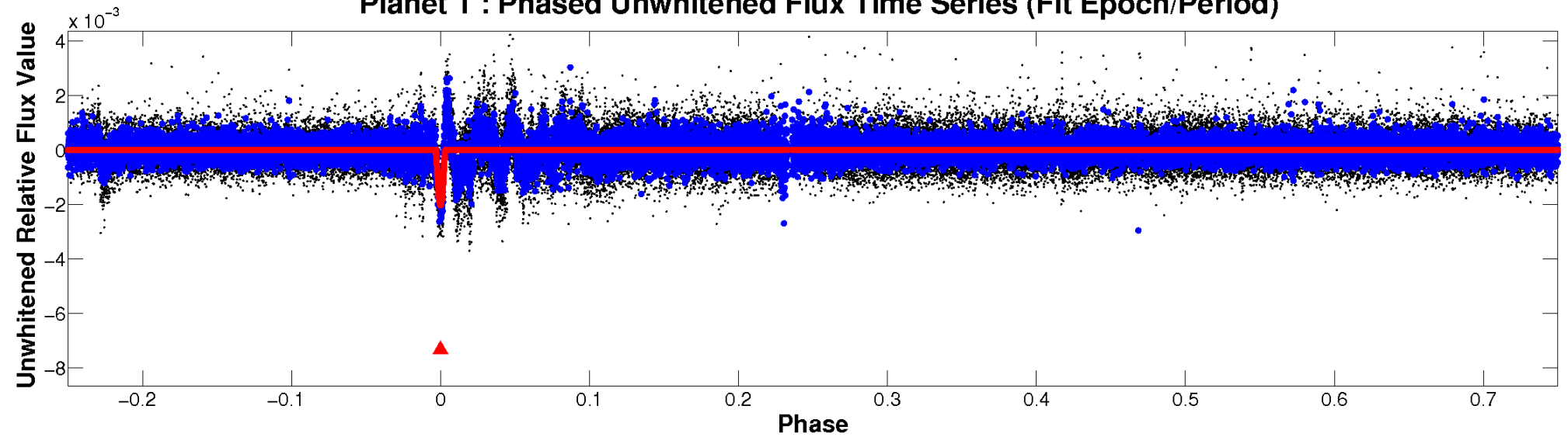
ALT Odd/Even

TCE 008229305-01

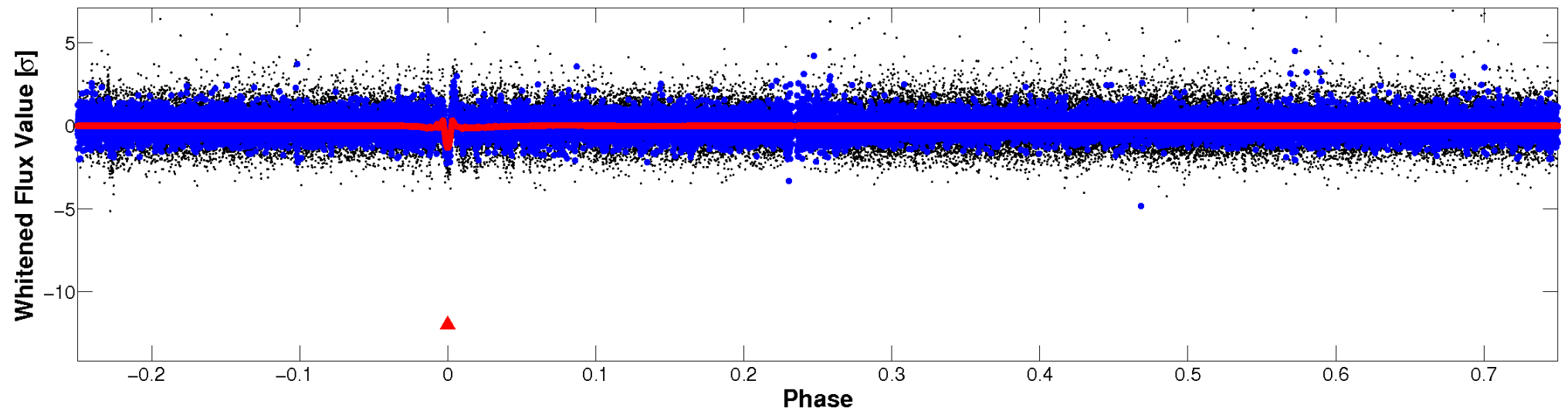


Non-Whitened Vs. Whitened Light Curve

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

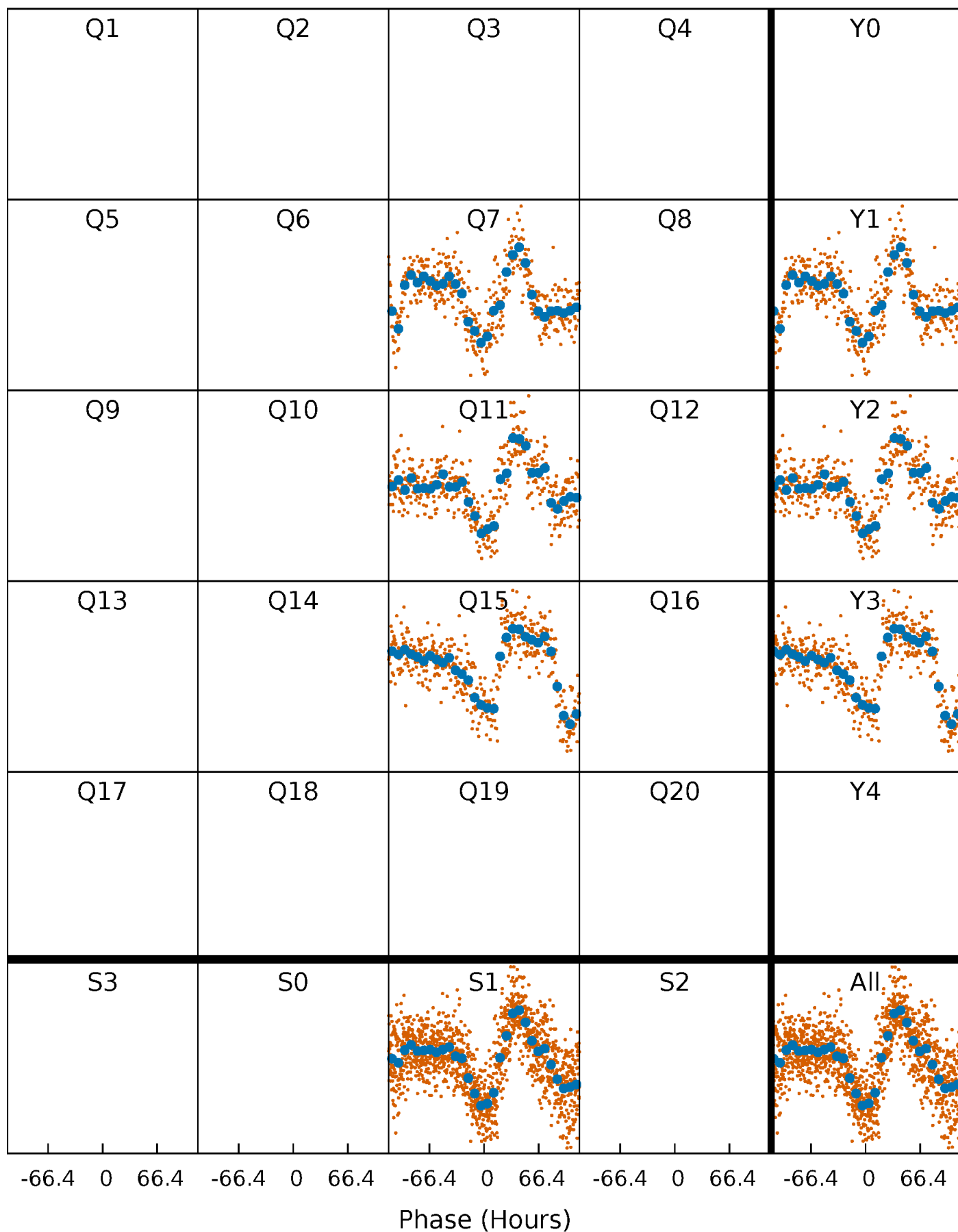


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



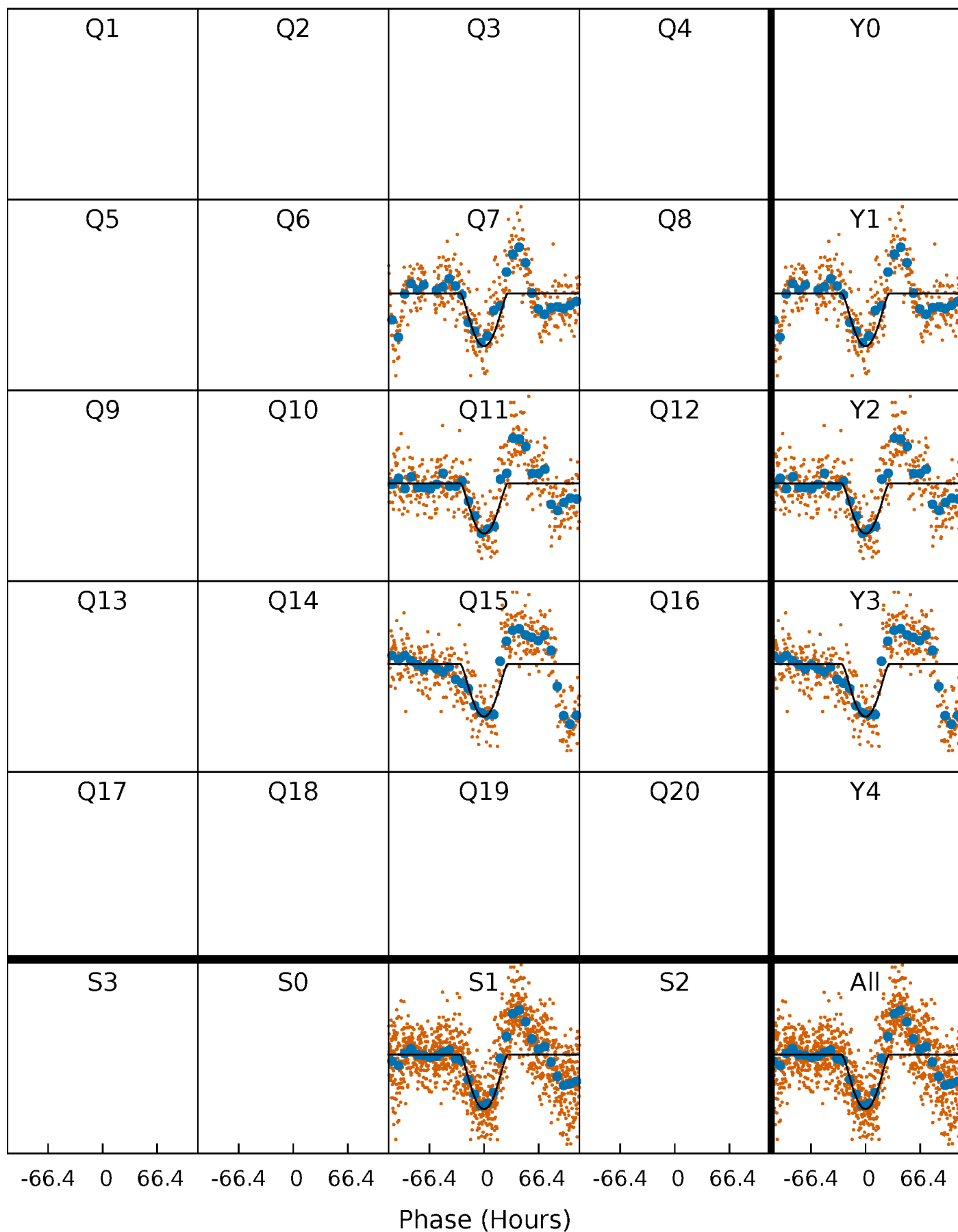
PDC Quarter-Phased Transit Curves

TCE 008229305-01 P=374.458576 Days $T_0=262.181087$ (BKJD)



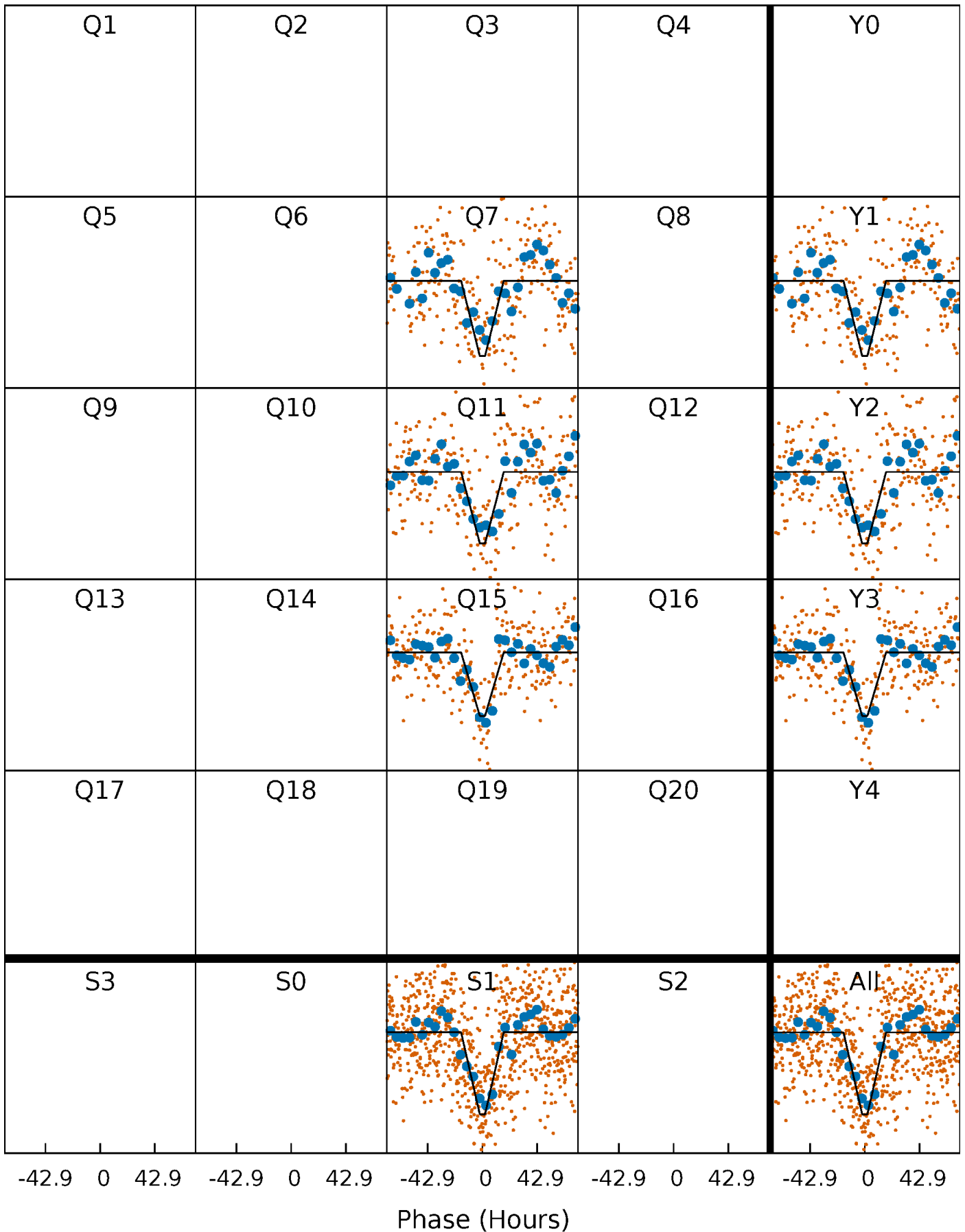
DV Quarter-Phased Transit Curves

TCE 008229305-01 P=374.458576 Days $T_0=262.181087$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

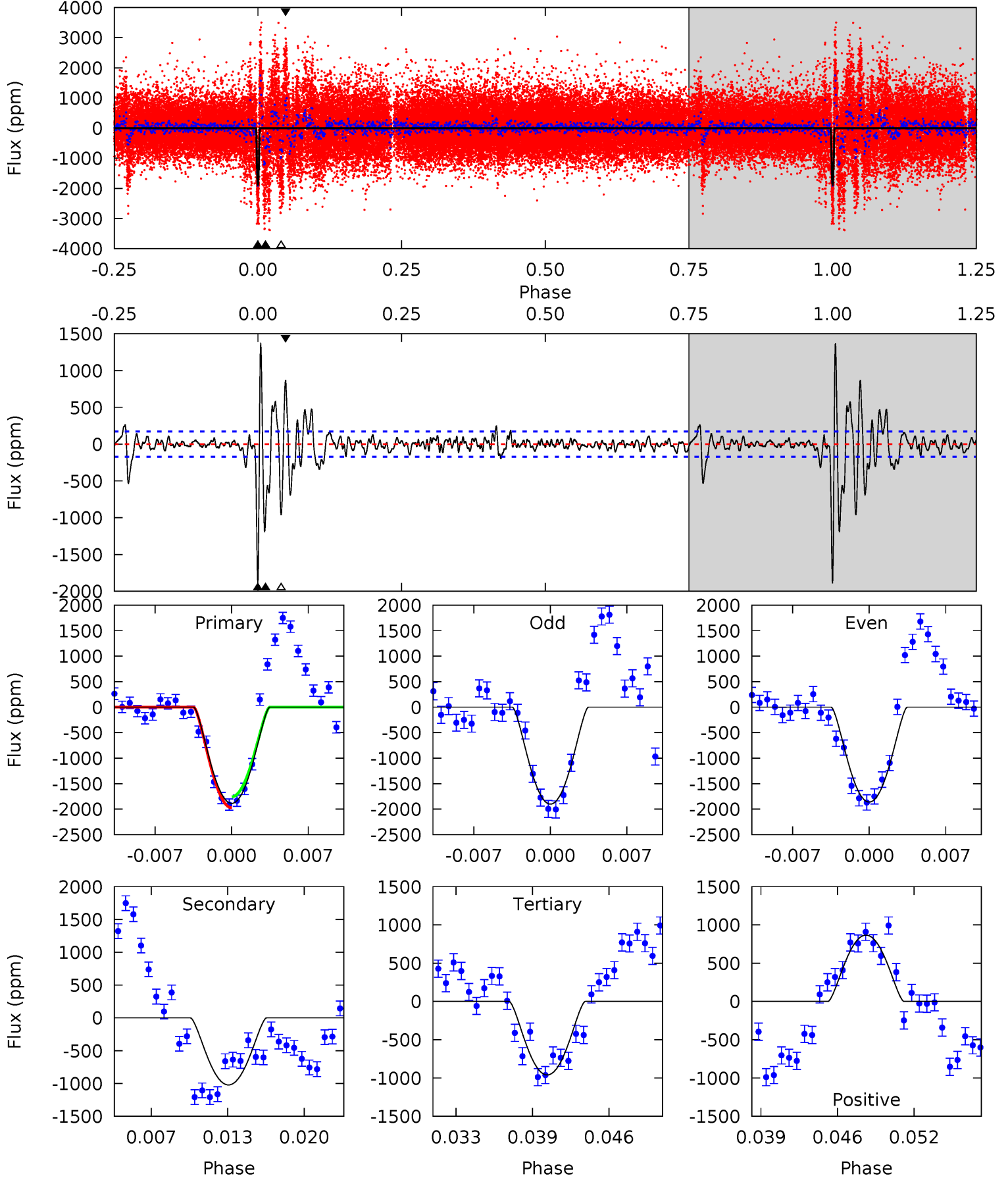
TCE 008229305-01 P=374.710623 Days $T_0=261.828807$ (BKJD)



DV Model-Shift Uniqueness Test

008229305-01, P = 374.458576 Days, E = 262.181087 Days

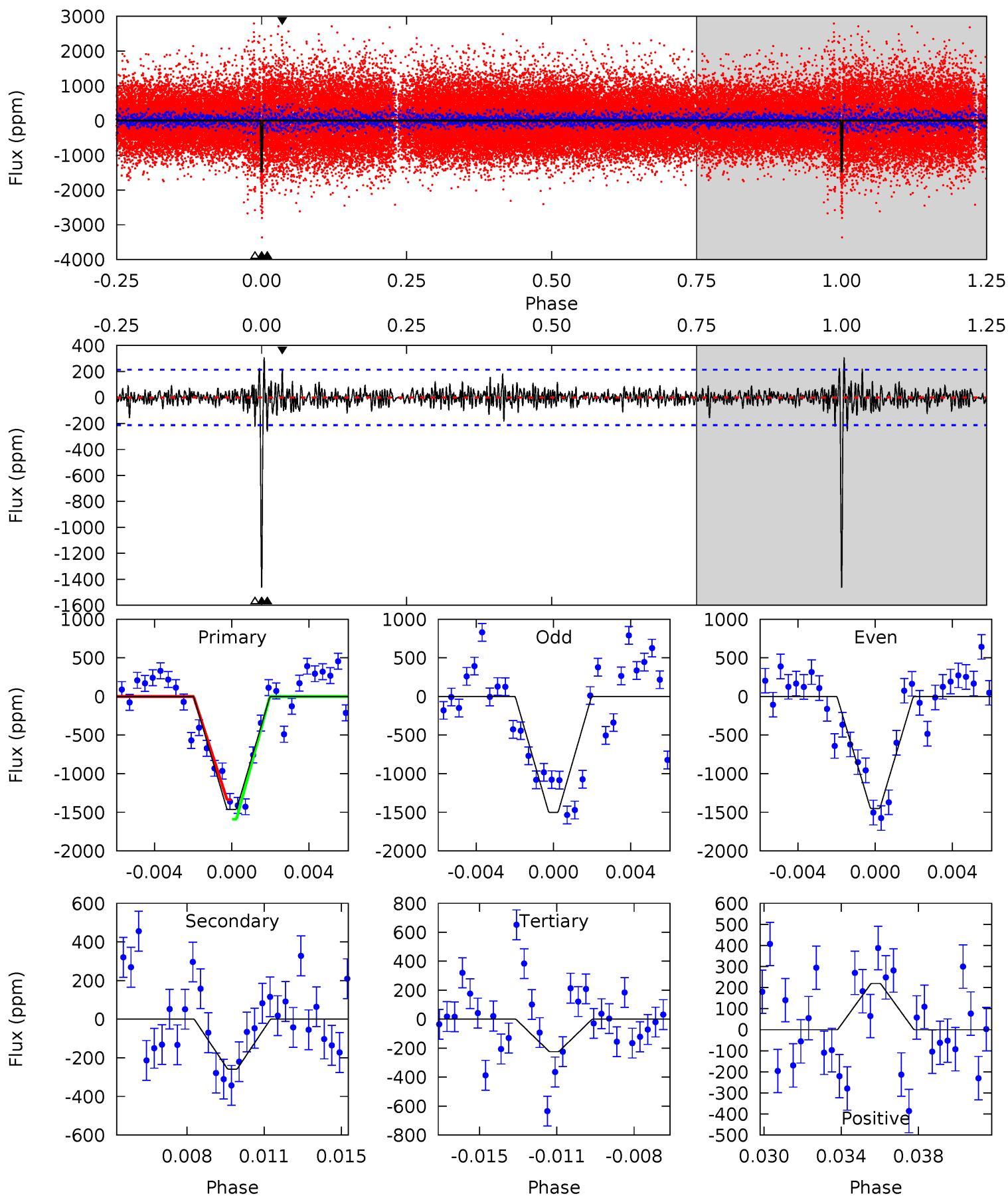
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
56.1	30.4	28.5	25.8	5.11	2.72	4.24	27.6	30.3	1.85	4.64	0.56	0.99	0.42	3.16



Alt Model-Shift Uniqueness Test

008229305-01, P = 374.710623 Days, E = 261.828807 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
35.7	6.32	5.47	5.36	5.21	2.90	1.10	30.3	30.4	0.84	0.96	0.57	0.98	0.17	3.07



Stellar Parameters For KIC 008229305

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6137^{+191}_{-233}	$4.487^{+0.054}_{-0.216}$	$-0.200^{+0.250}_{-0.350}$	$0.963^{+0.316}_{-0.105}$	$1.038^{+0.139}_{-0.139}$	$1.638^{+0.479}_{-0.884}$
	+3%/-4%	+1%/-5%	+125%/-175%	+33%/-11%	+13%/-13%	+29%/-54%
Source	KIC0	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 008229305-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-1022 ± 34	$8.06^{+6.09}_{-4.81}$	374^{+29}_{-20}	4271^{+2008}_{-733}	9058^{+45143}_{-6137}
Alt.	-259 ± 41	$6.26^{+5.39}_{-4.01}$	374^{+27}_{-19}	3680^{+1829}_{-603}	3729^{+26036}_{-2629}

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 $A_{obs} \gg 1.0$

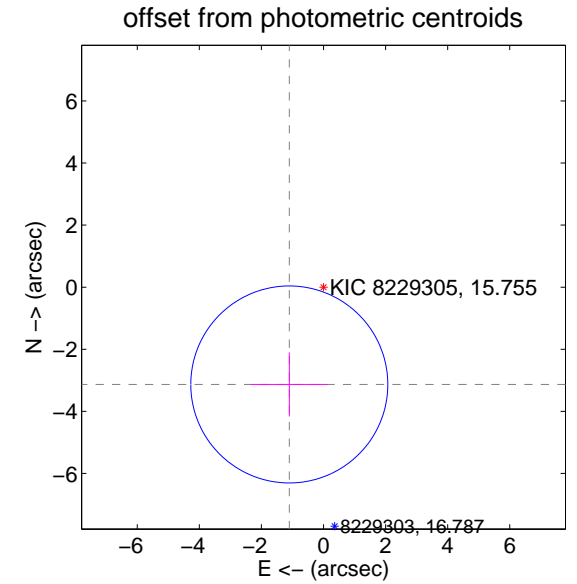
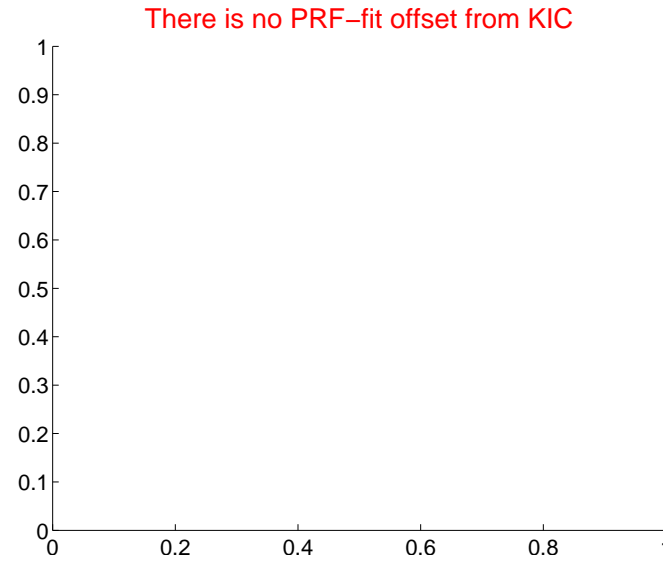
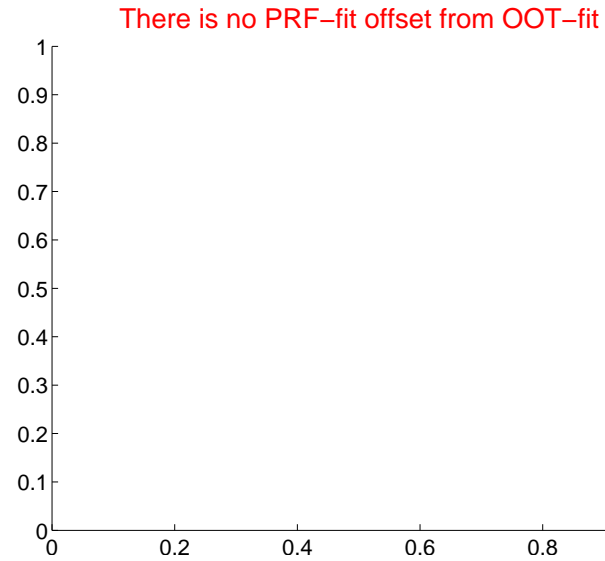
DV Centroid Data

Supplemental centroid analysis for 008229305-01. Kepler magnitude: 15.76. Transit SNR 16.15

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	3.32 ± 1.06	3.14	1.10 ± 1.23	-3.13 ± 1.03



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.



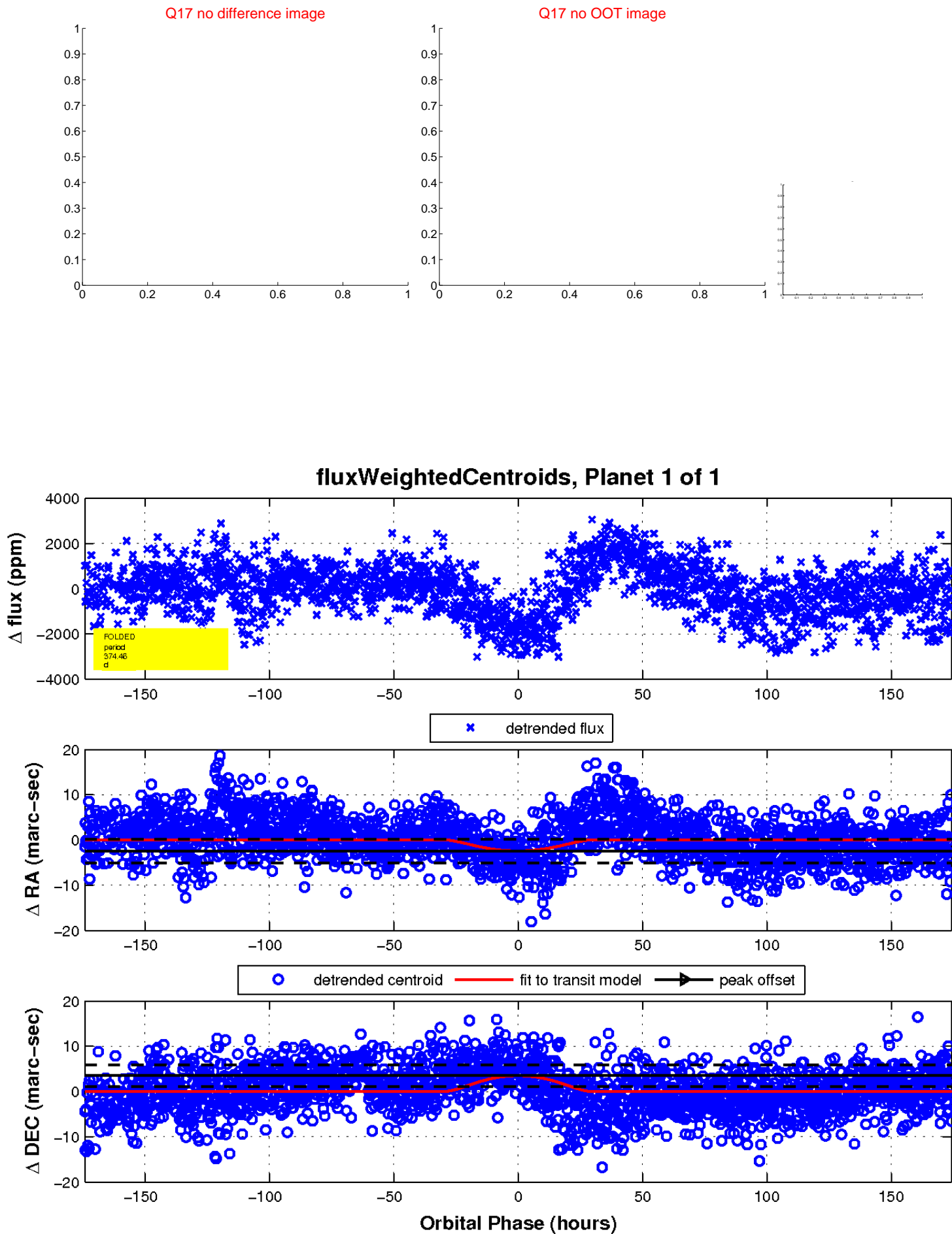
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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UKIRT Image

Declination

