

KIC 008630840

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})
008630840-01	OBS	8161.01	370.385315	263.382991	129.8	24.361	7.4	7.3	1.55	6179	1.90	2.74

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008630840-01	OBS	FP	0.10	1	0	0	0	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.

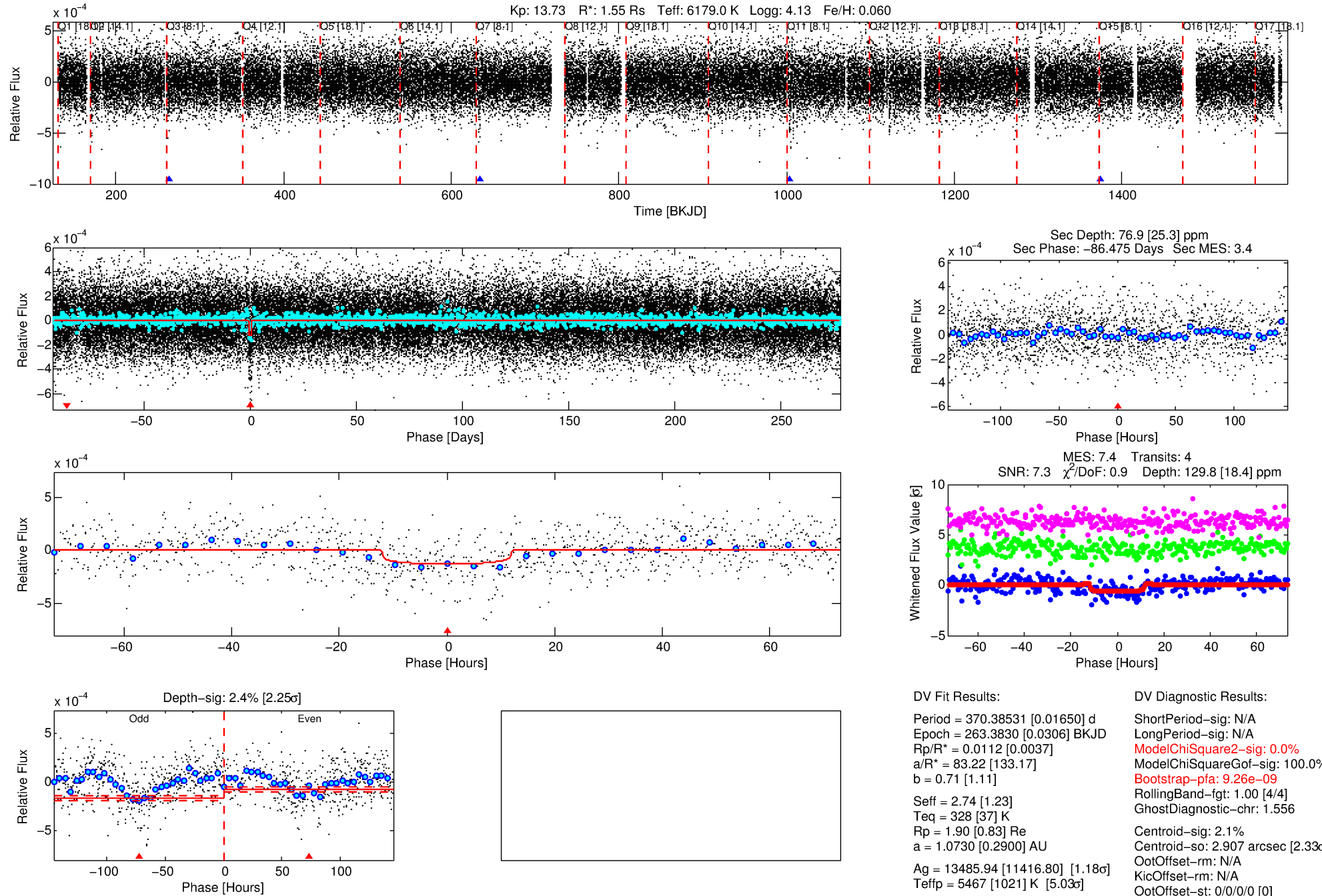
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008630840-01

No Significant Match Found

DV One-Page Summary

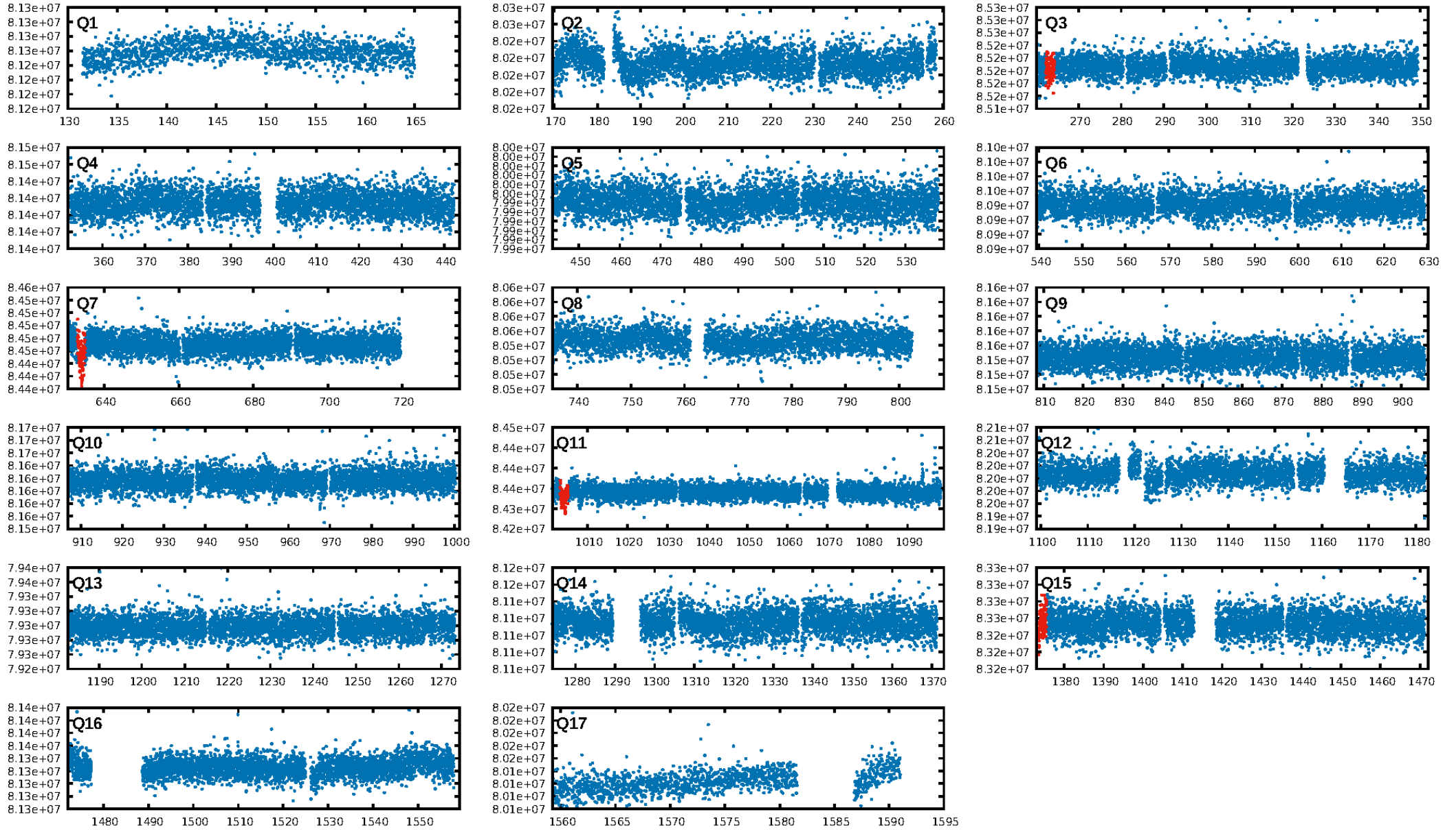
KIC: 8630840 Candidate: 1 of 1 Period: 370.385 d



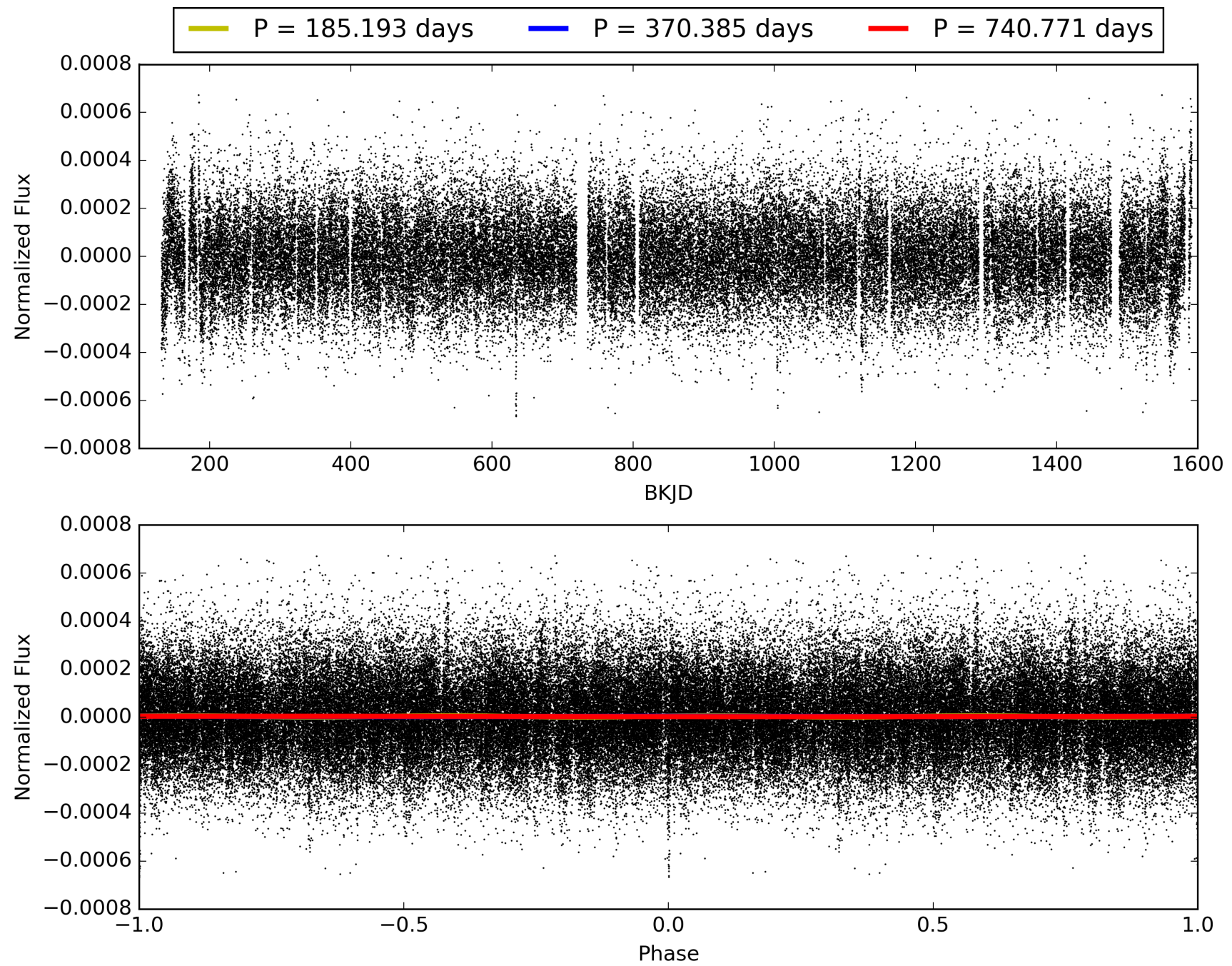
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 14:10:24 Z

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

TCE 008630840-01, PDC Light Curves

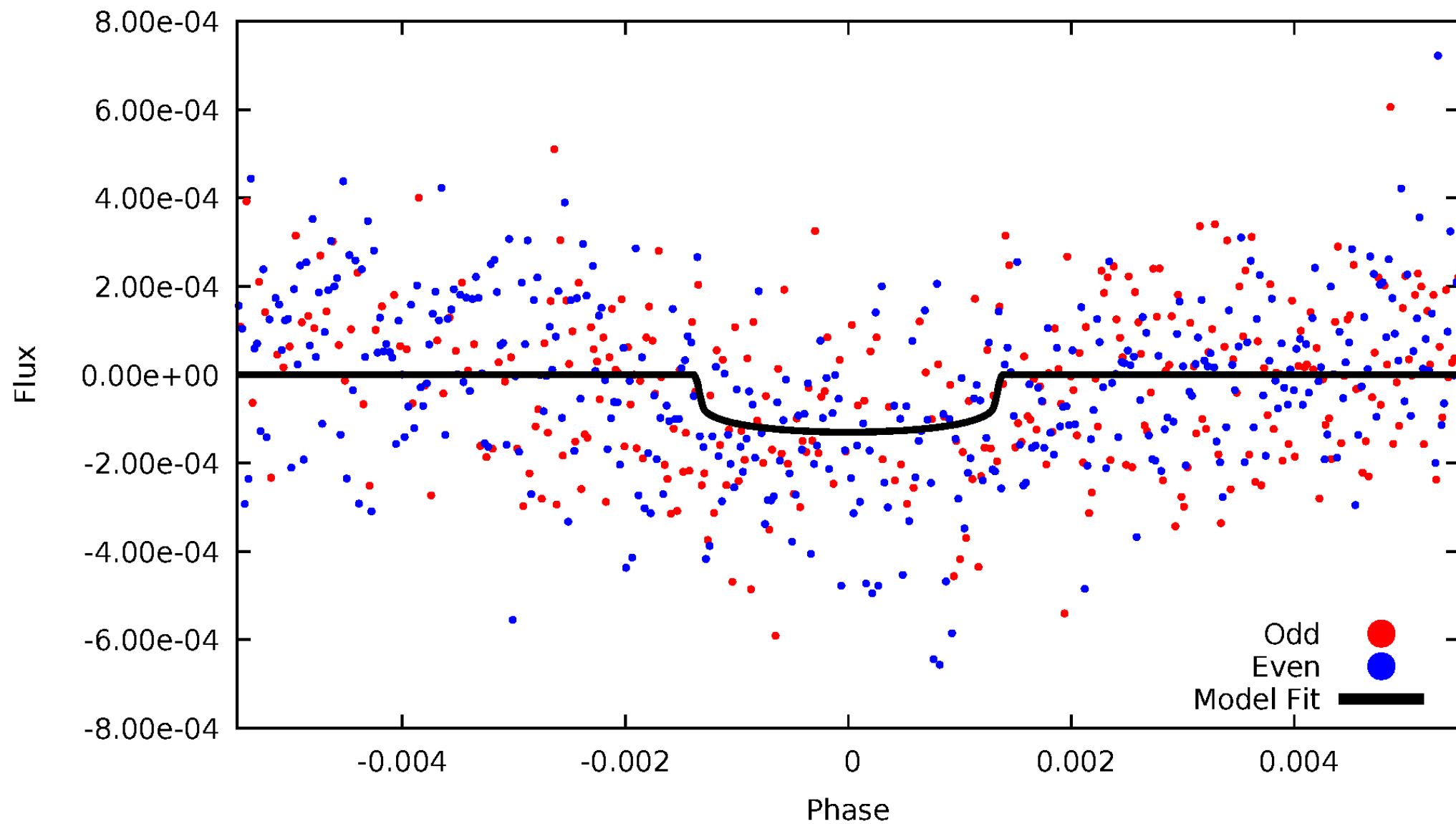


TCE 008630840-01



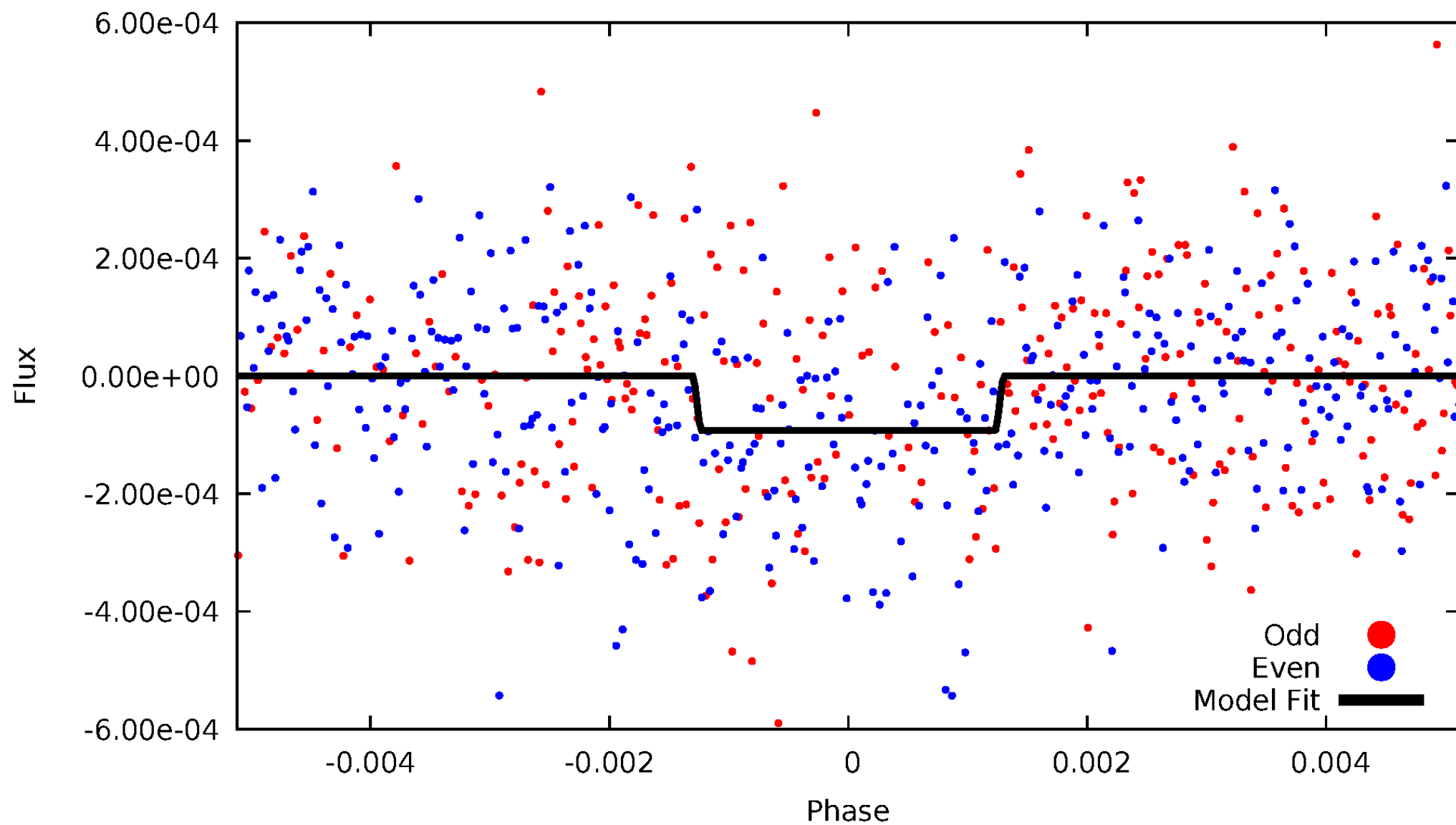
DV Odd/Even

TCE 008630840-01

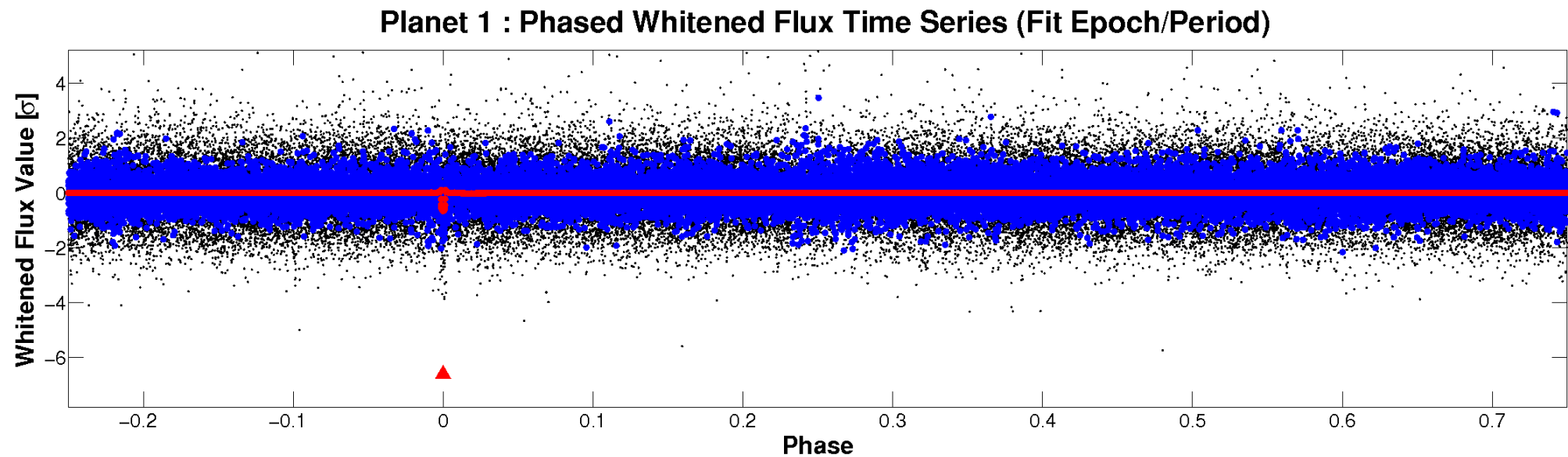
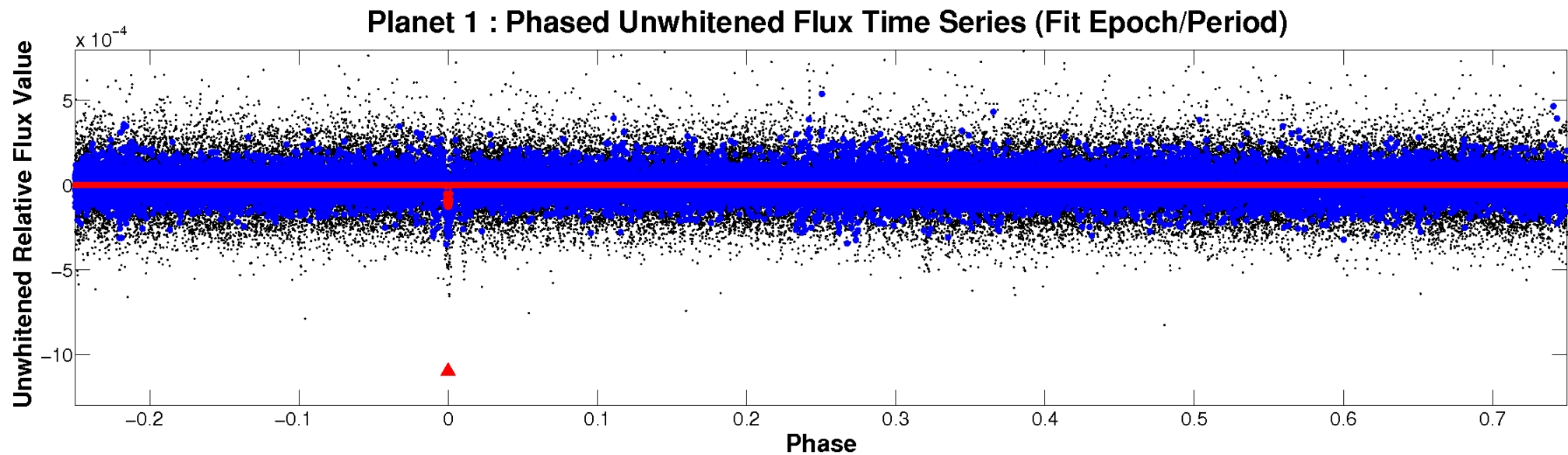


ALT Odd/Even

TCE 008630840-01

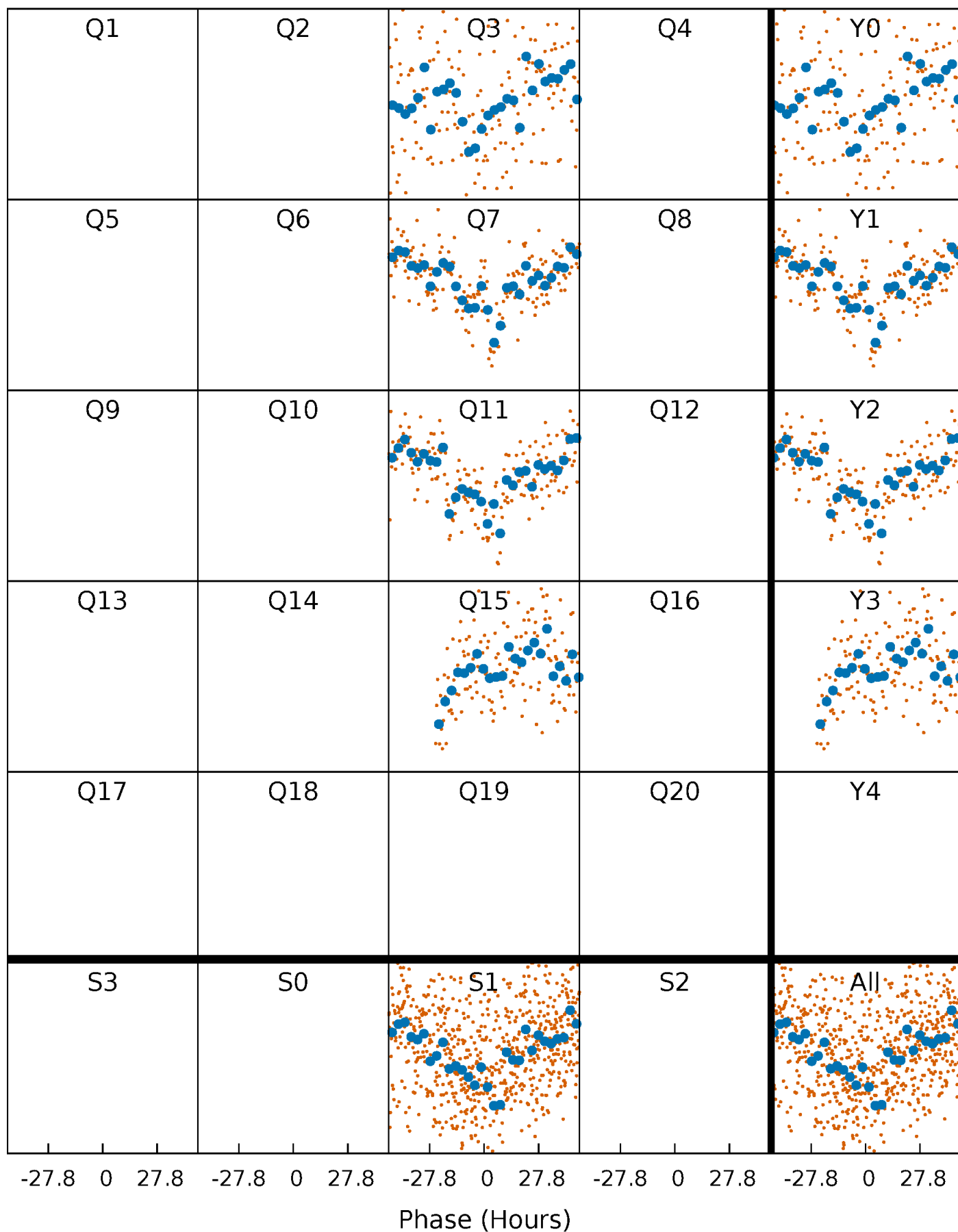


Non-Whitened Vs. Whitened Light Curve



PDC Quarter-Phased Transit Curves

TCE 008630840-01 P=370.385314 Days $T_0=263.382991$ (BKJD)



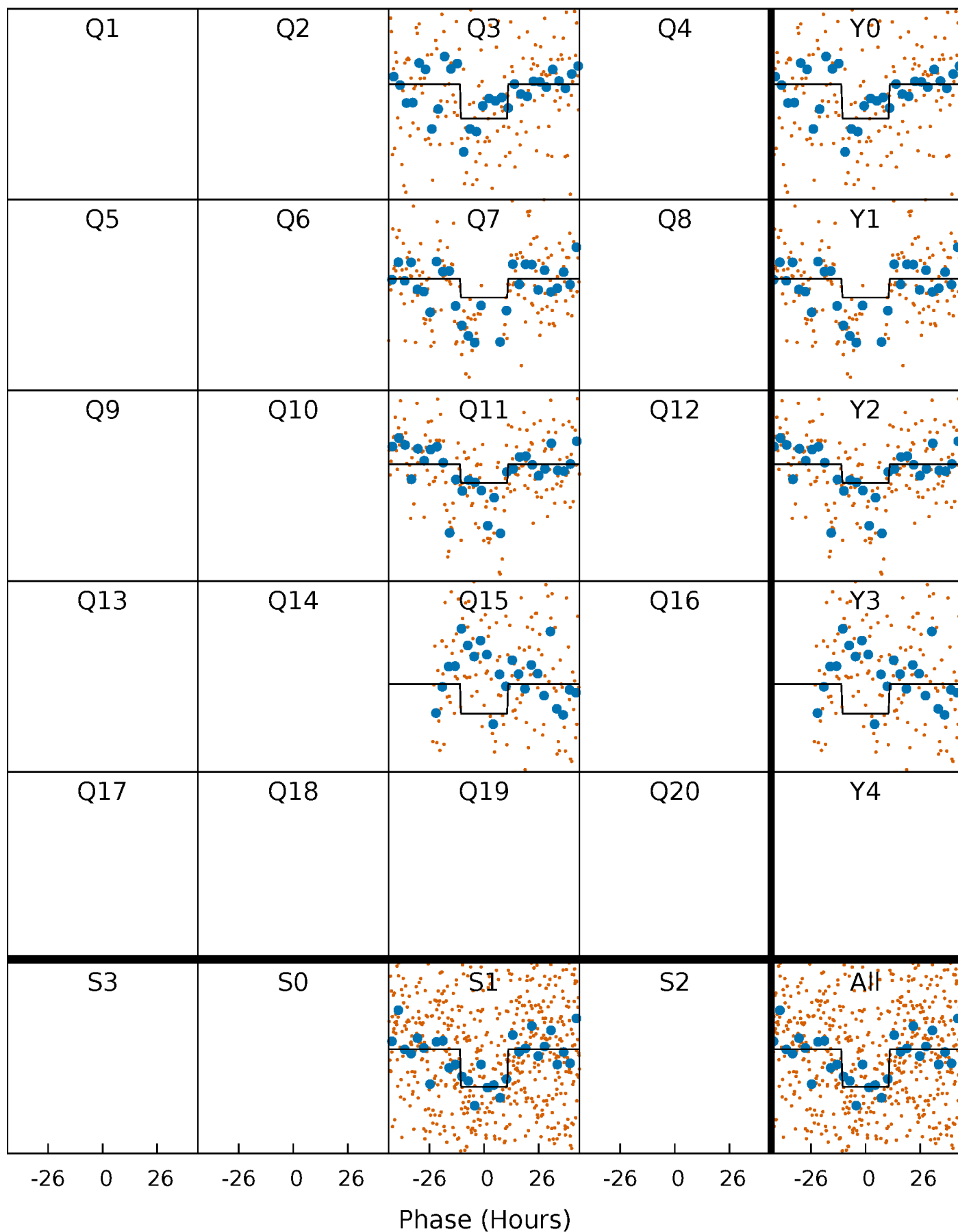
DV Quarter-Phased Transit Curves

TCE 008630840-01 P=370.385314 Days $T_0=263.382991$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

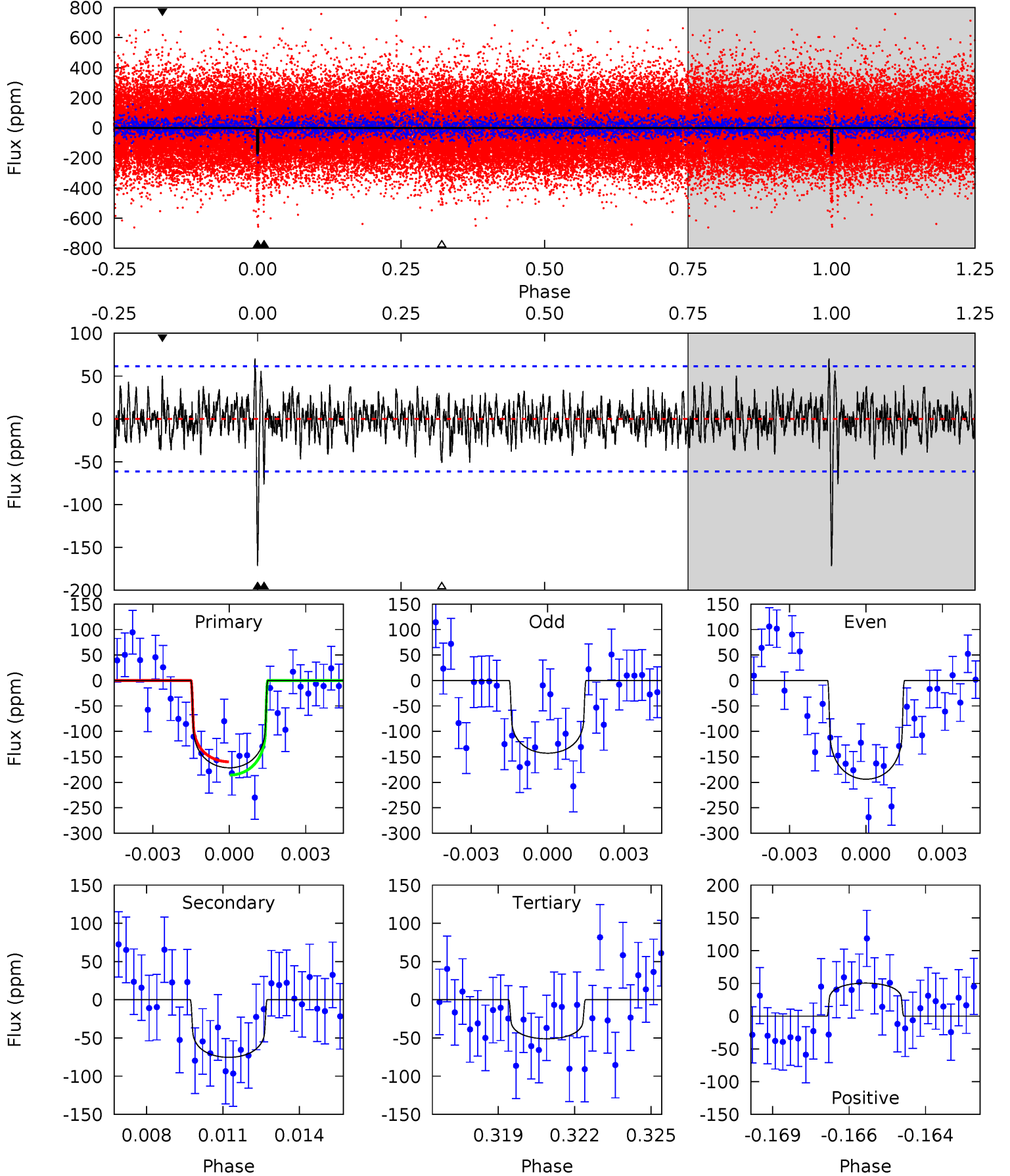
TCE 008630840-01 P=370.392331 Days $T_0=263.350964$ (BKJD)



DV Model-Shift Uniqueness Test

008630840-01, $P = 370.385314$ Days, $E = 263.382991$ Days

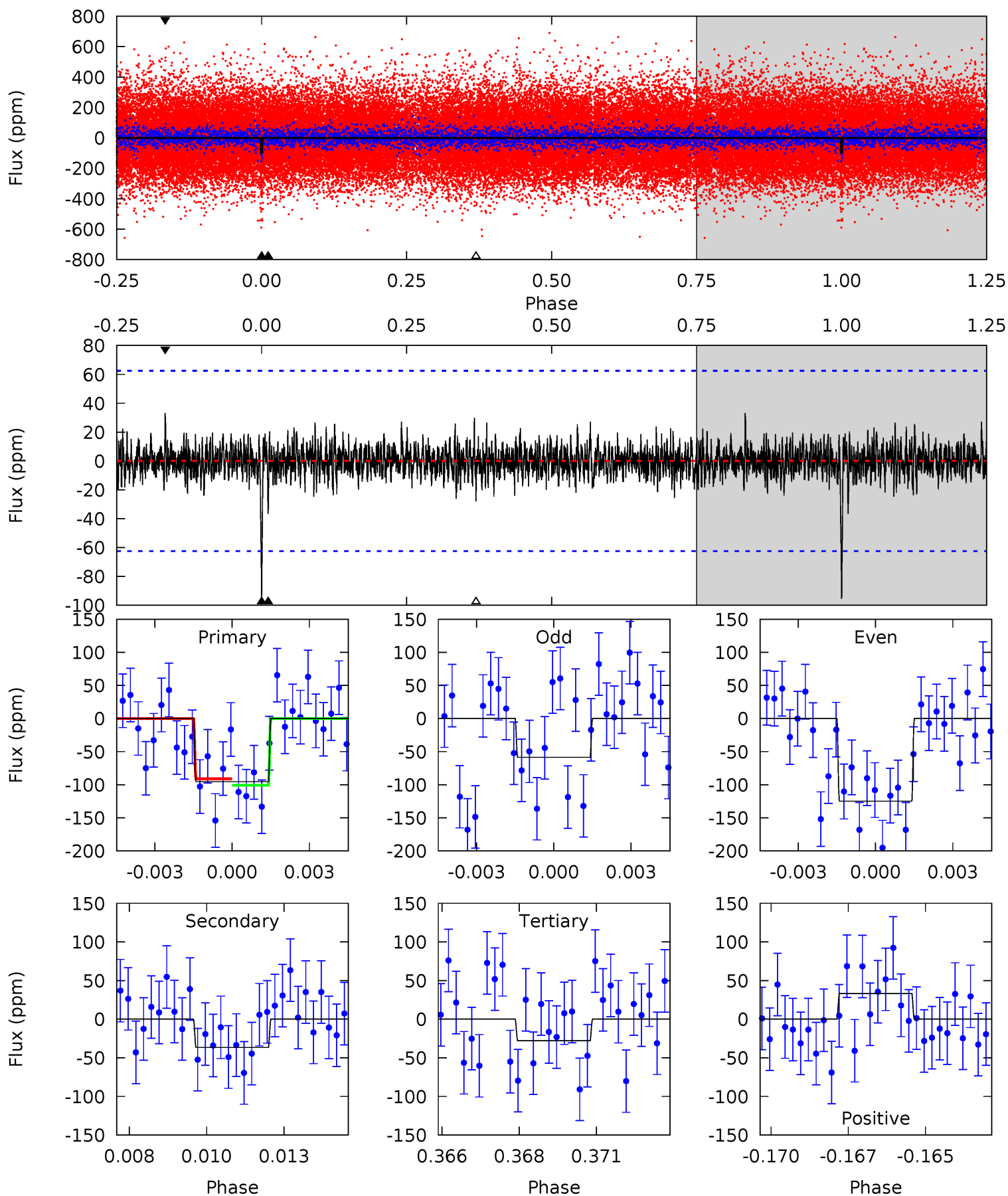
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14.7	6.47	4.39	4.33	5.27	2.99	1.35	10.3	10.4	2.08	2.14	2.19	0.96	0.29	1.12



Alt Model-Shift Uniqueness Test

008630840-01, $P = 370.392331$ Days, $E = 263.350964$ Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.06	3.09	2.35	2.79	5.28	3.01	0.66	5.70	5.27	0.73	0.30	2.79	0.90	0.26	0.42



Stellar Parameters For KIC 008630840

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$\rho_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6179^{+167}_{-223}	$4.134^{+0.246}_{-0.164}$	$0.060^{+0.250}_{-0.300}$	$1.555^{+0.451}_{-0.451}$	$1.199^{+0.182}_{-0.182}$	$0.449^{+0.615}_{-0.231}$
	+3%/-4%	+6%/-4%	+417%/-500%	+29%/-29%	+15%/-15%	+137%/-51%
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 008630840-01 / KOI 8161.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-75 ± 12	$1.87^{+0.73}_{-0.64}$	456^{+33}_{-37}	5420^{+1211}_{-631}	13535^{+17346}_{-6625}
Alt.	-37 ± 12	$1.55^{+0.71}_{-0.59}$	451^{+33}_{-37}	4934^{+1228}_{-695}	8958^{+15460}_{-5032}

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 $T_{\text{obs}} \gg T_{\text{max}}$ AND $A_{\text{obs}} \gg 1.0$

DV Centroid Data

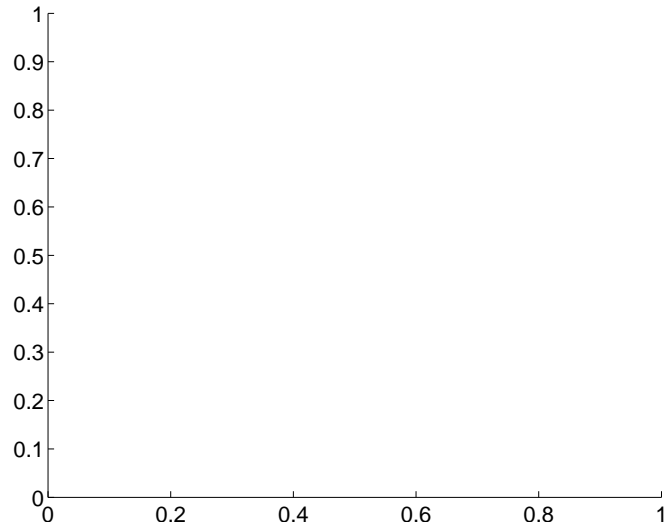
Supplemental centroid analysis for 008630840-01. Kepler magnitude: 13.73. Transit SNR 7.31

There are 0 quarters with good PRF difference image offsets

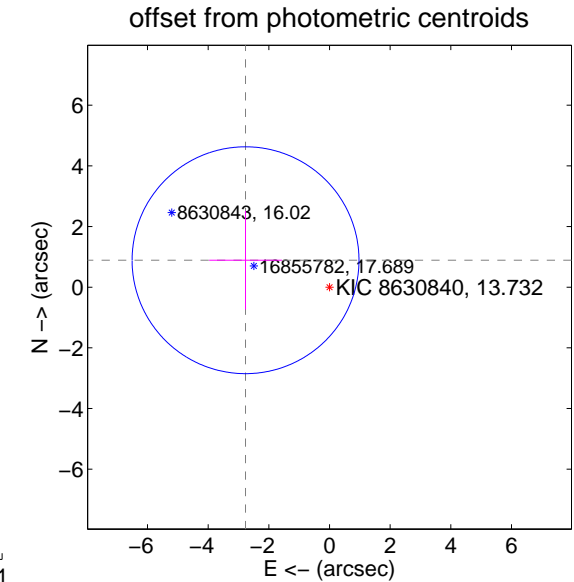
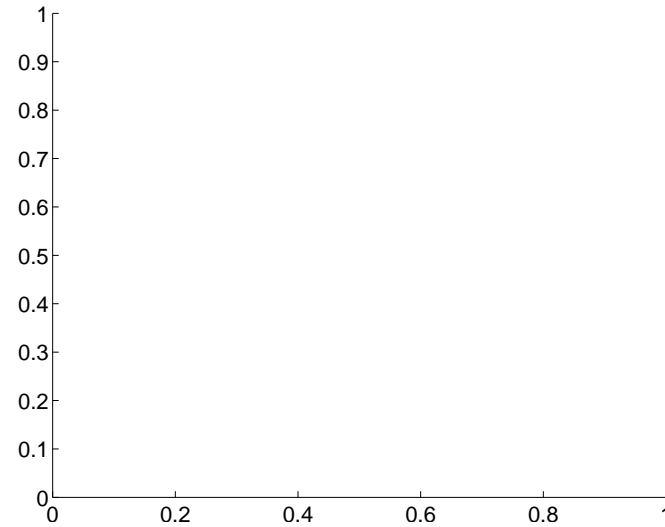
The direct PRF centroid is offset from the target star catalog position by about NaN arcsec

	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	2.91 ± 1.25	2.33	2.77 ± 1.20	0.89 ± 1.63

There is no PRF-fit offset from OOT-fit

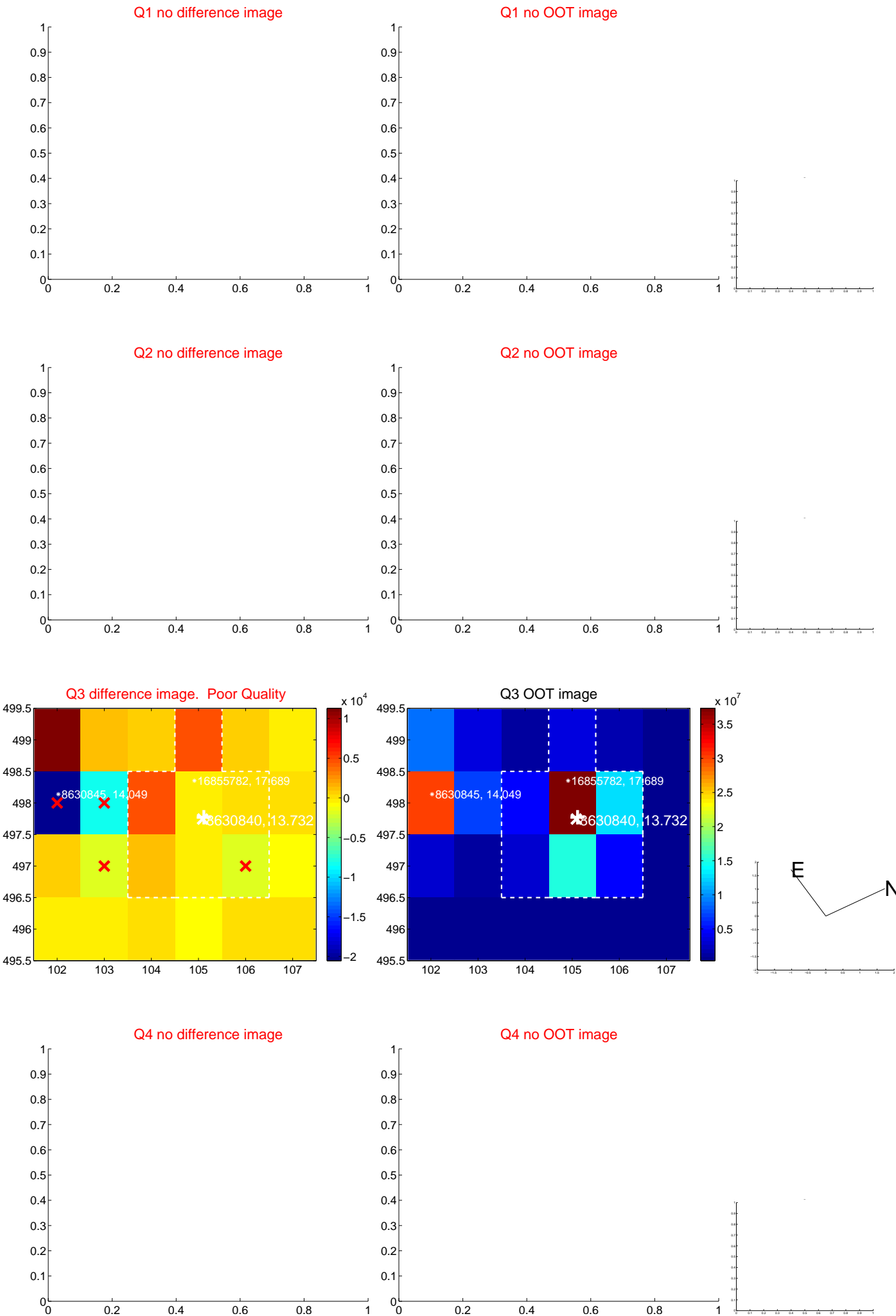


There is no PRF-fit offset from KIC



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.



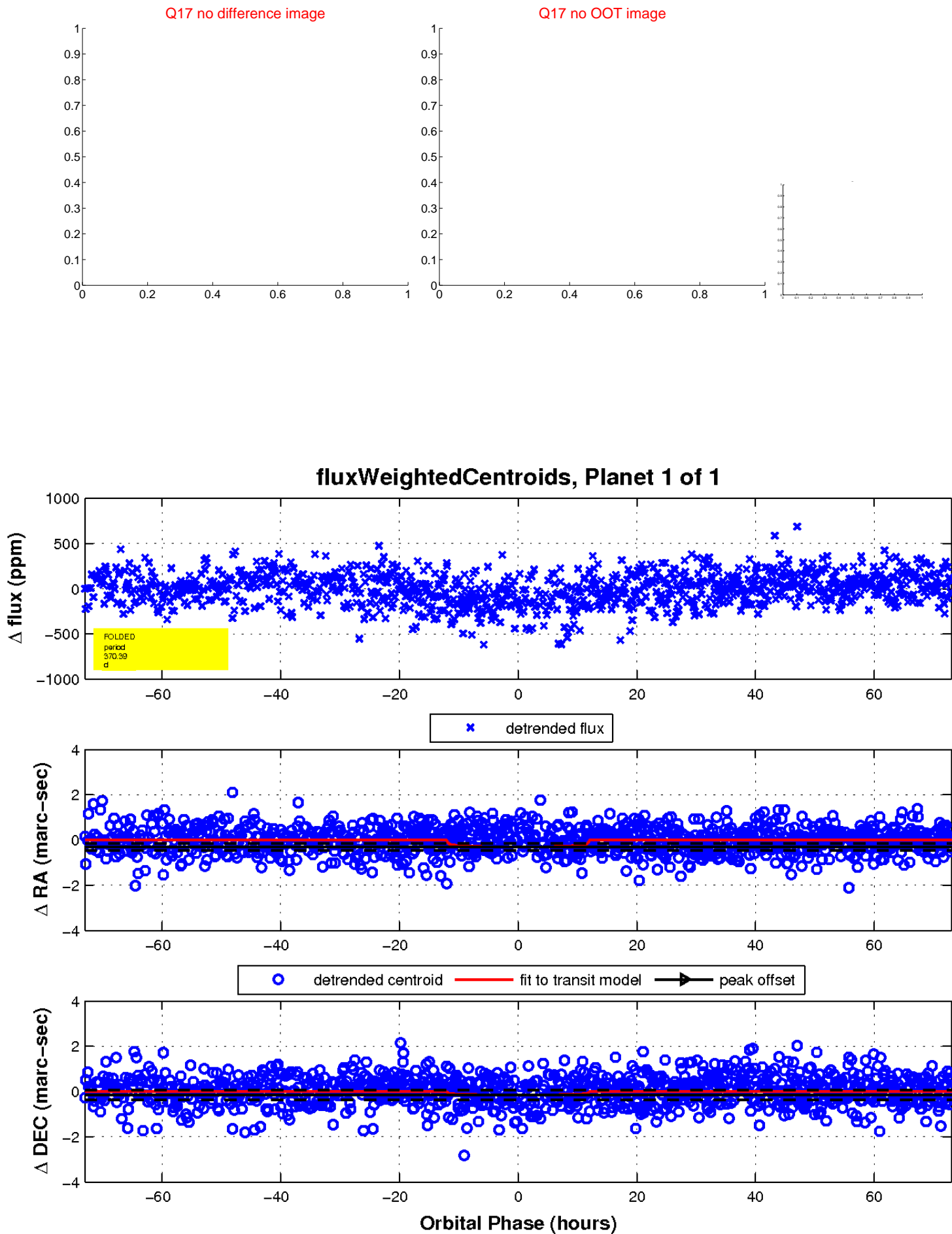
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

