

KIC 008106713

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})
008106713-01	OBS	No	525.535032	448.475177	1123.4	35.729	9.7	10.4	0.79	5379	3.88	0.32

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008106713-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—INCONSISTENT_TRANS—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.

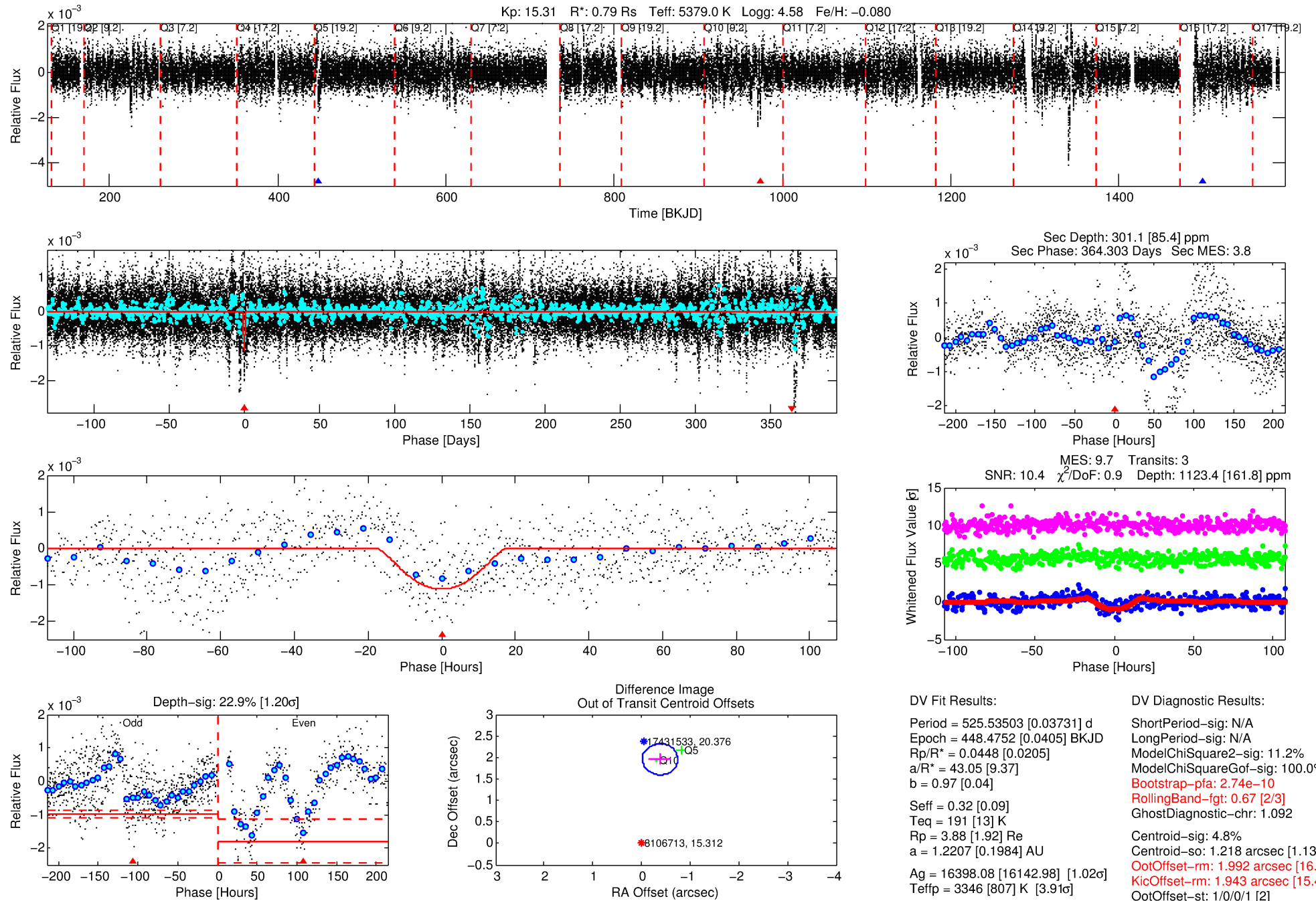
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008106713-01

No Significant Match Found

DV One-Page Summary

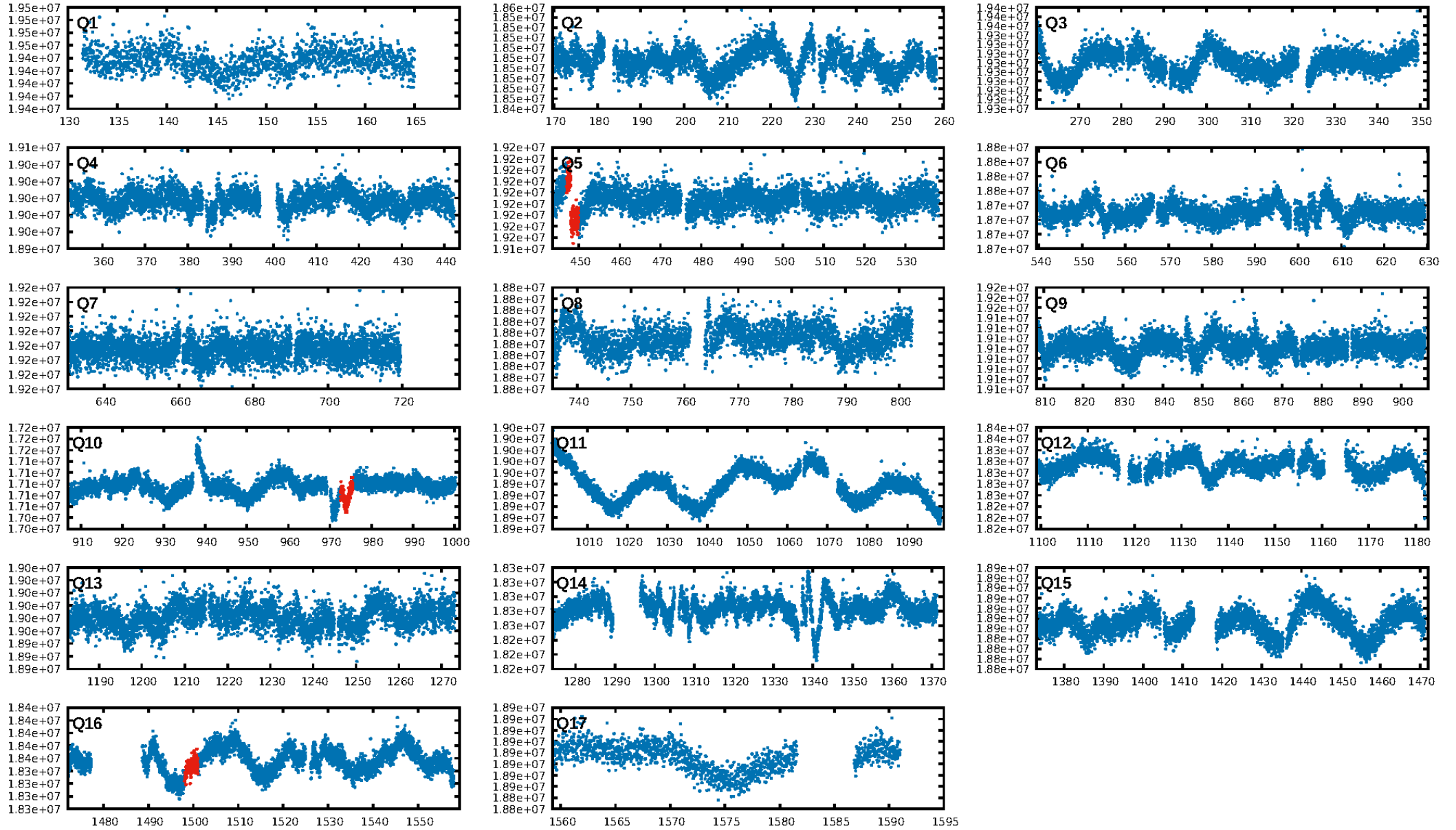
KIC: 8106713 Candidate: 1 of 1 Period: 525.535 d



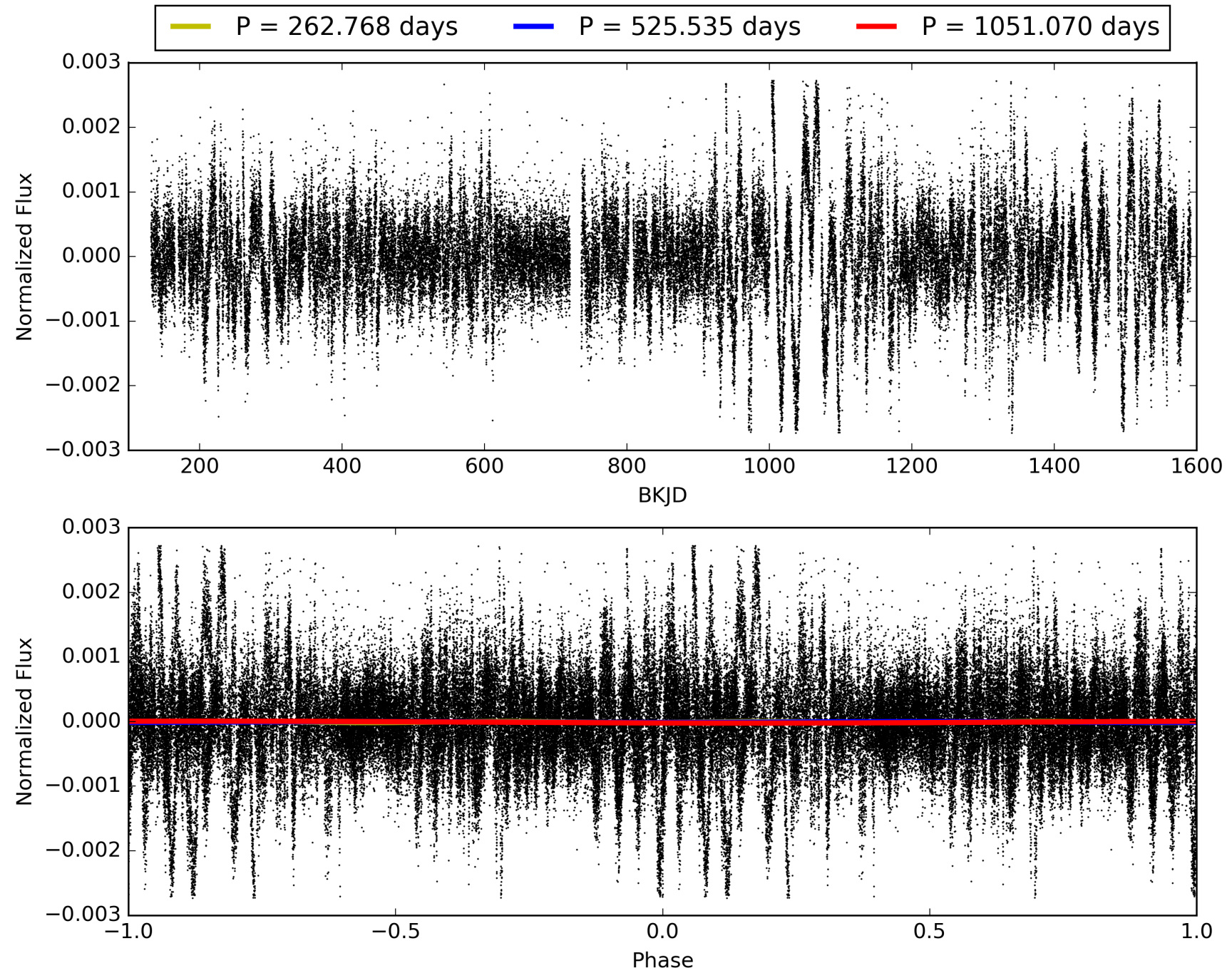
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 01:21:10 Z

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

TCE 008106713-01, PDC Light Curves

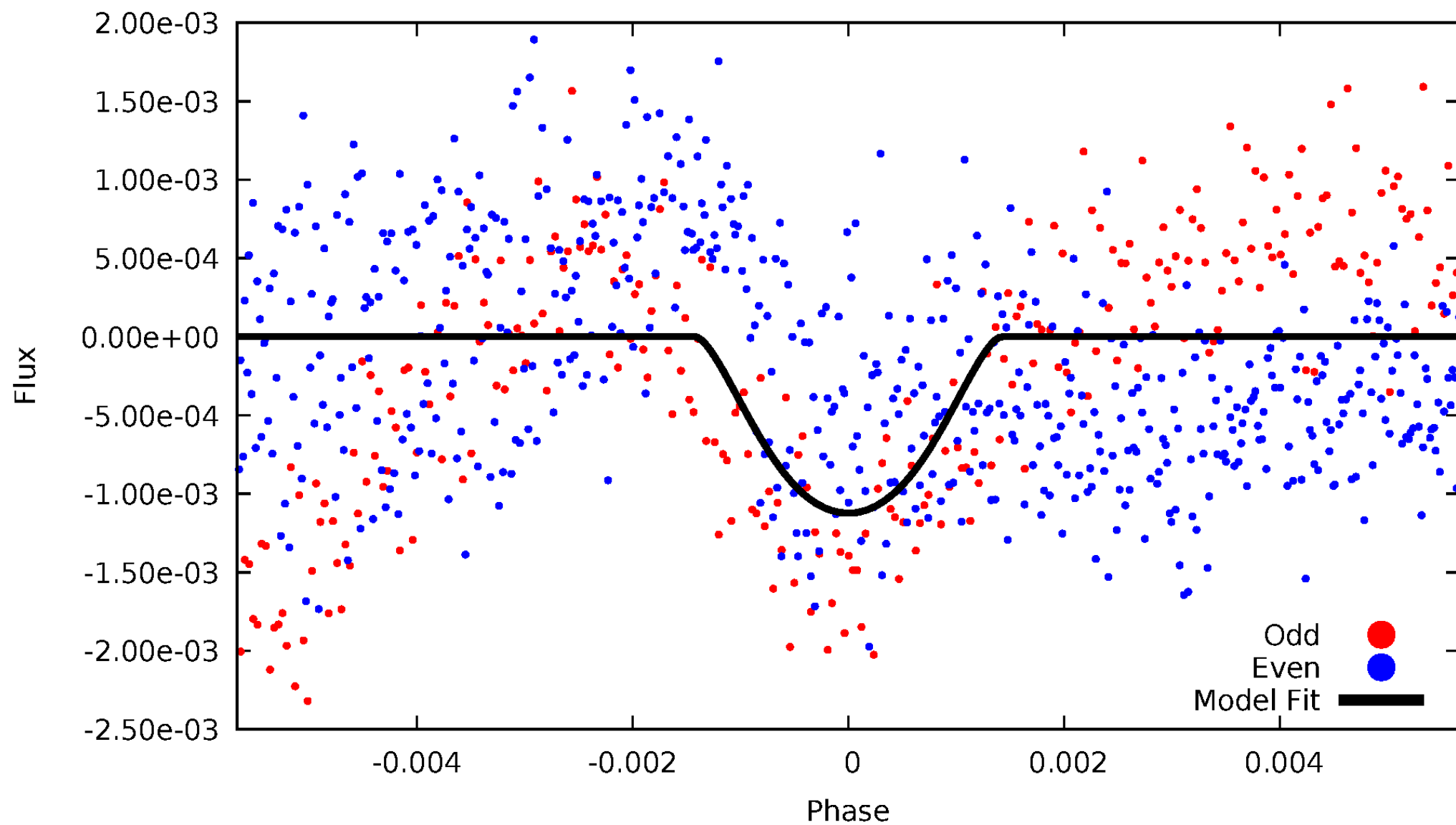


TCE 008106713-01



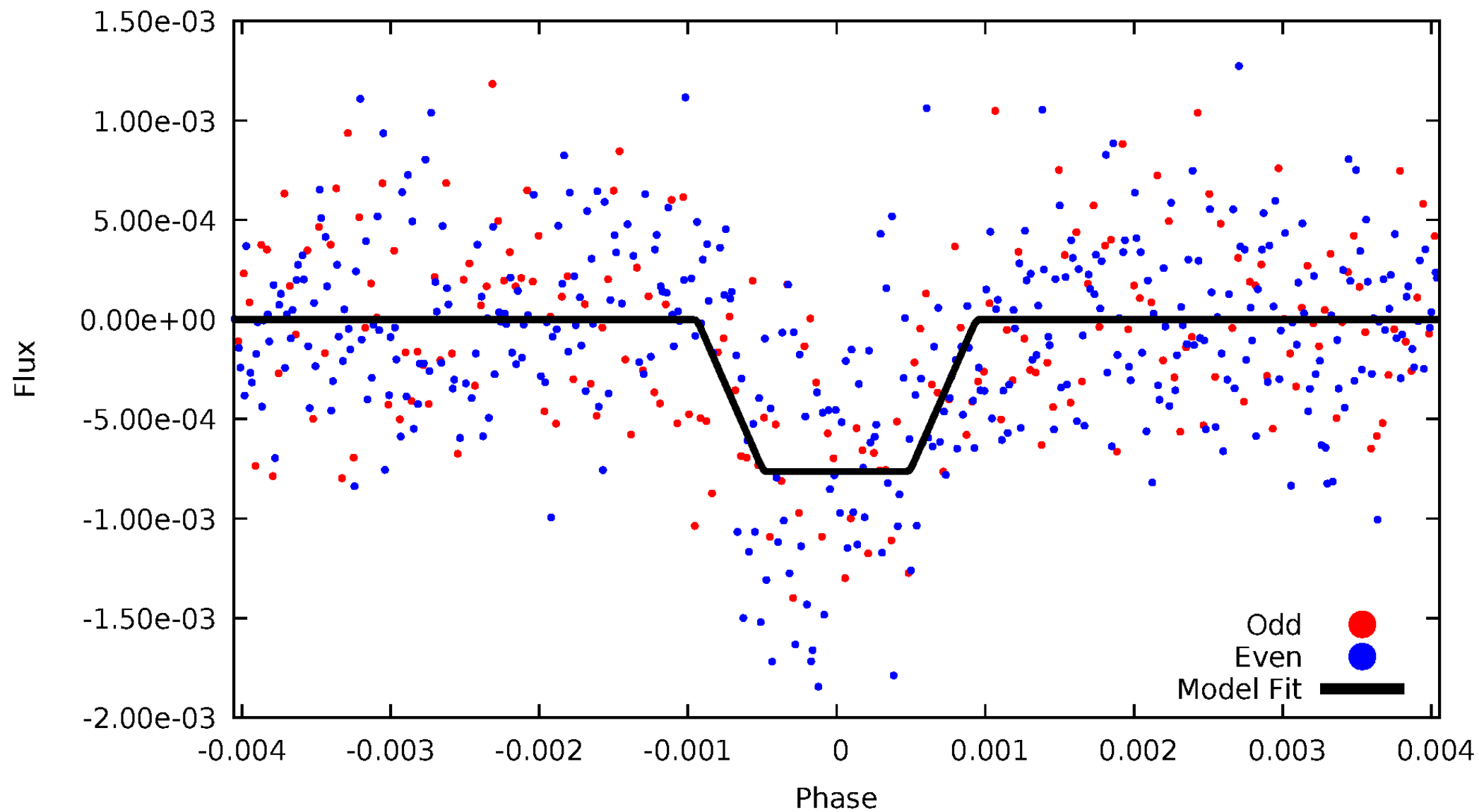
DV Odd/Even

TCE 008106713-01



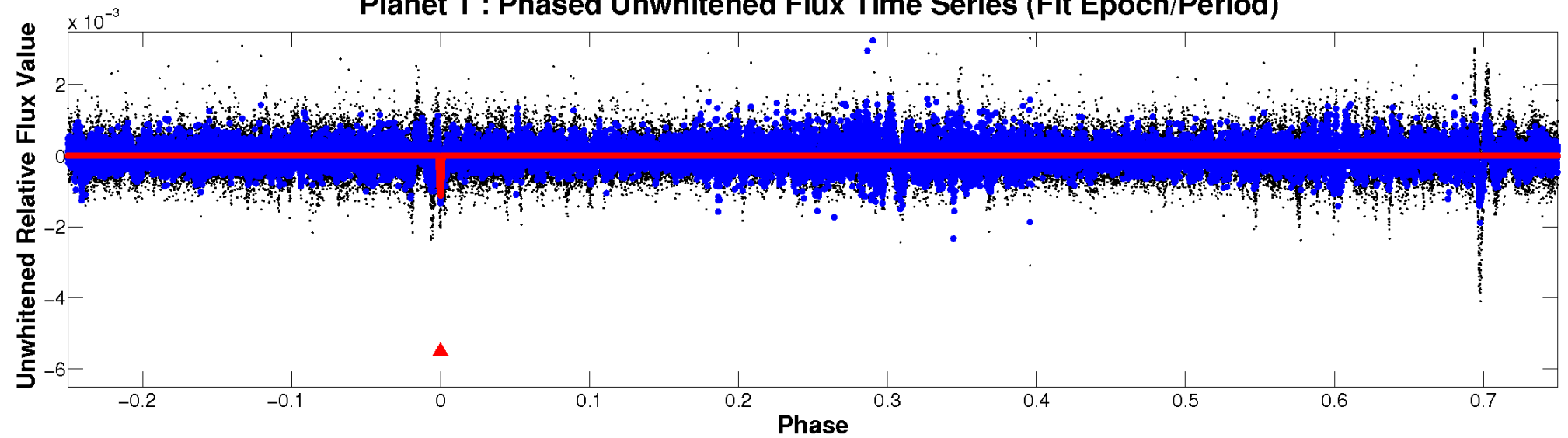
ALT Odd/Even

TCE 008106713-01

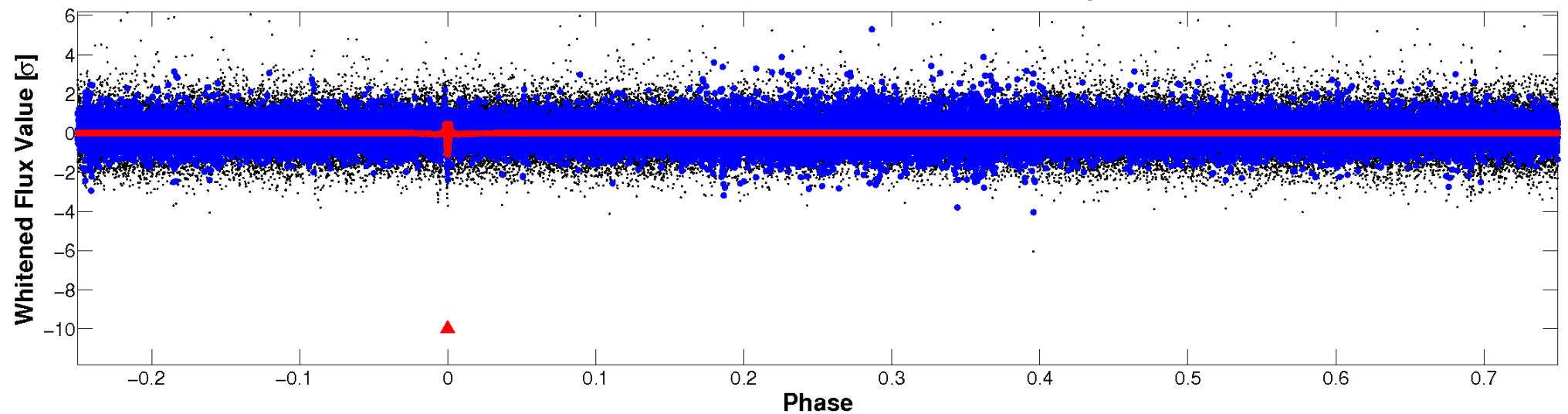


Non-Whitened Vs. Whitened Light Curve

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

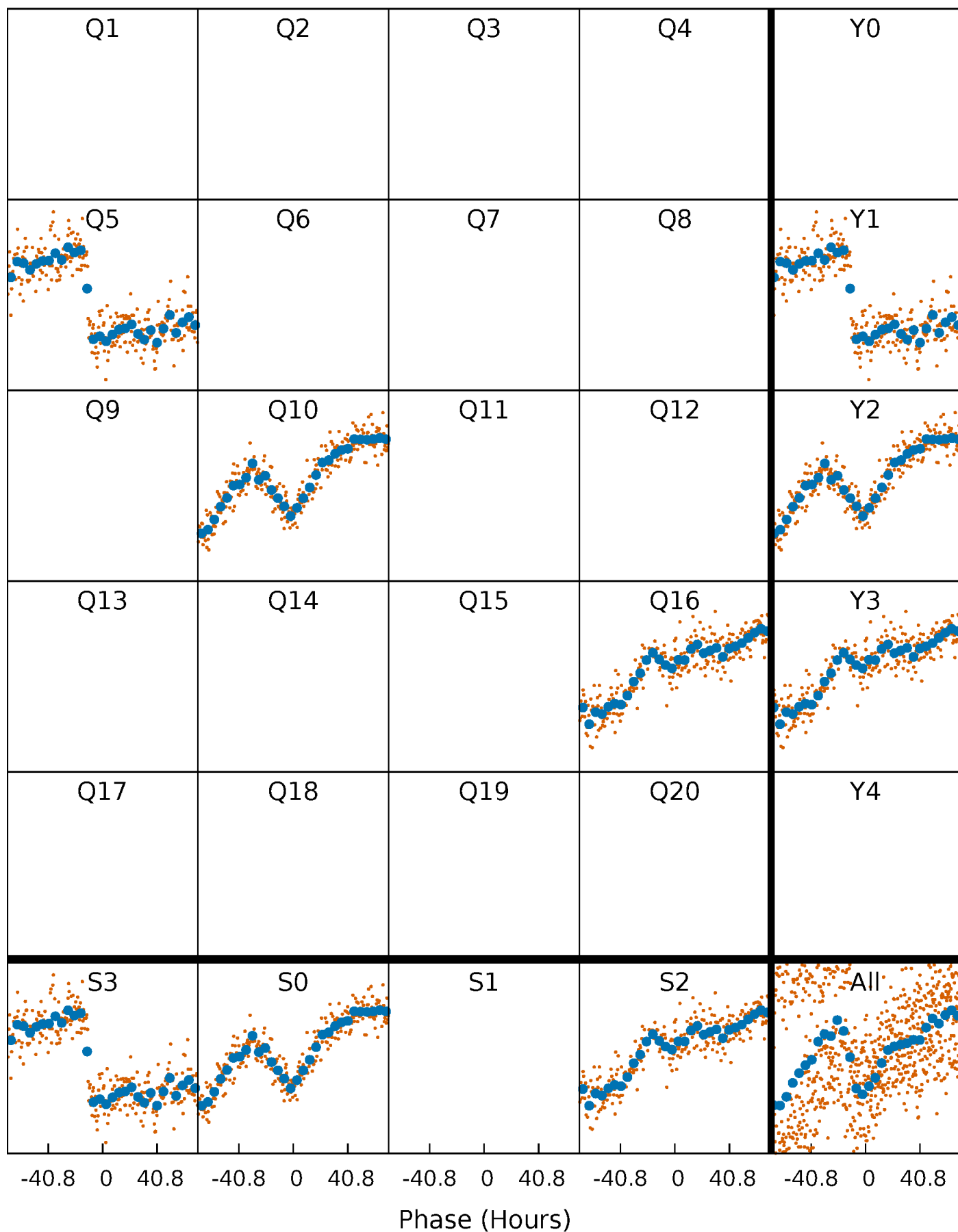


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



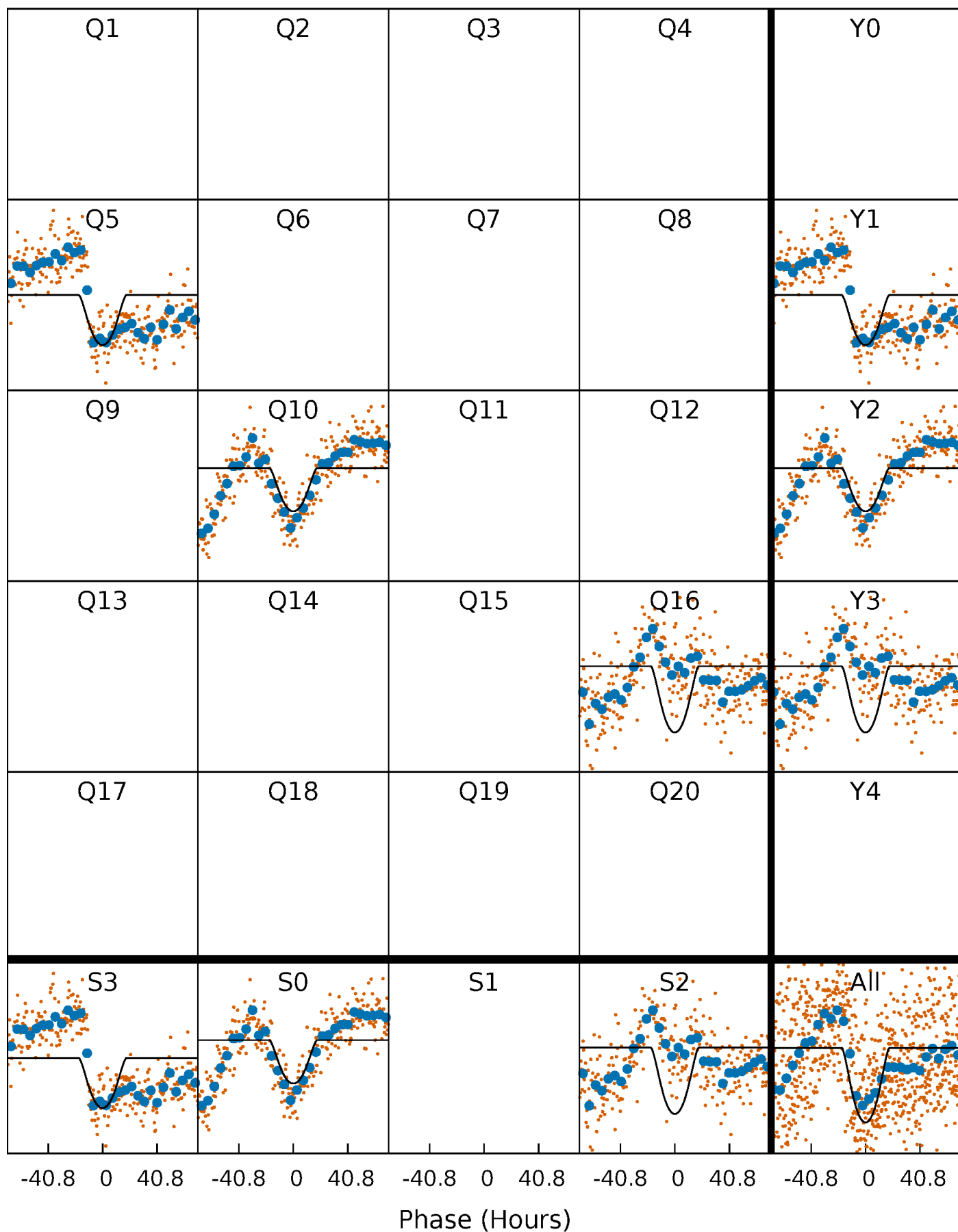
PDC Quarter-Phased Transit Curves

TCE 008106713-01 P=525.535032 Days $T_0=448.475177$ (BKJD)



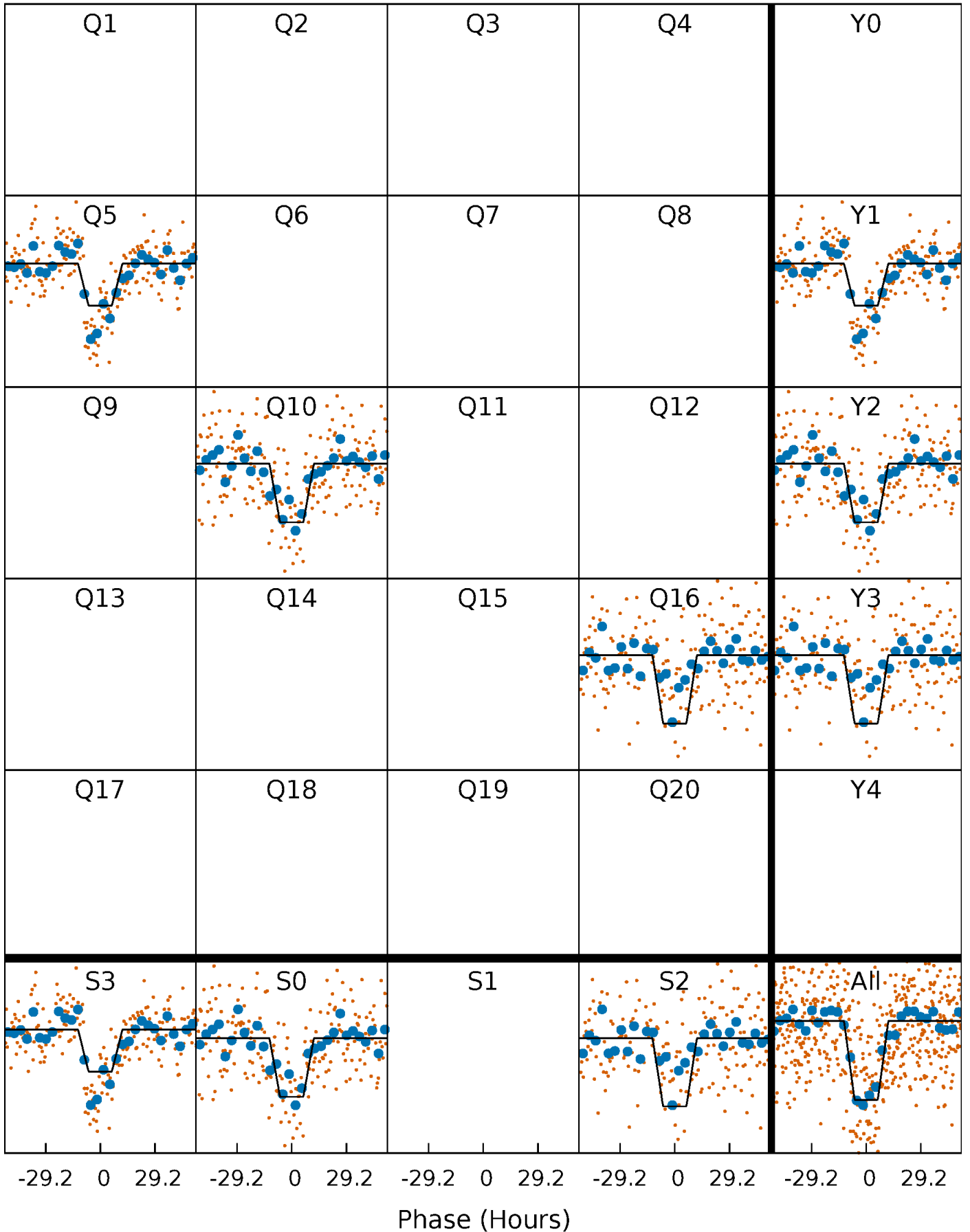
DV Quarter-Phased Transit Curves

TCE 008106713-01 P=525.535032 Days $T_0=448.475177$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

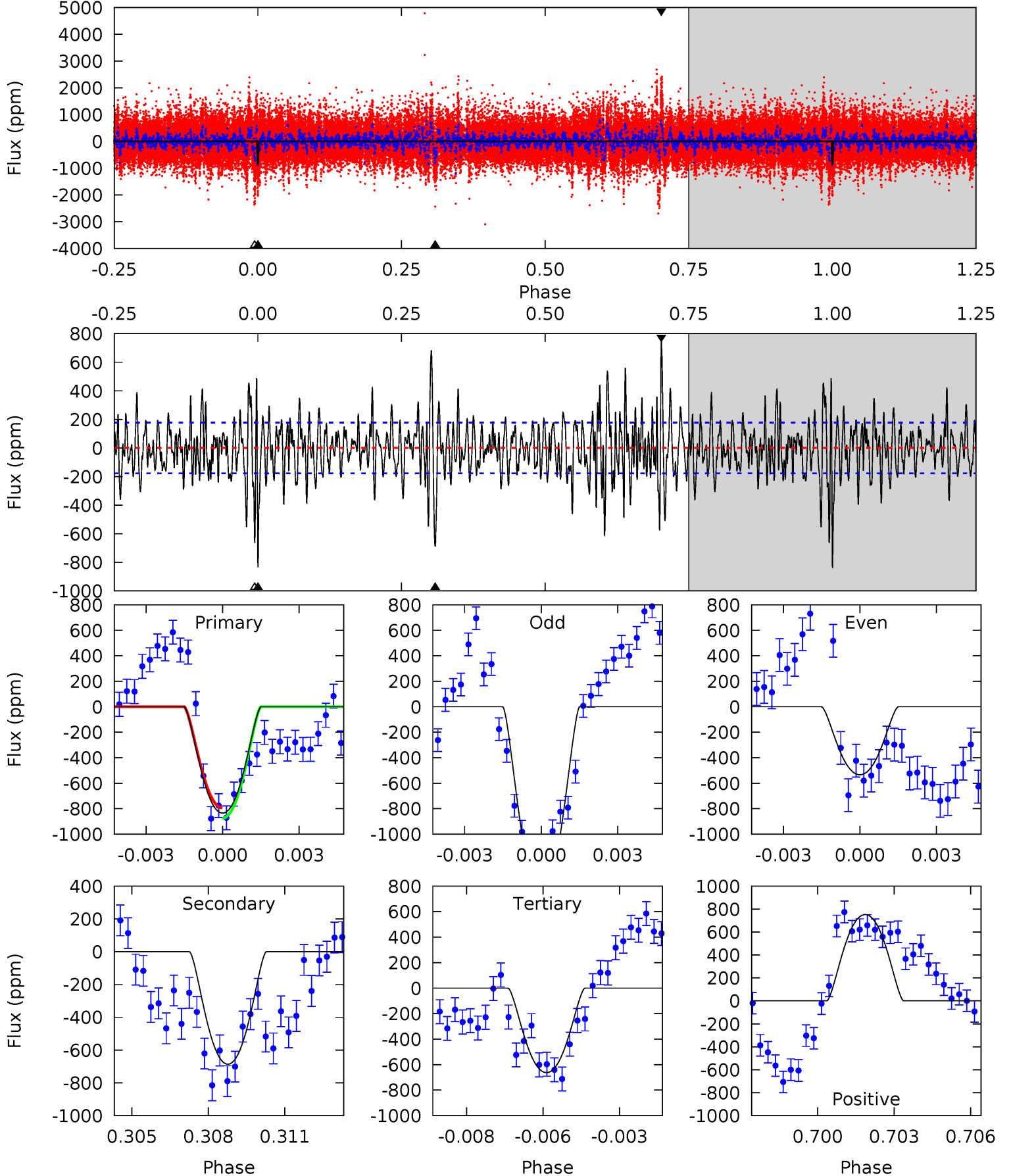
TCE 008106713-01 P=525.503485 Days $T_0=448.376711$ (BKJD)



DV Model-Shift Uniqueness Test

008106713-01, P = 525.535032 Days, E = 448.475177 Days

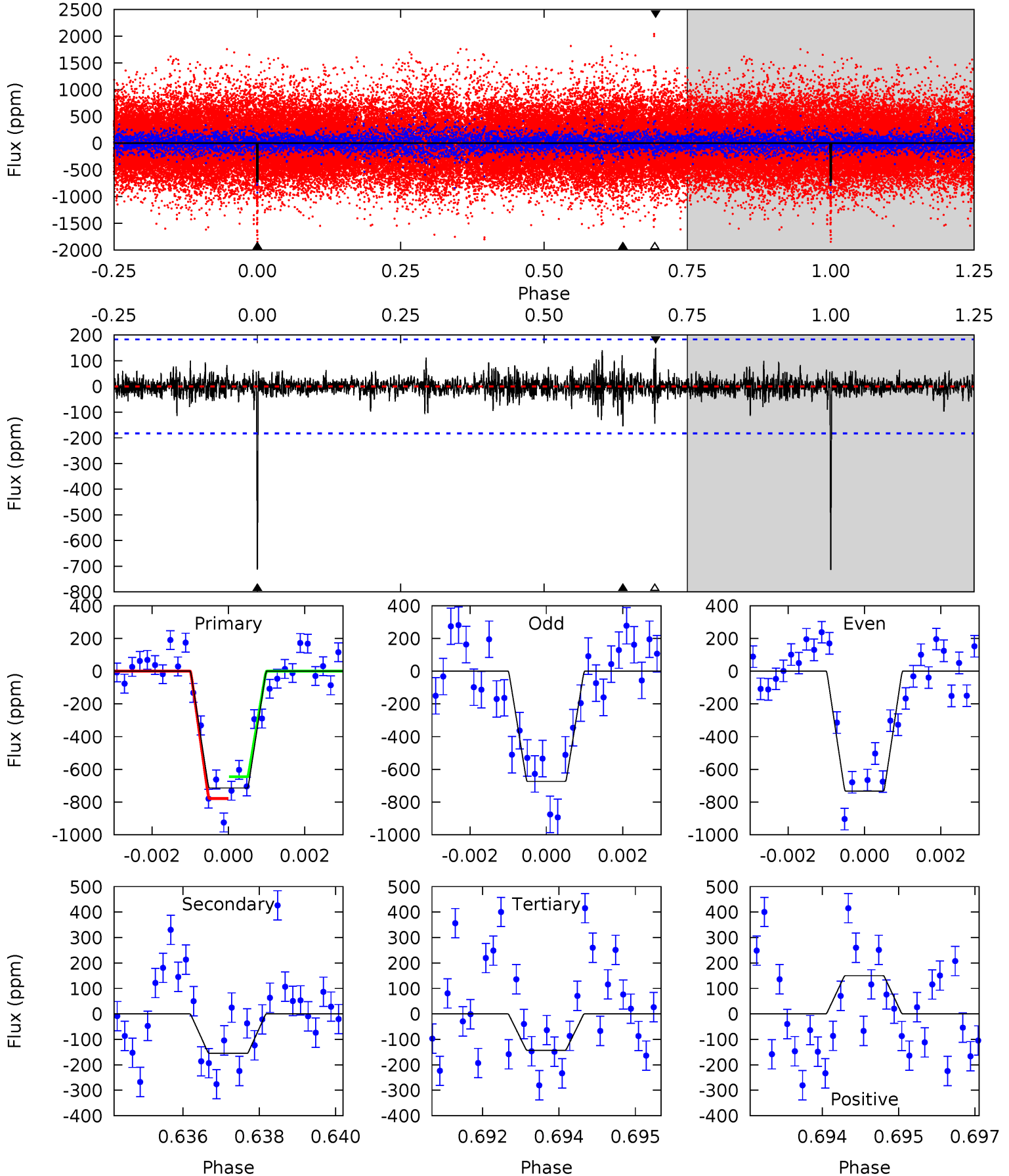
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
24.7	20.3	19.6	22.3	5.26	2.99	5.11	5.09	2.44	0.70	-1.96	13.2	0.79	0.47	1.18



Alt Model-Shift Uniqueness Test

008106713-01, P = 525.503485 Days, E = 448.376711 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
20.8	4.52	4.17	4.37	5.34	3.10	0.79	16.6	16.4	0.35	0.15	0.80	1.06	0.17	1.94



Stellar Parameters For KIC 008106713

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5379^{+175}_{-159}	$4.583^{+0.032}_{-0.128}$	$-0.080^{+0.300}_{-0.300}$	$0.793^{+0.154}_{-0.066}$	$0.886^{+0.070}_{-0.104}$	$2.500^{+0.425}_{-0.941}$
	+3%/-3%	+1%/-3%	+375%/-375%	+19%/-8%	+8%/-12%	+17%/-38%
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 008106713-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-686 ± 34	$4.07^{+1.88}_{-1.69}$	272^{+14}_{-11}	4312^{+1079}_{-545}	33464^{+64453}_{-17903}
Alt.	-155 ± 34	$2.68^{+1.76}_{-1.51}$	274^{+13}_{-11}	3810^{+1384}_{-556}	17270^{+71754}_{-11087}

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

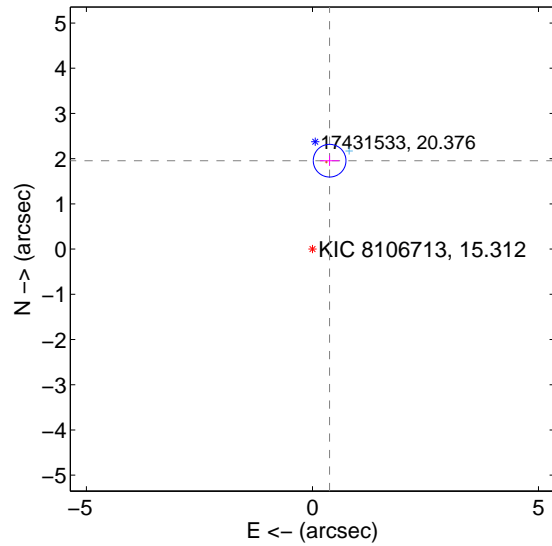
Supplemental centroid analysis for 008106713-01. Kepler magnitude: 15.31. Transit SNR 10.36

There are 1 quarters with good PRF difference image offsets

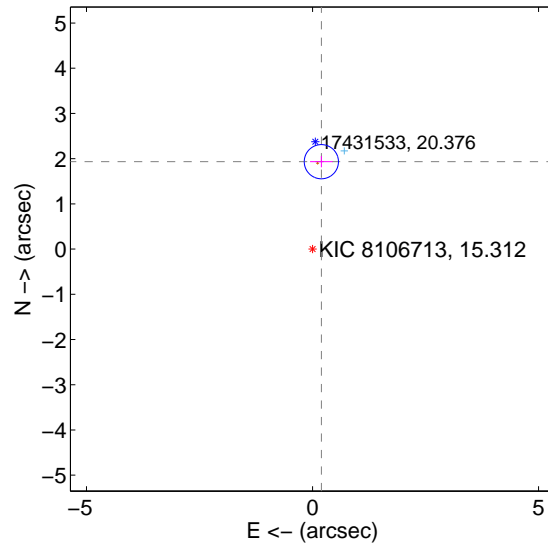
The direct PRF centroid is offset from the target star catalog position by about 0.20 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.992 ± 0.121	16.53	-0.380 ± 0.215	1.956 ± 0.115
PRF-fit source offset from KIC position	1.943 ± 0.126	15.41	-0.195 ± 0.250	1.933 ± 0.124
photometric centroid source offset	1.22 ± 1.08	1.13	-0.28 ± 1.11	1.18 ± 1.08

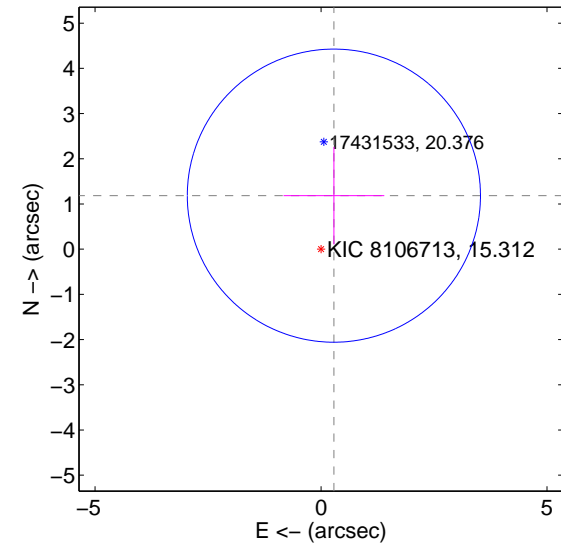
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position



offset from photometric centroids

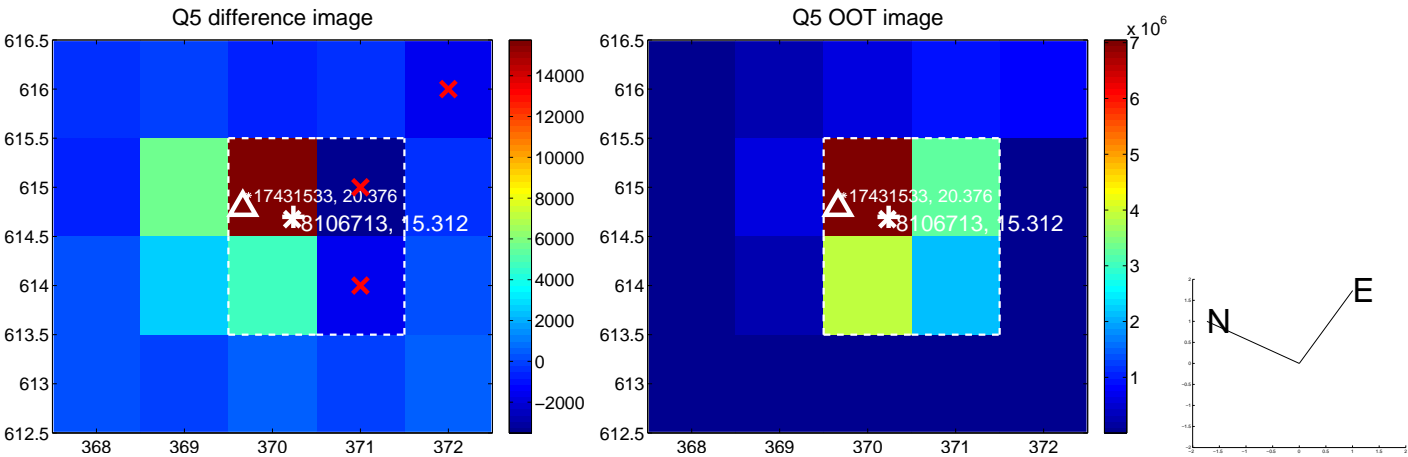


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

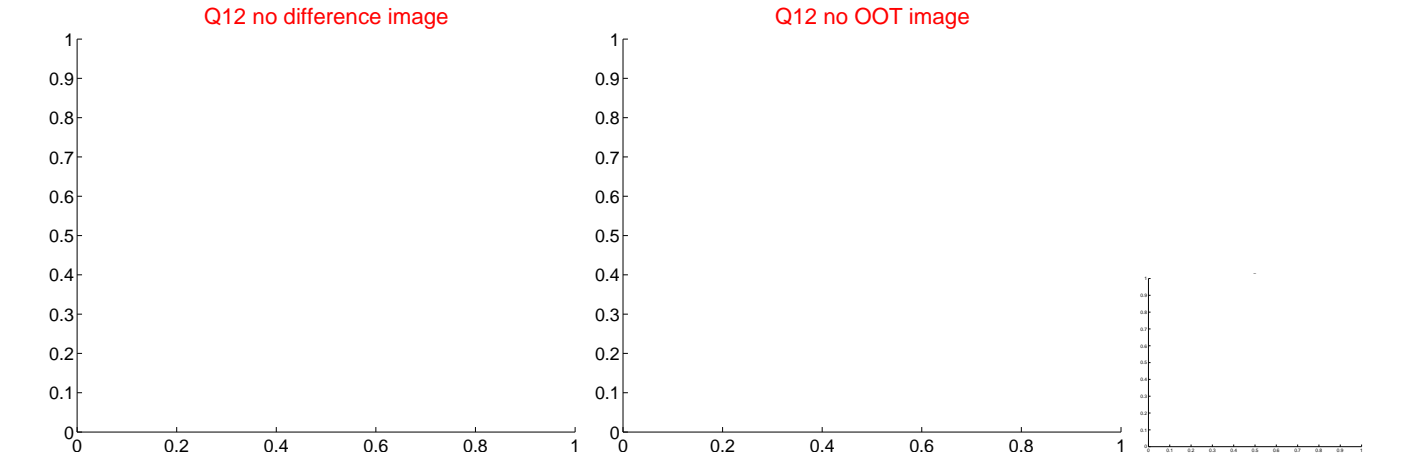
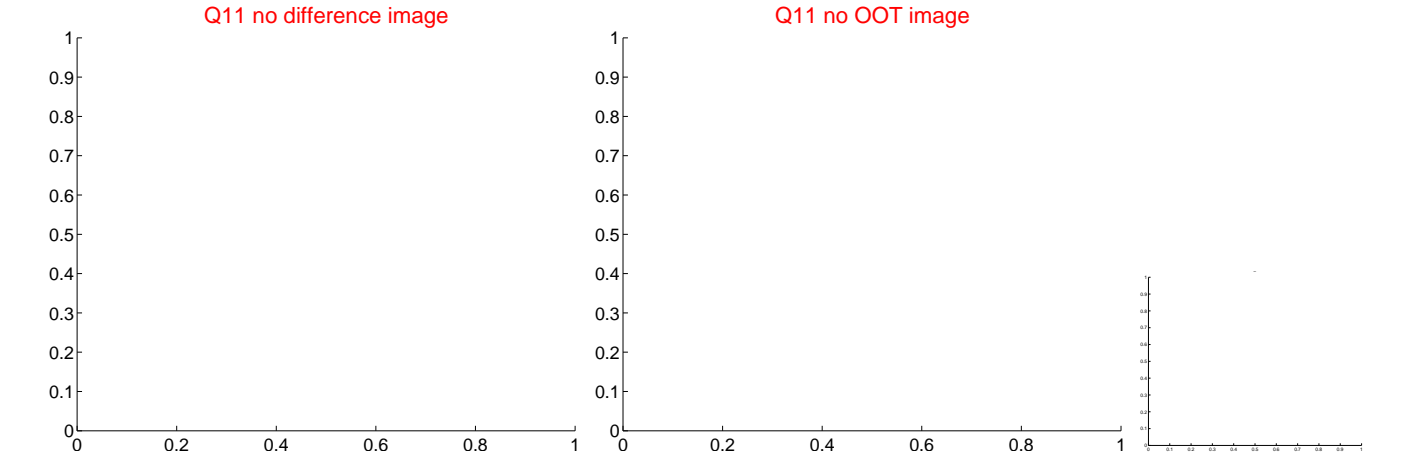
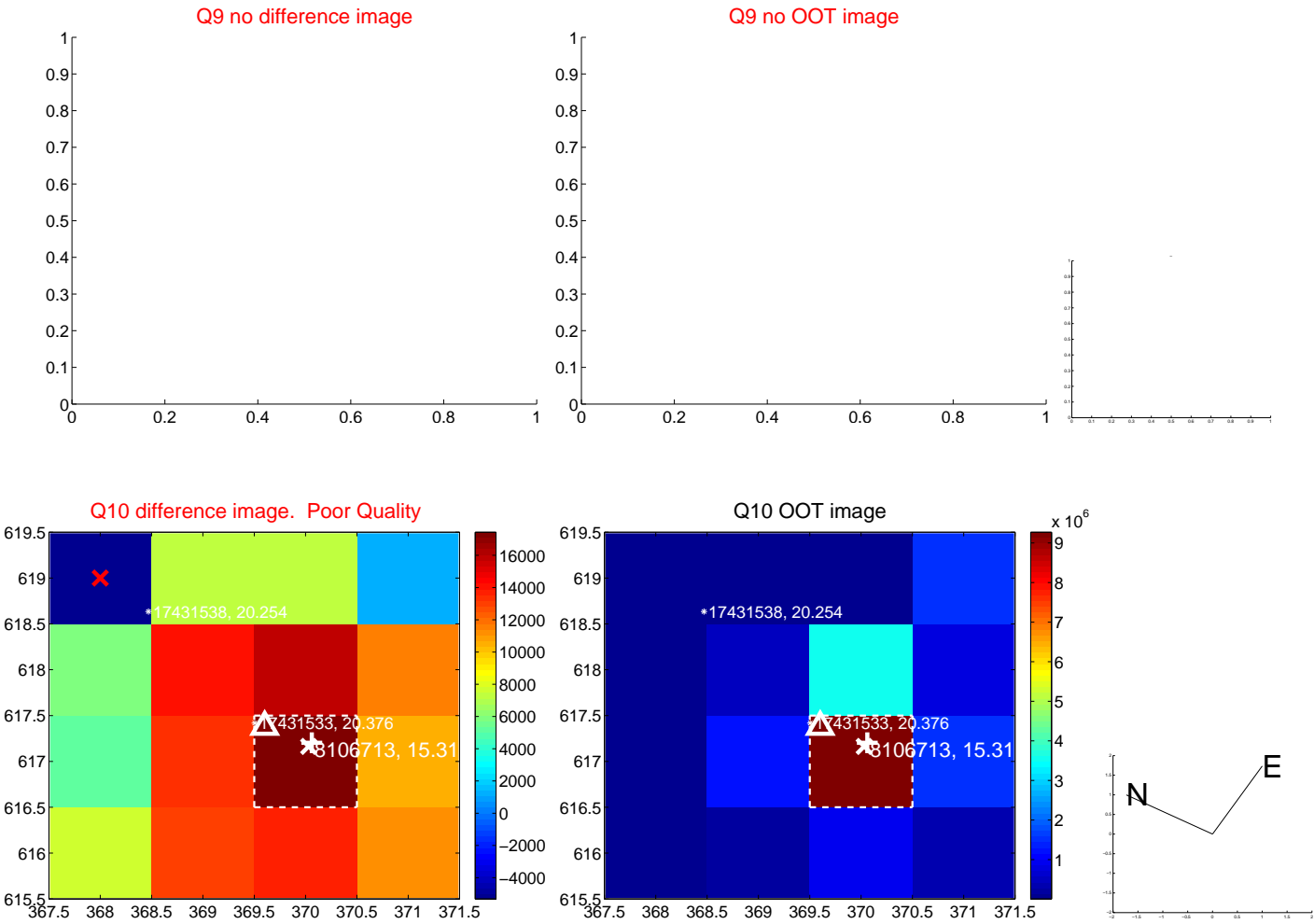
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



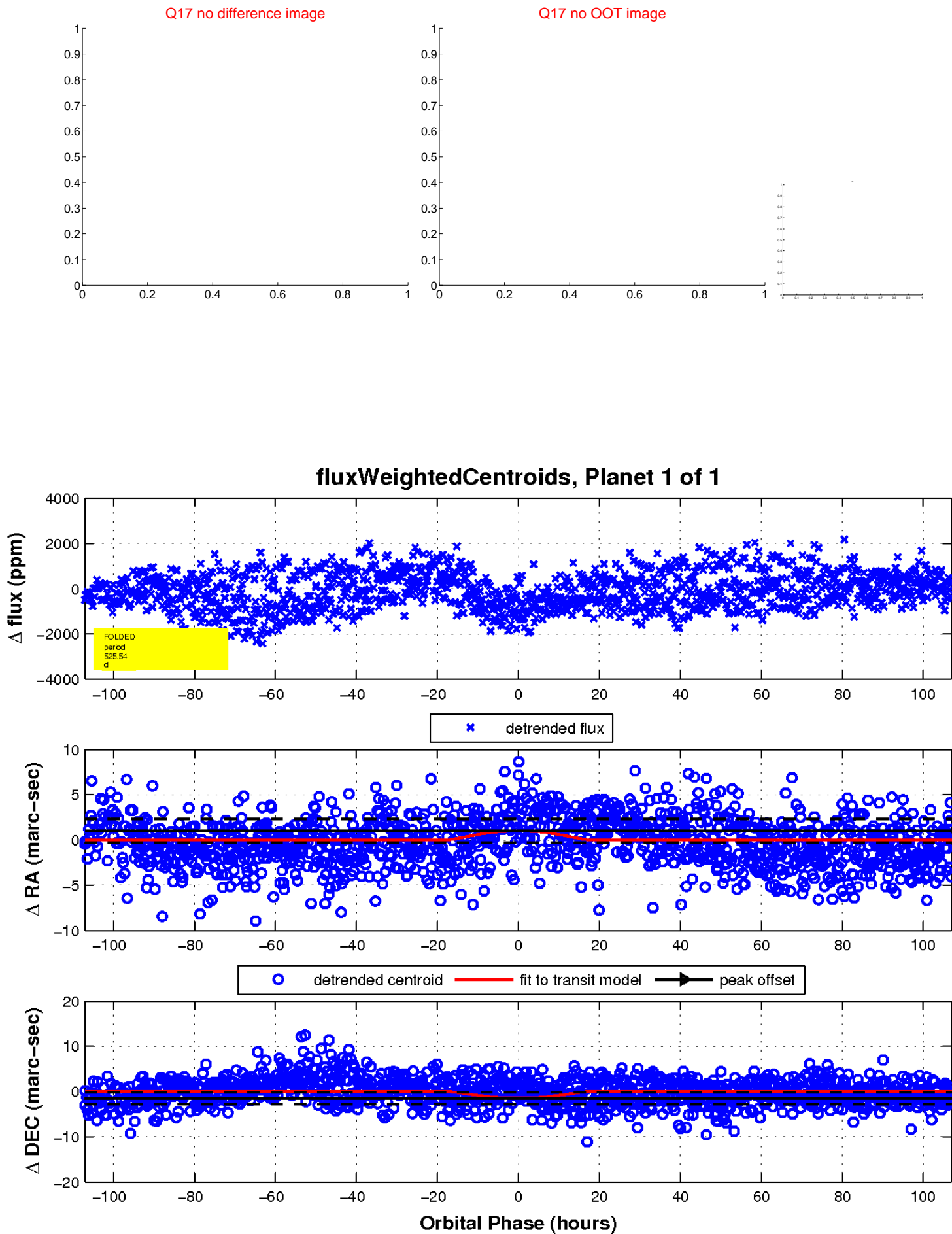
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



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.



UKIRT Image

Declination

