

KIC 007185710

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})
007185710-01	OBS	8136.01	160.244086	162.468180	547.3	5.579	7.3	7.1	6.78	5128	16.93	52.59

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007185710-01	OBS	FP	0.28	1	0	0	0	INDIV_TRANS_SKYE

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

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

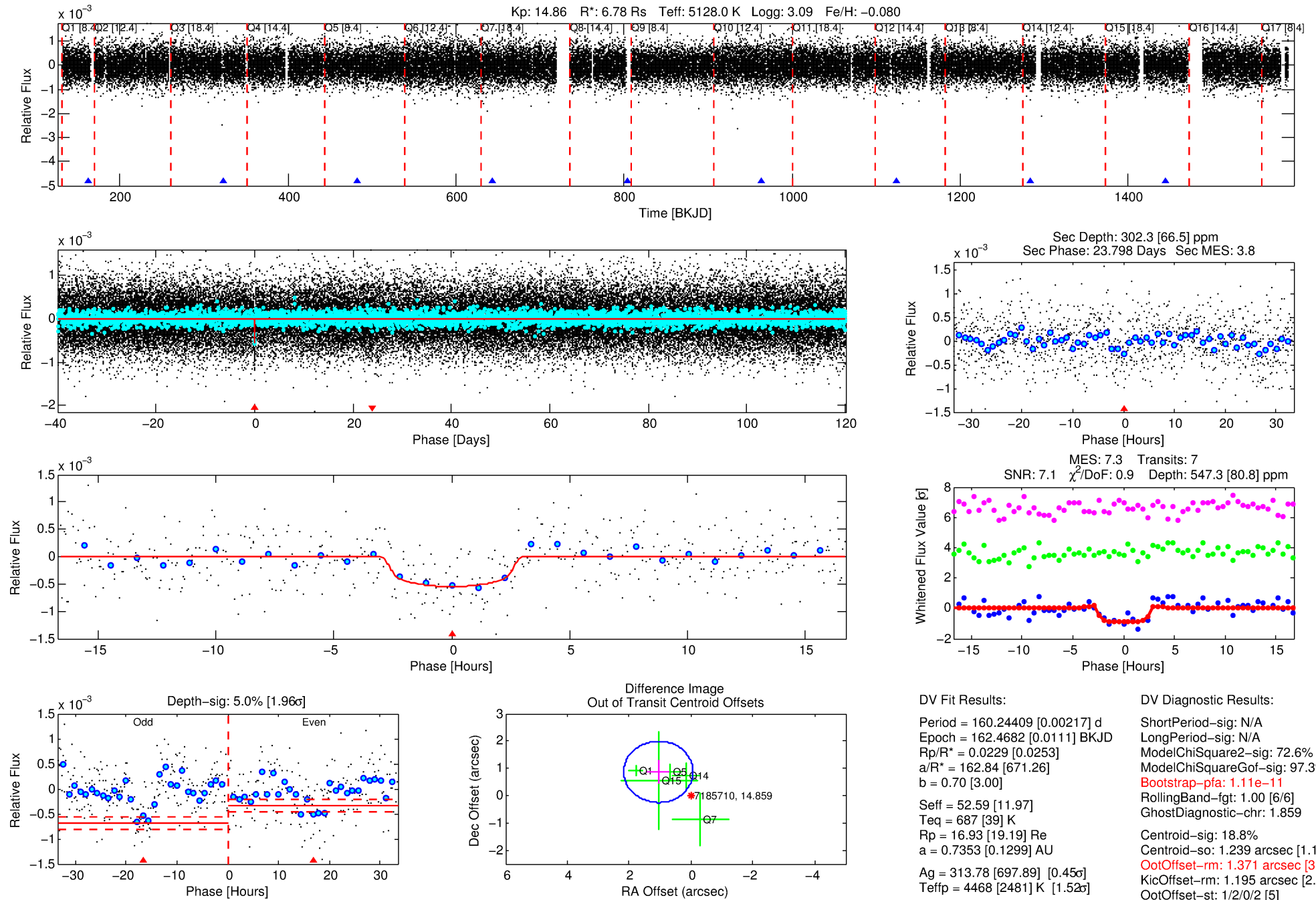
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007185710-01

No Significant Match Found

DV One-Page Summary

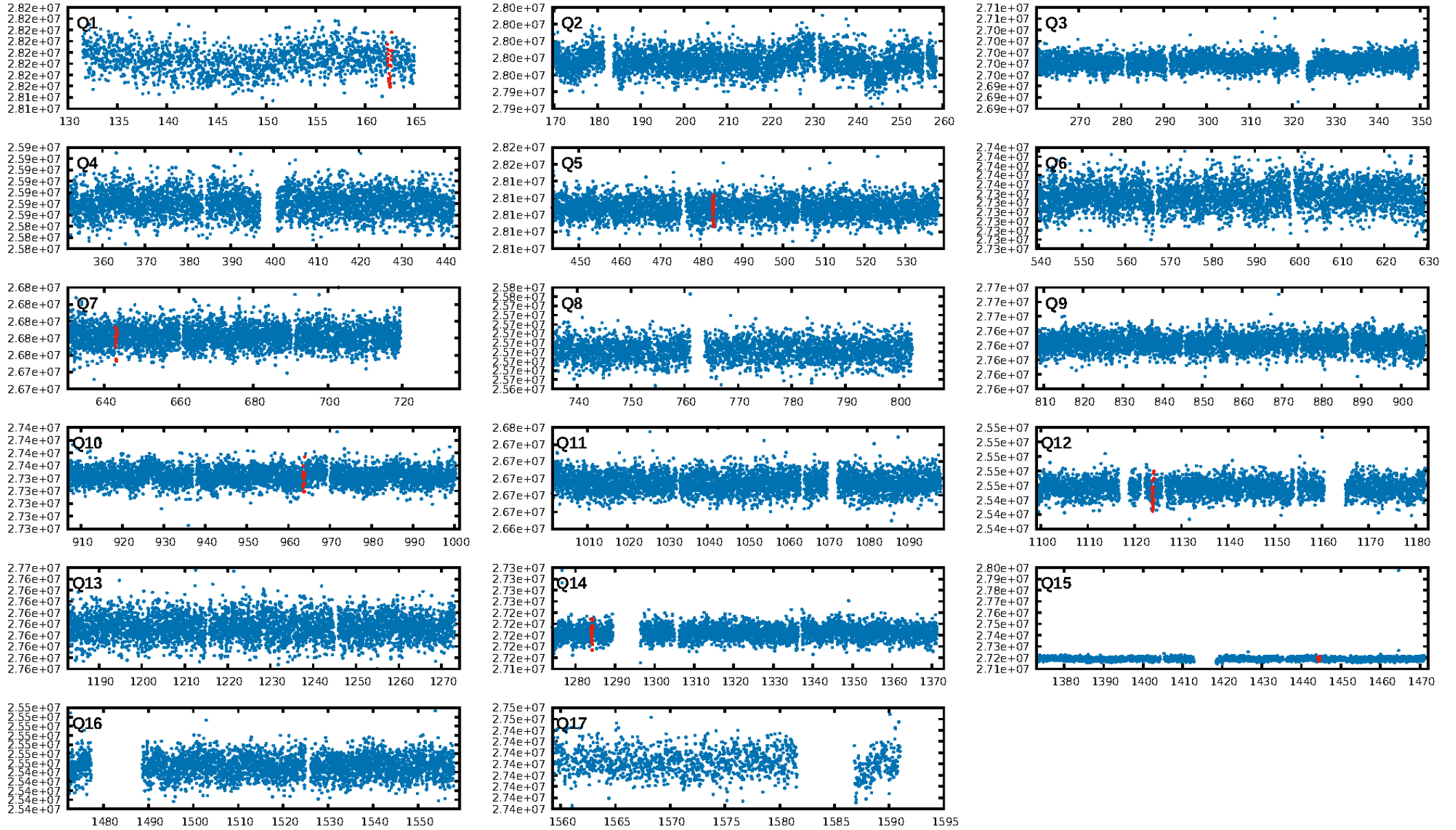
KIC: 7185710 Candidate: 1 of 1 Period: 160.244 d



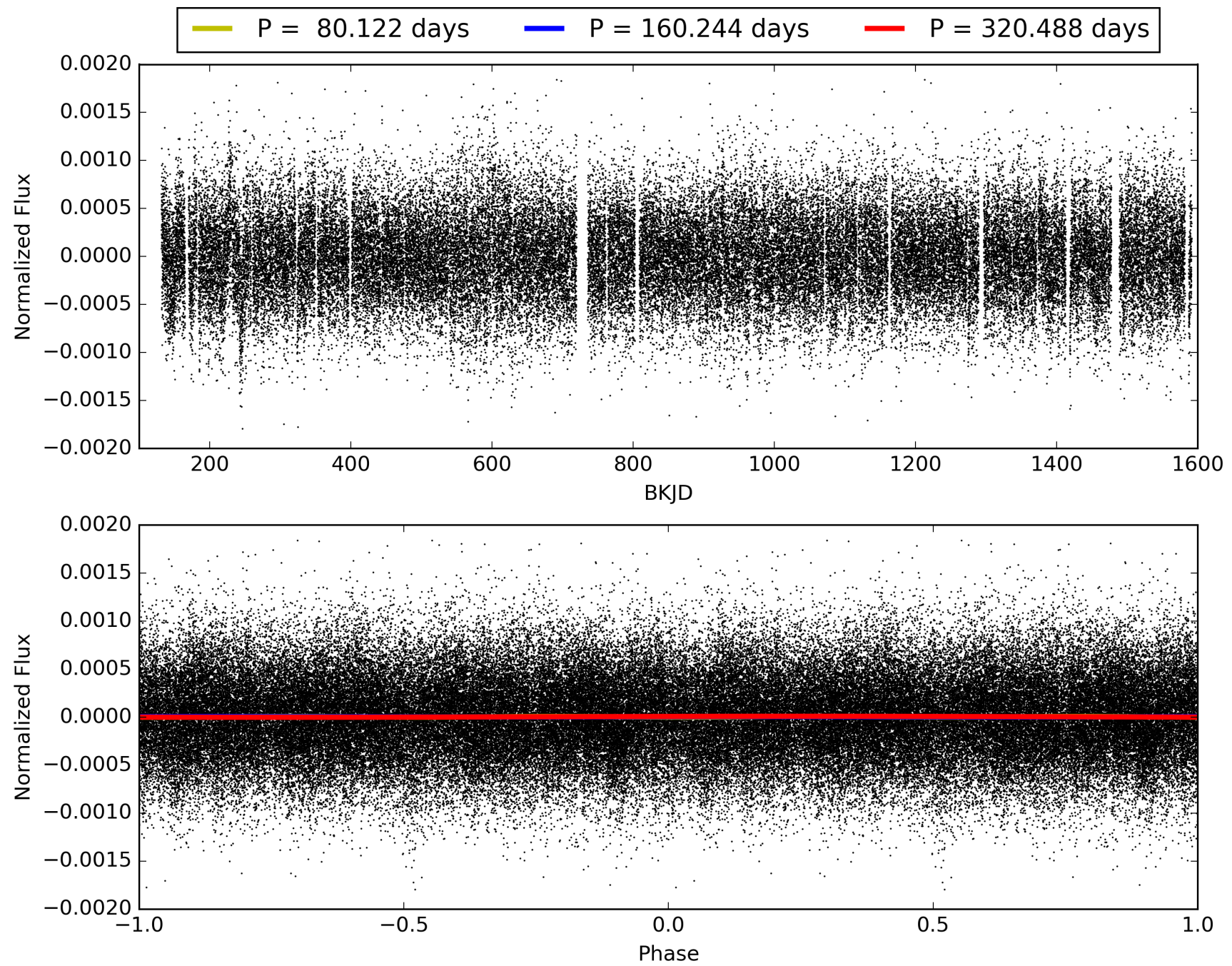
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 21:28:11 Z

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

TCE 007185710-01, PDC Light Curves

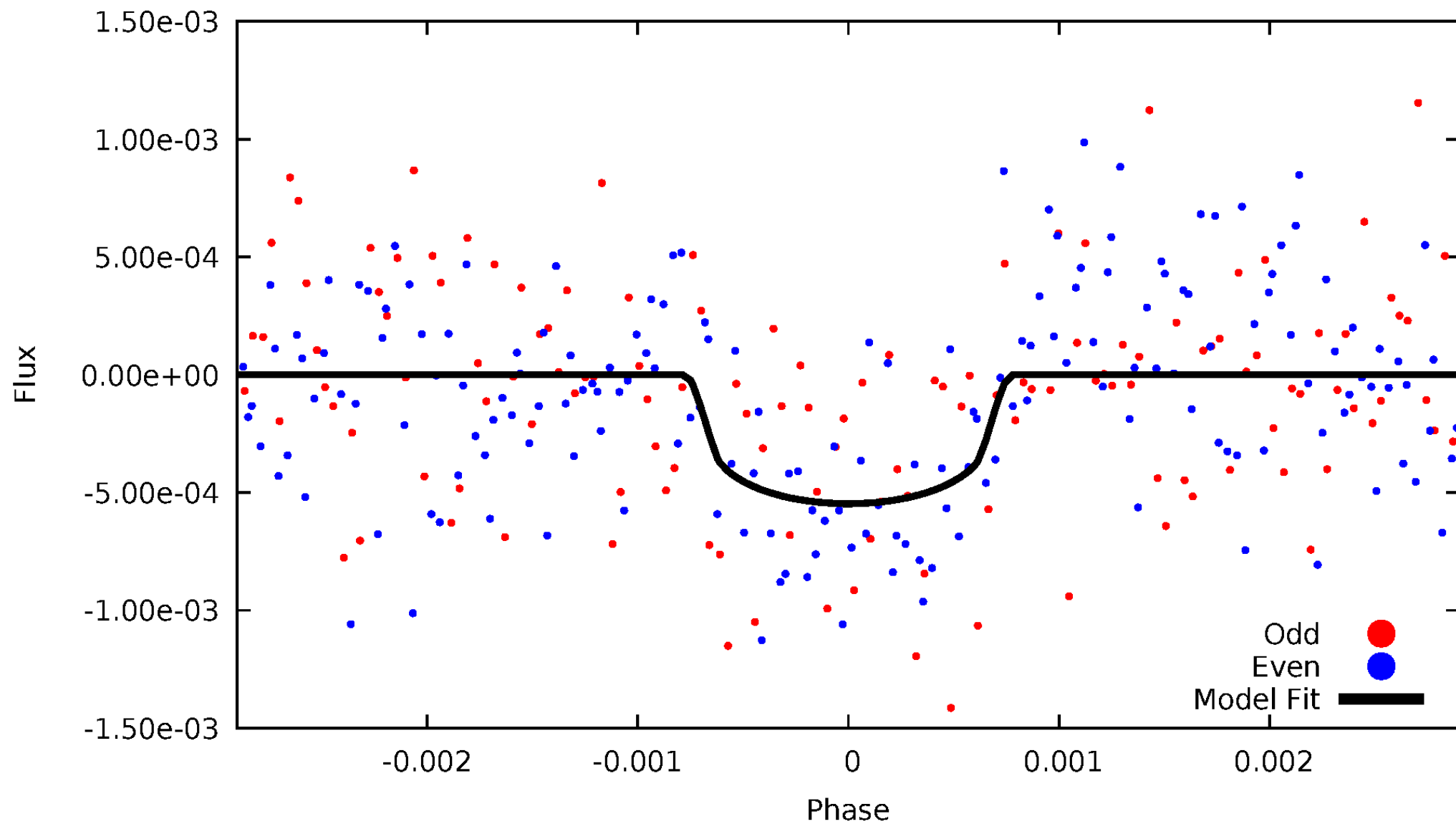


TCE 007185710-01



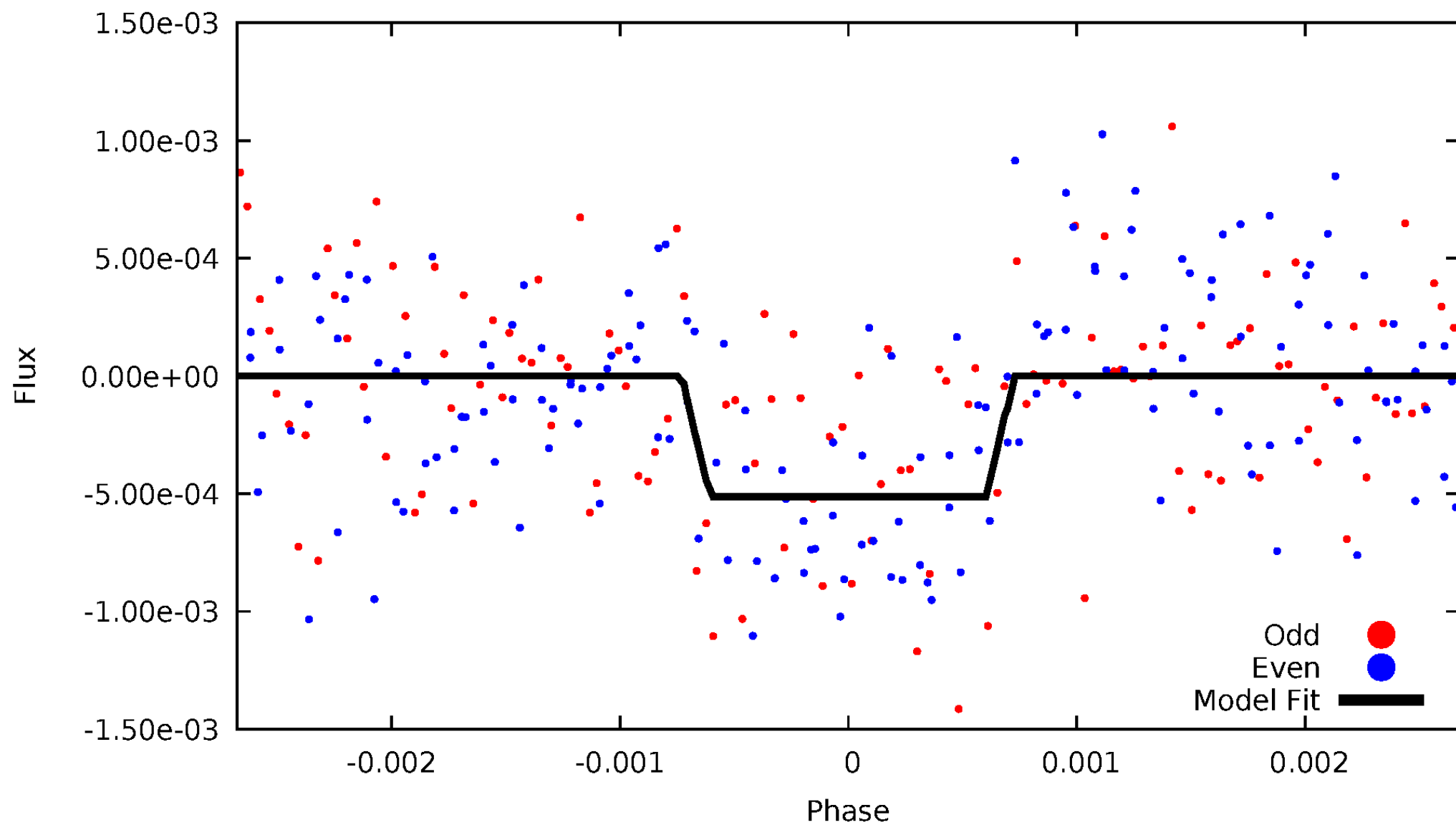
DV Odd/Even

TCE 007185710-01

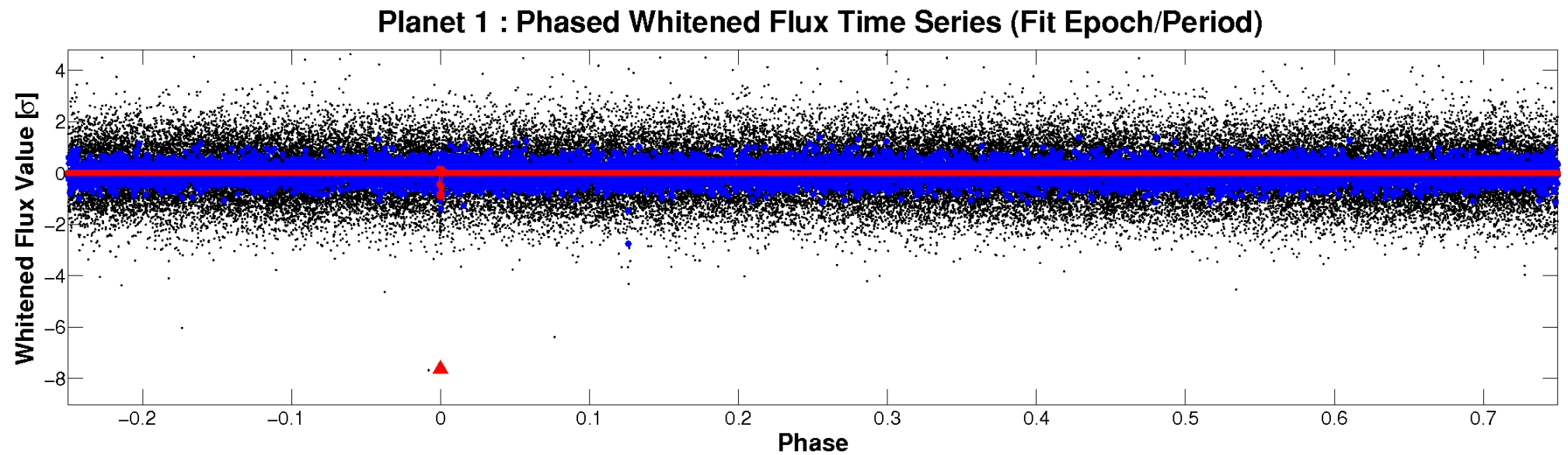
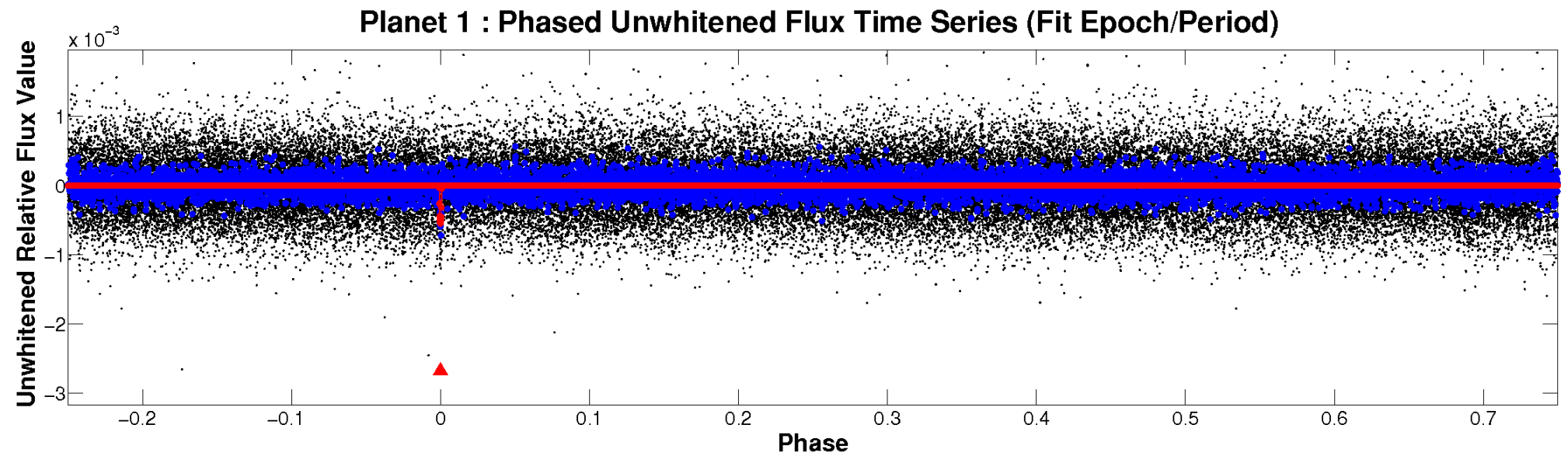


ALT Odd/Even

TCE 007185710-01

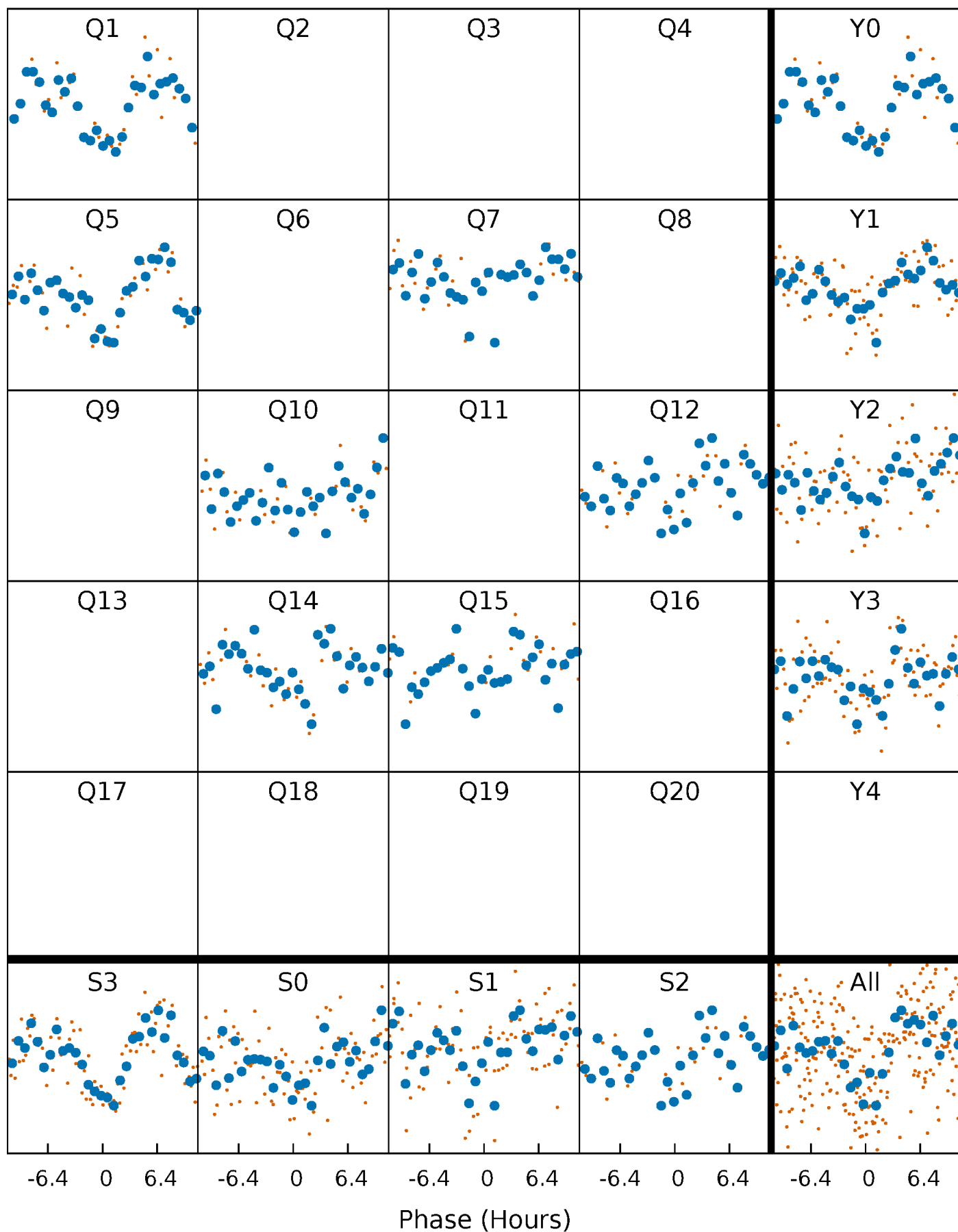


Non-Whitened Vs. Whitened Light Curve



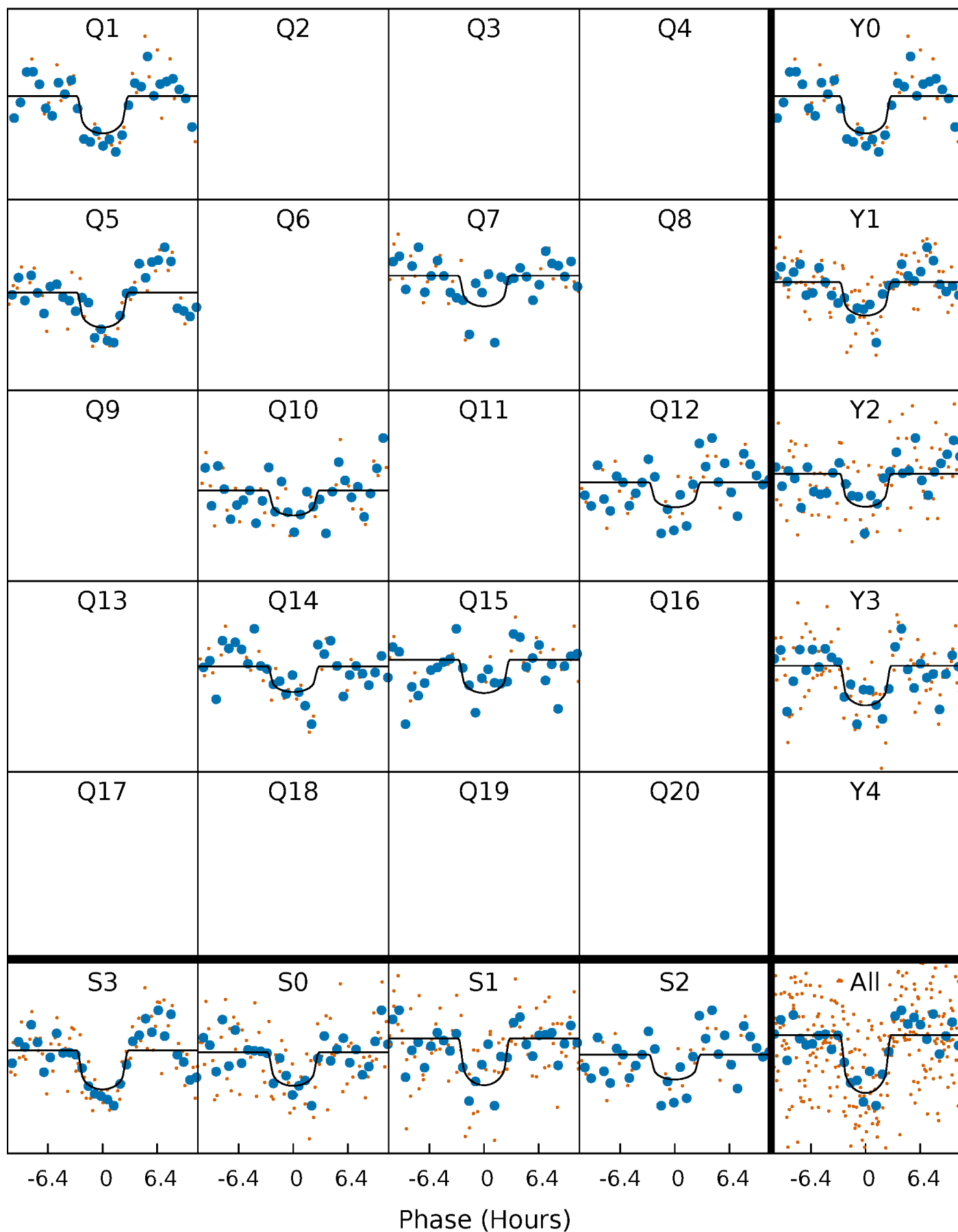
PDC Quarter-Phased Transit Curves

TCE 007185710-01 P=160.244086 Days $T_0=162.468180$ (BKJD)



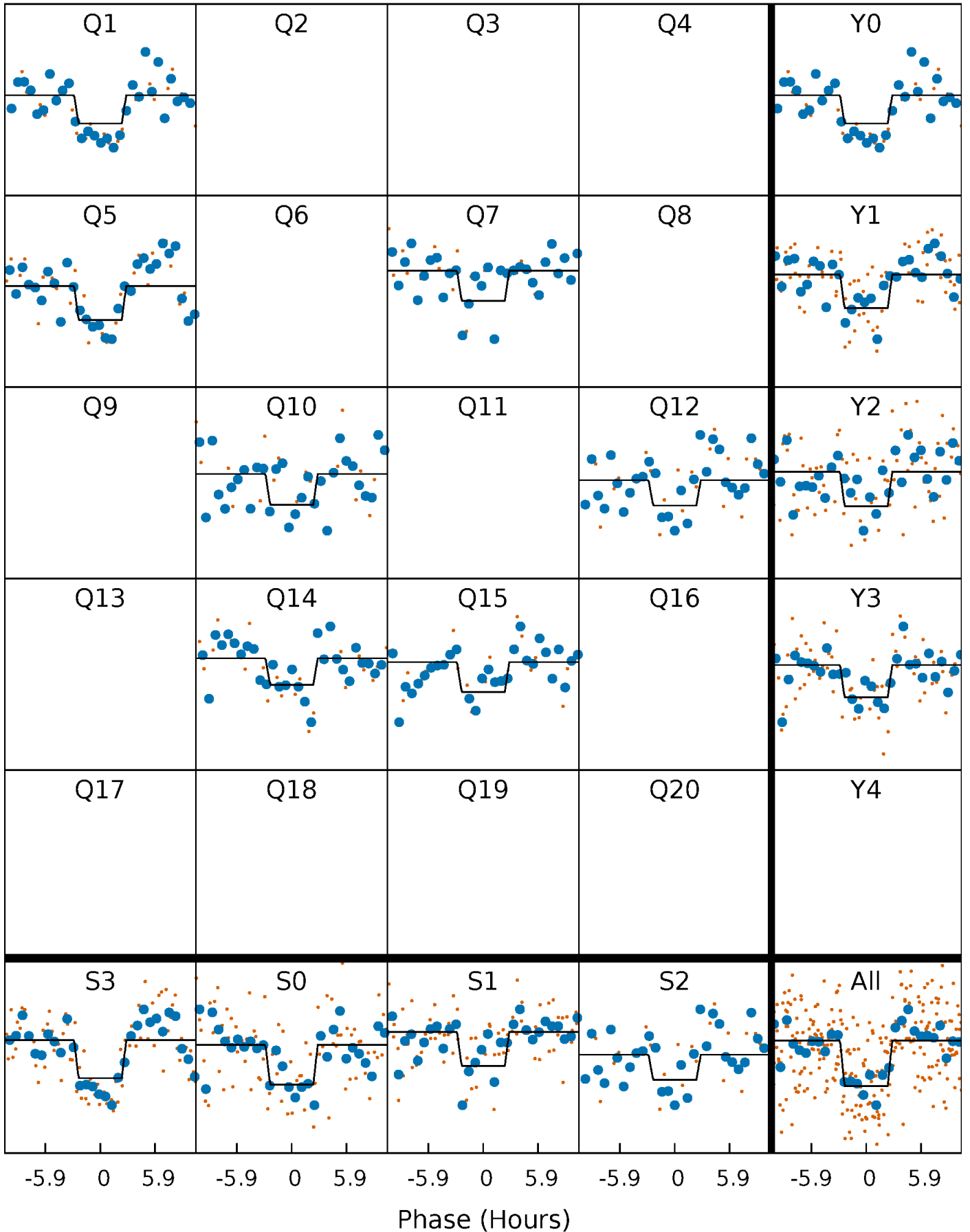
DV Quarter-Phased Transit Curves

TCE 007185710-01 P=160.244086 Days $T_0=162.468180$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

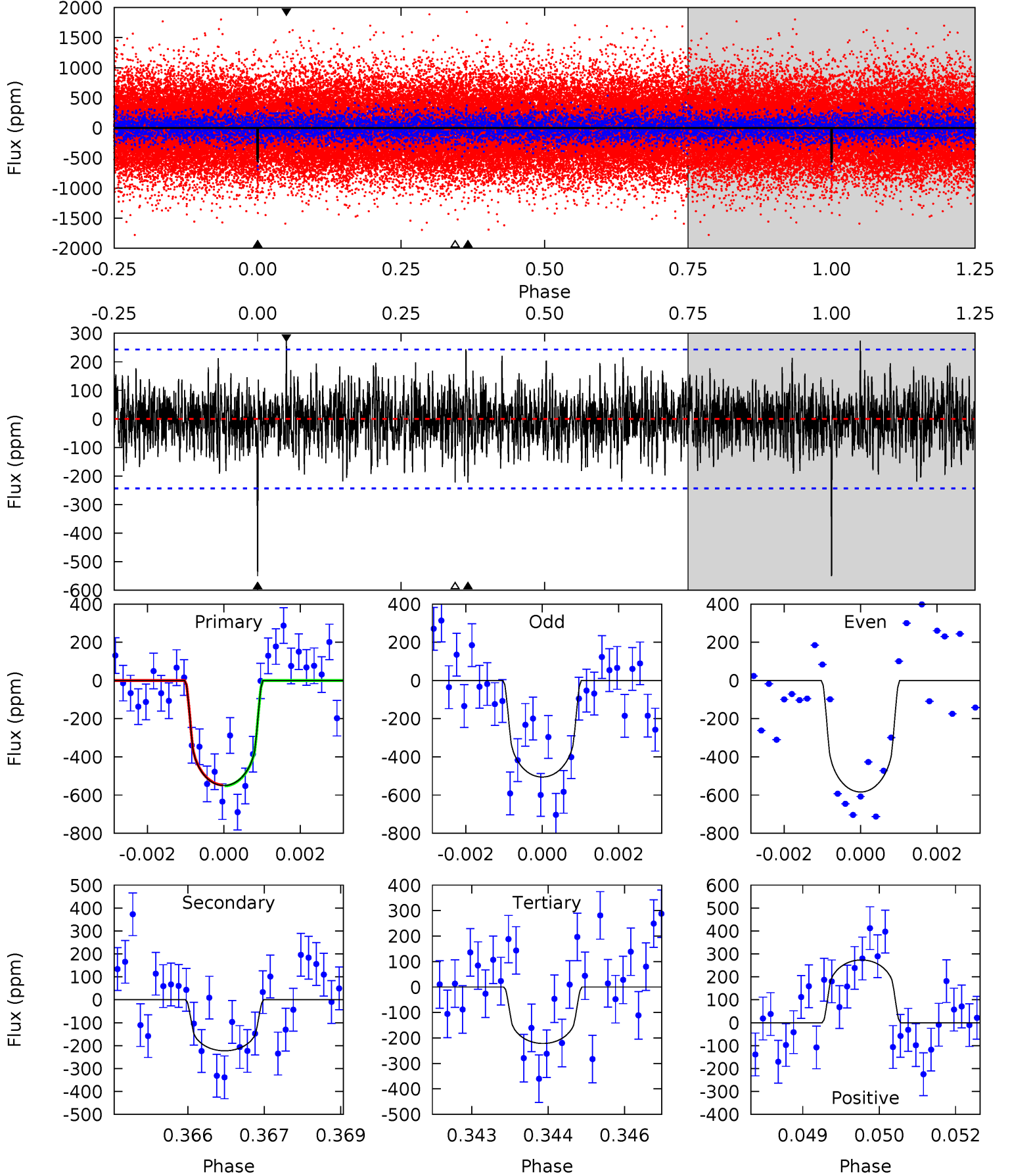
TCE 007185710-01 P=160.243412 Days $T_0=162.473503$ (BKJD)



DV Model-Shift Uniqueness Test

007185710-01, P = 160.244086 Days, E = 2.224094 Days

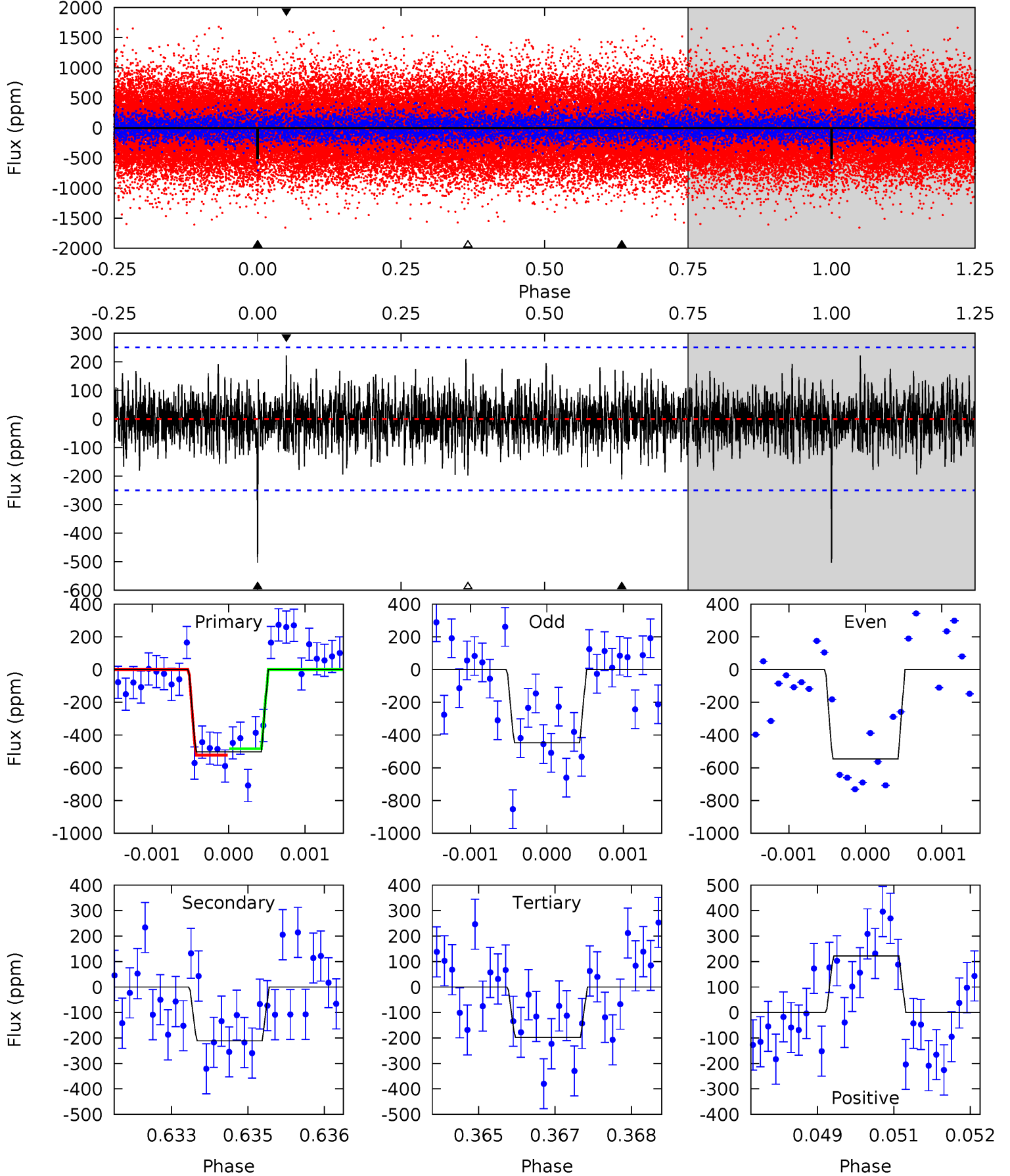
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.2	4.92	4.90	6.04	5.38	3.17	1.54	7.26	6.11	0.02	-1.12	0.85	1.04	0.33	0.05



Alt Model-Shift Uniqueness Test

007185710-01, P = 160.243412 Days, E = 2.230091 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.8	4.55	4.26	4.77	5.39	3.19	1.28	6.57	6.06	0.29	-0.22	1.05	1.19	0.31	0.42



Stellar Parameters For KIC 007185710

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$\rho_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5128^{+75}_{-175}	$3.091^{+0.033}_{-0.027}$	$-0.080^{+0.150}_{-0.350}$	$6.775^{+0.314}_{-1.777}$	$2.063^{+0.103}_{-0.924}$	$0.009^{+0.004}_{-0.001}$
	+1%/-3%	+1%/-1%	+188%/-438%	+5%/-26%	+5%/-45%	+39%/-8%
Source	PHO1	AST71	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 007185710-01 / KOI 8136.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-223 ± 45	$21.02^{+17.10}_{-13.22}$	958^{+21}_{-31}	3979^{+1940}_{-726}	153^{+890}_{-108}
Alt.	-211 ± 46	$22.14^{+15.62}_{-14.06}$	956^{+23}_{-36}	3823^{+1887}_{-622}	123^{+856}_{-82}

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 $A_{\text{obs}} \gg 1.0$

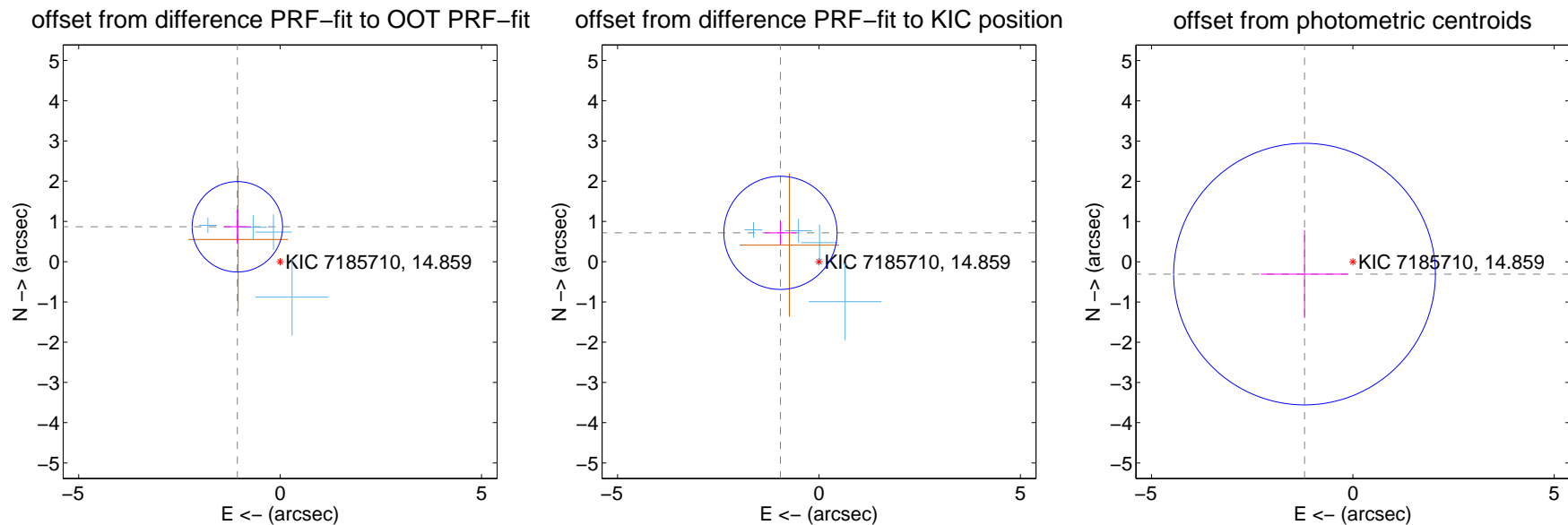
DV Centroid Data

Supplemental centroid analysis for 007185710-01. Kepler magnitude: 14.86. Transit SNR 7.11

There are 4 quarters with good PRF difference image offsets

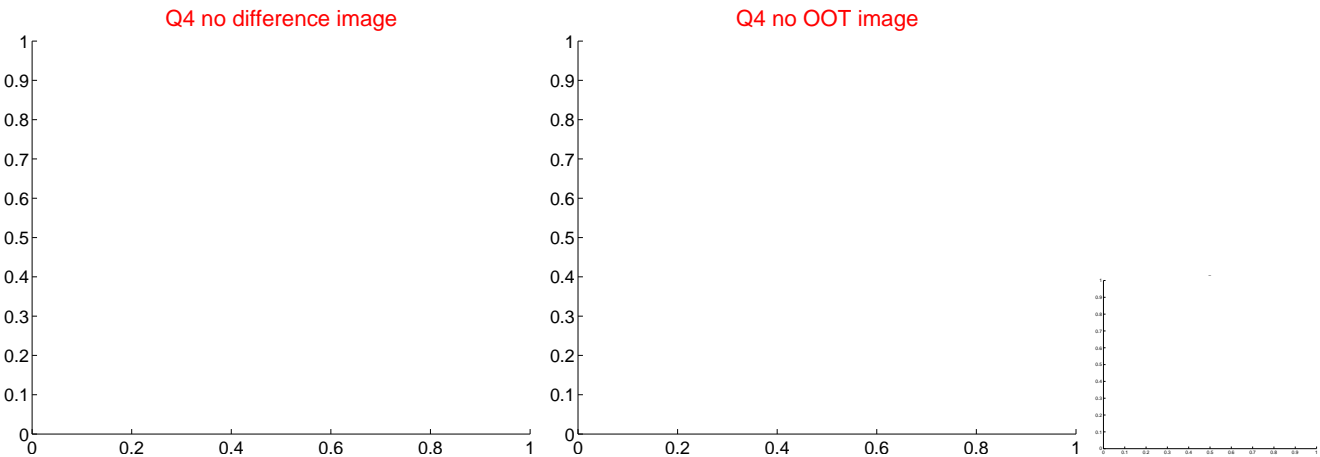
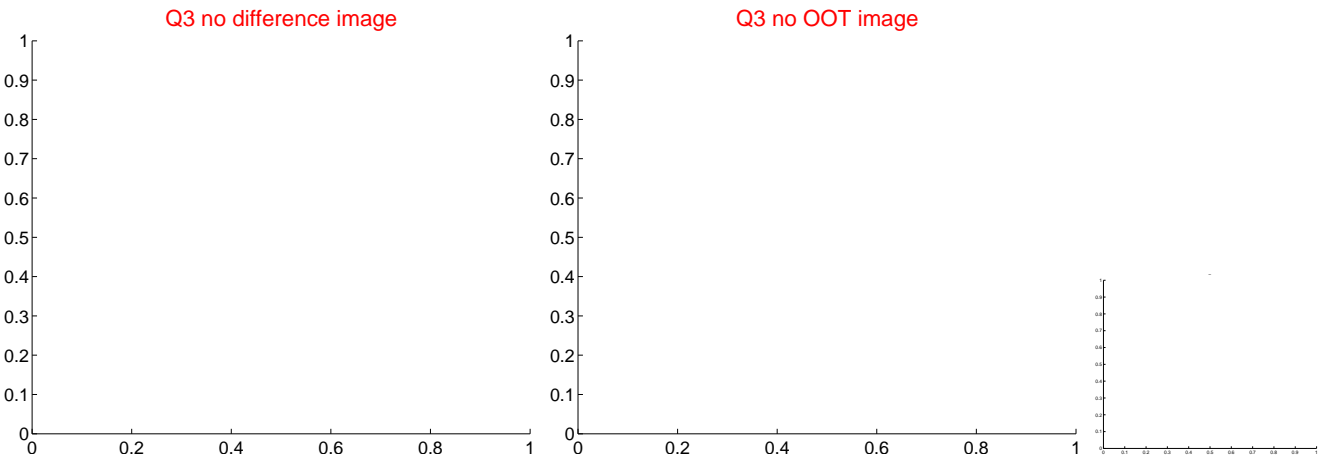
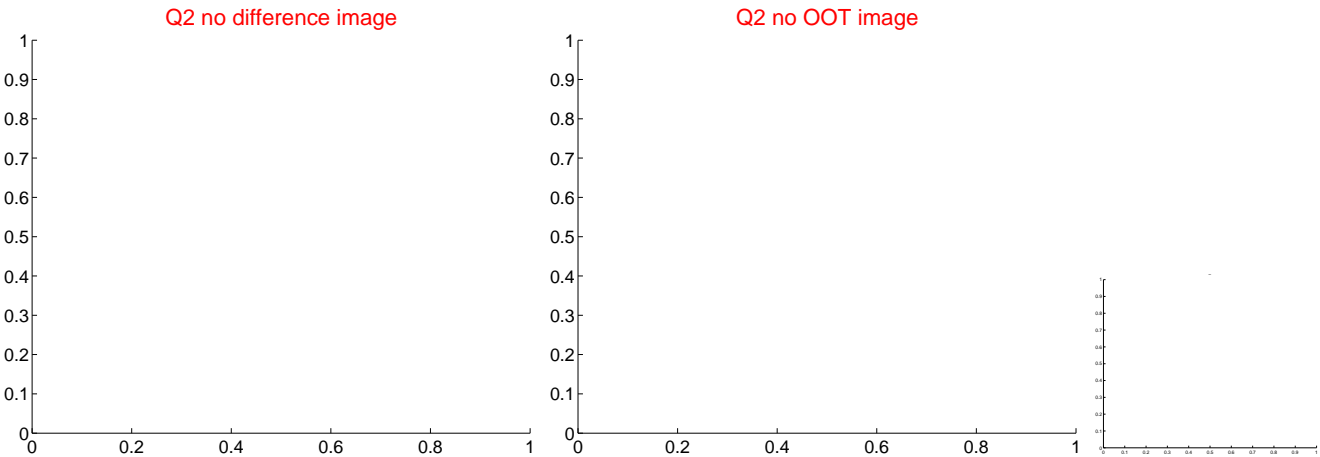
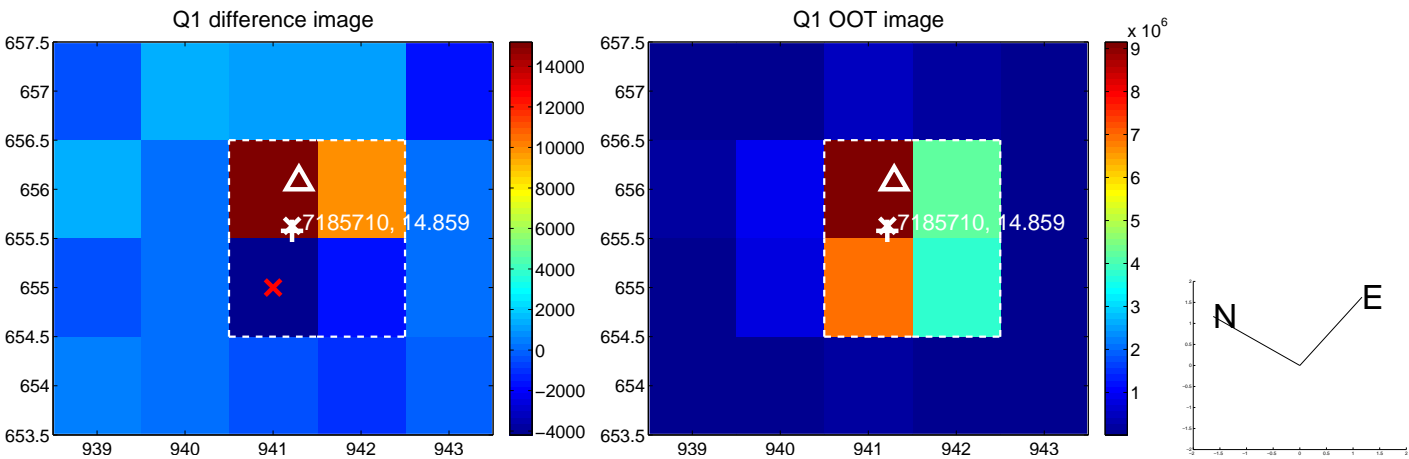
The direct PRF centroid is offset from the target star catalog position by about 0.34 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.371 ± 0.374	3.66	1.061 ± 0.336	0.867 ± 0.425
PRF-fit source offset from KIC position	1.195 ± 0.469	2.55	0.956 ± 0.394	0.717 ± 0.293
photometric centroid source offset	1.24 ± 1.08	1.14	1.20 ± 1.08	-0.31 ± 1.09

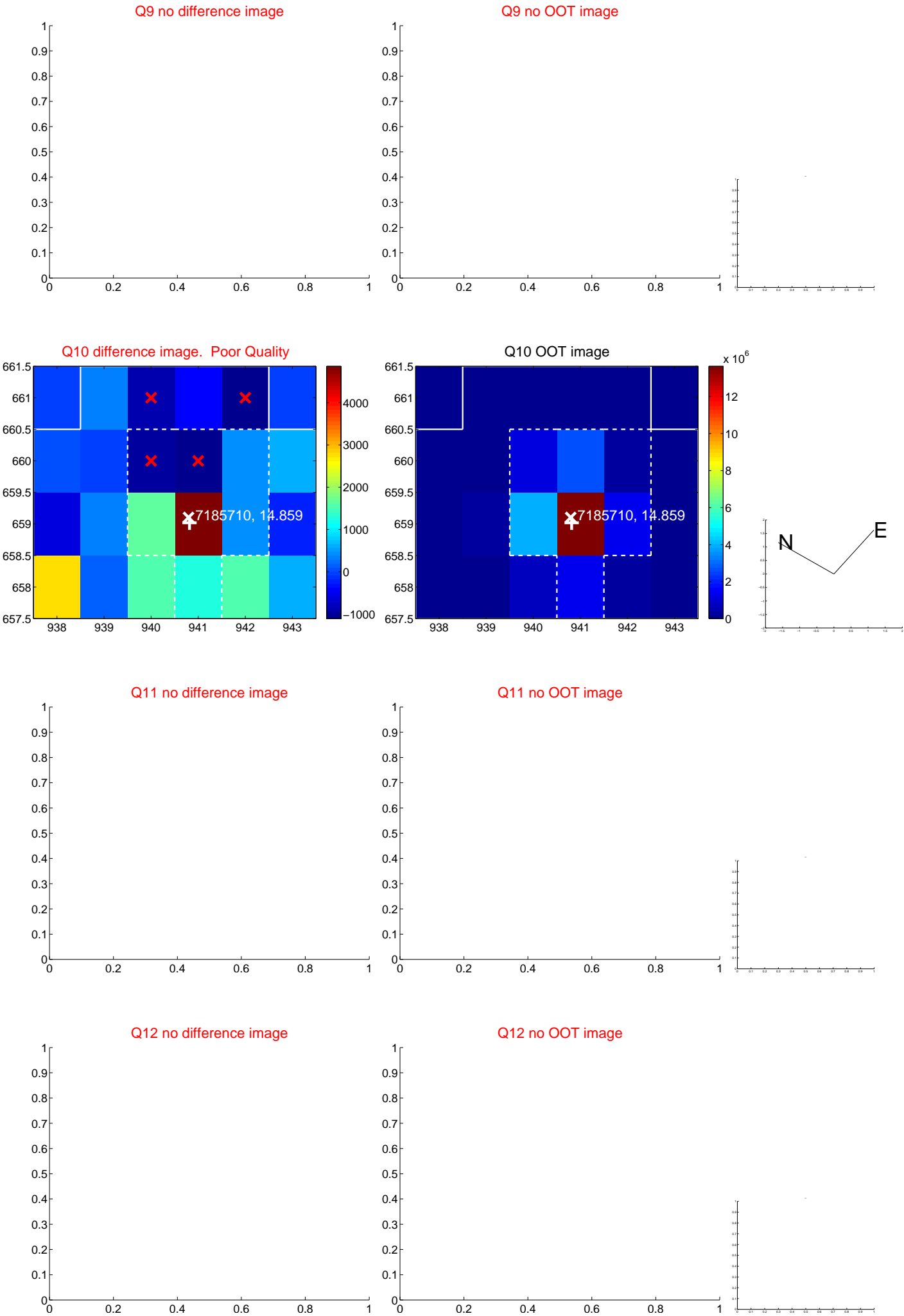


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

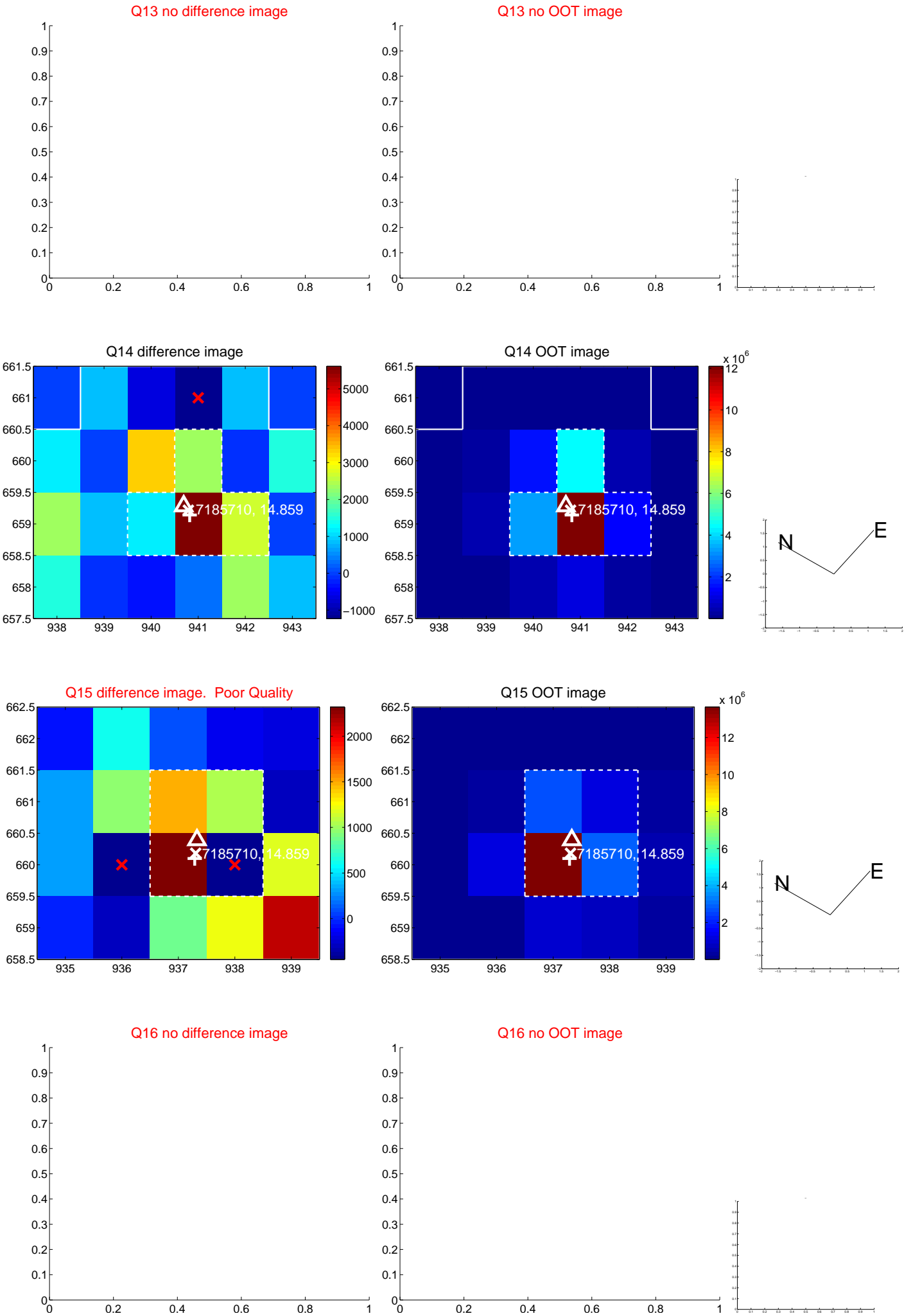
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



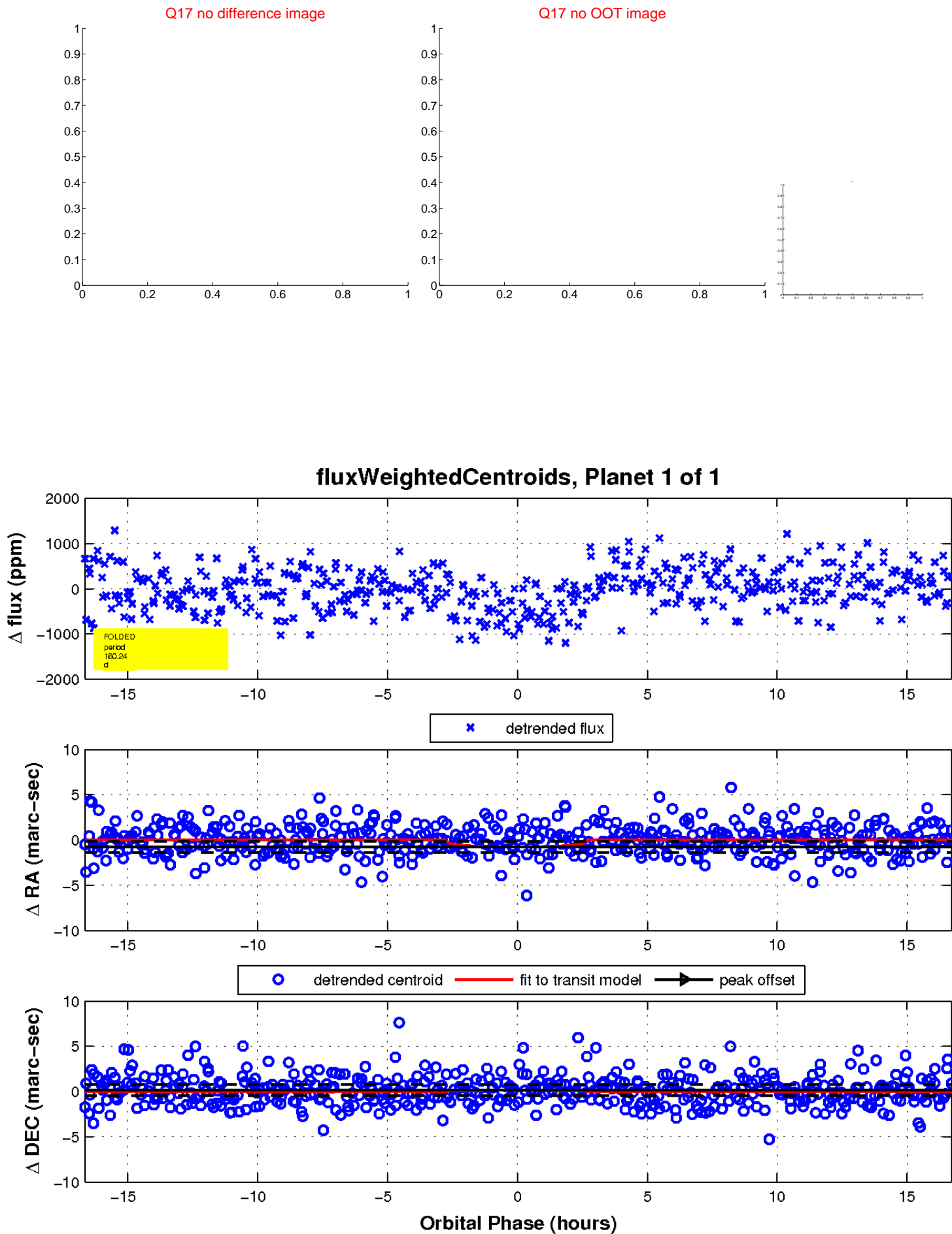
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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.



UKIRT Image

Declination

