

KIC 005775090

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})
005775090-01	OBS	8105.01	432.950647	173.288787	771.9	12.230	7.3	7.3	0.58	4403	1.98	0.12

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005775090-01	OBS	FP	0.02	1	0	0	0	ALL_TRANS_CHASES—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.

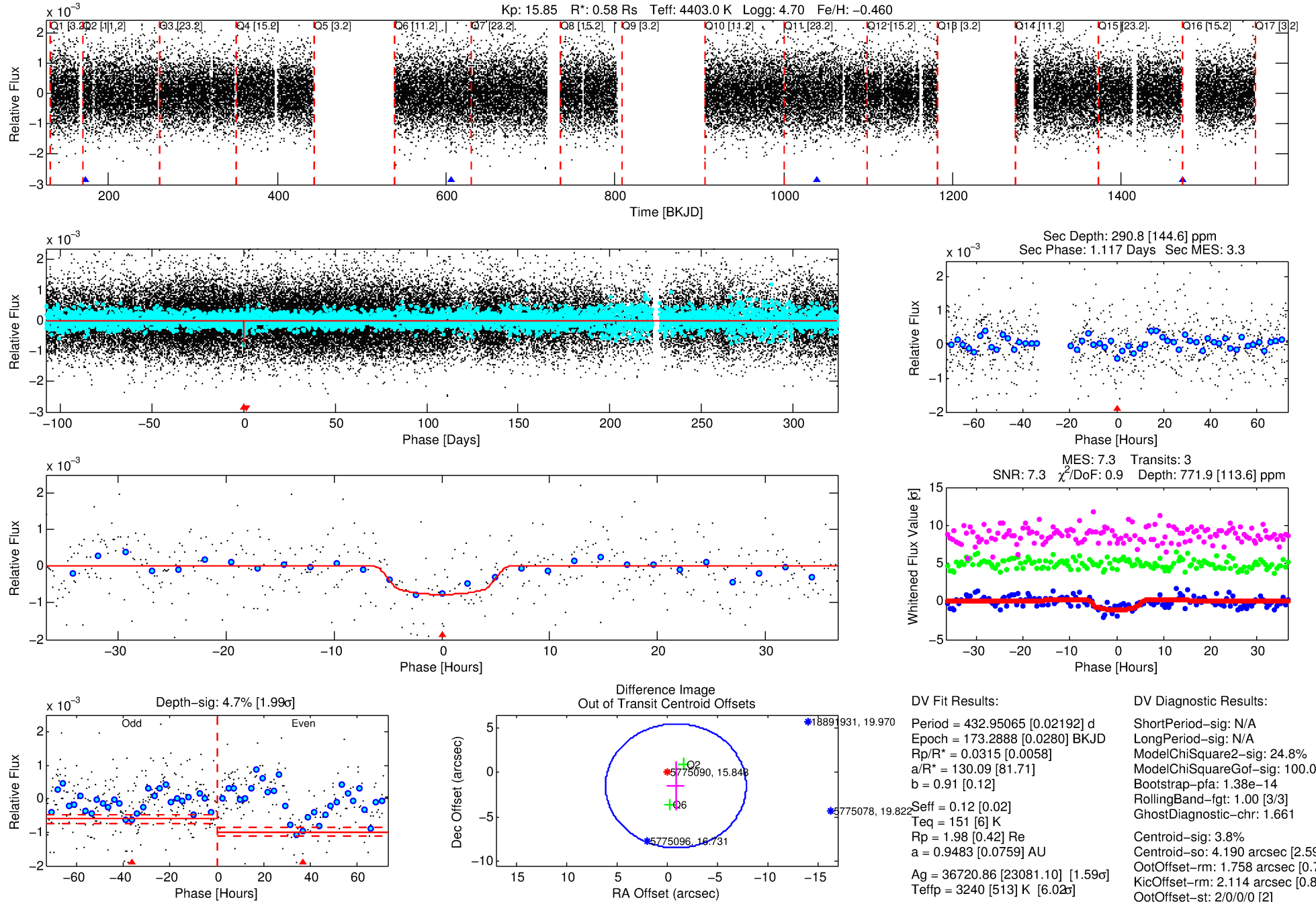
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005775090-01

No Significant Match Found

DV One-Page Summary

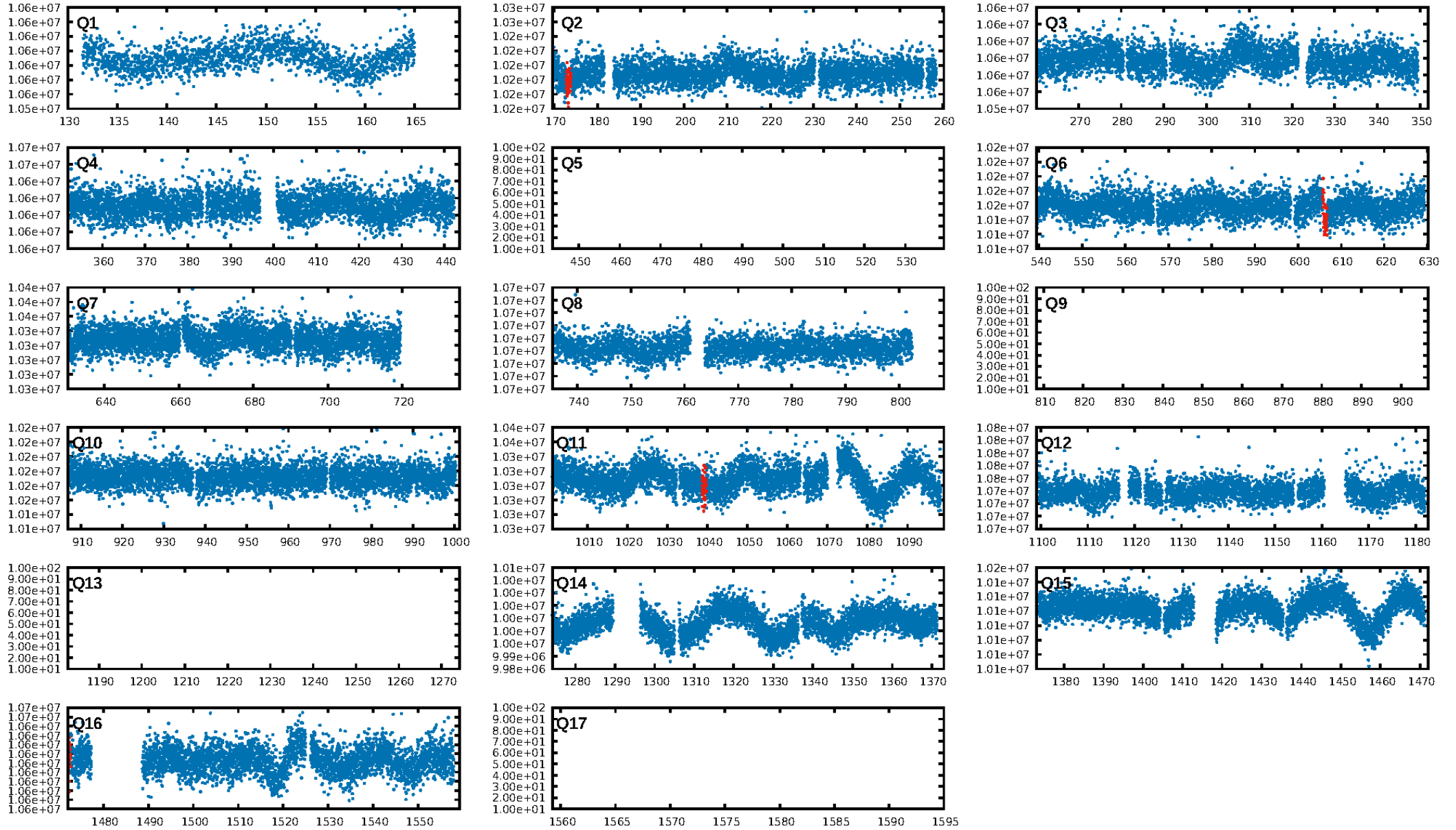
KIC: 5775090 Candidate: 1 of 1 Period: 432.951 d



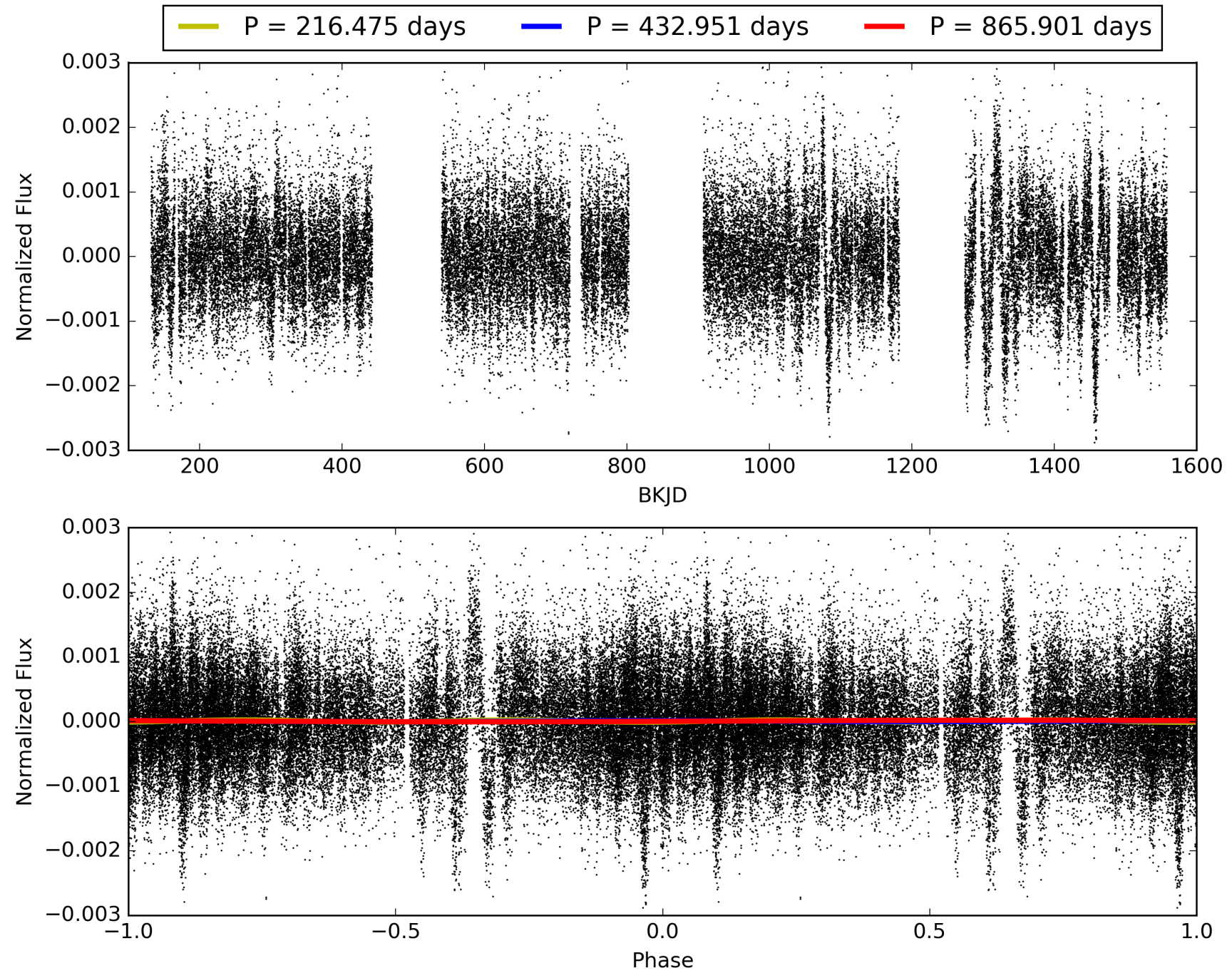
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 20:52:38 Z

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

TCE 005775090-01, PDC Light Curves

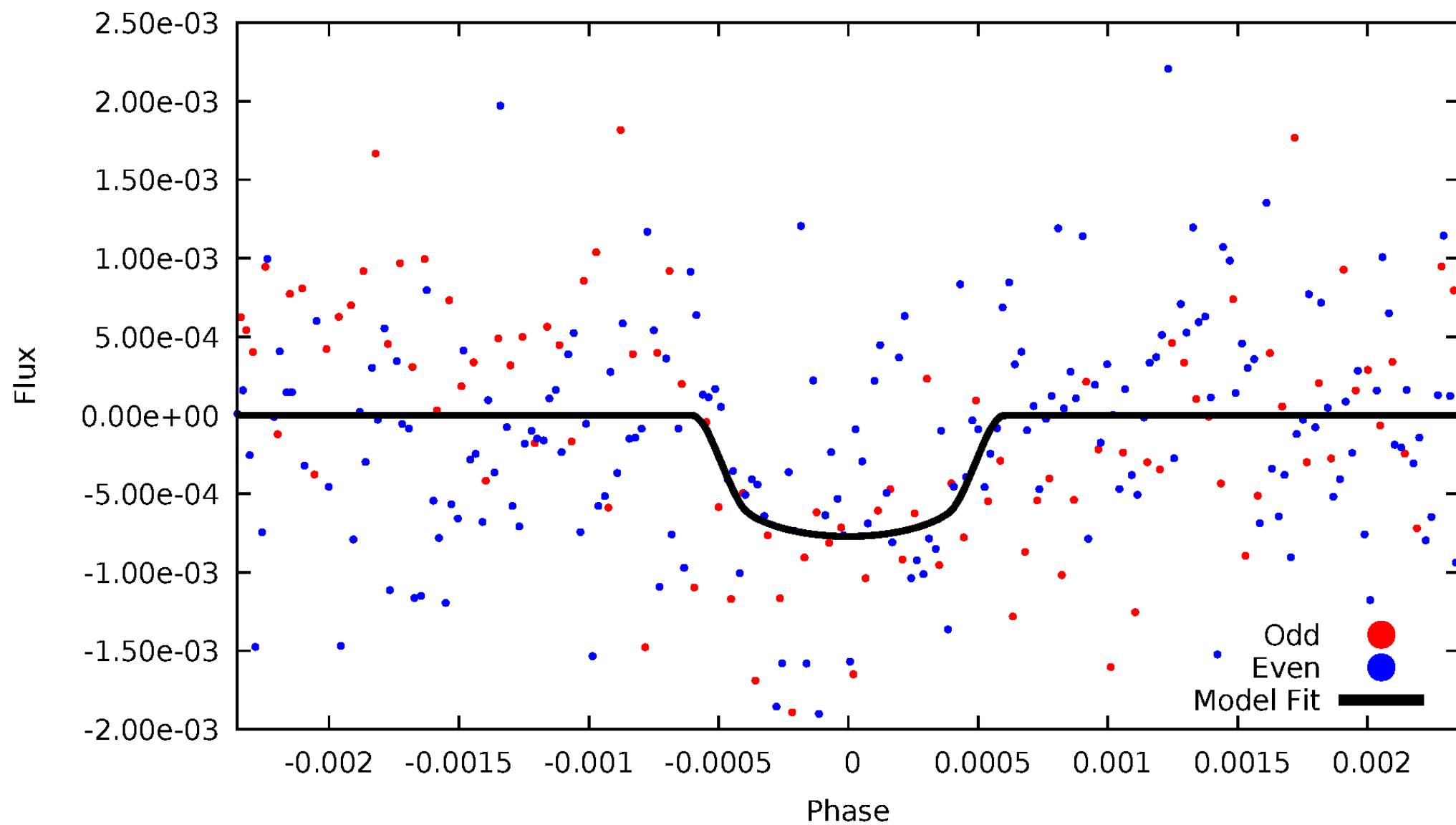


TCE 005775090-01



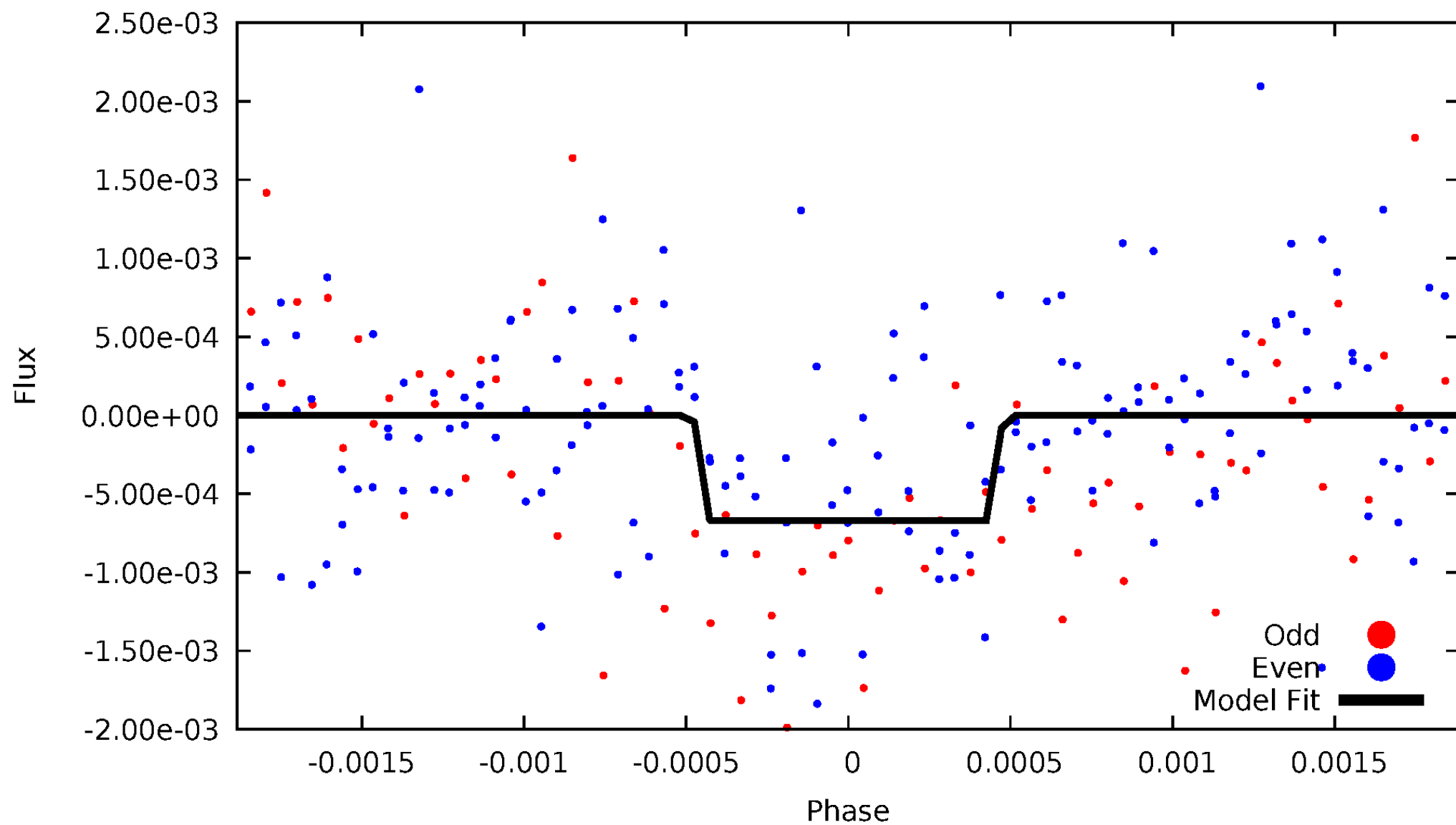
DV Odd/Even

TCE 005775090-01



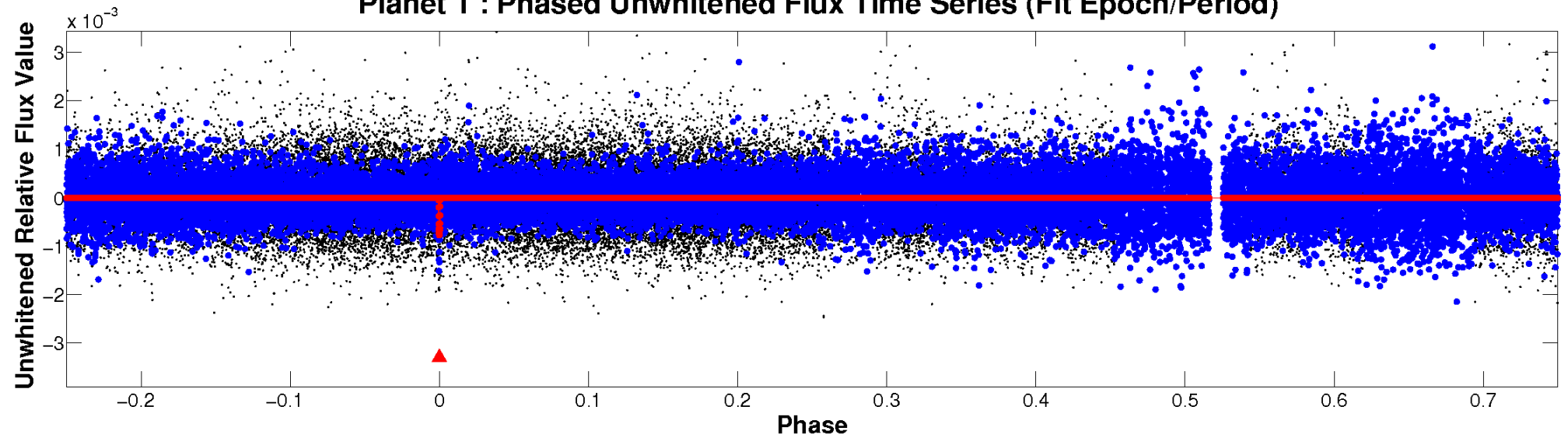
ALT Odd/Even

TCE 005775090-01

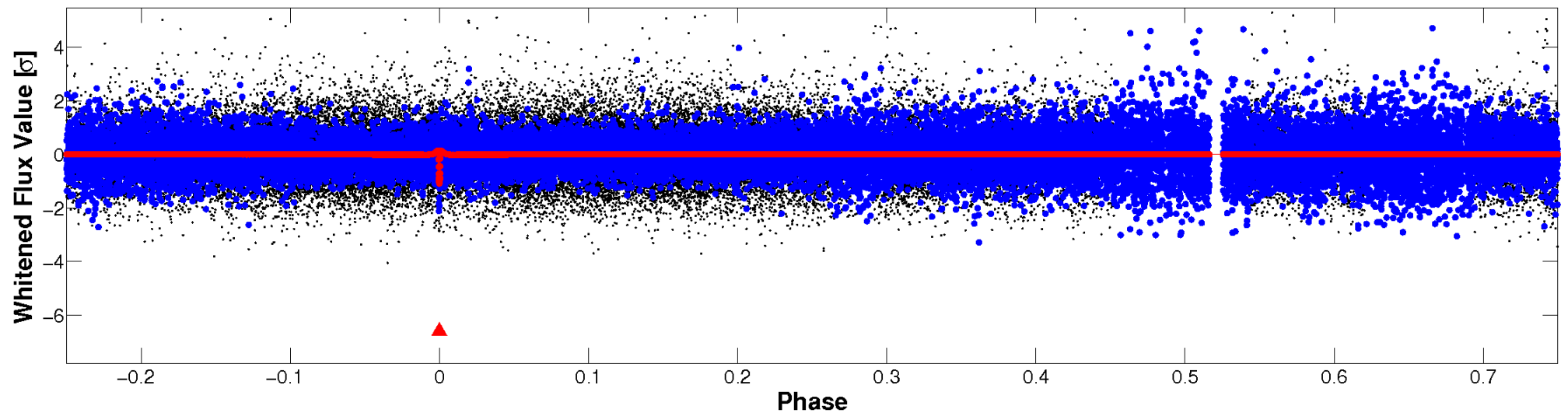


Non-Whitened Vs. Whitened Light Curve

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

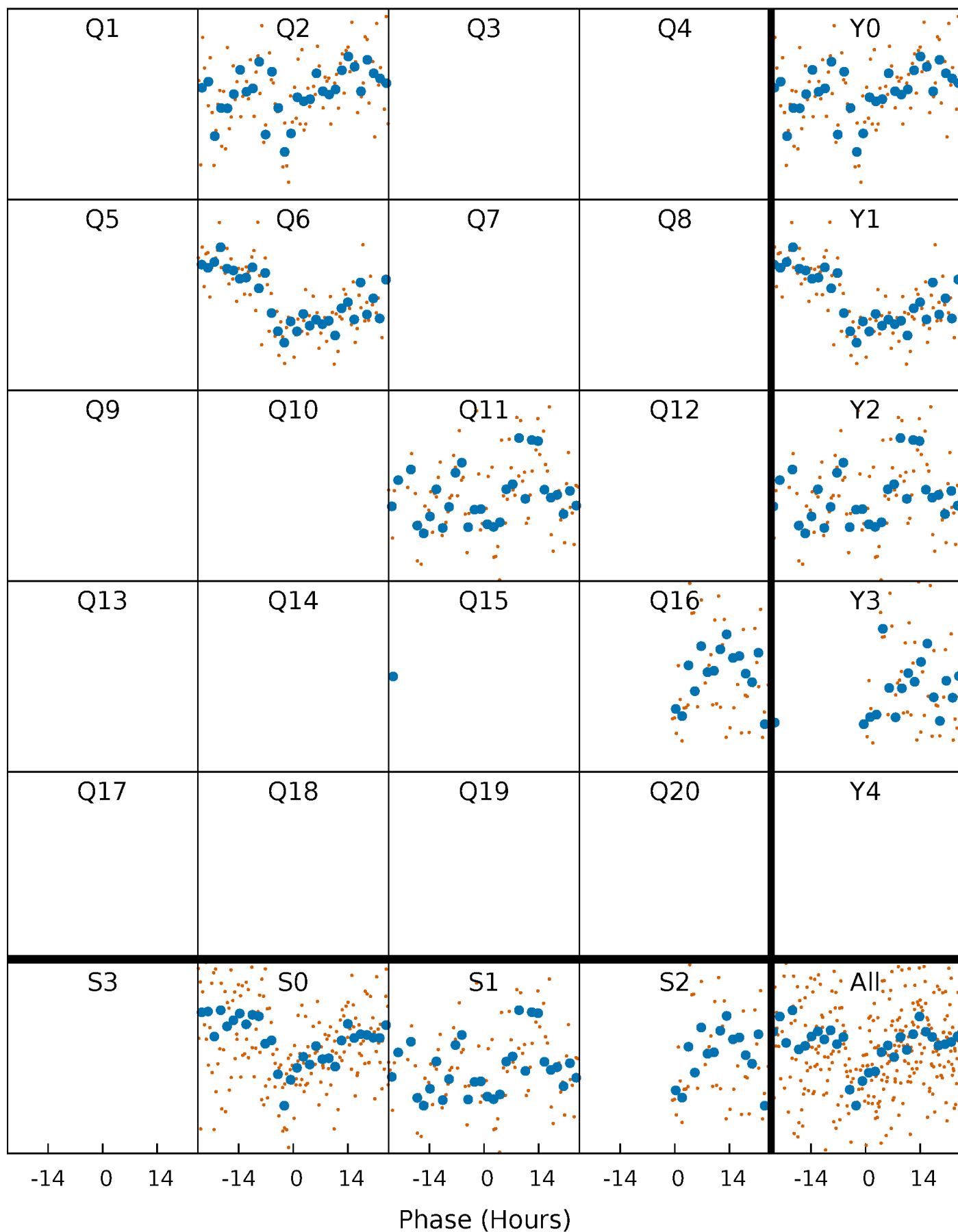


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



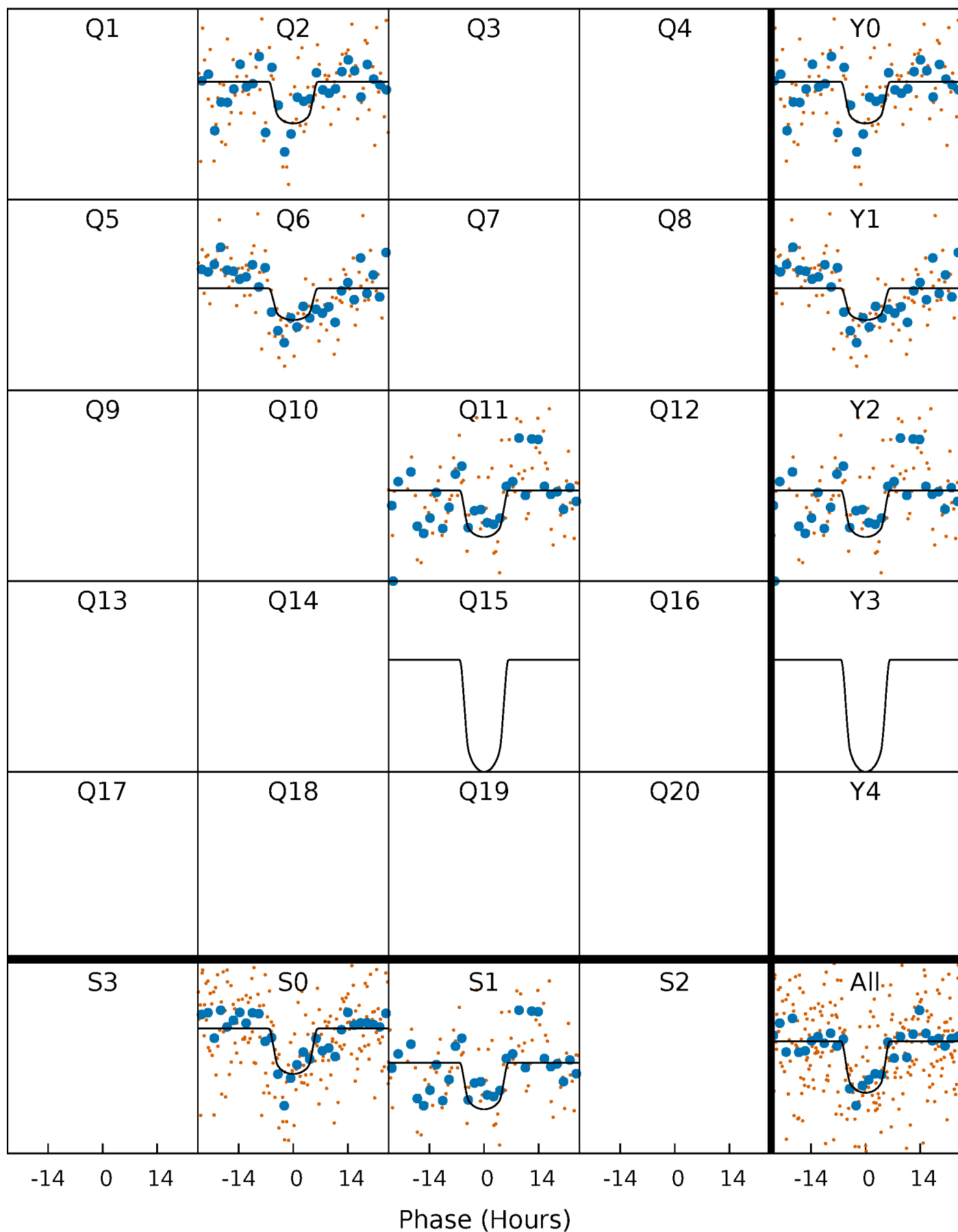
PDC Quarter-Phased Transit Curves

TCE 005775090-01 P=432.950647 Days $T_0=173.288787$ (BKJD)



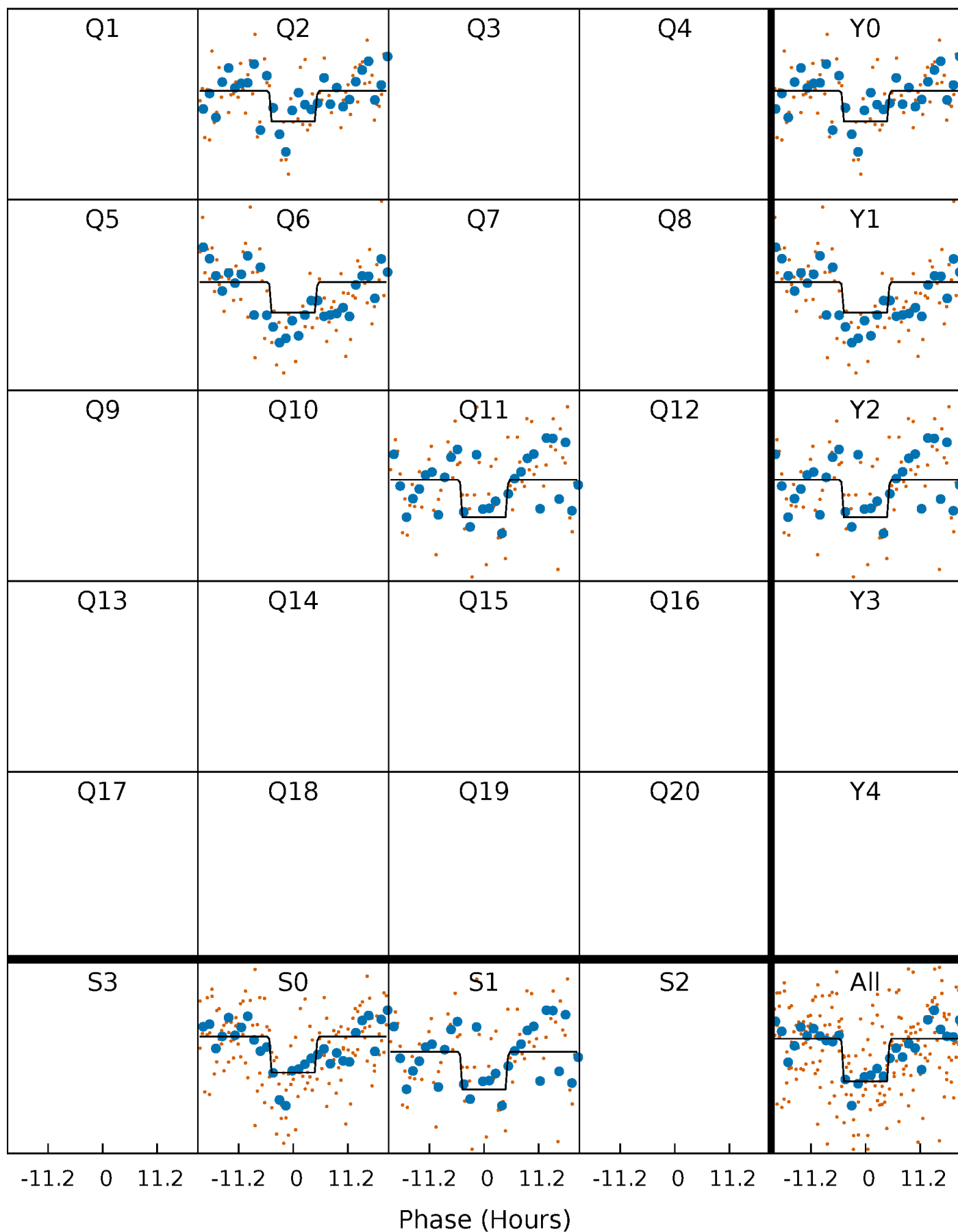
DV Quarter-Phased Transit Curves

TCE 005775090-01 P=432.950647 Days $T_0=173.288787$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

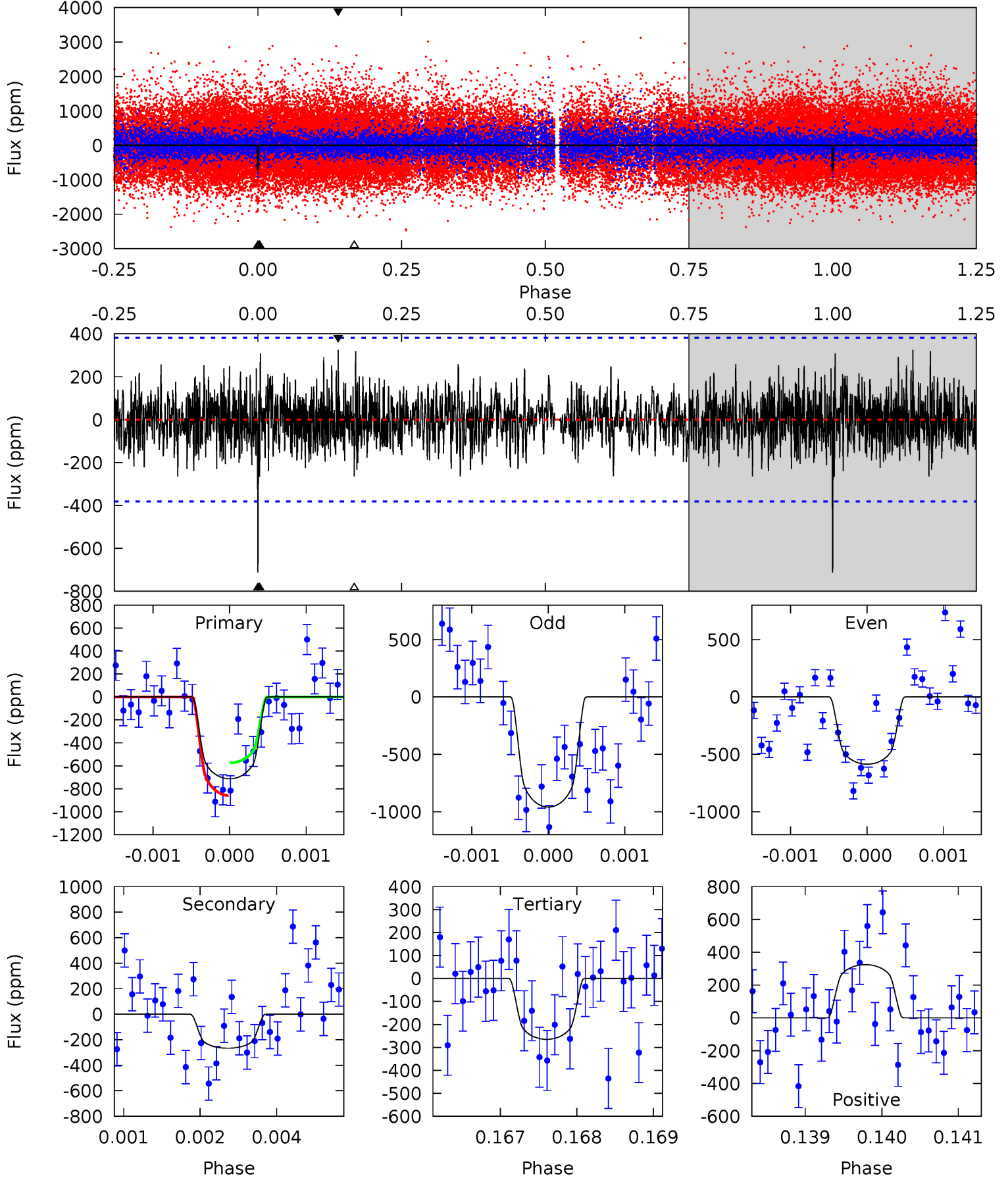
TCE 005775090-01 P=432.946269 Days $T_0=173.281242$ (BKJD)



DV Model-Shift Uniqueness Test

005775090-01, P = 432.950647 Days, E = 173.288787 Days

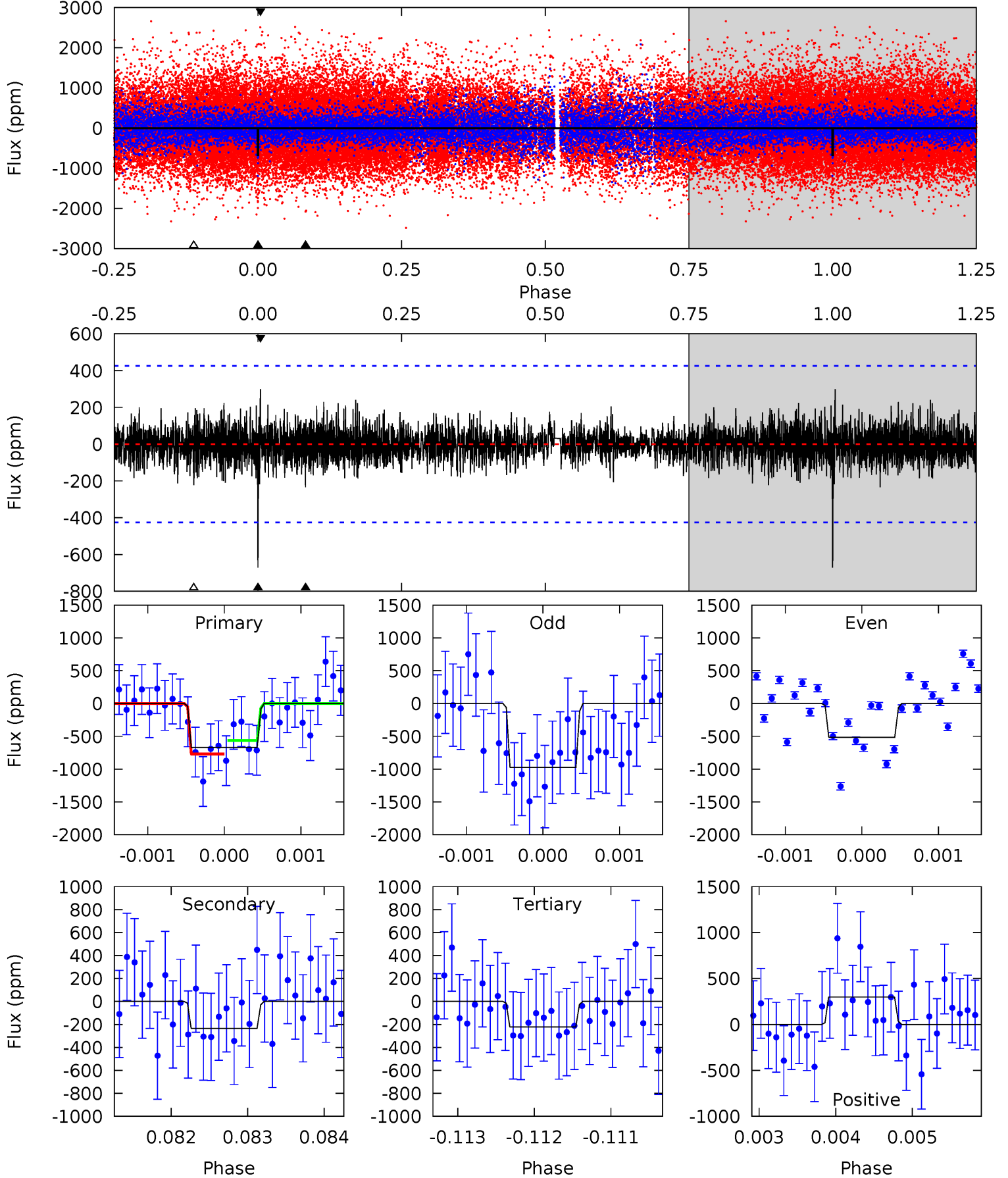
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.1	3.79	3.76	4.60	5.41	3.23	1.22	6.35	5.51	0.02	-0.82	2.52	1.09	0.31	2.02



Alt Model-Shift Uniqueness Test

005775090-01, P = 432.946269 Days, E = 173.281242 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.60	3.00	2.84	3.83	5.45	3.29	0.81	5.76	4.77	0.16	-0.83	2.80	1.22	0.31	1.31



Stellar Parameters For KIC 005775090

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	4403^{+131}_{-144}	$4.700^{+0.036}_{-0.049}$	$-0.460^{+0.300}_{-0.300}$	$0.576^{+0.061}_{-0.045}$	$0.606^{+0.059}_{-0.053}$	$4.478^{+0.714}_{-0.825}$
	+3%/-3%	+1%/-1%	+65%/-65%	+11%/-8%	+10%/-9%	+16%/-18%
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 005775090-01 / KOI 8105.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-267 ± 70	$2.02^{+0.38}_{-0.40}$	212^{+8}_{-8}	3479^{+293}_{-250}	32263^{+18797}_{-11511}
Alt.	-234 ± 78	$1.66^{+0.37}_{-0.40}$	212^{+7}_{-7}	3632^{+410}_{-327}	42827^{+35027}_{-19076}

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 $A_{obs} \gg 1.0$

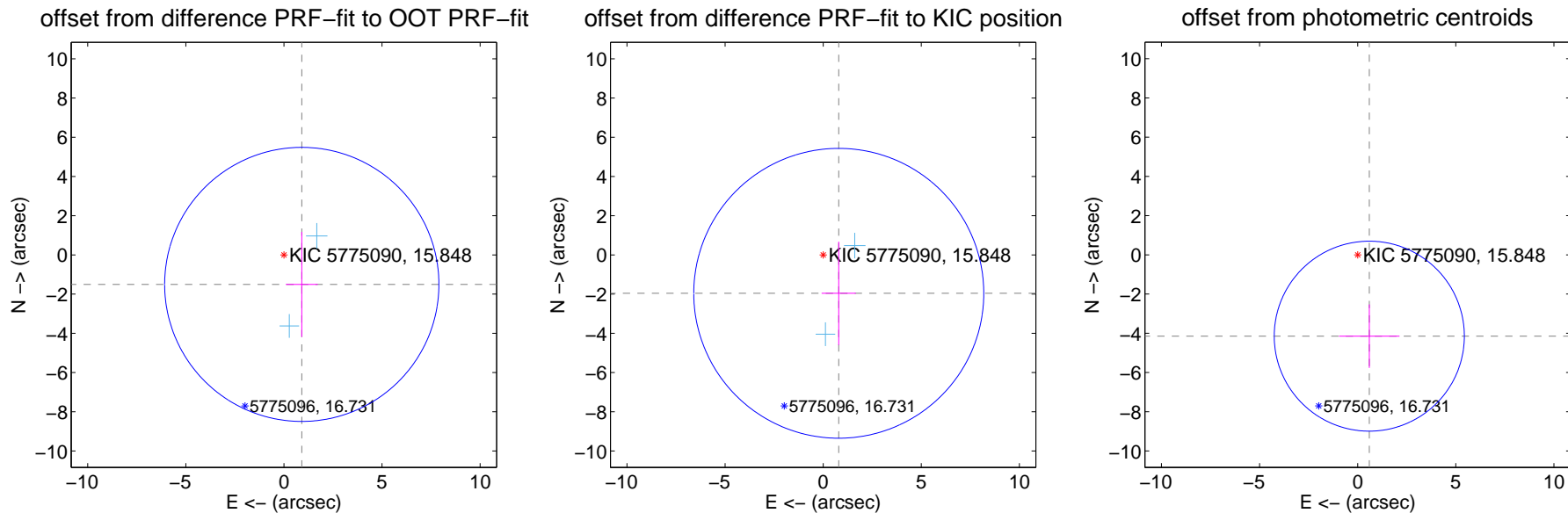
DV Centroid Data

Supplemental centroid analysis for 005775090-01. Kepler magnitude: 15.85. Transit SNR 7.32

There are 2 quarters with good PRF difference image offsets

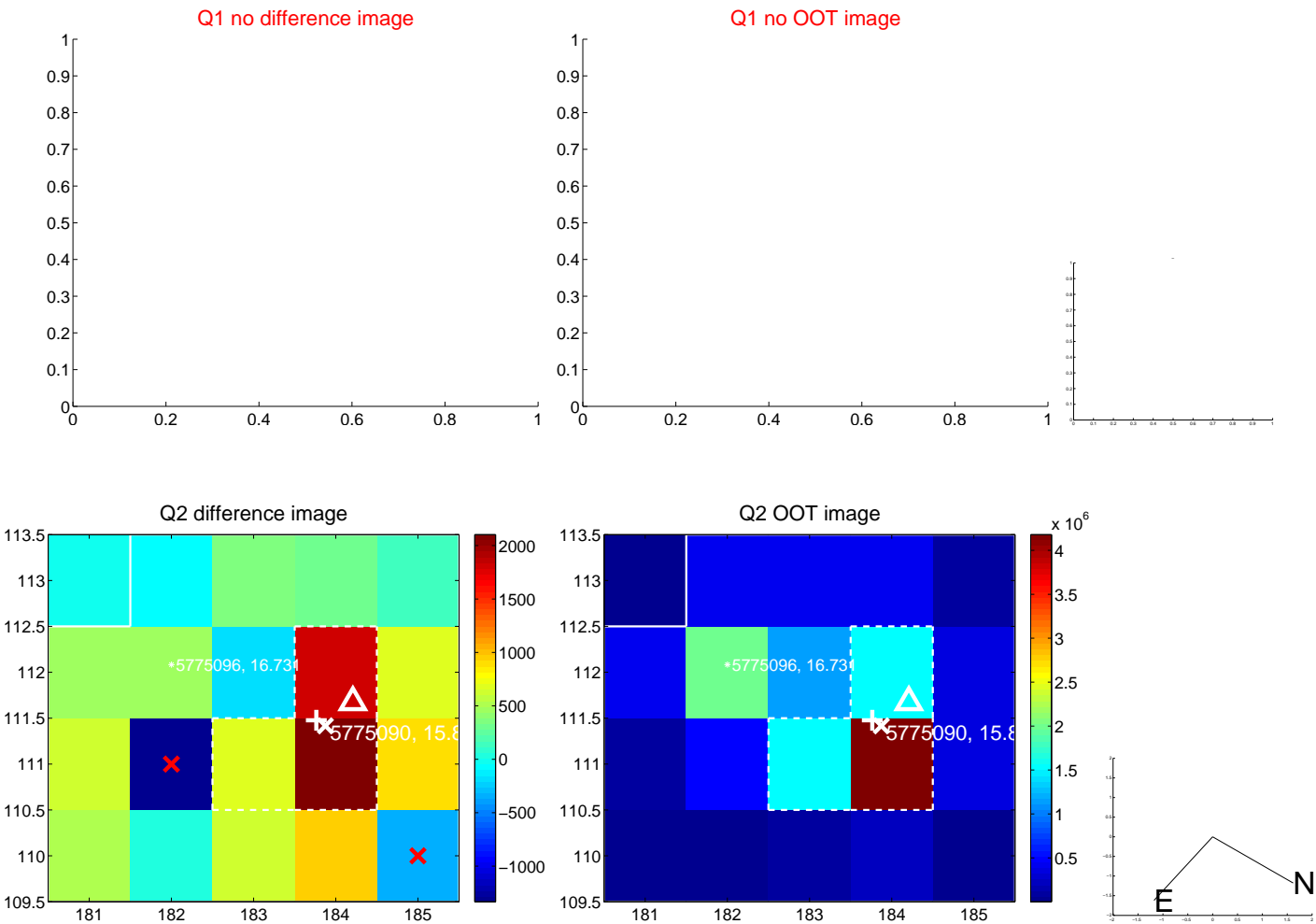
The direct PRF centroid is offset from the target star catalog position by about 0.45 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.758 ± 2.330	0.75	-0.910 ± 0.816	-1.504 ± 2.678
PRF-fit source offset from KIC position	2.114 ± 2.464	0.86	-0.794 ± 0.872	-1.959 ± 2.635
photometric centroid source offset	4.19 ± 1.61	2.59	-0.59 ± 1.54	-4.15 ± 1.62

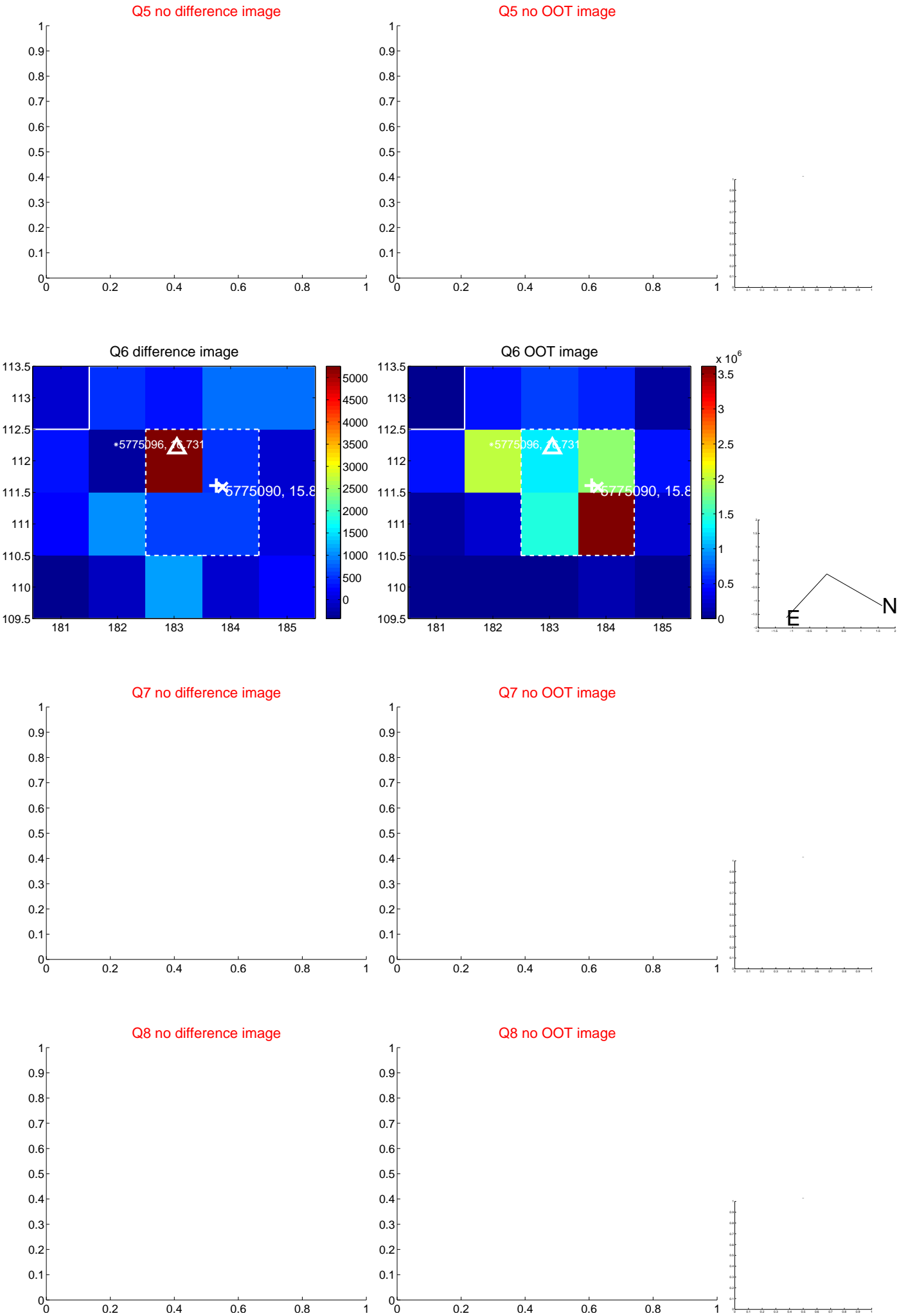


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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



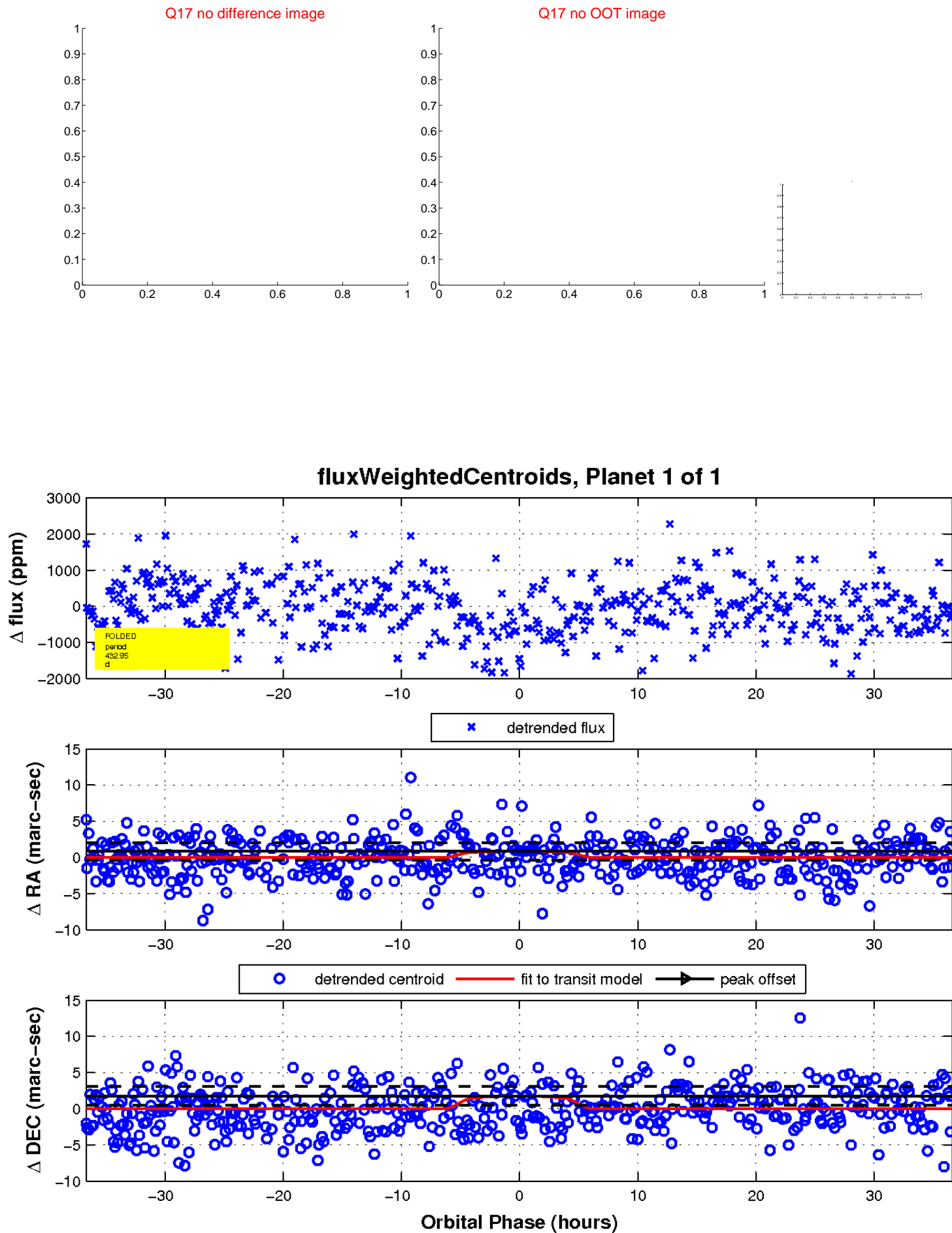
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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UKIRT Image

Declination

