

KIC 006058659

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})
006058659-01	OBS	No	526.239093	214.934408	345.8	15.000	8.9	-1.0	1.06	6321	1.97	0.92

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006058659-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—LPP_DV—INCONSISTENT_TRANS—CENT_NOFITS

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

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

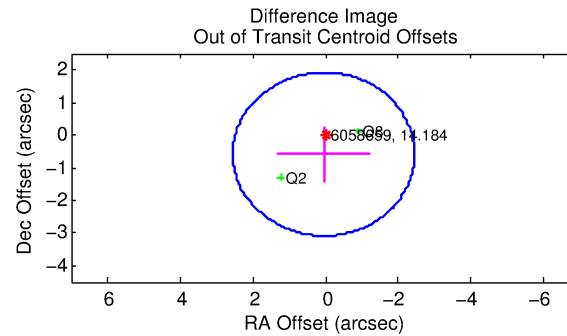
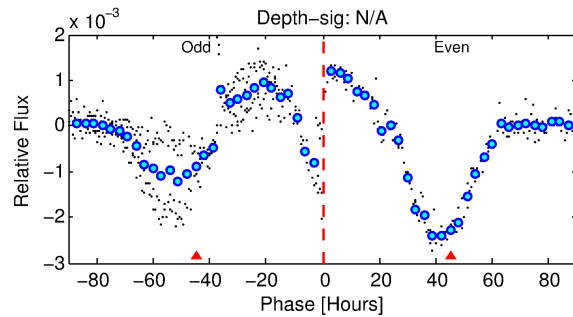
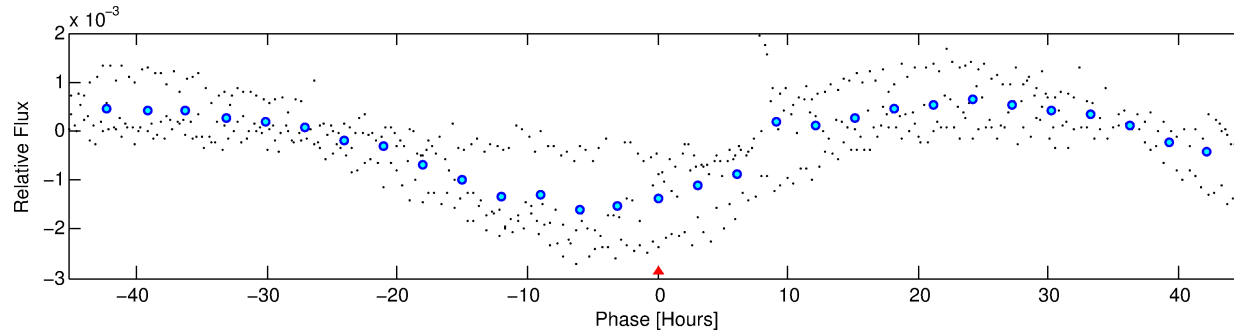
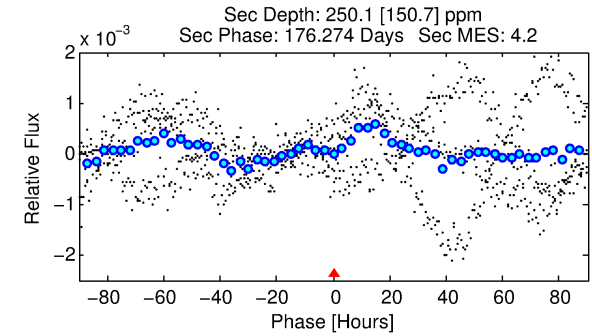
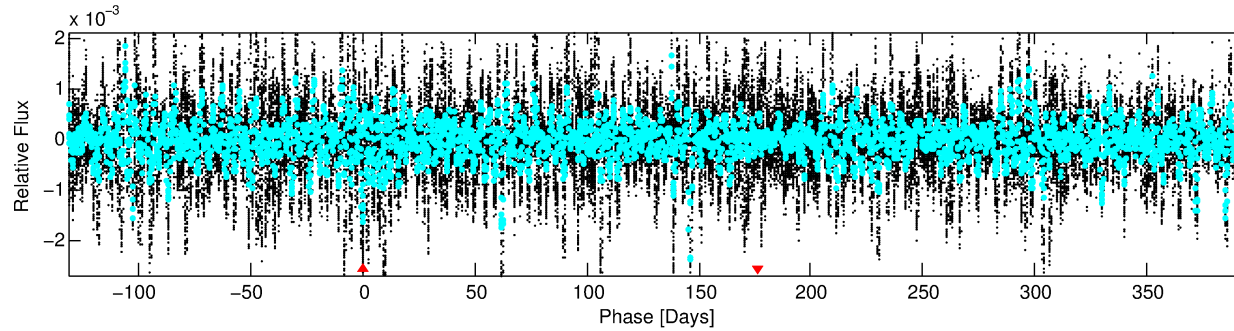
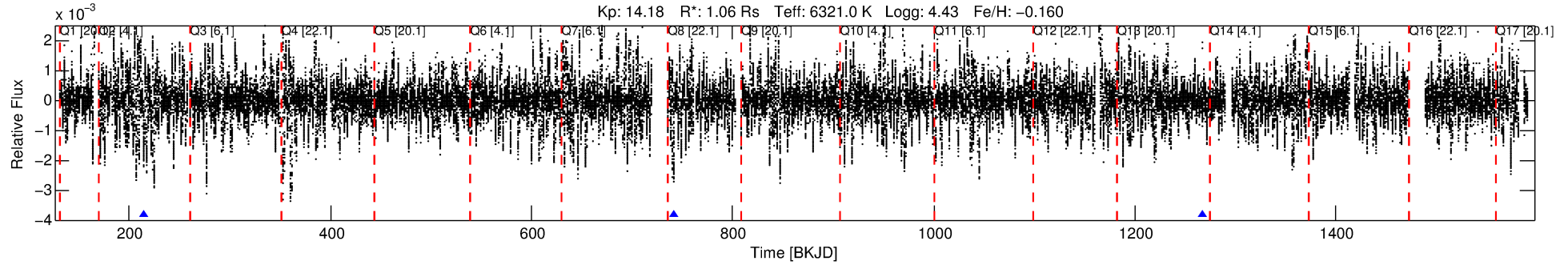
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006058659-01

No Significant Match Found

DV One-Page Summary

KIC: 6058659 Candidate: 1 of 1 Period: 526.239 d



TPS TCE Results:

Period = 526.23909 d
Epoch = 214.9344 BKJD

DV fit results are unavailable

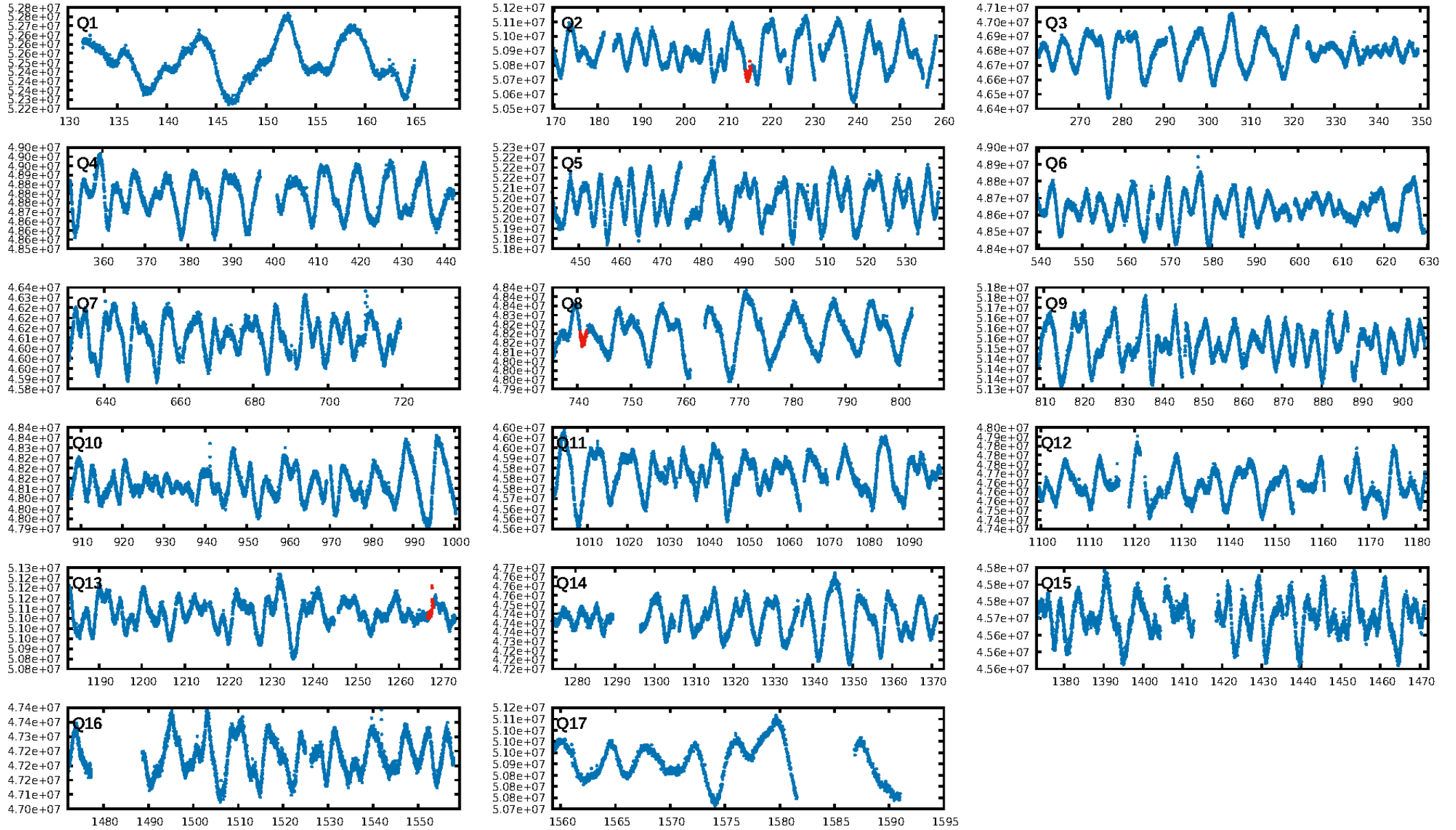
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 5.76e-11
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 0.5818
Centroid-sig: 63.5%
Centroid-so: 0.402 arcsec [0.62σ]
OotOffset-rm: 0.585 arcsec [0.70σ]
KicOffset-rm: 0.522 arcsec [0.62σ]
OotOffset-st: 1/0/1/0 [2]
KicOffset-st: 1/0/1/0 [2]
DiffImageQuality-fgm: 1.00 [2/2]
DiffImageOverlap-fno: 1.00 [2/2]

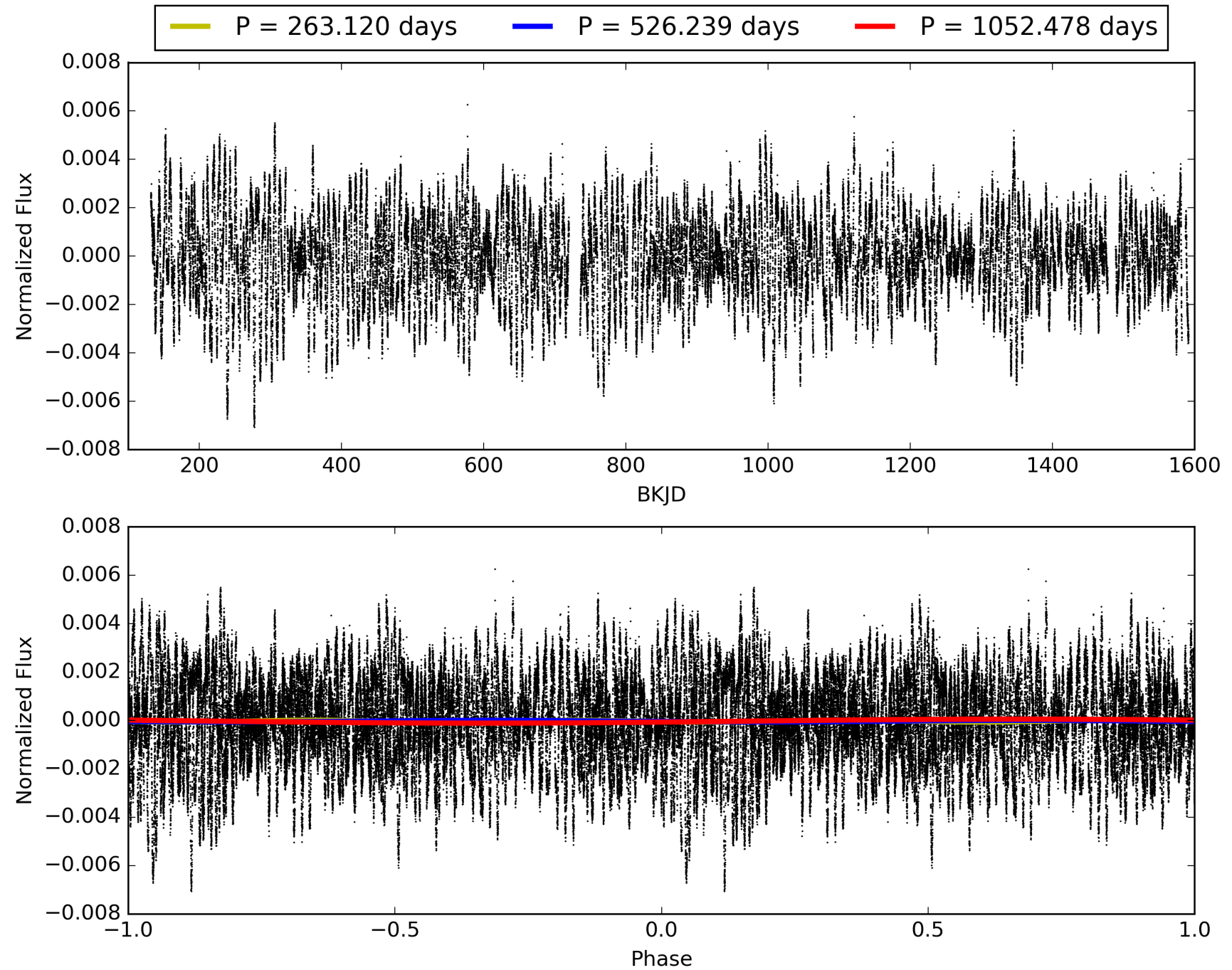
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 10:39:27 Z

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

TCE 006058659-01, PDC Light Curves

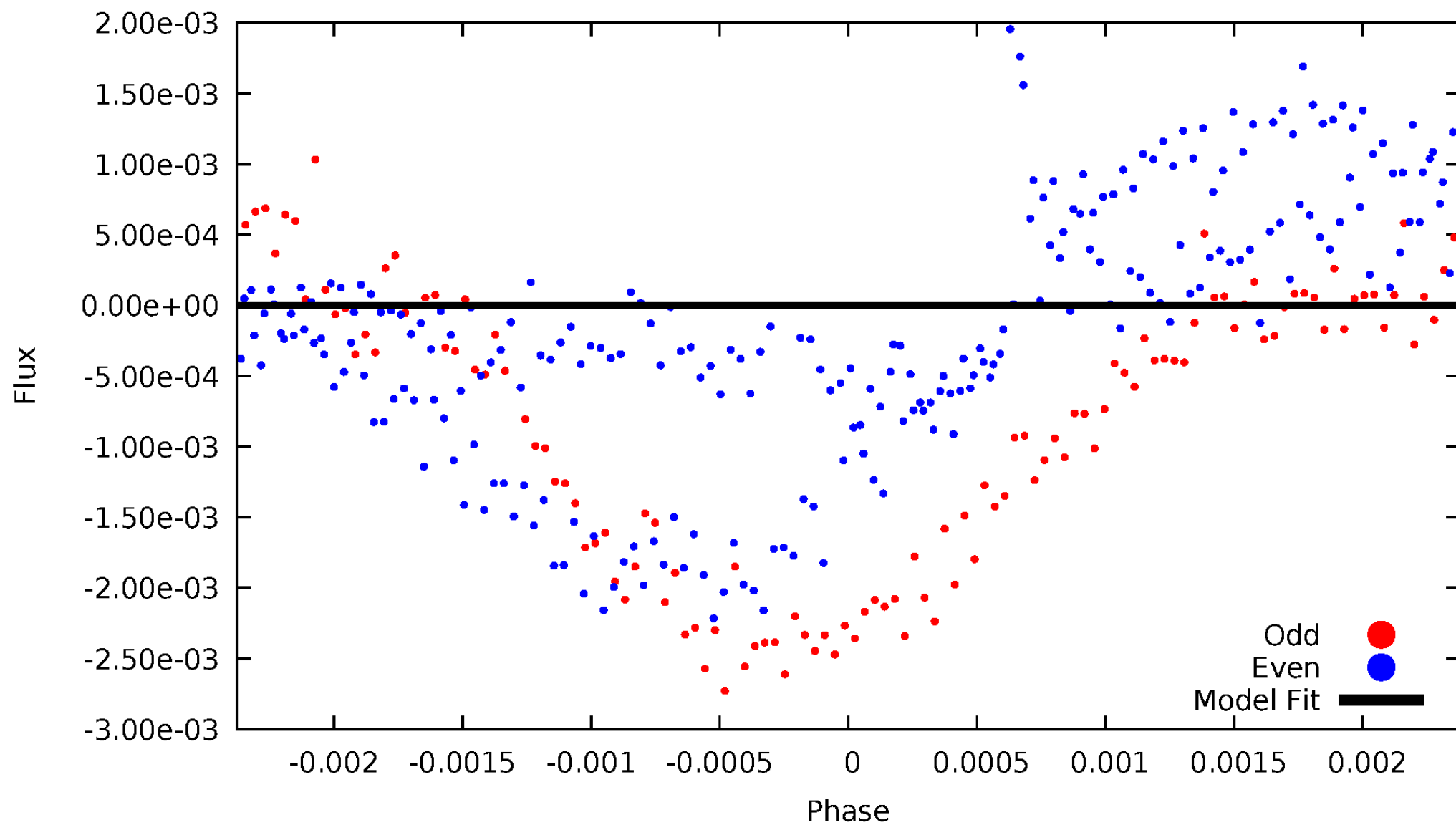


TCE 006058659-01



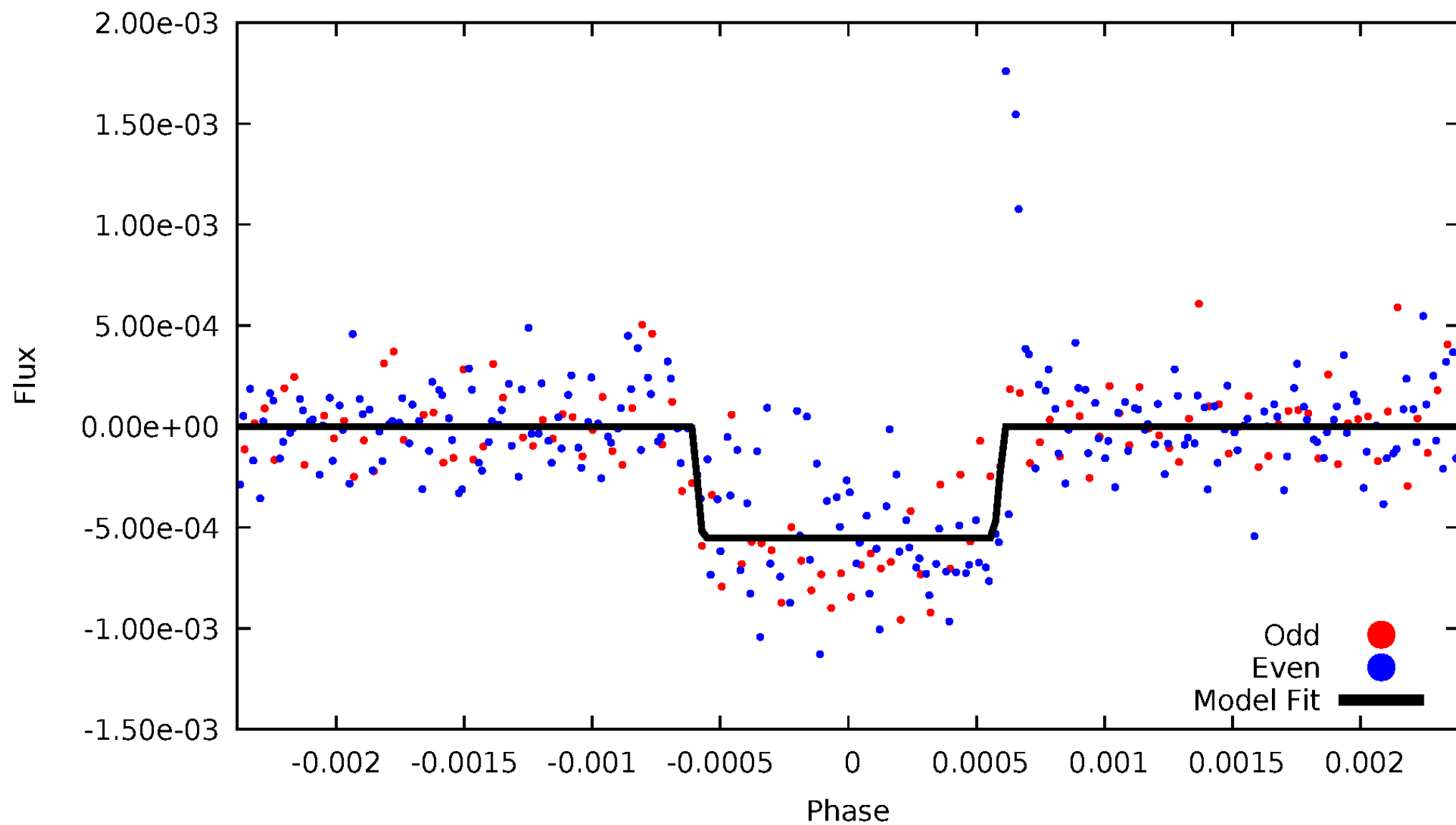
DV Odd/Even

TCE 006058659-01

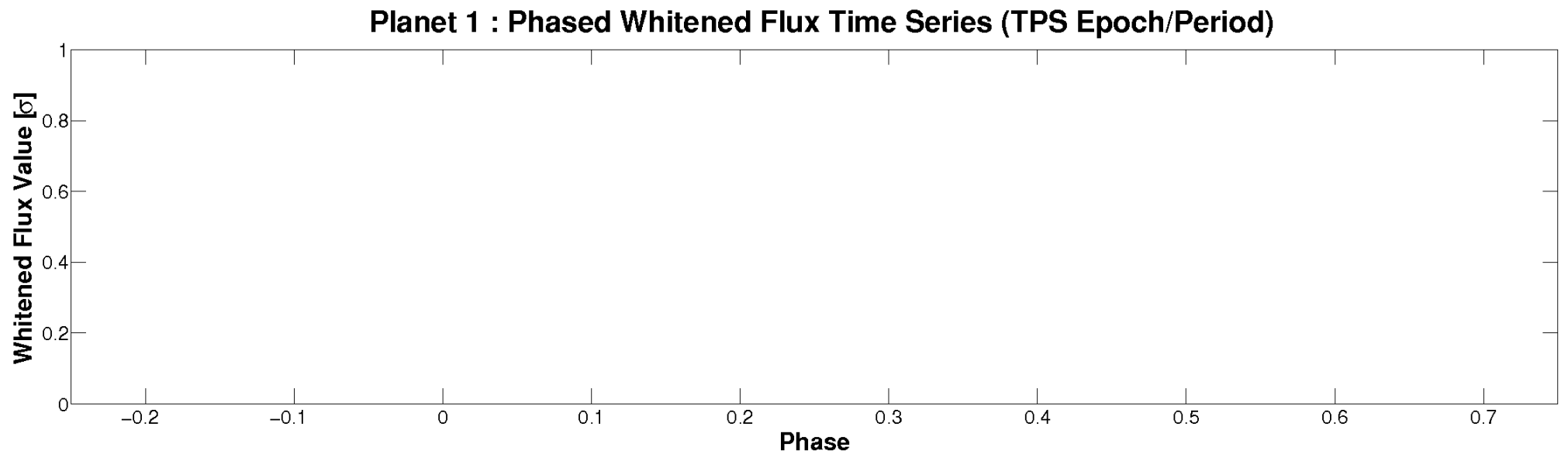
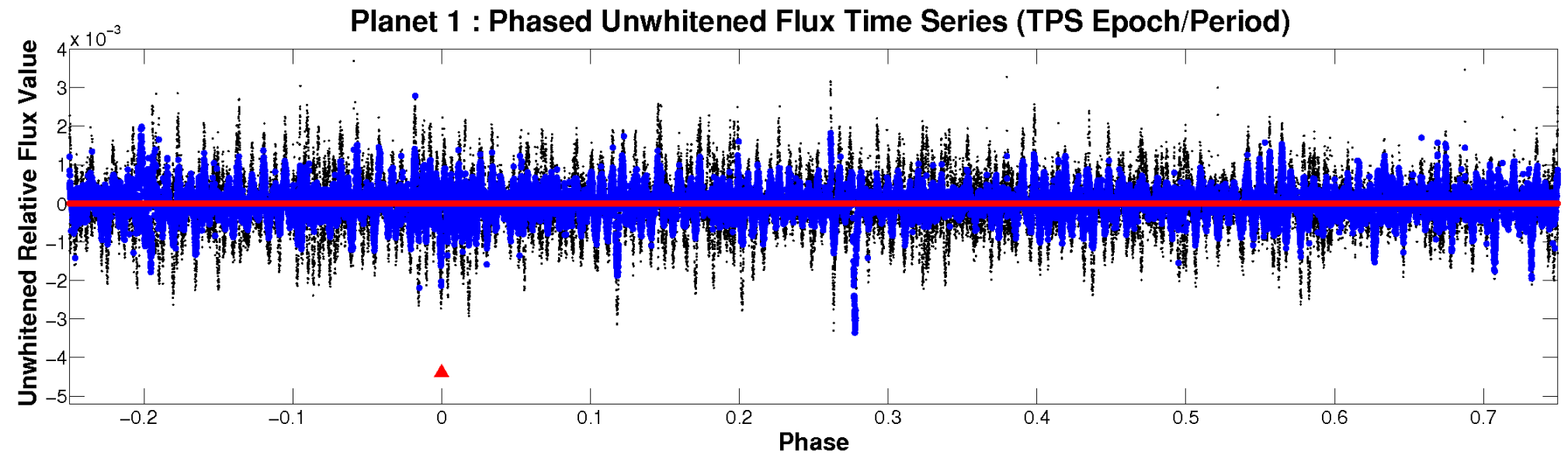


ALT Odd/Even

TCE 006058659-01

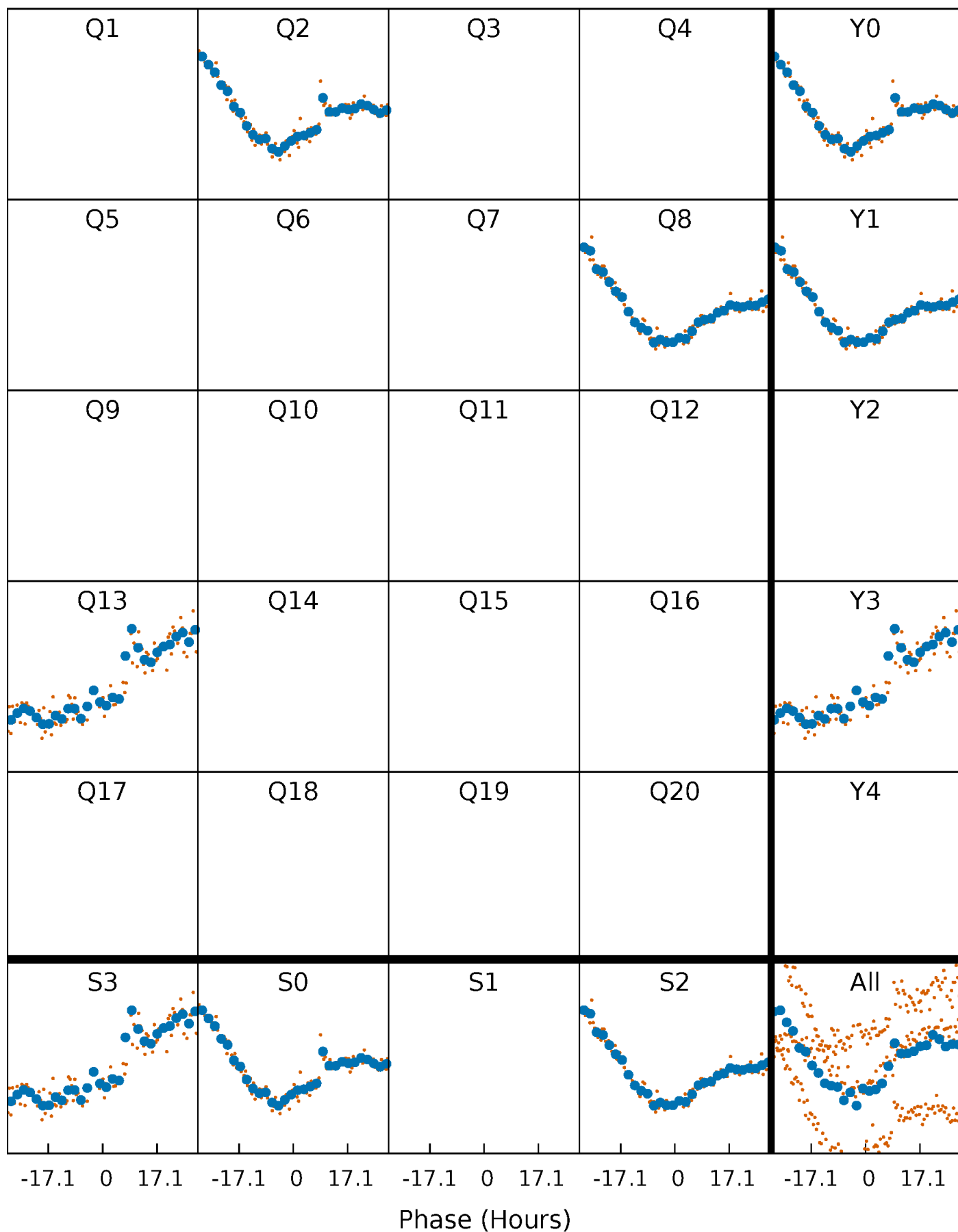


Non-Whitened Vs. Whitened Light Curve



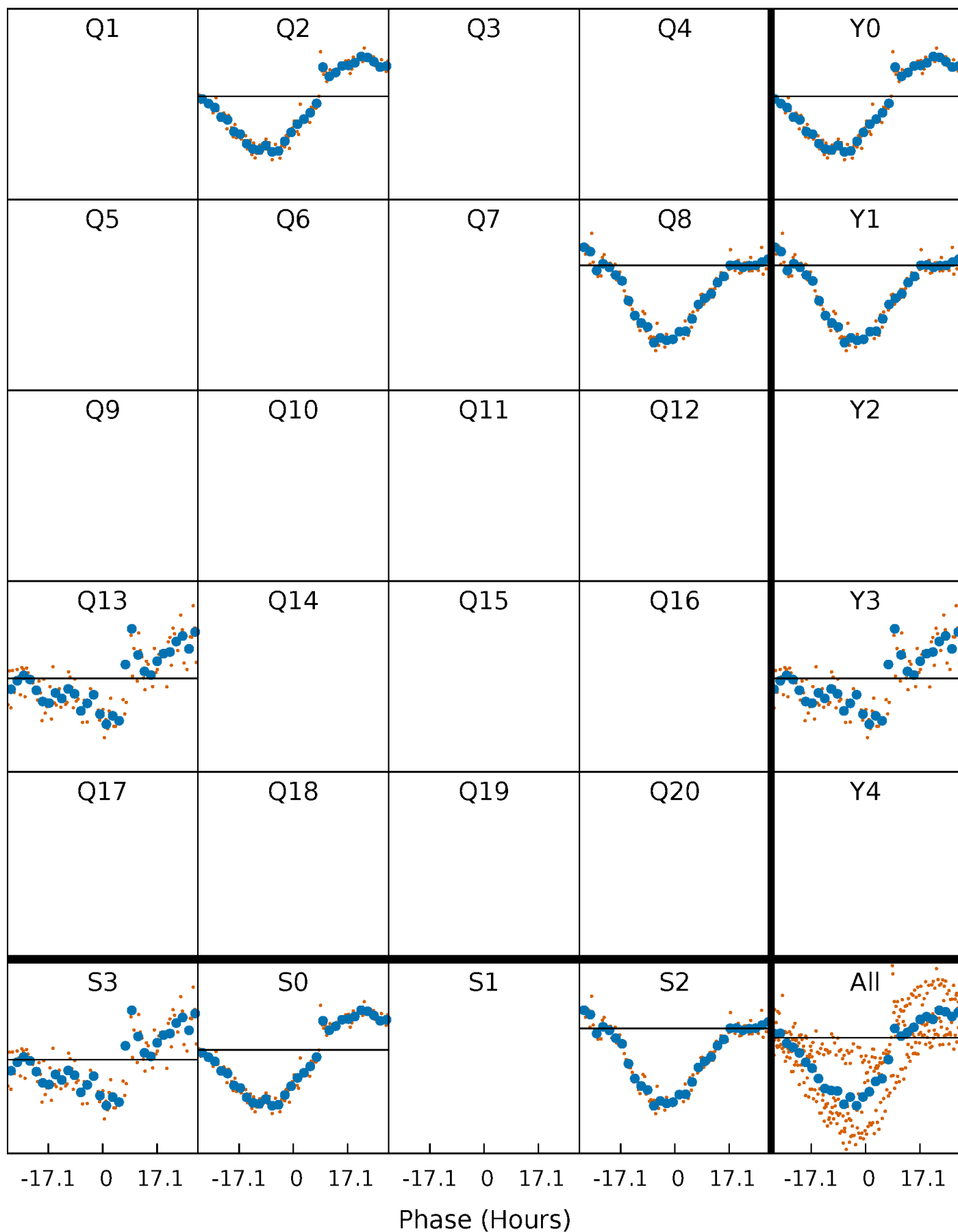
PDC Quarter-Phased Transit Curves

TCE 006058659-01 P=526.239093 Days $T_0=214.934408$ (BKJD)



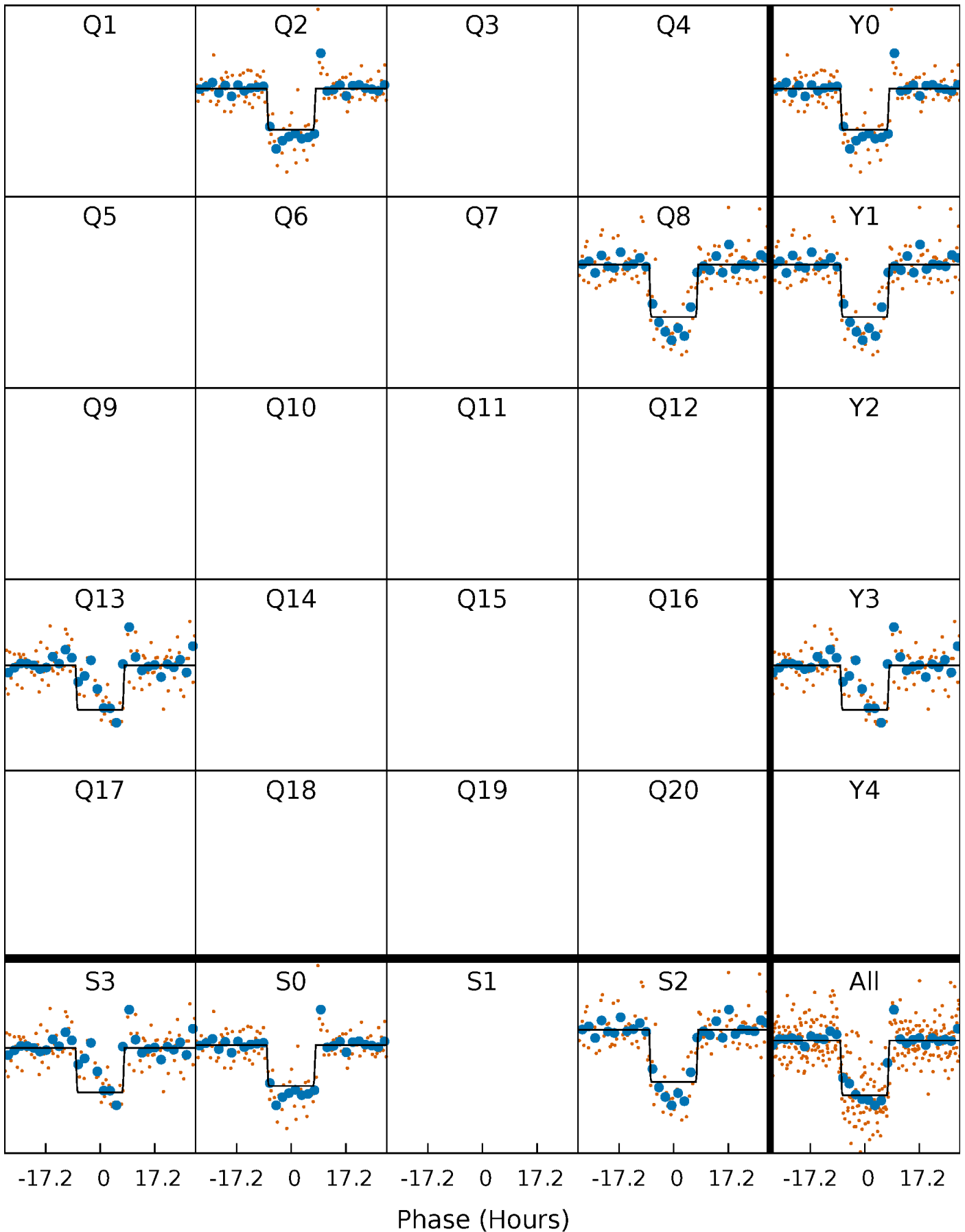
DV Quarter-Phased Transit Curves

TCE 006058659-01 P=526.239093 Days $T_0=214.934408$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

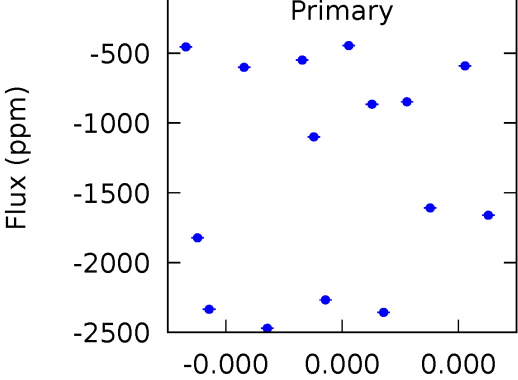
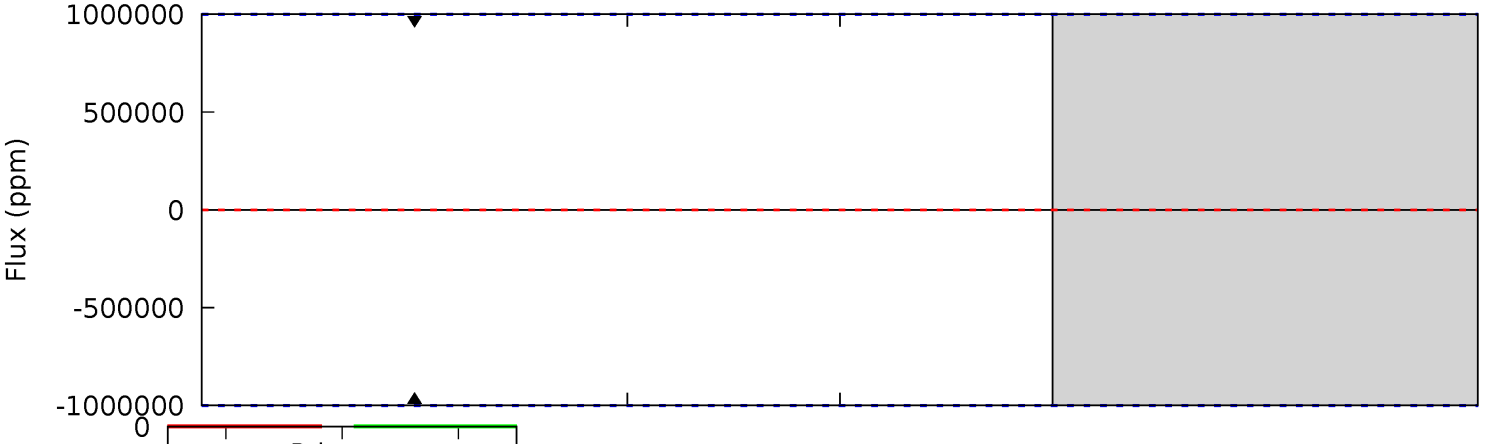
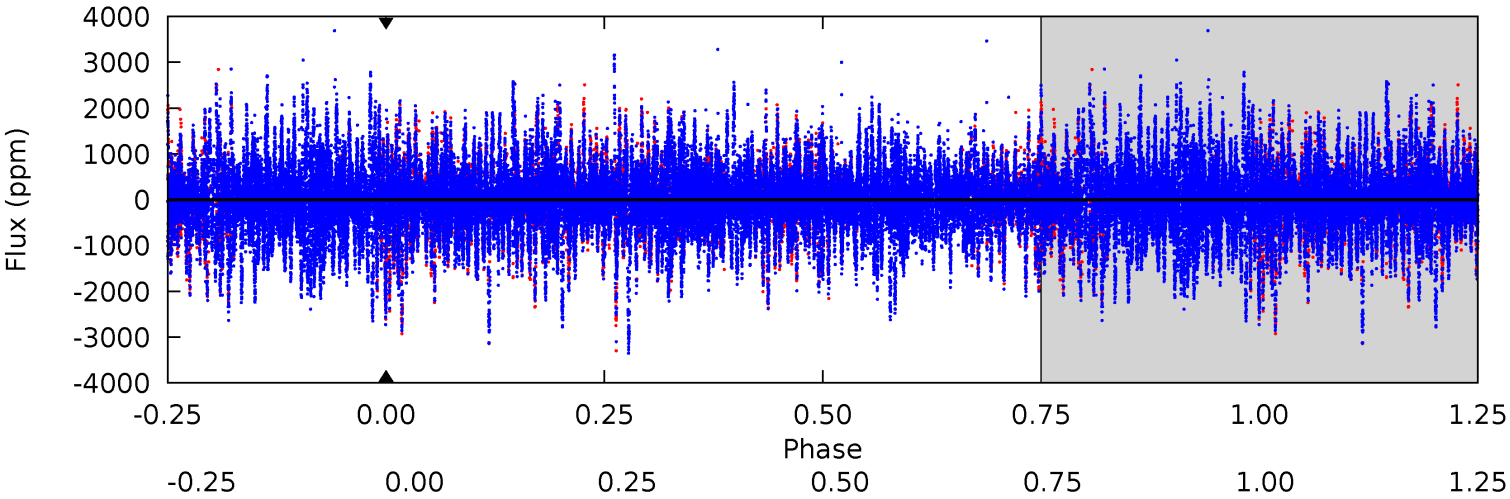
TCE 006058659-01 P=526.239093 Days $T_0=214.942061$ (BKJD)



DV Model-Shift Uniqueness Test

006058659-01, P = 526.239093 Days, E = 214.934408 Days

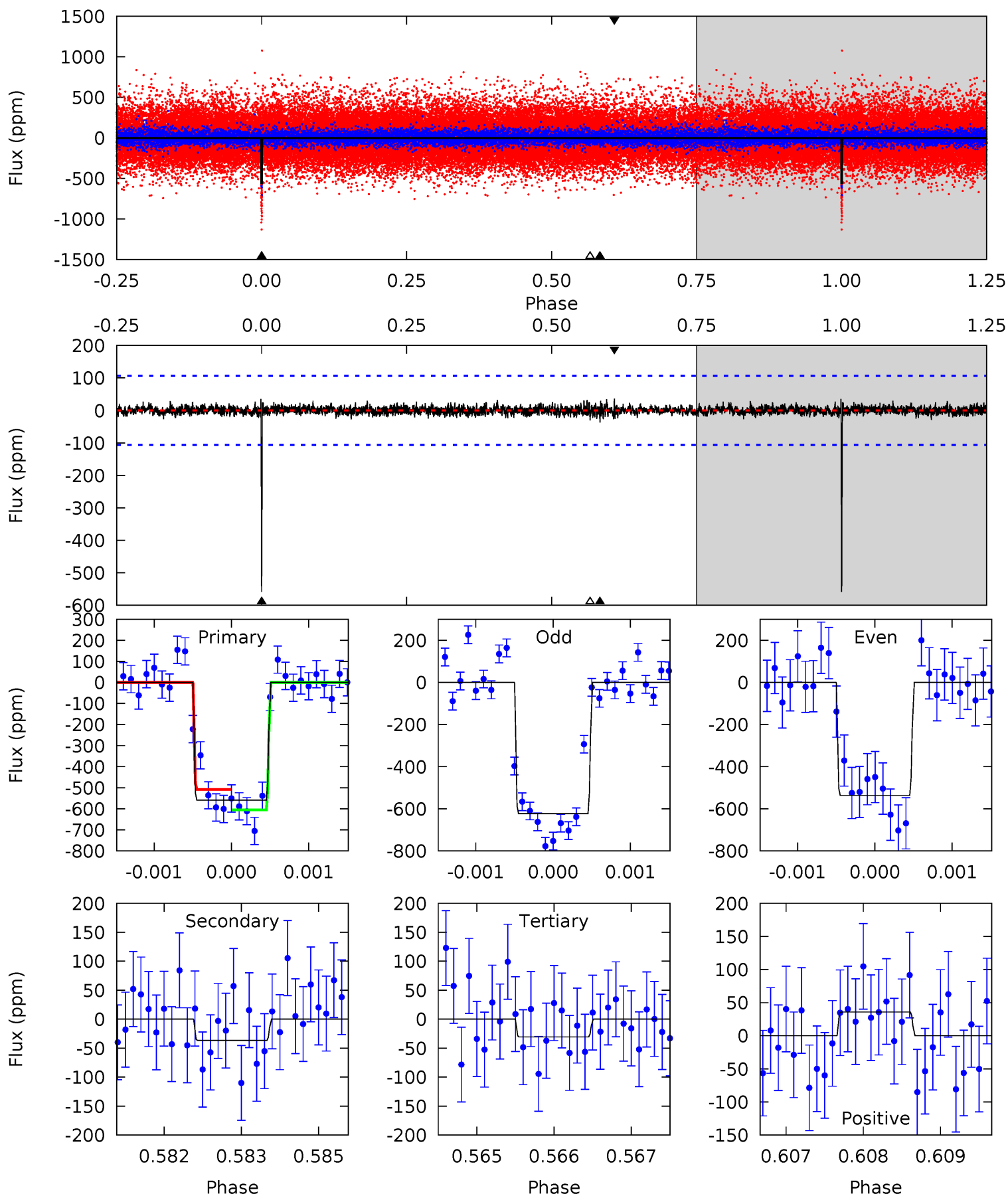
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

006058659-01, P = 526.239093 Days, E = 214.942061 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
28.5	1.86	1.56	1.83	5.42	3.23	0.40	26.9	26.7	0.30	0.04	2.12	0.93	0.06	2.48



Stellar Parameters For KIC 006058659

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6321^{+169}_{-206}	$4.434^{+0.054}_{-0.216}$	$-0.160^{+0.250}_{-0.300}$	$1.058^{+0.349}_{-0.116}$	$1.108^{+0.154}_{-0.154}$	$1.317^{+0.373}_{-0.688}$
	+3%/-3%	+1%/-5%	+156%/-188%	+33%/-11%	+14%/-14%	+28%/-52%
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 006058659-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	0 ± 1000000	$8.89^{+9.35}_{-6.17}$	357^{+26}_{-19}	2866^{+26811}_{-27351}	$844^{+2655956}_{-1910746}$
Alt.	-37 ± 20	$9.40^{+9.22}_{-6.56}$	355^{+27}_{-16}	2532^{+1050}_{-424}	331^{+3366}_{-265}

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 $A_{obs} \gg 1.0$

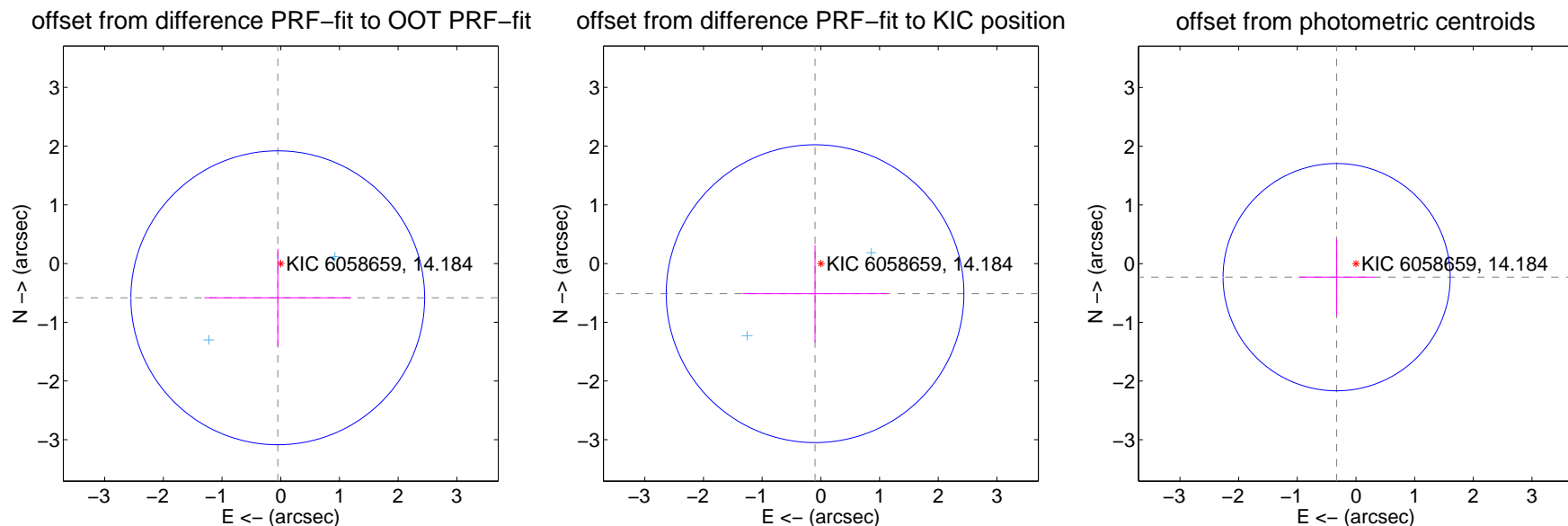
DV Centroid Data

Supplemental centroid analysis for 006058659-01. Kepler magnitude: 14.18. Transit SNR -1.00

There are 2 quarters with good PRF difference image offsets

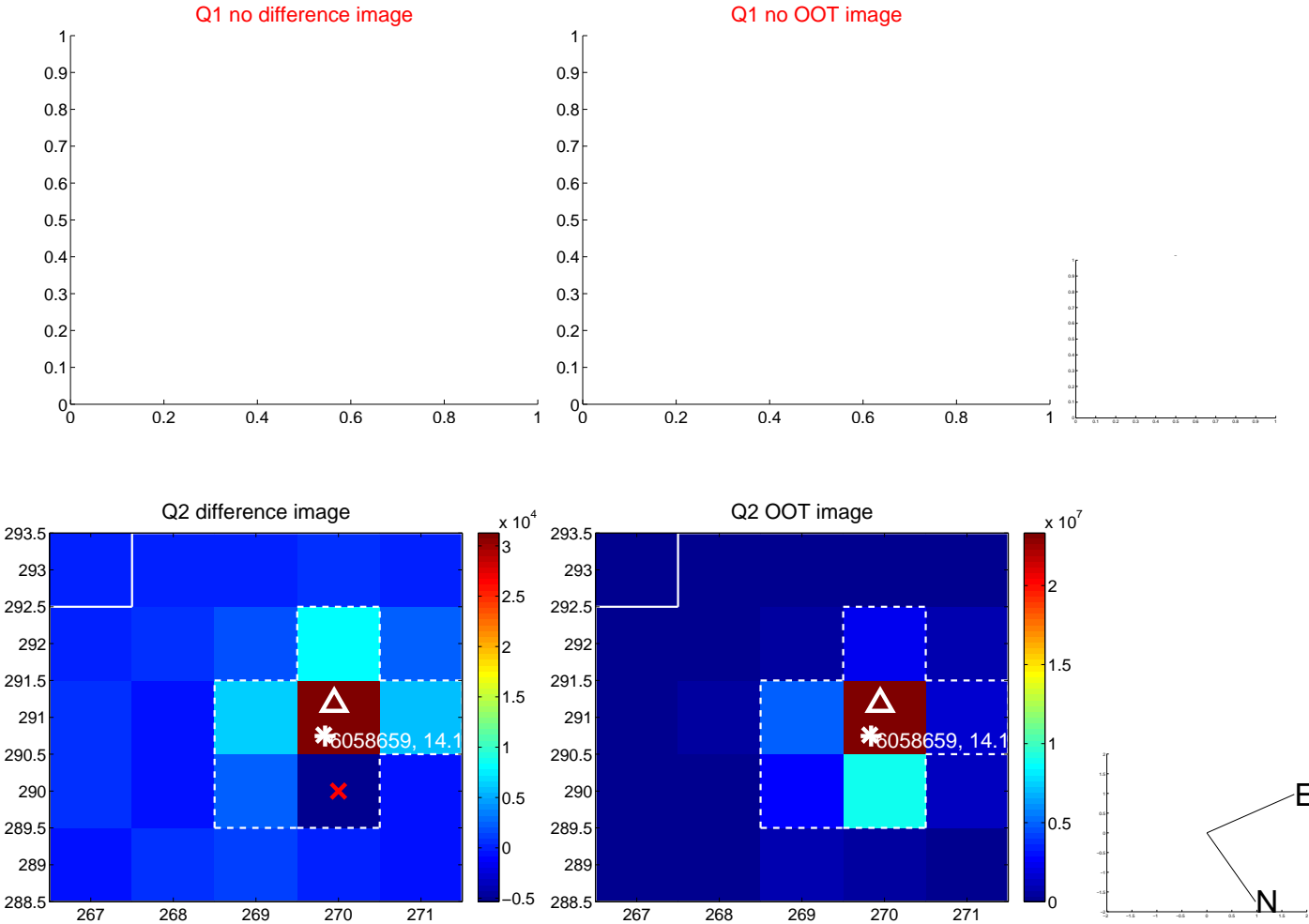
The direct PRF centroid is offset from the target star catalog position by about 0.09 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.585 ± 0.834	0.70	0.051 ± 1.251	-0.583 ± 0.830
PRF-fit source offset from KIC position	0.522 ± 0.845	0.62	0.099 ± 1.232	-0.513 ± 0.827
photometric centroid source offset	0.40 ± 0.65	0.62	0.33 ± 0.65	-0.23 ± 0.64

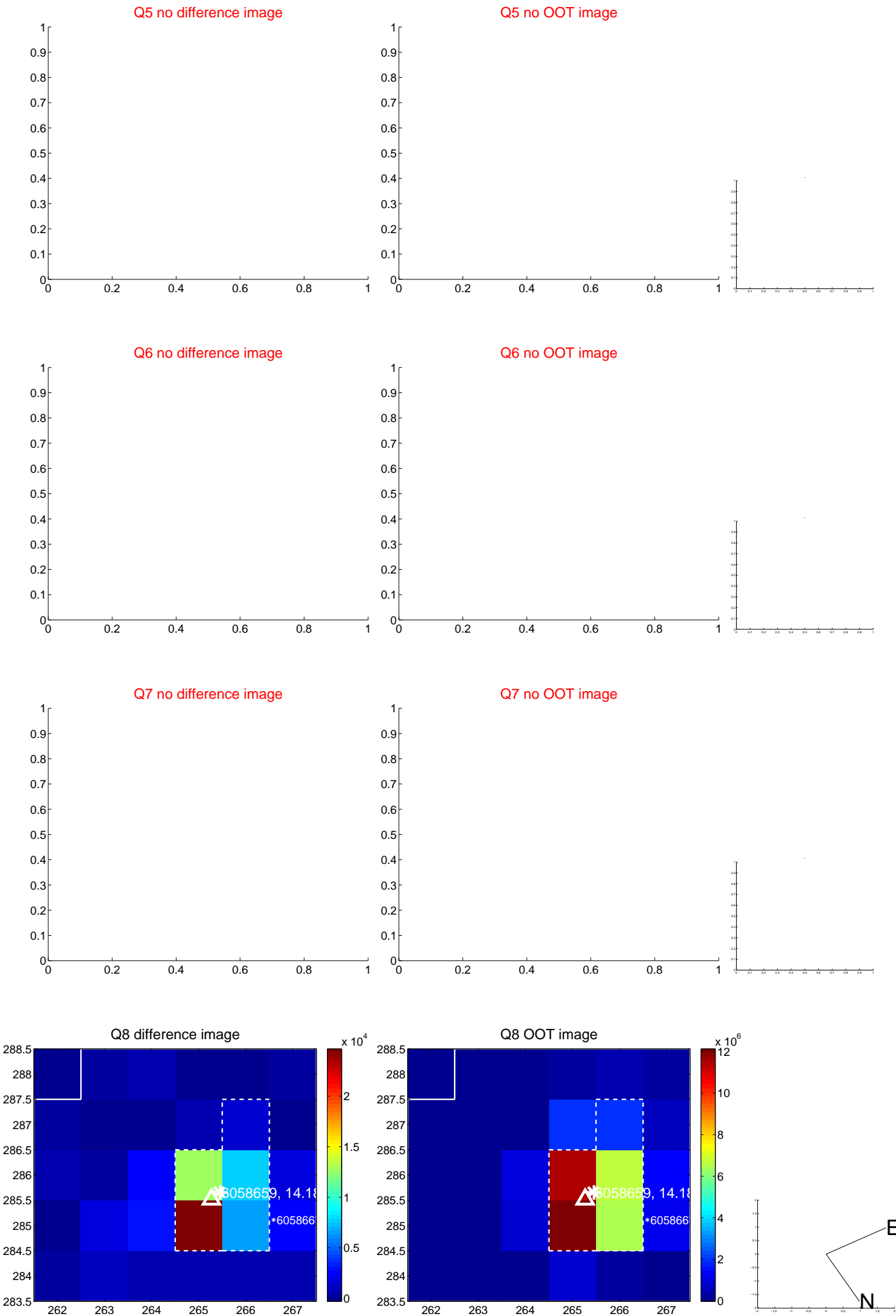


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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



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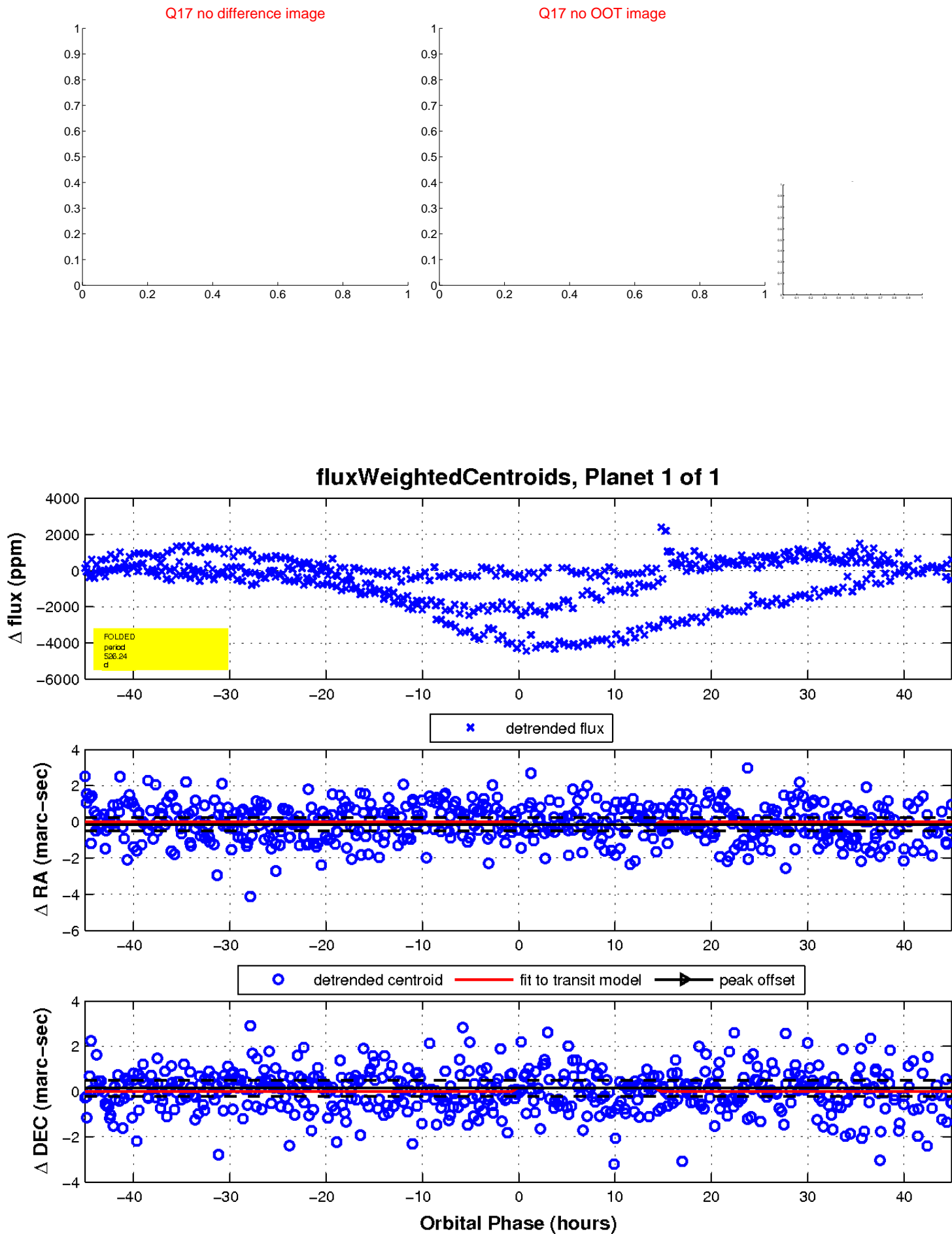
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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UKIRT Image

Declination

