

KIC 010586330

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})
010586330-01	OBS	No	305.575292	185.757160	358.5	16.584	8.5	8.5	0.87	5730	1.78	0.95

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010586330-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—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.

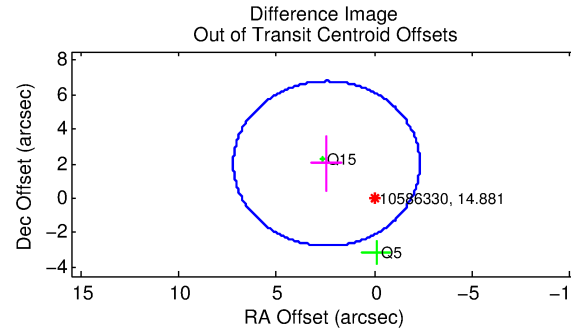
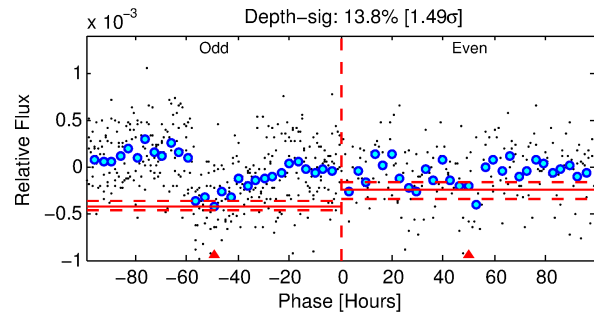
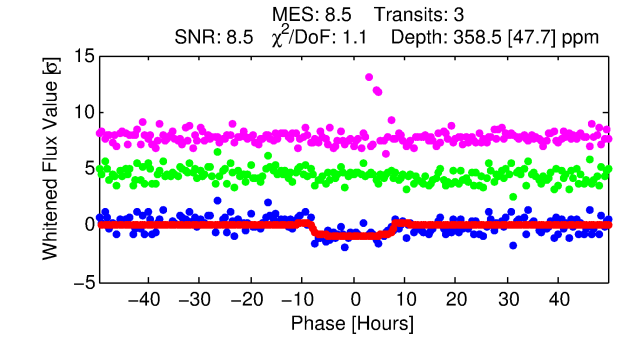
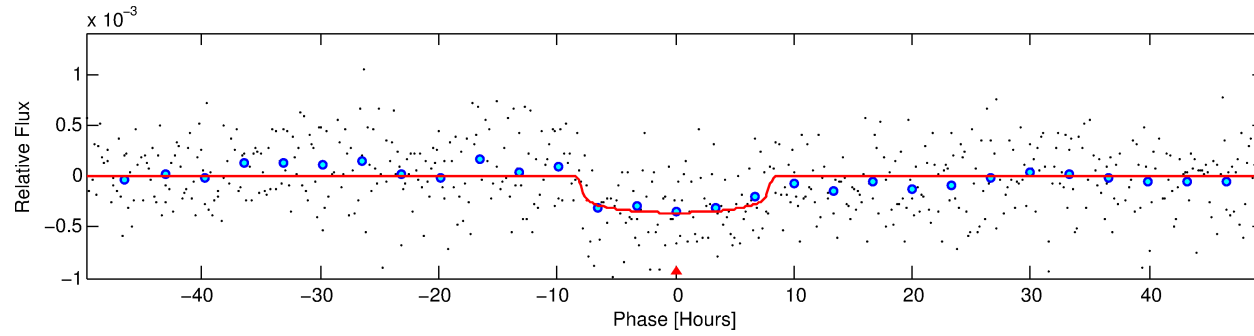
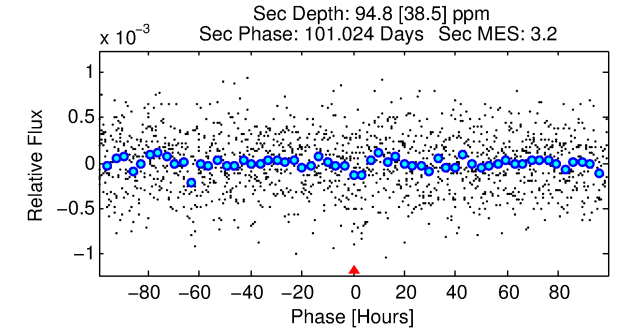
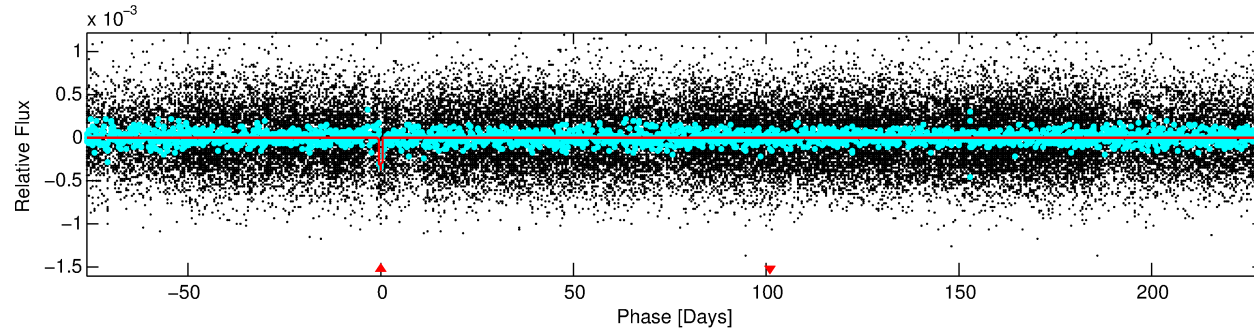
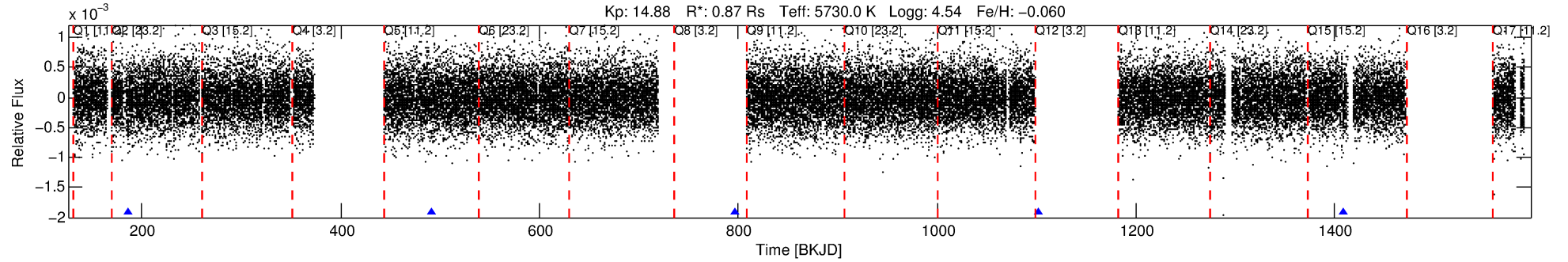
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 010586330-01

No Significant Match Found

DV One-Page Summary

KIC: 10586330 Candidate: 1 of 1 Period: 305.575 d



DV Fit Results:

Period = 305.57529 [0.00890] d
Epoch = 185.7572 [0.0232] BKJD
Rp/R* = 0.0188 [0.0071]
a/R* = 98.92 [163.71]
b = 0.74 [1.03]
Seff = 0.95 [0.37]
Teff = 252 [24] K
Rp = 1.78 [0.86] Re
a = 0.8786 [0.2242] AU
Ag = 12693.48 [11898.81] [1.07 σ]
Teffp = 4128 [895] K [4.33 σ]

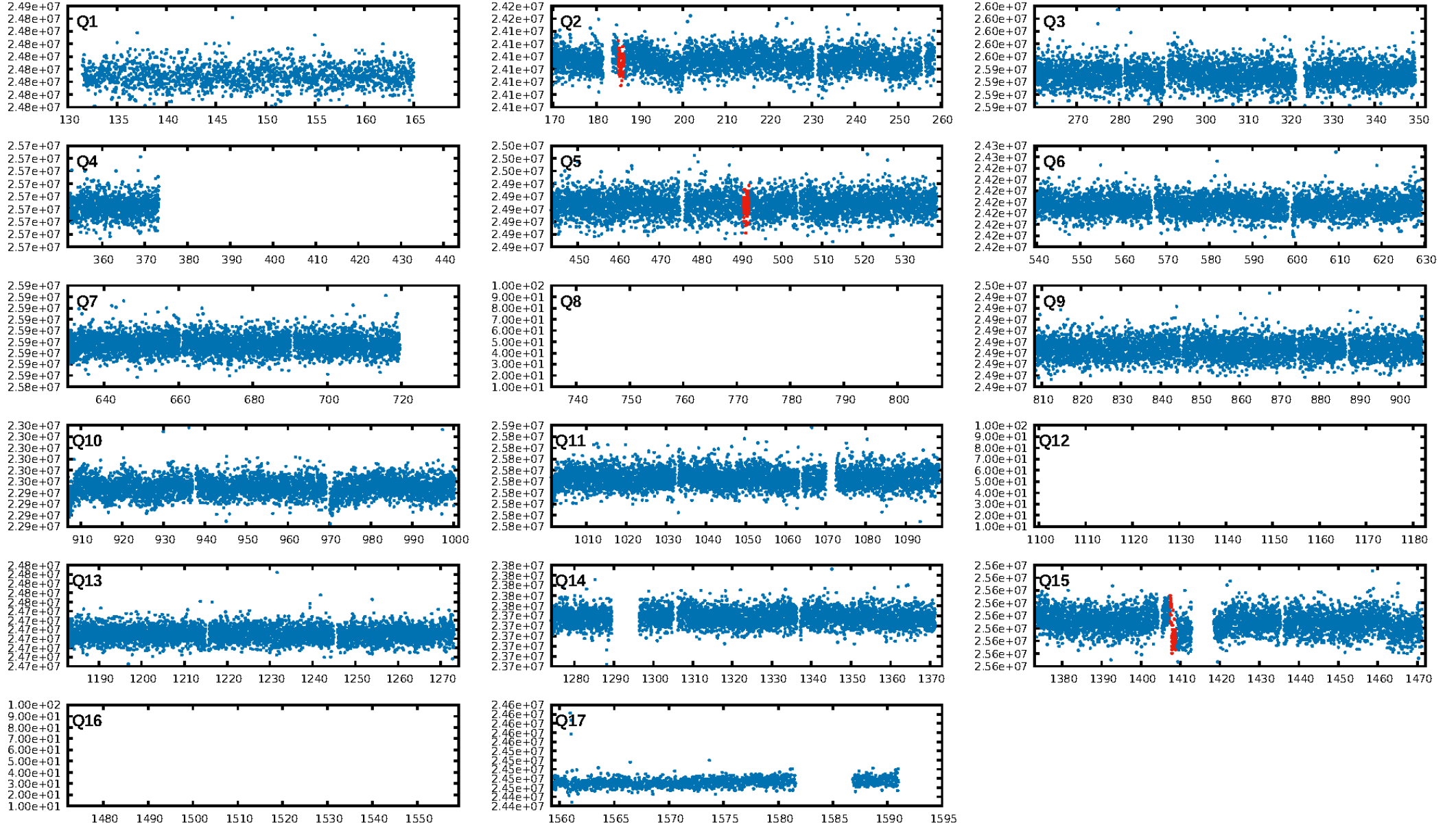
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 4.2%
ModelChiSquareGof-sig: 98.9%
Bootstrap-pfa: 3.27e-19
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 2.298
Centroid-sig: 1.4%
Centroid-so: 3.805 arcsec [2.42 σ]
OotOffset-rm: 3.156 arcsec [1.99 σ]
KicOffset-rm: 3.634 arcsec [2.57 σ]
OotOffset-st: 0/1/0/1 [2]
KicOffset-st: 0/1/0/1 [2]
DiffImageQuality-fgm: 1.00 [2/2]
DiffImageOverlap-fno: 1.00 [2/2]

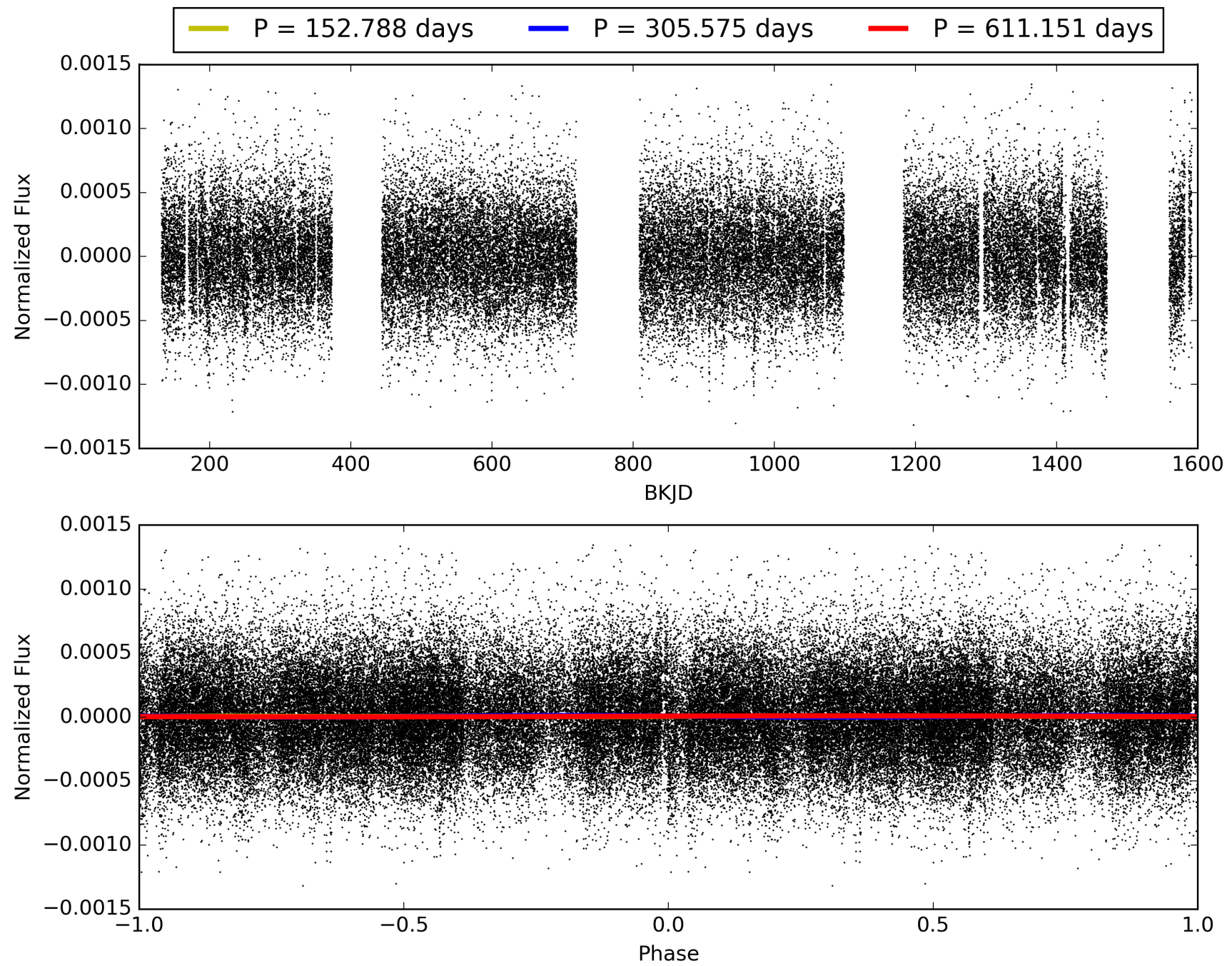
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 19:13:48 Z

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

TCE 010586330-01, PDC Light Curves

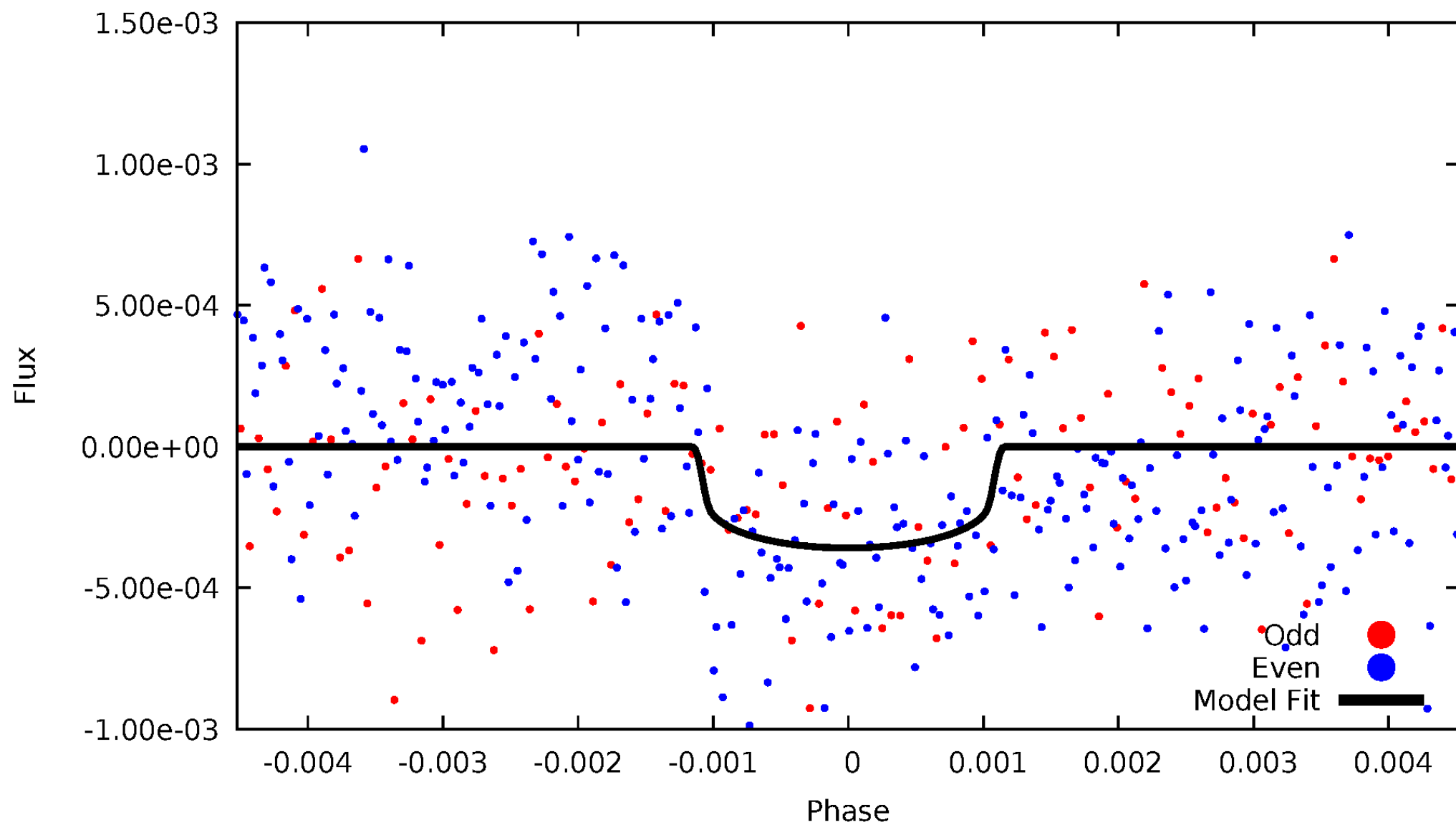


TCE 010586330-01



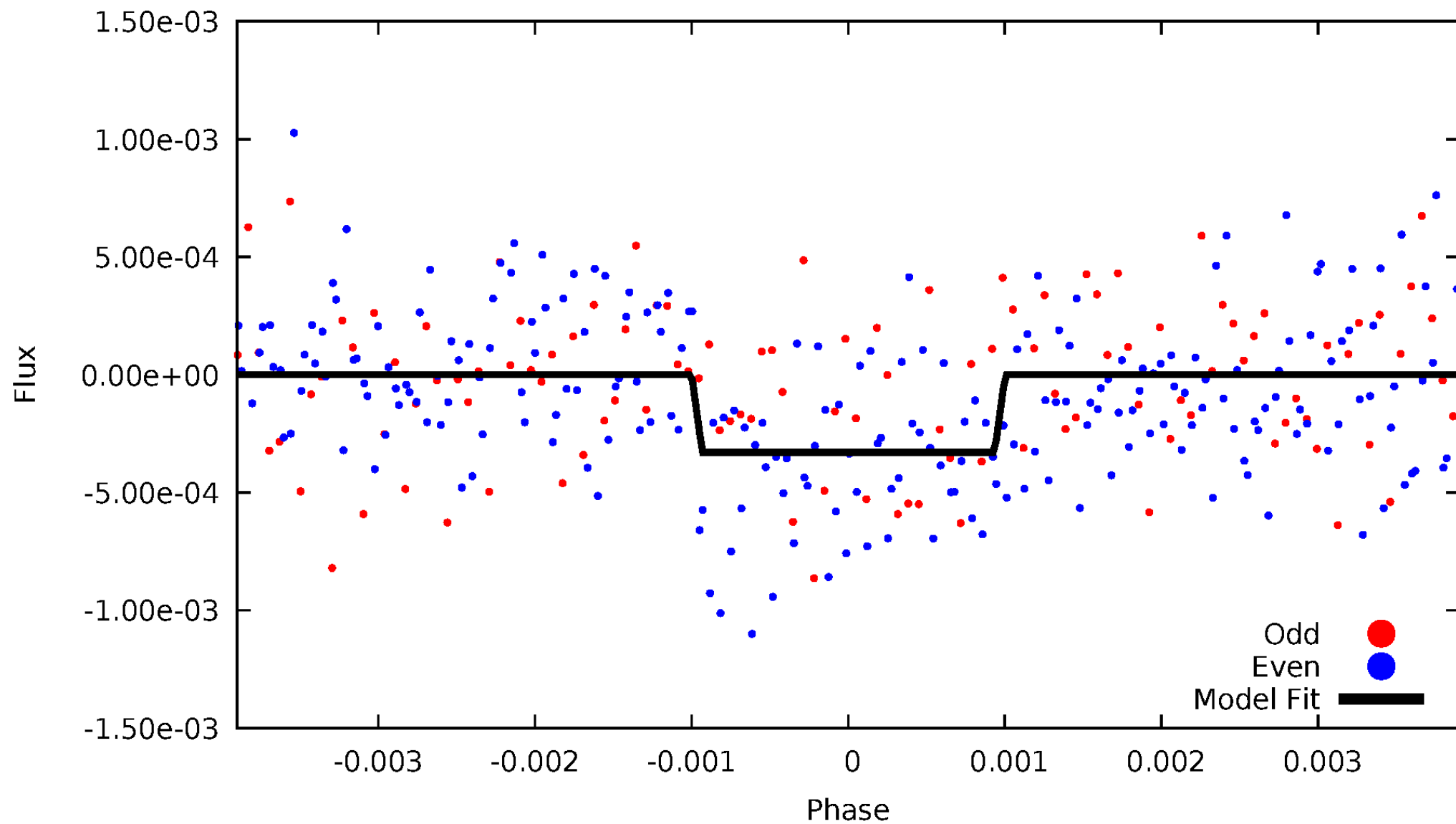
DV Odd/Even

TCE 010586330-01



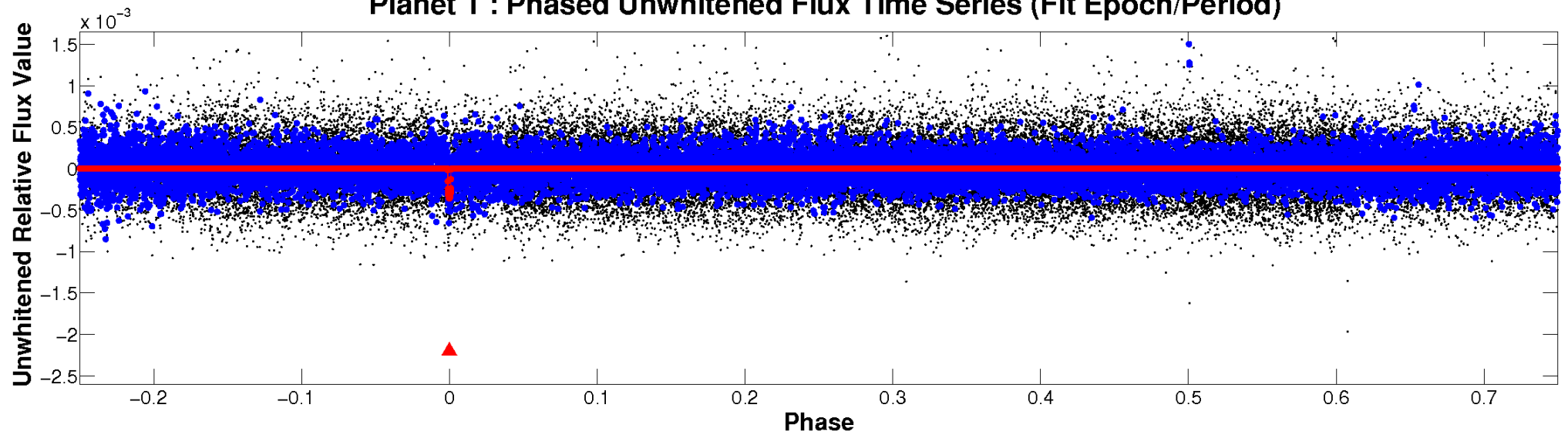
ALT Odd/Even

TCE 010586330-01

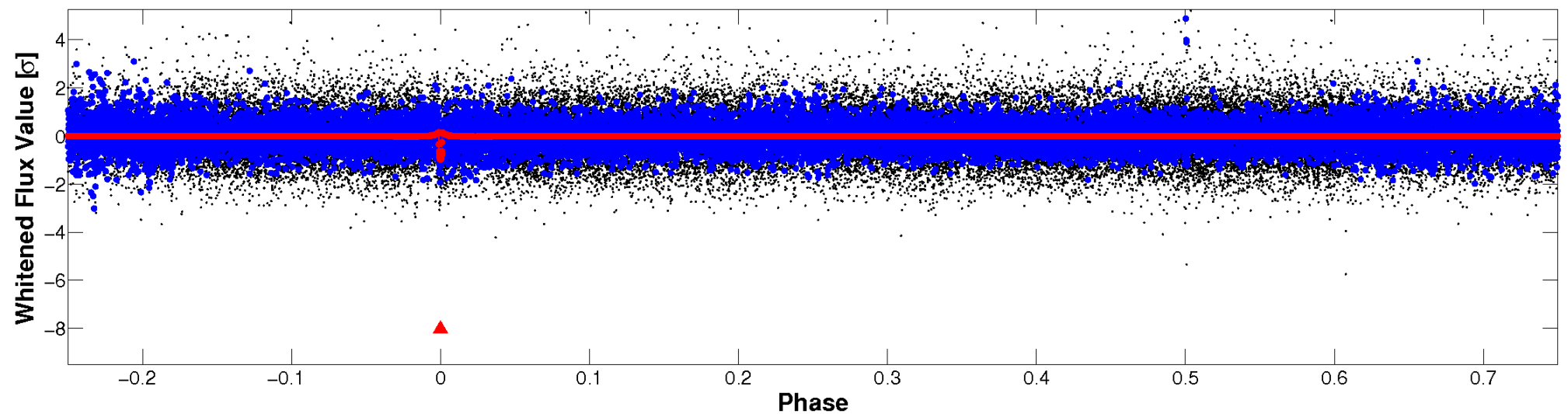


Non-Whitened Vs. Whitened Light Curve

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



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



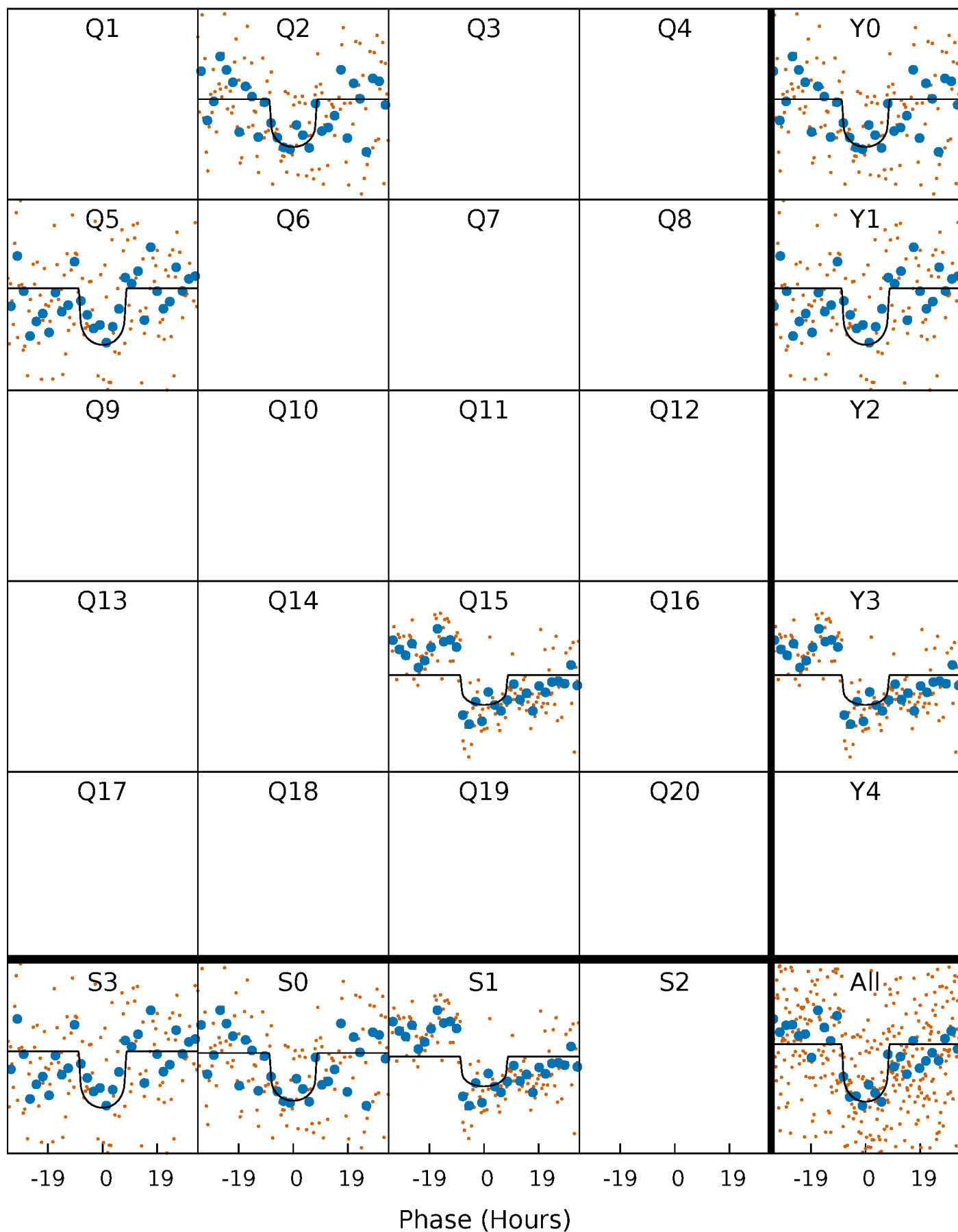
PDC Quarter-Phased Transit Curves

TCE 010586330-01 P=305.575292 Days $T_0=185.757160$ (BKJD)



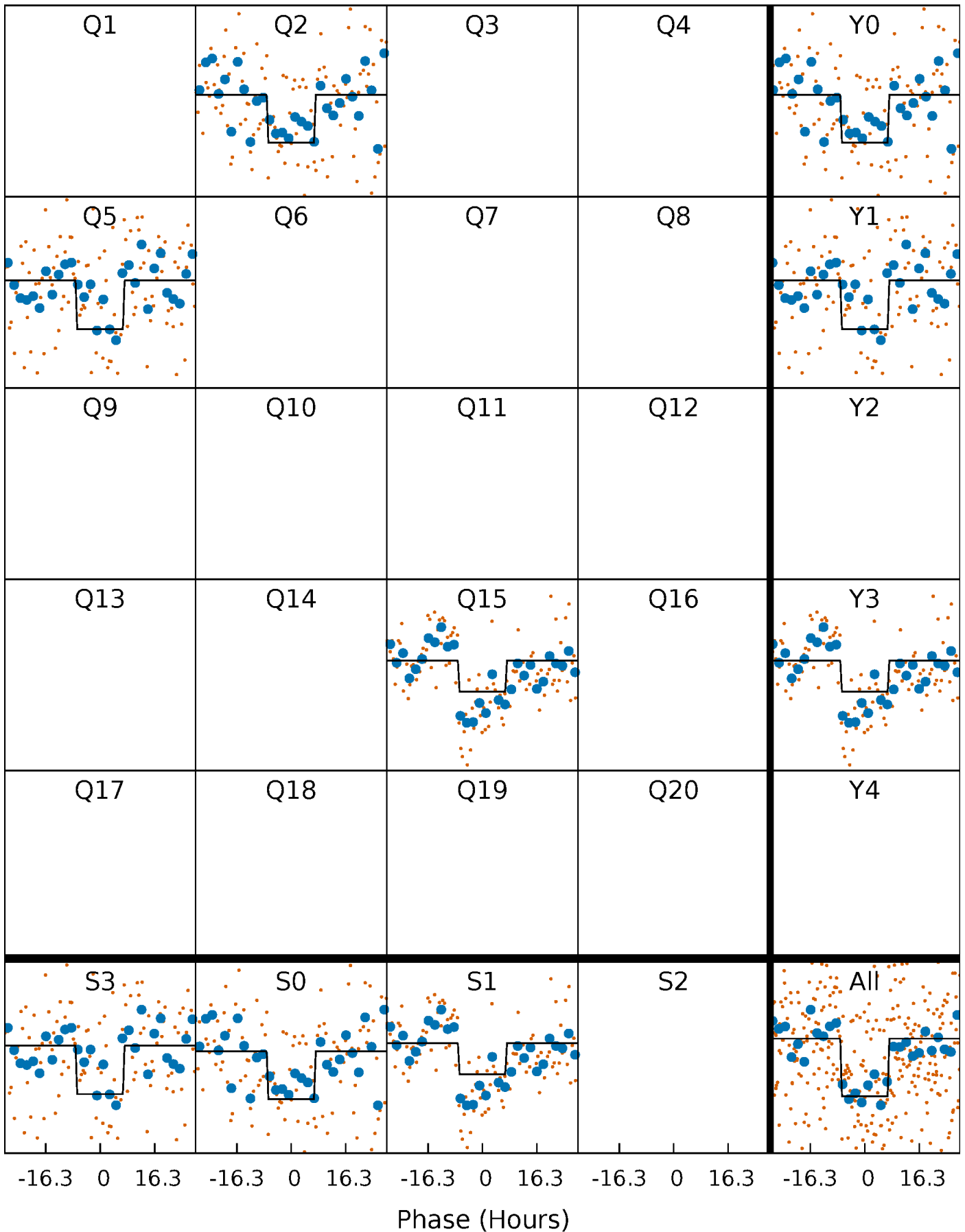
DV Quarter-Phased Transit Curves

TCE 010586330-01 P=305.575292 Days $T_0=185.757160$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

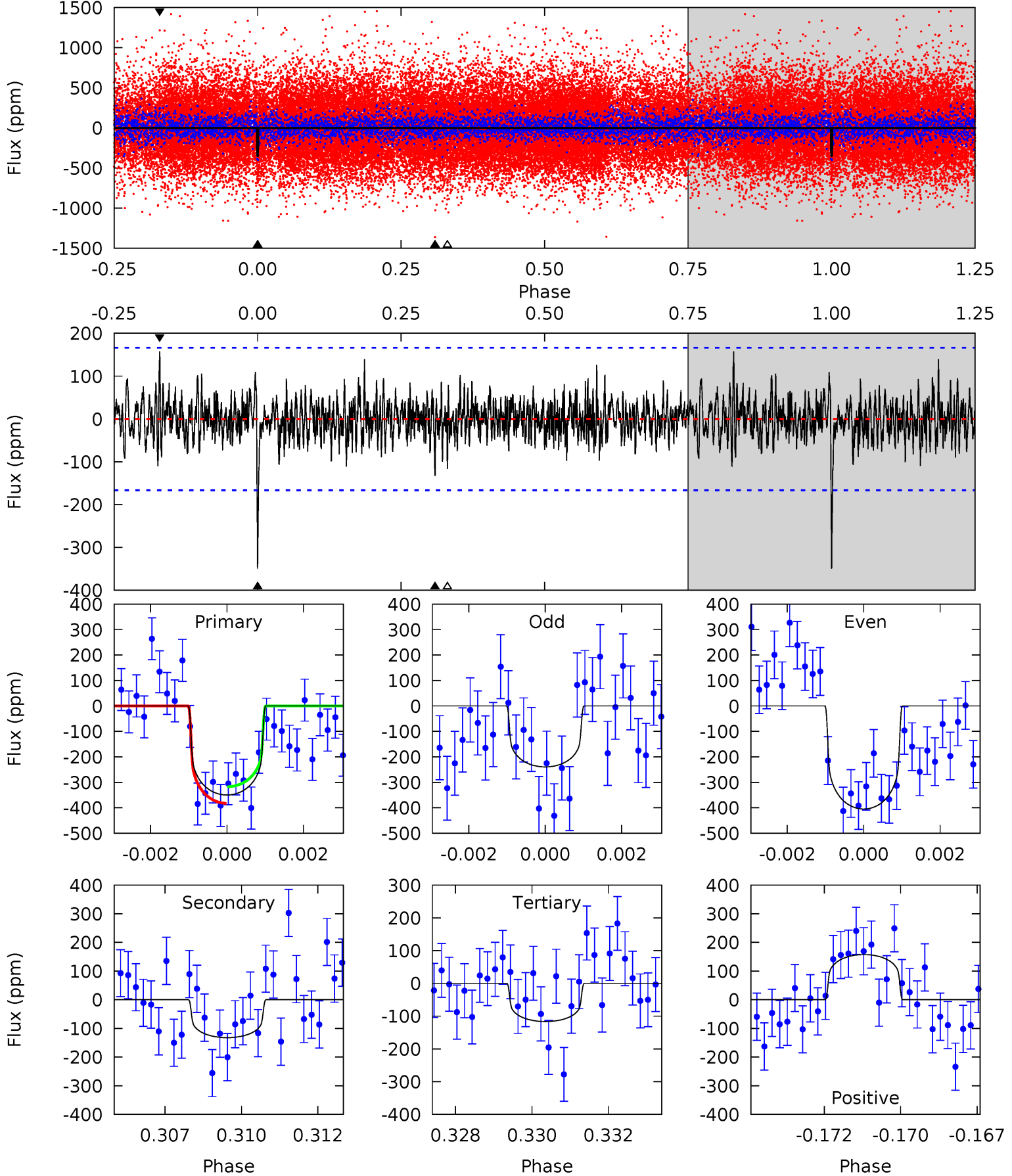
TCE 010586330-01 P=305.570267 Days $T_0=185.742331$ (BKJD)



DV Model-Shift Uniqueness Test

010586330-01, P = 305.575292 Days, E = 185.757160 Days

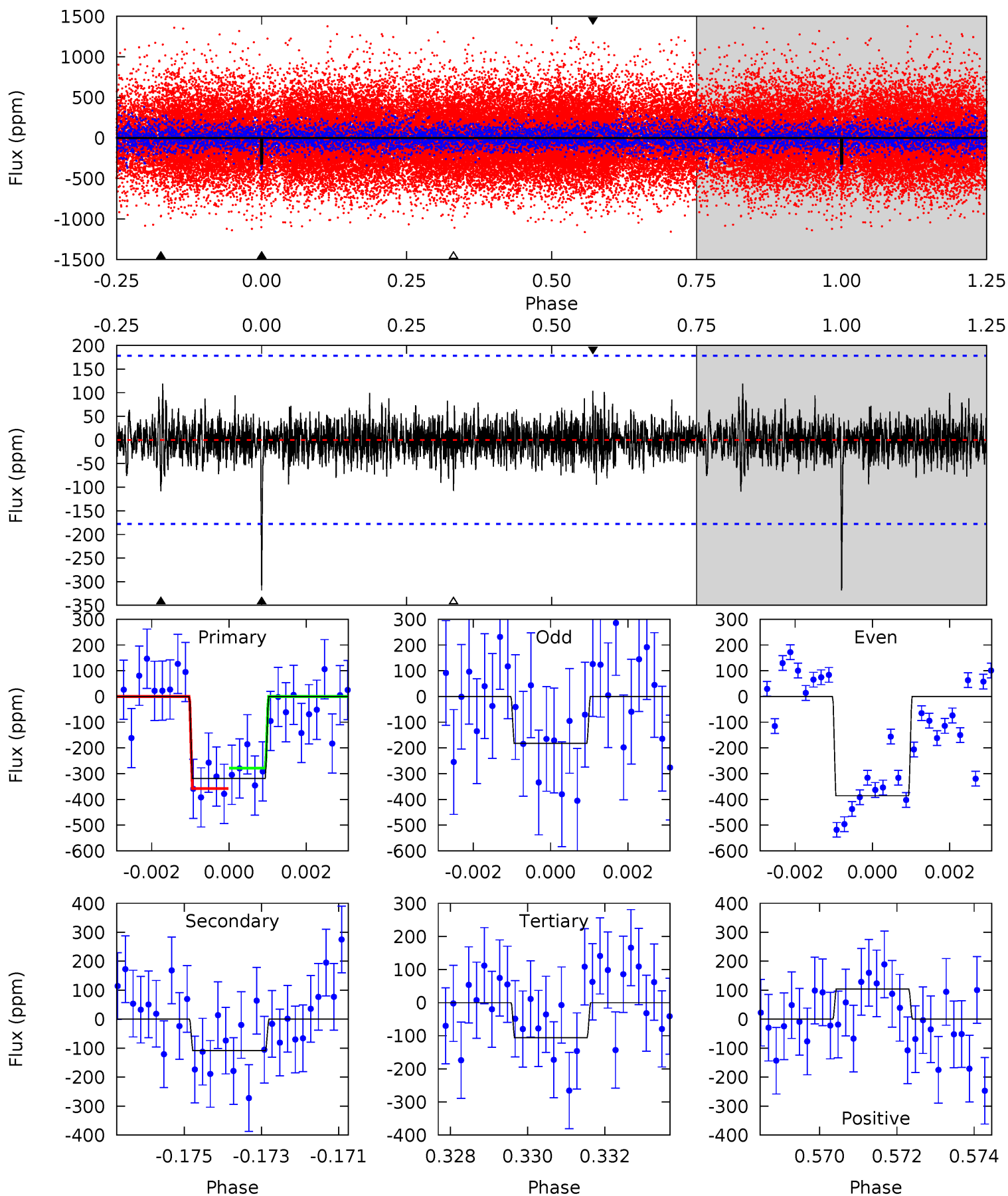
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.1	4.21	3.71	5.02	5.30	3.05	1.13	7.43	6.12	0.50	-0.81	2.49	1.05	0.31	1.04



Alt Model-Shift Uniqueness Test

010586330-01, P = 305.570267 Days, E = 185.742331 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.53	3.25	3.18	3.11	5.33	3.10	0.79	6.35	6.42	0.07	0.14	2.86	1.31	0.27	1.19



Stellar Parameters For KIC 010586330

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5730^{+153}_{-153}	$4.545^{+0.036}_{-0.204}$	$-0.060^{+0.300}_{-0.300}$	$0.870^{+0.263}_{-0.082}$	$0.968^{+0.106}_{-0.116}$	$2.069^{+0.399}_{-1.040}$
	+3%/-3%	+1%/-4%	+500%/-500%	+30%/-9%	+11%/-12%	+19%/-50%
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 010586330-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-132 ± 31	$1.86^{+0.71}_{-0.66}$	361^{+25}_{-16}	4615^{+1004}_{-540}	15407^{+21735}_{-7763}
Alt.	-108 ± 33	$1.81^{+0.78}_{-0.66}$	361^{+24}_{-16}	4472^{+1064}_{-551}	13501^{+22231}_{-7267}

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 $A_{obs} \gg 1.0$

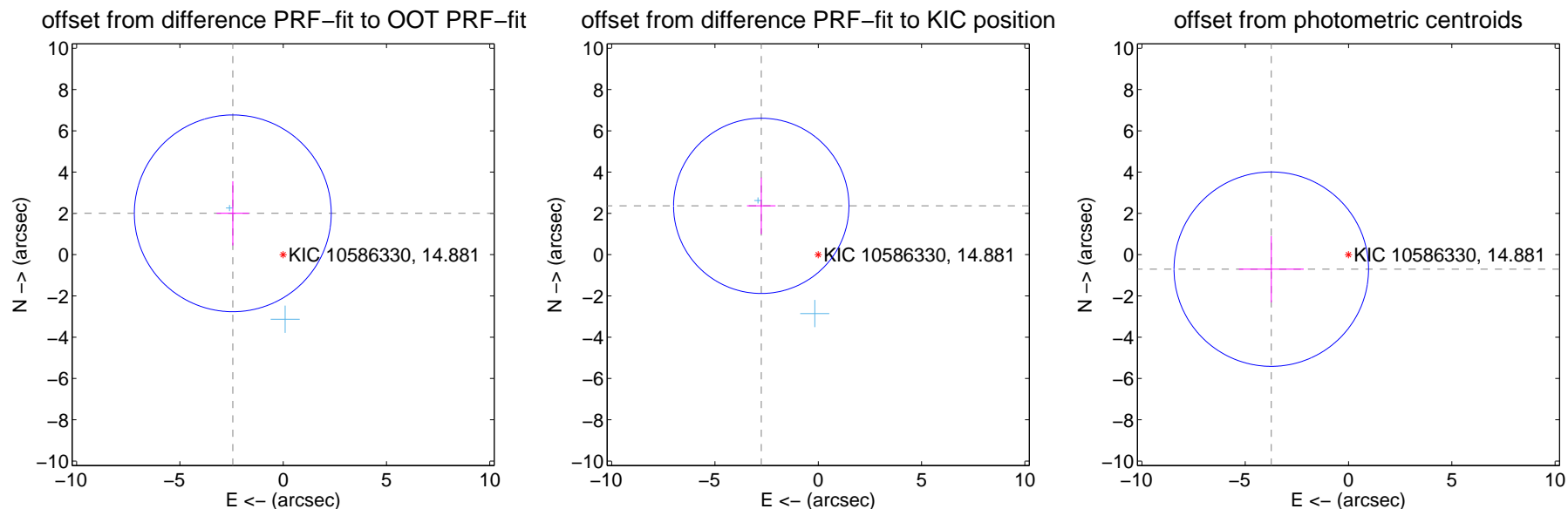
DV Centroid Data

Supplemental centroid analysis for 010586330-01. Kepler magnitude: 14.88. Transit SNR 8.49

There are 2 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.49 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	3.156 ± 1.589	1.99	2.440 ± 0.780	2.002 ± 1.557
PRF-fit source offset from KIC position	3.634 ± 1.415	2.57	2.760 ± 0.691	2.365 ± 1.371
photometric centroid source offset	3.80 ± 1.57	2.42	3.74 ± 1.57	-0.70 ± 1.60

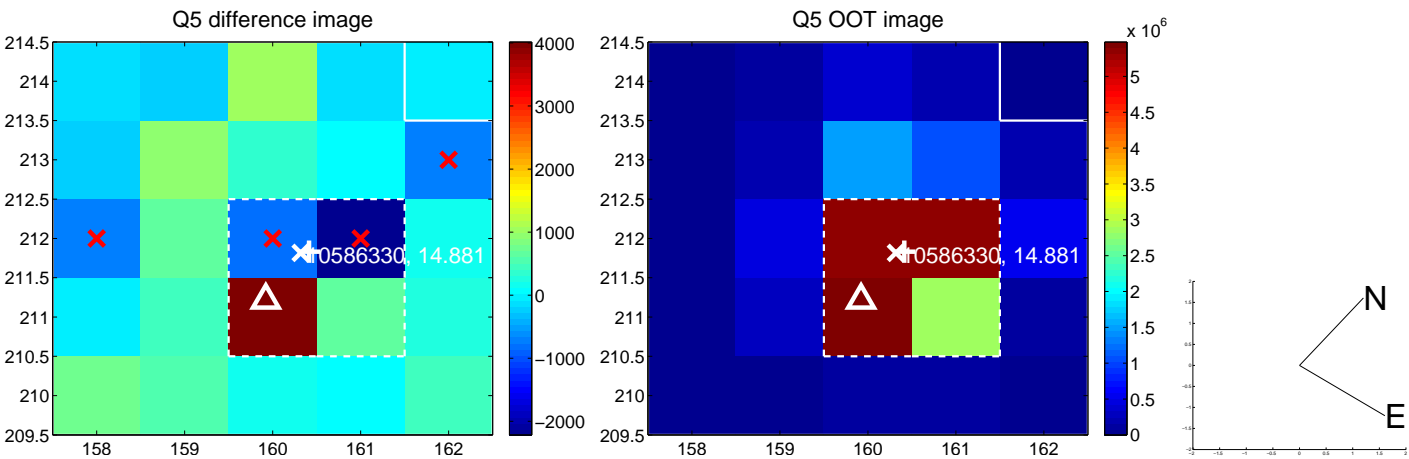


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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



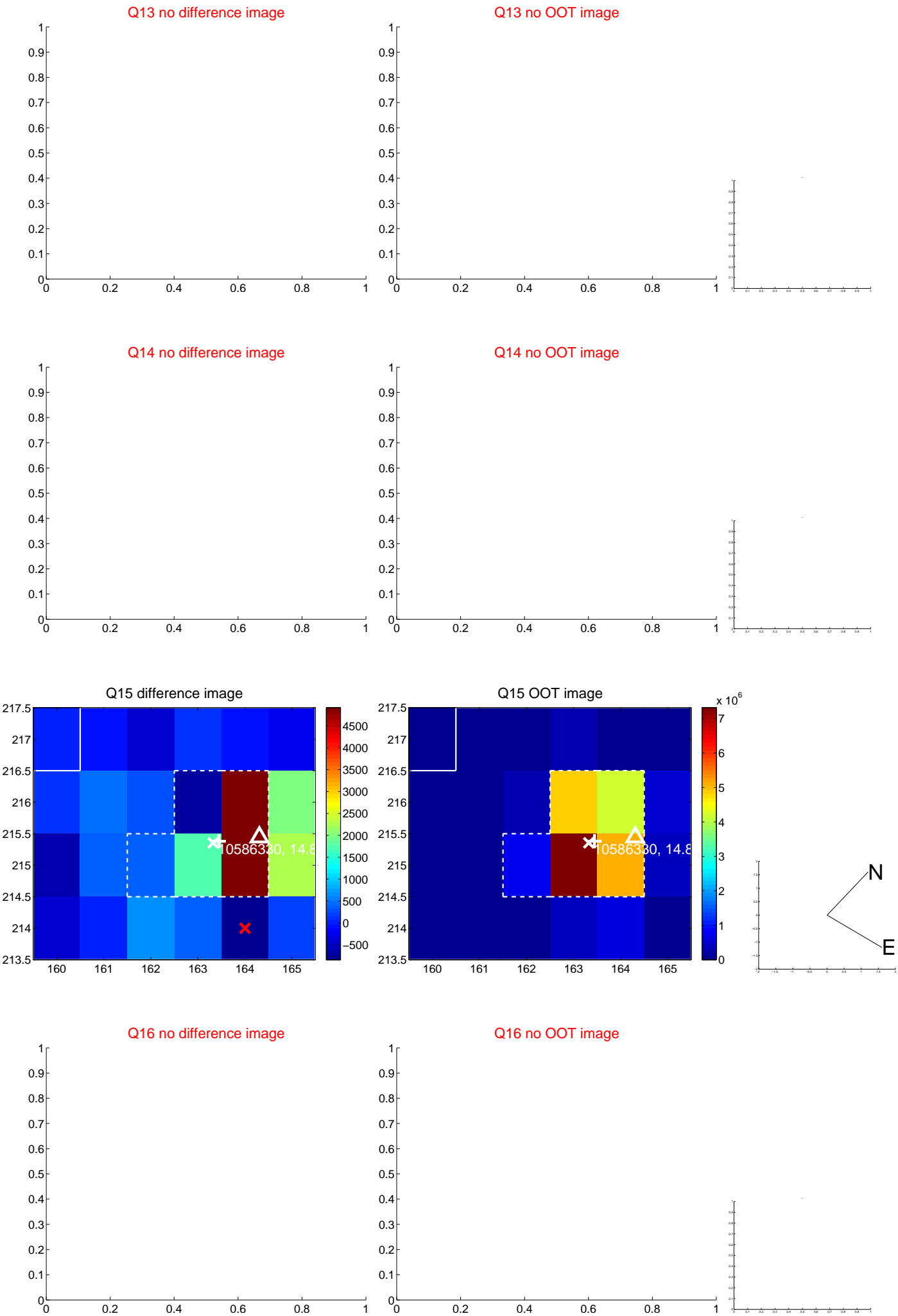
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



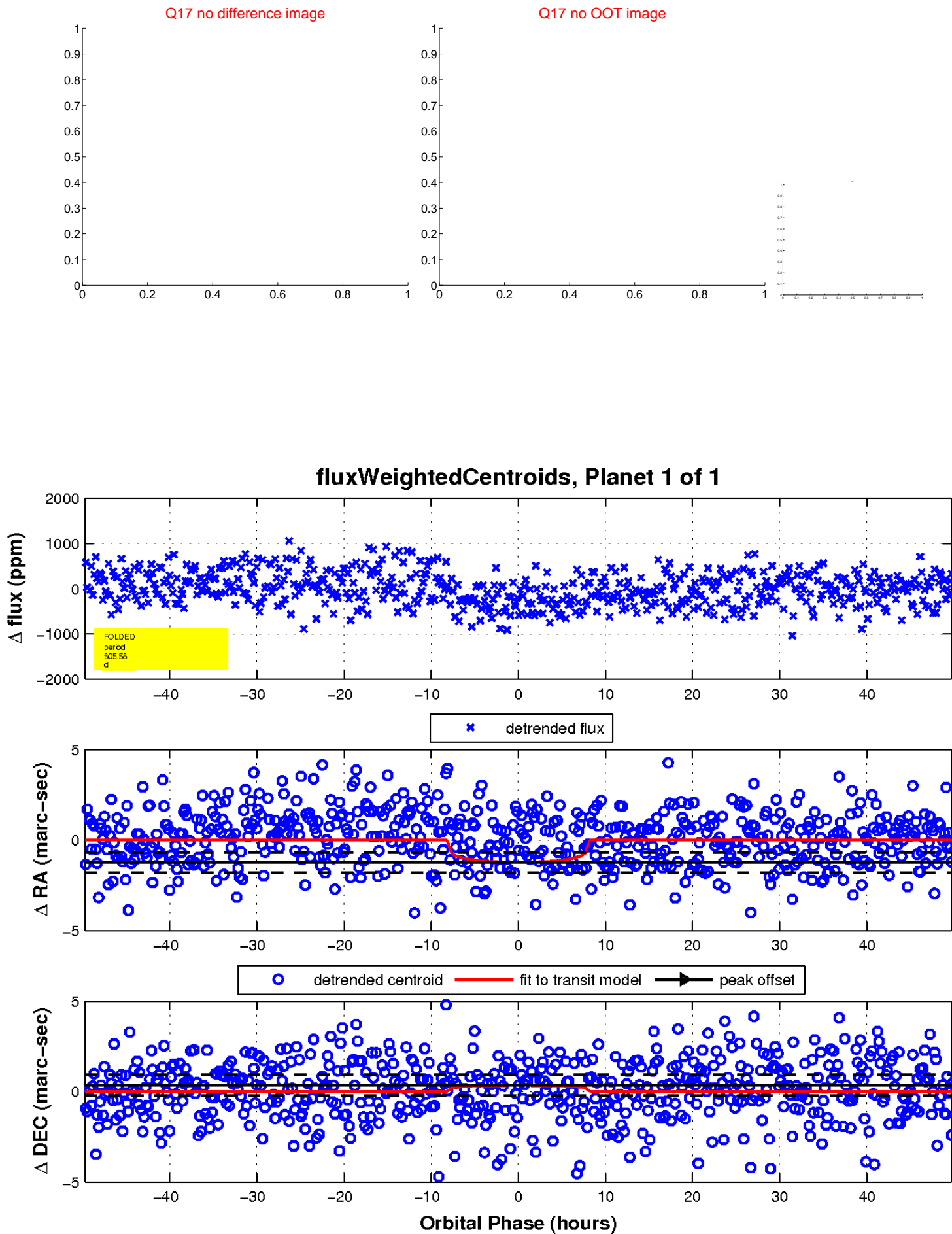
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



This plot does not exist for this TCE.