

KIC 011025661

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})
011025661-01	OBS	No	485.518286	311.412079	602.9	9.849	7.9	6.8	0.83	5141	2.25	0.35

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011025661-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—LPP_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.

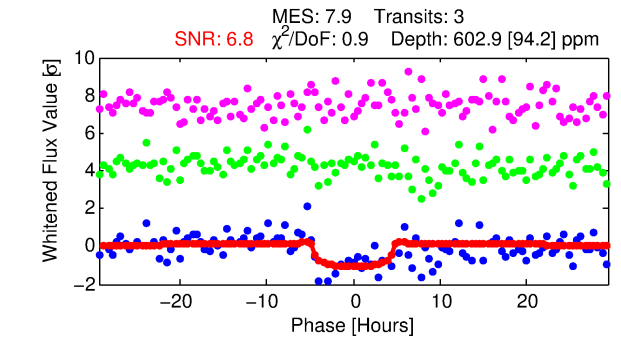
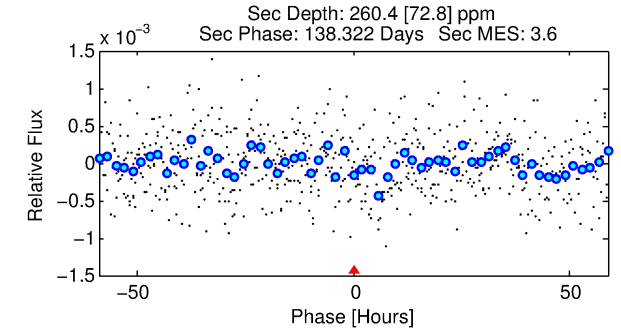
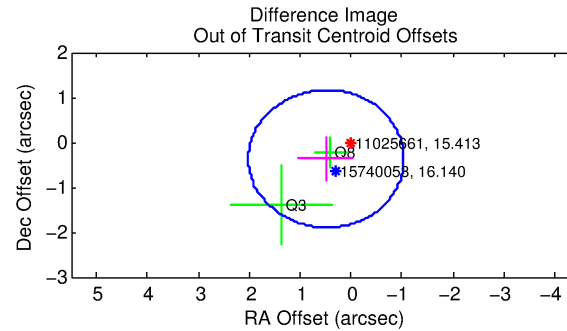
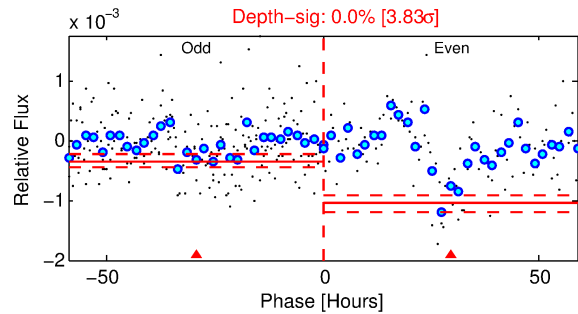
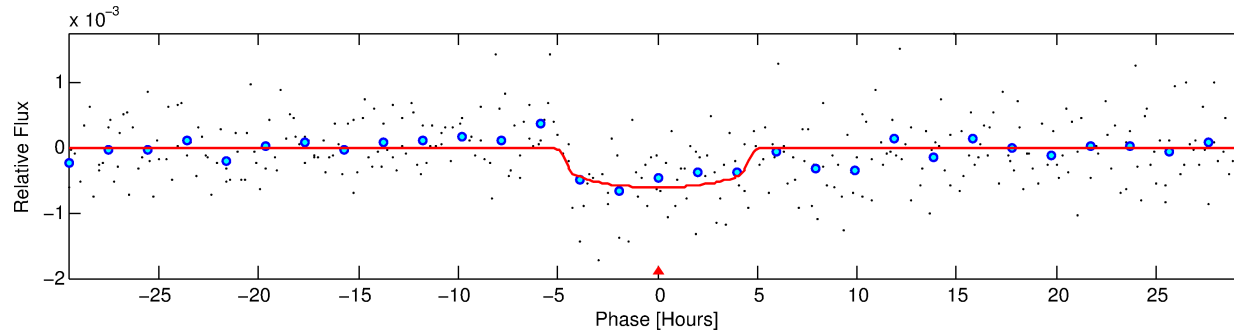
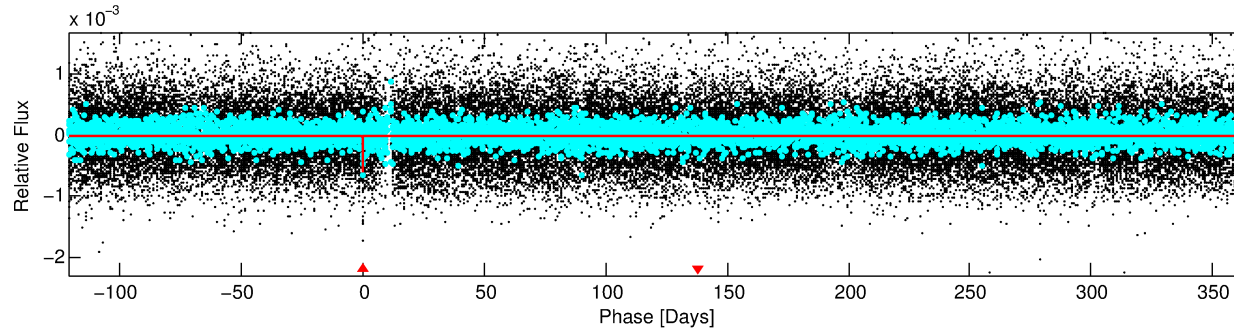
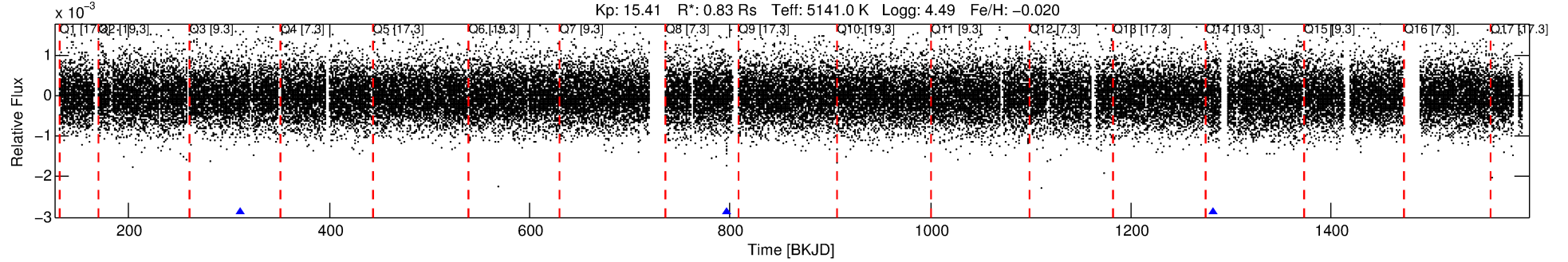
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011025661-01

No Significant Match Found

DV One-Page Summary

KIC: 11025661 Candidate: 1 of 1 Period: 485.518 d



DV Fit Results:

Period = 485.51829 [0.01580] d
Epoch = 311.4121 [0.0199] BKJD
Rp/R* = 0.0247 [0.0139]
a/R* = 256.23 [527.90]
b = 0.77 [1.13]
Seff = 0.35 [0.07]
Teq = 196 [10] K
Rp = 2.25 [1.29] Re
a = 1.1142 [0.1253] AU
Ag = 35132.00 [41079.83] [0.86 σ]
Teff = 4156 [1208] K [3.28 σ]

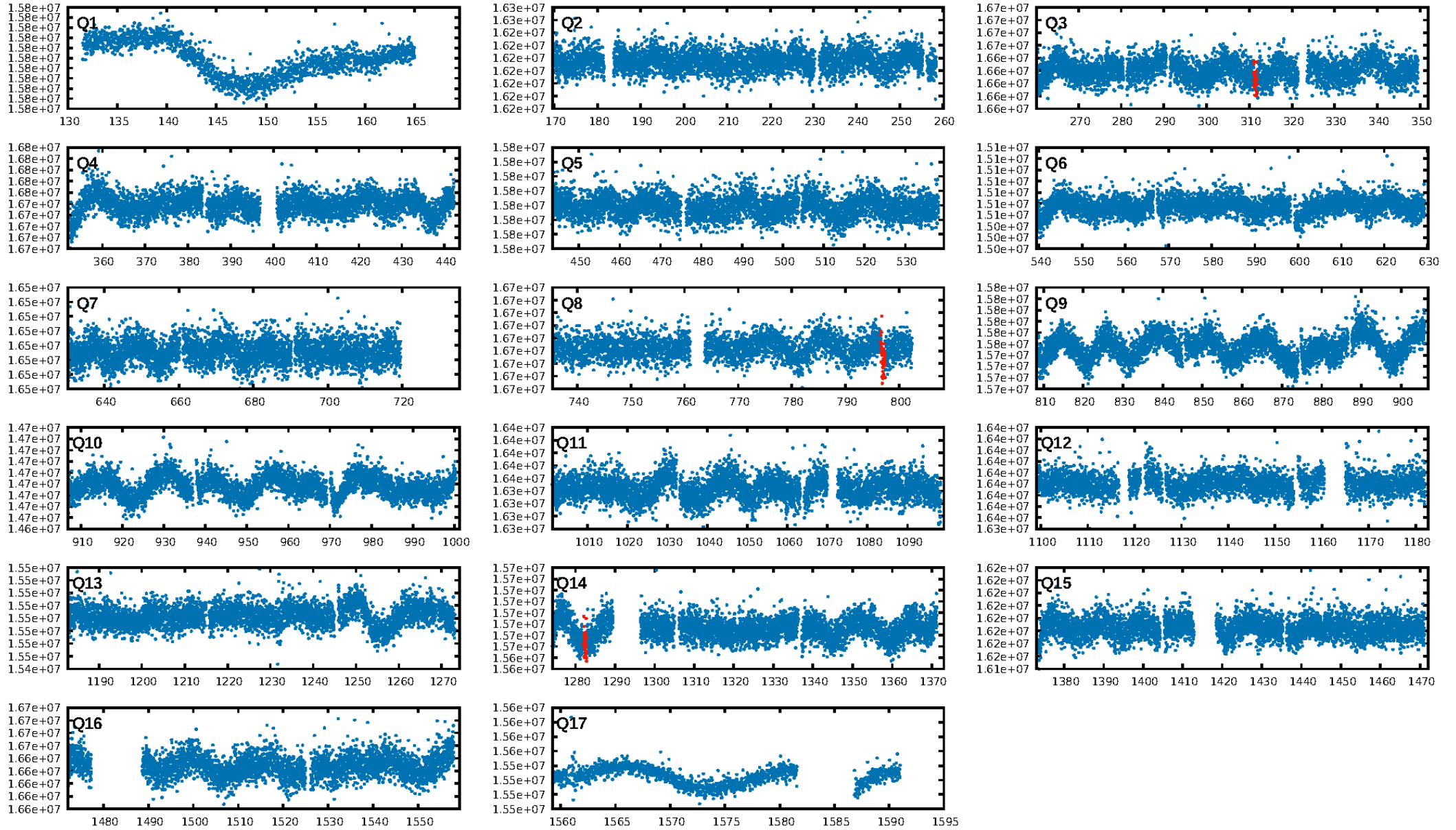
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.8%
ModelChiSquareGof-sig: 99.6%
Bootstrap-pfa: 2.79e-16
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 12.81
Centroid-sig: 12.4%
Centroid-so: 2.631 arcsec [1.53 σ]
OotOffset-rm: 0.611 arcsec [1.20 σ]
KicOffset-rm: 0.662 arcsec [1.30 σ]
OotOffset-st: 0/1/1/0 [2]
KicOffset-st: 0/1/1/0 [2]
DiffImageQuality-fgm: 0.50 [1/2]
DiffImageOverlap-fno: 1.00 [2/2]

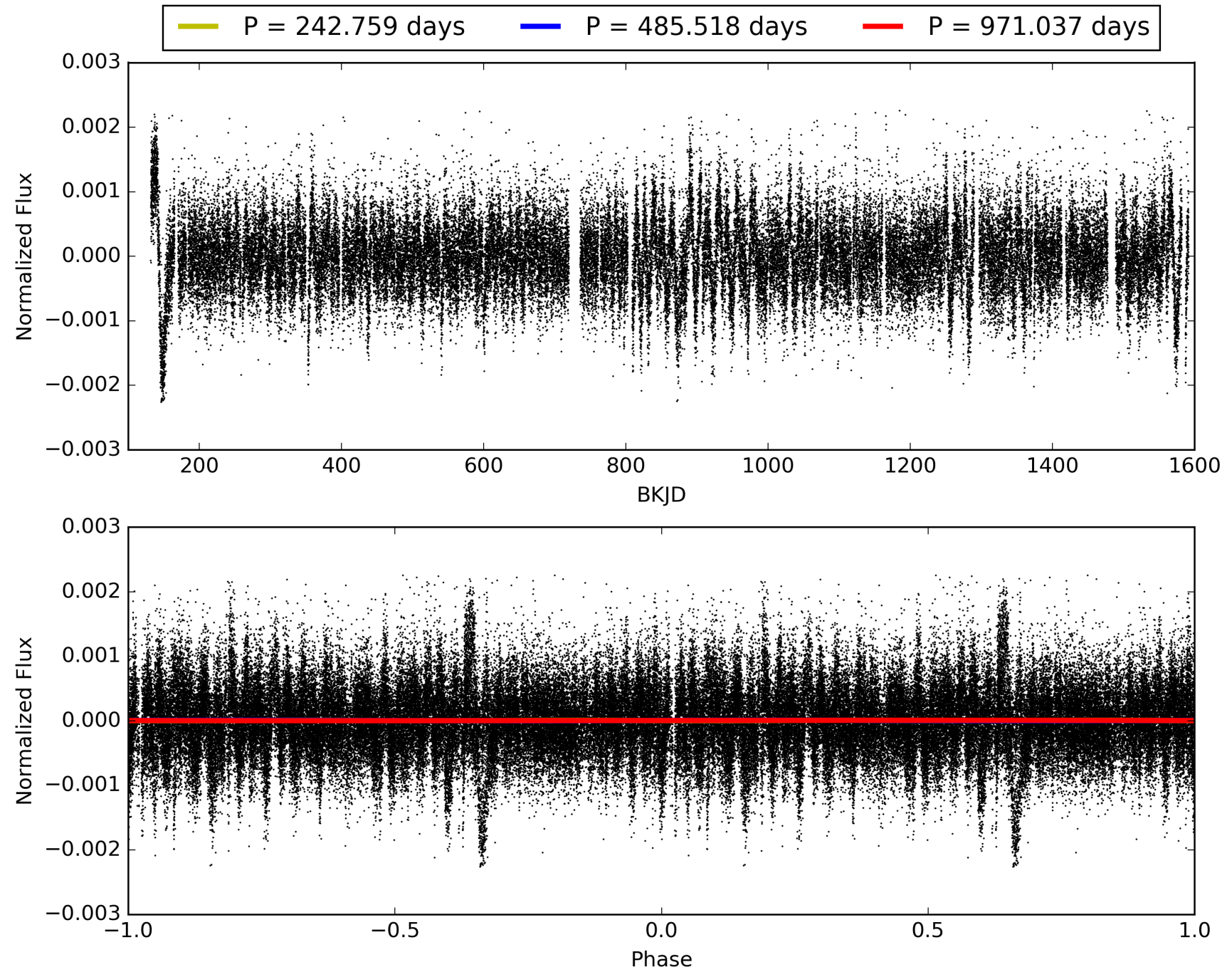
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 20:46:17 Z

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

TCE 011025661-01, PDC Light Curves

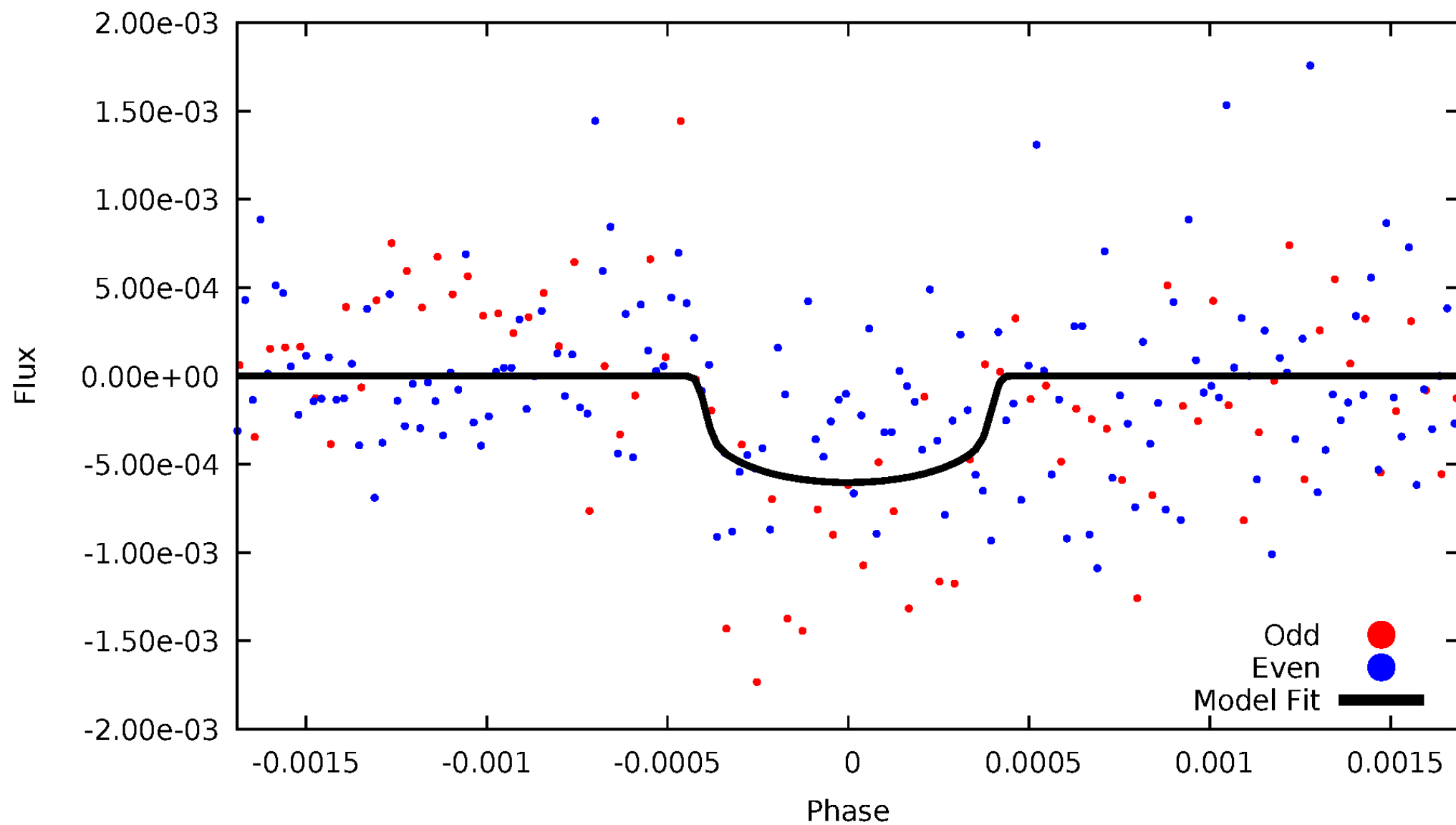


TCE 011025661-01



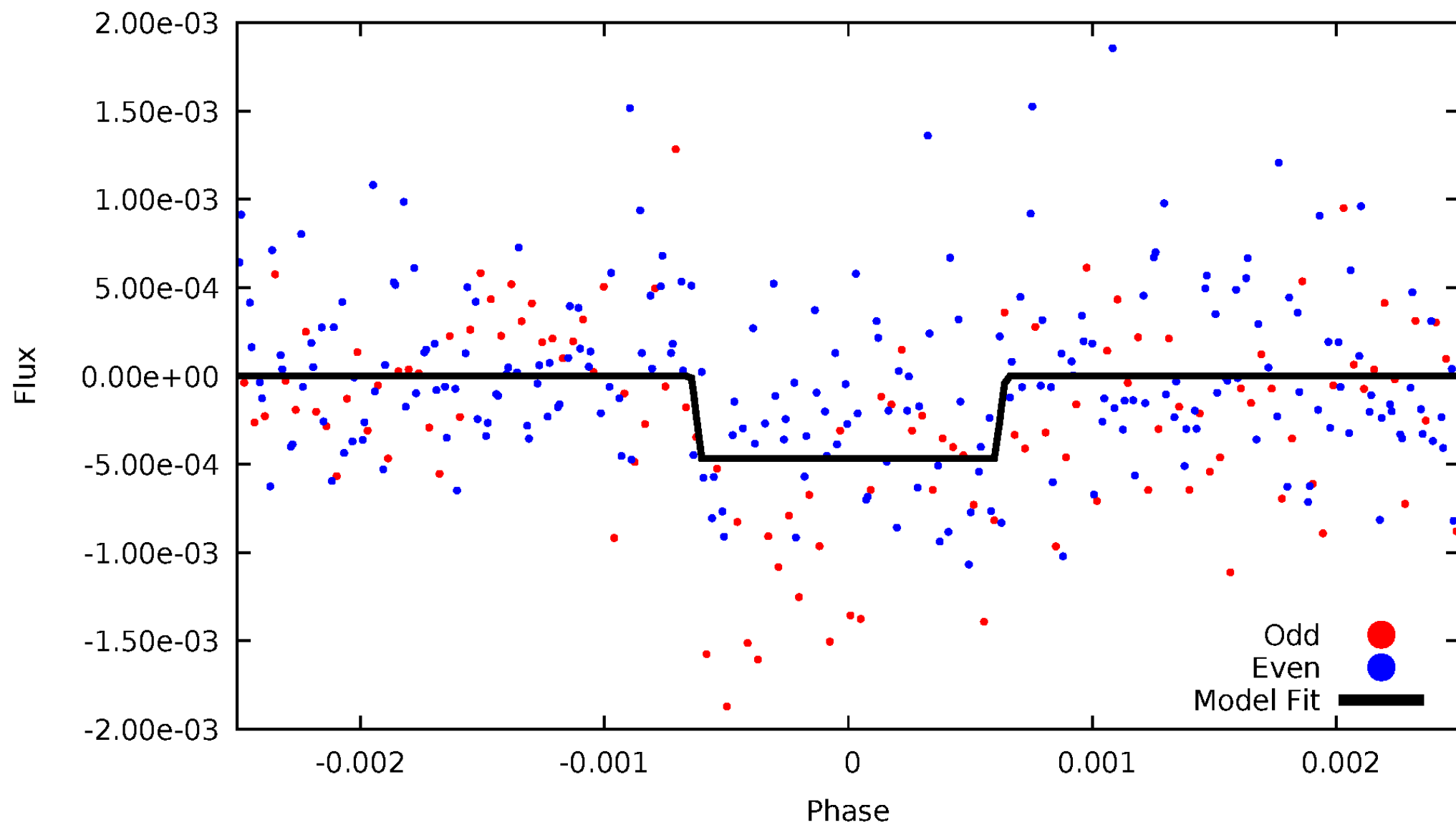
DV Odd/Even

TCE 011025661-01



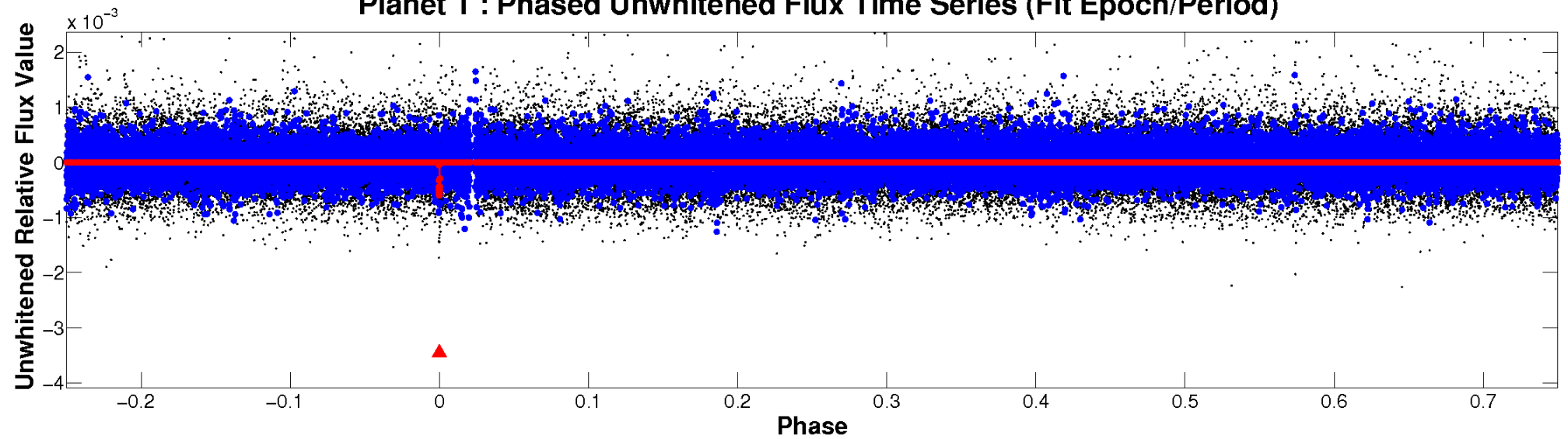
ALT Odd/Even

TCE 011025661-01

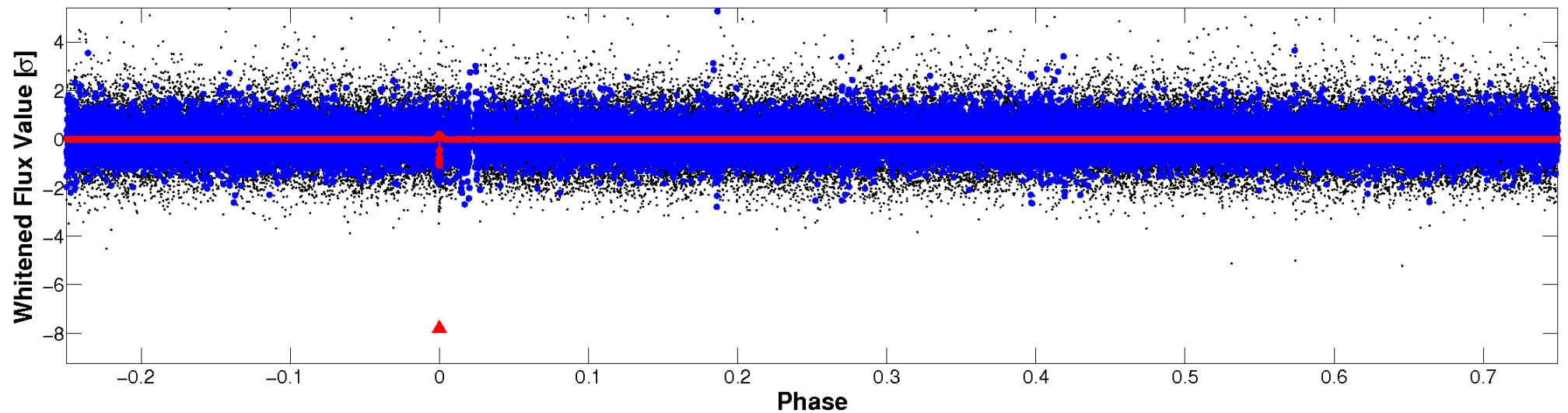


Non-Whitened Vs. Whitened Light Curve

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

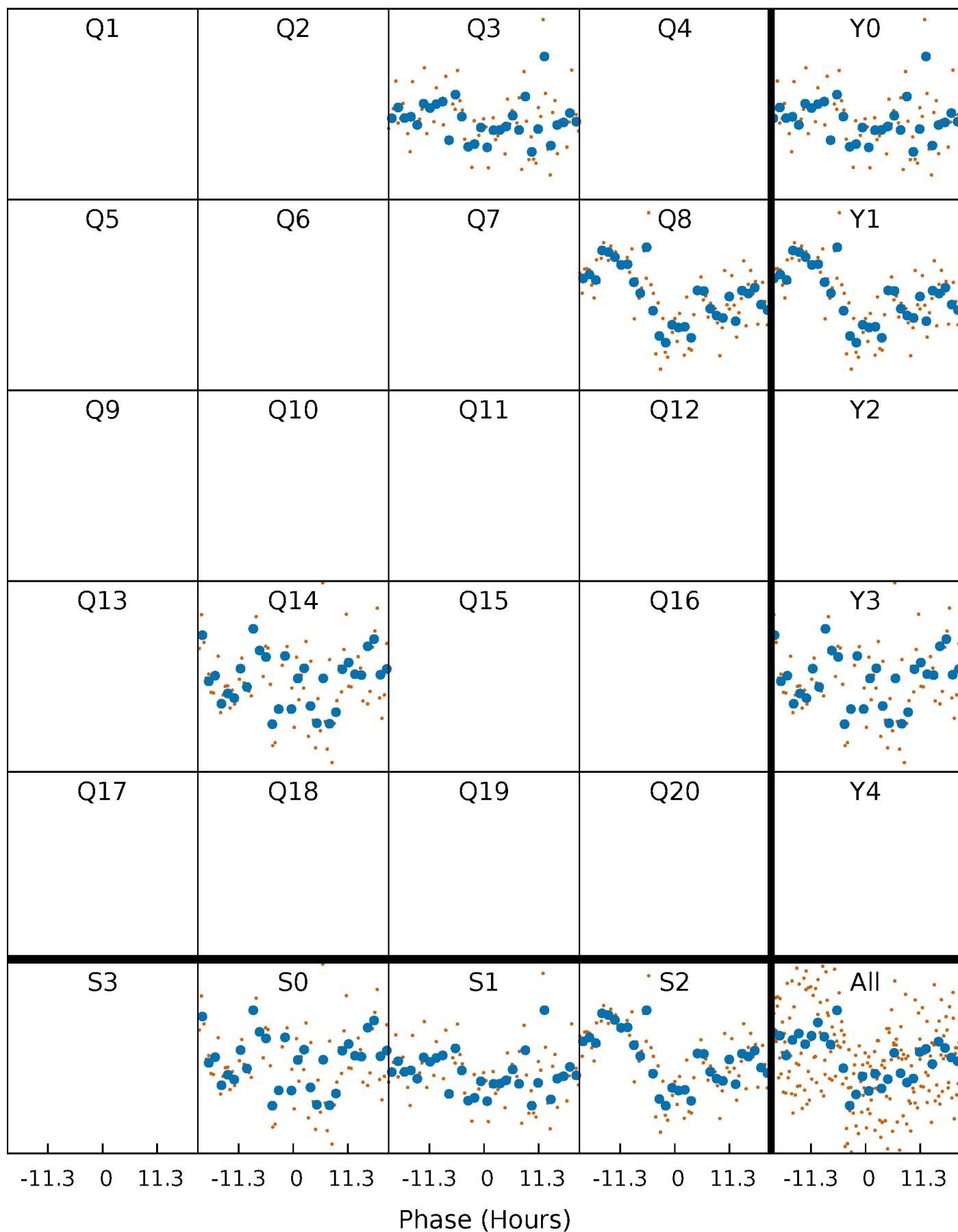


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



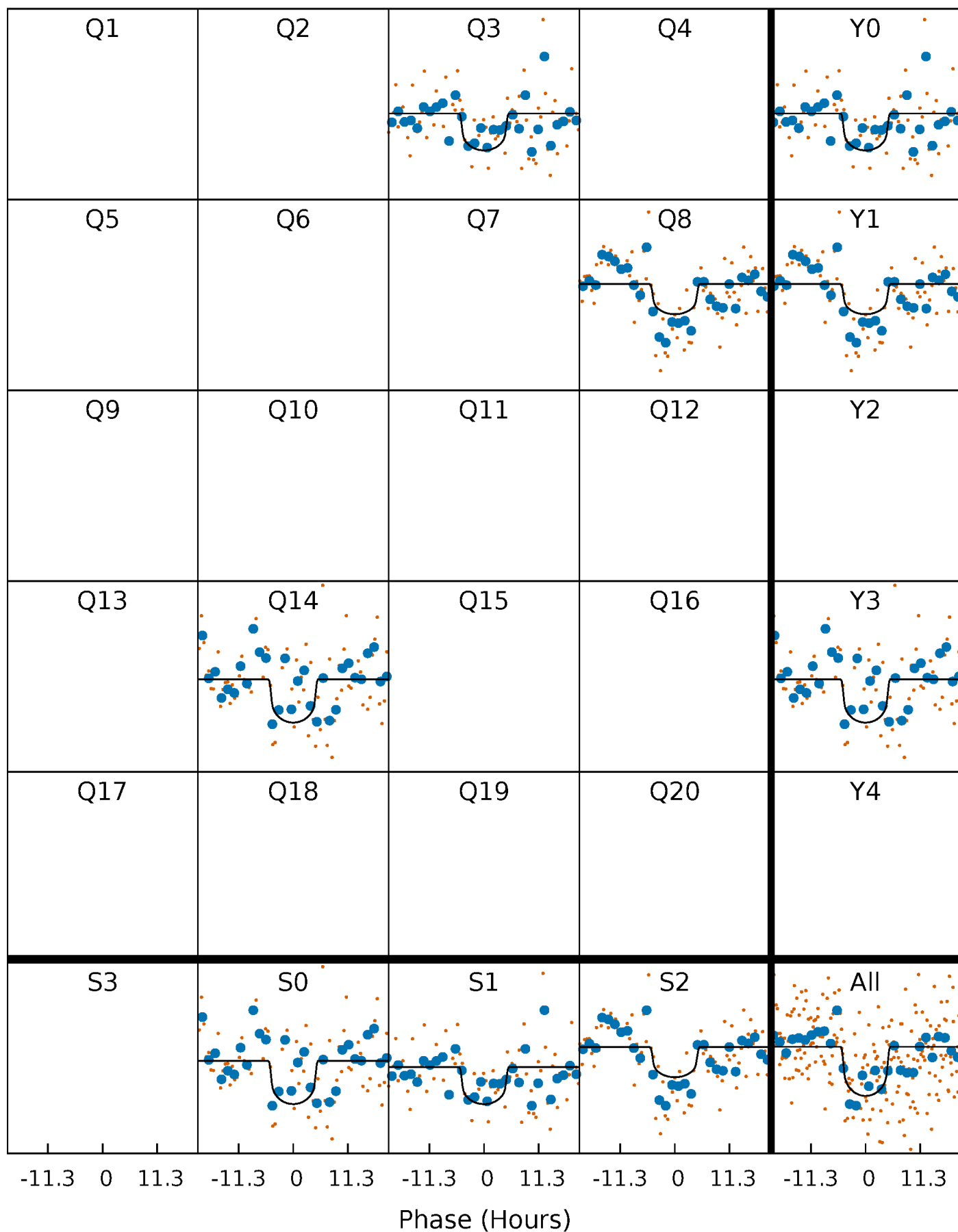
PDC Quarter-Phased Transit Curves

TCE 011025661-01 P=485.518286 Days $T_0=311.412079$ (BKJD)



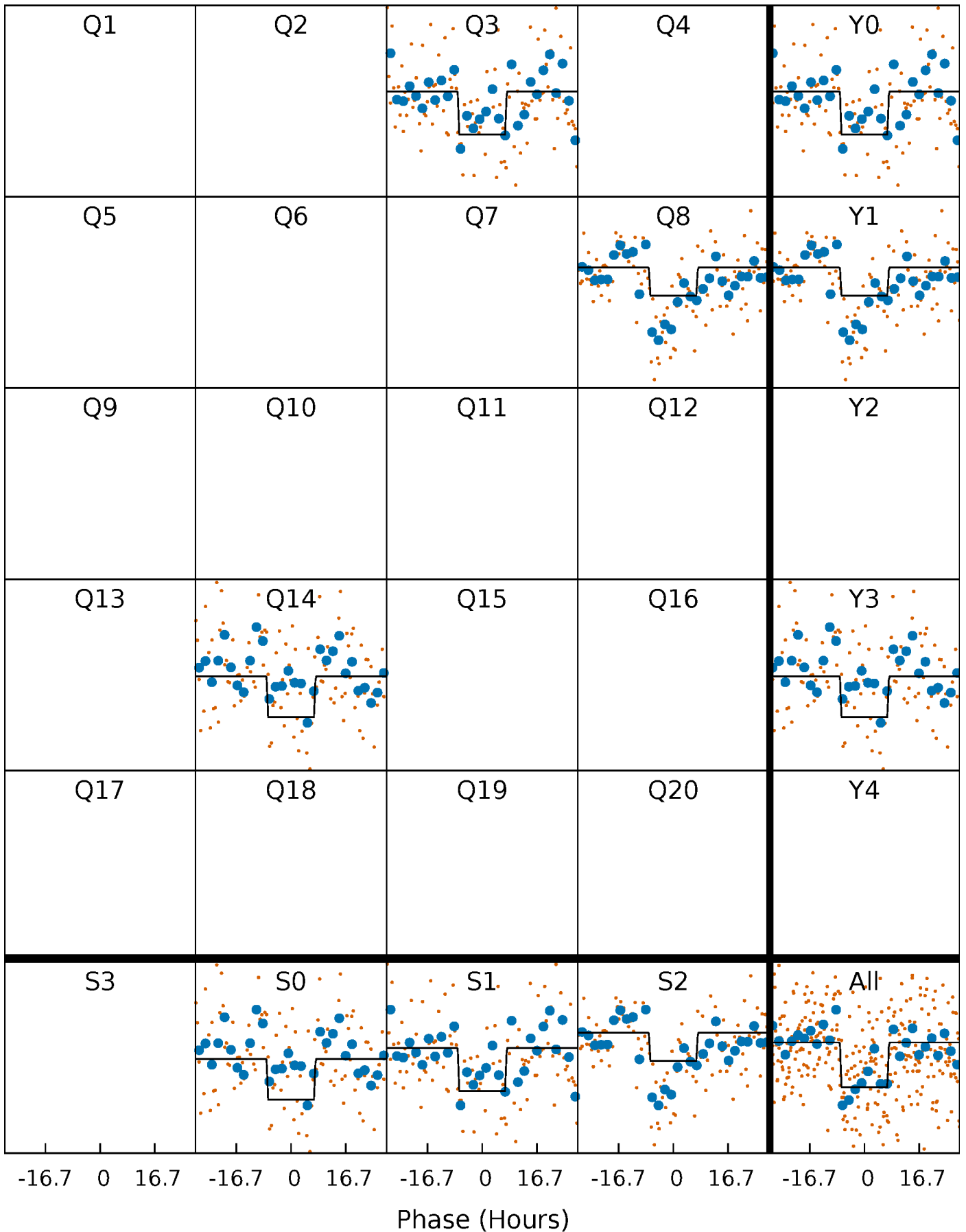
DV Quarter-Phased Transit Curves

TCE 011025661-01 P=485.518286 Days $T_0=311.412079$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

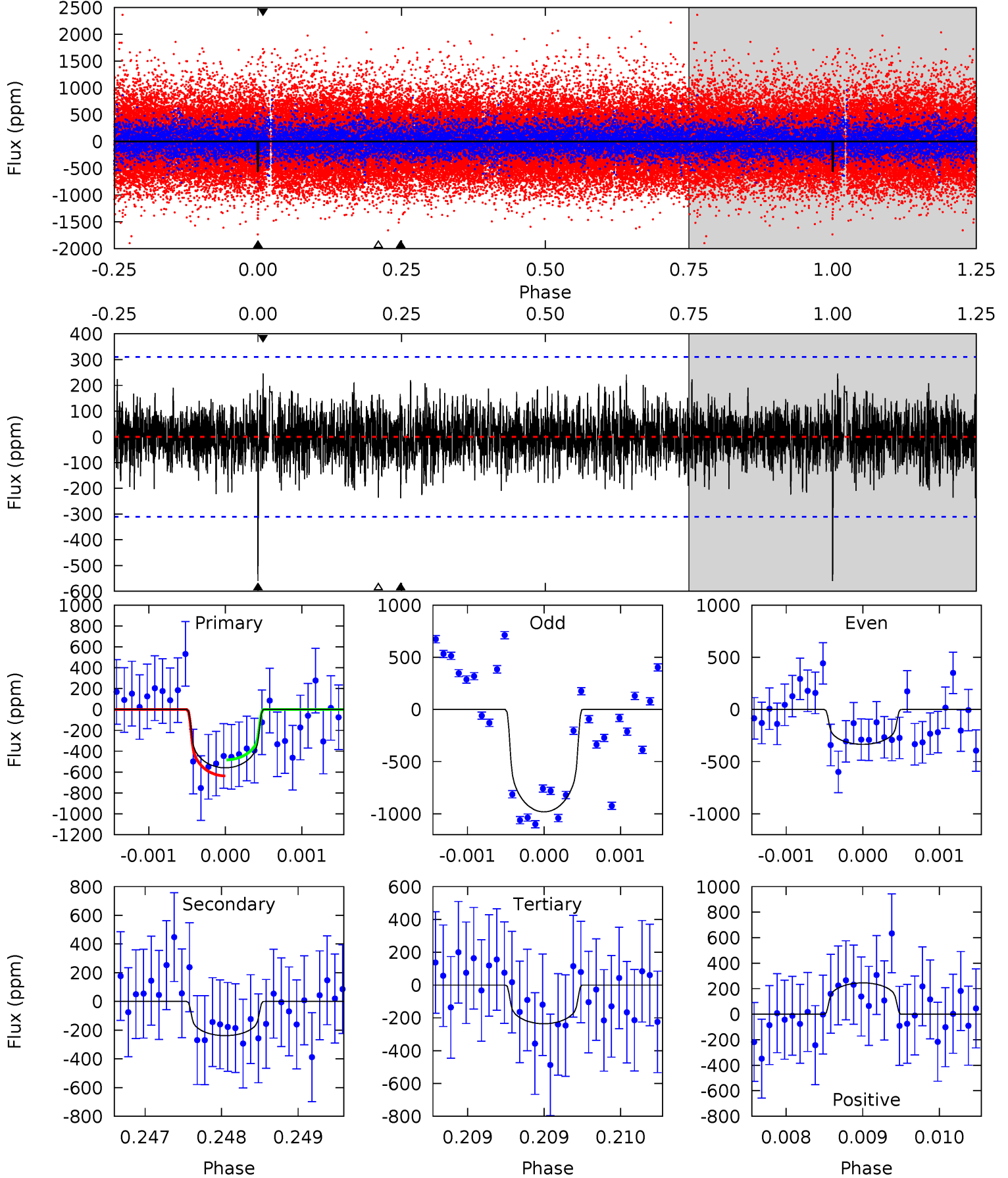
TCE 011025661-01 P=485.494574 Days $T_0=311.554053$ (BKJD)



DV Model-Shift Uniqueness Test

011025661-01, P = 485.518286 Days, E = 311.412079 Days

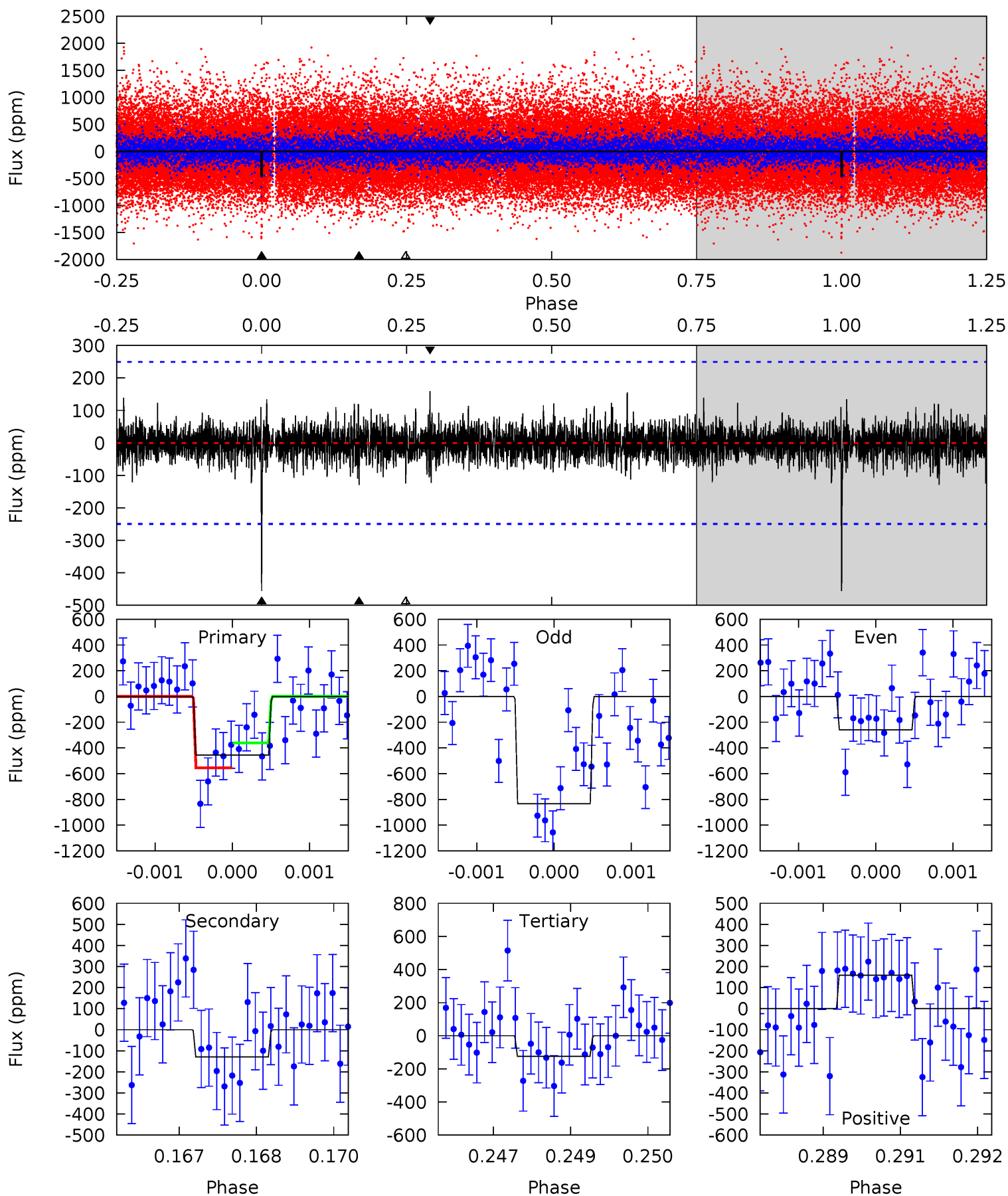
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.86	4.20	4.16	4.33	5.47	3.33	1.23	5.71	5.53	0.04	-0.13	5.48	1.35	0.31	1.35



Alt Model-Shift Uniqueness Test

011025661-01, P = 485.494574 Days, E = 311.554053 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.88	2.80	2.70	3.45	5.41	3.22	0.74	7.19	6.43	0.11	-0.64	5.91	1.38	0.26	2.10



Stellar Parameters For KIC 011025661

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5141^{+153}_{-153}	$4.488^{+0.100}_{-0.100}$	$-0.020^{+0.300}_{-0.300}$	$0.835^{+0.103}_{-0.093}$	$0.781^{+0.098}_{-0.057}$	$1.889^{+0.825}_{-0.527}$
	+3%/-3%	+2%/-2%	+1500%/-1500%	+12%/-11%	+13%/-7%	+44%/-28%
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 011025661-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-238 ± 57	$2.28^{+1.24}_{-1.05}$	275^{+13}_{-13}	4206^{+1348}_{-577}	29715^{+83990}_{-17132}
Alt.	-129 ± 46	$2.13^{+1.16}_{-1.23}$	275^{+12}_{-12}	3913^{+1658}_{-618}	19409^{+94317}_{-12392}

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

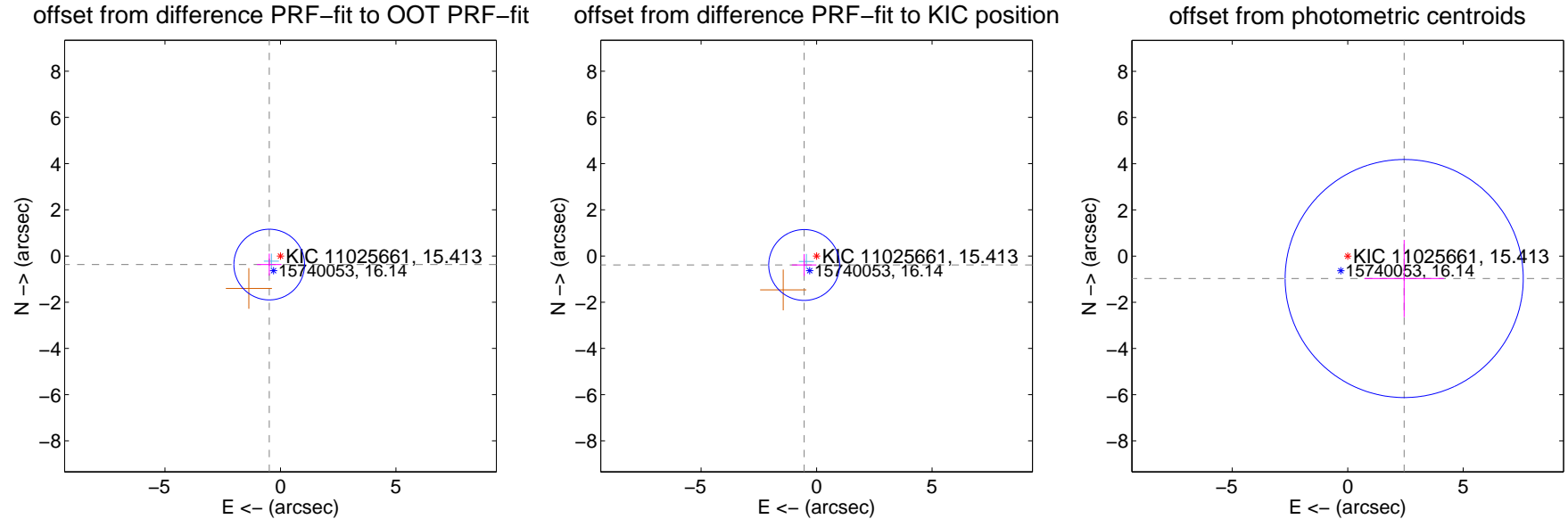
DV Centroid Data

Supplemental centroid analysis for 011025661-01. Kepler magnitude: 15.41. Transit SNR 6.80

There are 1 quarters with good PRF difference image offsets

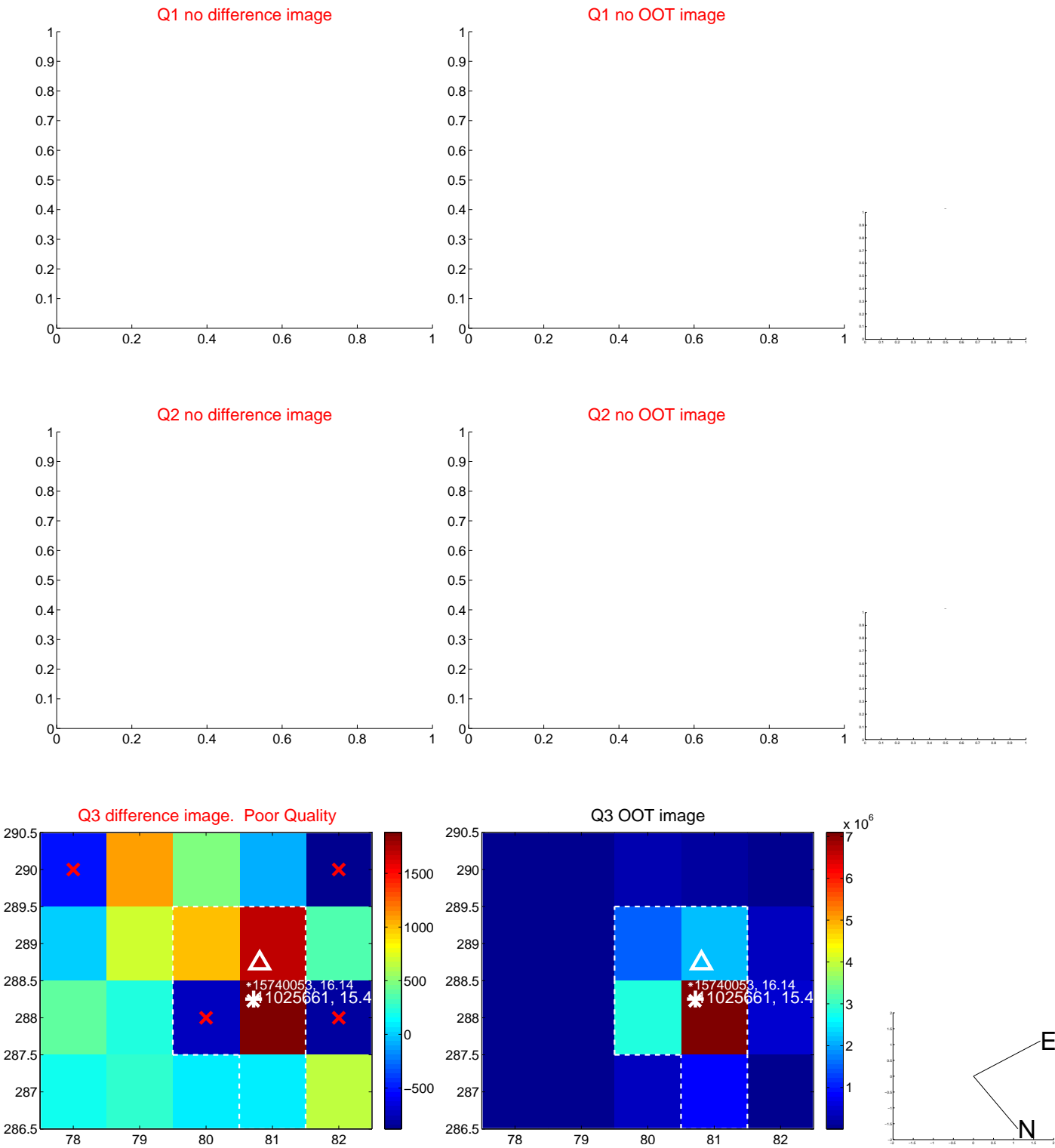
The direct PRF centroid is offset from the target star catalog position by about 0.05 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.611 ± 0.510	1.20	0.486 ± 0.529	-0.370 ± 0.475
PRF-fit source offset from KIC position	0.662 ± 0.511	1.30	0.537 ± 0.529	-0.388 ± 0.475
photometric centroid source offset	2.63 ± 1.72	1.53	-2.44 ± 1.73	-0.97 ± 1.67

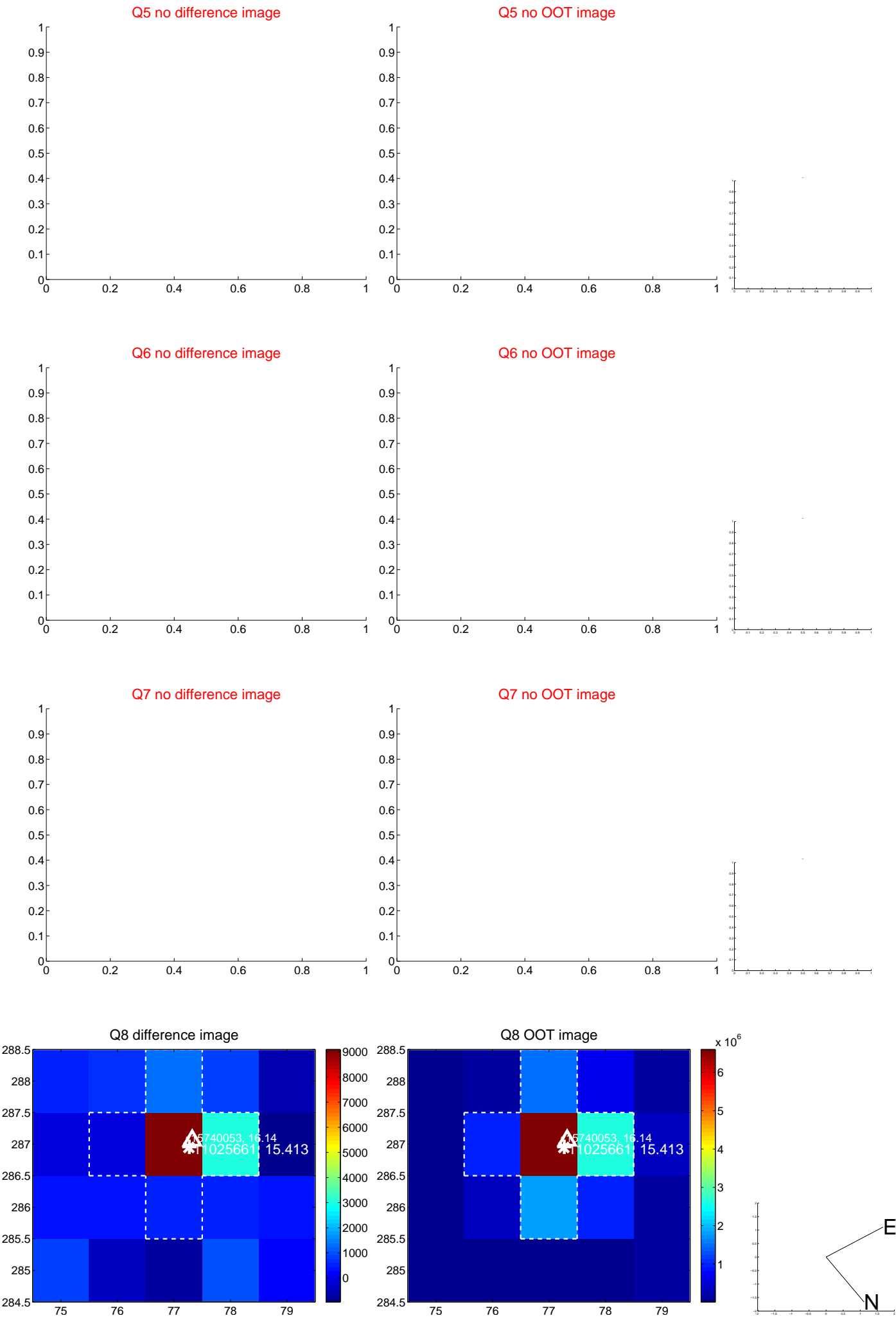


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

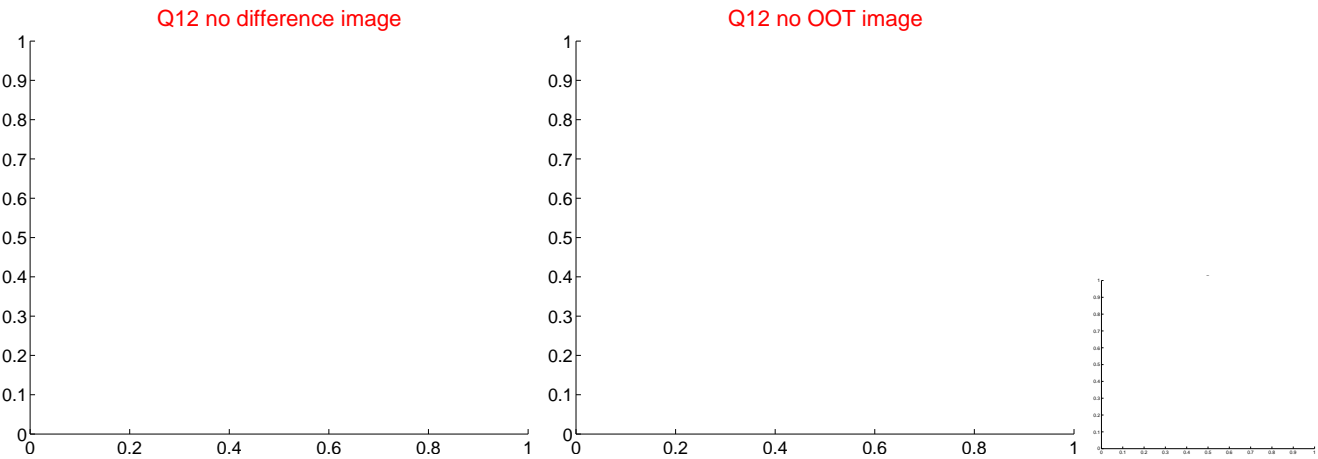
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



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



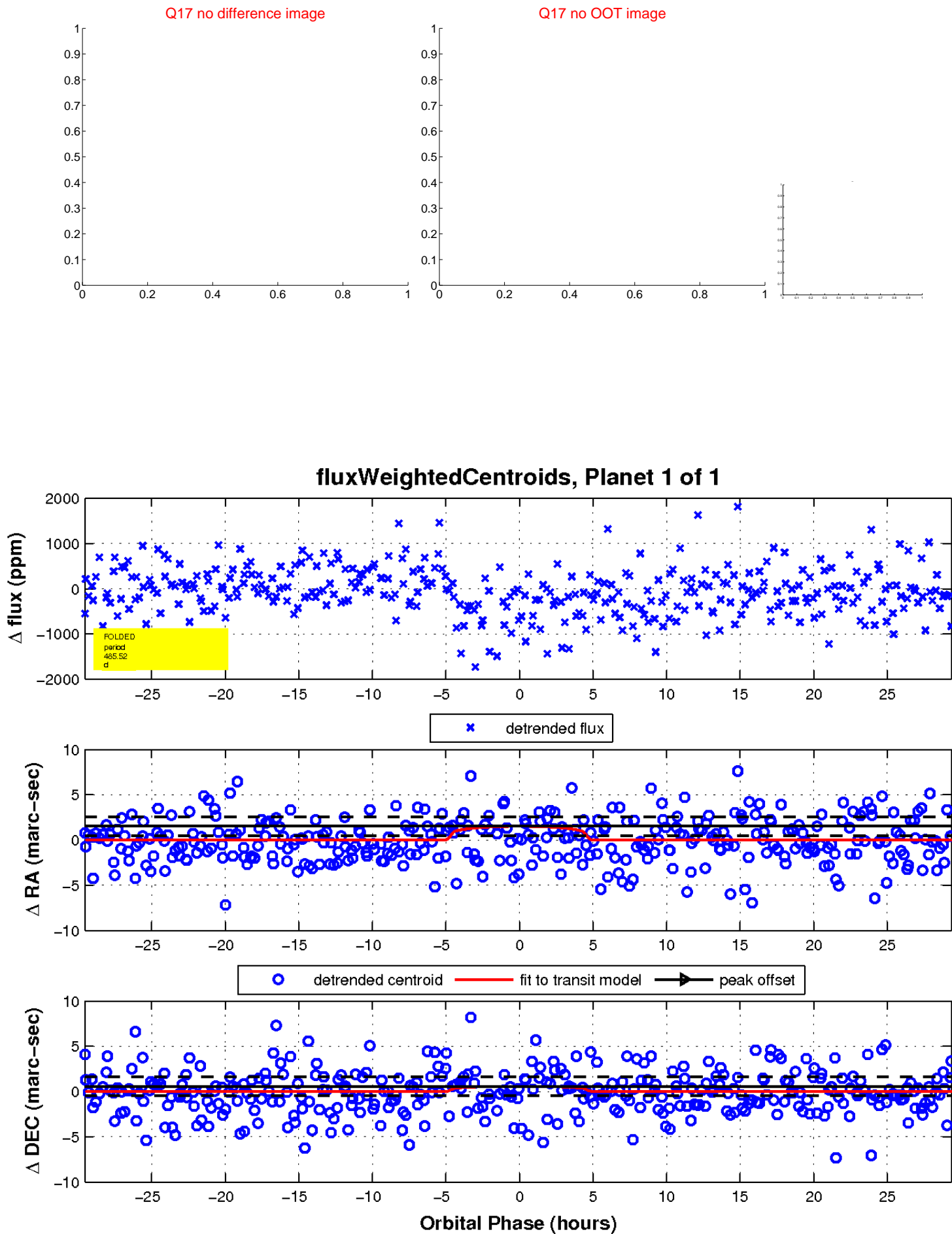
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

