

KIC 011967633

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})
011967633-01	OBS	No	459.743829	174.358880	225.6	5.405	12.0	7.6	0.69	4384	1.11	0.15

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011967633-01	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.

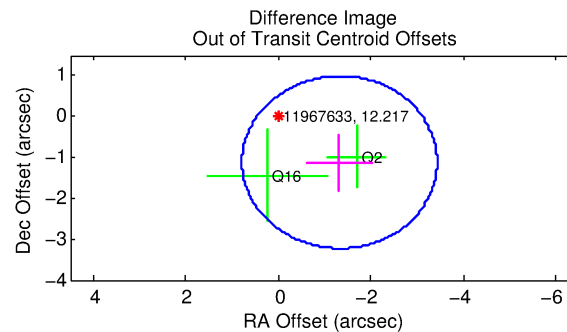
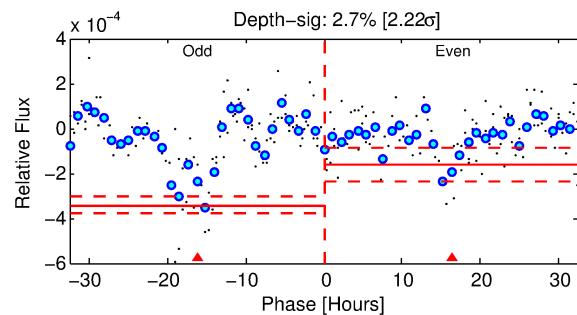
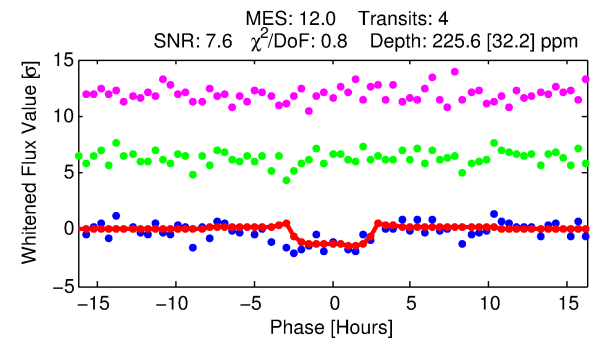
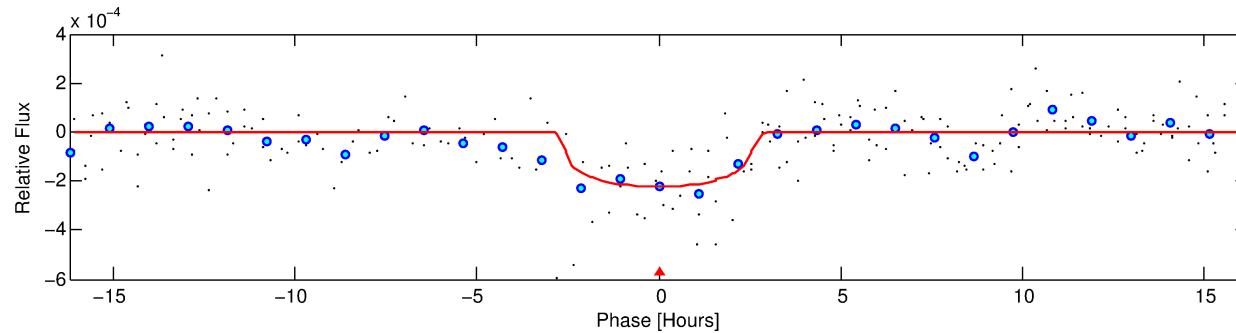
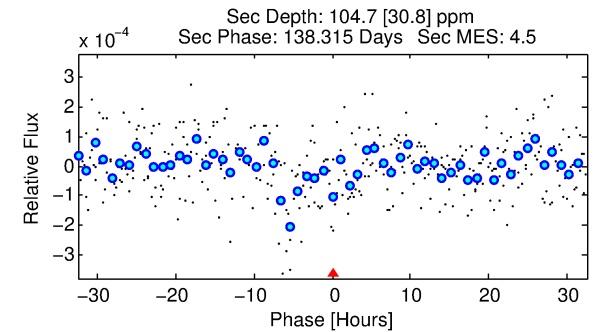
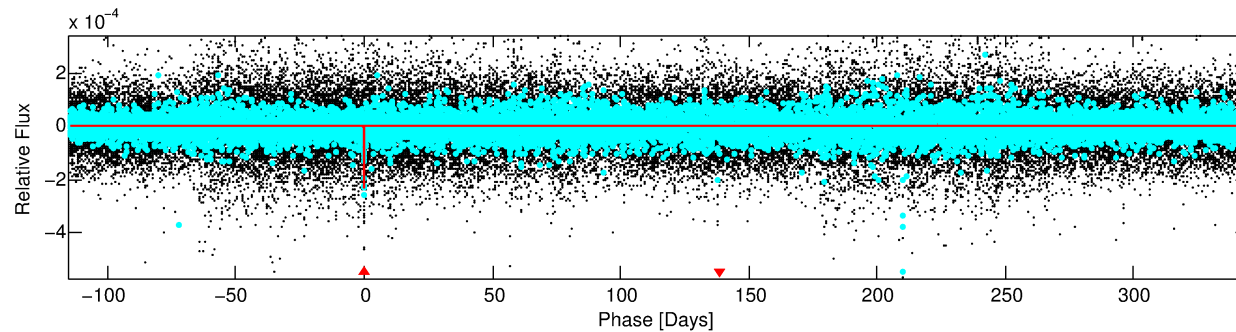
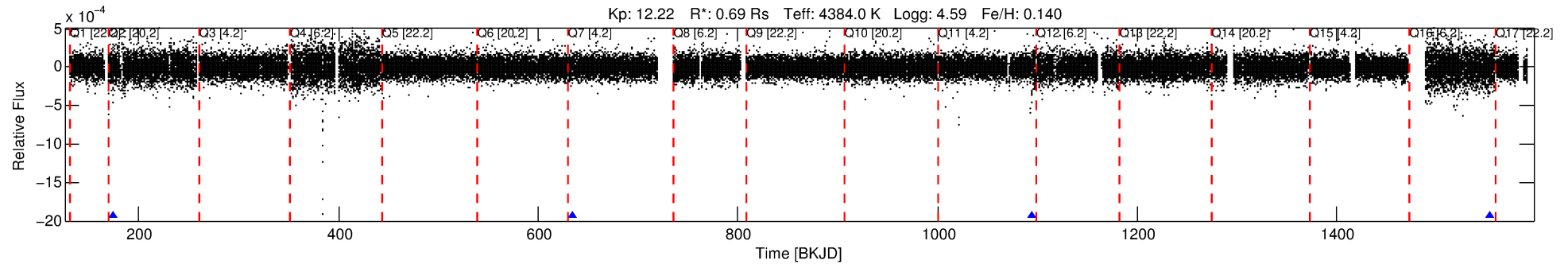
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011967633-01

No Significant Match Found

DV One-Page Summary

KIC: 11967633 Candidate: 1 of 1 Period: 459.744 d



DV Fit Results:

Period = 459.74383 [0.00496] d
Epoch = 174.3589 [0.0093] BKJD
Rp/R* = 0.0147 [0.0151]
a/R* = 479.47 [1516.31]
b = 0.70 [2.40]
Seff = 0.15 [0.02]
Teq = 159 [6] K
Rp = 1.11 [1.15] Re
a = 1.0289 [0.0731] AU
Ag = 49290.52 [102414.77] [0.48σ]
Teffp = 3662 [1903] K [1.84σ]

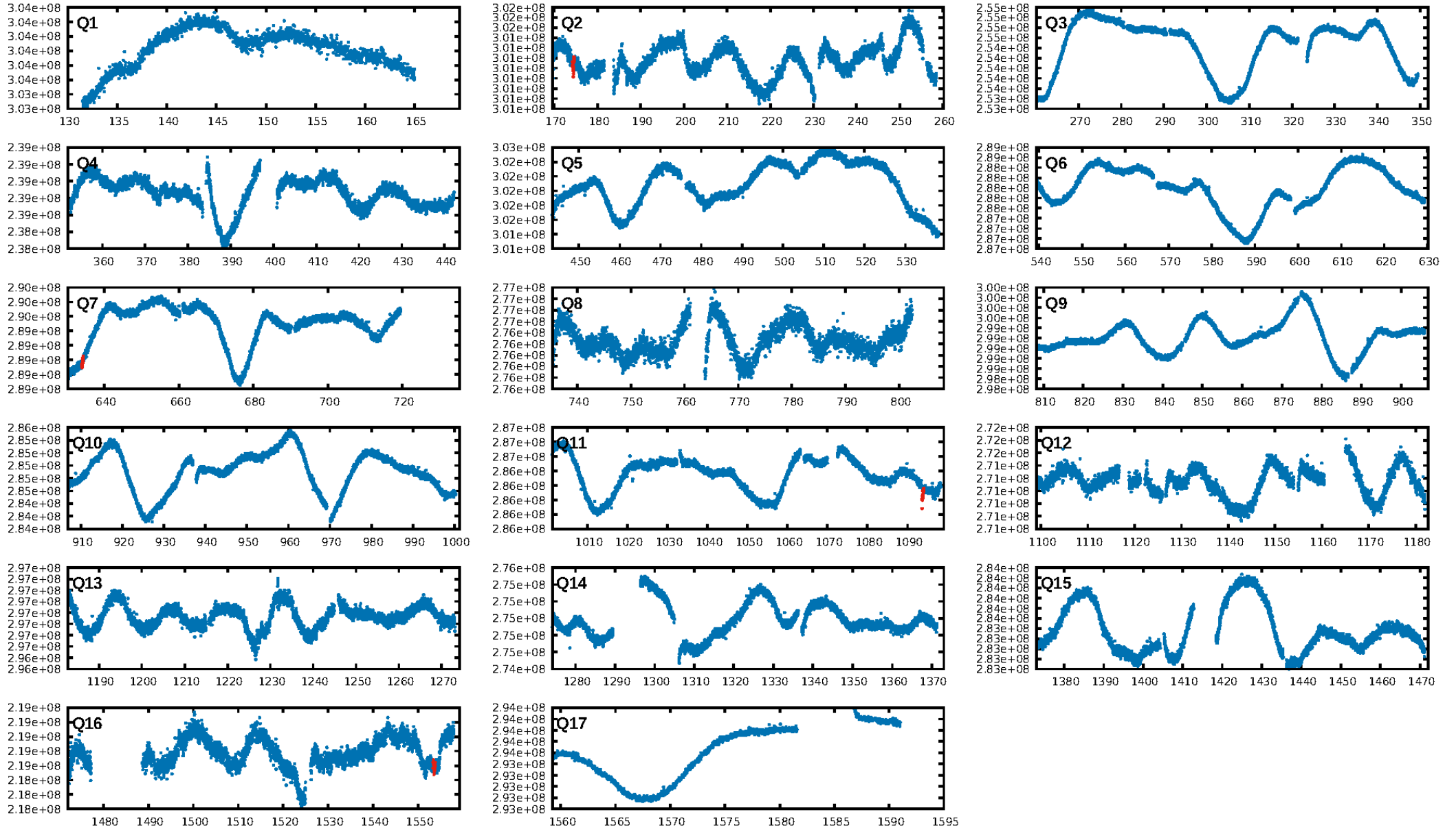
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 4.2%
ModelChiSquareGof-sig: 99.8%
Bootstrap-pfa: 7.53e-15
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: -3.059
Centroid-sig: 72.9%
Centroid-so: 1.156 arcsec [0.98σ]
OotOffset-rm: 1.732 arcsec [2.46σ]
OotOffset-st: 1/0/1/0 [2]
KicOffset-rm: 2.663 arcsec [3.73σ]
KicOffset-st: 1/0/1/0 [2]
DiffImageQuality-fgm: 0.00 [0/2]
DiffImageOverlap-fno: 1.00 [2/2]

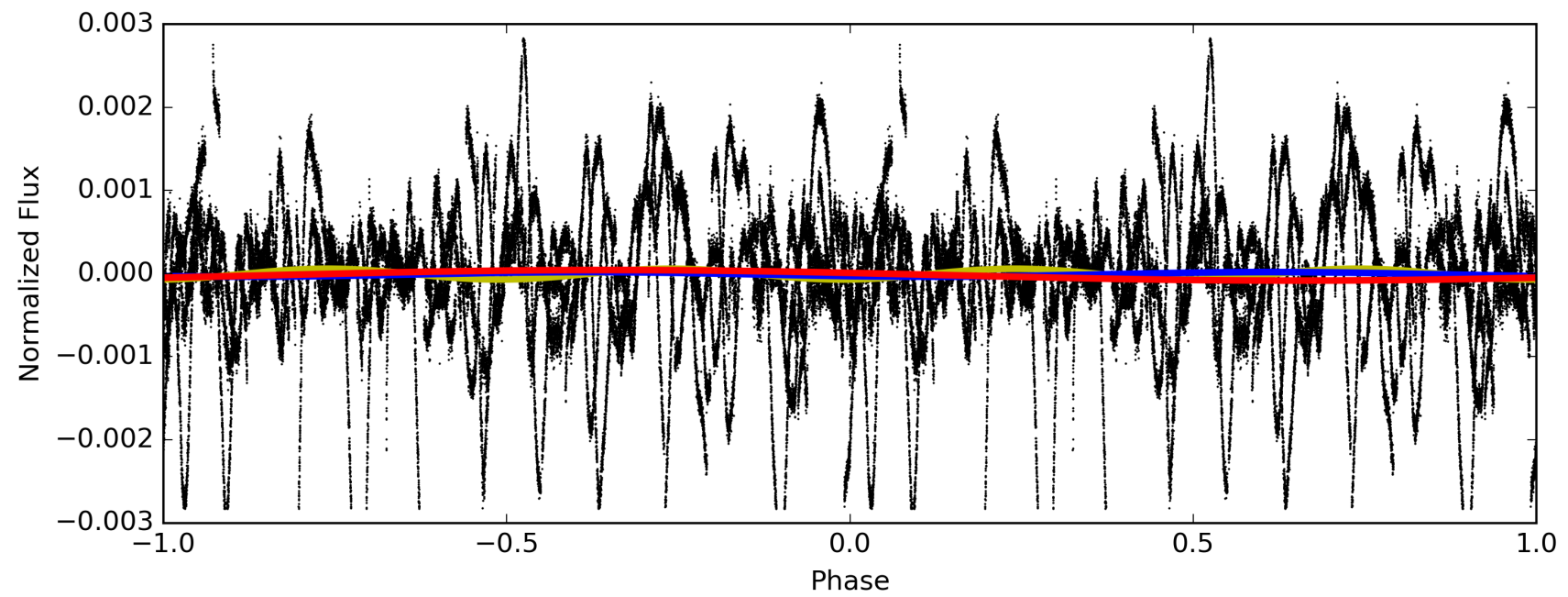
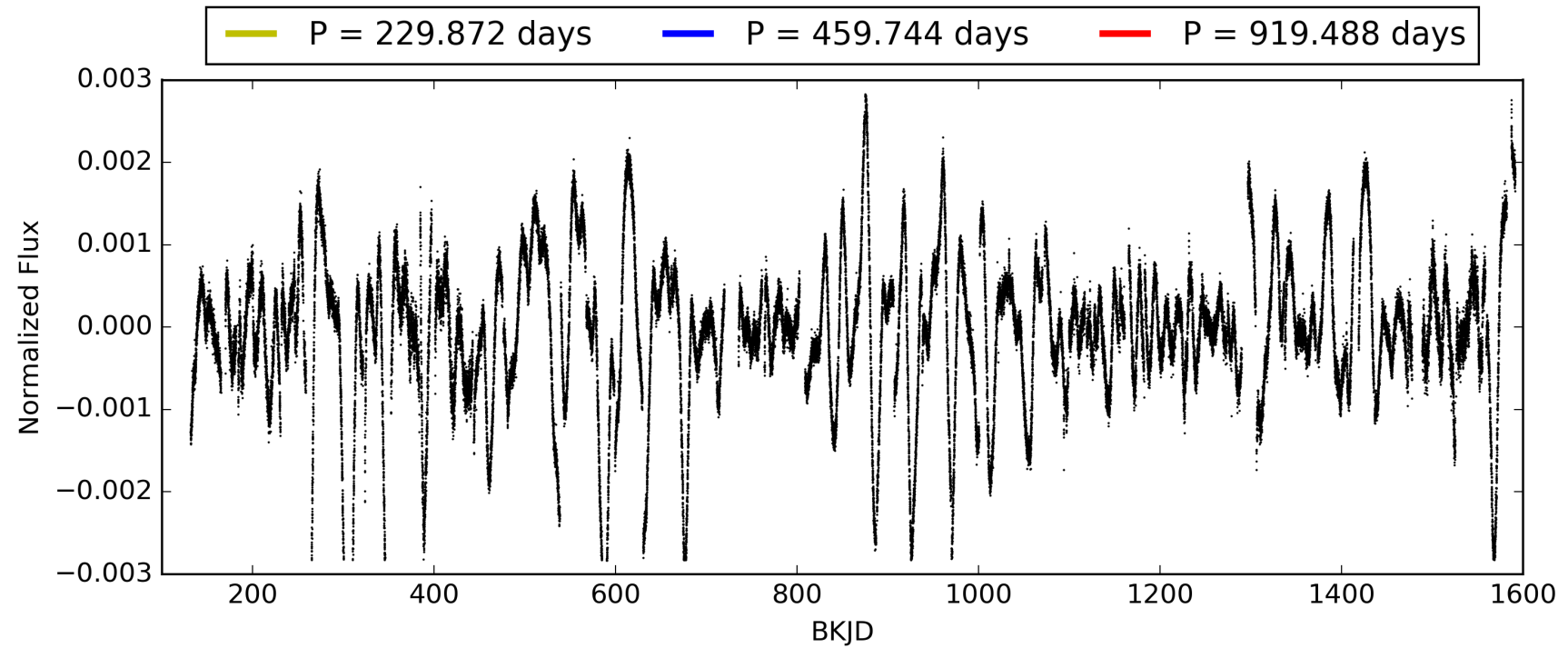
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 21:22:27 Z

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

TCE 011967633-01, PDC Light Curves

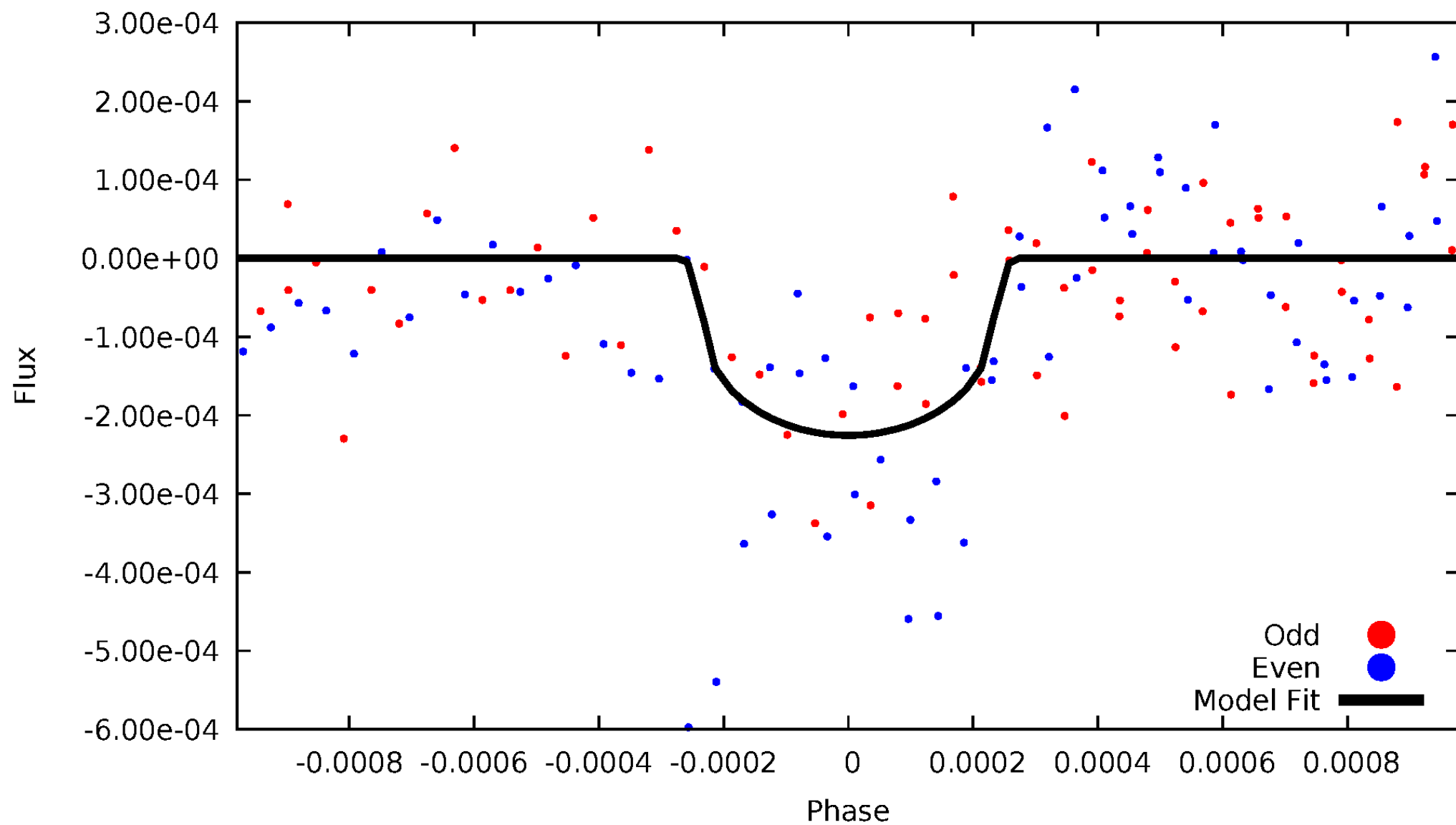


TCE 011967633-01



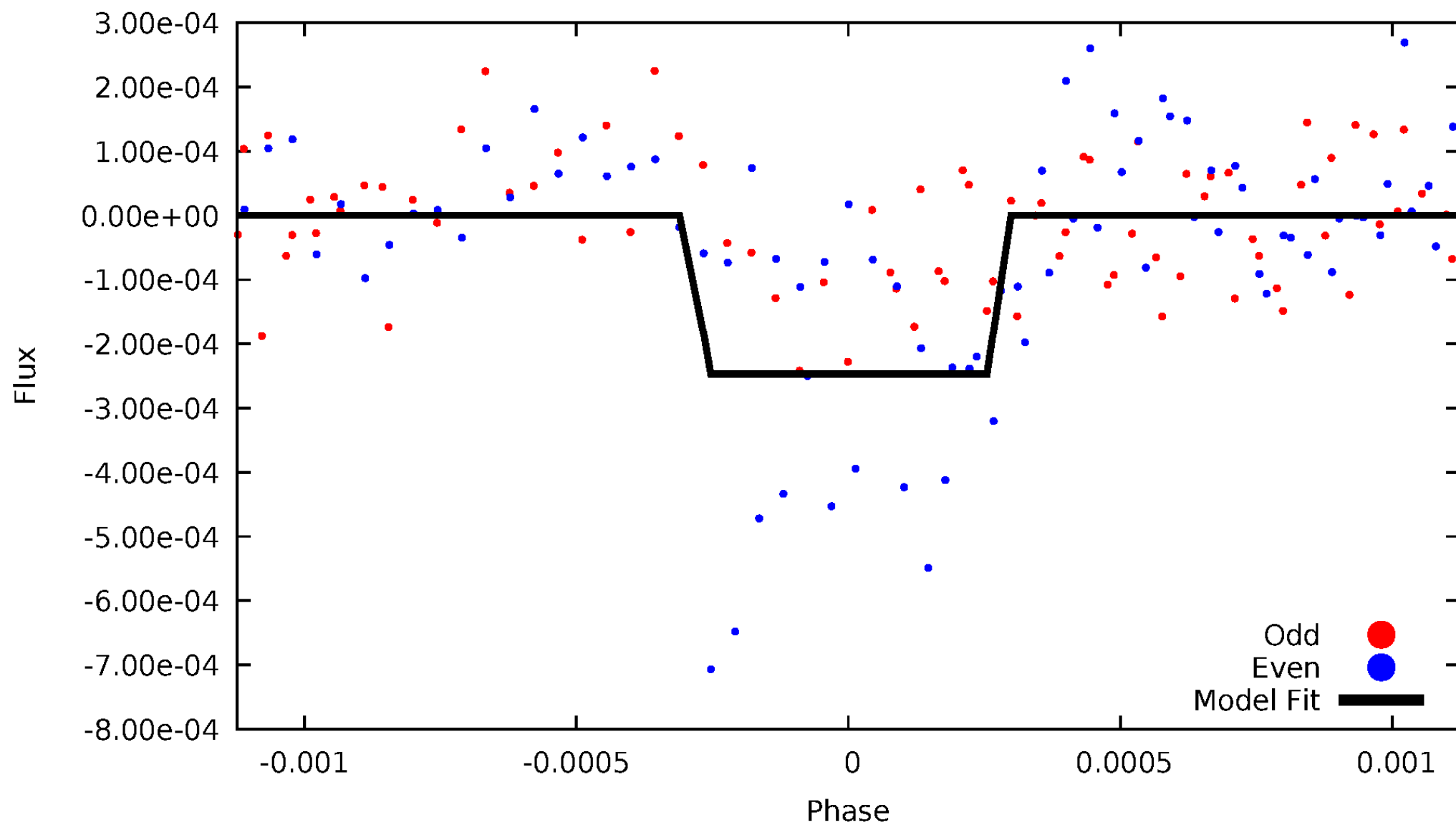
DV Odd/Even

TCE 011967633-01



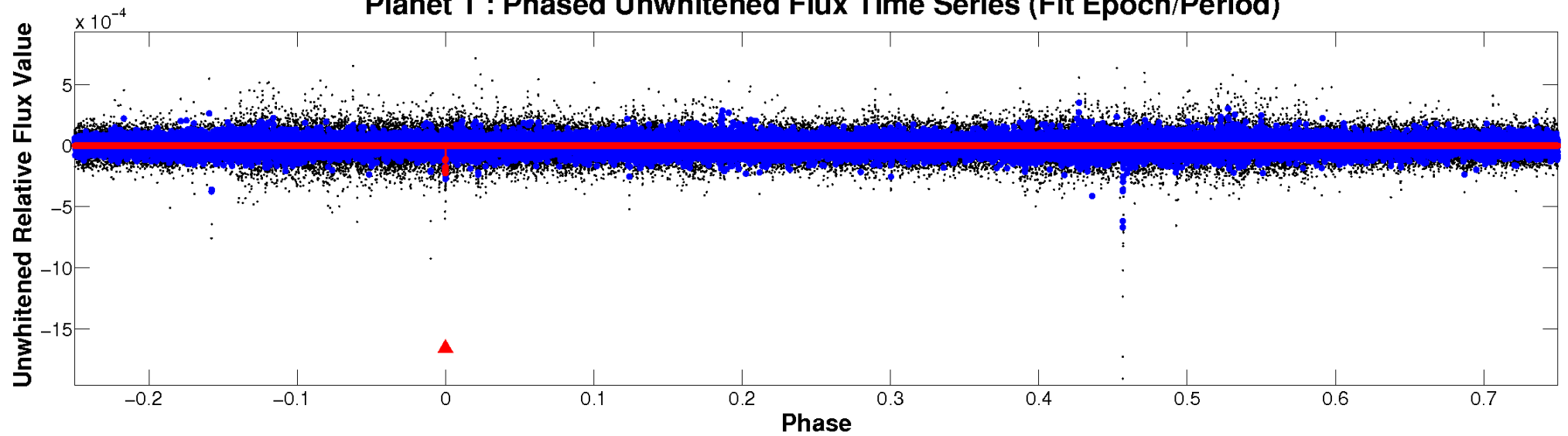
ALT Odd/Even

TCE 011967633-01

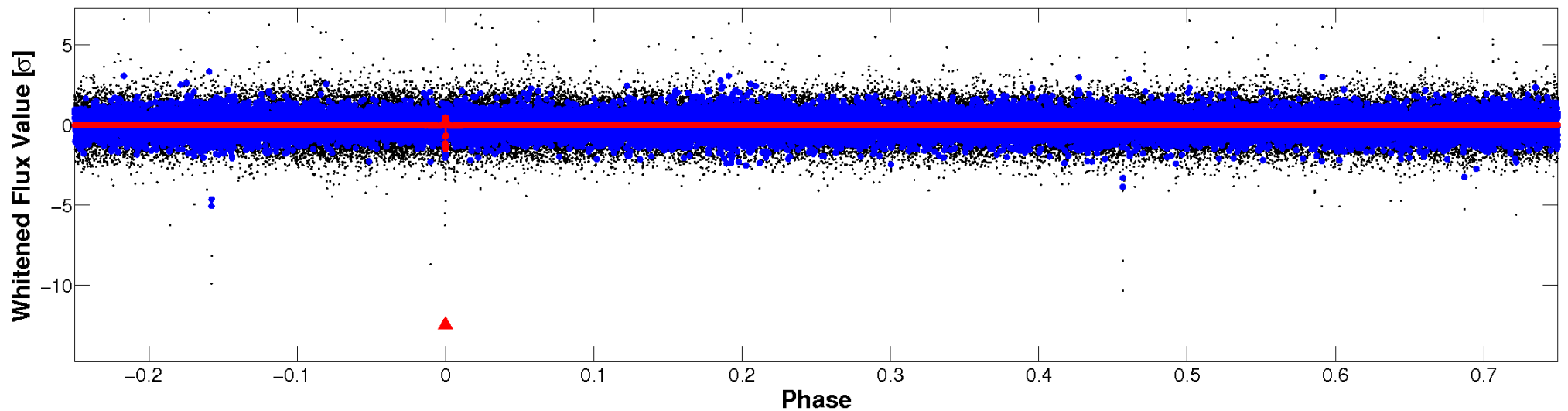


Non-Whitened Vs. Whitened Light Curve

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

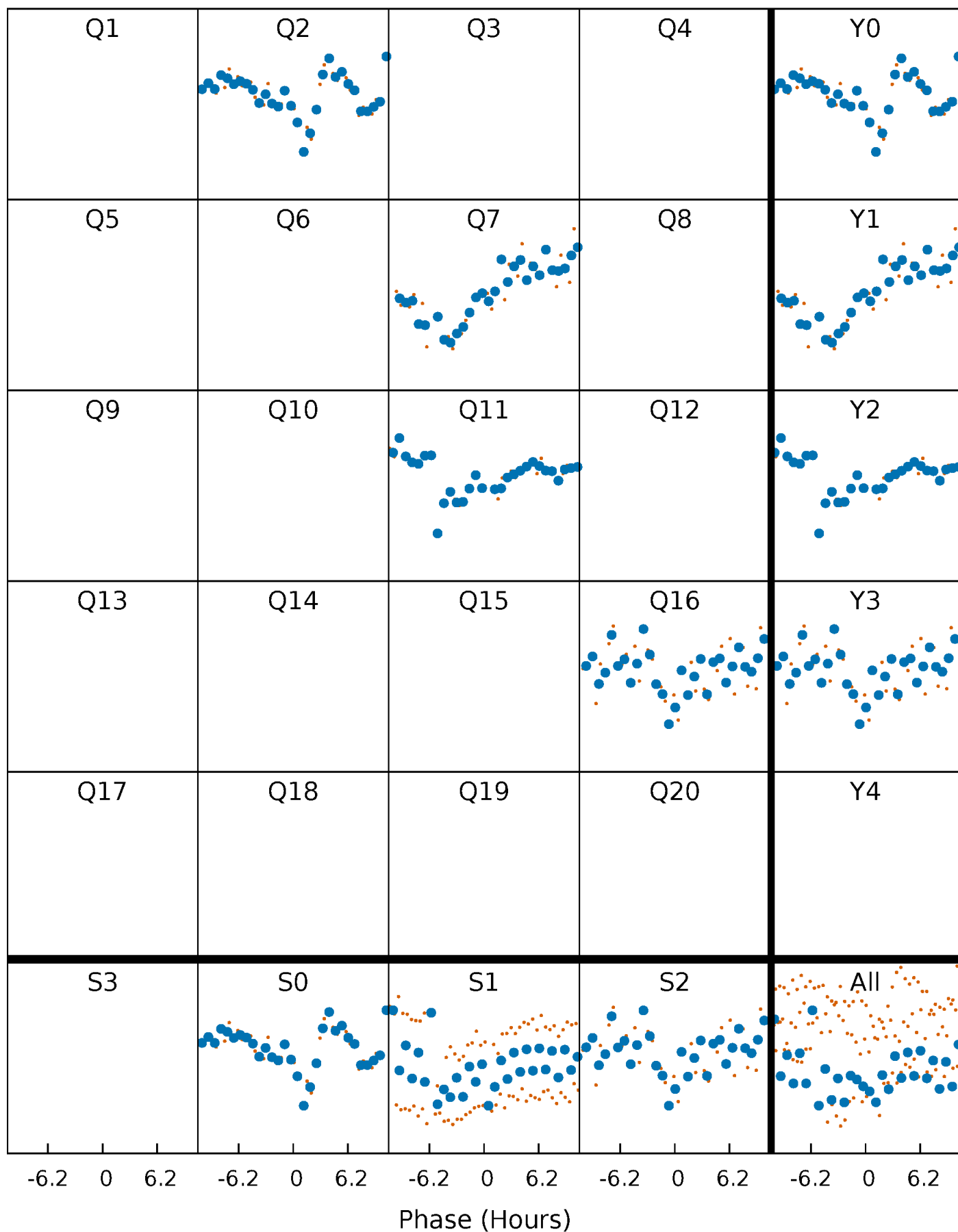


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



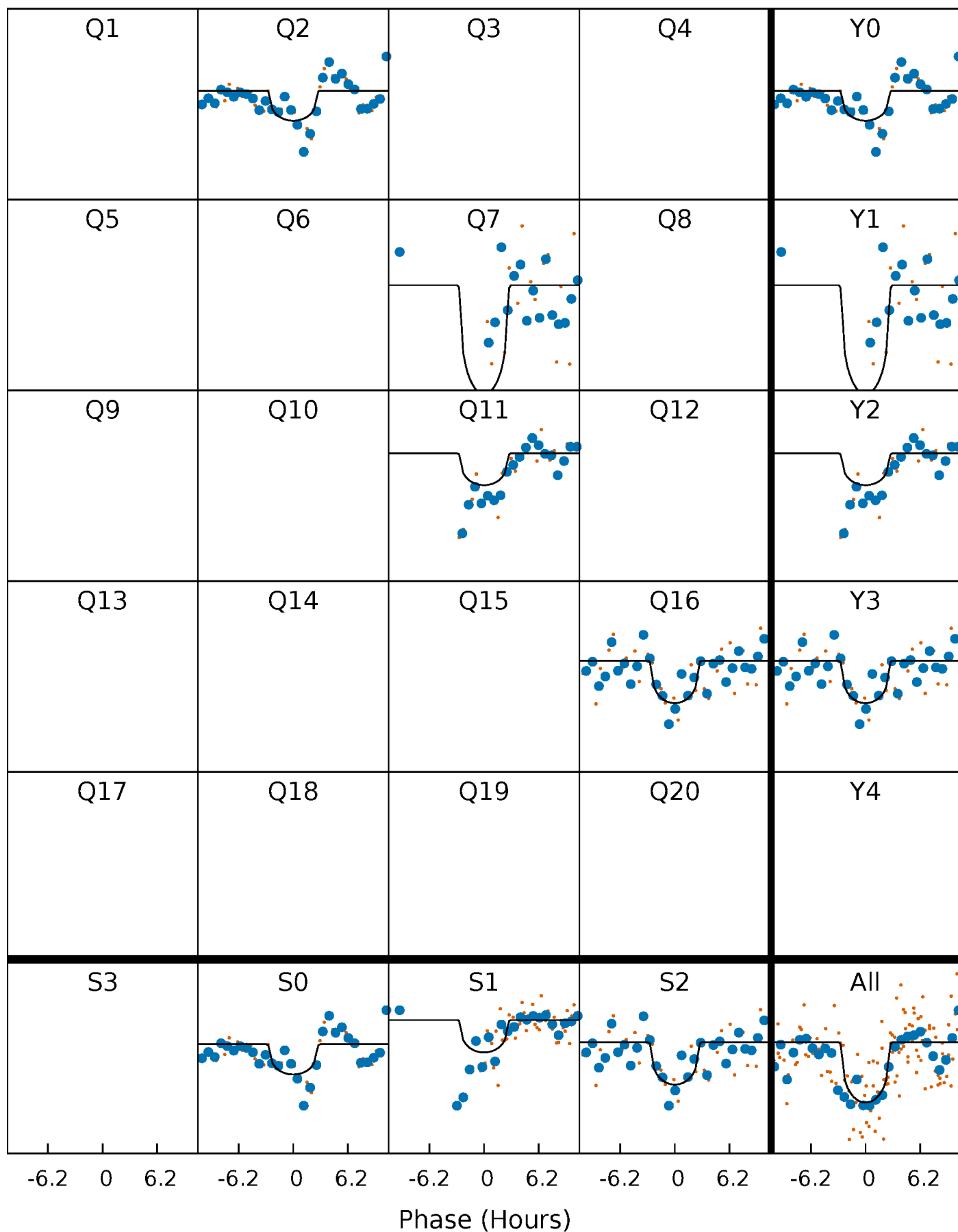
PDC Quarter-Phased Transit Curves

TCE 011967633-01 P=459.743829 Days $T_0=174.358880$ (BKJD)



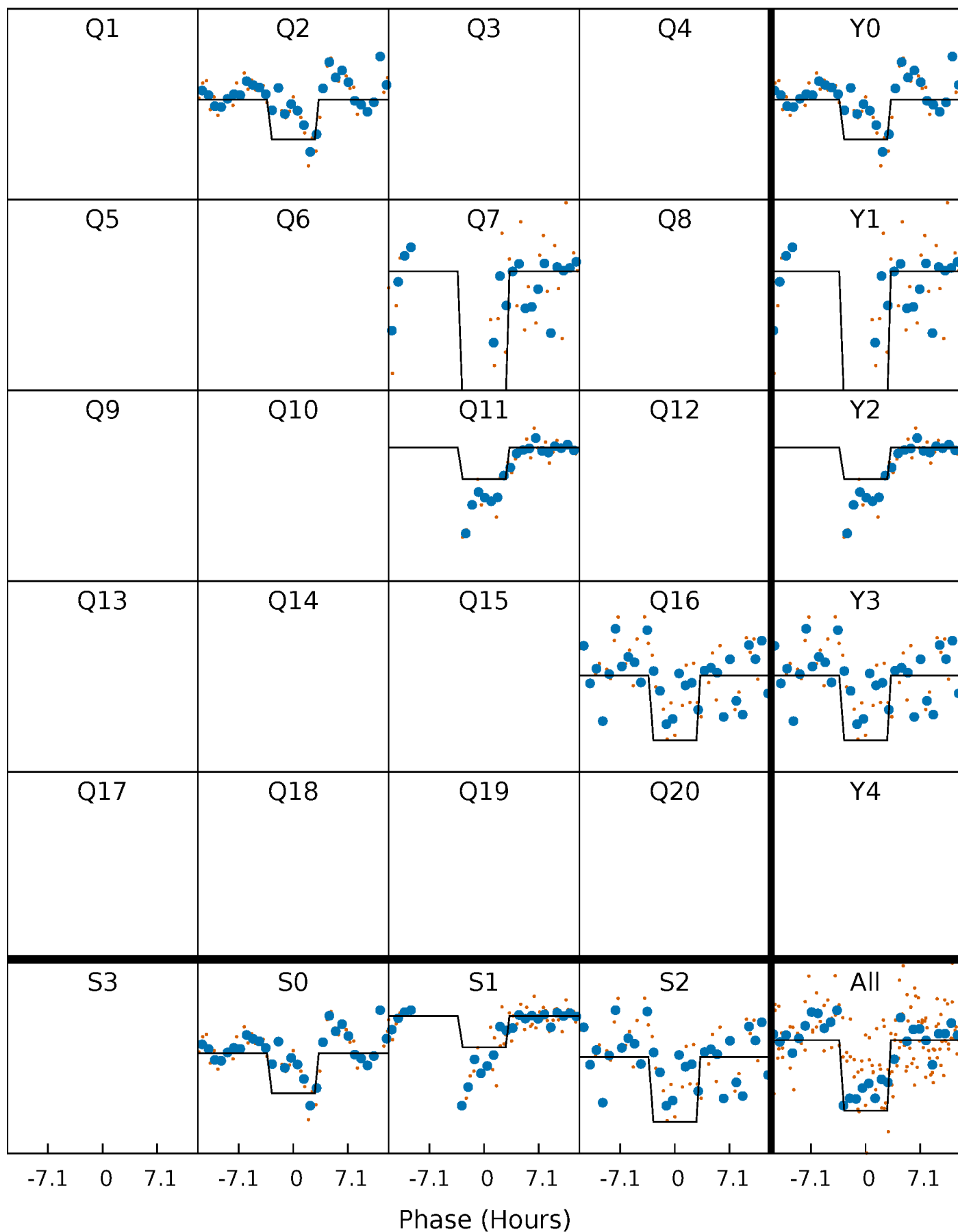
DV Quarter-Phased Transit Curves

TCE 011967633-01 P=459.743829 Days $T_0=174.358880$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

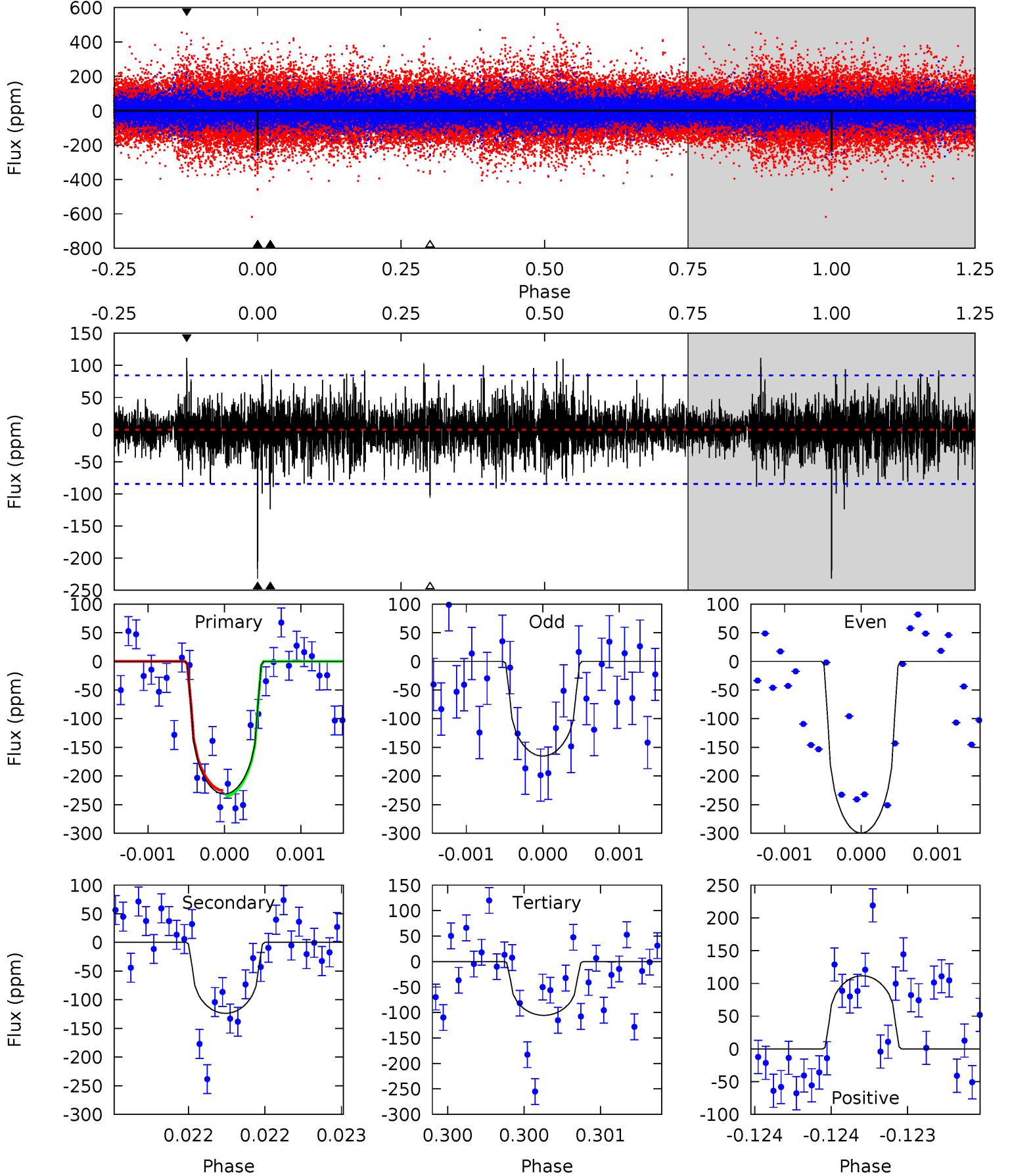
TCE 011967633-01 P=459.761911 Days $T_0=174.321289$ (BKJD)



DV Model-Shift Uniqueness Test

011967633-01, P = 459.743829 Days, E = 174.358880 Days

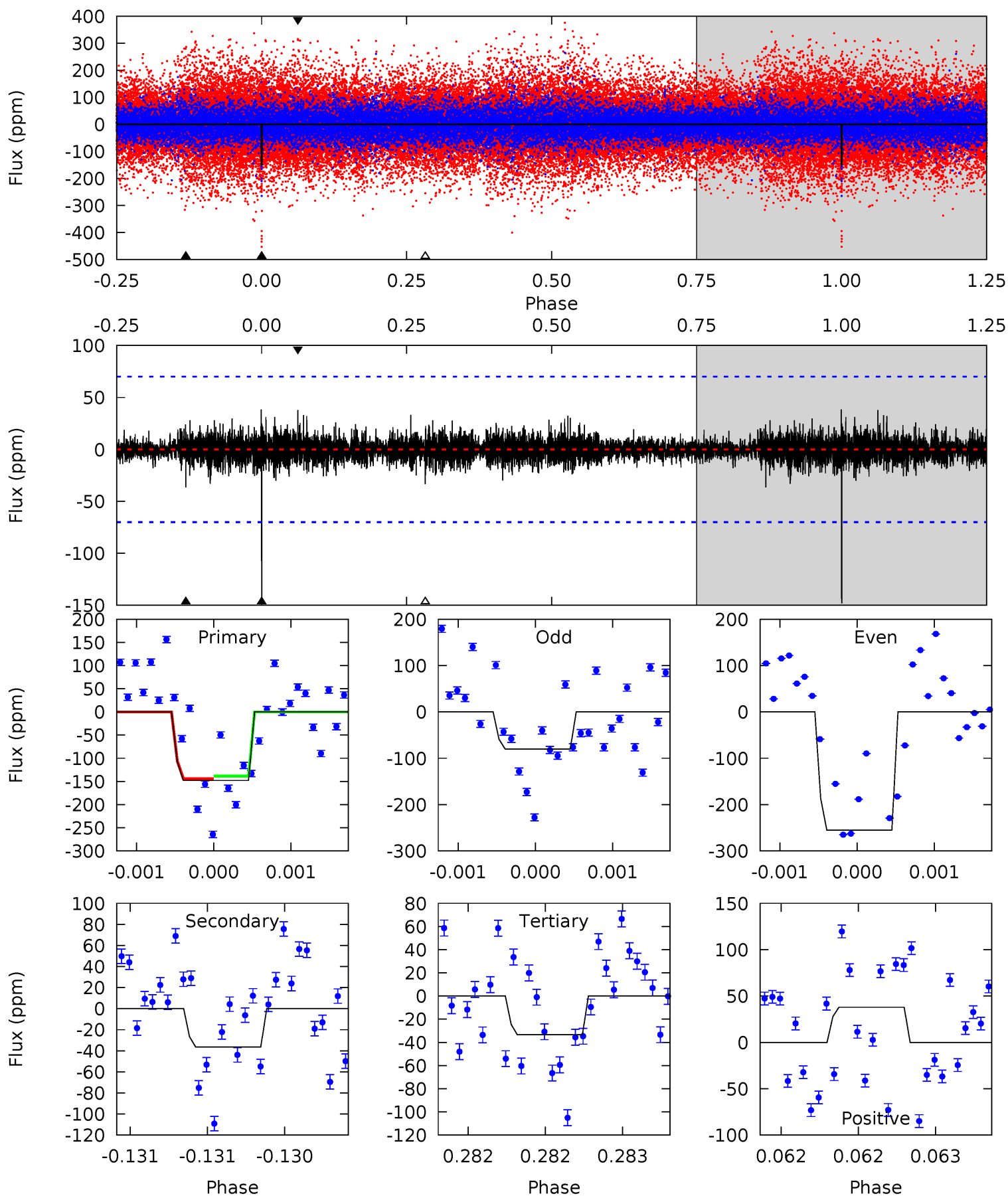
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
15.2	8.14	6.95	7.34	5.56	3.46	1.62	8.28	7.89	1.19	0.80	4.45	1.01	0.33	0.32



Alt Model-Shift Uniqueness Test

011967633-01, $P = 459.761911$ Days, $E = 174.321289$ Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.7	2.88	2.64	3.01	5.55	3.45	0.58	9.09	8.73	0.24	-0.13	7.09	1.69	0.21	0.23



Stellar Parameters For KIC 011967633

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	4384^{+119}_{-132}	$4.591^{+0.056}_{-0.018}$	$0.140^{+0.250}_{-0.300}$	$0.695^{+0.029}_{-0.059}$	$0.687^{+0.054}_{-0.054}$	$2.885^{+0.668}_{-0.231}$
	+3%/-3%	+1%/-0%	+179%/-214%	+4%/-8%	+8%/-8%	+23%/-8%
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 011967633-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-124 ± 15	$1.33^{+1.00}_{-0.83}$	220^{+7}_{-7}	3701^{+1675}_{-606}	$40758^{+244828}_{-27396}$
Alt.	-36 ± 13	$1.36^{+1.11}_{-0.86}$	220^{+7}_{-8}	3050^{+1118}_{-489}	11770^{+70128}_{-8728}

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 $A_{obs} \gg 1.0$

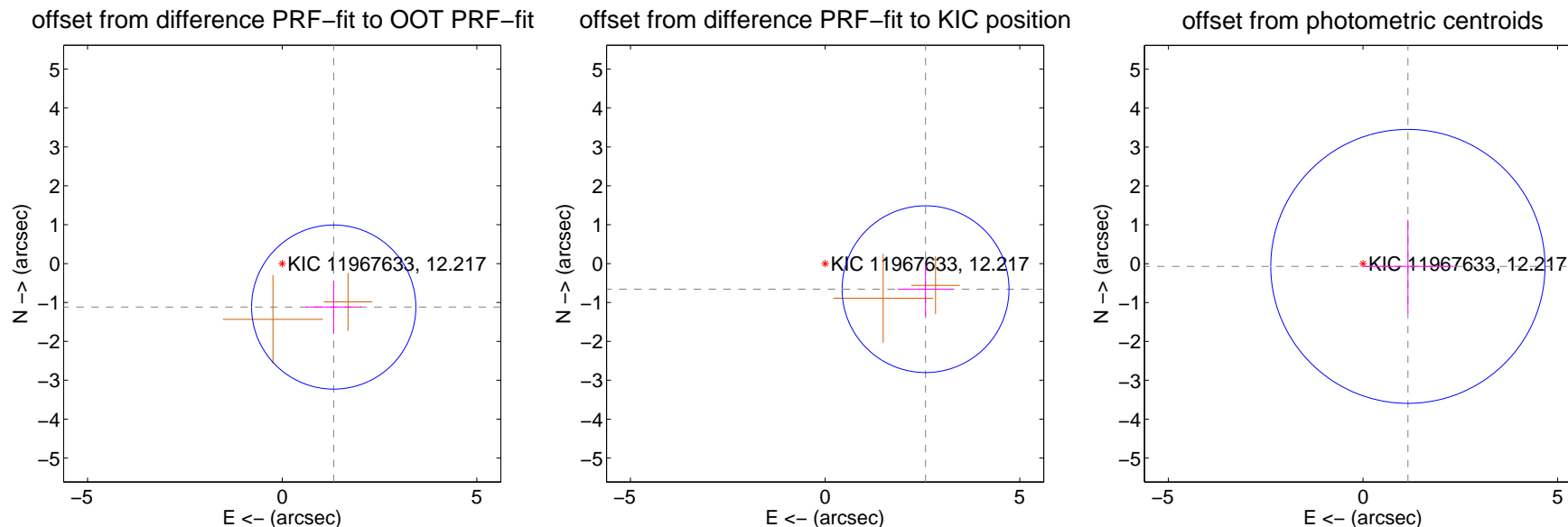
DV Centroid Data

Supplemental centroid analysis for 011967633-01. Kepler magnitude: 12.22. Transit SNR 7.65

There are 0 quarters with good PRF difference image offsets

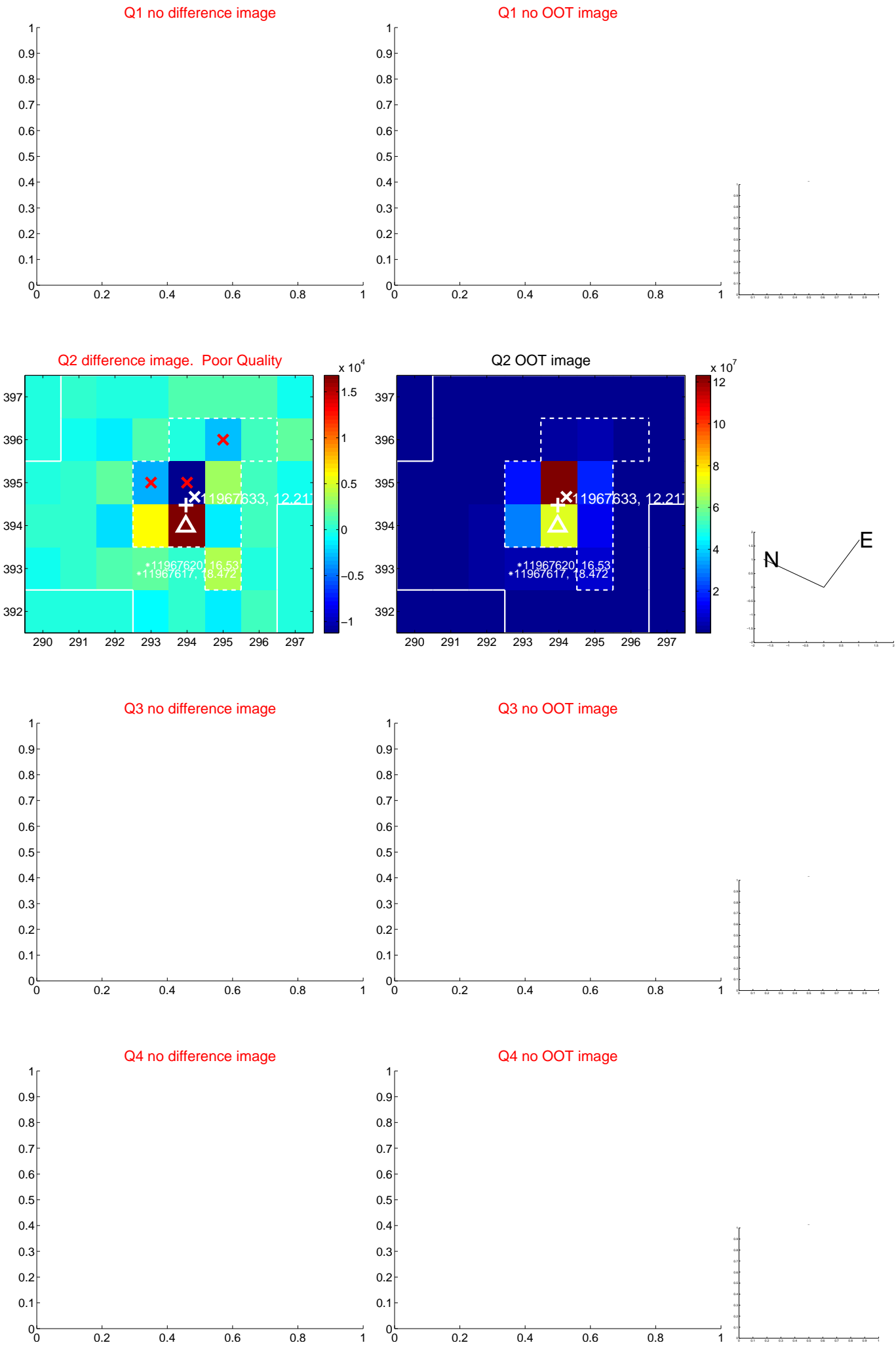
The direct PRF centroid is offset from the target star catalog position by about 1.81 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.732 ± 0.703	2.46	-1.324 ± 0.717	-1.118 ± 0.684
PRF-fit source offset from KIC position	2.663 ± 0.715	3.73	-2.580 ± 0.717	-0.658 ± 0.684
photometric centroid source offset	1.16 ± 1.17	0.98	-1.15 ± 1.17	-0.07 ± 1.20



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.



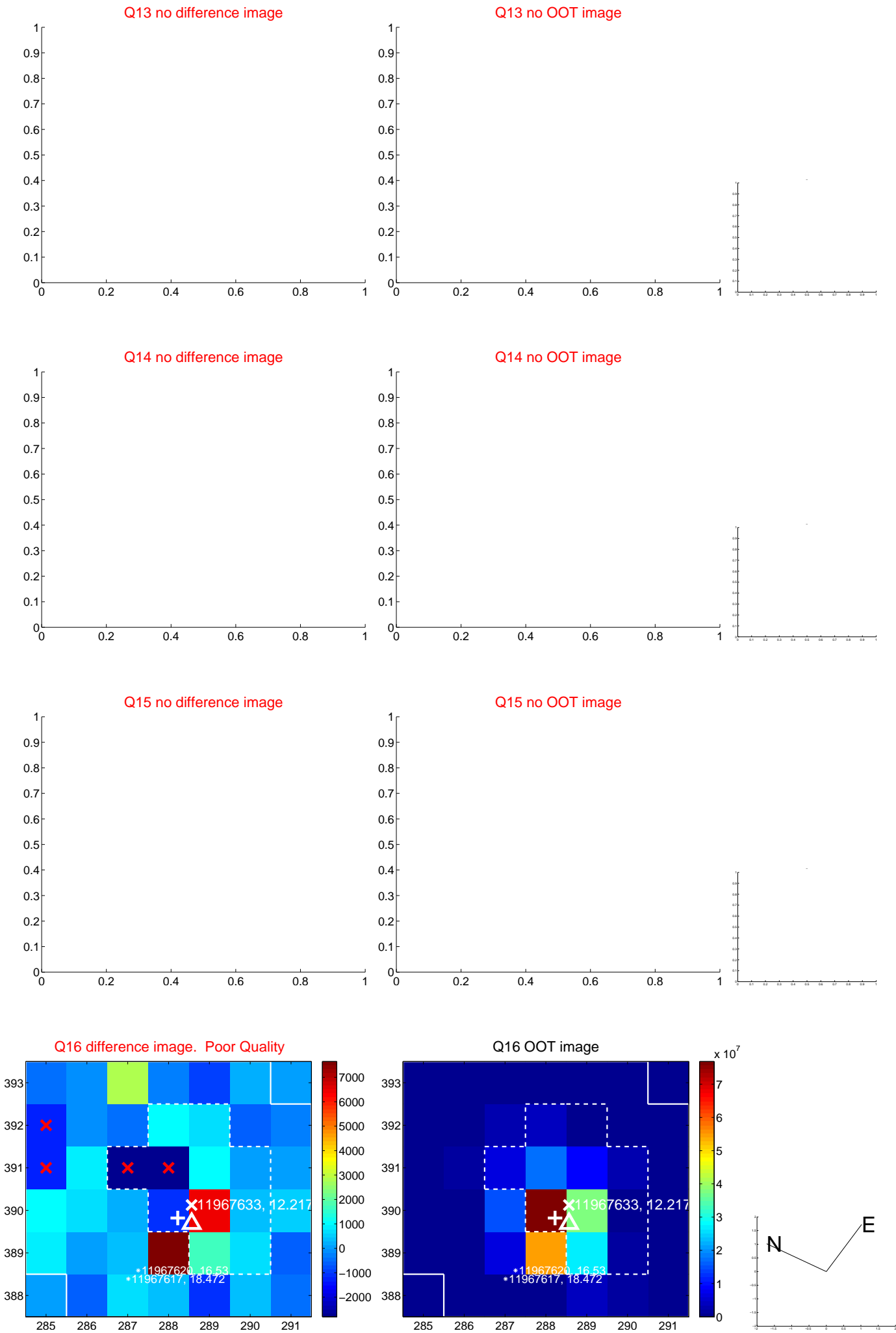
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



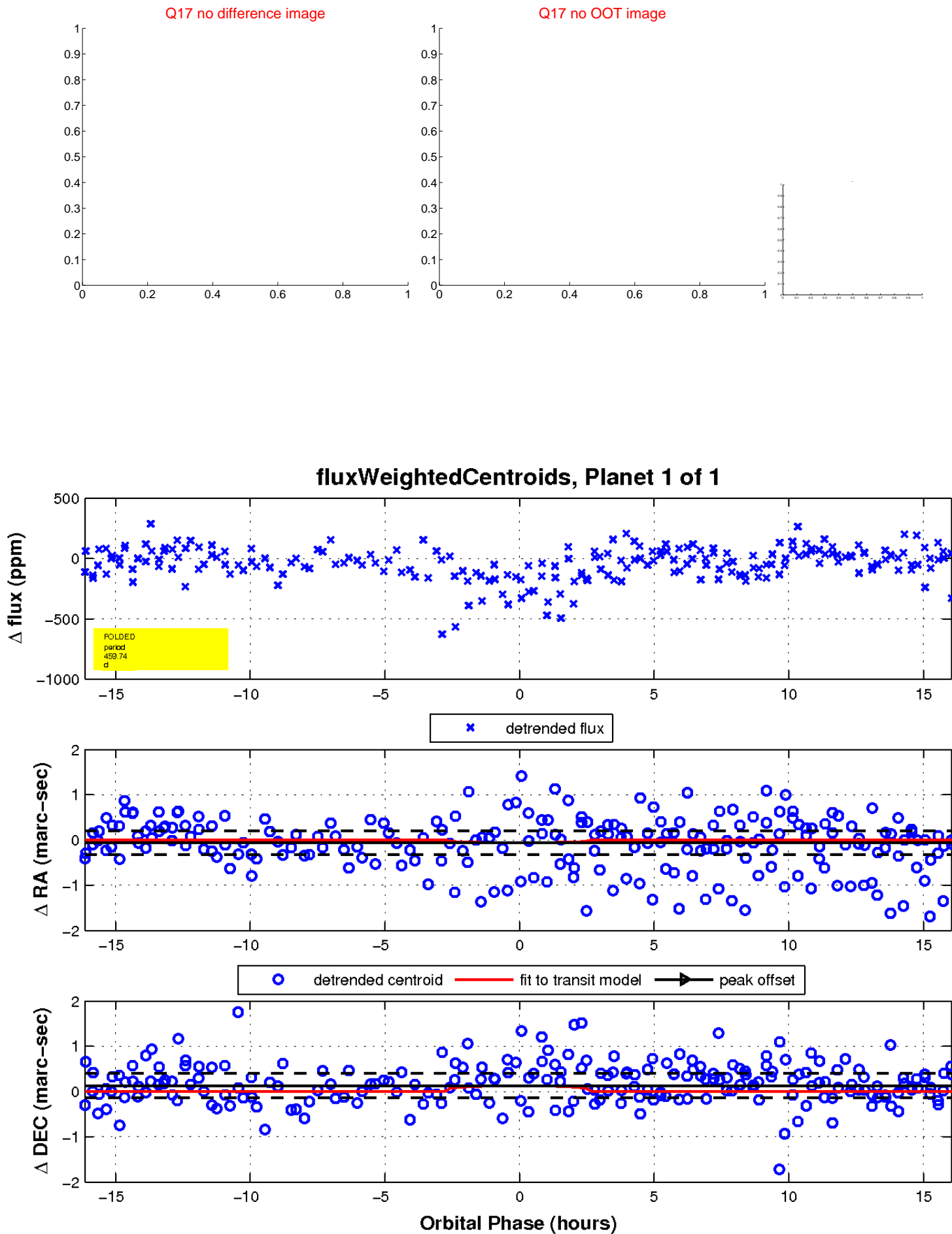
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UKIRT Image

Declination

