

KIC 007363829

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})
007363829-01	OBS	No	393.719085	335.816863	6367.3	12.512	73.6	82.3	2.02	5676	15.88	3.07

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007363829-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE—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.

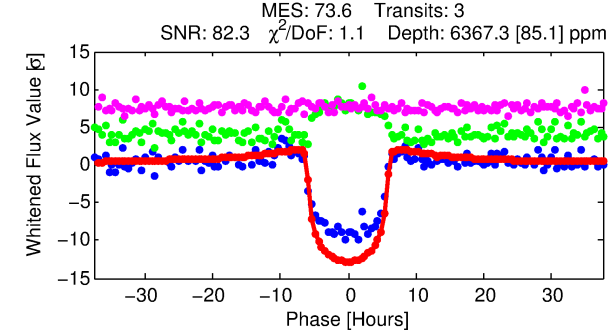
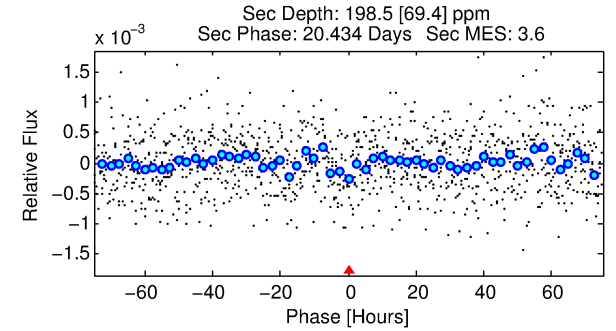
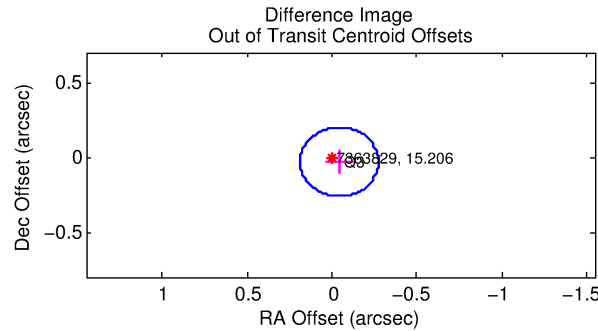
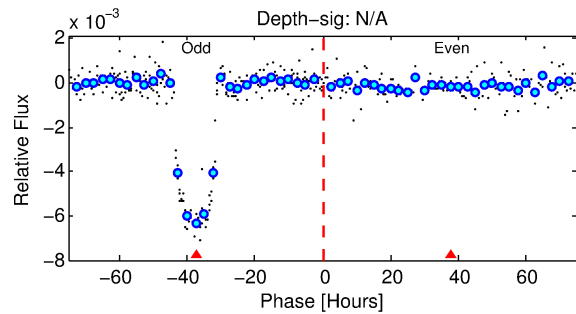
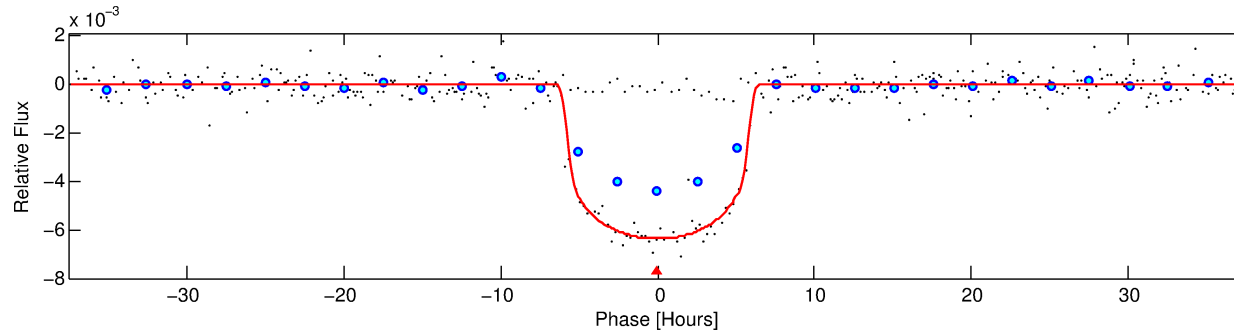
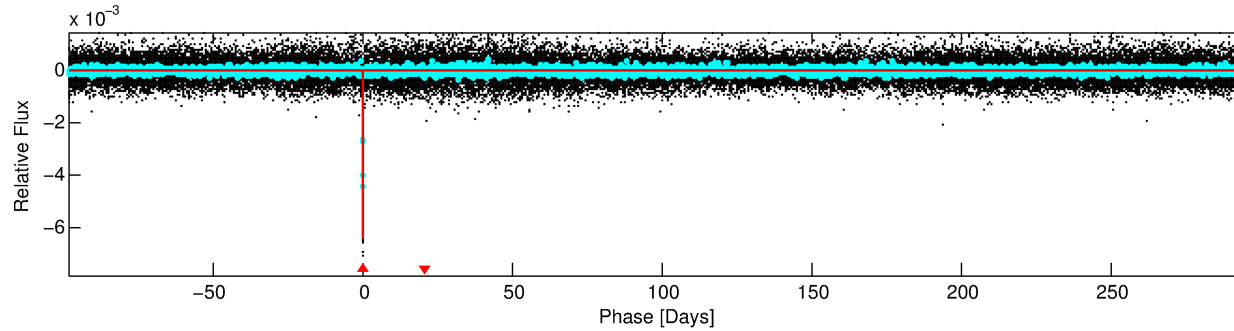
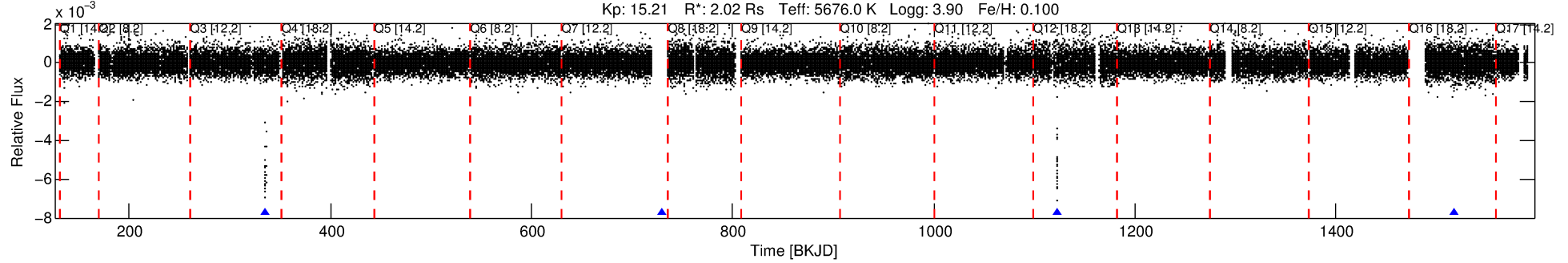
Ephemeris Match Information For 007363829-01

No Significant Match Found

DV One-Page Summary

KIC: 7363829 Candidate: 1 of 1 Period: 393.719 d
KOI: K01356 Corr: No Ephemeris Match

Kp: 15.21 R*: 2.02 Rs Teff: 5676.0 K Logg: 3.90 Fe/H: 0.100



DV Fit Results:

Period = 393.71908 [0.00116] d
Epoch = 335.8169 [0.0022] BKJD
Rp/R* = 0.0721 [0.0027]
a/R* = 257.72 [39.13]
b = 0.00 [33.07]
Seff = 3.07 [1.30]
Teff = 337 [36] K
Rp = 15.88 [4.77] Re
a = 1.1111 [0.3009] AU
Ag = 534.92 [294.42] [1.81σ]
Teffp = 2509 [227] K [9.44σ]

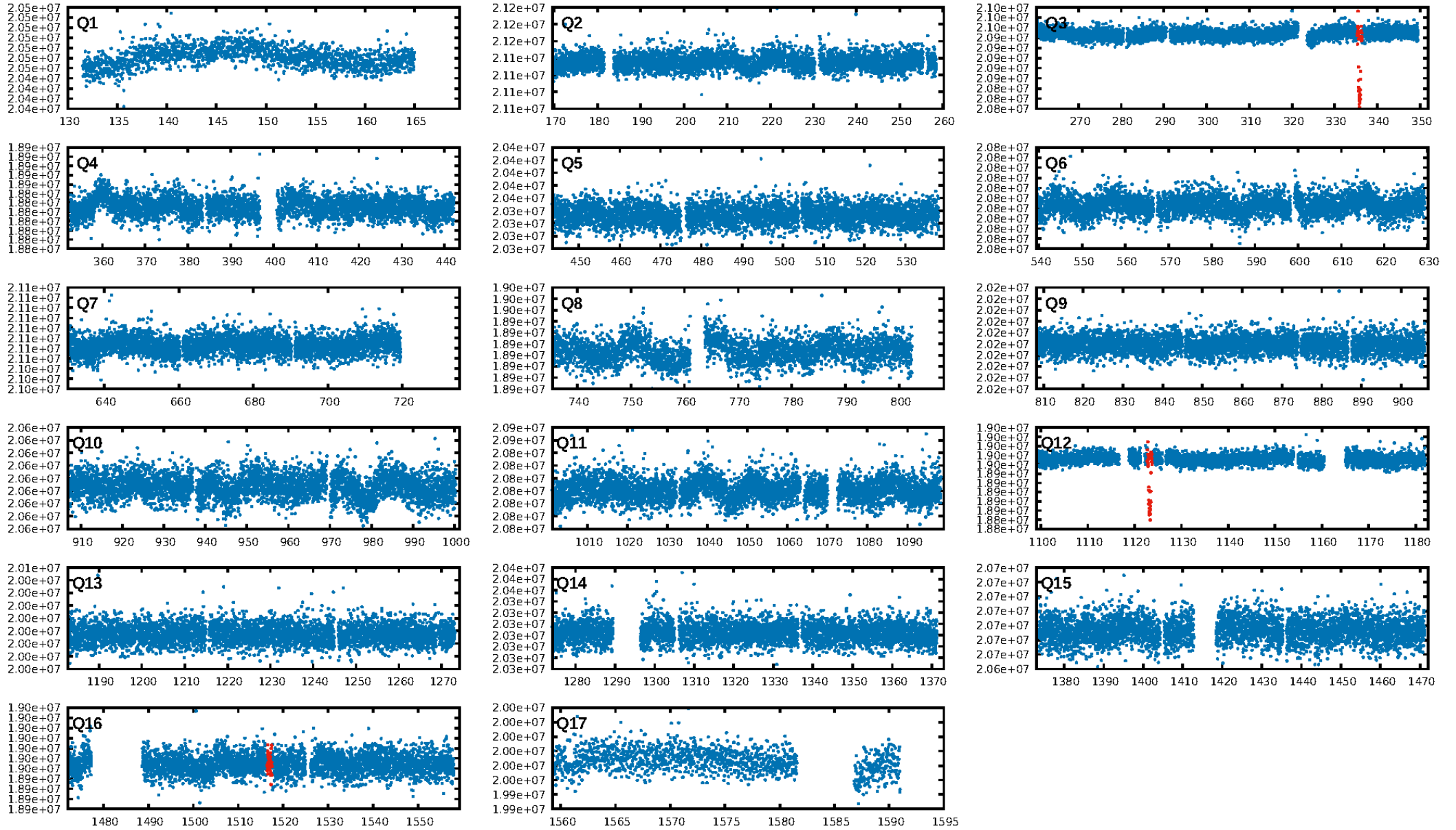
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 12.3%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 0.00e+00
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 4.093
Centroid-sig: 31.0%
Centroid-so: 0.210 arcsec [1.54σ]
OotOffset-rm: 0.053 arcsec [0.68σ]
KicOffset-rm: 0.077 arcsec [0.99σ]
OotOffset-st: 0/1/0/0 [1]
KicOffset-st: 0/1/0/0 [1]
DiffImageQuality-fgm: 1.00 [1/1]
DiffImageOverlap-fno: 1.00 [2/2]

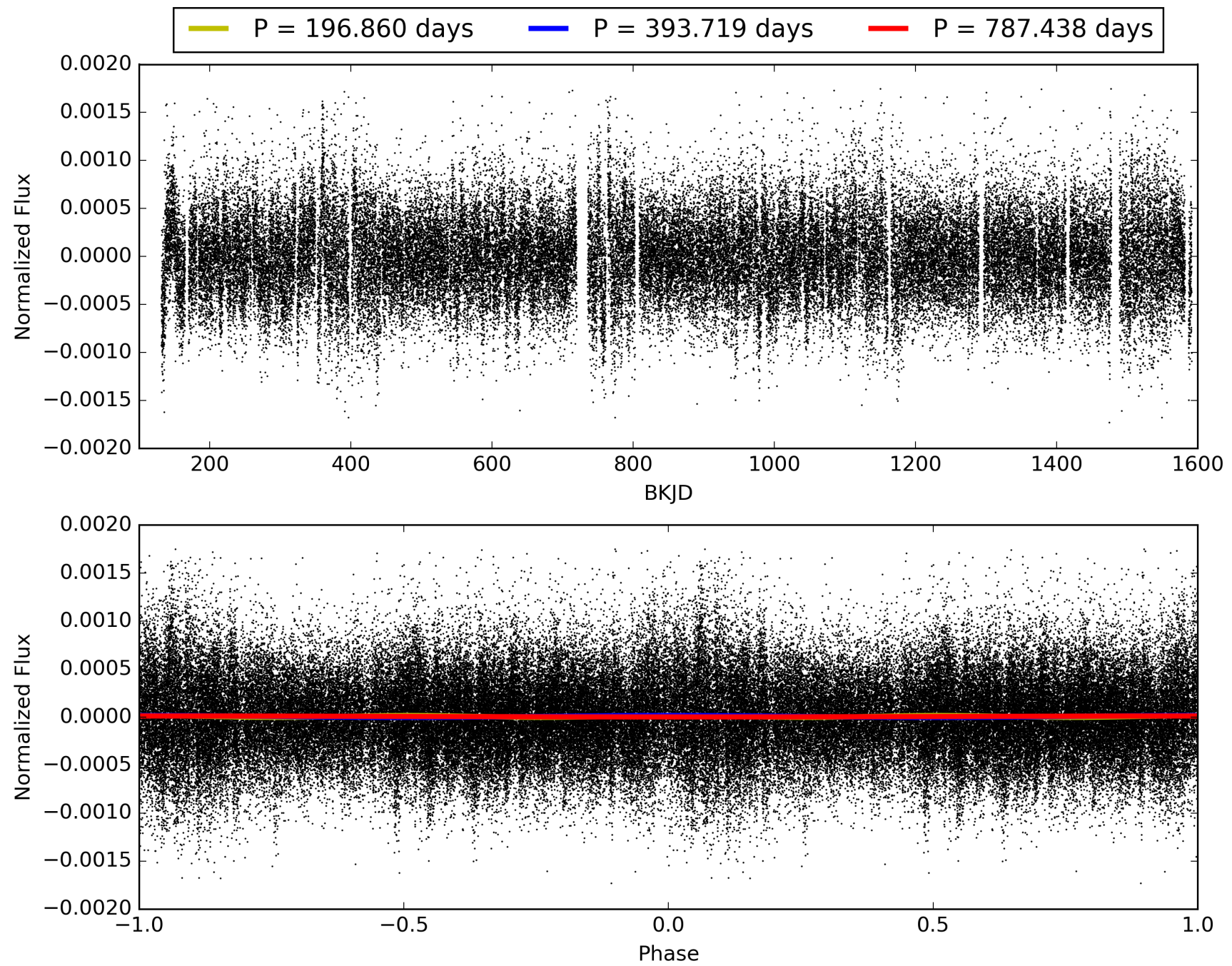
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 09:20:41 Z

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

TCE 007363829-01, PDC Light Curves

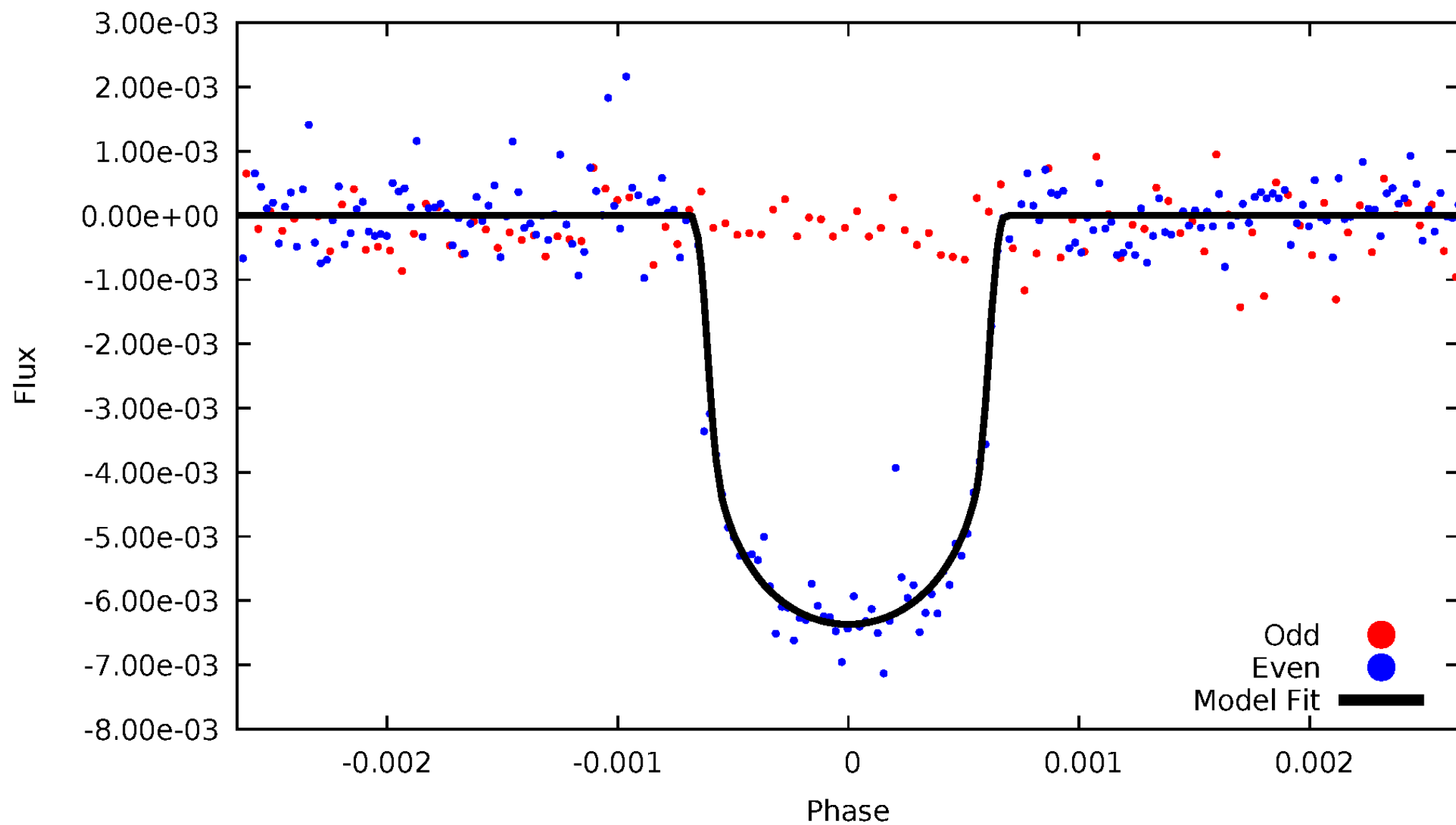


TCE 007363829-01



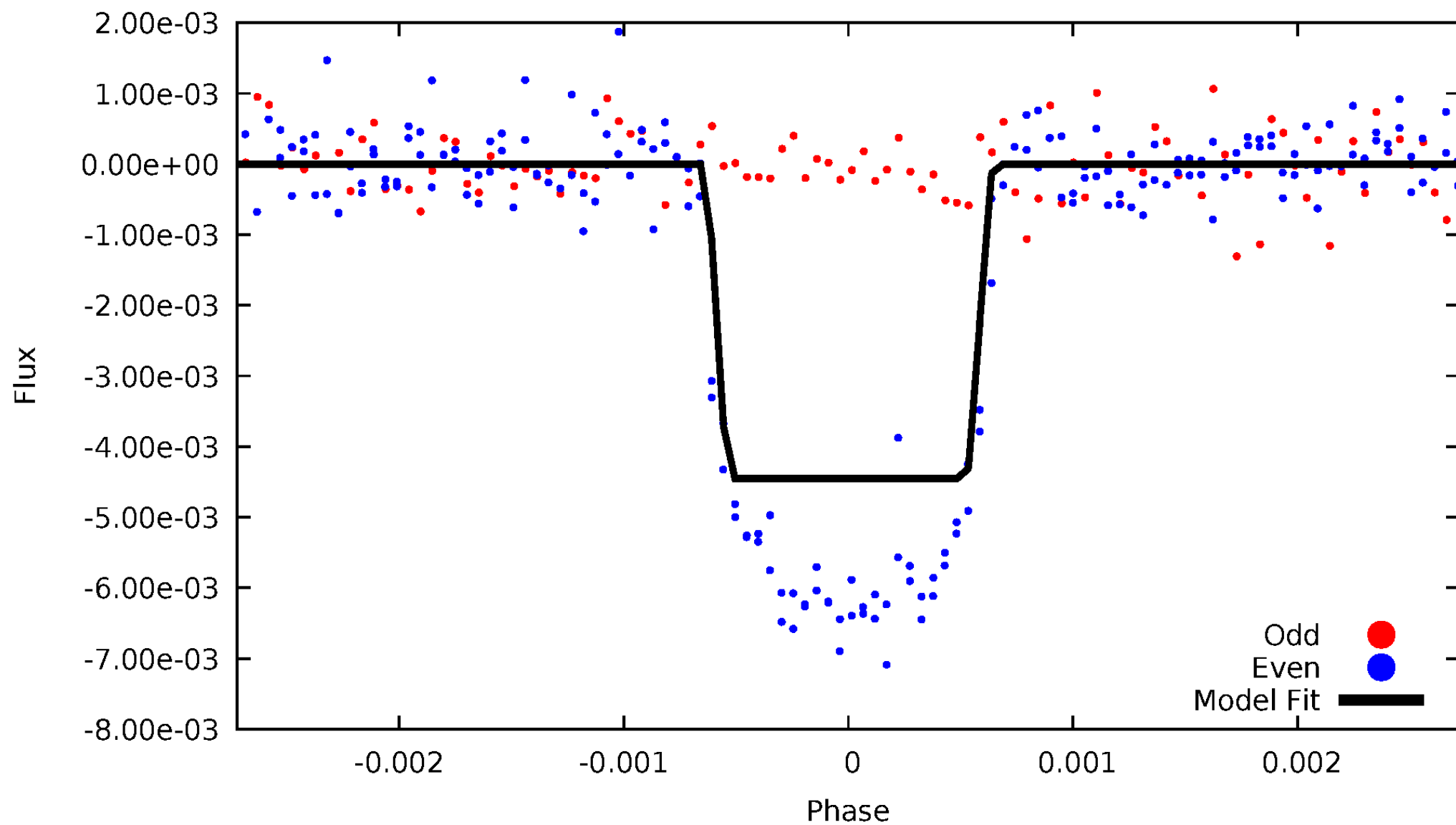
DV Odd/Even

TCE 007363829-01

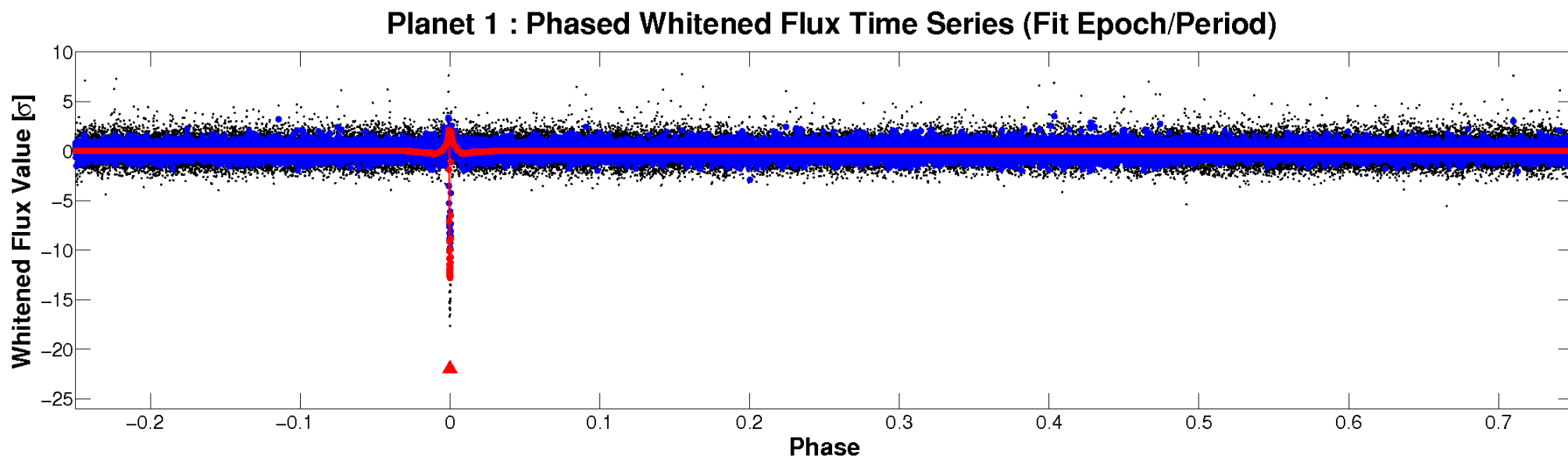
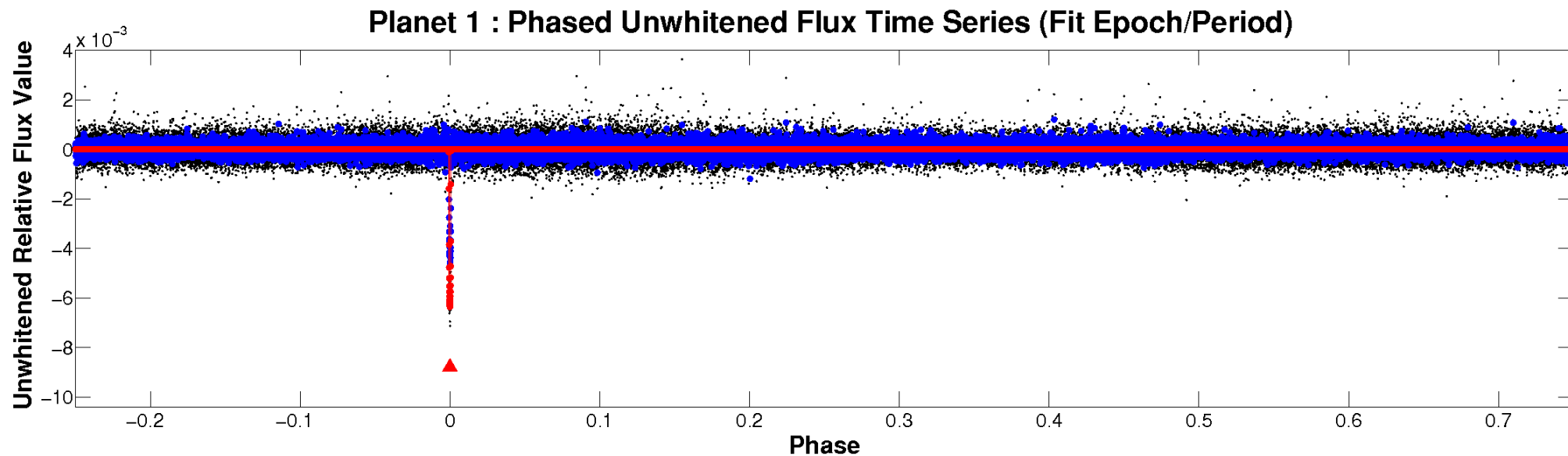


ALT Odd/Even

TCE 007363829-01

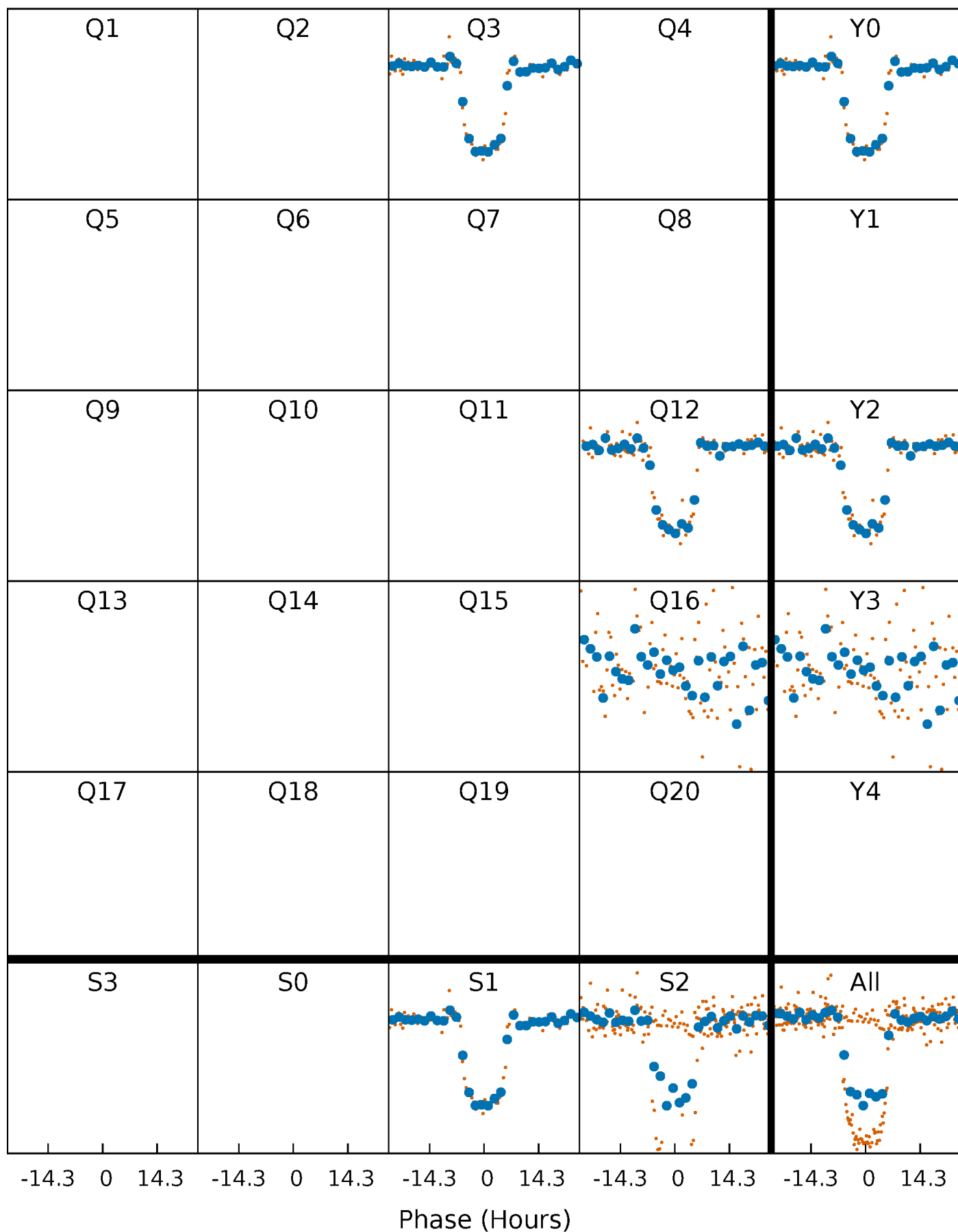


Non-Whitened Vs. Whitened Light Curve



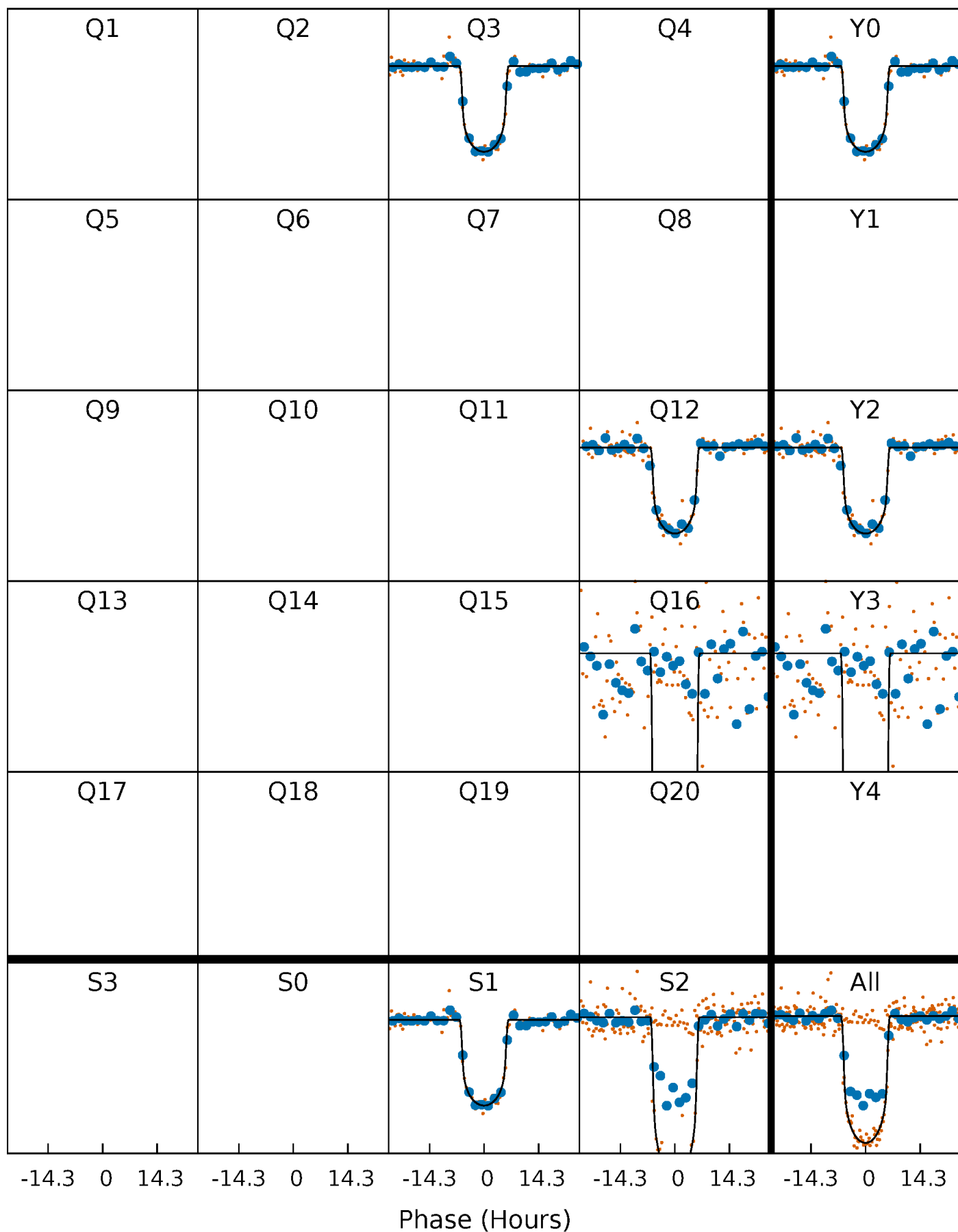
PDC Quarter-Phased Transit Curves

TCE 007363829-01 P=393.719085 Days $T_0=335.816863$ (BKJD)



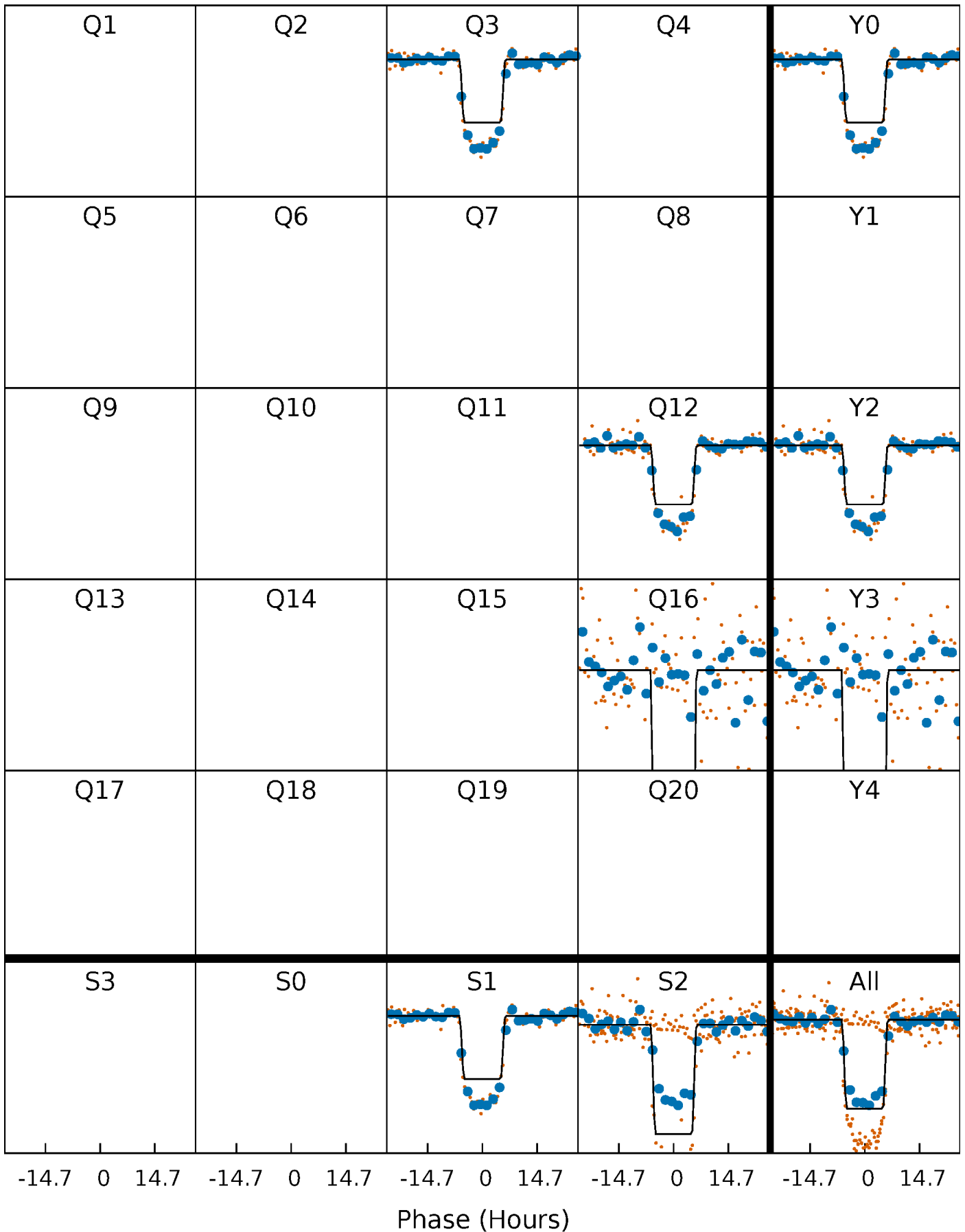
DV Quarter-Phased Transit Curves

TCE 007363829-01 P=393.719085 Days $T_0=335.816863$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

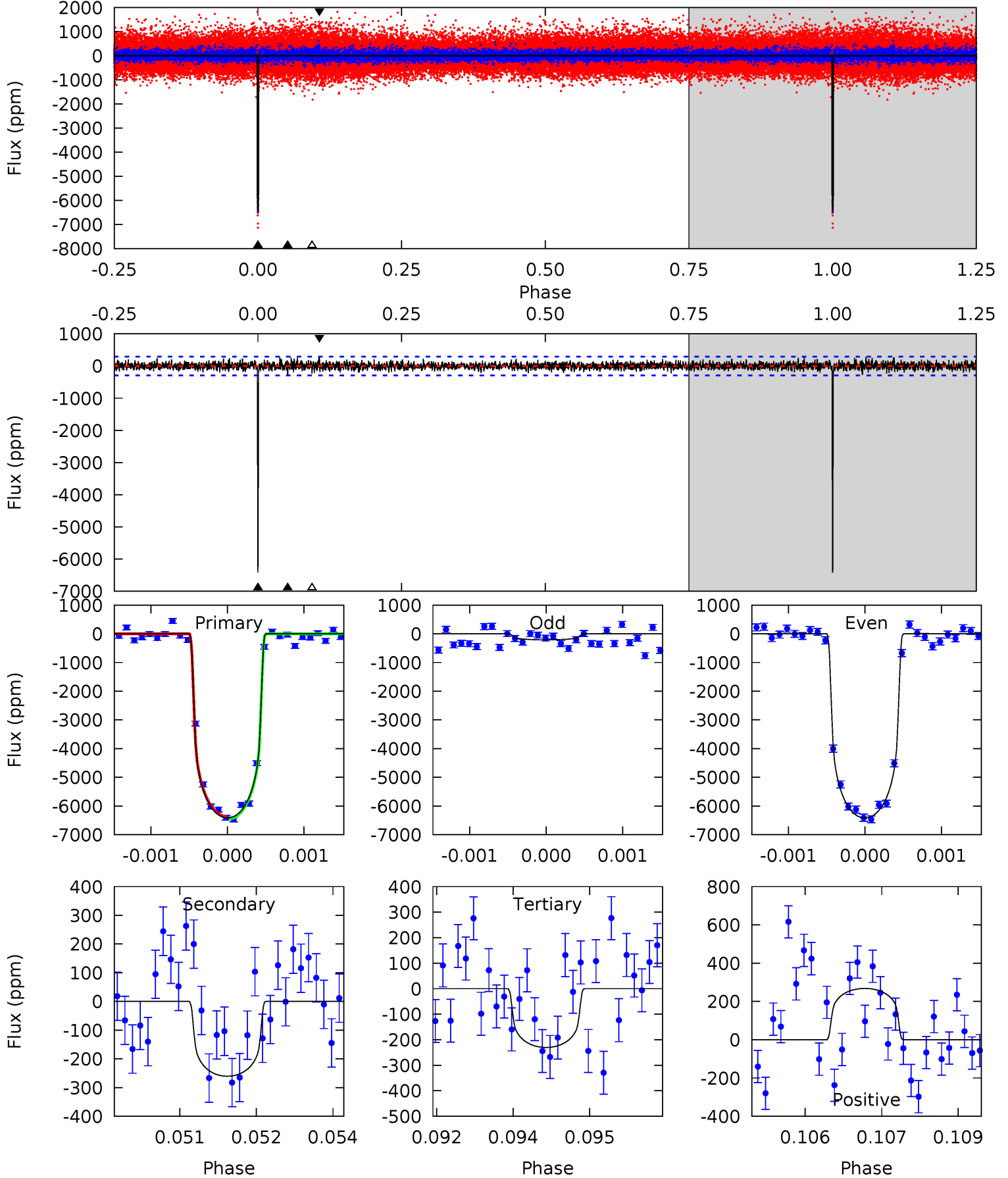
TCE 007363829-01 P=393.713834 Days $T_0=335.820562$ (BKJD)



DV Model-Shift Uniqueness Test

007363829-01, P = 393.719085 Days, E = 335.816863 Days

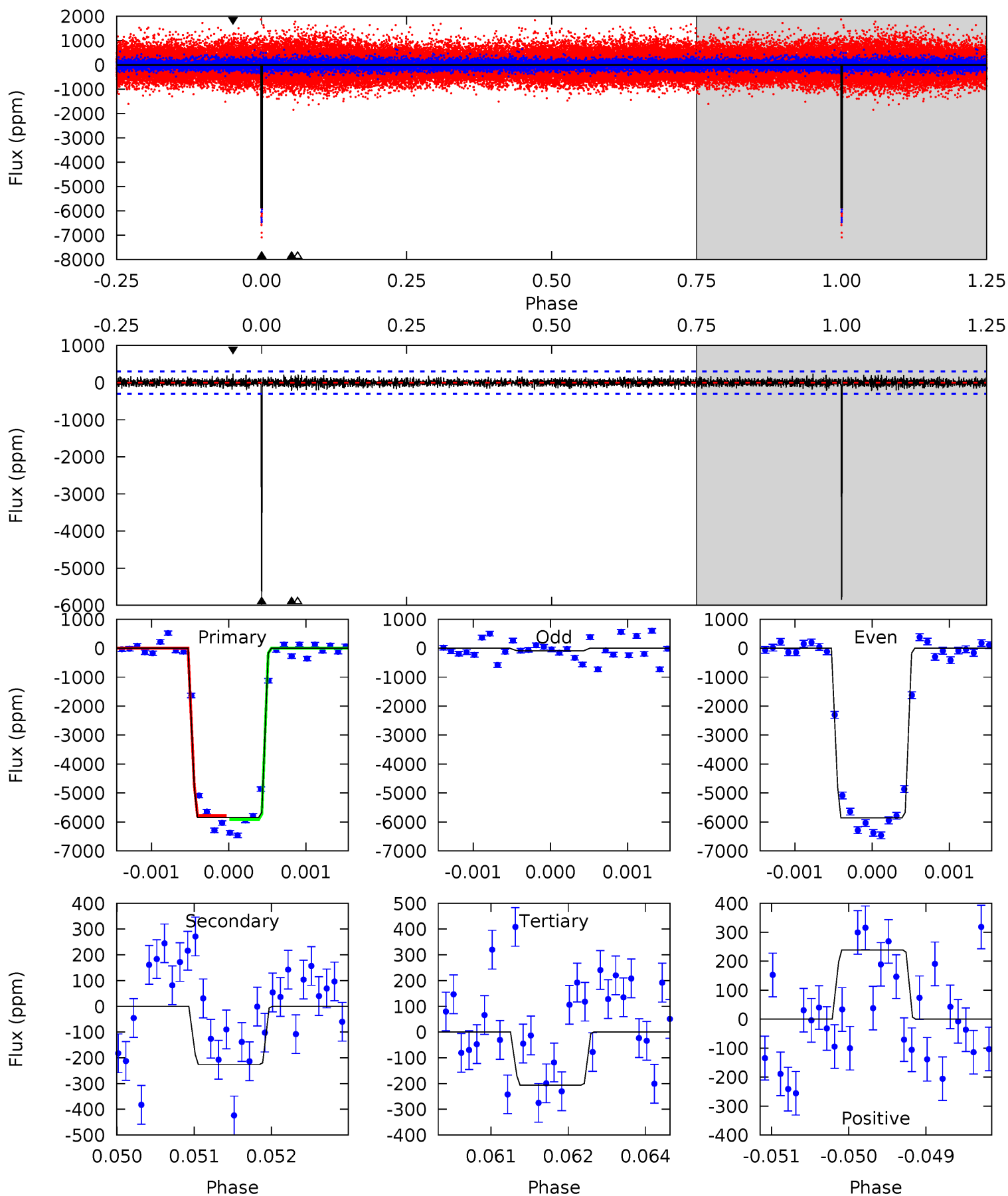
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
118.7	4.82	4.26	4.96	5.39	3.20	1.23	114.5	113.8	0.56	-0.14	66.2	0.68	0.04	0.85



Alt Model-Shift Uniqueness Test

007363829-01, P = 393.713834 Days, E = 335.820562 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
104.3	4.04	3.67	4.26	5.41	3.23	0.96	100.6	100.1	0.36	-0.22	59.9	0.68	0.04	0



Stellar Parameters For KIC 007363829

	$T_{\text{eff}} (K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M (M_{\odot})$	$\rho_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5676^{+85}_{-76}	$3.900^{+0.240}_{-0.080}$	$0.100^{+0.150}_{-0.150}$	$2.018^{+0.300}_{-0.601}$	$1.179^{+0.118}_{-0.176}$	$0.202^{+0.289}_{-0.051}$
	+1%/-1%	+6%/-2%	+150%/-150%	+15%/-30%	+10%/-15%	+143%/-25%
Source	SPE90	SPE90	SPE90	DSEP		

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

Secondary Eclipse Parameters for KIC 007363829-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-261 ± 54	$15.50^{+1.70}_{-2.43}$	465^{+22}_{-32}	3254^{+105}_{-108}	742^{+317}_{-185}
Alt.	-226 ± 56	$14.23^{+1.74}_{-2.11}$	466^{+19}_{-32}	3260^{+126}_{-146}	748^{+357}_{-218}

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

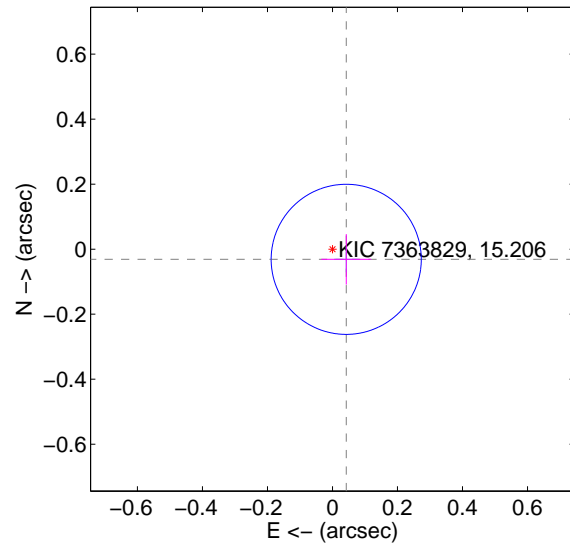
Supplemental centroid analysis for 007363829-01. Kepler magnitude: 15.21. Transit SNR 82.31

There are 1 quarters with good PRF difference image offsets

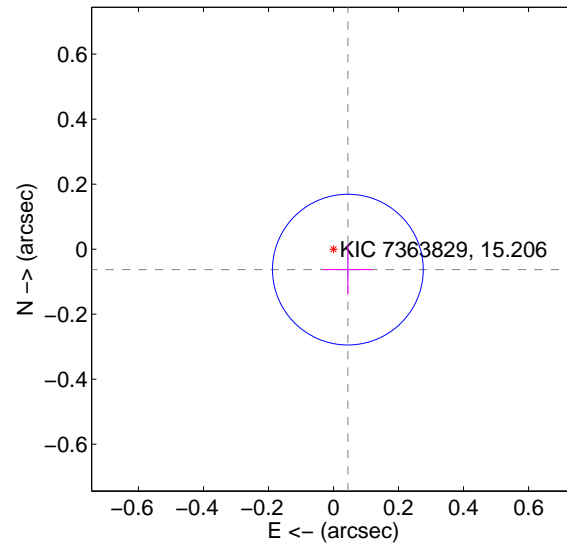
The direct PRF centroid is offset from the target star catalog position by about 0.03 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.053 ± 0.077	0.68	-0.042 ± 0.077	-0.031 ± 0.078
PRF-fit source offset from KIC position	0.077 ± 0.077	0.99	-0.044 ± 0.077	-0.063 ± 0.078
photometric centroid source offset	0.21 ± 0.14	1.54	0.16 ± 0.14	0.14 ± 0.13

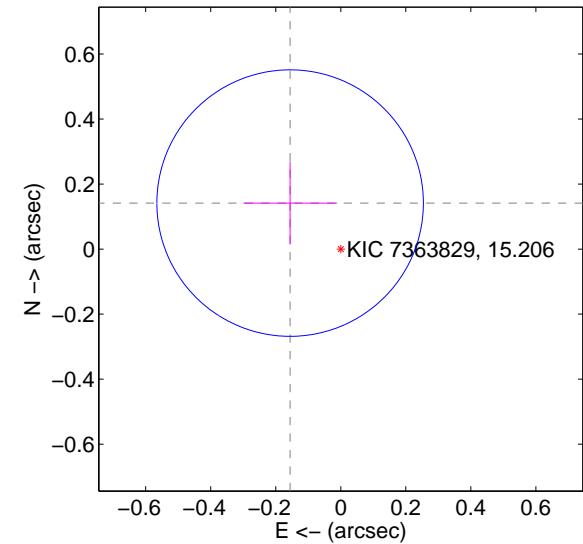
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

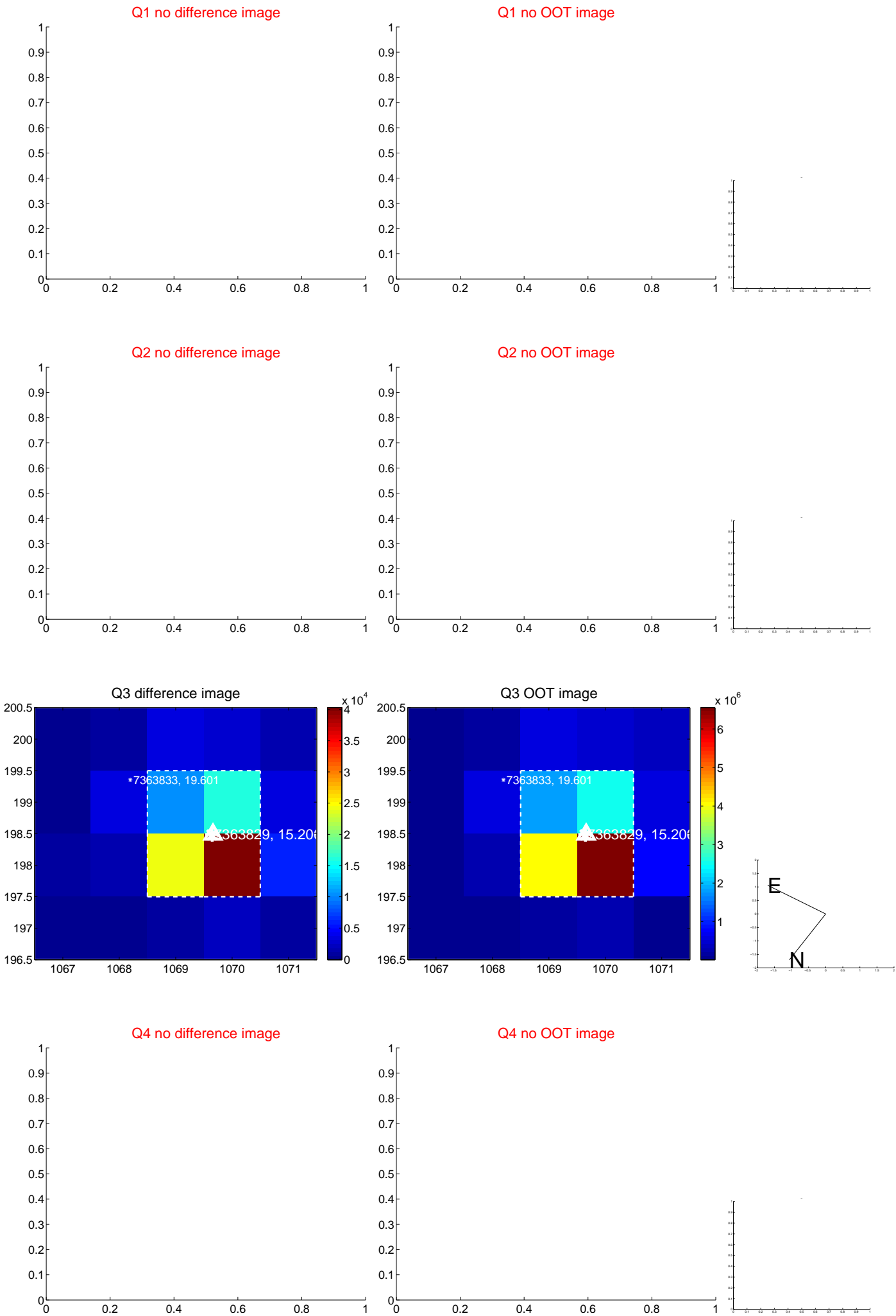


offset from photometric centroids



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.



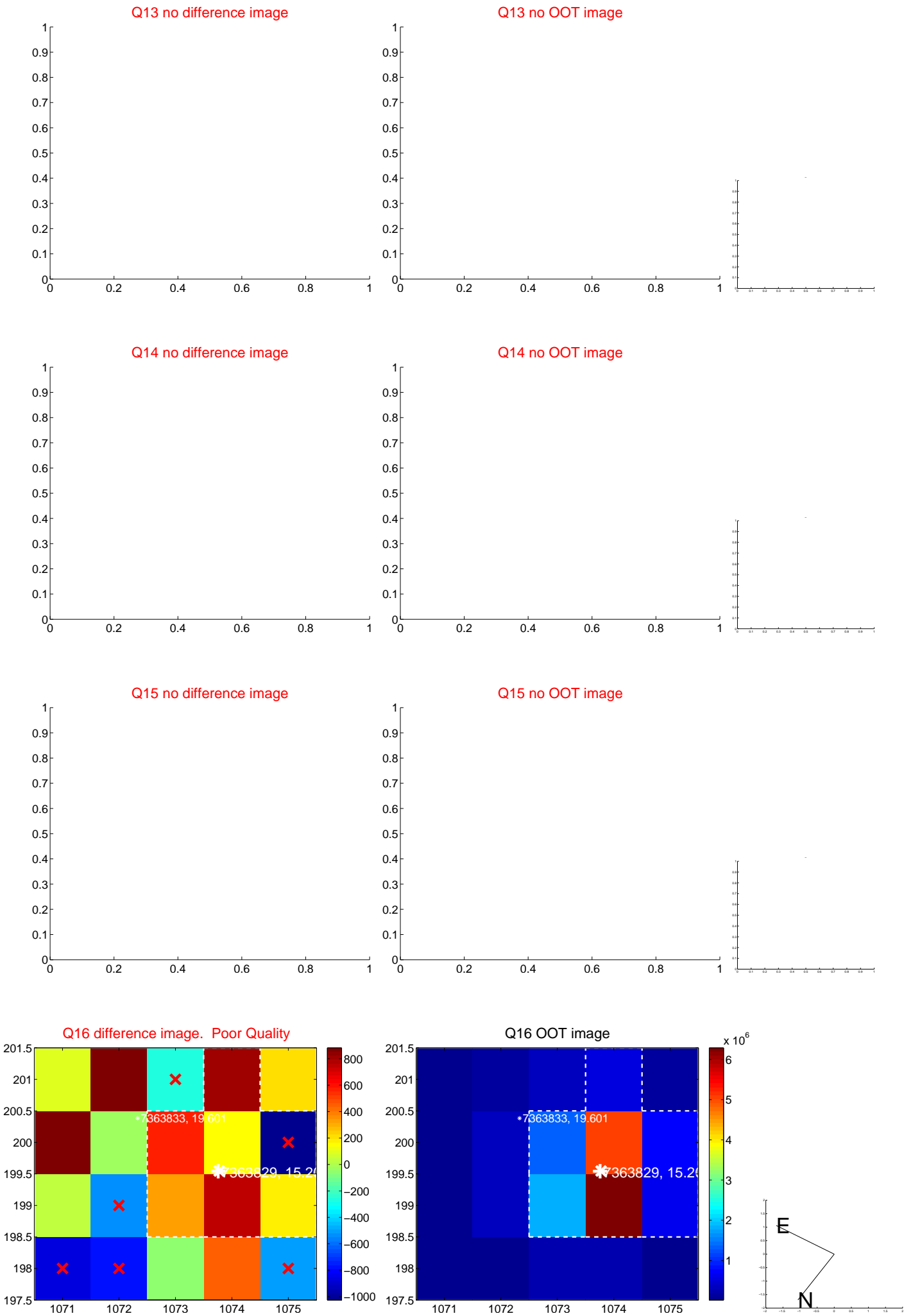
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



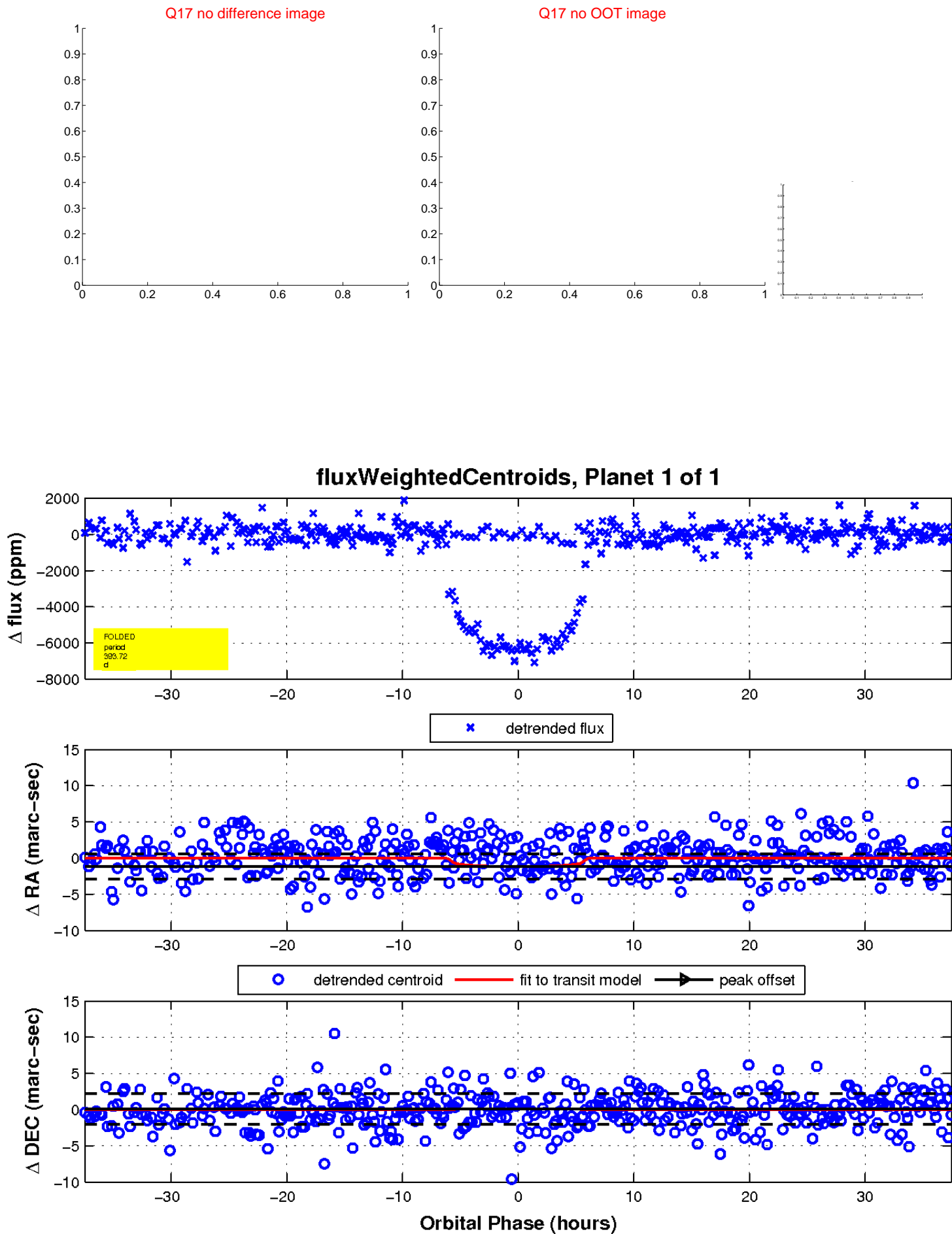
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

