

KIC 003341249

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})
003341249-01	OBS	No	511.476631	304.813089	385.5	12.715	7.6	7.4	1.10	6177	2.37	1.00

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003341249-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_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.

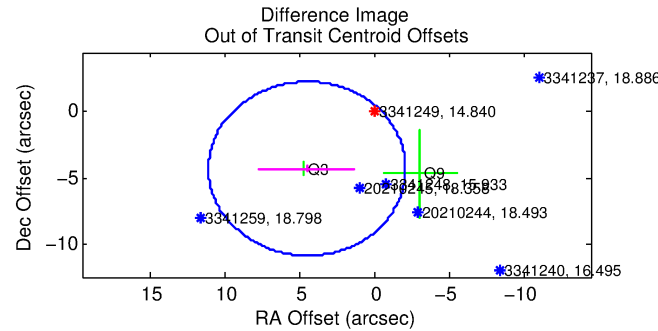
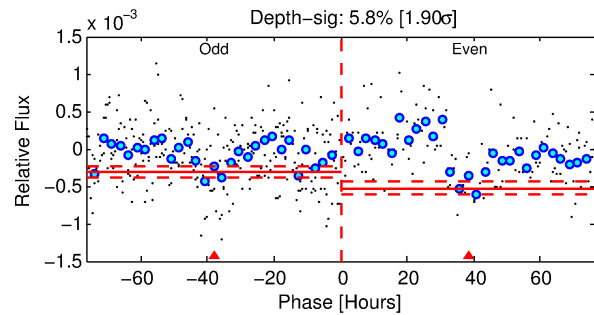
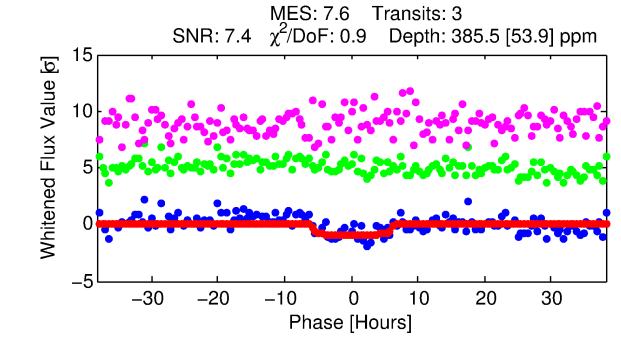
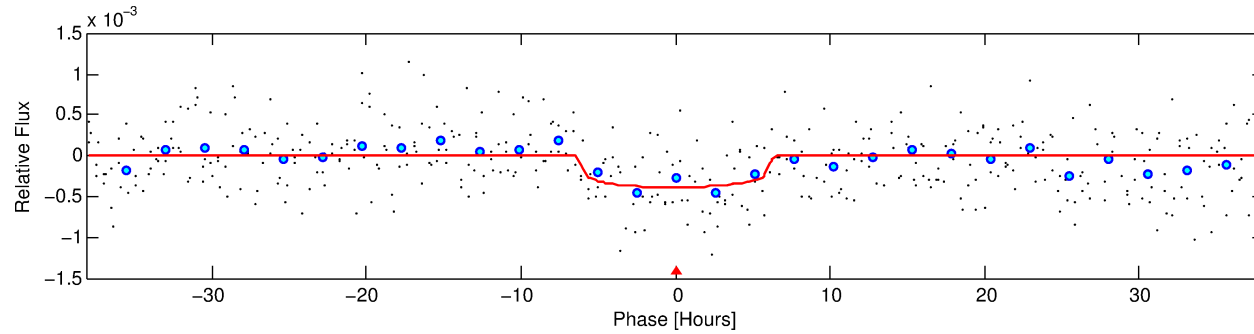
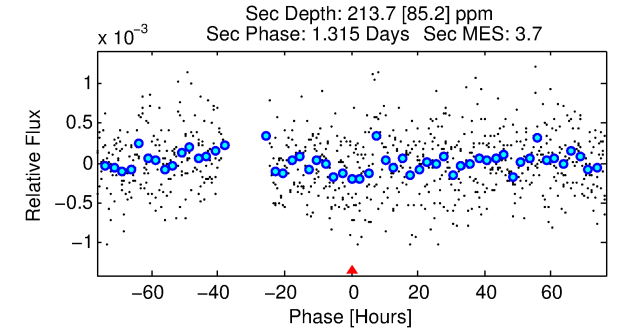
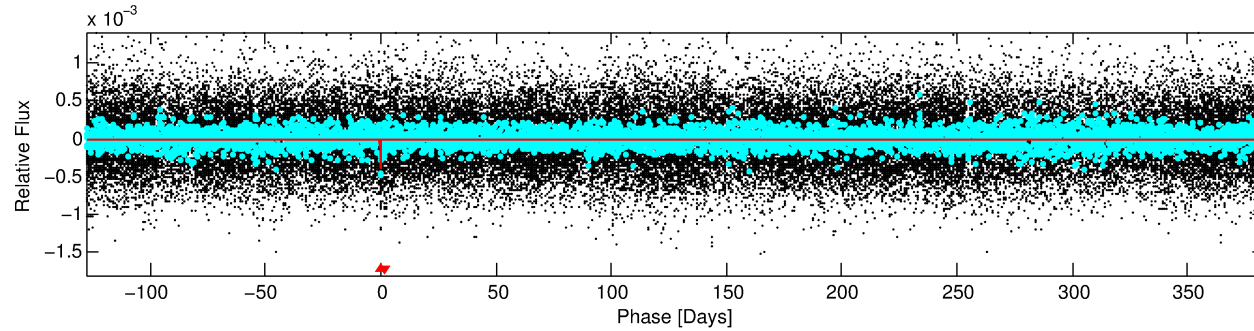
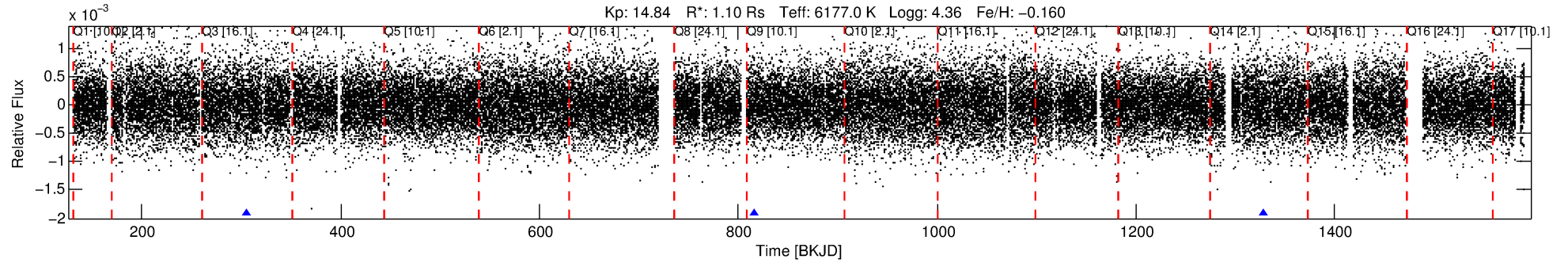
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 003341249-01

No Significant Match Found

DV One-Page Summary

KIC: 3341249 Candidate: 1 of 1 Period: 511.477 d



DV Fit Results:

Period = 511.47663 [0.01856] d
Epoch = 304.8131 [0.0239] BKJD
Rp/R* = 0.0196 [0.0095]
a/R* = 207.16 [500.99]
b = 0.76 [1.33]
Seff = 1.00 [0.40]
Teff = 255 [26] K
Rp = 2.36 [1.35] Re
a = 1.2615 [0.3246] AU
Ag = 33459.06 [37045.51] [0.90 σ]
Teffp = 5331 [1406] K [3.61 σ]

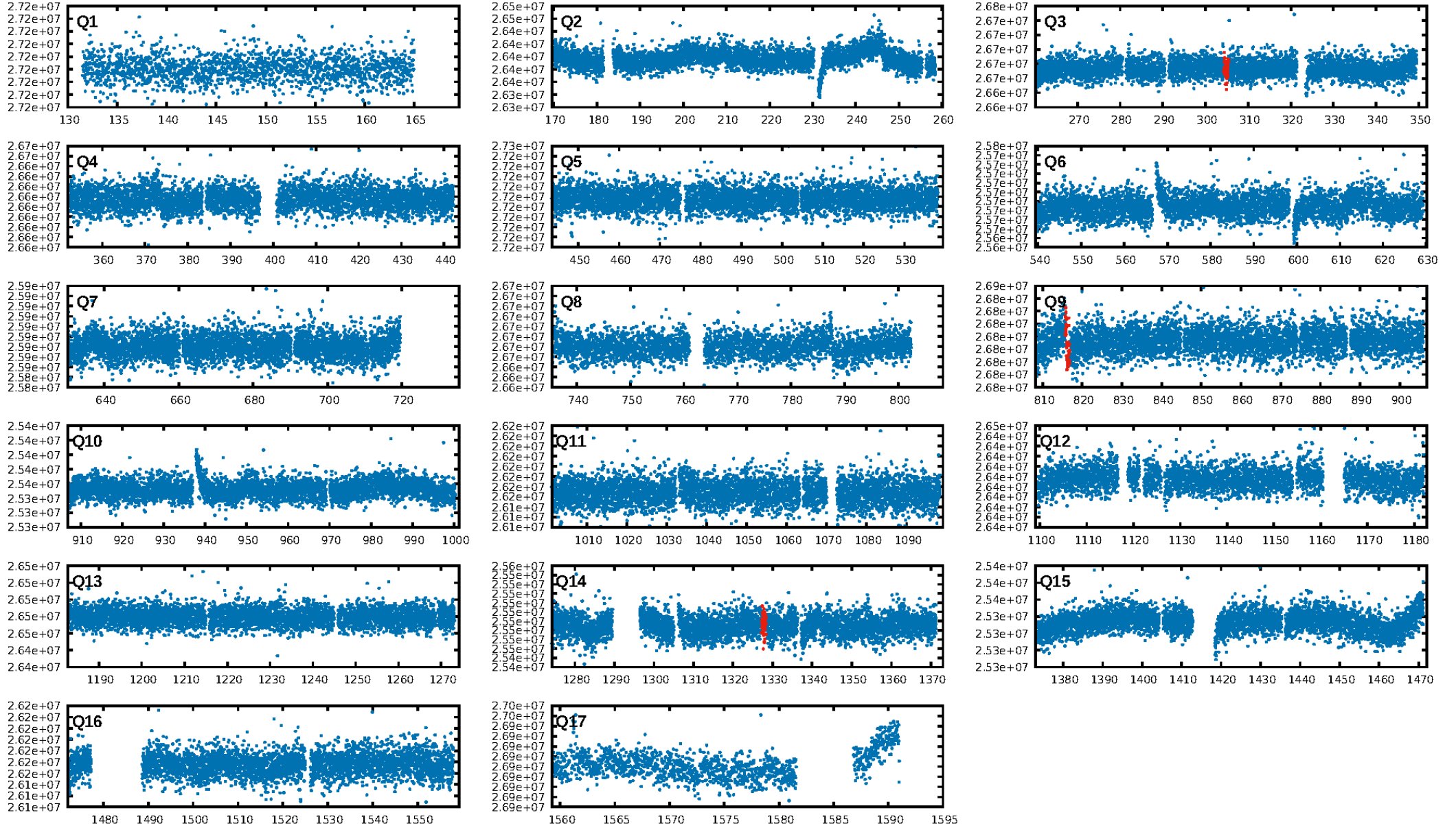
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 13.6%
ModelChiSquareGof-sig: 99.9%
Bootstrap-pfa: 1.48e-12
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: -7.009
Centroid-sig: 11.4%
Centroid-so: 3.243 arcsec [1.95 σ]
OotOffset-rm: 6.202 arcsec [2.83 σ]
KicOffset-rm: 6.571 arcsec [4.36 σ]
OotOffset-st: 0/1/0/1 [2]
KicOffset-st: 0/1/0/1 [2]
DiffImageQuality-fgm: 0.00 [0/2]
DiffImageOverlap-fno: 1.00 [3/3]

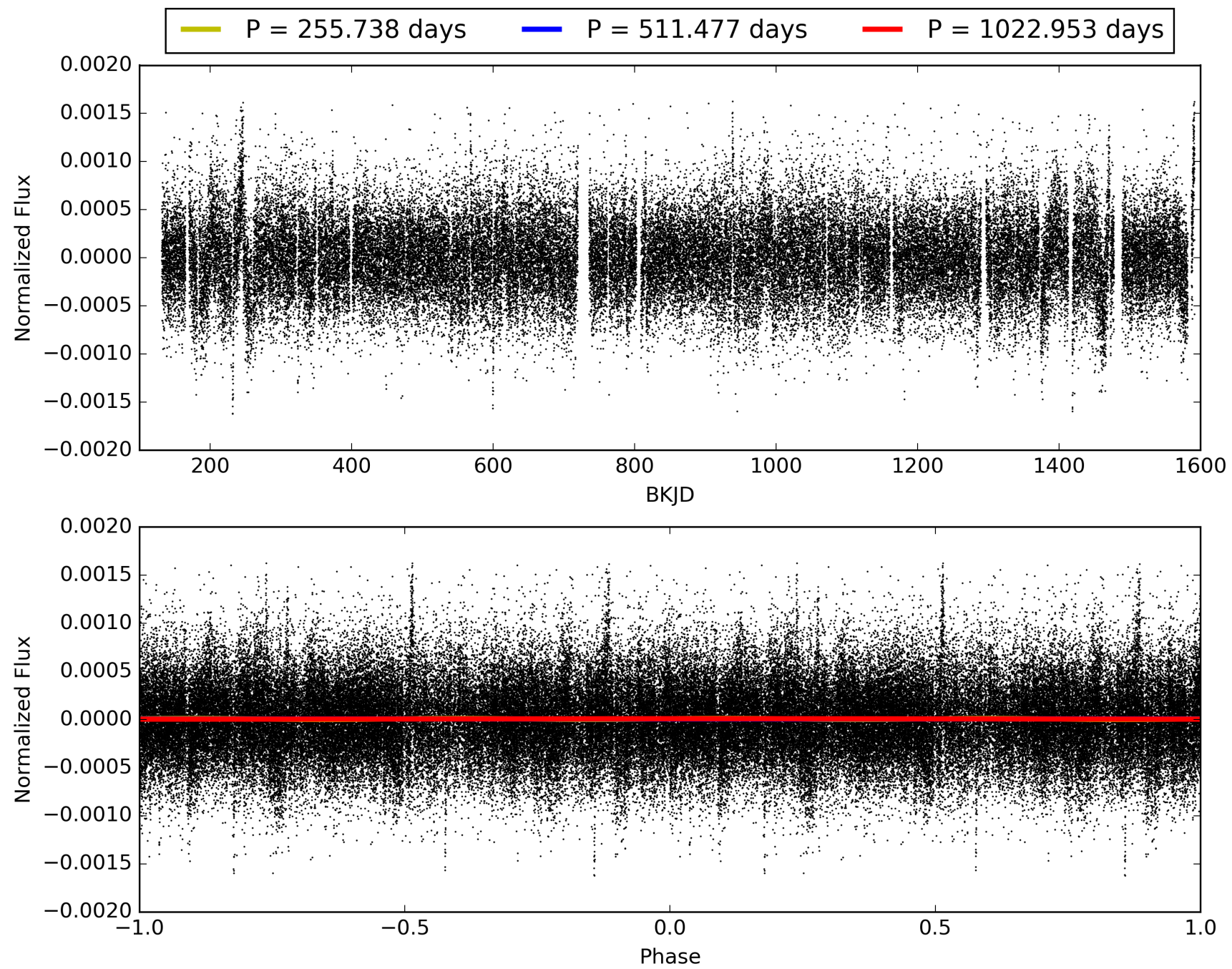
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 12:47:34 Z

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

TCE 003341249-01, PDC Light Curves

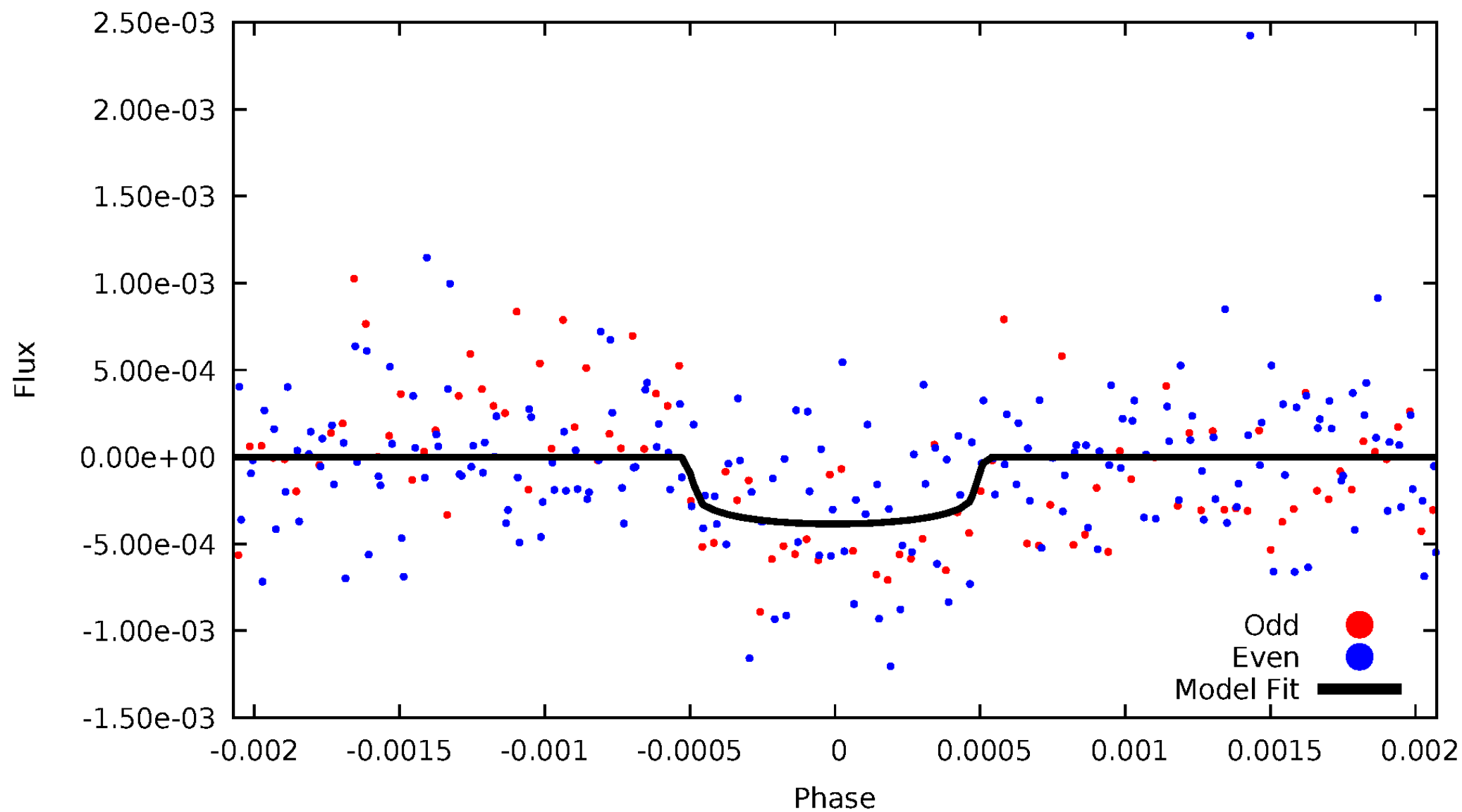


TCE 003341249-01



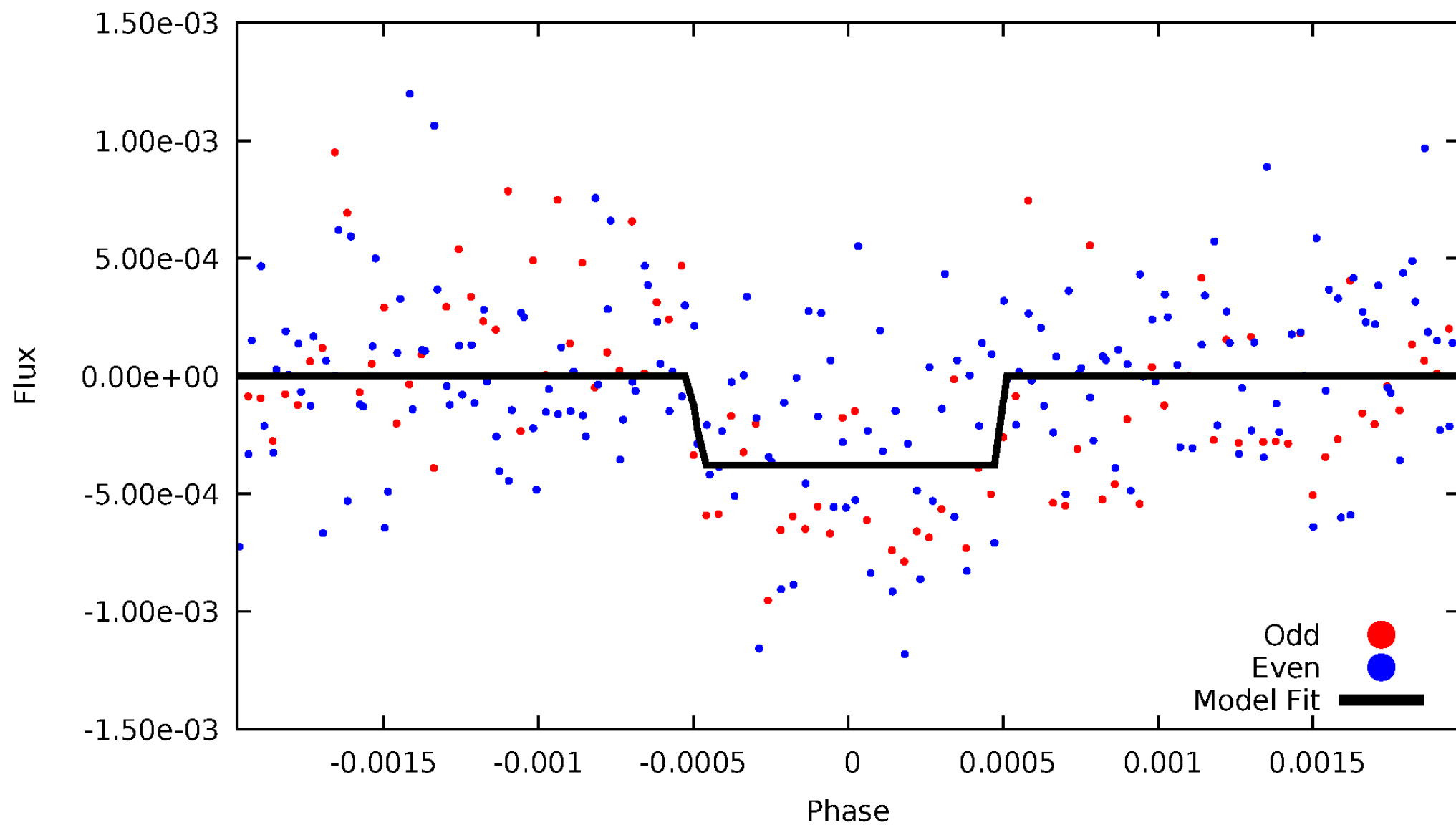
DV Odd/Even

TCE 003341249-01

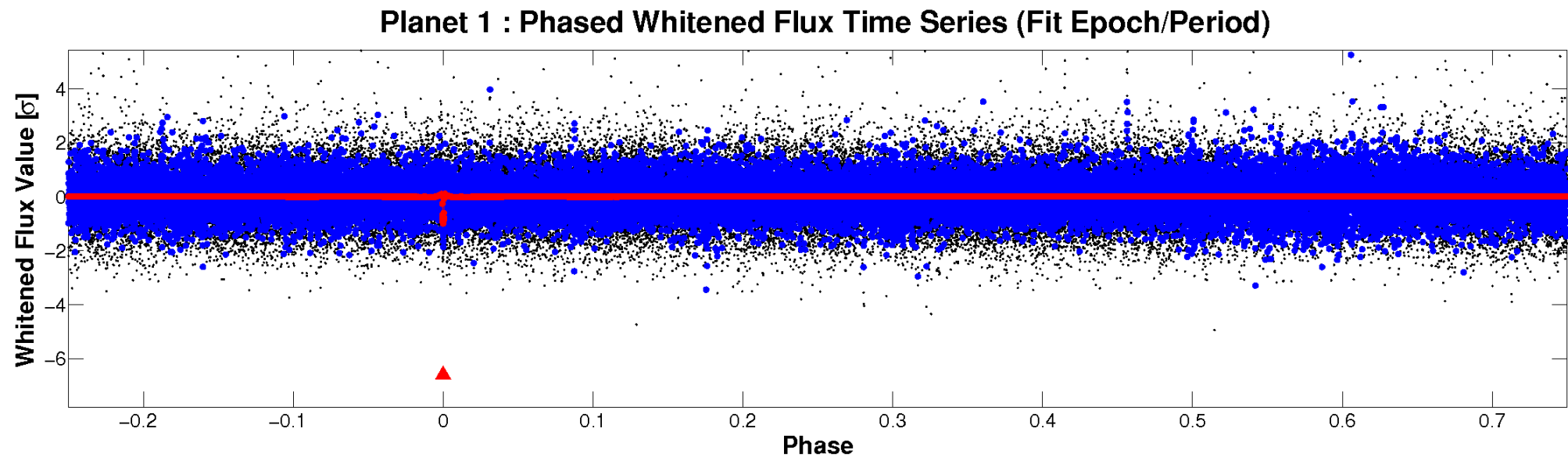
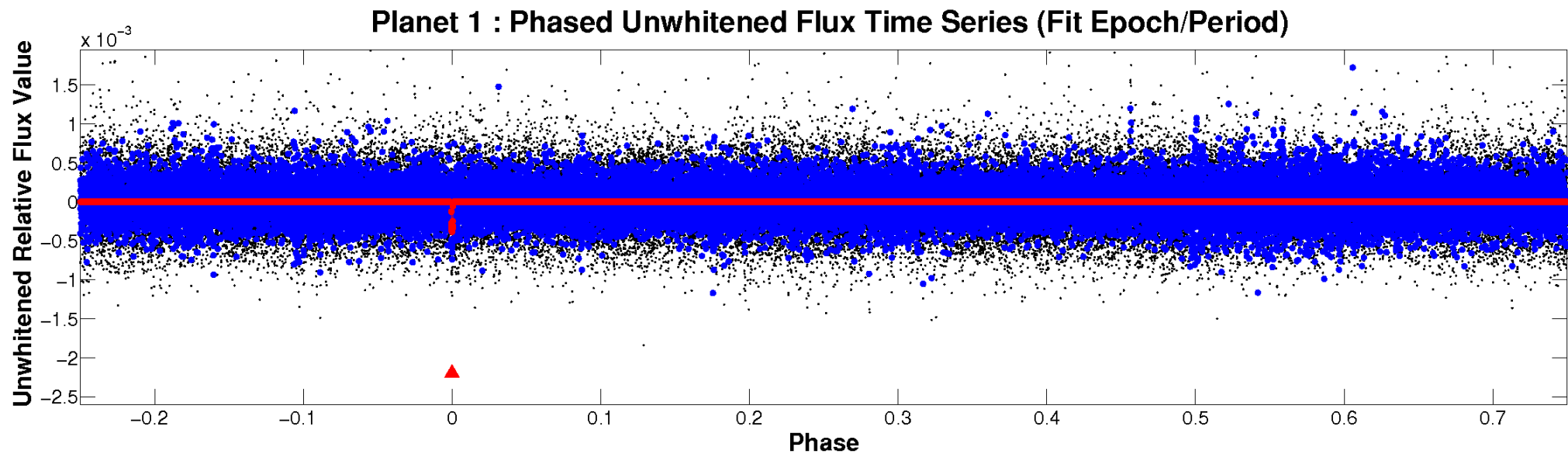


ALT Odd/Even

TCE 003341249-01

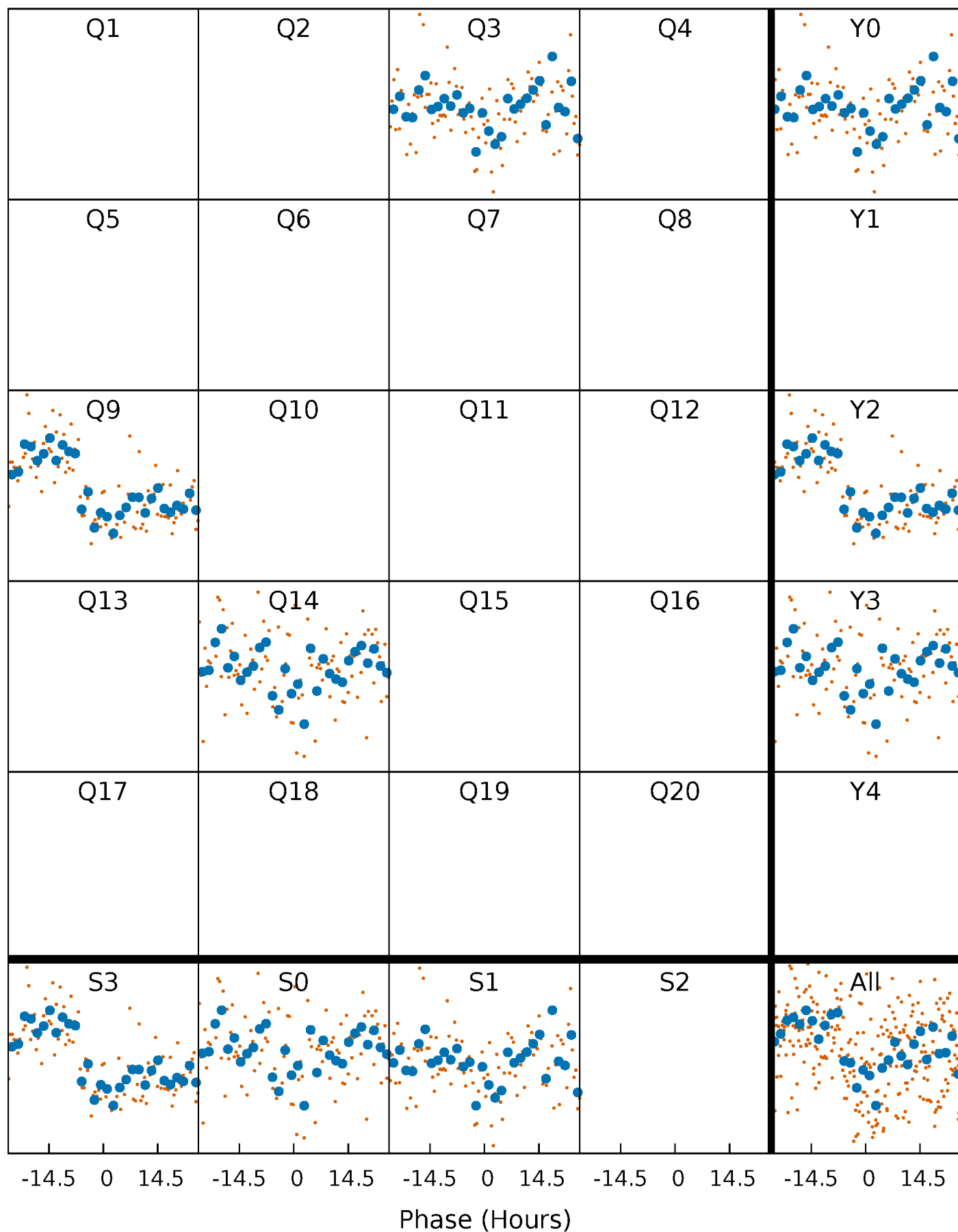


Non-Whitened Vs. Whitened Light Curve



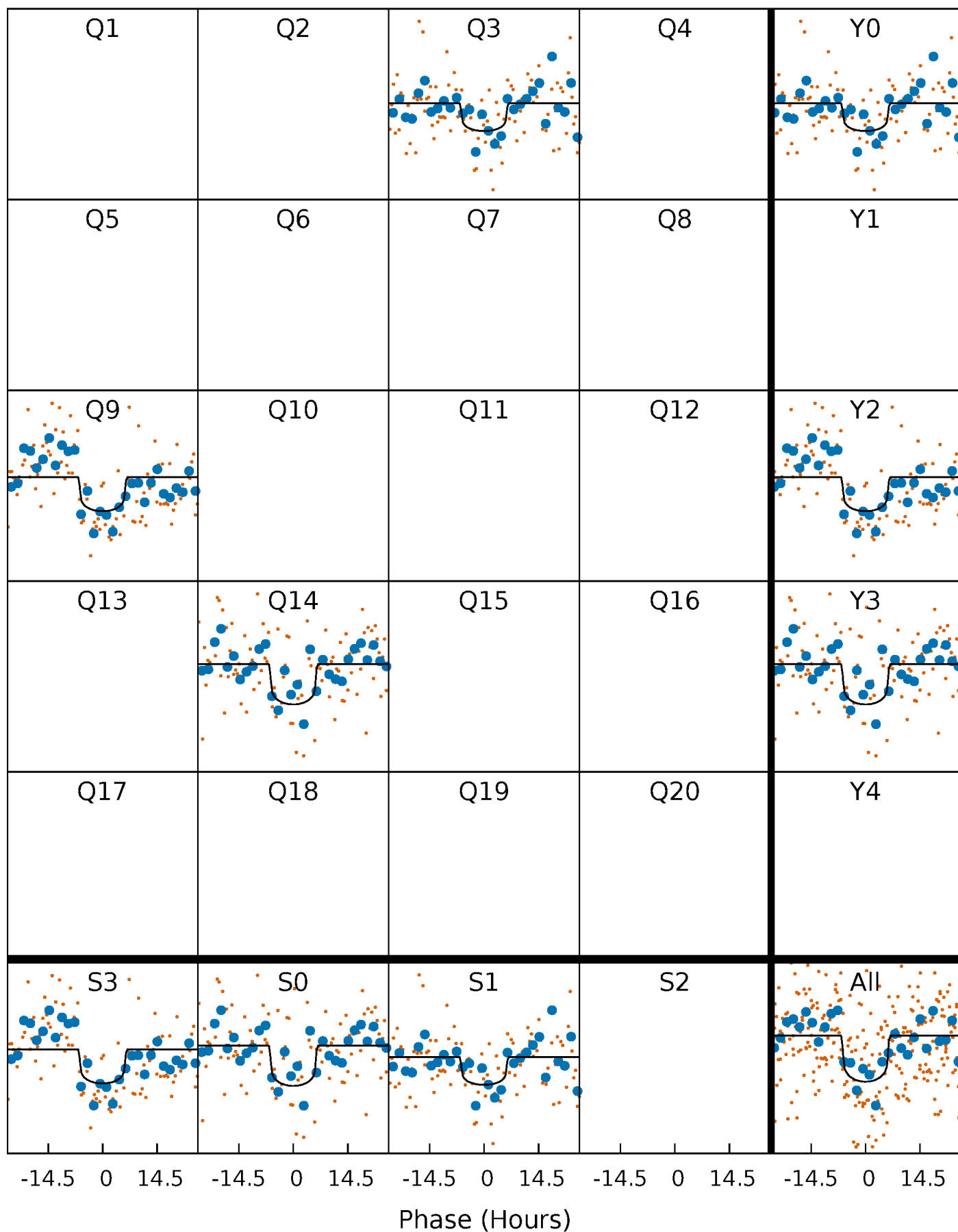
PDC Quarter-Phased Transit Curves

TCE 003341249-01 P=511.476631 Days $T_0=304.813089$ (BKJD)



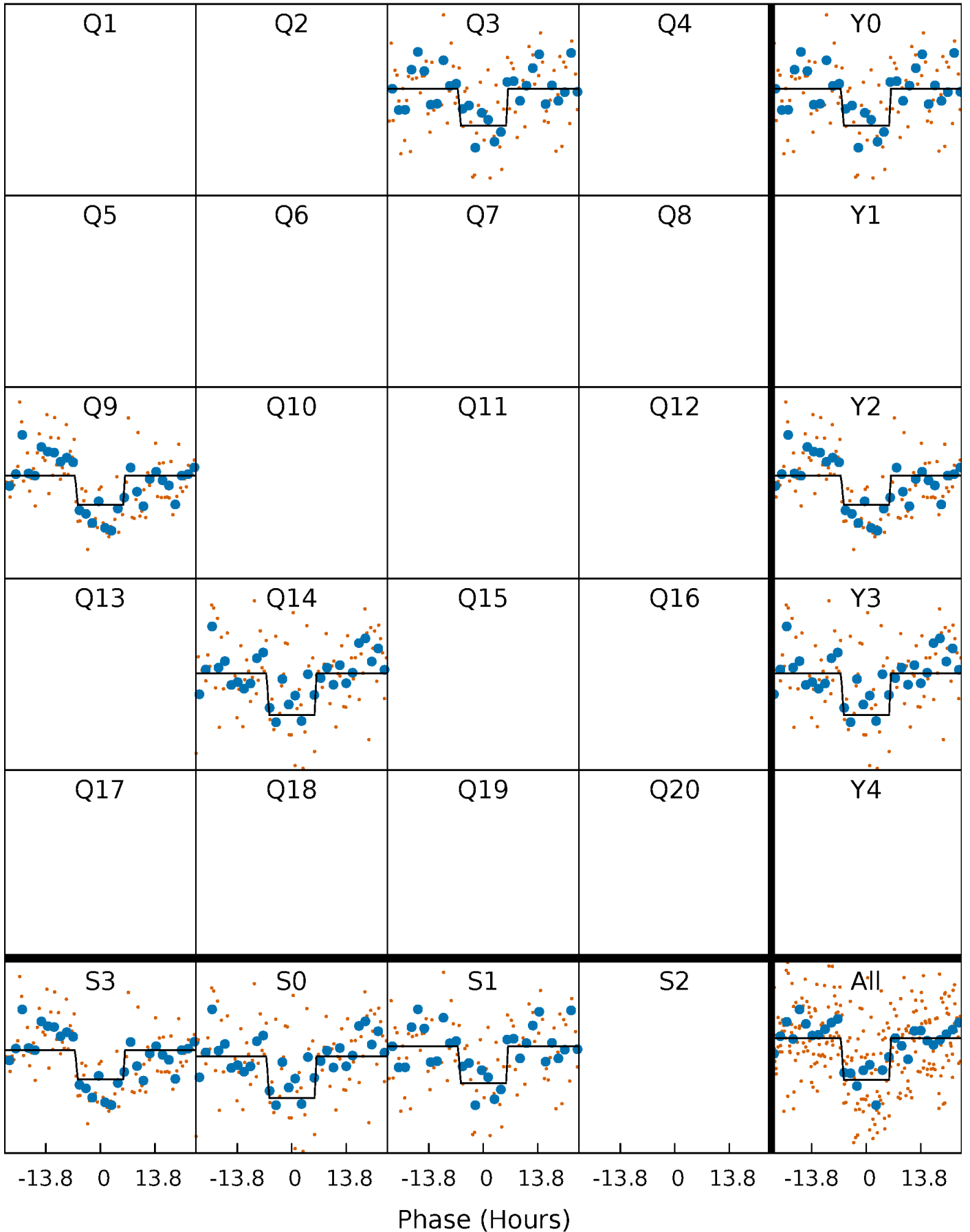
DV Quarter-Phased Transit Curves

TCE 003341249-01 P=511.476631 Days $T_0=304.813089$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

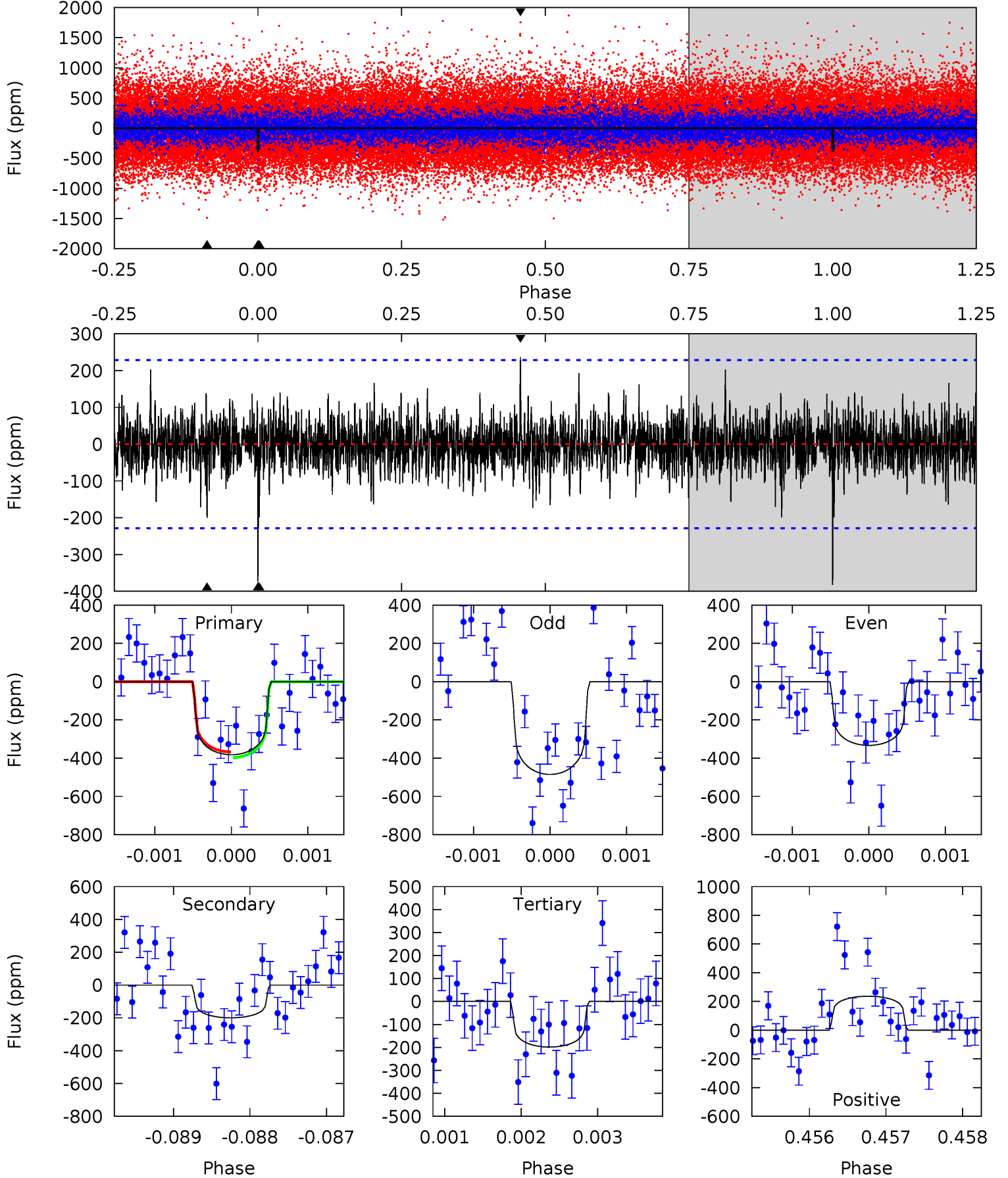
TCE 003341249-01 P=511.472440 Days $T_0=304.818055$ (BKJD)



DV Model-Shift Uniqueness Test

003341249-01, P = 511.476631 Days, E = 304.813089 Days

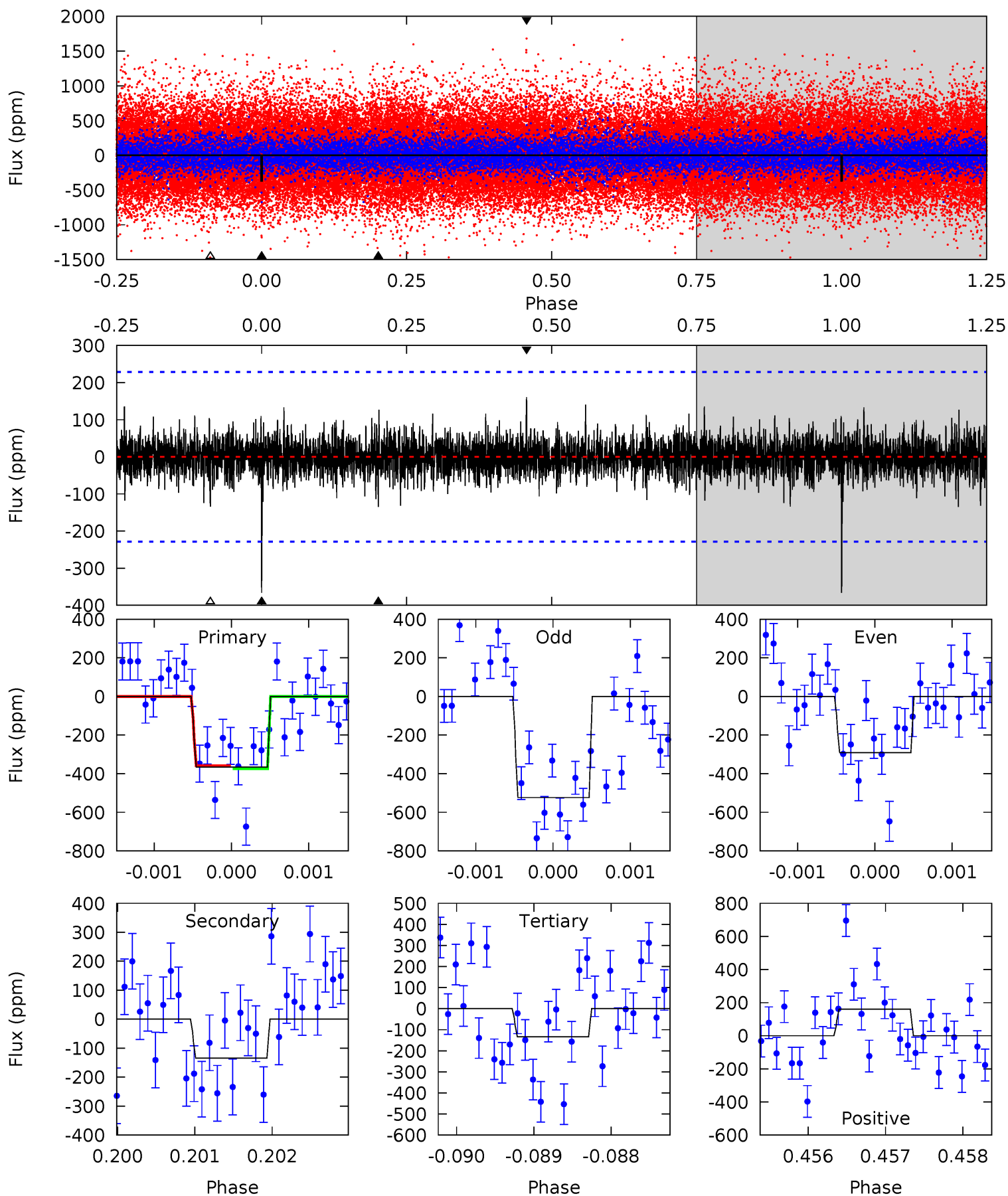
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.11	4.76	4.73	5.64	5.44	3.28	1.15	4.38	3.47	0.03	-0.88	1.70	0.94	0.38	0.36



Alt Model-Shift Uniqueness Test

003341249-01, P = 511.472440 Days, E = 304.818055 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.73	3.21	3.19	3.84	5.45	3.29	0.81	5.55	4.89	0.02	-0.64	2.59	1.06	0.31	0.17



Stellar Parameters For KIC 003341249

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6177^{+196}_{-240}	$4.362^{+0.108}_{-0.201}$	$-0.160^{+0.300}_{-0.300}$	$1.104^{+0.341}_{-0.158}$	$1.020^{+0.173}_{-0.116}$	$1.066^{+0.519}_{-0.557}$
	+3%/-4%	+2%/-5%	+188%/-188%	+31%/-14%	+17%/-11%	+49%/-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 003341249-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-200 ± 42	$2.47^{+1.27}_{-1.25}$	361^{+28}_{-22}	5222^{+2124}_{-808}	28528^{+90461}_{-16513}
Alt.	-135 ± 42	$2.46^{+1.22}_{-1.13}$	358^{+29}_{-22}	4851^{+1567}_{-816}	19463^{+50055}_{-12099}

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

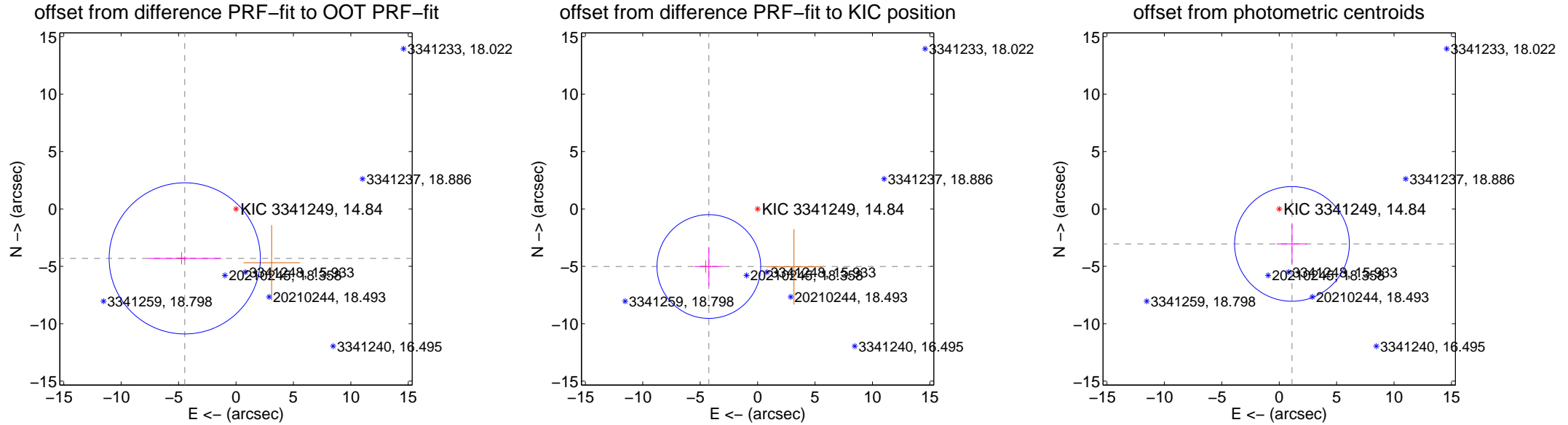
DV Centroid Data

Supplemental centroid analysis for 003341249-01. Kepler magnitude: 14.84. Transit SNR 7.38

There are 0 quarters with good PRF difference image offsets

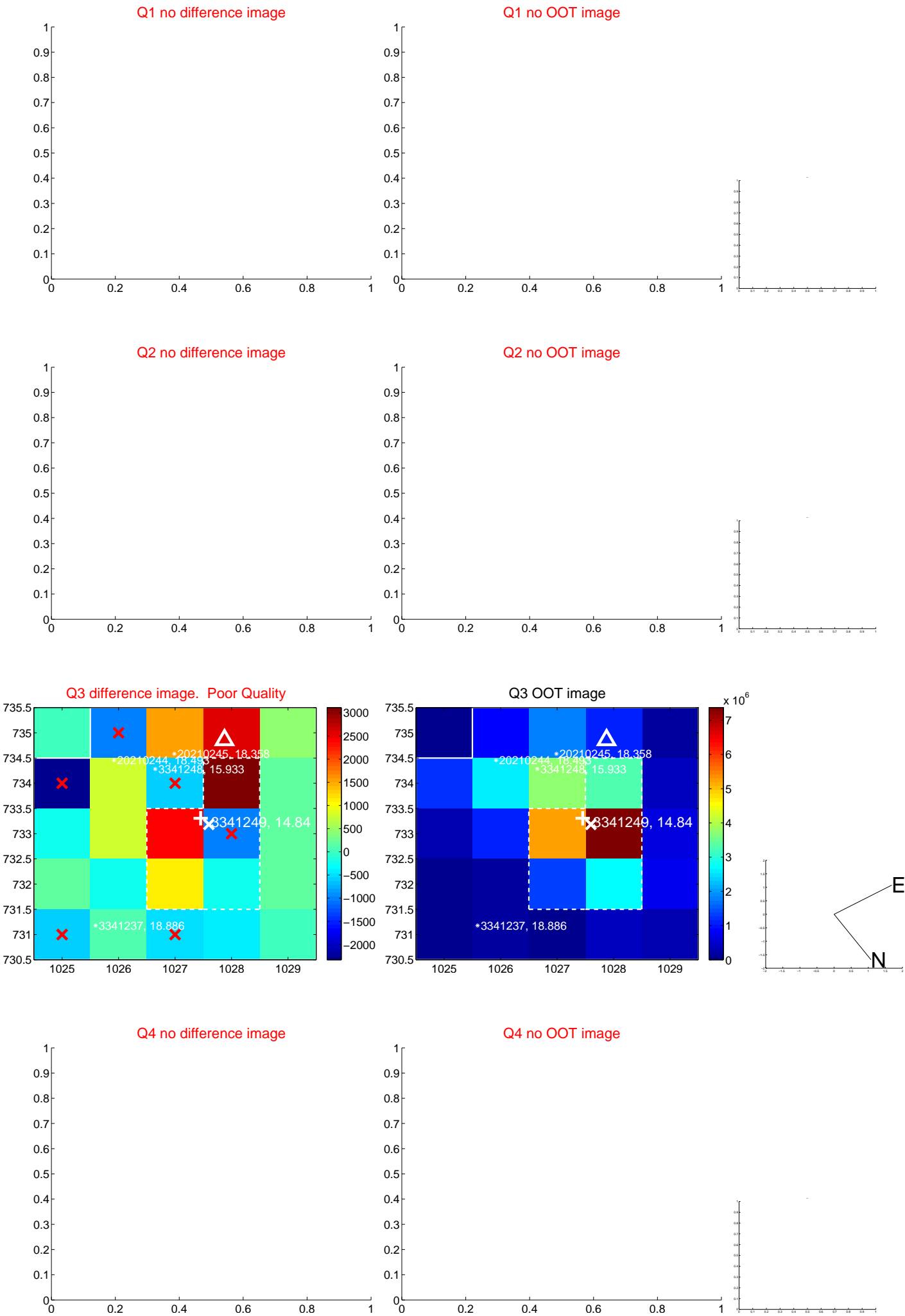
The direct PRF centroid is offset from the target star catalog position by about 0.36 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	6.202 ± 2.195	2.83	4.462 ± 3.204	-4.307 ± 0.173
PRF-fit source offset from KIC position	6.571 ± 1.506	4.36	4.244 ± 1.249	-5.017 ± 1.666
photometric centroid source offset	3.24 ± 1.67	1.95	-1.11 ± 1.34	-3.05 ± 1.70



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.

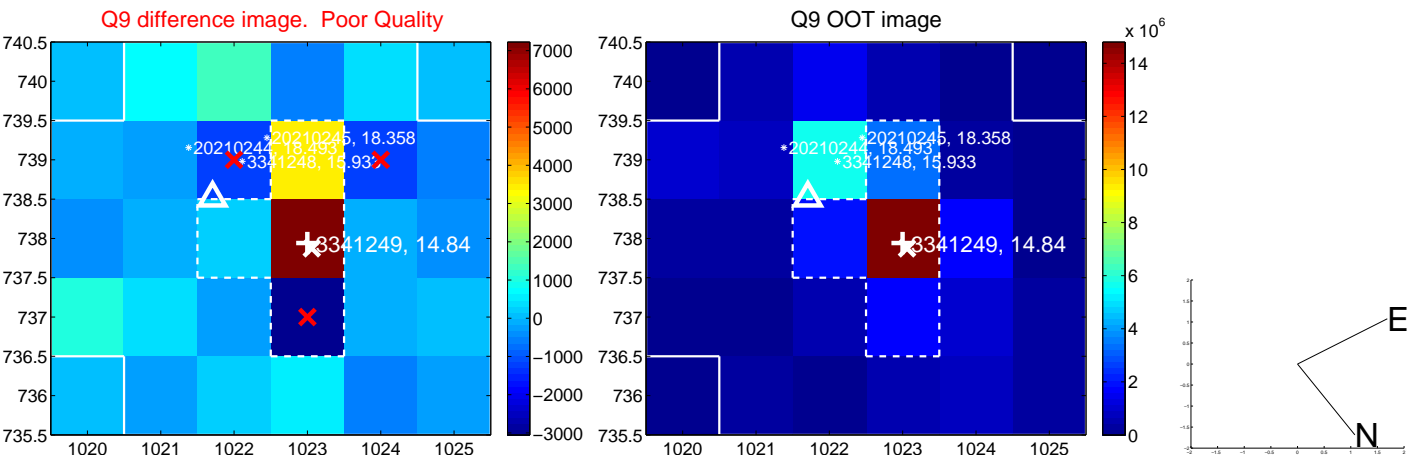
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



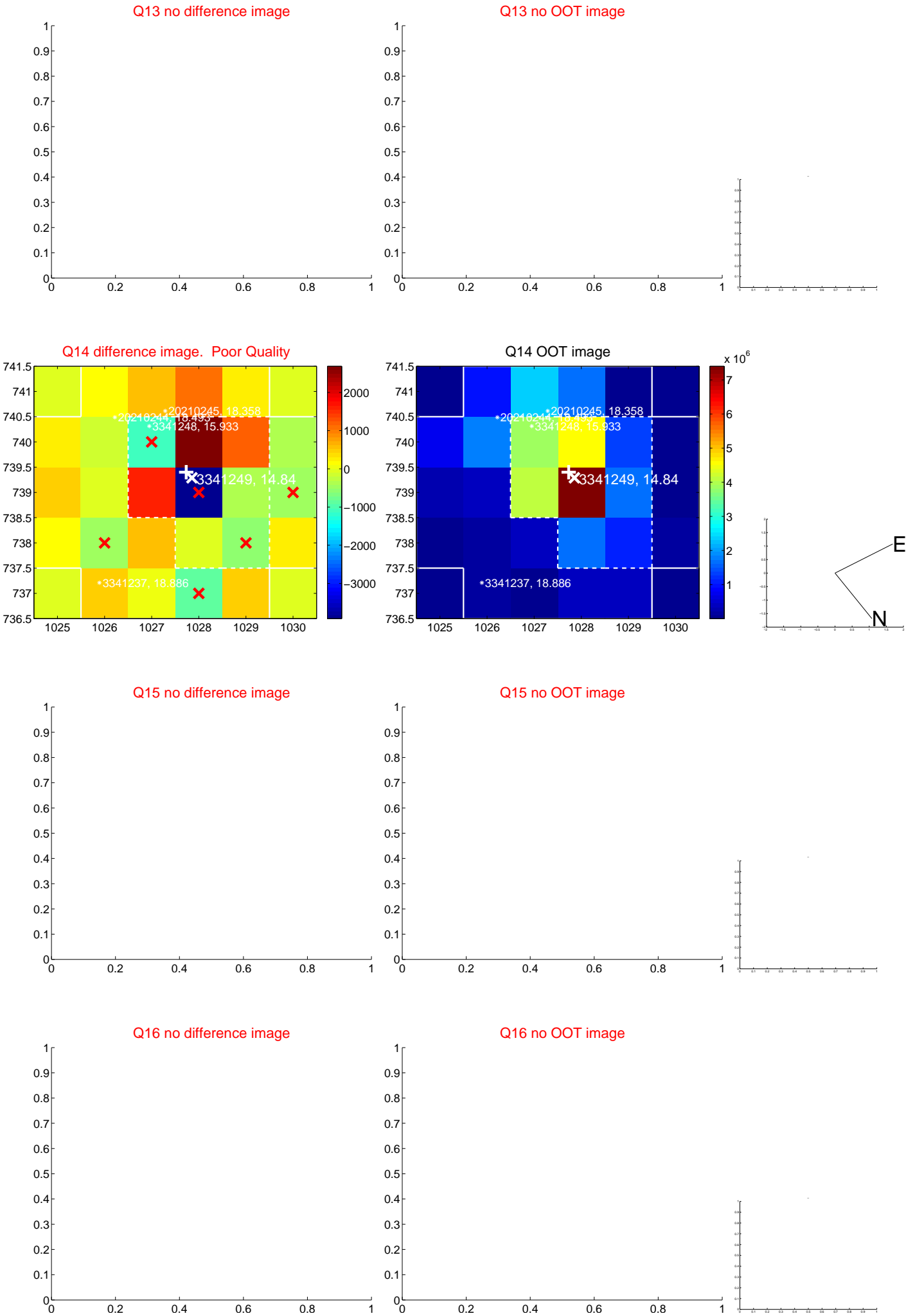
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



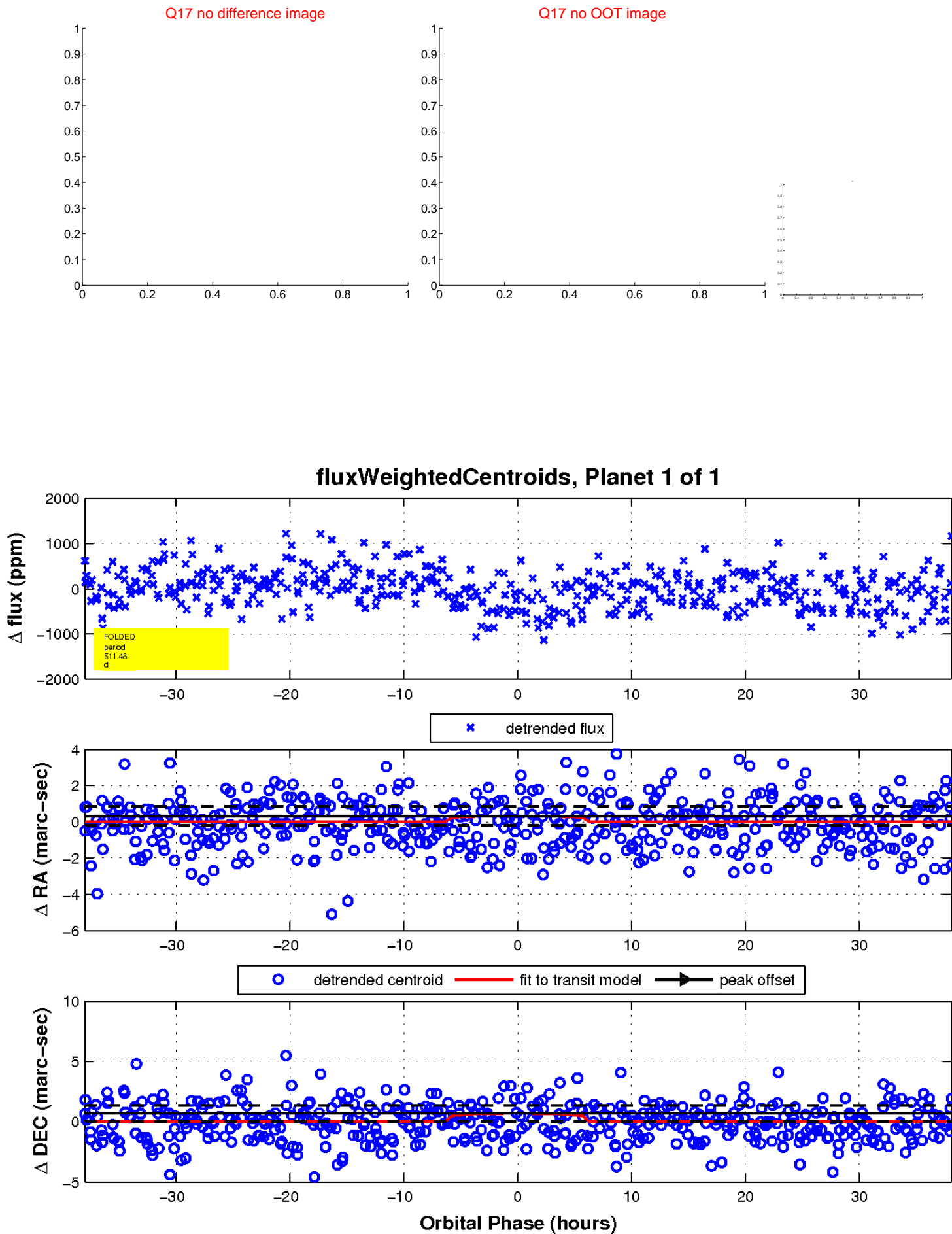
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white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination

