

KIC 011342550

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})
011342550-01	OBS	No	327.154959	197.119438	551.8	21.476	54.4	8.0	1.02	5645	2.42	1.14

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011342550-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—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.

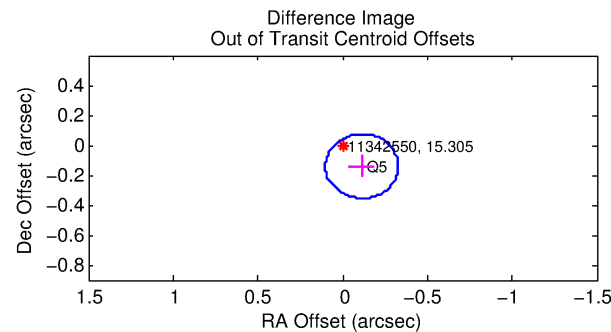
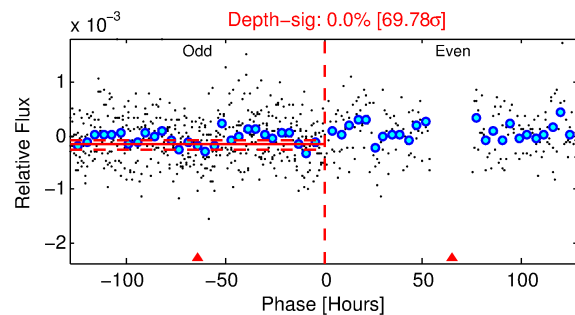
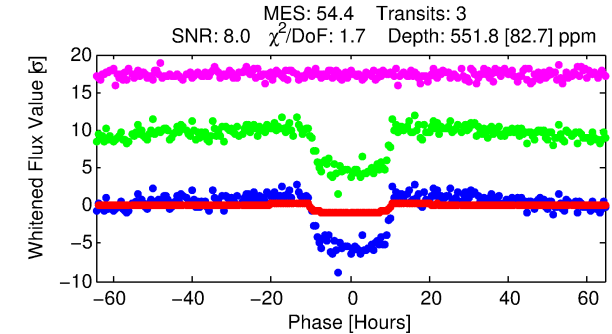
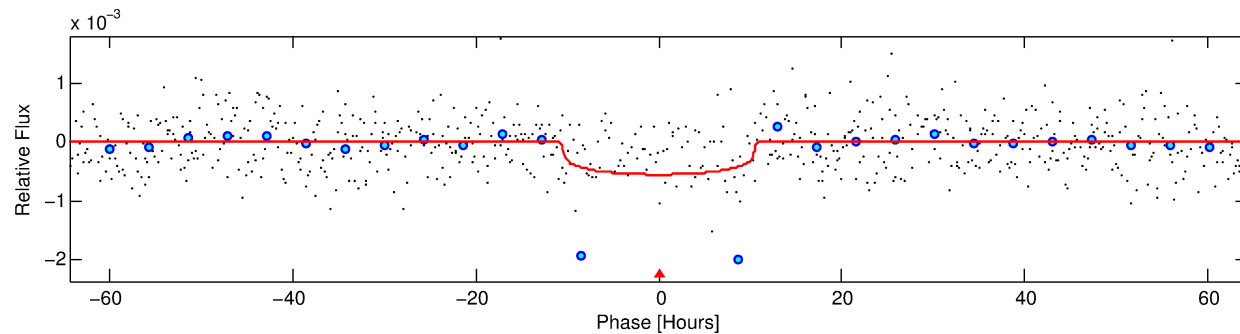
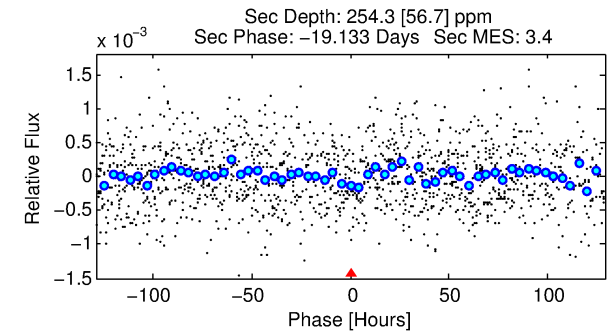
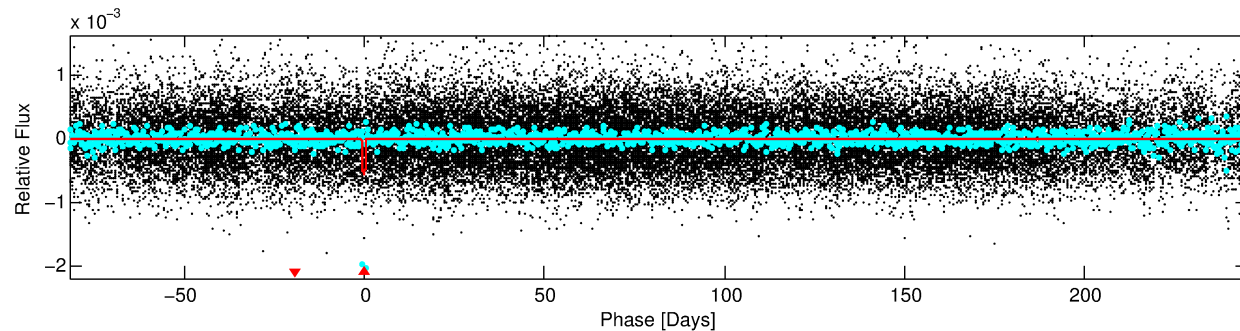
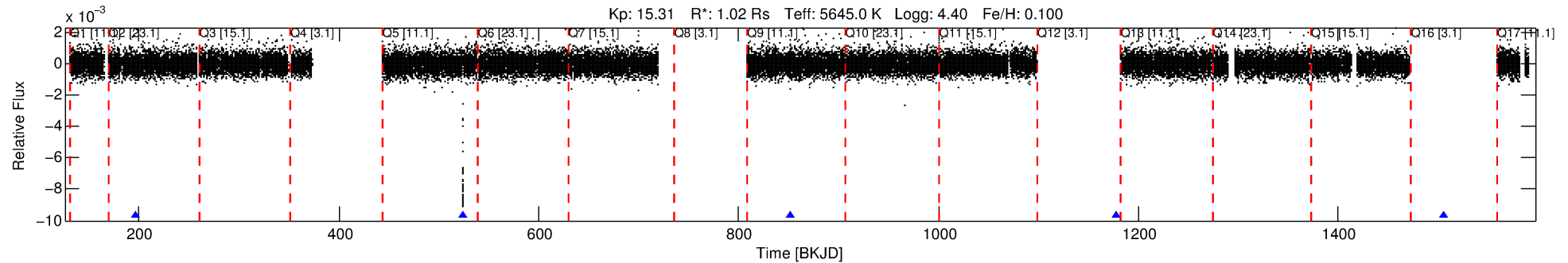
Ephemeris Match Information For 011342550-01

No Significant Match Found

DV One-Page Summary

KIC: 11342550 Candidate: 1 of 1 Period: 327.155 d

KOI: K01421 Corr: No Ephemeris Match



DV Fit Results:

Period = 327.15496 [0.02611] d
Epoch = 197.1194 [0.0323] BKJD
Rp/R* = 0.0216 [0.0201]
a/R* = 109.89 [421.65]
b = 0.39 [8.40]
Seff = 1.14 [0.23]
Teq = 264 [13] K
Rp = 2.42 [2.27] Re
a = 0.9148 [0.1189] AU
Ag = 20046.97 [37691.04] [0.53 σ]
Teffp = 4850 [2268] K [2.02 σ]

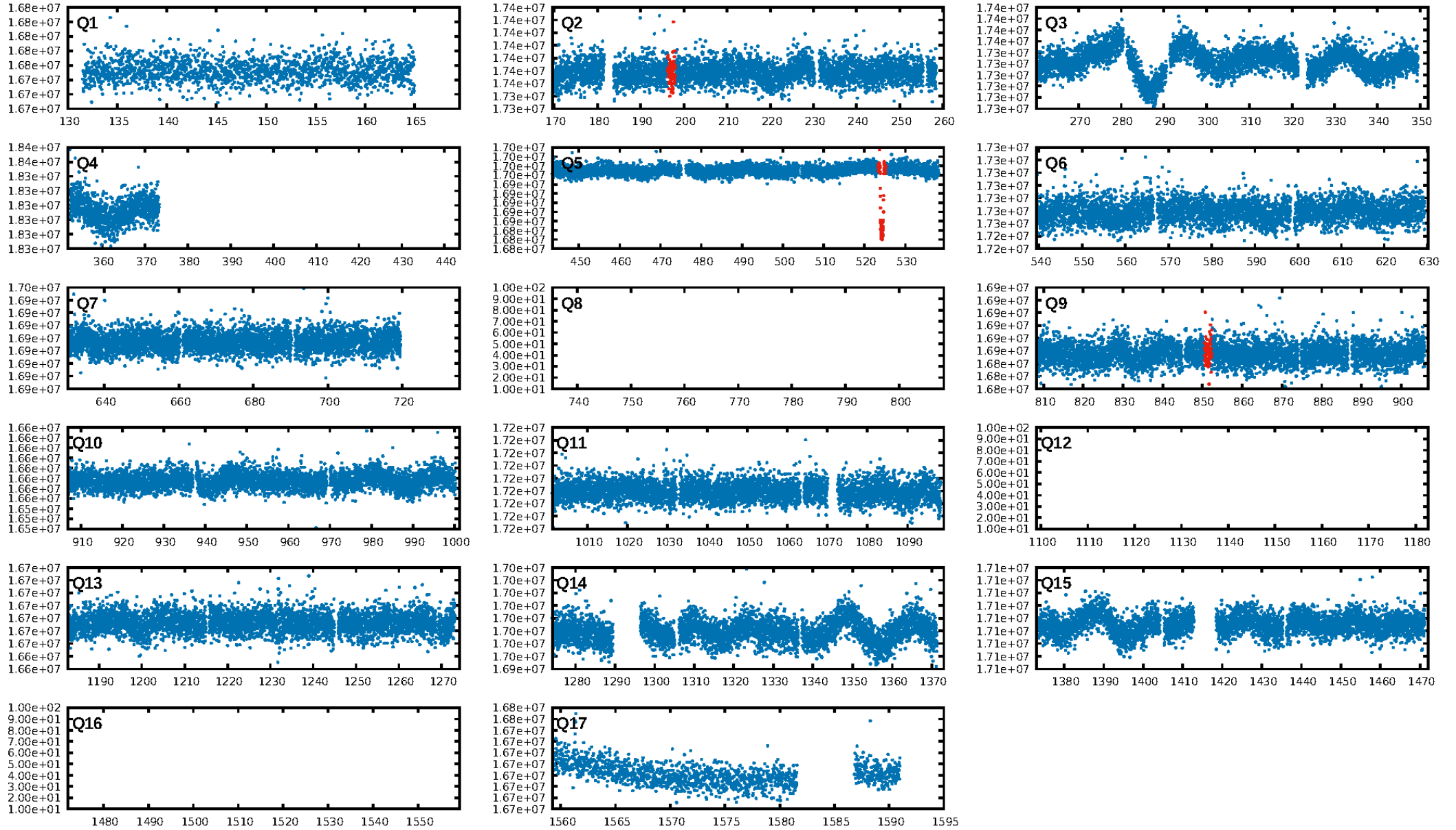
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.4%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 0.00e+00
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 2.011
Centroid-sig: 37.0%
Centroid-so: 0.985 arcsec [0.66 σ]
OotOffset-rm: 0.180 arcsec [2.51 σ]
OotOffset-st: 0/0/0/1 [1]
KicOffset-rm: 0.150 arcsec [2.10 σ]
KicOffset-st: 0/0/0/1 [1]
DiffImageQuality-fgm: 1.00 [1/1]
DiffImageOverlap-fno: 1.00 [3/3]

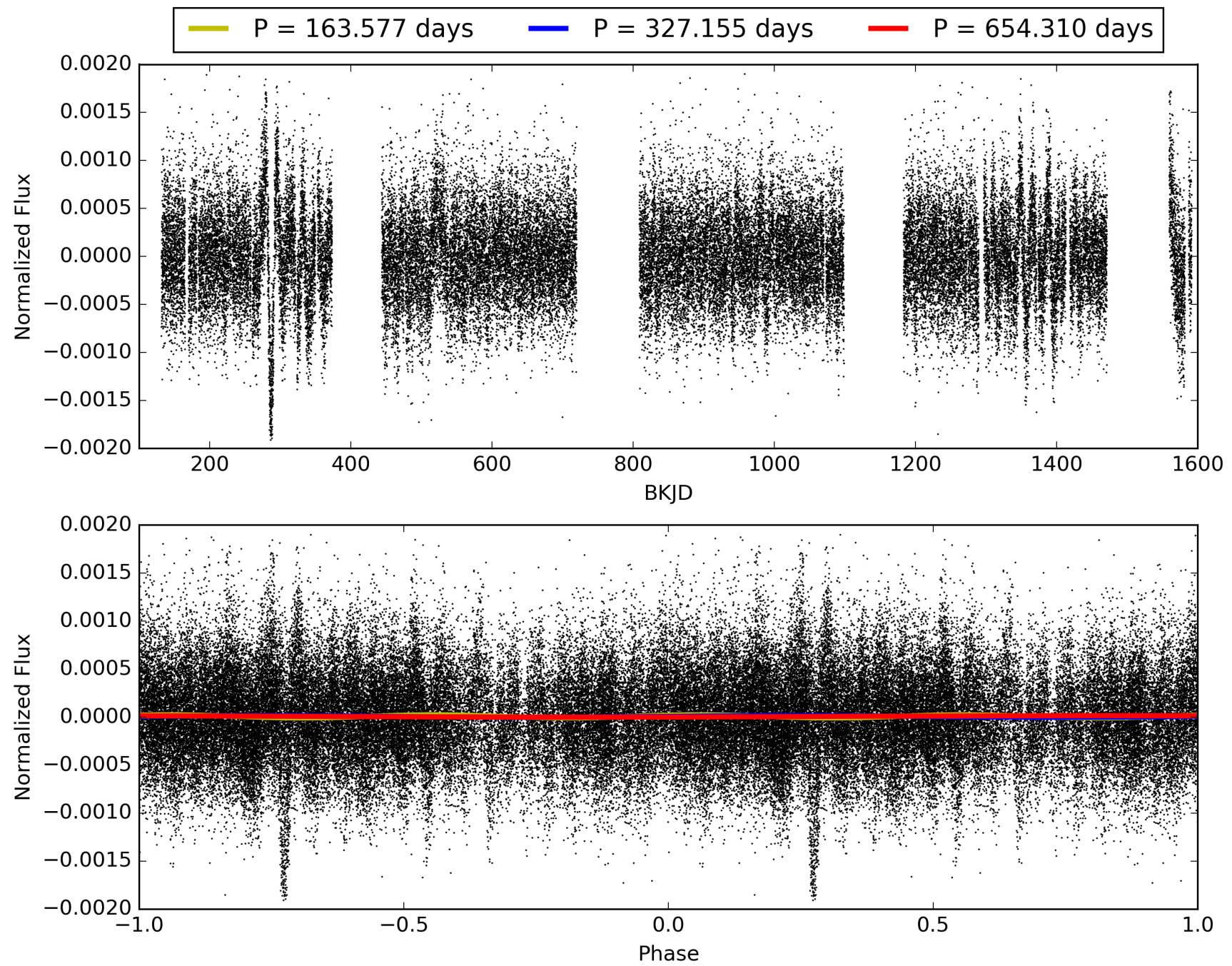
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 21:37:24 Z

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

TCE 011342550-01, PDC Light Curves

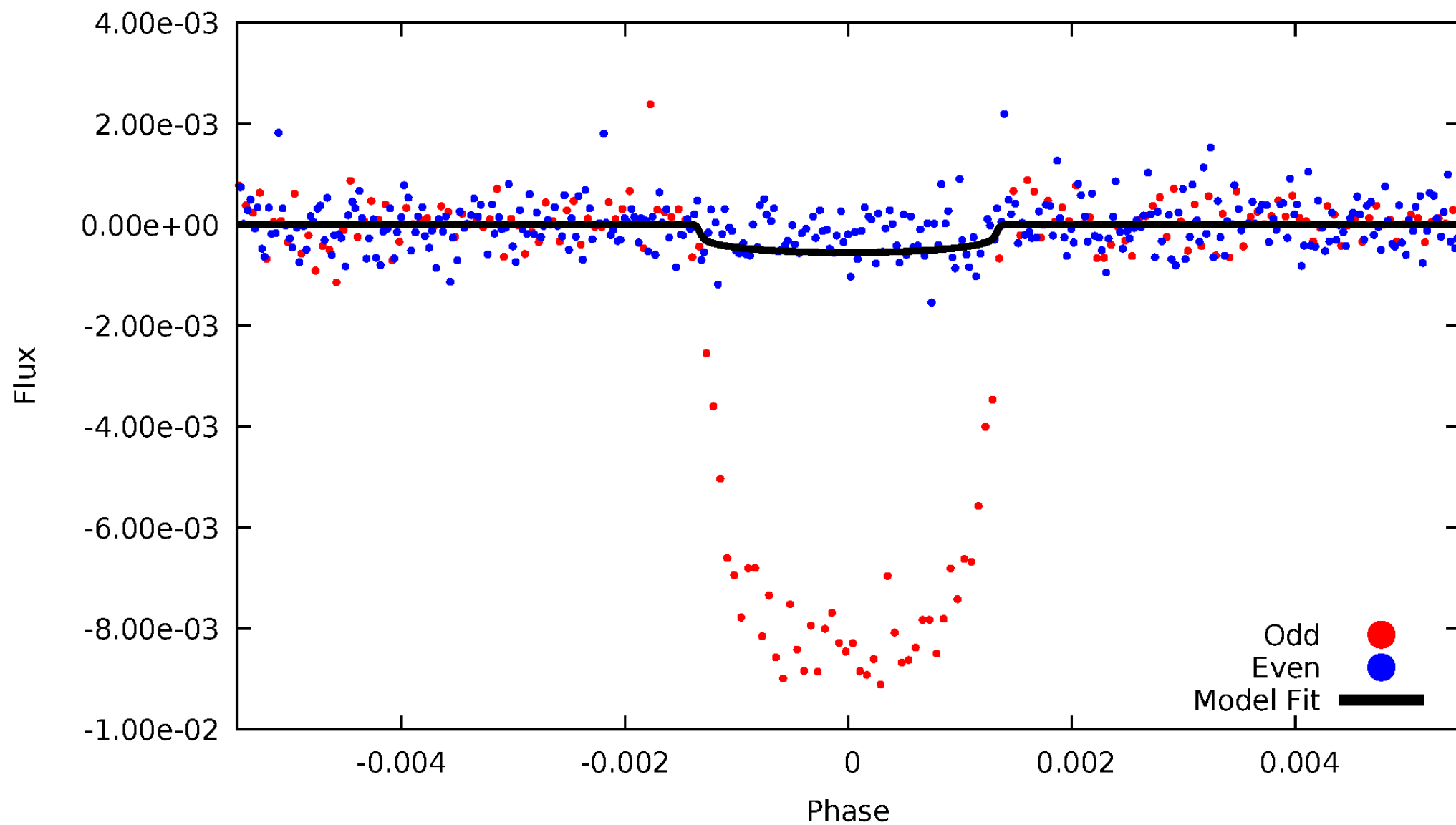


TCE 011342550-01



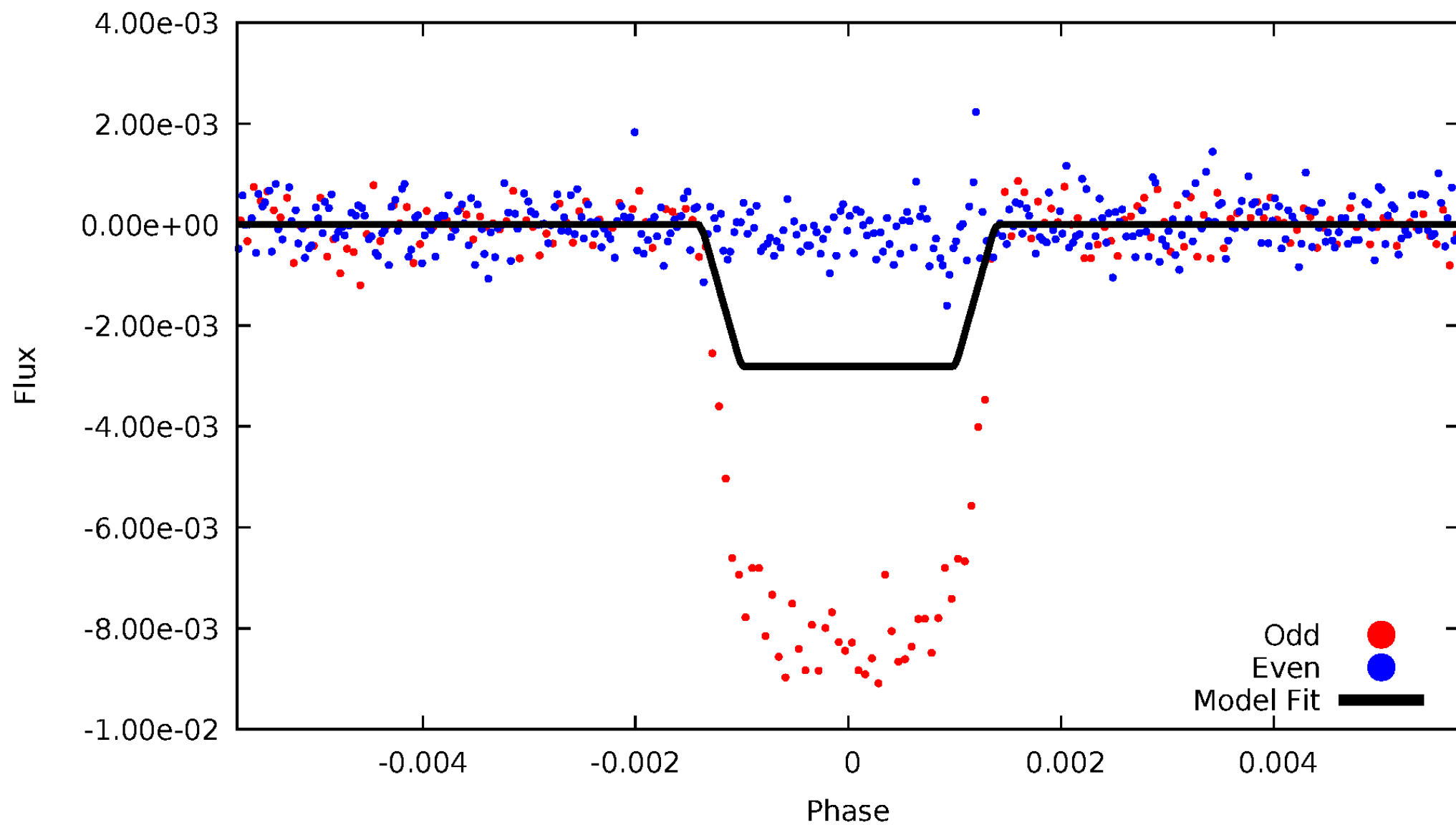
DV Odd/Even

TCE 011342550-01

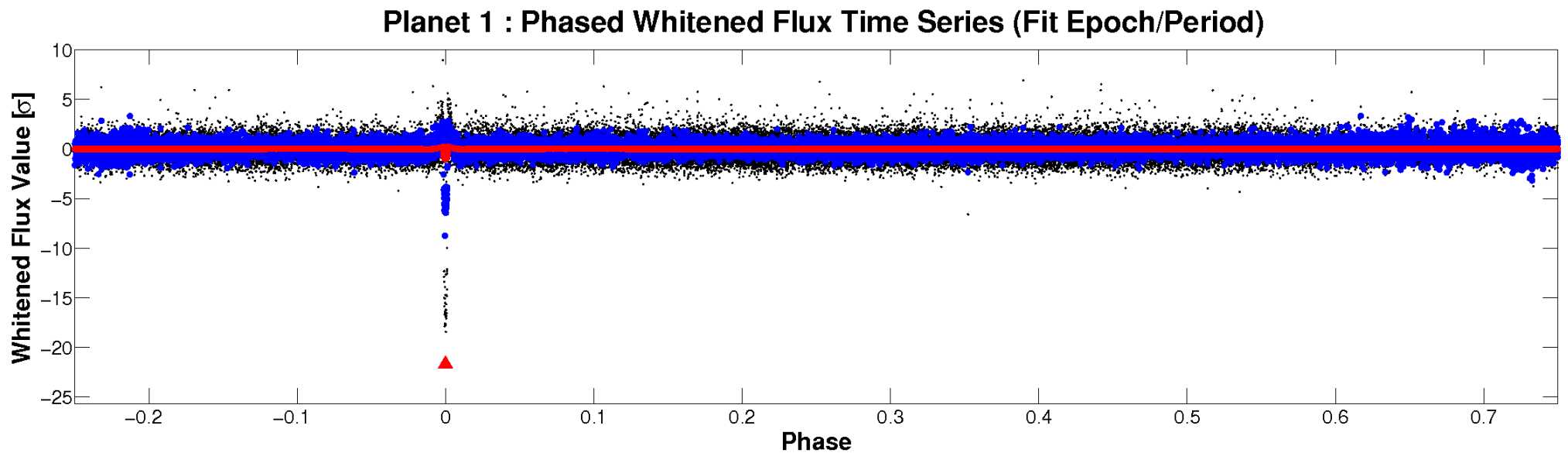
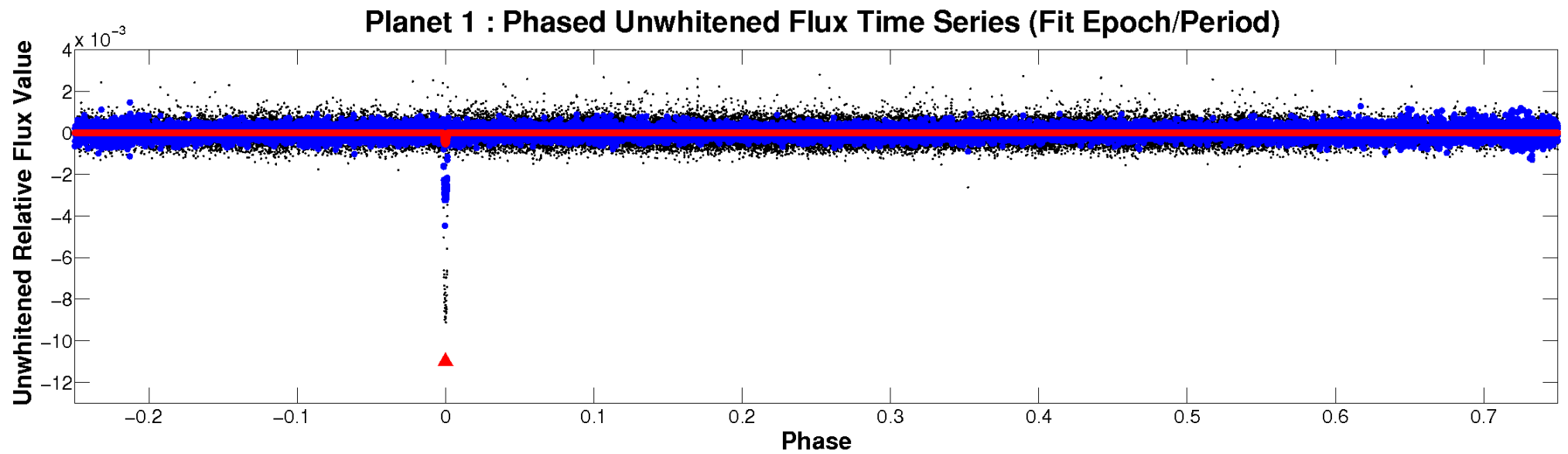


ALT Odd/Even

TCE 011342550-01

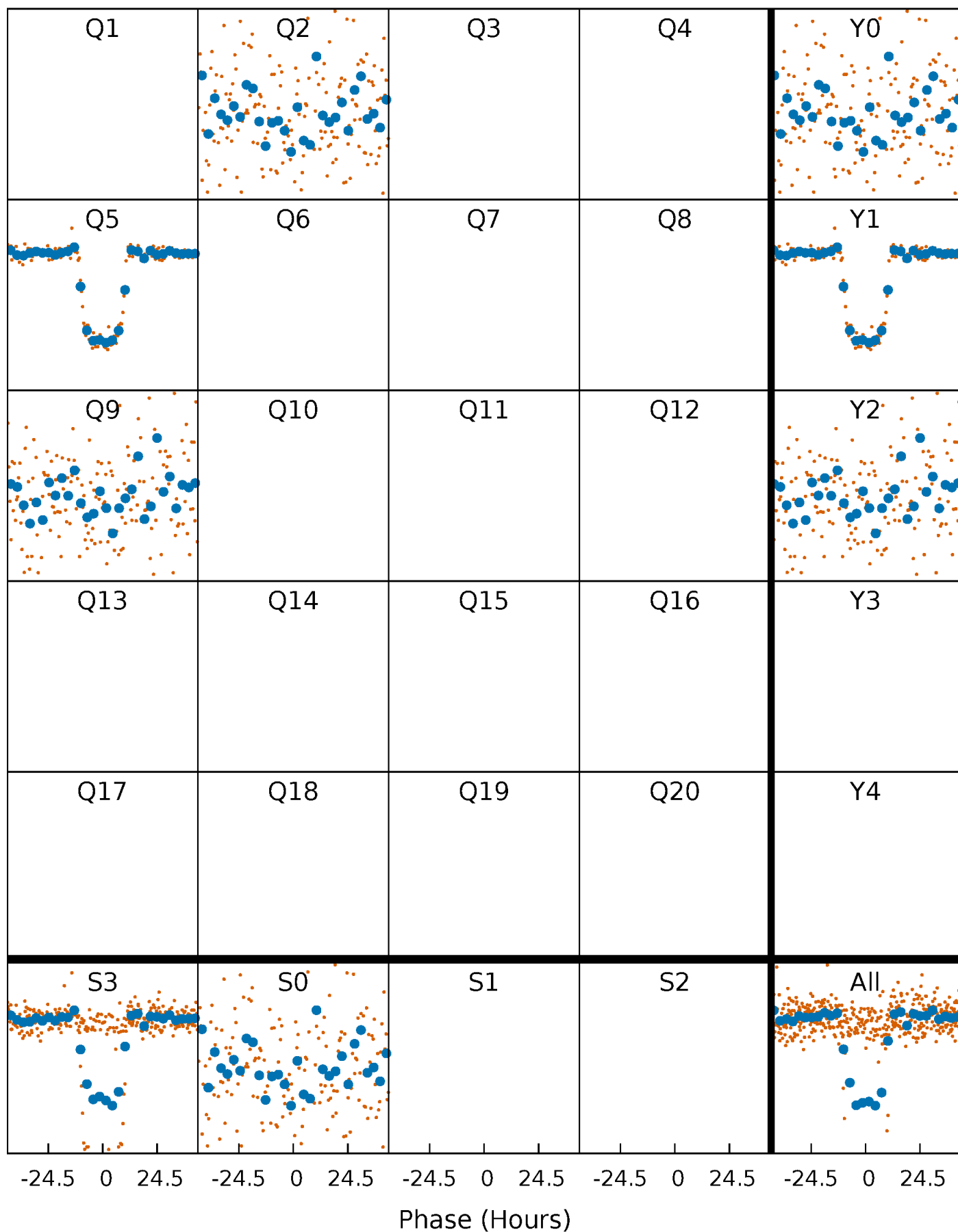


Non-Whitened Vs. Whitened Light Curve



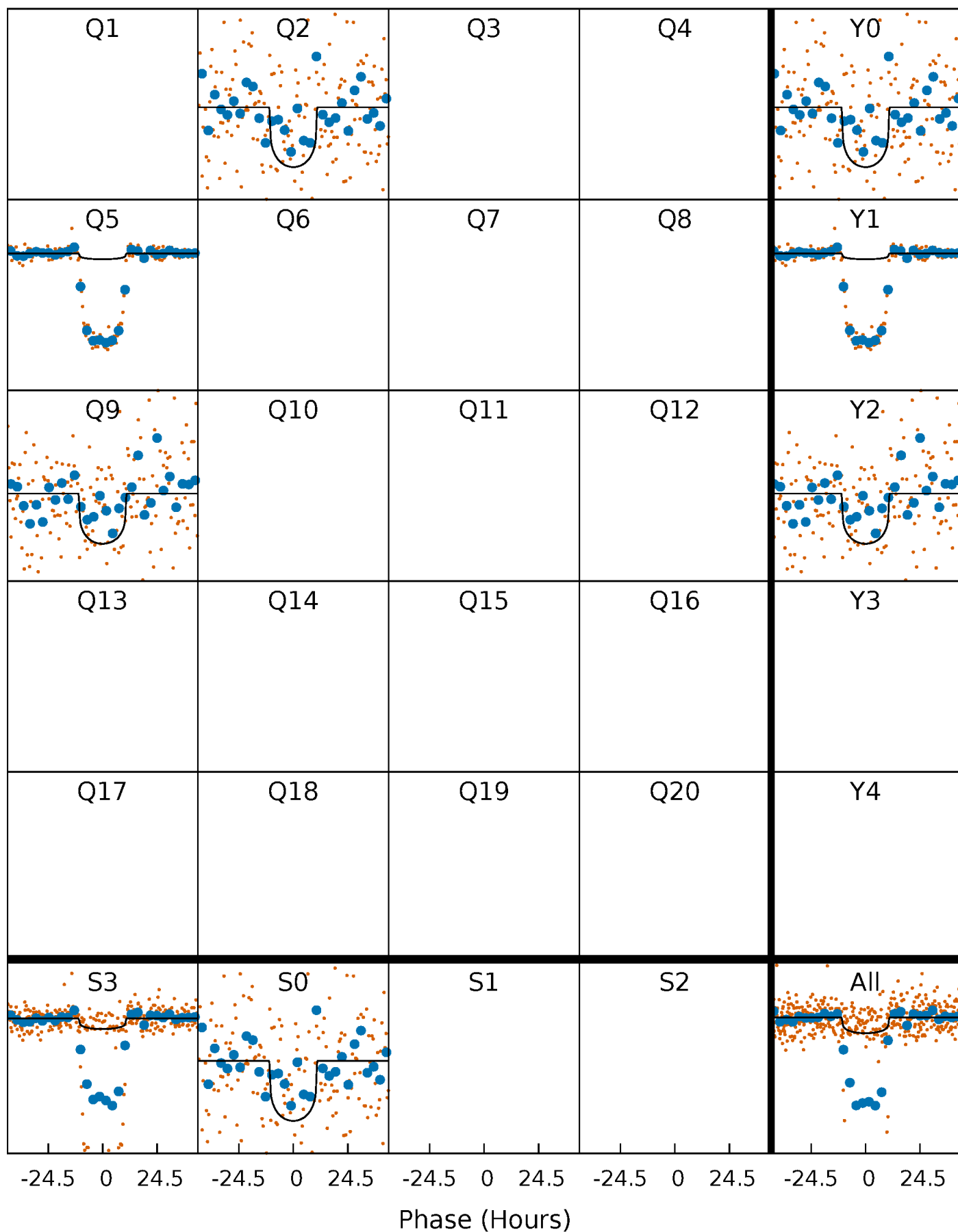
PDC Quarter-Phased Transit Curves

TCE 011342550-01 P=327.154959 Days $T_0=197.119439$ (BKJD)



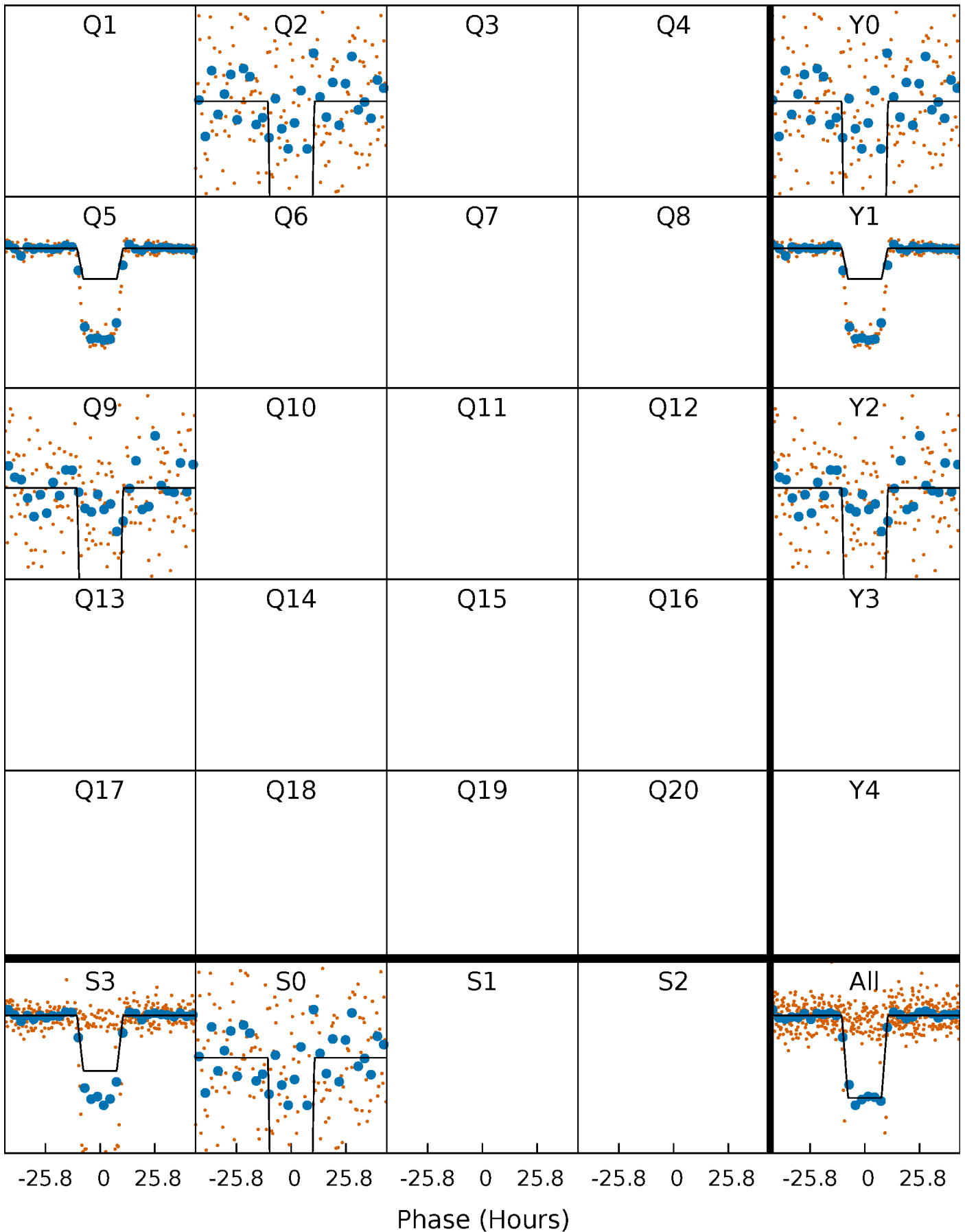
DV Quarter-Phased Transit Curves

TCE 011342550-01 P=327.154959 Days $T_0=197.119439$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

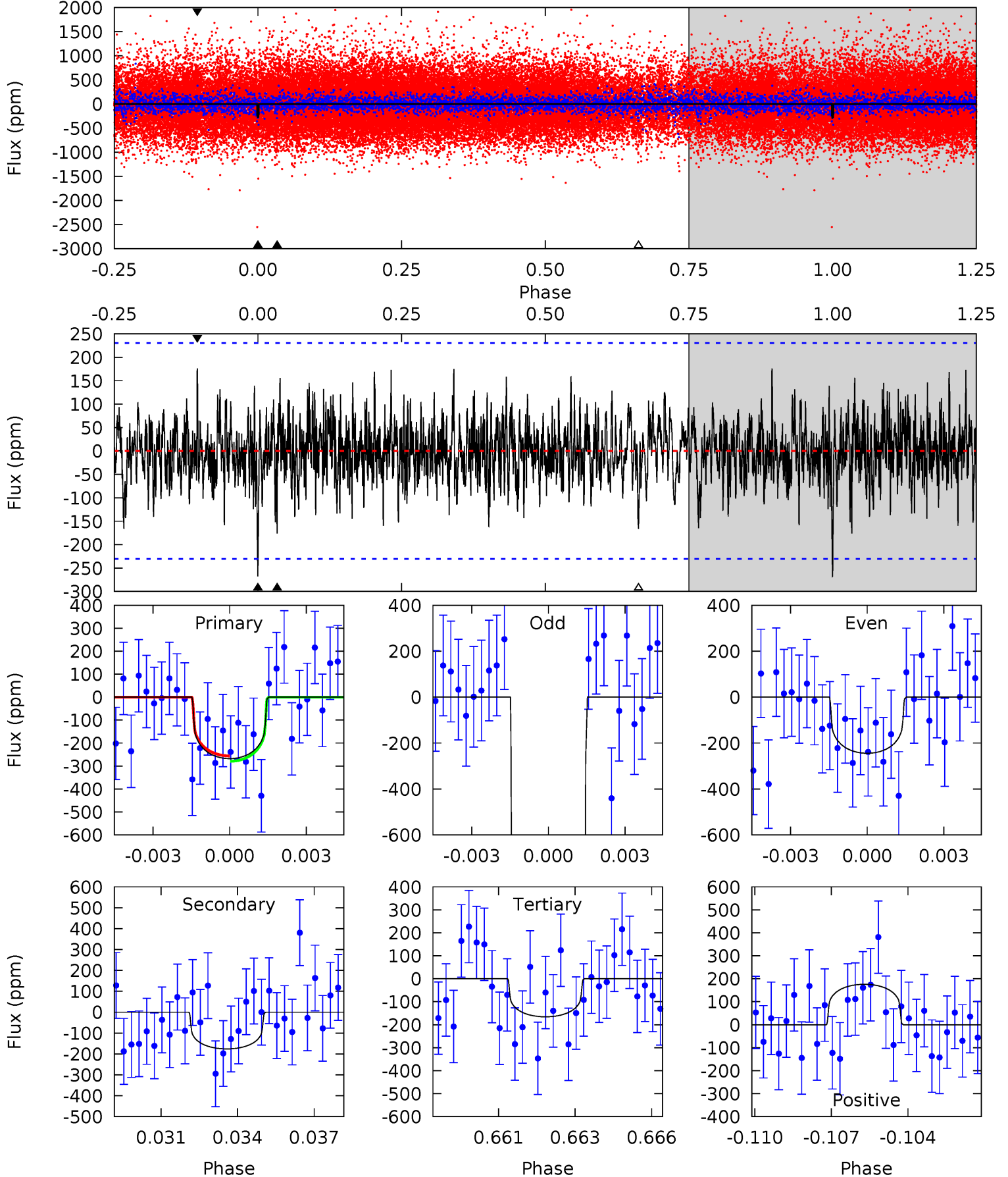
TCE 011342550-01 P=327.093617 Days $T_0=197.183016$ (BKJD)



DV Model-Shift Uniqueness Test

011342550-01, P = 327.154959 Days, E = 197.119439 Days

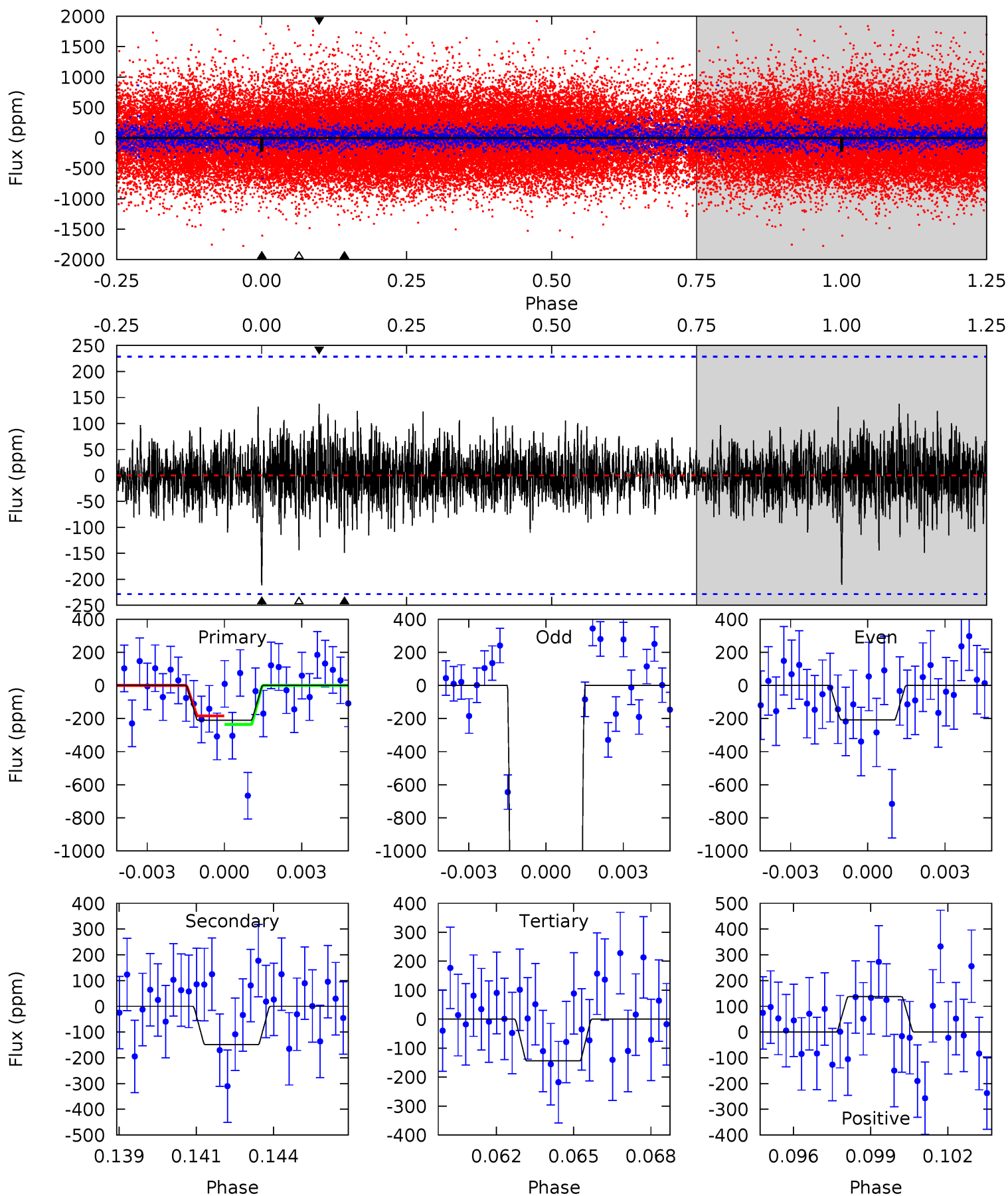
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.11	4.02	3.78	4.02	5.26	2.99	1.19	2.33	2.10	0.23	-0.00	105.9	11.9	0.40	0.27



Alt Model-Shift Uniqueness Test

011342550-01, P = 327.093617 Days, E = 197.183016 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
4.84	3.42	3.32	3.17	5.26	2.99	0.84	1.53	1.68	0.11	0.26	103.7	11.3	0.40	0.59



Stellar Parameters For KIC 011342550

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5645^{+76}_{-76}	$4.396^{+0.090}_{-0.110}$	$0.100^{+0.150}_{-0.150}$	$1.025^{+0.152}_{-0.101}$	$0.955^{+0.065}_{-0.055}$	$1.249^{+0.471}_{-0.404}$
	+1%/-1%	+2%/-3%	+150%/-150%	+15%/-10%	+7%/-6%	+38%/-32%
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 011342550-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-176 ± 44	$2.86^{+1.98}_{-1.70}$	369^{+16}_{-12}	4255^{+2063}_{-697}	9825^{+50823}_{-6532}
Alt.	-149 ± 43	$5.97^{+2.35}_{-2.29}$	368^{+14}_{-12}	3252^{+562}_{-315}	1886^{+3057}_{-987}

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 $A_{obs} \gg 1.0$

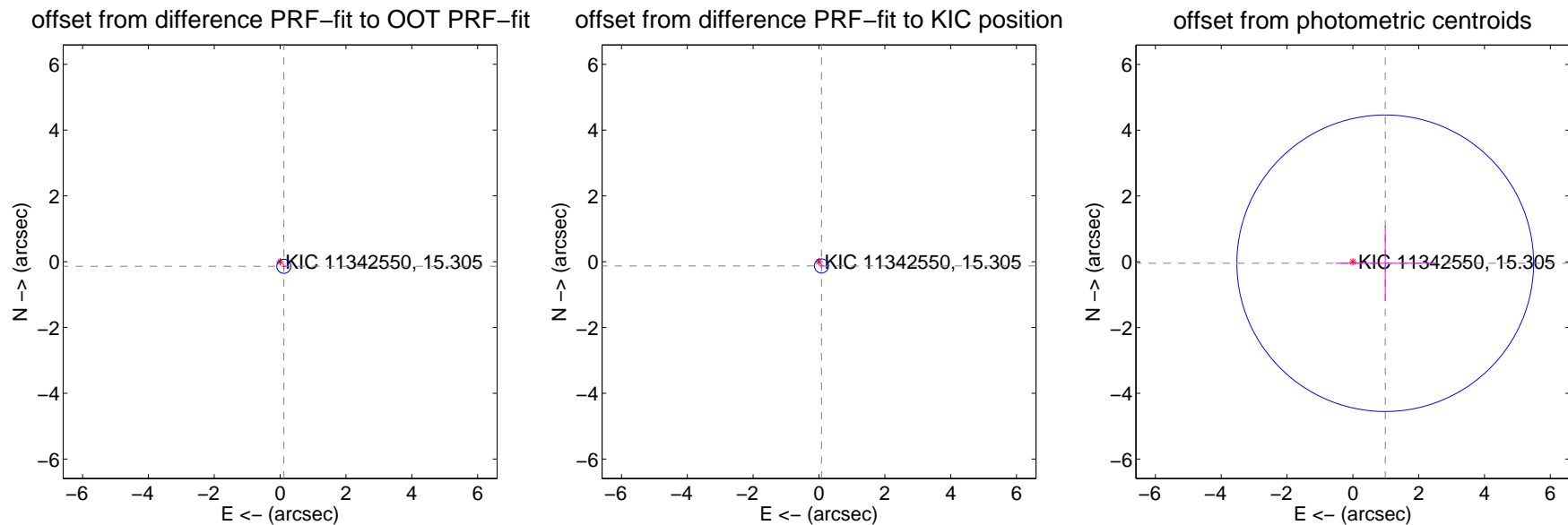
DV Centroid Data

Supplemental centroid analysis for 011342550-01. Kepler magnitude: 15.30. Transit SNR 8.01

There are 1 quarters with good PRF difference image offsets

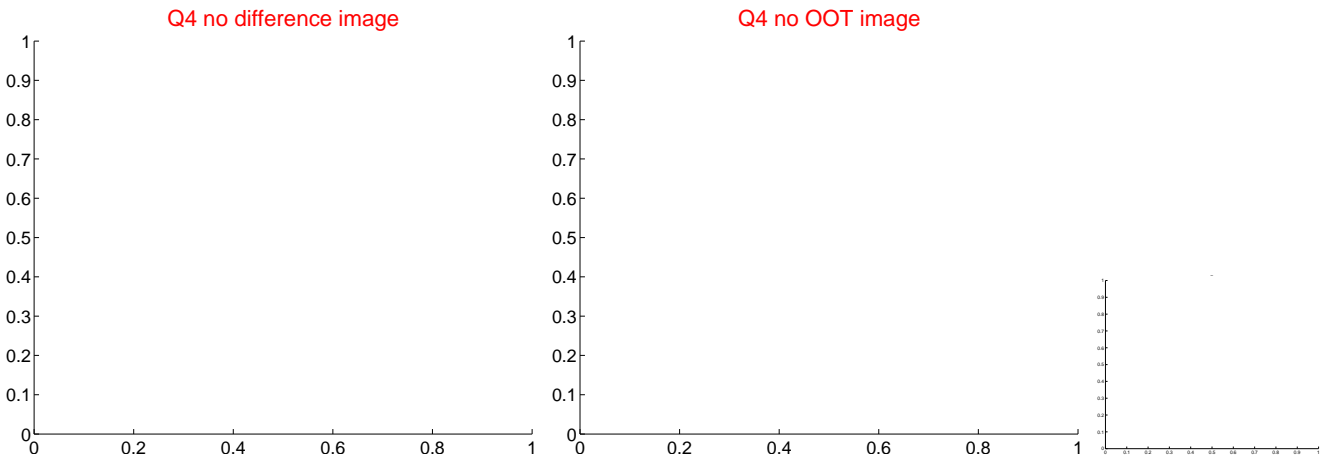
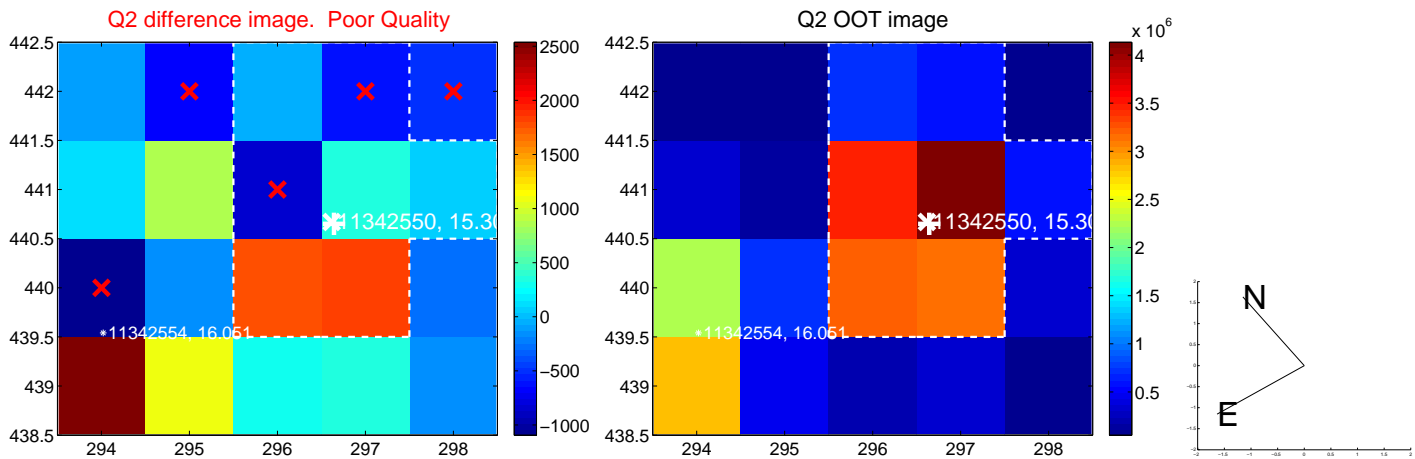
The direct PRF centroid is offset from the target star catalog position by about 0.04 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.180 ± 0.072	2.51	-0.113 ± 0.071	-0.140 ± 0.072
PRF-fit source offset from KIC position	0.150 ± 0.072	2.10	-0.076 ± 0.071	-0.130 ± 0.072
photometric centroid source offset	0.98 ± 1.50	0.66	-0.98 ± 1.50	-0.05 ± 1.14

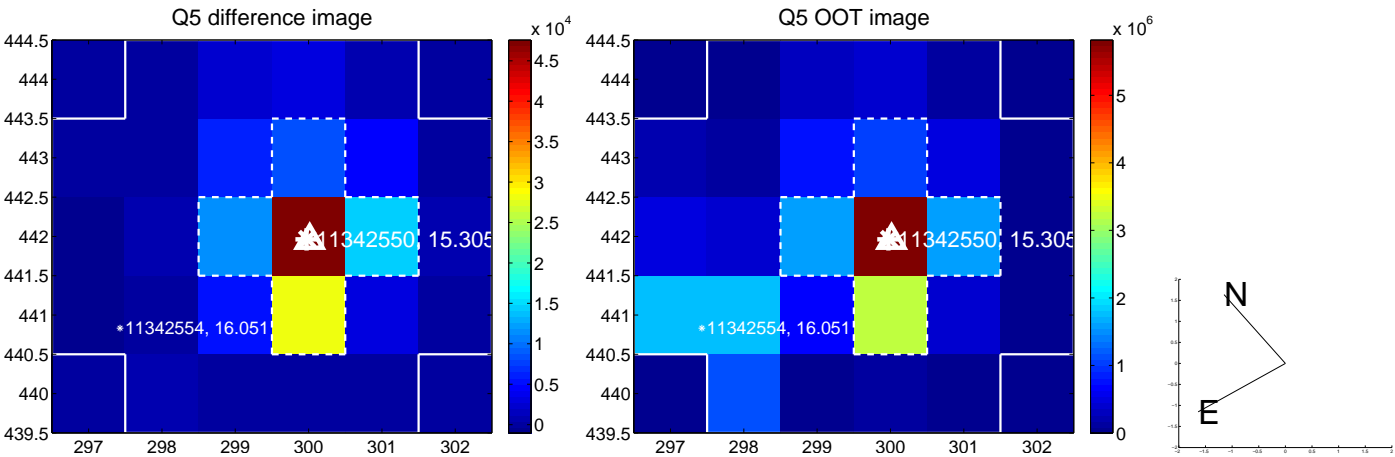


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

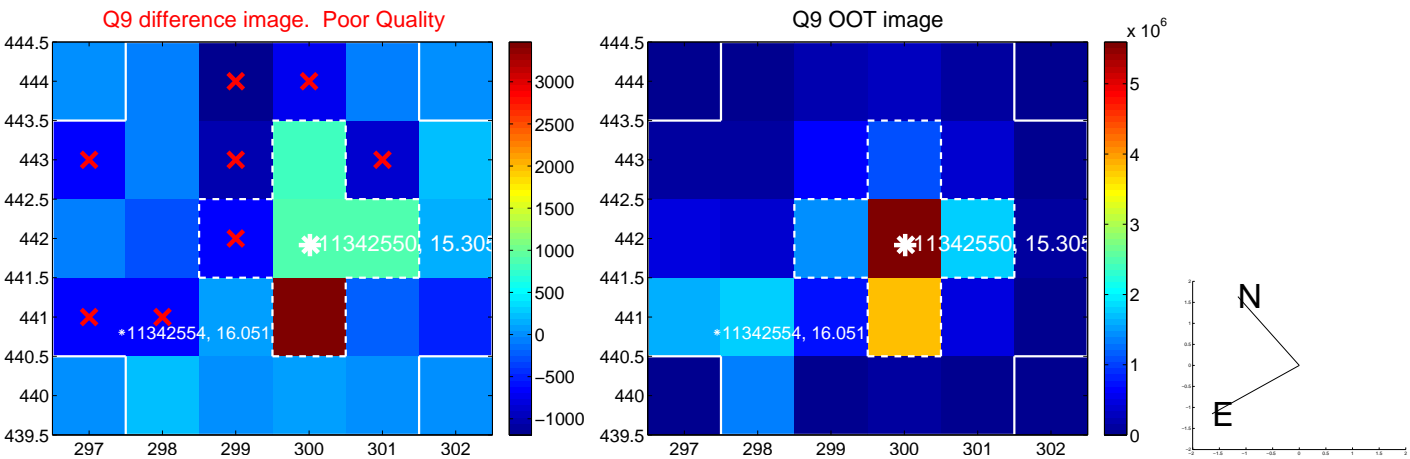
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



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



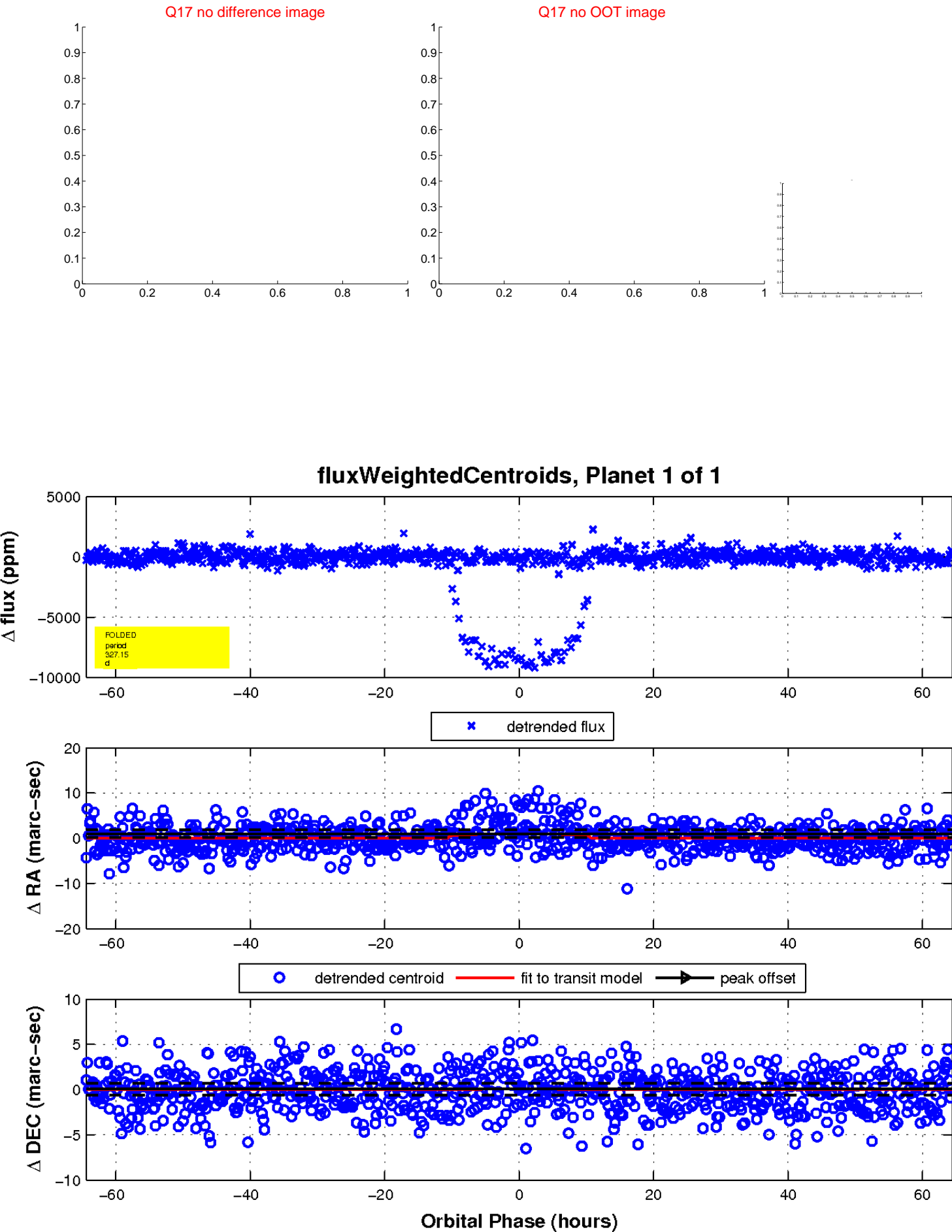
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

