

KIC 011152511

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})
011152511-01	OBS	5874.01	287.331436	360.842226	400.6	12.854	15.6	15.7	1.01	5426	2.14	1.18

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011152511-01	OBS	PC	0.53	0	0	0	0	NO_COMMENT

Notes: OBS = Observed. INJ = Injected. INV = Inverted. SCR = Scrambled.

N = Not Transit-Like. S = Stellar Eclipse. C = Centroid Offset. E = Ephemeris Match.

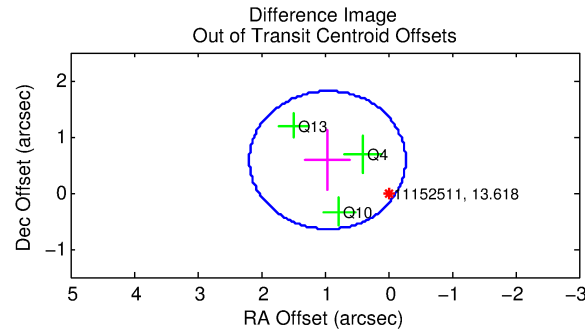
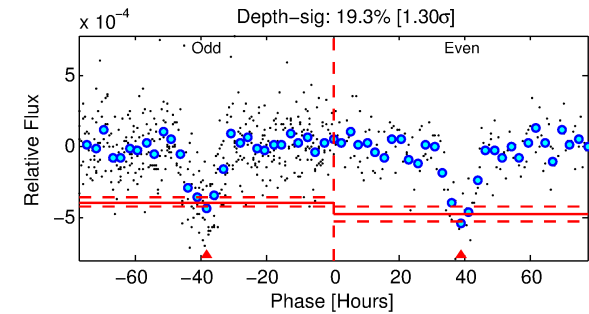
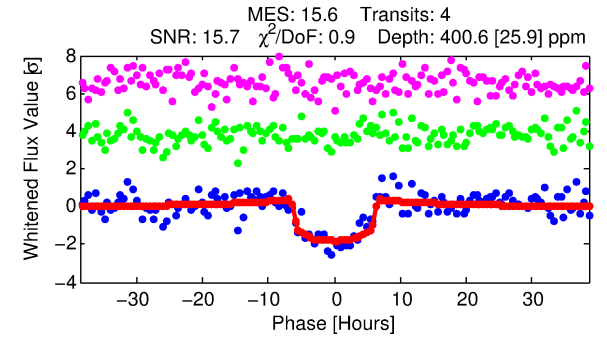
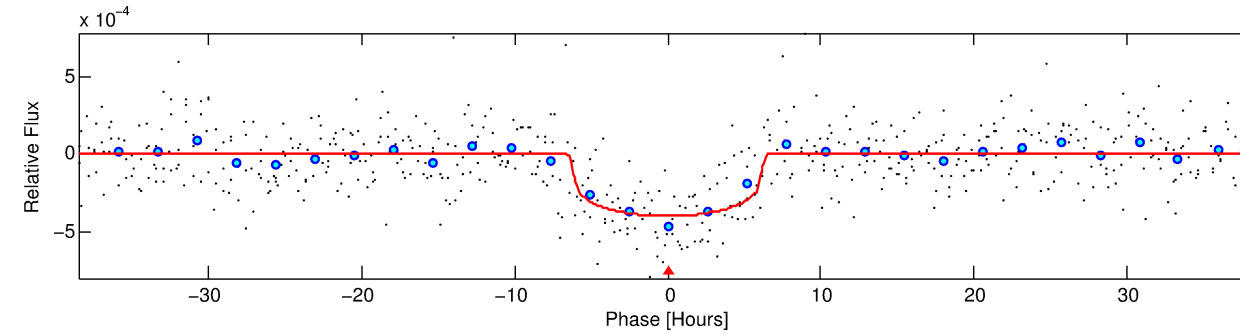
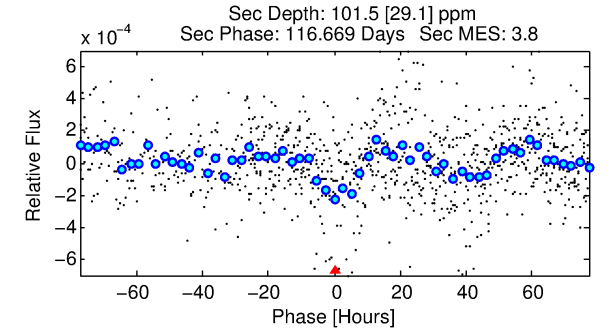
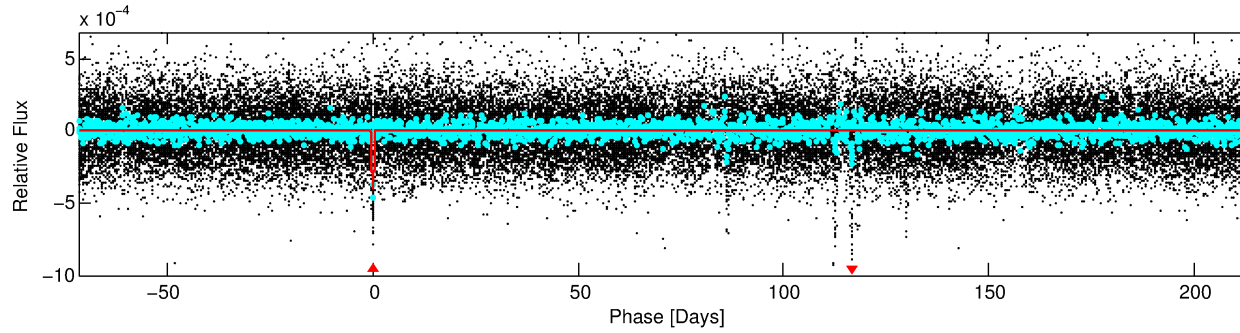
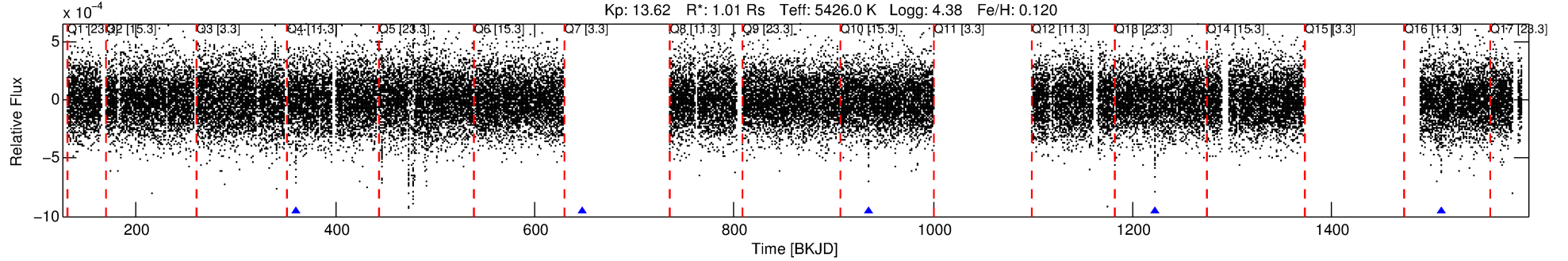
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011152511-01

No Significant Match Found

DV One-Page Summary

KIC: 11152511 Candidate: 1 of 1 Period: 287.331 d
KOI: K05874.01 Corr: 0.957



DV Fit Results:

Period = 287.33144 [0.00414] d
Epoch = 360.8422 [0.0112] BKJD
Rp/R* = 0.0195 [0.0077]
a/R* = 128.38 [199.99]
b = 0.69 [1.20]
Seff = 1.18 [0.26]
Teq = 266 [14] K
Rp = 2.14 [0.89] Re
a = 0.8178 [0.1037] AU
Ag = 8149.24 [7066.58] [1.15σ]
Teffp = 3902 [823] K [4.42σ]

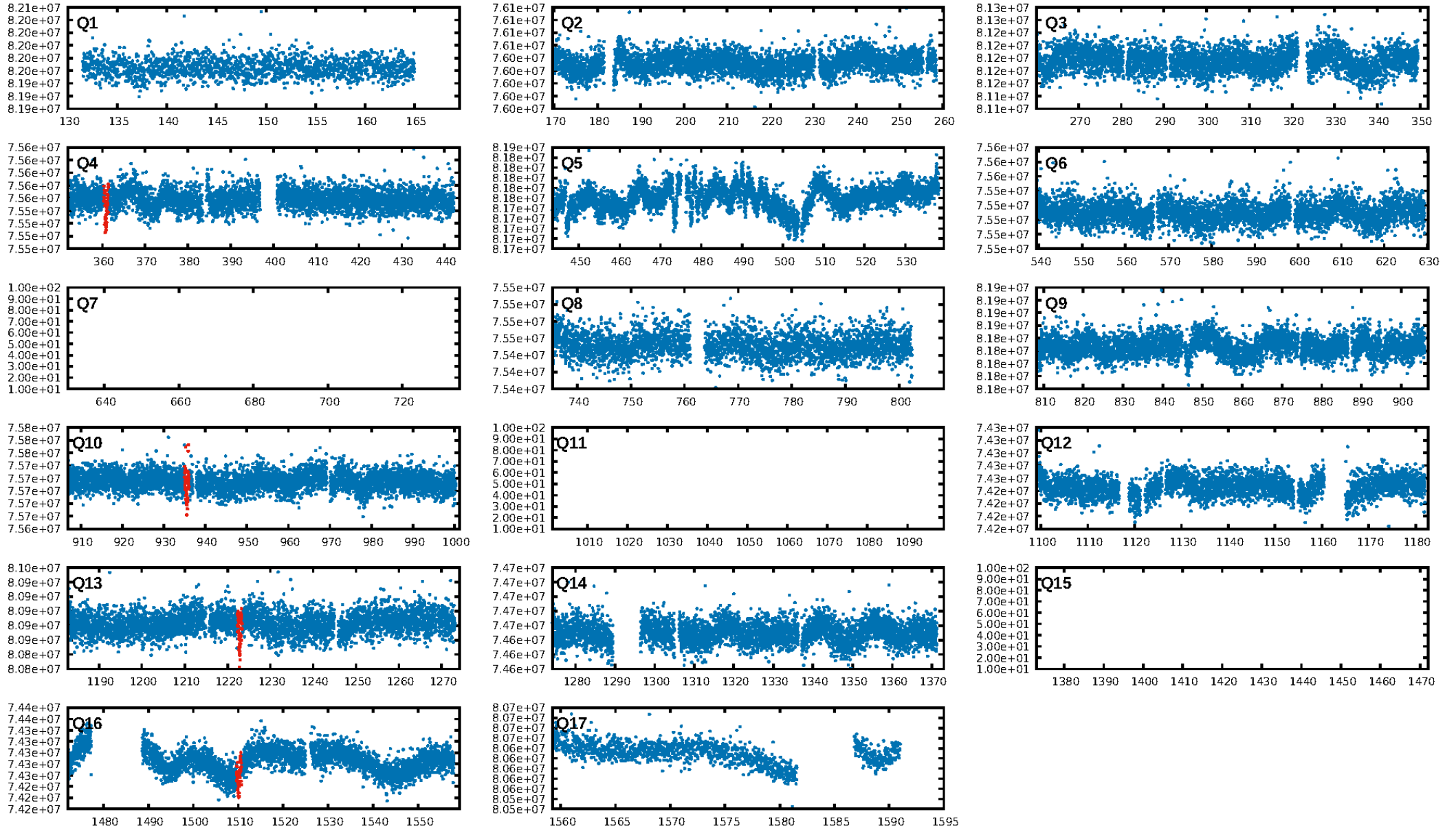
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 39.2%
ModelChiSquareGof-sig: 99.9%
Bootstrap-pfa: 2.22e-25
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: 4.476
Centroid-sig: 62.9%
Centroid-so: 0.748 arcsec [0.75σ]
OotOffset-rm: 1.116 arcsec [2.73σ]
OotOffset-st: 1/0/1/1 [3]
KicOffset-rm: 1.207 arcsec [2.65σ]
KicOffset-st: 1/0/1/1 [3]
DiffImageQuality-fgm: 1.00 [3/3]
DiffImageOverlap-fno: 1.00 [3/3]

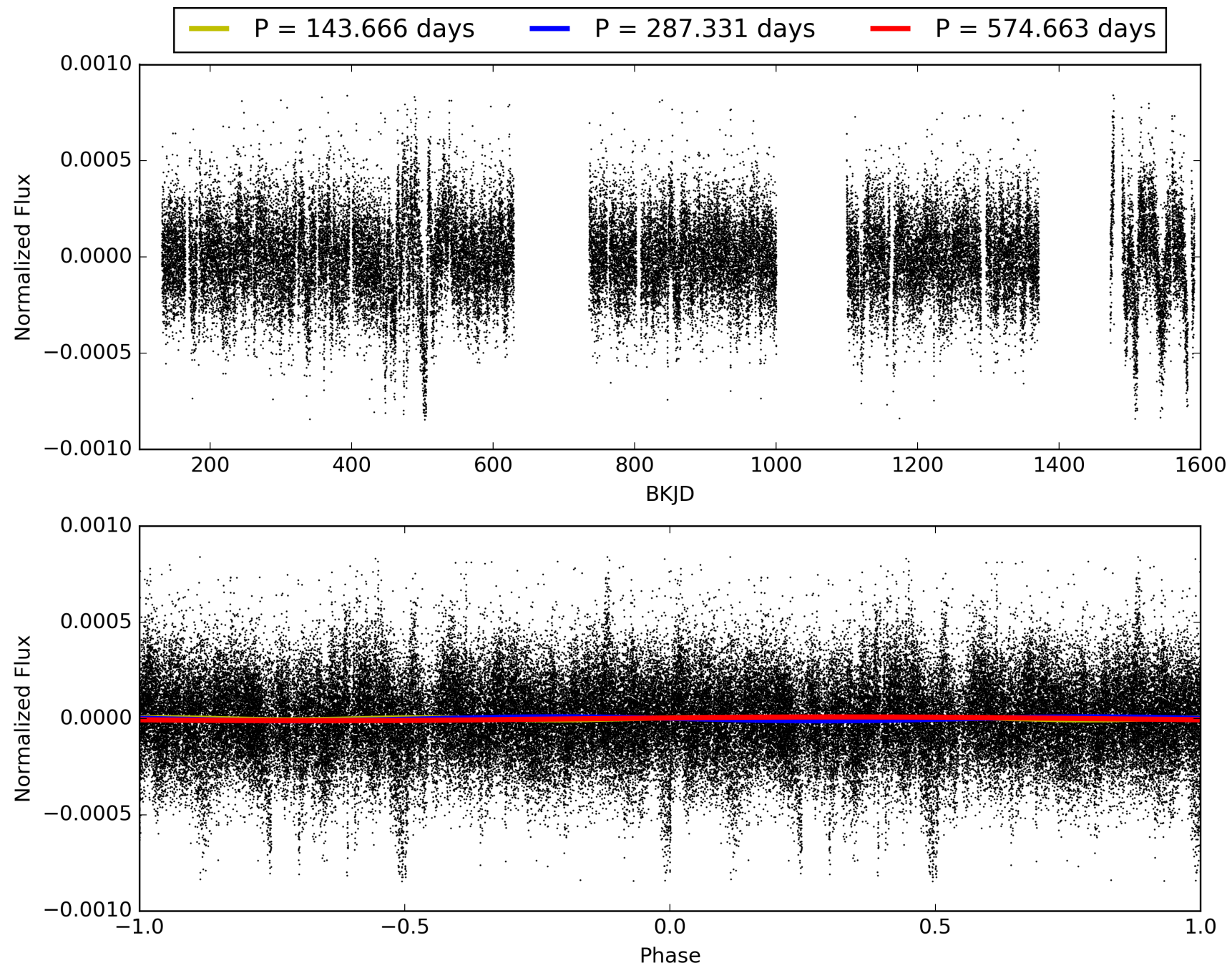
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 01:08:14 Z

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

TCE 011152511-01, PDC Light Curves

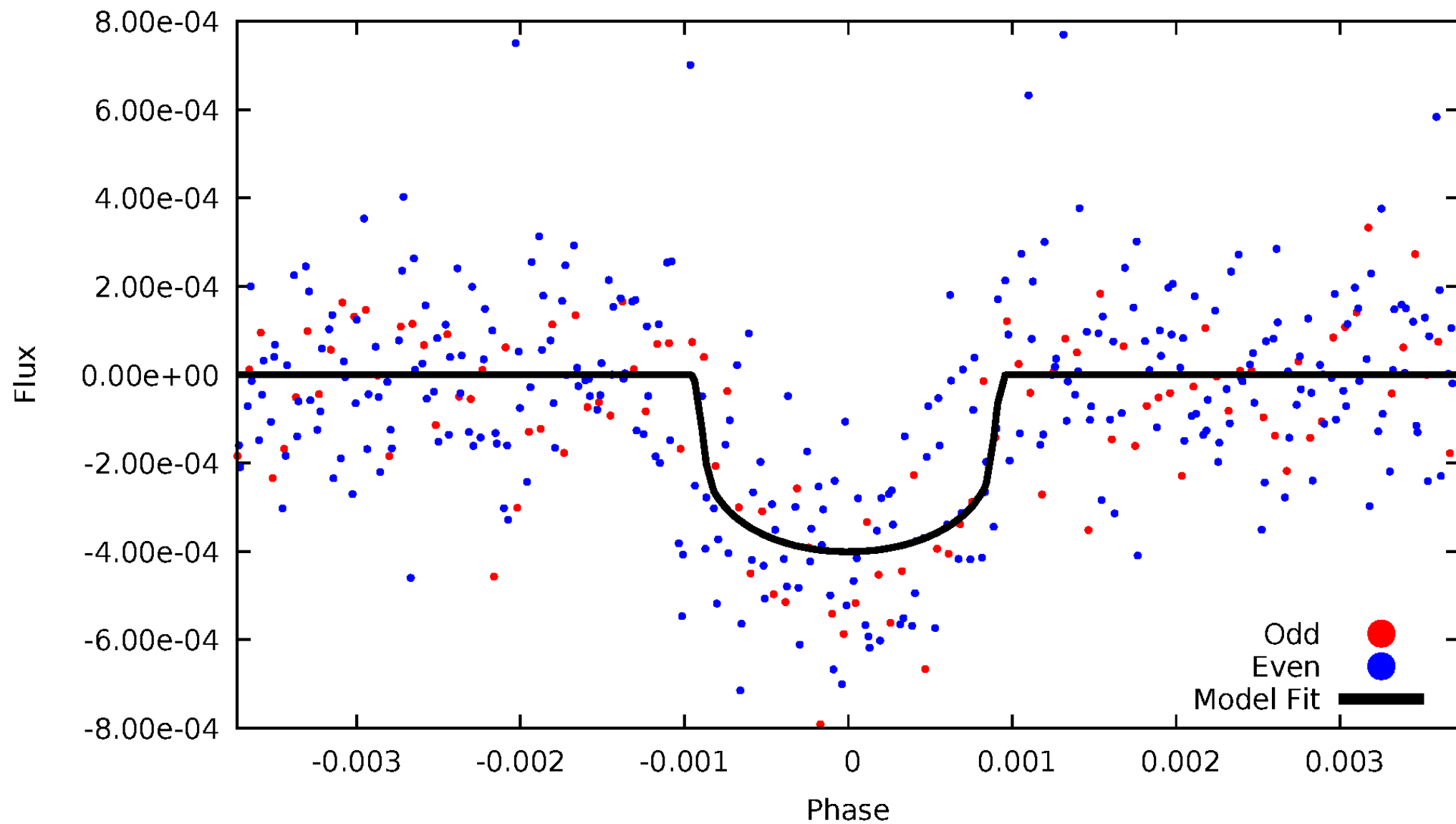


TCE 011152511-01



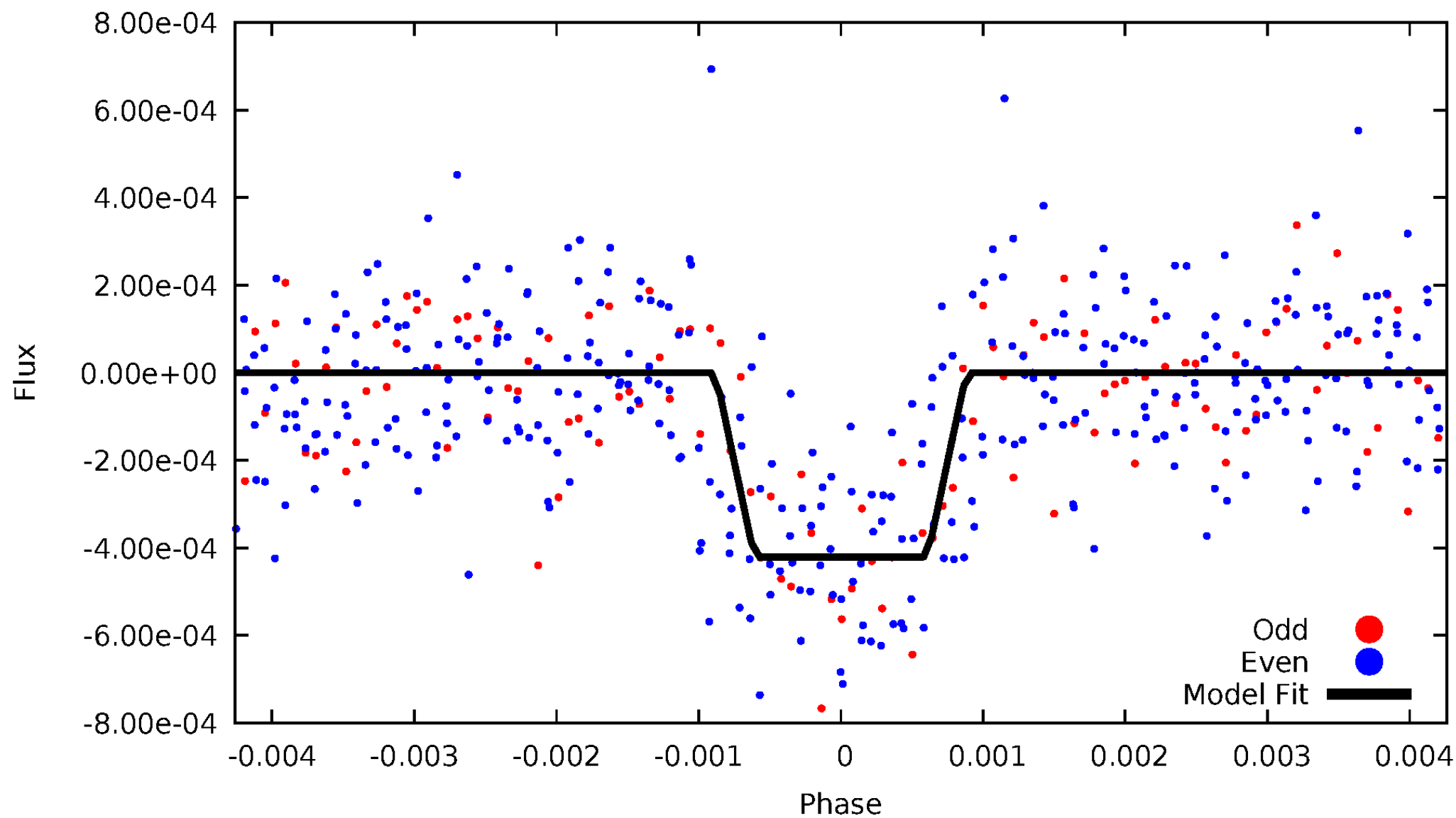
DV Odd/Even

TCE 011152511-01



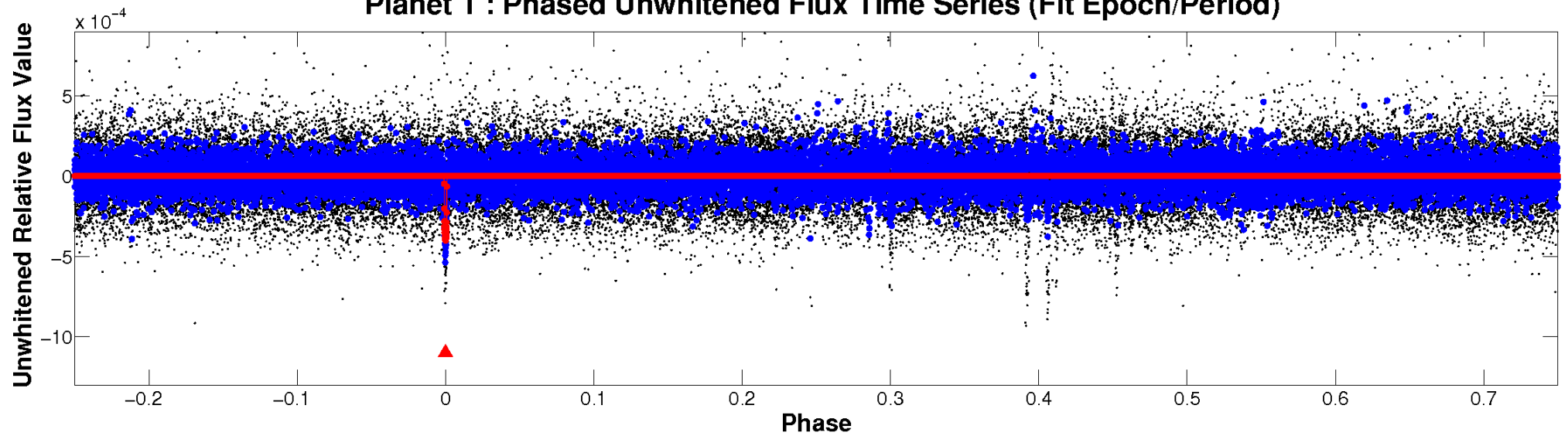
ALT Odd/Even

TCE 011152511-01

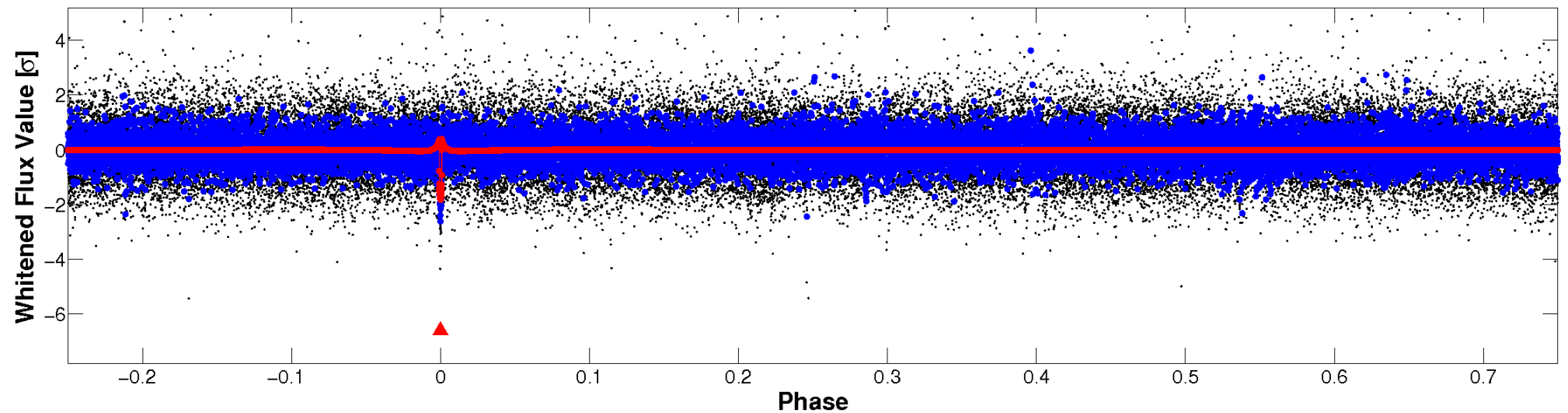


Non-Whitened Vs. Whitened Light Curve

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

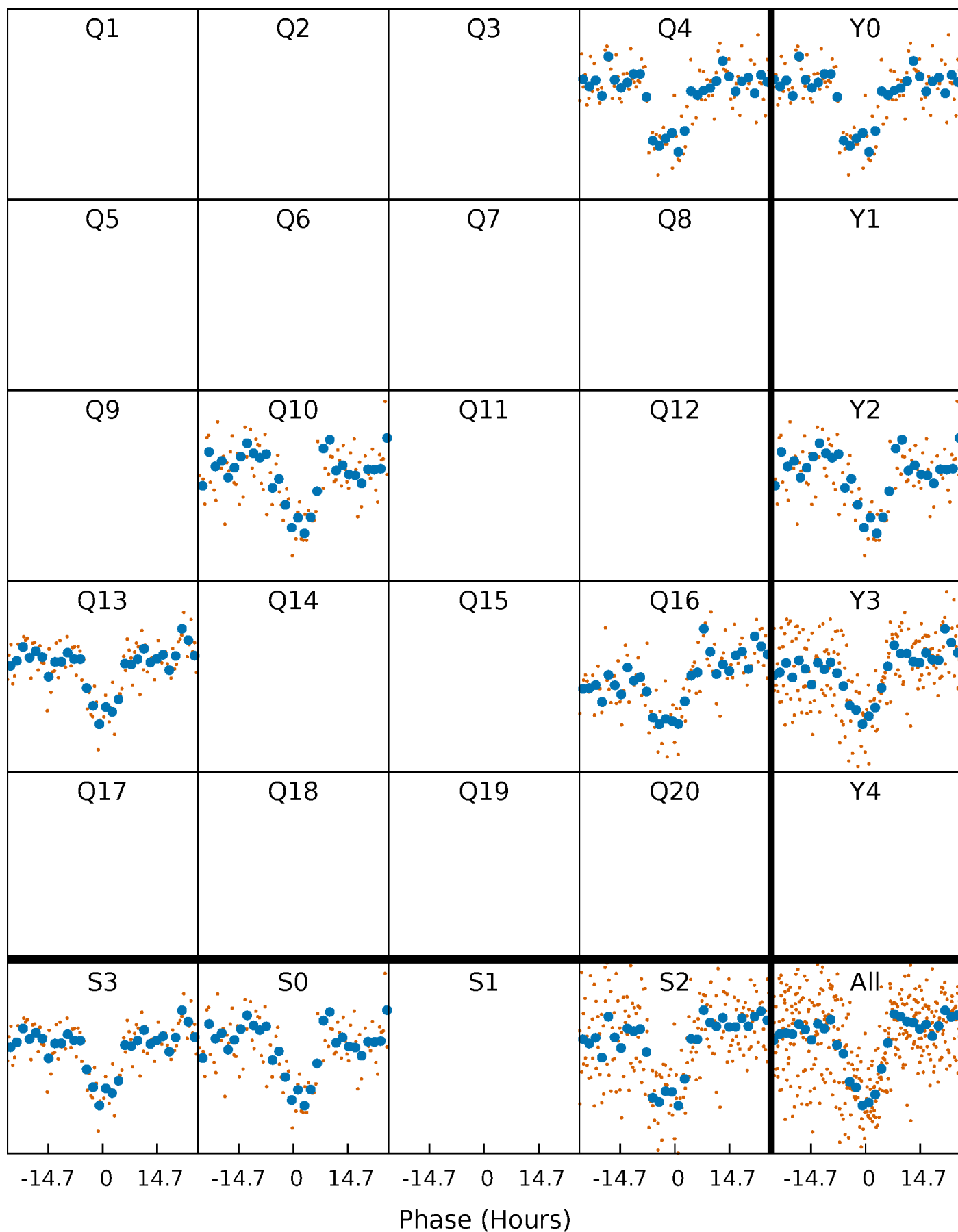


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



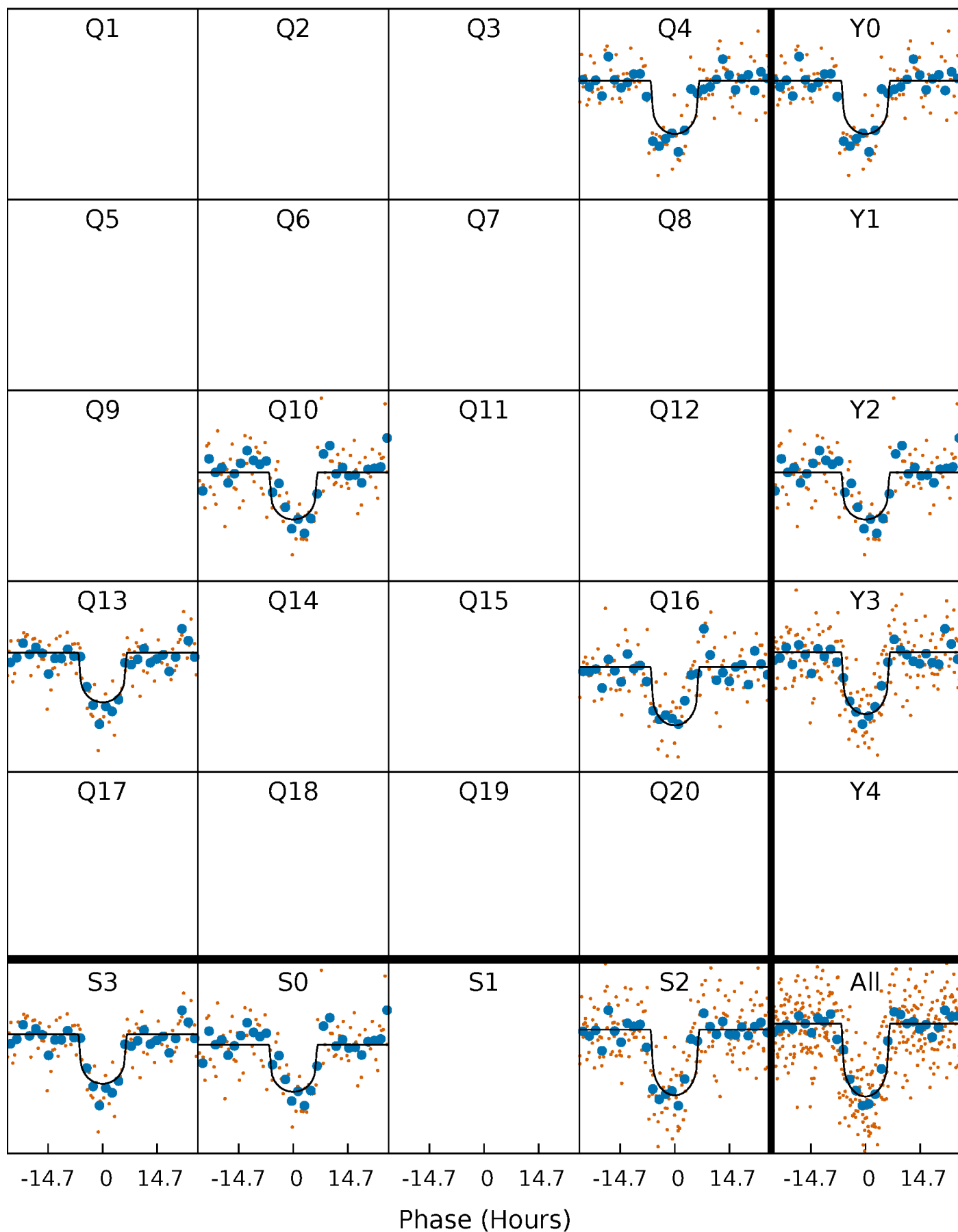
PDC Quarter-Phased Transit Curves

TCE 011152511-01 P=287.331436 Days $T_0=360.842226$ (BKJD)



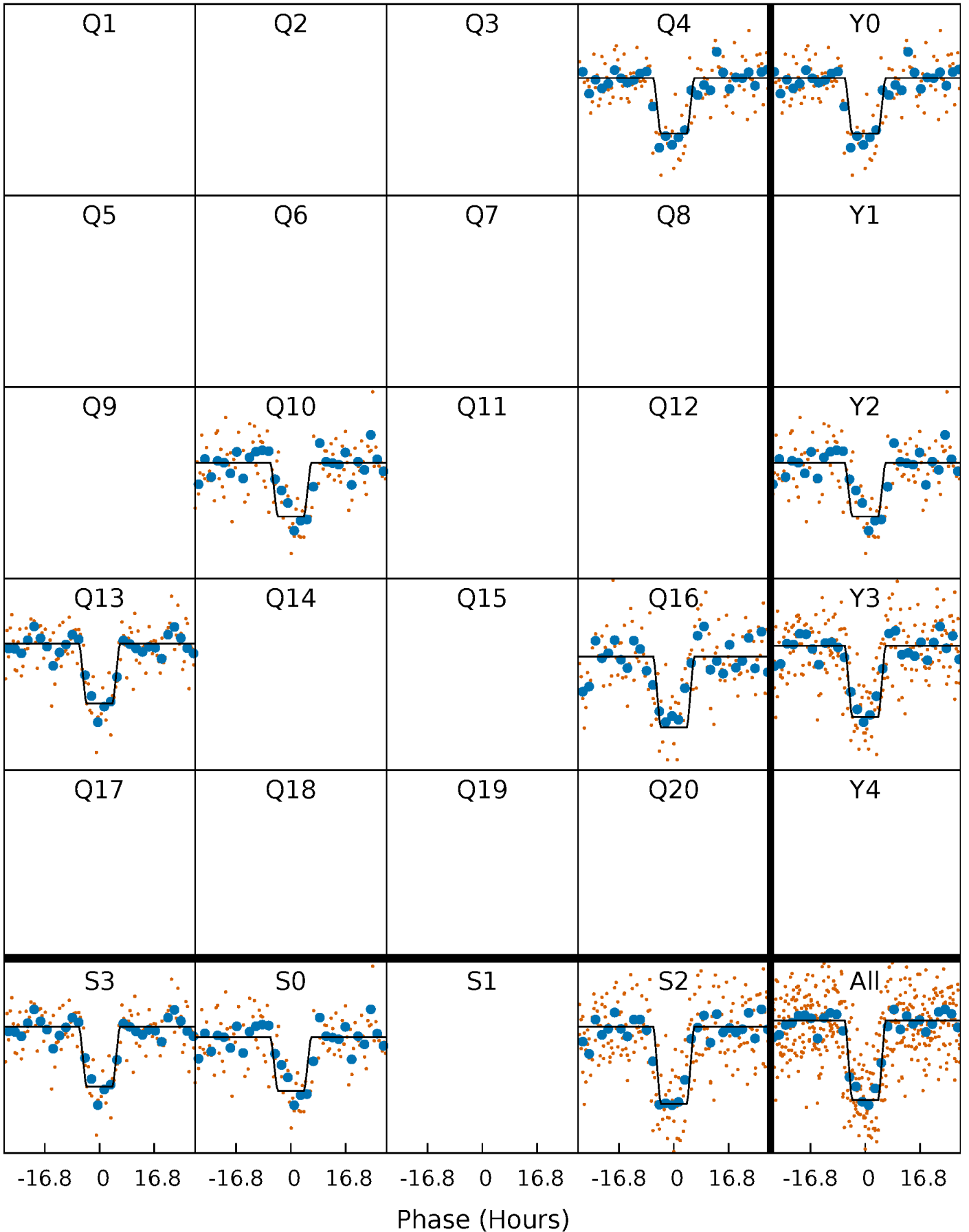
DV Quarter-Phased Transit Curves

TCE 011152511-01 P=287.331436 Days $T_0=360.842226$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

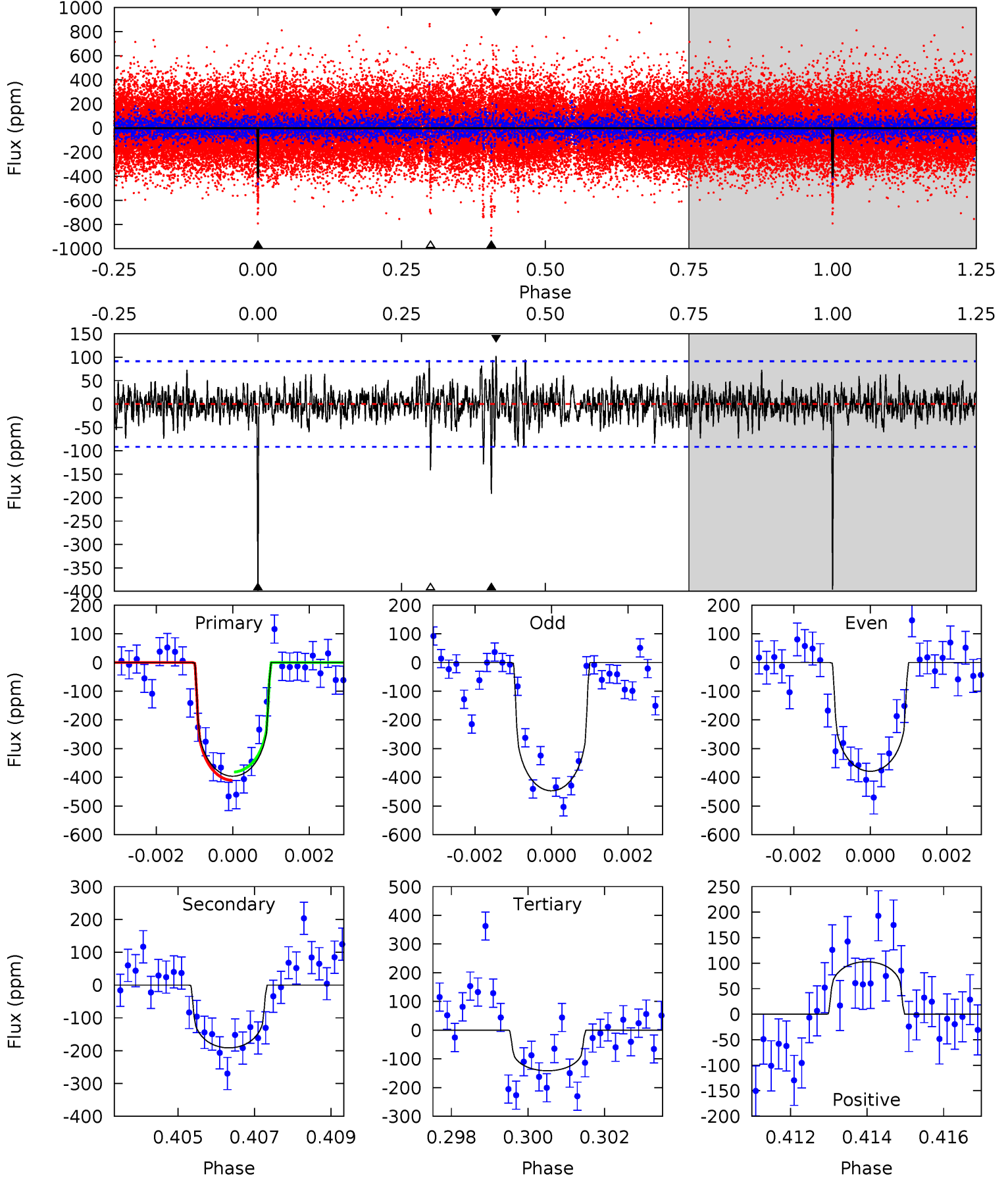
TCE 011152511-01 P=287.336721 Days $T_0=360.816731$ (BKJD)



DV Model-Shift Uniqueness Test

011152511-01, $P = 287.331436$ Days, $E = 73.510790$ Days

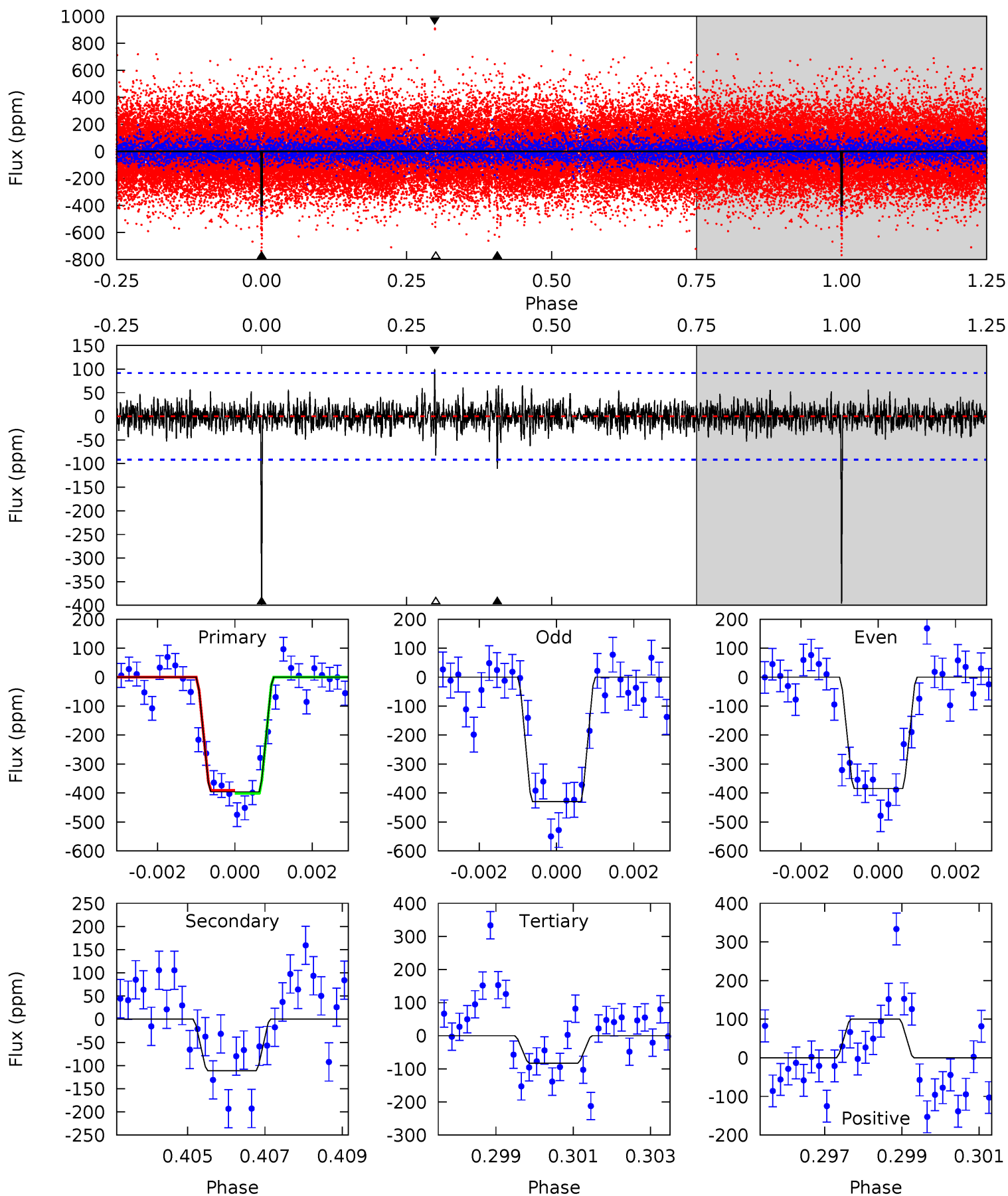
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
23.1	11.2	8.25	6.00	5.34	3.10	1.47	14.9	17.1	2.92	5.17	1.74	0.96	0.21	0.85



Alt Model-Shift Uniqueness Test

011152511-01, P = 287.336721 Days, E = 73.480010 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
23.1	6.47	4.82	5.84	5.34	3.12	1.02	18.2	17.2	1.64	0.62	1.14	0.97	0.20	0.32



Stellar Parameters For KIC 011152511

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5426^{+76}_{-76}	$4.378^{+0.126}_{-0.084}$	$0.120^{+0.150}_{-0.150}$	$1.007^{+0.124}_{-0.124}$	$0.883^{+0.061}_{-0.039}$	$1.218^{+0.668}_{-0.339}$
	+1%/-1%	+3%/-2%	+125%/-125%	+12%/-12%	+7%/-4%	+55%/-28%
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 011152511-01 / KOI 5874.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-191 ± 17	$2.09^{+0.81}_{-0.81}$	369^{+13}_{-15}	4717^{+1135}_{-576}	15895^{+29191}_{-7514}
Alt.	-111 ± 17	$2.22^{+0.89}_{-0.80}$	370^{+13}_{-14}	4129^{+792}_{-464}	8327^{+12375}_{-4202}

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 $A_{obs} \gg 1.0$

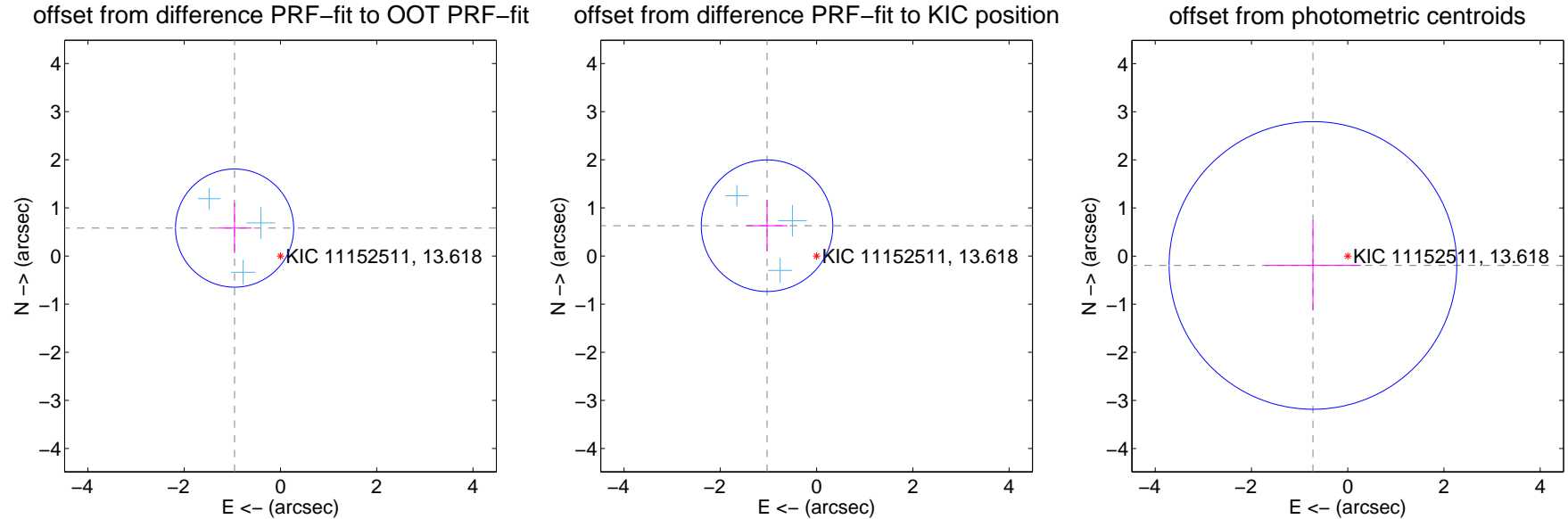
DV Centroid Data

Supplemental centroid analysis for 011152511-01. Kepler magnitude: 13.62. Transit SNR 15.68

There are 3 quarters with good PRF difference image offsets

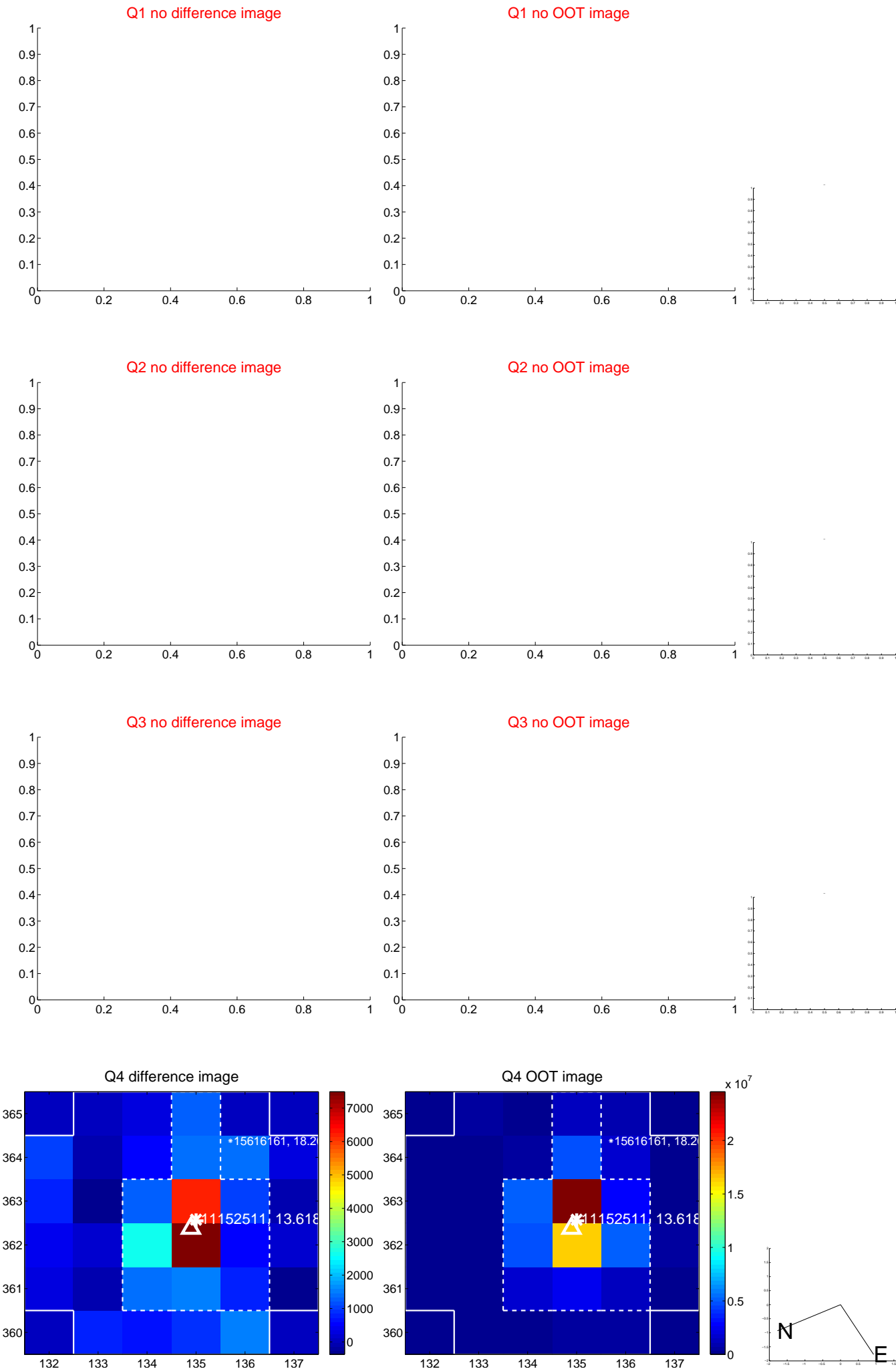
The direct PRF centroid is offset from the target star catalog position by about 0.19 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.116 ± 0.409	2.73	0.953 ± 0.358	0.581 ± 0.524
PRF-fit source offset from KIC position	1.207 ± 0.456	2.65	1.029 ± 0.424	0.630 ± 0.532
photometric centroid source offset	0.75 ± 1.00	0.75	0.72 ± 1.00	-0.19 ± 0.93



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.

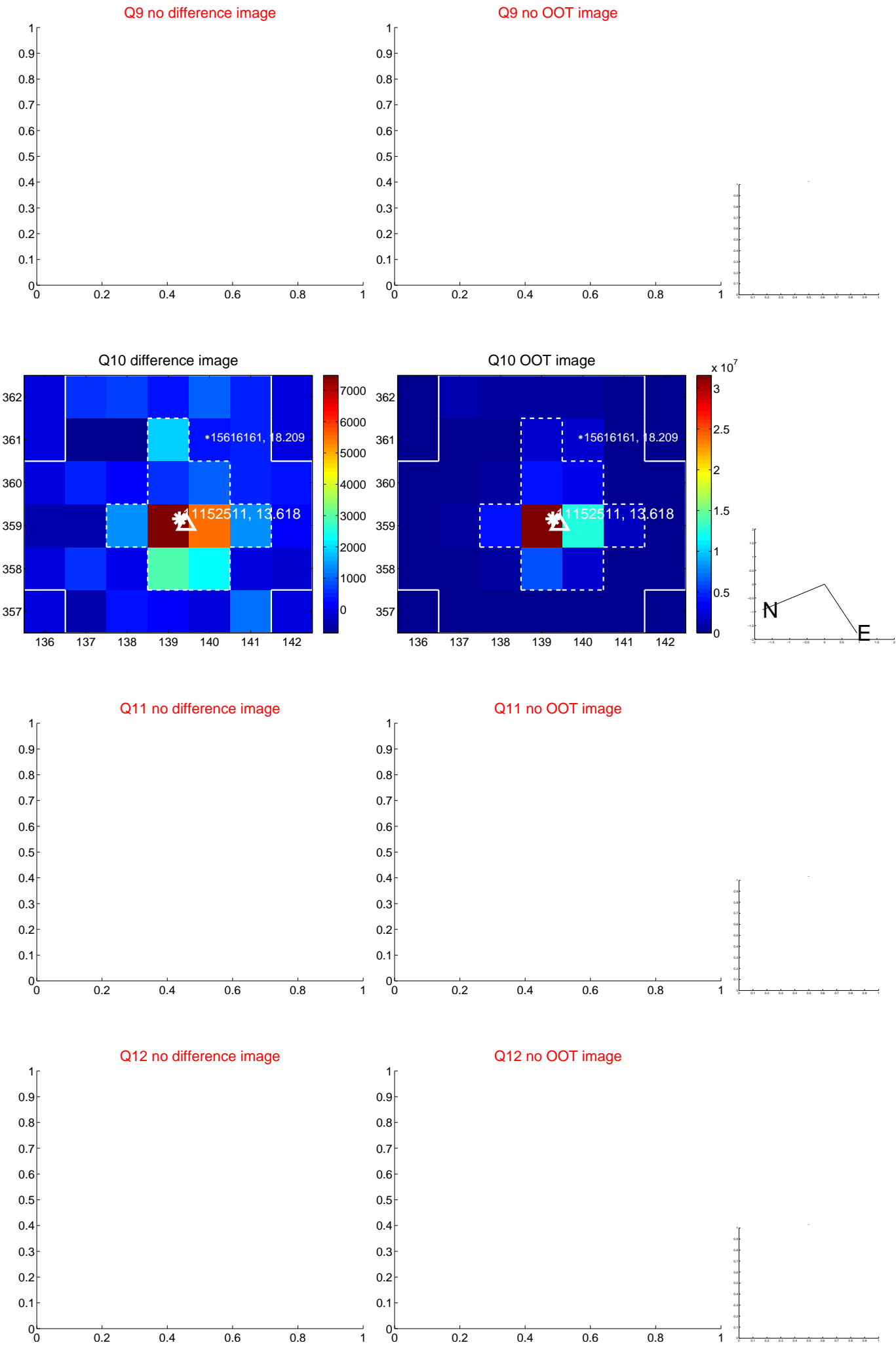
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



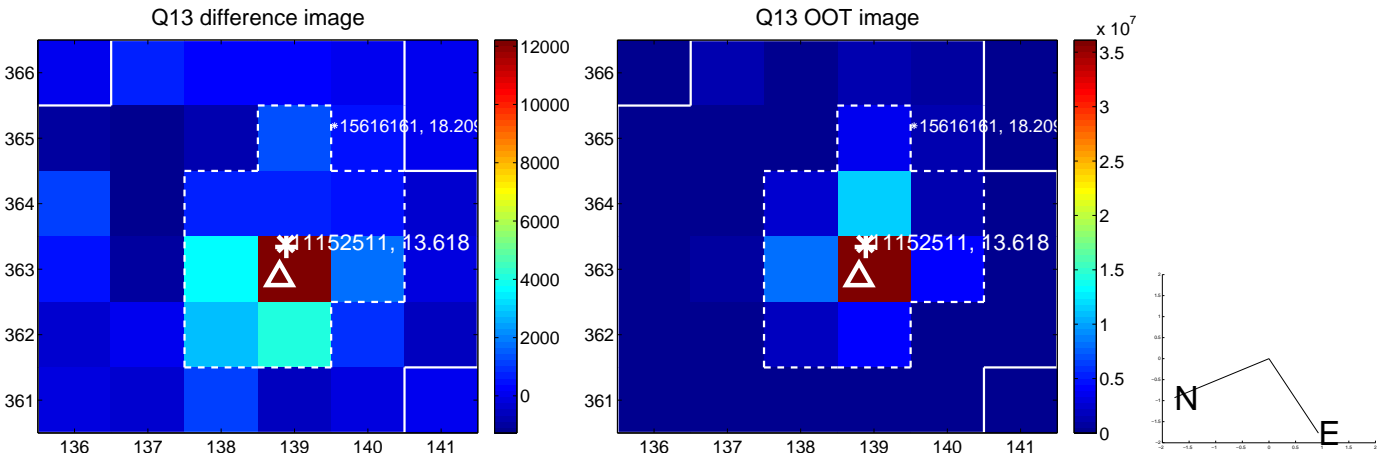
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



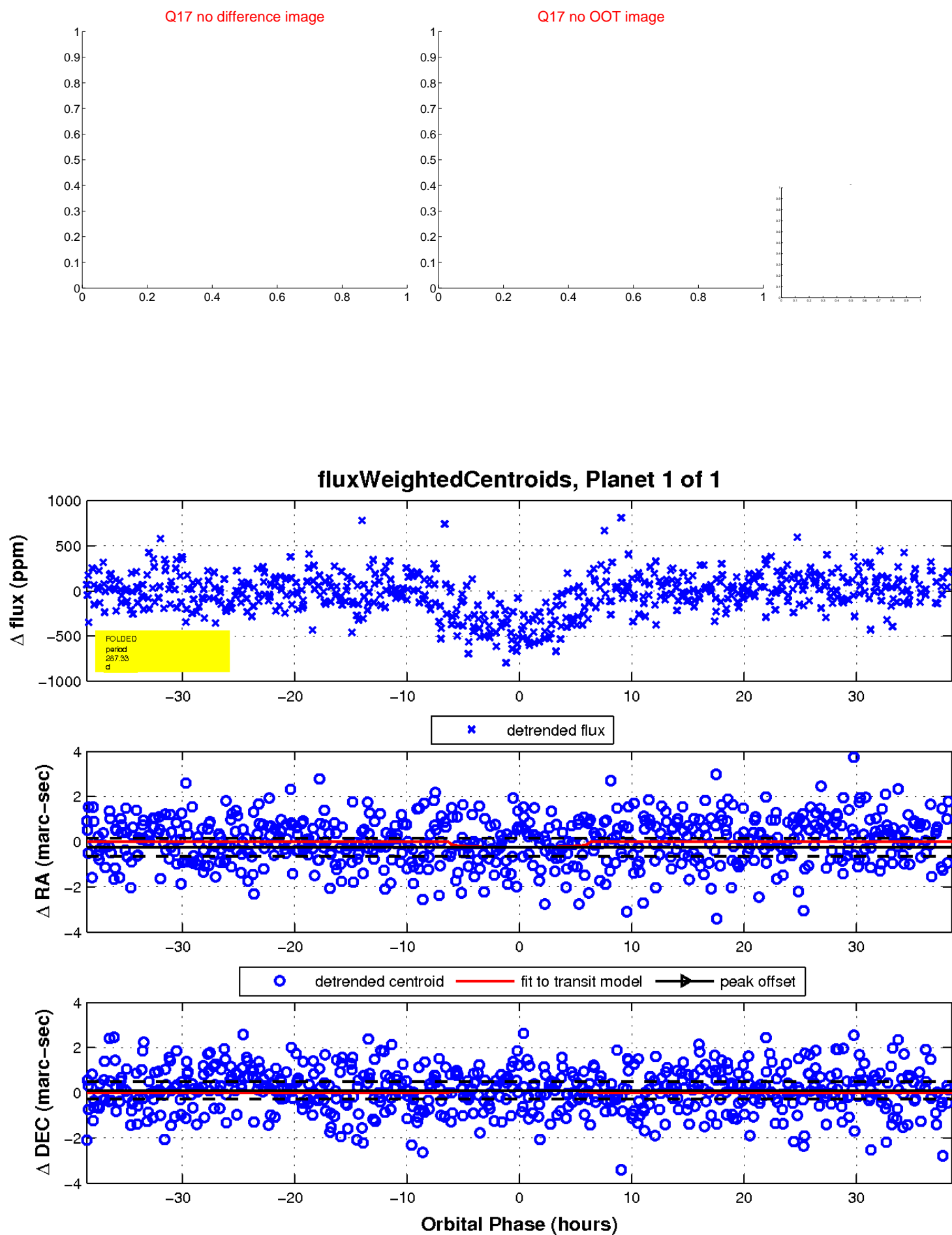
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

