

KIC 011454149

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})
011454149-01	OBS	No	361.697411	461.371712	53.1	6.407	8.9	5.1	1.10	6248	0.94	1.64

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011454149-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—INCONSISTENT_TRANS—CENT_SATURATED

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

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

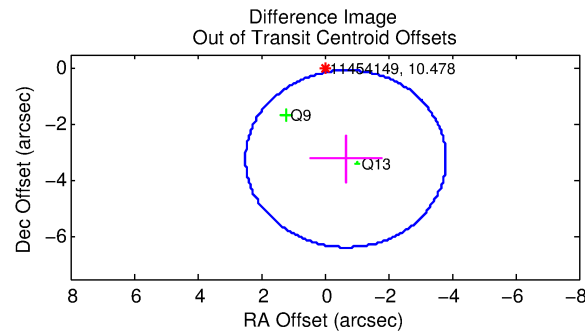
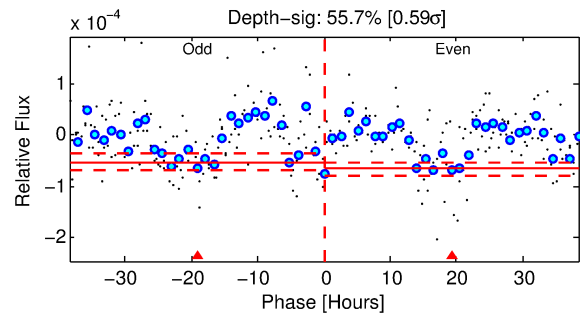
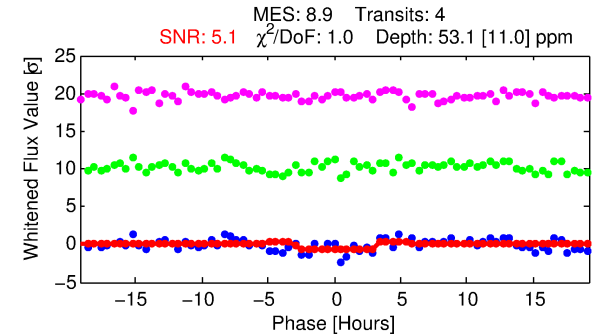
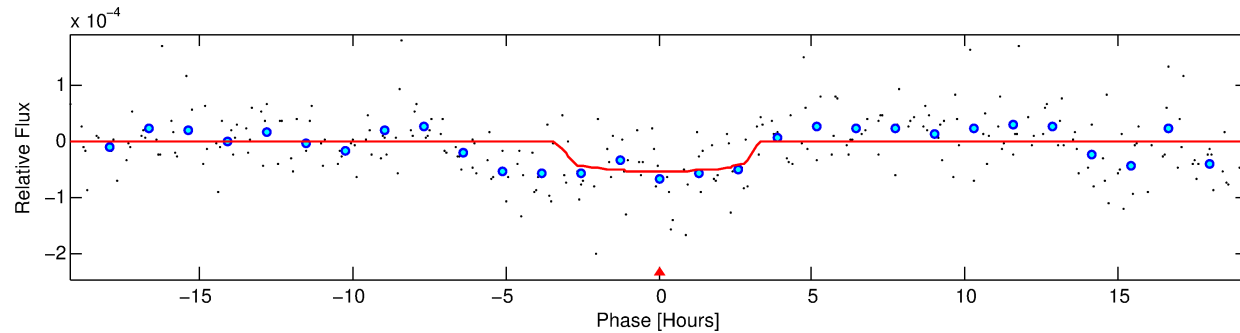
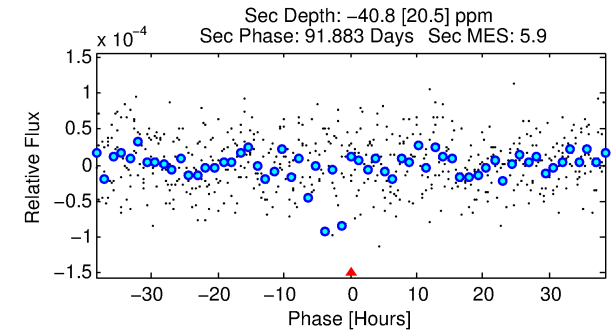
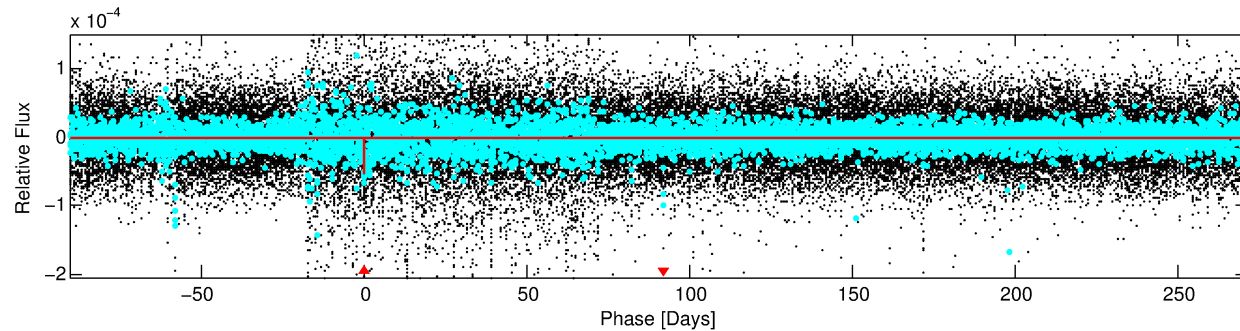
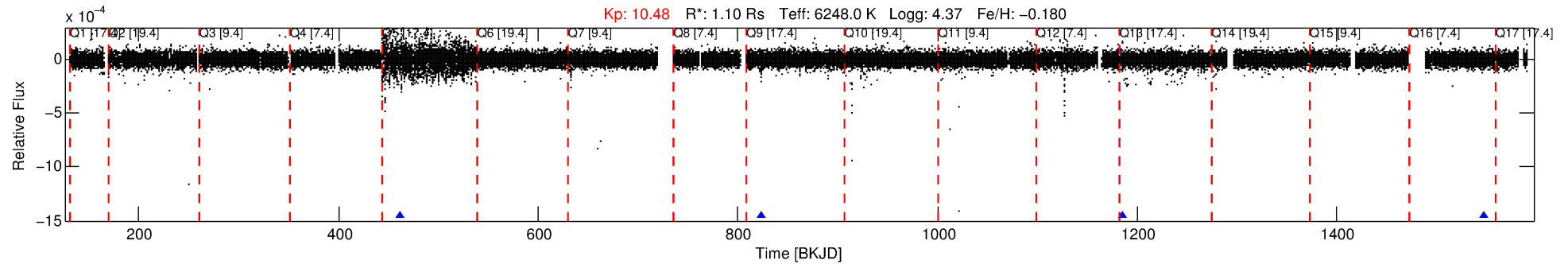
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011454149-01

No Significant Match Found

DV One-Page Summary

KIC: 11454149 Candidate: 1 of 1 Period: 361.697 d



DV Fit Results:

Period = 361.69741 [0.00825] d
Epoch = 461.3717 [0.0171] BKJD
Rp/R* = 0.0078 [0.0042]
a/R* = 197.38 [568.98]
b = 0.90 [0.63]
Seff = 1.64 [0.11]
Teq = 288 [5] K
Rp = 0.94 [0.51] Re
a = 1.0051 [0.0335] AU
Ag = N/A
Teffp = N/A

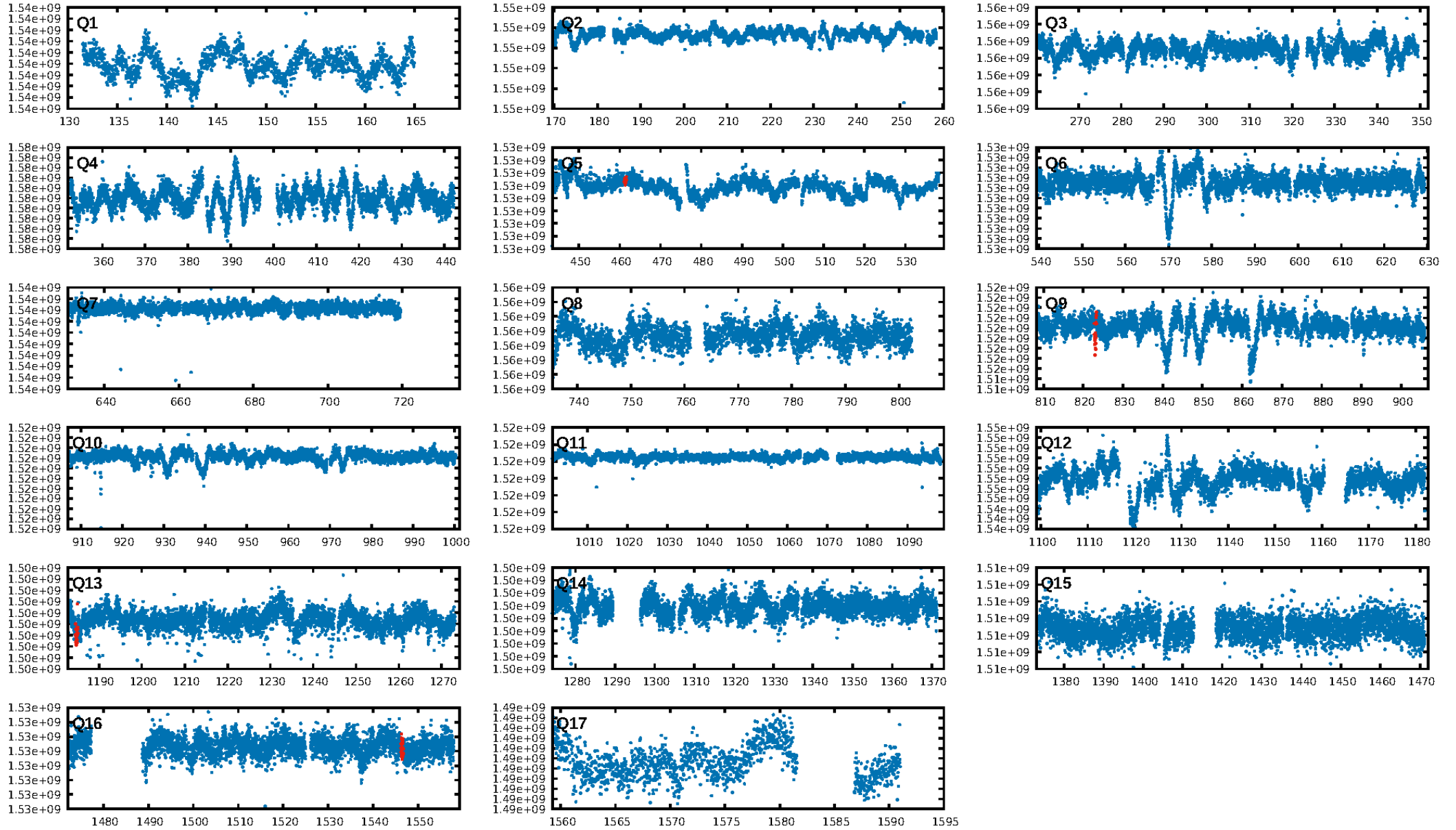
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 5.6%
ModelChiSquareGof-sig: 89.8%
Bootstrap-pfa: 1.66e-09
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: 2.593
Centroid-sig: 95.3%
Centroid-so: 0.943 arcsec [0.34σ]
OotOffset-rm: 3.289 arcsec [3.13σ]
KicOffset-rm: 3.624 arcsec [5.16σ]
OotOffset-st: 0/0/0/2 [2]
KicOffset-st: 0/0/0/2 [2]
DiffImageQuality-fgm: 0.50 [1/2]
DiffImageOverlap-fno: 1.00 [3/3]

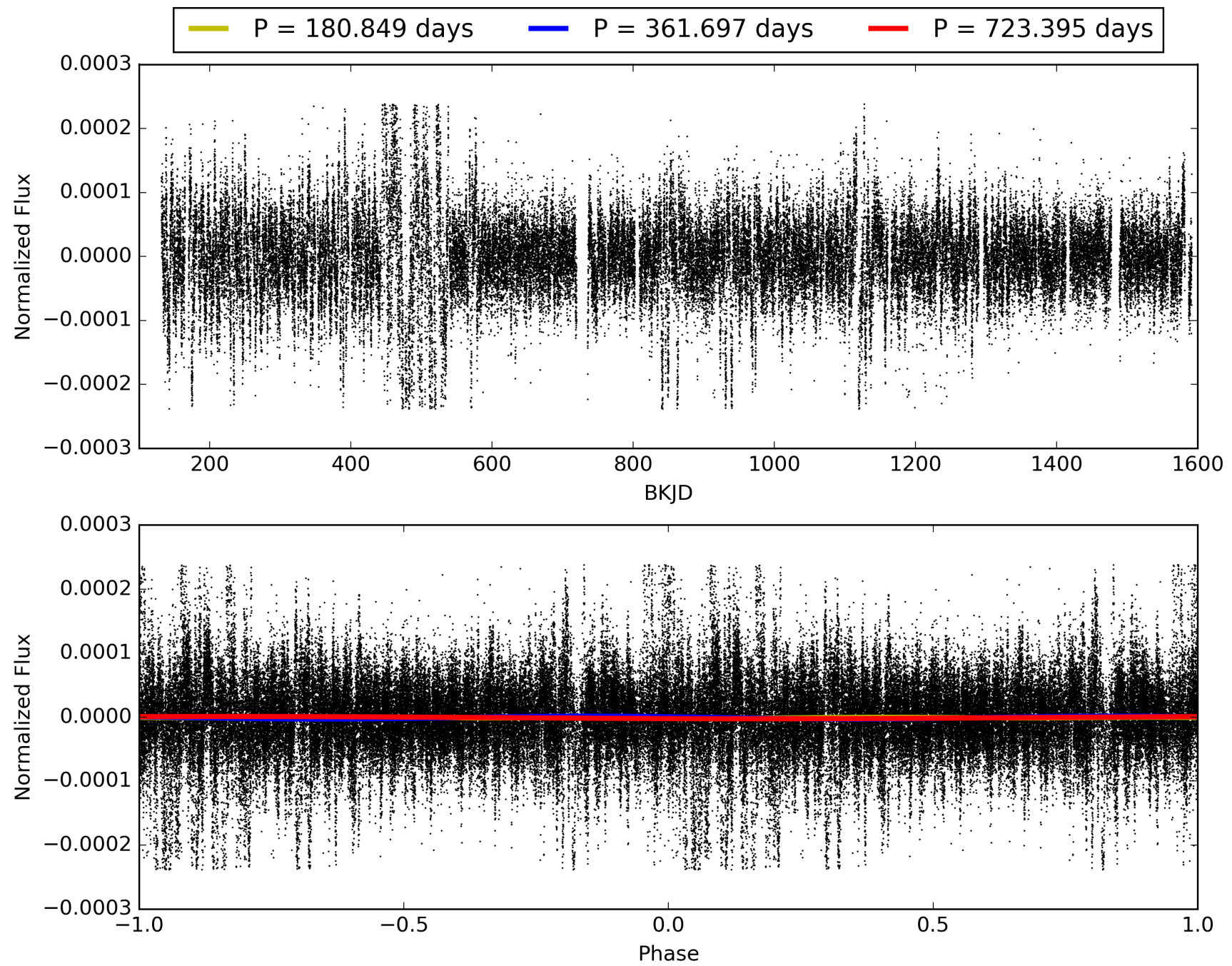
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 02:58:51 Z

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

TCE 011454149-01, PDC Light Curves

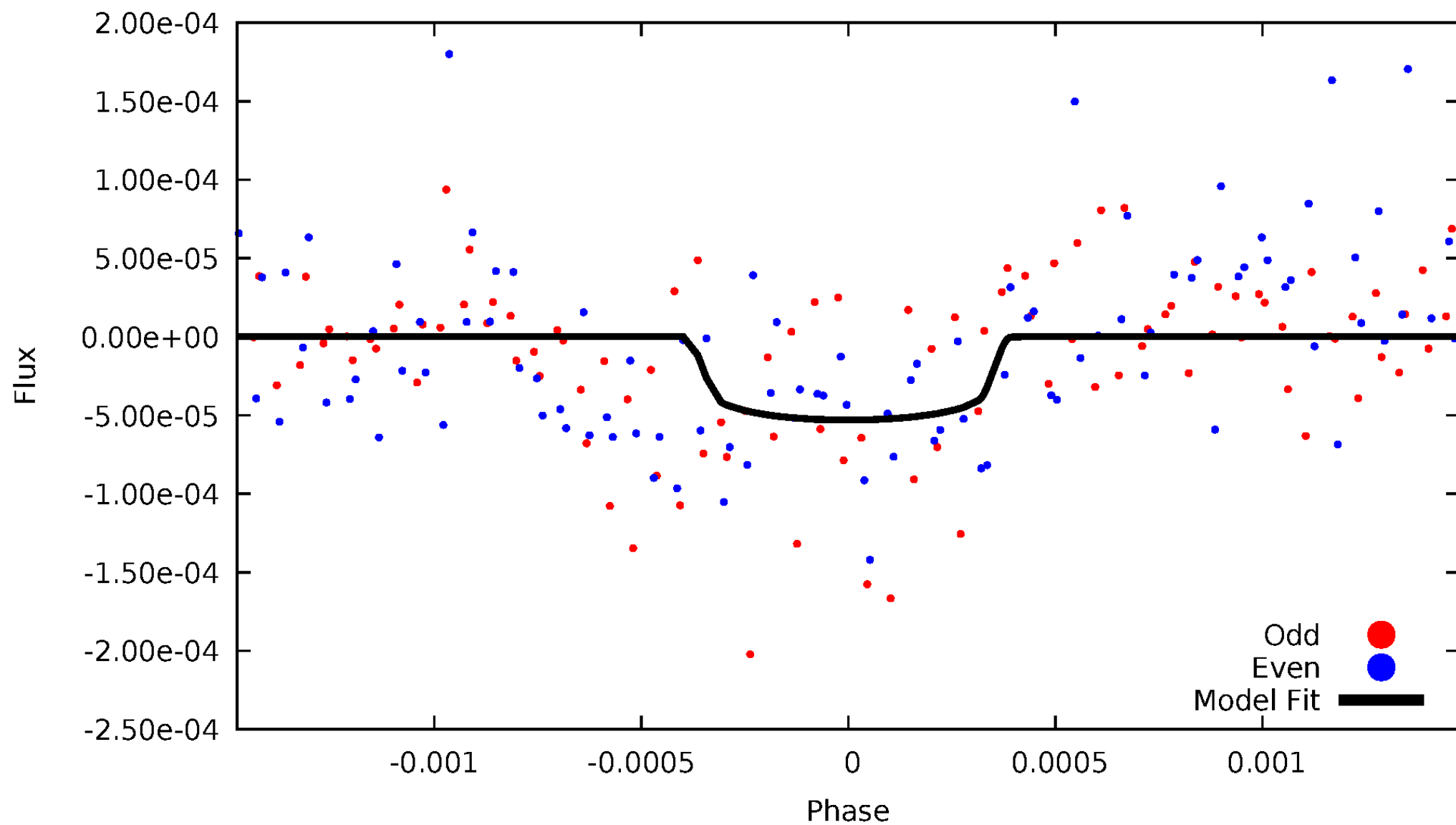


TCE 011454149-01



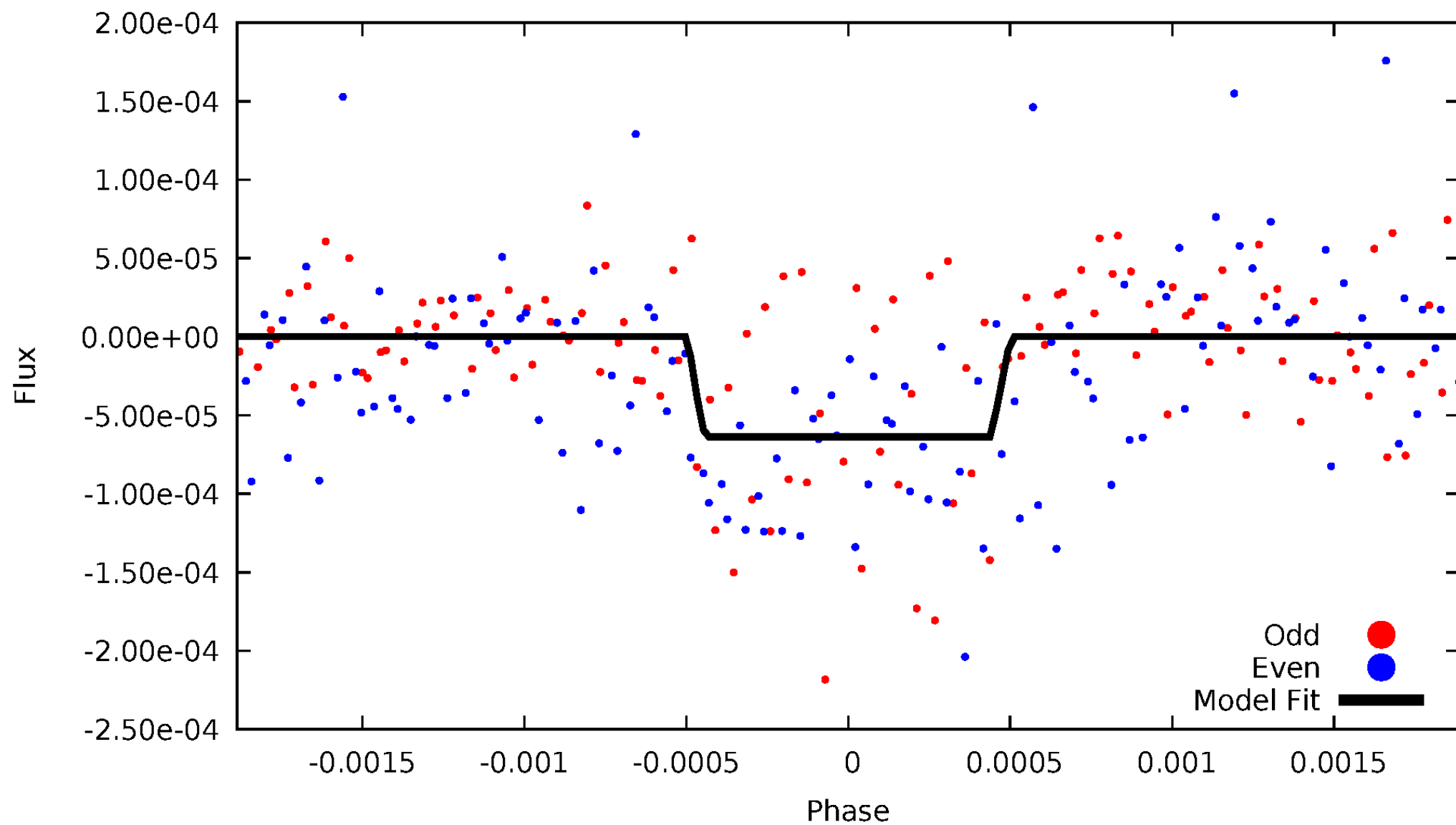
DV Odd/Even

TCE 011454149-01

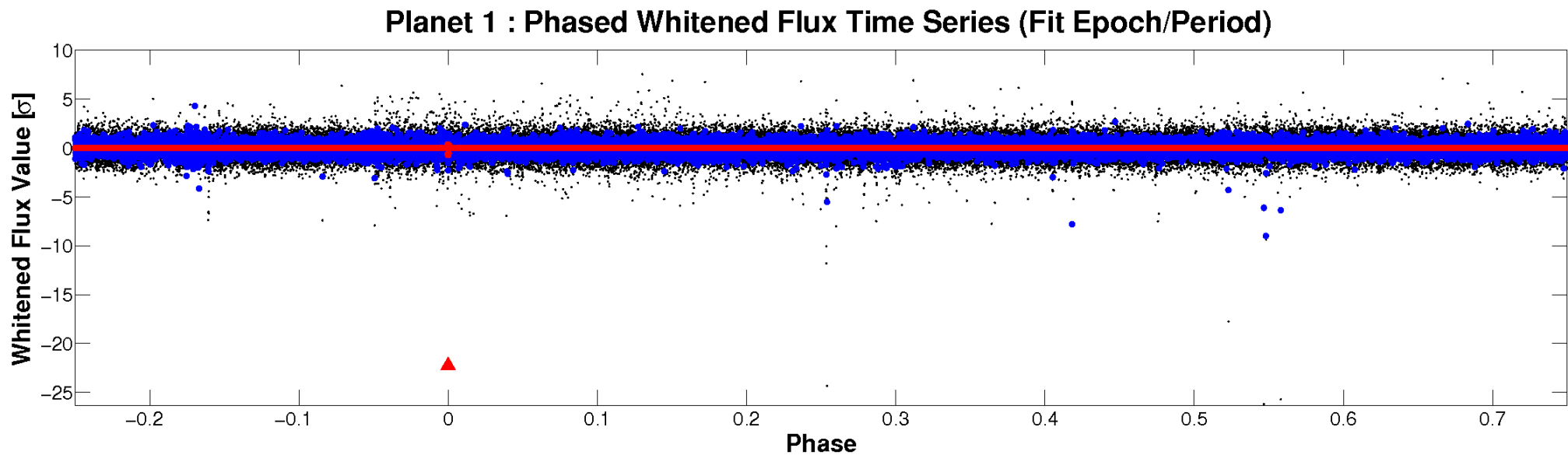
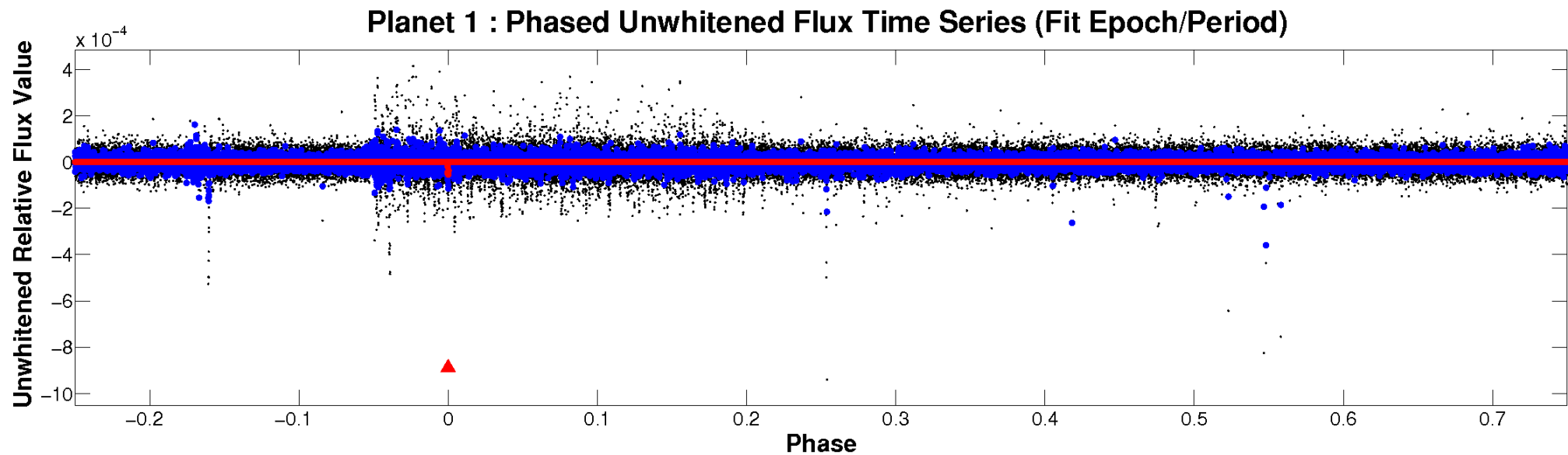


ALT Odd/Even

TCE 011454149-01

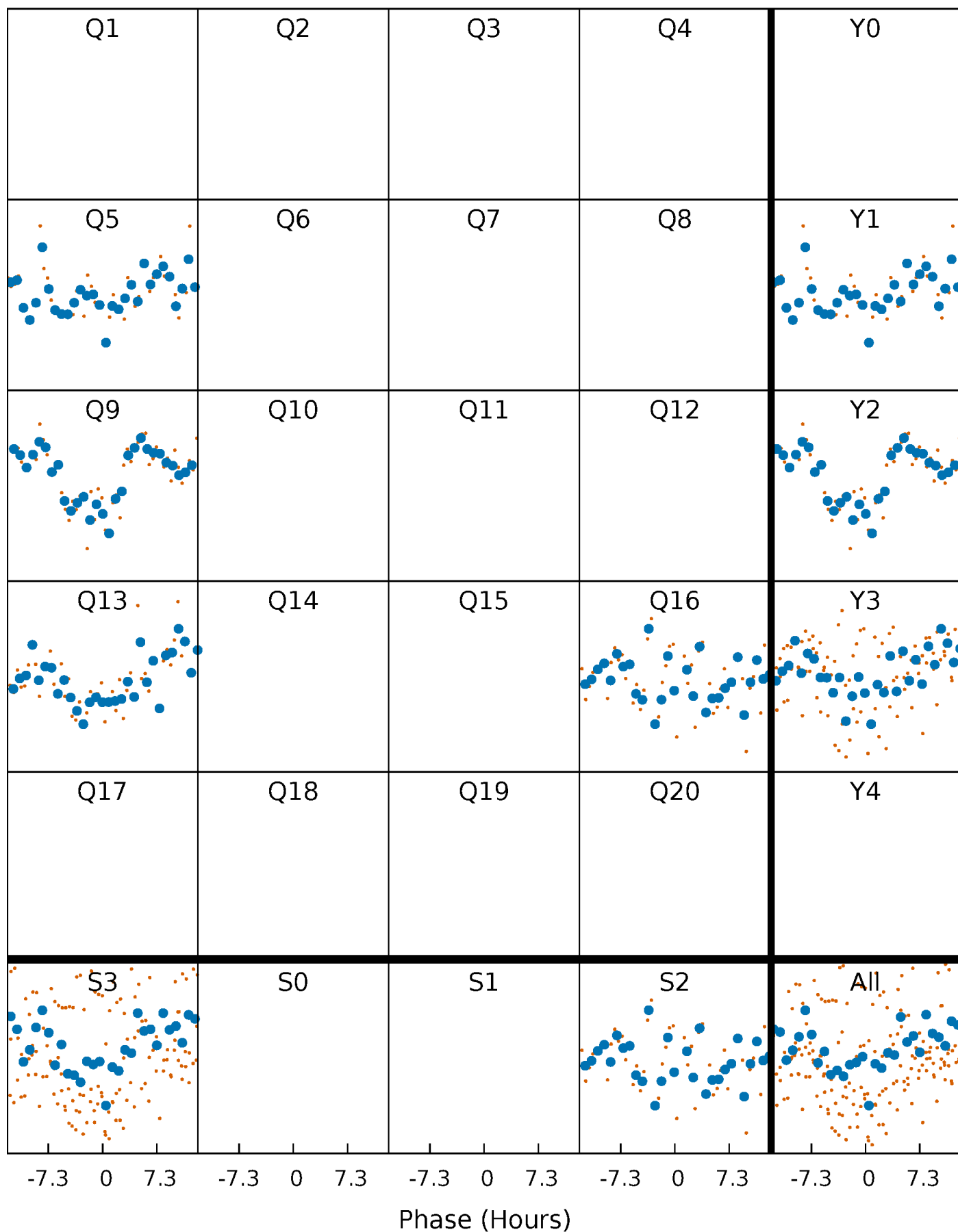


Non-Whitened Vs. Whitened Light Curve



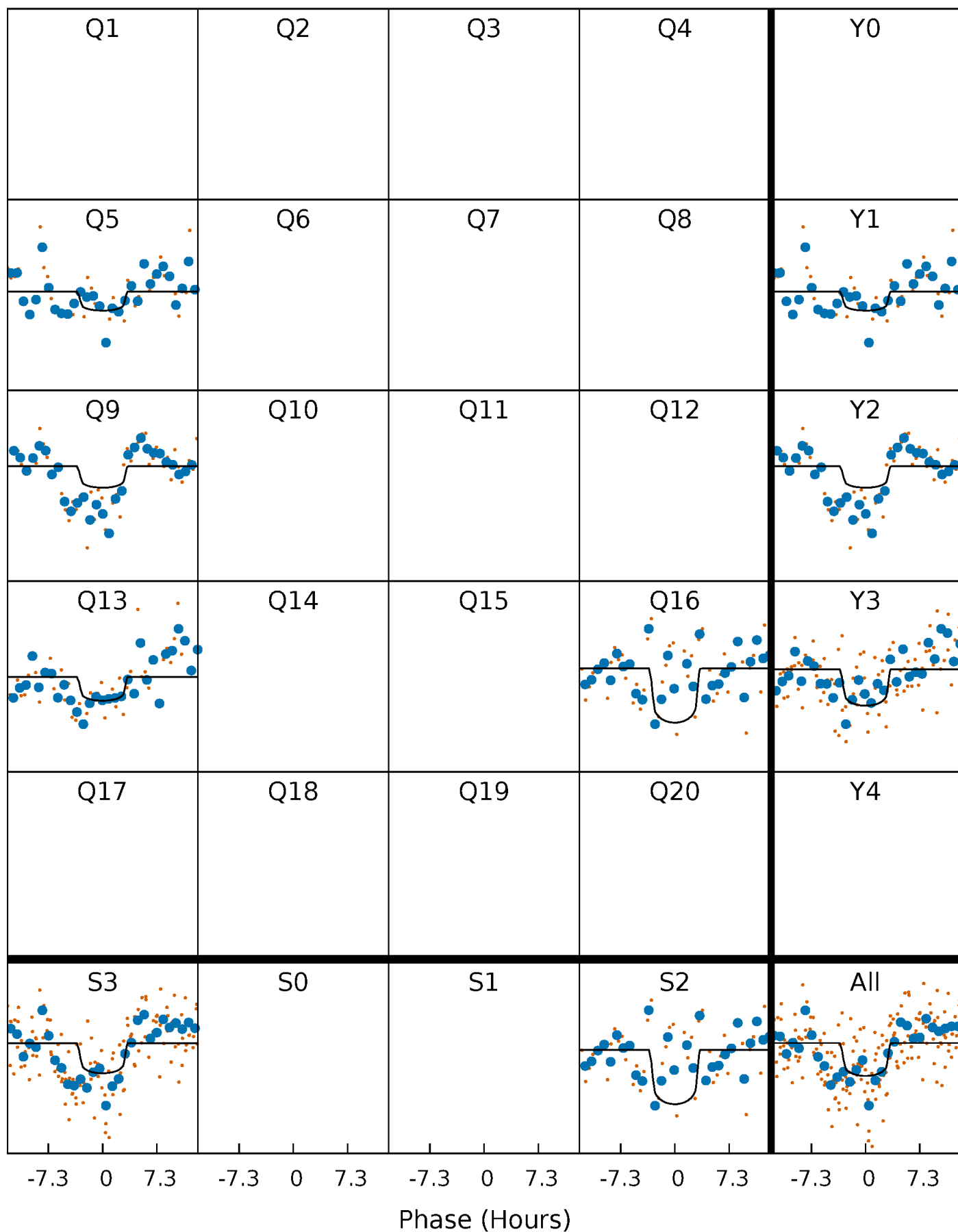
PDC Quarter-Phased Transit Curves

TCE 011454149-01 P=361.697411 Days $T_0=461.371712$ (BKJD)



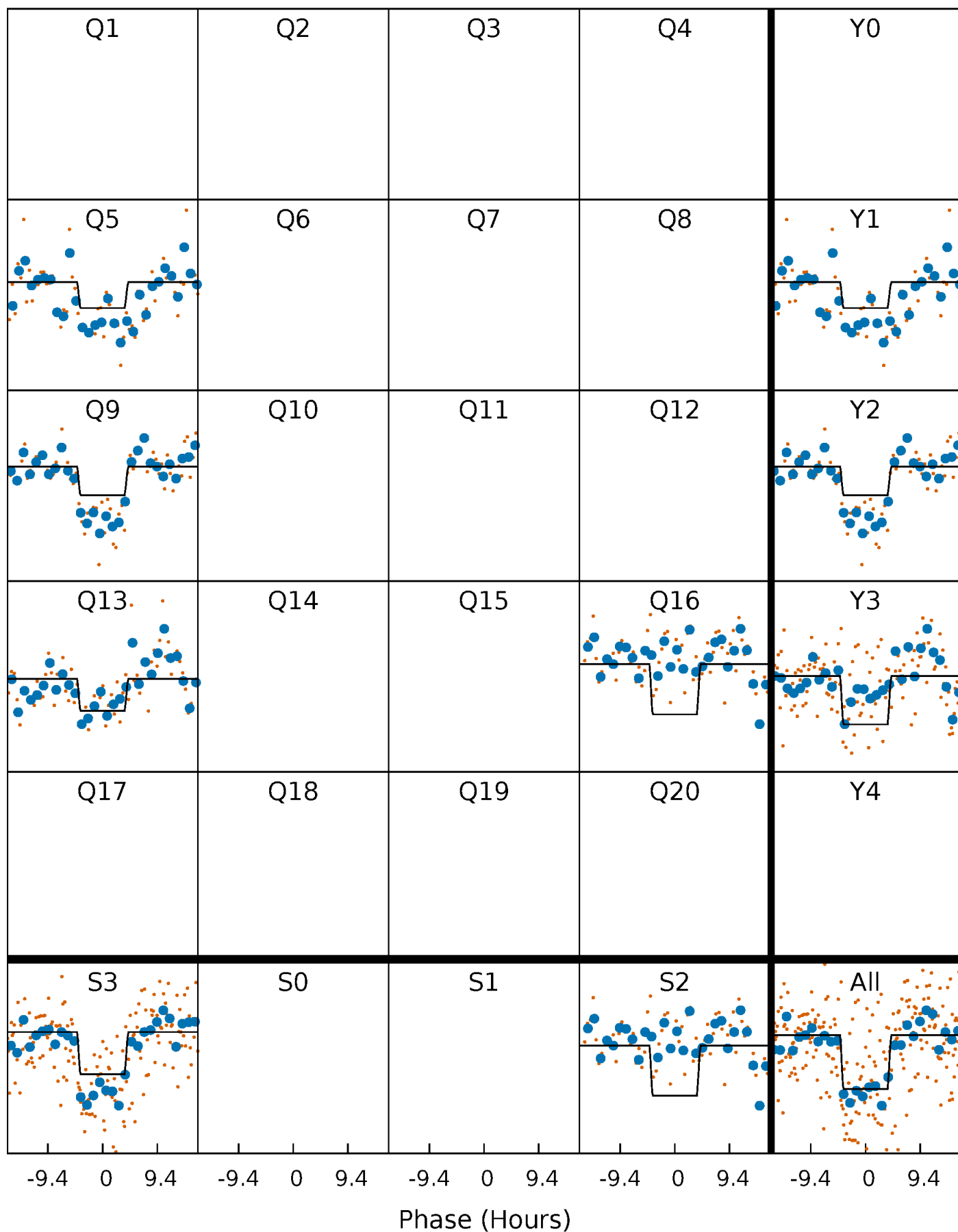
DV Quarter-Phased Transit Curves

TCE 011454149-01 P=361.697411 Days $T_0=461.371712$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

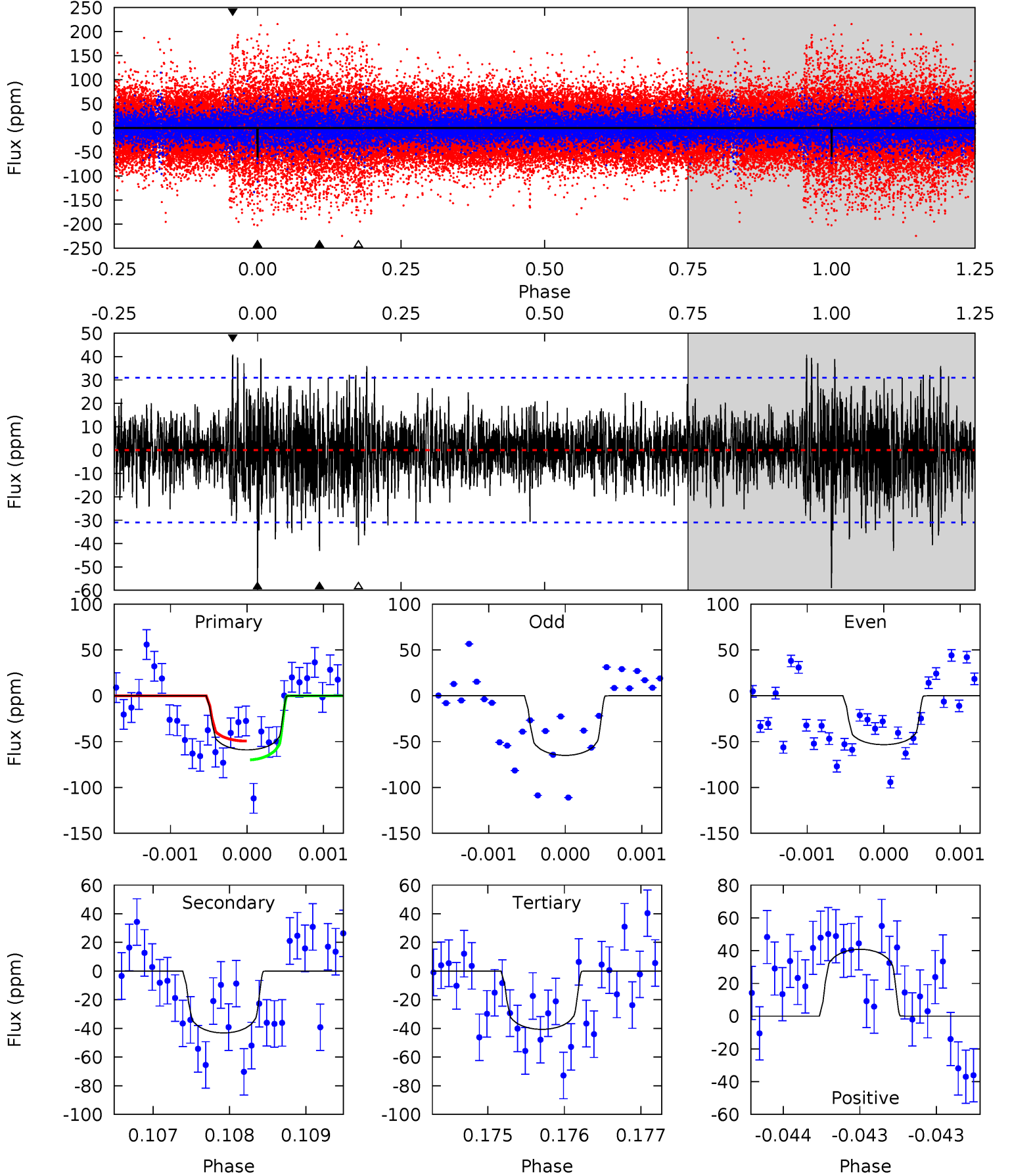
TCE 011454149-01 P=361.748935 Days $T_0=461.260369$ (BKJD)



DV Model-Shift Uniqueness Test

011454149-01, $P = 361.697411$ Days, $E = 99.674301$ Days

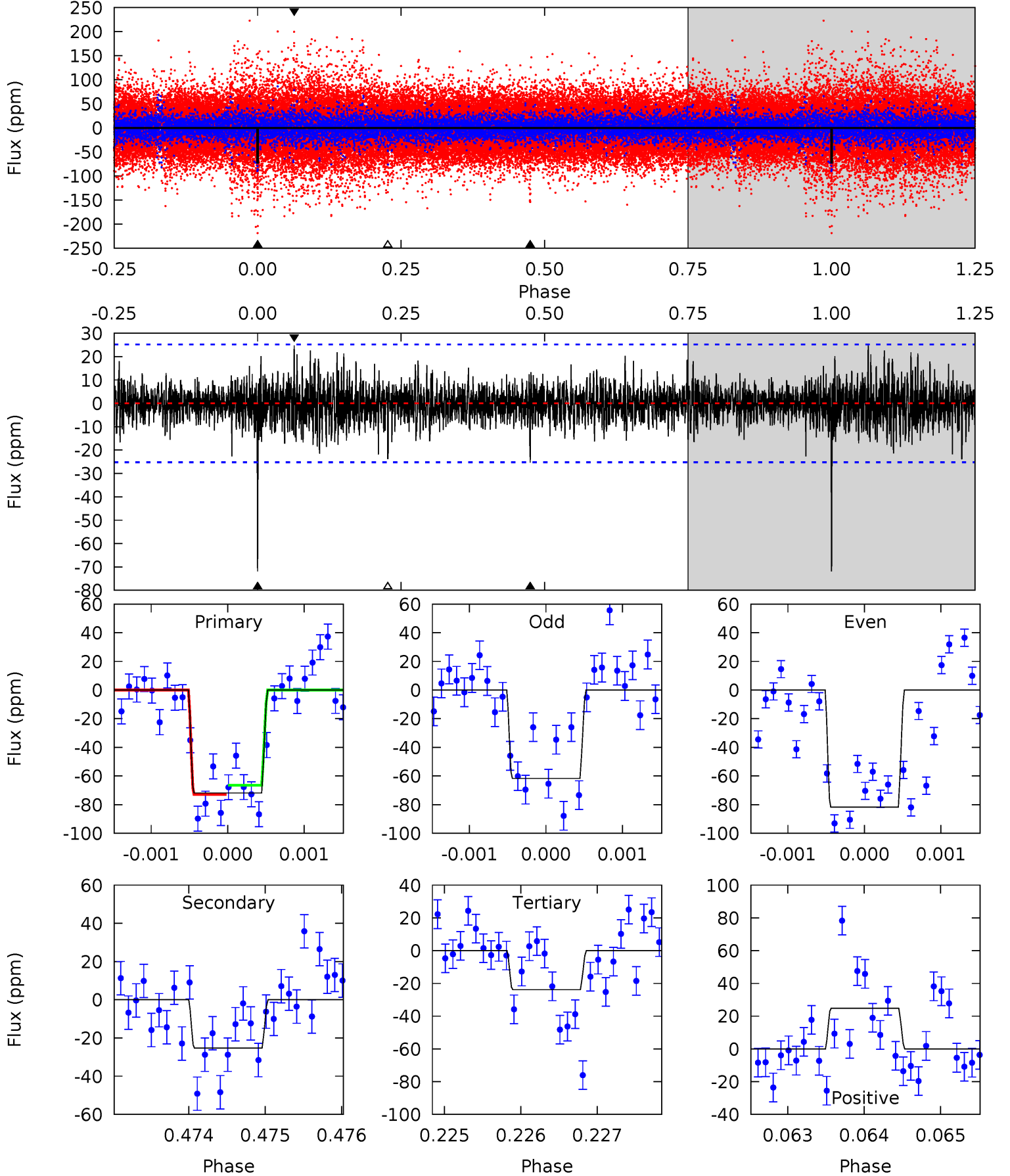
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.5	7.67	7.23	7.25	5.50	3.37	1.71	3.27	3.24	0.45	0.42	1.00	1.09	0.41	1.83



Alt Model-Shift Uniqueness Test

011454149-01, $P = 361.748935$ Days, $E = 99.511434$ Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
15.5	5.47	5.16	5.36	5.45	3.30	1.25	10.4	10.2	0.31	0.11	2.15	0.86	0.26	0.71



Stellar Parameters For KIC 011454149

	$T_{\text{eff}}(K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6248^{+88}_{-75}	$4.370^{+0.018}_{-0.018}$	$-0.180^{+0.150}_{-0.150}$	$1.100^{+0.050}_{-0.032}$	$1.030^{+0.087}_{-0.047}$	$1.091^{+0.070}_{-0.080}$
	+1%/-1%	+0%/-0%	+83%/-83%	+5%/-3%	+8%/-5%	+6%/-7%
Source	SPE72	AST10	SPE72	DSEP		

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

Secondary Eclipse Parameters for KIC 011454149-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-43 ± 6	$0.94^{+0.52}_{-0.45}$	403^{+7}_{-6}	5699^{+2427}_{-1010}	26418^{+69055}_{-15611}
Alt.	-25 ± 5	$0.99^{+0.48}_{-0.48}$	403^{+7}_{-6}	4964^{+1821}_{-755}	14628^{+38482}_{-8488}

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

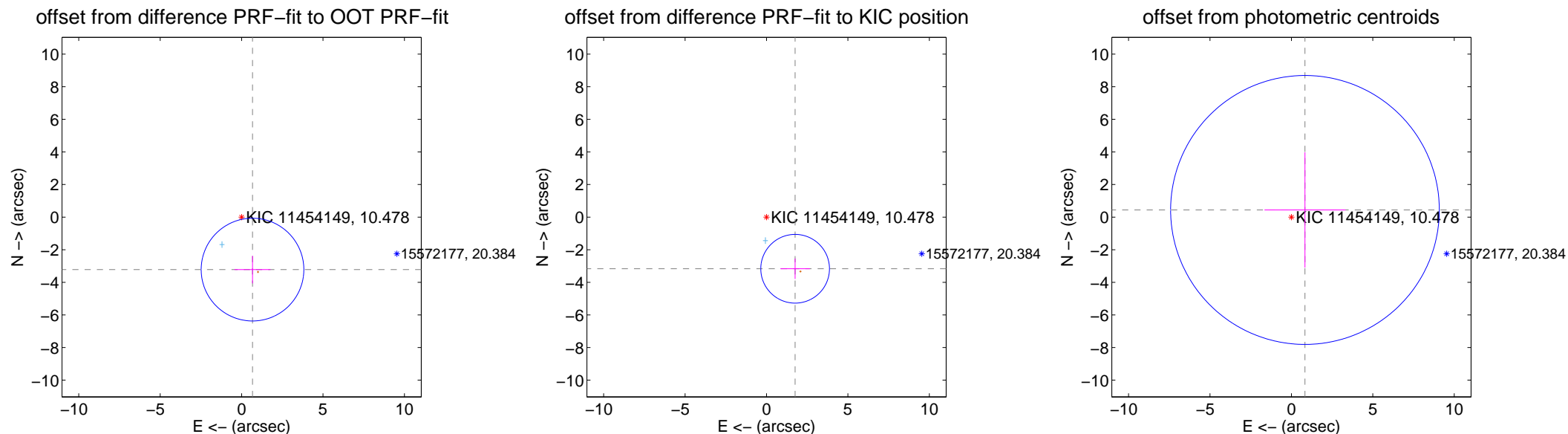
DV Centroid Data

Supplemental centroid analysis for 011454149-01. **Kepler magnitude: 10.48.** Transit SNR 5.14

There are 1 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 1.08 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	3.289 ± 1.051	3.13	-0.671 ± 1.107	-3.220 ± 0.844
PRF-fit source offset from KIC position	3.624 ± 0.703	5.16	-1.758 ± 0.906	-3.168 ± 0.627
photometric centroid source offset	0.94 ± 2.75	0.34	-0.83 ± 2.49	0.44 ± 3.54

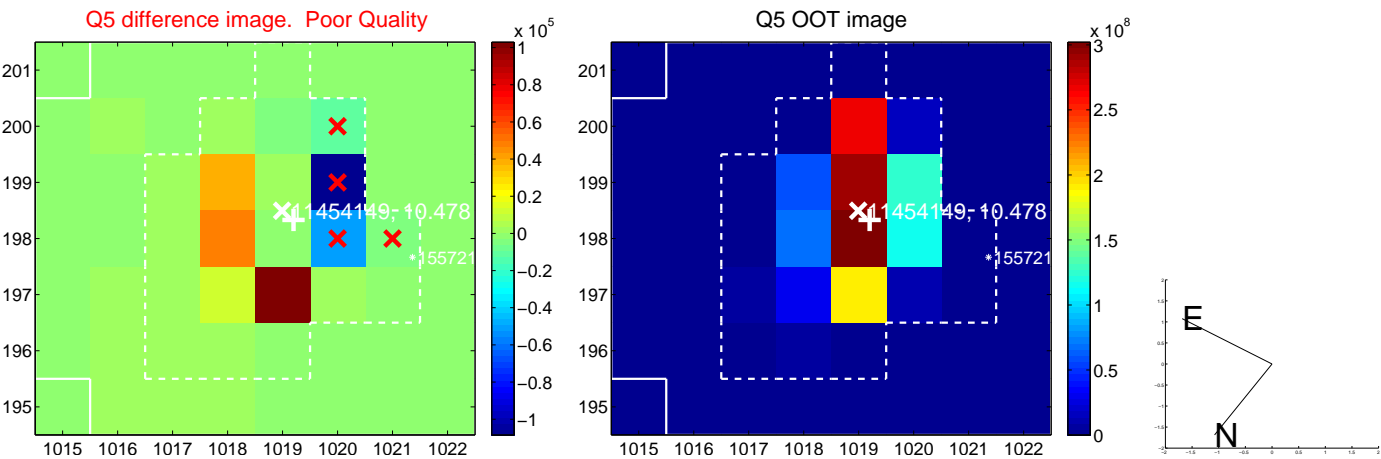


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

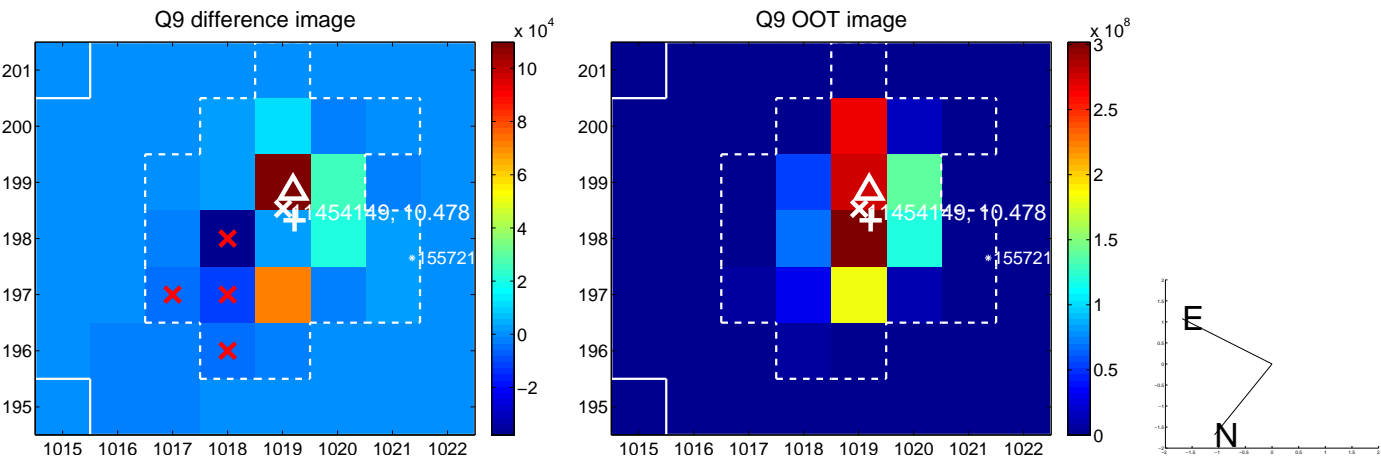
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



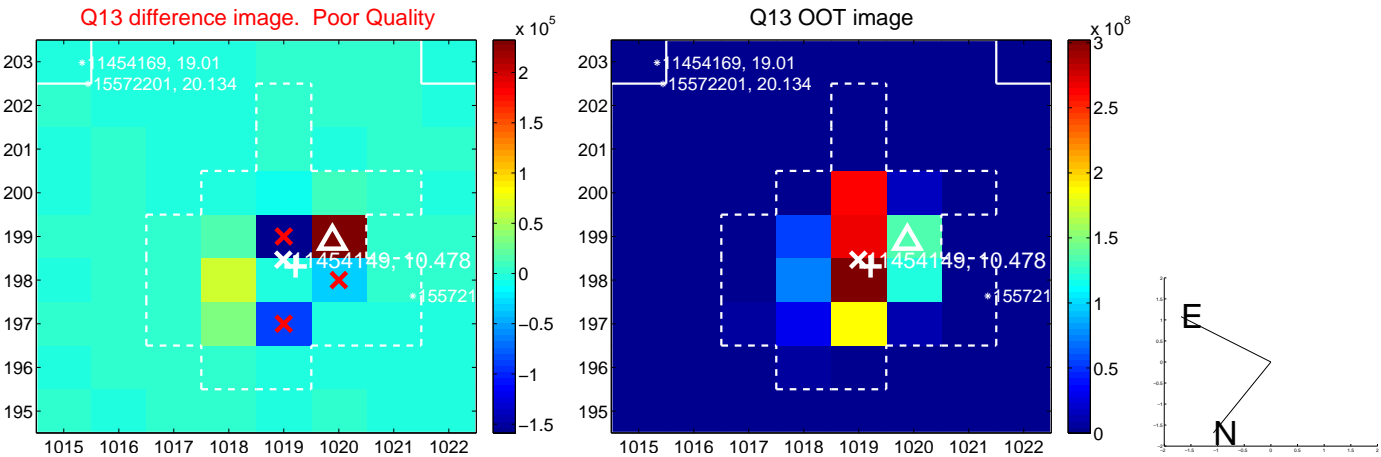
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



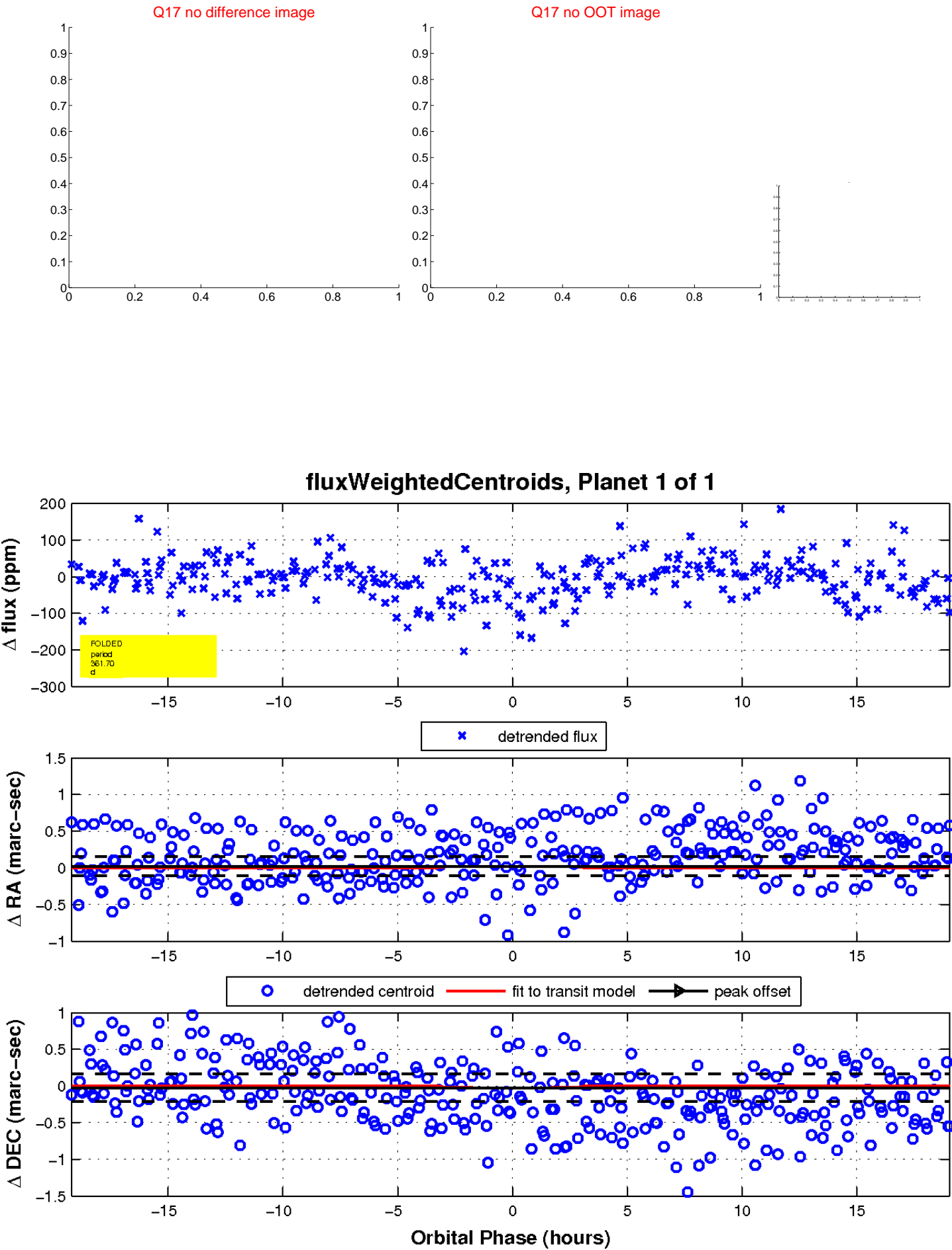
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.



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



UKIRT Image

Declination

