

KIC 011193511

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})
011193511-01	OBS	No	487.011867	309.550515	1160.8	3.677	9.7	7.2	0.71	5488	2.60	0.33

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011193511-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_TER_DV—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.

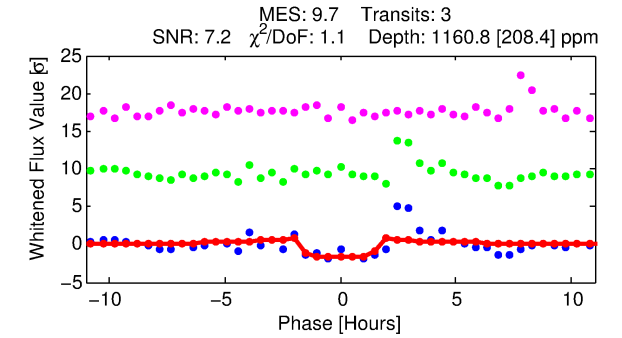
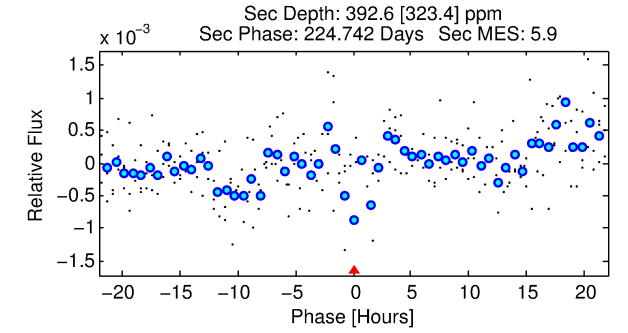
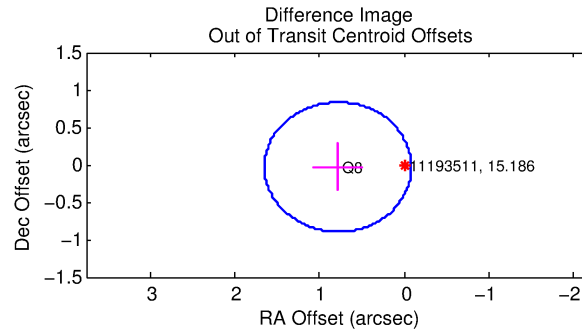
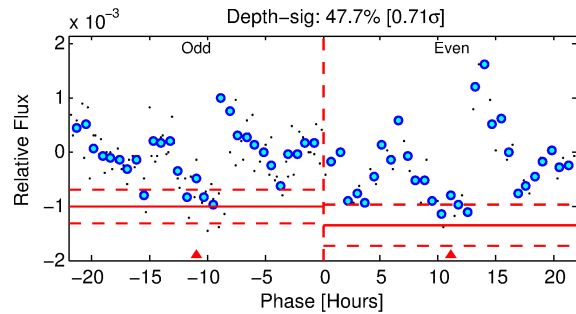
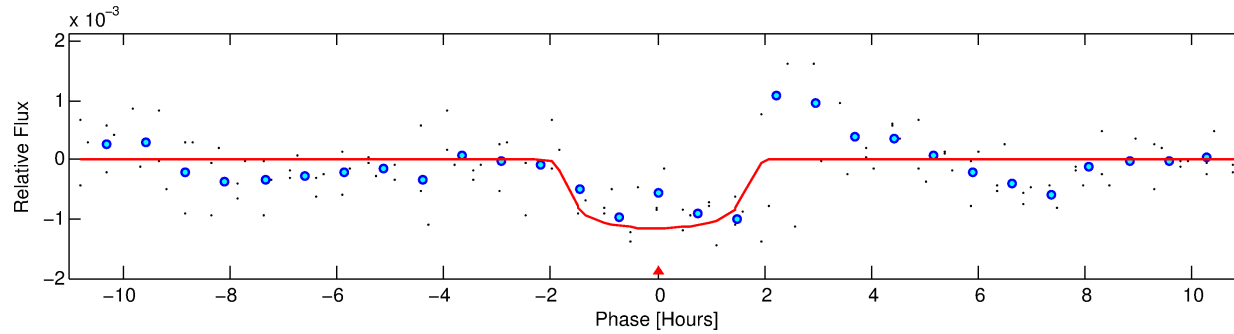
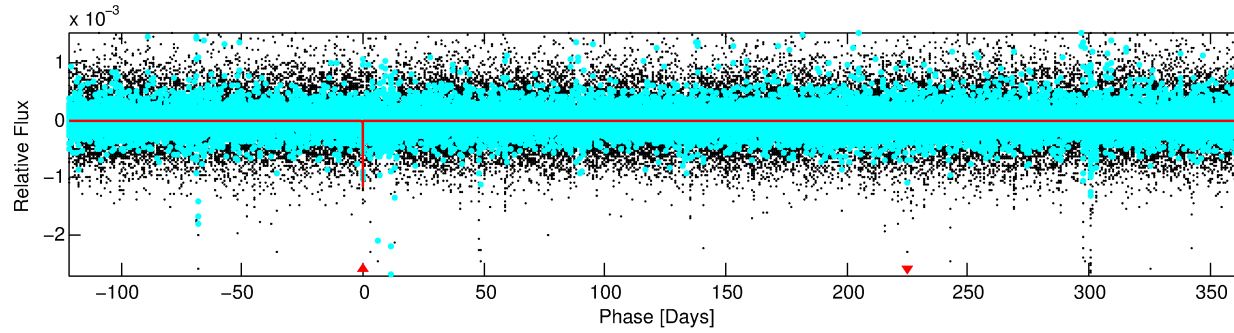
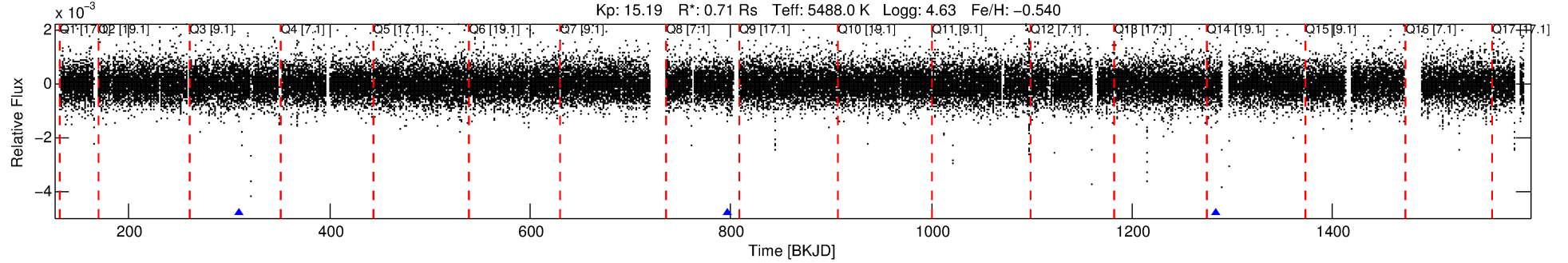
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011193511-01

No Significant Match Found

DV One-Page Summary

KIC: 11193511 Candidate: 1 of 1 Period: 487.012 d



DV Fit Results:

Period = 487.01187 [0.00615] d
Epoch = 309.5505 [0.0090] BKJD
Rp/R* = 0.0338 [0.0206]
a/R* = 732.35 [1888.83]
b = 0.74 [1.61]
Seff = 0.33 [0.08]
Teq = 193 [11] K
Rp = 2.60 [1.66] Re
a = 1.1124 [0.1607] AU
Ag = 39476.61 [58685.97] [0.67σ]
Teffp = 4203 [1553] K [2.58σ]

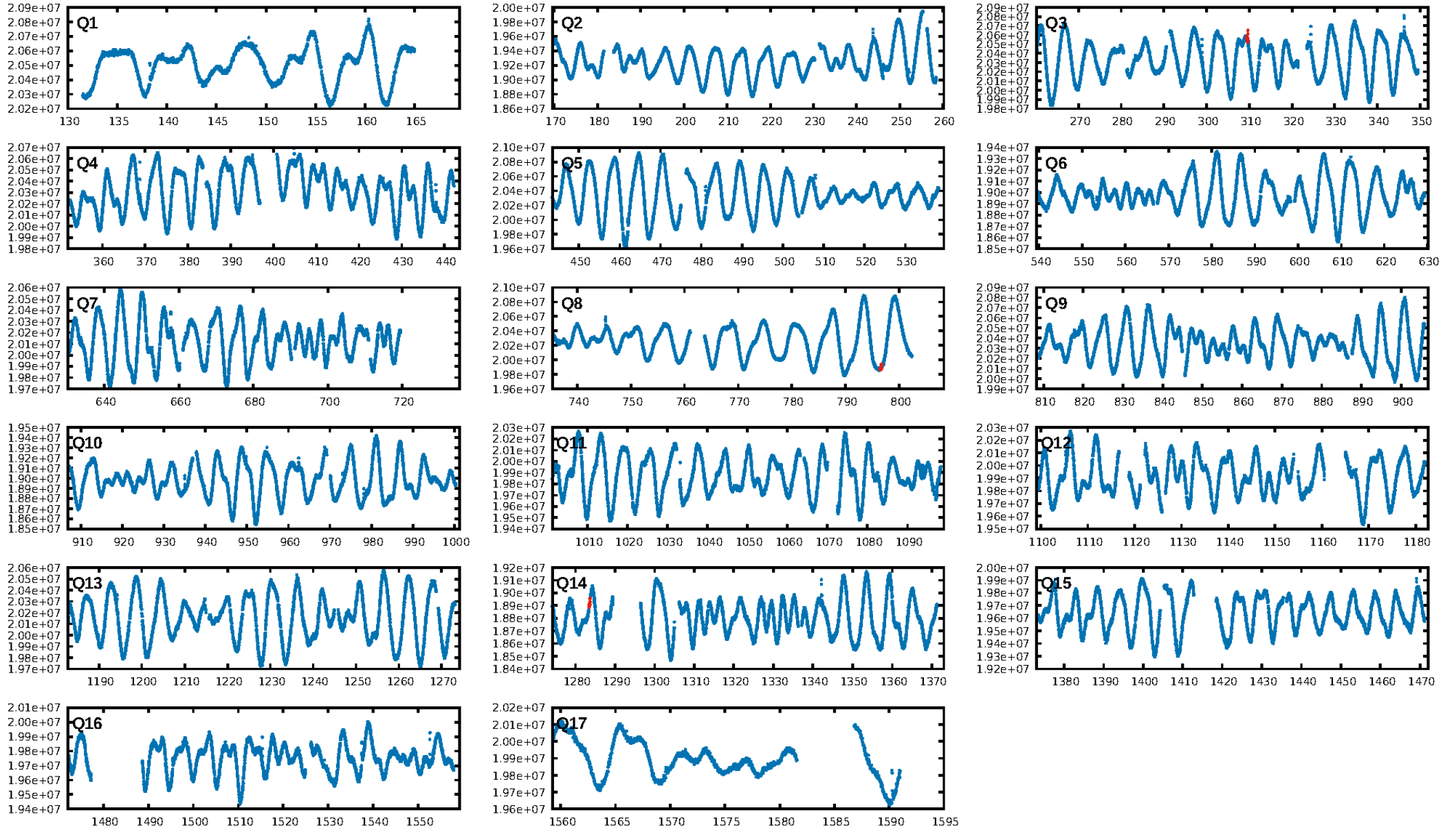
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 36.7%
ModelChiSquareGof-sig: 98.2%
Bootstrap-pfa: 4.01e-08
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: -1.44
Centroid-sig: 53.2%
Centroid-so: 0.882 arcsec [0.82σ]
OotOffset-rm: 0.782 arcsec [2.71σ]
OotOffset-st: 0/0/1/0 [1]
KicOffset-rm: 0.649 arcsec [2.25σ]
KicOffset-st: 0/0/1/0 [1]
DiffImageQuality-fgm: 1.00 [1/1]
DiffImageOverlap-fno: 1.00 [2/2]

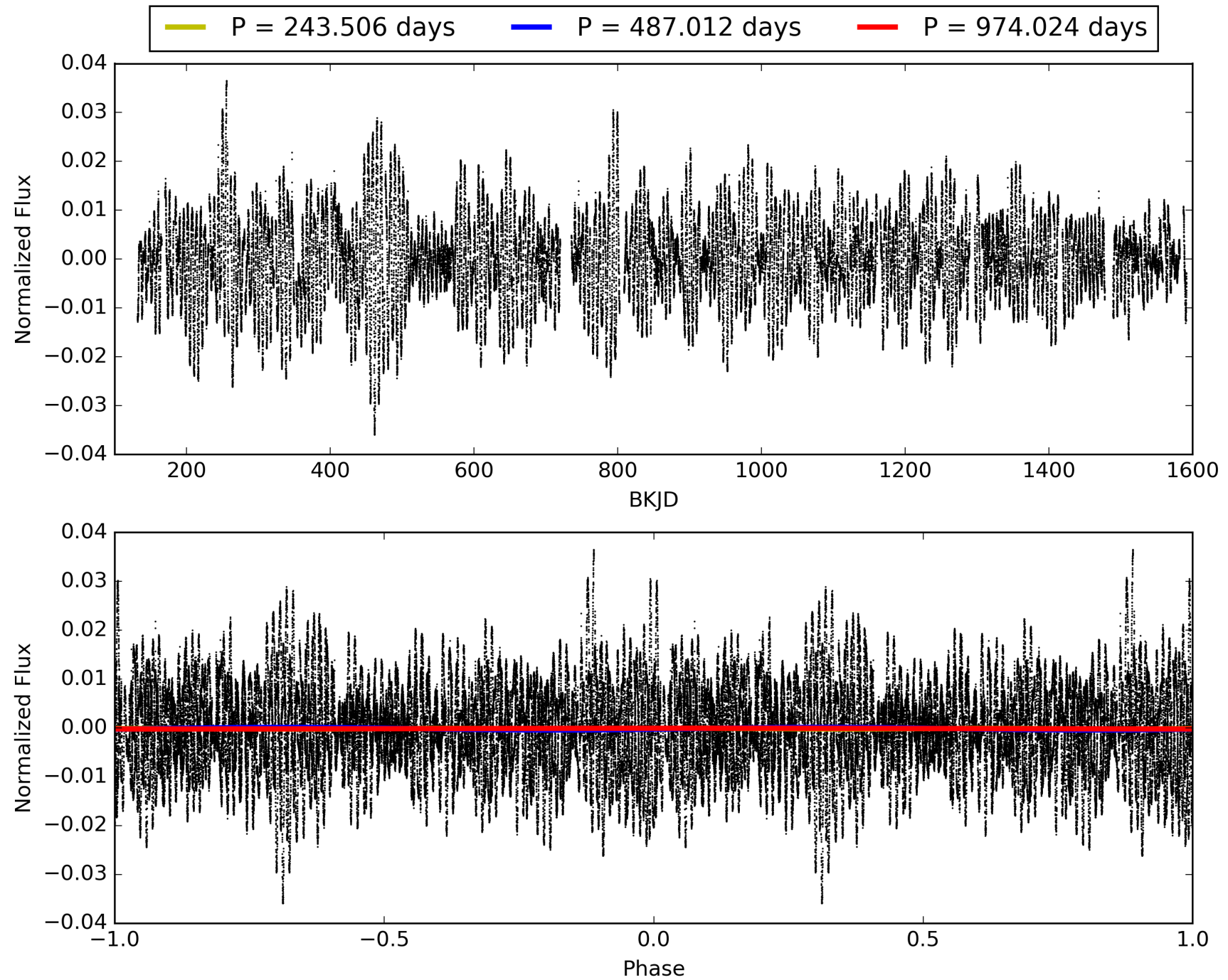
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 01:21:27 Z

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

TCE 011193511-01, PDC Light Curves

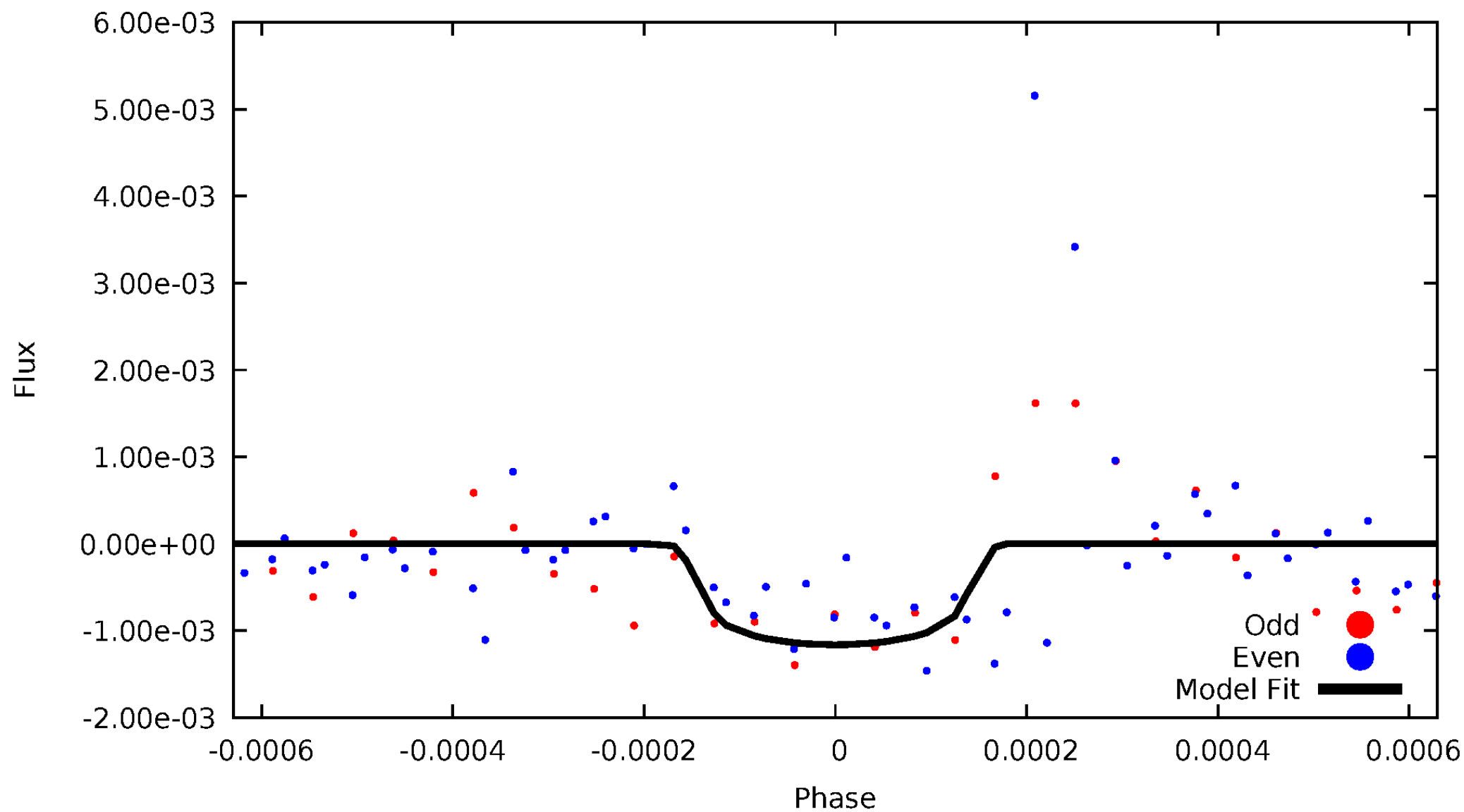


TCE 011193511-01



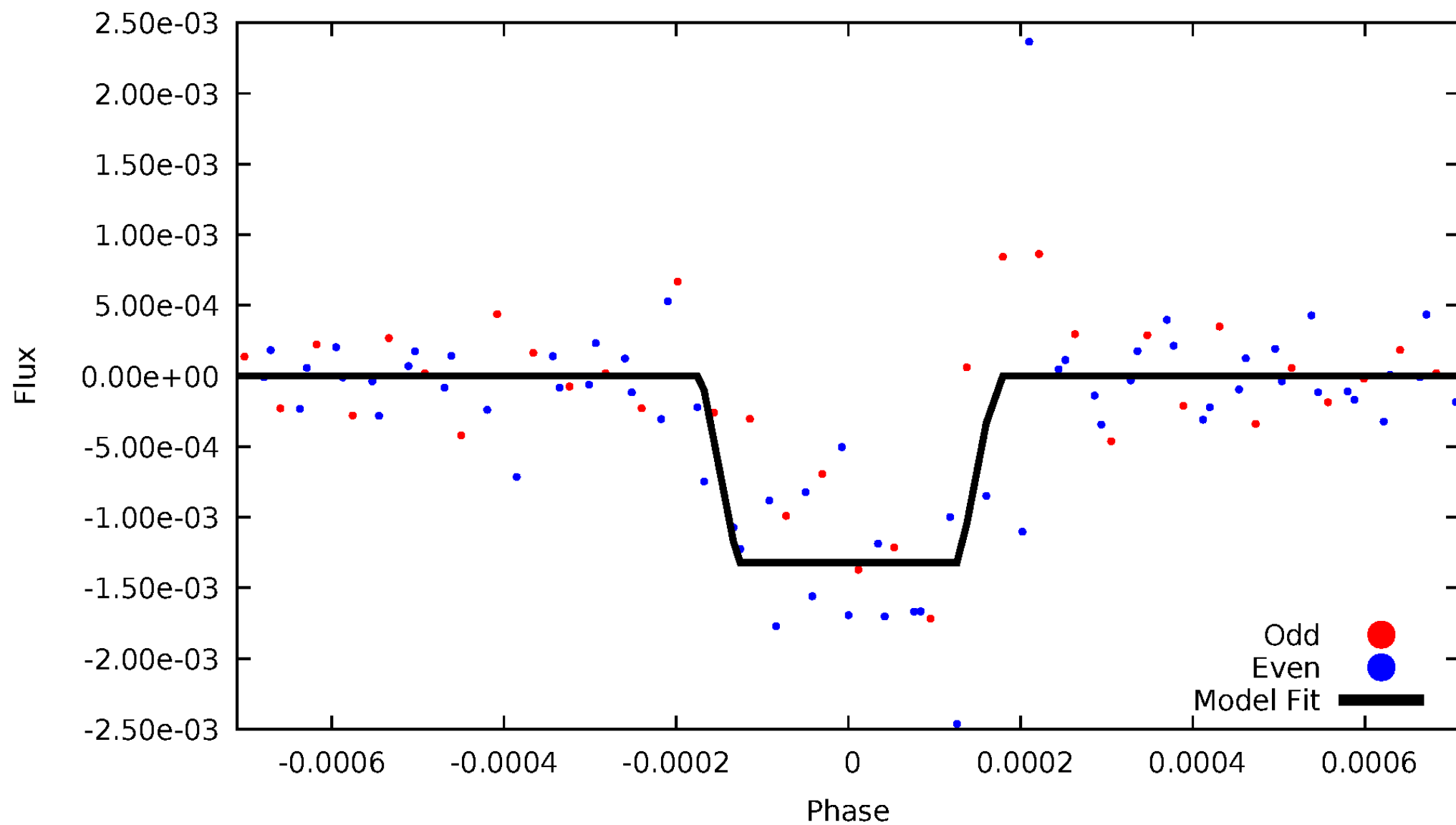
DV Odd/Even

TCE 011193511-01



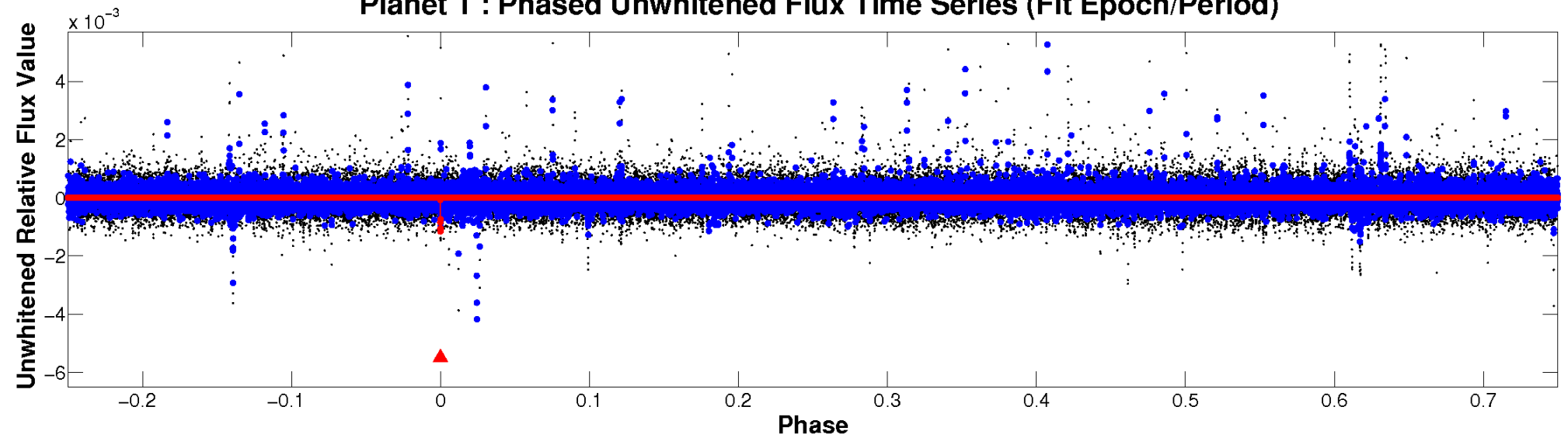
ALT Odd/Even

TCE 011193511-01

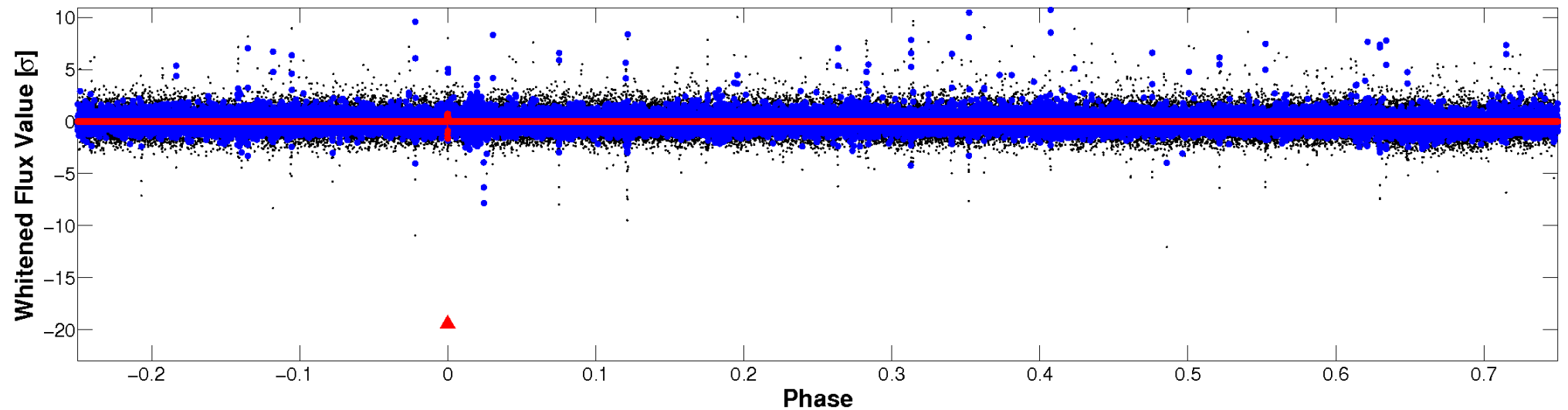


Non-Whitened Vs. Whitened Light Curve

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

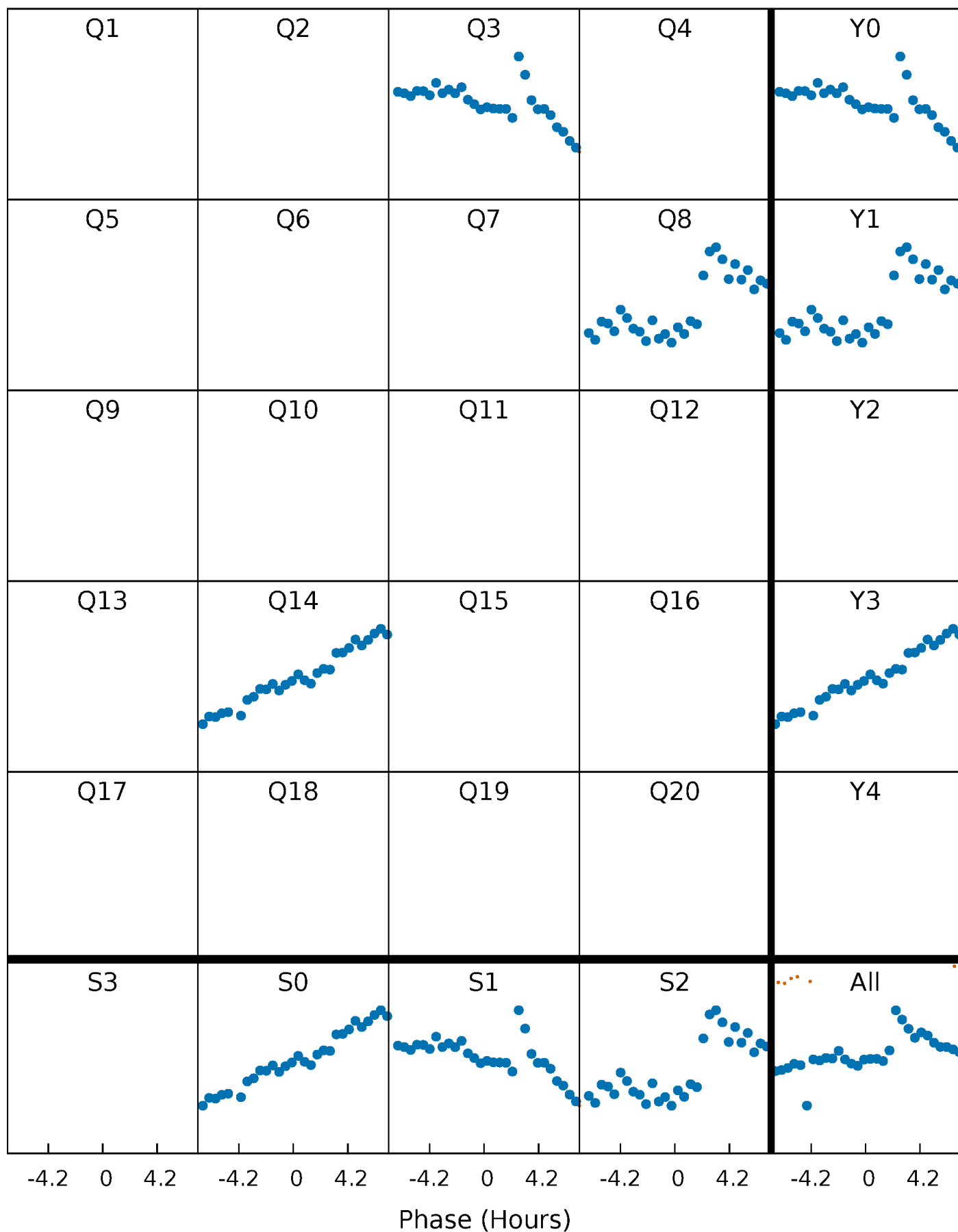


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



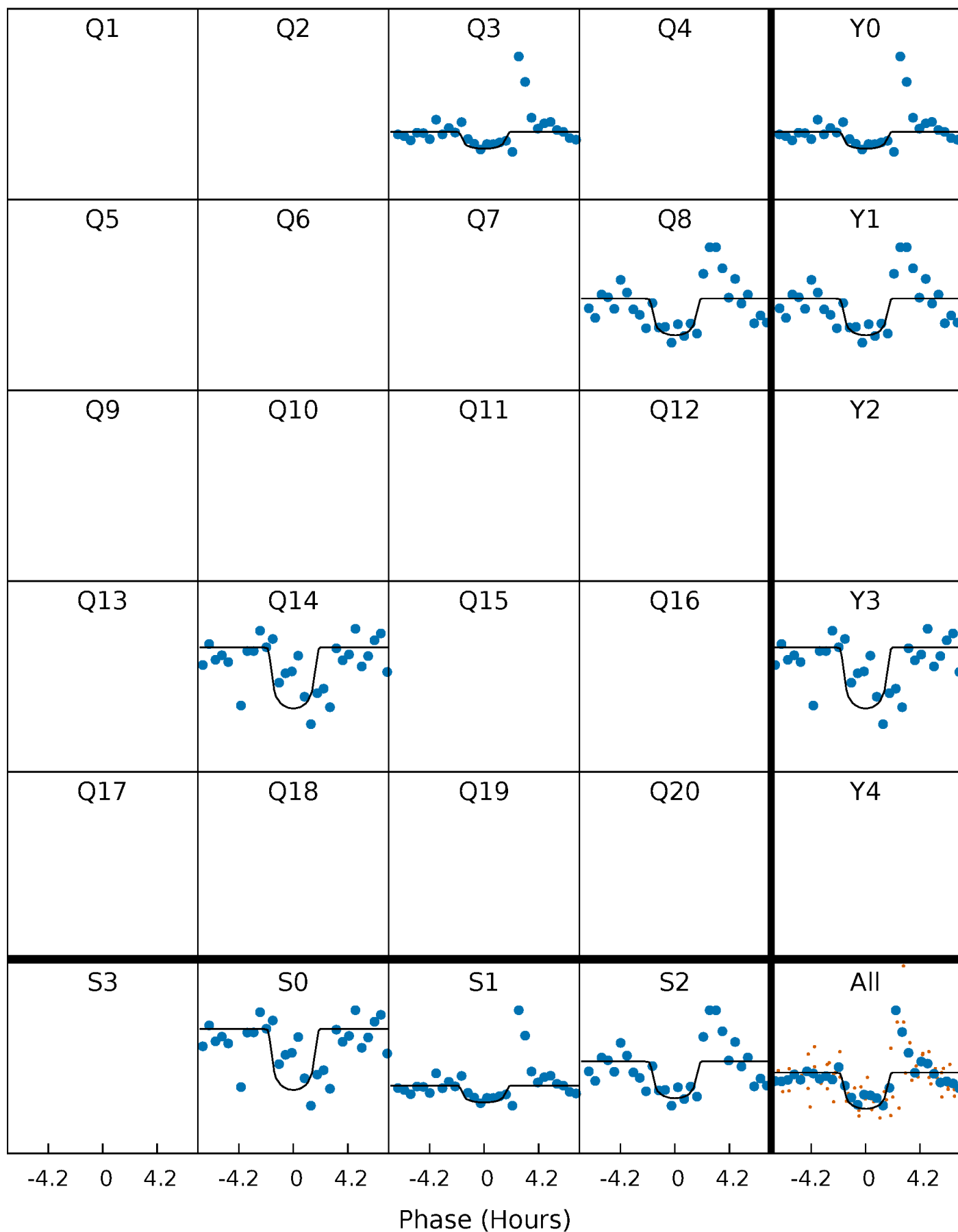
PDC Quarter-Phased Transit Curves

TCE 011193511-01 P=487.011867 Days $T_0=309.550515$ (BKJD)



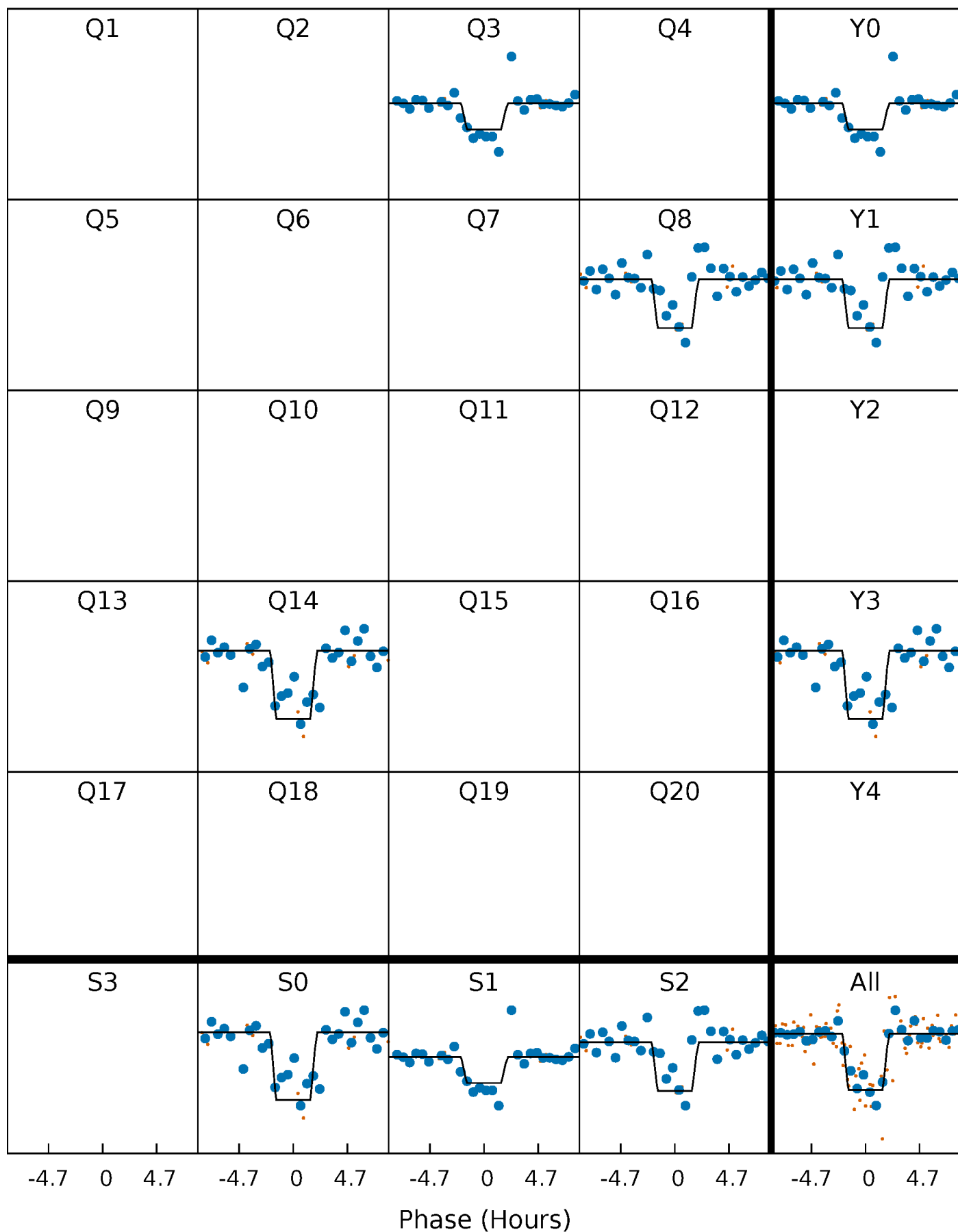
DV Quarter-Phased Transit Curves

TCE 011193511-01 P=487.011867 Days $T_0=309.550515$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

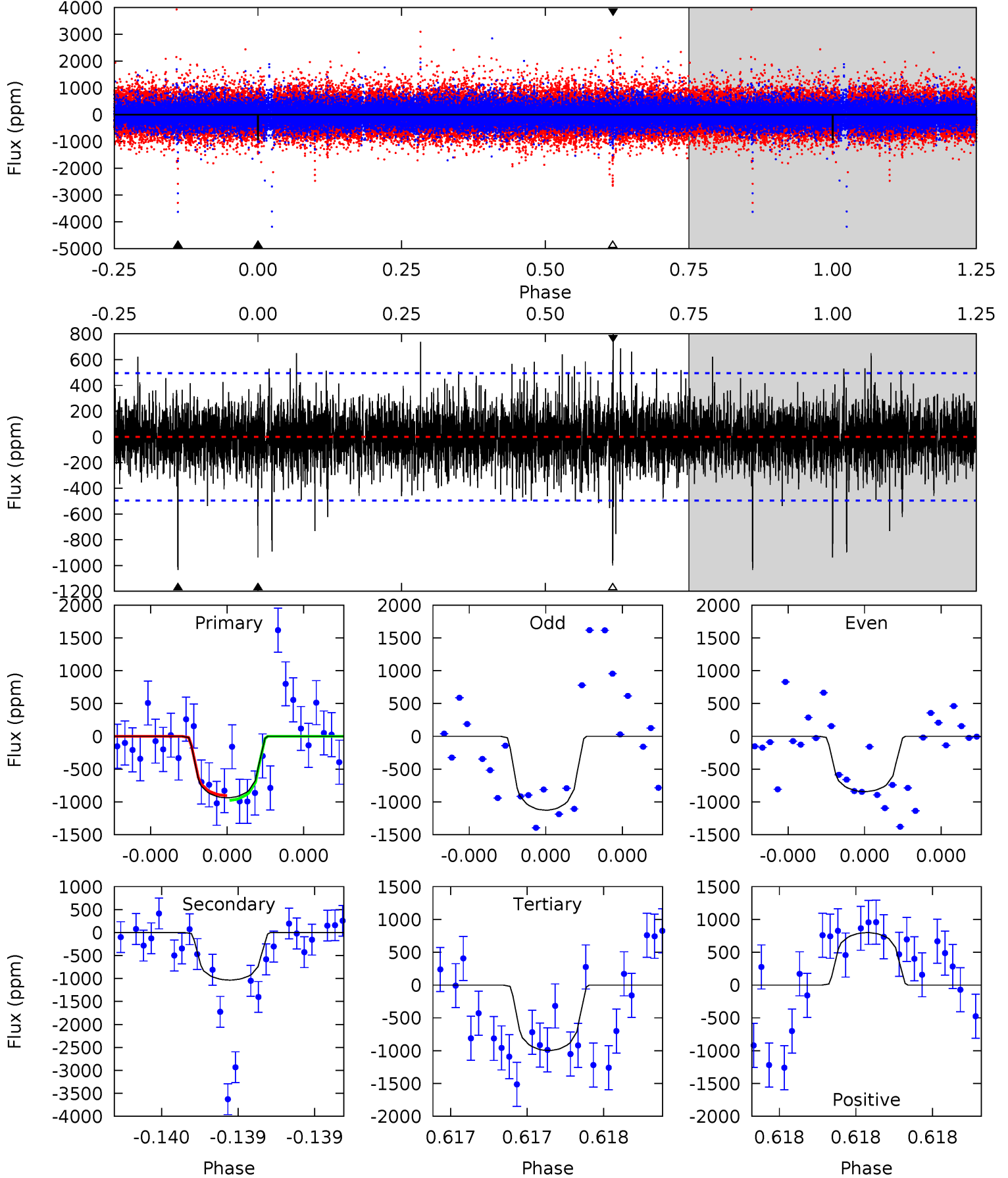
TCE 011193511-01 P=487.006658 Days $T_0=309.570215$ (BKJD)



DV Model-Shift Uniqueness Test

011193511-01, P = 487.011867 Days, E = 309.550515 Days

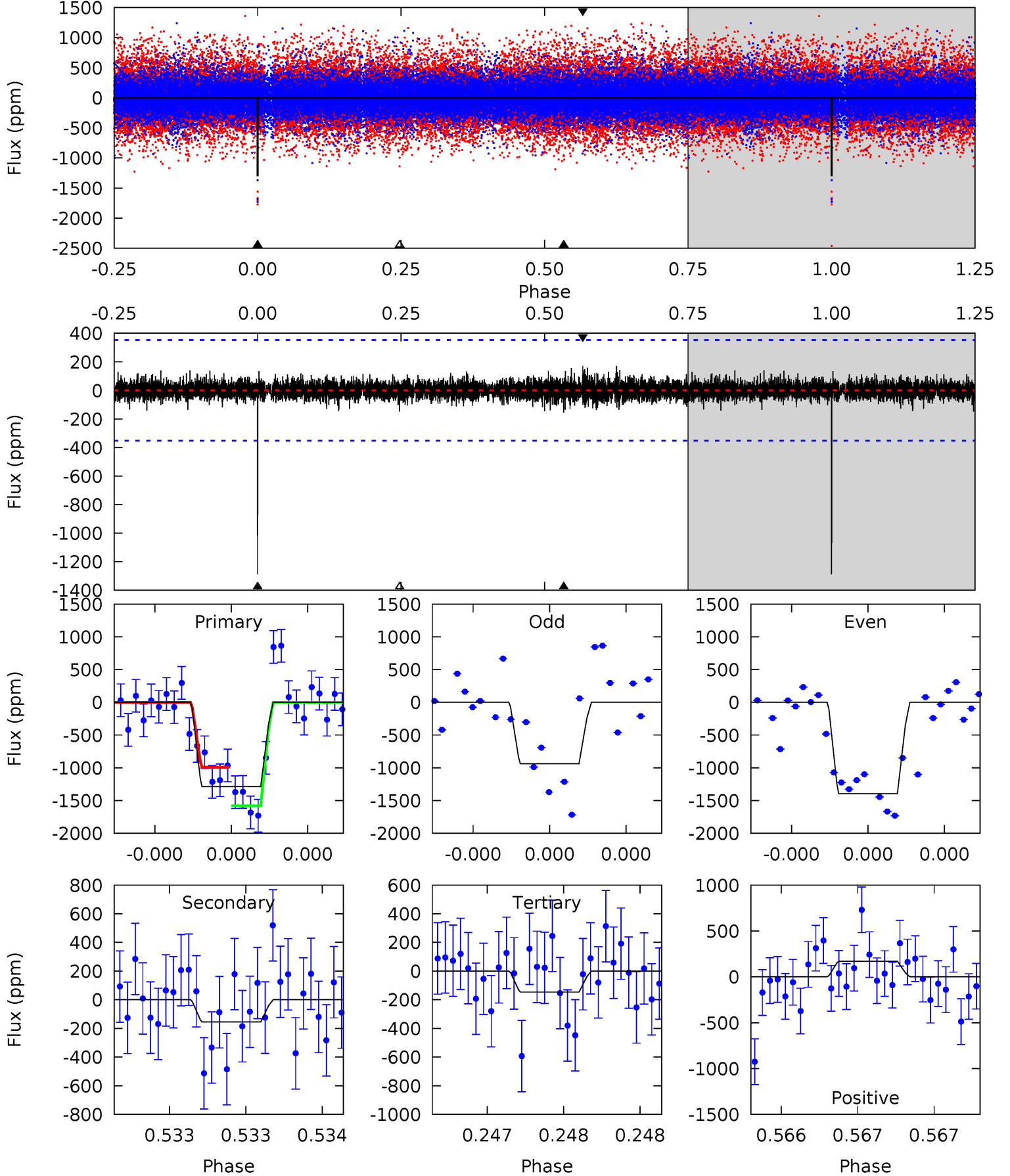
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.7	11.8	11.4	9.11	5.64	3.59	1.69	-0.68	1.58	0.42	2.69	1.46	1.02	0.44	0.43



Alt Model-Shift Uniqueness Test

011193511-01, $P = 487.006658$ Days, $E = 309.570215$ Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
20.6	2.49	2.35	2.73	5.65	3.59	0.53	18.3	17.9	0.14	-0.24	3.67	1.18	0.12	4.72



Stellar Parameters For KIC 011193511

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5488^{+163}_{-163}	$4.629^{+0.035}_{-0.105}$	$-0.540^{+0.300}_{-0.300}$	$0.706^{+0.127}_{-0.045}$	$0.790^{+0.074}_{-0.081}$	$3.162^{+0.471}_{-1.079}$
	+3%/-3%	+1%/-2%	+56%/-56%	+18%/-6%	+9%/-10%	+15%/-34%
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 011193511-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-1035 ± 88	$2.62^{+1.64}_{-1.36}$	272^{+13}_{-10}	5394^{+2658}_{-972}	$101721^{+336488}_{-64314}$
Alt.	-156 ± 62	$2.96^{+1.62}_{-1.38}$	273^{+13}_{-10}	3609^{+880}_{-546}	11967^{+31067}_{-7863}

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

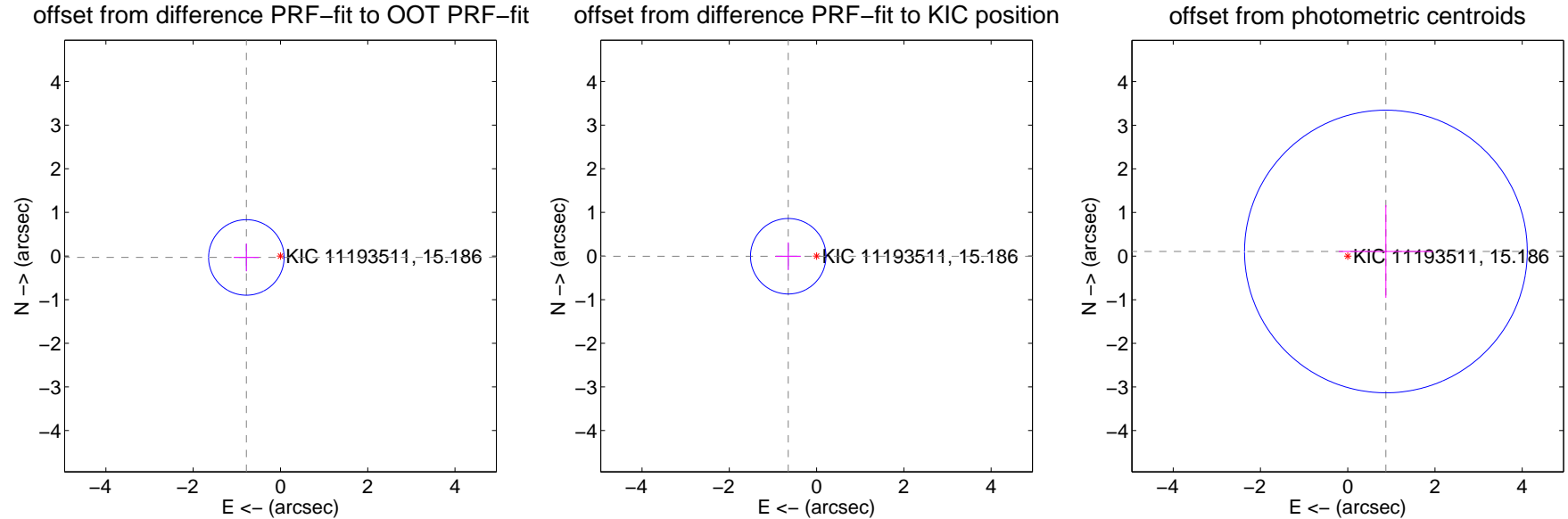
DV Centroid Data

Supplemental centroid analysis for 011193511-01. Kepler magnitude: 15.19. Transit SNR 7.24

There are 1 quarters with good PRF difference image offsets

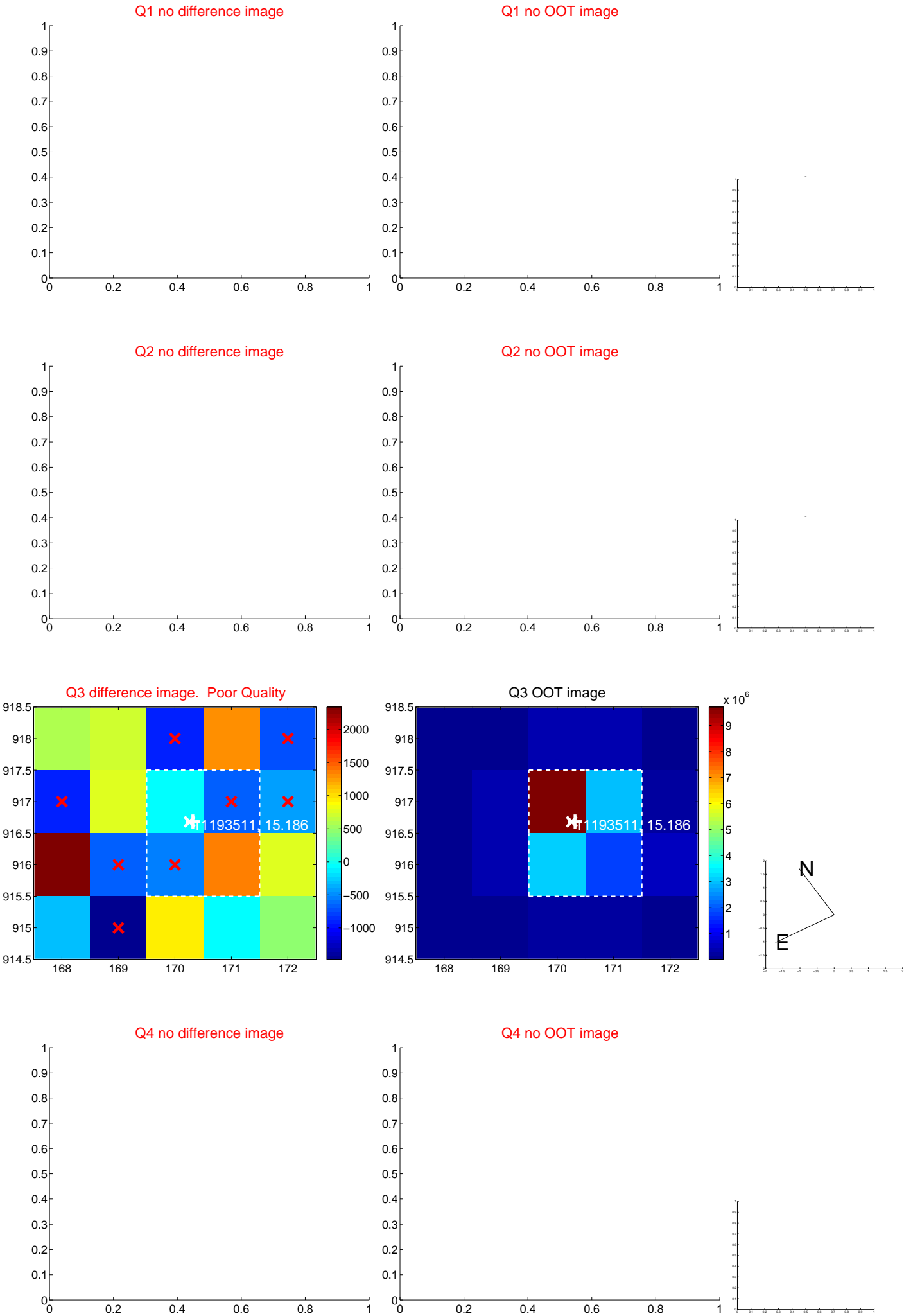
The direct PRF centroid is offset from the target star catalog position by about 0.14 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.782 ± 0.288	2.71	0.782 ± 0.288	-0.033 ± 0.317
PRF-fit source offset from KIC position	0.649 ± 0.288	2.25	0.649 ± 0.288	-0.005 ± 0.317
photometric centroid source offset	0.88 ± 1.08	0.82	-0.88 ± 1.08	0.11 ± 1.06

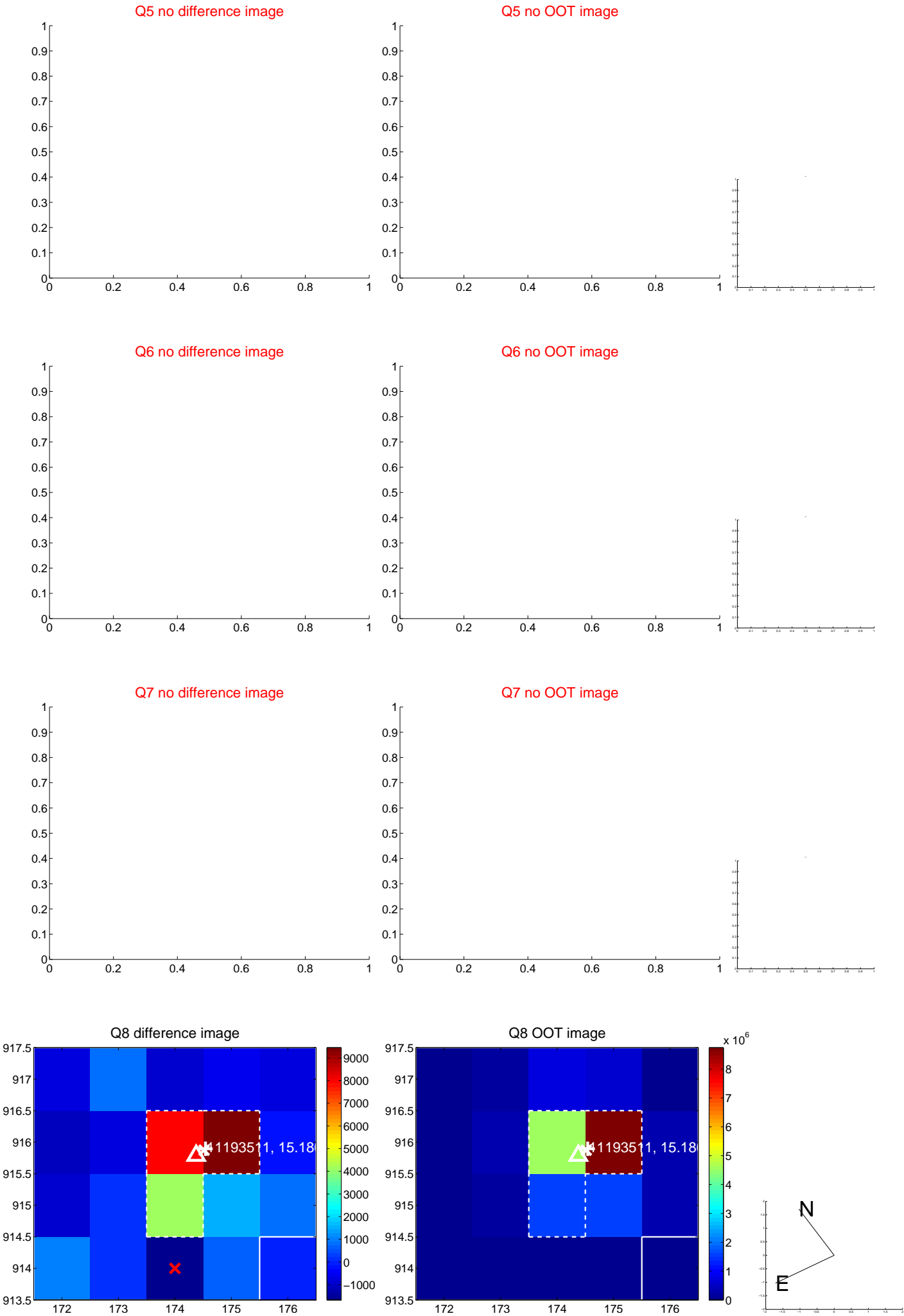


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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



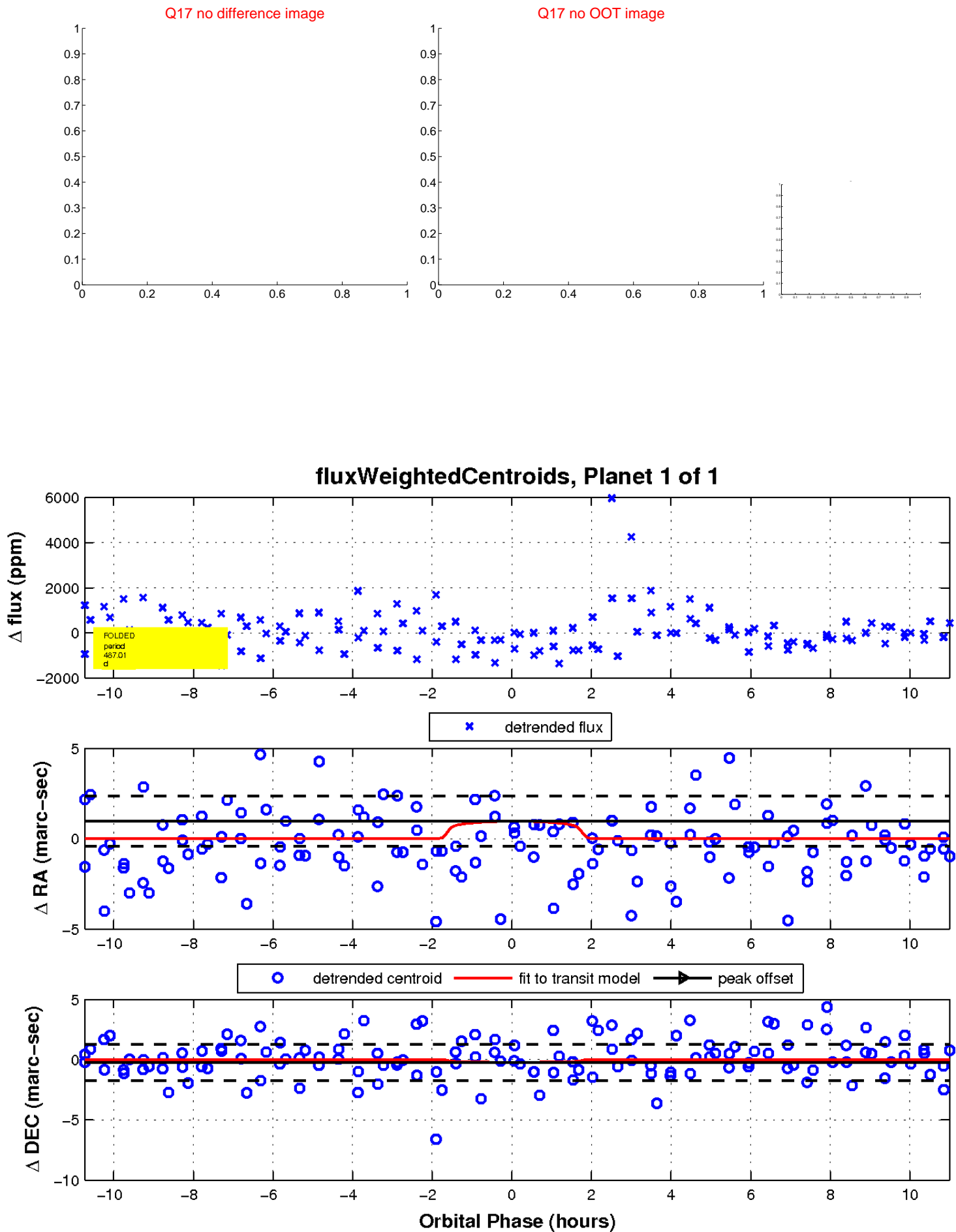
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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UKIRT Image

Declination

