

KIC 007619131

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})
007619131-01	OBS	No	370.747115	230.950233	1309.1	21.509	9.8	9.9	1.02	5842	7.11	1.05

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007619131-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE—LPP_DV—MOD_NONUNIQ_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.

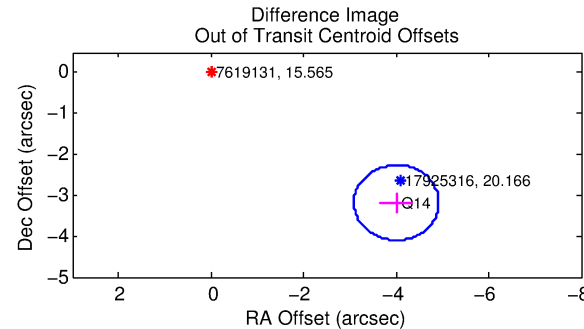
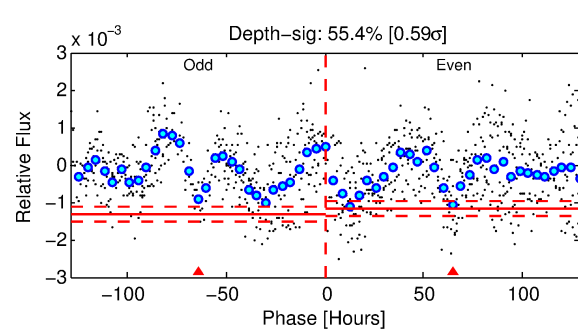
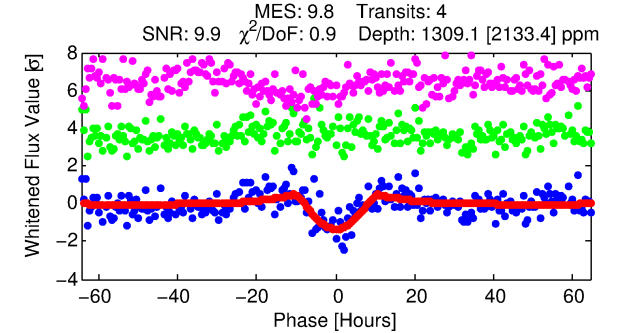
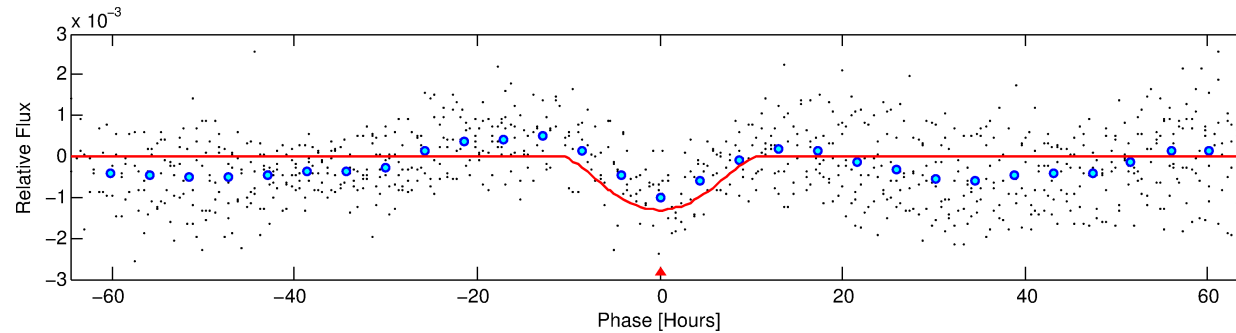
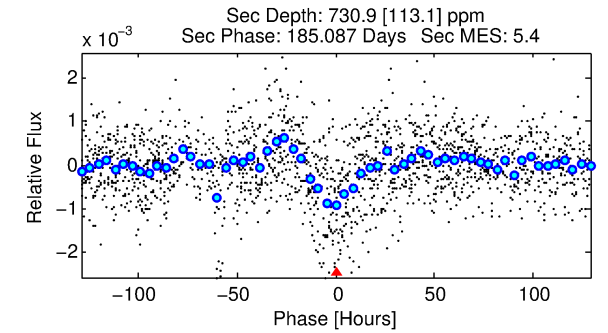
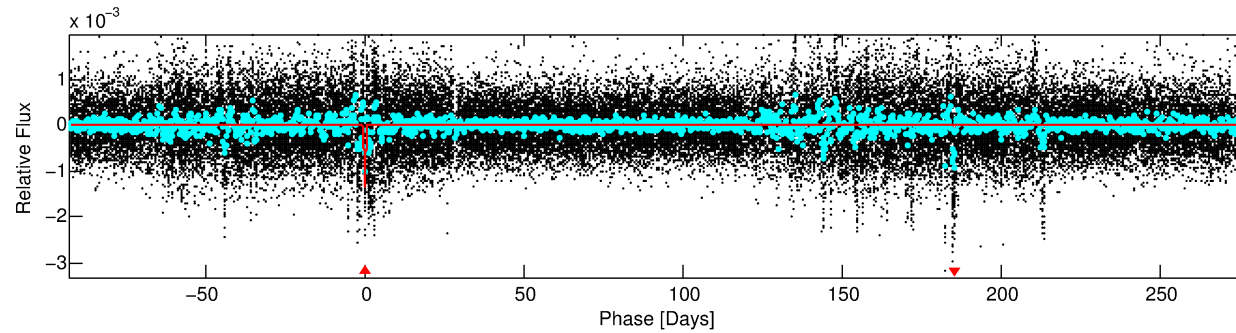
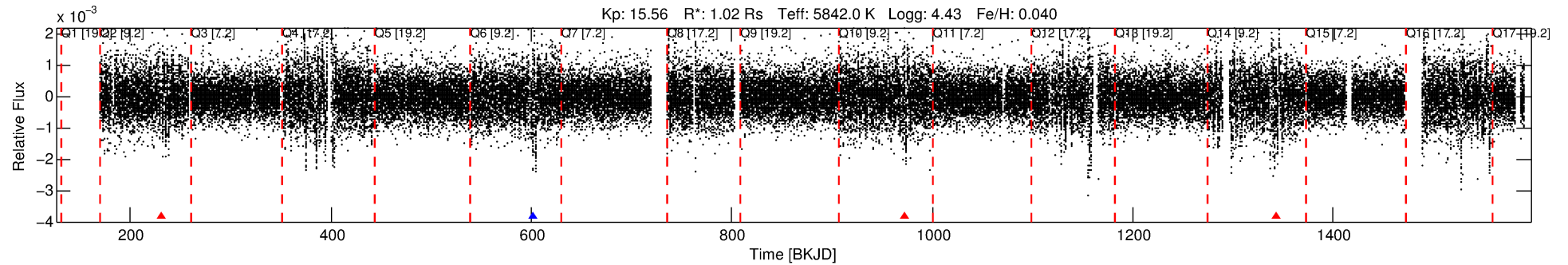
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007619131-01

No Significant Match Found

DV One-Page Summary

KIC: 7619131 Candidate: 1 of 1 Period: 370.747 d



DV Fit Results:

Period = 370.74712 [0.02415] d
Epoch = 230.9502 [0.0529] BKJD
Rp/R* = 0.0640 [0.1785]
a/R* = 47.87 [30.31]
b = 1.00 [0.32]
Seff = 1.05 [0.40]
Teq = 258 [25] K
Rp = 7.11 [19.94] Re
a = 1.0137 [0.2535] AU
Ag = 8176.77 [45733.01] [0.18σ]
Teff = 3797 [5300] K [0.67σ]

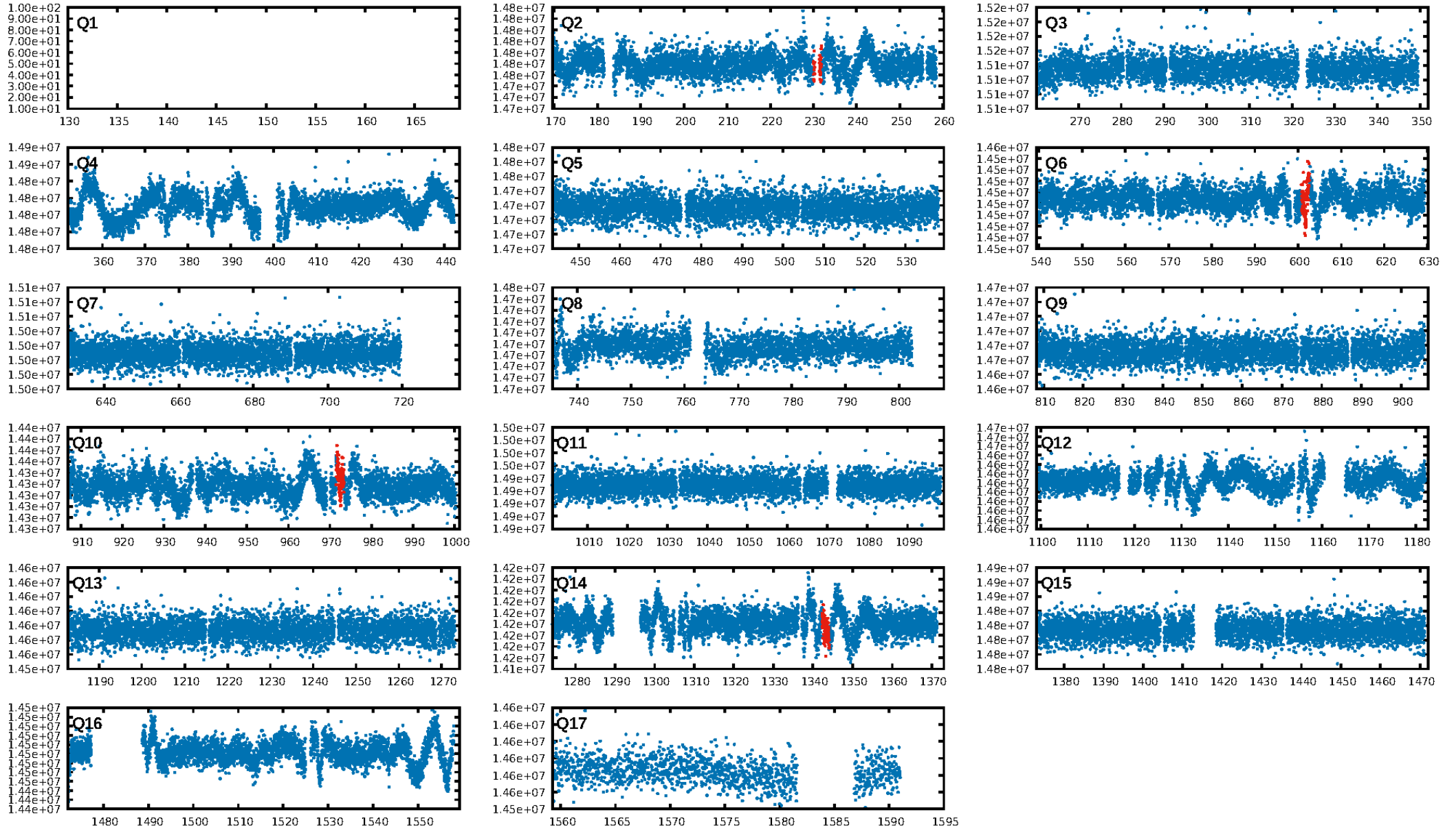
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 7.0%
ModelChiSquareGoF-sig: 100.0%
Bootstrap-pfa: 4.09e-11
RollingBand-fgt: 0.25 [1/4]
GhostDiagnostic-chr: 0.9993
Centroid-sig: 0.0%
Centroid-so: 15.153 arcsec [5.90σ]
OotOffset-rm: 5.114 arcsec [16.68σ]
KicOffset-rm: 5.273 arcsec [17.29σ]
OotOffset-st: 1/0/0/0 [1]
KicOffset-st: 1/0/0/0 [1]
DiffImageQuality-fgm: 0.00 [0/1]
DiffImageOverlap-fno: 1.00 [2/2]

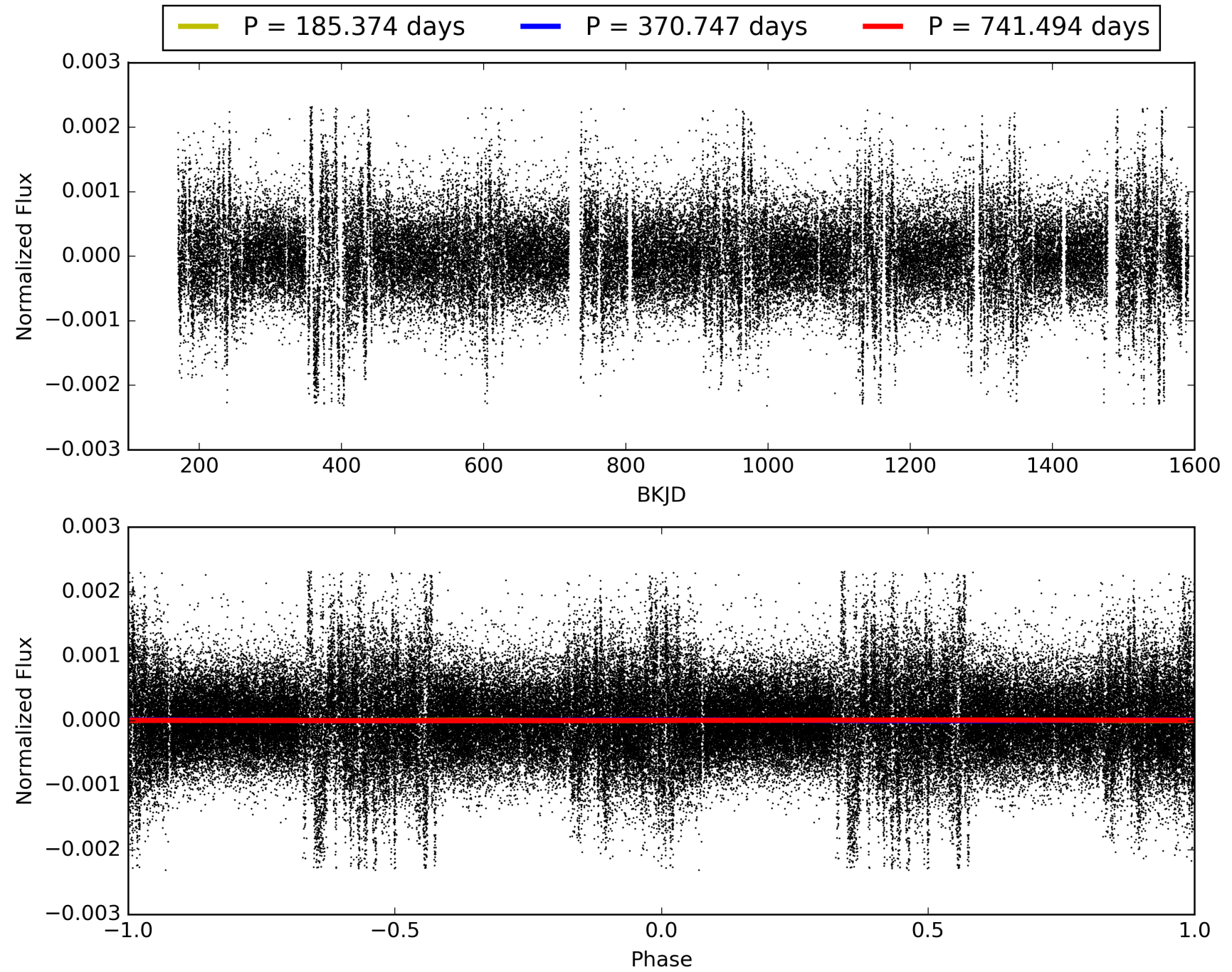
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 00:52:22 Z

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

TCE 007619131-01, PDC Light Curves

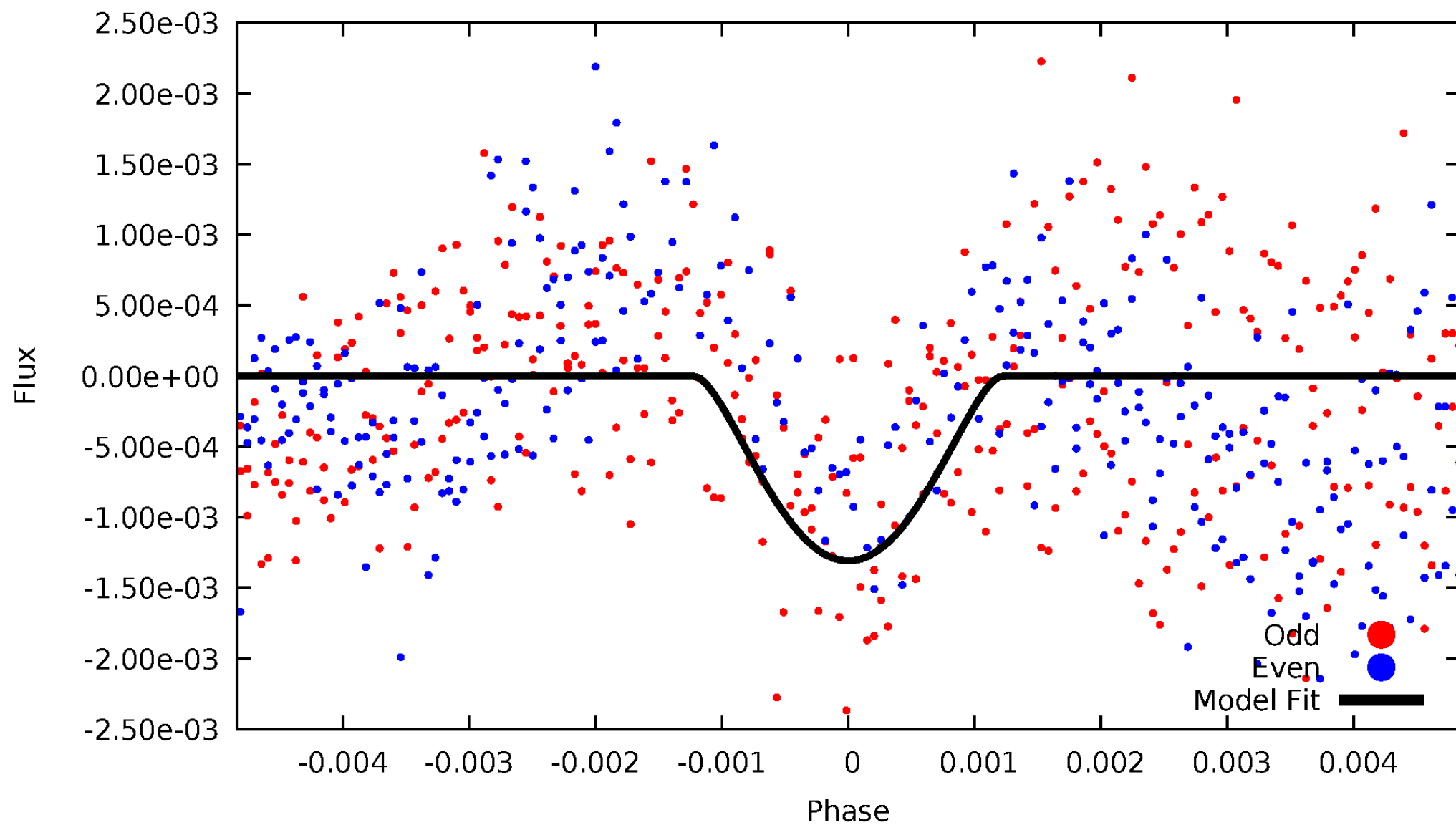


TCE 007619131-01



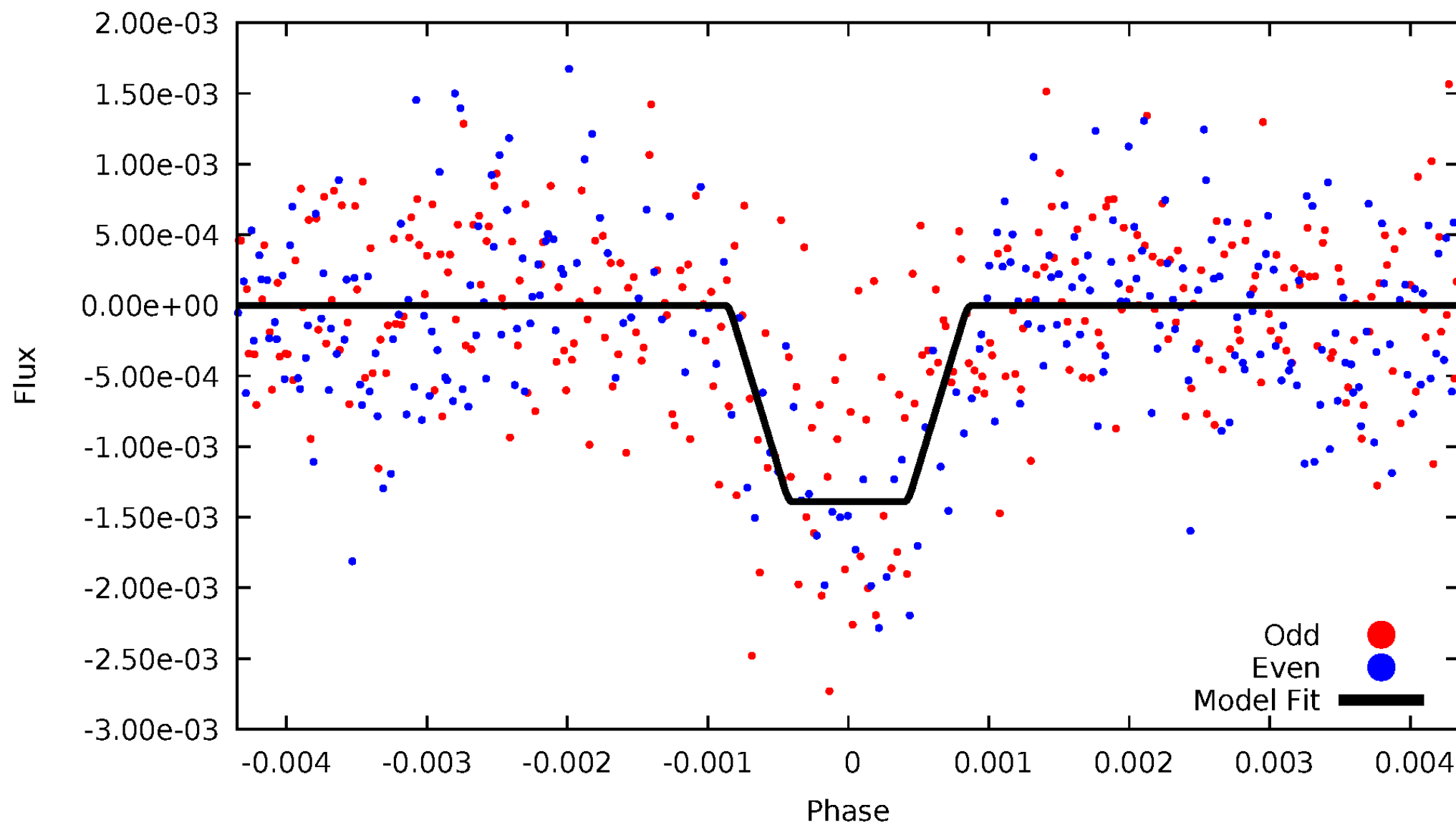
DV Odd/Even

TCE 007619131-01



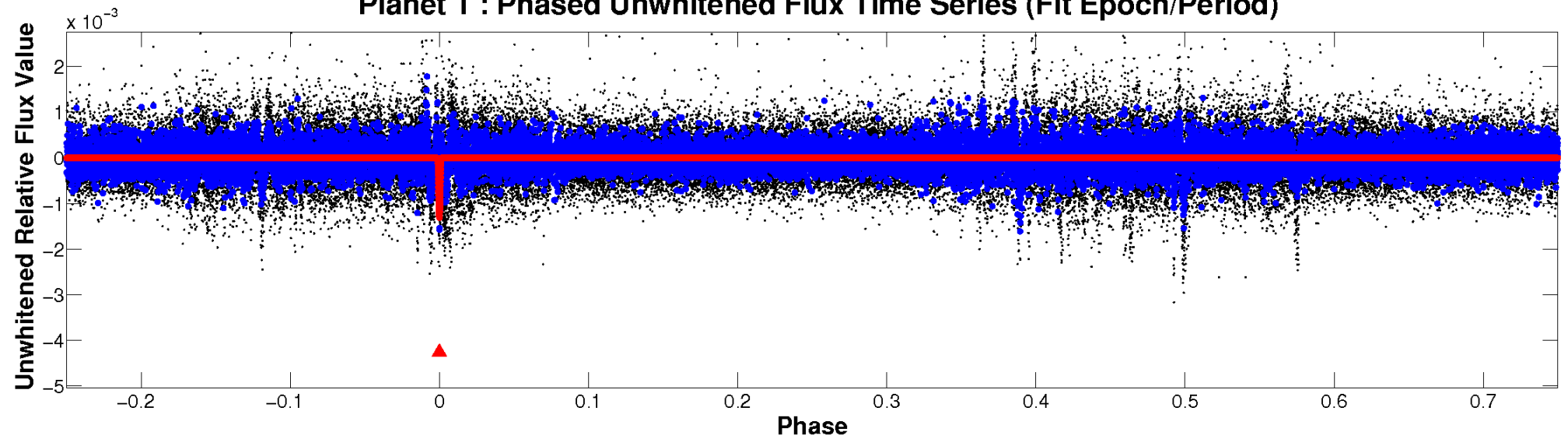
ALT Odd/Even

TCE 007619131-01

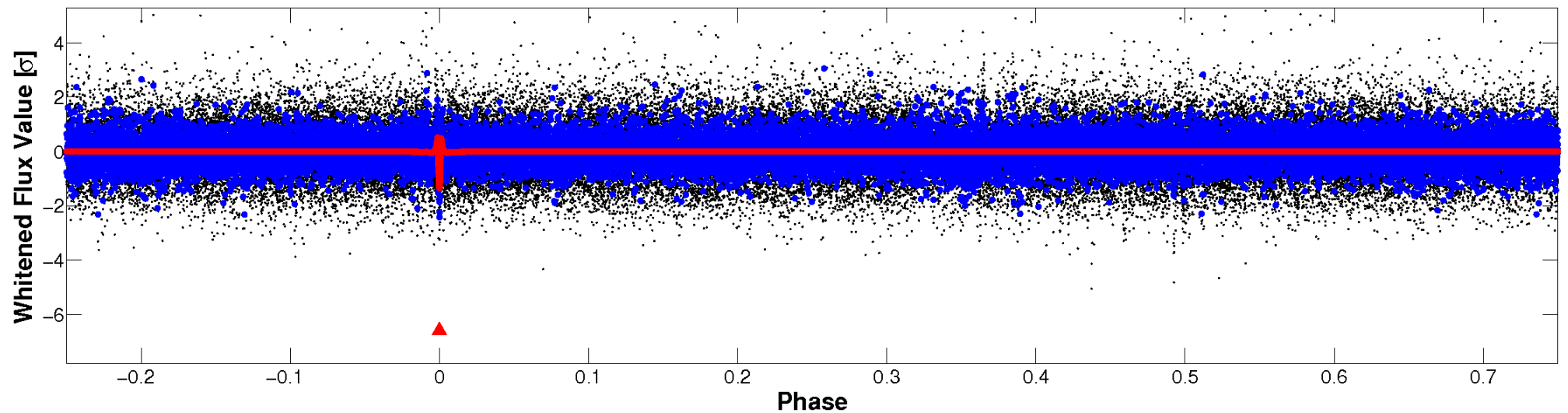


Non-Whitened Vs. Whitened Light Curve

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

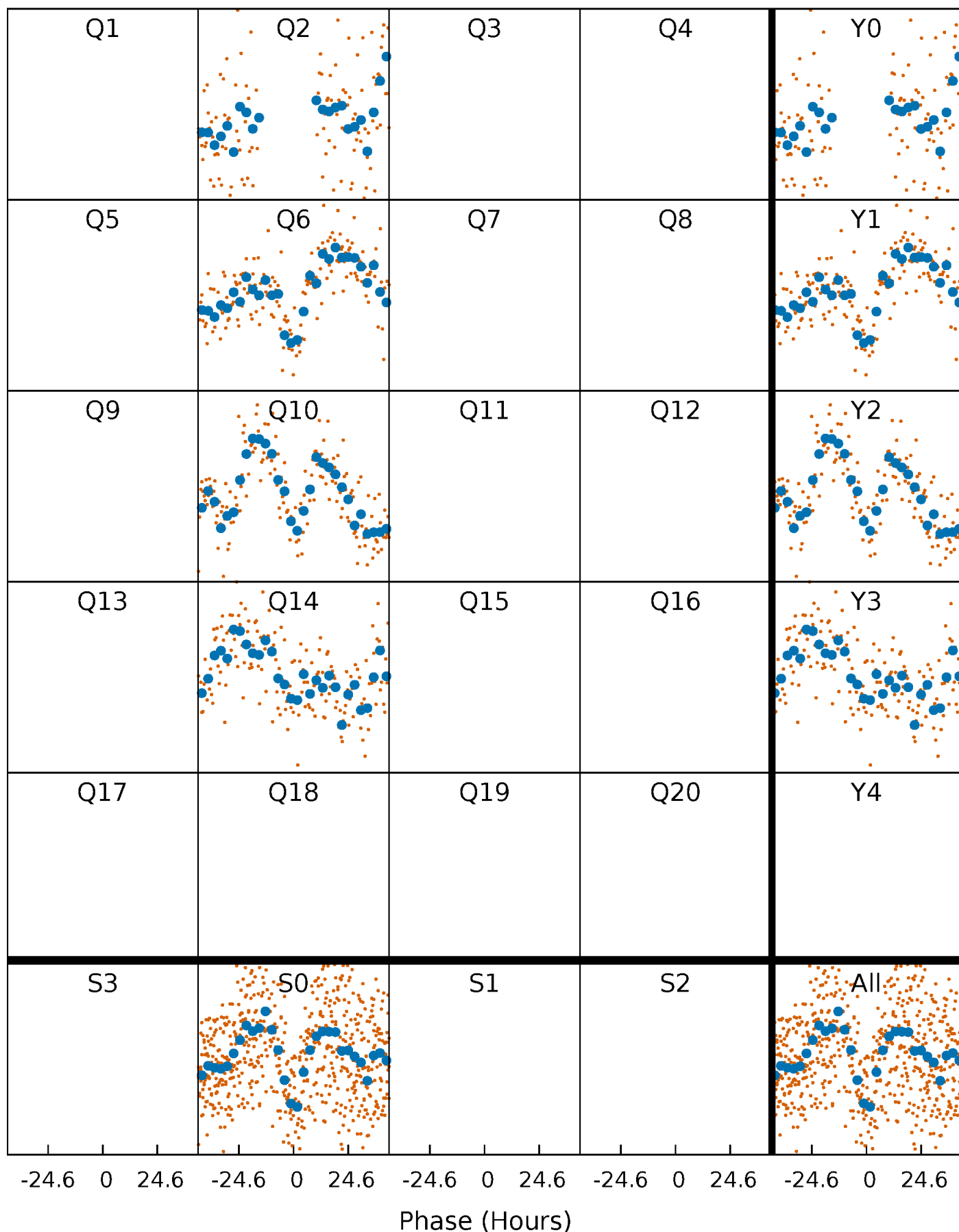


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



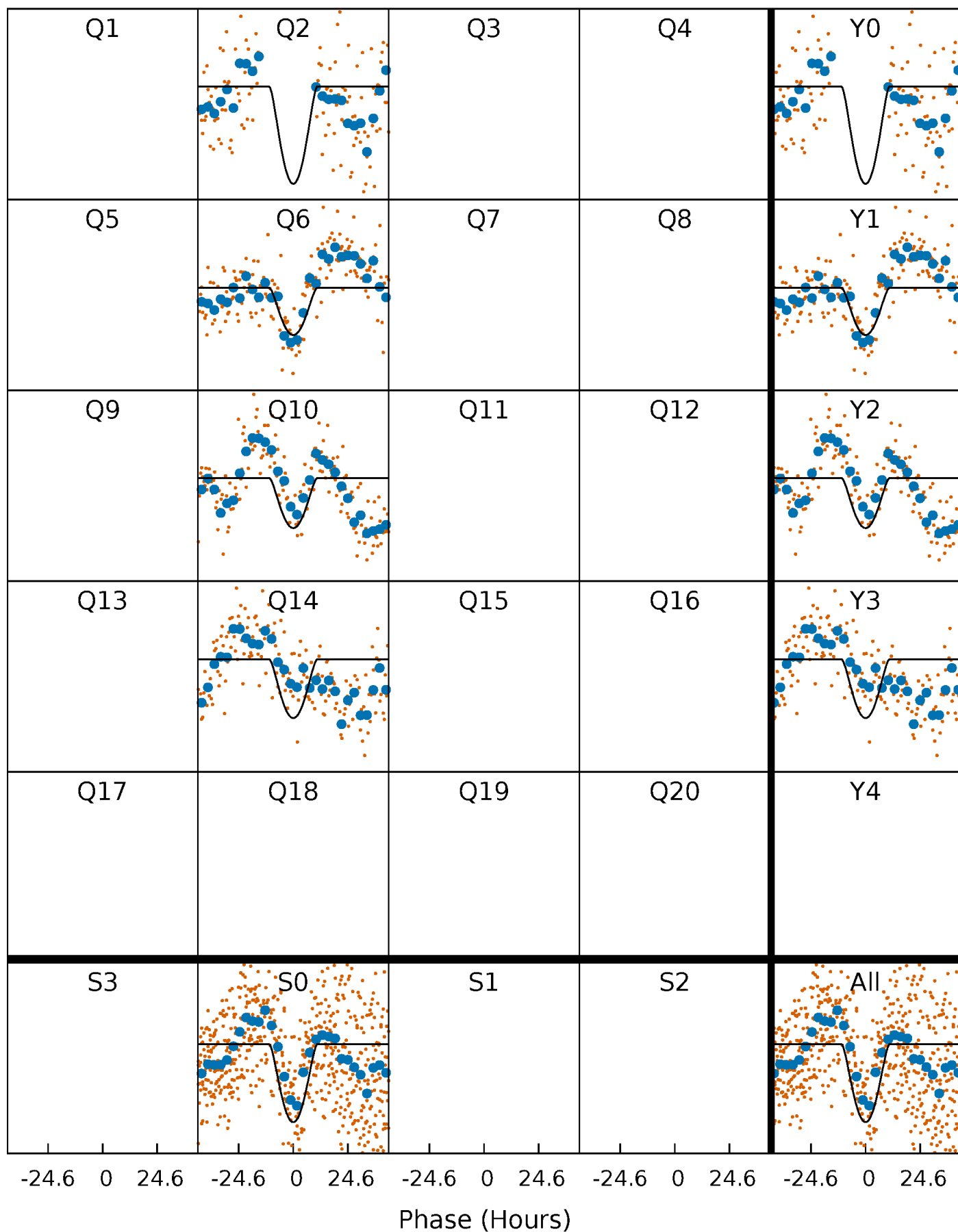
PDC Quarter-Phased Transit Curves

TCE 007619131-01 P=370.747115 Days $T_0=230.950233$ (BKJD)



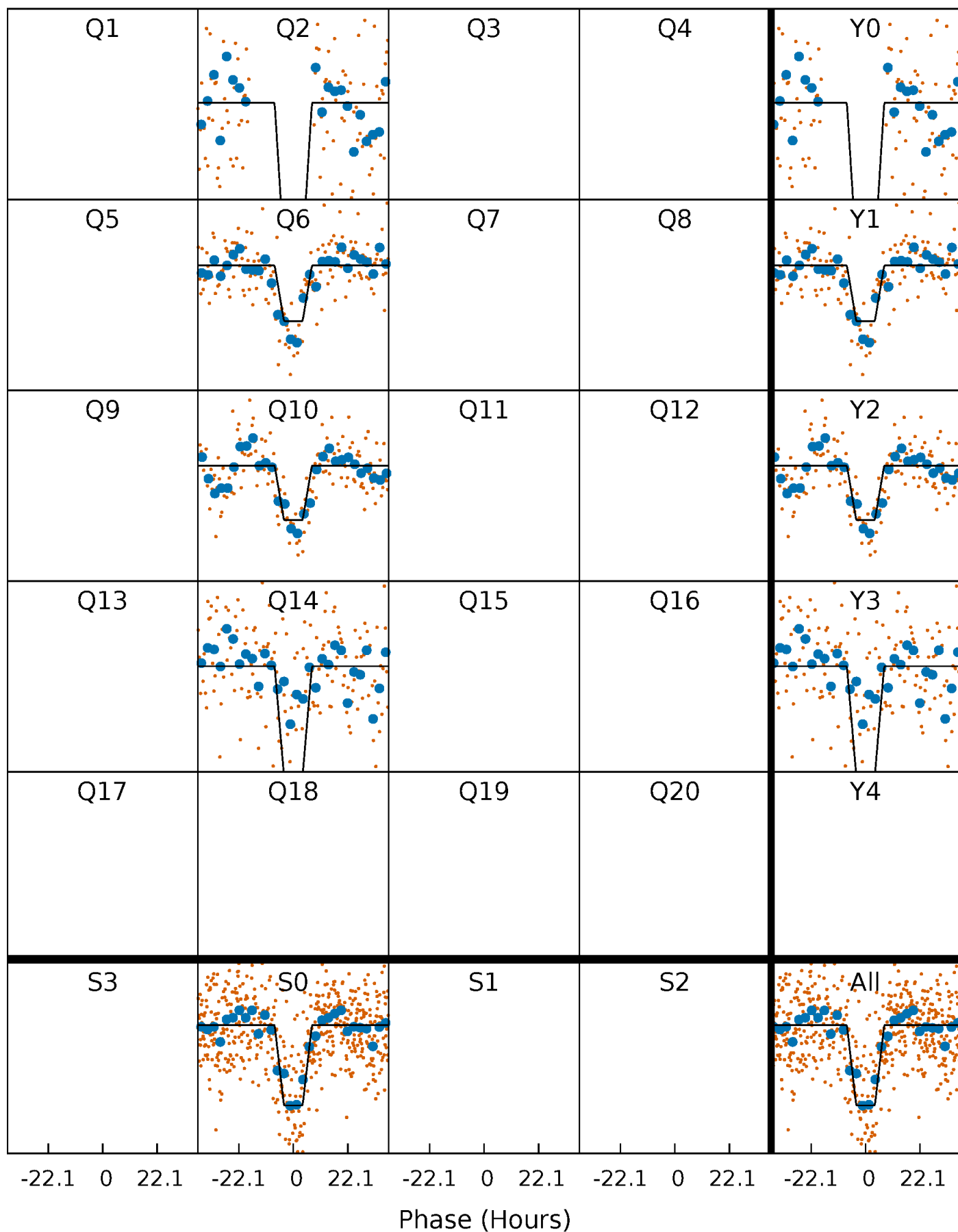
DV Quarter-Phased Transit Curves

TCE 007619131-01 P=370.747115 Days $T_0=230.950233$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

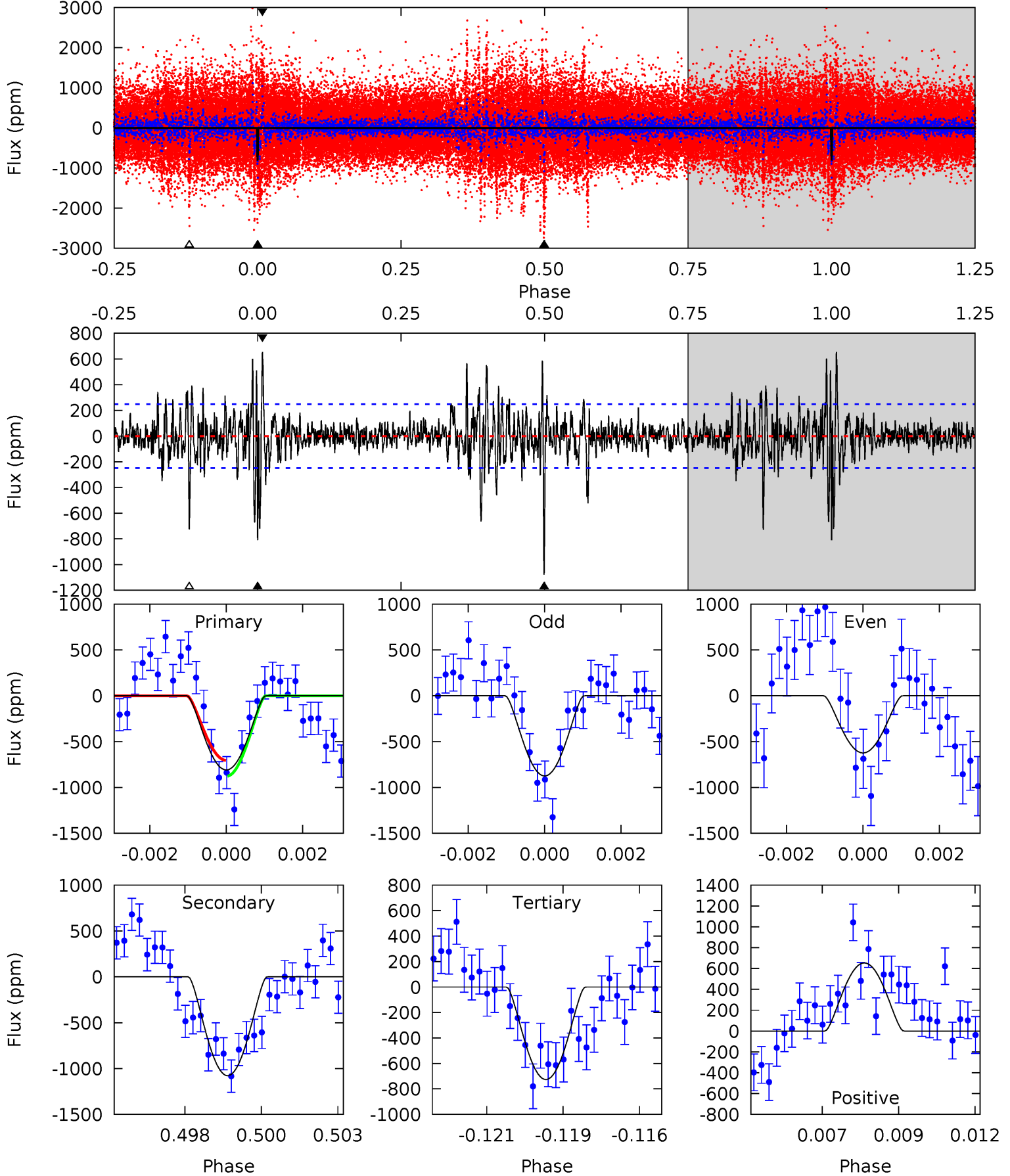
TCE 007619131-01 P=370.698834 Days $T_0=231.042436$ (BKJD)



DV Model-Shift Uniqueness Test

007619131-01, P = 370.747115 Days, E = 230.950233 Days

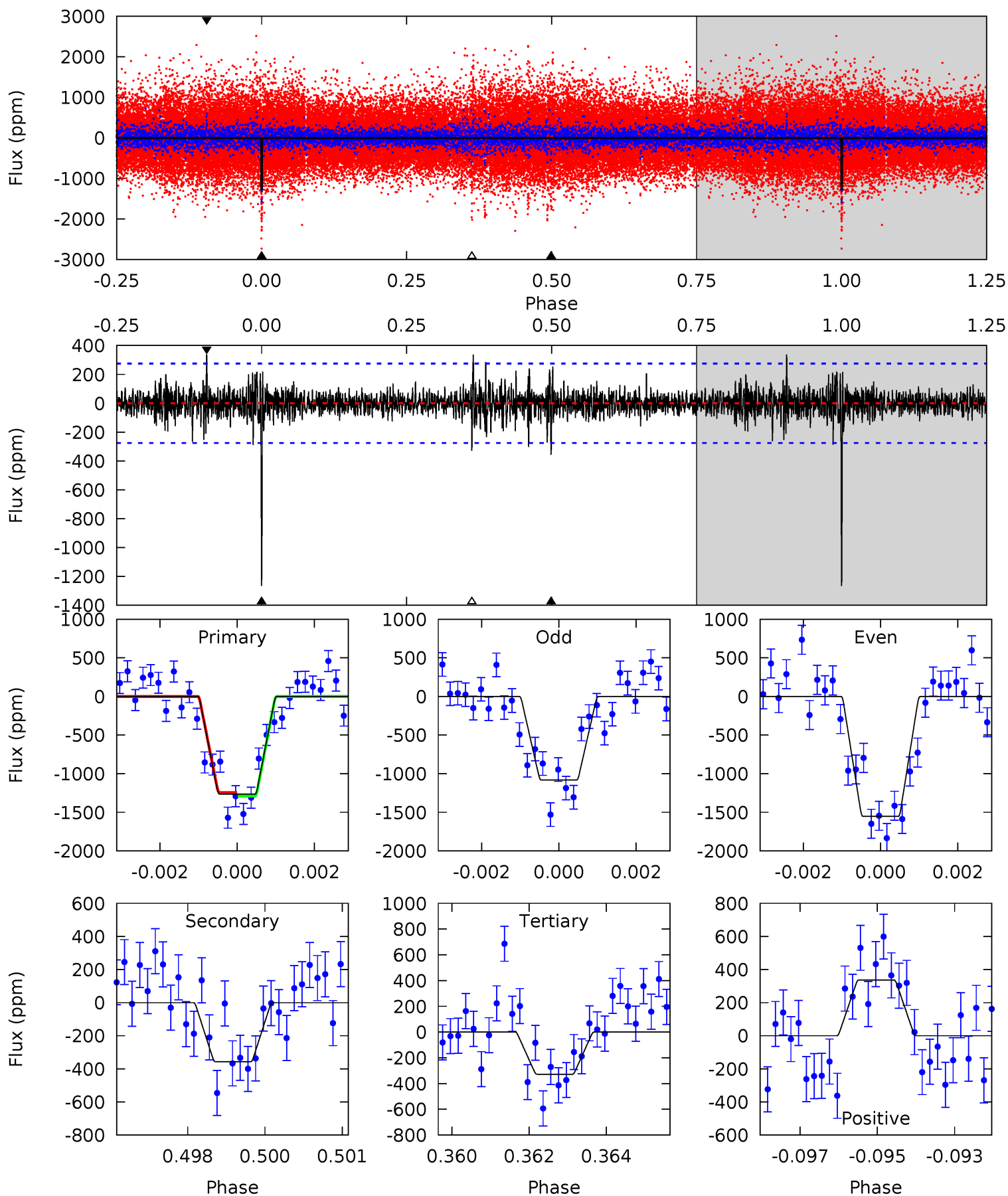
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
17.2	23.0	15.5	13.9	5.30	3.04	2.92	1.77	3.32	7.48	9.04	2.52	1.29	0.38	1.85



Alt Model-Shift Uniqueness Test

007619131-01, P = 370.698834 Days, E = 231.042436 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
24.6	6.94	6.37	6.54	5.35	3.13	1.22	18.2	18.1	0.57	0.40	4.36	0.79	0.21	0.44



Stellar Parameters For KIC 007619131

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5842^{+158}_{-193}	$4.427^{+0.084}_{-0.196}$	$0.040^{+0.250}_{-0.300}$	$1.018^{+0.305}_{-0.131}$	$1.009^{+0.127}_{-0.127}$	$1.348^{+0.494}_{-0.700}$
	+3%/-3%	+2%/-4%	+625%/-750%	+30%/-13%	+13%/-13%	+37%/-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 007619131-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-1078 ± 47	$17.45^{+16.56}_{-11.33}$	365^{+27}_{-19}	3295^{+1387}_{-567}	2023^{+13855}_{-1503}
Alt.	-357 ± 51	$14.28^{+16.07}_{-10.42}$	366^{+28}_{-19}	2949^{+1601}_{-508}	994^{+12712}_{-779}

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 $A_{obs} \gg 1.0$

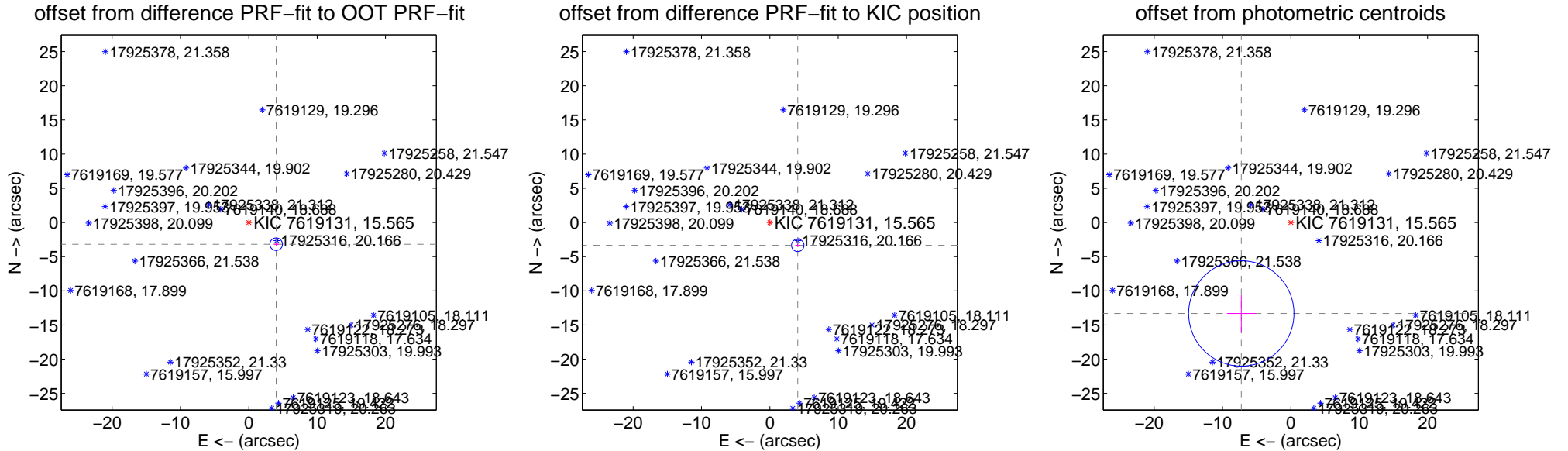
DV Centroid Data

Supplemental centroid analysis for 007619131-01. Kepler magnitude: 15.56. Transit SNR 9.87

There are 0 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.18 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	5.114 ± 0.307	16.68	-4.005 ± 0.346	-3.181 ± 0.232
PRF-fit source offset from KIC position	5.273 ± 0.305	17.29	-4.082 ± 0.346	-3.338 ± 0.232
photometric centroid source offset	15.15 ± 2.57	5.90	7.25 ± 2.10	-13.31 ± 2.69

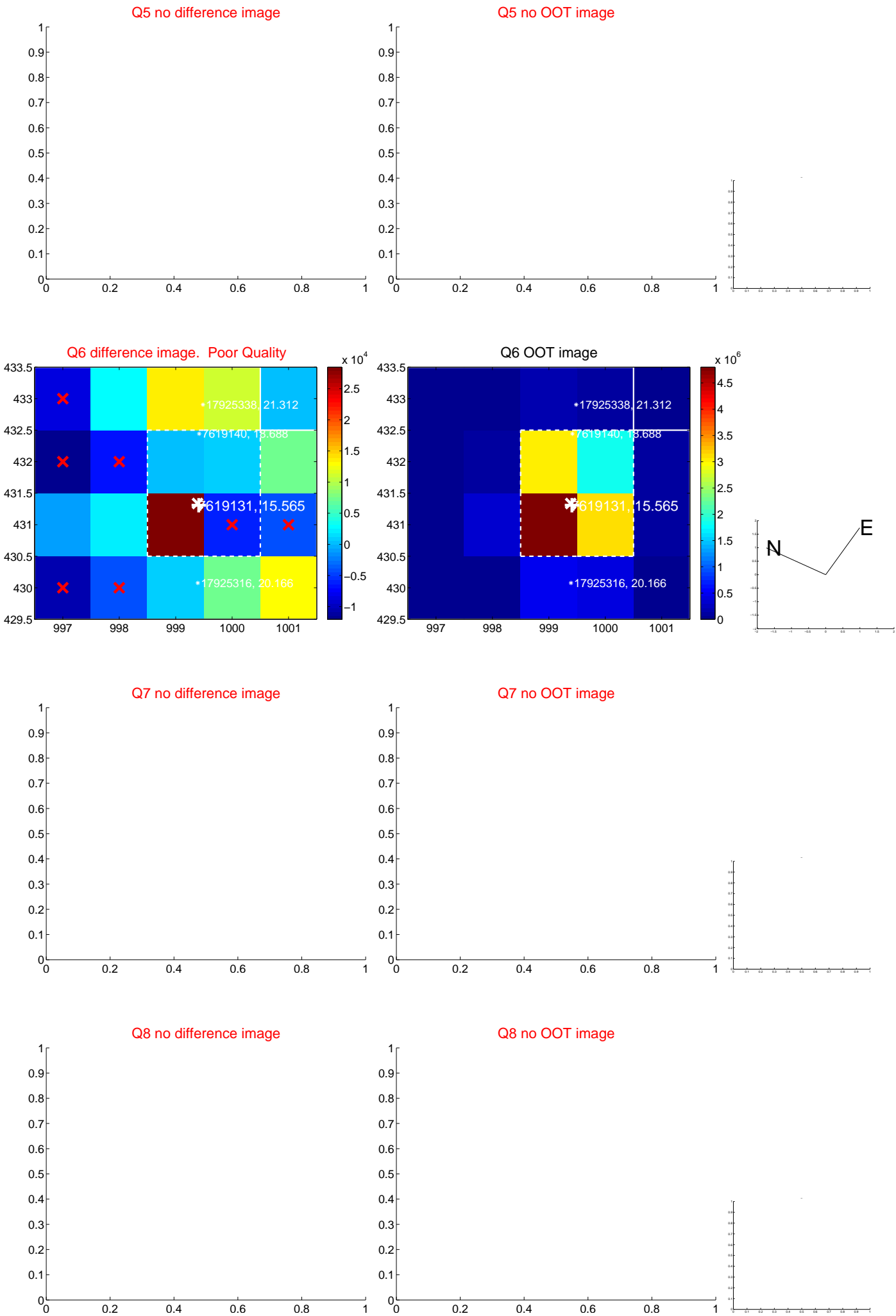


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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



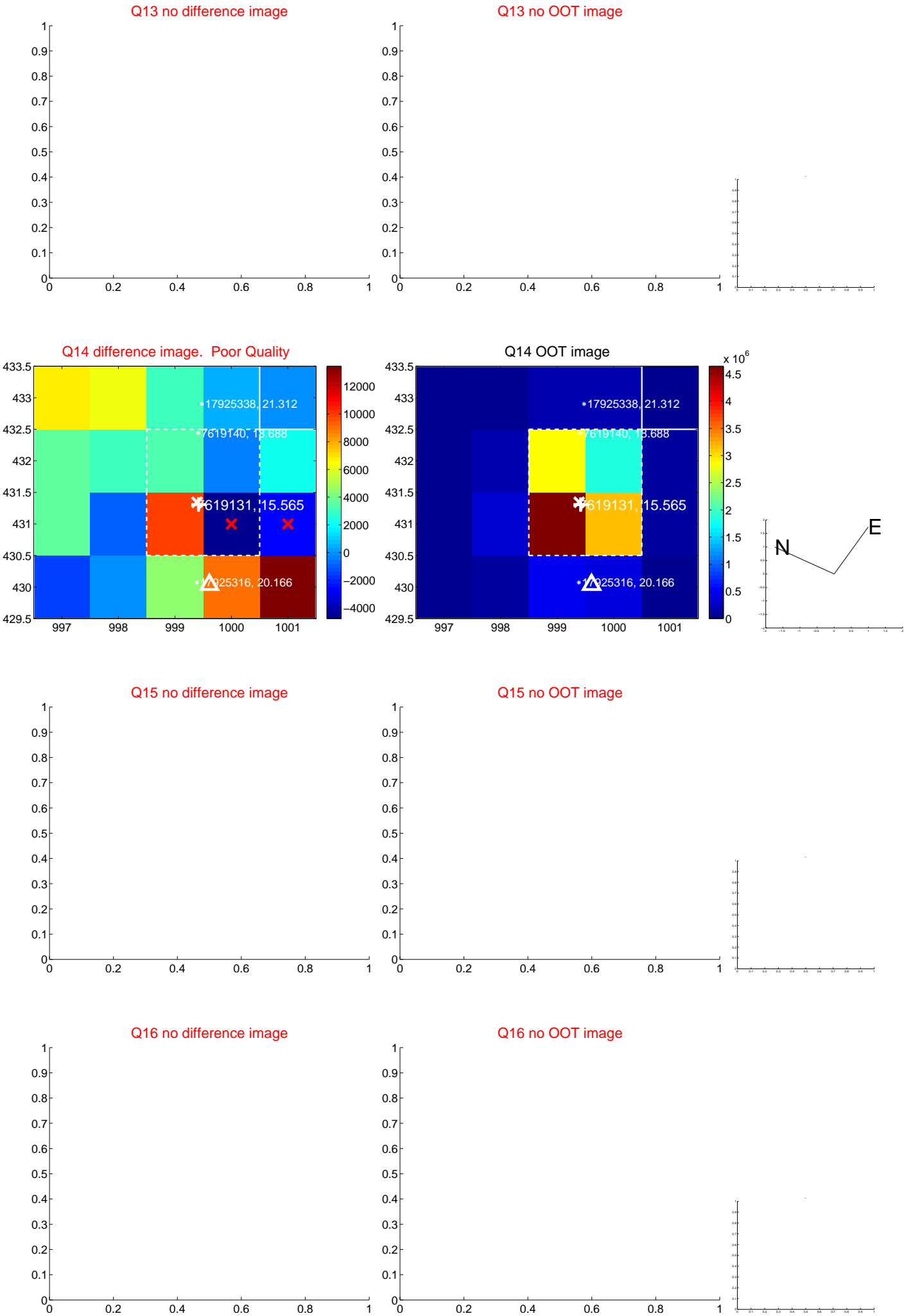
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



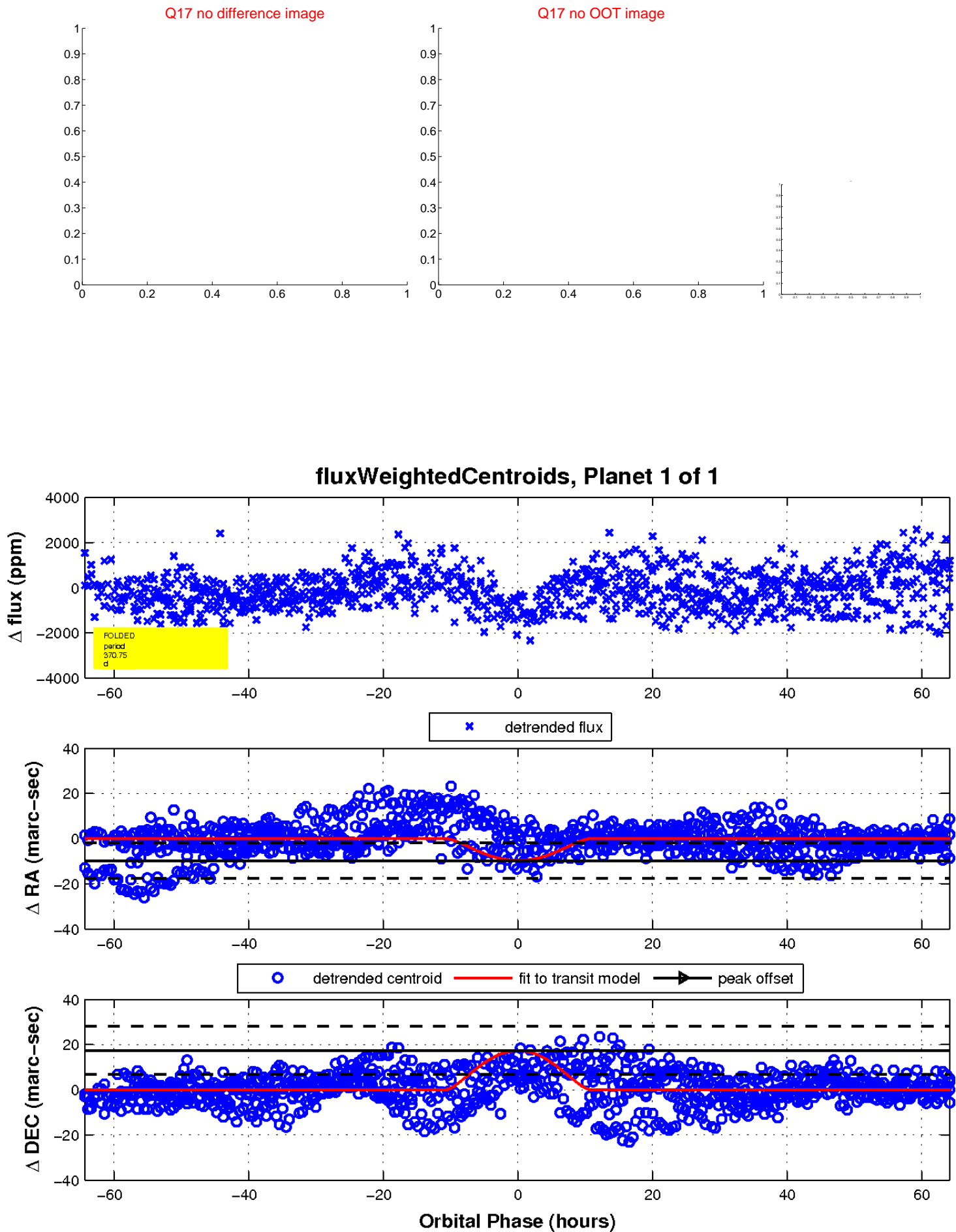
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



white ×: 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

