

KIC 005517211

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})
005517211-01	OBS	No	0.916887	132.113318	42.9	1.736	8.4	3.8	0.78	5325	0.62	1414.10

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005517211-01	OBS	FP	0.00	1	0	1	0	LPP_DV—CENT_UNRESOLVED_OFFSET

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

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

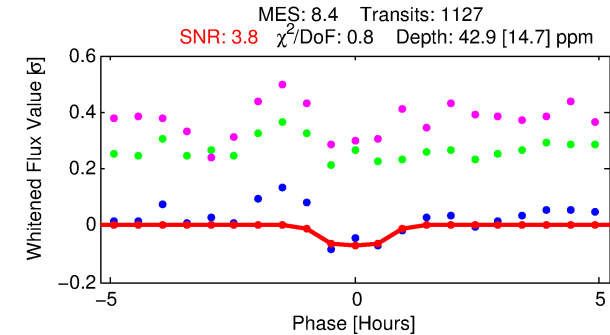
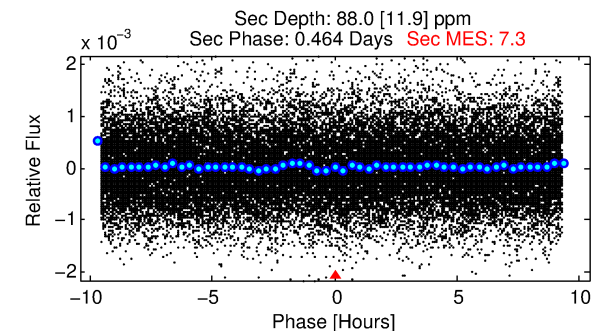
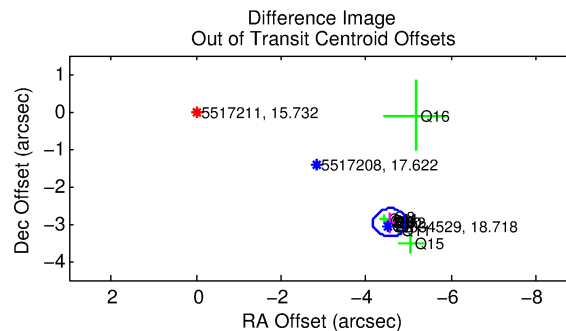
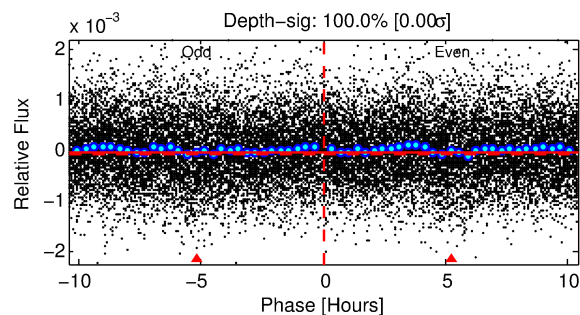
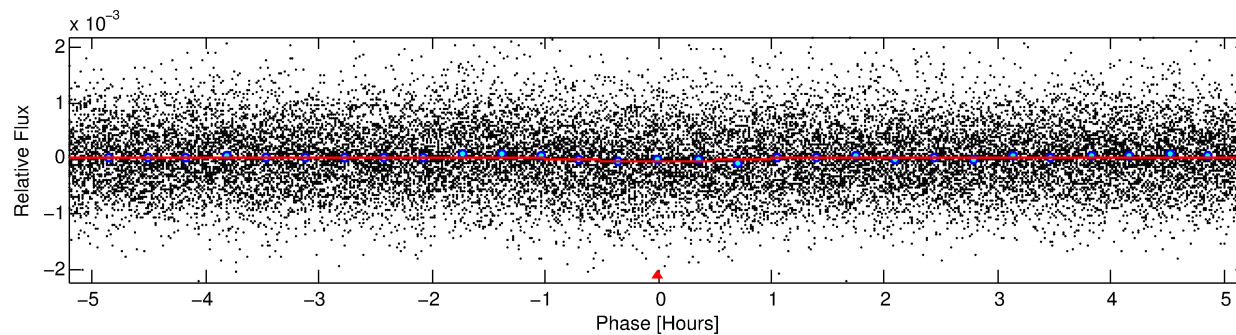
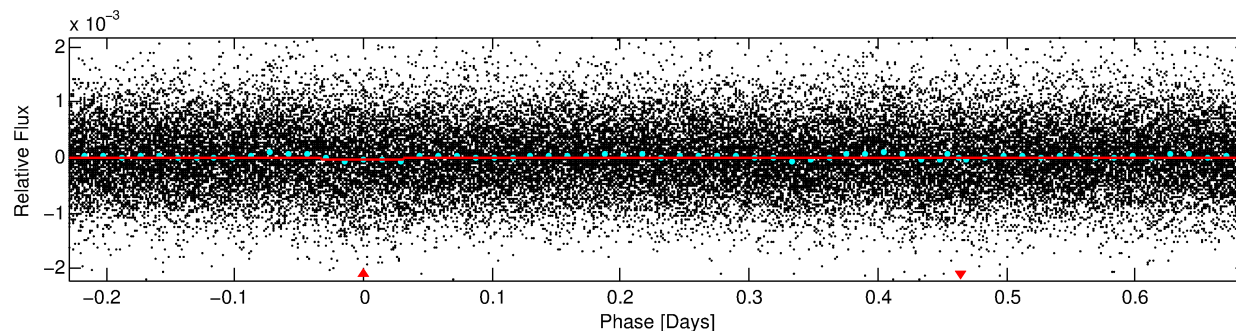
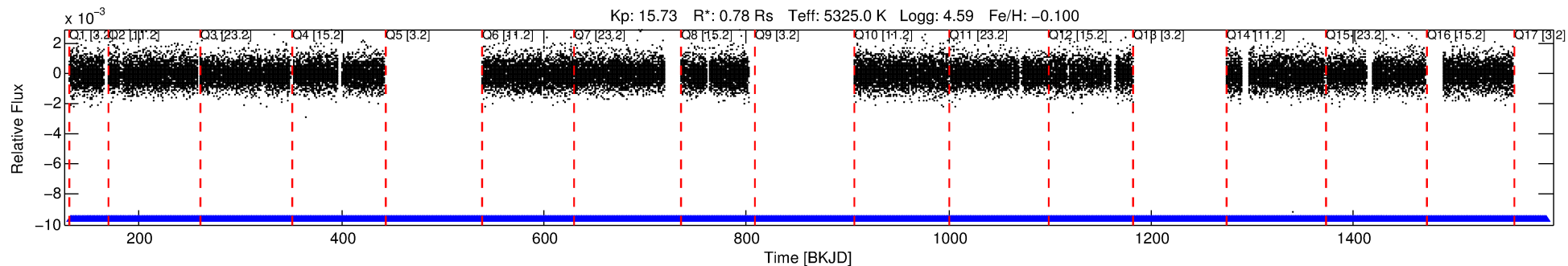
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005517211-01

No Significant Match Found

DV One-Page Summary

KIC: 5517211 Candidate: 1 of 1 Period: 0.917 d



DV Fit Results:

Period = 0.91689 [0.00003] d
Epoch = 132.1133 [0.0068] BKJD
Rp/R* = 0.0072 [0.0143]
a/R* = 2.05 [13.51]
b = 0.90 [1.88]
Seff = 1414.10 [345.69]
Teq = 1564 [96] K
Rp = 0.62 [1.23] Re
a = 0.0176 [0.0025] AU
Ag = 39.46 [156.54] [0.25 σ]
Teffp = 6059 [6005] K [0.75 σ]

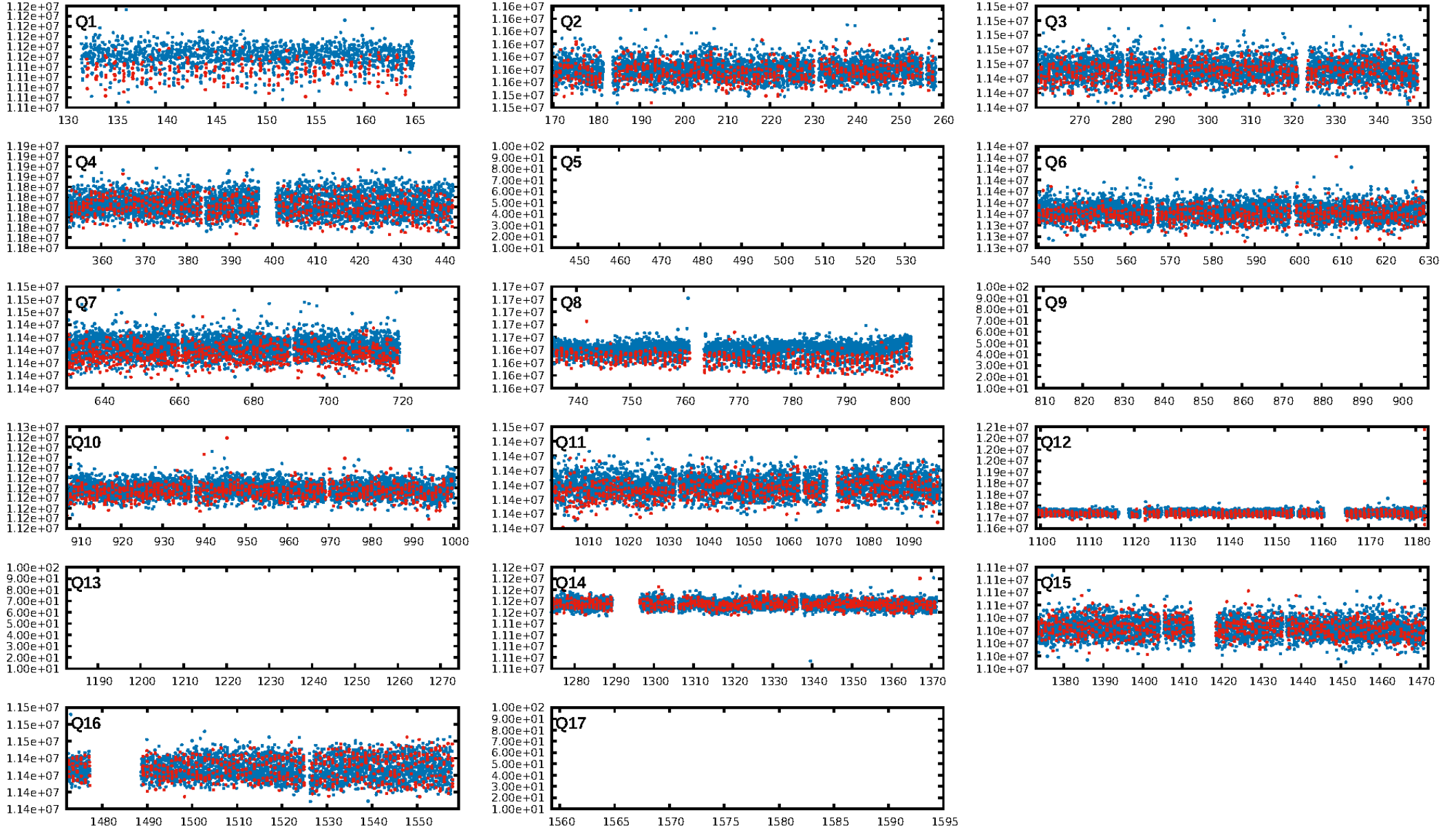
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 3.82e-17
RollingBand-fgt: 1.00 [1091/1091]
GhostDiagnostic-chr: 0.6341
Centroid-sig: 0.0%
Centroid-so: 17.186 arcsec [4.88 σ]
OotOffset-rm: 5.440 arcsec [43.03 σ]
KicOffset-rm: 5.537 arcsec [41.53 σ]
OotOffset-st: 4/4/4/1 [13]
KicOffset-st: 4/4/4/1 [13]
DiffImageQuality-fgm: 0.92 [12/13]
DiffImageOverlap-fno: 1.00 [13/13]

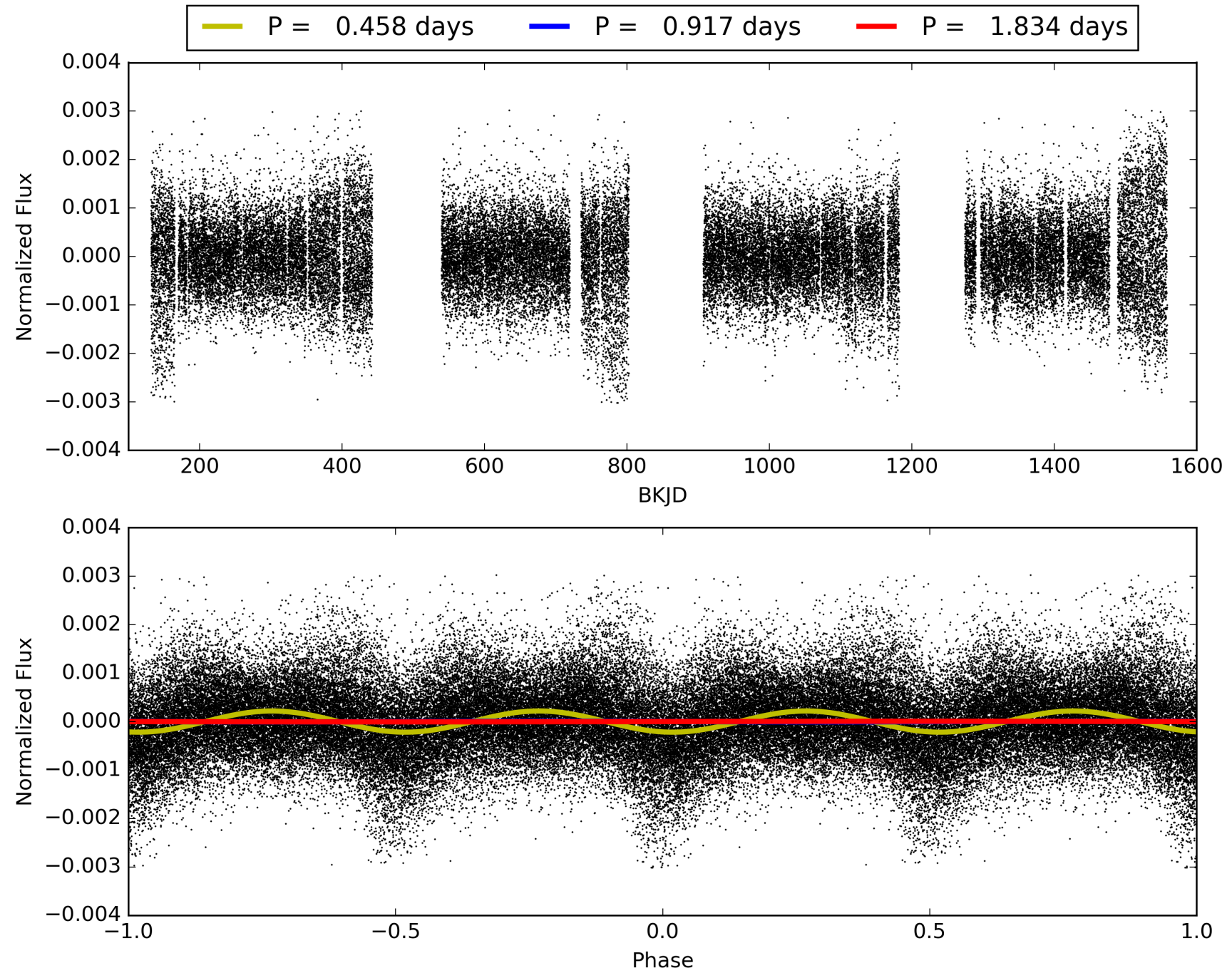
Software Revision: svn-ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 02:50:16 Z

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

TCE 005517211-01, PDC Light Curves

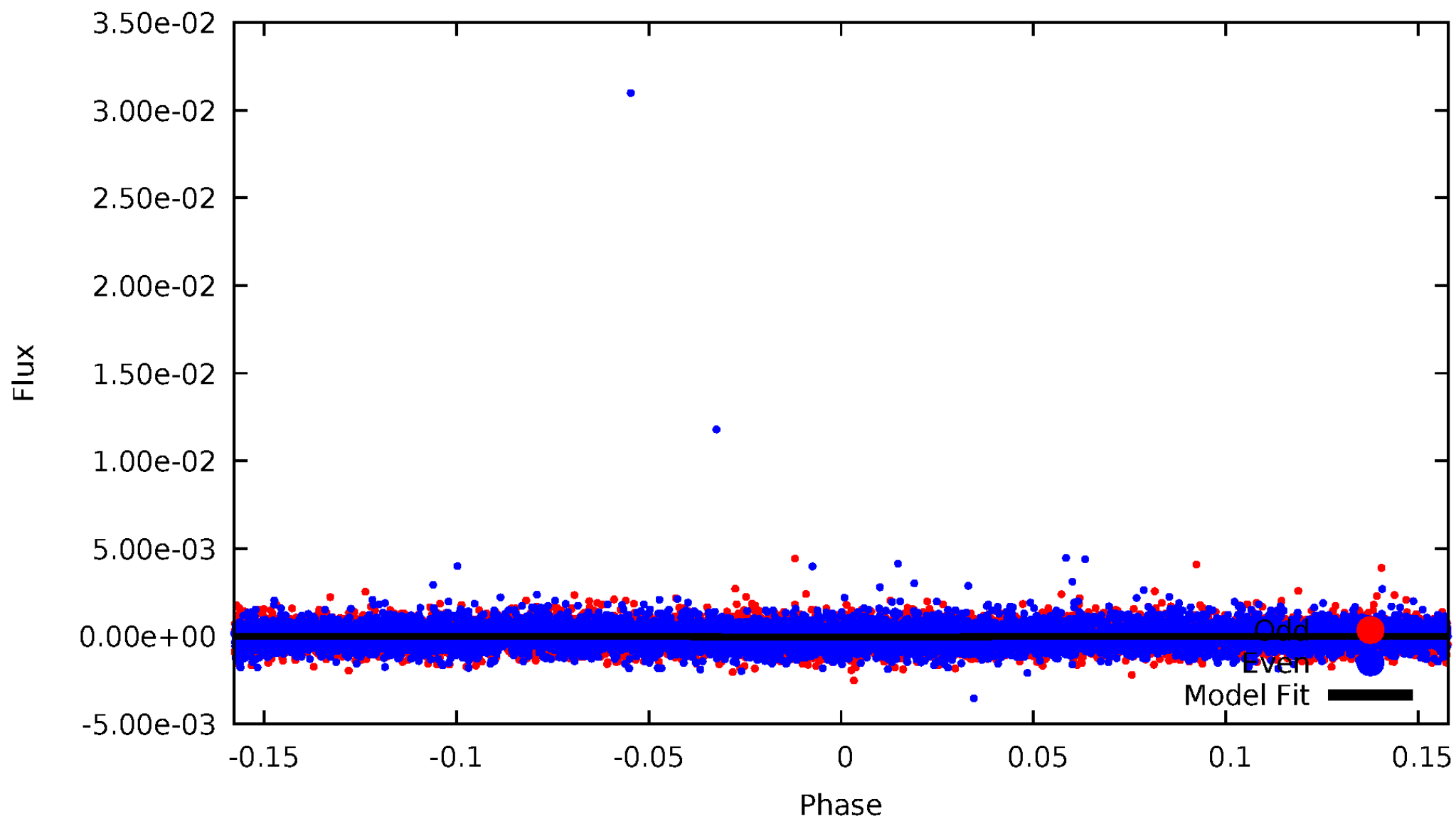


TCE 005517211-01



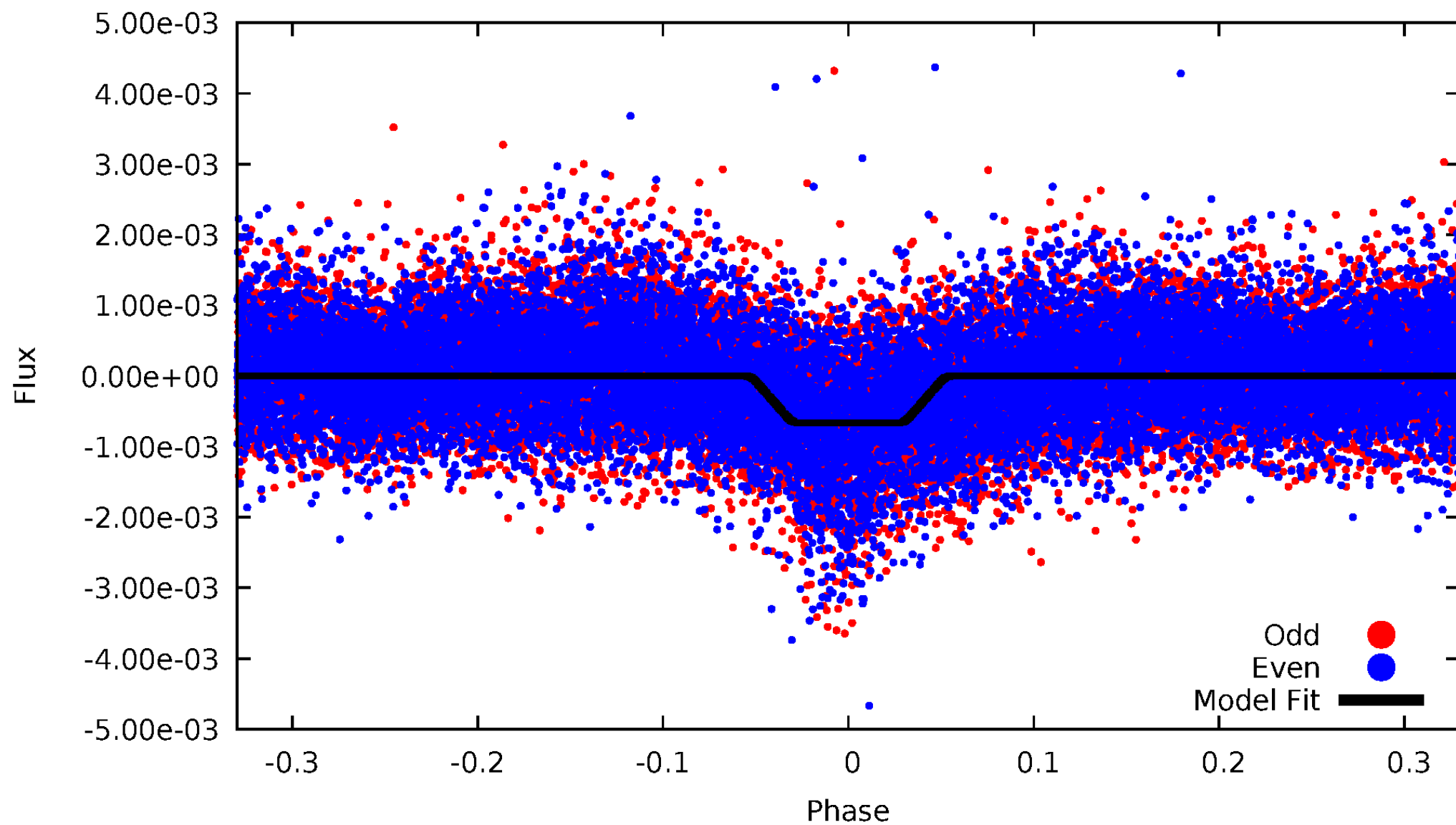
DV Odd/Even

TCE 005517211-01



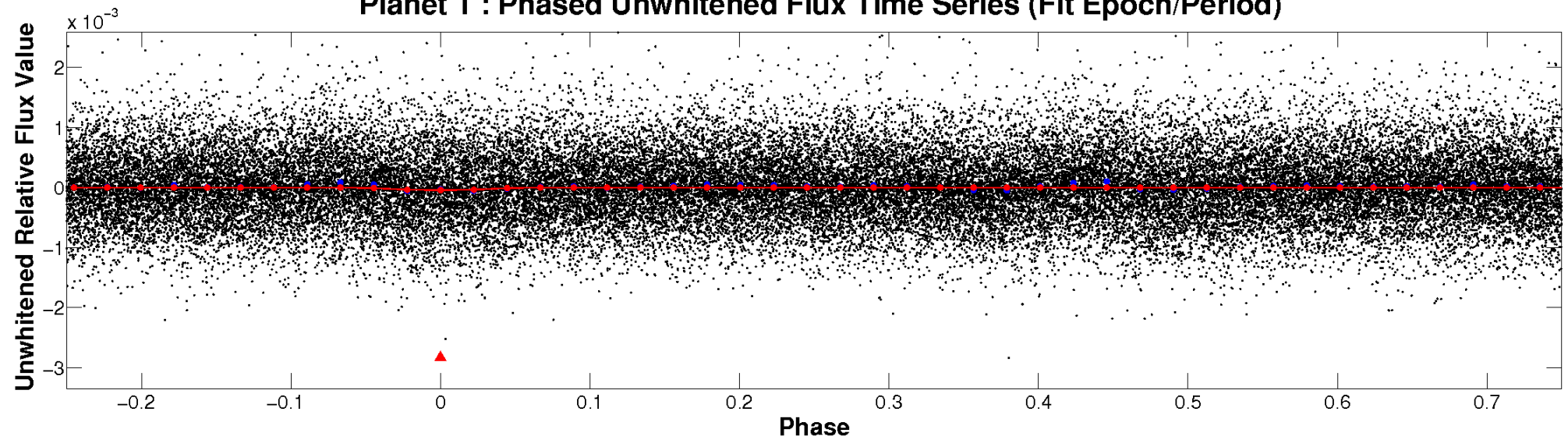
ALT Odd/Even

TCE 005517211-01

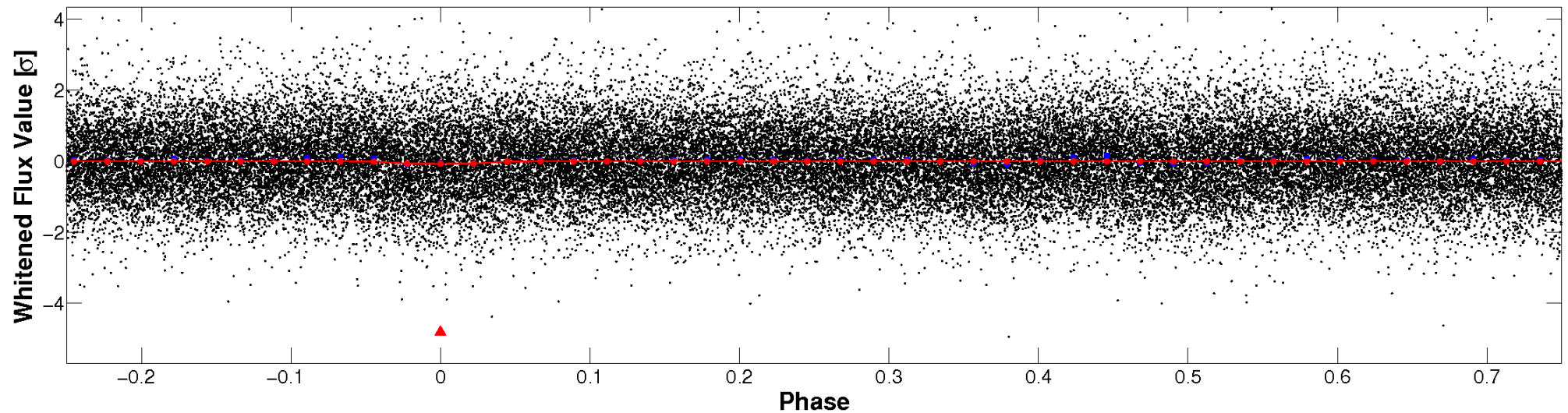


Non-Whitened Vs. Whitened Light Curve

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

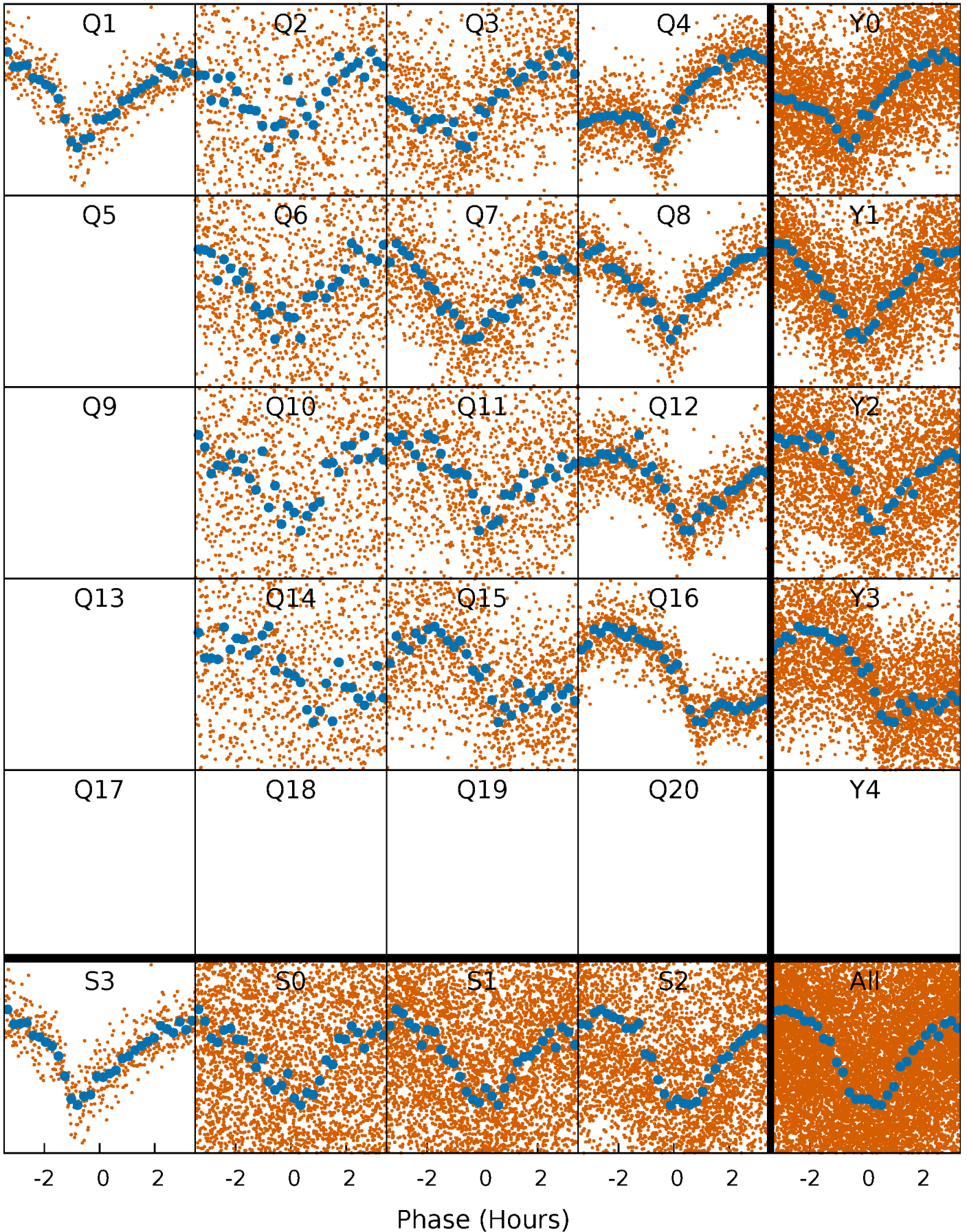


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



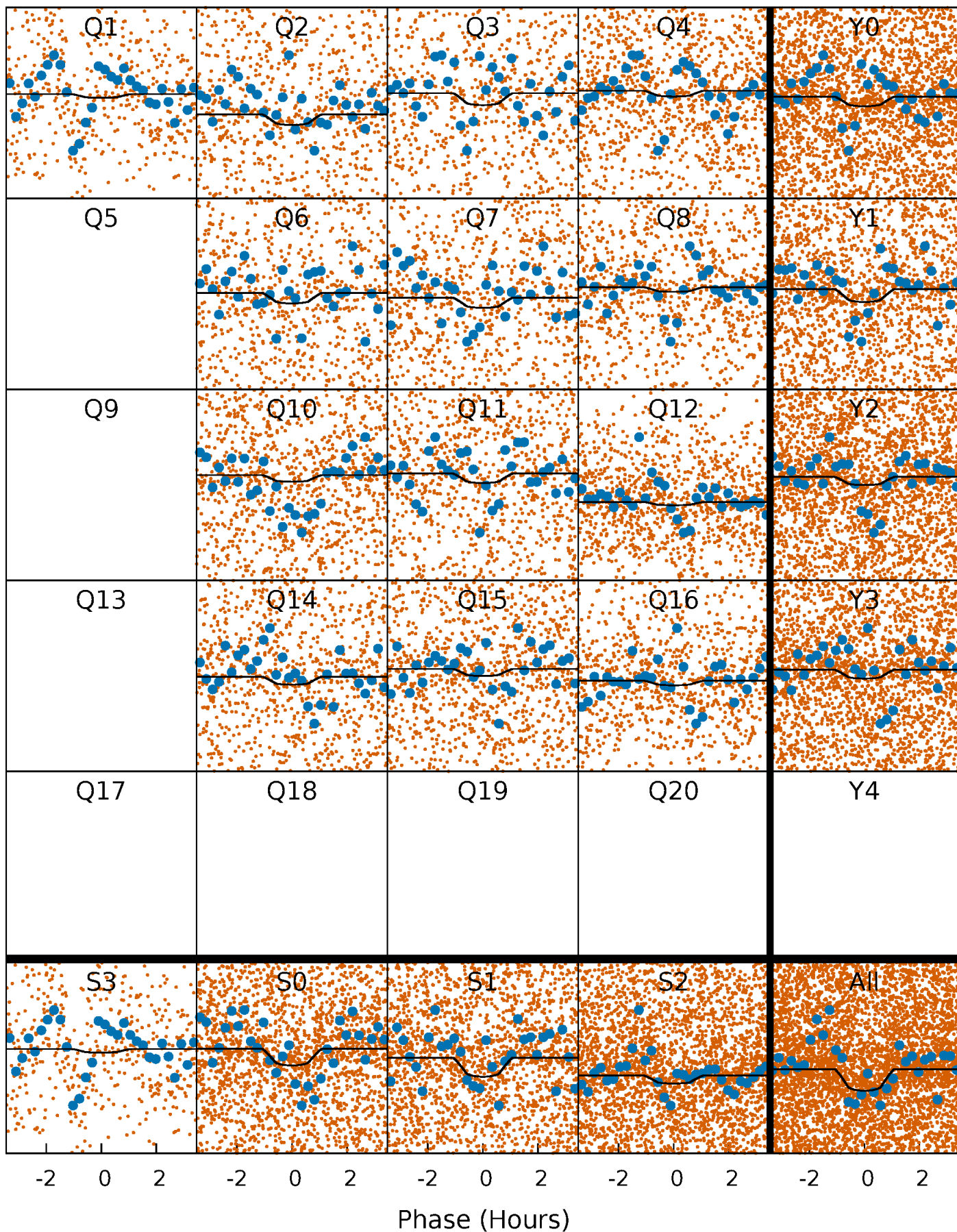
PDC Quarter-Phased Transit Curves

TCE 005517211-01 P= 0.916887 Days $T_0=132.113318$ (BKJD)



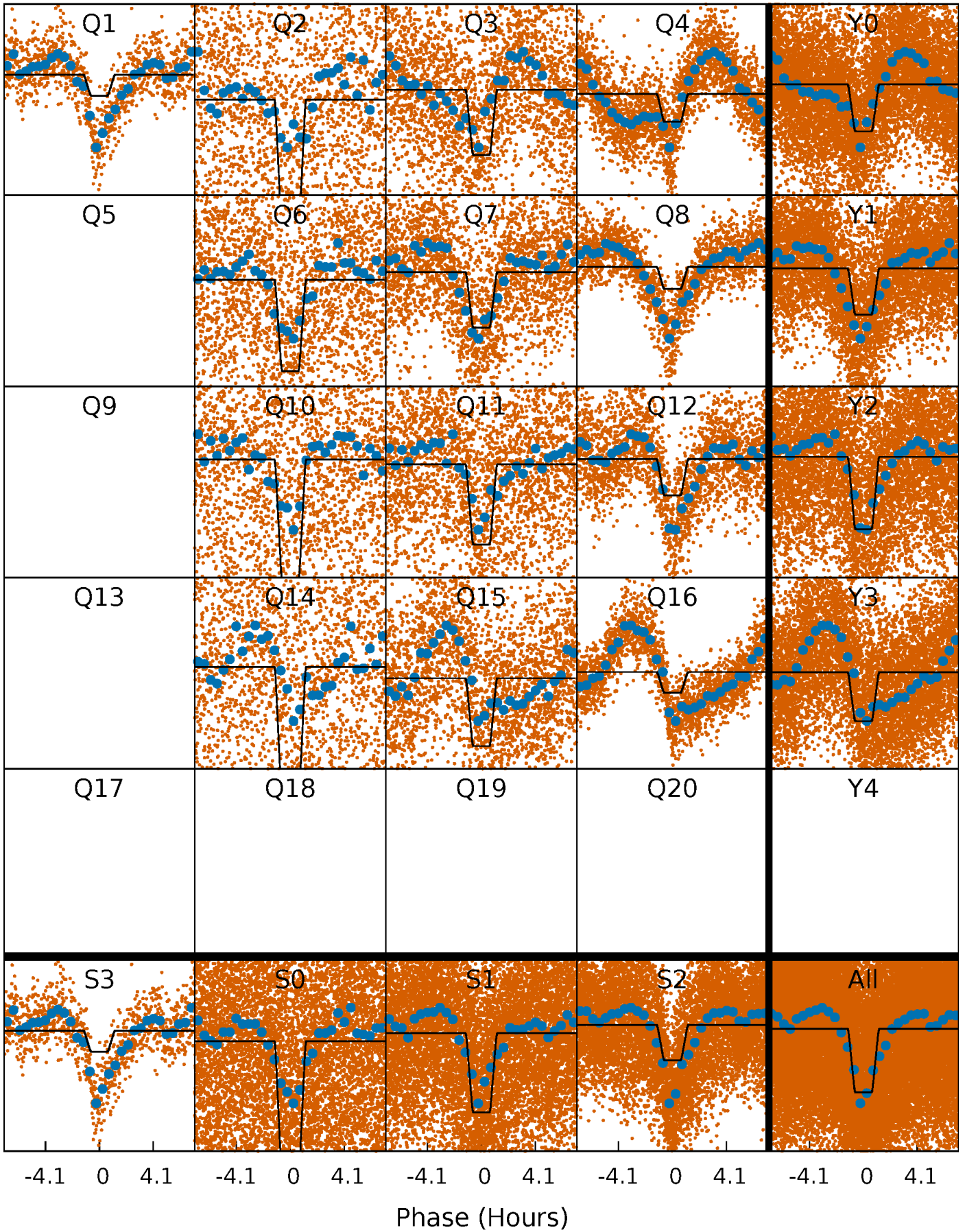
DV Quarter-Phased Transit Curves

TCE 005517211-01 P= 0.916887 Days $T_0=132.113318$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

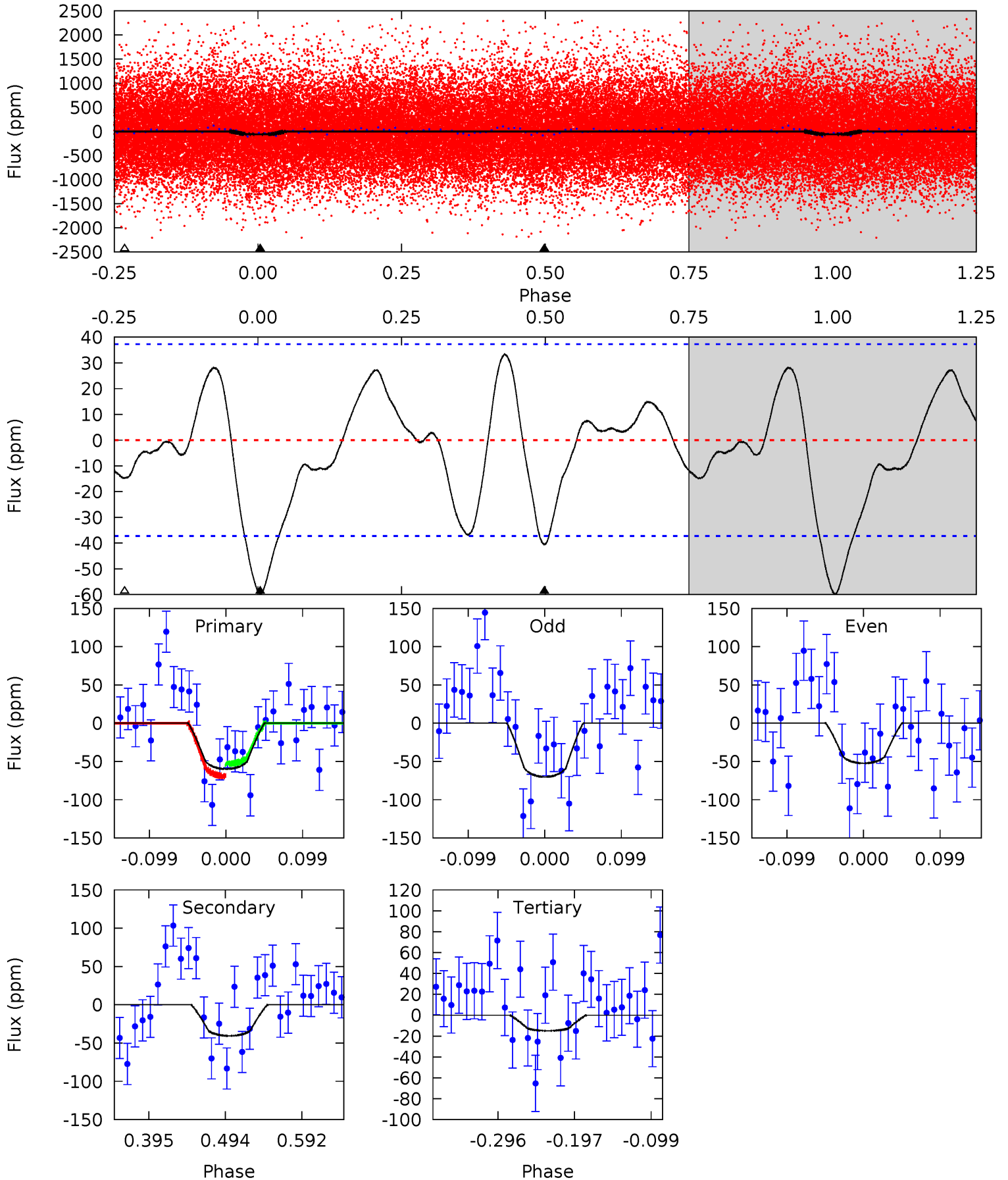
TCE 005517211-01 P= 0.916928 Days $T_0=132.088340$ (BKJD)



DV Model-Shift Uniqueness Test

005517211-01, P = 0.916887 Days, E = 131.196431 Days

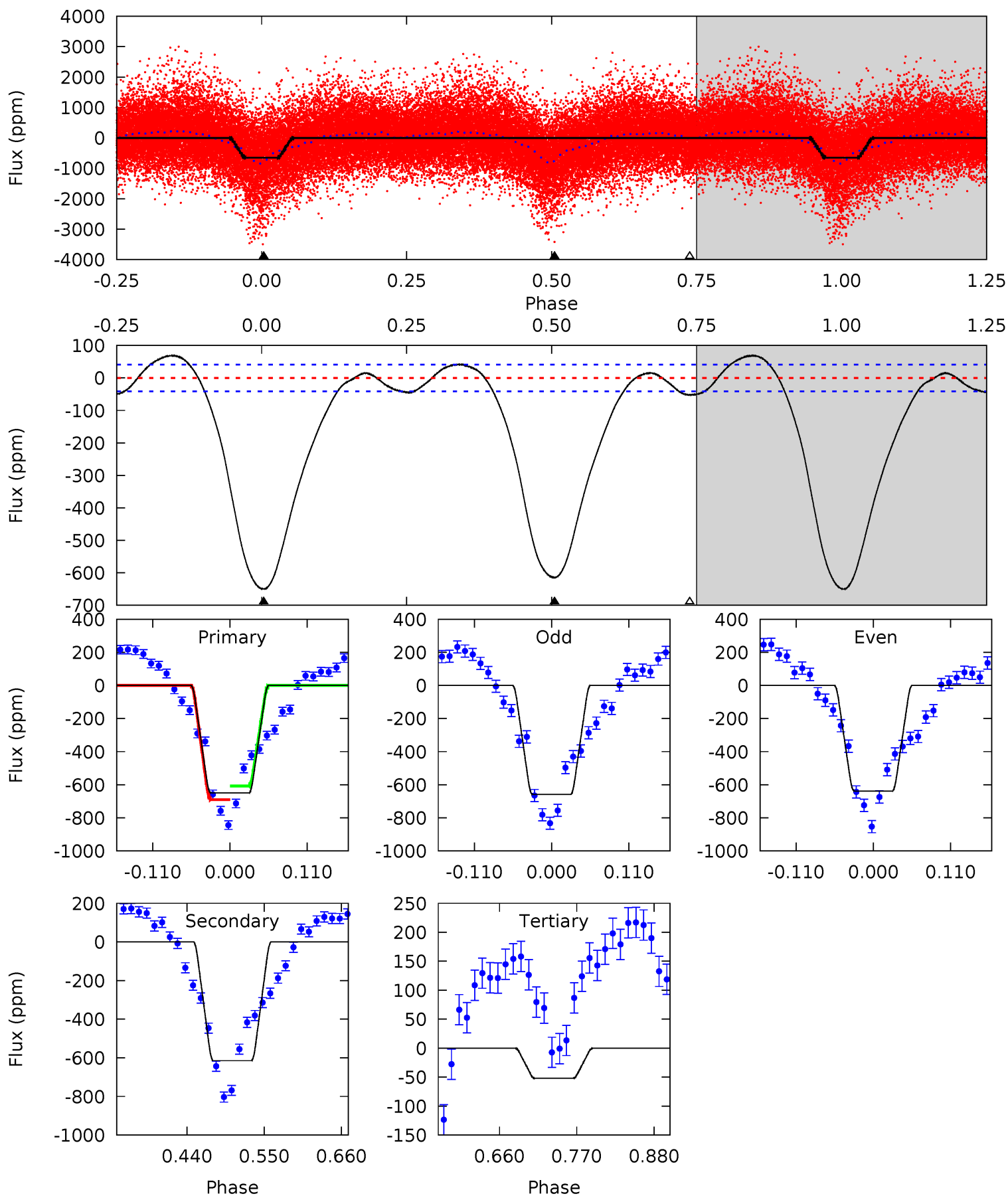
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.34	4.98	1.83	0	4.57	1.65	1.70	5.51	7.34	3.15	4.98	1.09	0.84	0.36	0.99



Alt Model-Shift Uniqueness Test

005517211-01, P = 0.916928 Days, E = 131.171412 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
71.9	68.0	5.77	0	4.54	1.60	3.98	66.1	71.9	62.2	68.0	1.14	1.17	0.10	4.59



Stellar Parameters For KIC 005517211

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5325^{+175}_{-143}	$4.591^{+0.030}_{-0.112}$	$-0.100^{+0.300}_{-0.300}$	$0.780^{+0.133}_{-0.061}$	$0.874^{+0.070}_{-0.104}$	$2.598^{+0.486}_{-0.904}$
	+3%/-3%	+1%/-2%	+300%/-300%	+17%/-8%	+8%/-12%	+19%/-35%
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 005517211-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-41 ± 8	$1.17^{+1.19}_{-0.81}$	2219^{+103}_{-82}	3939^{+2494}_{-906}	$4.994^{+45.361}_{-3.800}$
Alt.	-615 ± 9	$2.33^{+1.23}_{-1.18}$	2223^{+115}_{-80}	5141^{+2236}_{-830}	19^{+58}_{-11}

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

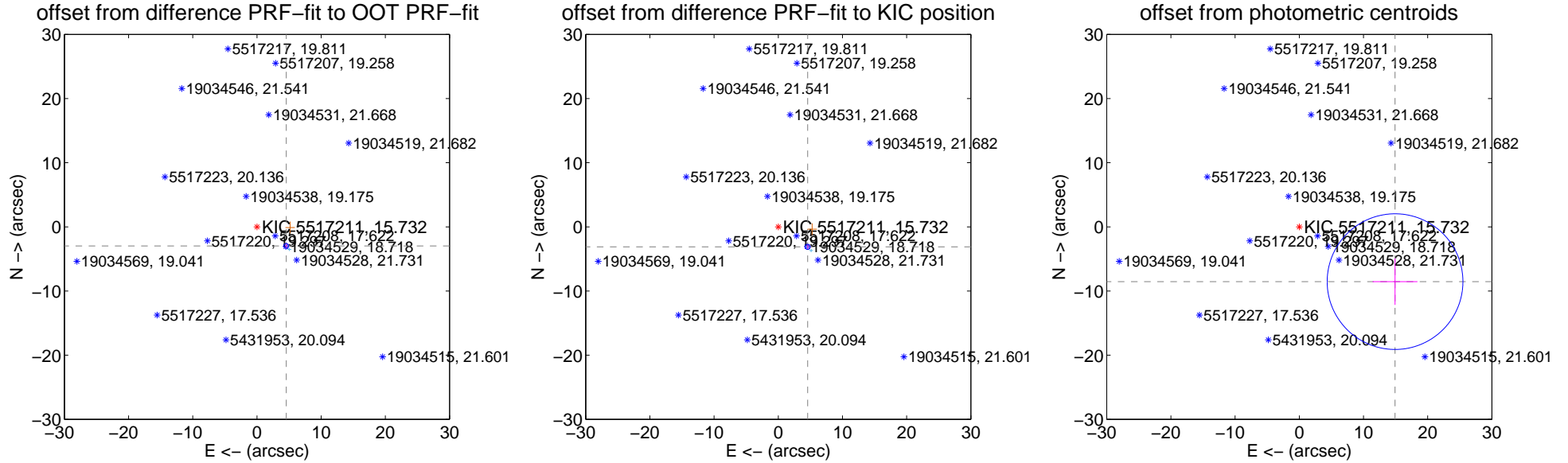
DV Centroid Data

Supplemental centroid analysis for 005517211-01. Kepler magnitude: 15.73. Transit SNR 3.81

There are 12 quarters with good PRF difference image offsets

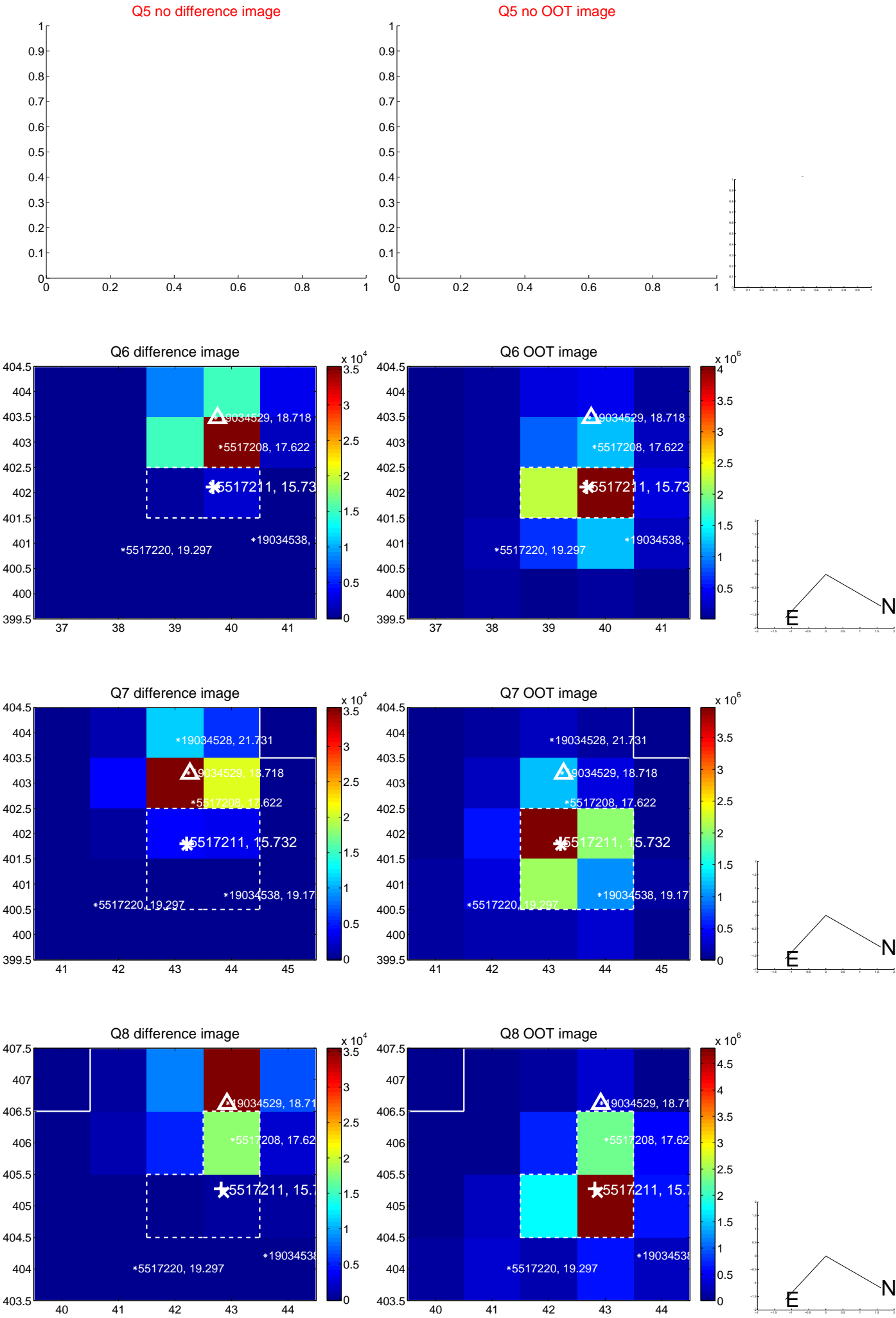
The direct PRF centroid is offset from the target star catalog position by about 0.28 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	5.440 ± 0.126	43.03	-4.558 ± 0.095	-2.969 ± 0.246
PRF-fit source offset from KIC position	5.537 ± 0.133	41.53	-4.572 ± 0.098	-3.123 ± 0.251
photometric centroid source offset	17.19 ± 3.52	4.88	-14.92 ± 3.49	-8.54 ± 3.62

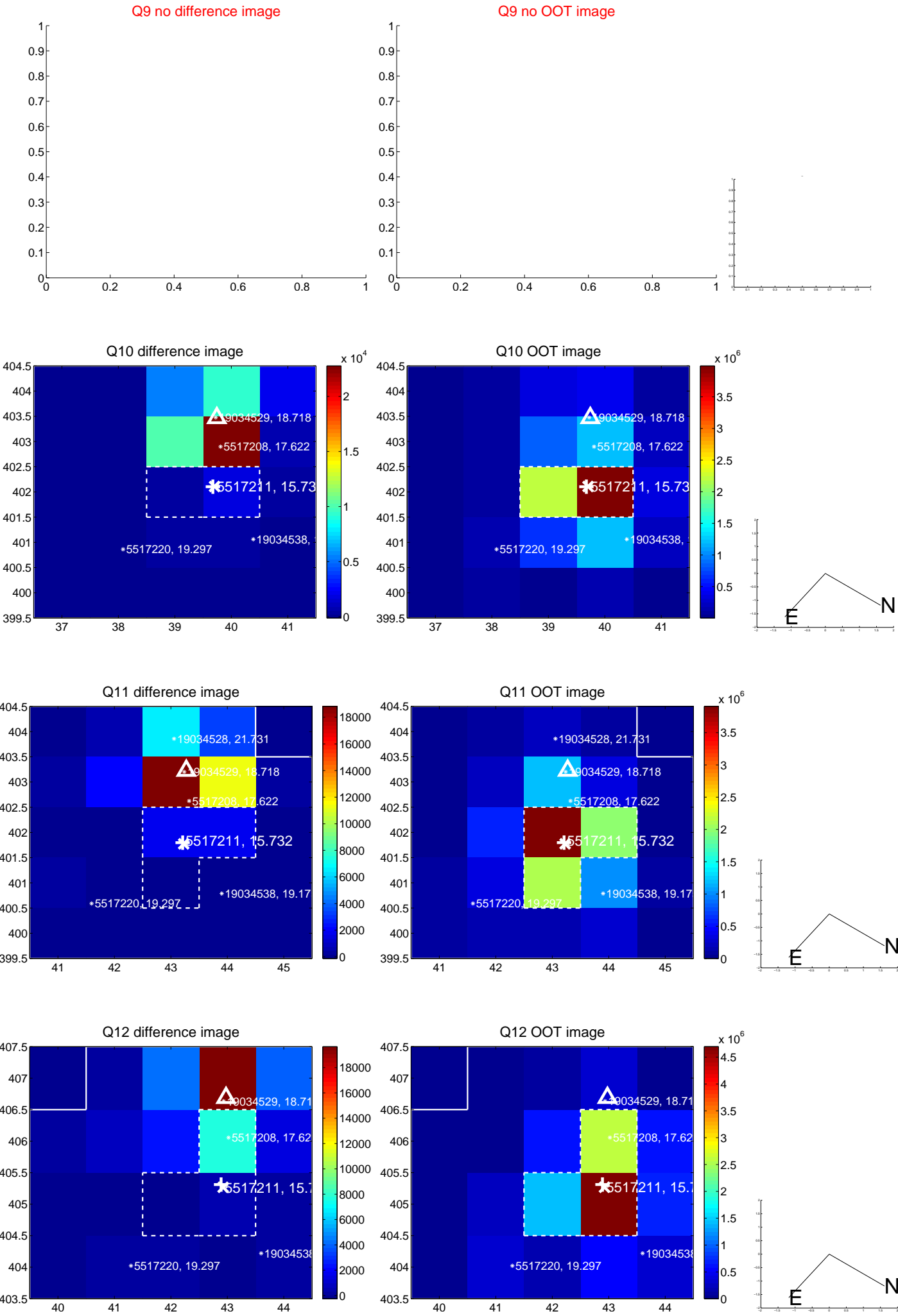


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

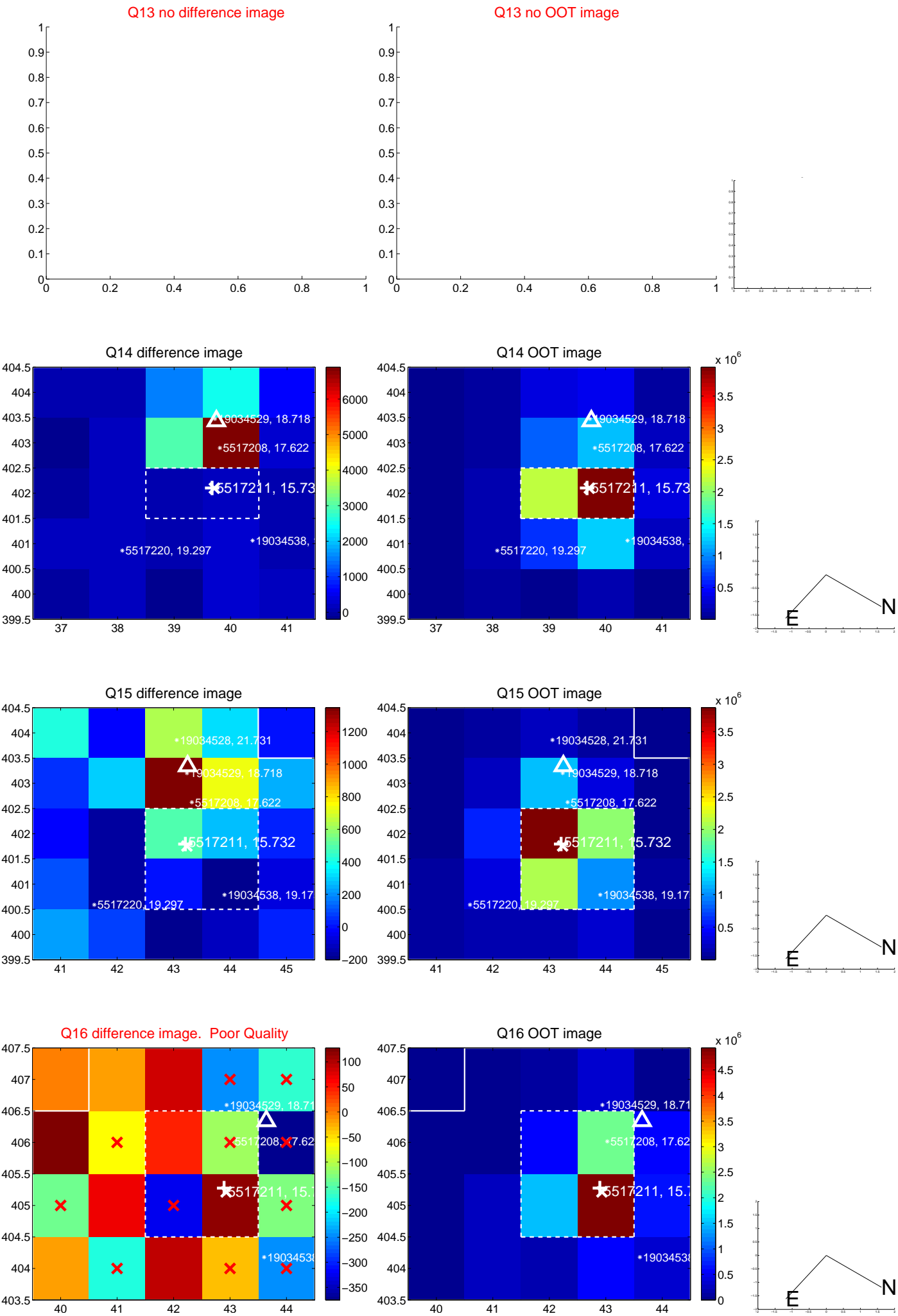
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



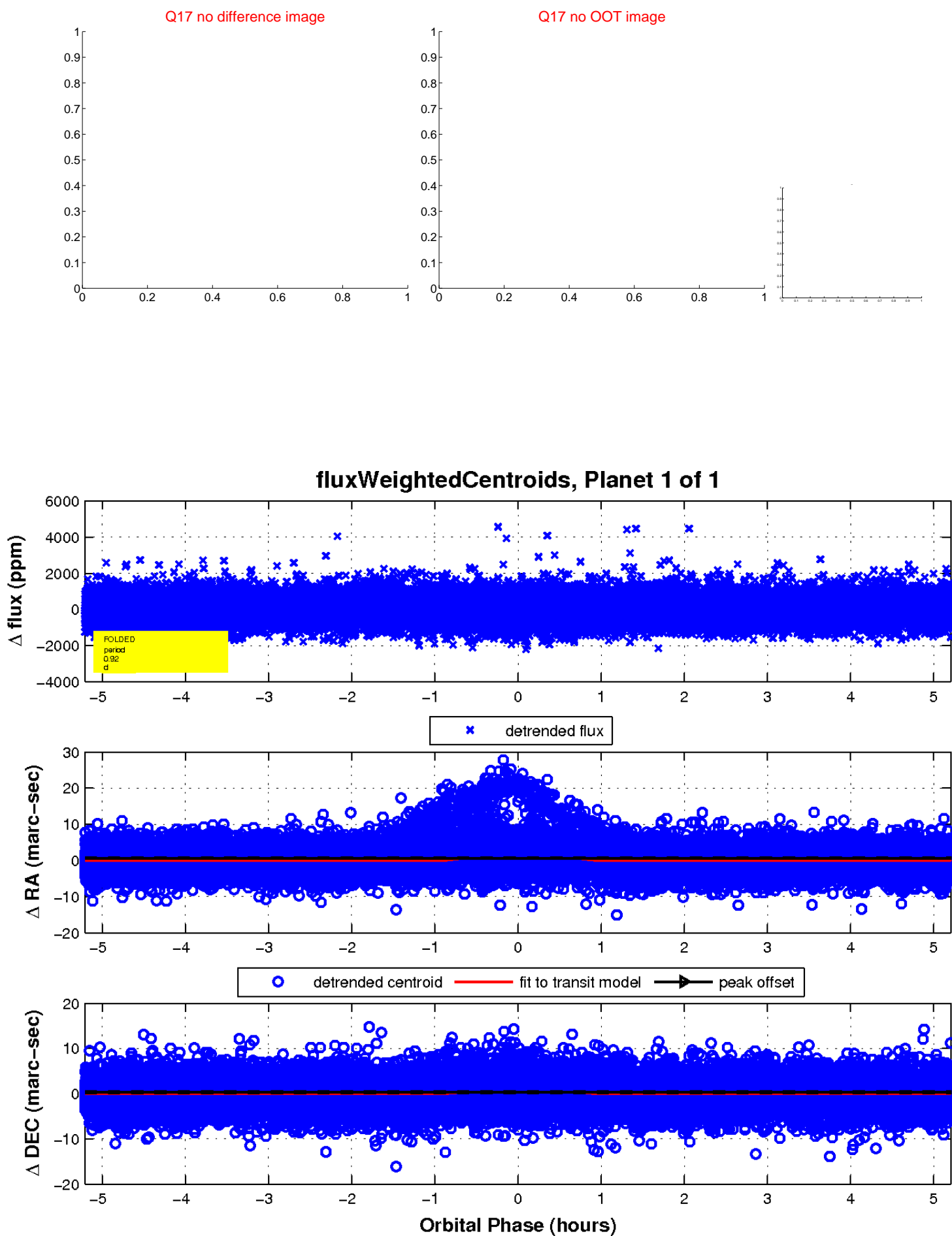
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

