

KIC 010917433

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})
010917433-01	OBS	3248.01	6.912629	132.154751	36.7	2.171	11.1	11.6	1.04	5761	0.76	219.03

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010917433-01	OBS	PC	0.96	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.

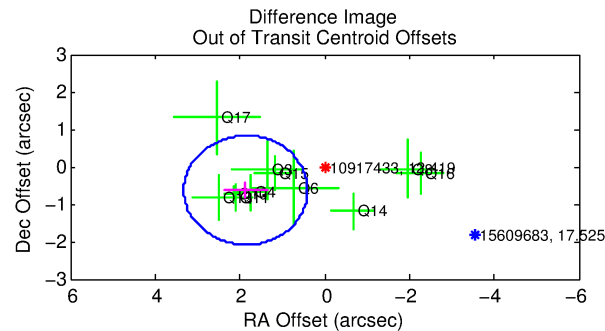
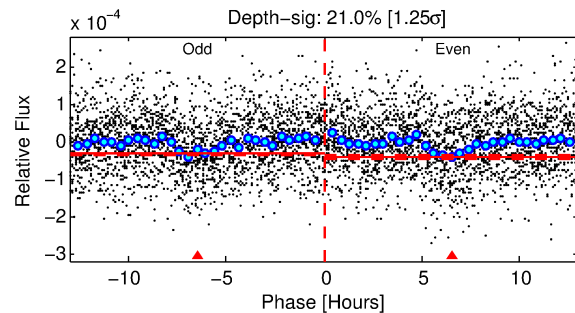
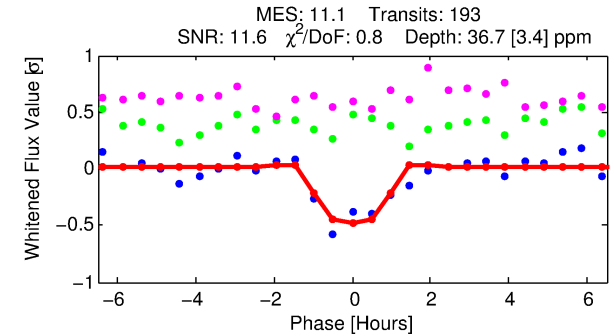
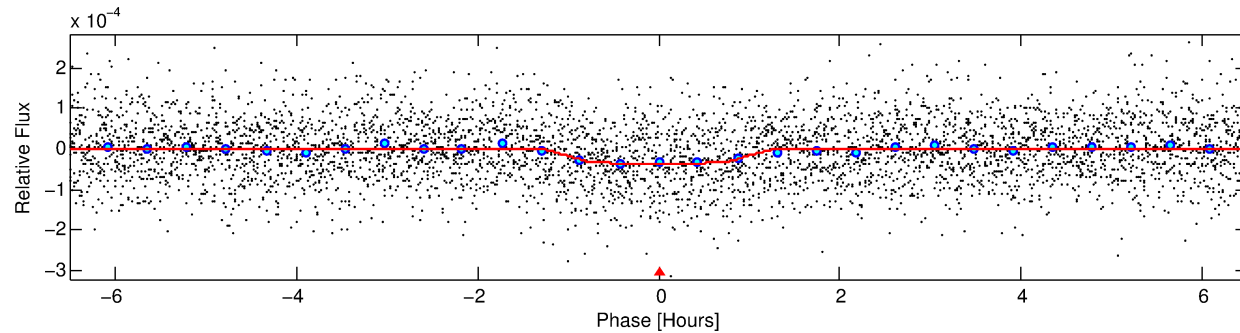
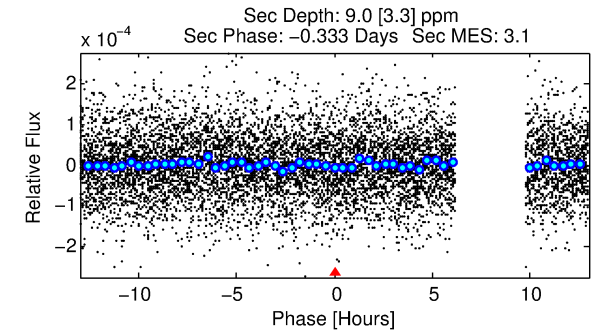
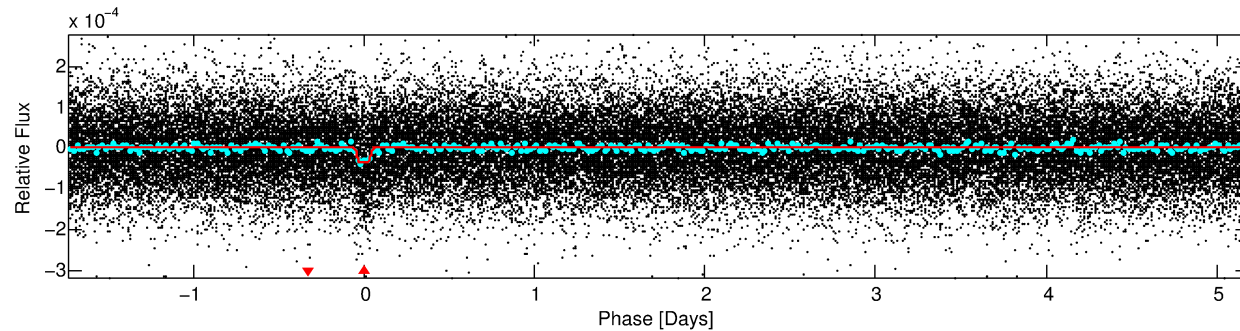
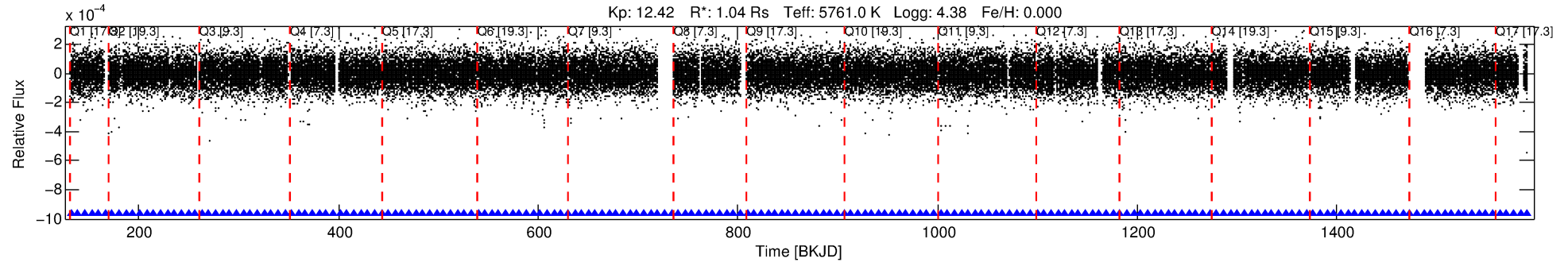
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 010917433-01

No Significant Match Found

DV One-Page Summary

KIC: 10917433 Candidate: 1 of 1 Period: 6.913 d
KOI: K03248.01 Corr: 0.972



DV Fit Results:

Period = 6.91263 [0.00004] d
Epoch = 132.1548 [0.0039] BKJD
Rp/R* = 0.0067 [0.0026]
a/R* = 10.41 [19.38]
b = 0.91 [0.35]
Seff = 219.03 [48.38]
Teq = 981 [54] K
Rp = 0.76 [0.32] Re
a = 0.0701 [0.0096] AU
Ag = 42.03 [36.77] [1.12σ]
Teffp = 3862 [825] K [3.49σ]

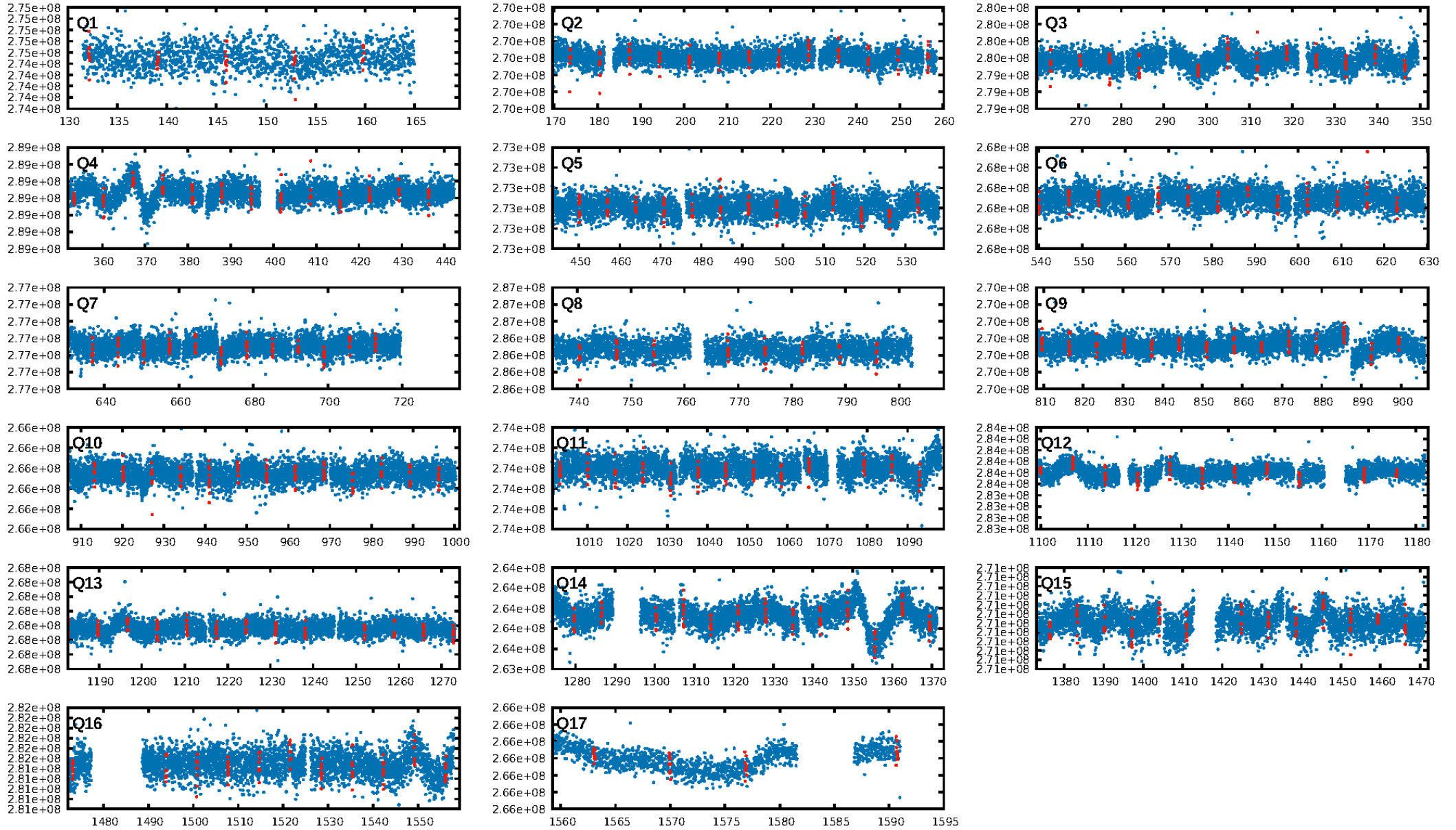
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 99.4%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 5.47e-28
RollingBand-fgt: 1.00 [184/184]
GhostDiagnostic-chr: 9.06
Centroid-sig: 7.3%
Centroid-so: 1.117 arcsec [1.19σ]
OotOffset-rm: 1.965 arcsec [4.05σ]
KicOffset-rm: 1.979 arcsec [4.57σ]
OotOffset-st: 3/3/3/2 [11]
KicOffset-st: 3/3/3/2 [11]
DiffImageQuality-fgm: 0.91 [10/11]
DiffImageOverlap-fno: 1.00 [17/17]

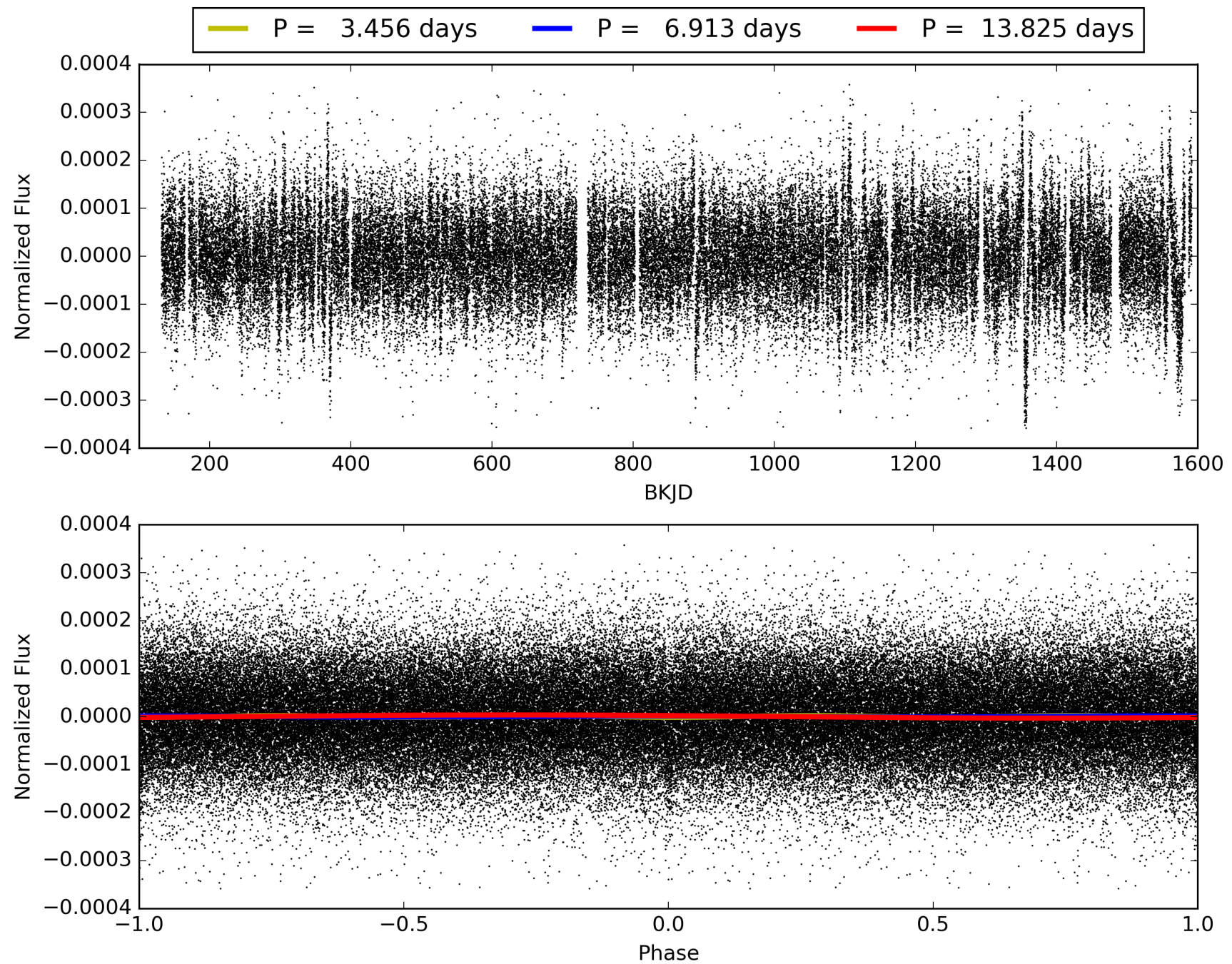
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 21:25:40 Z

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

TCE 010917433-01, PDC Light Curves

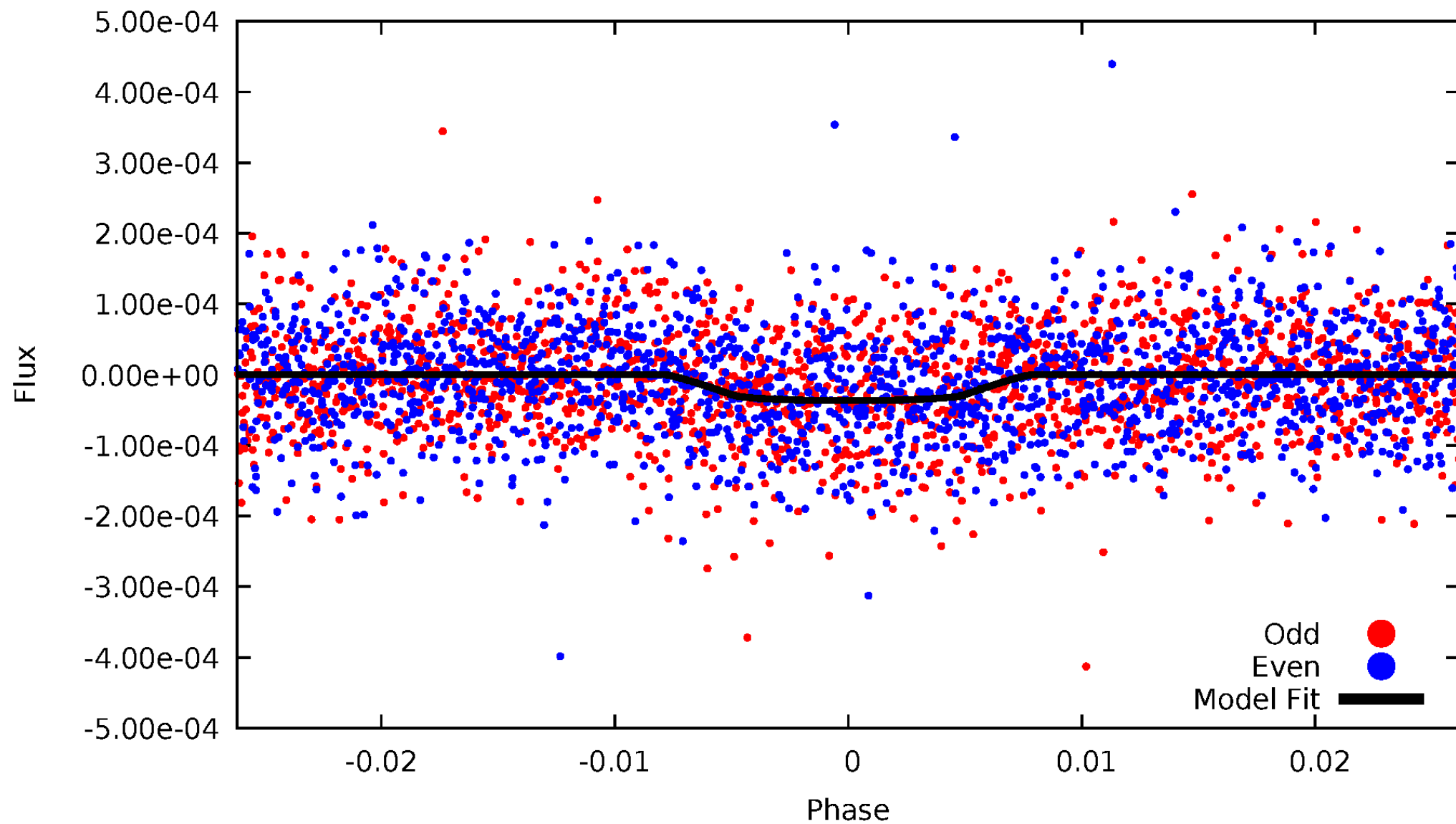


TCE 010917433-01



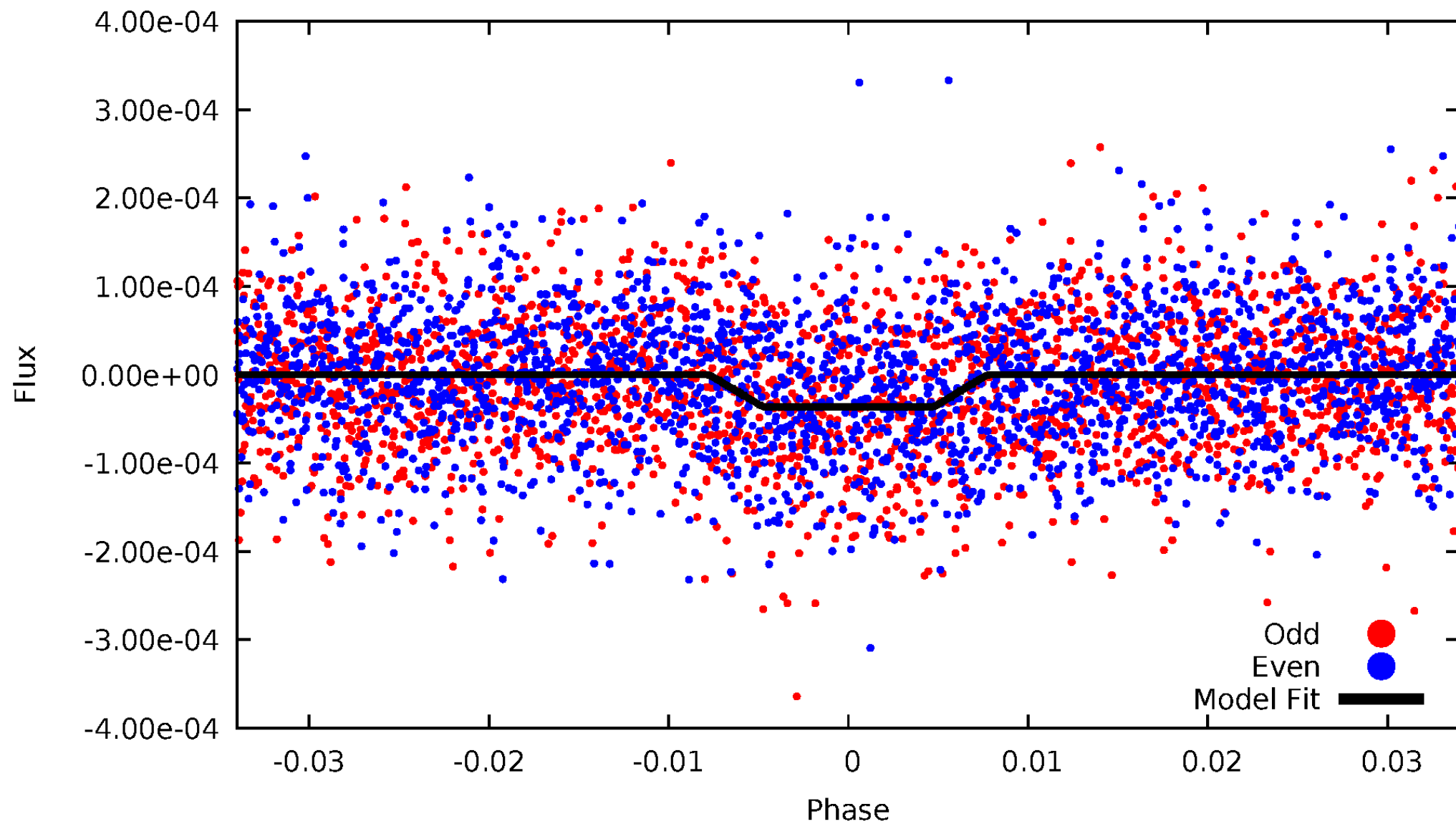
DV Odd/Even

TCE 010917433-01

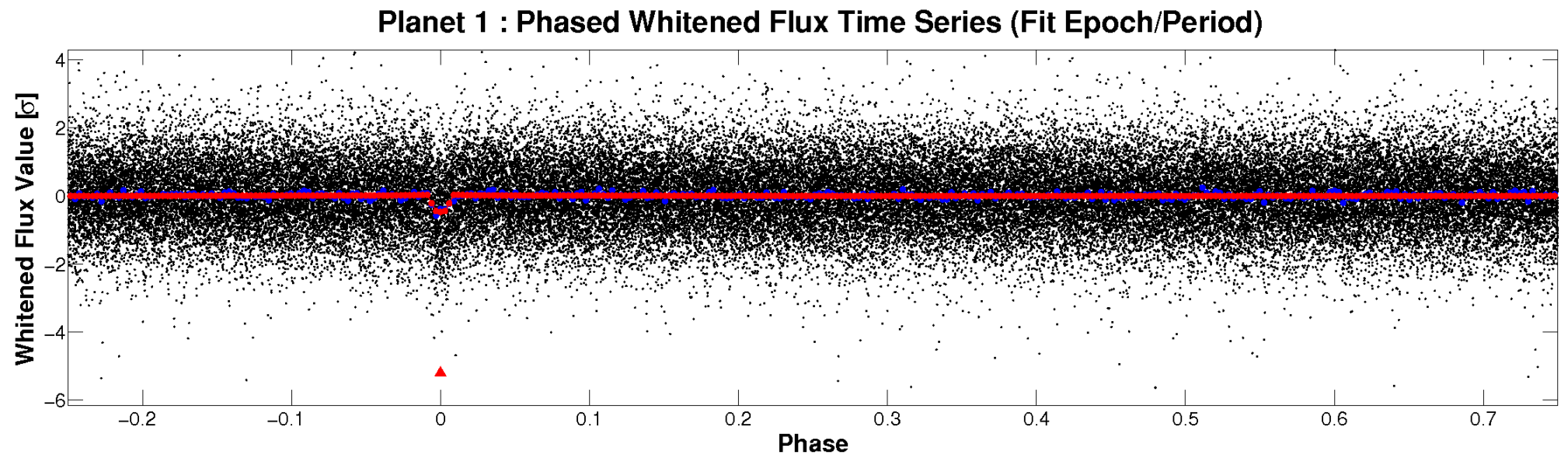
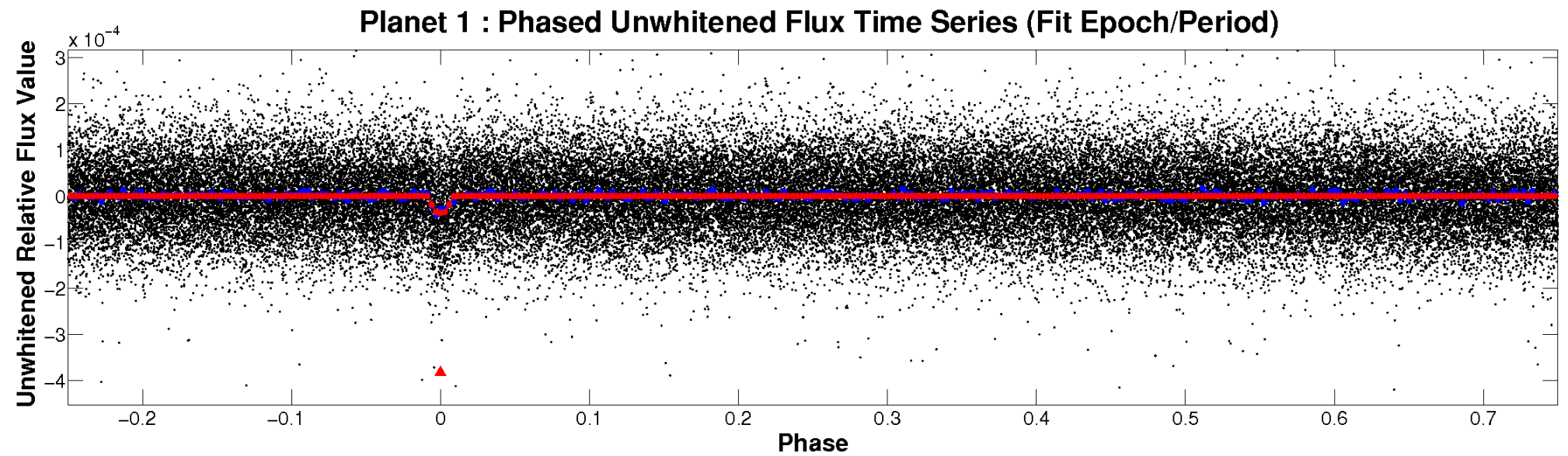


ALT Odd/Even

TCE 010917433-01

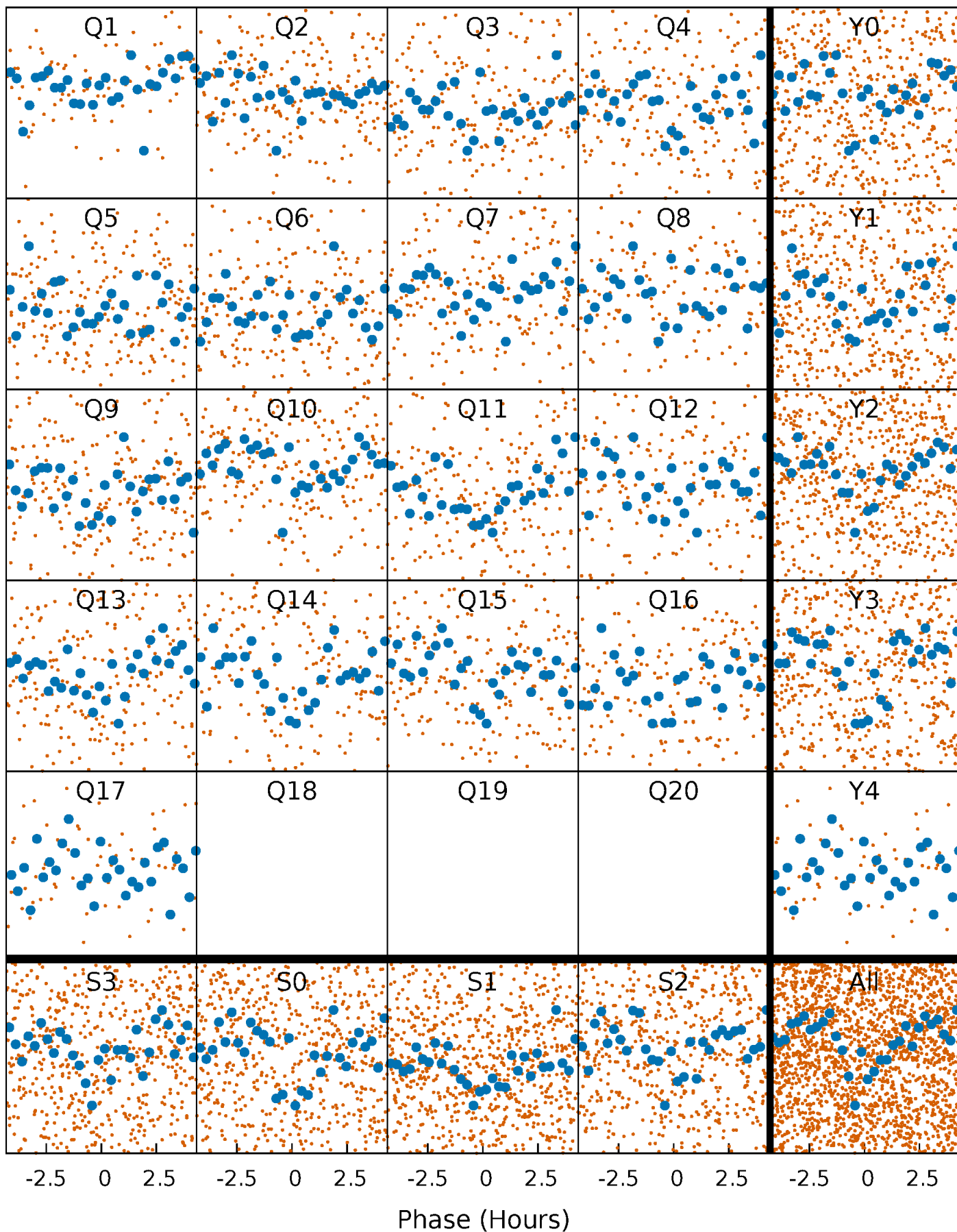


Non-Whitened Vs. Whitened Light Curve



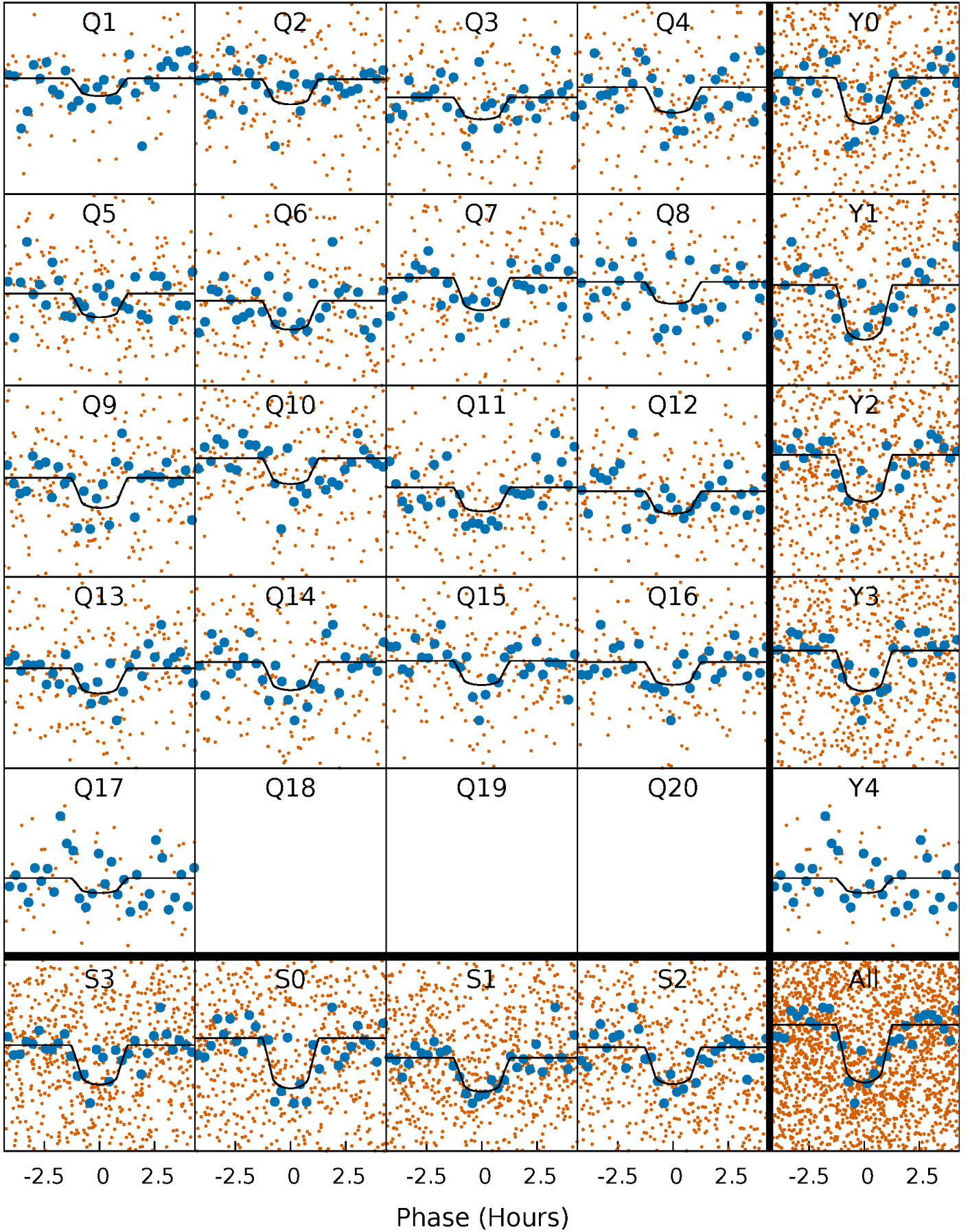
PDC Quarter-Phased Transit Curves

TCE 010917433-01 P= 6.912629 Days $T_0=132.154751$ (BKJD)



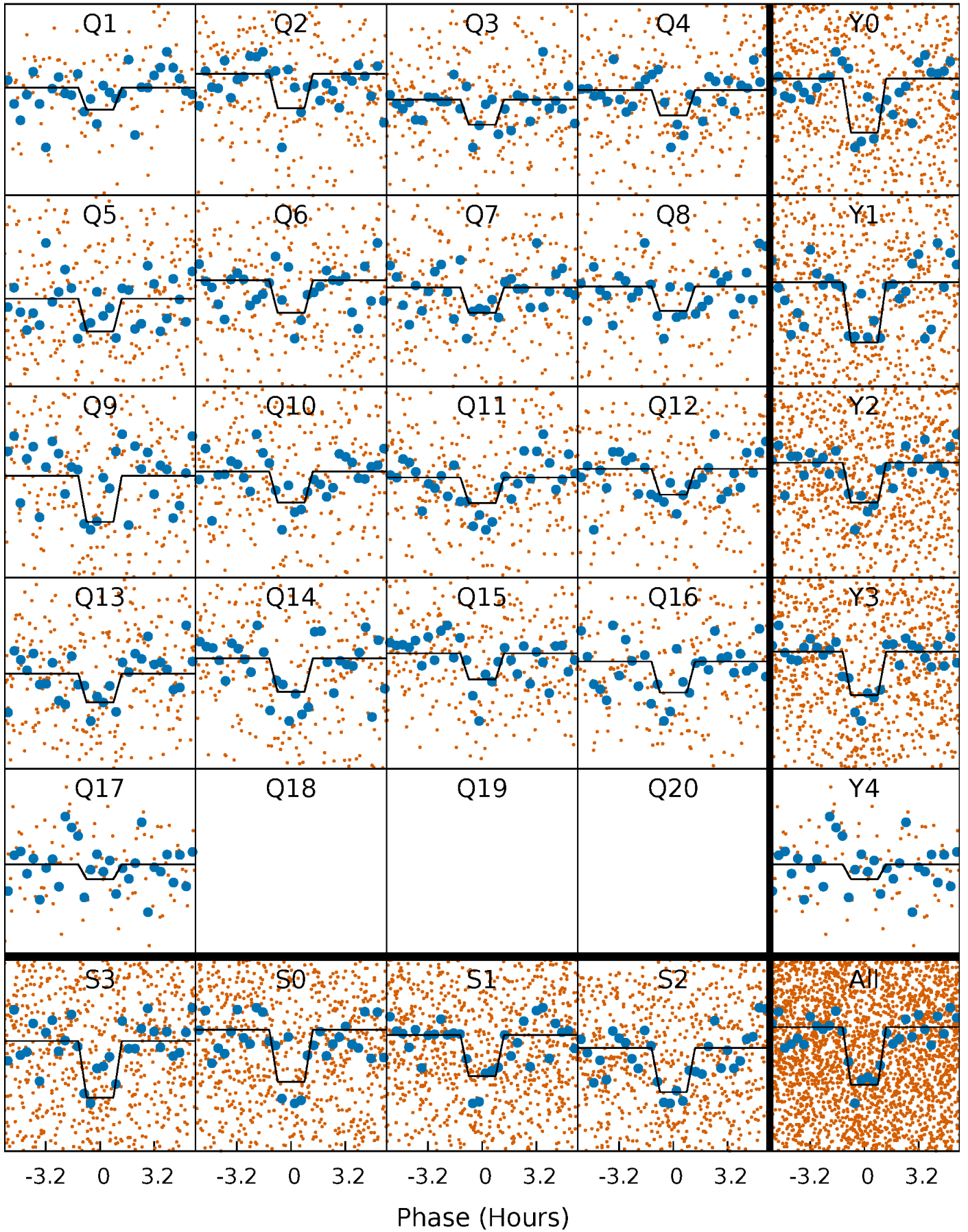
DV Quarter-Phased Transit Curves

TCE 010917433-01 P= 6.912629 Days $T_0=132.154751$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

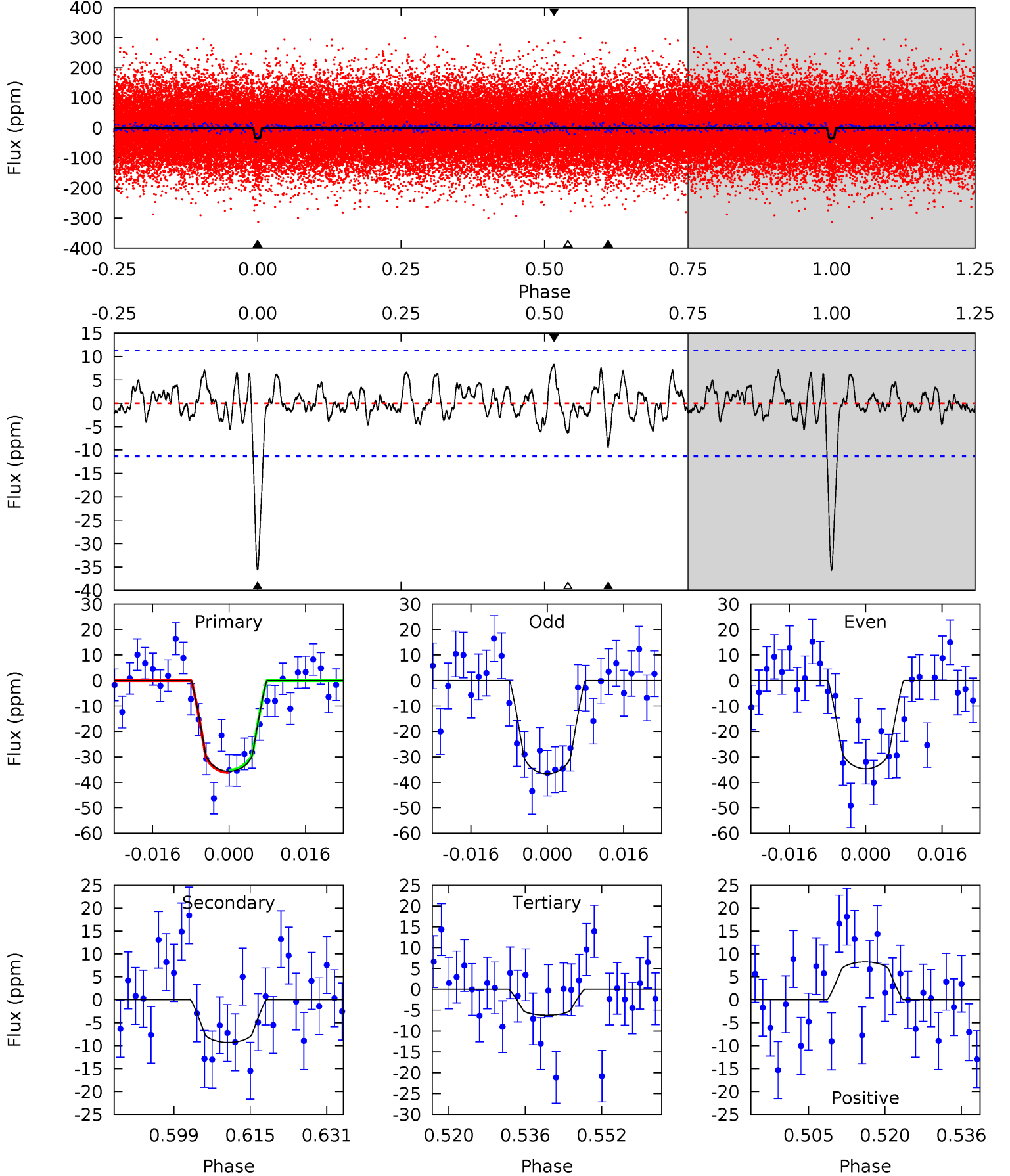
TCE 010917433-01 P= 6.912722 Days $T_0=132.144027$ (BKJD)



DV Model-Shift Uniqueness Test

010917433-01, P = 6.912629 Days, E = 125.242122 Days

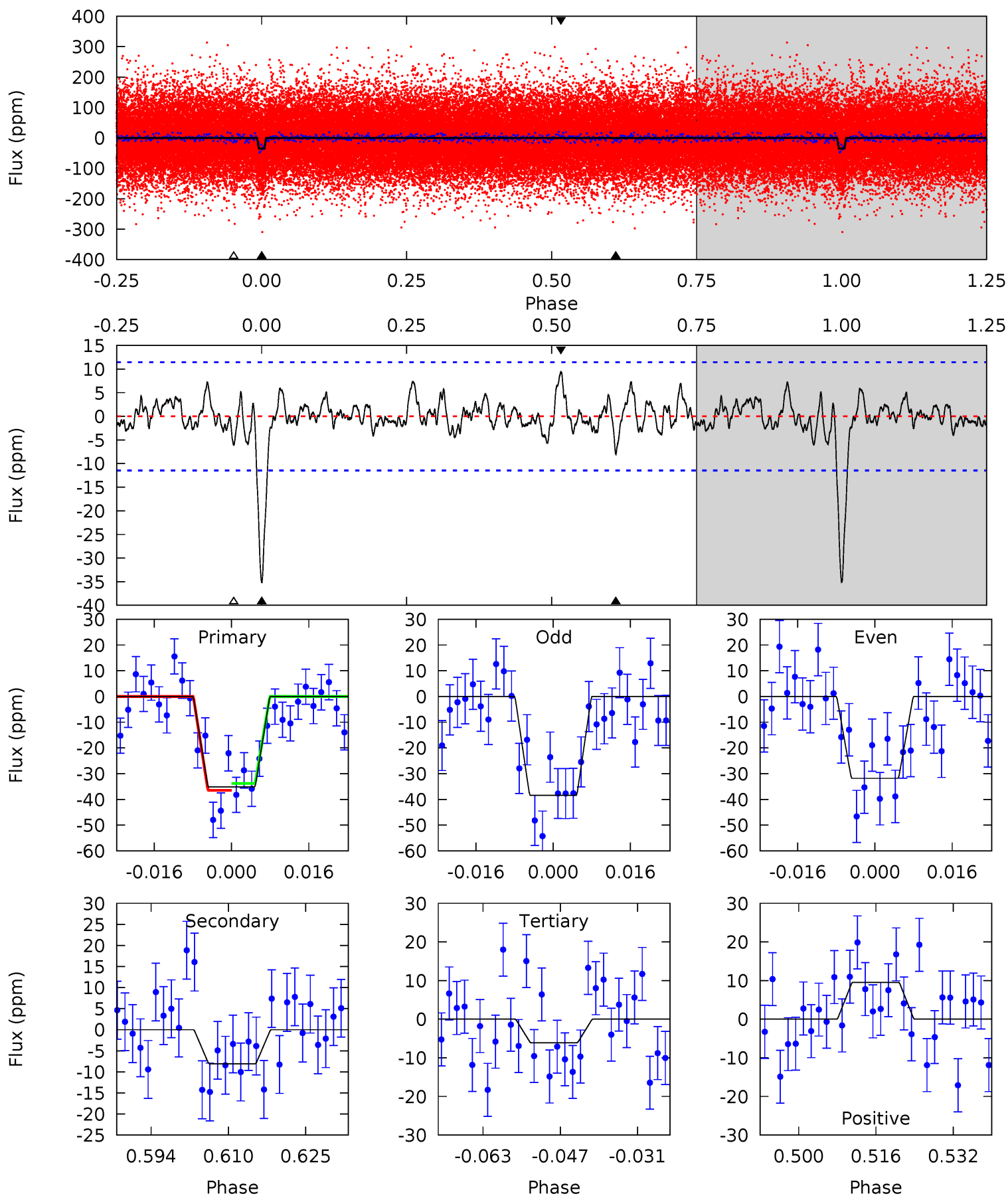
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
15.5	4.06	2.71	3.59	4.94	2.41	1.22	12.8	11.9	1.35	0.47	0.43	0.98	0.19	0.20



Alt Model-Shift Uniqueness Test

010917433-01, P = 6.912722 Days, E = 125.231305 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
15.1	3.47	2.62	4.10	4.94	2.42	1.14	12.5	11.0	0.85	-0.63	1.42	0.93	0.21	0.57



Stellar Parameters For KIC 010917433

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5761^{+115}_{-115}	$4.383^{+0.105}_{-0.116}$	$0.000^{+0.150}_{-0.150}$	$1.044^{+0.162}_{-0.122}$	$0.960^{+0.072}_{-0.065}$	$1.189^{+0.463}_{-0.392}$
	+2%/-2%	+2%/-3%	+inf%/-inf%	+16%/-12%	+8%/-7%	+39%/-33%
Source	SPE57	SPE57	SPE57	DSEP		

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

Secondary Eclipse Parameters for KIC 010917433-01 / KOI 3248.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-9 ± 2	$0.78^{+0.30}_{-0.30}$	1374^{+64}_{-57}	4115^{+833}_{-469}	40^{+65}_{-20}
Alt.	-8 ± 2	$0.67^{+0.31}_{-0.29}$	1371^{+67}_{-52}	4213^{+1122}_{-547}	46^{+104}_{-25}

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

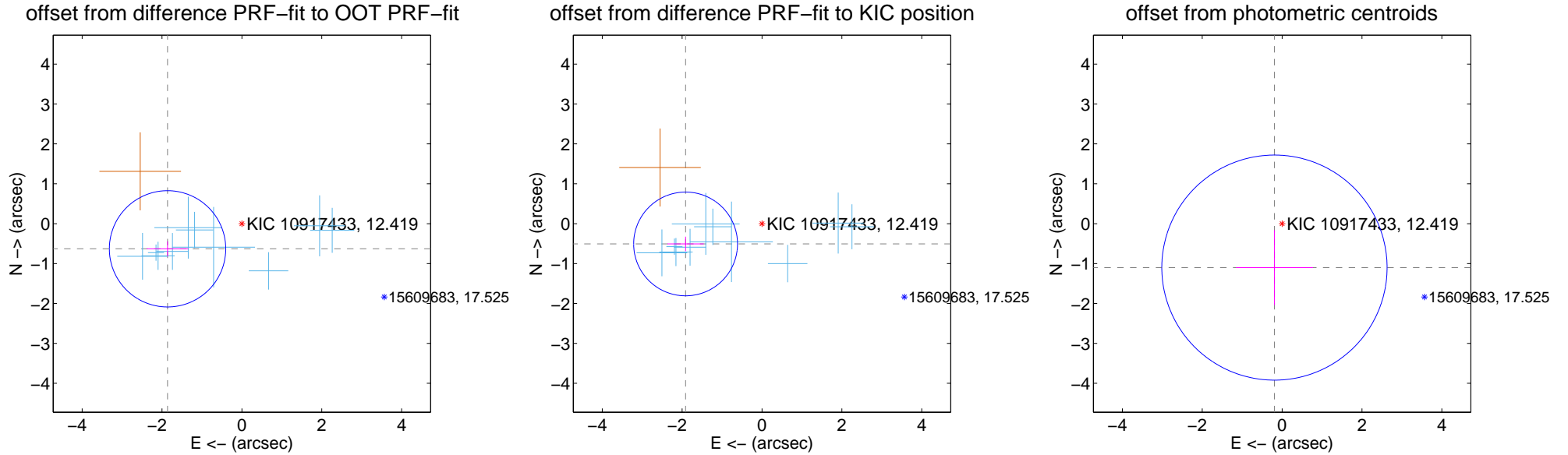
DV Centroid Data

Supplemental centroid analysis for 010917433-01. Kepler magnitude: 12.42. Transit SNR 11.59

There are 10 quarters with good PRF difference image offsets

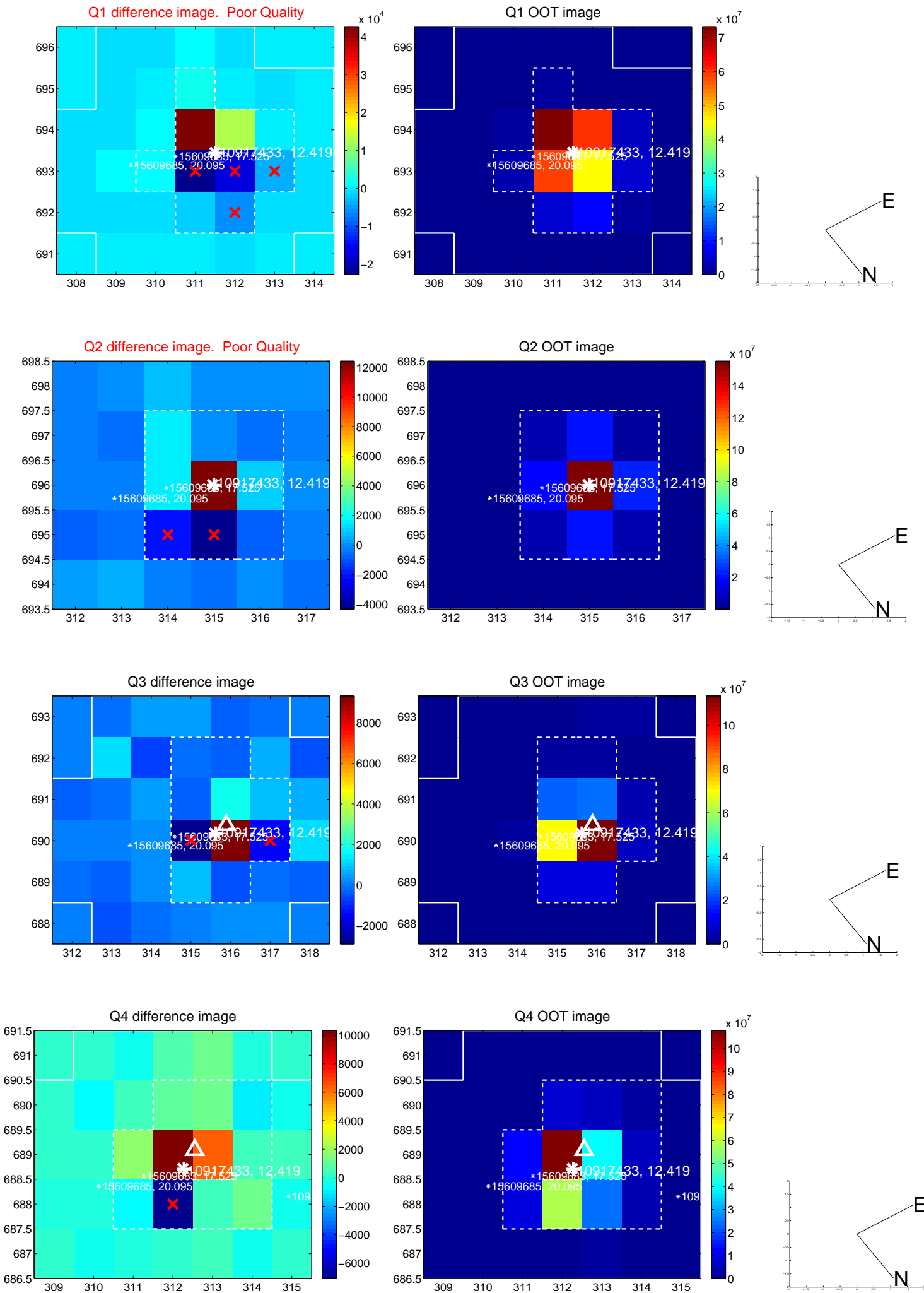
The direct PRF centroid is offset from the target star catalog position by about 0.10 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.965 ± 0.486	4.05	1.861 ± 0.520	-0.630 ± 0.188
PRF-fit source offset from KIC position	1.979 ± 0.433	4.57	1.913 ± 0.454	-0.508 ± 0.183
photometric centroid source offset	1.12 ± 0.94	1.19	0.19 ± 0.96	-1.10 ± 0.94

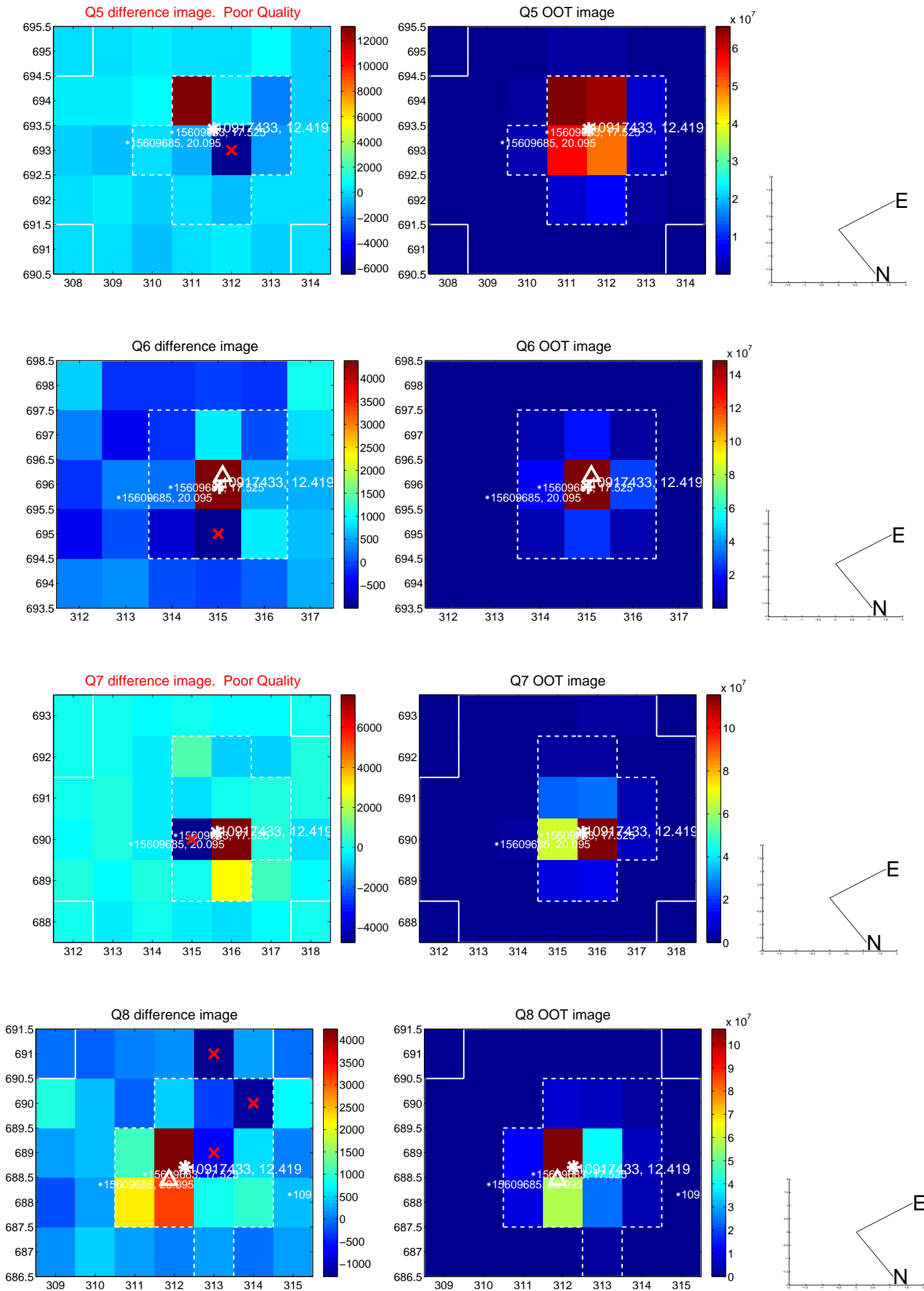


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

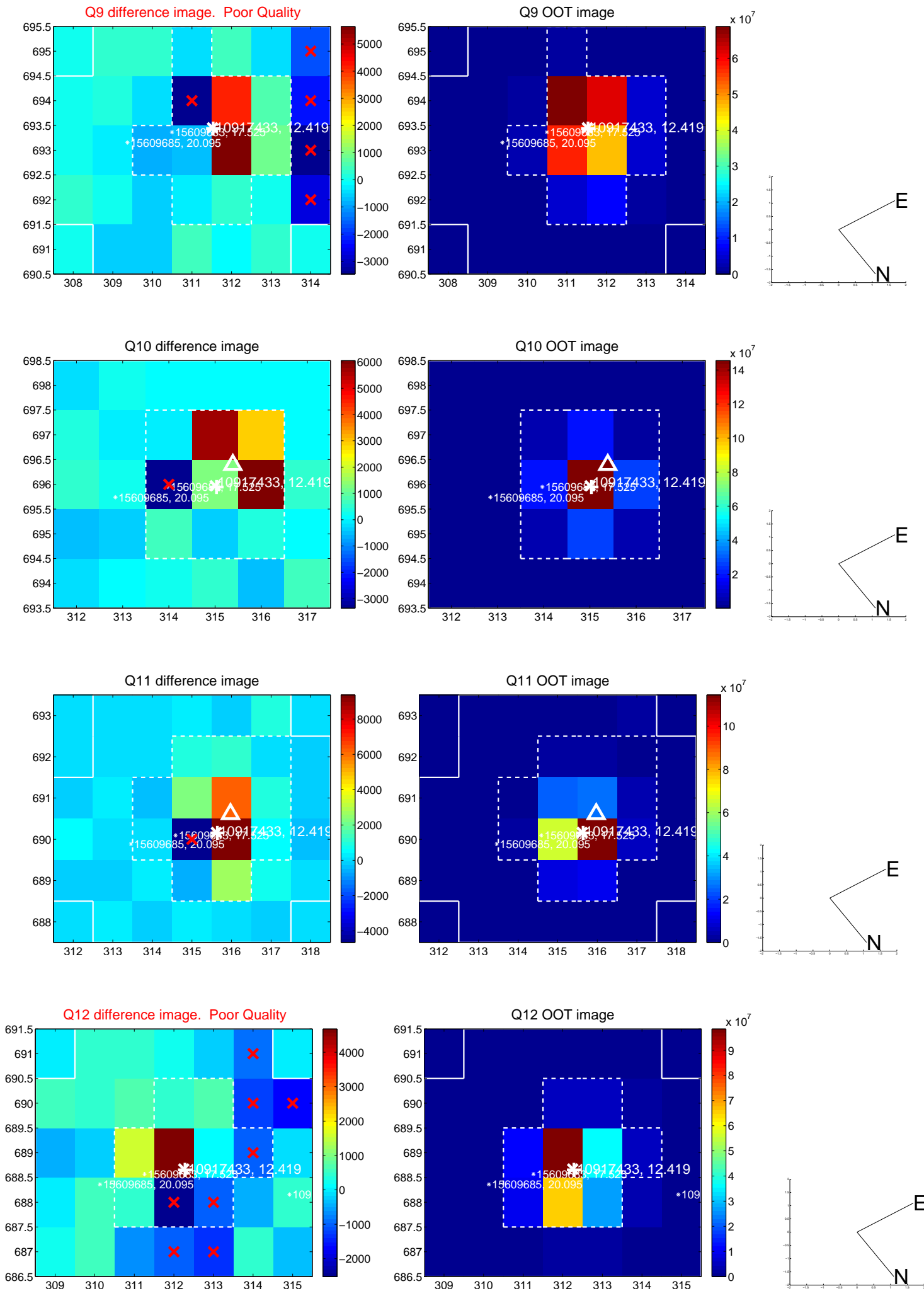
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



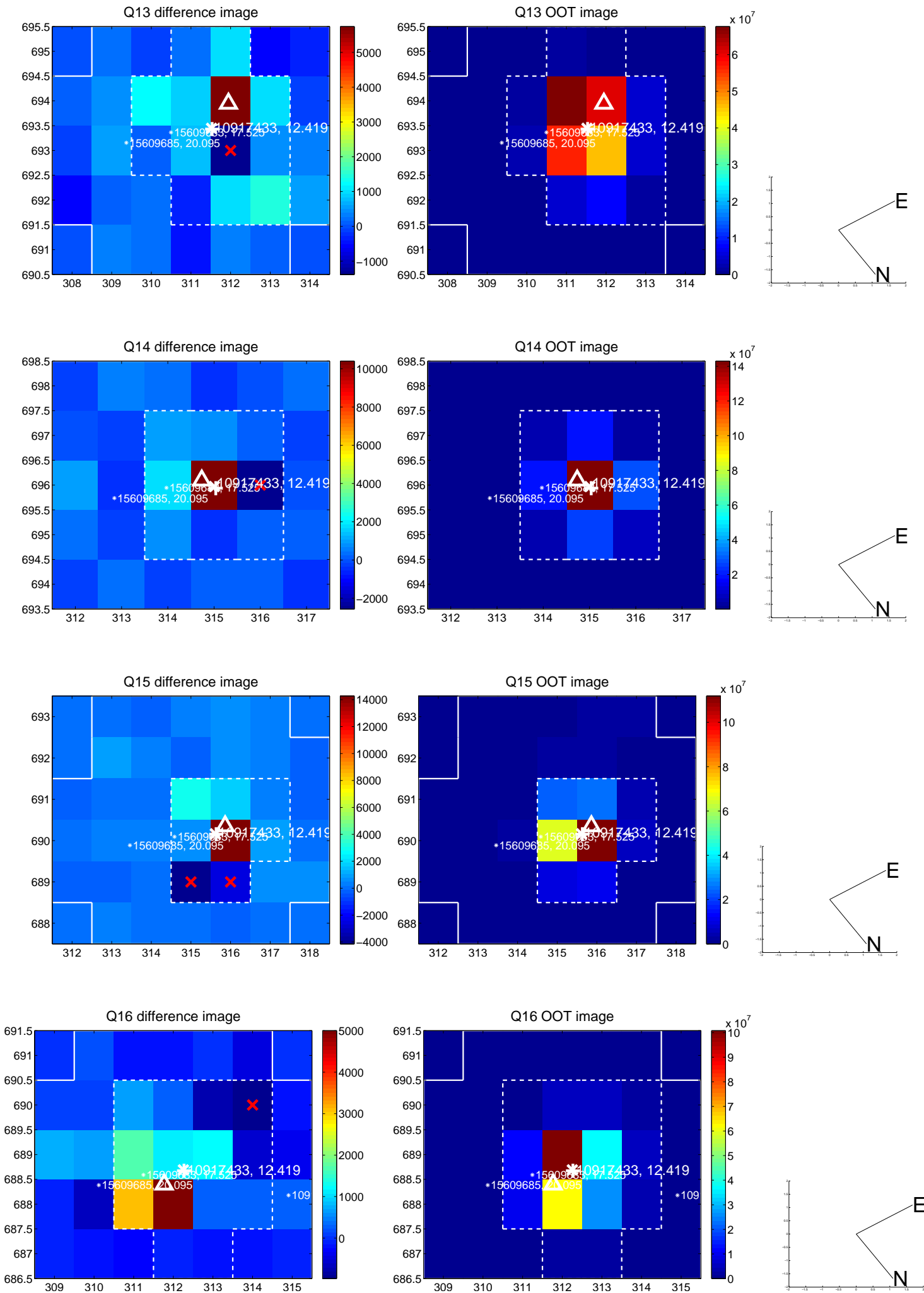
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



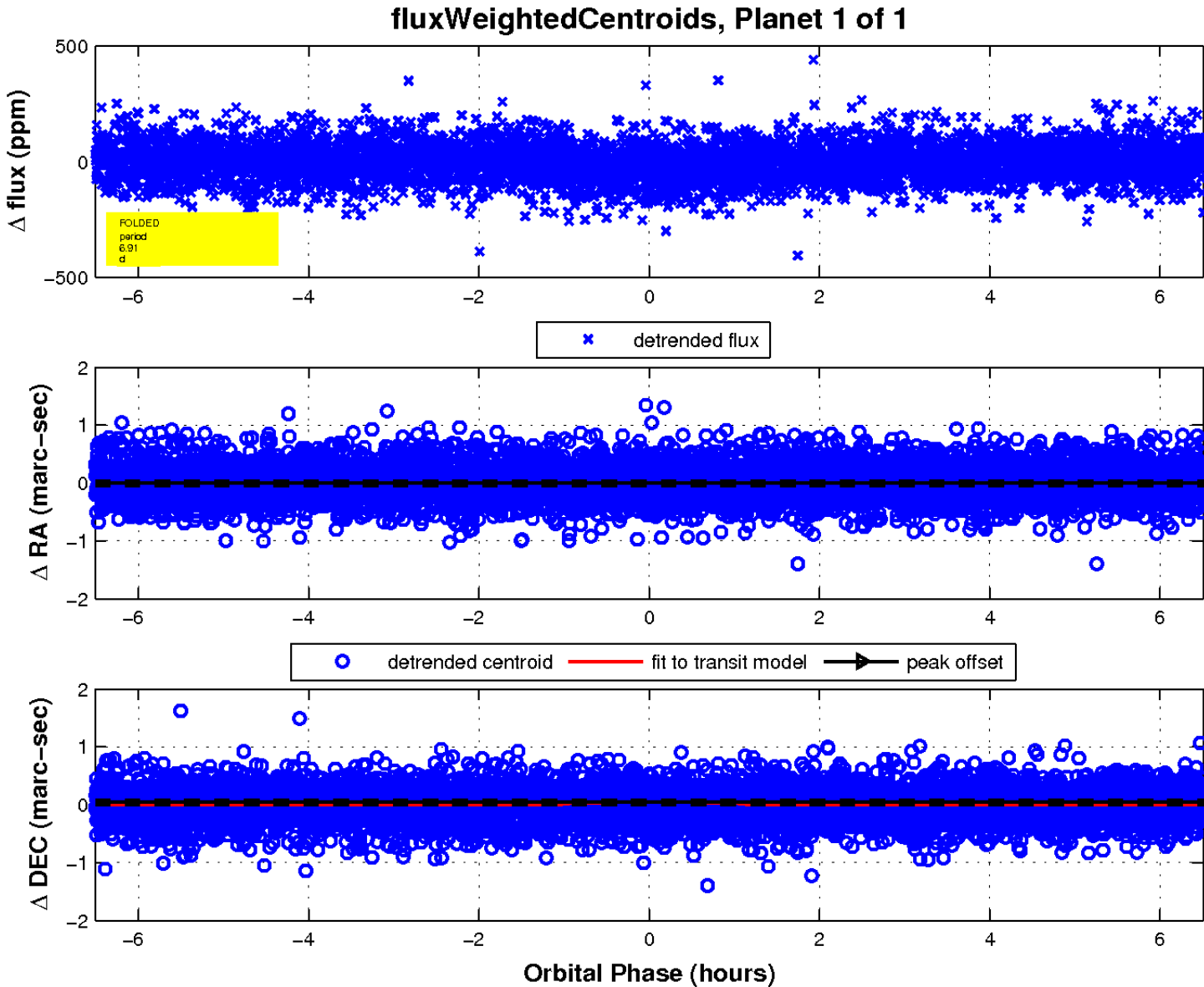
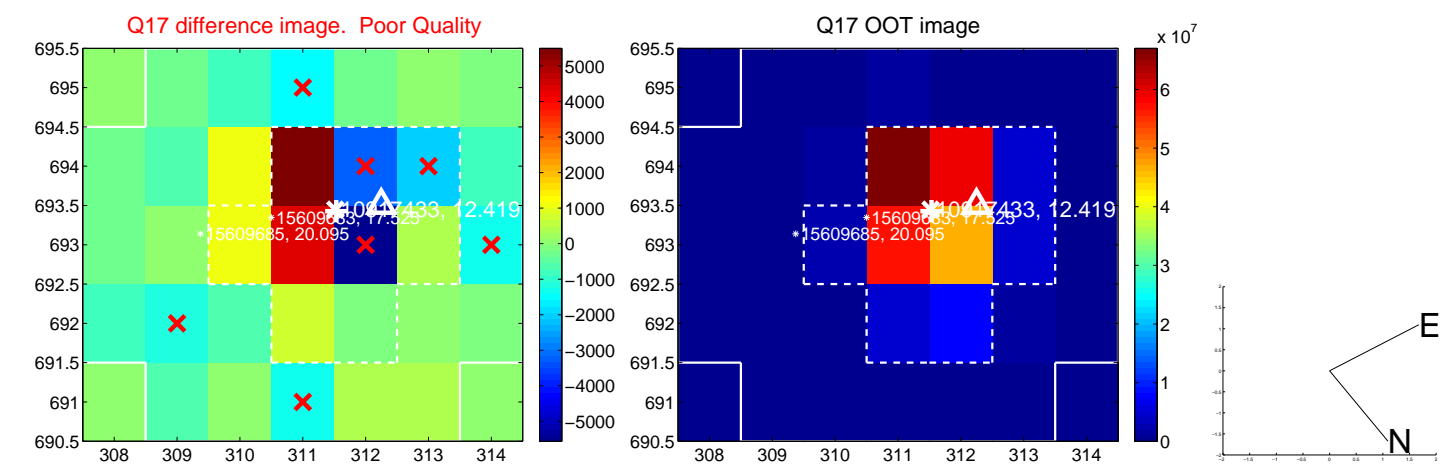
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white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination

