

KIC 006610433

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})
006610433-01	OBS	6744.01	0.921438	131.862135	1.3	7.518	11.2	3.9	2.98	7894	0.38	53501.91

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006610433-01	OBS	FP	0.00	1	0	0	0	LPP_DV—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.

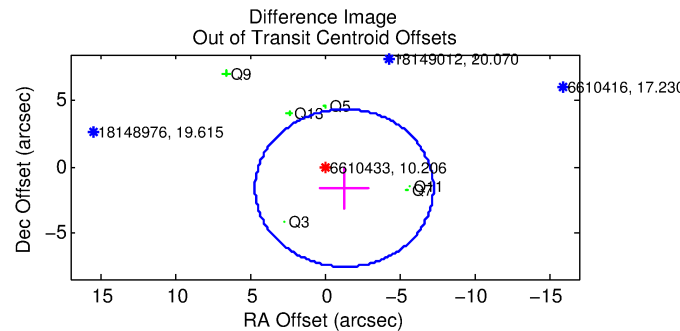
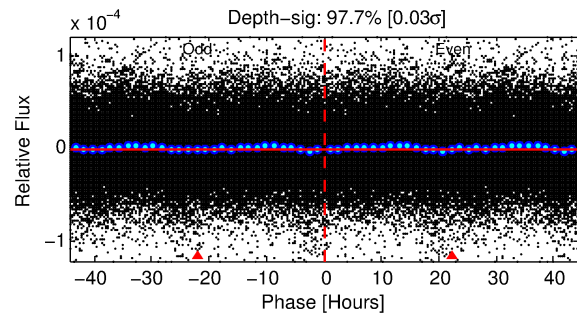
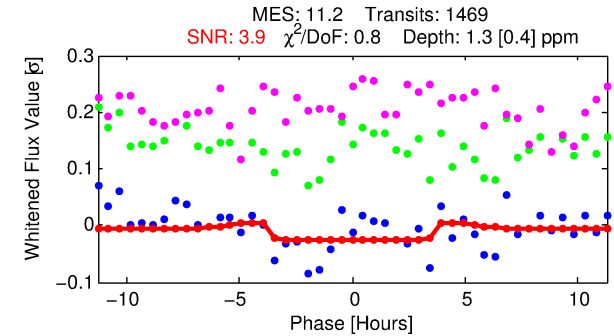
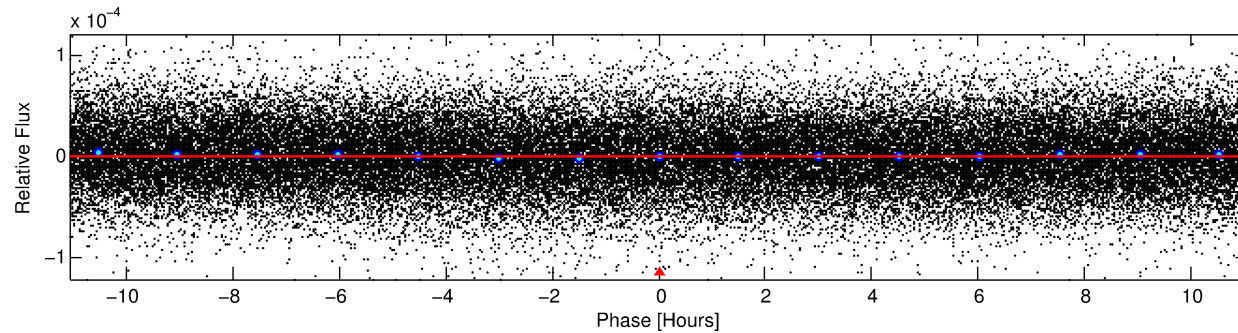
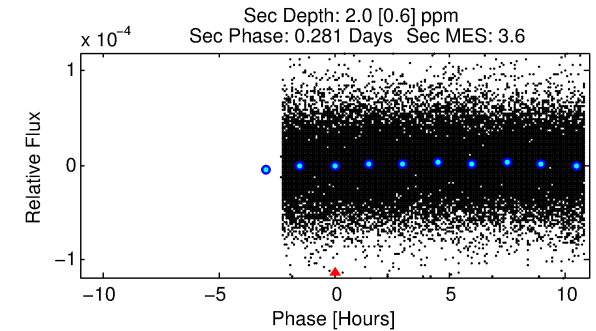
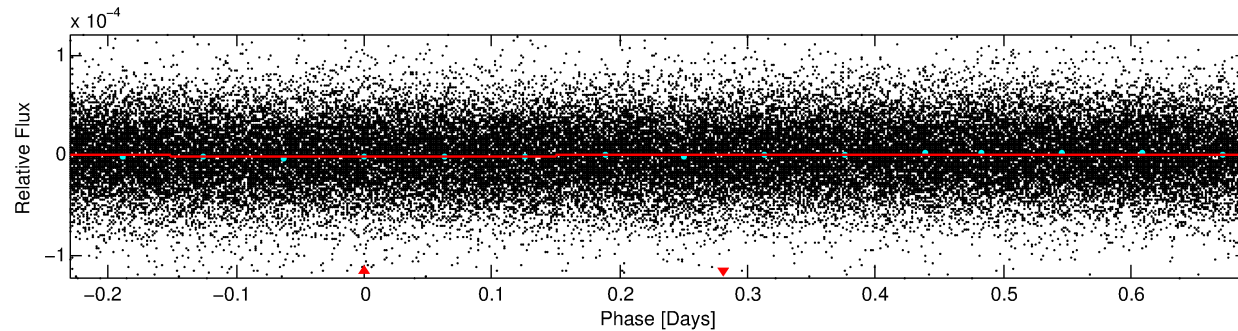
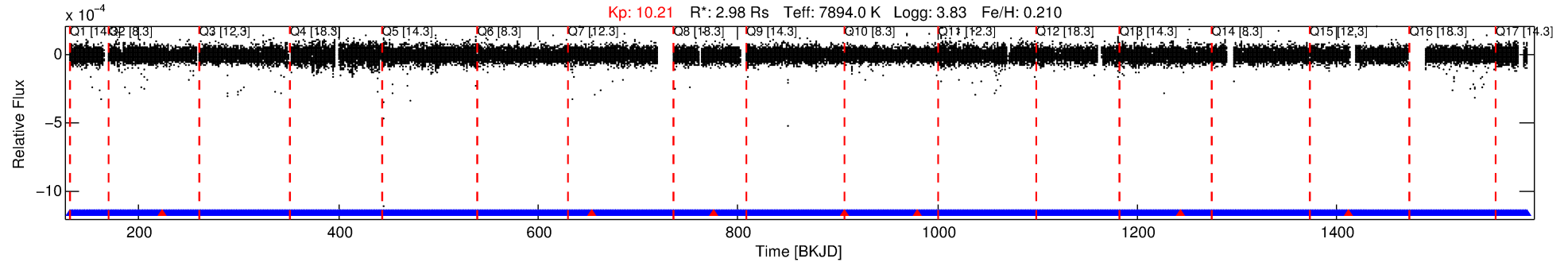
Ephemeris Match Information For 006610433-01

No Significant Match Found

DV One-Page Summary

KIC: 6610433 Candidate: 1 of 1 Period: 0.921 d

KOI: K06744 Corr: No Ephemeris Match



DV Fit Results:

Period = 0.92144 [0.00004] d
Epoch = 131.8621 [0.0121] BKJD
Rp/R* = 0.0012 [0.0006]
a/R* = 1.05 [0.29]
b = 0.81 [1.24]
Seff = 53501.91 [20462.77]
Teq = 3878 [371] K
Rp = 0.38 [0.21] Re
a = 0.0240 [0.0060] AU
Ag = 4.54 [4.89] [0.72σ]
Teffp = 8752 [2209] K [2.18σ]

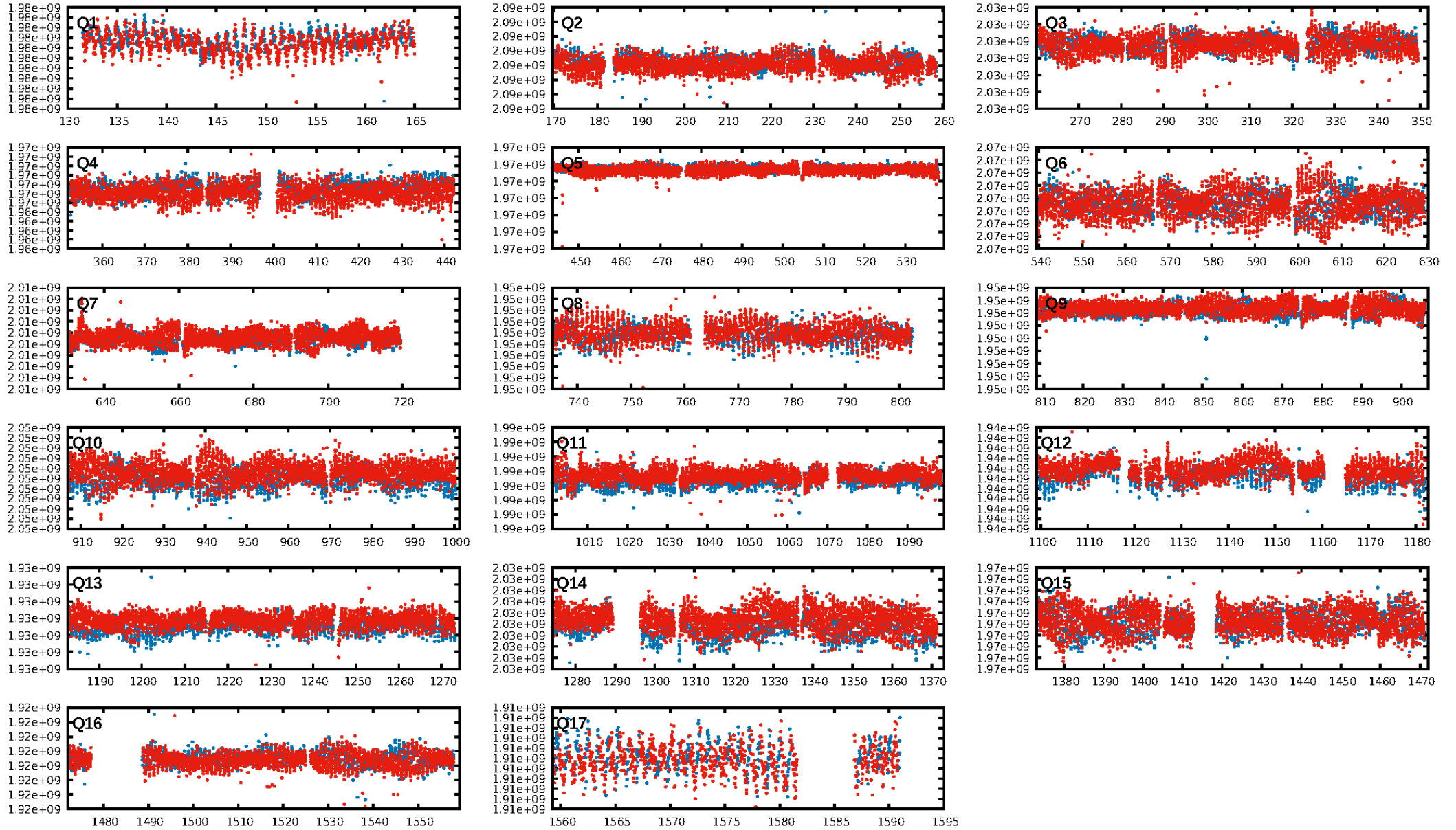
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGoF-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [1395/1402]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 2.085 arcsec [1.05σ]
KicOffset-rm: 2.900 arcsec [1.99σ]
OotOffset-st: 0/3/0/3 [6]
KicOffset-st: 0/3/0/3 [6]
DiffImageQuality-fgm: 0.17 [1/6]
DiffImageOverlap-fno: 1.00 [17/17]

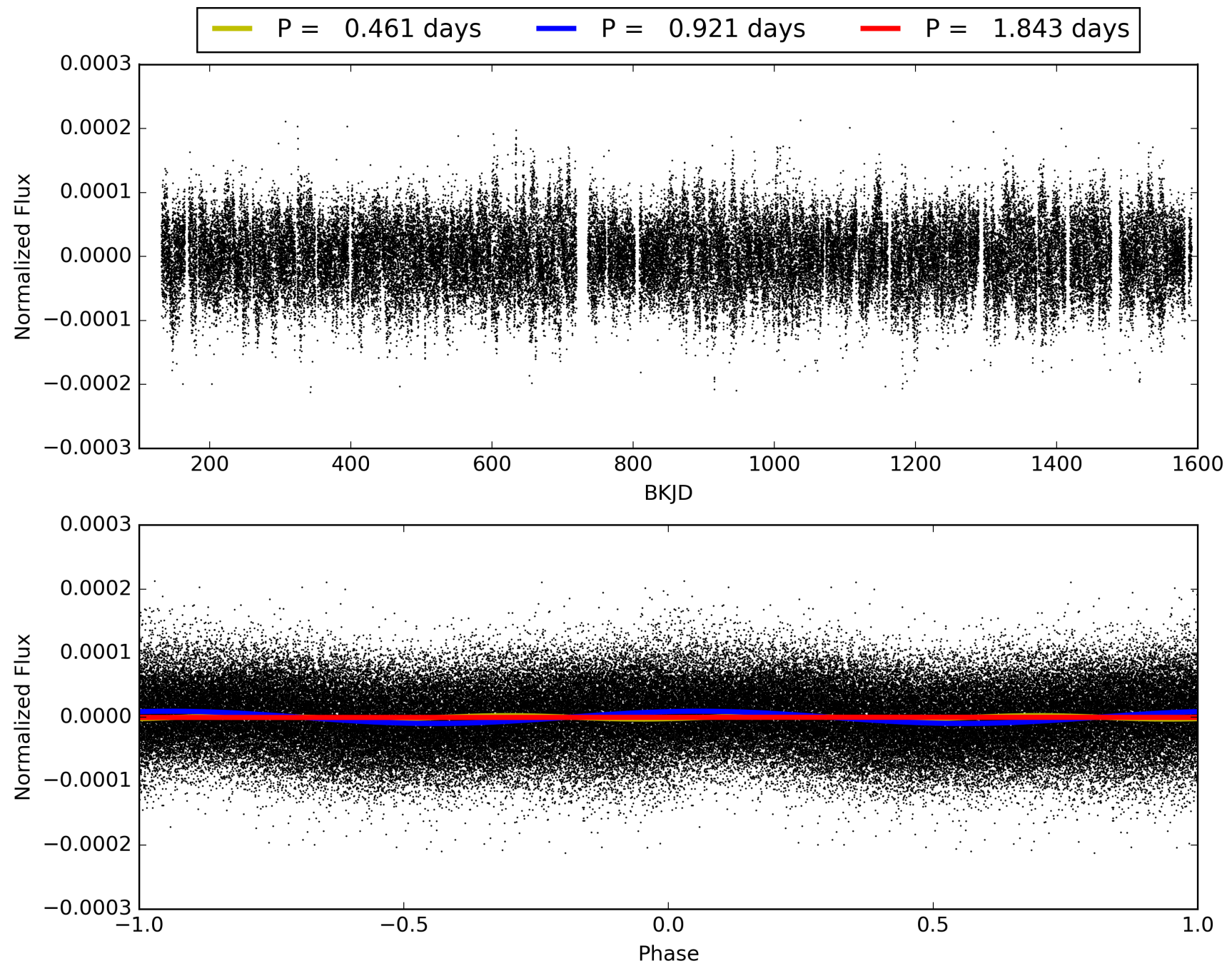
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 18:27:08 Z

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

TCE 006610433-01, PDC Light Curves

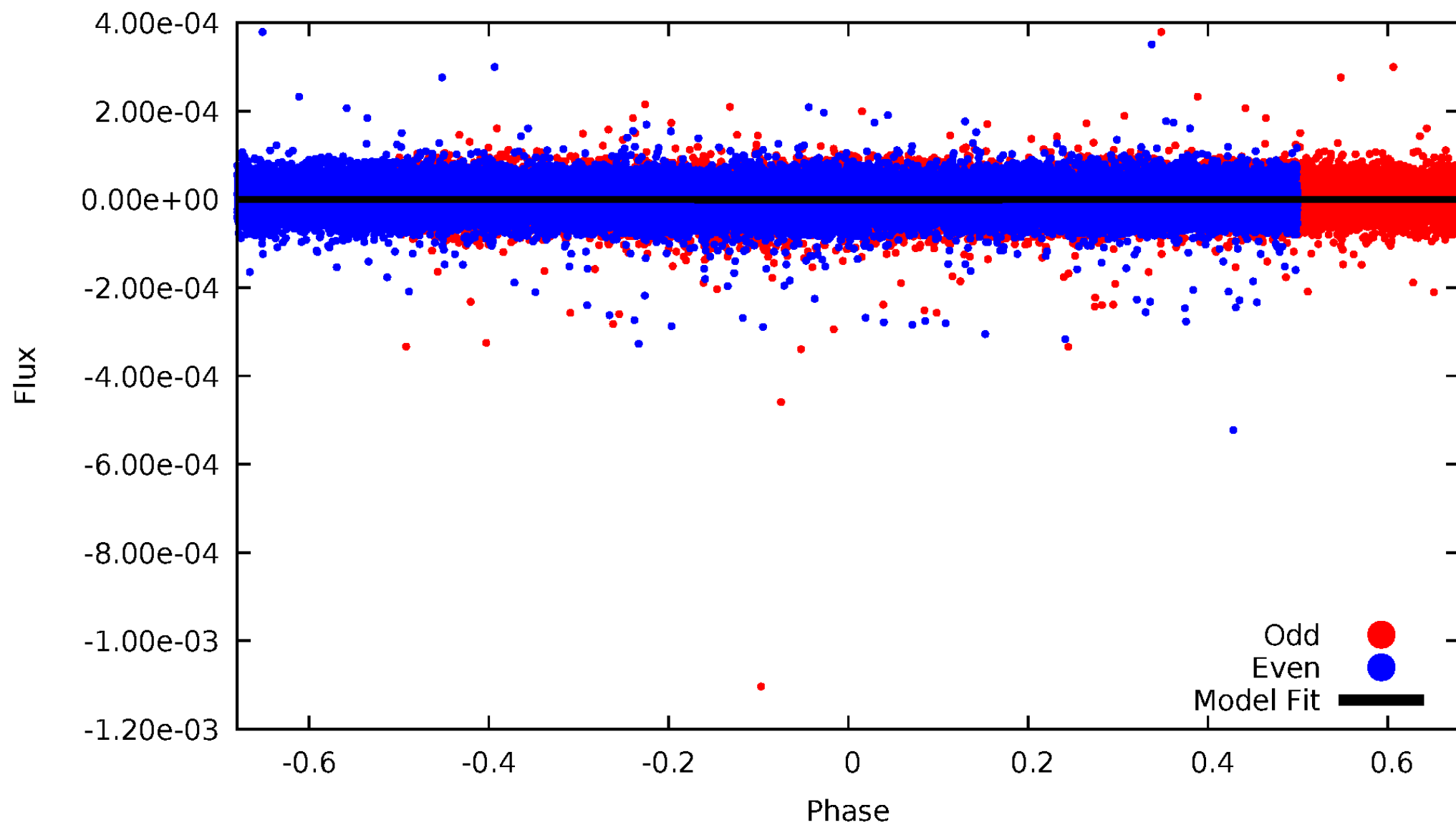


TCE 006610433-01



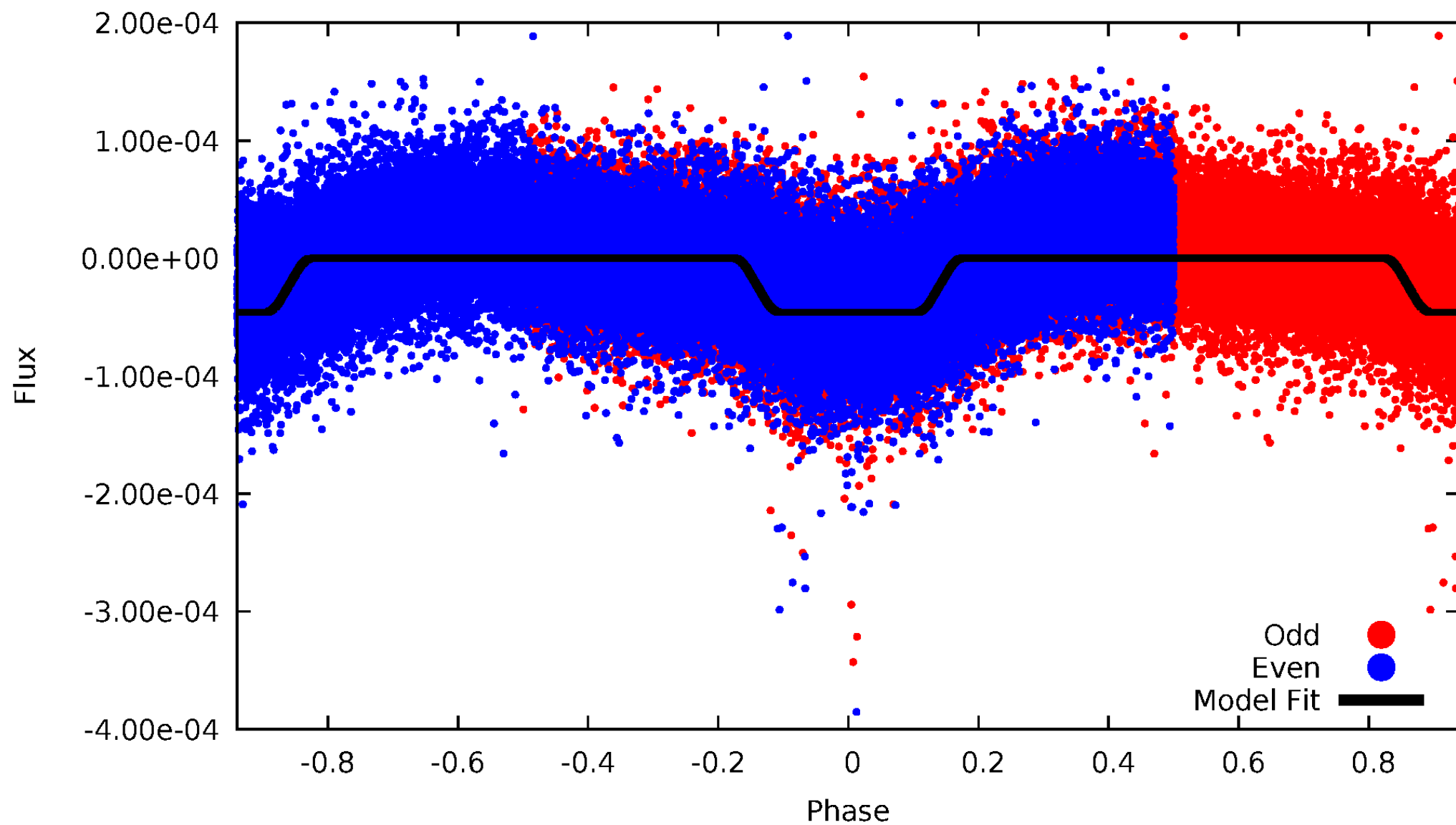
DV Odd/Even

TCE 006610433-01



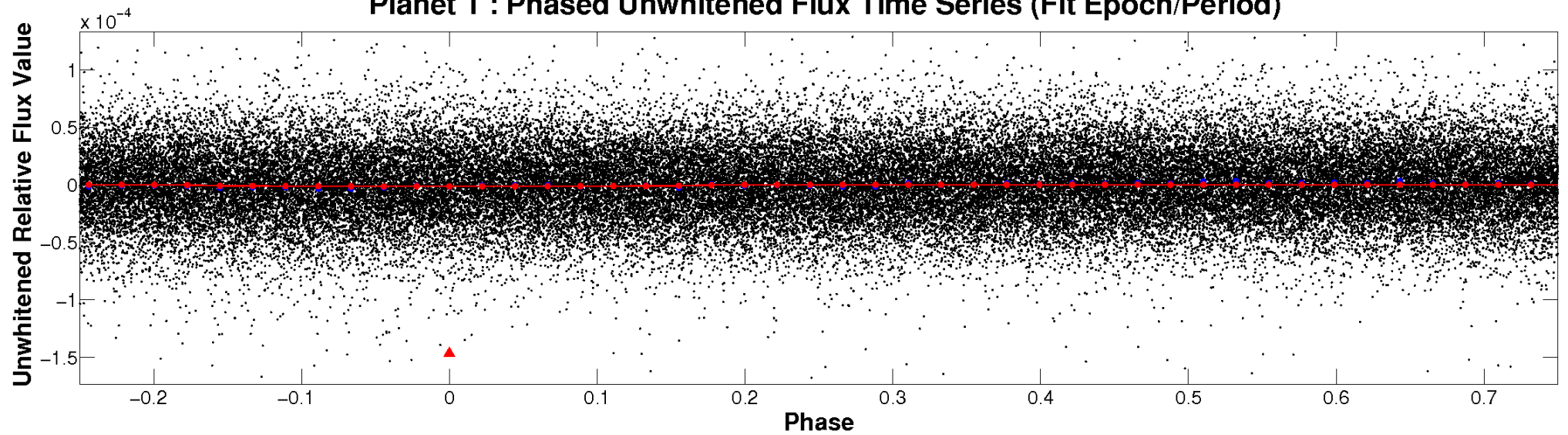
ALT Odd/Even

TCE 006610433-01

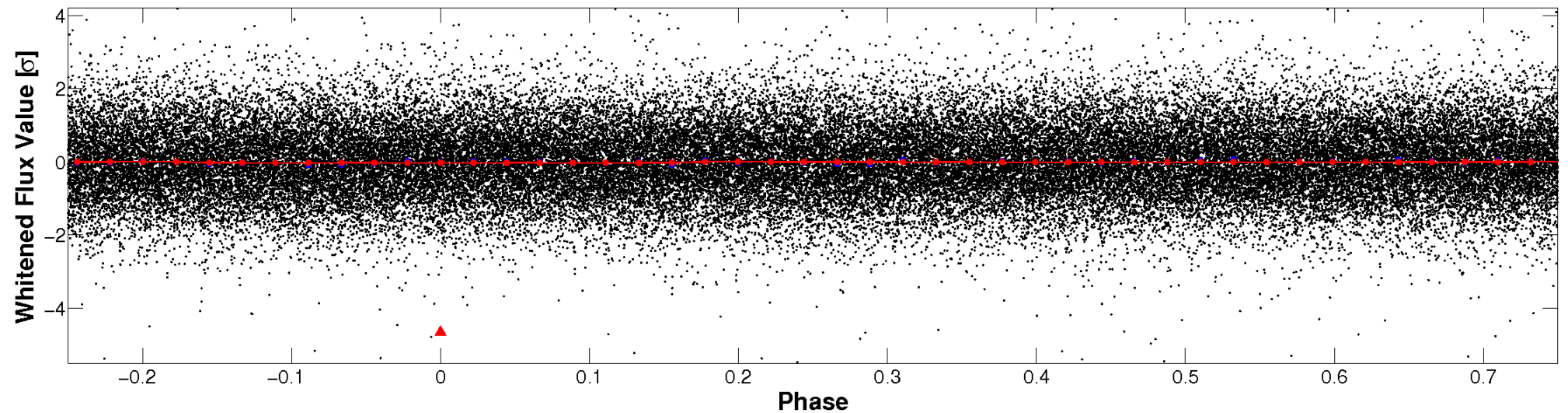


Non-Whitened Vs. Whitened Light Curve

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

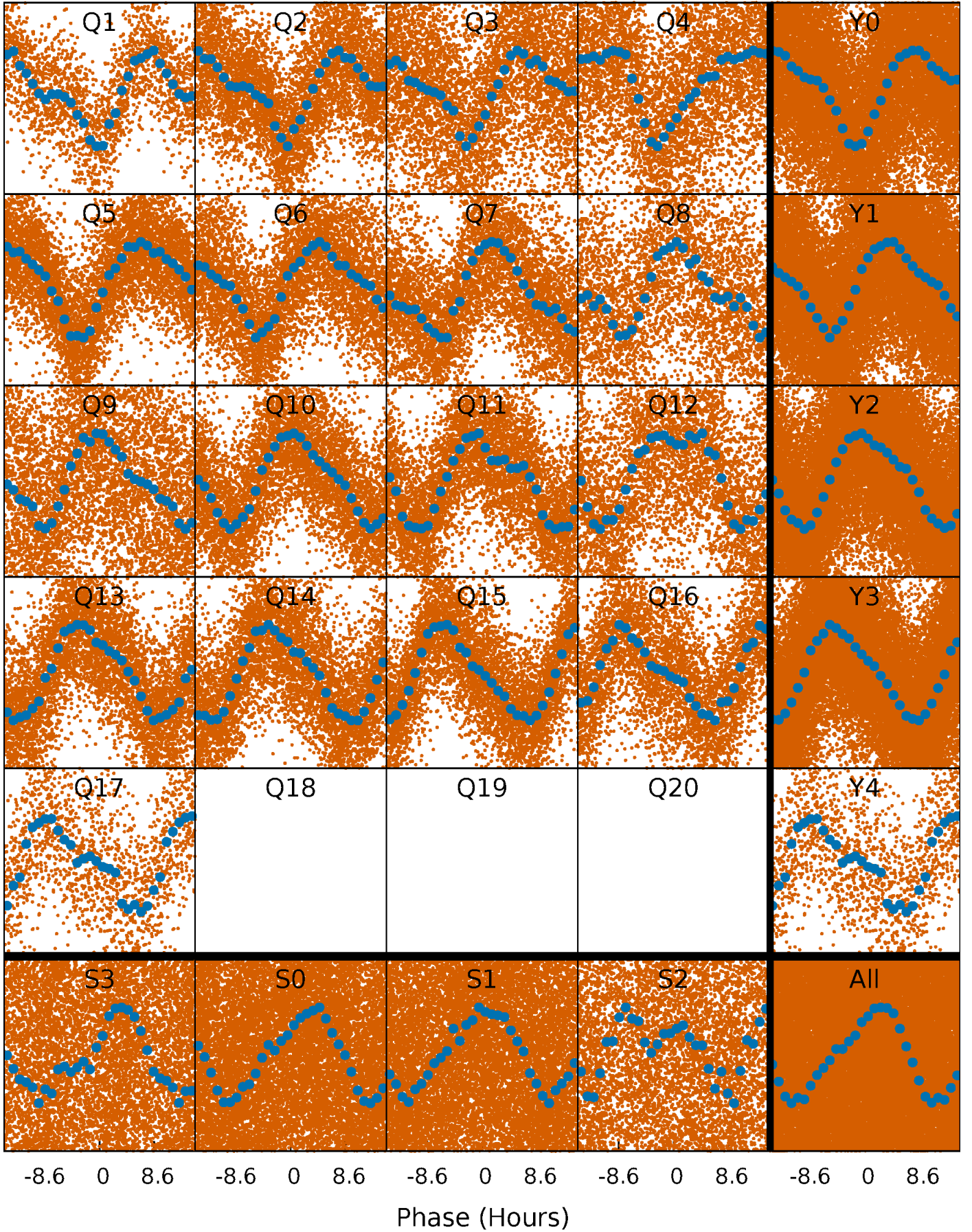


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



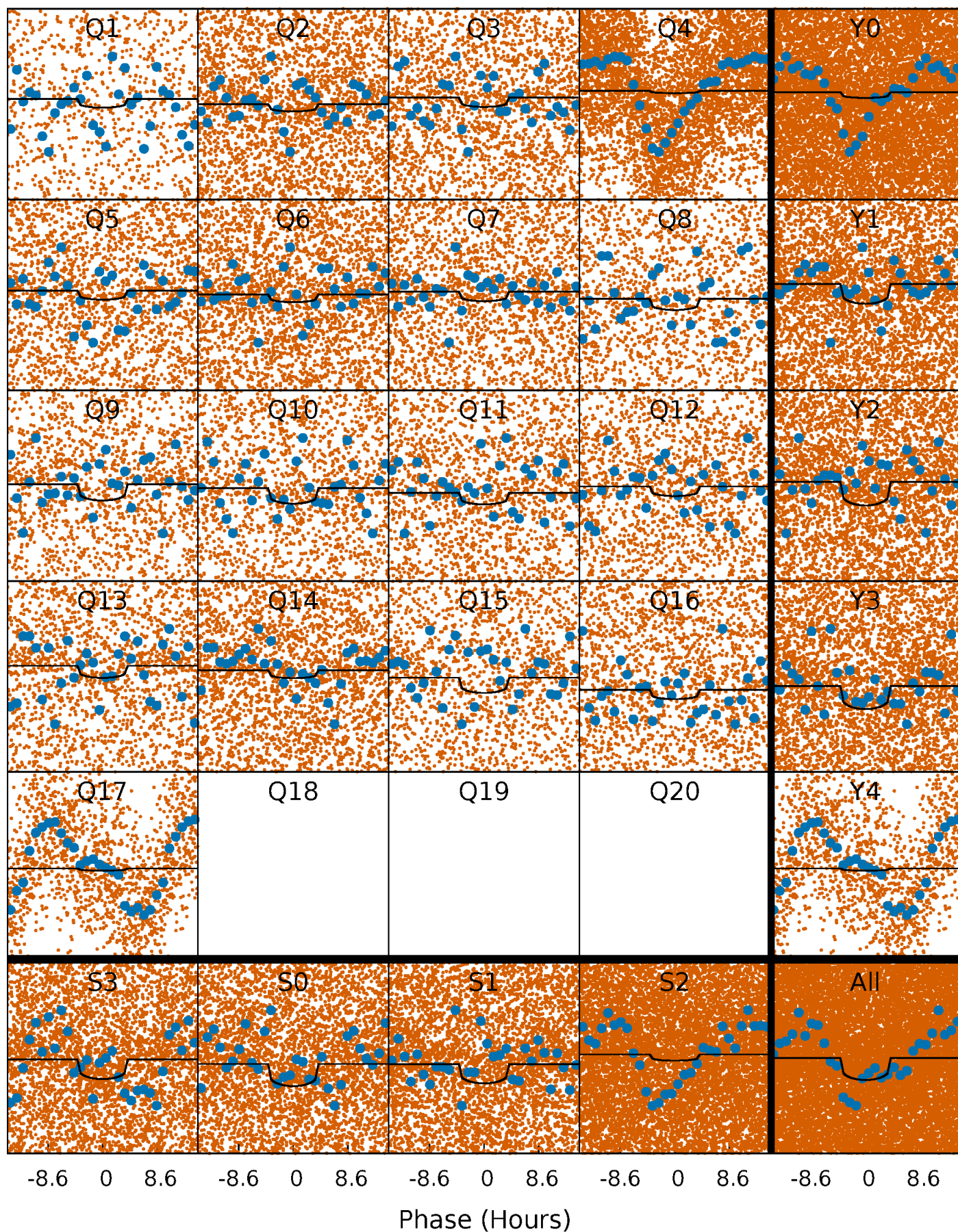
PDC Quarter-Phased Transit Curves

TCE 006610433-01 P= 0.921438 Days $T_0=131.862135$ (BKJD)



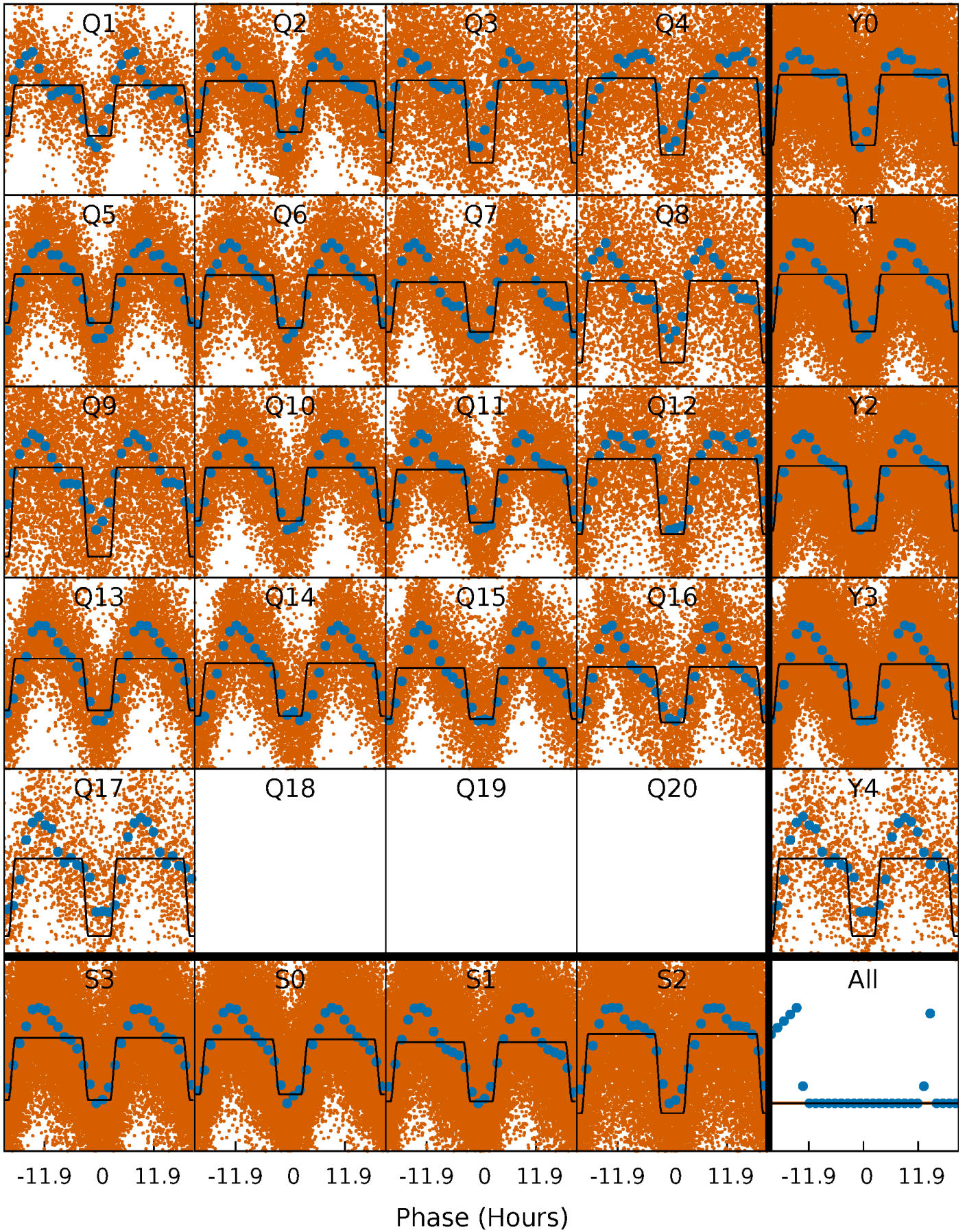
DV Quarter-Phased Transit Curves

TCE 006610433-01 P= 0.921438 Days $T_0=131.862135$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

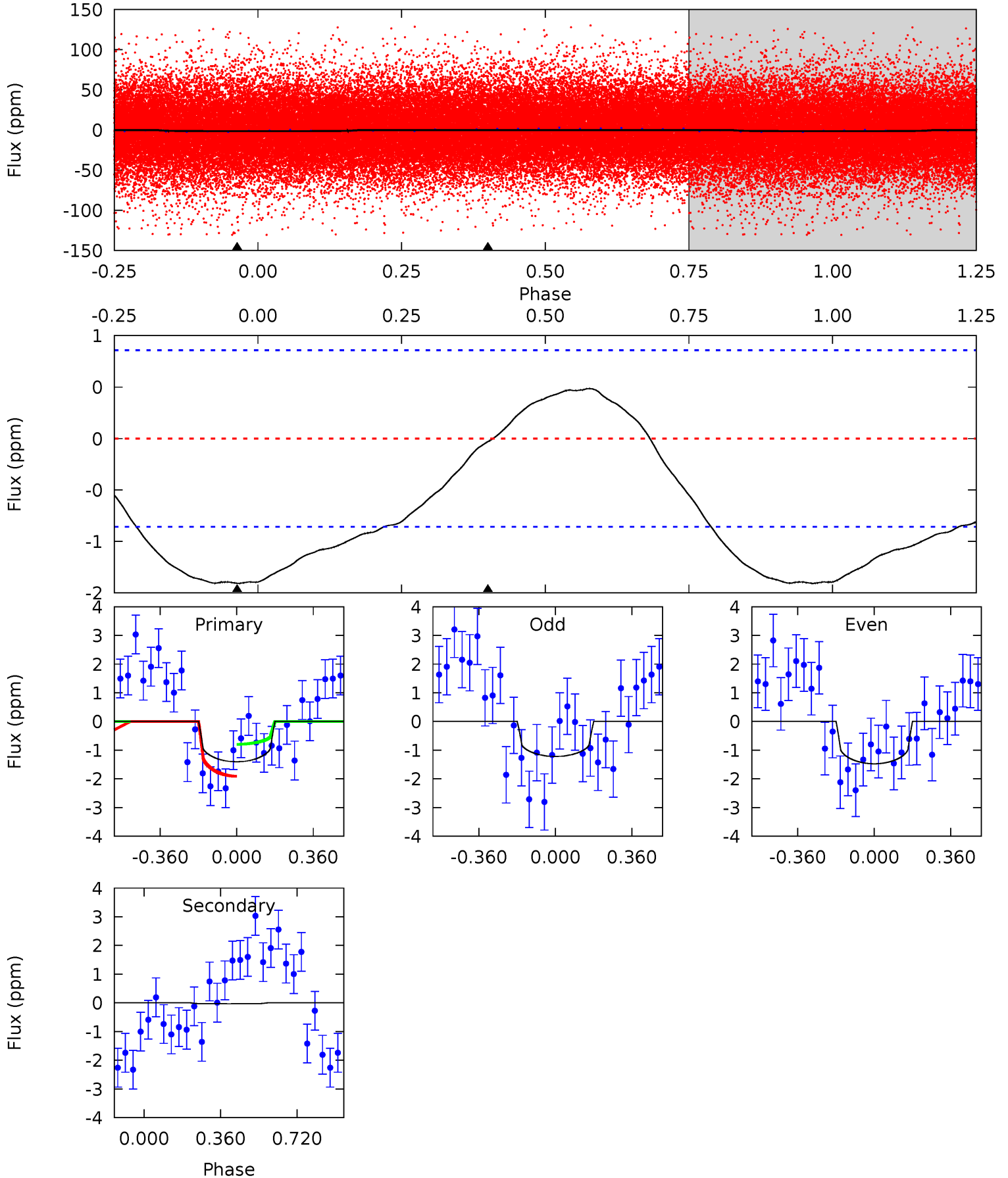
TCE 006610433-01 P= 0.920944 Days $T_0=131.905189$ (BKJD)



DV Model-Shift Uniqueness Test

006610433-01, P = 0.921438 Days, E = 130.940697 Days

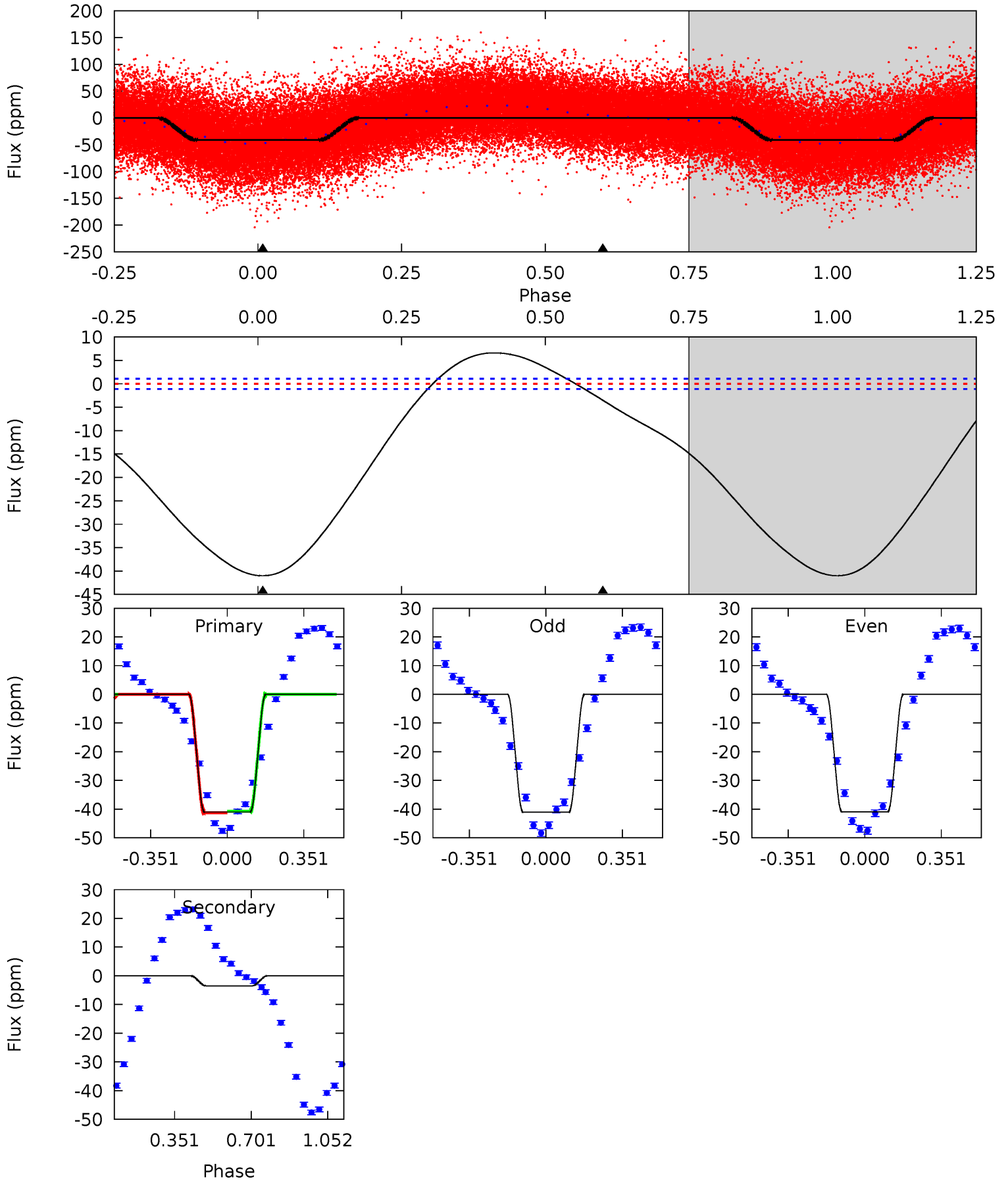
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.03	0.15	0	0	4.29	0.91	1.15	7.03	7.03	0.15	0.15	0.63	1.85	0.26	2.74



Alt Model-Shift Uniqueness Test

006610433-01, P = 0.920944 Days, E = 130.984245 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
161.8	13.9	0	0	4.29	0.93	14.0	161.8	161.8	13.9	13.9	0.35	0.98	0.14	1.08



Stellar Parameters For KIC 006610433

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	7894^{+78}_{-86}	$3.828^{+0.215}_{-0.099}$	$0.210^{+0.150}_{-0.250}$	$2.981^{+0.518}_{-0.842}$	$2.180^{+0.156}_{-0.338}$	$0.116^{+0.154}_{-0.035}$
	+1%/-1%	+6%/-3%	+71%/-119%	+17%/-28%	+7%/-16%	+133%/-30%
Source	SPE68	SPE68	SPE68	DSEP		

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

Secondary Eclipse Parameters for KIC 006610433-01 / KOI 6744.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-0 ± 0	$0.36^{+0.18}_{-0.16}$	5374^{+242}_{-357}	-4302^{+9137}_{-1182}	$0.056^{+0.722}_{-0.537}$
Alt.	-4 ± 0	$2.15^{+0.30}_{-0.36}$	5375^{+259}_{-352}	-3396^{+6401}_{-460}	$0.239^{+0.093}_{-0.053}$

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 $A_{obs} \gg 1.0$

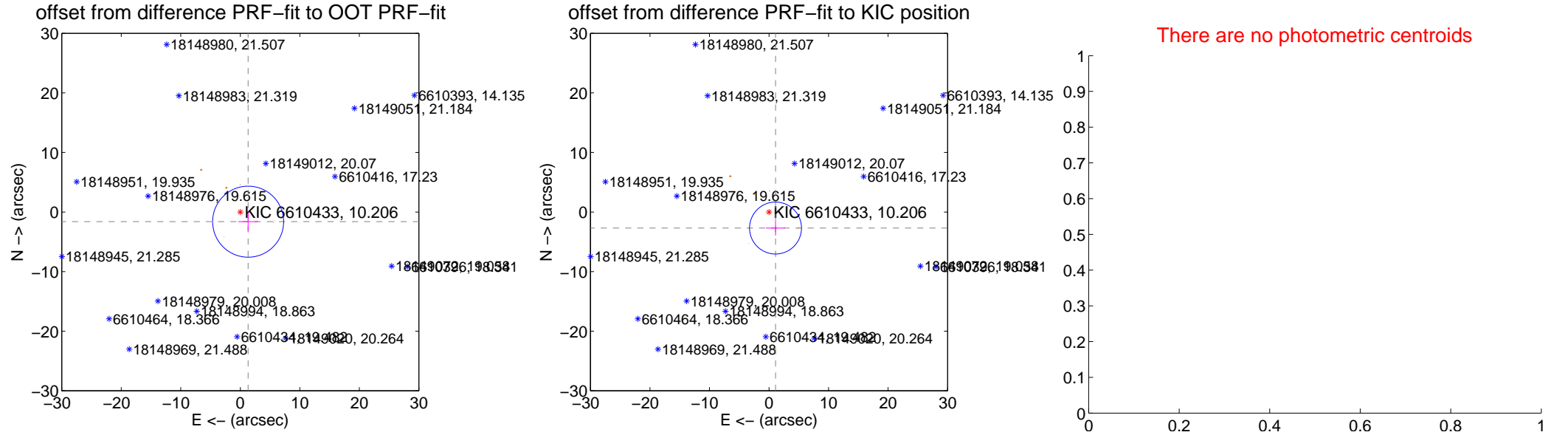
DV Centroid Data

Supplemental centroid analysis for 006610433-01. **Kepler magnitude: 10.21.** Transit SNR 3.88

There are 1 quarters with good PRF difference image offsets

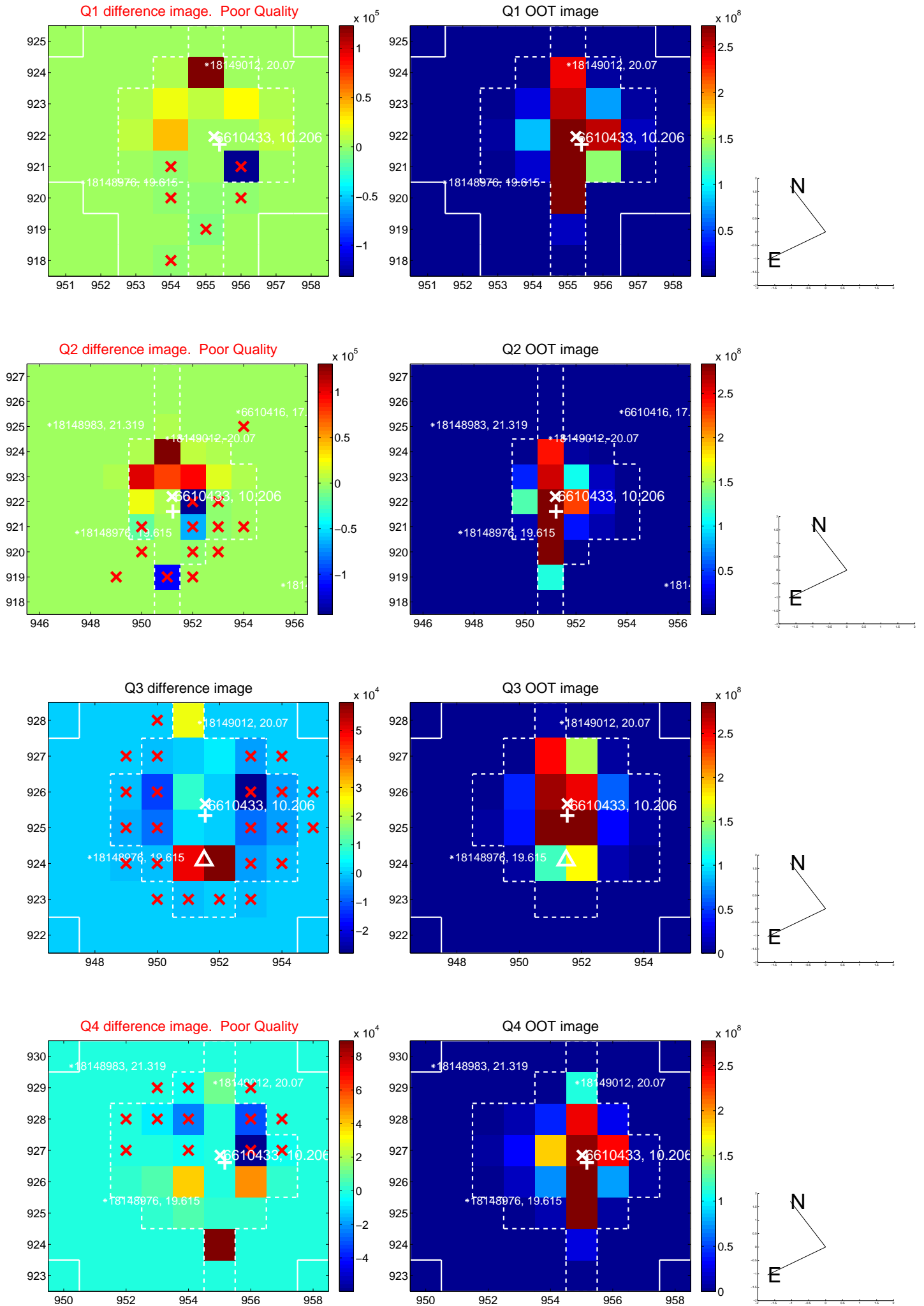
The direct PRF centroid is offset from the target star catalog position by about 1.08 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.085 ± 1.987	1.05	-1.316 ± 1.658	-1.617 ± 1.602
PRF-fit source offset from KIC position	2.900 ± 1.454	1.99	-1.094 ± 1.610	-2.685 ± 1.267
photometric centroid source offset	—	—	—	—

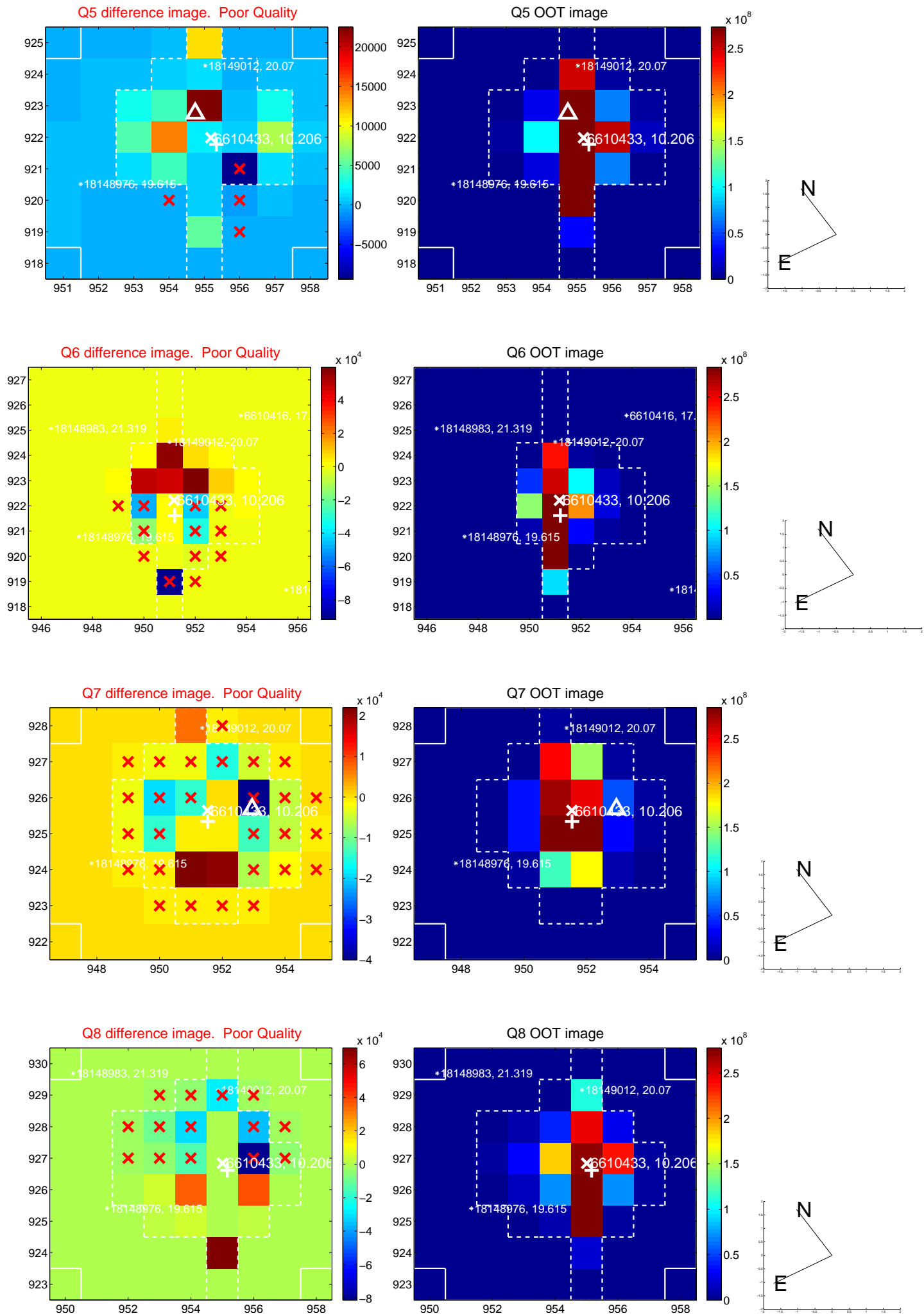


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

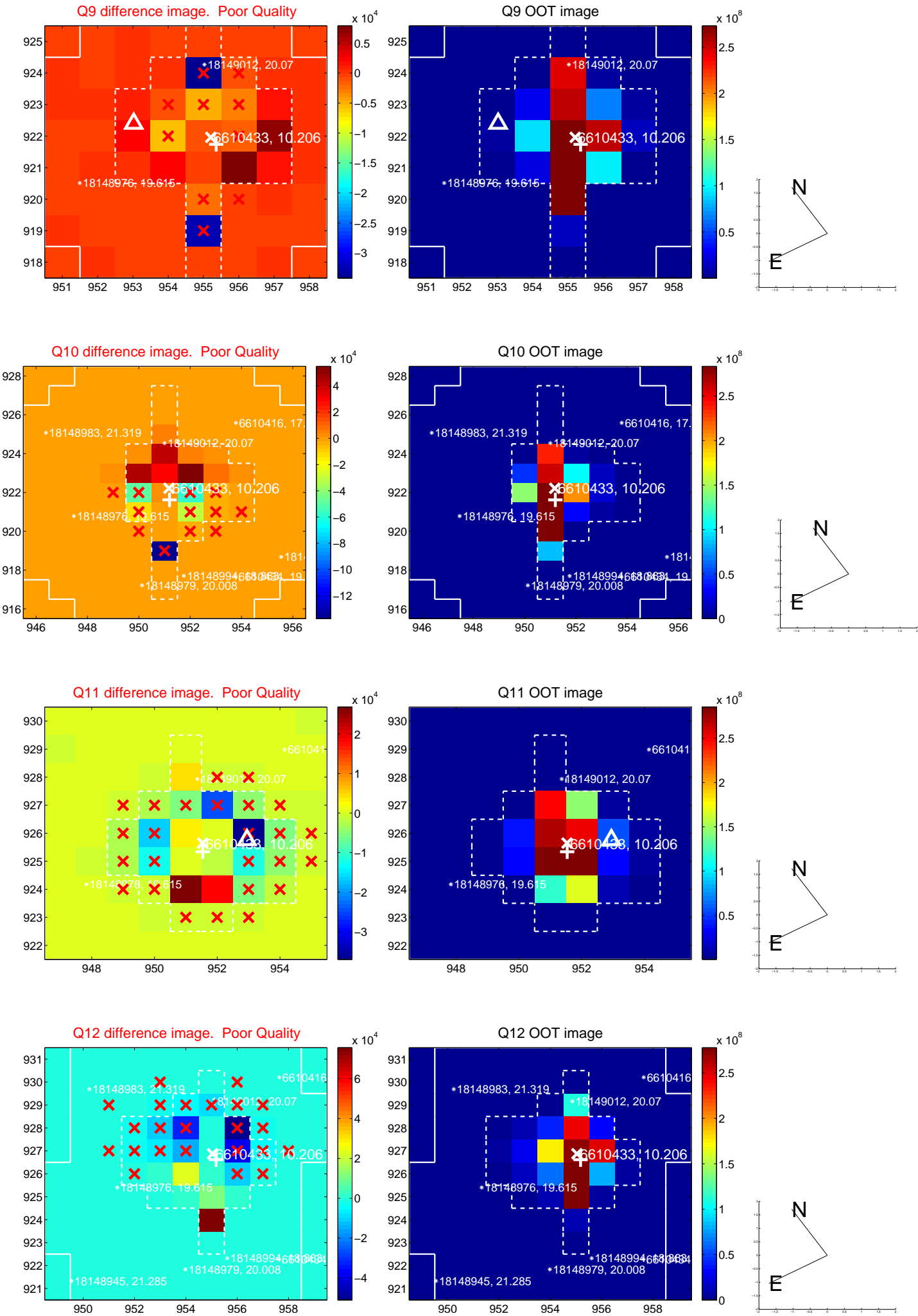
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



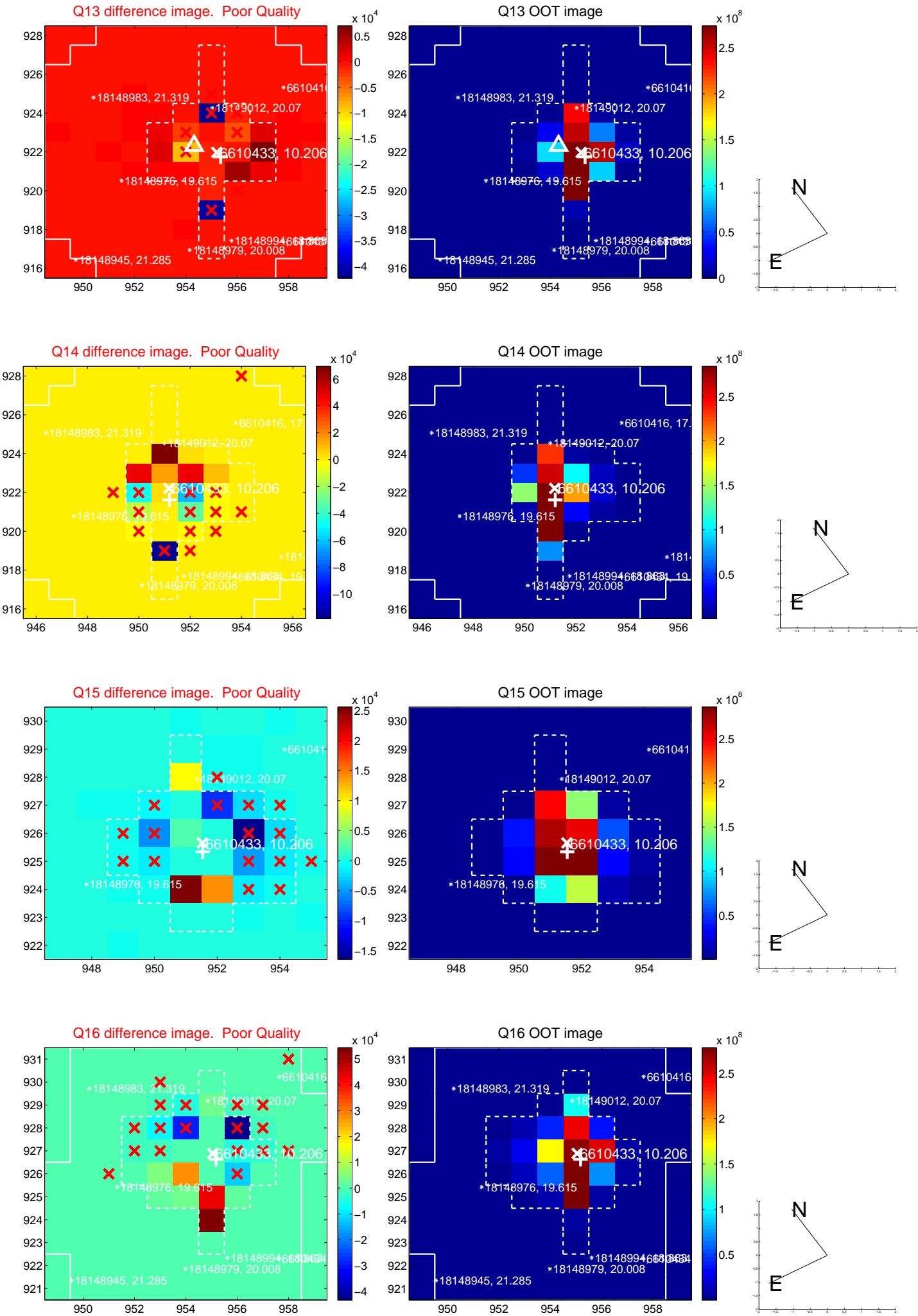
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



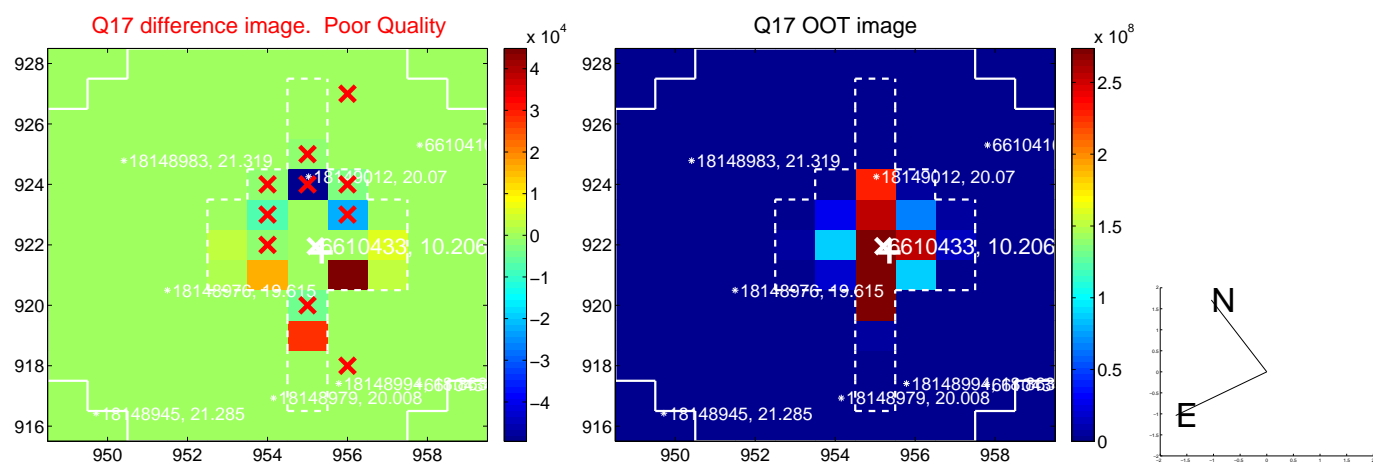
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



folded centroid time series figure for this object.



UKIRT Image

