

KIC 004944828

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})
004944828-01	OBS	No	0.909591	131.715089	0.5	9.189	9.6	1.0	3.23	8083	0.23	73310.42

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
004944828-01	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.

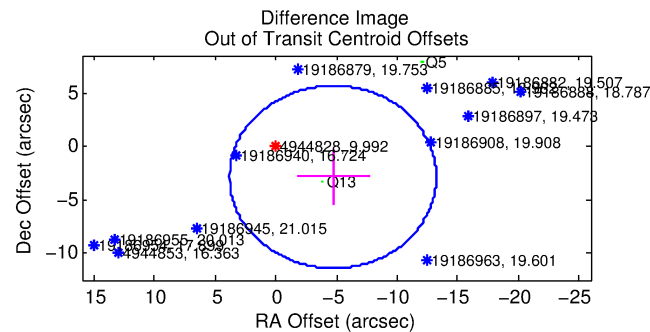
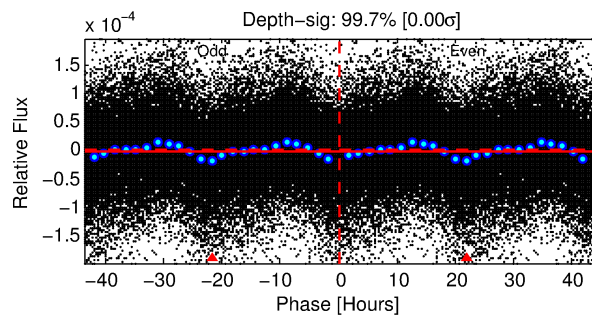
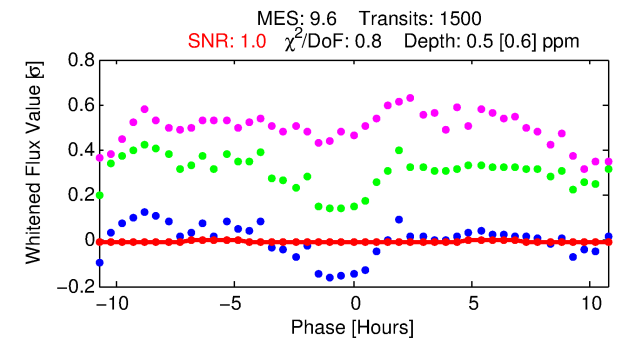
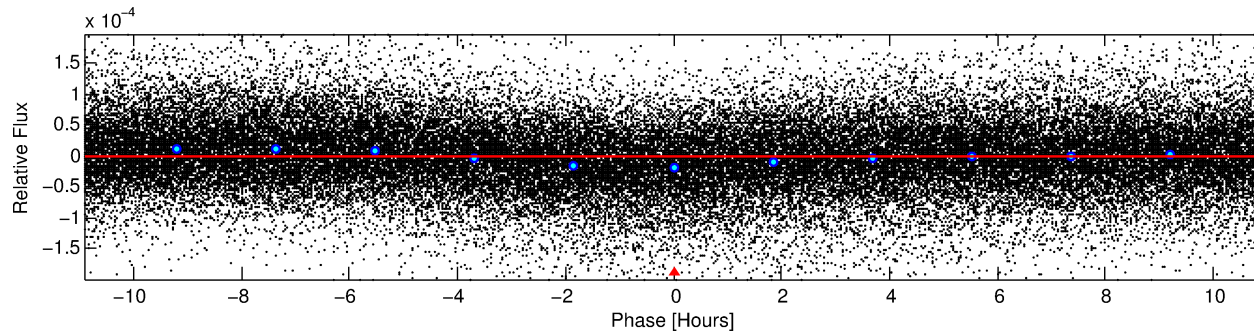
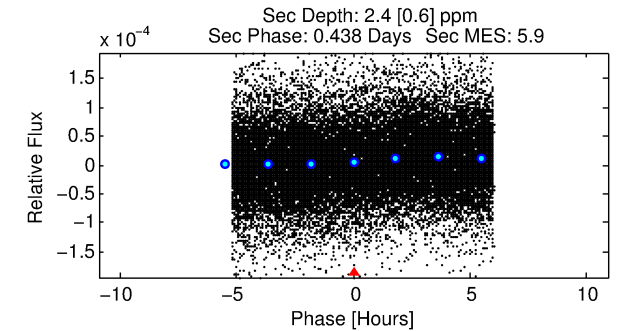
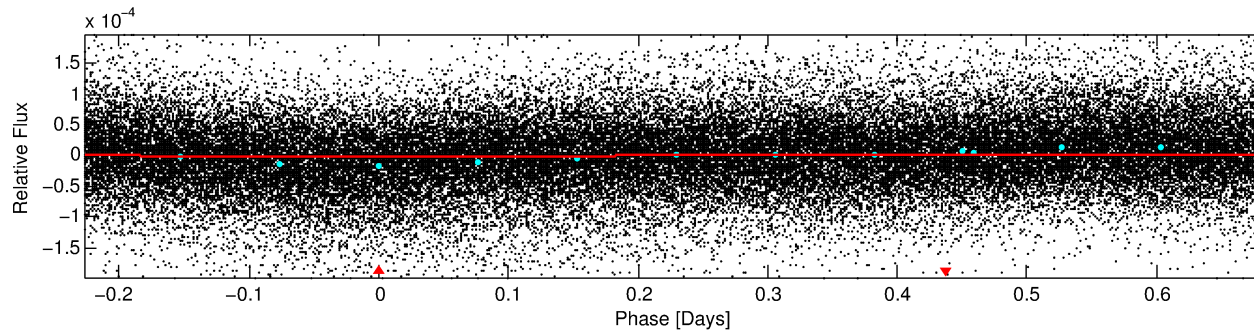
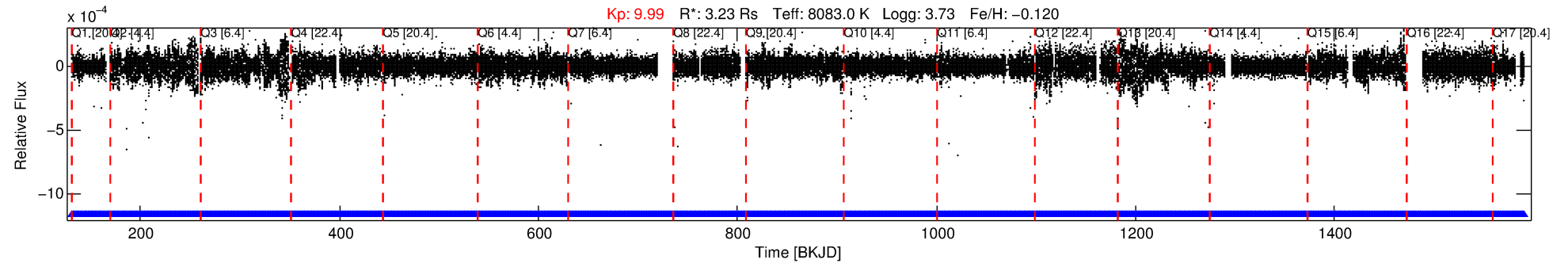
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 004944828-01

No Significant Match Found

DV One-Page Summary

KIC: 4944828 Candidate: 1 of 1 Period: 0.910 d



DV Fit Results:

Period = 0.90959 [0.00014] d
Epoch = 131.7151 [0.0372] BKJD
Rp/R* = 0.0007 [0.0025]
a/R* = 1.03 [1.39]
b = 0.01 [1875.56]
Seff = 73310.42 [33577.36]
Teq = 4196 [480] K
Rp = 0.23 [0.88] Re
a = 0.0233 [0.0068] AU
Ag = 13.24 [100.01] [0.12σ]
Teffp = 12374 [23327] K [0.35σ]

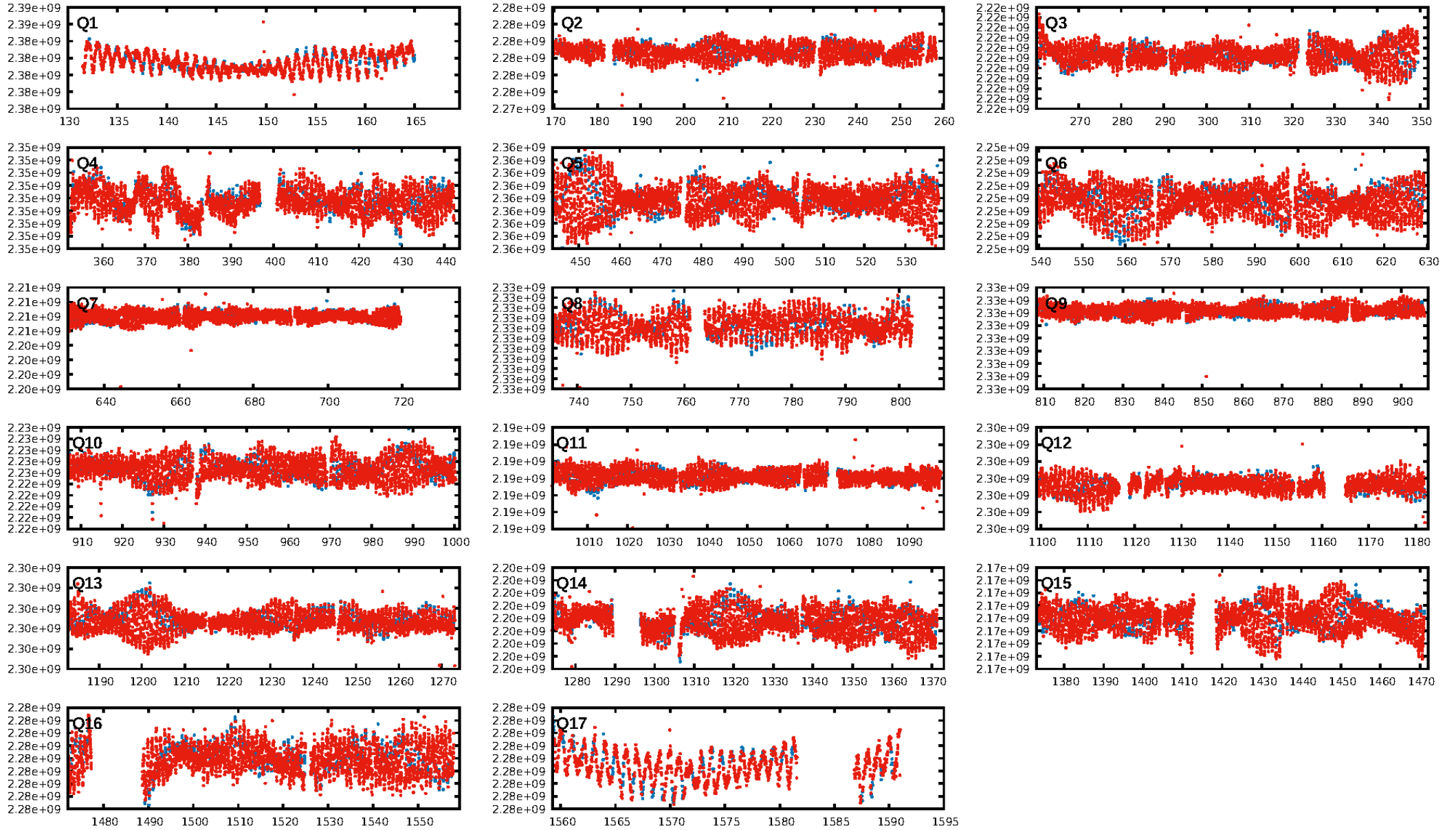
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [1433/1433]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 5.523 arcsec [1.94σ]
KicOffset-rm: 4.618 arcsec [1.62σ]
OotOffset-st: 0/0/0/2 [2]
KicOffset-st: 0/0/0/2 [2]
DiffImageQuality-fgm: 0.00 [0/2]
DiffImageOverlap-fno: 1.00 [17/17]

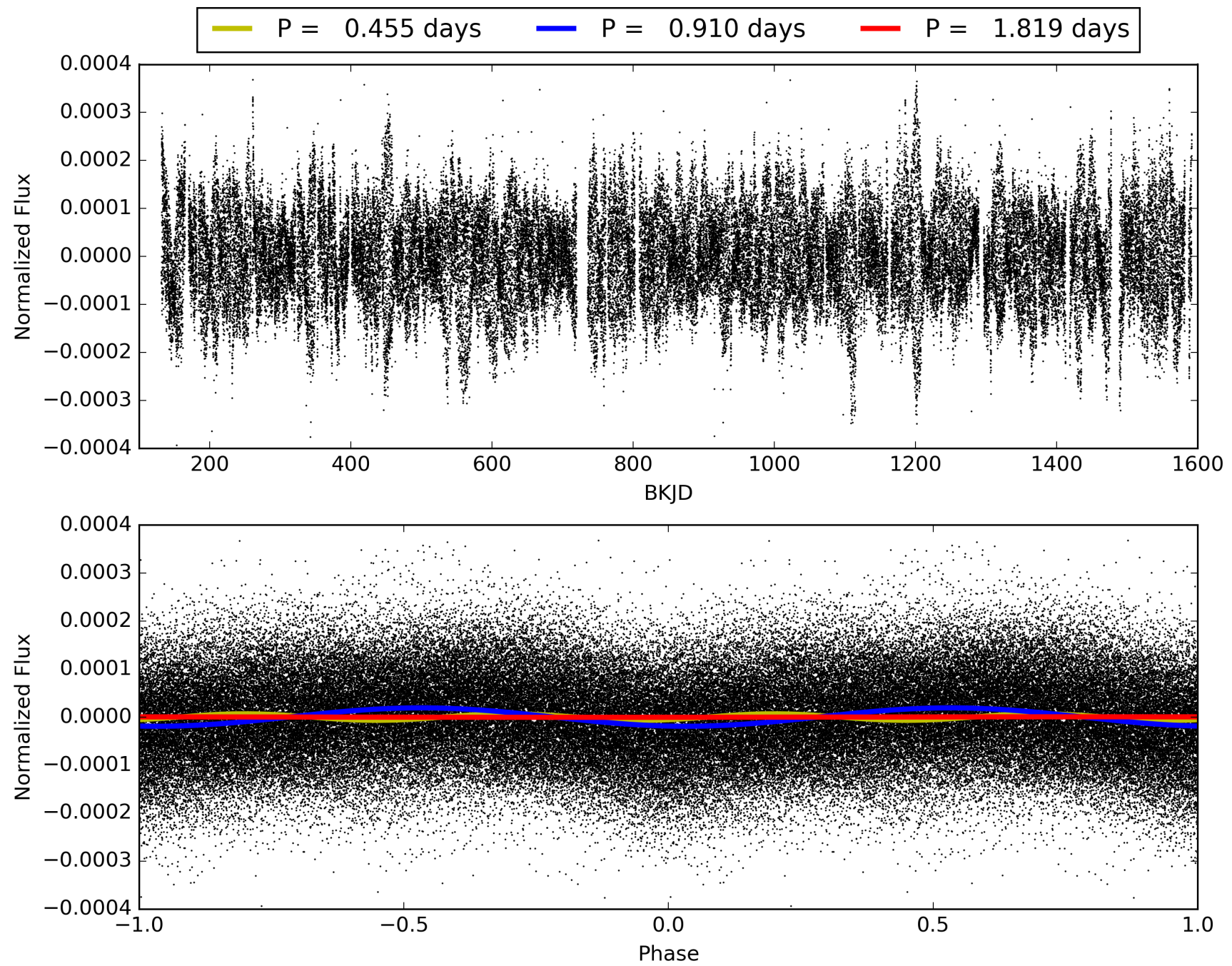
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 10:04:51 Z

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

TCE 004944828-01, PDC Light Curves

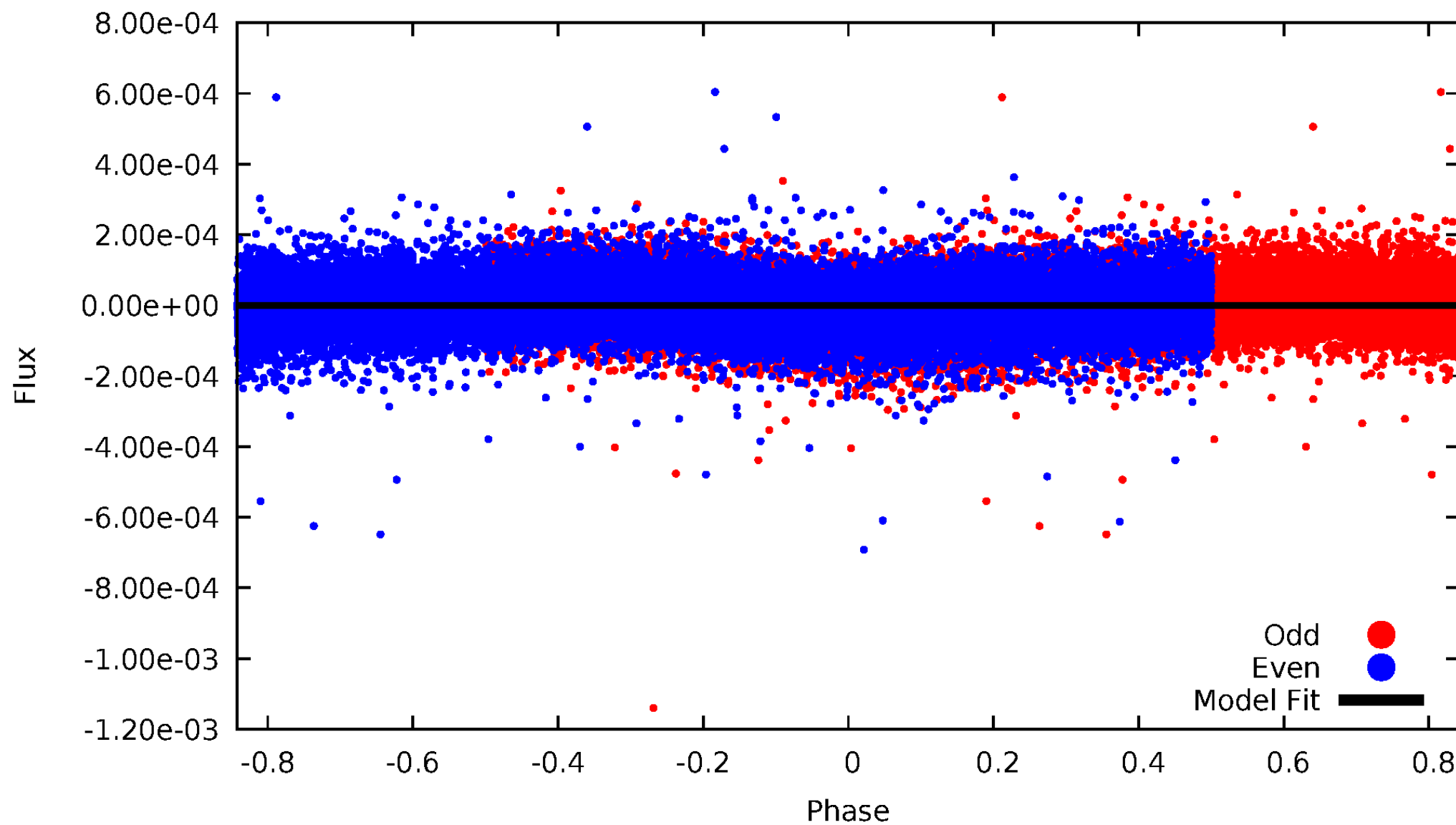


TCE 004944828-01



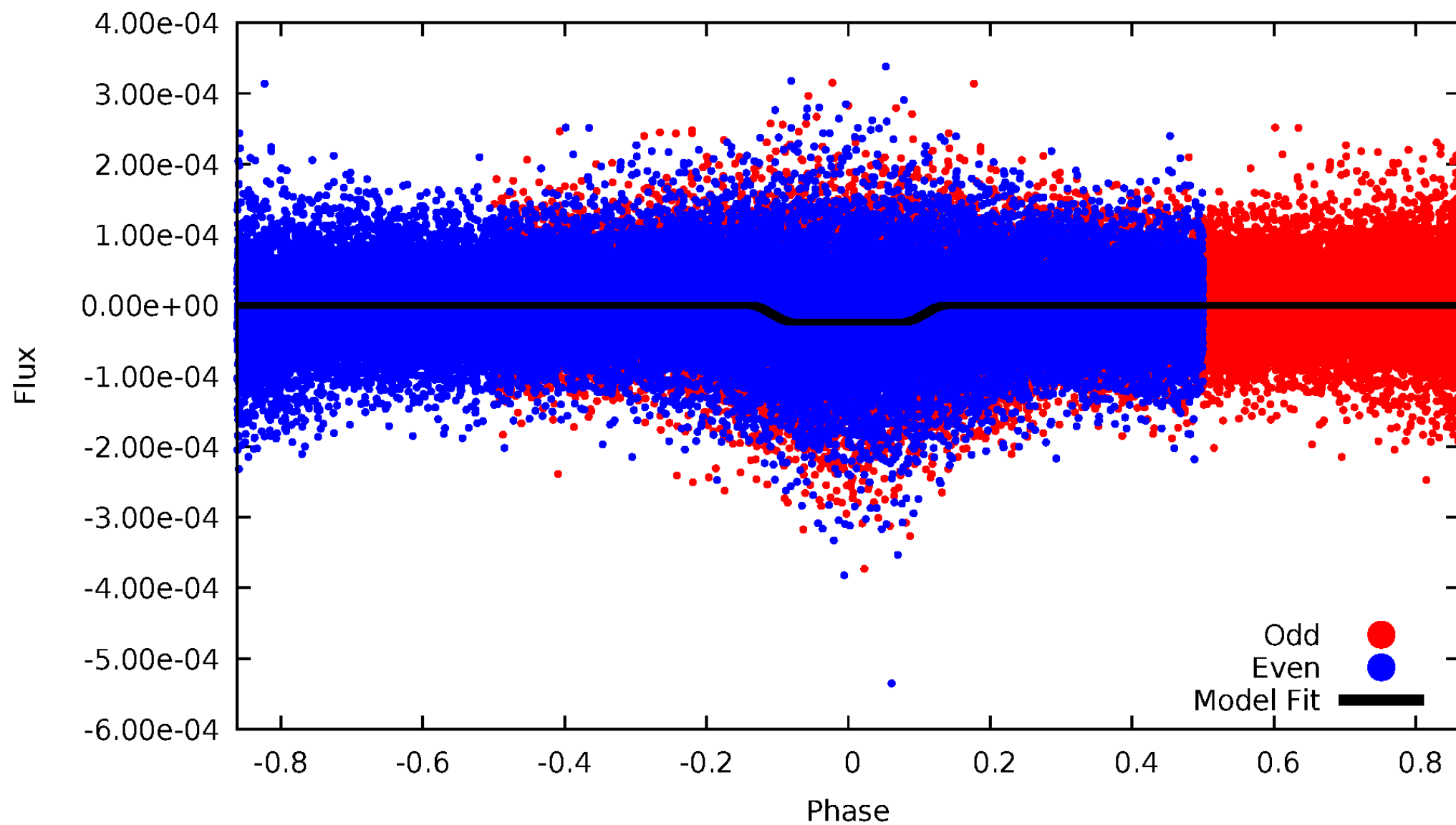
DV Odd/Even

TCE 004944828-01



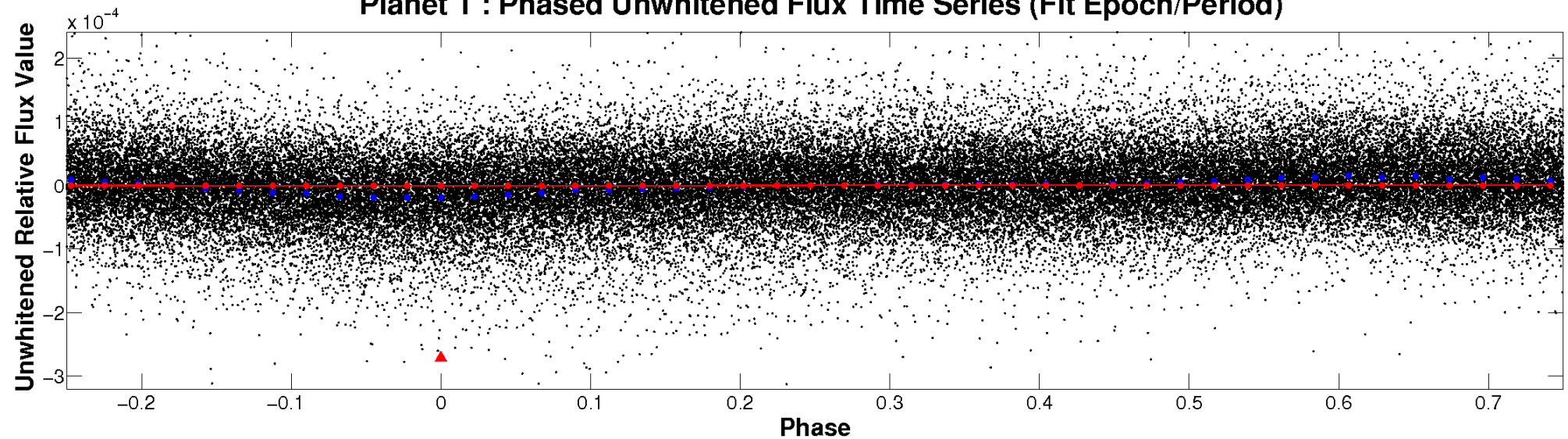
ALT Odd/Even

TCE 004944828-01

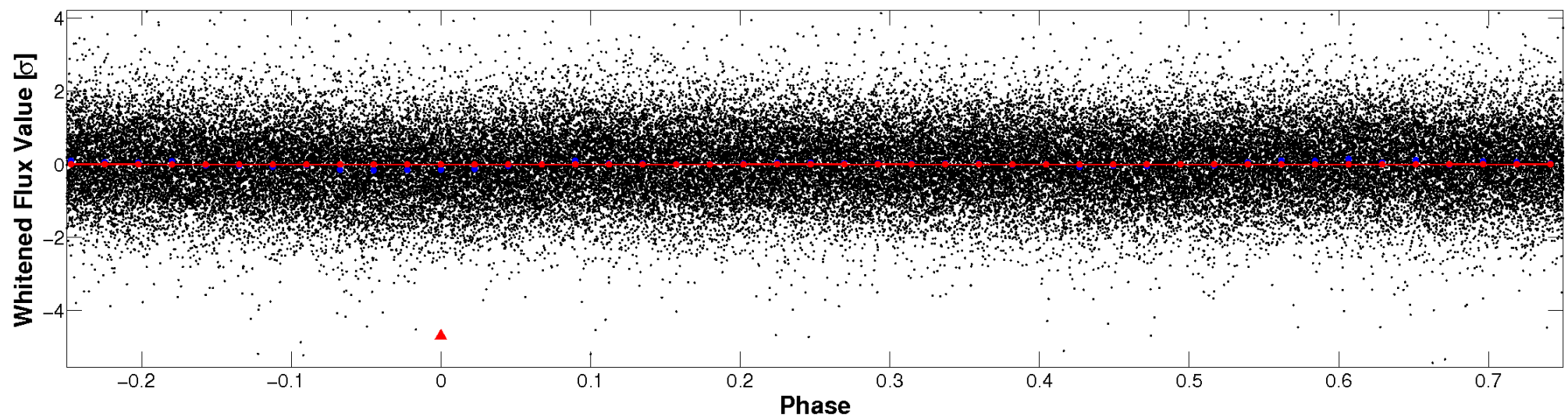


Non-Whitened Vs. Whitened Light Curve

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

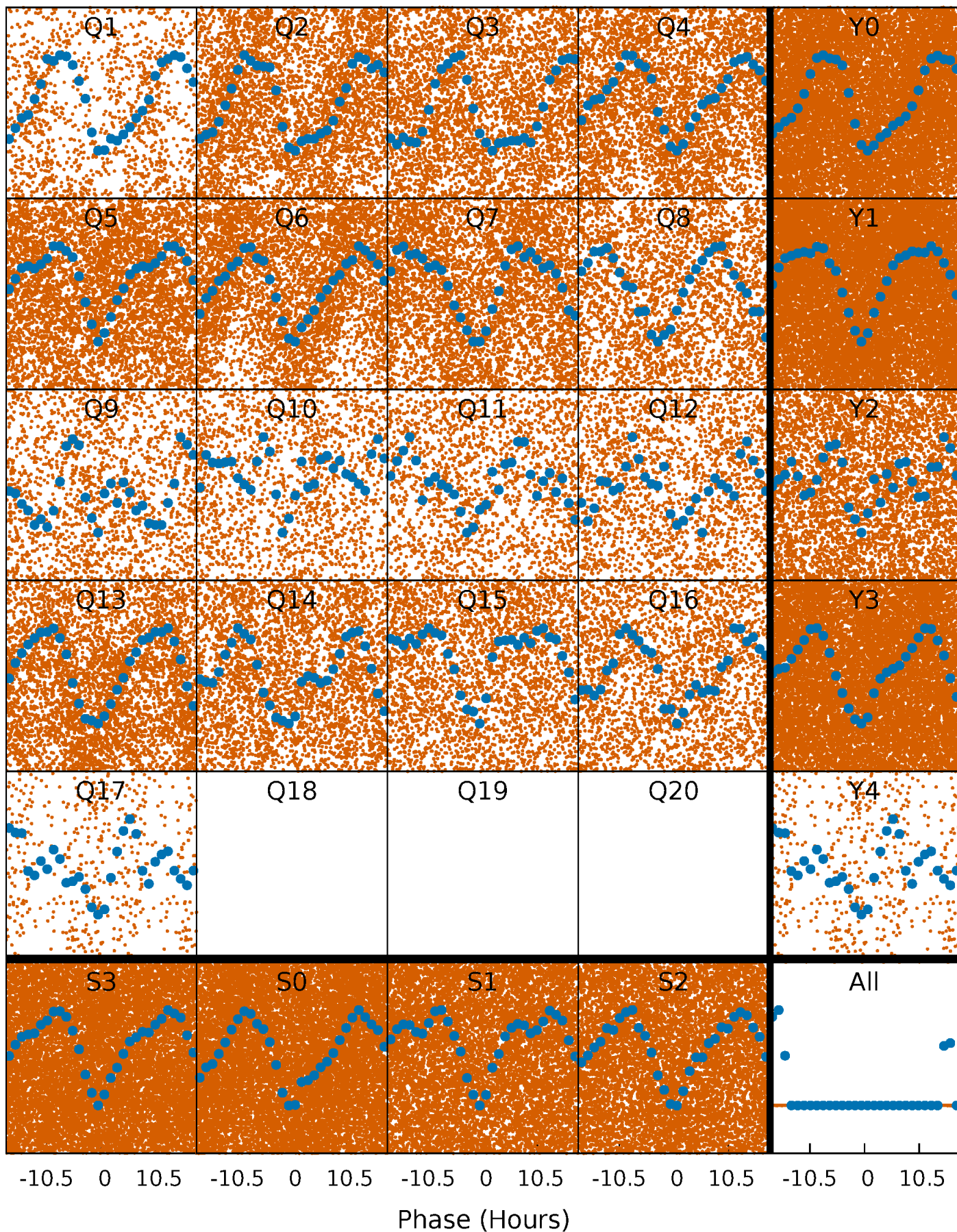


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



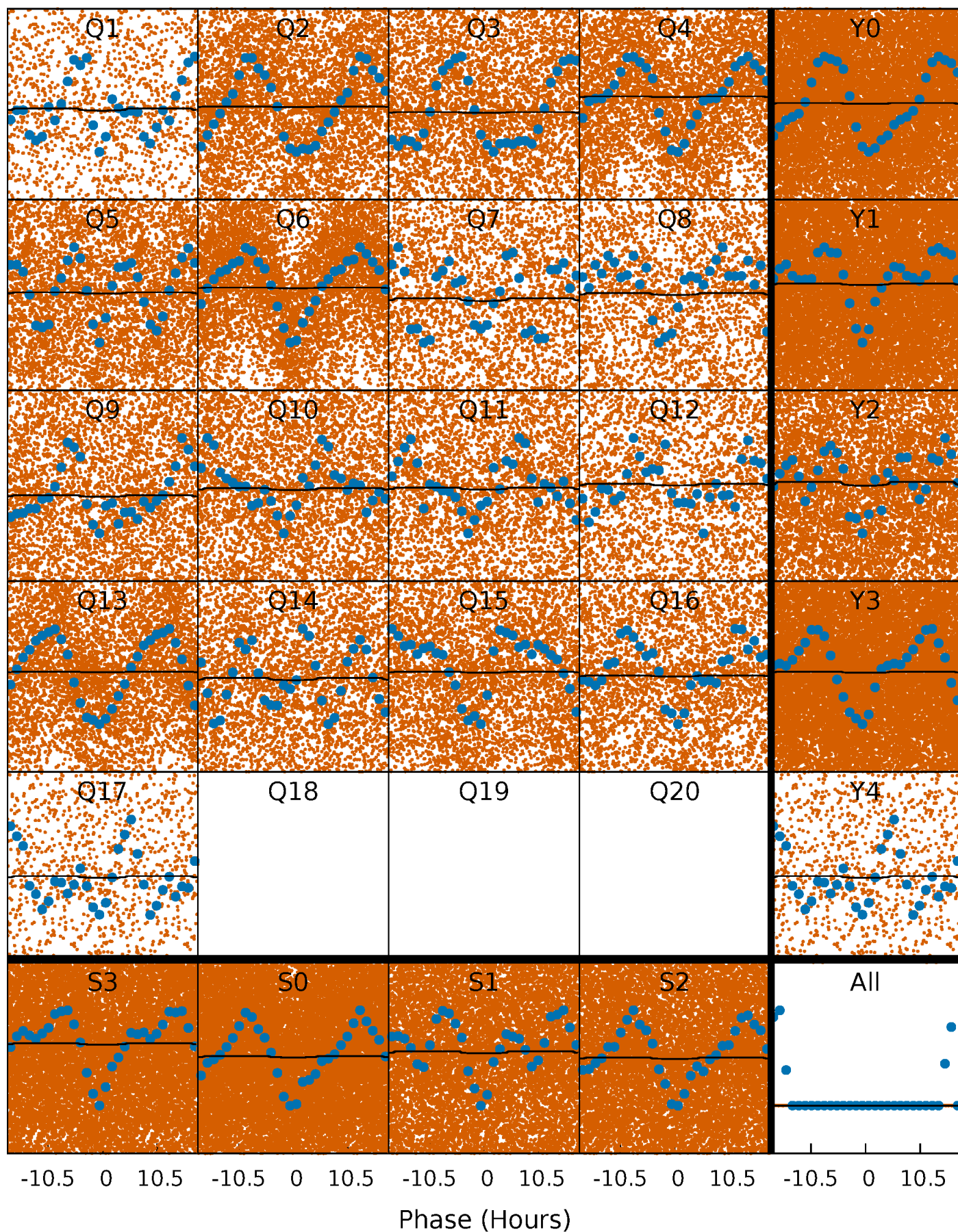
PDC Quarter-Phased Transit Curves

TCE 004944828-01 P= 0.909591 Days $T_0=131.715089$ (BKJD)



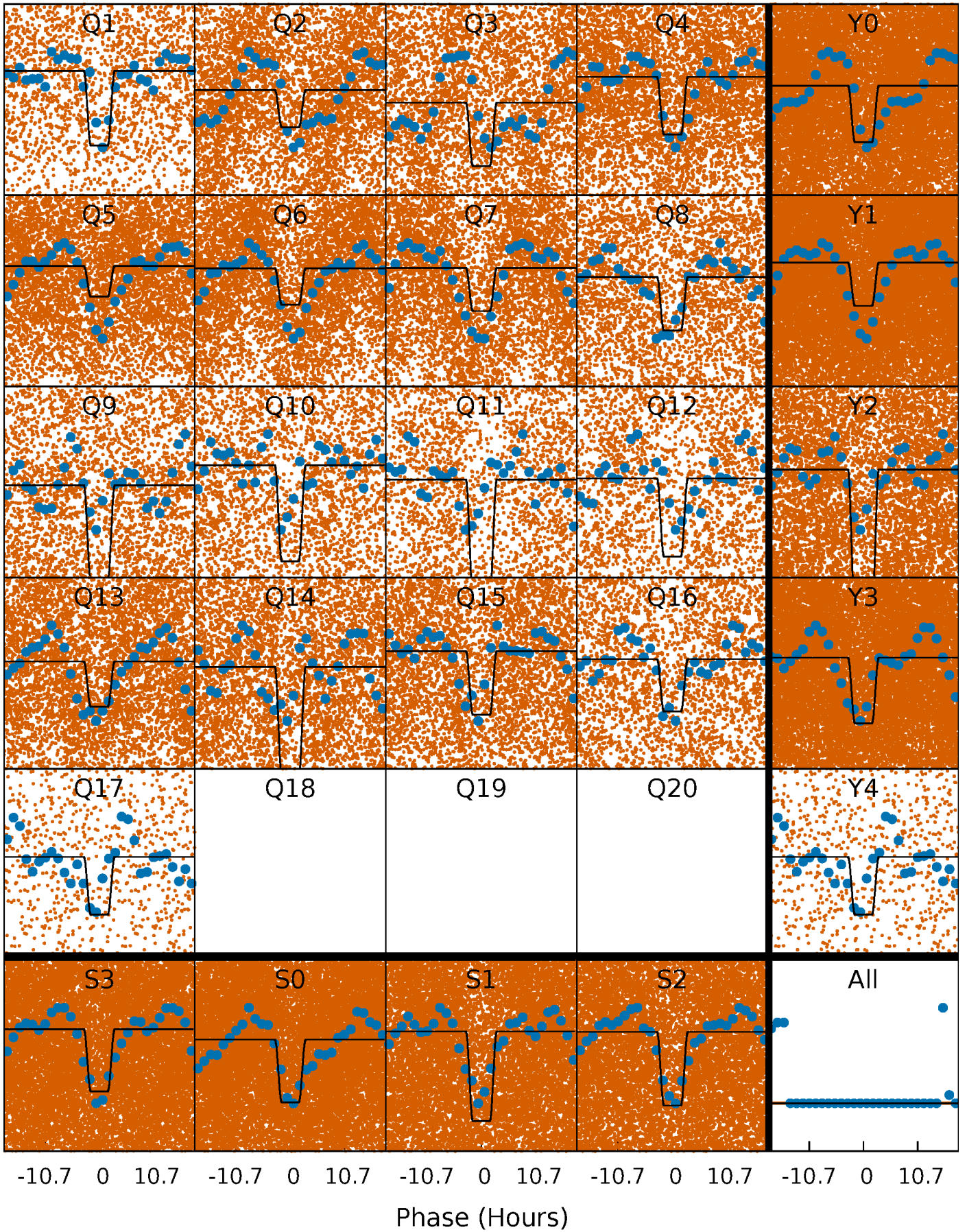
DV Quarter-Phased Transit Curves

TCE 004944828-01 P= 0.909591 Days $T_0=131.715089$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

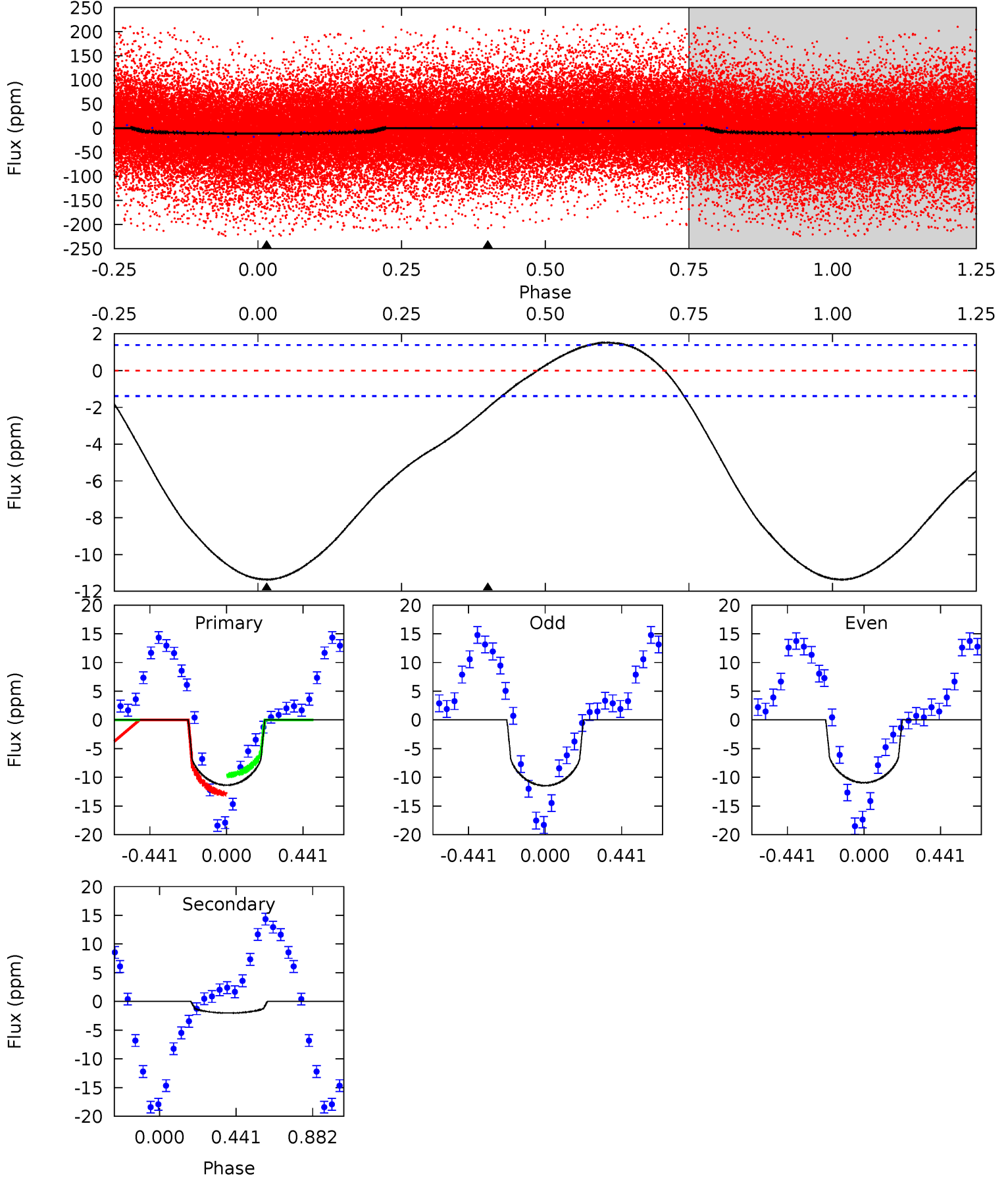
TCE 004944828-01 P= 0.909633 Days $T_0=131.661955$ (BKJD)



DV Model-Shift Uniqueness Test

004944828-01, P = 0.909591 Days, E = 130.805498 Days

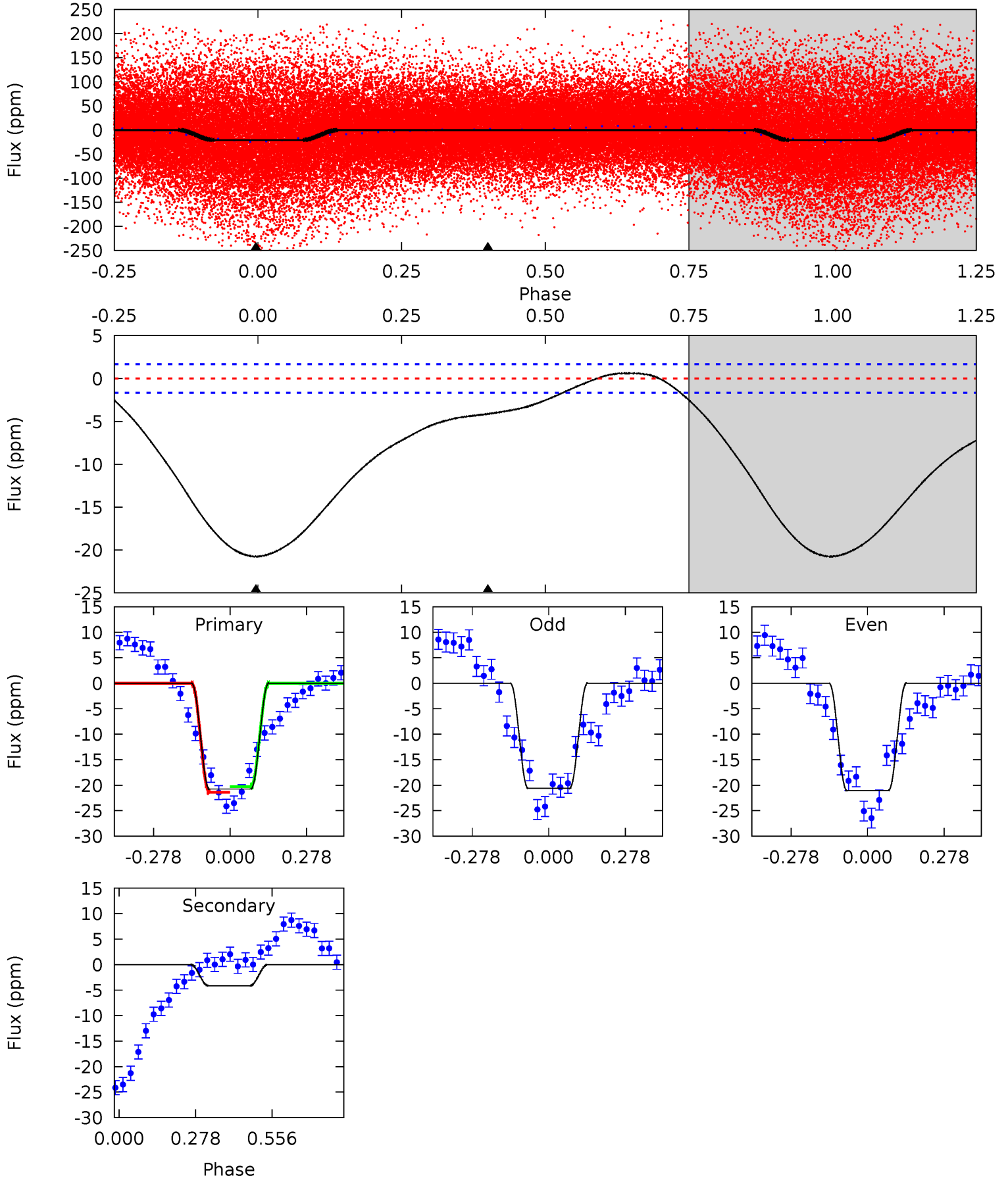
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
34.7	6.16	0	0	4.24	0.77	3.12	34.7	34.7	6.16	6.16	0.80	1.63	0.12	4.89



Alt Model-Shift Uniqueness Test

004944828-01, P = 0.909633 Days, E = 130.752322 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
54.2	10.8	0	0	4.35	1.08	2.43	54.2	54.2	10.8	10.8	0.62	0.98	0.03	1.22



Stellar Parameters For KIC 004944828

	$T_{\text{eff}} (K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M (M_{\odot})$	$\rho_{\star} (\text{g}\cdot\text{cm}^{-3})$
	8083^{+72}_{-88}	$3.730^{+0.264}_{-0.050}$	$-0.120^{+0.150}_{-0.200}$	$3.226^{+0.472}_{-1.011}$	$2.039^{+0.267}_{-0.243}$	$0.086^{+0.146}_{-0.019}$
	+1%/-1%	+7%/-1%	+125%/-167%	+15%/-31%	+13%/-12%	+171%/-22%
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 004944828-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-2 ± 0	$0.64^{+0.68}_{-0.43}$	5714^{+233}_{-411}	6216^{+8510}_{-2870}	$1.425^{+11.966}_{-1.087}$
Alt.	-4 ± 0	$1.61^{+0.84}_{-0.79}$	5713^{+243}_{-435}	4174^{+2460}_{-7970}	$0.486^{+1.413}_{-0.274}$

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

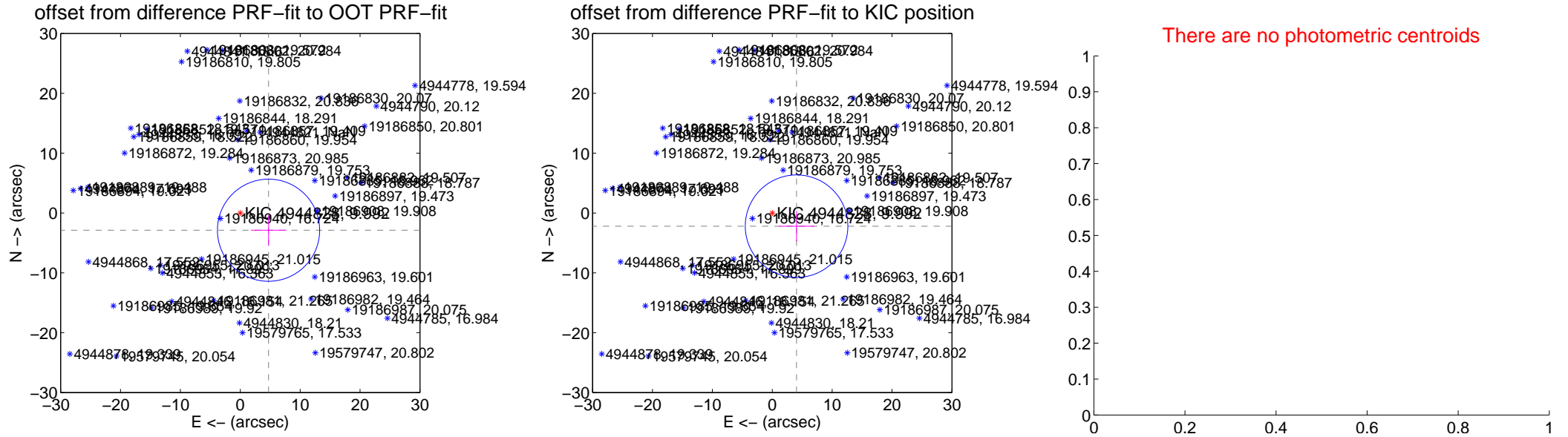
DV Centroid Data

Supplemental centroid analysis for 004944828-01. **Kepler magnitude: 9.99.** Transit SNR 1.01

There are 0 quarters with good PRF difference image offsets

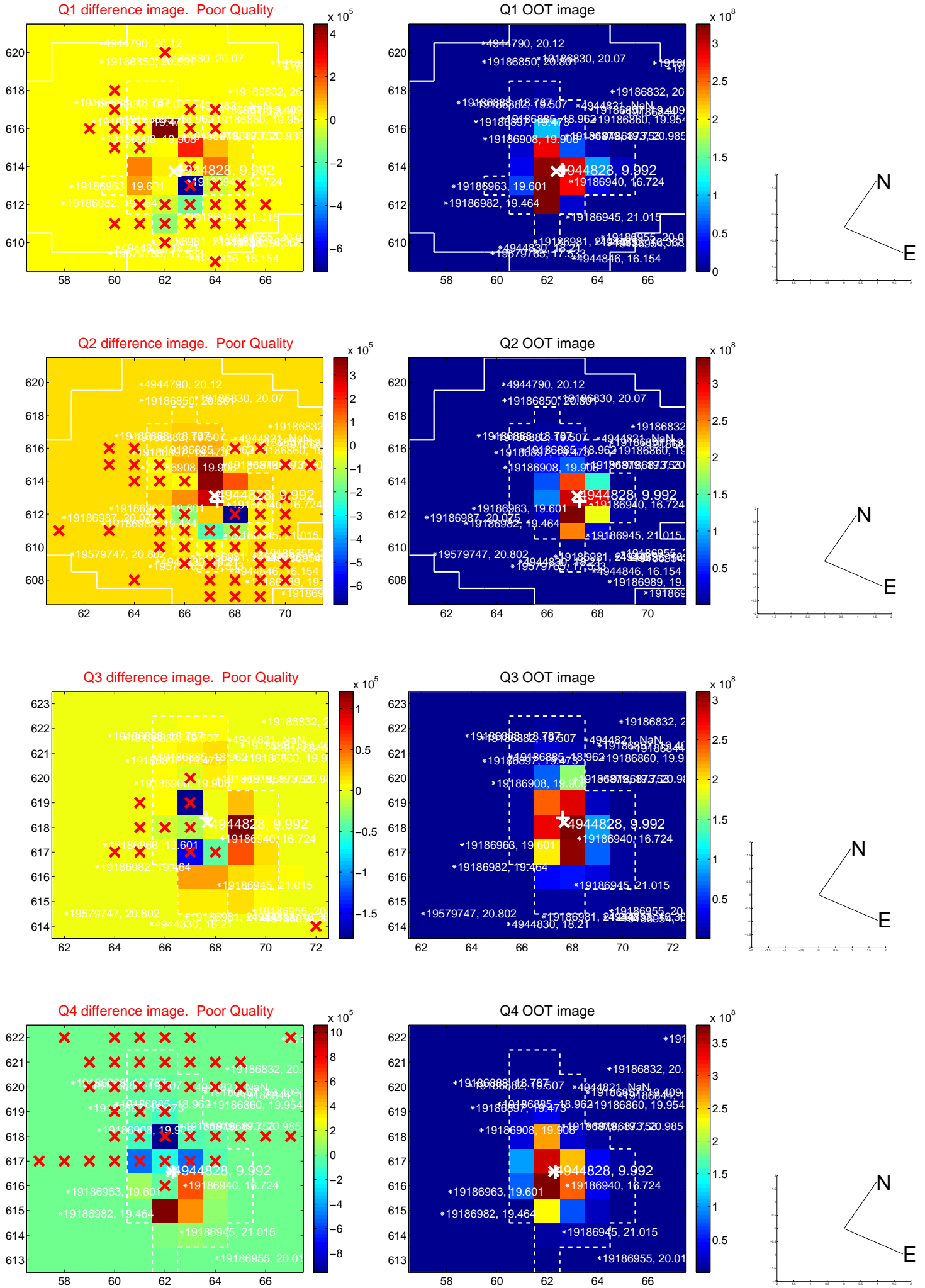
The direct PRF centroid is offset from the target star catalog position by about 0.94 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	5.523 ± 2.845	1.94	-4.716 ± 2.937	-2.875 ± 2.579
PRF-fit source offset from KIC position	4.618 ± 2.855	1.62	-4.060 ± 2.936	-2.201 ± 2.556
photometric centroid source offset	—	—	—	—

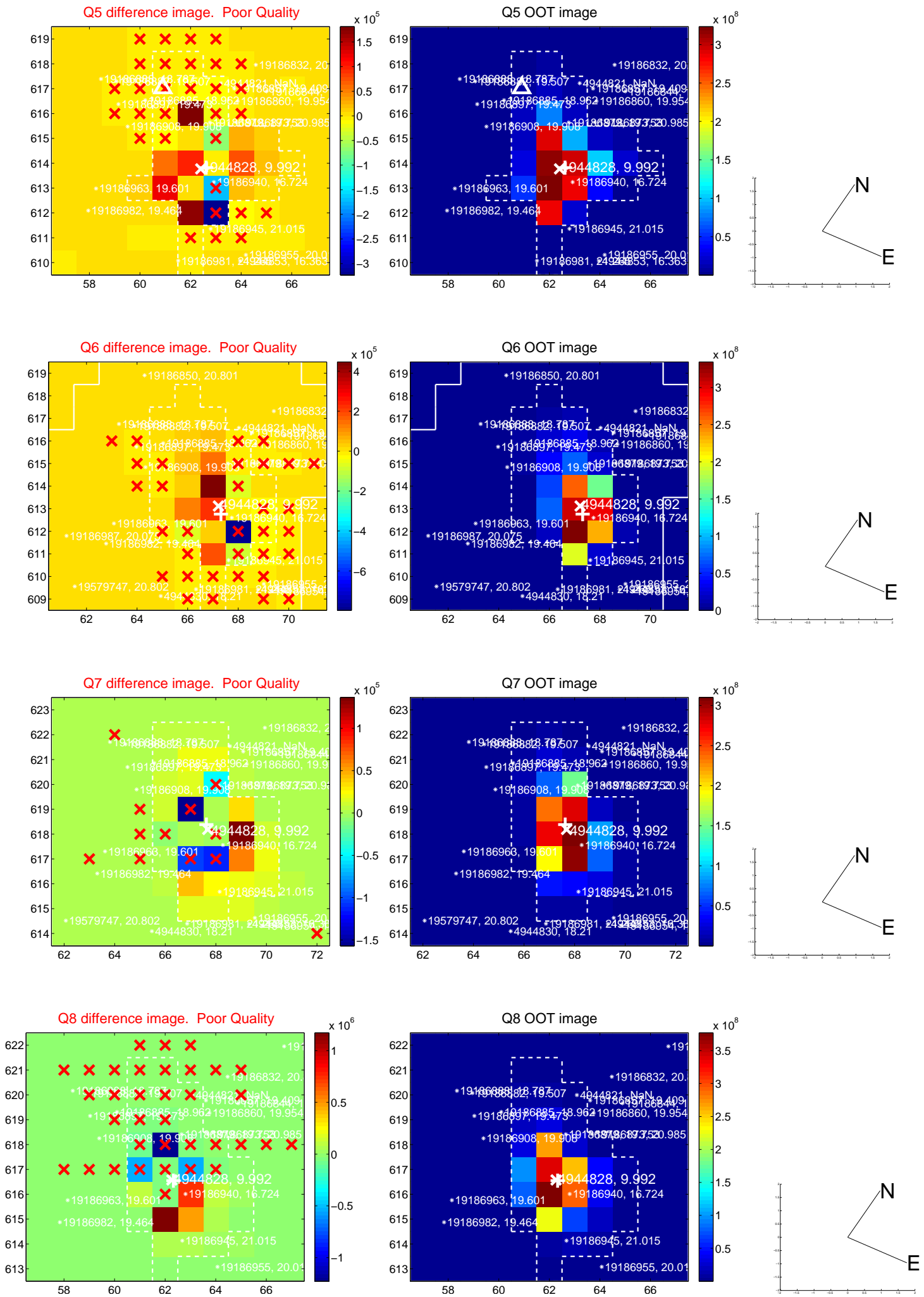


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

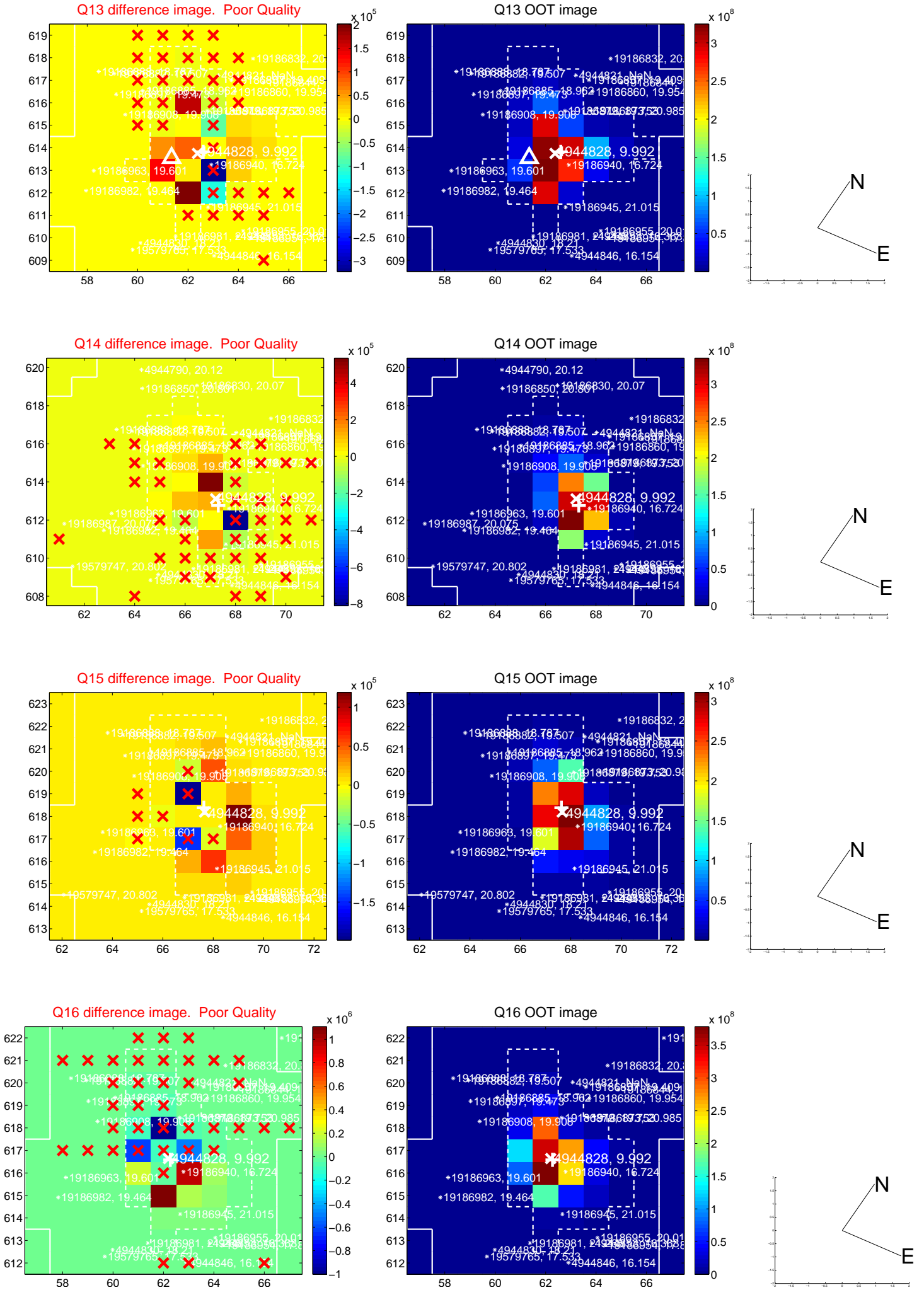
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



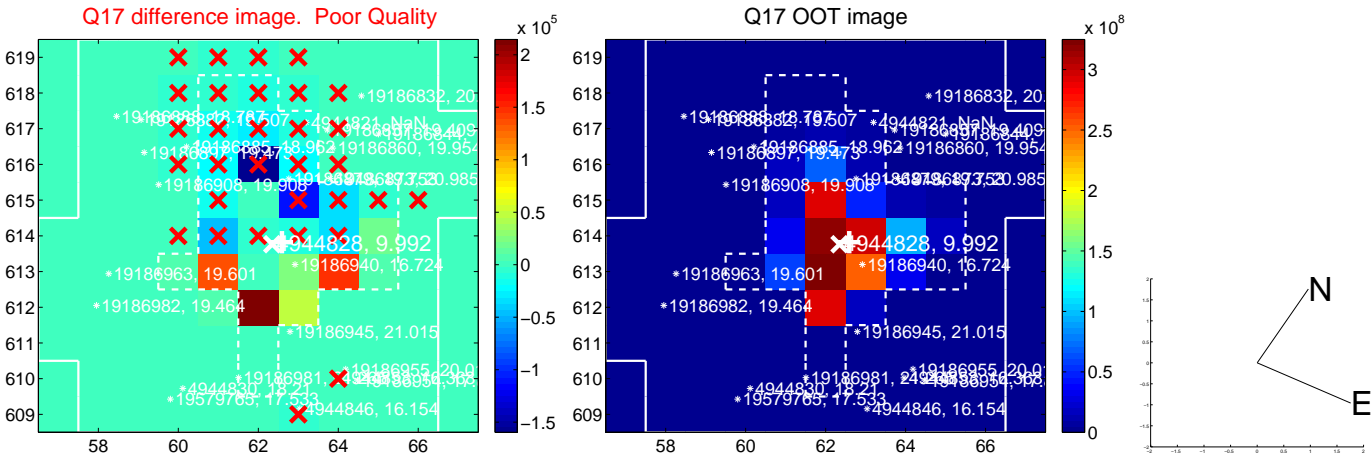
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

Declination

