

KIC 010801714

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})
010801714-01	OBS	No	0.603422	131.622500	3.2	5.378	9.5	4.2	1.67	6958	0.30	22367.29

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010801714-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—CENT_SATURATED

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

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

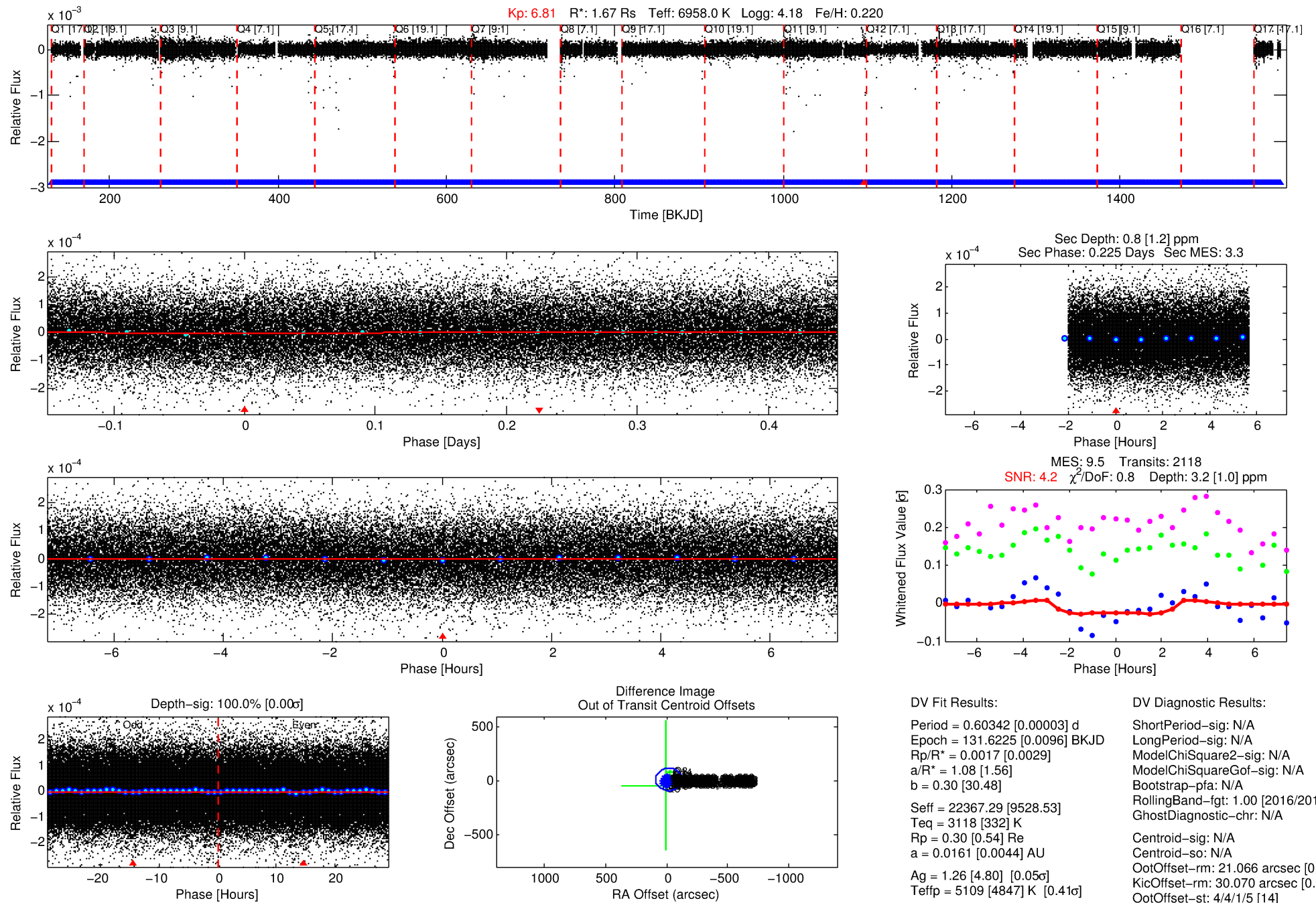
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 010801714-01

No Significant Match Found

DV One-Page Summary

KIC: 10801714 Candidate: 1 of 1 Period: 0.603 d



DV Fit Results:

Period = 0.60342 [0.00003] d
Epoch = 131.6225 [0.0096] BKJD
Rp/R* = 0.0017 [0.0029]
a/R* = 1.08 [1.56]
b = 0.30 [30.48]
Seff = 22367.29 [9528.53]
Teq = 3118 [332] K
Rp = 0.30 [0.54] Re
a = 0.0161 [0.0044] AU
Ag = 1.26 [4.80] [0.05σ]
Teff = 5109 [4847] K [0.41σ]

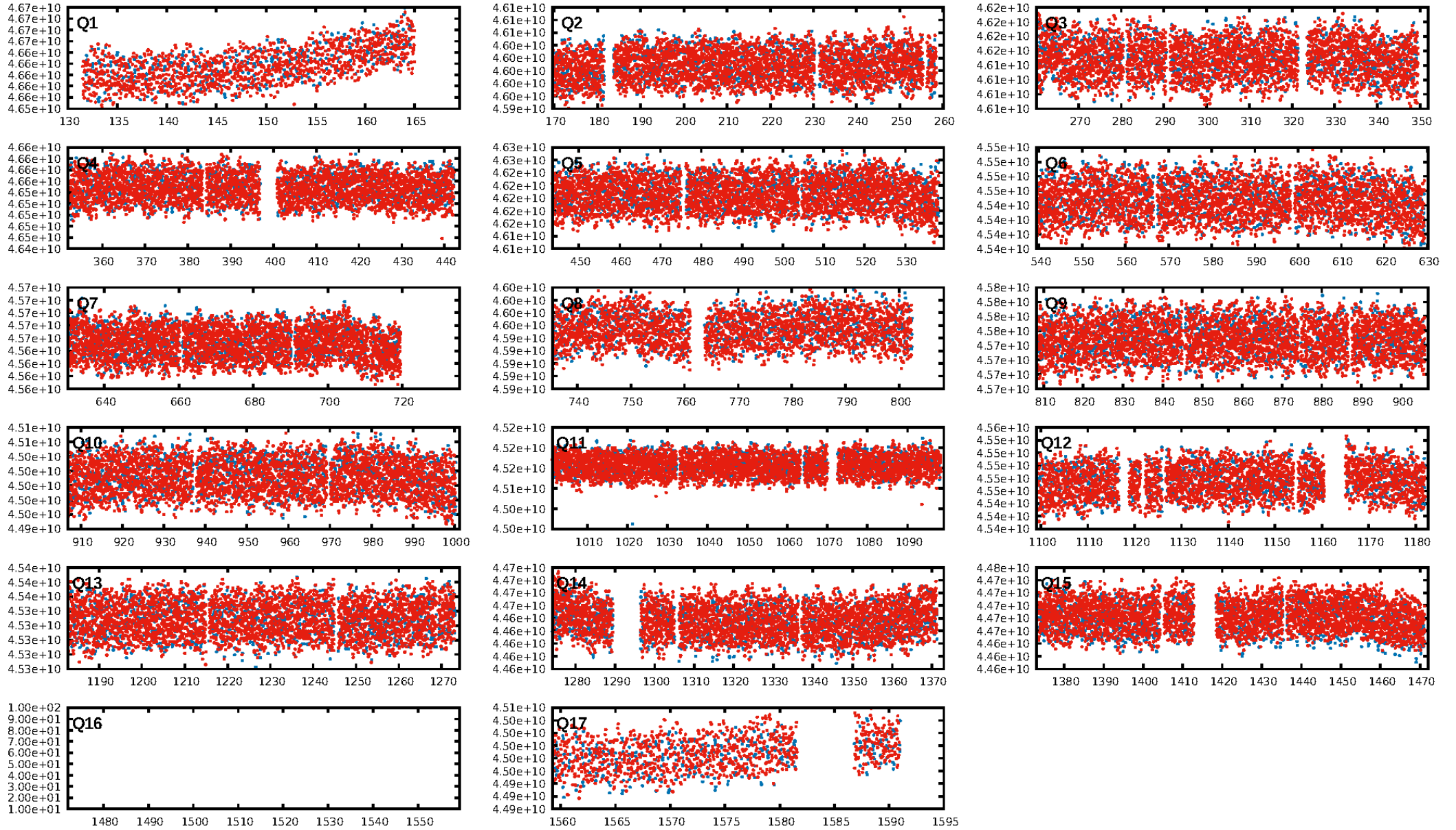
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [2016/2017]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 21.066 arcsec [0.60σ]
KicOffset-rm: 30.070 arcsec [0.83σ]
OotOffset-st: 4/4/1/5 [14]
KicOffset-st: 4/4/1/5 [14]
DiffImageQuality-fgm: 0.00 [0/14]
DiffImageOverlap-fno: 1.00 [16/16]

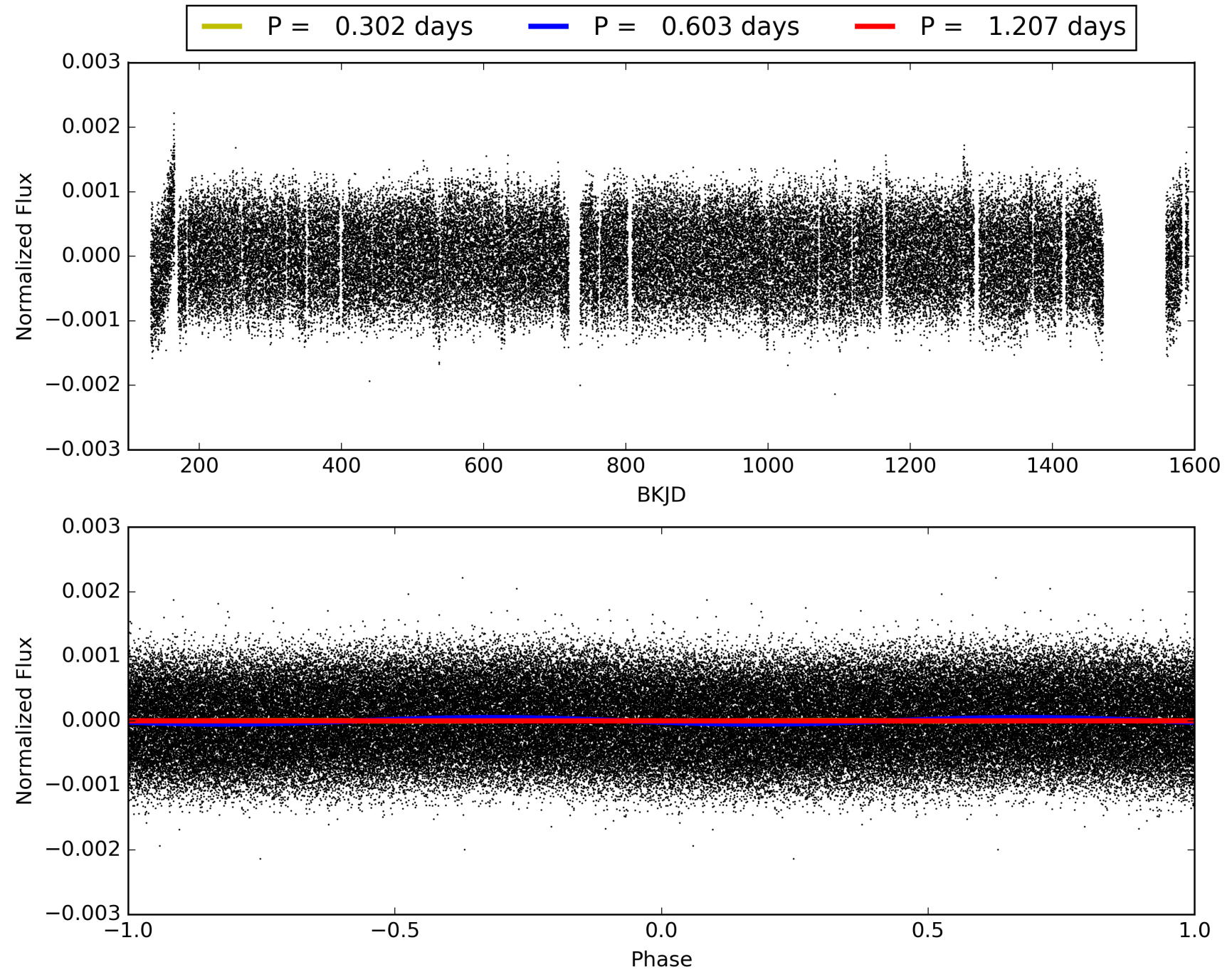
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 03:08:30 Z

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

TCE 010801714-01, PDC Light Curves

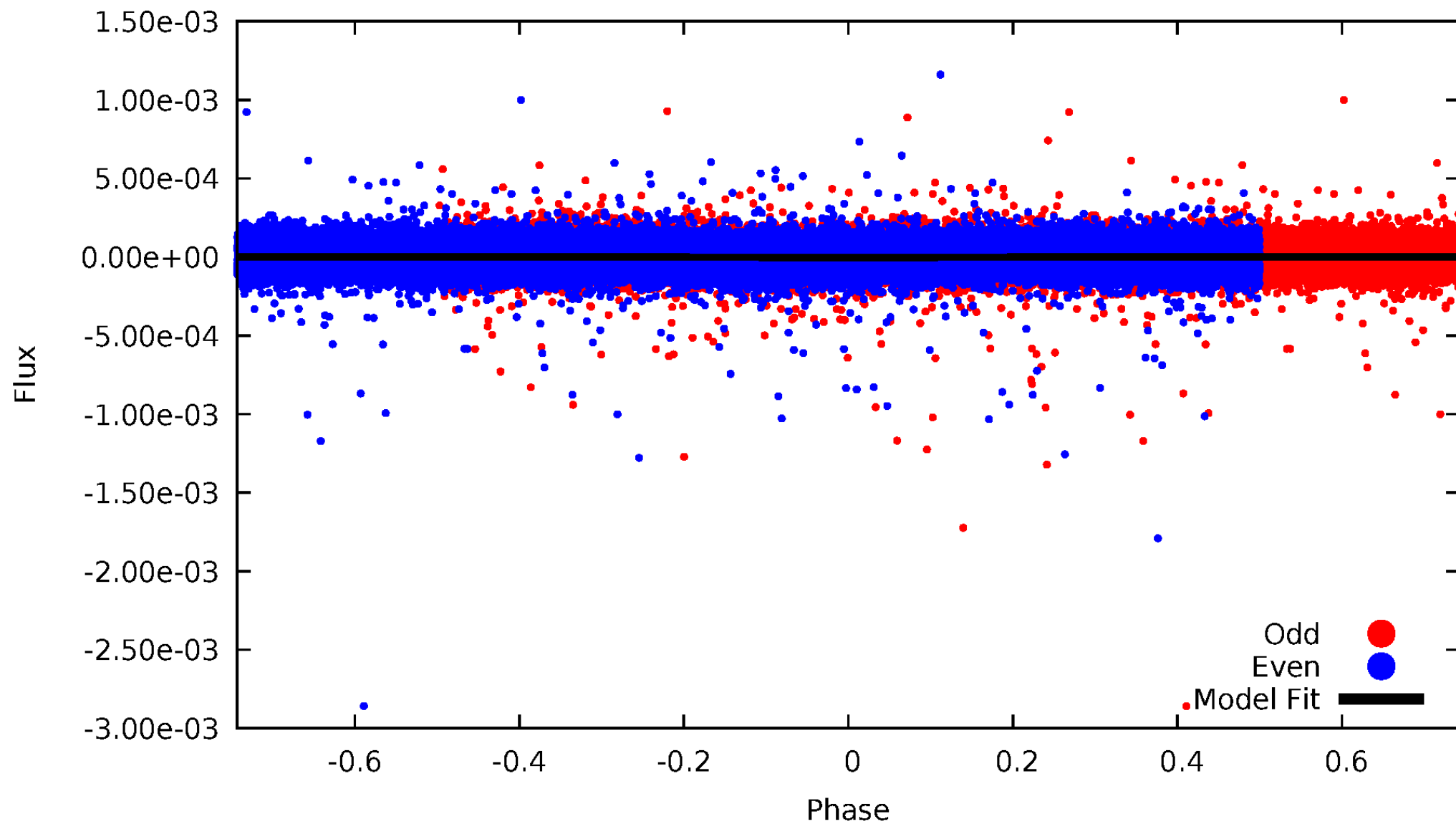


TCE 010801714-01



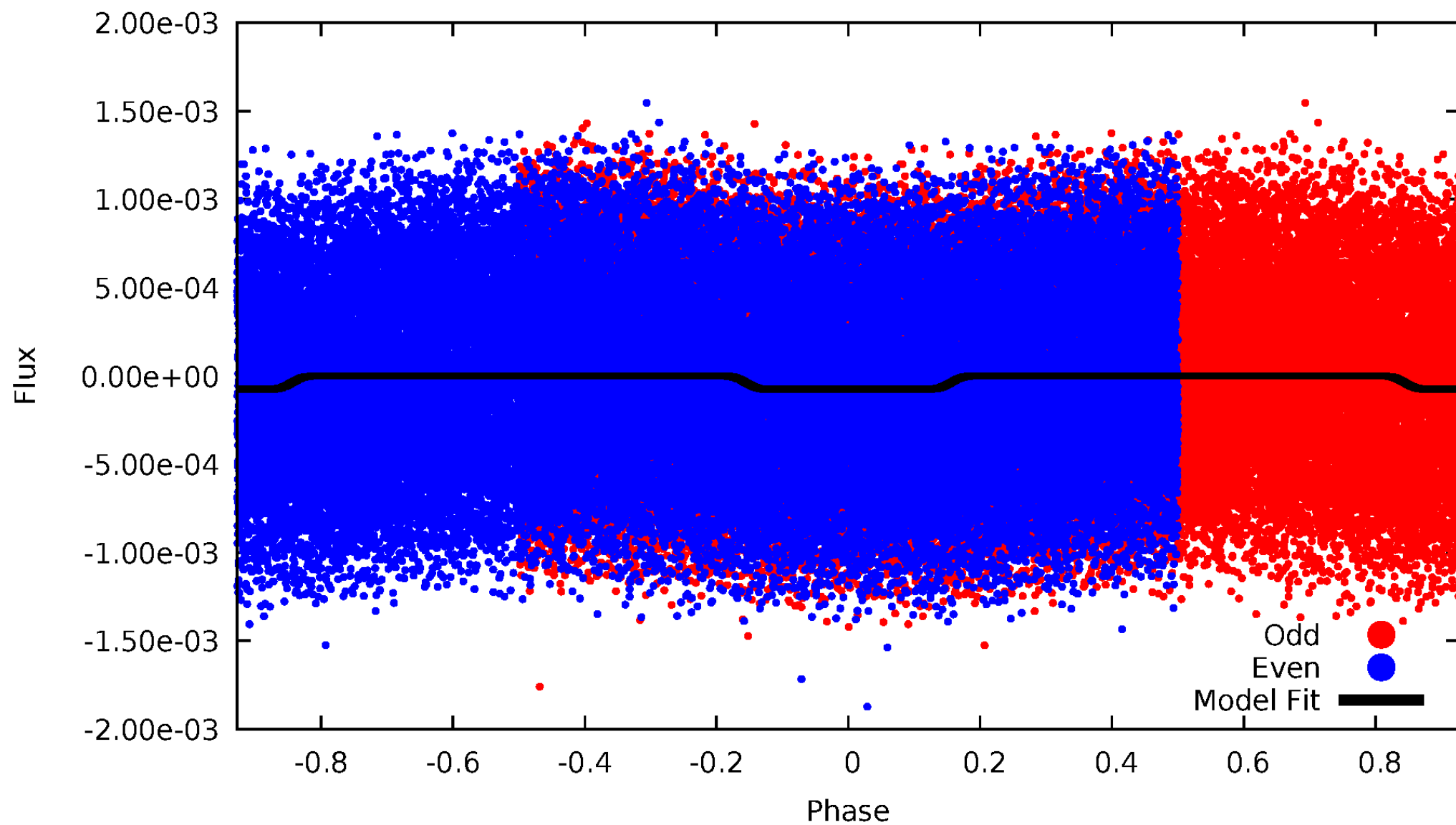
DV Odd/Even

TCE 010801714-01



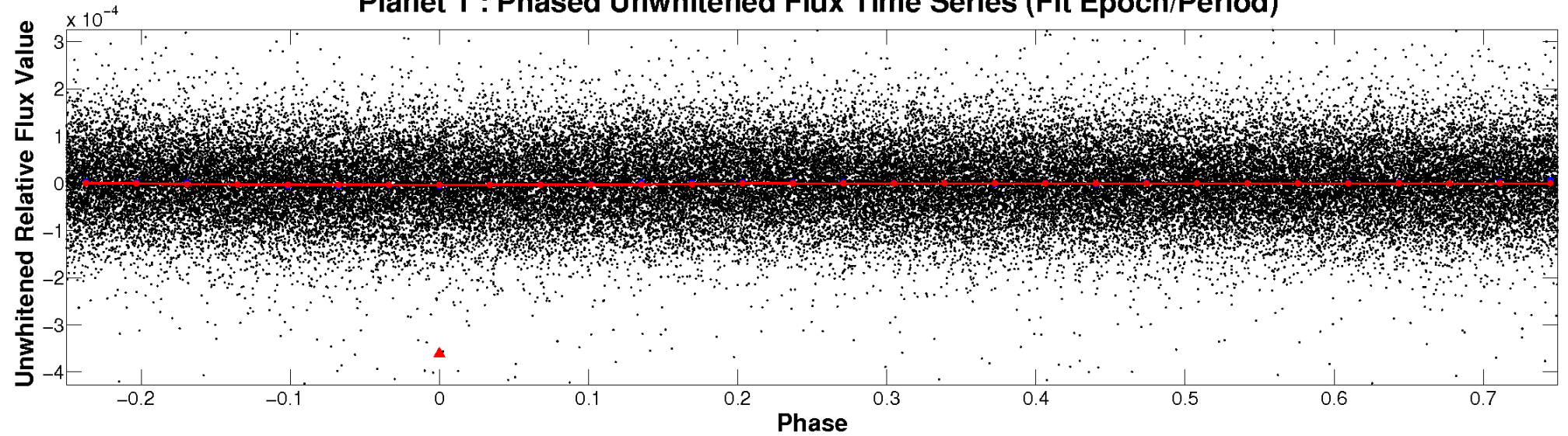
ALT Odd/Even

TCE 010801714-01

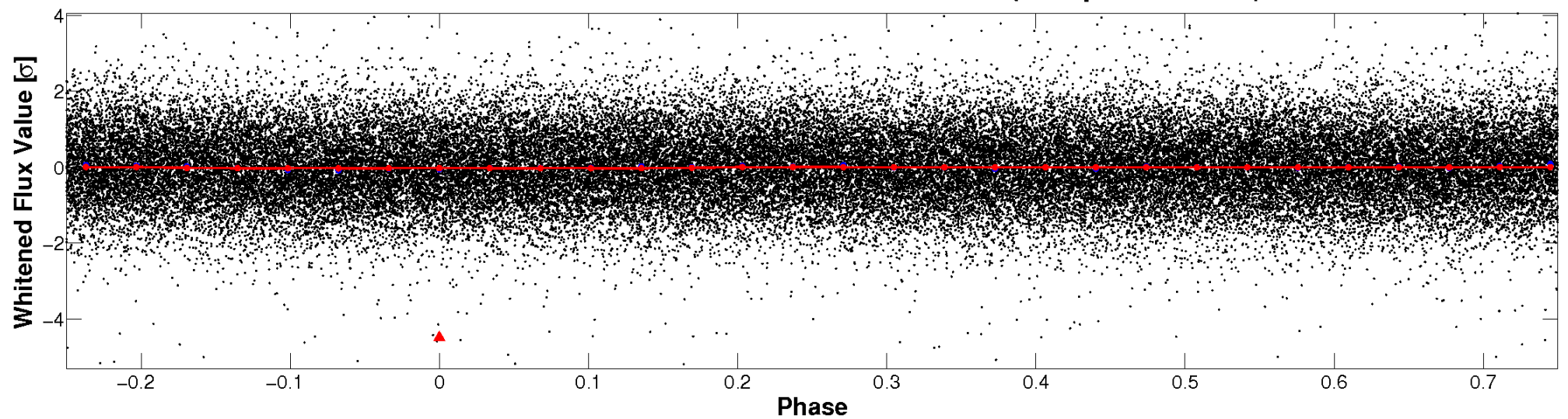


Non-Whitened Vs. Whitened Light Curve

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

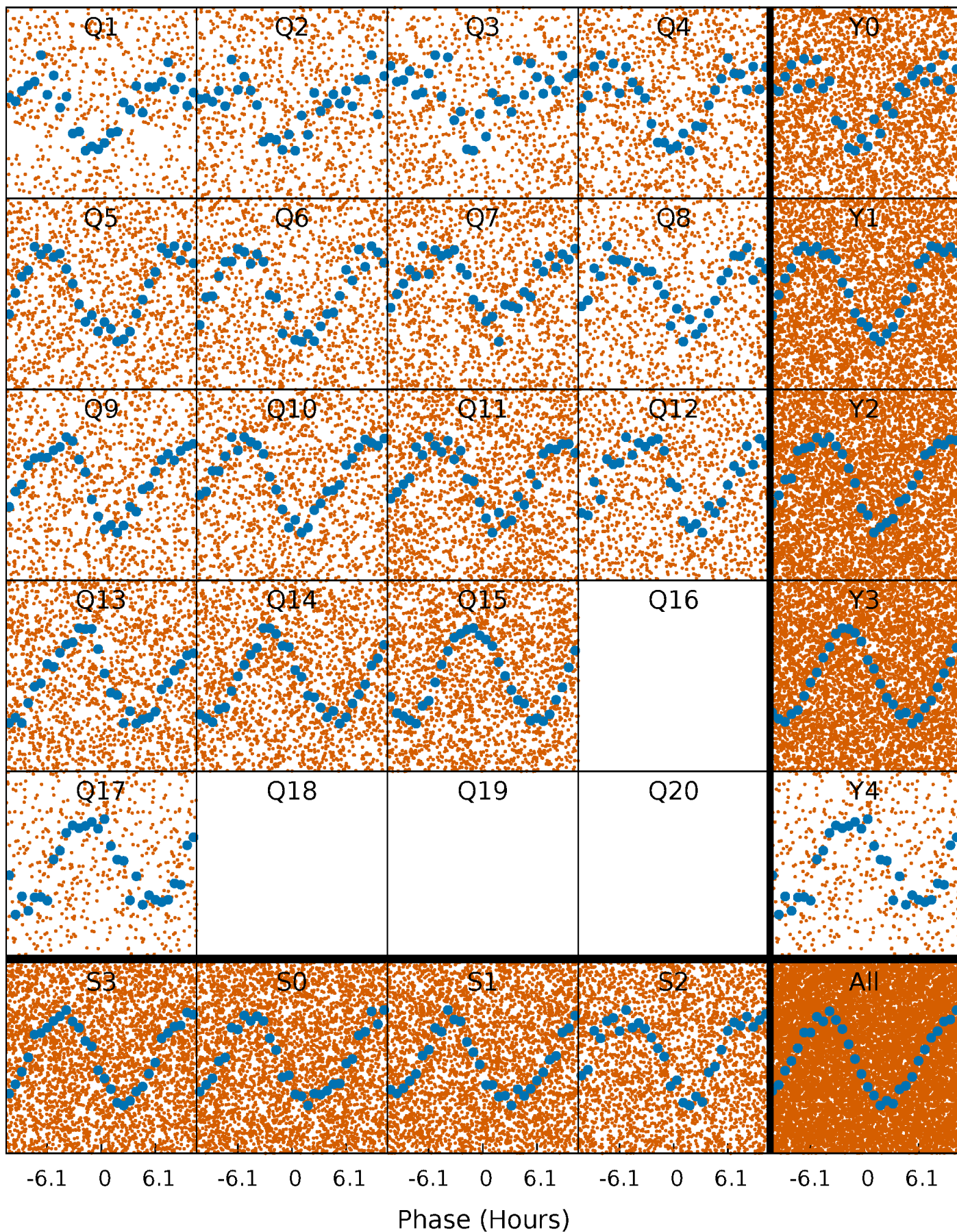


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



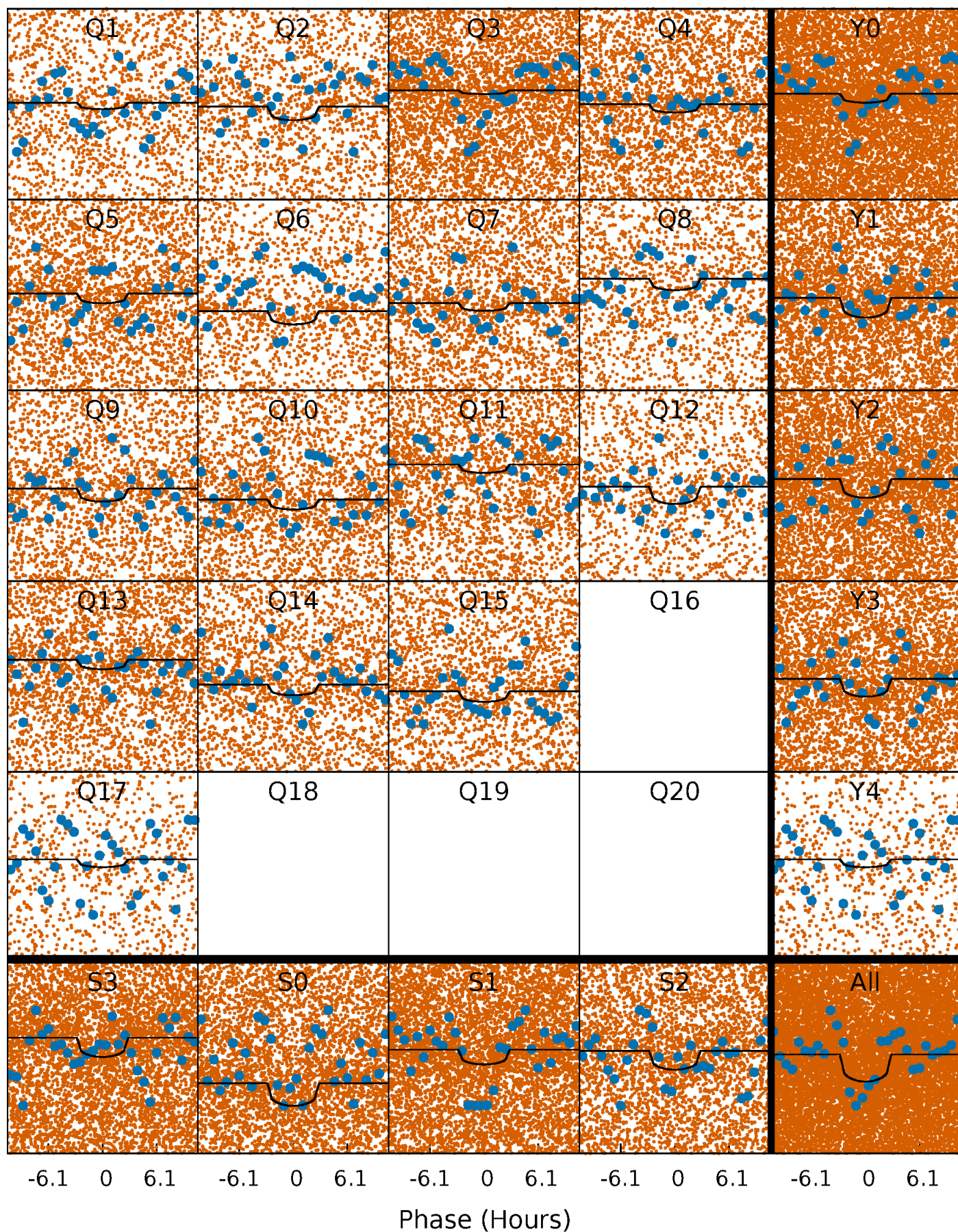
PDC Quarter-Phased Transit Curves

TCE 010801714-01 P= 0.603422 Days $T_0=131.622500$ (BKJD)



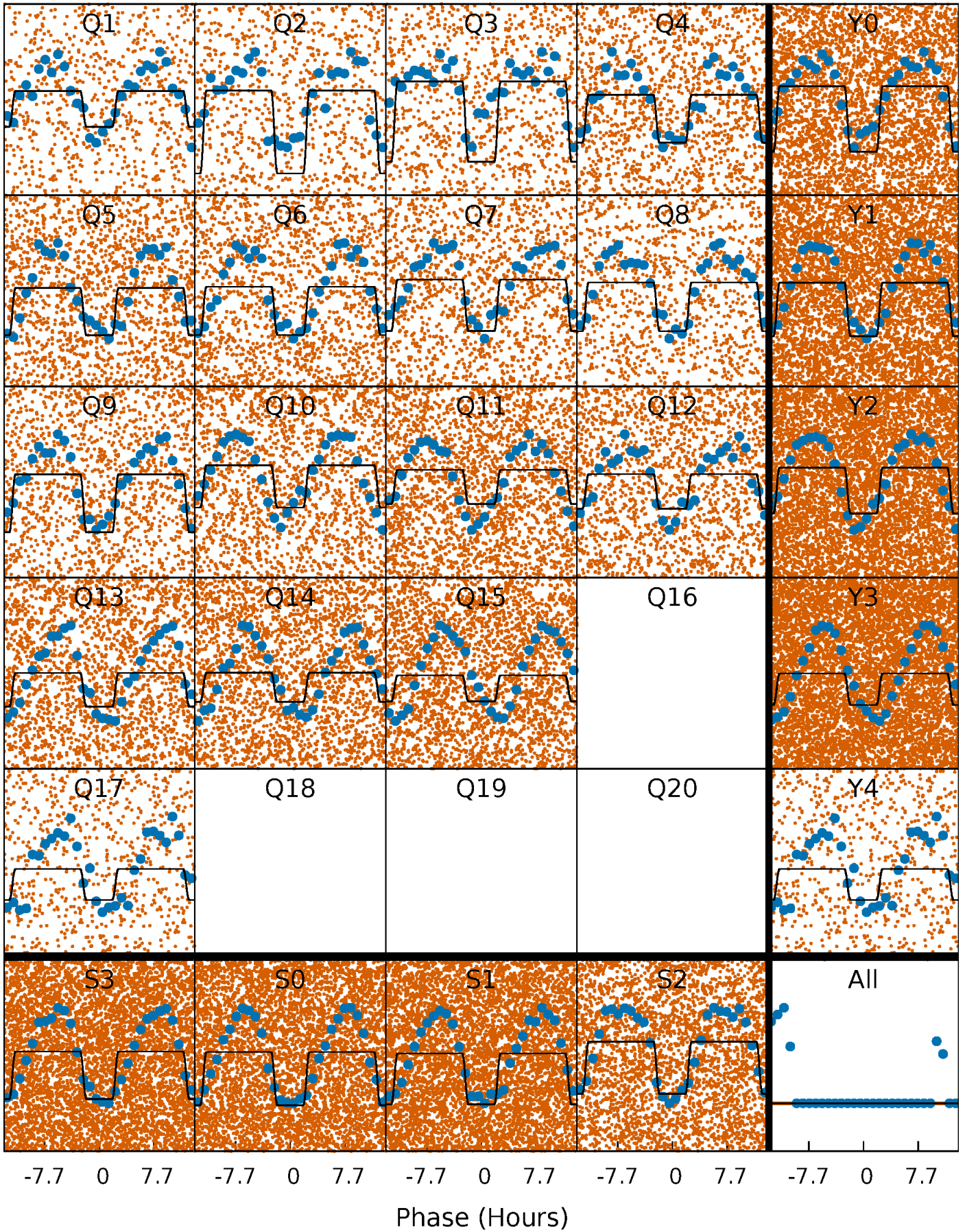
DV Quarter-Phased Transit Curves

TCE 010801714-01 P= 0.603422 Days $T_0=131.622500$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

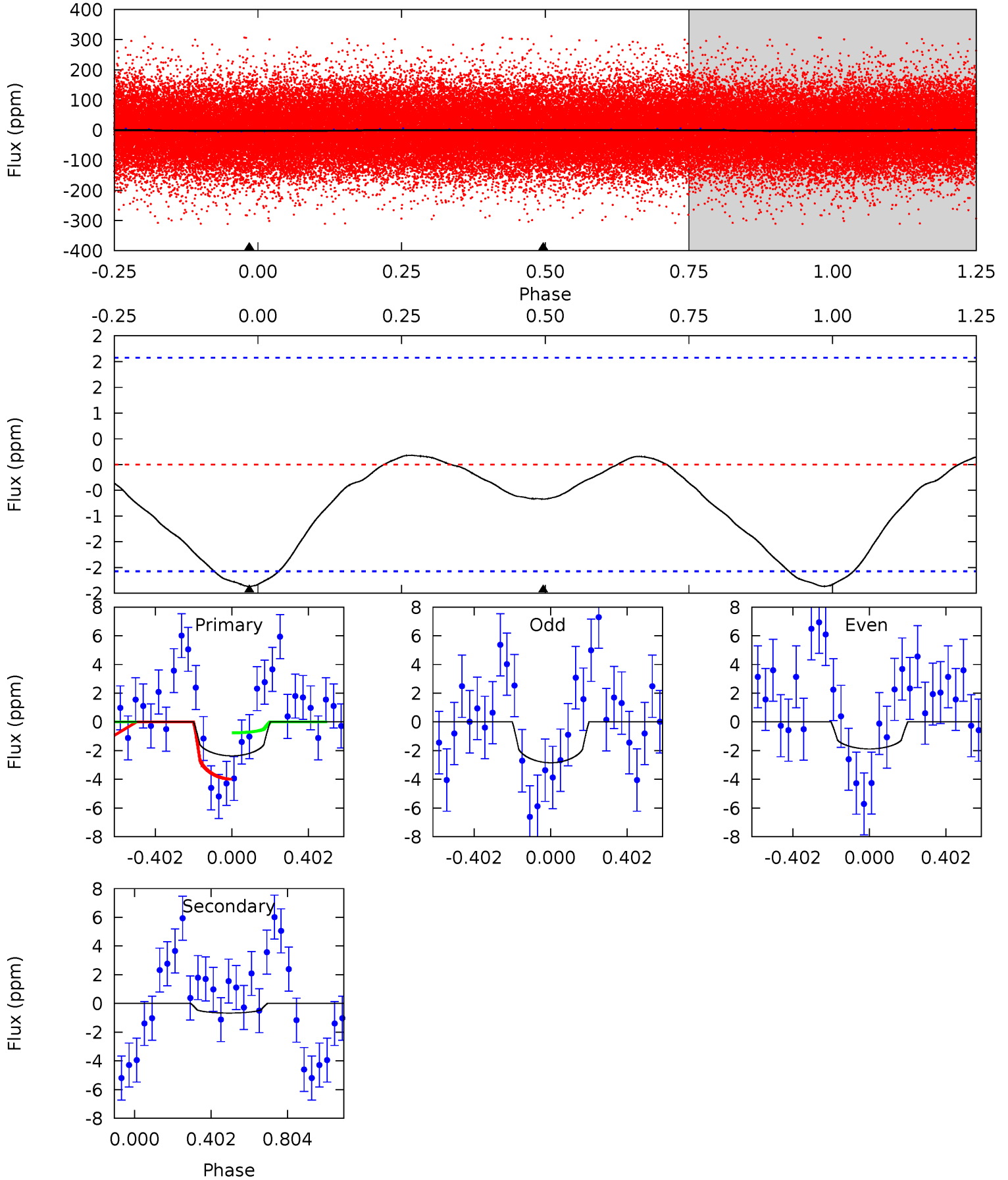
TCE 010801714-01 P= 0.603506 Days $T_0=131.597905$ (BKJD)



DV Model-Shift Uniqueness Test

010801714-01, P = 0.603422 Days, E = 131.019078 Days

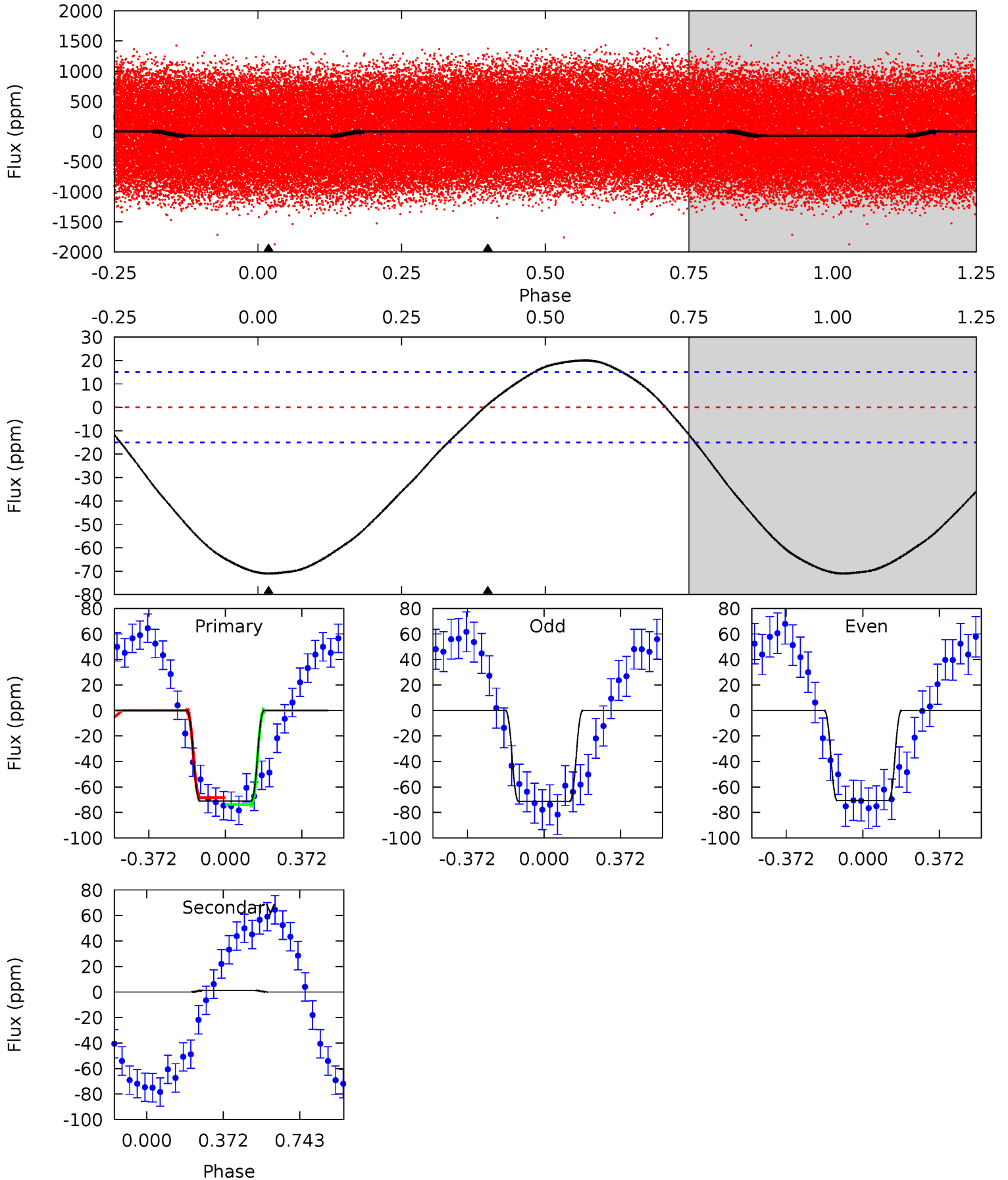
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
4.87	1.38	0	0	4.26	0.84	0.41	4.87	4.87	1.38	1.38	0.98	1.54	0.07	3.31



Alt Model-Shift Uniqueness Test

010801714-01, P = 0.603506 Days, E = 130.994399 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
20.3	-0.35	0	0	4.28	0.89	2.21	20.3	20.3	-0.35	-0.35	0.08	0.97	0.22	0.78



Stellar Parameters For KIC 010801714

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6958^{+192}_{-301}	$4.182^{+0.105}_{-0.210}$	$0.220^{+0.150}_{-0.350}$	$1.665^{+0.545}_{-0.252}$	$1.536^{+0.216}_{-0.216}$	$0.469^{+0.234}_{-0.246}$
	+3%/-4%	+3%/-5%	+68%/-159%	+33%/-15%	+14%/-14%	+50%/-52%
Source	PHO54	PHO54	PHO54	DSEP		

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

Secondary Eclipse Parameters for KIC 010801714-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-1 ± 0	$0.52^{+0.47}_{-0.36}$	4377^{+342}_{-267}	-2647^{+8976}_{-1216}	$0.282^{+2.974}_{-0.237}$
Alt.	1 ± 4	$1.65^{+0.59}_{-0.58}$	4389^{+318}_{-265}	-4073^{+527}_{-429}	$-0.052^{+0.175}_{-0.251}$

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 $A_{obs} \gg 1.0$

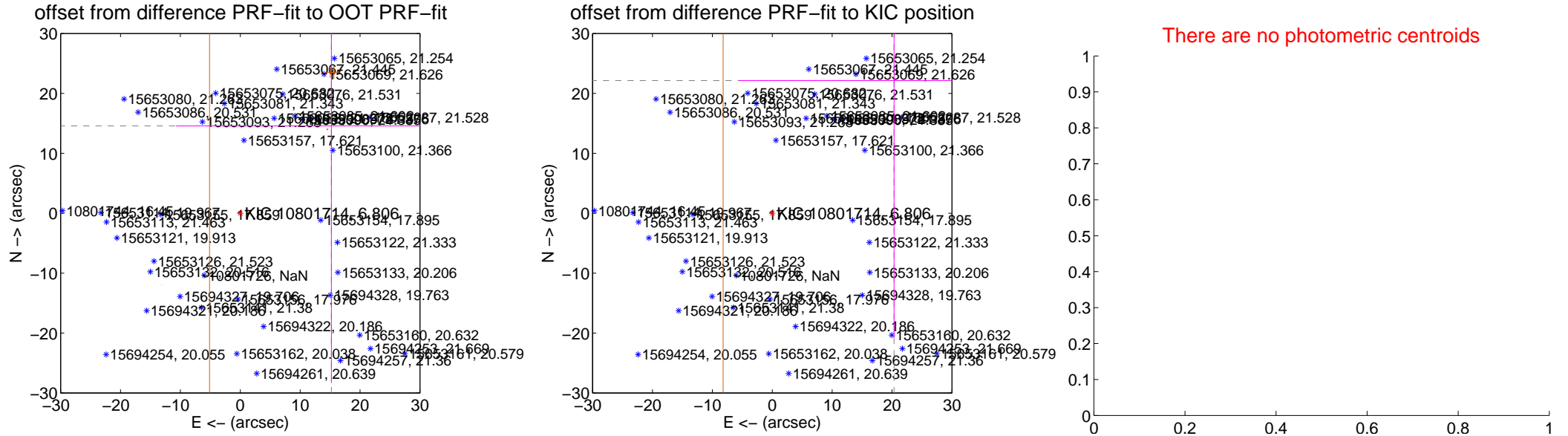
DV Centroid Data

Supplemental centroid analysis for 010801714-01. **Kepler magnitude: 6.81.** Transit SNR 4.18

There are 0 quarters with good PRF difference image offsets

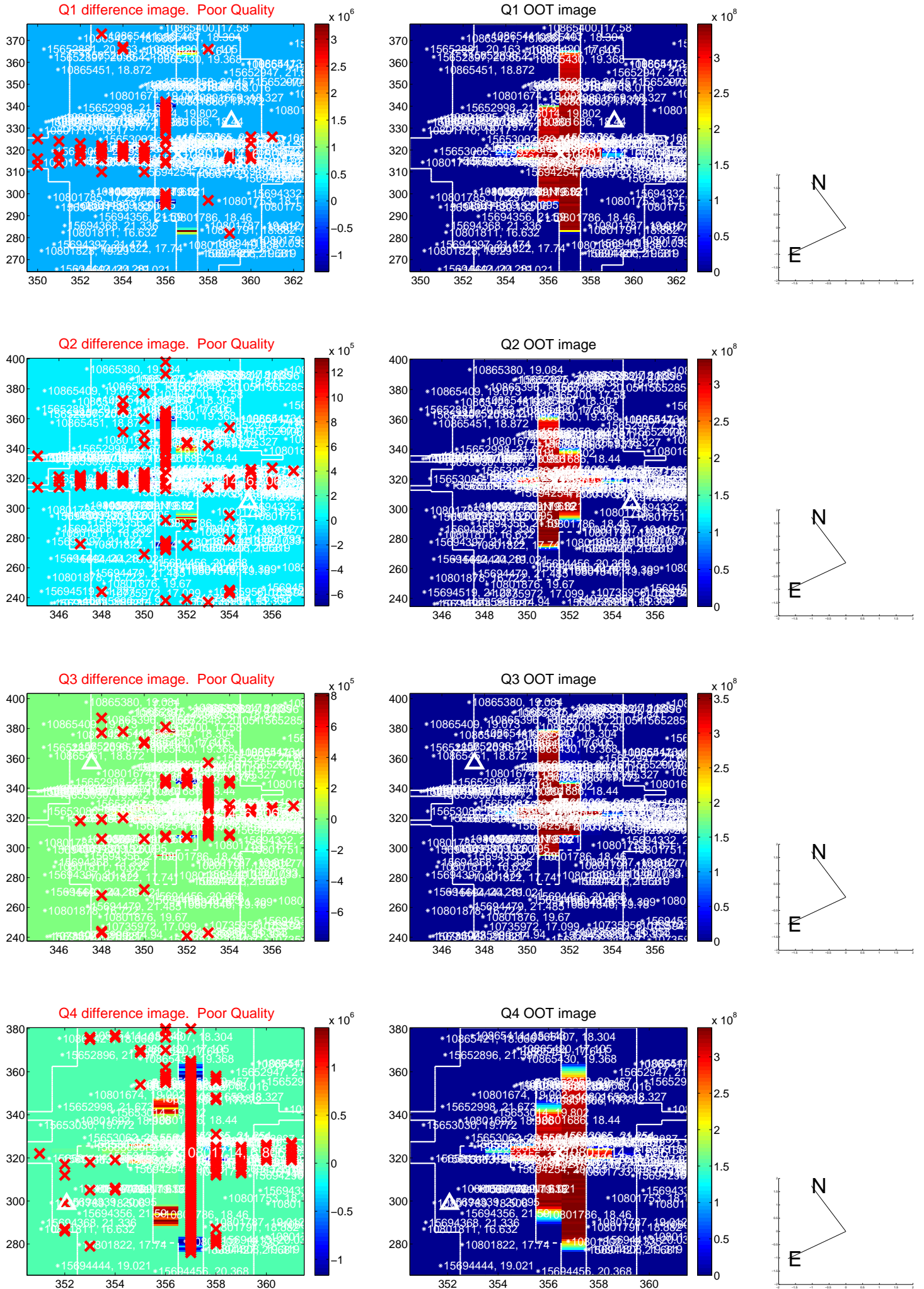
The OOT PRF centroid is offset from the target star catalog position by about 10.19 arcsec so the offset from difference PRF-fit to OOT-fit may be invalid.

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	21.066 ± 35.102	0.60	-15.216 ± 25.966	14.569 ± 42.905
PRF-fit source offset from KIC position	30.070 ± 36.150	0.83	-20.343 ± 25.965	22.144 ± 42.905
photometric centroid source offset	—	—	—	—

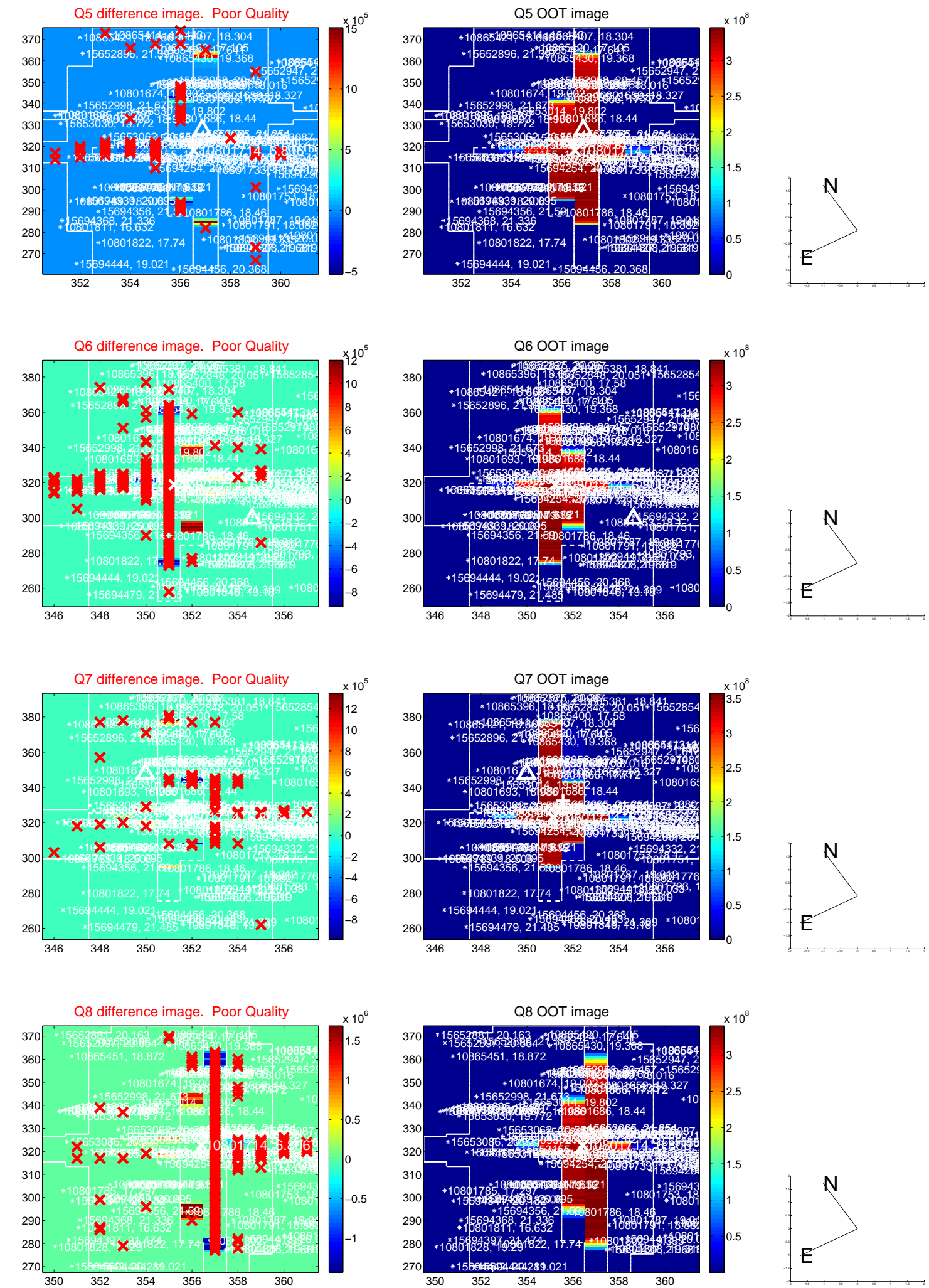


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

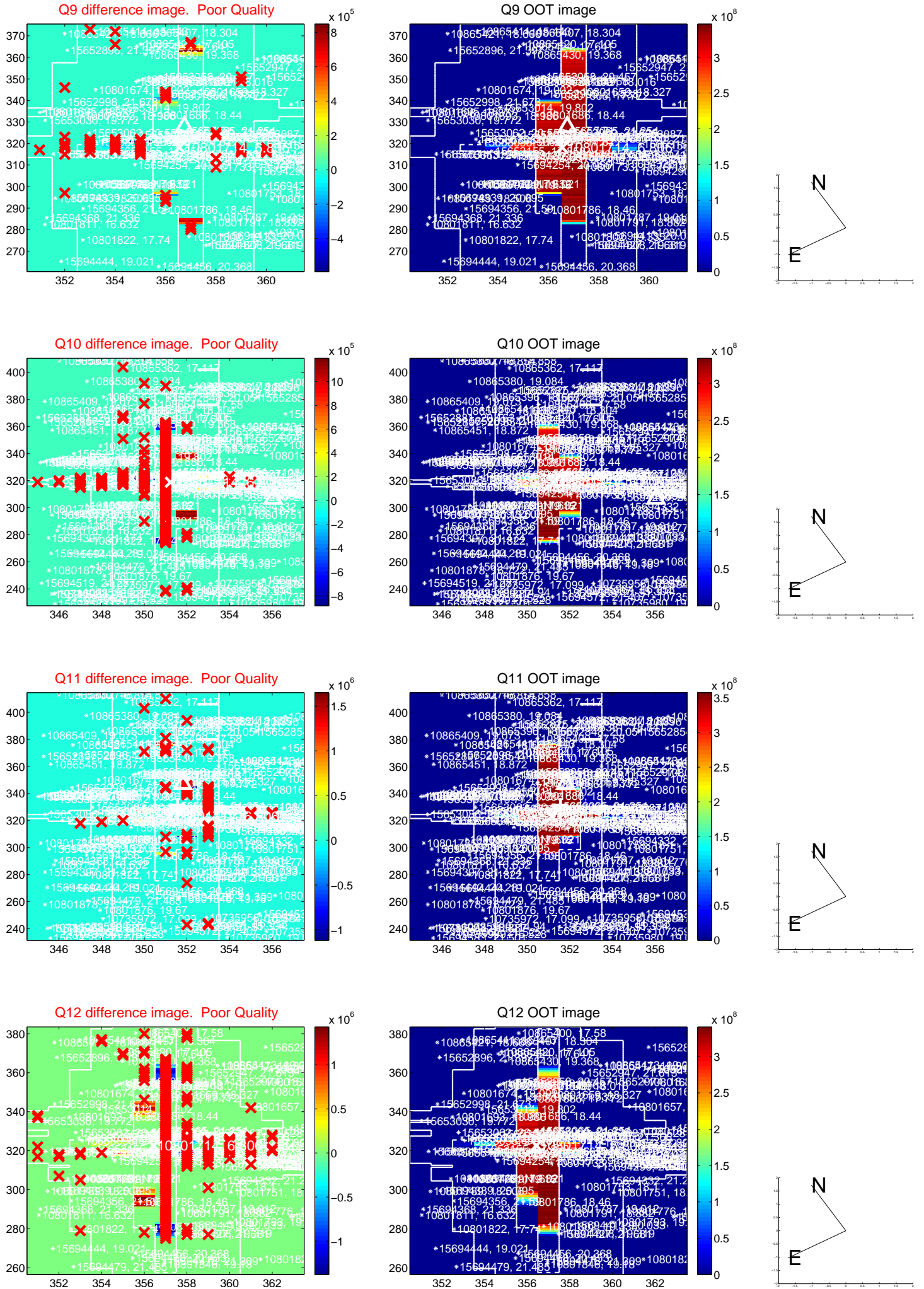
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



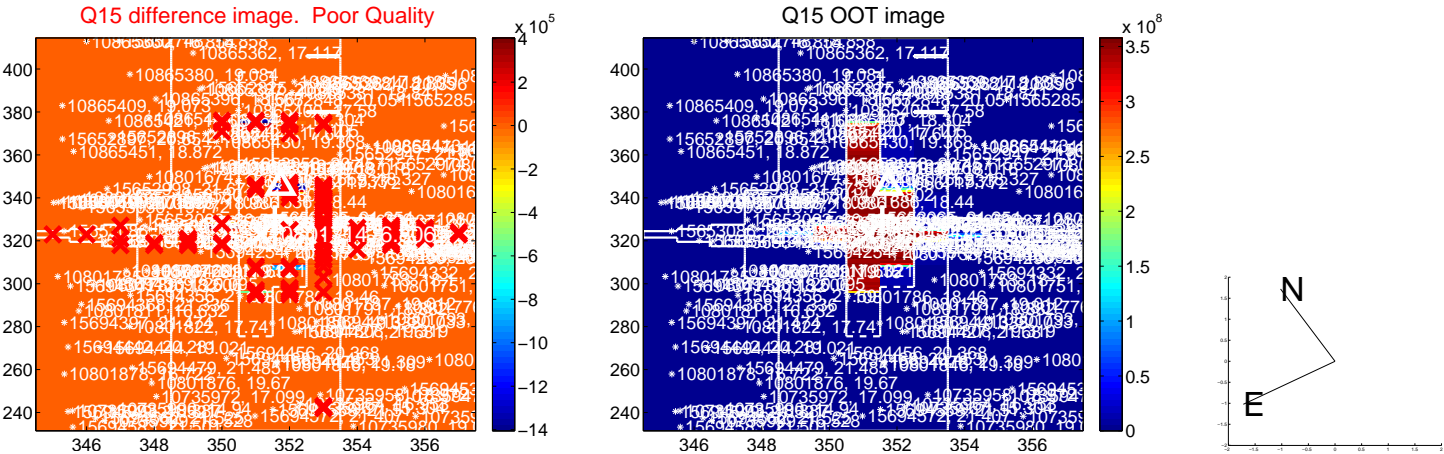
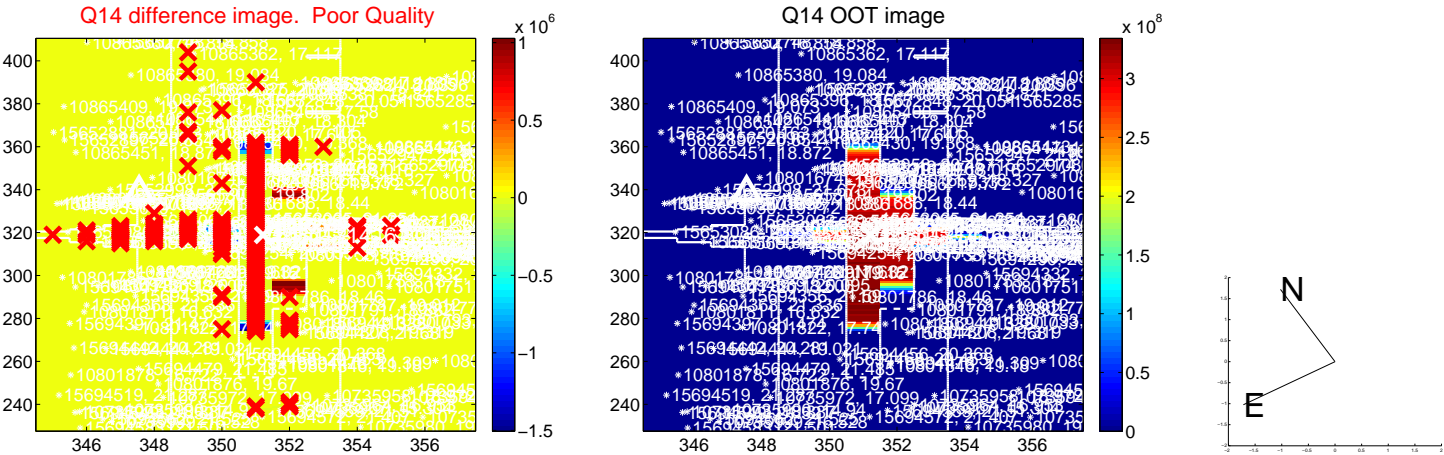
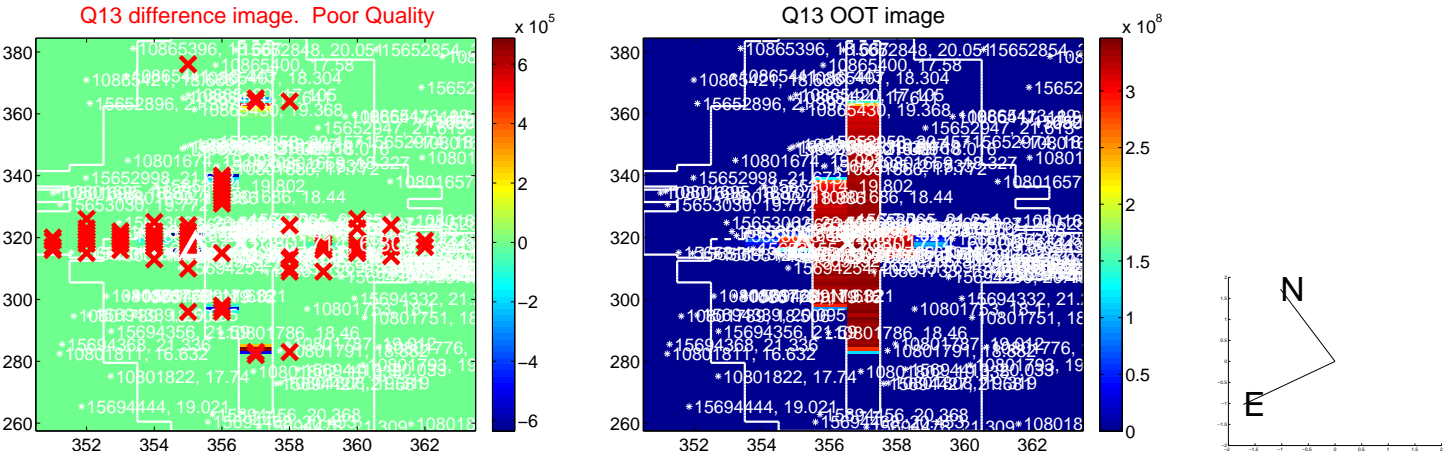
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



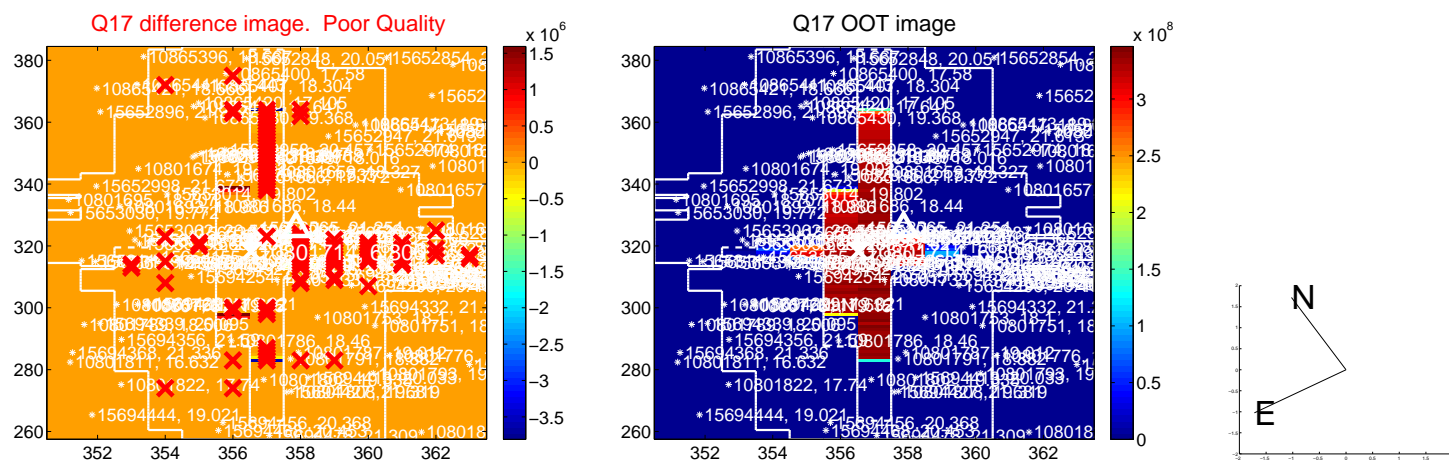
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

