

KIC 008330312

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})
008330312-01	OBS	No	0.564138	132.198306	0.0	5.438	8.3	0.0	1.52	7128	0.00	23286.21

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008330312-01	OBS	FP	0.00	1	0	0	0	LPP_DV

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

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

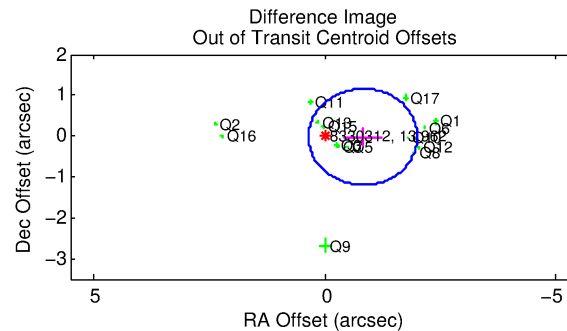
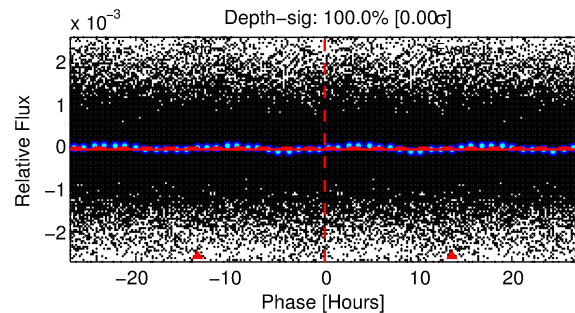
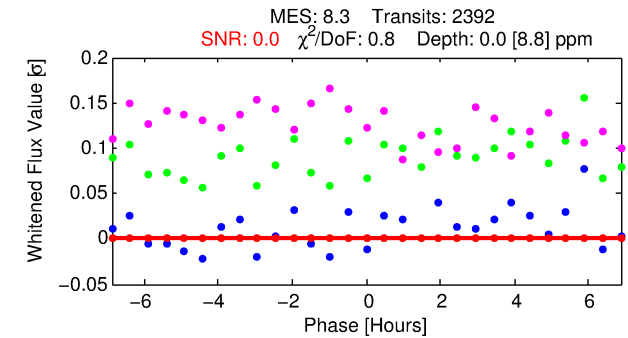
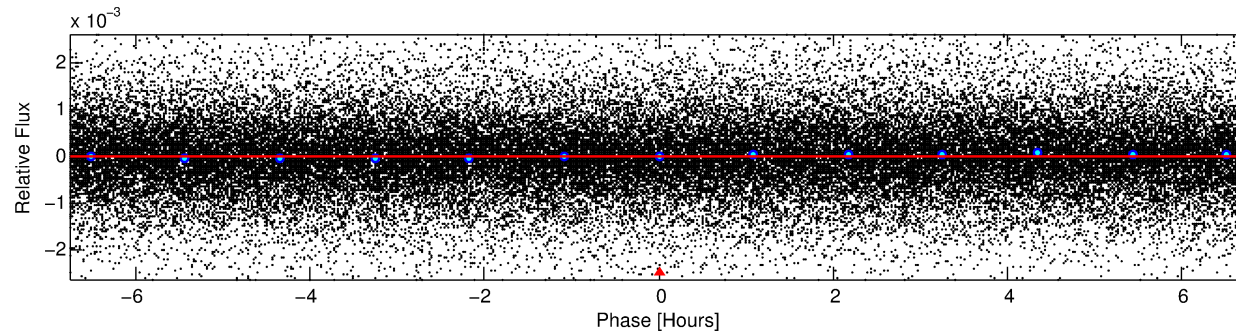
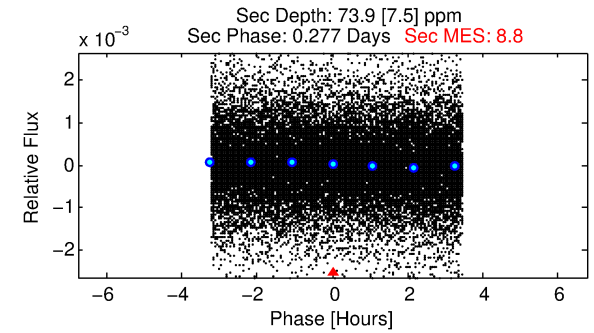
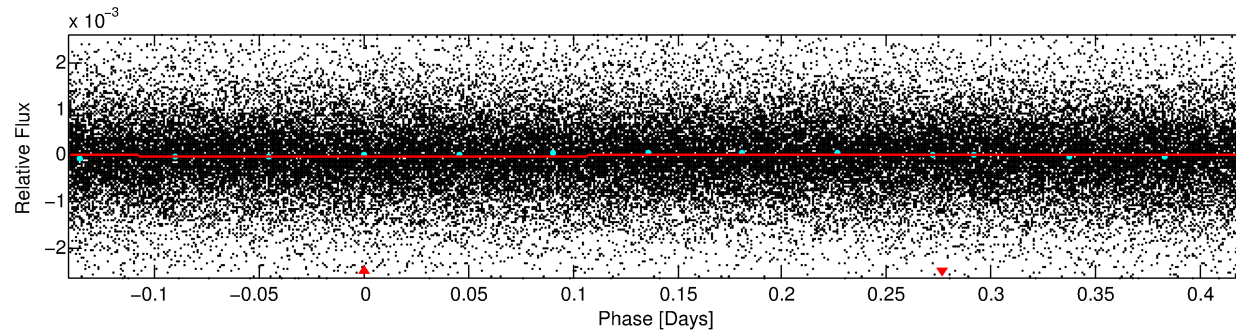
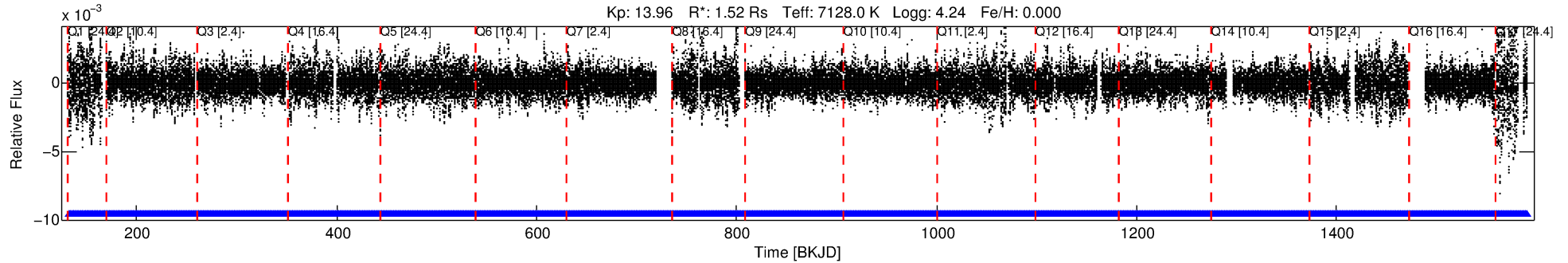
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008330312-01

No Significant Match Found

DV One-Page Summary

KIC: 8330312 Candidate: 1 of 1 Period: 0.564 d



DV Fit Results:

Period = 0.56414 [698.77809] d
Epoch = 132.1983 [127317.9358] BKJD
Rp/R* = 0.0000 [4.0977]
a/R* = 1.03 [28248.42]
b = 0.57 [817669.18]
Seff = 23286.21 [38458389.39]
Teq = 3150 [1300568] K
Rp = 0.00 [678.78] Re
a = 0.0151 [12.4929] AU
Ag = 341995761.29 [2814455816925390.50] 10⁰⁰⁰
Teffp = 662287 [1362733924100] K

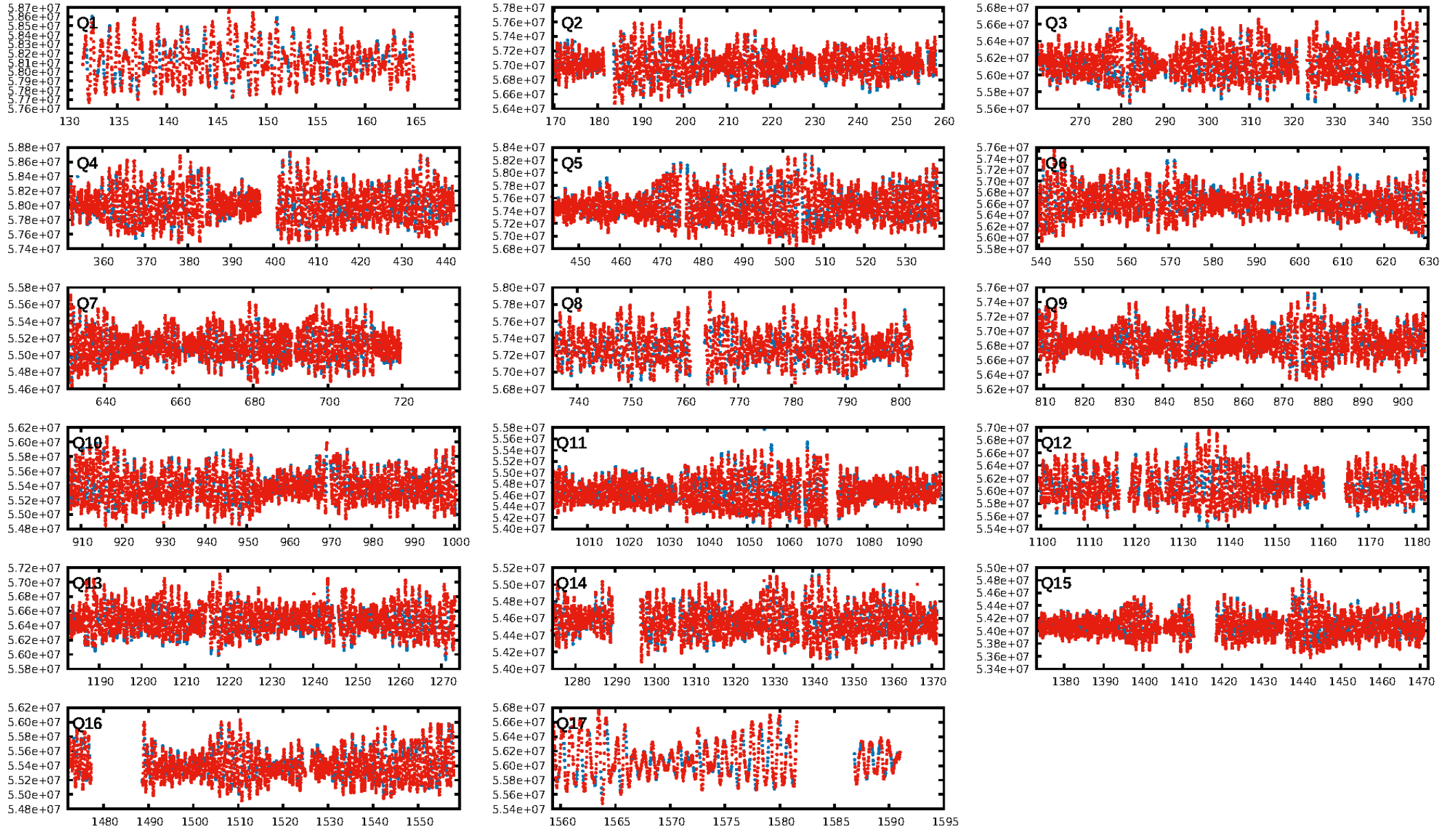
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [2284/2284]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 0.826 arcsec [2.11 σ]
OotOffset-rm: 0.805 arcsec [2.08 σ]
OotOffset-st: 3/4/3/5 [15]
KicOffset-st: 3/4/3/5 [15]
DiffImageQuality-fgm: 0.53 [8/15]
DiffImageOverlap-fno: 1.00 [17/17]

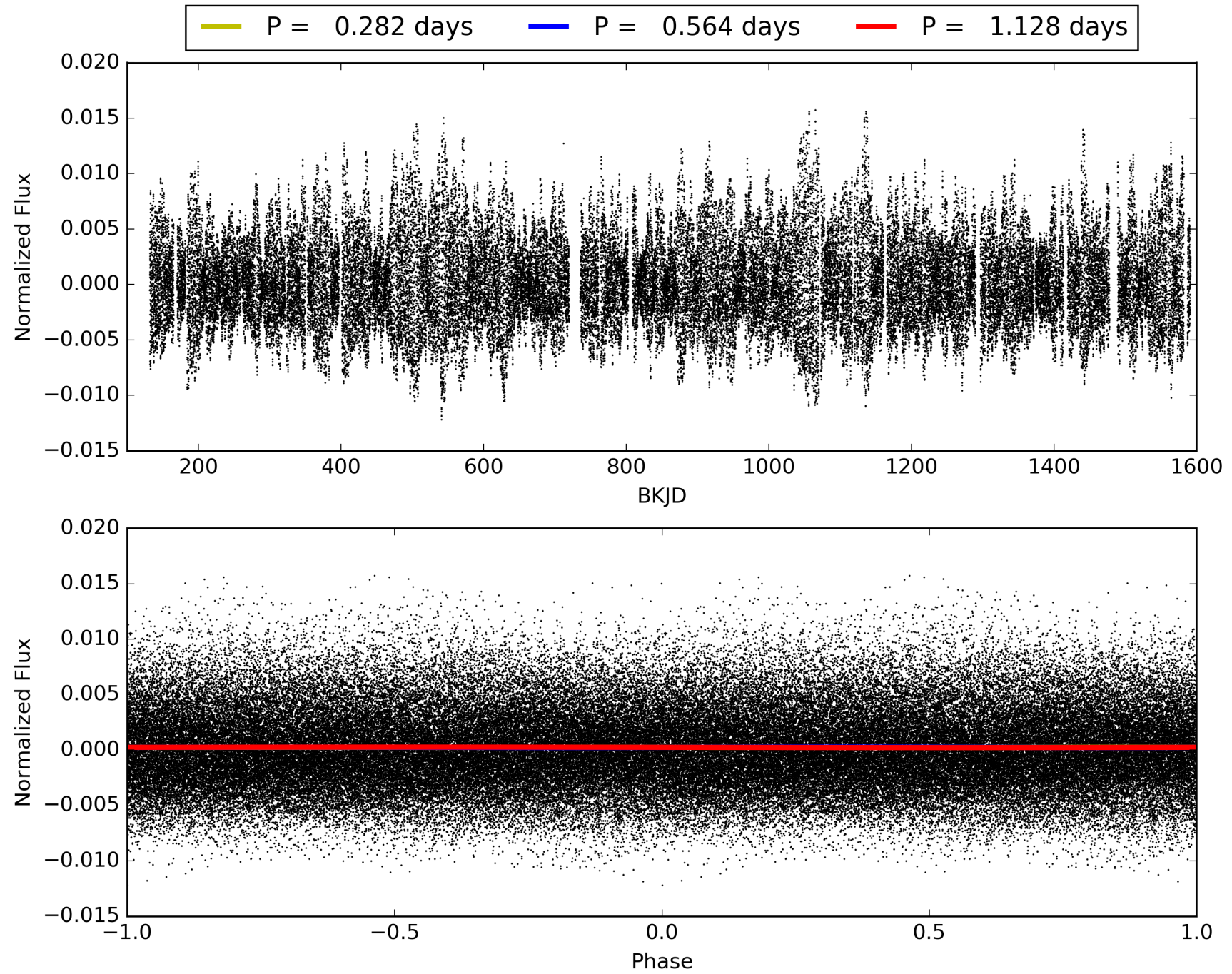
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 01:23:37 Z

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

TCE 008330312-01, PDC Light Curves

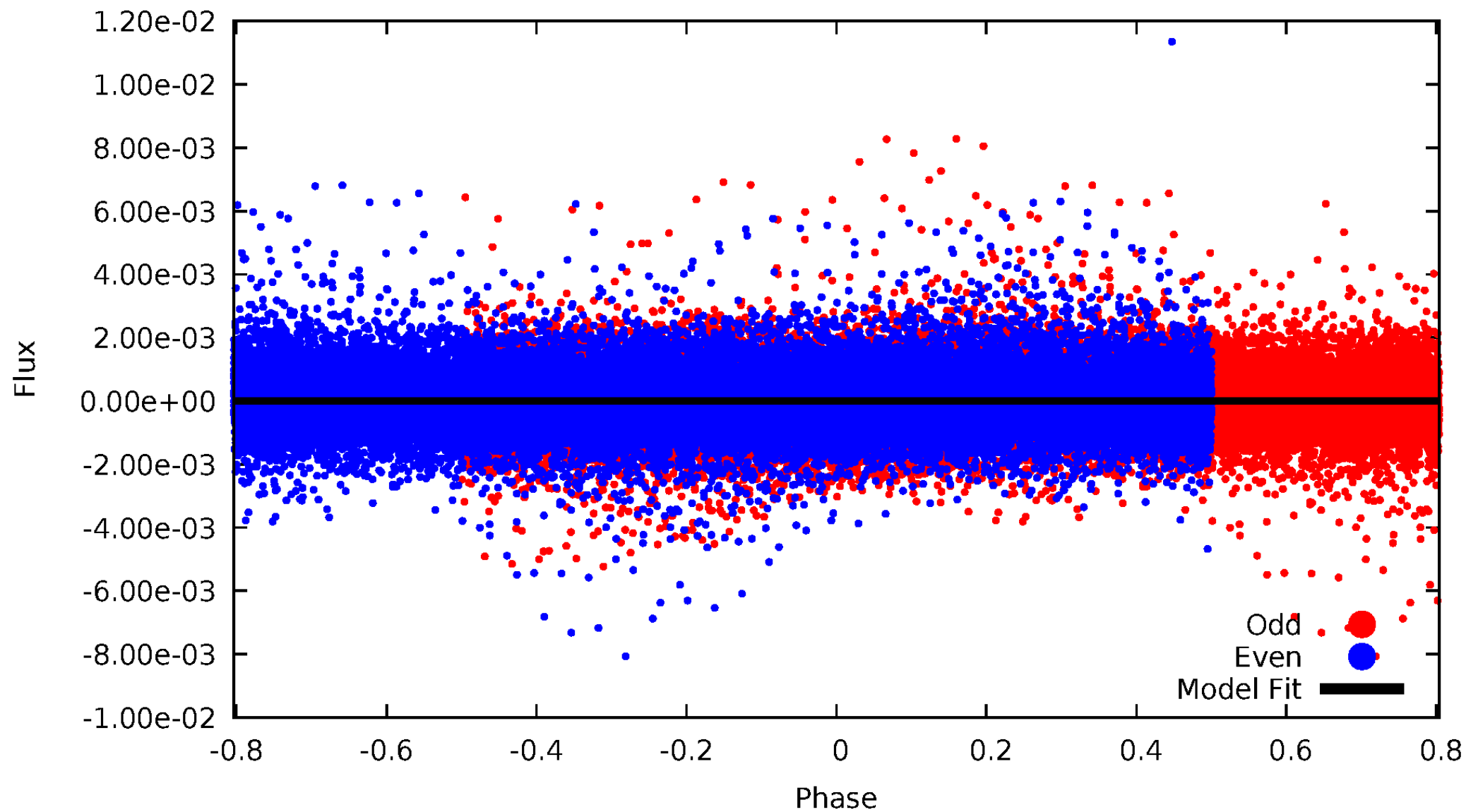


TCE 008330312-01



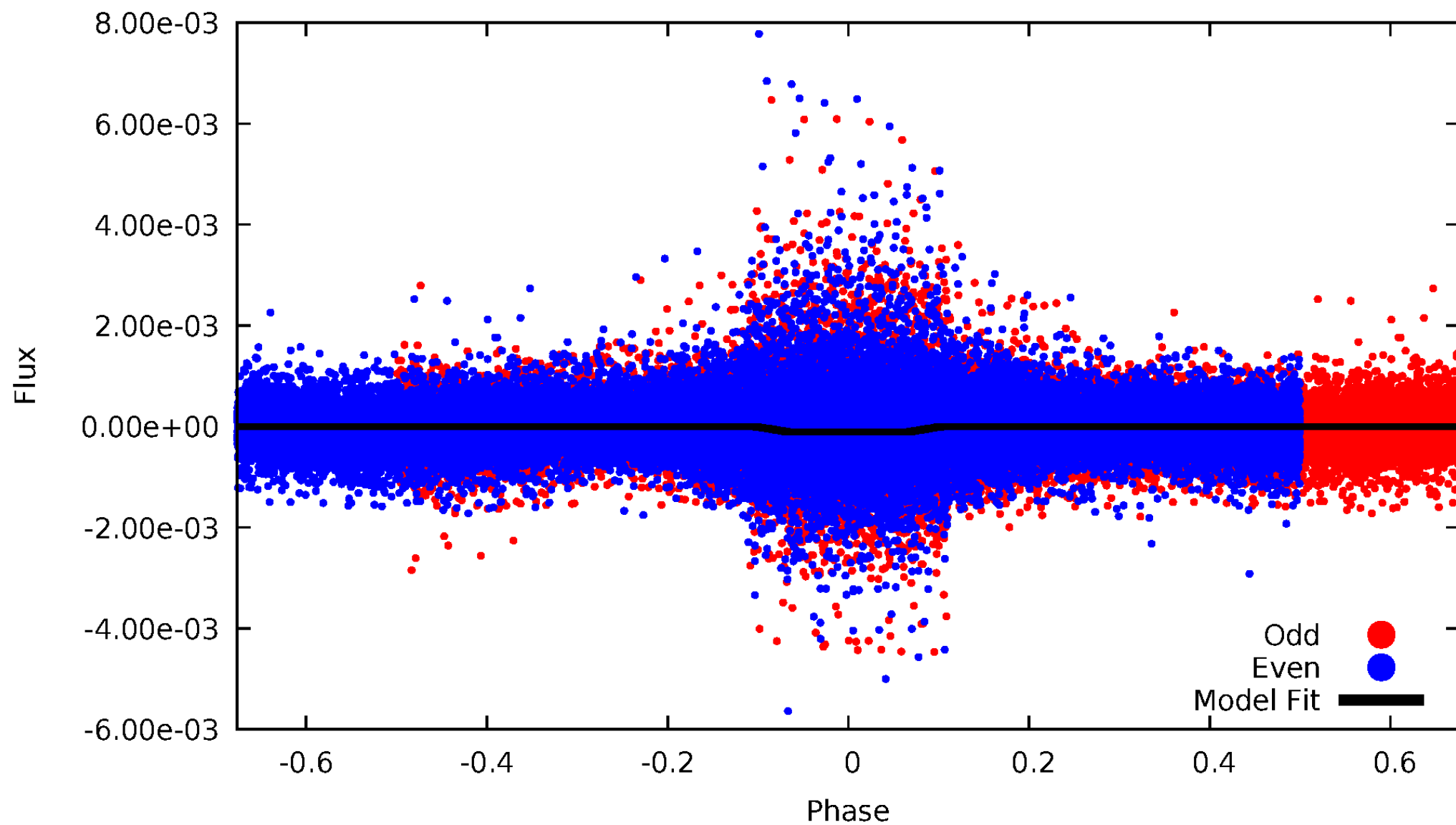
DV Odd/Even

TCE 008330312-01



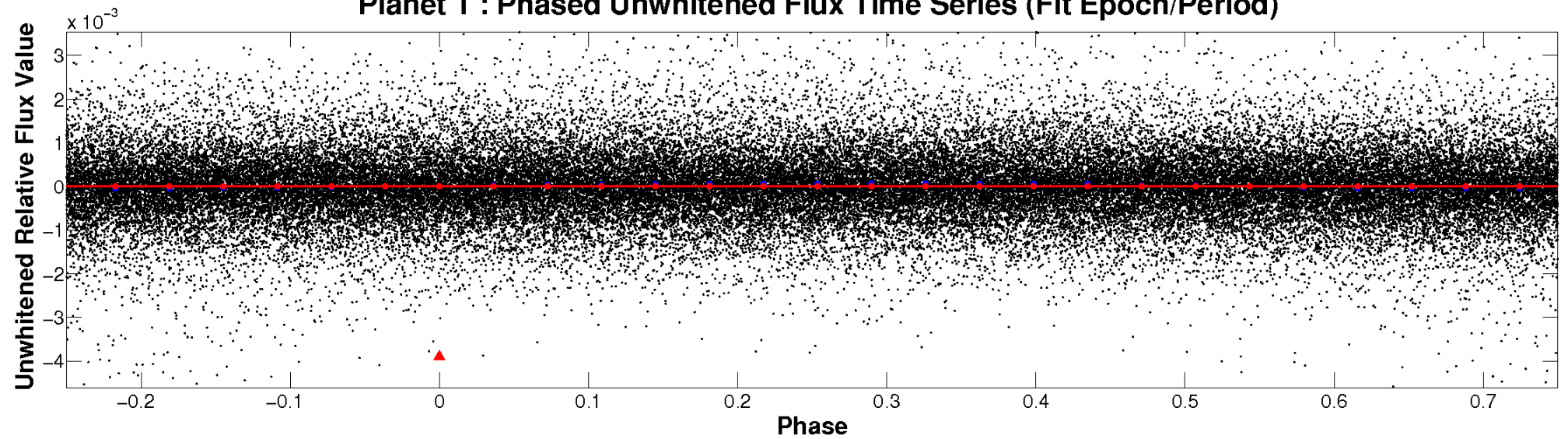
ALT Odd/Even

TCE 008330312-01

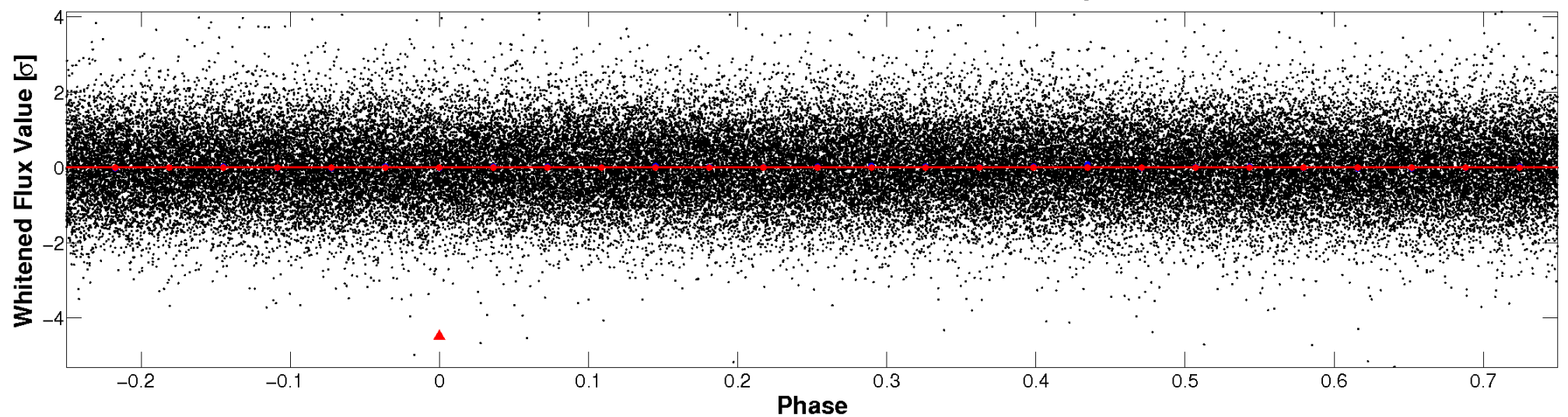


Non-Whitened Vs. Whitened Light Curve

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

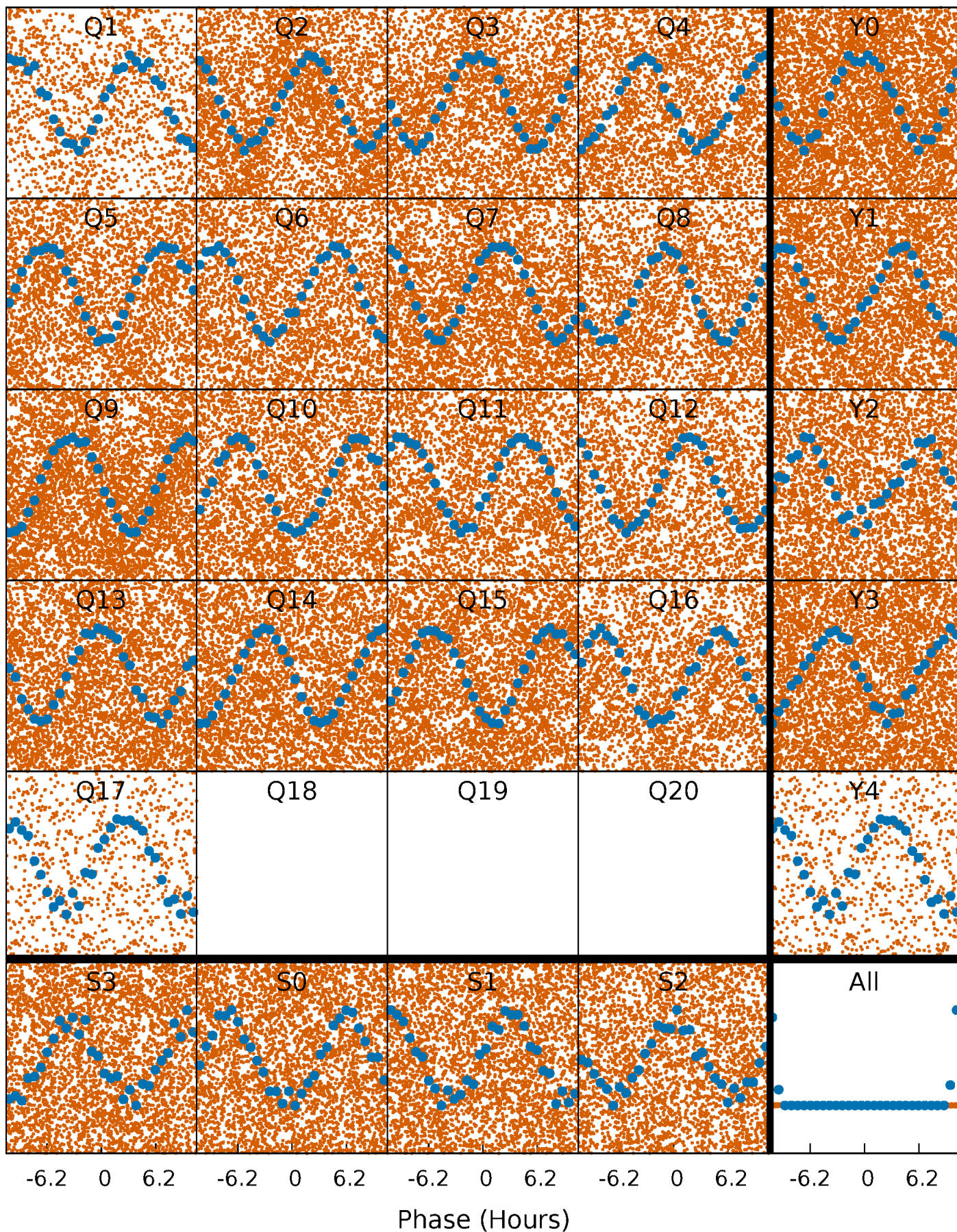


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



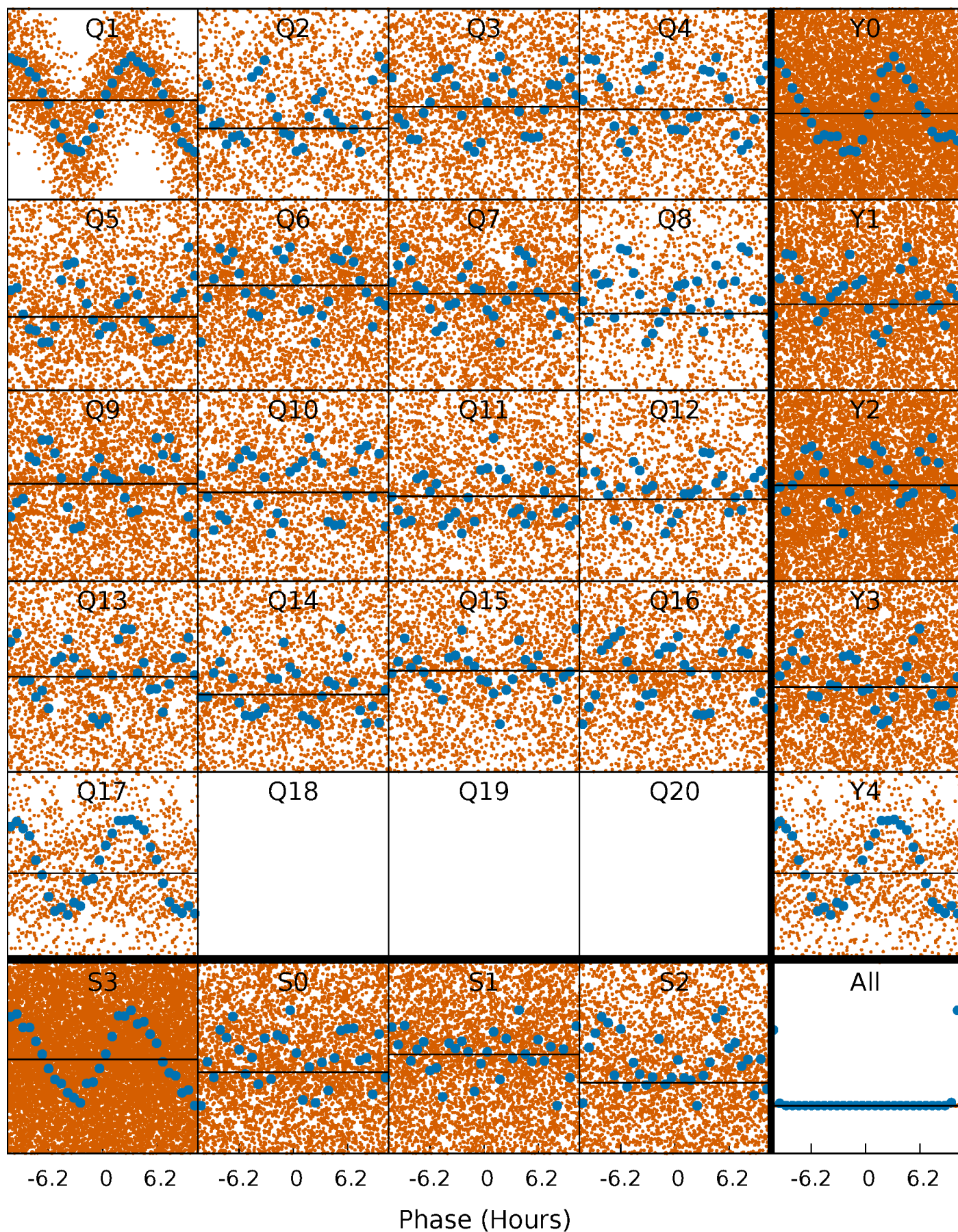
PDC Quarter-Phased Transit Curves

TCE 008330312-01 P= 0.564138 Days $T_0=132.198306$ (BKJD)



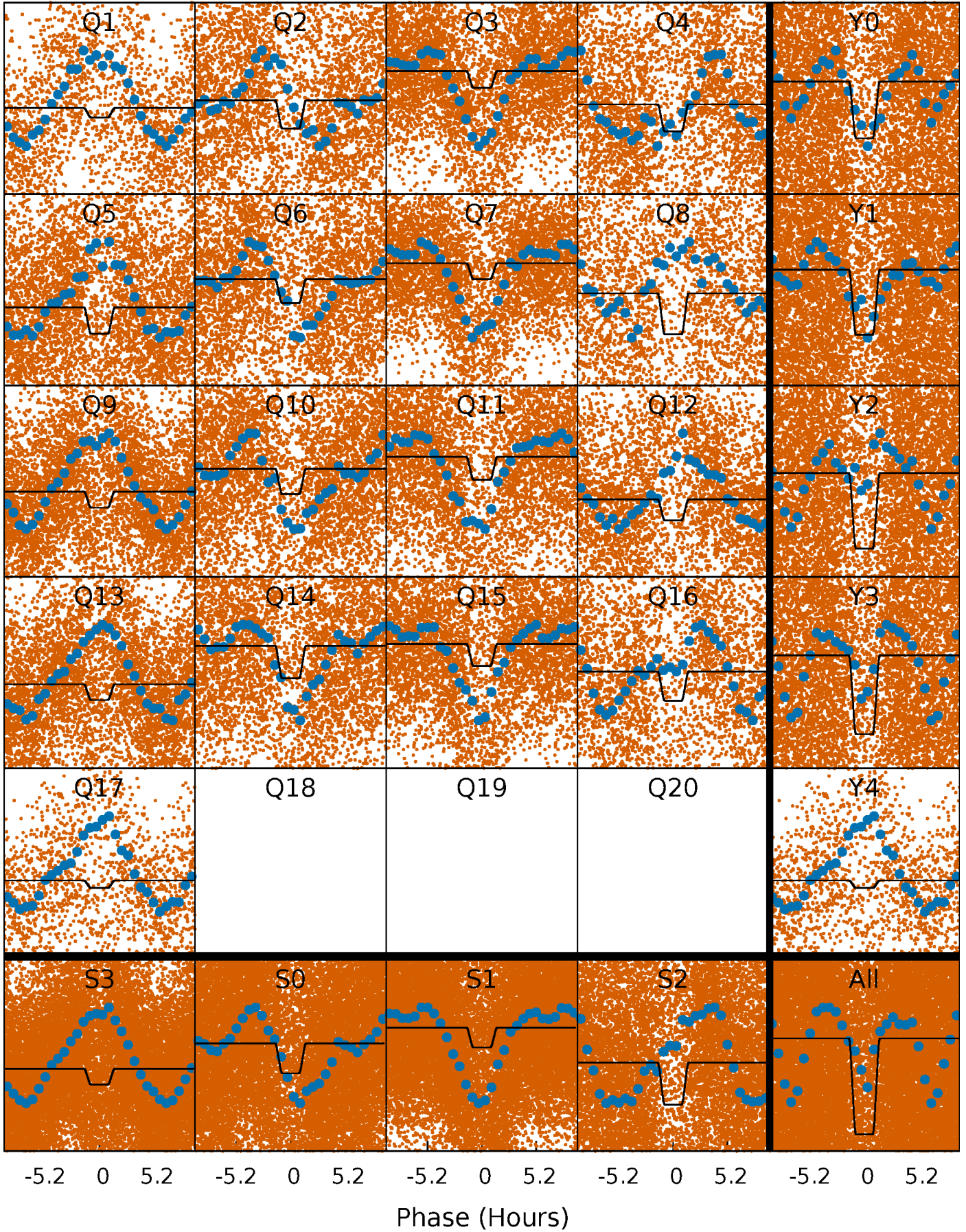
DV Quarter-Phased Transit Curves

TCE 008330312-01 P= 0.564138 Days $T_0=132.198306$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

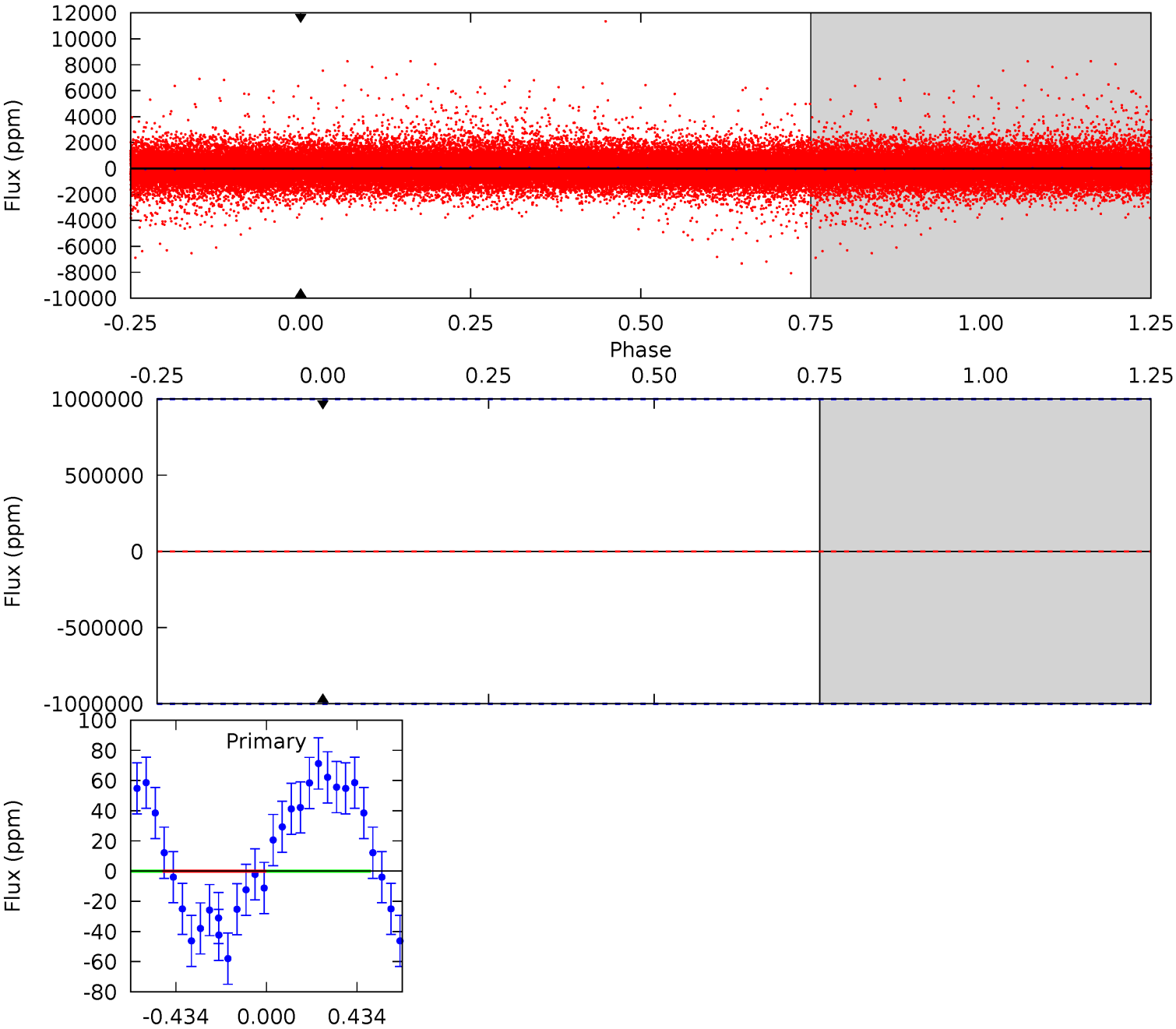
TCE 008330312-01 P= 0.564341 Days $T_0=131.818814$ (BKJD)



DV Model-Shift Uniqueness Test

008330312-01, P = 0.564138 Days, E = 131.070030 Days

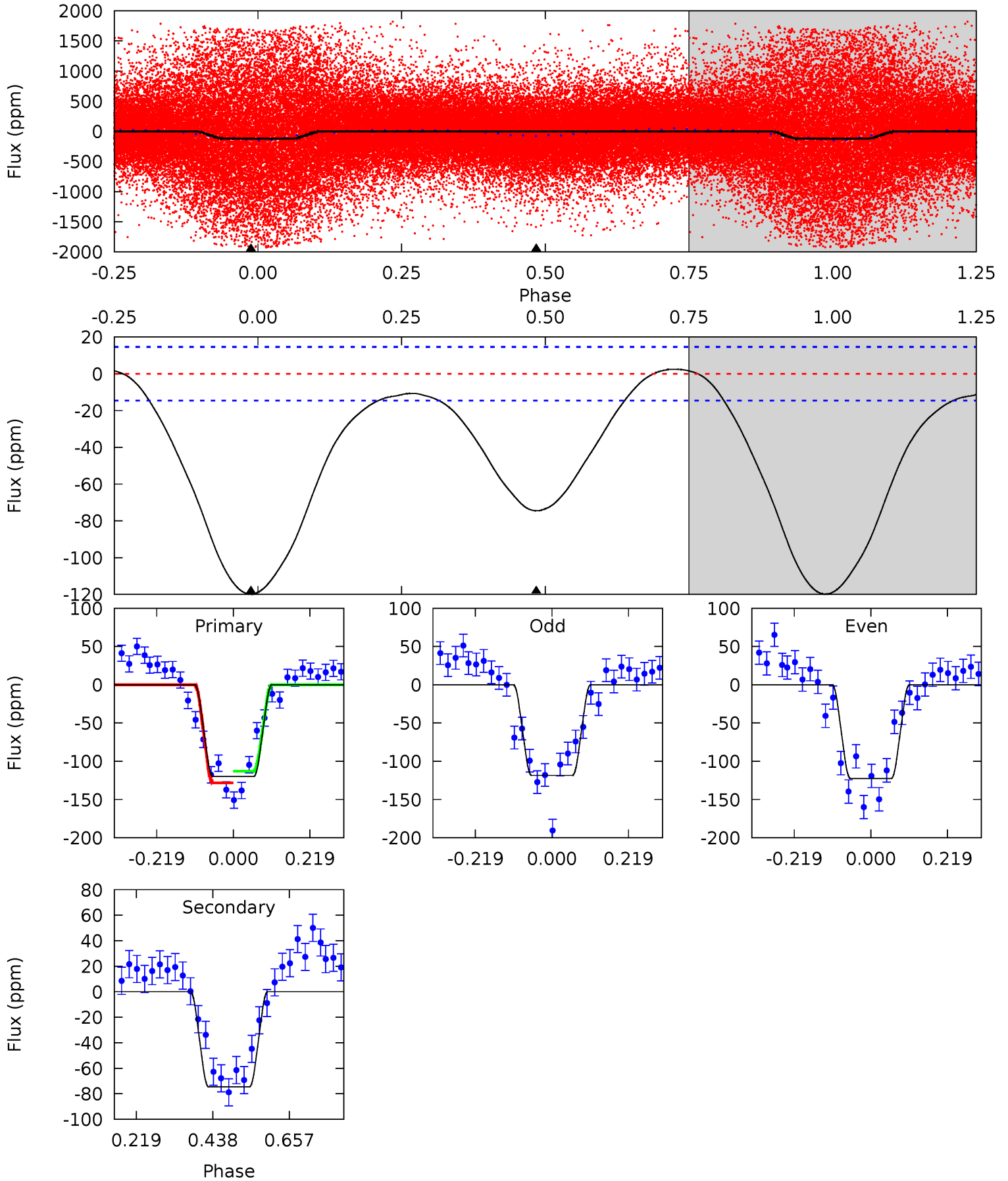
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

008330312-01, P = 0.564341 Days, E = 131.254473 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
36.0	22.4	0	0	4.40	1.23	2.14	36.0	36.0	22.4	22.4	0.59	0.25	0.02	2.30



Stellar Parameters For KIC 008330312

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7128^{+200}_{-343}	$4.237^{+0.087}_{-0.203}$	$0.000^{+0.200}_{-0.350}$	$1.518^{+0.542}_{-0.232}$	$1.452^{+0.211}_{-0.211}$	$0.584^{+0.234}_{-0.299}$
	+3%/-5%	+2%/-5%	+inf%/-inf%	+36%/-15%	+15%/-15%	+40%/-51%
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 008330312-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	0 ± 1000000	$482.36^{+506.20}_{-331.15}$	468^{+224}_{-101}	-1851^{+5221}_{-1265}	$-0.326^{+997.209}_{-615.541}$
Alt.	-75 ± 3	$468.81^{+523.23}_{-328.25}$	476^{+249}_{-112}	1026^{+678}_{-2599}	$0.303^{+4.129}_{-0.264}$

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 $A_{obs} \gg 1.0$

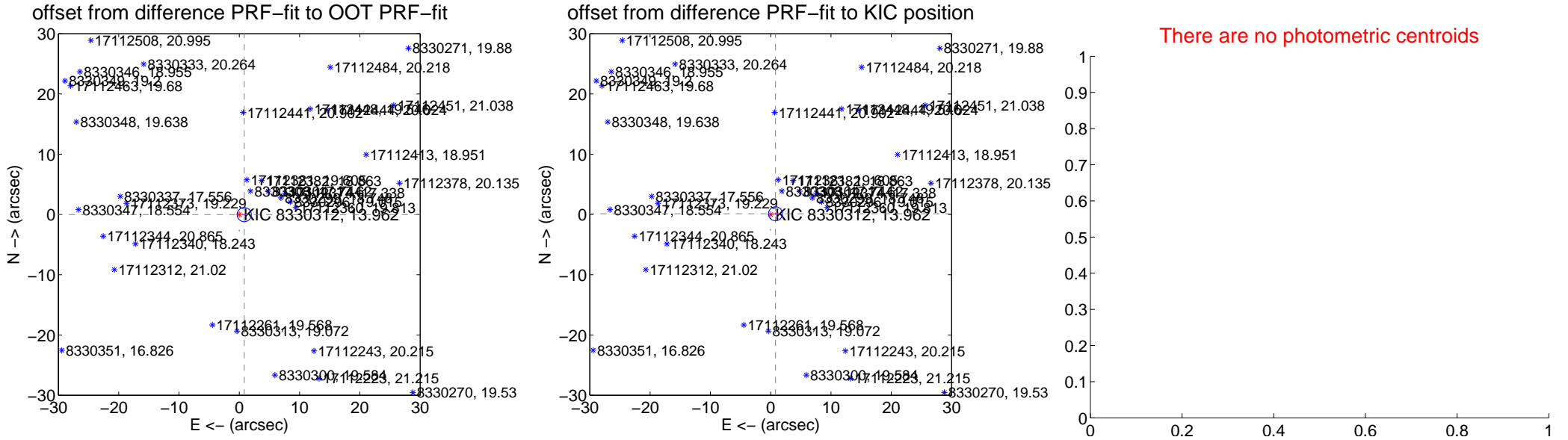
DV Centroid Data

Supplemental centroid analysis for 008330312-01. Kepler magnitude: 13.96. Transit SNR 0.00

There are 8 quarters with good PRF difference image offsets

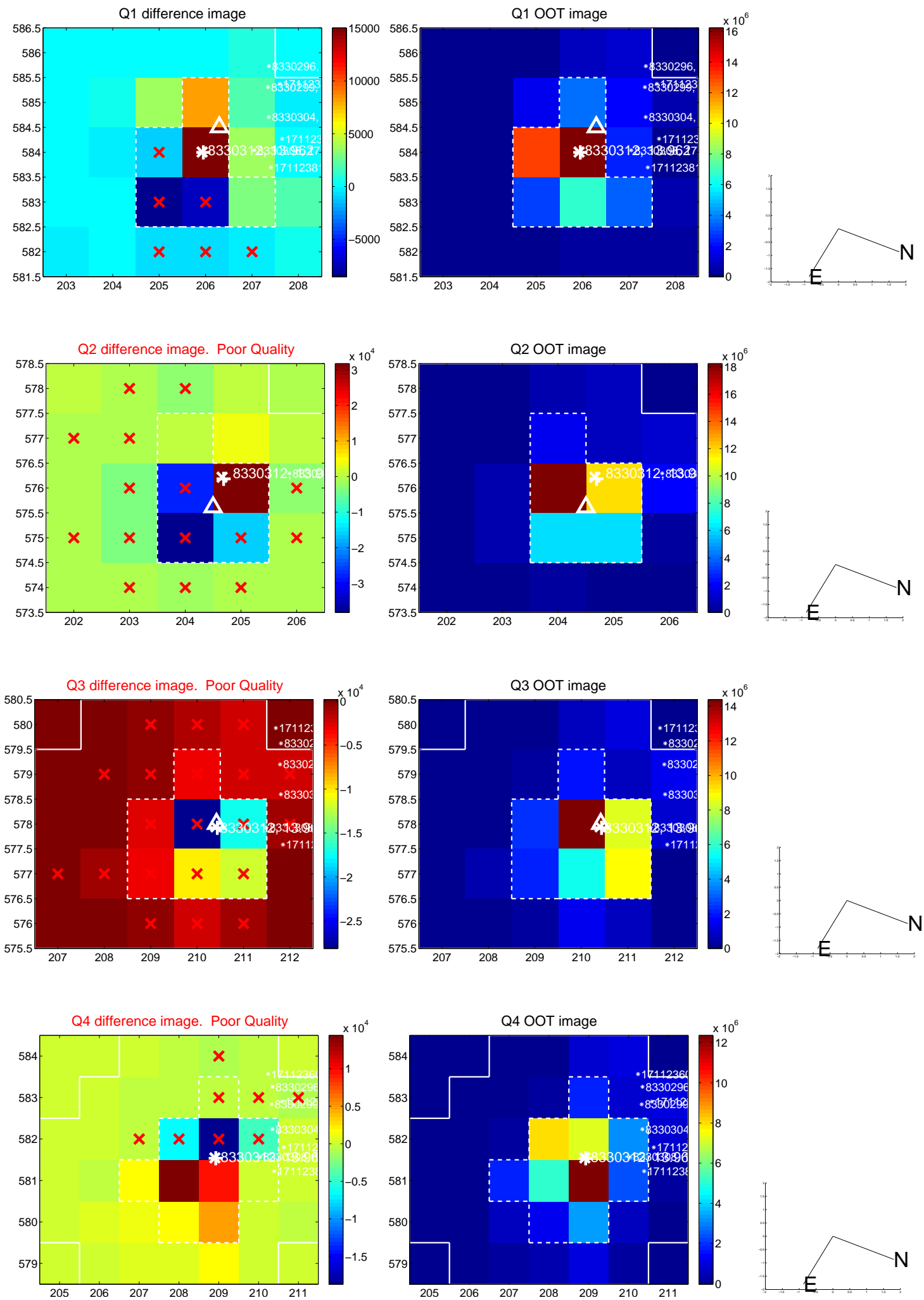
The direct PRF centroid is offset from the target star catalog position by about 0.10 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.826 ± 0.392	2.11	-0.826 ± 0.392	-0.022 ± 0.201
PRF-fit source offset from KIC position	0.805 ± 0.386	2.08	-0.796 ± 0.386	0.120 ± 0.216
photometric centroid source offset	—	—	—	—

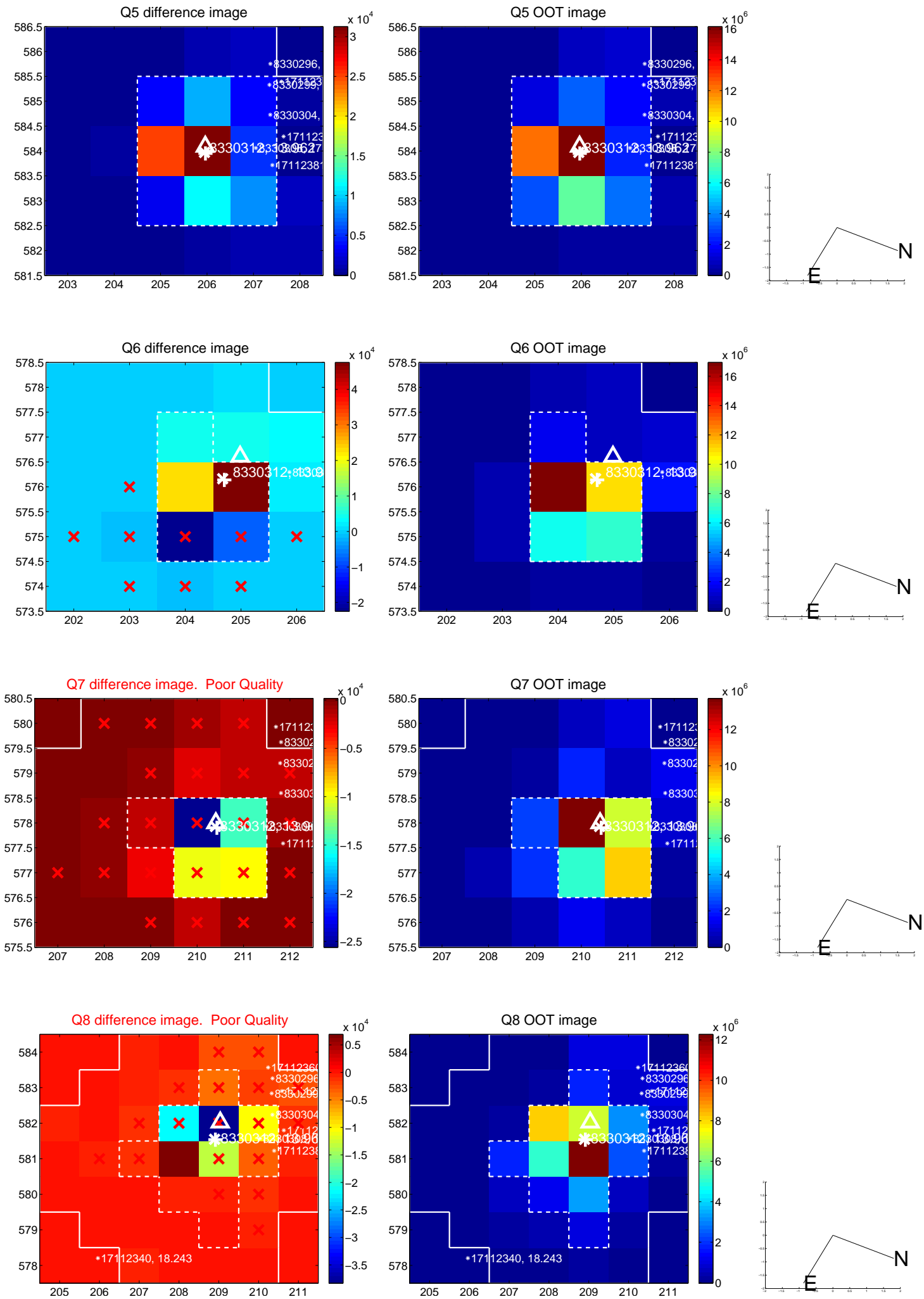


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

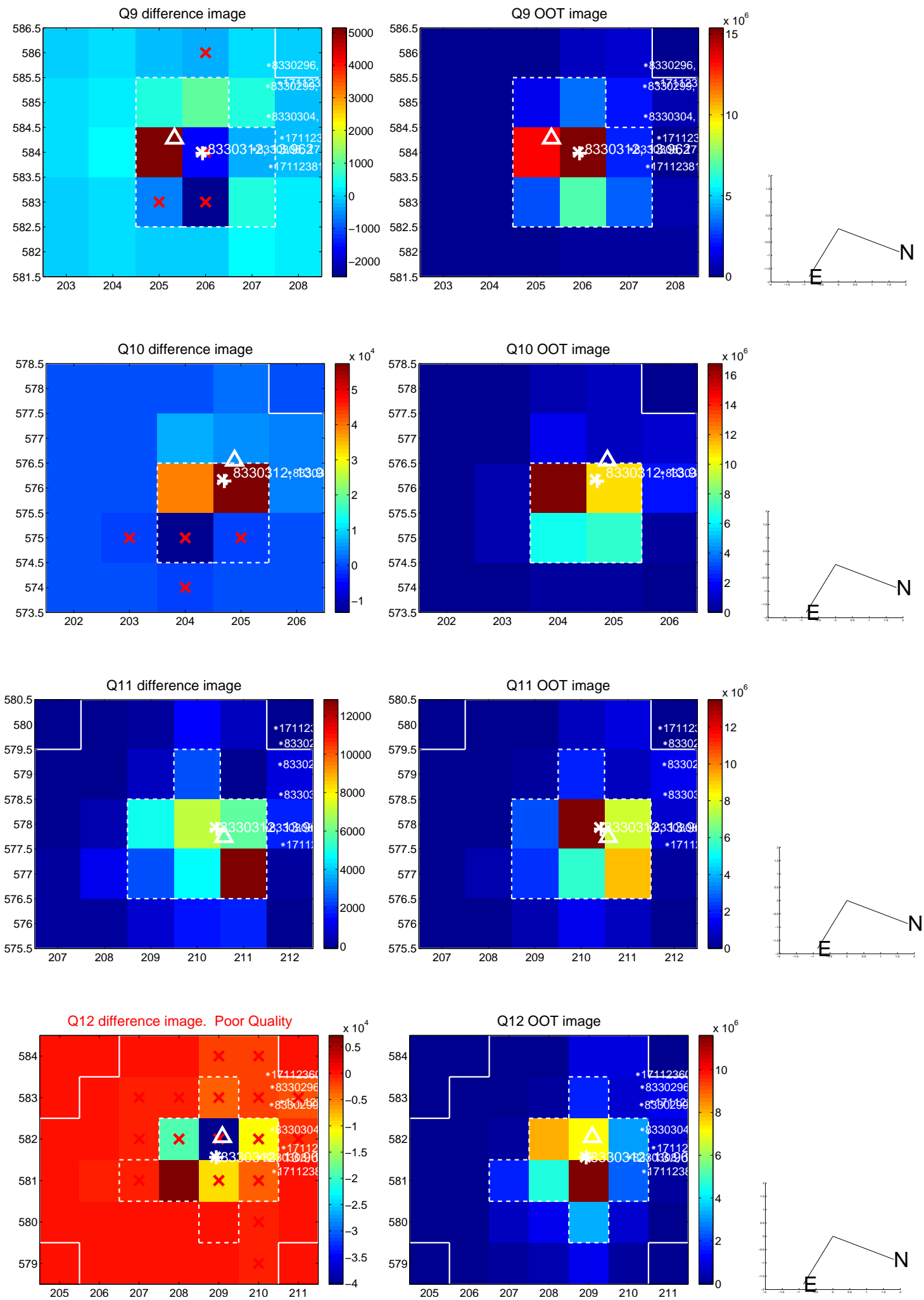
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



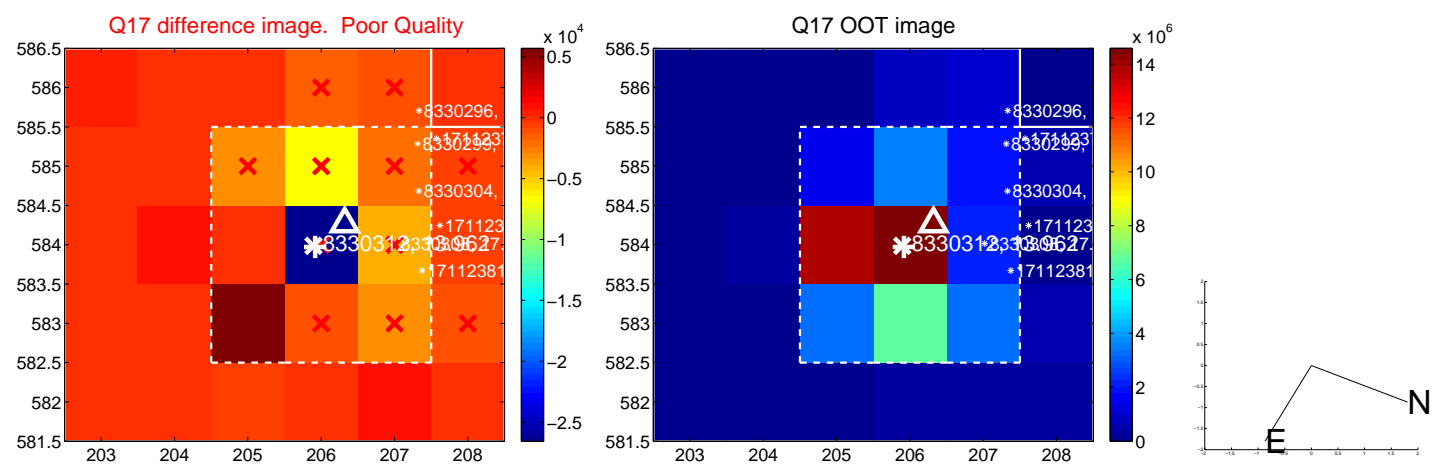
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

