

KIC 005354183

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})
005354183-01	OBS	No	0.916171	132.380949	1.6	9.018	8.1	2.5	1.84	7219	0.24	17293.72

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005354183-01	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.

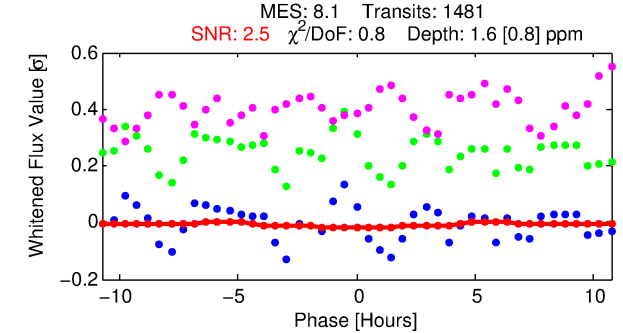
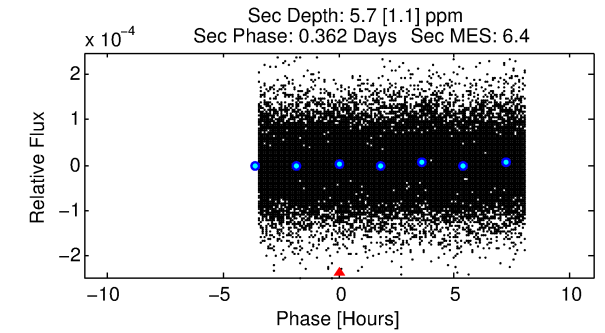
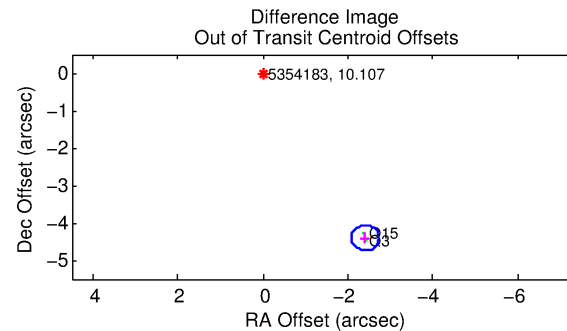
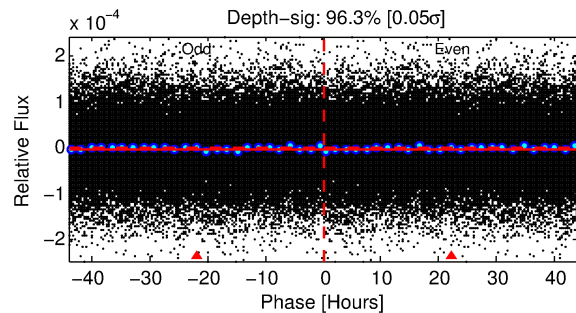
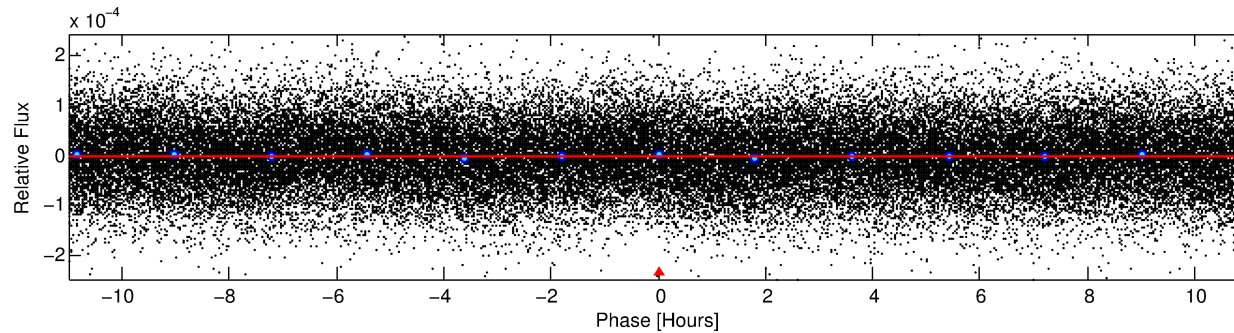
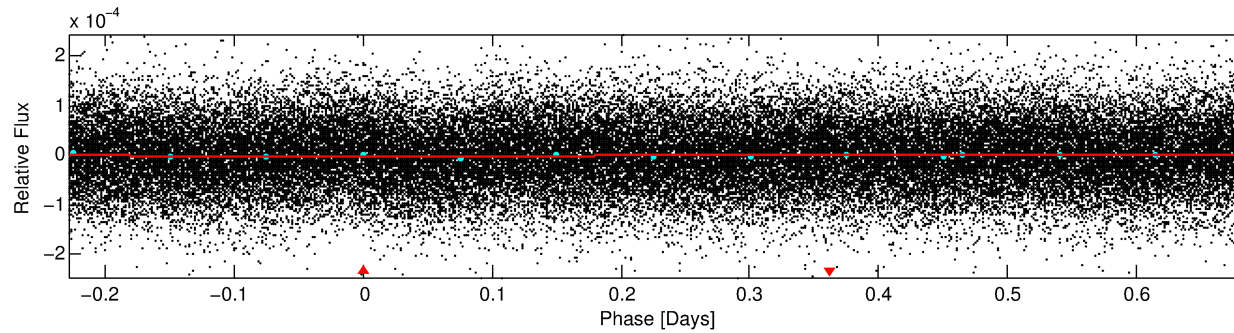
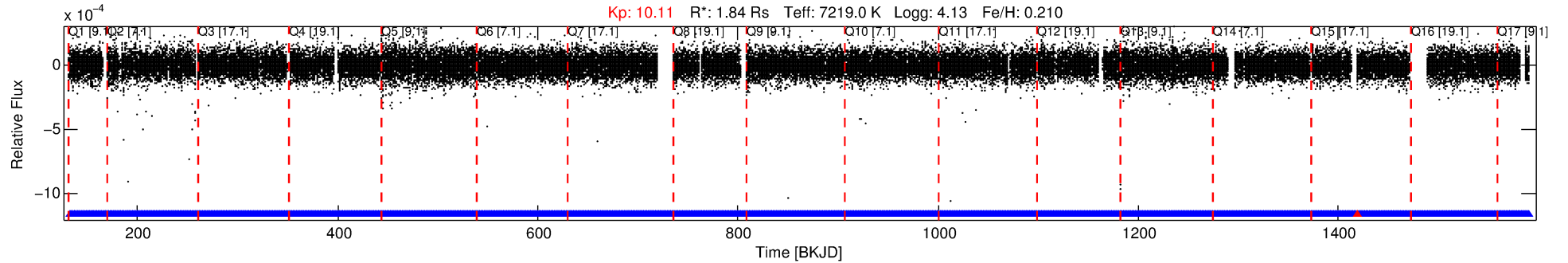
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005354183-01

No Significant Match Found

DV One-Page Summary

KIC: 5354183 Candidate: 1 of 1 Period: 0.916 d



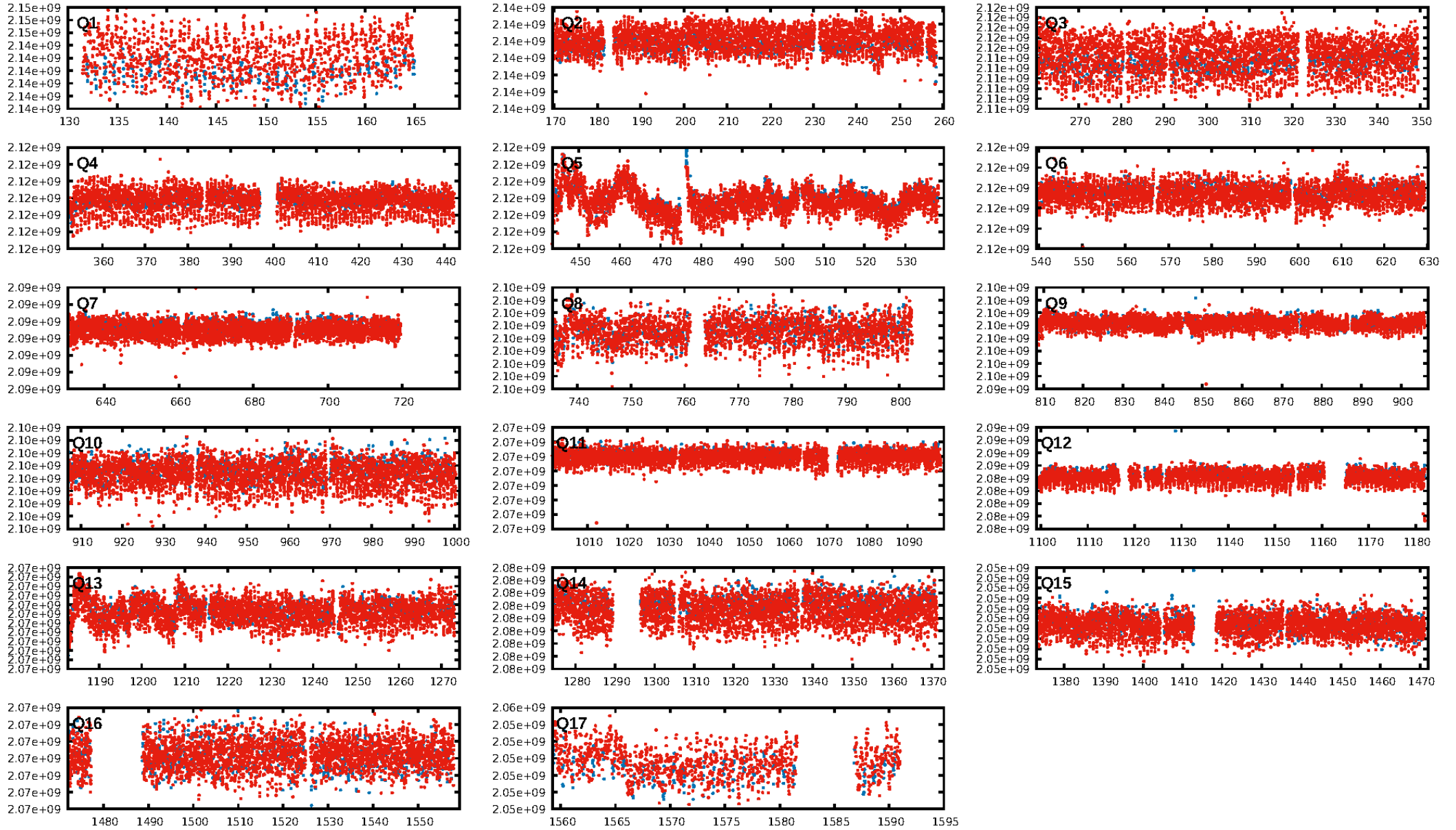
DV Fit Results:

Period = 0.91617 [0.00007] d
Epoch = 132.3809 [0.0227] BKJD
Rp/R* = 0.0012 [0.0039]
a/R* = 1.04 [1.49]
b = 0.30 [60.26]
Seff = 17293.72 [7161.13]
Teq = 2924 [303] K
Rp = 0.24 [0.78] Re
a = 0.0218 [0.0057] AU
Ag = 26.57 [174.88] [0.15 σ]
Teffp = 10265 [16868] K [0.44 σ]

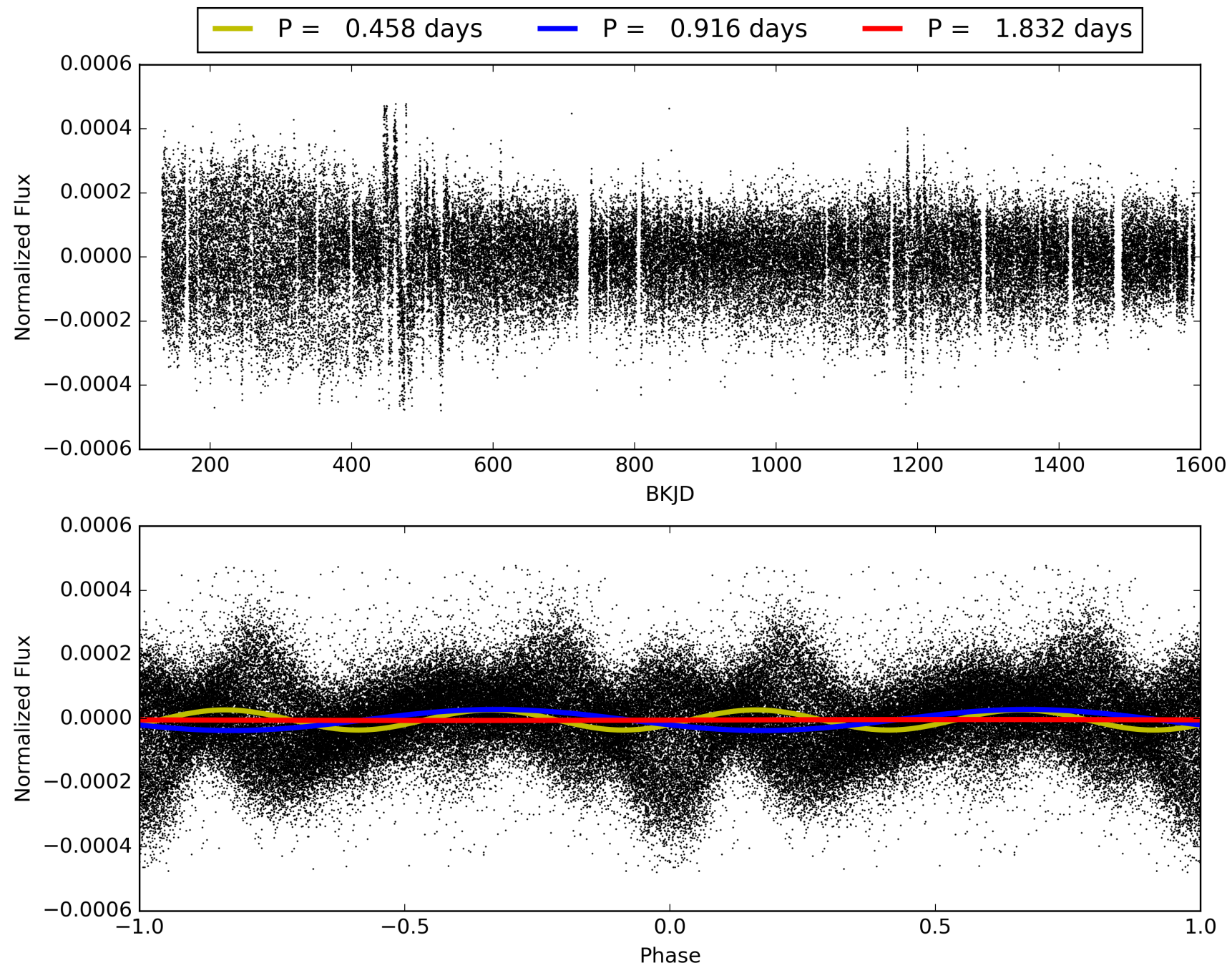
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [1413/1414]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 5.023 arcsec [45.78 σ]
KicOffset-rm: 4.527 arcsec [40.48 σ]
OotOffset-st: 0/2/0/0 [2]
KicOffset-st: 0/2/0/0 [2]
DiffImageQuality-fgm: 1.00 [2/2]
DiffImageOverlap-fno: 1.00 [17/17]

TCE 005354183-01, PDC Light Curves

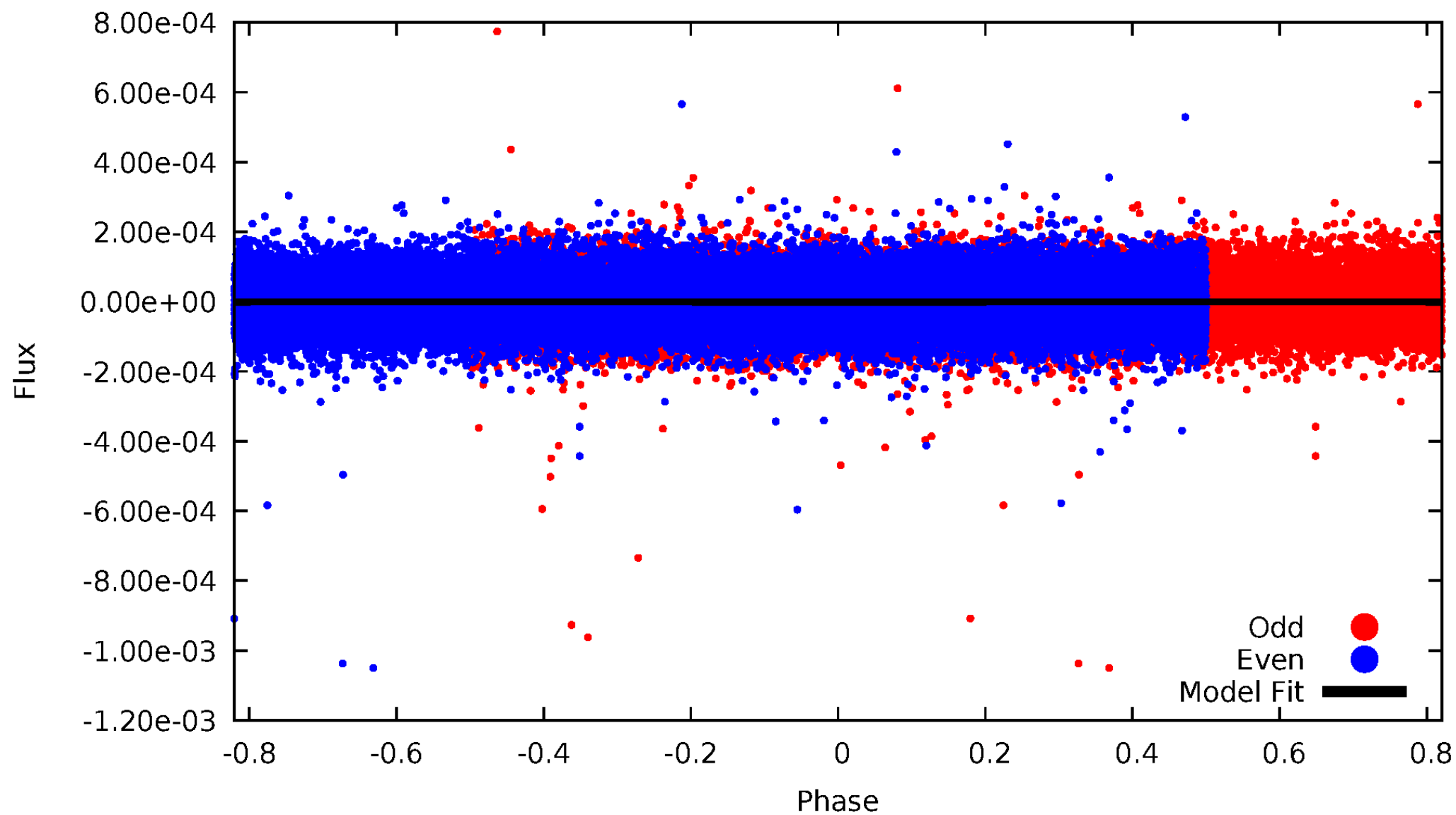


TCE 005354183-01



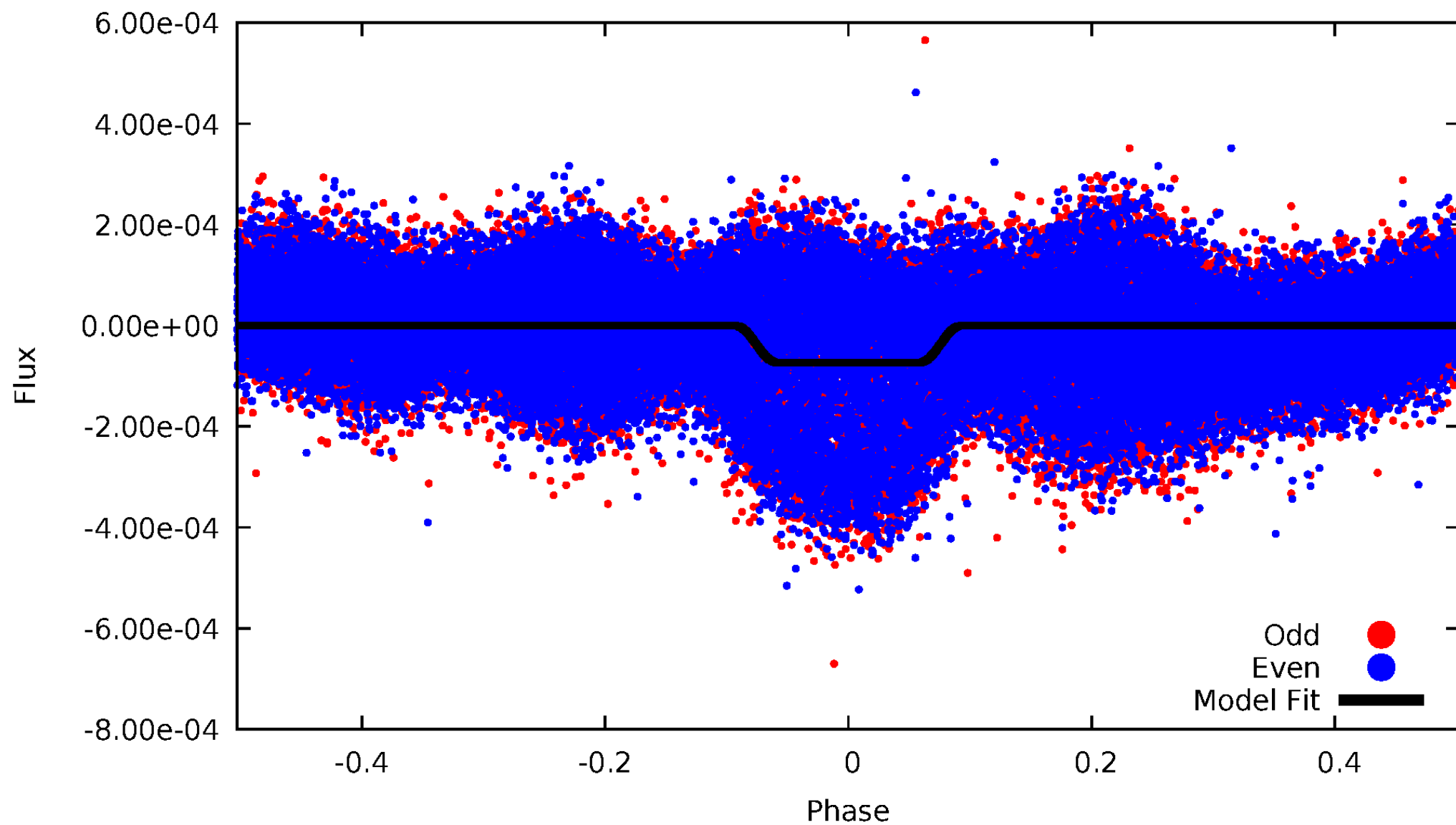
DV Odd/Even

TCE 005354183-01



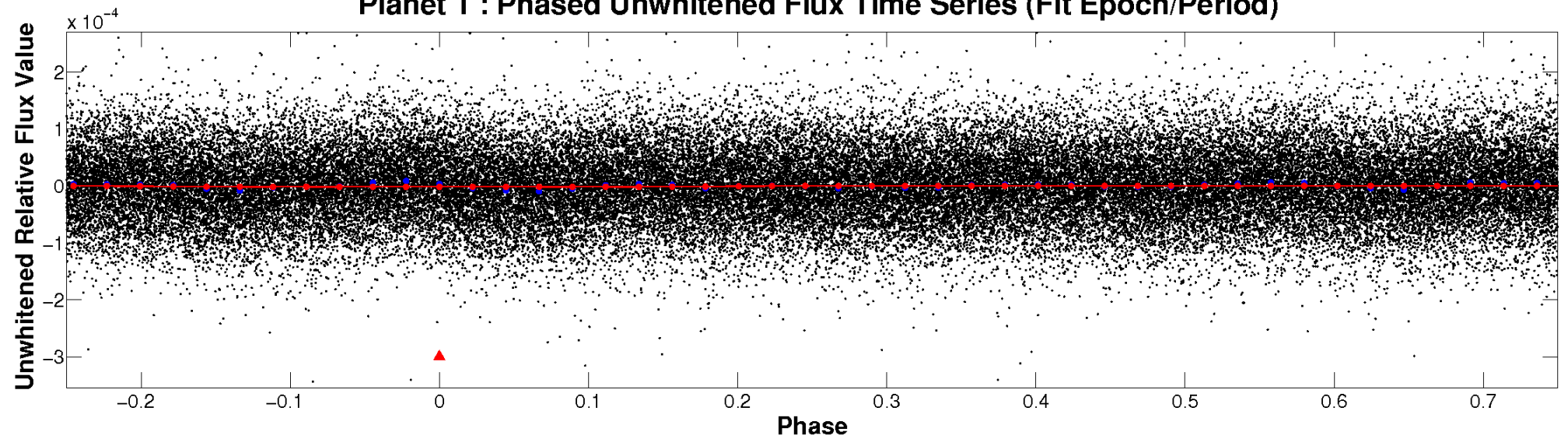
ALT Odd/Even

TCE 005354183-01

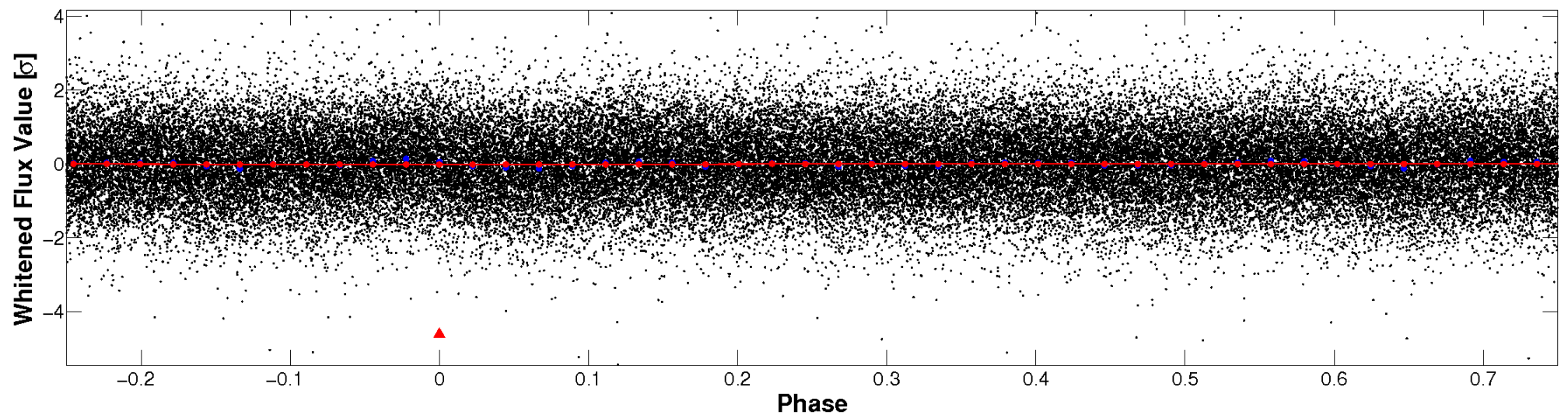


Non-Whitened Vs. Whitened Light Curve

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

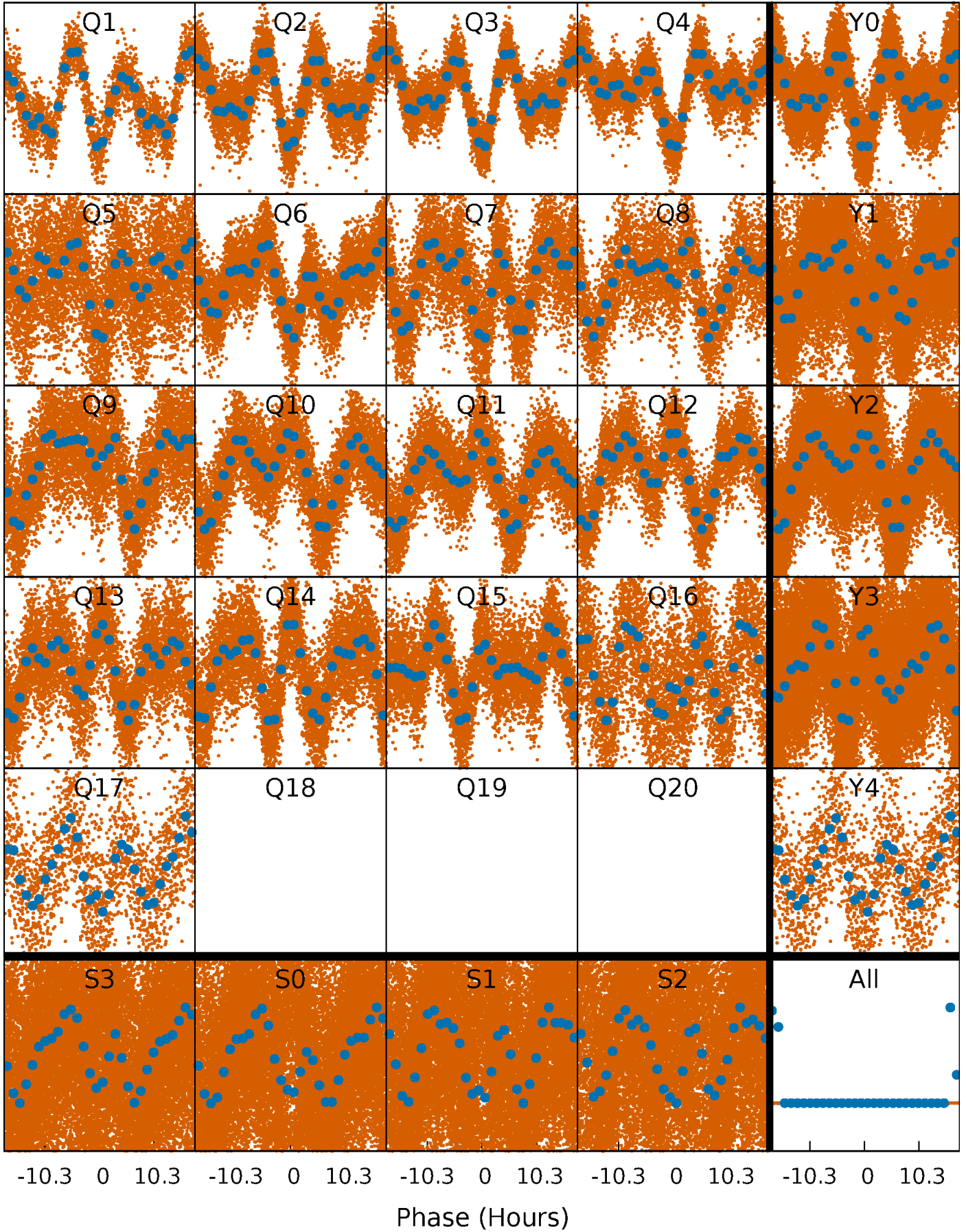


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



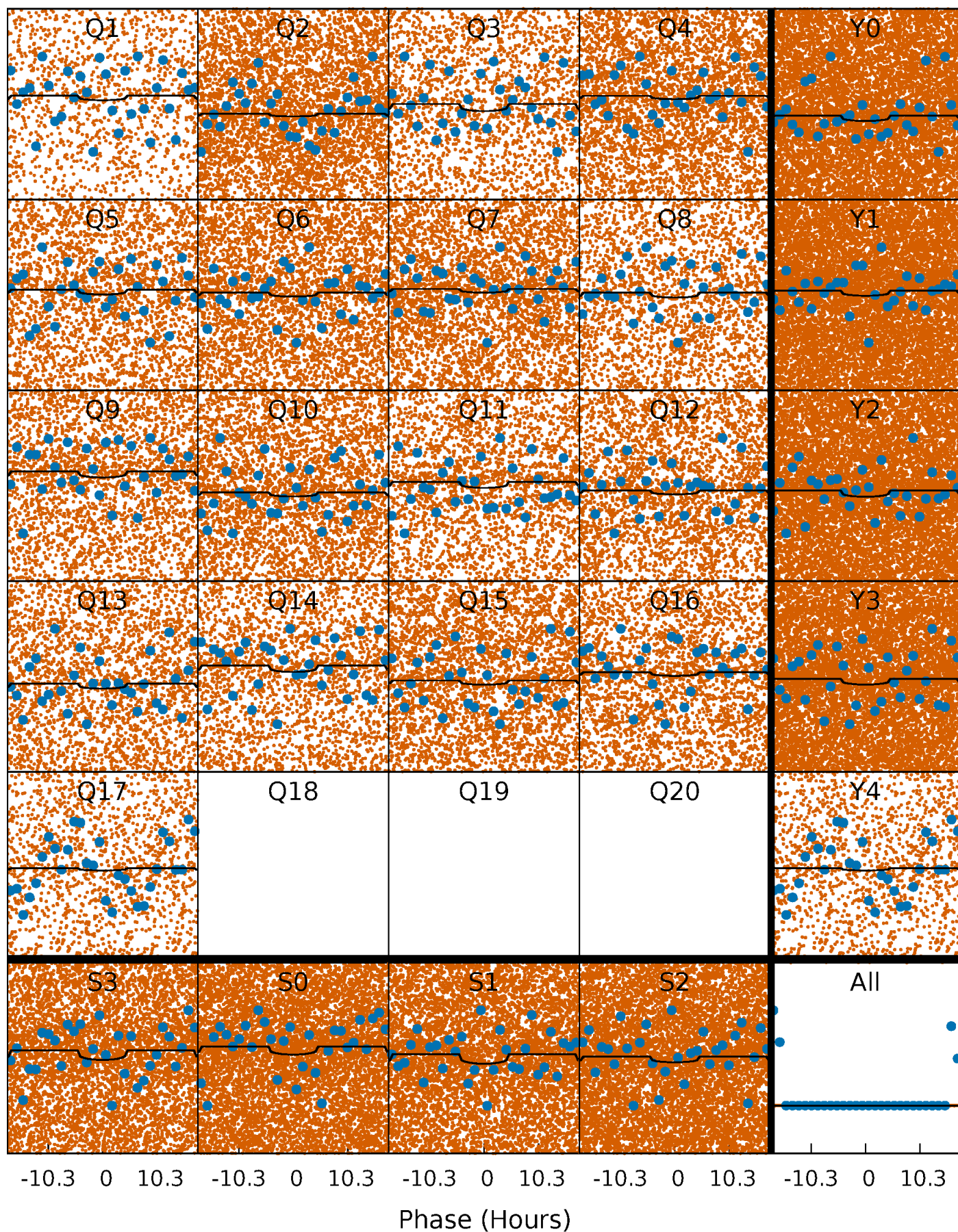
PDC Quarter-Phased Transit Curves

TCE 005354183-01 P= 0.916171 Days $T_0=132.380949$ (BKJD)



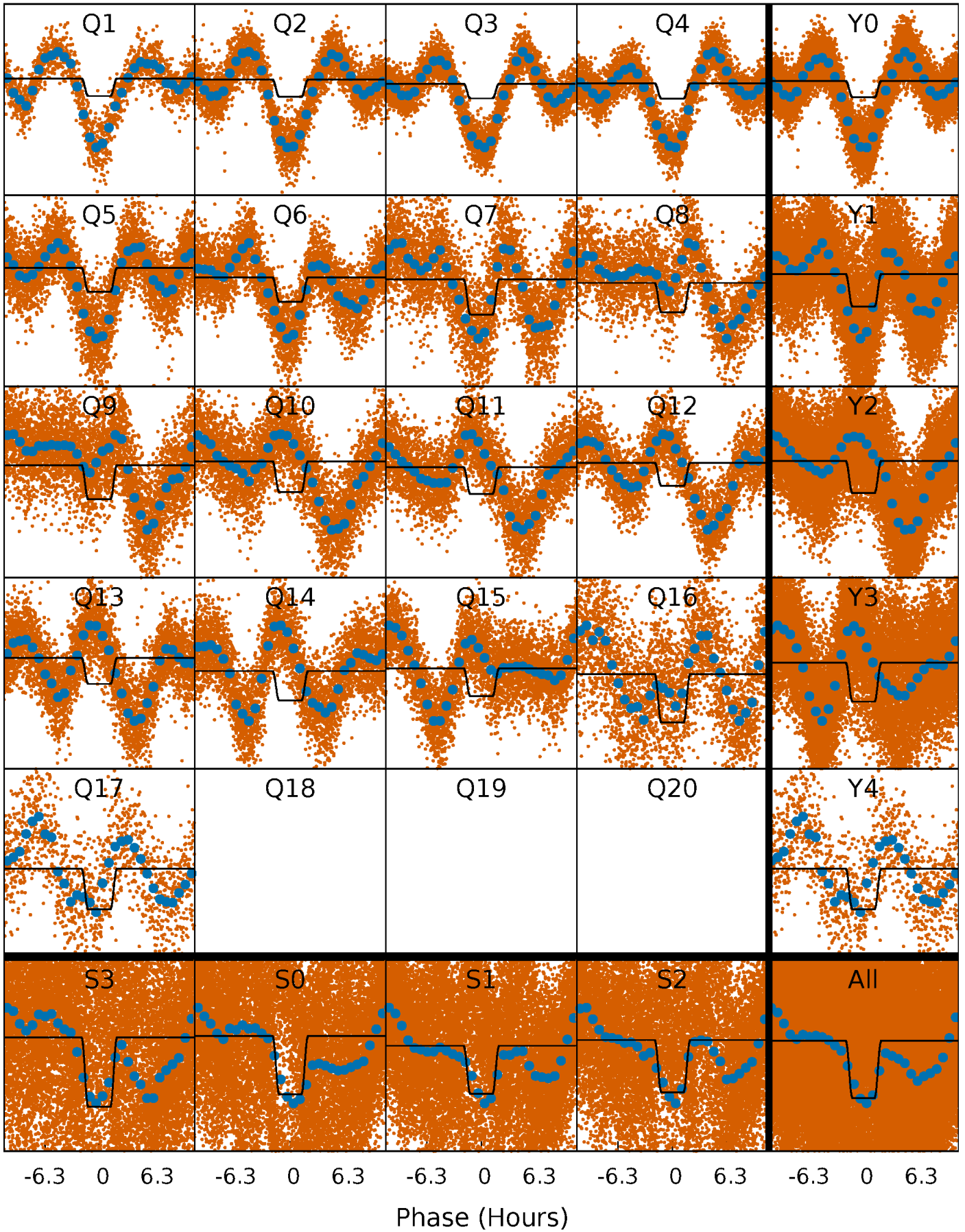
DV Quarter-Phased Transit Curves

TCE 005354183-01 P= 0.916171 Days $T_0=132.380949$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

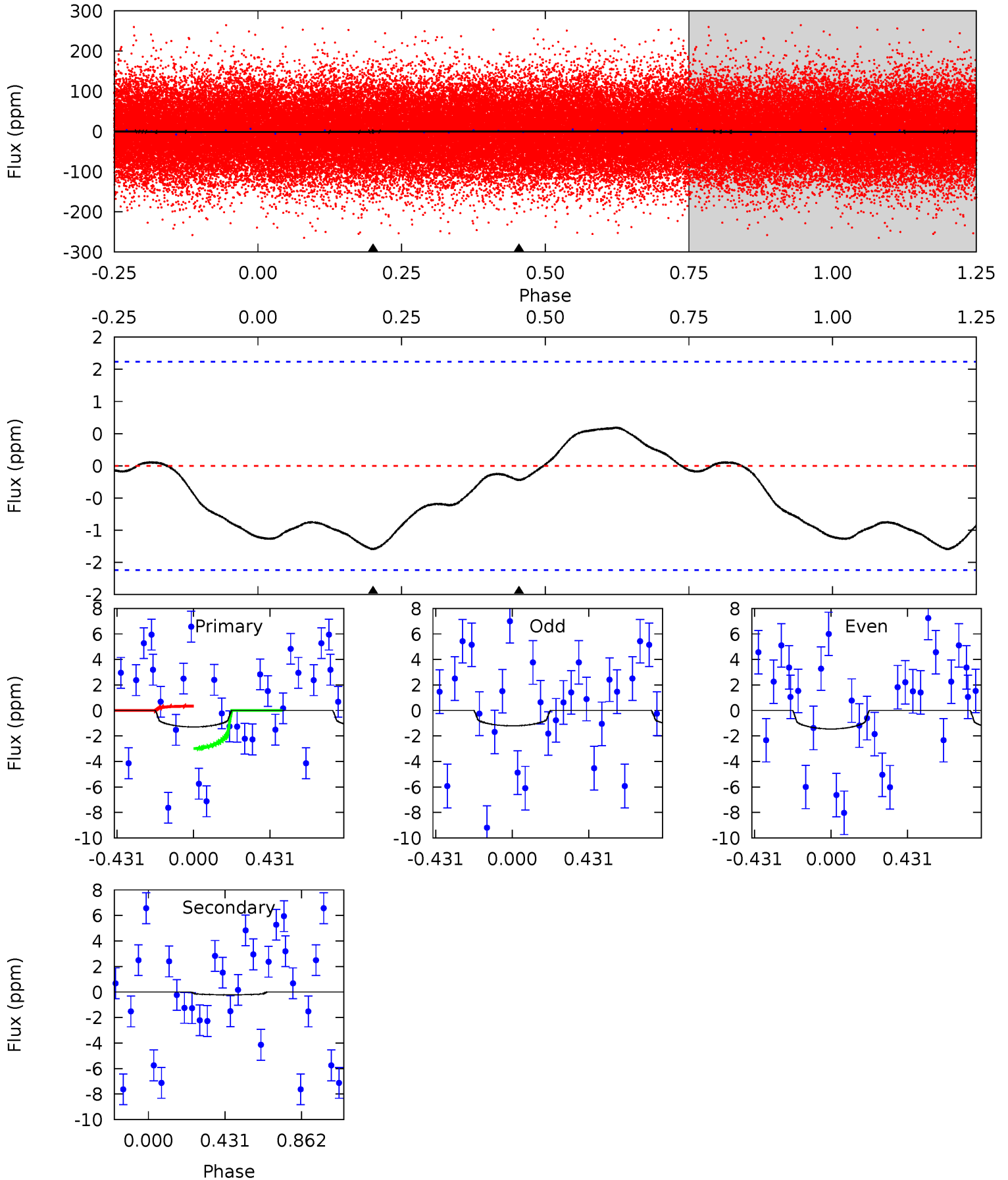
TCE 005354183-01 P= 0.916217 Days $T_0=132.373442$ (BKJD)



DV Model-Shift Uniqueness Test

005354183-01, P = 0.916171 Days, E = 131.464778 Days

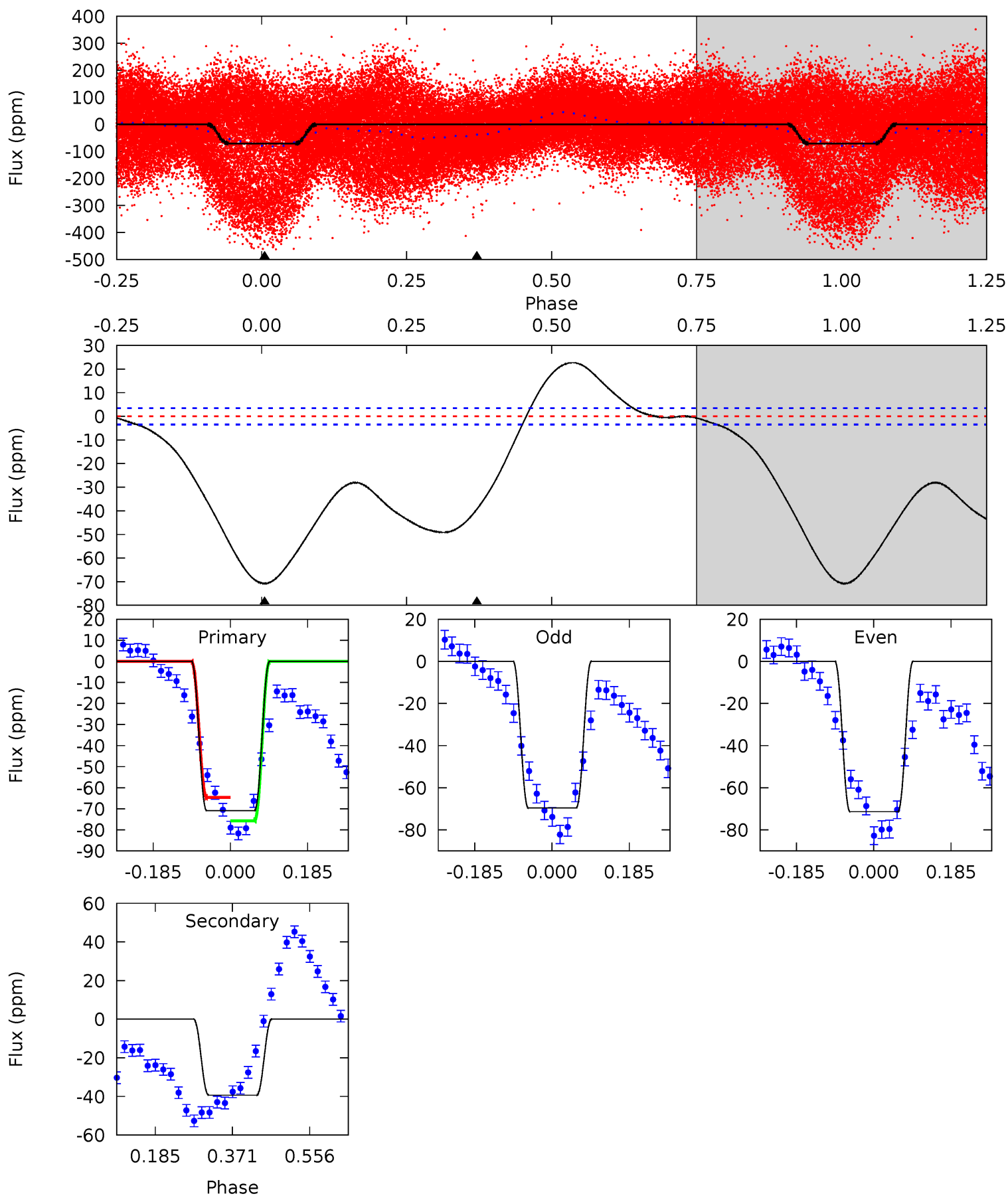
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.40	0.58	0	0	4.25	0.79	0.26	3.40	3.40	0.58	0.58	0.32	-39.1	0.31	3.47



Alt Model-Shift Uniqueness Test

005354183-01, P = 0.916217 Days, E = 131.457225 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
90.4	50.2	0	0	4.43	1.32	9.14	90.4	90.4	50.2	50.2	1.15	5.25	0.24	5.57



Stellar Parameters For KIC 005354183

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	7219^{+200}_{-343}	$4.126^{+0.105}_{-0.195}$	$0.210^{+0.150}_{-0.350}$	$1.839^{+0.590}_{-0.318}$	$1.650^{+0.204}_{-0.226}$	$0.373^{+0.188}_{-0.200}$
	+3%/-5%	+3%/-5%	+71%/-167%	+32%/-17%	+12%/-14%	+50%/-53%
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 005354183-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-0 \pm 0	$0.60^{+0.65}_{-0.41}$	4121^{+323}_{-270}	-3516^{+8036}_{-511}	$0.089^{+1.045}_{-0.191}$
Alt.	-39 \pm 1	$1.81^{+0.90}_{-0.84}$	4113^{+330}_{-254}	5888^{+2512}_{-1074}	$3.147^{+7.629}_{-1.748}$

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

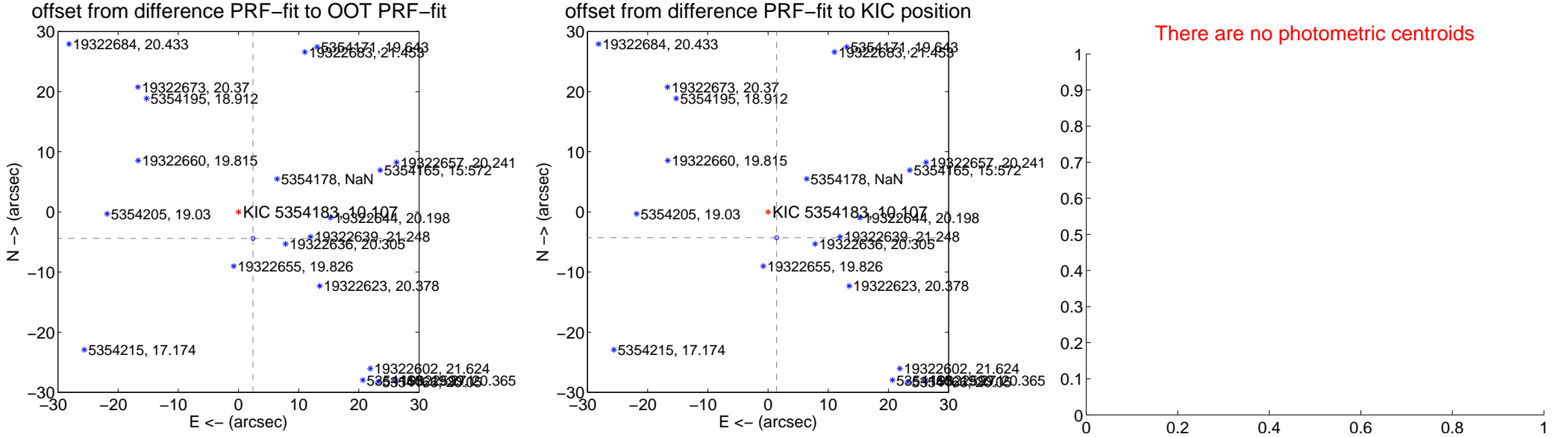
DV Centroid Data

Supplemental centroid analysis for 005354183-01. **Kepler magnitude: 10.11.** Transit SNR 2.47

There are 2 quarters with good PRF difference image offsets

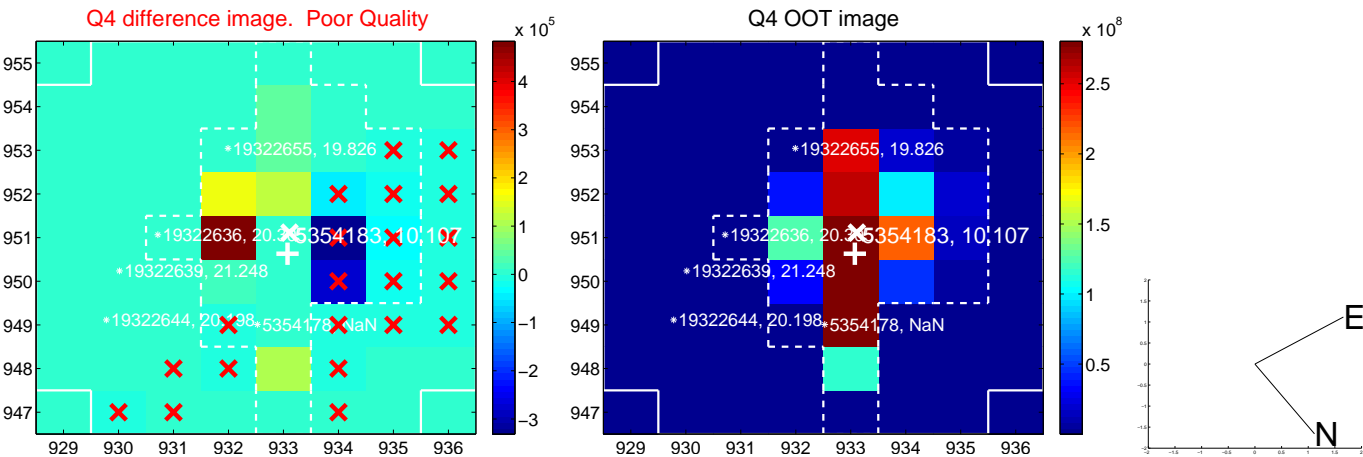
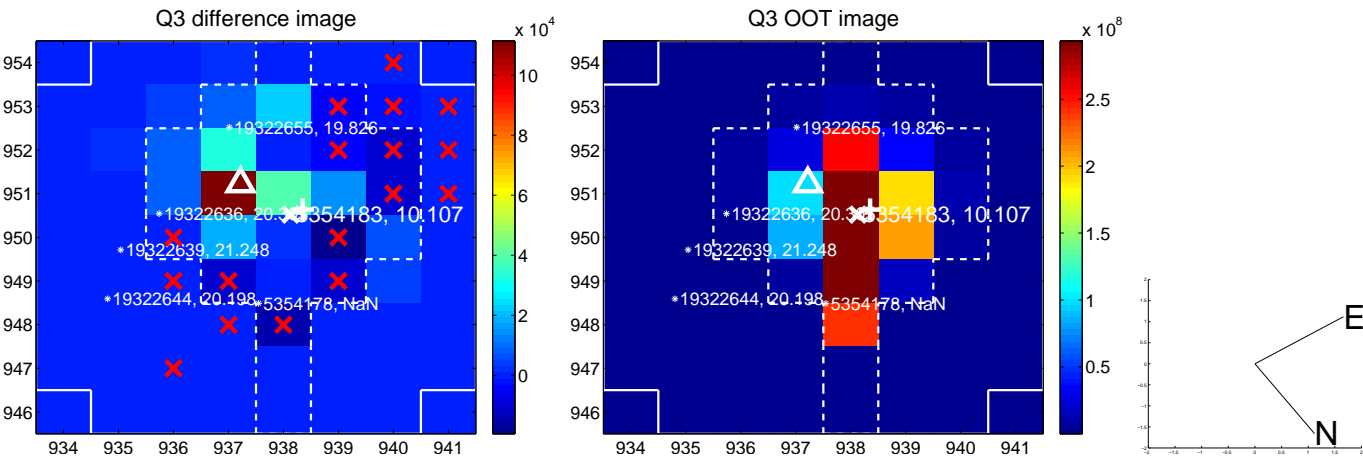
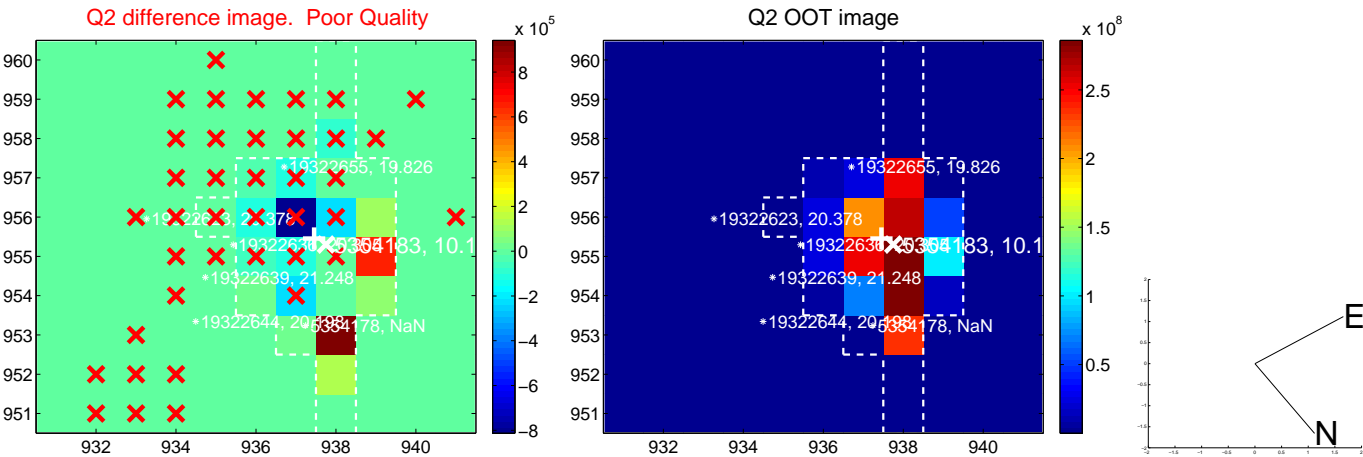
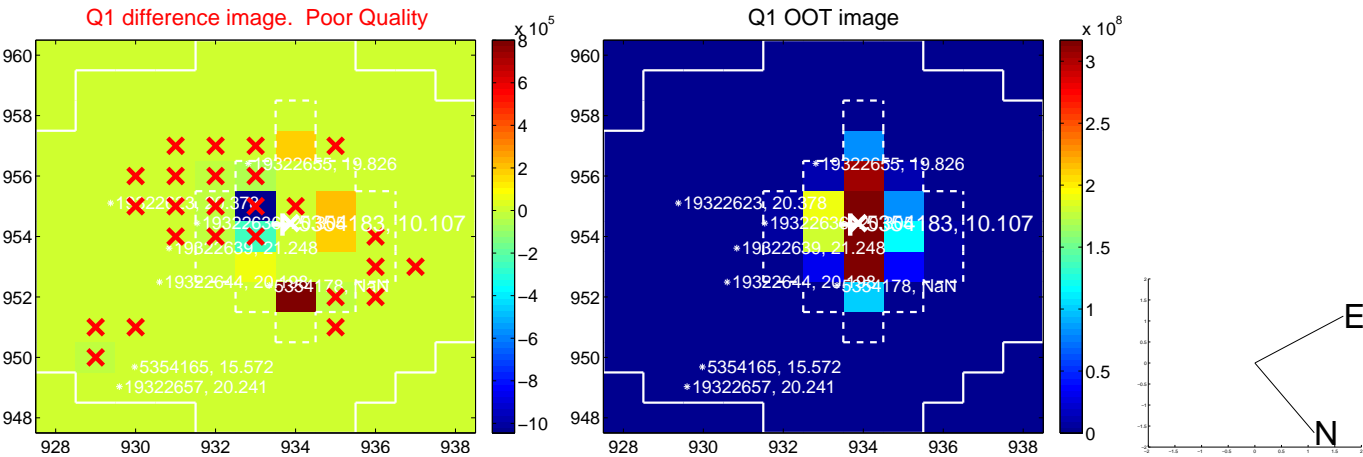
The direct PRF centroid is offset from the target star catalog position by about 0.98 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	5.023 ± 0.110	45.78	-2.408 ± 0.070	-4.408 ± 0.119
PRF-fit source offset from KIC position	4.527 ± 0.112	40.48	-1.426 ± 0.068	-4.297 ± 0.116
photometric centroid source offset	—	—	—	—

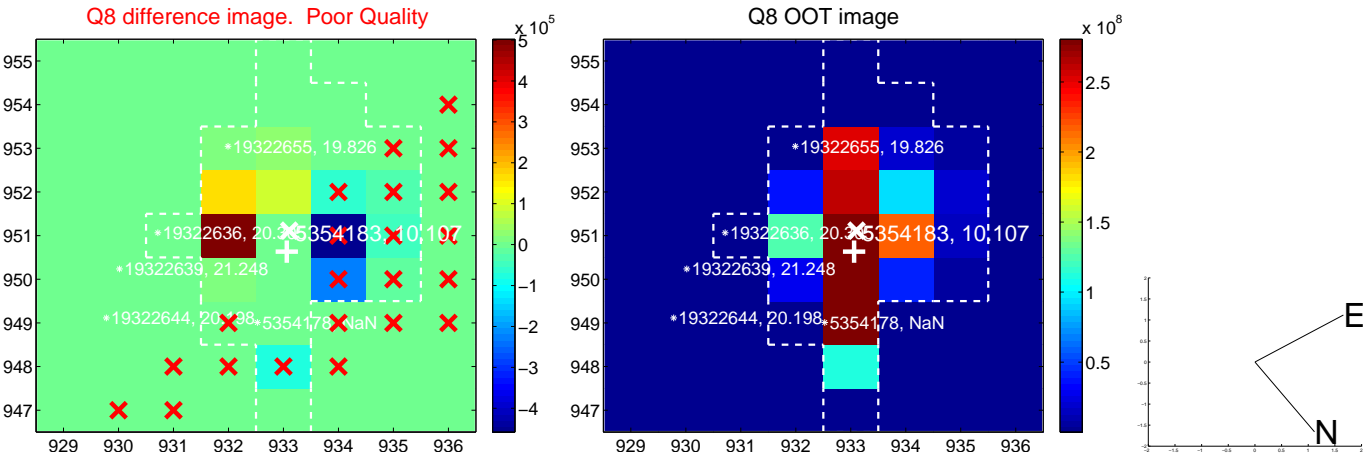
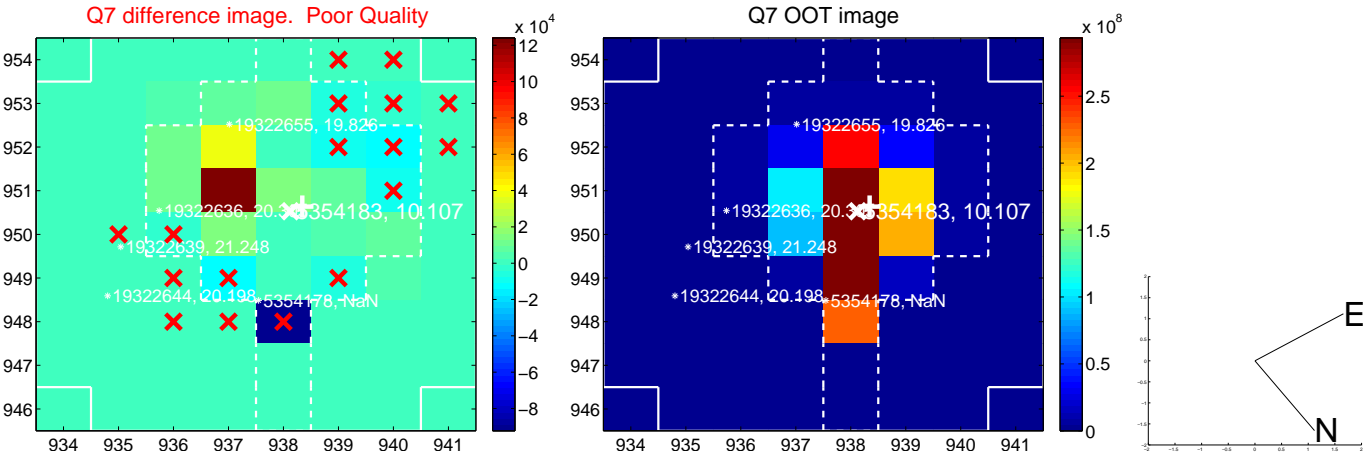
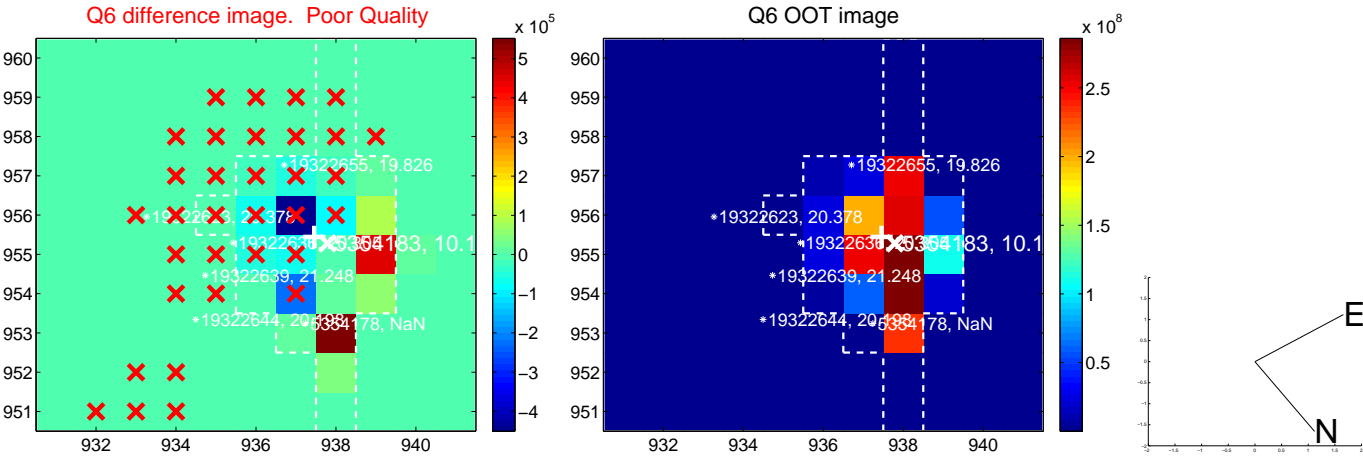
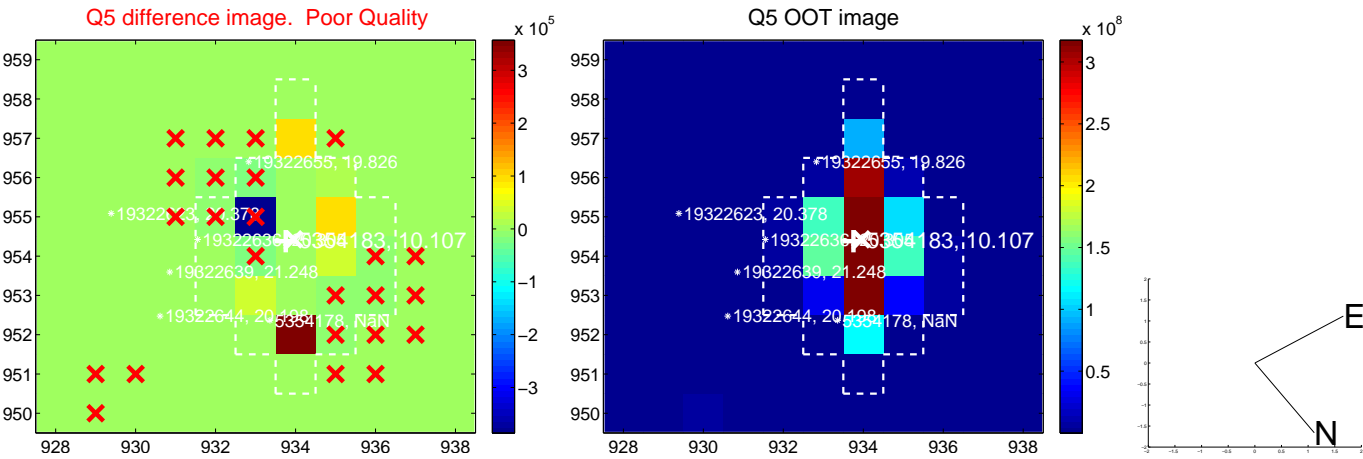


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

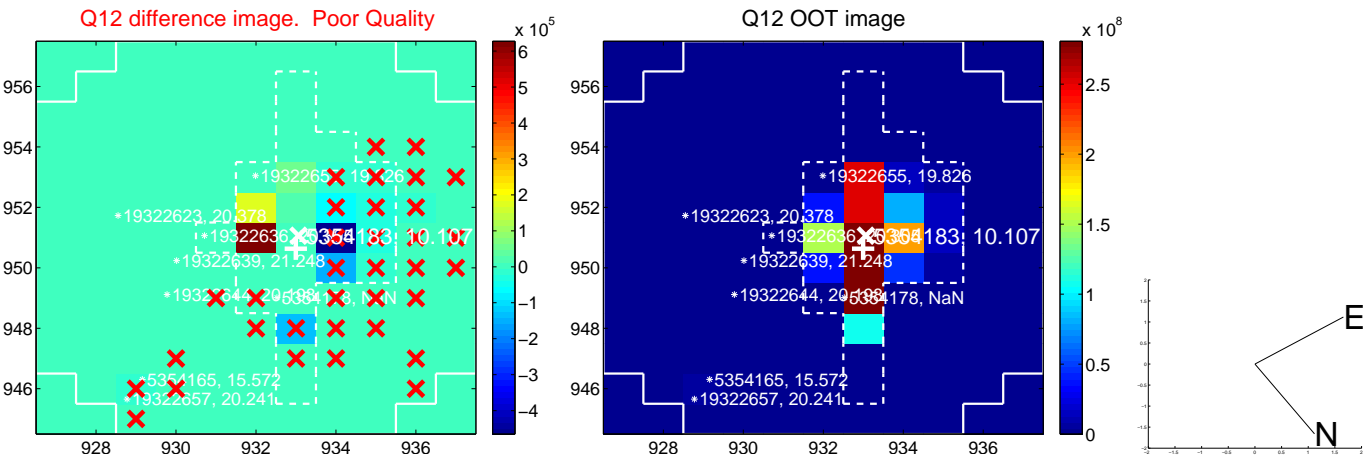
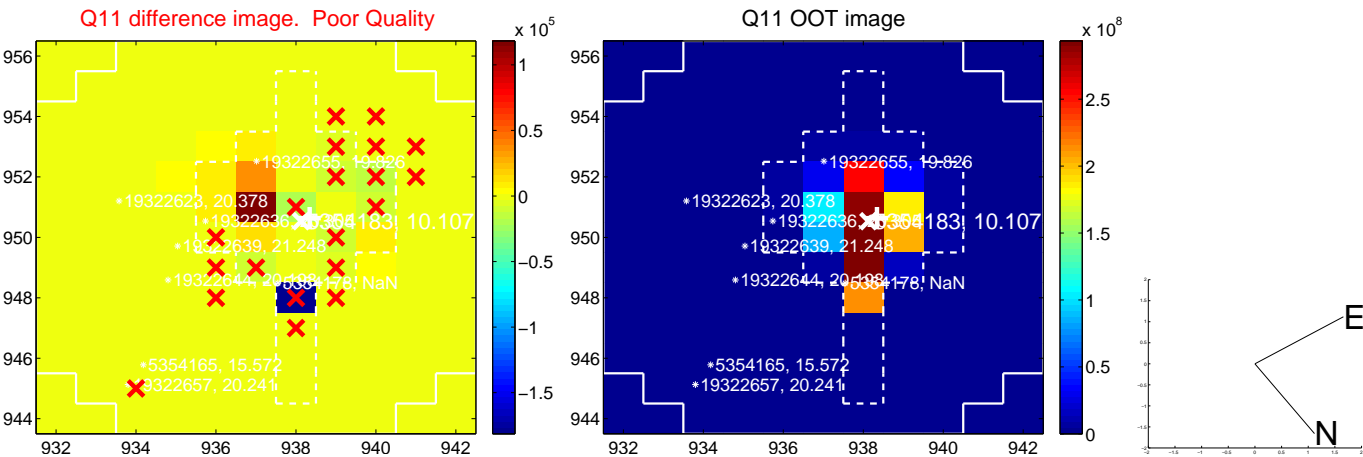
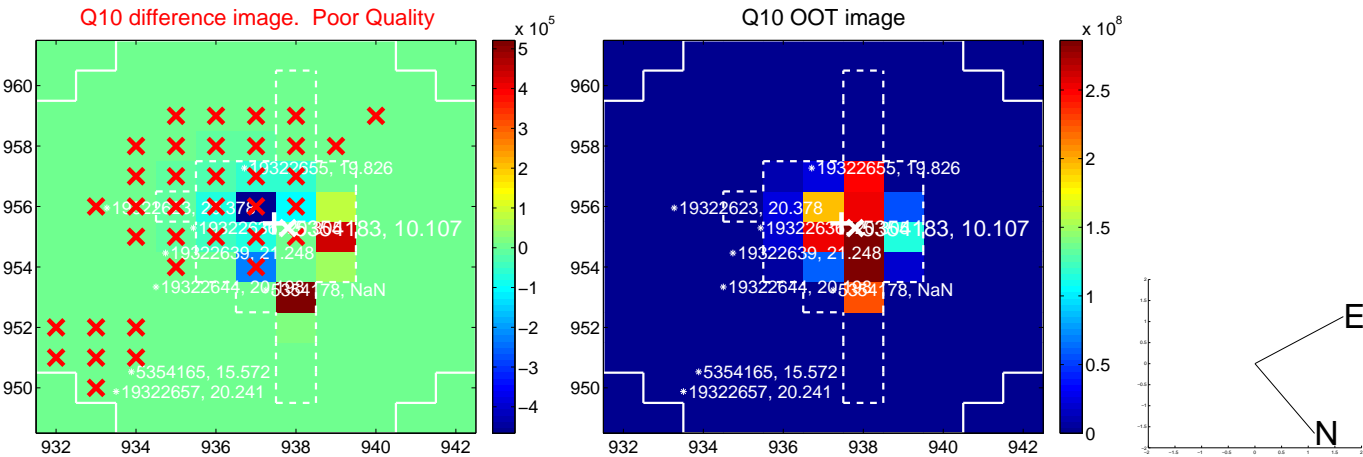
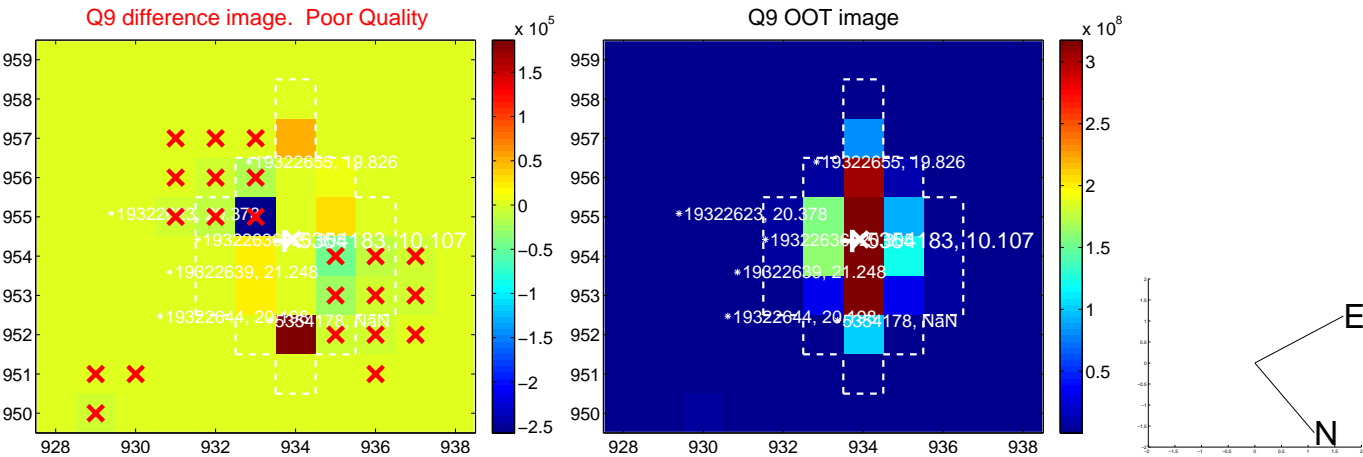
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



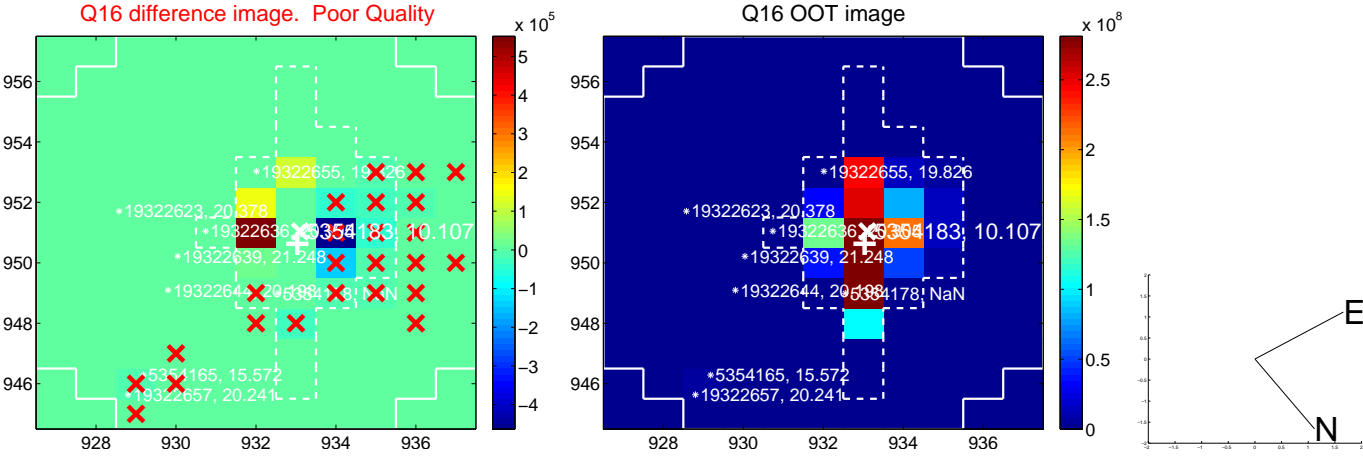
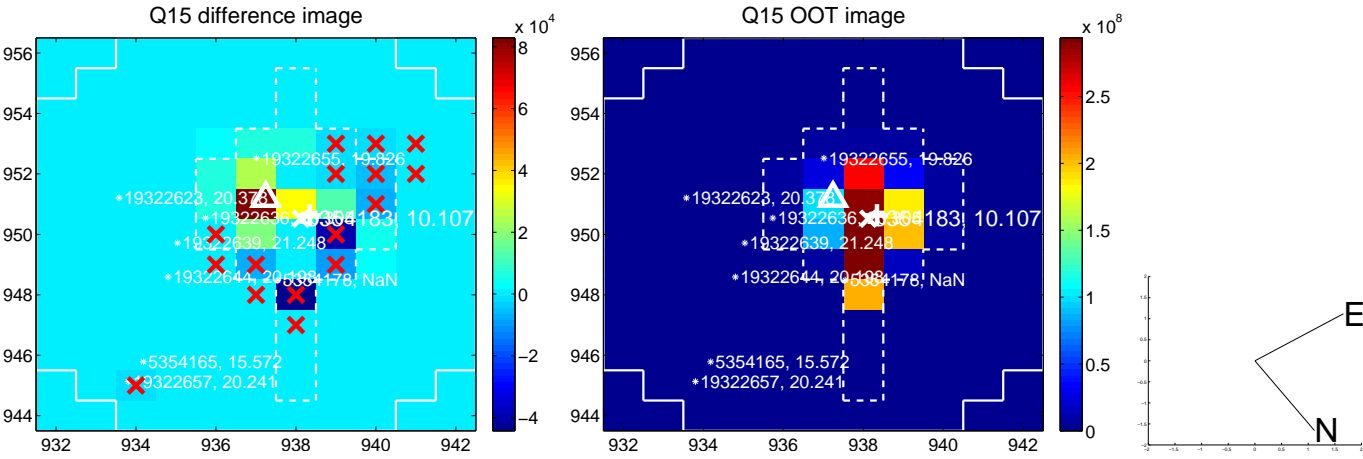
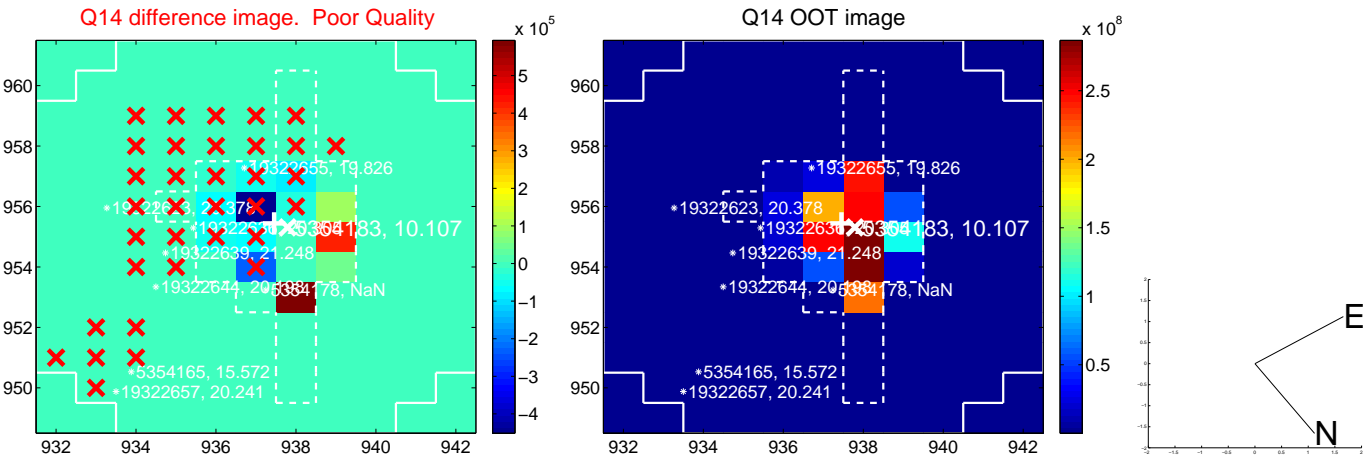
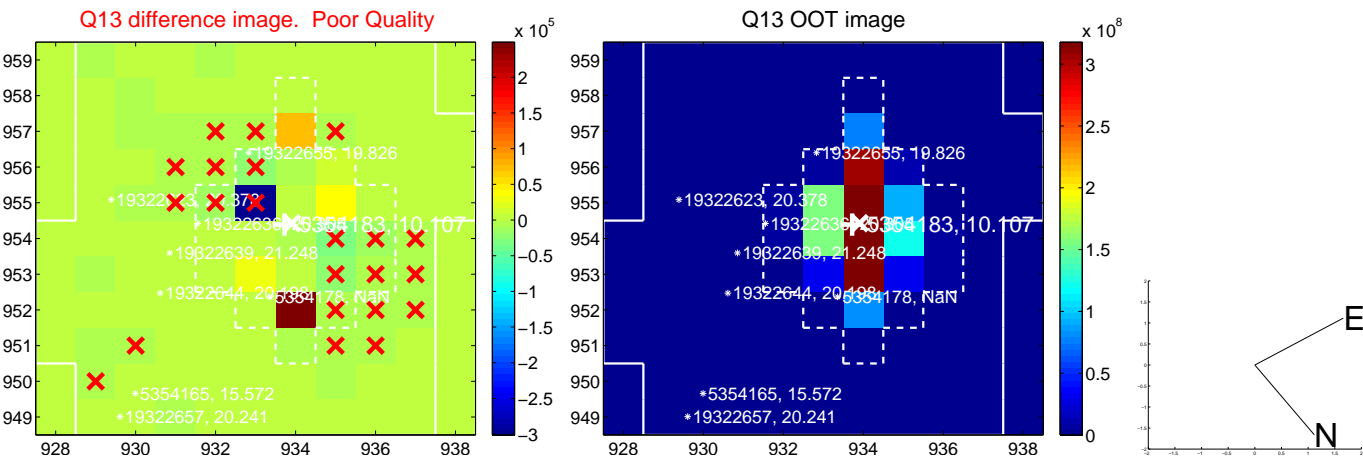
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



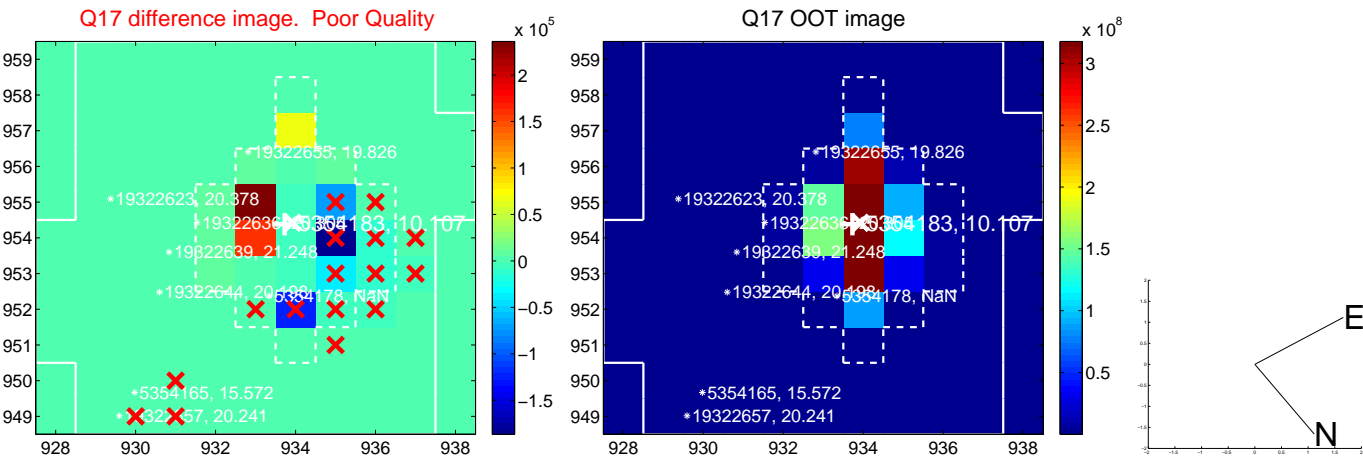
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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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

