

KIC 010195933

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})
010195933-01	OBS	No	5.685713	132.886614	83.7	27.162	9.7	9.1	0.78	5481	0.72	138.87

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010195933-01	OBS	FP	0.00	1	0	1	0	LPP_DV—CENT_RESOLVED_OFFSET—HALO_GHOST

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

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

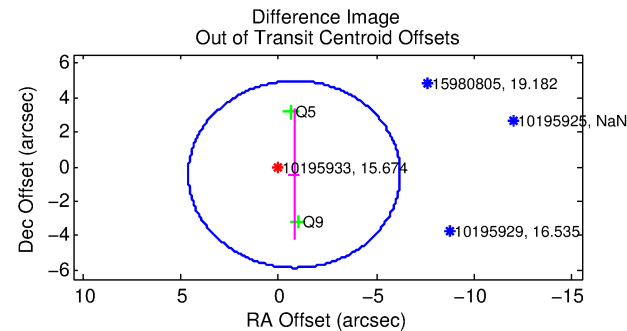
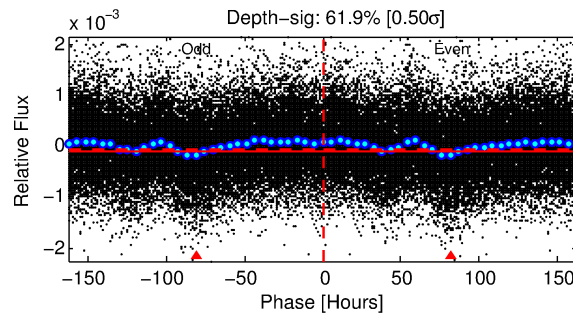
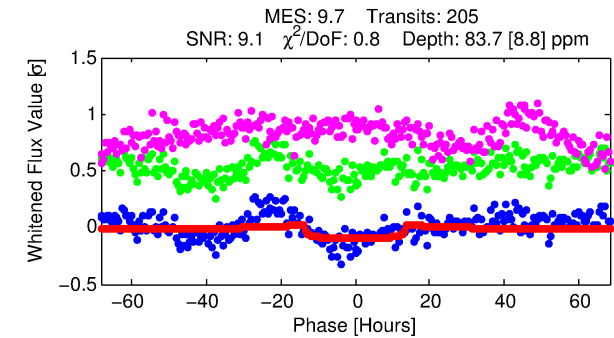
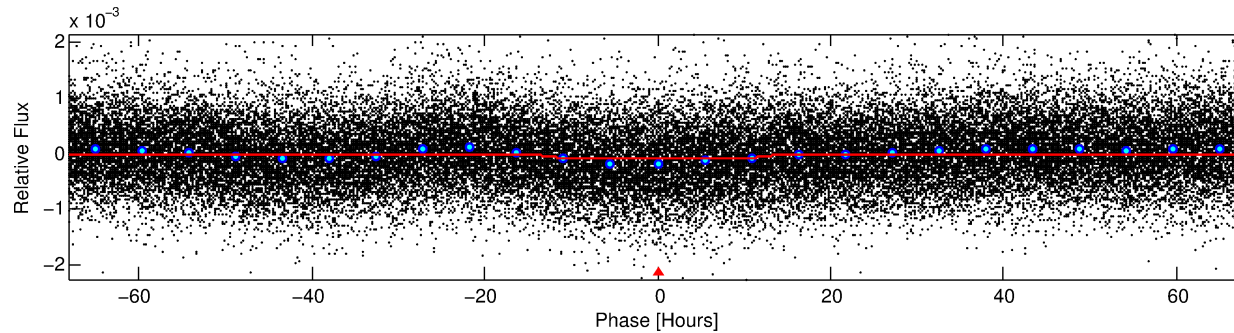
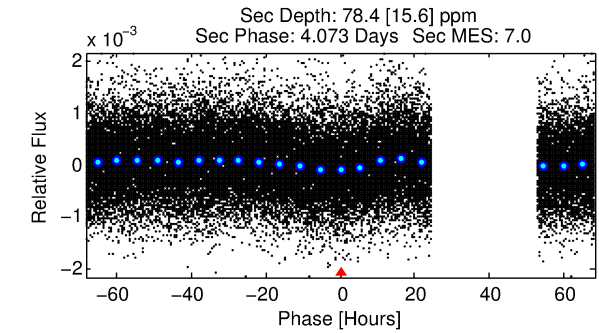
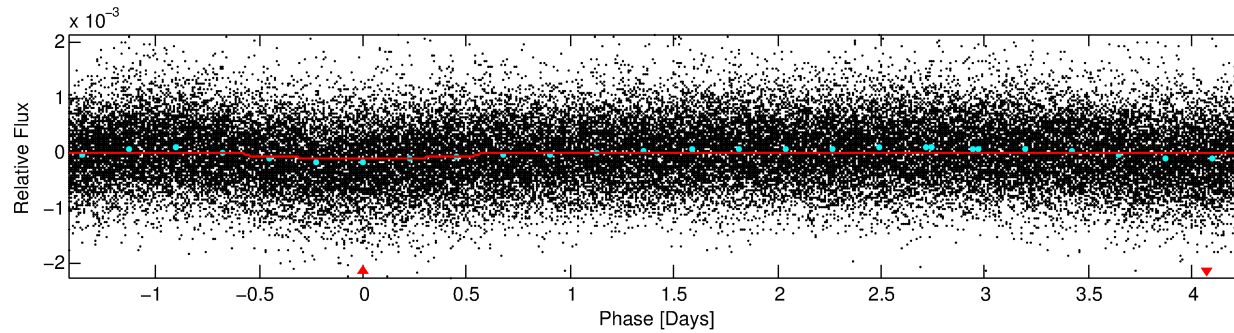
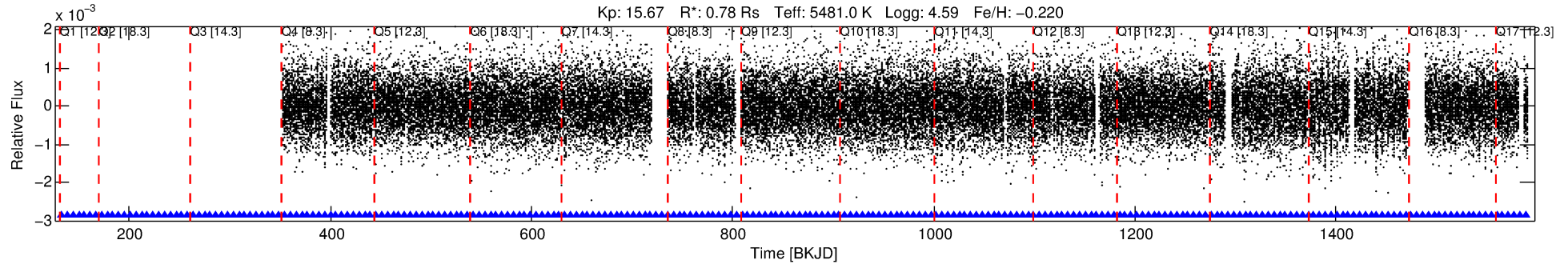
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 010195933-01

No Significant Match Found

DV One-Page Summary

KIC: 10195933 Candidate: 1 of 1 Period: 5.686 d



DV Fit Results:

Period = 5.68571 [0.00017] d
Epoch = 132.8866 [0.0251] BKJD
Rp/R* = 0.0084 [0.0064]
a/R* = 1.62 [3.19]
b = 0.42 [6.24]
Seff = 138.87 [39.36]
Teq = 875 [62] K
Rp = 0.72 [0.57] Re
a = 0.0594 [0.0104] AU
Ag = 295.85 [461.89] [0.64σ]
Teffp = 5613 [2170] K [2.18σ]

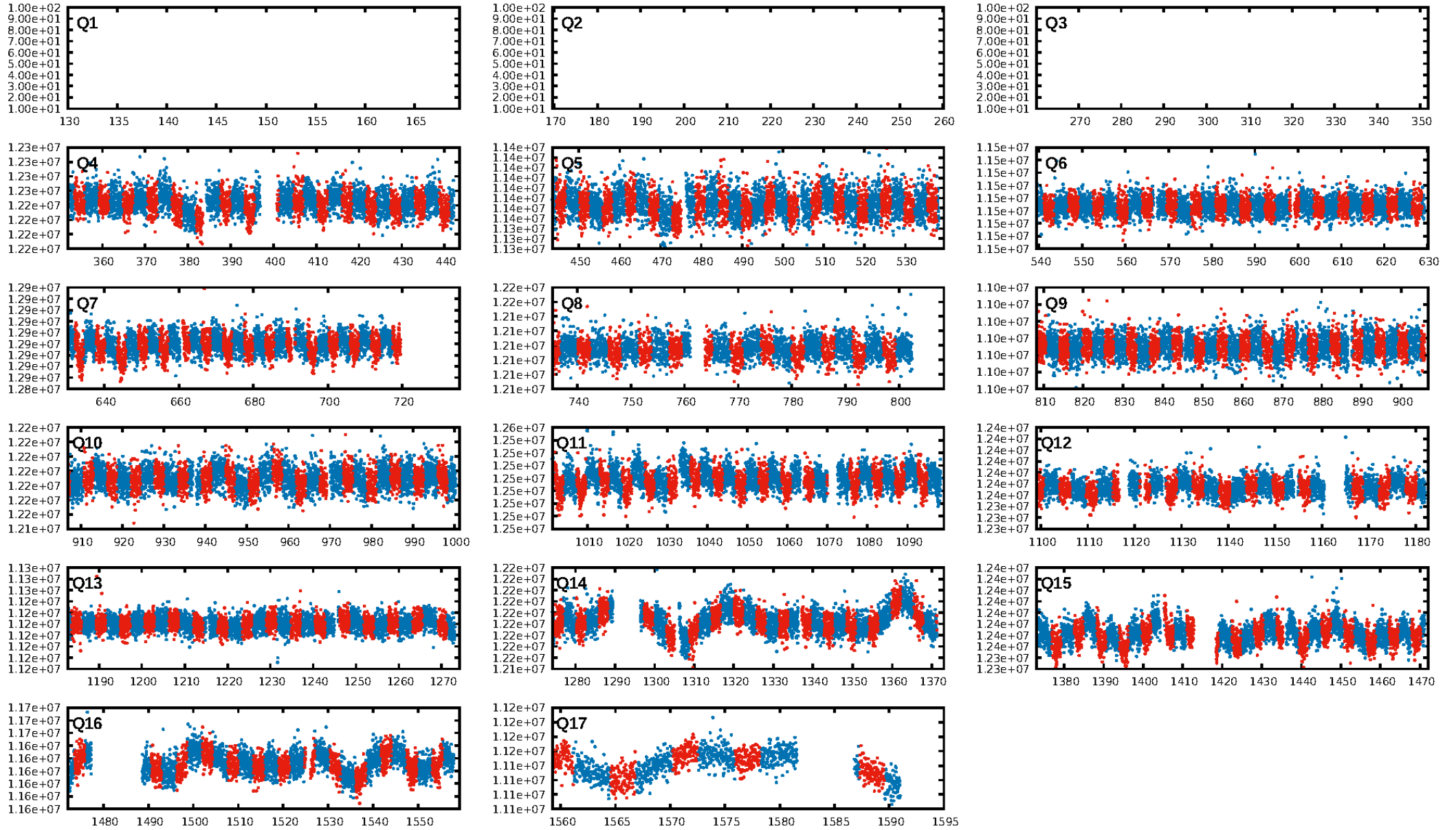
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.90e-24
RollingBand-fgt: 1.00 [200/200]
GhostDiagnostic-chr: -0.1824
Centroid-sig: 0.0%
Centroid-so: 6.951 arcsec [7.04σ]
OotOffset-rm: 0.918 arcsec [0.51σ]
KicOffset-rm: 1.187 arcsec [0.90σ]
OotOffset-st: 0/0/0/2 [2]
KicOffset-st: 0/0/0/2 [2]
DiffImageQuality-fgm: 0.50 [1/2]
DiffImageOverlap-fno: 1.00 [14/14]

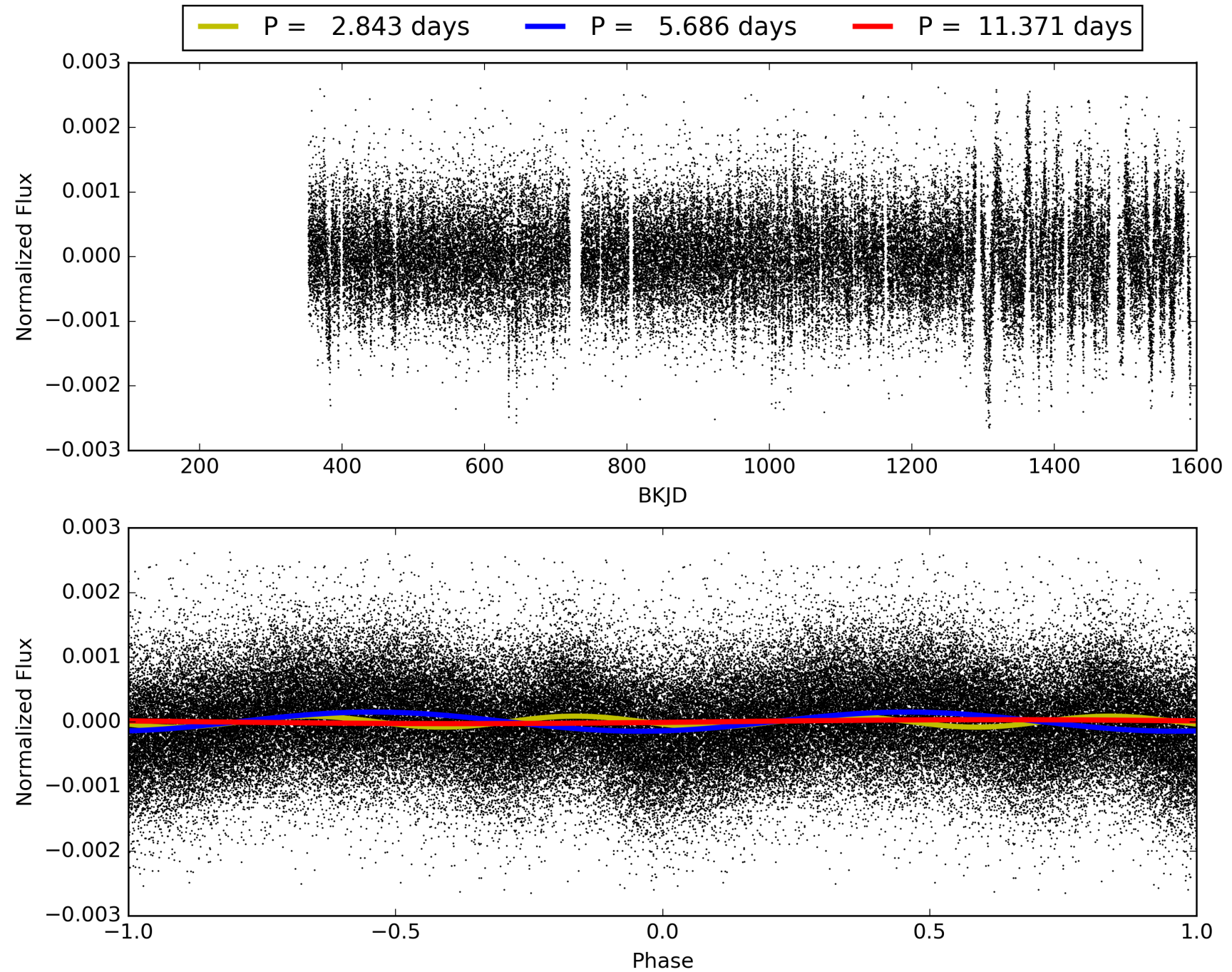
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 23:28:45 Z

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

TCE 010195933-01, PDC Light Curves

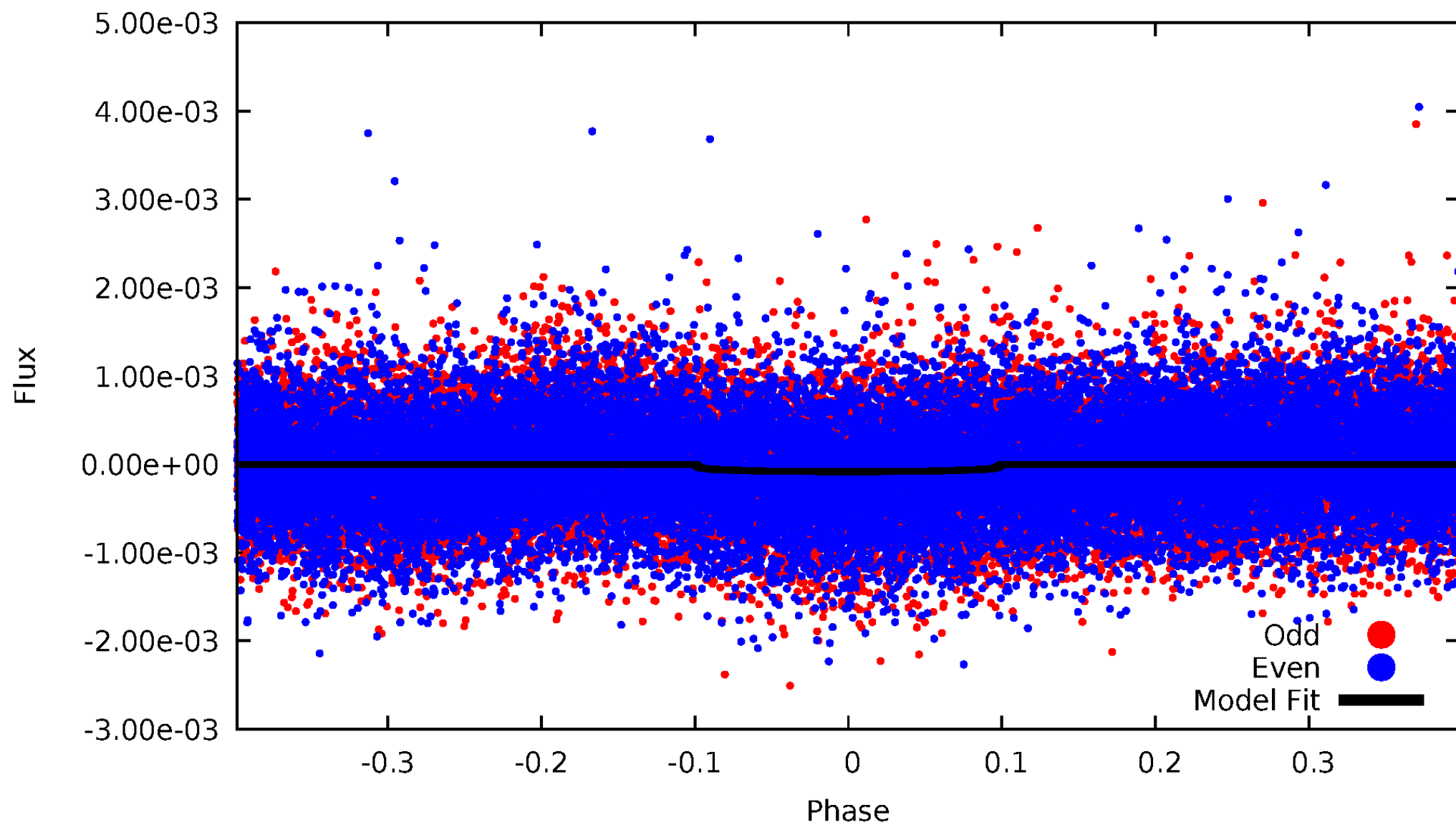


TCE 010195933-01



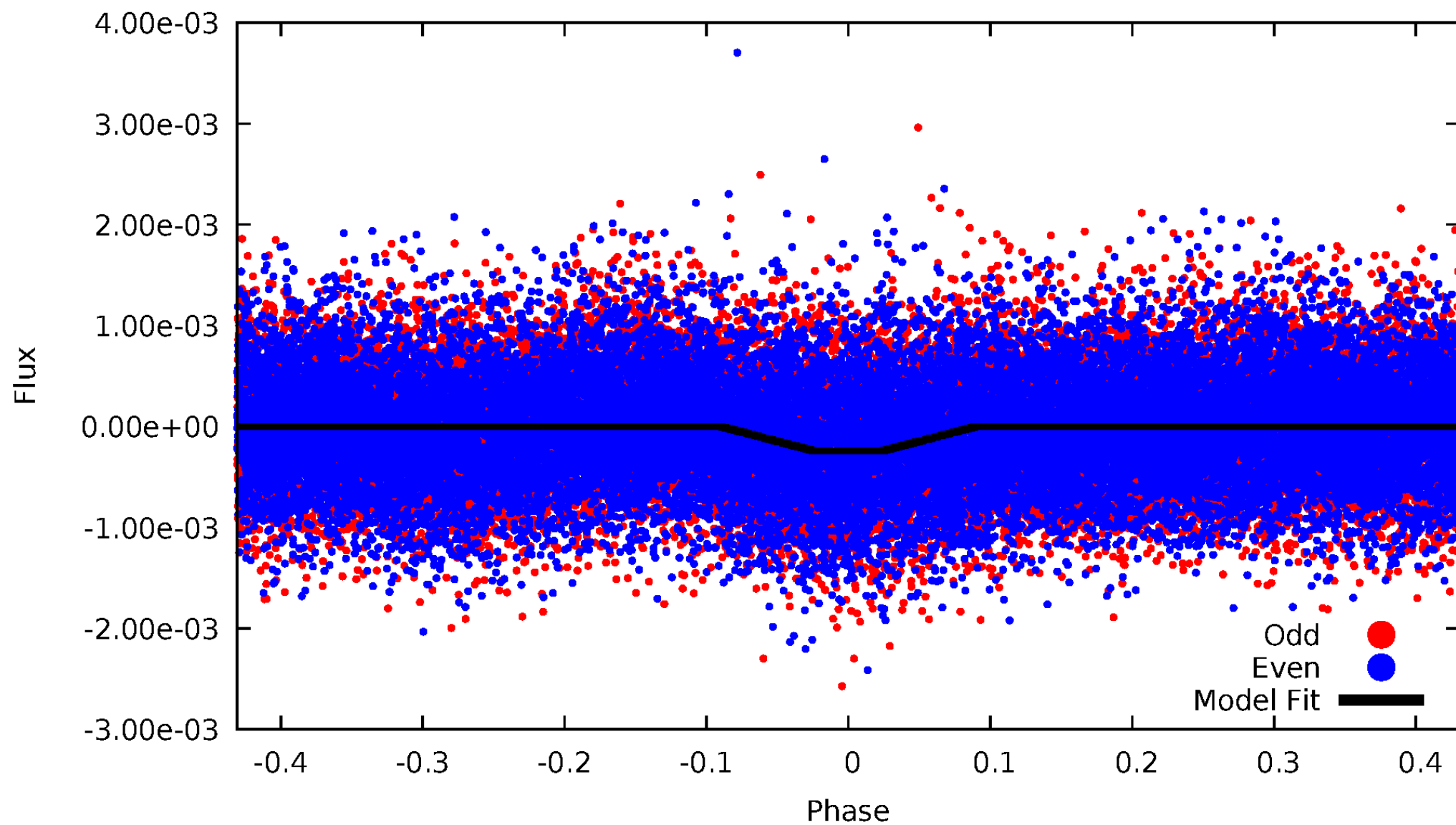
DV Odd/Even

TCE 010195933-01



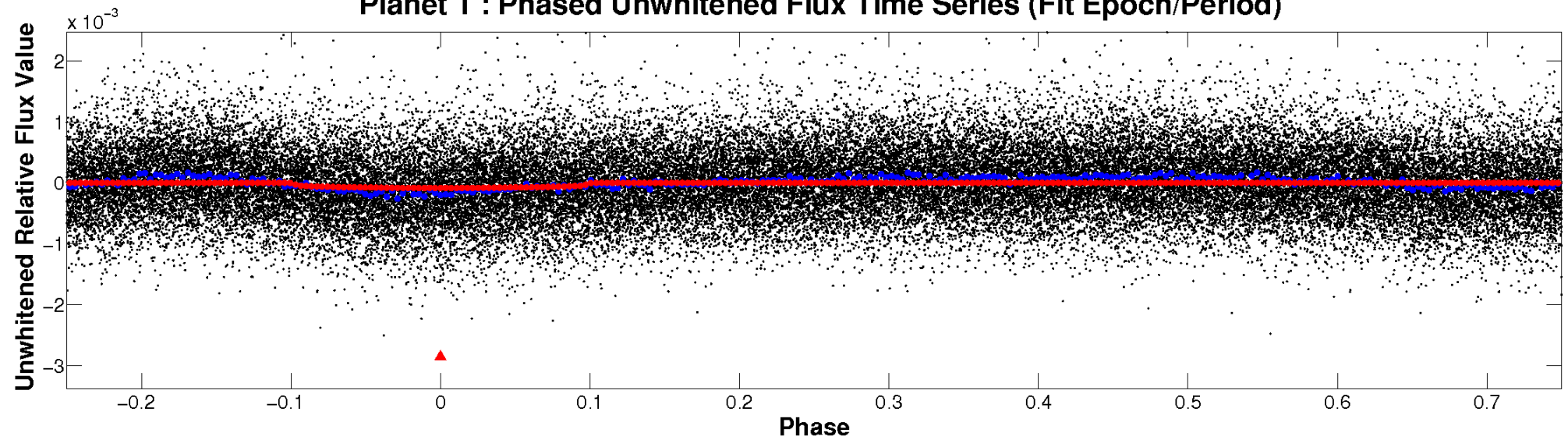
ALT Odd/Even

TCE 010195933-01

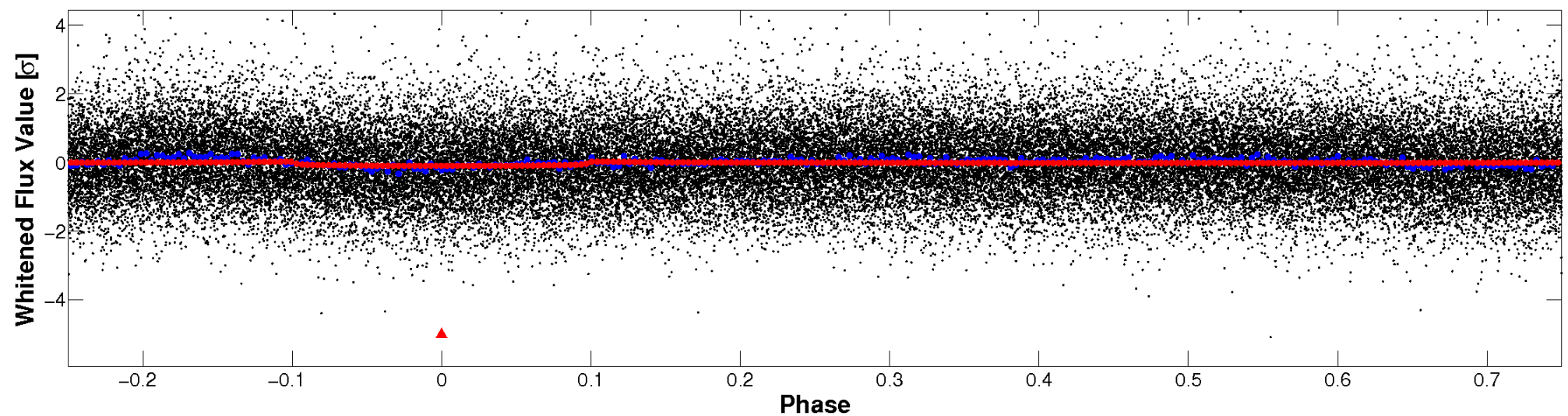


Non-Whitened Vs. Whitened Light Curve

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

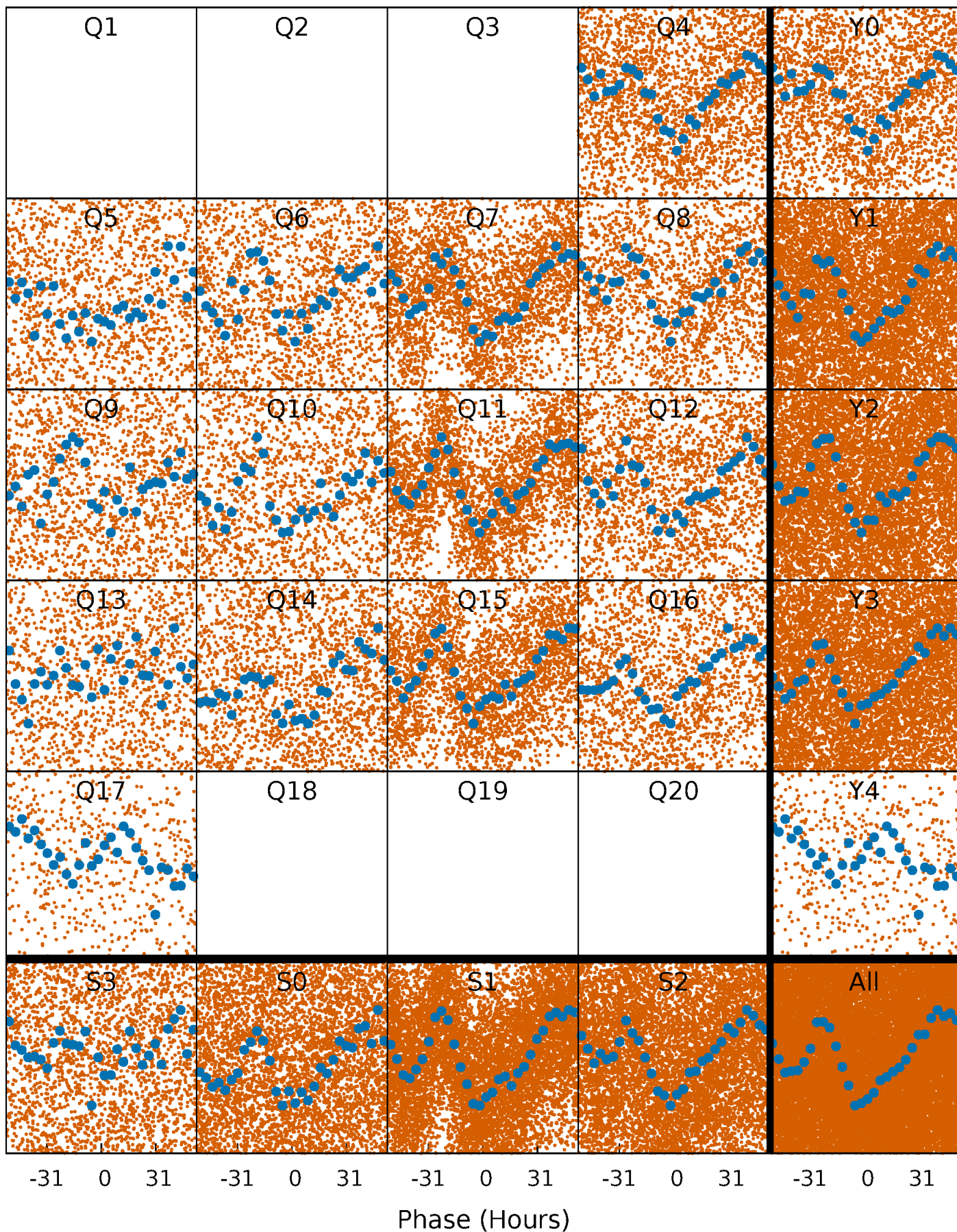


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



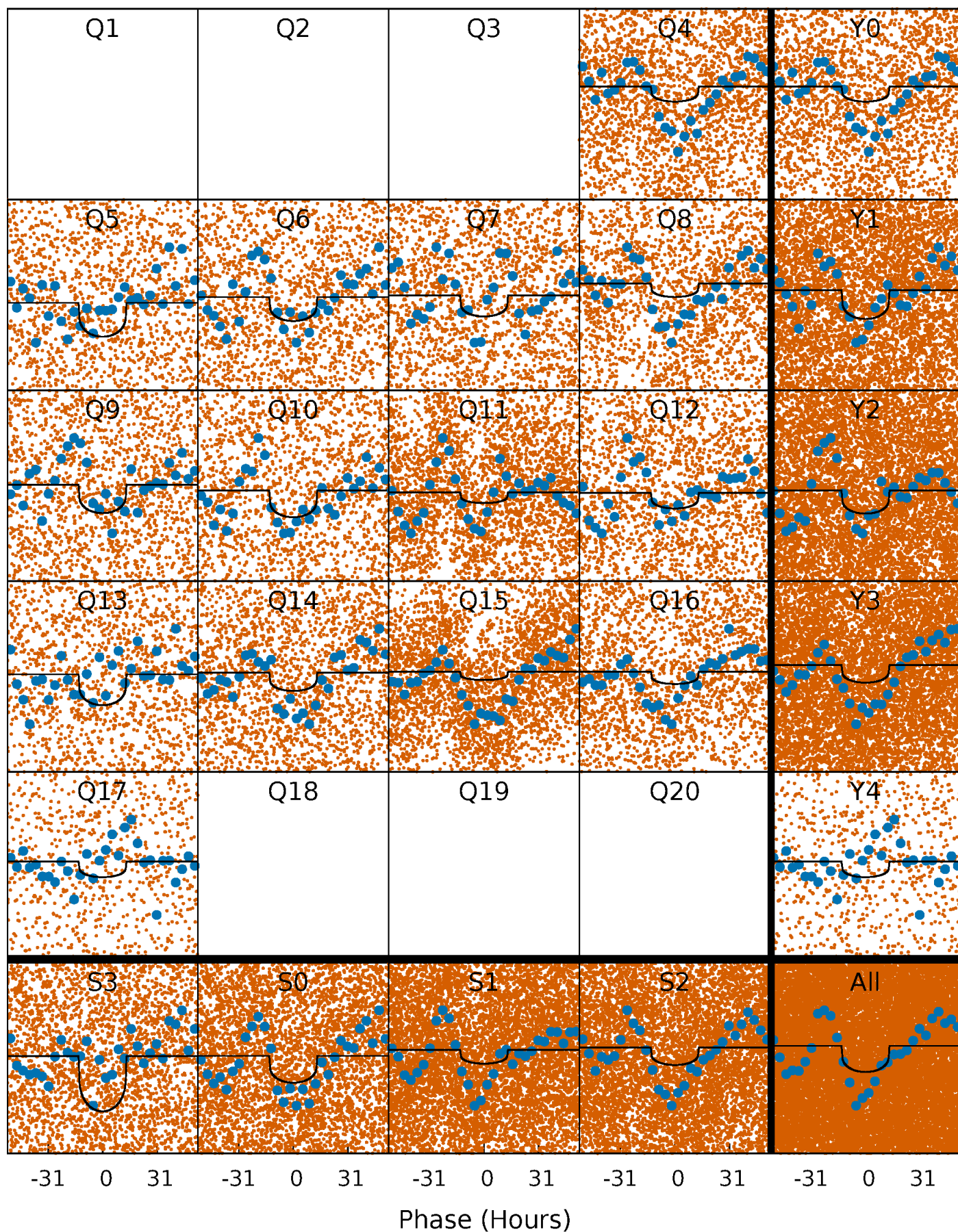
PDC Quarter-Phased Transit Curves

TCE 010195933-01 P= 5.685713 Days $T_0=132.886614$ (BKJD)



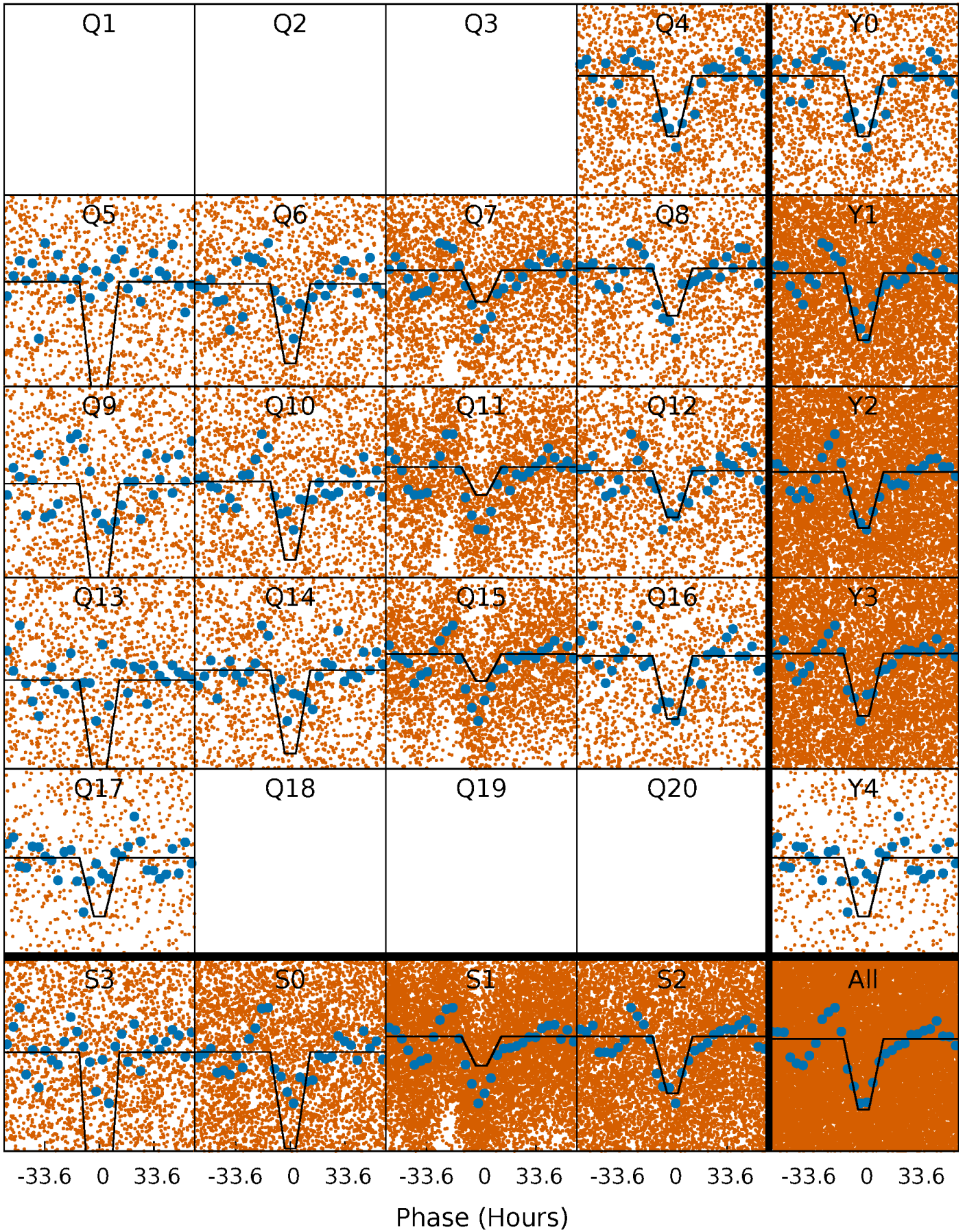
DV Quarter-Phased Transit Curves

TCE 010195933-01 P= 5.685713 Days $T_0=132.886614$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

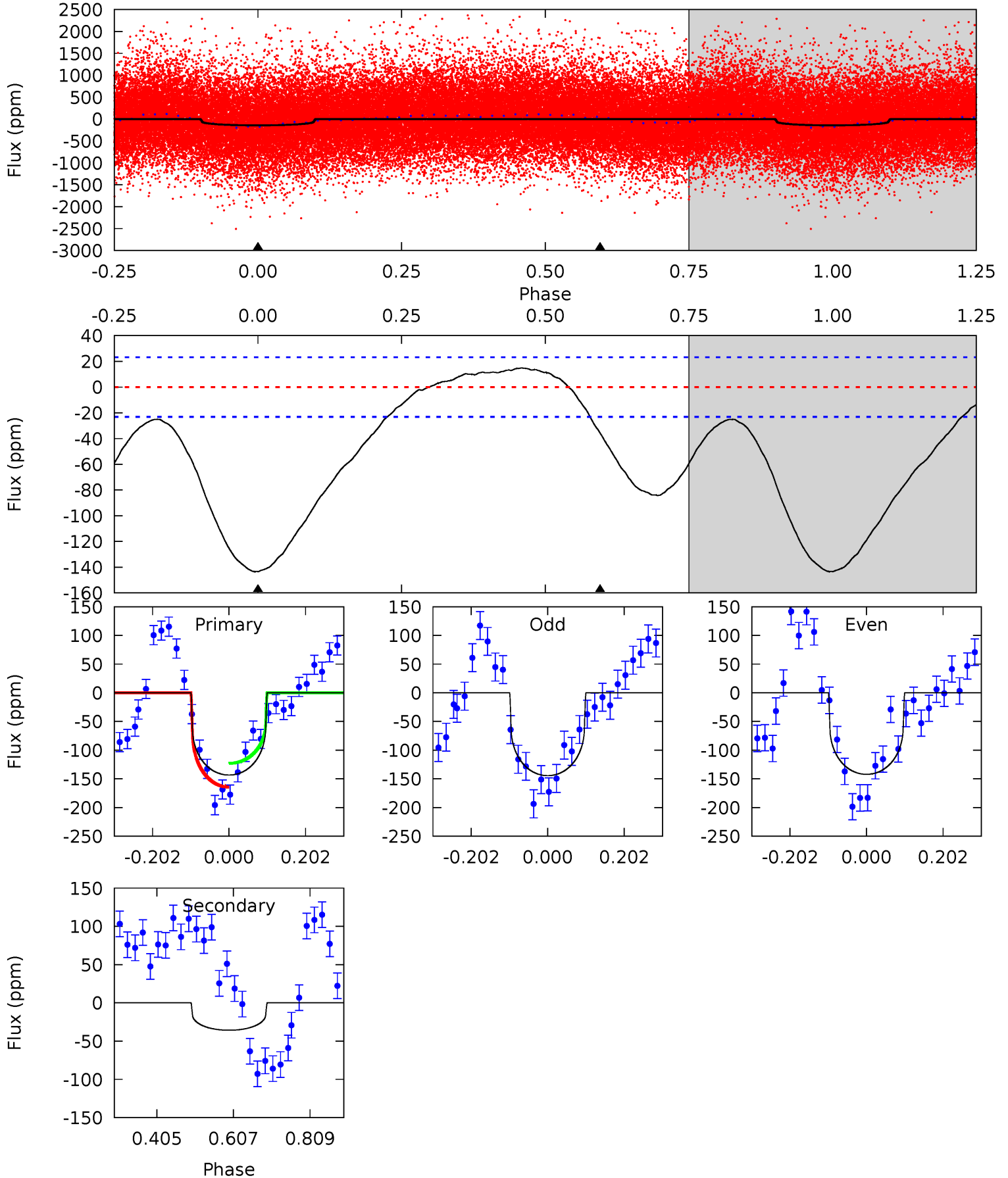
TCE 010195933-01 P= 5.684617 Days $T_0=132.922201$ (BKJD)



DV Model-Shift Uniqueness Test

010195933-01, P = 5.685713 Days, E = 132.886614 Days

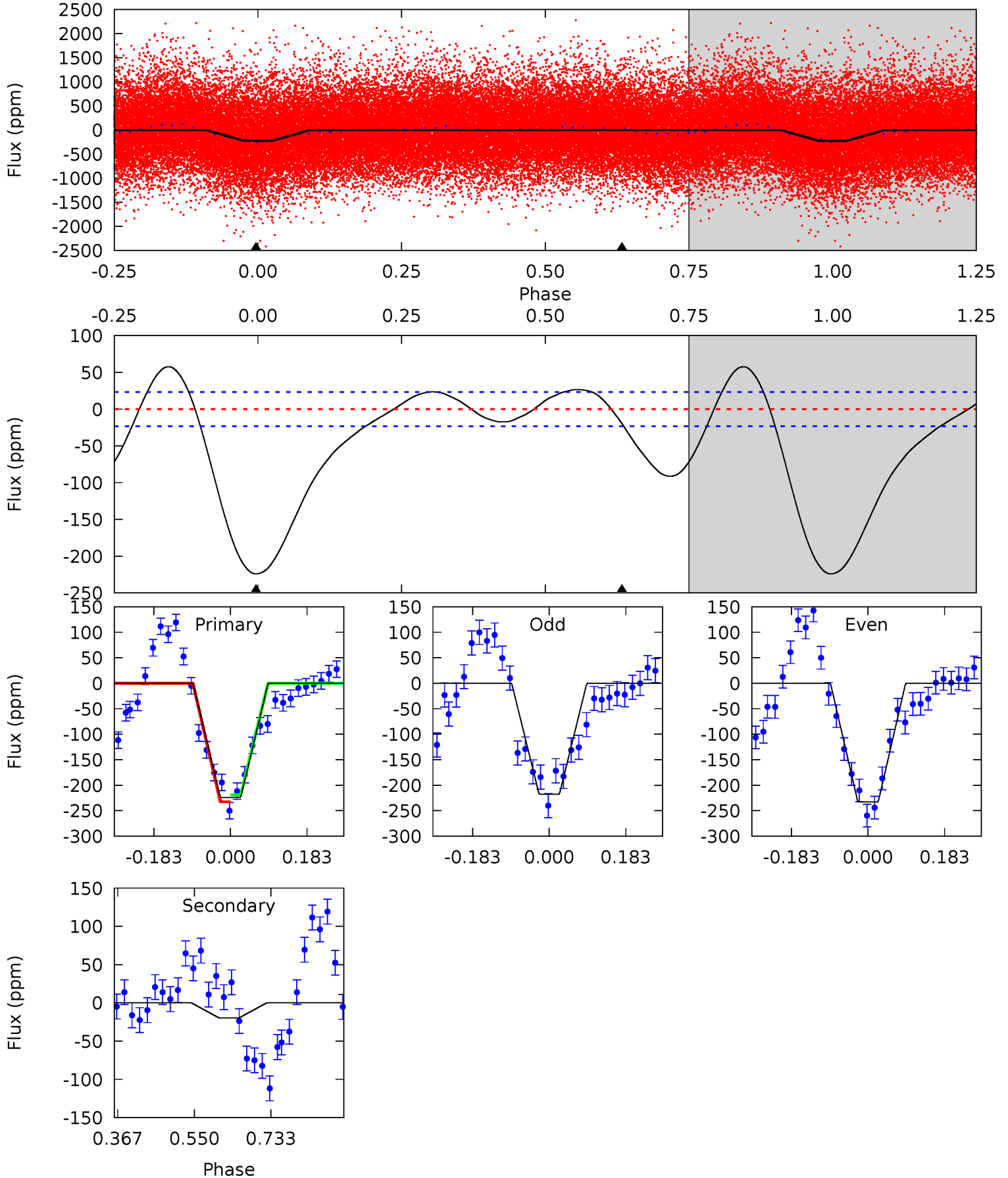
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
27.3	6.81	0	0	4.41	1.28	2.50	27.3	27.3	6.81	6.81	0.22	1.41	0.09	3.98



Alt Model-Shift Uniqueness Test

010195933-01, P = 5.684617 Days, E = 132.922201 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
42.6	3.72	0	0	4.44	1.33	2.94	42.6	42.6	3.72	3.72	1.44	1.55	0.20	1.28



Stellar Parameters For KIC 010195933

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5481^{+182}_{-182}	$4.592^{+0.036}_{-0.135}$	$-0.220^{+0.300}_{-0.300}$	$0.778^{+0.164}_{-0.070}$	$0.871^{+0.083}_{-0.102}$	$2.607^{+0.478}_{-1.089}$
	+3%/-3%	+1%/-3%	+136%/-136%	+21%/-9%	+10%/-12%	+18%/-42%
Source	KIC0	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 010195933-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-36 ± 5	$0.81^{+0.52}_{-0.48}$	1246^{+64}_{-56}	4551^{+2347}_{-752}	100^{+496}_{-62}
Alt.	-20 ± 5	$1.35^{+0.60}_{-0.56}$	1244^{+73}_{-51}	3422^{+698}_{-400}	21^{+37}_{-12}

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 $A_{obs} \gg 1.0$

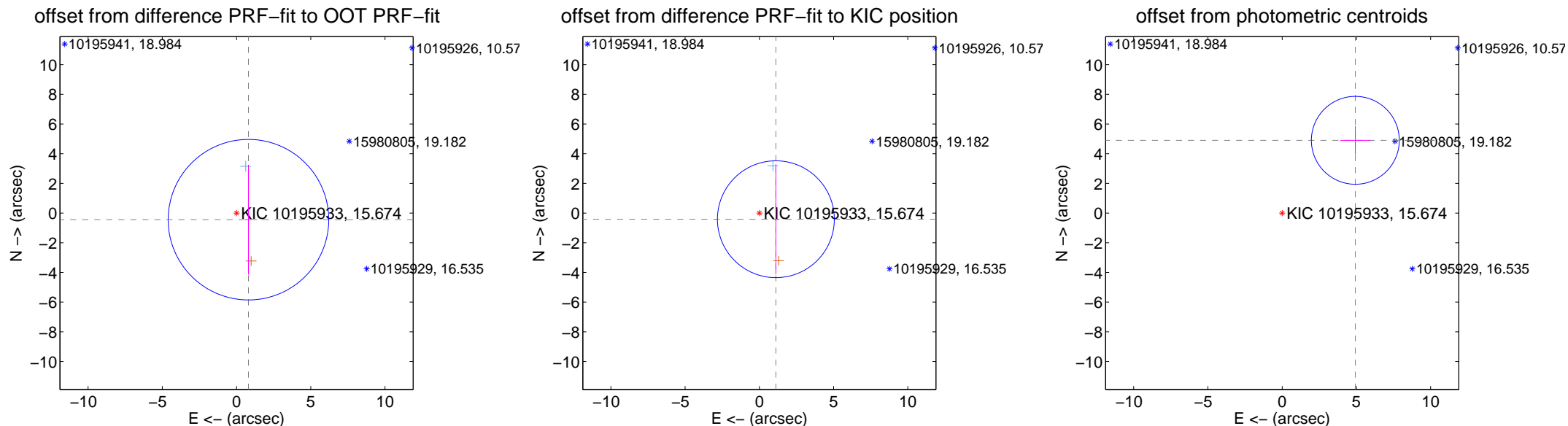
DV Centroid Data

Supplemental centroid analysis for 010195933-01. Kepler magnitude: 15.67. Transit SNR 9.11

There are 1 quarters with good PRF difference image offsets

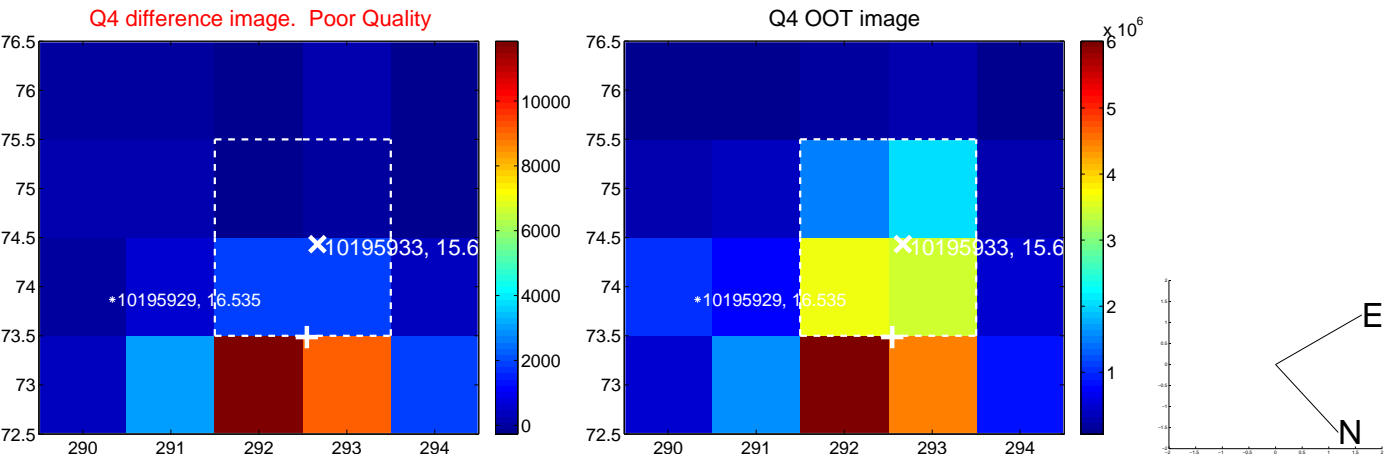
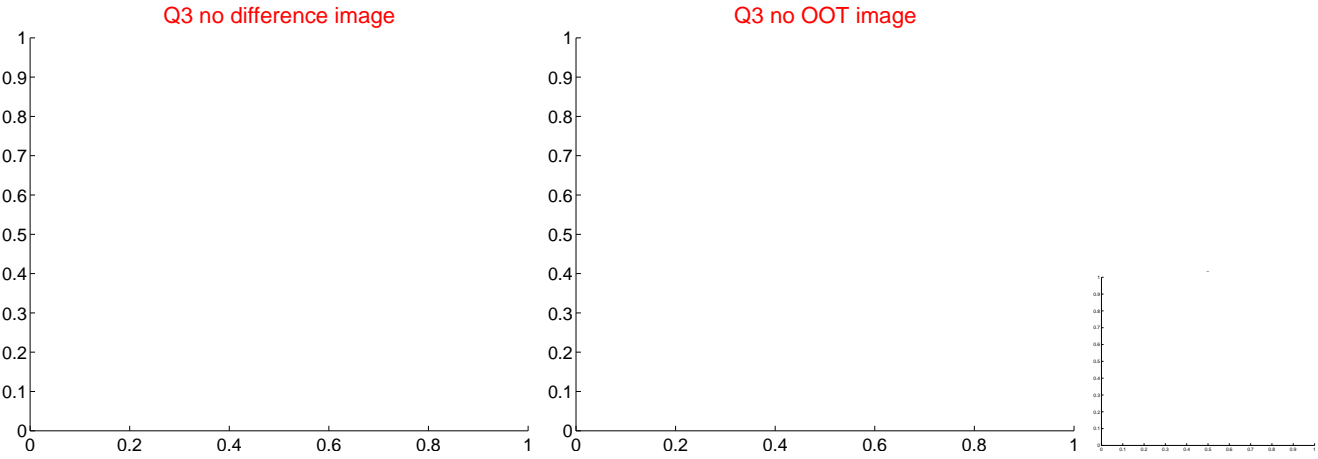
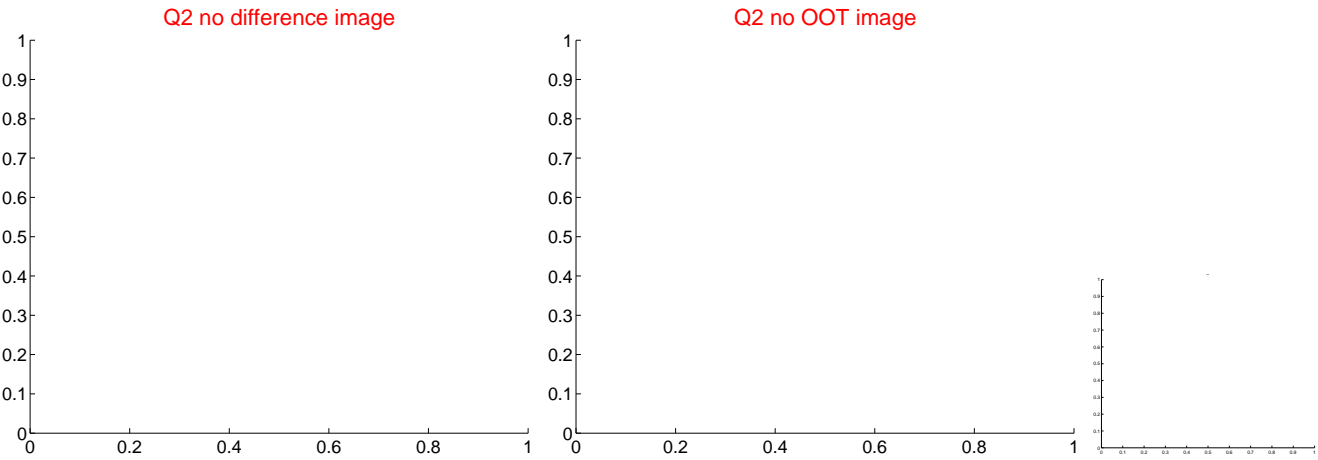
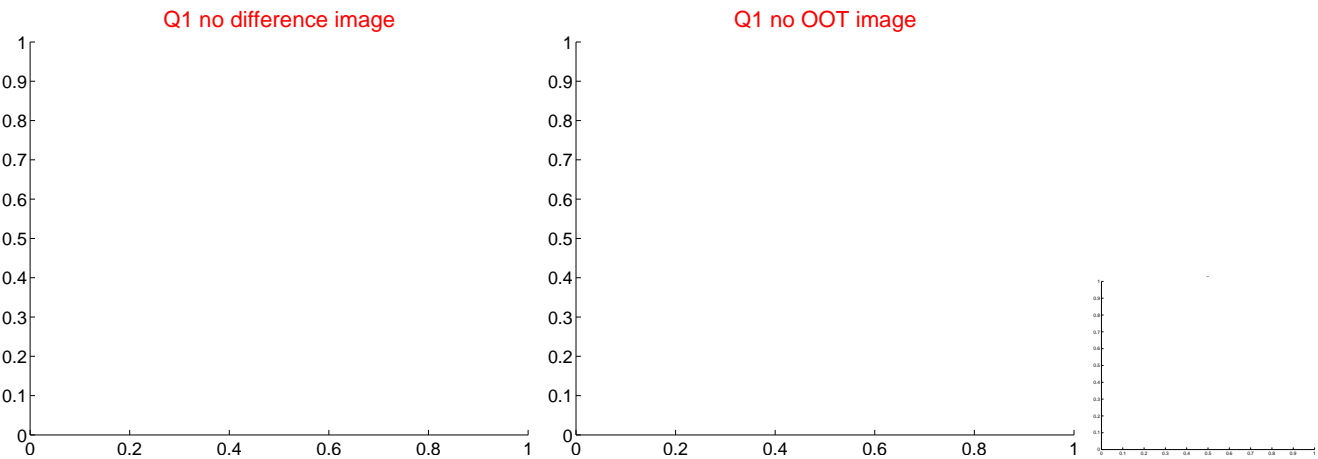
The direct PRF centroid is offset from the target star catalog position by about 0.32 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.918 ± 1.803	0.51	-0.803 ± 0.224	-0.445 ± 3.699
PRF-fit source offset from KIC position	1.187 ± 1.312	0.90	-1.112 ± 0.234	-0.415 ± 3.703
photometric centroid source offset	6.95 ± 0.99	7.04	-4.93 ± 1.02	4.90 ± 0.96

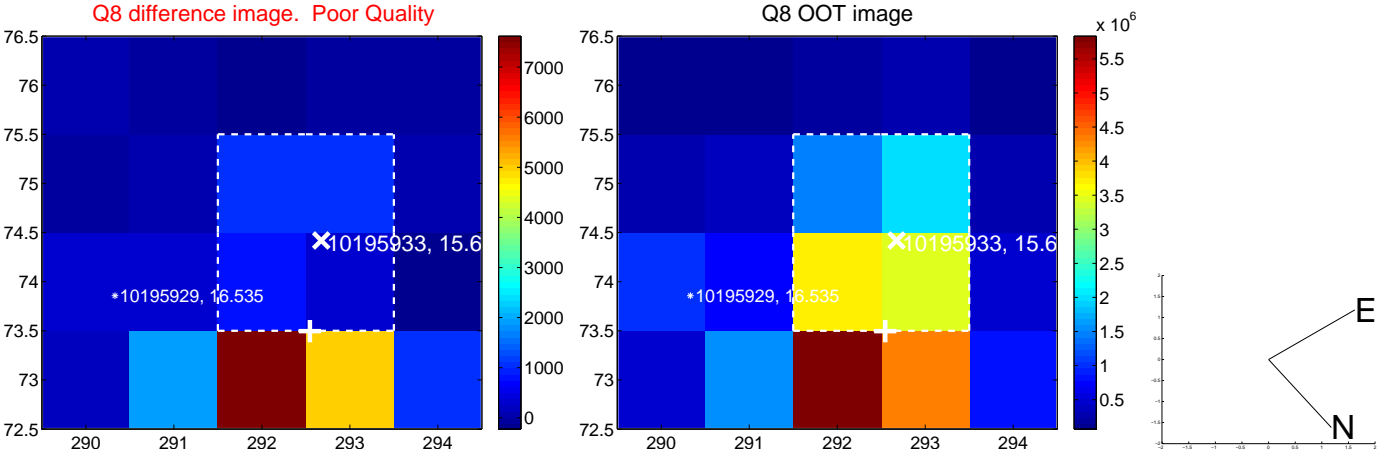
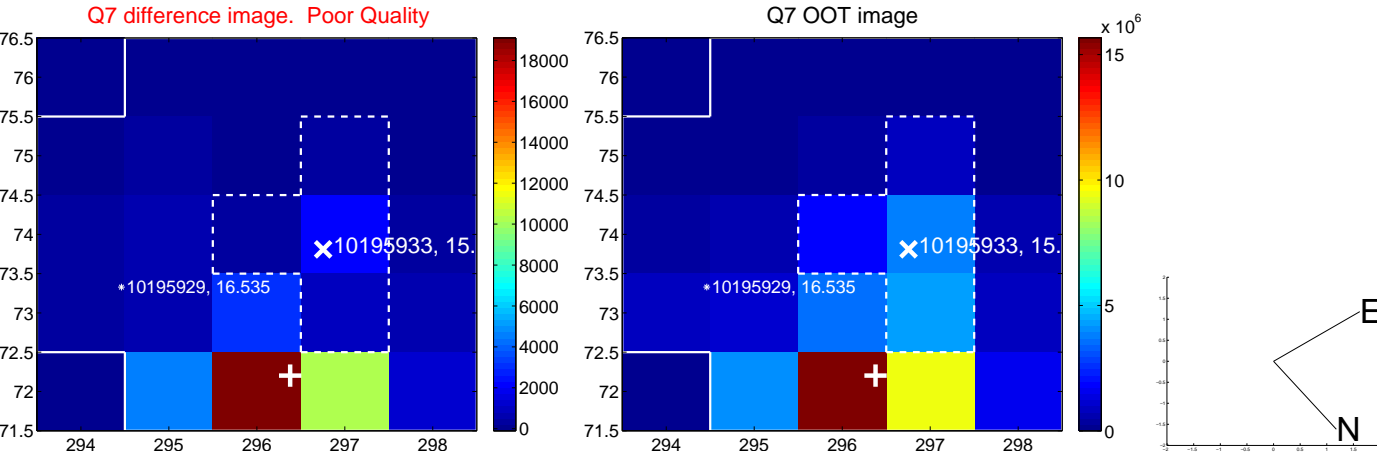
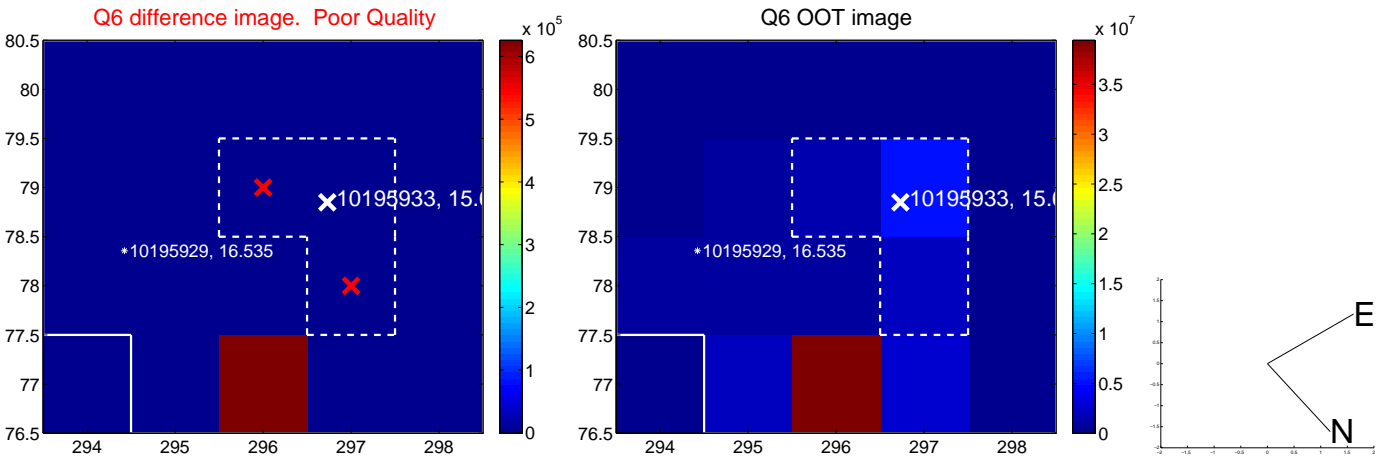
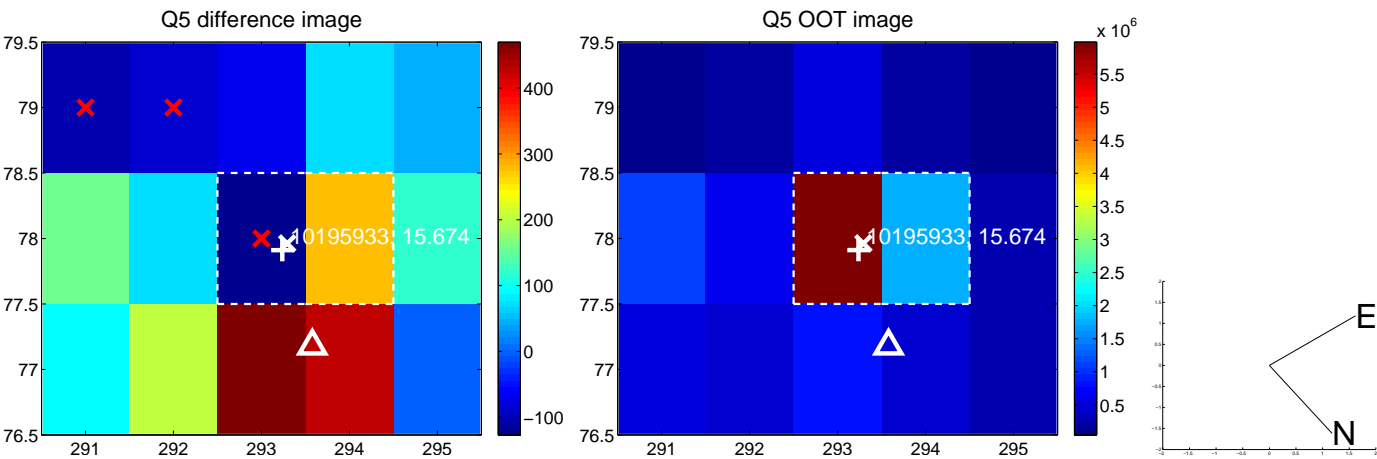


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

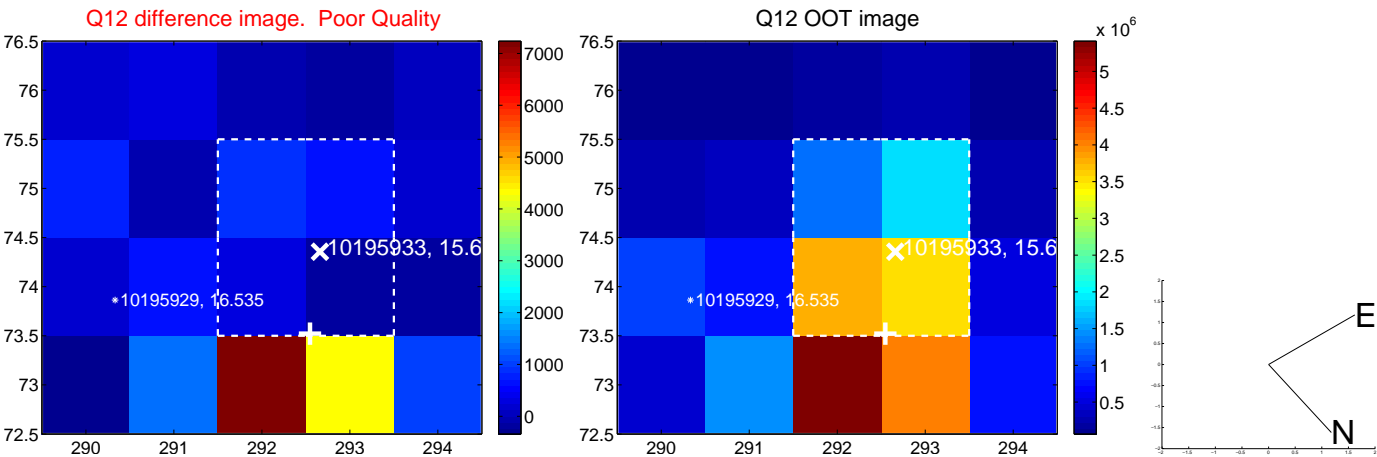
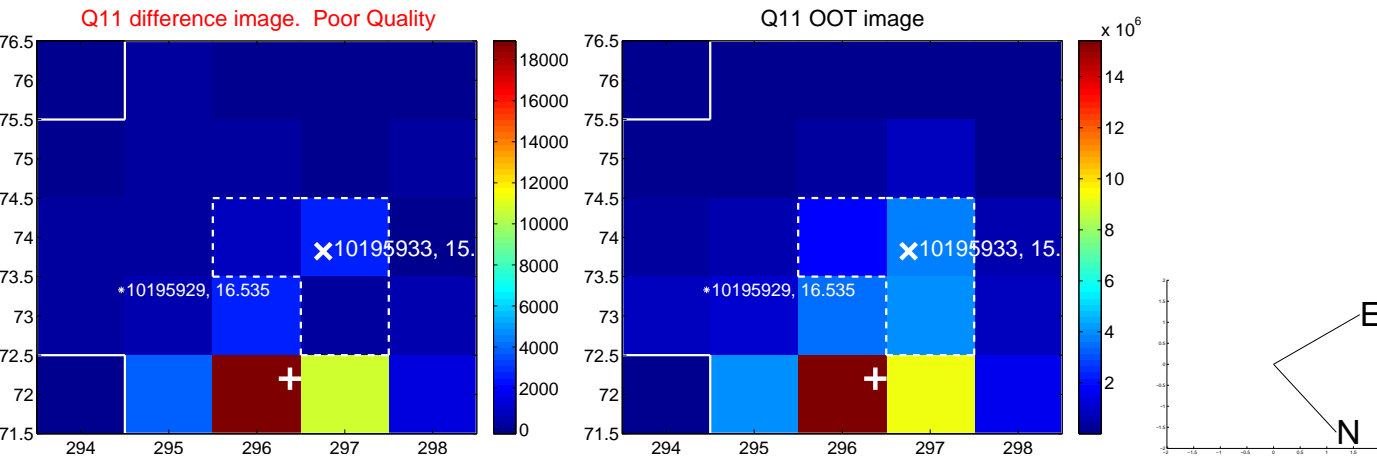
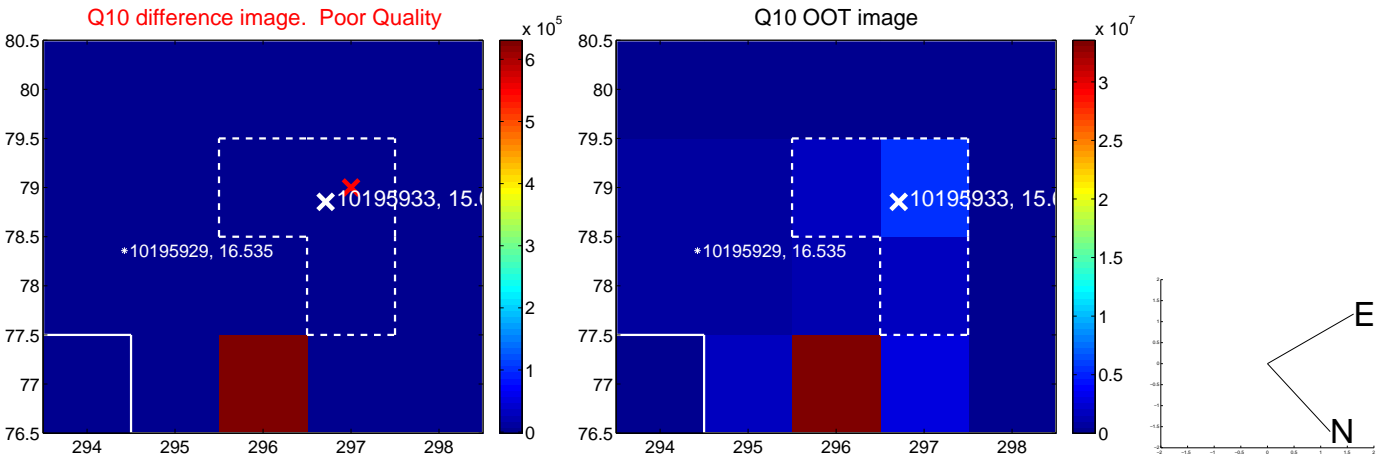
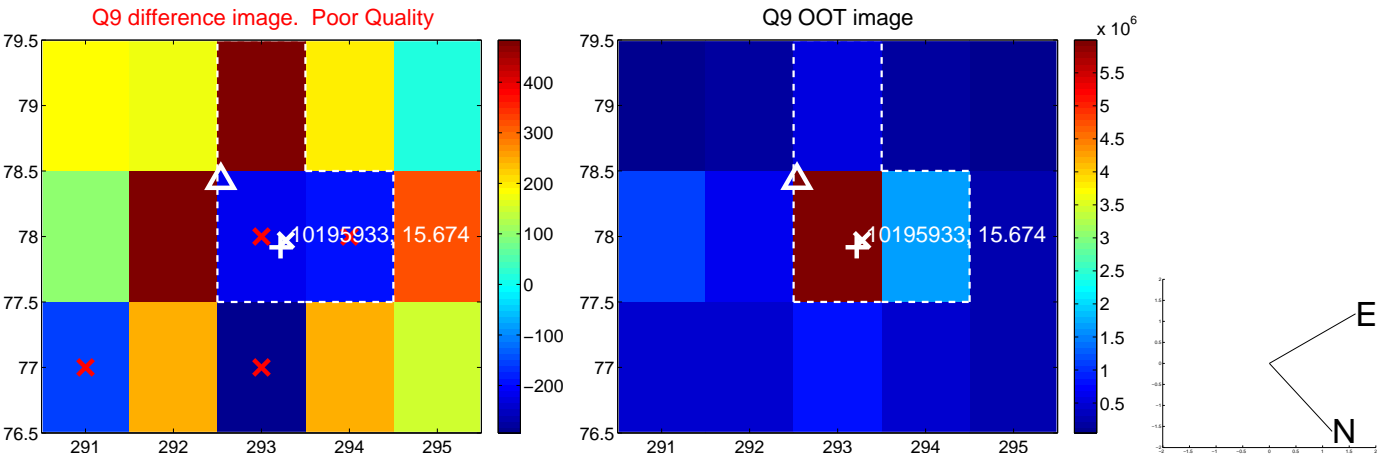
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



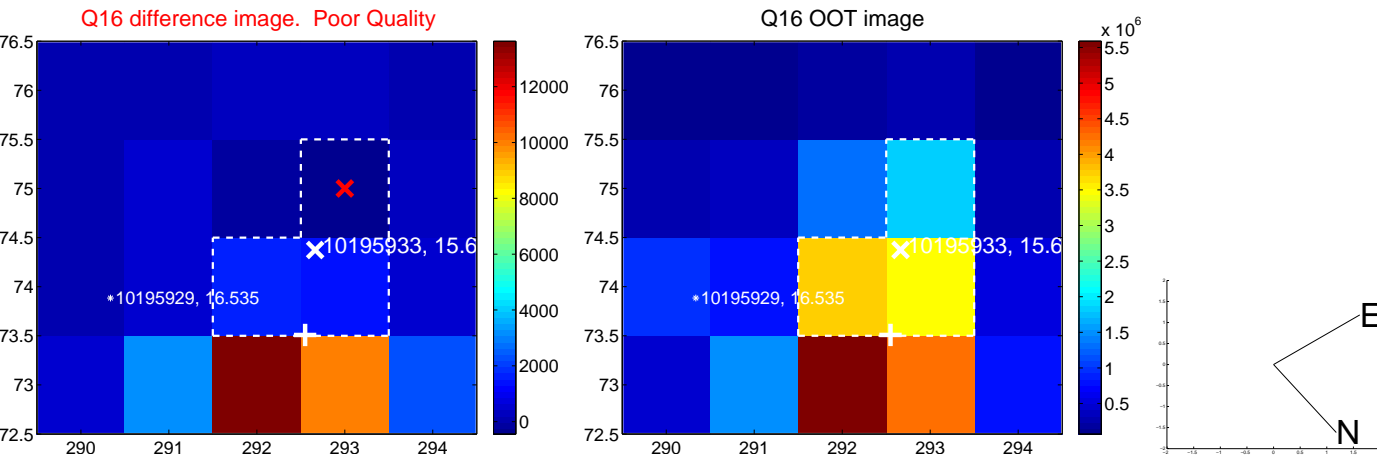
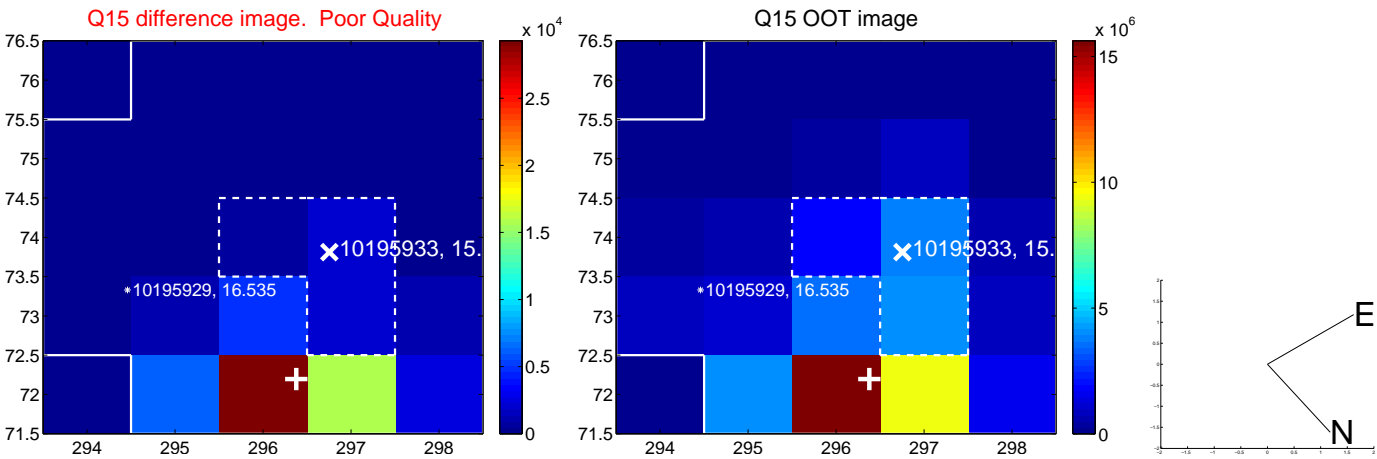
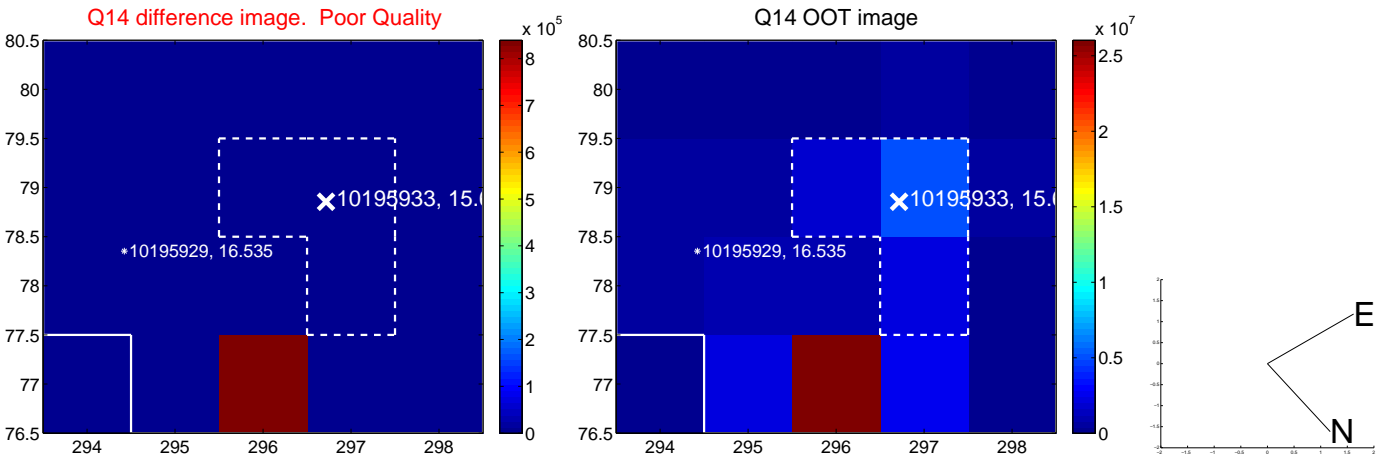
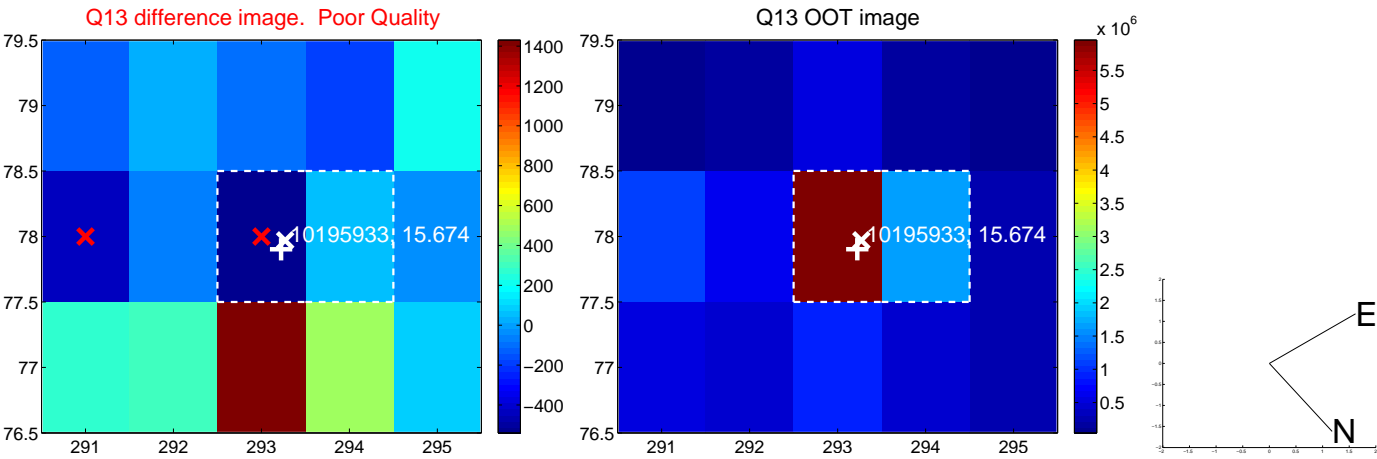
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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.



UKIRT Image

