

KIC 005033298

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})
005033298-01	OBS	No	0.664211	131.913336	0.0	6.598	8.3	0.0	1.46	6832	0.00	15380.99

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005033298-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—CENT_FEW_DIFFS

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

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

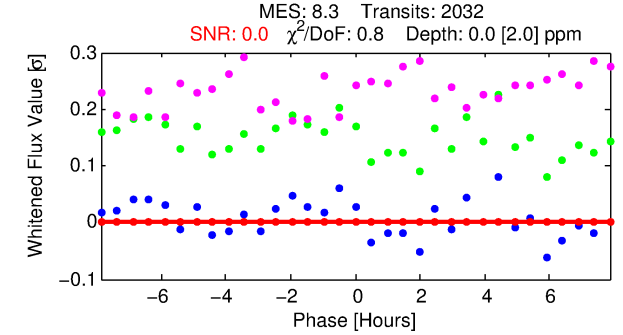
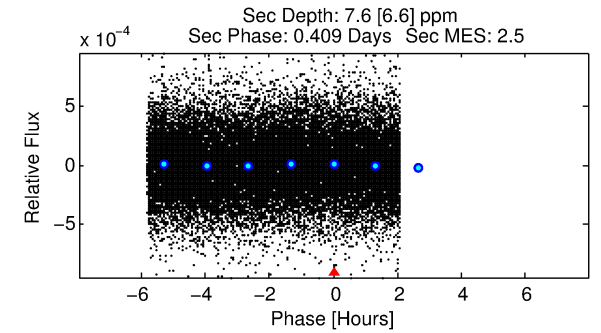
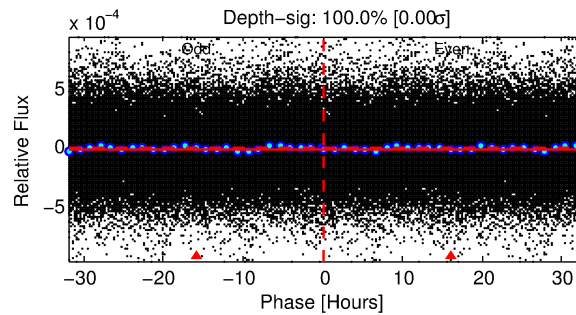
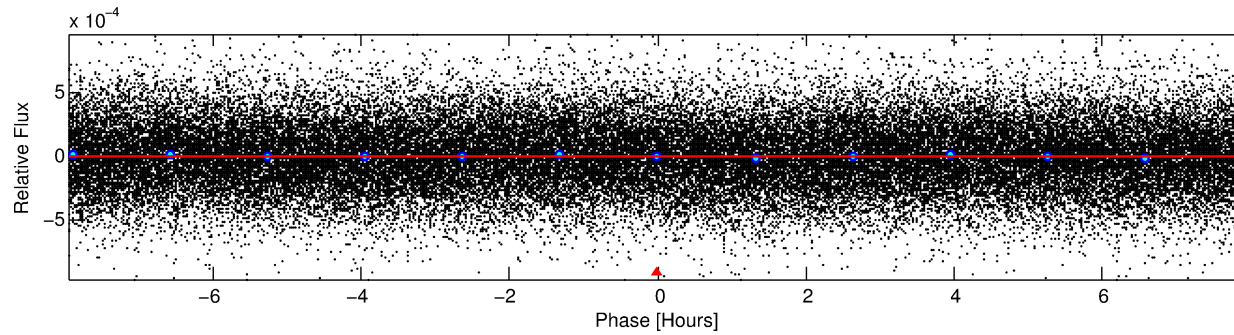
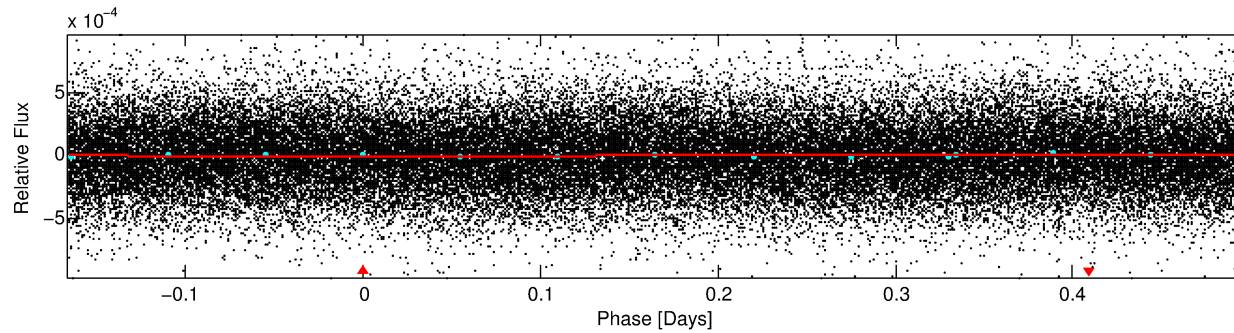
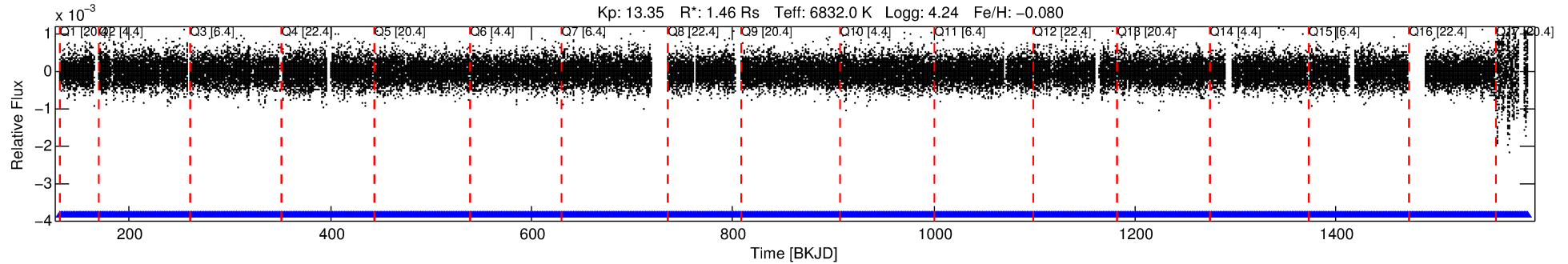
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005033298-01

No Significant Match Found

DV One-Page Summary

KIC: 5033298 Candidate: 1 of 1 Period: 0.664 d



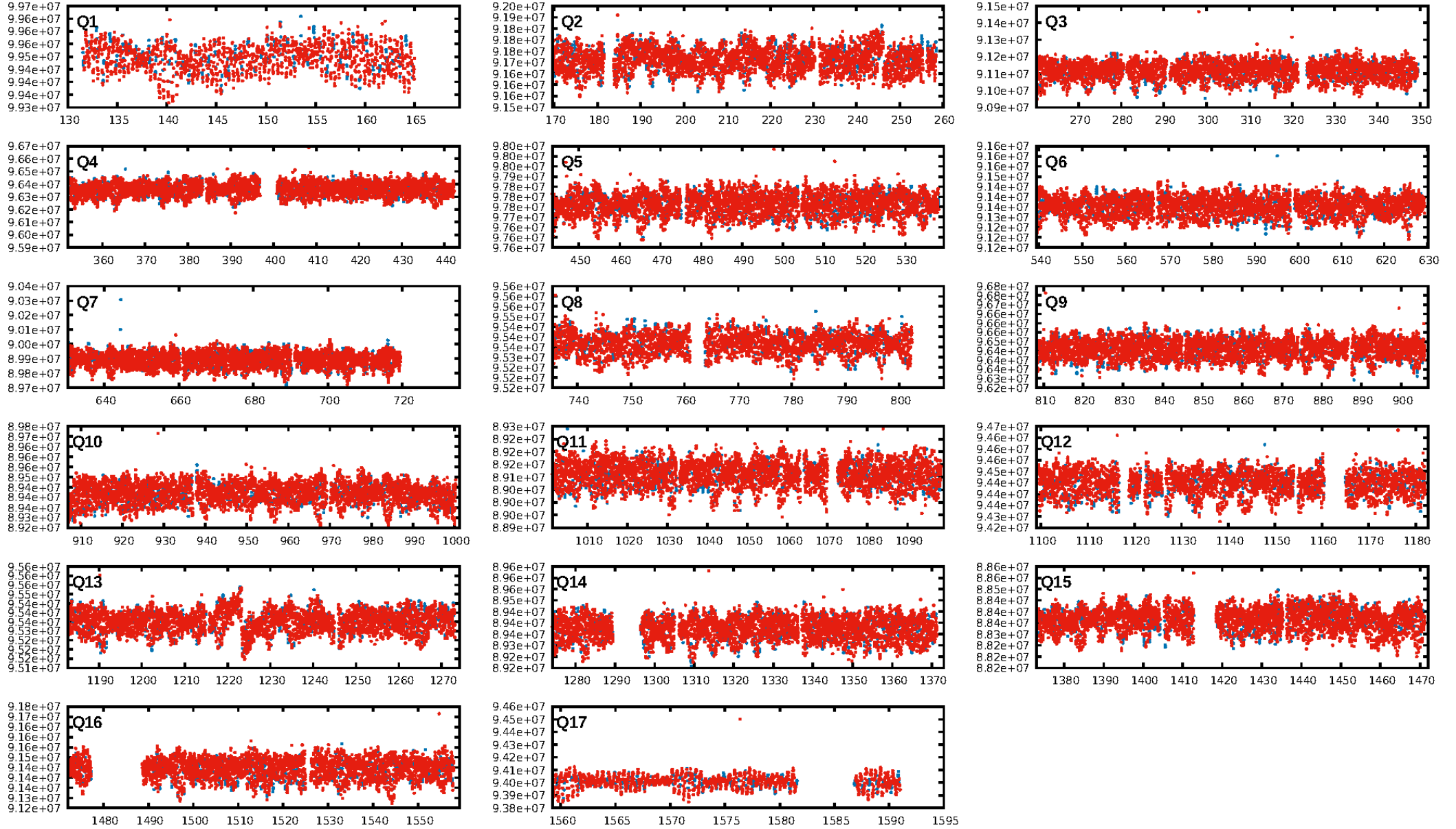
DV Fit Results:

Period = 0.66421 [487.03466] d
Epoch = 131.9133 [166673.8209] BKJD
Rp/R* = 0.0000 [1.4274]
a/R* = 1.01 [16519.63]
b = 0.86 [473842.50]
Seff = 15380.99 [15037547.48]
Teff = 2840 [694073] K
Rp = 0.00 [226.94] Re
a = 0.0164 [8.0236] AU
Ag = 71482690.95 [258797790068417.815] [0.000]
Teffp = 403704 [365432113268] K [0.000]

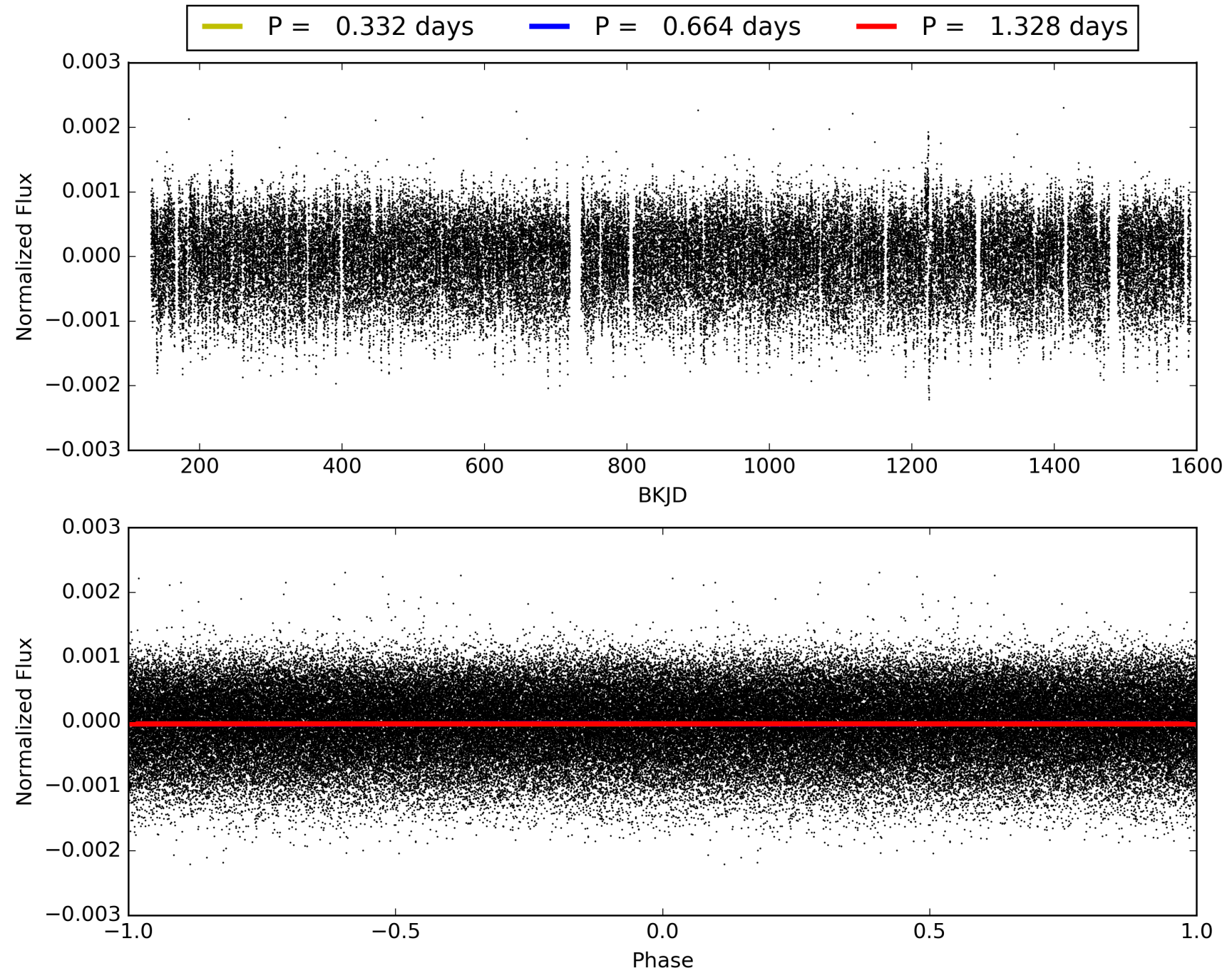
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [1941/1941]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OptOffset-rm: N/A
OptOffset-rm: N/A
OptOffset-st: 0/0/0/0 [0]
KicOffset-st: 0/0/0/0 [0]
DiffImageQuality-fgm: N/A
DiffImageOverlap-fno: 1.00 [17/17]

TCE 005033298-01, PDC Light Curves

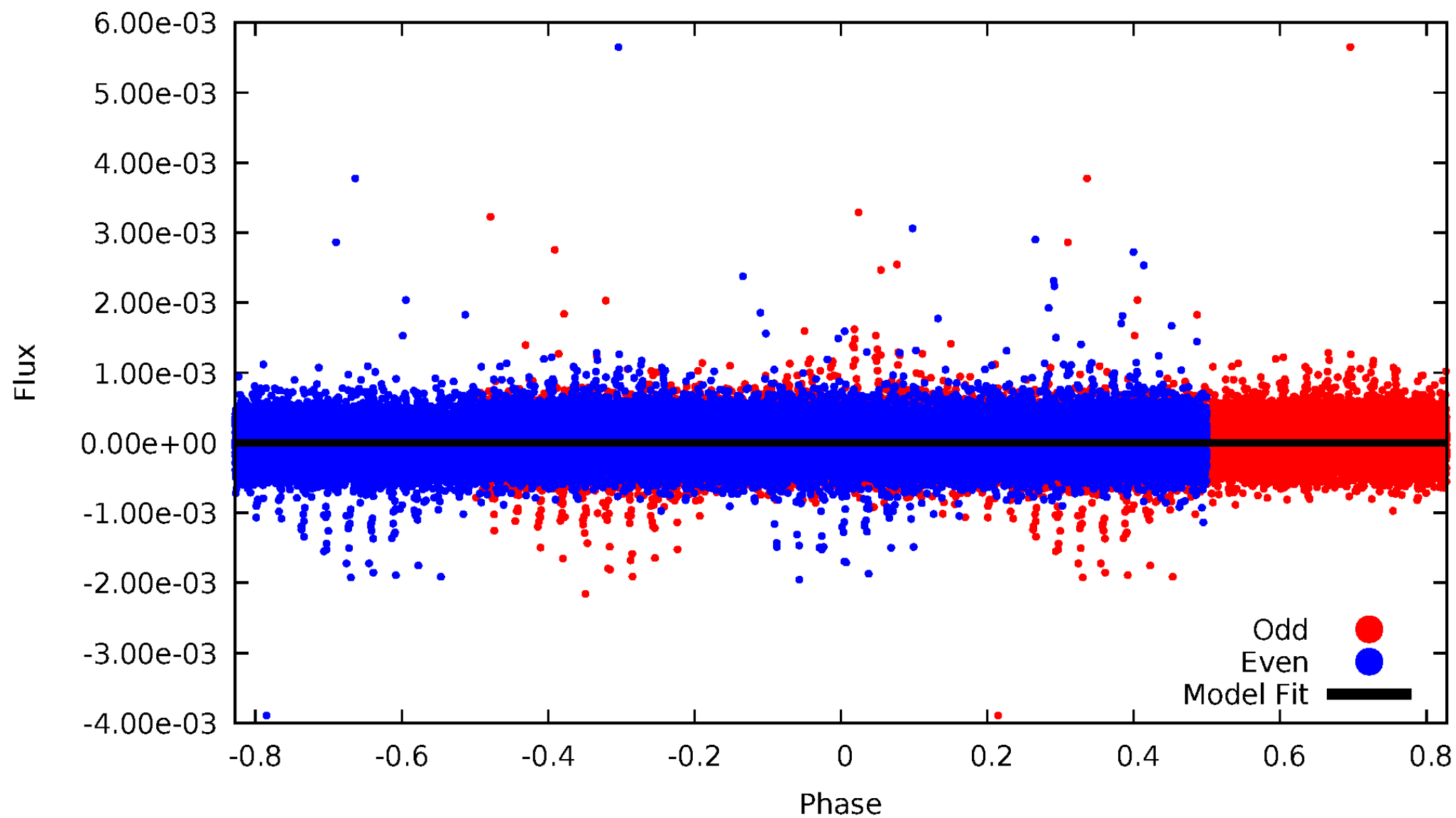


TCE 005033298-01



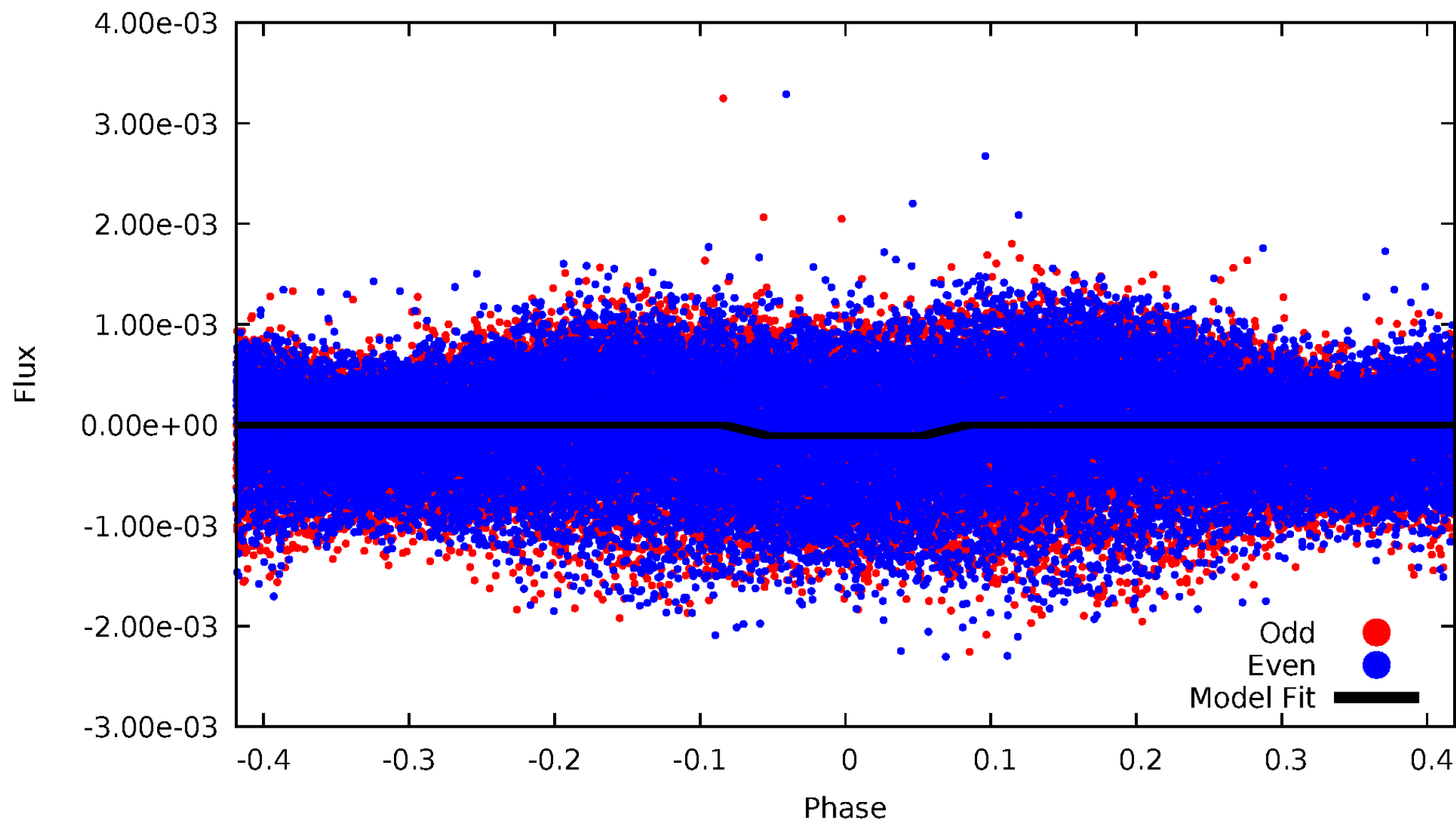
DV Odd/Even

TCE 005033298-01



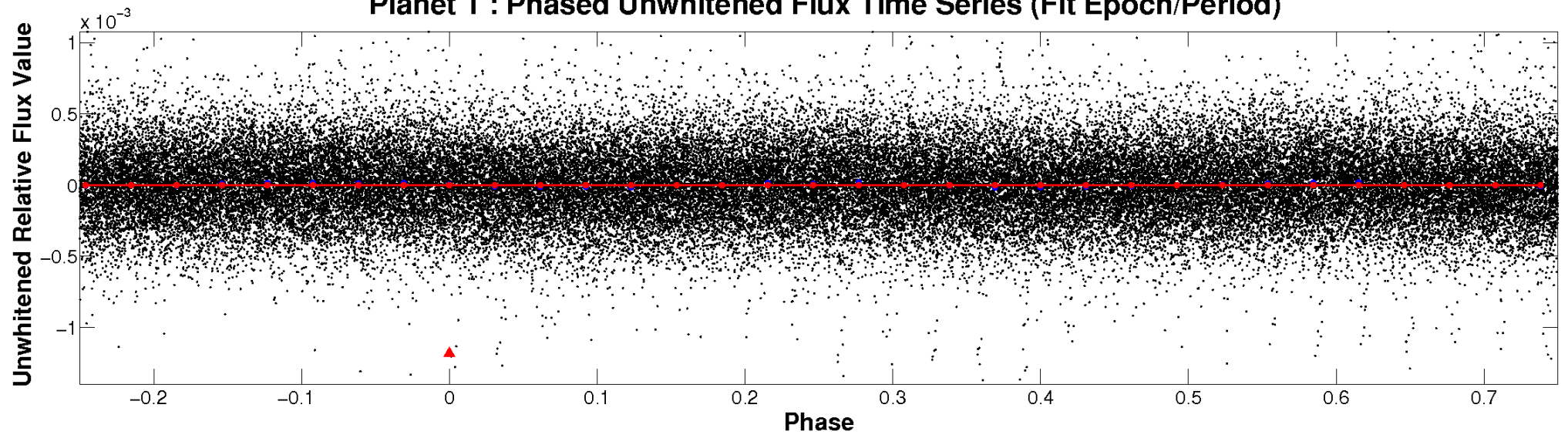
ALT Odd/Even

TCE 005033298-01

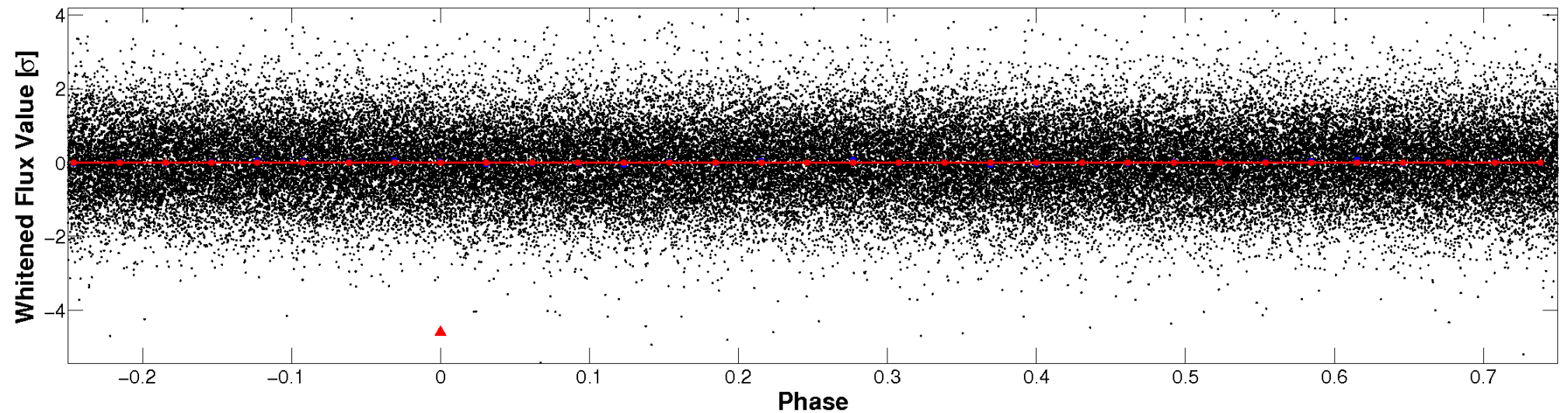


Non-Whitened Vs. Whitened Light Curve

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

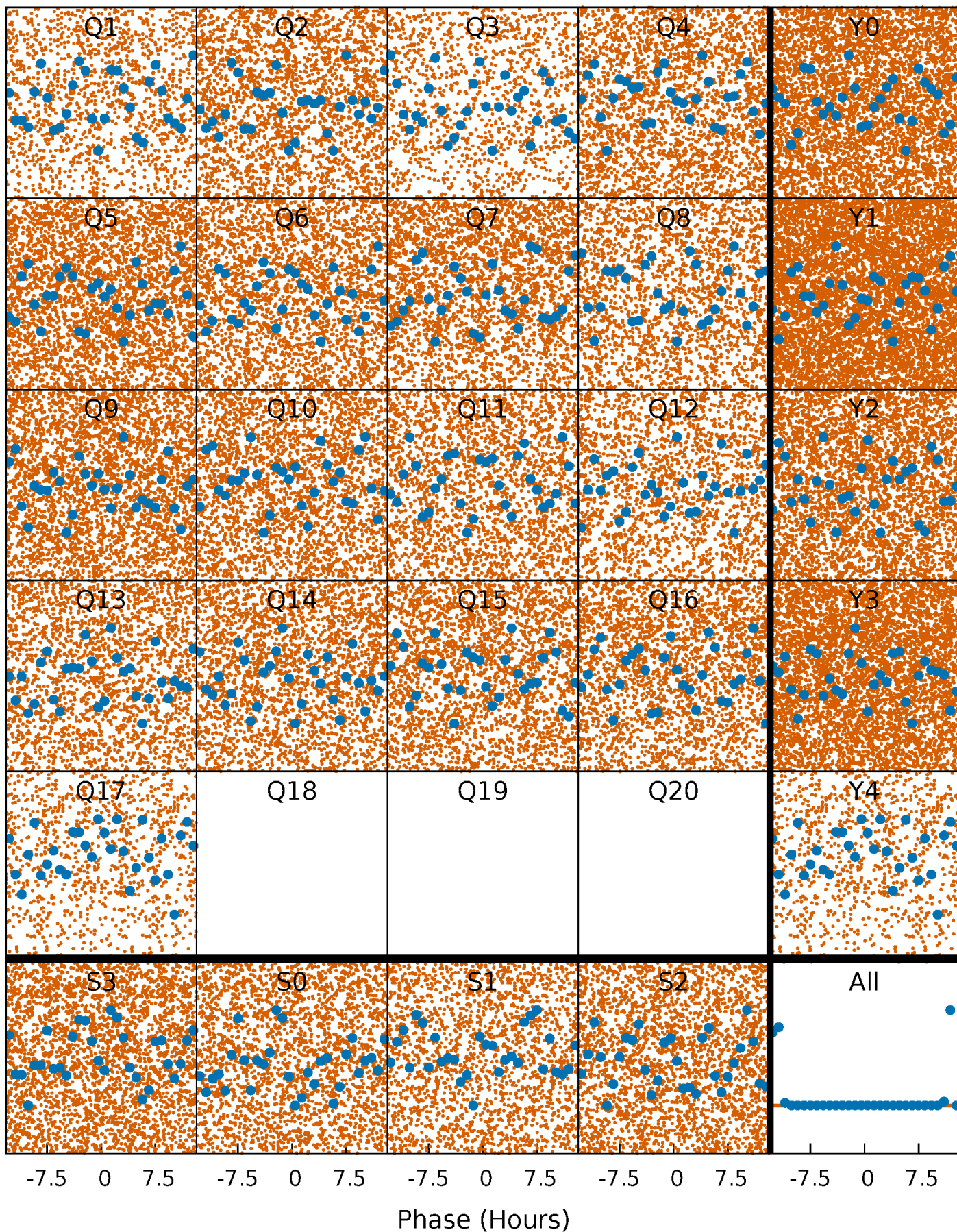


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



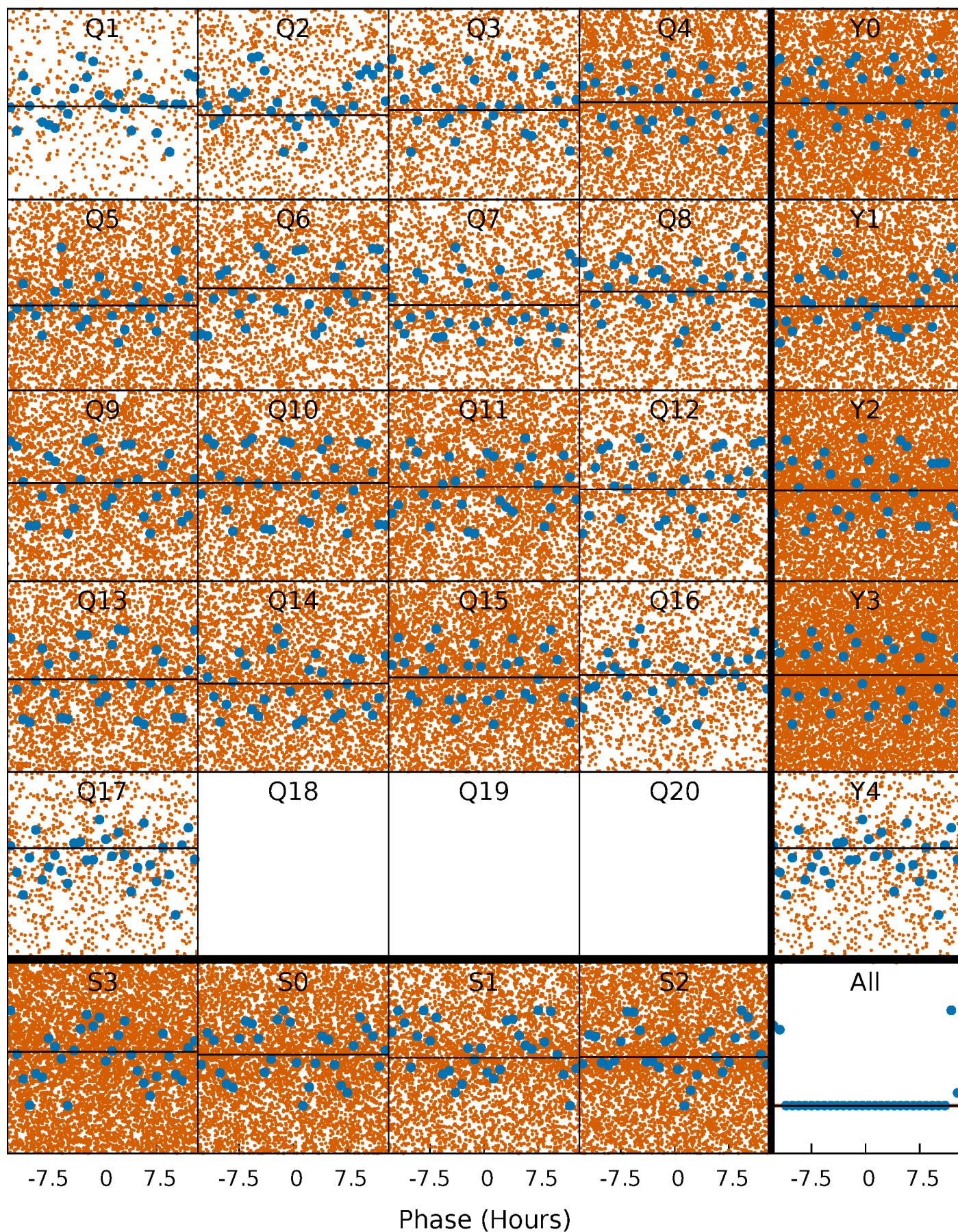
PDC Quarter-Phased Transit Curves

TCE 005033298-01 P= 0.664211 Days $T_0=131.913336$ (BKJD)



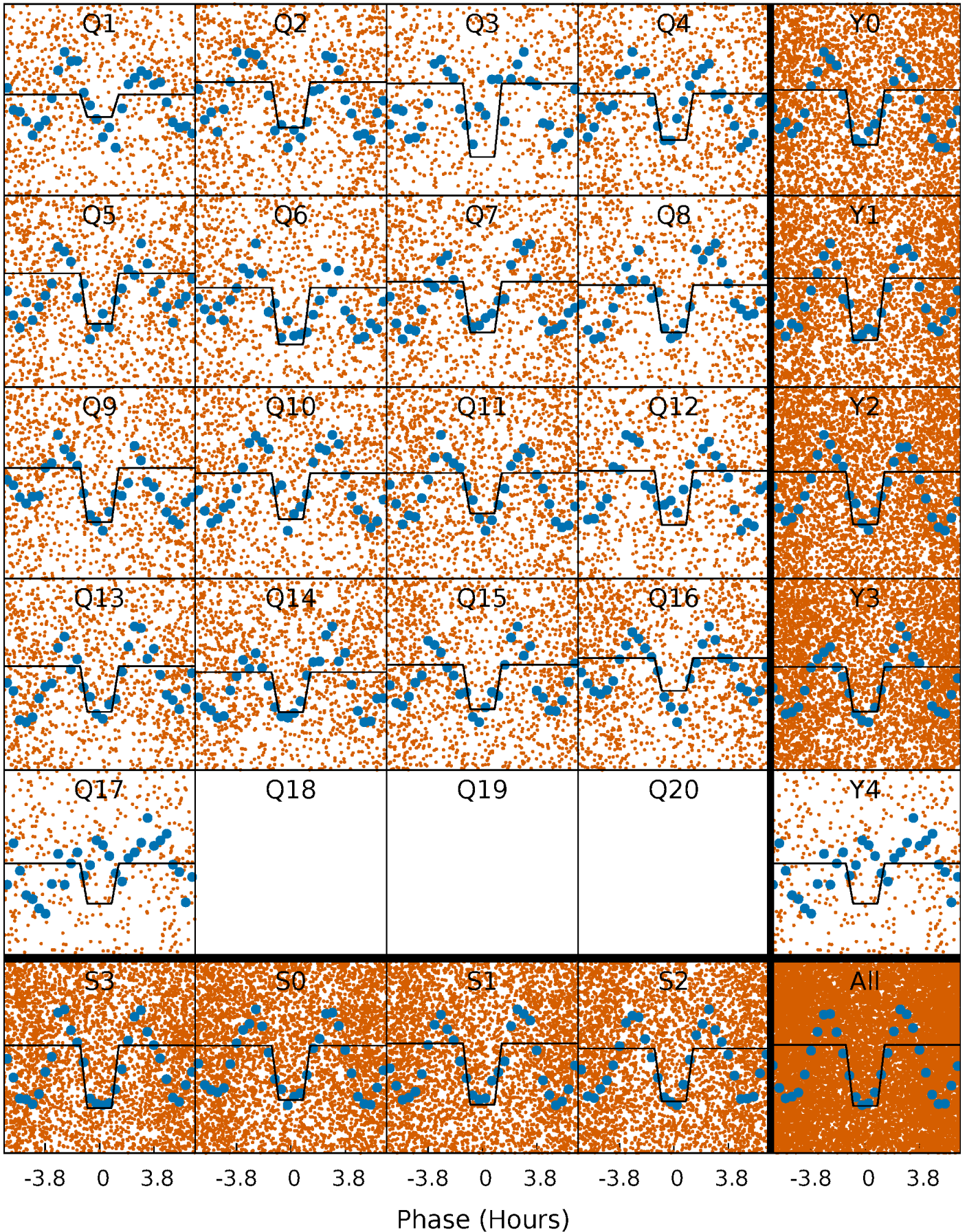
DV Quarter-Phased Transit Curves

TCE 005033298-01 P= 0.664211 Days $T_0=131.913336$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

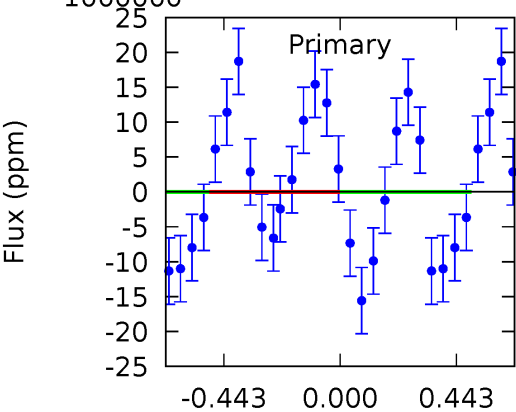
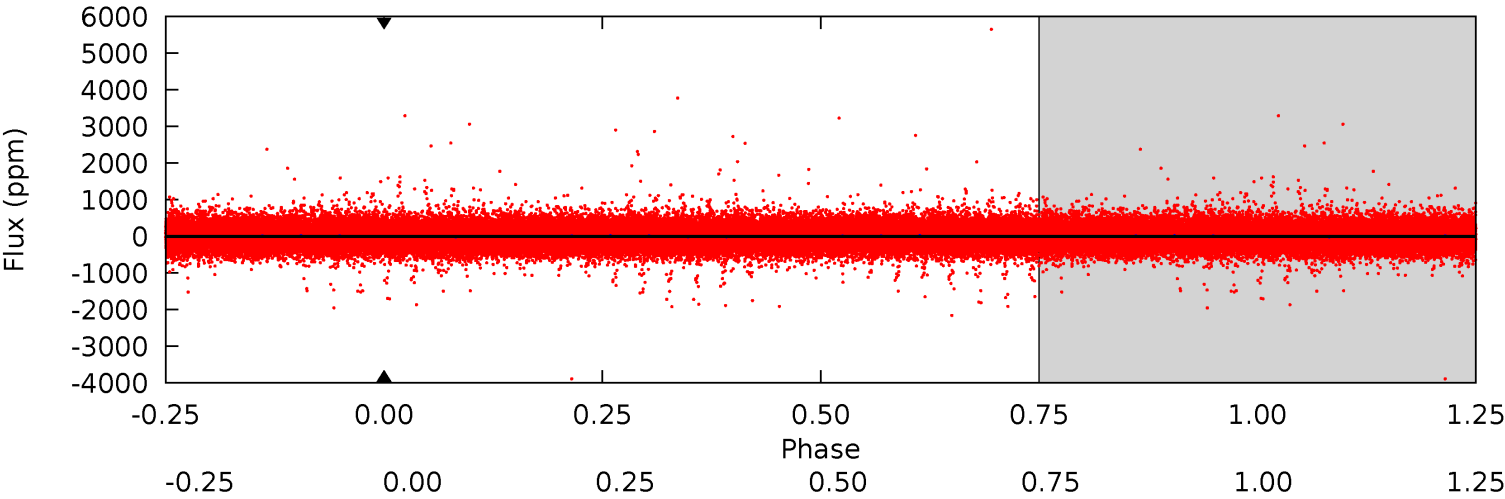
TCE 005033298-01 P= 0.664493 Days $T_0=131.867903$ (BKJD)



DV Model-Shift Uniqueness Test

005033298-01, P = 0.664211 Days, E = 131.249125 Days

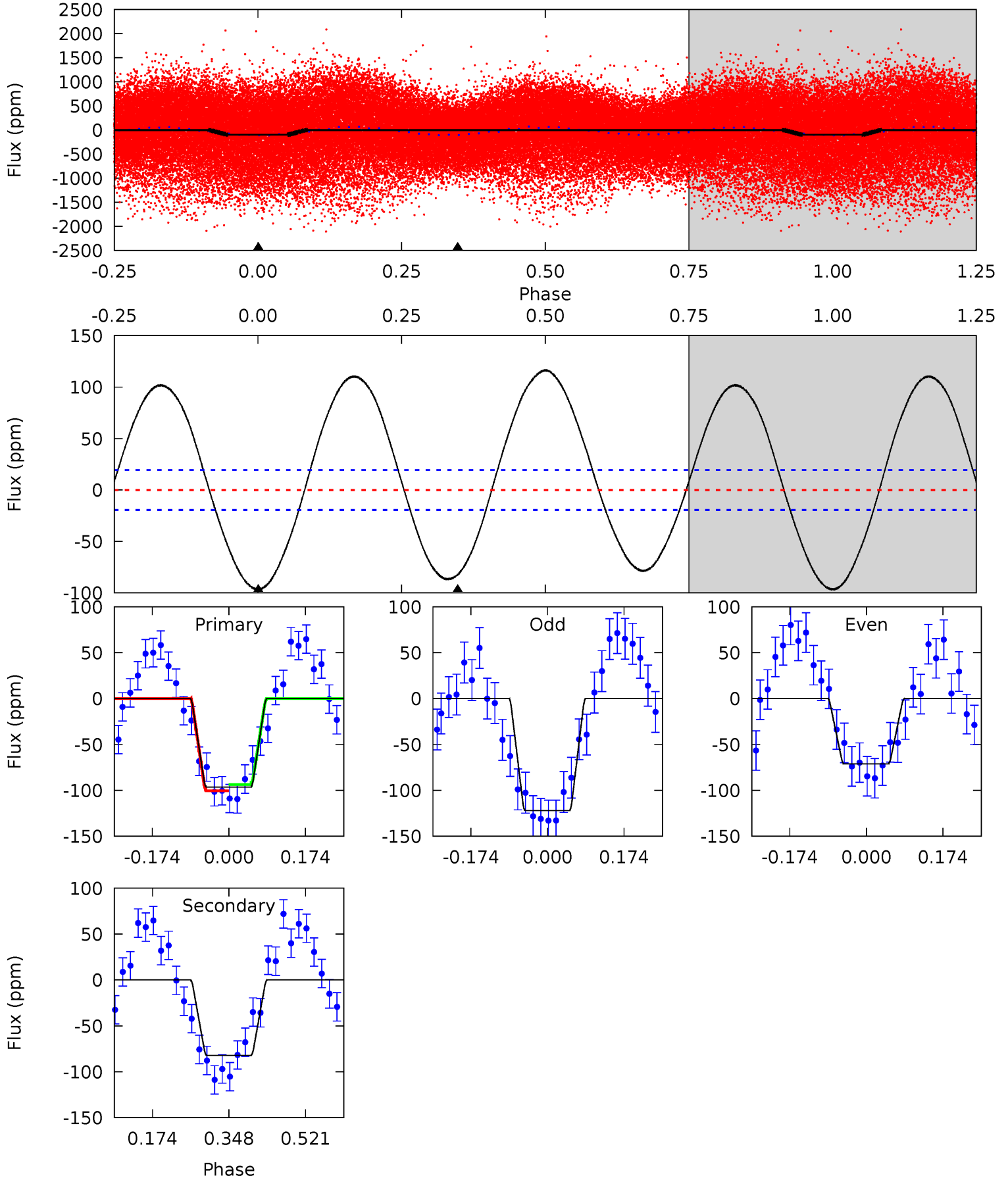
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

005033298-01, P = 0.664493 Days, E = 131.203410 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
22.1	18.8	0	0	4.45	1.36	14.2	22.1	22.1	18.8	18.8	5.41	2.49	0.55	0.67



Stellar Parameters For KIC 005033298

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6832^{+189}_{-307}	$4.237^{+0.108}_{-0.201}$	$-0.080^{+0.250}_{-0.350}$	$1.457^{+0.495}_{-0.266}$	$1.345^{+0.204}_{-0.224}$	$0.612^{+0.360}_{-0.304}$
	+3%/-4%	+3%/-5%	+312%/-438%	+34%/-18%	+15%/-17%	+59%/-50%
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 005033298-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	0 ± 1000000	$165.15^{+166.96}_{-121.55}$	508^{+252}_{-119}	1960^{+2891}_{-6423}	$0.725^{+4296.320}_{-3262.853}$
Alt.	-82 ± 4	$169.61^{+168.78}_{-120.55}$	516^{+258}_{-121}	1610^{+505}_{-3055}	$1.474^{+17.837}_{-1.290}$

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 $A_{obs} \gg 1.0$

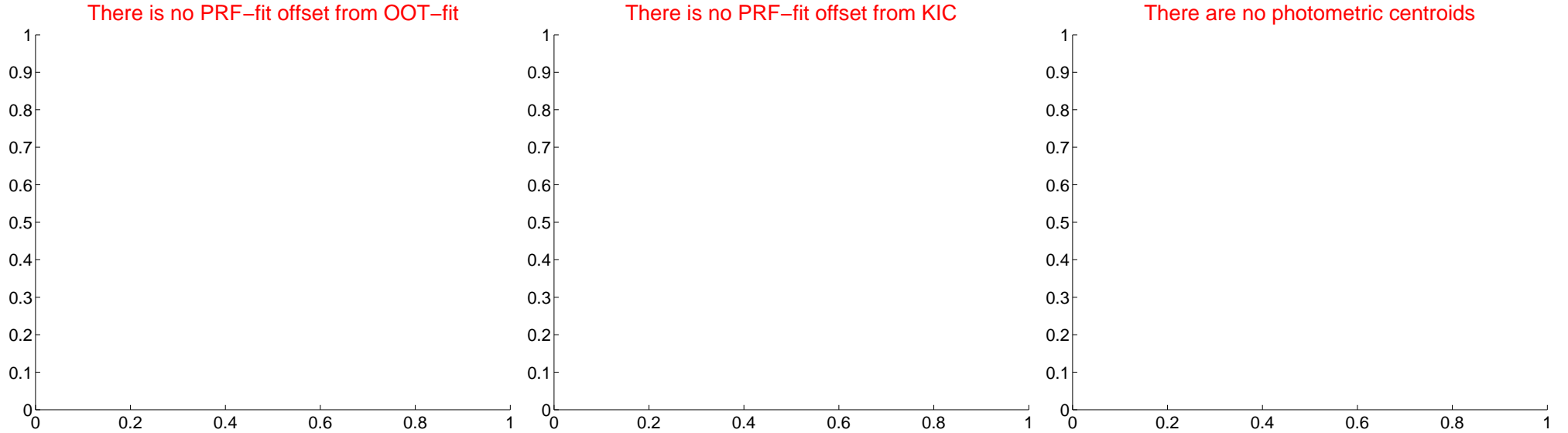
DV Centroid Data

Supplemental centroid analysis for 005033298-01. Kepler magnitude: 13.35. Transit SNR 0.00

There are 0 quarters with good PRF difference image offsets

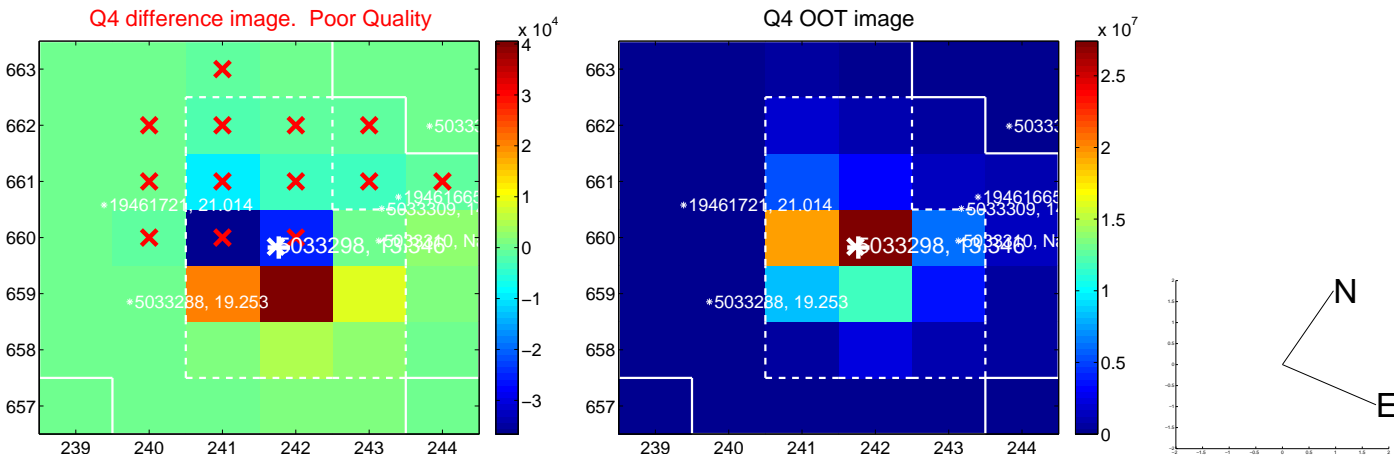
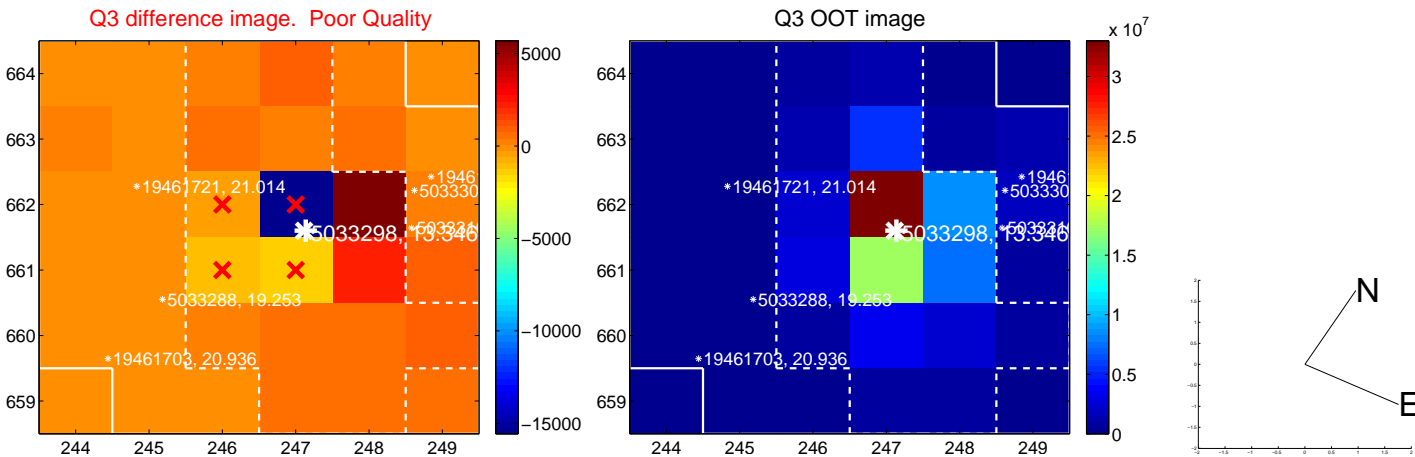
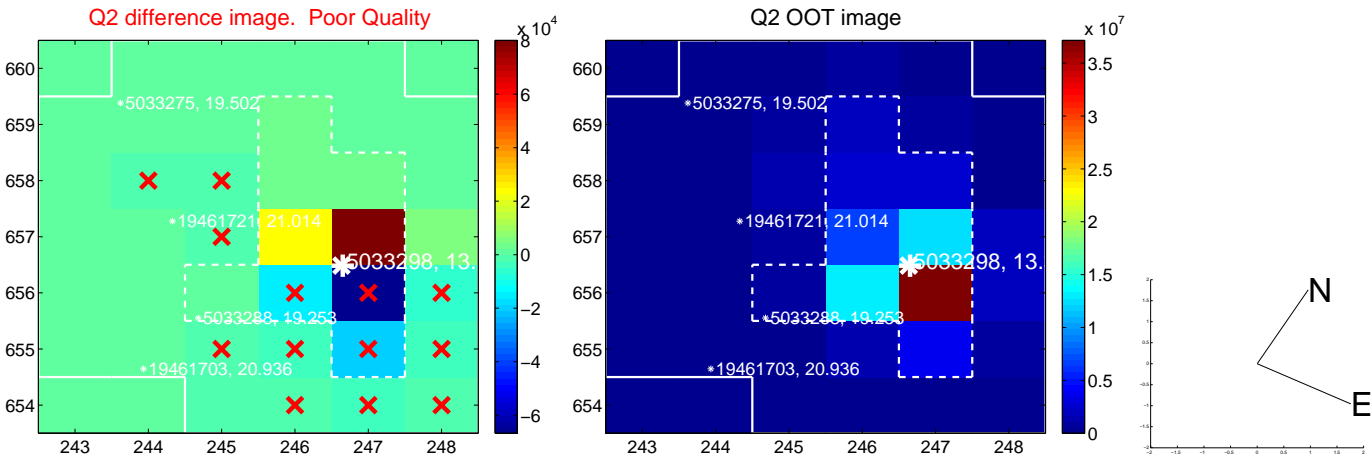
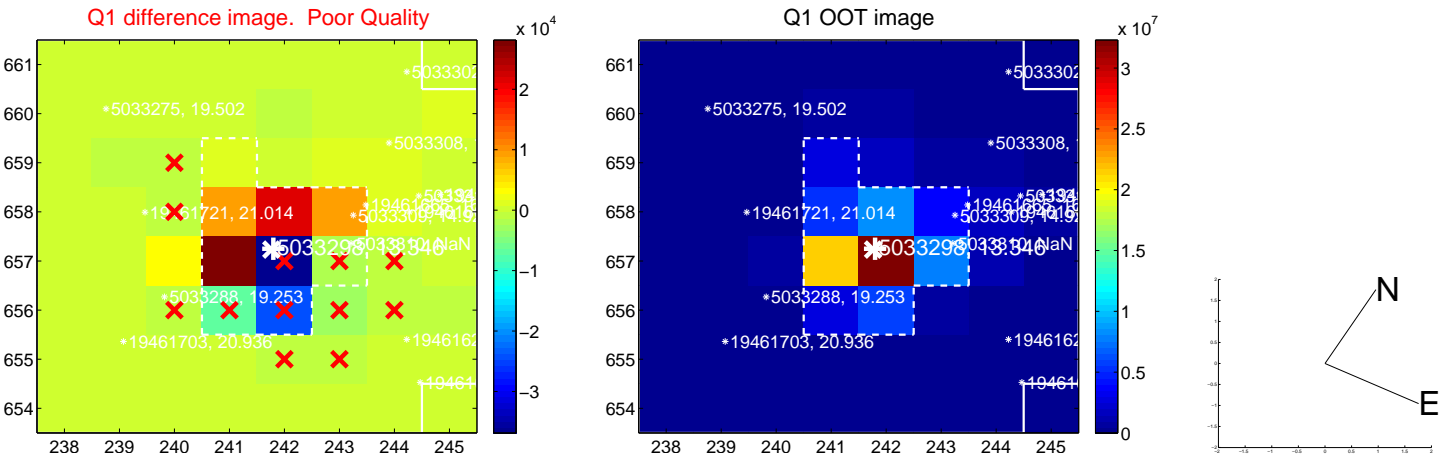
The direct PRF centroid is offset from the target star catalog position by about NaN arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	—	—	—	—
PRF-fit source offset from KIC position	—	—	—	—
photometric centroid source offset	—	—	—	—

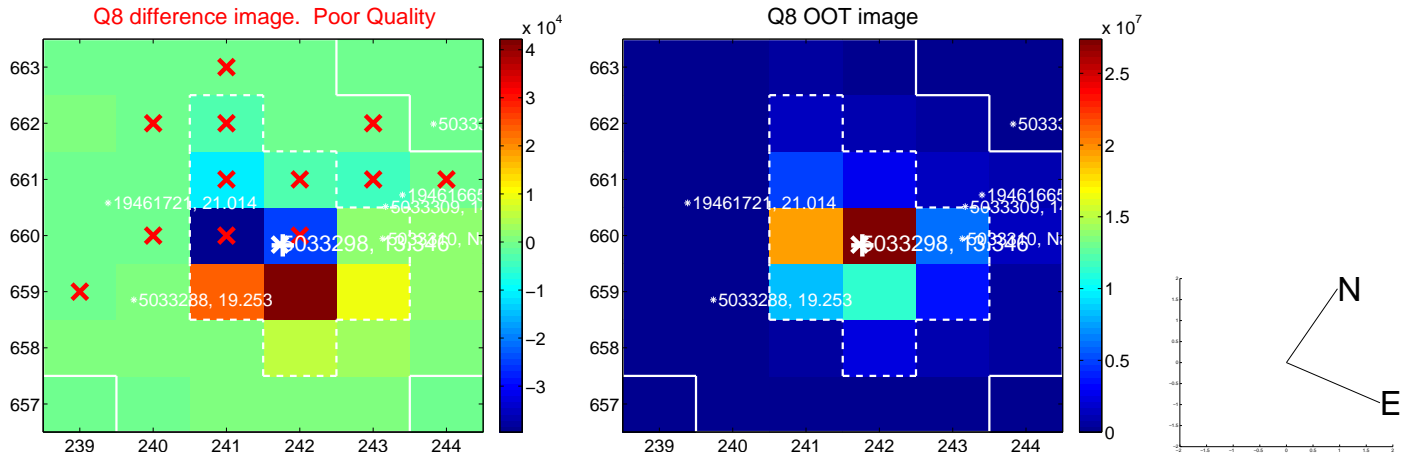
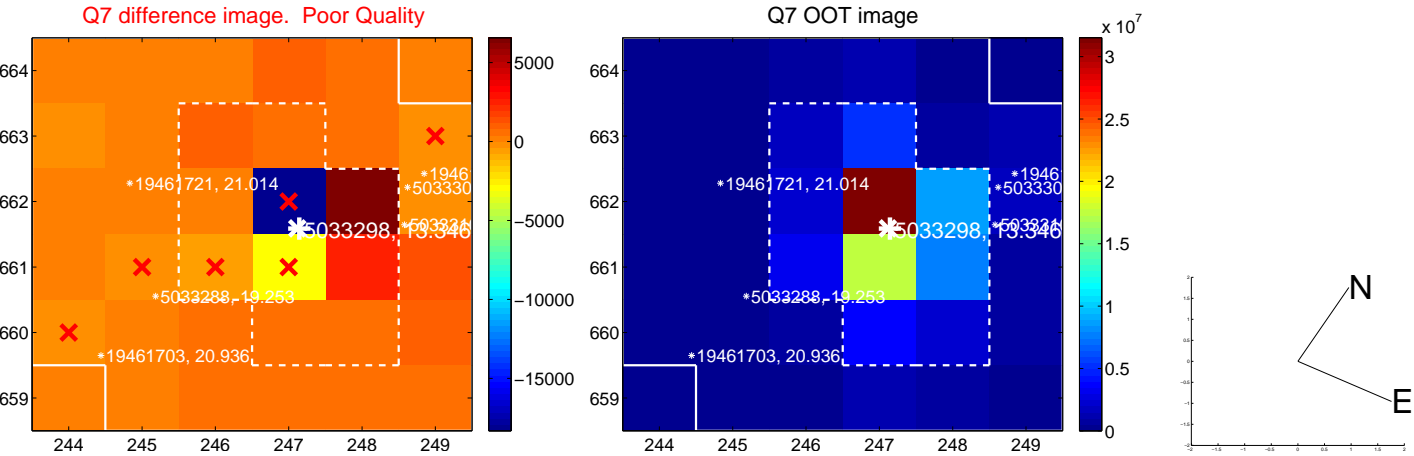
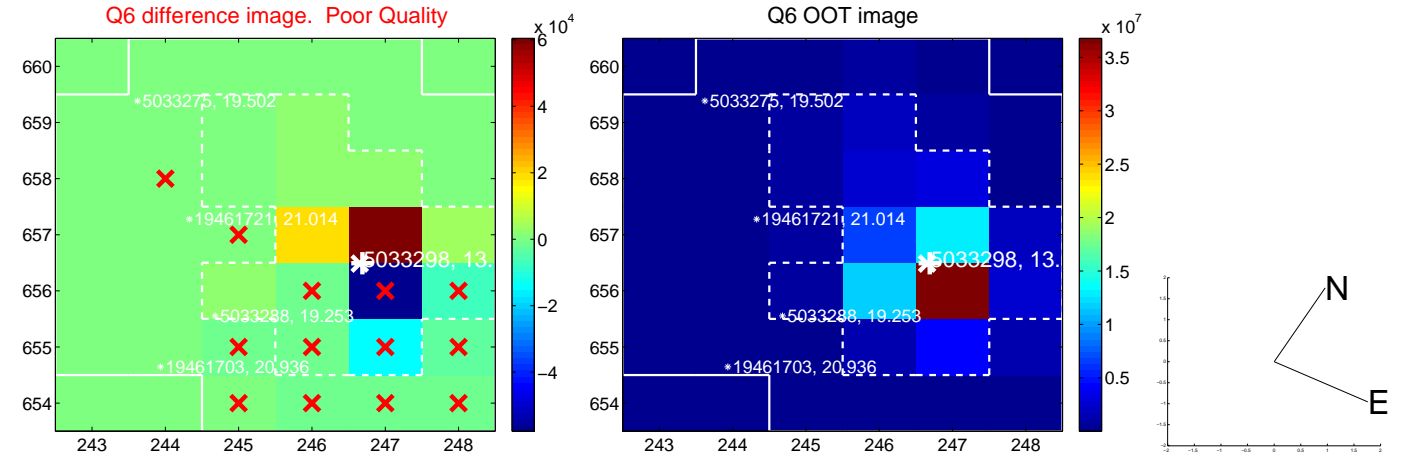
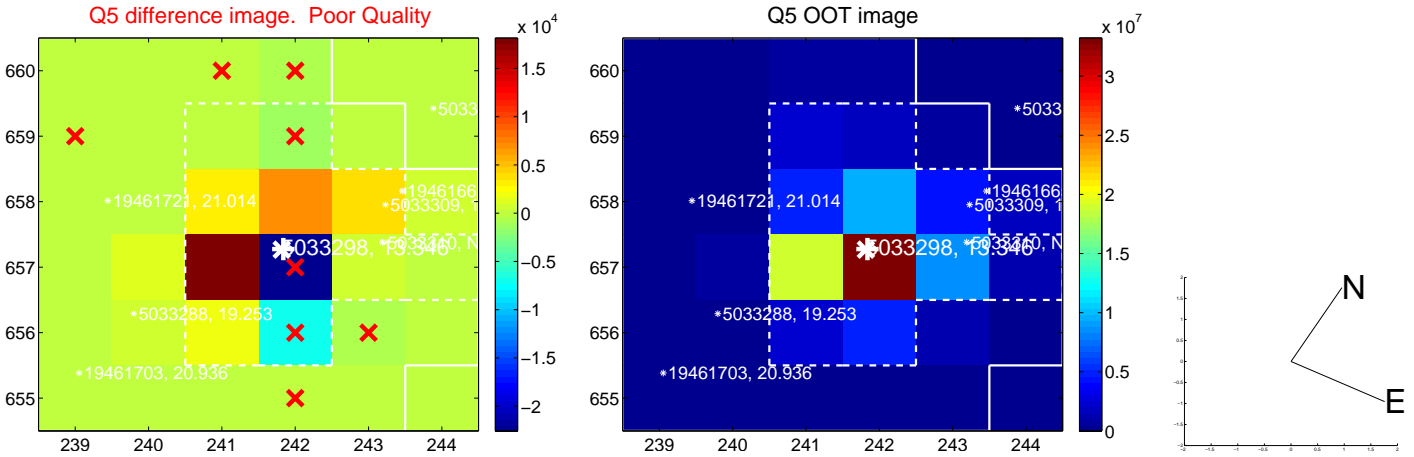


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

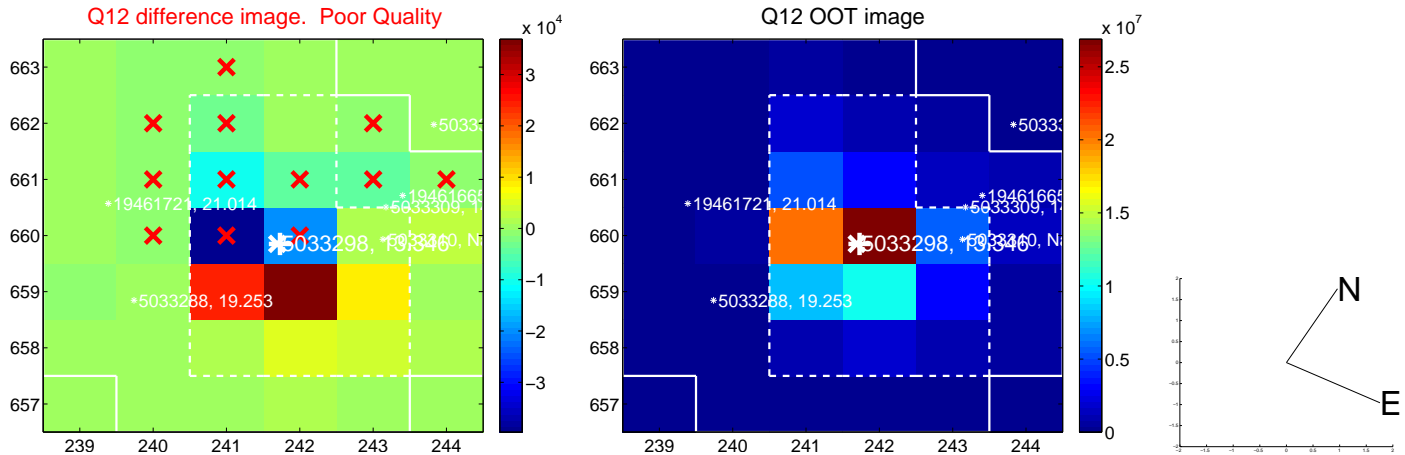
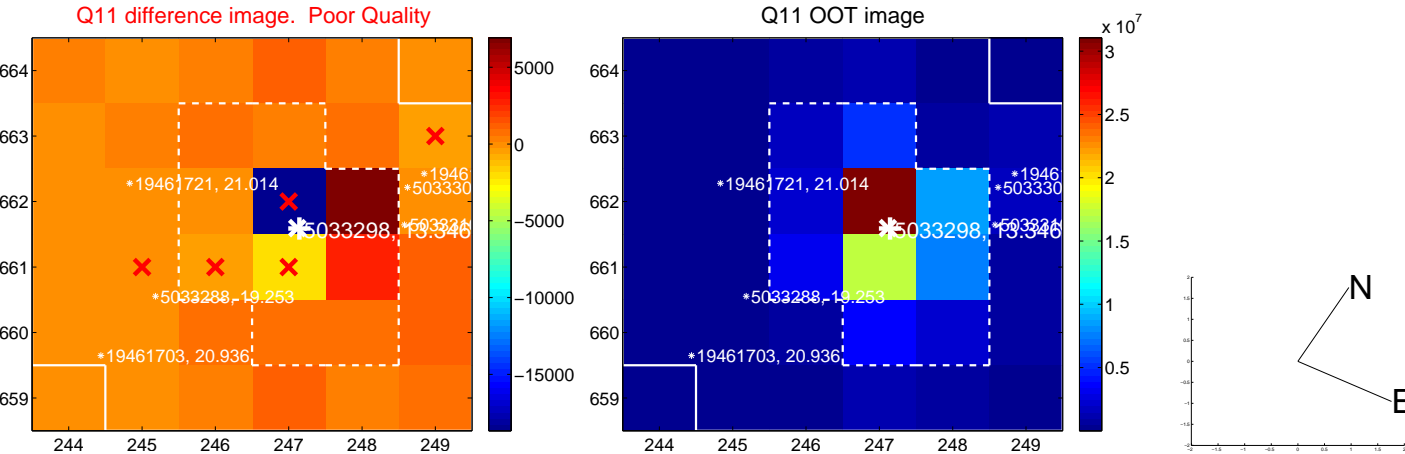
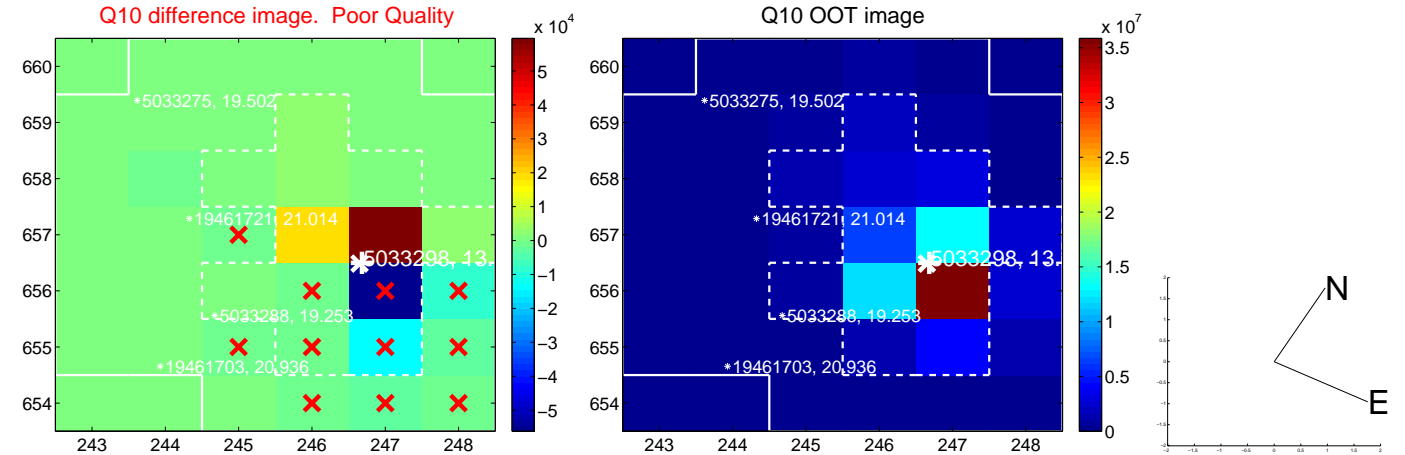
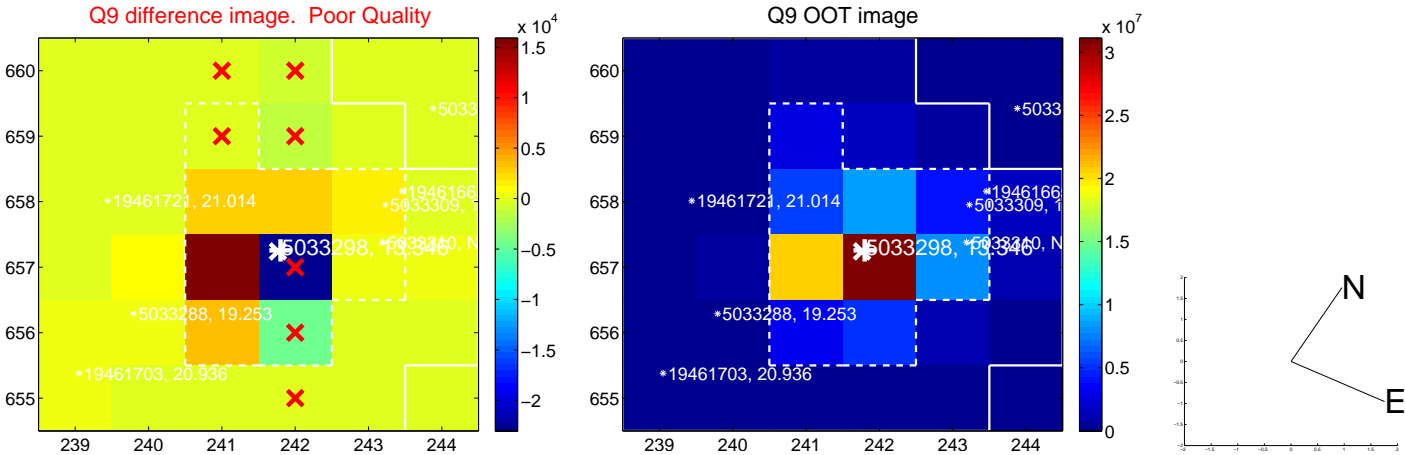
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



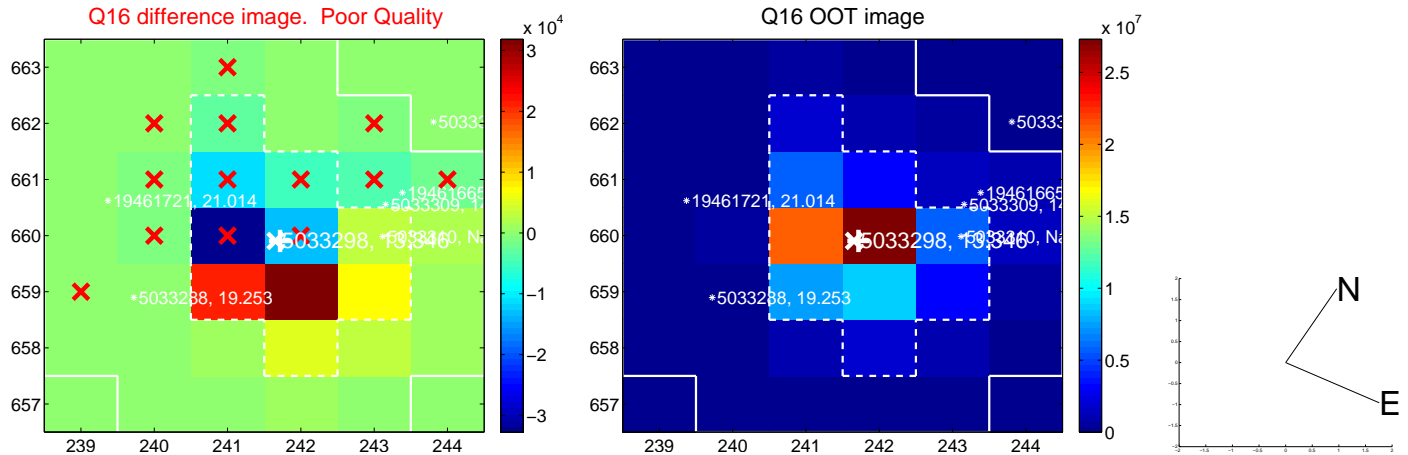
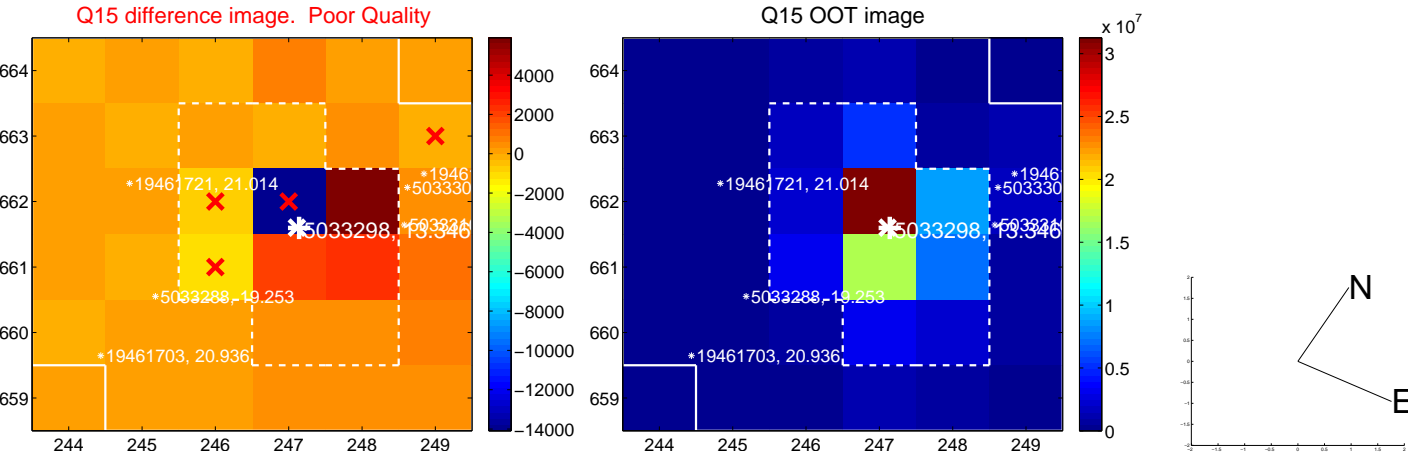
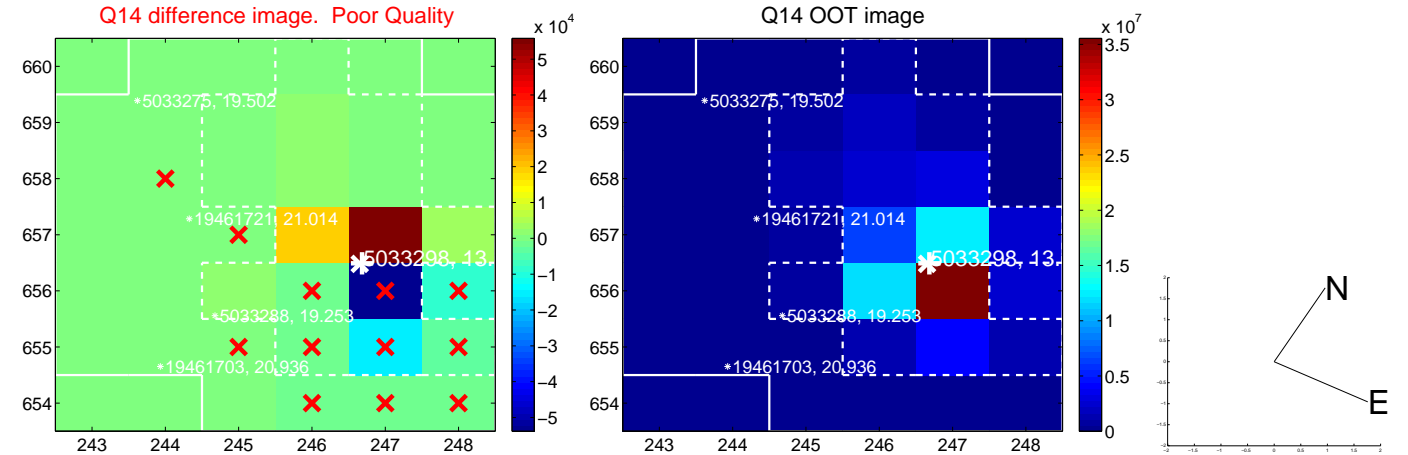
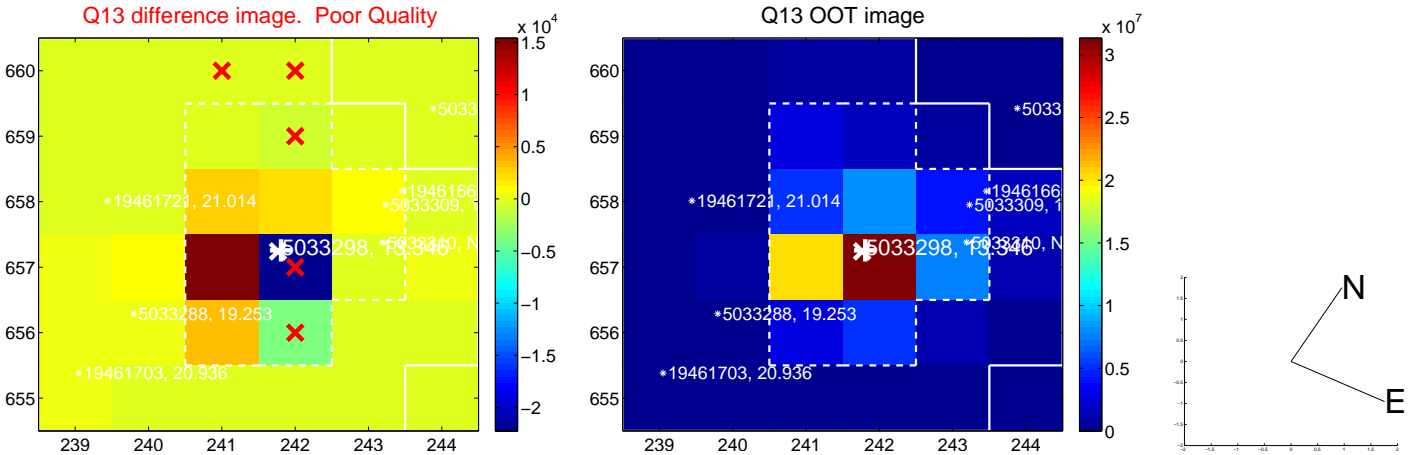
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



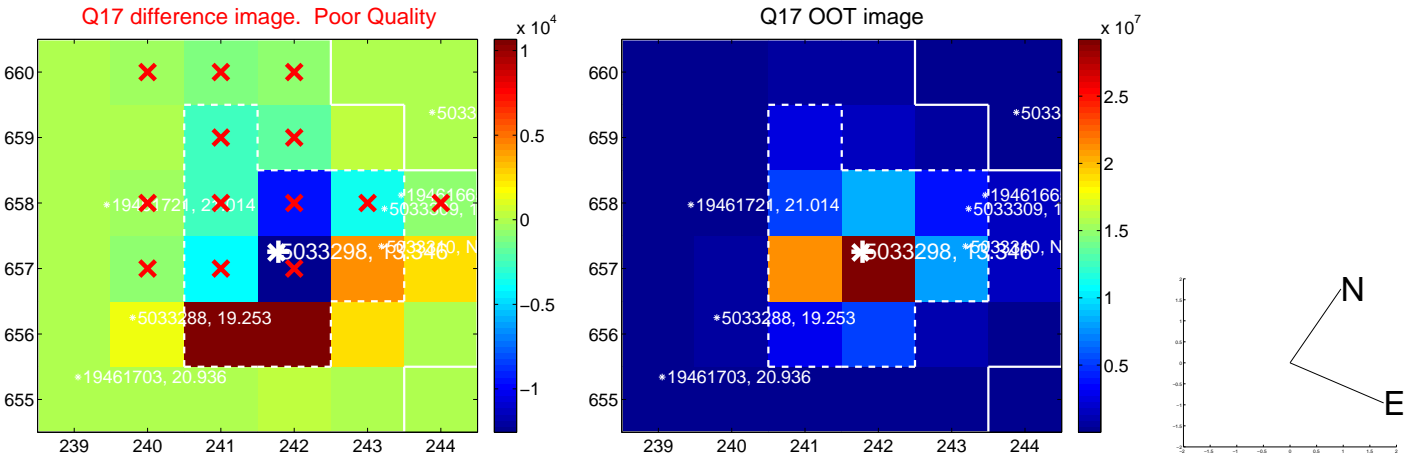
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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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

