

KIC 003123292

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})
003123292-01	OBS	No	0.809460	132.307860	68.4	1.732	8.2	9.1	0.72	4862	0.73	1083.72

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003123292-01	OBS	FP	0.00	1	0	0	0	LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT

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

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

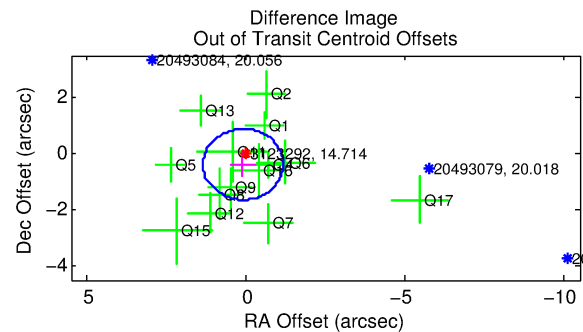
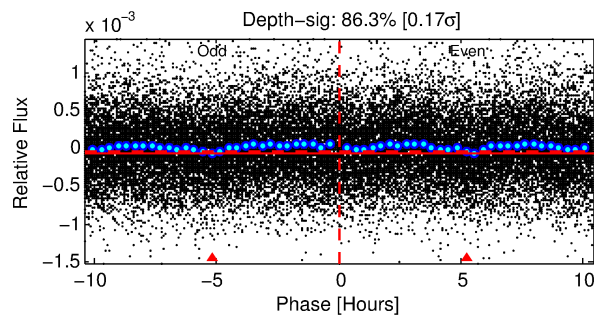
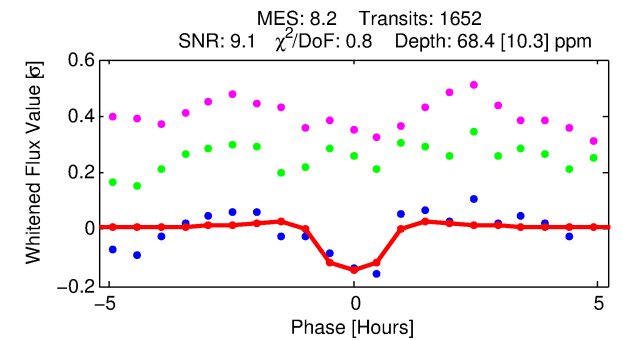
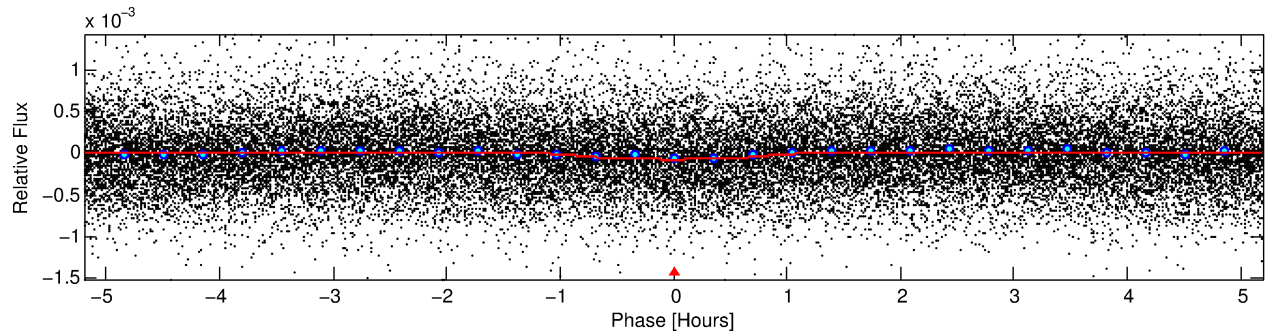
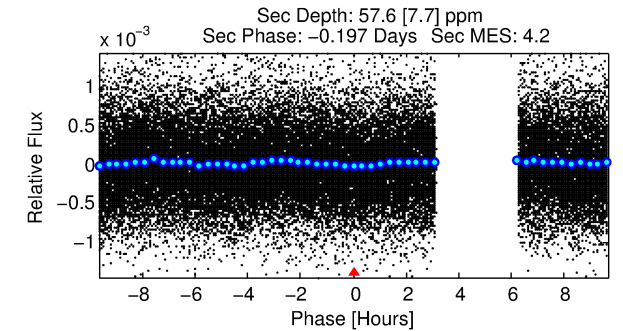
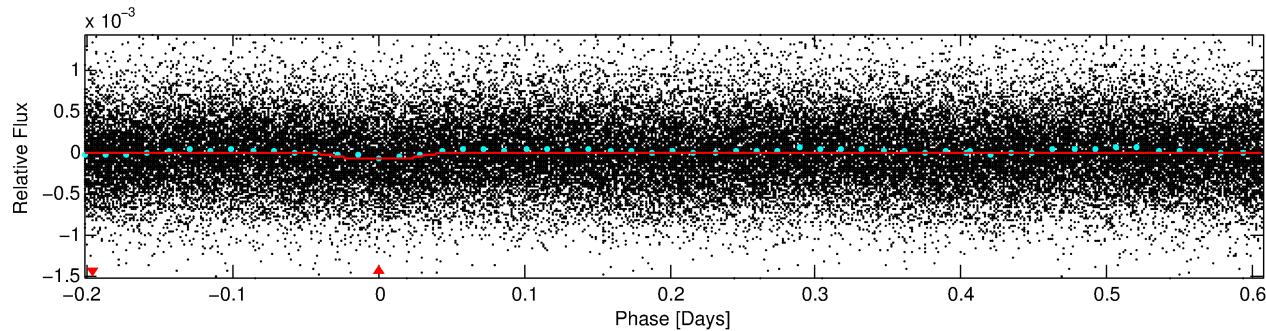
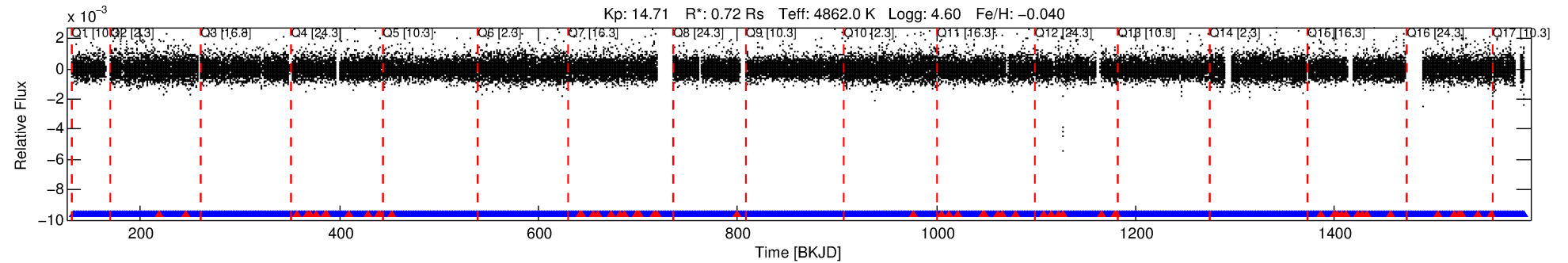
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 003123292-01

No Significant Match Found

DV One-Page Summary

KIC: 3123292 Candidate: 1 of 1 Period: 0.809 d



DV Fit Results:

Period = 0.80946 [0.00001] d
Epoch = 132.3079 [0.0024] BKJD
Rp/R* = 0.0092 [0.0072]
a/R* = 1.93 [4.22]
b = 0.89 [0.71]
Seff = 1083.72 [102.59]
Teff = 1463 [35] K
Rp = 0.73 [0.57] Re
a = 0.0155 [0.0007] AU
Ag = 14.49 [22.64] [0.60σ]
Teffp = 4413 [1724] K [1.71σ]

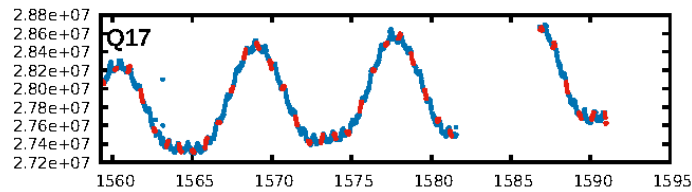
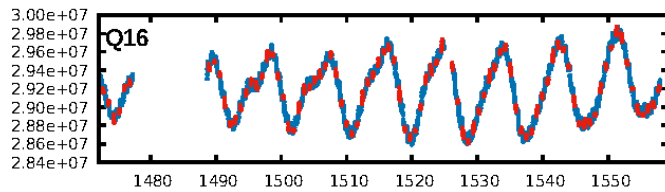
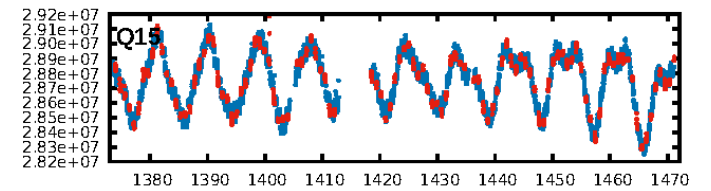
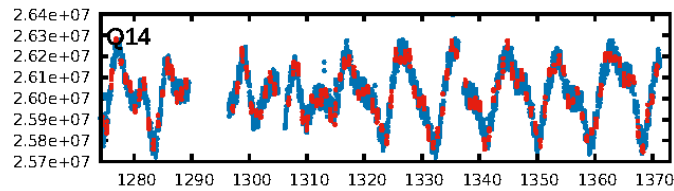
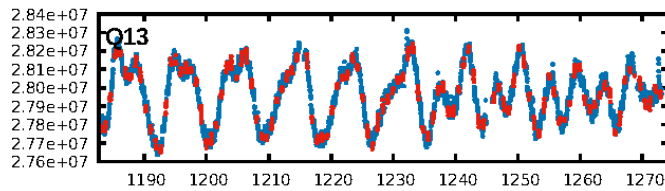
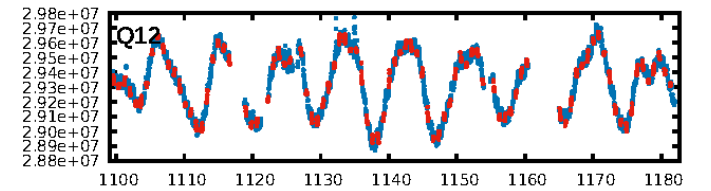
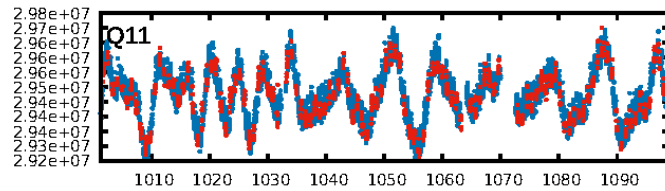
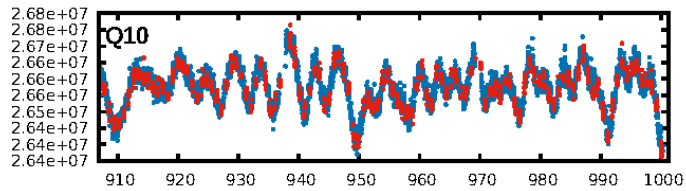
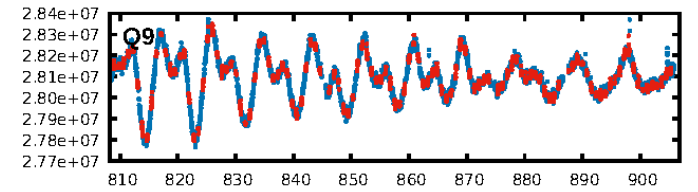
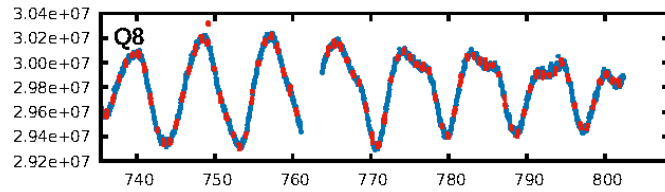
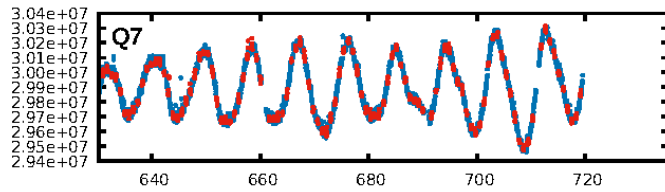
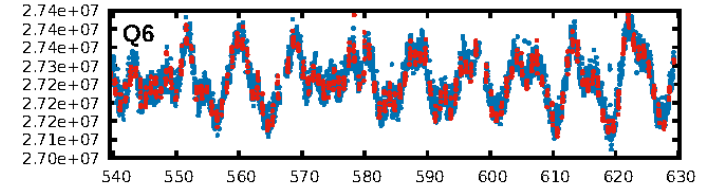
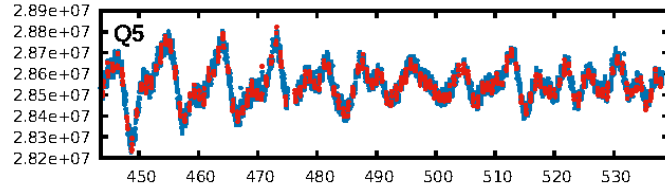
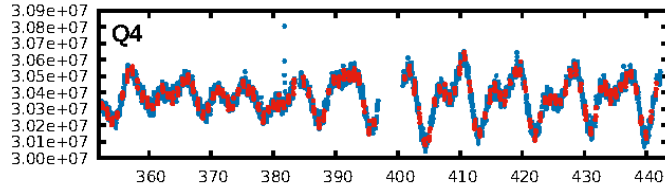
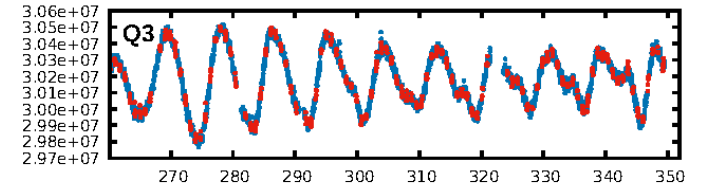
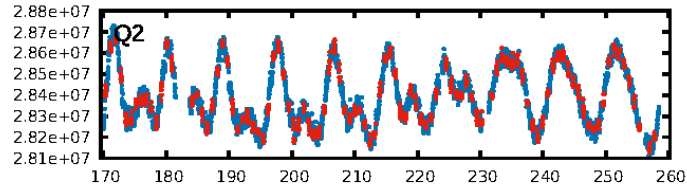
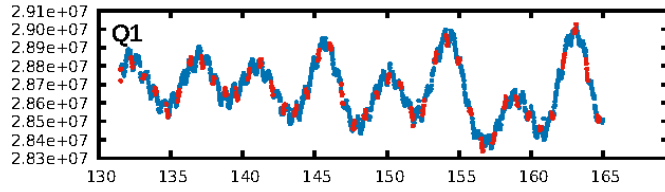
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 7.86e-15
RollingBand-fgt: 0.96 [1519/1576]
GhostDiagnostic-chr: 7.193
Centroid-sig: 9.0%
Centroid-so: 1.277 arcsec [1.03σ]
OotOffset-rm: 0.395 arcsec [0.94σ]
KicOffset-rm: 0.537 arcsec [1.26σ]
OotOffset-st: 2/3/4/5 [14]
KicOffset-st: 2/3/4/5 [14]
DiffImageQuality-fgm: 0.64 [9/14]
DiffImageOverlap-fno: 1.00 [17/17]

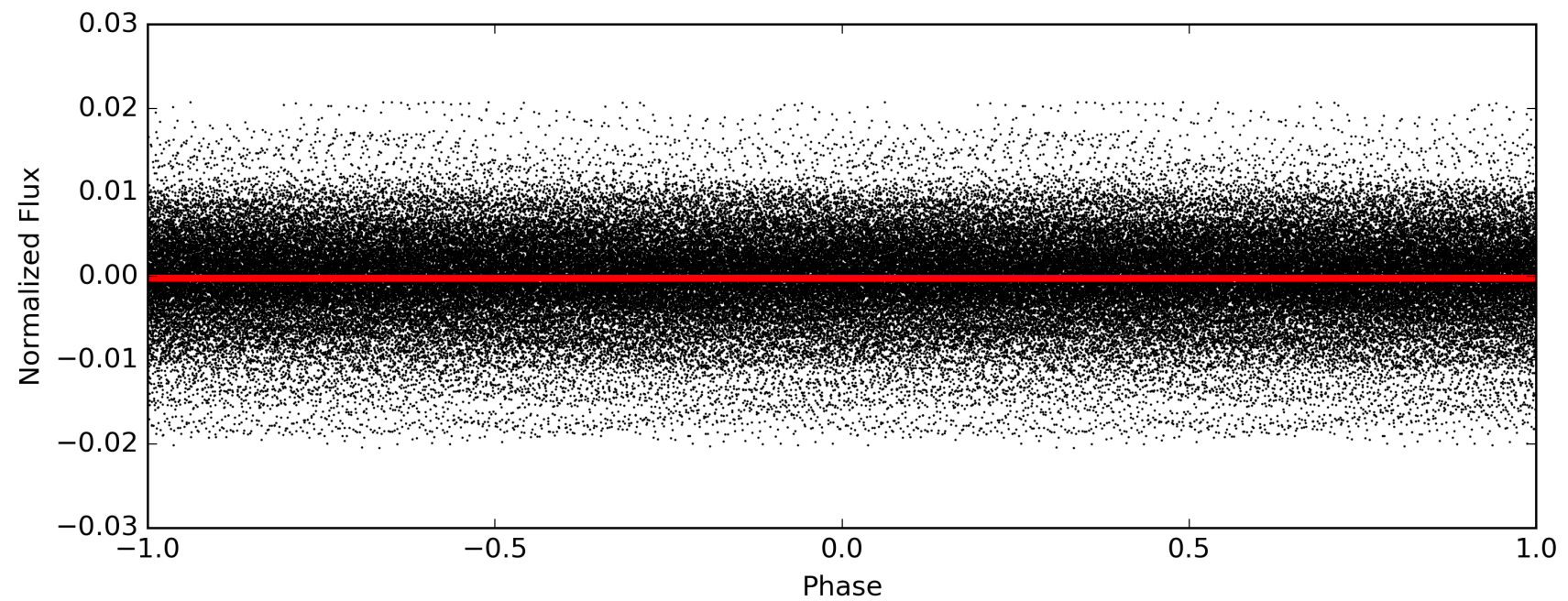
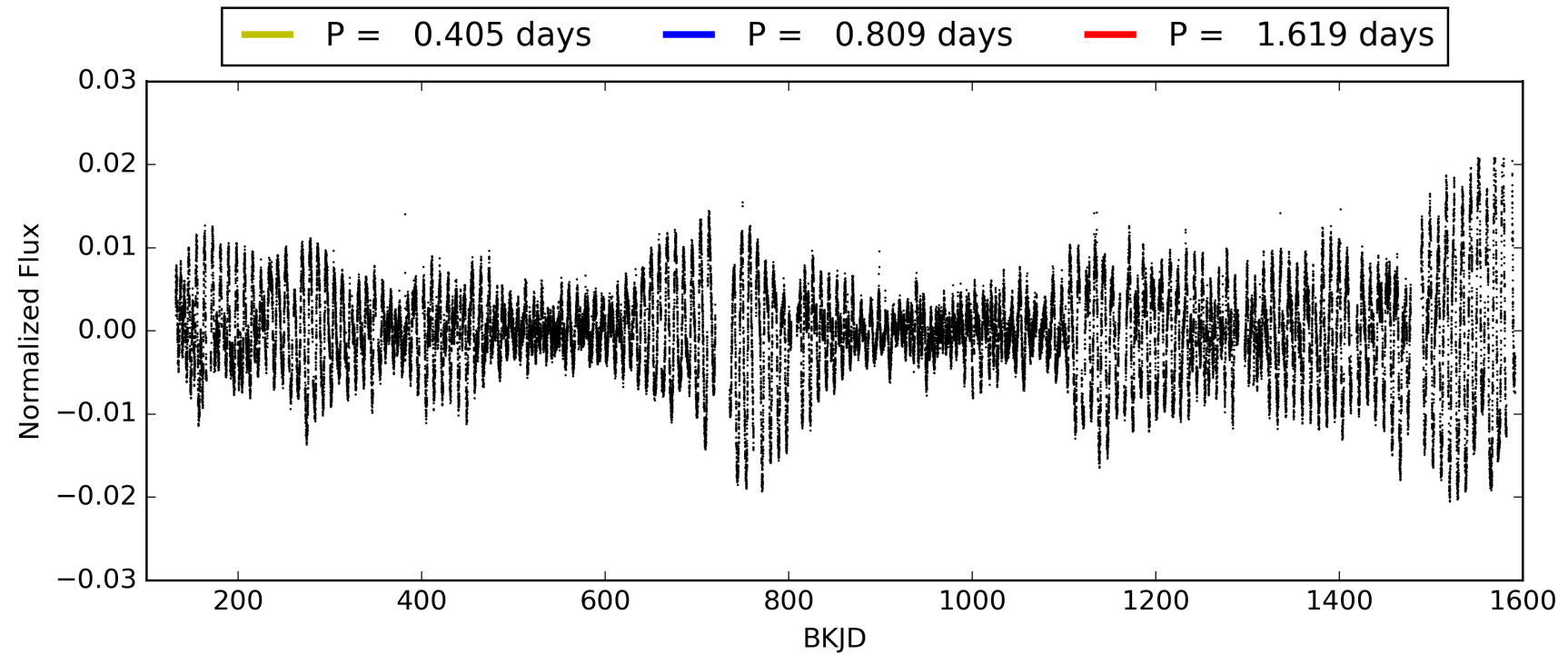
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 02:22:47 Z

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

TCE 003123292-01, PDC Light Curves

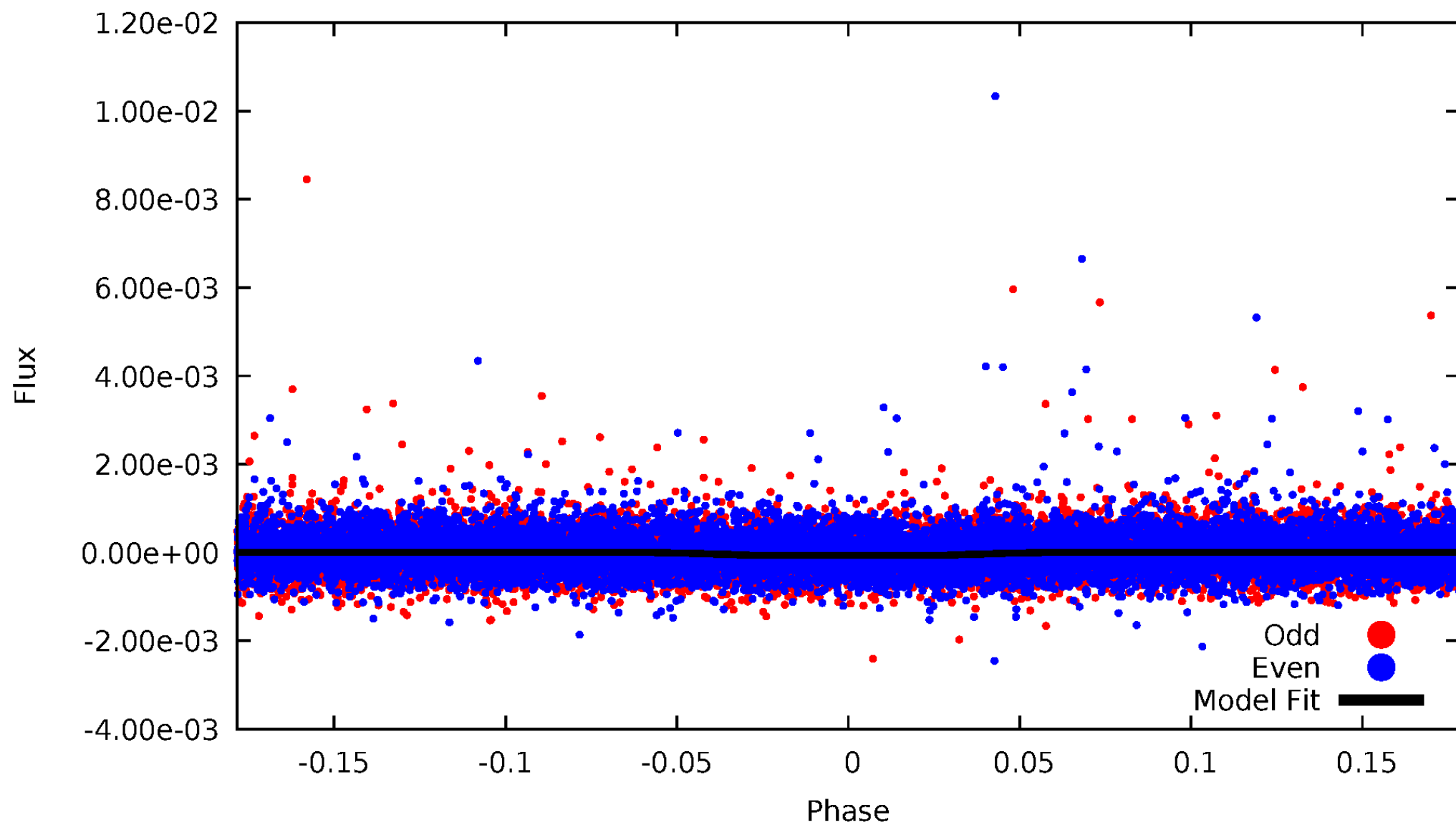


TCE 003123292-01



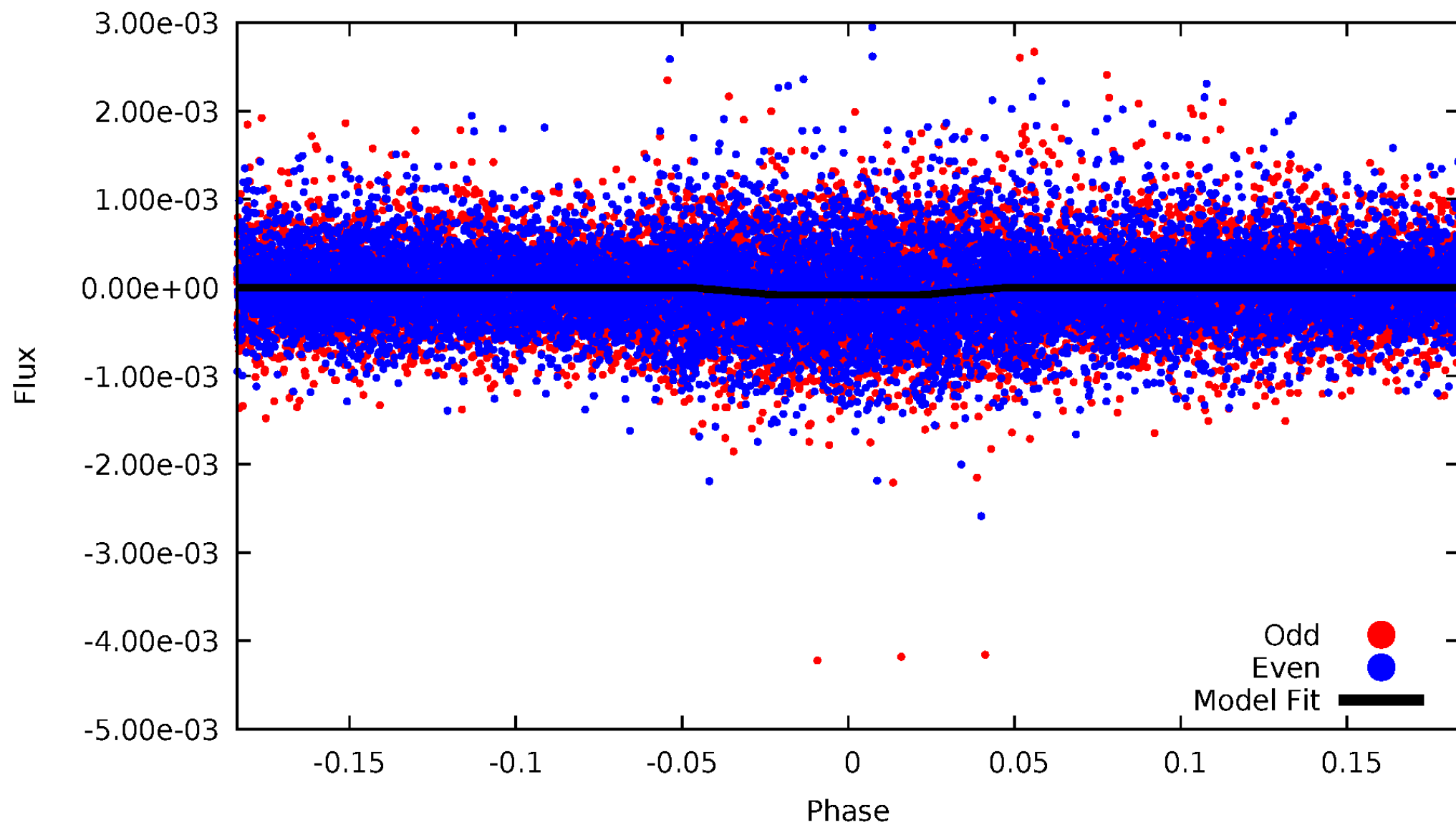
DV Odd/Even

TCE 003123292-01



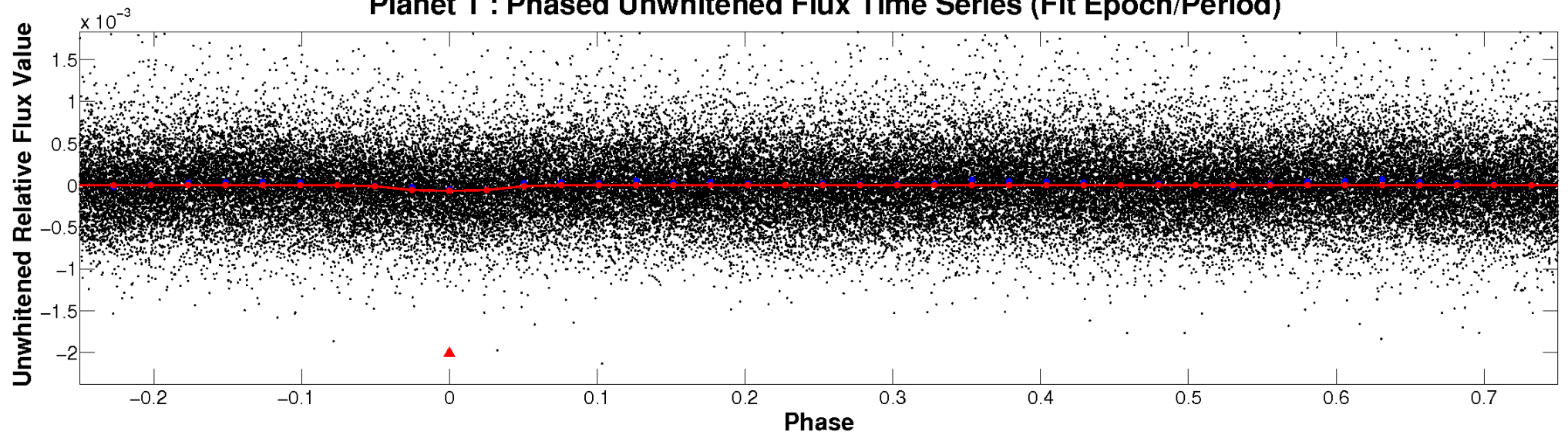
ALT Odd/Even

TCE 003123292-01

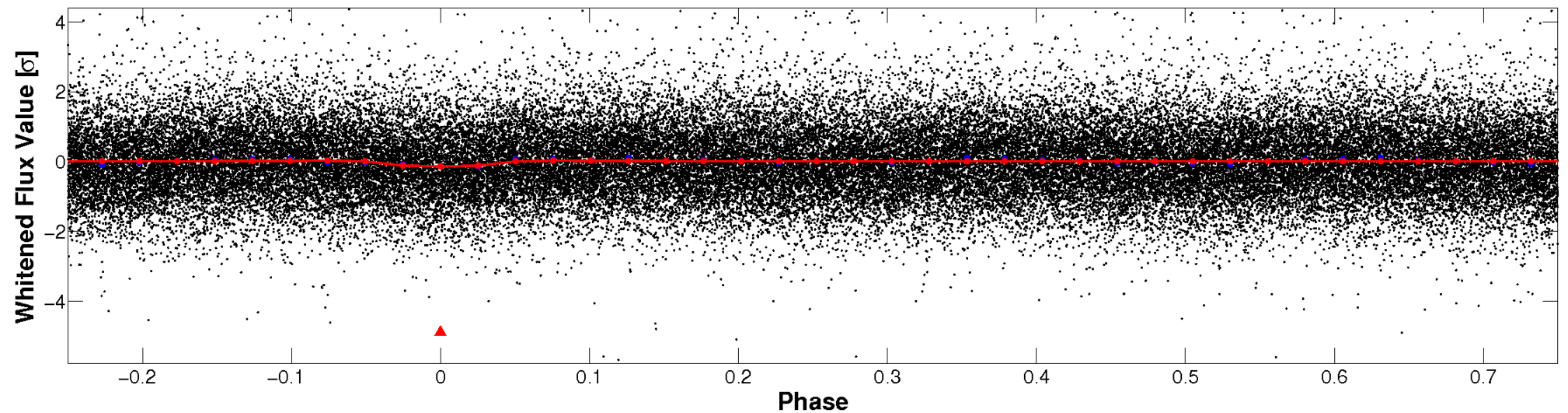


Non-Whitened Vs. Whitened Light Curve

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

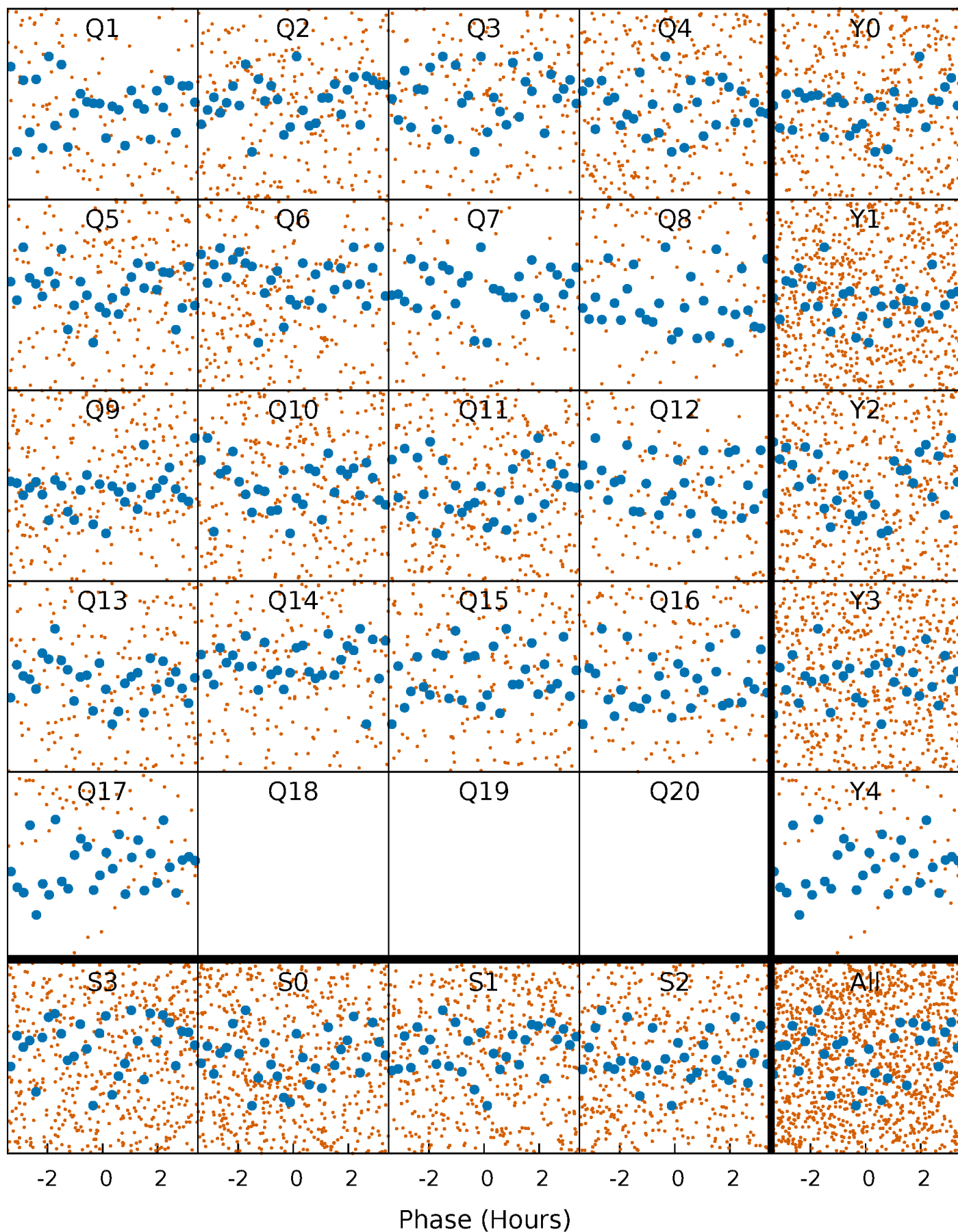


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



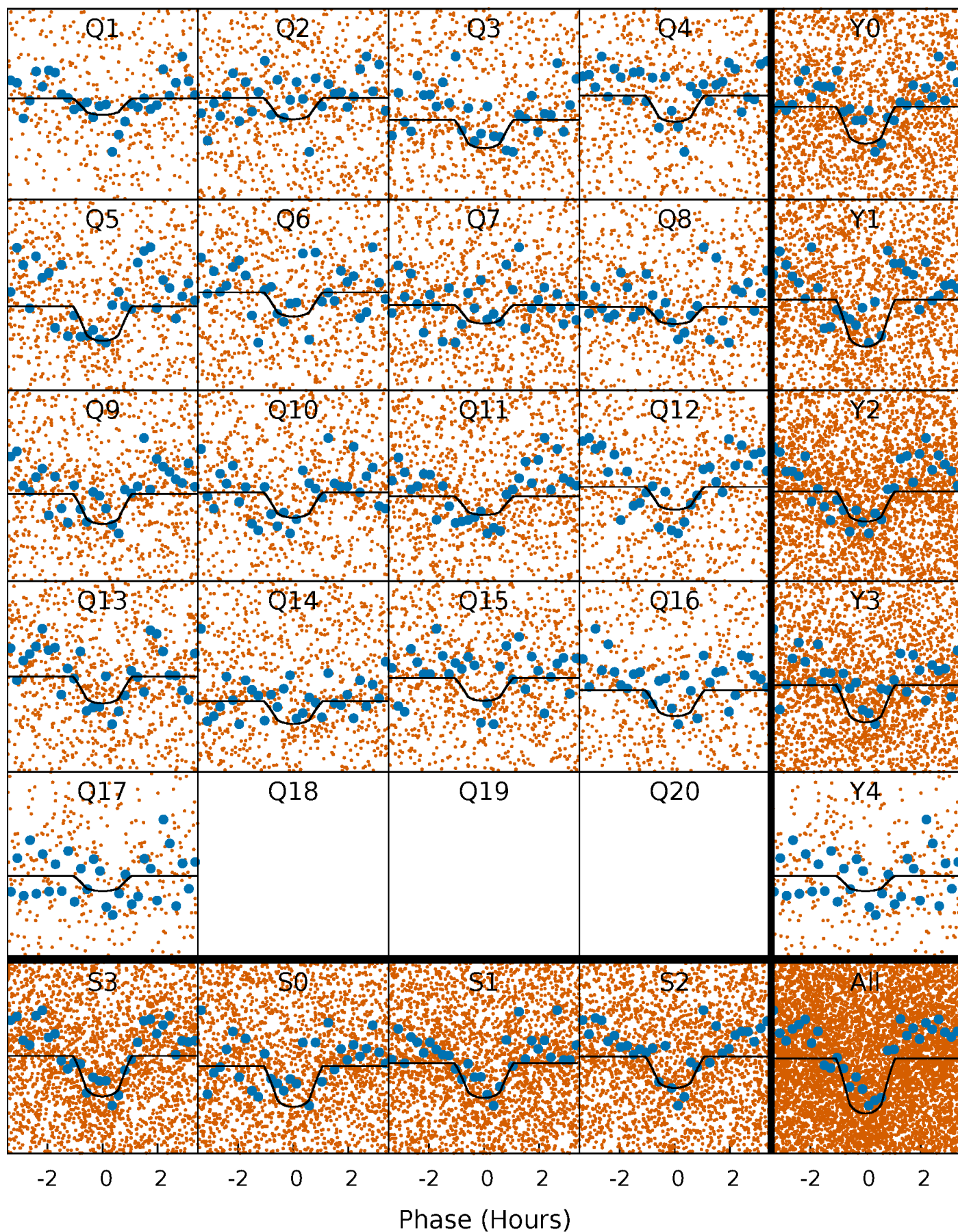
PDC Quarter-Phased Transit Curves

TCE 003123292-01 P= 0.809460 Days $T_0=132.307860$ (BKJD)



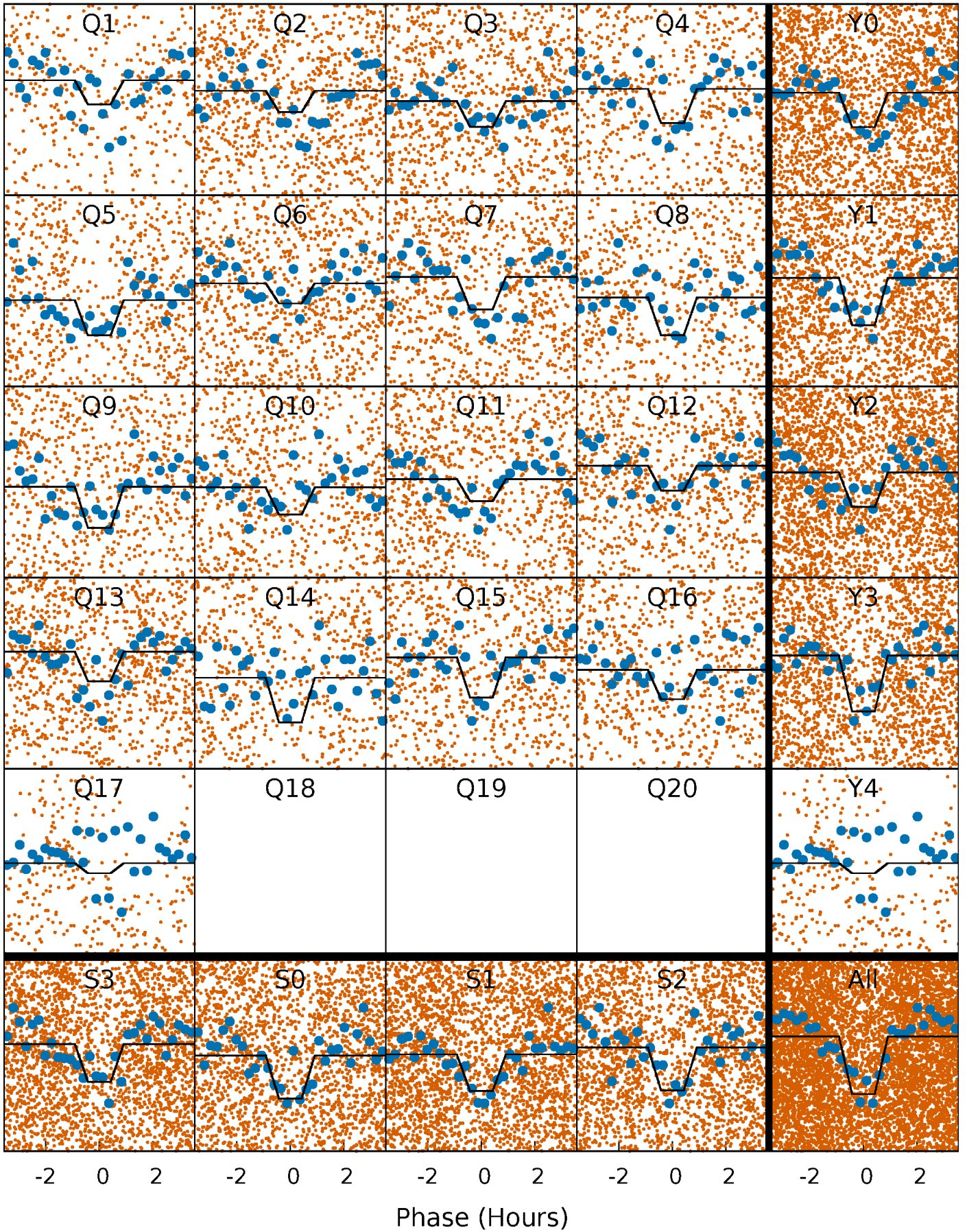
DV Quarter-Phased Transit Curves

TCE 003123292-01 P= 0.809460 Days $T_0=132.307860$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

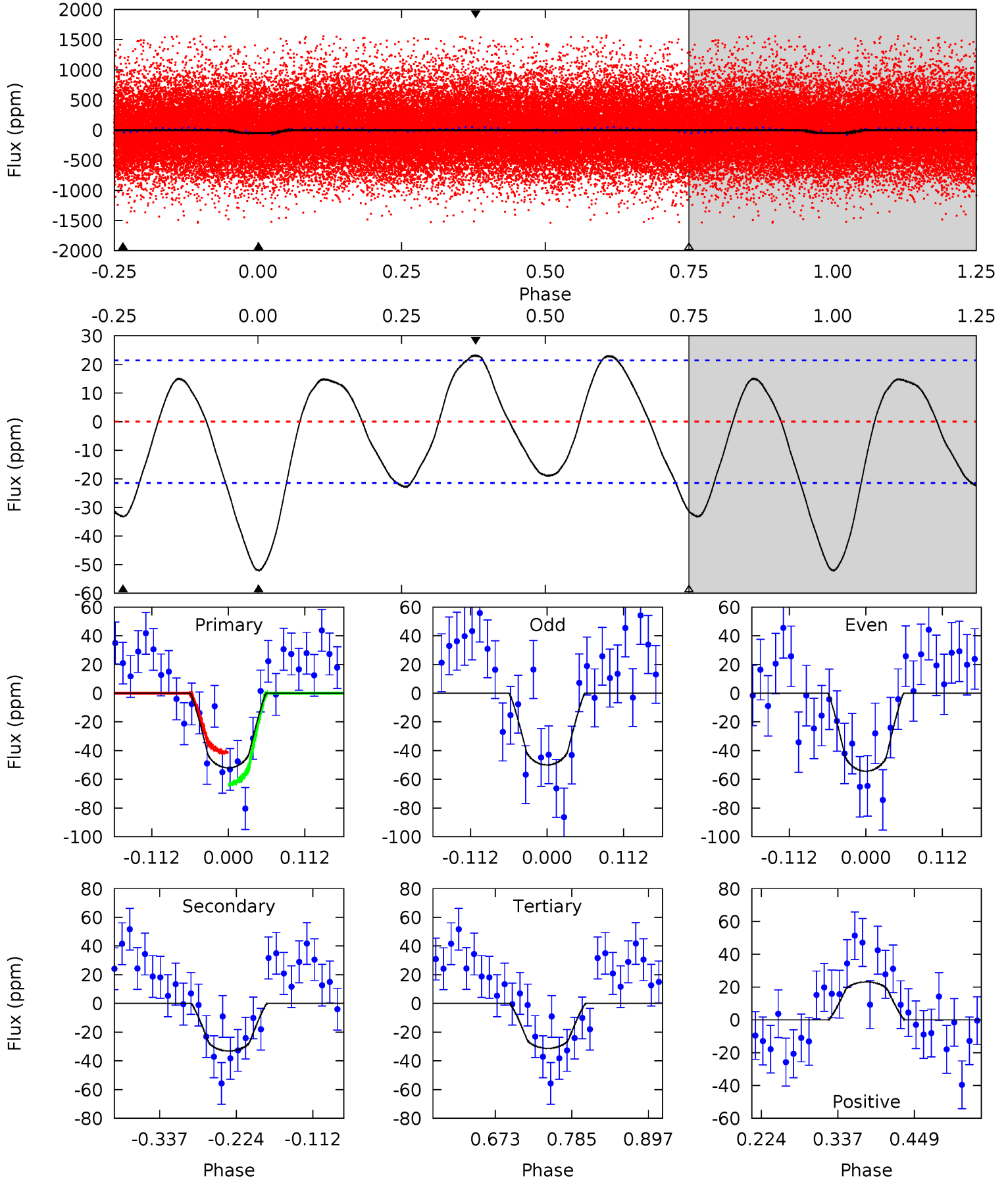
TCE 003123292-01 P= 0.809466 Days $T_0=132.310046$ (BKJD)



DV Model-Shift Uniqueness Test

003123292-01, P = 0.809460 Days, E = 131.498400 Days

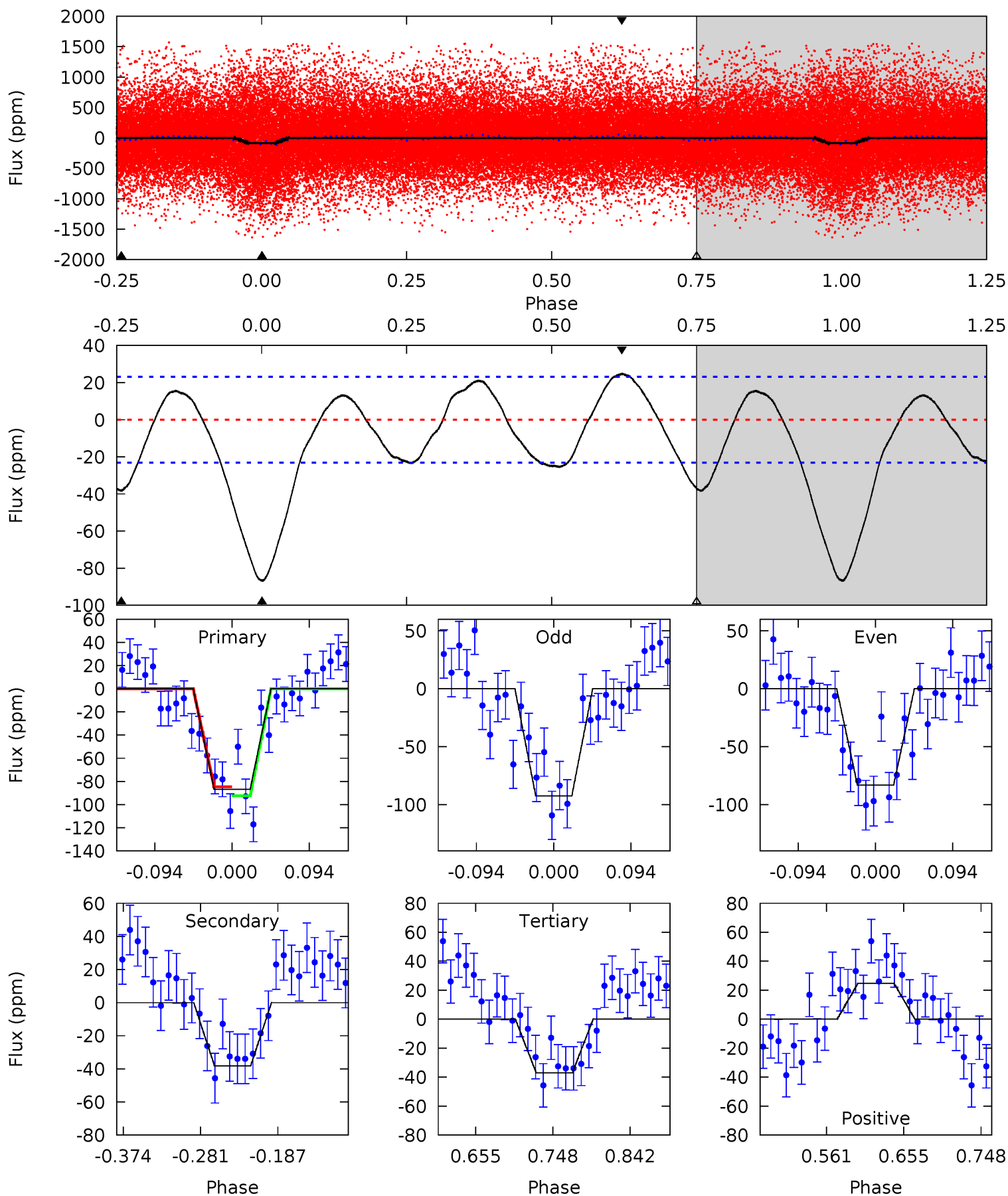
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.0	7.03	6.64	4.90	4.54	1.59	3.25	4.40	6.14	0.39	2.13	0.46	0.83	0.31	2.33



Alt Model-Shift Uniqueness Test

003123292-01, P = 0.809466 Days, E = 131.500580 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
17.2	7.57	7.33	4.90	4.58	1.68	3.21	9.85	12.3	0.24	2.67	0.91	0.99	0.22	0.78



Stellar Parameters For KIC 003123292

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	4862^{+77}_{-77}	$4.602^{+0.024}_{-0.039}$	$-0.040^{+0.150}_{-0.150}$	$0.722^{+0.040}_{-0.029}$	$0.760^{+0.036}_{-0.041}$	$2.847^{+0.311}_{-0.367}$
	+2%/-2%	+1%/-1%	+375%/-375%	+6%/-4%	+5%/-5%	+11%/-13%
Source	SPE68	SPE68	SPE68	DSEP		

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

Secondary Eclipse Parameters for KIC 003123292-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-33 ± 5	$0.80^{+0.53}_{-0.46}$	2051^{+39}_{-41}	3903^{+1667}_{-649}	$6.939^{+31.266}_{-4.536}$
Alt.	-38 ± 5	$0.77^{+0.54}_{-0.46}$	2050^{+45}_{-42}	4050^{+1946}_{-709}	$8.367^{+41.746}_{-5.447}$

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

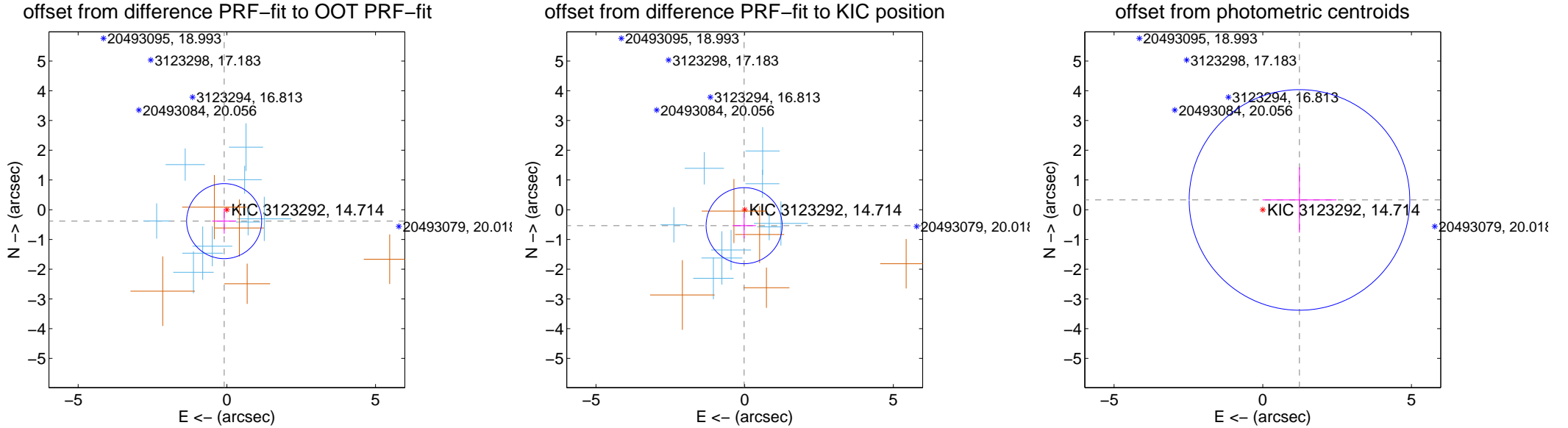
DV Centroid Data

Supplemental centroid analysis for 003123292-01. Kepler magnitude: 14.71. Transit SNR 9.14

There are 9 quarters with good PRF difference image offsets

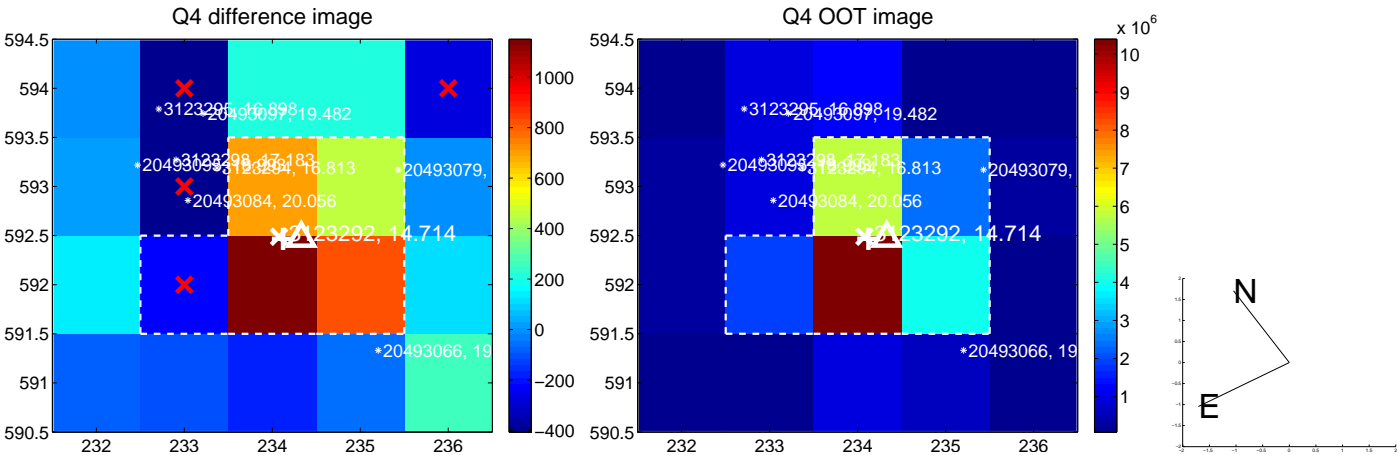
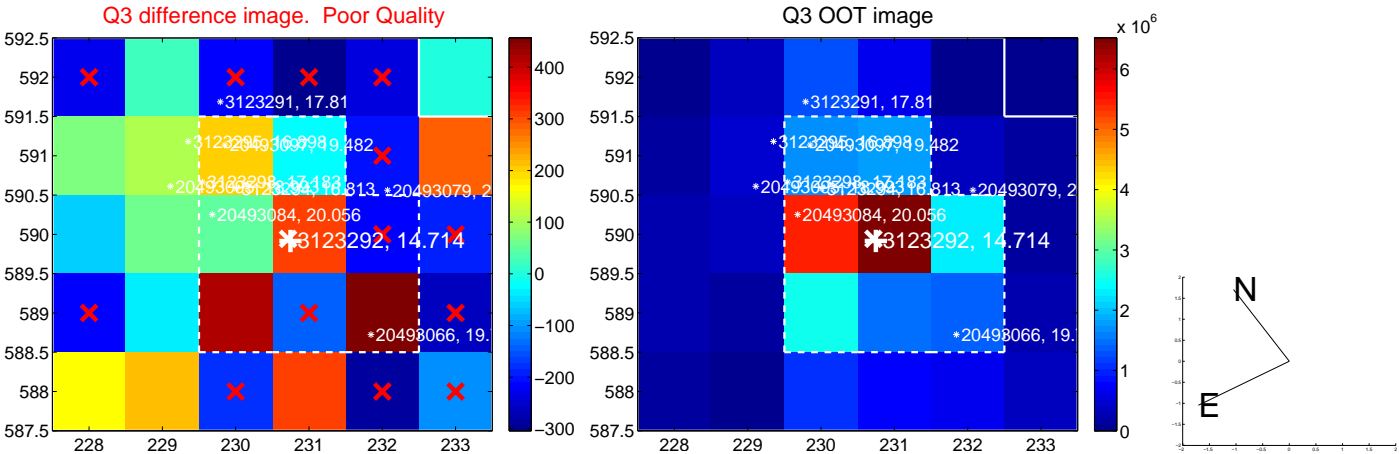
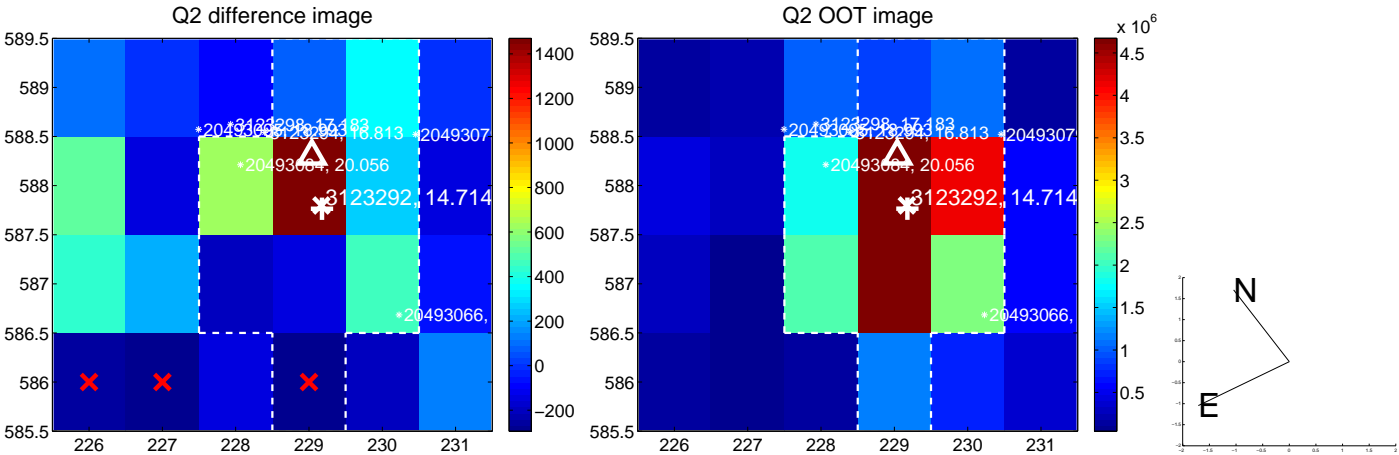
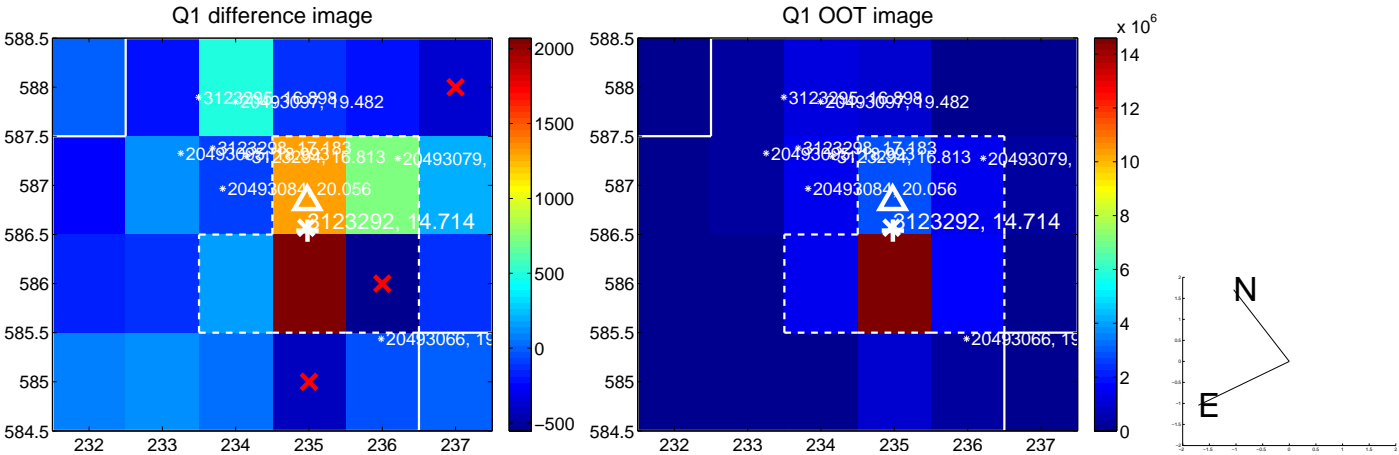
The direct PRF centroid is offset from the target star catalog position by about 0.16 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.395 ± 0.421	0.94	0.091 ± 0.406	-0.384 ± 0.421
PRF-fit source offset from KIC position	0.537 ± 0.426	1.26	0.018 ± 0.395	-0.537 ± 0.426
photometric centroid source offset	1.28 ± 1.24	1.03	-1.23 ± 1.25	0.33 ± 1.10

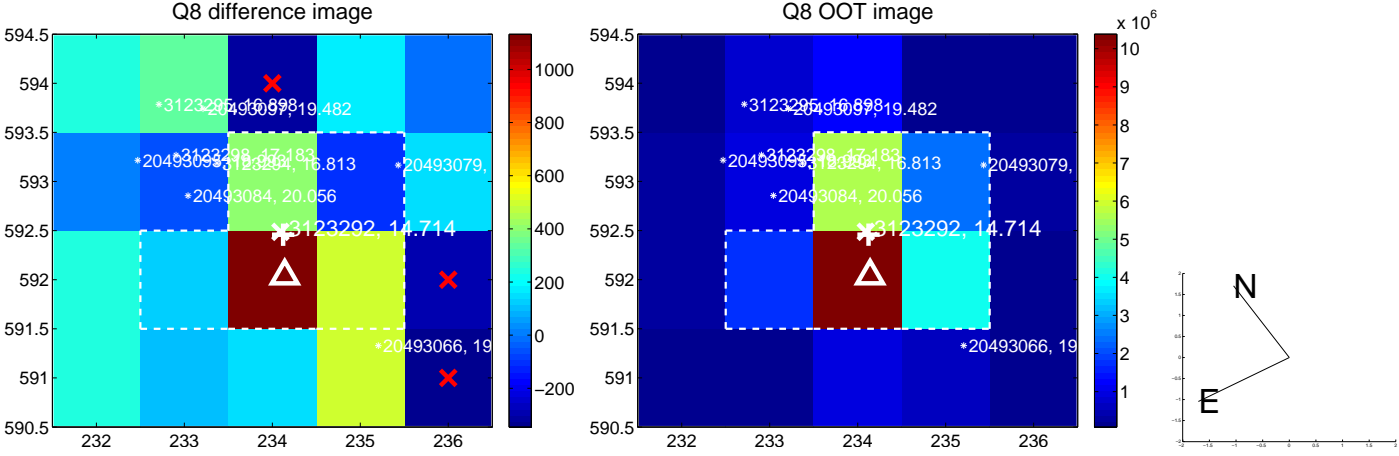
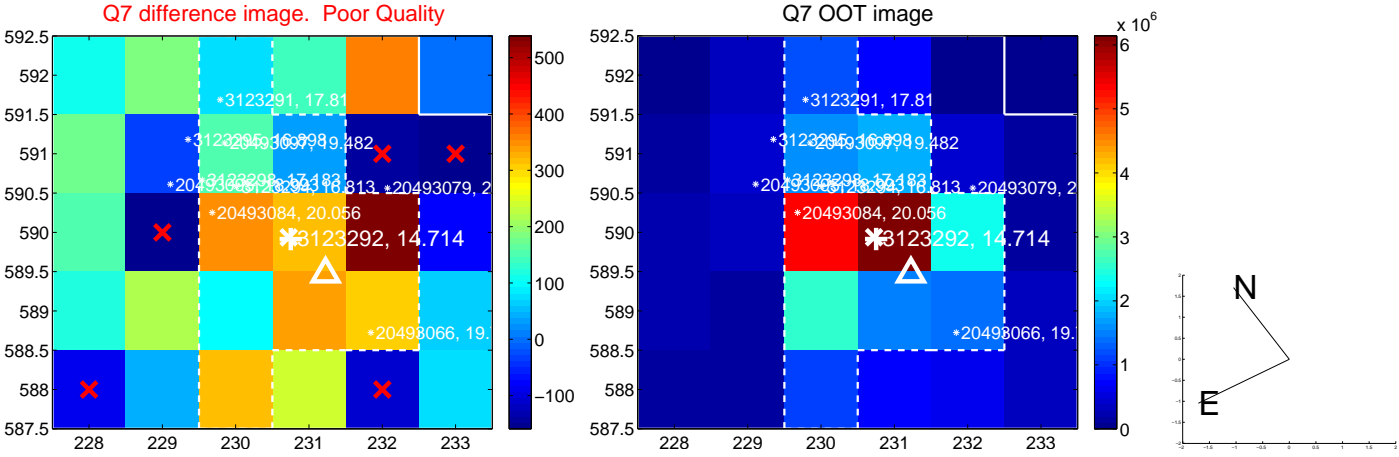
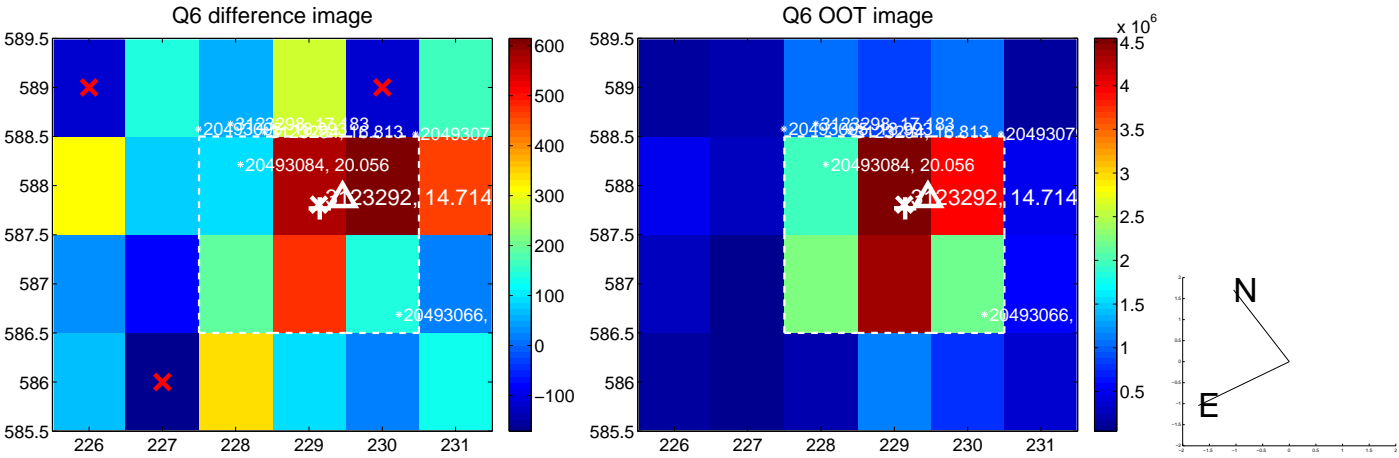
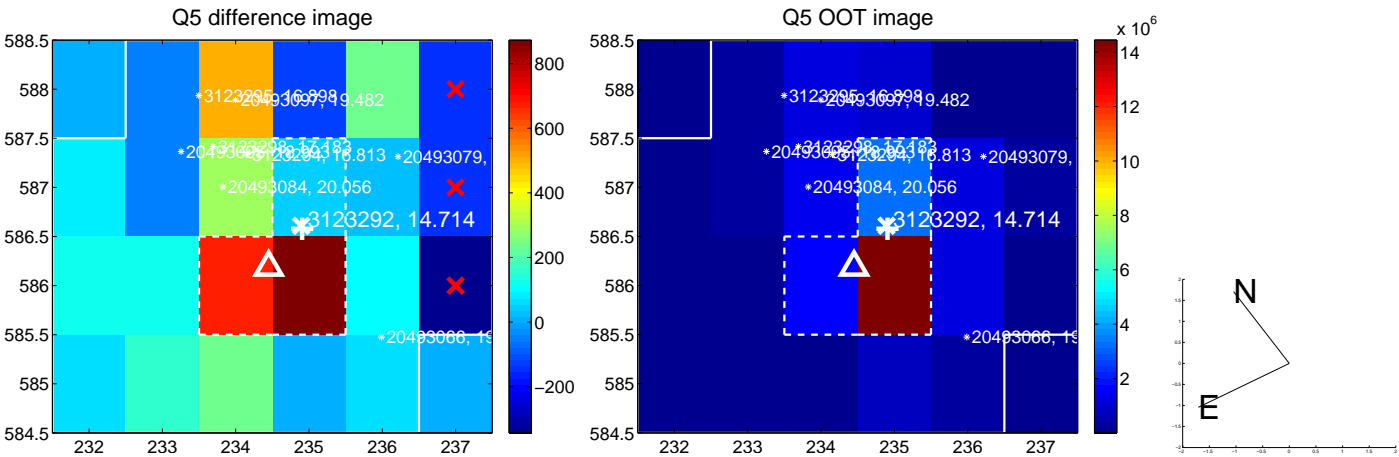


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

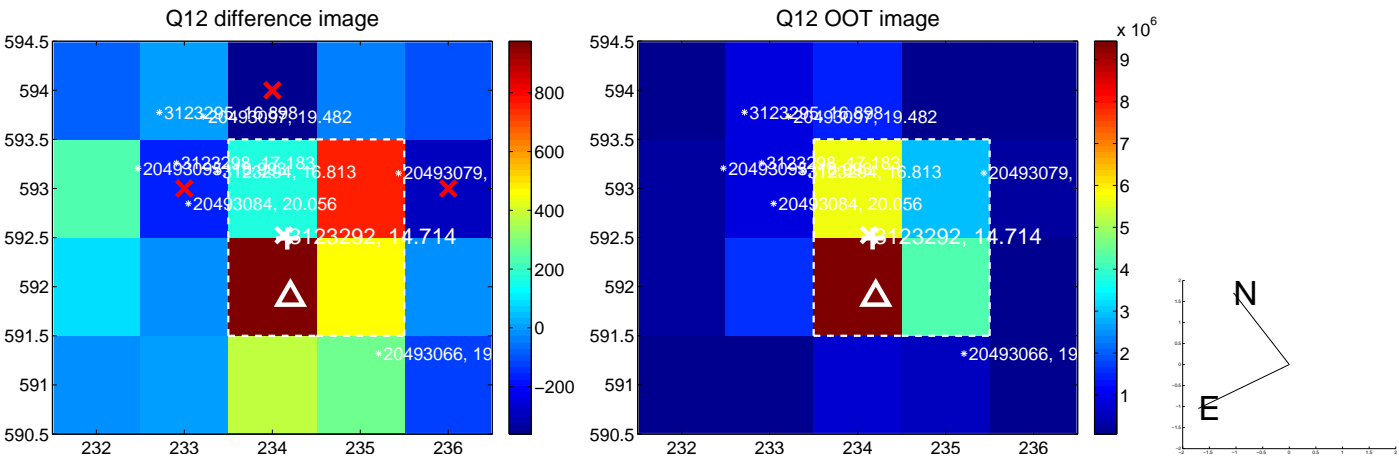
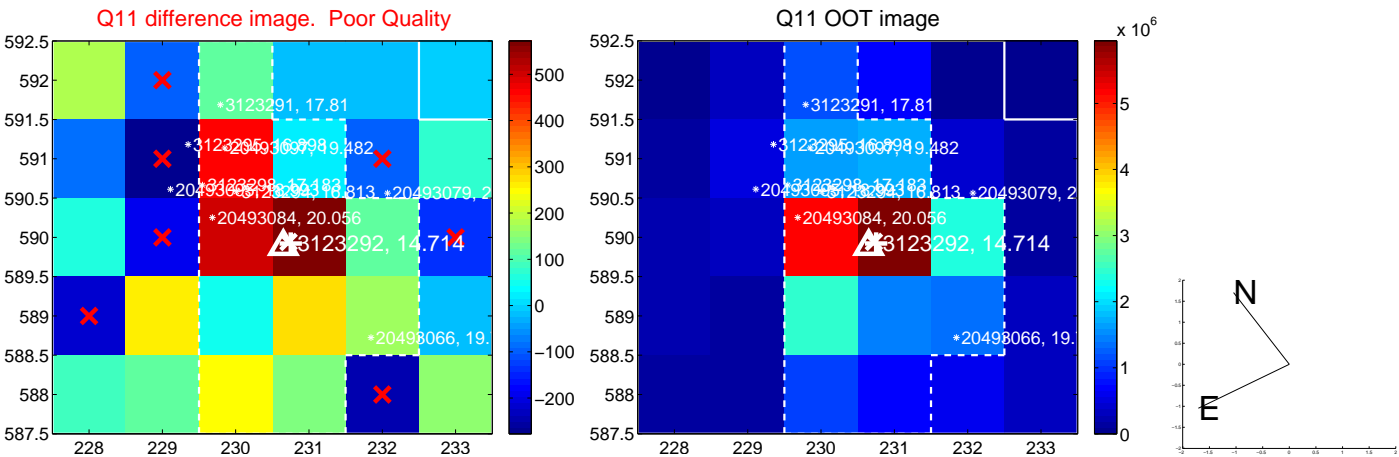
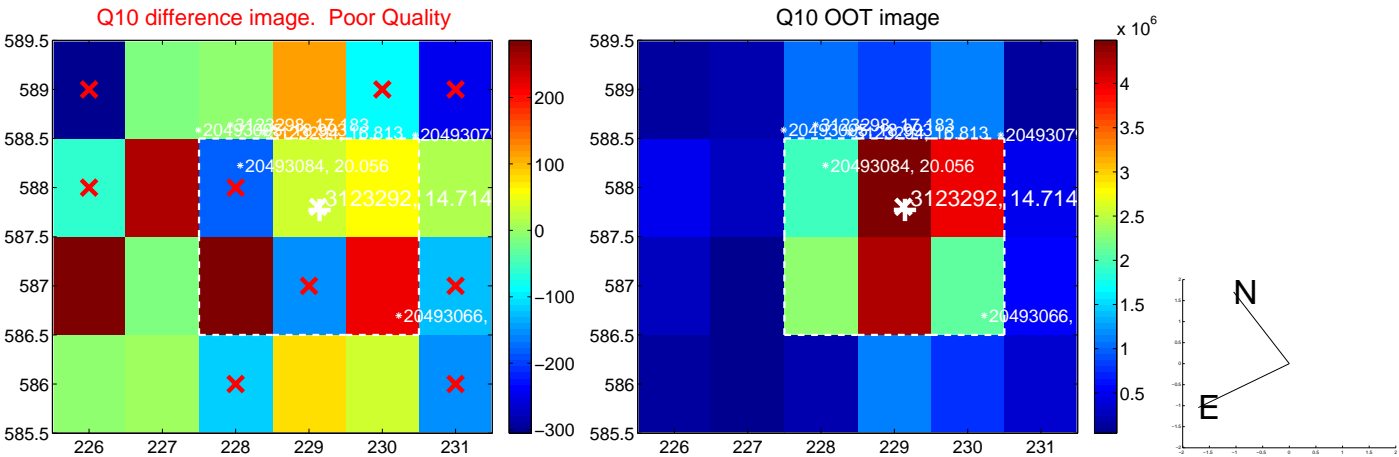
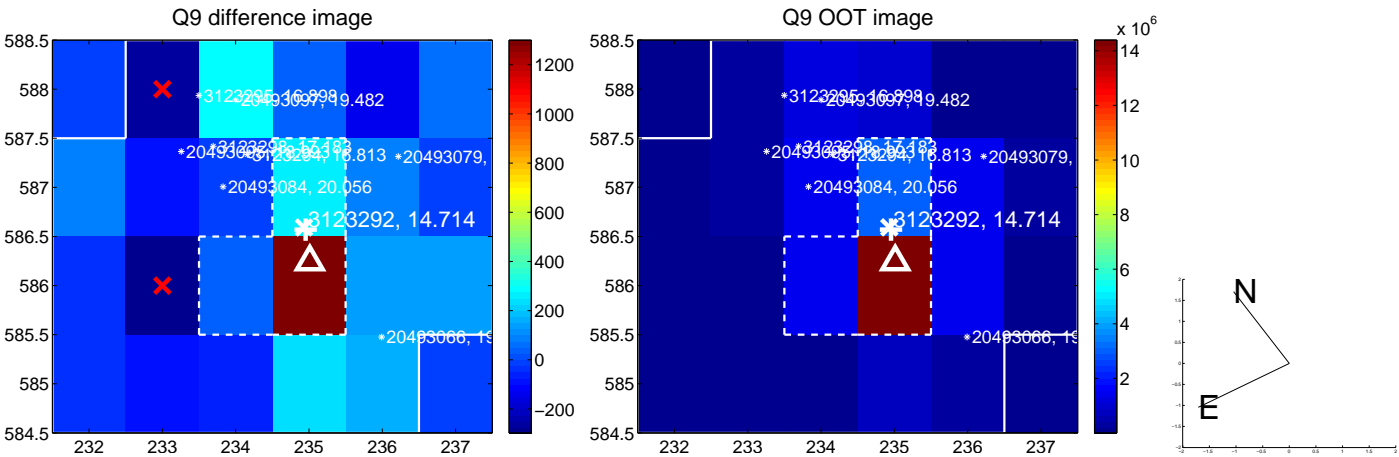
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



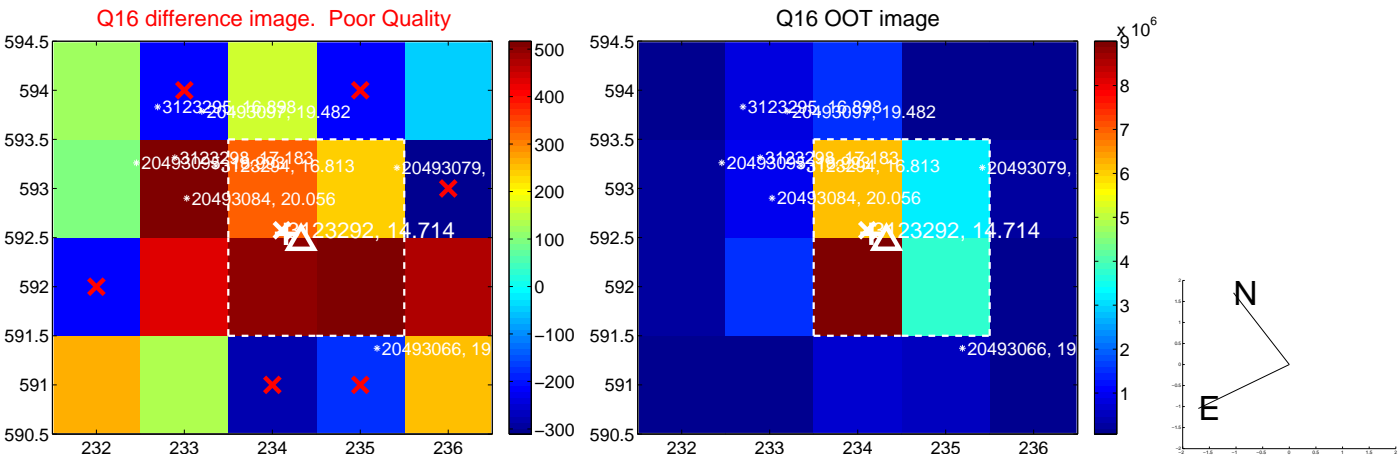
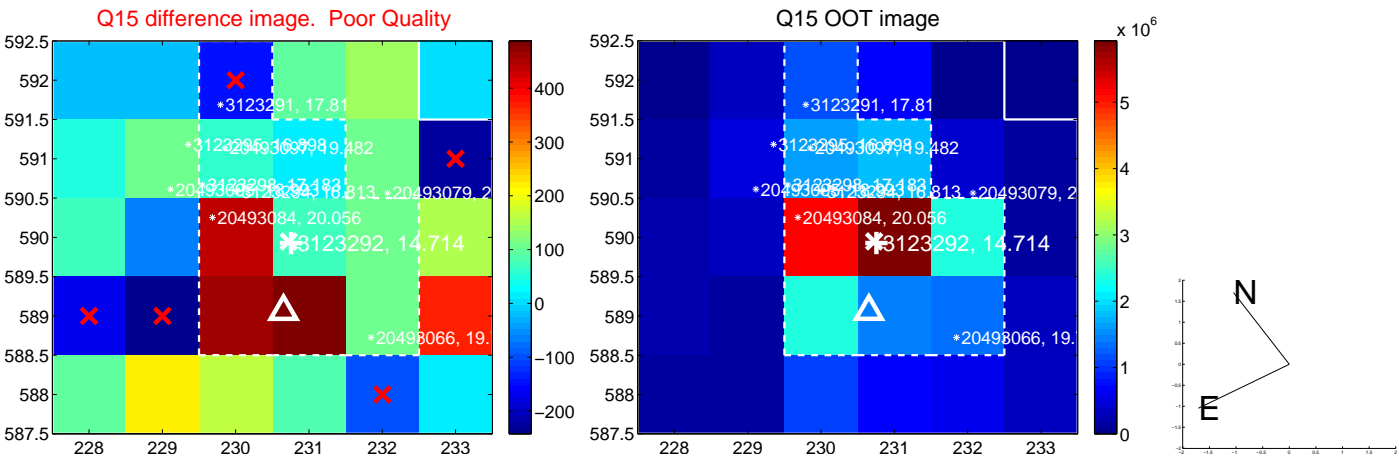
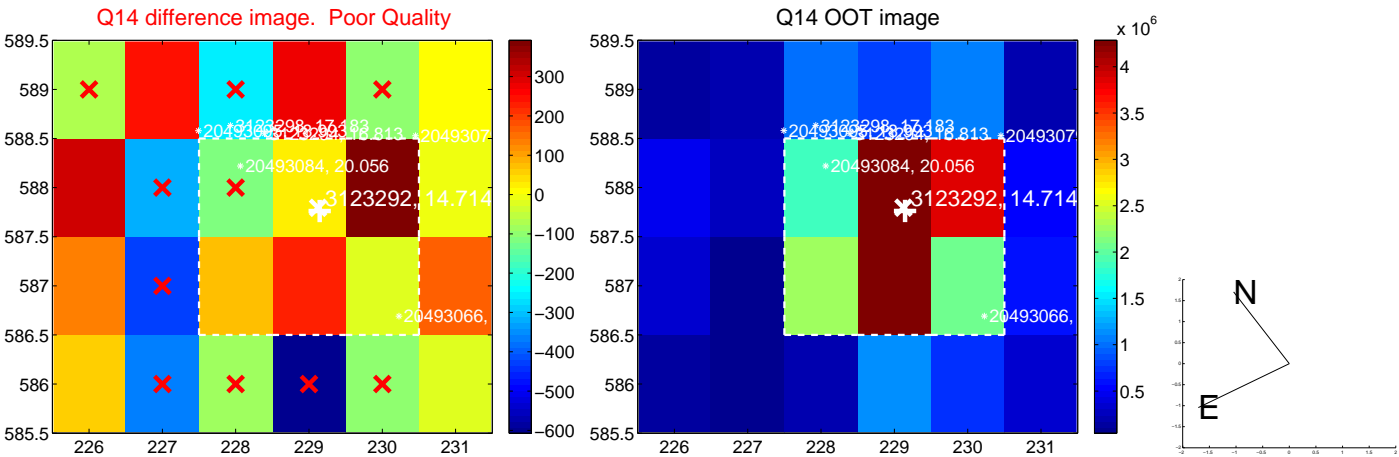
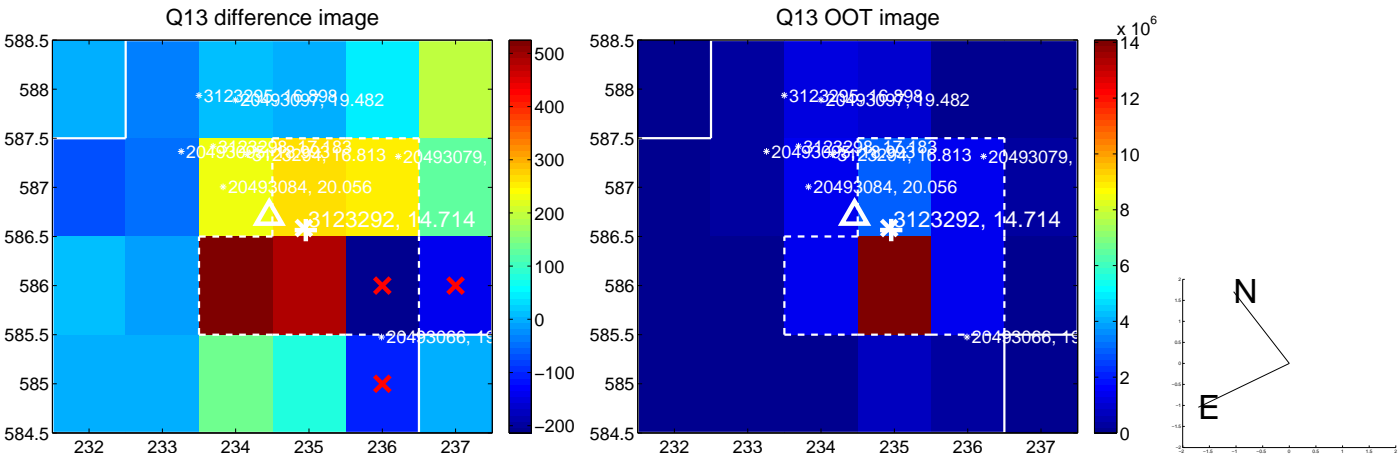
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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.



UKIRT Image

Declination

