

KIC 011619202

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})
011619202-01	OBS	No	0.607717	132.049136	14.7	1.650	8.1	9.2	3.05	8340	1.35	129522.72

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011619202-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—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.

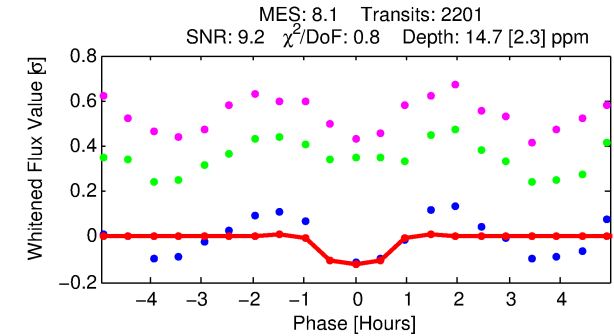
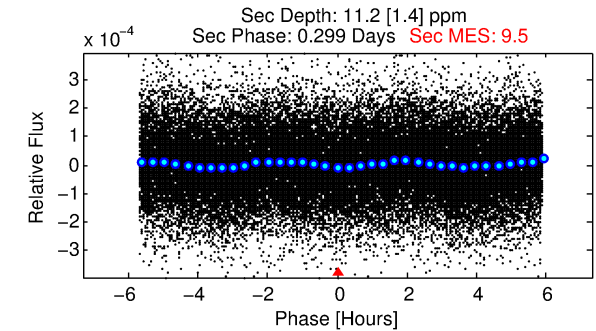
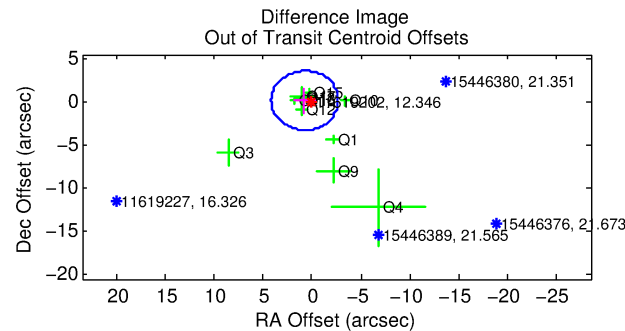
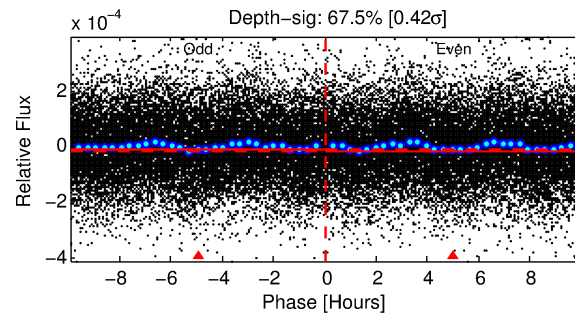
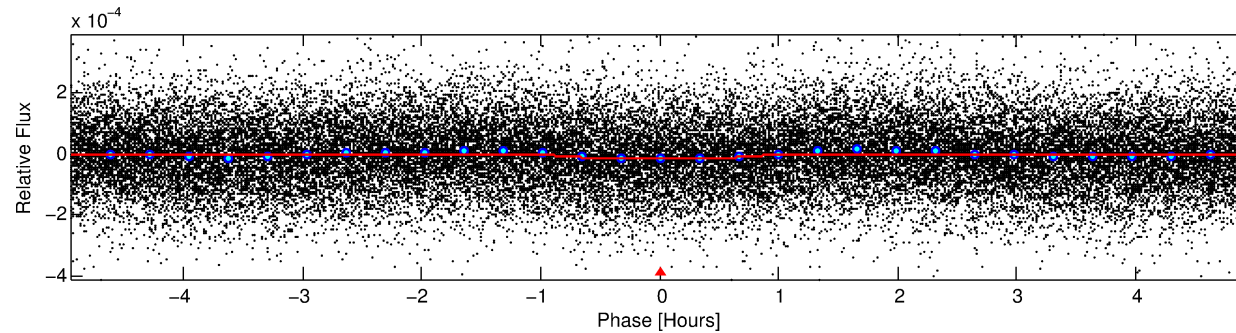
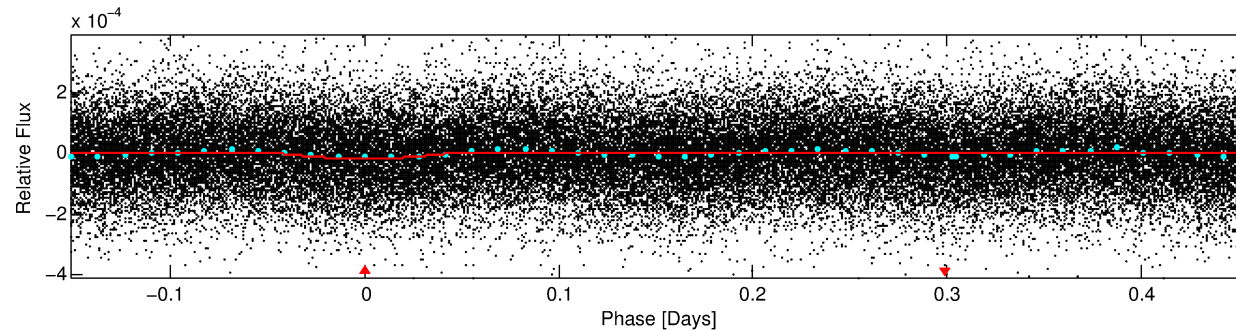
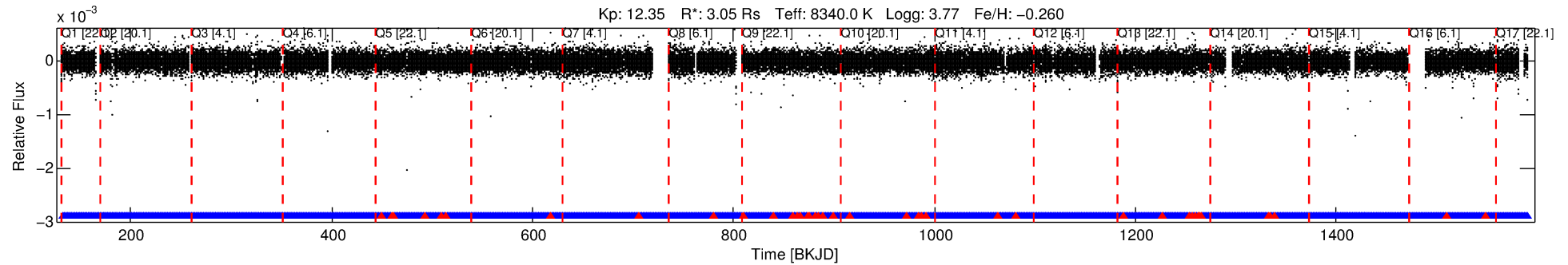
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011619202-01

No Significant Match Found

DV One-Page Summary

KIC: 11619202 Candidate: 1 of 1 Period: 0.608 d



DV Fit Results:

Period = 0.60772 [0.00001] d
Epoch = 132.0491 [0.0024] BKJD
Rp/R* = 0.0041 [0.0007]
a/R* = 1.61 [0.95]
b = 0.89 [0.23]
Seff = 129522.72 [97797.49]
Teq = 4837 [913] K
Rp = 1.35 [0.68] Re
a = 0.0177 [0.0081] AU
Ag = 1.05 [0.86] [0.06σ]
Teffp = 7578 [753] K [2.32σ]

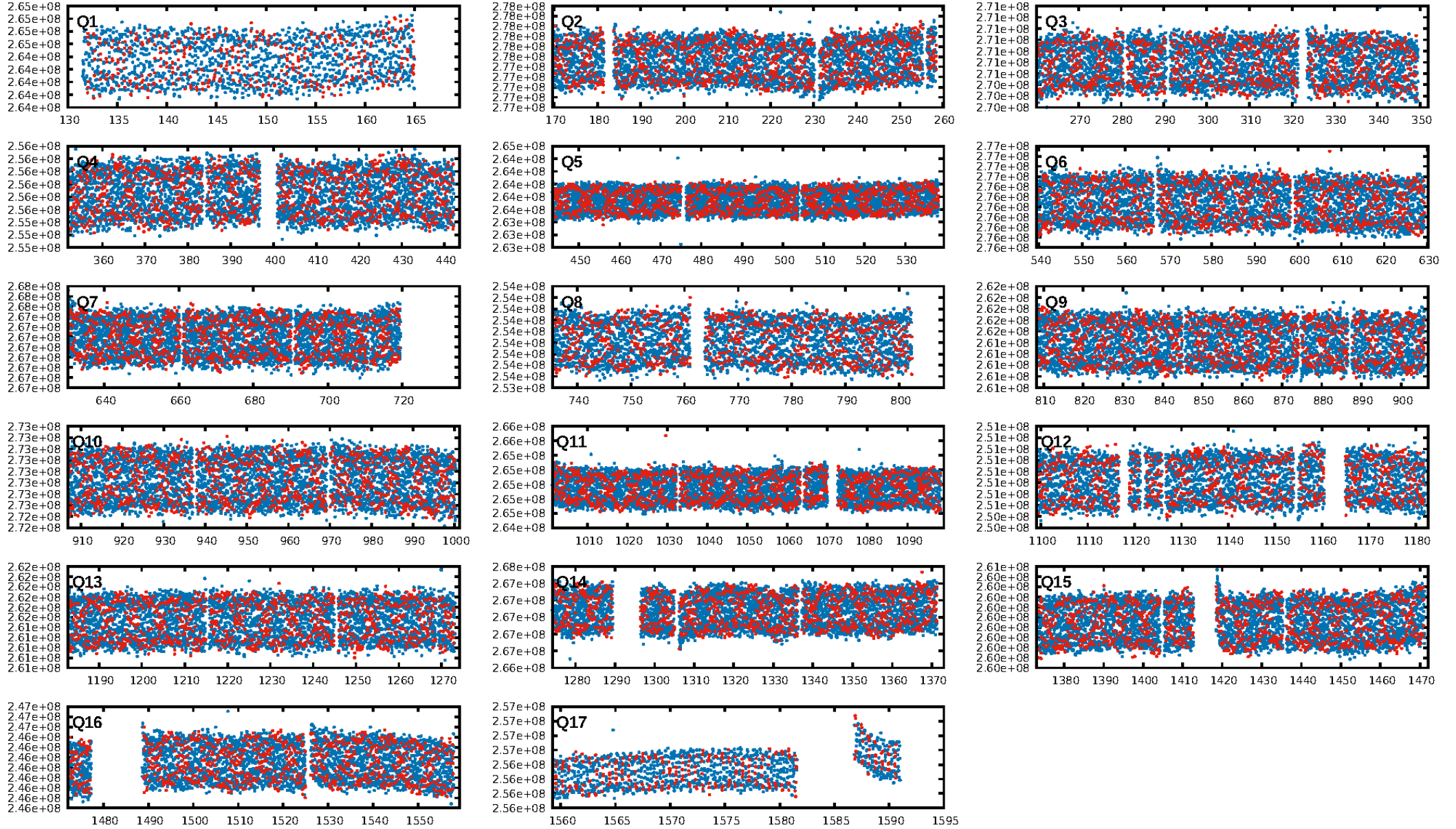
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.92e-14
RollingBand-fgt: 0.98 [2061/2102]
GhostDiagnostic-chr: 1.336
Centroid-sig: 24.6%
Centroid-so: 1.277 arcsec [1.28σ]
OotOffset-rm: 0.768 arcsec [0.67σ]
KicOffset-rm: 0.935 arcsec [0.85σ]
OotOffset-st: 1/3/3/4 [11]
KicOffset-st: 1/3/3/4 [11]
DiffImageQuality-fgm: 0.55 [6/11]
DiffImageOverlap-fno: 1.00 [17/17]

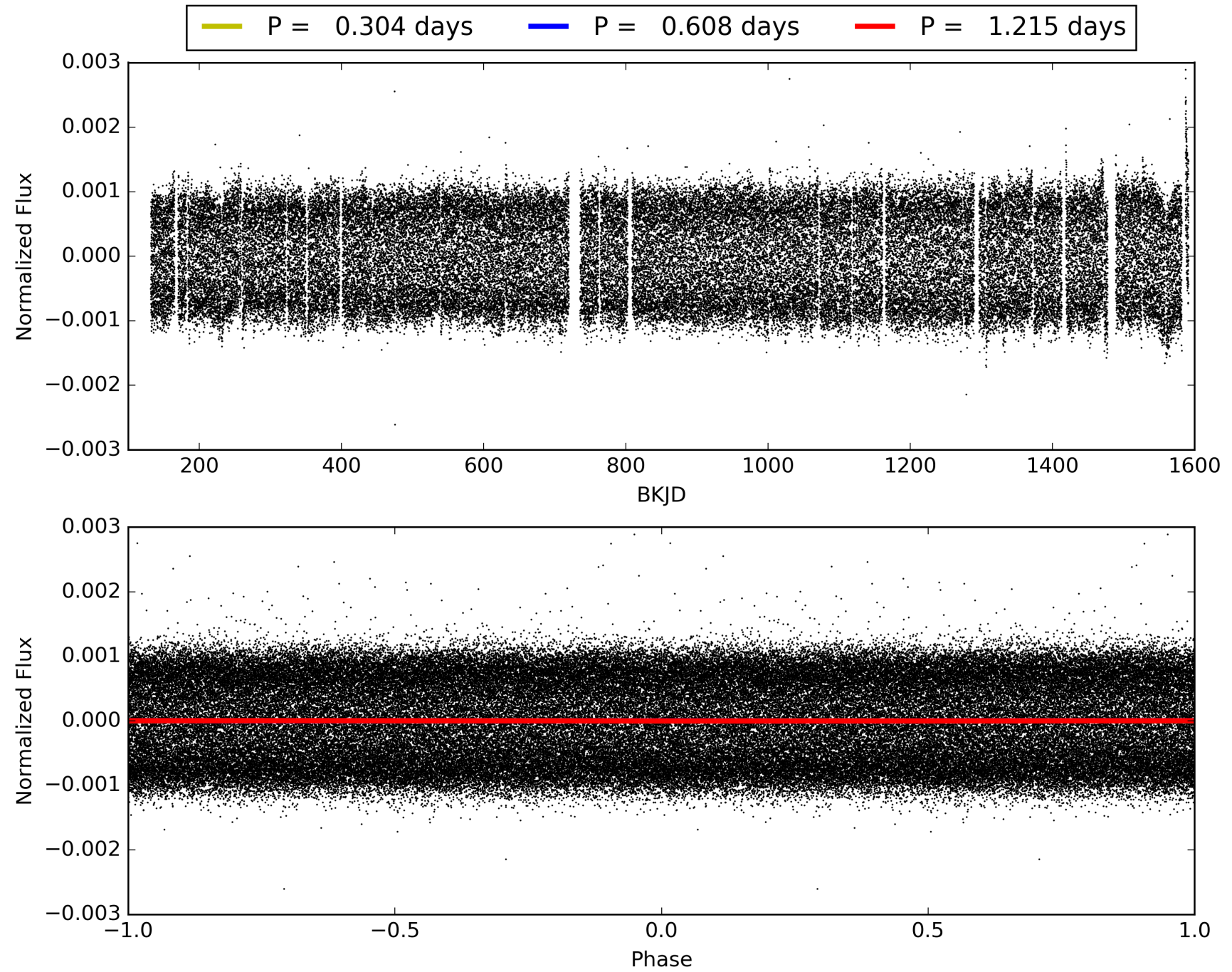
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 05:17:24 Z

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

TCE 011619202-01, PDC Light Curves

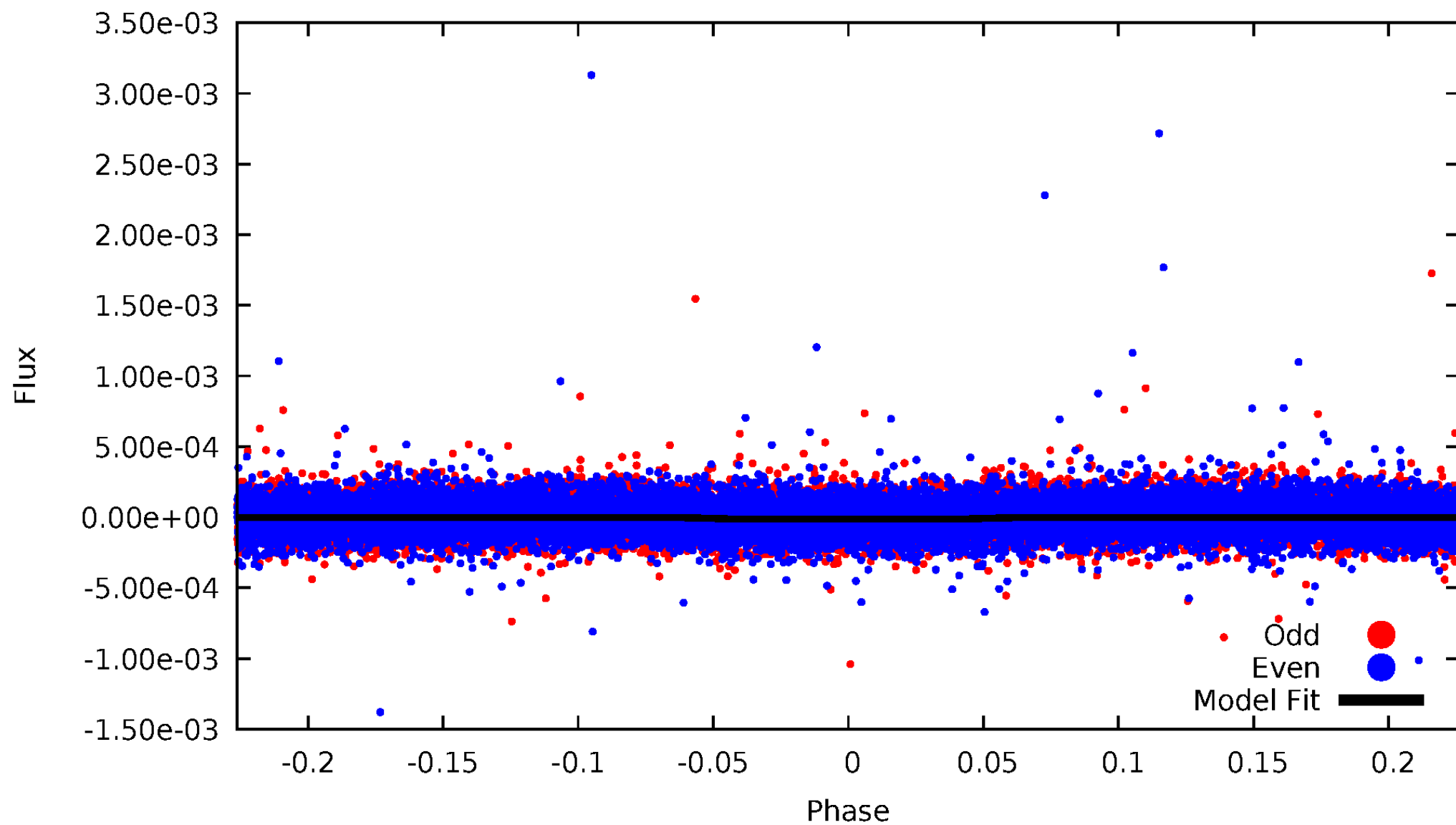


TCE 011619202-01



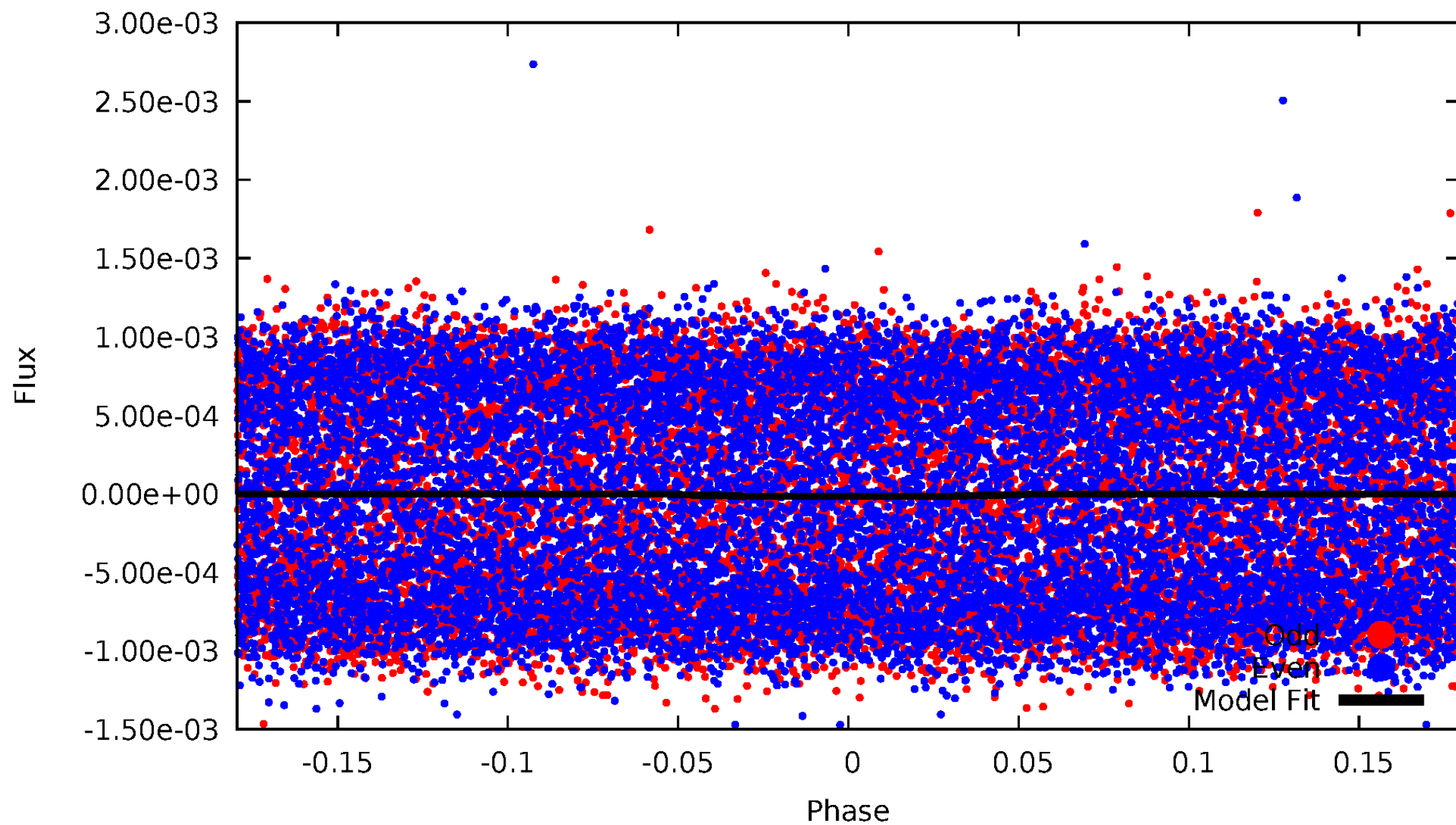
DV Odd/Even

TCE 011619202-01



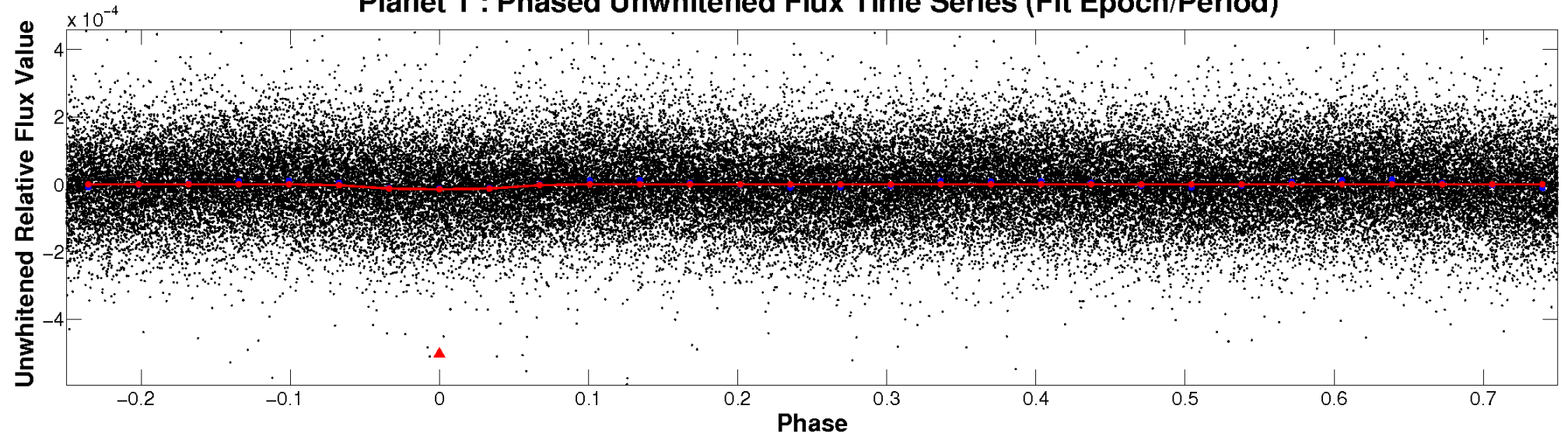
ALT Odd/Even

TCE 011619202-01

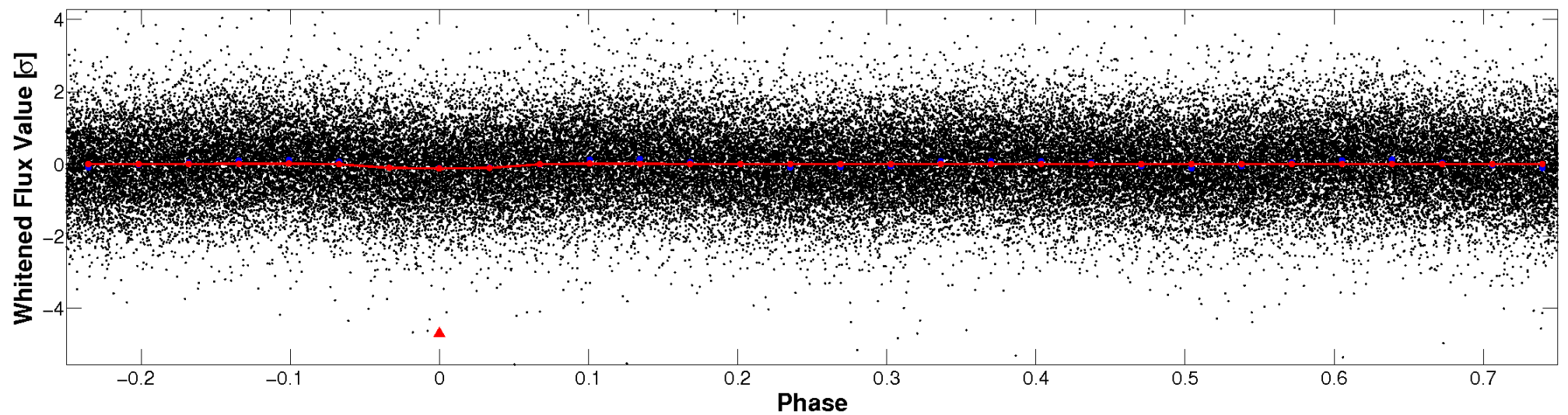


Non-Whitened Vs. Whitened Light Curve

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

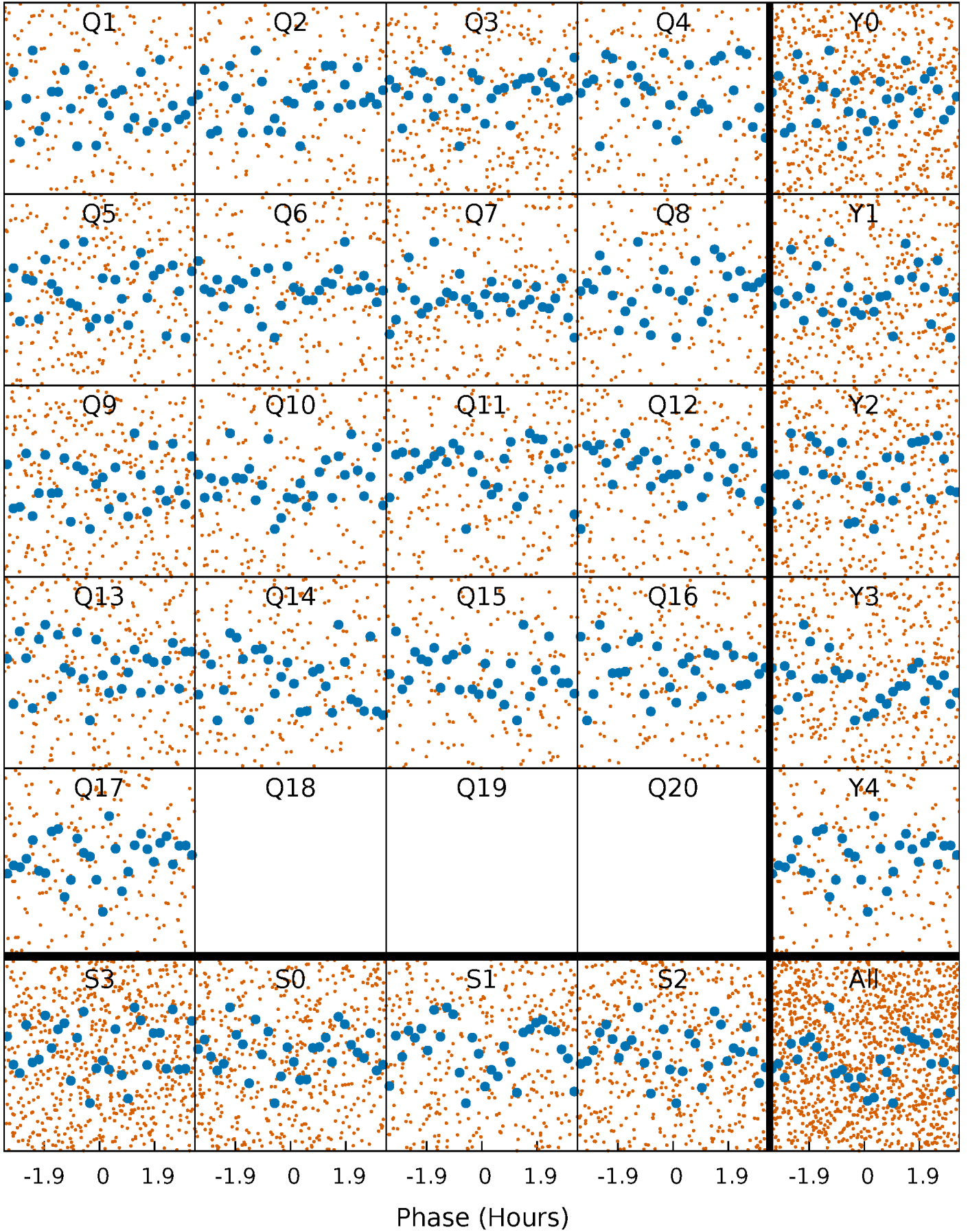


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



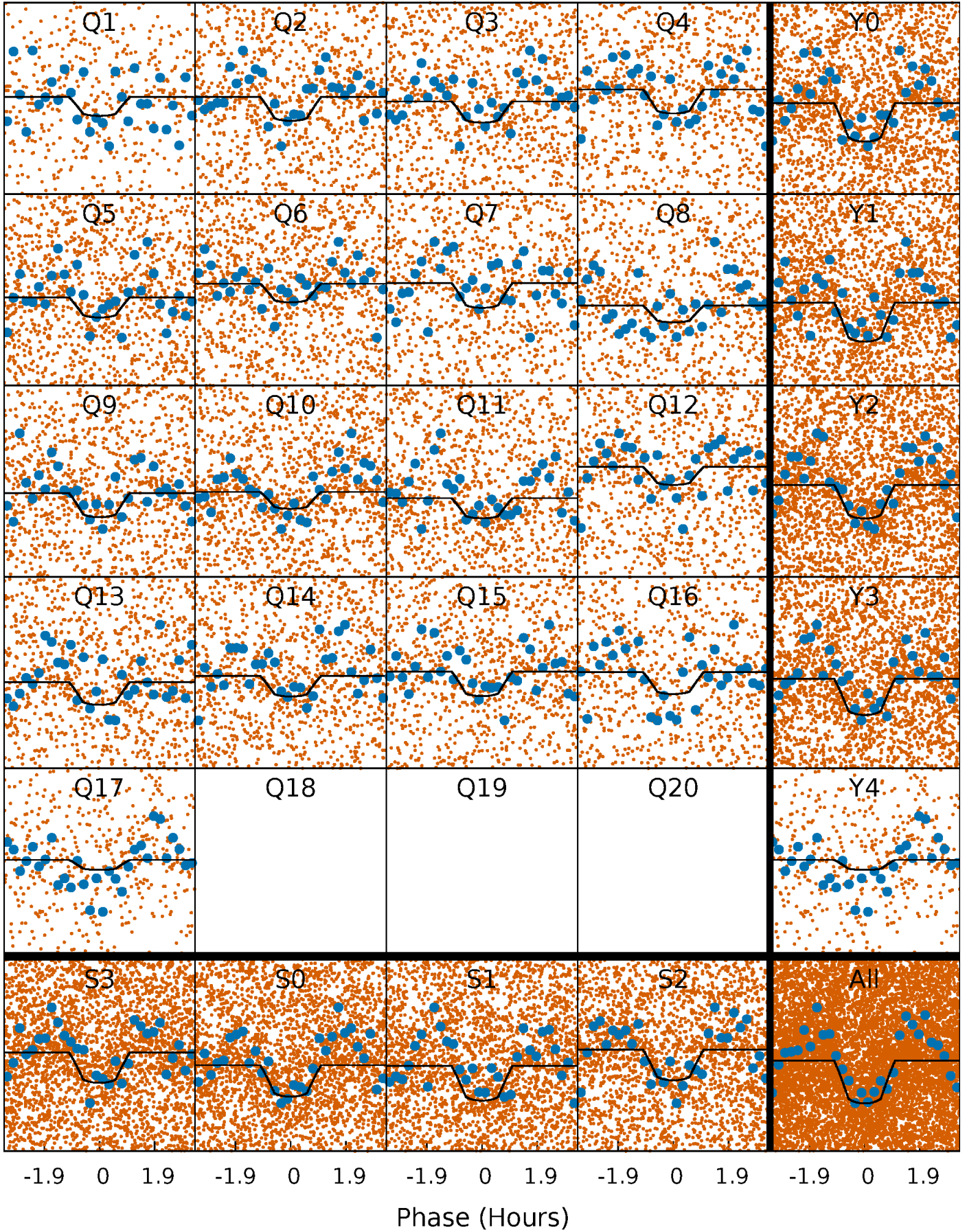
PDC Quarter-Phased Transit Curves

TCE 011619202-01 P= 0.607717 Days $T_0=132.049136$ (BKJD)



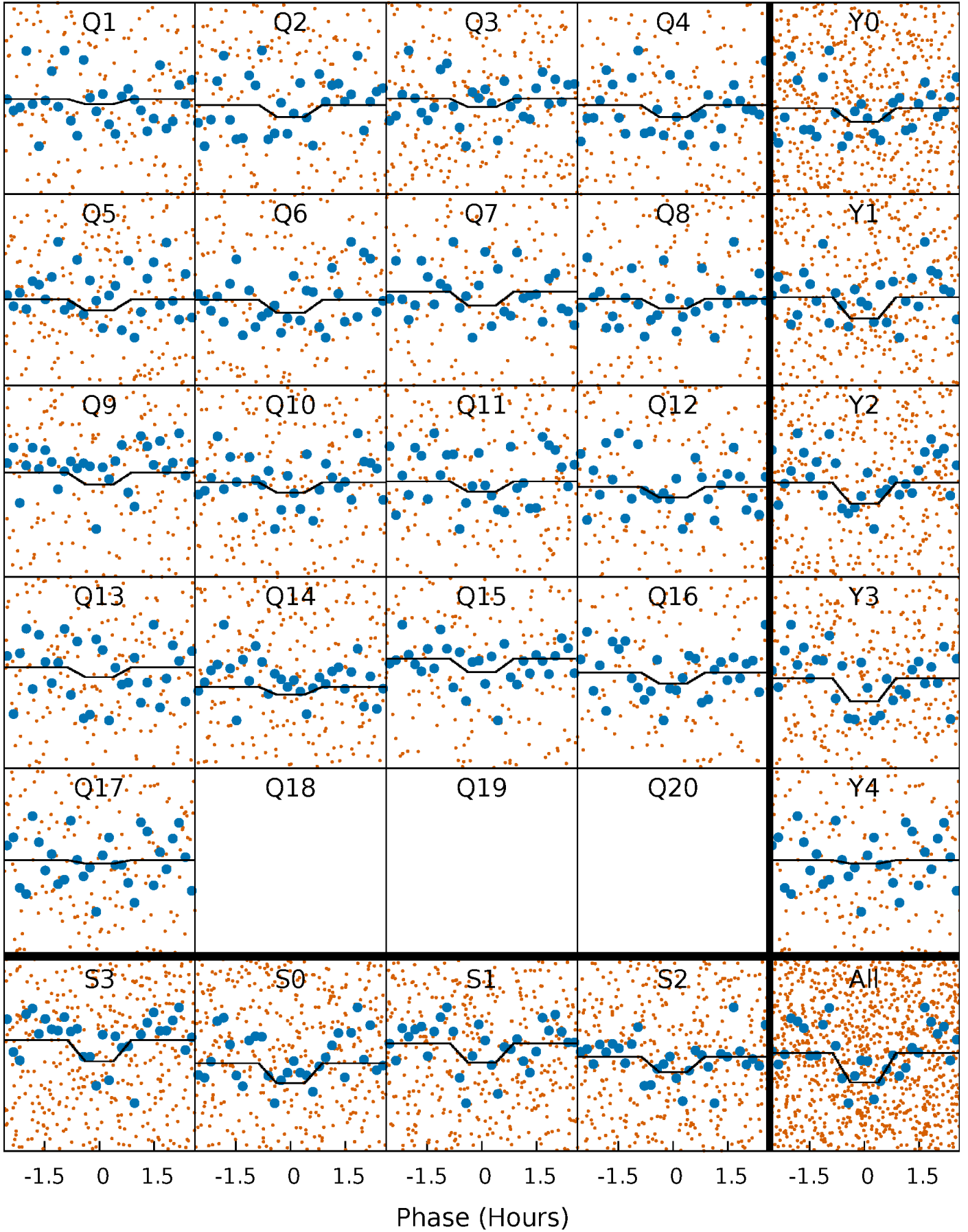
DV Quarter-Phased Transit Curves

TCE 011619202-01 P= 0.607717 Days $T_0=132.049136$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

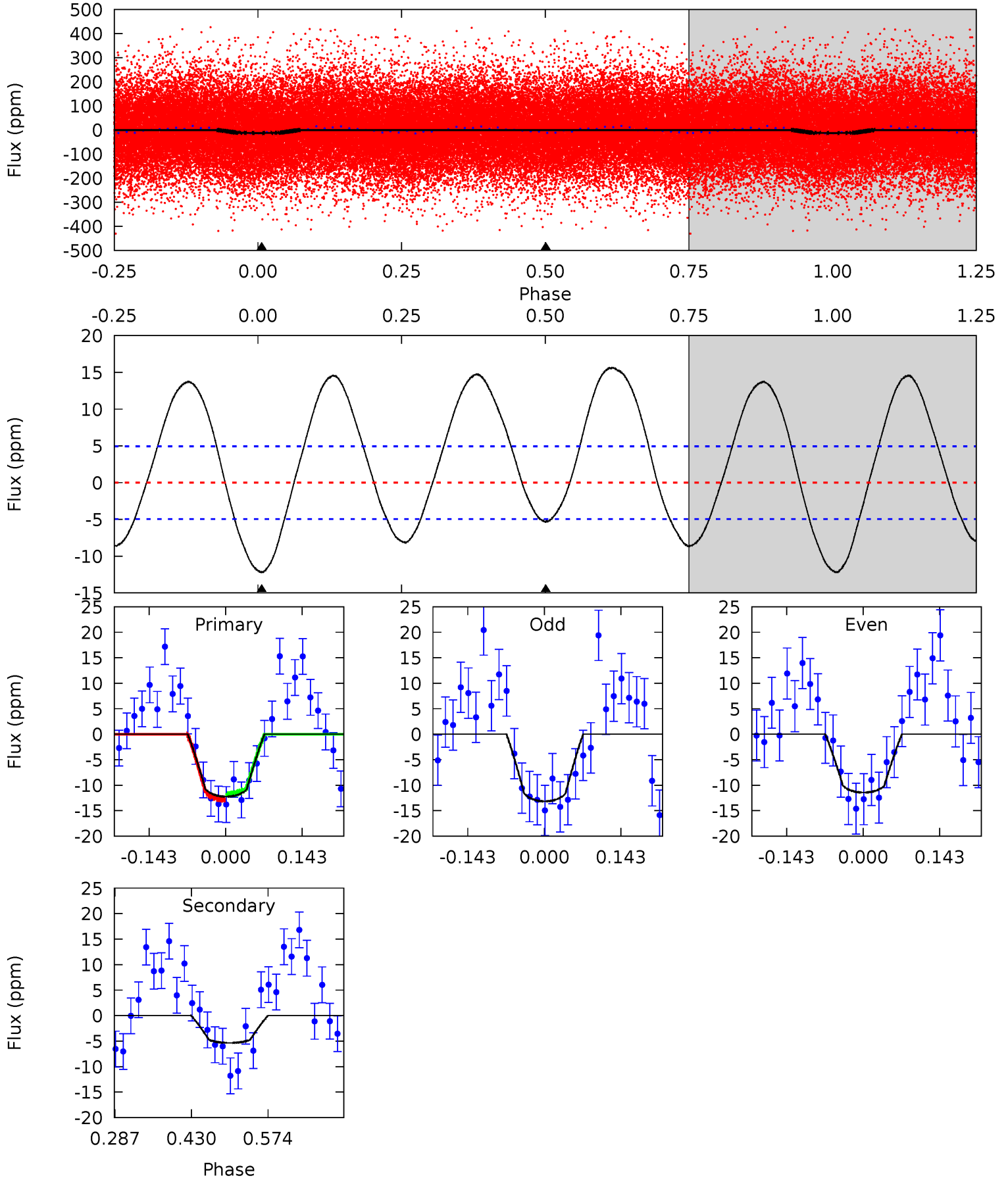
TCE 011619202-01 P= 0.607724 Days $T_0=132.037787$ (BKJD)



DV Model-Shift Uniqueness Test

011619202-01, P = 0.607717 Days, E = 131.441419 Days

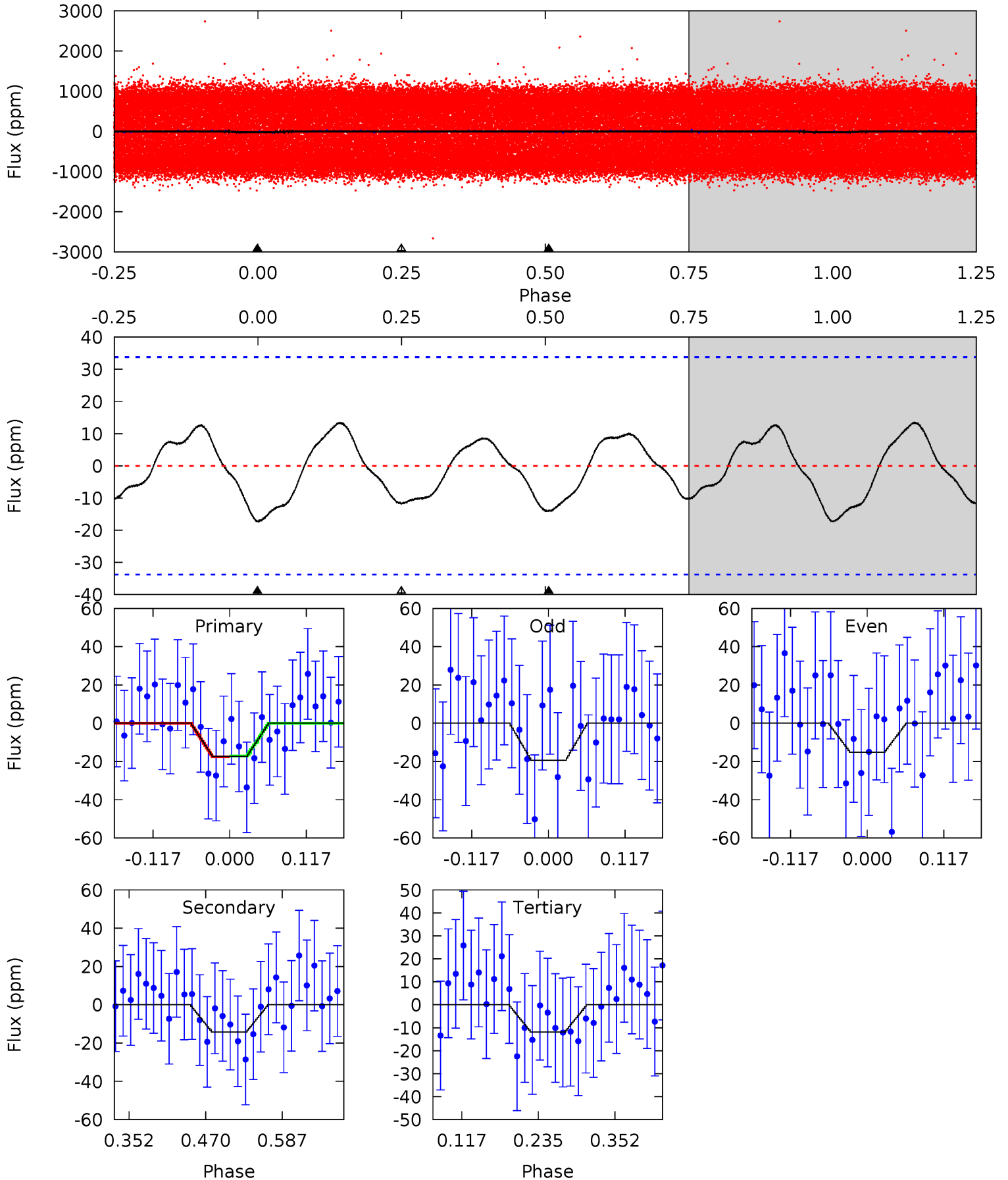
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.1	4.84	0	0	4.49	1.46	6.35	11.1	11.1	4.84	4.84	0.78	0.96	0.56	0.45



Alt Model-Shift Uniqueness Test

011619202-01, P = 0.607724 Days, E = 131.430063 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2.32	1.91	1.59	0	4.53	1.57	1.02	0.74	2.32	0.32	1.91	0.28	1.13	0.44	0.03



Stellar Parameters For KIC 011619202

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	8340^{+206}_{-354}	$3.767^{+0.433}_{-0.076}$	$-0.260^{+0.200}_{-0.350}$	$3.052^{+0.481}_{-1.444}$	$1.987^{+0.329}_{-0.494}$	$0.098^{+0.402}_{-0.031}$
	+2%/-4%	+11%/-2%	+77%/-135%	+16%/-47%	+17%/-25%	+408%/-31%
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 011619202-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-5 ± 1	$1.23^{+0.34}_{-0.34}$	6501^{+465}_{-815}	5179^{+947}_{-1206}	$0.611^{+0.506}_{-0.238}$
Alt.	-14 ± 7	$1.28^{+0.34}_{-0.31}$	6508^{+440}_{-769}	7187^{+1702}_{-1795}	$1.466^{+1.554}_{-0.823}$

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 $A_{obs} \gg 1.0$

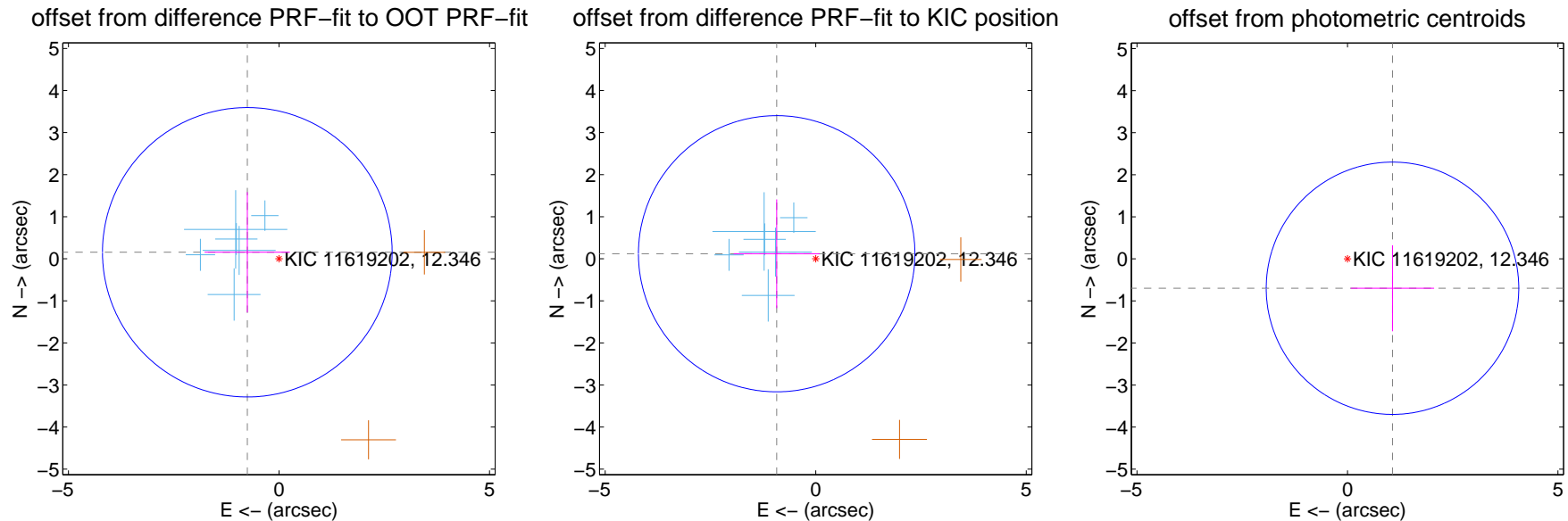
DV Centroid Data

Supplemental centroid analysis for 011619202-01. Kepler magnitude: 12.35. Transit SNR 9.19

There are 6 quarters with good PRF difference image offsets

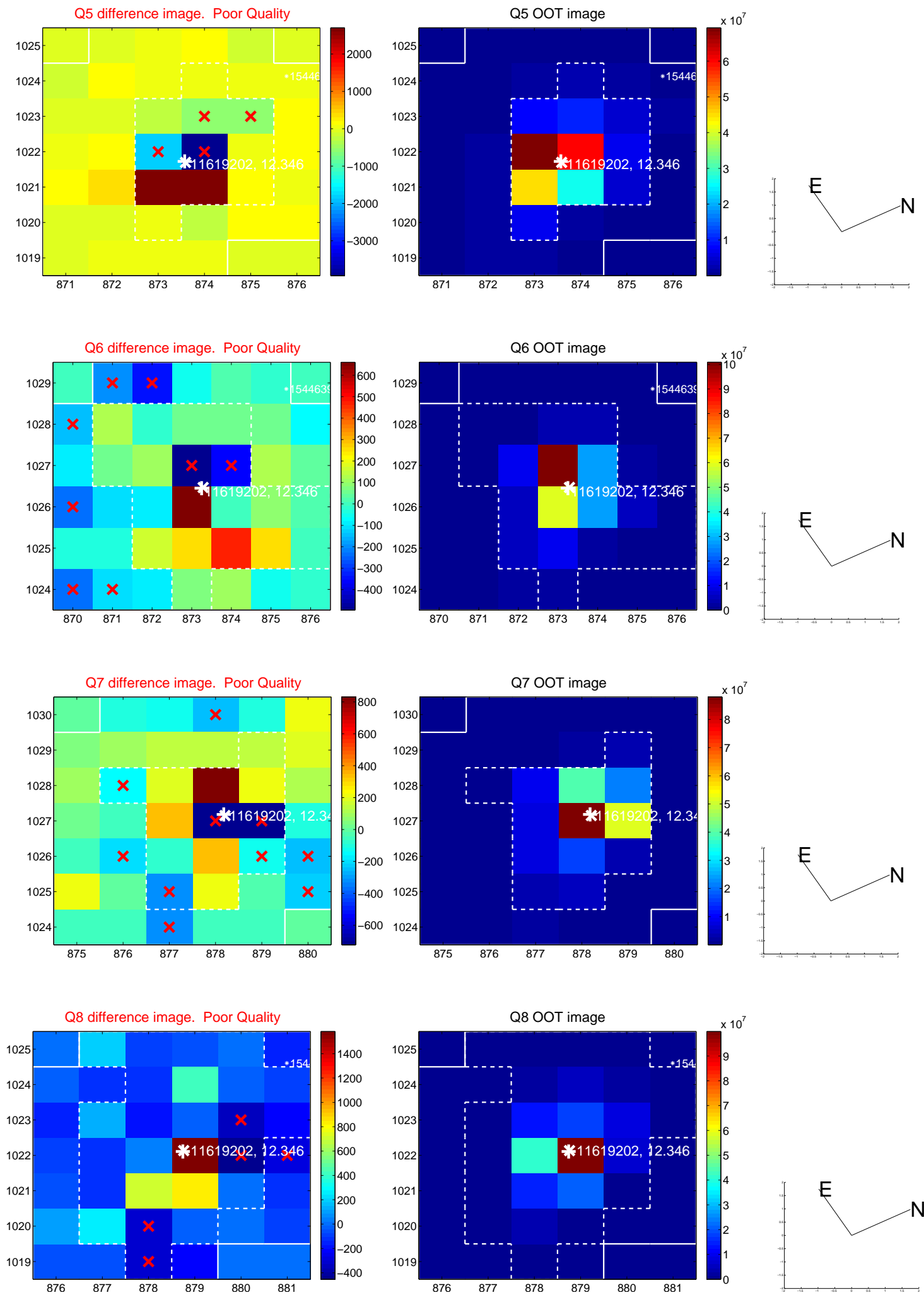
The direct PRF centroid is offset from the target star catalog position by about 0.20 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.768 ± 1.146	0.67	0.752 ± 1.014	0.156 ± 1.430
PRF-fit source offset from KIC position	0.935 ± 1.094	0.85	0.927 ± 1.022	0.120 ± 1.292
photometric centroid source offset	1.28 ± 1.00	1.28	-1.07 ± 0.99	-0.70 ± 1.02

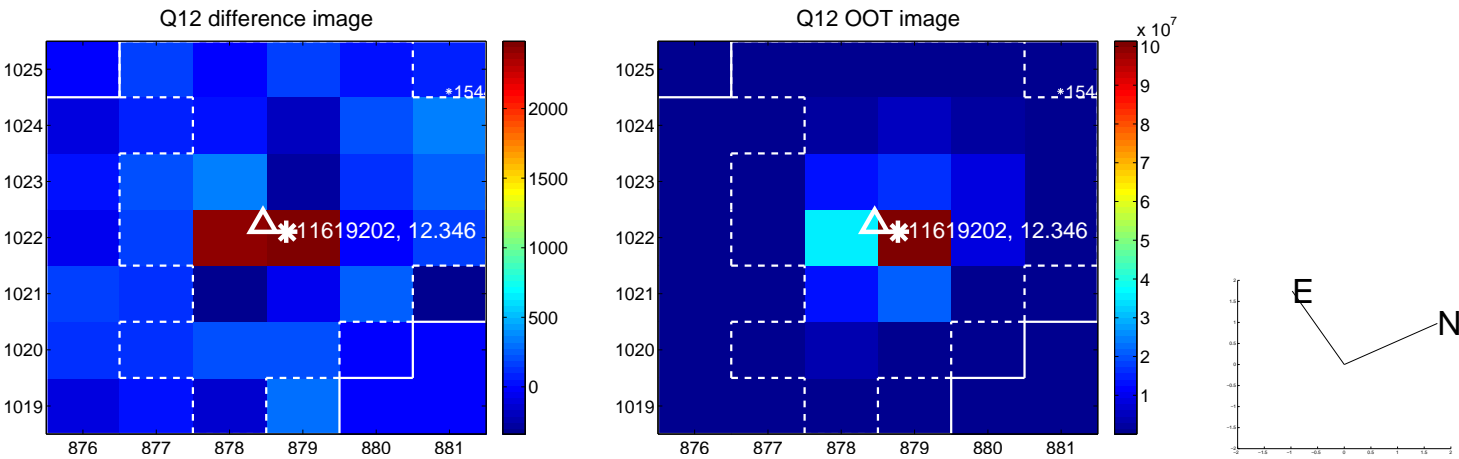
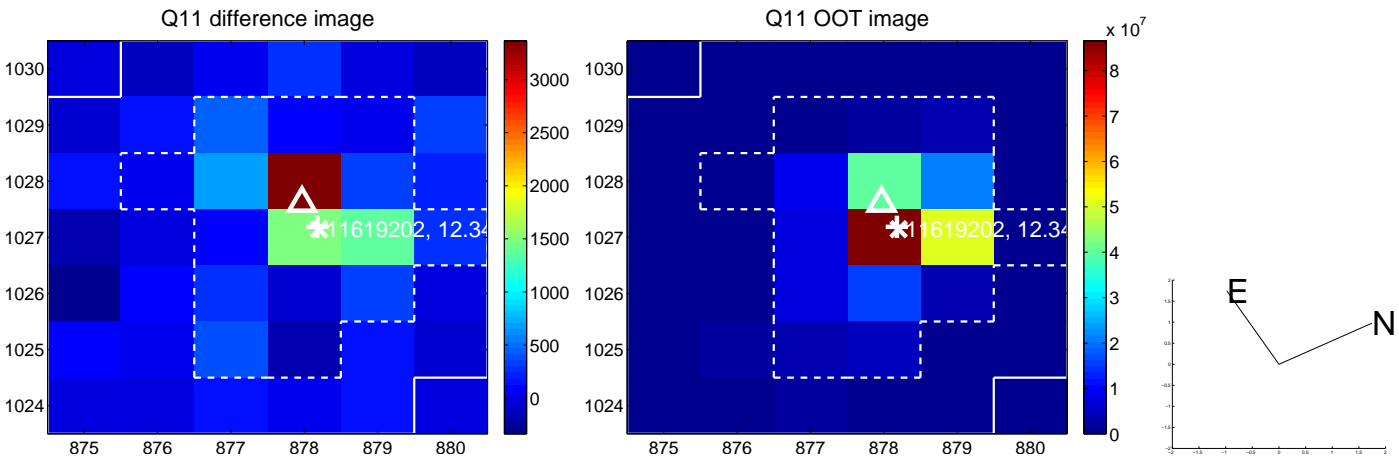
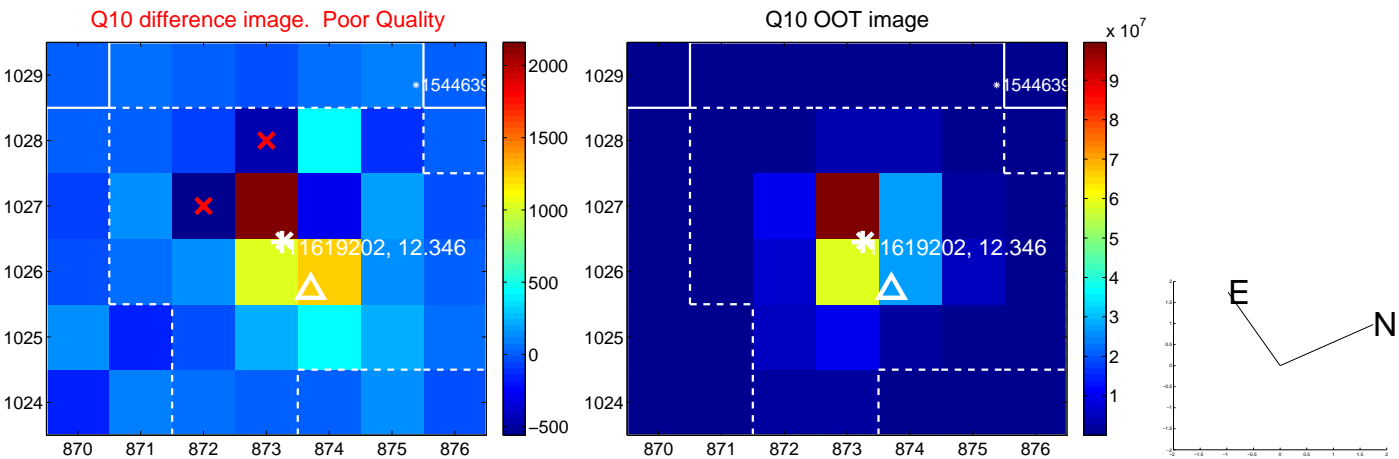
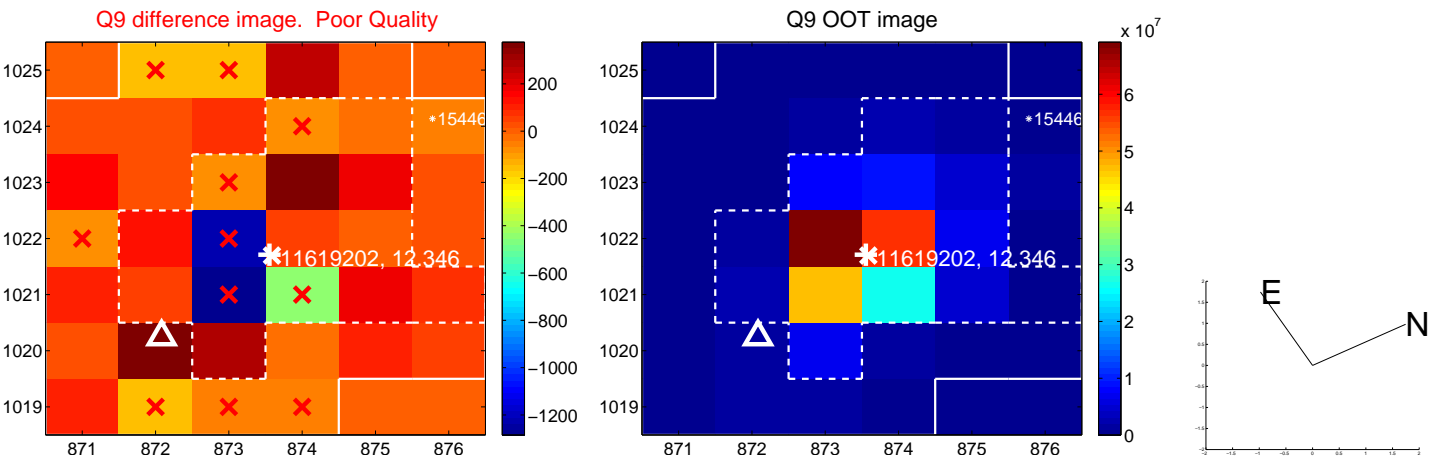


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

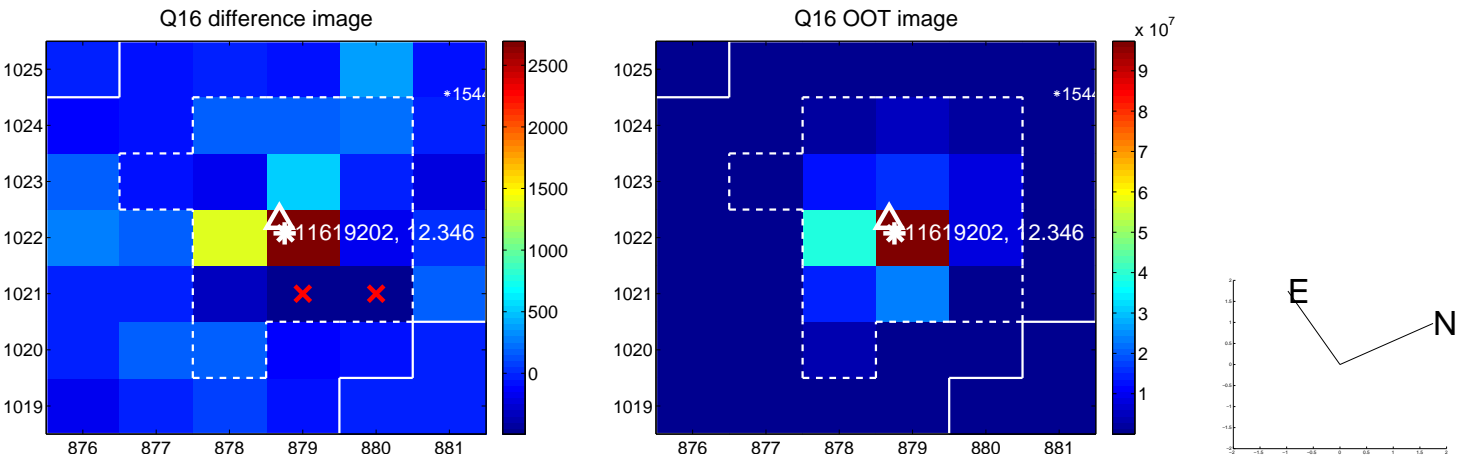
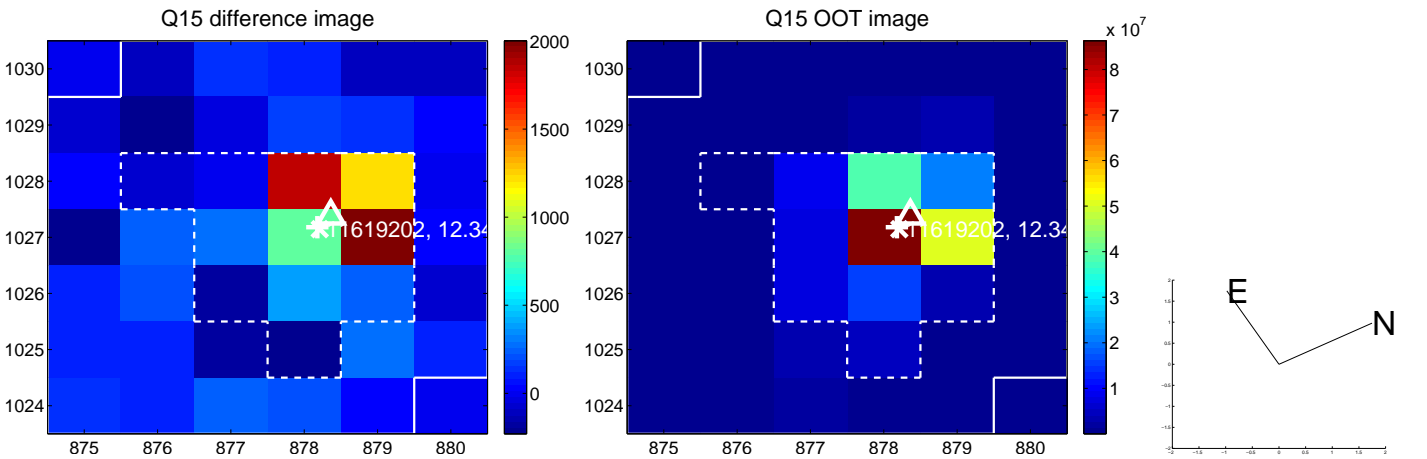
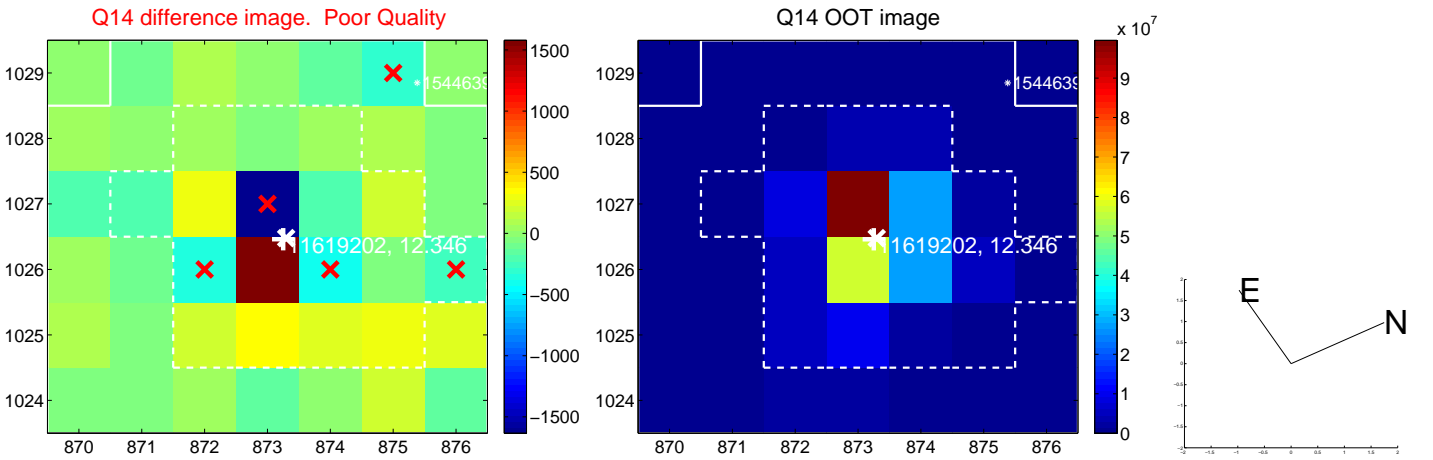
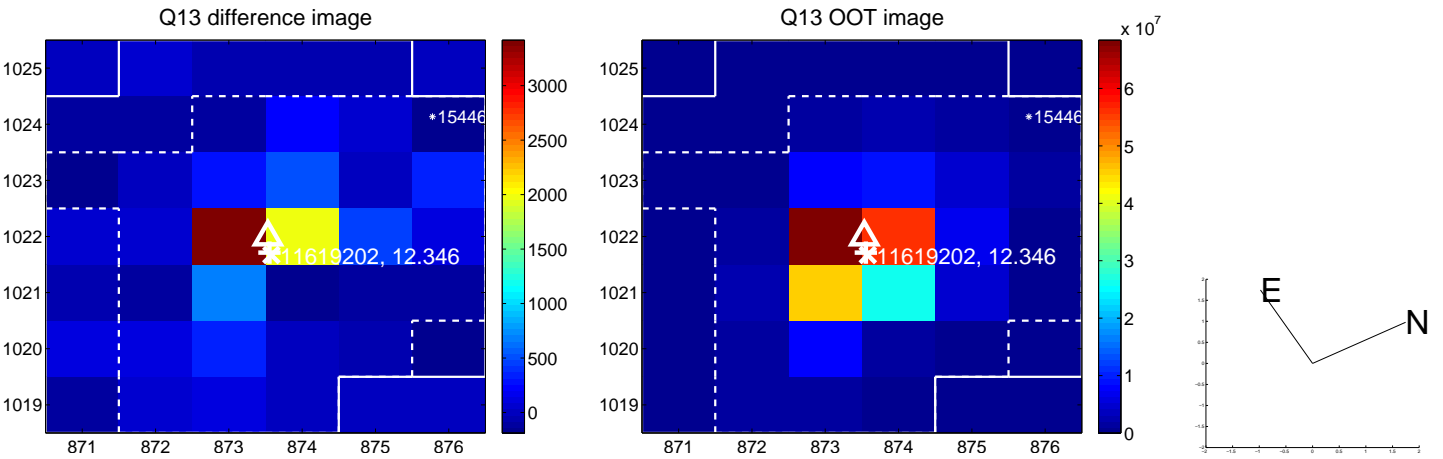
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



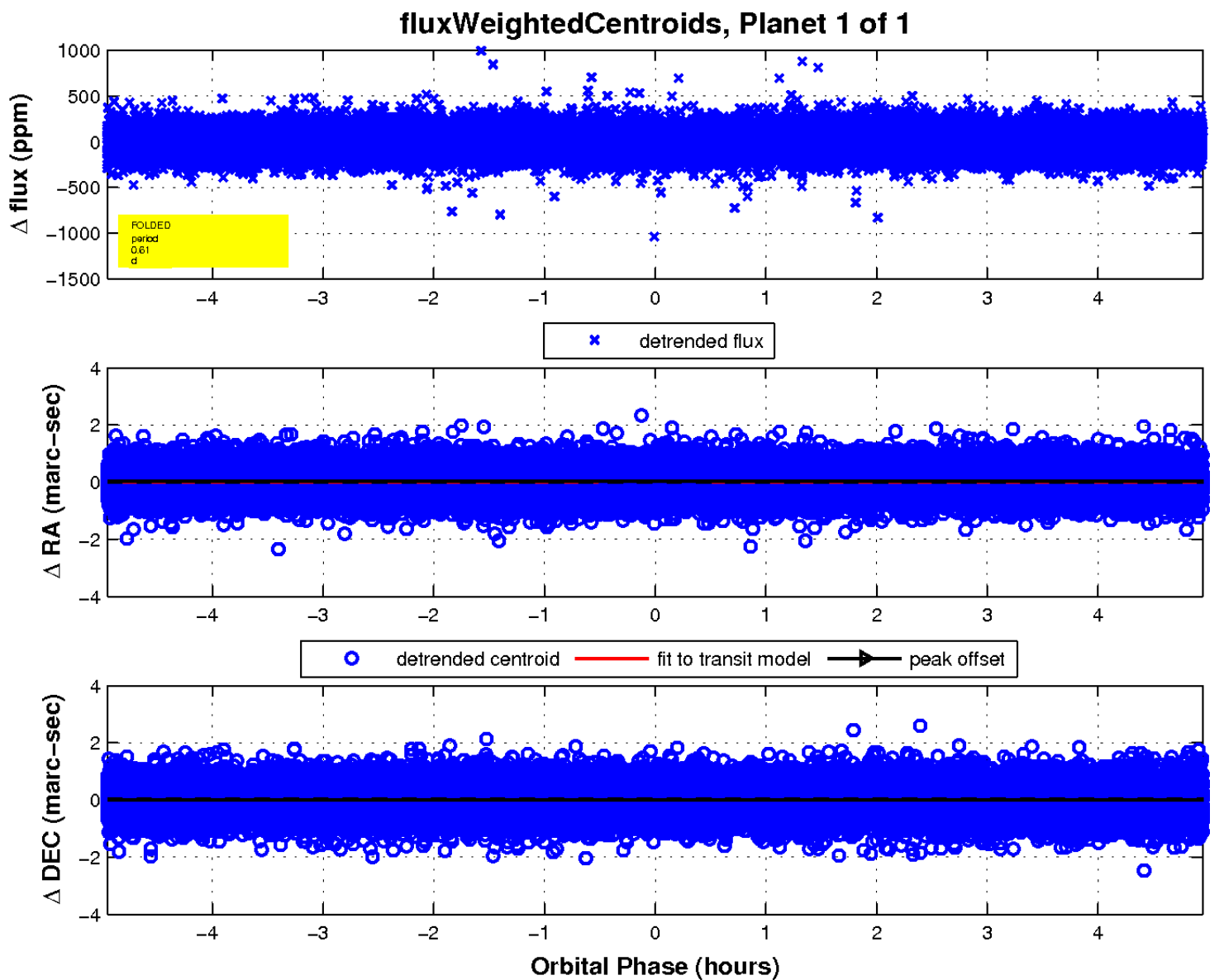
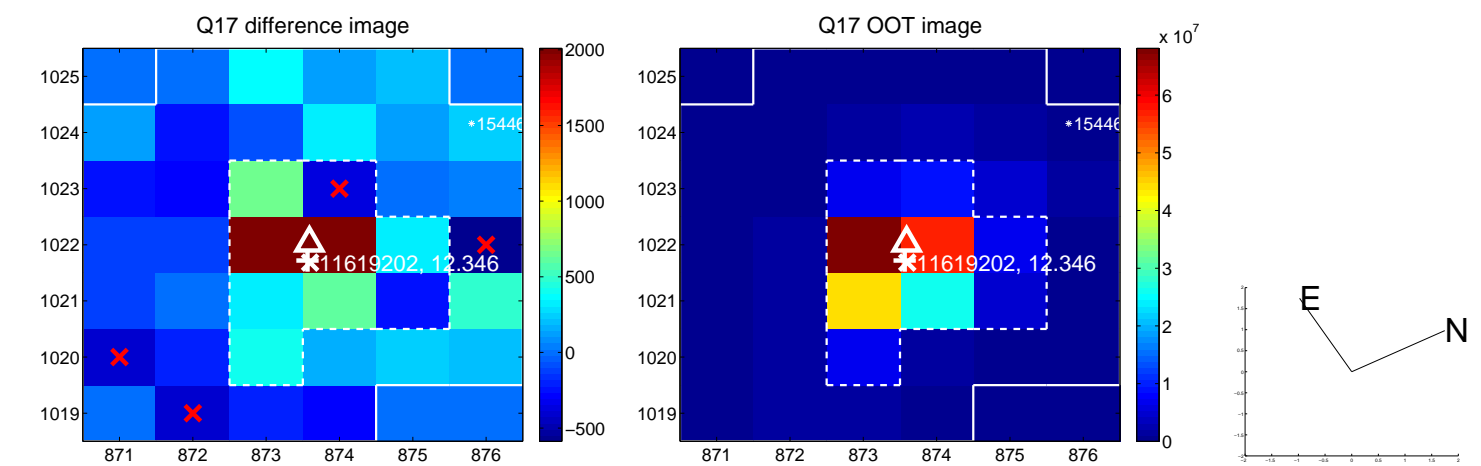
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

