

KIC 005269603

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})
005269603-01	OBS	No	1.007033	132.283570	7.7	2.569	7.7	7.4	2.23	7428	0.72	22958.00

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005269603-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—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.

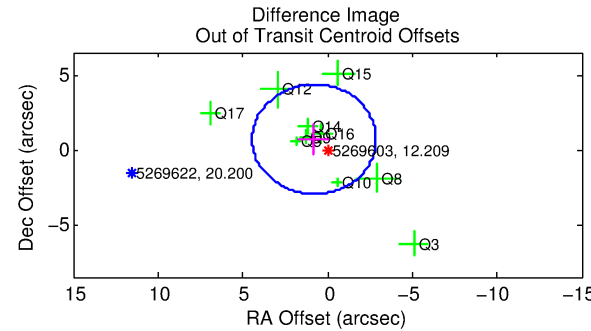
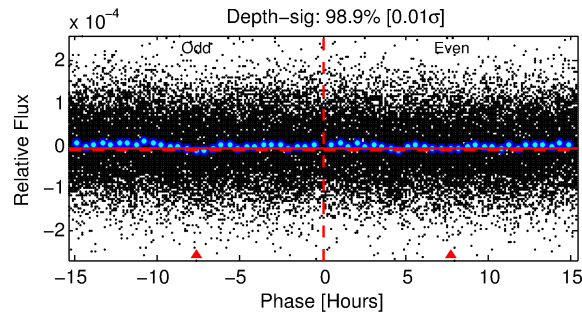
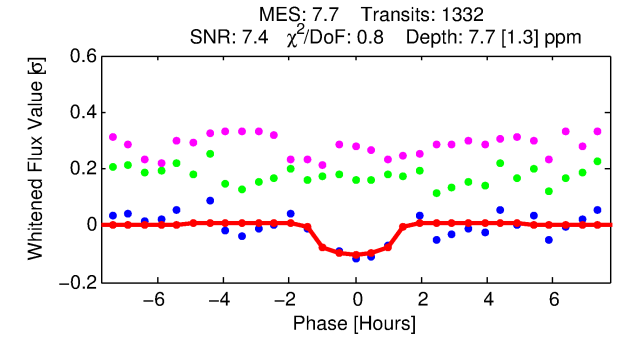
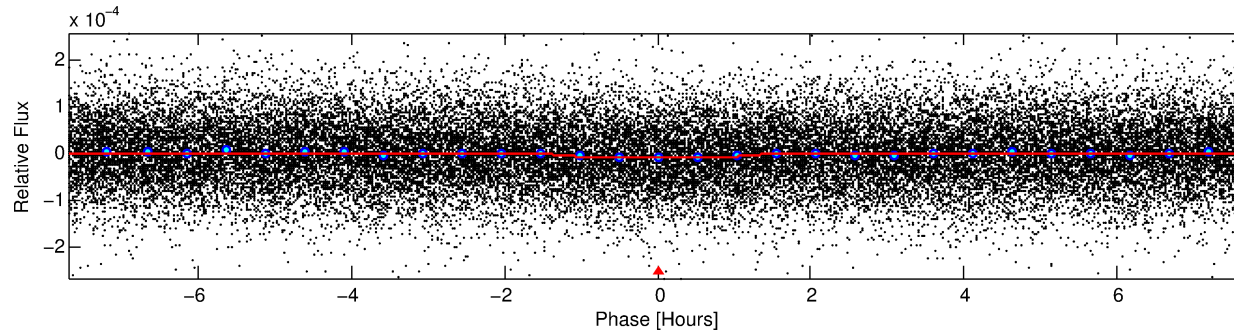
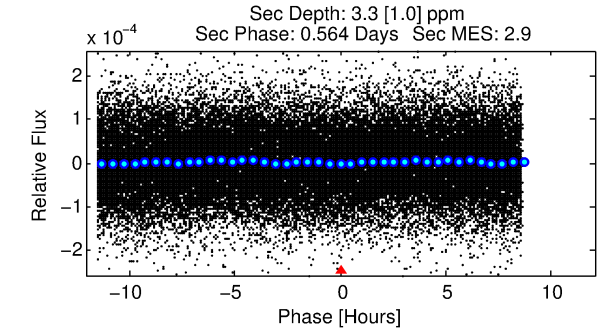
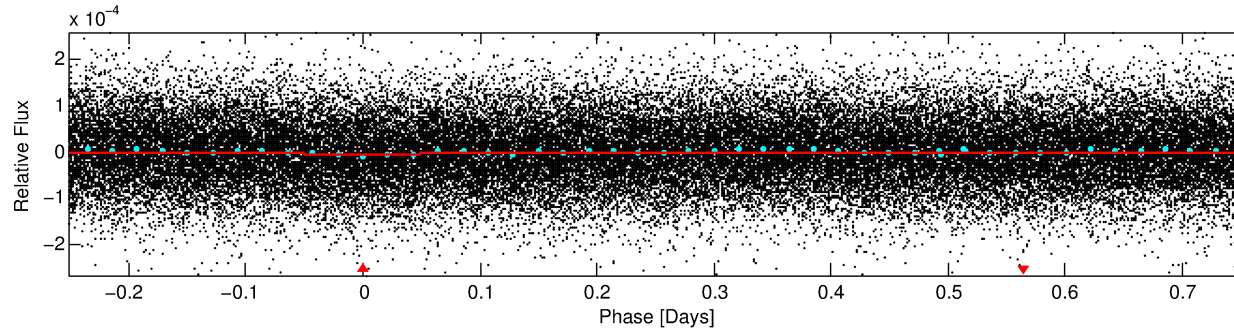
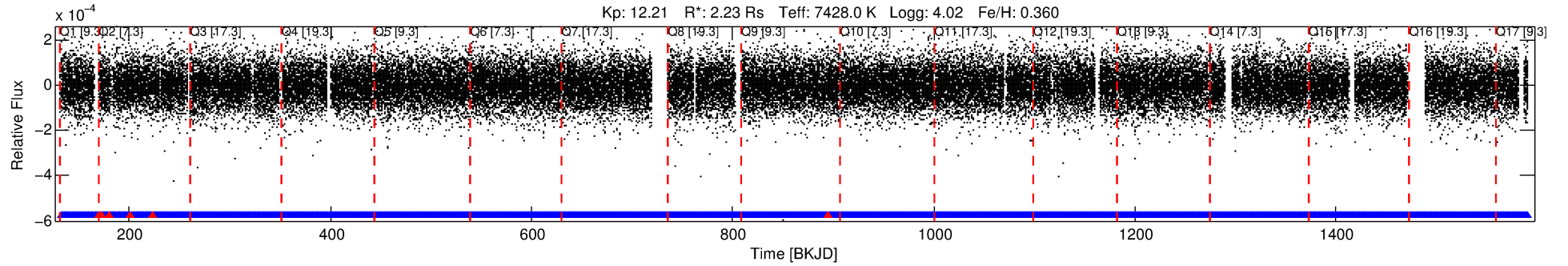
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005269603-01

No Significant Match Found

DV One-Page Summary

KIC: 5269603 Candidate: 1 of 1 Period: 1.007 d



DV Fit Results:

Period = 1.00703 [0.00001] d
Epoch = 132.2836 [0.0043] BKJD
Rp/R* = 0.0029 [0.0005]
a/R* = 1.61 [1.03]
b = 0.90 [0.22]
Seff = 22958.00 [5011.02]
Teq = 3139 [171] K
Rp = 0.72 [0.18] Re
a = 0.0243 [0.0036] AU
Ag = 2.10 [1.11] [0.99σ]
Teffp = 5842 [707] K [3.71σ]

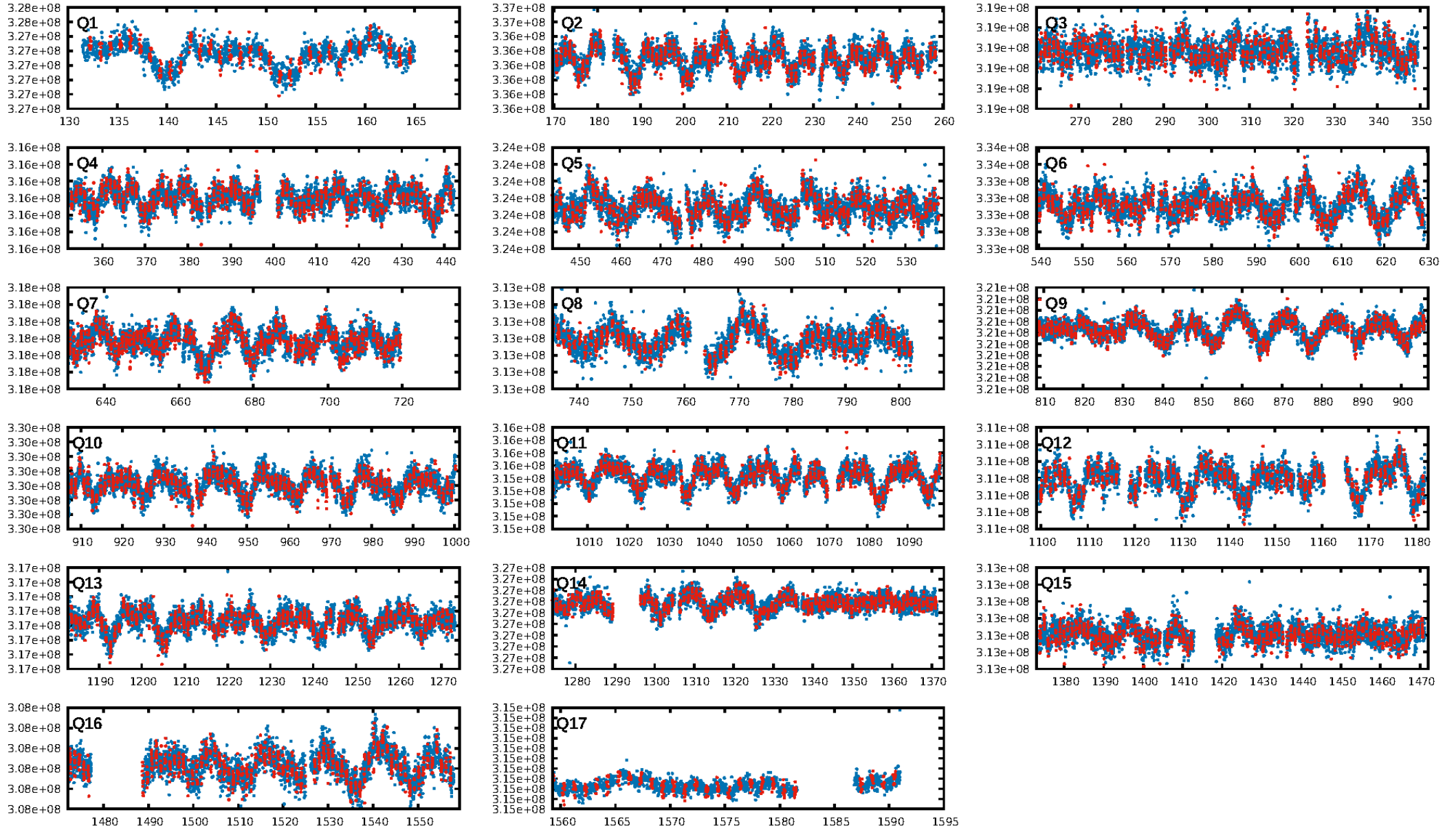
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 2.19e-14
RollingBand-fgt: 1.00 [1266/1272]
GhostDiagnostic-chr: -1.241
Centroid-sig: 0.0%
Centroid-so: 3.382 arcsec [2.40σ]
OotOffset-rm: 1.058 arcsec [0.87σ]
KicOffset-rm: 1.055 arcsec [0.83σ]
OotOffset-st: 2/2/3/3 [10]
KicOffset-st: 2/2/3/3 [10]
DiffImageQuality-fgm: 0.40 [4/10]
DiffImageOverlap-fno: 1.00 [17/17]

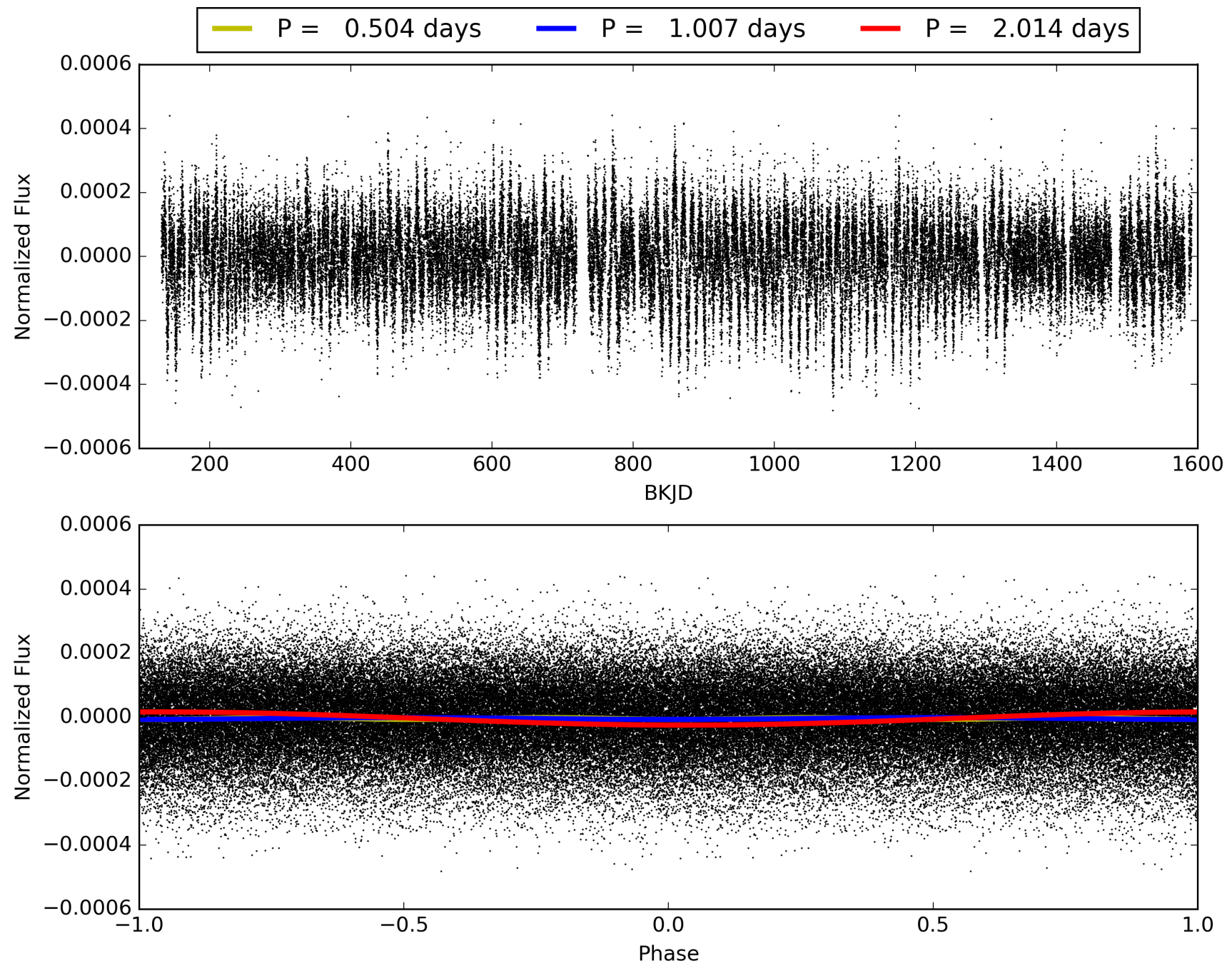
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 06:28:11 Z

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

TCE 005269603-01, PDC Light Curves

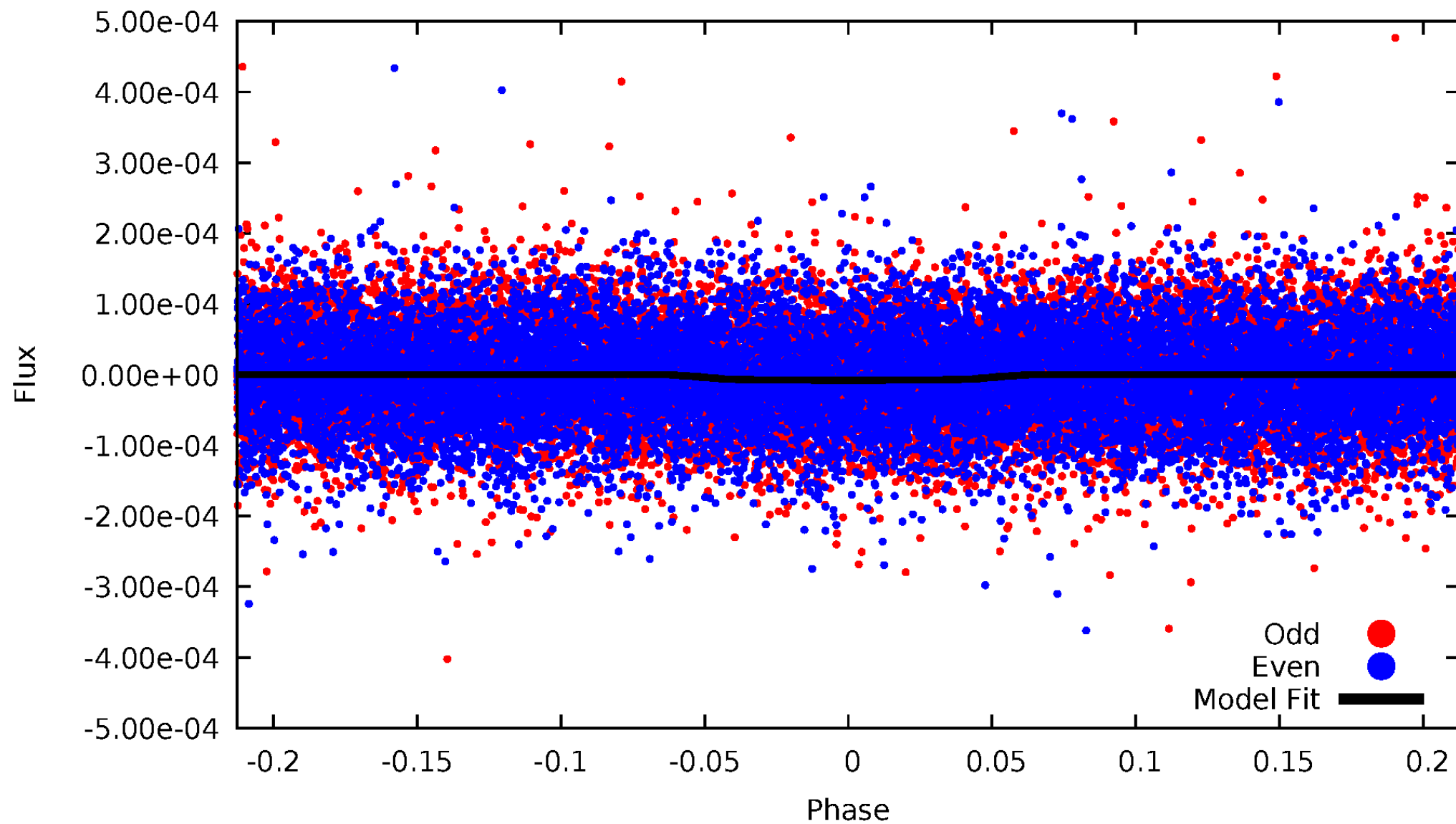


TCE 005269603-01



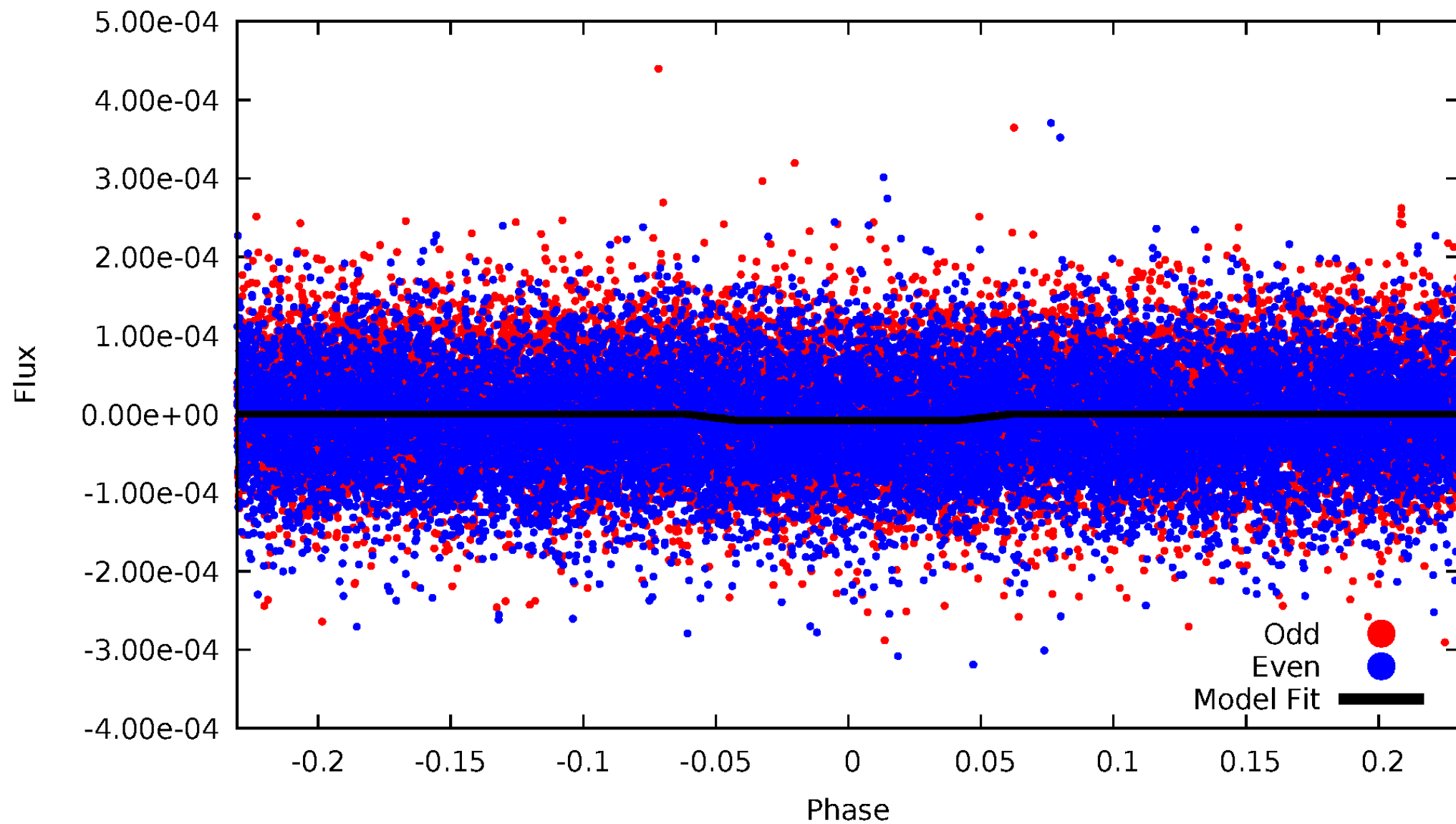
DV Odd/Even

TCE 005269603-01



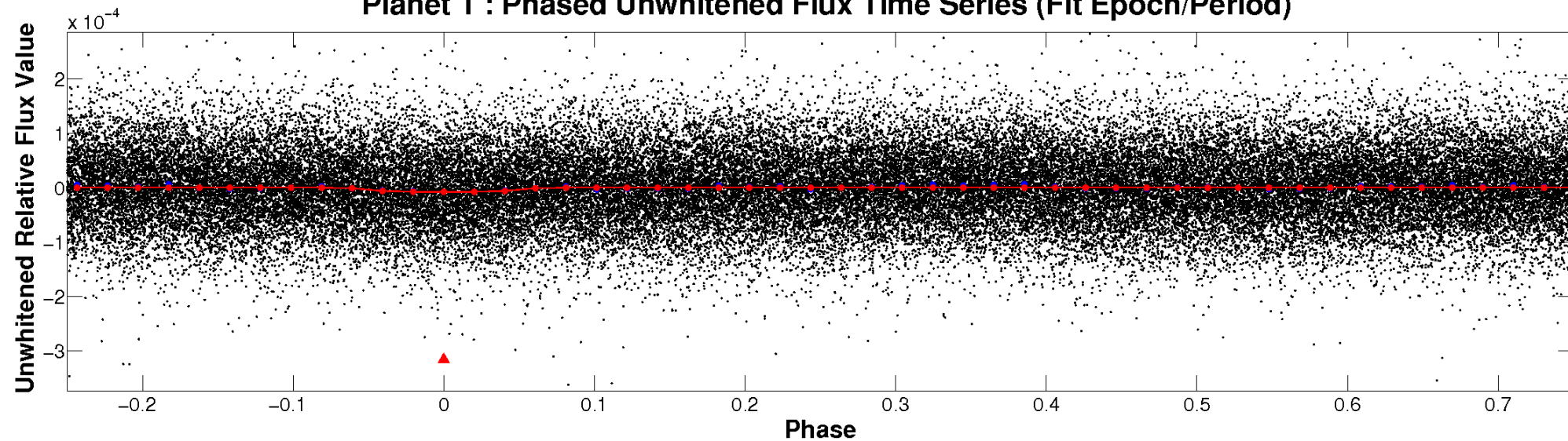
ALT Odd/Even

TCE 005269603-01

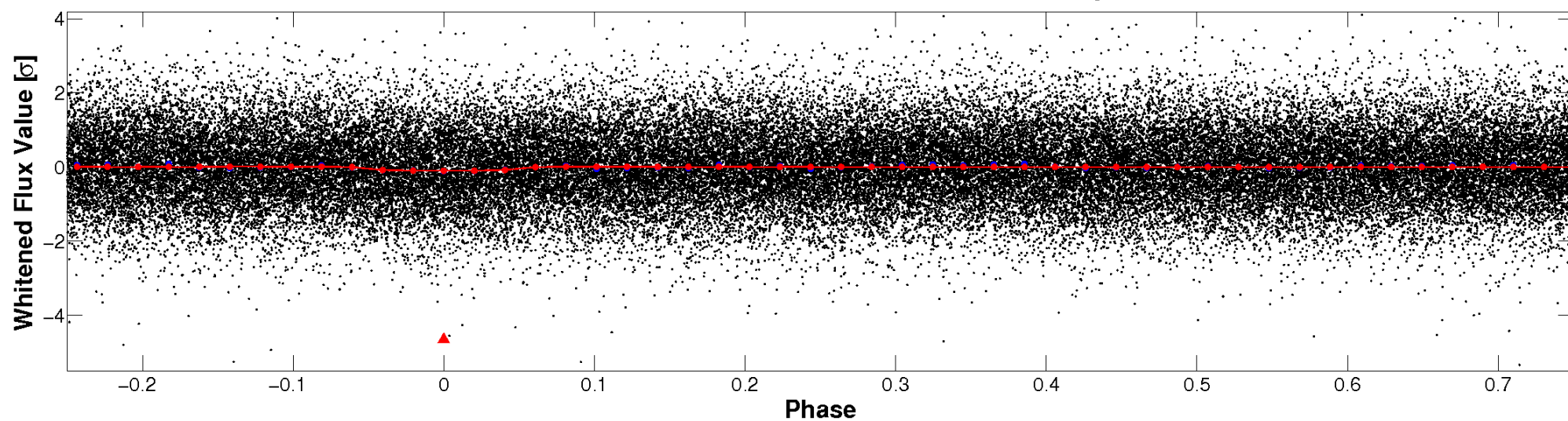


Non-Whitened Vs. Whitened Light Curve

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

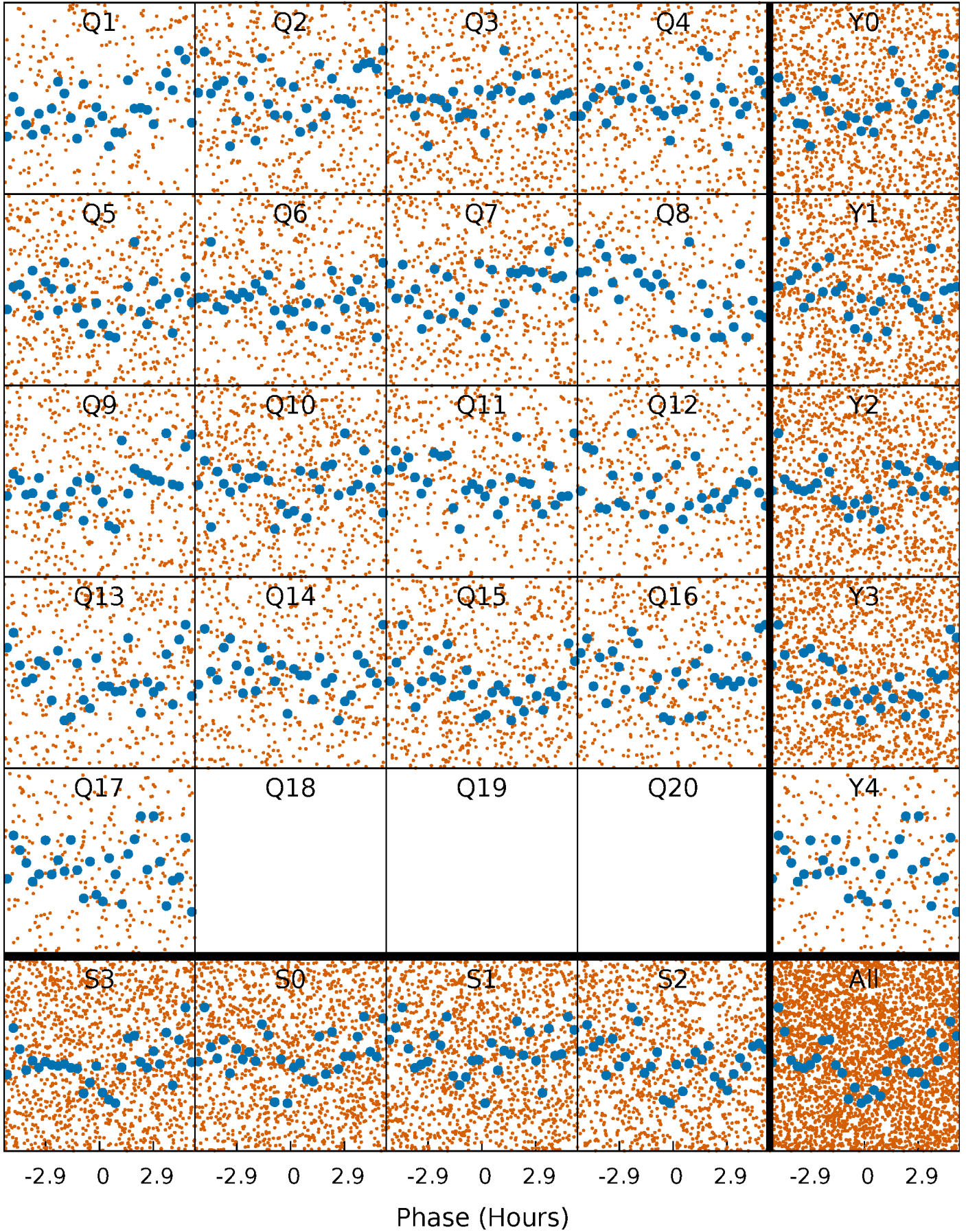


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



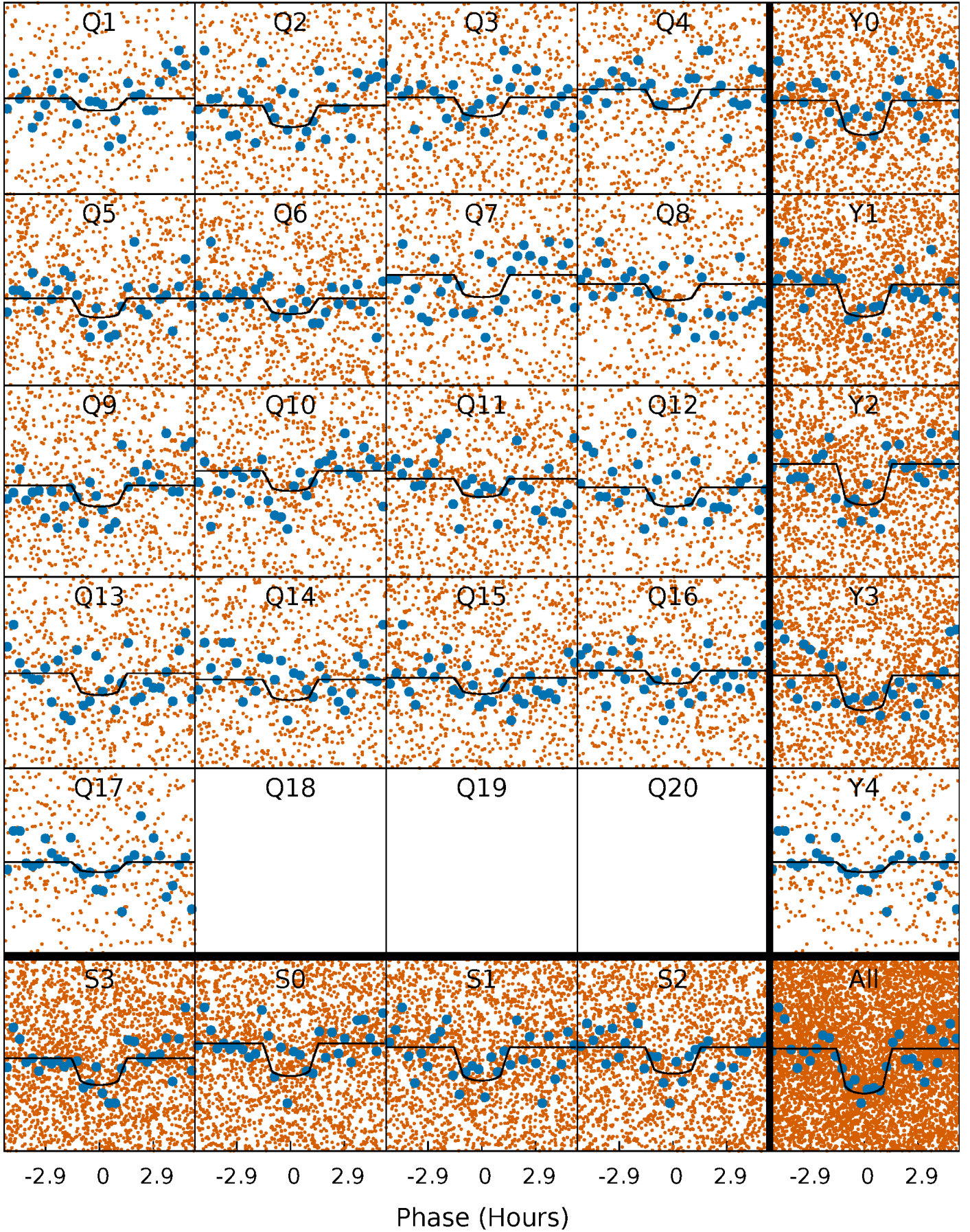
PDC Quarter-Phased Transit Curves

TCE 005269603-01 P= 1.007033 Days $T_0=132.283570$ (BKJD)



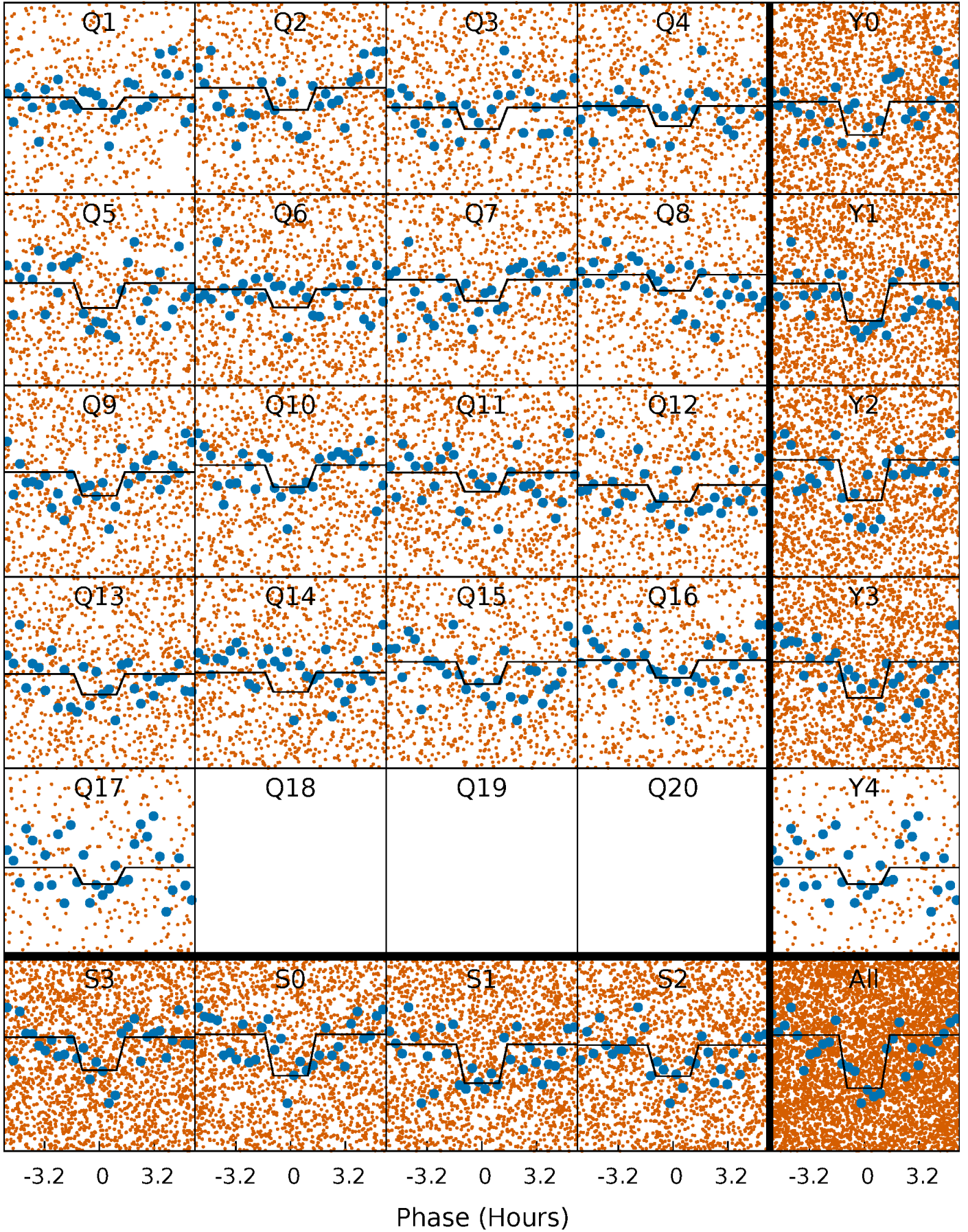
DV Quarter-Phased Transit Curves

TCE 005269603-01 P= 1.007033 Days $T_0=132.283570$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

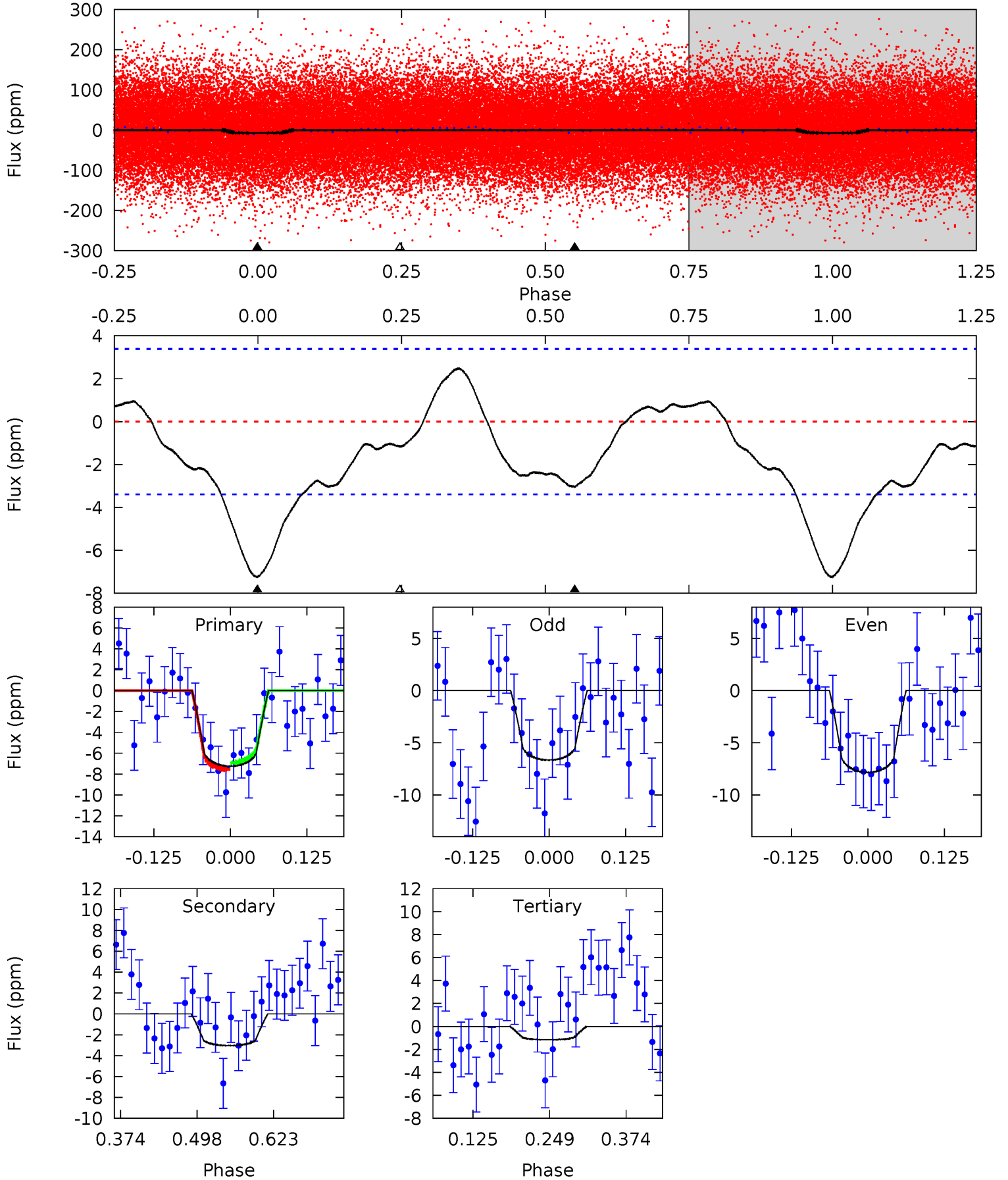
TCE 005269603-01 P= 1.007024 Days $T_0=132.284567$ (BKJD)



DV Model-Shift Uniqueness Test

005269603-01, P = 1.007033 Days, E = 131.276537 Days

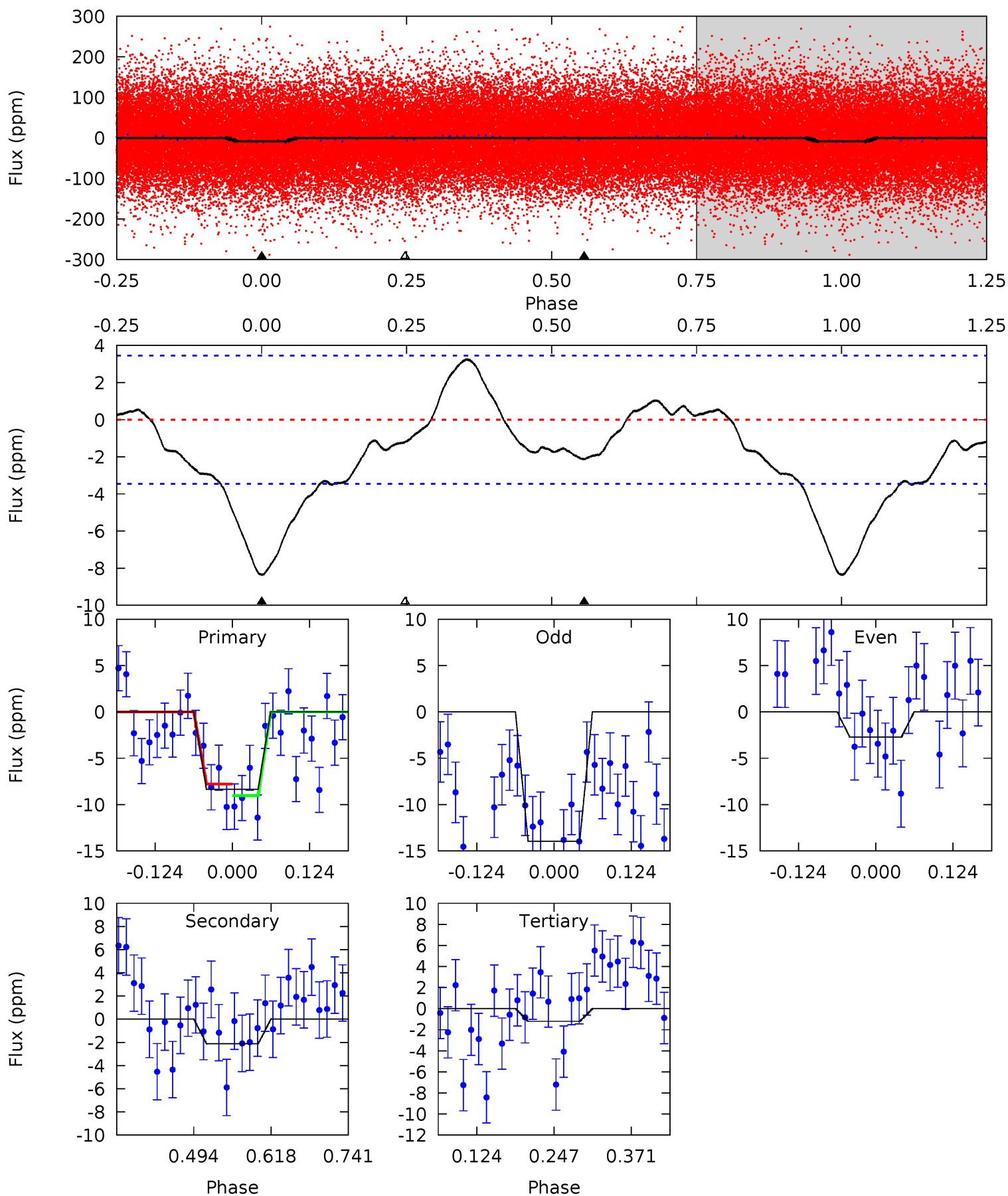
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.65	4.05	1.55	0	4.52	1.54	1.83	8.10	9.65	2.50	4.05	0.78	0.91	0.25	0.41



Alt Model-Shift Uniqueness Test

005269603-01, P = 1.007024 Days, E = 131.277543 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.9	2.78	1.58	0	4.52	1.54	2.20	9.34	10.9	1.20	2.78	7.35	0.85	0.28	0.82



Stellar Parameters For KIC 005269603

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	7428^{+73}_{-88}	$4.017^{+0.095}_{-0.116}$	$0.360^{+0.050}_{-0.200}$	$2.228^{+0.391}_{-0.294}$	$1.880^{+0.089}_{-0.145}$	$0.239^{+0.106}_{-0.087}$
	+1%/-1%	+2%/-3%	+14%/-56%	+18%/-13%	+5%/-8%	+44%/-36%
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 005269603-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-3 ± 1	$0.72^{+0.14}_{-0.13}$	4409^{+192}_{-167}	5424^{+629}_{-573}	$1.880^{+1.050}_{-0.663}$
Alt.	-2 ± 1	$0.71^{+0.15}_{-0.14}$	4393^{+197}_{-154}	4932^{+719}_{-751}	$1.325^{+0.907}_{-0.605}$

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 $A_{obs} \gg 1.0$

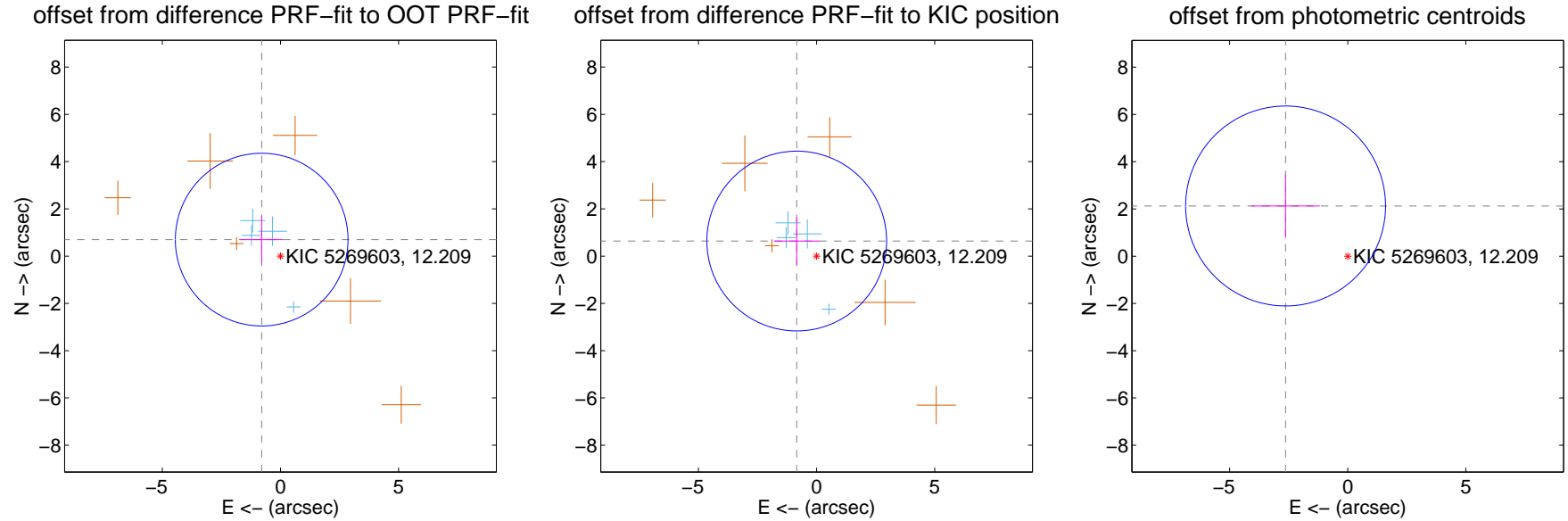
DV Centroid Data

Supplemental centroid analysis for 005269603-01. Kepler magnitude: 12.21. Transit SNR 7.35

There are 4 quarters with good PRF difference image offsets

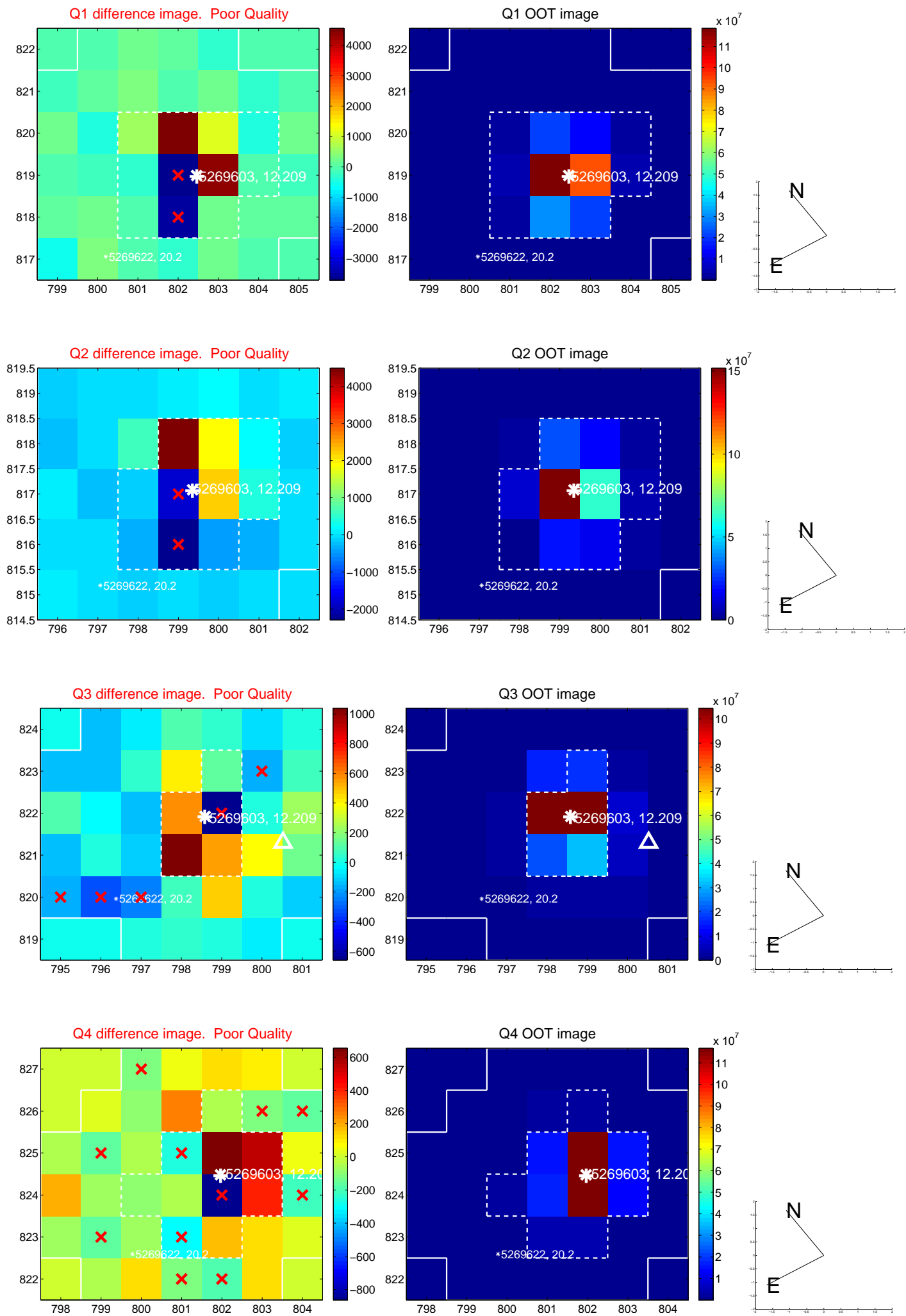
The direct PRF centroid is offset from the target star catalog position by about 0.11 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.058 ± 1.218	0.87	0.795 ± 0.891	0.699 ± 1.000
PRF-fit source offset from KIC position	1.055 ± 1.268	0.83	0.840 ± 0.964	0.638 ± 1.003
photometric centroid source offset	3.38 ± 1.41	2.40	2.63 ± 1.45	2.13 ± 1.34

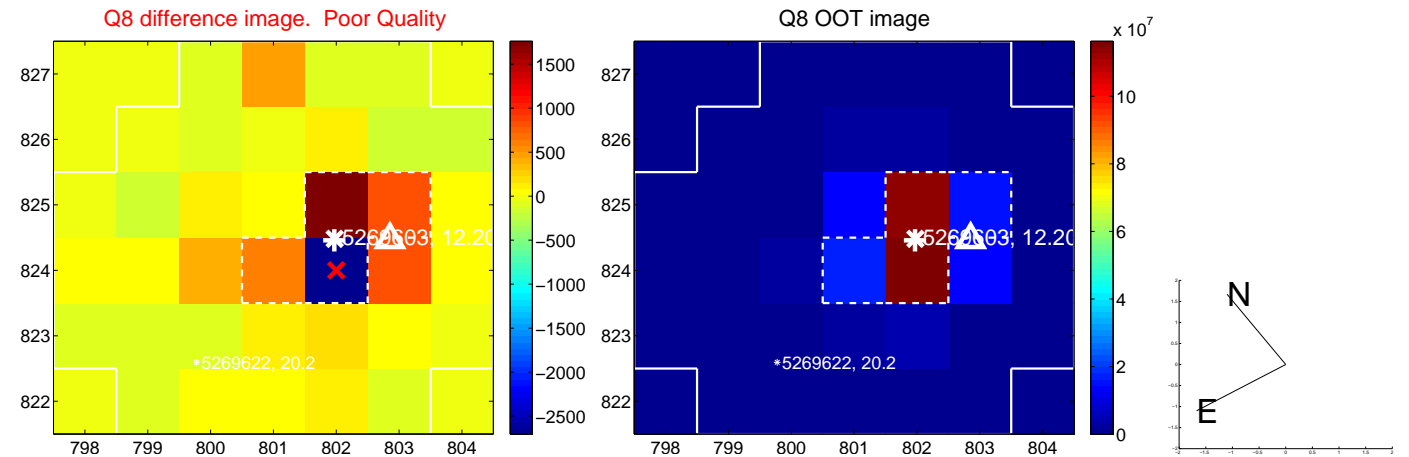
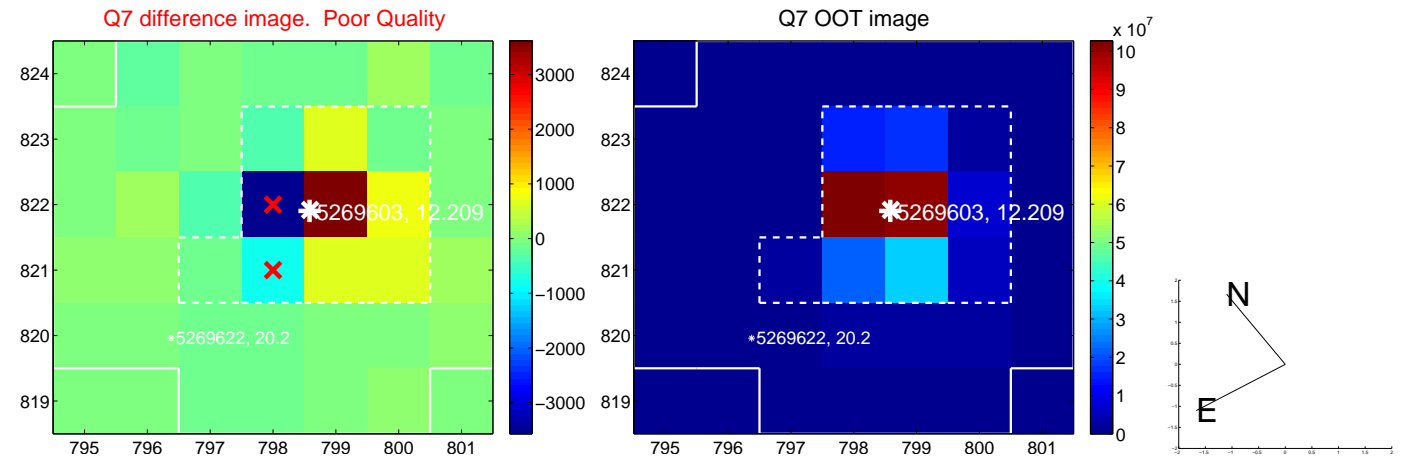
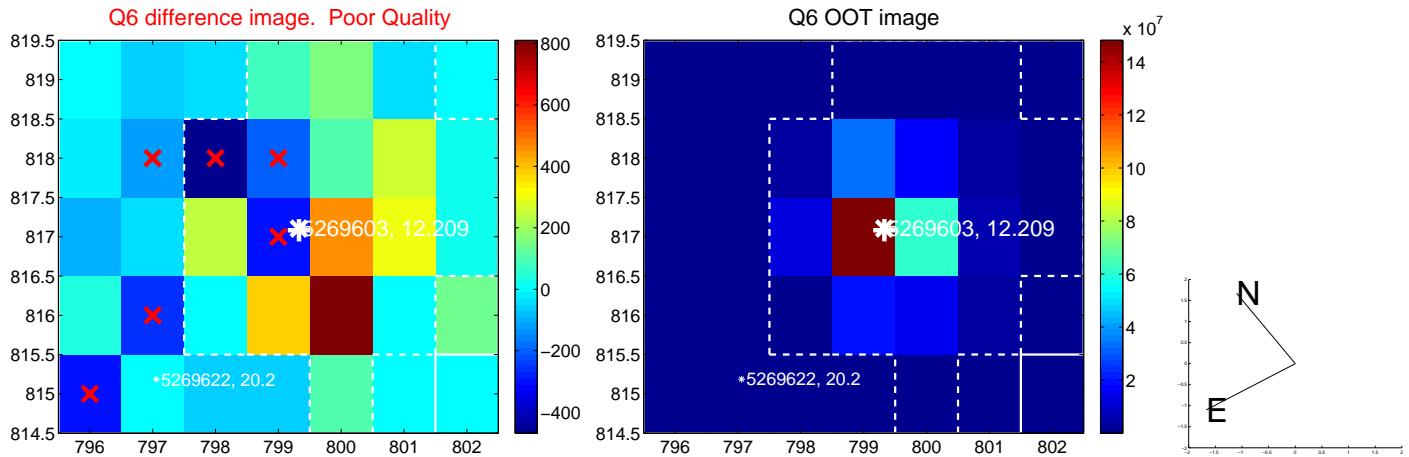
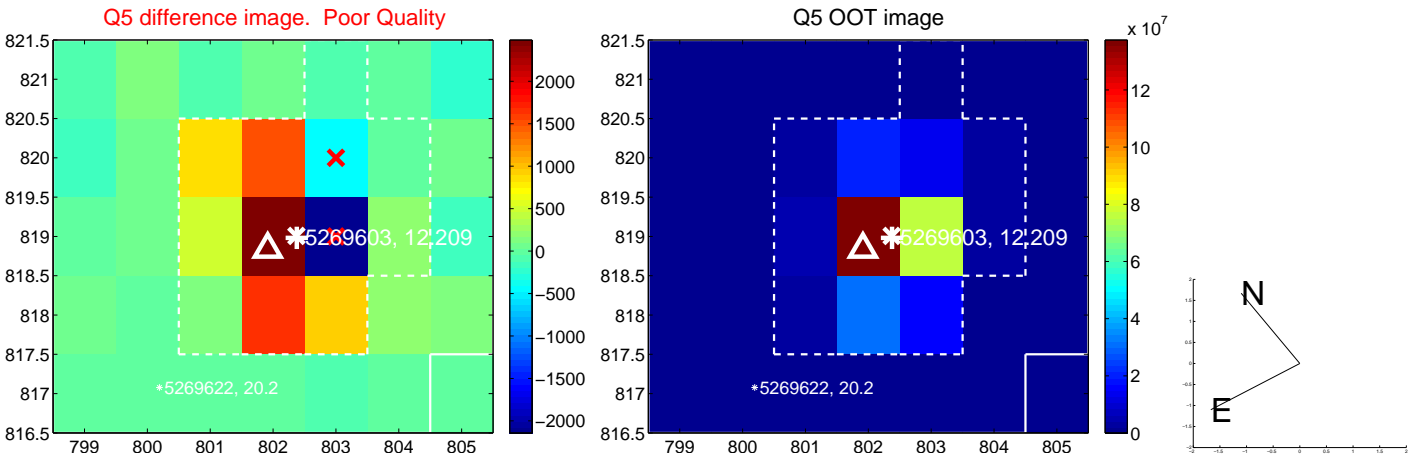


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

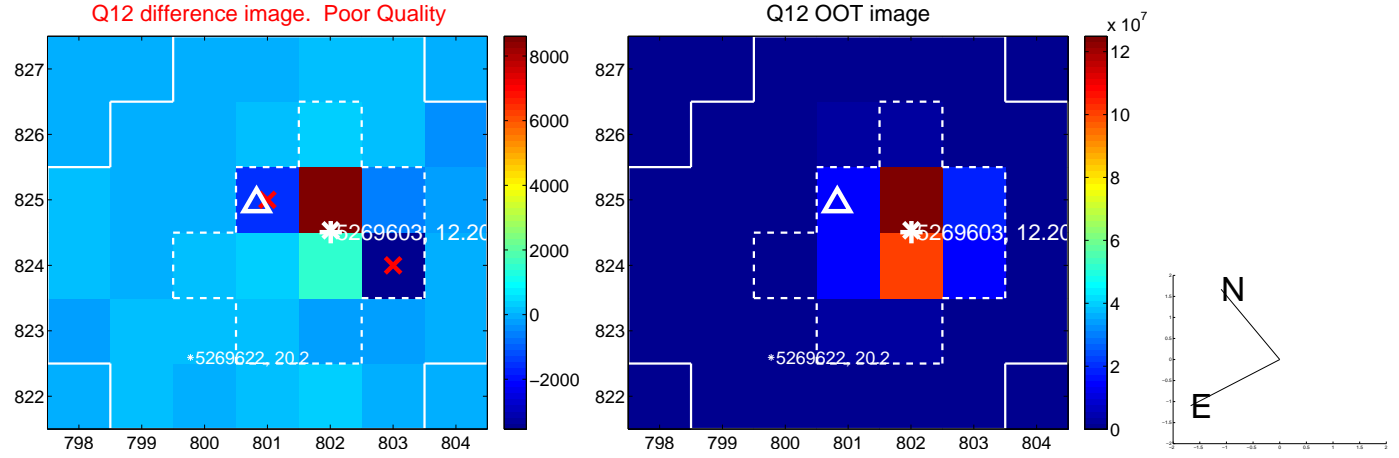
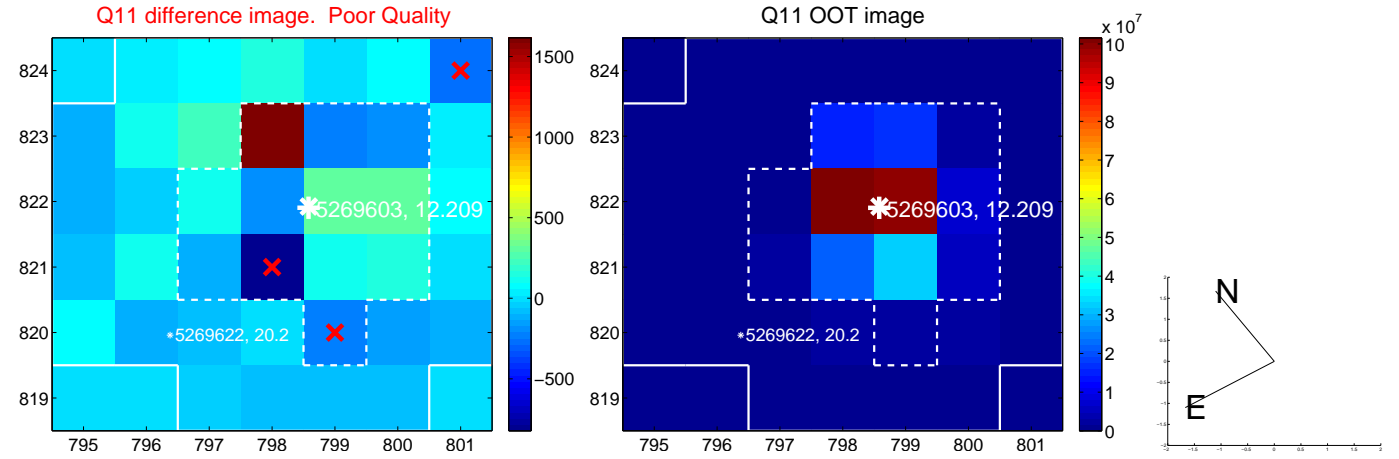
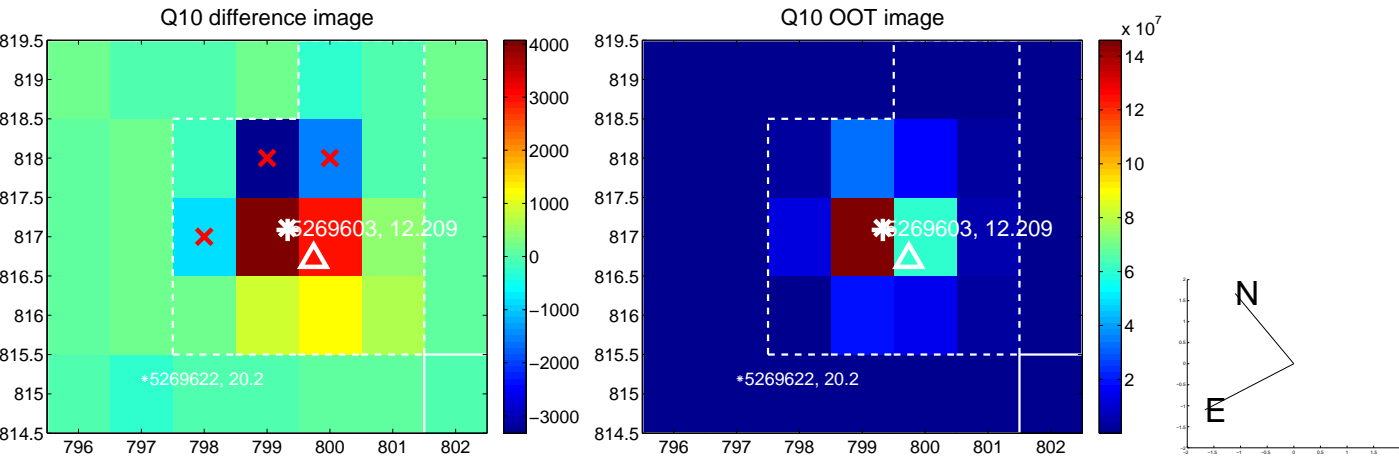
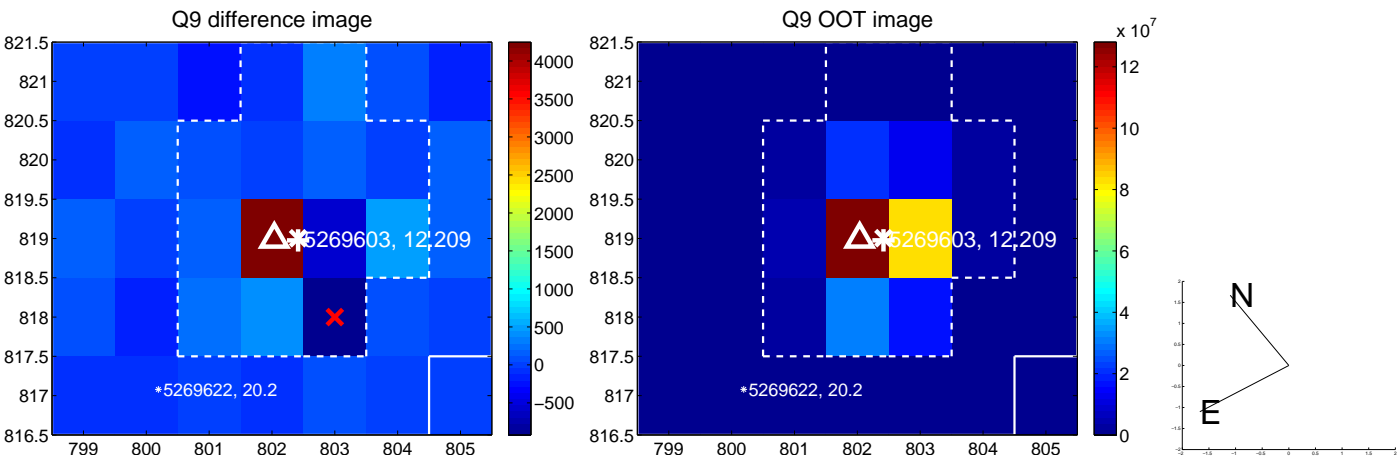
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



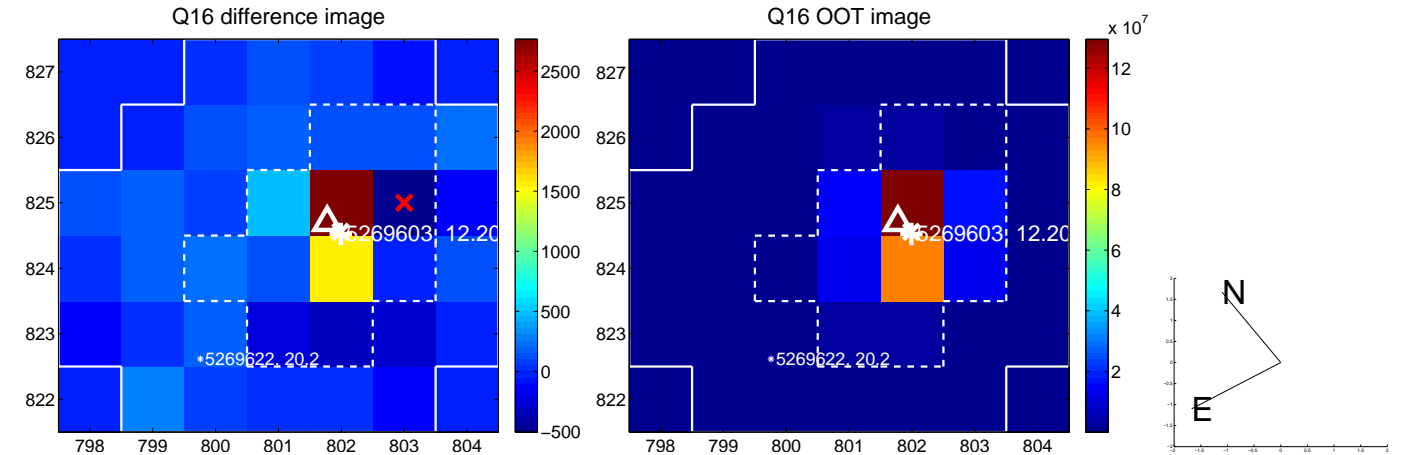
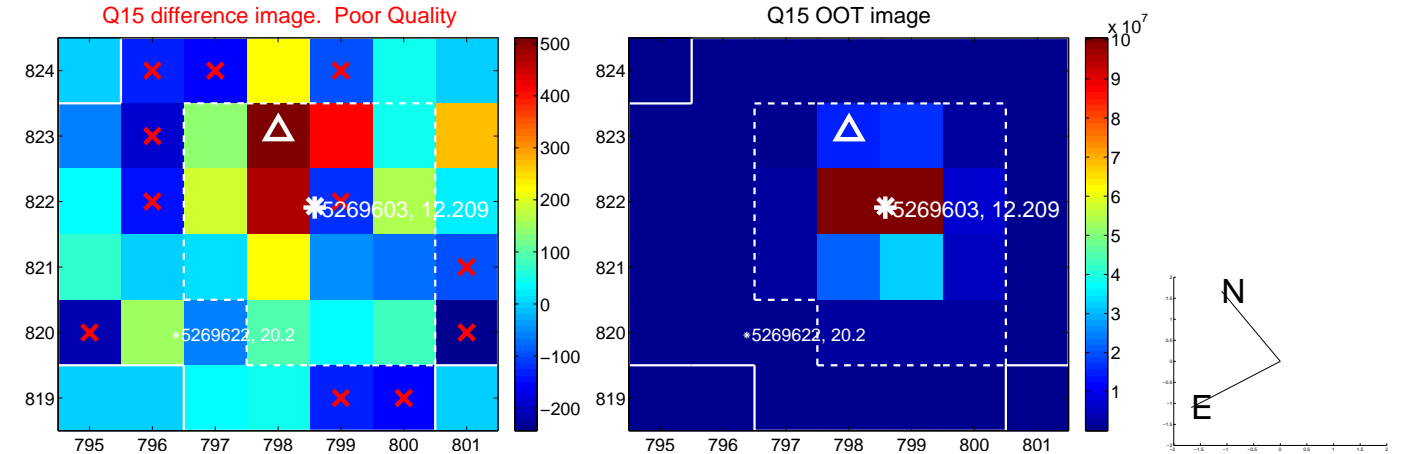
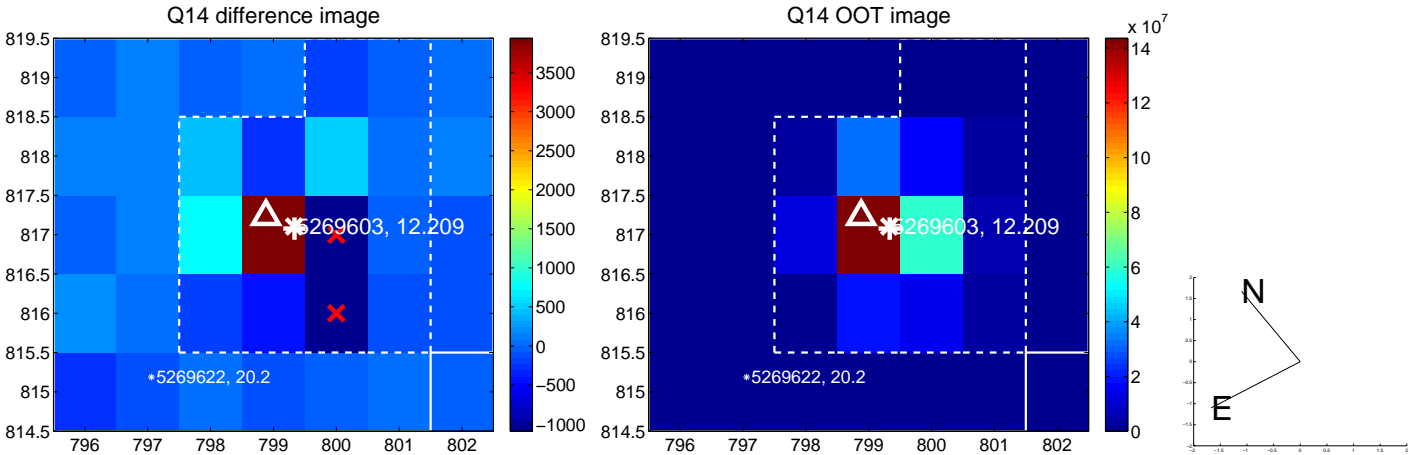
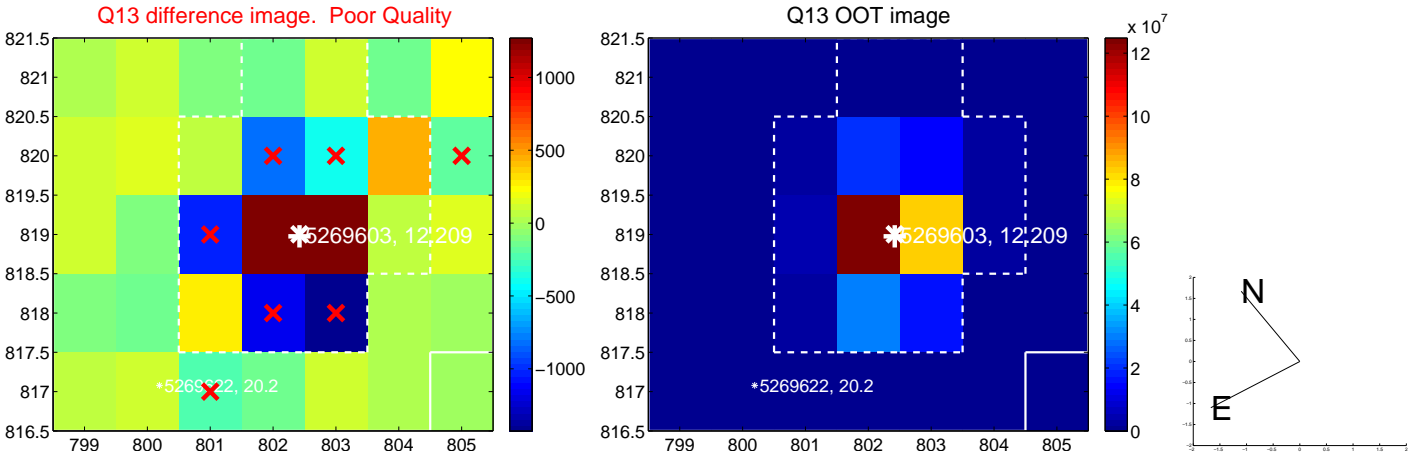
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



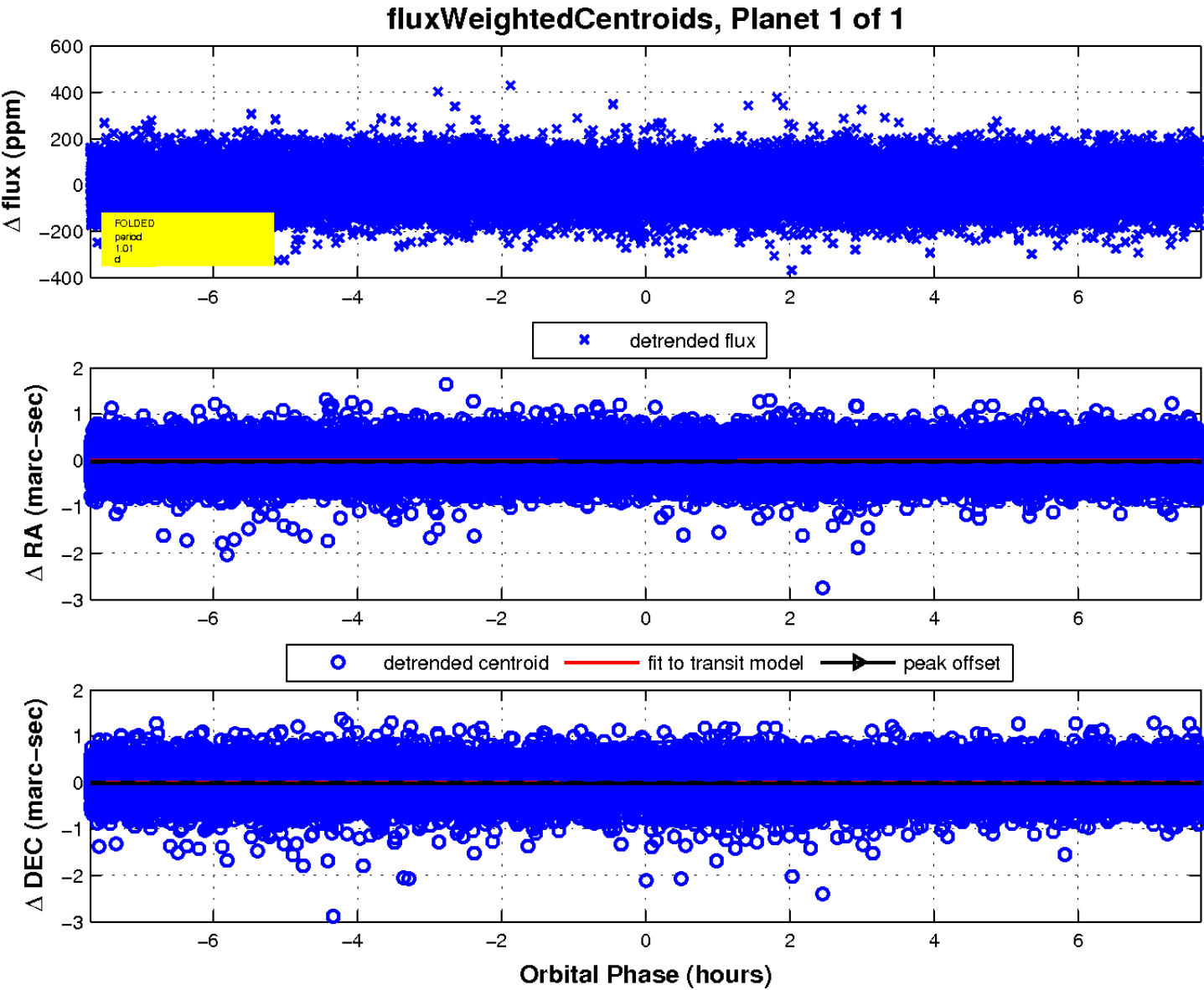
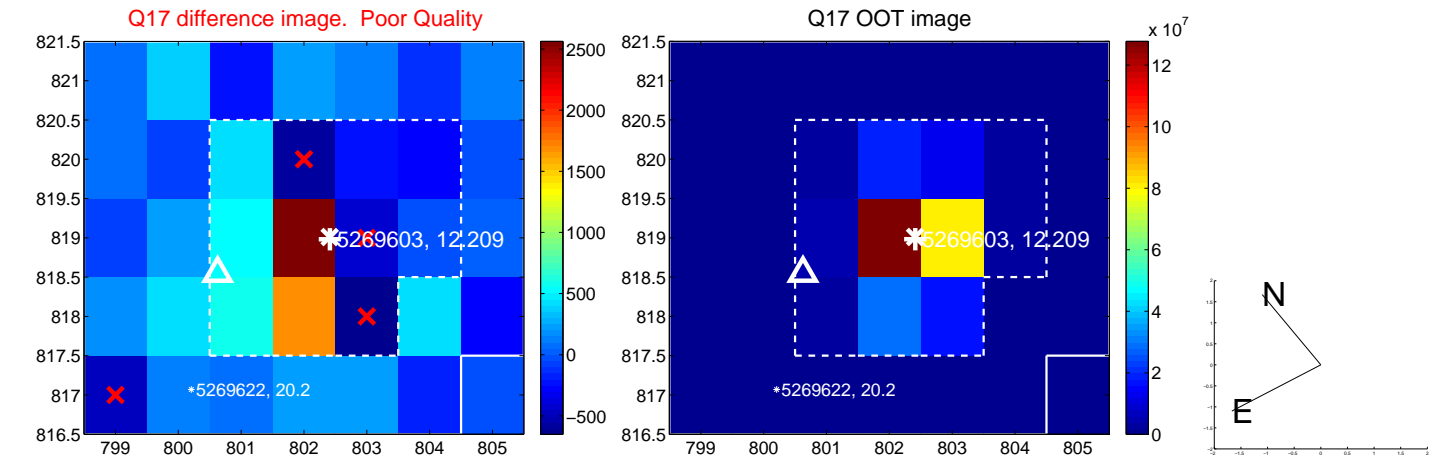
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white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination

