

KIC 008260902

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})
008260902-01	OBS	2144.01	38.671463	157.622332	593.3	5.676	22.0	22.2	0.91	5432	2.62	15.06

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008260902-01	OBS	PC	0.99	0	0	0	0	NO_COMMENT

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

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

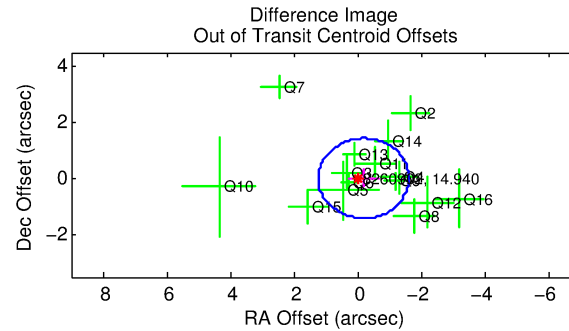
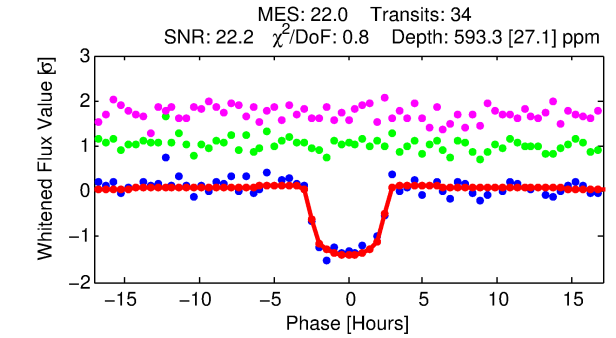
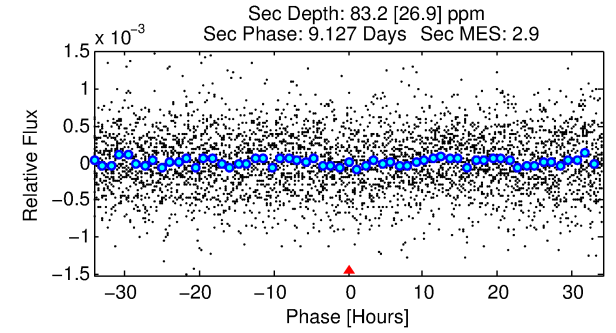
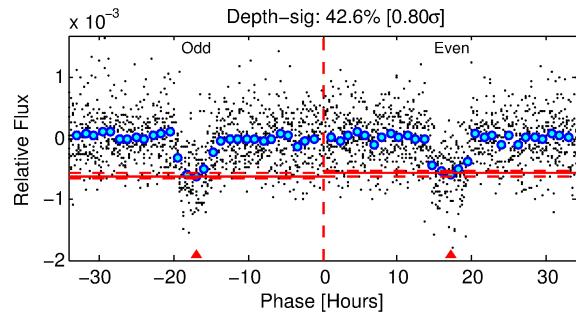
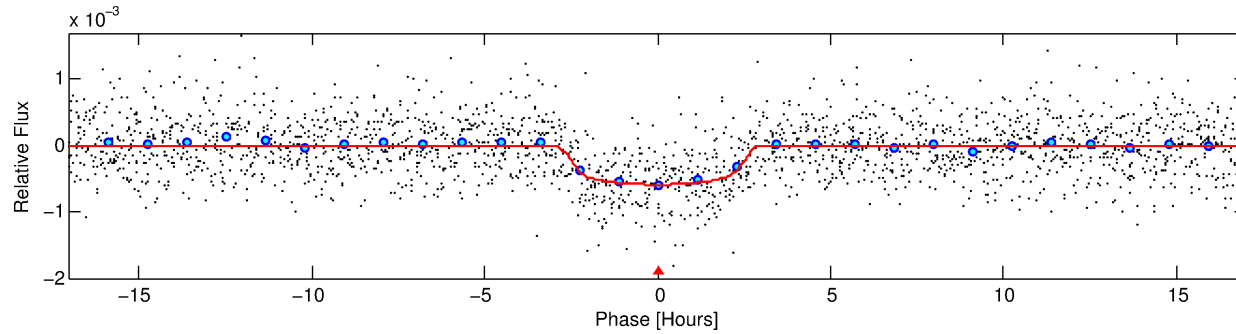
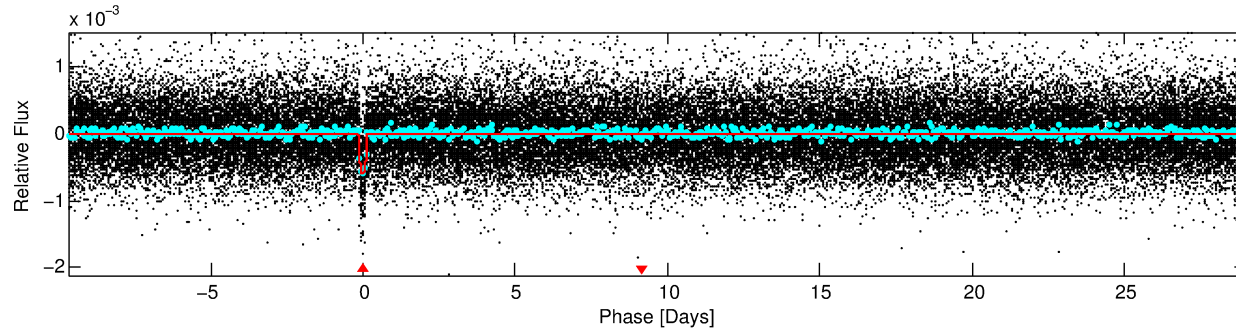
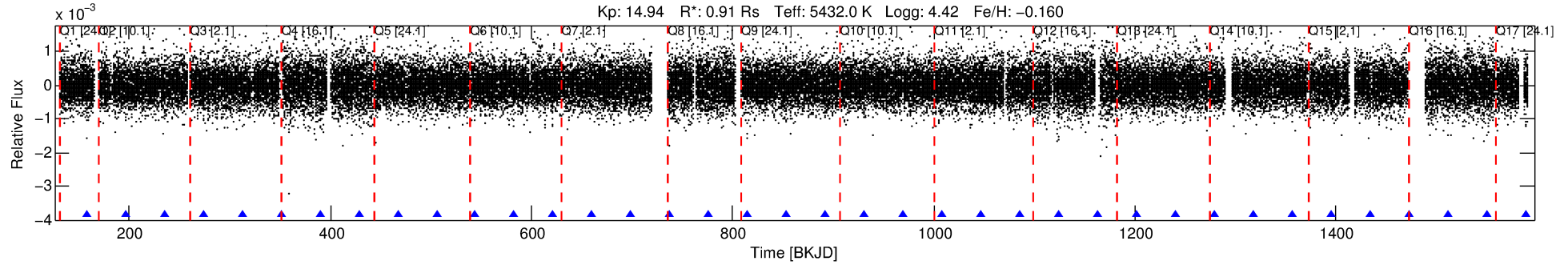
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008260902-01

No Significant Match Found

DV One-Page Summary

KIC: 8260902 Candidate: 1 of 1 Period: 38.671 d
KOI: K02144.01 Corr: 0.991



DV Fit Results:

Period = 38.67146 [0.00023] d
Epoch = 157.6223 [0.0050] BKJD
Rp/R* = 0.0263 [0.0026]
a/R* = 27.36 [11.34]
b = 0.88 [0.11]
Seff = 15.06 [7.37]
Teq = 502 [61] K
Rp = 2.62 [0.92] Re
a = 0.2078 [0.0636] AU
Ag = 288.28 [175.51] [1.64 σ]
Teffp = 3200 [319] K [8.31 σ]

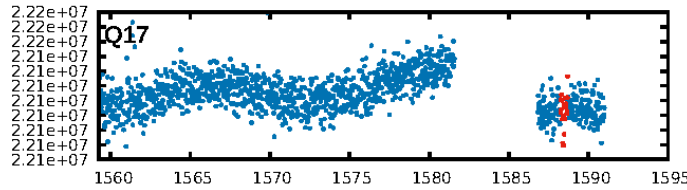
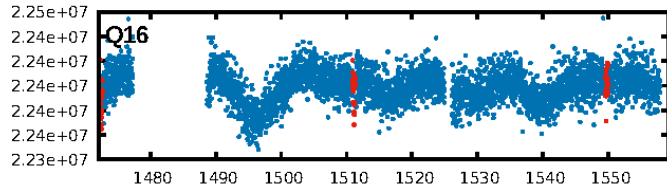
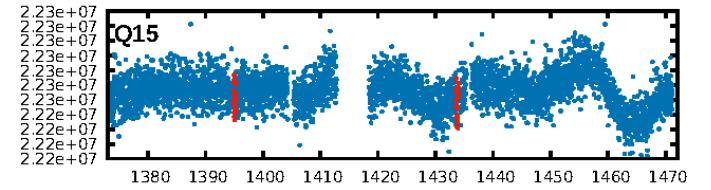
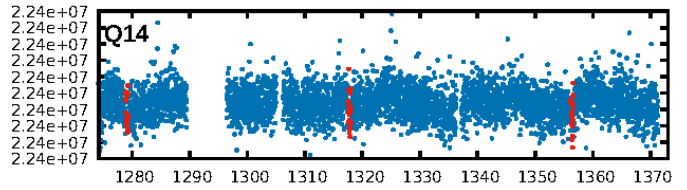
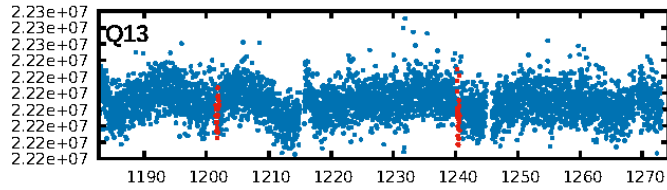
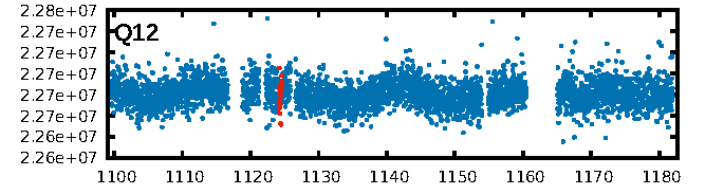
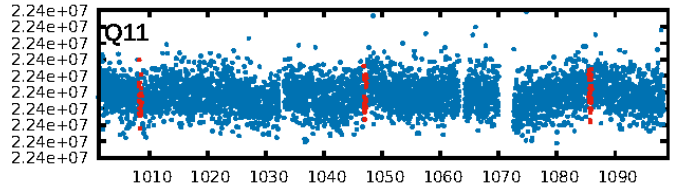
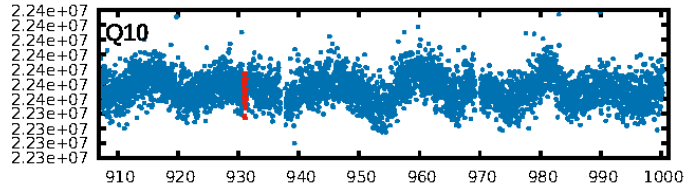
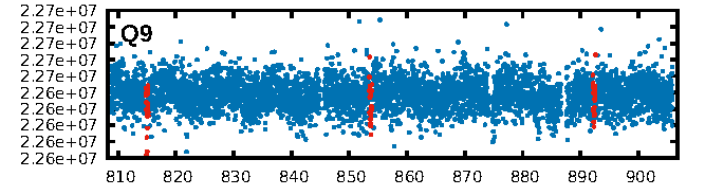
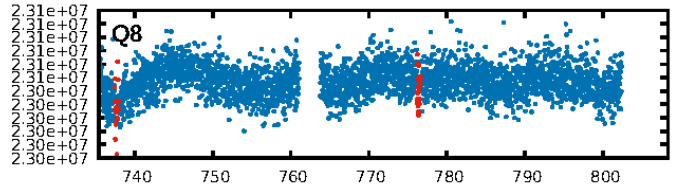
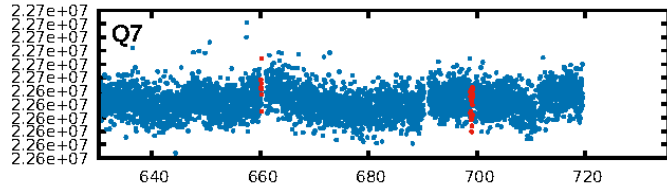
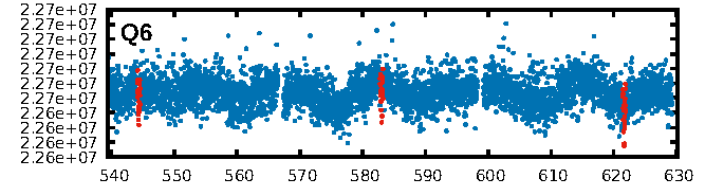
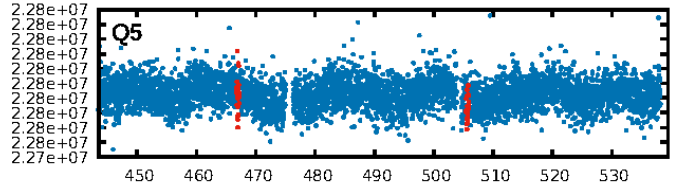
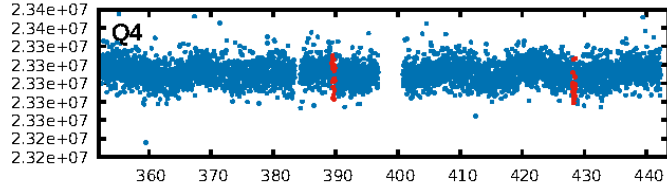
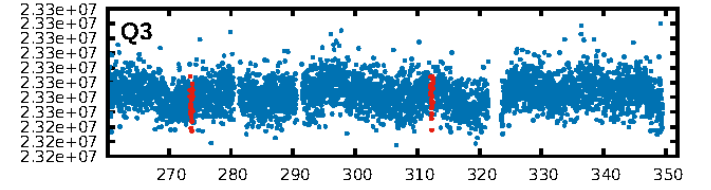
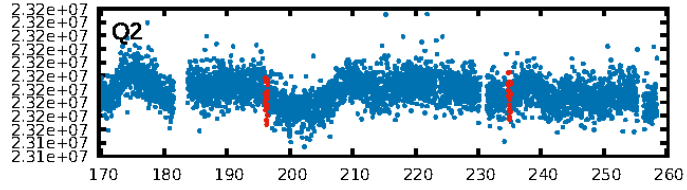
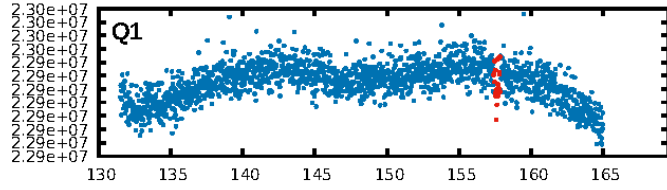
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 99.8%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 1.81e-106
RollingBand-fgt: 1.00 [32/32]
GhostDiagnostic-chr: 2.385
Centroid-sig: 45.7%
Centroid-so: 0.647 arcsec [1.02 σ]
OotOffset-rm: 0.195 arcsec [0.41 σ]
KicOffset-rm: 0.164 arcsec [0.40 σ]
OotOffset-st: 4/4/4/3 [15]
KicOffset-st: 4/4/4/3 [15]
DiffImageQuality-fgm: 0.53 [8/15]
DiffImageOverlap-fno: 1.00 [17/17]

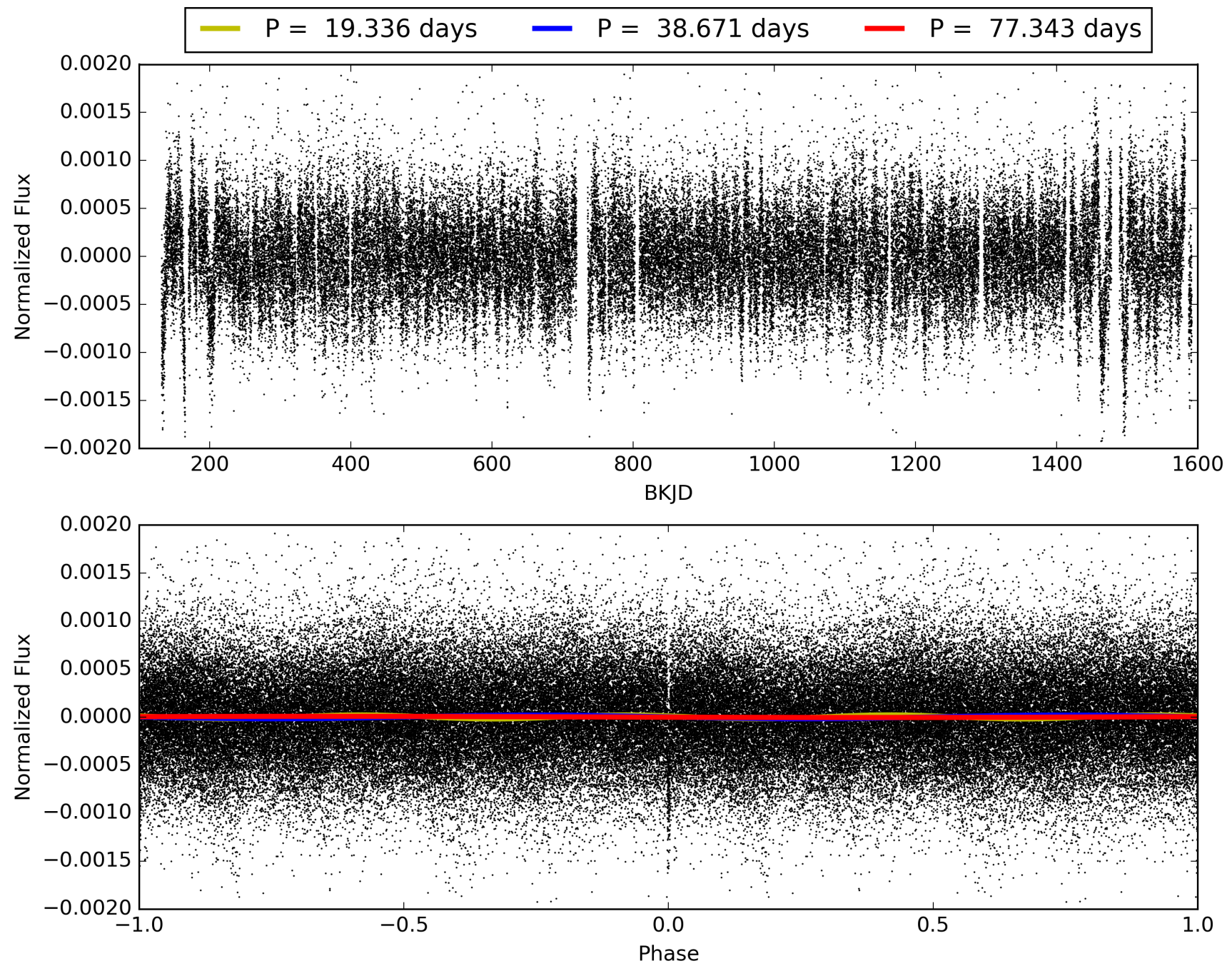
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 13:22:24 Z

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

TCE 008260902-01, PDC Light Curves

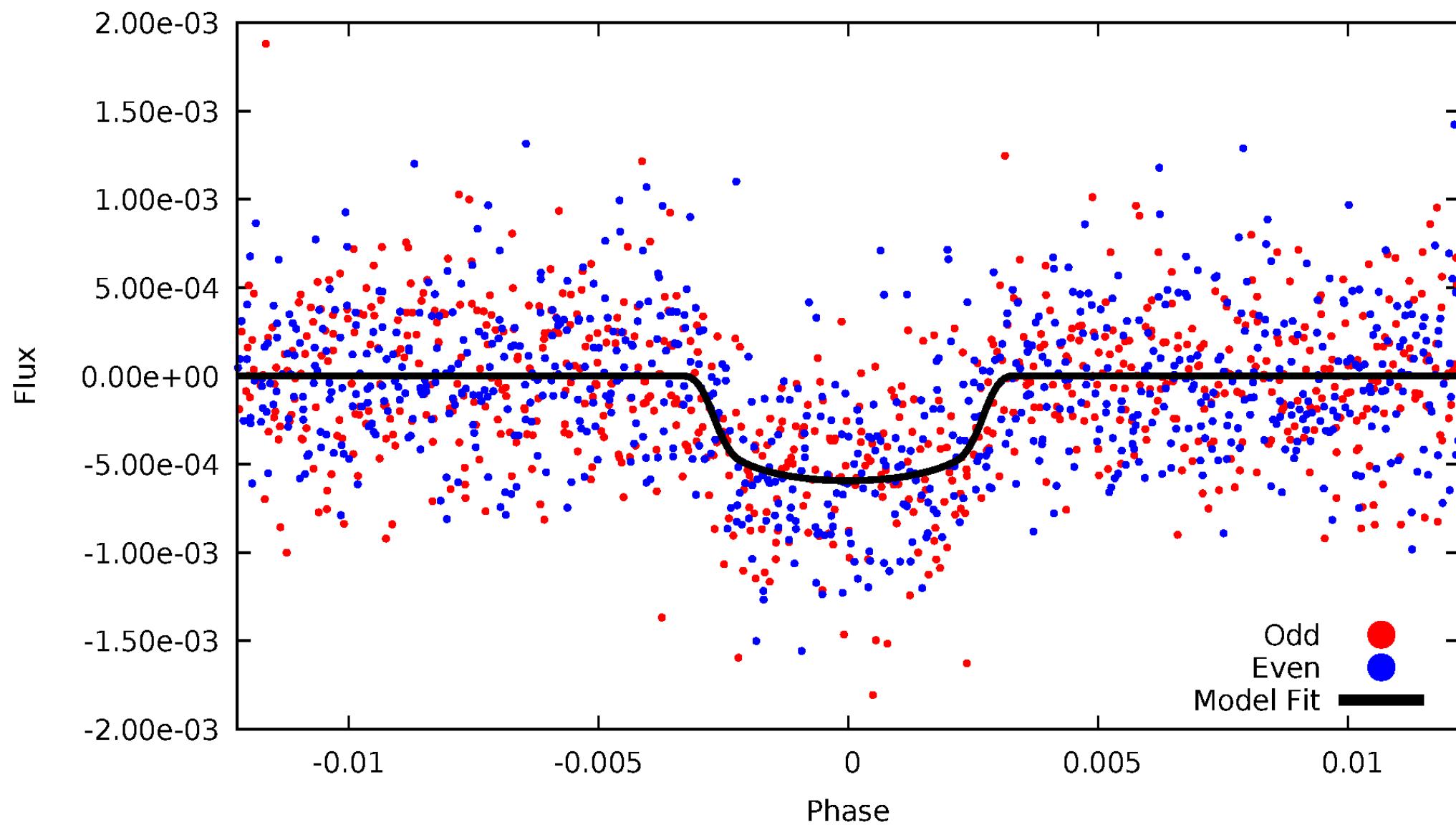


TCE 008260902-01



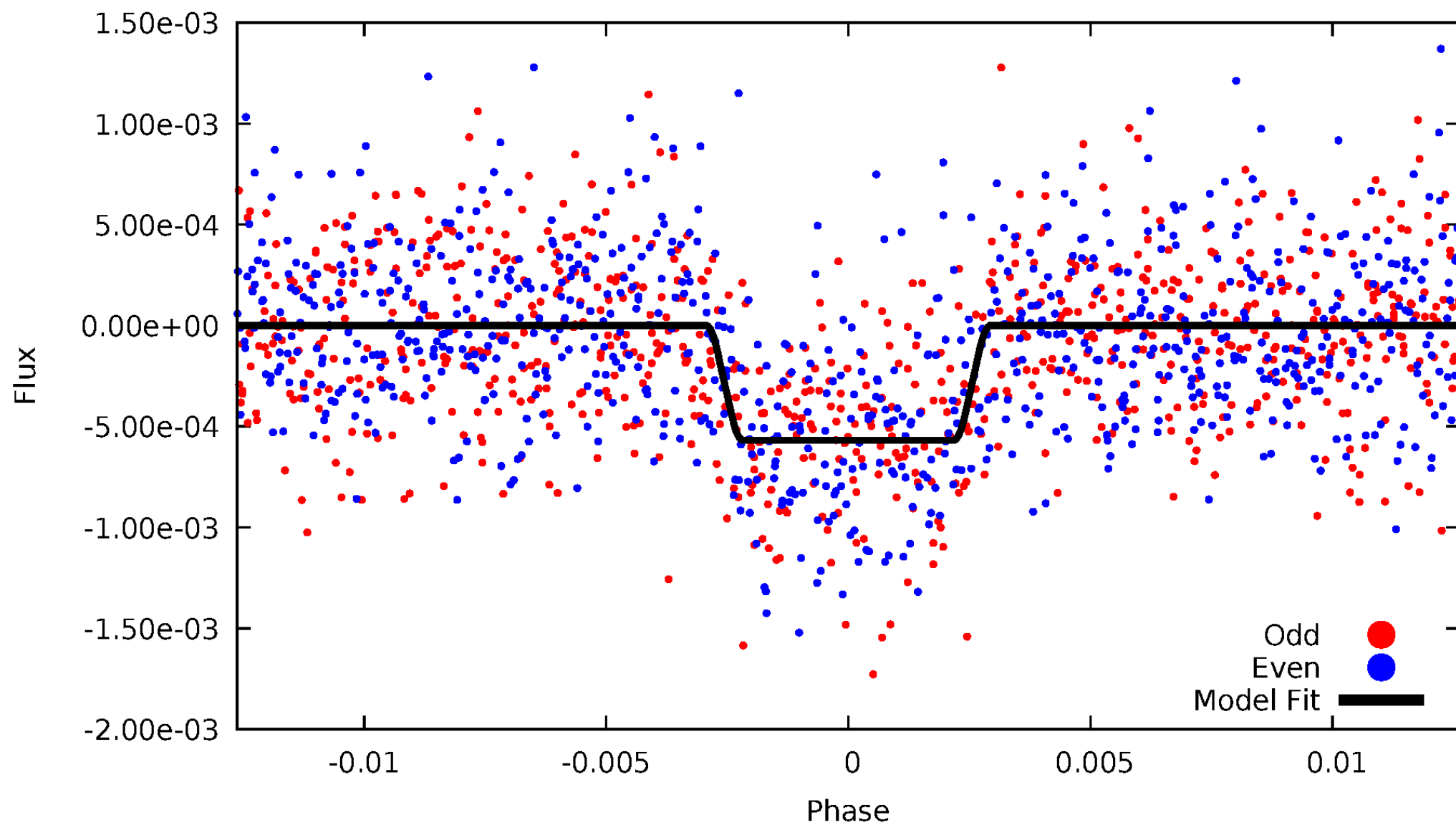
DV Odd/Even

TCE 008260902-01



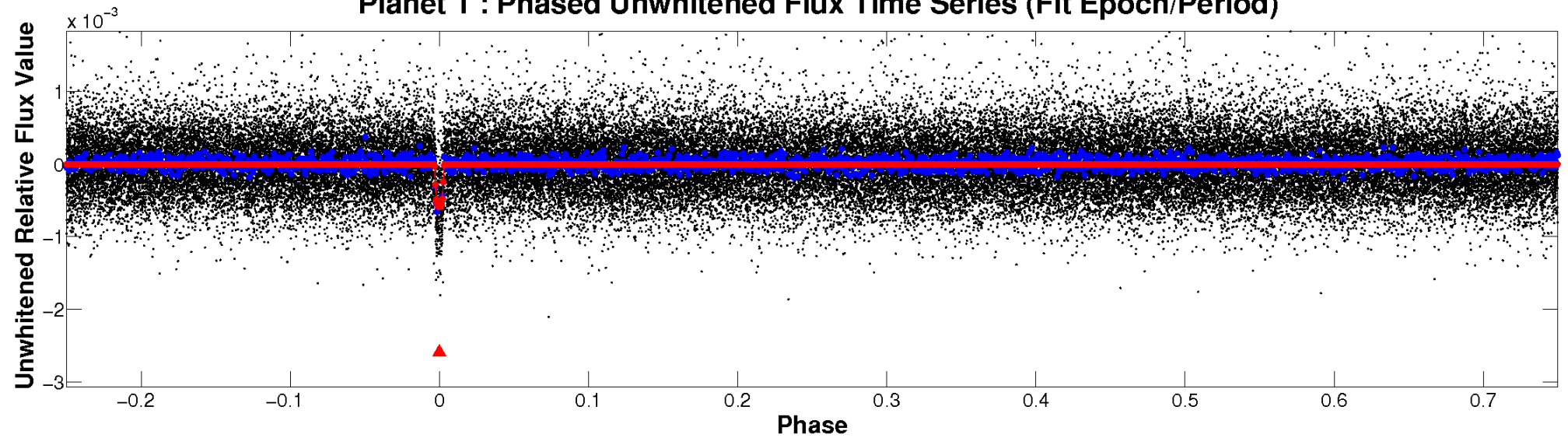
ALT Odd/Even

TCE 008260902-01

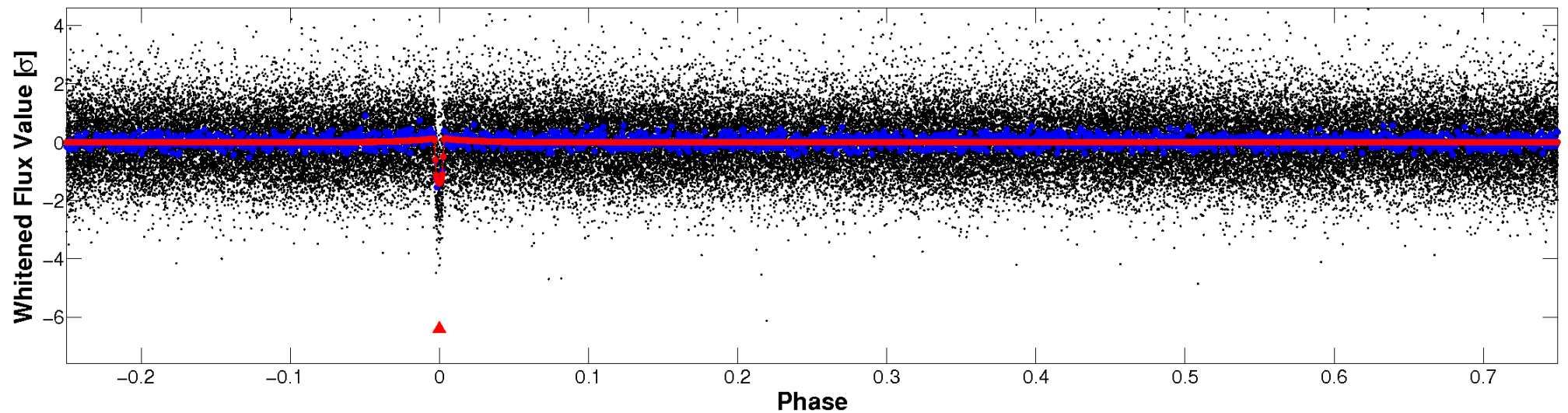


Non-Whitened Vs. Whitened Light Curve

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

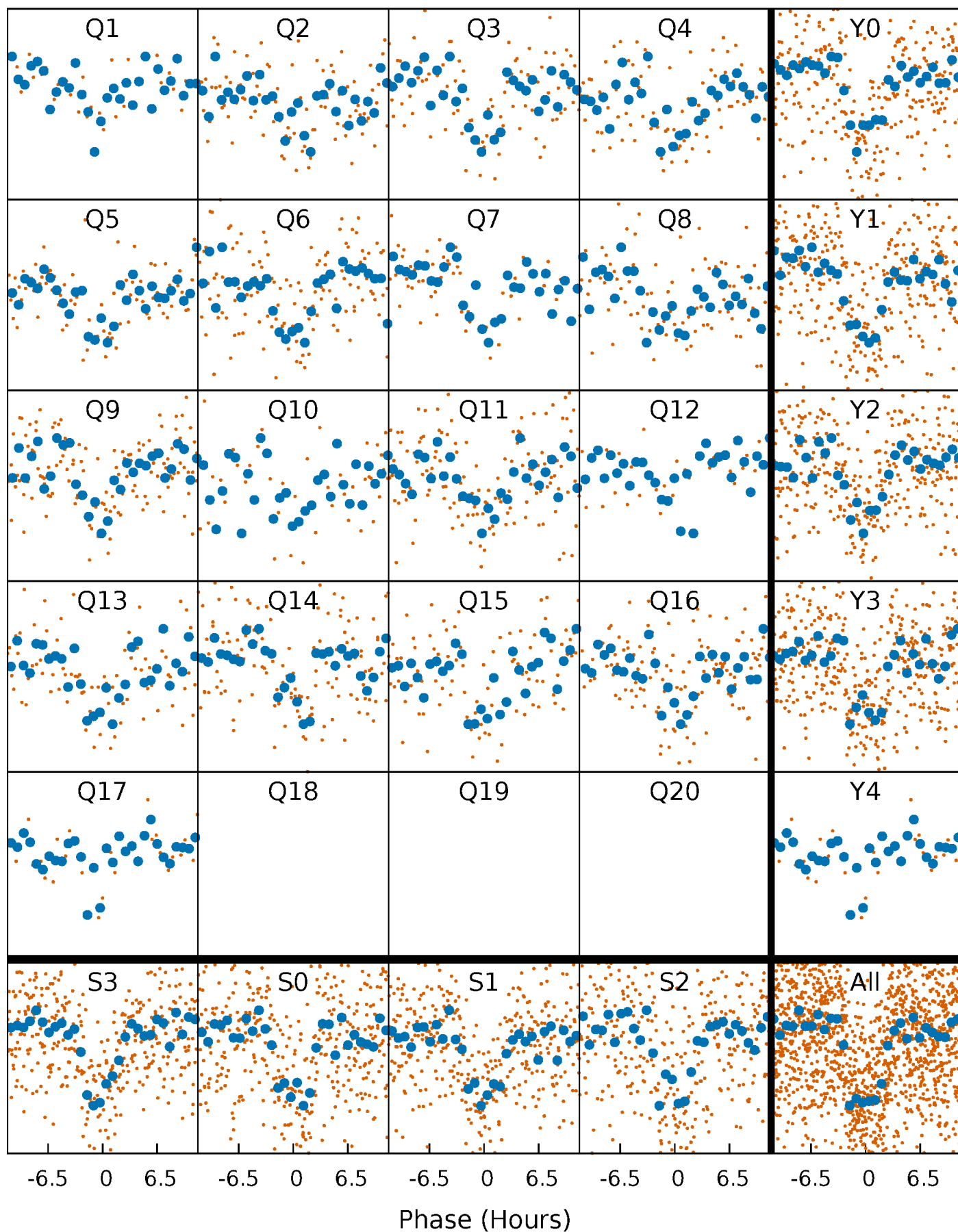


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



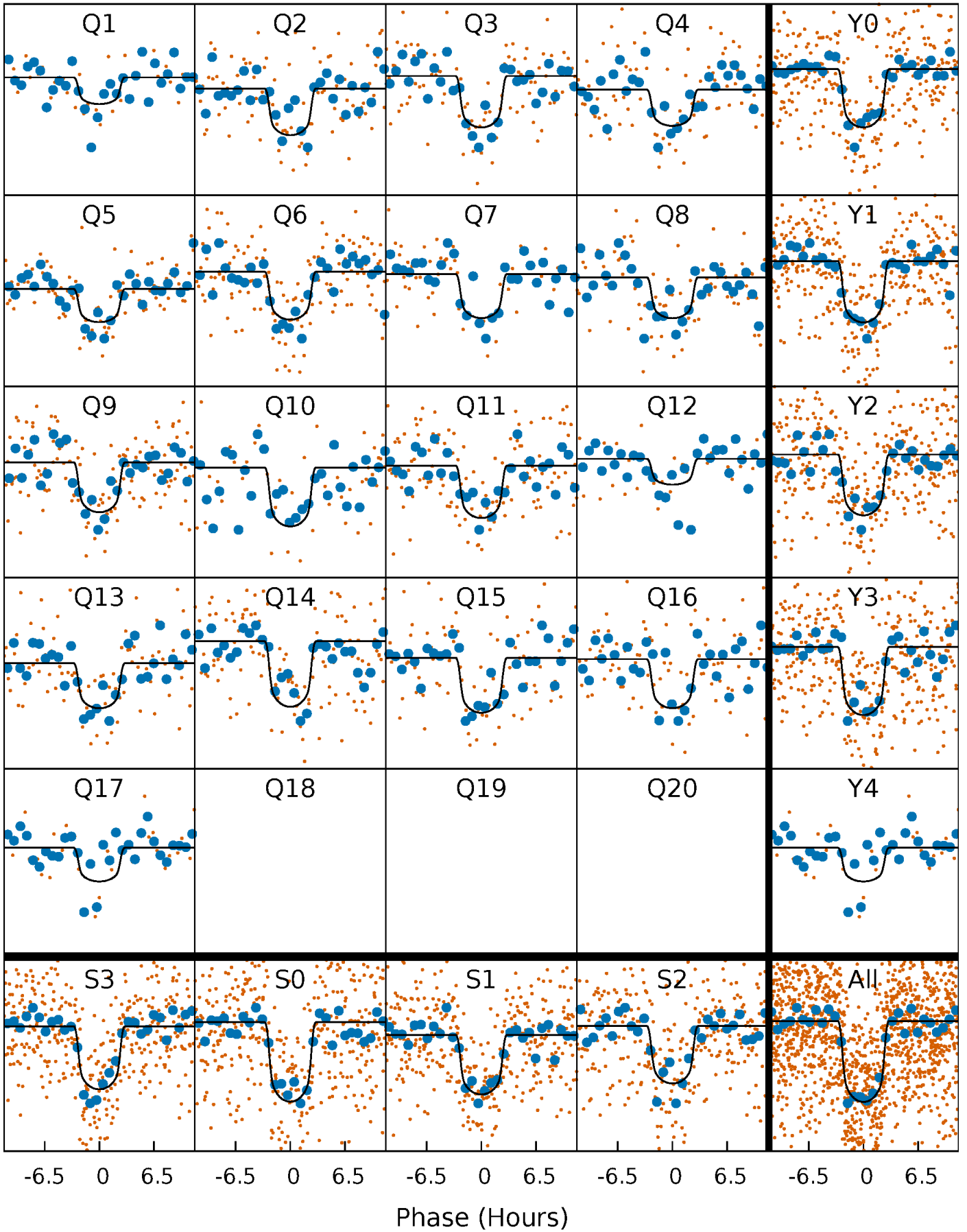
PDC Quarter-Phased Transit Curves

TCE 008260902-01 P= 38.671463 Days $T_0=157.622332$ (BKJD)



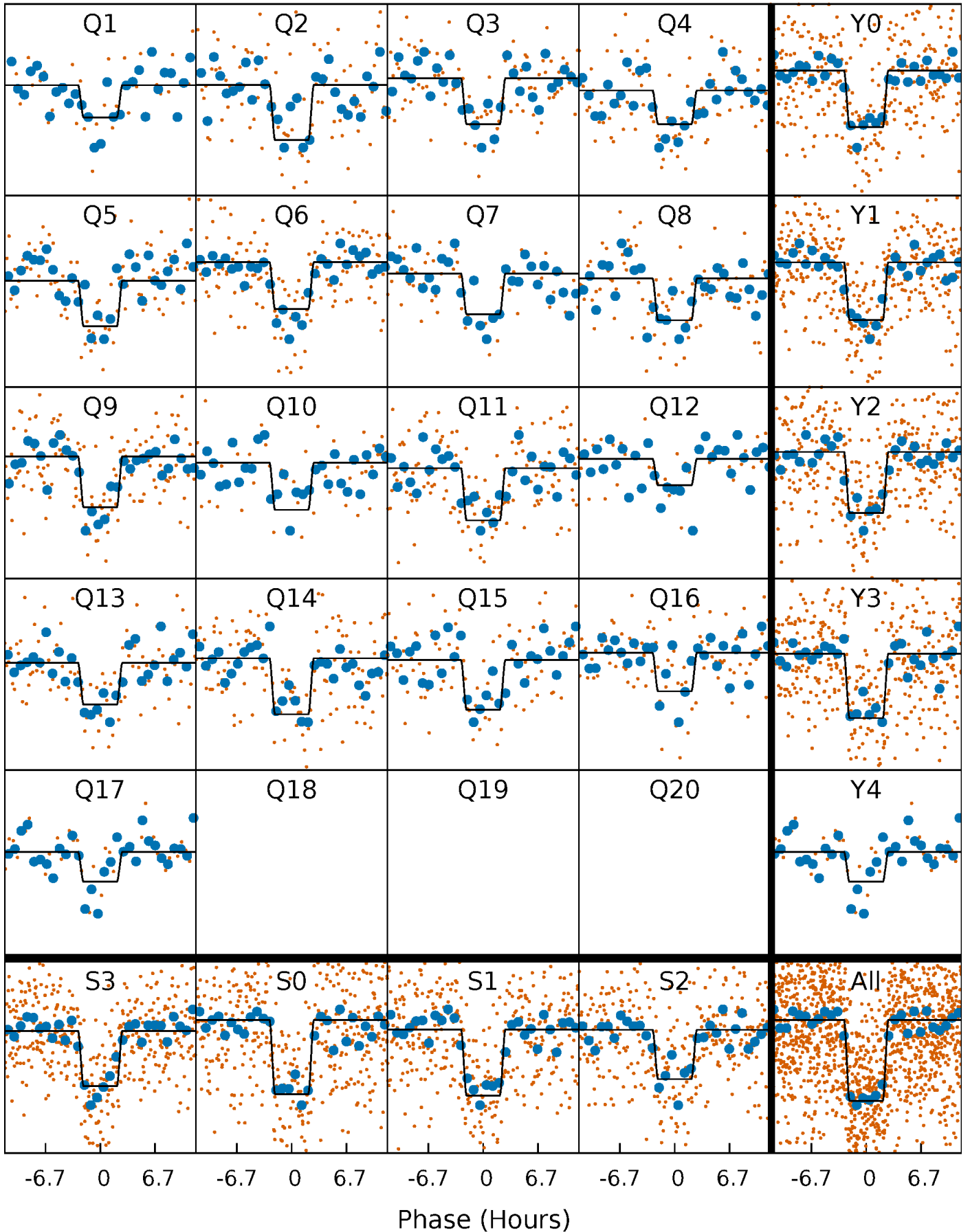
DV Quarter-Phased Transit Curves

TCE 008260902-01 P= 38.671463 Days $T_0=157.622332$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

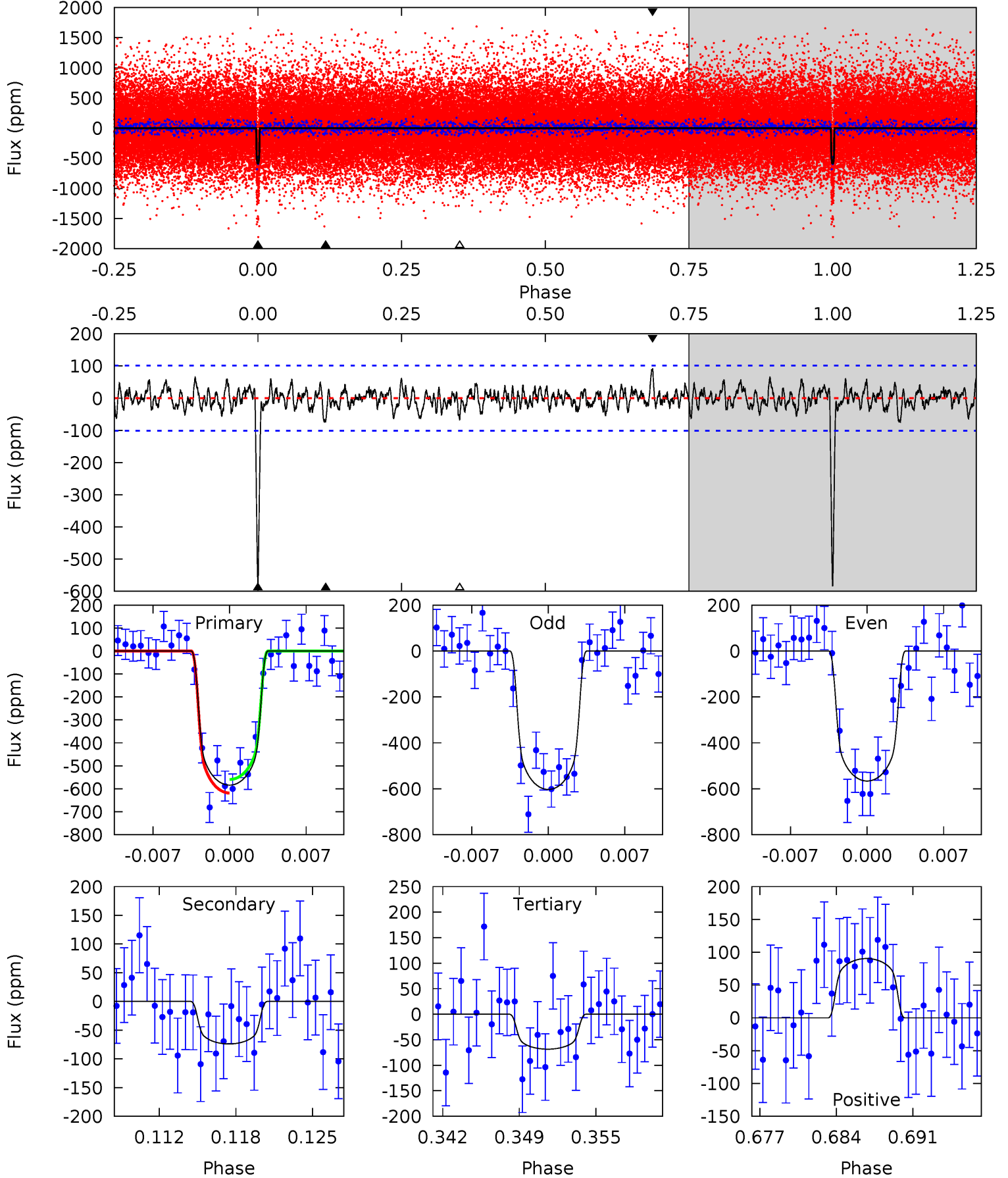
TCE 008260902-01 P= 38.671214 Days $T_0=157.625349$ (BKJD)



DV Model-Shift Uniqueness Test

008260902-01, P = 38.671463 Days, E = 118.950869 Days

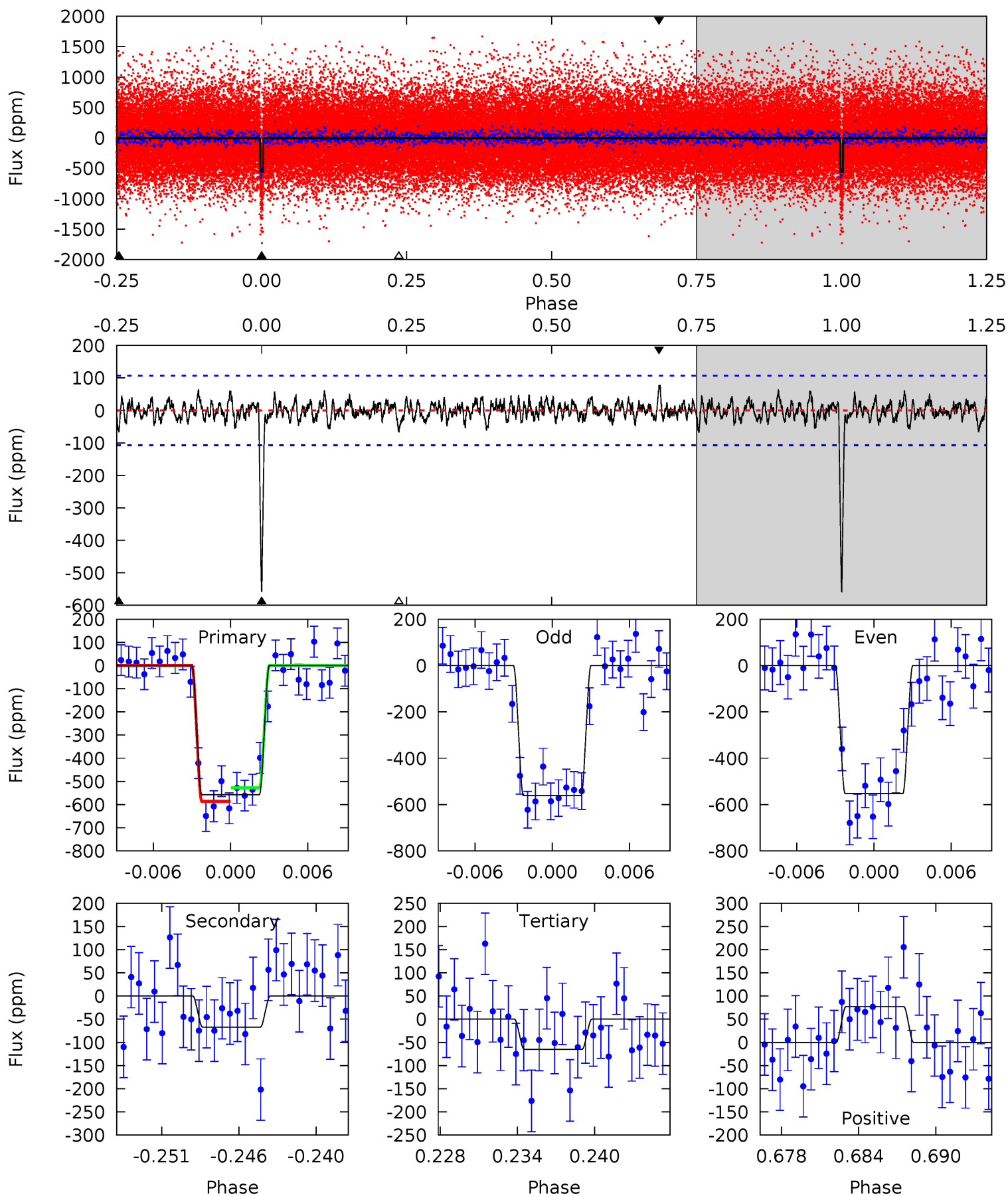
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
29.5	3.73	3.45	4.56	5.11	2.72	1.19	26.0	24.9	0.28	-0.83	0.93	0.99	0.13	1.48



Alt Model-Shift Uniqueness Test

008260902-01, $P = 38.671214$ Days, $E = 118.954135$ Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
26.7	3.22	3.13	3.70	5.13	2.76	1.02	23.6	23.0	0.09	-0.48	0.22	0.96	0.12	1.40



Stellar Parameters For KIC 008260902

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5432^{+159}_{-159}	$4.420^{+0.147}_{-0.273}$	$-0.160^{+0.300}_{-0.250}$	$0.913^{+0.306}_{-0.141}$	$0.801^{+0.124}_{-0.057}$	$1.481^{+0.958}_{-0.859}$
	+3%/-3%	+3%/-6%	+188%/-156%	+34%/-15%	+15%/-7%	+65%/-58%
Source	PHO1	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 008260902-01 / KOI 2144.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-74 ± 20	$2.72^{+0.55}_{-0.39}$	712^{+64}_{-45}	3563^{+200}_{-211}	237^{+116}_{-87}
Alt.	-67 ± 21	$2.46^{+0.56}_{-0.40}$	710^{+66}_{-47}	3589^{+241}_{-247}	254^{+156}_{-108}

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 $A_{obs} \gg 1.0$

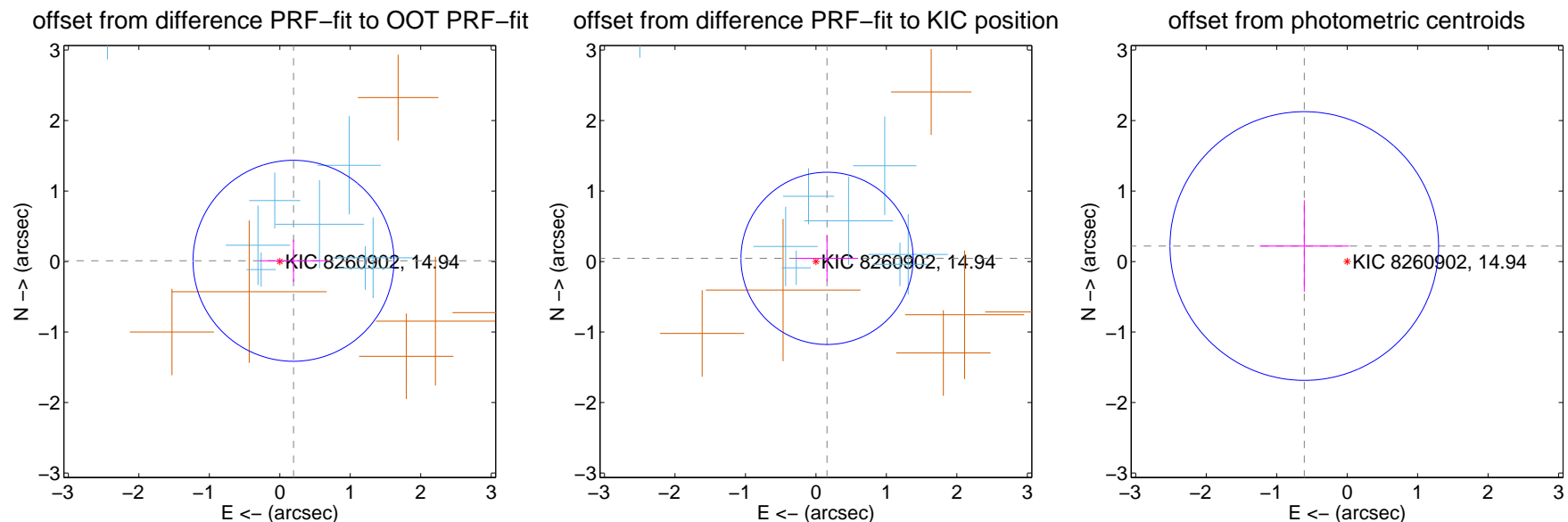
DV Centroid Data

Supplemental centroid analysis for 008260902-01. Kepler magnitude: 14.94. Transit SNR 22.18

There are 8 quarters with good PRF difference image offsets

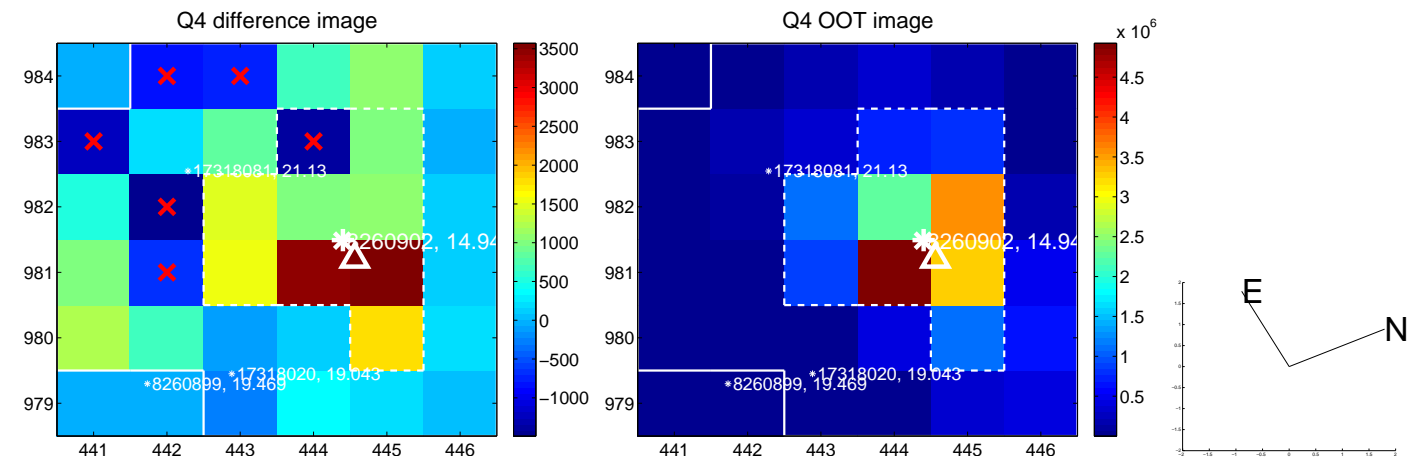
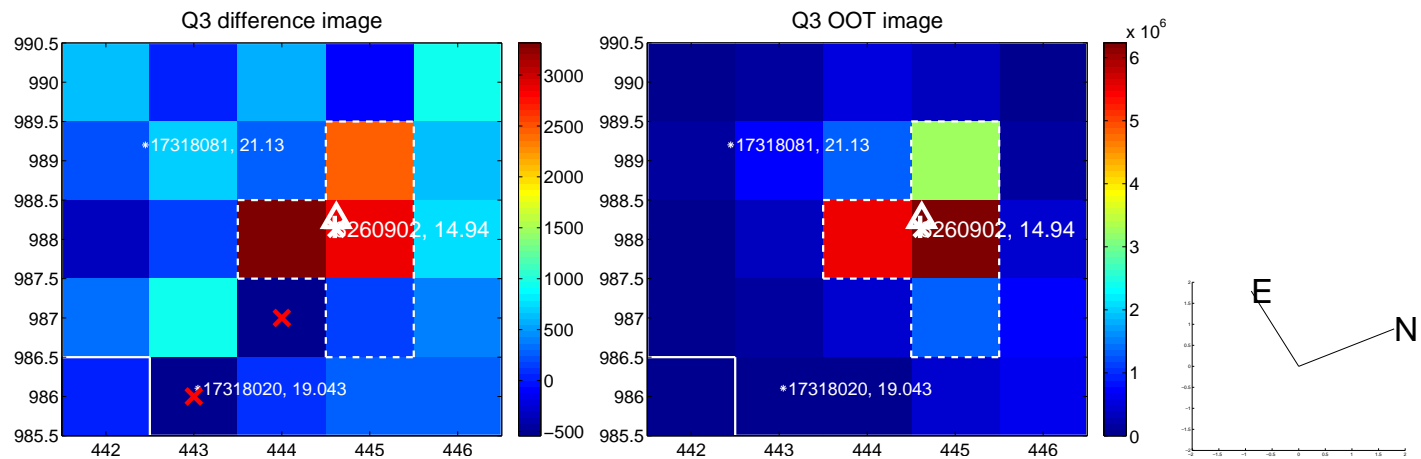
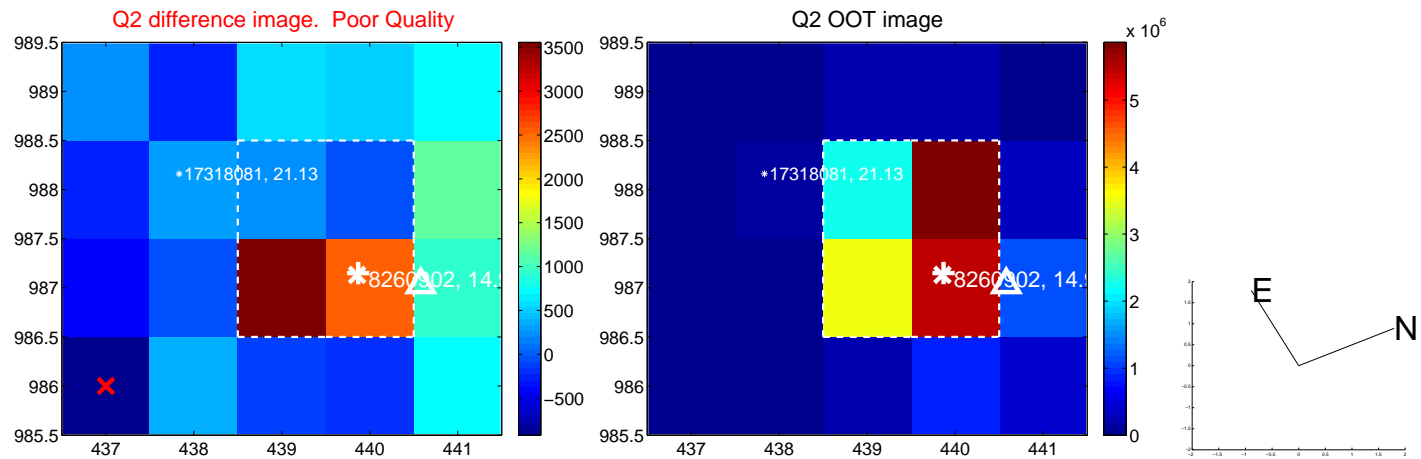
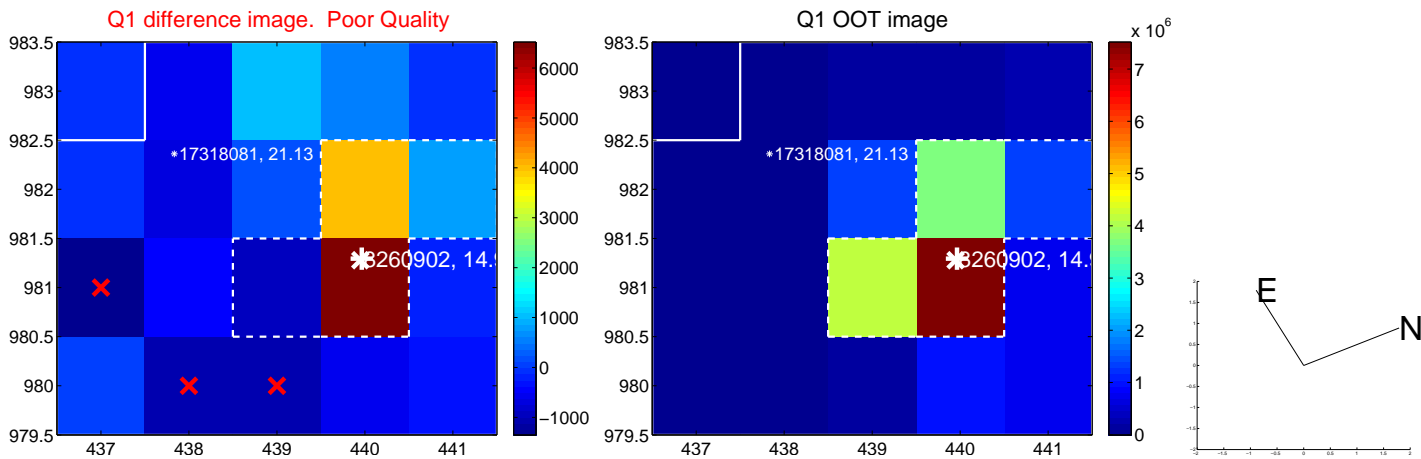
The direct PRF centroid is offset from the target star catalog position by about 0.05 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.195 ± 0.475	0.41	-0.194 ± 0.479	0.010 ± 0.300
PRF-fit source offset from KIC position	0.164 ± 0.407	0.40	-0.158 ± 0.440	0.045 ± 0.325
photometric centroid source offset	0.65 ± 0.64	1.02	0.61 ± 0.63	0.22 ± 0.65

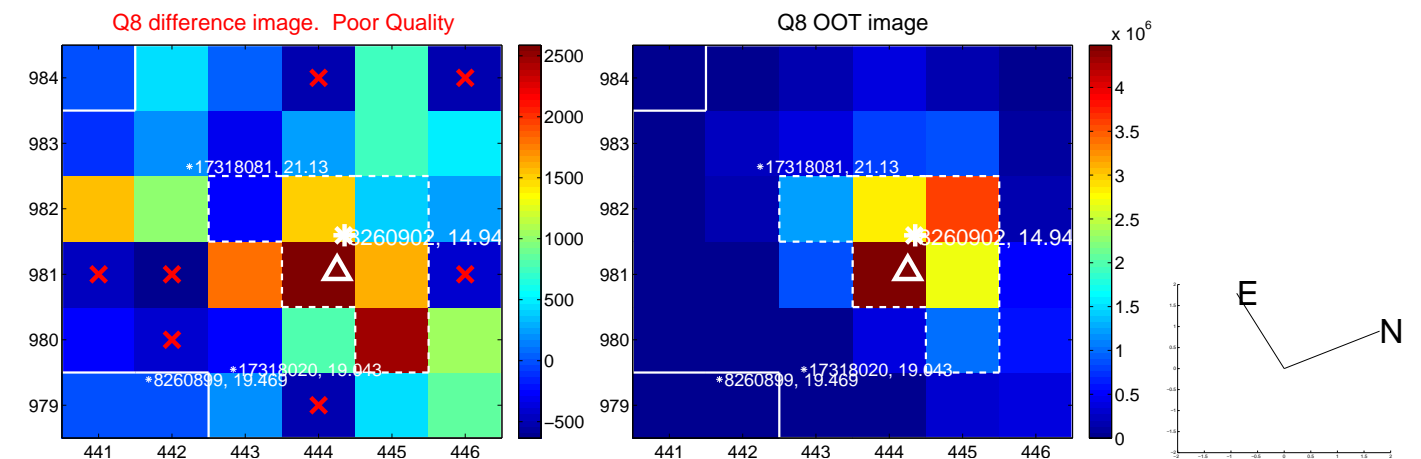
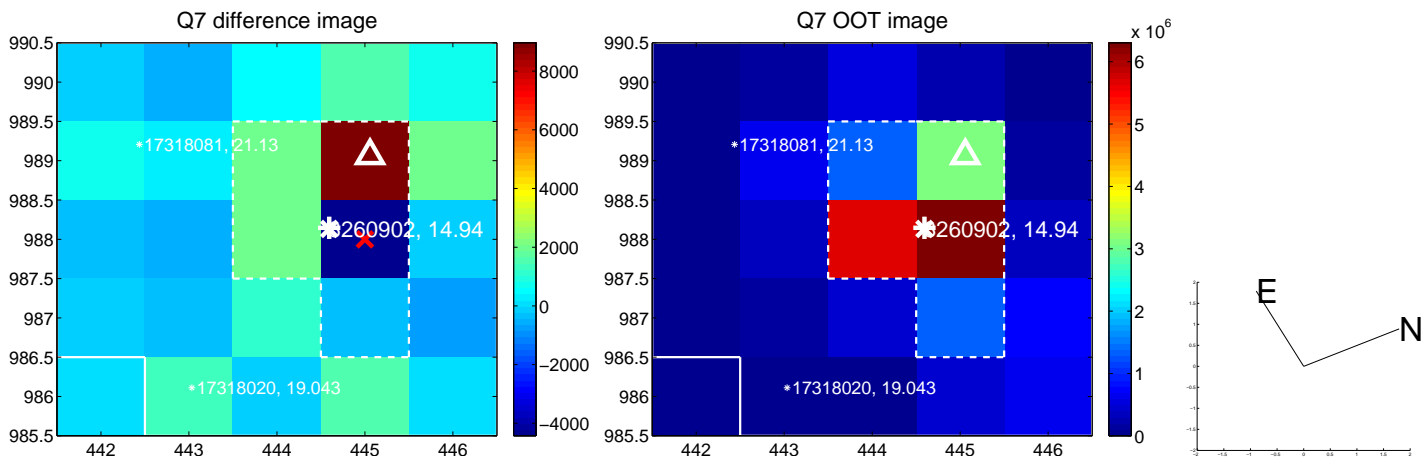
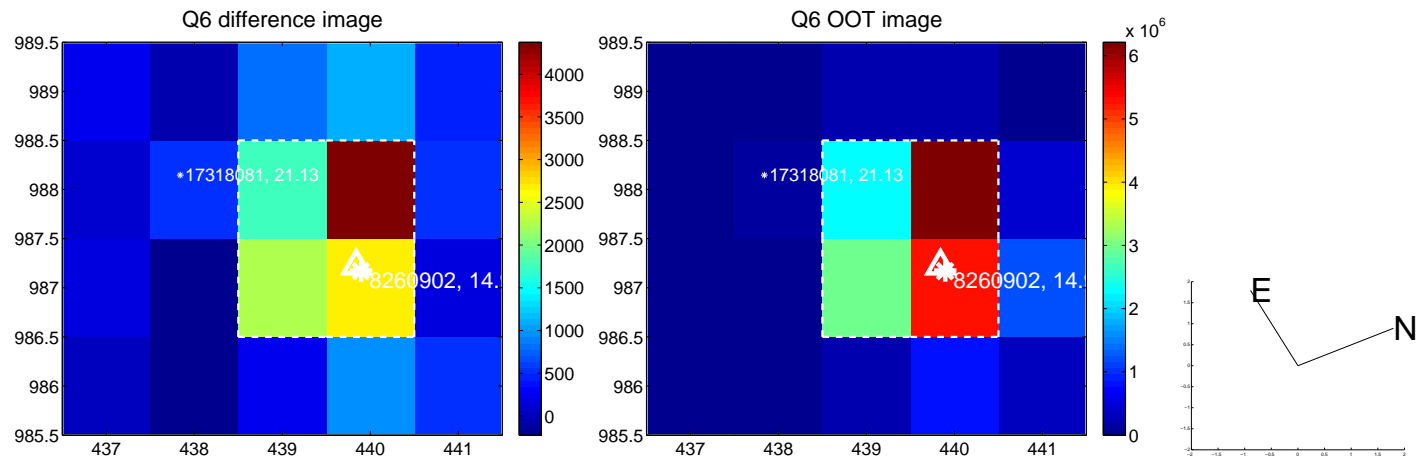
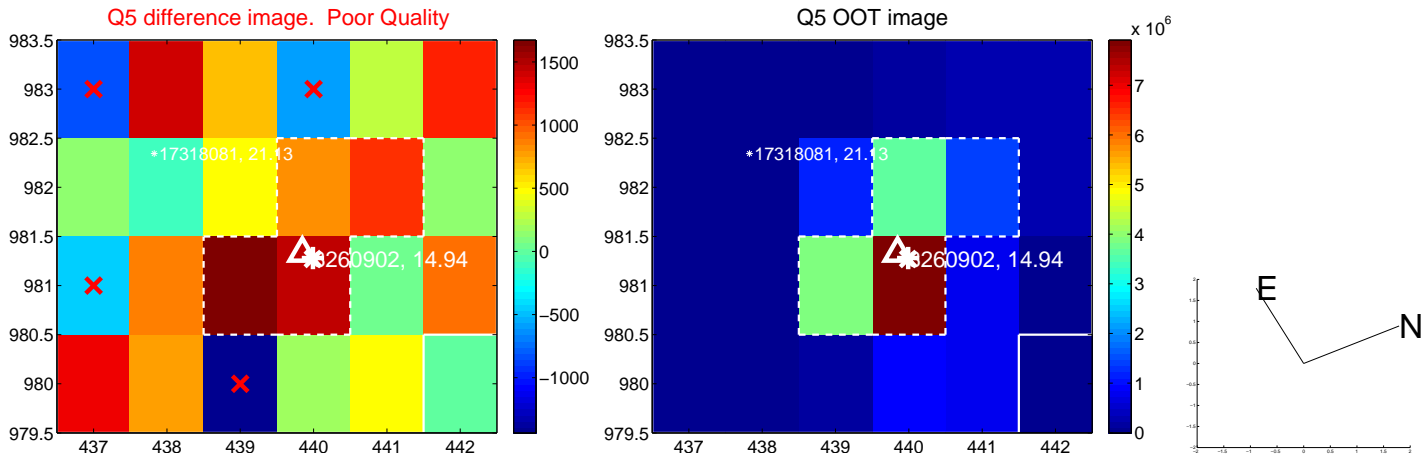


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

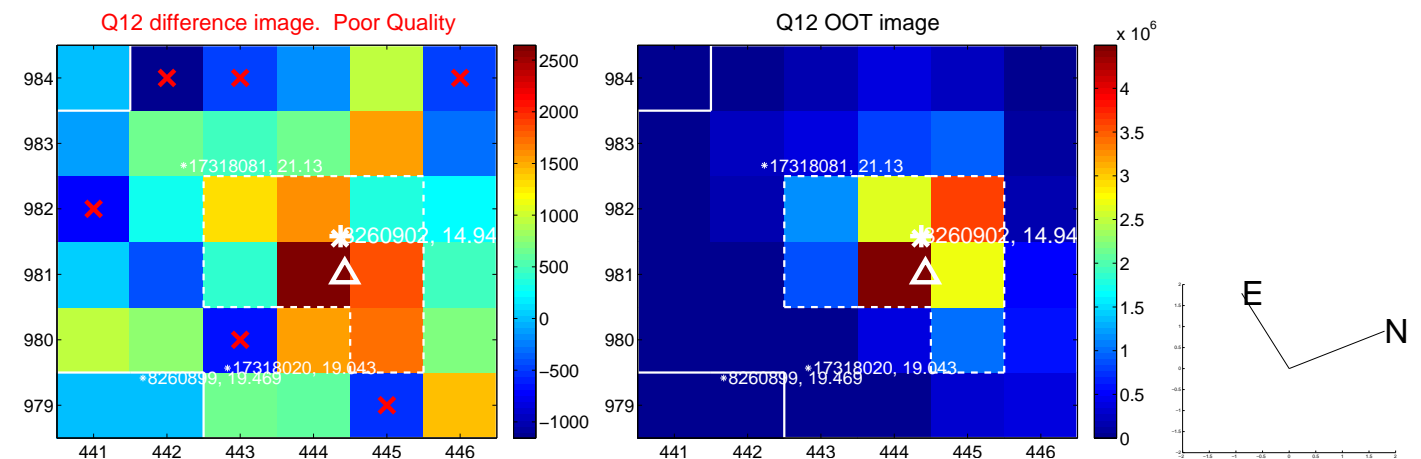
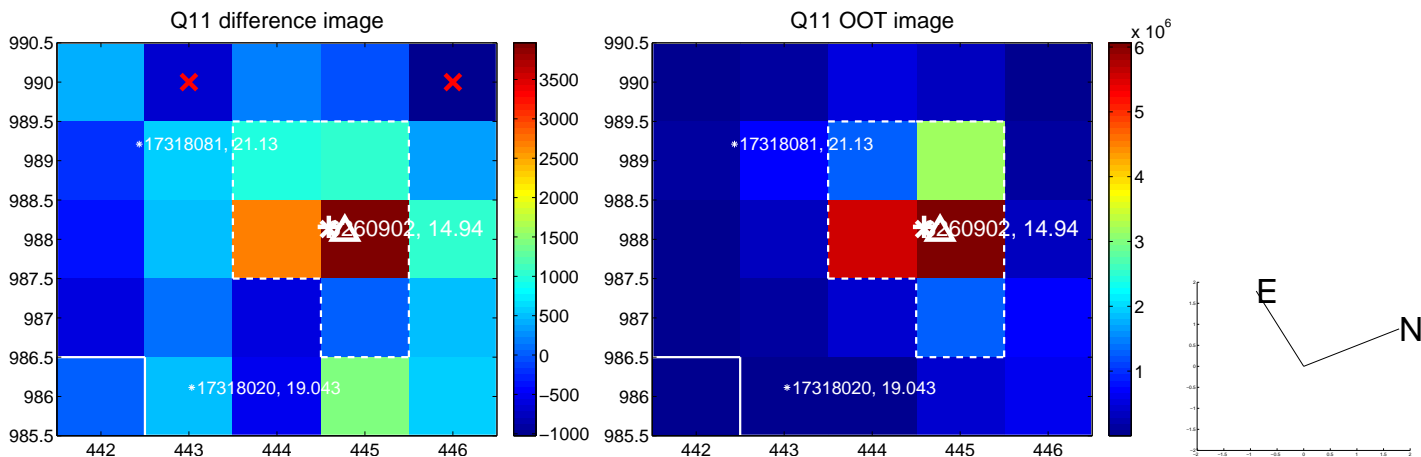
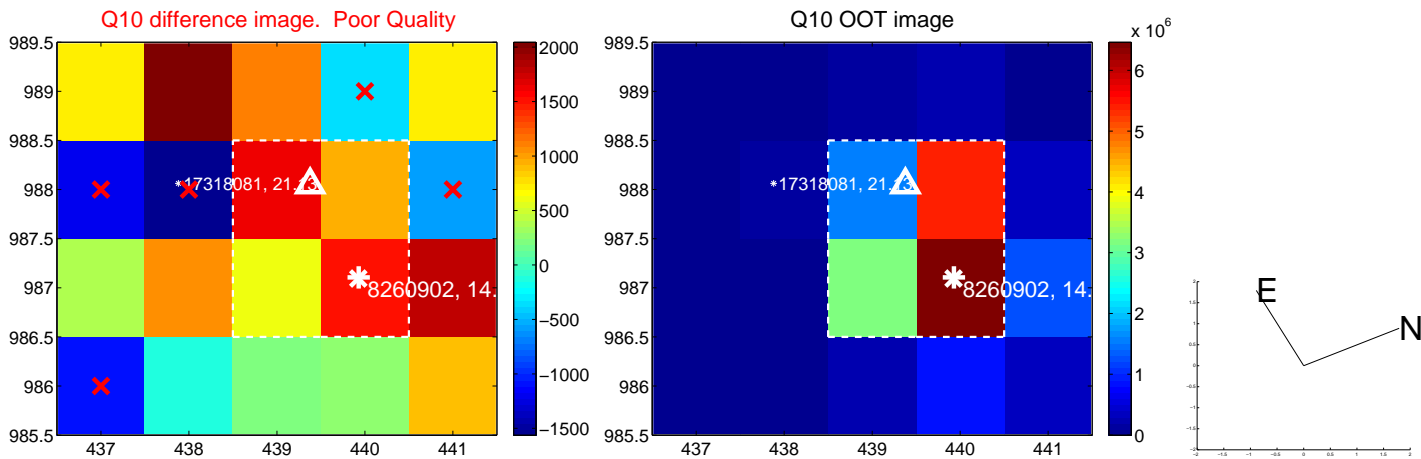
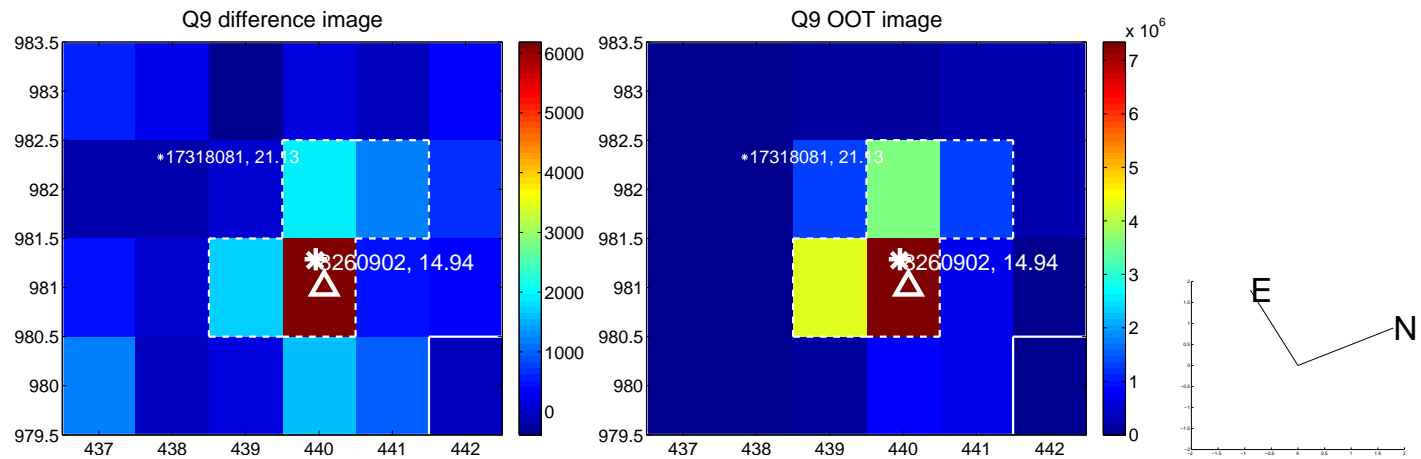
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



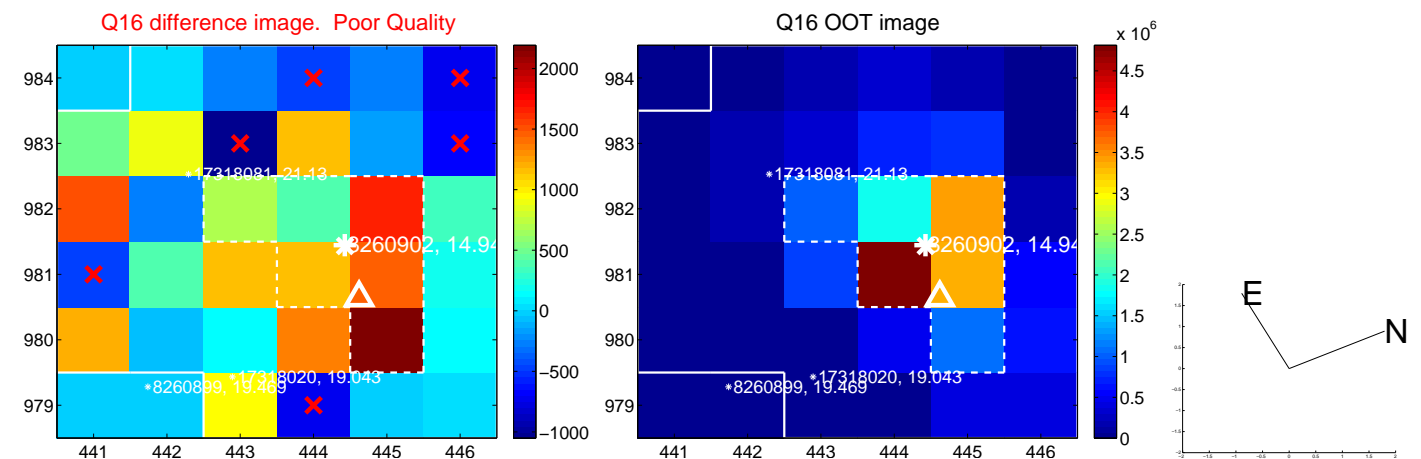
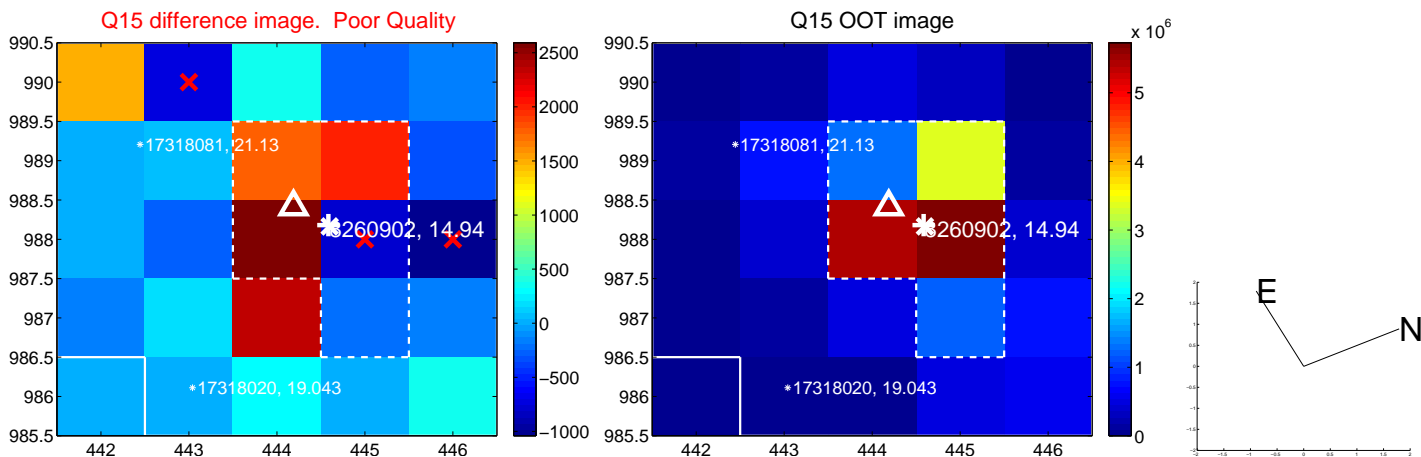
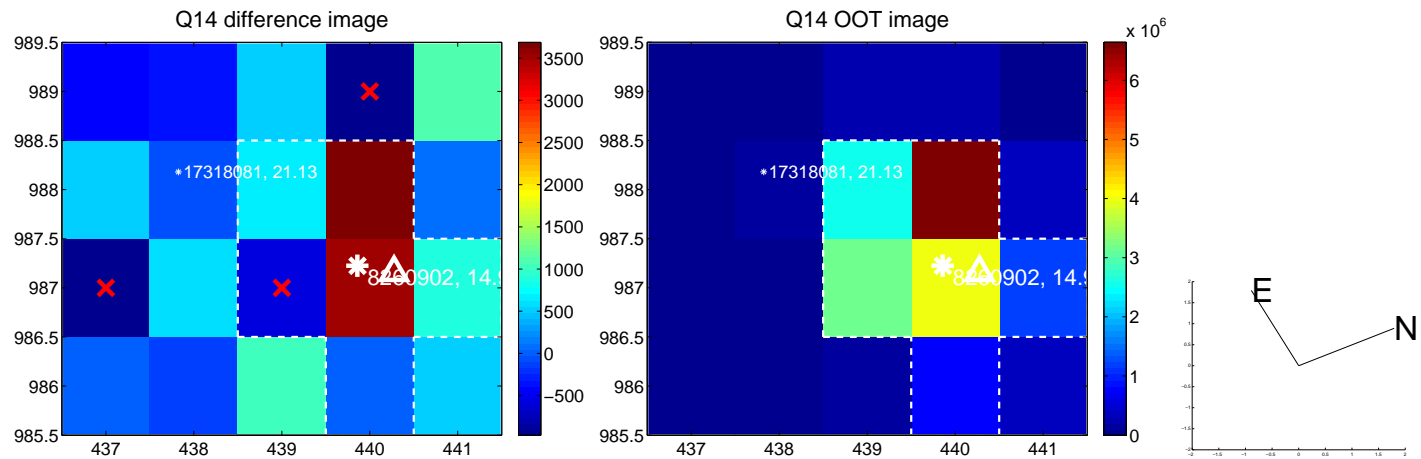
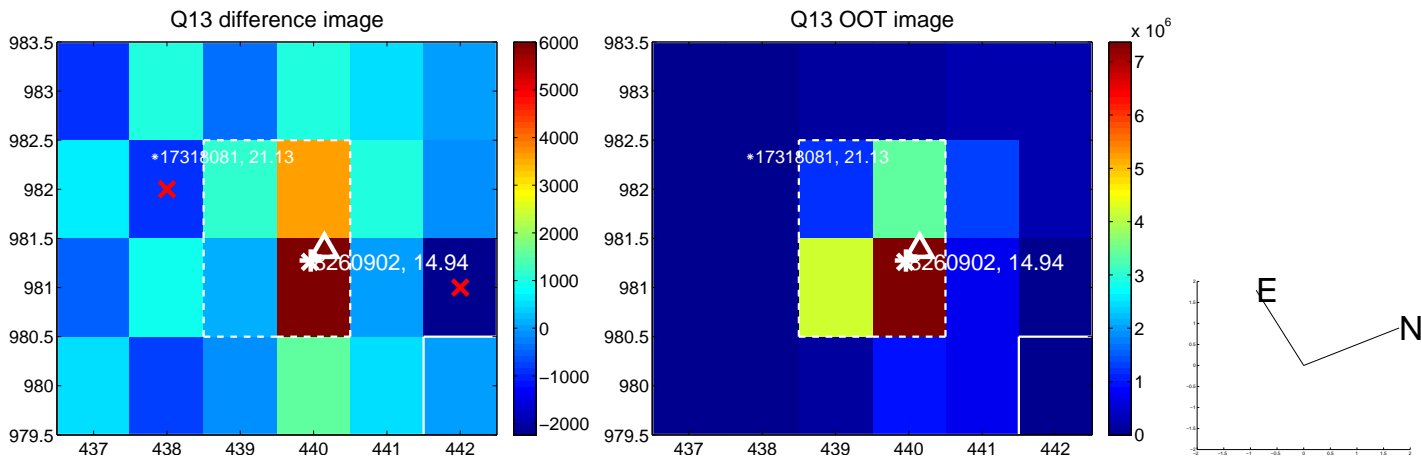
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



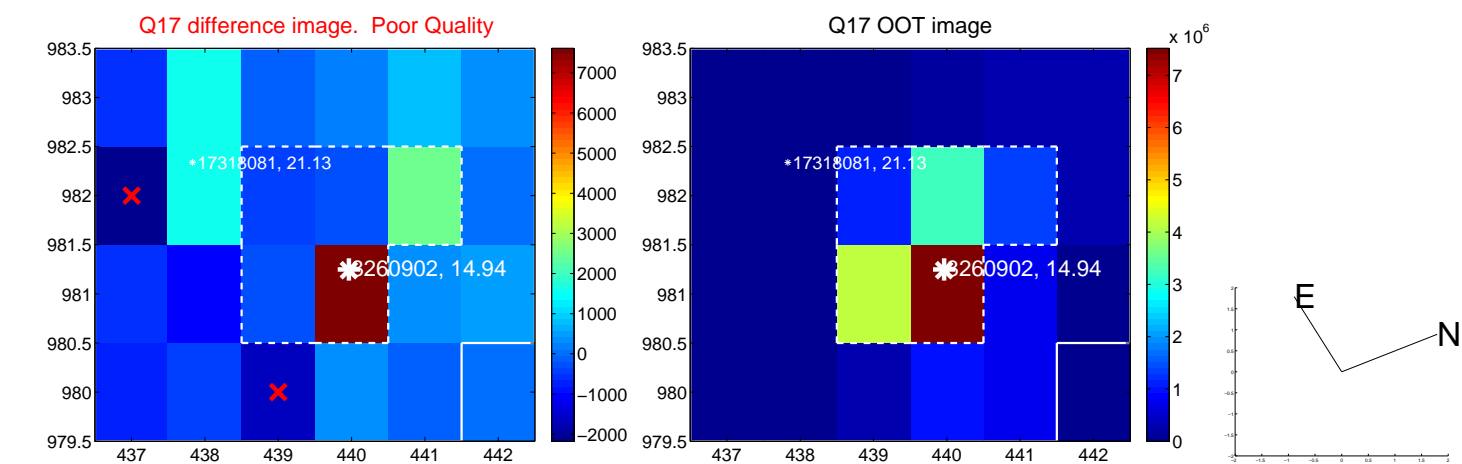
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



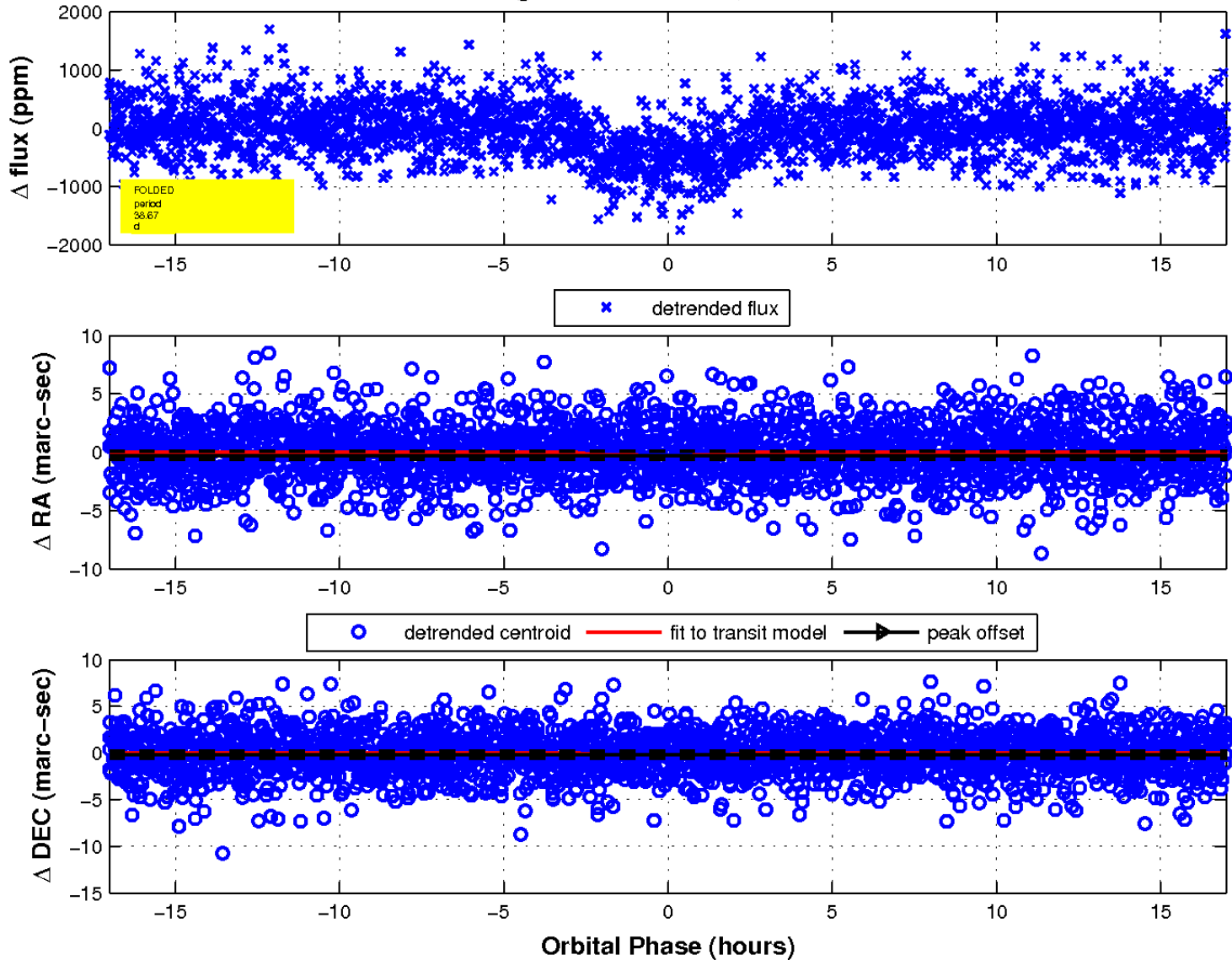
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

