

KIC 003644174

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})
003644174-01	OBS	6347.01	1.806630	132.235648	185.8	1.251	9.1	9.9	0.70	4606	1.18	297.86

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003644174-01	OBS	FP	0.00	0	0	1	0	CENT_UNRESOLVED_OFFSET

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.

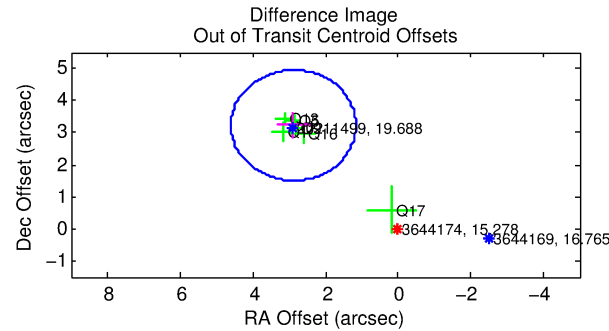
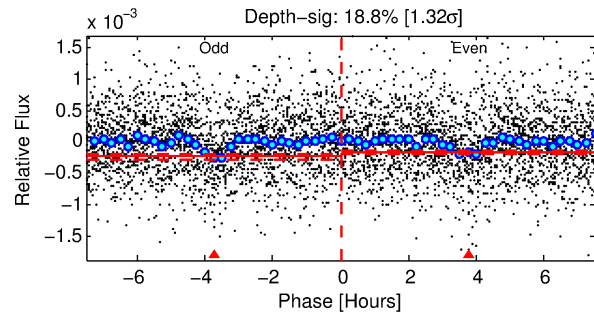
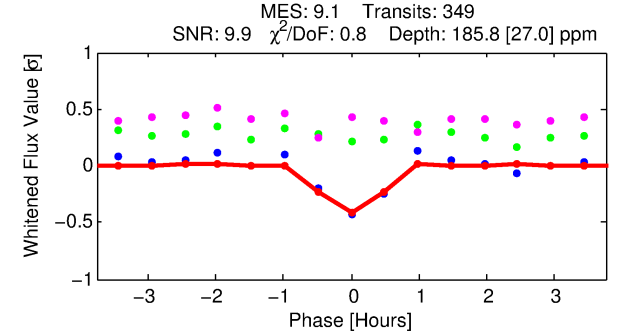
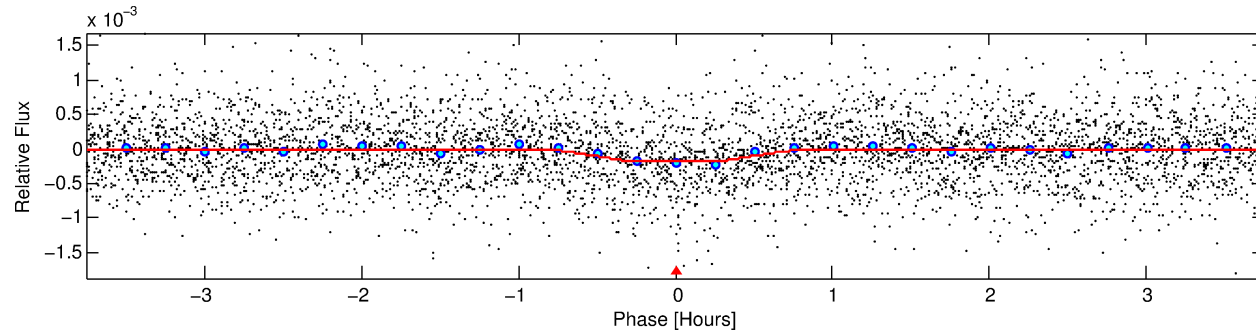
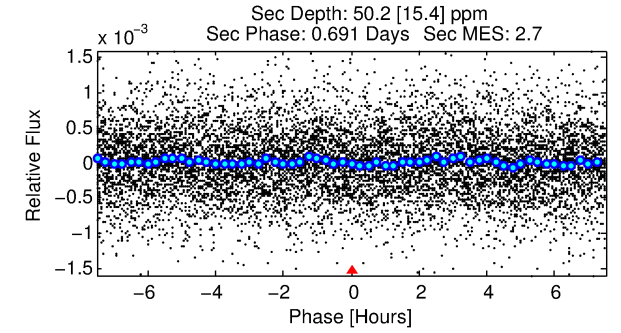
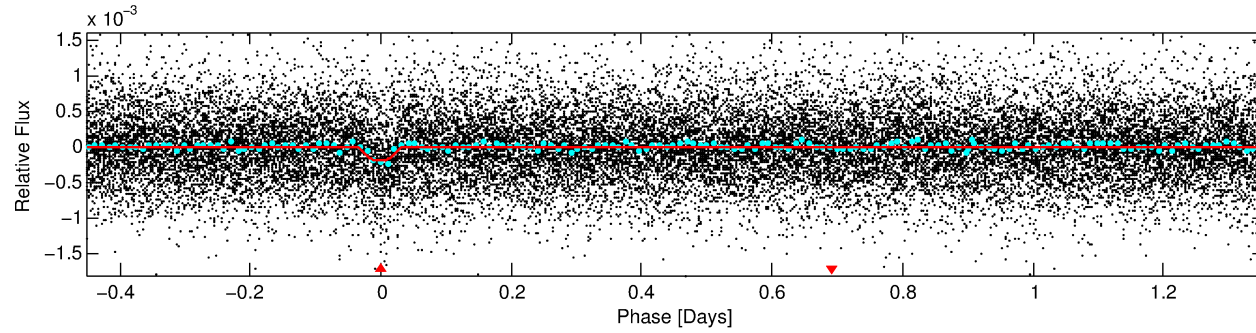
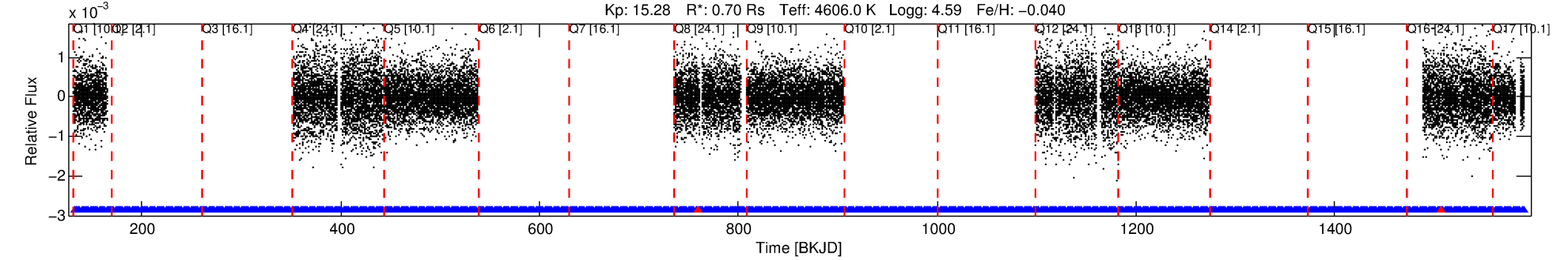
Ephemeris Match Information For 003644174-01

No Significant Match Found

DV One-Page Summary

KIC: 3644174 Candidate: 1 of 1 Period: 1.807 d

KOI: K06347.01 Corr: 0.951



DV Fit Results:

Period = 1.80663 [0.00001] d
Epoch = 132.2356 [0.0021] BKJD
Rp/R* = 0.0155 [0.0167]
a/R* = 5.25 [20.41]
b = 0.90 [0.88]
Seff = 297.86 [46.15]
Teff = 1059 [41] K
Rp = 1.18 [1.28] Re
a = 0.0257 [0.0018] AU
Ag = 13.06 [28.49] [0.42σ]
Teffp = 3113 [1699] K [1.21σ]

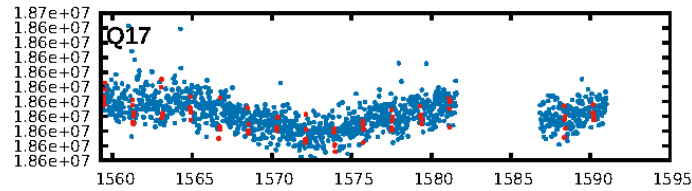
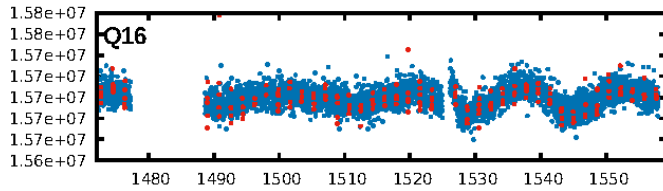
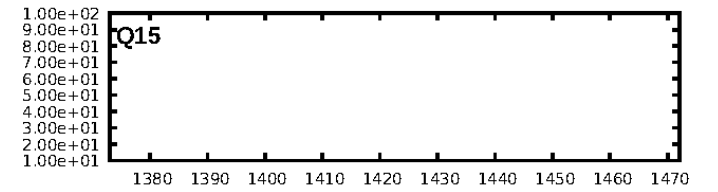
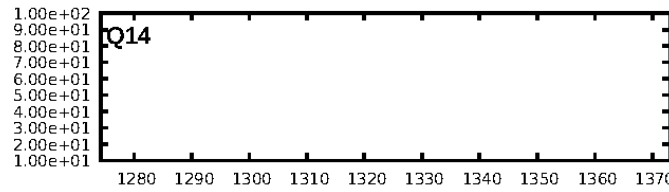
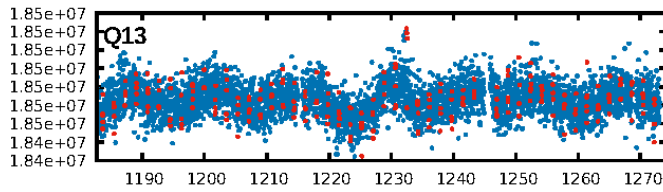
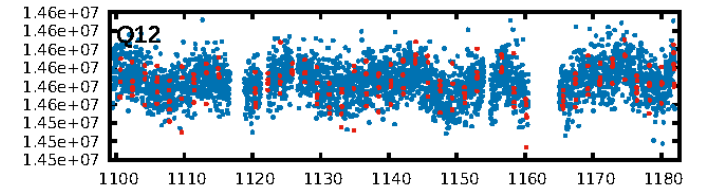
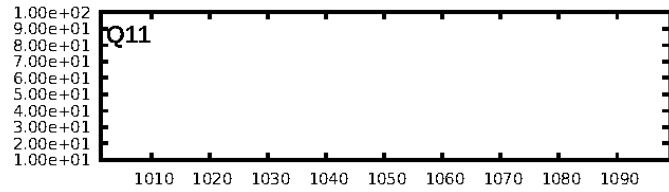
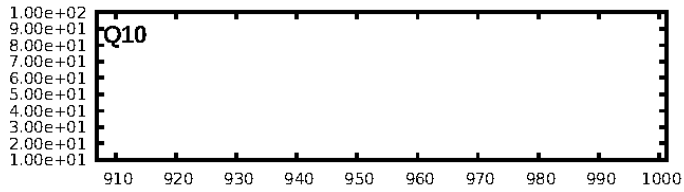
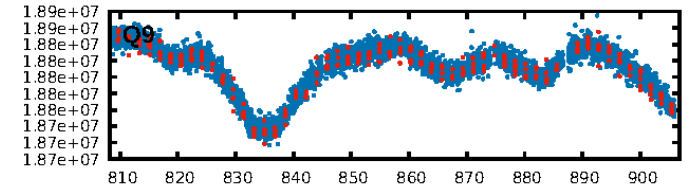
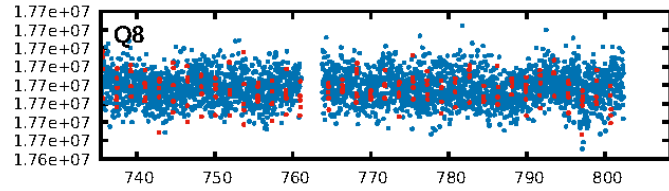
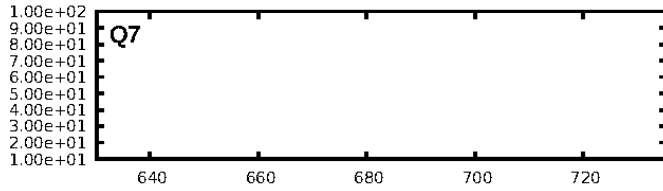
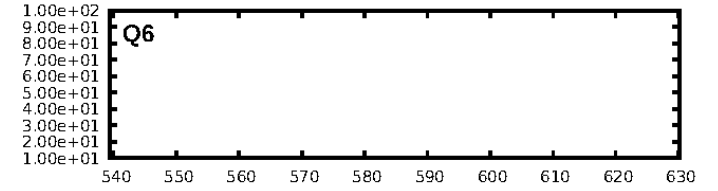
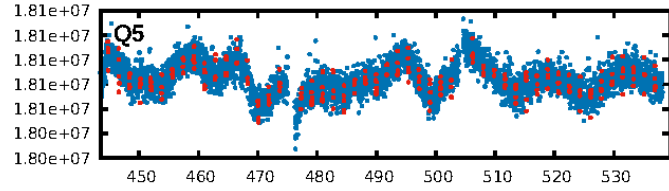
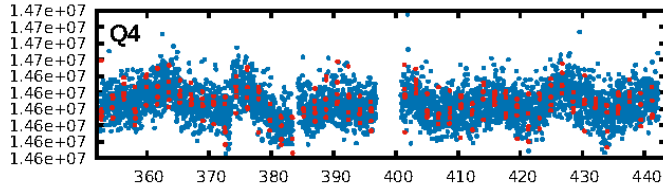
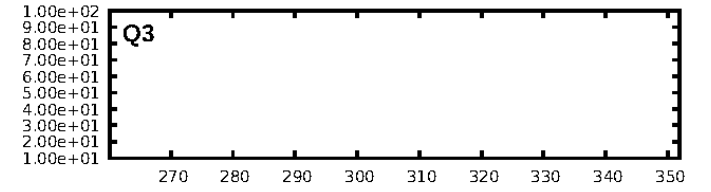
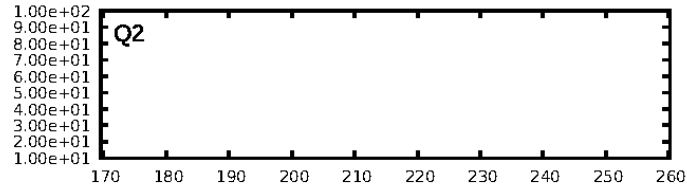
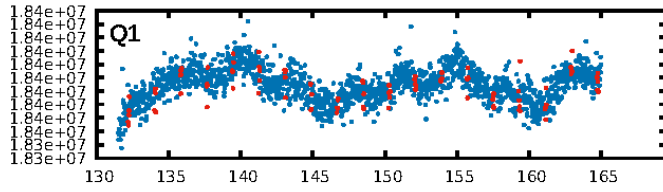
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 4.25e-20
RollingBand-fgt: 0.99 [313/315]
GhostDiagnostic-chr: 0.5276
Centroid-sig: 0.0%
Centroid-so: 7.867 arcsec [7.23σ]
OotOffset-rm: 4.324 arcsec [7.54σ]
KicOffset-rm: 4.109 arcsec [8.93σ]
OotOffset-st: 0/0/1/5 [6]
KicOffset-st: 0/0/1/5 [6]
DiffImageQuality-fgm: 0.83 [5/6]
DiffImageOverlap-fno: 1.00 [9/9]

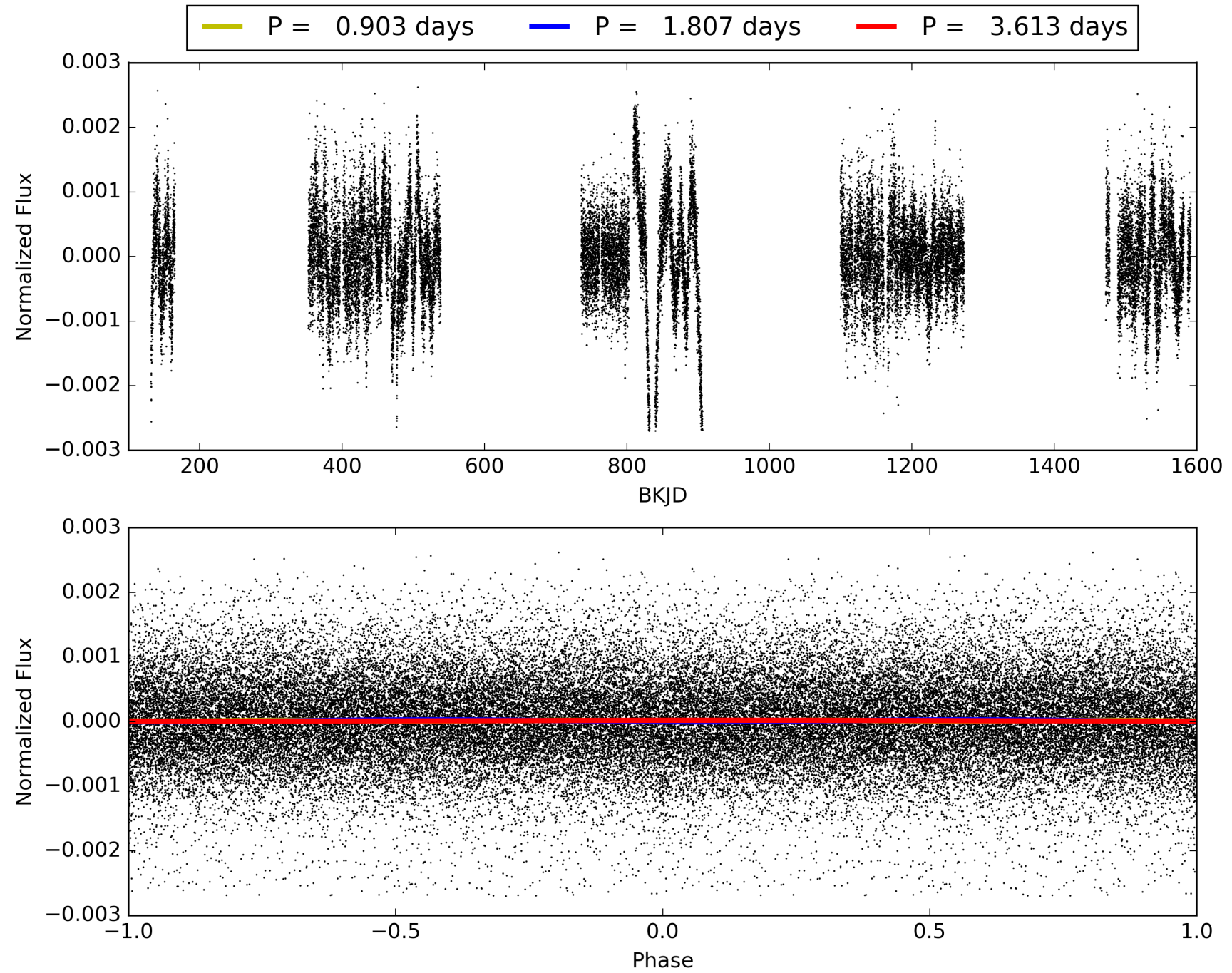
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 15:11:44 Z

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

TCE 003644174-01, PDC Light Curves

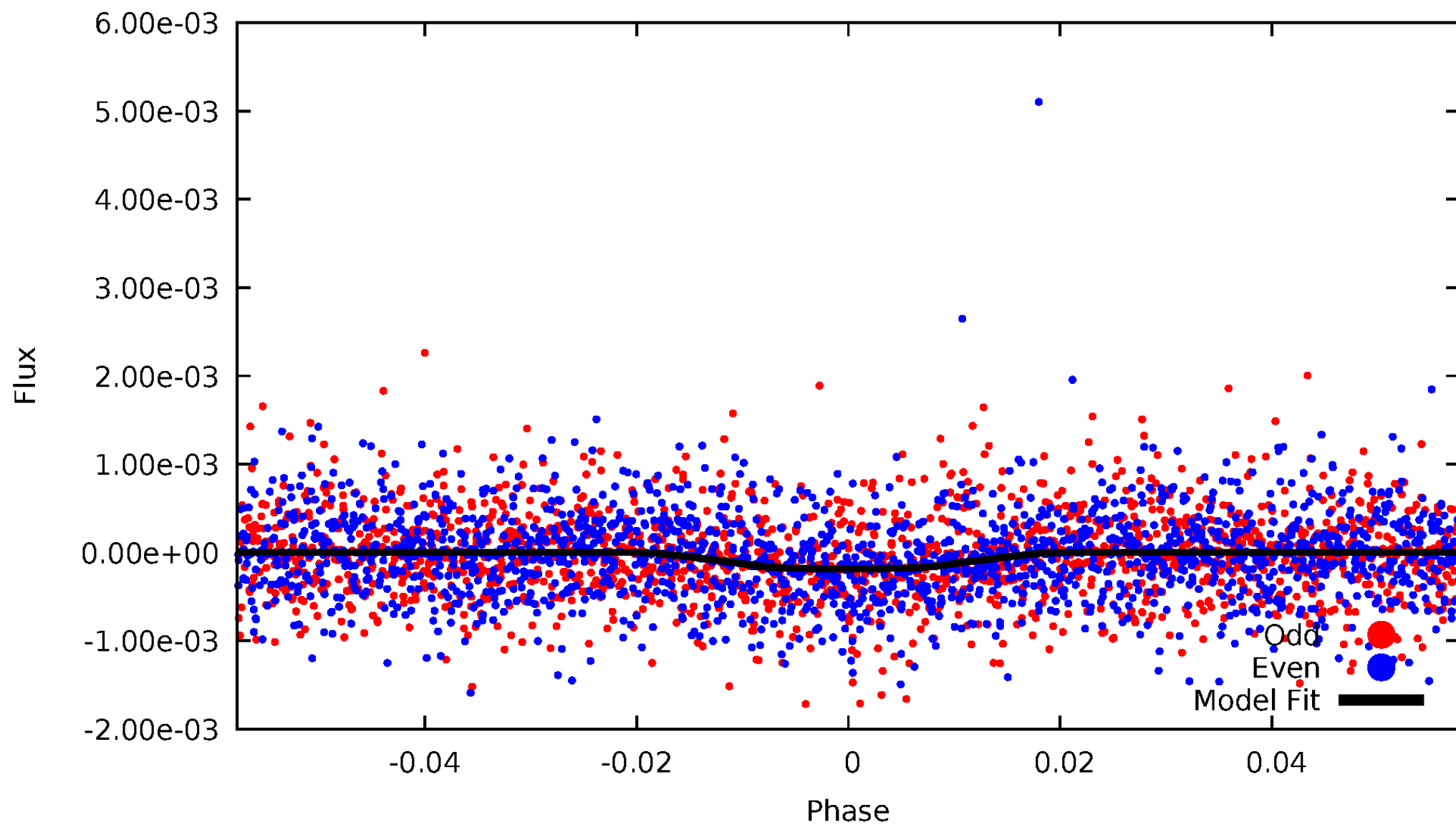


TCE 003644174-01



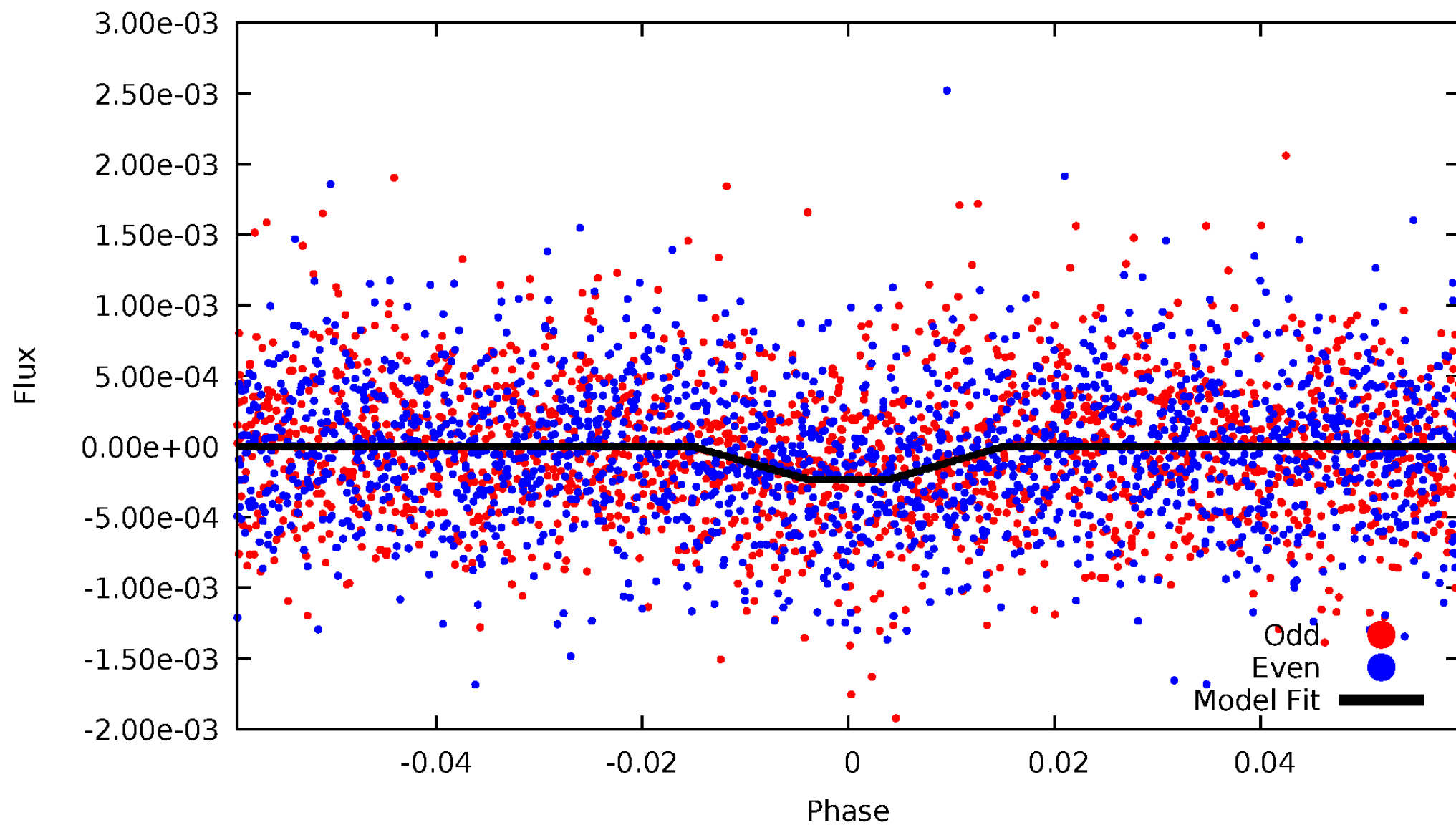
DV Odd/Even

TCE 003644174-01



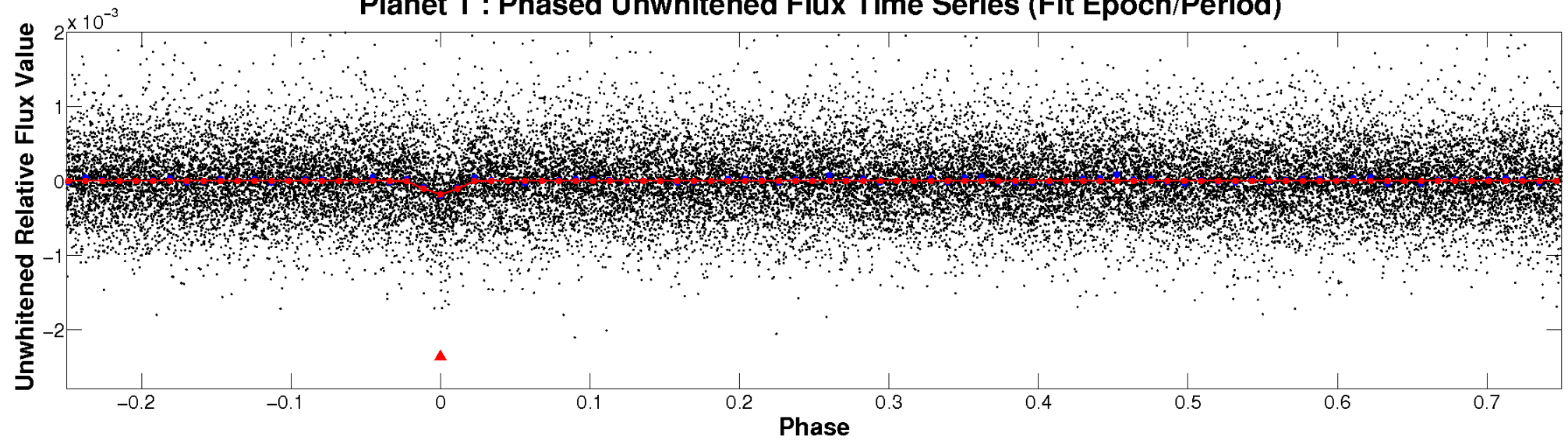
ALT Odd/Even

TCE 003644174-01

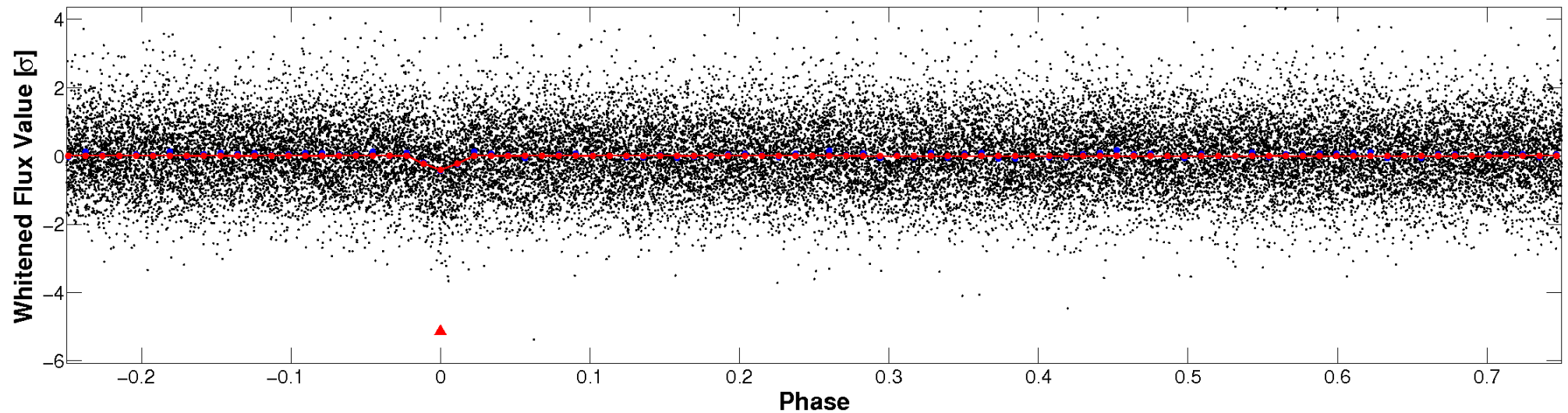


Non-Whitened Vs. Whitened Light Curve

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

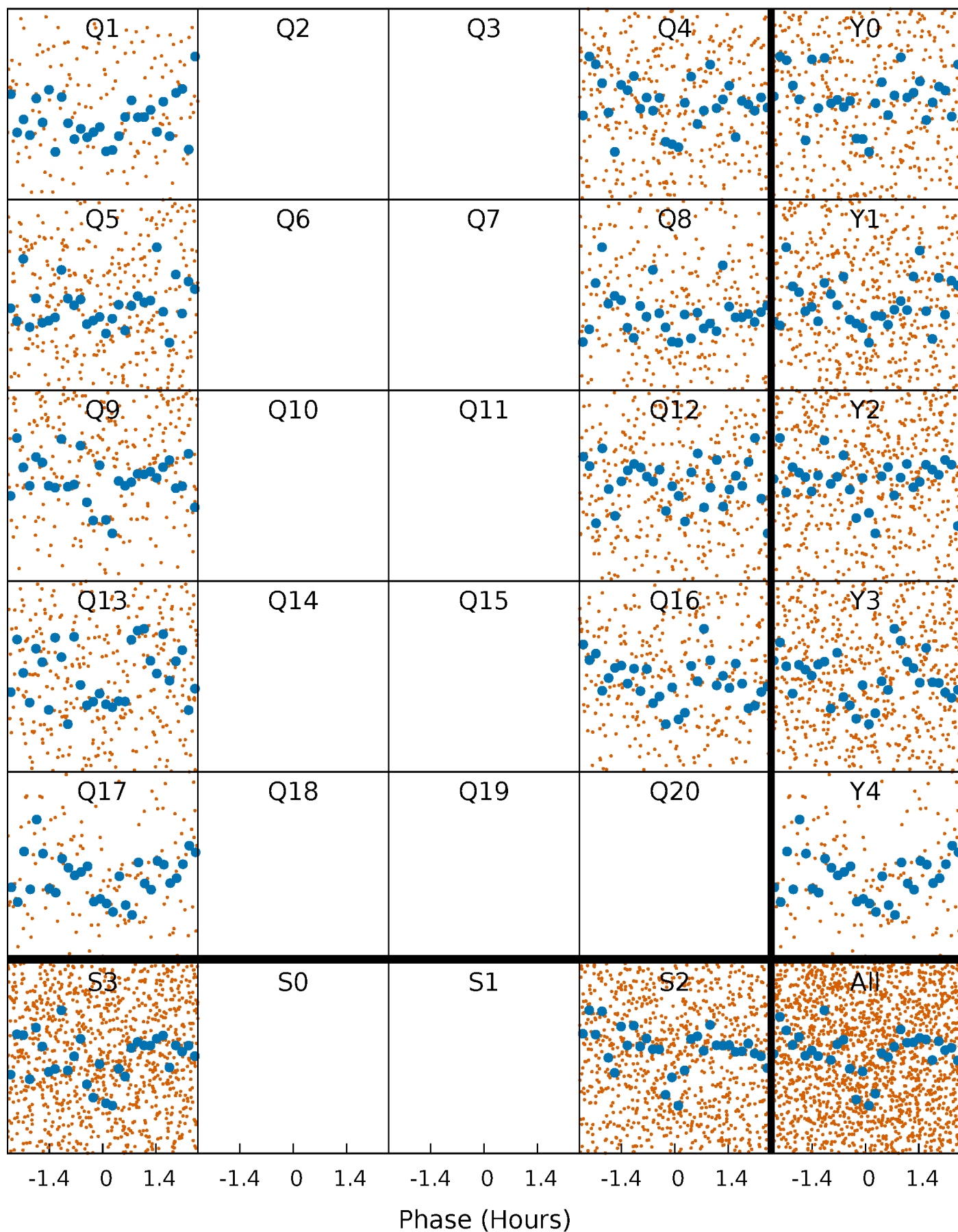


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



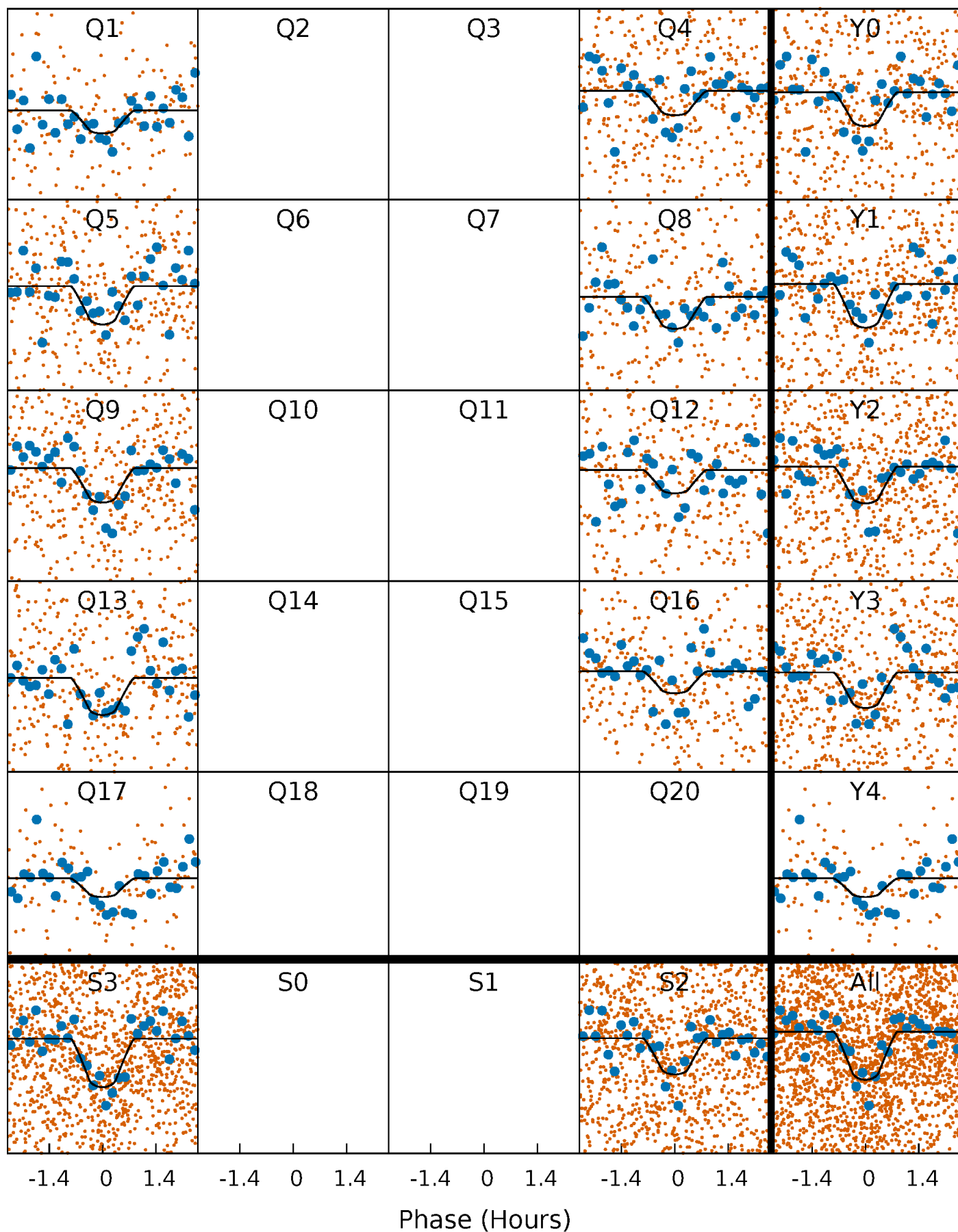
PDC Quarter-Phased Transit Curves

TCE 003644174-01 P= 1.806630 Days $T_0=132.235648$ (BKJD)



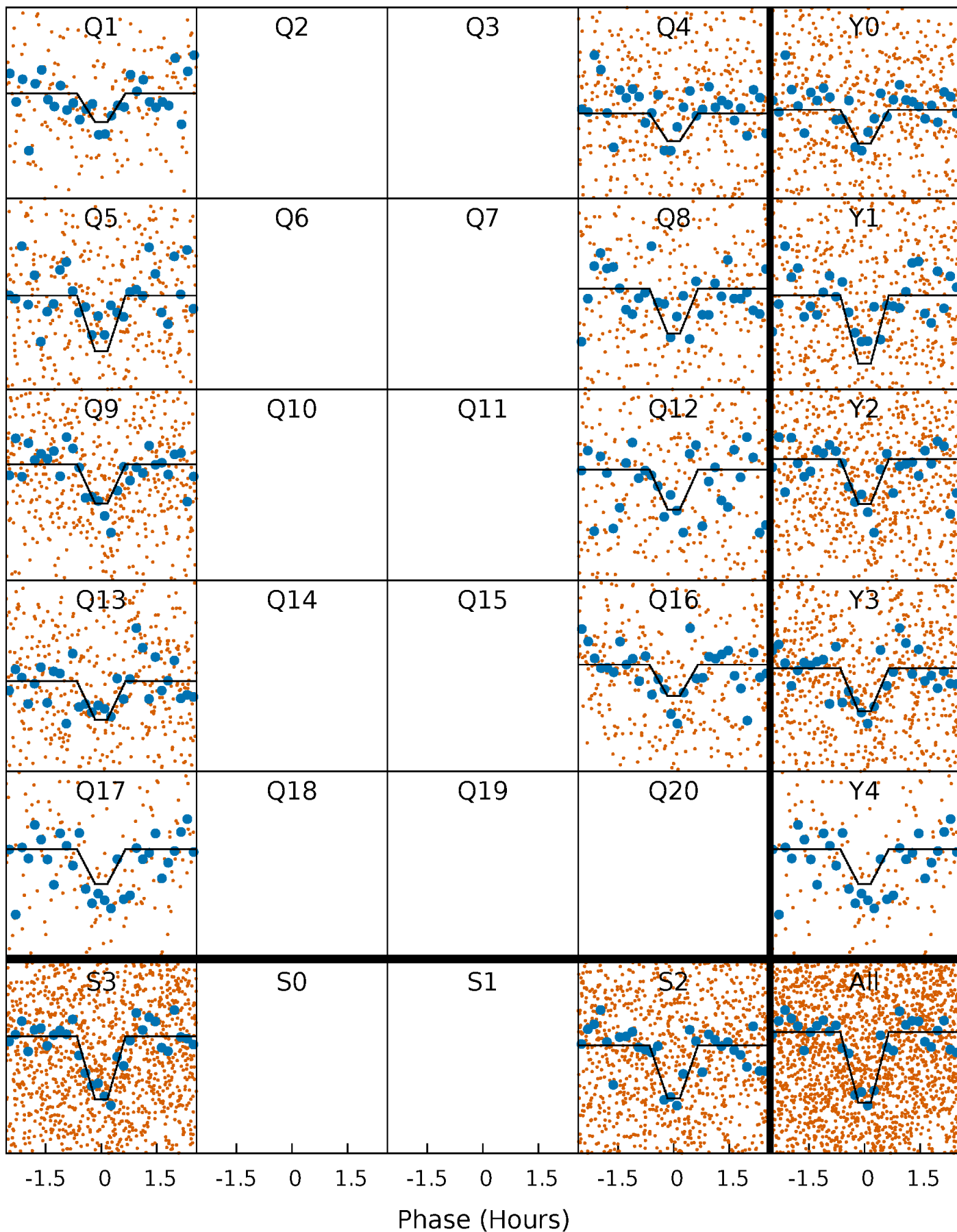
DV Quarter-Phased Transit Curves

TCE 003644174-01 P= 1.806630 Days $T_0=132.235648$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

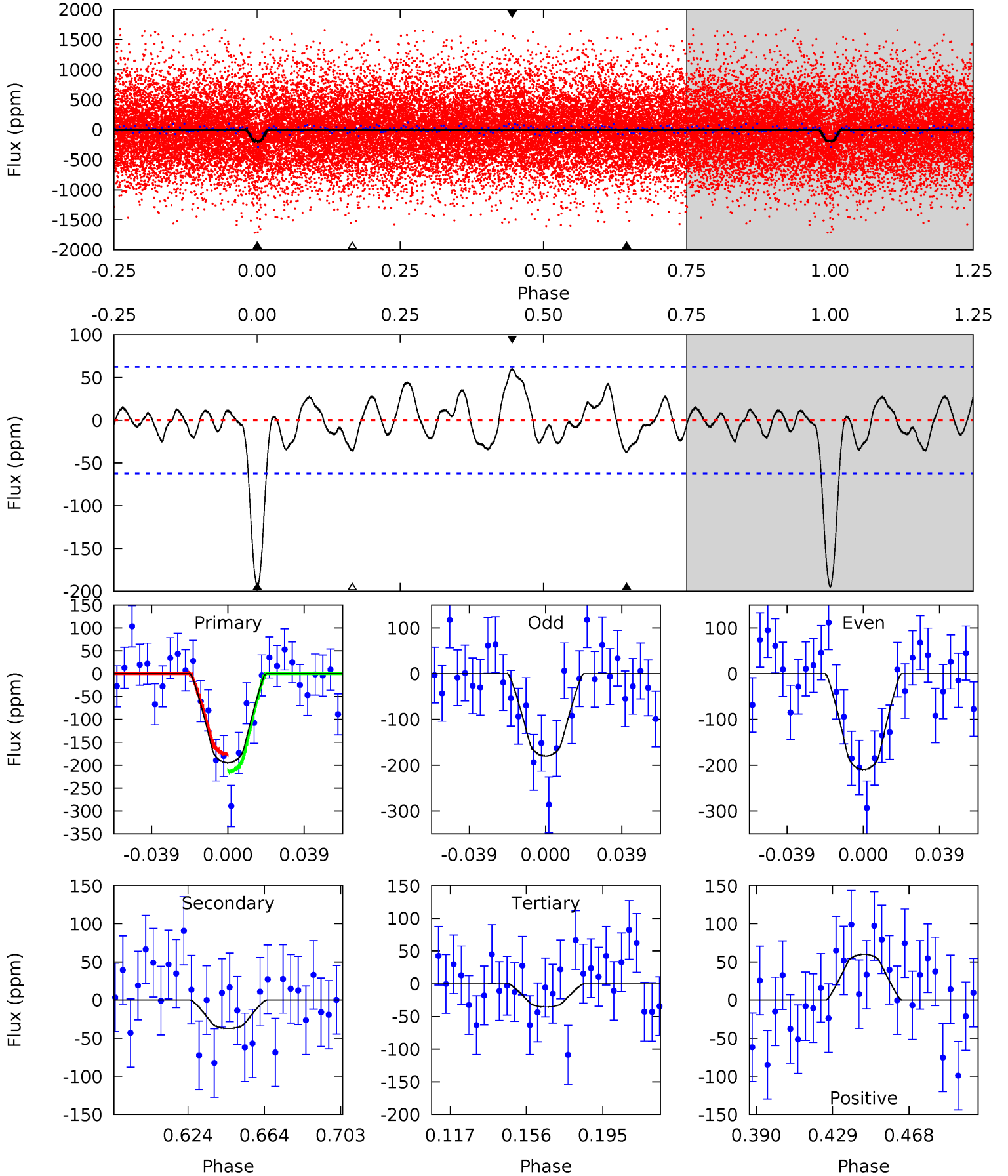
TCE 003644174-01 P= 1.806633 Days $T_0=132.235623$ (BKJD)



DV Model-Shift Uniqueness Test

003644174-01, P = 1.806630 Days, E = 130.429018 Days

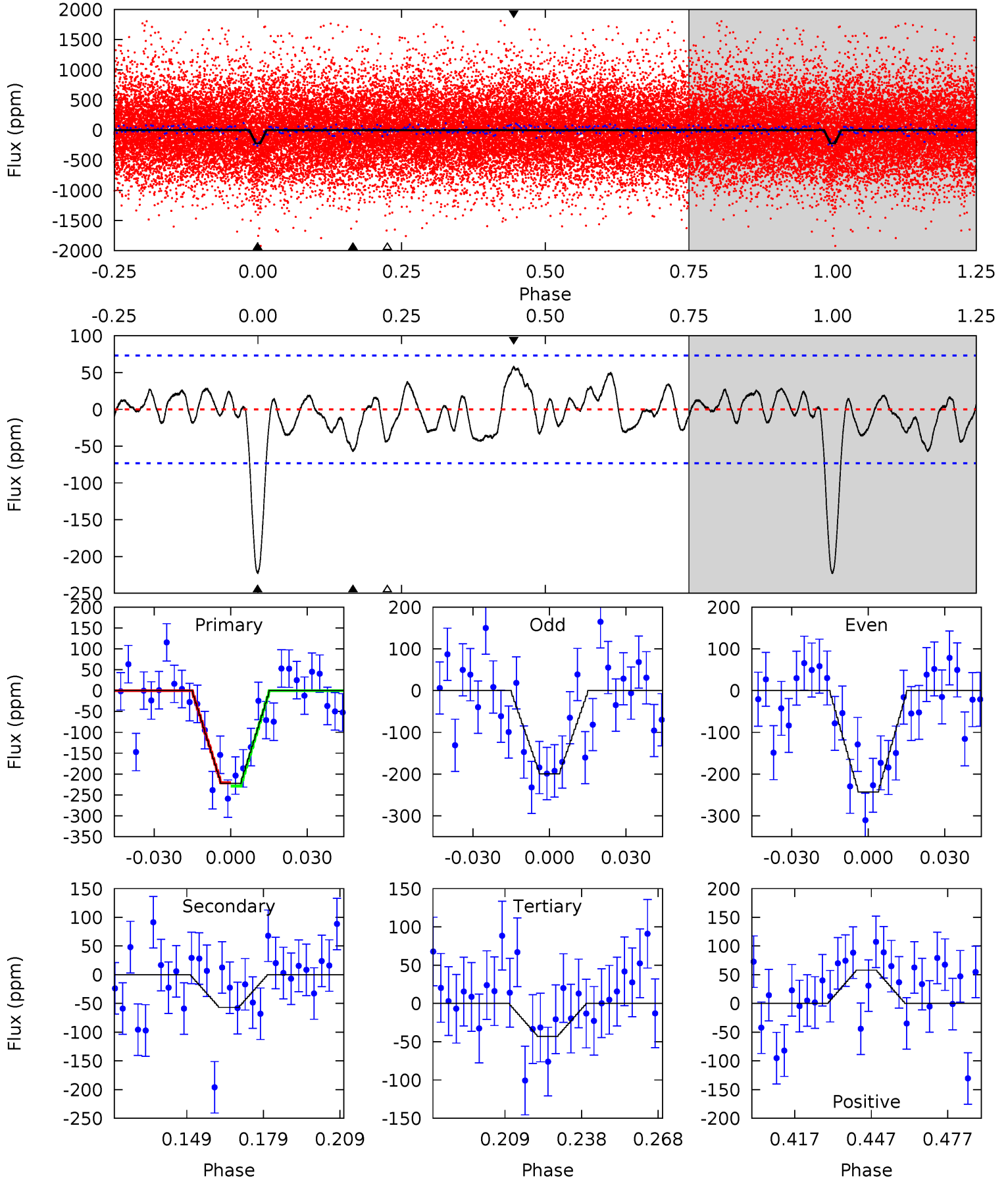
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14.9	2.84	2.71	4.58	4.76	2.06	1.55	12.2	10.3	0.13	-1.73	1.14	1.02	0.24	1.47



Alt Model-Shift Uniqueness Test

003644174-01, P = 1.806633 Days, E = 130.428990 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14.6	3.73	2.82	3.81	4.81	2.17	1.49	11.8	10.8	0.91	-0.08	1.44	1.04	0.21	0.26



Stellar Parameters For KIC 003644174

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (g \cdot \text{cm}^{-3})$
	4606^{+138}_{-138}	$4.591^{+0.052}_{-0.028}$	$-0.040^{+0.300}_{-0.300}$	$0.699^{+0.045}_{-0.060}$	$0.696^{+0.070}_{-0.056}$	$2.866^{+0.670}_{-0.307}$
	+3%/-3%	+1%/-1%	+750%/-750%	+6%/-9%	+10%/-8%	+23%/-11%
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 003644174-01 / KOI 6347.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-37 ± 13	$1.43^{+1.24}_{-0.91}$	1473^{+49}_{-48}	3098^{+1214}_{-552}	$6.037^{+40.871}_{-4.294}$
Alt.	-57 ± 15	$1.47^{+1.30}_{-0.92}$	1472^{+48}_{-54}	3290^{+1291}_{-580}	$9.583^{+53.436}_{-6.943}$

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 $A_{obs} \gg 1.0$

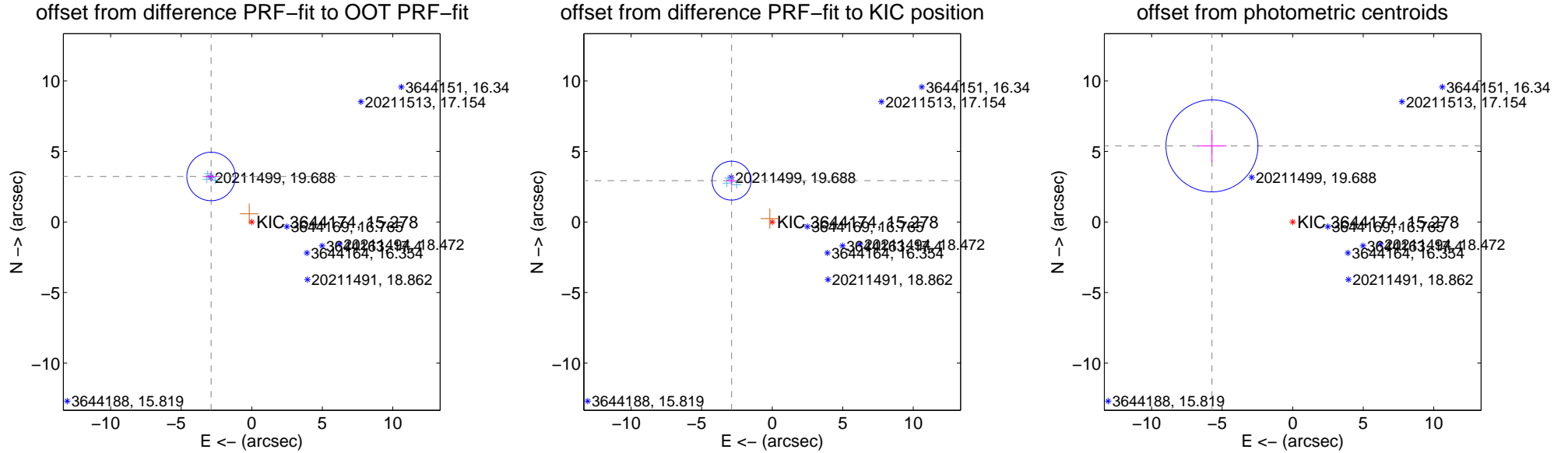
DV Centroid Data

Supplemental centroid analysis for 003644174-01. Kepler magnitude: 15.28. Transit SNR 9.89

There are 5 quarters with good PRF difference image offsets

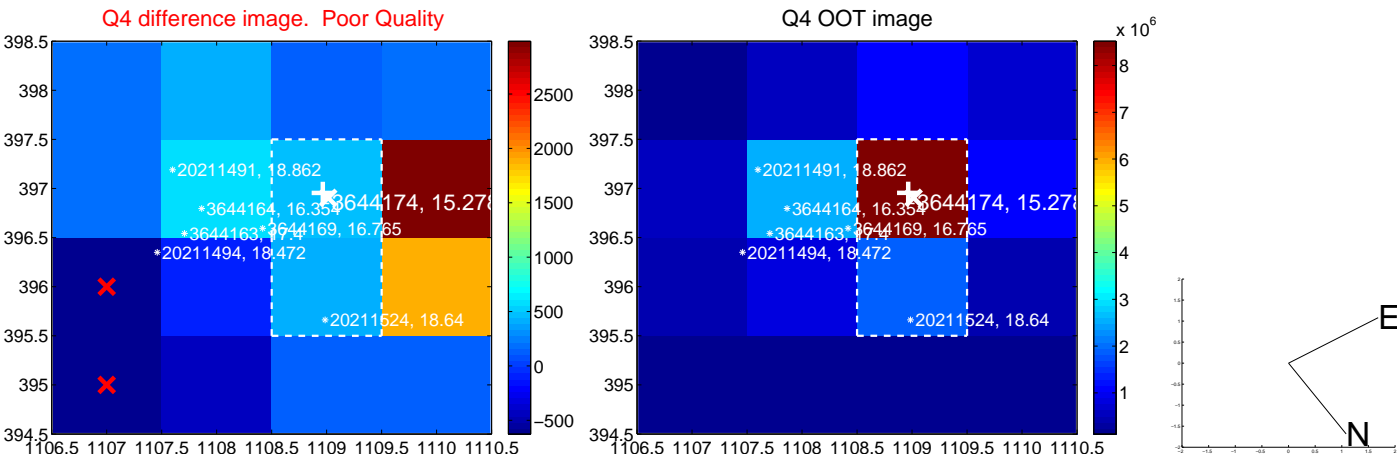
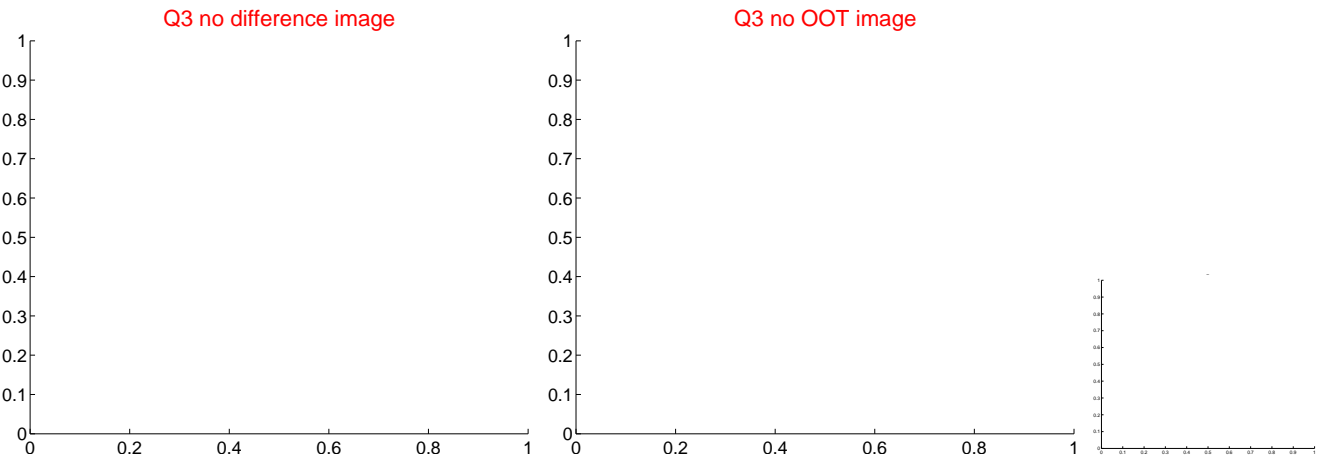
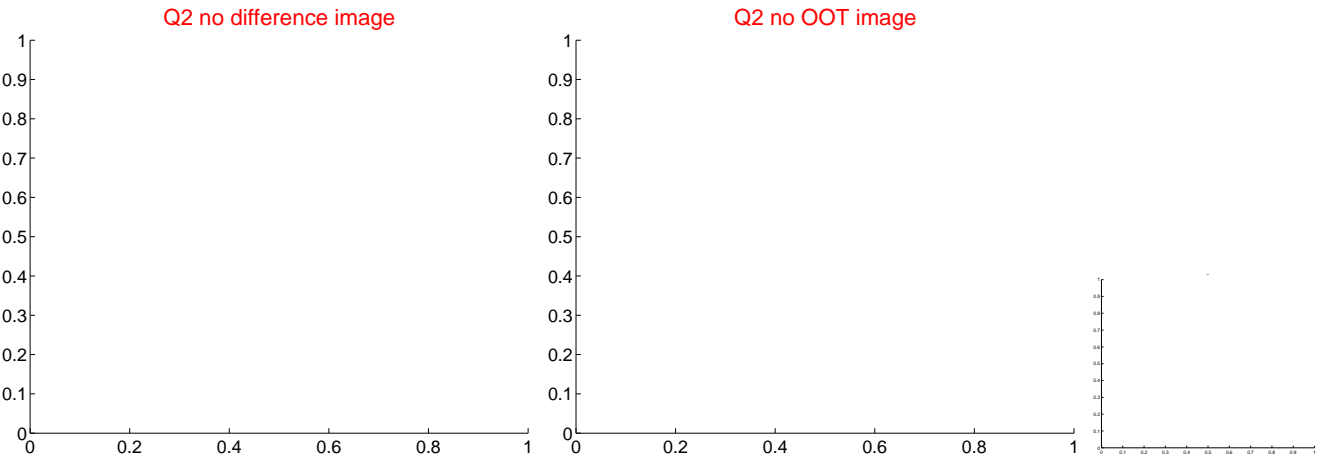
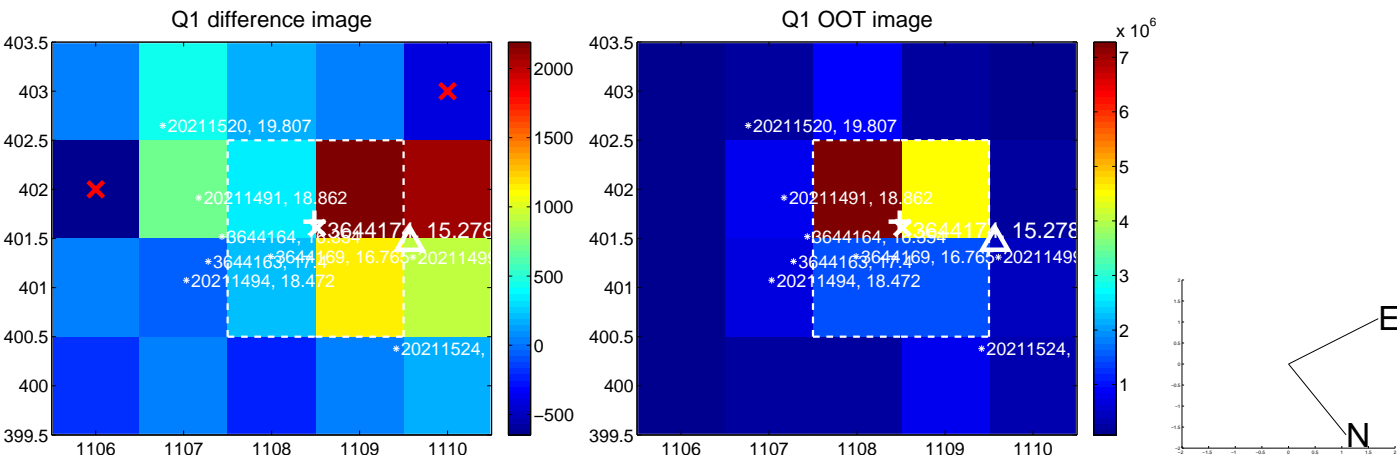
The direct PRF centroid is offset from the target star catalog position by about 0.34 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	4.324 ± 0.573	7.54	2.880 ± 0.433	3.226 ± 0.392
PRF-fit source offset from KIC position	4.109 ± 0.460	8.93	2.881 ± 0.335	2.929 ± 0.327
photometric centroid source offset	7.87 ± 1.09	7.23	5.72 ± 1.02	5.40 ± 1.16

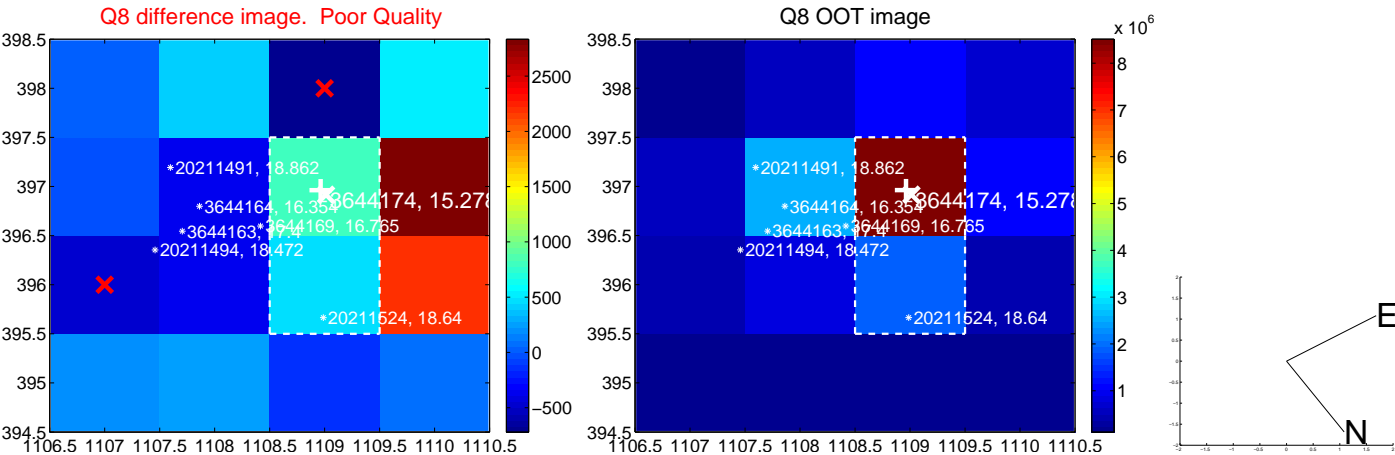
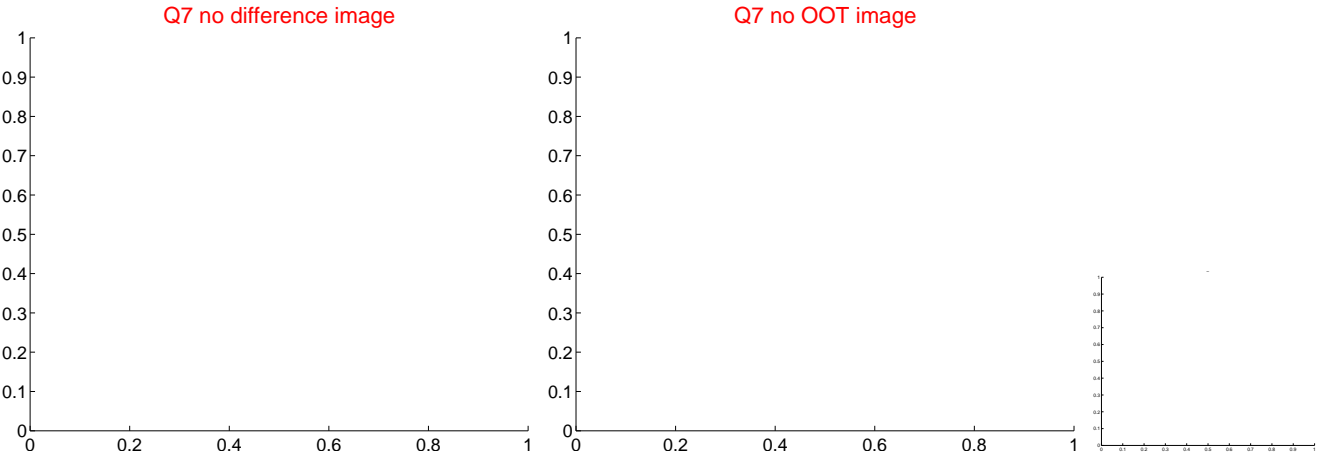
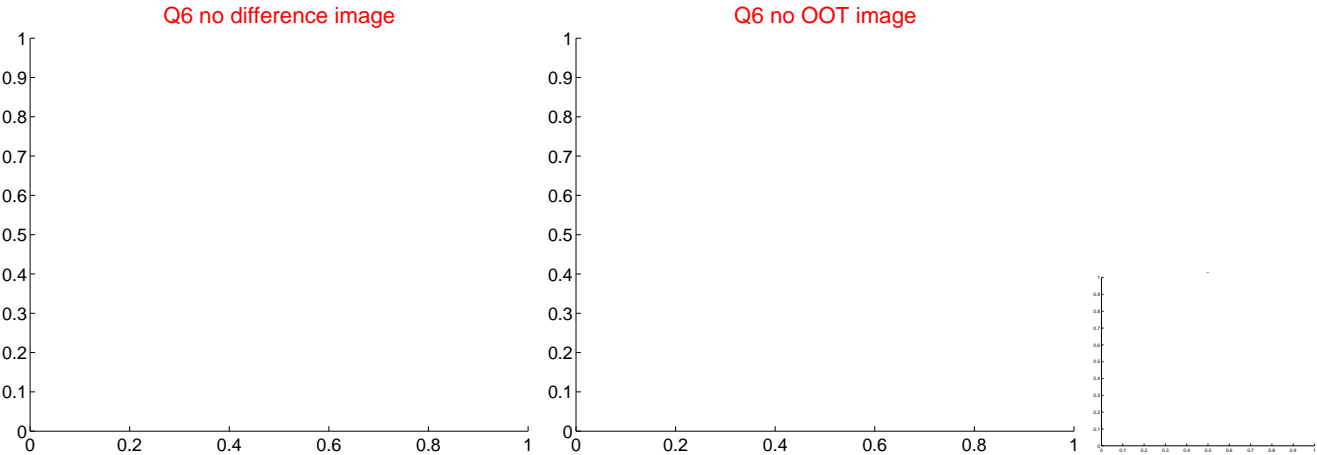
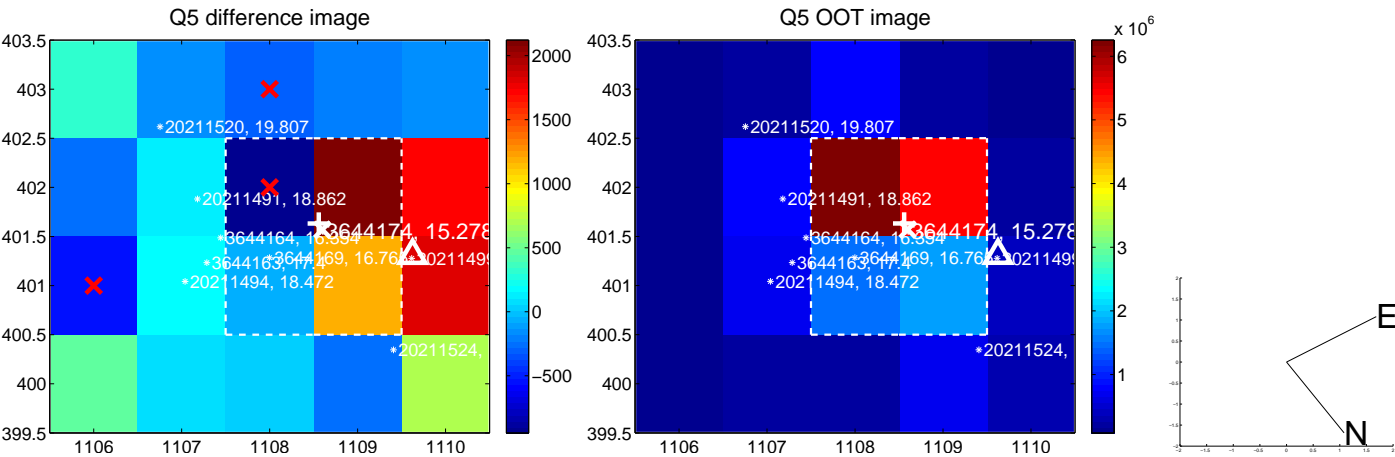


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets**; **Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

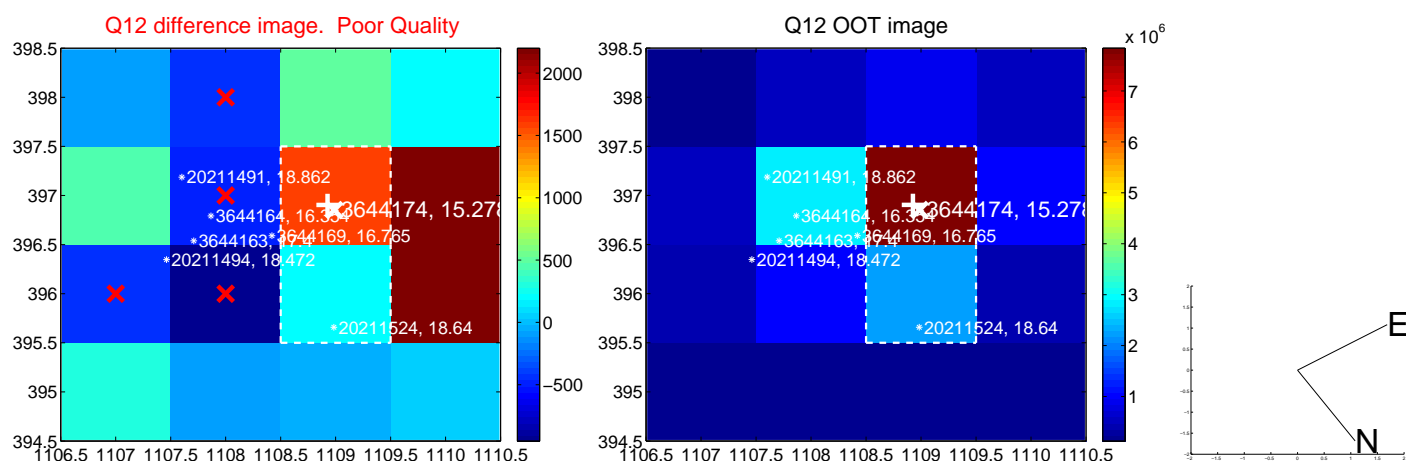
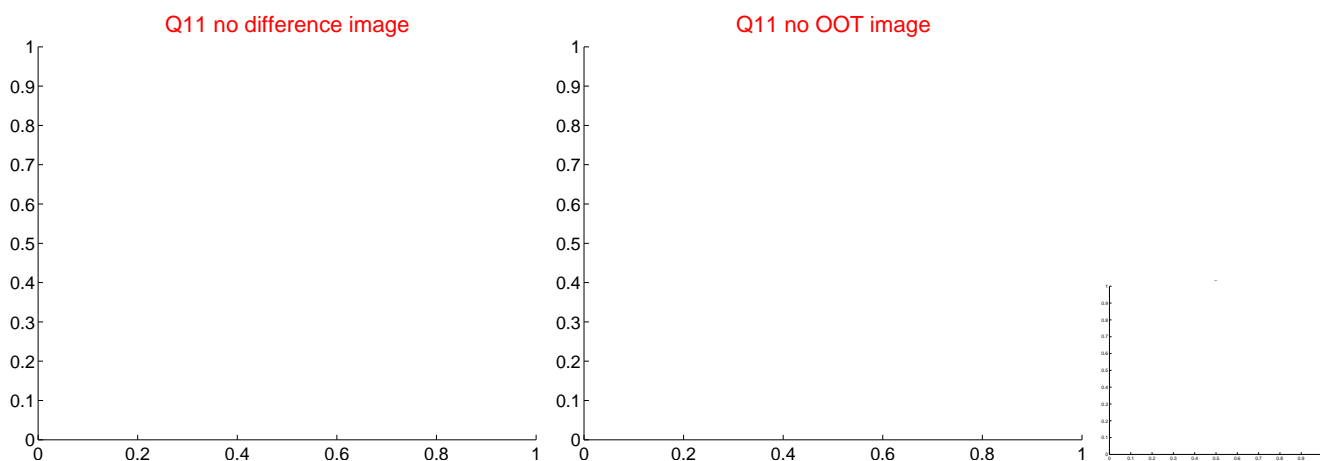
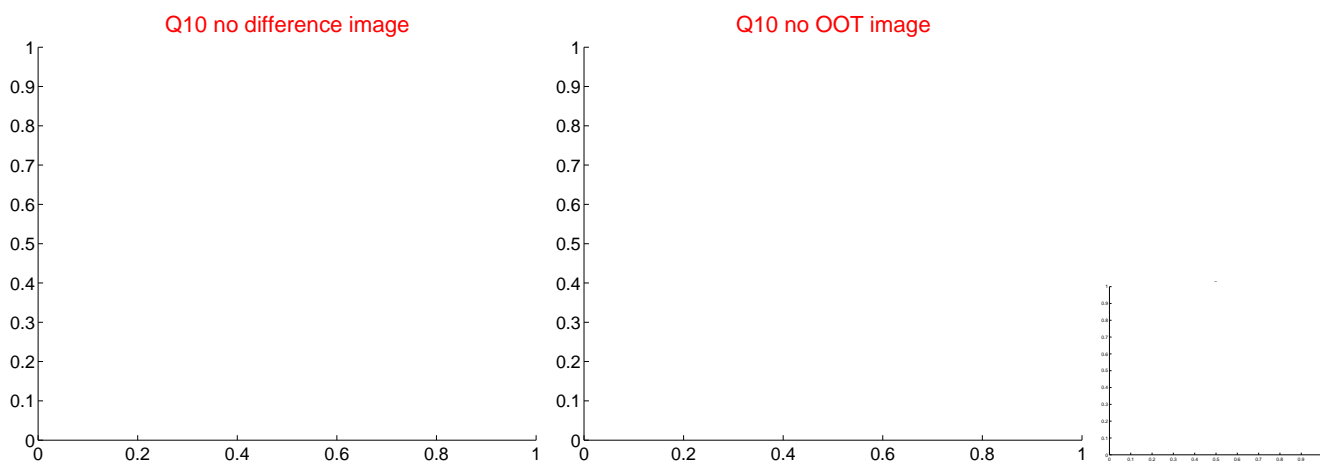
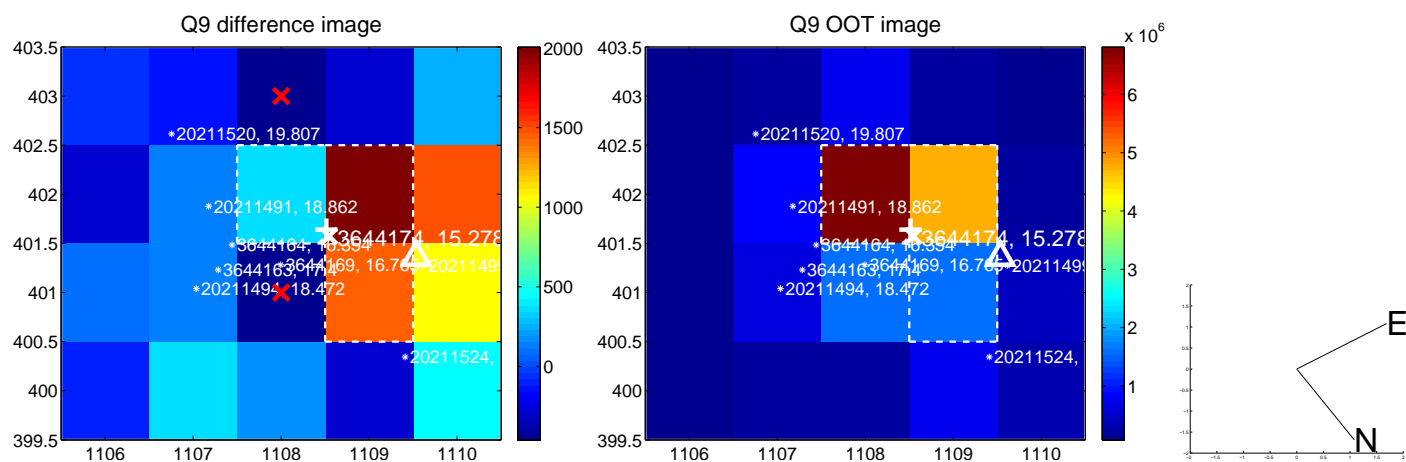
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



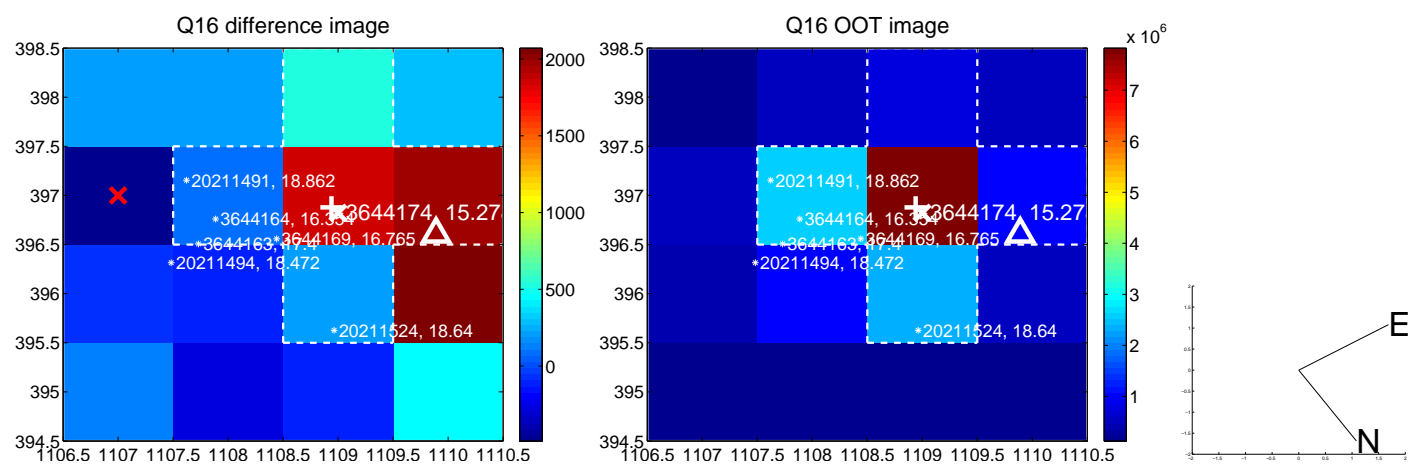
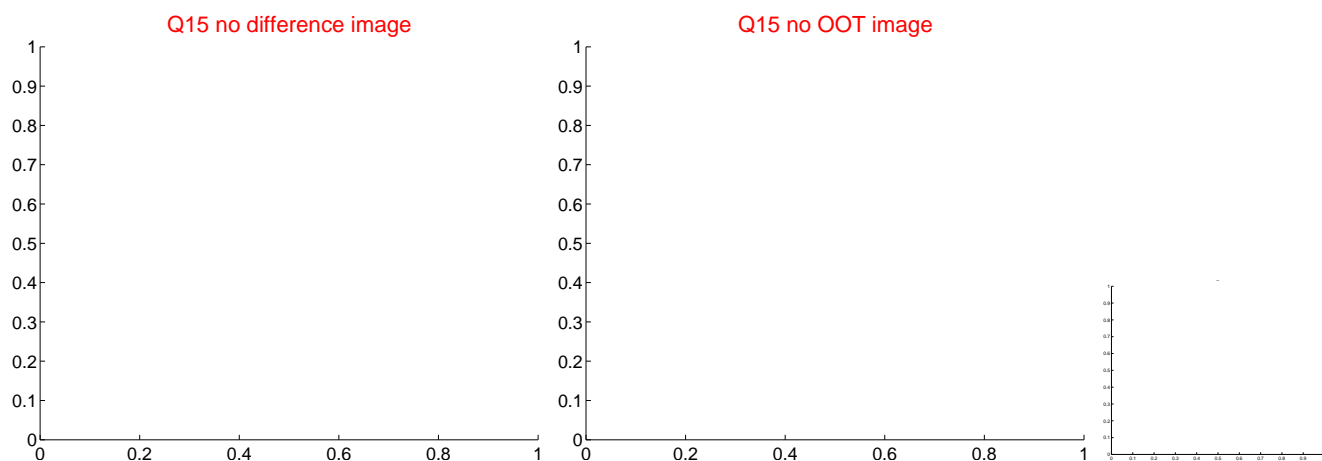
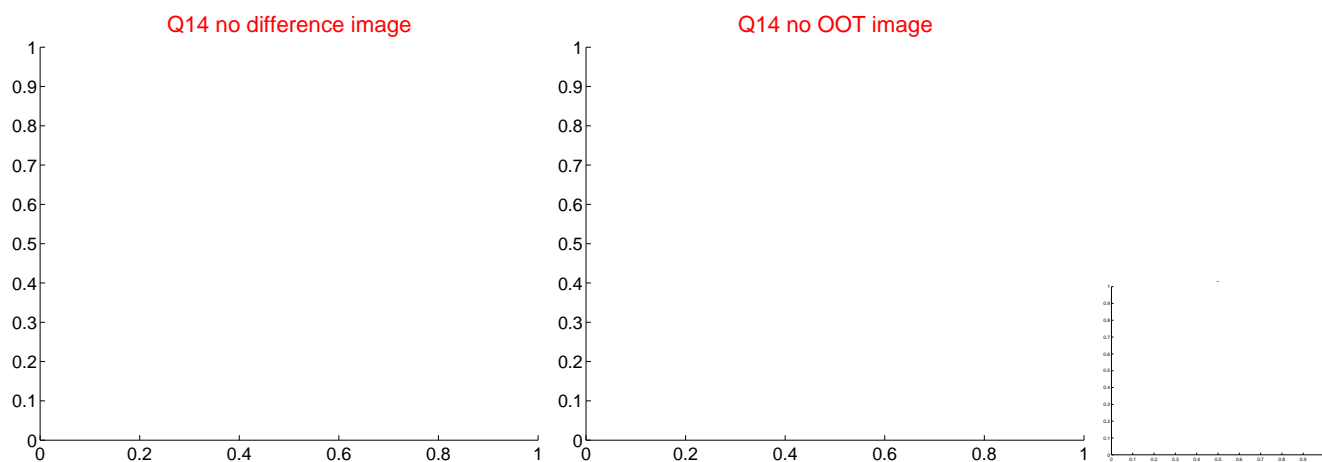
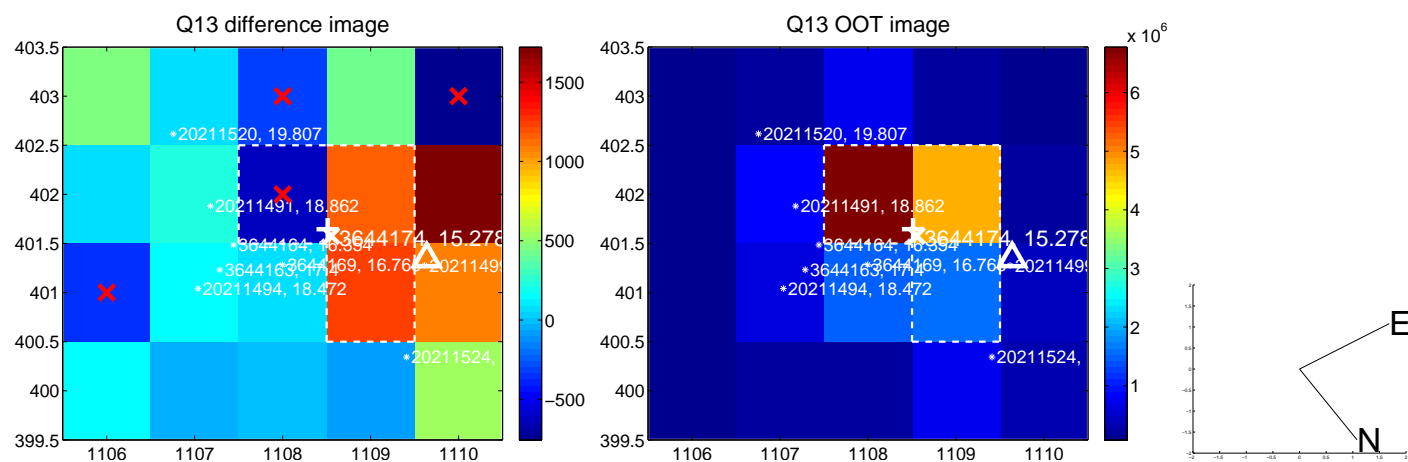
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



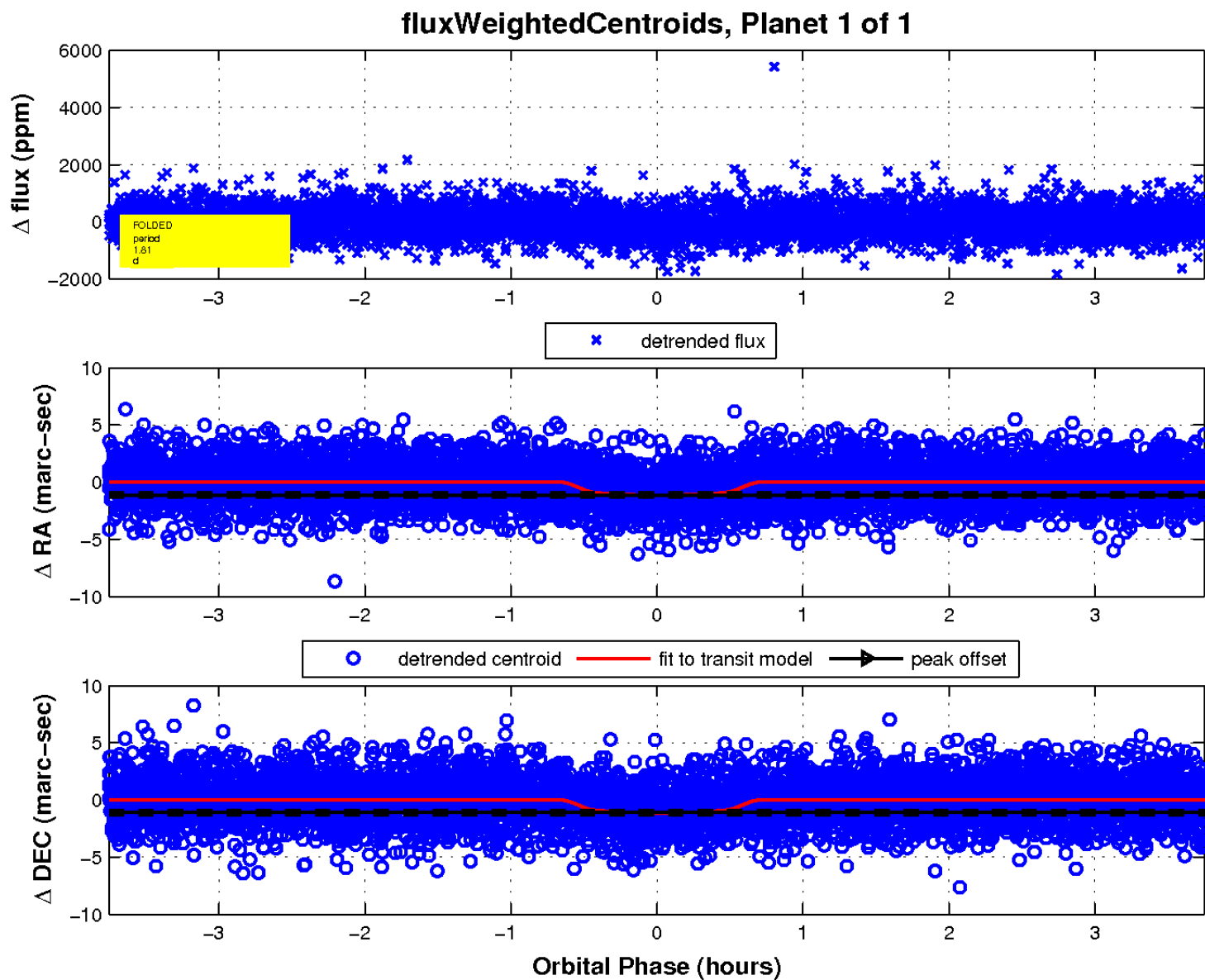
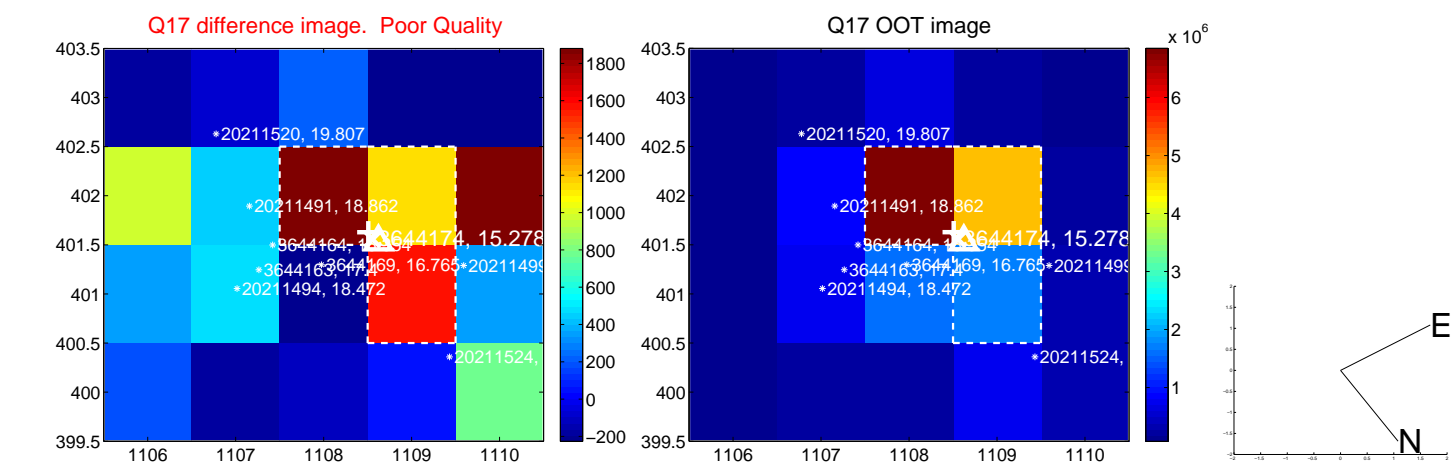
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

