

KIC 007769815

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})
007769815-01	OBS	6915.01	4.435385	134.729818	151.3	2.585	8.6	8.9	0.84	5659	1.24	262.31

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007769815-01	OBS	FP	0.00	0	0	1	0	CENT_RESOLVED_OFFSET—HALO_GHOST

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

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

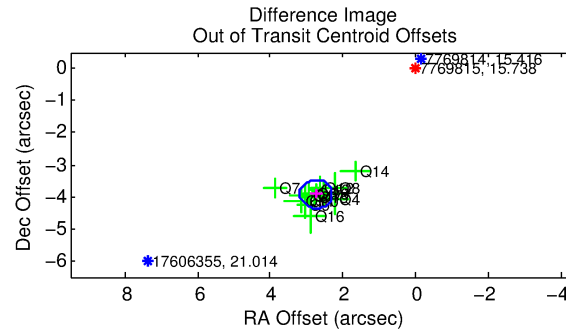
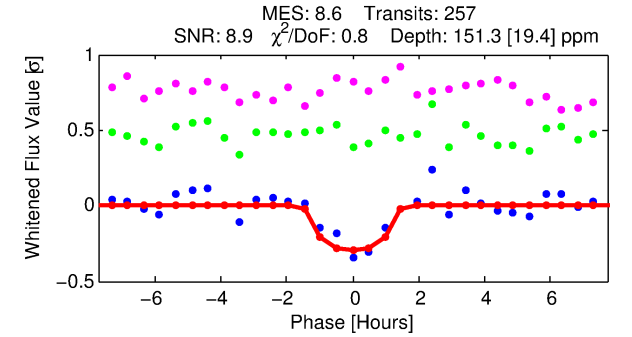
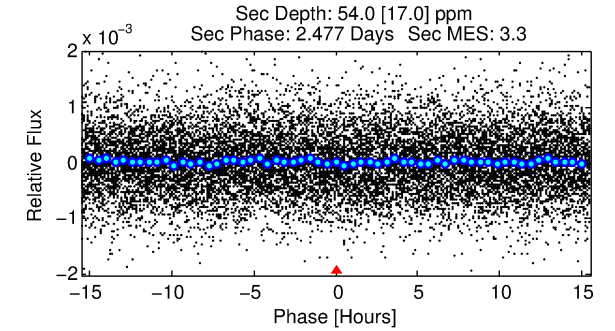
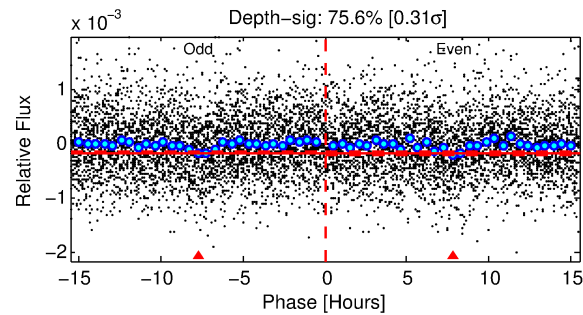
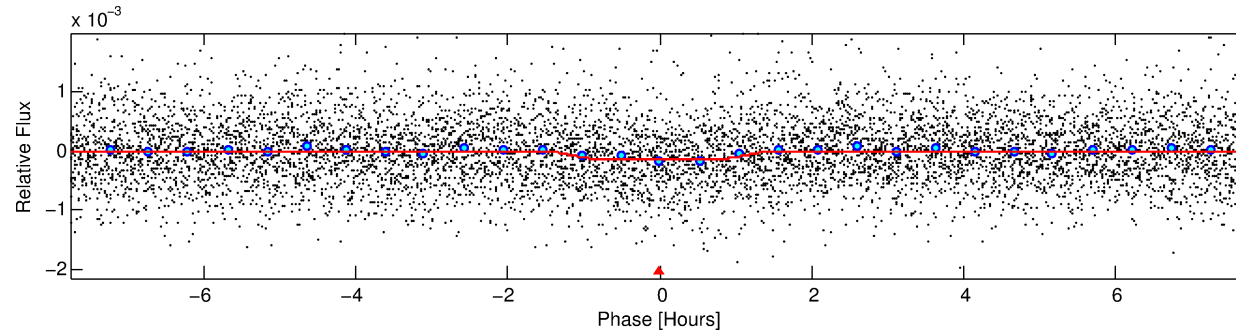
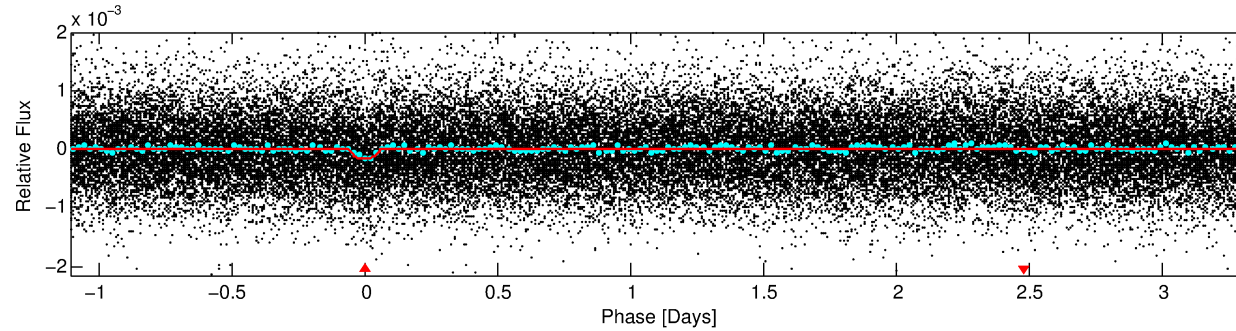
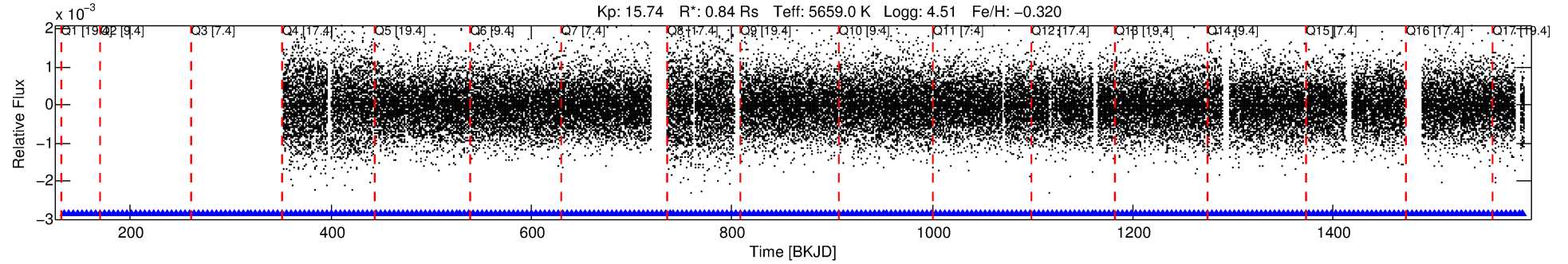
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007769815-01

No Significant Match Found

DV One-Page Summary

KIC: 7769815 Candidate: 1 of 1 Period: 4.435 d
KOI: K06915.01 Corr: 0.863



DV Fit Results:

Period = 4.43538 [0.00003] d
Epoch = 134.7298 [0.0059] BKJD
Rp/R* = 0.0134 [0.0102]
a/R* = 6.07 [21.79]
b = 0.90 [0.76]
Seff = 262.31 [85.94]
Teq = 1026 [84] K
Rp = 1.24 [0.99] Re
a = 0.0498 [0.0105] AU
Ag = 48.31 [76.18] [0.62 σ]
Teffp = 4183 [1625] K [1.94 σ]

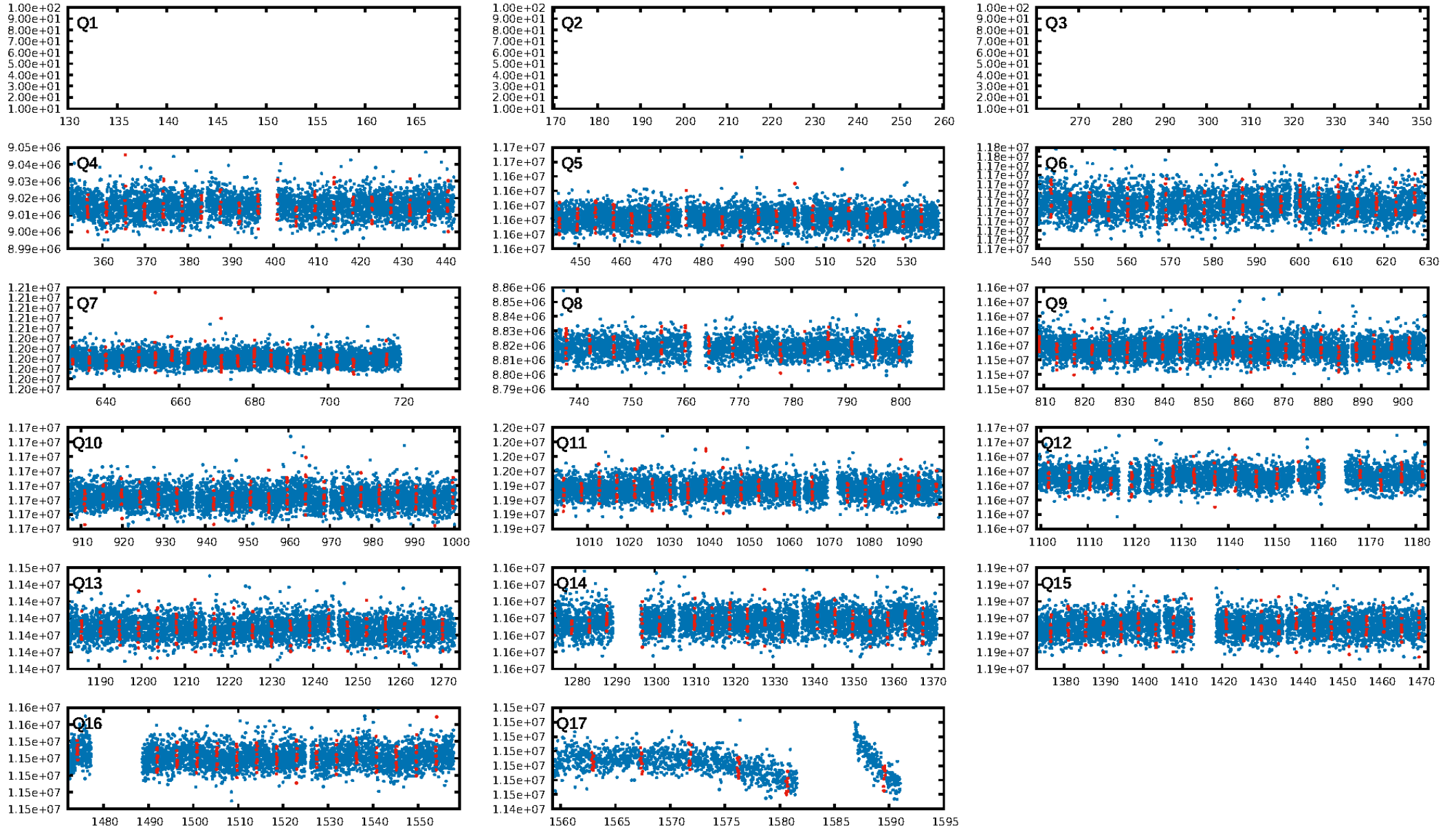
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 7.76e-18
RollingBand-fgt: 1.00 [251/251]
GhostDiagnostic-chr: -0.1316
Centroid-sig: 0.0%
Centroid-so: 18.457 arcsec [10.75 σ]
OotOffset-rm: 4.784 arcsec [32.44 σ]
KicOffset-rm: 4.847 arcsec [34.58 σ]
OotOffset-st: 3/3/4/4 [14]
KicOffset-st: 3/3/4/4 [14]
DiffImageQuality-fgm: 0.93 [13/14]
DiffImageOverlap-fno: 1.00 [14/14]

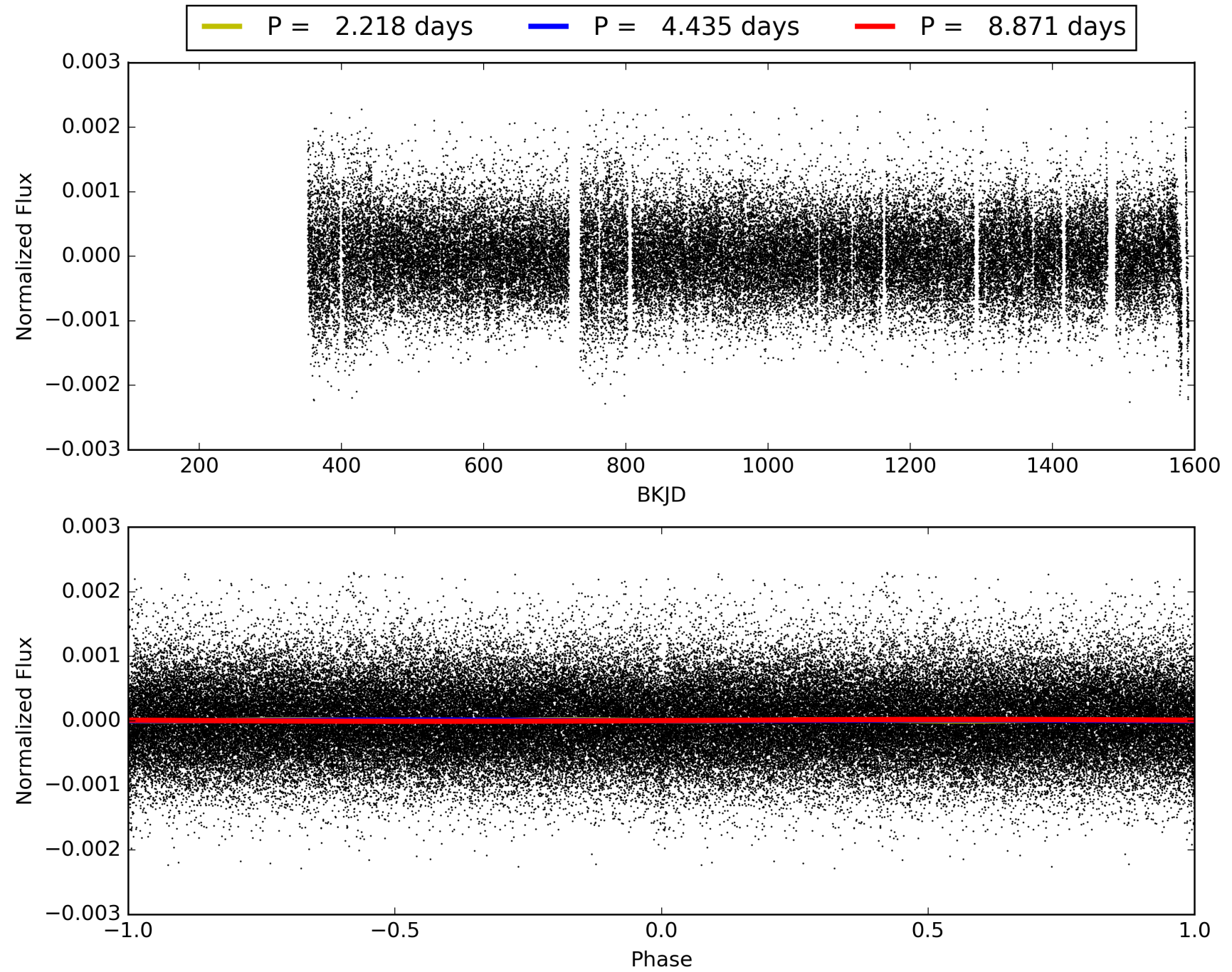
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 20:55:27 Z

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

TCE 007769815-01, PDC Light Curves

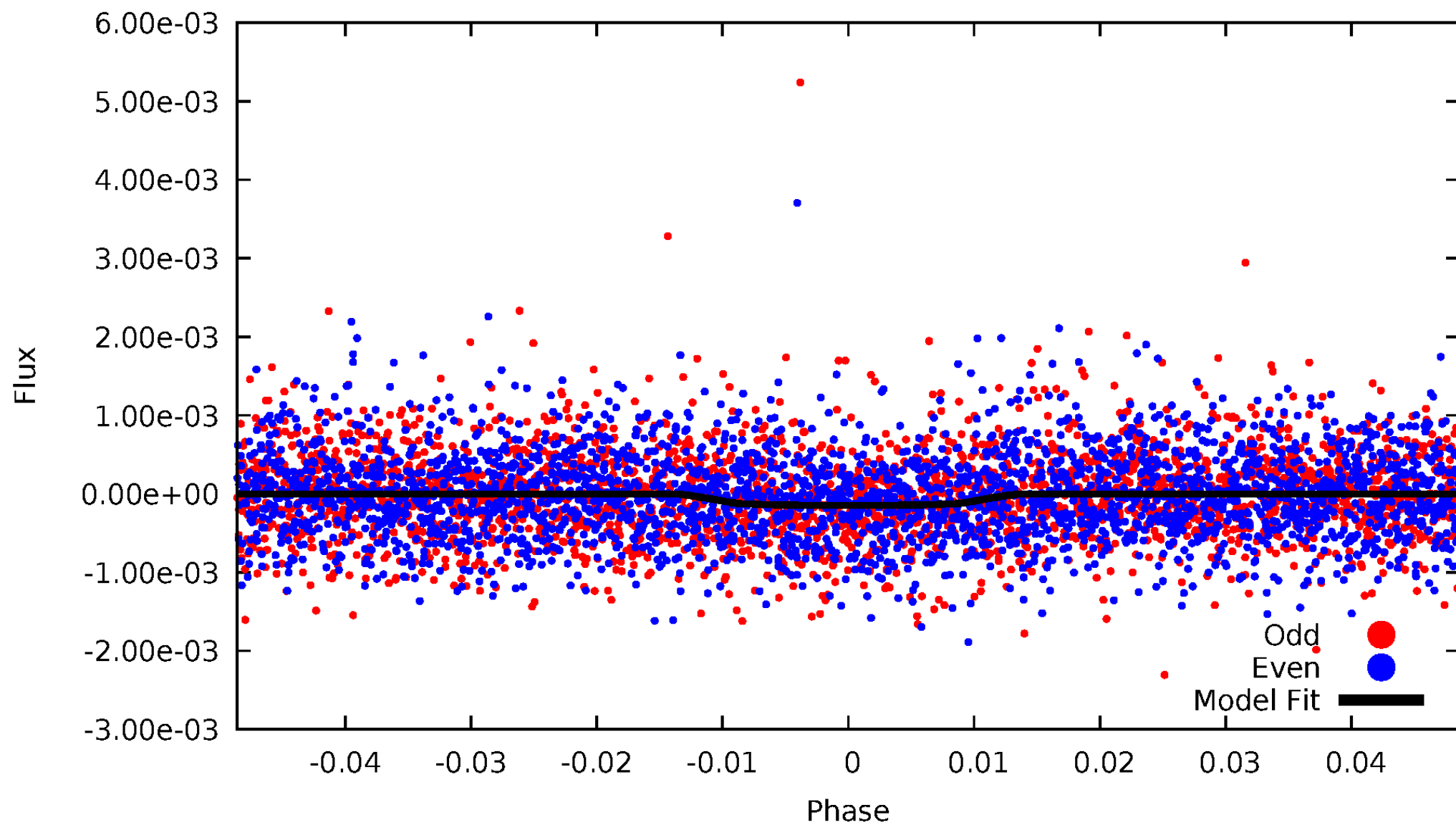


TCE 007769815-01



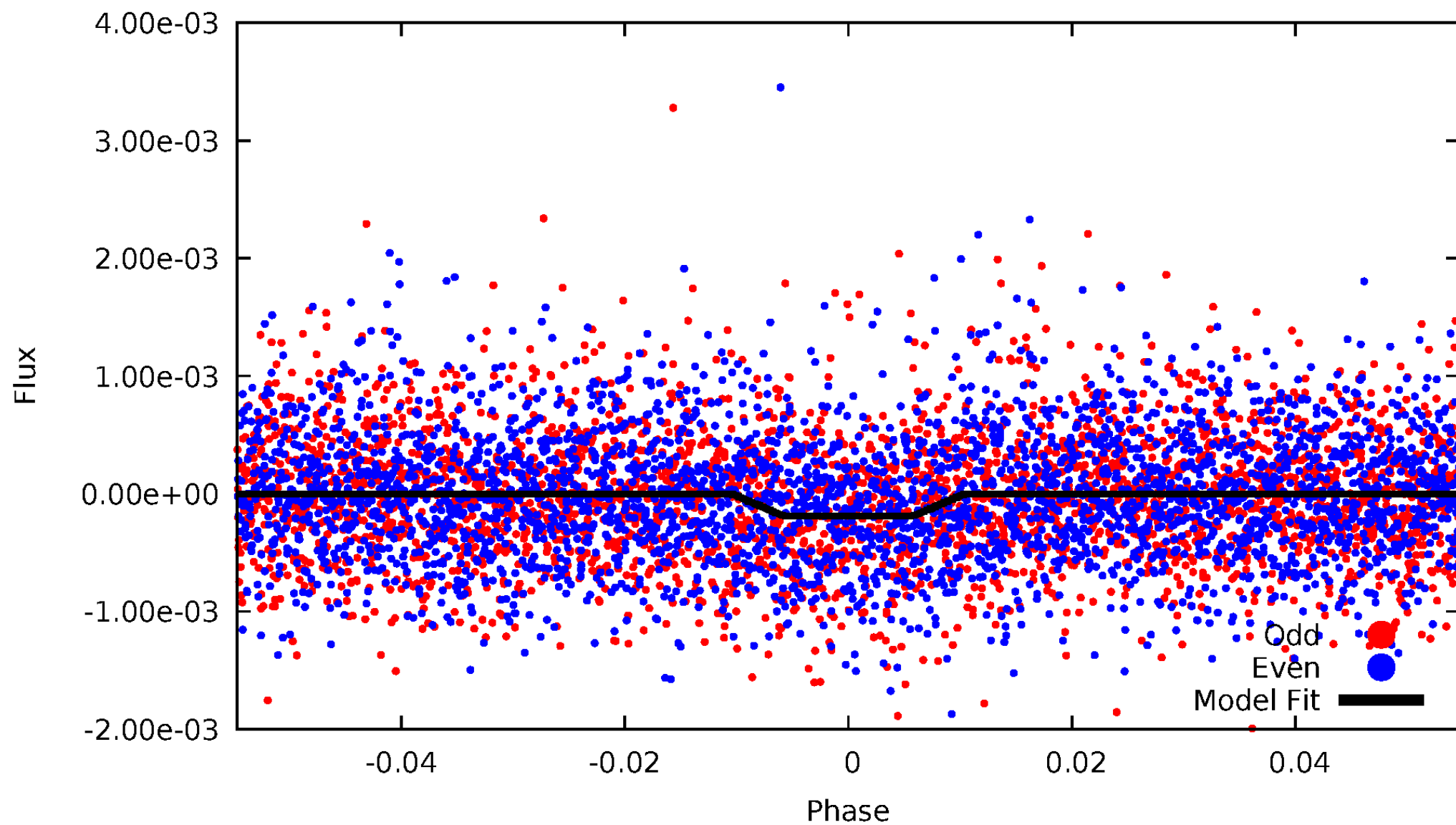
DV Odd/Even

TCE 007769815-01



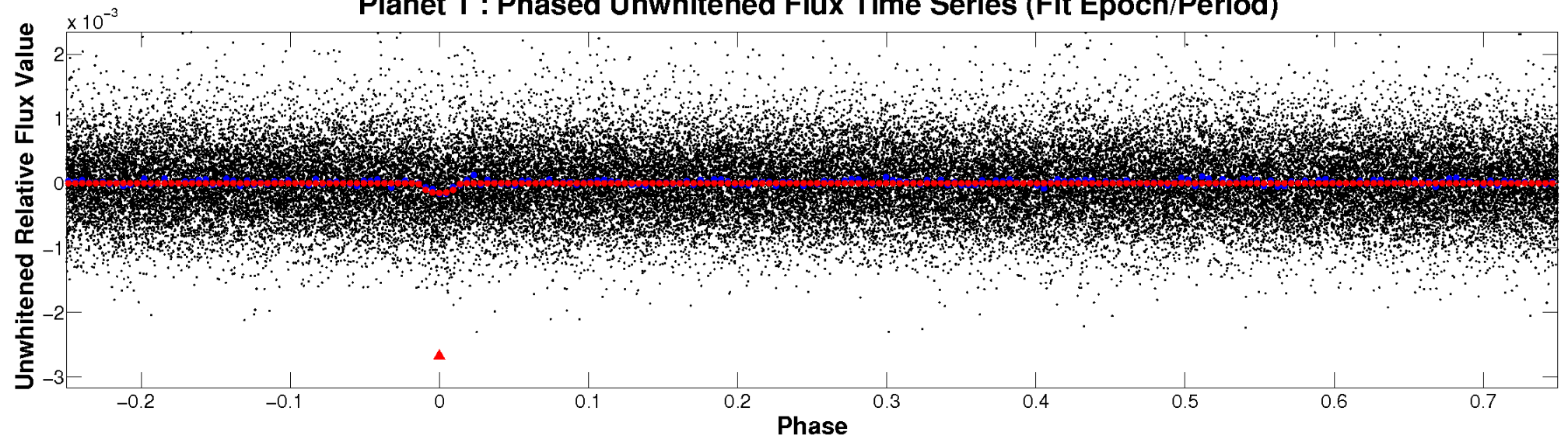
ALT Odd/Even

TCE 007769815-01

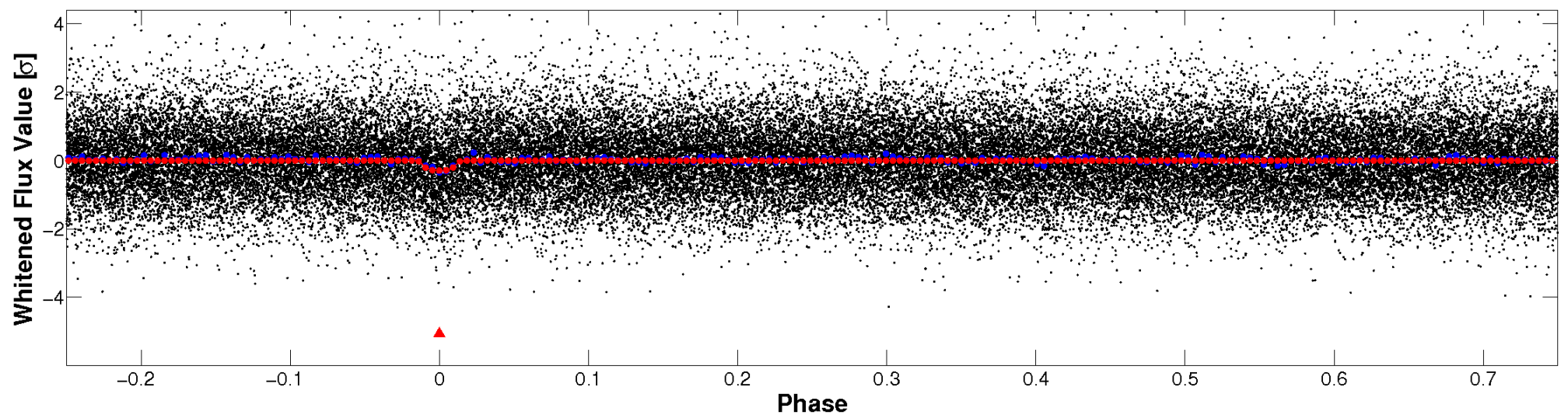


Non-Whitened Vs. Whitened Light Curve

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

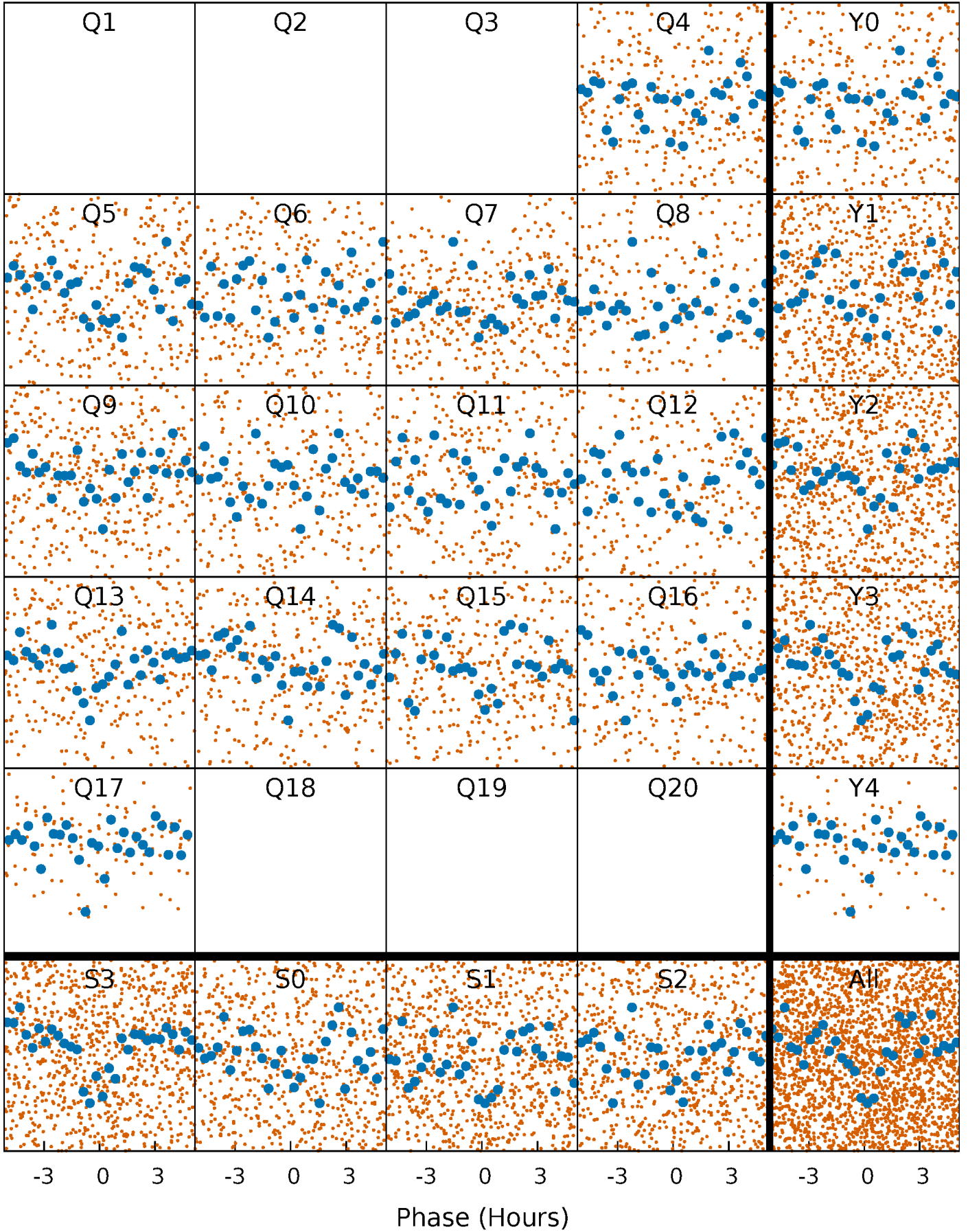


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



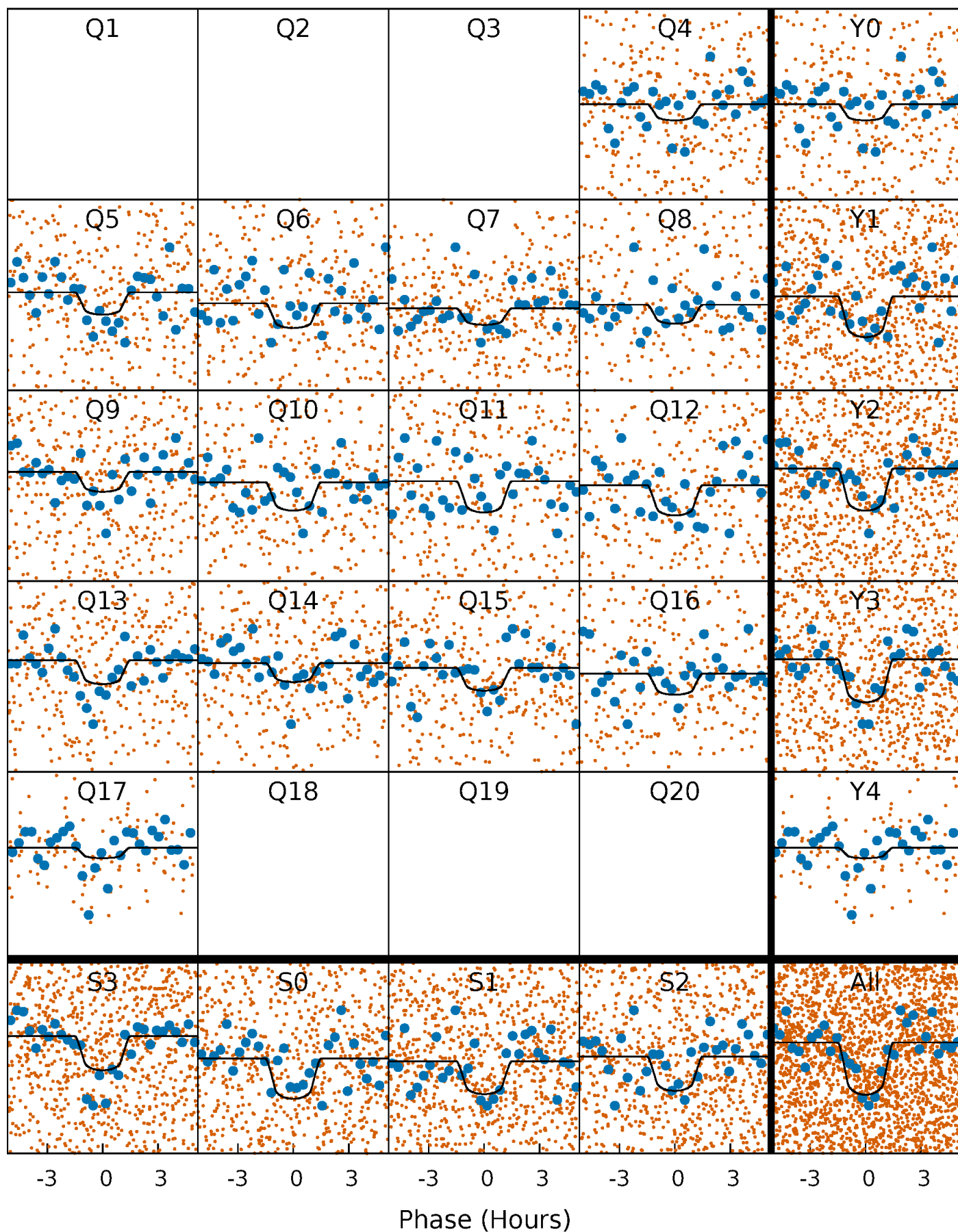
PDC Quarter-Phased Transit Curves

TCE 007769815-01 P= 4.435385 Days $T_0=134.729818$ (BKJD)



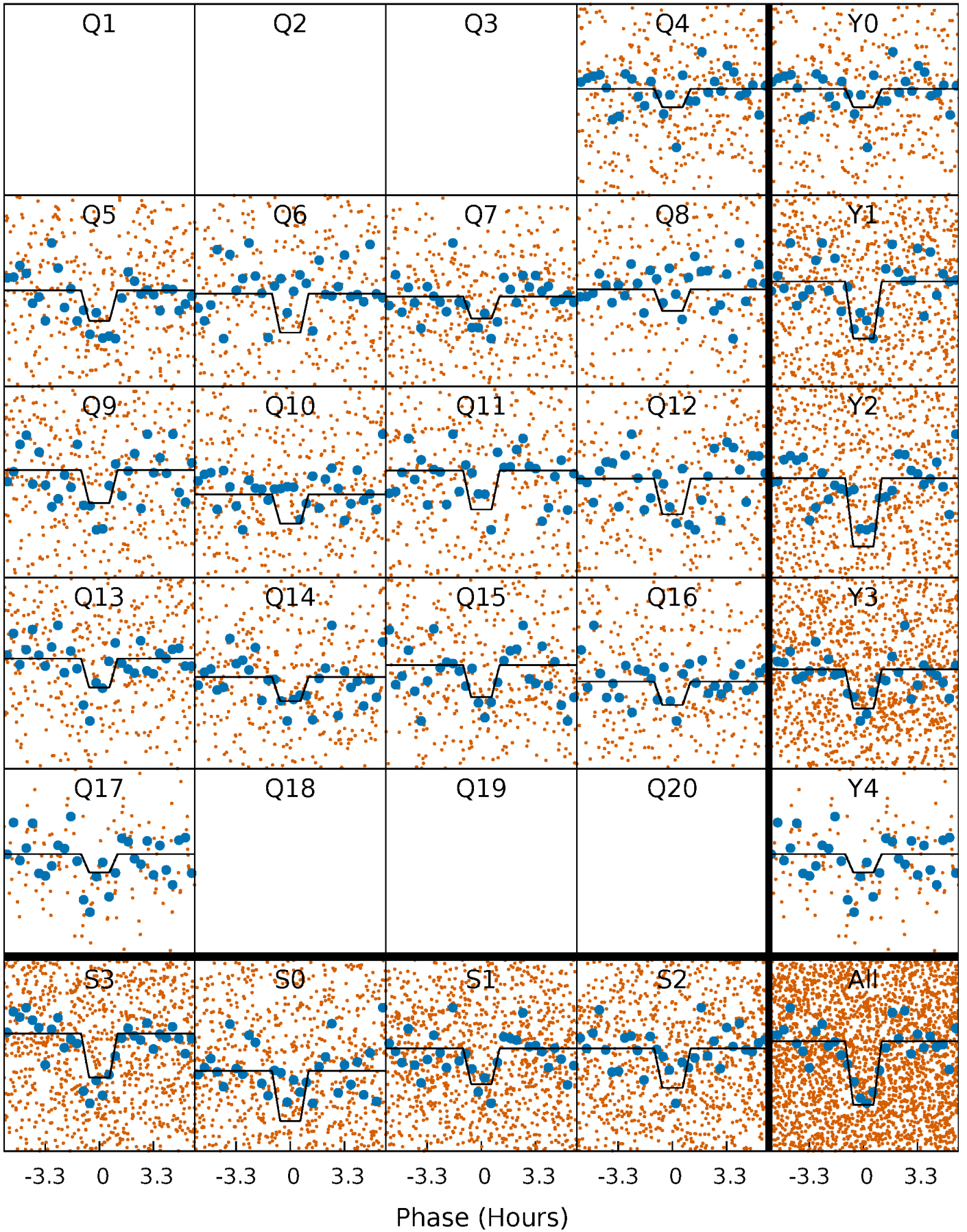
DV Quarter-Phased Transit Curves

TCE 007769815-01 P= 4.435385 Days $T_0=134.729818$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

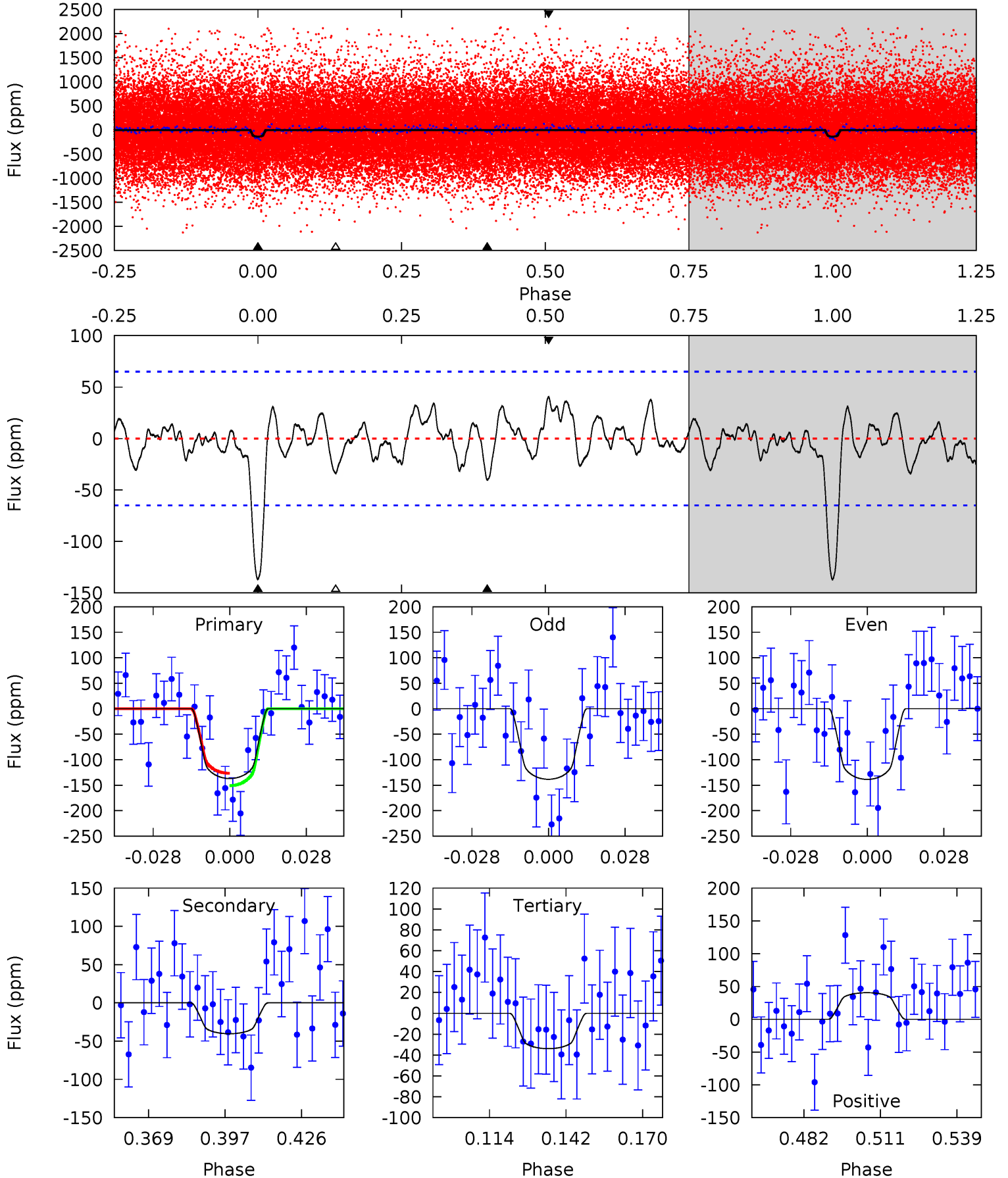
TCE 007769815-01 P= 4.435342 Days $T_0=134.740855$ (BKJD)



DV Model-Shift Uniqueness Test

007769815-01, P = 4.435385 Days, E = 134.729818 Days

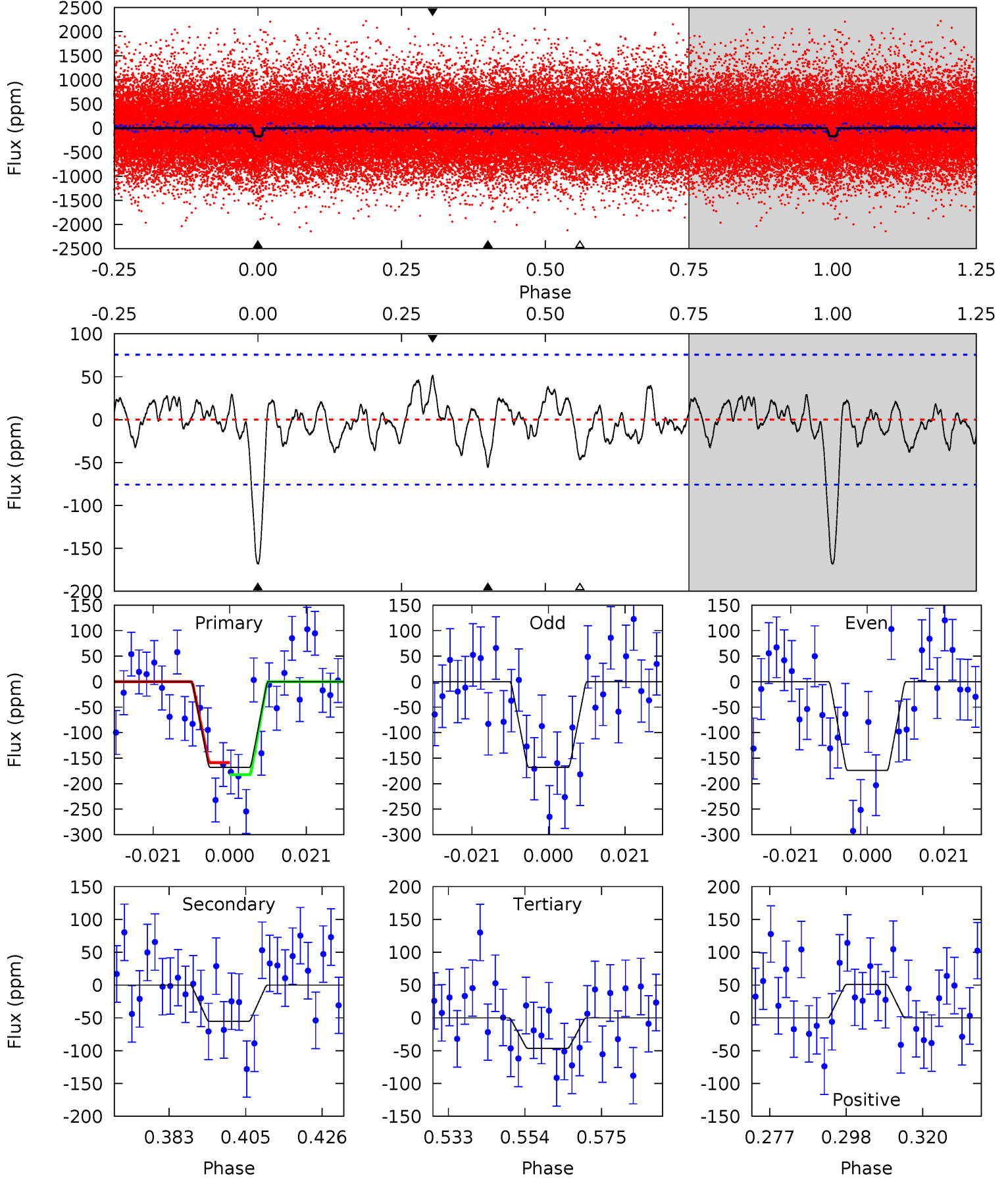
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.2	3.00	2.52	3.01	4.82	2.19	1.15	7.65	7.16	0.48	-0.02	0.01	0.99	0.23	0.90



Alt Model-Shift Uniqueness Test

007769815-01, P = 4.435342 Days, E = 134.740855 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.8	3.56	3.00	3.28	4.88	2.30	1.19	7.83	7.54	0.57	0.28	0.19	1.04	0.23	0.77



Stellar Parameters For KIC 007769815

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5659^{+186}_{-186}	$4.511^{+0.069}_{-0.161}$	$-0.320^{+0.300}_{-0.300}$	$0.842^{+0.215}_{-0.092}$	$0.839^{+0.106}_{-0.080}$	$1.977^{+0.696}_{-0.900}$
	+3%/-3%	+2%/-4%	+94%/-94%	+26%/-11%	+13%/-10%	+35%/-46%
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 007769815-01 / KOI 6915.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-40 ± 13	$1.39^{+0.97}_{-0.87}$	1447^{+96}_{-69}	4003^{+2100}_{-668}	28^{+173}_{-18}
Alt.	-55 ± 16	$1.44^{+0.97}_{-0.81}$	1450^{+89}_{-66}	4150^{+1869}_{-669}	34^{+156}_{-22}

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

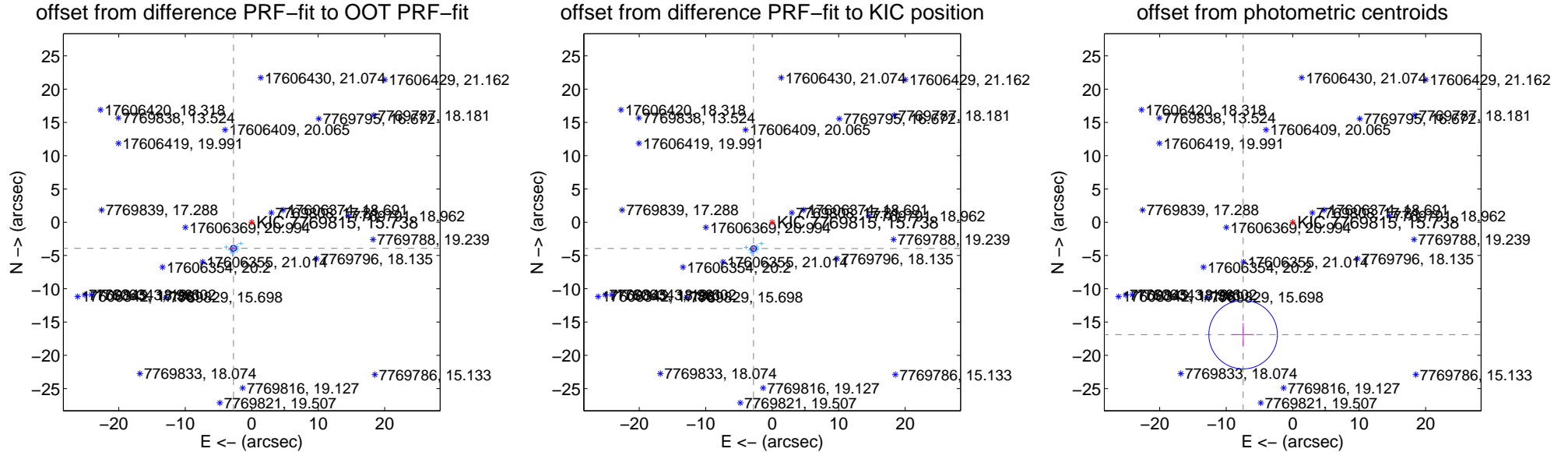
DV Centroid Data

Supplemental centroid analysis for 007769815-01. Kepler magnitude: 15.74. Transit SNR 8.87

There are 13 quarters with good PRF difference image offsets

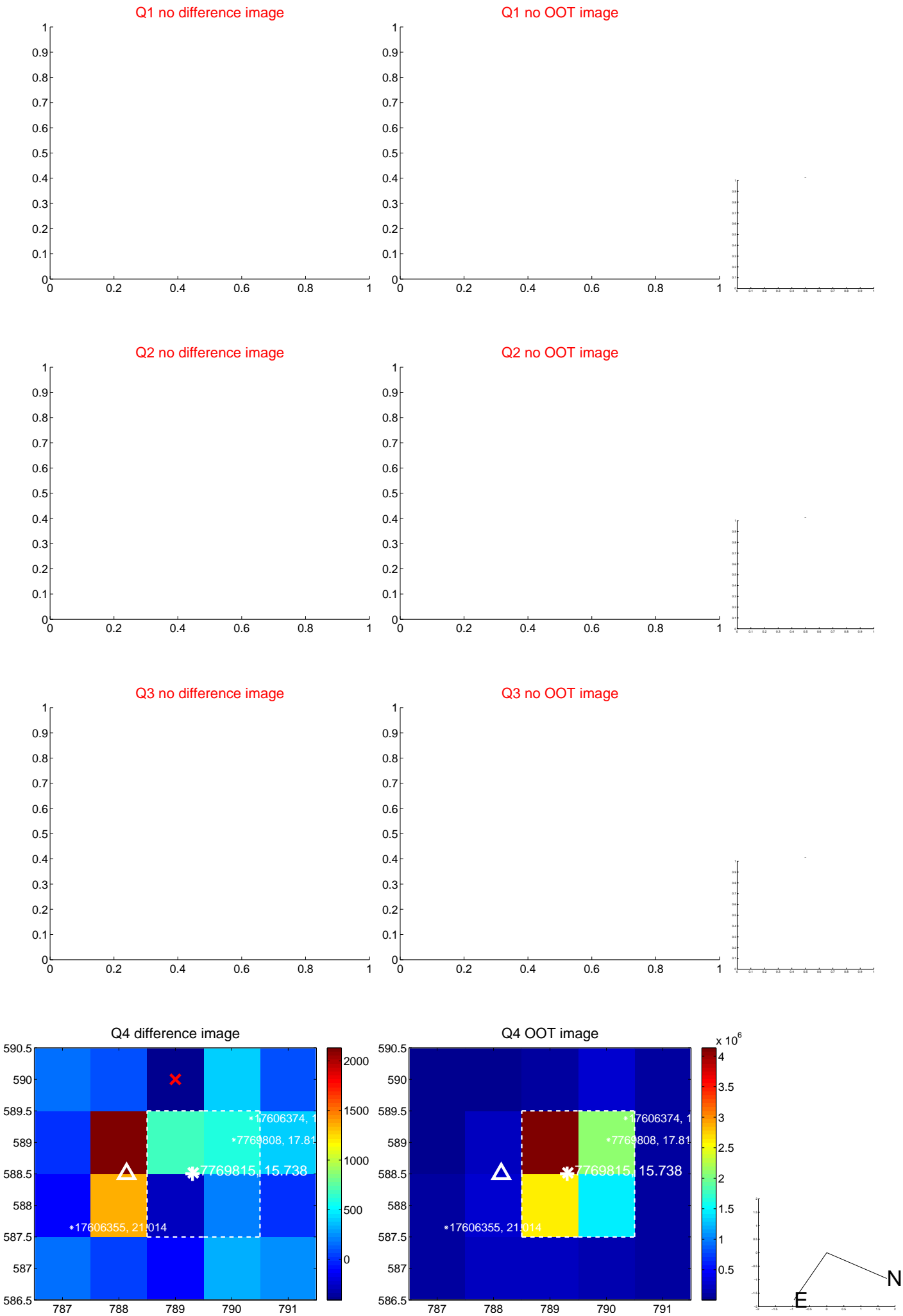
The direct PRF centroid is offset from the target star catalog position by about 0.03 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	4.784 ± 0.147	32.44	2.745 ± 0.150	-3.918 ± 0.114
PRF-fit source offset from KIC position	4.847 ± 0.140	34.58	2.804 ± 0.147	-3.954 ± 0.104
photometric centroid source offset	18.46 ± 1.72	10.75	7.45 ± 1.62	-16.89 ± 1.74

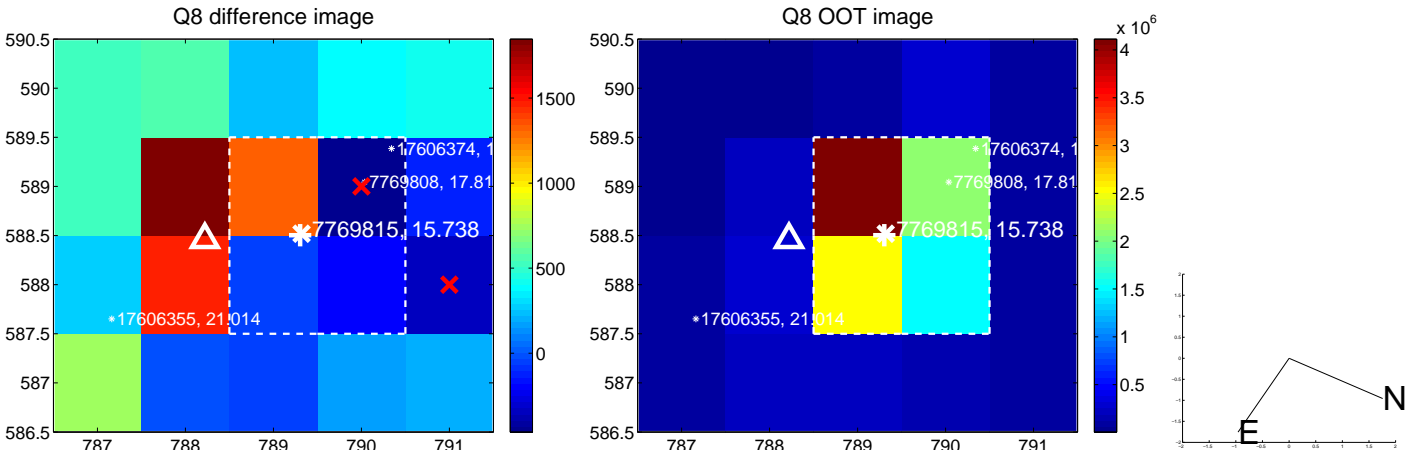
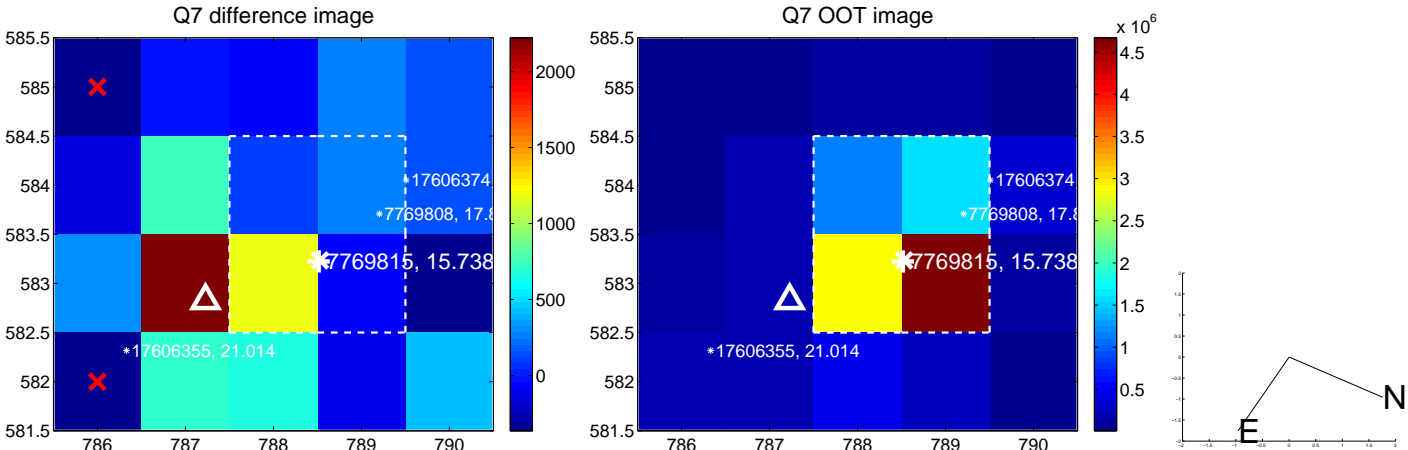
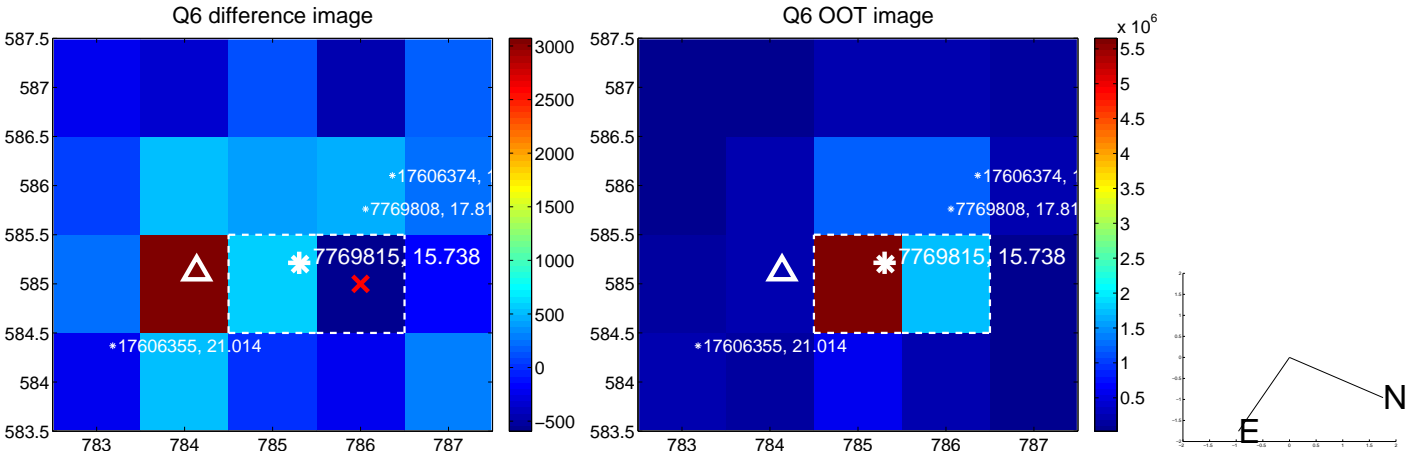
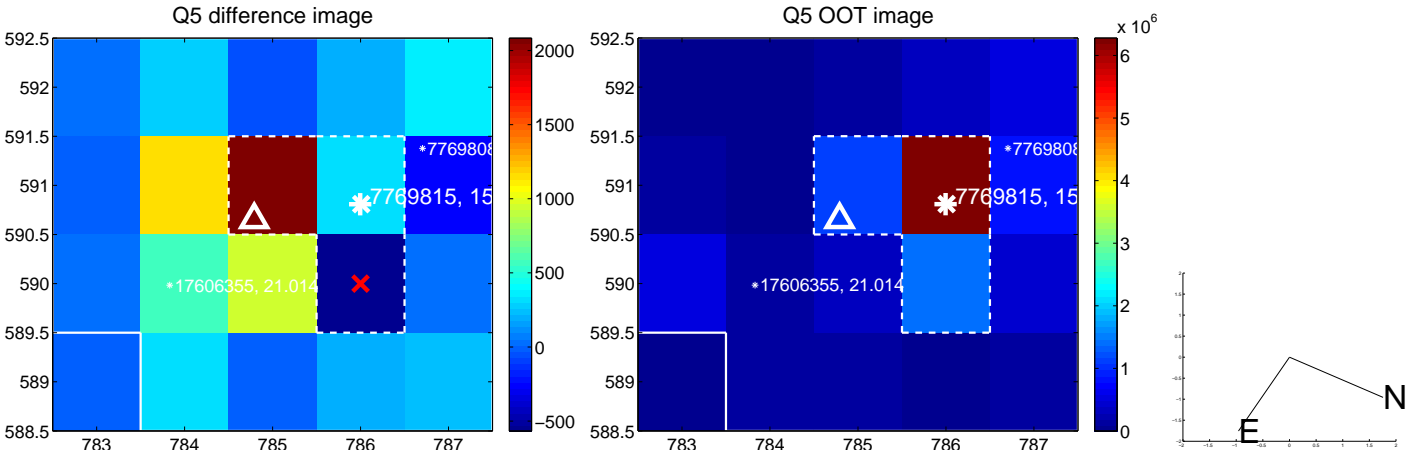


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

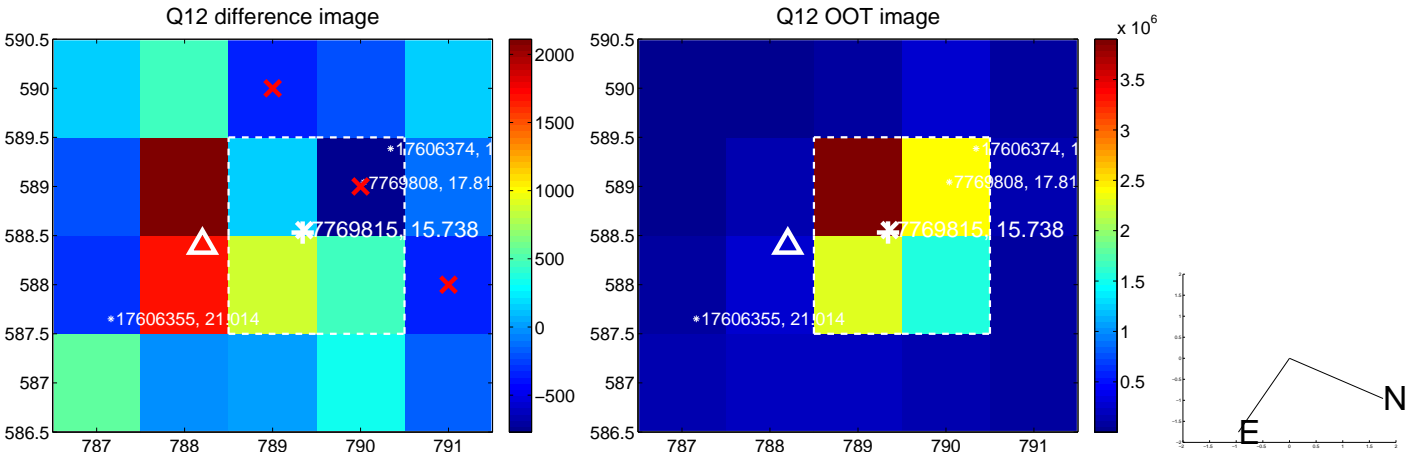
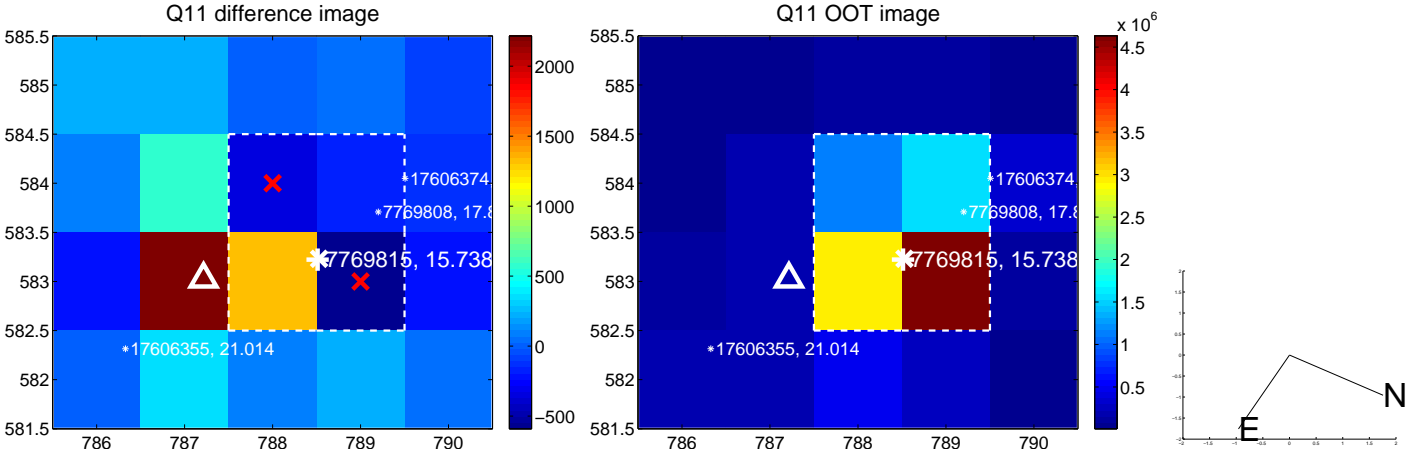
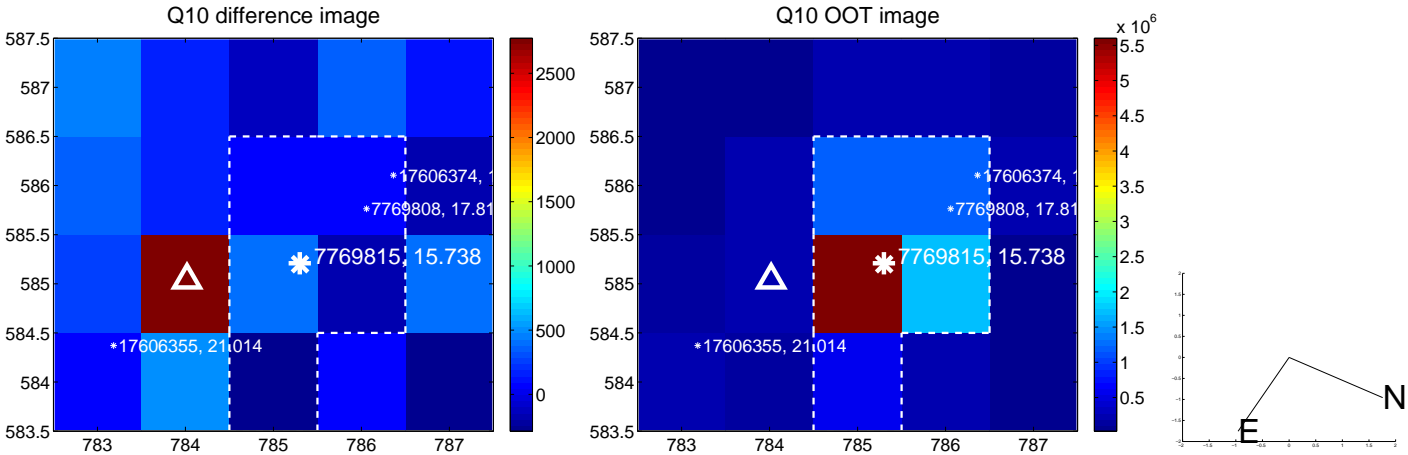
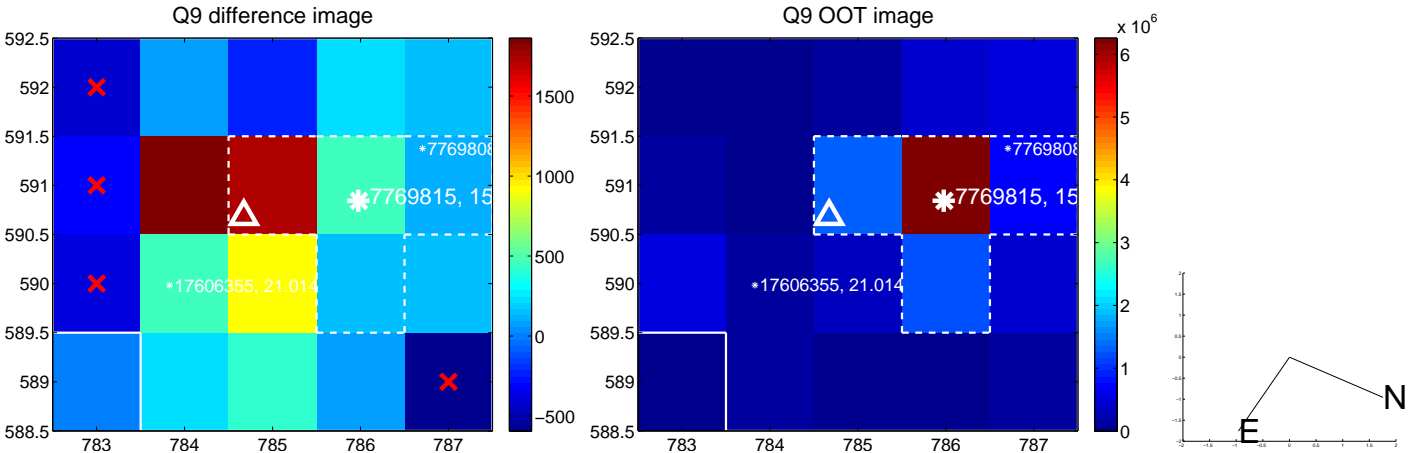
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



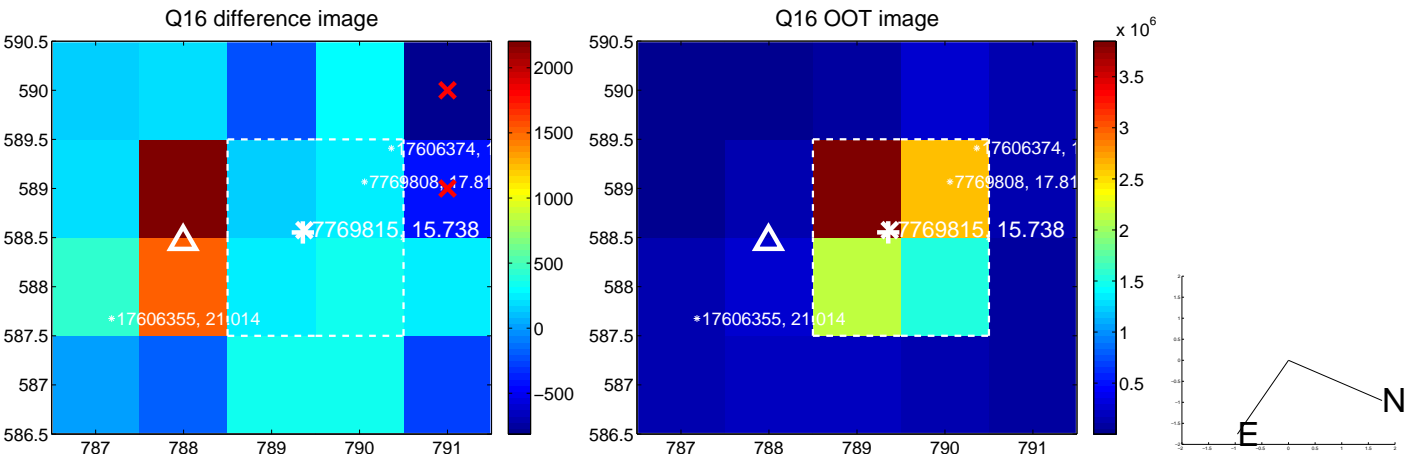
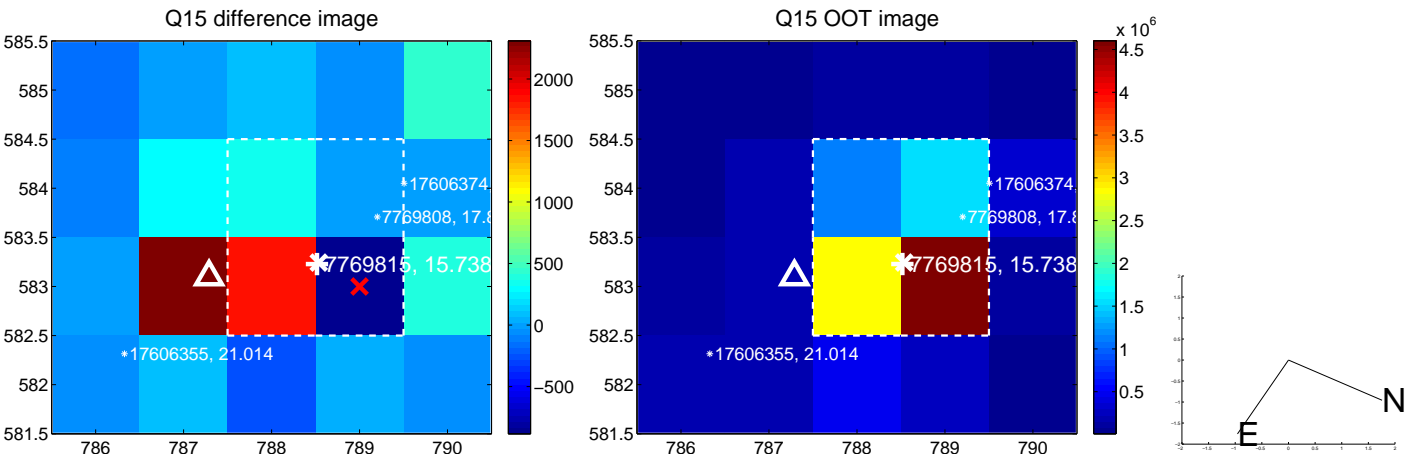
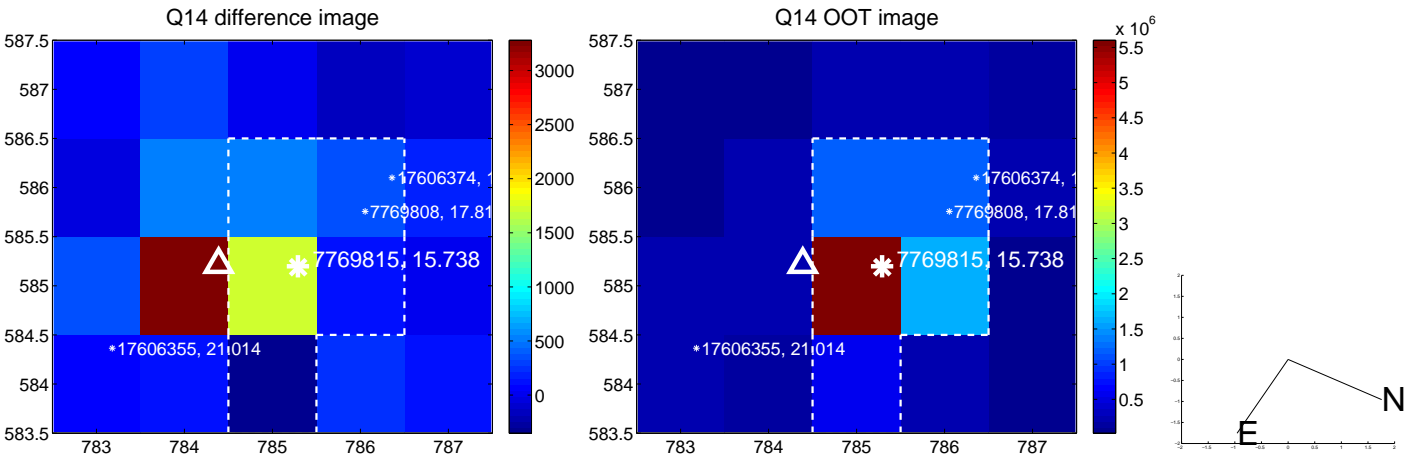
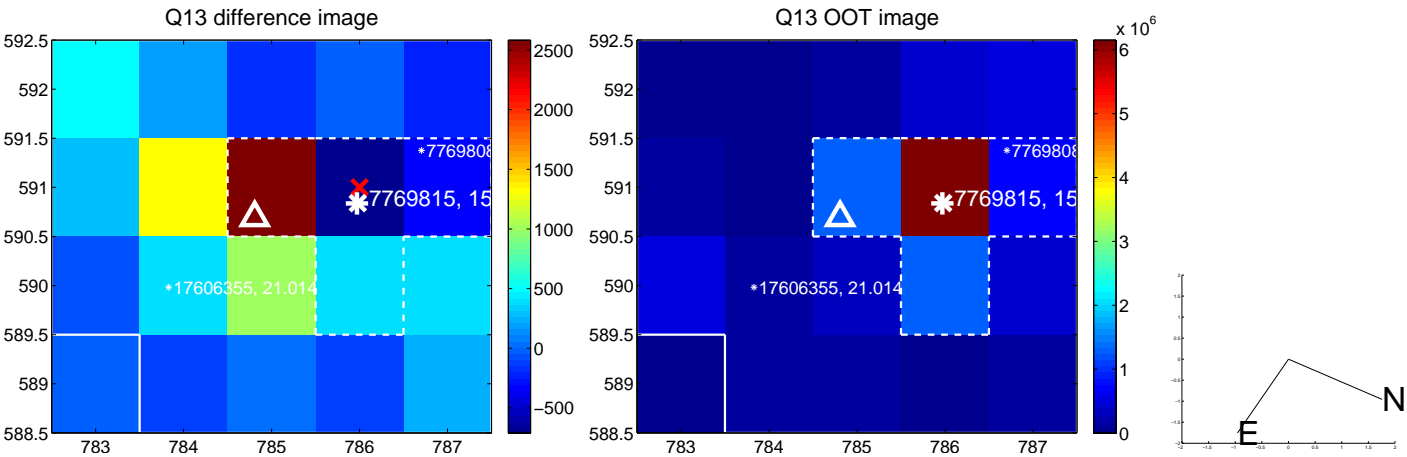
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



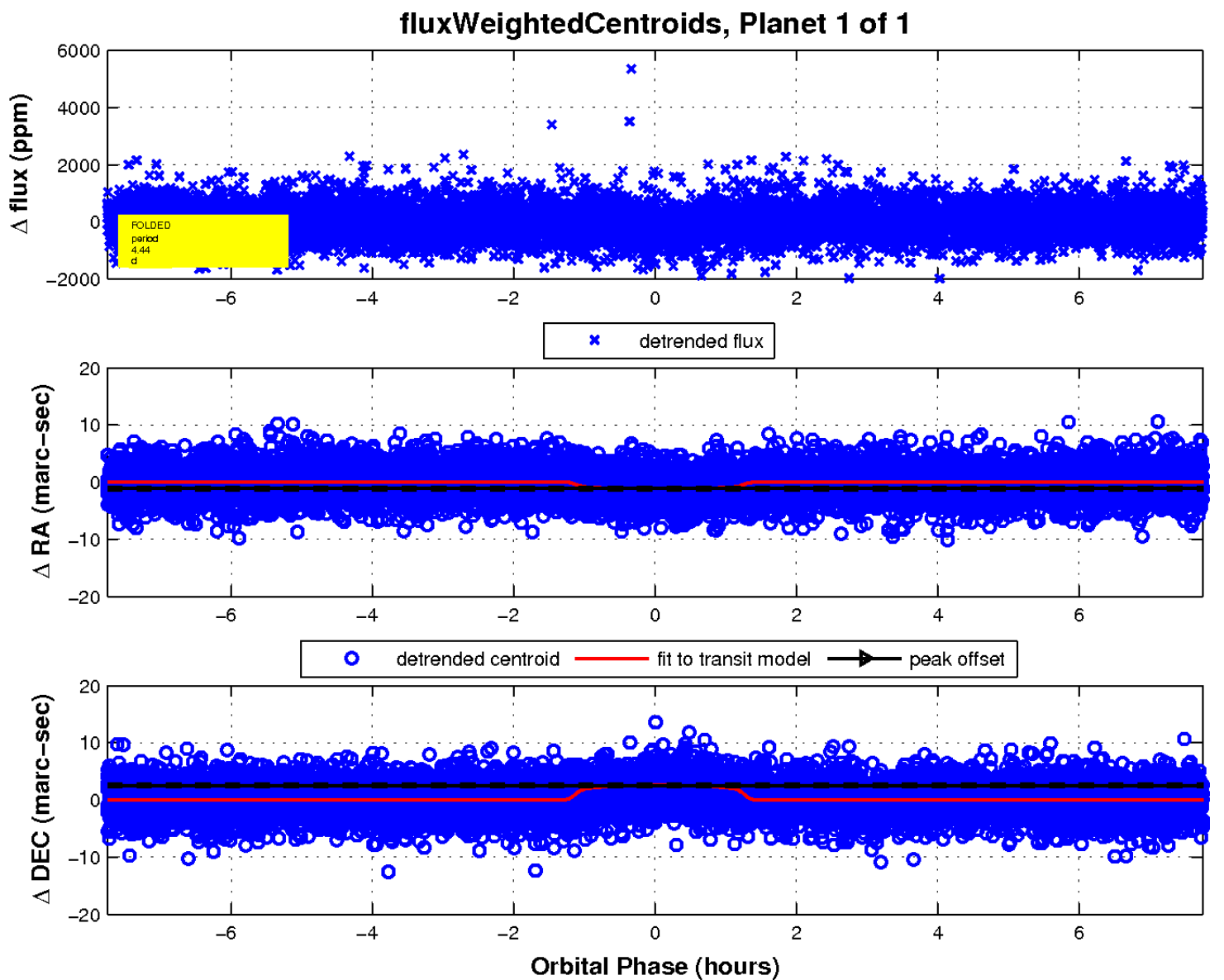
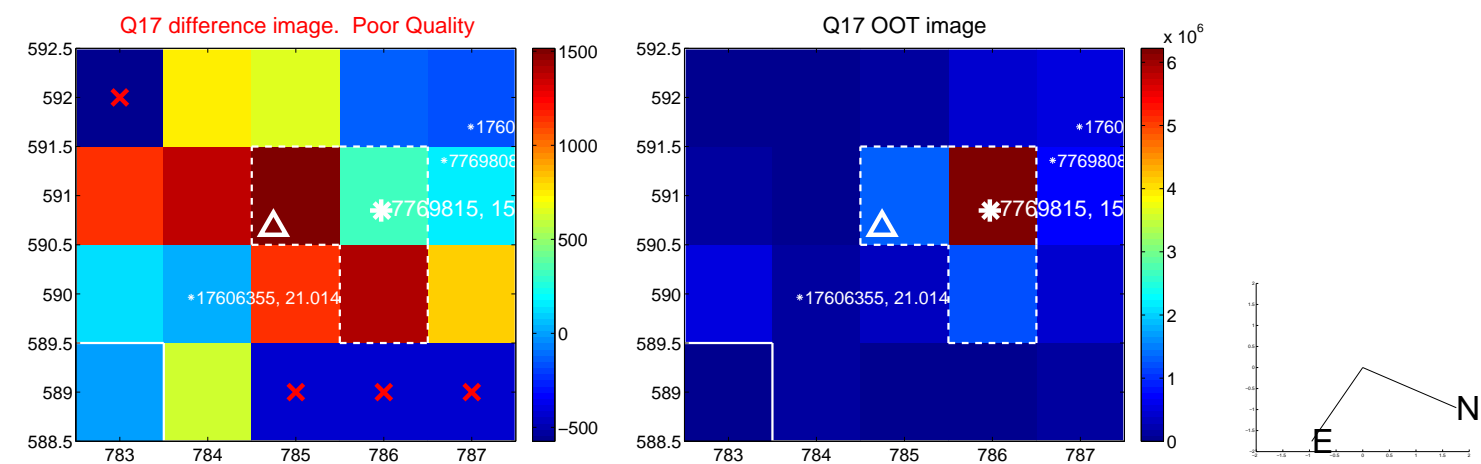
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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UKIRT Image

Declination

