

KIC 008288947

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})
008288947-01	OBS	1142.01	3.755756	133.430693	417.0	2.361	24.5	26.9	0.79	5311	1.84	215.95

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008288947-01	OBS	PC	1.00	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.

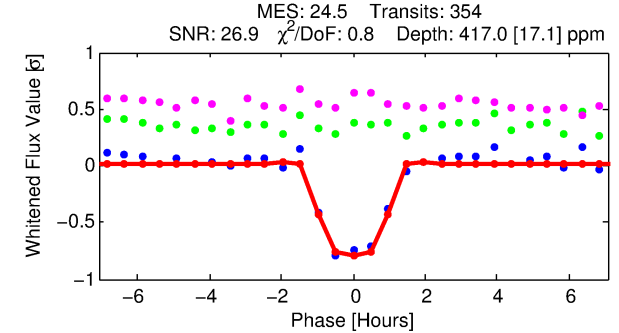
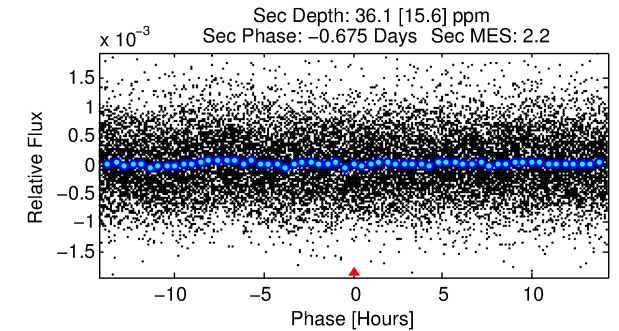
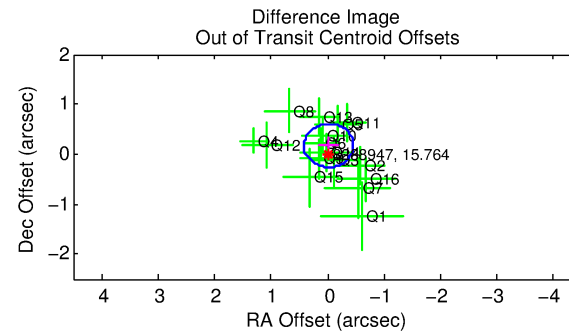
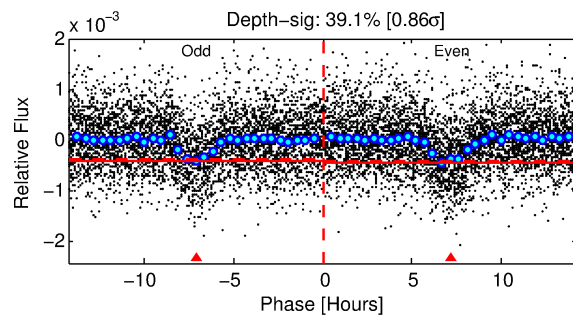
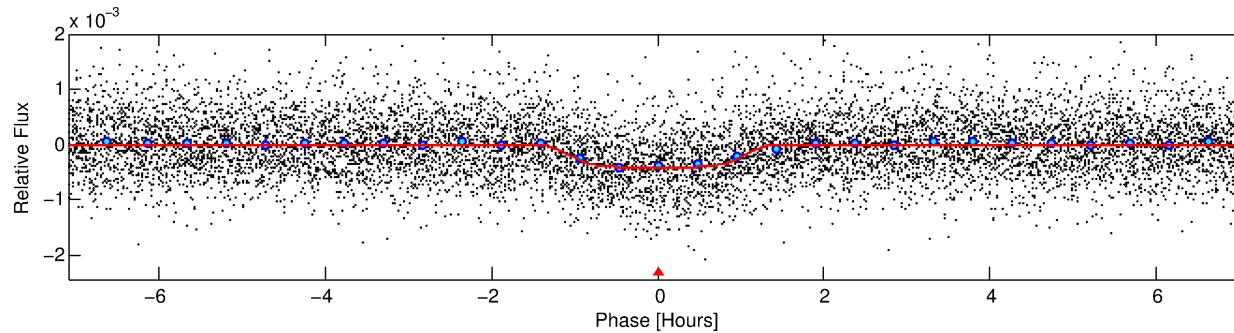
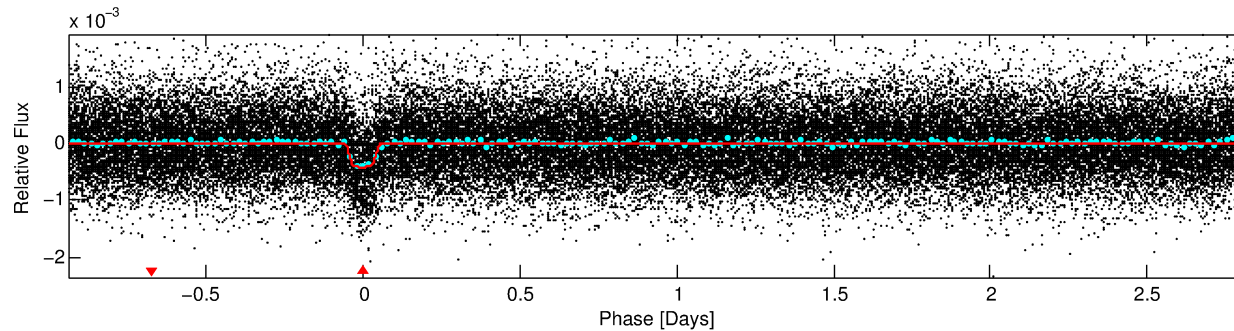
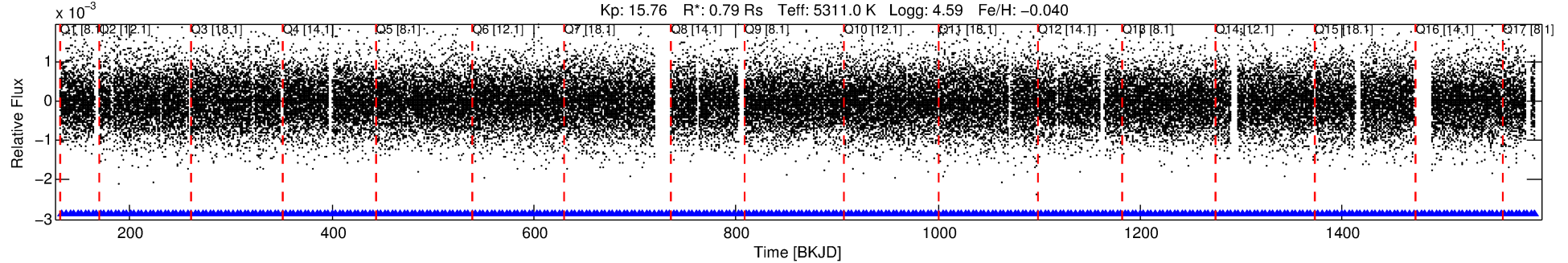
Ephemeris Match Information For 008288947-01

No Significant Match Found

DV One-Page Summary

KIC: 8288947 Candidate: 1 of 1 Period: 3.756 d
KOI: K01142.01 Corr: 0.984

Kp: 15.76 R*: 0.79 Rs Teff: 5311.0 K Logg: 4.59 Fe/H: -0.040



DV Fit Results:

Period = 3.75576 [0.00001] d
Epoch = 133.4307 [0.0015] BKJD
Rp/R* = 0.0214 [0.0082]
a/R* = 7.10 [10.70]
b = 0.84 [0.55]
Seff = 215.95 [52.72]
Teq = 977 [60] K
Rp = 1.84 [0.77] Re
a = 0.0453 [0.0064] AU
Ag = 11.98 [10.81] [1.02σ]
Teffp = 2812 [624] K [2.92σ]

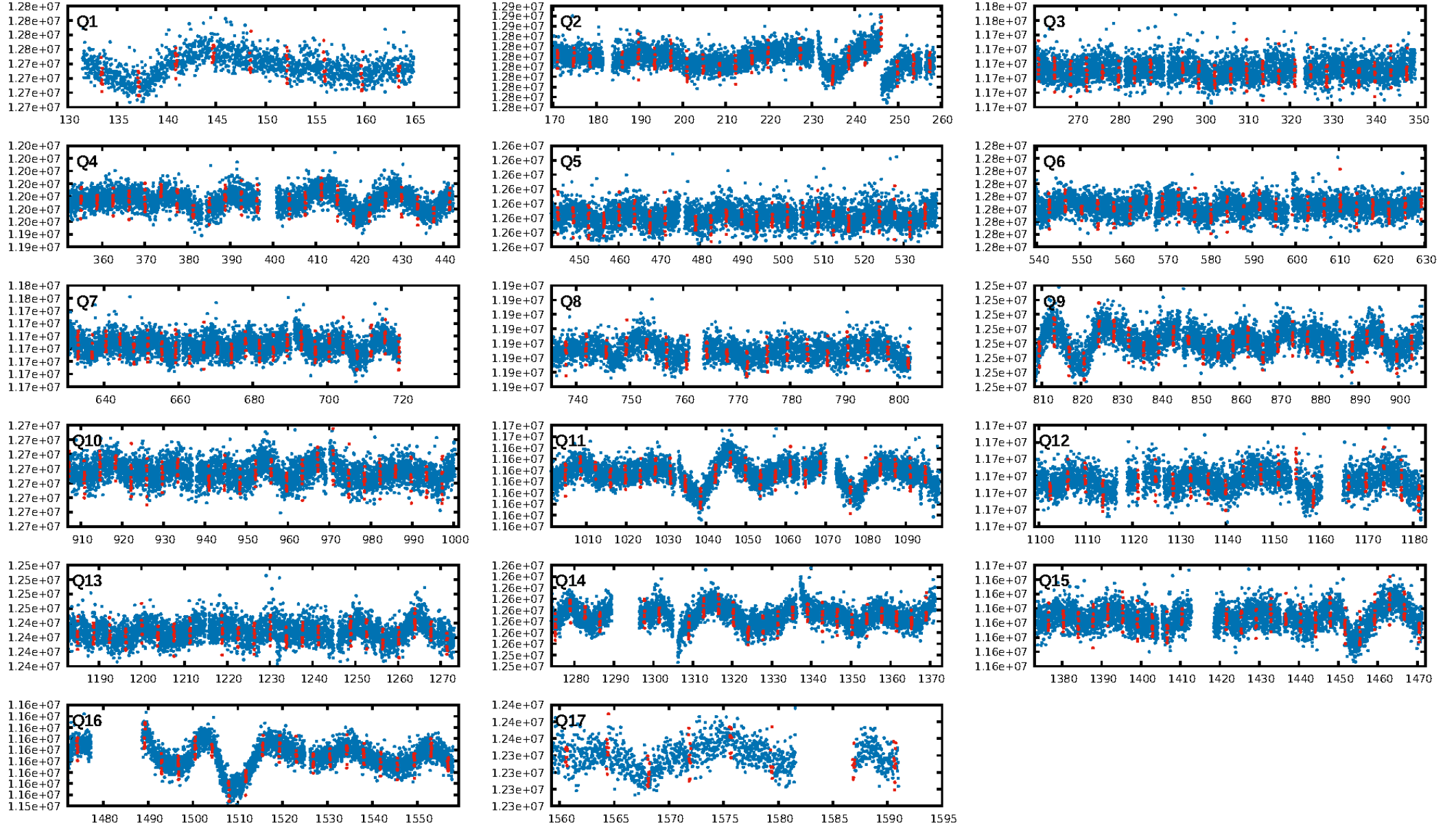
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 6.58e-130
RollingBand-fgt: 1.00 [337/337]
GhostDiagnostic-chr: 7.115
Centroid-sig: 9.3%
Centroid-so: 0.588 arcsec [1.30σ]
OotOffset-rm: 0.176 arcsec [1.21σ]
KicOffset-rm: 0.114 arcsec [0.61σ]
OotOffset-st: 4/4/4/4 [16]
KicOffset-st: 4/4/4/4 [16]
DiffImageQuality-fgm: 1.00 [16/16]
DiffImageOverlap-fno: 1.00 [17/17]

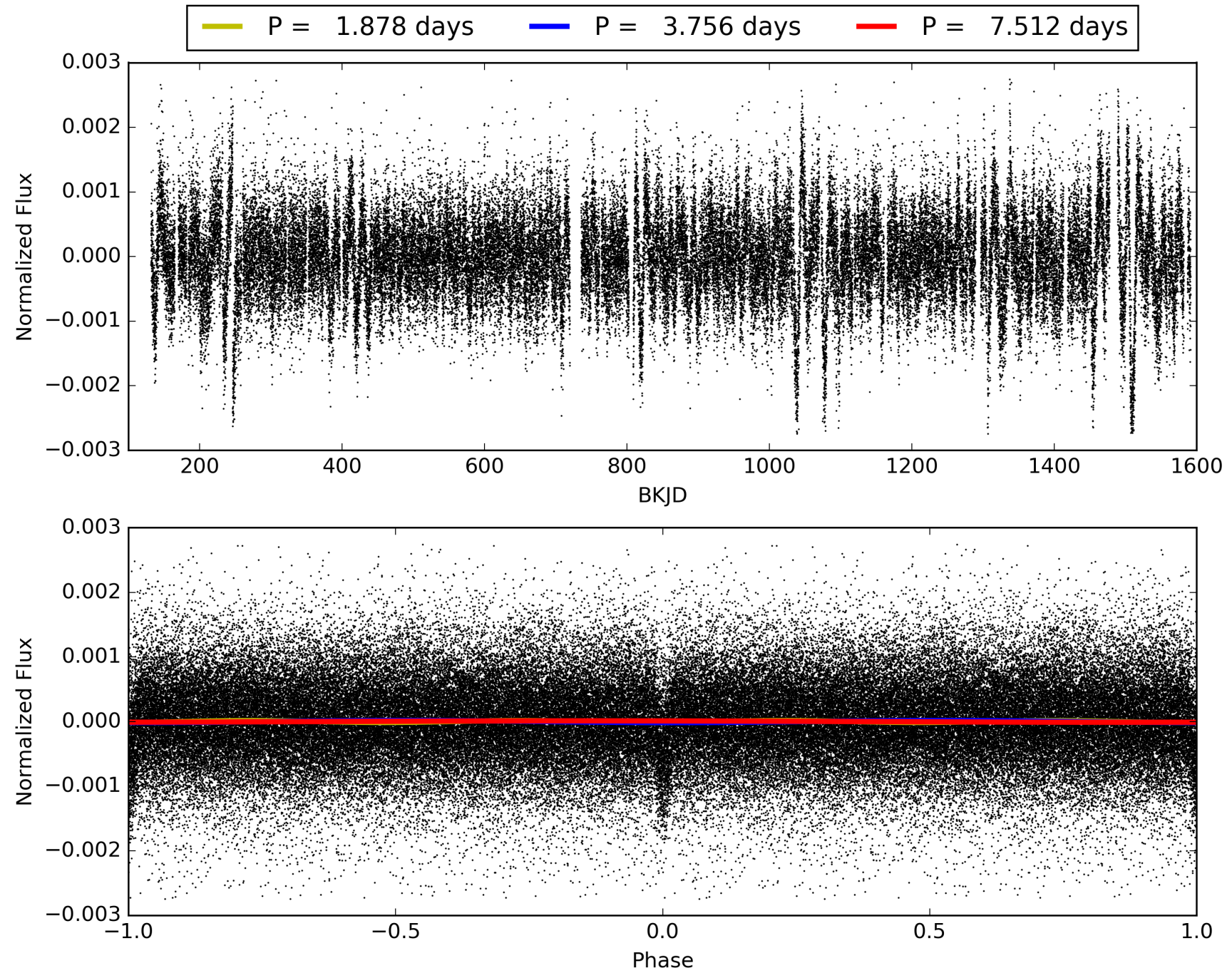
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 01:03:44 Z

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

TCE 008288947-01, PDC Light Curves

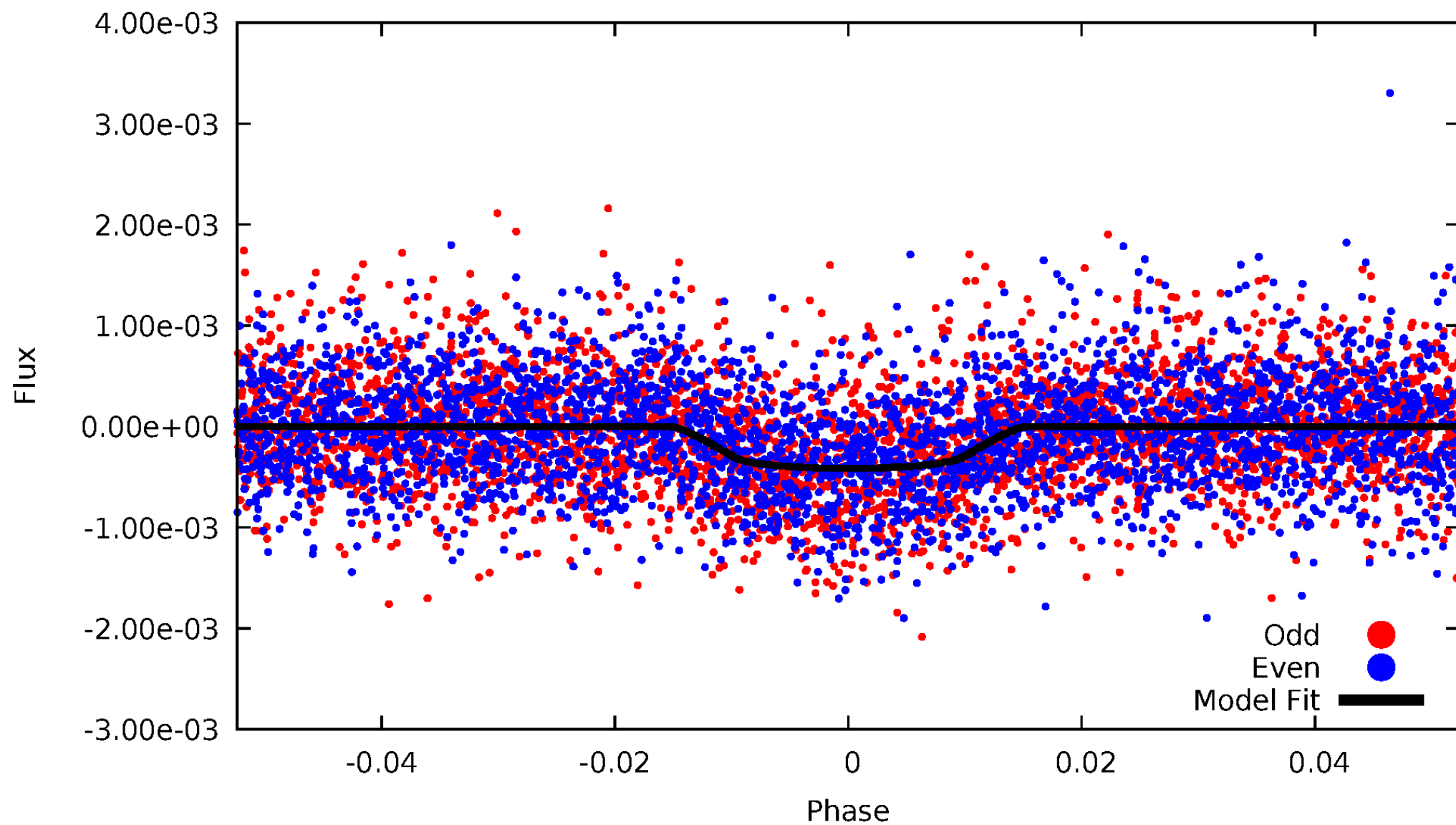


TCE 008288947-01



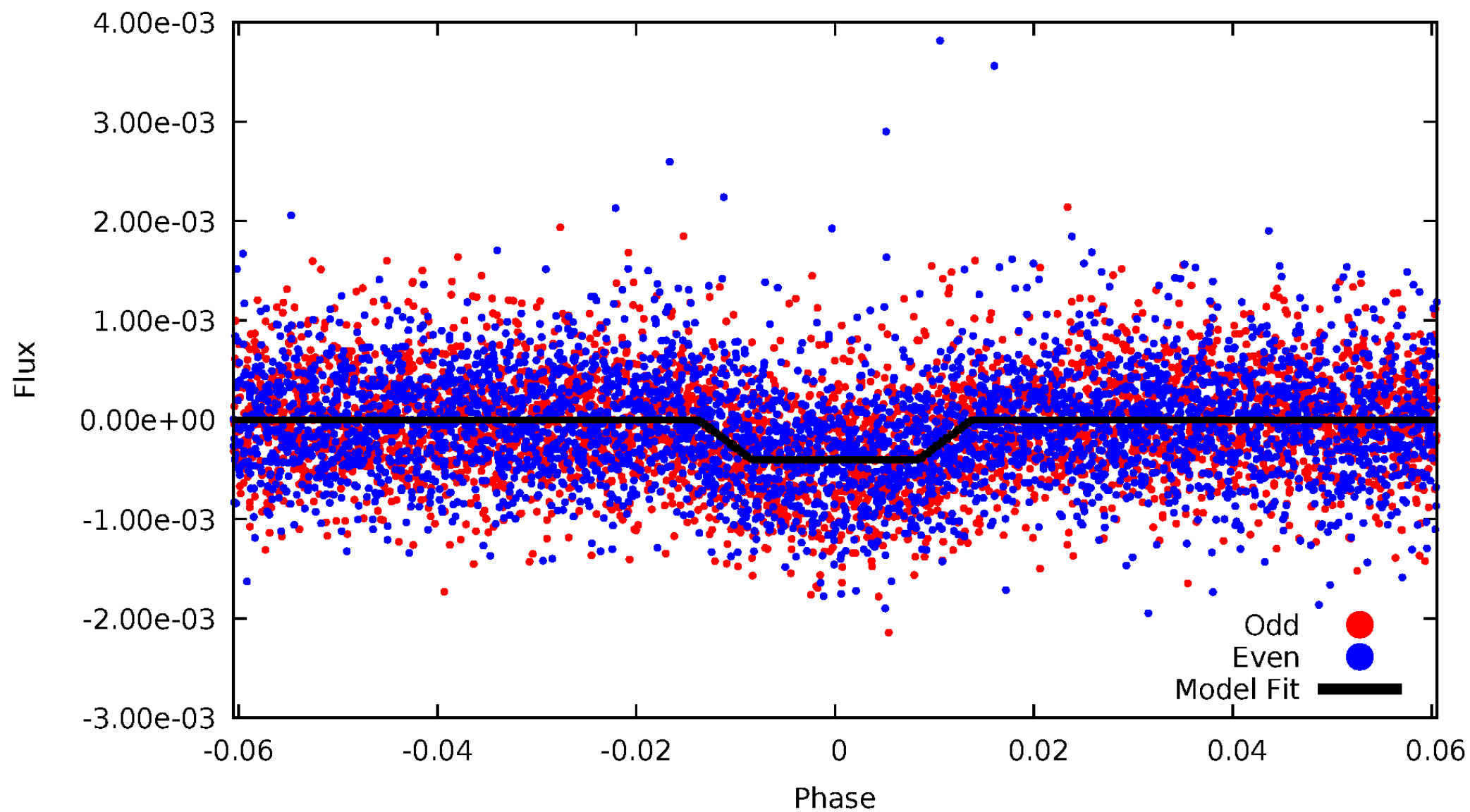
DV Odd/Even

TCE 008288947-01



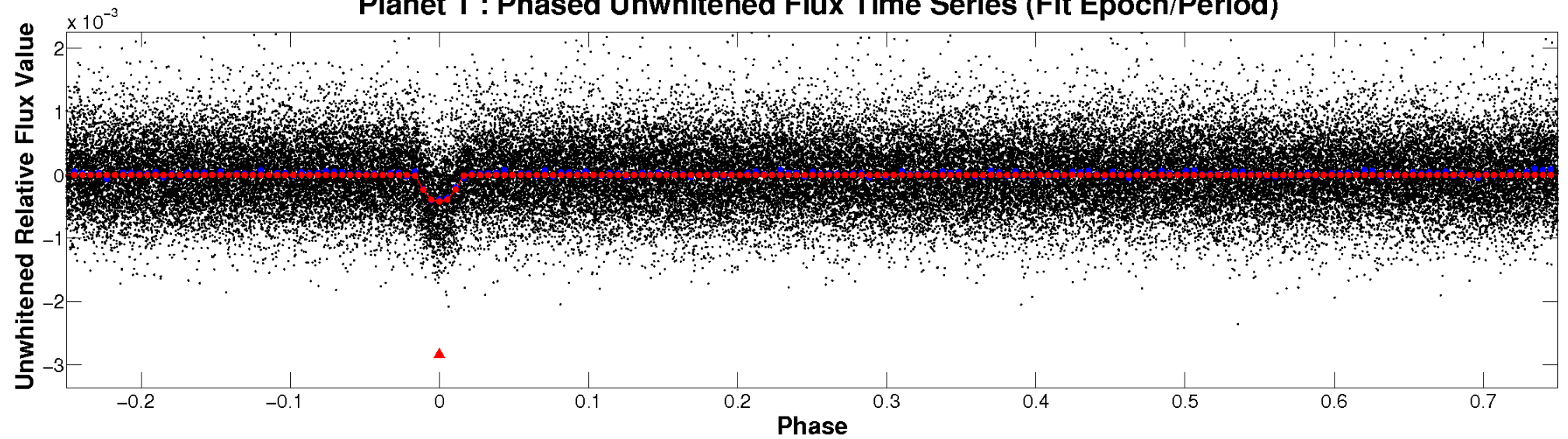
ALT Odd/Even

TCE 008288947-01

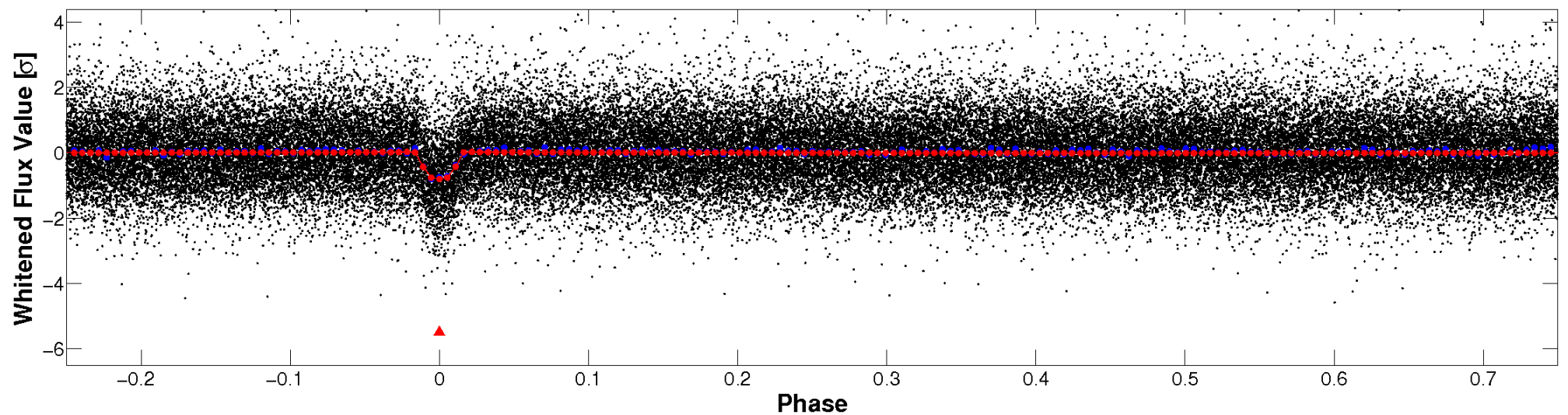


Non-Whitened Vs. Whitened Light Curve

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

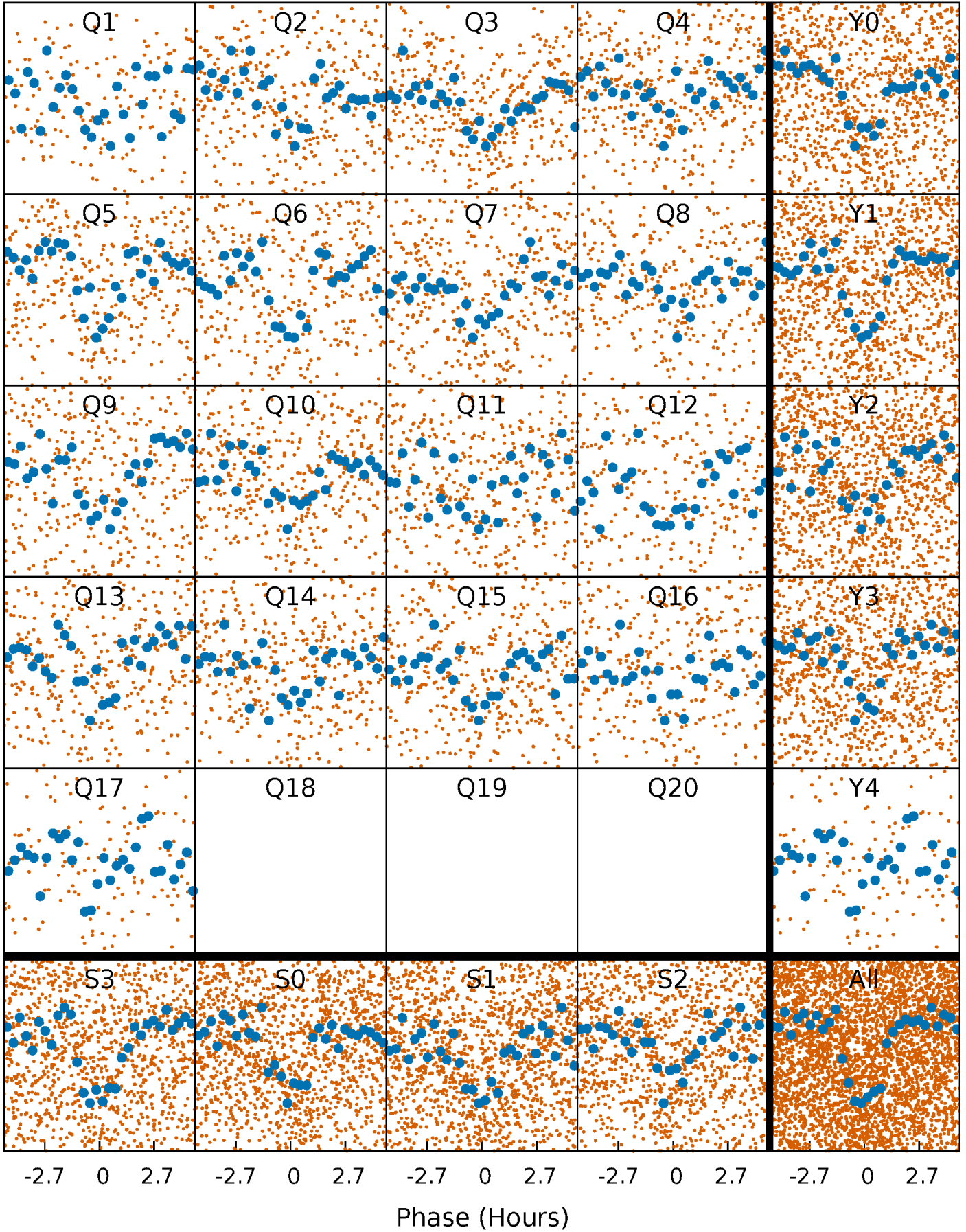


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



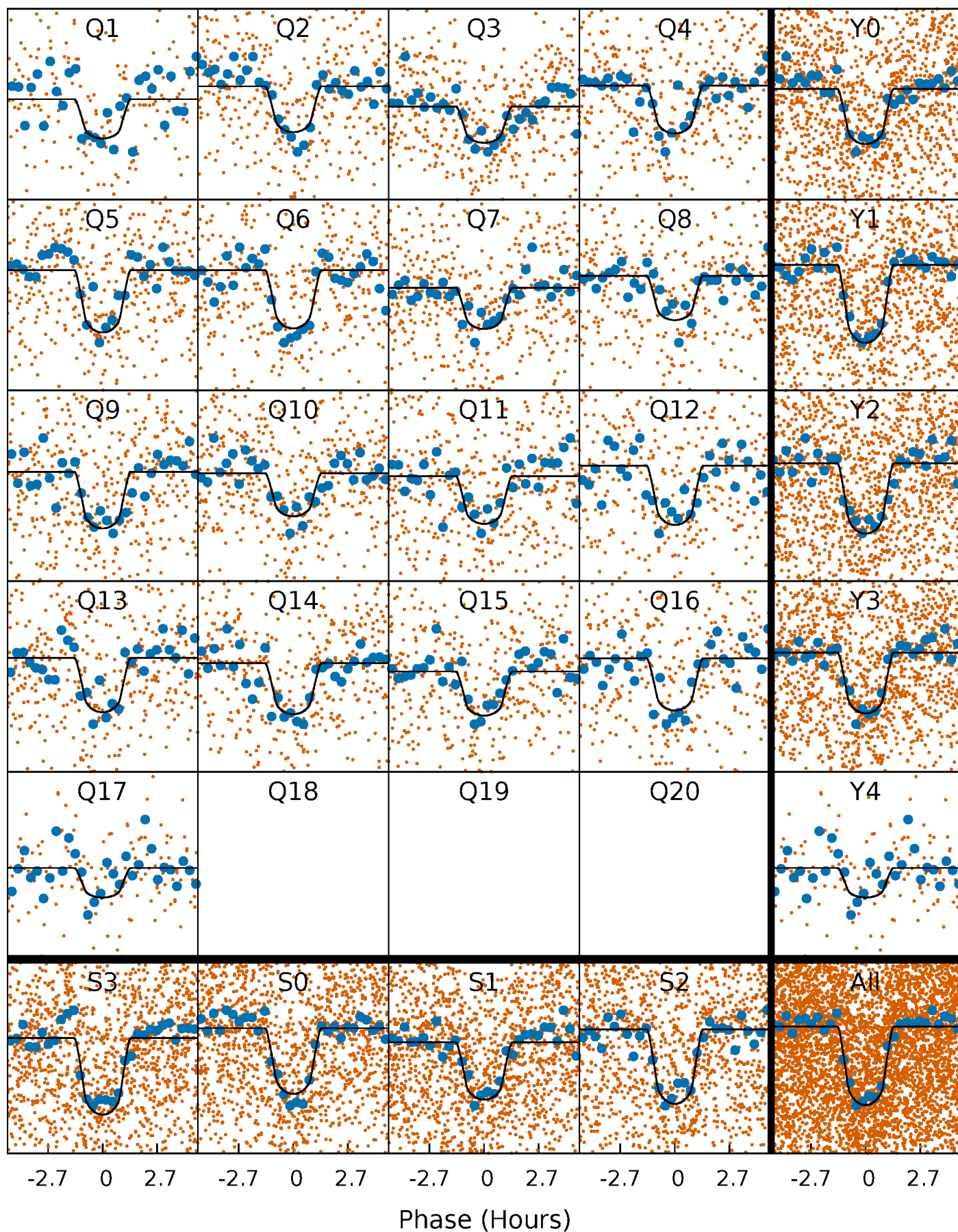
PDC Quarter-Phased Transit Curves

TCE 008288947-01 P= 3.755756 Days $T_0=133.430693$ (BKJD)



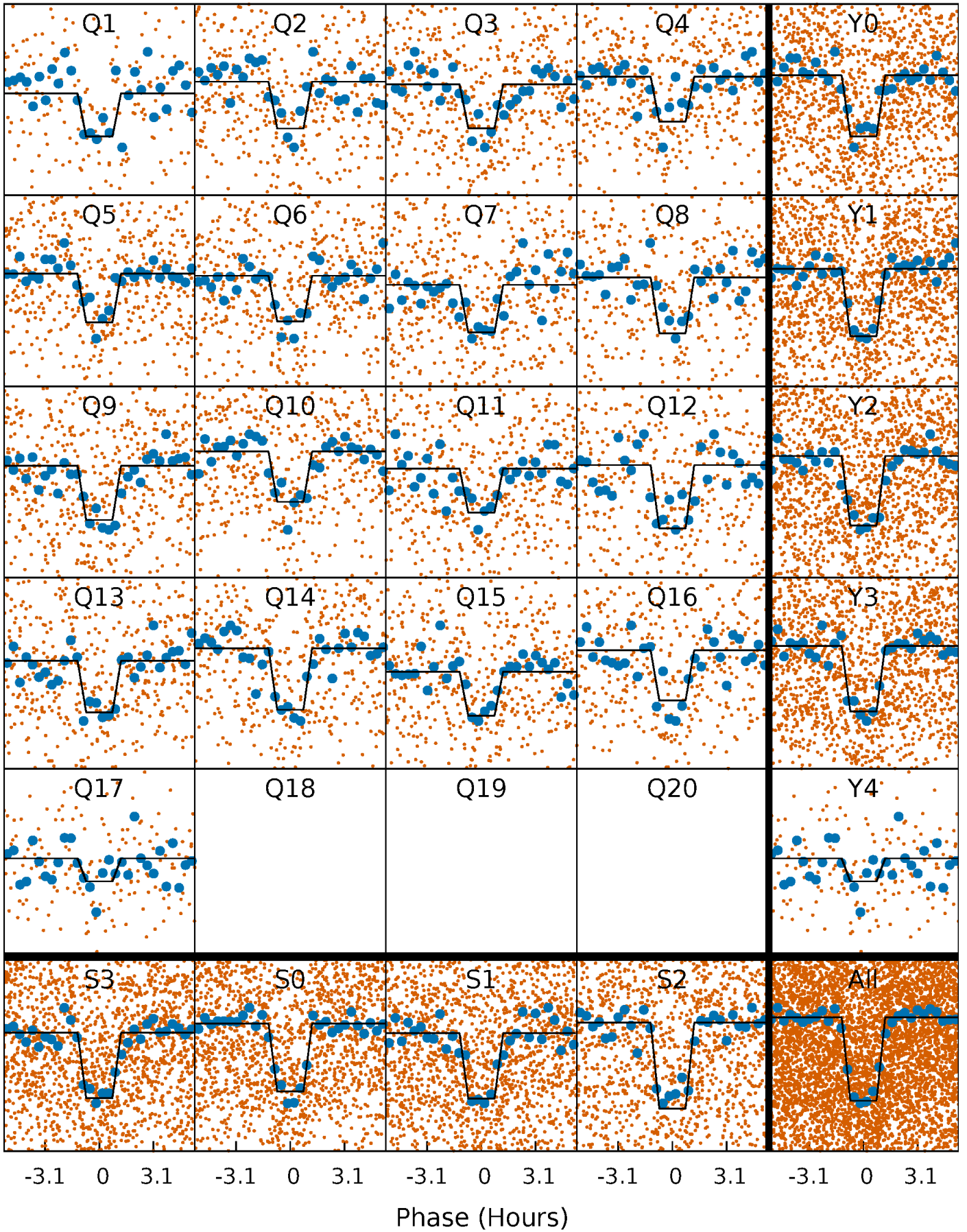
DV Quarter-Phased Transit Curves

TCE 008288947-01 P= 3.755756 Days $T_0=133.430693$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

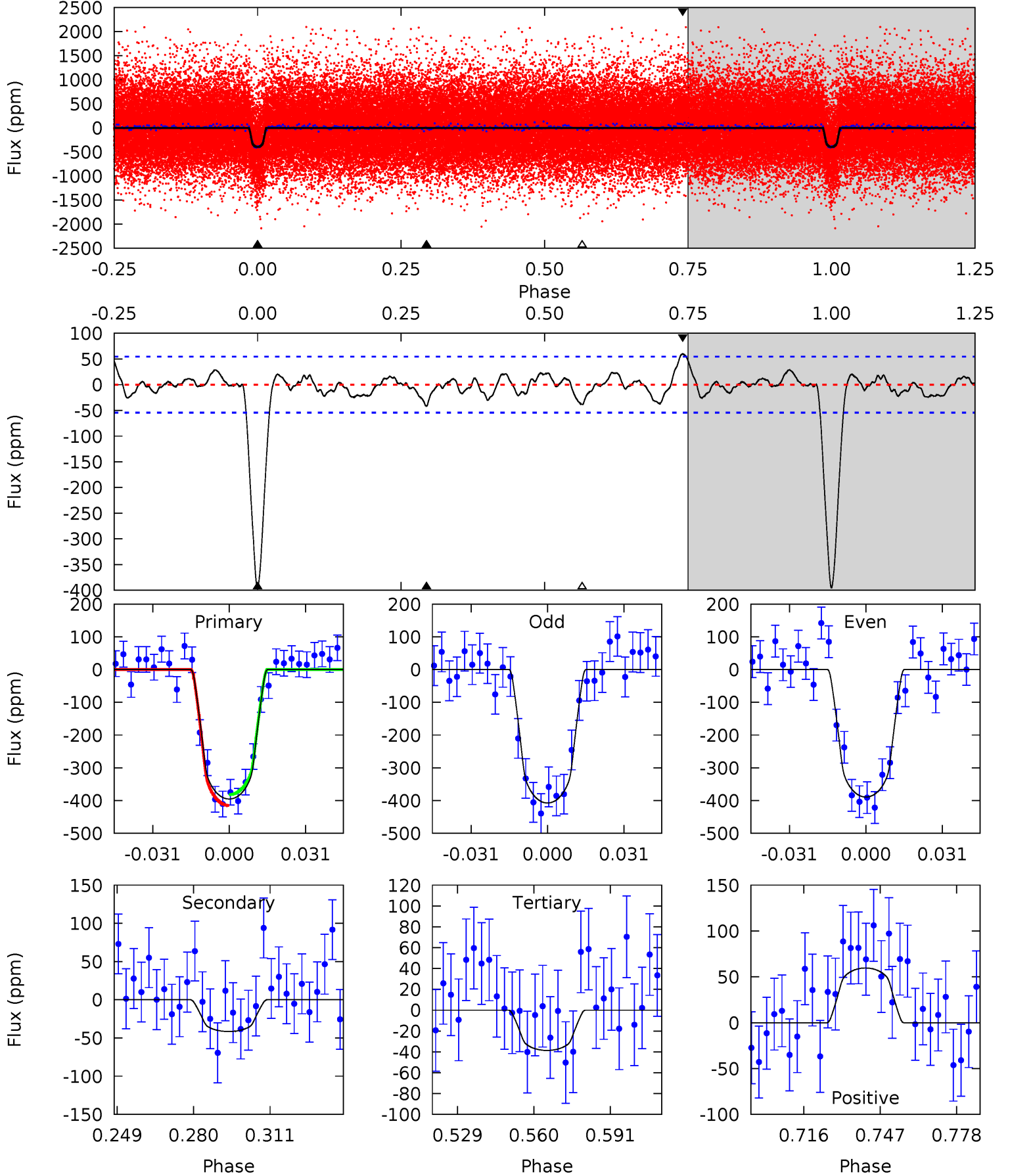
TCE 008288947-01 P= 3.755735 Days $T_0=133.434459$ (BKJD)



DV Model-Shift Uniqueness Test

008288947-01, P = 3.755756 Days, E = 129.674937 Days

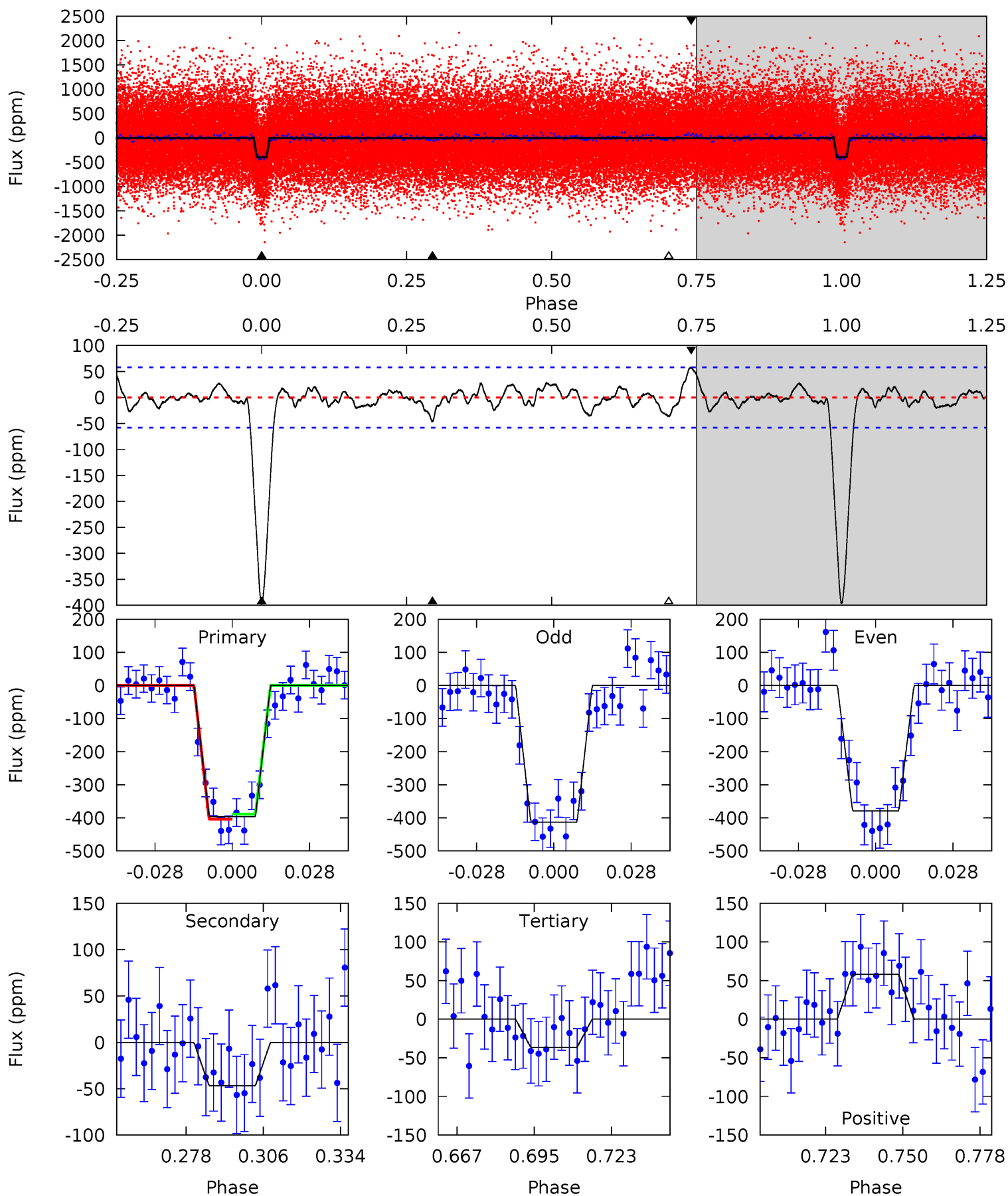
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
34.9	3.66	3.40	5.26	4.80	2.16	1.47	31.5	29.6	0.26	-1.59	0.80	0.96	0.13	1.46



Alt Model-Shift Uniqueness Test

008288947-01, P = 3.755735 Days, E = 129.678724 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
32.9	3.88	3.04	4.82	4.83	2.20	1.30	29.9	28.1	0.84	-0.94	1.42	0.95	0.13	0.66



Stellar Parameters For KIC 008288947

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5311^{+175}_{-159}	$4.588^{+0.035}_{-0.112}$	$-0.040^{+0.300}_{-0.300}$	$0.788^{+0.133}_{-0.061}$	$0.884^{+0.070}_{-0.096}$	$2.546^{+0.397}_{-0.851}$
	+3%/-3%	+1%/-2%	+750%/-750%	+17%/-8%	+8%/-11%	+16%/-33%
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 008288947-01 / KOI 1142.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-42 ± 11	$1.90^{+0.74}_{-0.74}$	1387^{+66}_{-56}	3389^{+589}_{-372}	13^{+20}_{-6}
Alt.	-47 ± 12	$1.81^{+0.71}_{-0.77}$	1390^{+67}_{-55}	3504^{+753}_{-371}	16^{+32}_{-8}

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

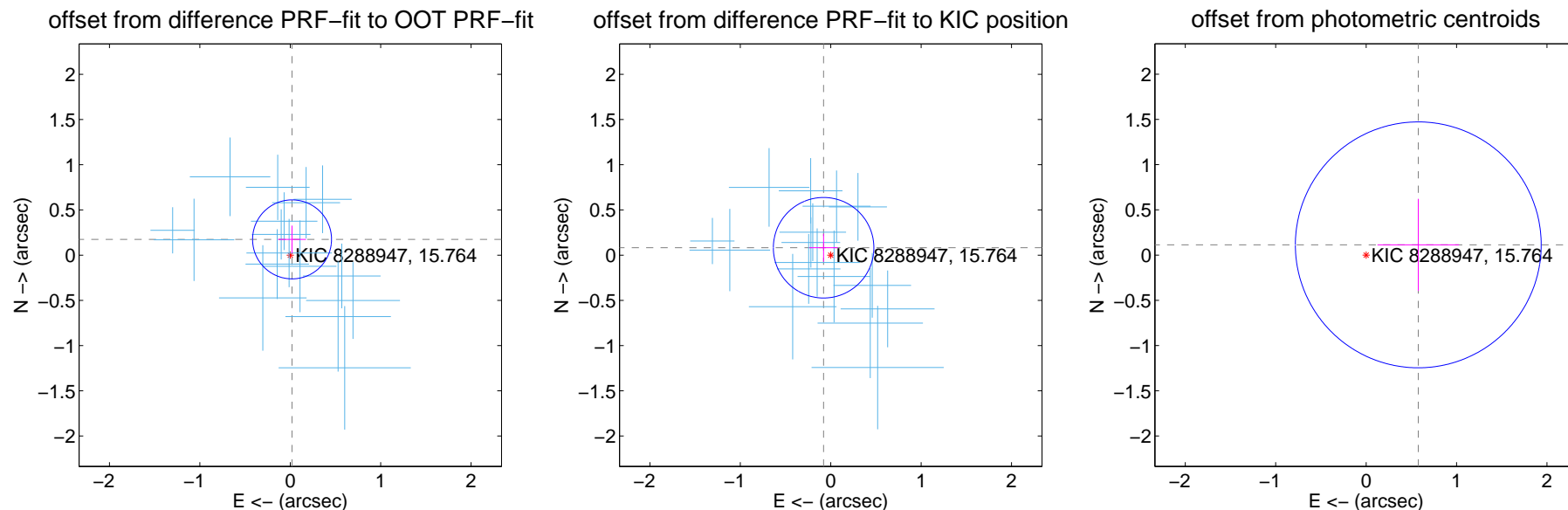
DV Centroid Data

Supplemental centroid analysis for 008288947-01. Kepler magnitude: 15.76. Transit SNR 26.92

There are 16 quarters with good PRF difference image offsets

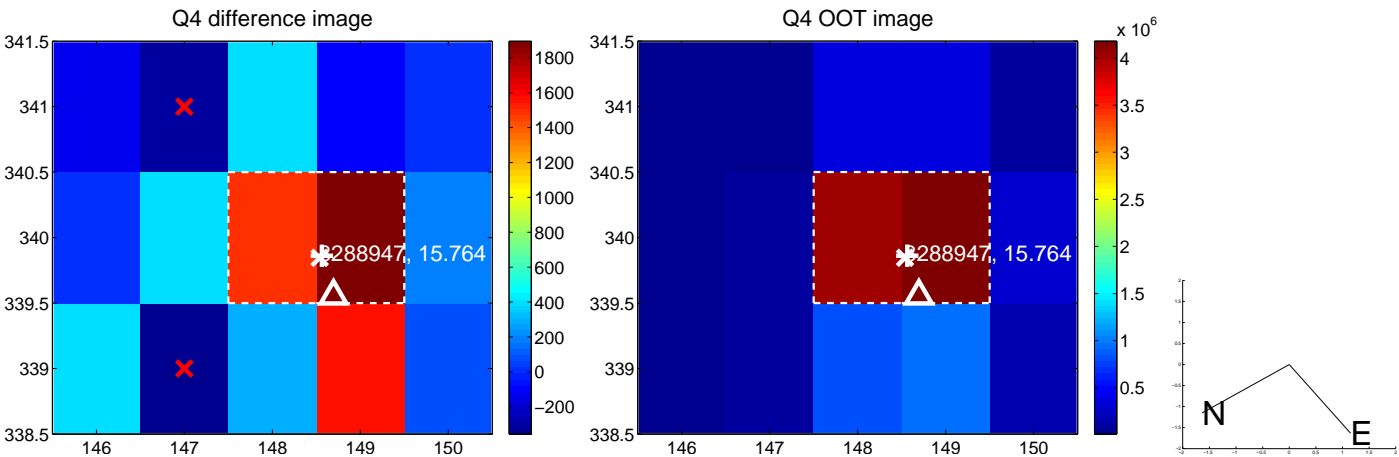
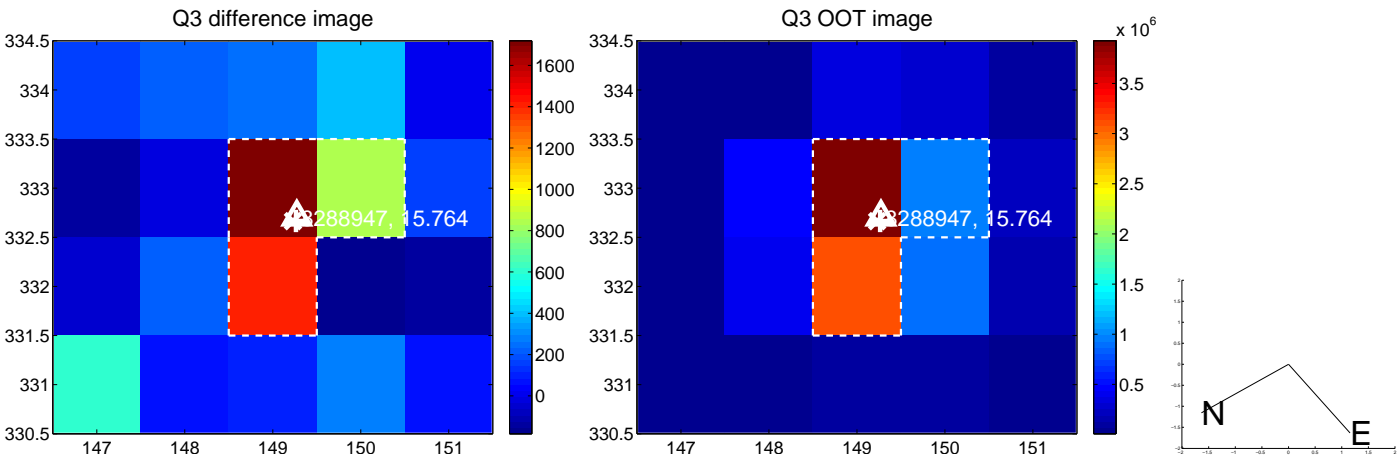
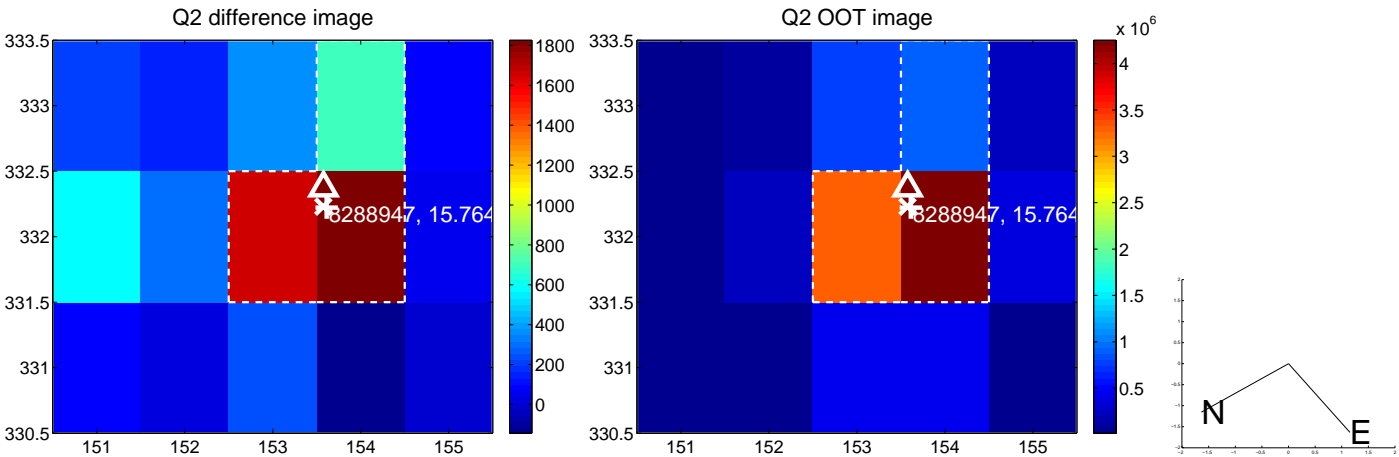
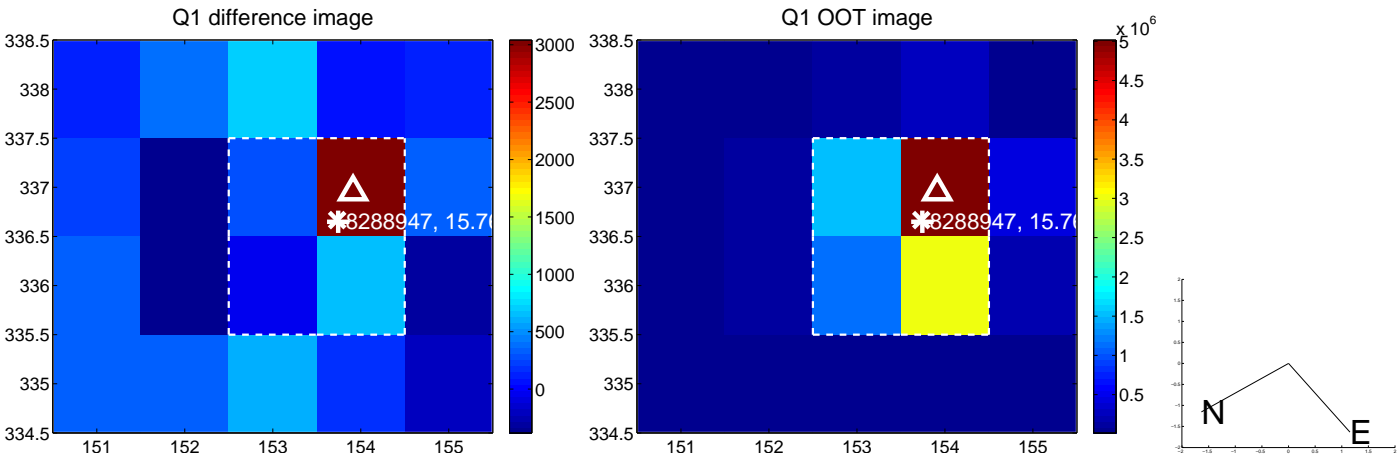
The direct PRF centroid is offset from the target star catalog position by about 0.11 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.176 ± 0.146	1.21	-0.020 ± 0.154	0.175 ± 0.152
PRF-fit source offset from KIC position	0.114 ± 0.185	0.61	0.079 ± 0.157	0.082 ± 0.154
photometric centroid source offset	0.59 ± 0.45	1.30	-0.58 ± 0.45	0.11 ± 0.51

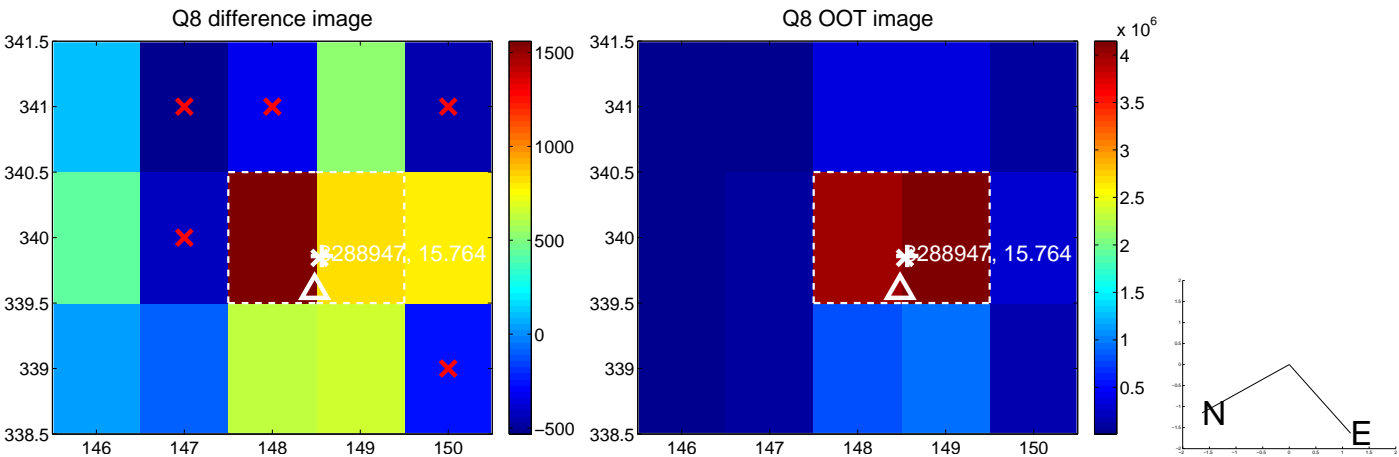
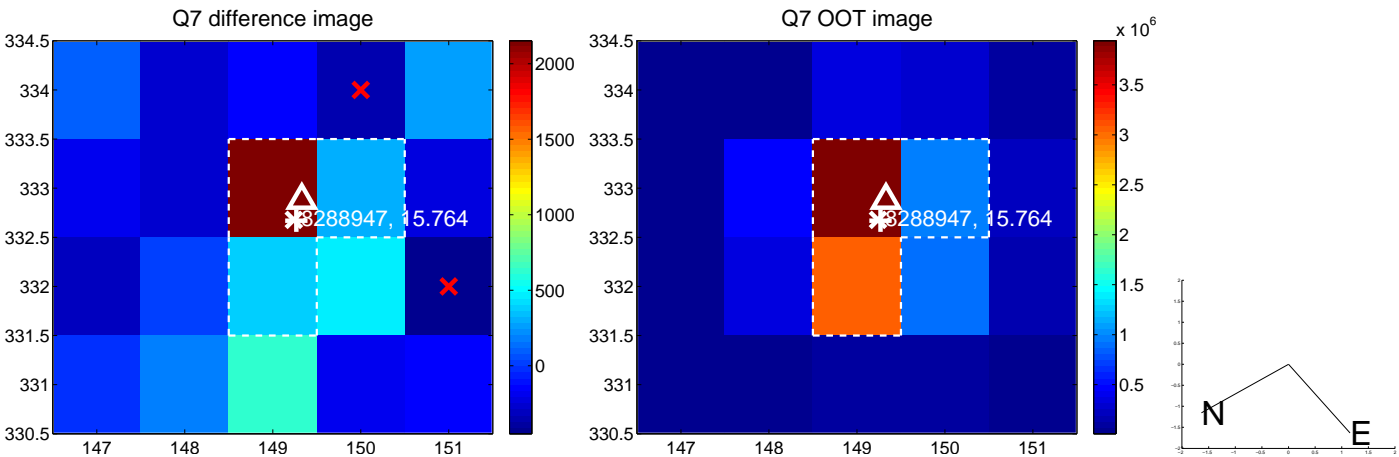
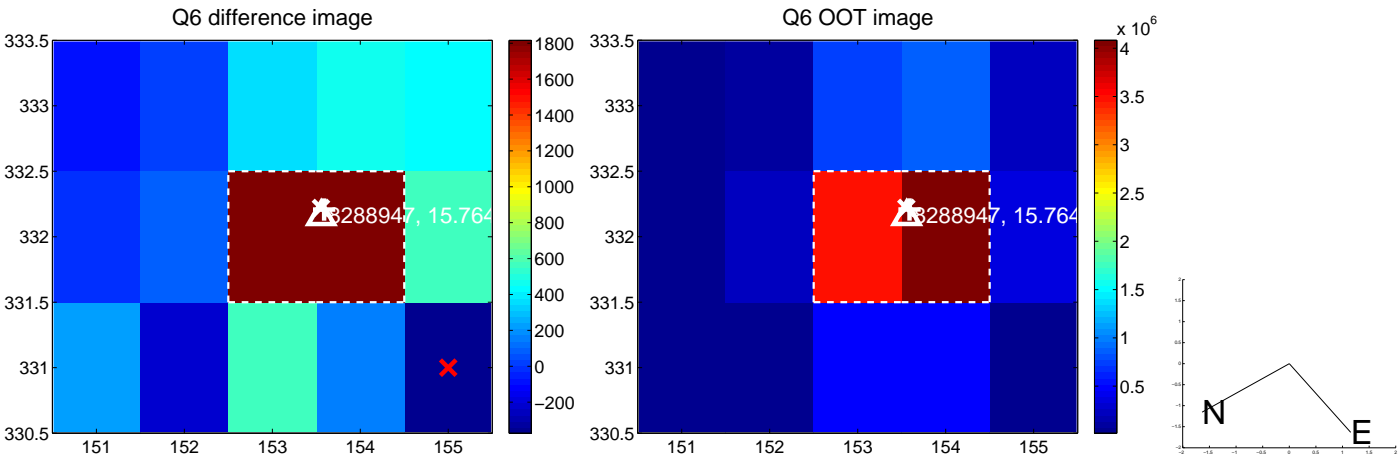
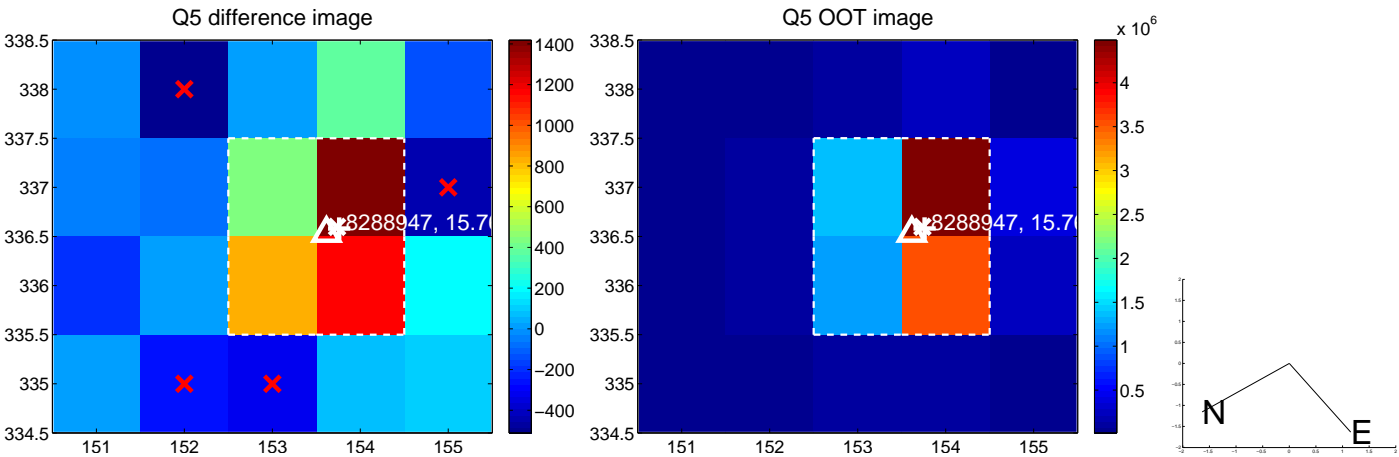


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

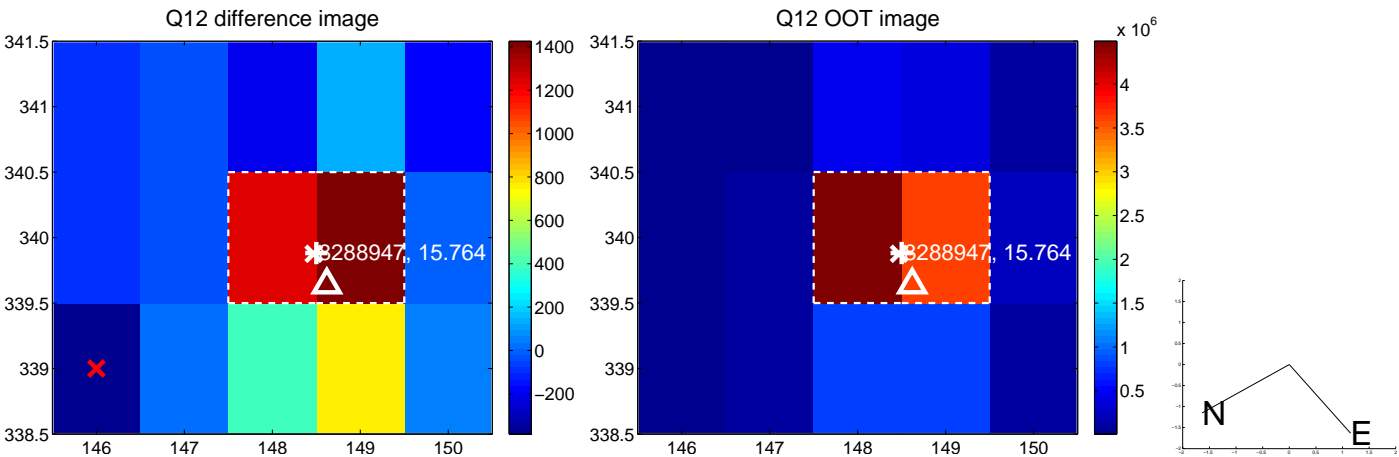
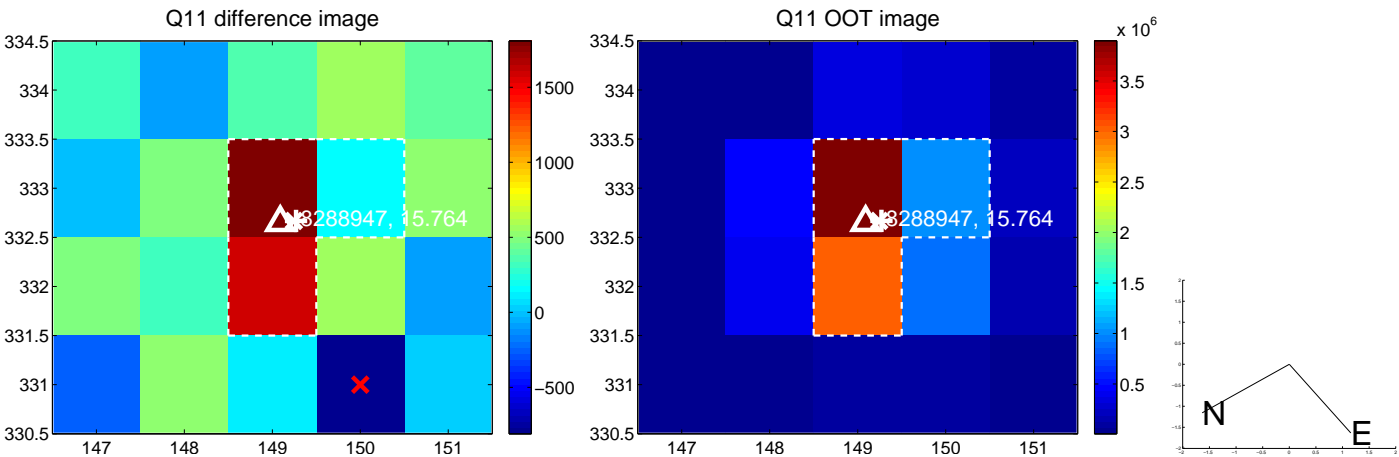
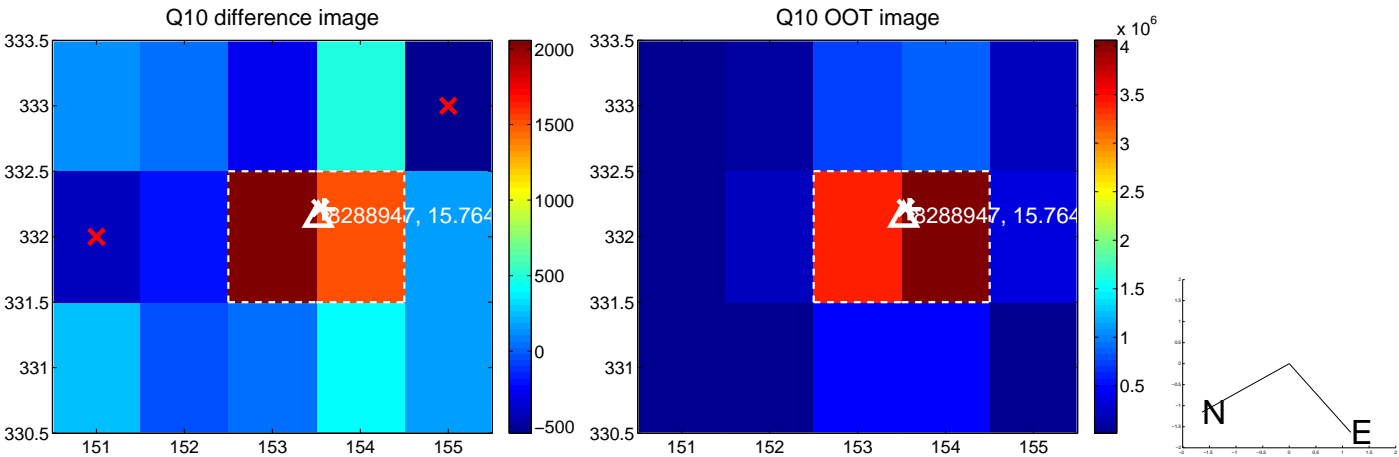
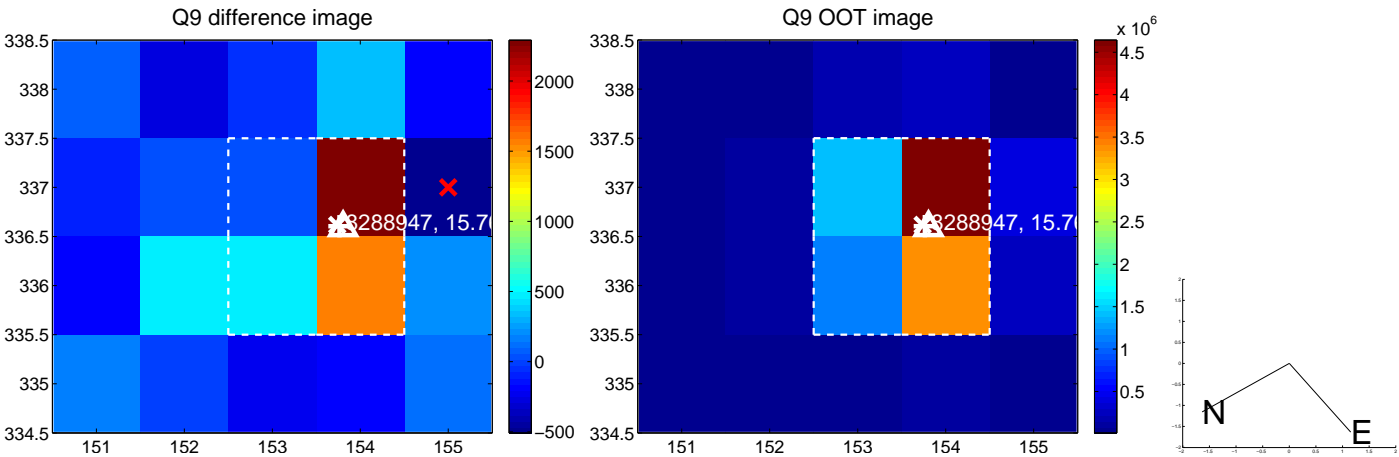
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



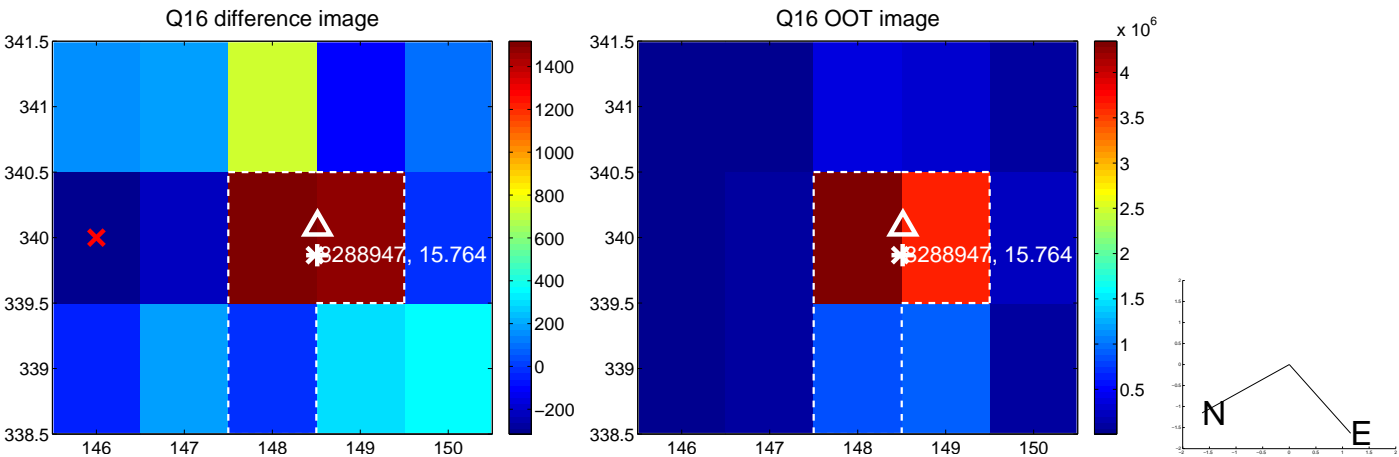
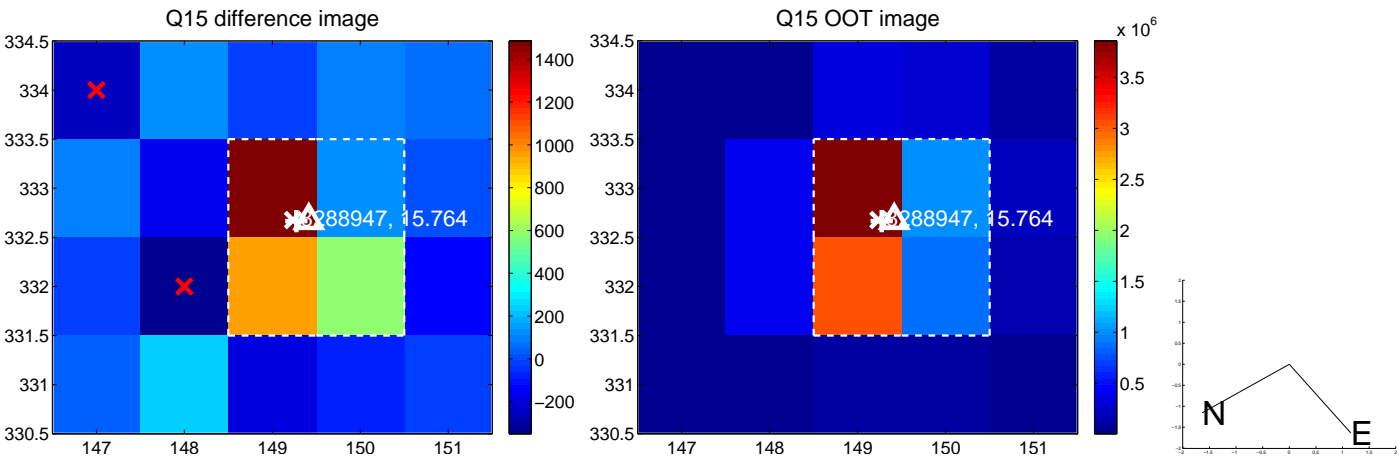
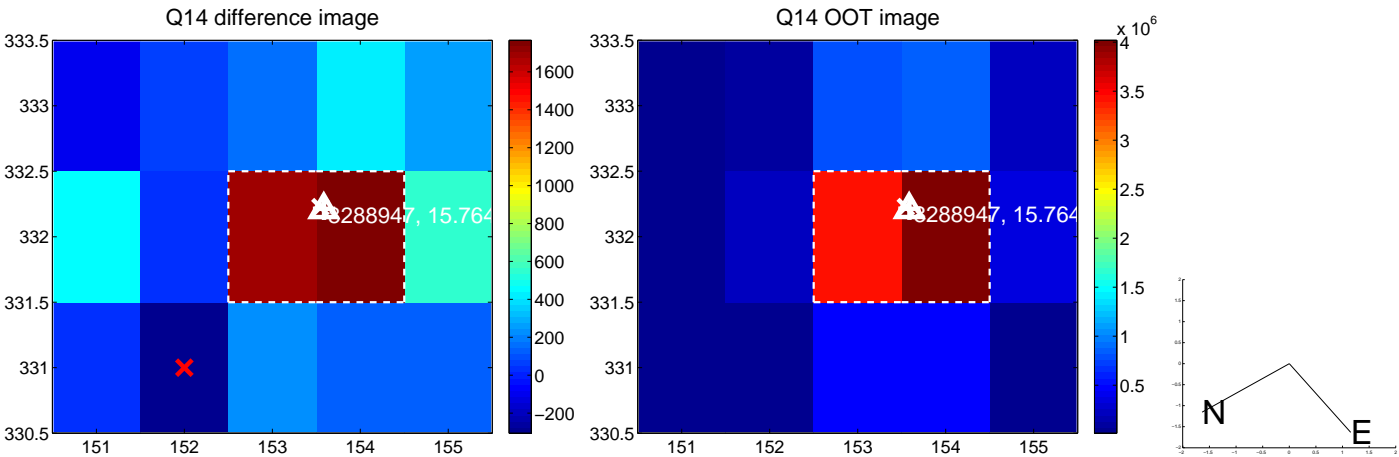
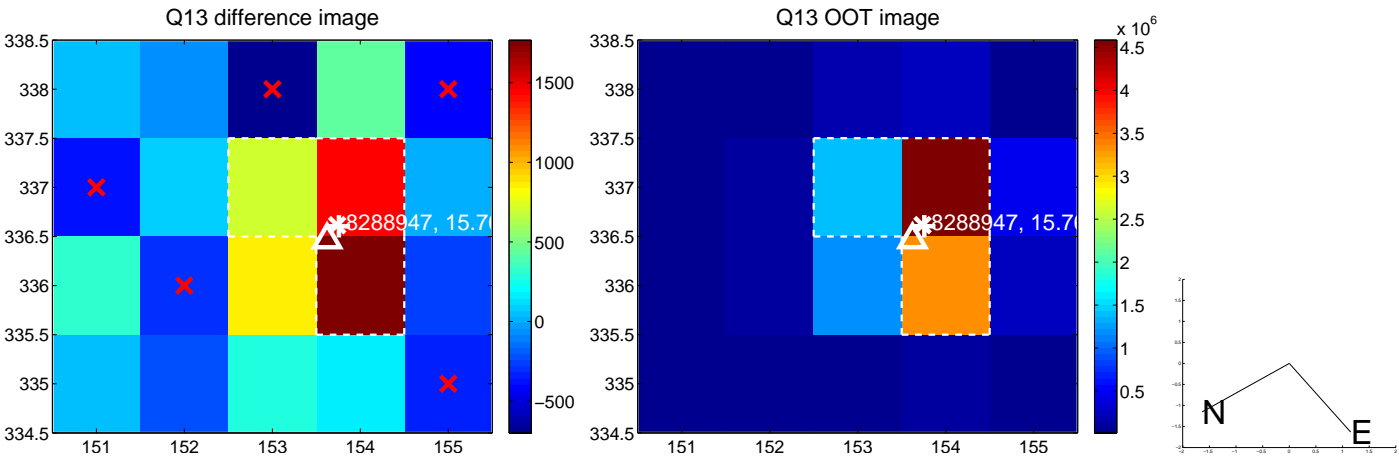
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



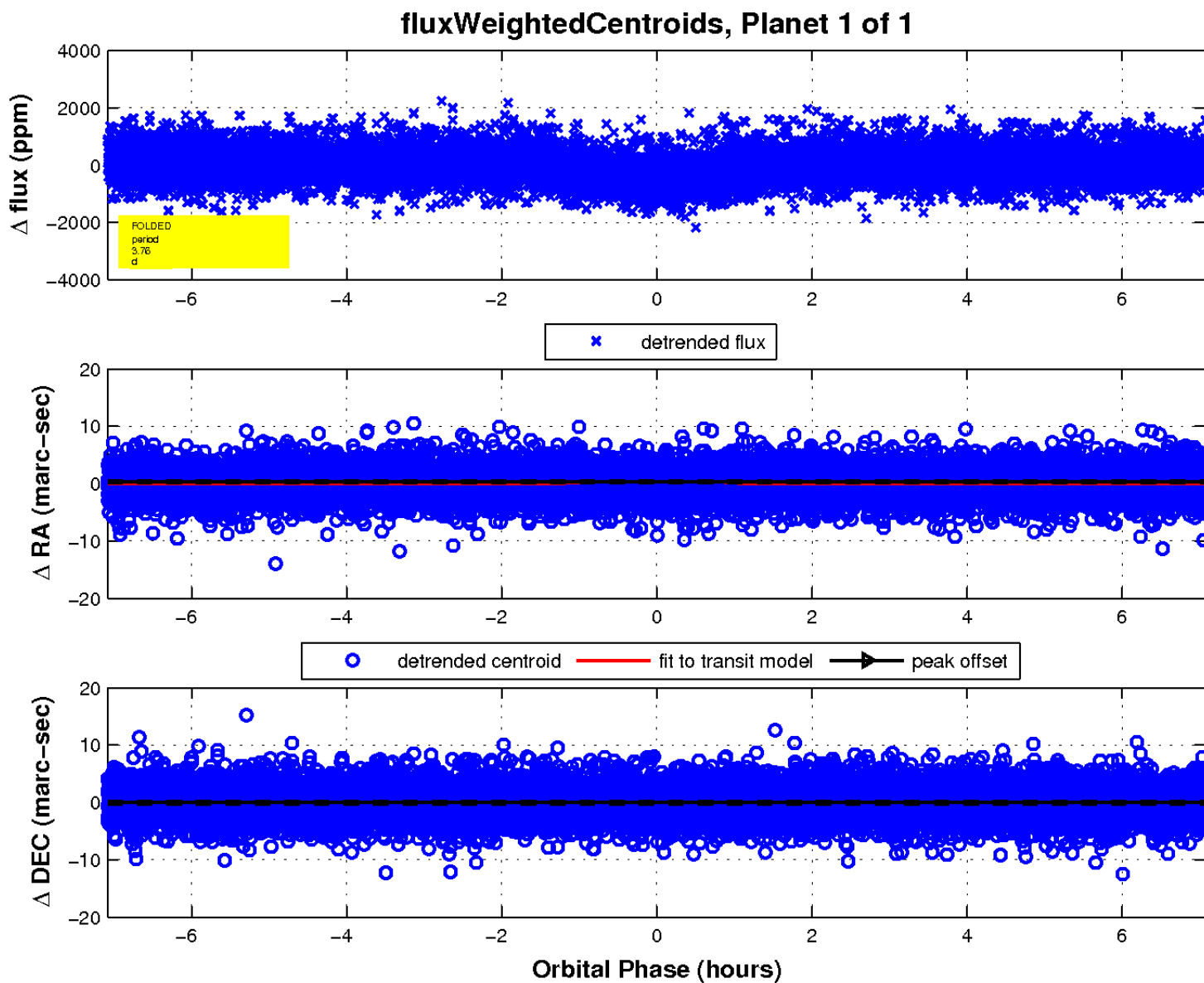
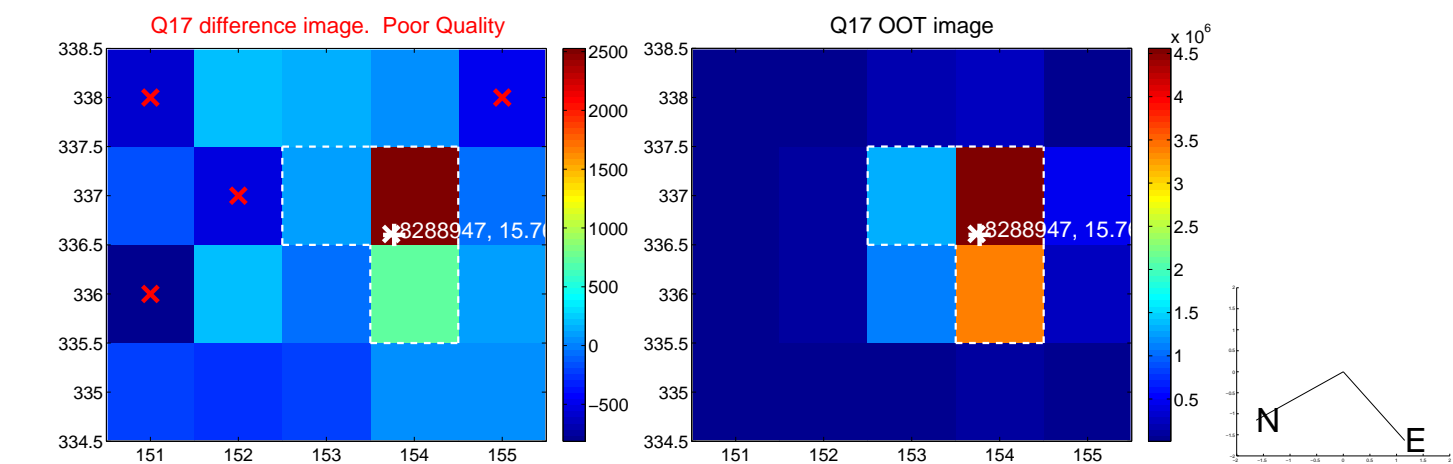
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.



UKIRT Image

Declination

