

KIC 003444588

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})
003444588-01	OBS	1202.01	0.928313	131.946897	348.6	1.278	13.6	21.0	0.60	4109	1.37	366.42

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003444588-01	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.

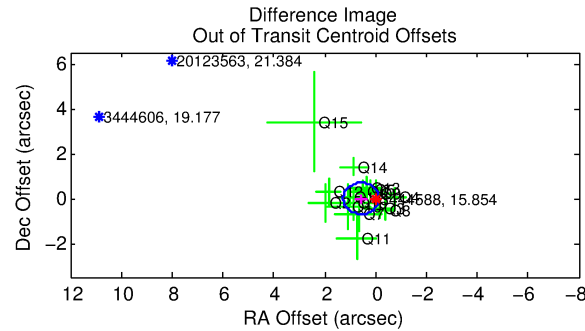
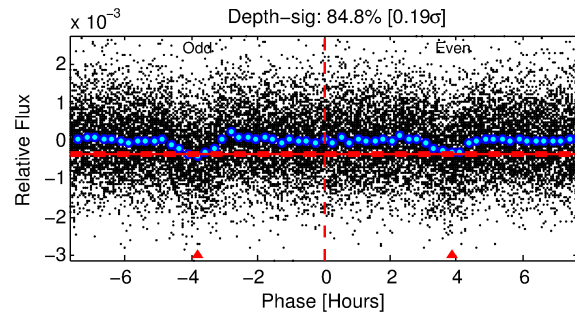
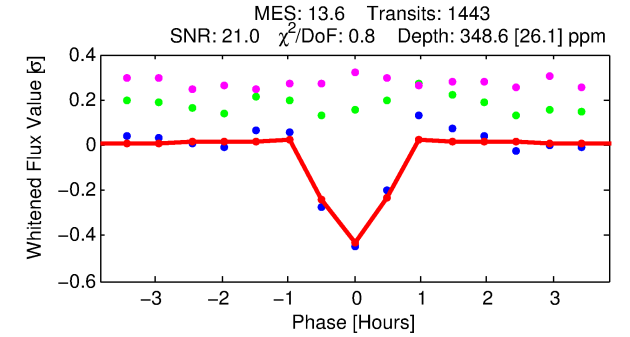
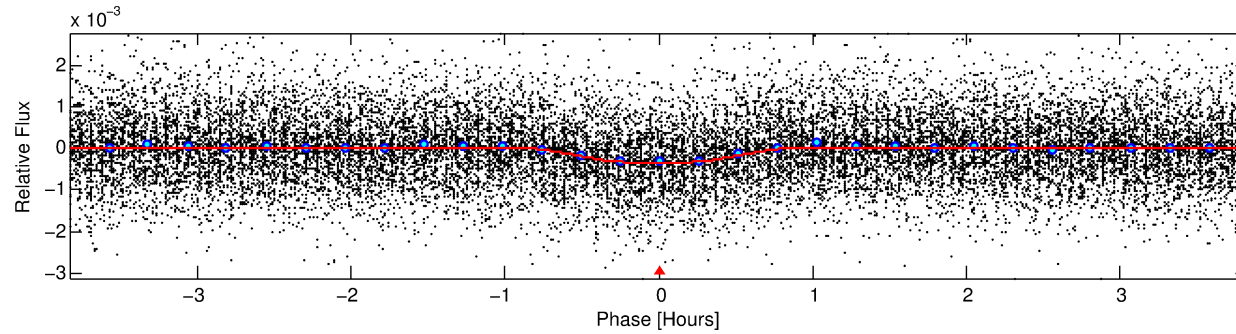
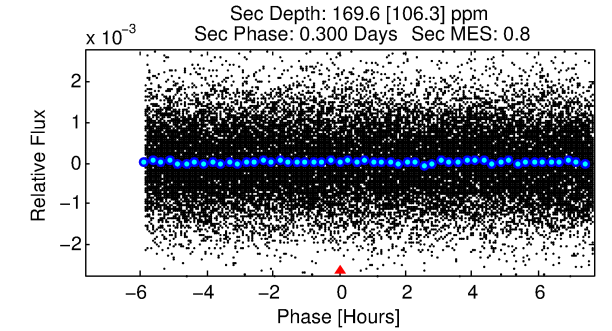
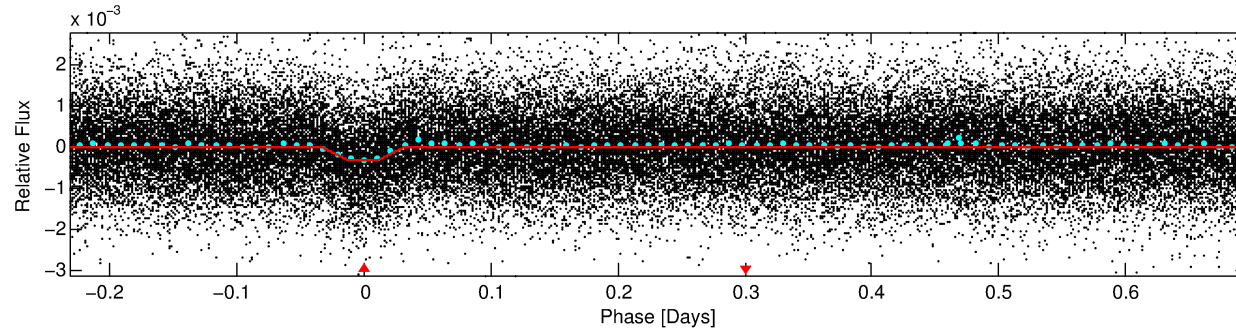
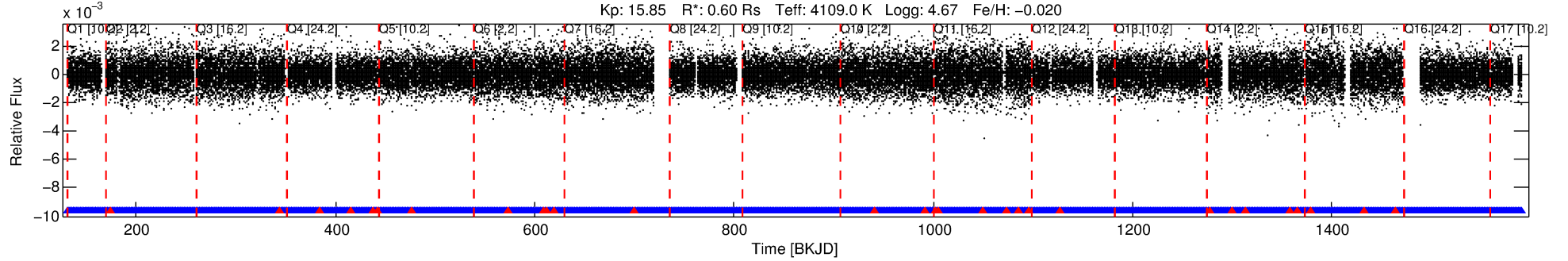
Ephemeris Match Information For 003444588-01

No Significant Match Found

DV One-Page Summary

KIC: 3444588 Candidate: 1 of 1 Period: 0.928 d

KOI: K01202.01 Corr: 0.965



DV Fit Results:

Period = 0.92831 [0.00000] d
Epoch = 131.9469 [0.0009] BKJD
Rp/R* = 0.0209 [0.0104]
a/R* = 2.86 [4.93]
b = 0.90 [0.44]
Seff = 366.42 [34.66]
Teq = 1116 [26] K
Rp = 1.37 [0.69] Re
a = 0.0159 [0.0006] AU
Ag = 12.53 [14.77] [0.78σ]
Teffp = 3246 [957] K [2.22σ]

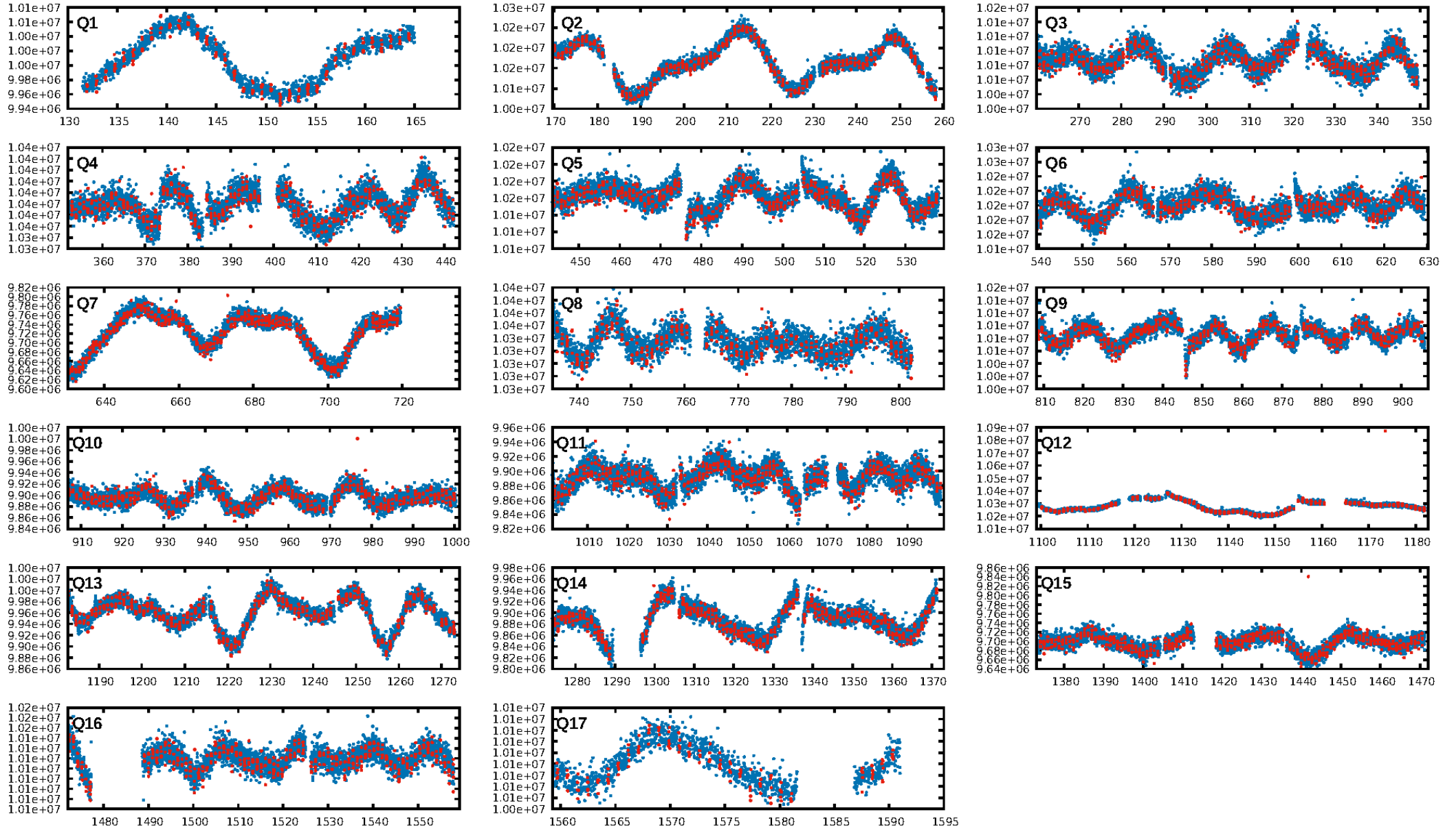
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 4.90e-44
RollingBand-fgt: 0.98 [1349/1379]
GhostDiagnostic-chr: 3.489
Centroid-sig: 13.3%
Centroid-so: 0.985 arcsec [1.49σ]
OotOffset-rm: 0.577 arcsec [2.48σ]
KicOffset-rm: 0.715 arcsec [2.99σ]
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]

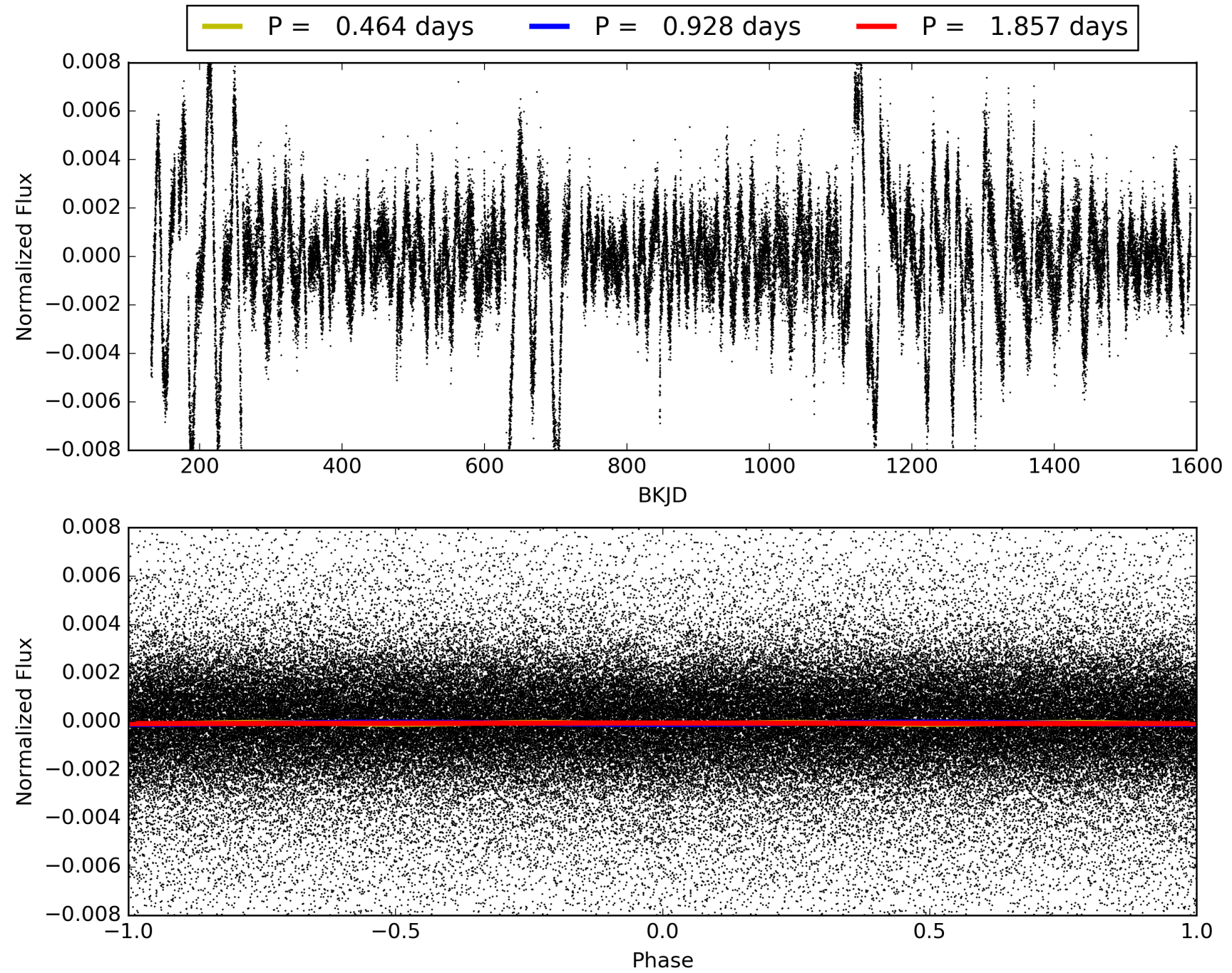
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 01:40:33 Z

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

TCE 003444588-01, PDC Light Curves

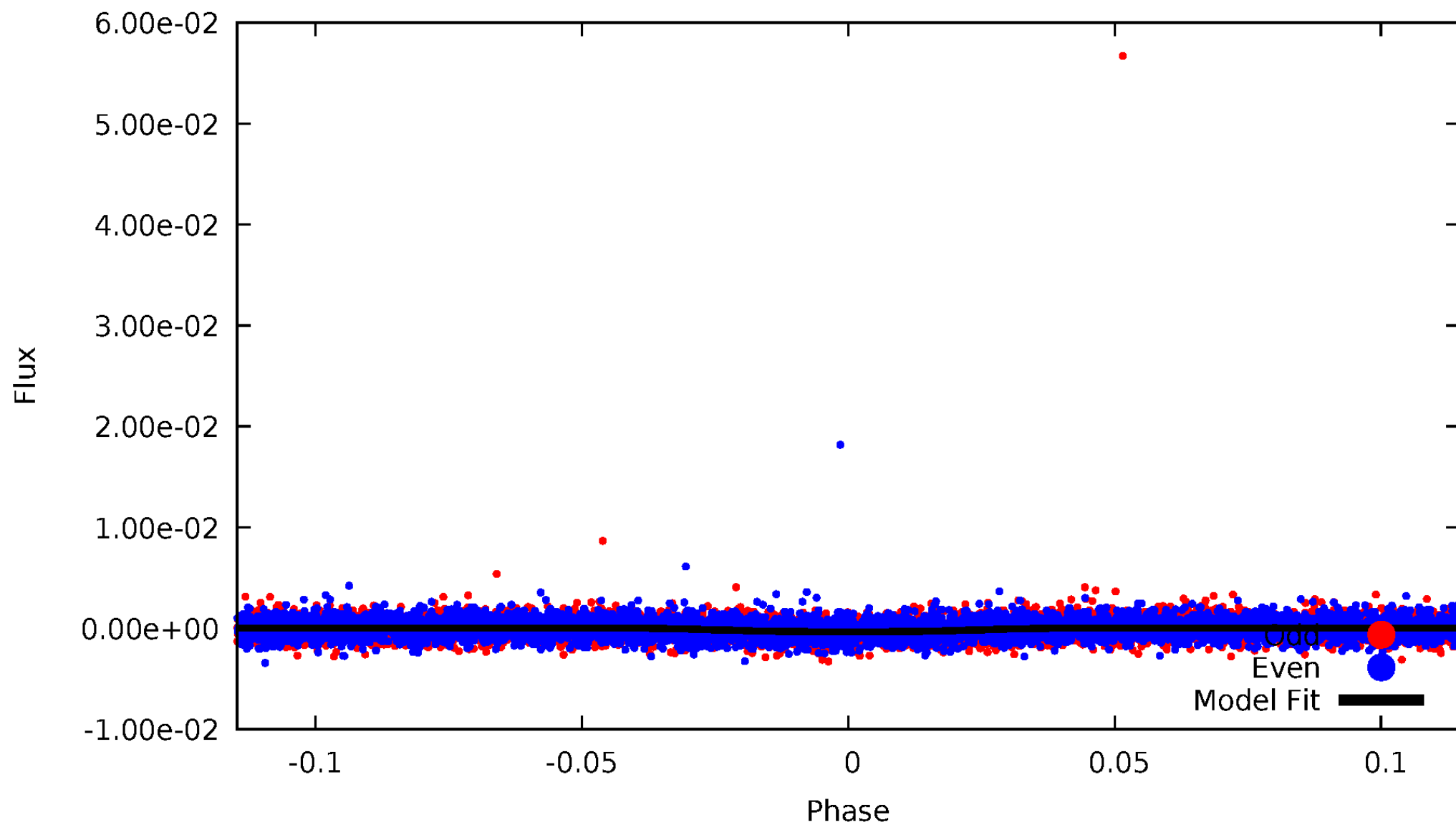


TCE 003444588-01



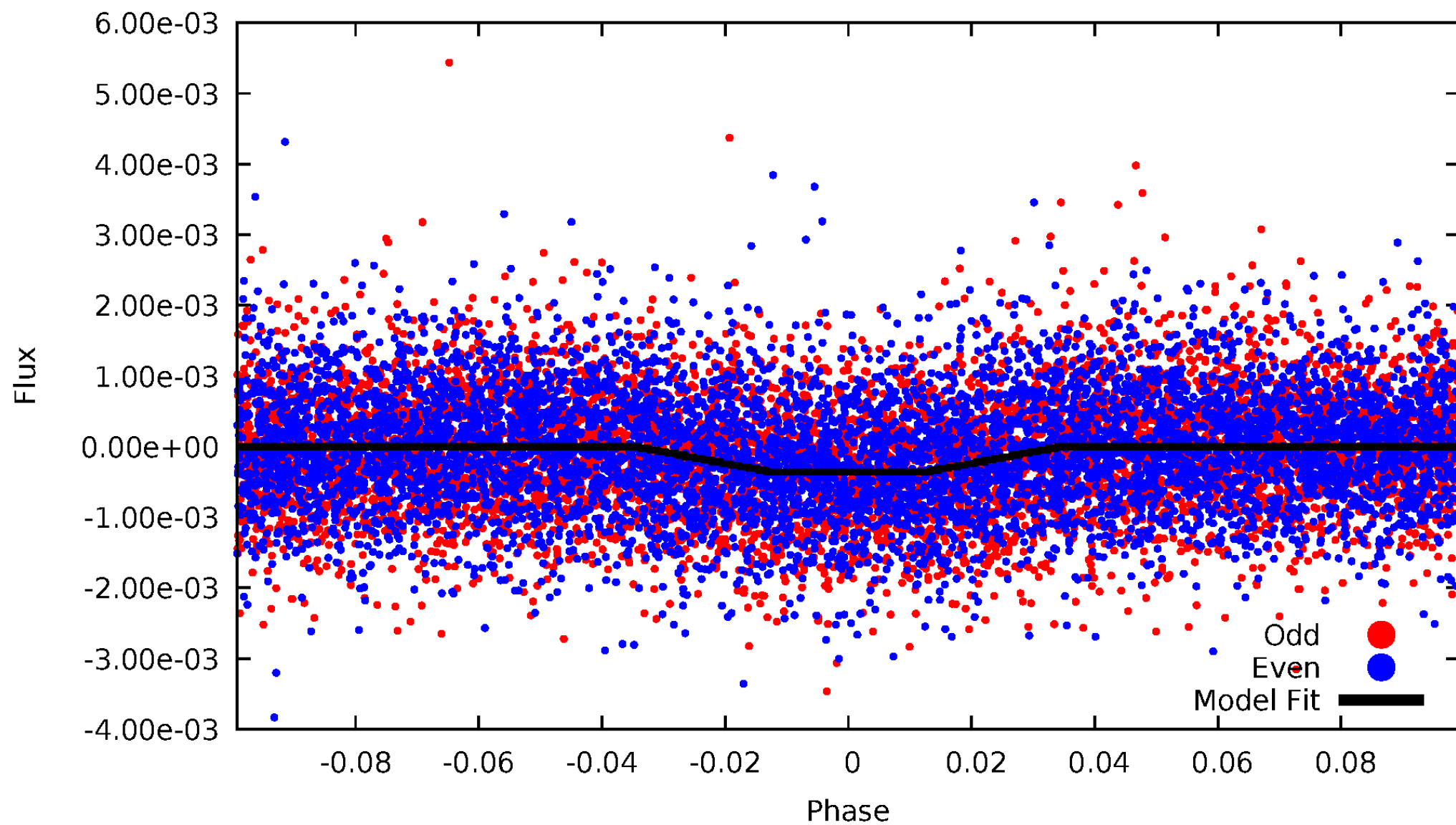
DV Odd/Even

TCE 003444588-01



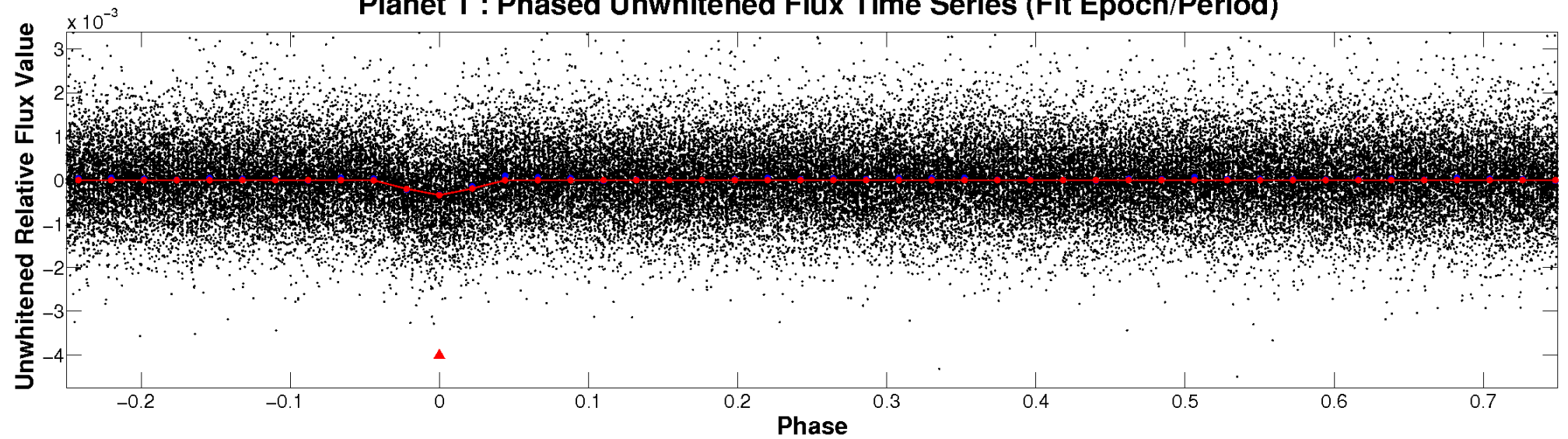
ALT Odd/Even

TCE 003444588-01

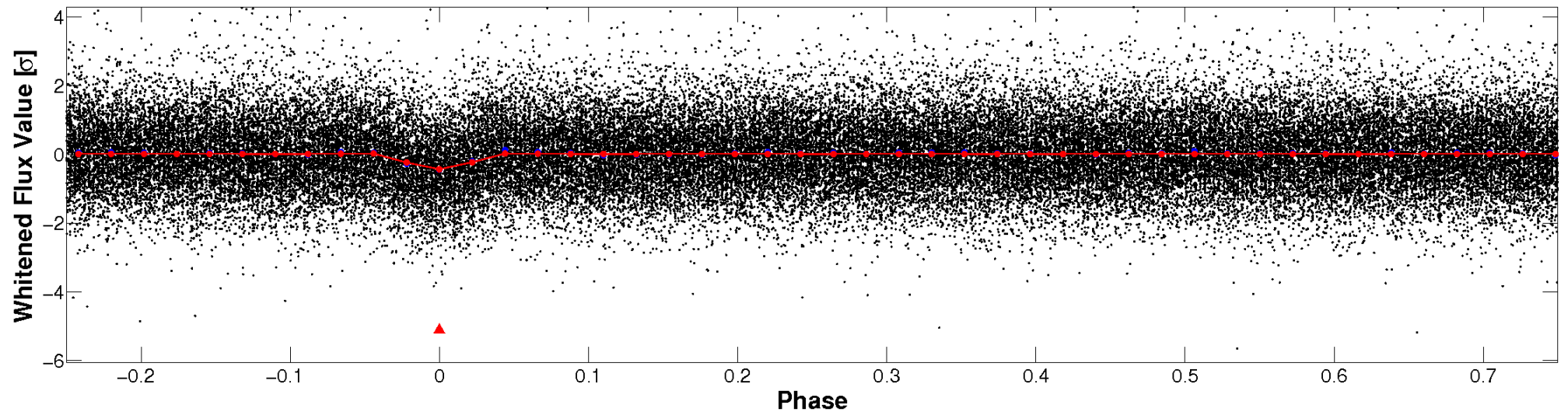


Non-Whitened Vs. Whitened Light Curve

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

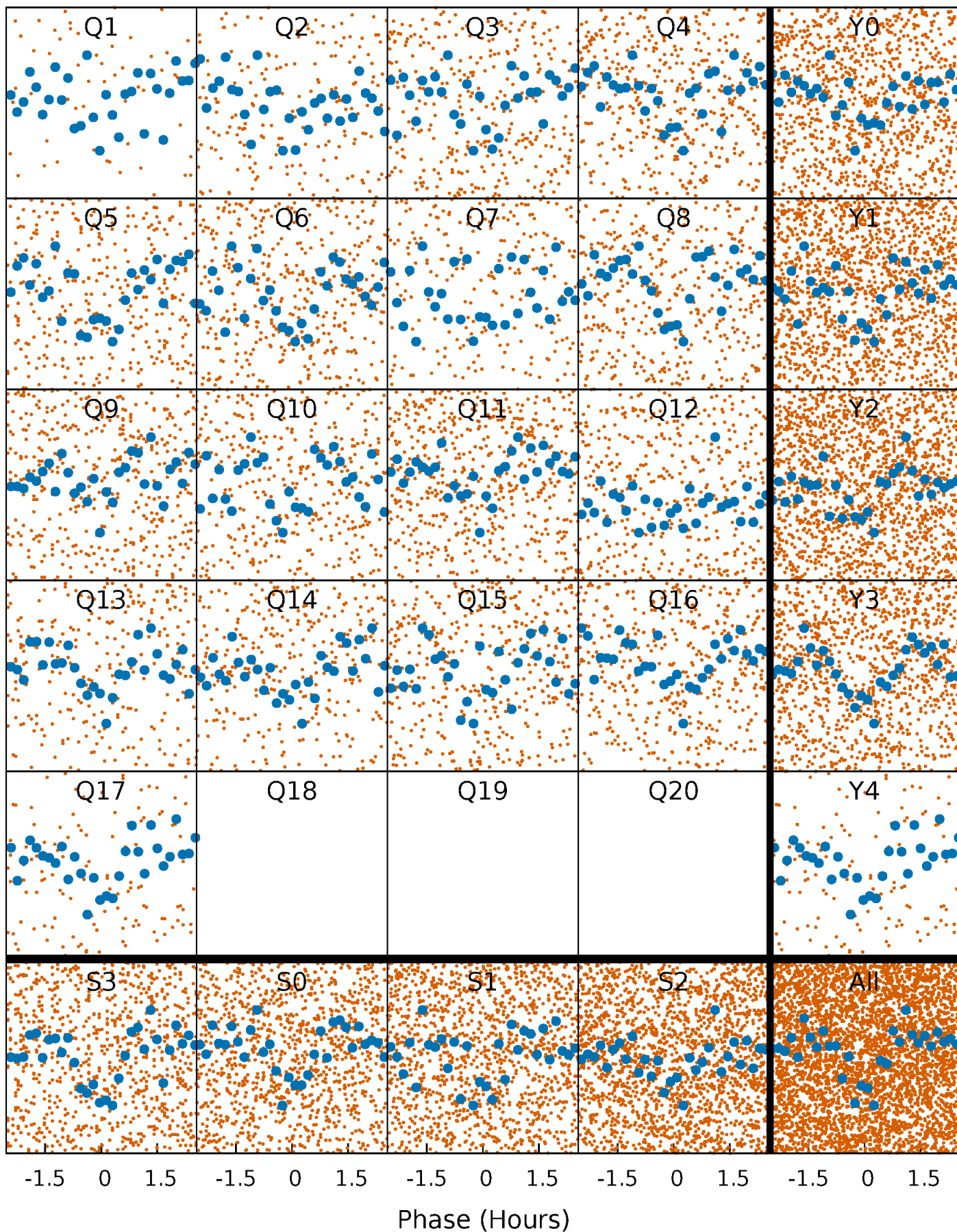


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



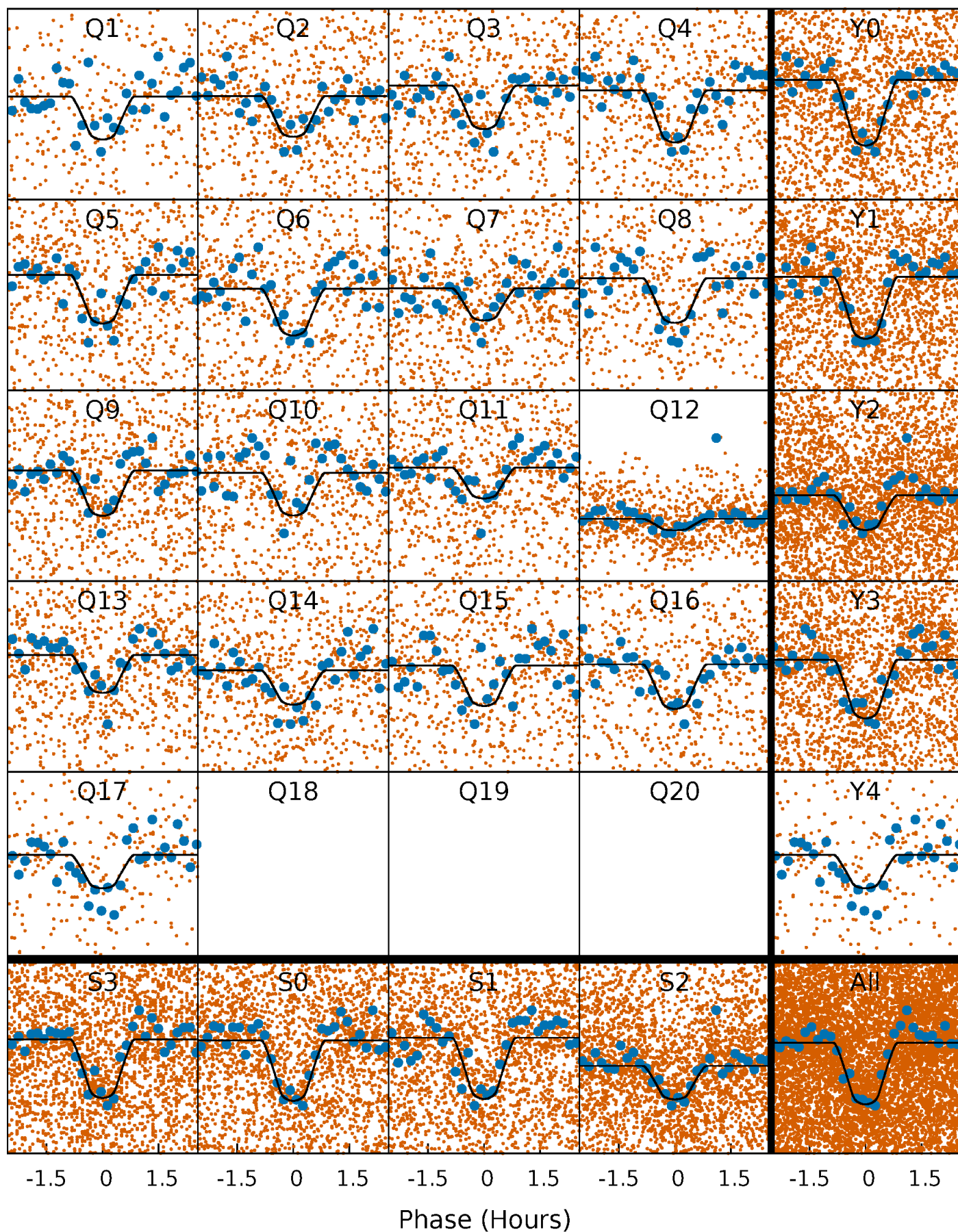
PDC Quarter-Phased Transit Curves

TCE 003444588-01 P= 0.928313 Days $T_0=131.946897$ (BKJD)



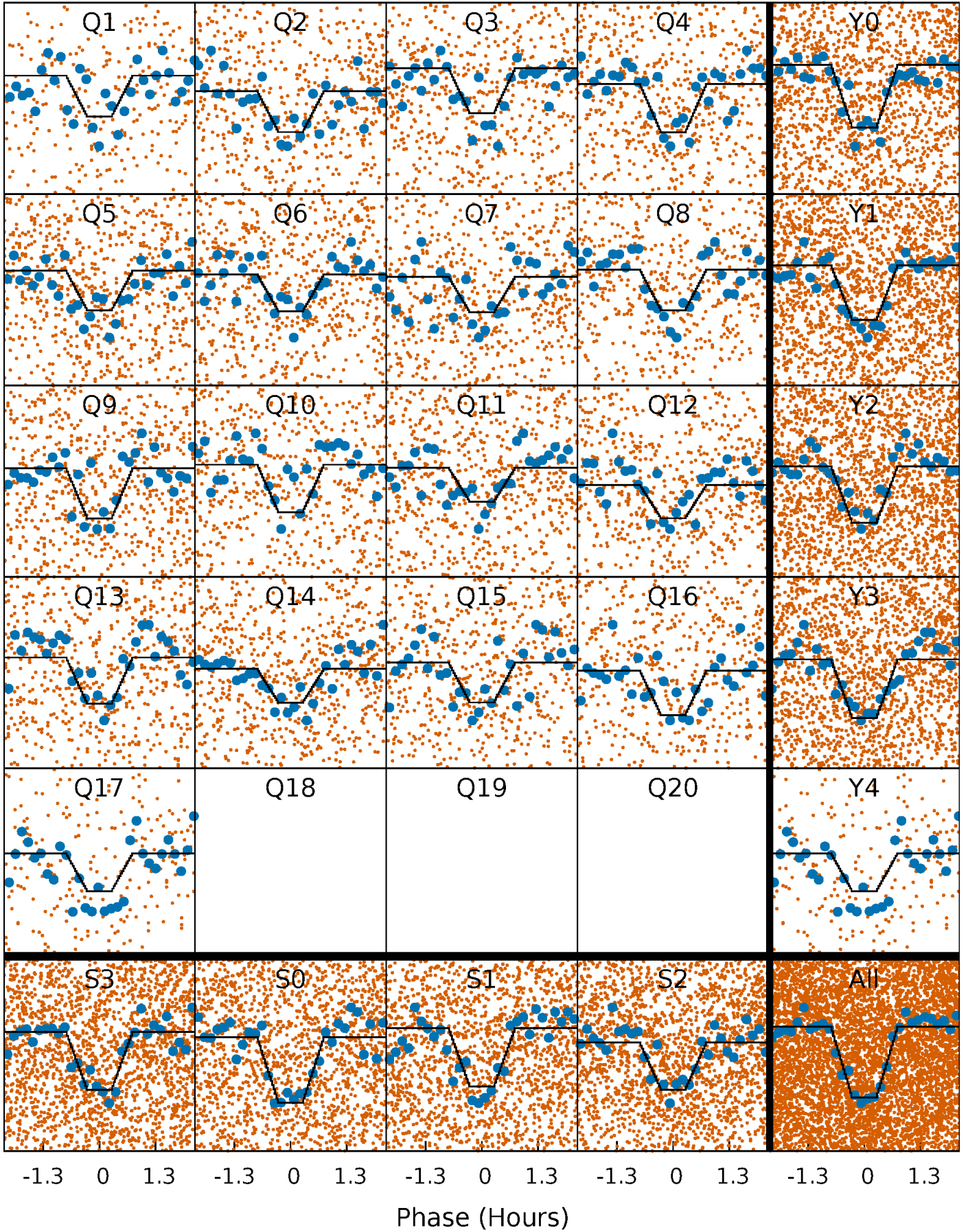
DV Quarter-Phased Transit Curves

TCE 003444588-01 P= 0.928313 Days $T_0=131.946897$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

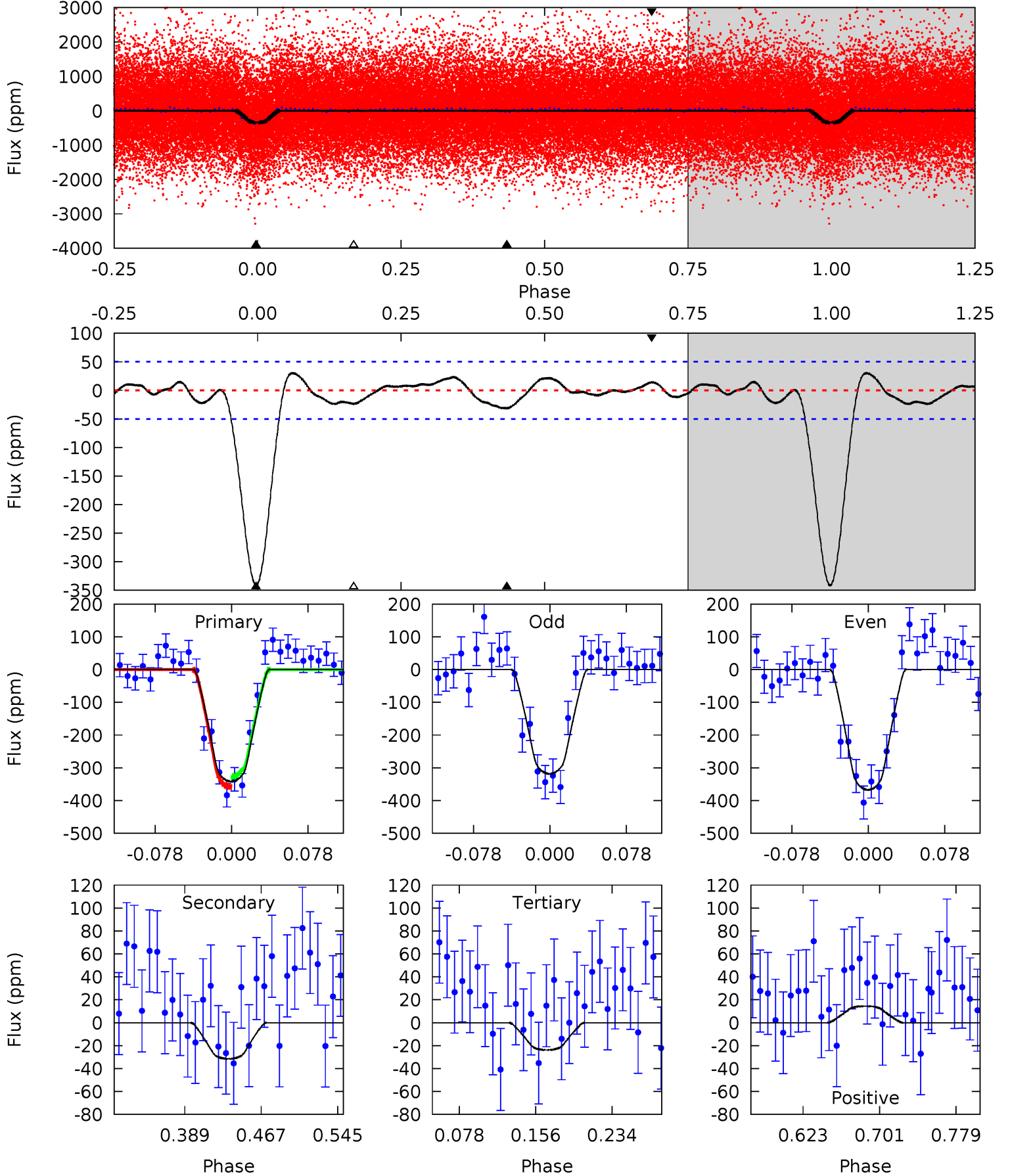
TCE 003444588-01 P= 0.928312 Days $T_0=131.946330$ (BKJD)



DV Model-Shift Uniqueness Test

003444588-01, P = 0.928313 Days, E = 131.018584 Days

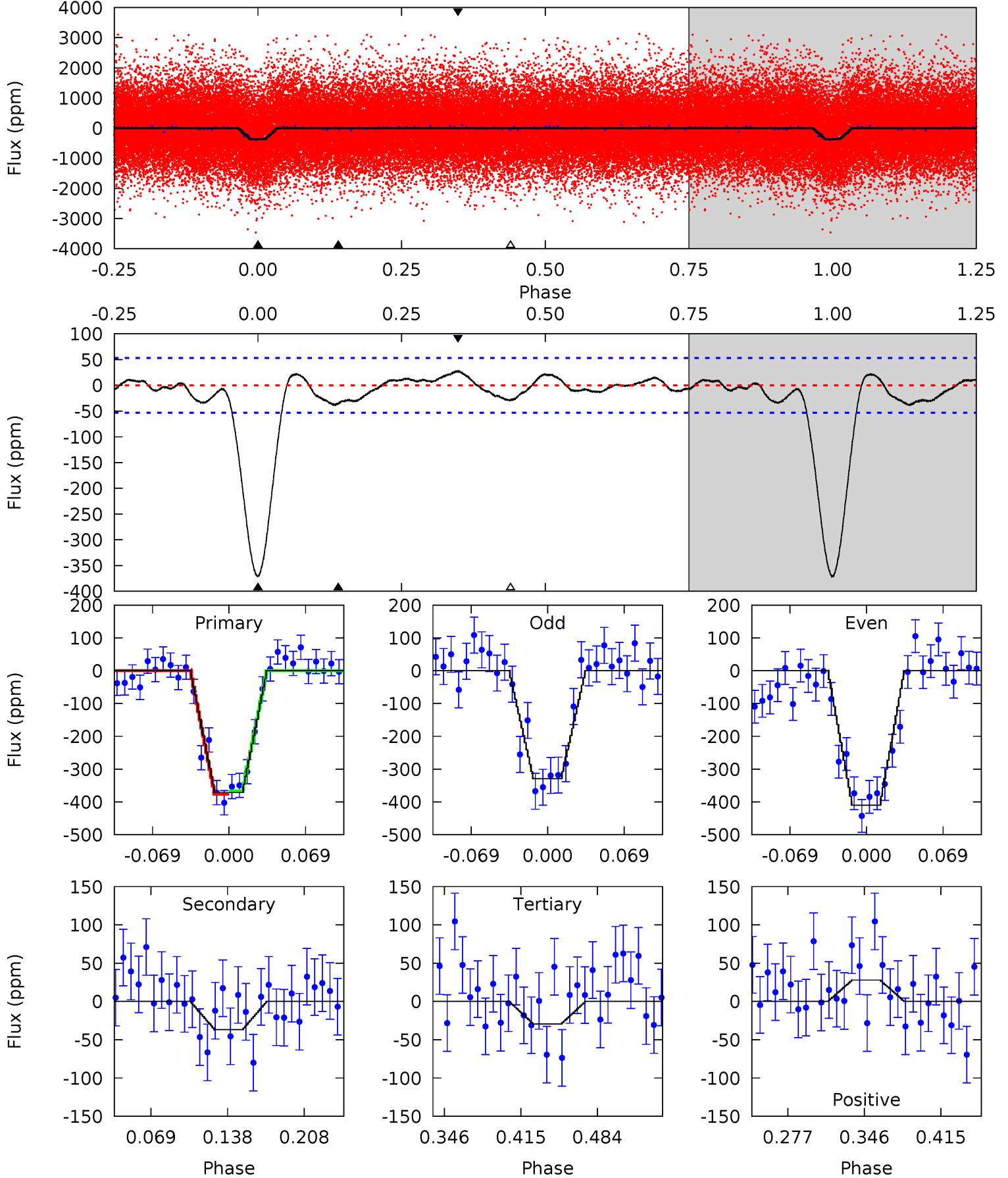
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
31.4	2.90	2.19	1.32	4.62	1.76	1.09	29.2	30.1	0.71	1.57	2.26	0.95	0.08	1.45



Alt Model-Shift Uniqueness Test

003444588-01, P = 0.928312 Days, E = 131.018018 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
32.4	3.22	2.56	2.44	4.64	1.82	1.21	29.8	30.0	0.66	0.77	3.53	0.95	0.07	0.44



Stellar Parameters For KIC 003444588

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	4109^{+82}_{-82}	$4.672^{+0.022}_{-0.025}$	$-0.020^{+0.150}_{-0.150}$	$0.602^{+0.027}_{-0.030}$	$0.621^{+0.028}_{-0.034}$	$4.017^{+0.428}_{-0.353}$
	+2%/-2%	+0%/-1%	+750%/-750%	+4%/-5%	+5%/-5%	+11%/-9%
Source	SPE60	SPE60	SPE60	DSEP		

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

Secondary Eclipse Parameters for KIC 003444588-01 / KOI 1202.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-32 ± 11	$1.40^{+0.68}_{-0.64}$	1561^{+34}_{-35}	2681^{+538}_{-355}	$2.193^{+5.350}_{-1.307}$
Alt.	-37 ± 11	$1.26^{+0.59}_{-0.65}$	1561^{+36}_{-35}	2848^{+719}_{-381}	$3.288^{+10.919}_{-1.977}$

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

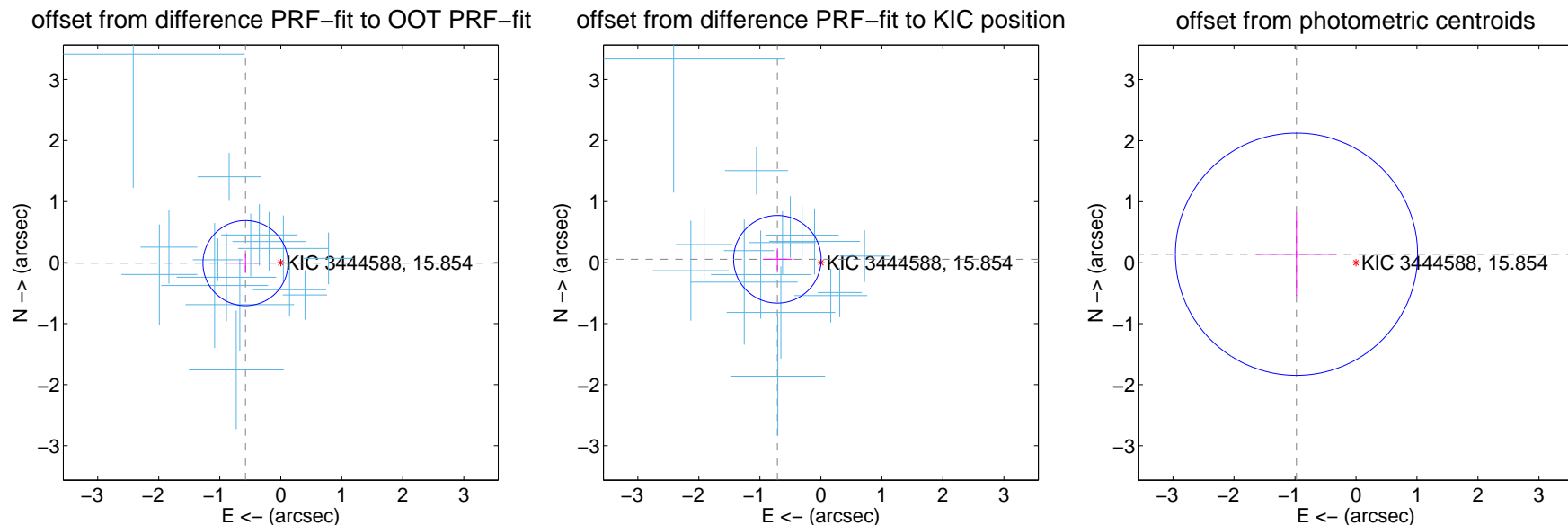
DV Centroid Data

Supplemental centroid analysis for 003444588-01. Kepler magnitude: 15.85. Transit SNR 21.02

There are 16 quarters with good PRF difference image offsets

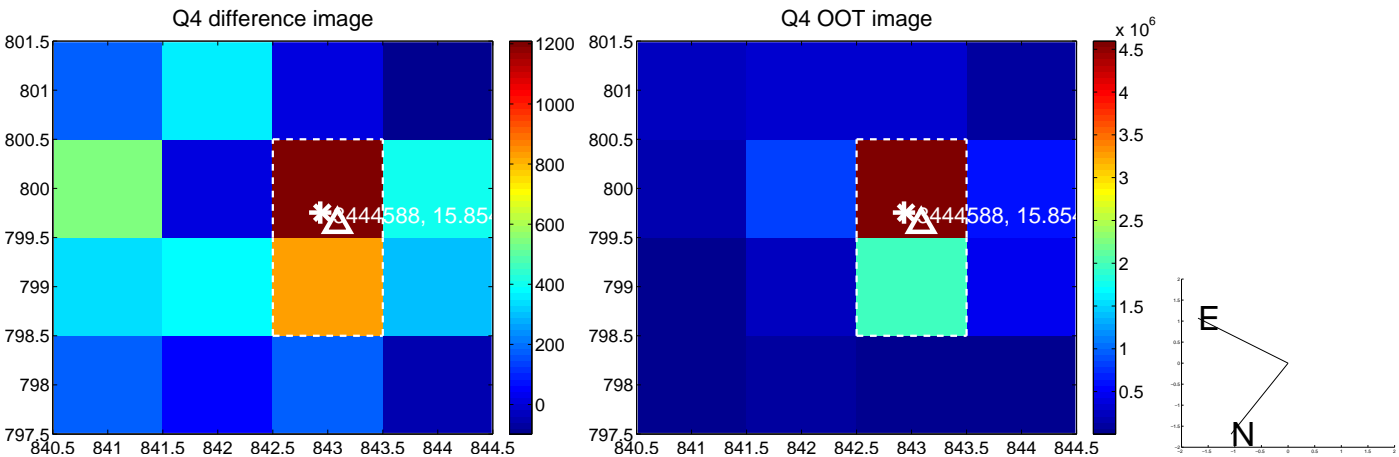
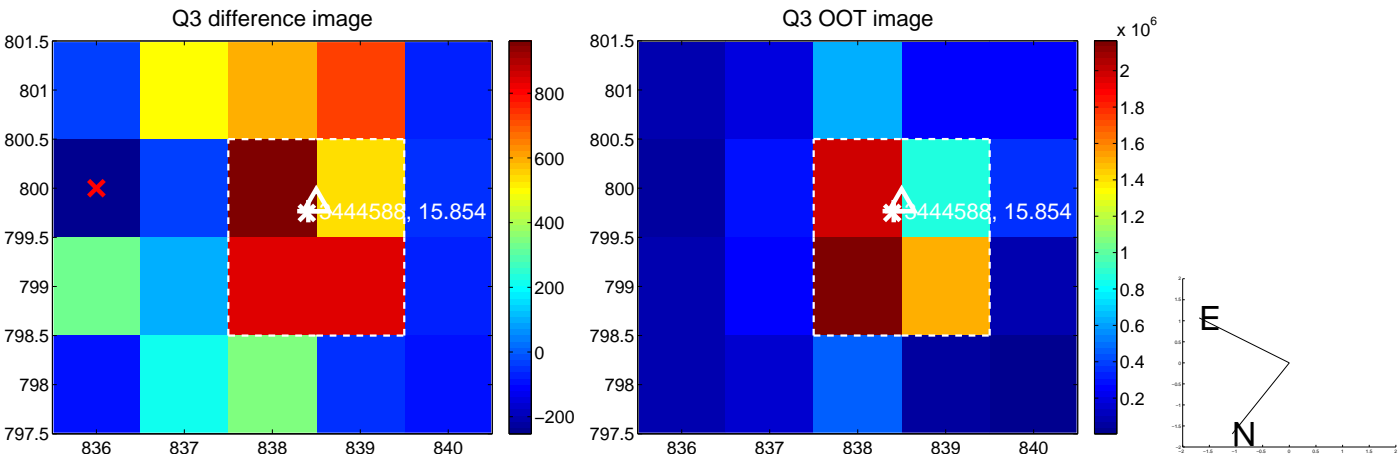
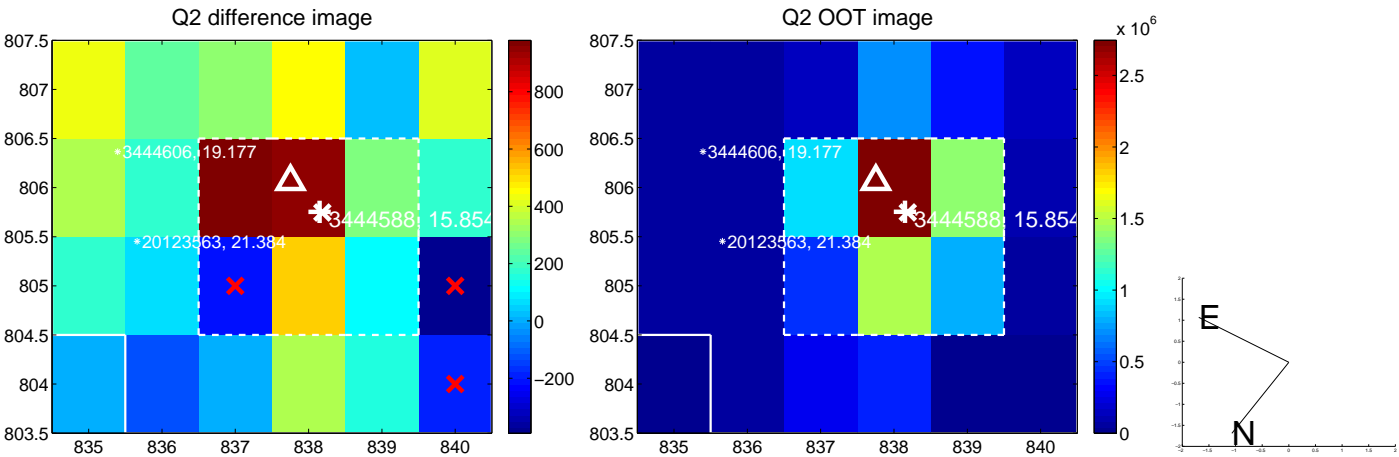
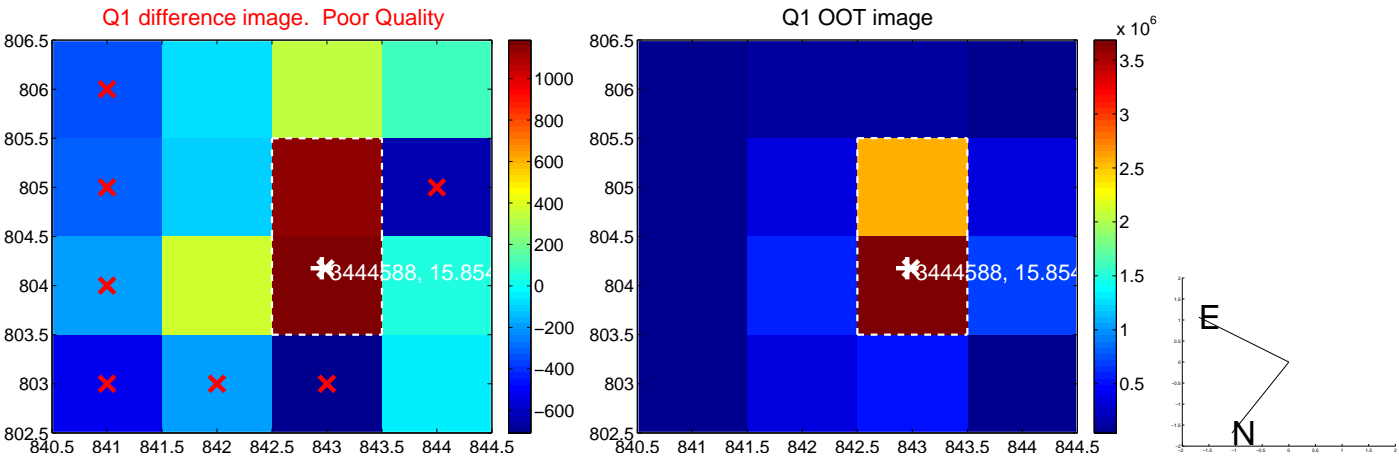
The direct PRF centroid is offset from the target star catalog position by about 0.21 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.577 ± 0.233	2.48	0.577 ± 0.233	-0.008 ± 0.161
PRF-fit source offset from KIC position	0.715 ± 0.239	2.99	0.713 ± 0.240	0.054 ± 0.178
photometric centroid source offset	0.98 ± 0.66	1.49	0.98 ± 0.66	0.14 ± 0.68

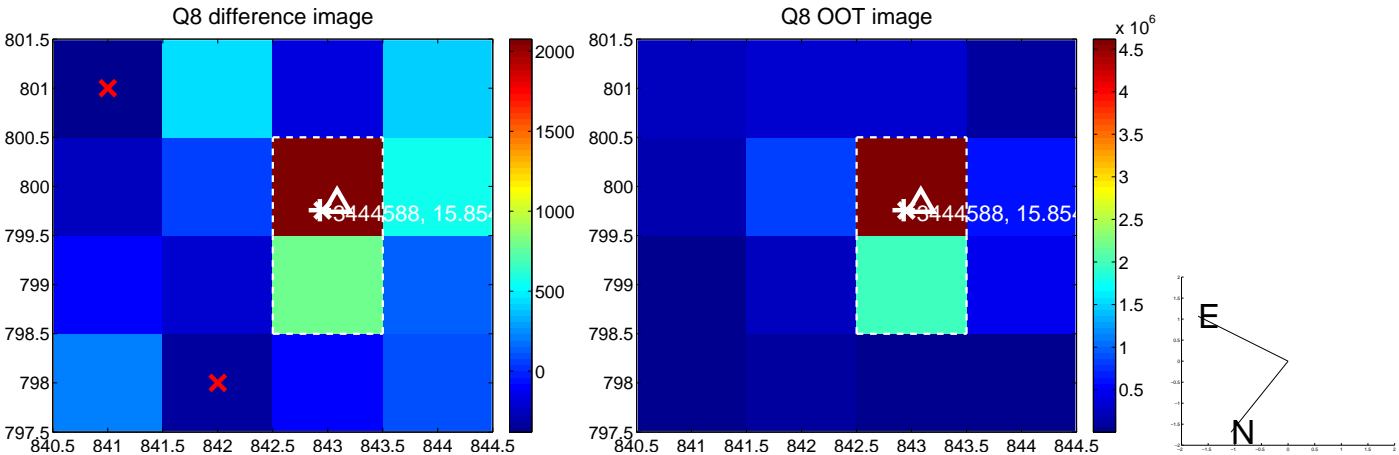
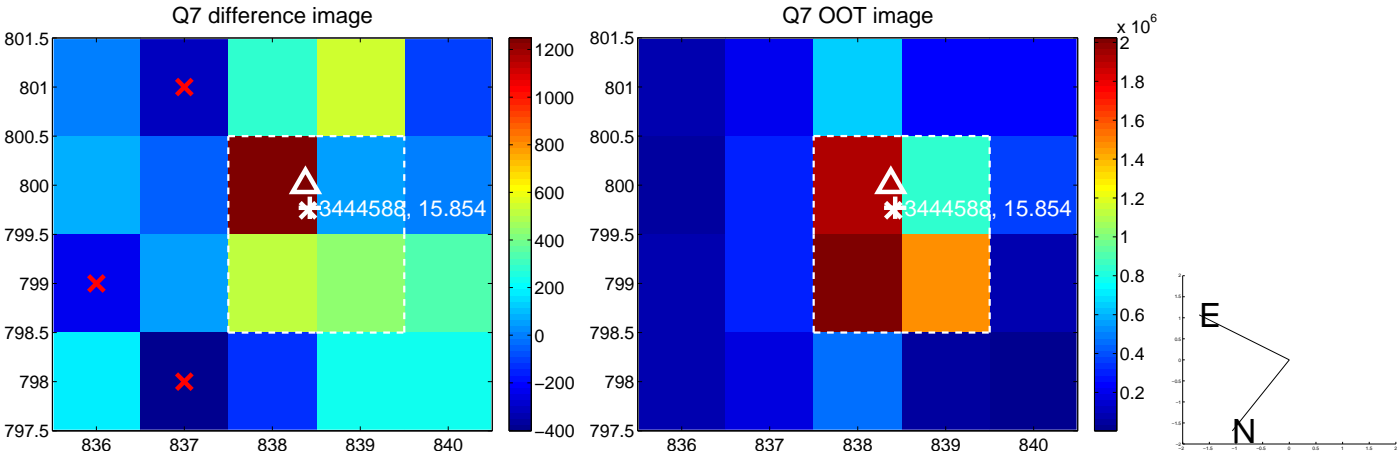
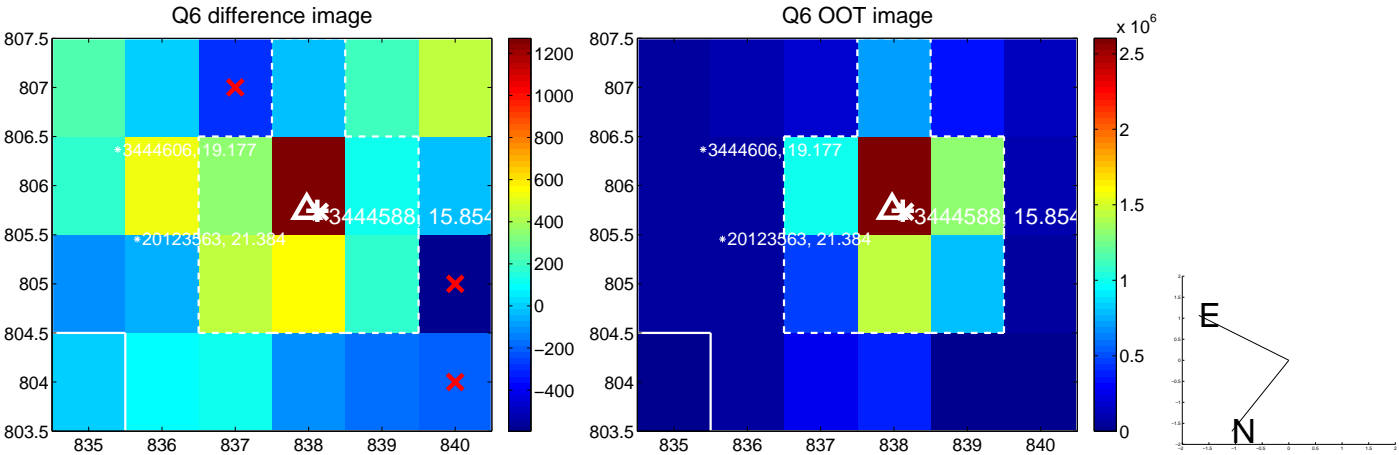
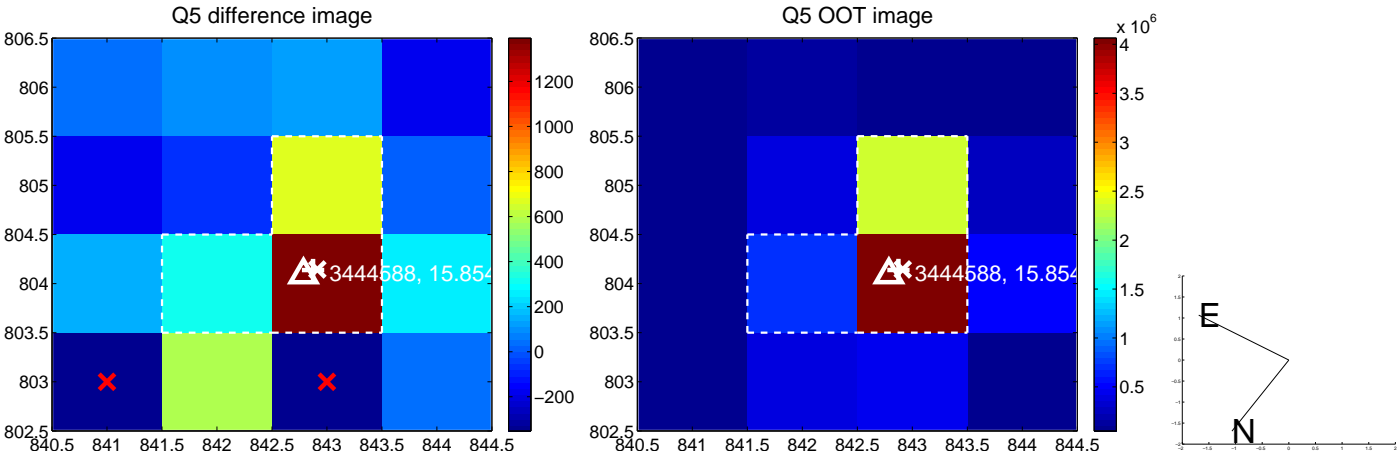


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

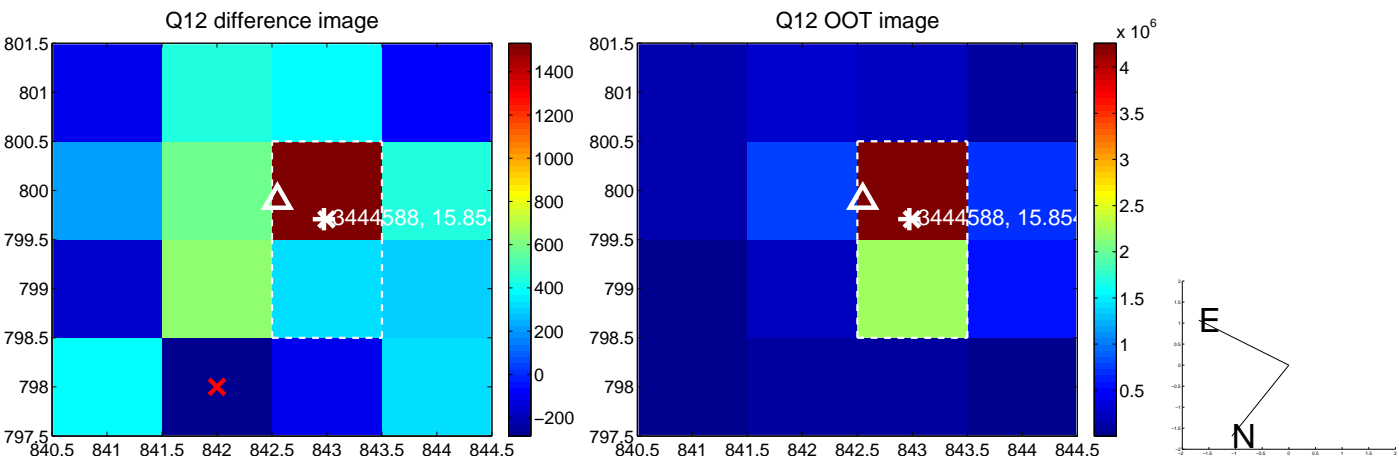
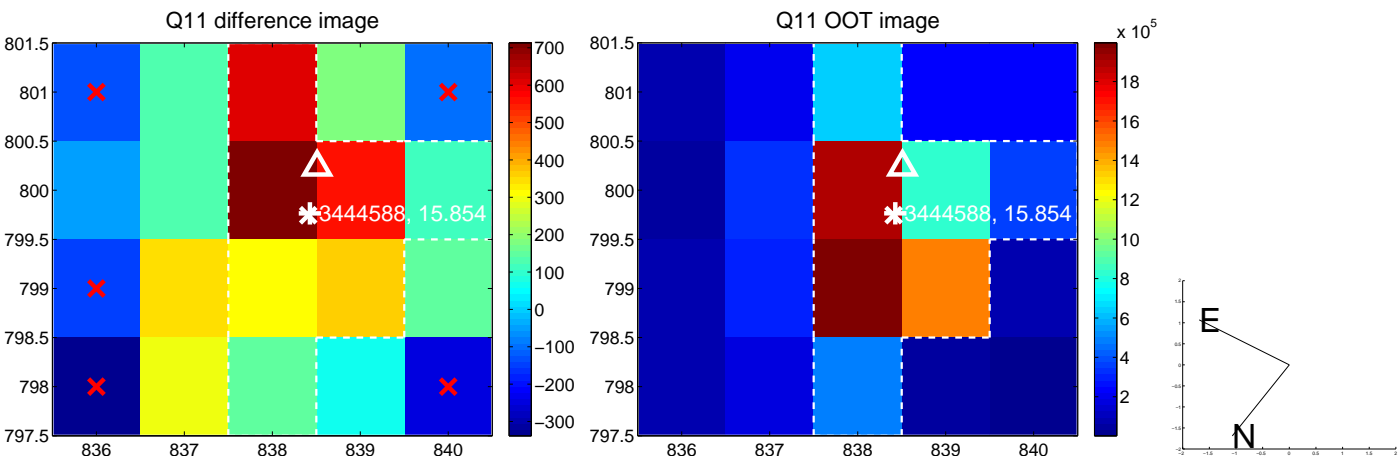
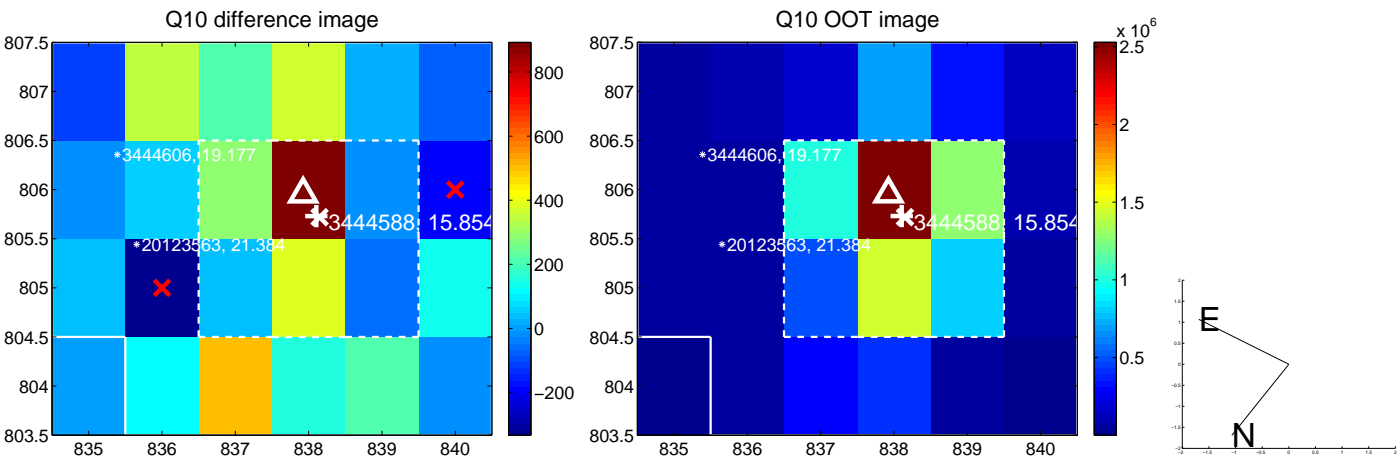
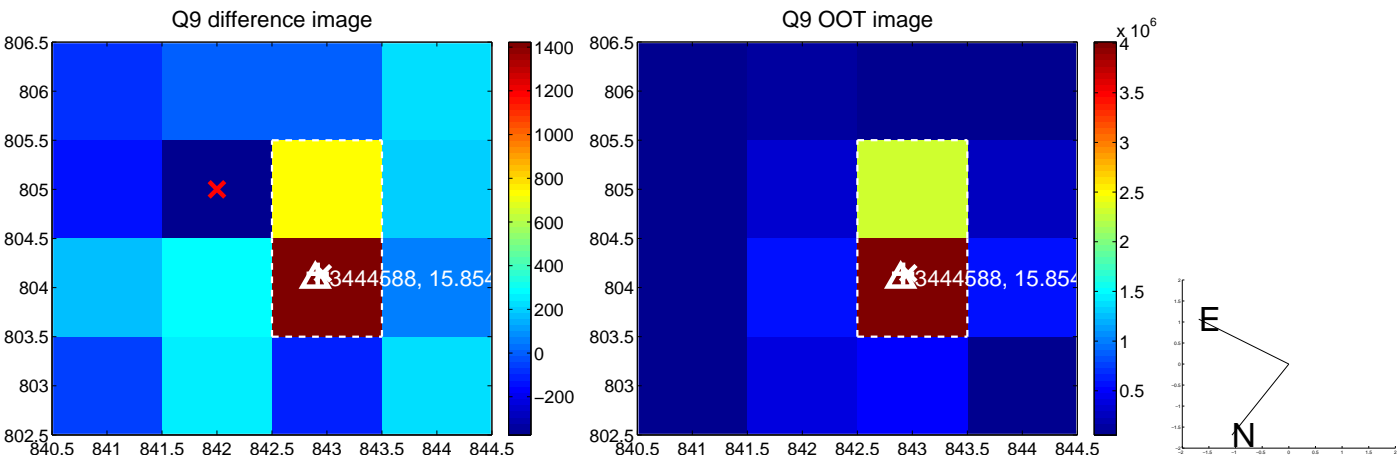
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



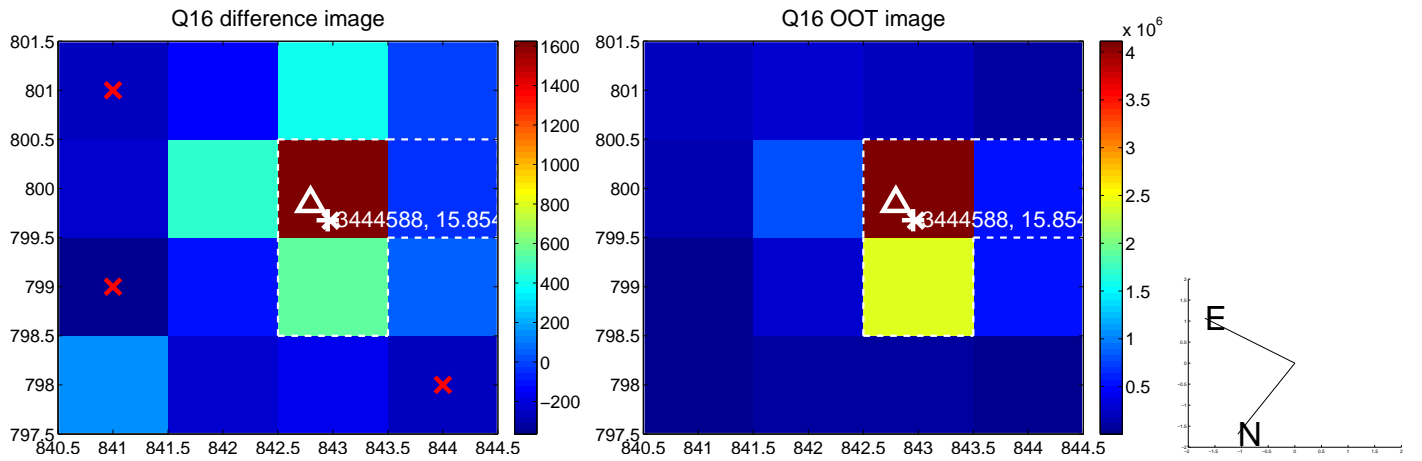
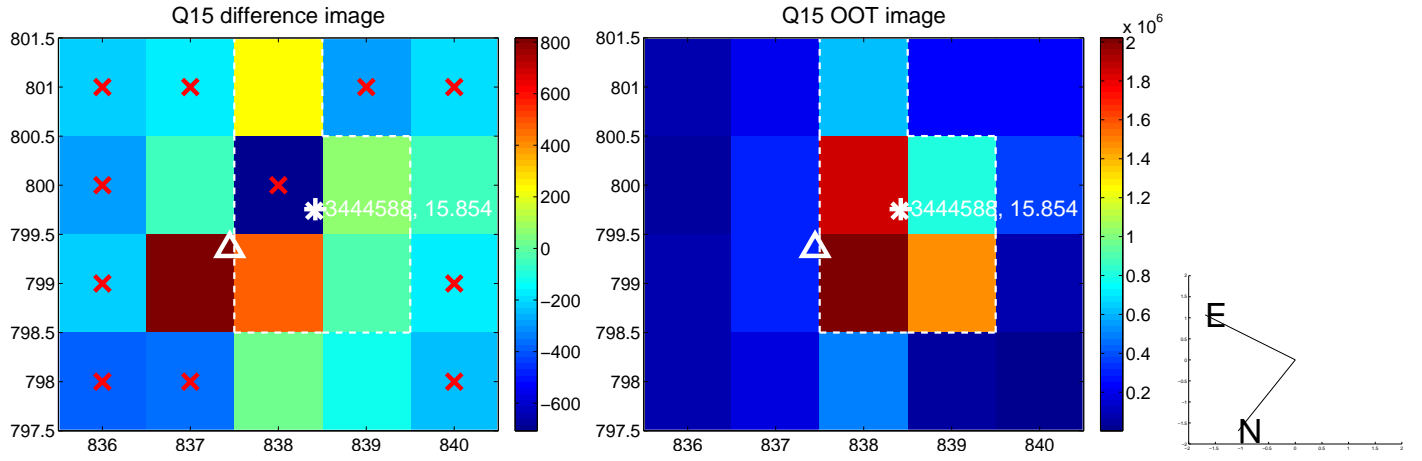
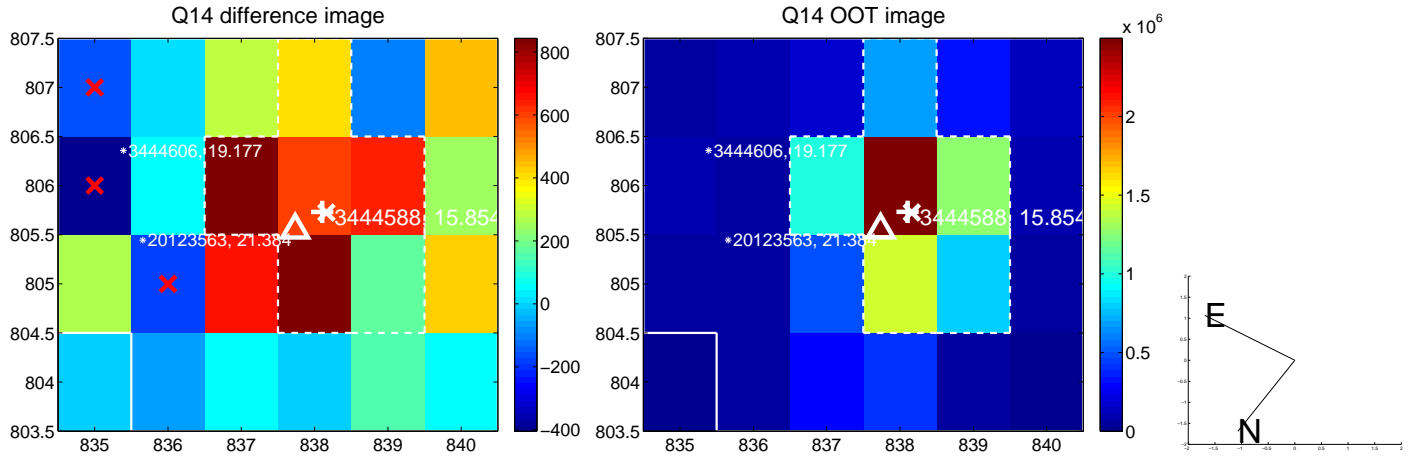
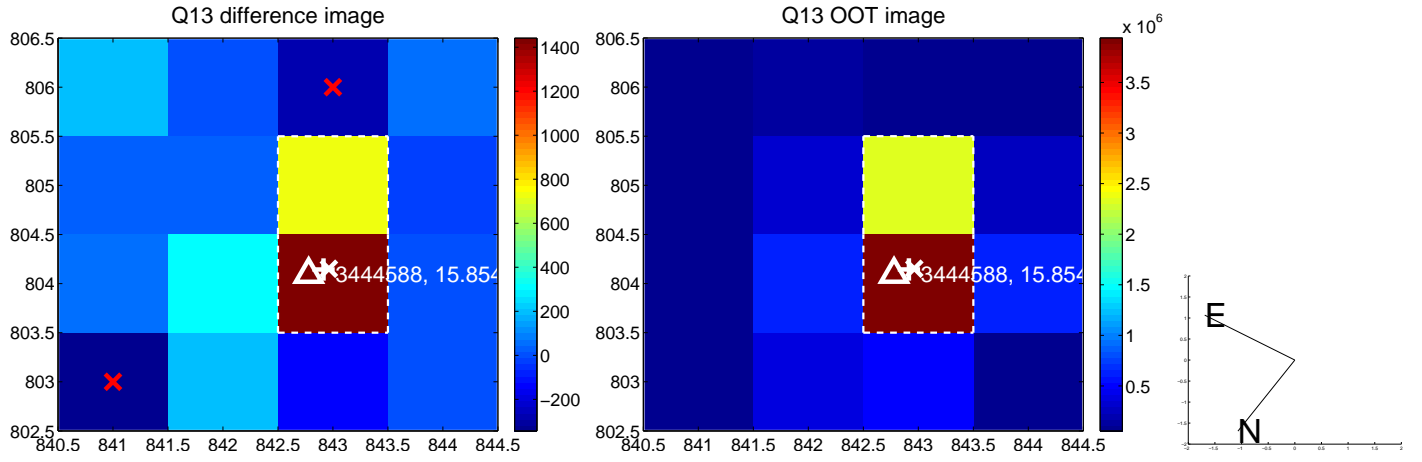
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



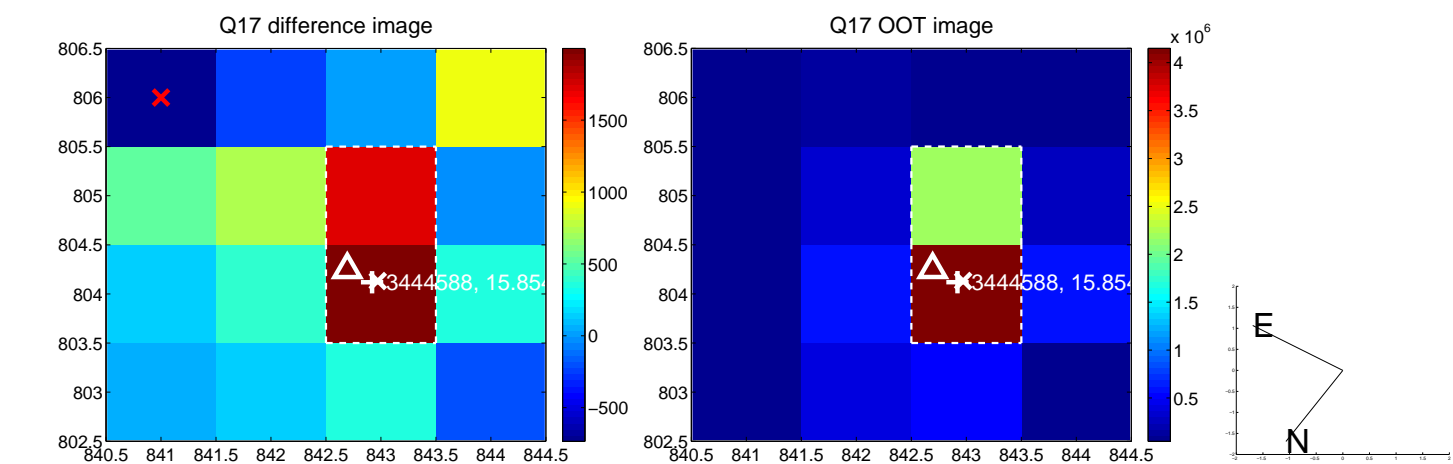
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



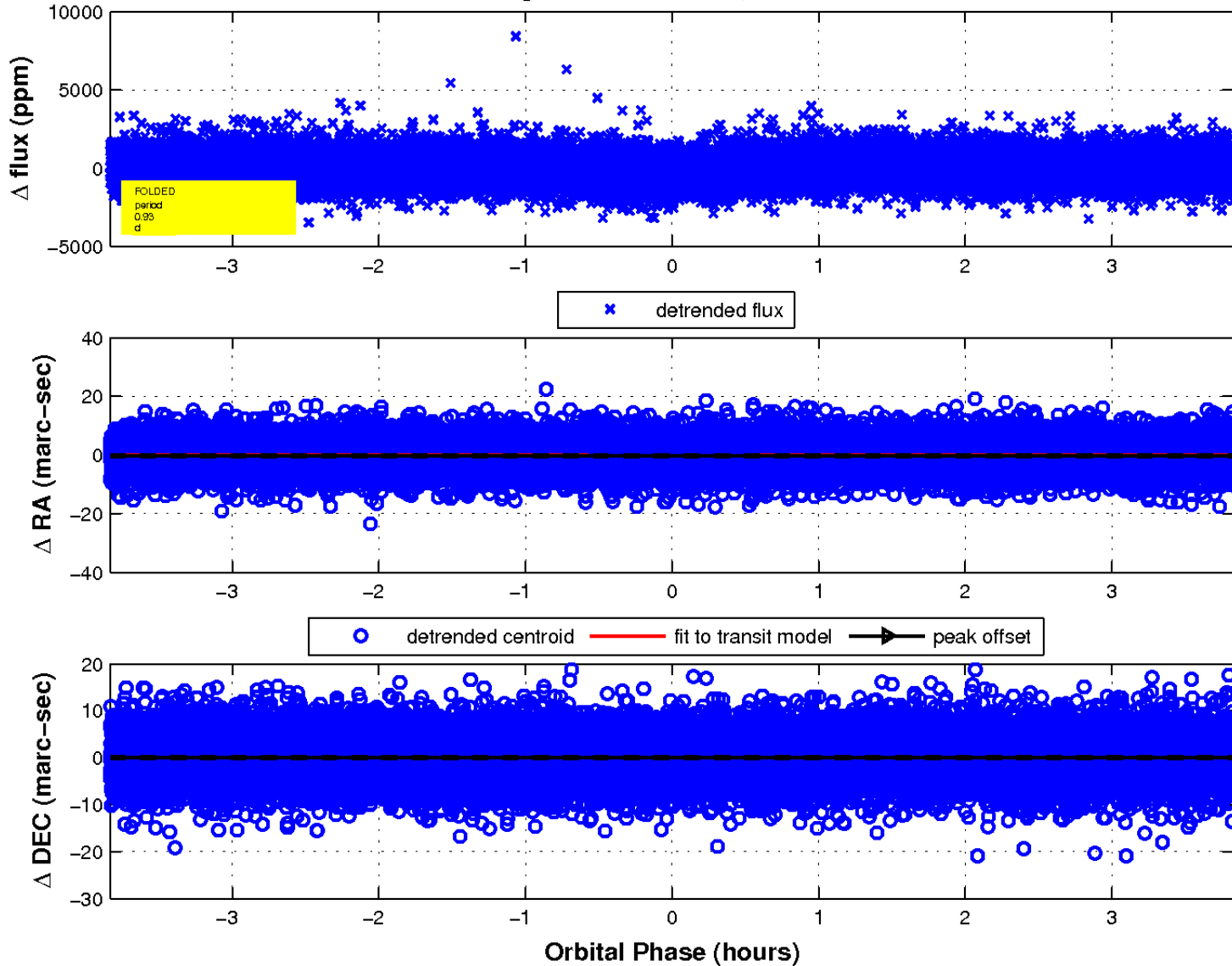
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

