

KIC 007335514

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})
007335514-01	OBS	6860.01	0.576740	132.066108	30.6	1.731	10.7	11.8	0.72	4524	0.49	1322.38

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007335514-01	OBS	PC	1.00	0	0	0	0	CENT_KIC_POS

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.

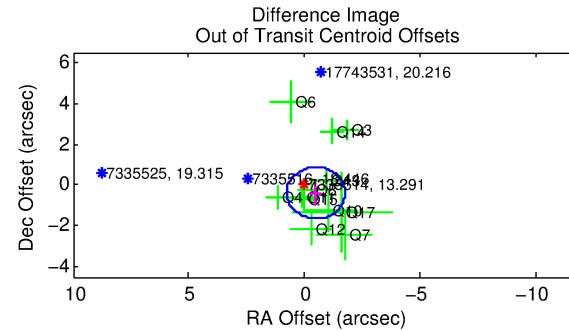
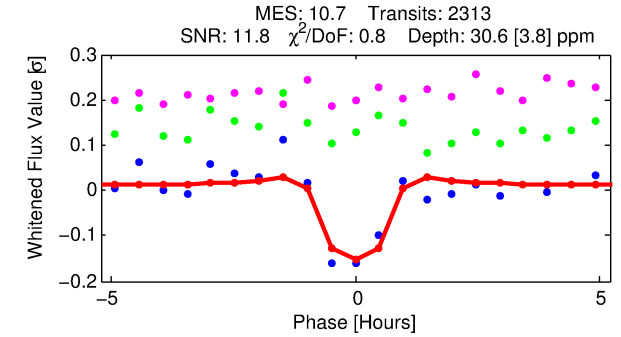
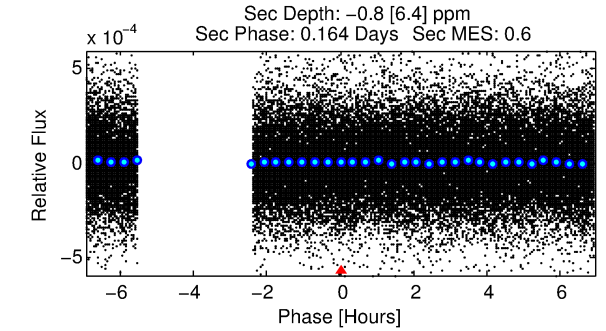
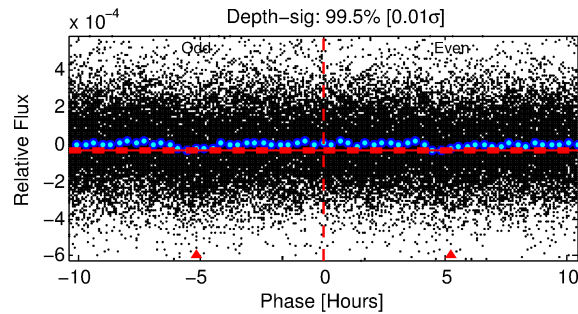
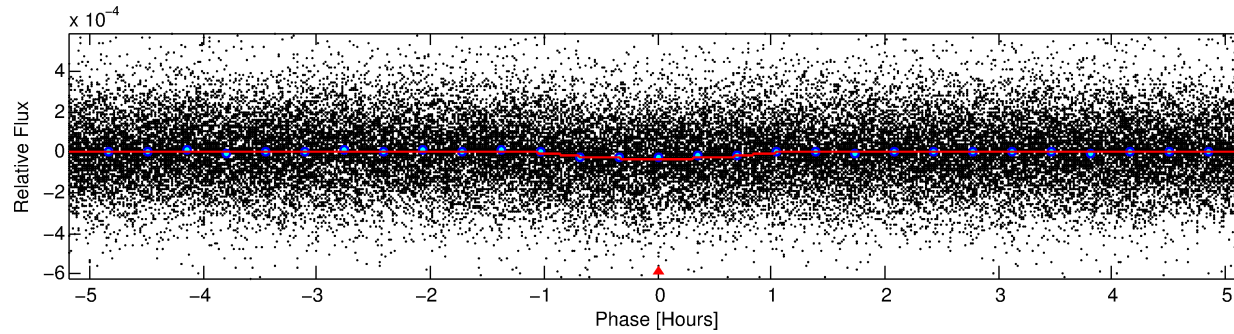
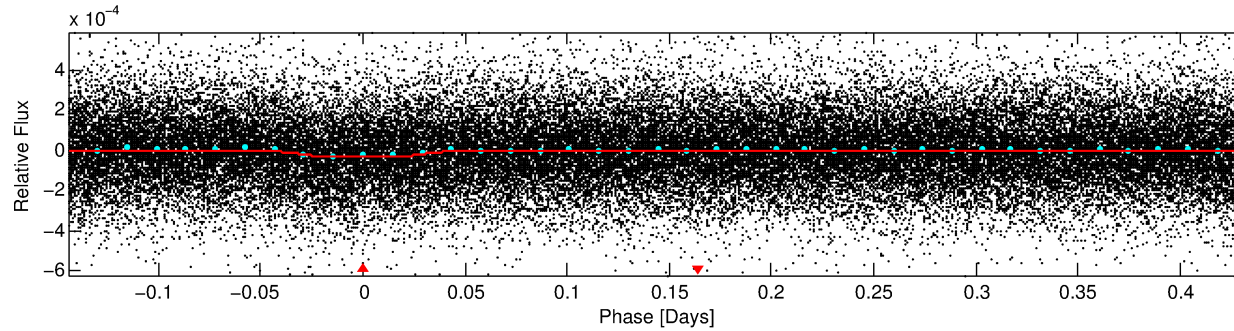
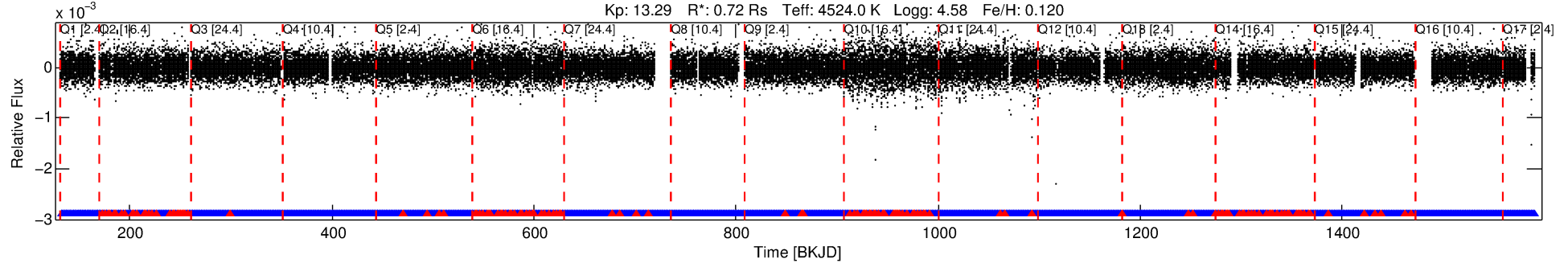
Ephemeris Match Information For 007335514-01

No Significant Match Found

DV One-Page Summary

KIC: 7335514 Candidate: 1 of 1 Period: 0.577 d
KOI: K06860.01 Corr: 0.898

Kp: 13.29 R*: 0.72 Rs Teff: 4524.0 K Logg: 4.58 Fe/H: 0.120



DV Fit Results:

Period = 0.57674 [0.00001] d
Epoch = 132.0661 [0.0018] BKJD
Rp/R* = 0.0063 [0.0033]
a/R* = 1.49 [1.59]
b = 0.90 [0.44]
Seff = 1322.38 [135.72]
Teff = 1538 [39] K
Rp = 0.49 [0.26] Re
a = 0.0121 [0.0006] AU
Ag = N/A
Teffp = N/A

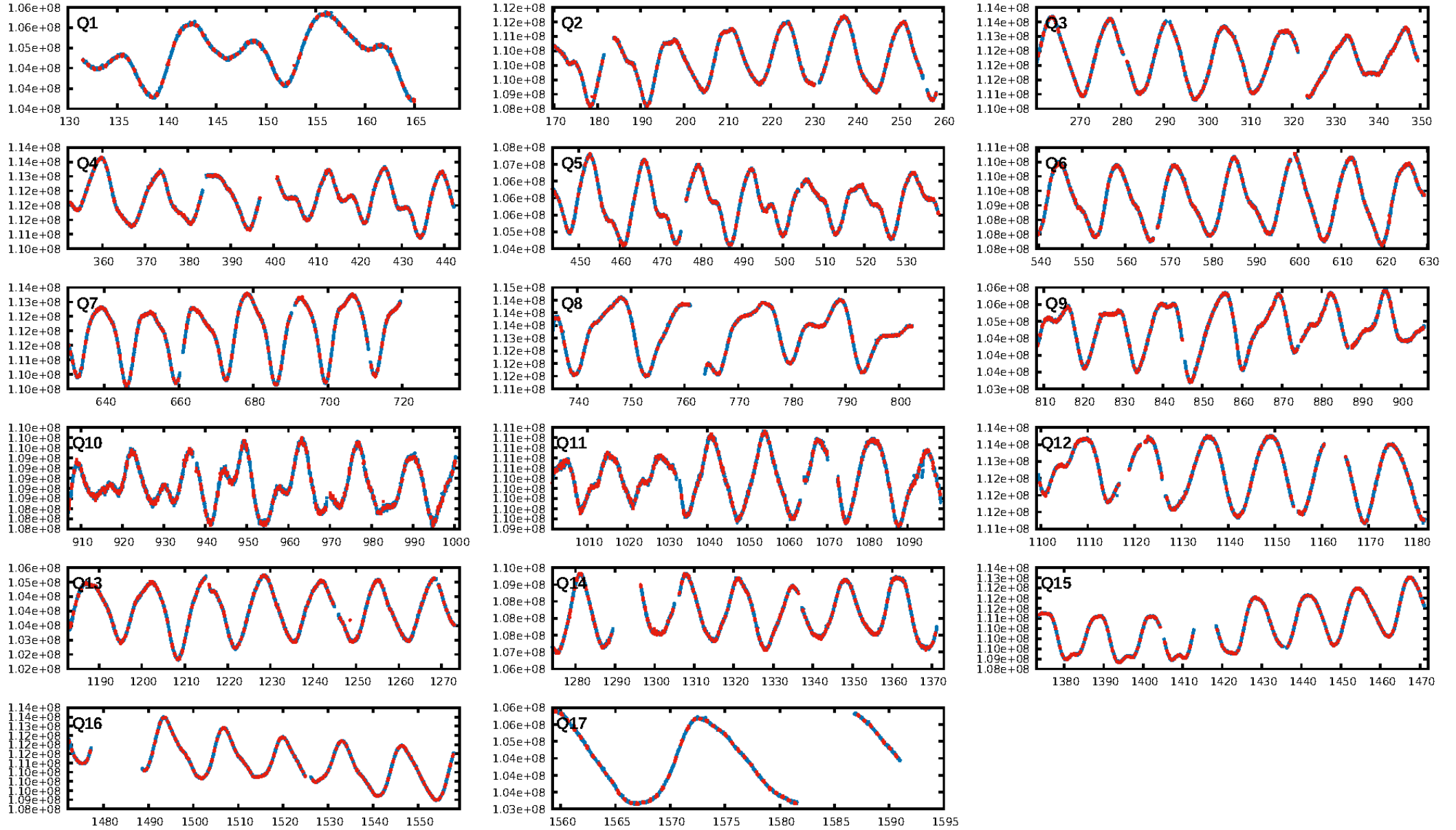
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.97e-24
RollingBand-fgt: 0.93 [2054/2208]
GhostDiagnostic-chr: 6.369
Centroid-sig: 17.4%
Centroid-so: 0.643 arcsec [0.64σ]
OotOffset-rm: 0.620 arcsec [1.47σ]
KicOffset-rm: 0.693 arcsec [1.54σ]
OotOffset-st: 3/4/3/2 [12]
KicOffset-st: 3/4/3/2 [12]
DiffImageQuality-fgm: 0.75 [9/12]
DiffImageOverlap-fno: 1.00 [17/17]

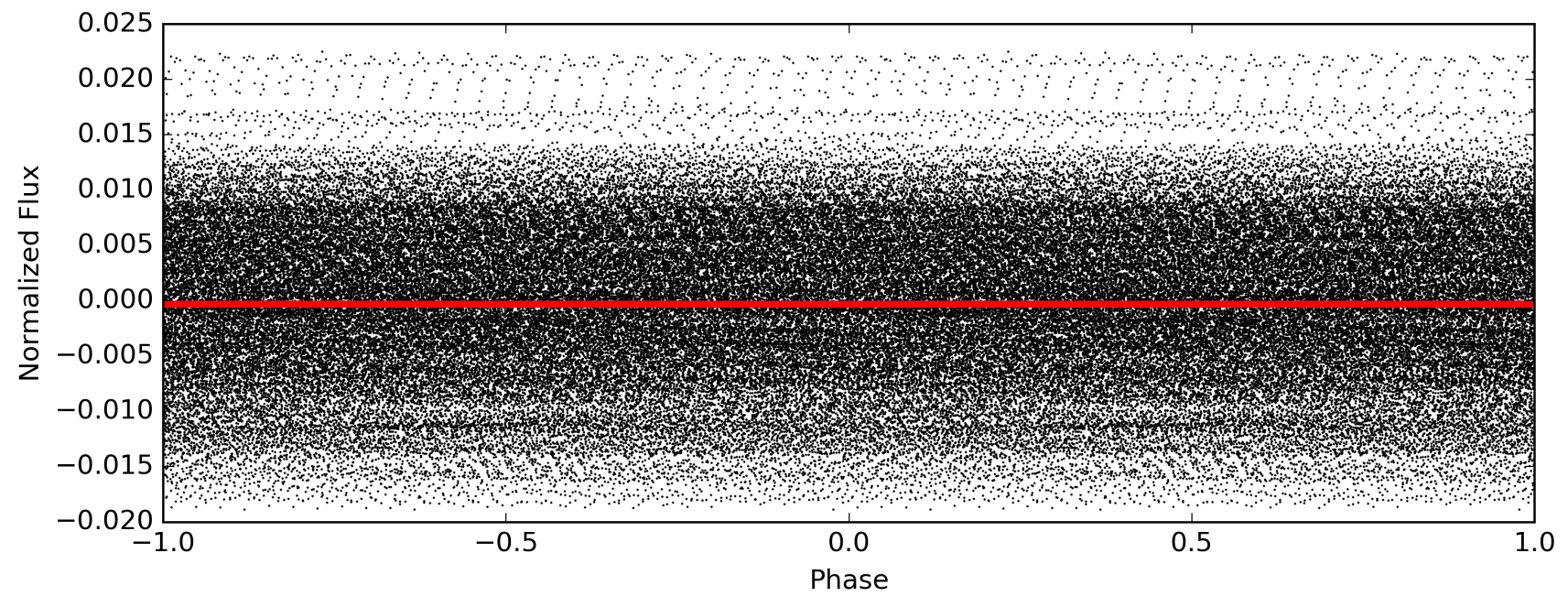
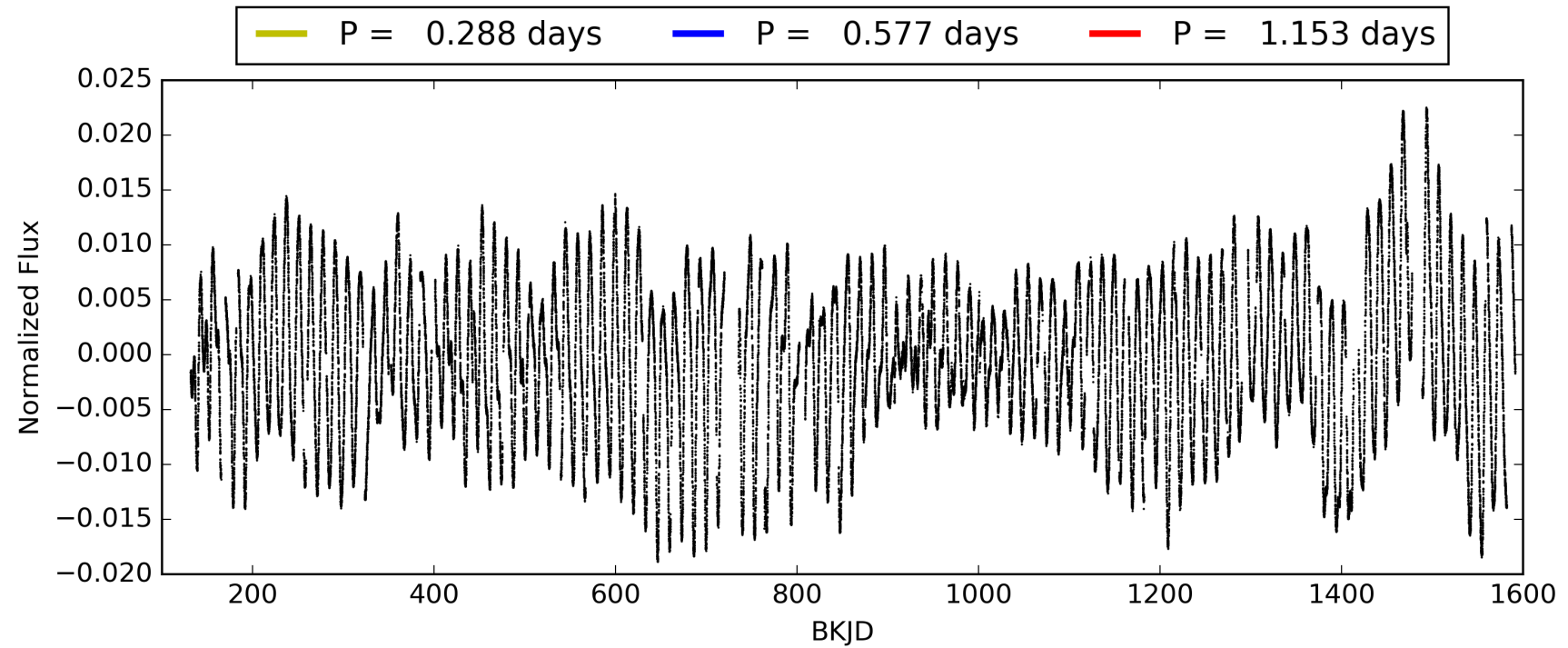
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 12:32:05 Z

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

TCE 007335514-01, PDC Light Curves

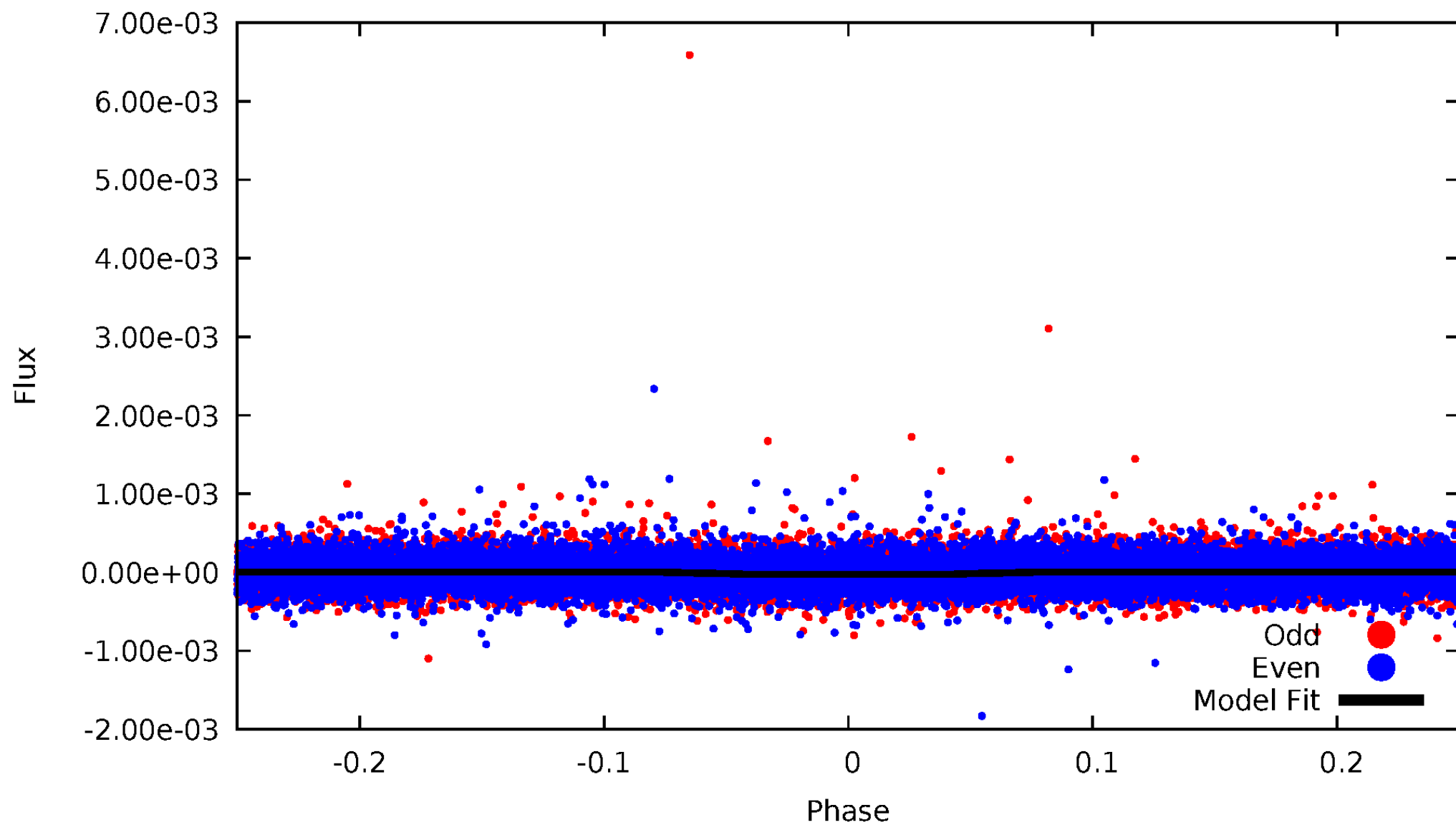


TCE 007335514-01



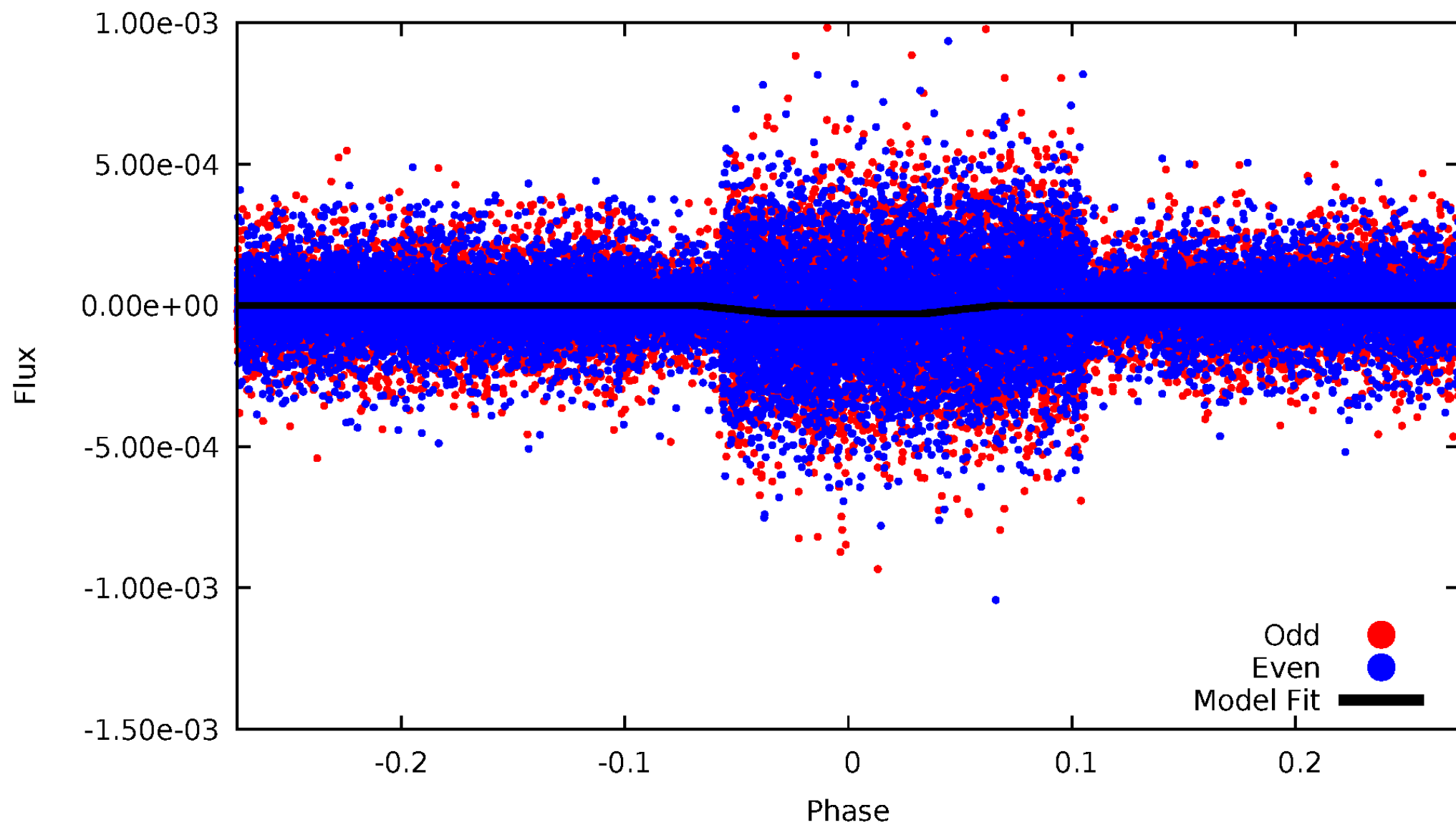
DV Odd/Even

TCE 007335514-01



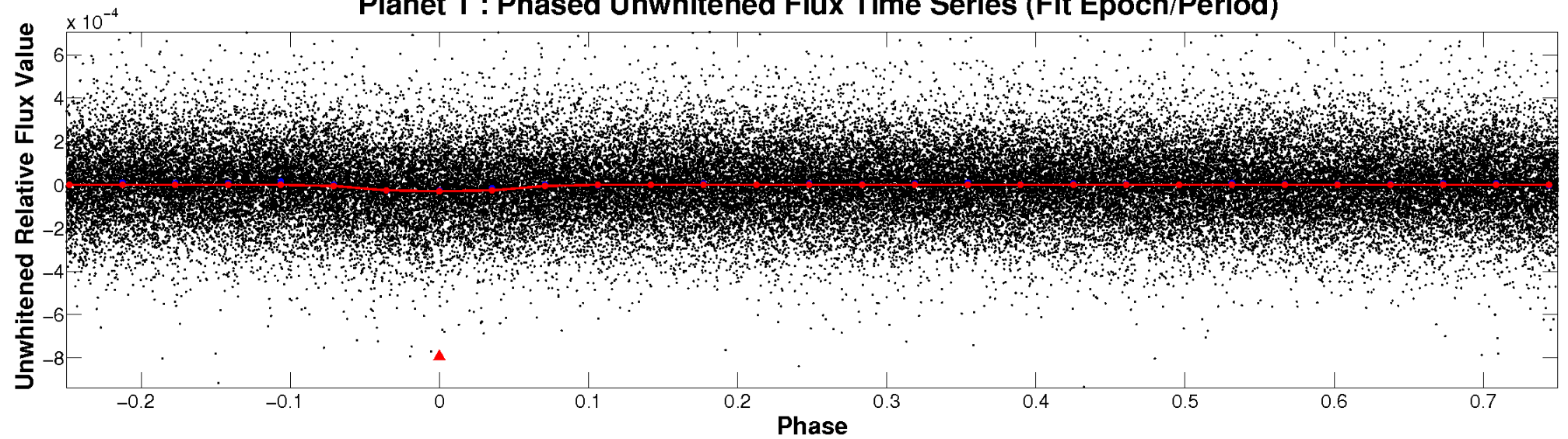
ALT Odd/Even

TCE 00733514-01

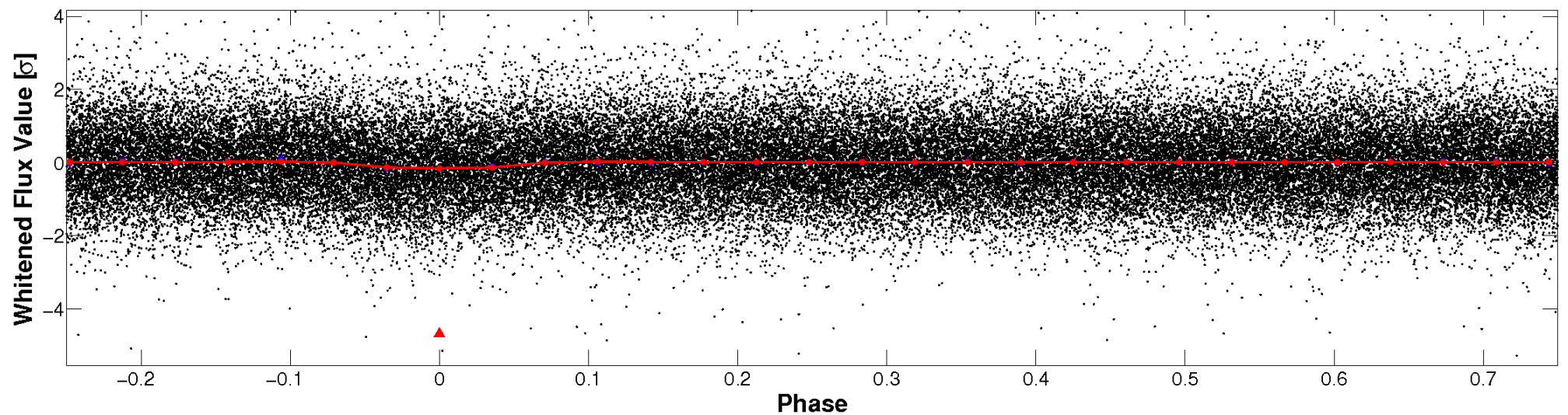


Non-Whitened Vs. Whitened Light Curve

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

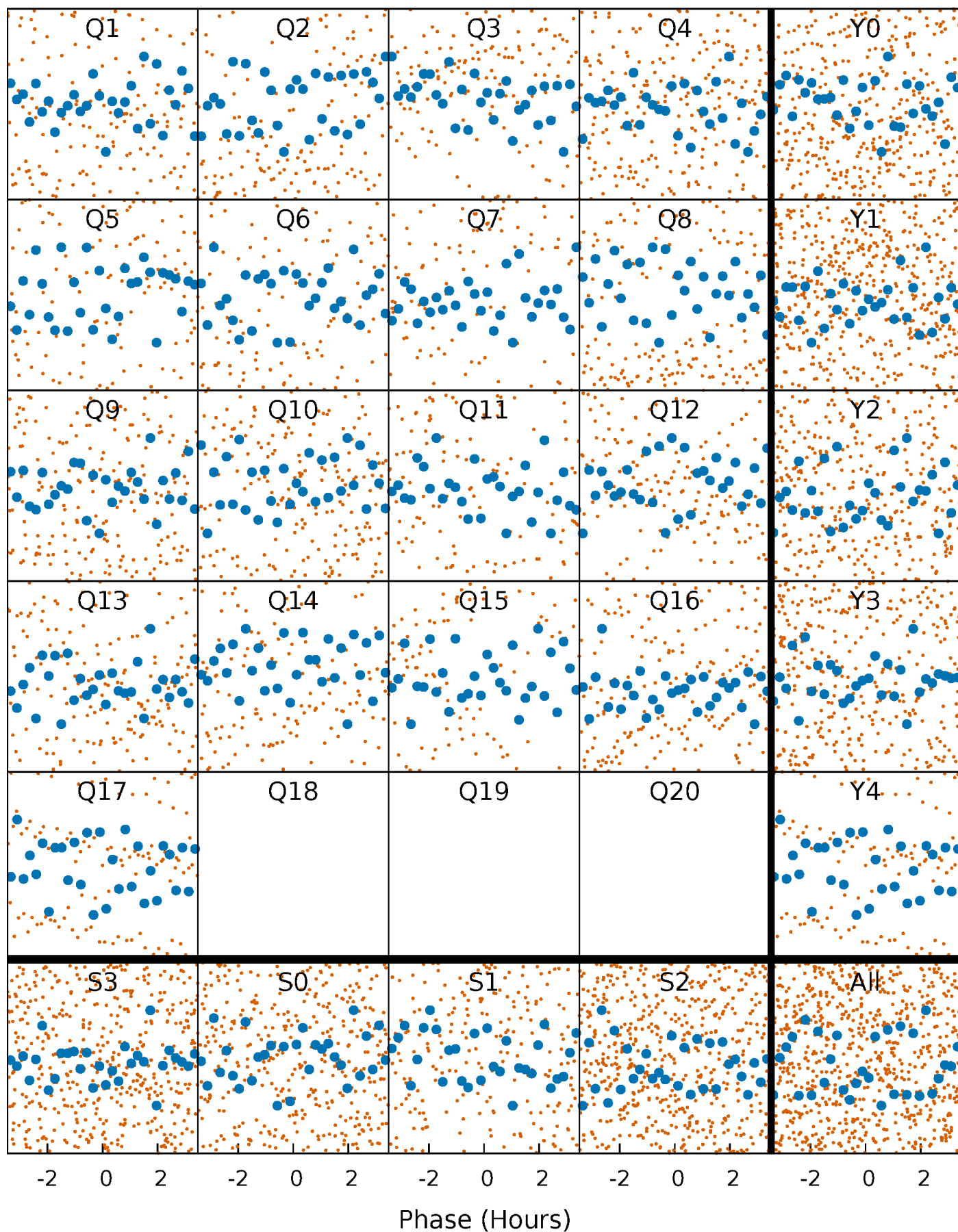


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



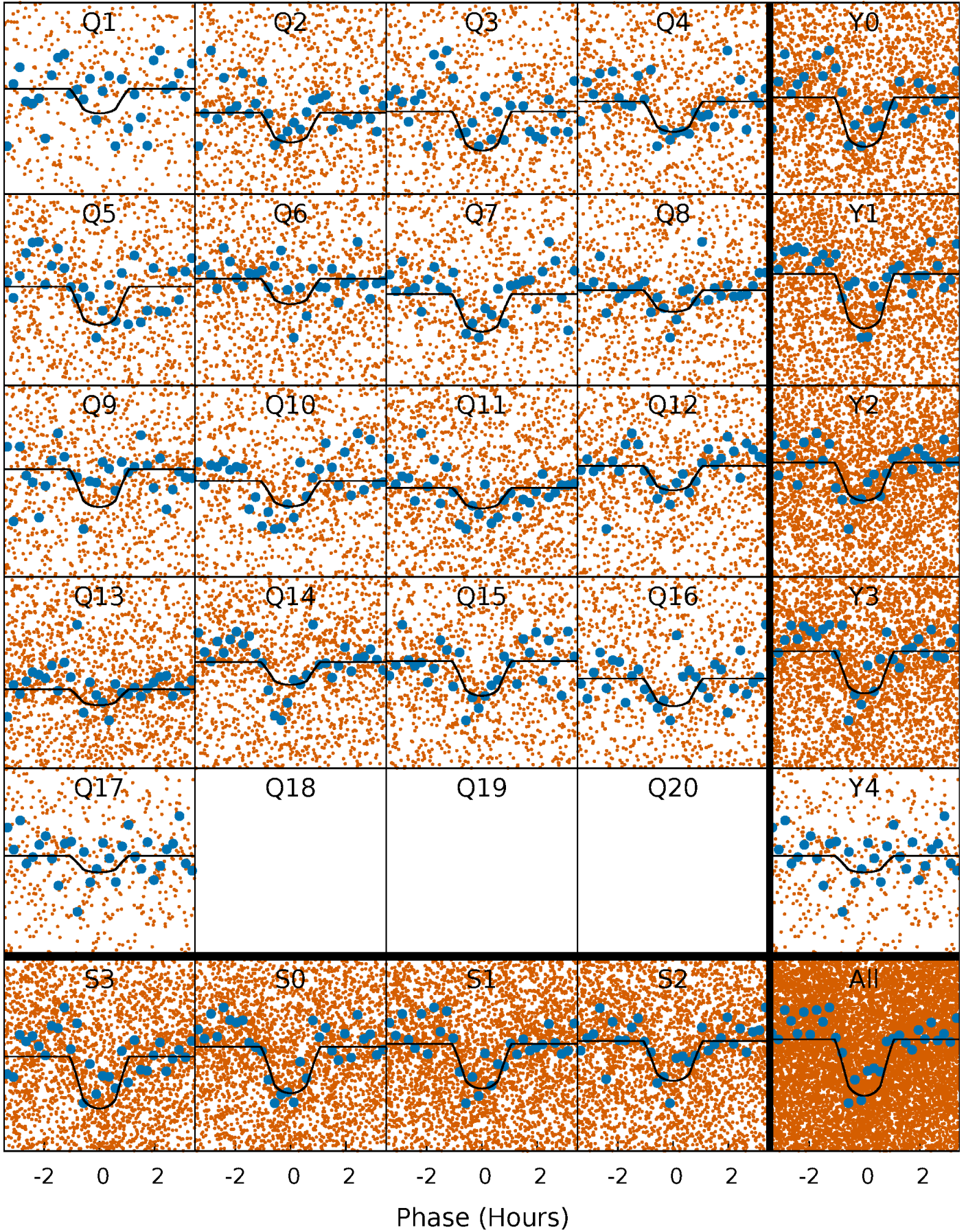
PDC Quarter-Phased Transit Curves

TCE 007335514-01 P= 0.576740 Days $T_0=132.066108$ (BKJD)



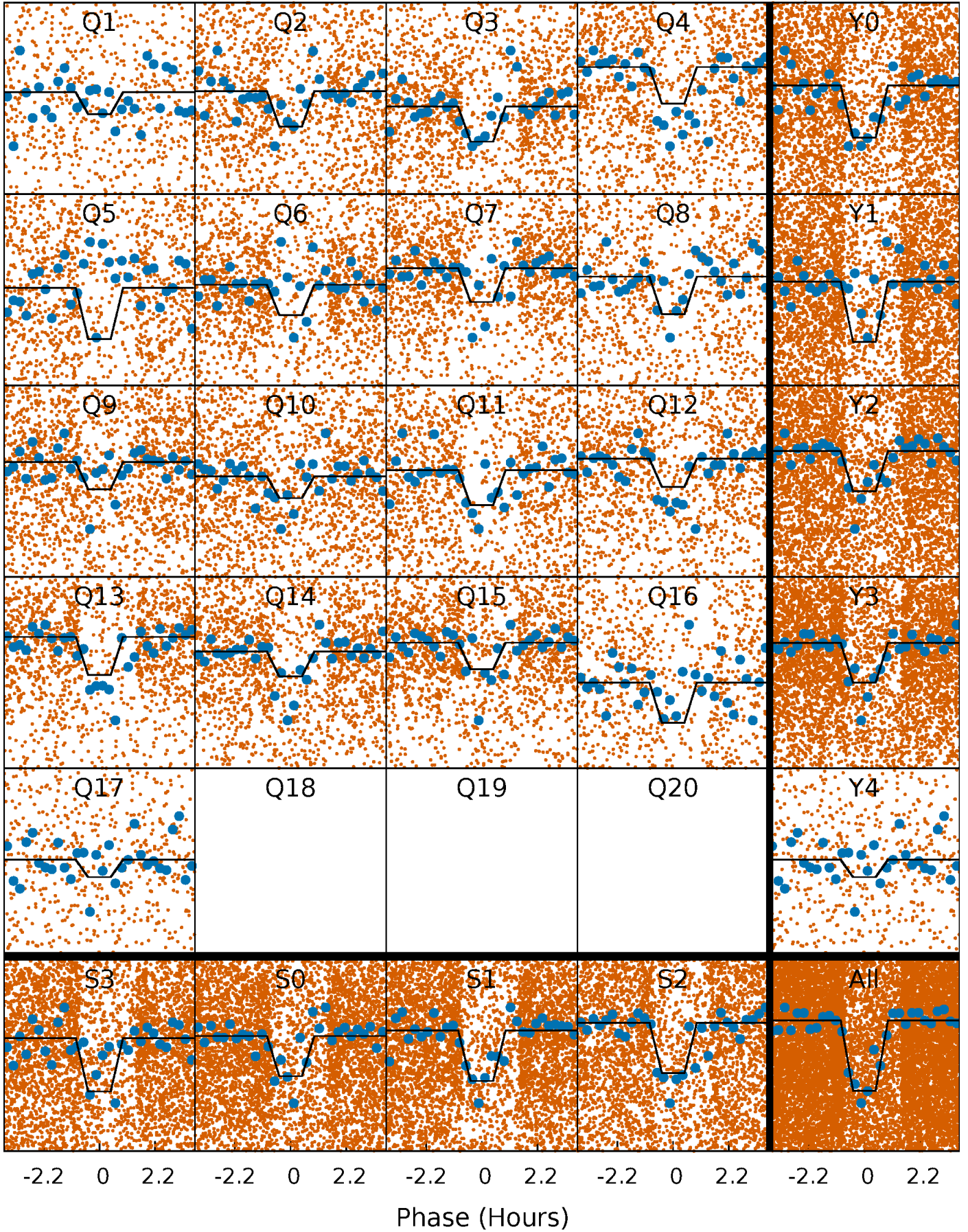
DV Quarter-Phased Transit Curves

TCE 007335514-01 P= 0.576740 Days $T_0=132.066108$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

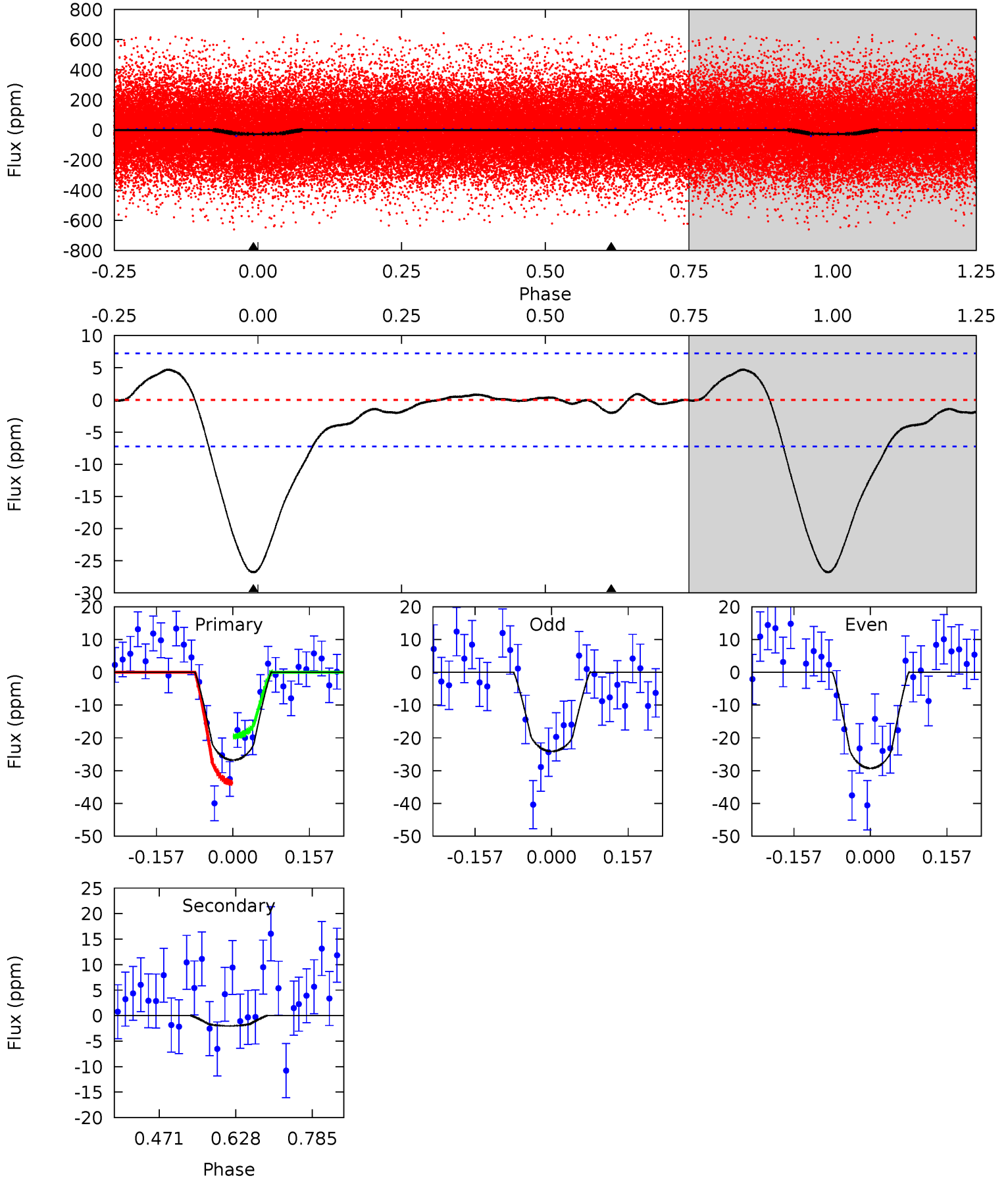
TCE 007335514-01 P= 0.576732 Days $T_0=132.070998$ (BKJD)



DV Model-Shift Uniqueness Test

007335514-01, P = 0.576740 Days, E = 131.489368 Days

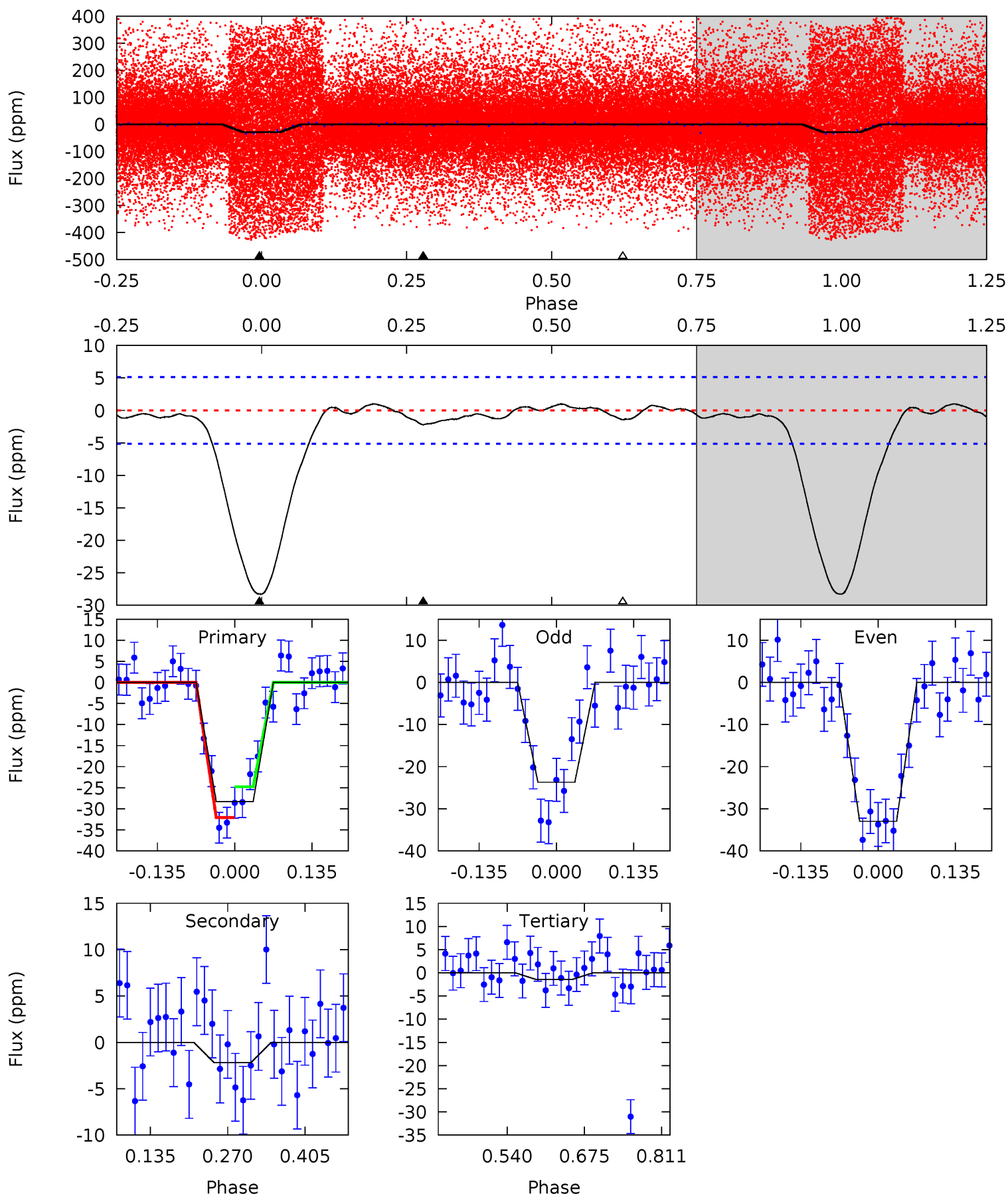
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
16.5	1.24	0	0	4.47	1.41	1.10	16.5	16.5	1.24	1.24	1.60	0.87	0.15	4.36



Alt Model-Shift Uniqueness Test

007335514-01, P = 0.576732 Days, E = 131.494266 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
24.8	1.91	1.24	0	4.50	1.49	0.58	23.5	24.8	0.68	1.91	4.06	1.14	0.03	3.18



Stellar Parameters For KIC 007335514

	$T_{\text{eff}}(K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	4524^{+81}_{-72}	$4.576^{+0.042}_{-0.012}$	$0.120^{+0.150}_{-0.150}$	$0.717^{+0.023}_{-0.038}$	$0.707^{+0.043}_{-0.025}$	$2.697^{+0.434}_{-0.150}$
	+2%/-2%	+1%/-0%	+125%/-125%	+3%/-5%	+6%/-4%	+16%/-6%
Source	SPE90	SPE90	SPE90	DSEP		

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

Secondary Eclipse Parameters for KIC 007335514-01 / KOI 6860.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-2 ± 2	$0.49^{+0.26}_{-0.26}$	2140^{+43}_{-42}	2497^{+912}_{-4933}	$0.567^{+2.328}_{-0.490}$
Alt.	-2 ± 1	$0.45^{+0.25}_{-0.25}$	2135^{+44}_{-40}	2722^{+1002}_{-4604}	$0.834^{+3.956}_{-0.555}$

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

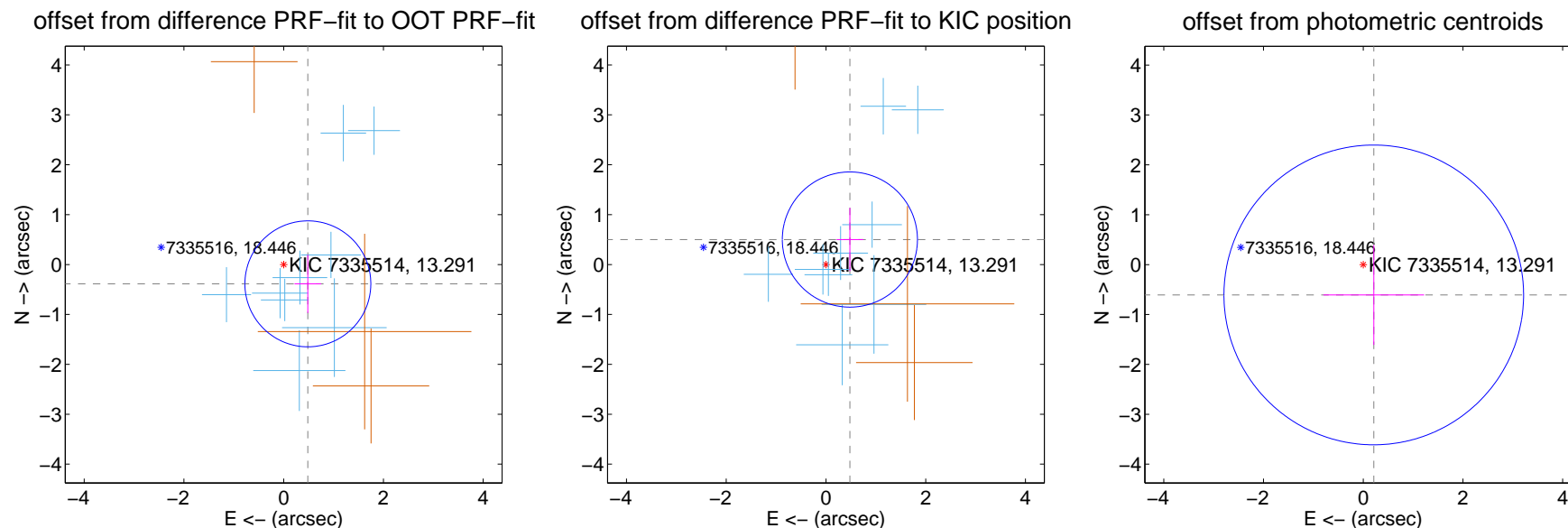
DV Centroid Data

Supplemental centroid analysis for 007335514-01. Kepler magnitude: 13.29. Transit SNR 11.79

There are 9 quarters with good PRF difference image offsets

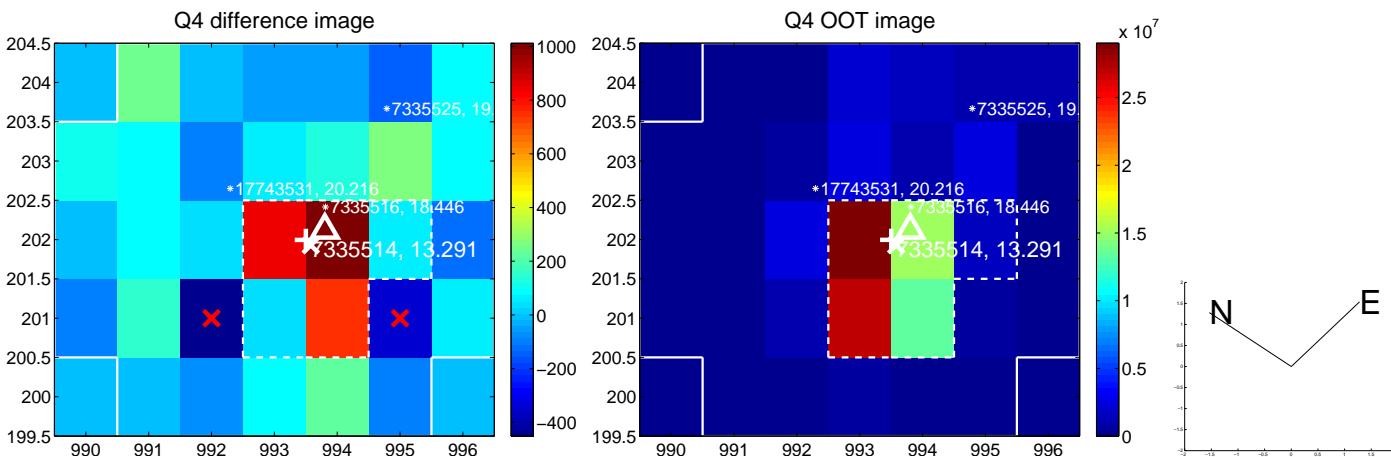
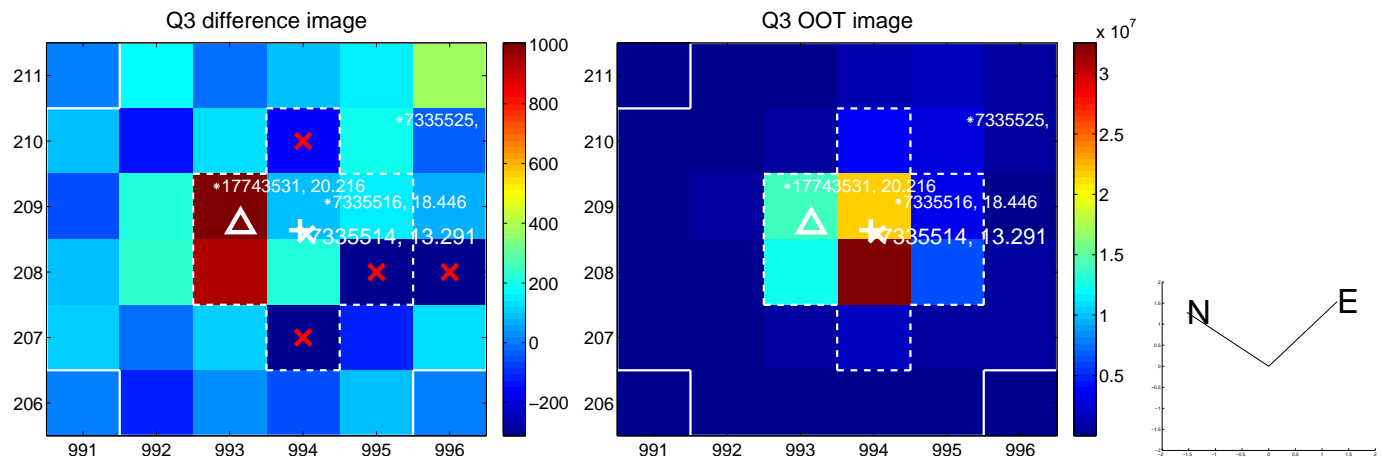
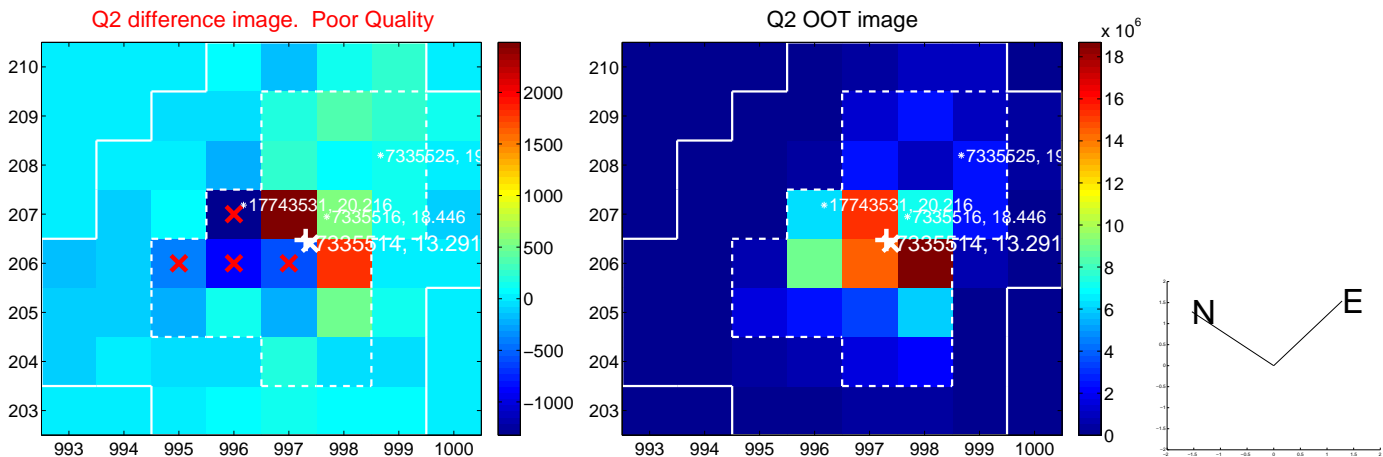
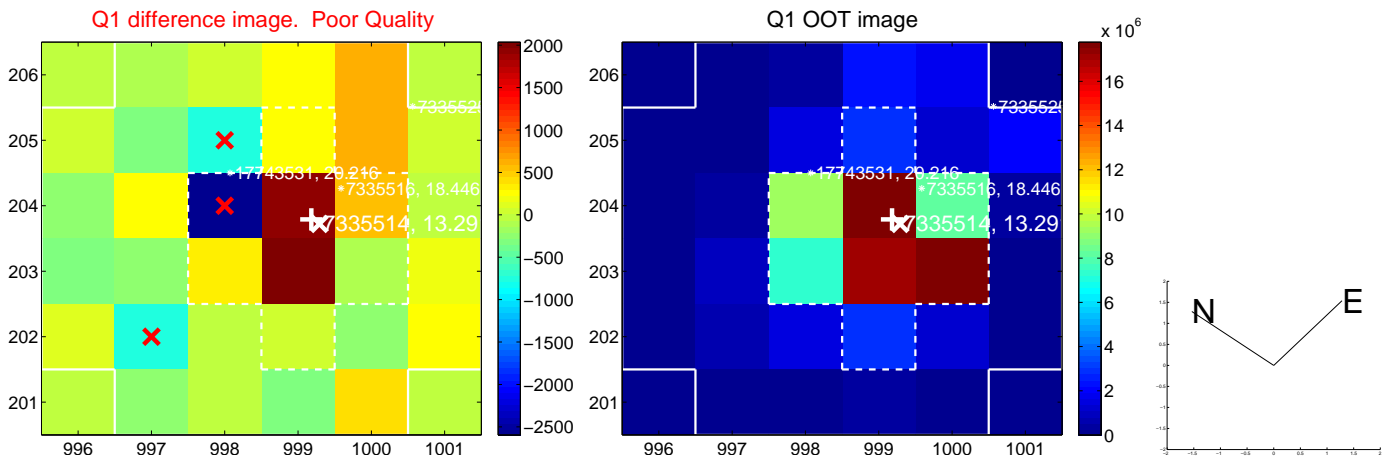
The direct PRF centroid is offset from the target star catalog position by about 0.56 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.620 ± 0.421	1.47	-0.485 ± 0.267	-0.387 ± 0.583
PRF-fit source offset from KIC position	0.693 ± 0.452	1.54	-0.479 ± 0.267	0.501 ± 0.633
photometric centroid source offset	0.64 ± 1.00	0.64	-0.21 ± 1.01	-0.61 ± 1.00

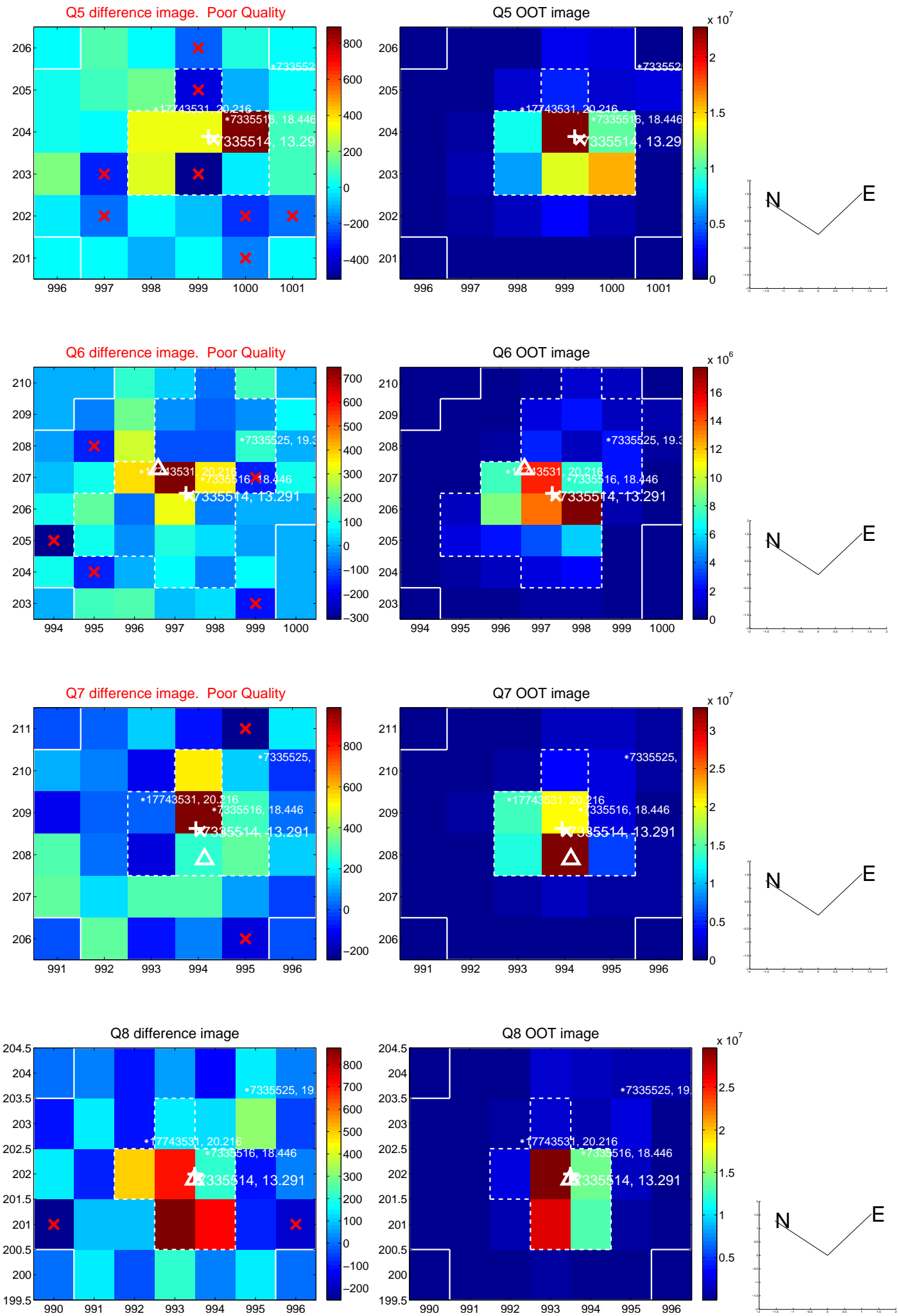


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets**; **Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

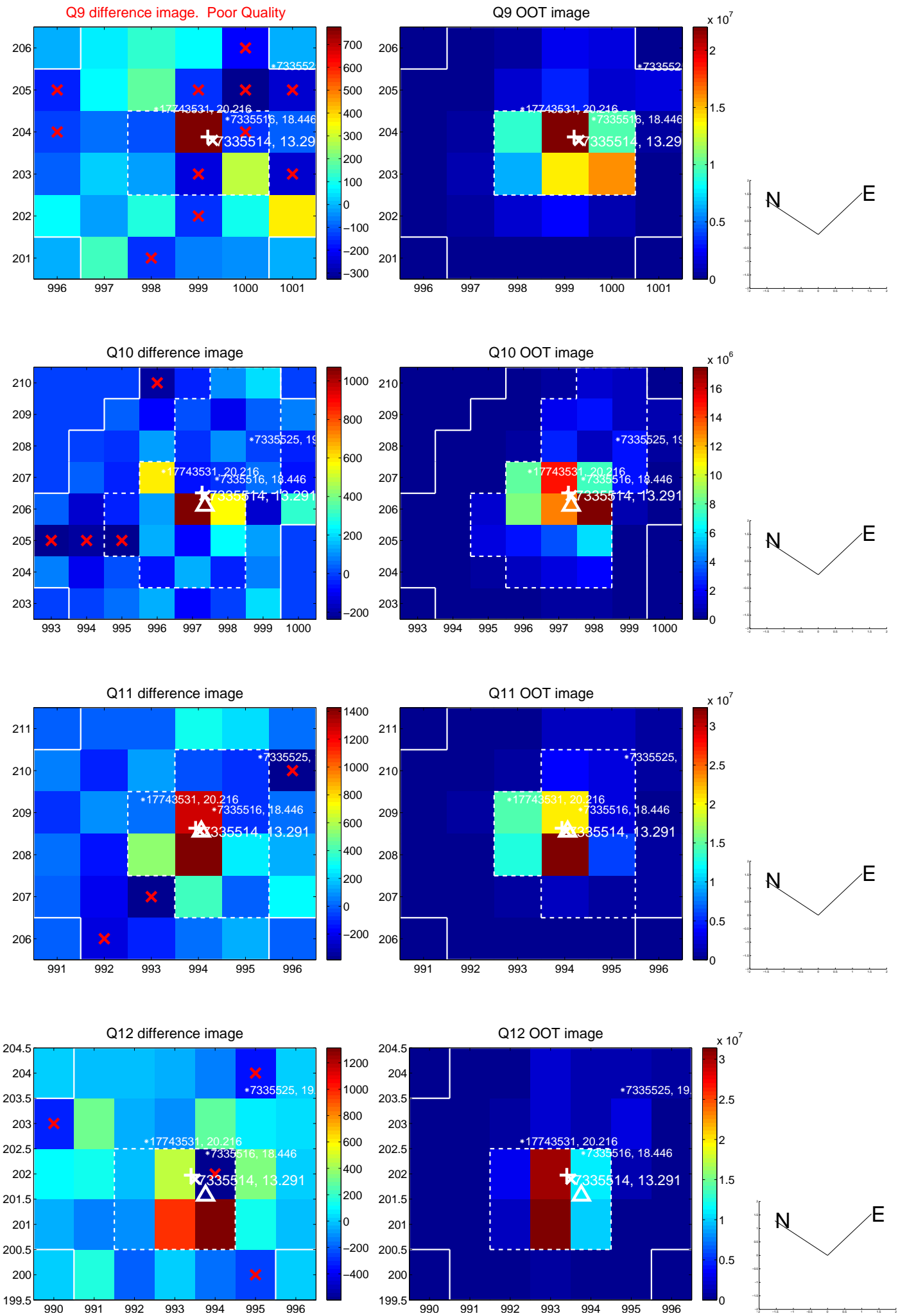
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



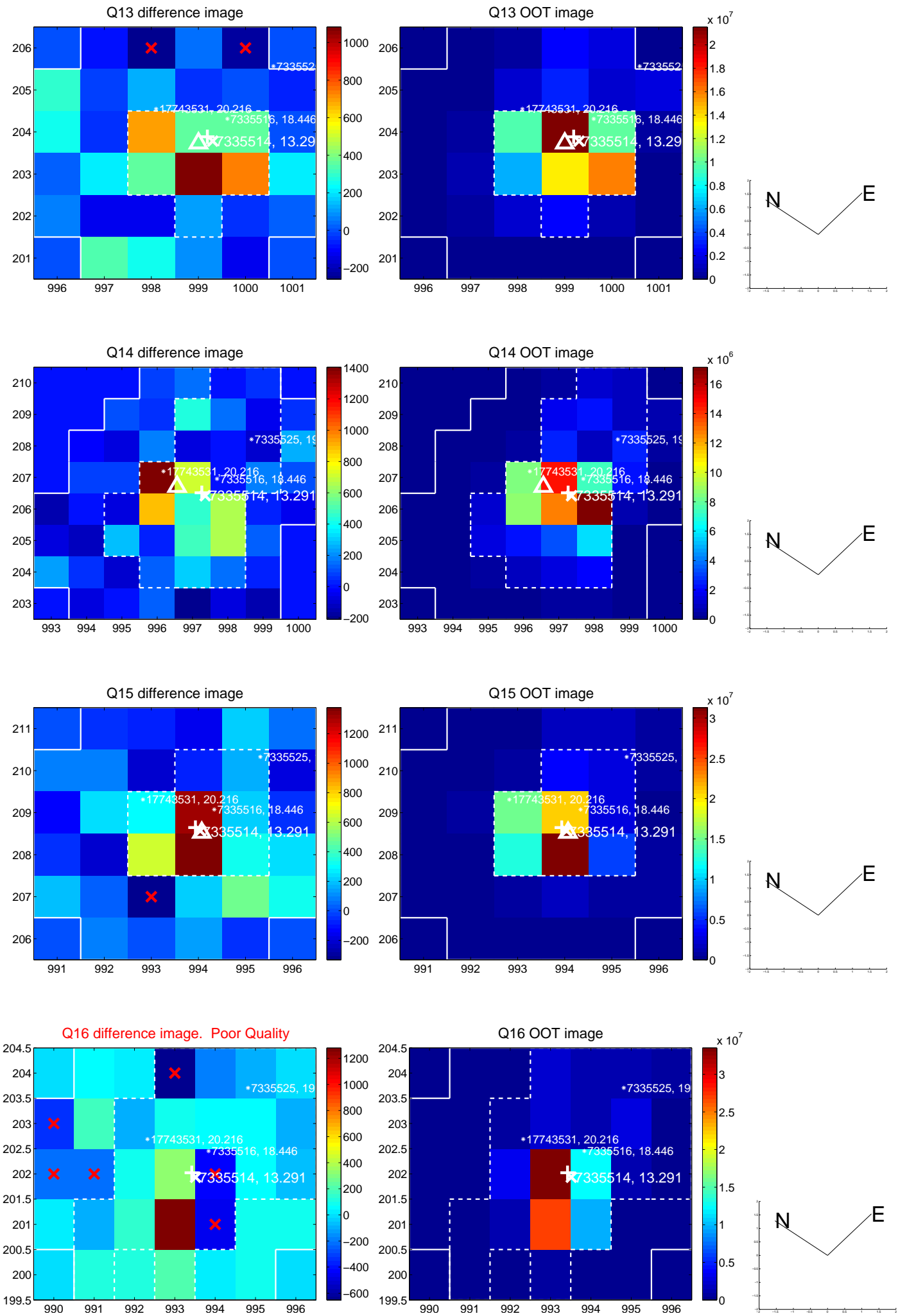
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



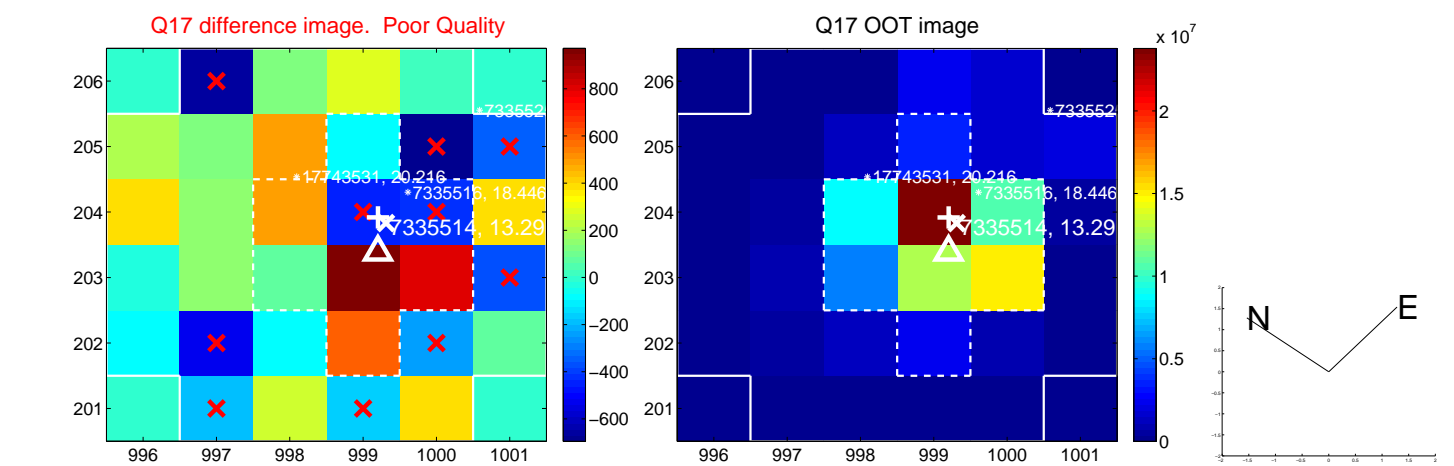
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



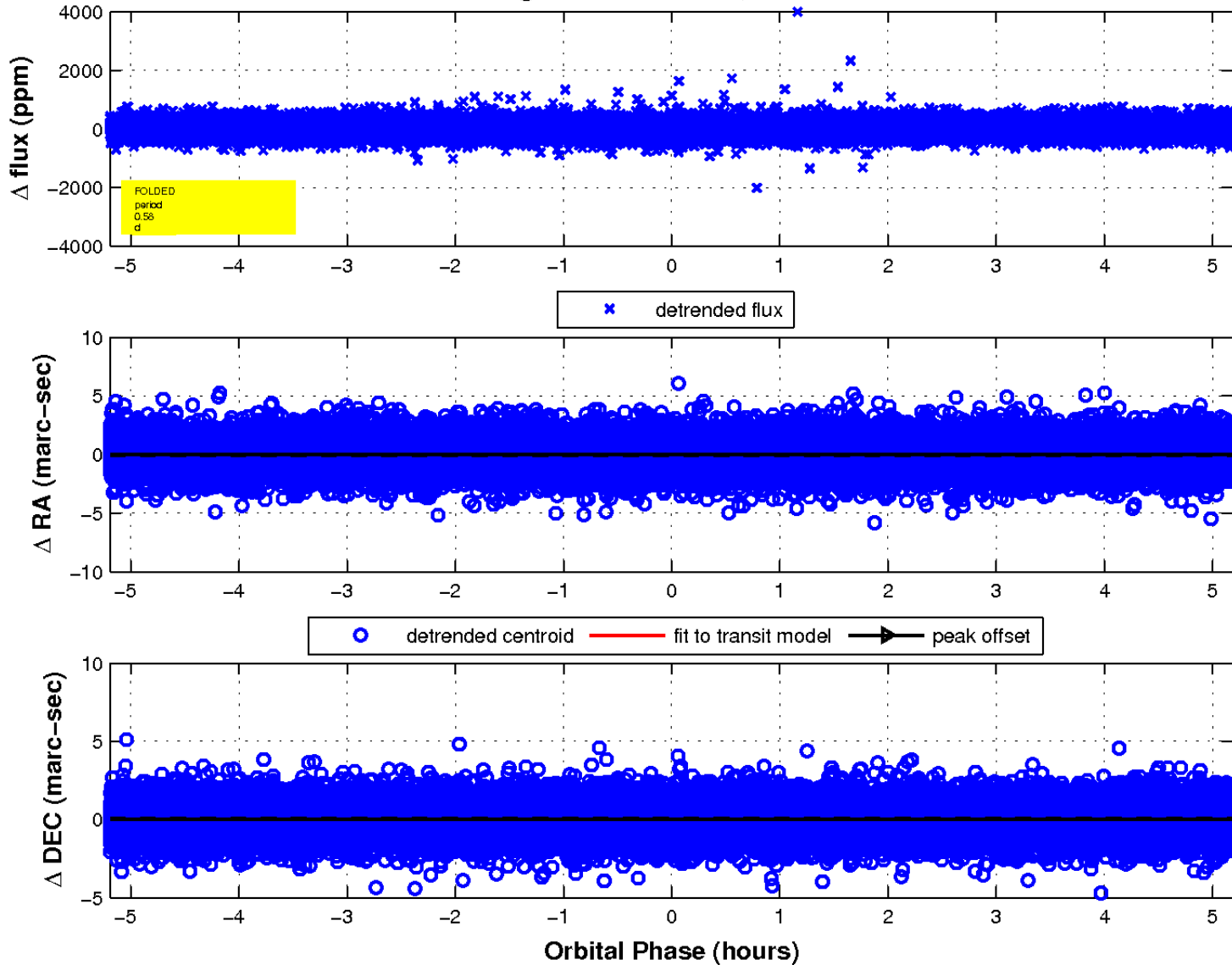
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

