

KIC 005390069

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})
005390069-01	OBS	No	1.359465	132.302382	53.4	12.723	7.5	11.1	1.20	6937	0.93	4543.55

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005390069-01	OBS	FP	0.00	1	0	0	0	LPP_DV—CENT_FEW_DIFFS

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

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

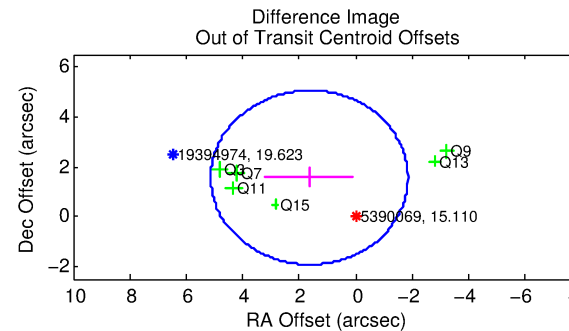
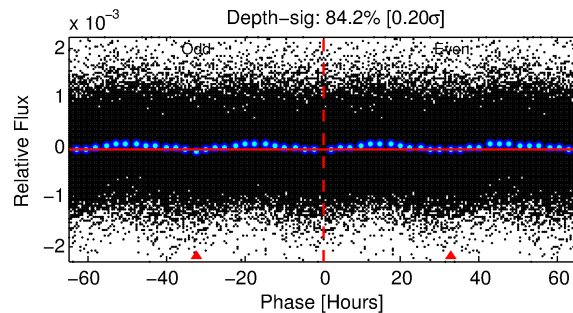
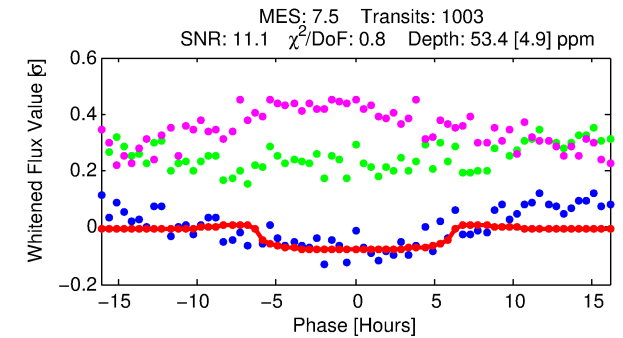
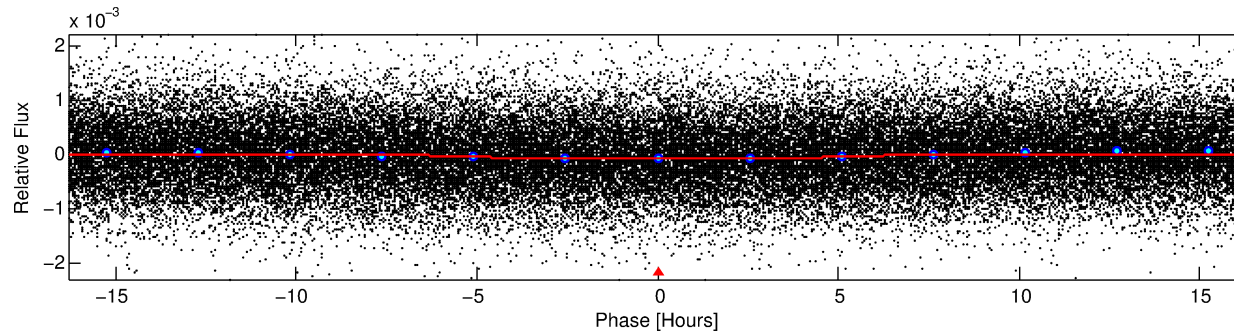
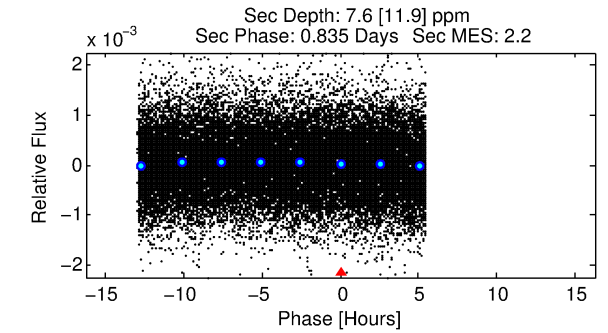
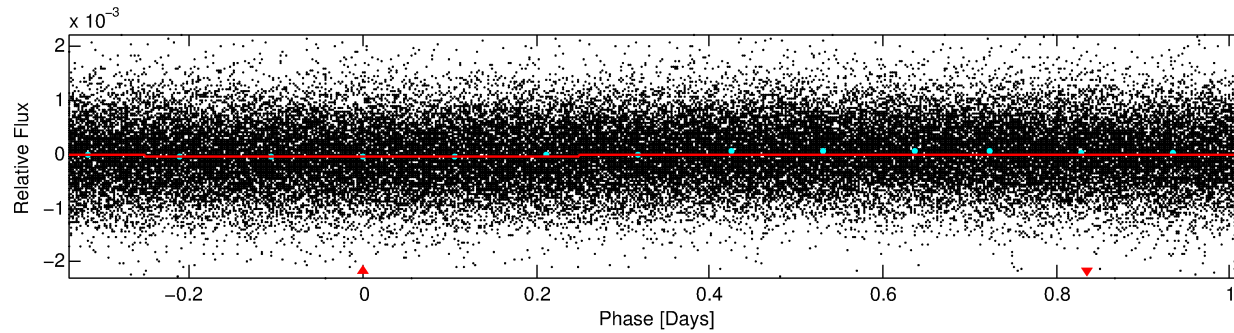
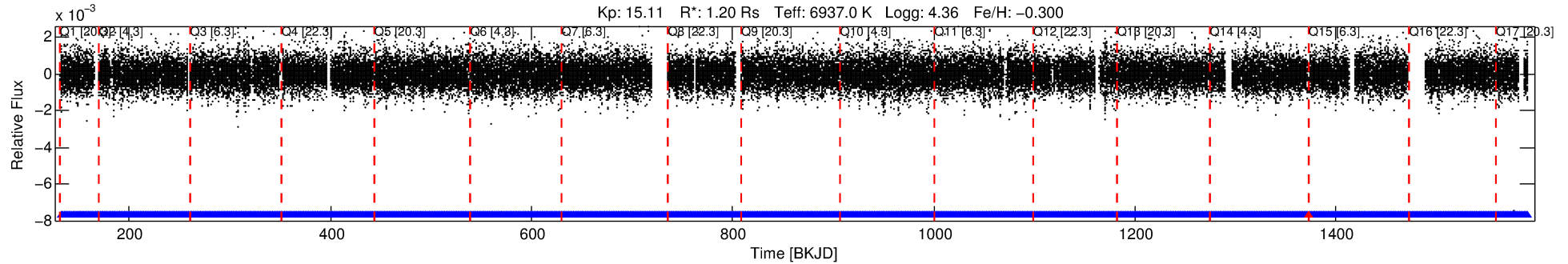
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005390069-01

No Significant Match Found

DV One-Page Summary

KIC: 5390069 Candidate: 1 of 1 Period: 1.359 d



DV Fit Results:

Period = 1.35946 [0.00002] d
Epoch = 132.3024 [0.0092] BKJD
Rp/R* = 0.0071 [0.0041]
a/R* = 1.05 [0.30]
b = 0.64 [3.24]
Seff = 4543.55 [1681.99]
Teff = 2094 [194] K
Rp = 0.93 [0.60] Re
a = 0.0256 [0.0059] AU
Ag = 3.21 [6.34] [0.35σ]
Teffp = 4332 [2120] K [1.05σ]

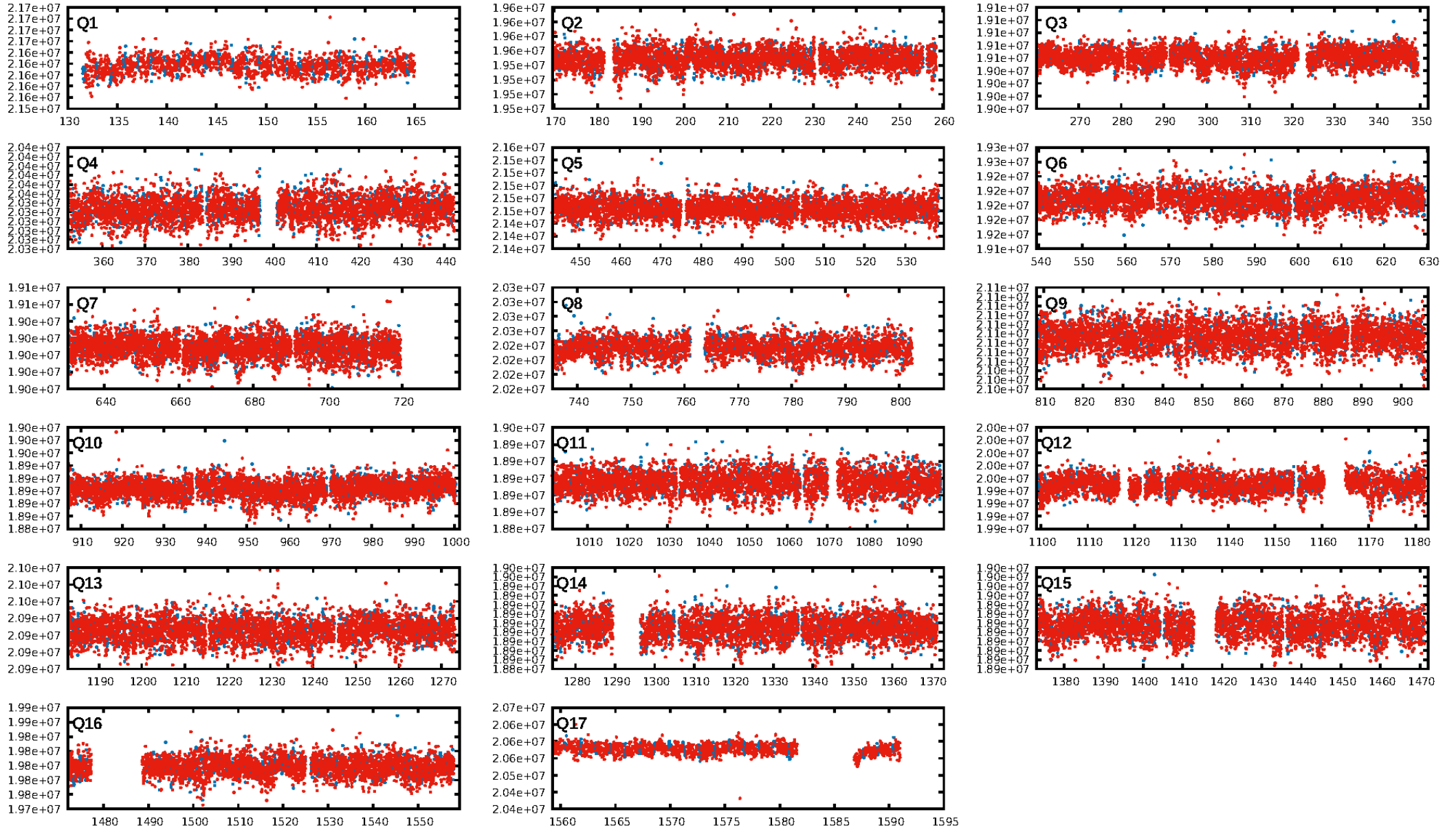
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [956/957]
GhostDiagnostic-chr: 3.082
Centroid-sig: 16.5%
Centroid-so: 1.724 arcsec [2.01σ]
OotOffset-rm: 2.265 arcsec [1.95σ]
KicOffset-rm: 2.071 arcsec [1.69σ]
OotOffset-st: 0/4/0/2 [6]
KicOffset-st: 0/4/0/2 [6]
DiffImageQuality-fgm: 0.00 [0/6]
DiffImageOverlap-fno: 1.00 [17/17]

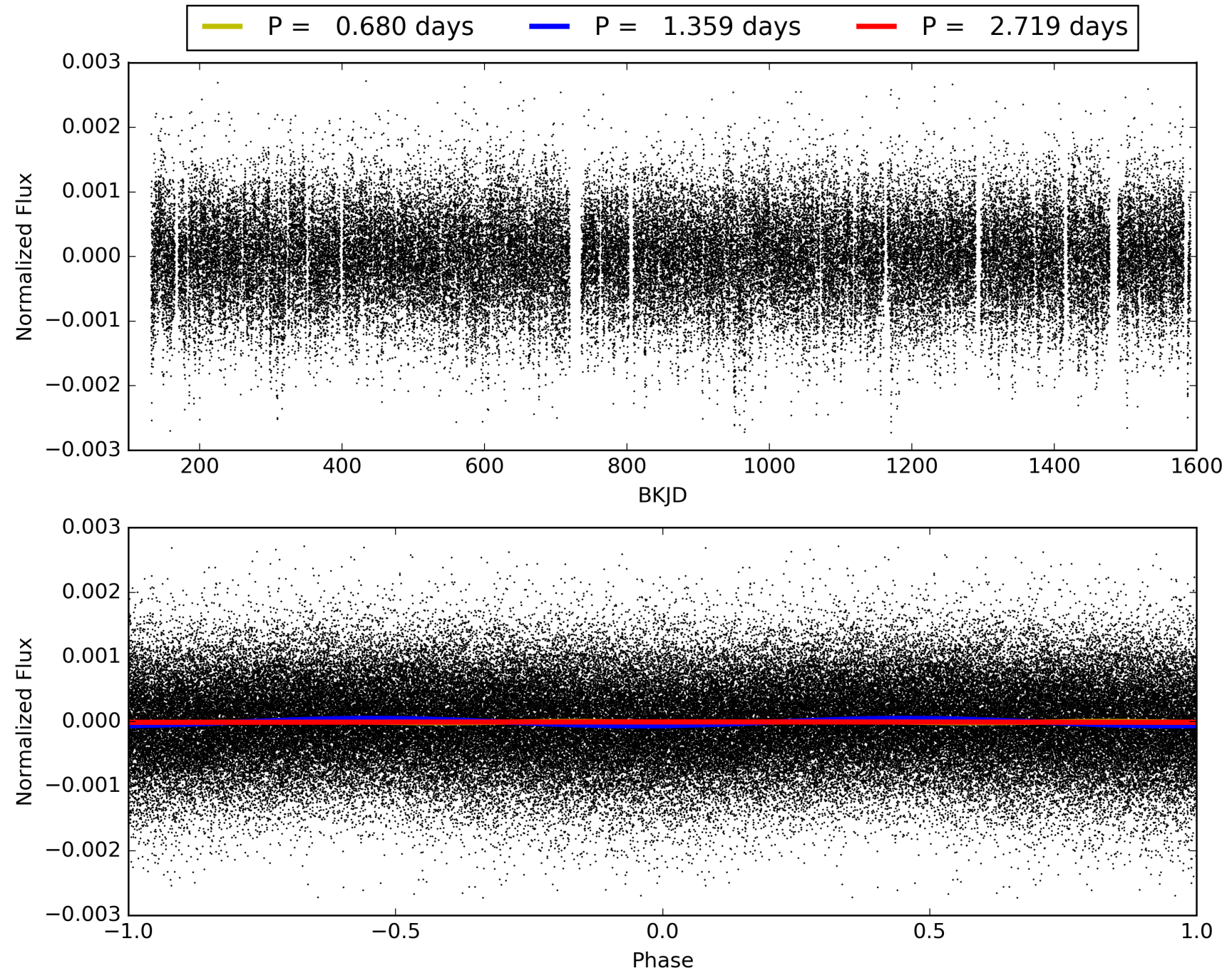
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 08:16:14 Z

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

TCE 005390069-01, PDC Light Curves

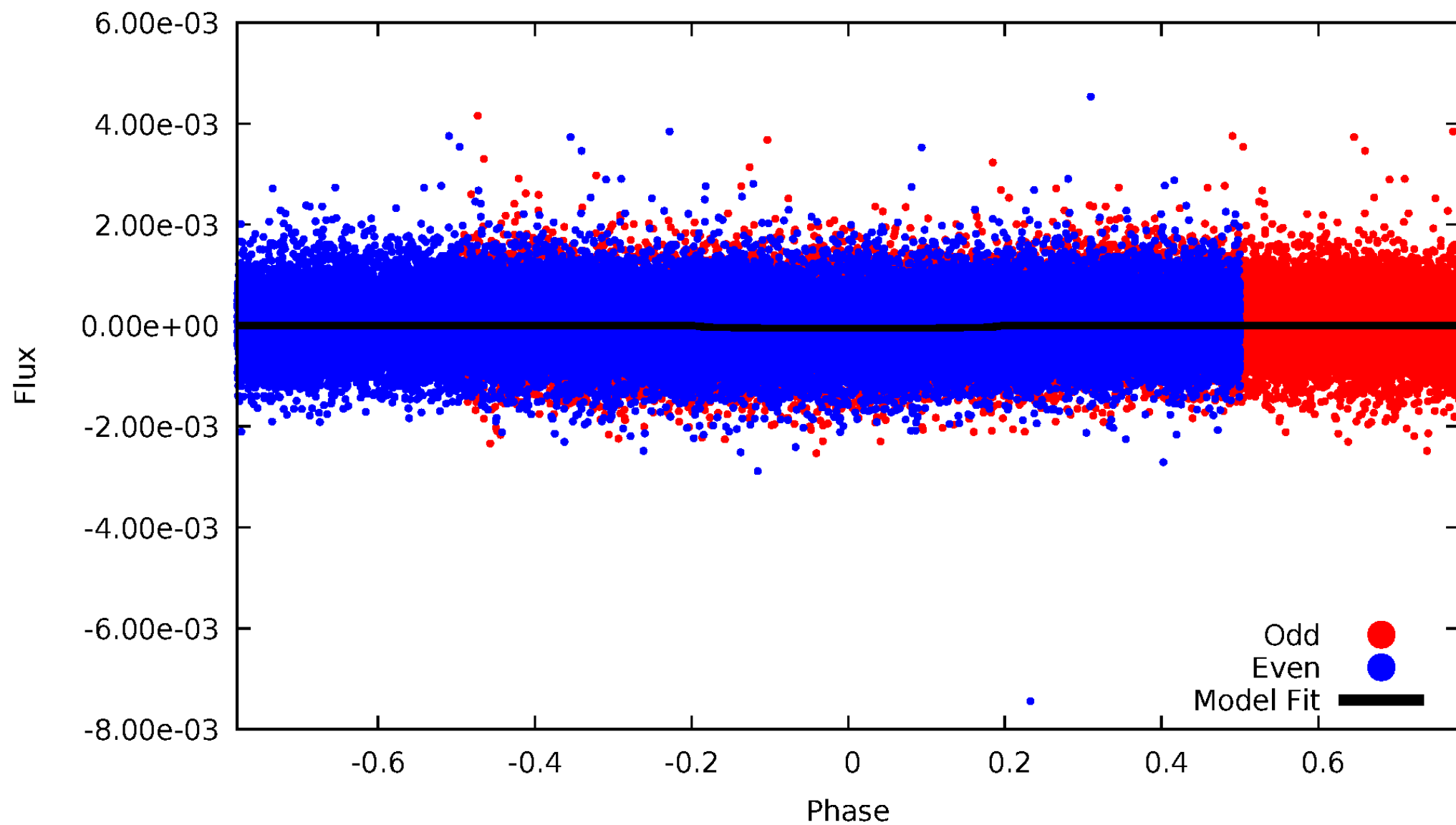


TCE 005390069-01



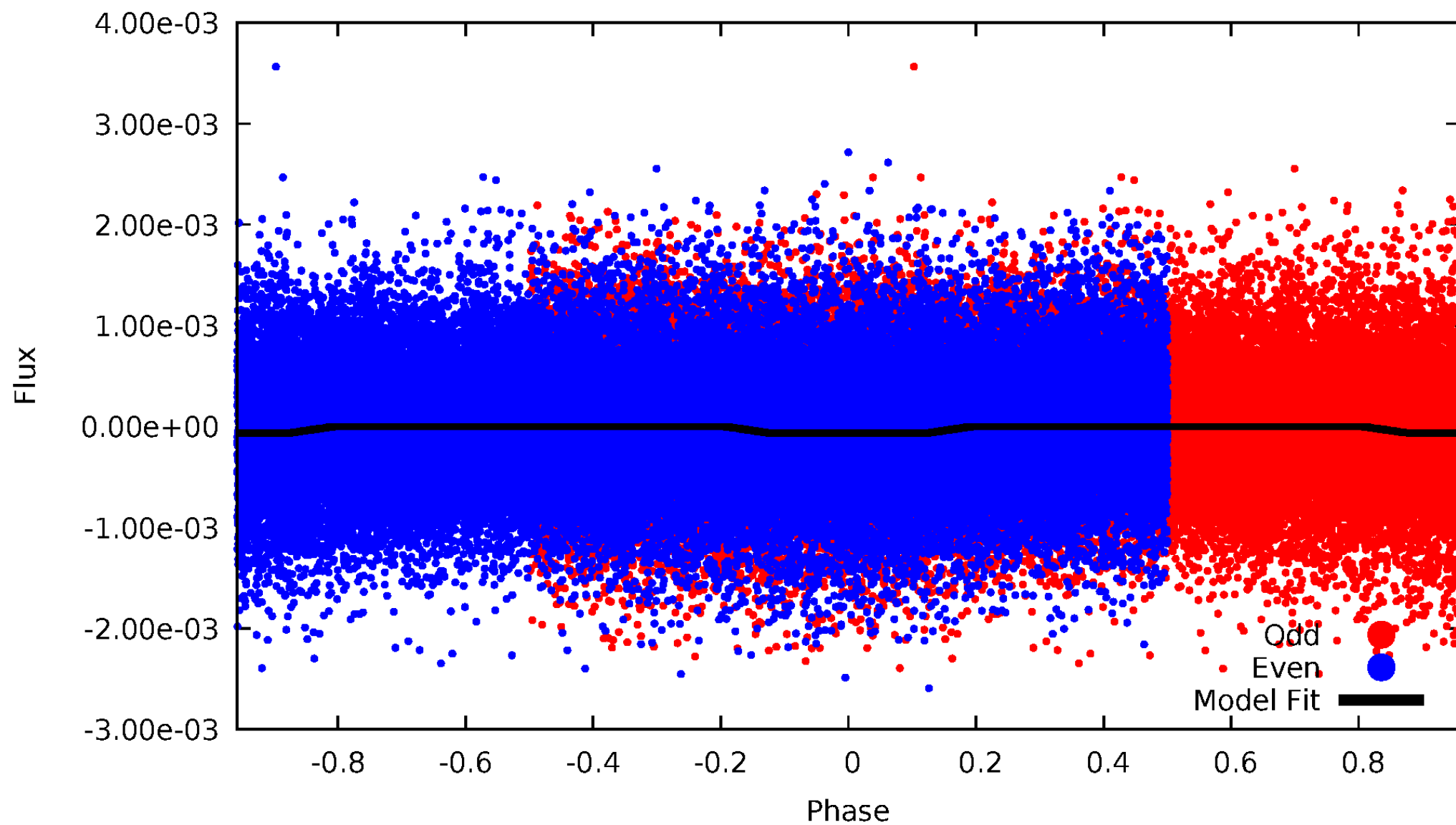
DV Odd/Even

TCE 005390069-01



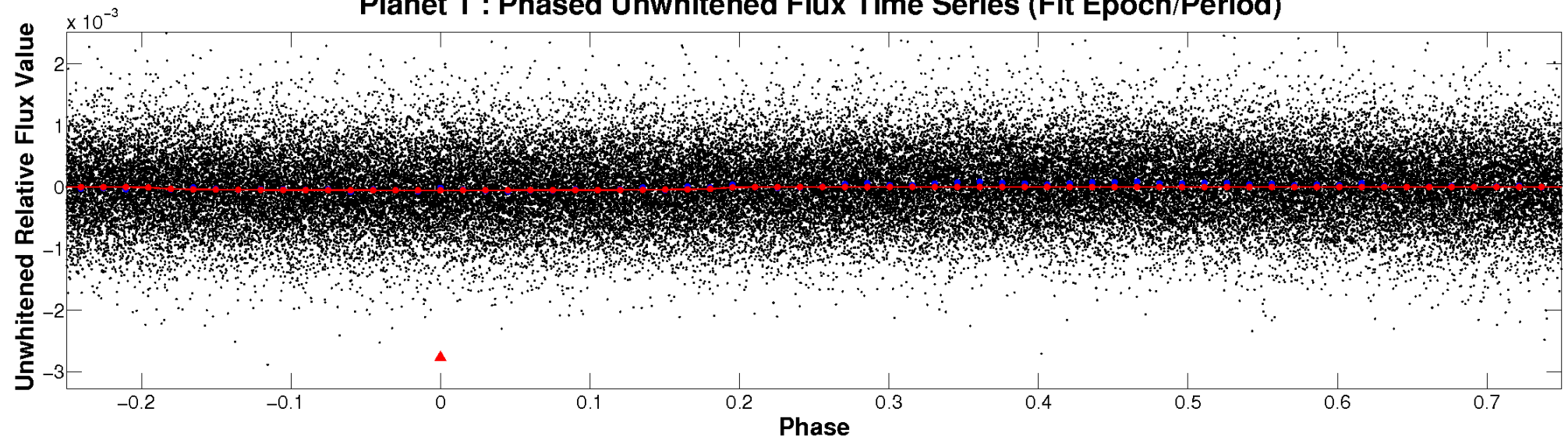
ALT Odd/Even

TCE 005390069-01

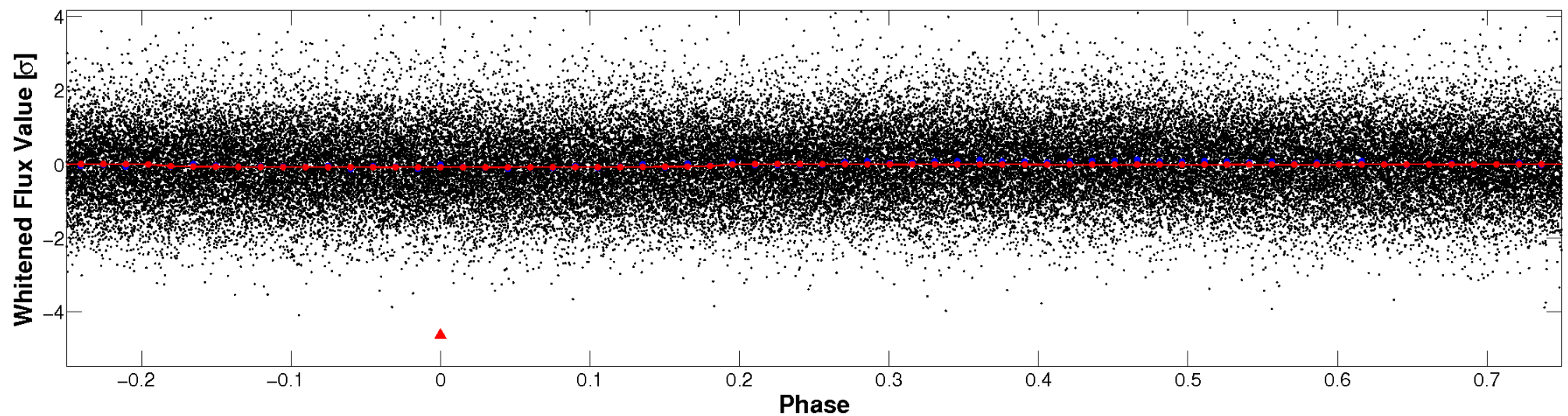


Non-Whitened Vs. Whitened Light Curve

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

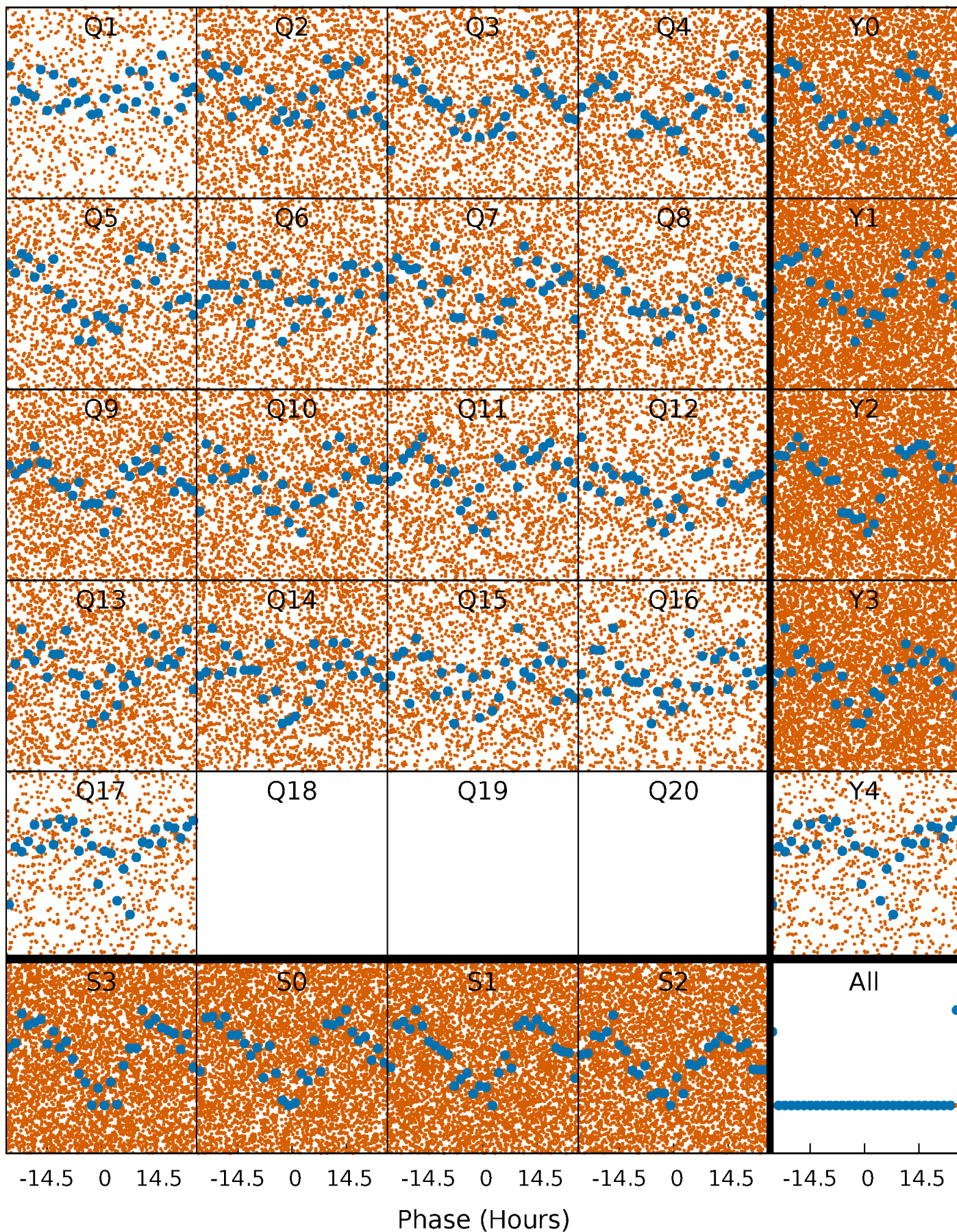


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



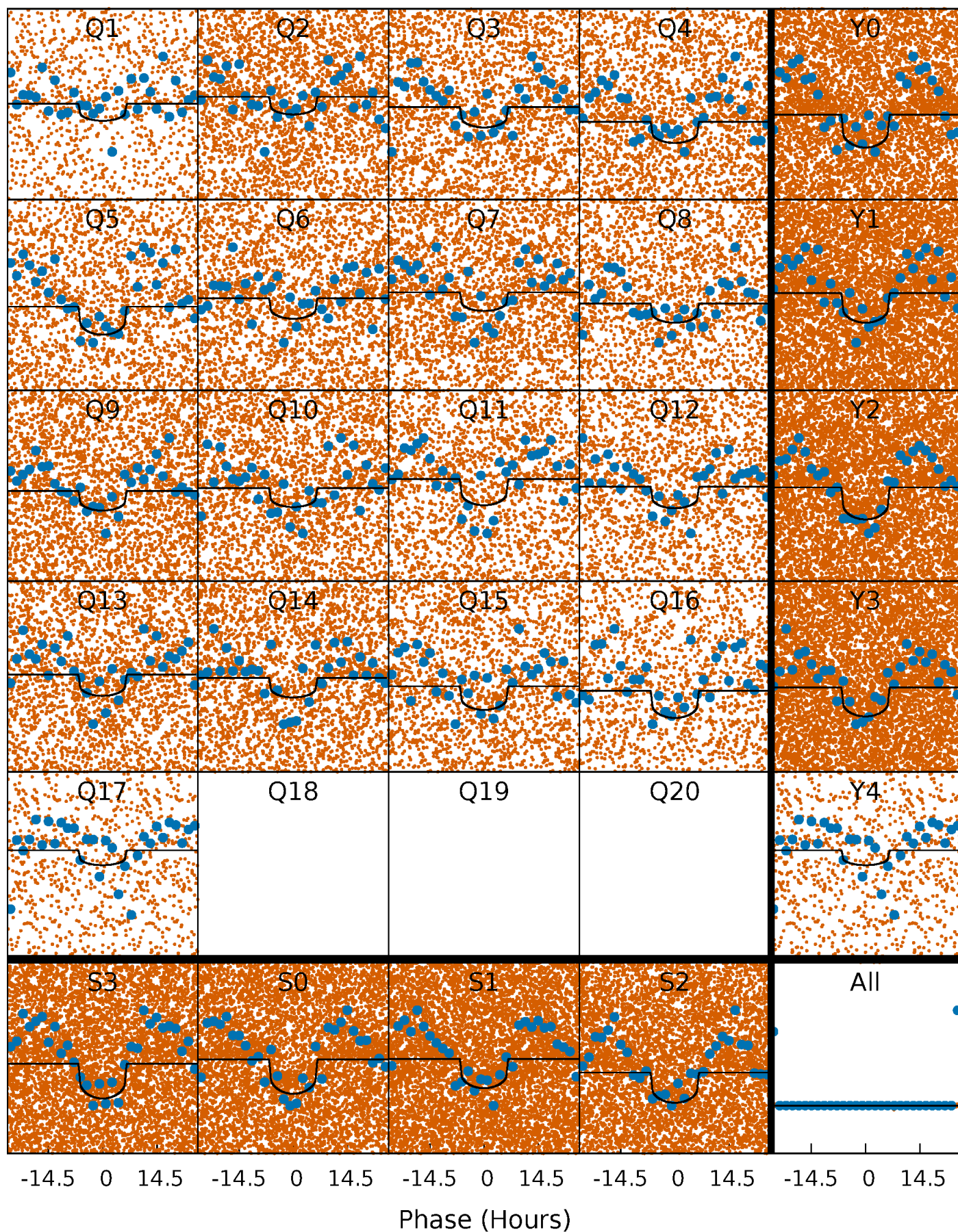
PDC Quarter-Phased Transit Curves

TCE 005390069-01 P= 1.359465 Days $T_0=132.302382$ (BKJD)



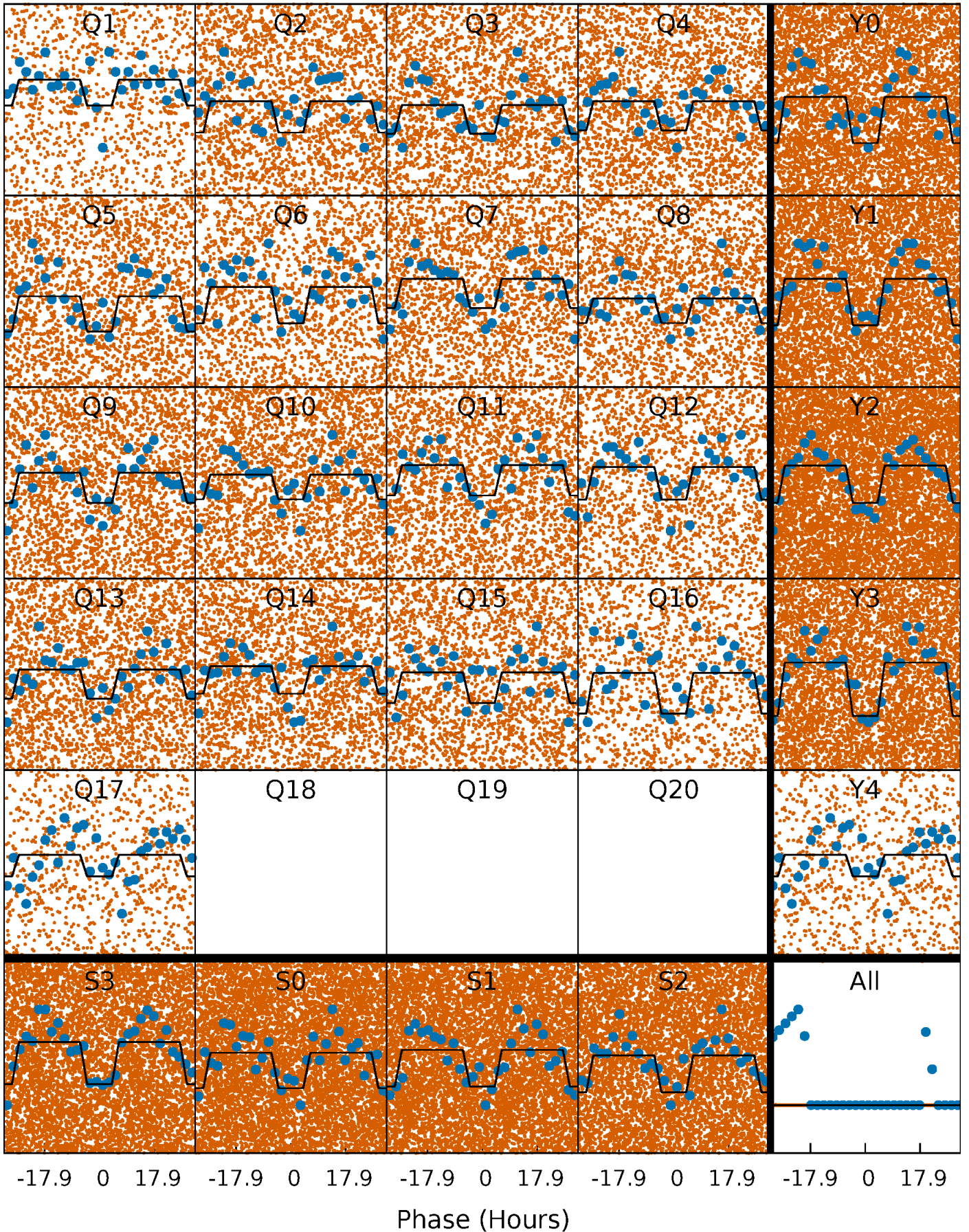
DV Quarter-Phased Transit Curves

TCE 005390069-01 P= 1.359465 Days $T_0=132.302382$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

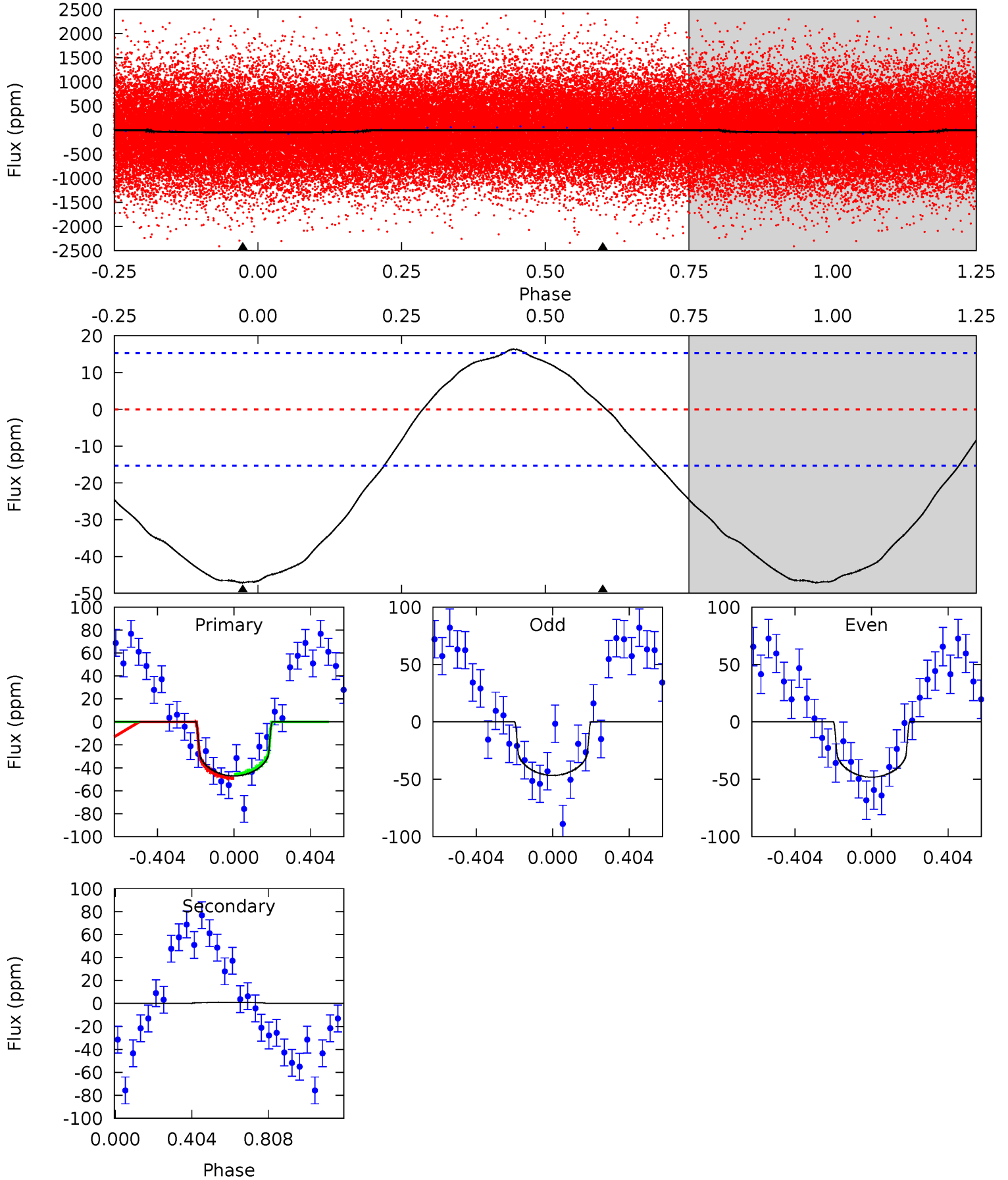
TCE 005390069-01 P= 1.359297 Days $T_0=132.370999$ (BKJD)



DV Model-Shift Uniqueness Test

005390069-01, P = 1.359465 Days, E = 130.942917 Days

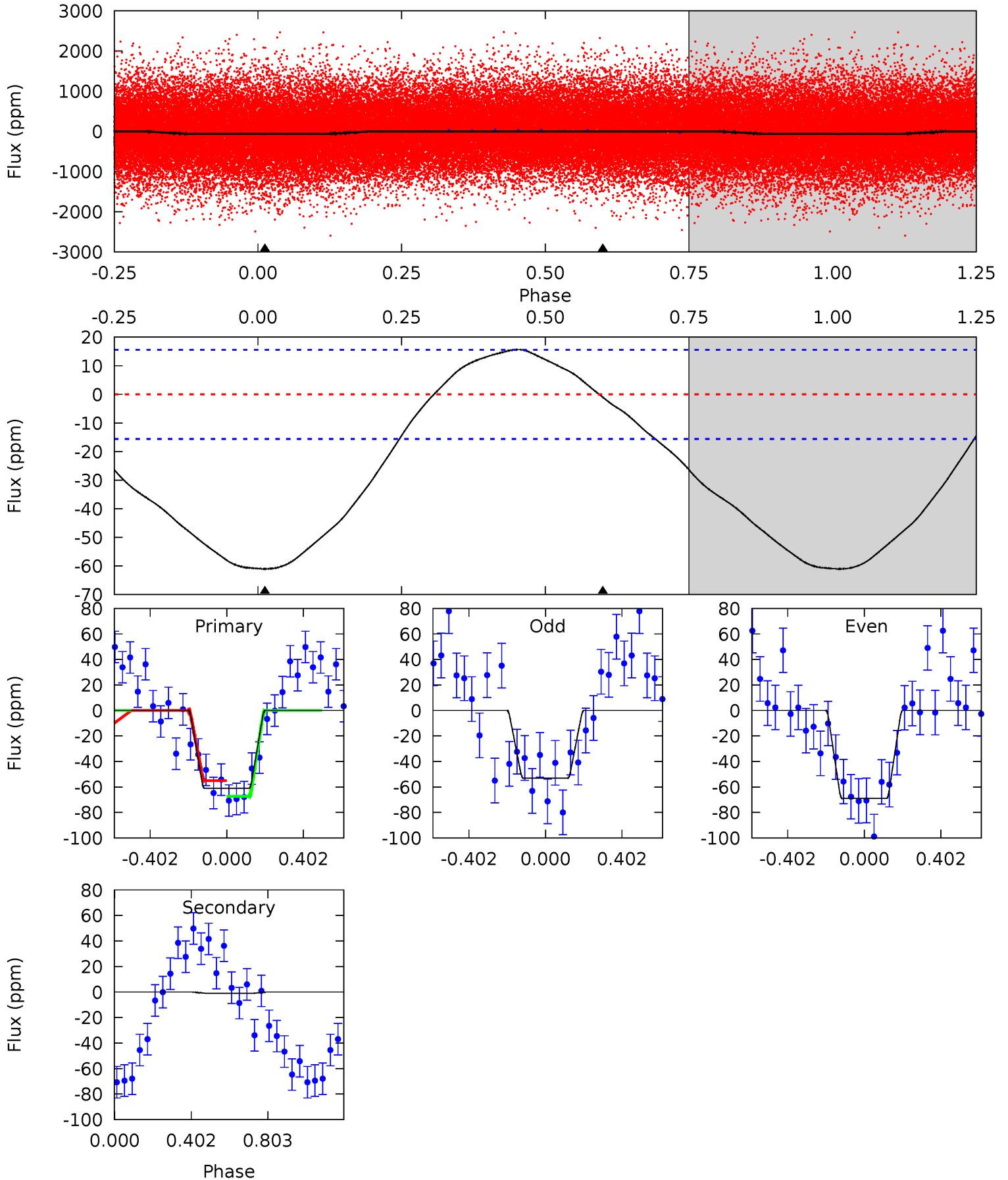
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.1	-0.24	0	0	4.26	0.83	1.63	13.1	13.1	-0.24	-0.24	0.21	0.99	0.26	0.52



Alt Model-Shift Uniqueness Test

005390069-01, P = 1.359297 Days, E = 131.011702 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
16.7	0.27	0	0	4.26	0.84	1.76	16.7	16.7	0.27	0.27	2.20	1.10	0.20	1.57



Stellar Parameters For KIC 005390069

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6937^{+191}_{-310}	$4.364^{+0.057}_{-0.172}$	$-0.300^{+0.250}_{-0.350}$	$1.198^{+0.338}_{-0.145}$	$1.229^{+0.160}_{-0.160}$	$1.008^{+0.312}_{-0.472}$
	+3%/-4%	+1%/-4%	+83%/-117%	+28%/-12%	+13%/-13%	+31%/-47%
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 005390069-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	1 ± 4	$1.01^{+0.63}_{-0.52}$	2974^{+186}_{-180}	-3312^{+6897}_{-1046}	$-0.193^{+1.395}_{-2.074}$
Alt.	-1 ± 4	$1.08^{+0.64}_{-0.50}$	2965^{+191}_{-153}	-2647^{+6664}_{-1158}	$0.200^{+1.677}_{-1.068}$

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 $A_{obs} \gg 1.0$

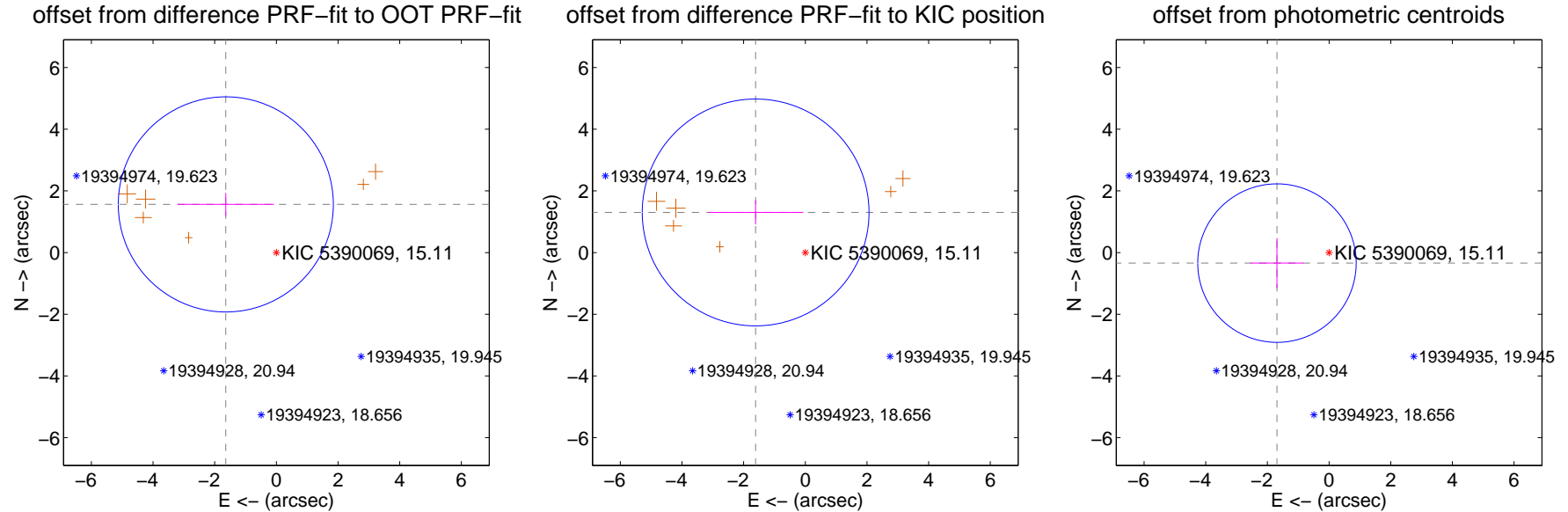
DV Centroid Data

Supplemental centroid analysis for 005390069-01. Kepler magnitude: 15.11. Transit SNR 11.13

There are 0 quarters with good PRF difference image offsets

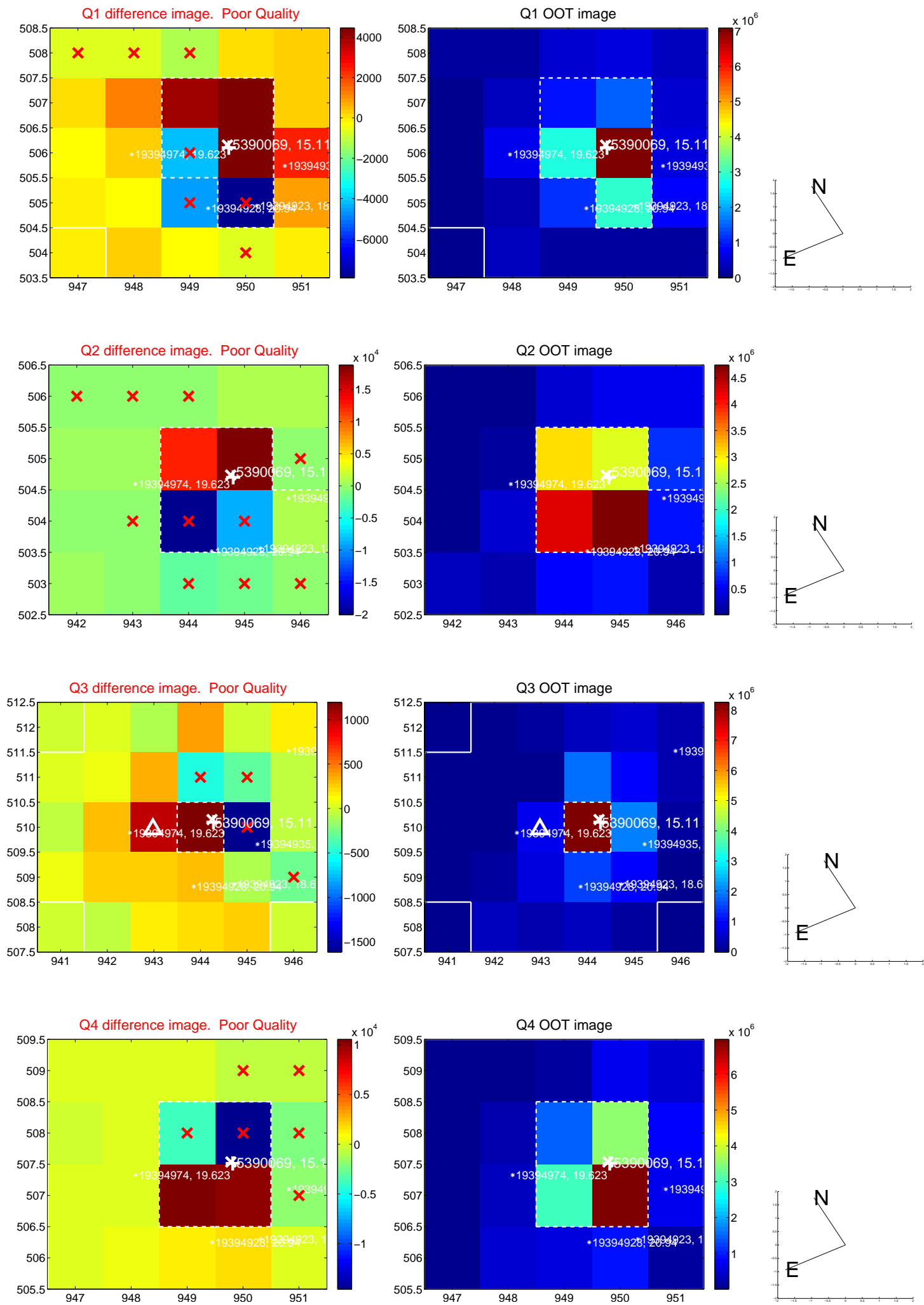
The direct PRF centroid is offset from the target star catalog position by about 0.30 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.265 ± 1.162	1.95	1.640 ± 1.565	1.562 ± 0.375
PRF-fit source offset from KIC position	2.071 ± 1.226	1.69	1.611 ± 1.544	1.301 ± 0.387
photometric centroid source offset	1.72 ± 0.86	2.01	1.69 ± 0.86	-0.34 ± 0.81

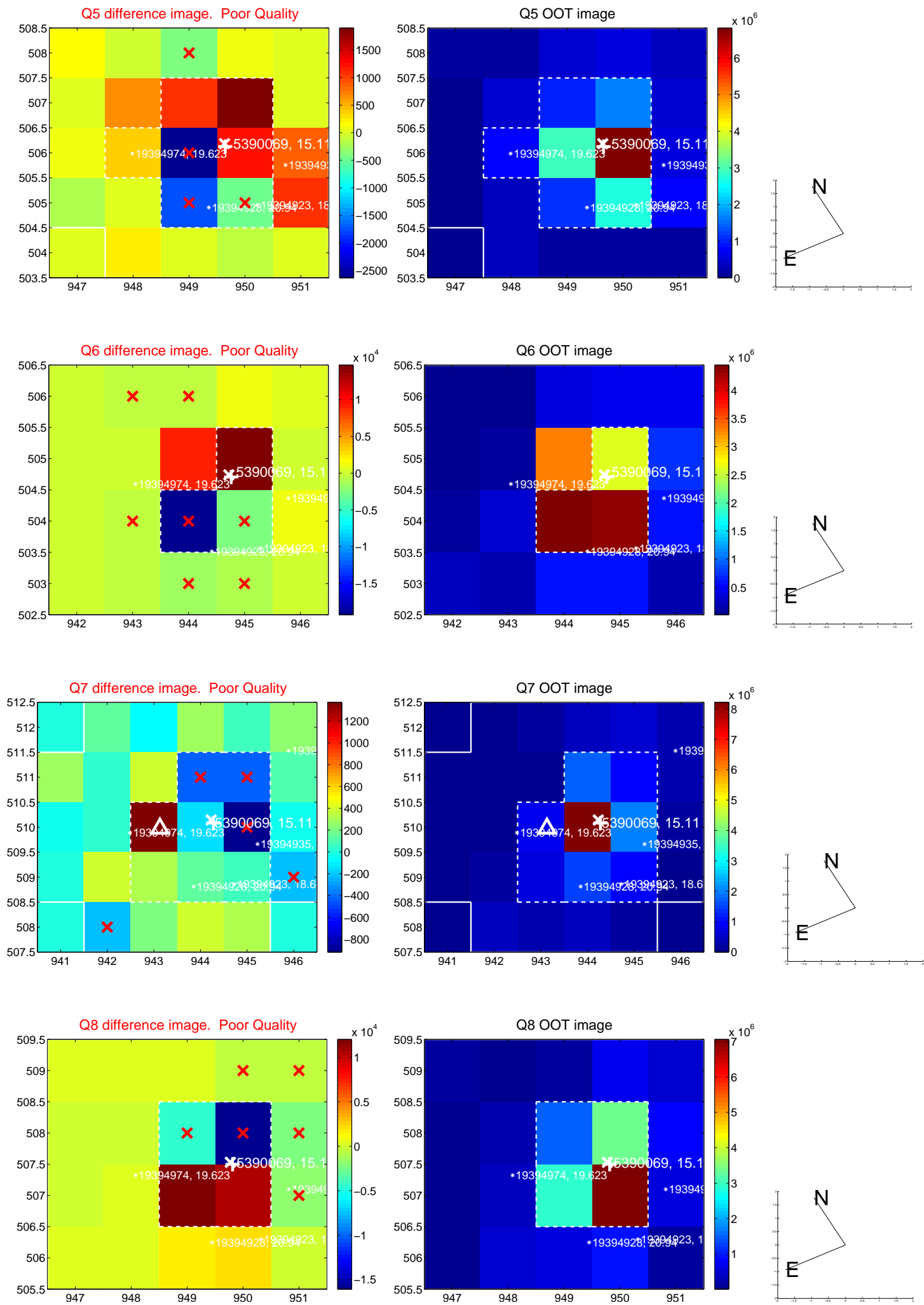


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

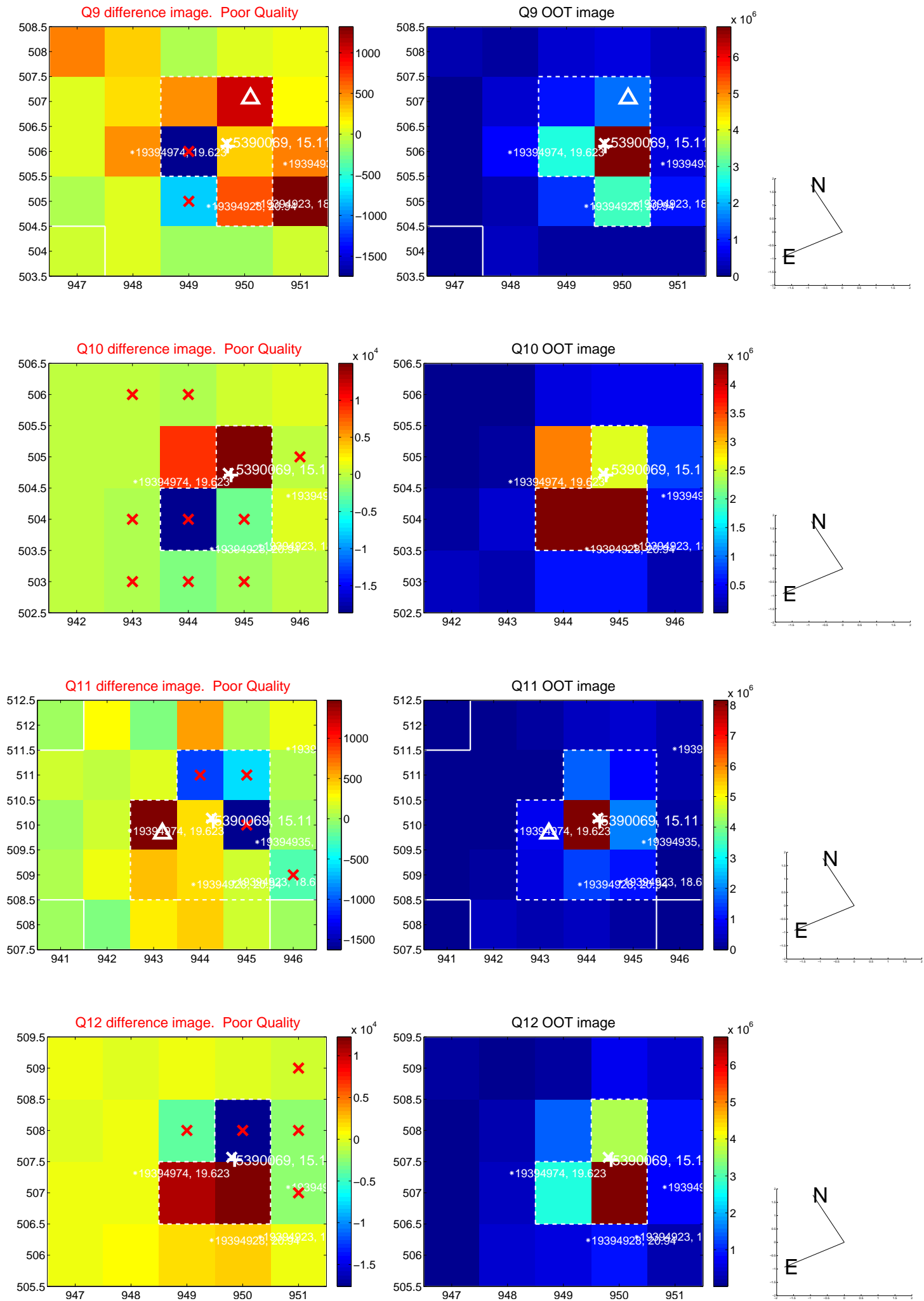
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



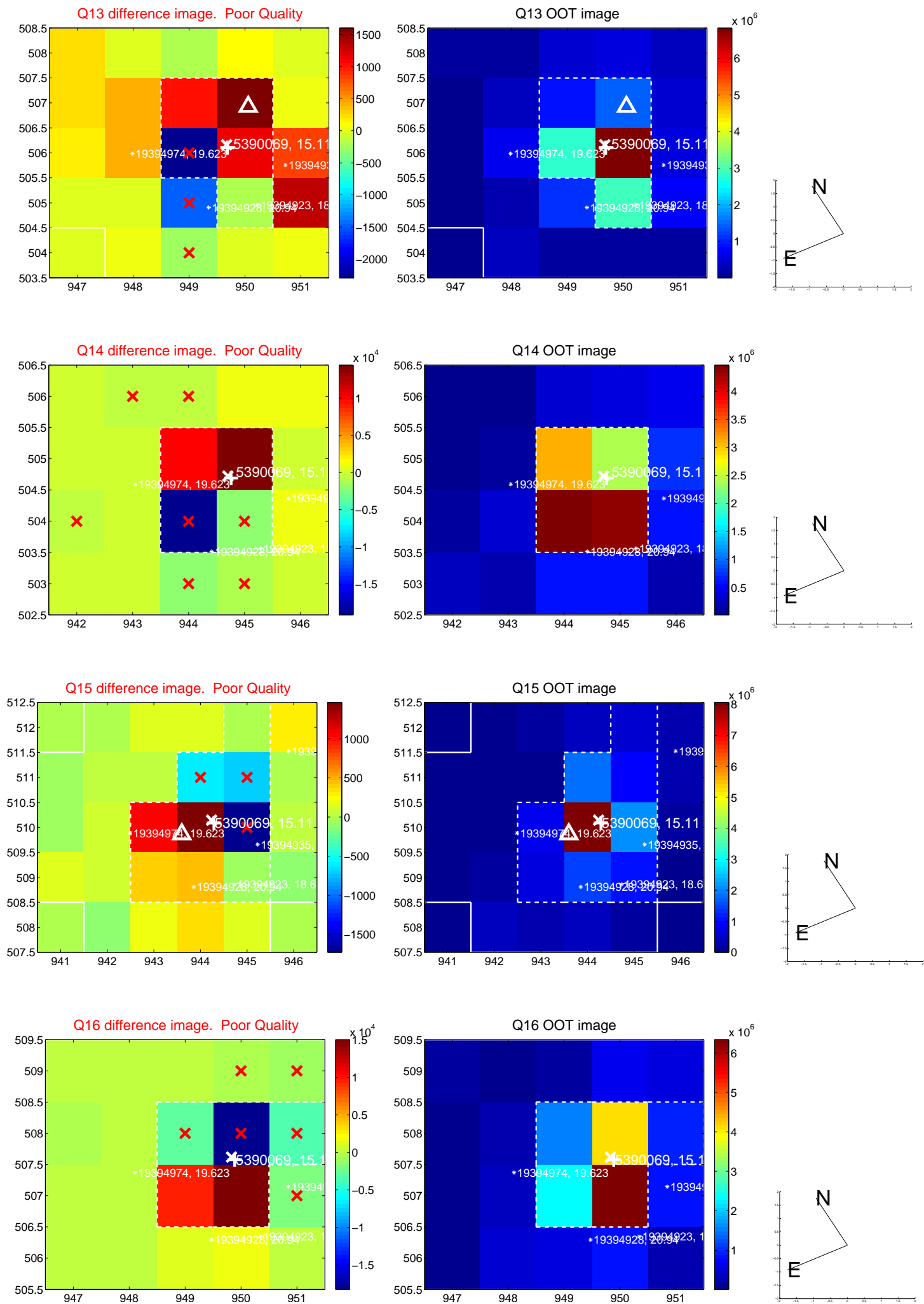
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



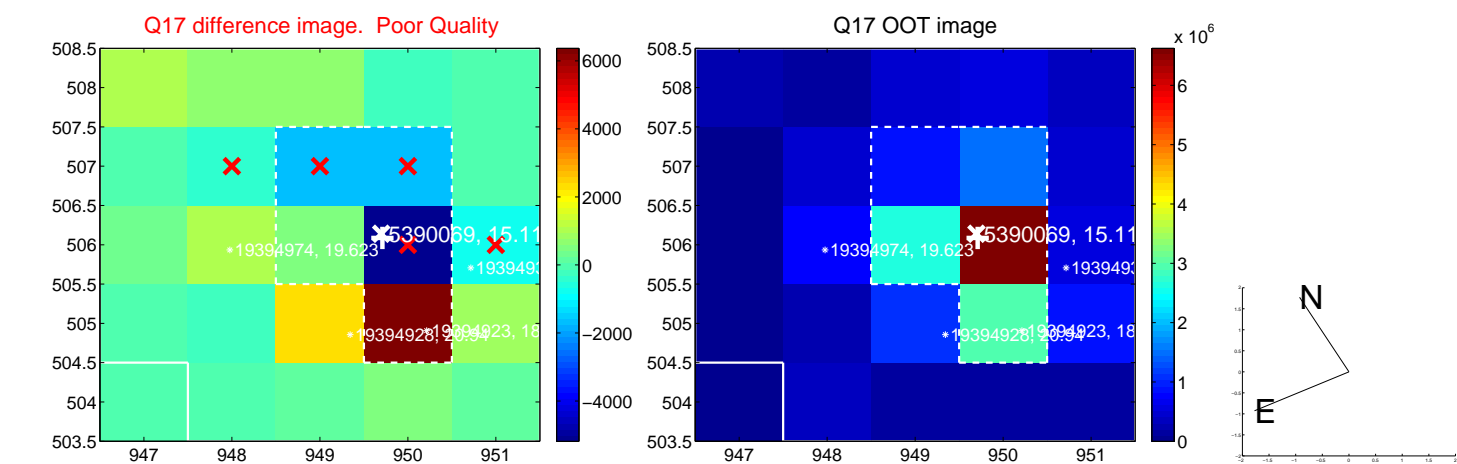
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



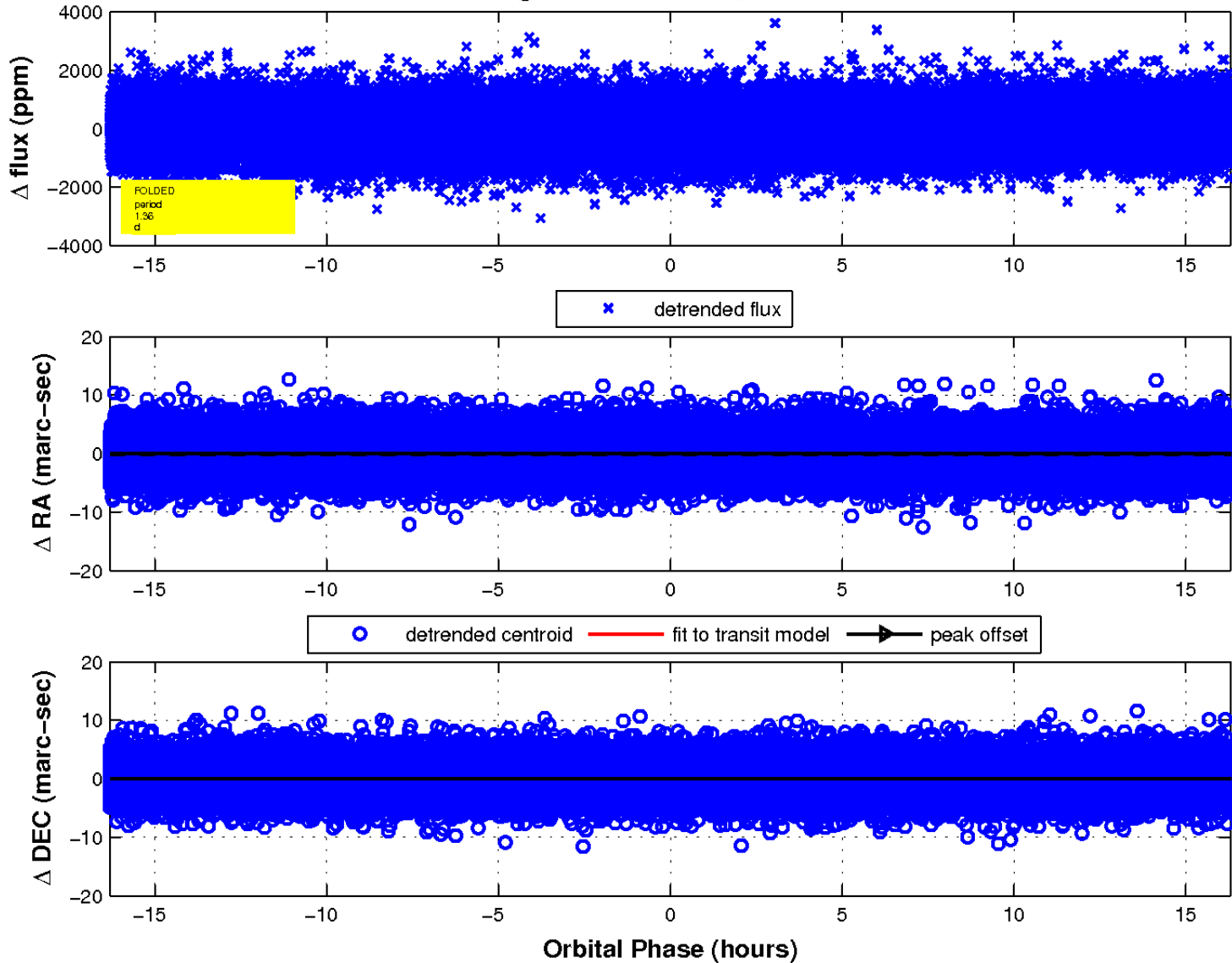
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

