

KIC 005184709

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})
005184709-01	OBS	1670.01	10.579050	141.075405	334.7	1.628	18.5	21.7	1.09	6323	2.31	176.09

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005184709-01	OBS	FP	0.38	0	0	1	0	CENT_RESOLVED_OFFSET

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

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

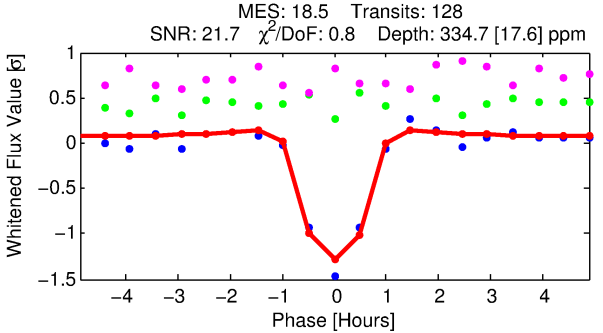
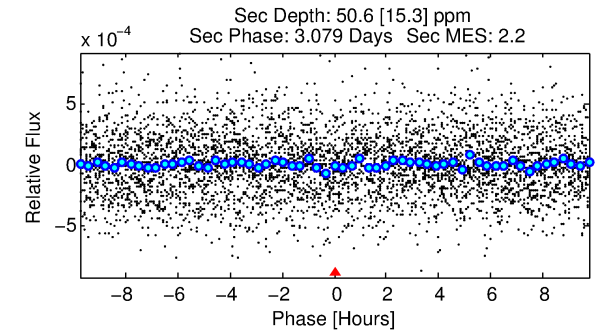
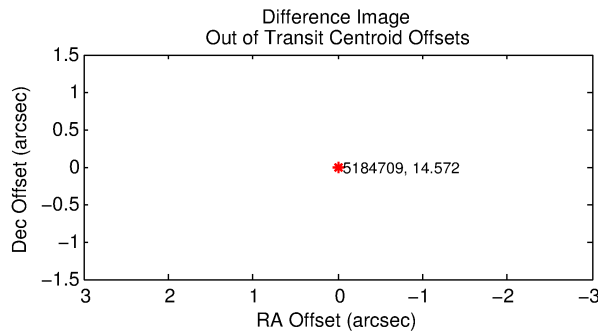
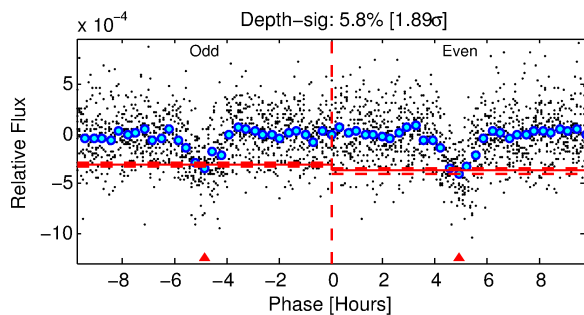
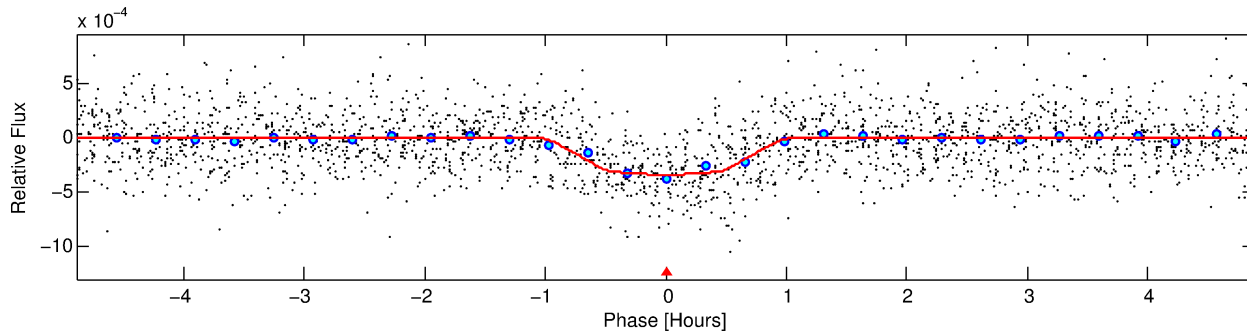
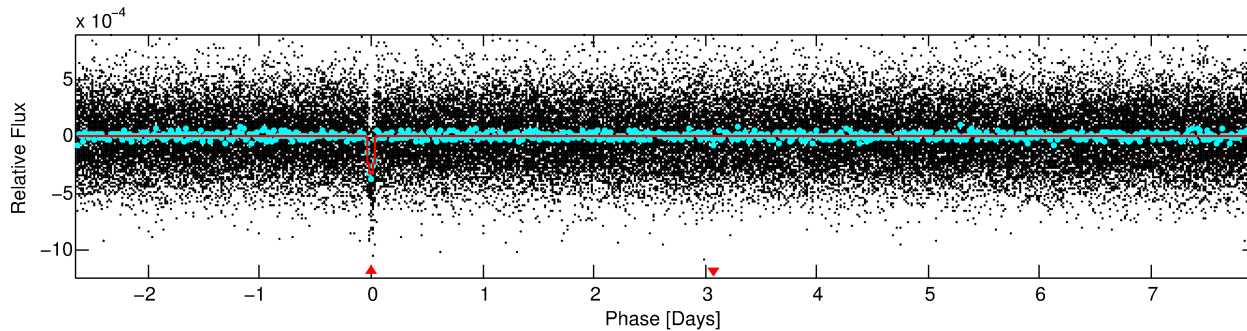
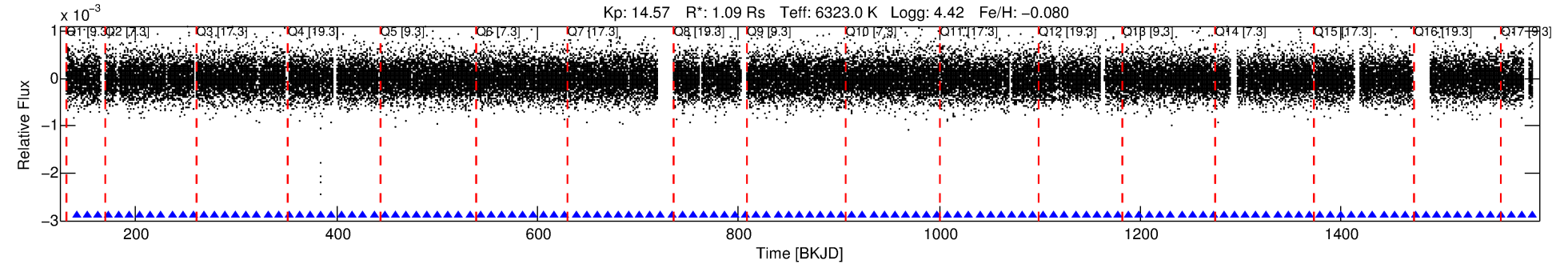
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005184709-01

No Significant Match Found

DV One-Page Summary

KIC: 5184709 Candidate: 1 of 1 Period: 10.579 d
KOI: K01670.01 Corr: 0.905



DV Fit Results:

Period = 10.57905 [0.00003] d
Epoch = 141.0754 [0.0019] BKJD
Rp/R* = 0.0194 [0.0062]
a/R* = 25.85 [44.53]
b = 0.88 [0.46]
Seff = 176.09 [68.38]
Teq = 929 [90] K
Rp = 2.31 [1.02] Re
a = 0.0986 [0.0244] AU
Ag = 50.65 [40.19] [1.24 σ]
Teffp = 3831 [699] K [4.12 σ]

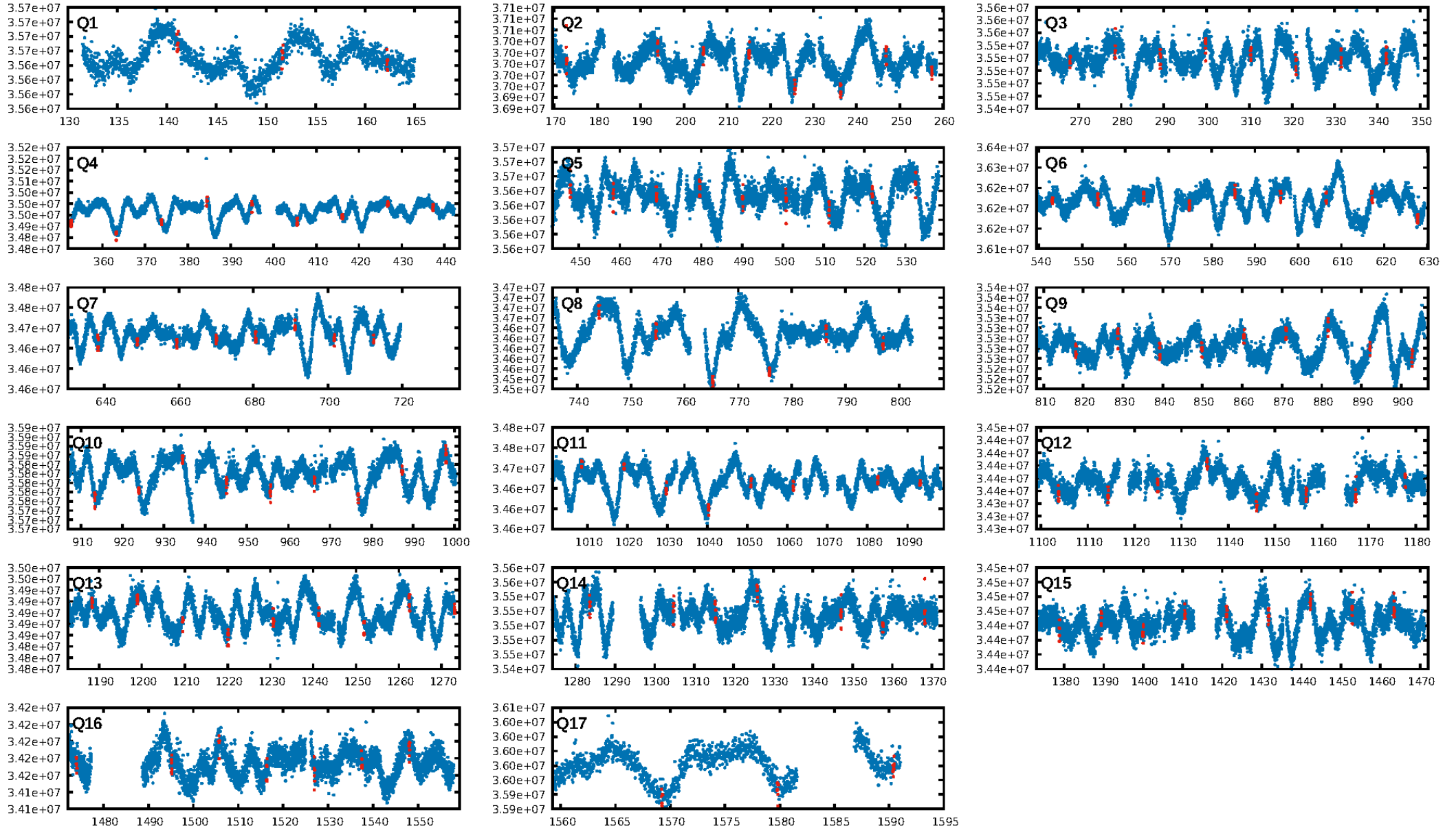
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 100.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 5.27e-75
RollingBand-fgt: 1.00 [122/122]
GhostDiagnostic-chr: 1.046
Centroid-sig: 9.4%
Centroid-so: 5.926 arcsec [9.49 σ]
OotOffset-rm: N/A
KicOffset-rm: 2.386 arcsec [1.71 σ]
OotOffset-st: 0/0/0 [0]
KicOffset-st: 0/0/1/1 [2]
DiffImageQuality-fgm: 0.50 [1/2]
DiffImageOverlap-fno: 1.00 [17/17]

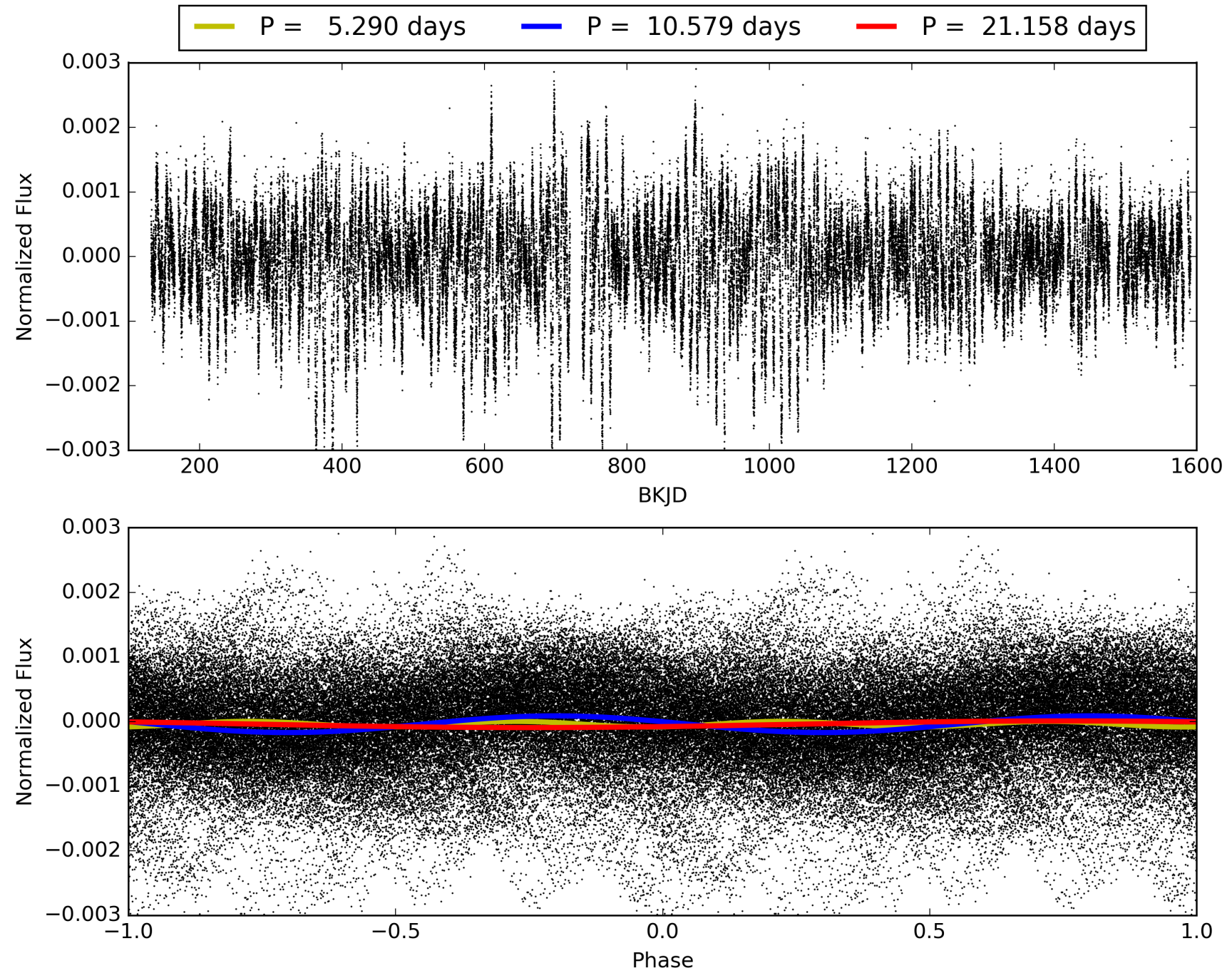
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 04:33:41 Z

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

TCE 005184709-01, PDC Light Curves

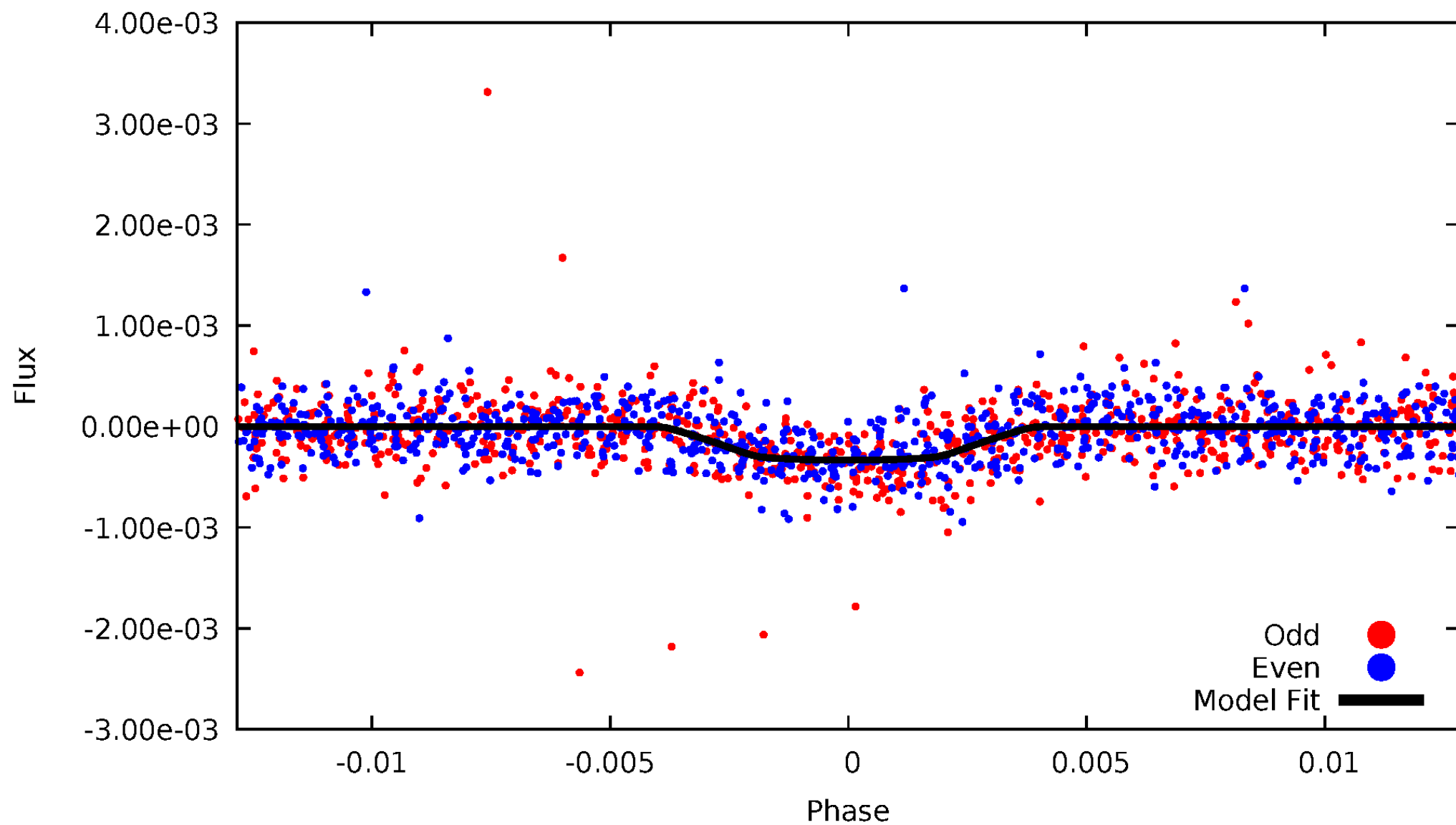


TCE 005184709-01



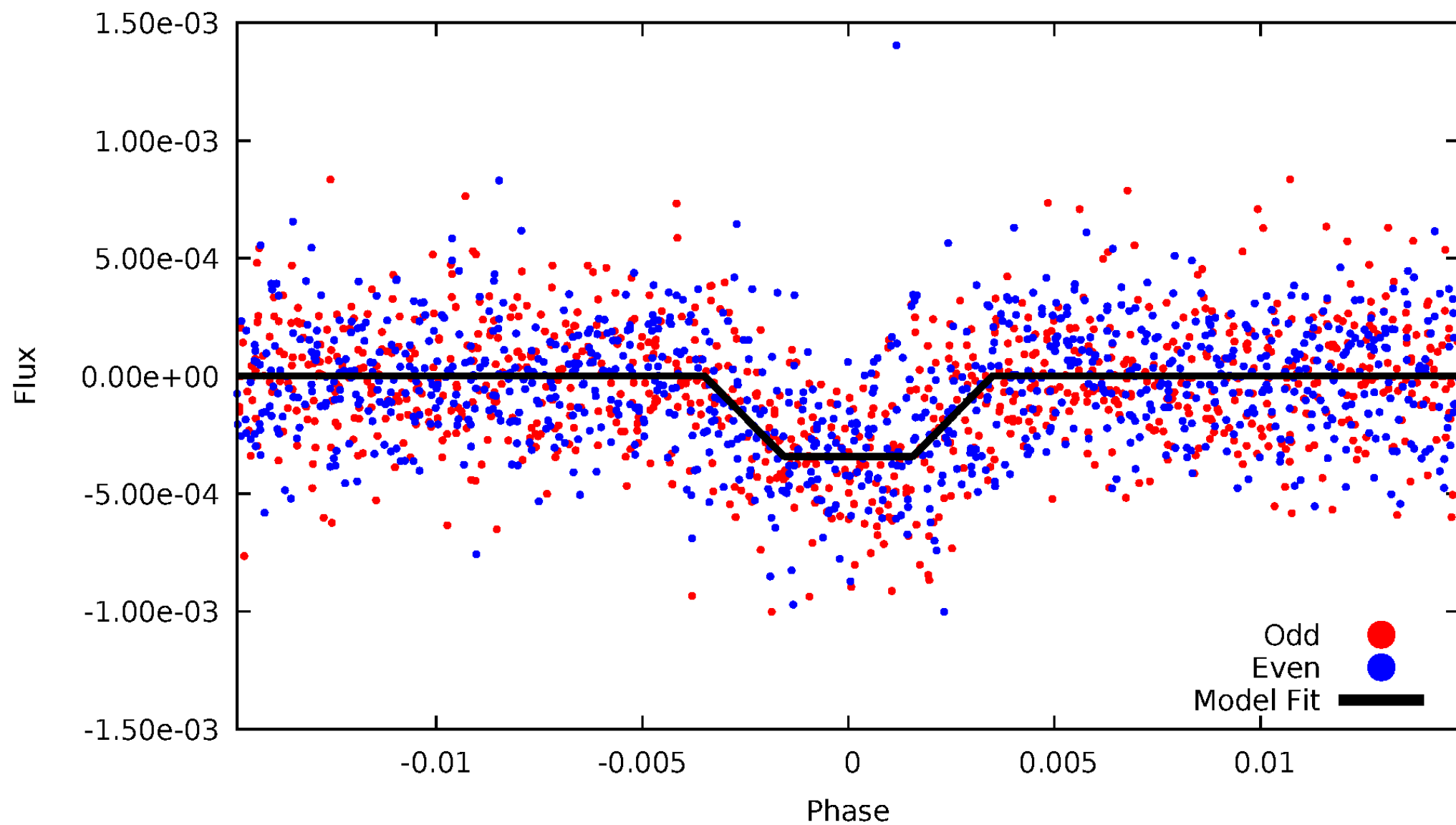
DV Odd/Even

TCE 005184709-01

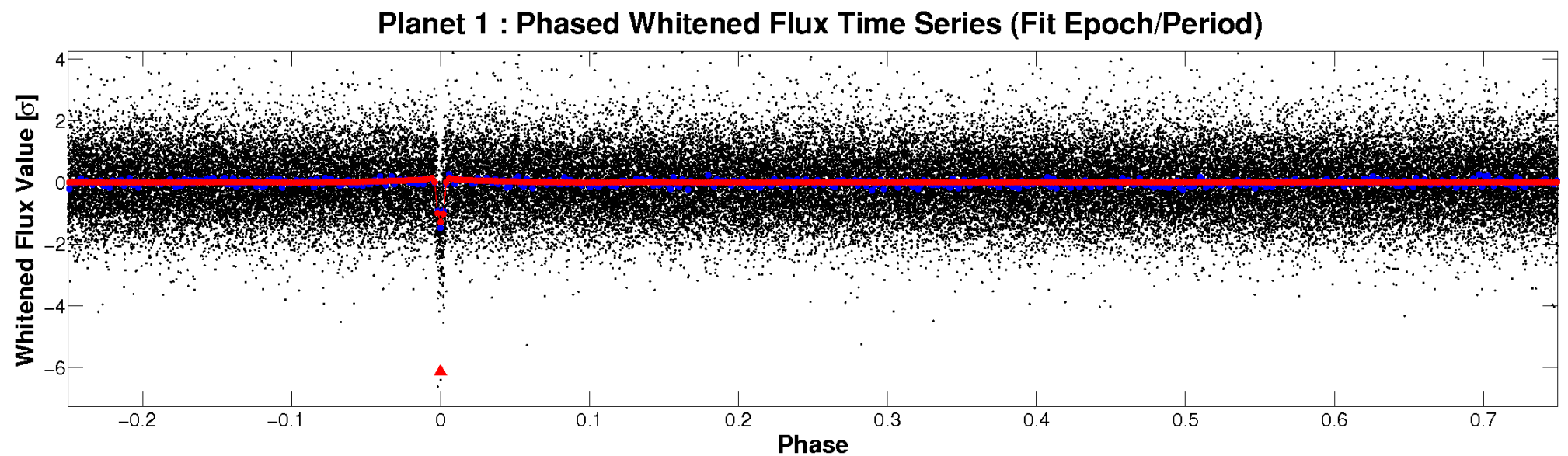
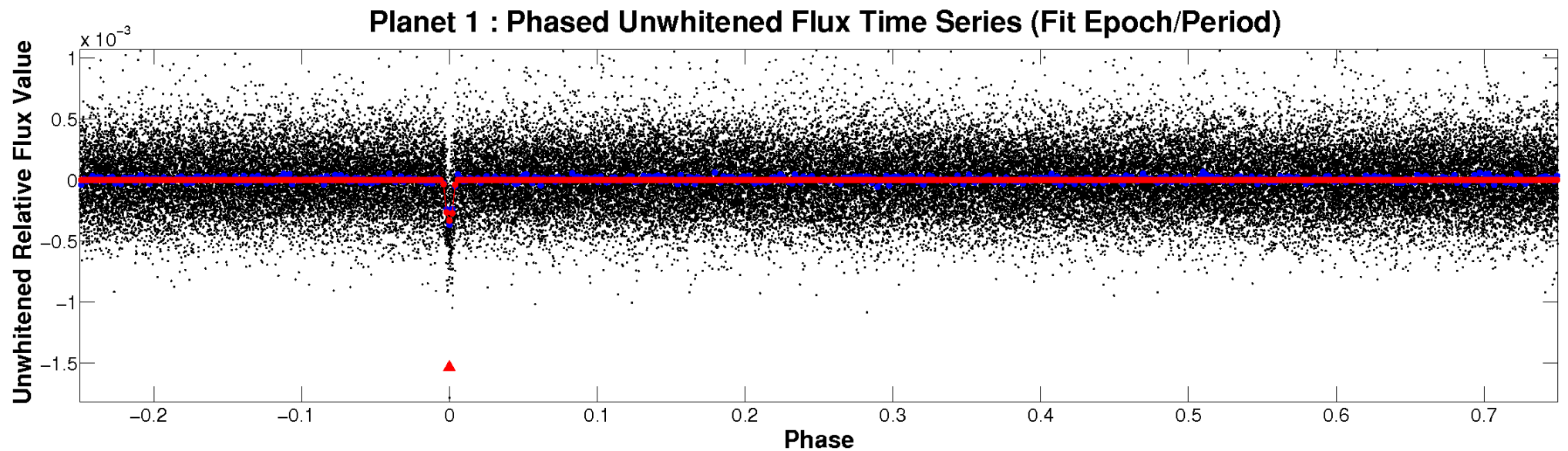


ALT Odd/Even

TCE 005184709-01

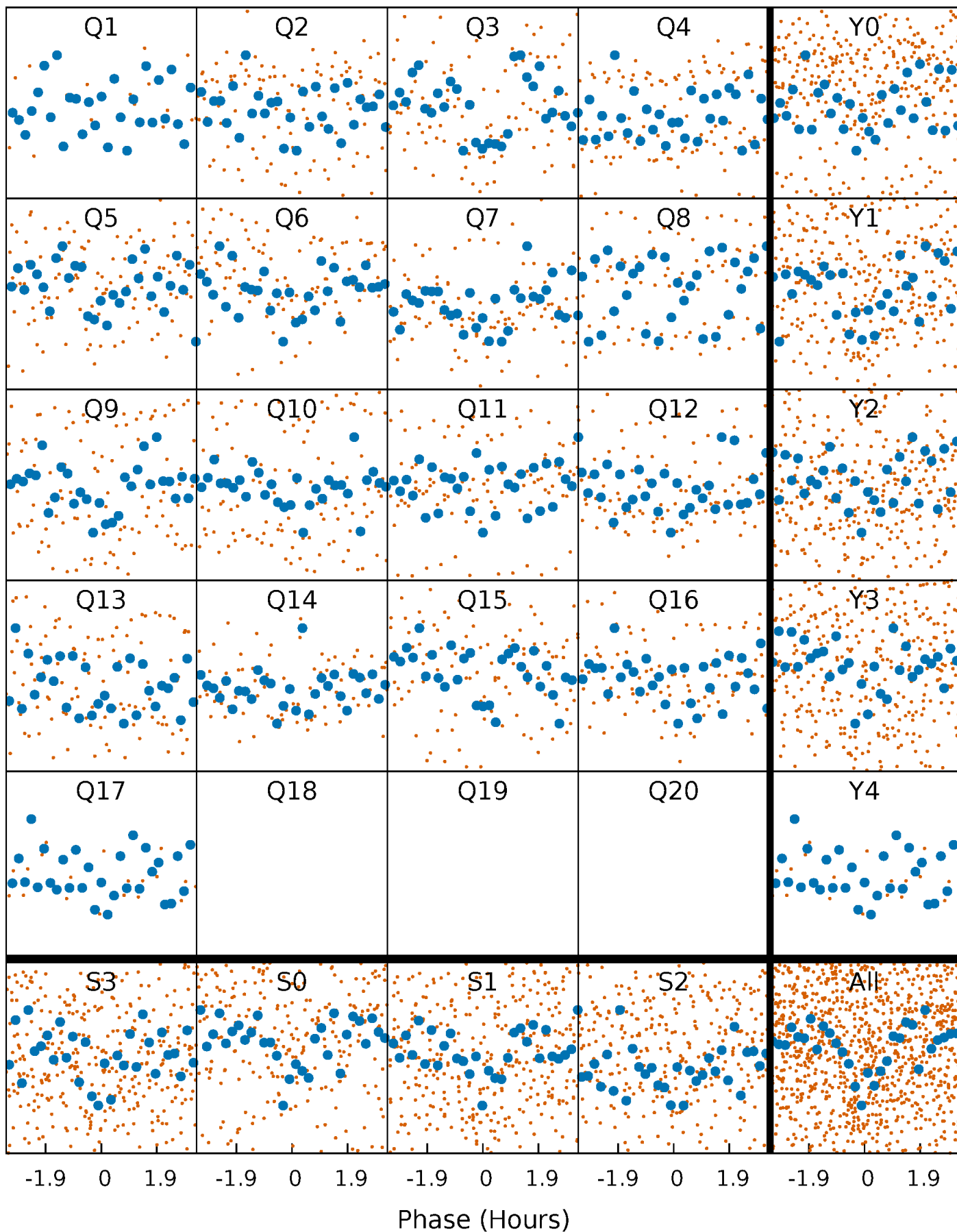


Non-Whitened Vs. Whitened Light Curve



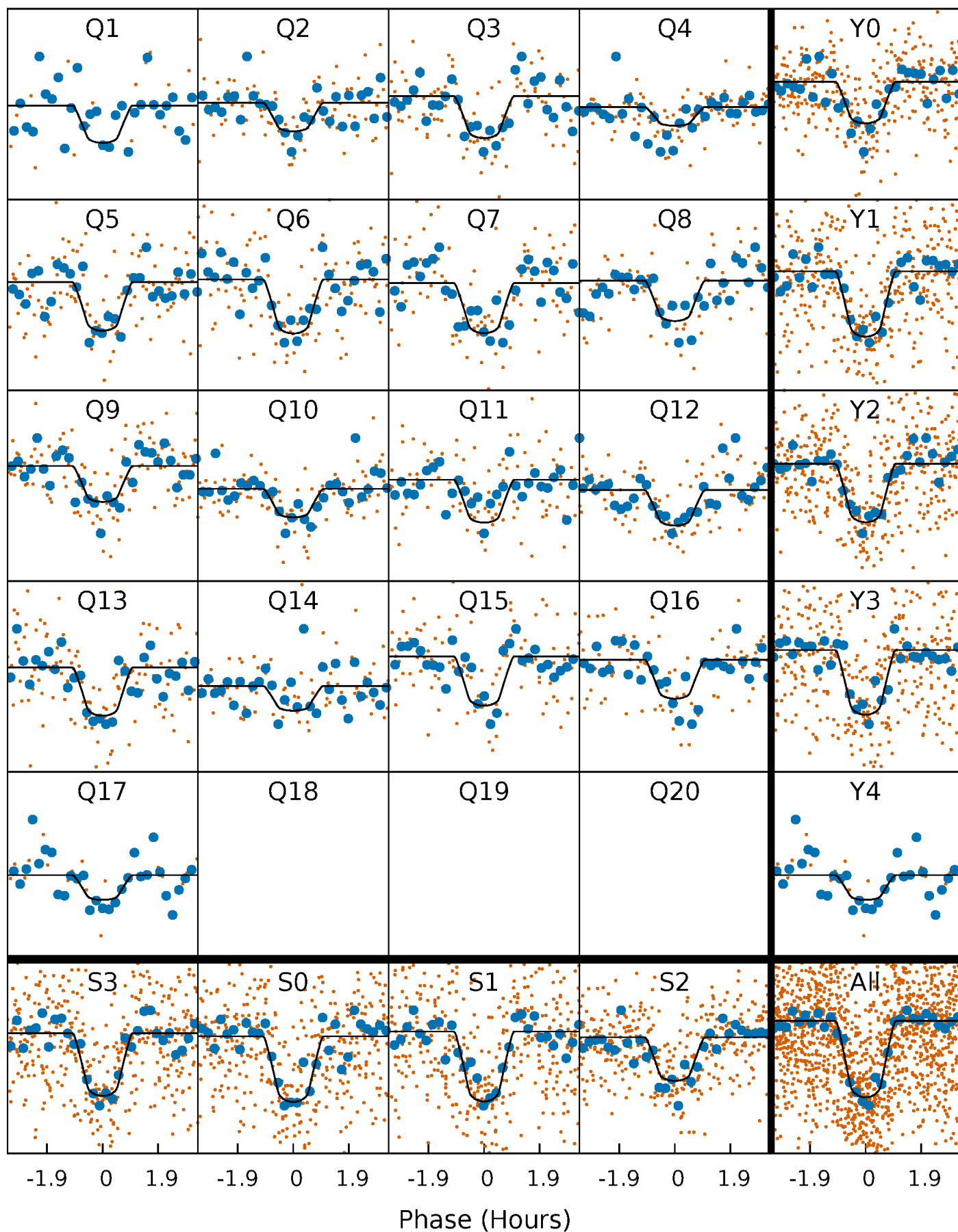
PDC Quarter-Phased Transit Curves

TCE 005184709-01 P= 10.579050 Days $T_0=141.075405$ (BKJD)



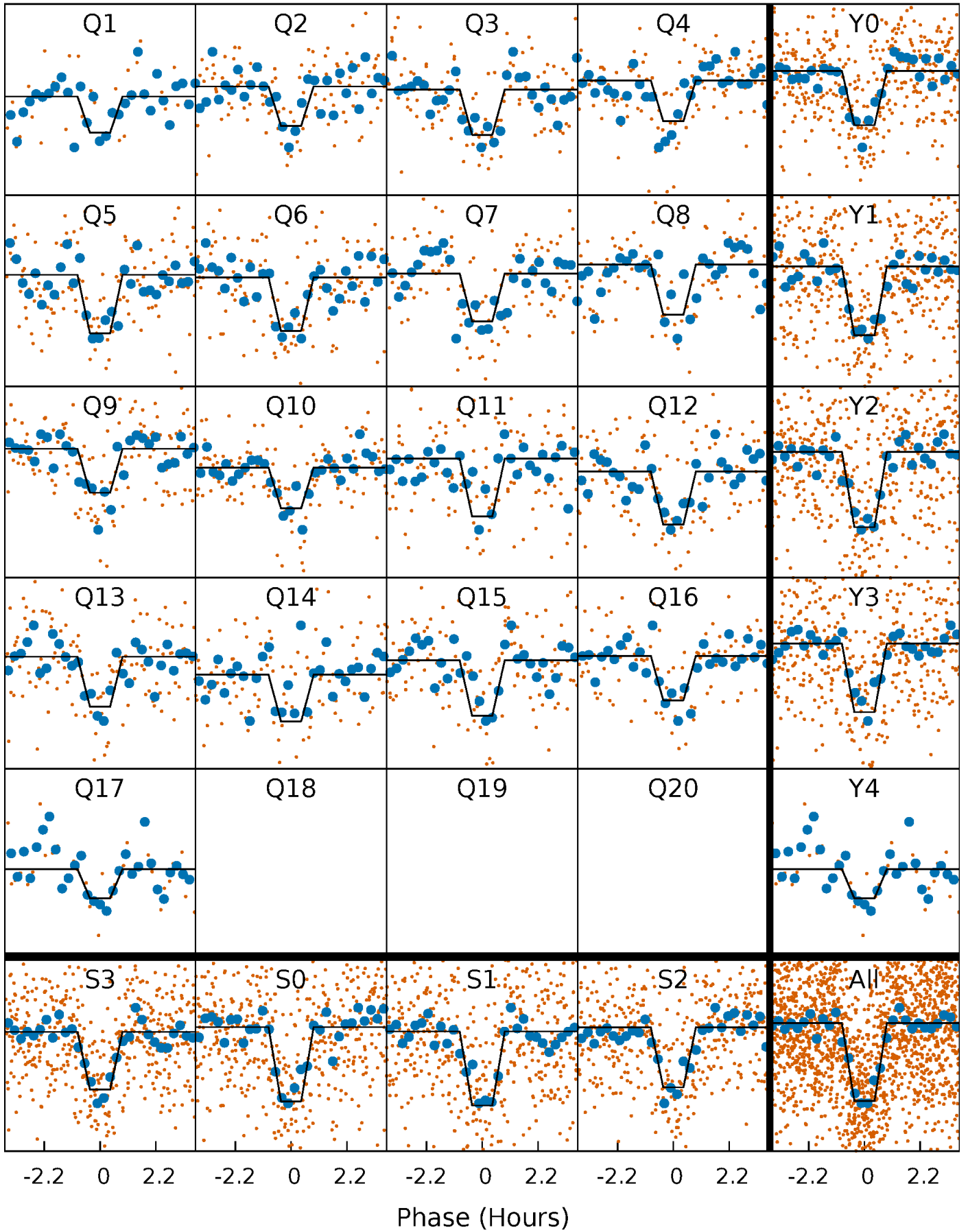
DV Quarter-Phased Transit Curves

TCE 005184709-01 P= 10.579050 Days $T_0=141.075405$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

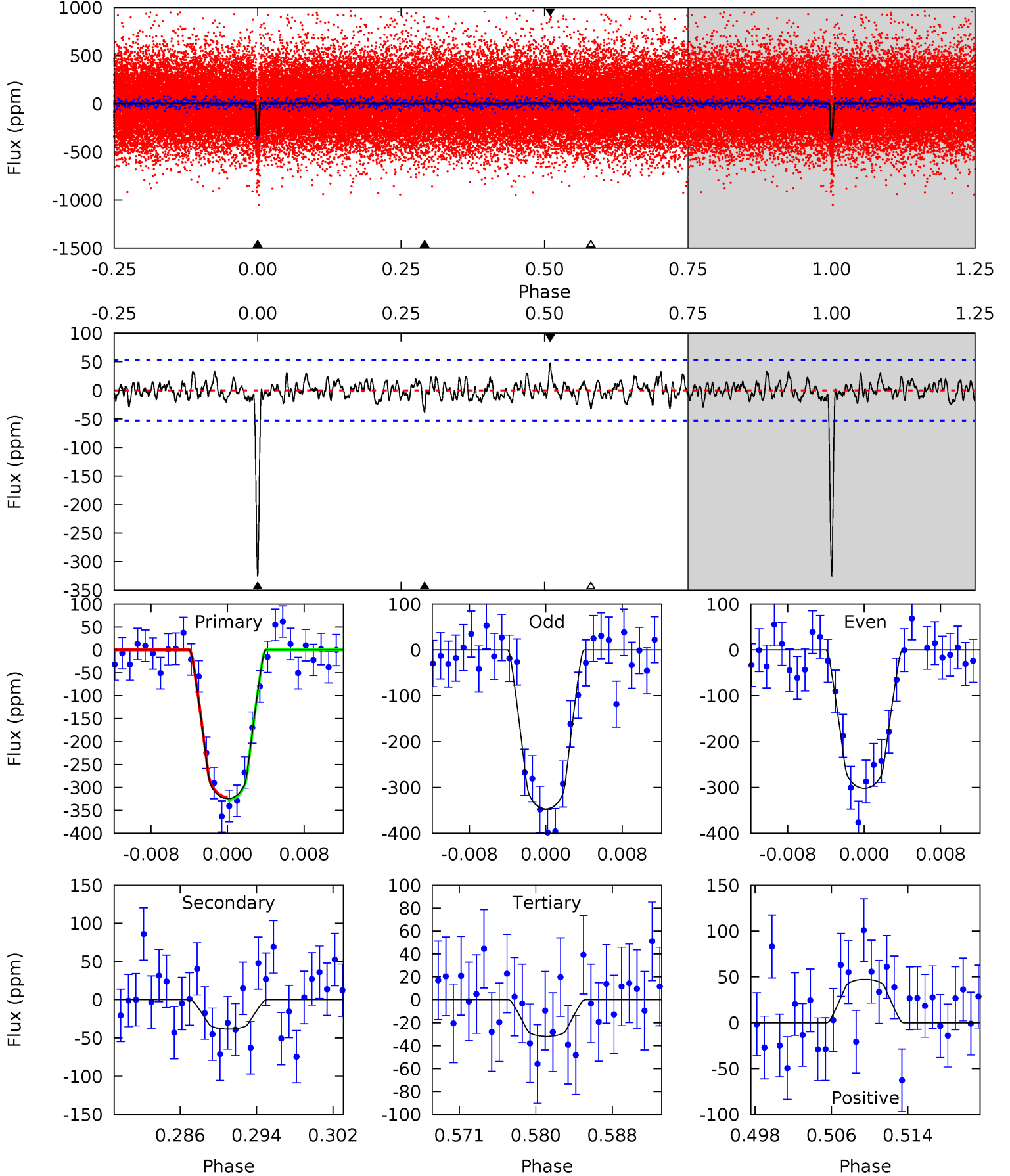
TCE 005184709-01 P= 10.579041 Days $T_0=141.076512$ (BKJD)



DV Model-Shift Uniqueness Test

005184709-01, P = 10.579050 Days, E = 130.496355 Days

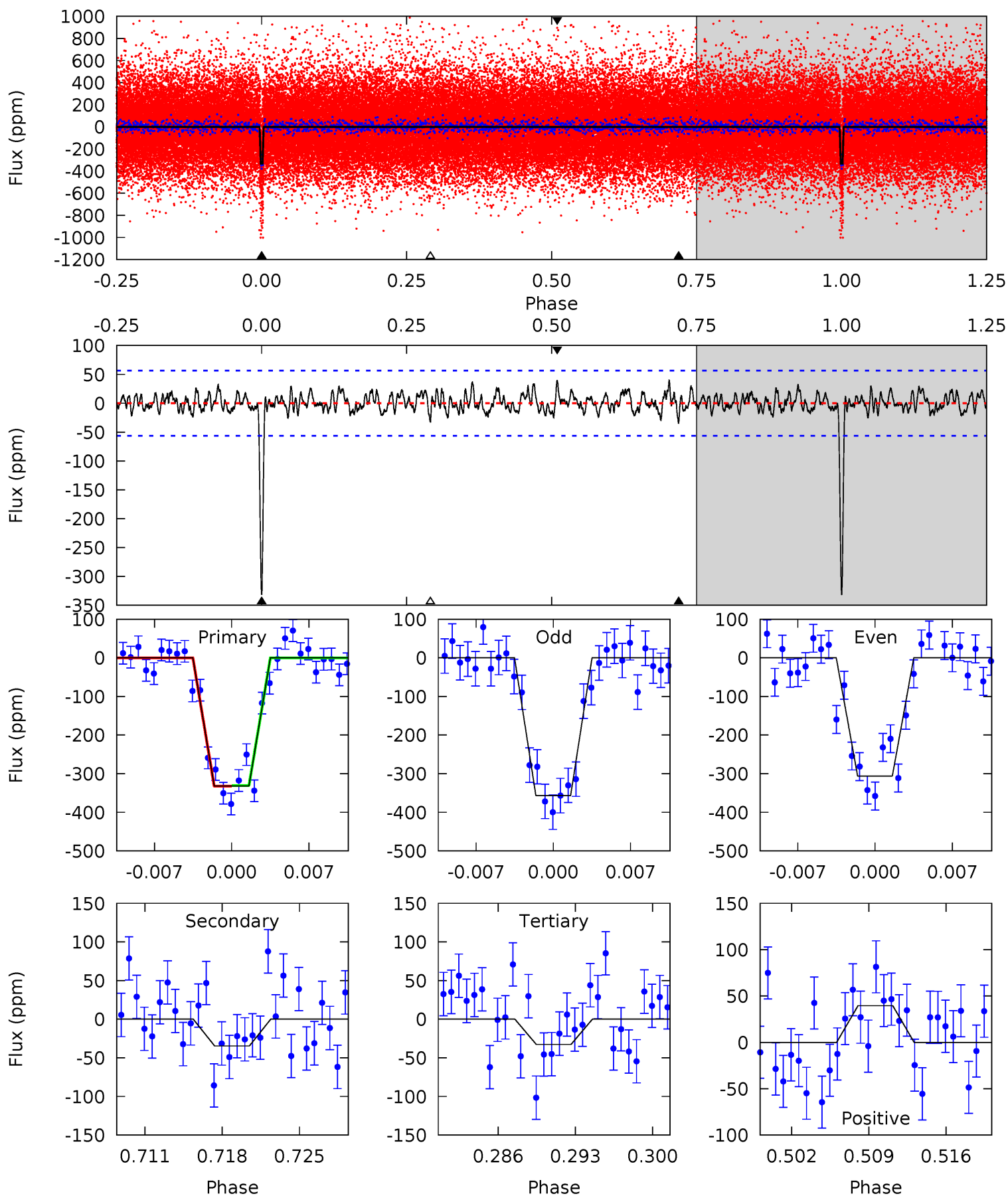
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
31.1	3.67	3.06	4.53	5.07	2.65	1.17	28.0	26.6	0.61	-0.86	2.16	1.00	0.13	0.28



Alt Model-Shift Uniqueness Test

005184709-01, P = 10.579041 Days, E = 130.497471 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
29.9	3.13	2.95	3.57	5.10	2.70	1.14	27.0	26.4	0.17	-0.44	2.31	0.95	0.11	0.07



Stellar Parameters For KIC 005184709

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6323^{+174}_{-261}	$4.418^{+0.062}_{-0.188}$	$-0.080^{+0.250}_{-0.300}$	$1.093^{+0.329}_{-0.141}$	$1.140^{+0.157}_{-0.157}$	$1.230^{+0.411}_{-0.601}$
	+3%/-4%	+1%/-4%	+312%/-375%	+30%/-13%	+14%/-14%	+33%/-49%
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 005184709-01 / KOI 1670.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-38 ± 10	$2.39^{+0.79}_{-0.80}$	1320^{+90}_{-77}	3906^{+642}_{-393}	35^{+46}_{-17}
Alt.	-35 ± 11	$2.25^{+0.91}_{-0.77}$	1317^{+87}_{-63}	3938^{+680}_{-504}	35^{+52}_{-19}

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 $A_{obs} \gg 1.0$

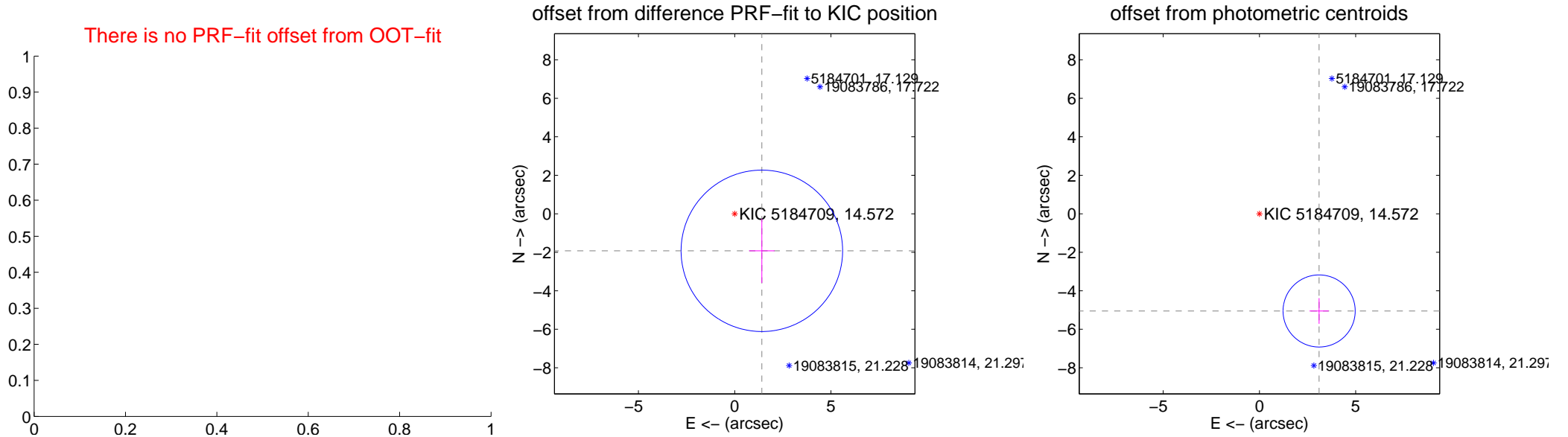
DV Centroid Data

Supplemental centroid analysis for 005184709-01. Kepler magnitude: 14.57. Transit SNR 21.68

There are 1 quarters with good PRF difference image offsets

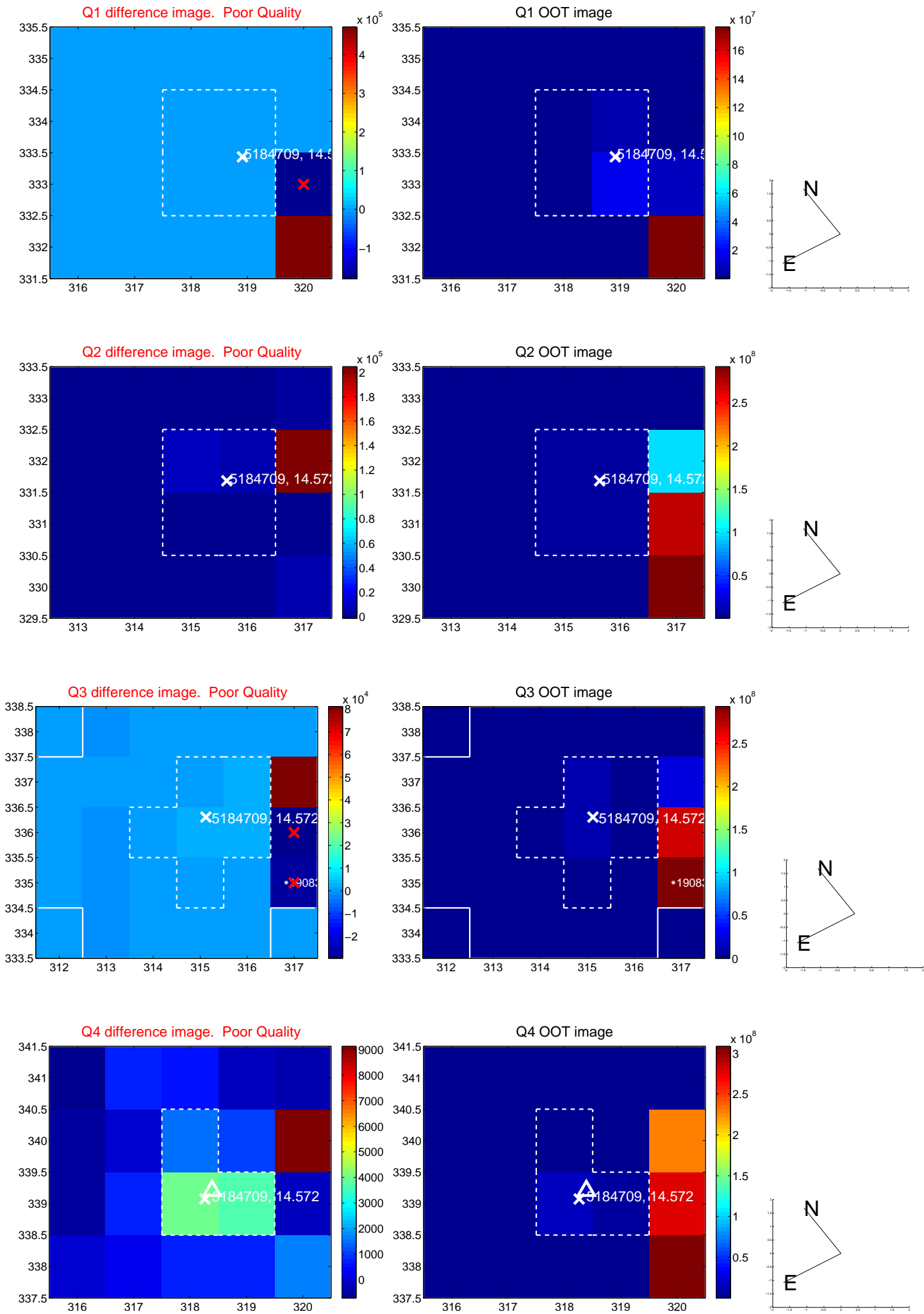
The direct PRF centroid is offset from the target star catalog position by about NaN arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	—	—	—	—
PRF-fit source offset from KIC position	2.386 ± 1.398	1.71	-1.411 ± 0.659	-1.925 ± 1.665
photometric centroid source offset	5.93 ± 0.62	9.49	-3.10 ± 0.50	-5.05 ± 0.67

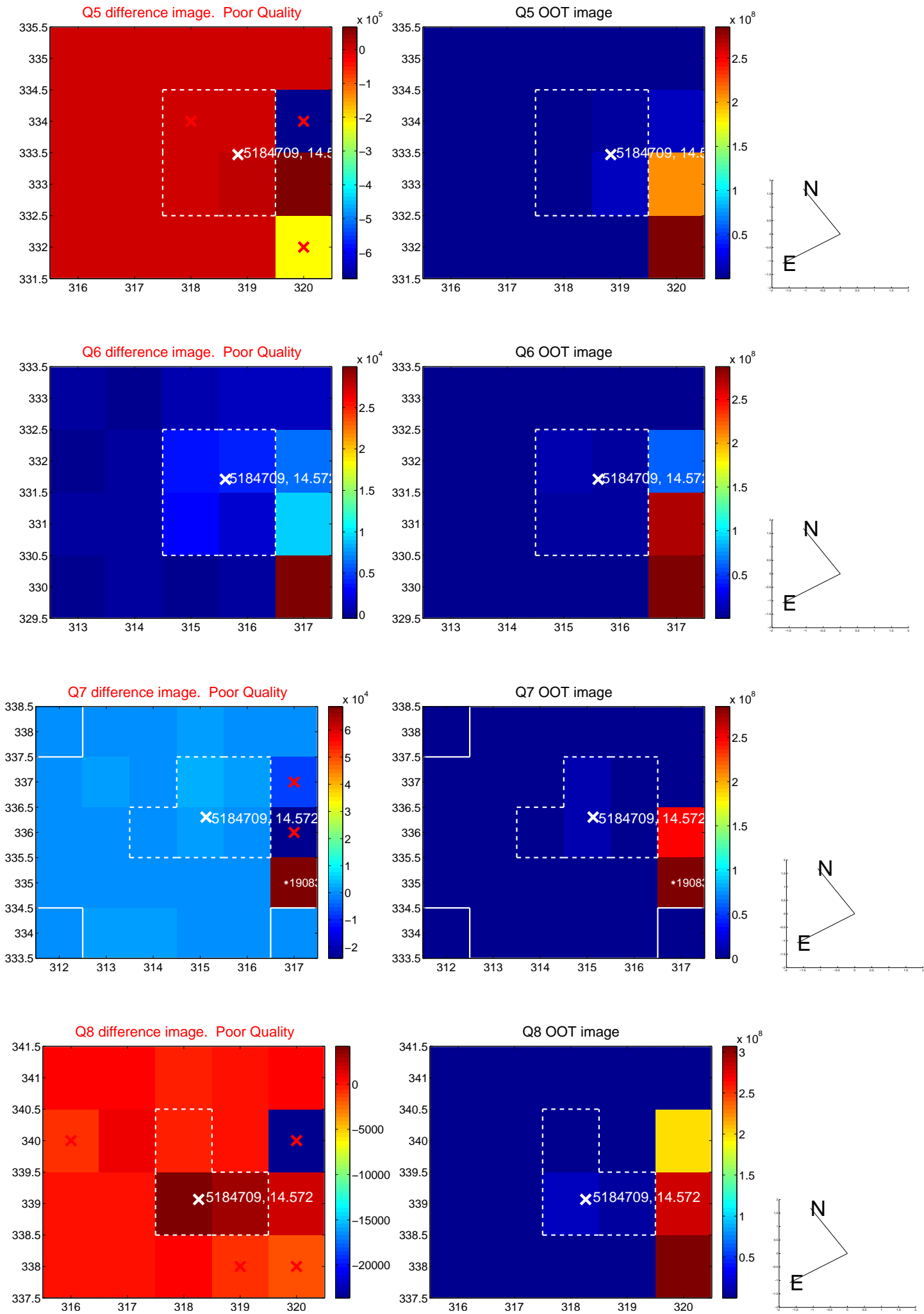


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

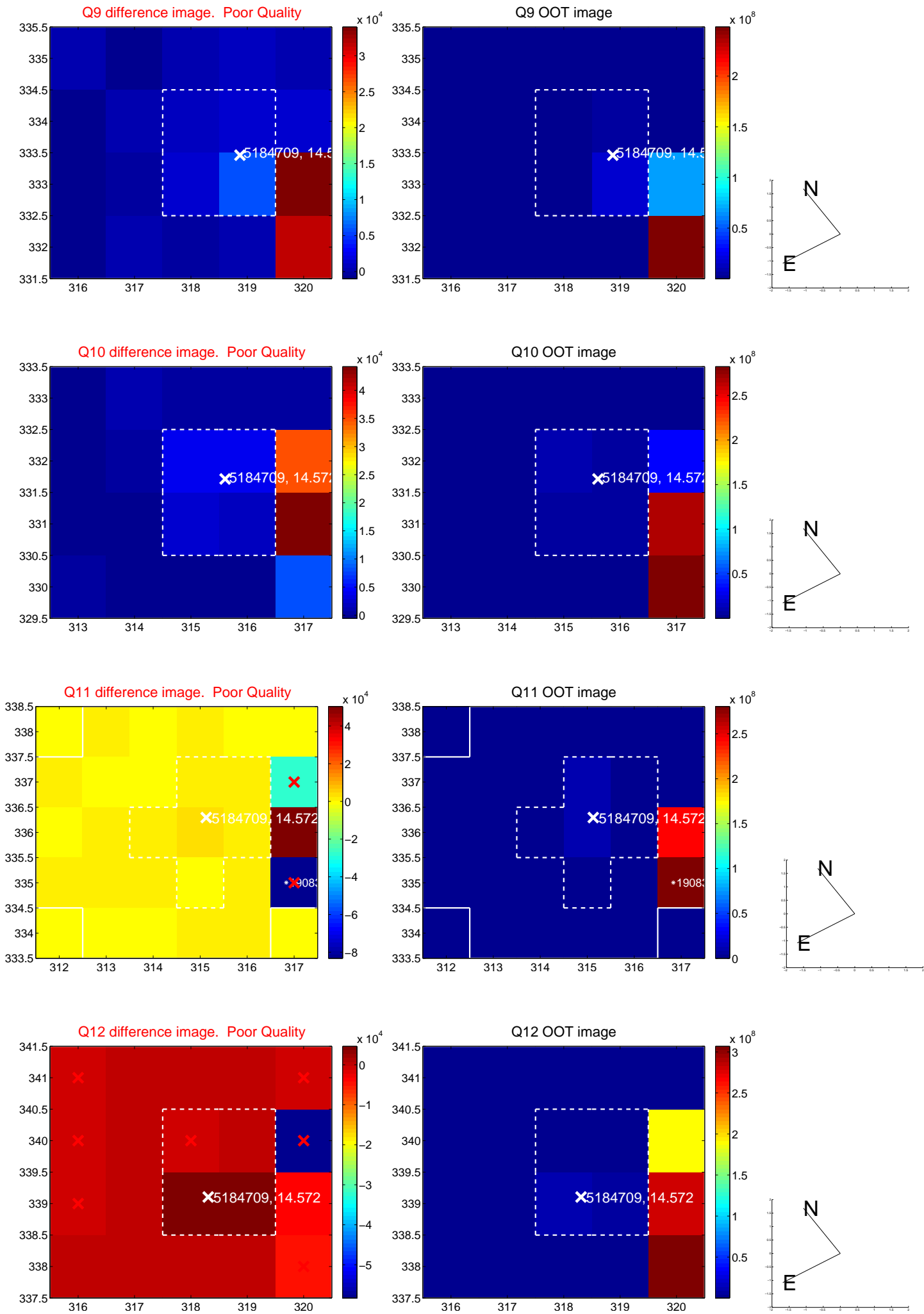
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



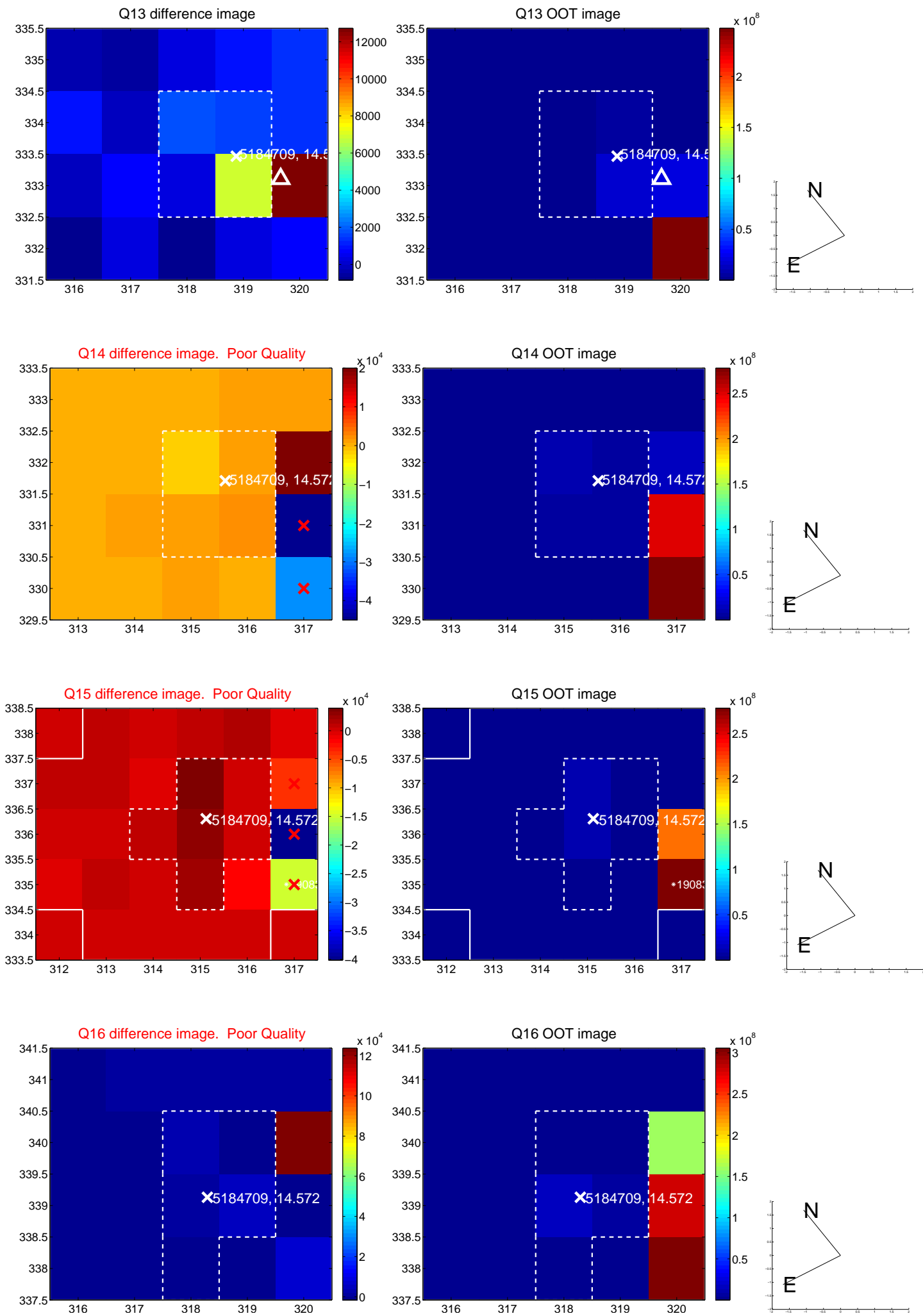
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



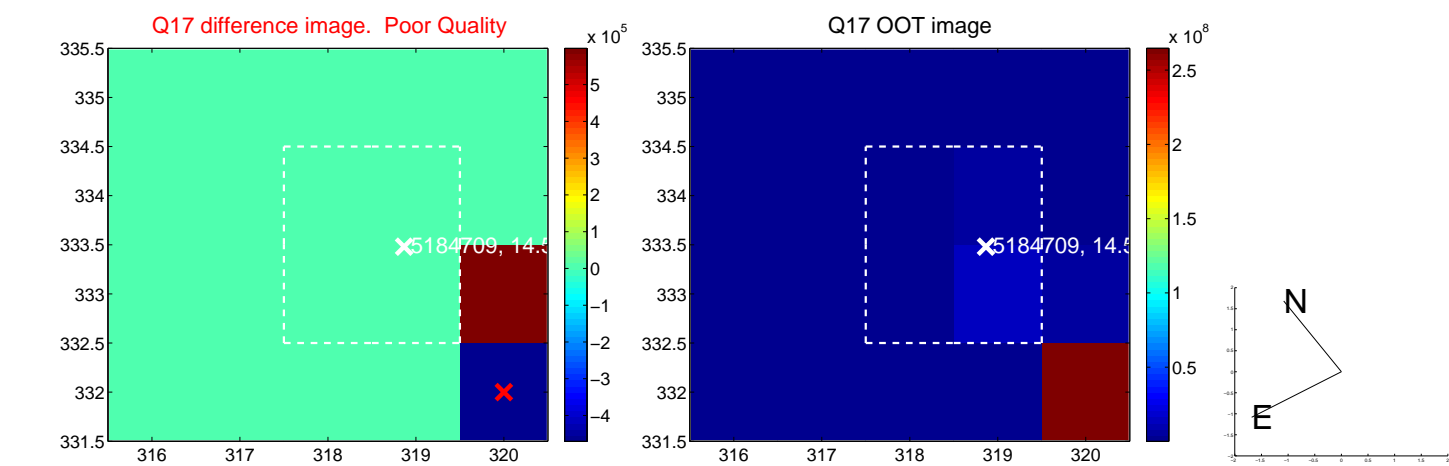
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



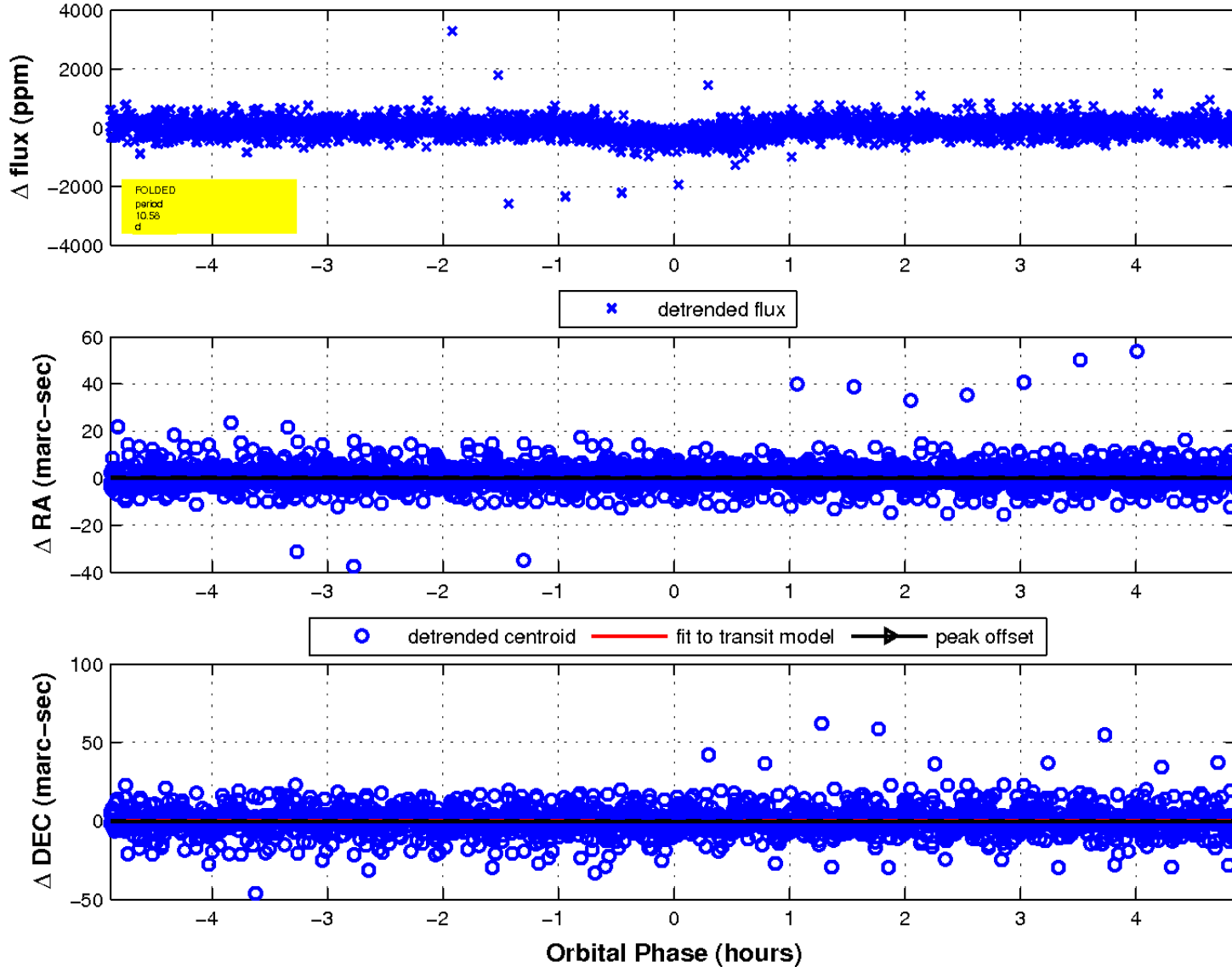
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

