

KIC 007091594

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})
007091594-01	OBS	No	2.157226	132.906757	0.0	24.608	10.2	0.0	1.73	6849	0.00	4483.01

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007091594-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—CENT_FEW_MEAS

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

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

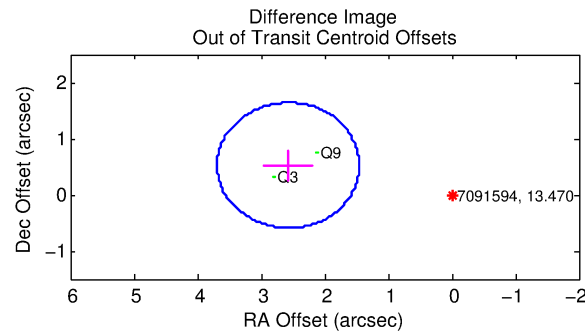
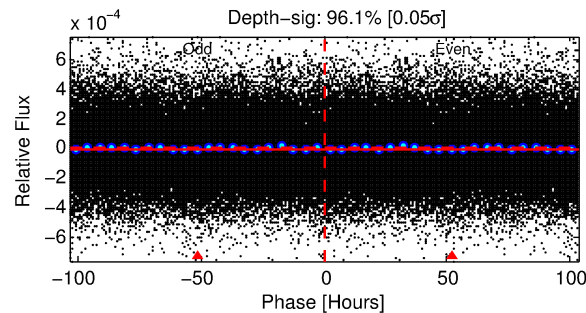
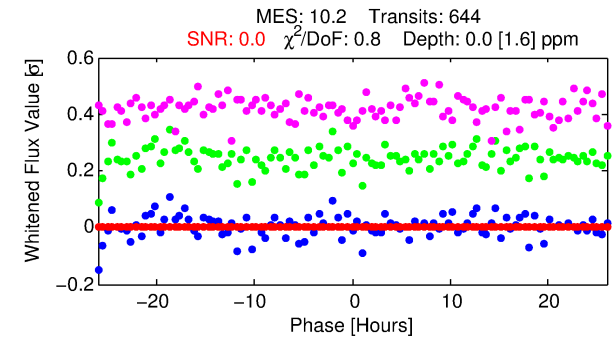
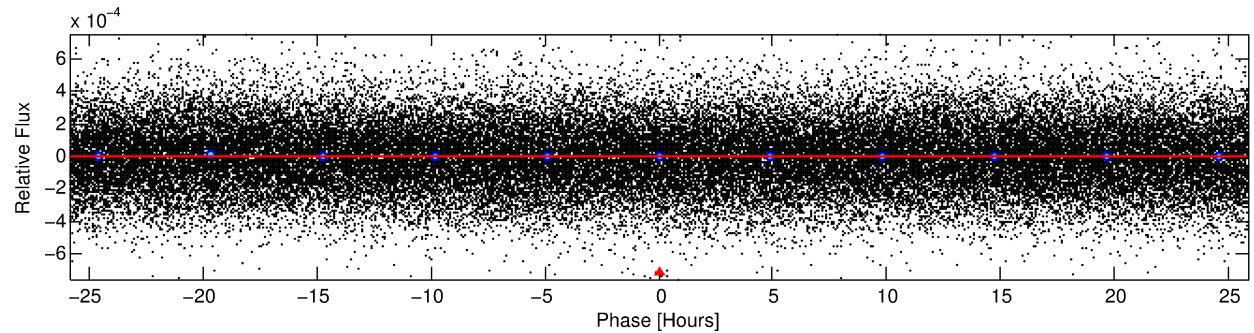
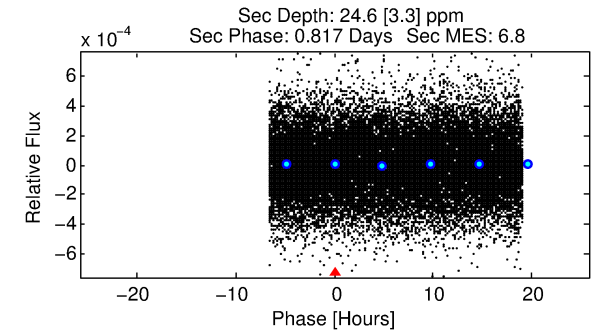
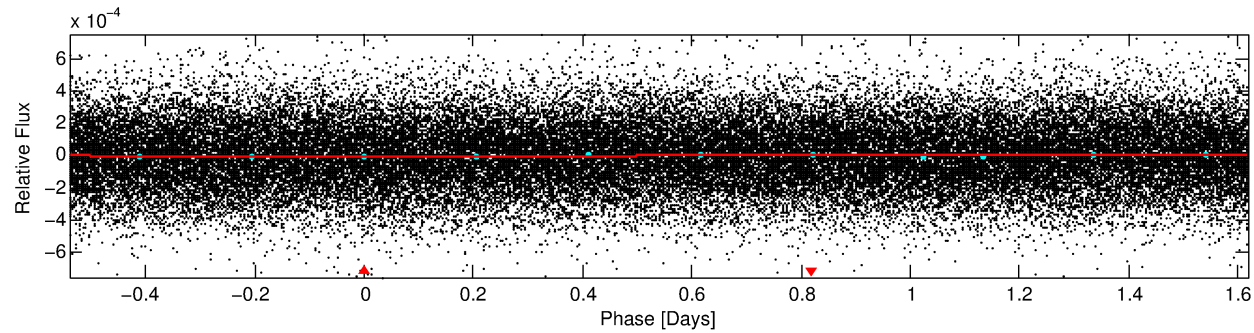
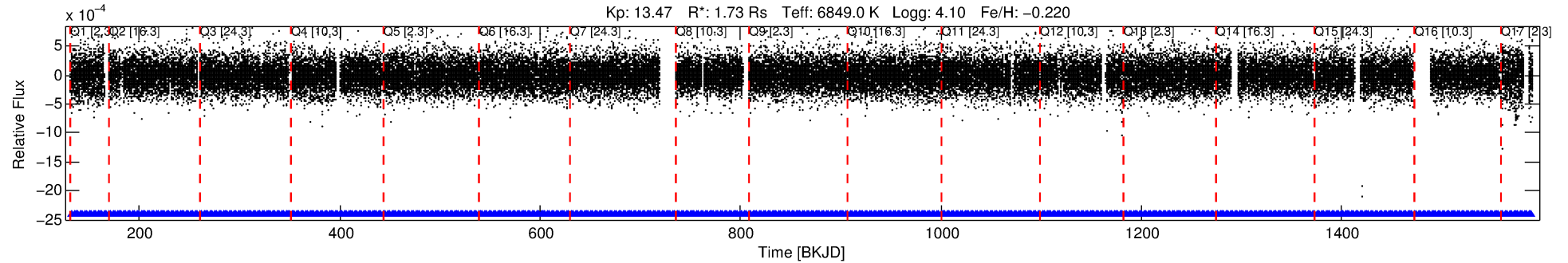
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007091594-01

No Significant Match Found

DV One-Page Summary

KIC: 7091594 Candidate: 1 of 1 Period: 2.157 d



DV Fit Results:

Period = 2.15723 [18.08628] d
Epoch = 132.9068 [4227.6333] BKJD
Rp/R* = 0.0000 [0.1249]
a/R* = 1.00 [308.04]
b = 0.50 [92486.23]
Seff = 4483.01 [50146.78]
Teq = 2087 [5835] K
Rp = 0.00 [23.53] Re
a = 0.0362 [0.2025] AU
Ag = 9186316.00 [311106787370.28] [0.000]
Teffp = 177601 [1503710532] K [0.000]

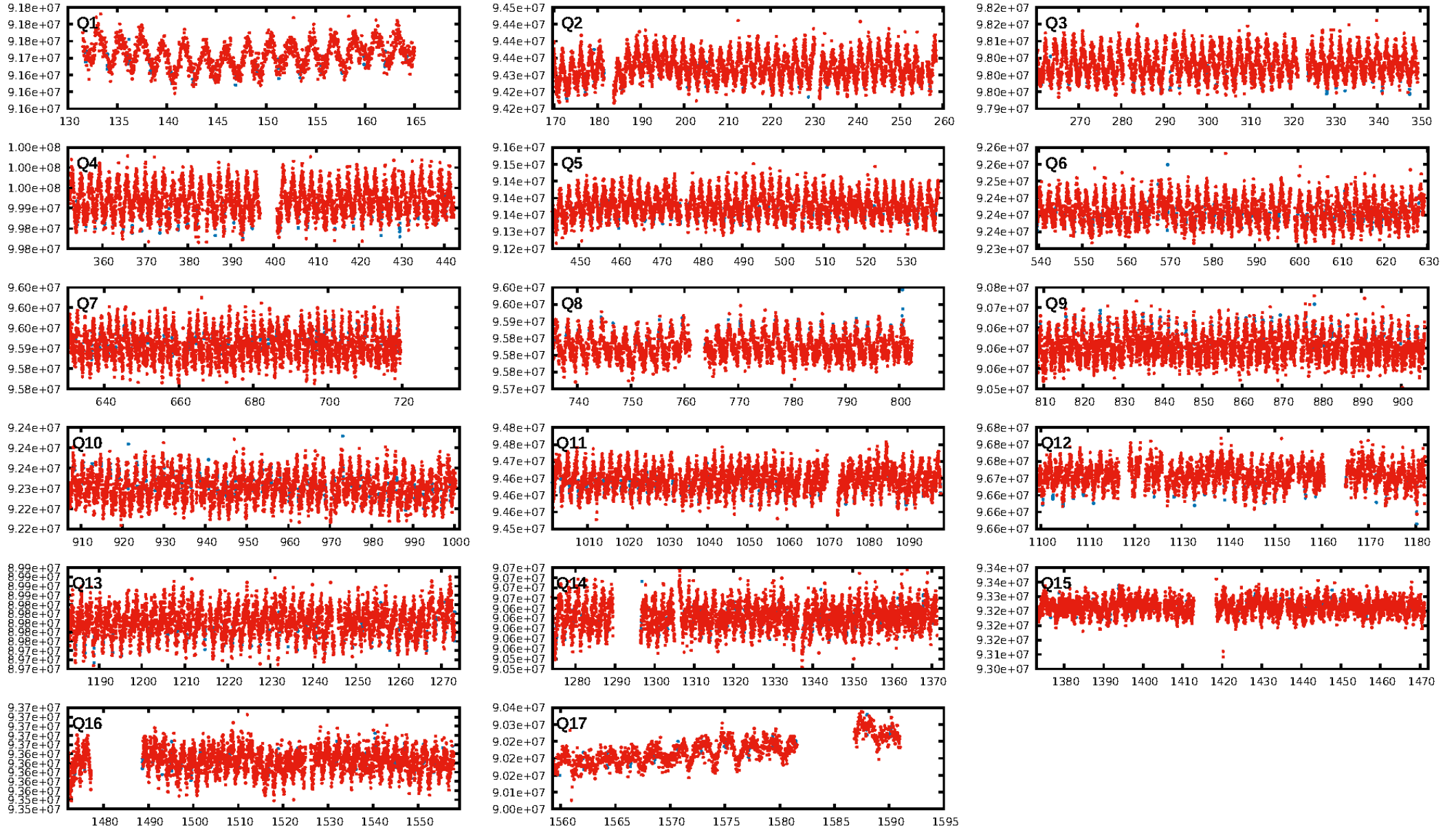
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [614/614]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
QotOffset-rm: 2.626 arcsec [7.05σ]
KicOffset-rm: 2.645 arcsec [6.99σ]
QotOffset-st: 0/1/0/1 [2]
KicOffset-st: 0/1/0/1 [2]
DiffImageQuality-fgm: 0.50 [1/2]
DiffImageOverlap-fno: 1.00 [17/17]

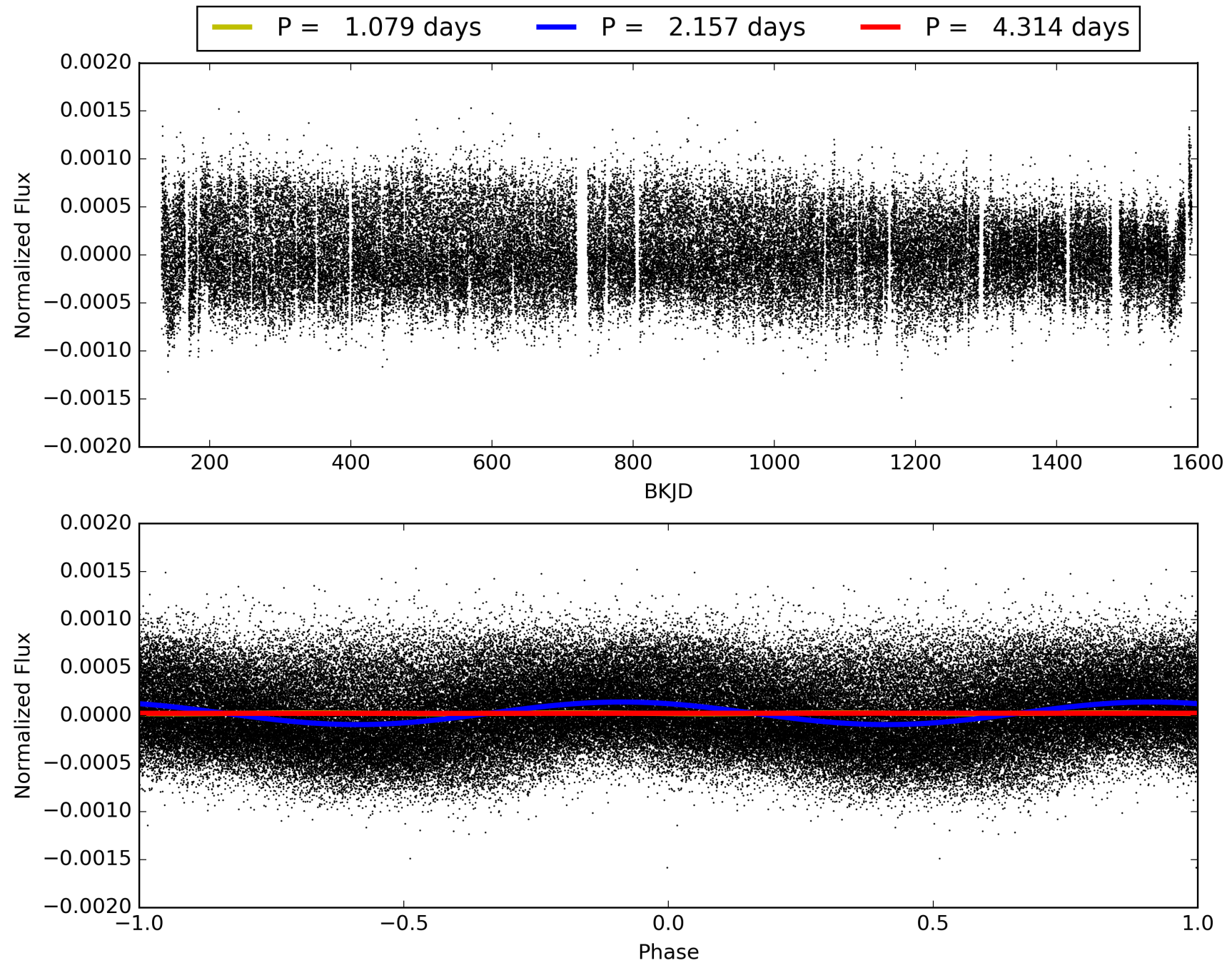
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 21:37:11 Z

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

TCE 007091594-01, PDC Light Curves

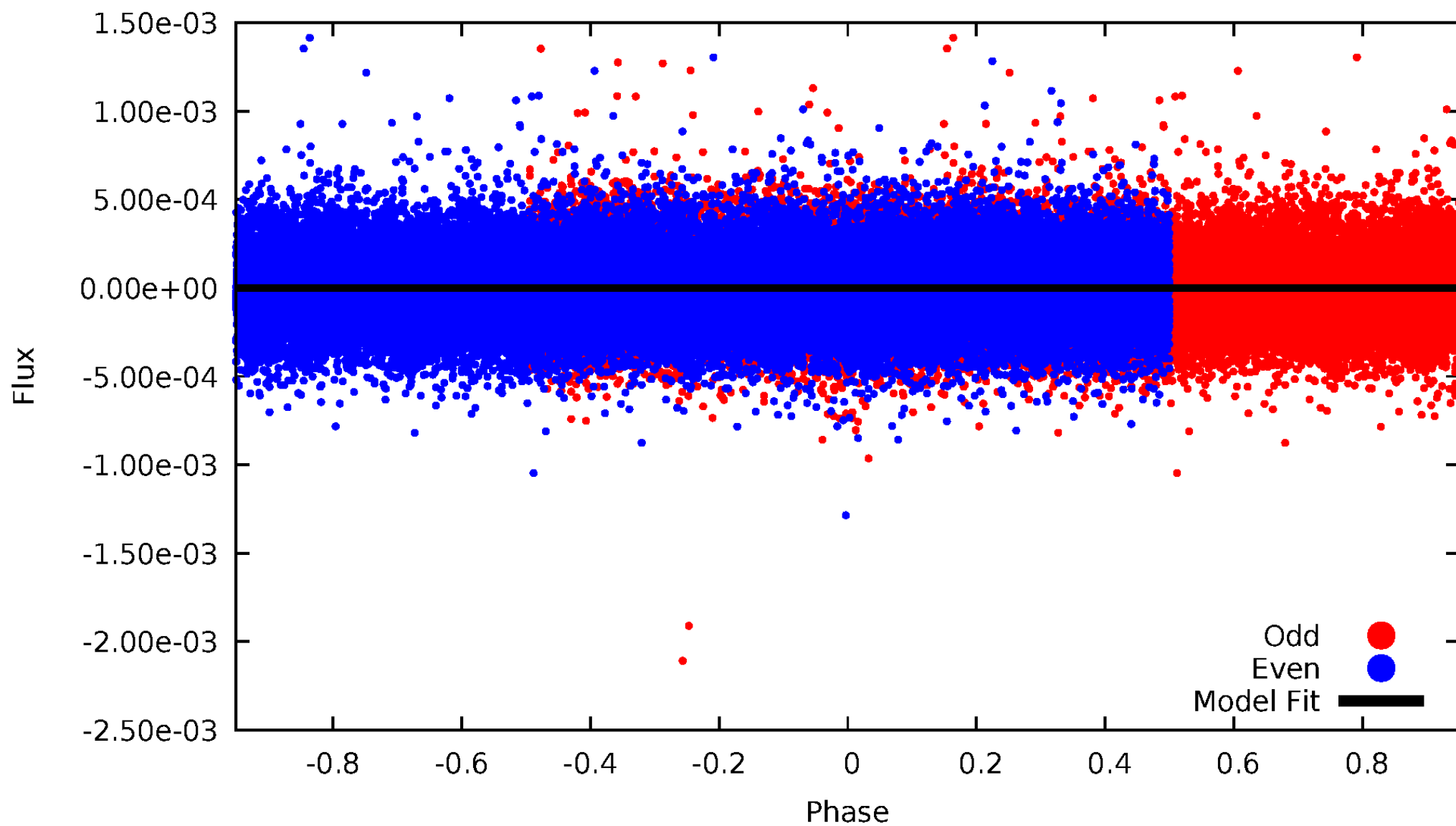


TCE 007091594-01



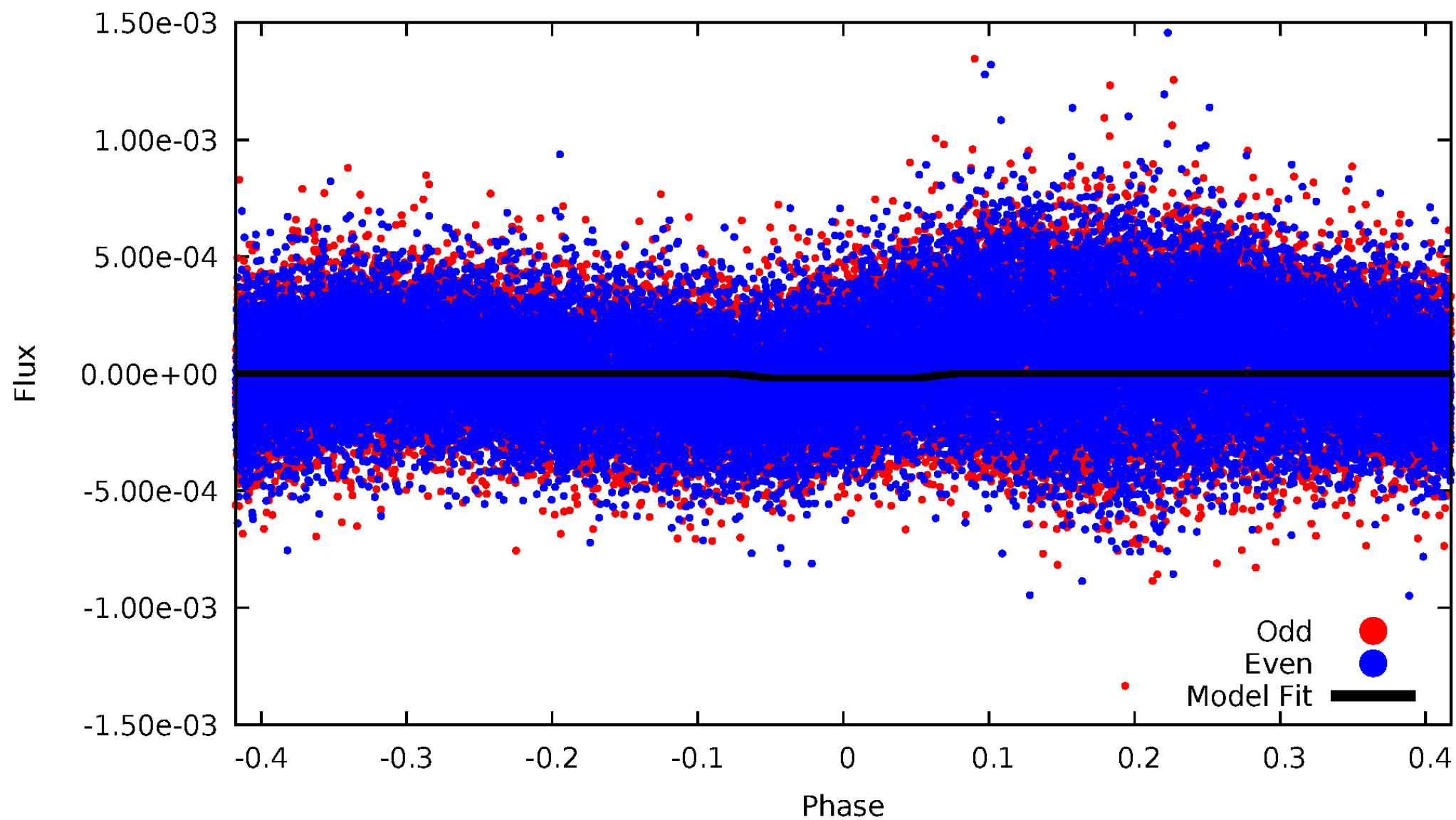
DV Odd/Even

TCE 007091594-01



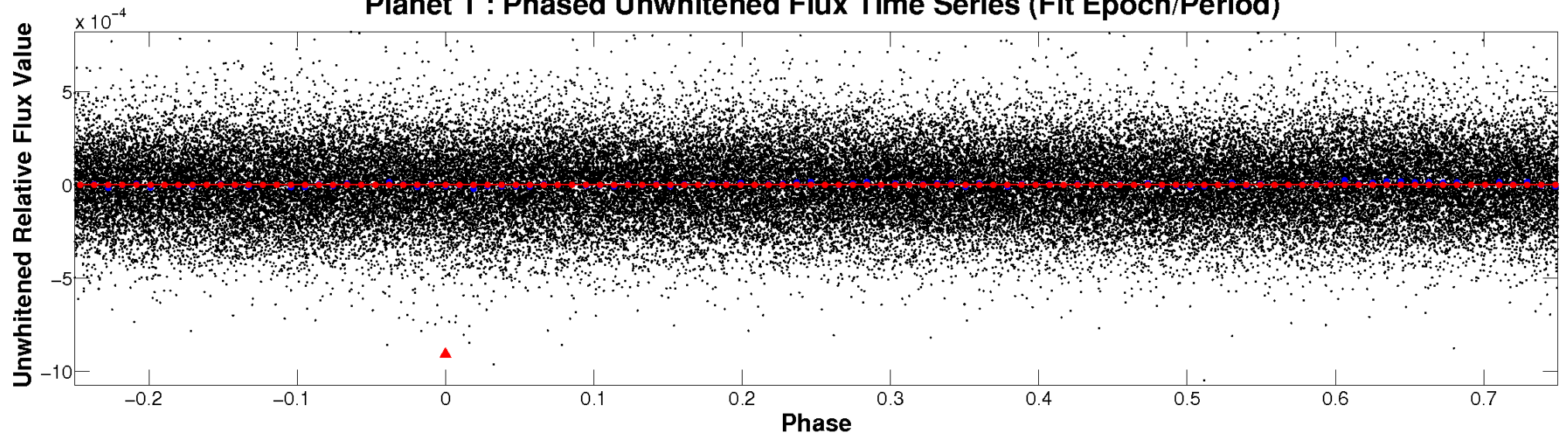
ALT Odd/Even

TCE 007091594-01

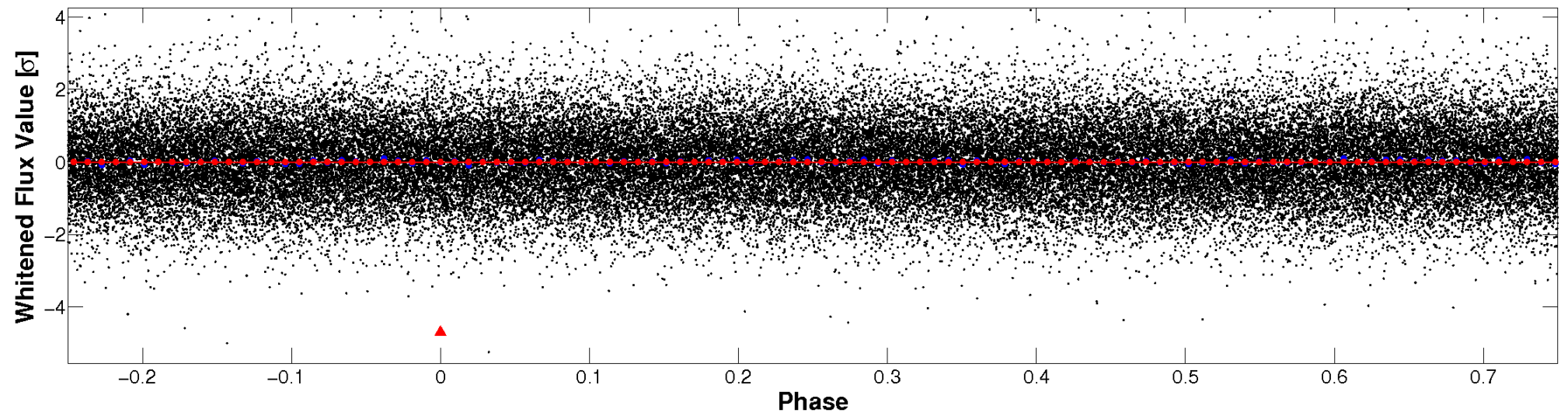


Non-Whitened Vs. Whitened Light Curve

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

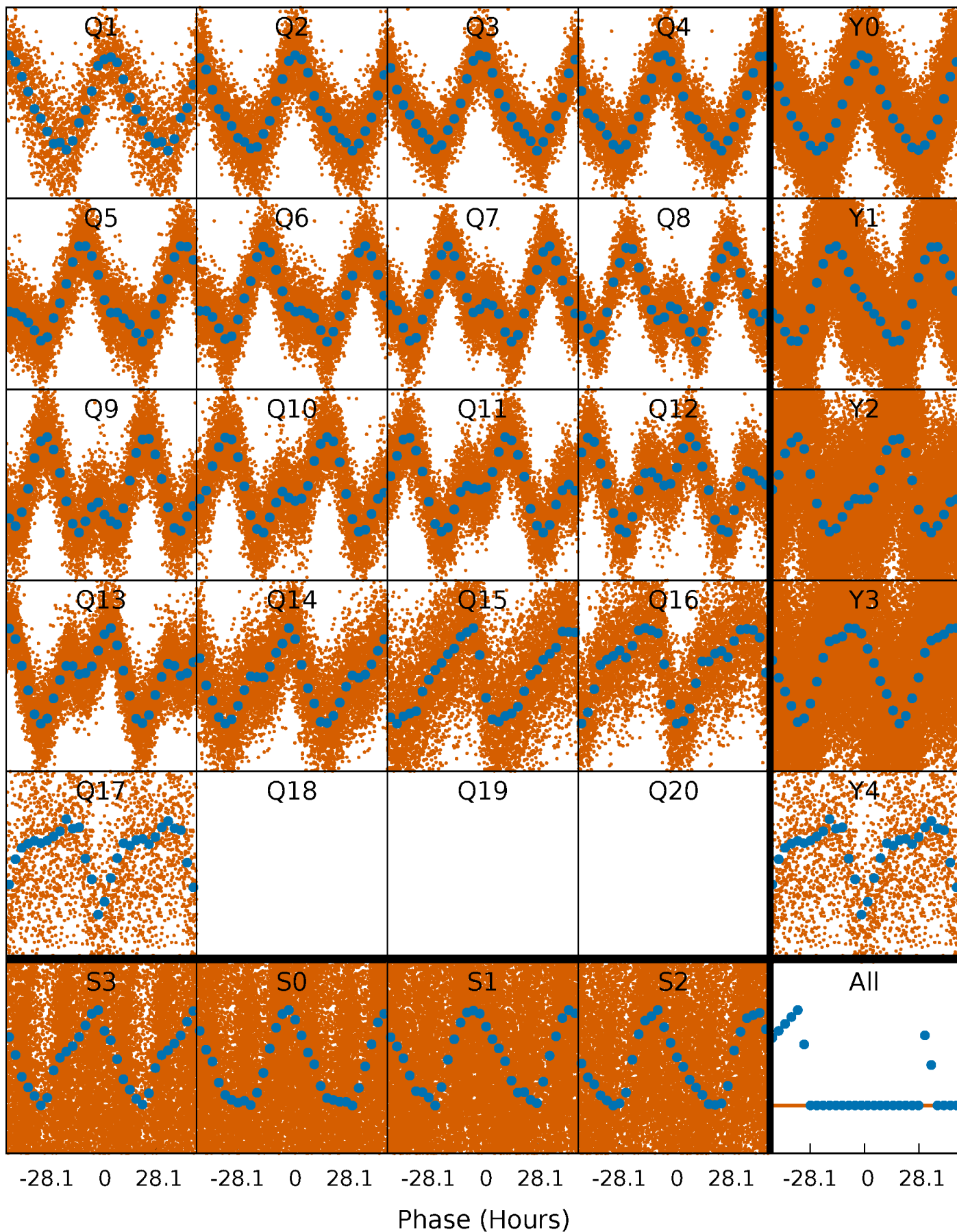


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



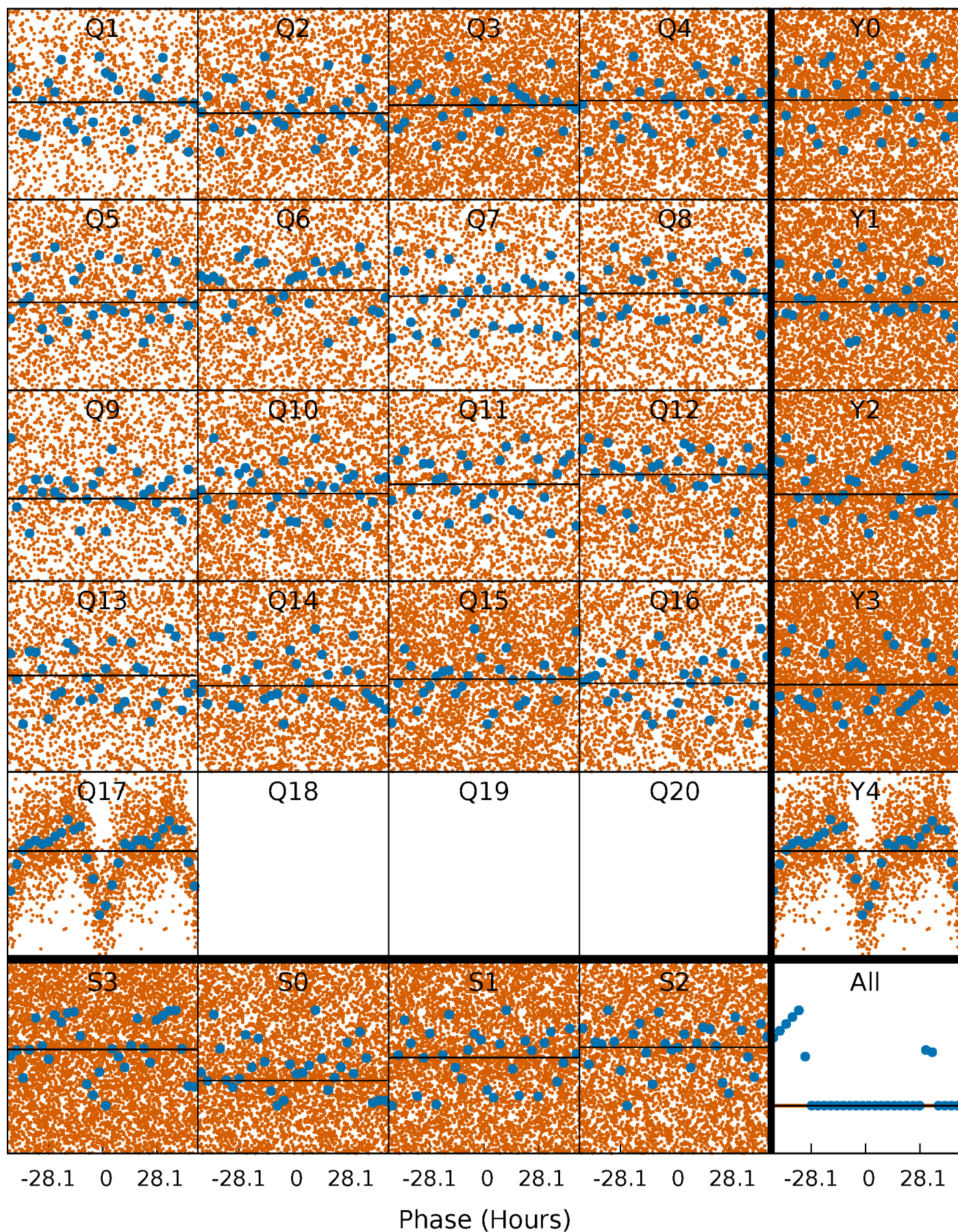
PDC Quarter-Phased Transit Curves

TCE 007091594-01 P= 2.157226 Days $T_0=132.906757$ (BKJD)



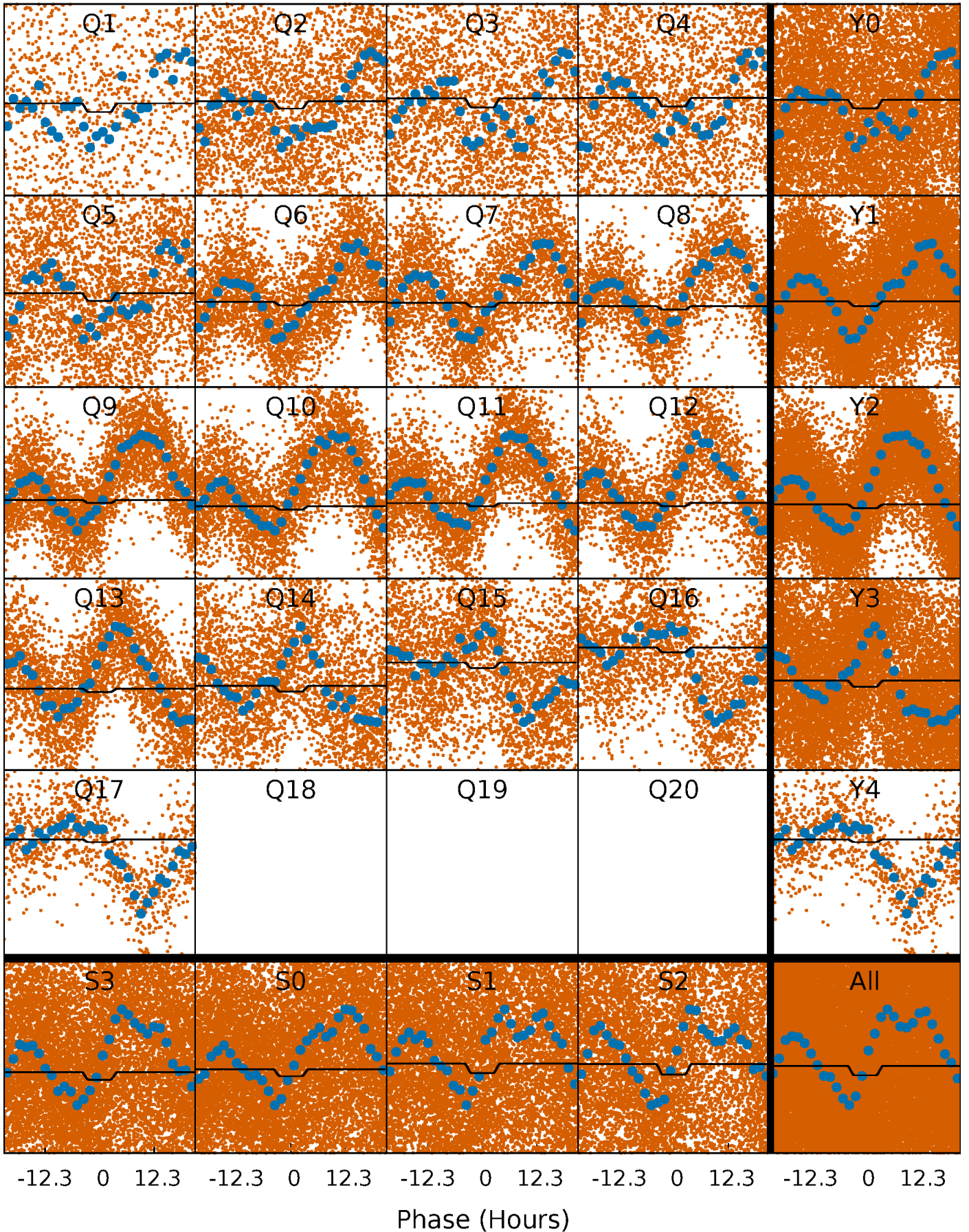
DV Quarter-Phased Transit Curves

TCE 007091594-01 P= 2.157226 Days $T_0=132.906757$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

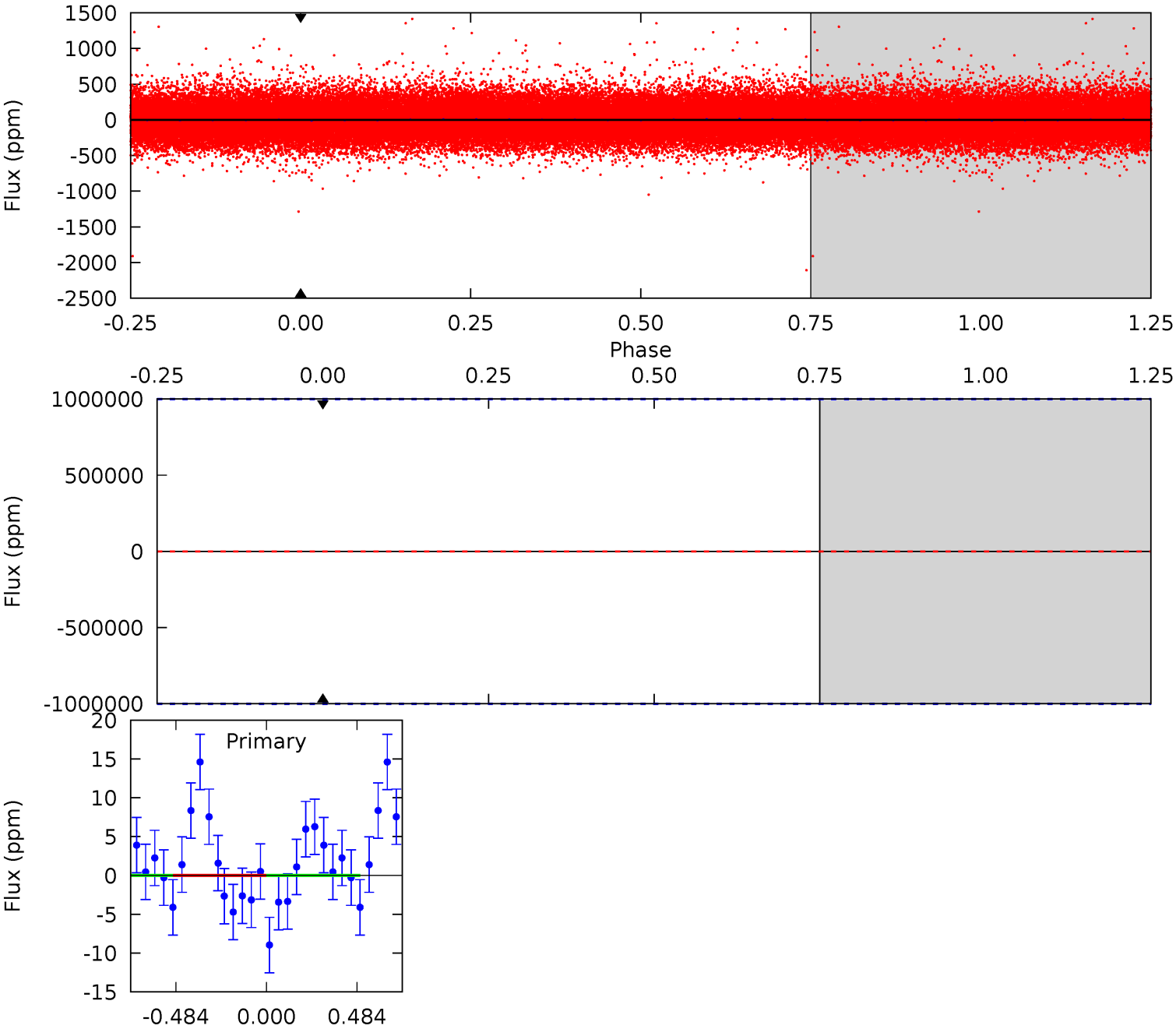
TCE 007091594-01 P= 2.154275 Days $T_0=132.282348$ (BKJD)



DV Model-Shift Uniqueness Test

007091594-01, P = 2.157226 Days, E = 130.749531 Days

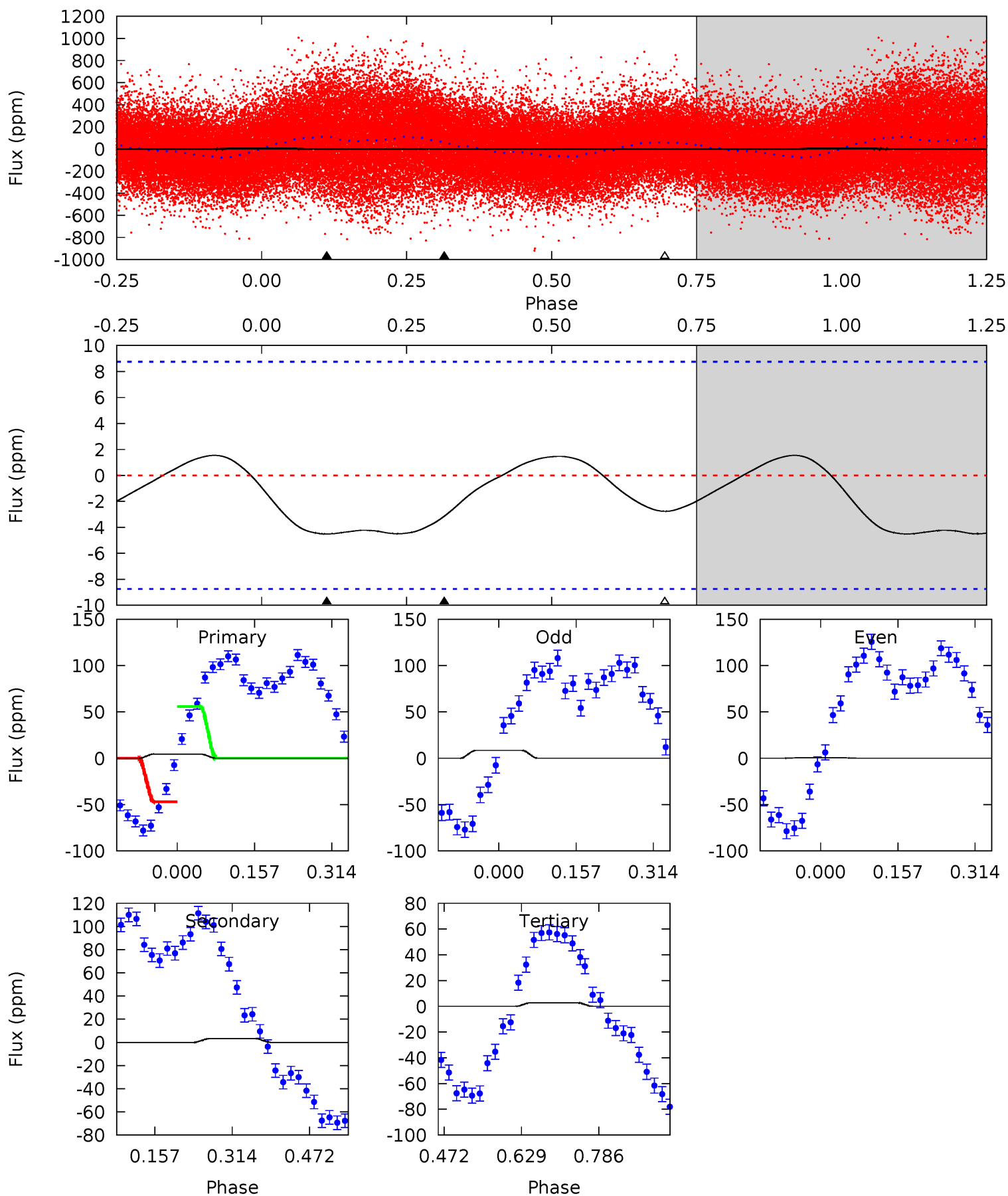
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

007091594-01, P = 2.154275 Days, E = 130.128073 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2.30	1.61	1.41	0	4.47	1.41	0.78	0.89	2.30	0.19	1.61	2.02	-0.74	0.25	1.93



Stellar Parameters For KIC 007091594

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$\rho_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6849^{+165}_{-236}	$4.097^{+0.214}_{-0.175}$	$-0.220^{+0.250}_{-0.300}$	$1.726^{+0.485}_{-0.485}$	$1.361^{+0.194}_{-0.259}$	$0.373^{+0.457}_{-0.179}$
	+2%/-3%	+5%/-4%	+114%/-136%	+28%/-28%	+14%/-19%	+122%/-48%
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 007091594-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	0 ± 1000000	$15.94^{+15.86}_{-11.61}$	1591^{+693}_{-346}	-5761^{+33921}_{-18638}	$-32.058^{+6500.859}_{-4648.908}$
Alt.	-3 ± 2	$17.13^{+17.84}_{-12.45}$	1589^{+831}_{-348}	-2091^{+4415}_{-595}	$0.056^{+1.021}_{-0.050}$

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

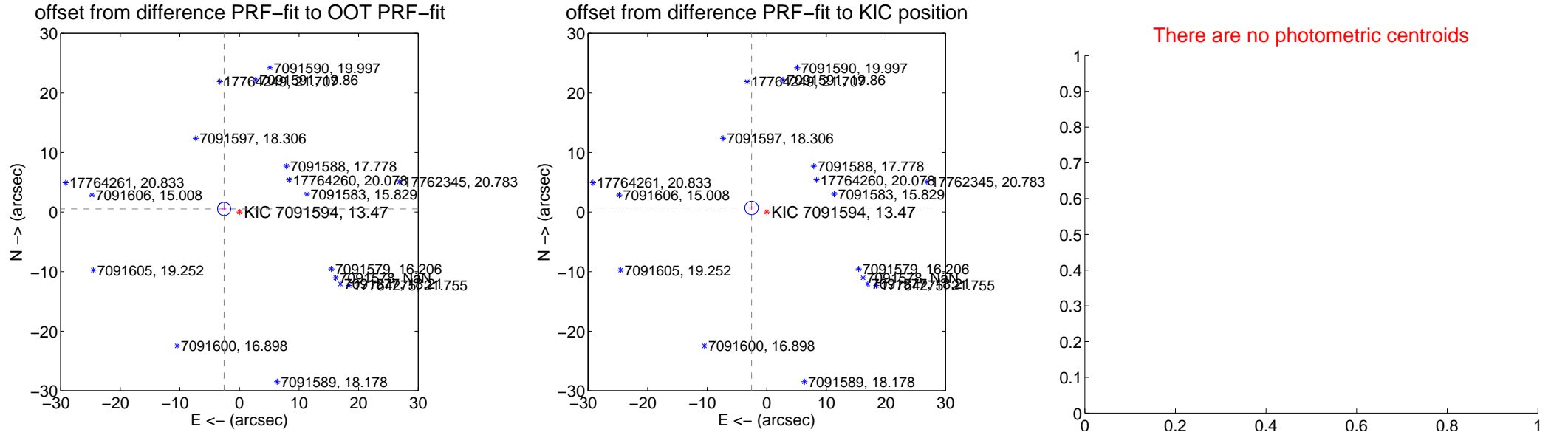
DV Centroid Data

Supplemental centroid analysis for 007091594-01. Kepler magnitude: 13.47. Transit SNR 0.00

There are 1 quarters with good PRF difference image offsets

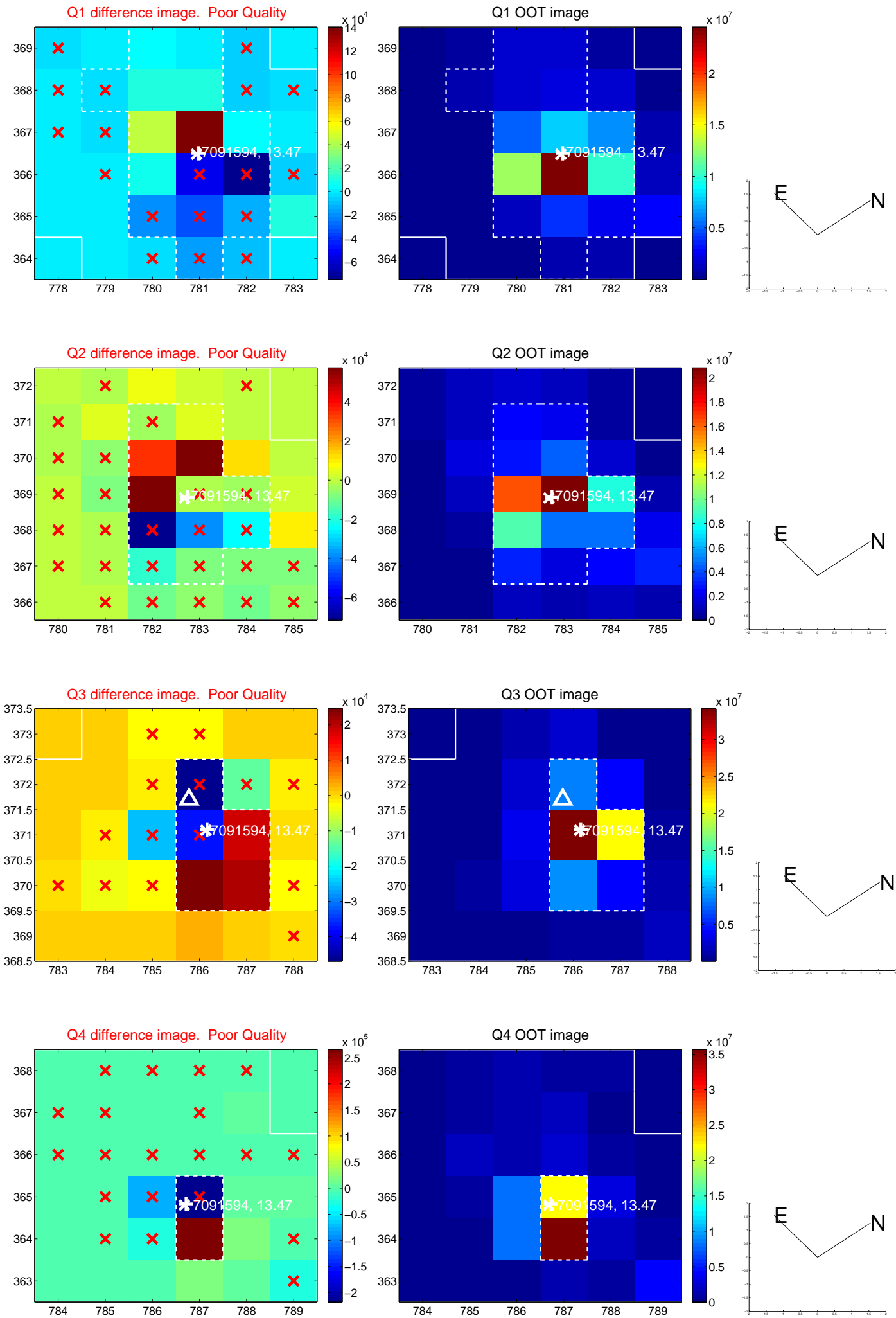
The direct PRF centroid is offset from the target star catalog position by about 0.21 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.626 ± 0.372	7.05	2.573 ± 0.376	0.524 ± 0.260
PRF-fit source offset from KIC position	2.645 ± 0.379	6.99	2.555 ± 0.383	0.684 ± 0.309
photometric centroid source offset	—	—	—	—

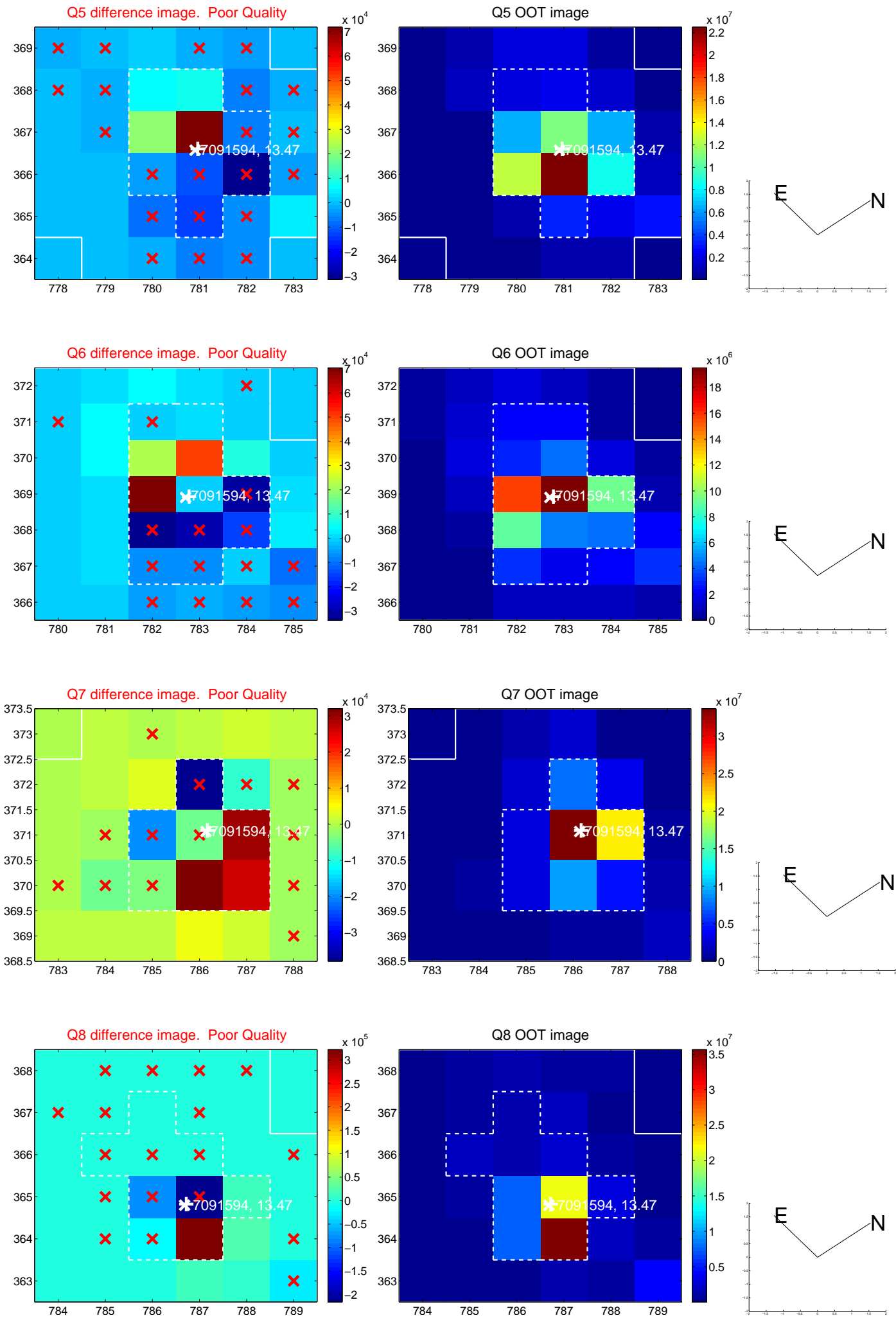


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

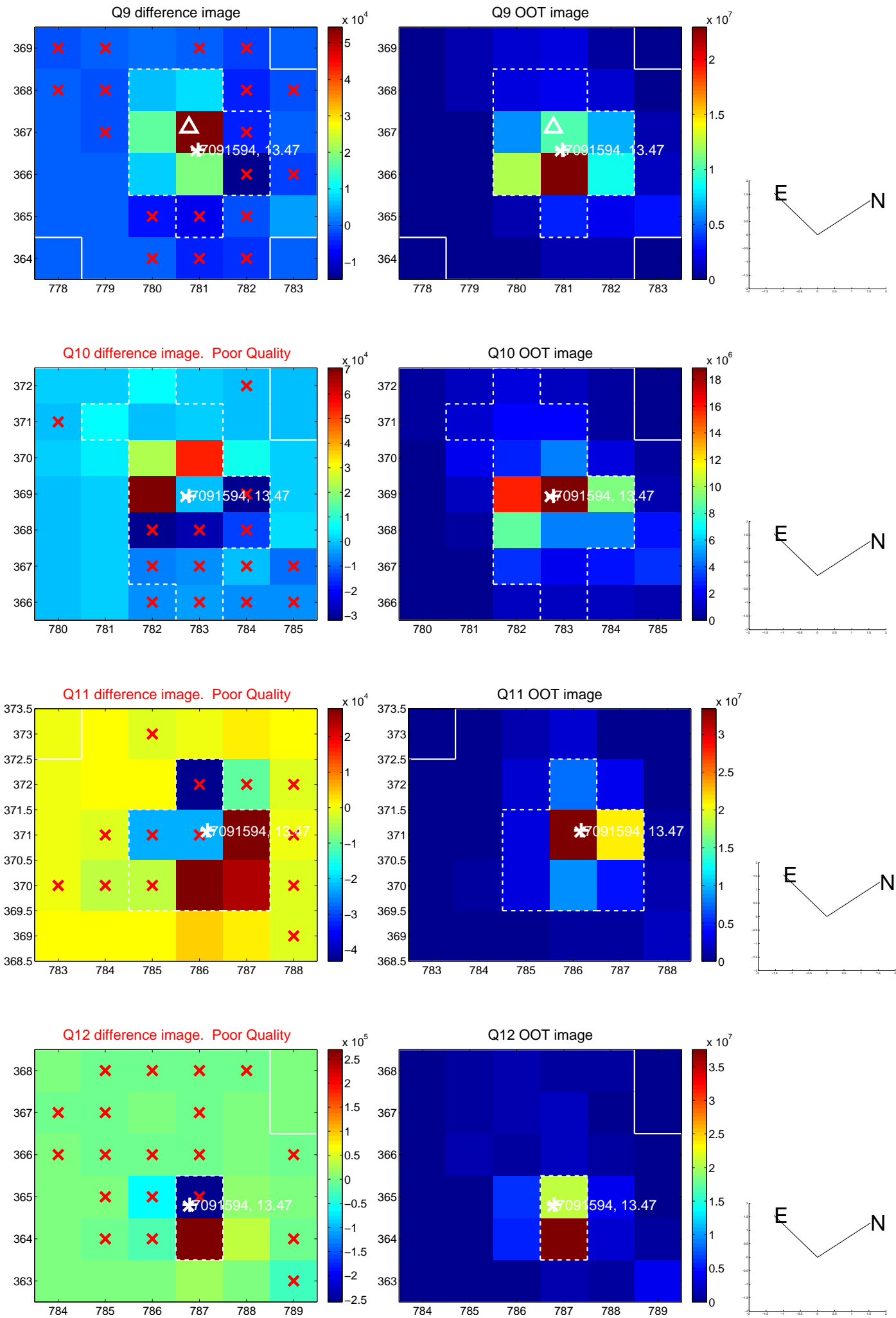
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



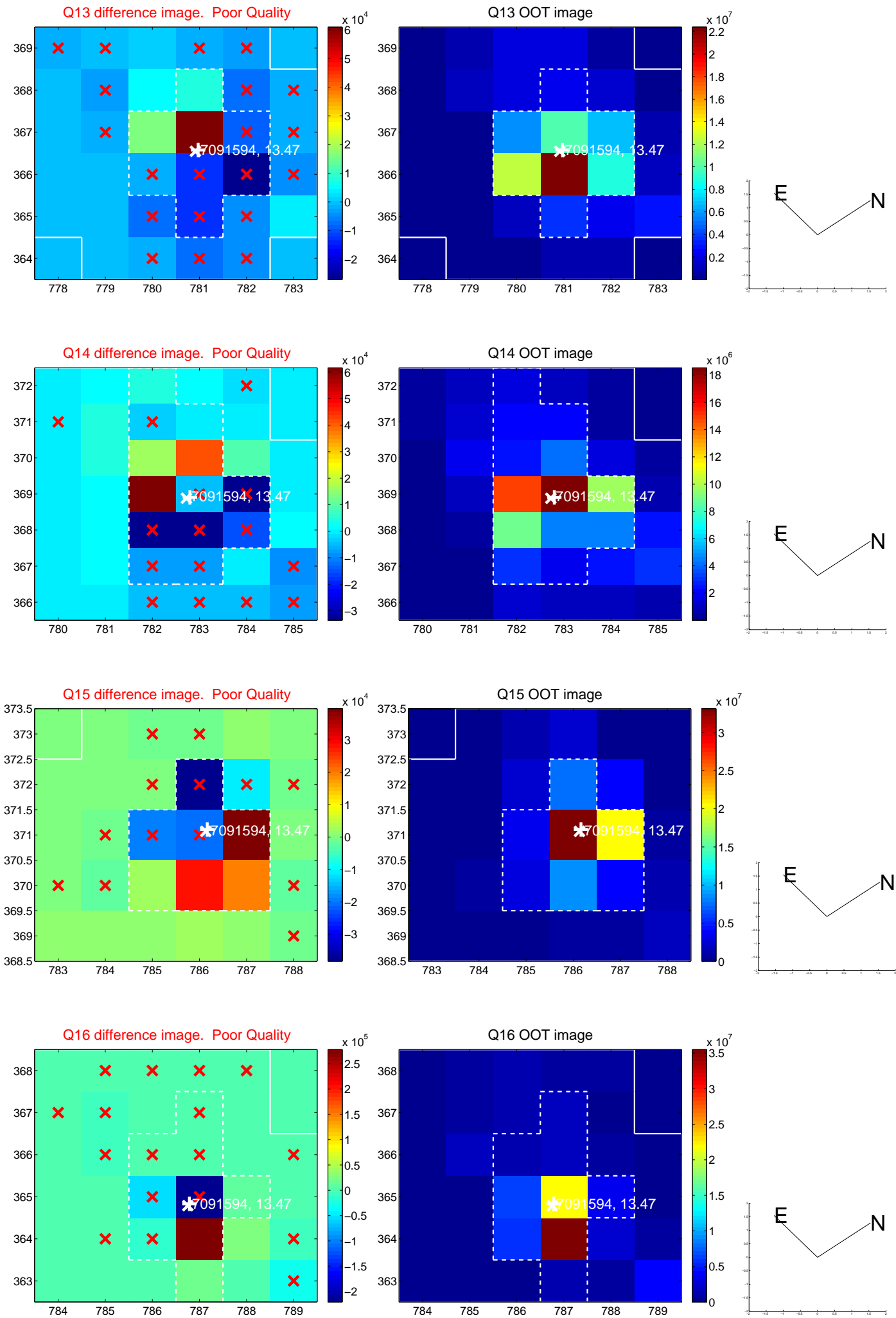
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



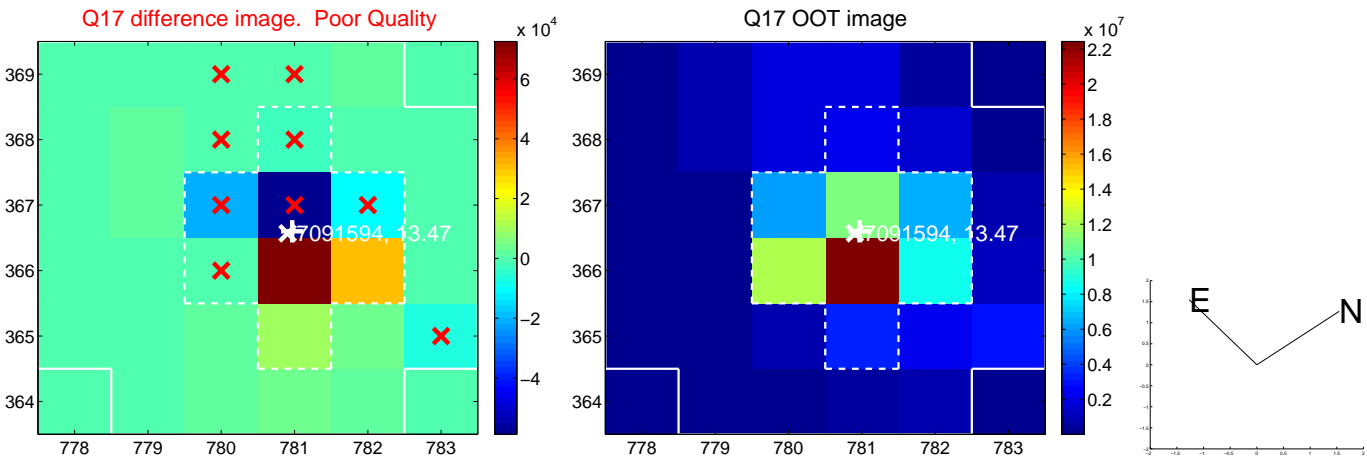
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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.



folded centroid time series figure for this object.

UKIRT Image

Declination

