

KIC 008098300

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})
008098300-01	OBS	6964.01	2.152950	132.357027	213829.9	3.000	39759.4	-1.0	1.04	6502	48.84	1535.40

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008098300-01	OBS	FP	0.00	0	1	0	0	DEPTH_ODDEVEN_DV—DEPTH_ODDEVEN_ALT—MOD_ODDEVEN_ALT—CENT_NOFITS

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.

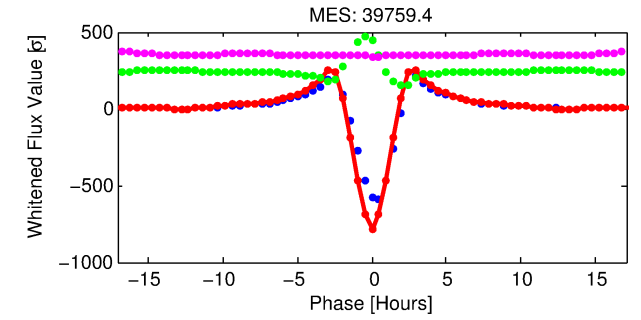
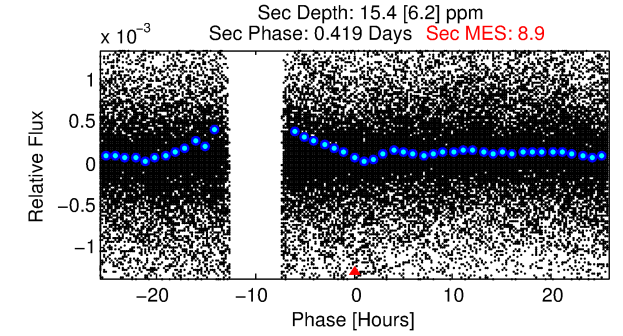
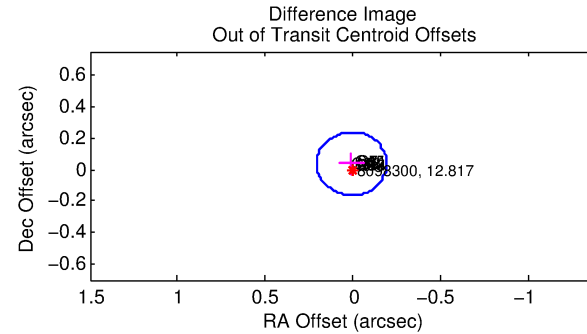
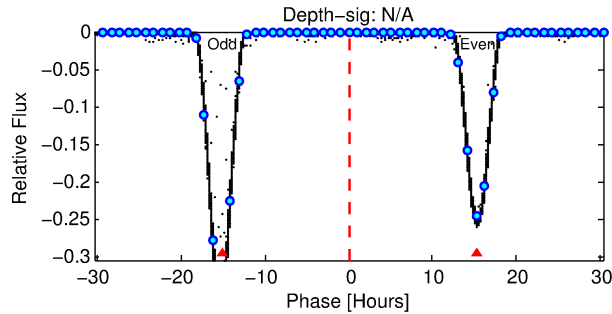
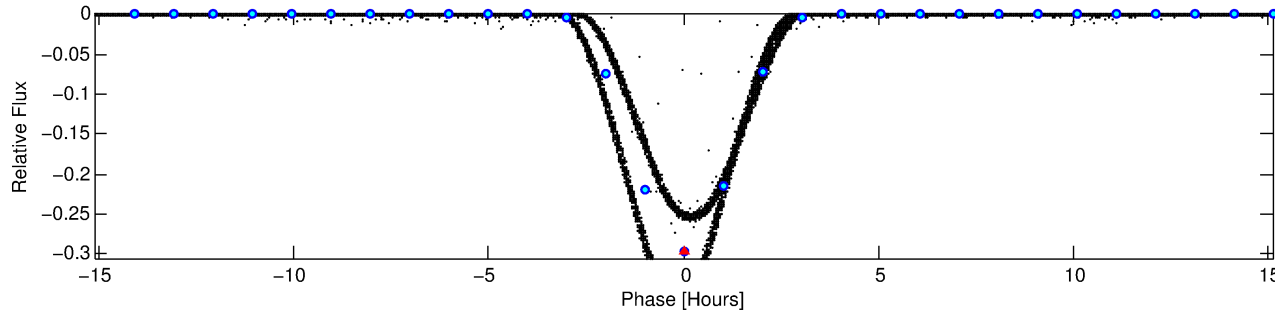
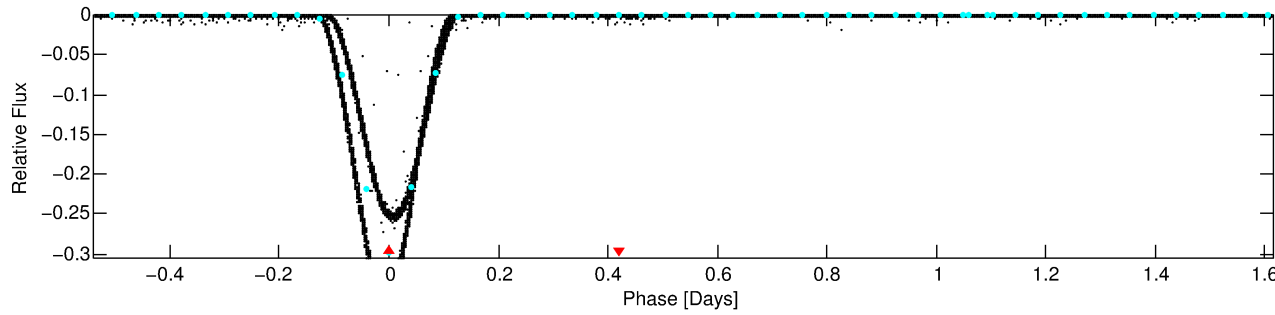
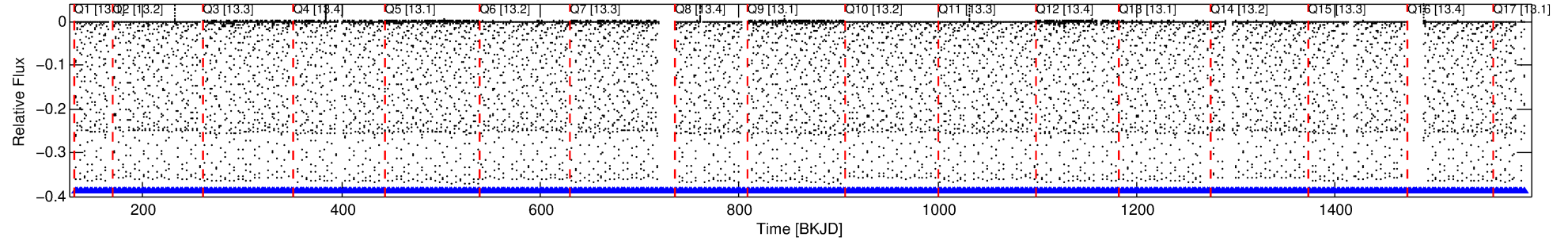
Ephemeris Match Information For 008098300-01

No Significant Match Found

DV One-Page Summary

KIC: 8098300 Candidate: 1 of 1 Period: 2.153 d
KOI: K06964 Corr: No Ephemeris Match

Kp: 12.82 R*: 1.04 Rs Teff: 6502.0 K Logg: 4.44 Fe/H: -0.400



TPS TCE Results:

Period = 2.15295 d
Epoch = 132.3570 BKJD

DV fit results are unavailable

DV Diagnostic Results:

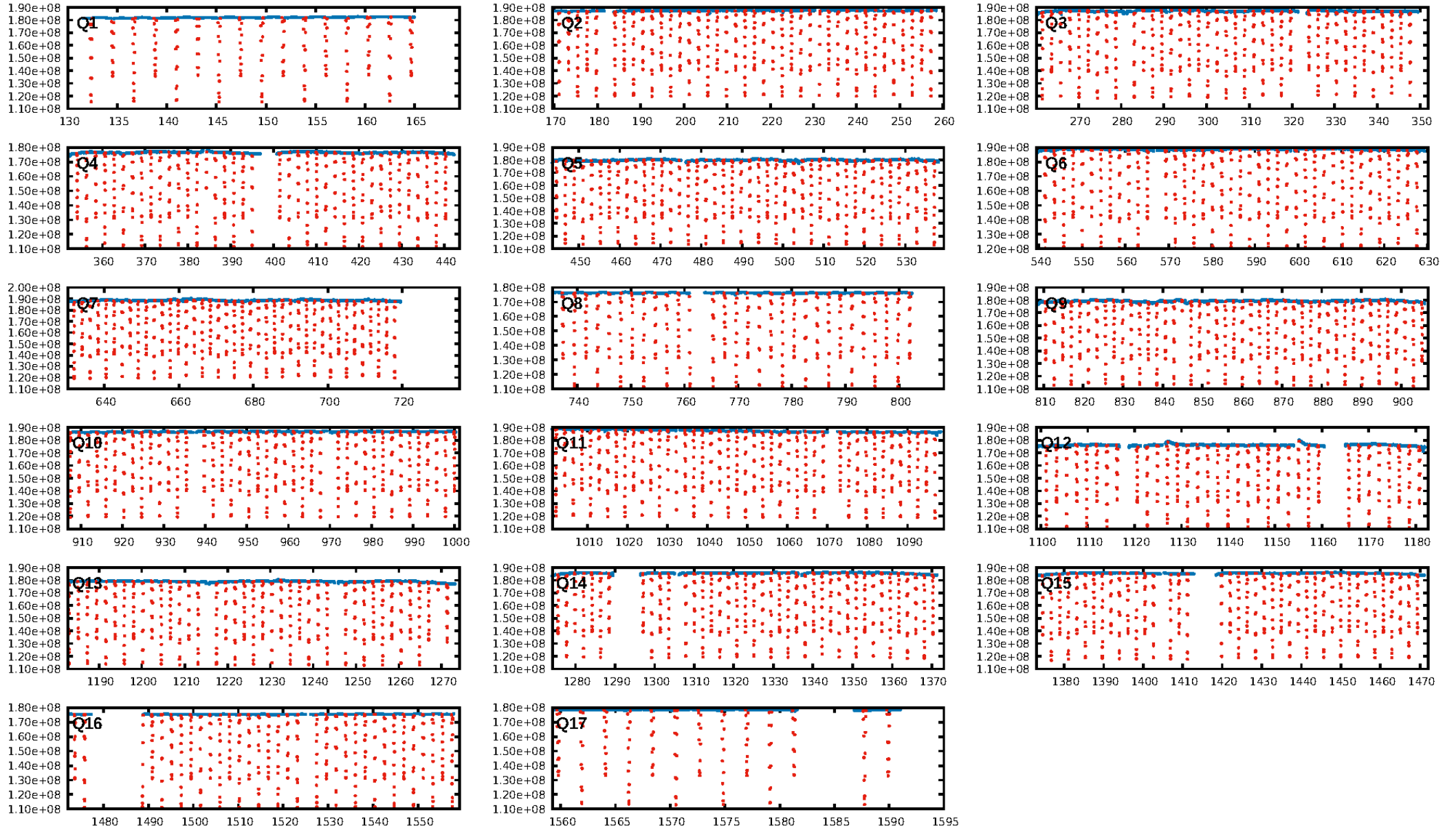
ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [592/592]
GhostDiagnostic-chr: 1.702

Centroid-sig: 0.0%
Centroid-so: 0.036 arcsec [180.57σ]
OotOffset-rm: 0.039 arcsec [0.59σ]
KicOffset-rm: 0.054 arcsec [0.81σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 1.00 [17/17]
DiffImageOverlap-fno: 1.00 [17/17]

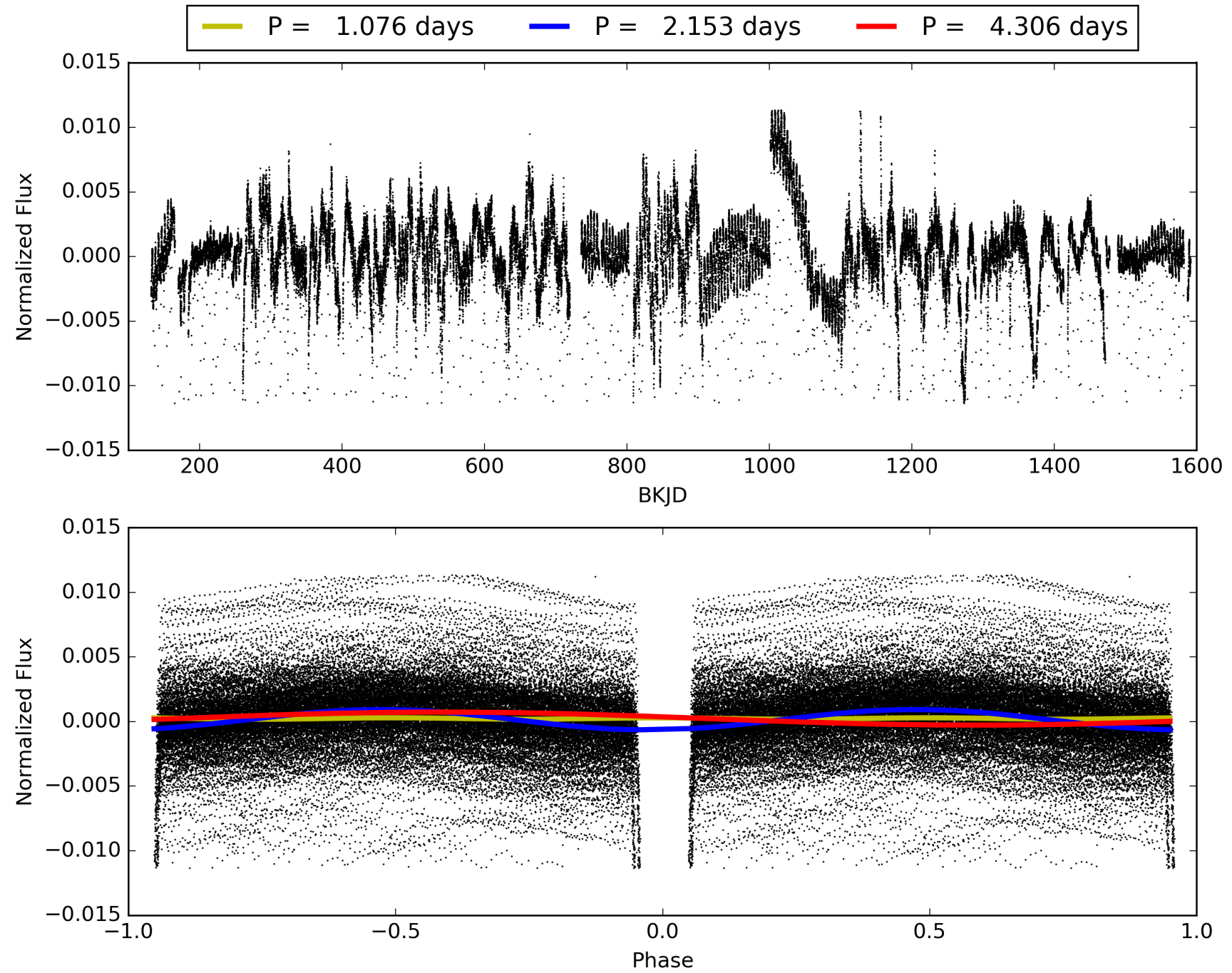
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 18:40:37 Z

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

TCE 008098300-01, PDC Light Curves

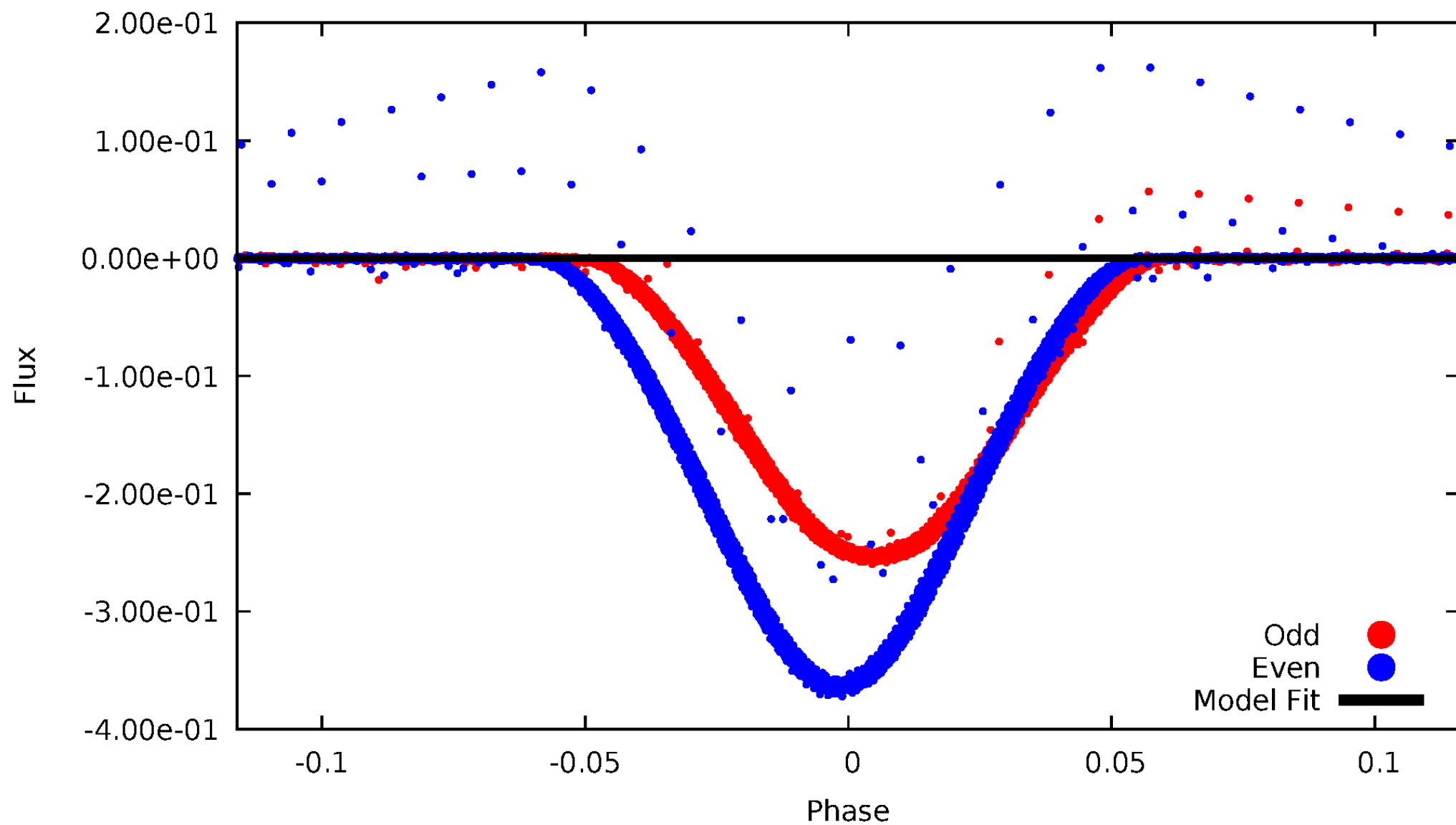


TCE 008098300-01



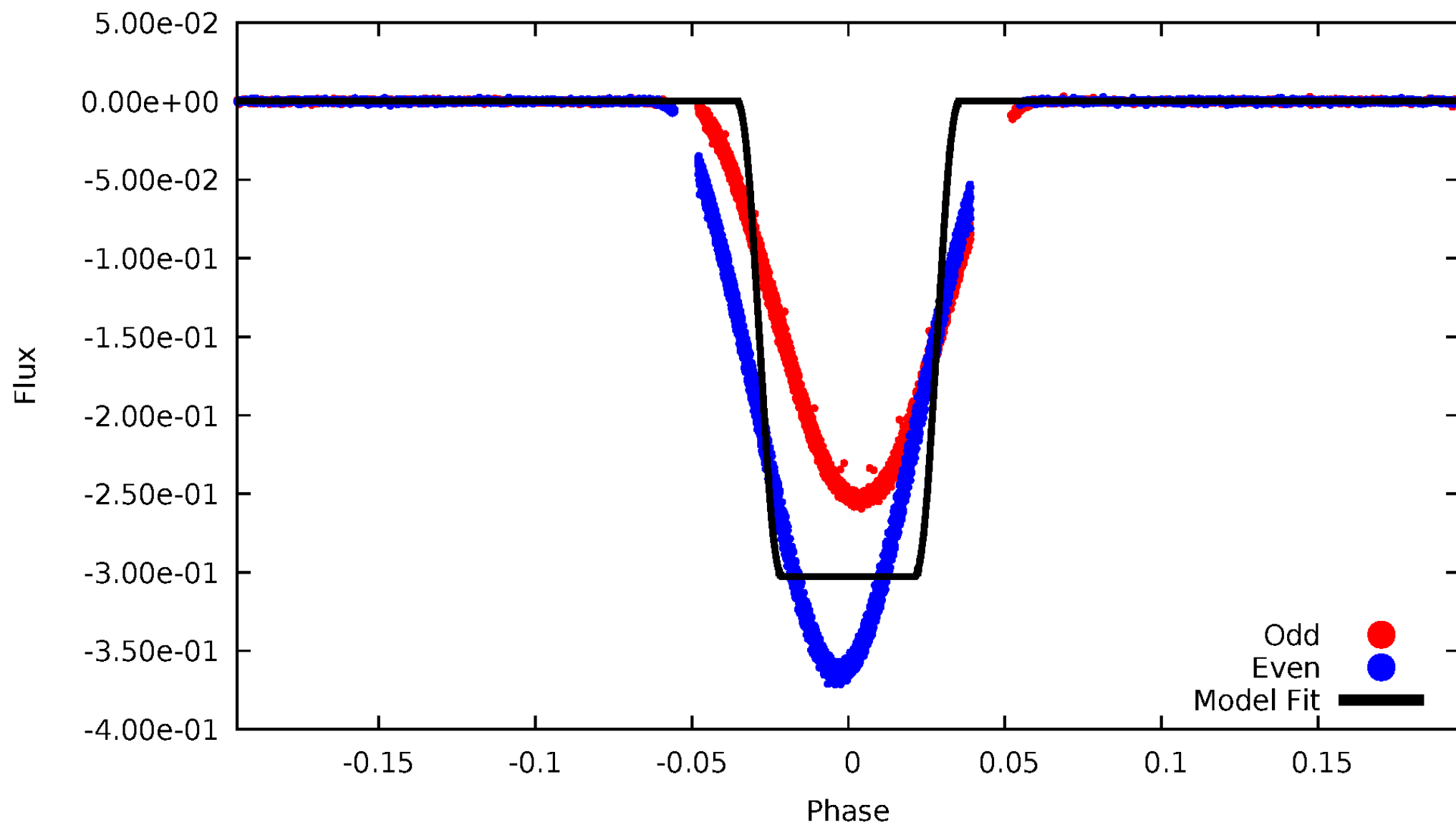
DV Odd/Even

TCE 008098300-01



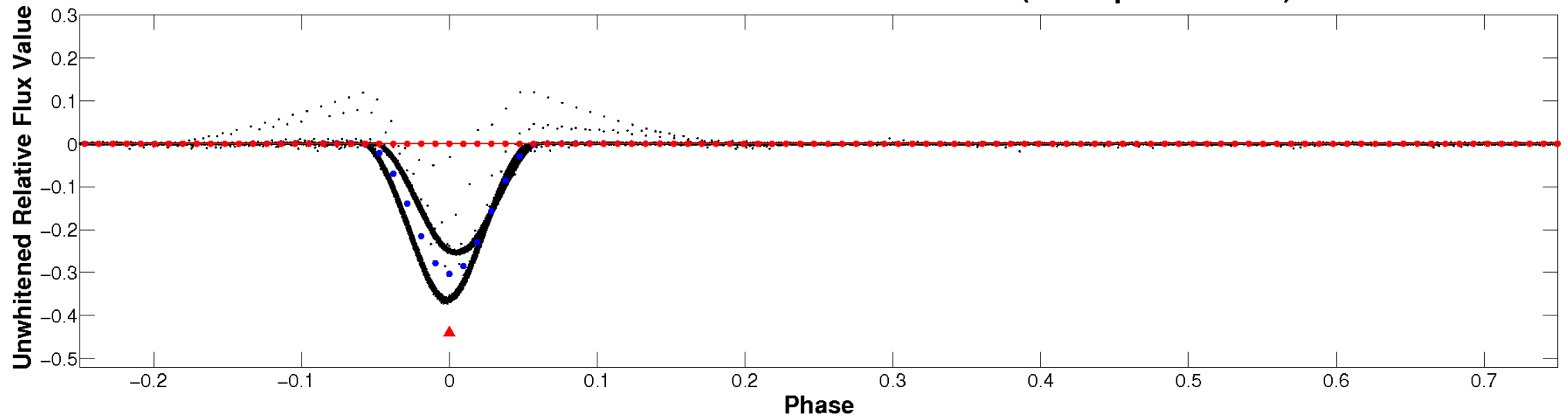
ALT Odd/Even

TCE 008098300-01

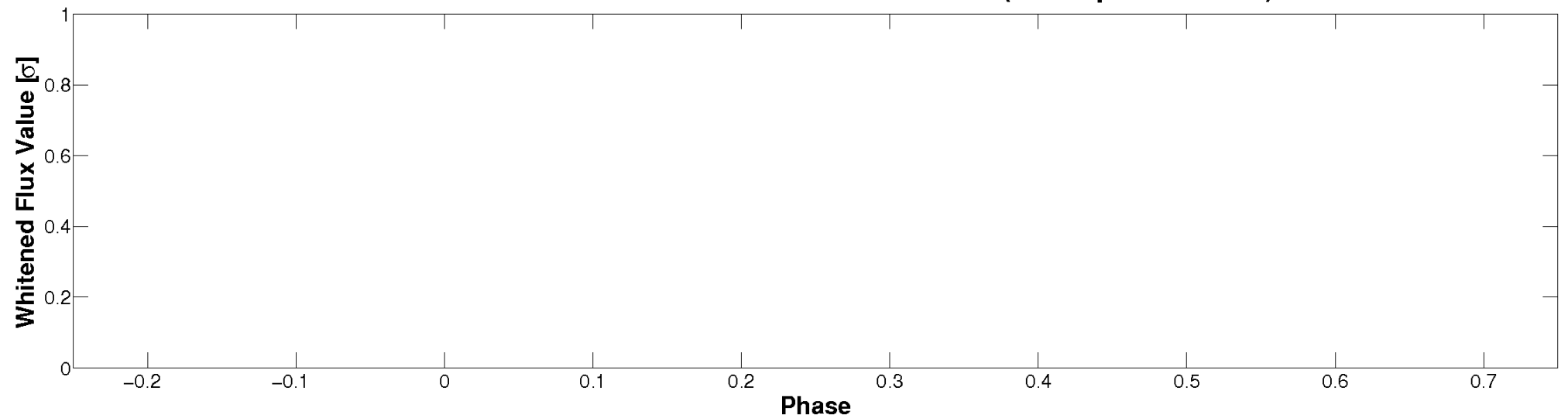


Non-Whitened Vs. Whitened Light Curve

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

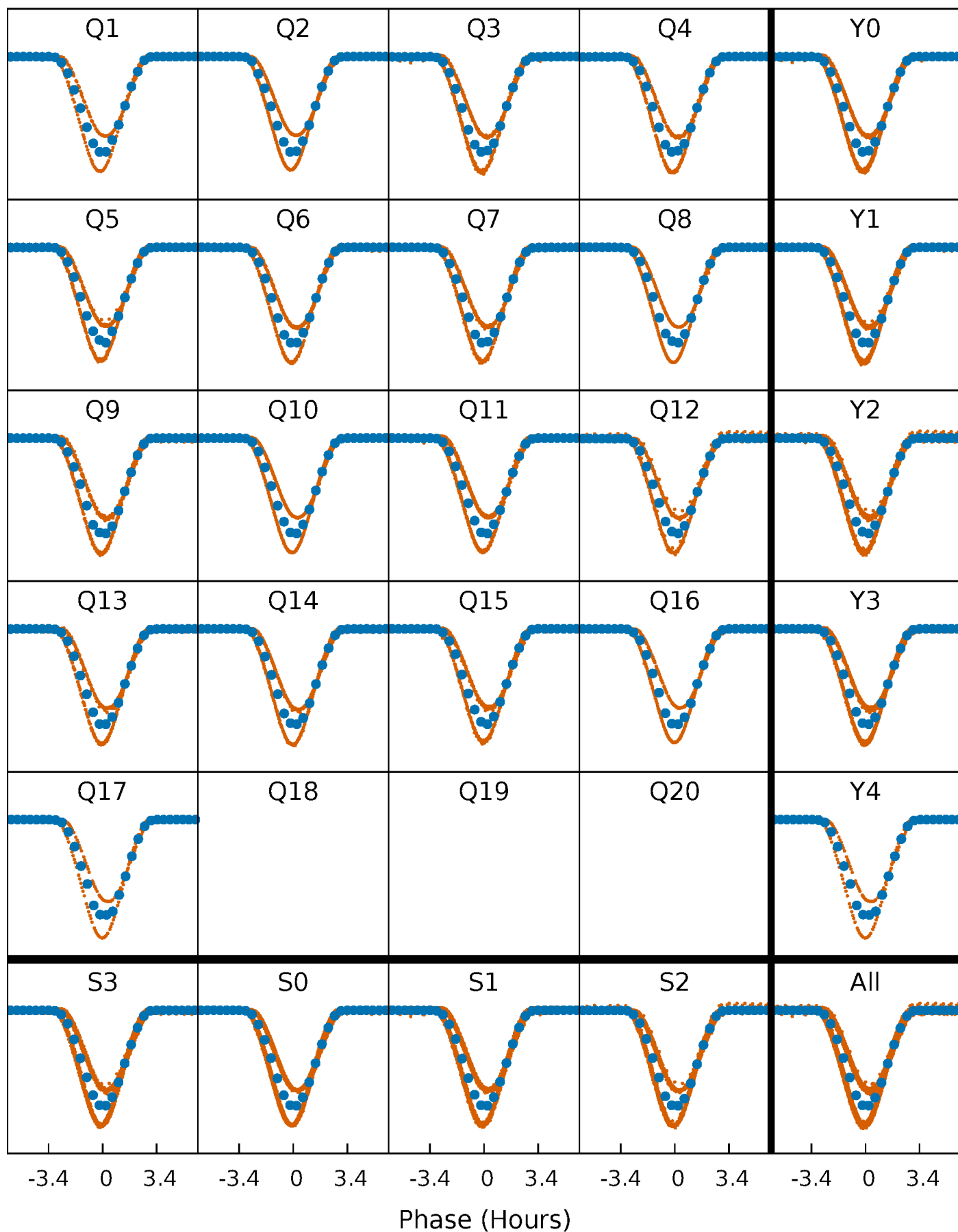


Planet 1 : Phased Whitened Flux Time Series (TPS Epoch/Period)



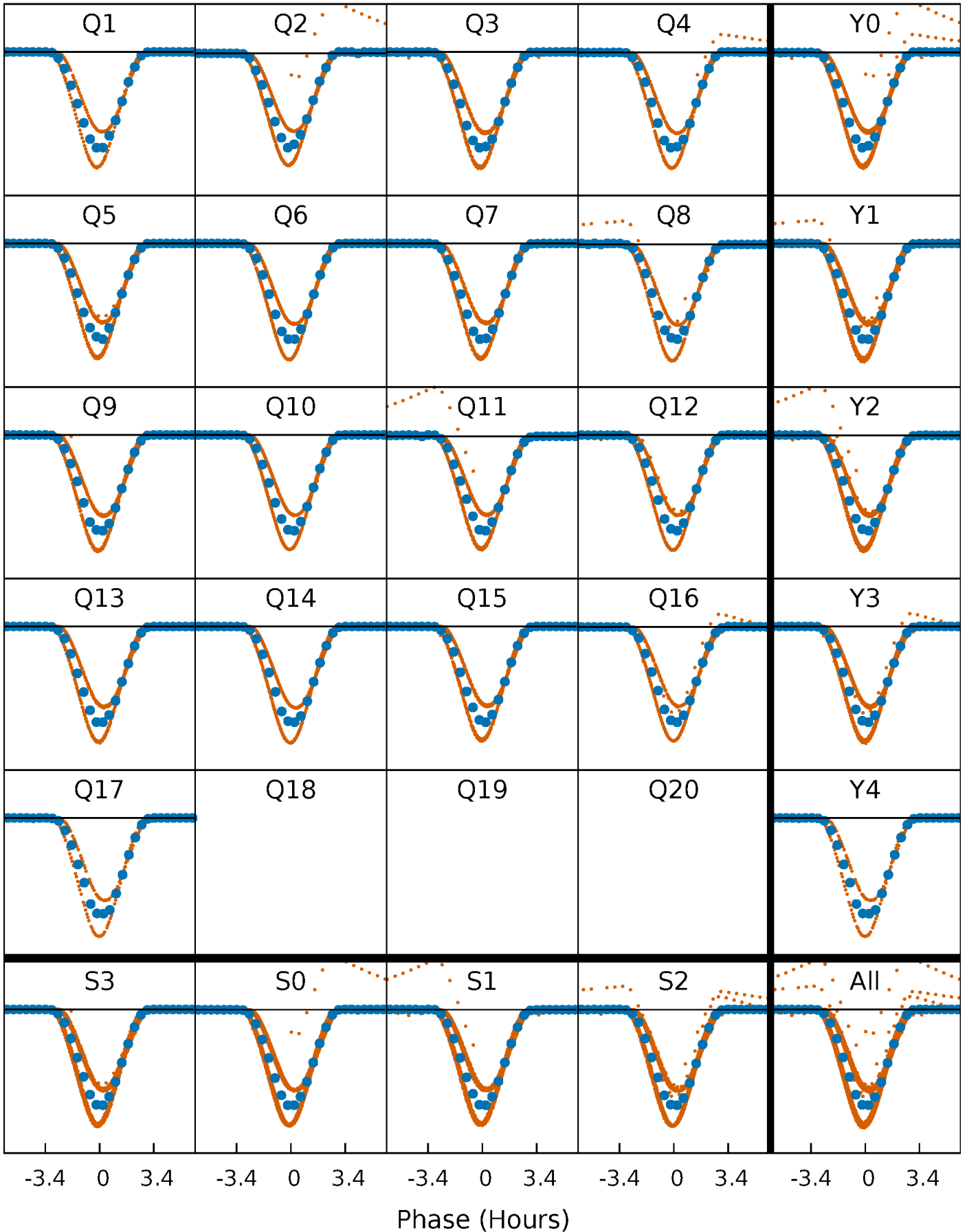
PDC Quarter-Phased Transit Curves

TCE 008098300-01 P= 2.152950 Days $T_0=132.357027$ (BKJD)



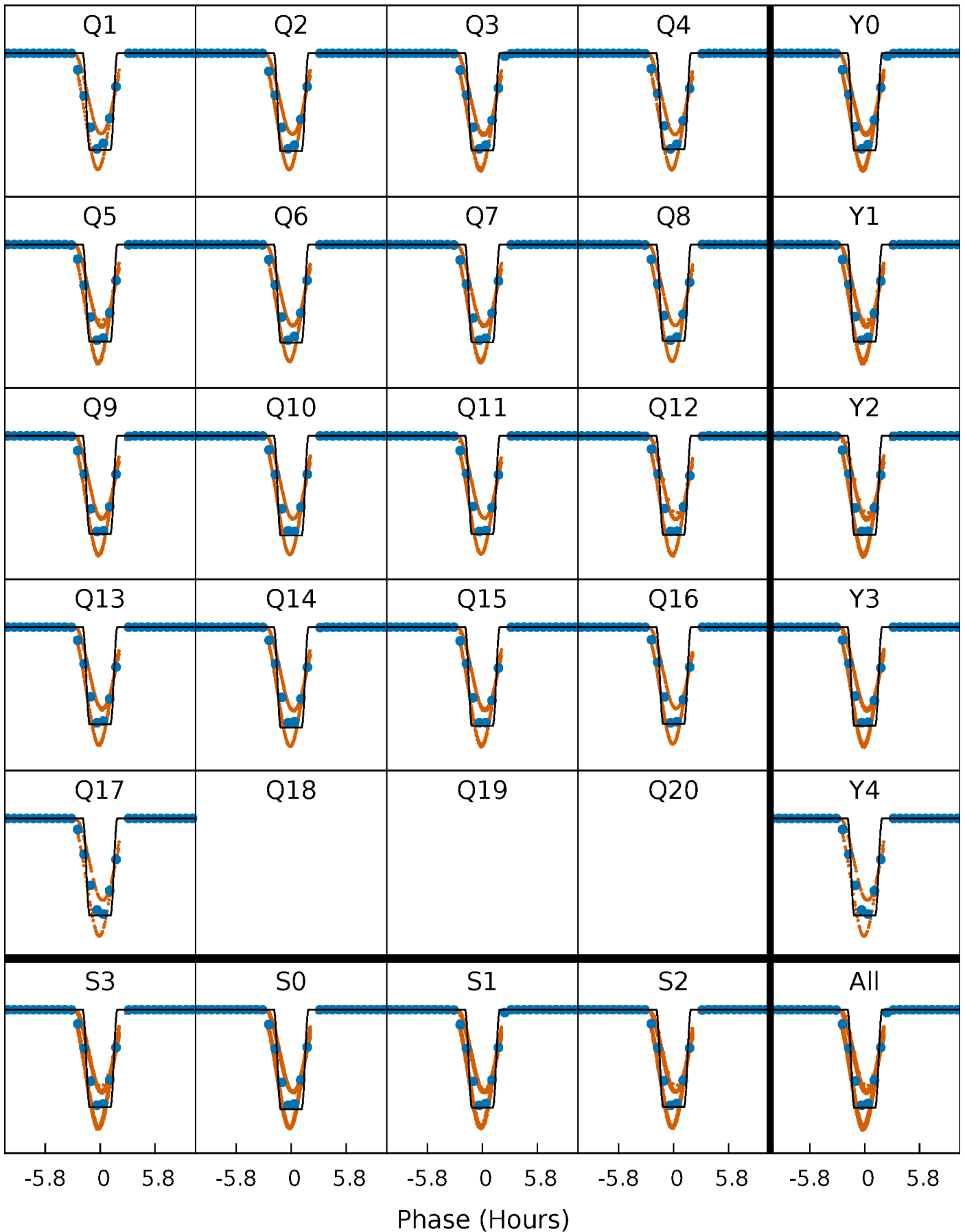
DV Quarter-Phased Transit Curves

TCE 008098300-01 P= 2.152950 Days $T_0=132.357027$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

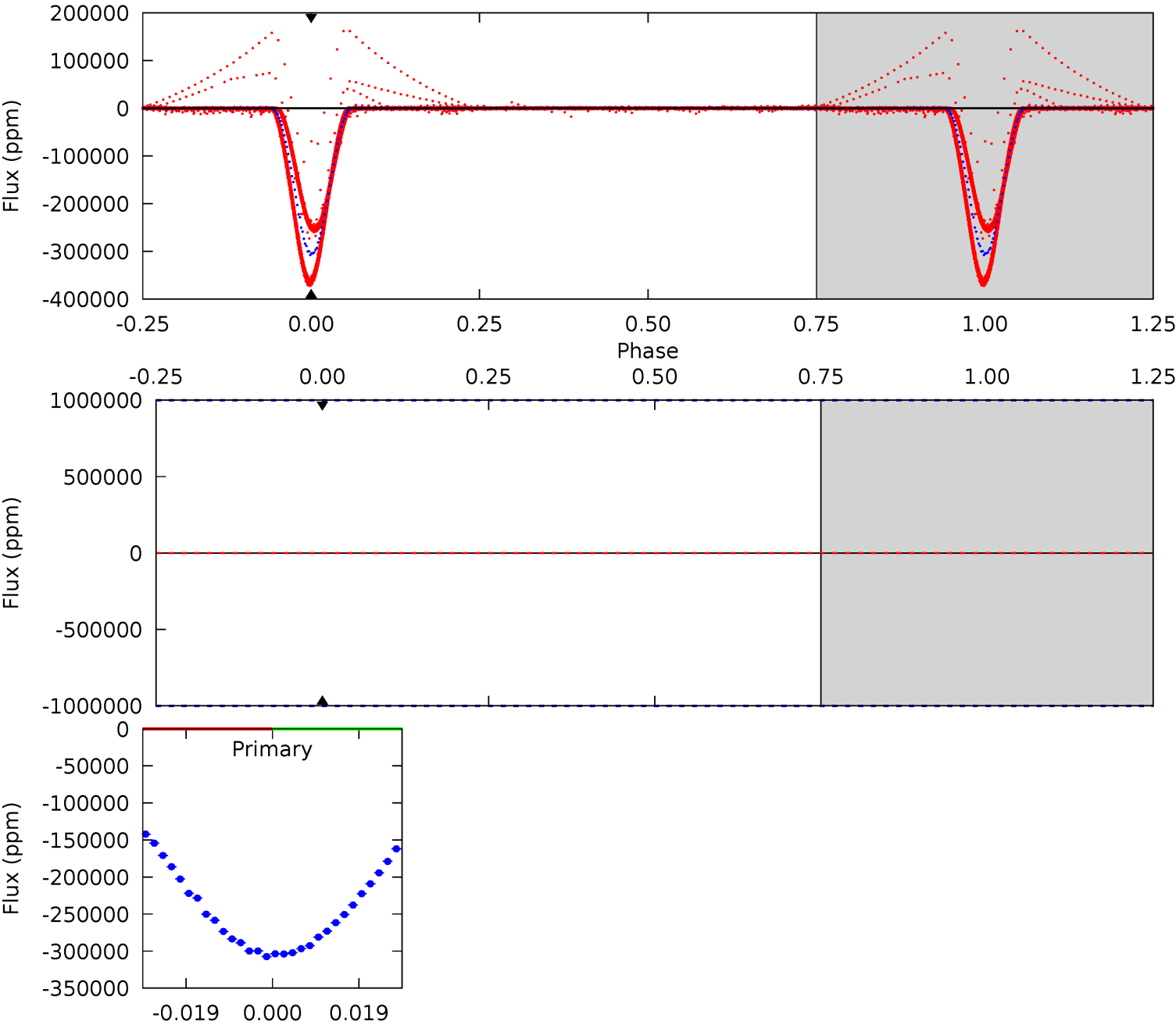
TCE 008098300-01 P= 2.152950 Days $T_0=132.359696$ (BKJD)



DV Model-Shift Uniqueness Test

008098300-01, P = 2.152950 Days, E = 130.204077 Days

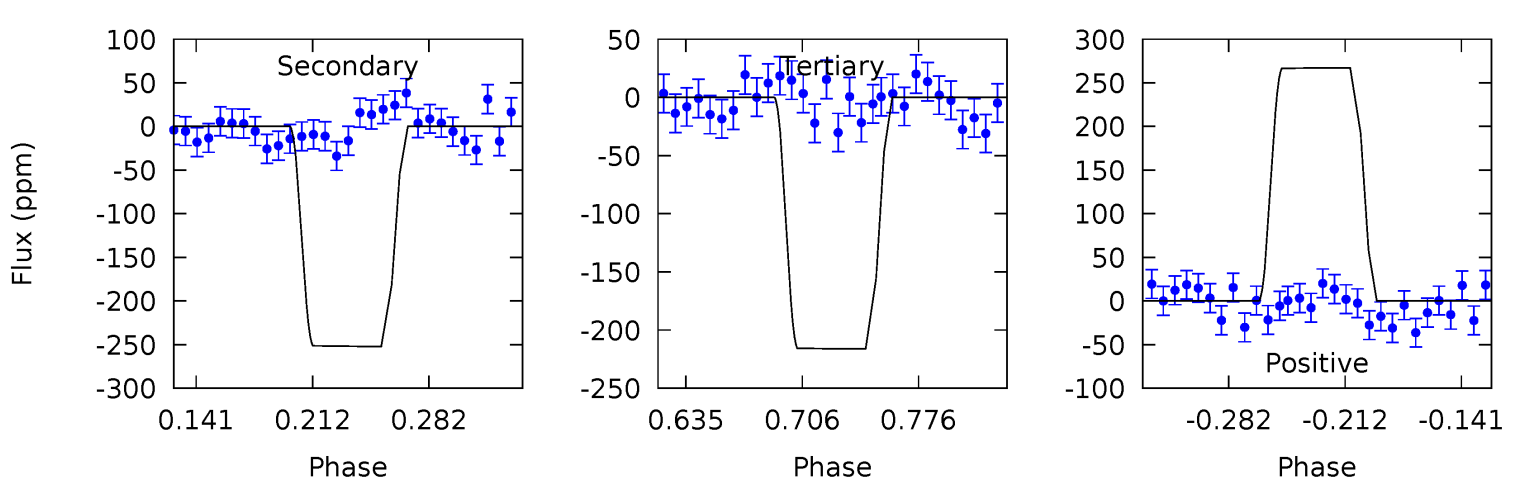
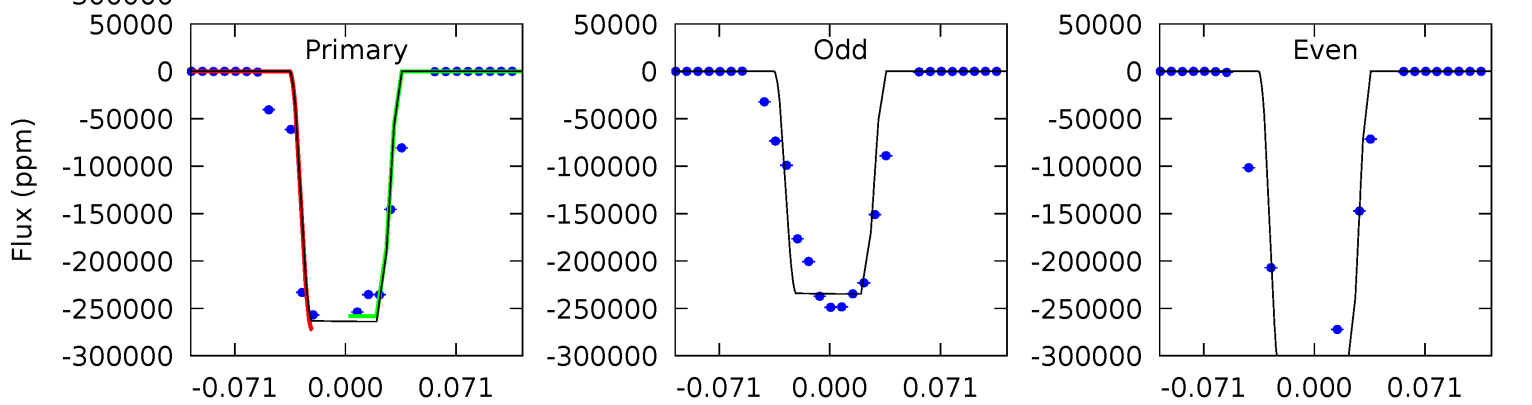
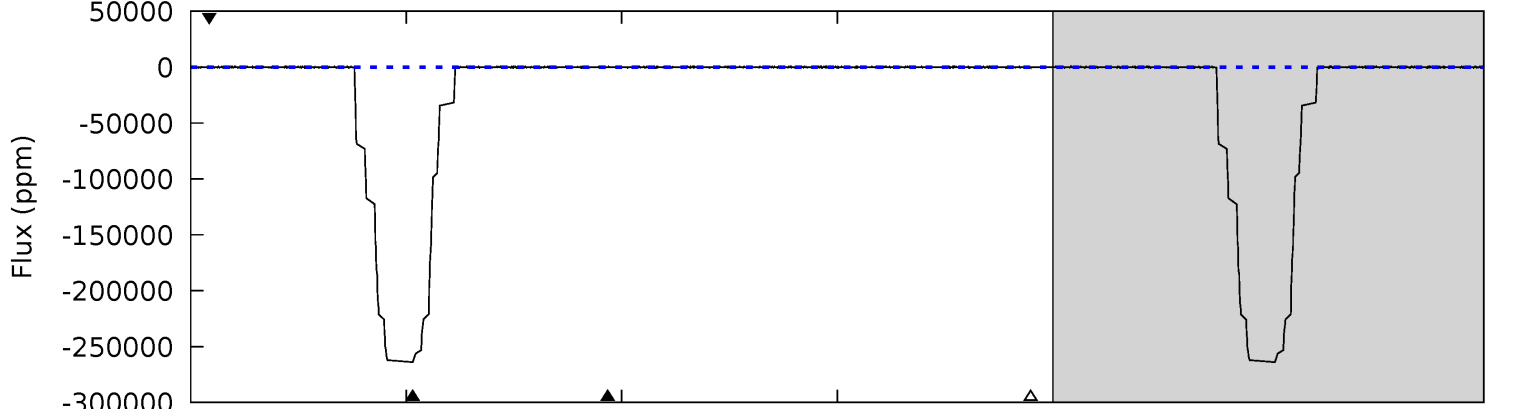
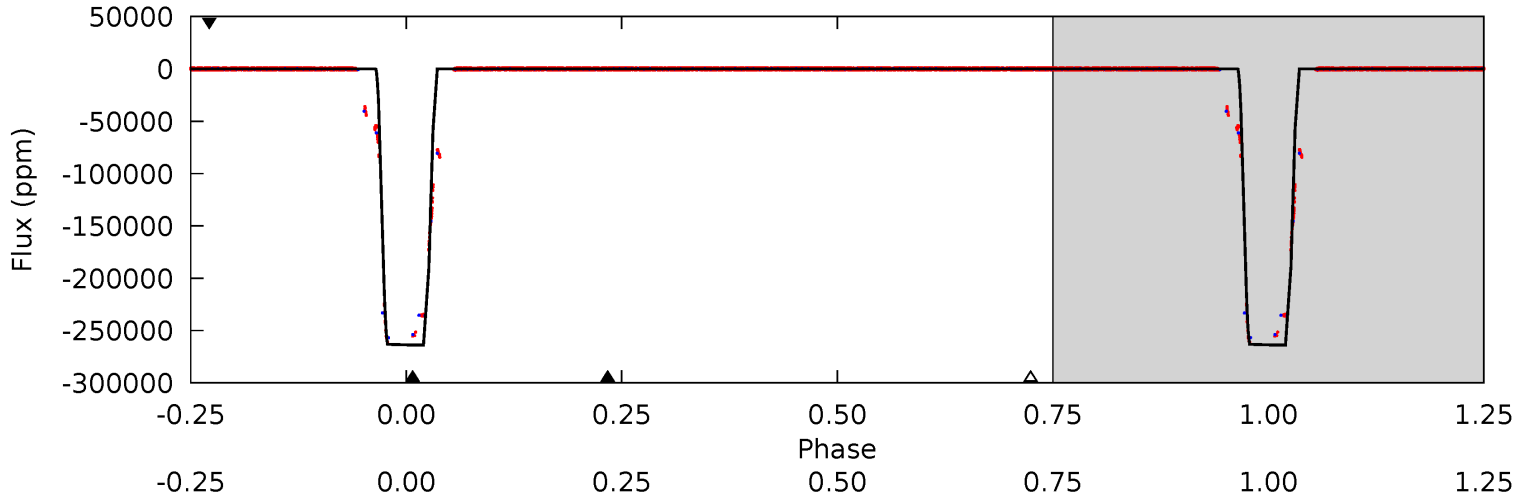
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

008098300-01, P = 2.152950 Days, E = 130.206746 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6319	6.03	5.18	6.40	4.64	1.81	1.54	6314	6312	0.86	-0.37	2825	0.90	0.00	0



Stellar Parameters For KIC 008098300

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6502^{+146}_{-178}	$4.440^{+0.052}_{-0.208}$	$-0.400^{+0.250}_{-0.350}$	$1.037^{+0.317}_{-0.106}$	$1.077^{+0.136}_{-0.136}$	$1.361^{+0.371}_{-0.700}$
	+2%/-3%	+1%/-5%	+62%/-87%	+31%/-10%	+13%/-13%	+27%/-51%
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 008098300-01 / KOI 6964.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	0 ± 1000000	$50.60^{+13.55}_{-12.85}$	2278^{+151}_{-102}	-3586^{+9286}_{-2012}	$-1.845^{+27.165}_{-22.224}$
Alt.	-252 ± 42	$64.90^{+14.06}_{-13.33}$	2275^{+167}_{-106}	-2611^{+71}_{-111}	$0.036^{+0.023}_{-0.013}$

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 $A_{obs} \gg 1.0$

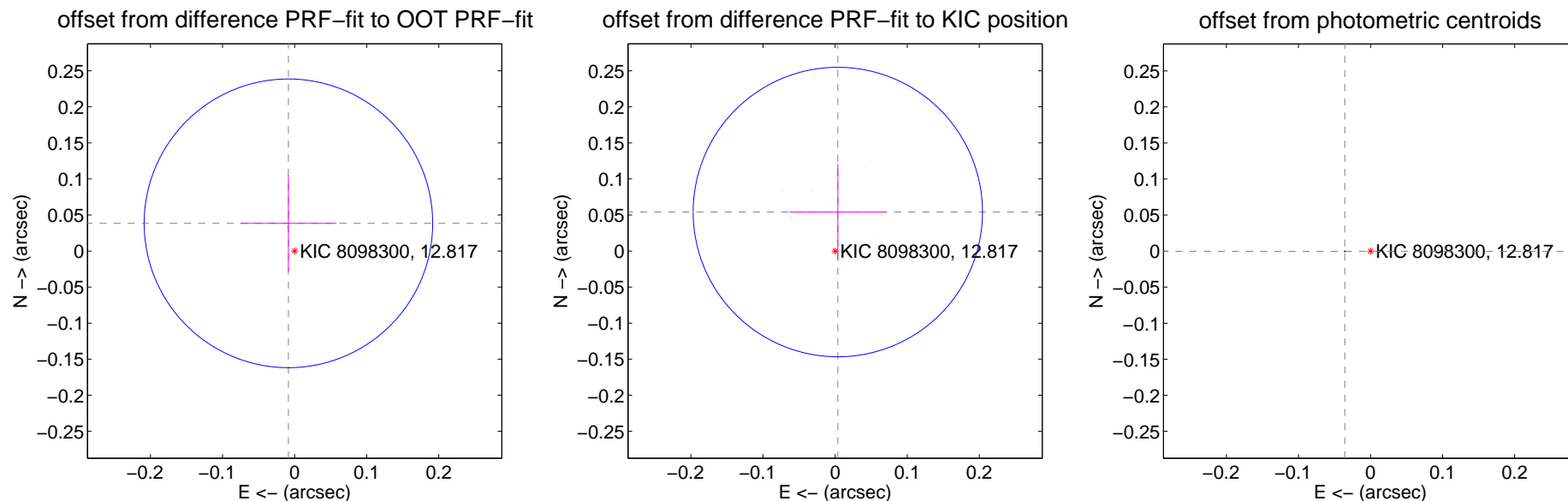
DV Centroid Data

Supplemental centroid analysis for 008098300-01. Kepler magnitude: 12.82. Transit SNR -1.00

There are 17 quarters with good PRF difference image offsets

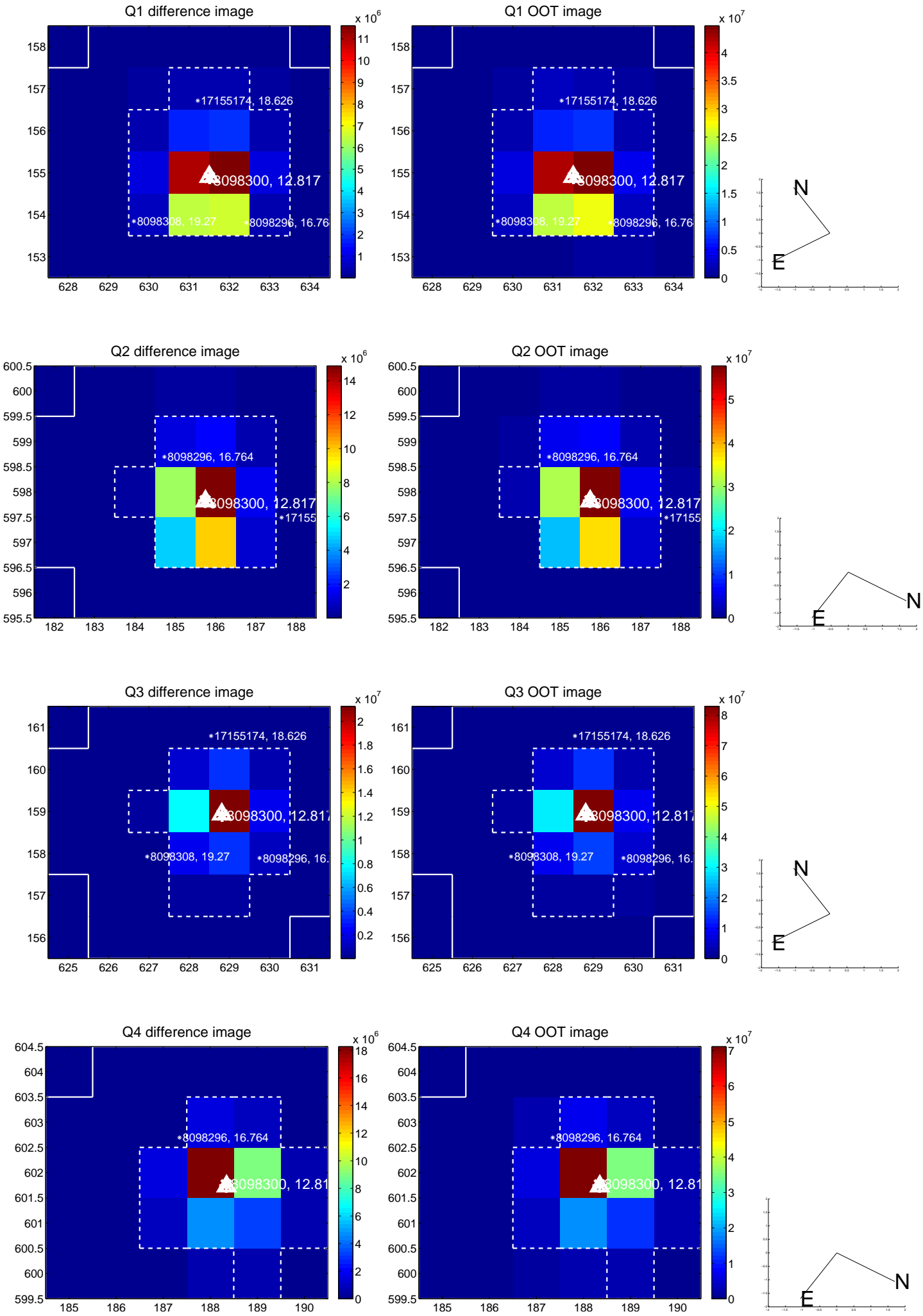
The direct PRF centroid is offset from the target star catalog position by about 0.04 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.039 ± 0.067	0.59	0.009 ± 0.067	0.038 ± 0.067
PRF-fit source offset from KIC position	0.054 ± 0.067	0.81	-0.004 ± 0.067	0.054 ± 0.067
photometric centroid source offset	0.04 ± 0.00	180.57	0.04 ± 0.00	-0.00 ± 0.00

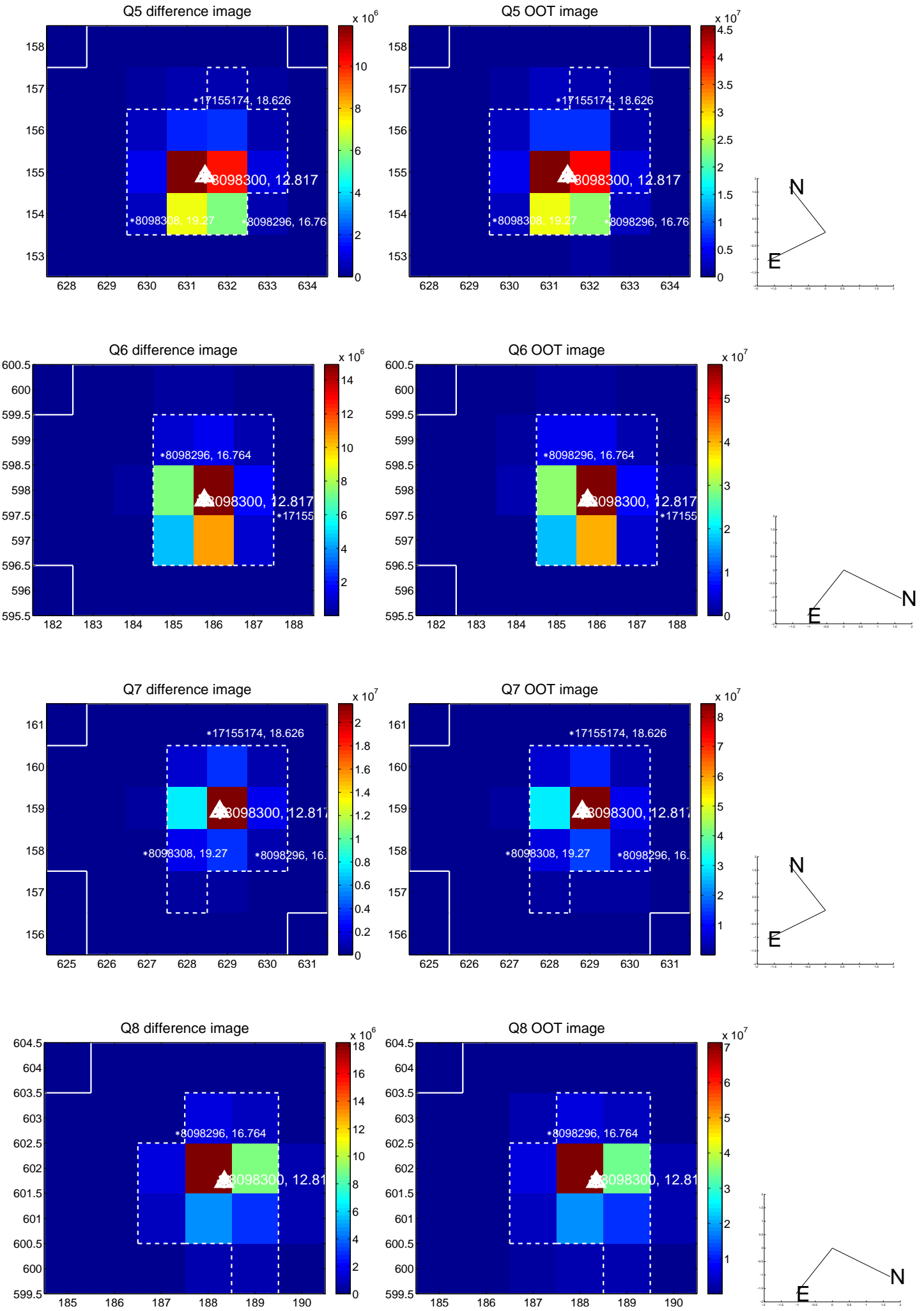


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

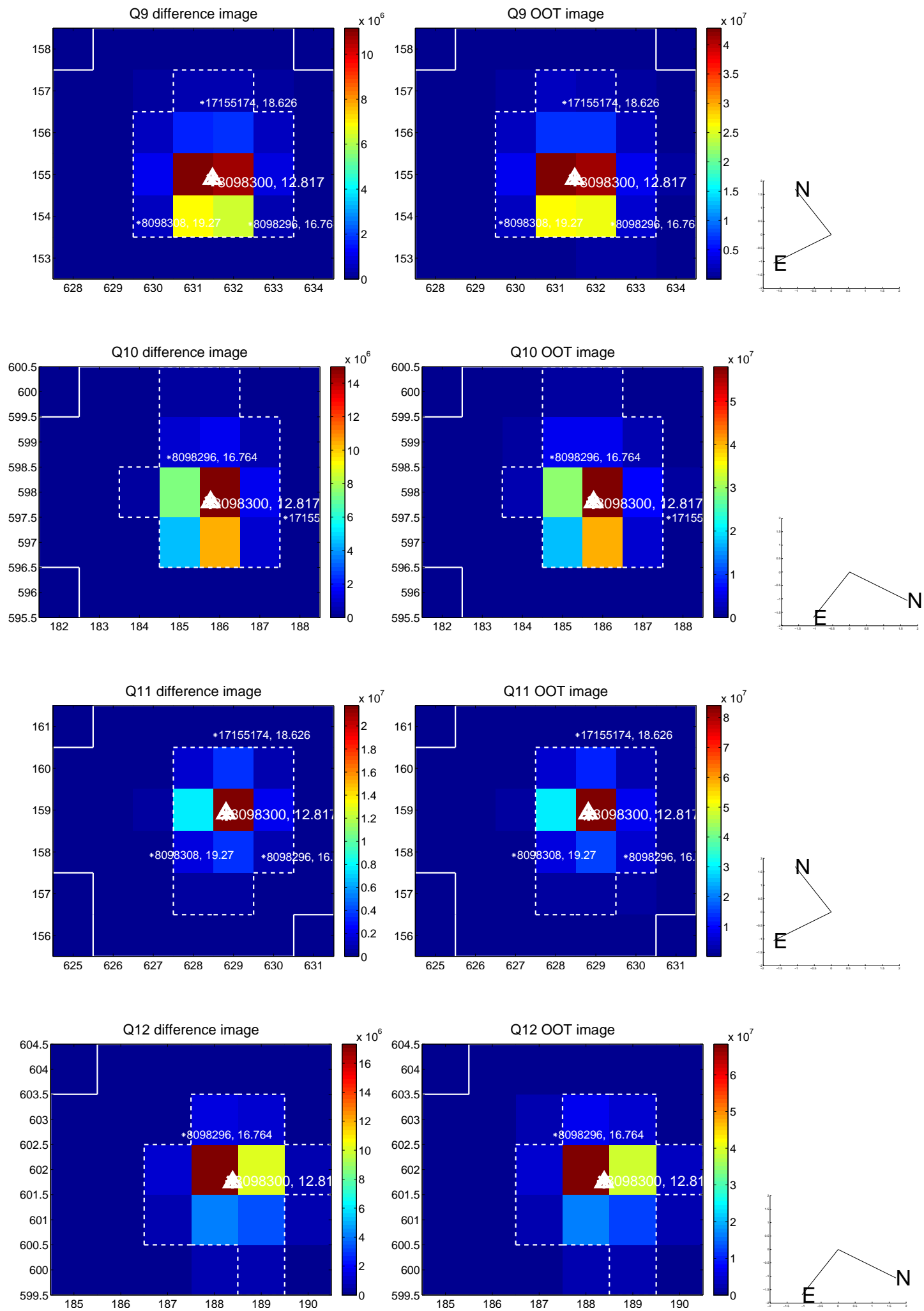
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



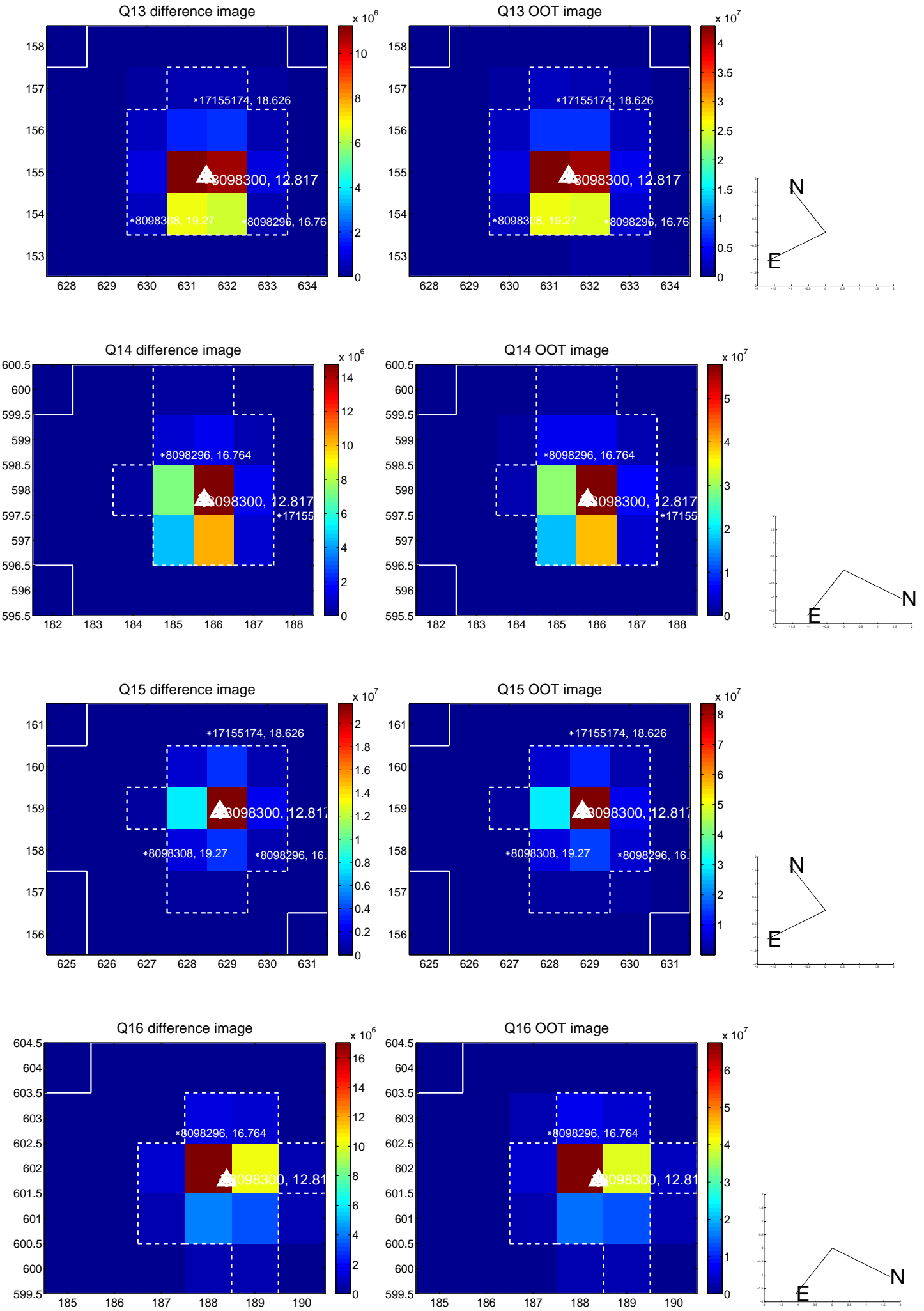
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



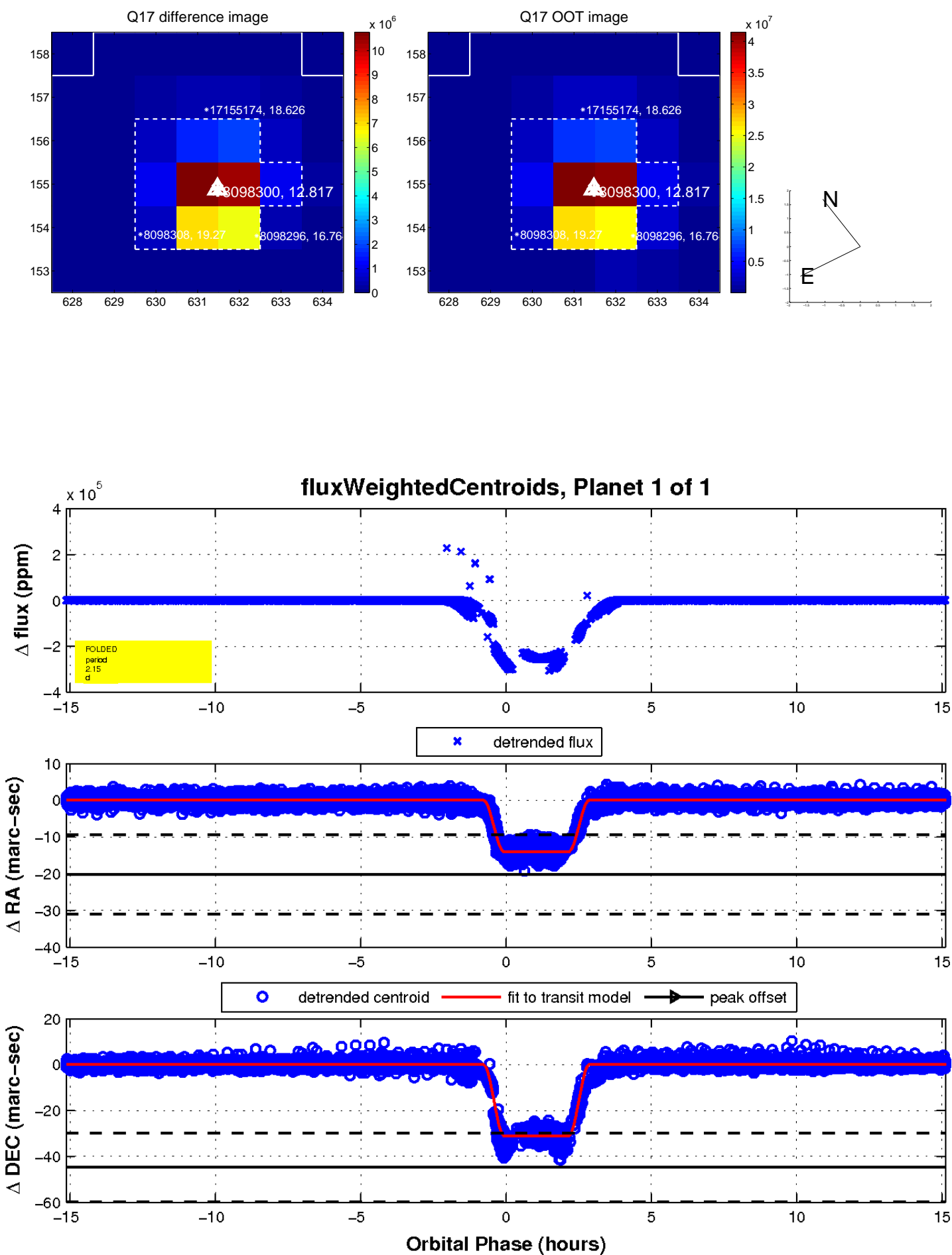
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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.



UKIRT Image

Declination

