

KIC 006599919

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})
006599919-01	OBS	0858.01	13.610155	133.156609	5659.9	2.562	209.1	201.0	0.90	5697	10.89	68.46

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006599919-01	OBS	FP	0.00	0	1	0	0	DEEP_V_SHAPED

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.

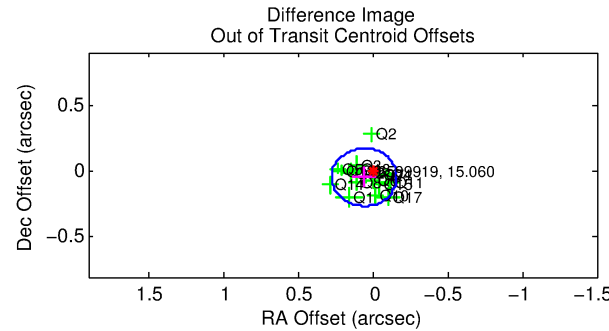
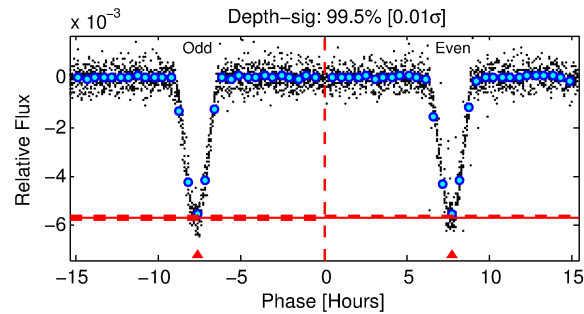
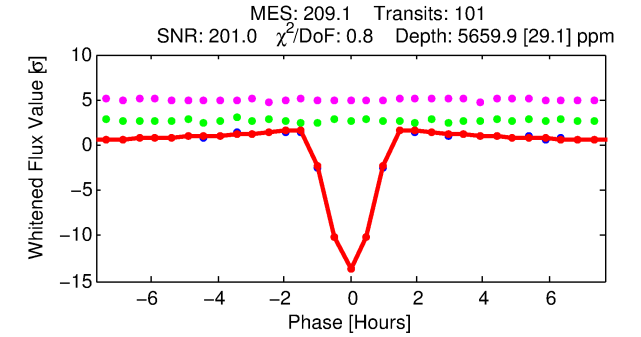
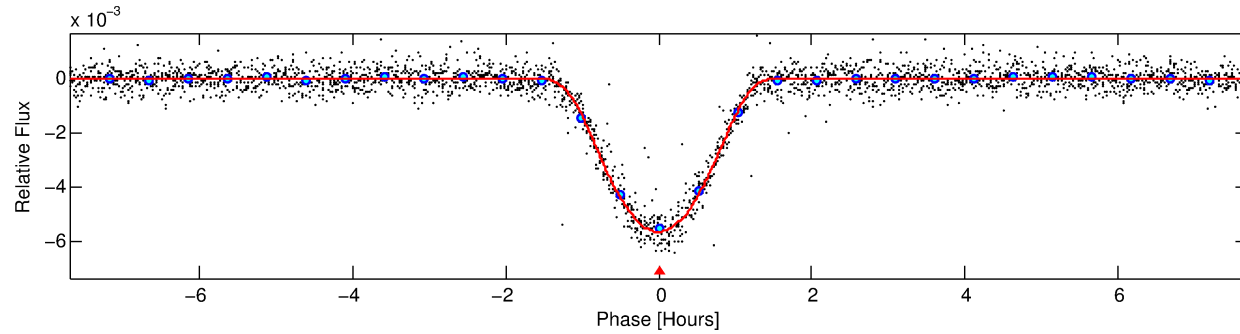
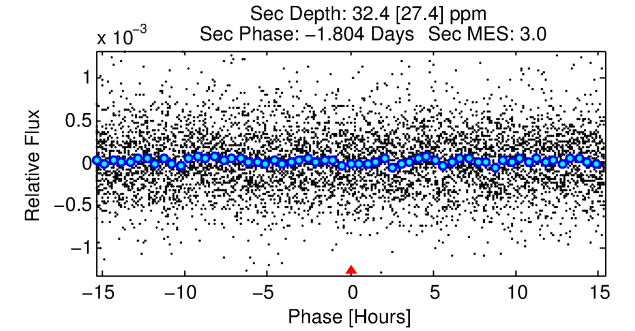
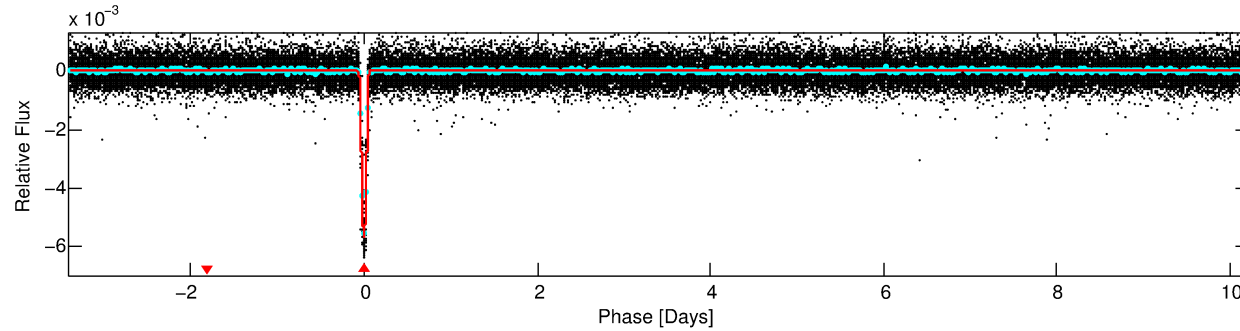
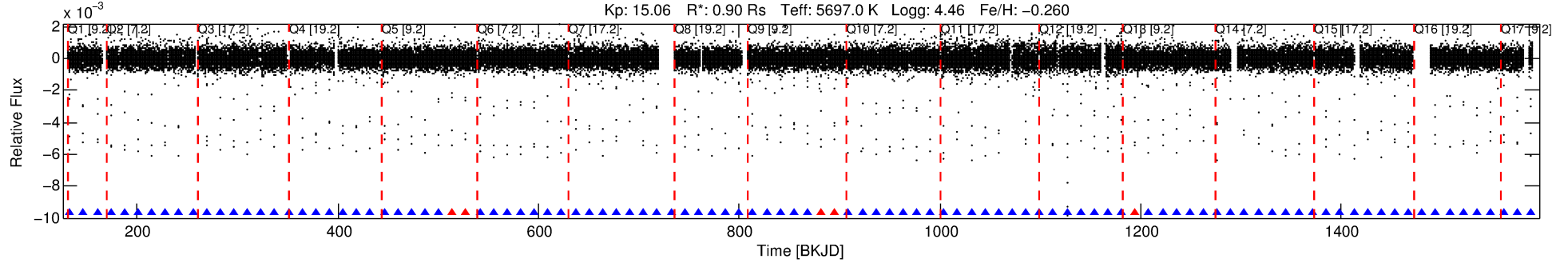
Ephemeris Match Information For 006599919-01

No Significant Match Found

DV One-Page Summary

KIC: 6599919 Candidate: 1 of 1 Period: 13.610 d
KOI: K00858.01 Corr: 0.996

Kp: 15.06 R*: 0.90 Rs Teff: 5697.0 K Logg: 4.46 Fe/H: -0.260



DV Fit Results:

Period = 13.61015 [0.00000] d
Epoch = 133.1566 [0.0003] BKJD
Rp/R* = 0.1105 [0.0168]
a/R* = 21.69 [0.80]
b = 0.97 [0.03]
Seff = 68.46 [23.68]
Teq = 733 [63] K
Rp = 10.89 [3.27] Re
a = 0.1060 [0.0236] AU
Ag = 1.69 [1.62] [0.42σ]
Teffp = 1292 [293] K [1.86σ]

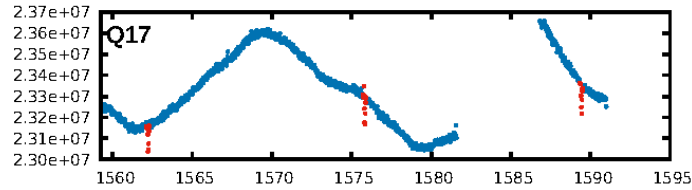
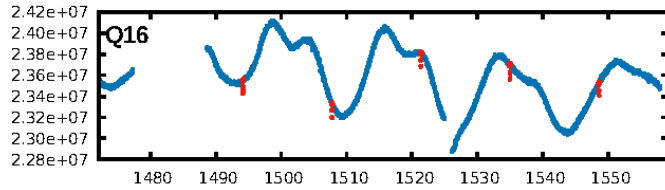
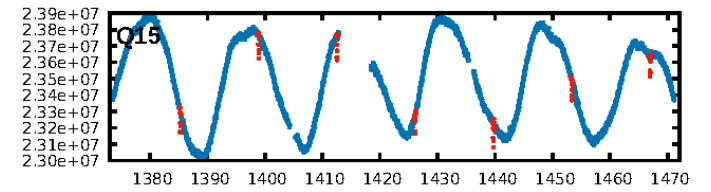
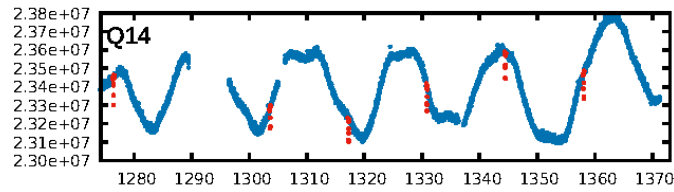
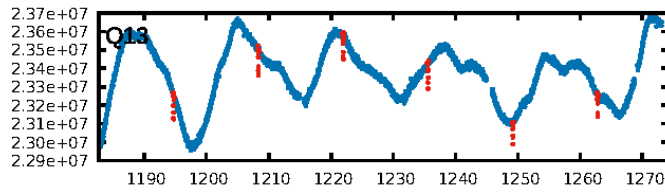
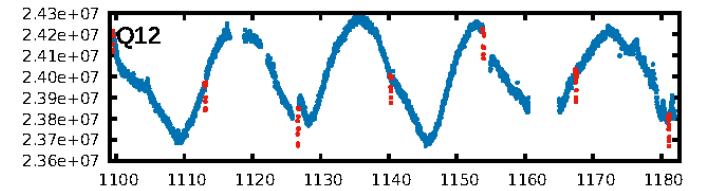
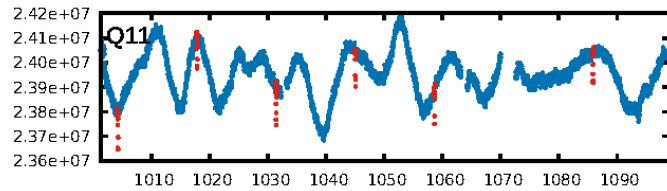
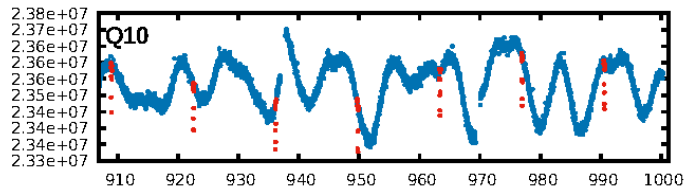
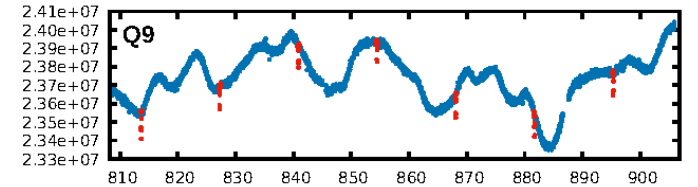
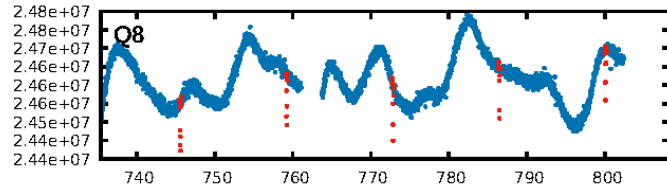
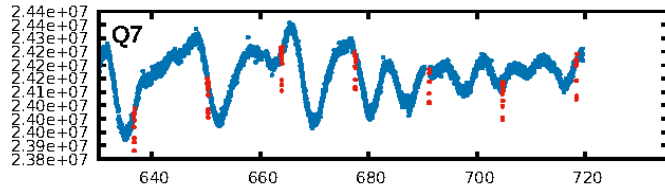
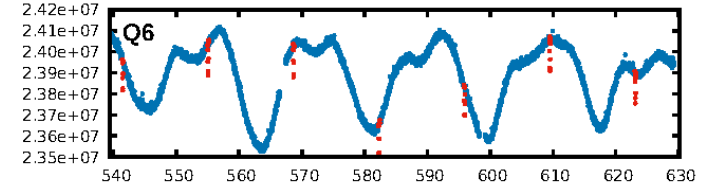
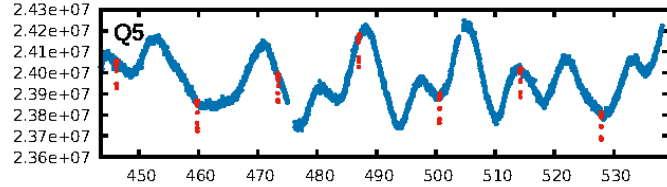
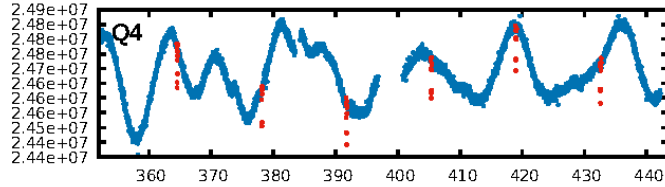
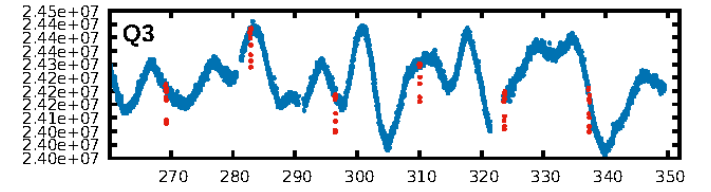
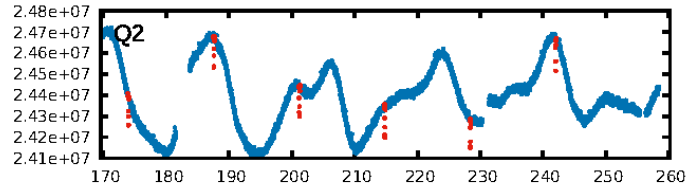
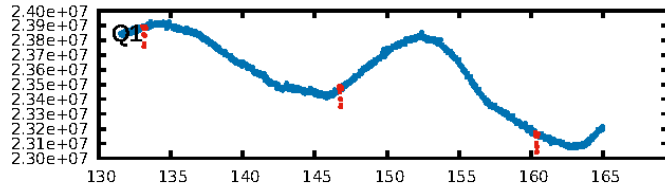
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 55.5%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 0.00e+00
RollingBand-fgt: 0.95 [90/95]
GhostDiagnostic-chr: 2.807
Centroid-sig: 1.5%
Centroid-so: 0.225 arcsec [3.63σ]
OotOffset-rm: 0.072 arcsec [0.99σ]
KicOffset-rm: 0.160 arcsec [2.13σ]
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]

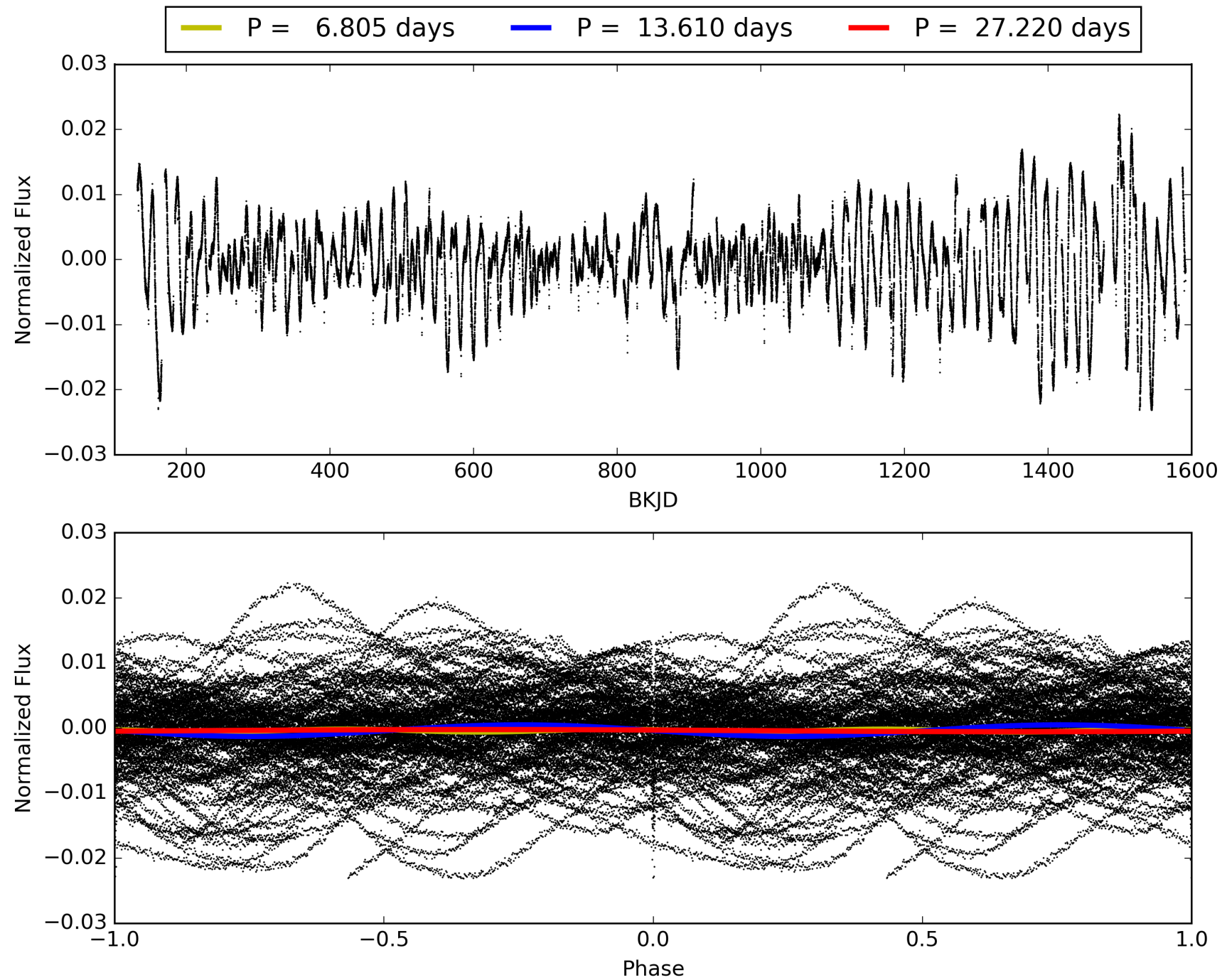
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 16:40:04 Z

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

TCE 006599919-01, PDC Light Curves

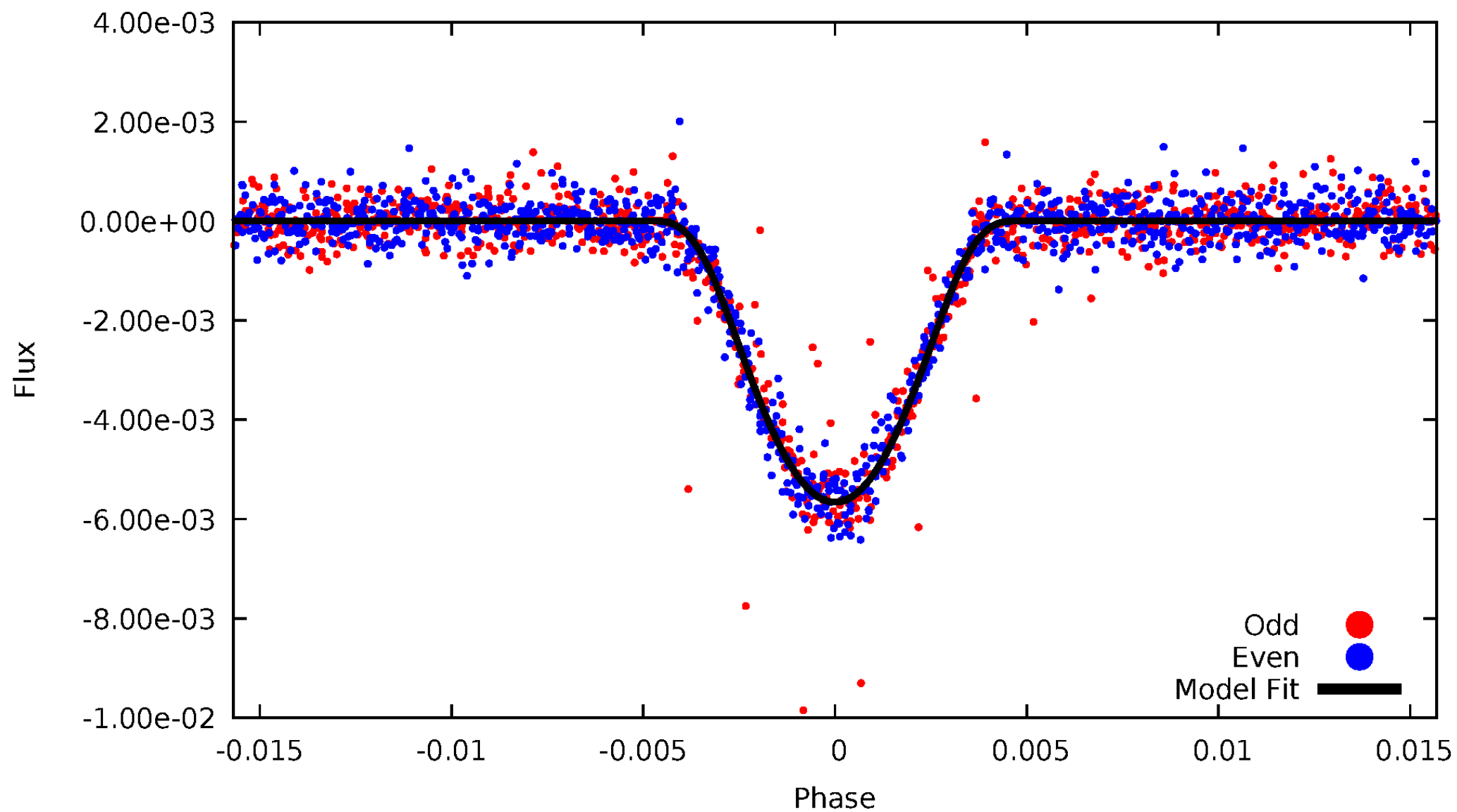


TCE 006599919-01



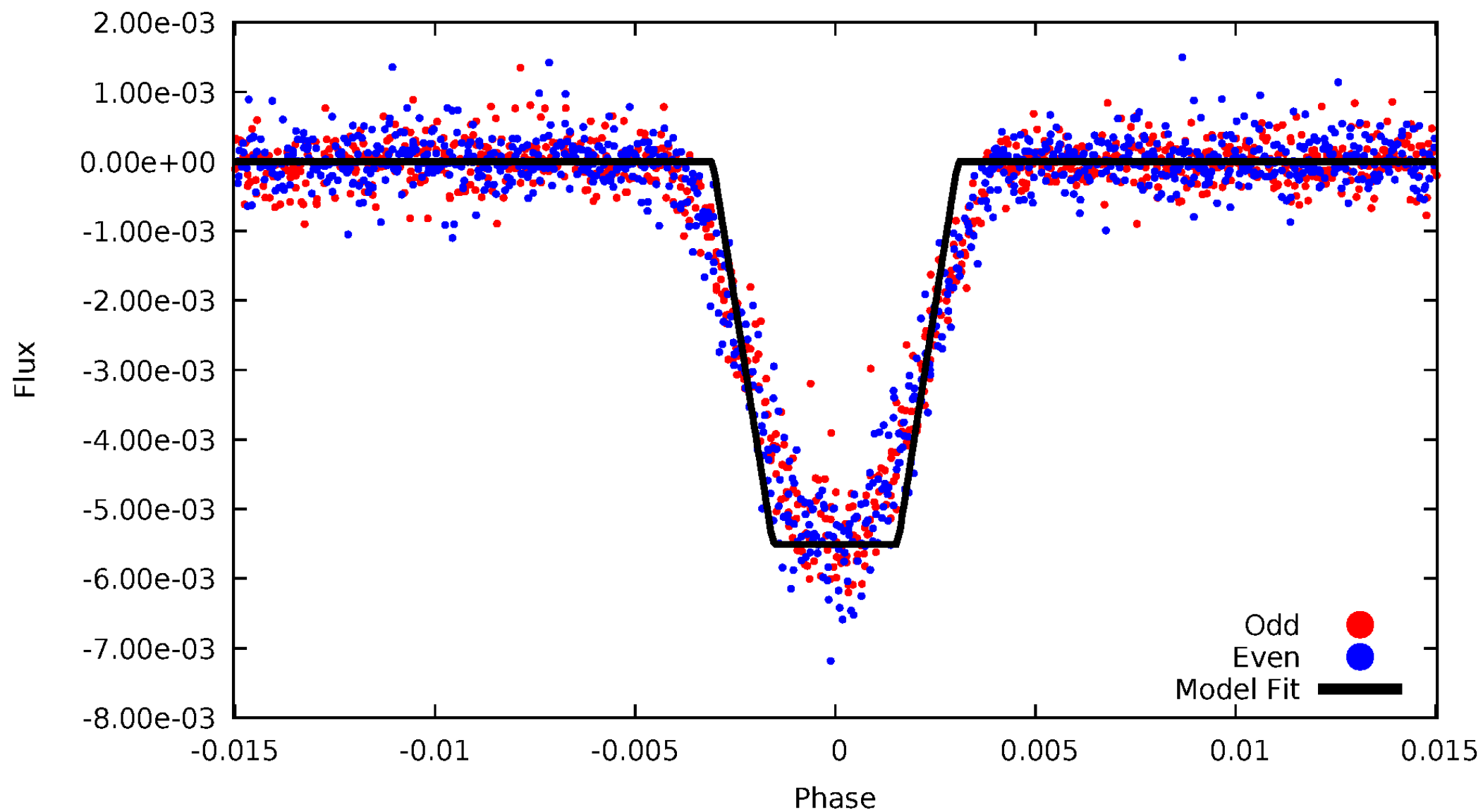
DV Odd/Even

TCE 006599919-01



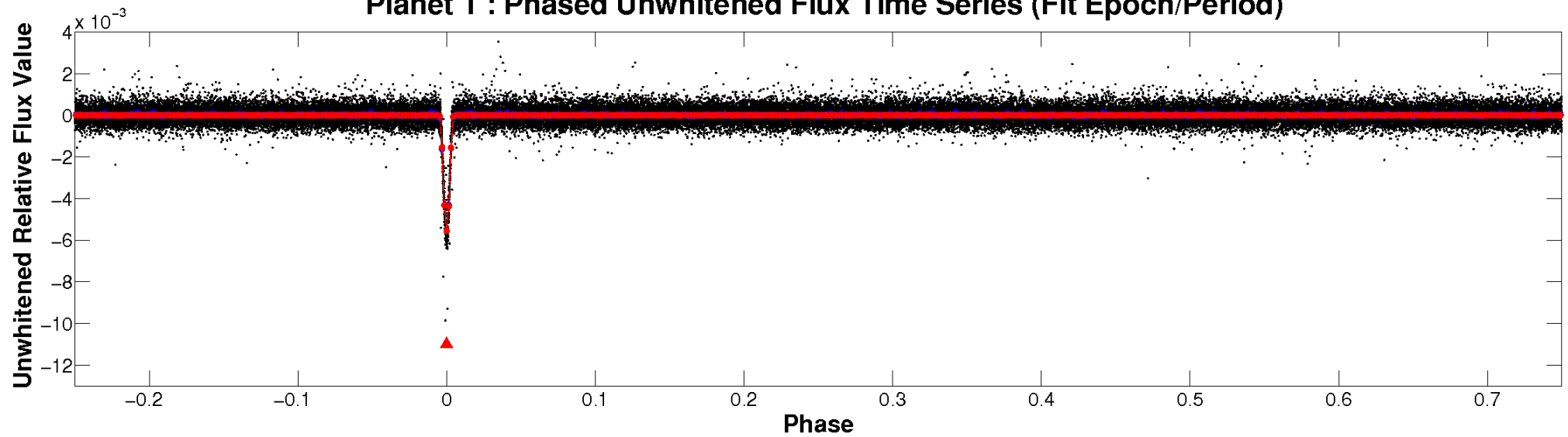
ALT Odd/Even

TCE 006599919-01

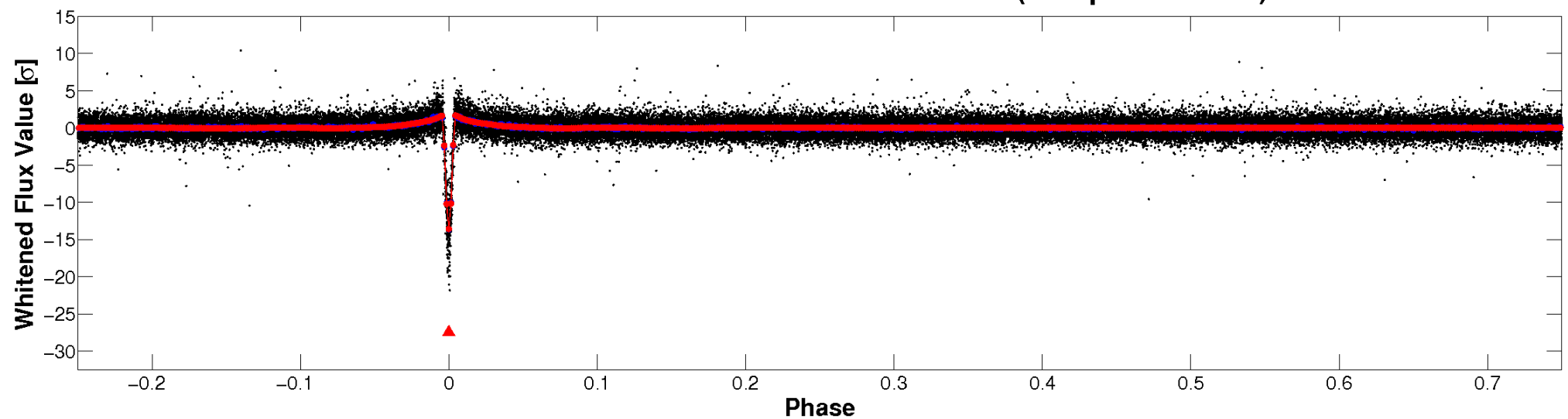


Non-Whitened Vs. Whitened Light Curve

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

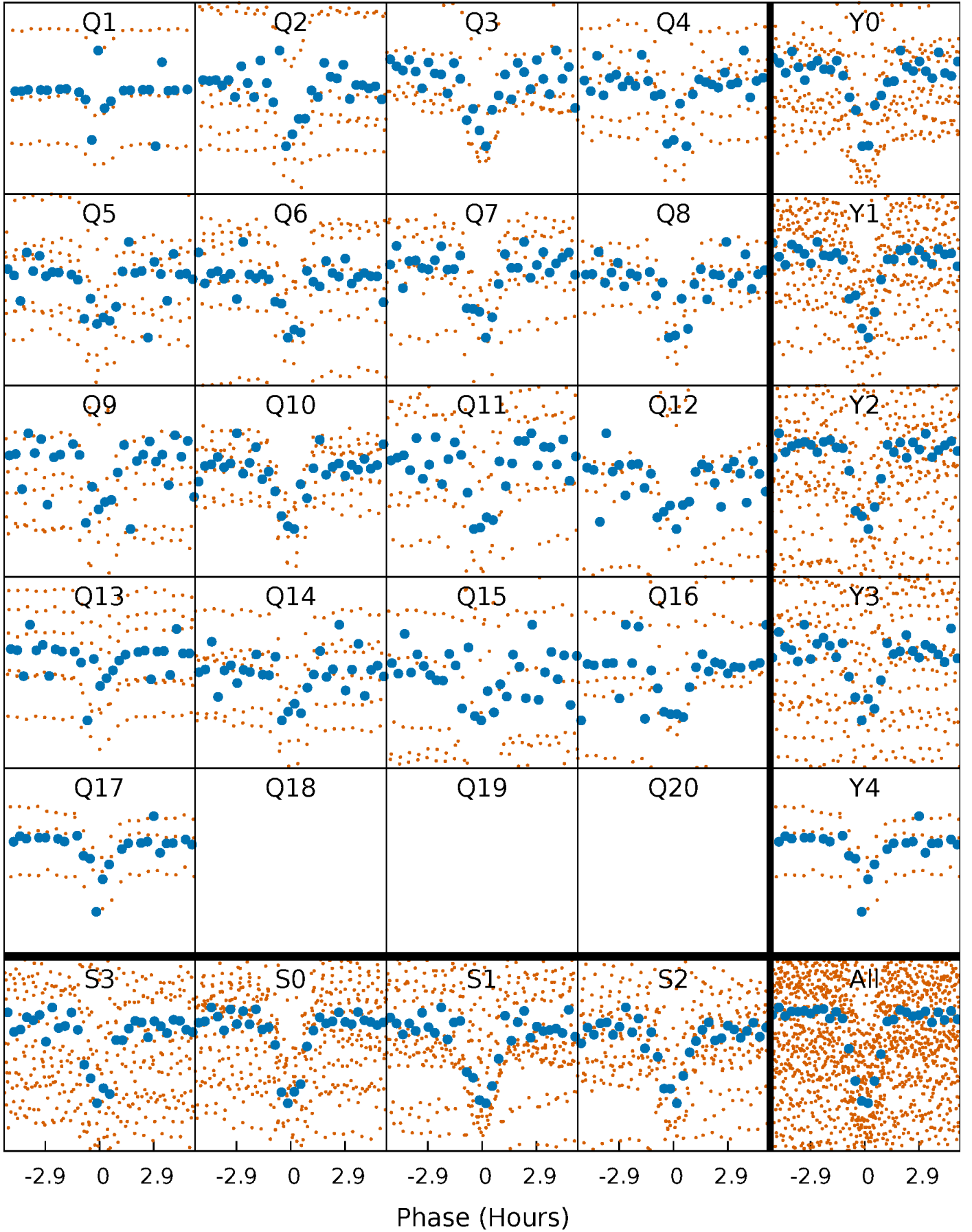


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



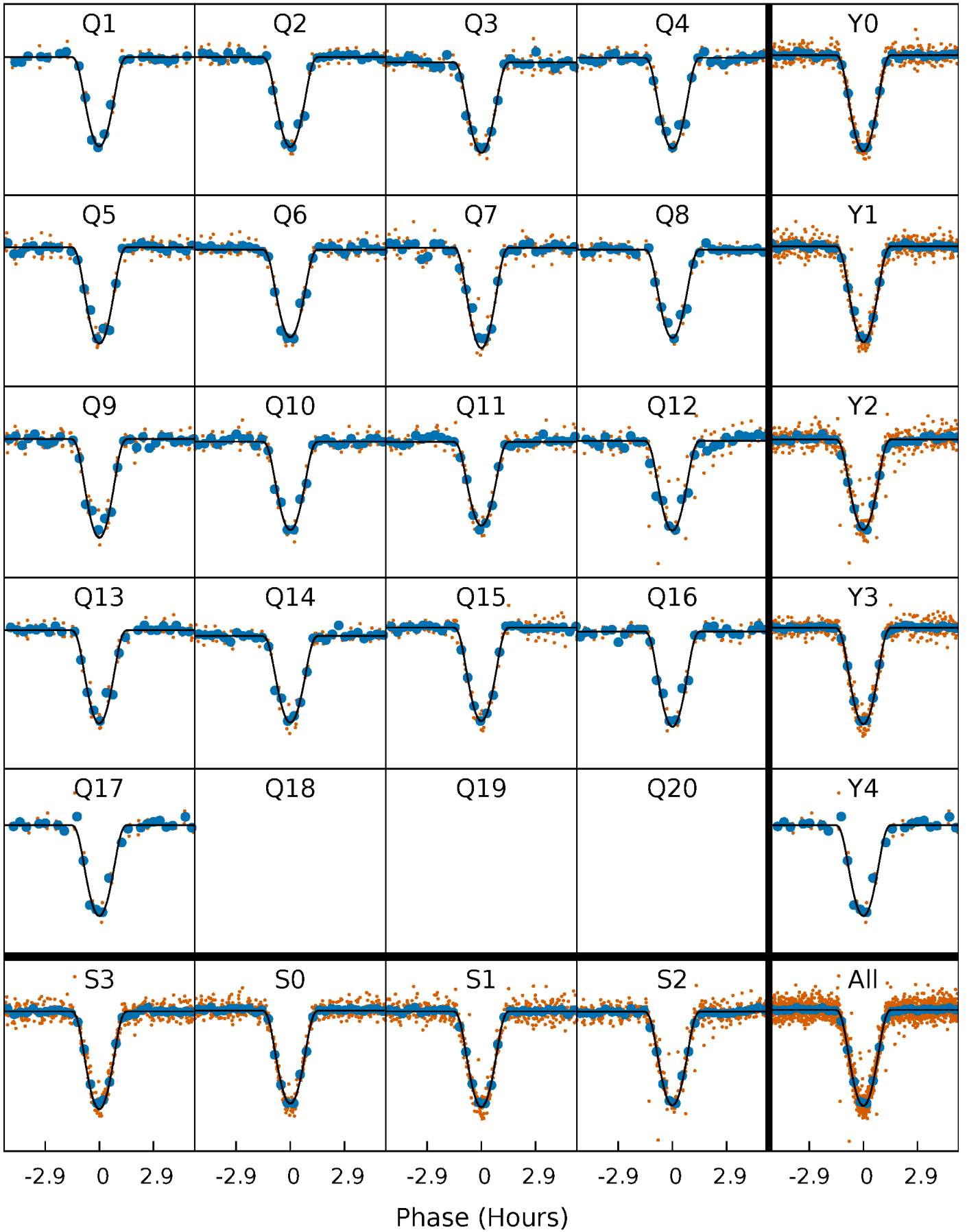
PDC Quarter-Phased Transit Curves

TCE 006599919-01 P= 13.610155 Days $T_0=133.156609$ (BKJD)



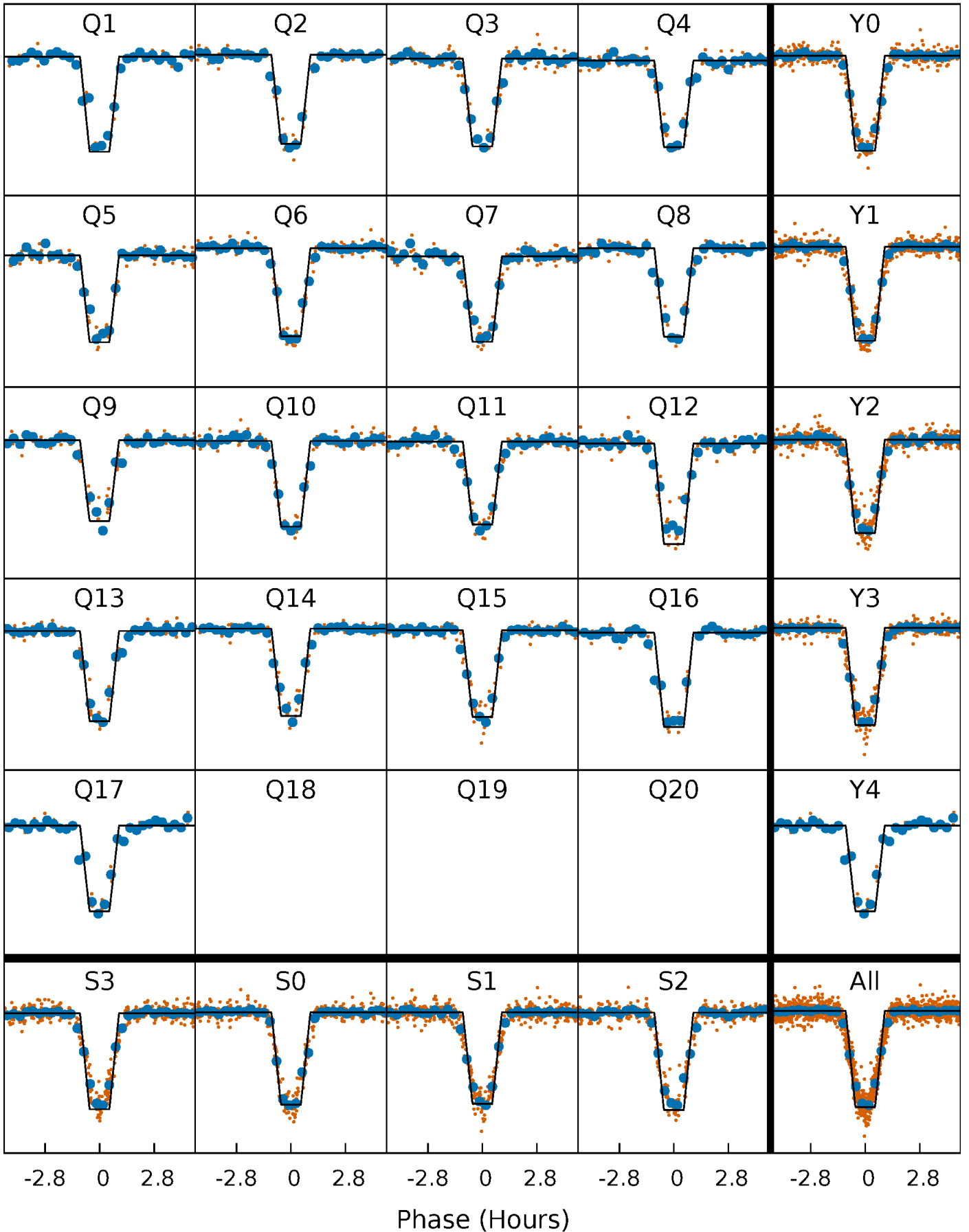
DV Quarter-Phased Transit Curves

TCE 006599919-01 P= 13.610155 Days $T_0=133.156609$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

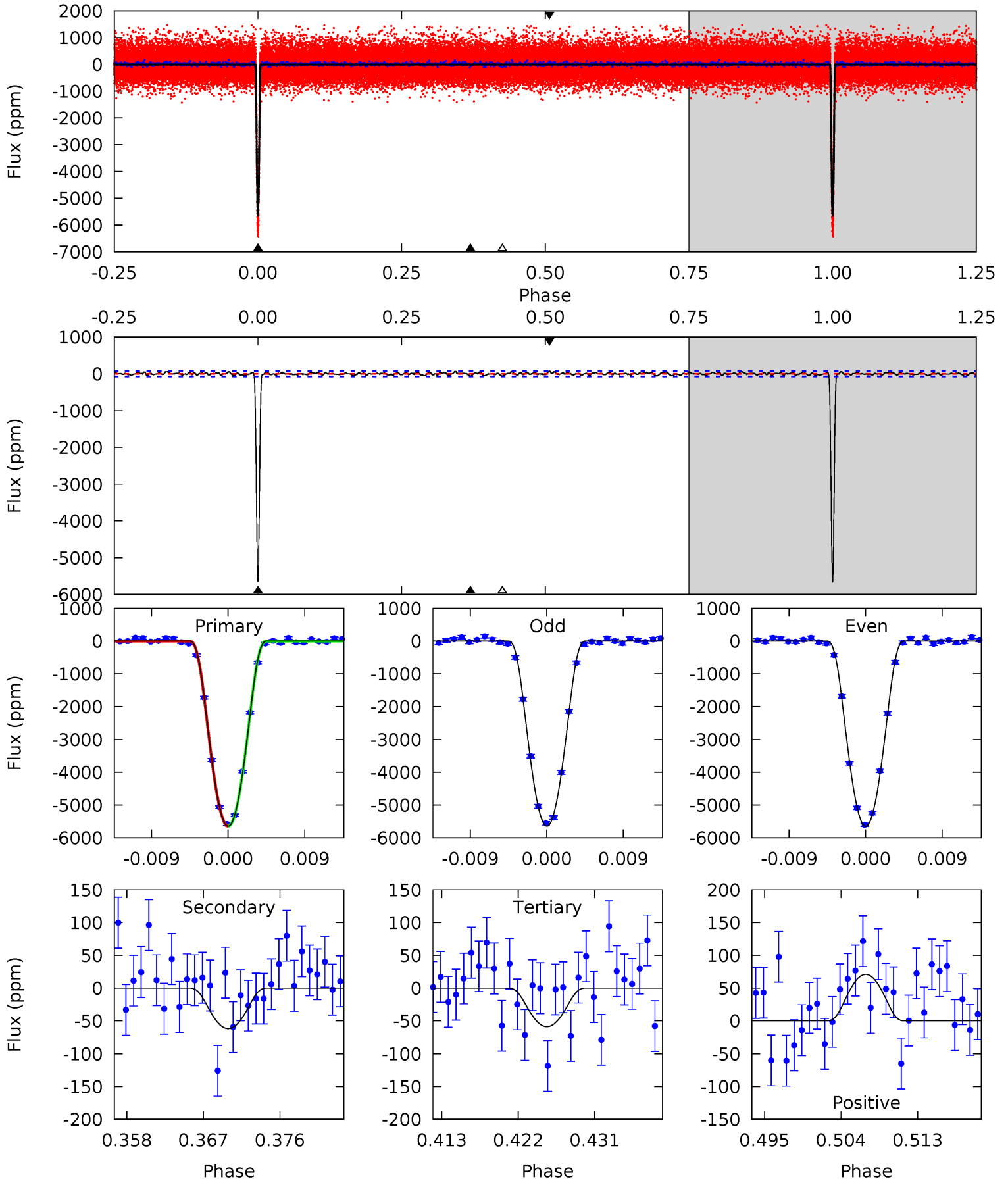
TCE 006599919-01 P= 13.610185 Days $T_0=133.154893$ (BKJD)



DV Model-Shift Uniqueness Test

006599919-01, P = 13.610155 Days, E = 119.546454 Days

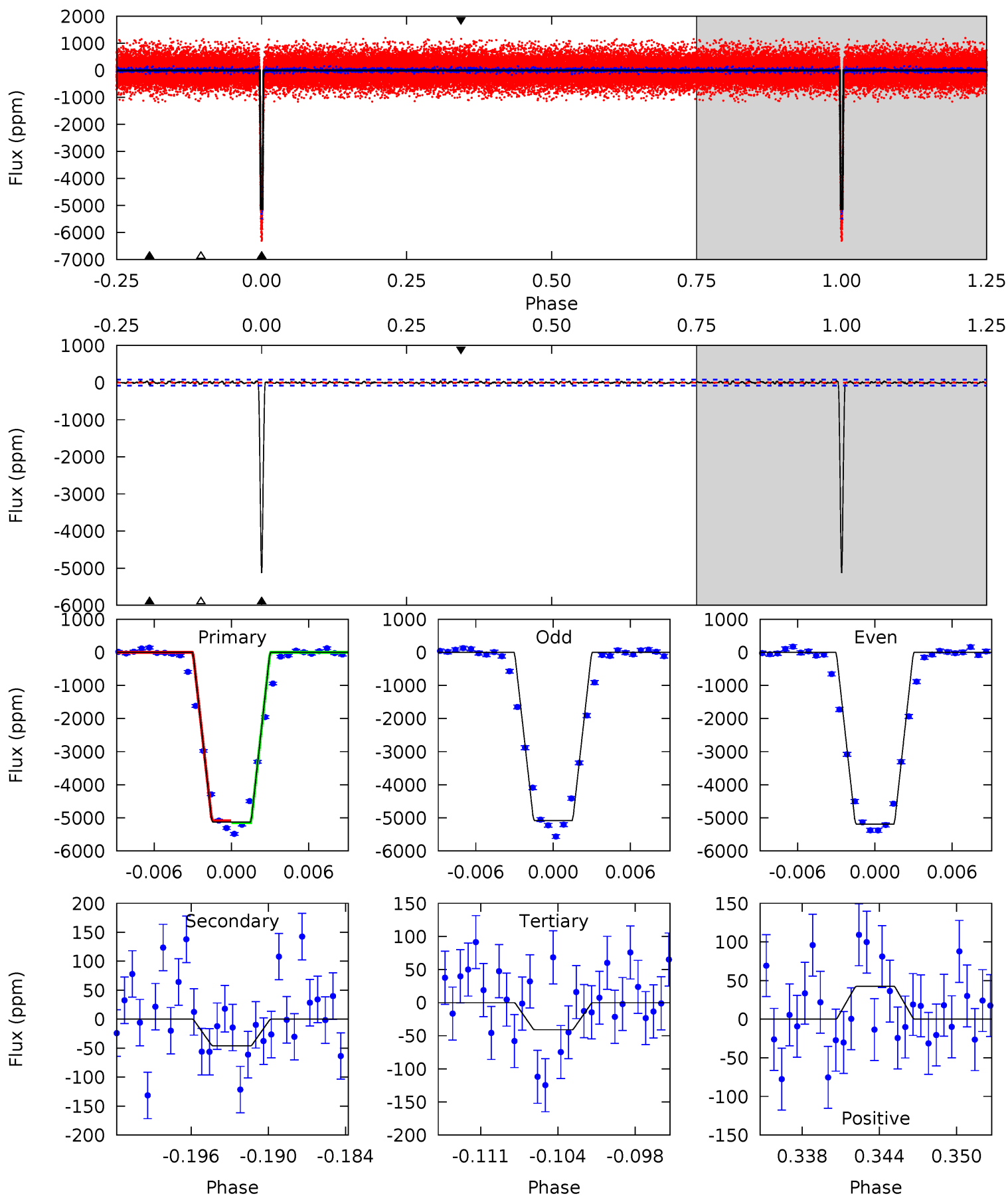
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
385.1	4.22	4.01	4.83	5.04	2.61	1.61	381.1	380.3	0.20	-0.61	0.22	1.00	0.01	0.02



Alt Model-Shift Uniqueness Test

006599919-01, P = 13.610185 Days, E = 119.544708 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
327.0	2.94	2.61	2.71	5.12	2.74	0.95	324.4	324.3	0.33	0.23	3.26	1.01	0.01	1.91



Stellar Parameters For KIC 006599919

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5697^{+154}_{-154}	$4.460^{+0.098}_{-0.182}$	$-0.260^{+0.300}_{-0.300}$	$0.903^{+0.234}_{-0.108}$	$0.857^{+0.117}_{-0.072}$	$1.640^{+0.679}_{-0.778}$
	+3%/-3%	+2%/-4%	+115%/-115%	+26%/-12%	+14%/-8%	+41%/-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 006599919-01 / KOI 0858.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-62 ± 15	$11.22^{+2.06}_{-2.02}$	1034^{+66}_{-49}	2374^{+136}_{-118}	$3.044^{+1.768}_{-1.064}$
Alt.	-46 ± 16	$7.44^{+1.94}_{-1.67}$	1033^{+65}_{-52}	2532^{+222}_{-176}	$5.011^{+4.570}_{-2.194}$

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 $A_{obs} \gg 1.0$

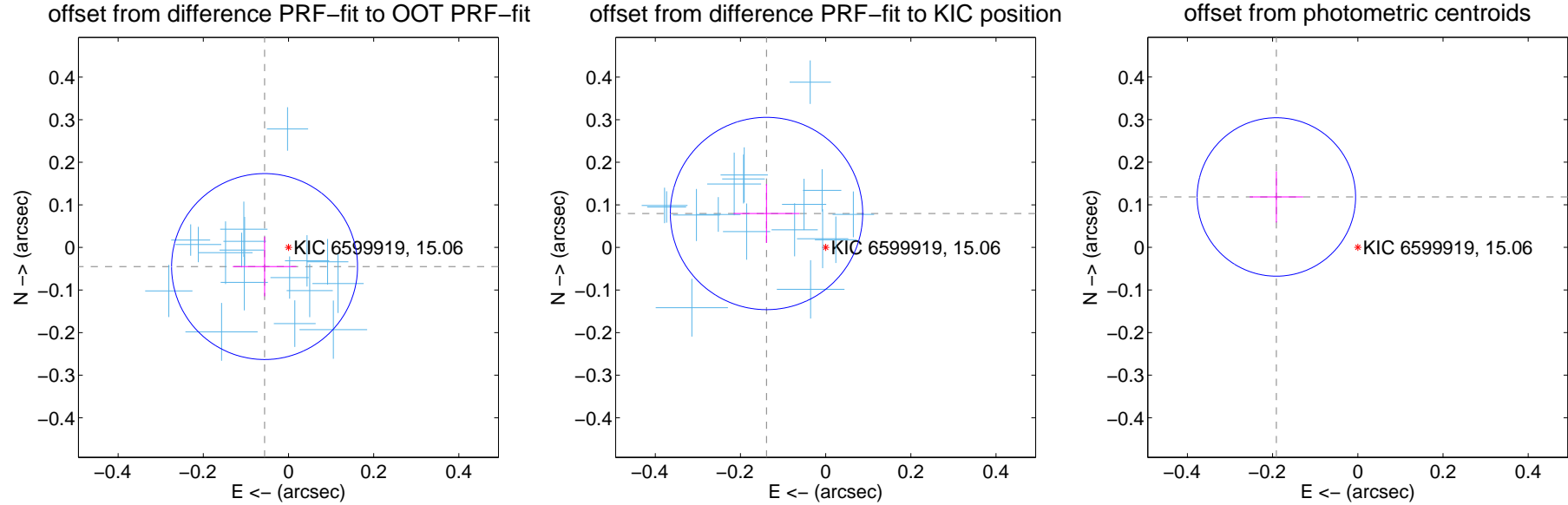
DV Centroid Data

Supplemental centroid analysis for 006599919-01. Kepler magnitude: 15.06. Transit SNR 200.99

There are 17 quarters with good PRF difference image offsets

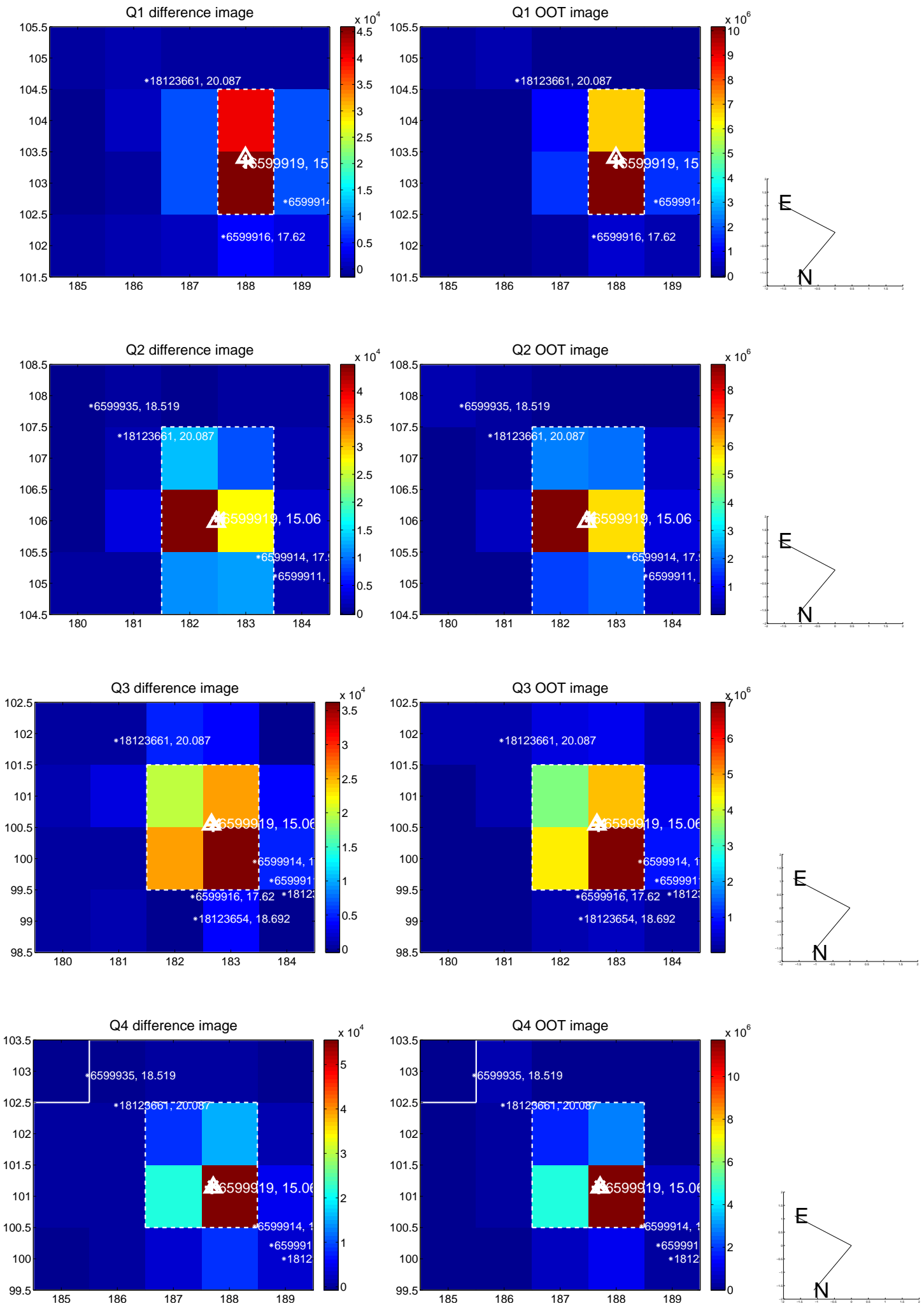
The direct PRF centroid is offset from the target star catalog position by about 0.17 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.072 ± 0.073	0.99	0.056 ± 0.075	-0.045 ± 0.070
PRF-fit source offset from KIC position	0.160 ± 0.075	2.13	0.139 ± 0.077	0.080 ± 0.069
photometric centroid source offset	0.22 ± 0.06	3.63	0.19 ± 0.06	0.12 ± 0.06

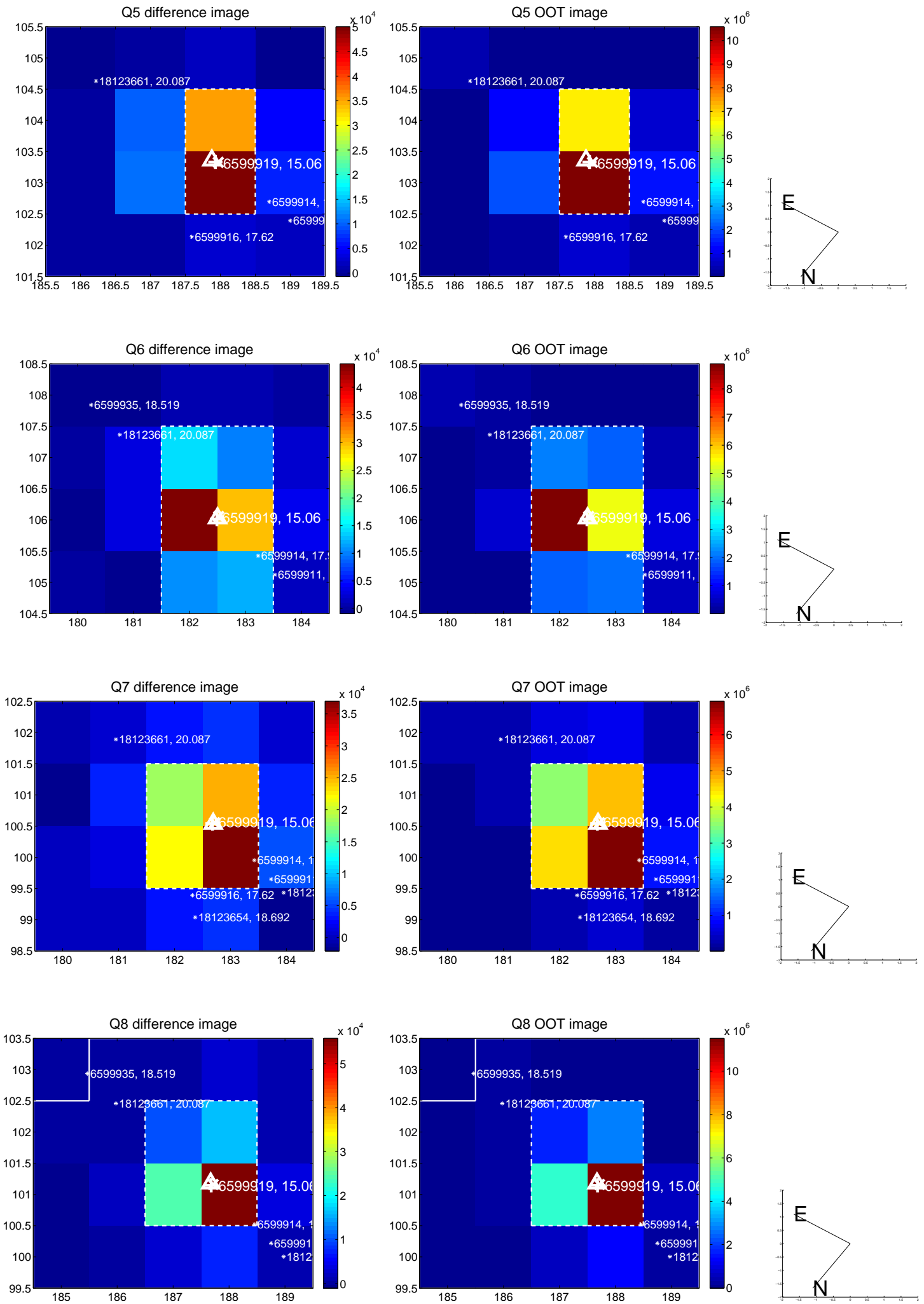


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

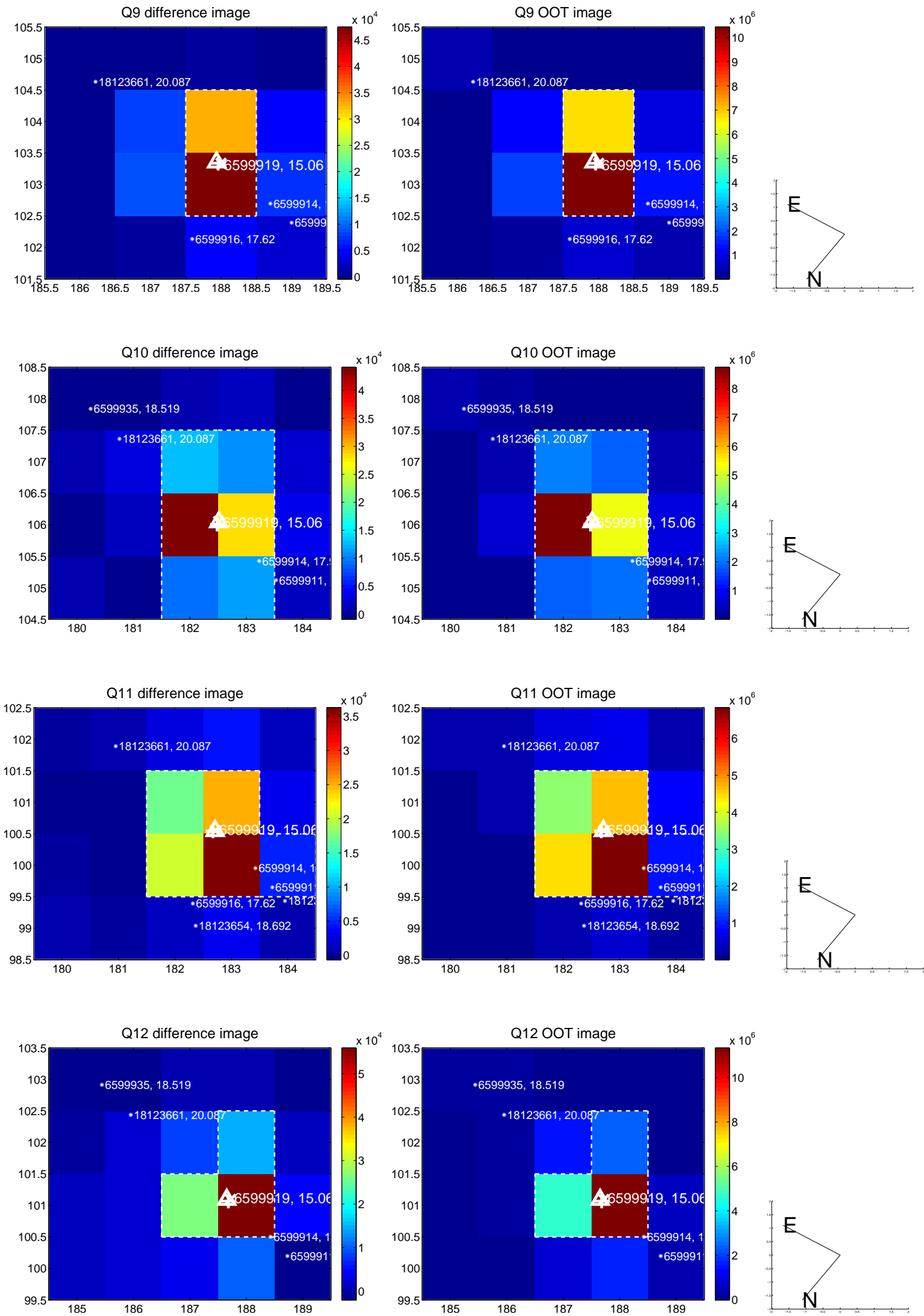
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



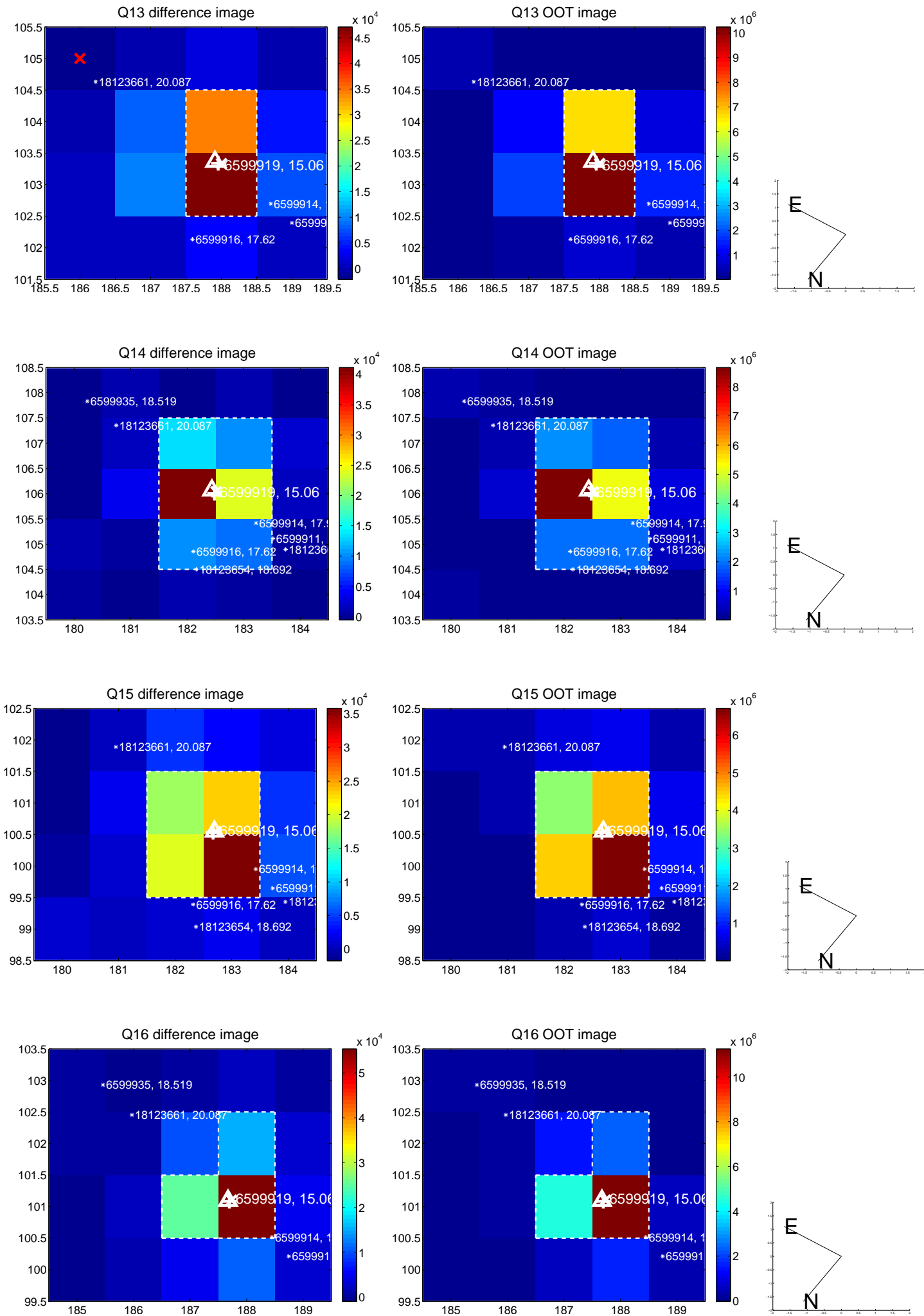
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



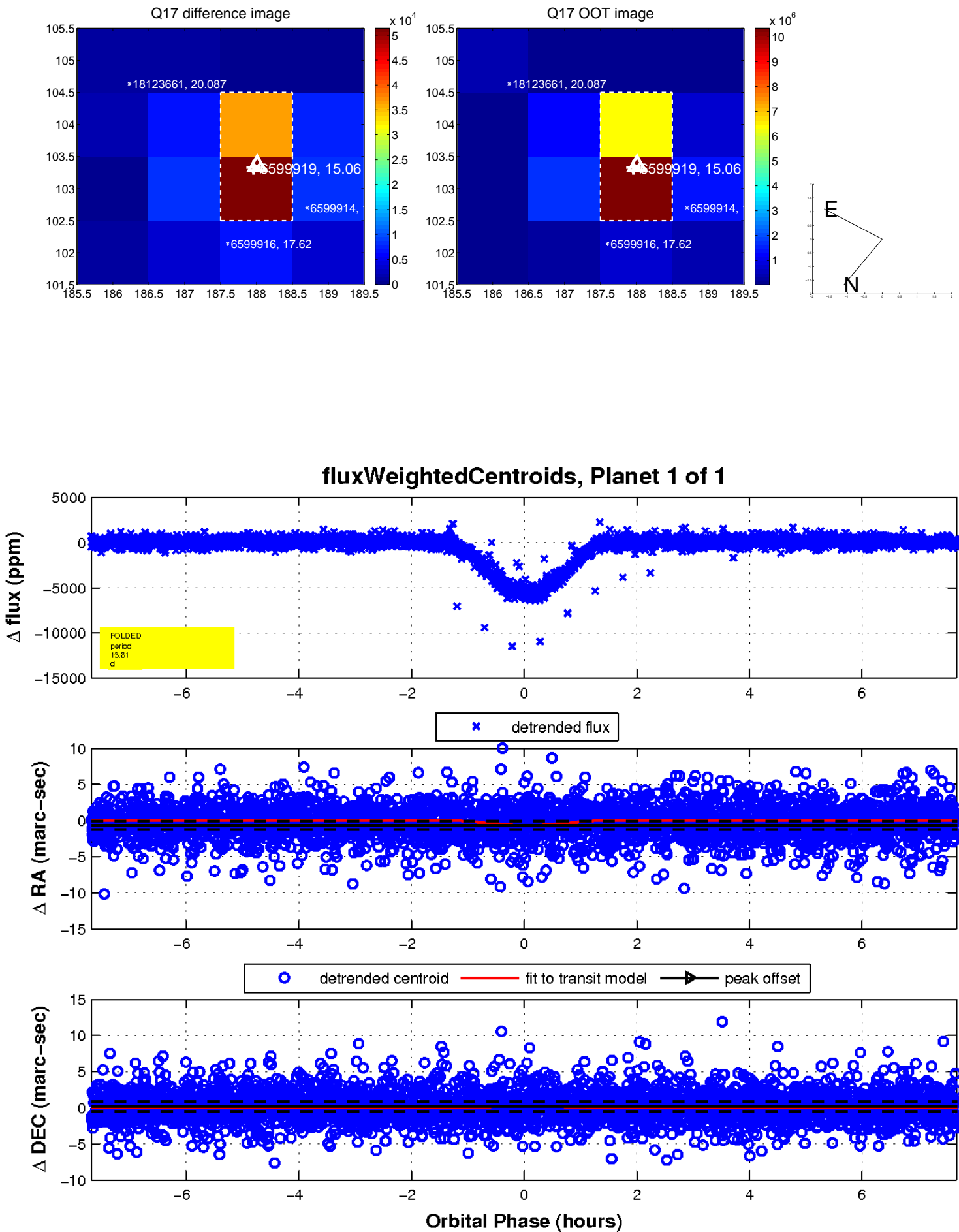
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

