

KIC 003848919

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})
003848919-01	OBS	5015.01	0.523630	131.763277	51251.2	2.000	8814.7	-1.0	0.74	5407	16.79	3353.19

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003848919-01	OBS	FP	0.00	0	1	0	0	SWEET_EB—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.

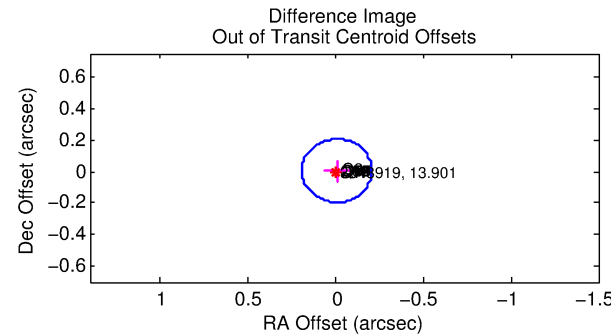
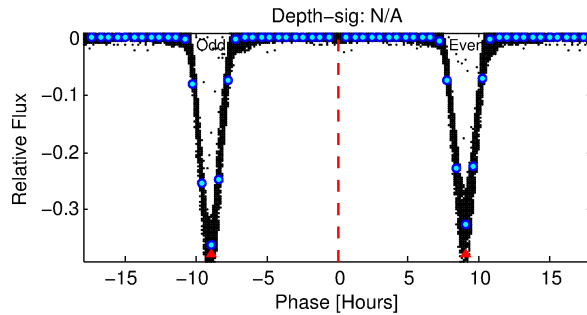
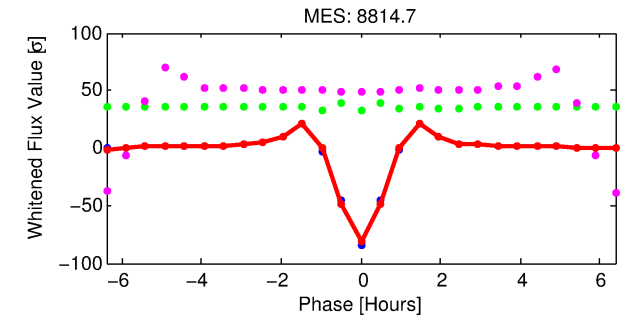
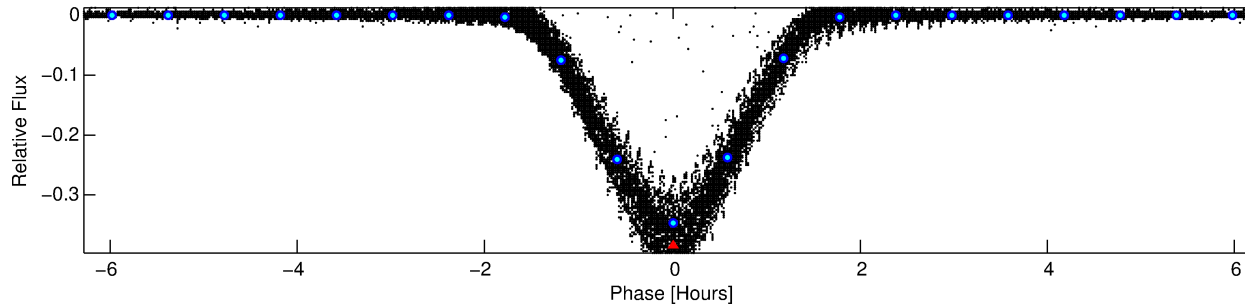
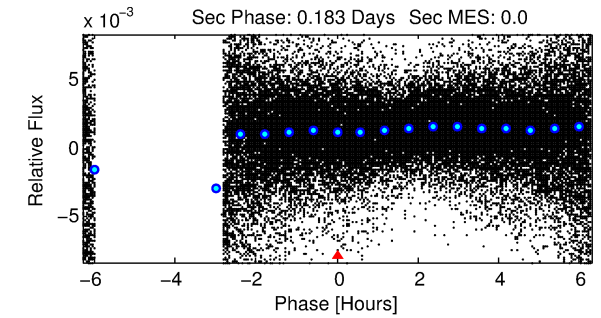
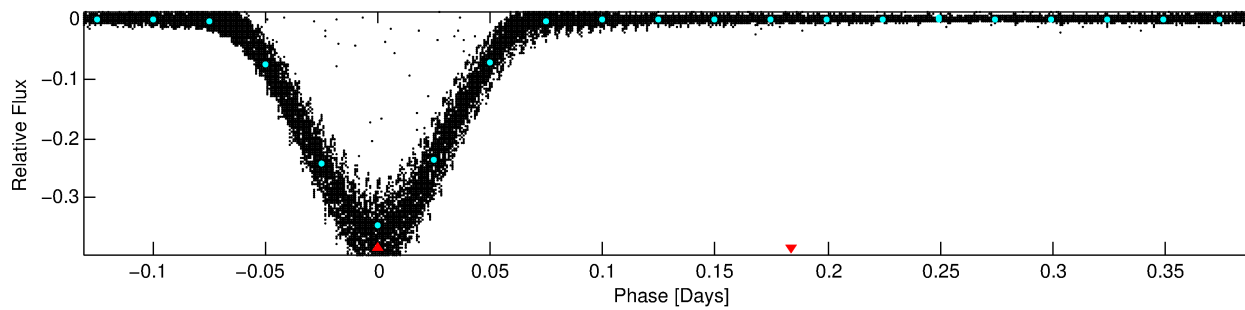
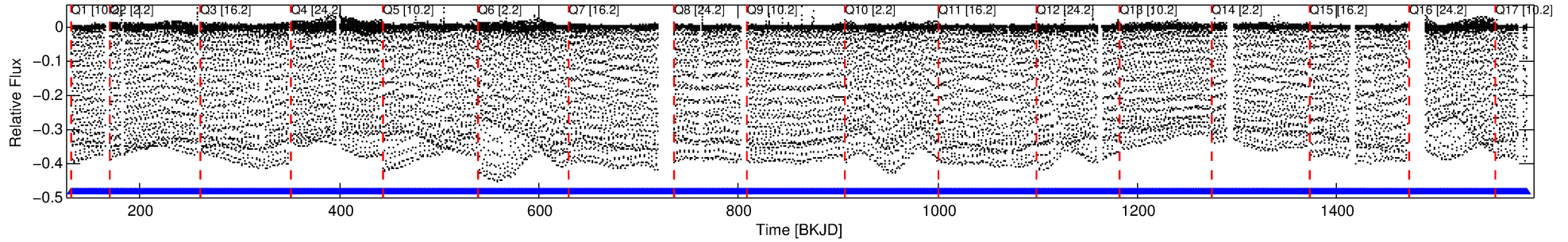
Ephemeris Match Information For 003848919-01

No Significant Match Found

DV One-Page Summary

KIC: 3848919 Candidate: 1 of 1 Period: 0.524 d
KOI: K05015.01 Corr: 0.759

Kp: 13.90 R*: 0.74 Rs Teff: 5407.0 K Logg: 4.54 Fe/H: -0.620



TPS TCE Results:

Period = 0.52363 d
Epoch = 131.7633 BKJD

DV fit results are unavailable

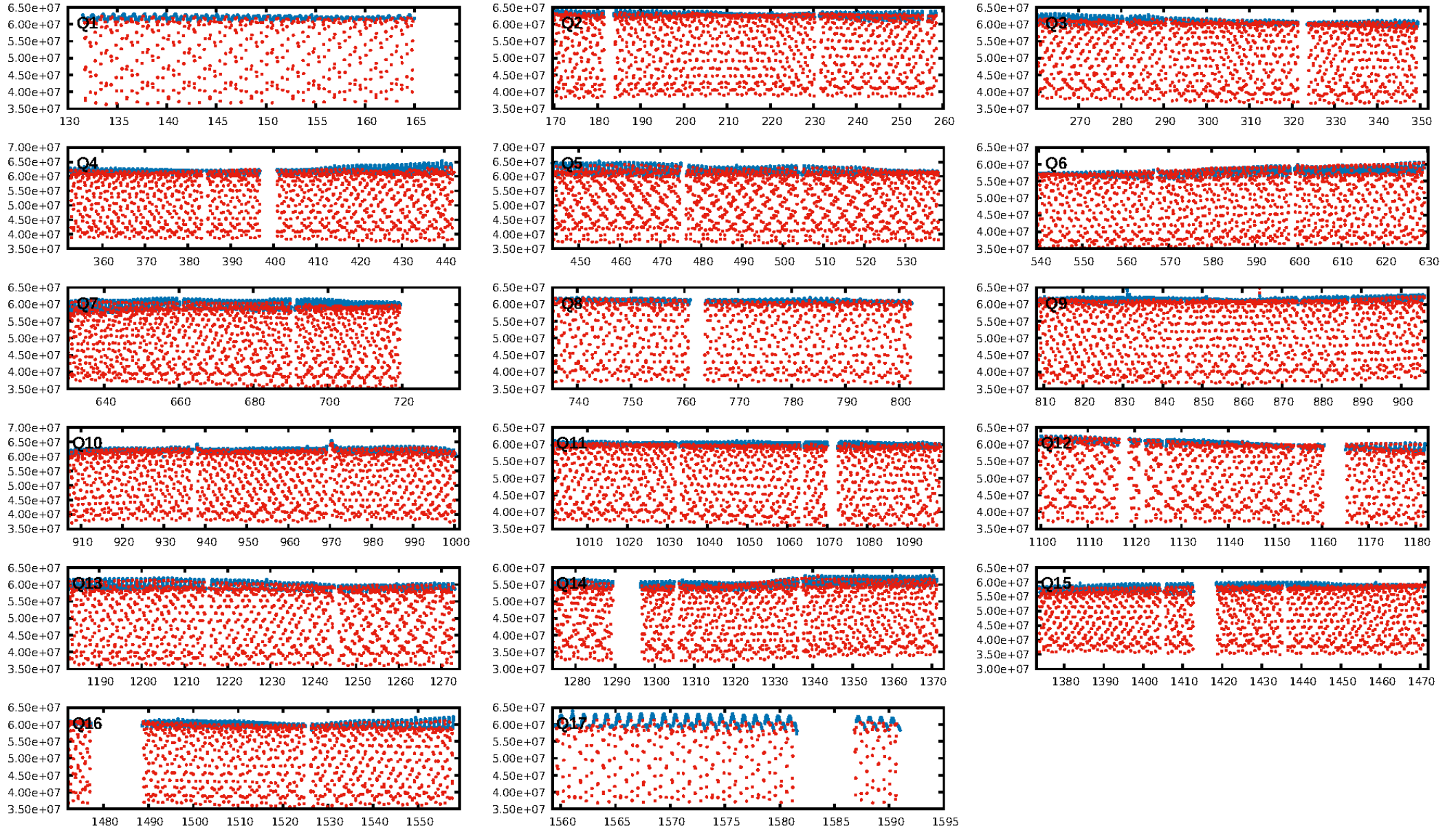
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [2444/2444]
GhostDiagnostic-chr: 1.137
Centroid-sig: N/A
Centroid-so: 0.245 arcsec [710.73σ]
OotOffset-rm: 0.009 arcsec [0.14σ]
KicOffset-rm: 0.256 arcsec [3.73σ]
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]

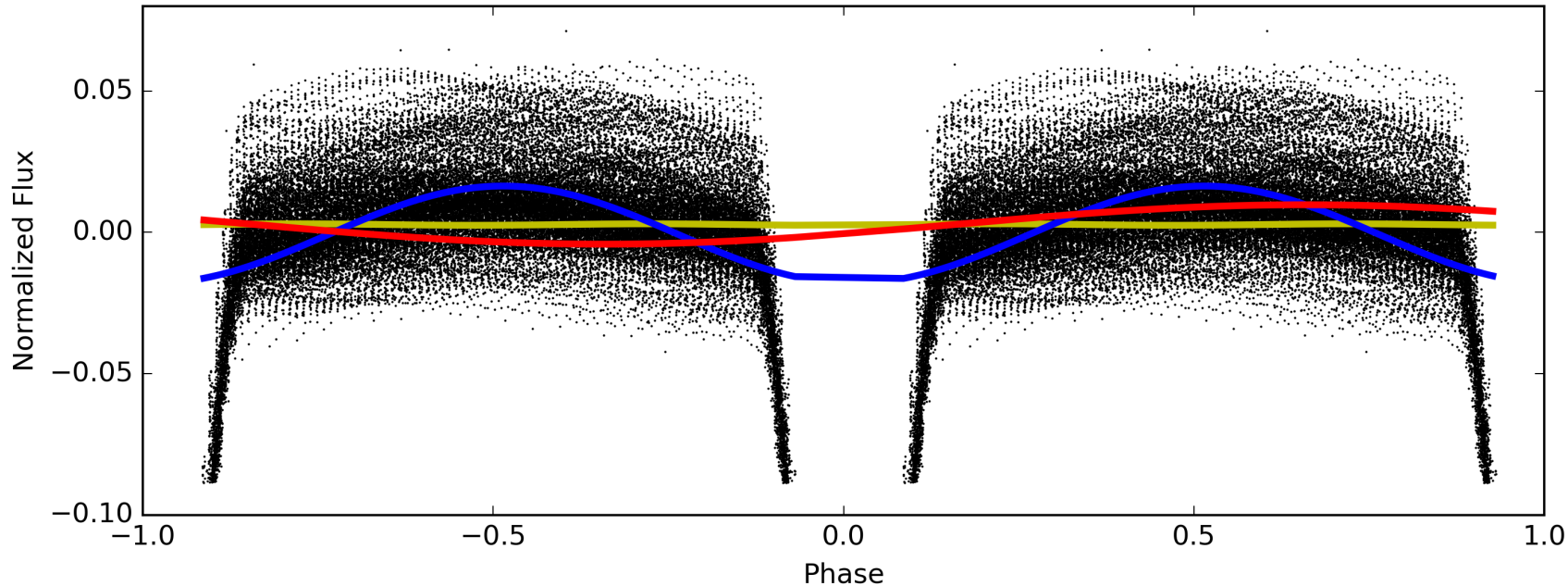
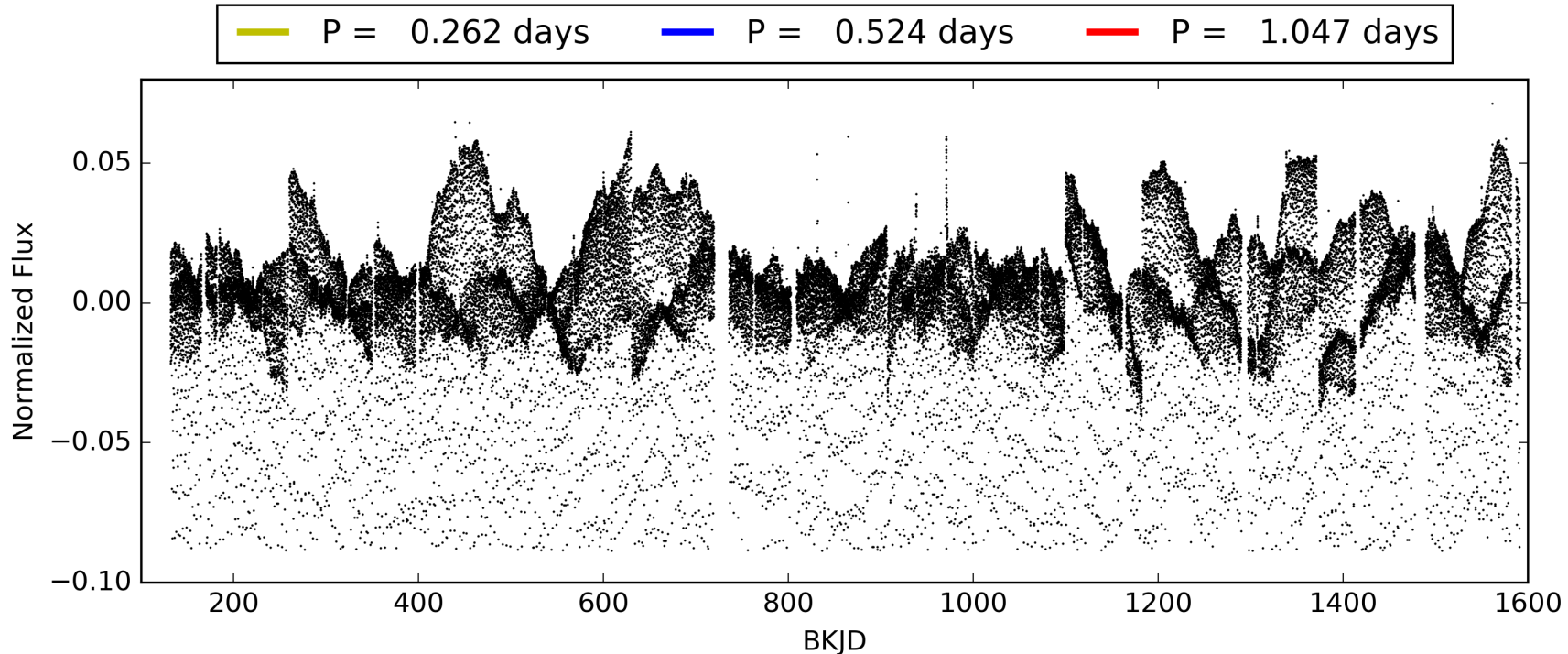
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 07:46:53 Z

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

TCE 003848919-01, PDC Light Curves

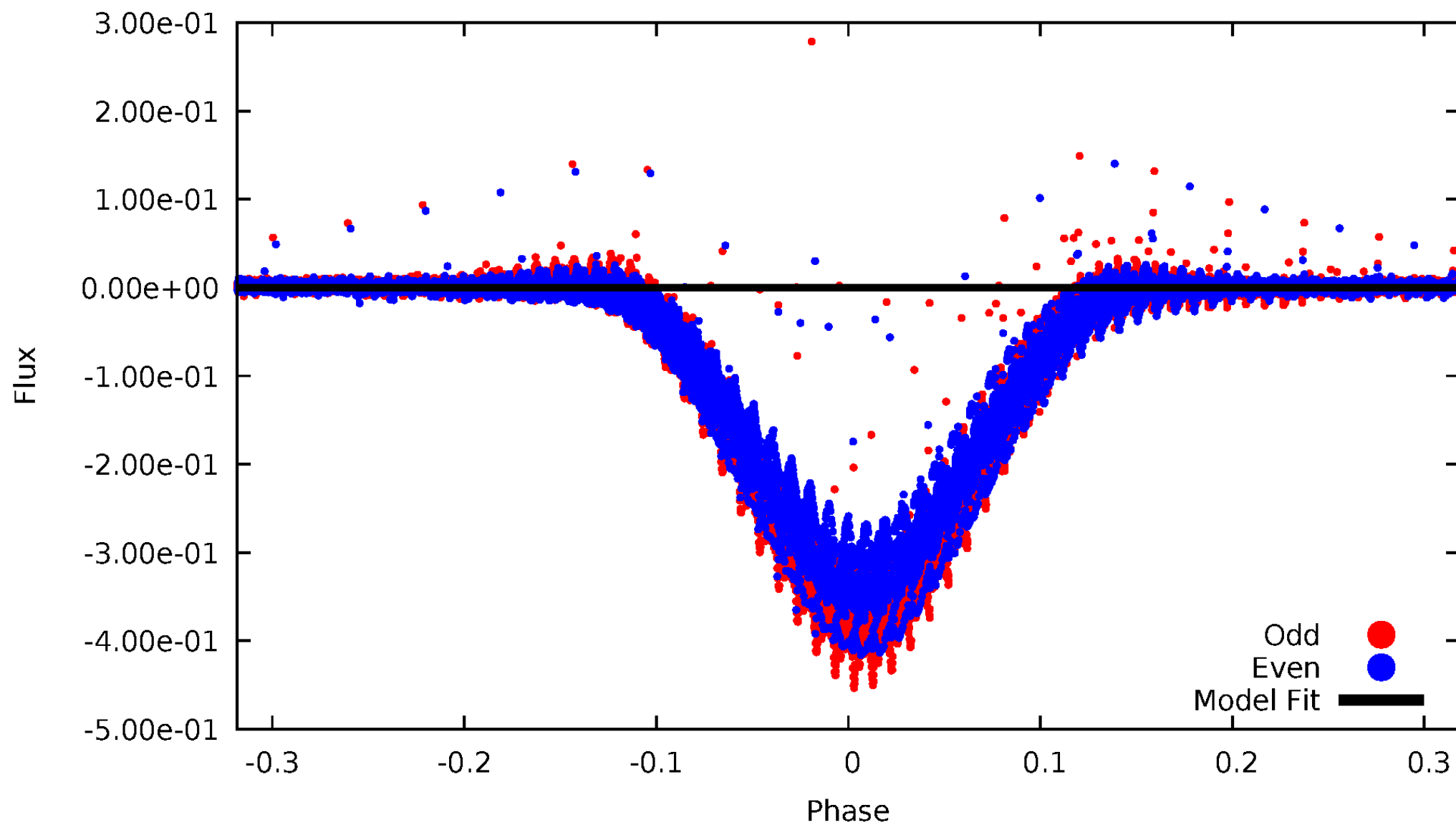


TCE 003848919-01



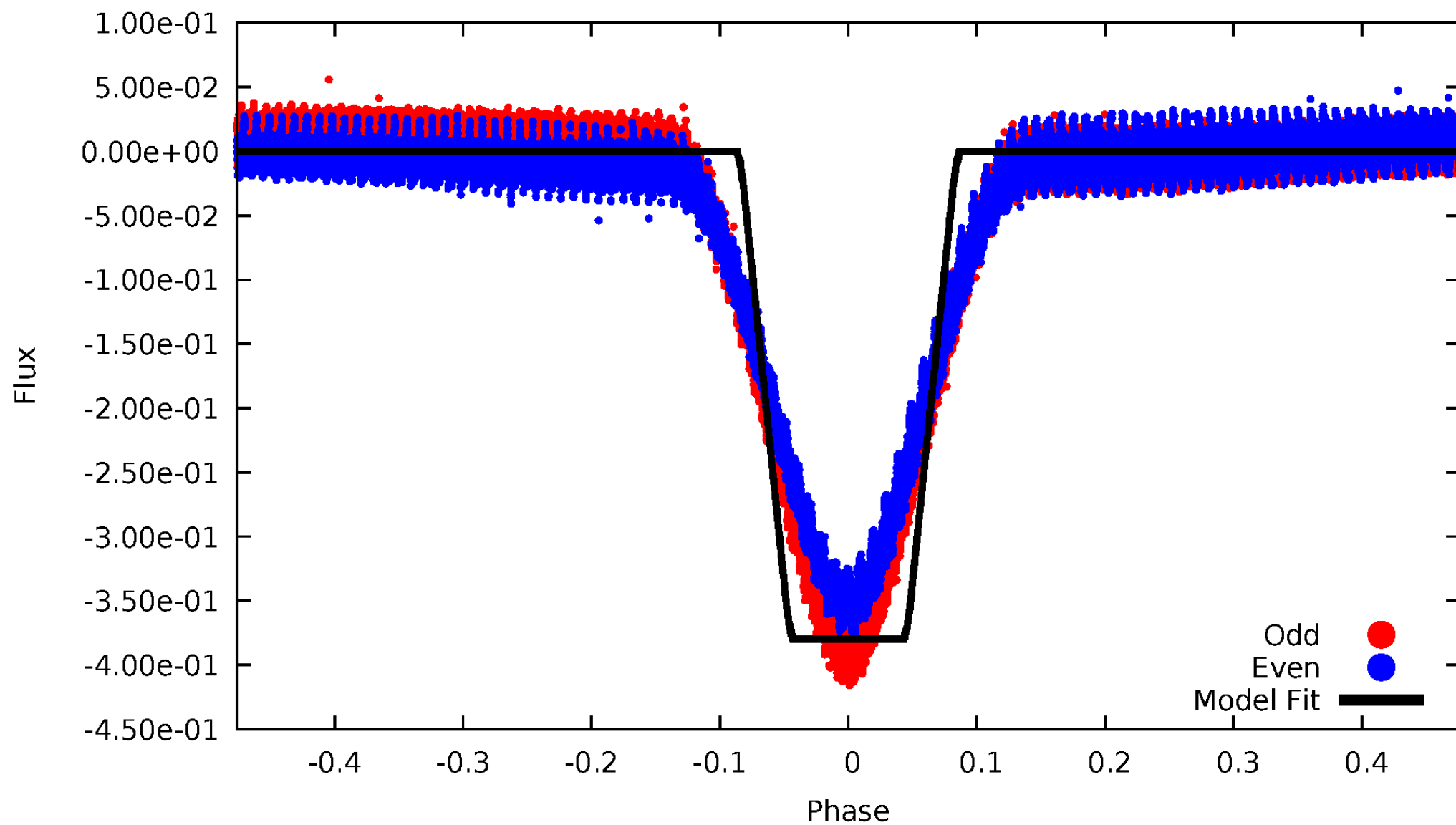
DV Odd/Even

TCE 003848919-01



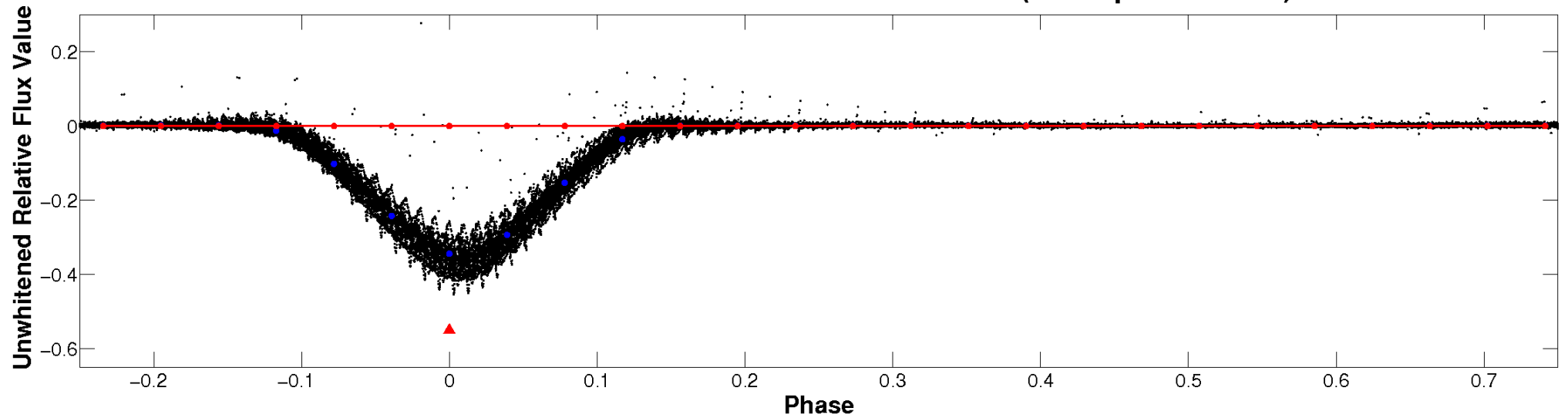
ALT Odd/Even

TCE 003848919-01



Non-Whitened Vs. Whitened Light Curve

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

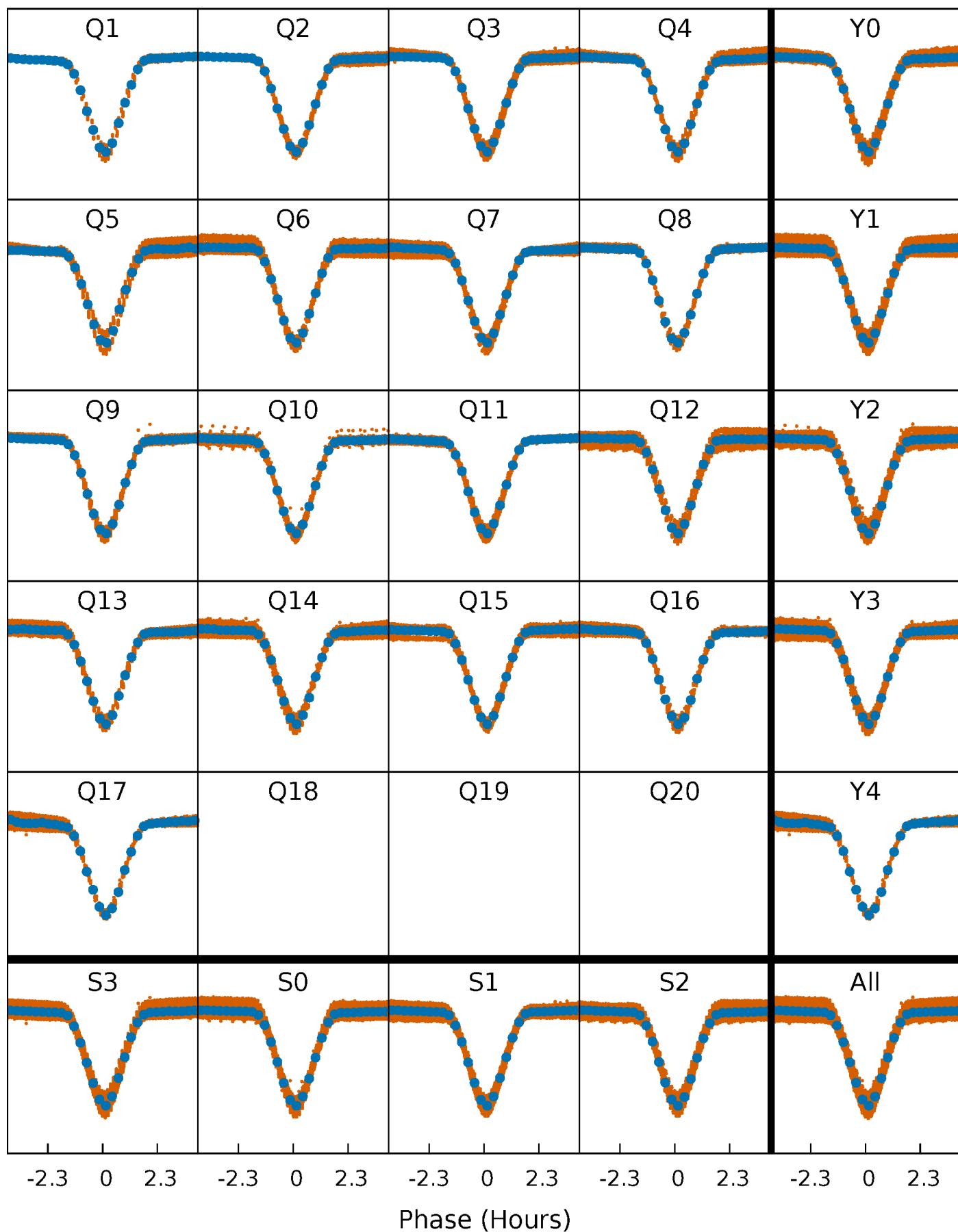


Planet 1 : Phased Whitened Flux Time Series (TPS Epoch/Period)



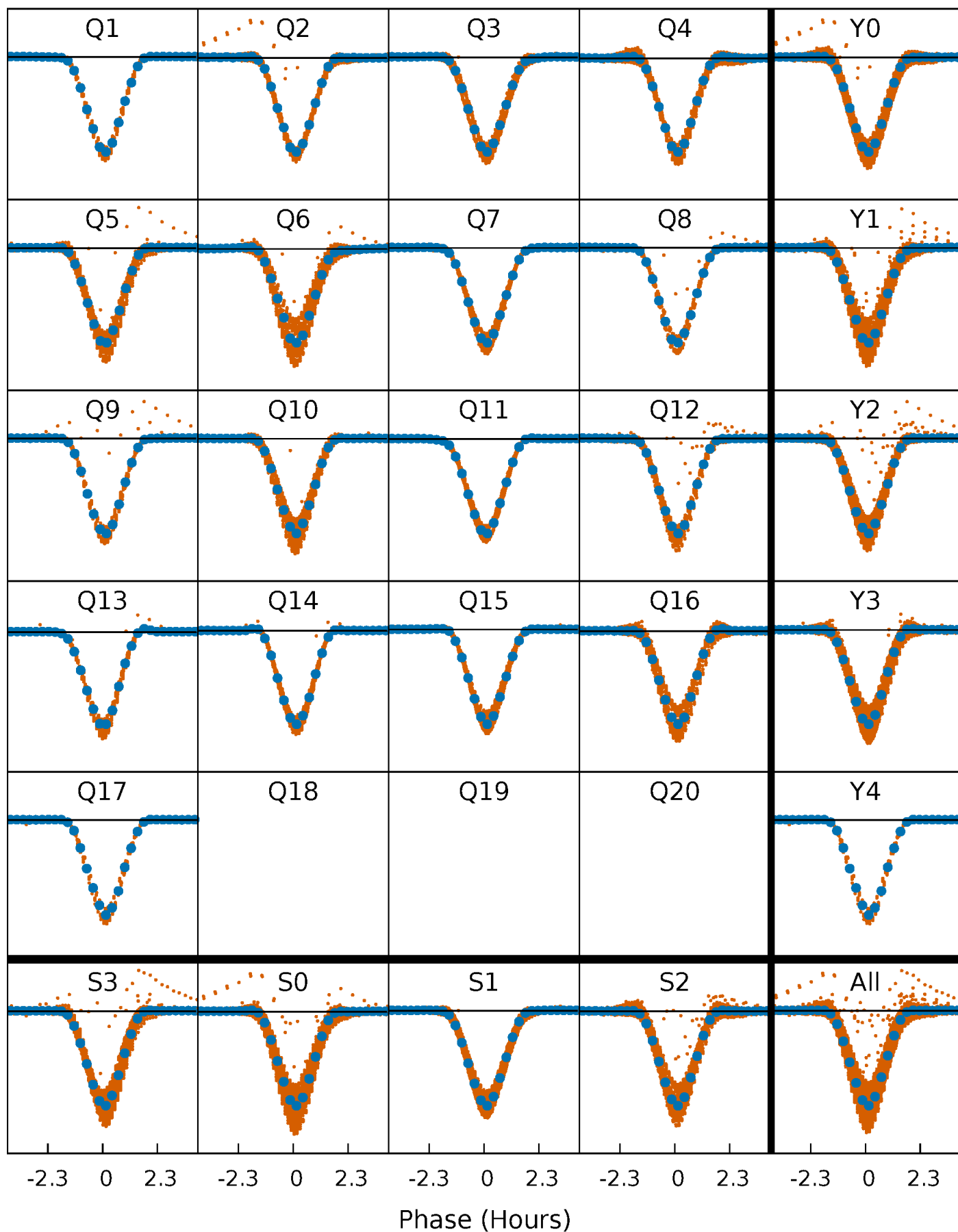
PDC Quarter-Phased Transit Curves

TCE 003848919-01 P= 0.523630 Days $T_0=131.763277$ (BKJD)



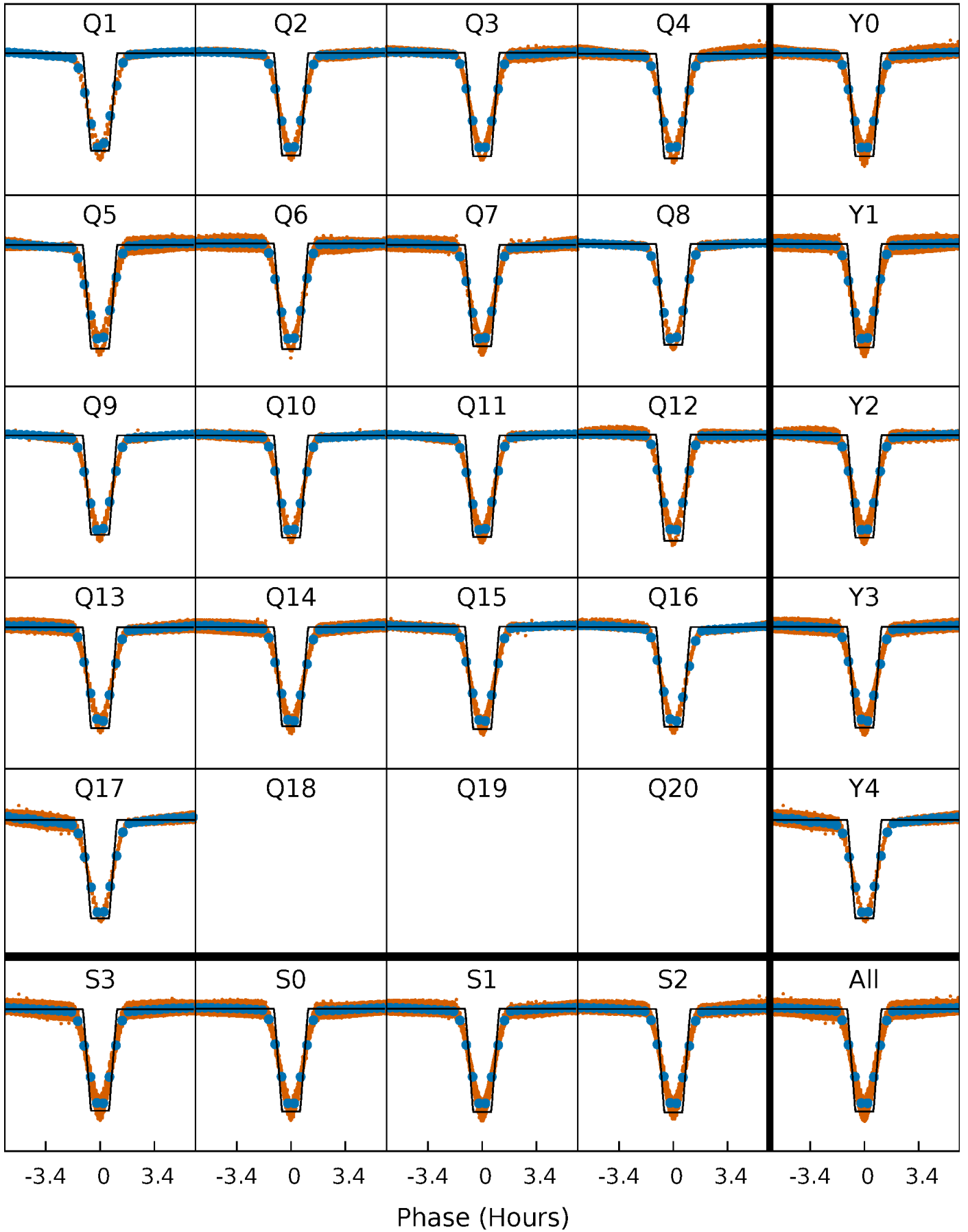
DV Quarter-Phased Transit Curves

TCE 003848919-01 P= 0.523630 Days $T_0=131.763277$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

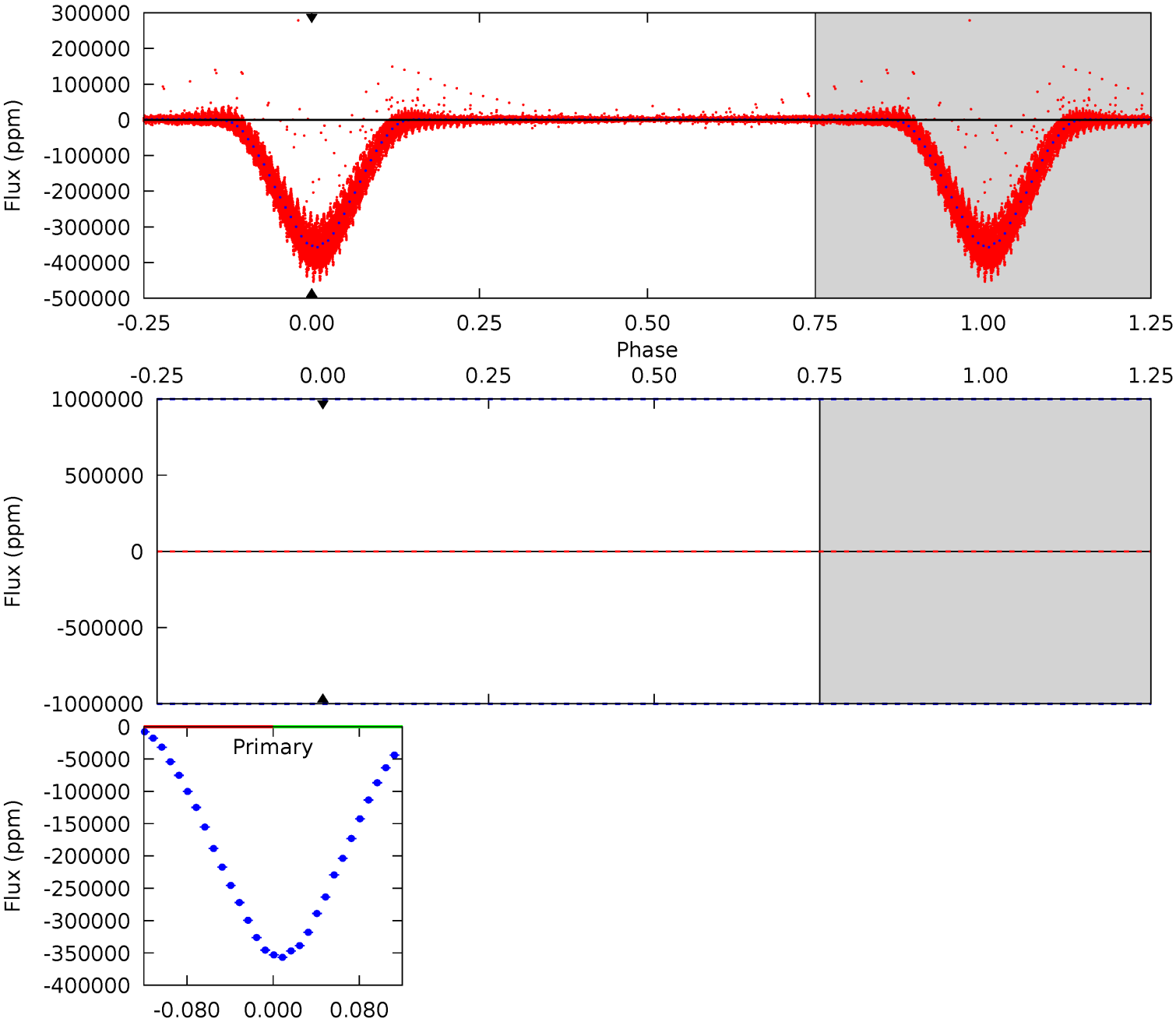
TCE 003848919-01 P= 0.523630 Days $T_0=131.767521$ (BKJD)



DV Model-Shift Uniqueness Test

003848919-01, P = 0.523630 Days, E = 131.239647 Days

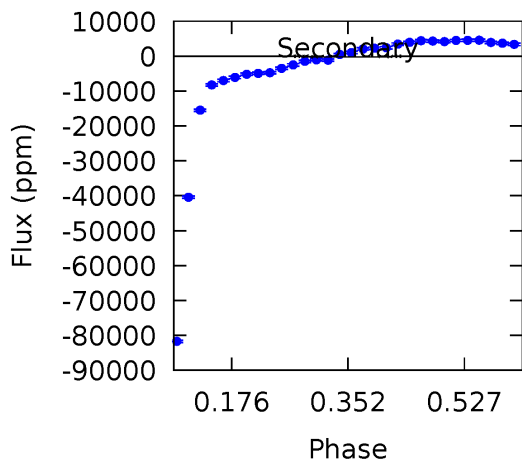
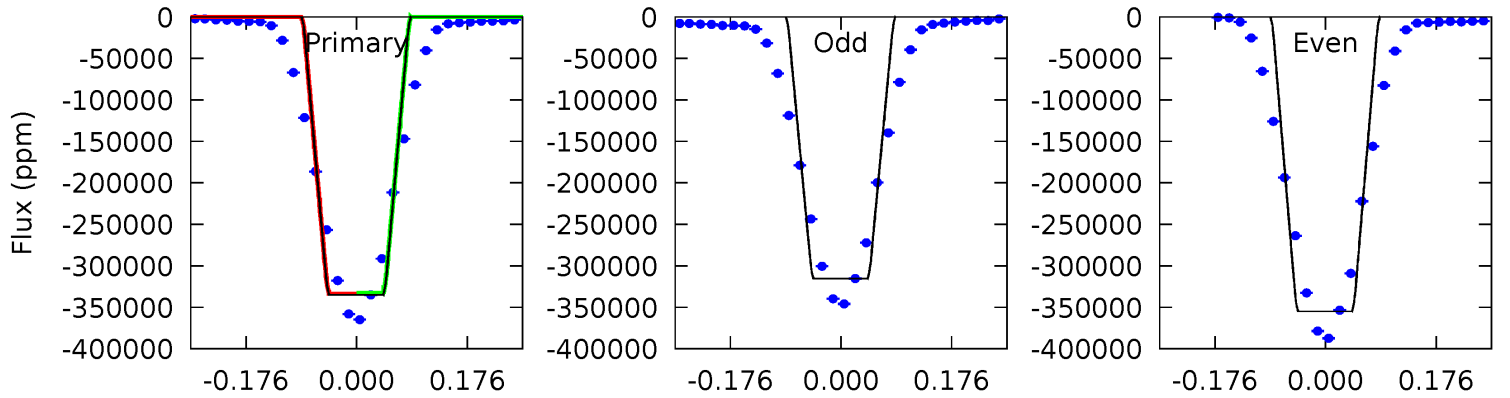
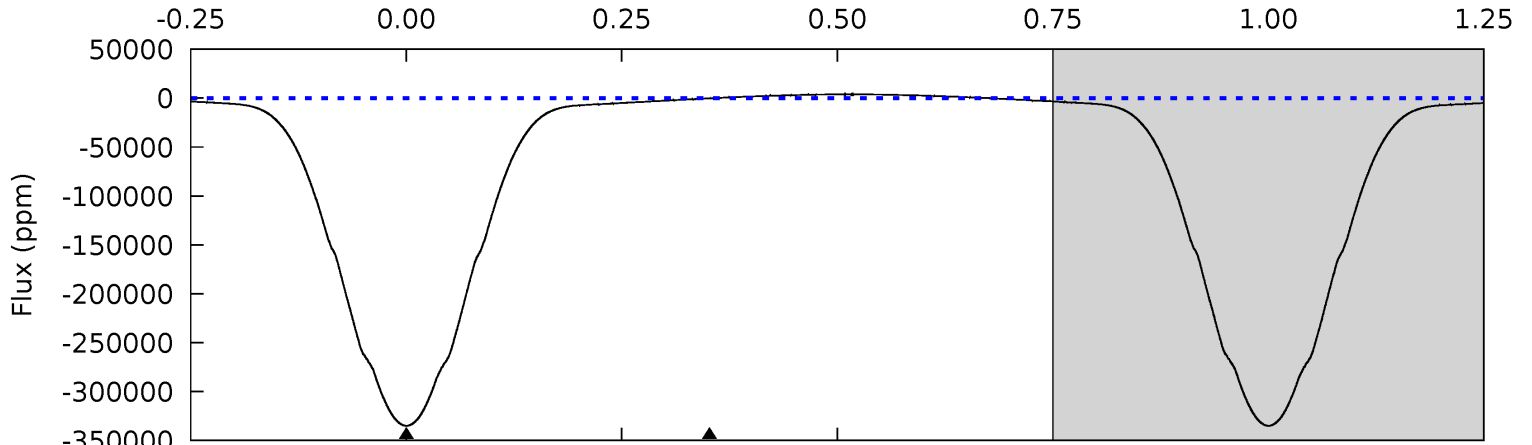
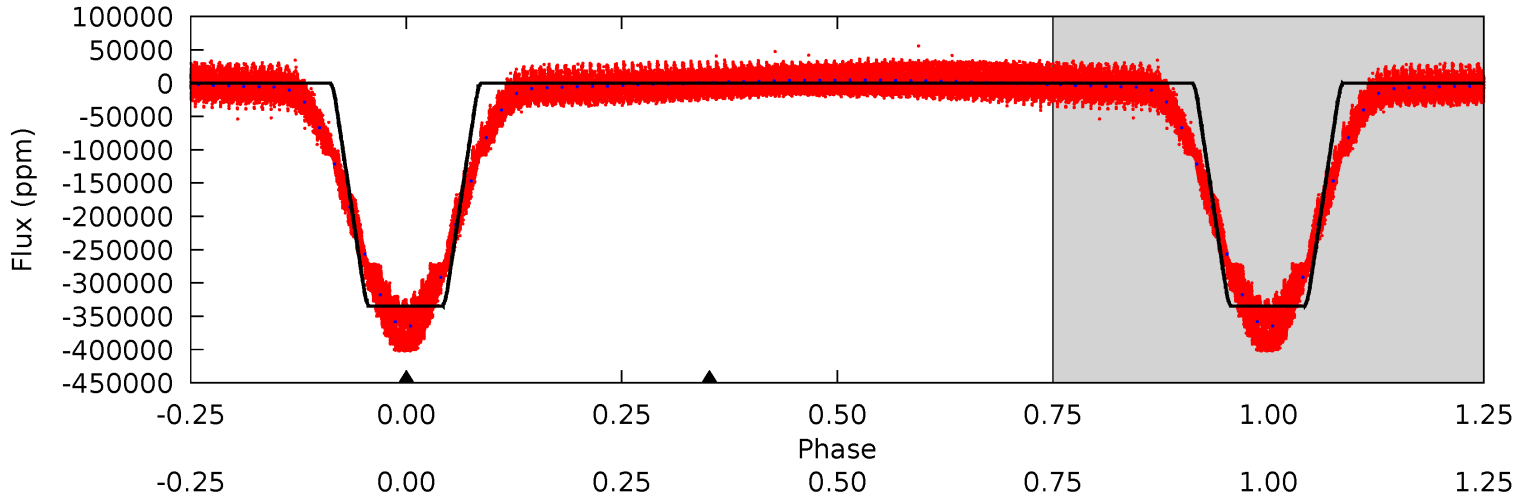
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

003848919-01, P = 0.523630 Days, E = 131.243891 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2975	1.90	0	0	4.44	1.35	30.7	2975	2975	1.90	1.90	163.6	1.00	0.01	3.60



Stellar Parameters For KIC 003848919

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5407^{+160}_{-144}	$4.535^{+0.099}_{-0.081}$	$-0.620^{+0.350}_{-0.300}$	$0.745^{+0.097}_{-0.088}$	$0.694^{+0.090}_{-0.039}$	$2.364^{+1.006}_{-0.595}$
	+3%/-3%	+2%/-2%	+56%/-48%	+13%/-12%	+13%/-6%	+43%/-25%
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 003848919-01 / KOI 5015.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	0 ± 1000000	$16.54^{+8.43}_{-6.98}$	2712^{+111}_{-122}	3375^{+4200}_{-10014}	$1.179^{+38.080}_{-25.047}$
Alt.	-213 ± 113	$50.39^{+8.46}_{-8.85}$	2706^{+111}_{-118}	-2898^{+71}_{-71}	$0.006^{+0.005}_{-0.003}$

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 $A_{obs} \gg 1.0$

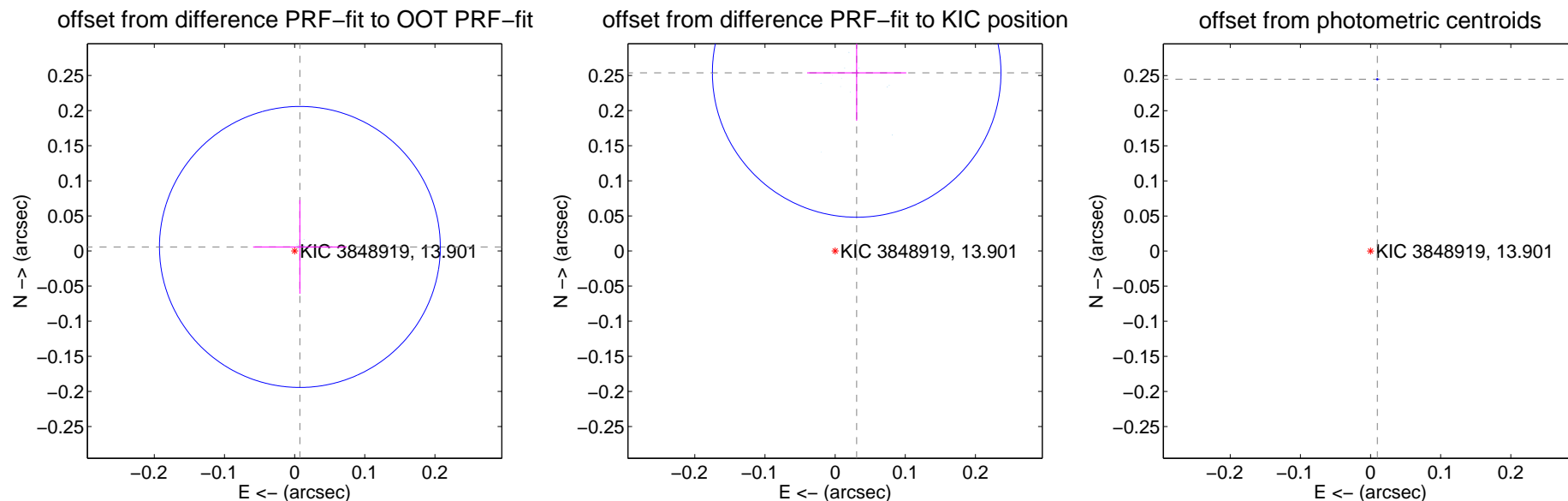
DV Centroid Data

Supplemental centroid analysis for 003848919-01. Kepler magnitude: 13.90. Transit SNR -1.00

There are 17 quarters with good PRF difference image offsets

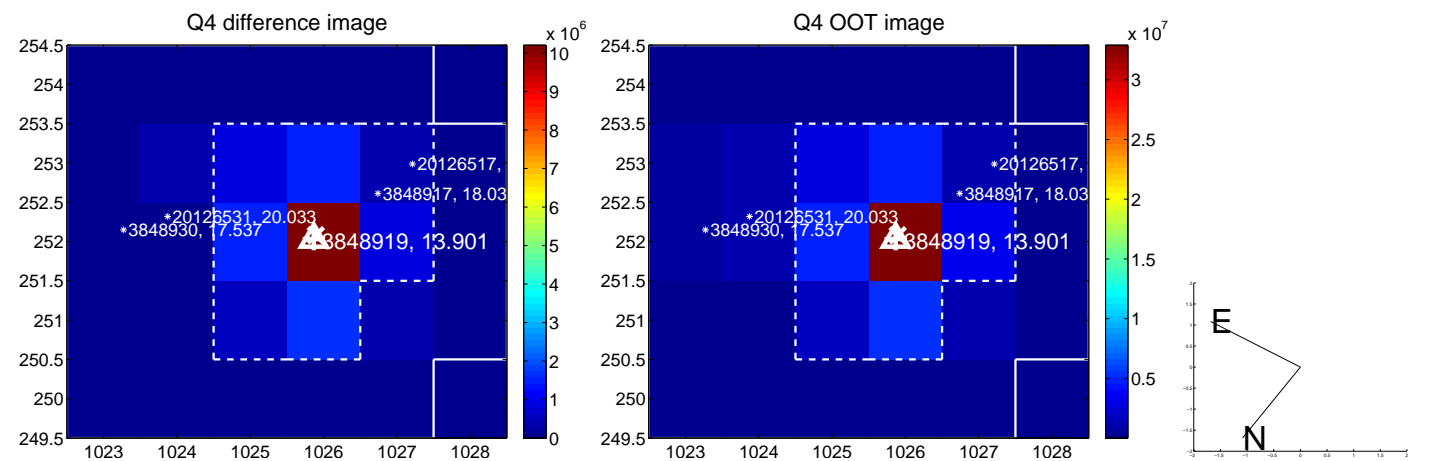
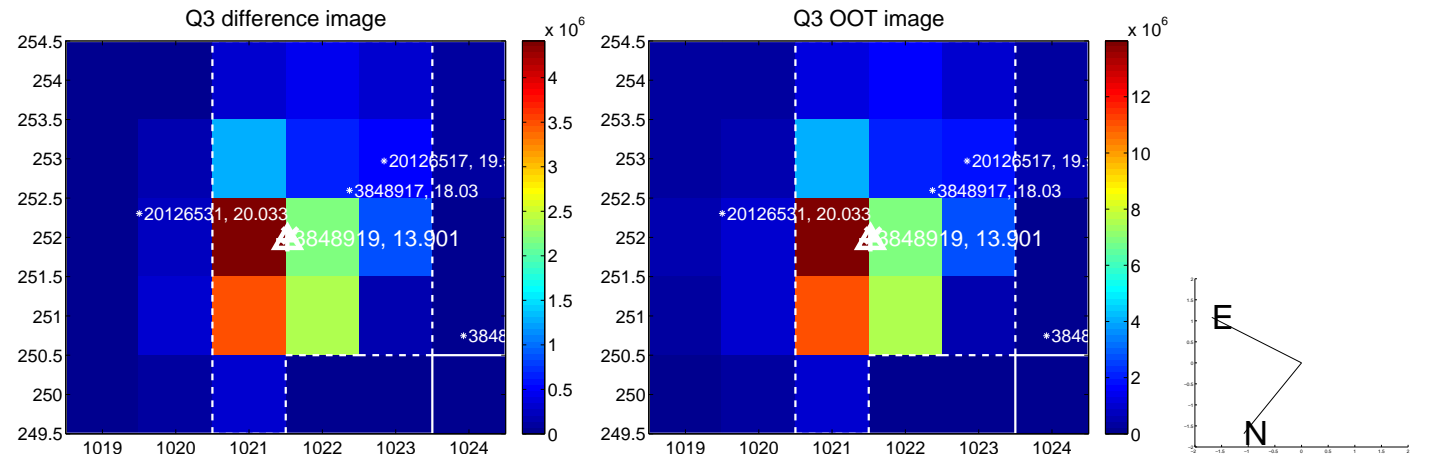
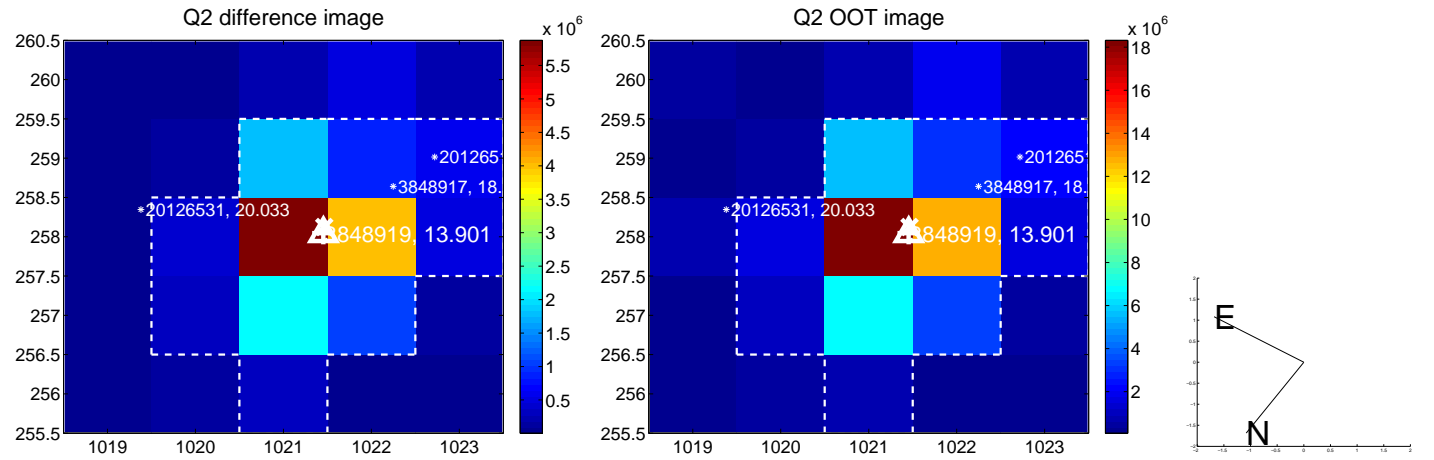
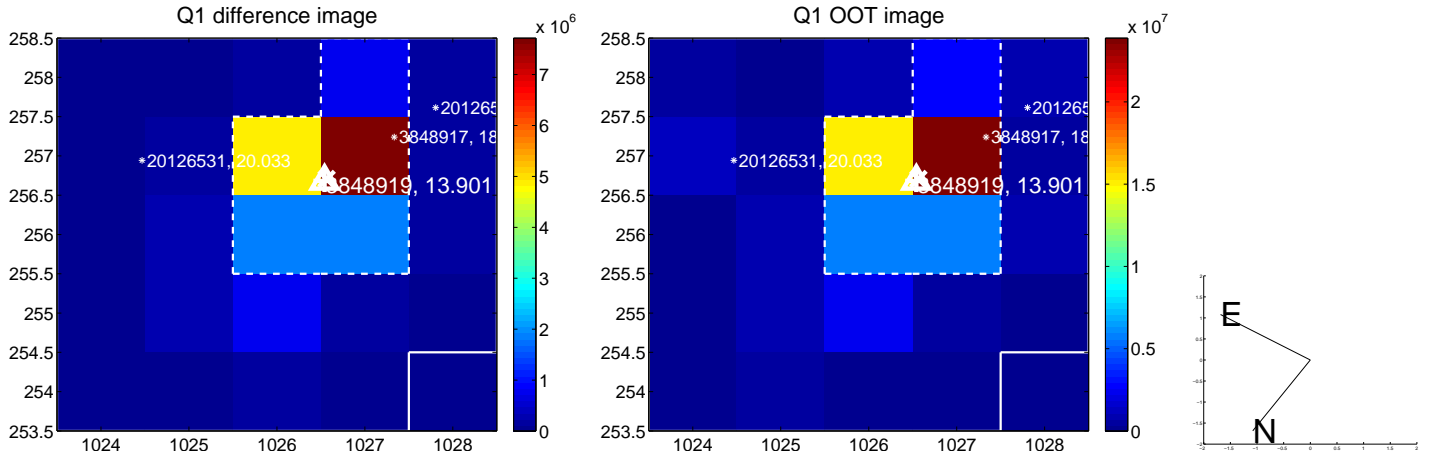
The direct PRF centroid is offset from the target star catalog position by about 0.24 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.009 ± 0.067	0.14	-0.008 ± 0.067	0.006 ± 0.067
PRF-fit source offset from KIC position	0.256 ± 0.069	3.73	-0.031 ± 0.071	0.254 ± 0.068
photometric centroid source offset	0.24 ± 0.00	710.73	-0.01 ± 0.00	0.24 ± 0.00

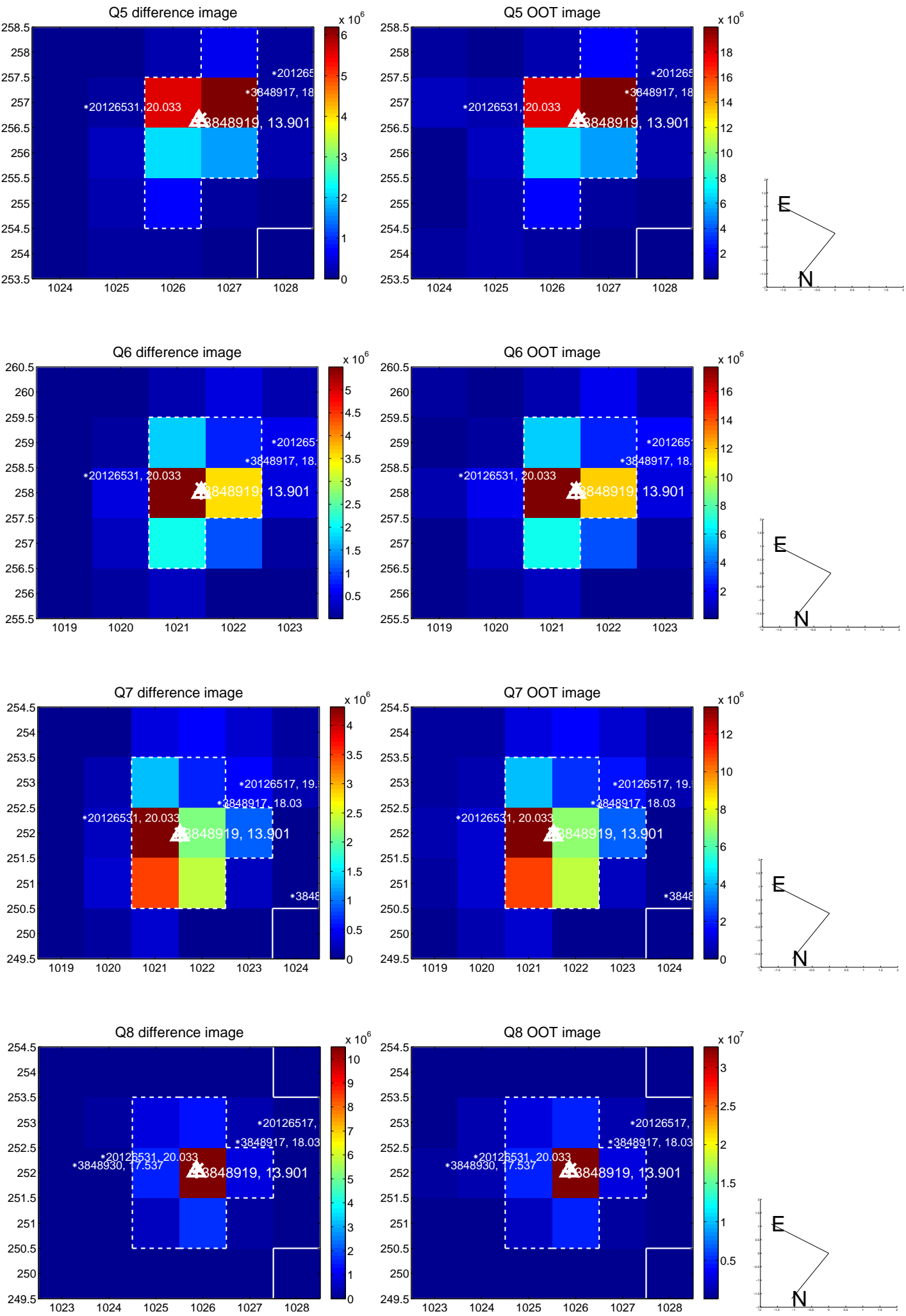


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

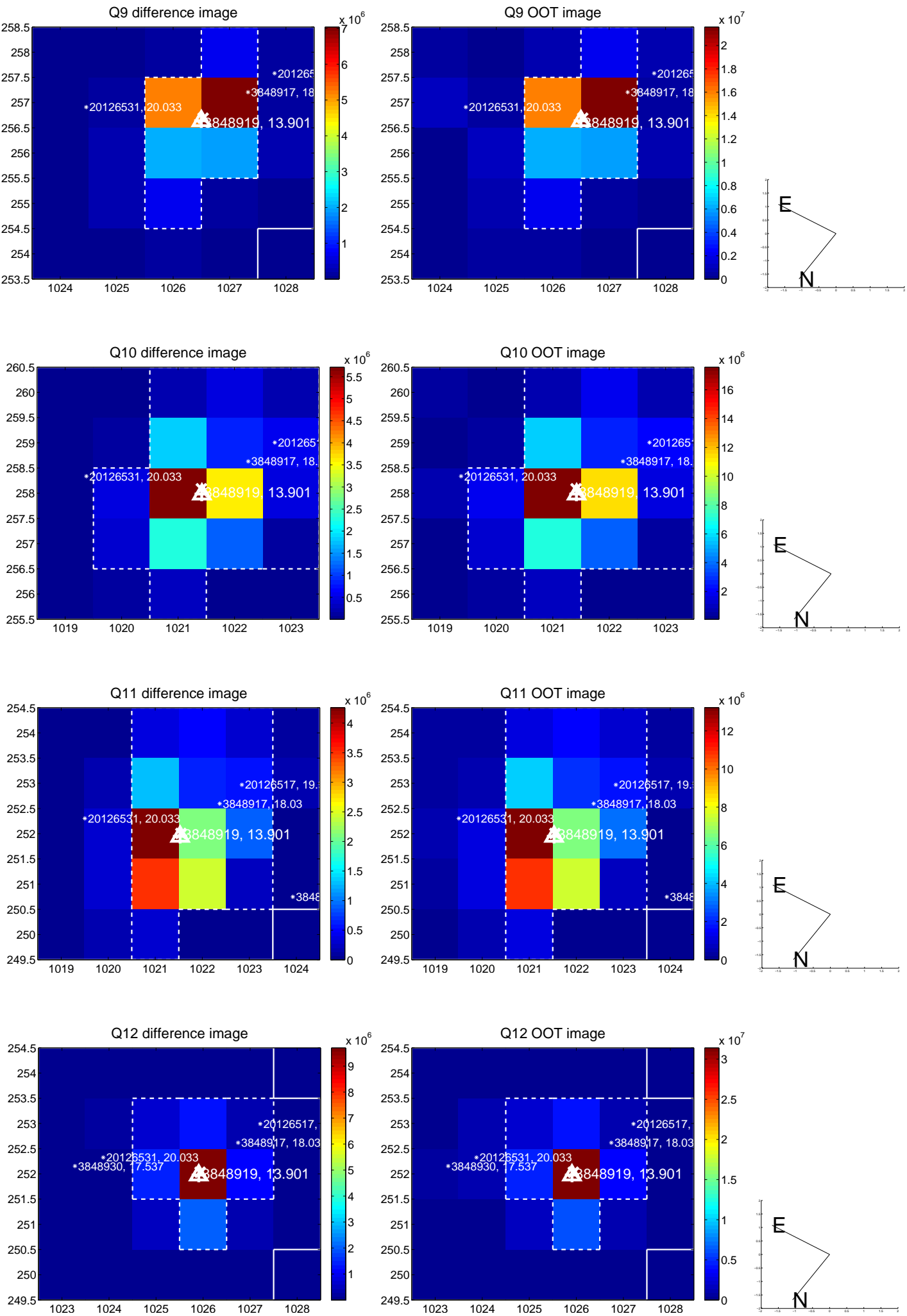
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



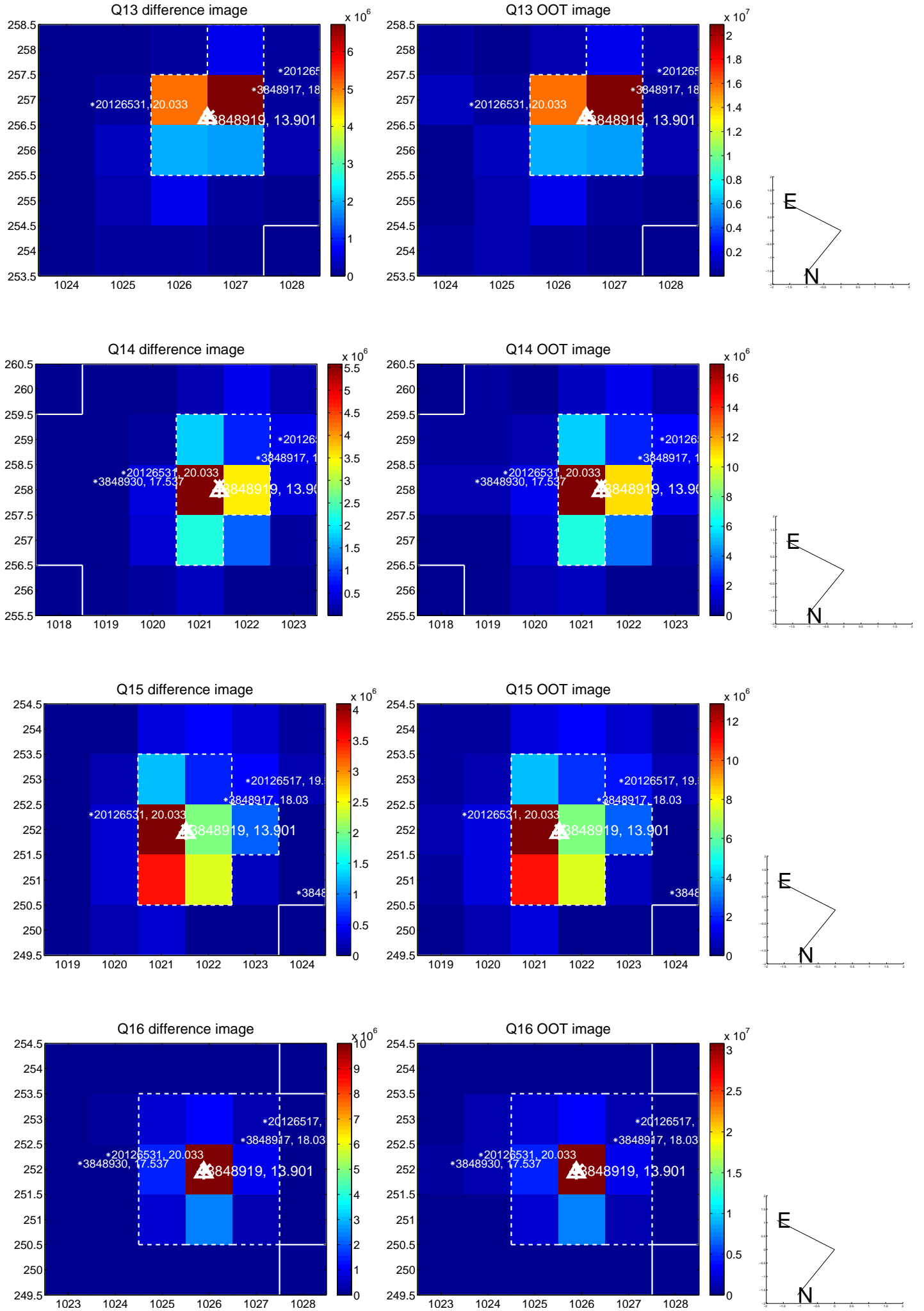
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



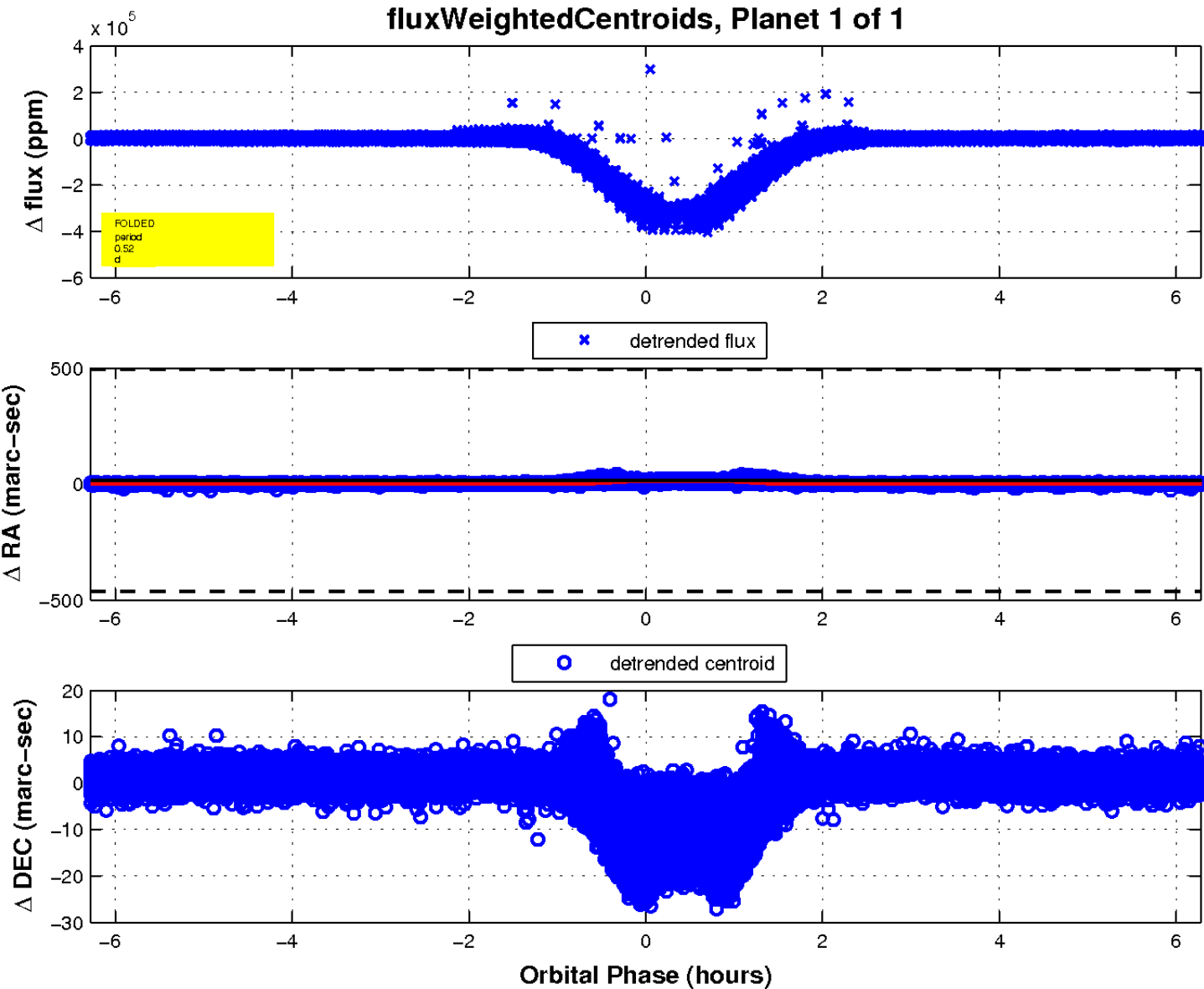
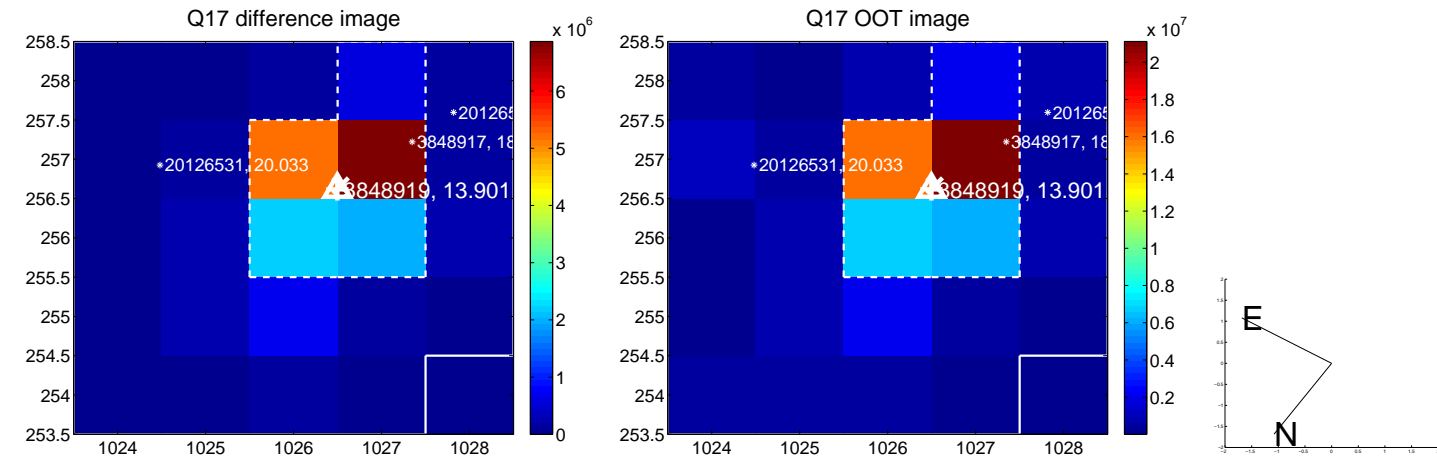
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white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

