

KIC 009579192

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})
009579192-01	OBS	7192.01	12.083537	139.616883	42962.0	7.800	6275.6	5578.9	2.21	6770	50.11	697.87

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
009579192-01	OBS	FP	0.00	0	1	0	0	MOD_SEC_DV—MOD_SEC_ALT

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.

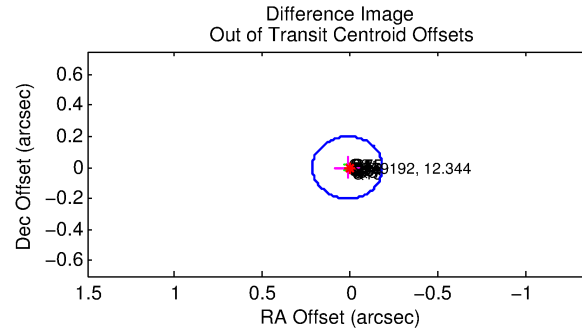
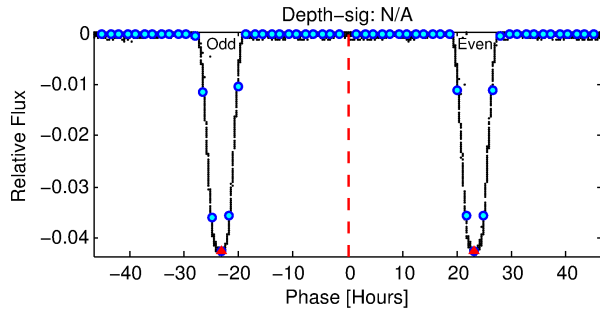
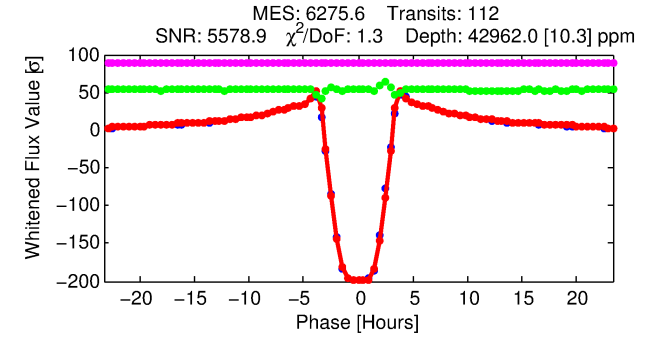
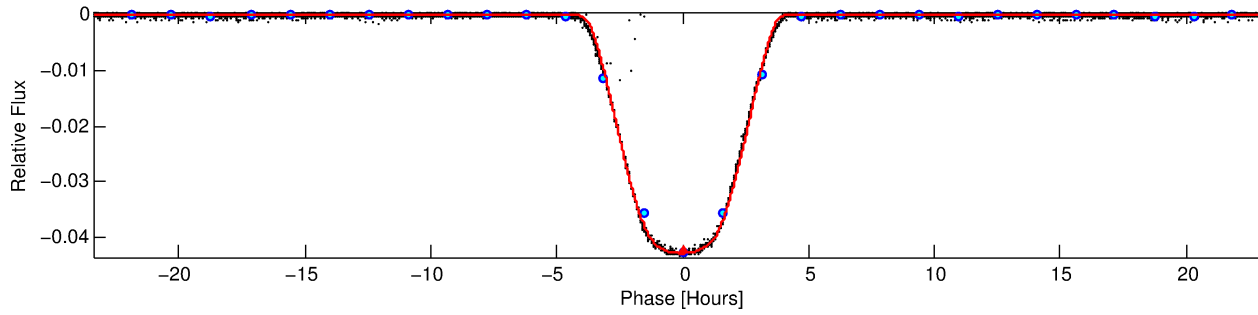
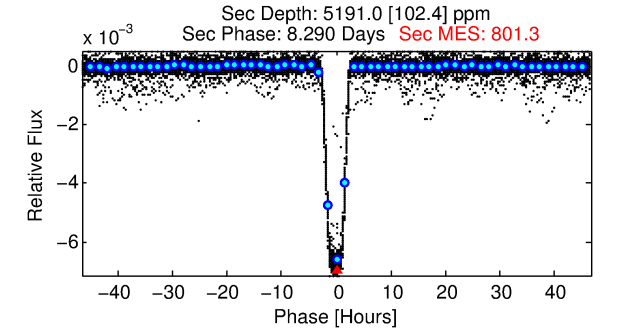
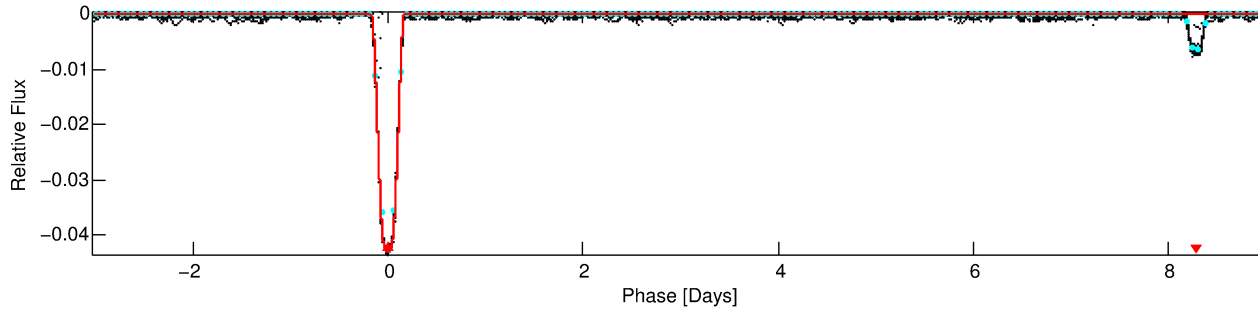
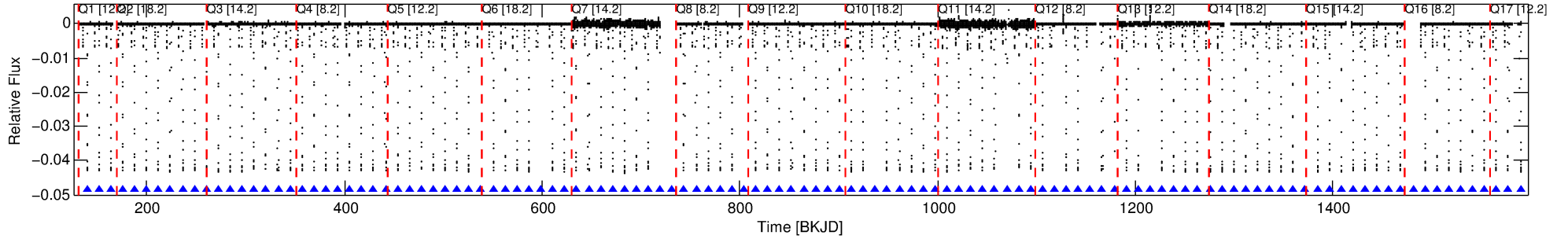
Ephemeris Match Information For 009579192-01

No Significant Match Found

DV One-Page Summary

KIC: 9579192 Candidate: 1 of 1 Period: 12.084 d
KOI: K07192.01 Corr: 0.994

Kp: 12.34 R*: 2.21 Rs Teff: 6770.0 K Logg: 3.89 Fe/H: -0.240



DV Fit Results:

Period = 12.08354 [0.00000] d
Epoch = 139.6169 [0.0000] BKJD
Rp/R* = 0.2074 [0.0000]
a/R* = 11.33 [0.00]
b = 0.74 [0.00]
Seff = 697.87 [329.68]
Teq = 1311 [155] K
Rp = 50.11 [15.41] Re
a = 0.1150 [0.0333] AU
Ag = 15.04 [6.88] [2.04σ]
Teffp = 3990 [121] K [13.63σ]

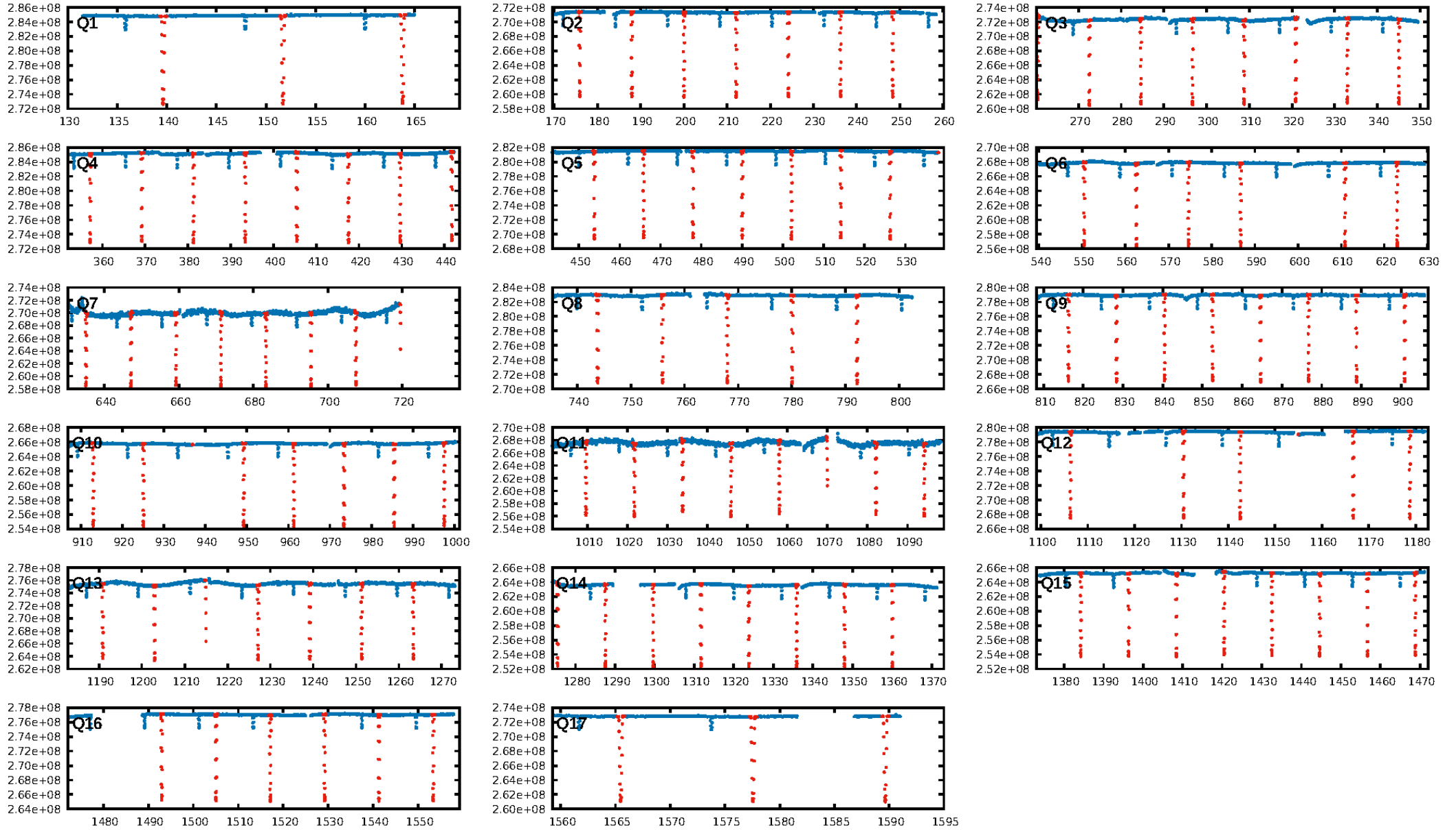
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 0.0%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [106/106]
GhostDiagnostic-chr: 9.151
Centroid-sig: 0.0%
Centroid-so: 0.084 arcsec [96.18σ]
OotOffset-rm: 0.017 arcsec [0.26σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-rm: 0.104 arcsec [1.55σ]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 1.00 [17/17]
DiffImageOverlap-fno: 1.00 [17/17]

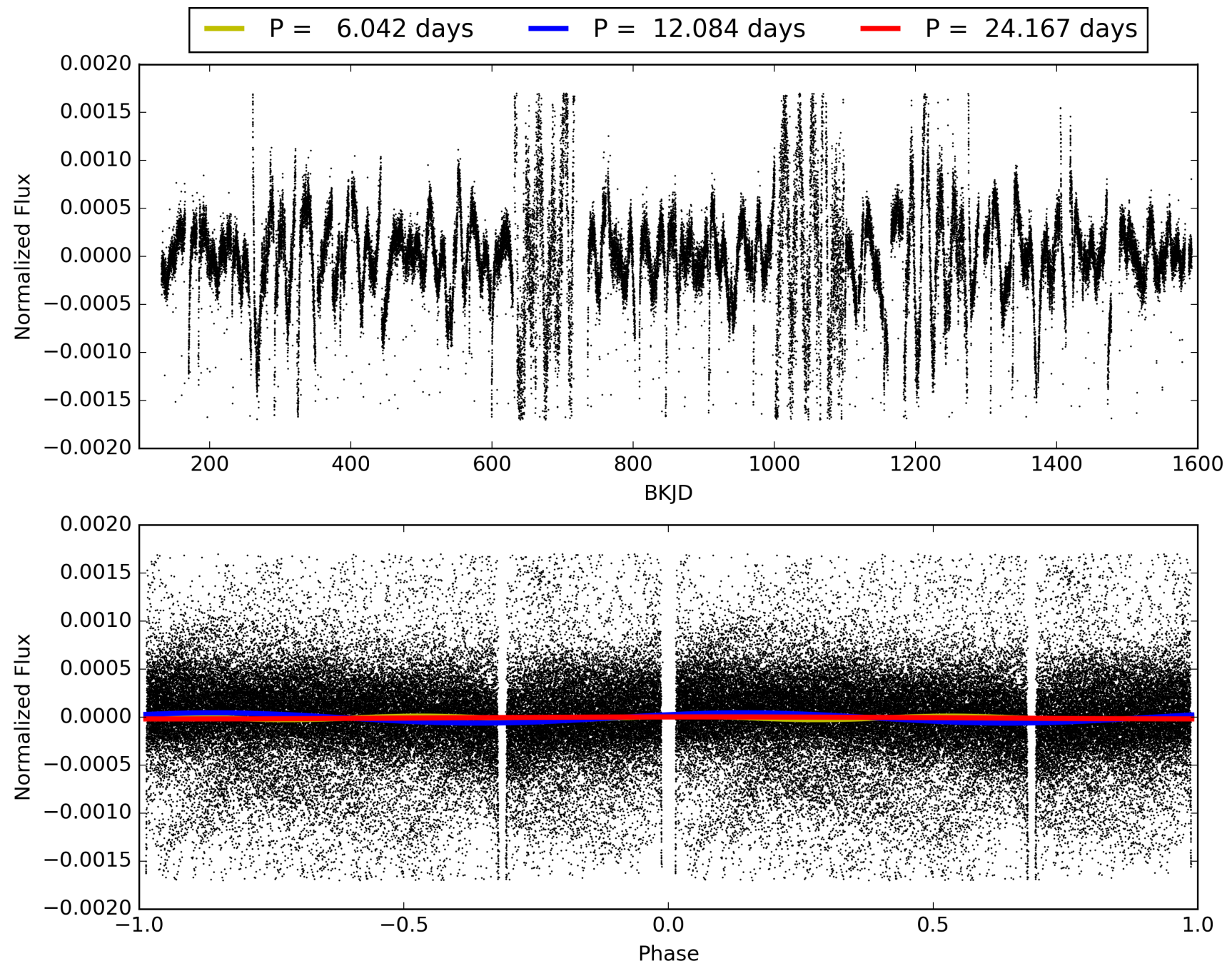
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 05:43:17 Z

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

TCE 009579192-01, PDC Light Curves

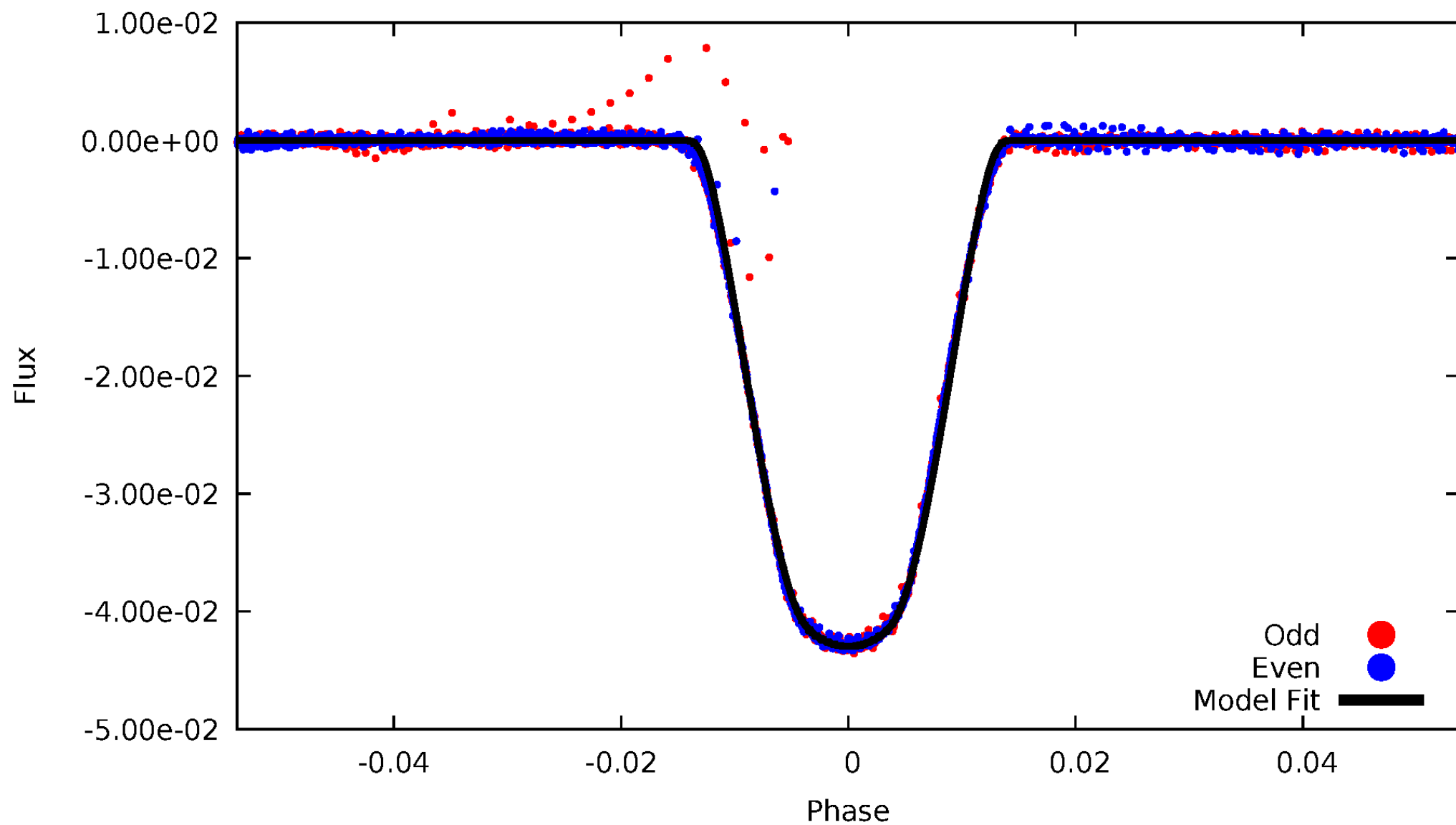


TCE 009579192-01



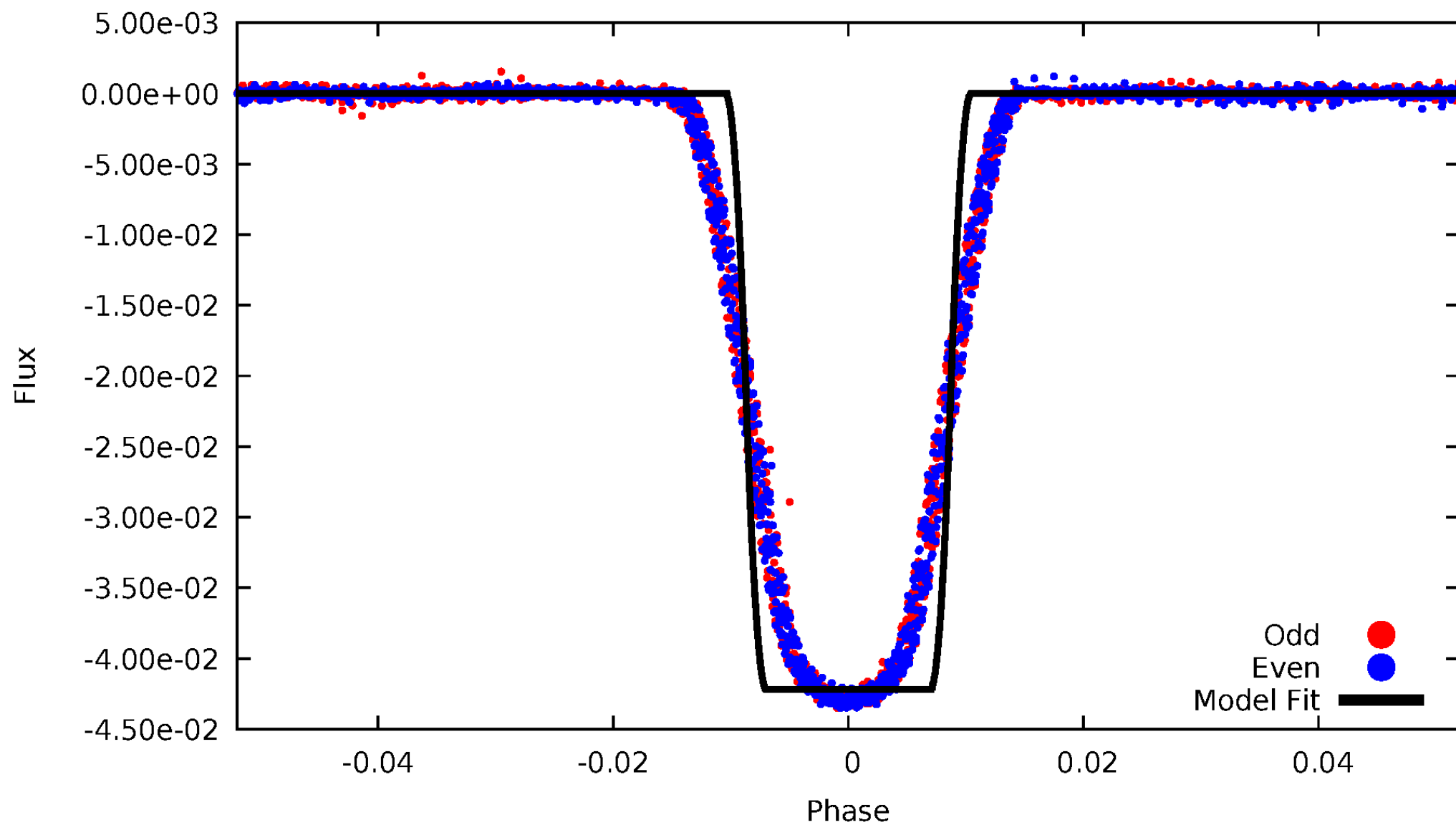
DV Odd/Even

TCE 009579192-01



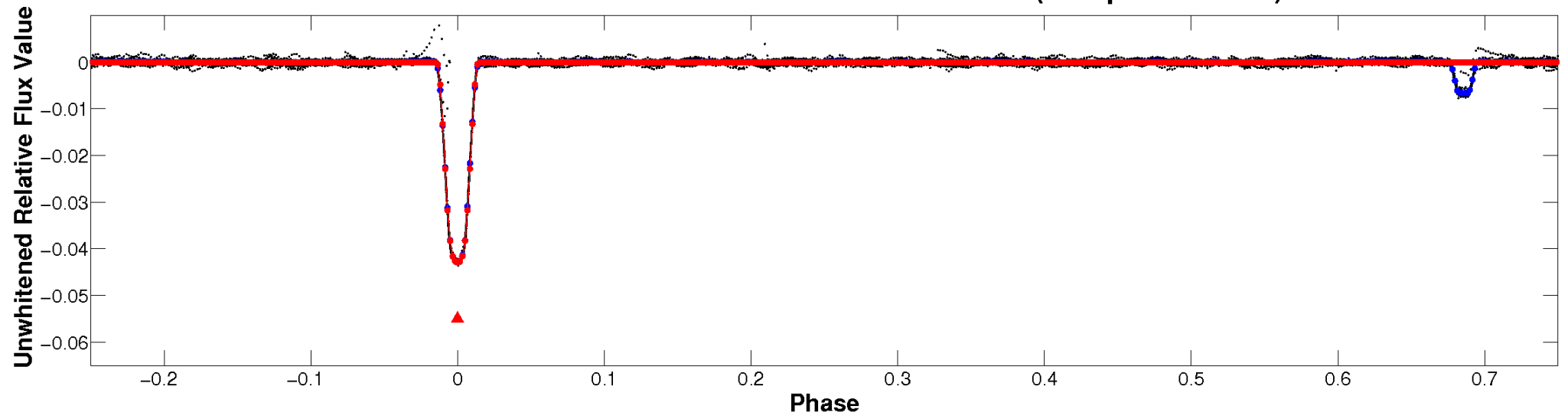
ALT Odd/Even

TCE 009579192-01

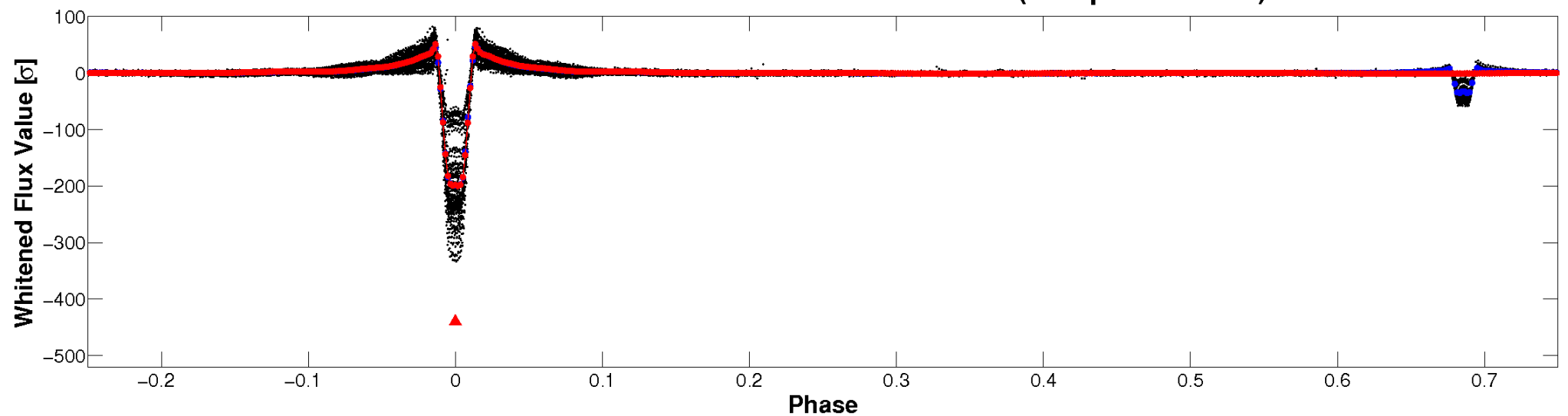


Non-Whitened Vs. Whitened Light Curve

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

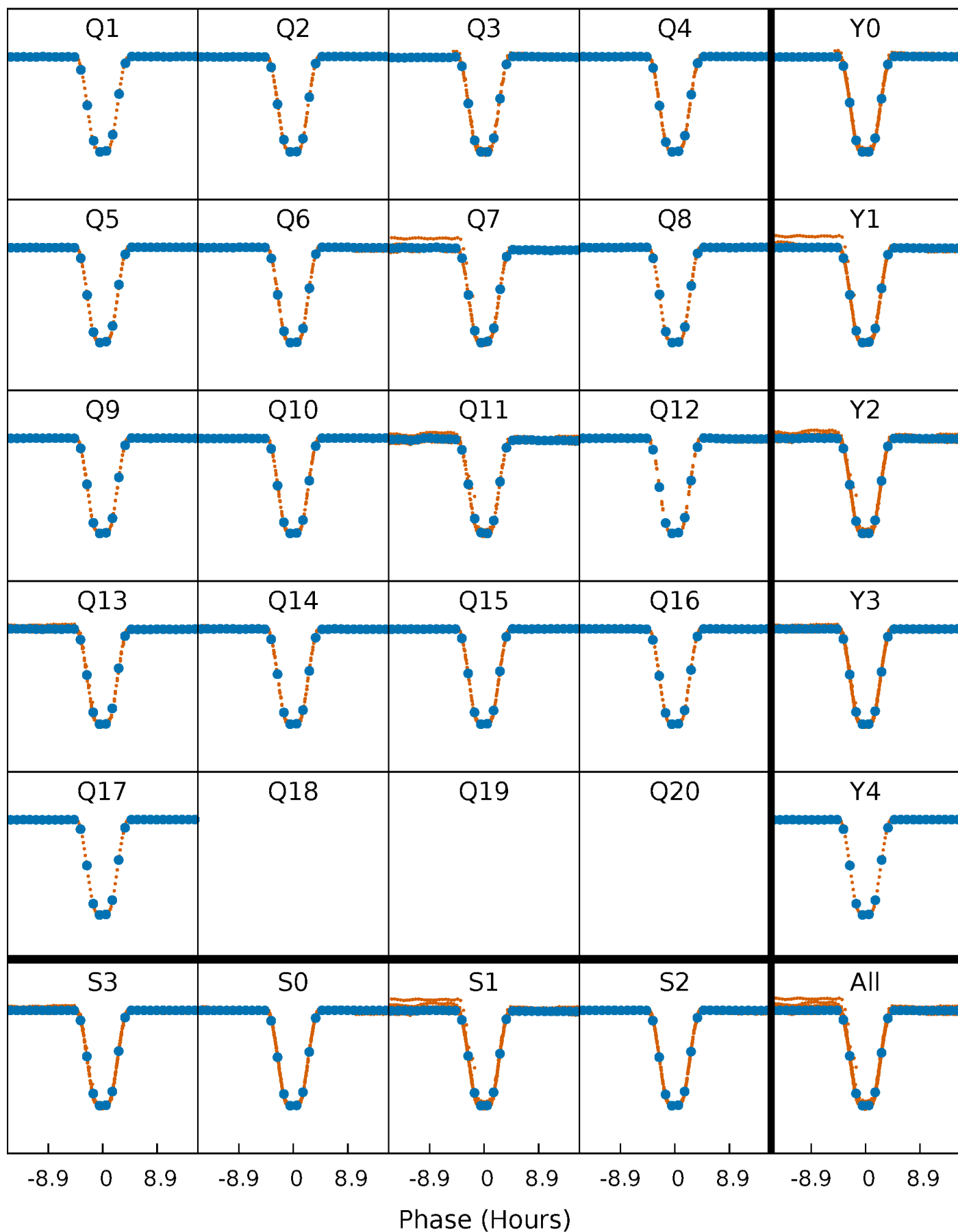


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



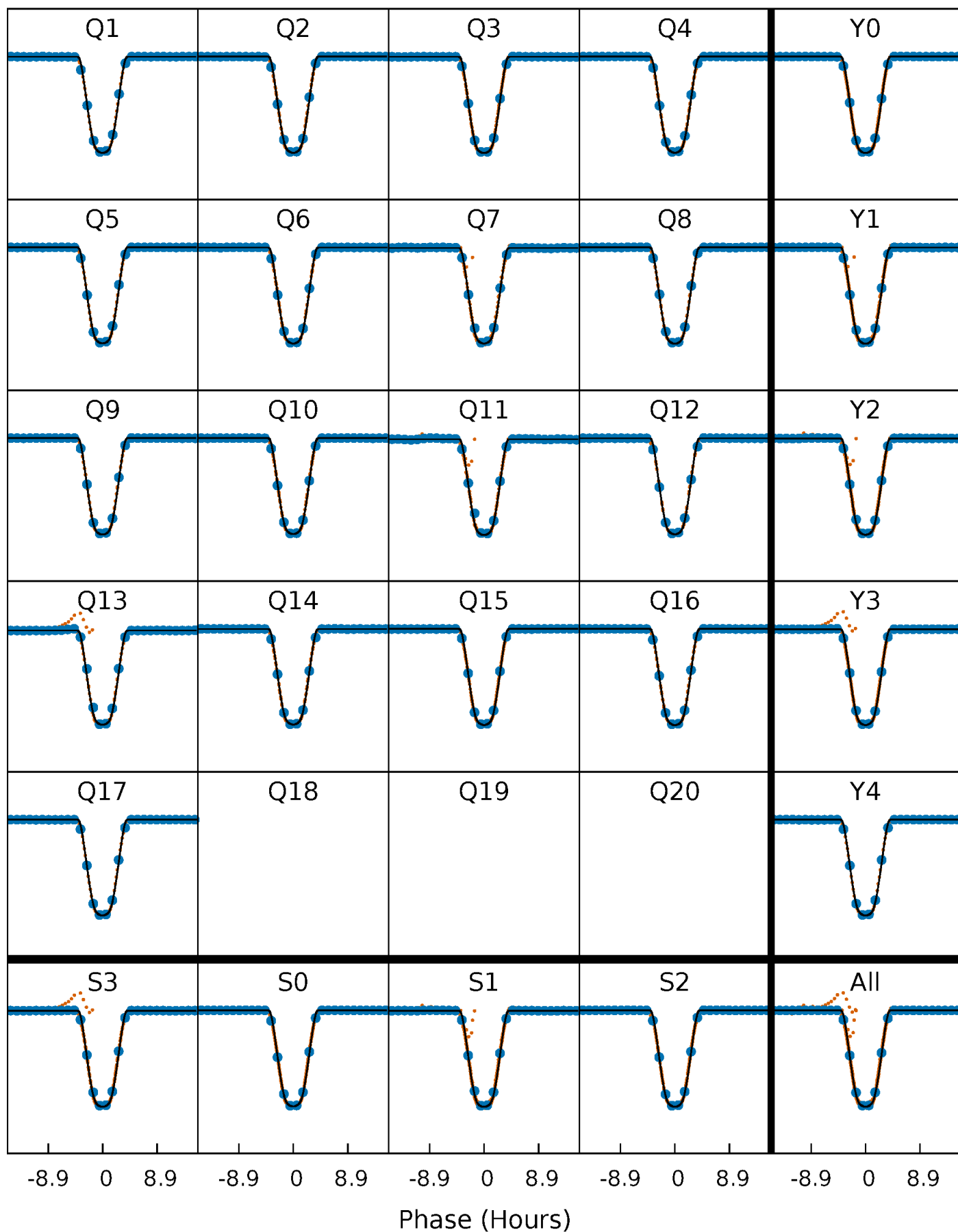
PDC Quarter-Phased Transit Curves

TCE 009579192-01 P= 12.083537 Days $T_0=139.616884$ (BKJD)



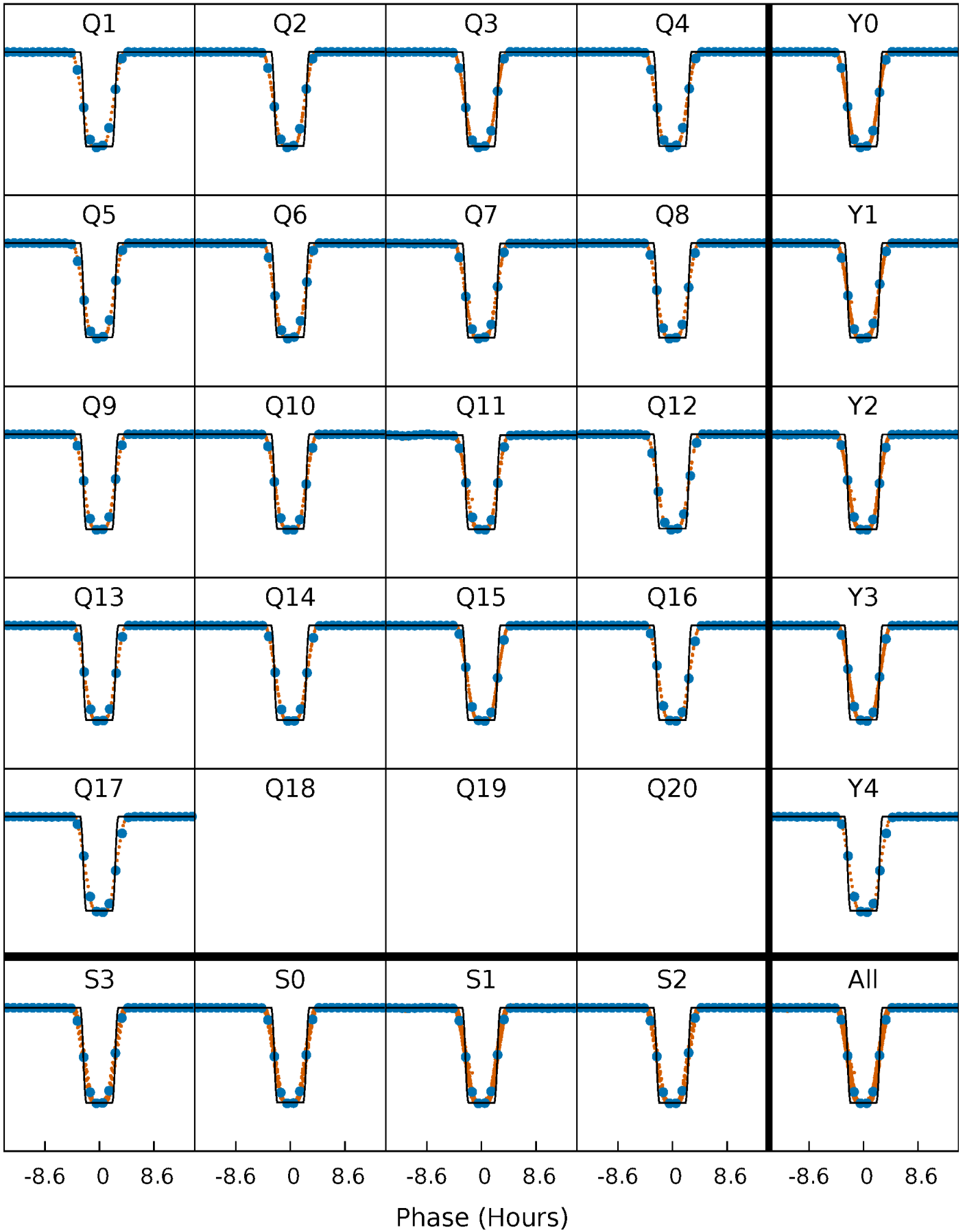
DV Quarter-Phased Transit Curves

TCE 009579192-01 P= 12.083537 Days $T_0=139.616884$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

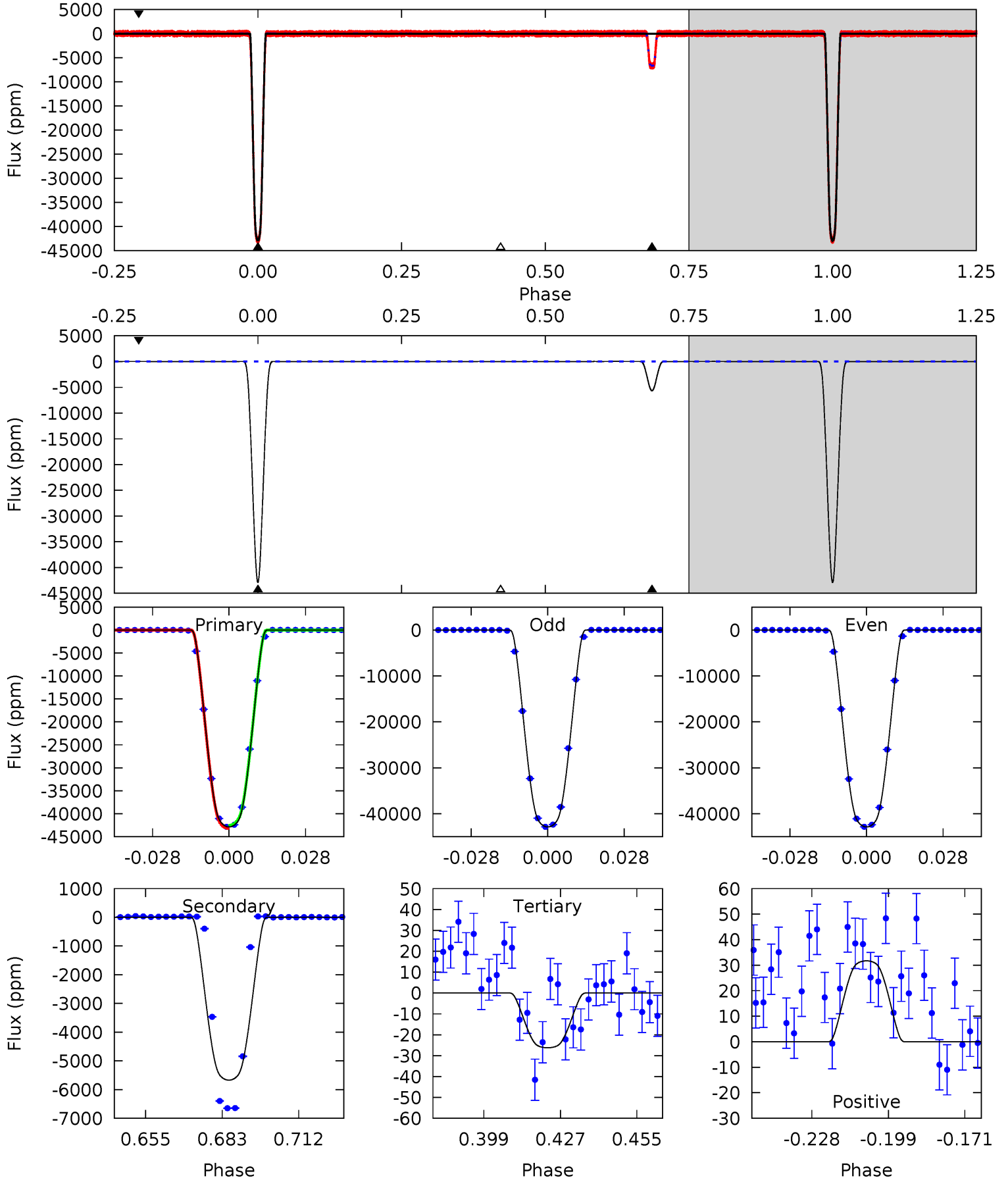
TCE 009579192-01 P= 12.083386 Days $T_0=139.624775$ (BKJD)



DV Model-Shift Uniqueness Test

009579192-01, P = 12.083537 Days, E = 127.533347 Days

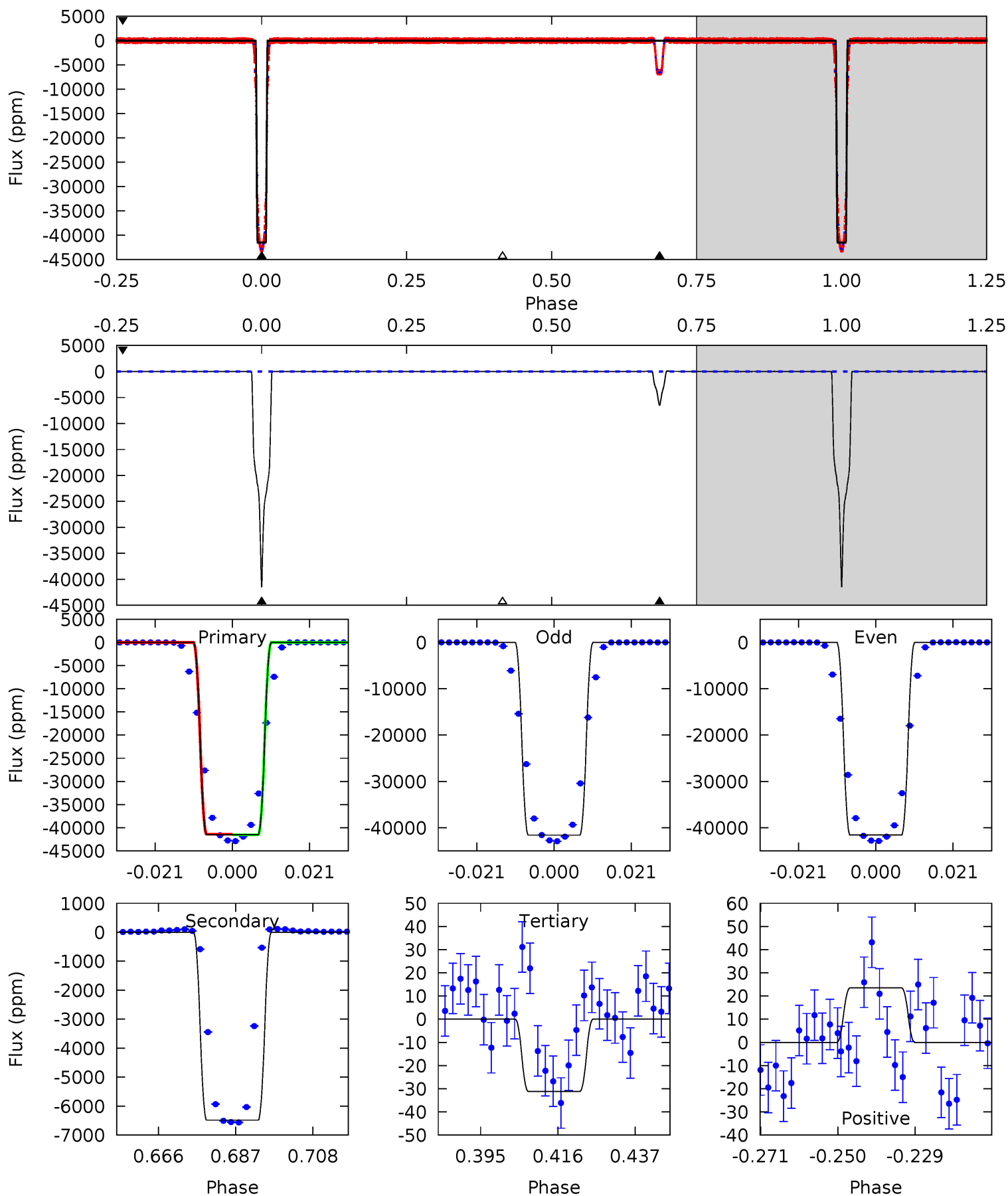
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11821	1564	7.23	8.74	4.82	2.19	3.49	11814	11813	1556	1555	0.11	0.98	0.00	17.6



Alt Model-Shift Uniqueness Test

009579192-01, P = 12.083386 Days, E = 127.541389 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7312	1143	5.50	4.14	4.88	2.31	1.53	7307	7308	1137	1139	0.37	0.99	0.00	1.76



Stellar Parameters For KIC 009579192

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6770^{+162}_{-203}	$3.890^{+0.266}_{-0.114}$	$-0.240^{+0.300}_{-0.250}$	$2.214^{+0.454}_{-0.681}$	$1.389^{+0.231}_{-0.231}$	$0.180^{+0.320}_{-0.065}$
	+2%/-3%	+7%/-3%	+125%/-104%	+21%/-31%	+17%/-17%	+177%/-36%
Source	PHO1	FLK73	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 009579192-01 / KOI 7192.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-5672 ± 4	$49.24^{+6.54}_{-8.11}$	1809^{+113}_{-164}	4296^{+69}_{-99}	17^{+7}_{-3}
Alt.	-6484 ± 6	$49.51^{+6.00}_{-8.98}$	1806^{+118}_{-144}	4420^{+70}_{-86}	20^{+8}_{-4}

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

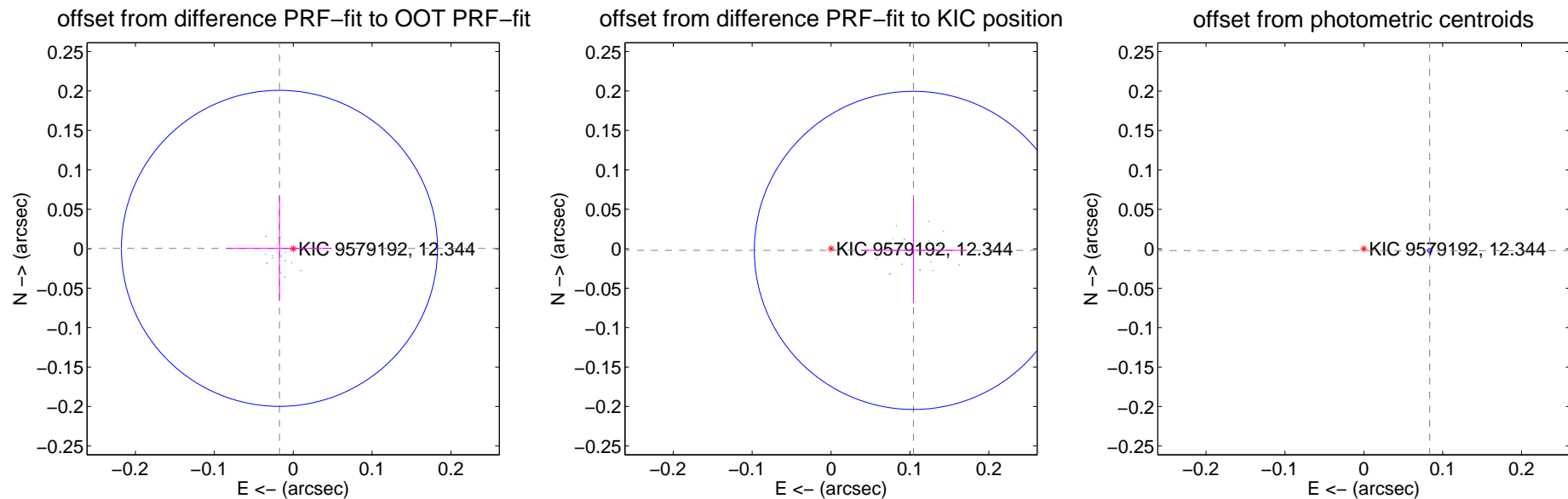
DV Centroid Data

Supplemental centroid analysis for 009579192-01. Kepler magnitude: 12.34. Transit SNR 5578.93

There are 17 quarters with good PRF difference image offsets

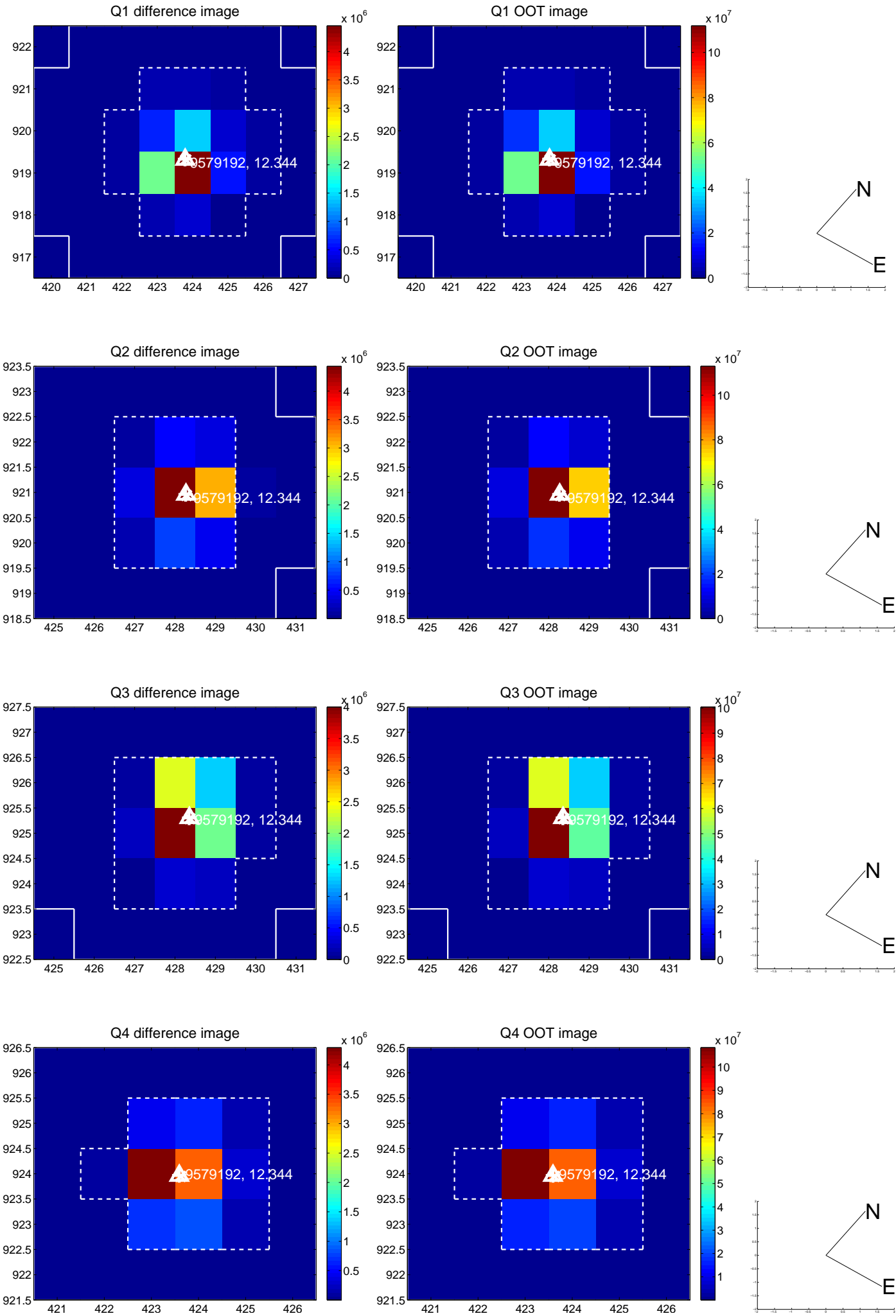
The direct PRF centroid is offset from the target star catalog position by about 0.13 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.017 ± 0.067	0.26	0.017 ± 0.067	0.000 ± 0.067
PRF-fit source offset from KIC position	0.104 ± 0.067	1.55	-0.104 ± 0.067	-0.002 ± 0.067
photometric centroid source offset	0.08 ± 0.00	96.18	-0.08 ± 0.00	-0.00 ± 0.00

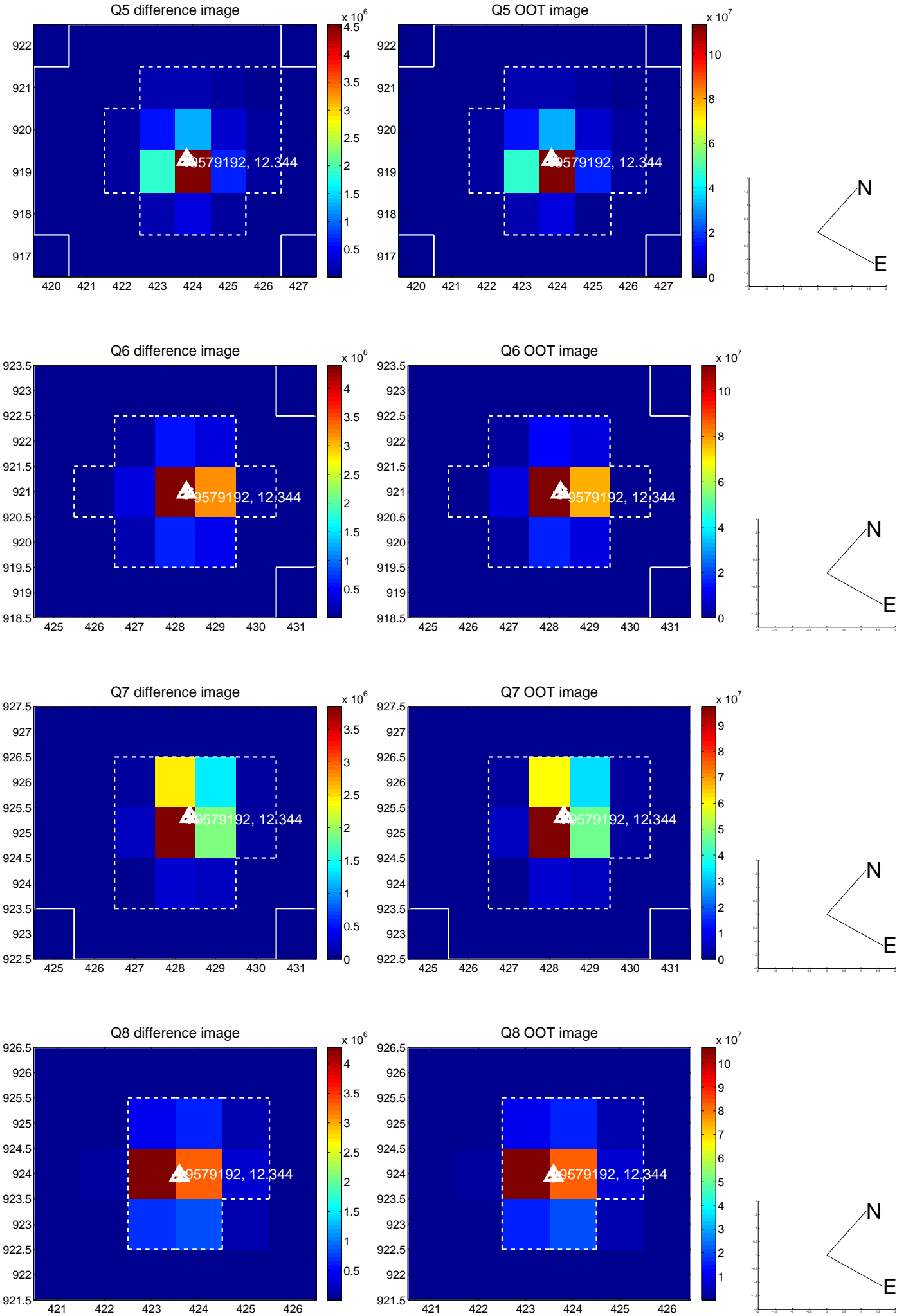


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

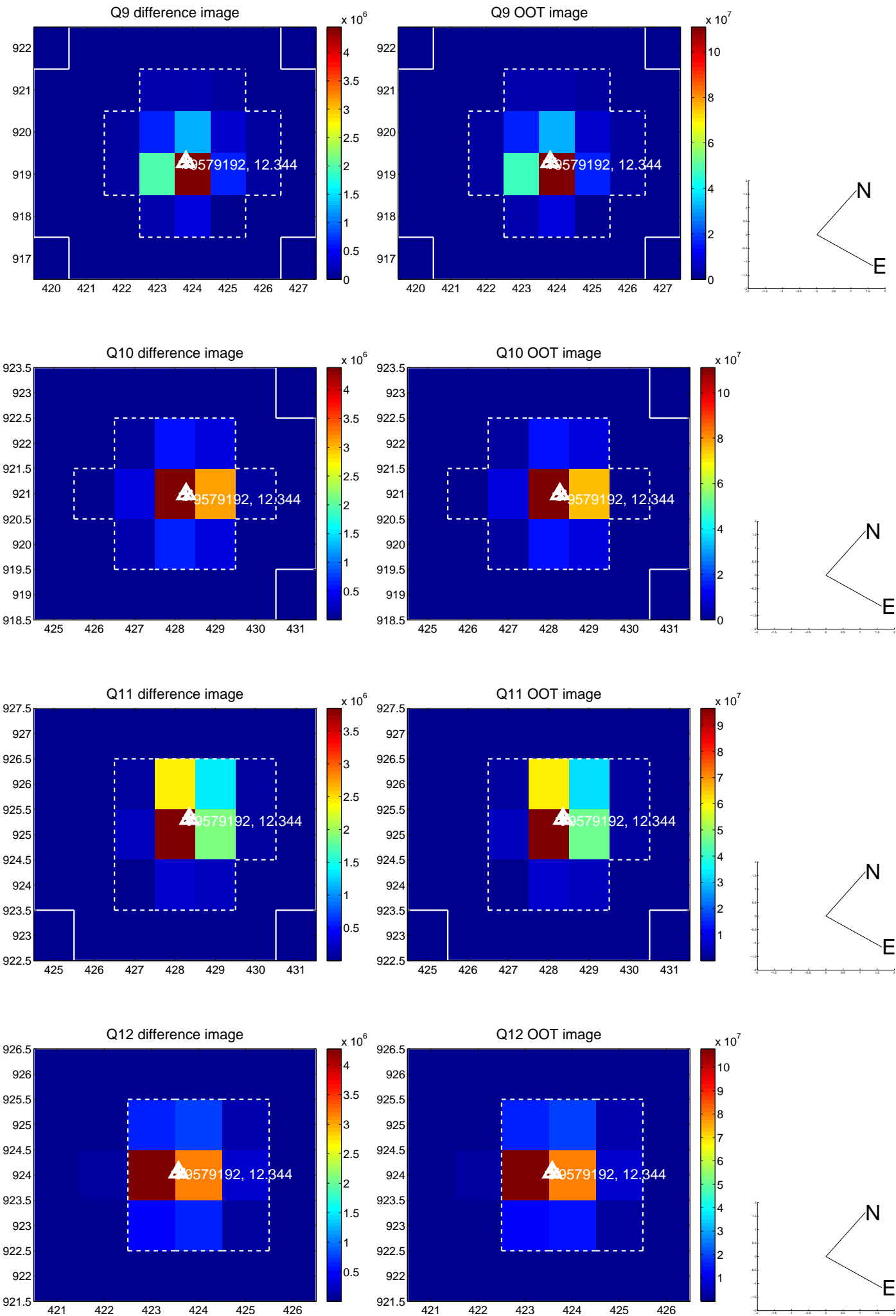
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



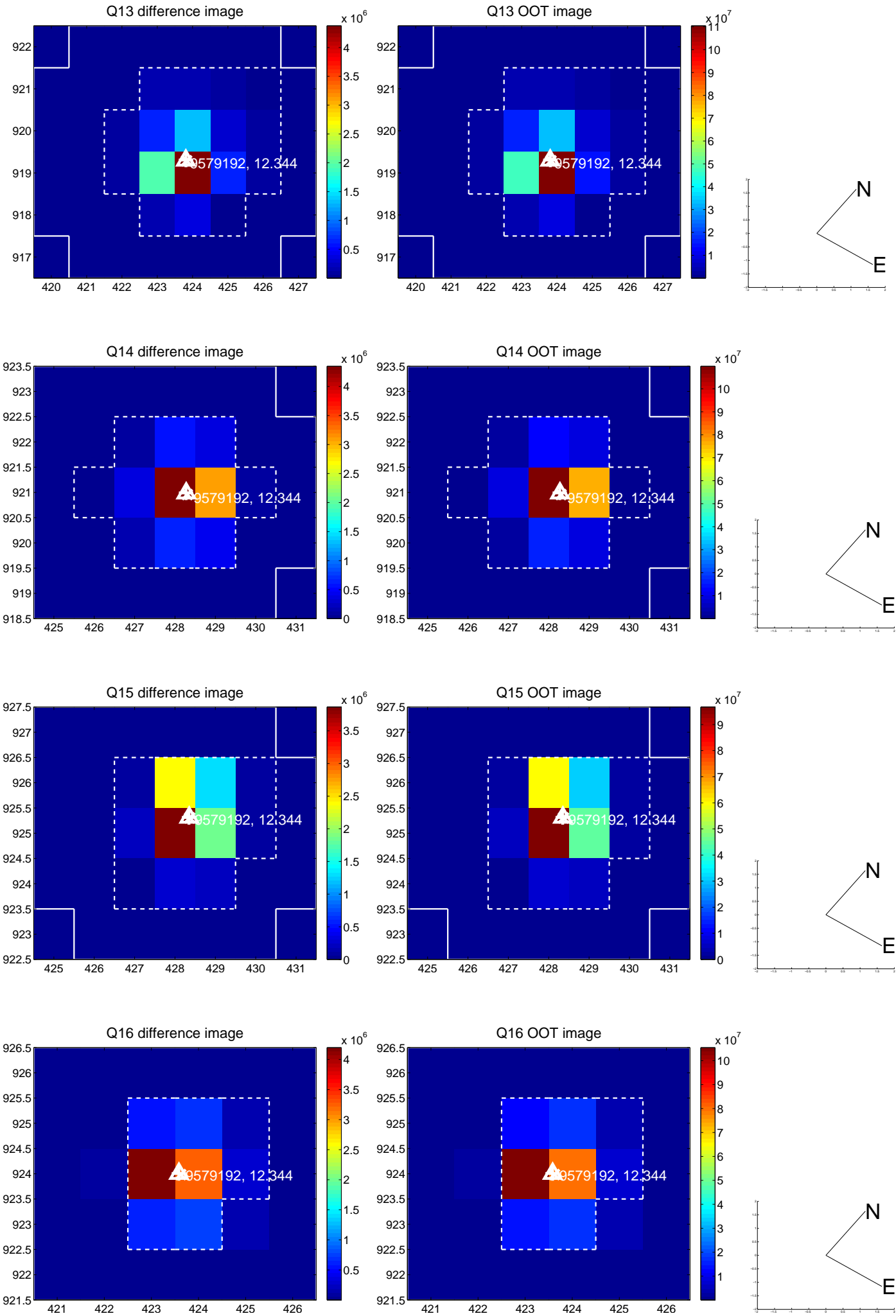
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



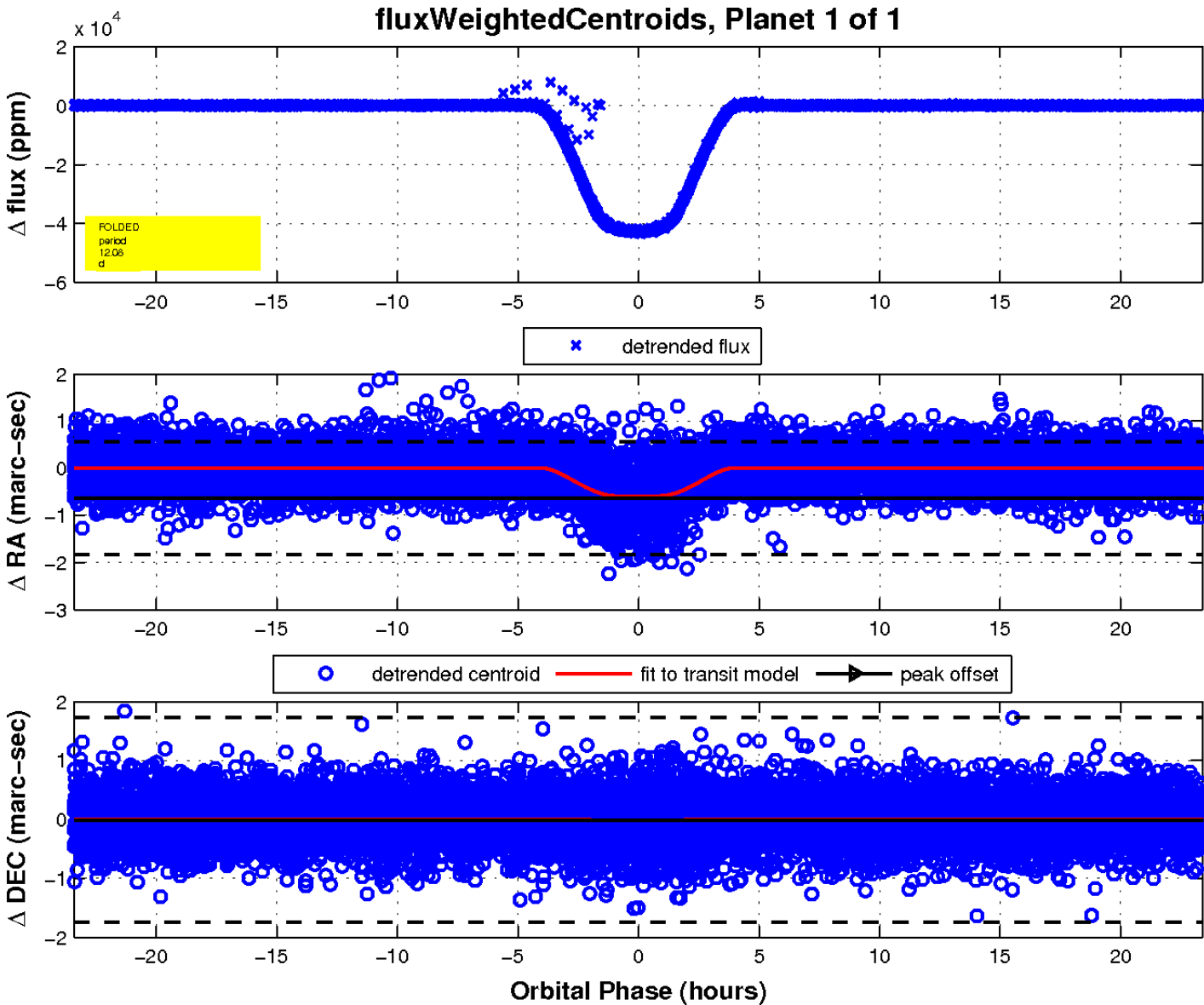
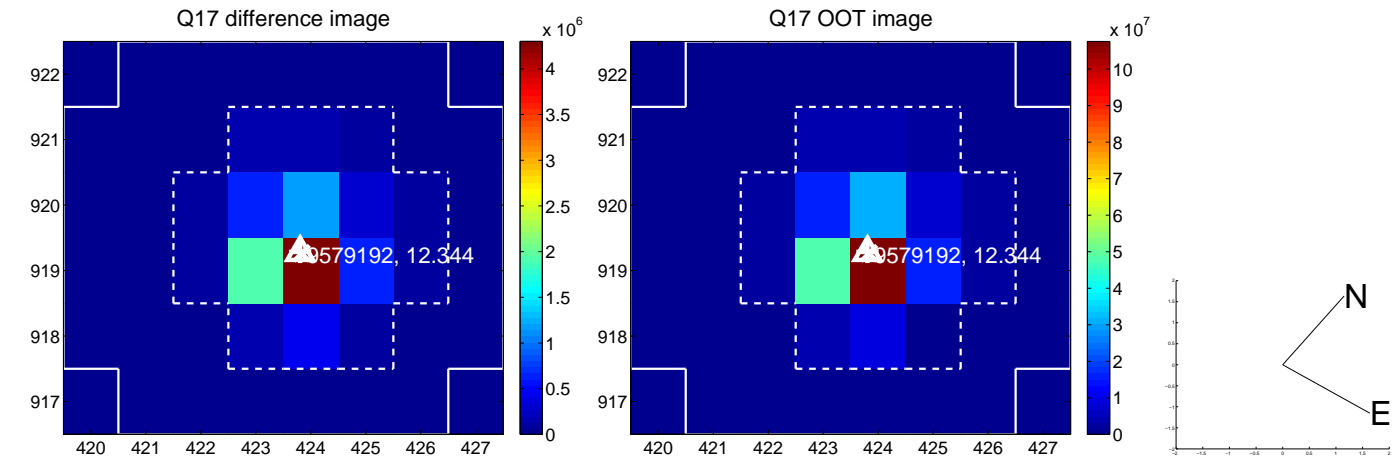
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white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination

