

KIC 011519134

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})
011519134-01	OBS	3419.01	58.585036	140.799749	75130.9	3.594	3454.9	2420.0	1.99	6379	79.28	59.25

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011519134-01	OBS	FP	0.00	0	1	0	0	MOD_ODDEVEN_ALT—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.

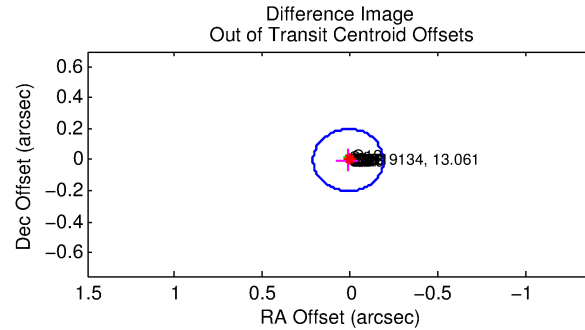
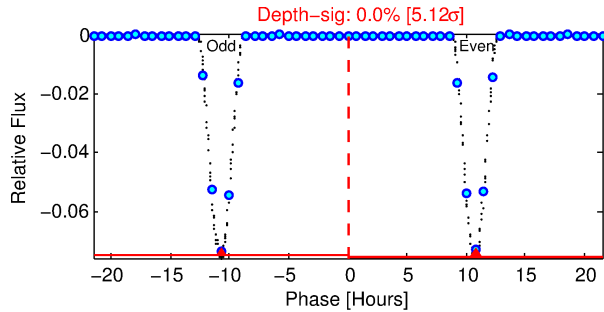
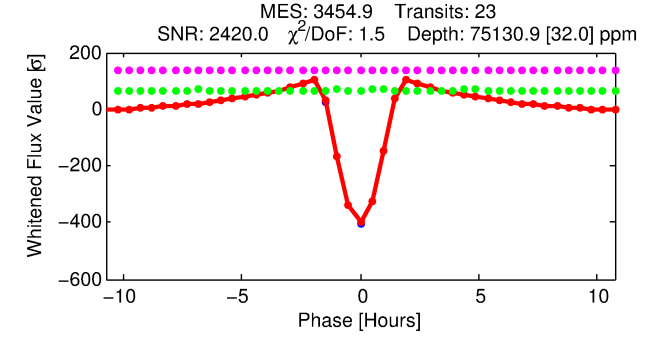
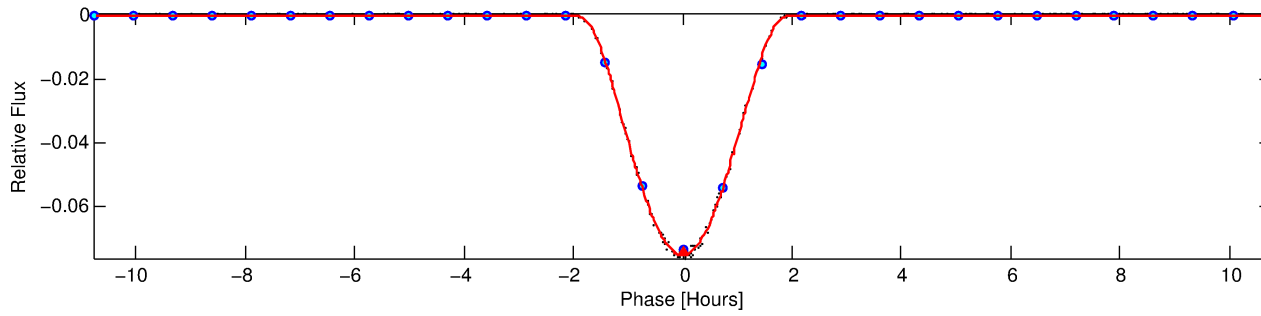
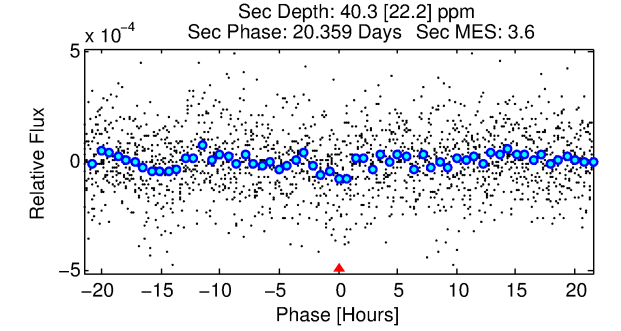
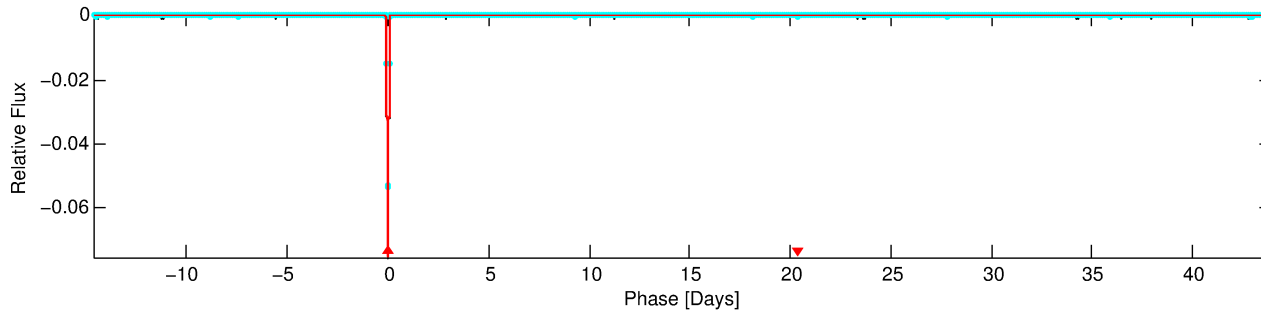
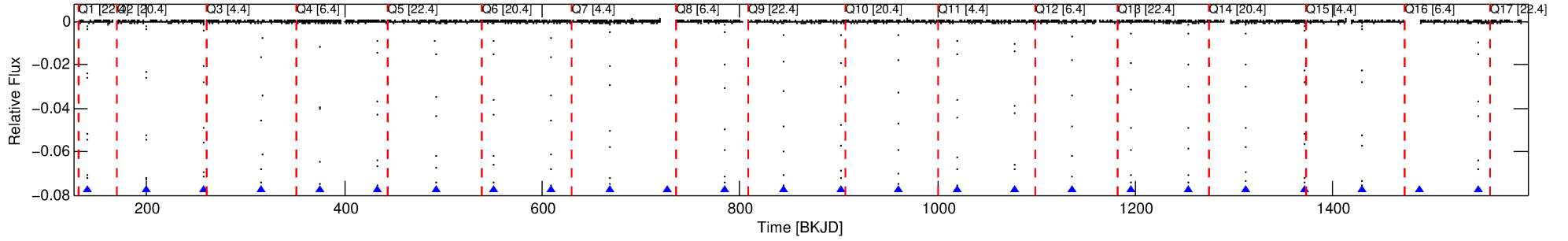
Ephemeris Match Information For 011519134-01

No Significant Match Found

DV One-Page Summary

KIC: 11519134 Candidate: 1 of 1 Period: 58.585 d
KOI: K03419.01 Corr: 0.998

Kp: 13.06 R*: 1.99 Rs Teff: 6379.0 K Logg: 3.92 Fe/H: -0.240



DV Fit Results:

Period = 58.58504 [0.00000] d
Epoch = 140.7997 [0.0000] BKJD
Rp/R* = 0.3644 [0.0074]
a/R* = 126.59 [0.10]
b = 0.91 [0.01]
Seff = 59.25 [28.70]
Teff = 707 [86] K
Rp = 79.28 [25.86] Re
a = 0.3155 [0.0952] AU
Ag = 0.35 [0.26] [-2.54σ]
Teffp = 842 [119] K [0.92σ]

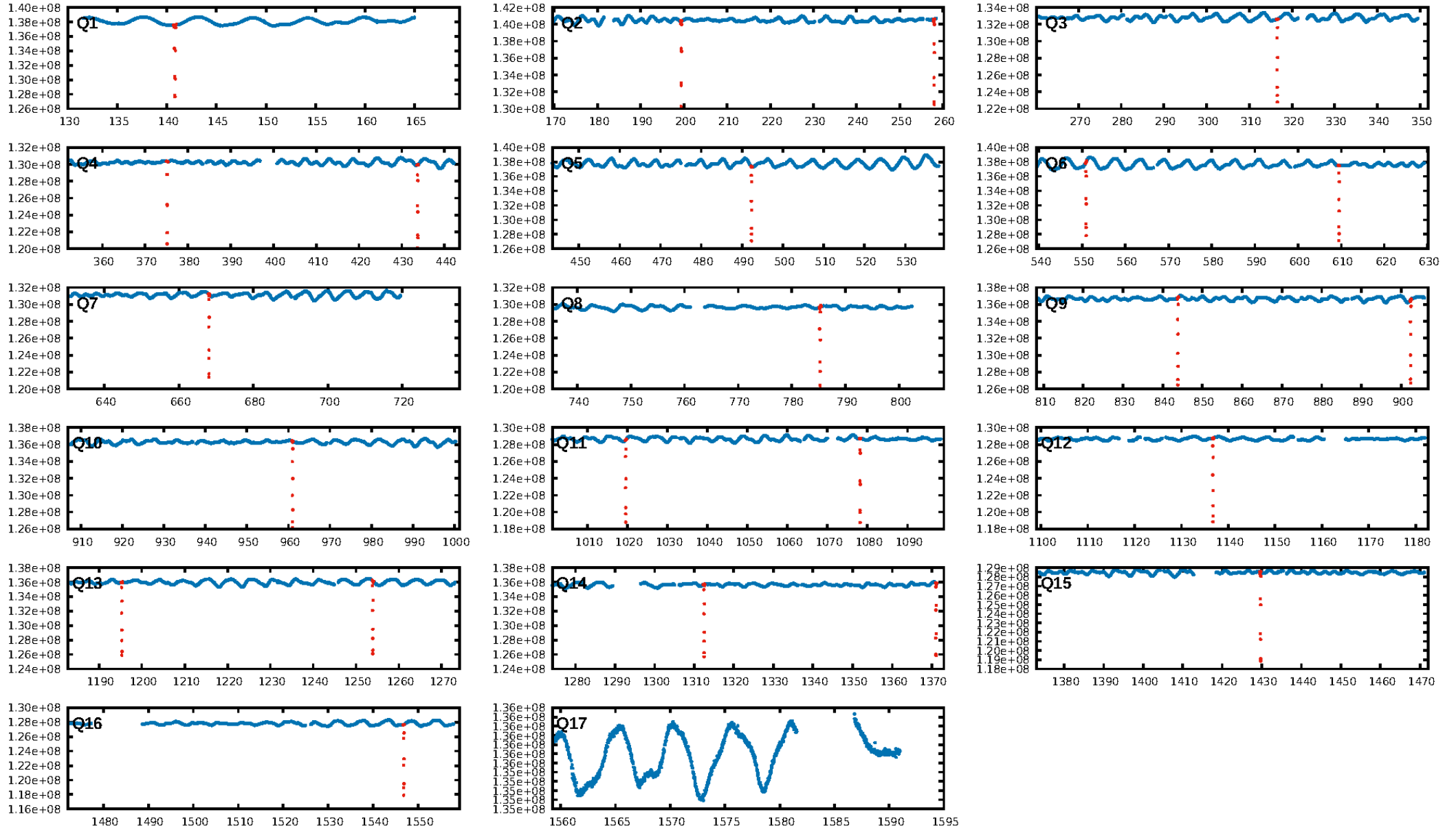
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 0.0%
Bootstrap-pfa: 0.00e+00
RollingBand-fgt: 1.00 [22/22]
GhostDiagnostic-chr: 3.994
Centroid-sig: 0.0%
Centroid-so: 0.266 arcsec [87.77σ]
OotOffset-rm: 0.012 arcsec [0.18σ]
KicOffset-rm: 0.111 arcsec [1.64σ]
OotOffset-st: 4/4/4/4 [16]
KicOffset-st: 4/4/4/4 [16]
DiffImageQuality-fgm: 1.00 [16/16]
DiffImageOverlap-fno: 1.00 [16/16]

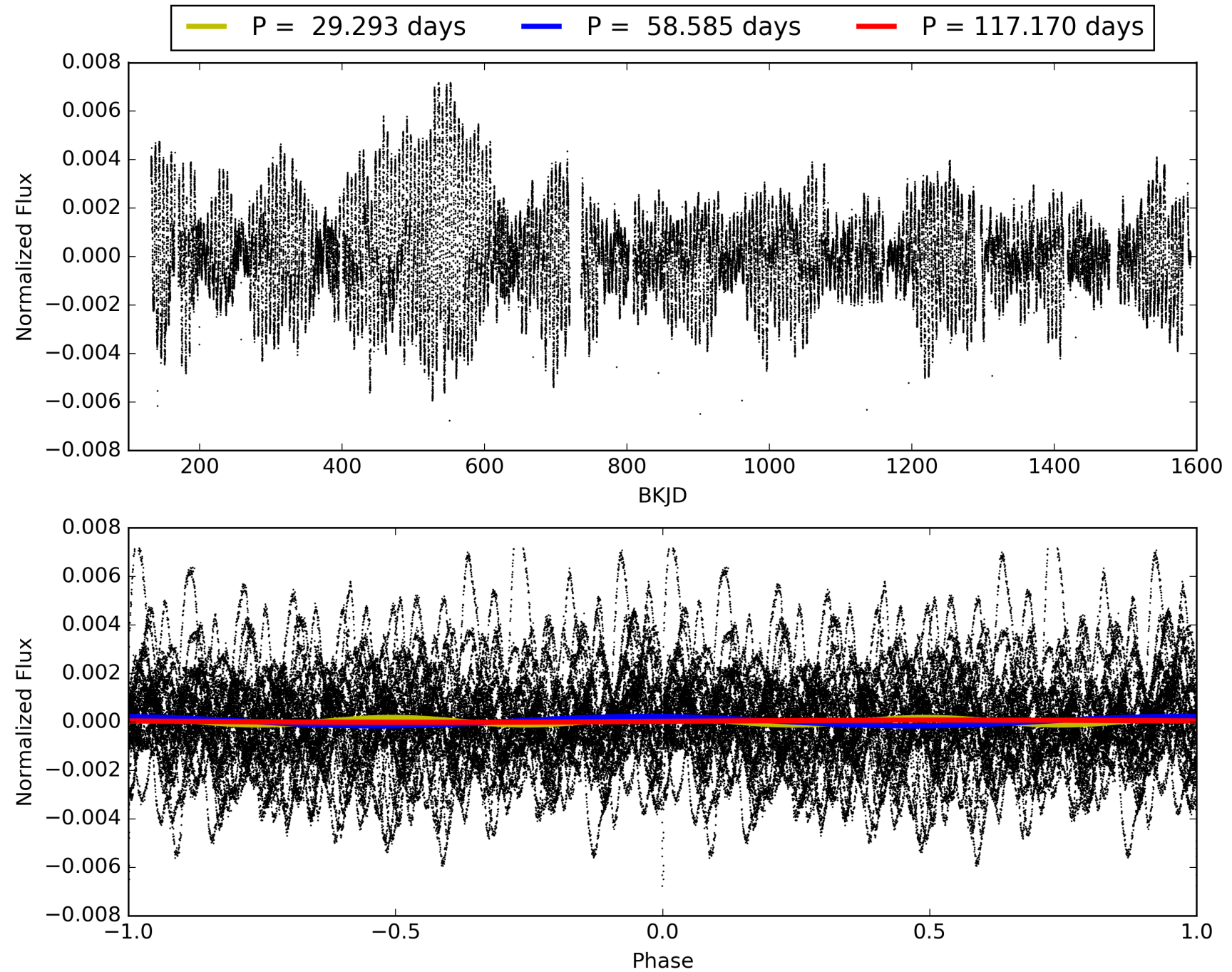
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 07:34:05 Z

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

TCE 011519134-01, PDC Light Curves

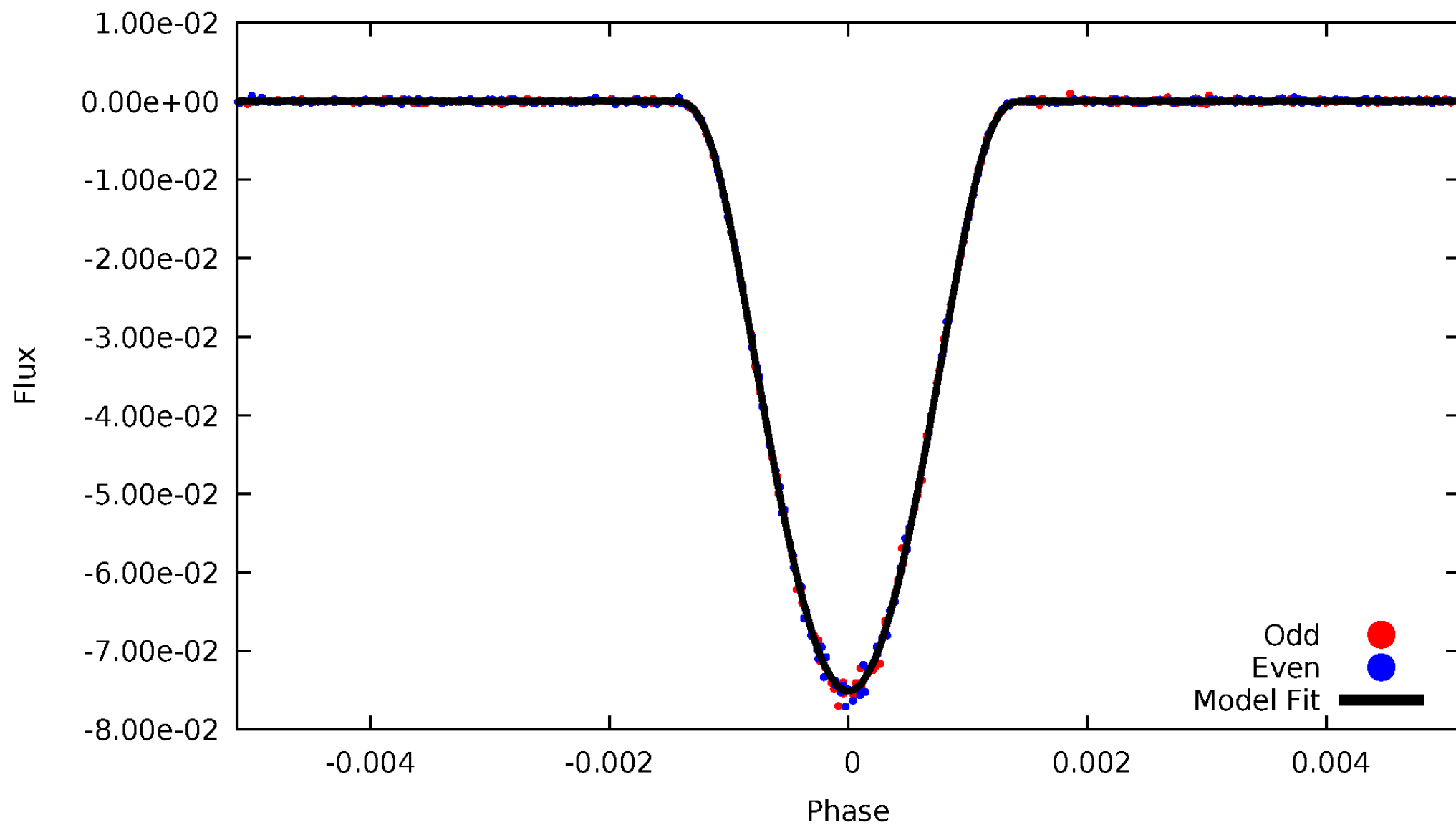


TCE 011519134-01



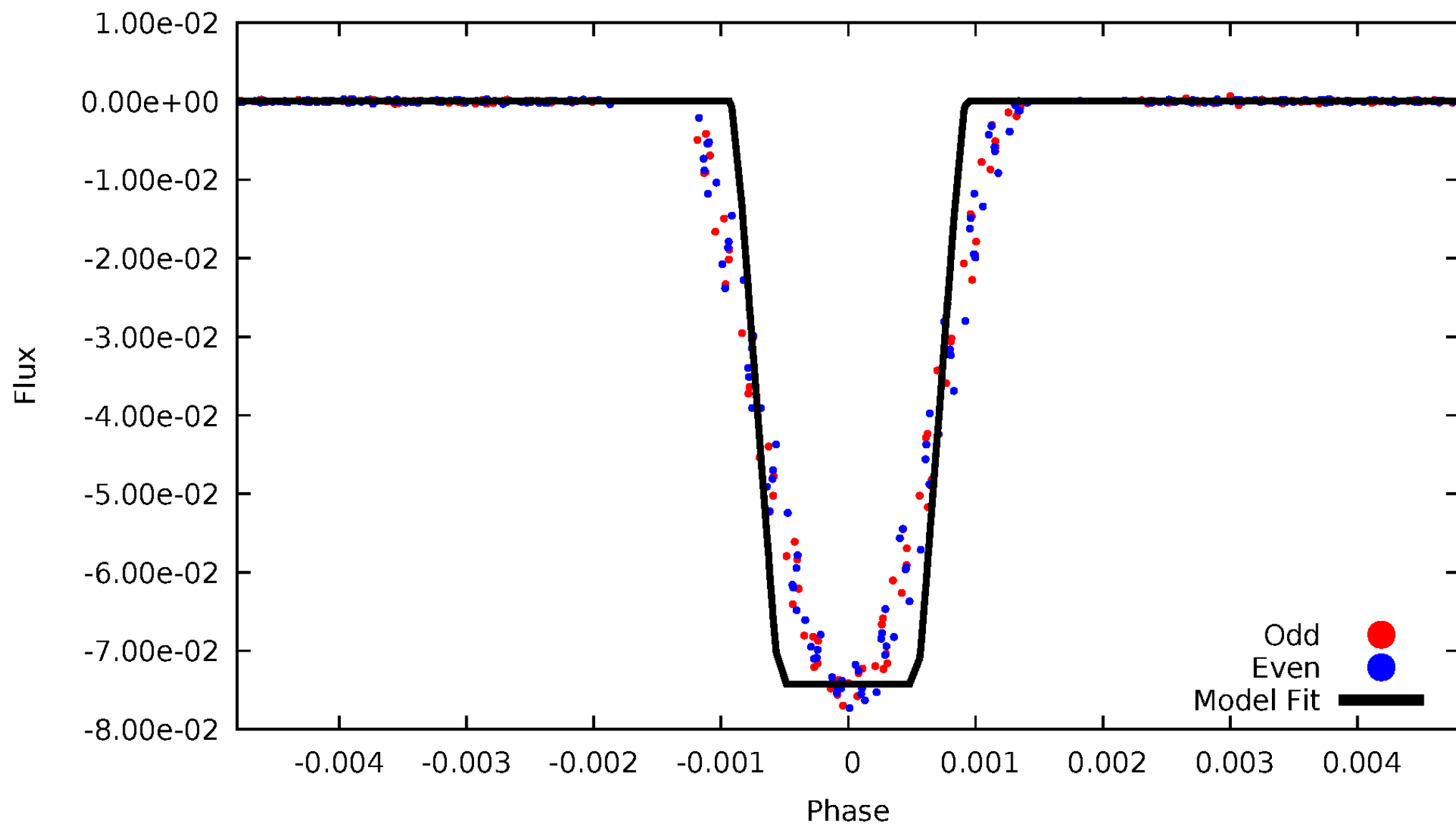
DV Odd/Even

TCE 011519134-01



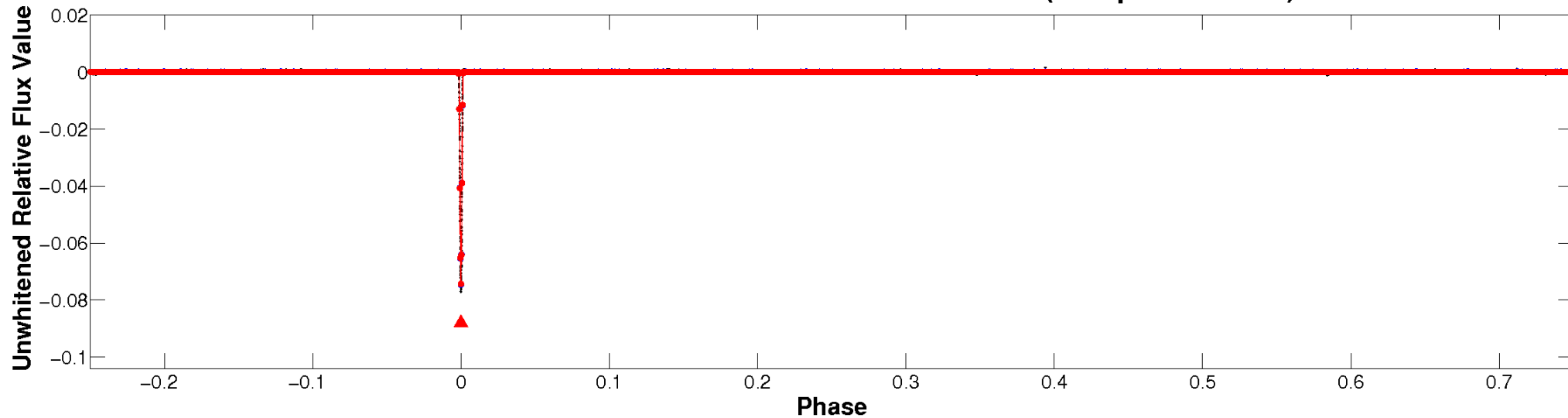
ALT Odd/Even

TCE 011519134-01

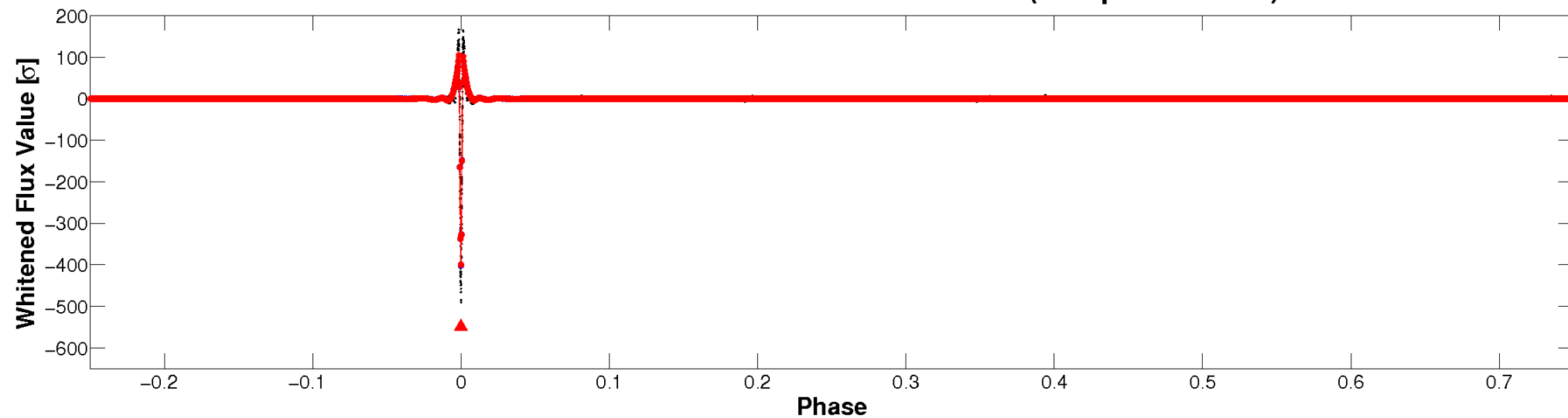


Non-Whitened Vs. Whitened Light Curve

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

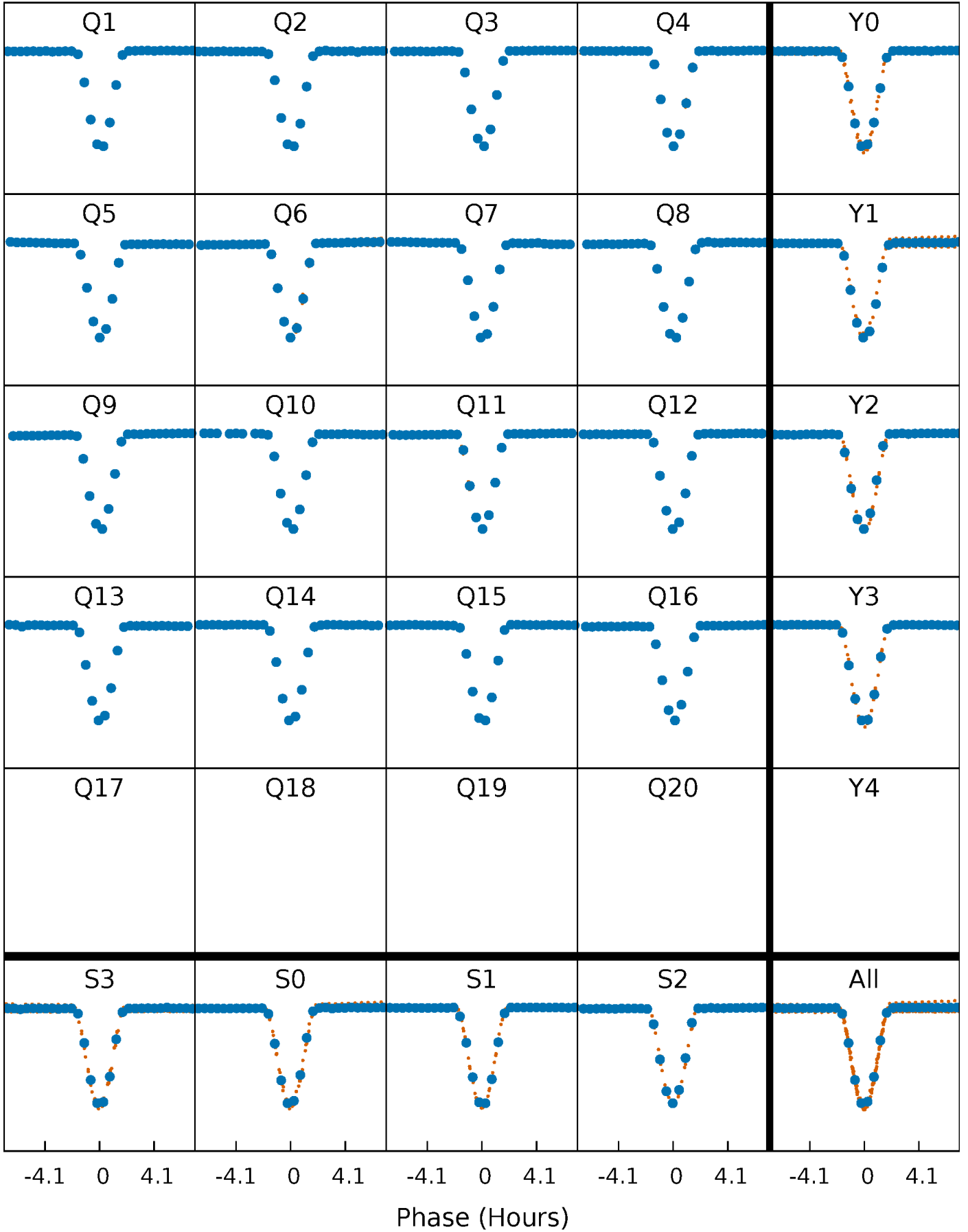


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



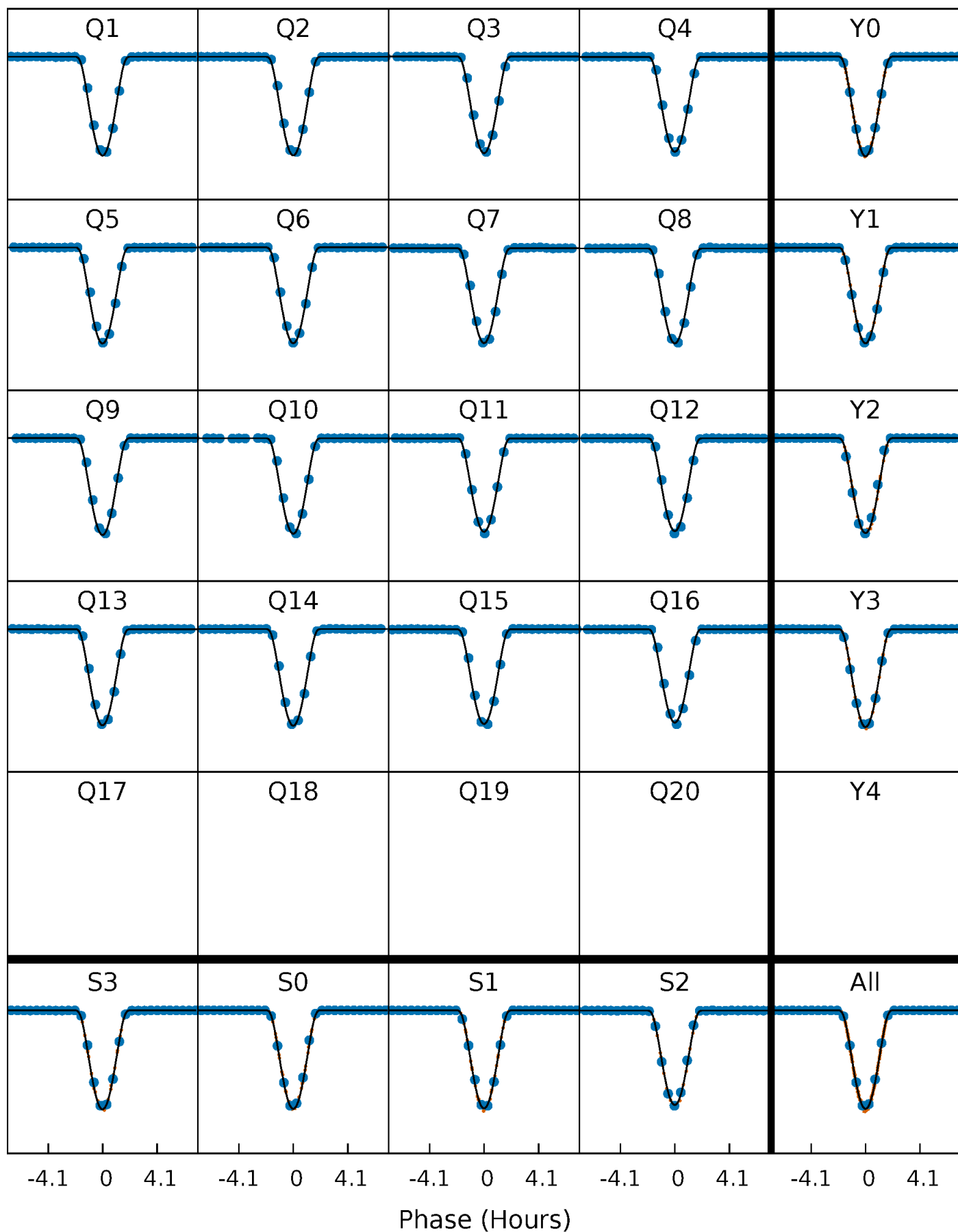
PDC Quarter-Phased Transit Curves

TCE 011519134-01 P= 58.585036 Days $T_0=140.799749$ (BKJD)



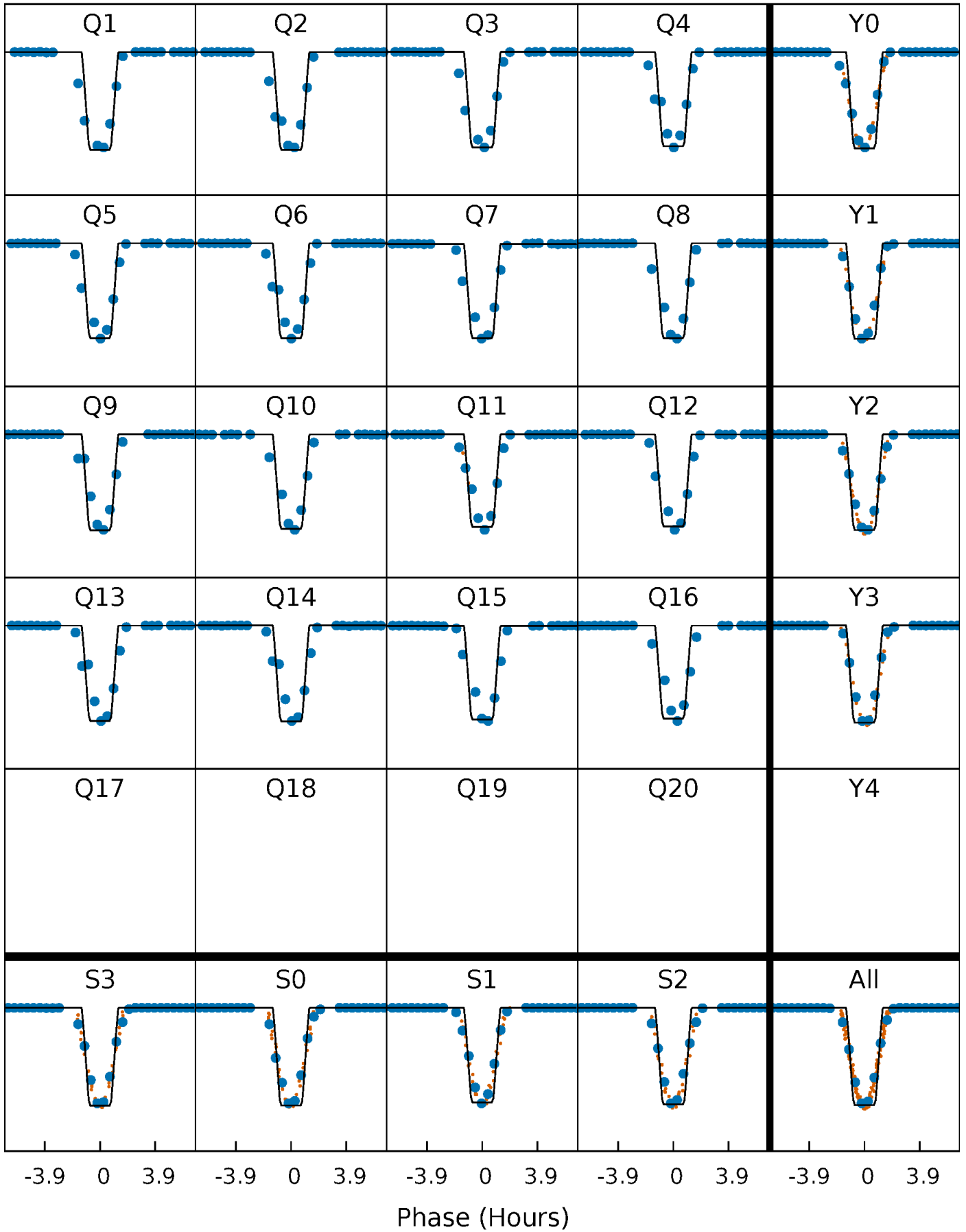
DV Quarter-Phased Transit Curves

TCE 011519134-01 P= 58.585036 Days $T_0=140.799749$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

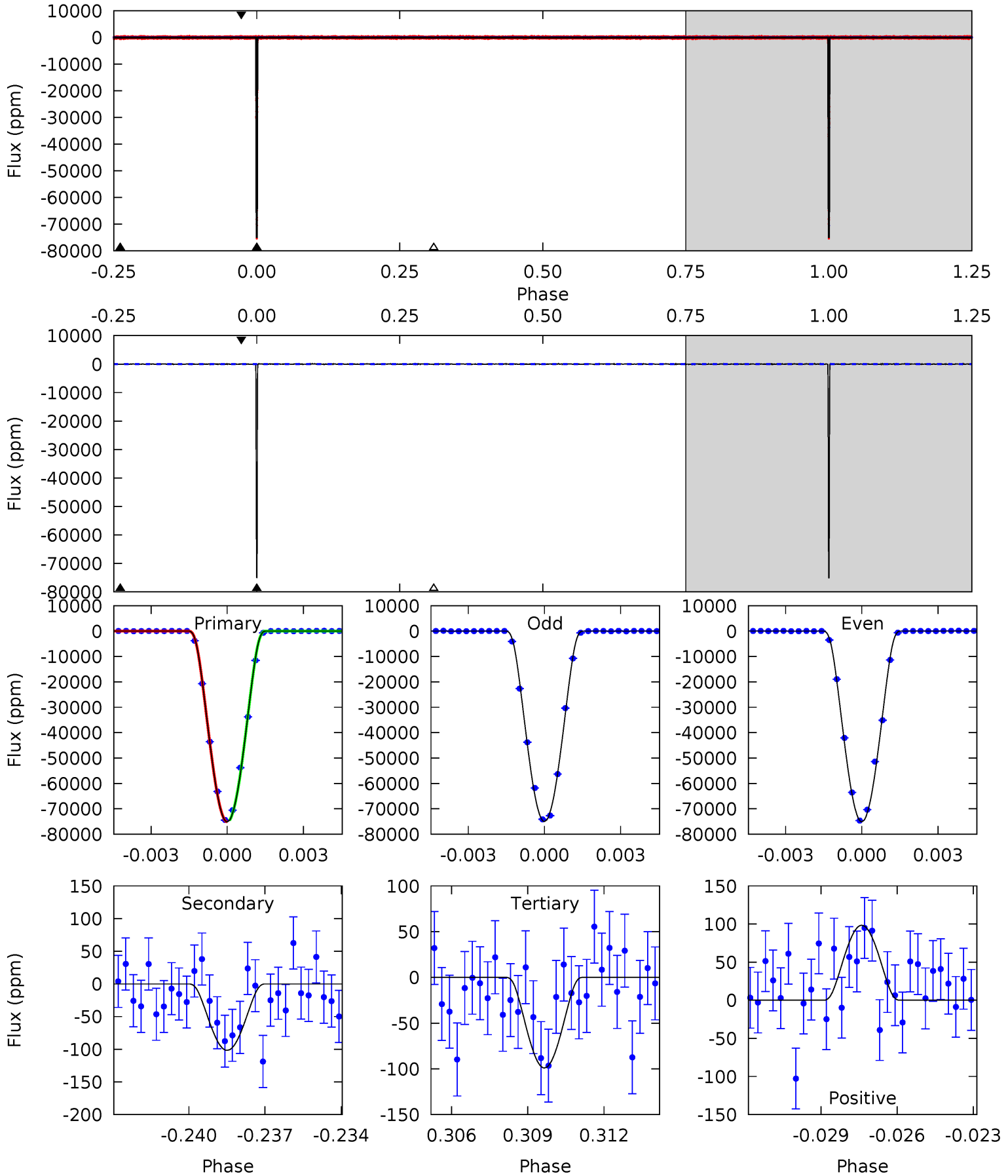
TCE 011519134-01 P= 58.584605 Days $T_0=140.804711$ (BKJD)



DV Model-Shift Uniqueness Test

011519134-01, P = 58.585036 Days, E = 82.214713 Days

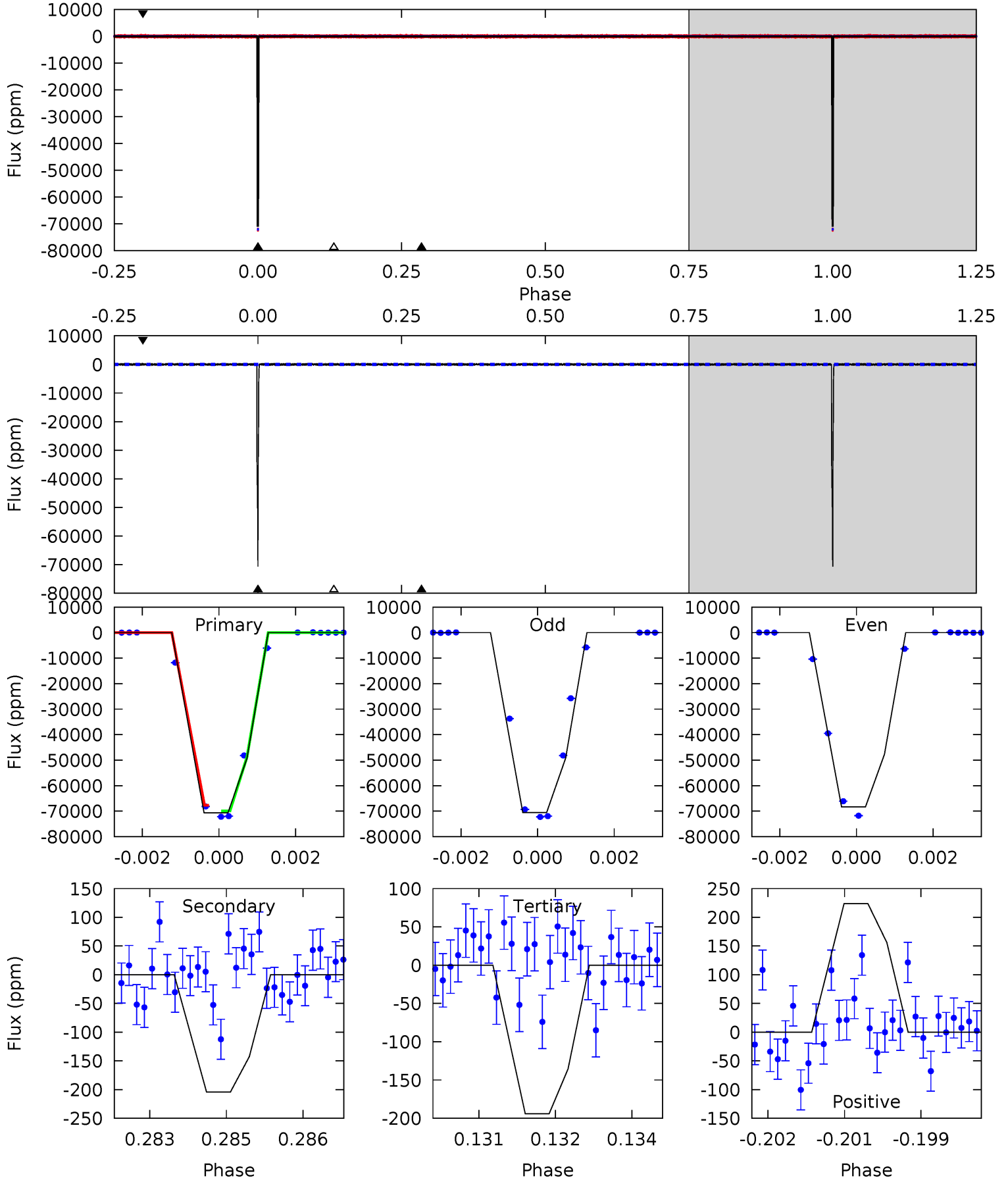
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6183	8.37	8.15	8.09	5.26	2.98	2.34	6175	6175	0.22	0.28	3.34	1.00	0.00	25.7



Alt Model-Shift Uniqueness Test

011519134-01, P = 58.584605 Days, E = 82.220106 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
1502	4.34	4.12	4.75	5.35	3.12	3.33	1498	1497	0.22	-0.41	28.4	1.00	0.00	0



Stellar Parameters For KIC 011519134

	$T_{\text{eff}}(K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6379^{+174}_{-174}	$3.925^{+0.273}_{-0.117}$	$-0.240^{+0.300}_{-0.250}$	$1.994^{+0.432}_{-0.649}$	$1.222^{+0.216}_{-0.195}$	$0.217^{+0.384}_{-0.076}$
	+3%/-3%	+7%/-3%	+125%/-104%	+22%/-33%	+18%/-16%	+177%/-35%
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 011519134-01 / KOI 3419.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-102 ± 12	$78.44^{+10.13}_{-12.91}$	977^{+65}_{-80}	1972^{+48}_{-55}	$0.941^{+0.355}_{-0.243}$
Alt.	-204 ± 47	$58.77^{+8.07}_{-10.39}$	977^{+66}_{-80}	2343^{+68}_{-89}	$3.365^{+1.599}_{-1.013}$

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 $A_{obs} \gg 1.0$

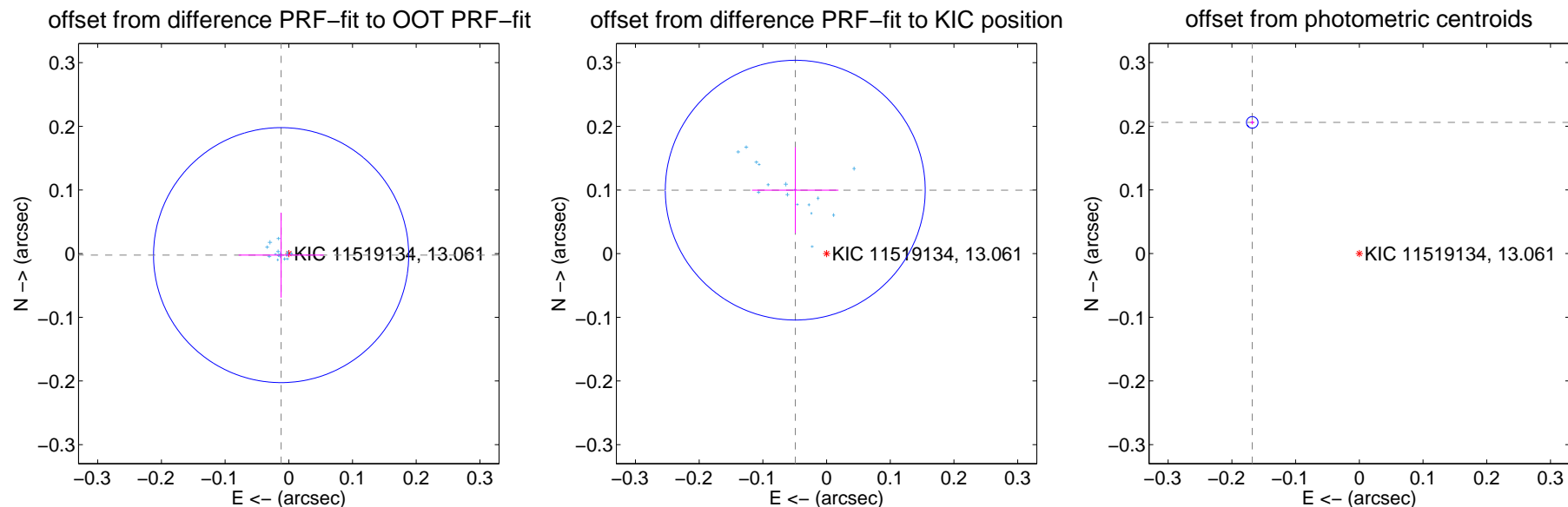
DV Centroid Data

Supplemental centroid analysis for 011519134-01. Kepler magnitude: 13.06. Transit SNR 2419.99

There are 16 quarters with good PRF difference image offsets

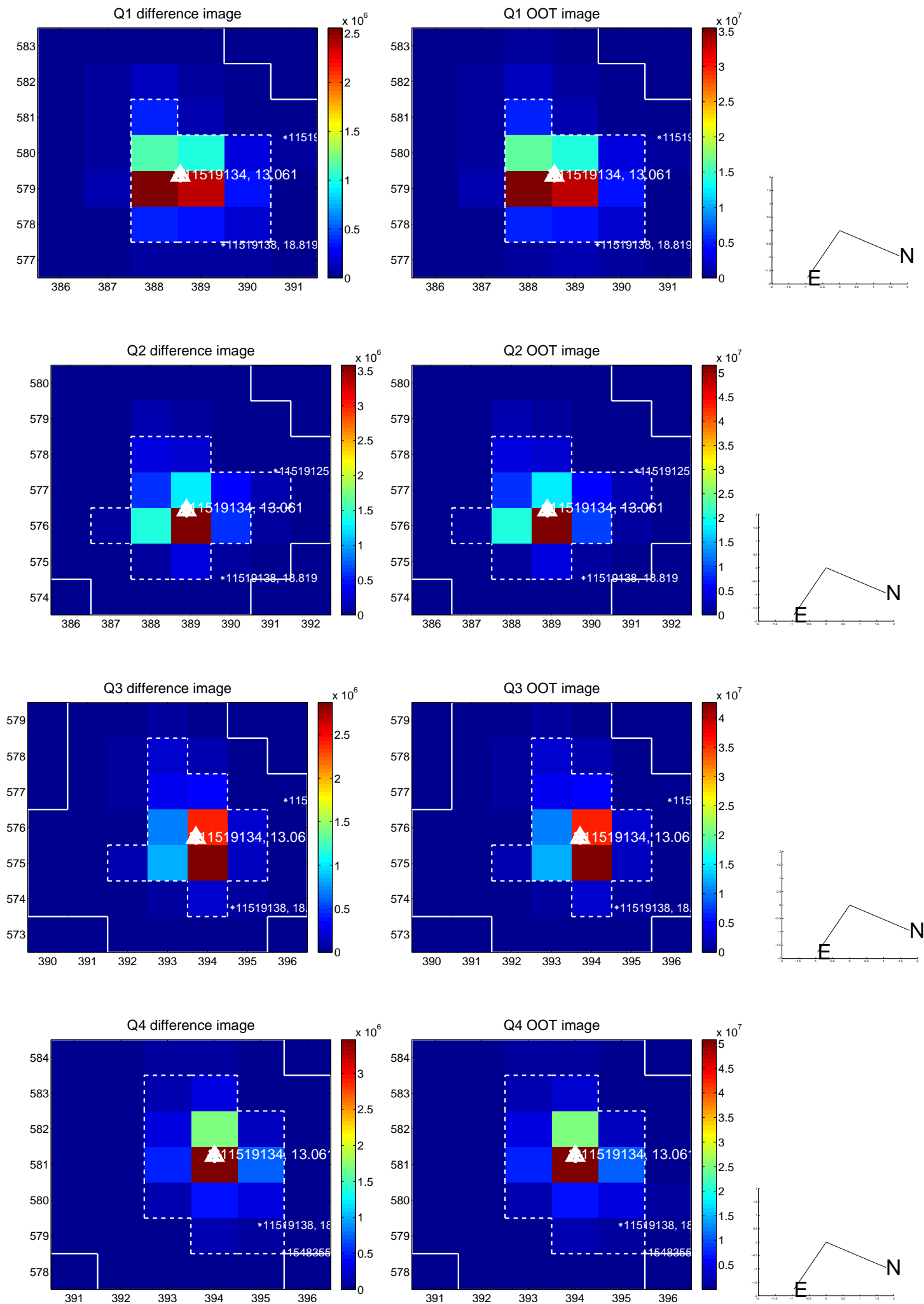
The direct PRF centroid is offset from the target star catalog position by about 0.14 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.012 ± 0.067	0.18	0.012 ± 0.067	-0.002 ± 0.067
PRF-fit source offset from KIC position	0.111 ± 0.068	1.64	0.049 ± 0.068	0.100 ± 0.067
photometric centroid source offset	0.27 ± 0.00	87.77	0.17 ± 0.00	0.21 ± 0.00

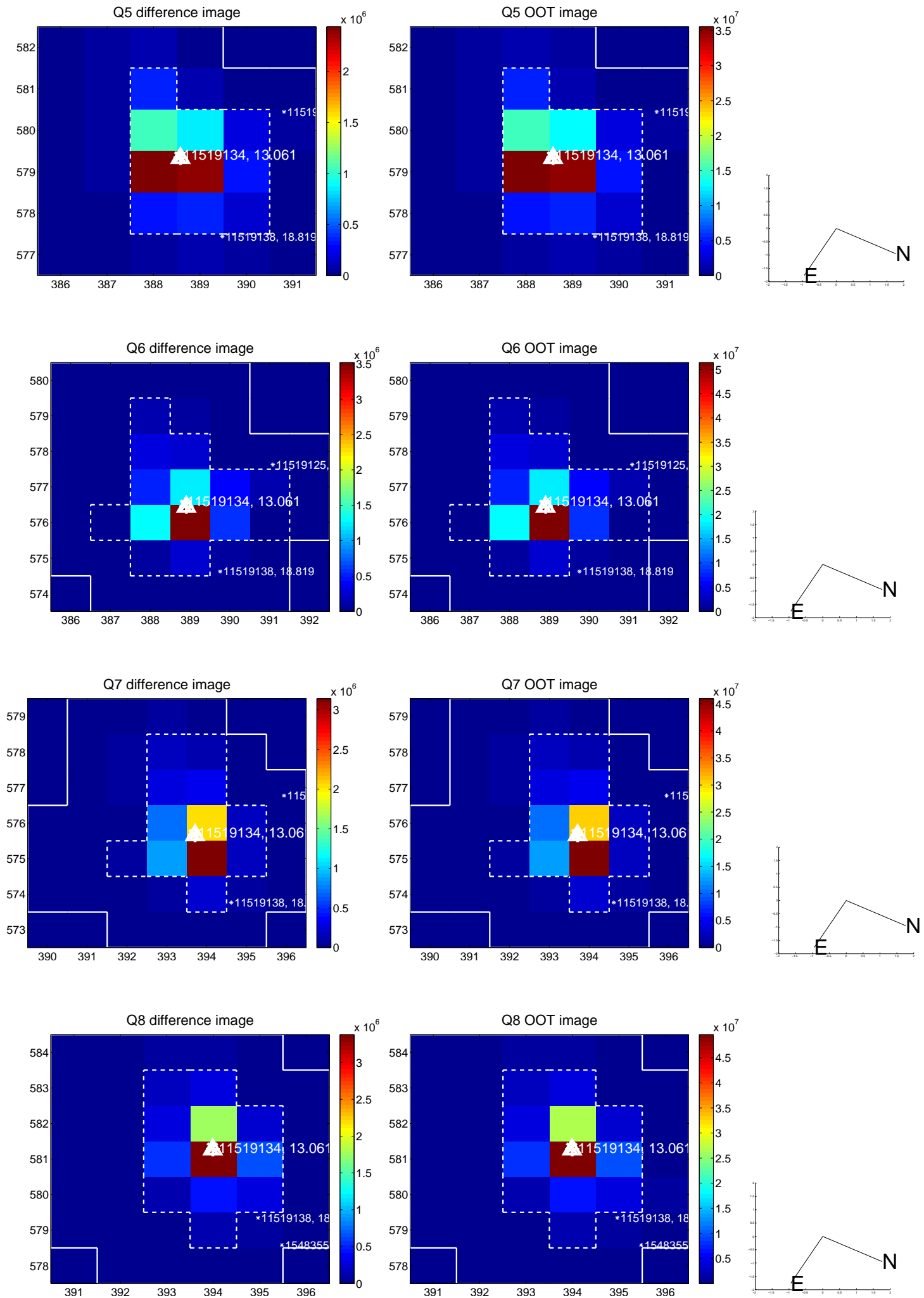


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets**; **Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

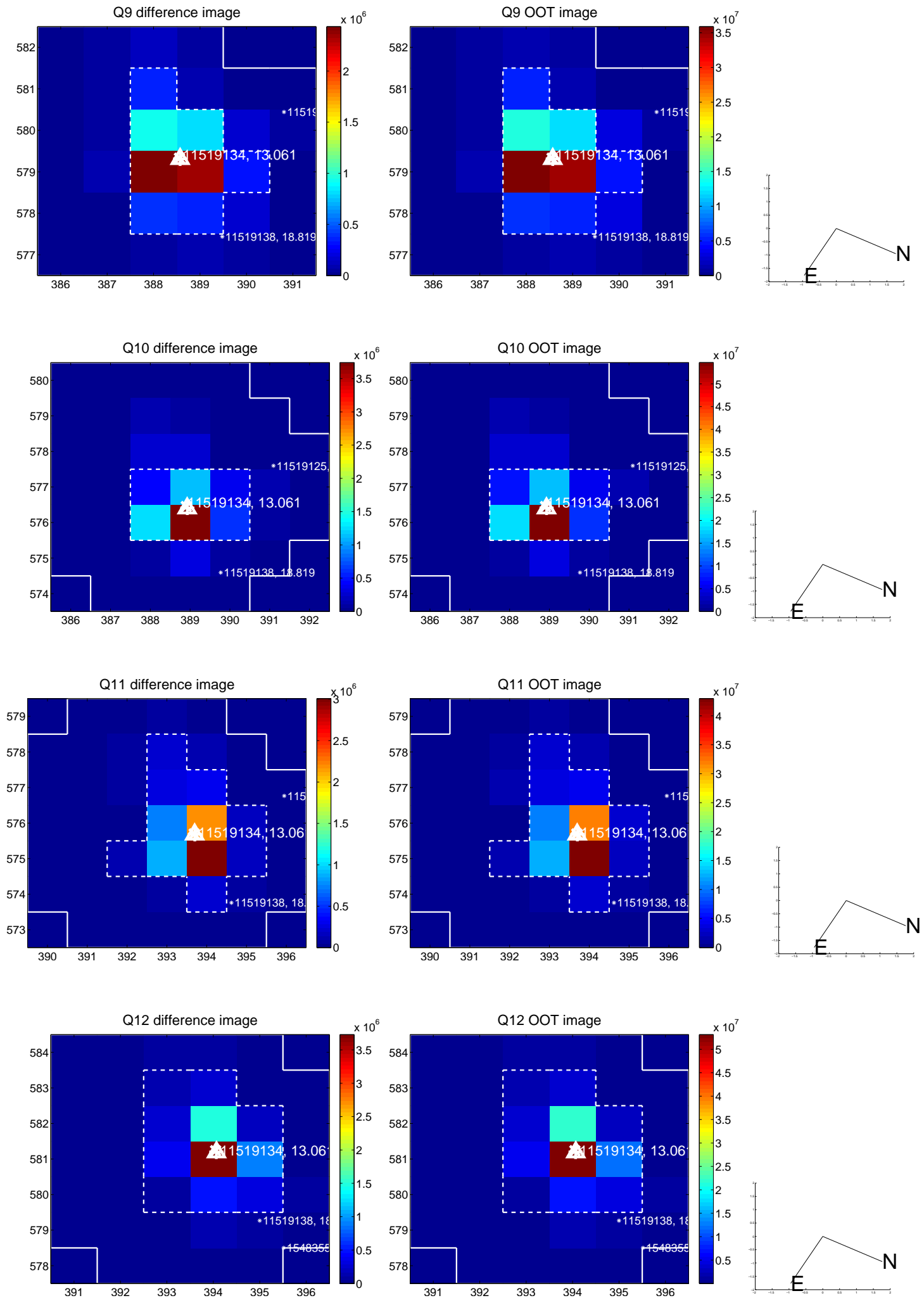
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



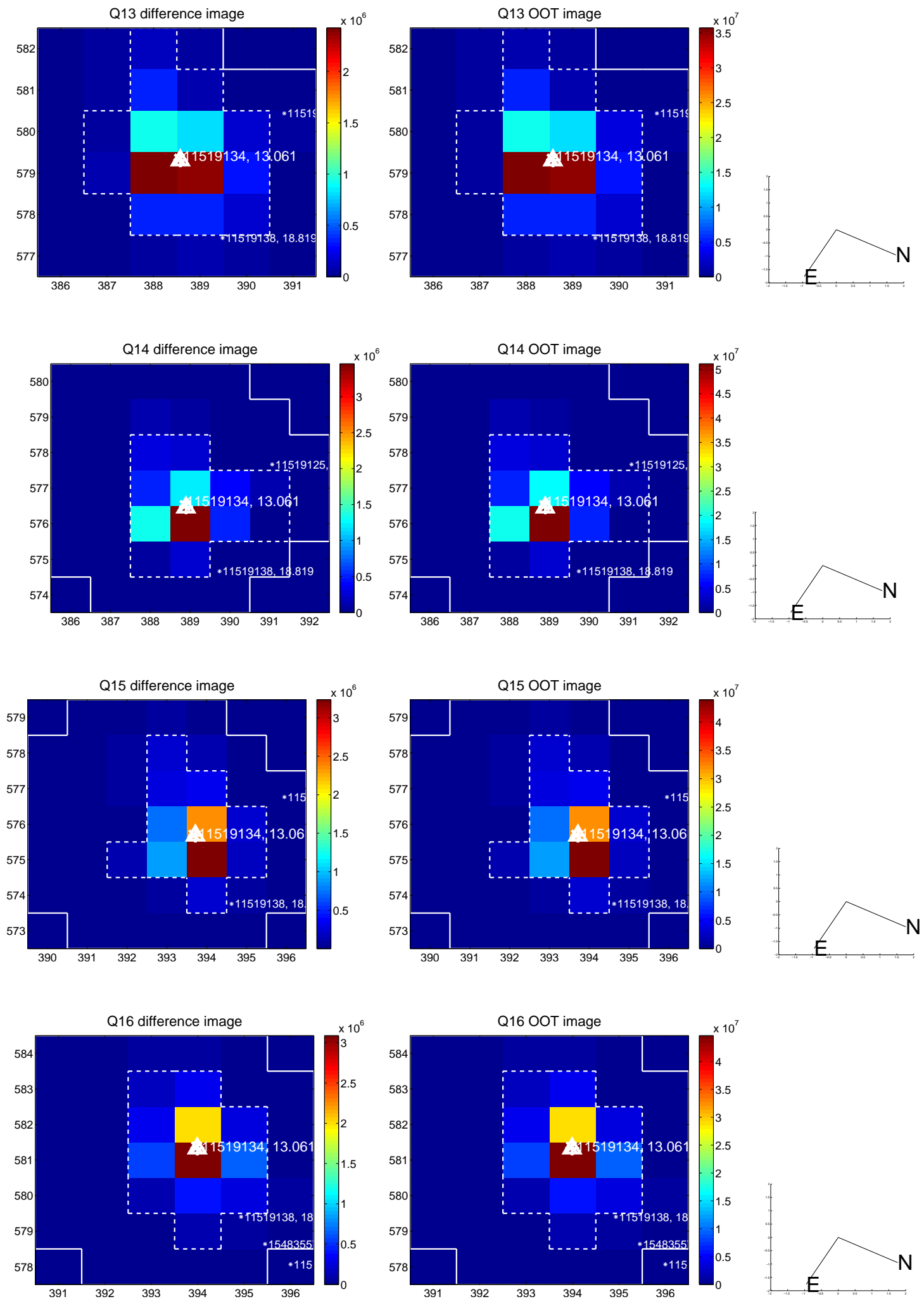
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



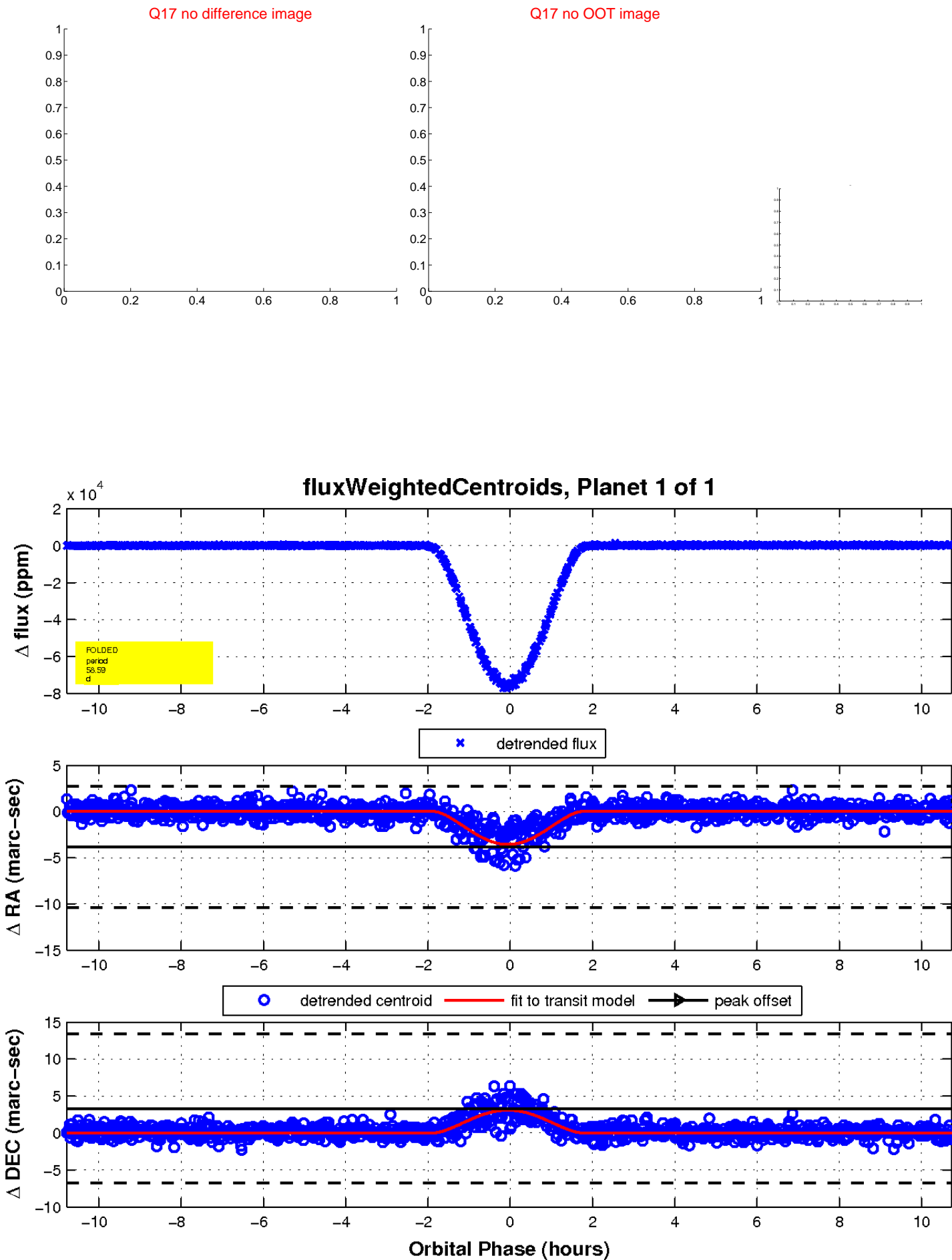
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

