

KIC 011147460

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})
011147460-01	OBS	6235.01	2.053875	132.941250	4924.0	4.729	325.0	438.0	4.09	5051	54.35	9669.04

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011147460-01	OBS	FP	0.00	0	1	0	0	MOD_ODDEVEN_DV—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 011147460-01

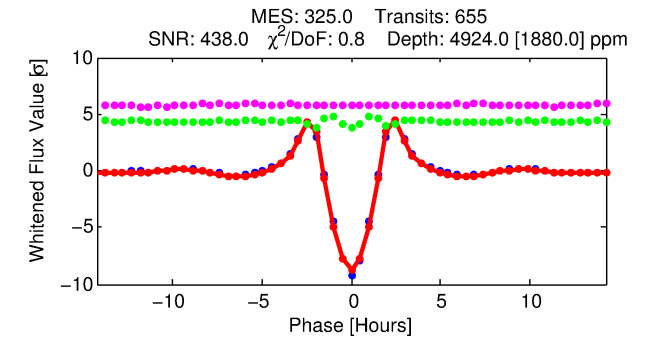
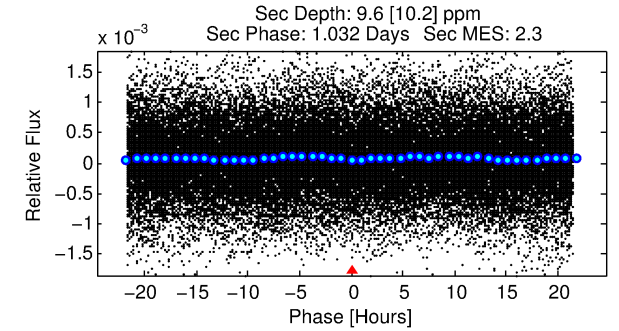
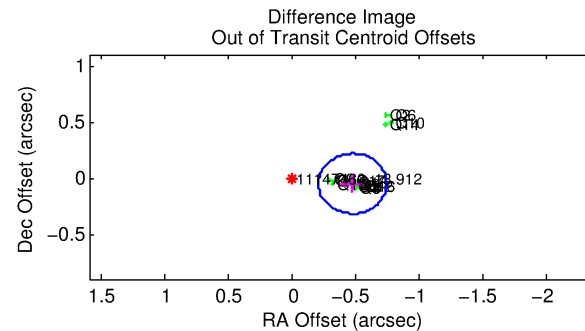
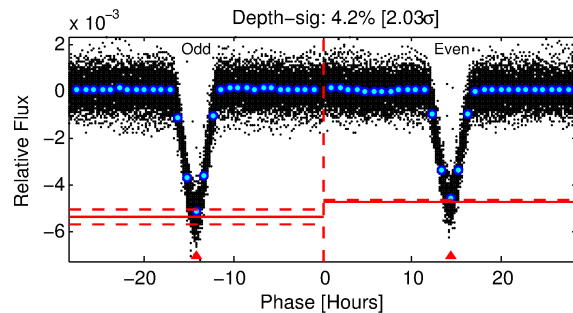
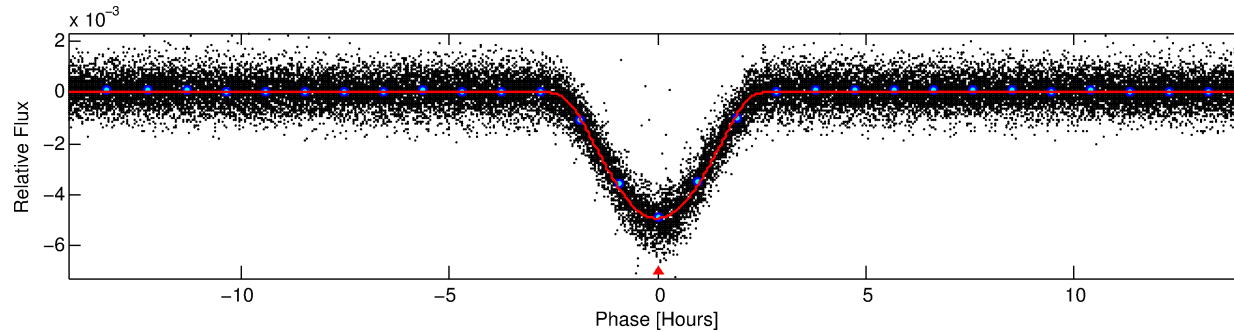
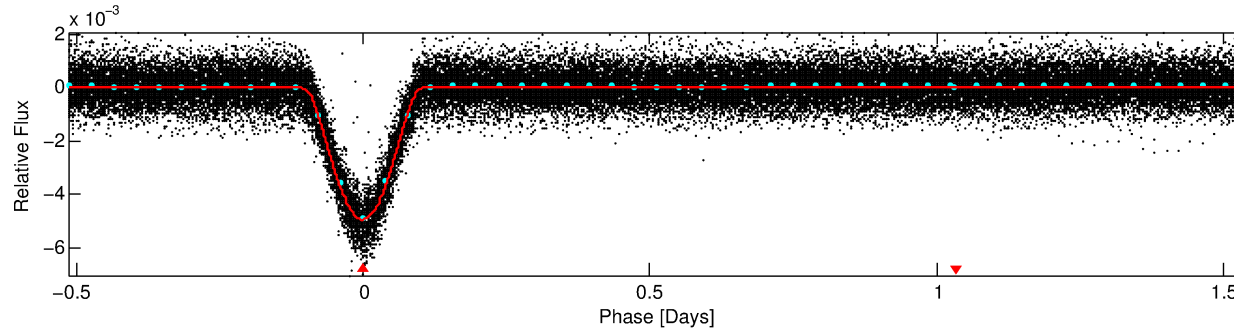
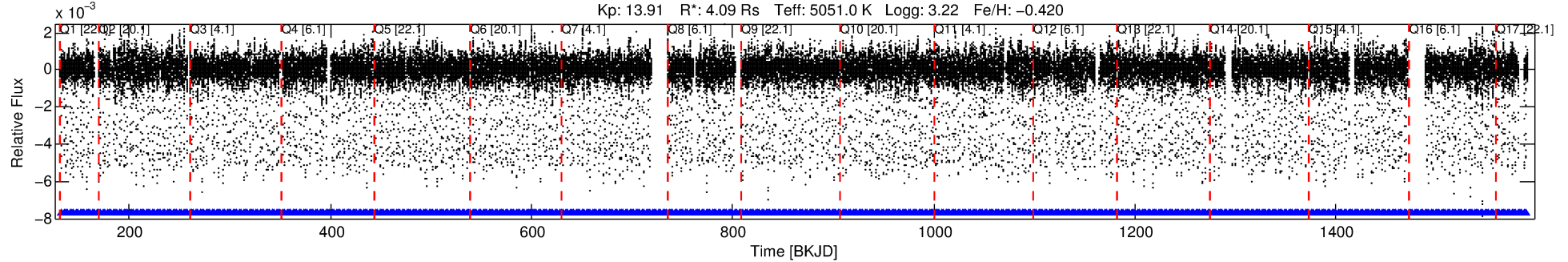
No Significant Match Found

DV One-Page Summary

KIC: 11147460 Candidate: 1 of 1 Period: 2.054 d

KOI: K06235.01 Corr: 0.991

Kp: 13.91 R*: 4.09 Rs Teff: 5051.0 K Logg: 3.22 Fe/H: -0.420



DV Fit Results:

Period = 2.05387 [0.00000] d
Epoch = 132.9412 [0.0001] BKJD
Rp/R* = 0.1218 [0.0059]
a/R* = 1.98 [0.01]
b = 1.00 [0.04]
Seff = 9669.04 [5806.08]
Teq = 2529 [380] K
Rp = 54.35 [25.11] Re
a = 0.0318 [0.0126] AU
Ag = 0.00 [0.00] [-453.57σ]
Teffp = 807 [215] K [-3.95σ]

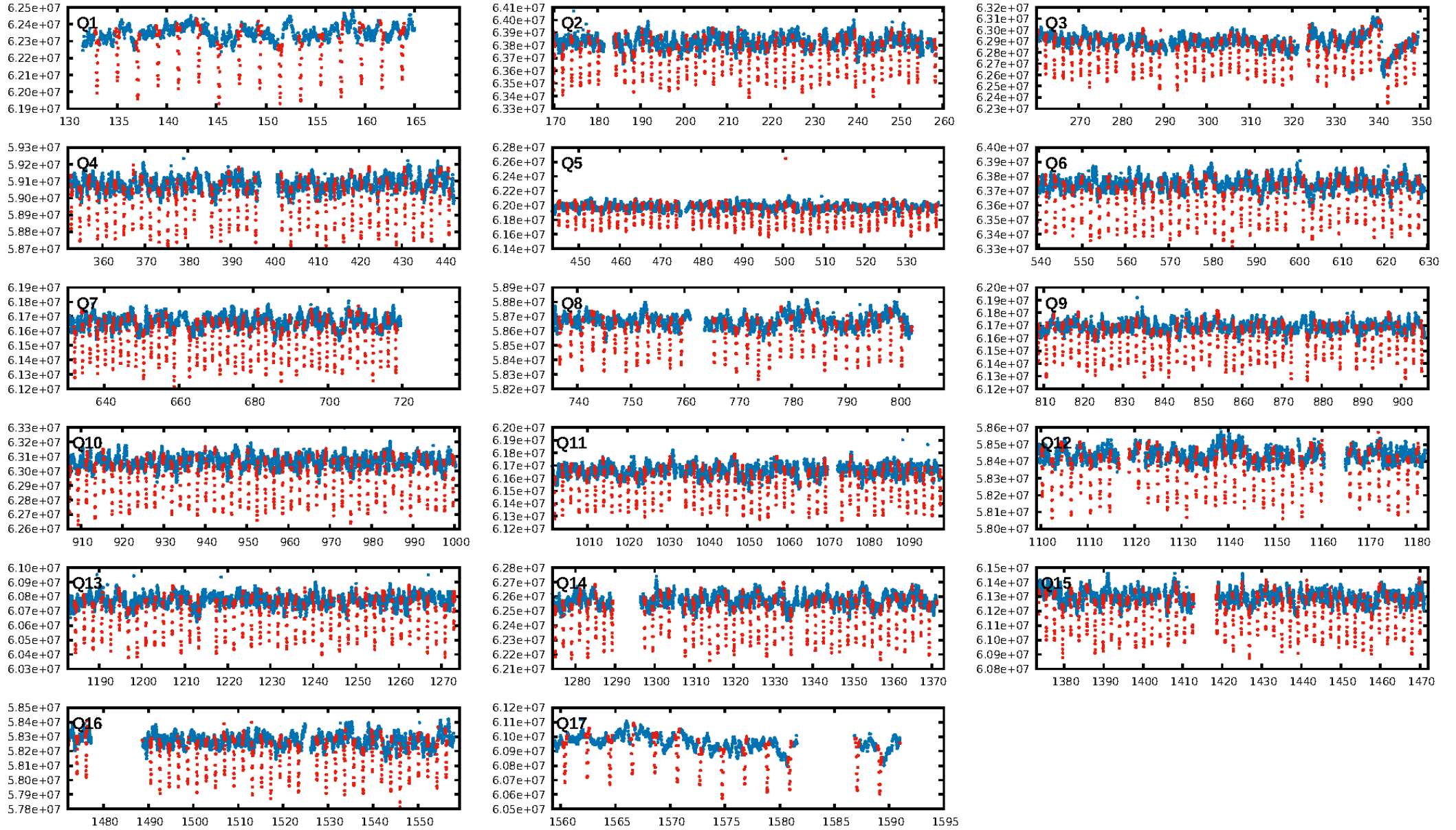
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 0.00e+00
RollingBand-fgt: 1.00 [626/626]
GhostDiagnostic-chr: 7.401
Centroid-sig: 0.0%
Centroid-so: 0.642 arcsec [50.90σ]
OotOffset-rm: 0.473 arcsec [5.30σ]
KicOffset-rm: 0.068 arcsec [1.00σ]
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]

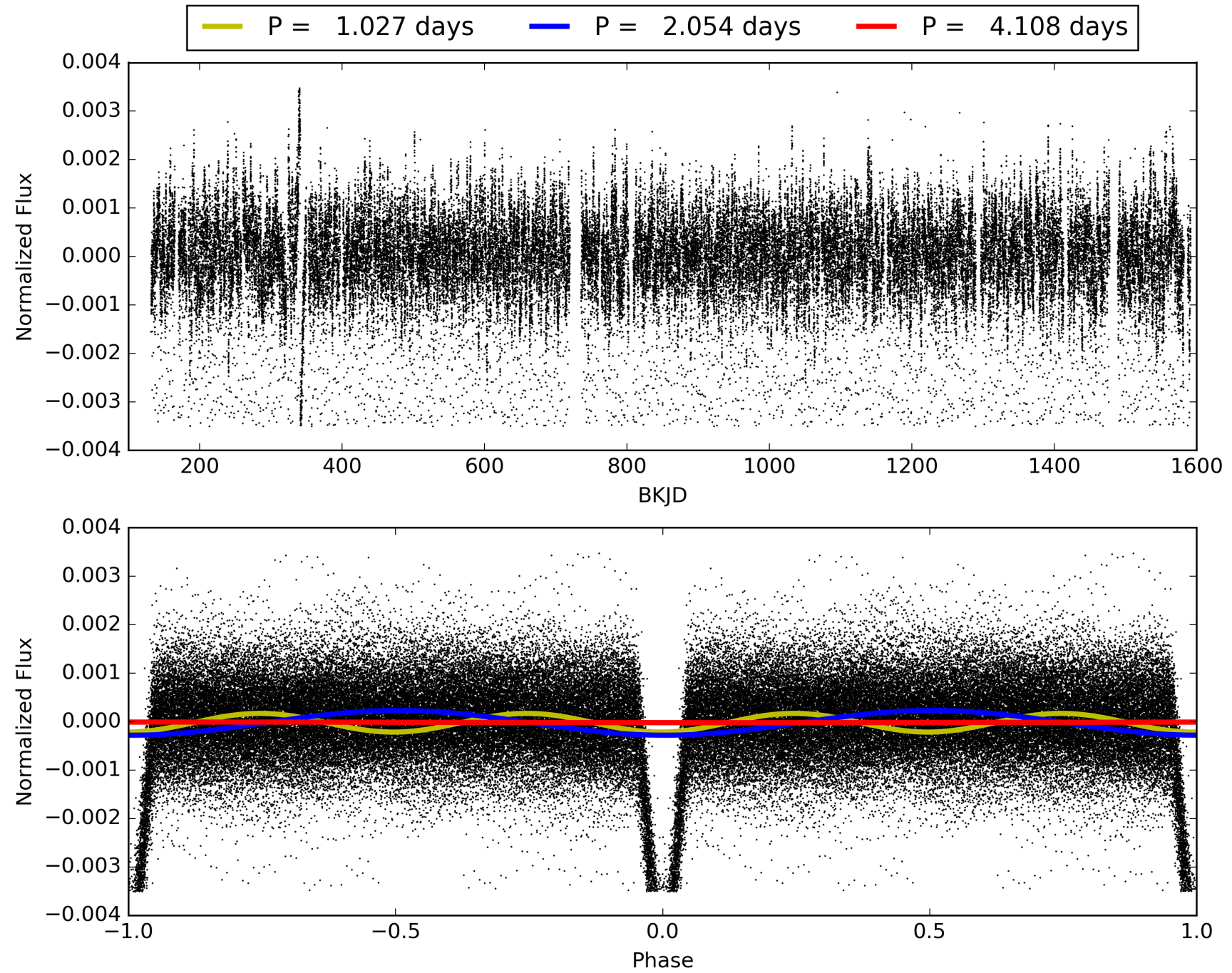
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 05:08:45 Z

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

TCE 011147460-01, PDC Light Curves

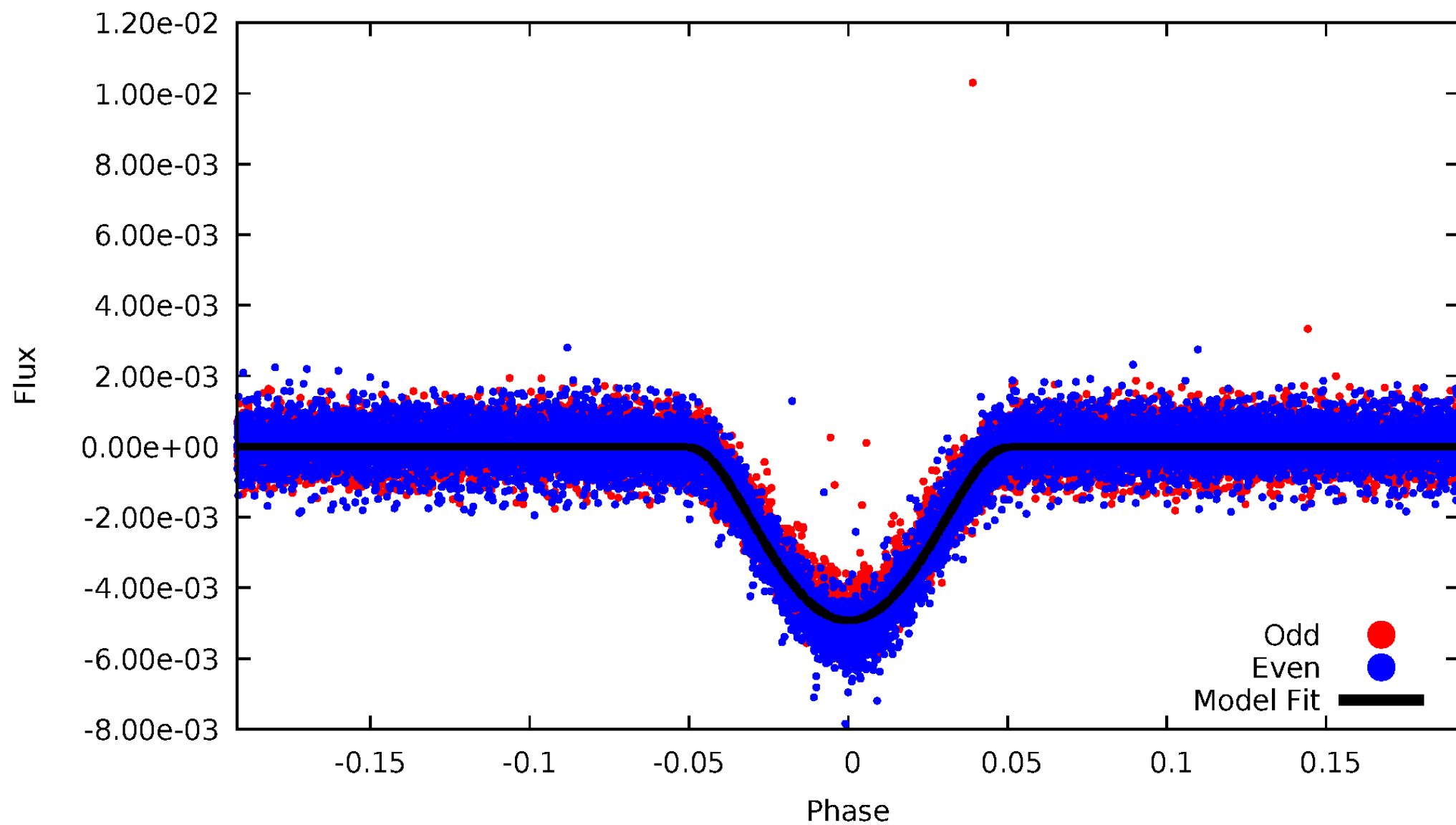


TCE 011147460-01



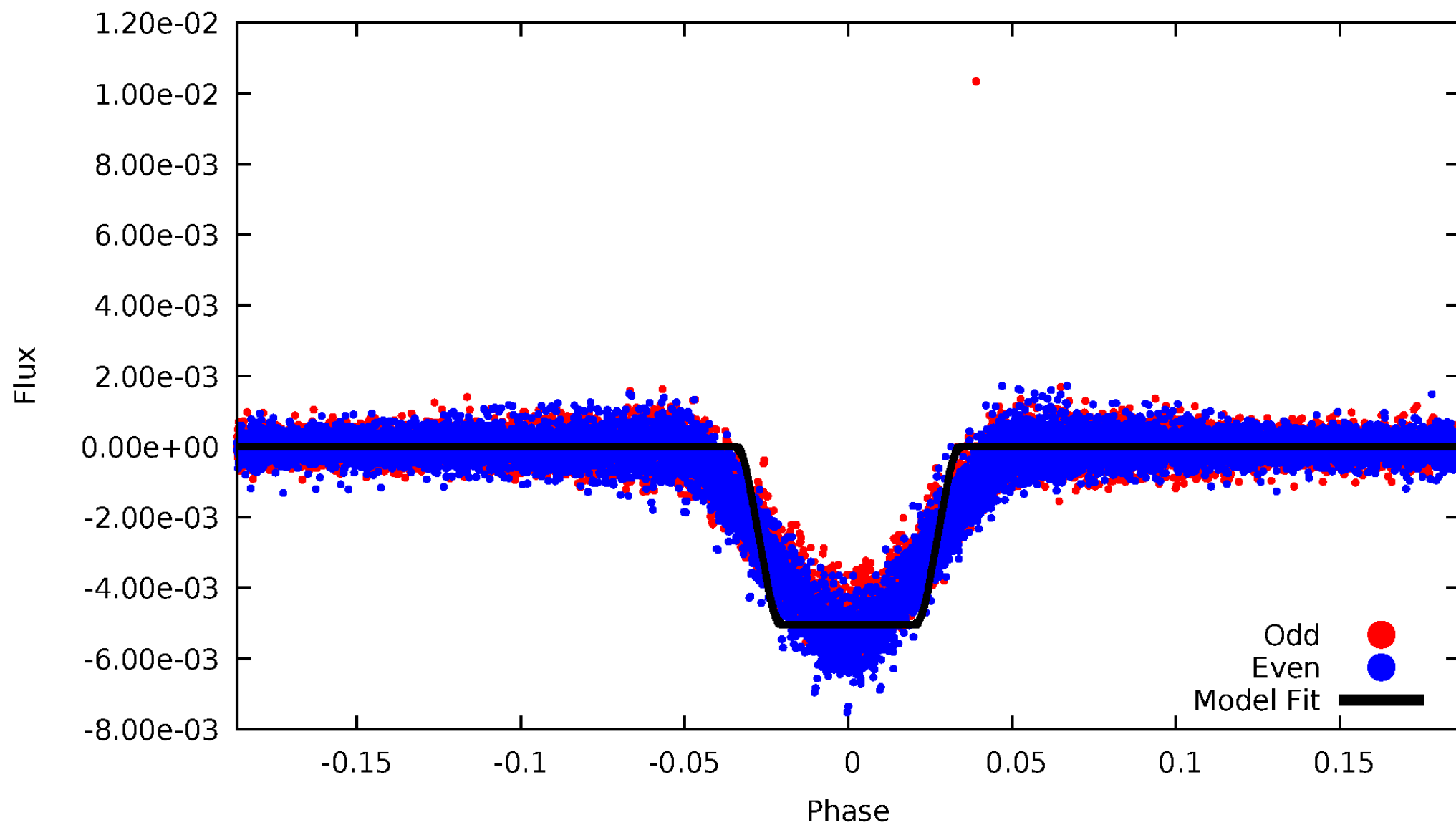
DV Odd/Even

TCE 011147460-01

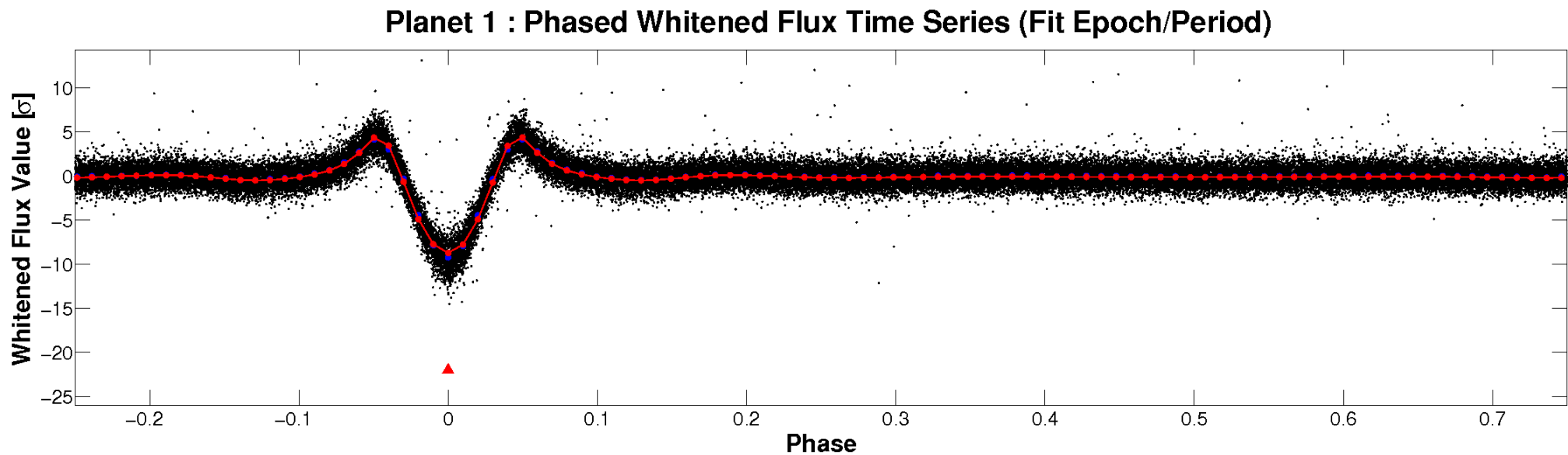
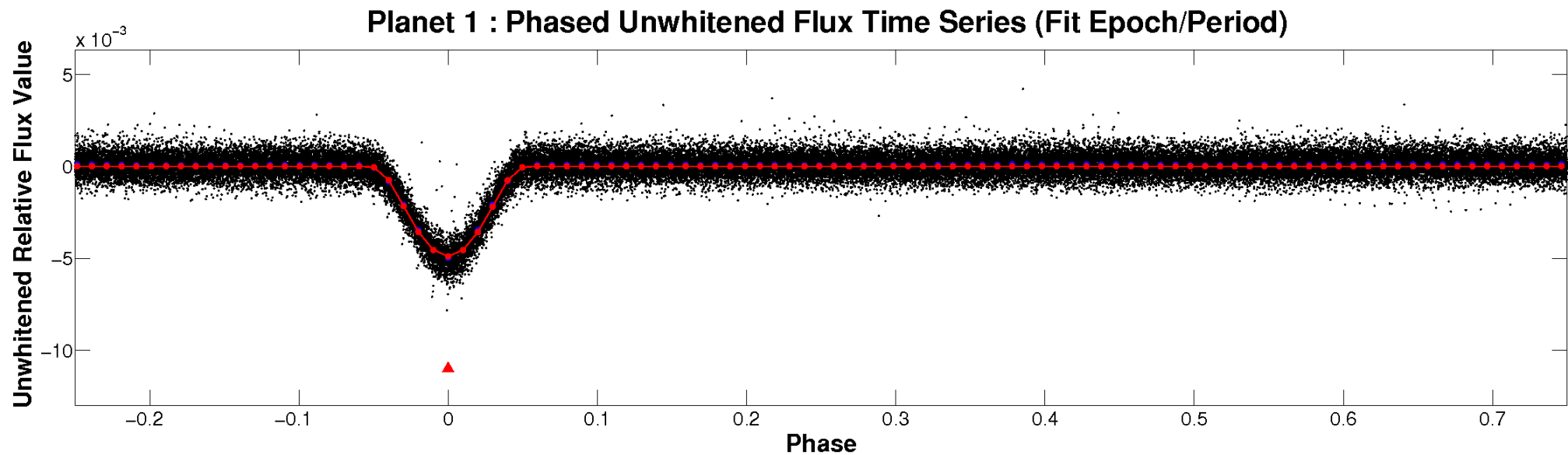


ALT Odd/Even

TCE 011147460-01

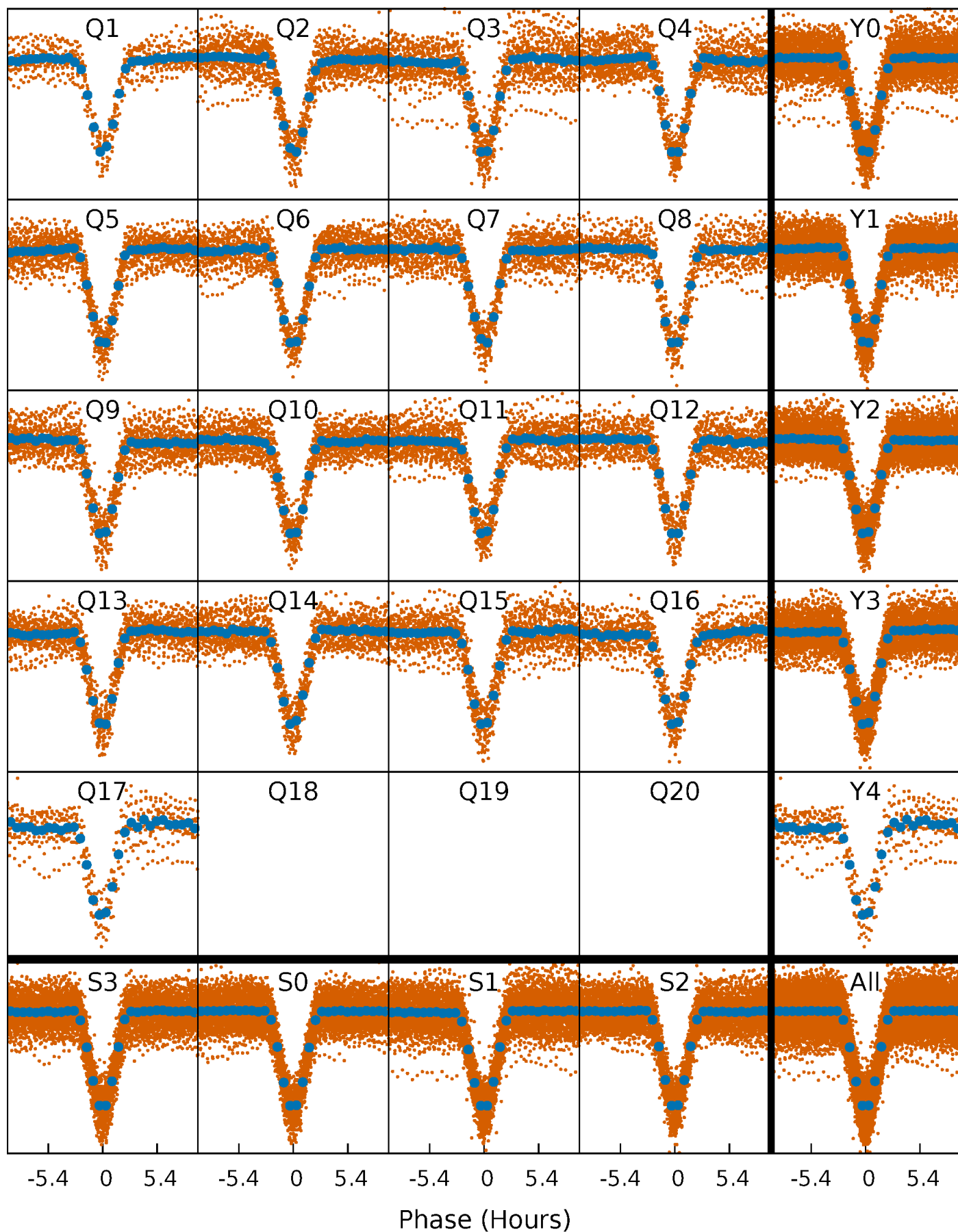


Non-Whitened Vs. Whitened Light Curve



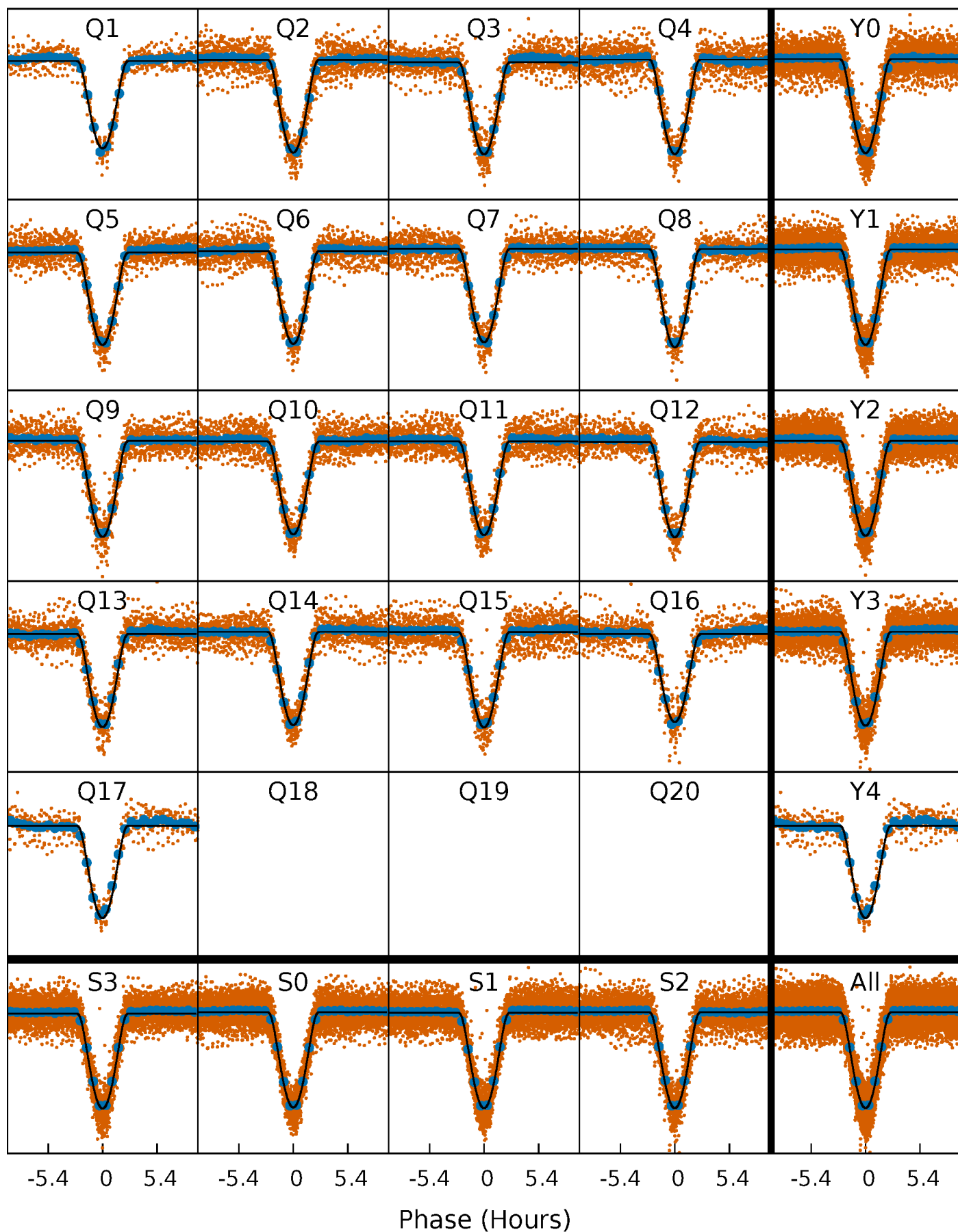
PDC Quarter-Phased Transit Curves

TCE 011147460-01 P= 2.053875 Days $T_0=132.941250$ (BKJD)



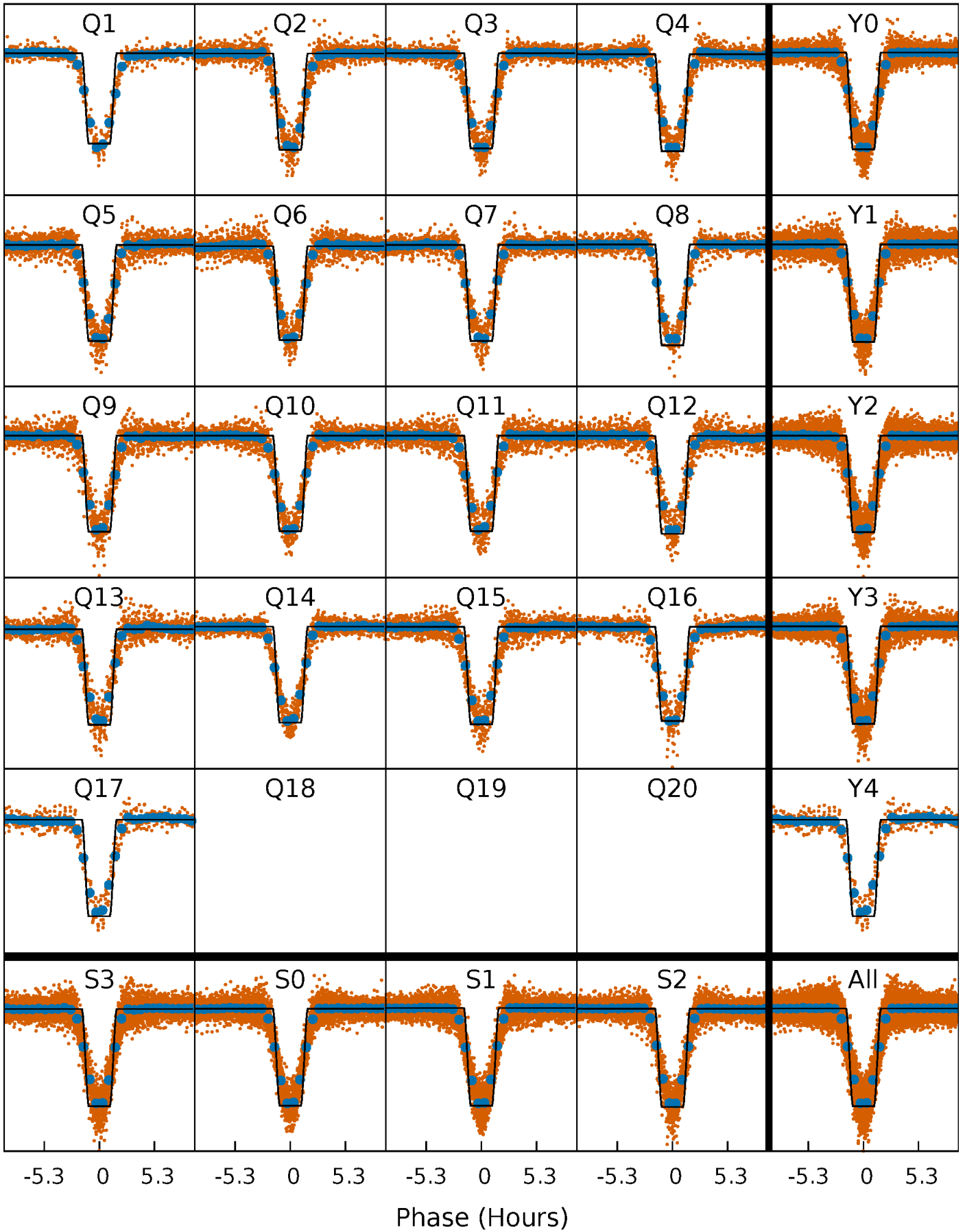
DV Quarter-Phased Transit Curves

TCE 011147460-01 P= 2.053875 Days $T_0=132.941250$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

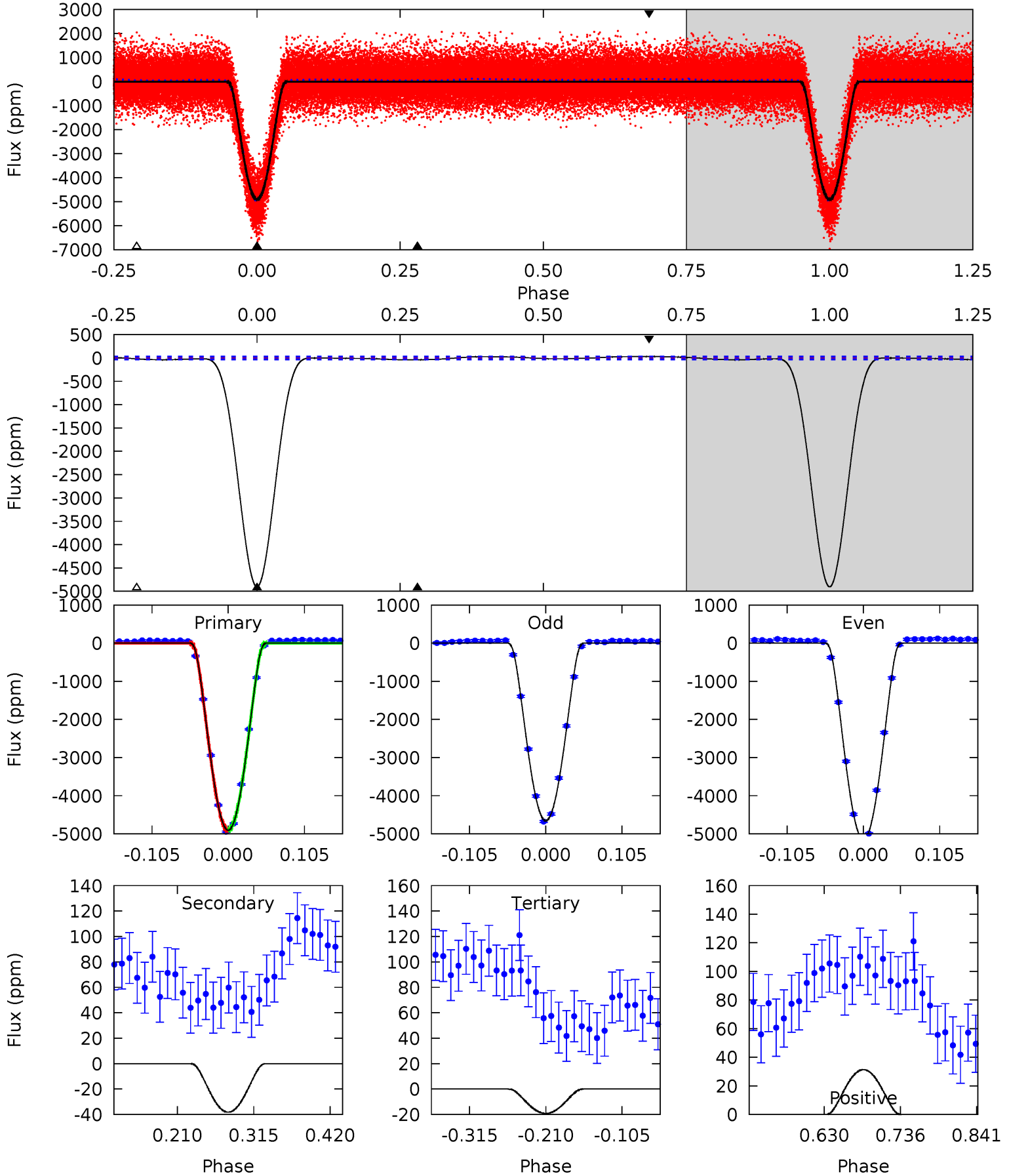
TCE 011147460-01 P= 2.053872 Days $T_0=132.942037$ (BKJD)



DV Model-Shift Uniqueness Test

011147460-01, P = 2.053875 Days, E = 130.887375 Days

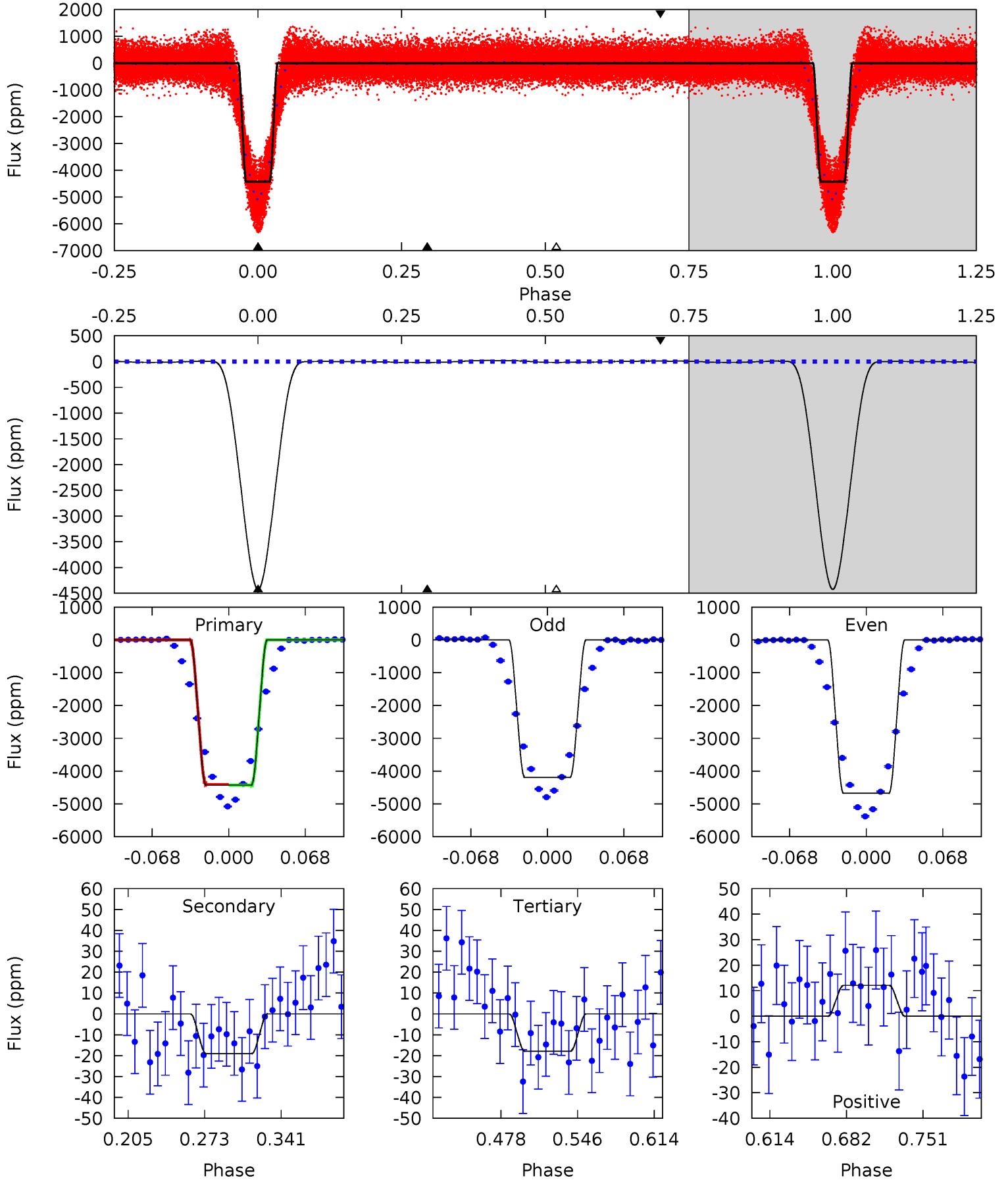
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
769.9	5.99	3.01	4.92	4.55	1.62	3.38	766.9	765.0	2.99	1.07	39.1	1.00	0.01	1.14



Alt Model-Shift Uniqueness Test

011147460-01, P = 2.053872 Days, E = 130.888165 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
912.2	3.93	3.68	2.50	4.64	1.82	2.32	908.5	909.7	0.25	1.44	49.7	1.00	0.00	2.40



Stellar Parameters For KIC 011147460

	$T_{\text{eff}} (K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5051^{+127}_{-114}	$3.220^{+0.330}_{-0.270}$	$-0.420^{+0.300}_{-0.200}$	$4.089^{+1.879}_{-1.253}$	$1.014^{+0.270}_{-0.135}$	$0.021^{+0.041}_{-0.014}$
	+3%/-2%	+10%/-8%	+71%/-48%	+46%/-31%	+27%/-13%	+194%/-67%
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 011147460-01 / KOI 6235.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-38 ± 6	$53.50^{+12.80}_{-10.25}$	3488^{+383}_{-344}	-3337^{+204}_{-230}	$0.008^{+0.004}_{-0.003}$
Alt.	-19 ± 5	$31.12^{+8.23}_{-6.60}$	3481^{+406}_{-352}	-3322^{+214}_{-251}	$0.011^{+0.008}_{-0.005}$

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 $A_{obs} \gg 1.0$

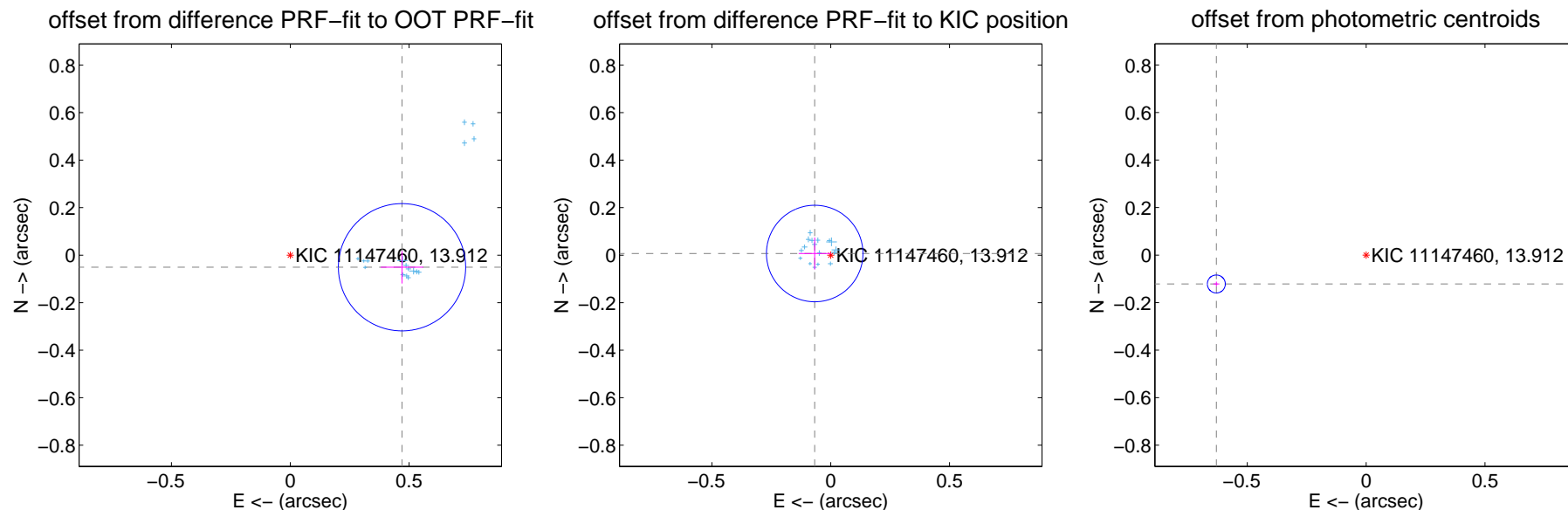
DV Centroid Data

Supplemental centroid analysis for 011147460-01. Kepler magnitude: 13.91. Transit SNR 437.98

There are 17 quarters with good PRF difference image offsets

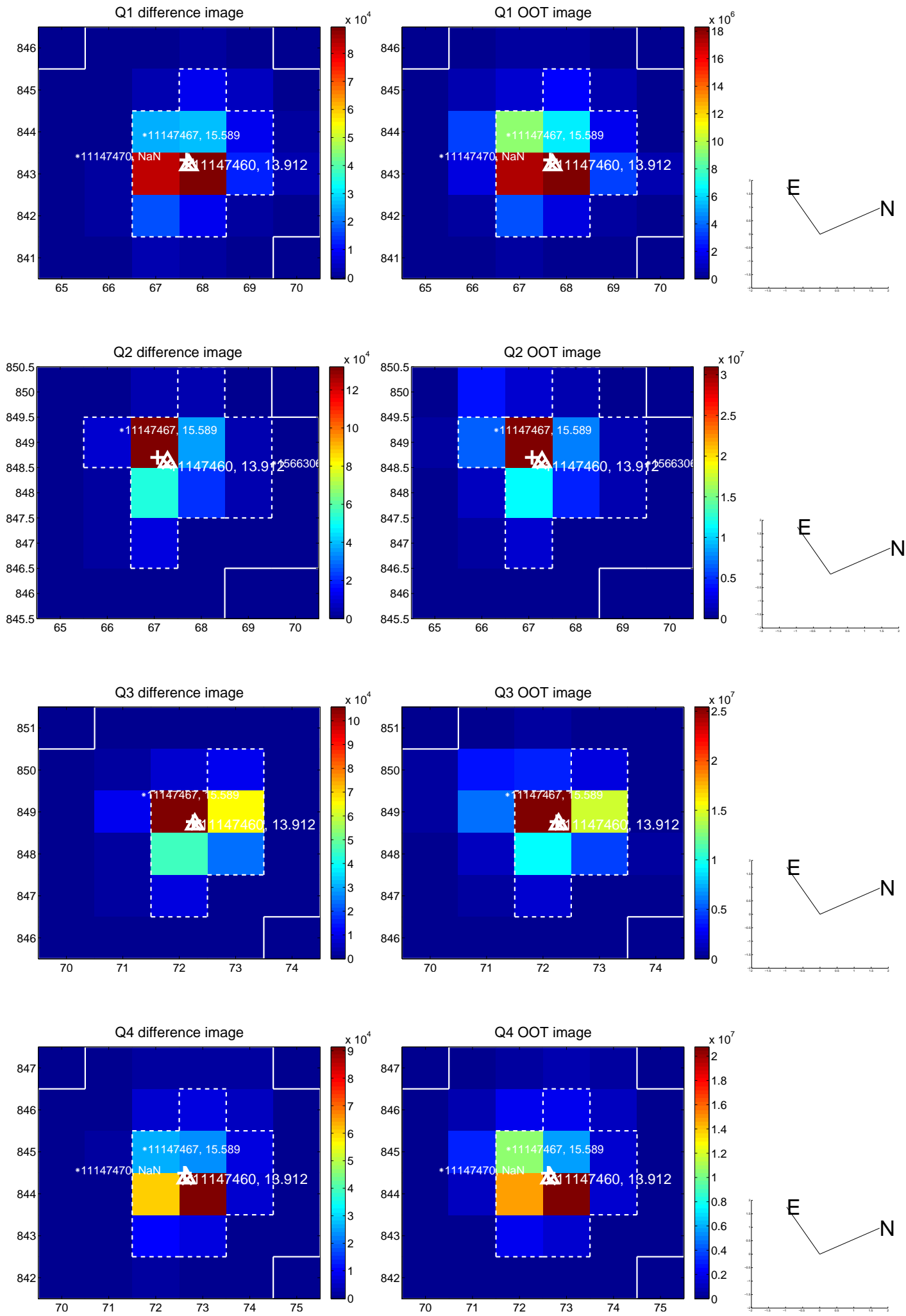
The direct PRF centroid is offset from the target star catalog position by about 0.48 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.473 ± 0.089	5.30	-0.470 ± 0.090	-0.051 ± 0.068
PRF-fit source offset from KIC position	0.068 ± 0.068	1.00	0.067 ± 0.068	0.007 ± 0.067
photometric centroid source offset	0.64 ± 0.01	50.90	0.63 ± 0.01	-0.12 ± 0.01

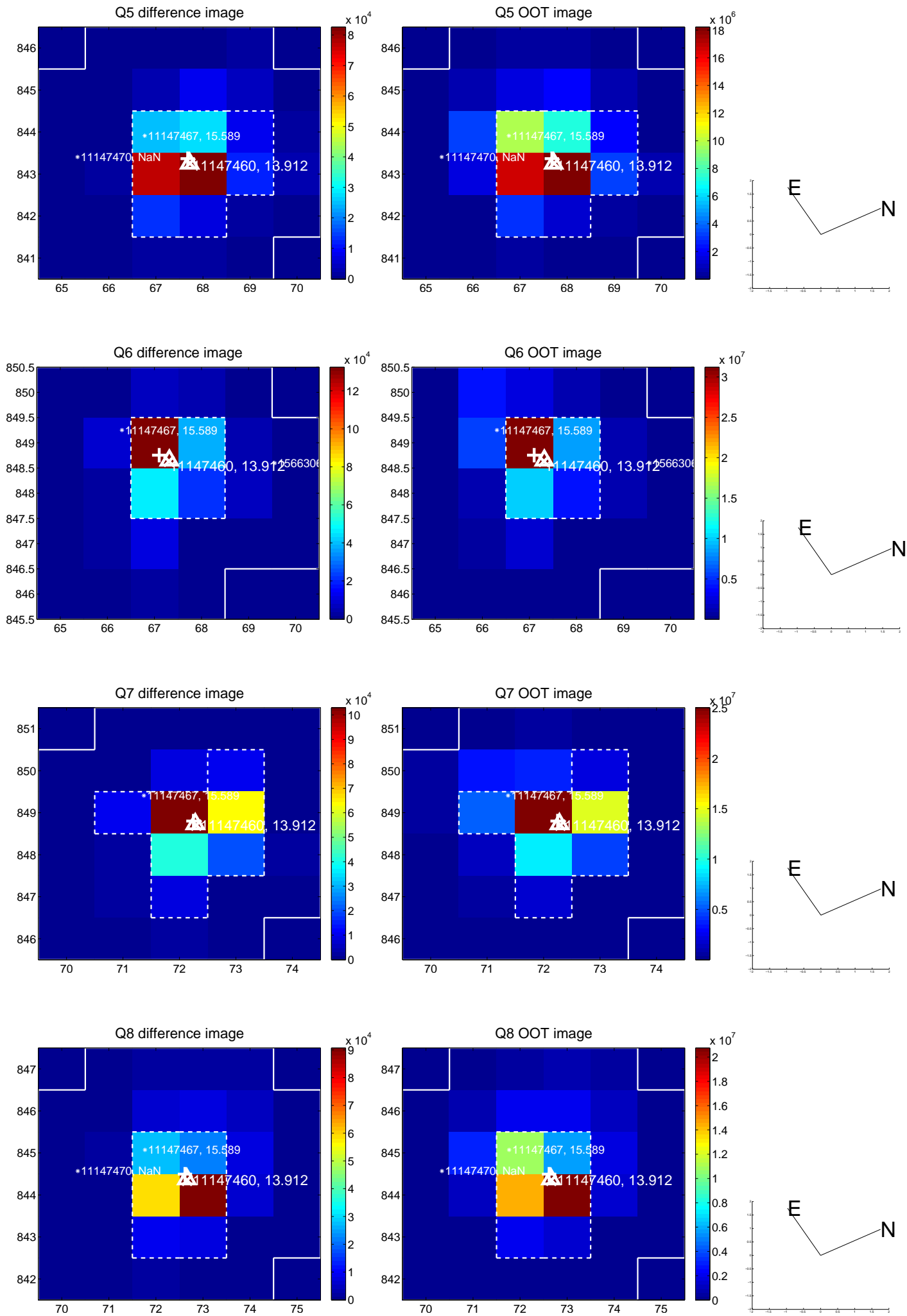


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

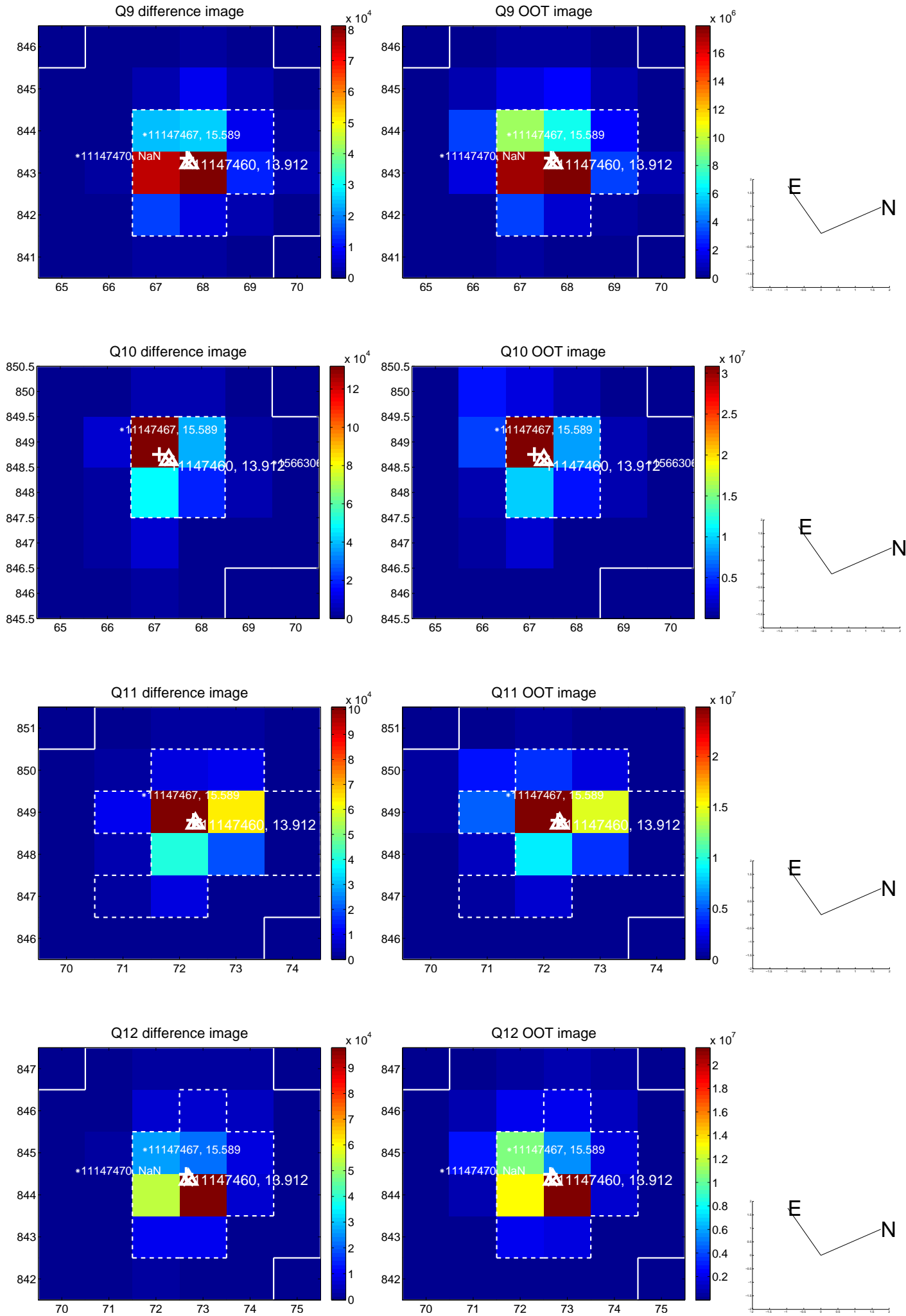
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



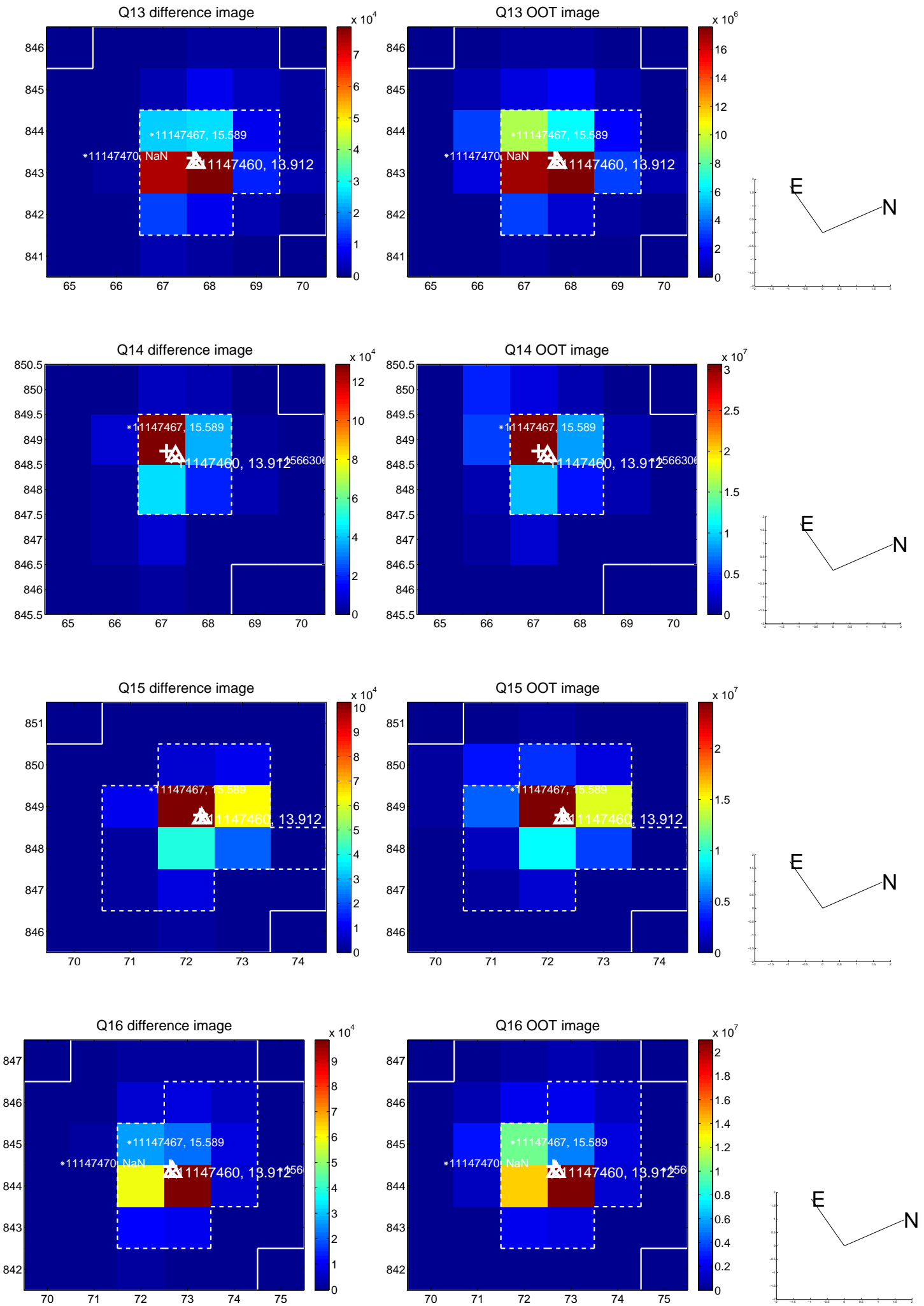
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



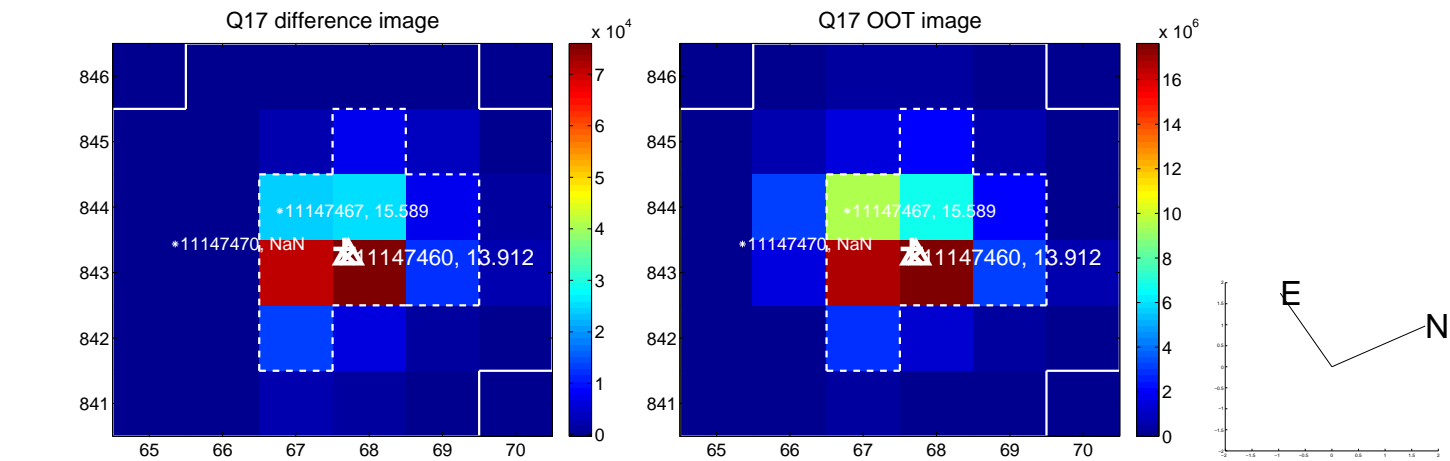
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



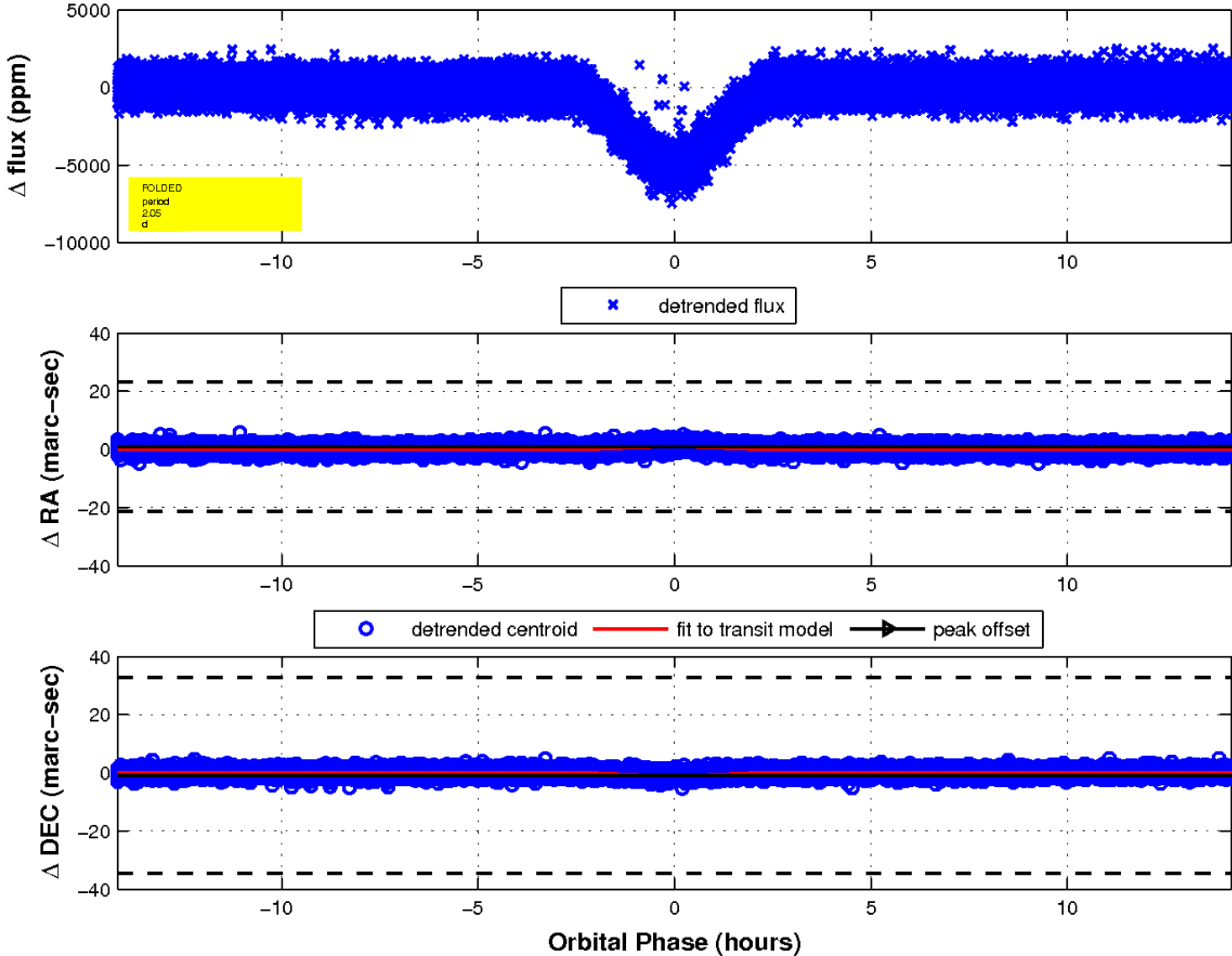
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

