

KIC 011466960

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})
011466960-01	OBS	3917.01	0.695943	131.908577	167.9	1.685	12.3	26.2	1.43	6737	2.17	13341.54

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011466960-01	OBS	FP	0.00	0	0	1	0	CENT_UNRESOLVED_OFFSET

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 011466960-01

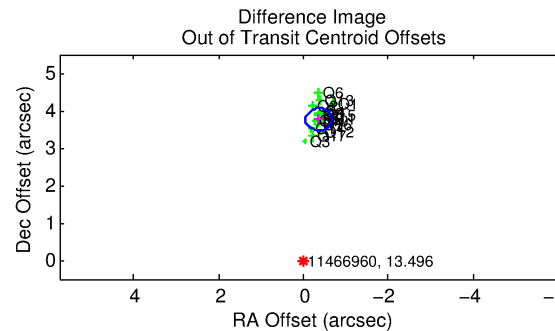
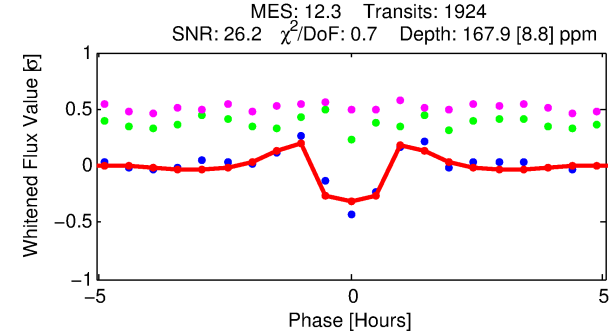
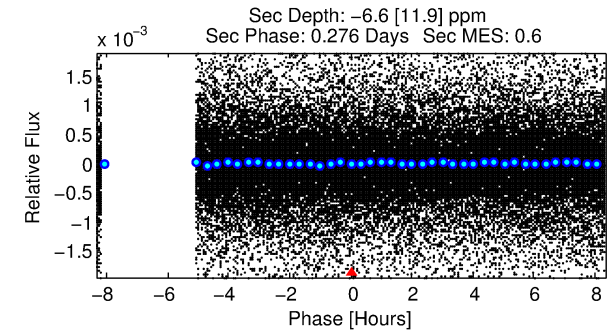
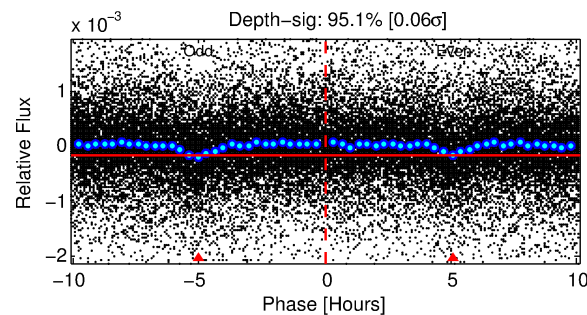
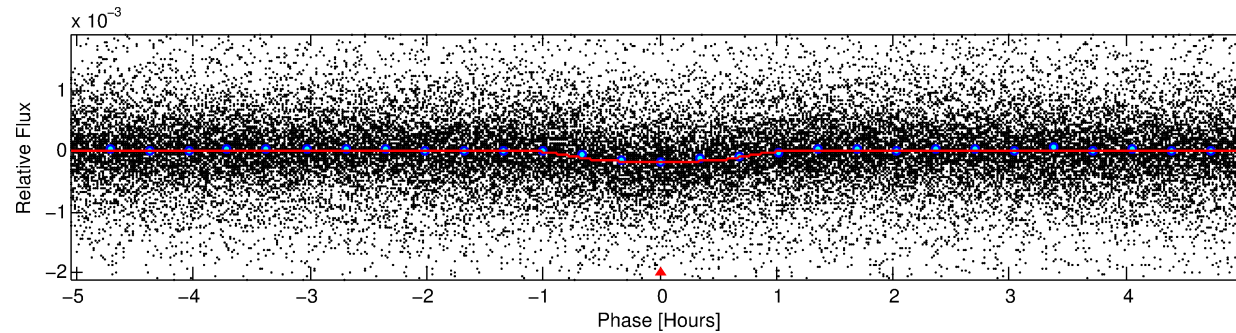
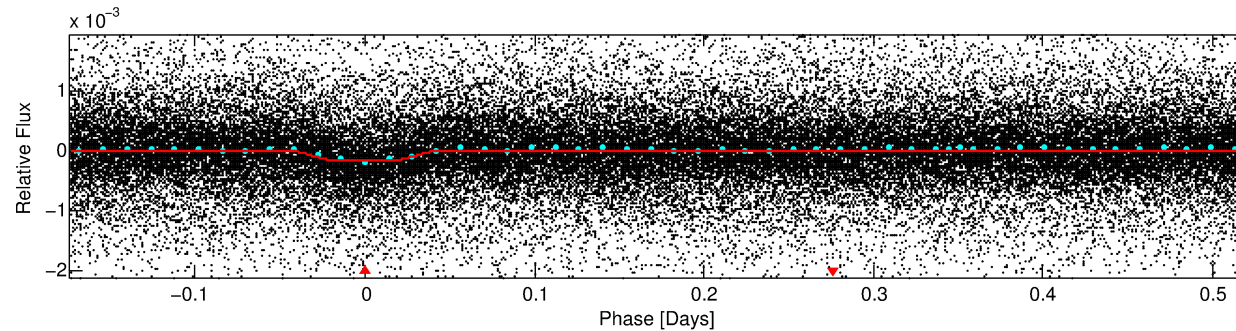
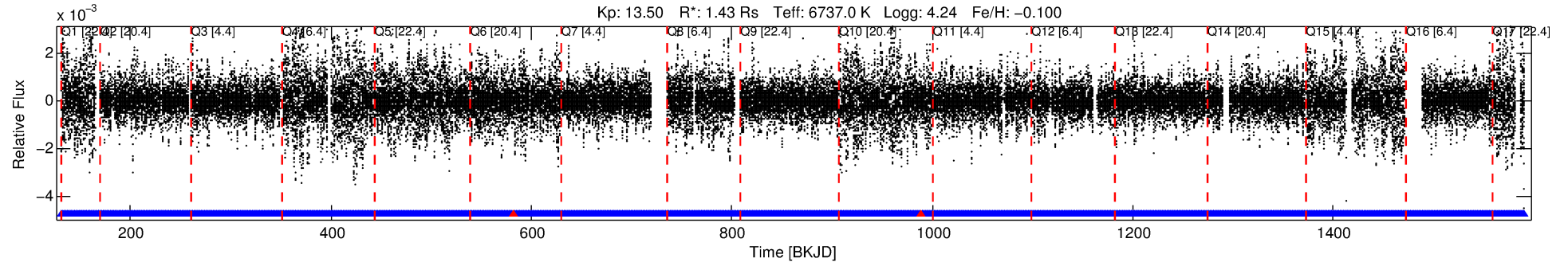
No Significant Match Found

DV One-Page Summary

KIC: 11466960 Candidate: 1 of 1 Period: 0.696 d

KOI: K03917.01 Corr: 0.892

Kp: 13.50 R*: 1.43 Rs Teff: 6737.0 K Logg: 4.24 Fe/H: -0.100



DV Fit Results:

Period = 0.69594 [0.00000] d
Epoch = 131.9086 [0.0005] BKJD
Rp/R* = 0.0139 [0.0016]
a/R* = 1.72 [0.75]
b = 0.90 [0.13]
Seff = 13341.54 [5244.90]
Teq = 2740 [269] K
Rp = 2.17 [0.74] Re
a = 0.0168 [0.0044] AU
Ag = N/A
Teff = N/A

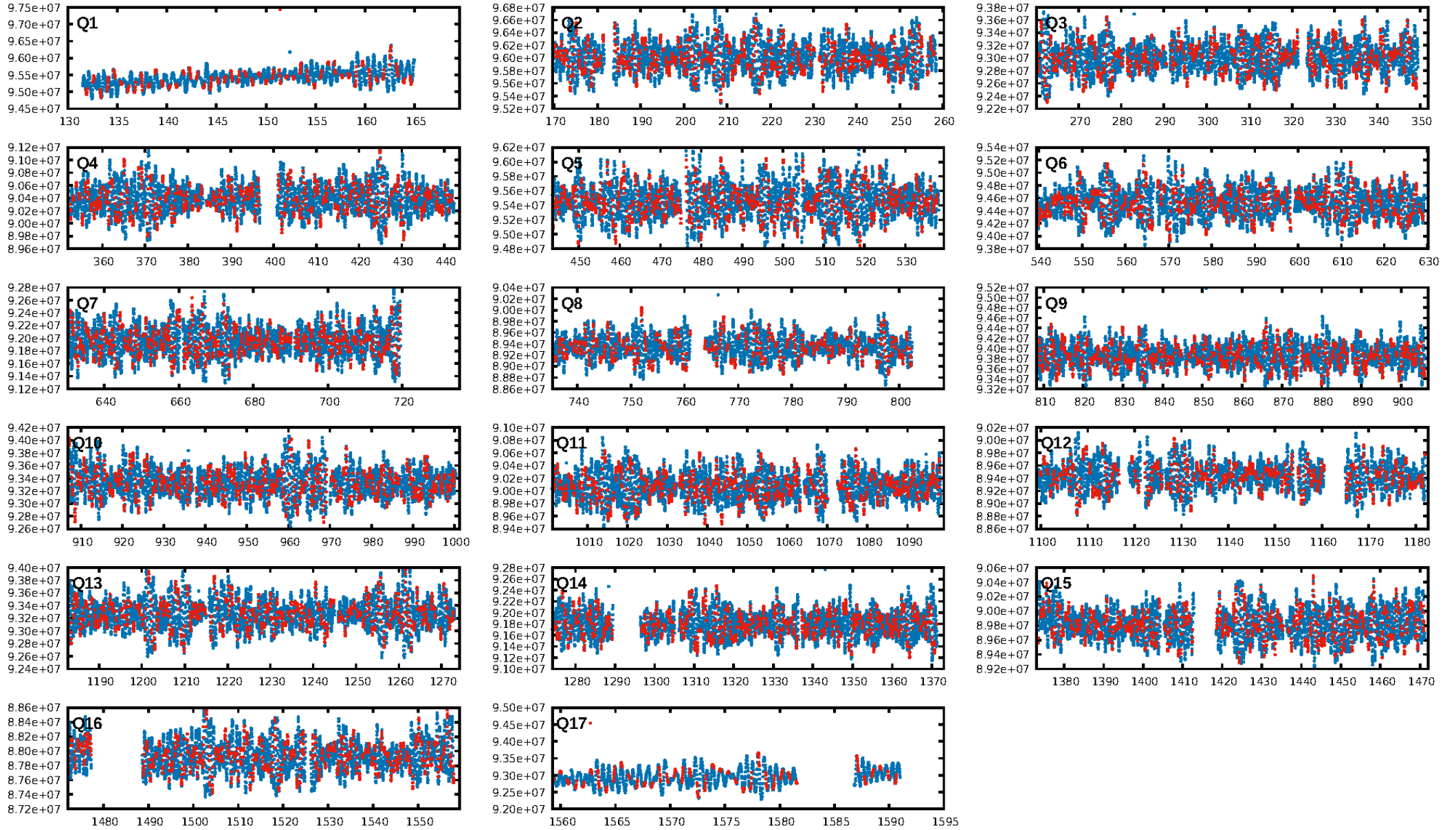
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.71e-34
RollingBand-fgt: 1.00 [1835/1837]
GhostDiagnostic-chr: 1.016
Centroid-sig: 0.0%
Centroid-so: 2.507 arcsec [11.78σ]
OotOffset-rm: 3.782 arcsec [37.54σ]
KicOffset-rm: 3.742 arcsec [35.38σ]
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]

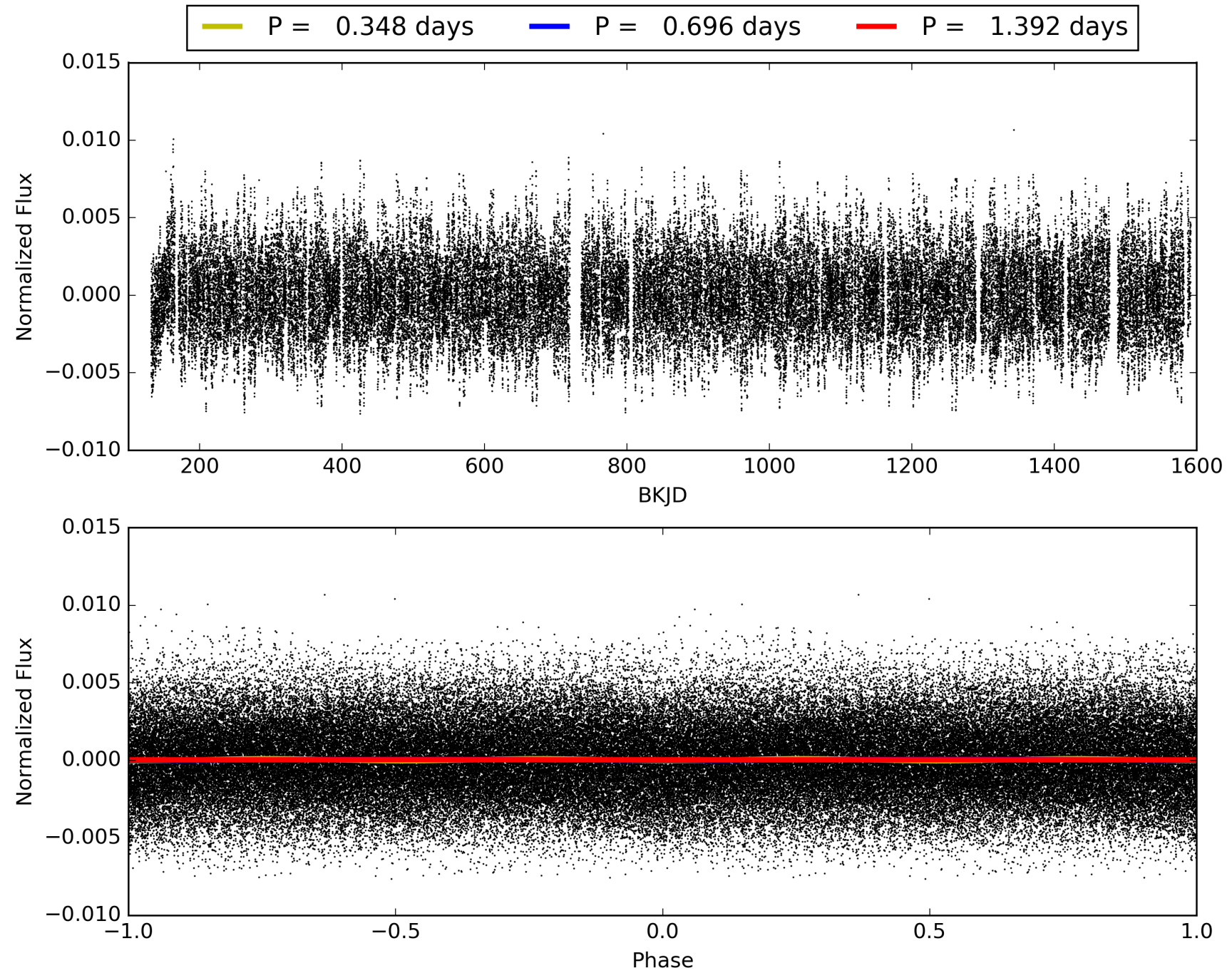
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 15:14:28 Z

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

TCE 011466960-01, PDC Light Curves

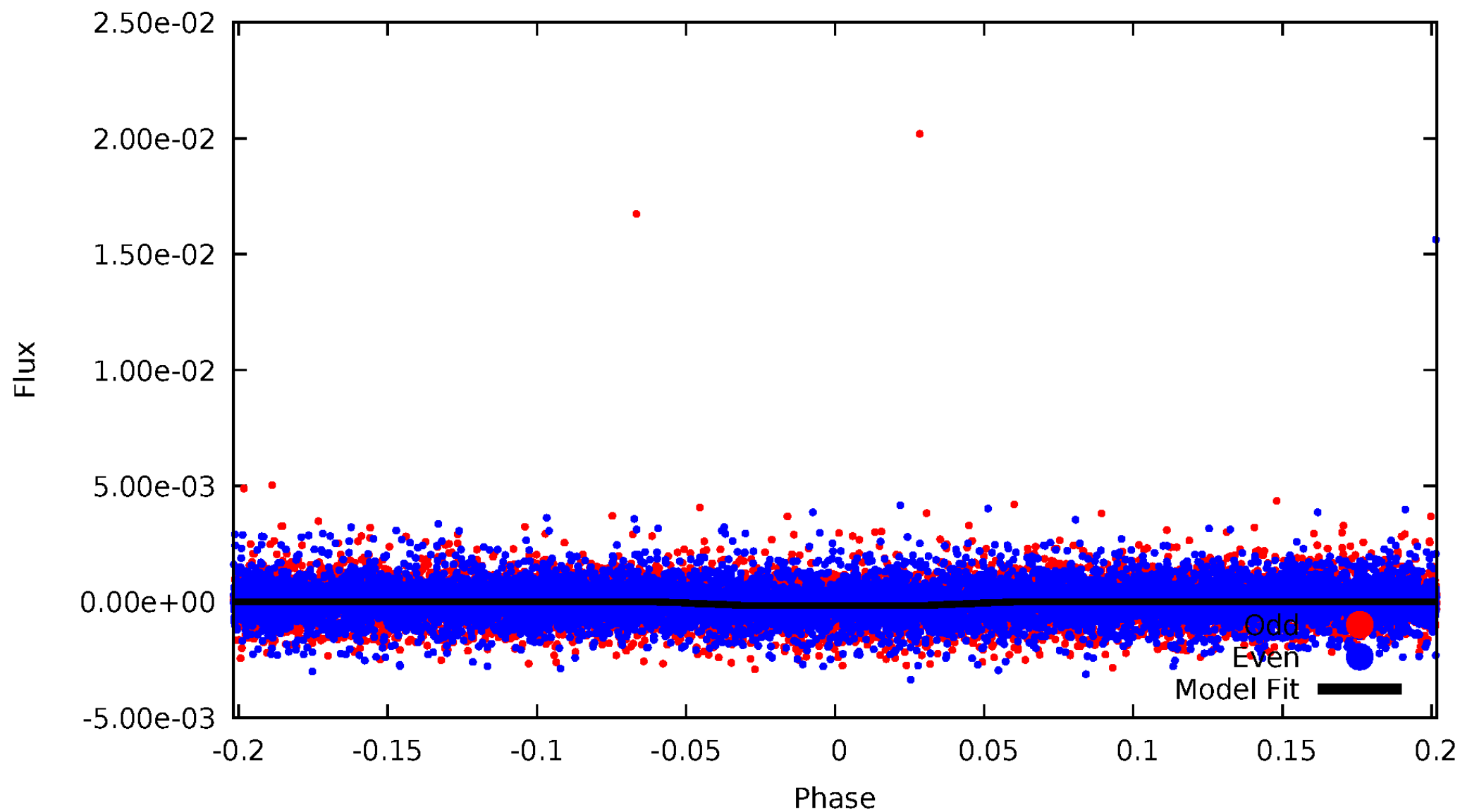


TCE 011466960-01



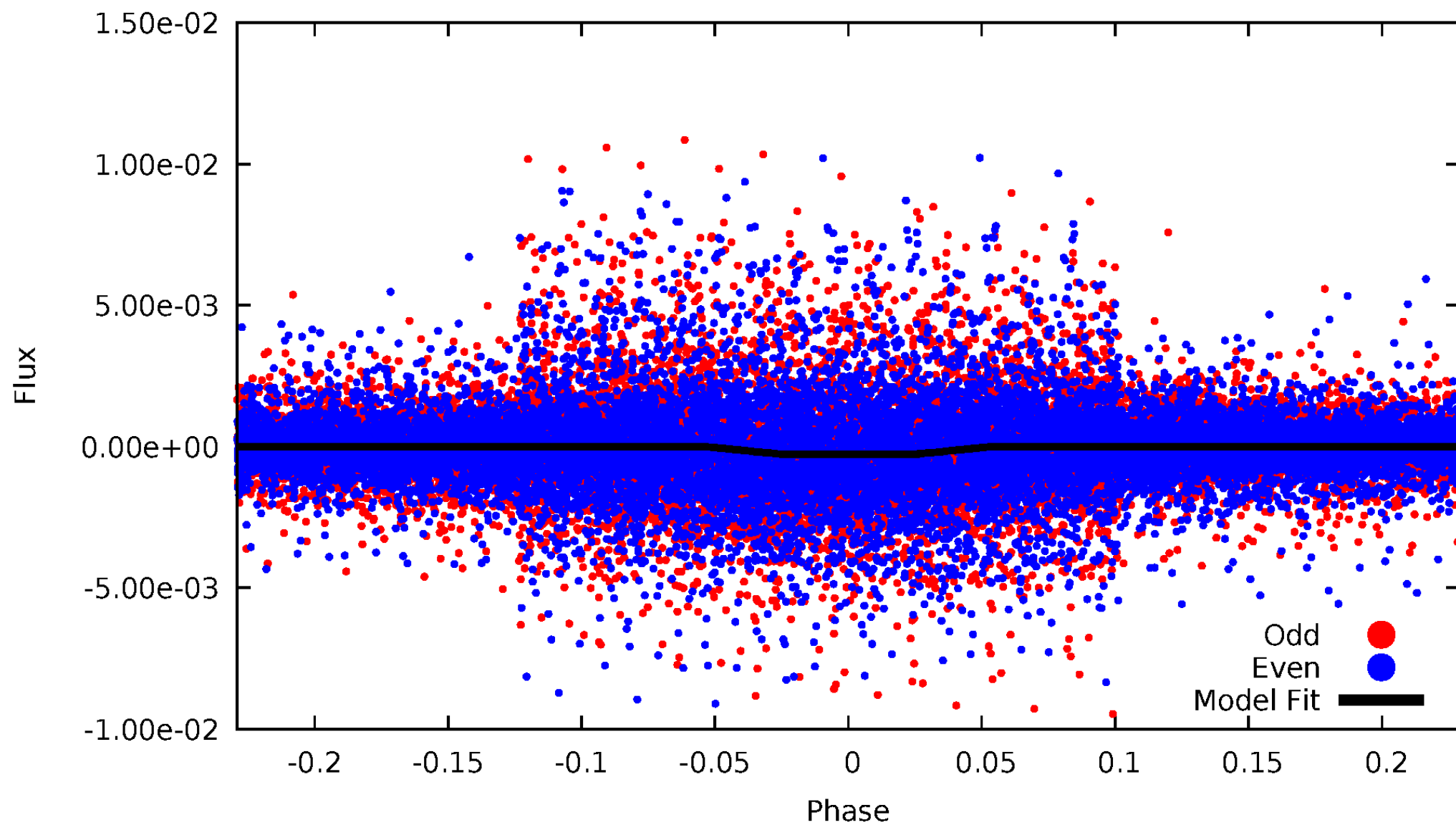
DV Odd/Even

TCE 011466960-01



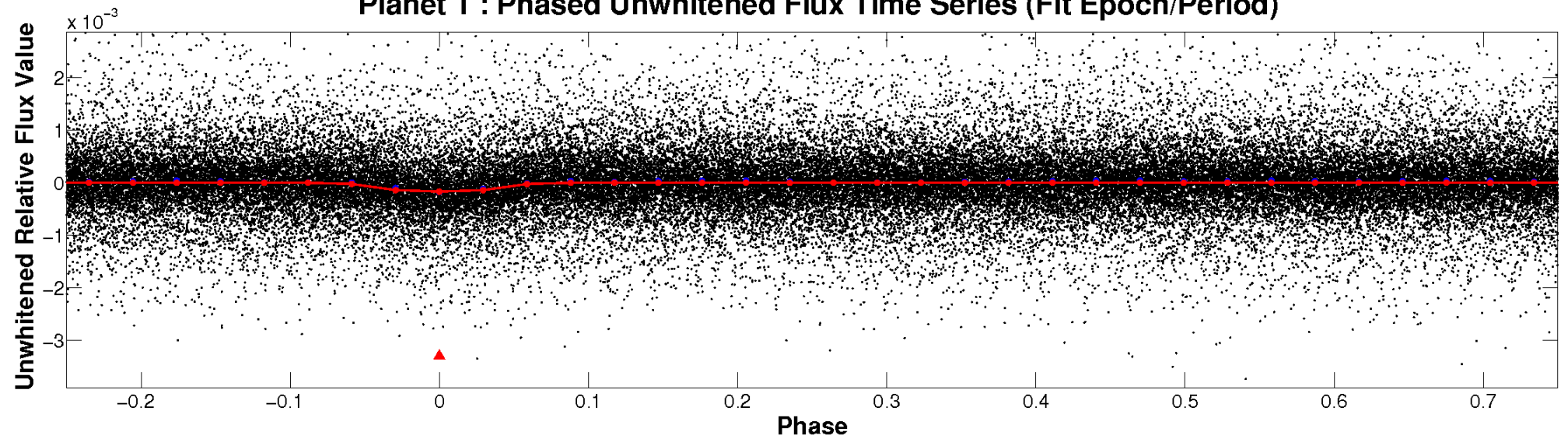
ALT Odd/Even

TCE 011466960-01

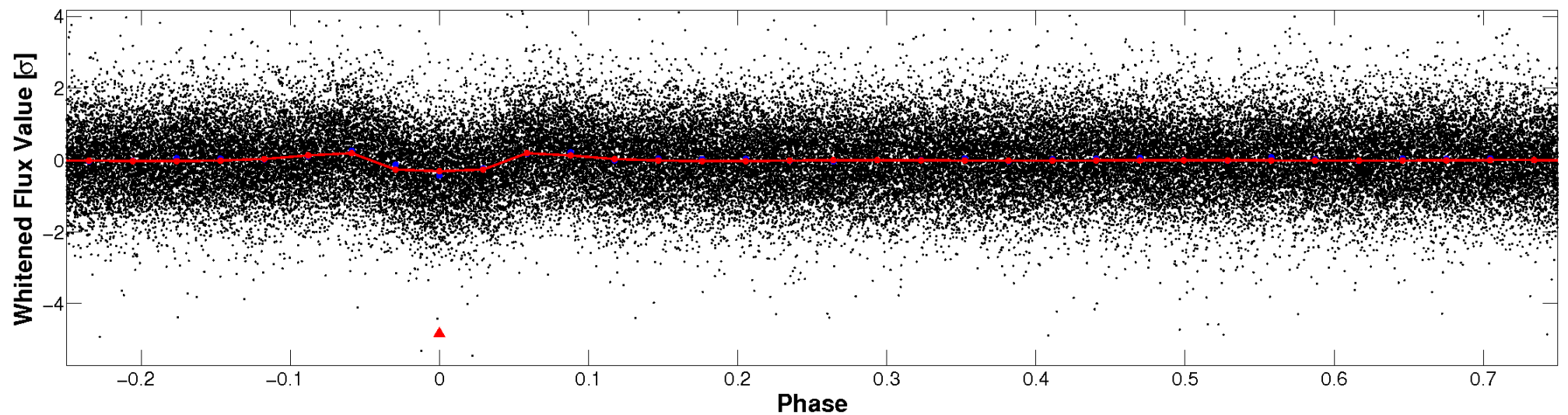


Non-Whitened Vs. Whitened Light Curve

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

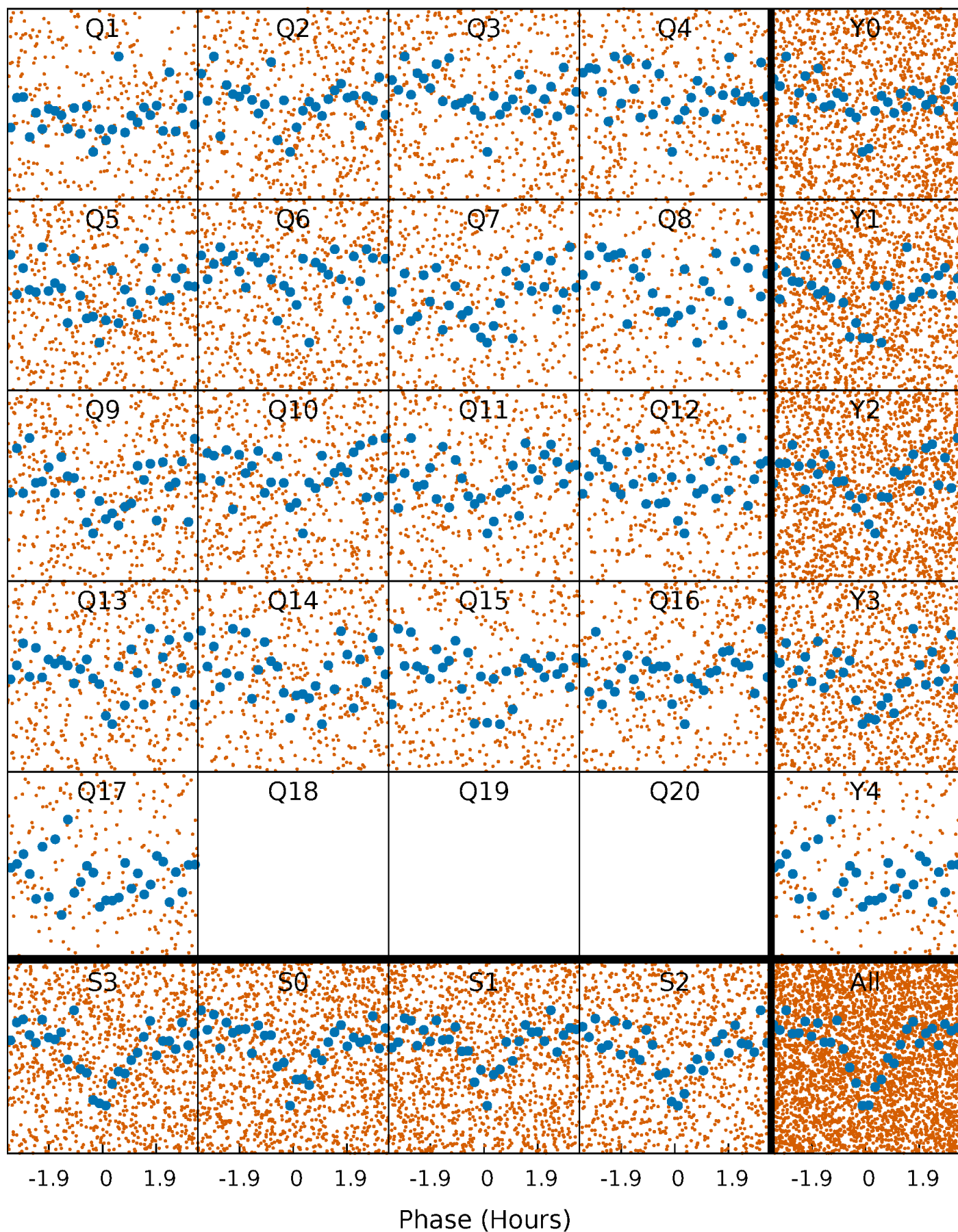


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



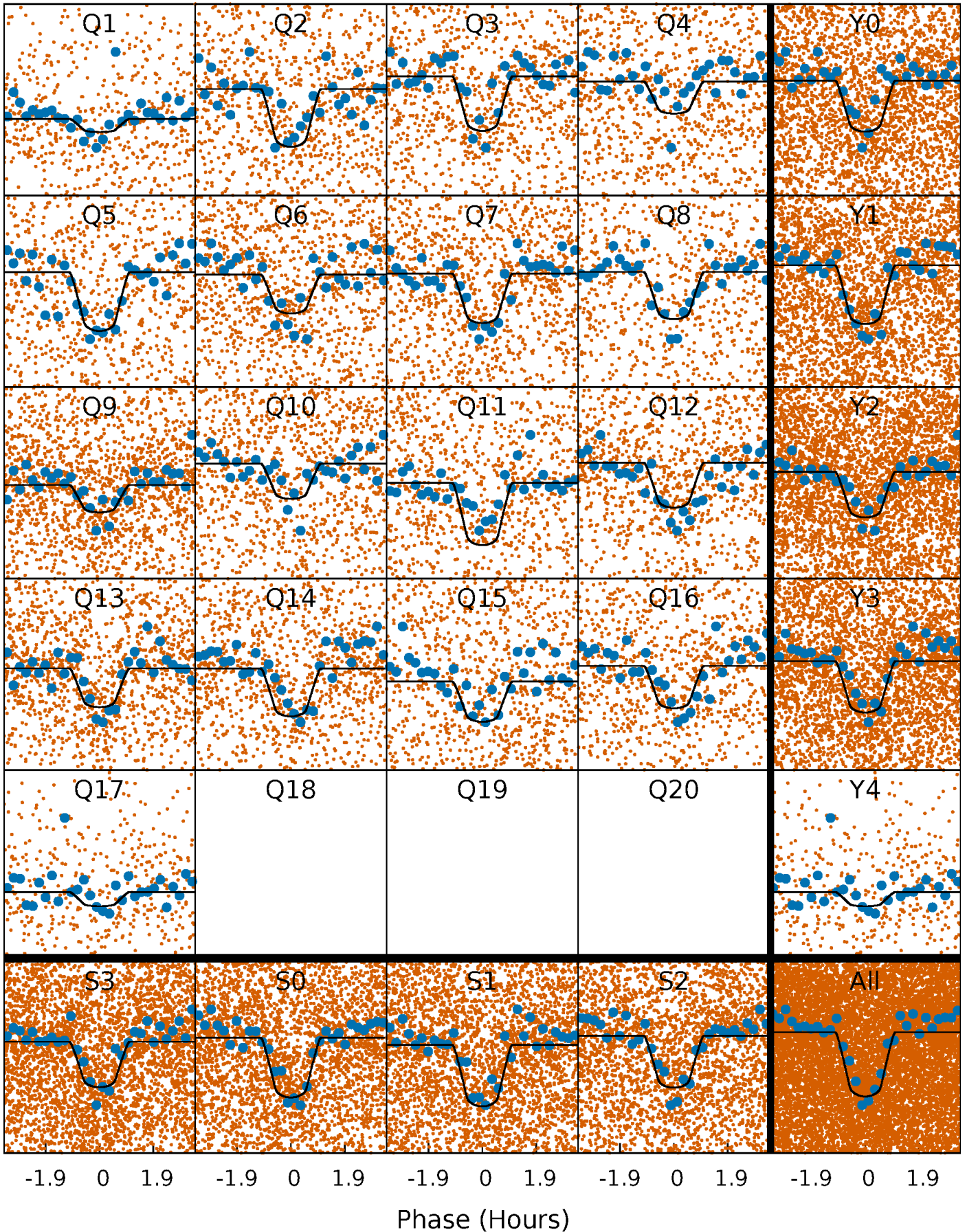
PDC Quarter-Phased Transit Curves

TCE 011466960-01 P= 0.695943 Days $T_0=131.908577$ (BKJD)



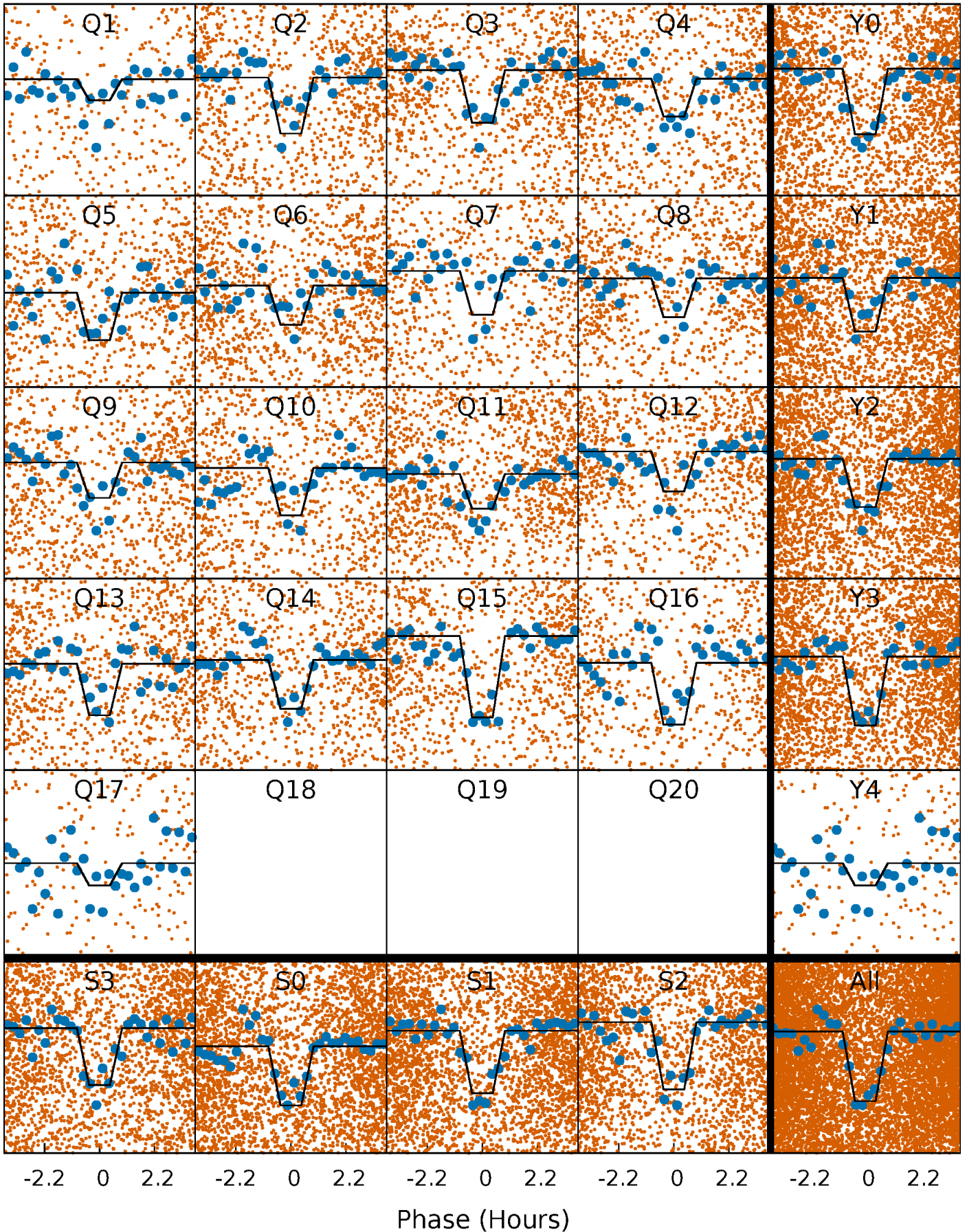
DV Quarter-Phased Transit Curves

TCE 011466960-01 P= 0.695943 Days $T_0=131.908577$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

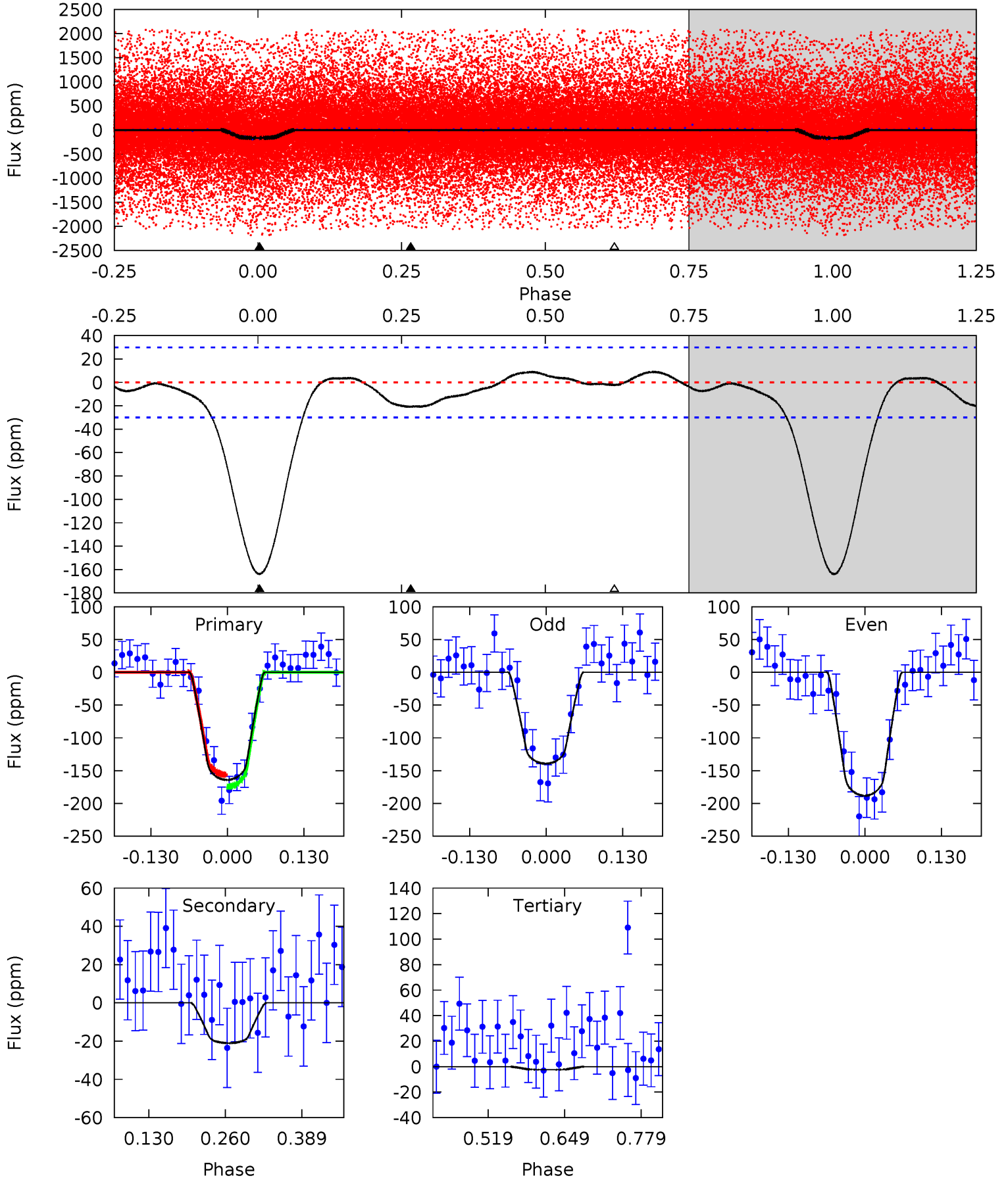
TCE 011466960-01 P= 0.695948 Days $T_0=131.907532$ (BKJD)



DV Model-Shift Uniqueness Test

011466960-01, P = 0.695943 Days, E = 131.212634 Days

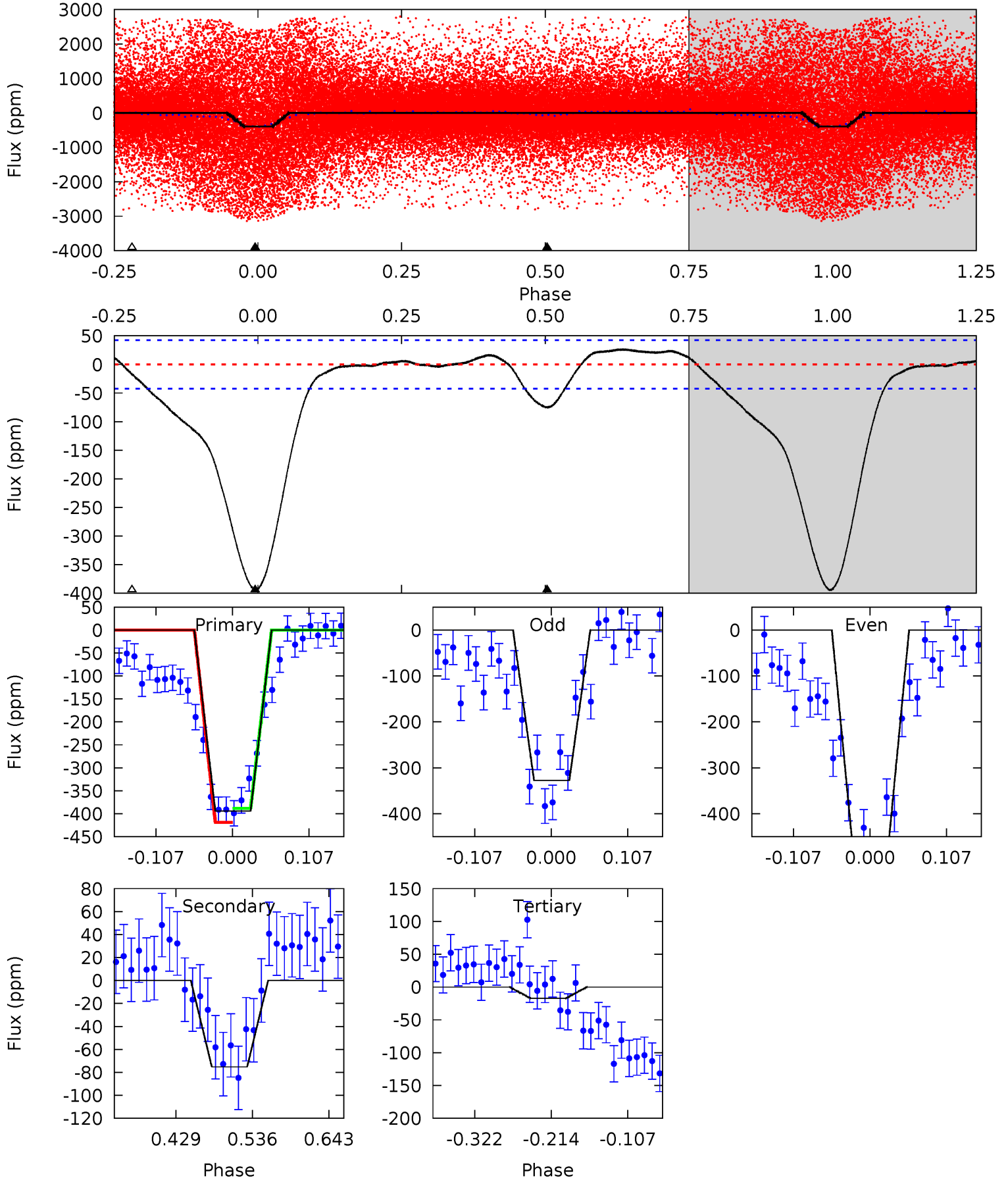
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
24.7	3.16	0.37	0	4.51	1.51	0.74	24.3	24.7	2.79	3.16	3.70	0.86	0.05	1.36



Alt Model-Shift Uniqueness Test

011466960-01, P = 0.695948 Days, E = 131.211584 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
42.2	8.06	1.84	0	4.55	1.61	3.43	40.4	42.2	6.22	8.06	7.96	0.69	0.06	1.63



Stellar Parameters For KIC 011466960

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6737^{+165}_{-236}	$4.243^{+0.105}_{-0.195}$	$-0.100^{+0.250}_{-0.300}$	$1.425^{+0.455}_{-0.245}$	$1.303^{+0.184}_{-0.204}$	$0.634^{+0.372}_{-0.318}$
	+2%/-4%	+2%/-5%	+250%/-300%	+32%/-17%	+14%/-16%	+59%/-50%
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 011466960-01 / KOI 3917.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-21 ± 7	$2.25^{+0.41}_{-0.38}$	3863^{+301}_{-220}	3702^{+400}_{-729}	$0.646^{+0.331}_{-0.272}$
Alt.	-75 ± 9	$2.64^{+0.46}_{-0.37}$	3867^{+283}_{-220}	4732^{+303}_{-304}	$1.649^{+0.625}_{-0.485}$

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

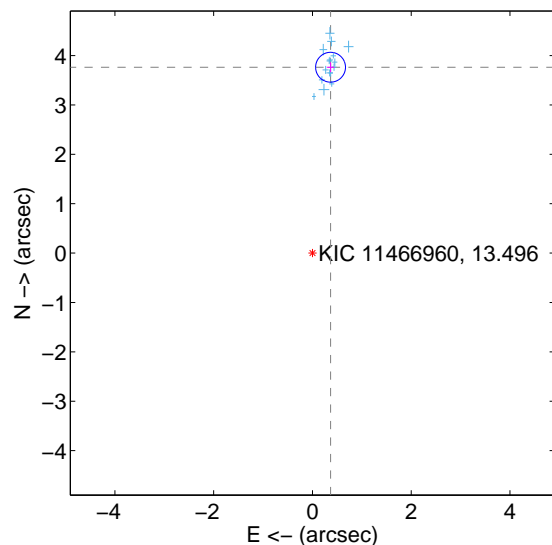
Supplemental centroid analysis for 011466960-01. Kepler magnitude: 13.50. Transit SNR 26.25

There are 17 quarters with good PRF difference image offsets

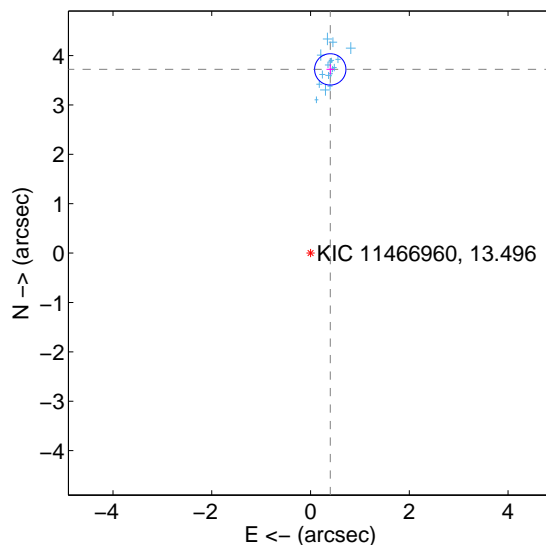
The direct PRF centroid is offset from the target star catalog position by about 0.07 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	3.782 ± 0.101	37.54	-0.367 ± 0.075	3.764 ± 0.100
PRF-fit source offset from KIC position	3.742 ± 0.106	35.38	-0.400 ± 0.076	3.721 ± 0.104
photometric centroid source offset	2.51 ± 0.21	11.78	-0.13 ± 0.18	2.50 ± 0.21

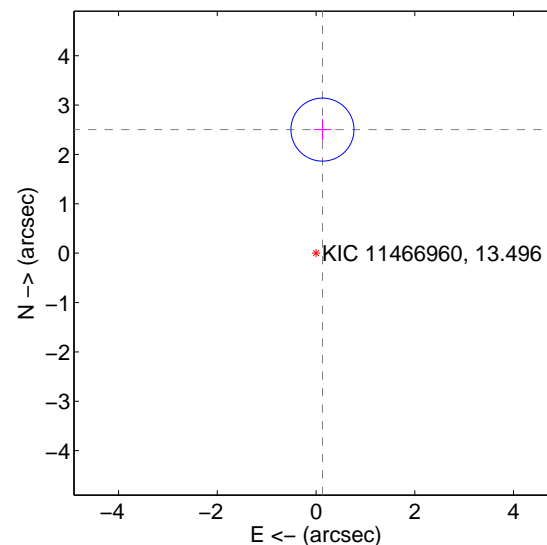
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

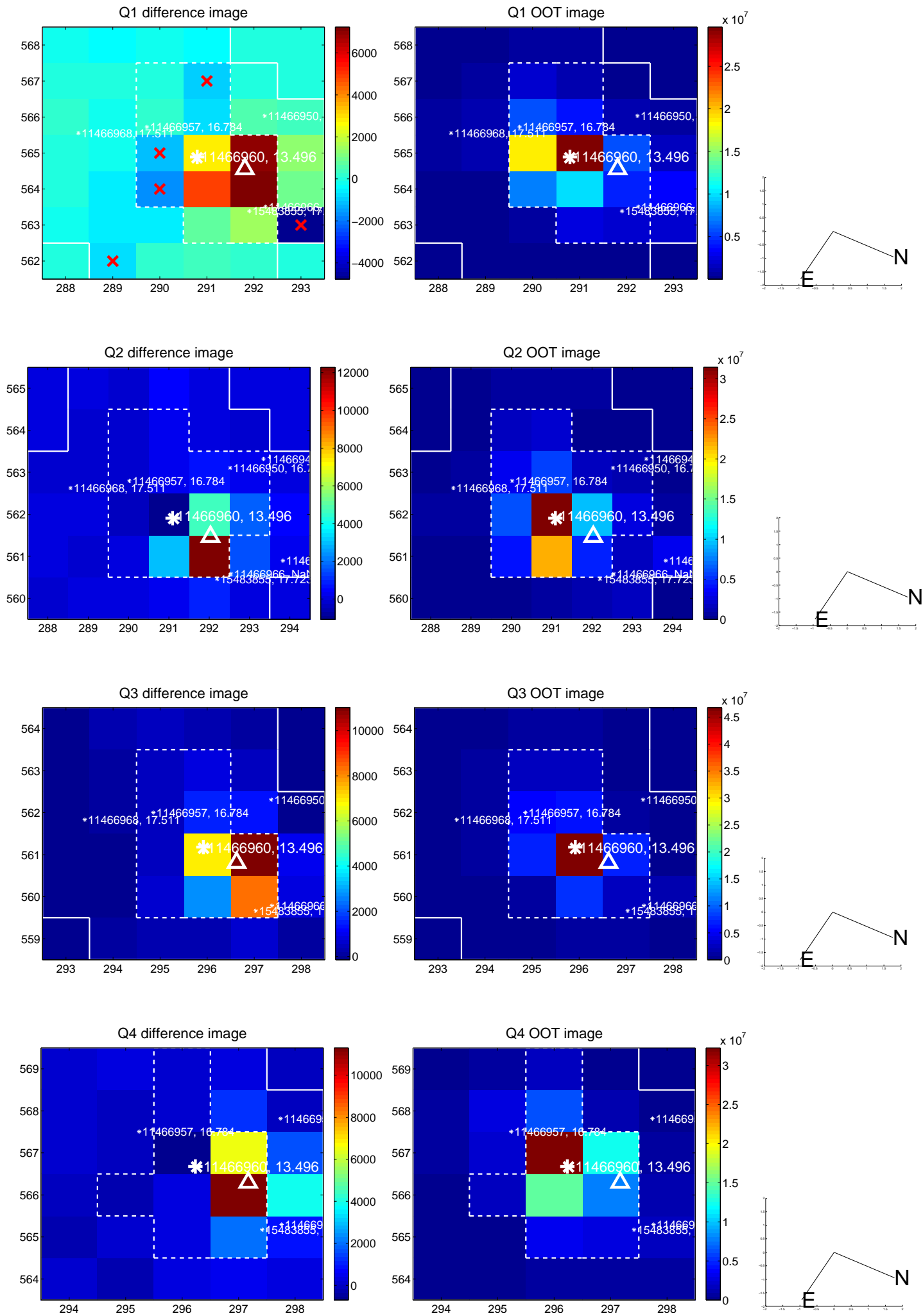


offset from photometric centroids

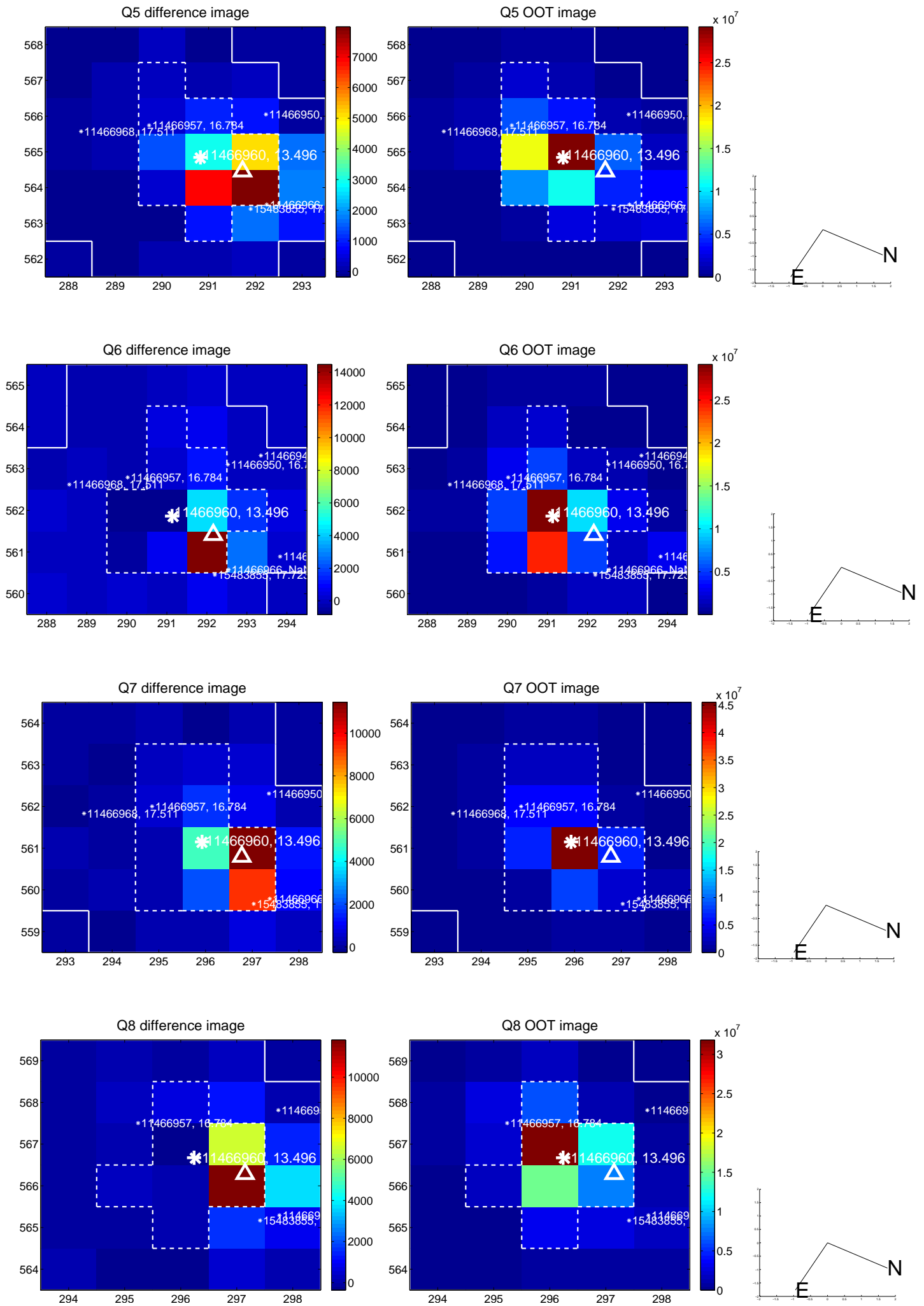


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

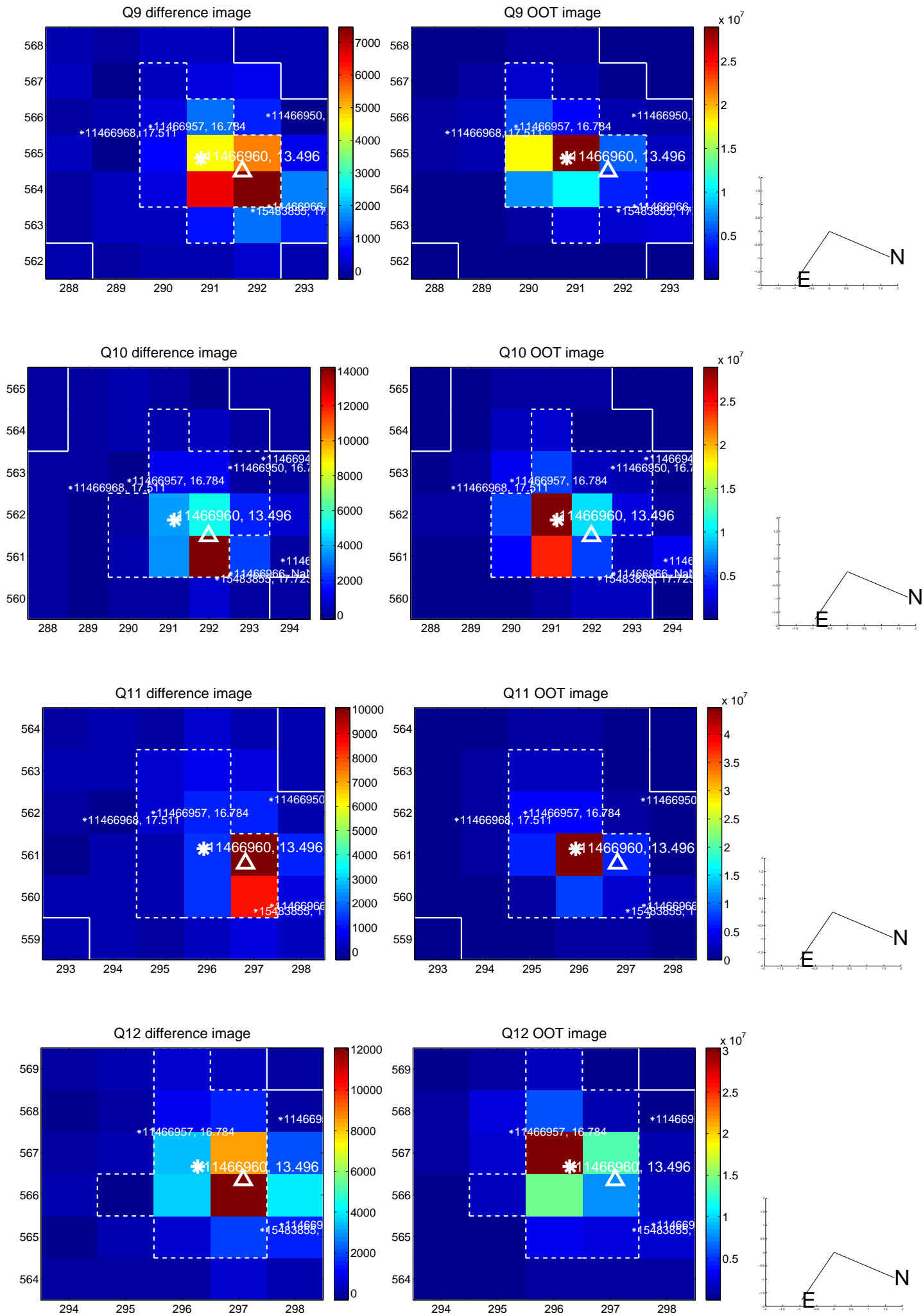
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



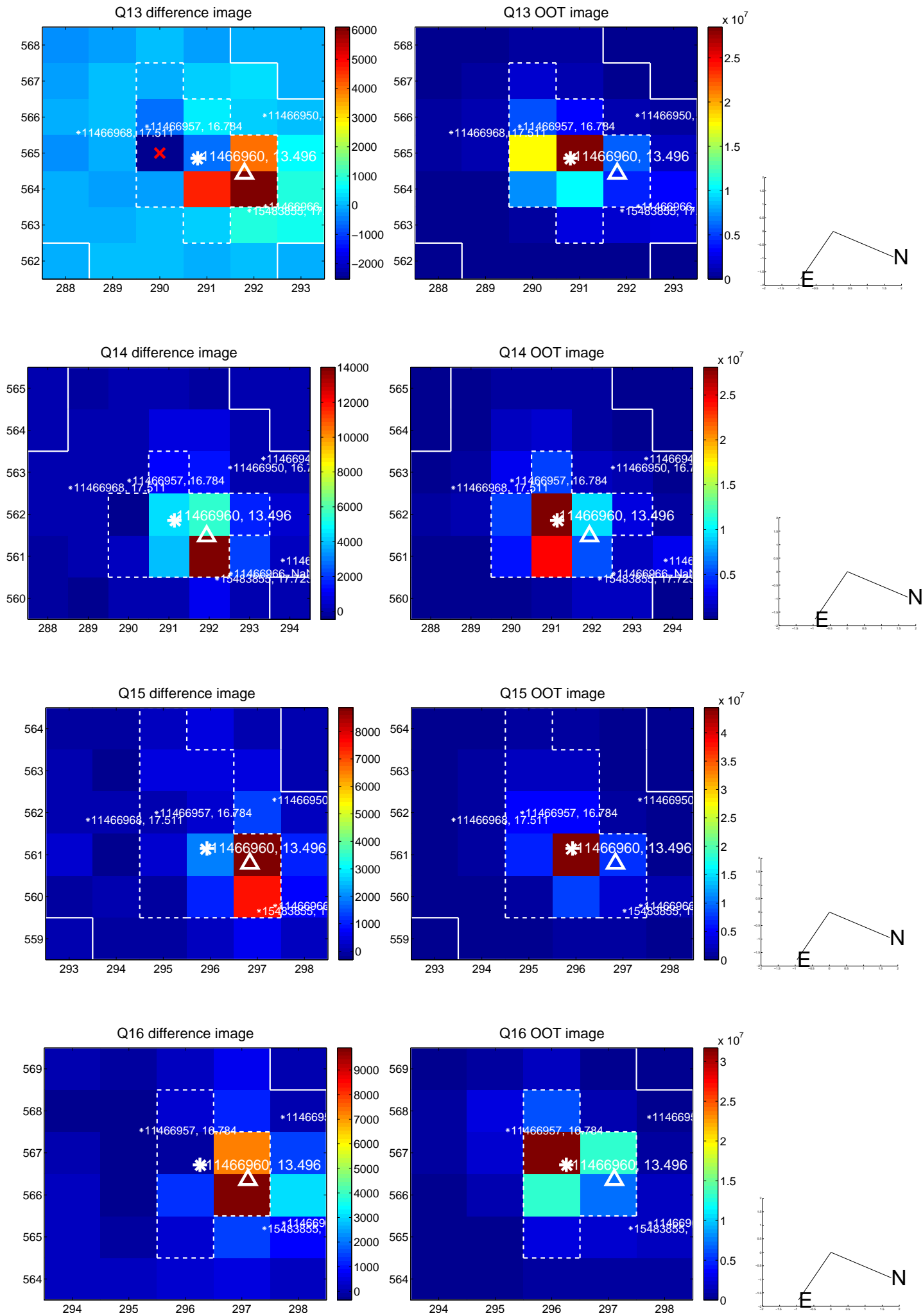
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



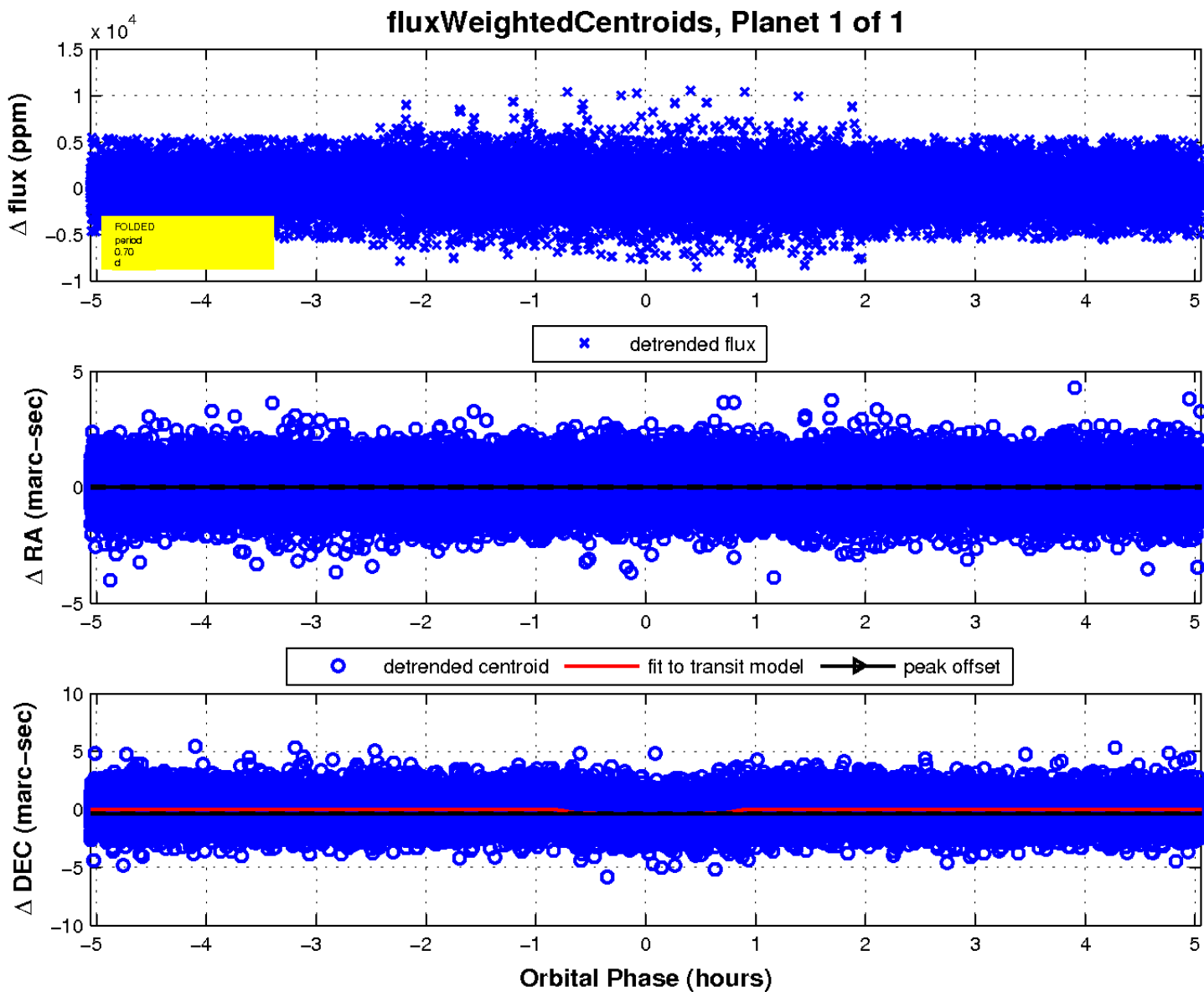
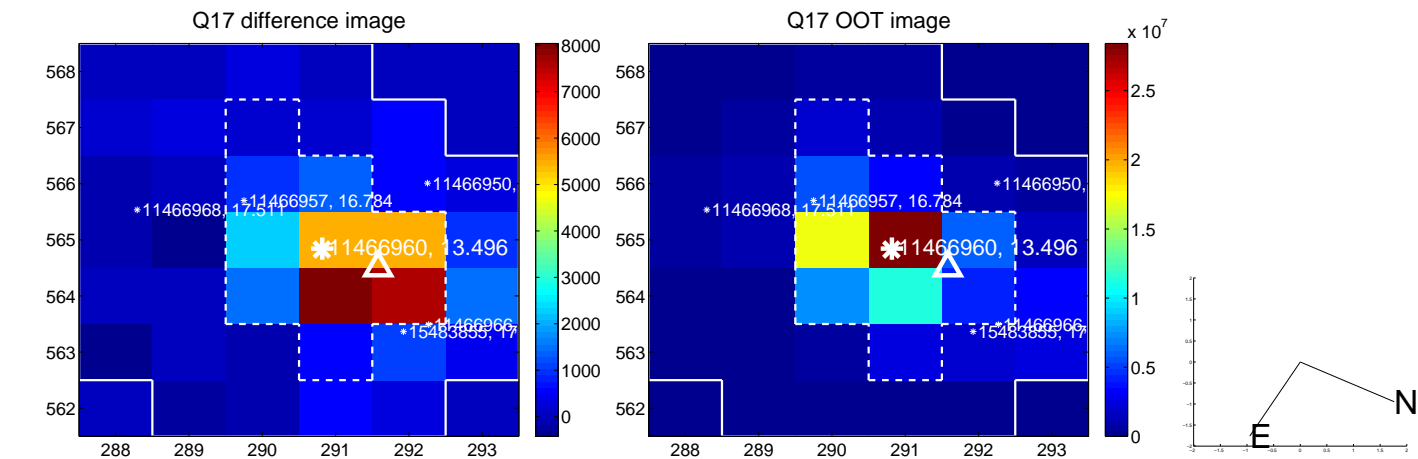
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

