

KIC 011508644

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})
011508644-01	OBS	3101.01	14.256260	133.409458	186.6	4.795	12.7	12.6	1.03	6140	1.65	95.34

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011508644-01	OBS	PC	1.00	0	0	0	0	NO_COMMENT

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.

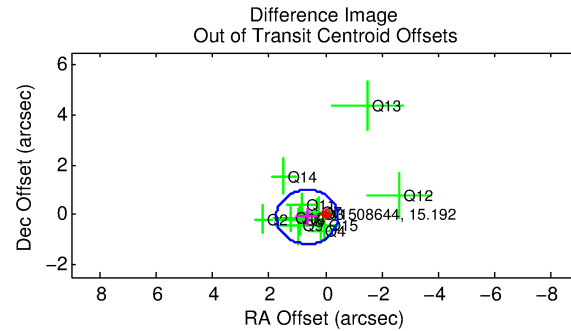
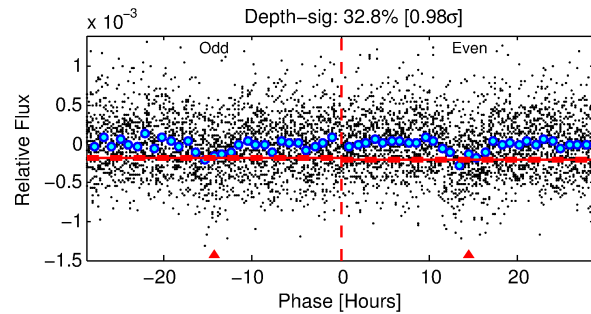
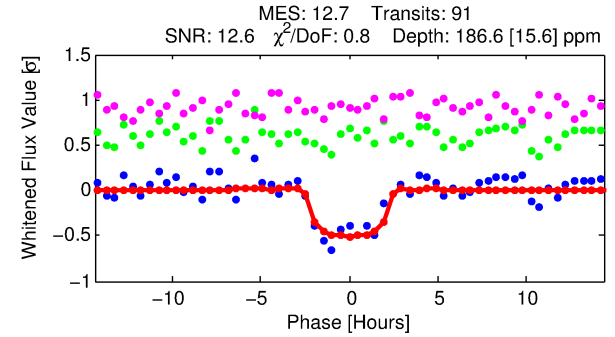
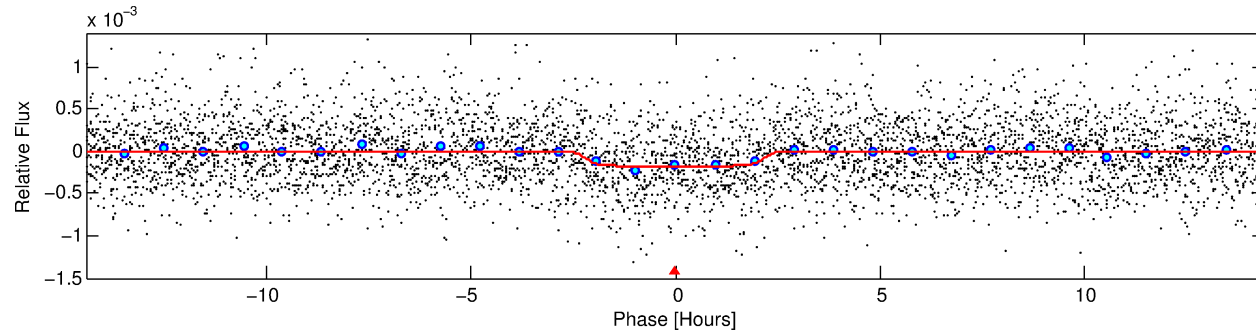
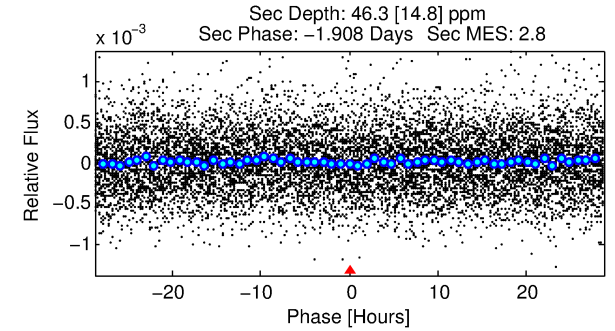
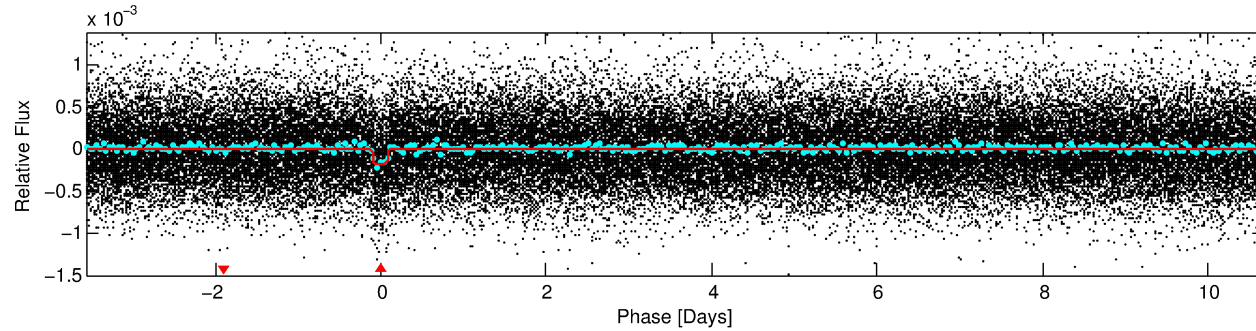
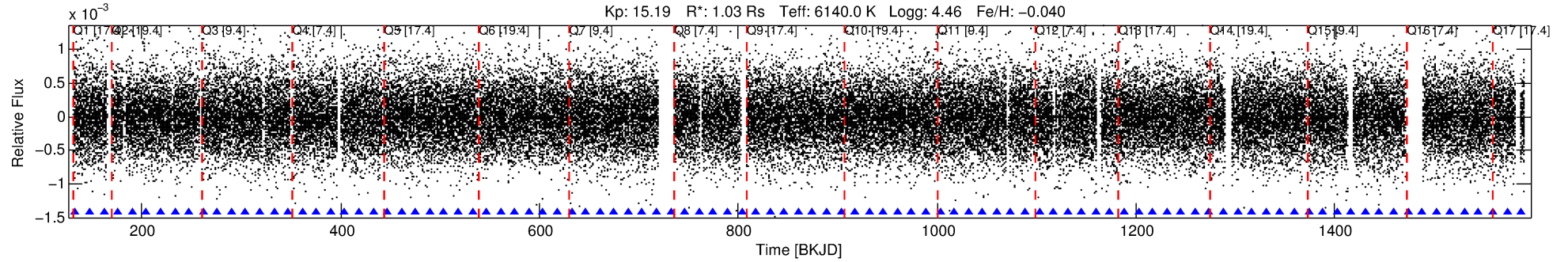
Ephemeris Match Information For 011508644-01

No Significant Match Found

DV One-Page Summary

KIC: 11508644 Candidate: 1 of 1 Period: 14.256 d

KOI: K03101.01 Corr: 0.957



DV Fit Results:

Period = 14.25626 [0.00014] d
Epoch = 133.4095 [0.0078] BKJD
Rp/R* = 0.0147 [0.0039]
a/R* = 10.70 [14.62]
b = 0.90 [0.30]
Seff = 95.34 [40.06]
Teq = 797 [84] K
Rp = 1.65 [0.70] Re
a = 0.1187 [0.0325] AU
Ag = 131.65 [96.75] [1.35σ]
Teffp = 4173 [669] K [5.01σ]

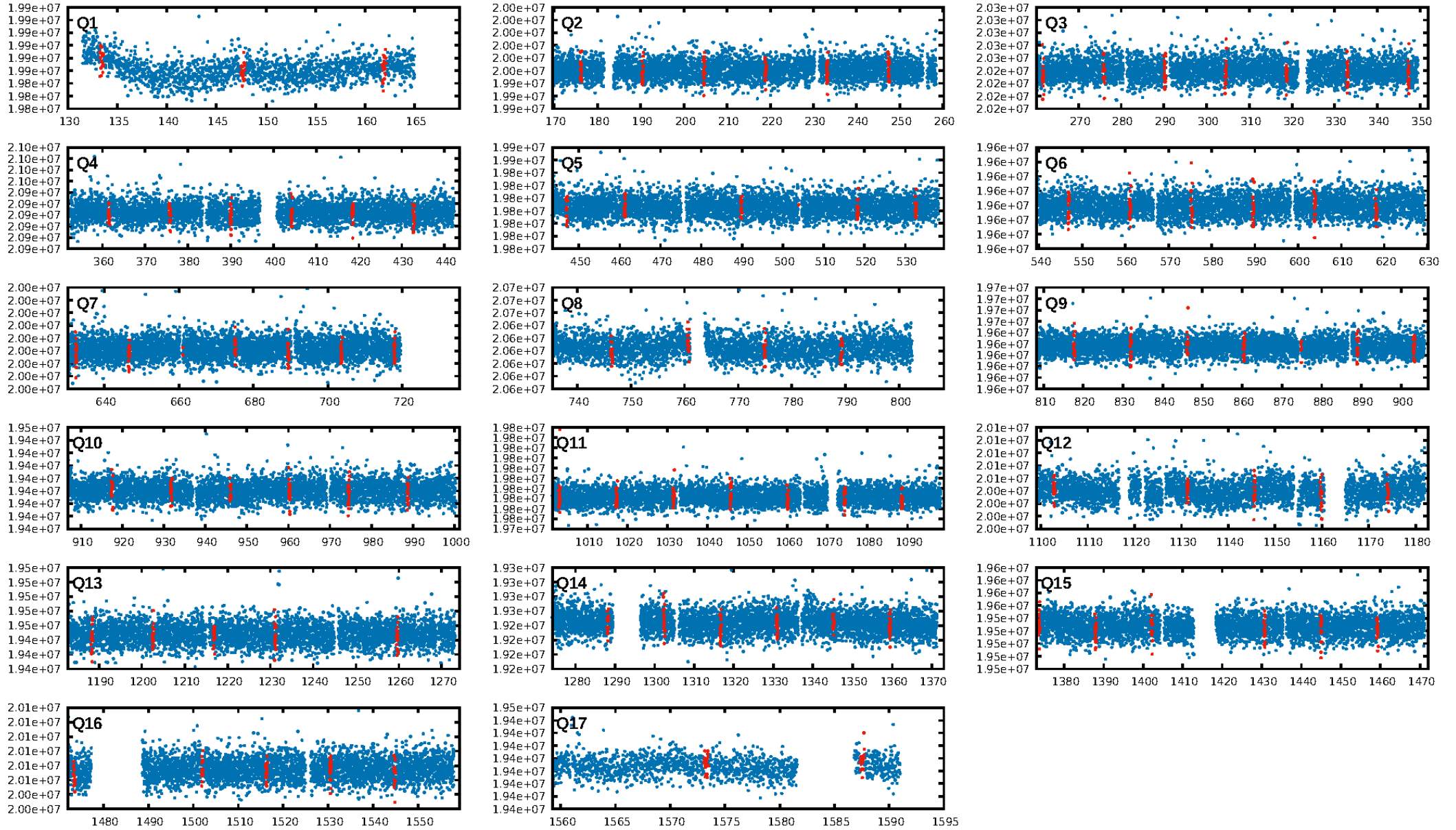
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 99.9%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 3.00e-36
RollingBand-fgt: 1.00 [86/86]
GhostDiagnostic-chr: 13.84
Centroid-sig: 35.2%
Centroid-so: 0.765 arcsec [0.68σ]
OotOffset-rm: 0.664 arcsec [1.83σ]
KicOffset-rm: 0.542 arcsec [1.11σ]
OotOffset-st: 4/4/2/2 [12]
KicOffset-st: 4/4/2/2 [12]
DiffImageQuality-fgm: 0.75 [9/12]
DiffImageOverlap-fno: 1.00 [17/17]

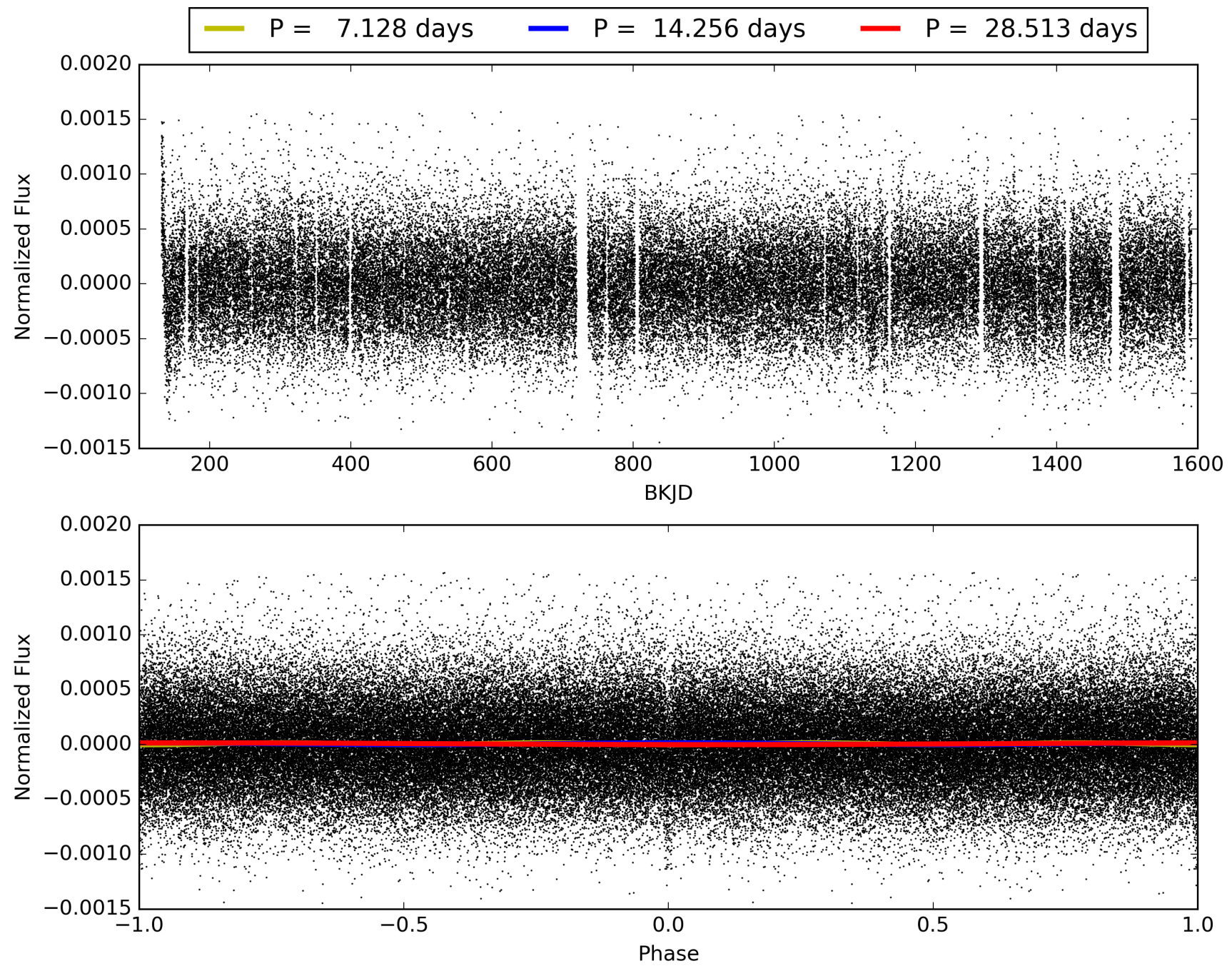
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 19:52:12 Z

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

TCE 011508644-01, PDC Light Curves

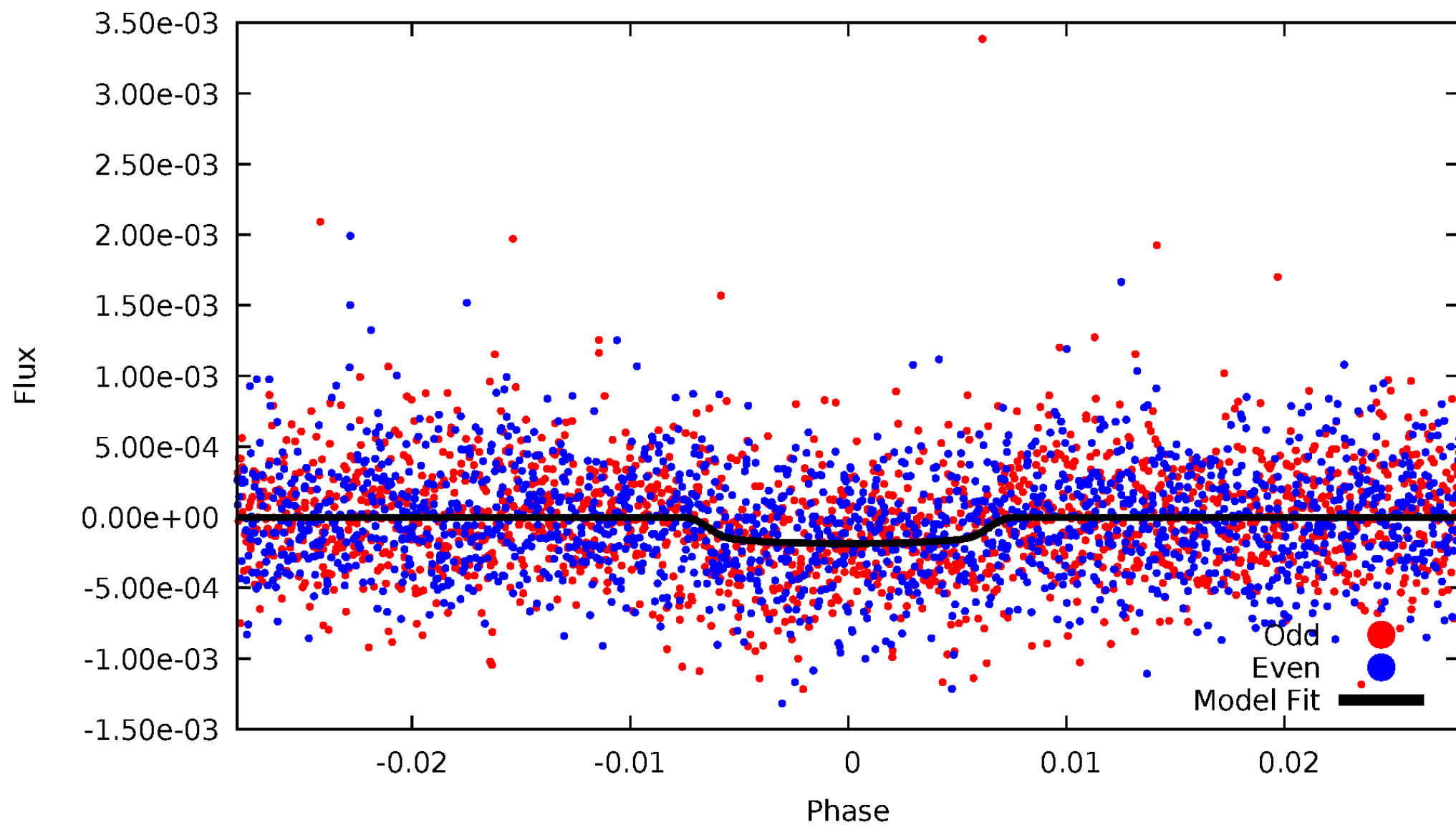


TCE 011508644-01



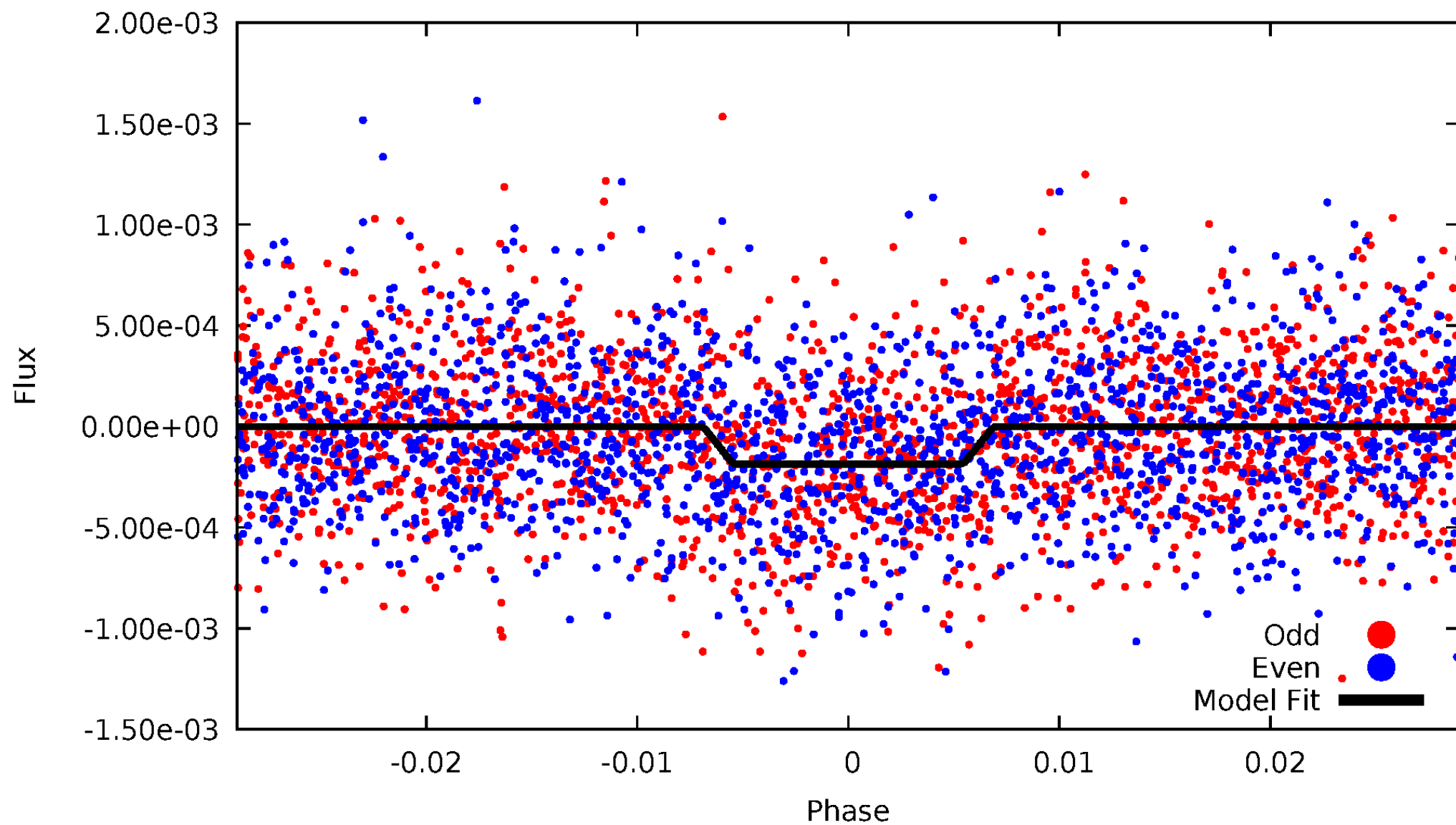
DV Odd/Even

TCE 011508644-01



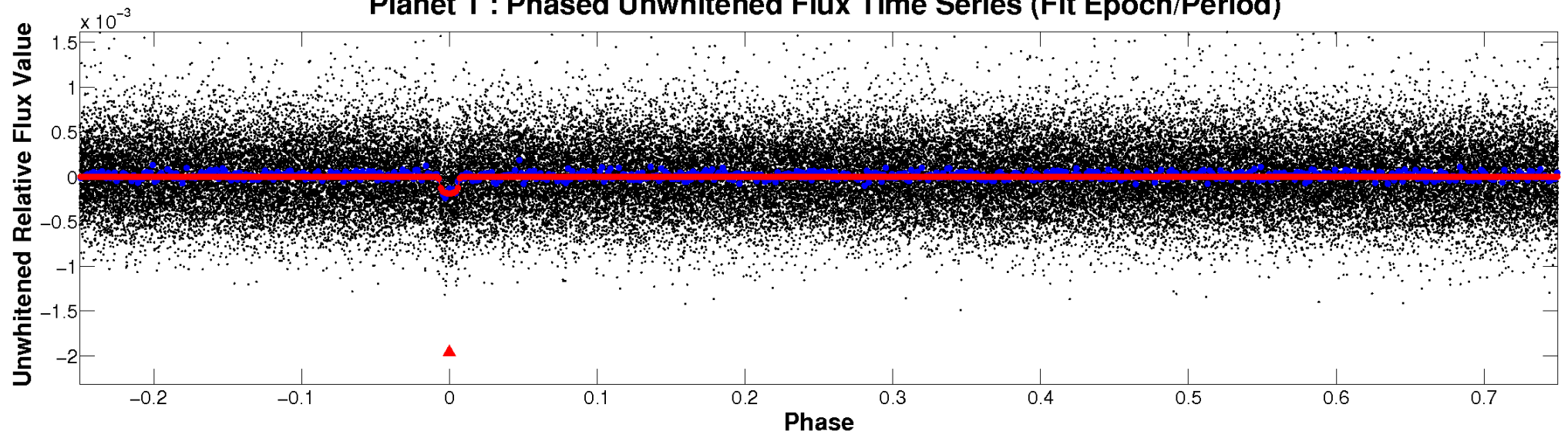
ALT Odd/Even

TCE 011508644-01

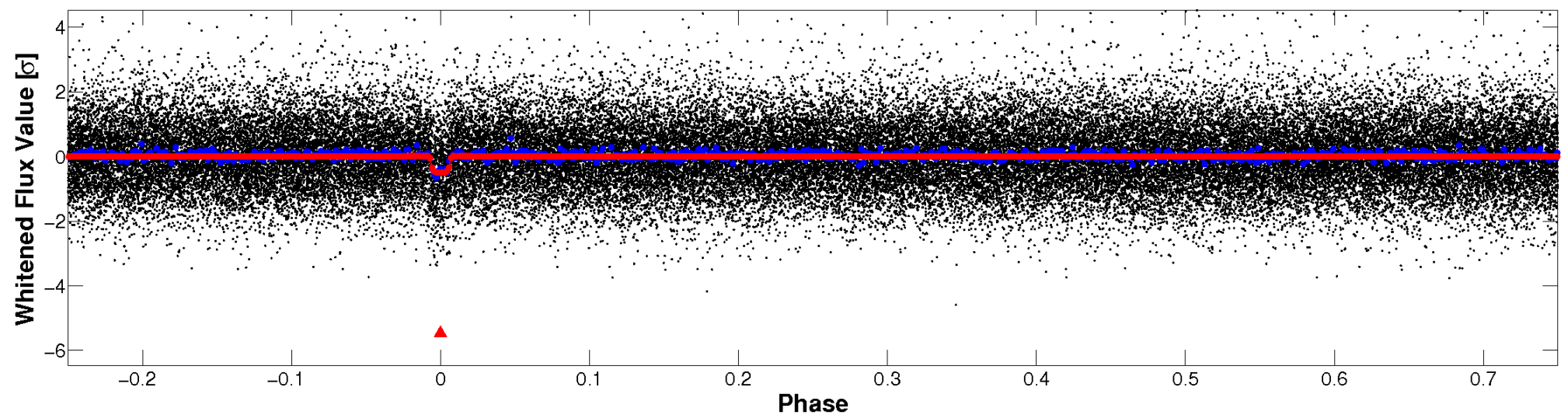


Non-Whitened Vs. Whitened Light Curve

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

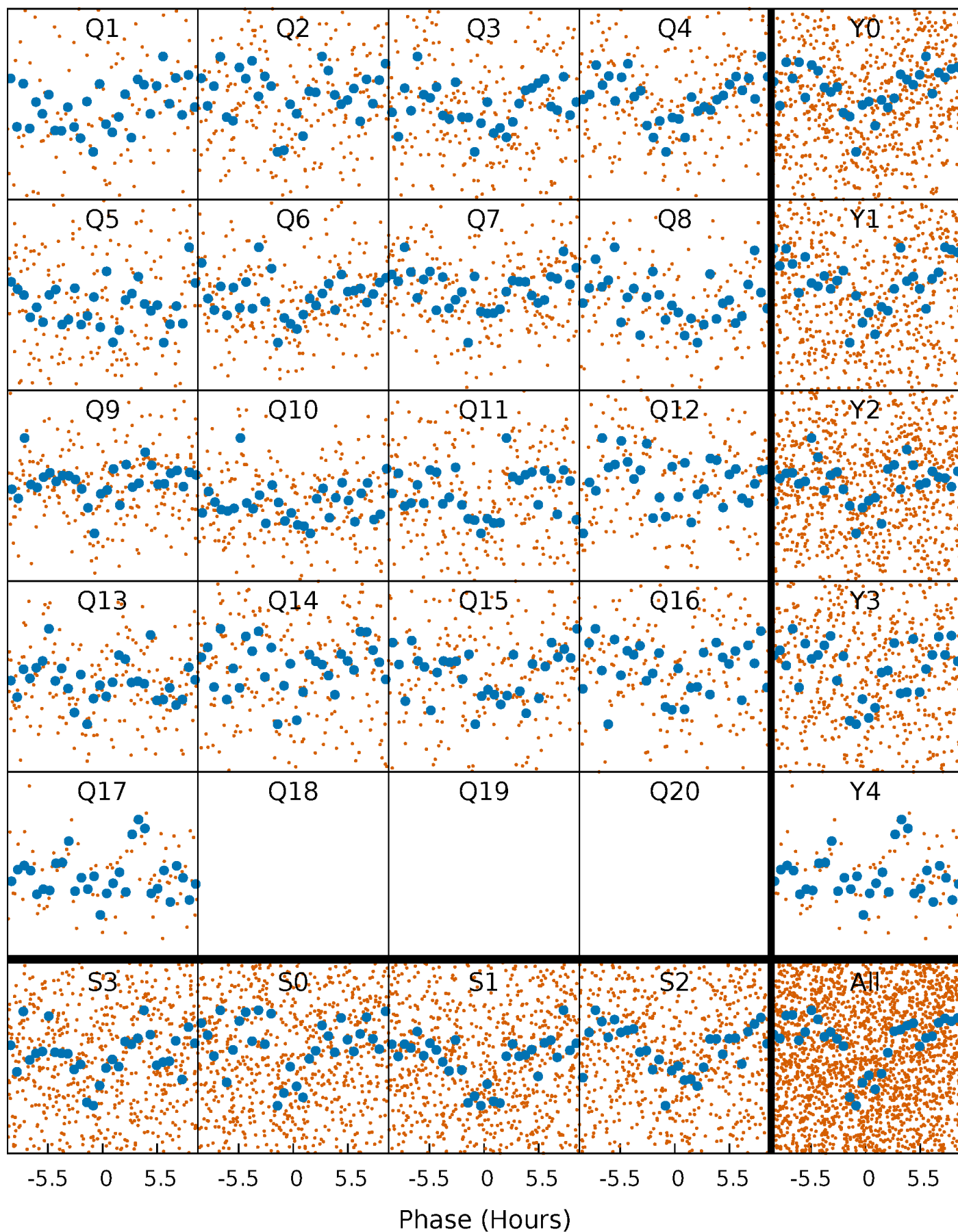


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



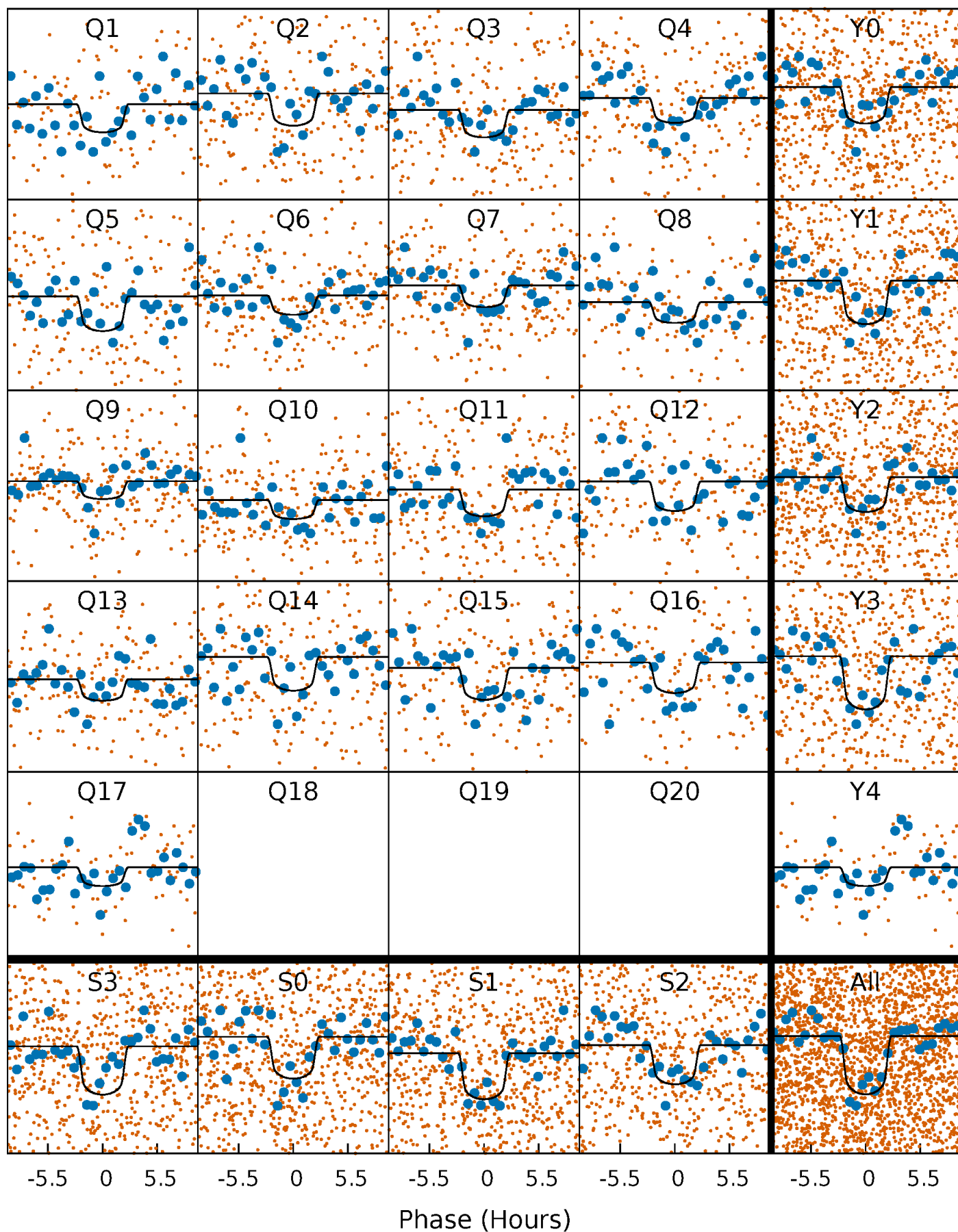
PDC Quarter-Phased Transit Curves

TCE 011508644-01 P= 14.256260 Days $T_0=133.409458$ (BKJD)



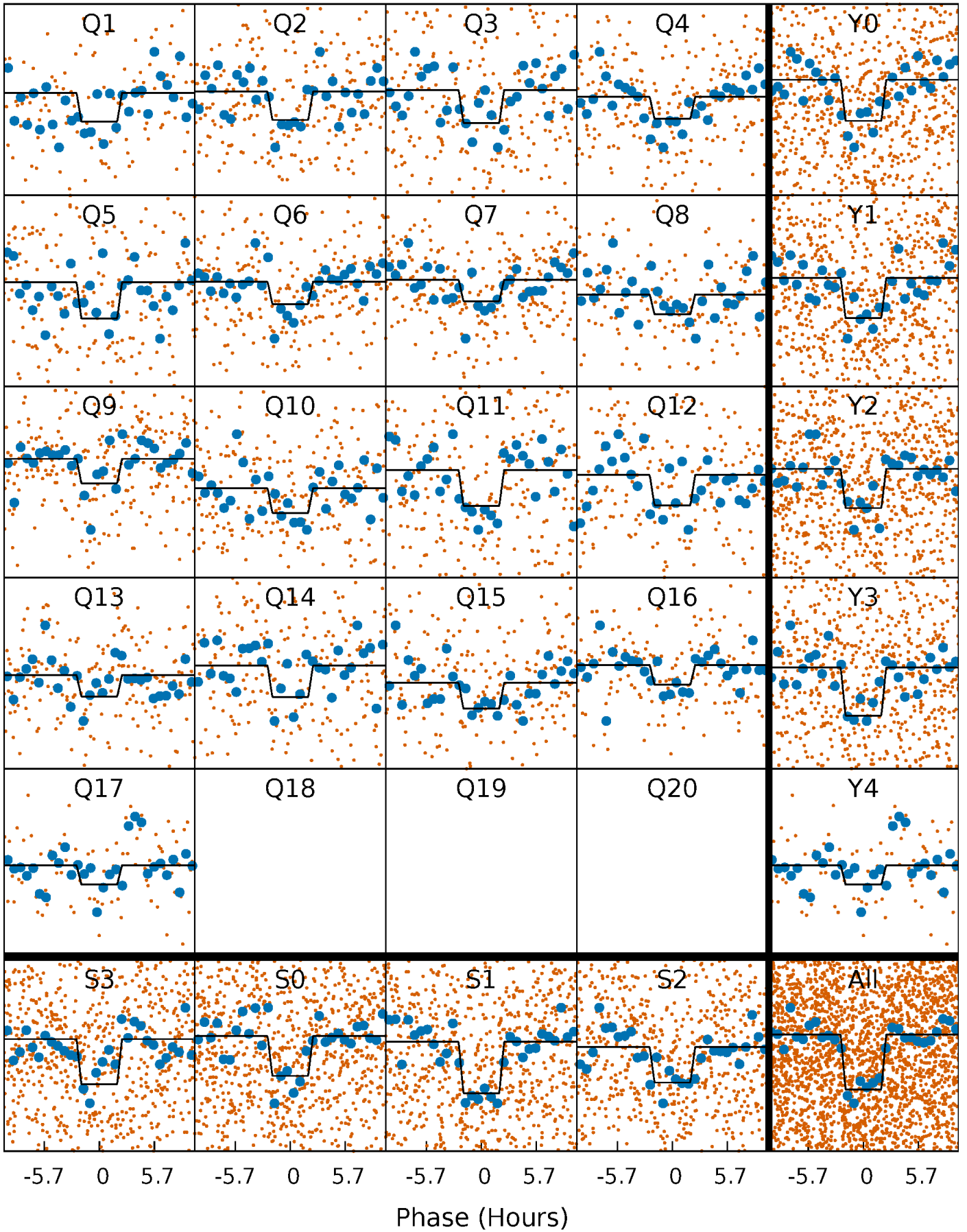
DV Quarter-Phased Transit Curves

TCE 011508644-01 P= 14.256260 Days $T_0=133.409458$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

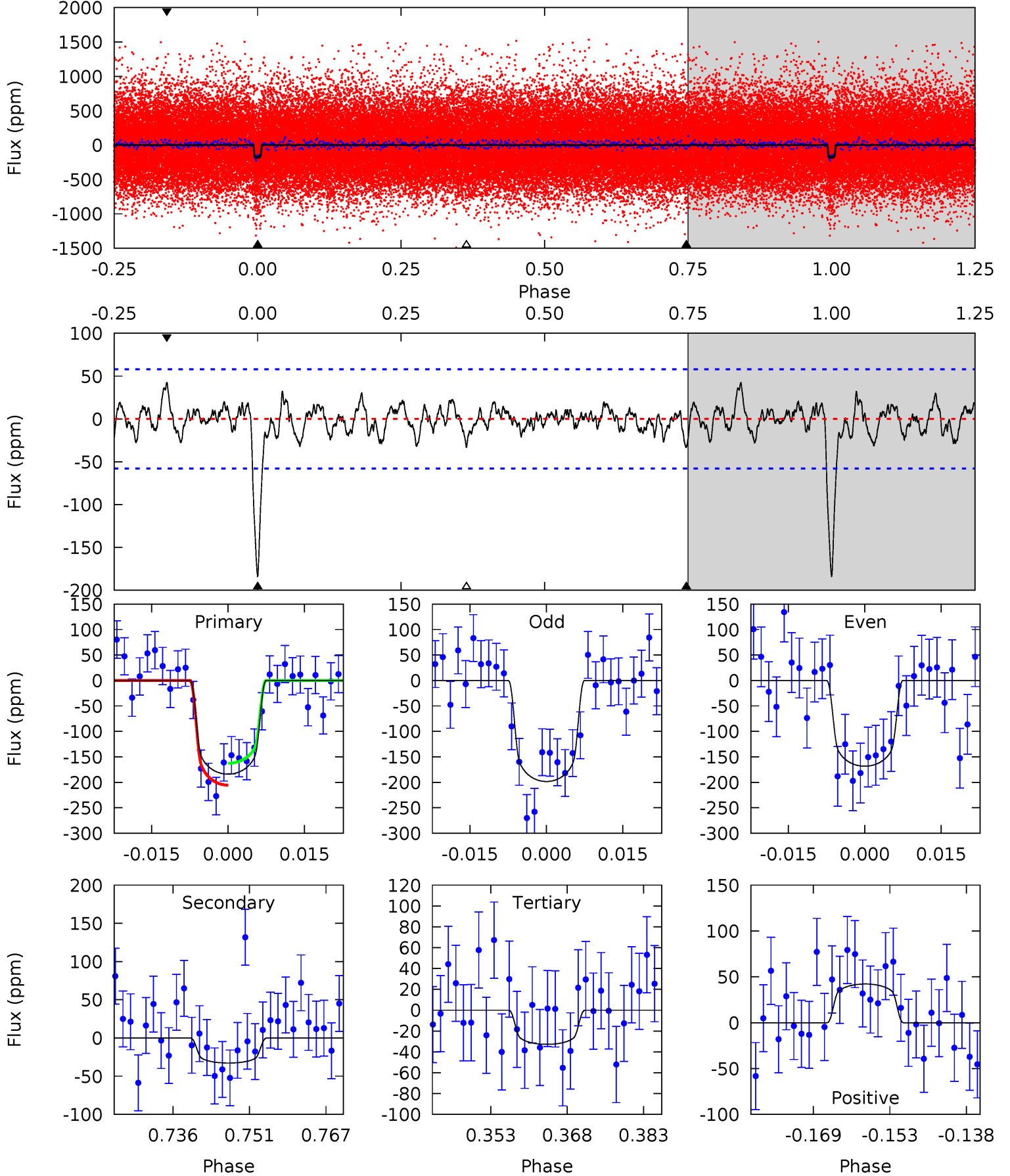
TCE 011508644-01 P= 14.256241 Days $T_0=133.411690$ (BKJD)



DV Model-Shift Uniqueness Test

011508644-01, P = 14.256260 Days, E = 119.153198 Days

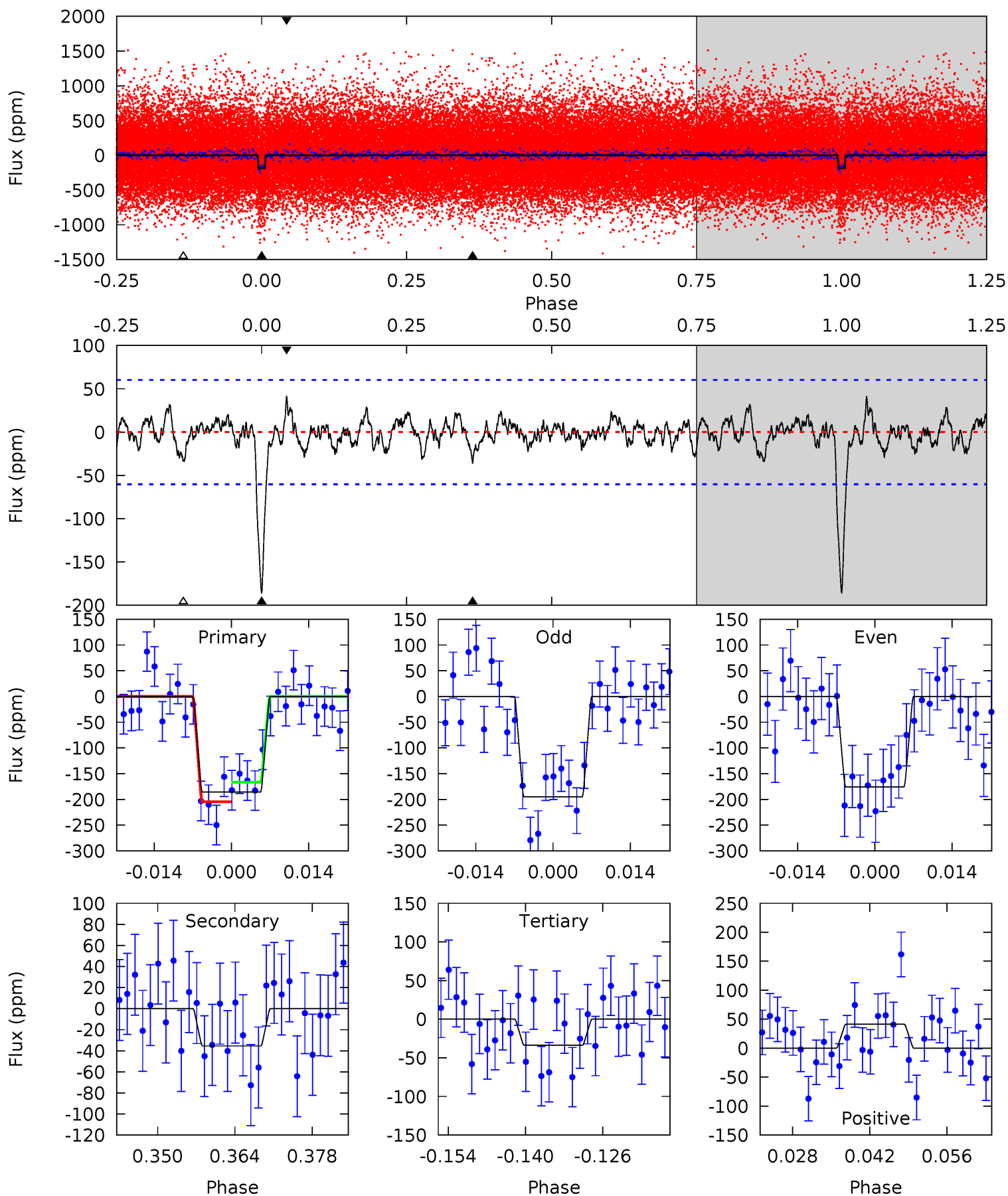
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
15.7	2.80	2.80	3.60	4.94	2.42	1.05	12.9	12.1	0.00	-0.80	1.29	0.90	0.19	1.84



Alt Model-Shift Uniqueness Test

011508644-01, P = 14.256241 Days, E = 119.155449 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
15.3	2.91	2.77	3.39	4.96	2.46	0.97	12.5	11.9	0.14	-0.48	0.80	0.86	0.18	1.57



Stellar Parameters For KIC 011508644

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6140^{+171}_{-236}	$4.455^{+0.056}_{-0.210}$	$-0.040^{+0.250}_{-0.300}$	$1.027^{+0.341}_{-0.114}$	$1.094^{+0.151}_{-0.151}$	$1.422^{+0.415}_{-0.759}$
	+3%/-4%	+1%/-5%	+625%/-750%	+33%/-11%	+14%/-14%	+29%/-53%
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 011508644-01 / KOI 3101.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-33 ± 12	$1.73^{+0.54}_{-0.51}$	1135^{+86}_{-58}	4078^{+635}_{-438}	79^{+89}_{-38}
Alt.	-35 ± 12	$1.60^{+0.53}_{-0.49}$	1138^{+85}_{-62}	4240^{+725}_{-466}	100^{+119}_{-52}

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 $A_{obs} \gg 1.0$

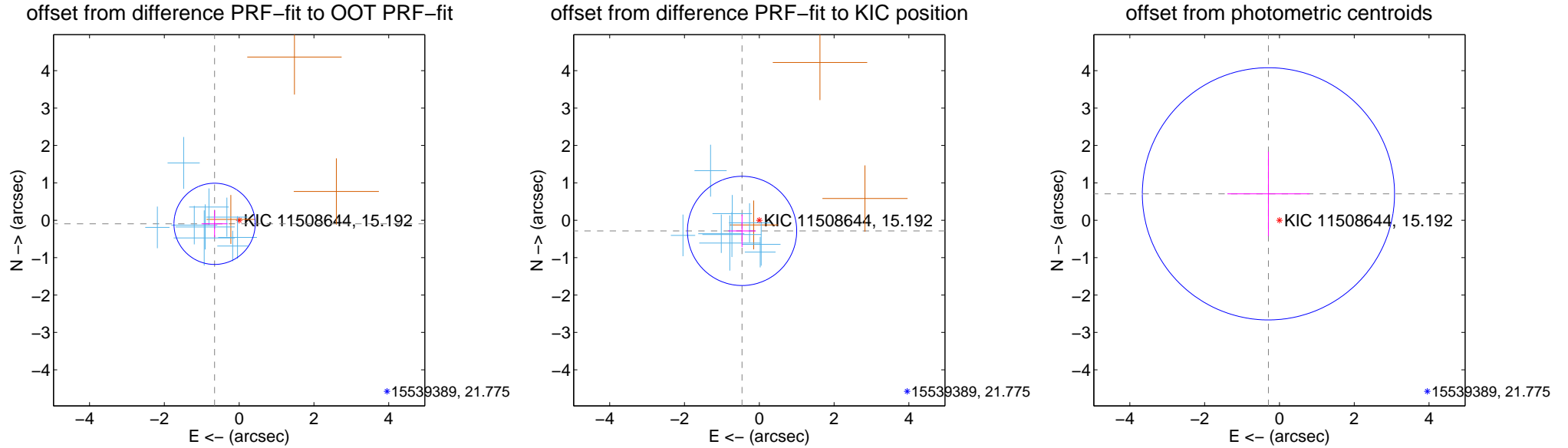
DV Centroid Data

Supplemental centroid analysis for 011508644-01. Kepler magnitude: 15.19. Transit SNR 12.58

There are 9 quarters with good PRF difference image offsets

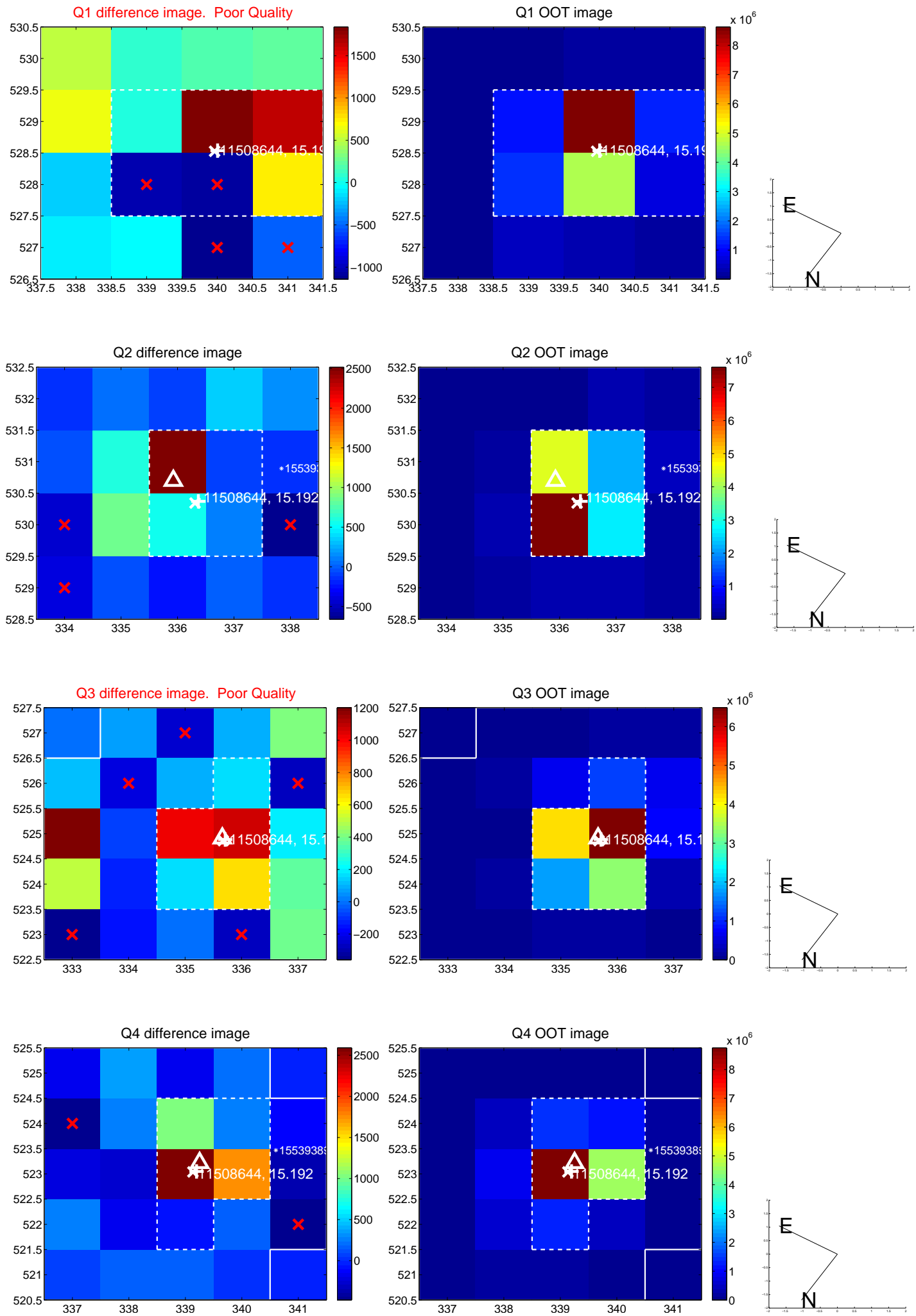
The direct PRF centroid is offset from the target star catalog position by about 0.21 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.664 ± 0.362	1.83	0.657 ± 0.347	-0.096 ± 0.359
PRF-fit source offset from KIC position	0.542 ± 0.487	1.11	0.461 ± 0.368	-0.285 ± 0.436
photometric centroid source offset	0.77 ± 1.12	0.68	0.29 ± 1.10	0.71 ± 1.13

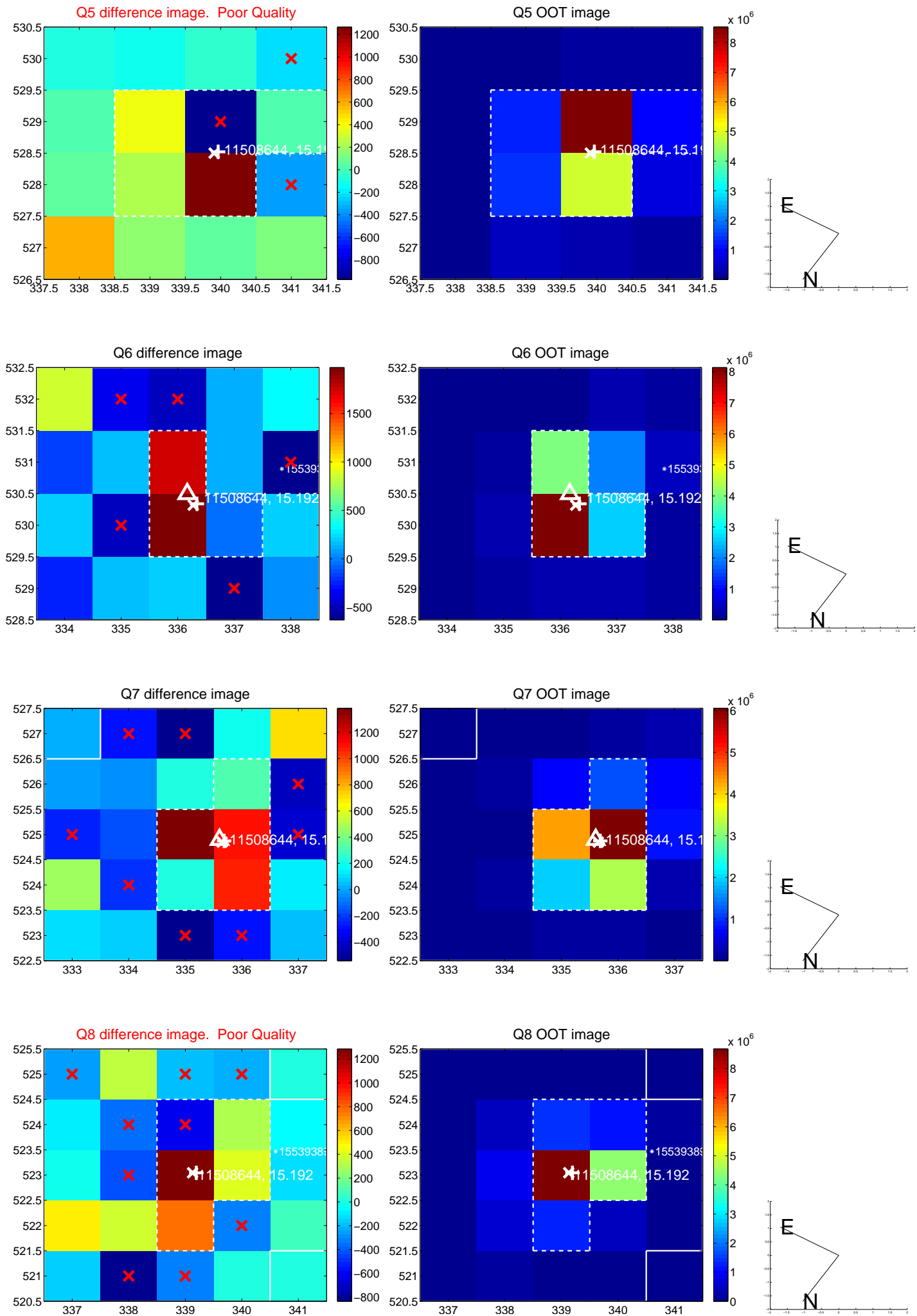


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

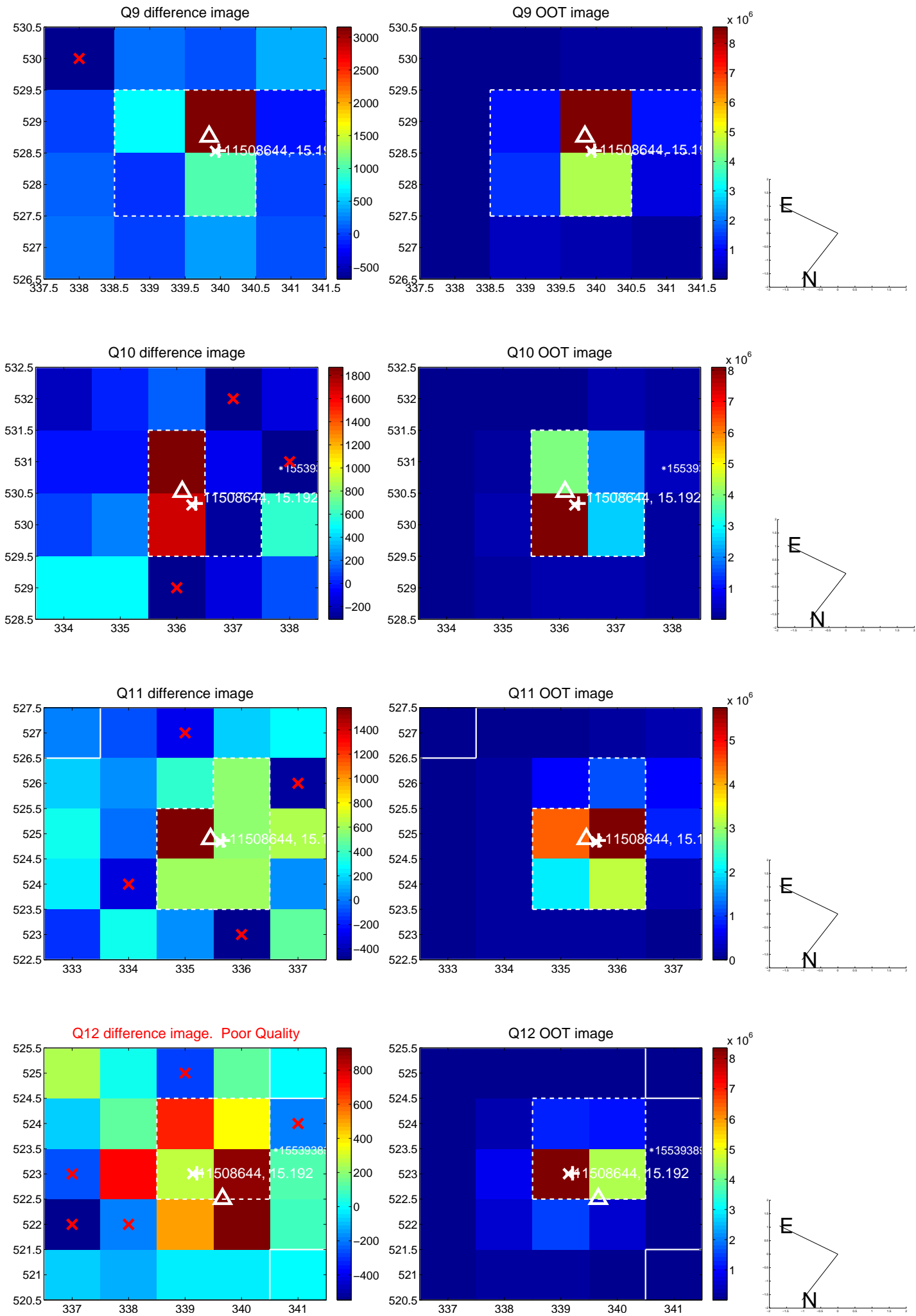
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



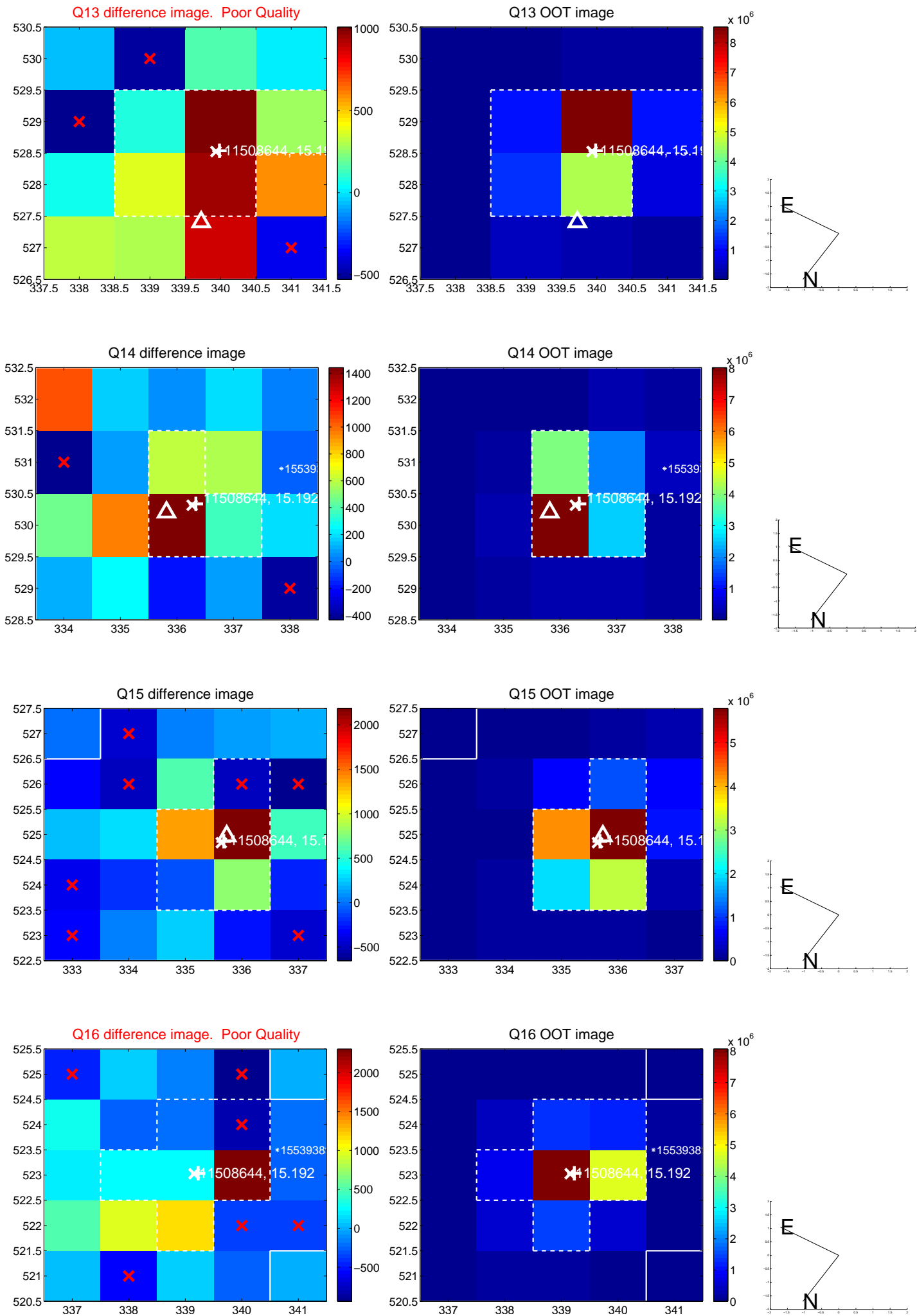
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



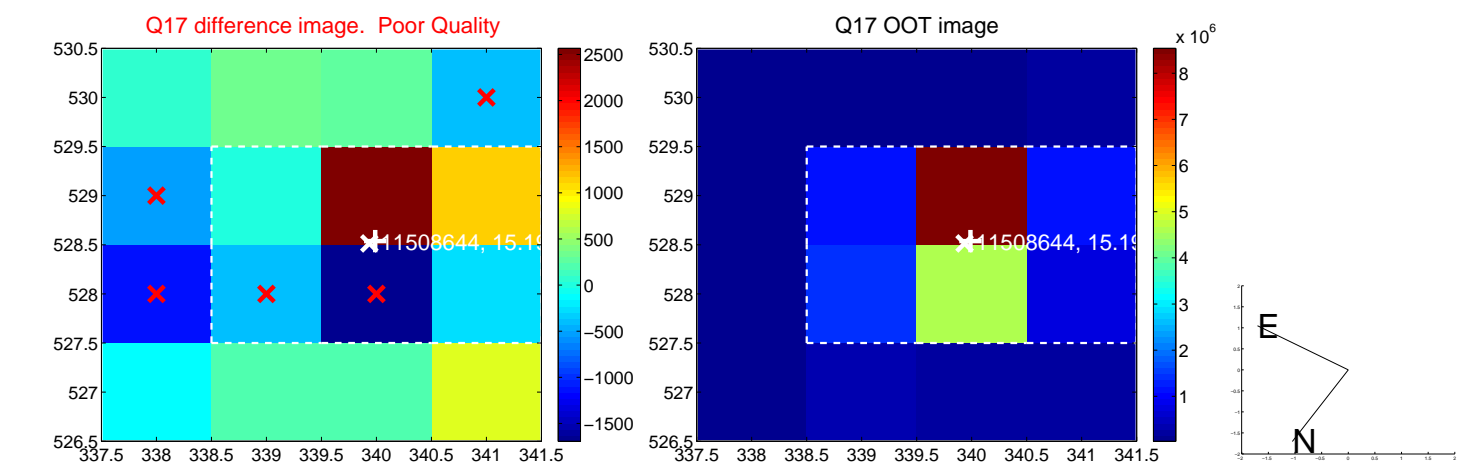
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



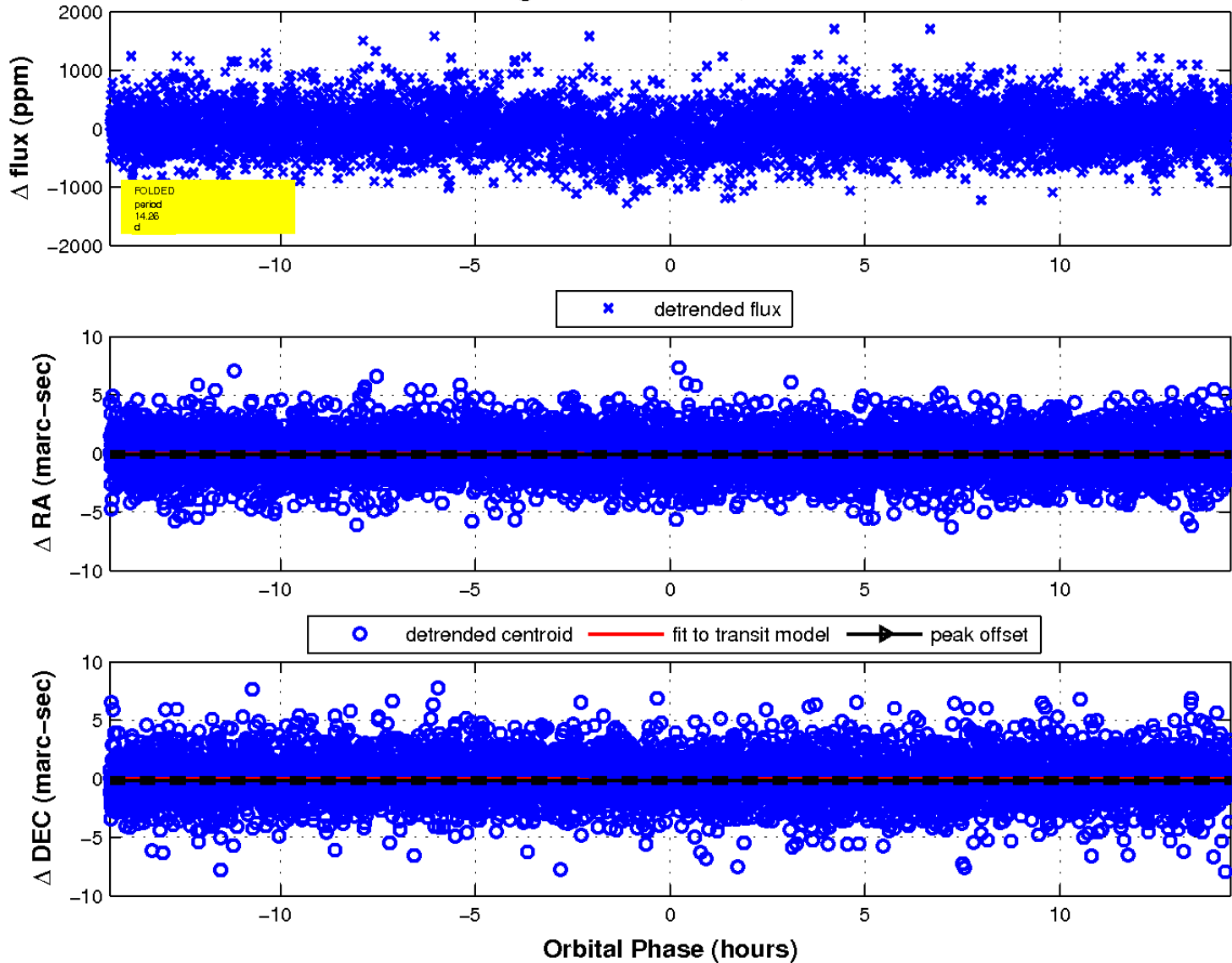
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

