

KIC 011912932

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})
011912932-01	OBS	3085.01	3.747863	134.179878	90.3	3.738	15.6	16.2	0.89	5706	1.00	337.39

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011912932-01	OBS	FP	0.00	0	0	1	1	HALO_GHOST—EPHEM_MATCH

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.

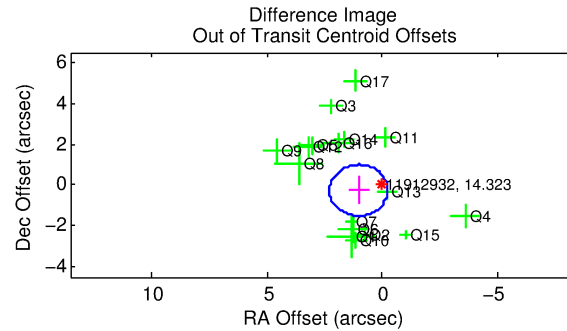
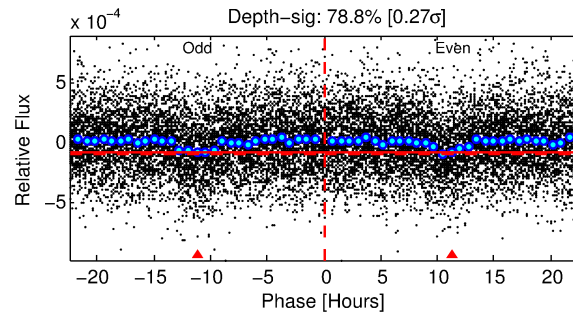
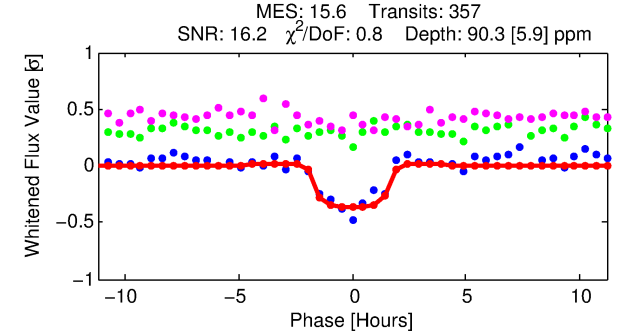
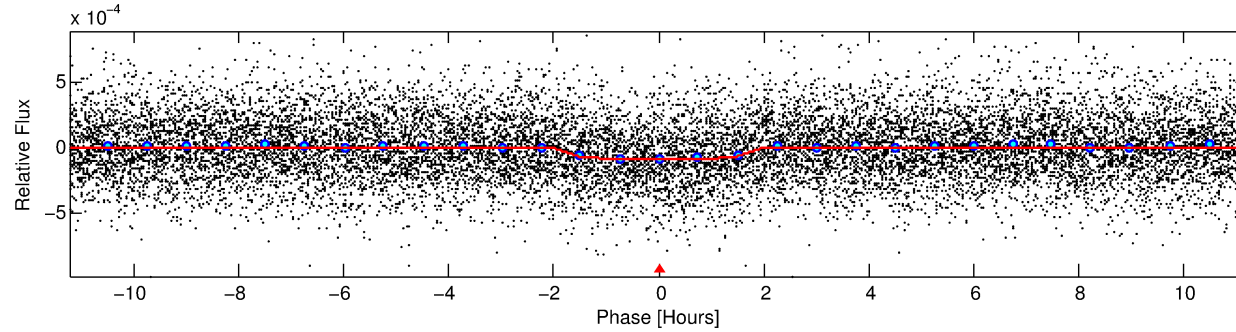
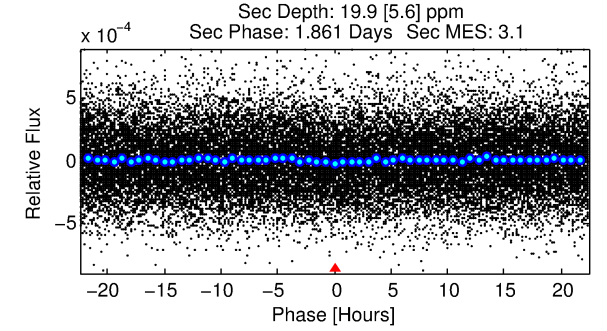
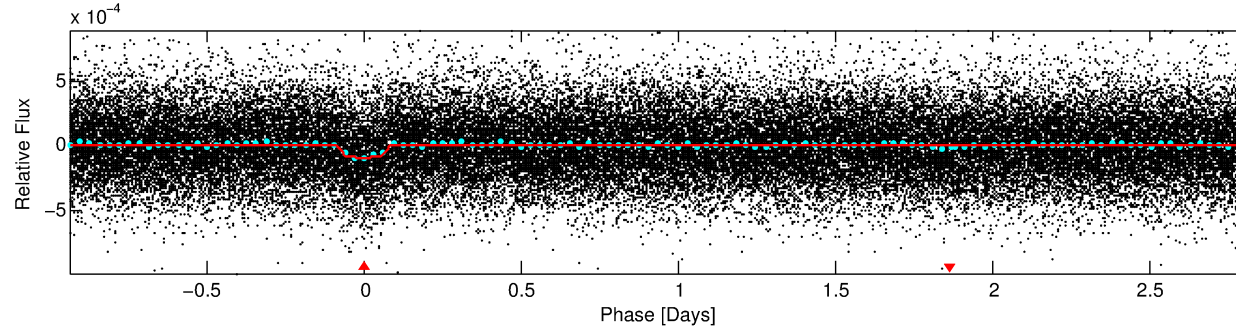
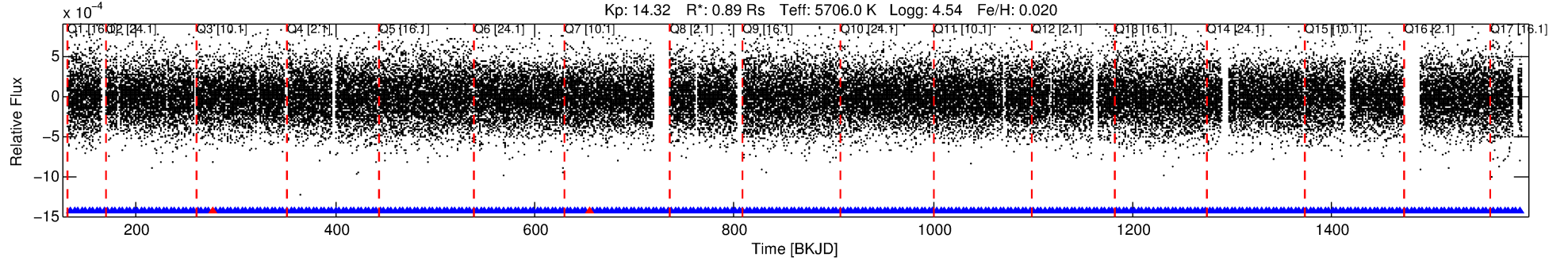
Ephemeris Match Information For 011912932-01

TCE (1)	KIC	Parent (2)	Parent KIC	$P_1:P_2$	Dist ($''$)	Δ Row	Δ Col	m_2	m_1	D_2/D_1	Mechanism	Flag	σ_P	σ_T
011912932-01	11912932	011913071-pri	11913071	1:1	209.5	37	37	9.53	14.32	2100.00	Direct-PRF	0	0.42	0.32

Notes: $P_1:P_2$ is the period ratio. Dist is the distance in arcseconds. Δ Row and Δ Col are the number of pixels apart in row and column. m_2 and m_1 are the magnitudes of the parent and child. D_2/D_1 is the parent's transit depth divided by the child's. σ_P and σ_T are the significance of the match in period and epoch. For a match to be considered significant $\sigma_P < 5.0$ and $\sigma_T < 5.0$. Matches which have σ_P and σ_T very close to this cutoff should receive extra scrutiny, especially if the period ratio is very large.

DV One-Page Summary

KIC: 11912932 Candidate: 1 of 1 Period: 3.748 d
KOI: K03085.01 Corr: 0.976



DV Fit Results:

Period = 3.74786 [0.00002] d
Epoch = 134.1799 [0.0036] BKJD
Rp/R* = 0.0103 [0.0039]
a/R* = 3.72 [6.23]
b = 0.89 [0.41]
Seff = 337.39 [122.83]
Teq = 1093 [99] K
Rp = 1.00 [0.47] Re
a = 0.0470 [0.0111] AU
Ag = 24.29 [21.51] [1.08σ]
Teffp = 3751 [771] K [3.42σ]

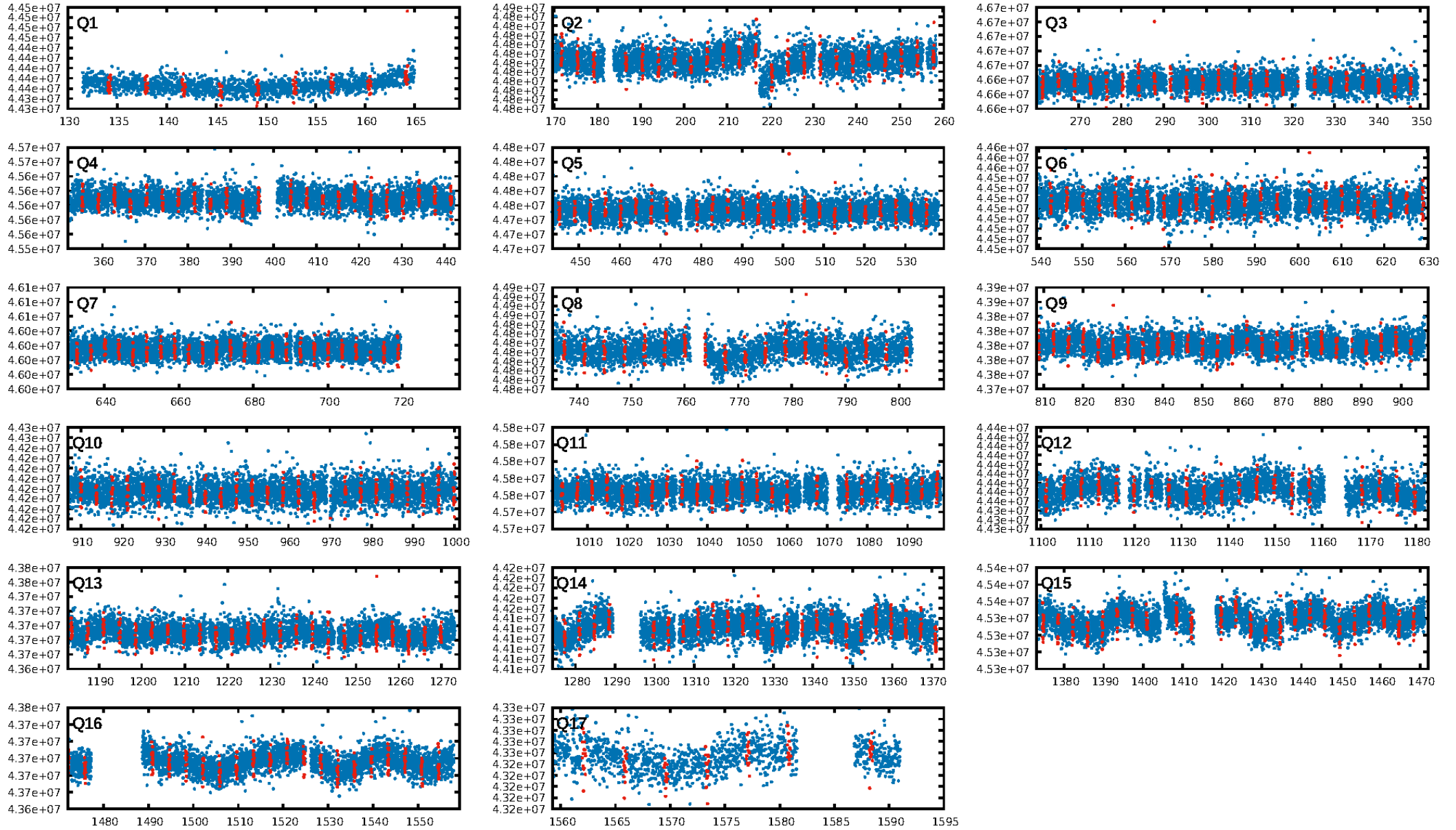
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.65e-55
RollingBand-fgt: 0.99 [339/341]
GhostDiagnostic-chr: 0.1225
Centroid-sig: 0.6%
Centroid-so: 2.011 arcsec [2.10σ]
OotOffset-rm: 1.068 arcsec [2.55σ]
KicOffset-rm: 1.028 arcsec [2.55σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 0.18 [3/17]
DiffImageOverlap-fno: 1.00 [17/17]

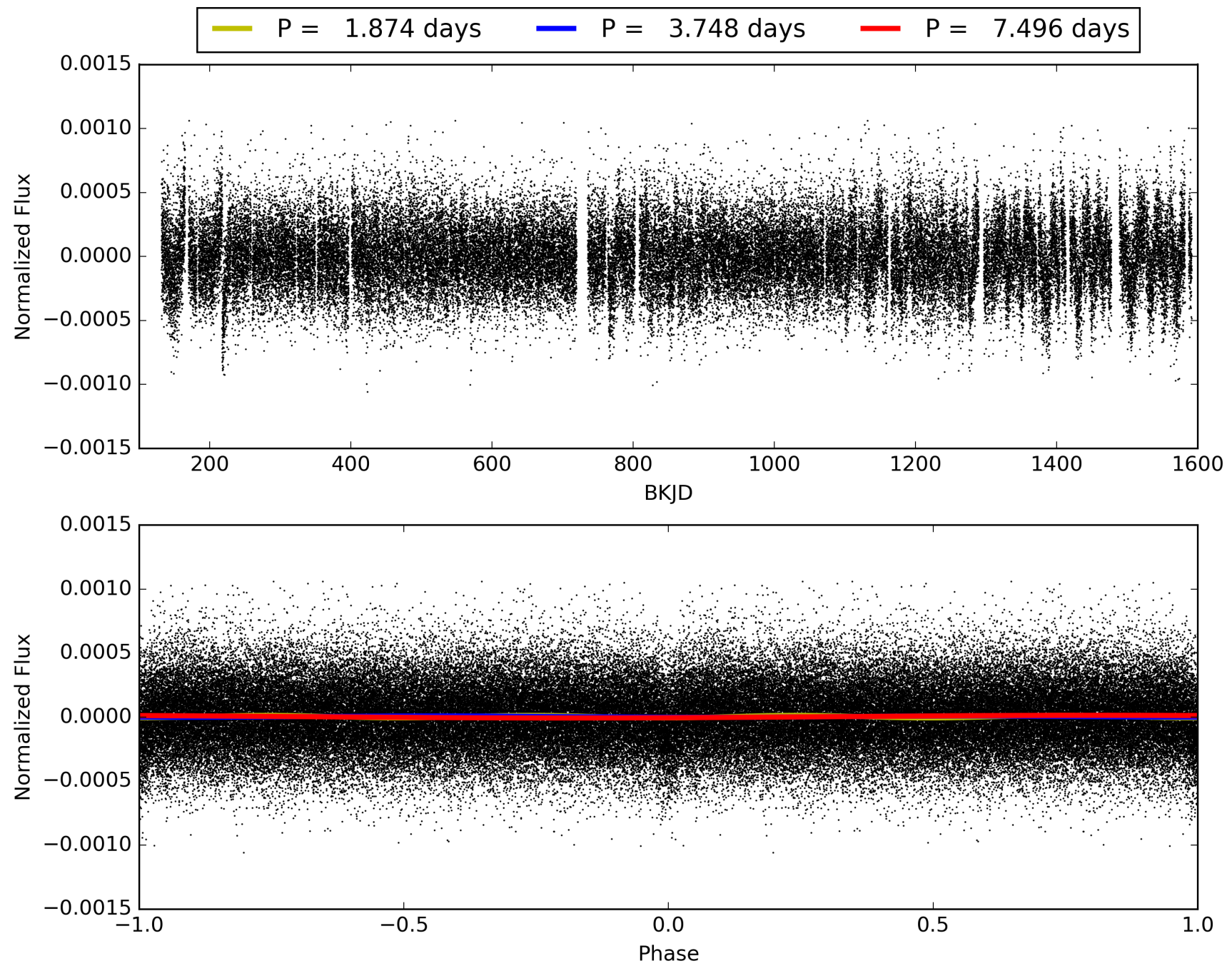
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 23:47:40 Z

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

TCE 011912932-01, PDC Light Curves

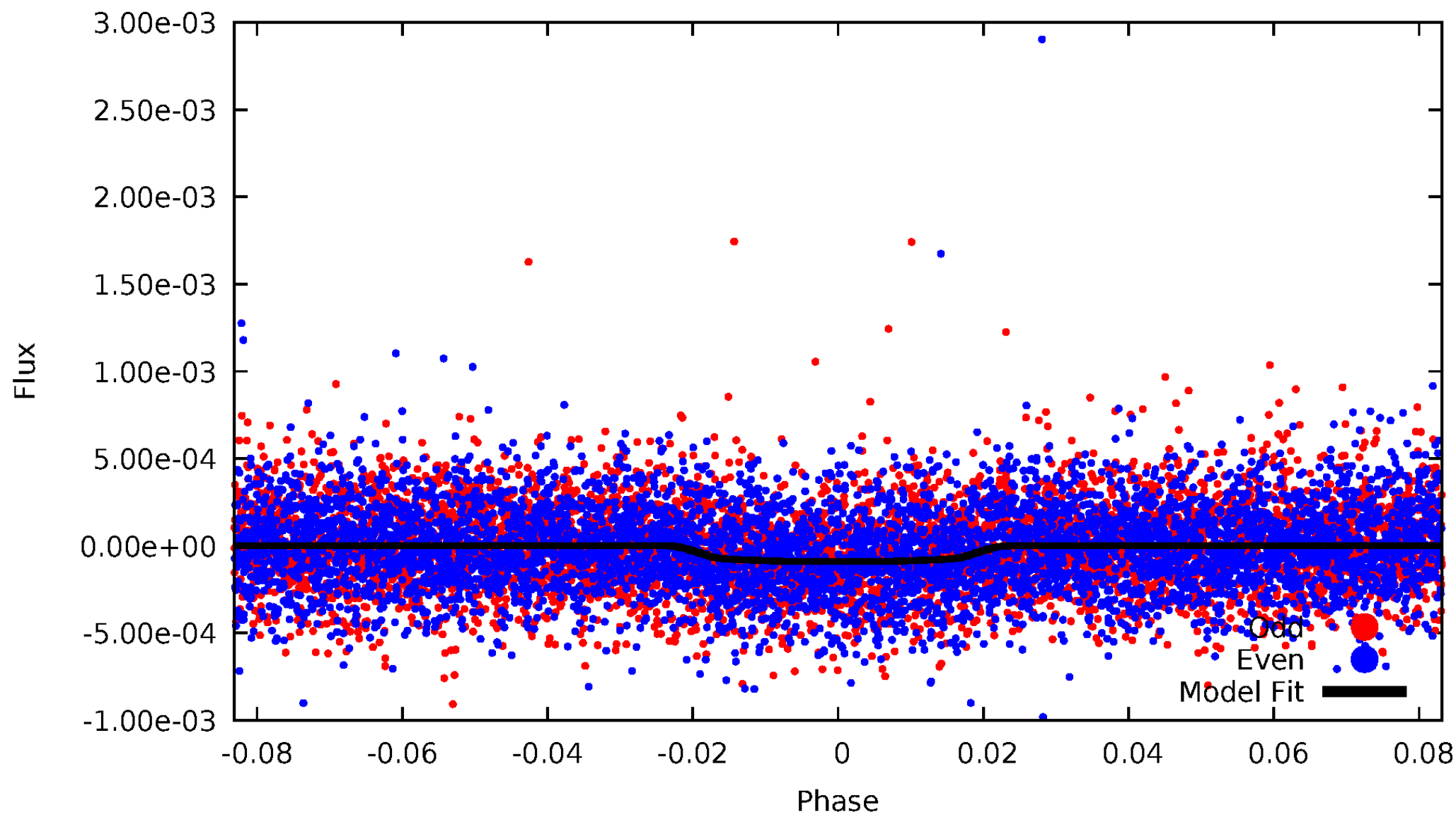


TCE 011912932-01



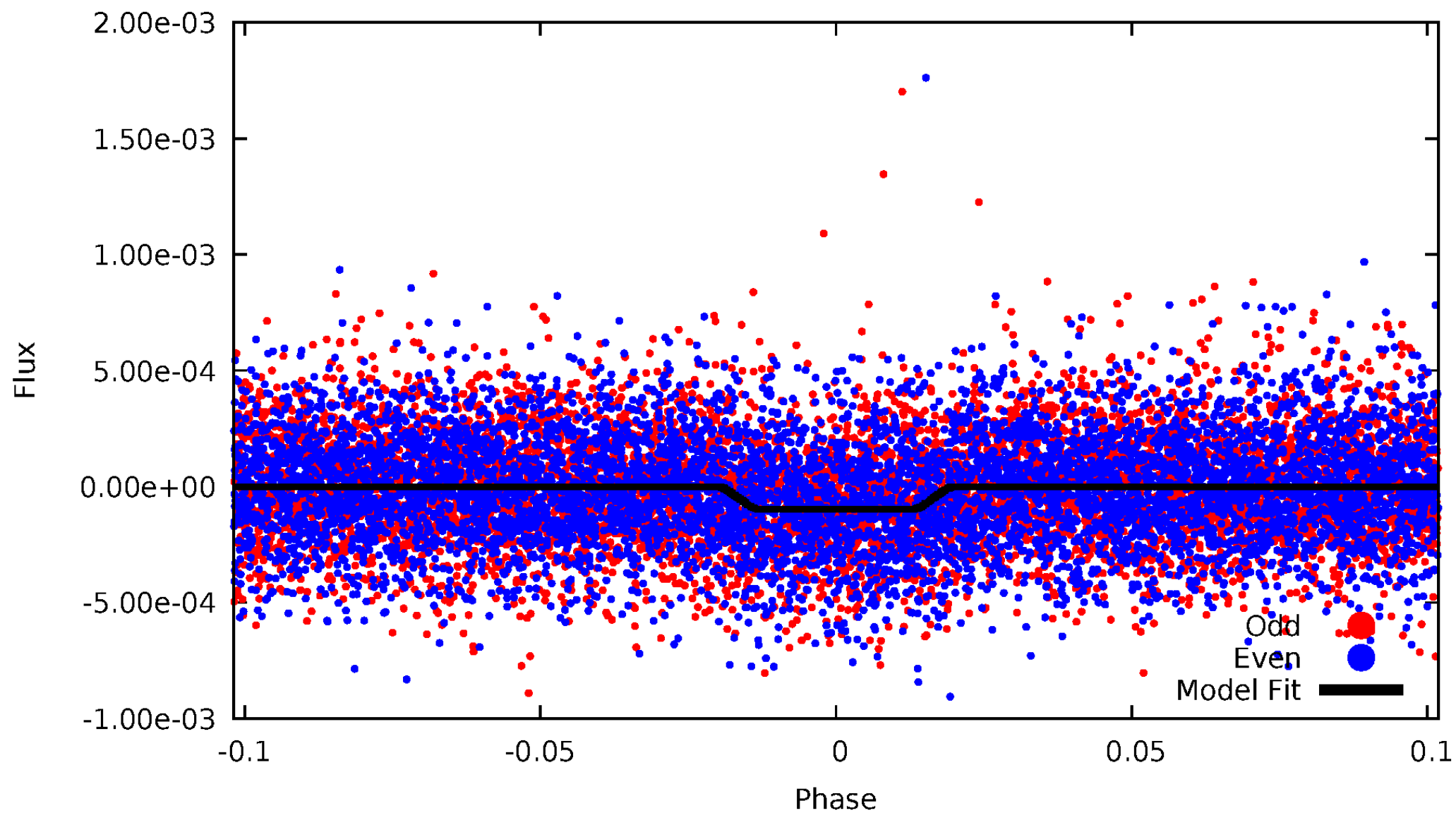
DV Odd/Even

TCE 011912932-01

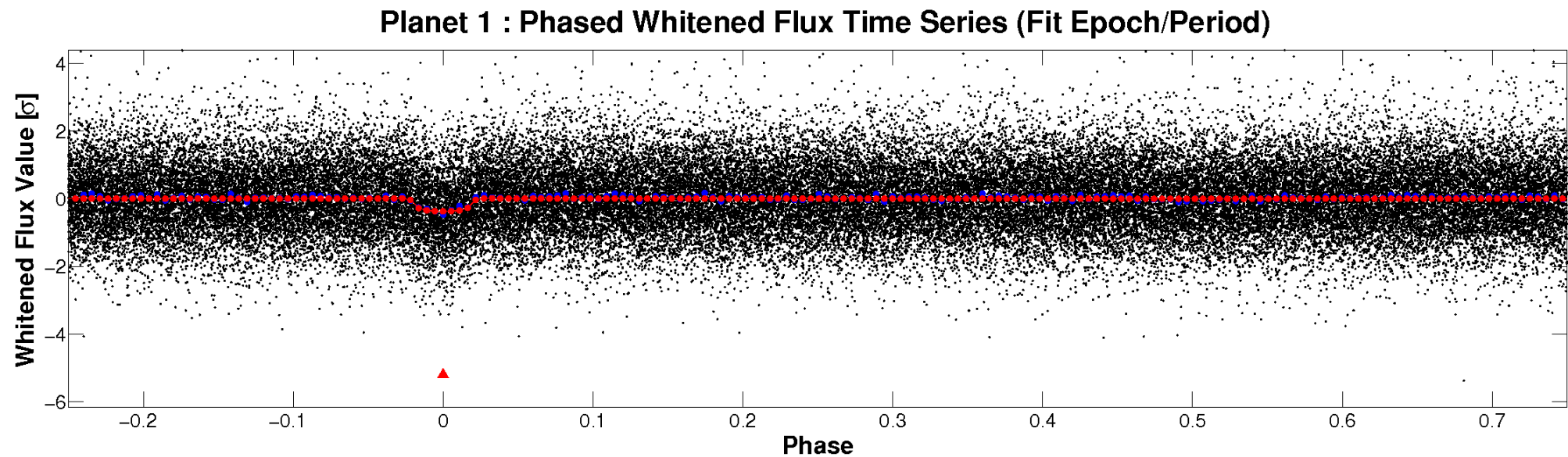
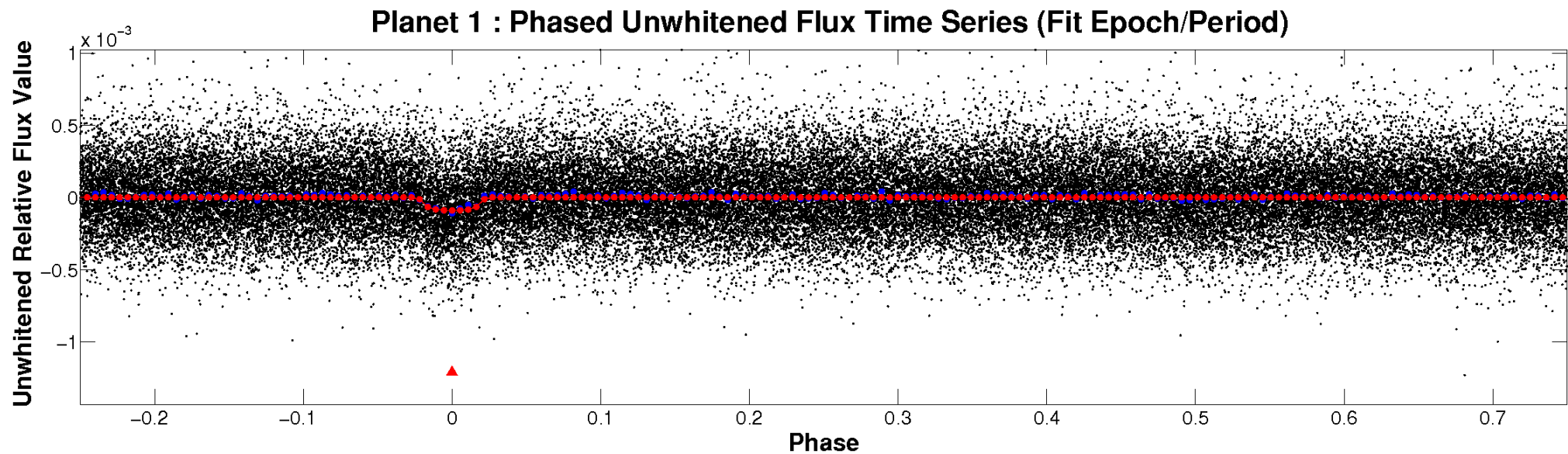


ALT Odd/Even

TCE 011912932-01

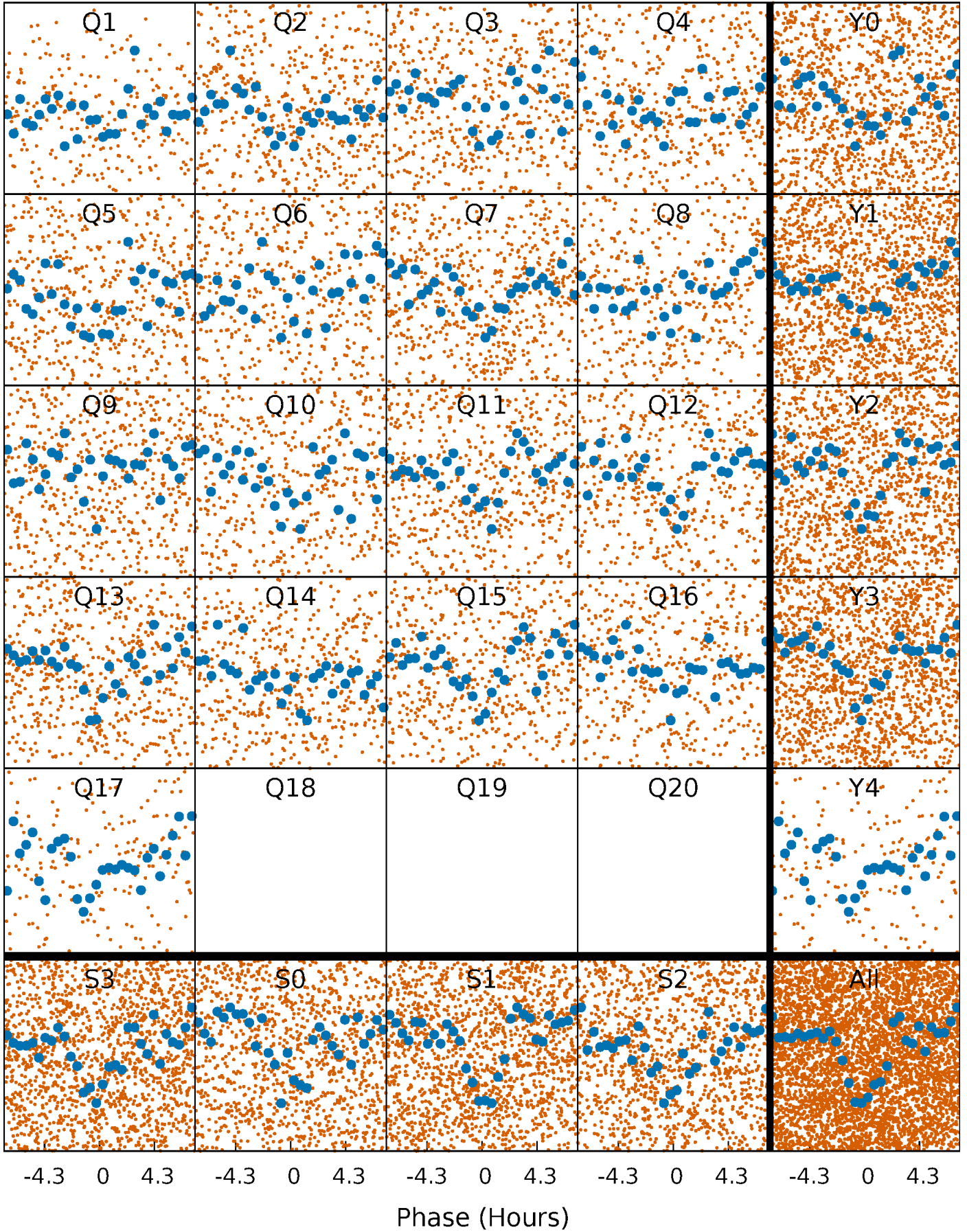


Non-Whitened Vs. Whitened Light Curve



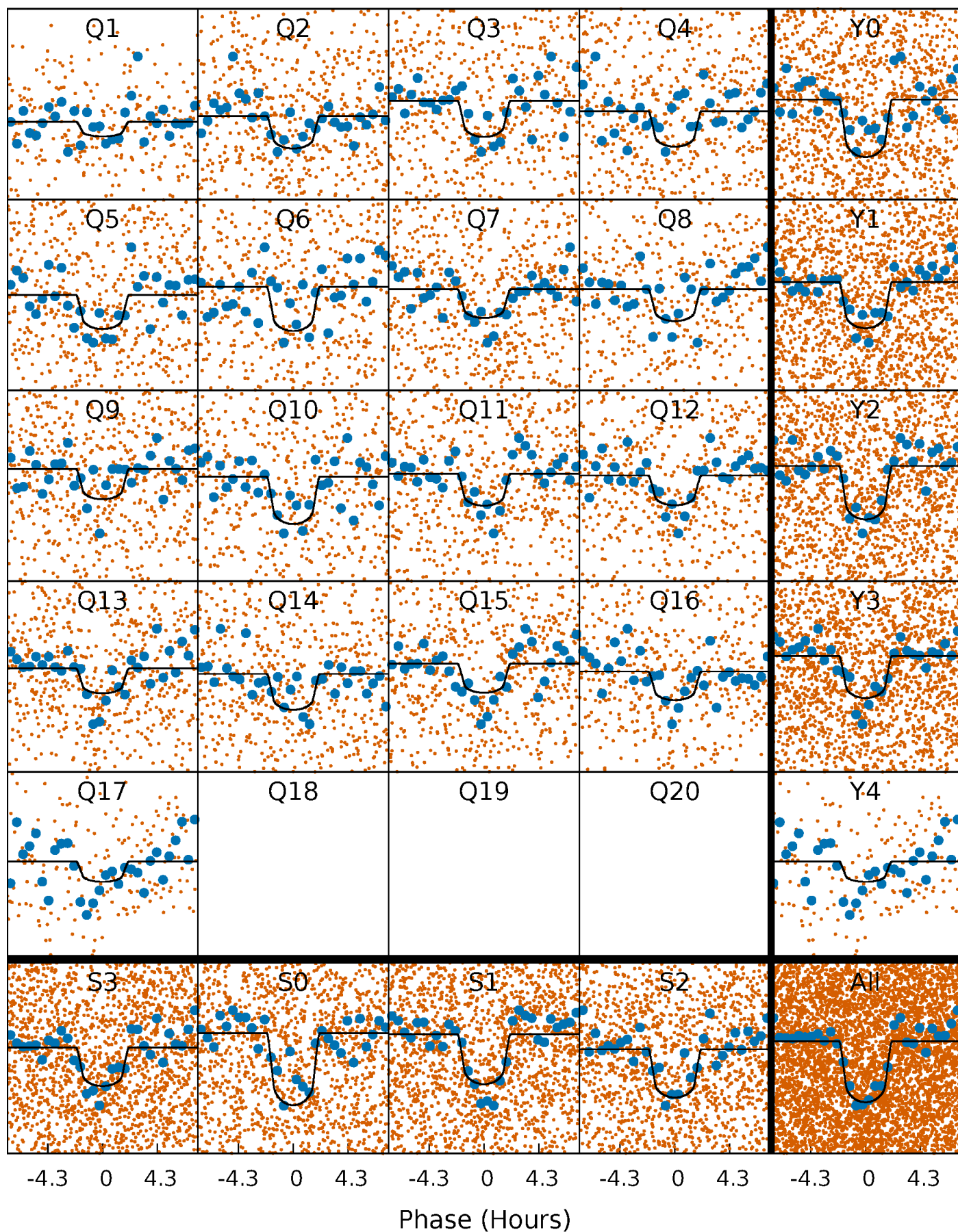
PDC Quarter-Phased Transit Curves

TCE 011912932-01 P= 3.747863 Days $T_0=134.179878$ (BKJD)



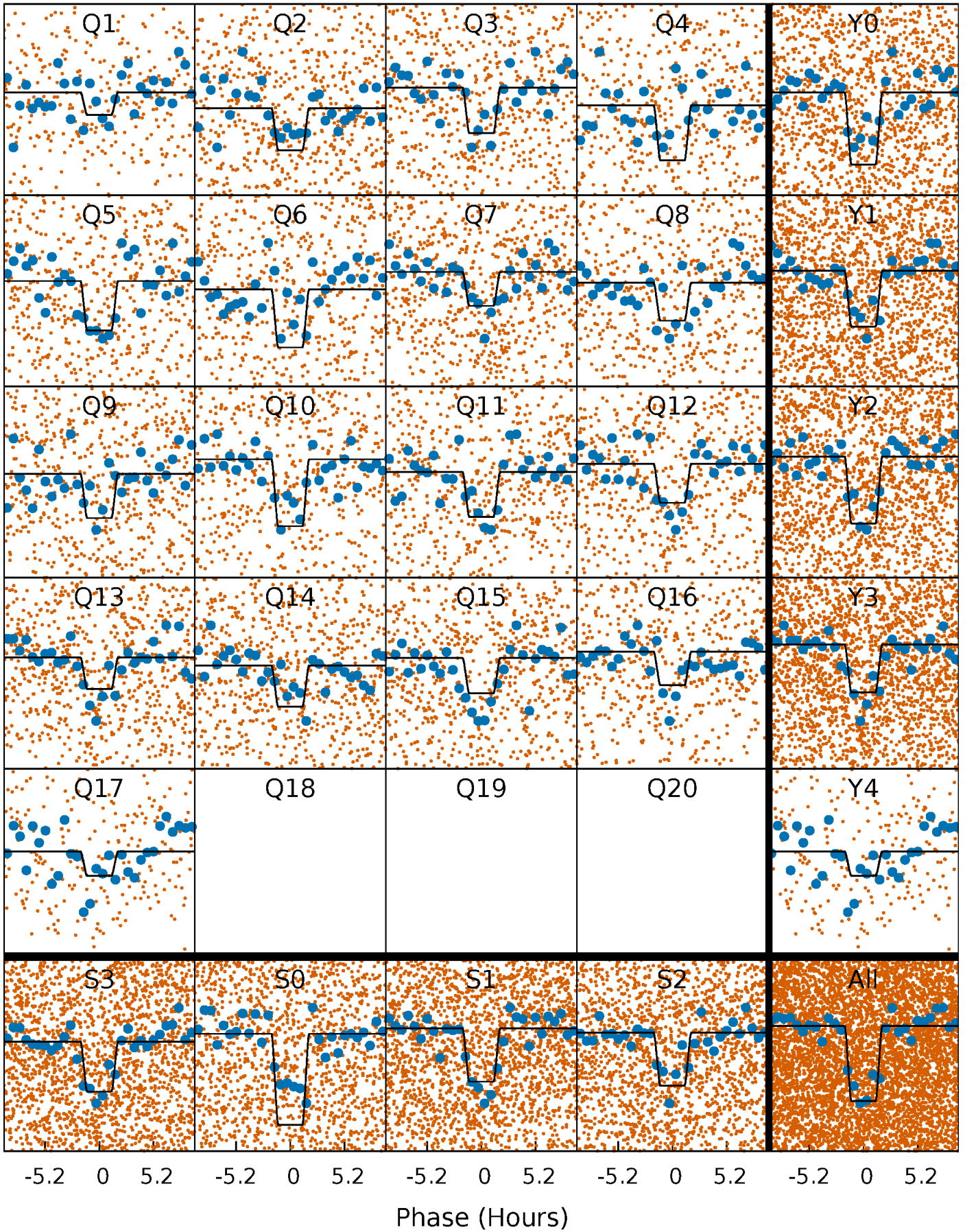
DV Quarter-Phased Transit Curves

TCE 011912932-01 P= 3.747863 Days $T_0=134.179878$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

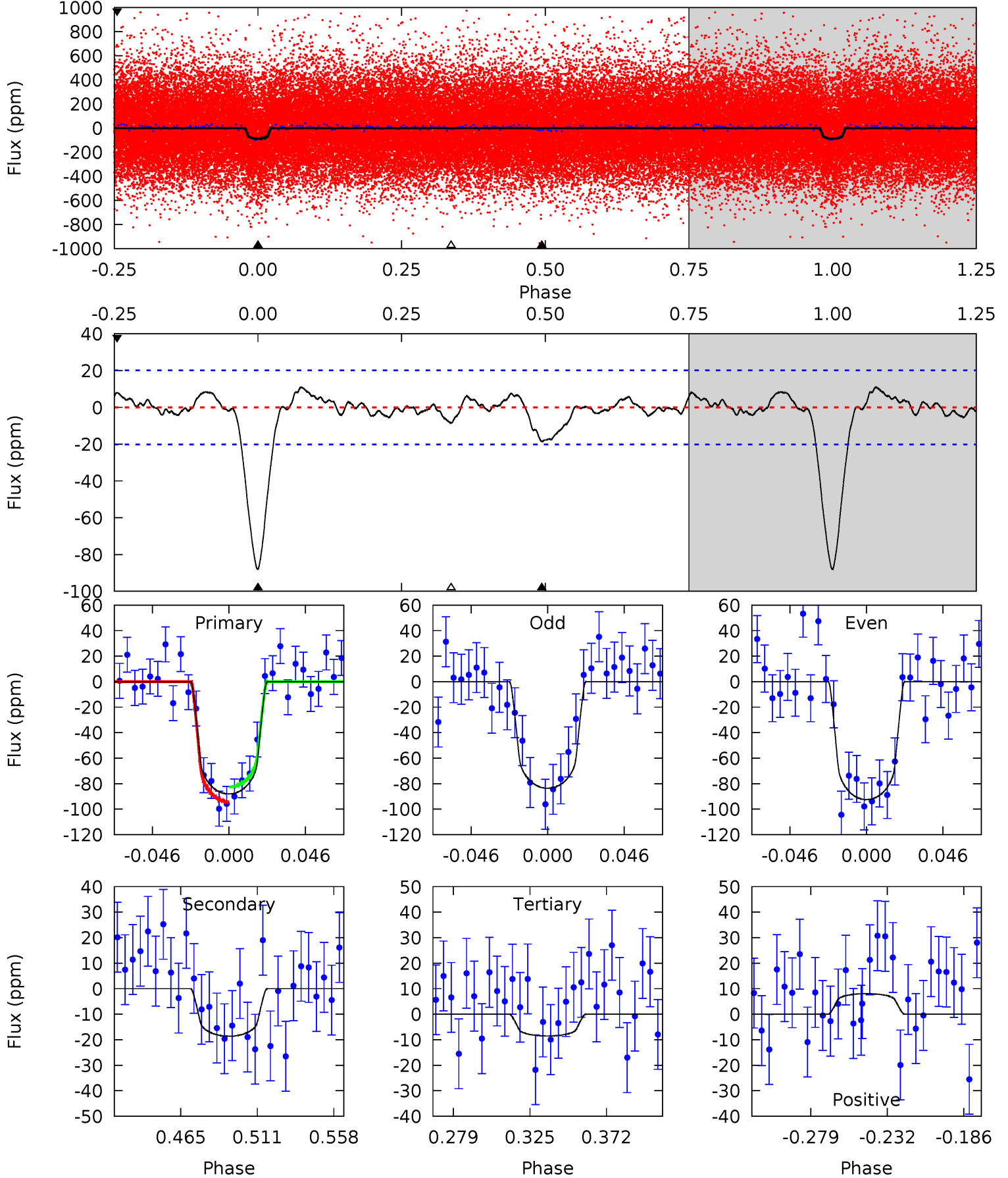
TCE 011912932-01 P= 3.747863 Days $T_0=134.176101$ (BKJD)



DV Model-Shift Uniqueness Test

011912932-01, P = 3.747863 Days, E = 130.432015 Days

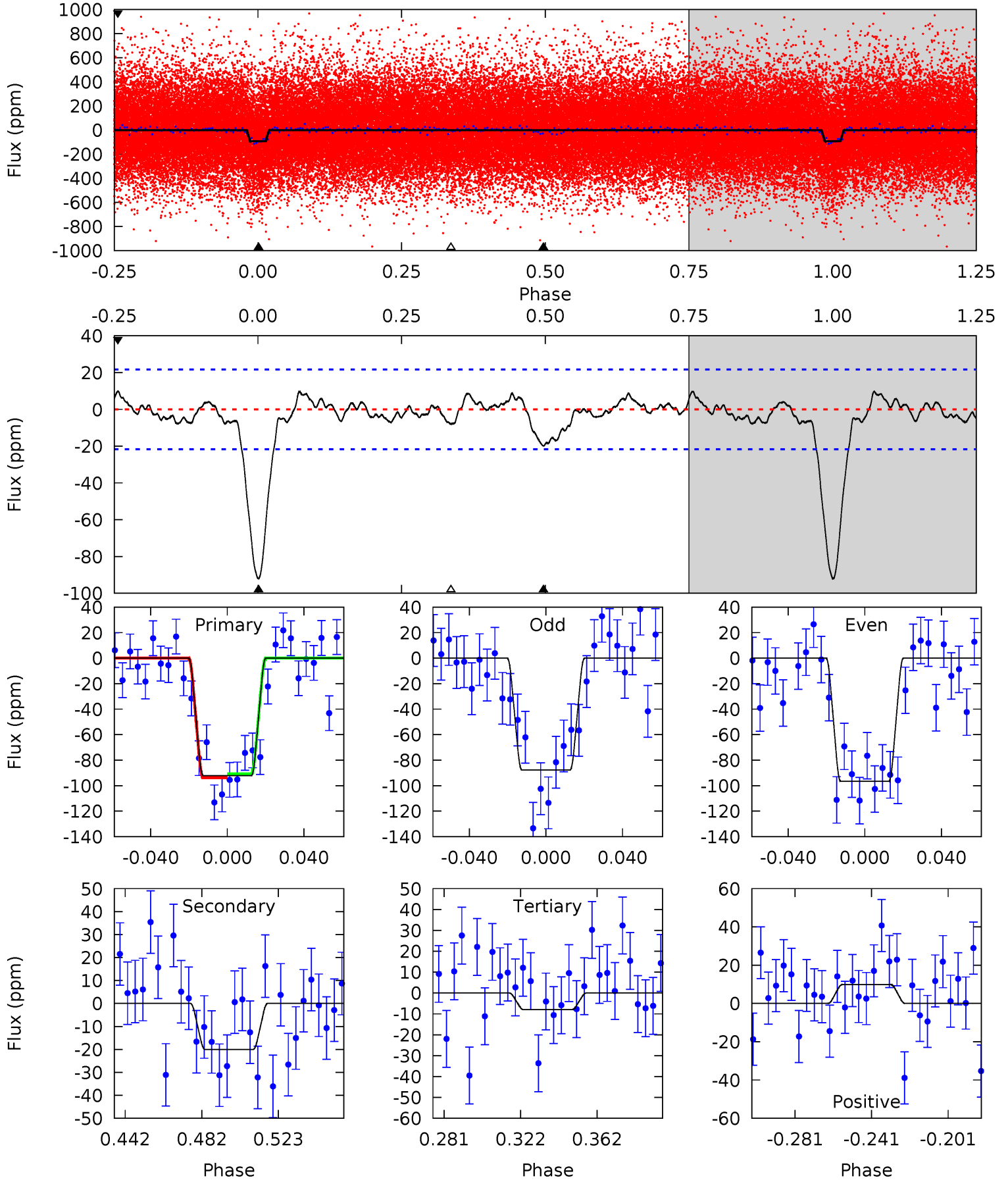
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
20.6	4.37	2.00	1.89	4.72	1.99	0.89	18.6	18.7	2.37	2.47	1.04	1.00	0.11	1.36



Alt Model-Shift Uniqueness Test

011912932-01, P = 3.747863 Days, E = 130.428238 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
20.2	4.38	1.74	2.16	4.75	2.05	0.93	18.4	18.0	2.63	2.22	0.98	1.03	0.10	0.35



Stellar Parameters For KIC 011912932

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5706^{+156}_{-156}	$4.537^{+0.036}_{-0.192}$	$0.020^{+0.250}_{-0.300}$	$0.886^{+0.244}_{-0.081}$	$0.986^{+0.102}_{-0.114}$	$1.997^{+0.368}_{-0.979}$
	+3%/-3%	+1%/-4%	+1250%/-1500%	+28%/-9%	+10%/-12%	+18%/-49%
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 011912932-01 / KOI 3085.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-19 ± 4	$1.06^{+0.41}_{-0.42}$	1561^{+105}_{-66}	3977^{+902}_{-423}	19^{+36}_{-9}
Alt.	-20 ± 5	$1.01^{+0.41}_{-0.39}$	1560^{+106}_{-66}	4105^{+883}_{-480}	24^{+40}_{-13}

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

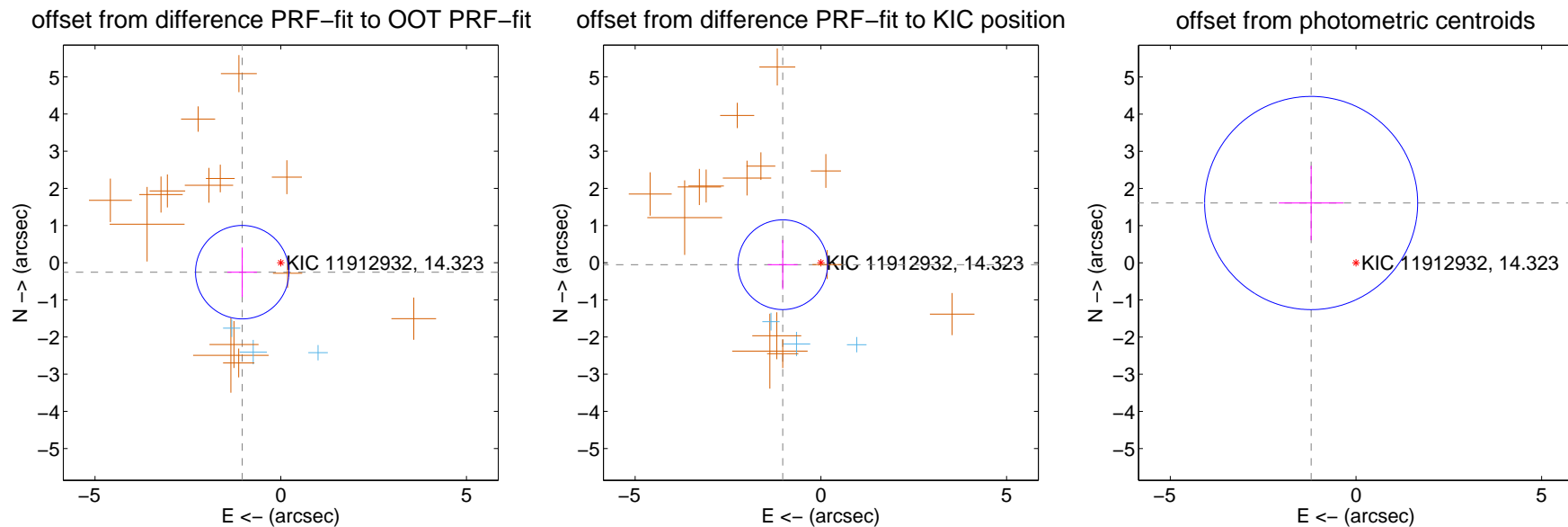
DV Centroid Data

Supplemental centroid analysis for 011912932-01. Kepler magnitude: 14.32. Transit SNR 16.21

There are 3 quarters with good PRF difference image offsets

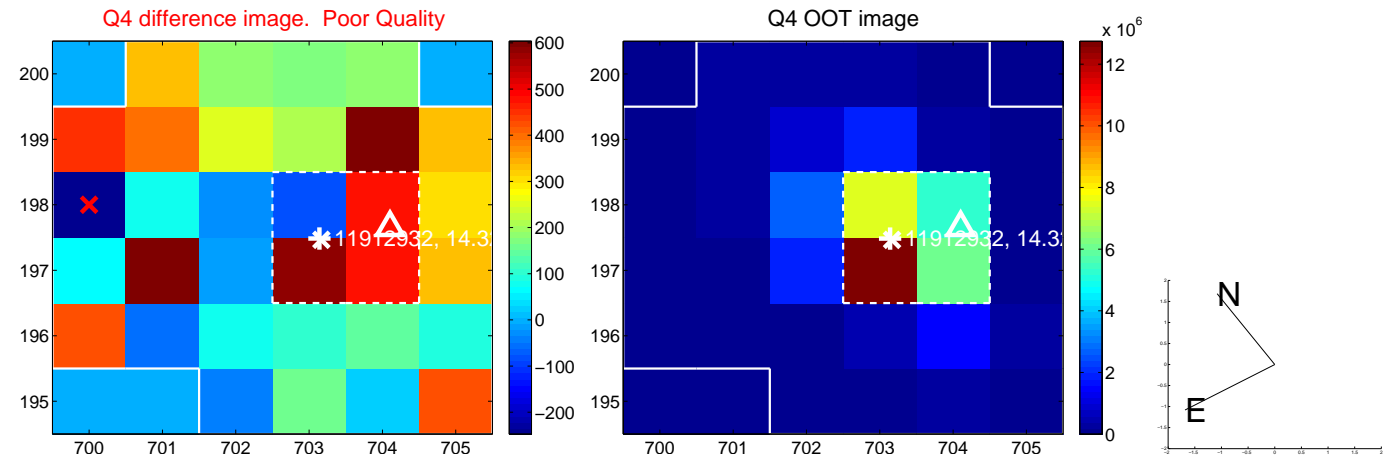
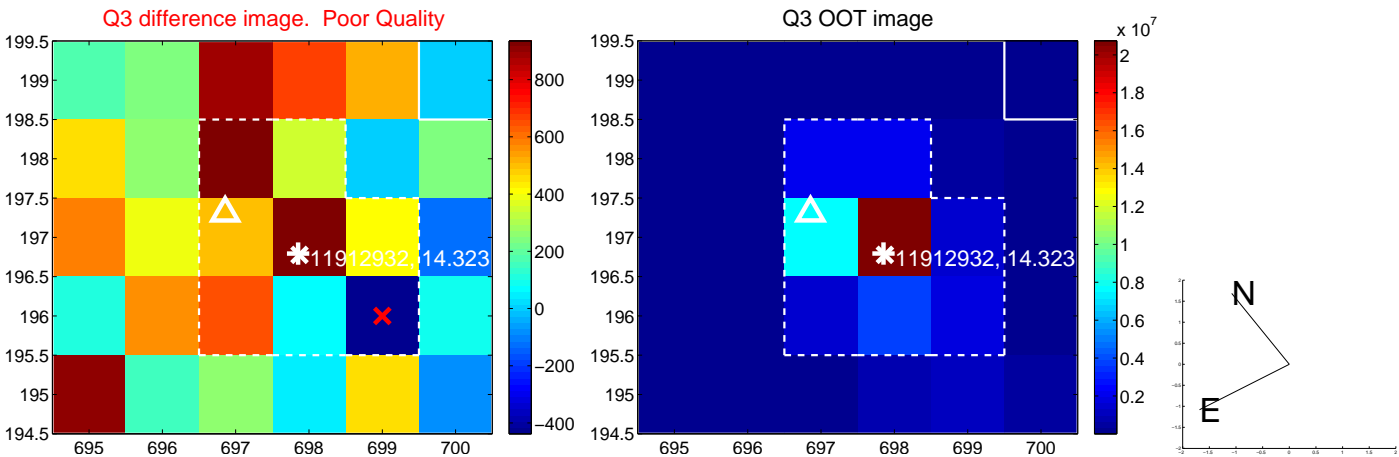
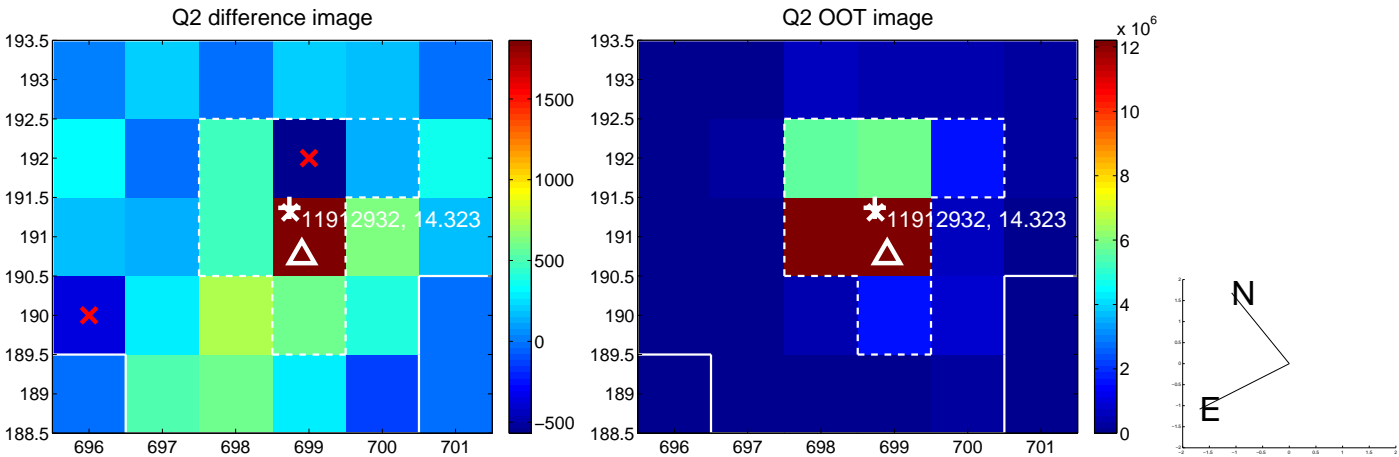
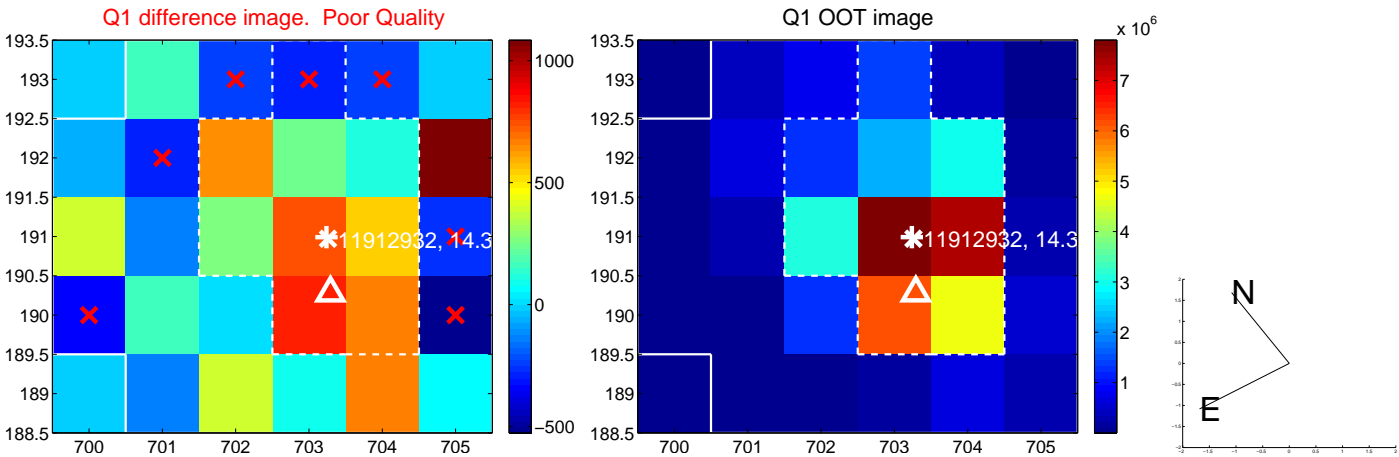
The direct PRF centroid is offset from the target star catalog position by about 0.19 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.068 ± 0.419	2.55	1.037 ± 0.399	-0.255 ± 0.665
PRF-fit source offset from KIC position	1.028 ± 0.402	2.55	1.026 ± 0.401	-0.054 ± 0.663
photometric centroid source offset	2.01 ± 0.96	2.10	1.21 ± 0.87	1.61 ± 1.00

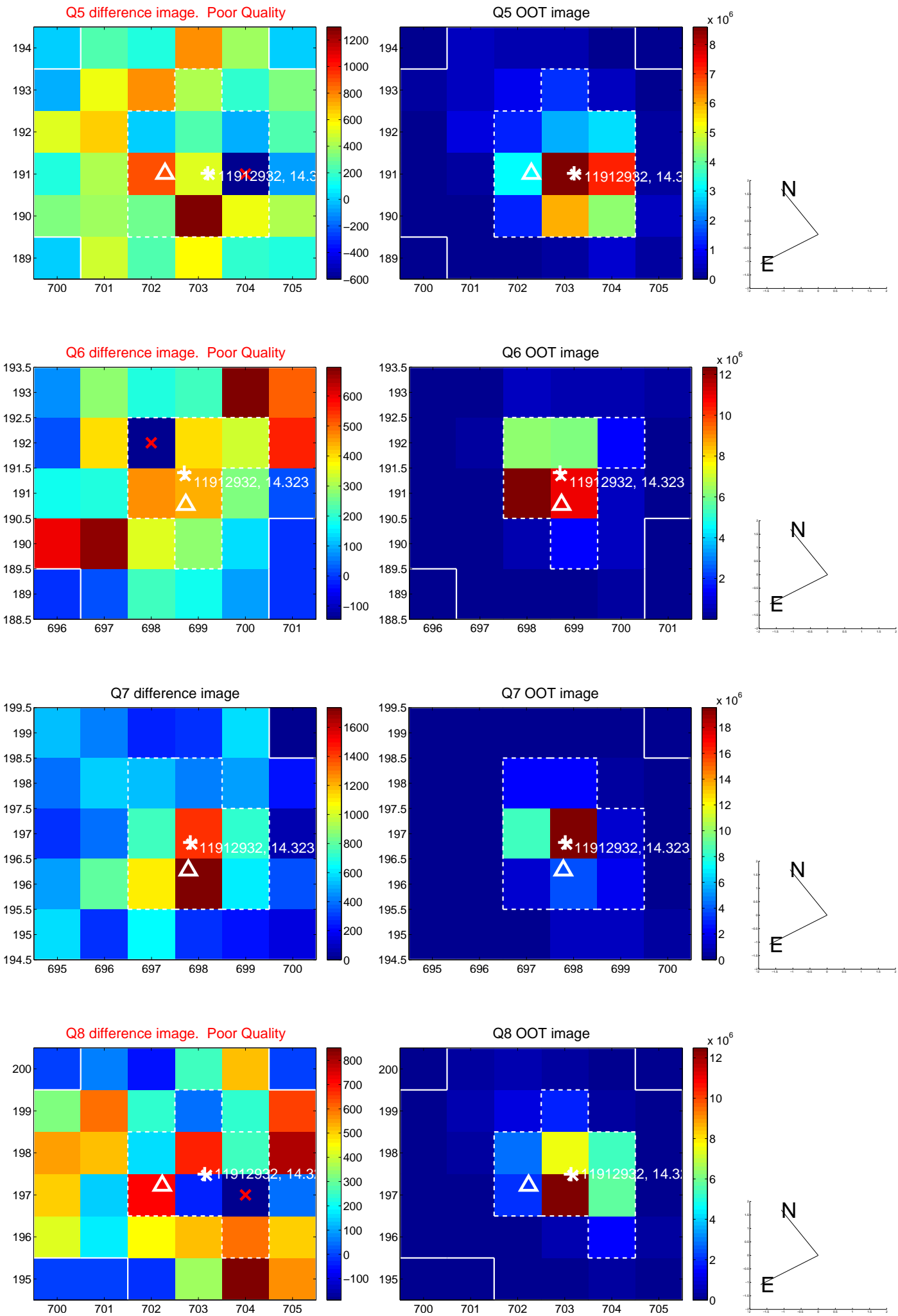


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

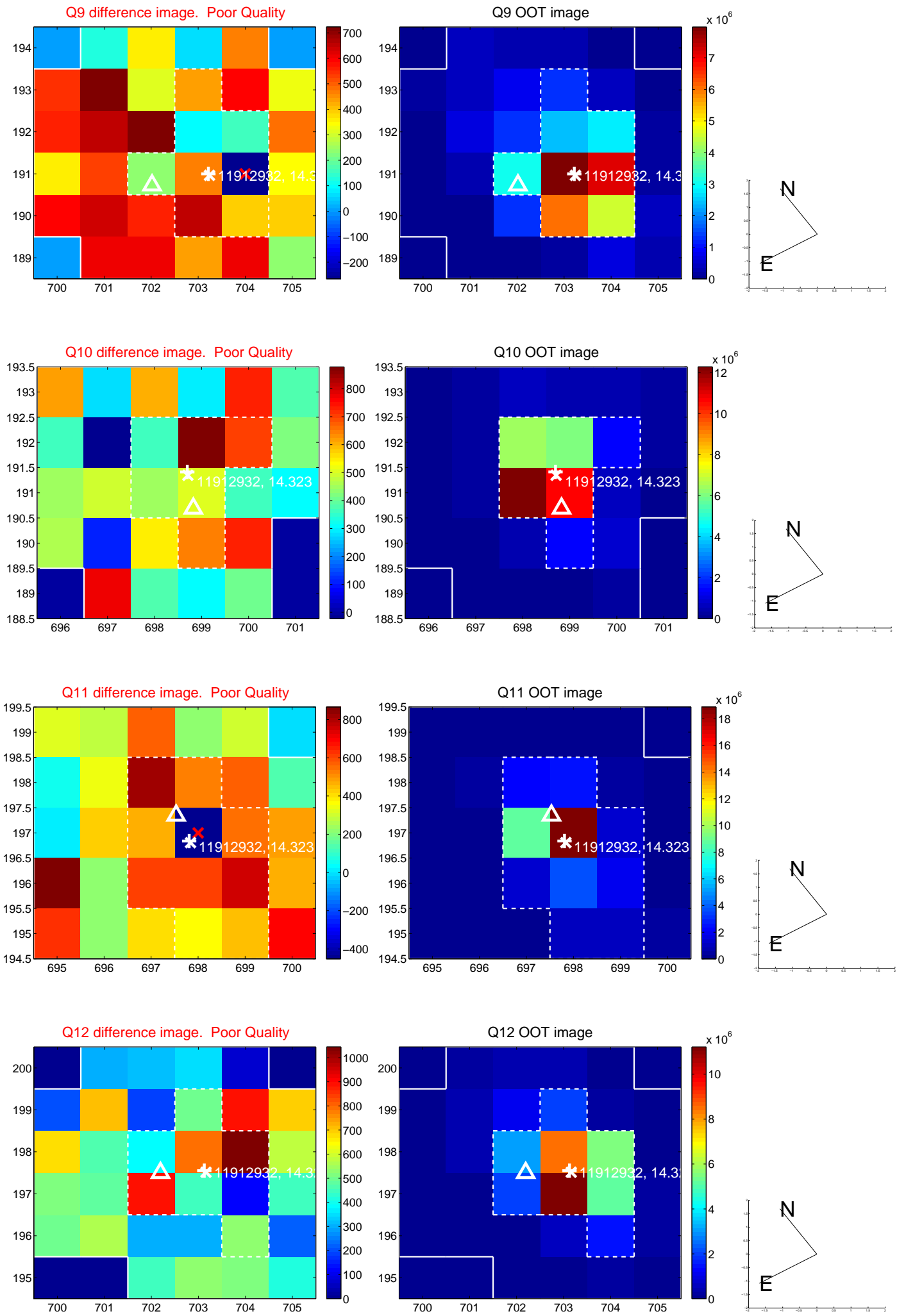
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



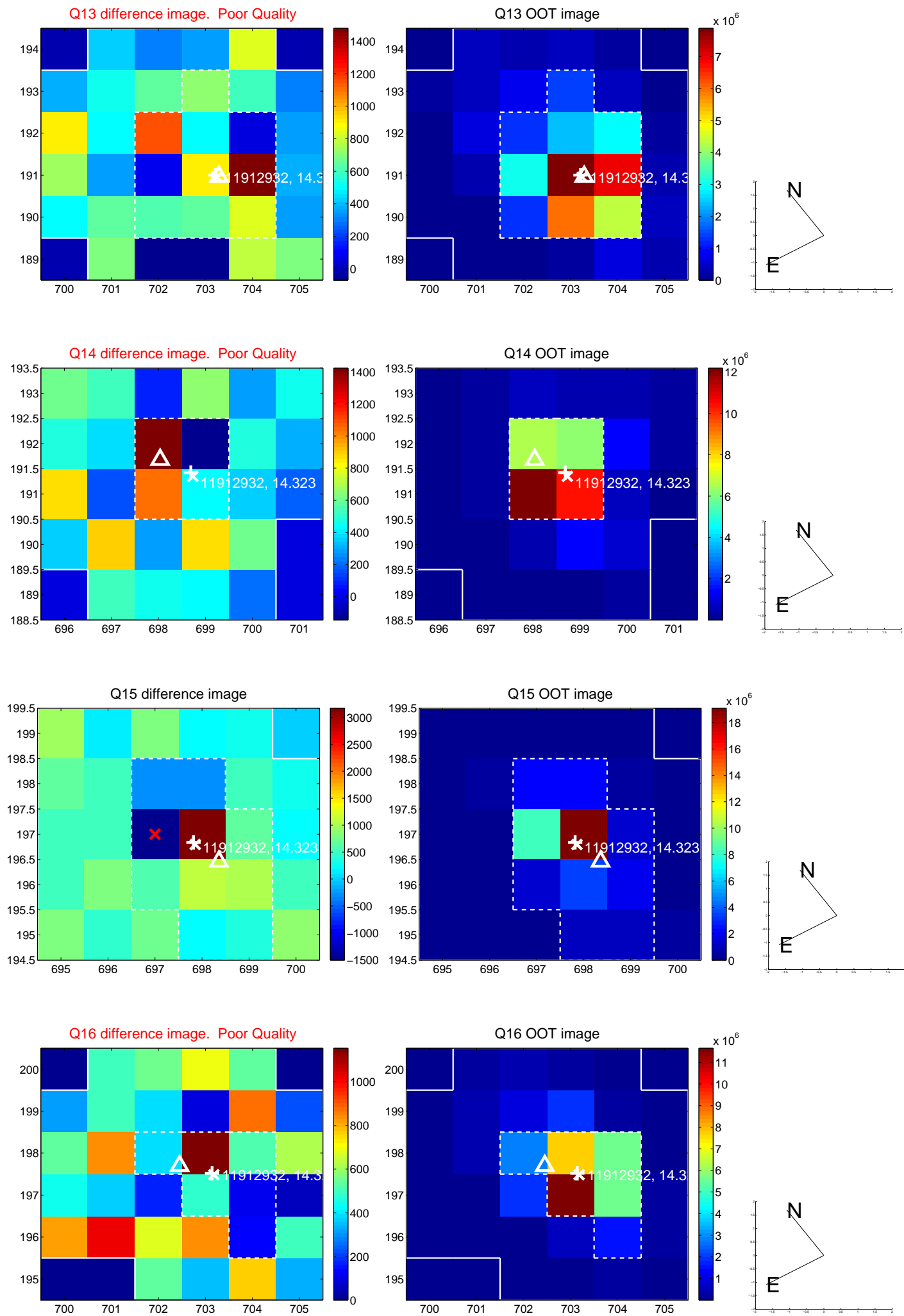
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



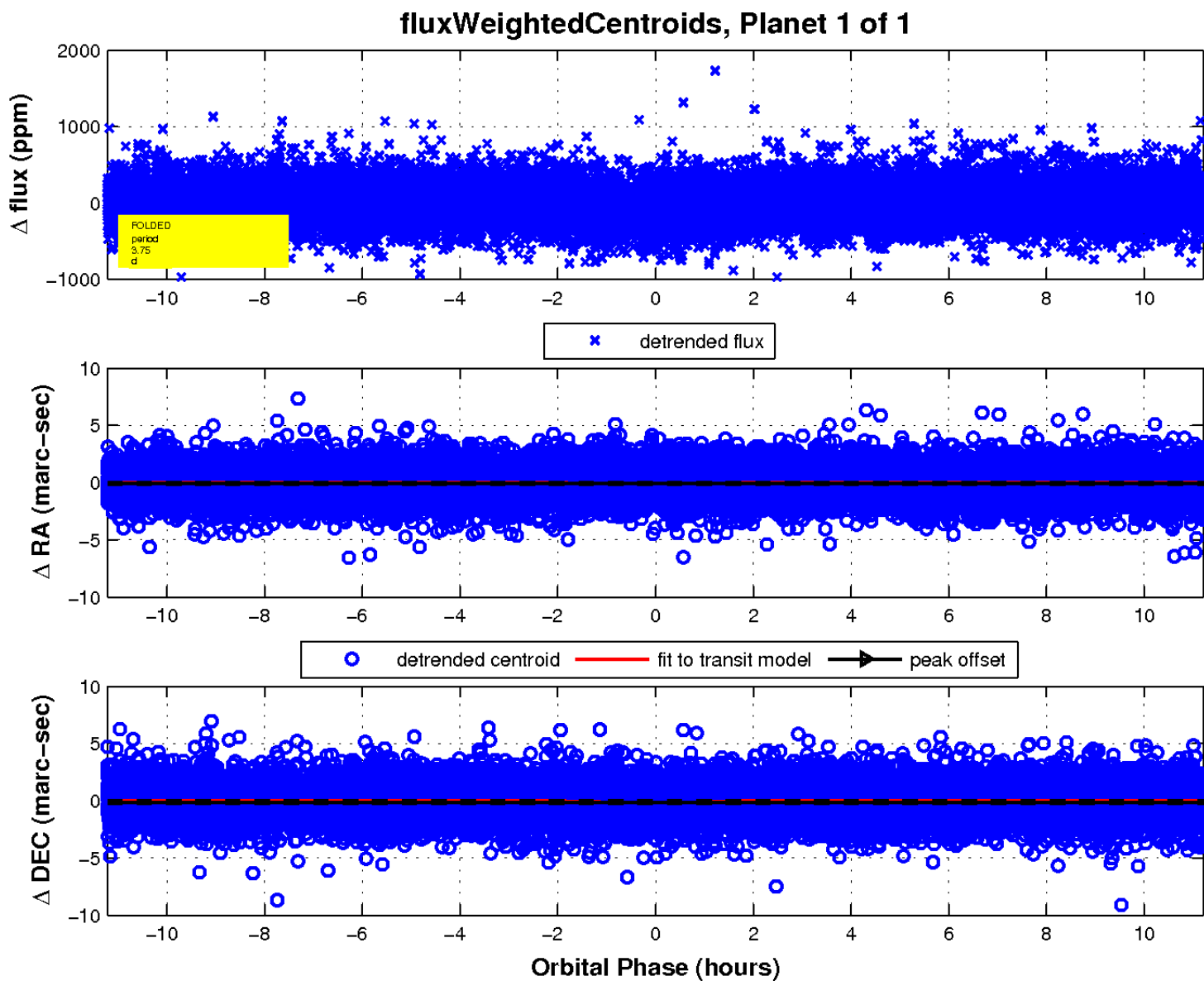
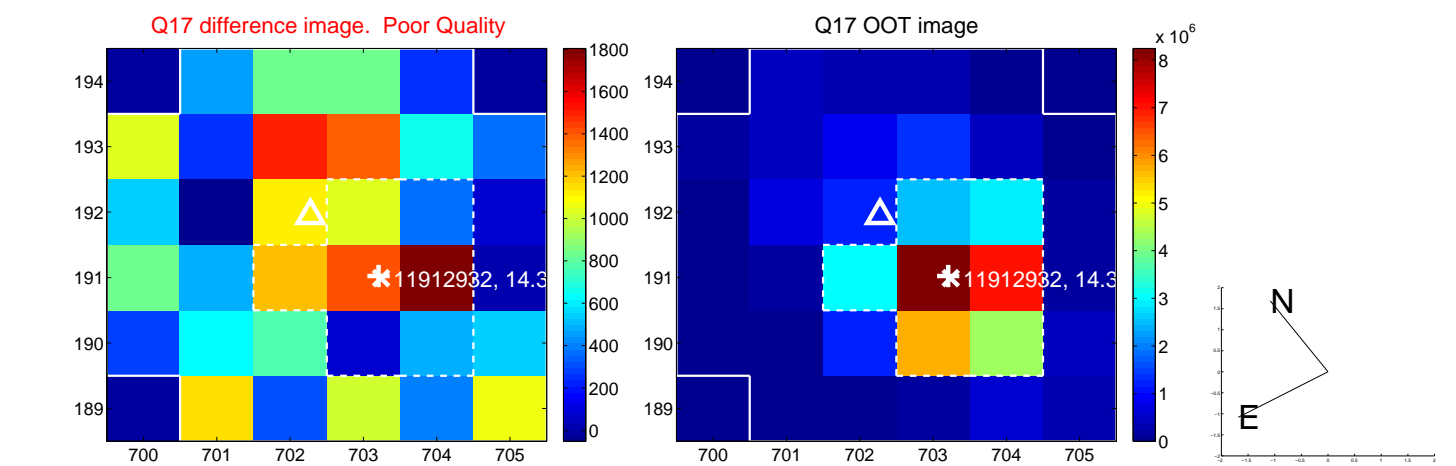
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

