

KIC 005302167

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})
005302167-01	OBS	No	0.912522	131.868170	10.6	9.063	8.5	10.8	2.63	8402	0.87	54668.97

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005302167-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—CENT_FEW_DIFFS

Notes: OBS = Observed. INJ = Injected. INV = Inverted. SCR = Scrambled.

N = Not Transit-Like. S = Stellar Eclipse. C = Centroid Offset. E = Ephemeris Match.

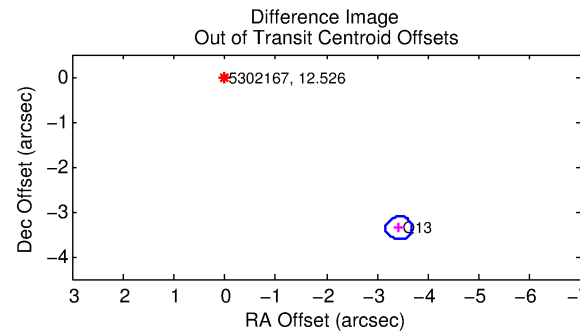
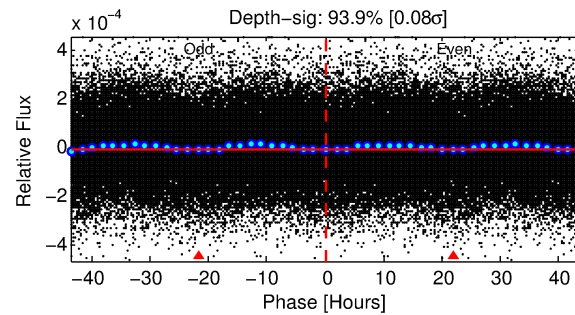
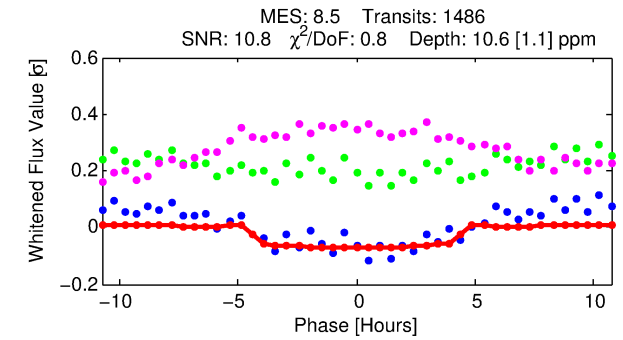
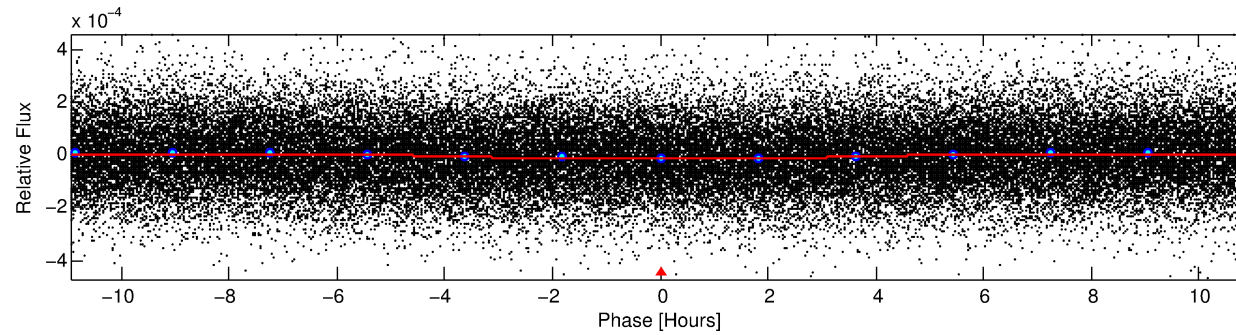
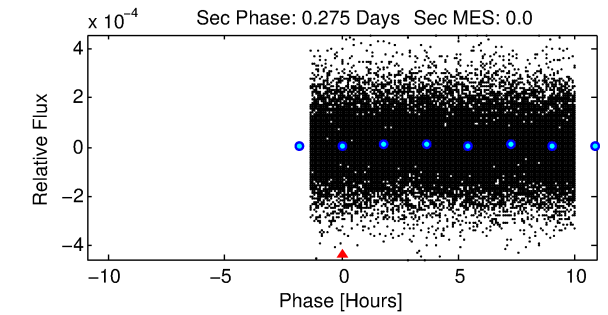
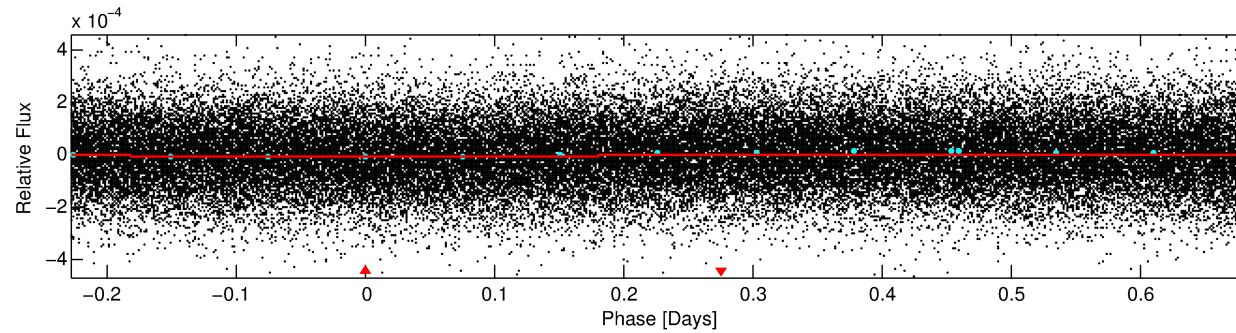
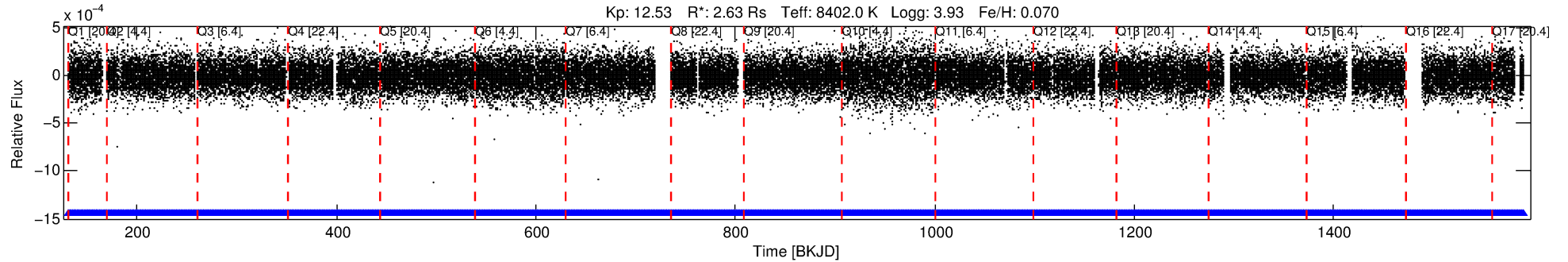
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005302167-01

No Significant Match Found

DV One-Page Summary

KIC: 5302167 Candidate: 1 of 1 Period: 0.913 d



DV Fit Results:

Period = 0.91252 [0.00002] d
Epoch = 131.8682 [0.0072] BKJD
Rp/R* = 0.0030 [0.0024]
a/R* = 1.04 [0.35]
b = 0.20 [23.07]
Seff = 54668.97 [27787.24]
Teq = 3899 [495] K
Rp = 0.87 [0.75] Re
a = 0.0237 [0.0074] AU
Ag = N/A
Teffp = N/A

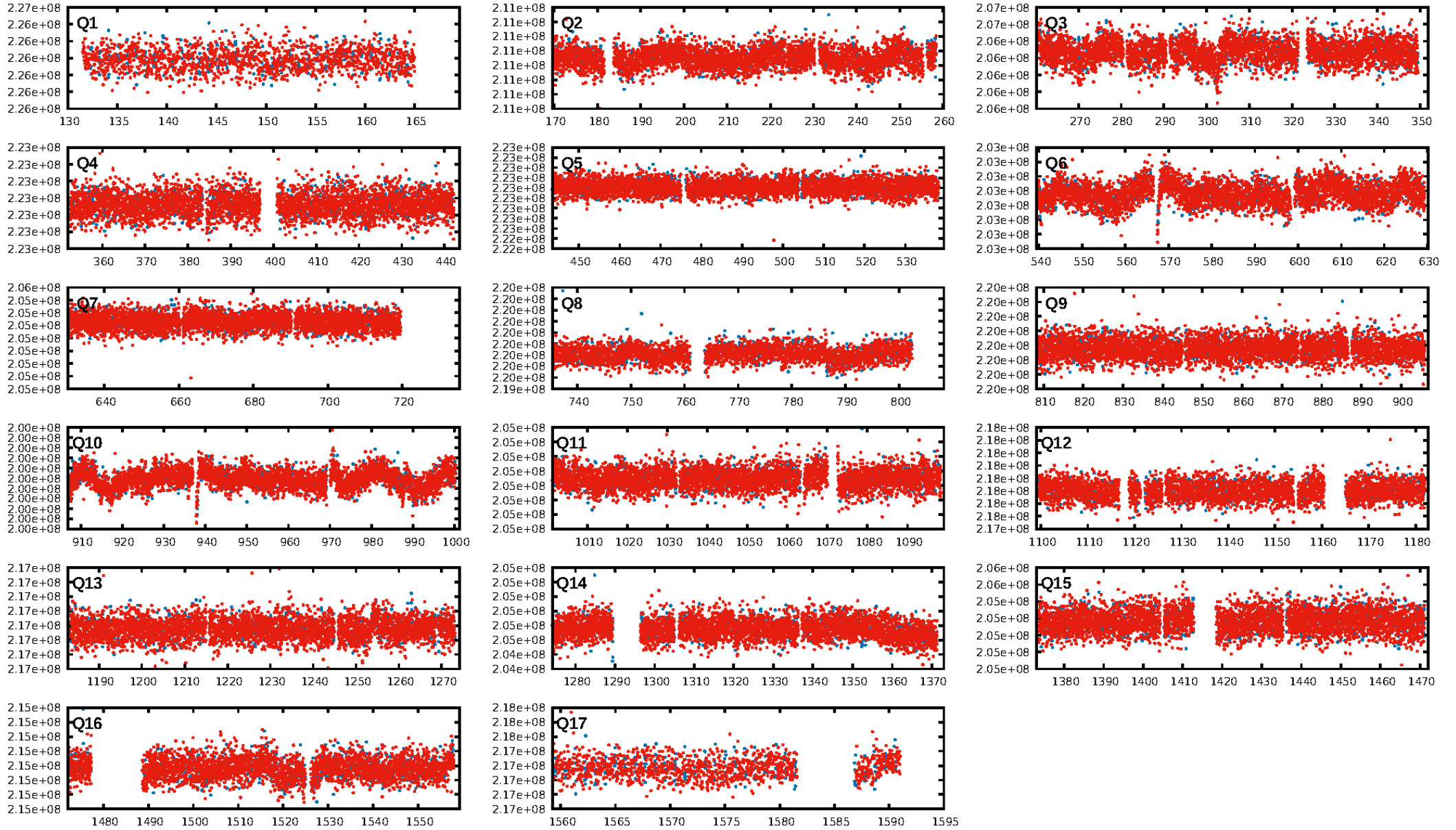
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [1419/1419]
GhostDiagnostic-chr: -6.229
Centroid-sig: 25.9%
Centroid-so: 1.109 arcsec [1.03σ]
OotOffset-rm: 4.795 arcsec [56.38σ]
KicOffset-rm: 4.795 arcsec [56.37σ]
OotOffset-st: 0/0/0/1 [1]
KicOffset-st: 0/0/0/1 [1]
DiffImageQuality-fgm: 0.00 [0/1]
DiffImageOverlap-fno: 1.00 [17/17]

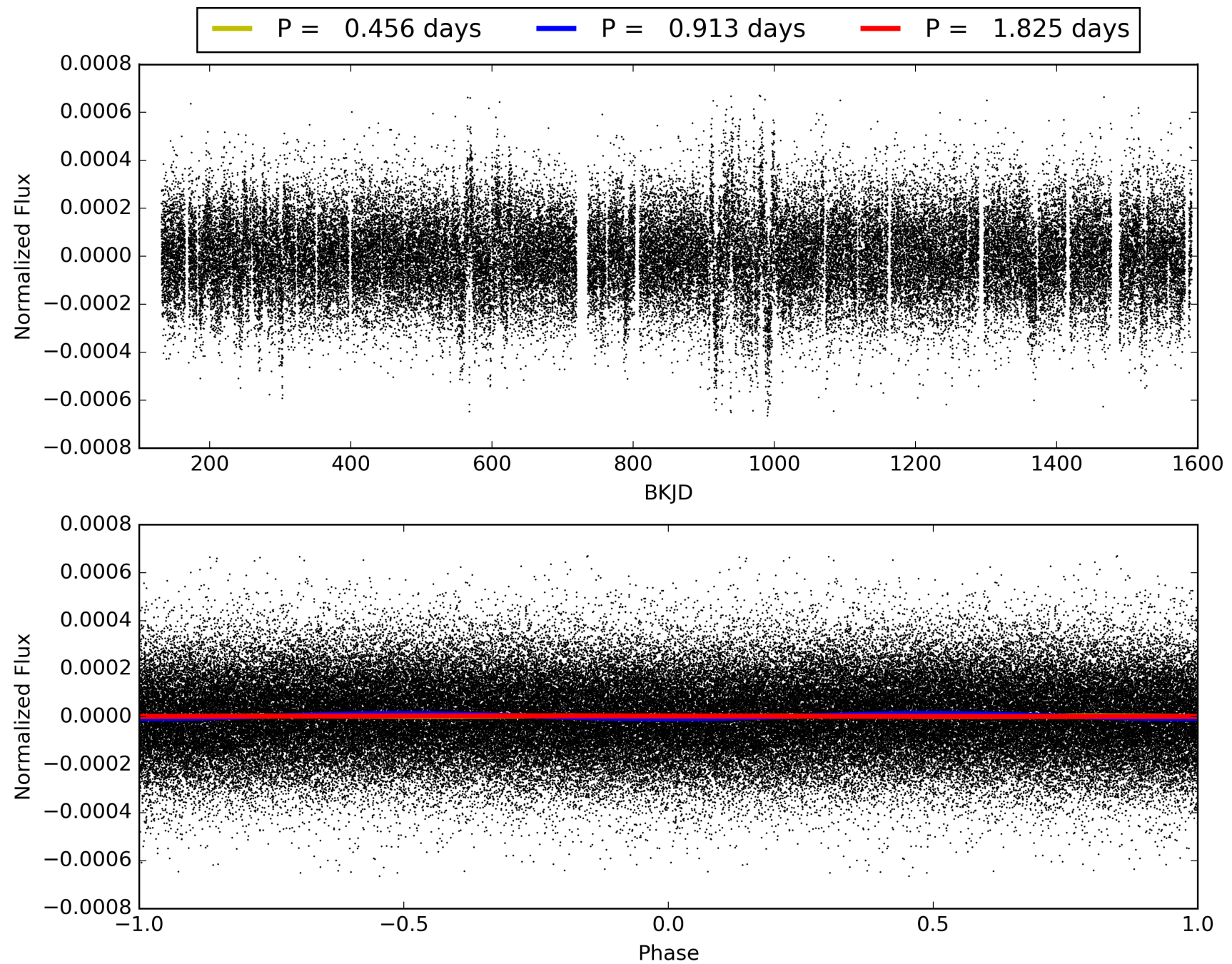
Software Revision: svn-ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 08:32:02 Z

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

TCE 005302167-01, PDC Light Curves

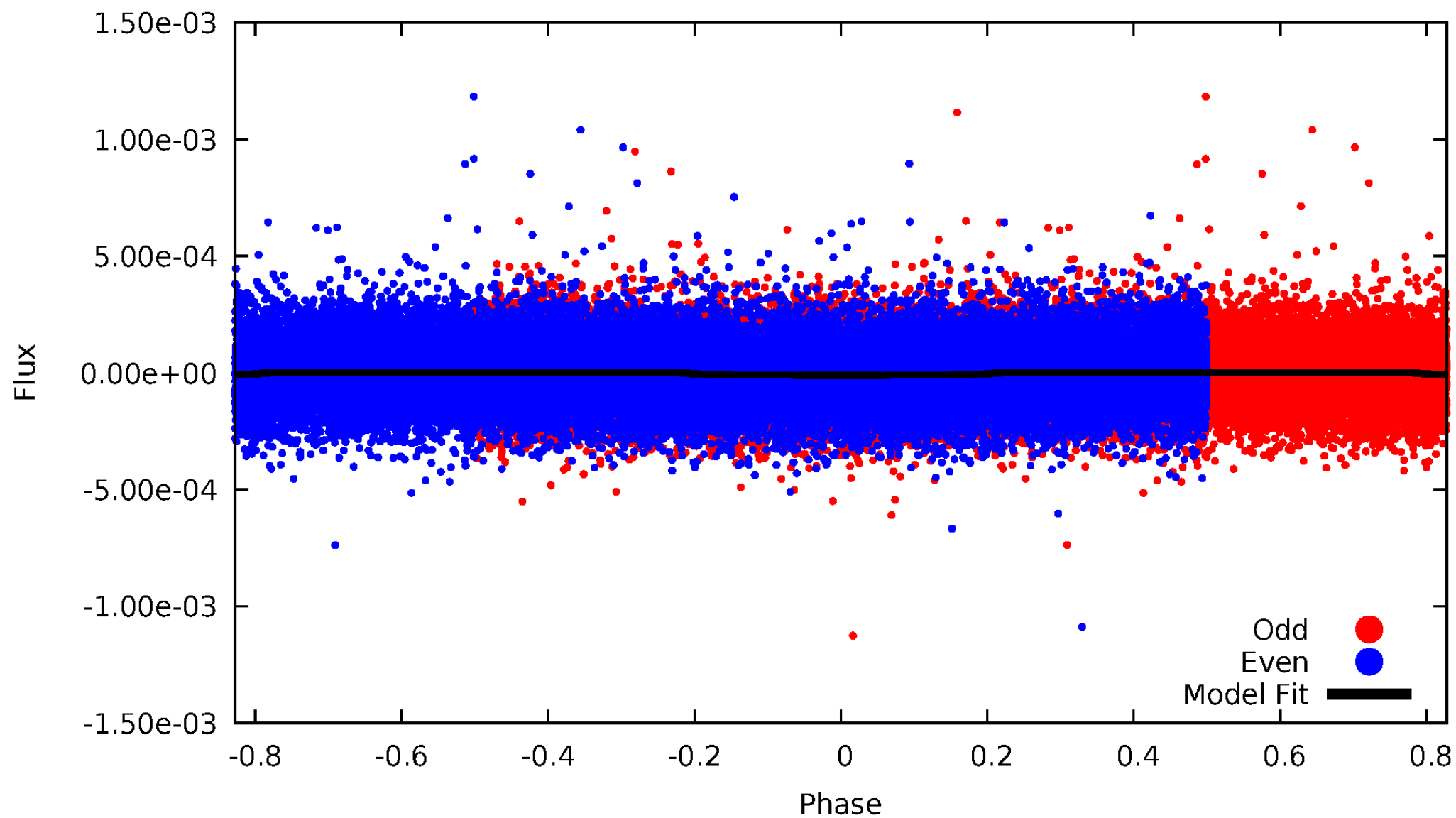


TCE 005302167-01



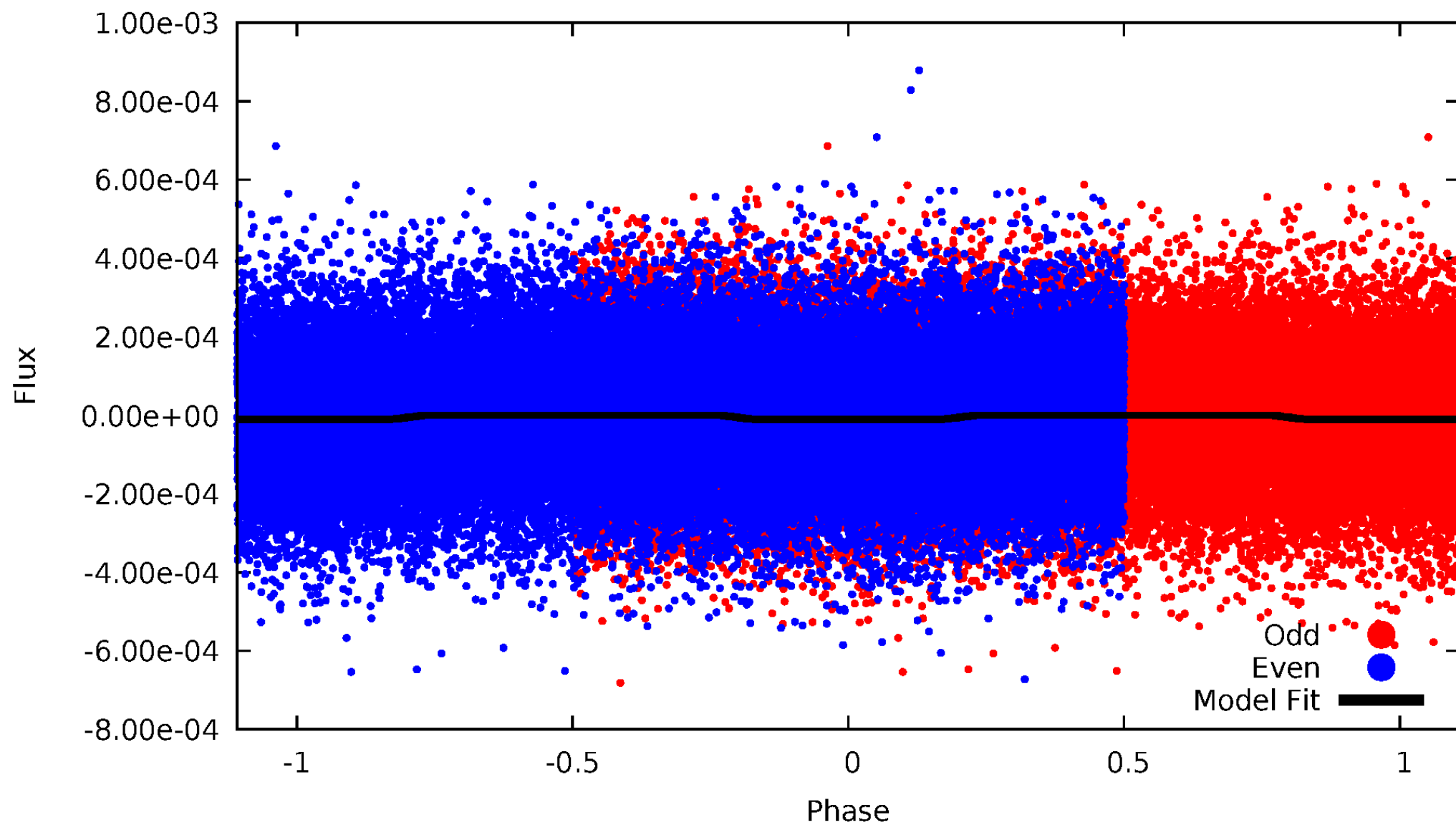
DV Odd/Even

TCE 005302167-01



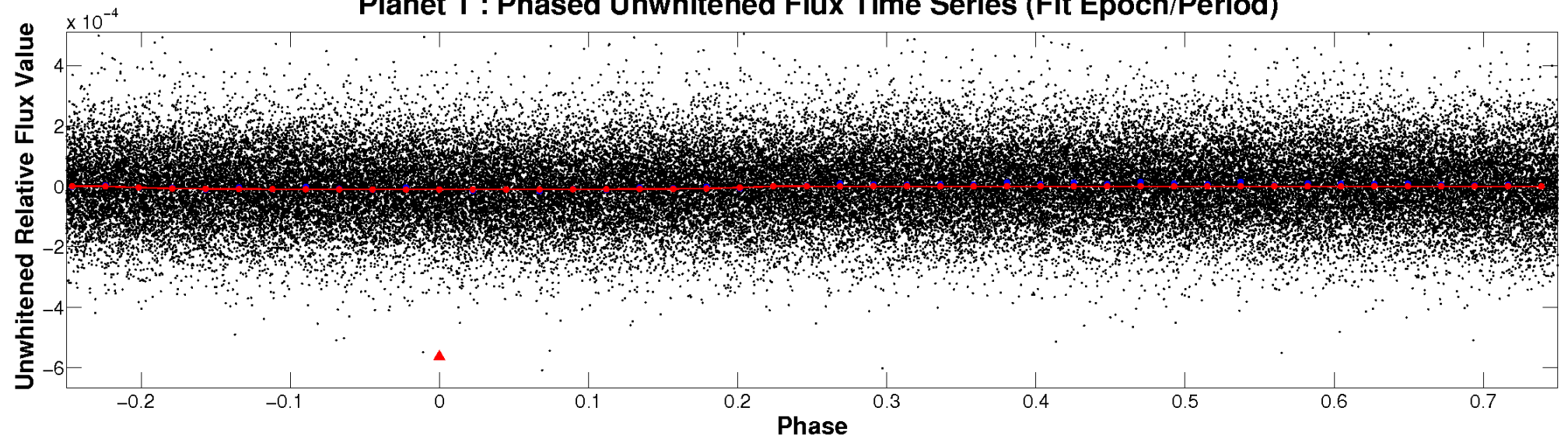
ALT Odd/Even

TCE 005302167-01

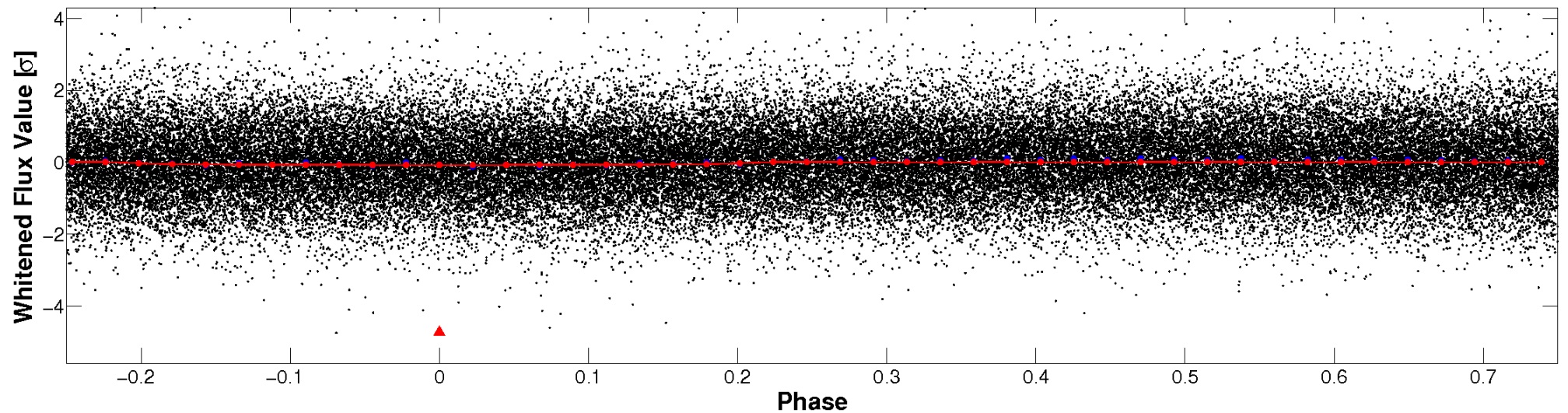


Non-Whitened Vs. Whitened Light Curve

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

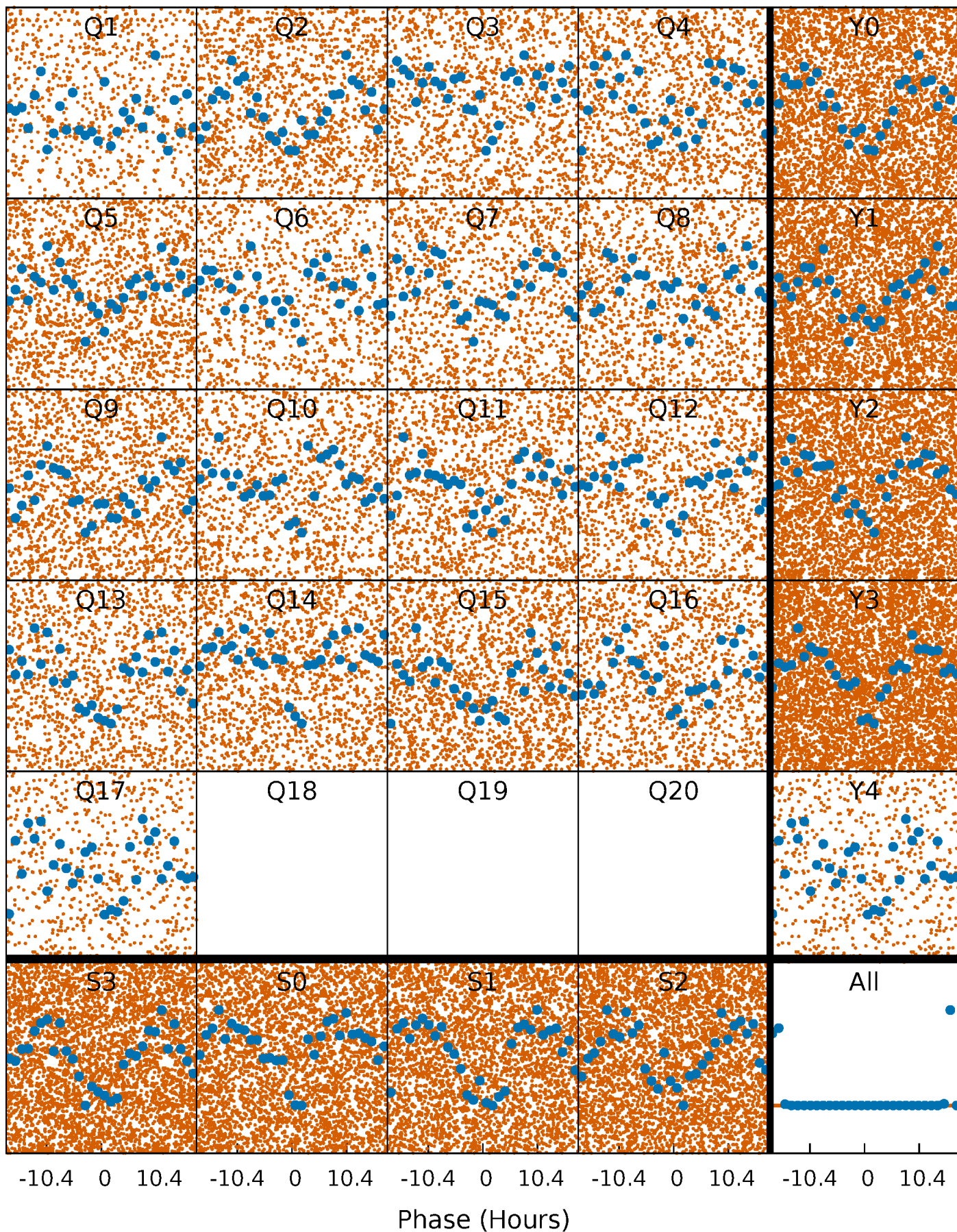


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



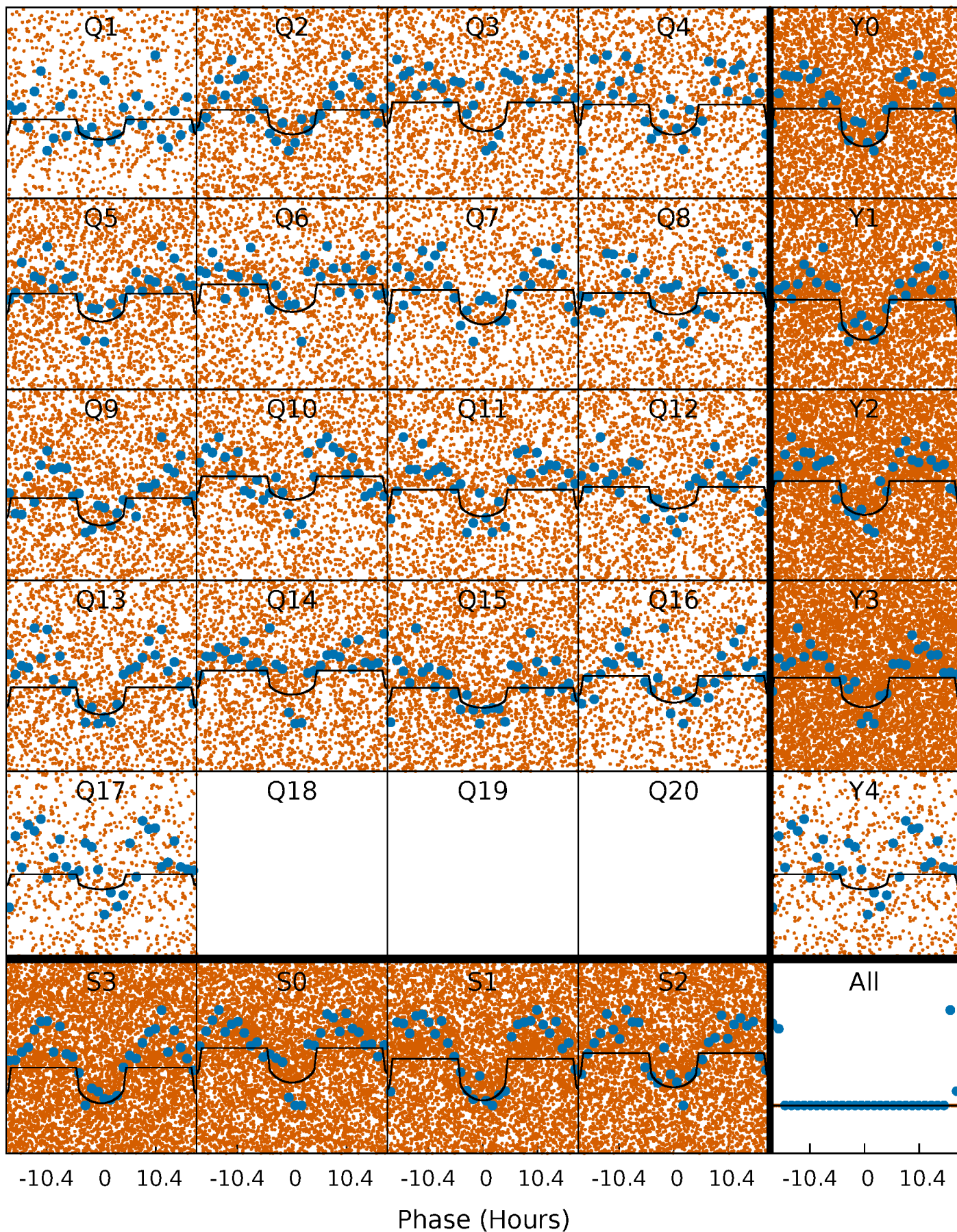
PDC Quarter-Phased Transit Curves

TCE 005302167-01 P= 0.912522 Days $T_0=131.868170$ (BKJD)



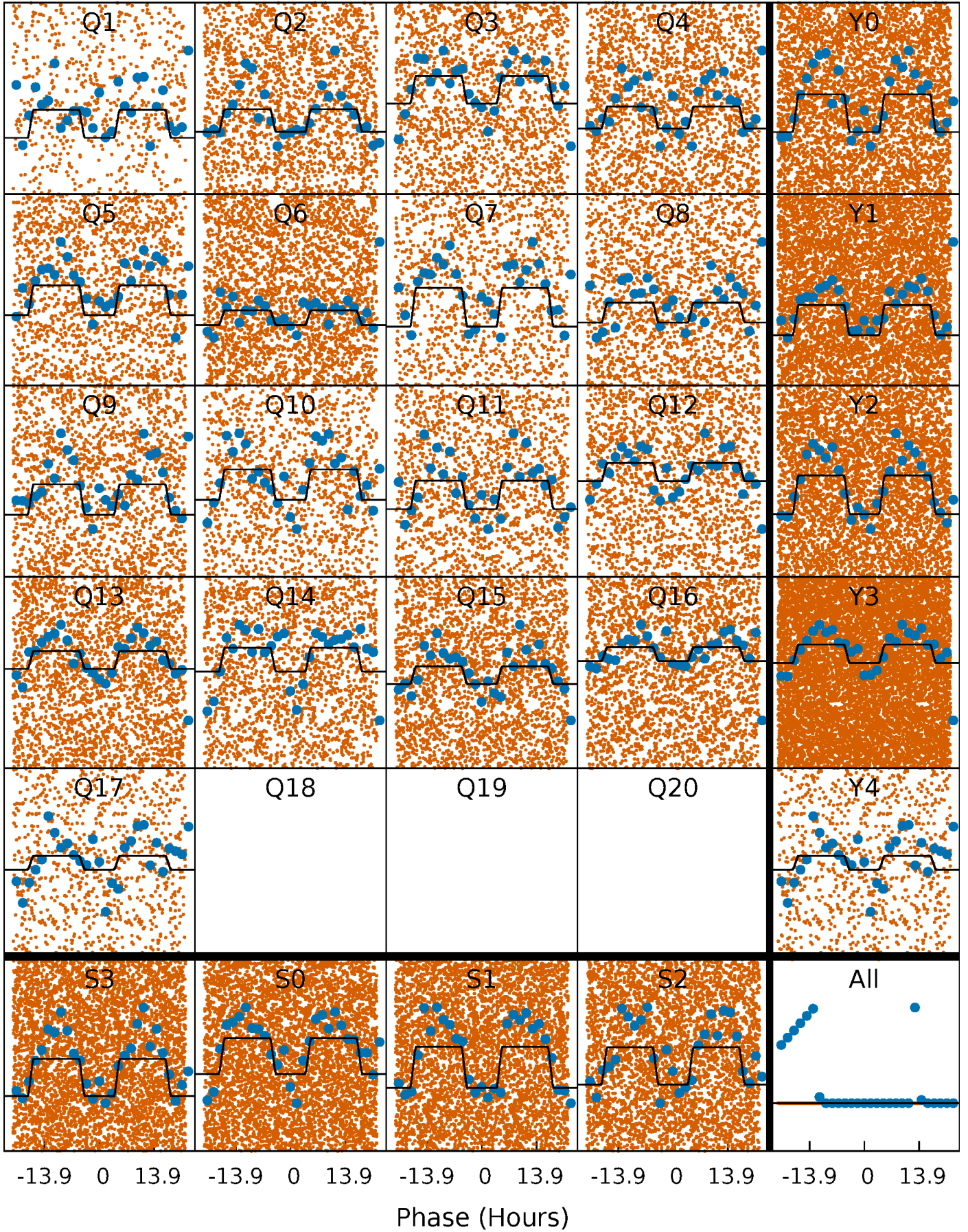
DV Quarter-Phased Transit Curves

TCE 005302167-01 P= 0.912522 Days $T_0=131.868170$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

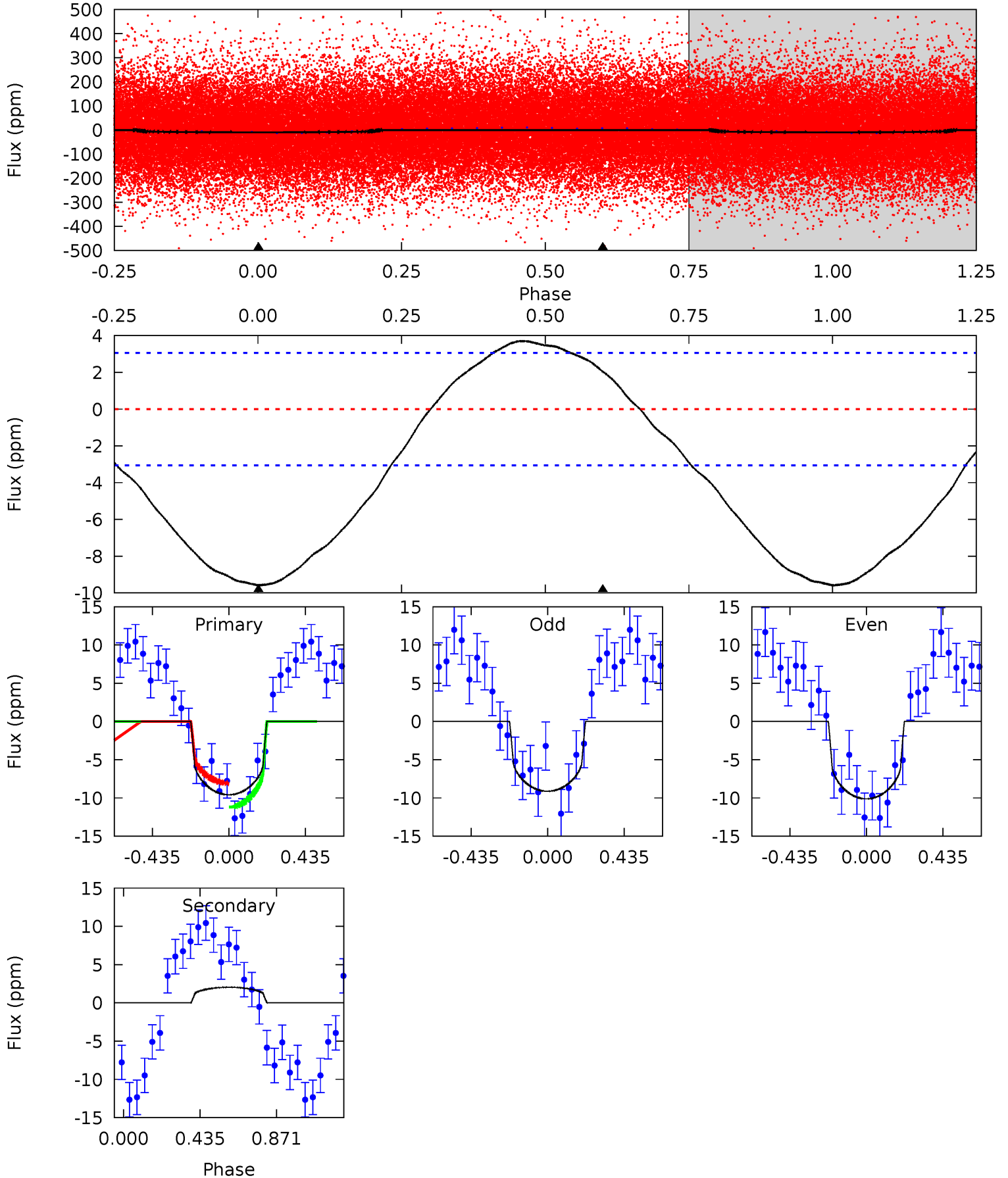
TCE 005302167-01 P= 0.912504 Days $T_0=131.864106$ (BKJD)



DV Model-Shift Uniqueness Test

005302167-01, P = 0.912522 Days, E = 130.955648 Days

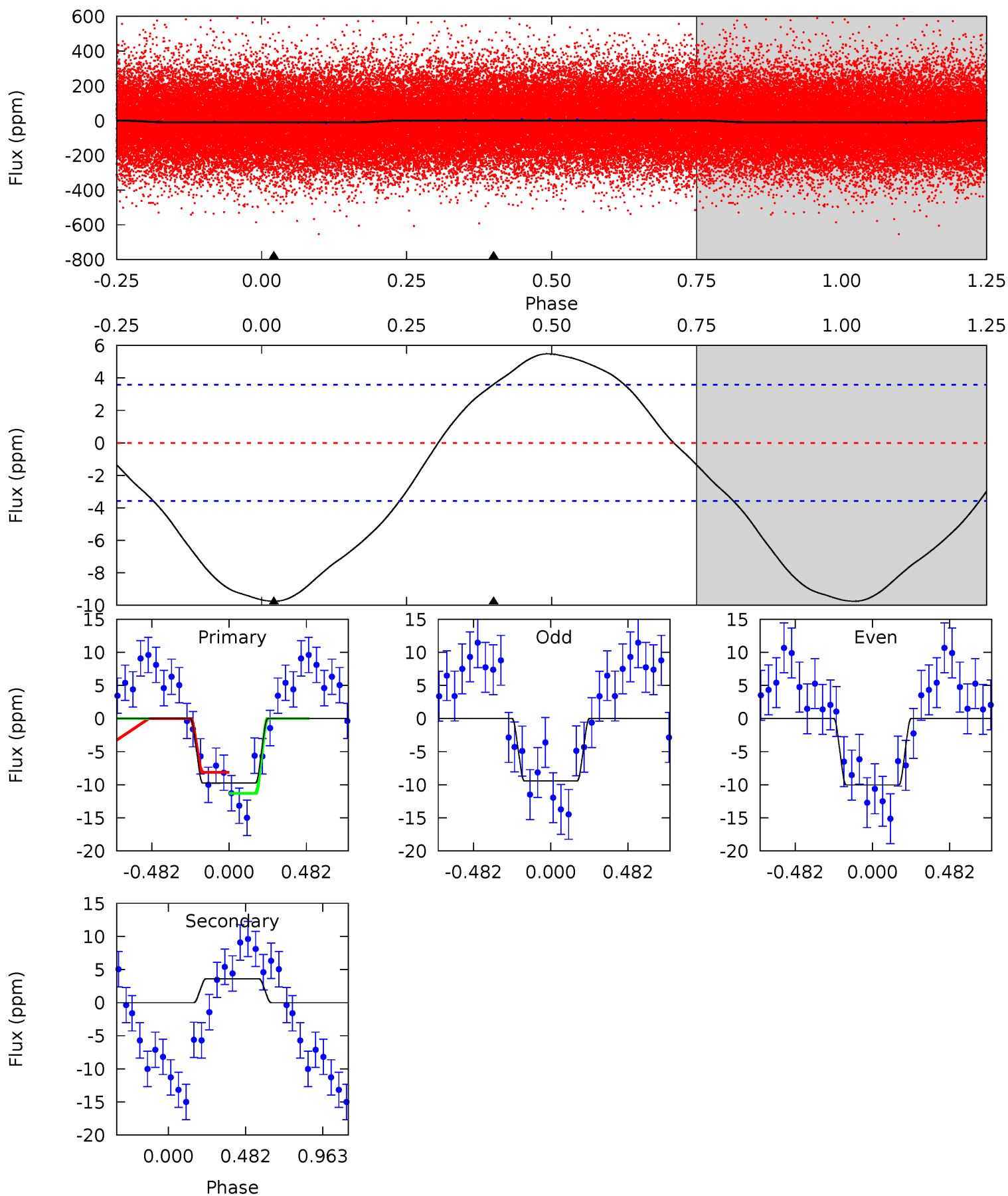
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.3	-2.83	0	0	4.25	0.78	1.68	13.3	13.3	-2.83	-2.83	0.69	0.94	0.28	2.23



Alt Model-Shift Uniqueness Test

005302167-01, P = 0.912504 Days, E = 130.951602 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.5	-4.26	0	0	4.22	0.70	1.33	11.5	11.5	-4.26	-4.26	0.36	1.09	0.36	1.88



Stellar Parameters For KIC 005302167

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	8402^{+202}_{-404}	$3.930^{+0.266}_{-0.114}$	$0.070^{+0.250}_{-0.550}$	$2.627^{+0.496}_{-0.921}$	$2.140^{+0.306}_{-0.611}$	$0.166^{+0.300}_{-0.059}$
	+2%/-5%	+7%/-3%	+357%/-786%	+19%/-35%	+14%/-29%	+181%/-36%
Source	KIC0	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 005302167-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	2 ± 1	$0.90^{+0.66}_{-0.52}$	5330^{+338}_{-500}	-5754^{+820}_{-2832}	$-0.746^{+0.532}_{-3.461}$
Alt.	4 ± 1	$0.99^{+0.66}_{-0.59}$	5344^{+353}_{-477}	-6209^{+973}_{-3533}	$-1.135^{+0.754}_{-5.460}$

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 $A_{obs} \gg 1.0$

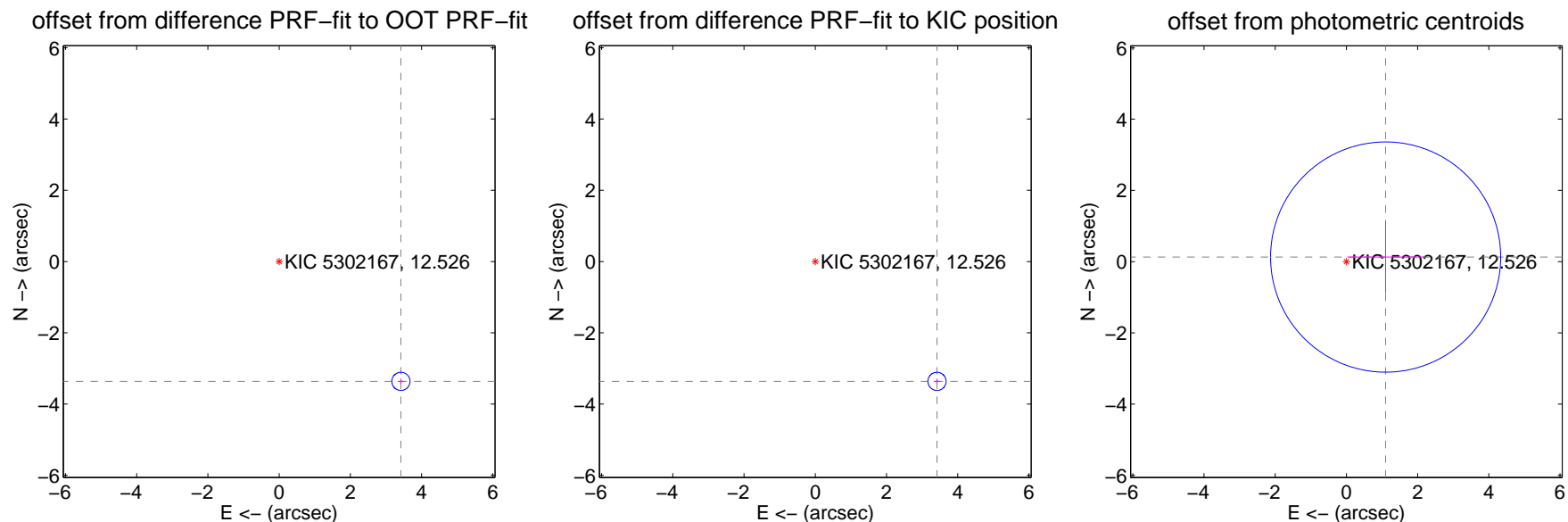
DV Centroid Data

Supplemental centroid analysis for 005302167-01. Kepler magnitude: 12.53. Transit SNR 10.77

There are 0 quarters with good PRF difference image offsets

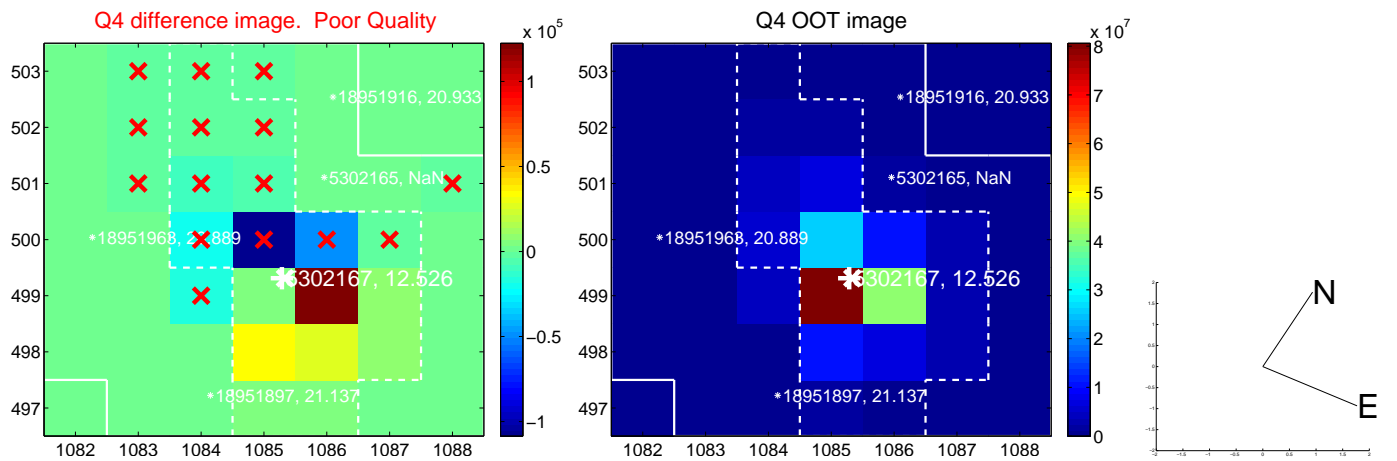
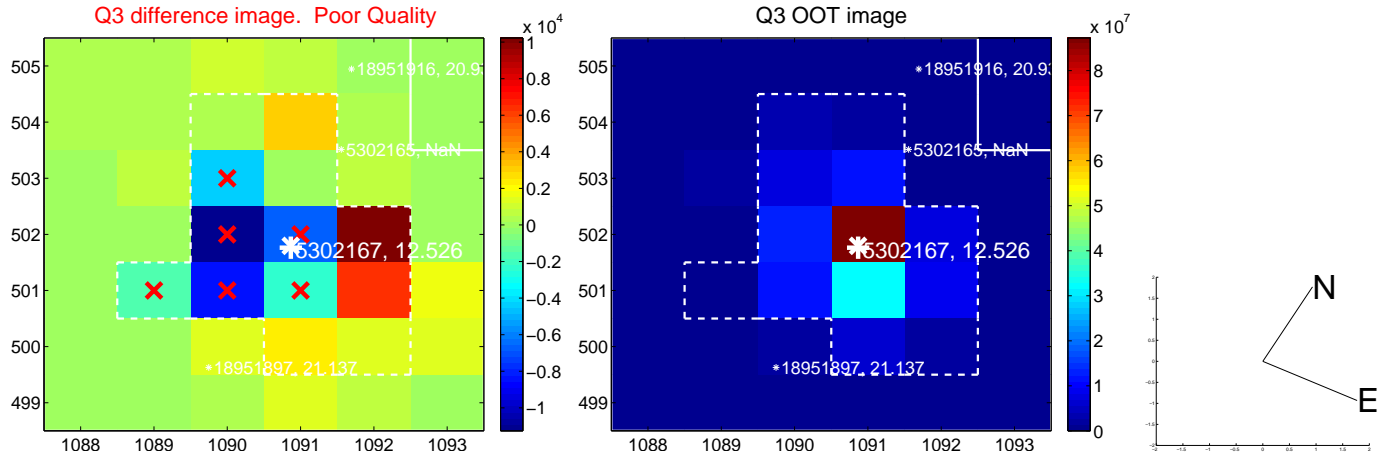
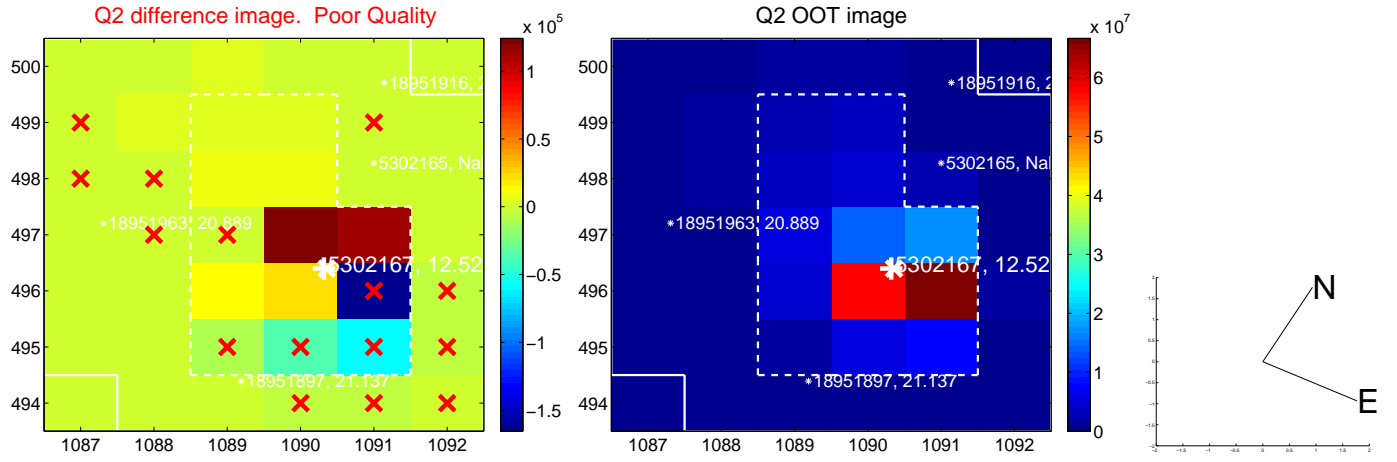
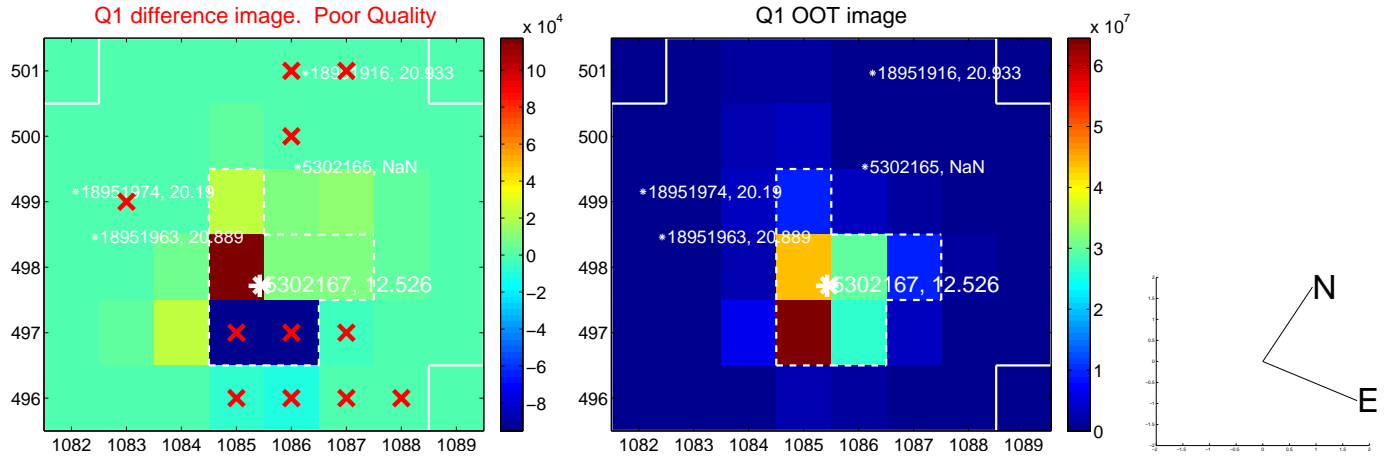
The direct PRF centroid is offset from the target star catalog position by about 0.00 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	4.795 ± 0.085	56.38	-3.419 ± 0.092	-3.363 ± 0.078
PRF-fit source offset from KIC position	4.795 ± 0.085	56.37	-3.418 ± 0.092	-3.363 ± 0.078
photometric centroid source offset	1.11 ± 1.08	1.03	-1.10 ± 1.08	0.13 ± 1.01

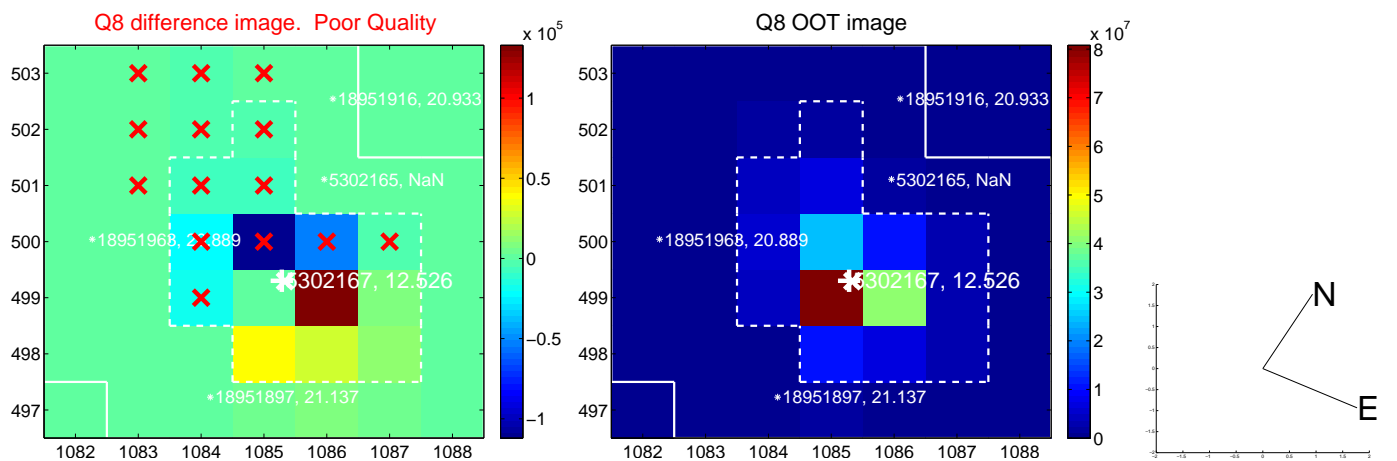
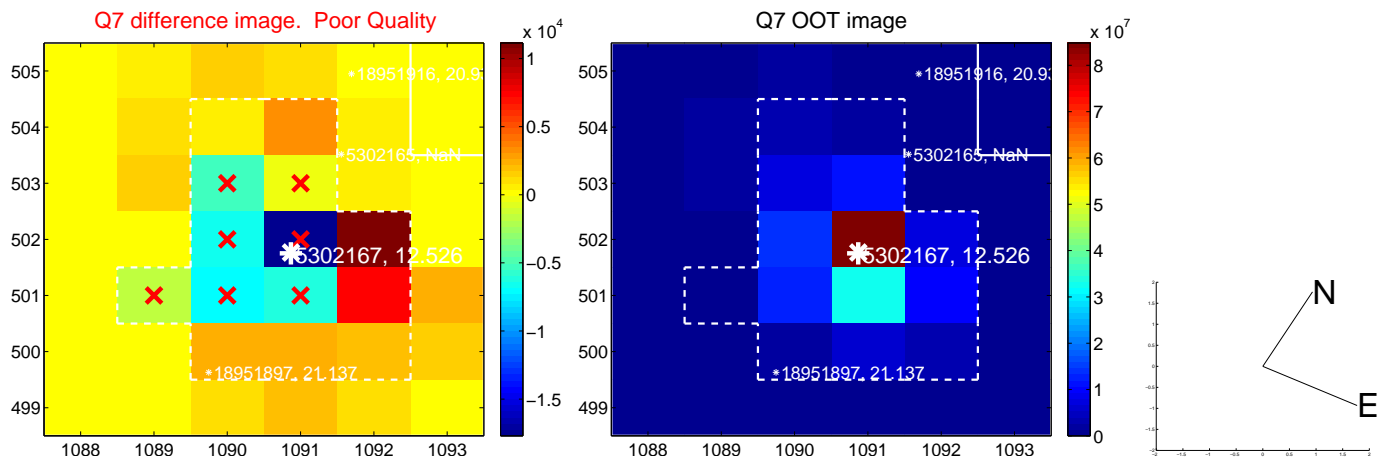
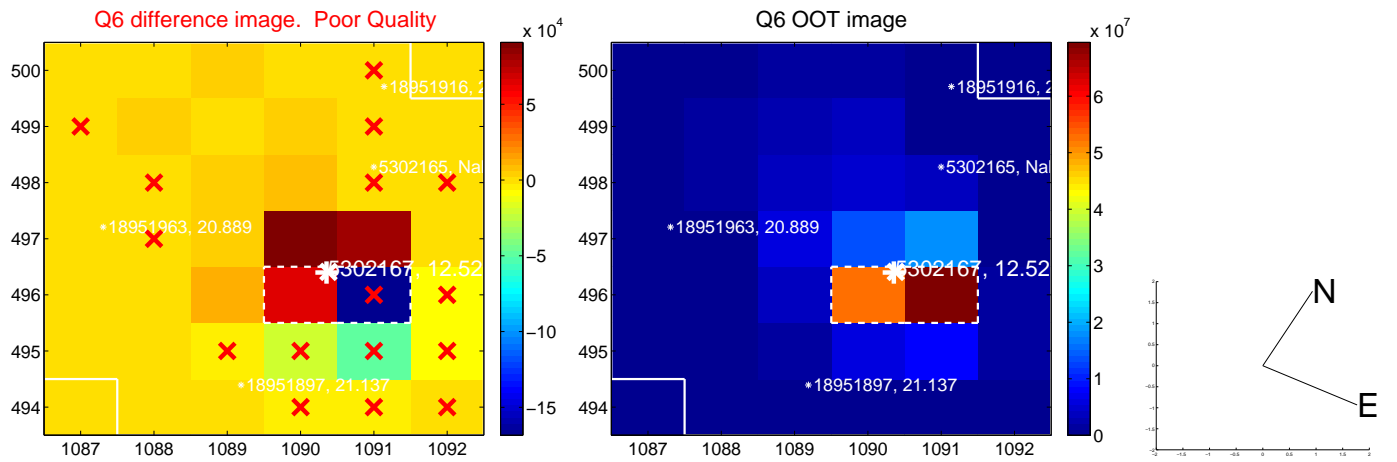
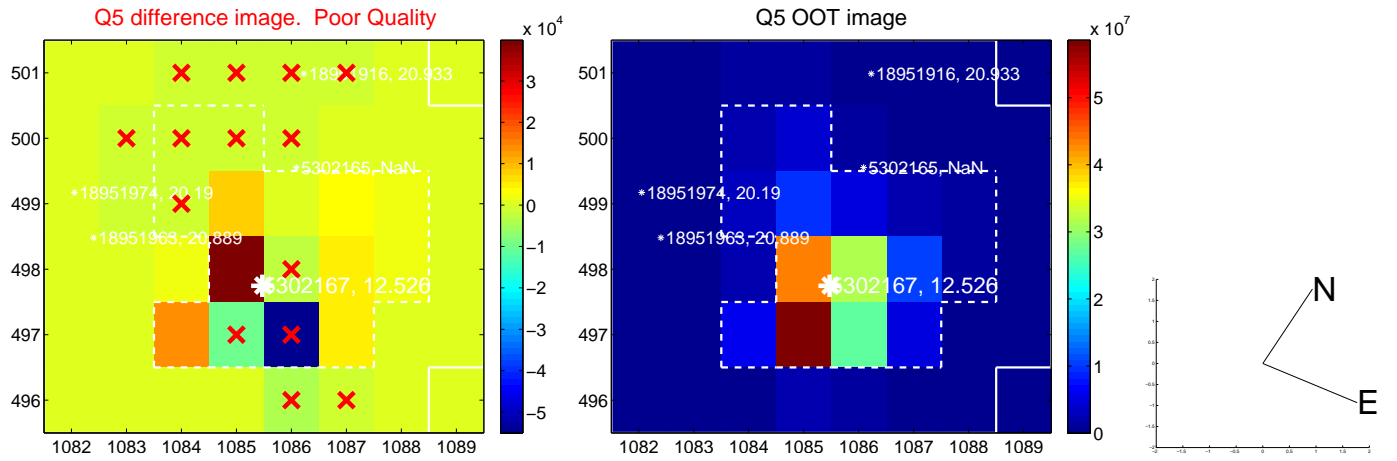


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

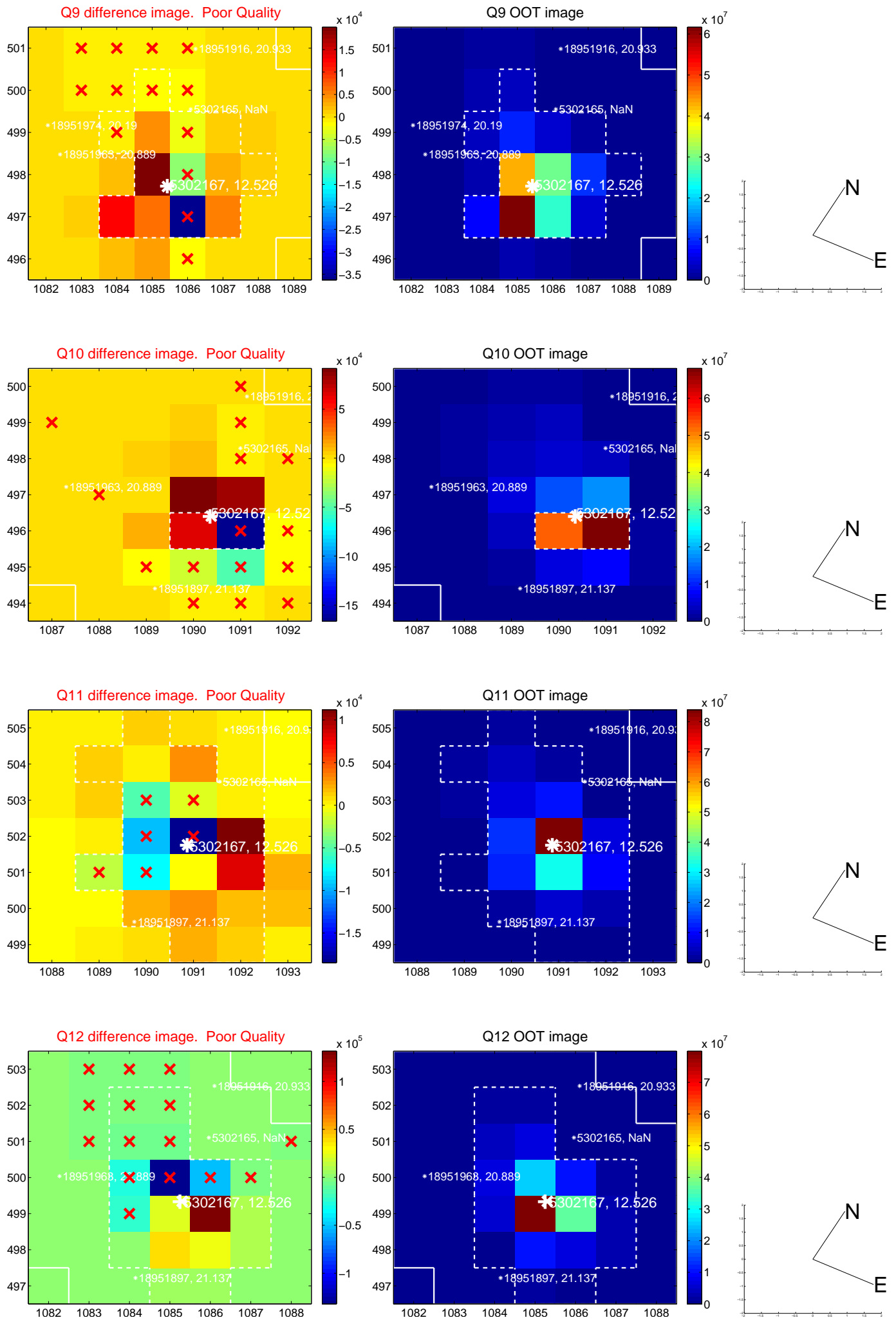
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



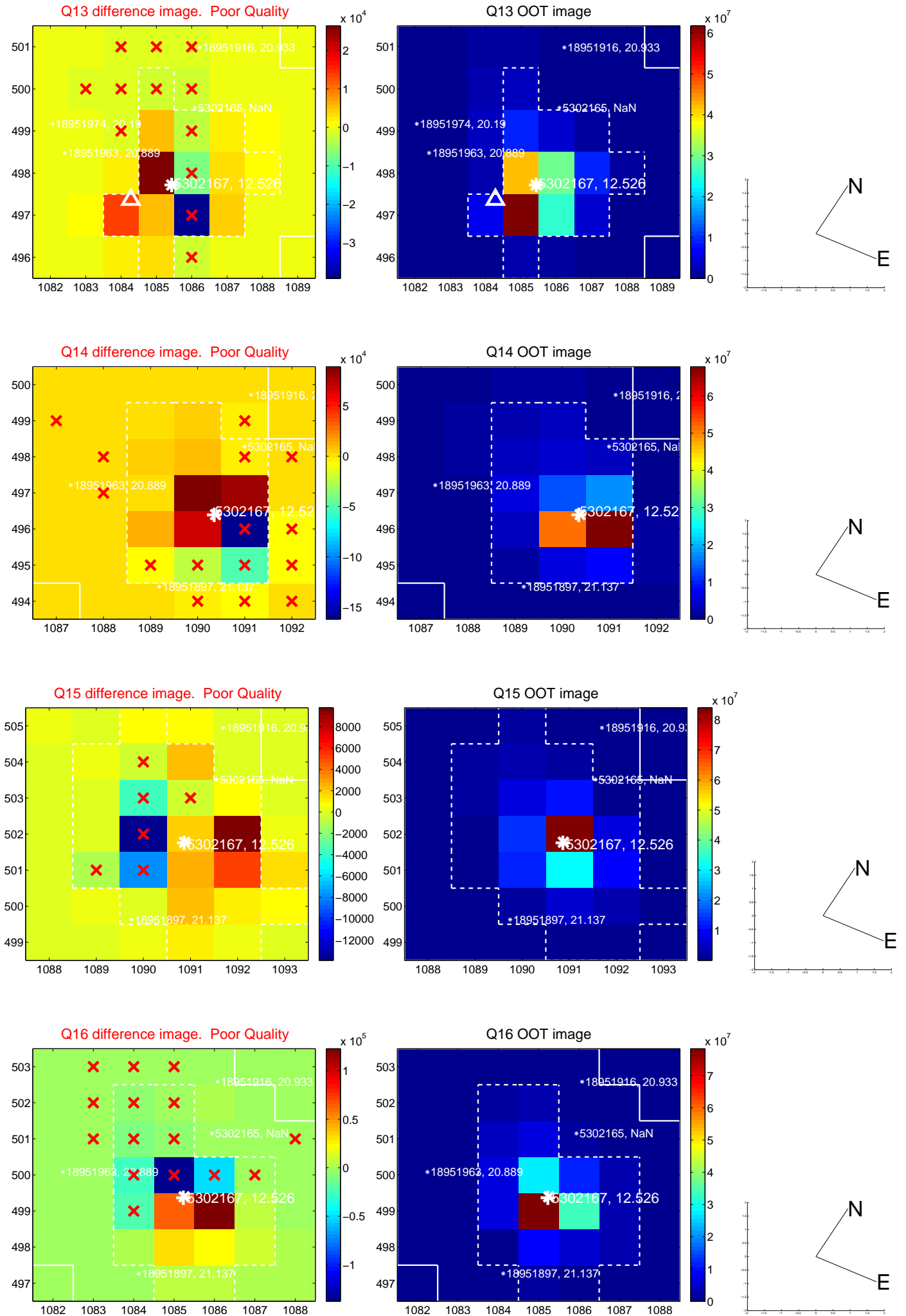
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



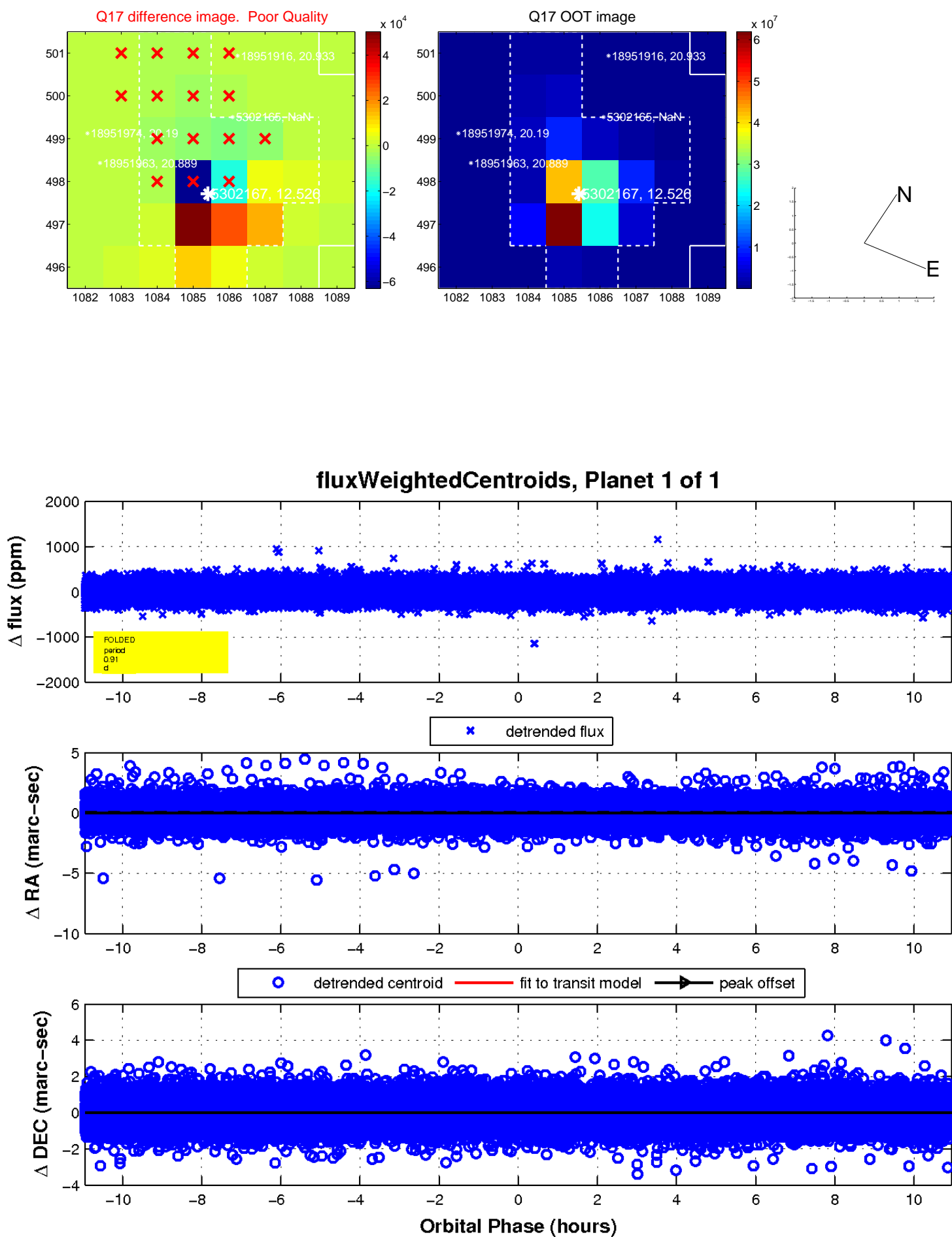
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

