

KIC 005273195

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})
005273195-01	OBS	No	0.630777	132.094836	5.2	6.931	7.5	9.8	2.91	8560	0.68	124714.84

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005273195-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—CENT_SATURATED

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

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

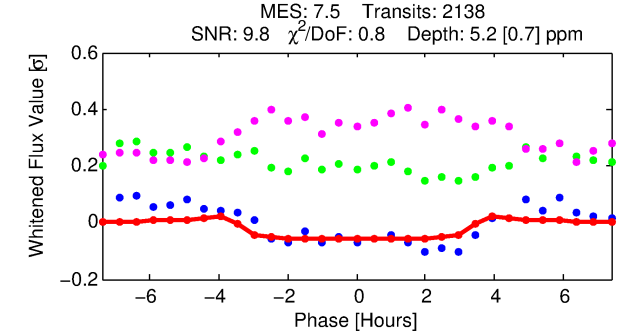
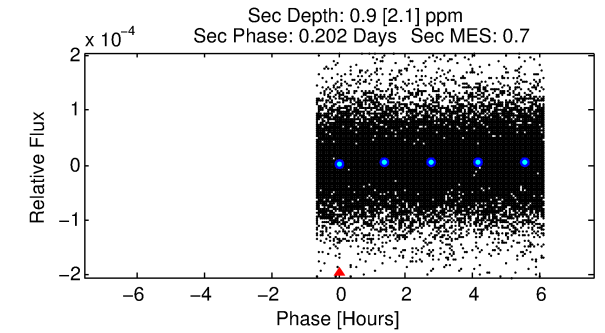
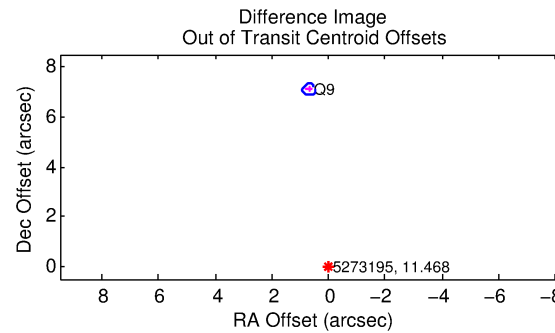
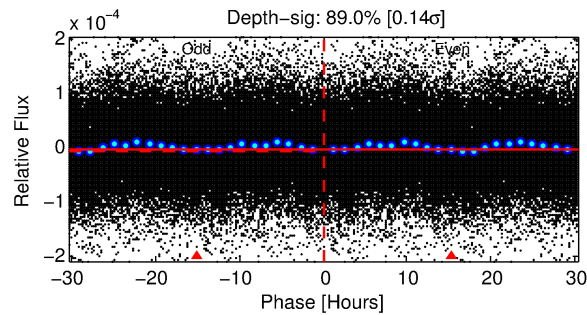
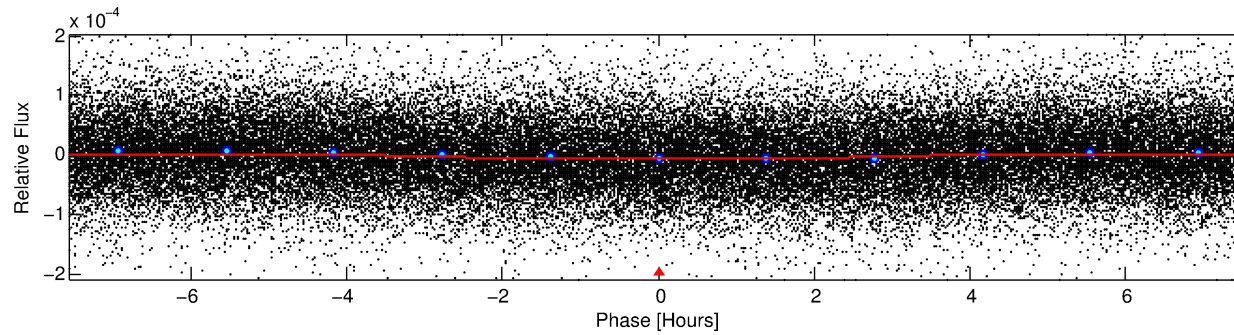
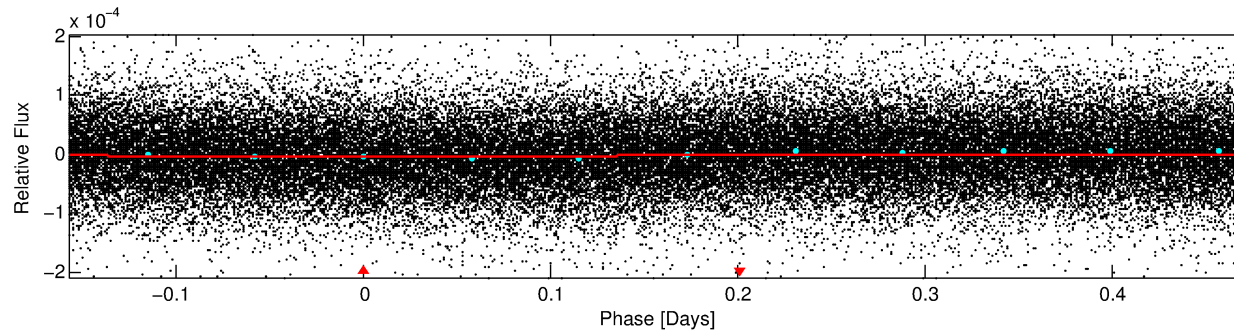
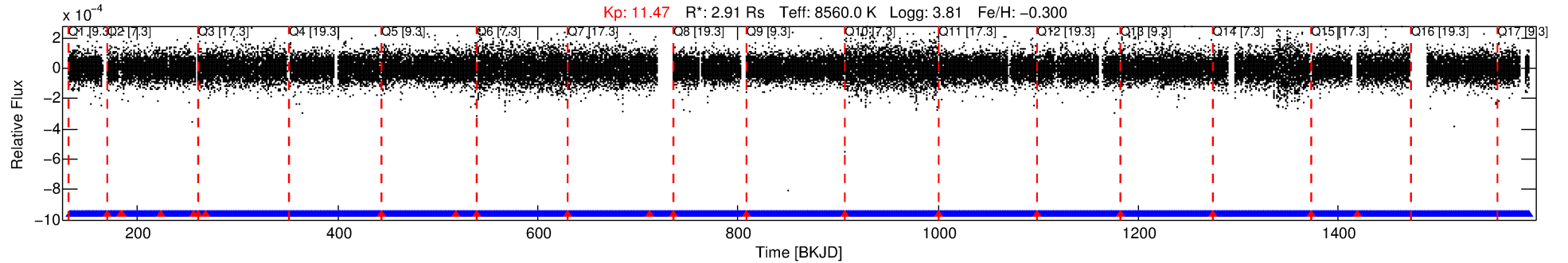
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005273195-01

No Significant Match Found

DV One-Page Summary

KIC: 5273195 Candidate: 1 of 1 Period: 0.631 d



DV Fit Results:

Period = 0.63078 [0.00001] d
Epoch = 132.0948 [0.0052] BKJD
Rp/R* = 0.0021 [0.0011]
a/R* = 1.01 [0.06]
b = 0.19 [16.54]
Seff = 124714.84 [64065.54]
Teq = 4792 [615] K
Rp = 0.68 [0.42] Re
a = 0.0181 [0.0059] AU
Ag = 0.36 [0.94] [-0.68 σ]
Teffp = 5749 [3640] K [0.26 σ]

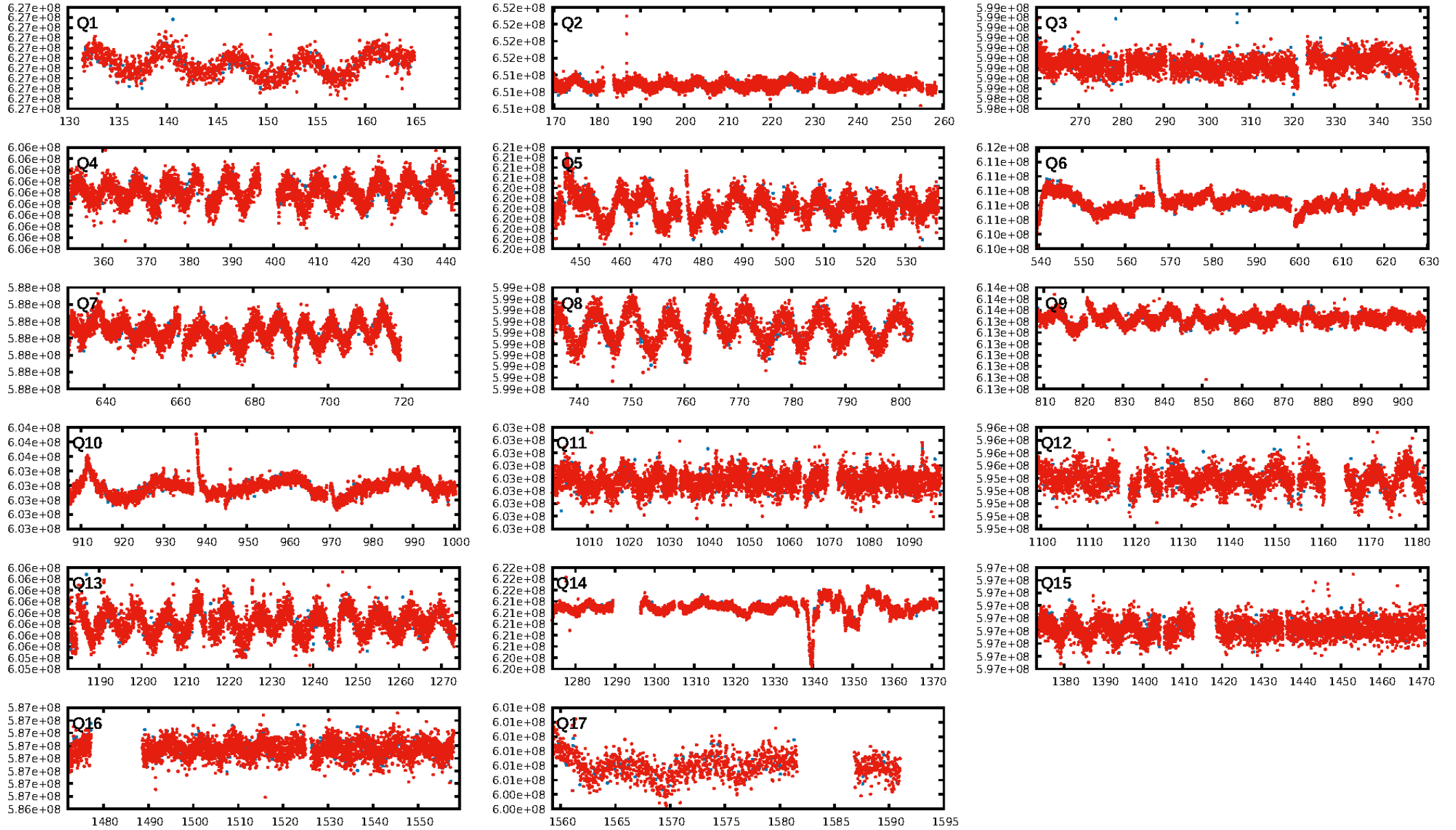
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 0.99 [2017/2041]
GhostDiagnostic-chr: 4.523
Centroid-sig: 6.1%
Centroid-so: 1.161 arcsec [1.32 σ]
OotOffset-rm: 7.134 arcsec [93.64 σ]
KicOffset-rm: 7.090 arcsec [93.07 σ]
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]

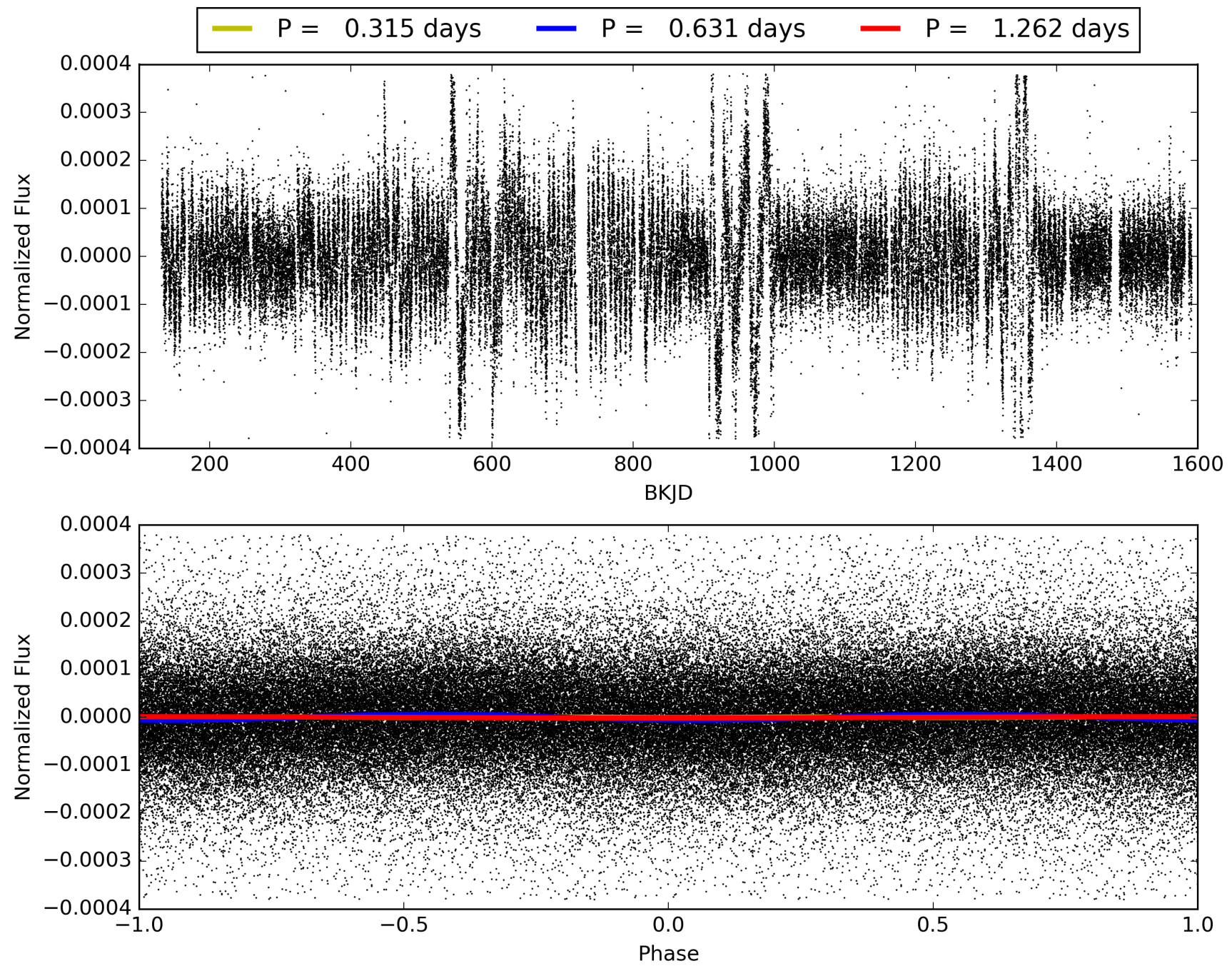
Software Revision: svn-ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 13:00:39 Z

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

TCE 005273195-01, PDC Light Curves

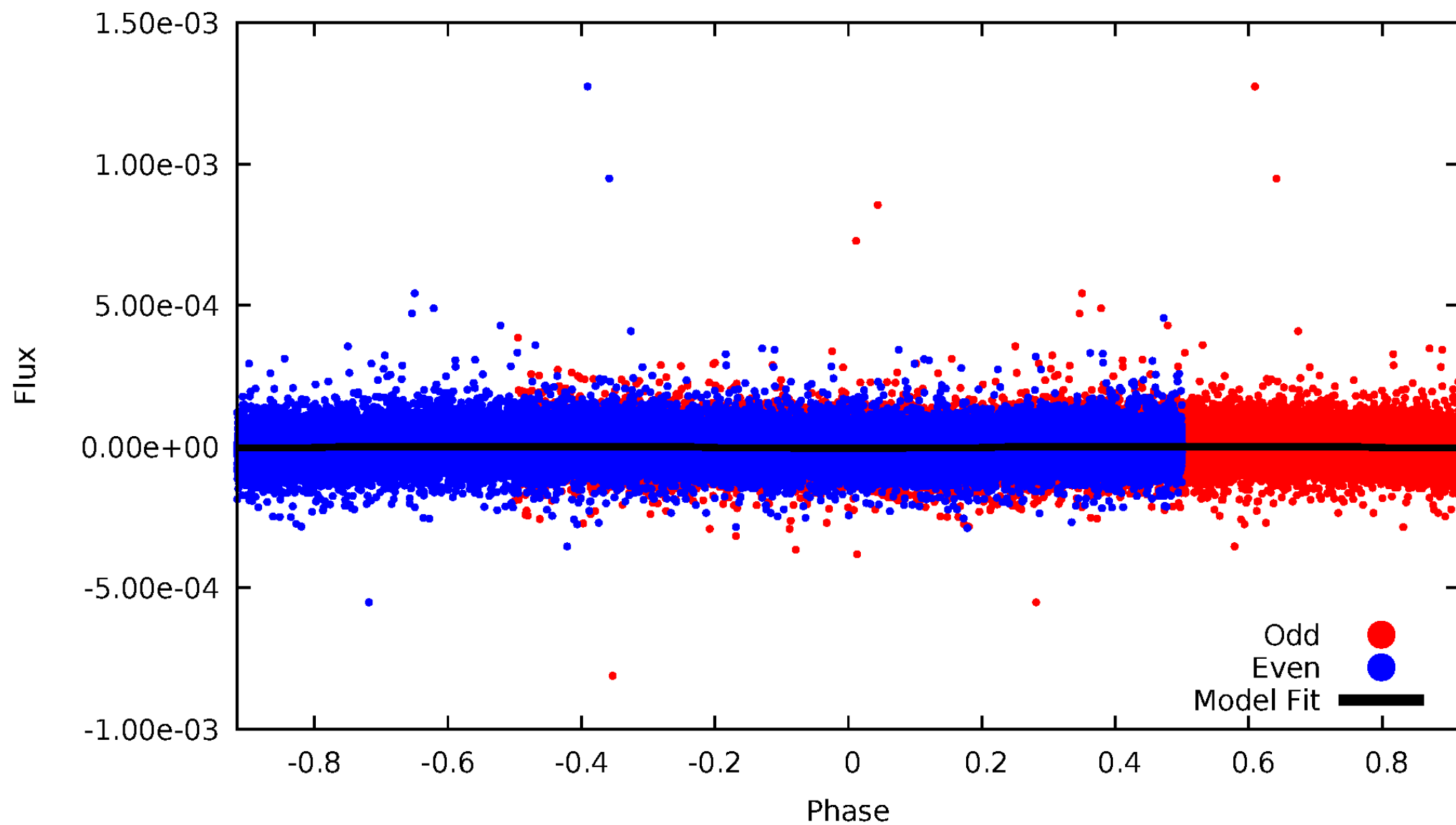


TCE 005273195-01



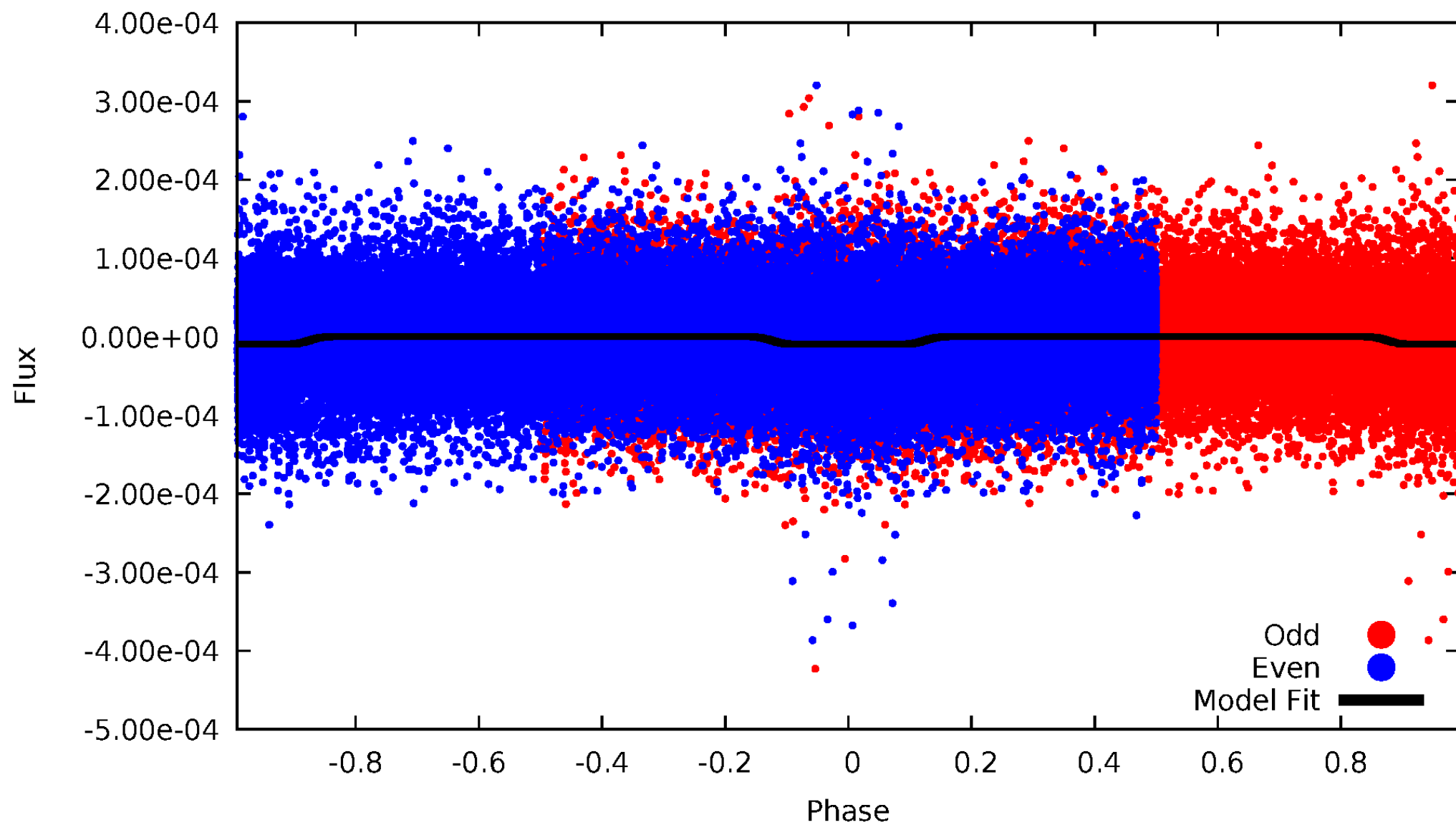
DV Odd/Even

TCE 005273195-01



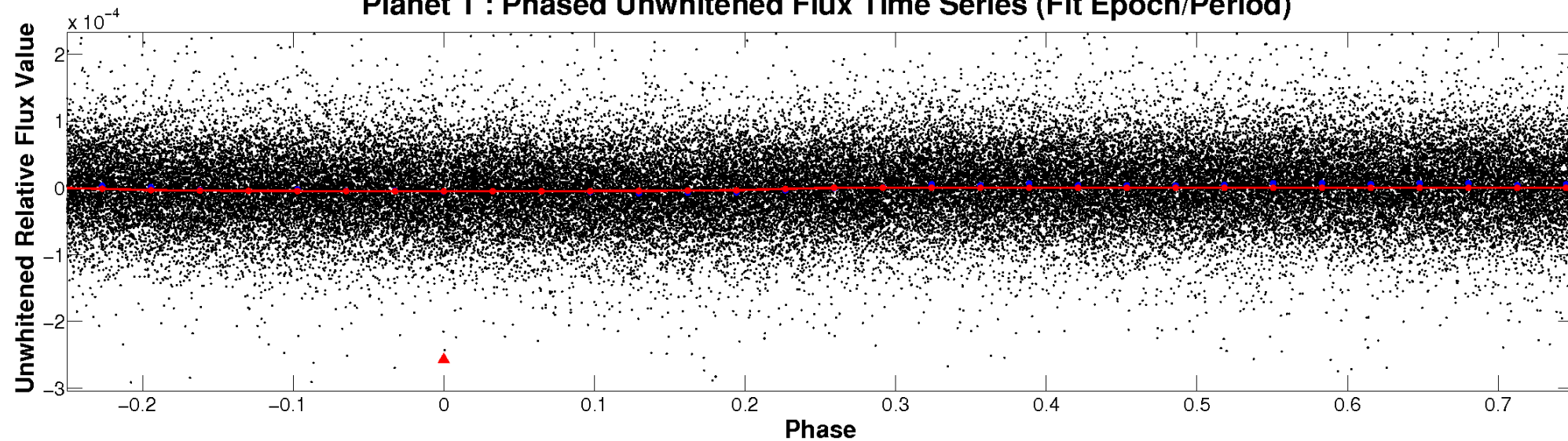
ALT Odd/Even

TCE 005273195-01

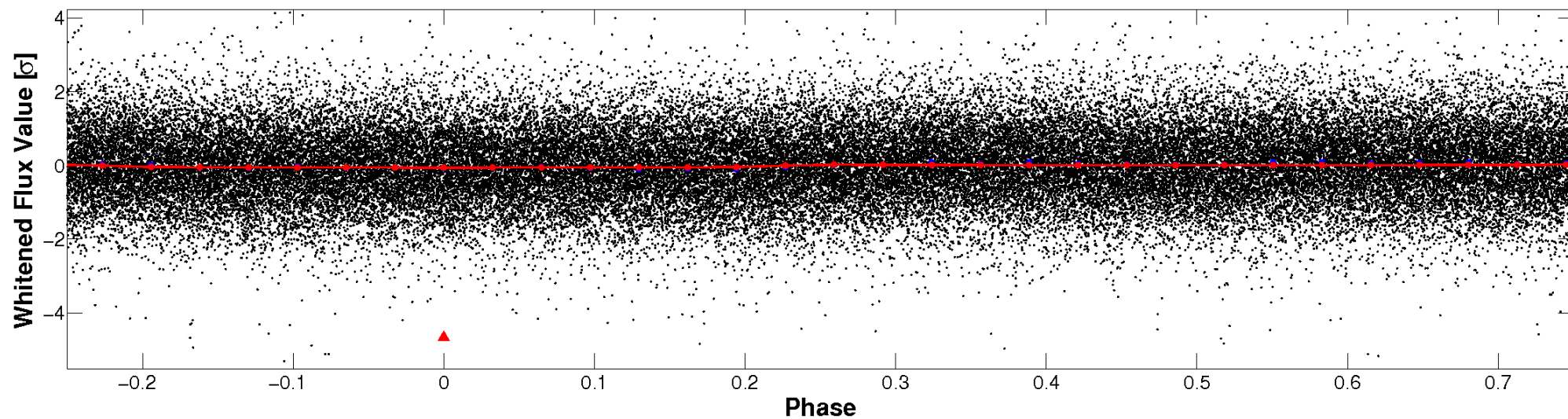


Non-Whitened Vs. Whitened Light Curve

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

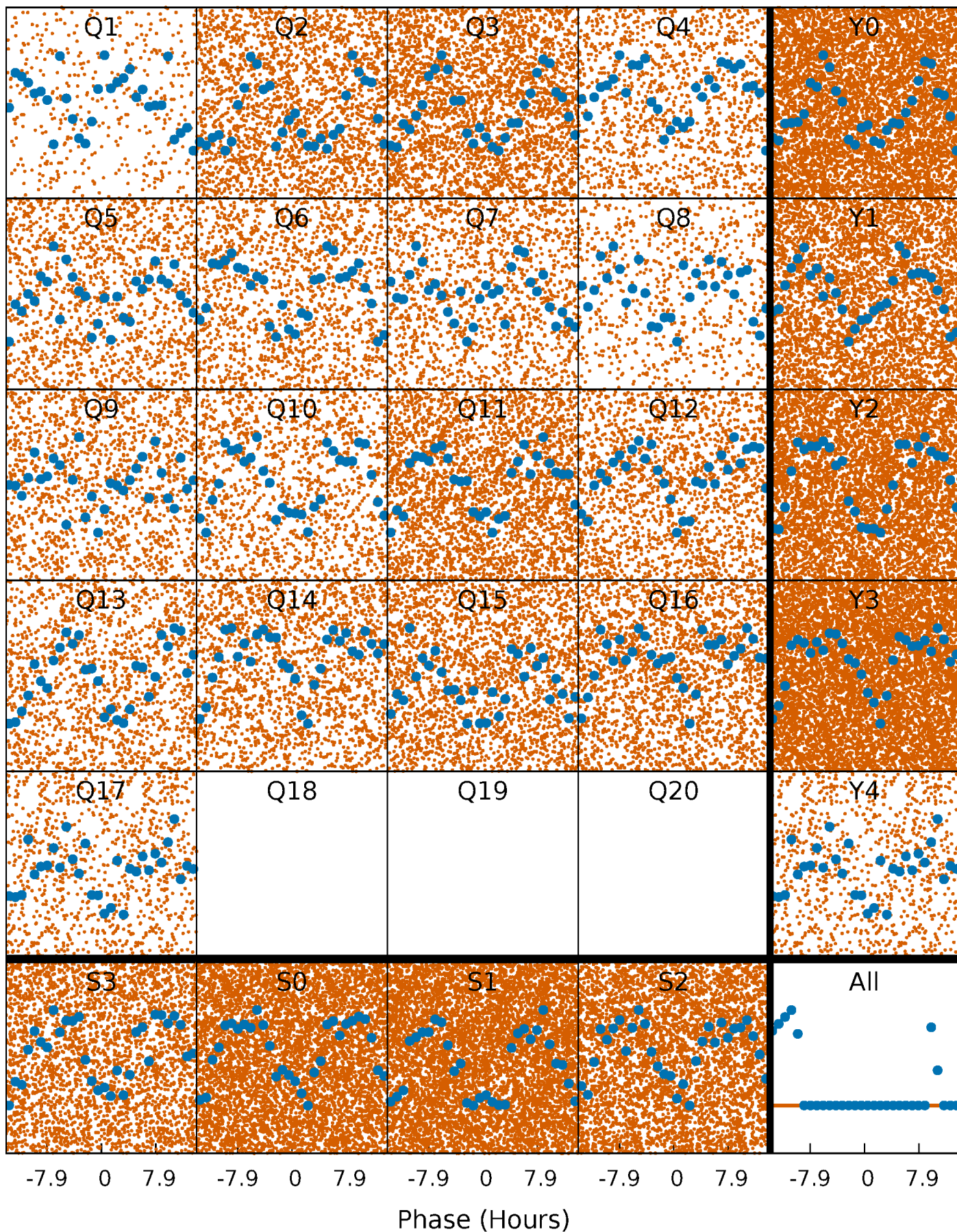


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



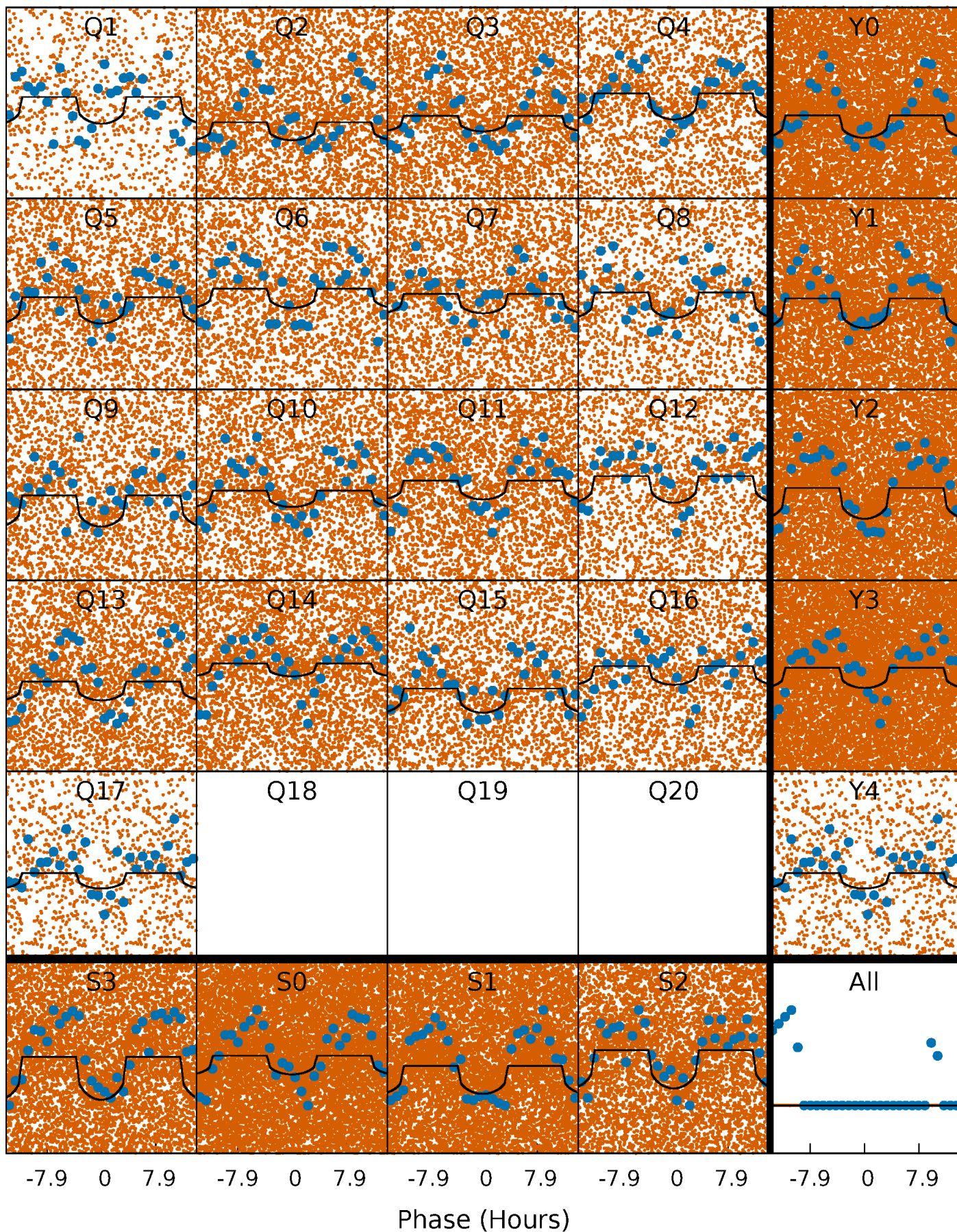
PDC Quarter-Phased Transit Curves

TCE 005273195-01 P= 0.630777 Days $T_0=132.094836$ (BKJD)



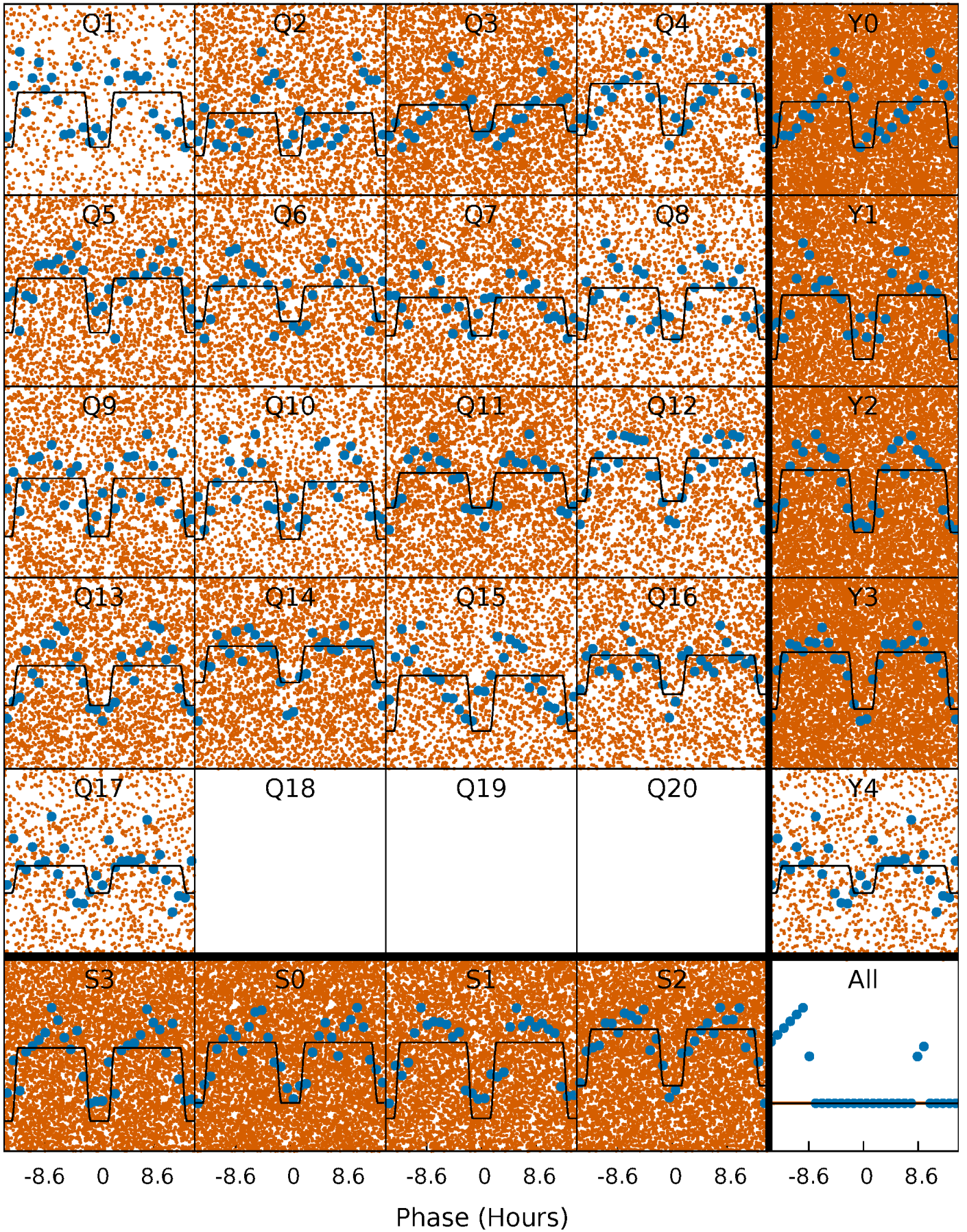
DV Quarter-Phased Transit Curves

TCE 005273195-01 P= 0.630777 Days $T_0=132.094836$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

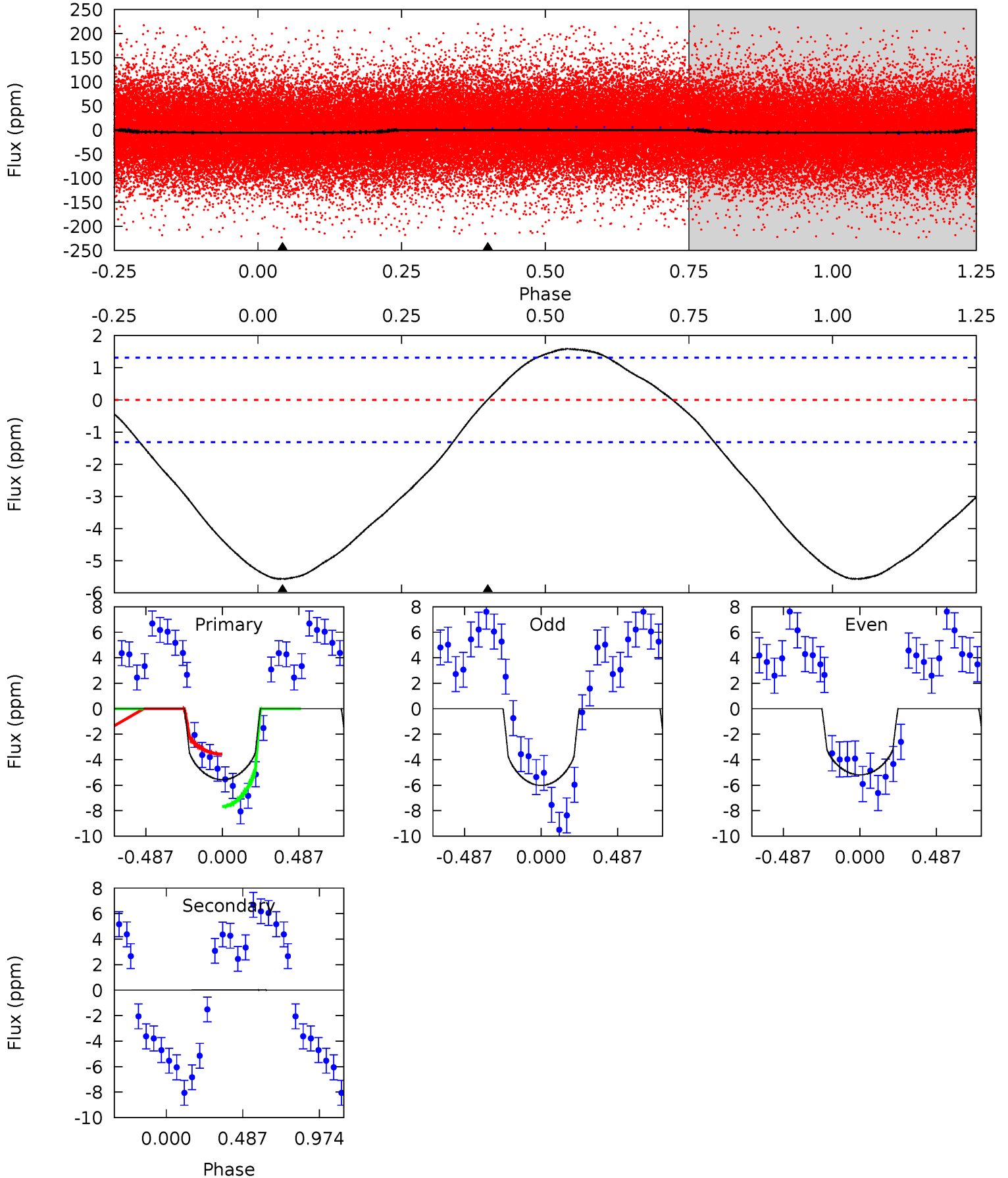
TCE 005273195-01 P= 0.630870 Days $T_0=132.005798$ (BKJD)



DV Model-Shift Uniqueness Test

005273195-01, P = 0.630777 Days, E = 131.464059 Days

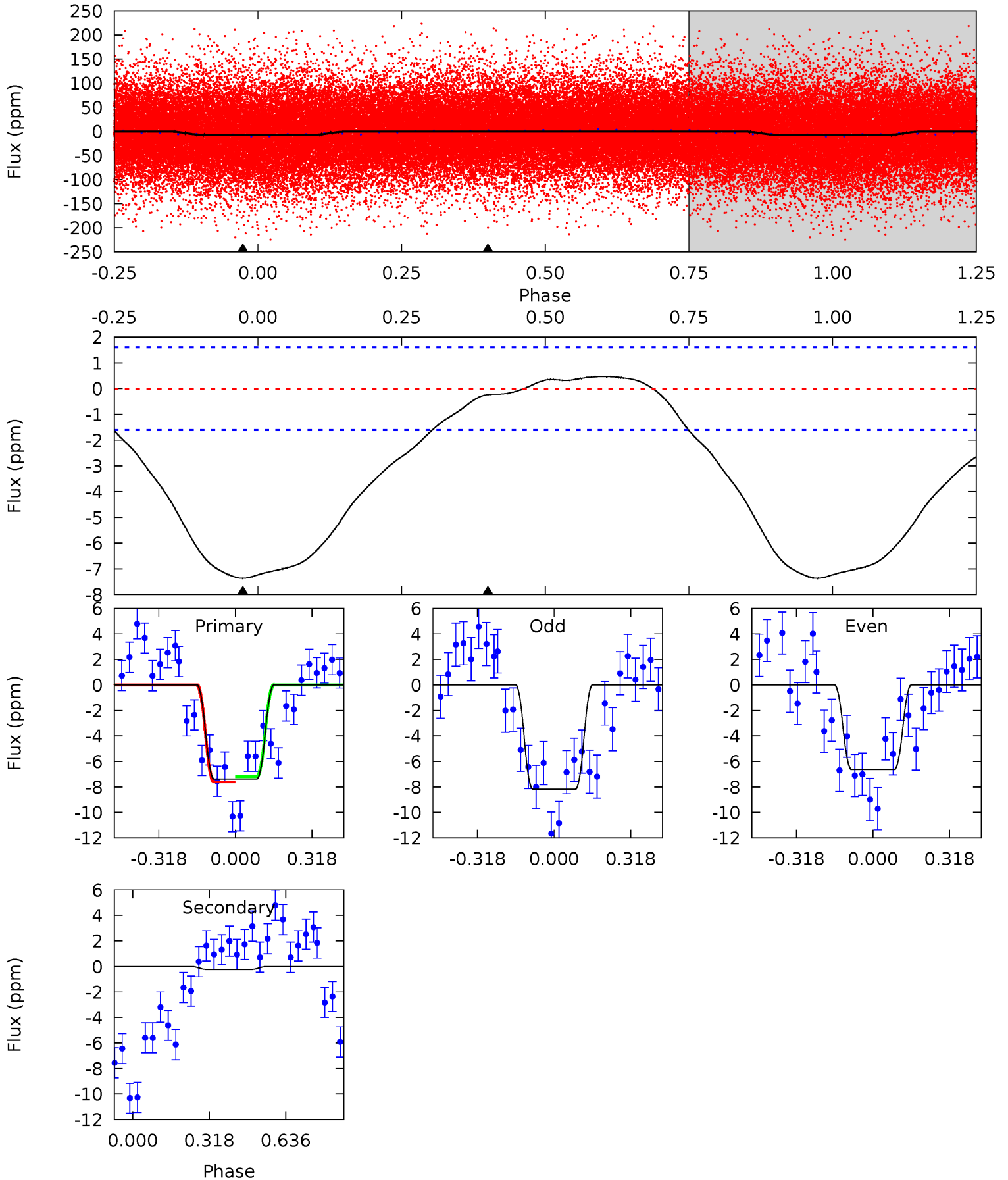
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
17.9	-0.03	0	0	4.22	0.69	1.37	17.9	17.9	-0.03	-0.03	1.33	0.97	0.22	6.77



Alt Model-Shift Uniqueness Test

005273195-01, $P = 0.630870$ Days, $E = 131.374928$ Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
19.8	0.63	0	0	4.32	1.00	1.30	19.8	19.8	0.63	0.63	2.07	1.02	0.06	0.52



Stellar Parameters For KIC 005273195

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	8560^{+59}_{-102}	$3.806^{+0.297}_{-0.033}$	$-0.300^{+0.050}_{-0.150}$	$2.907^{+0.168}_{-1.011}$	$1.972^{+0.172}_{-0.237}$	$0.113^{+0.227}_{-0.013}$
	+1%/-1%	+8%/-1%	+17%/-50%	+6%/-35%	+9%/-12%	+201%/-12%
Source	SPE68	SPE68	SPE68	DSEP		

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

Secondary Eclipse Parameters for KIC 005273195-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	0 ± 0	$0.67^{+0.33}_{-0.34}$	6575^{+189}_{-584}	-5199^{+893}_{-586}	$-0.010^{+0.166}_{-0.187}$
Alt.	-0 ± 0	$0.91^{+0.36}_{-0.36}$	6572^{+188}_{-516}	-5005^{+857}_{-360}	$0.040^{+0.132}_{-0.078}$

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

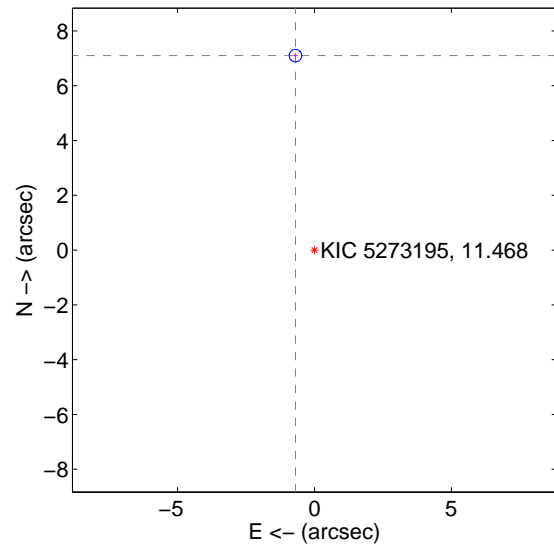
Supplemental centroid analysis for 005273195-01. **Kepler magnitude: 11.47.** Transit SNR 9.80

There are 0 quarters with good PRF difference image offsets

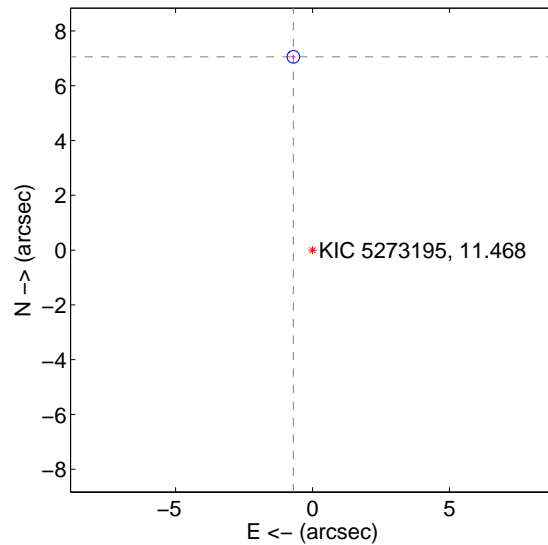
The direct PRF centroid is offset from the target star catalog position by about 0.05 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	7.134 ± 0.076	93.64	0.693 ± 0.079	7.100 ± 0.076
PRF-fit source offset from KIC position	7.090 ± 0.076	93.07	0.700 ± 0.079	7.055 ± 0.076
photometric centroid source offset	1.16 ± 0.88	1.32	1.15 ± 0.88	-0.15 ± 0.95

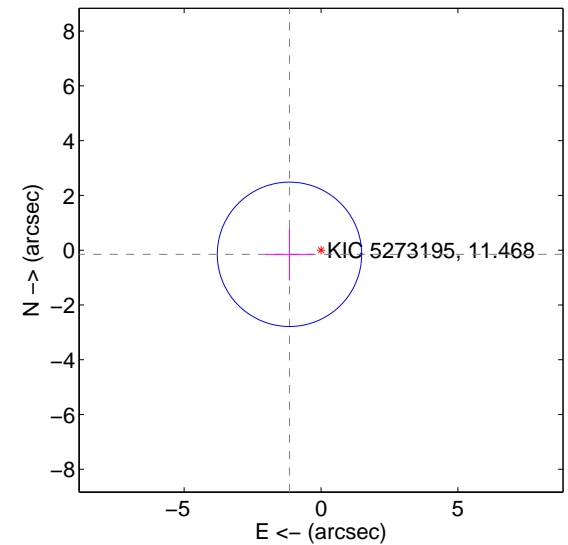
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

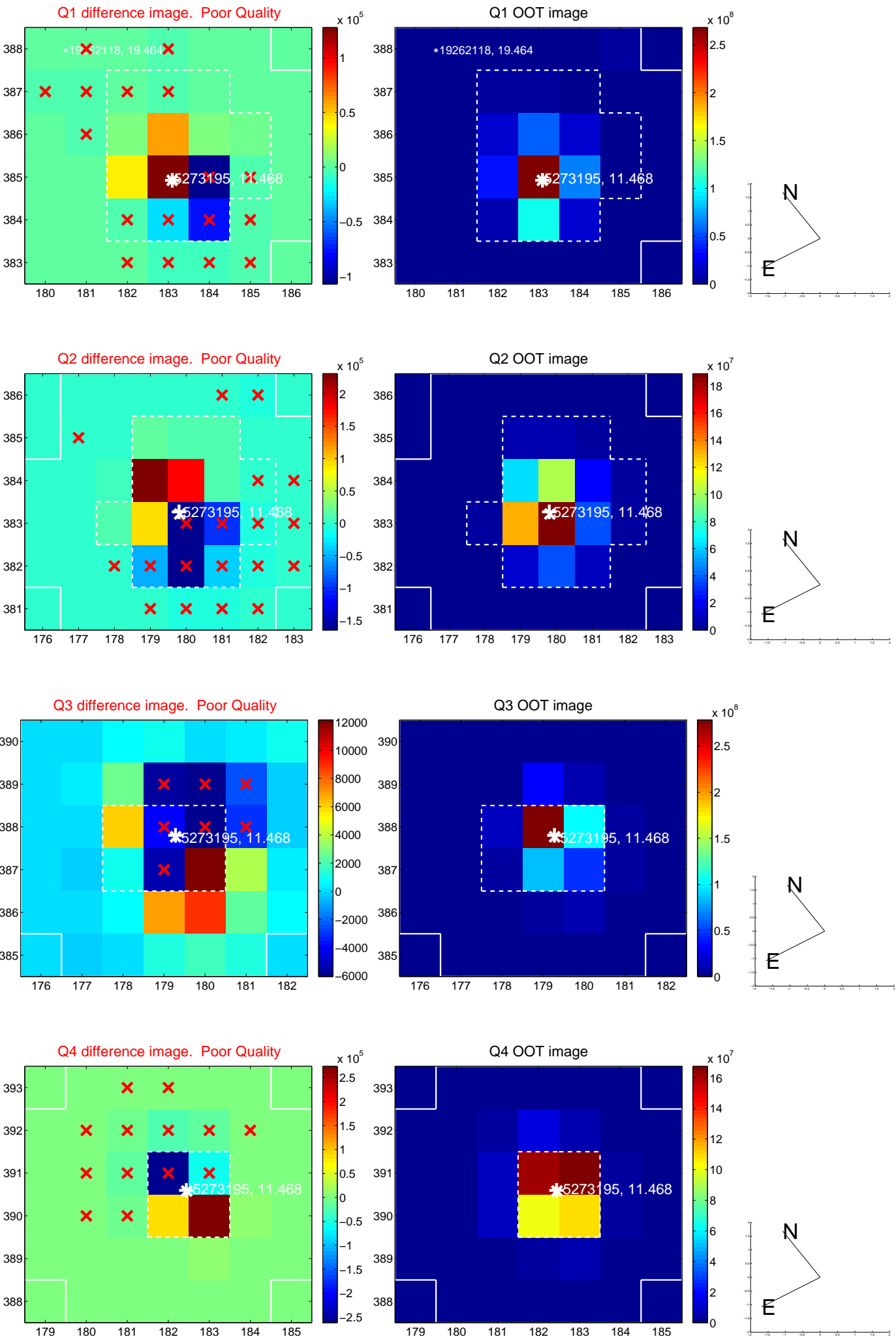


offset from photometric centroids

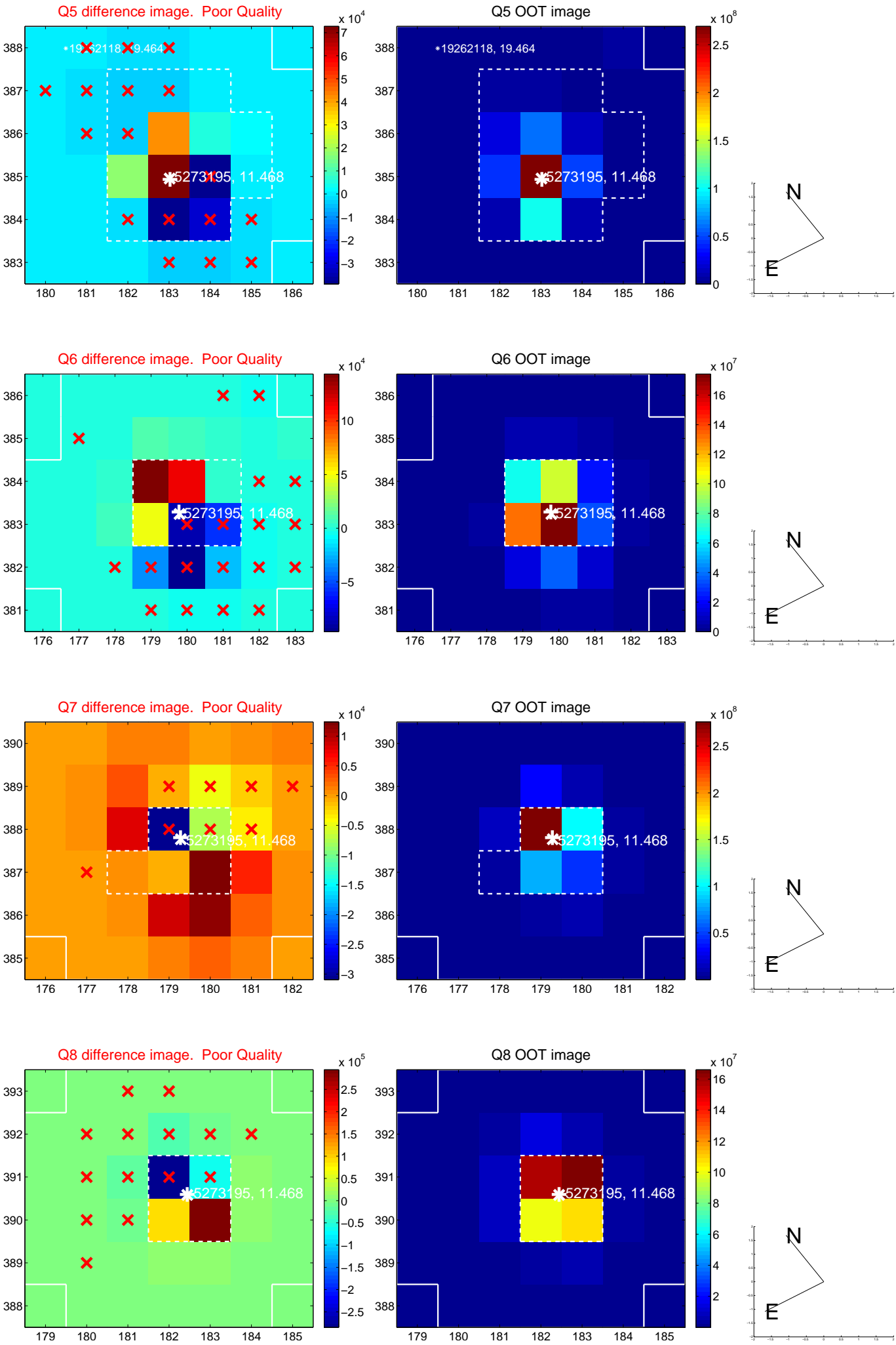


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

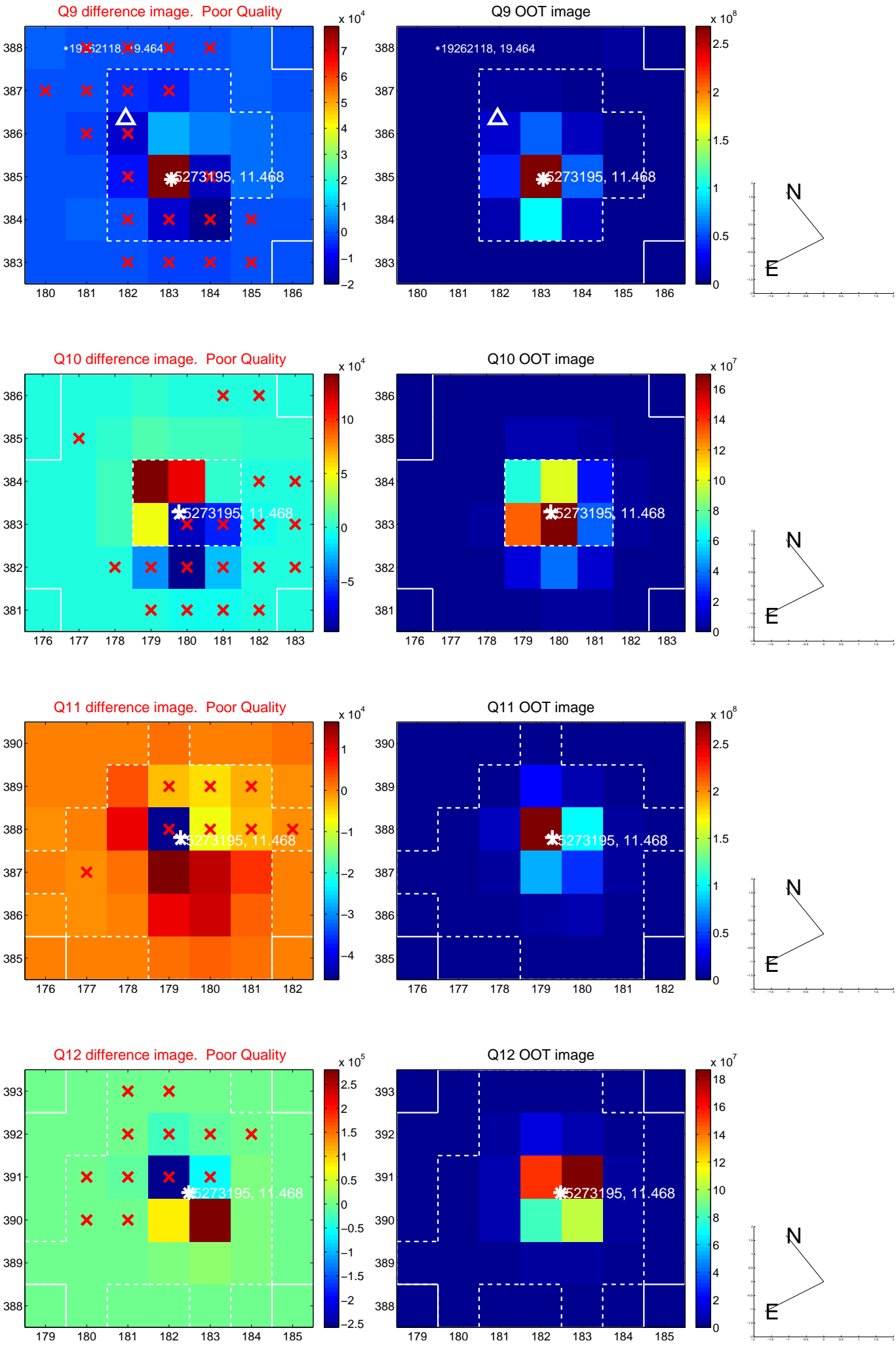
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



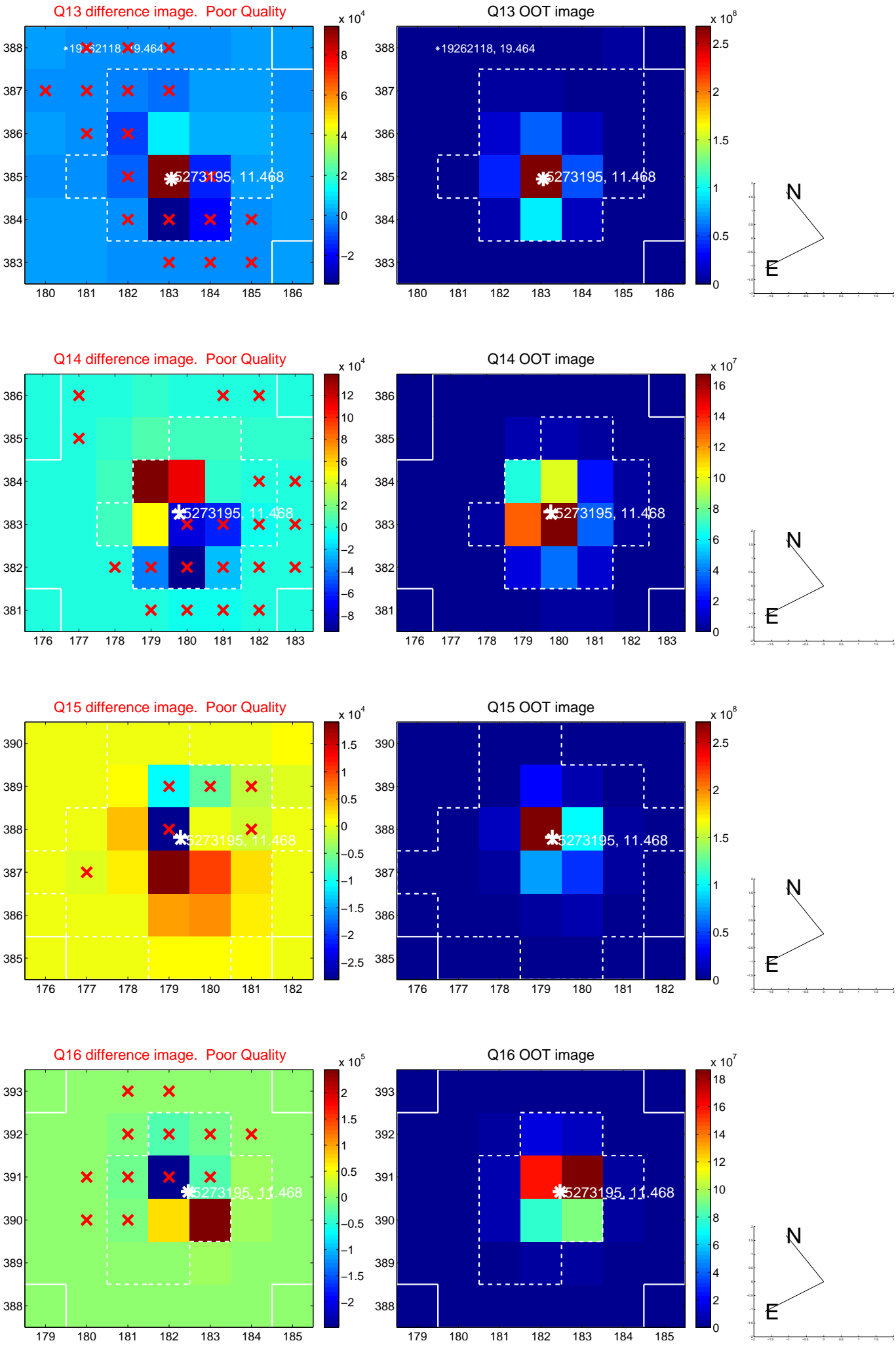
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



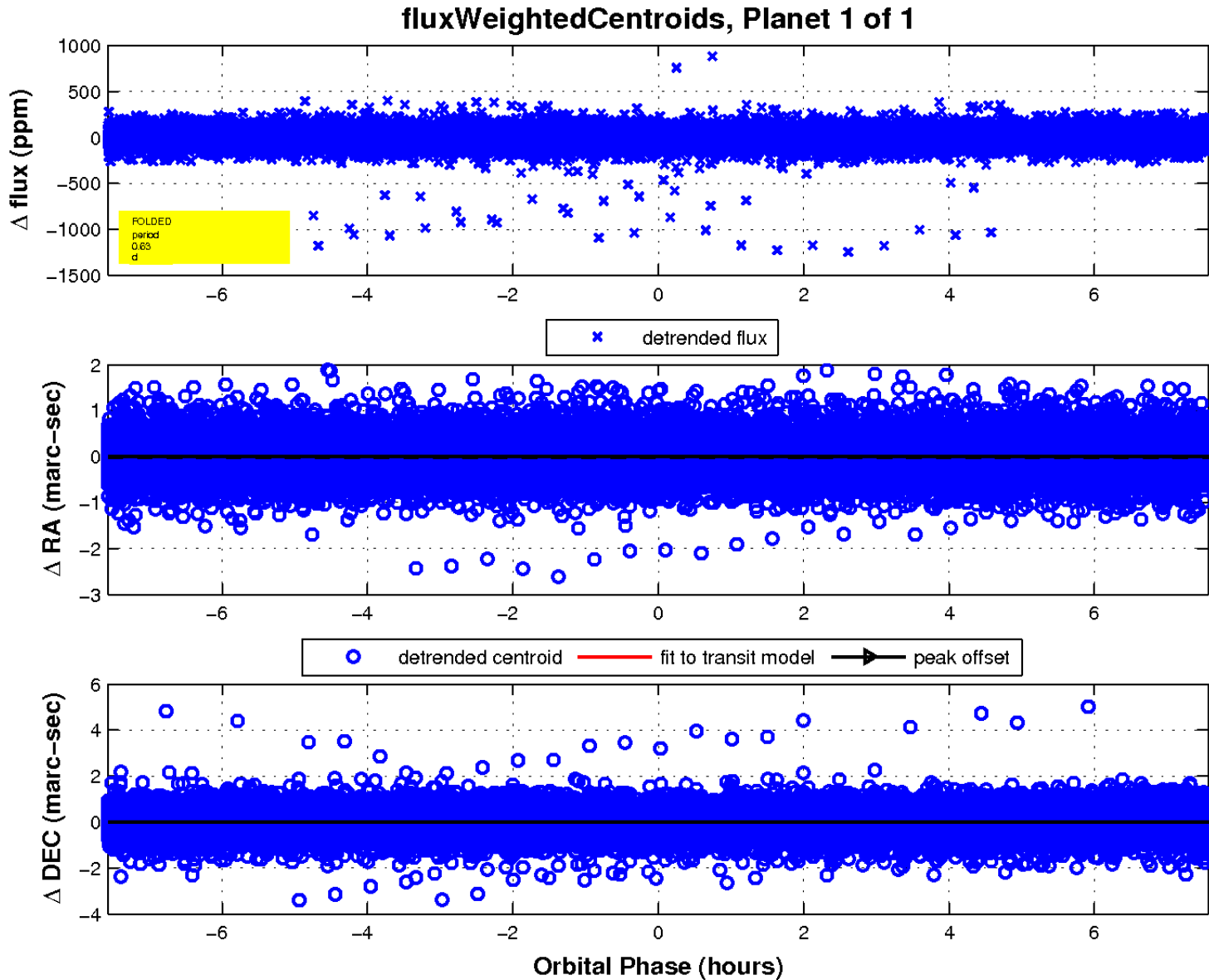
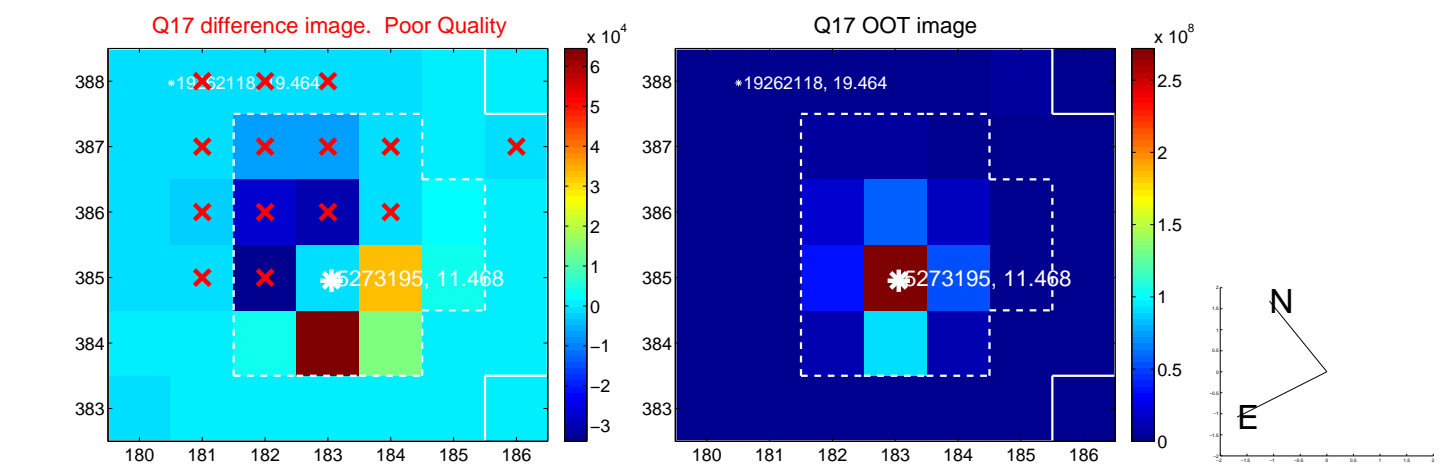
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

