

KIC 009579266

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})
009579266-01	OBS	No	0.823899	132.331140	80.2	6.965	7.3	10.1	0.75	5164	0.80	1386.40

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
009579266-01	OBS	FP	0.00	1	0	0	0	LPP_DV—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.

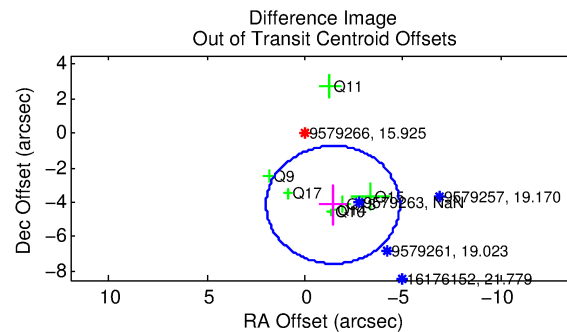
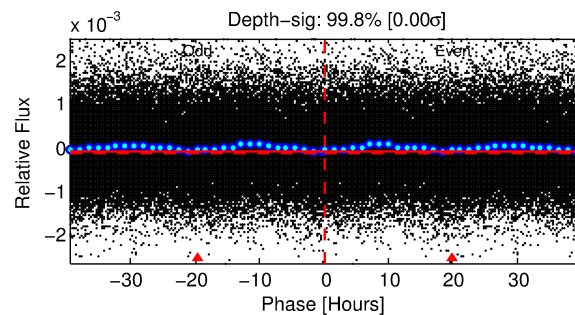
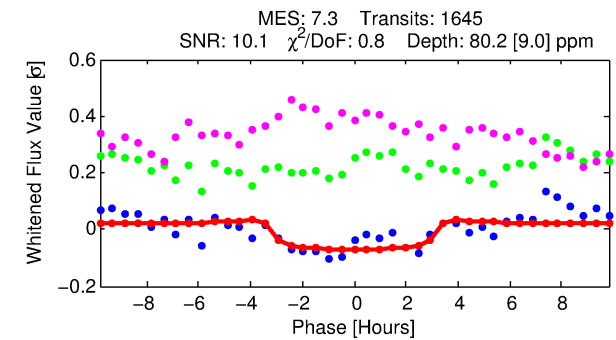
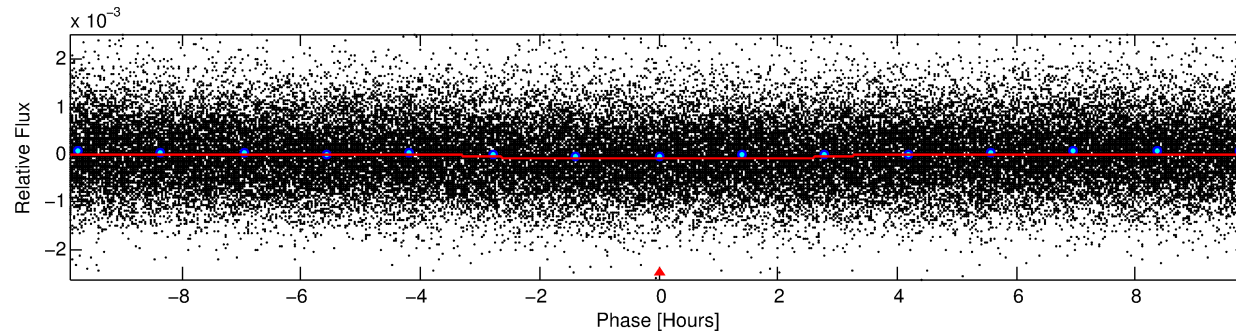
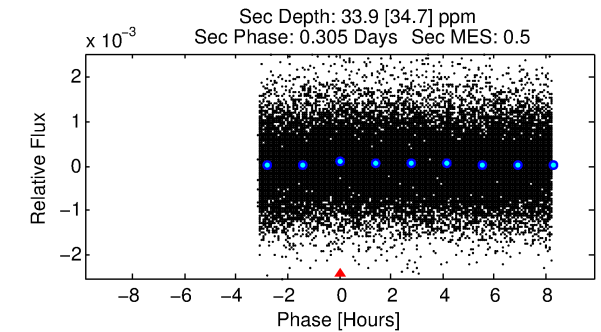
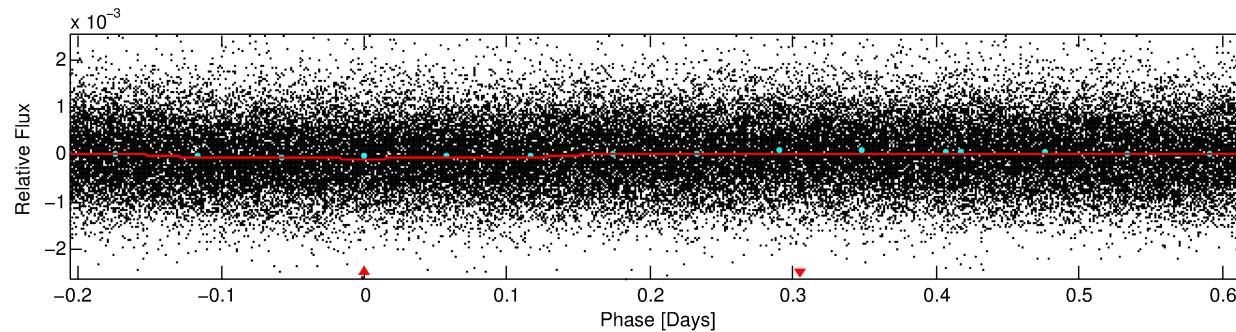
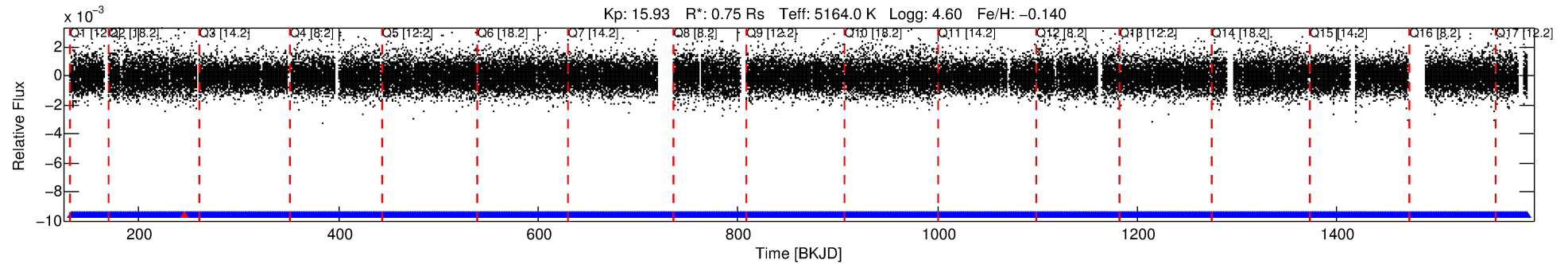
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 009579266-01

No Significant Match Found

DV One-Page Summary

KIC: 9579266 Candidate: 1 of 1 Period: 0.824 d



DV Fit Results:

Period = 0.82390 [0.00001] d
Epoch = 132.3311 [0.0056] BKJD
Rp/R* = 0.0098 [0.0030]
a/R* = 1.04 [0.09]
b = 0.88 [0.32]
Seff = 1386.40 [274.00]
Teq = 1556 [77] K
Rp = 0.80 [0.27] Re
a = 0.0160 [0.0018] AU
Ag = 7.56 [9.14] [0.72σ]
Teffp = 3989 [1201] K [2.02σ]

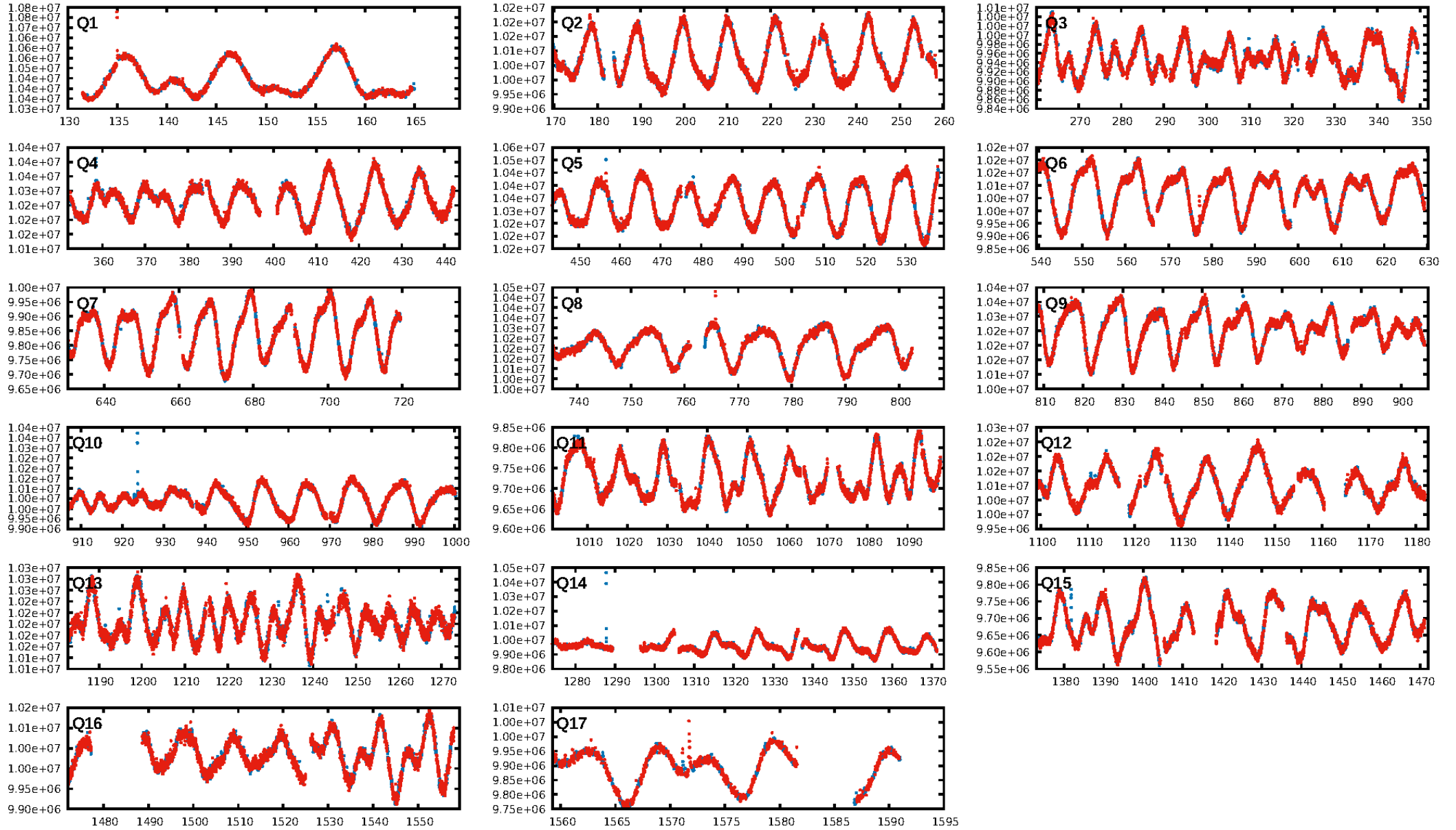
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [1570/1571]
GhostDiagnostic-chr: 1.41
Centroid-sig: 80.5%
Centroid-so: 0.213 arcsec [0.19σ]
OotOffset-rm: 4.388 arcsec [3.86σ]
KicOffset-rm: 4.502 arcsec [5.23σ]
OotOffset-st: 2/2/0/3 [7]
KicOffset-st: 2/2/0/3 [7]
DiffImageQuality-fgm: 0.00 [0/7]
DiffImageOverlap-fno: 1.00 [17/17]

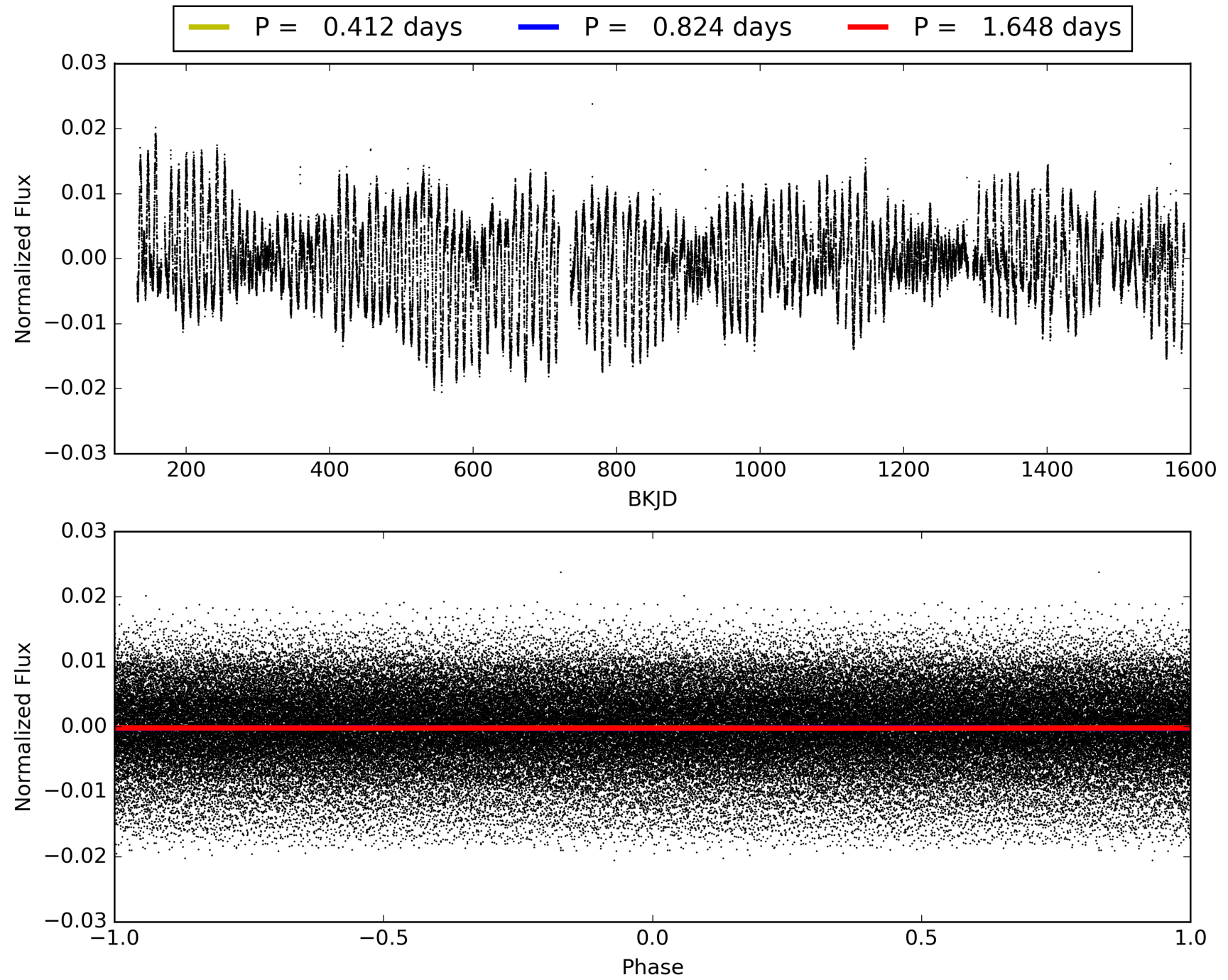
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 04:13:00 Z

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

TCE 009579266-01, PDC Light Curves

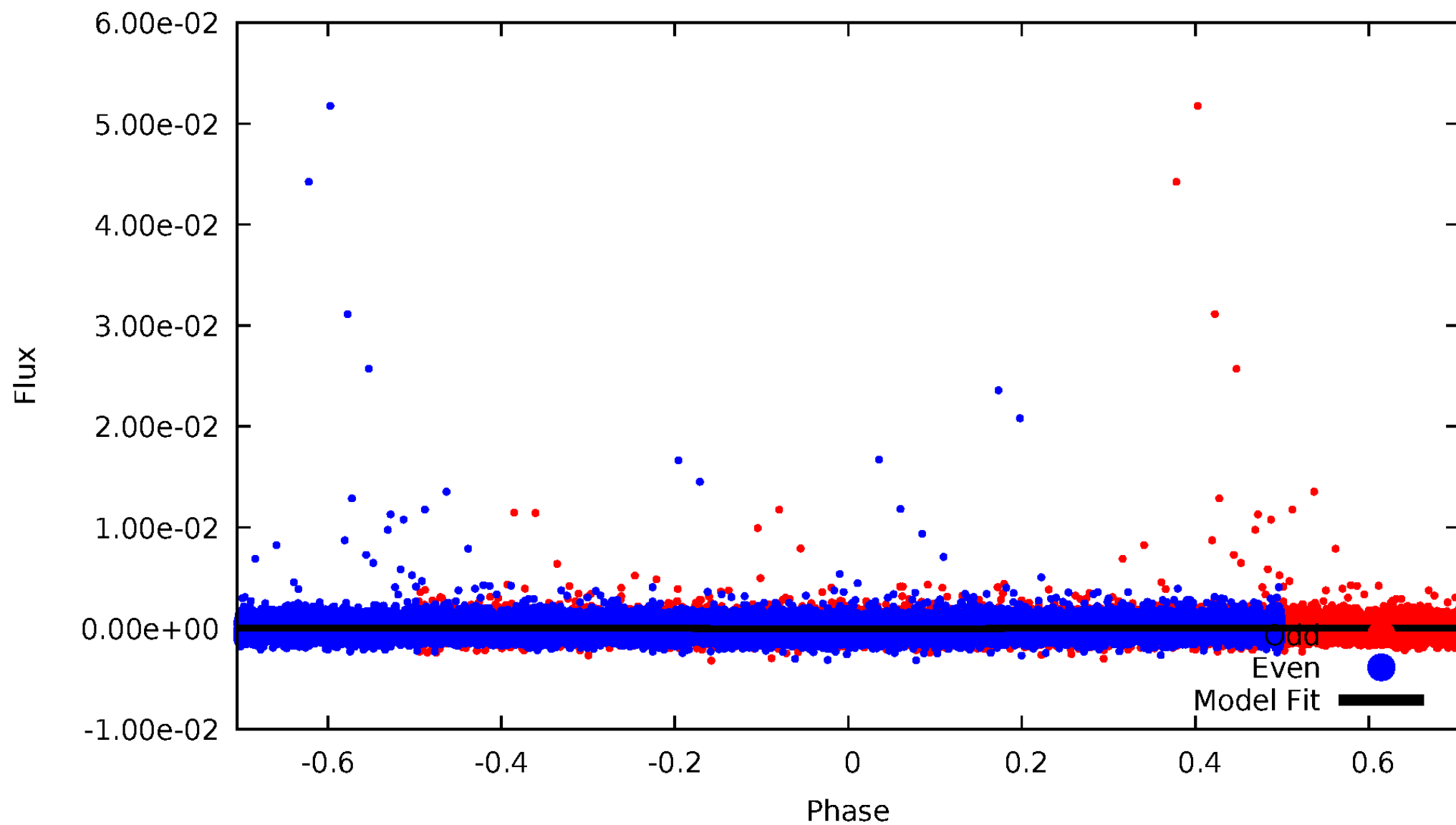


TCE 009579266-01



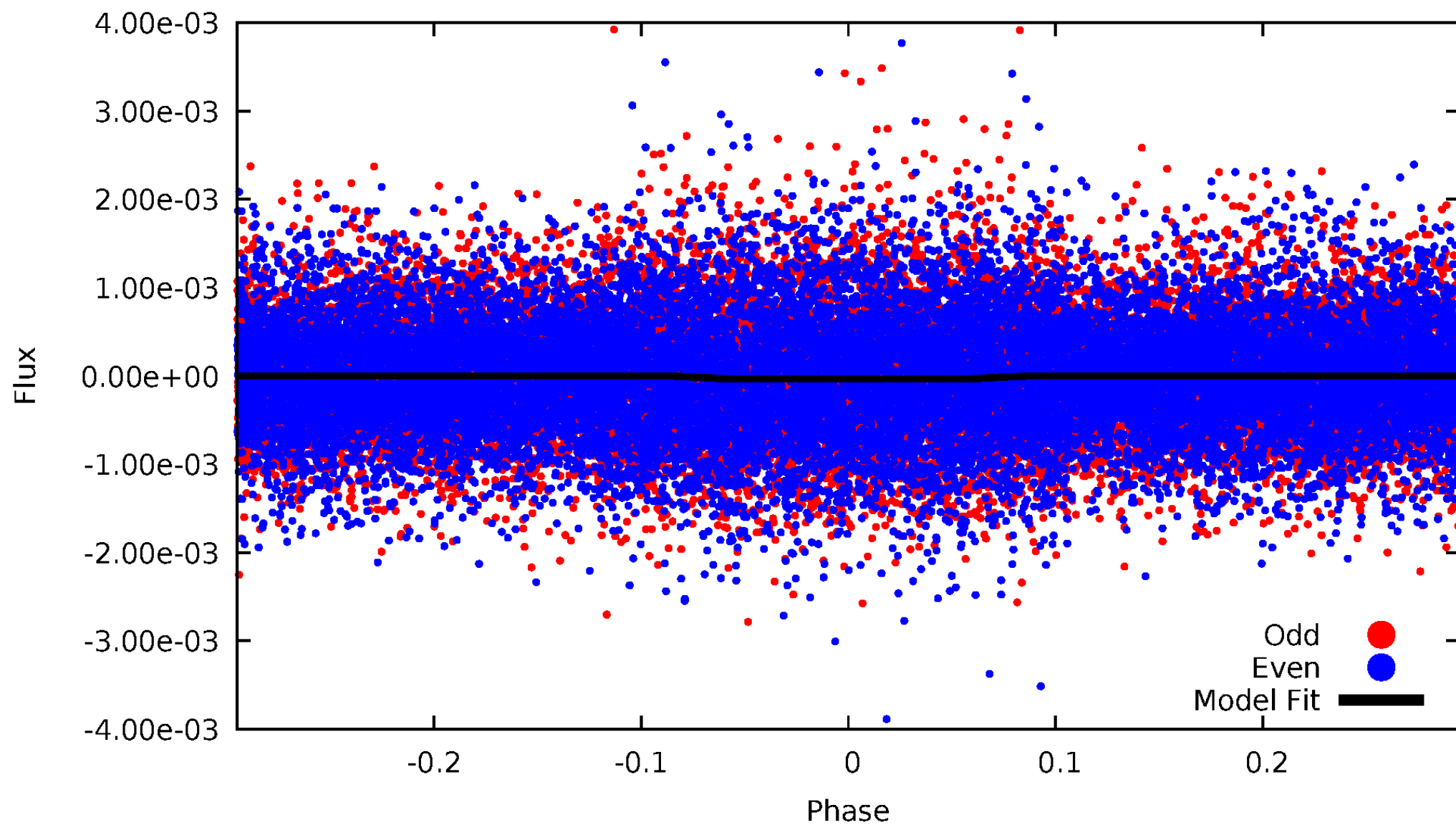
DV Odd/Even

TCE 009579266-01



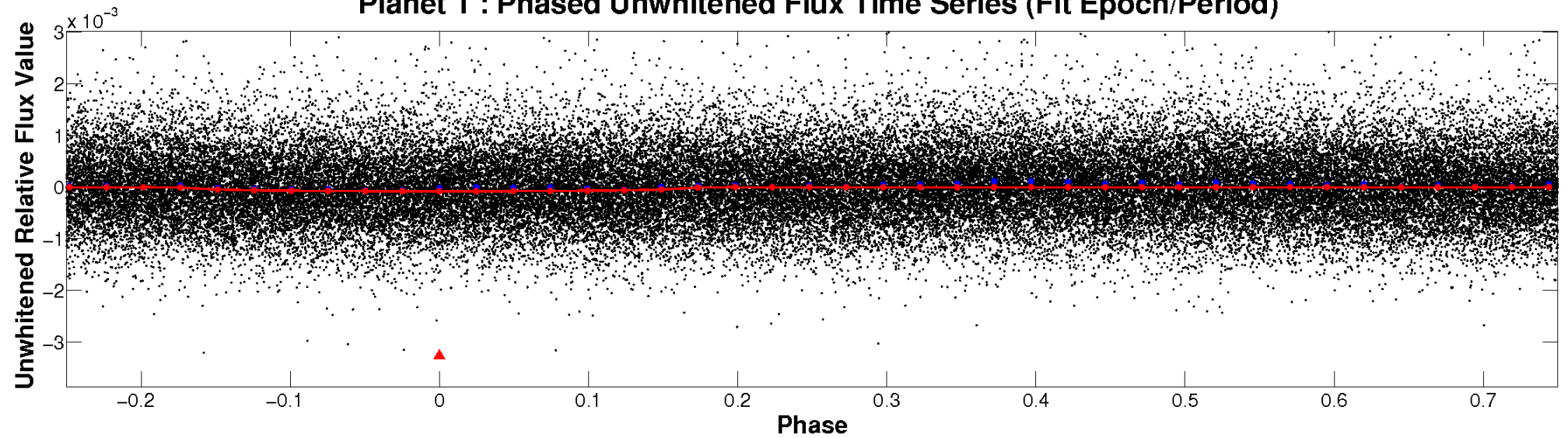
ALT Odd/Even

TCE 009579266-01

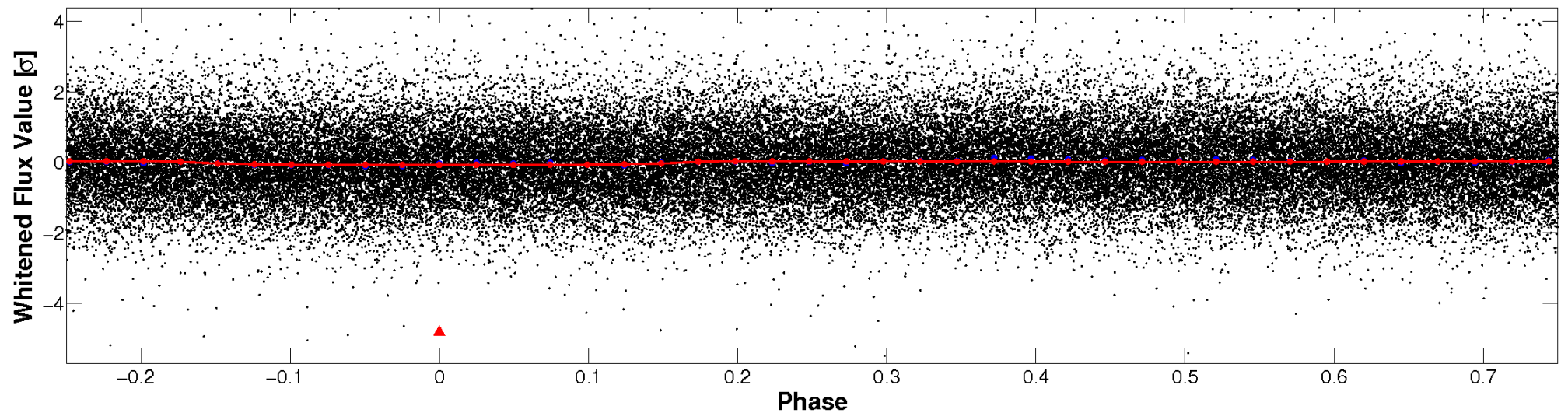


Non-Whitened Vs. Whitened Light Curve

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

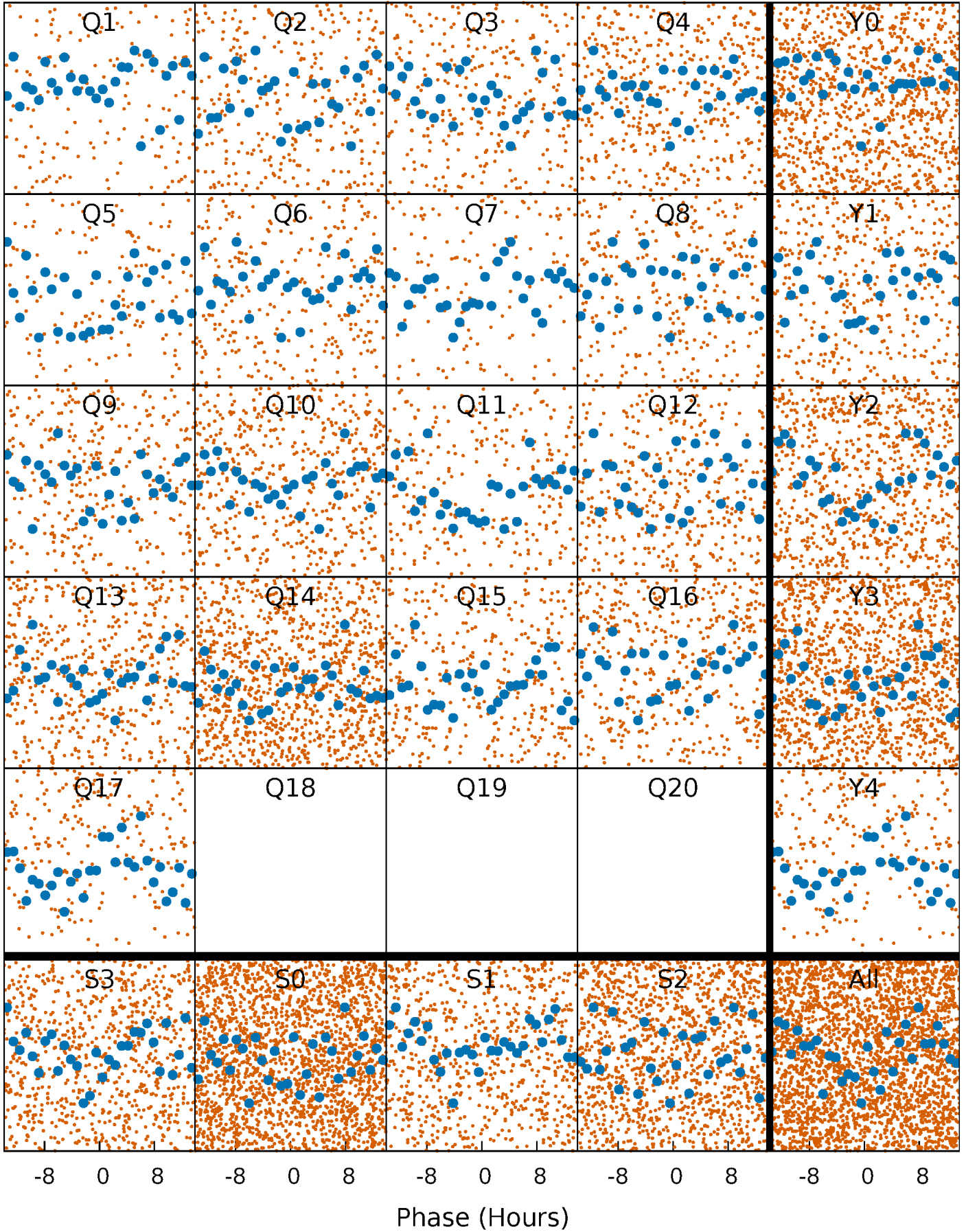


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



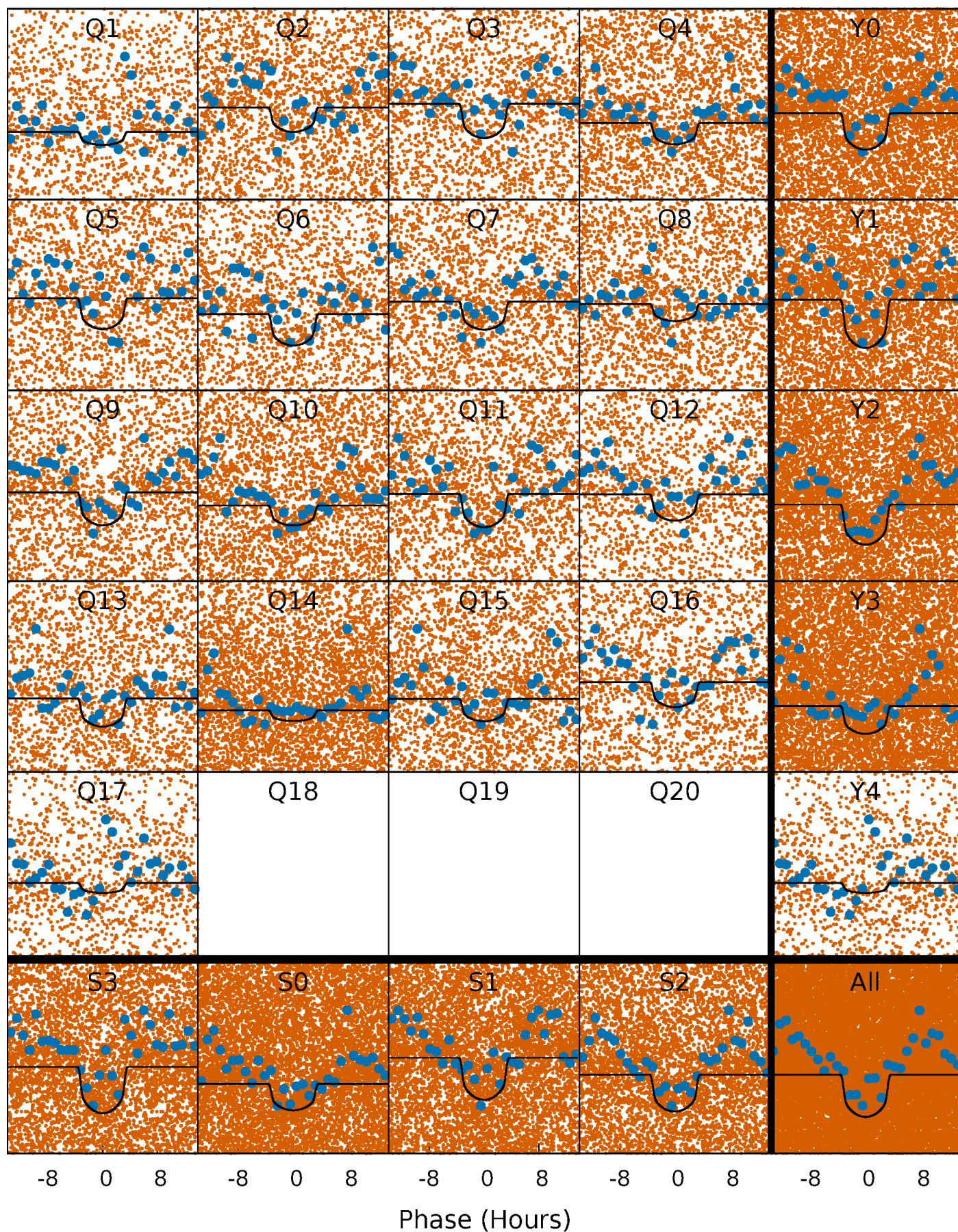
PDC Quarter-Phased Transit Curves

TCE 009579266-01 P= 0.823899 Days $T_0=132.331140$ (BKJD)



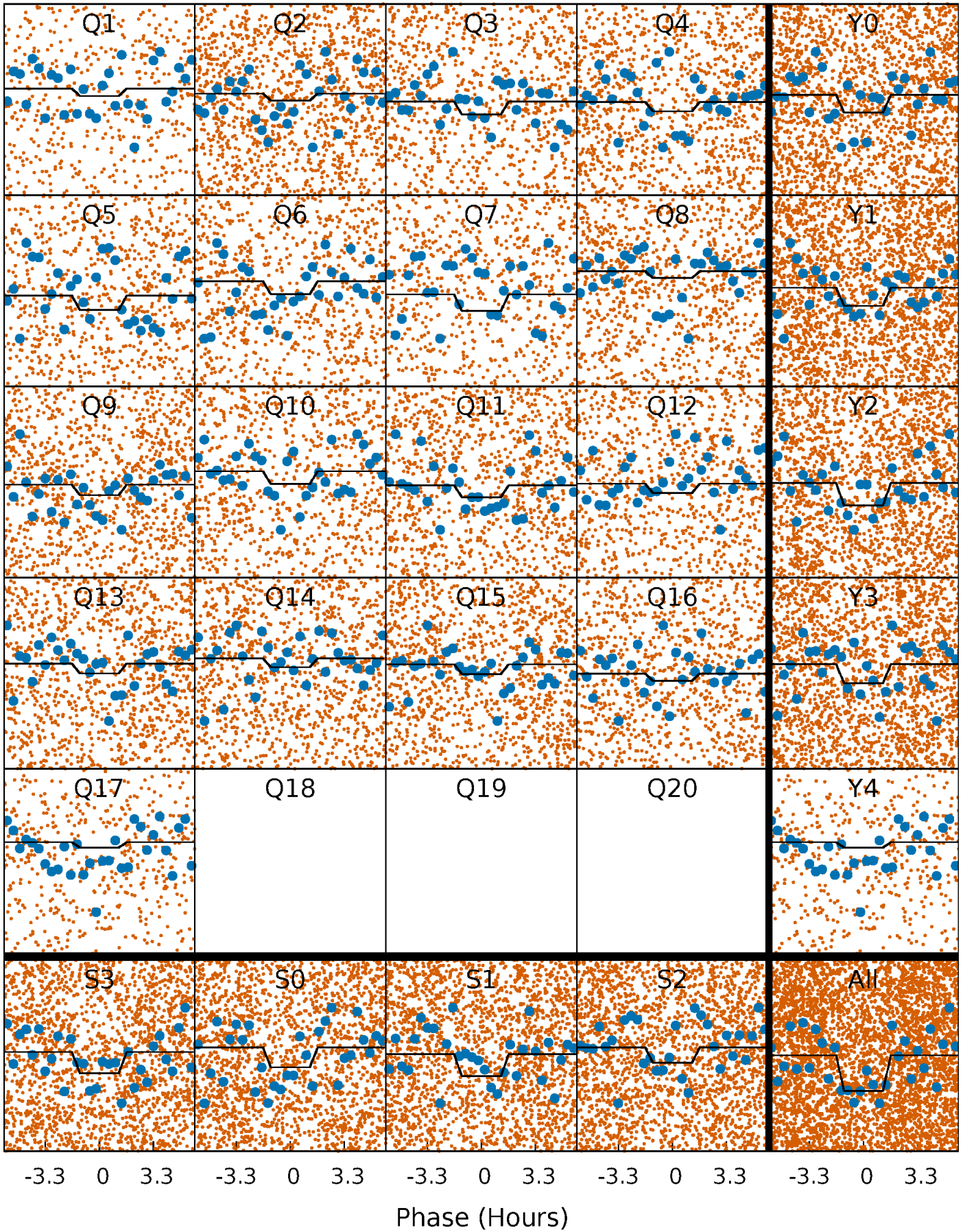
DV Quarter-Phased Transit Curves

TCE 009579266-01 P= 0.823899 Days $T_0=132.331140$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

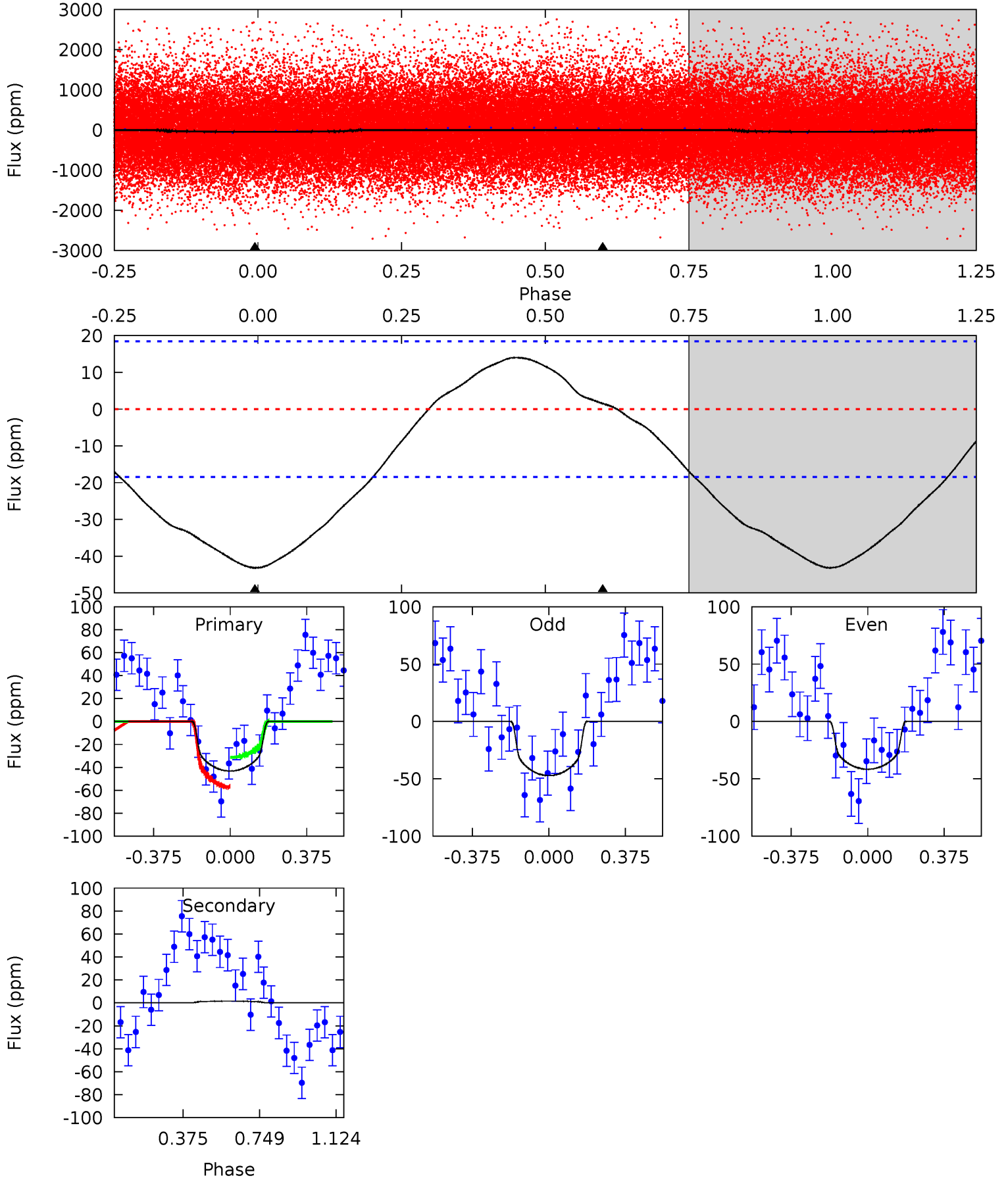
TCE 009579266-01 P= 0.823857 Days $T_0=132.315413$ (BKJD)



DV Model-Shift Uniqueness Test

009579266-01, P = 0.823899 Days, E = 131.507241 Days

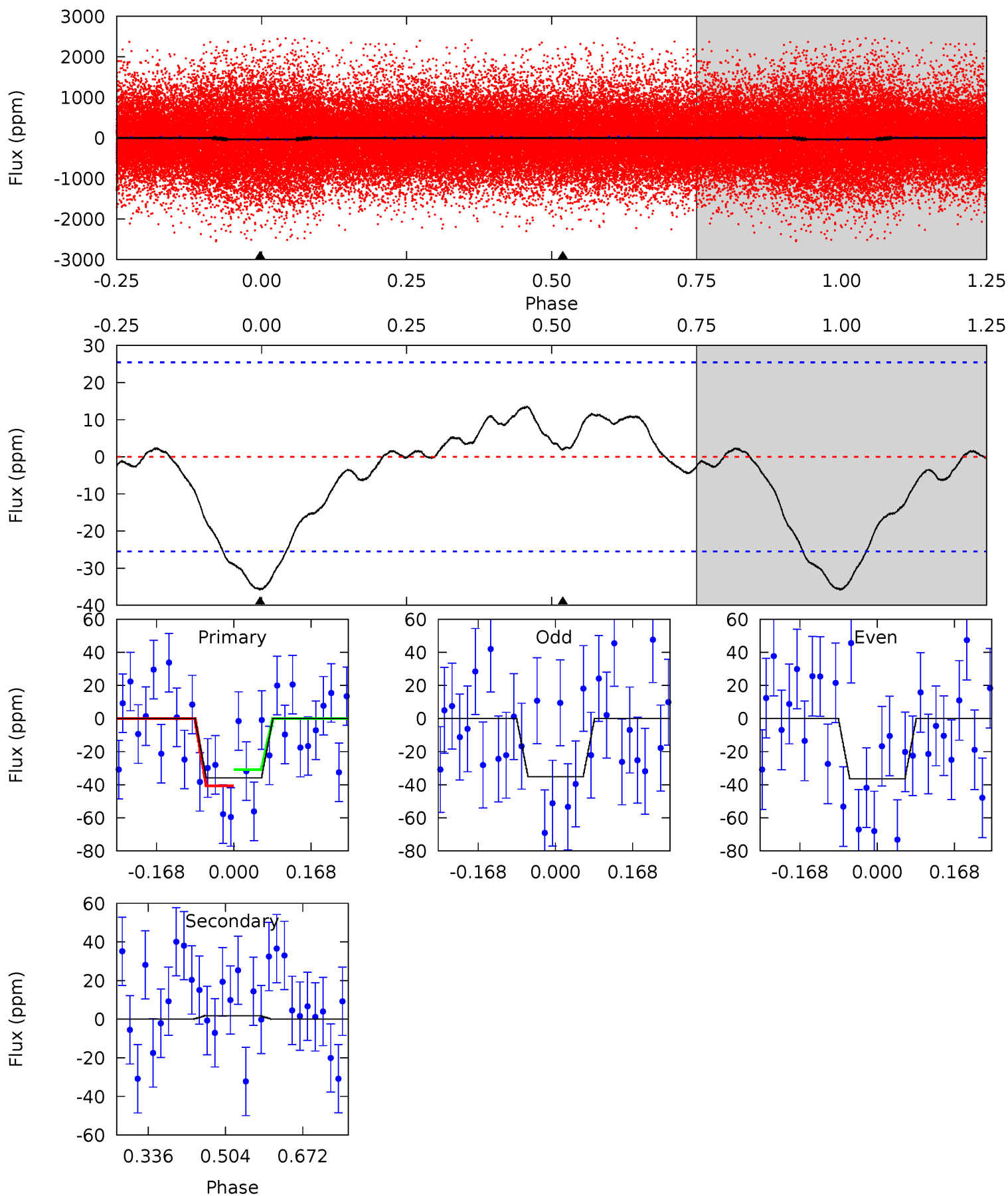
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.0	-0.35	0	0	4.28	0.89	1.09	10.0	10.0	-0.35	-0.35	0.65	0.67	0.25	2.98



Alt Model-Shift Uniqueness Test

009579266-01, P = 0.823857 Days, E = 131.491556 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.27	-0.32	0	0	4.45	1.38	0.49	6.27	6.27	-0.32	-0.32	0.12	0.71	0.28	0.85



Stellar Parameters For KIC 009579266

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5164^{+153}_{-138}	$4.598^{+0.033}_{-0.083}$	$-0.140^{+0.300}_{-0.300}$	$0.747^{+0.105}_{-0.065}$	$0.809^{+0.073}_{-0.081}$	$2.733^{+0.475}_{-0.702}$
	+3%/-3%	+1%/-2%	+214%/-214%	+14%/-9%	+9%/-10%	+17%/-26%
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 009579266-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	2 ± 4	$0.81^{+0.28}_{-0.24}$	2202^{+85}_{-79}	-2840^{+5428}_{-505}	$-0.293^{+0.891}_{-1.236}$
Alt.	2 ± 6	$0.45^{+0.26}_{-0.22}$	2198^{+89}_{-75}	-3190^{+6764}_{-1110}	$-1.050^{+3.971}_{-6.924}$

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

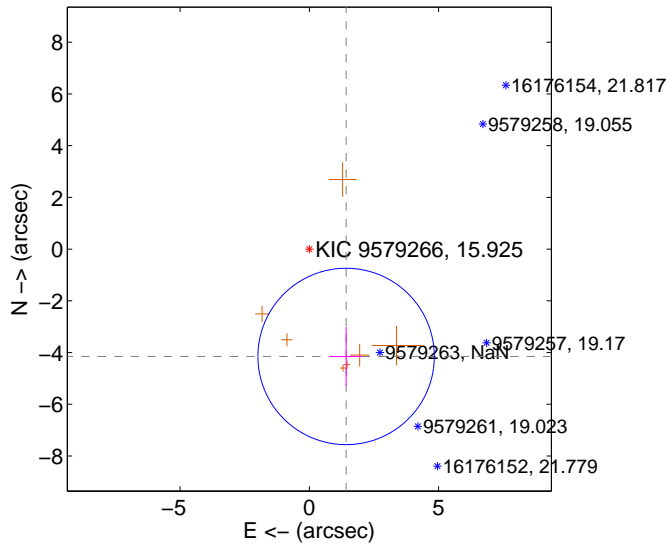
Supplemental centroid analysis for 009579266-01. Kepler magnitude: 15.93. Transit SNR 10.15

There are 0 quarters with good PRF difference image offsets

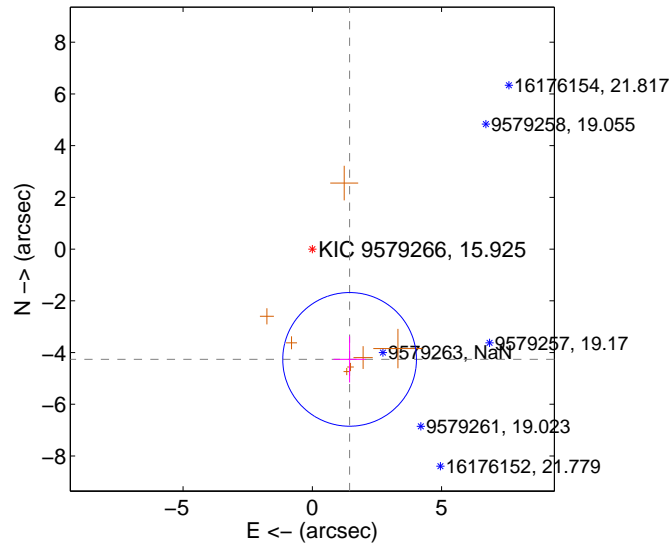
The direct PRF centroid is offset from the target star catalog position by about 0.13 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	4.388 ± 1.137	3.86	-1.422 ± 0.635	-4.152 ± 1.141
PRF-fit source offset from KIC position	4.502 ± 0.862	5.23	-1.442 ± 0.619	-4.265 ± 0.894
photometric centroid source offset	0.21 ± 1.10	0.19	0.18 ± 1.13	-0.11 ± 1.02

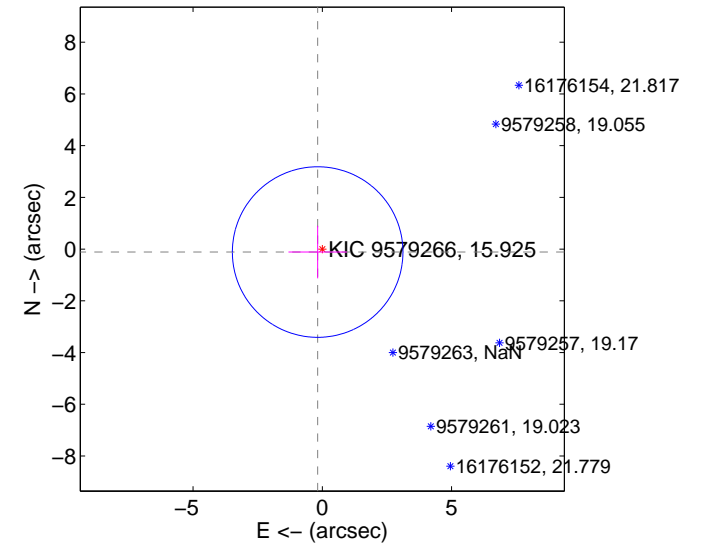
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

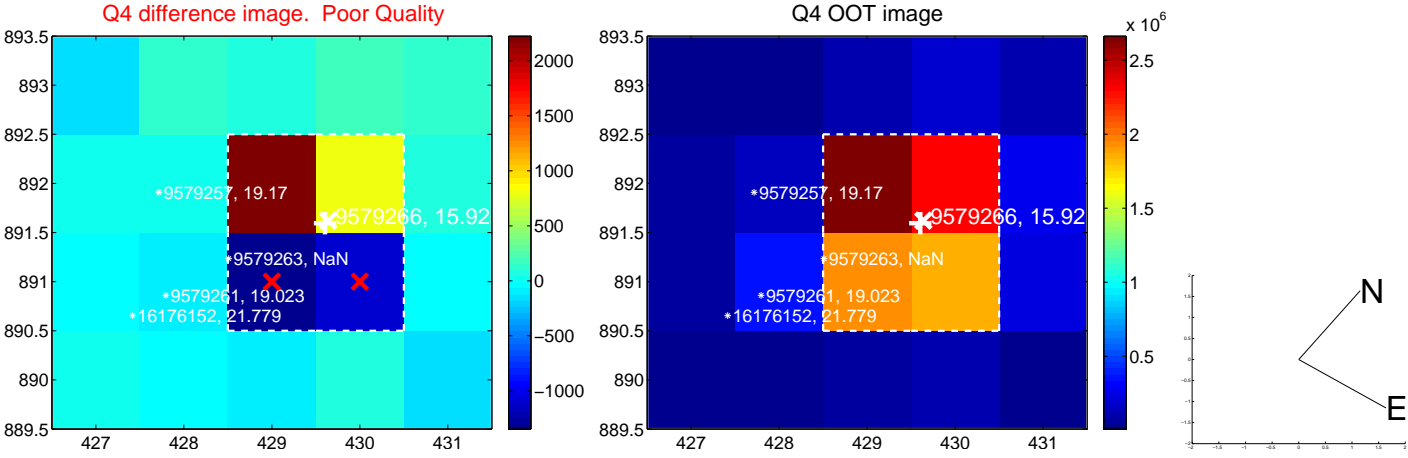
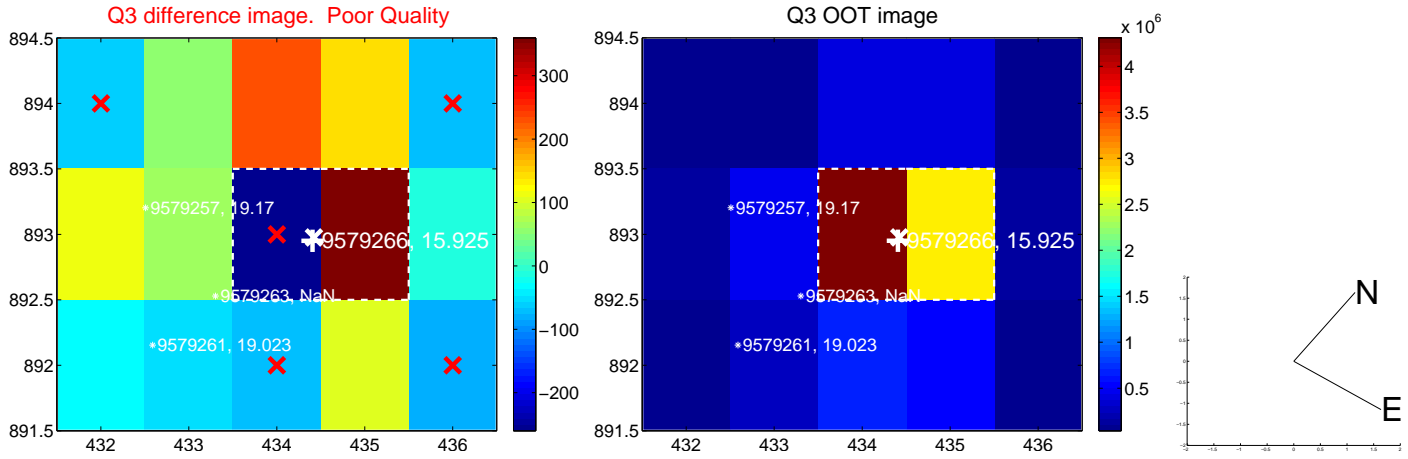
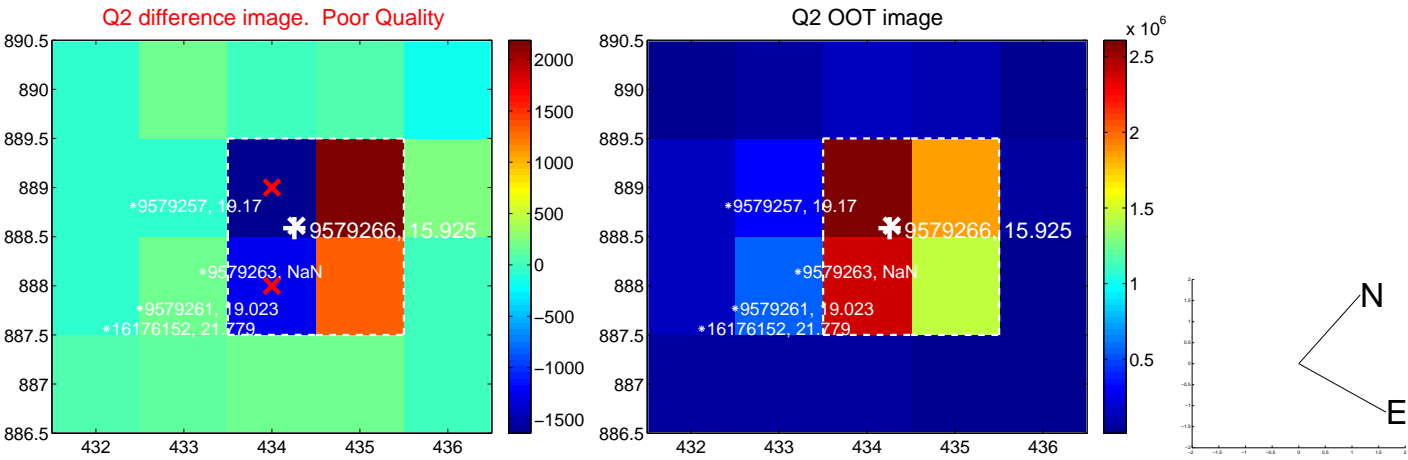
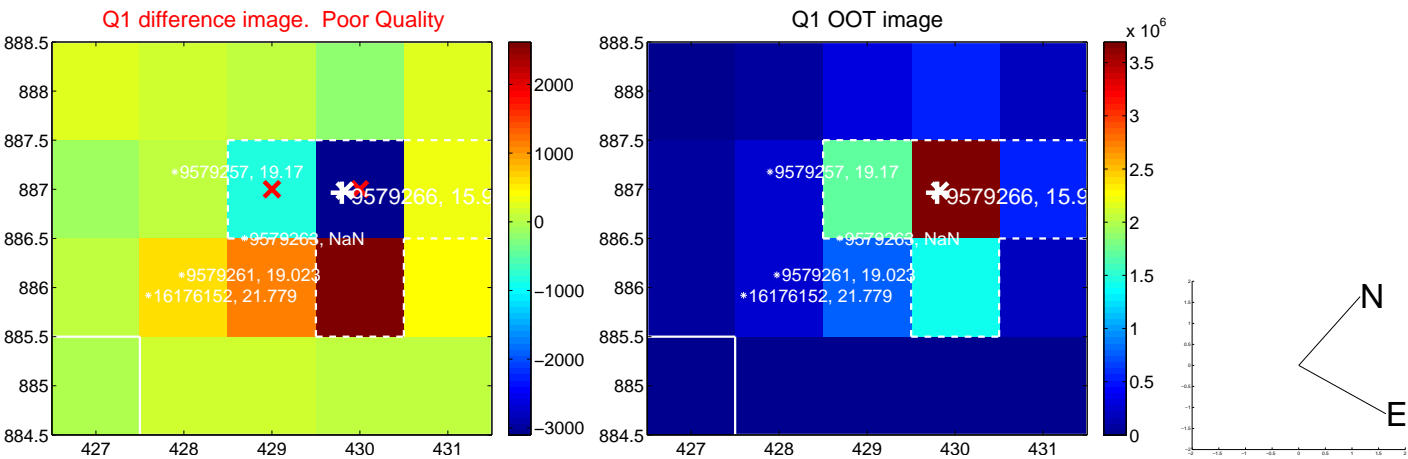


offset from photometric centroids

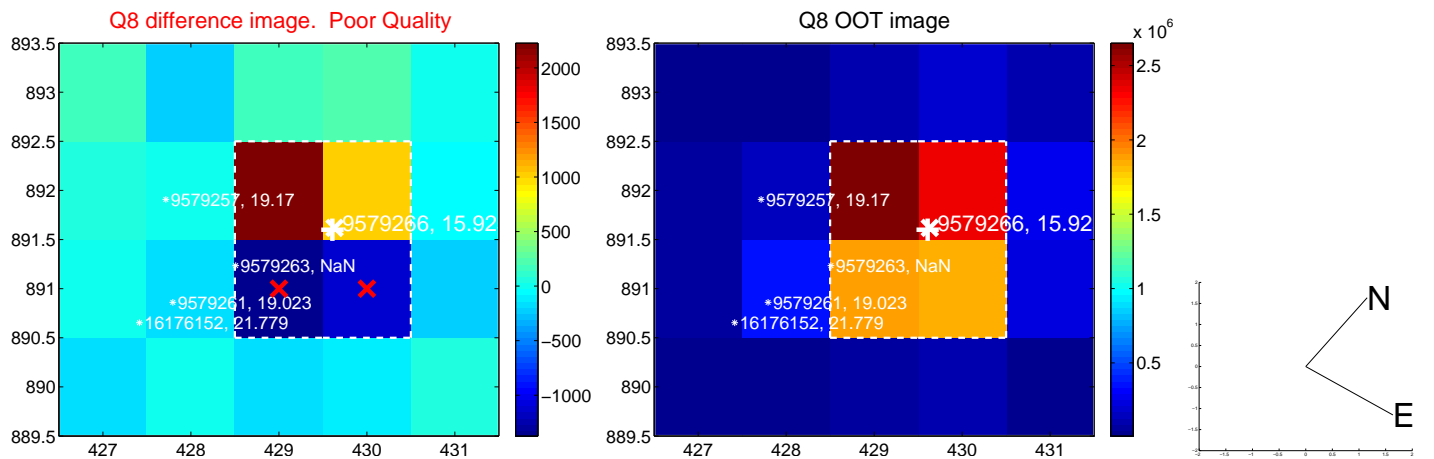
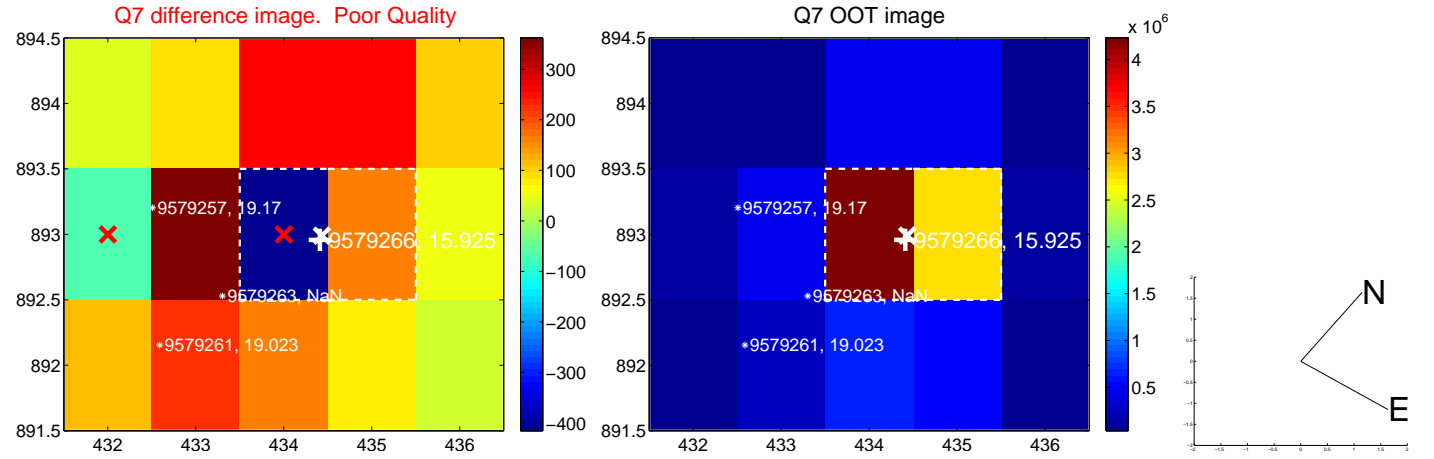
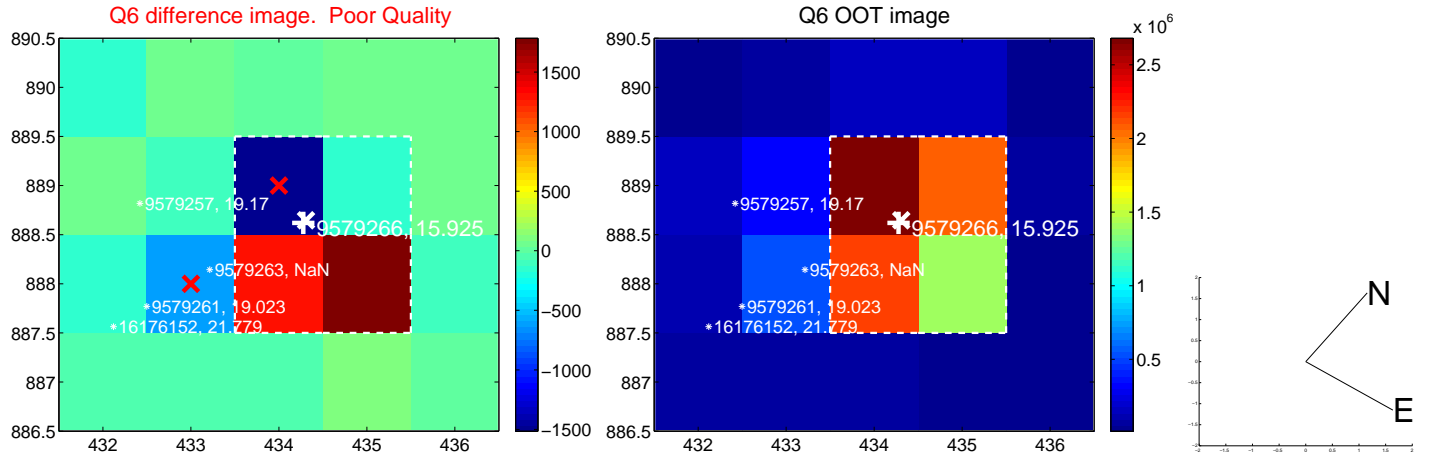
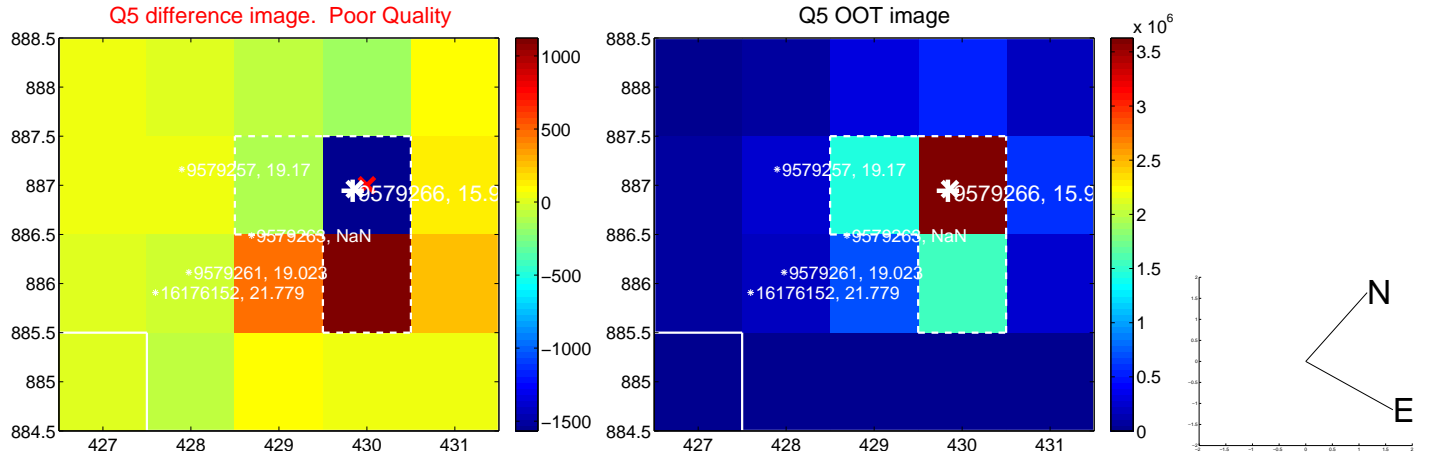


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

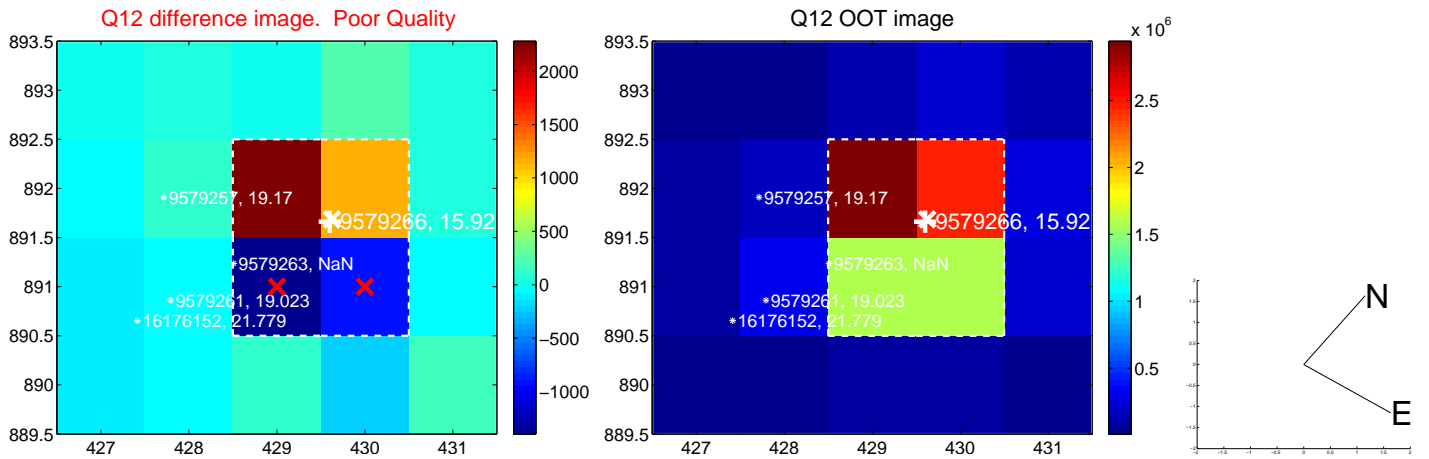
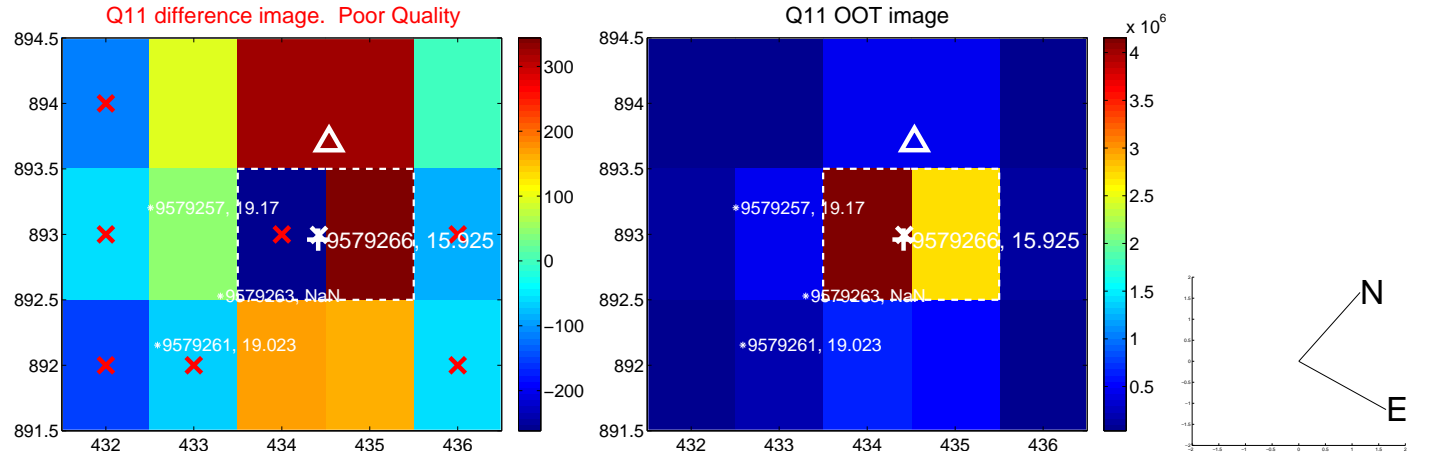
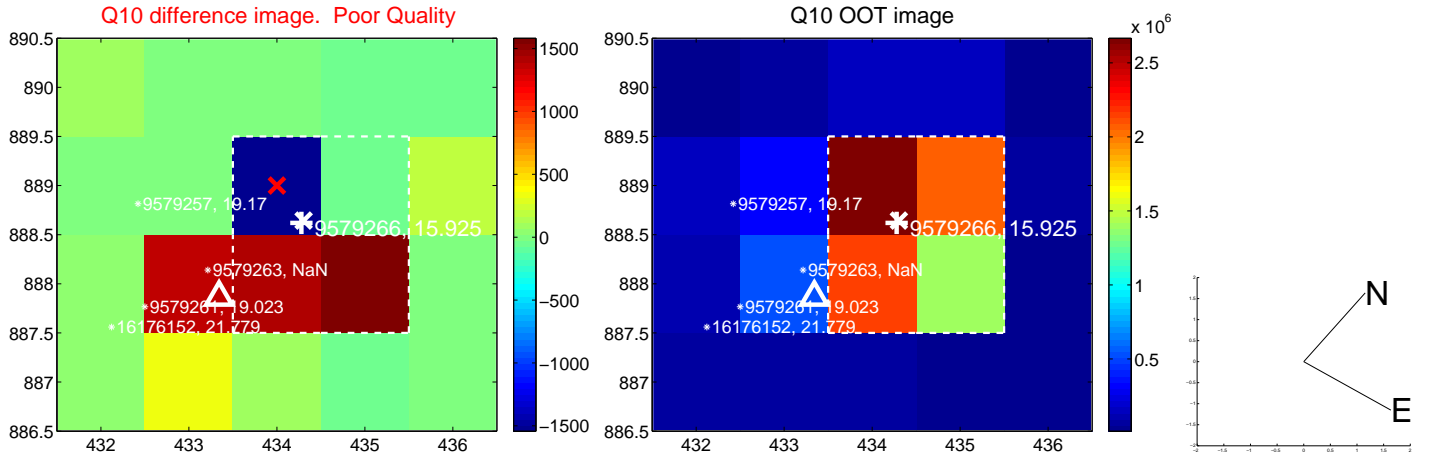
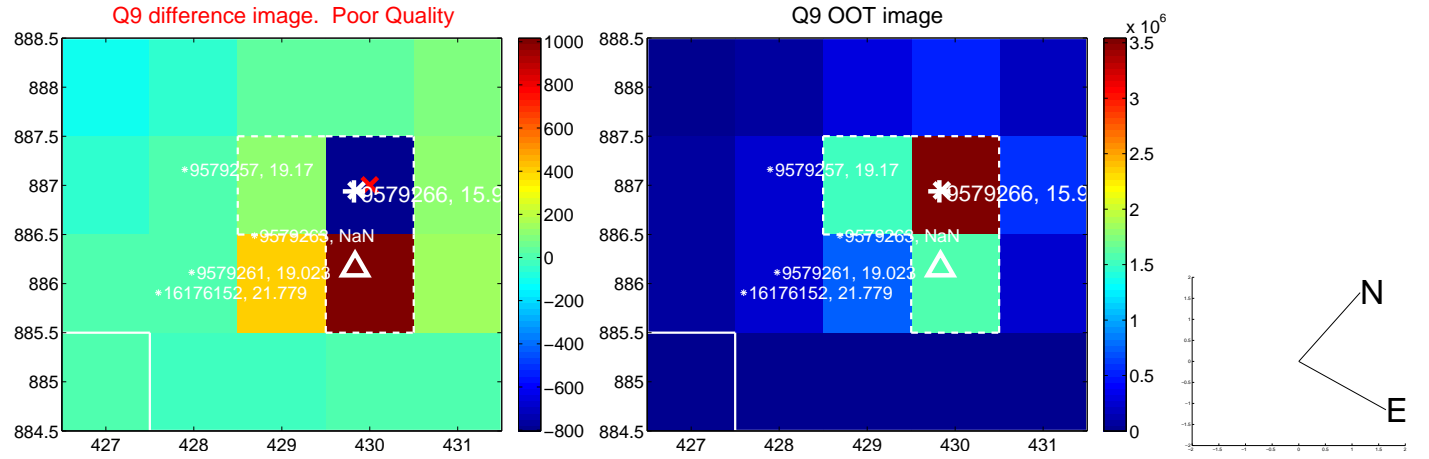
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



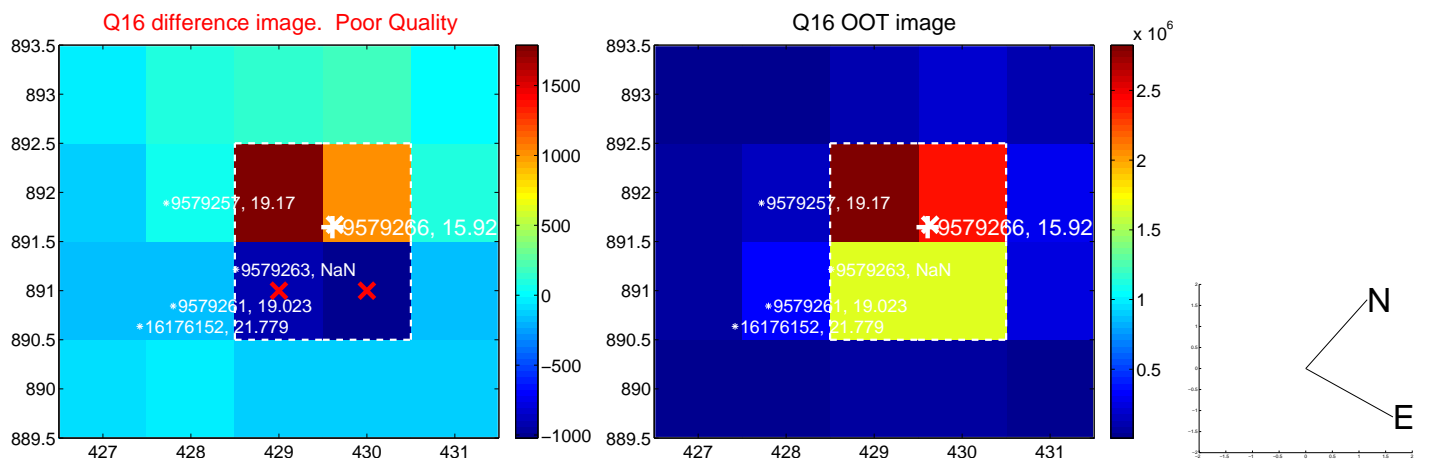
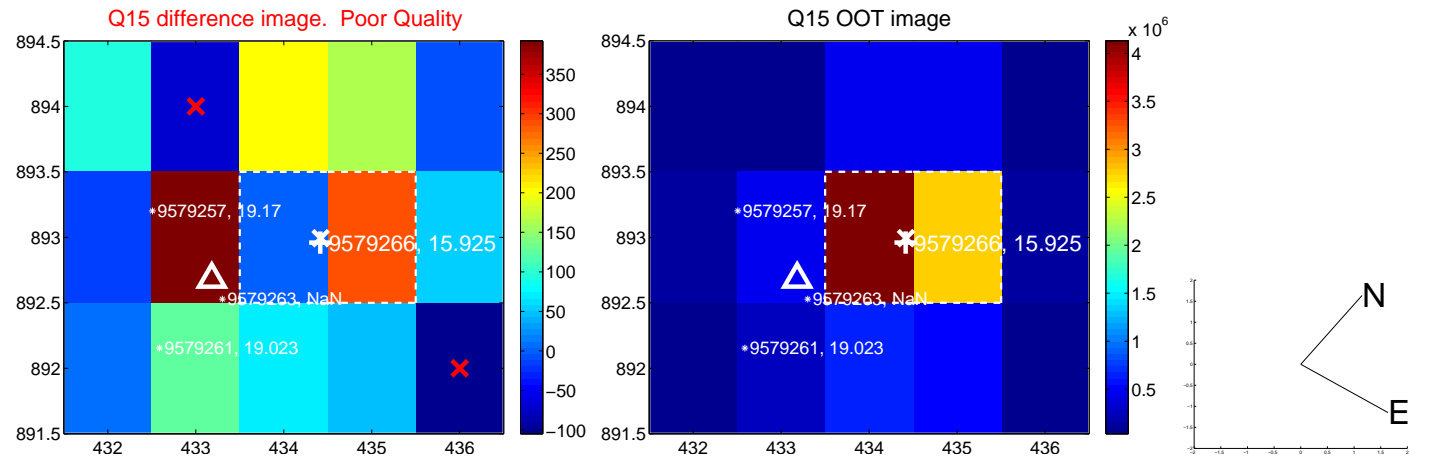
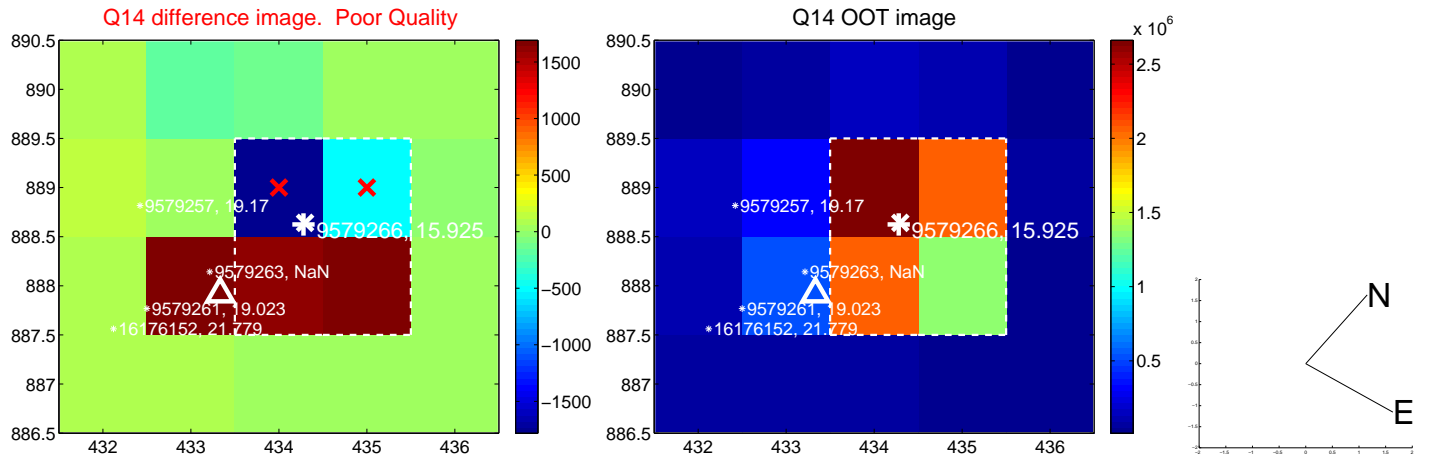
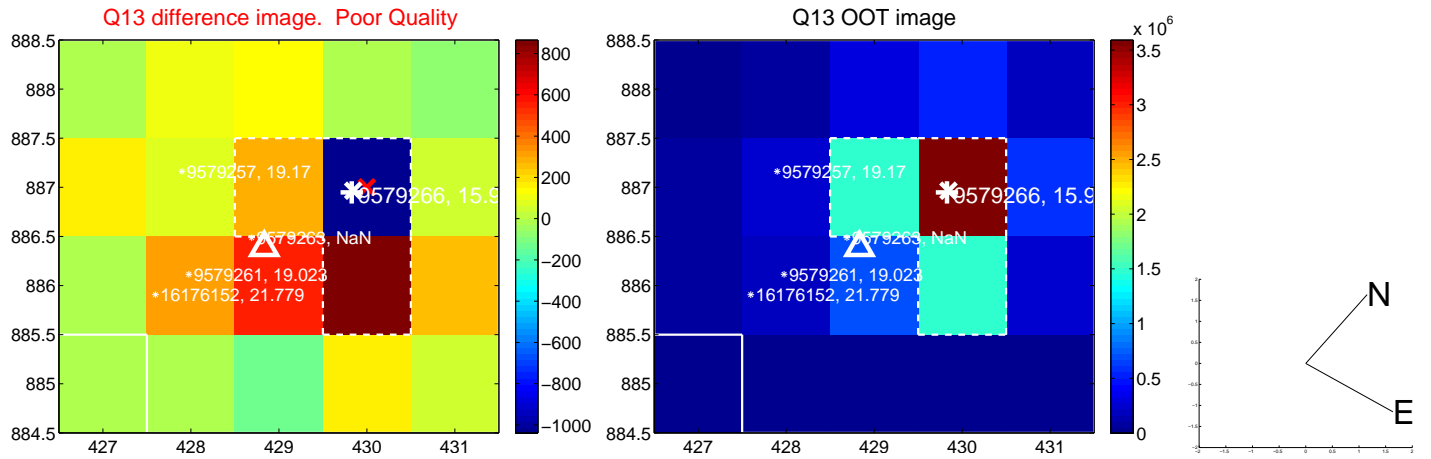
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



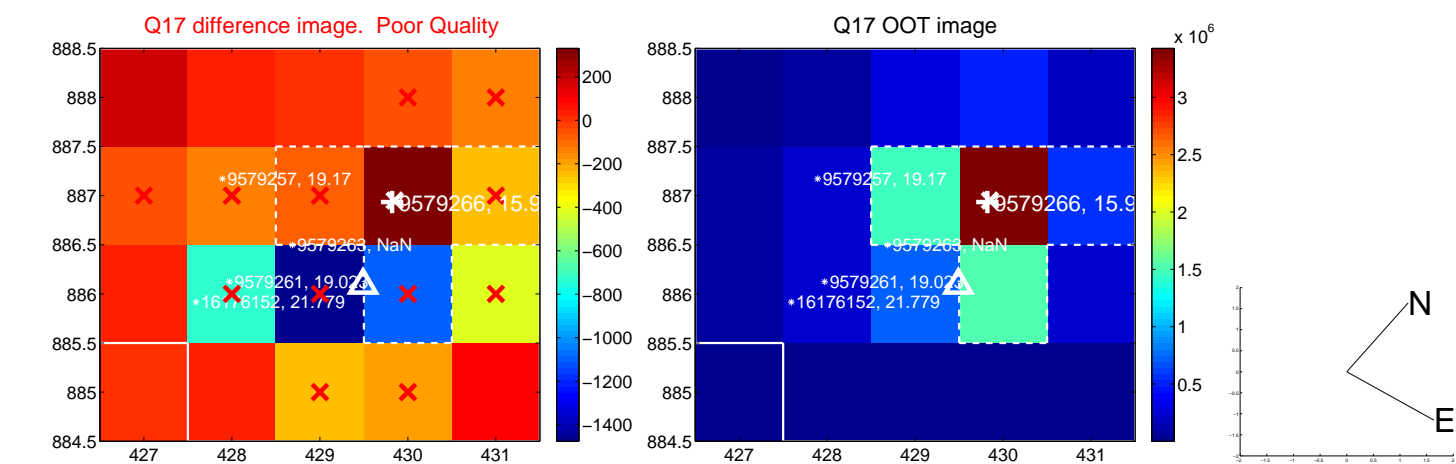
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



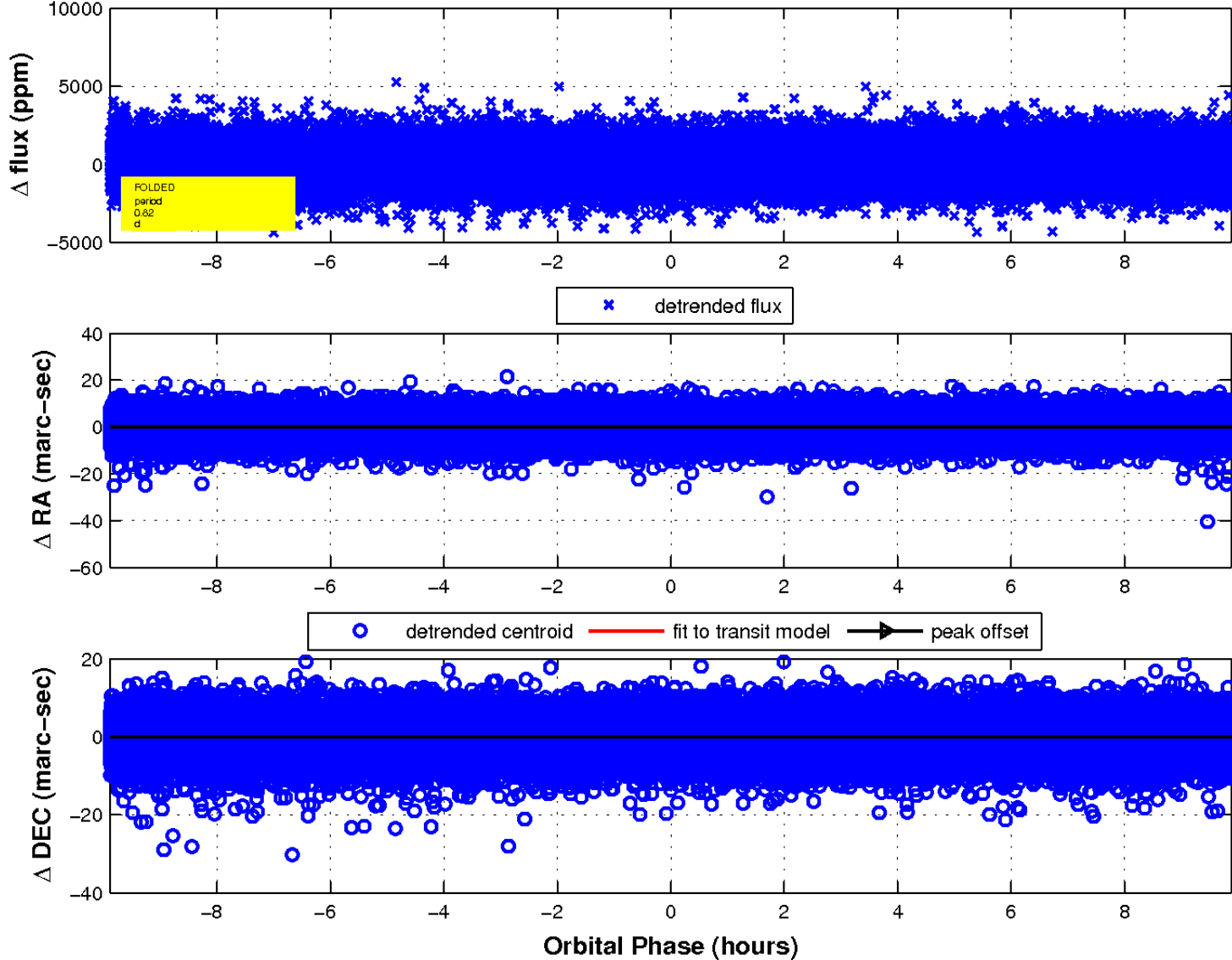
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

