

KIC 006447326

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})
006447326-01	OBS	6711.01	4.319220	132.320731	92.0	26.298	8.2	9.6	1.03	6225	0.99	500.13

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006447326-01	OBS	FP	0.00	1	0	1	0	LPP_DV—CENT_UNRESOLVED_OFFSET

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 006447326-01

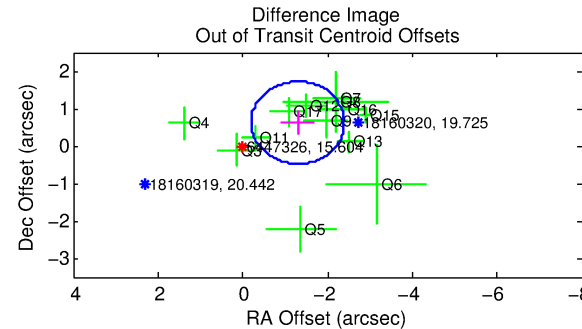
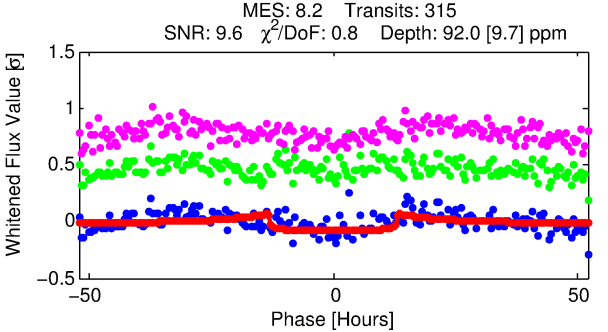
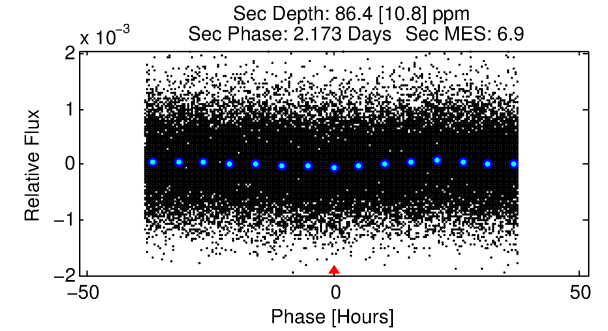
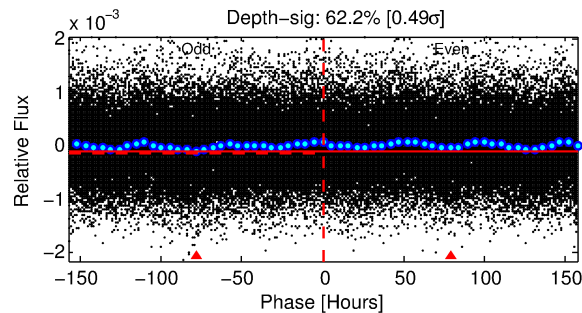
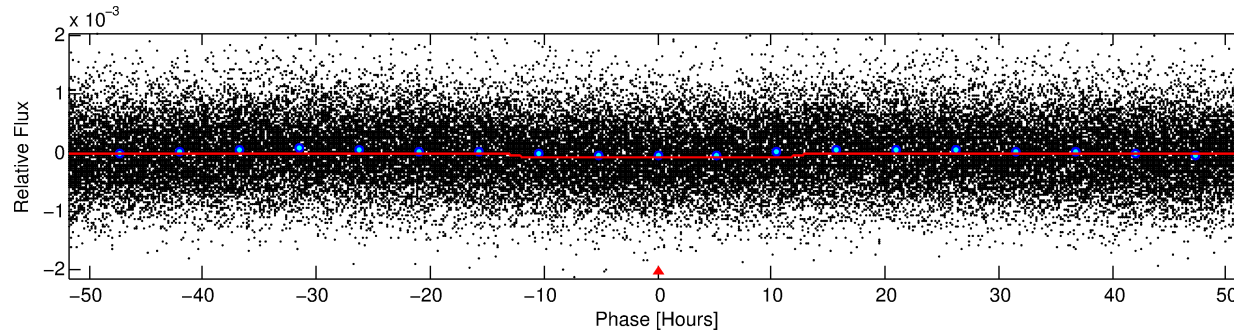
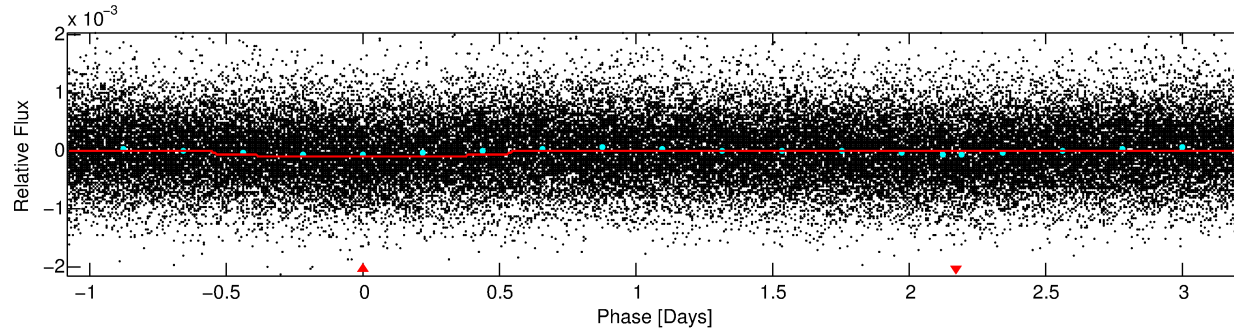
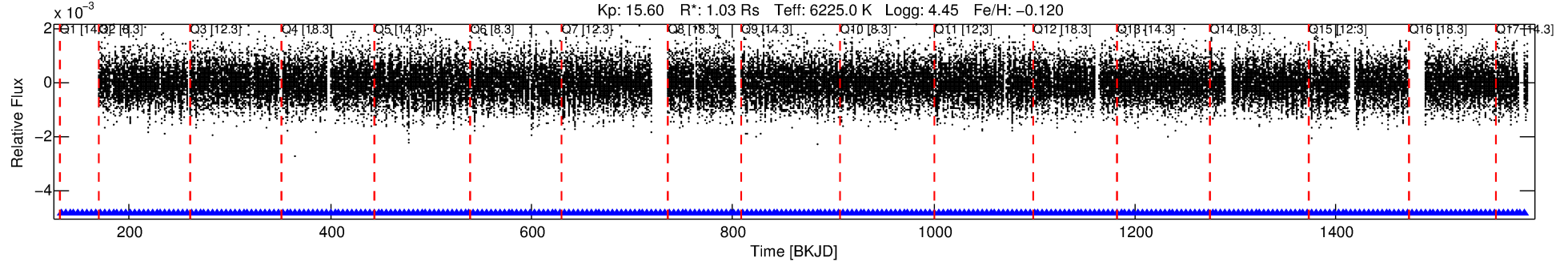
No Significant Match Found

DV One-Page Summary

KIC: 6447326 Candidate: 1 of 1 Period: 4.319 d

KOI: K06711.01 Corr: 0.757

Kp: 15.60 R*: 1.03 Rs Teff: 6225.0 K Logg: 4.45 Fe/H: -0.120



DV Fit Results:

Period = 4.31922 [0.00007] d
Epoch = 132.3207 [0.0125] BKJD
Rp/R* = 0.0088 [0.0063]
a/R* = 1.41 [2.52]
b = 0.02 [185.09]
Seff = 500.13 [197.43]
Teq = 1206 [119] K
Rp = 0.99 [0.77] Re
a = 0.0535 [0.0136] AU
Ag = 138.91 [205.29] [0.67σ]
Teffp = 6401 [2302] K [2.25σ]

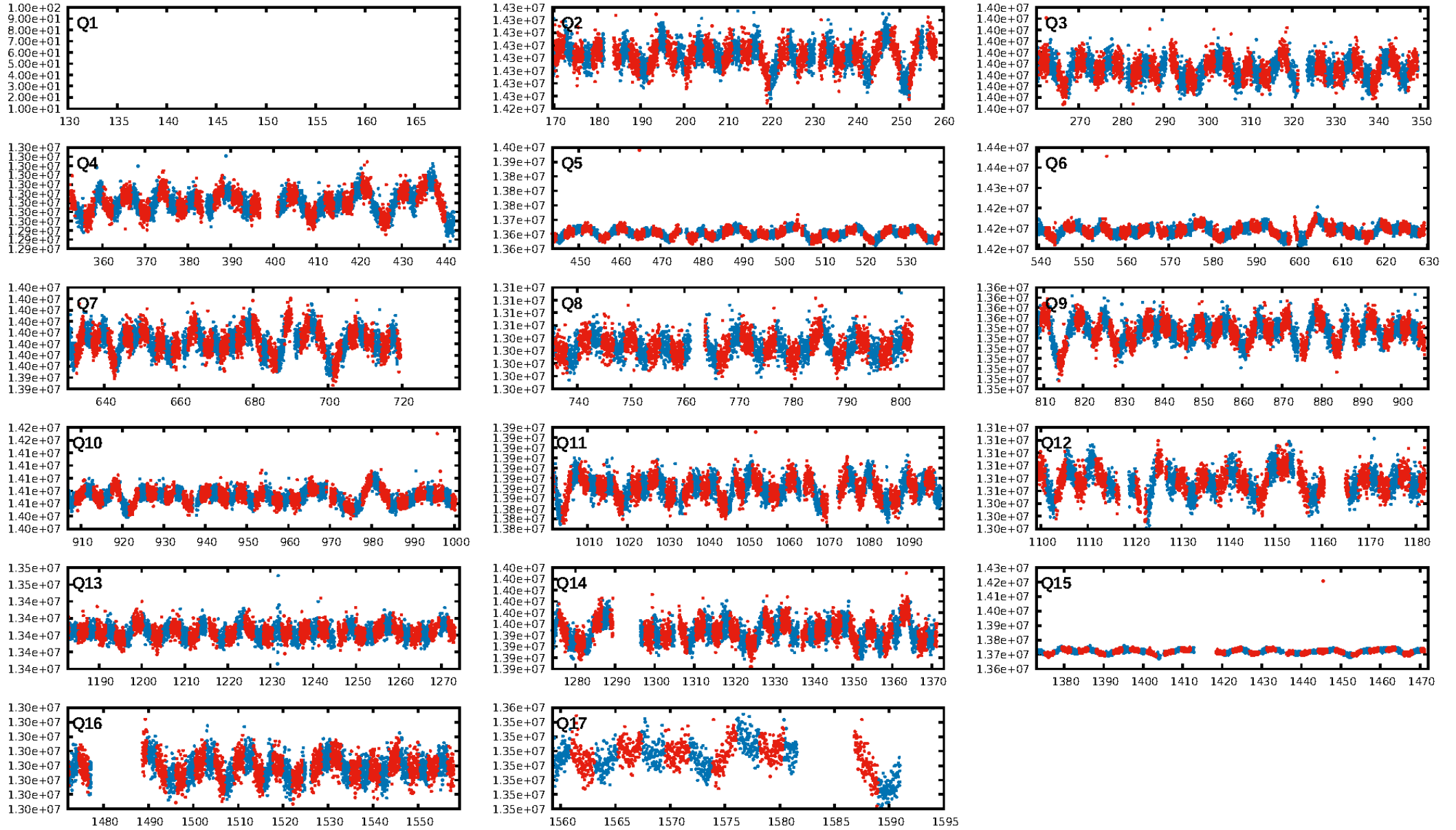
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 3.29e-19
RollingBand-fgt: 1.00 [309/309]
GhostDiagnostic-chr: 1.91
Centroid-sig: 2.1%
Centroid-so: 0.631 arcsec [0.93σ]
OotOffset-rm: 1.437 arcsec [3.91σ]
KicOffset-rm: 1.423 arcsec [4.21σ]
OotOffset-st: 1/4/4/4 [13]
KicOffset-st: 1/4/4/4 [13]
DiffImageQuality-fgm: 0.77 [10/13]
DiffImageOverlap-fno: 1.00 [16/16]

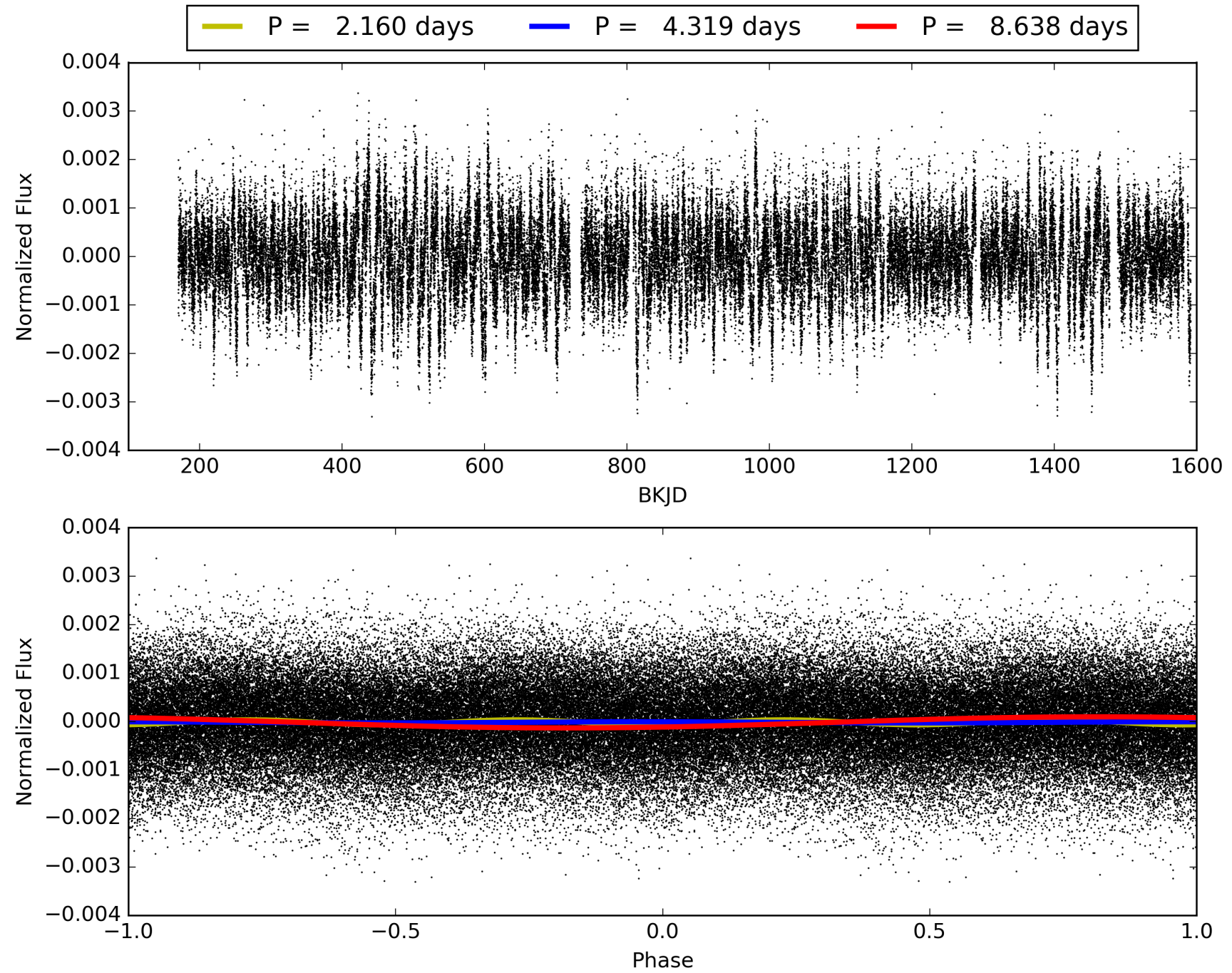
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 16:15:59 Z

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

TCE 006447326-01, PDC Light Curves

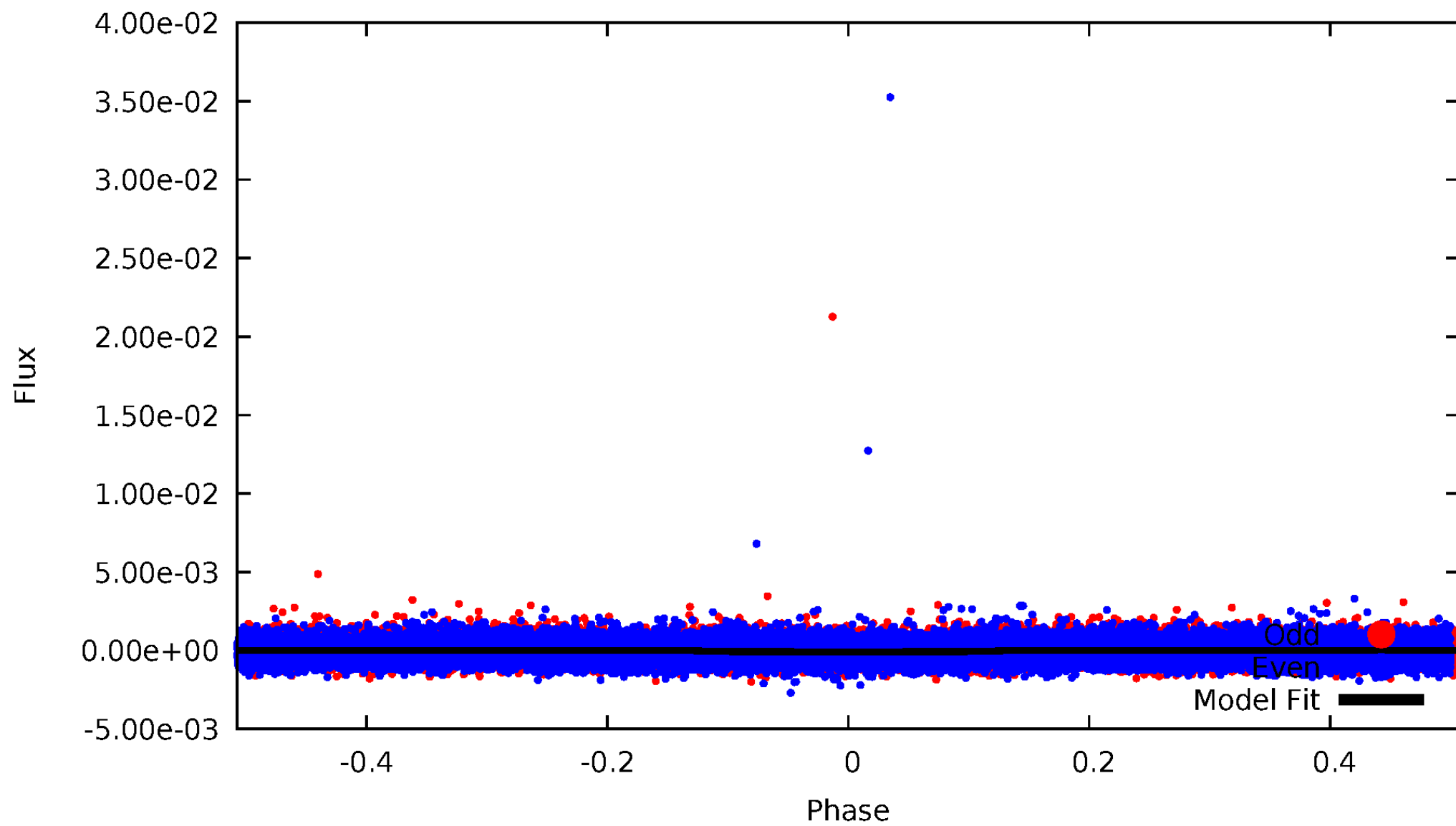


TCE 006447326-01



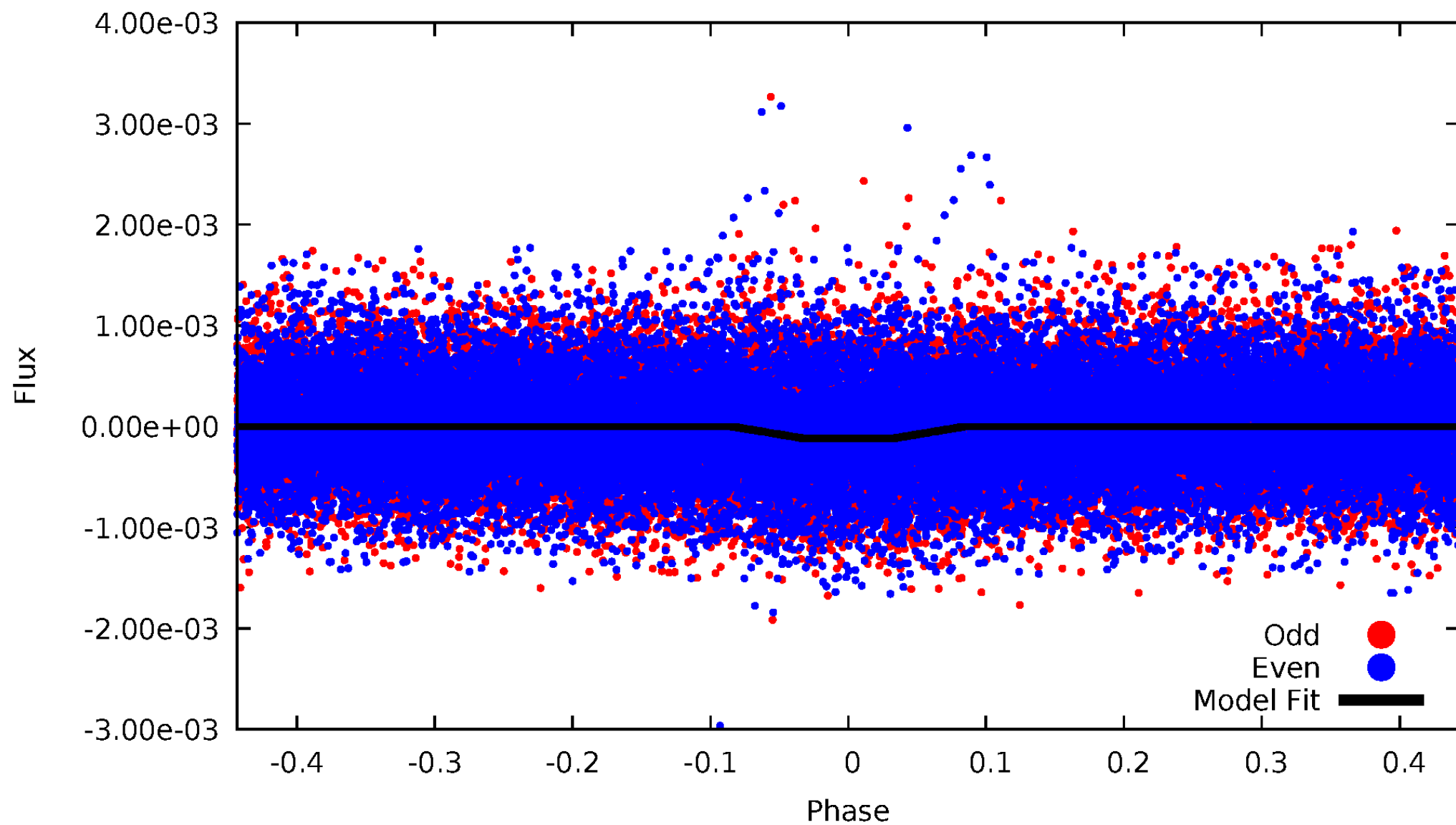
DV Odd/Even

TCE 006447326-01



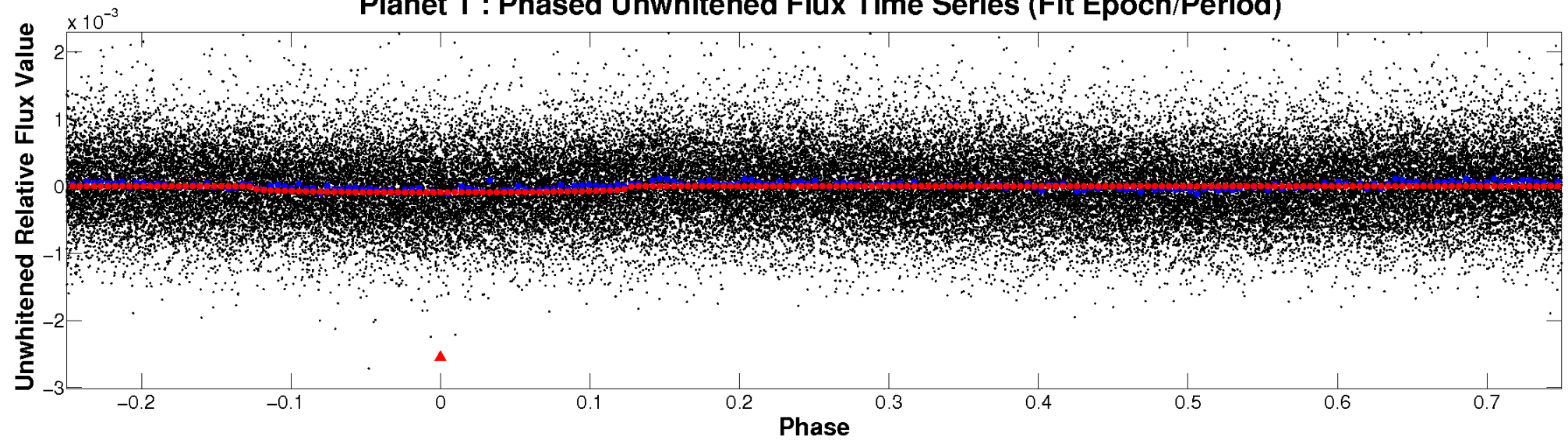
ALT Odd/Even

TCE 006447326-01

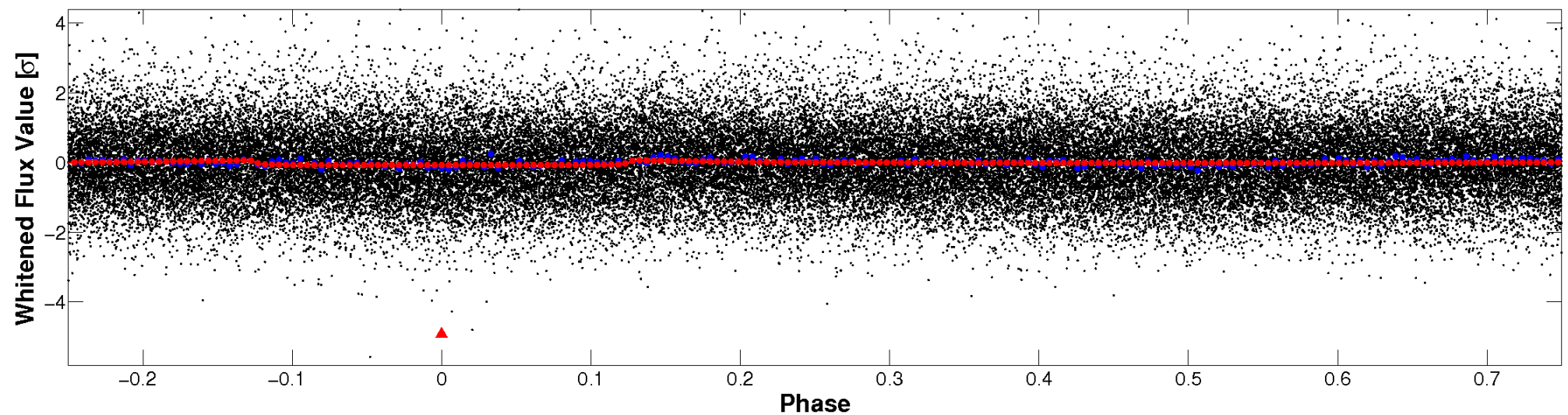


Non-Whitened Vs. Whitened Light Curve

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

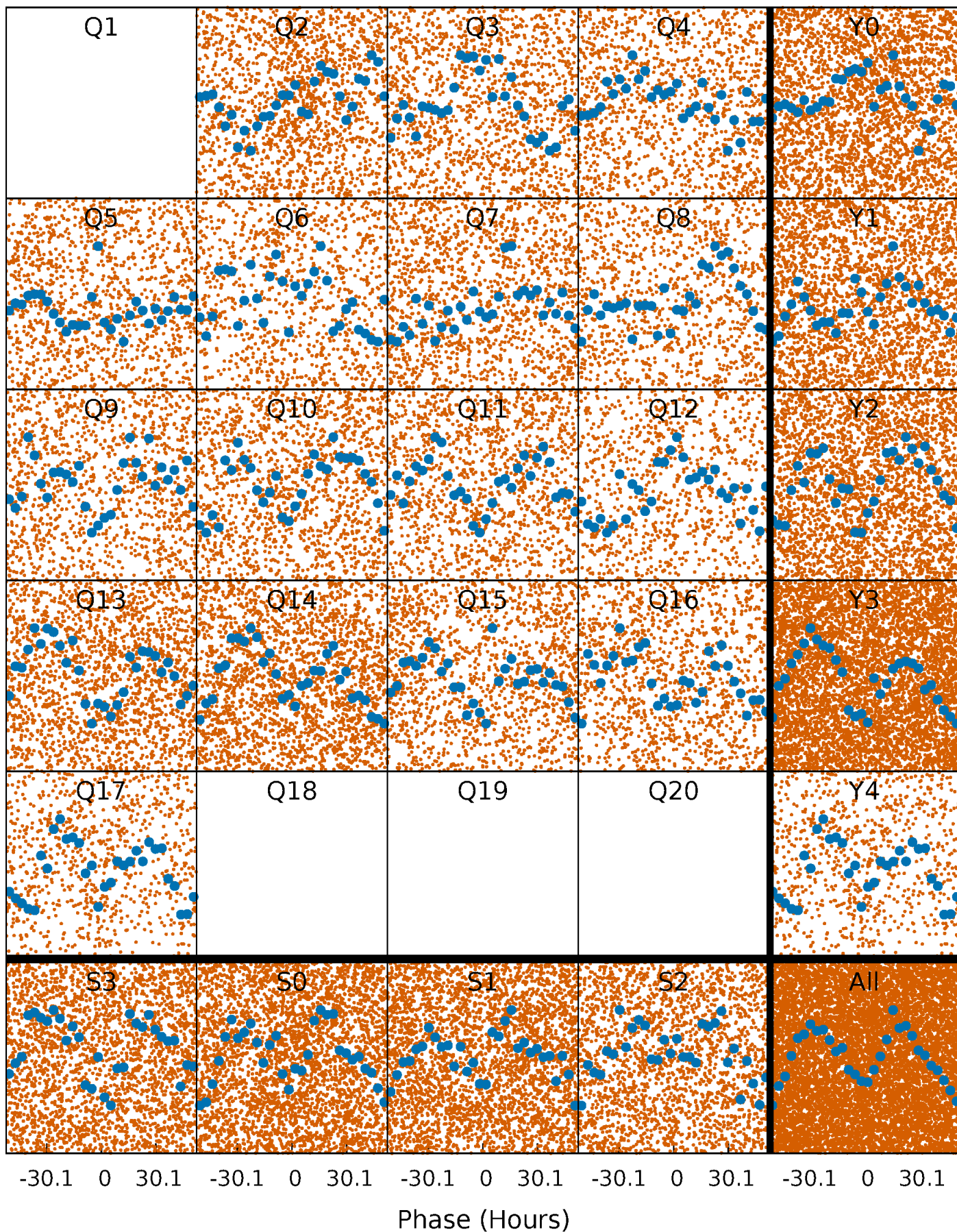


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



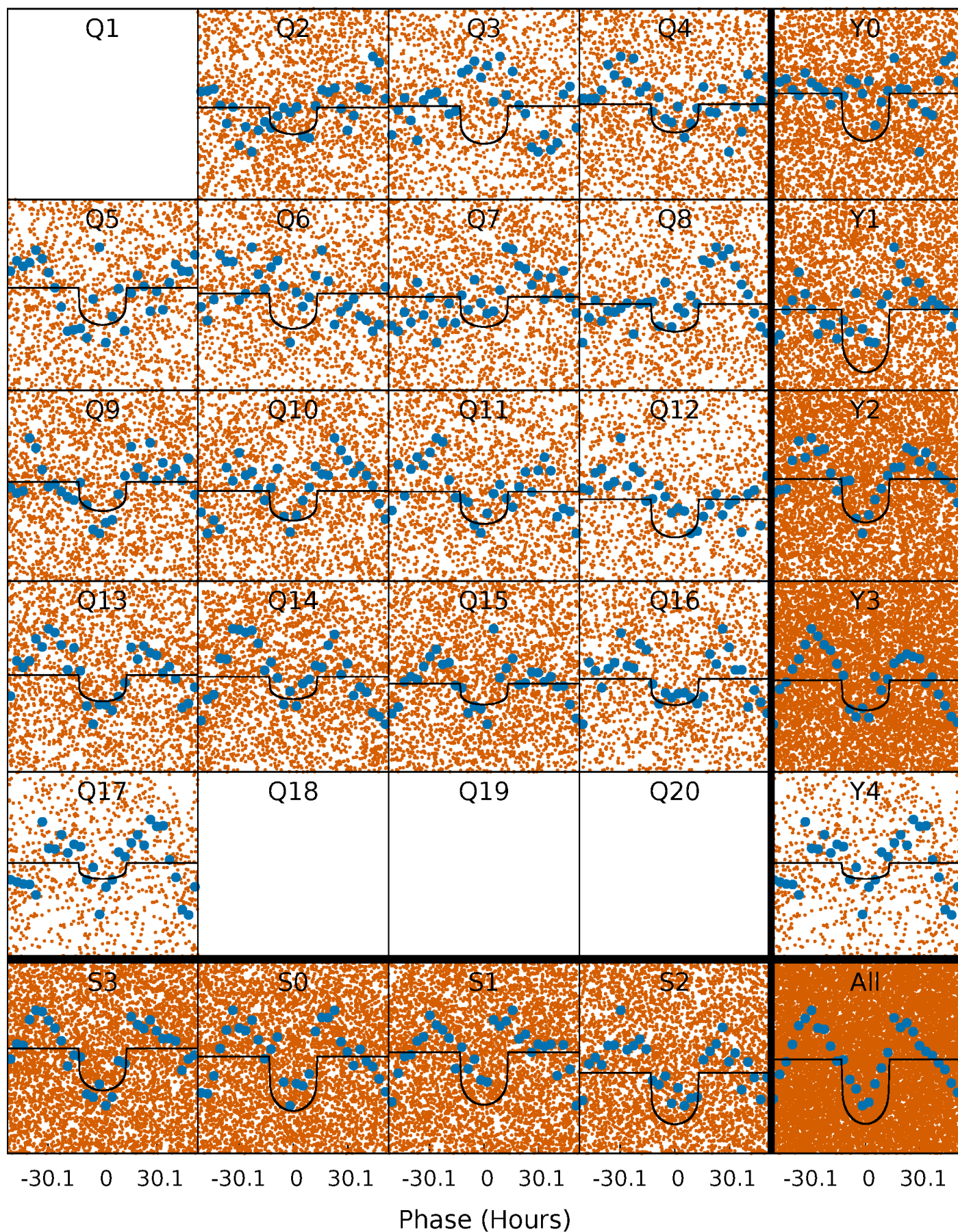
PDC Quarter-Phased Transit Curves

TCE 006447326-01 P= 4.319220 Days $T_0=132.320731$ (BKJD)



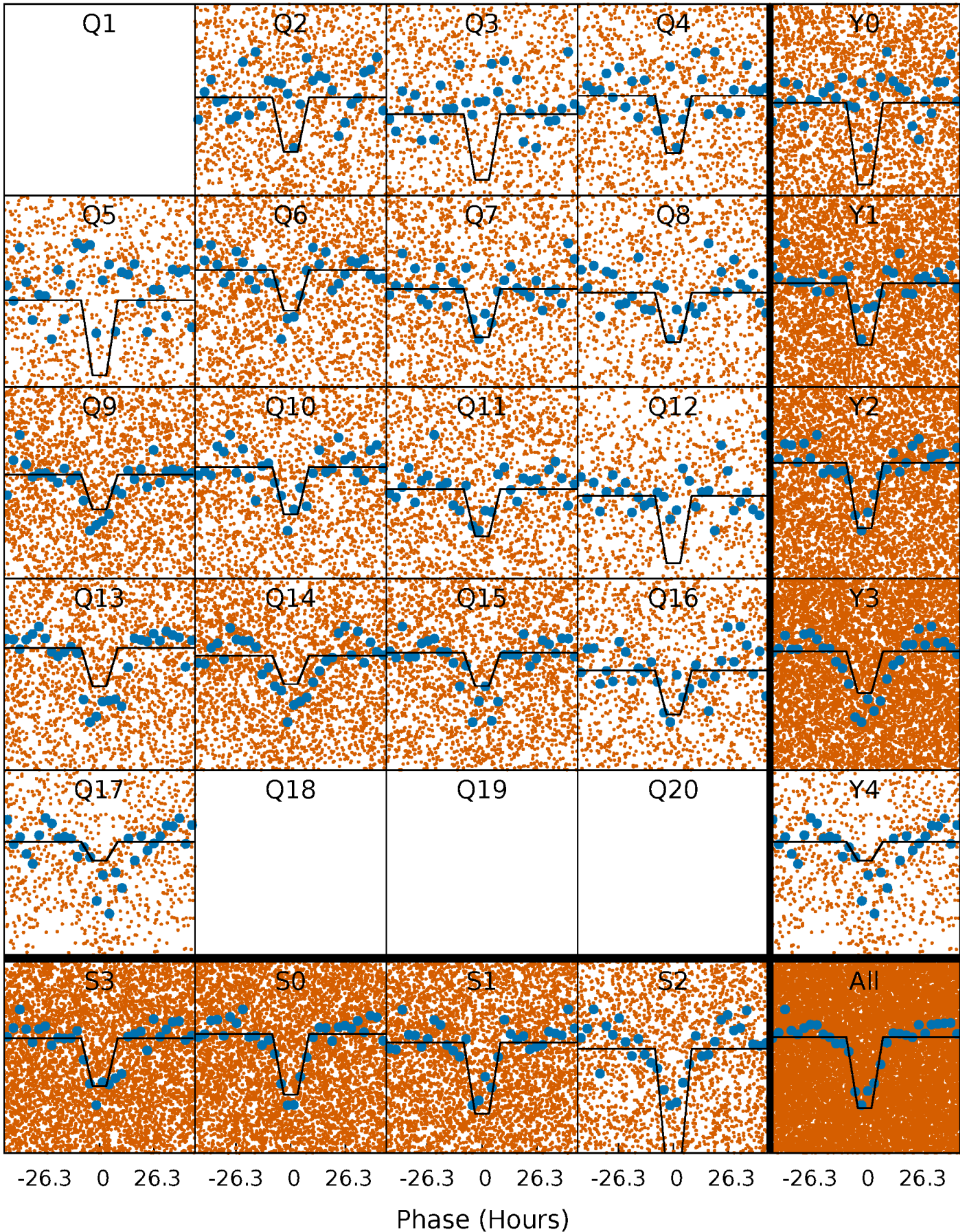
DV Quarter-Phased Transit Curves

TCE 006447326-01 P= 4.319220 Days $T_0=132.320731$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

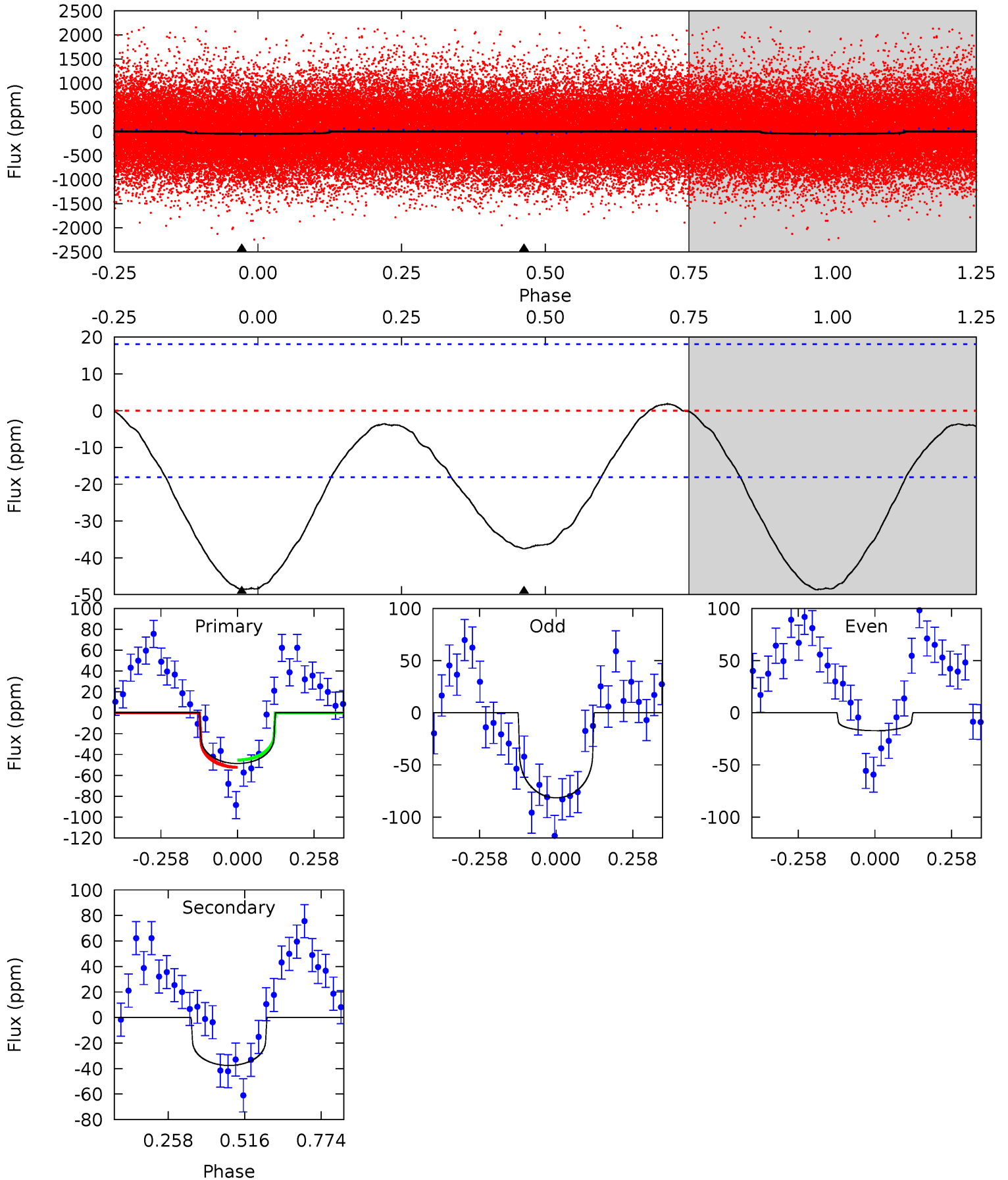
TCE 006447326-01 P= 4.317696 Days $T_0=132.597980$ (BKJD)



DV Model-Shift Uniqueness Test

006447326-01, P = 4.319220 Days, E = 132.320731 Days

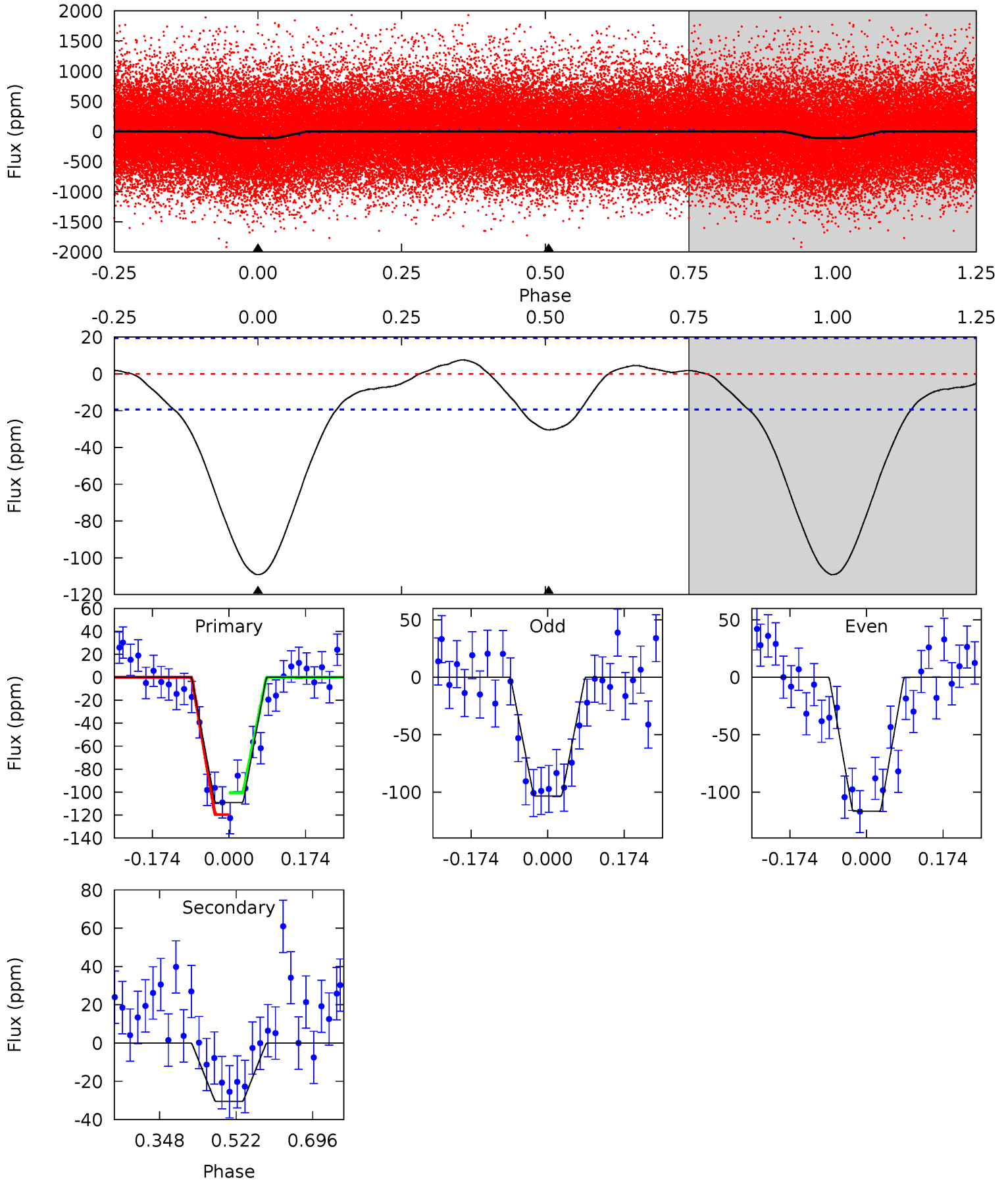
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.7	9.06	0	0	4.36	1.13	0.62	11.7	11.7	9.06	9.06	7.76	0.75	0.04	0.85



Alt Model-Shift Uniqueness Test

006447326-01, P = 4.317696 Days, E = 132.597980 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
25.1	6.99	0	0	4.45	1.36	1.04	25.1	25.1	6.99	6.99	1.52	0.64	0.07	2.18



Stellar Parameters For KIC 006447326

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6225^{+185}_{-222}	$4.450^{+0.062}_{-0.200}$	$-0.120^{+0.250}_{-0.300}$	$1.031^{+0.314}_{-0.126}$	$1.091^{+0.155}_{-0.141}$	$1.400^{+0.374}_{-0.712}$
	+3%/-4%	+1%/-4%	+208%/-250%	+30%/-12%	+14%/-13%	+27%/-51%
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 006447326-01 / KOI 6711.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-38 ± 4	$1.12^{+0.73}_{-0.62}$	1718^{+127}_{-83}	5073^{+2452}_{-918}	46^{+178}_{-29}
Alt.	-30 ± 4	$1.29^{+0.74}_{-0.66}$	1720^{+126}_{-93}	4580^{+1730}_{-727}	29^{+88}_{-17}

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

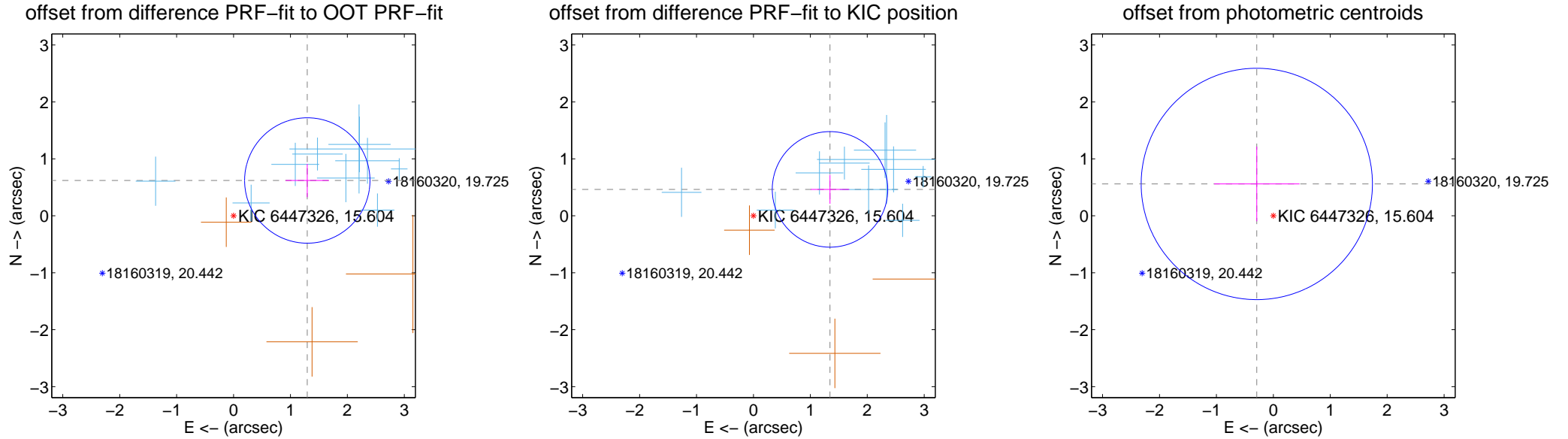
DV Centroid Data

Supplemental centroid analysis for 006447326-01. Kepler magnitude: 15.60. Transit SNR 9.56

There are 10 quarters with good PRF difference image offsets

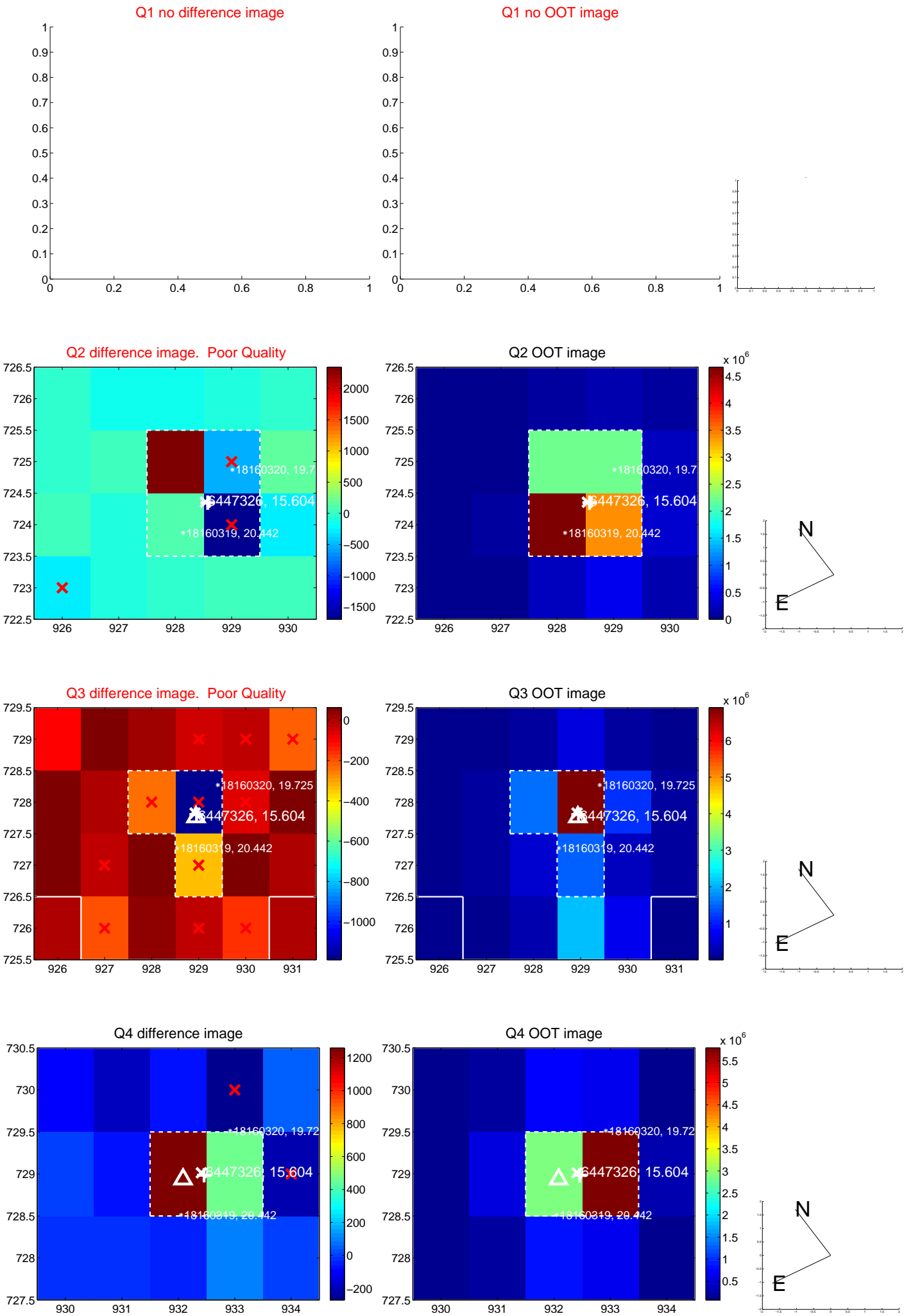
The direct PRF centroid is offset from the target star catalog position by about 0.17 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.437 ± 0.367	3.91	-1.296 ± 0.380	0.620 ± 0.293
PRF-fit source offset from KIC position	1.423 ± 0.338	4.21	-1.345 ± 0.338	0.464 ± 0.254
photometric centroid source offset	0.63 ± 0.68	0.93	0.29 ± 0.75	0.56 ± 0.66

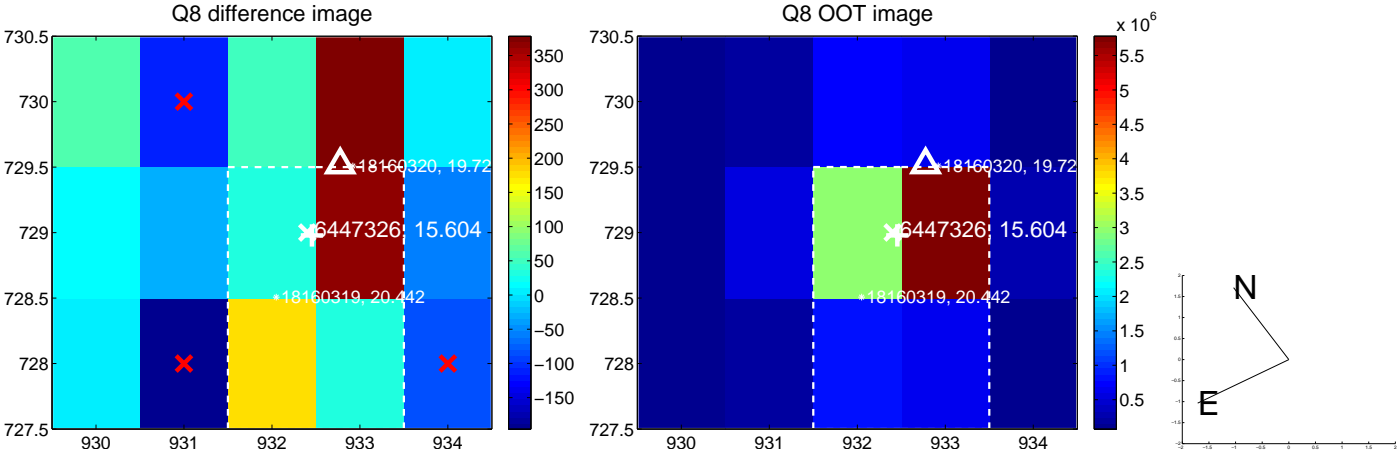
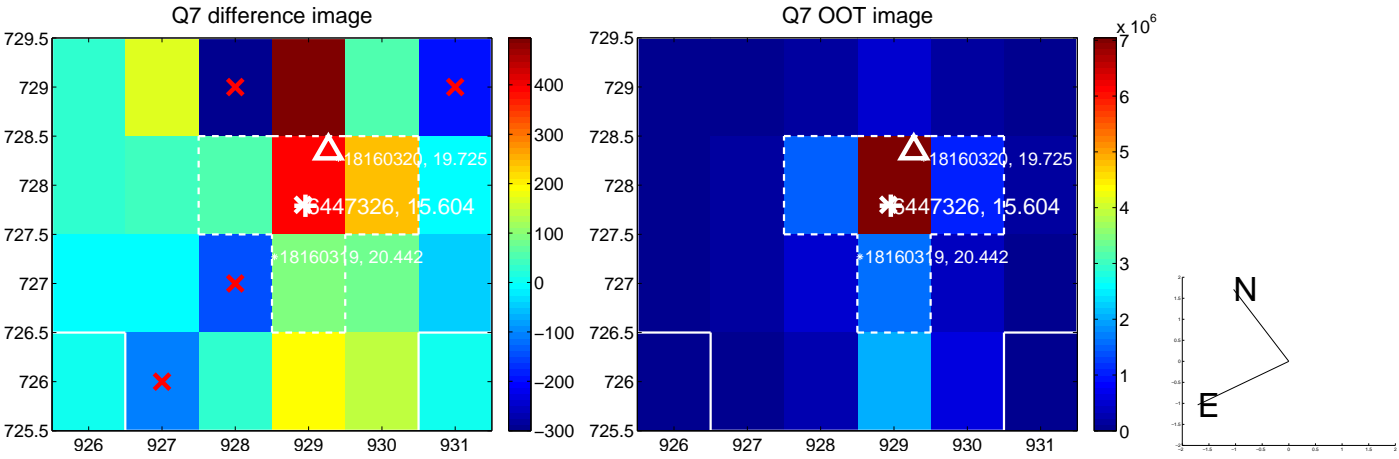
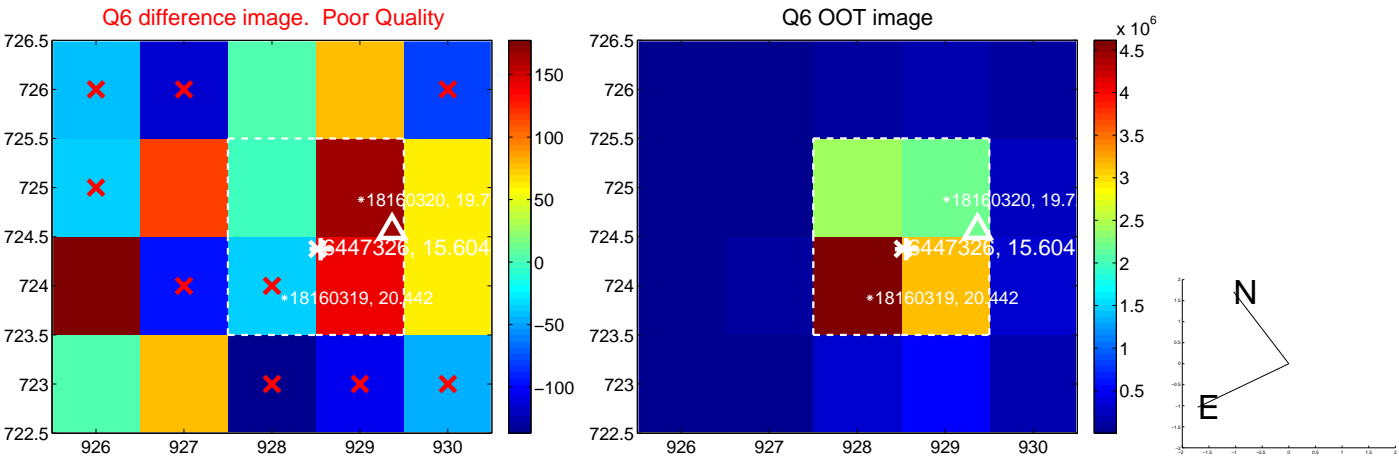
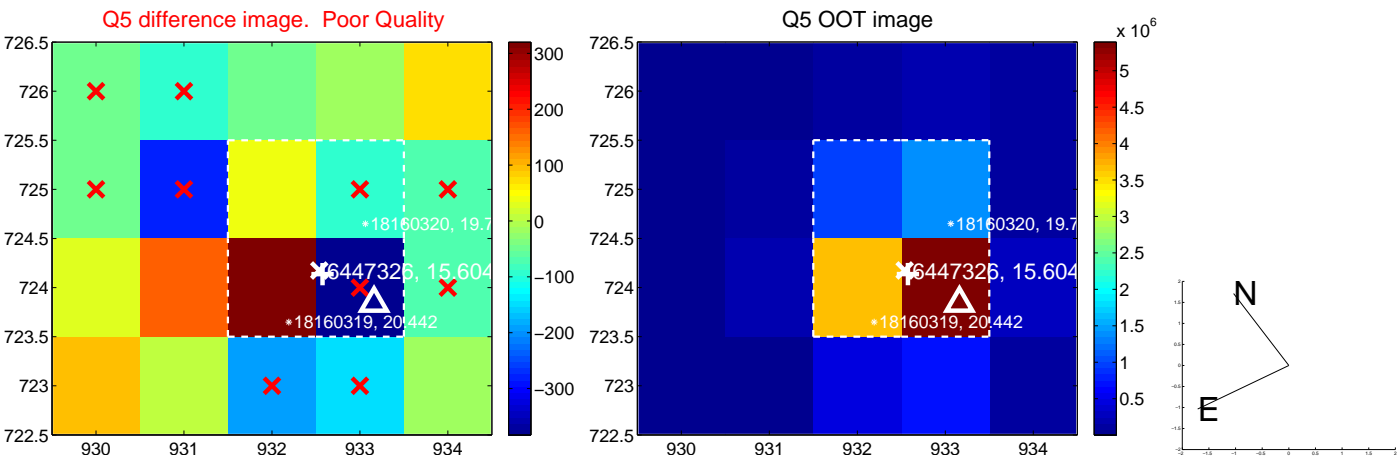


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

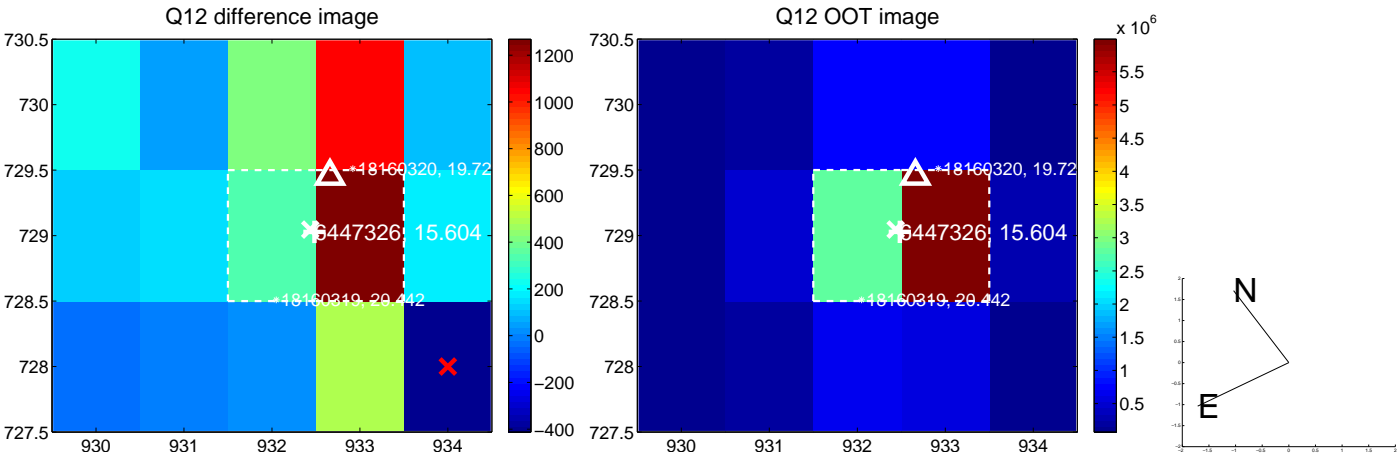
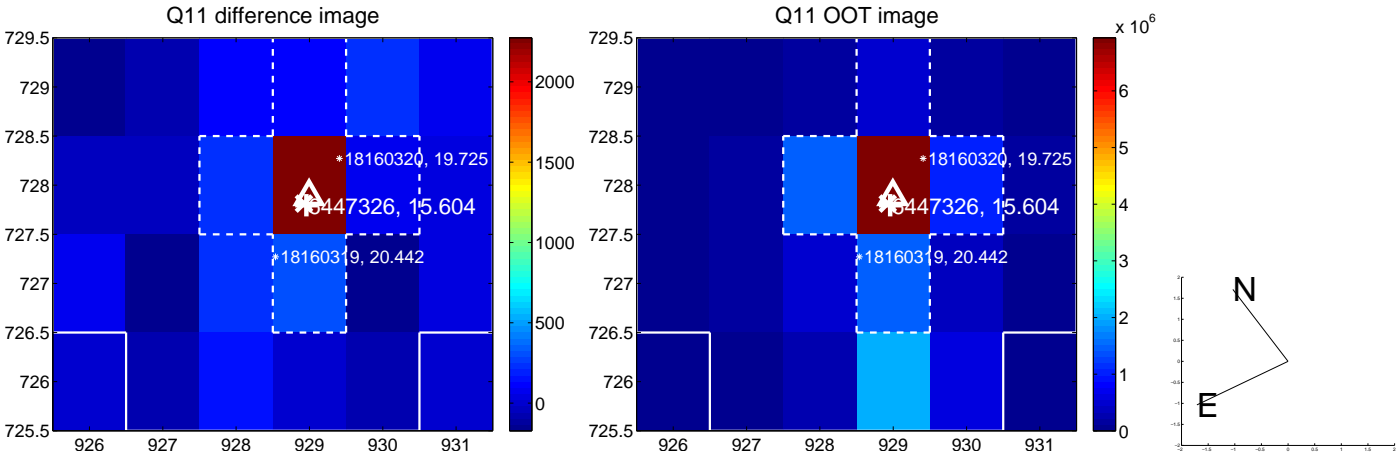
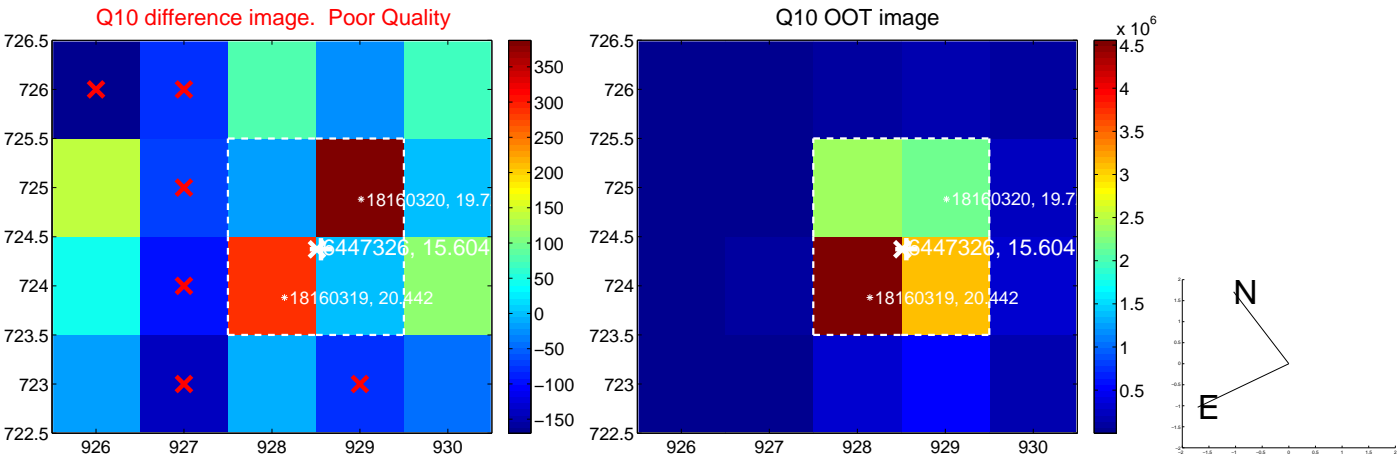
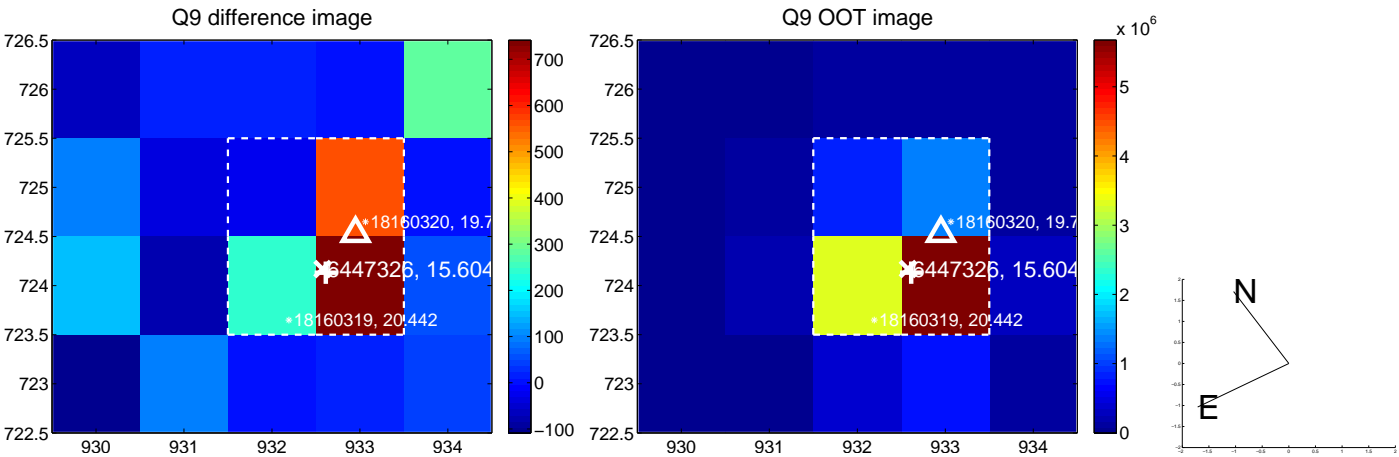
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



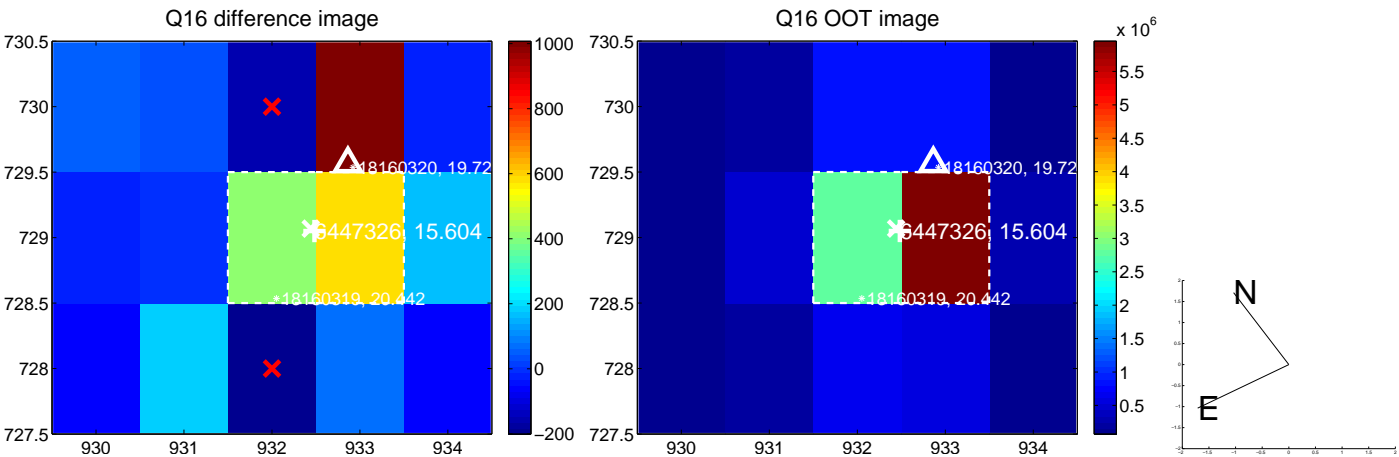
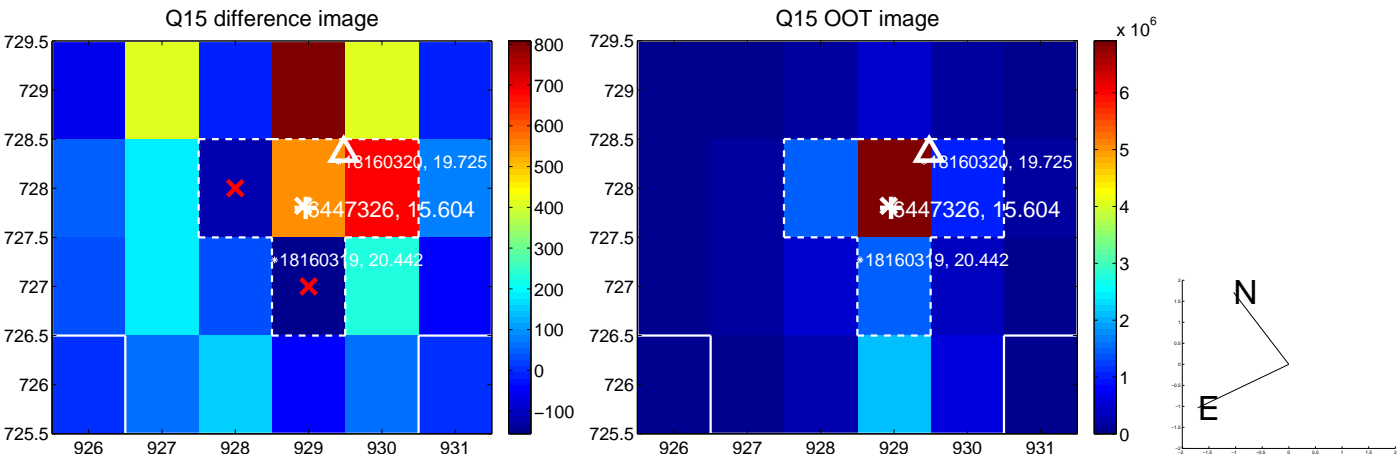
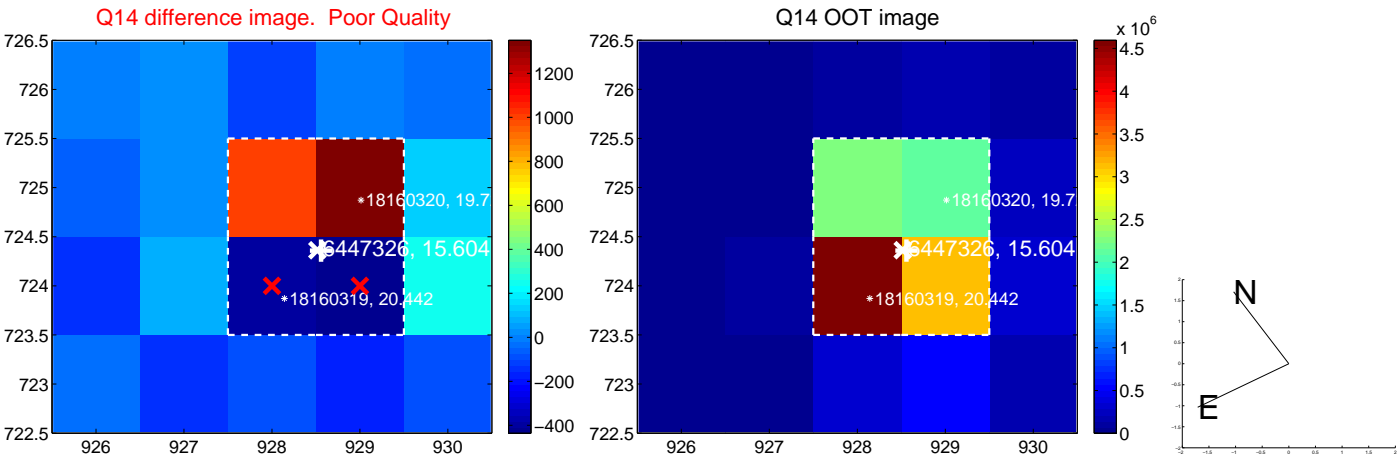
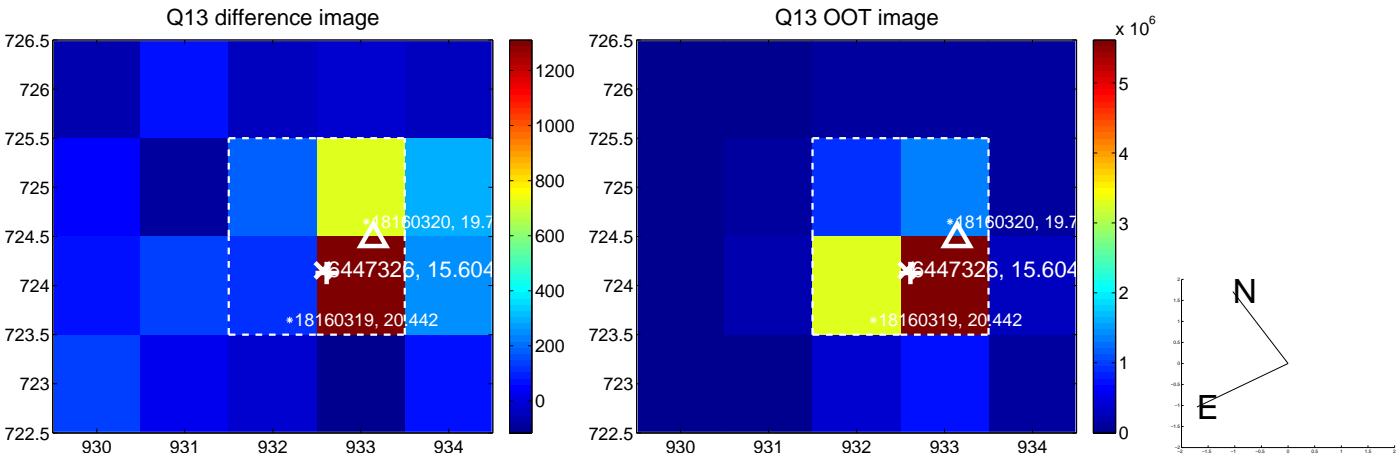
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



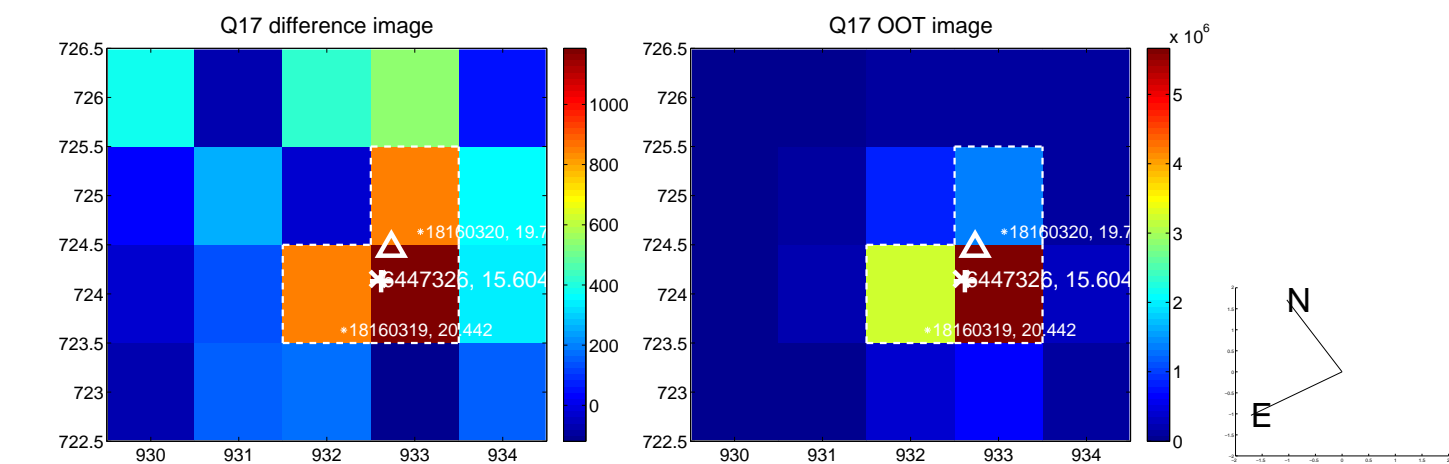
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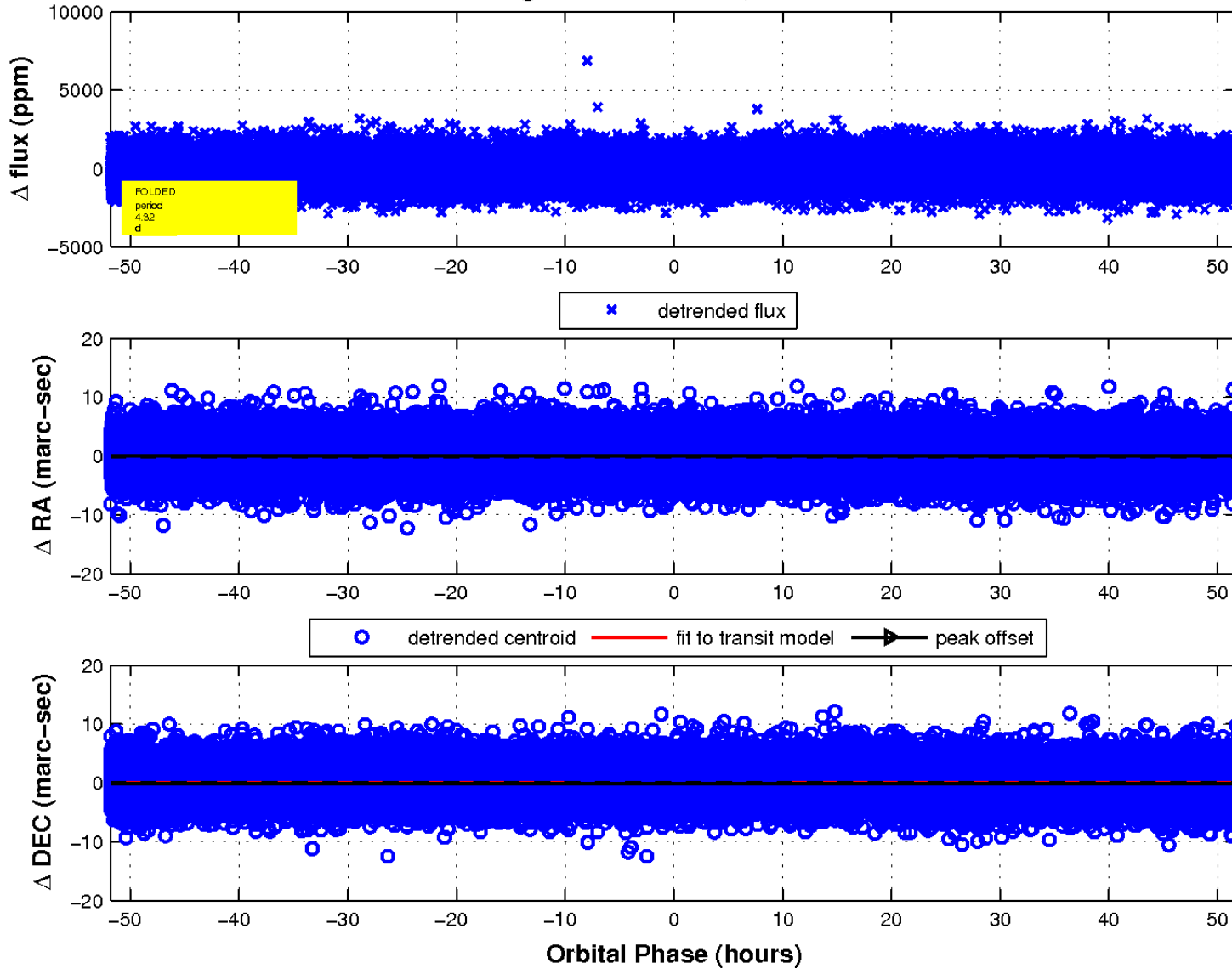
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

