

KIC 006964929

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})
006964929-01	OBS	2756.01	0.665016	131.668465	91.2	2.017	21.3	23.2	1.07	5884	1.21	5289.30

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006964929-01	OBS	PC	0.94	0	0	0	0	NO_COMMENT

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

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

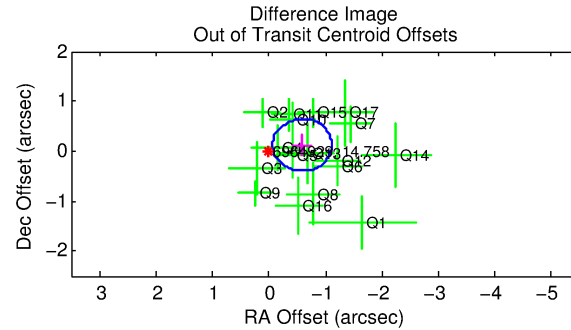
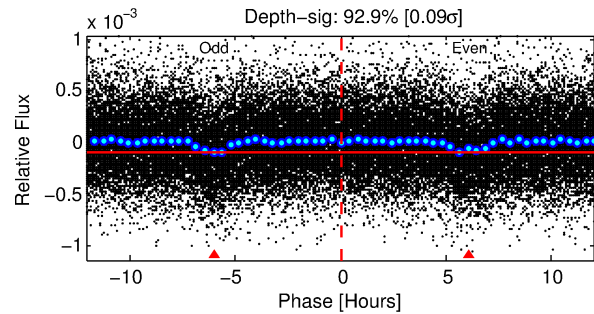
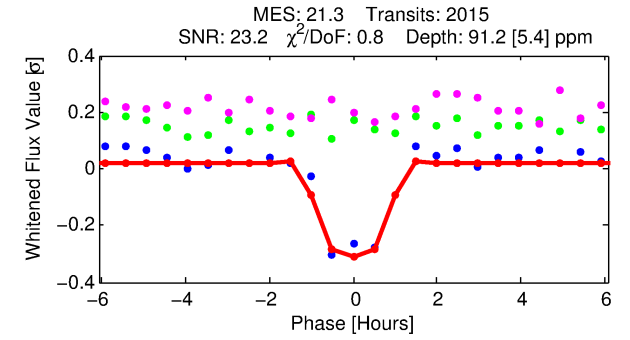
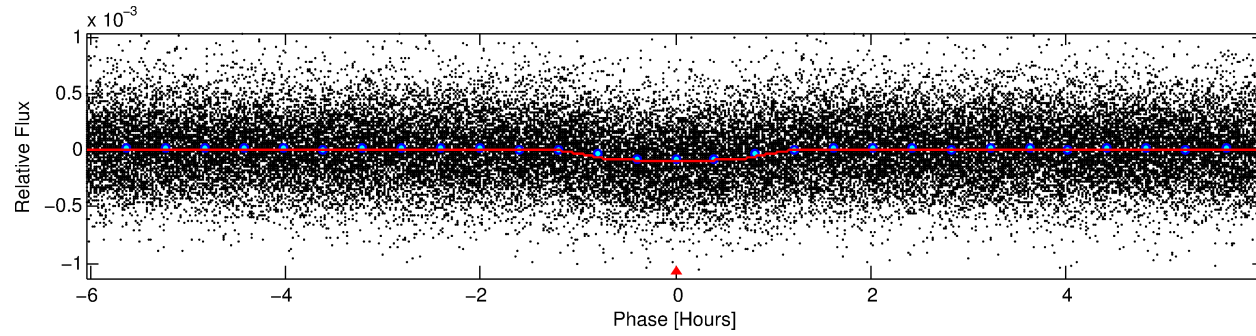
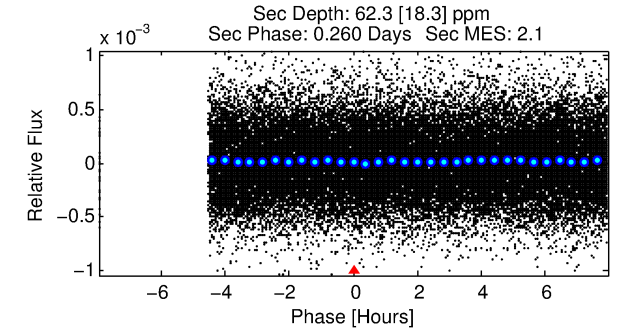
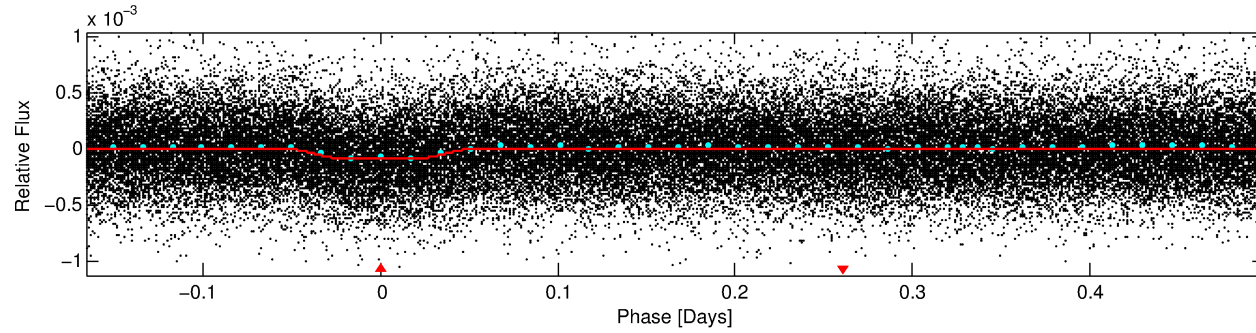
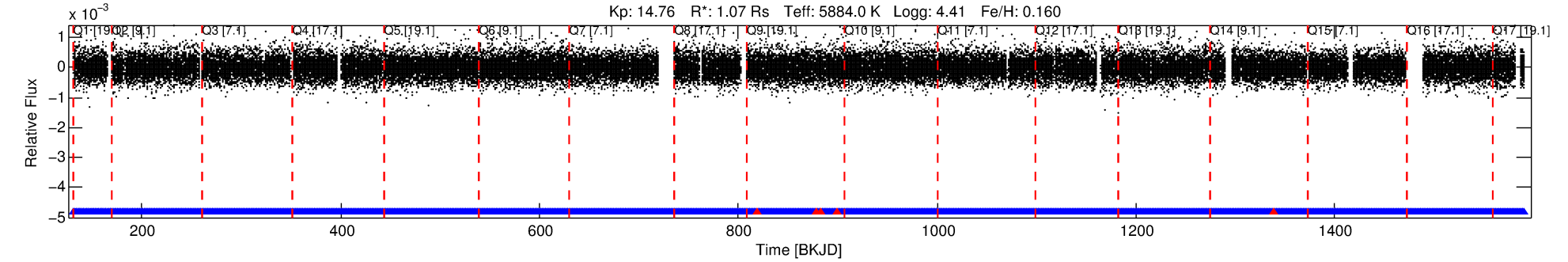
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006964929-01

No Significant Match Found

DV One-Page Summary

KIC: 6964929 Candidate: 1 of 1 Period: 0.665 d
KOI: K02756.01 Corr: 0.910



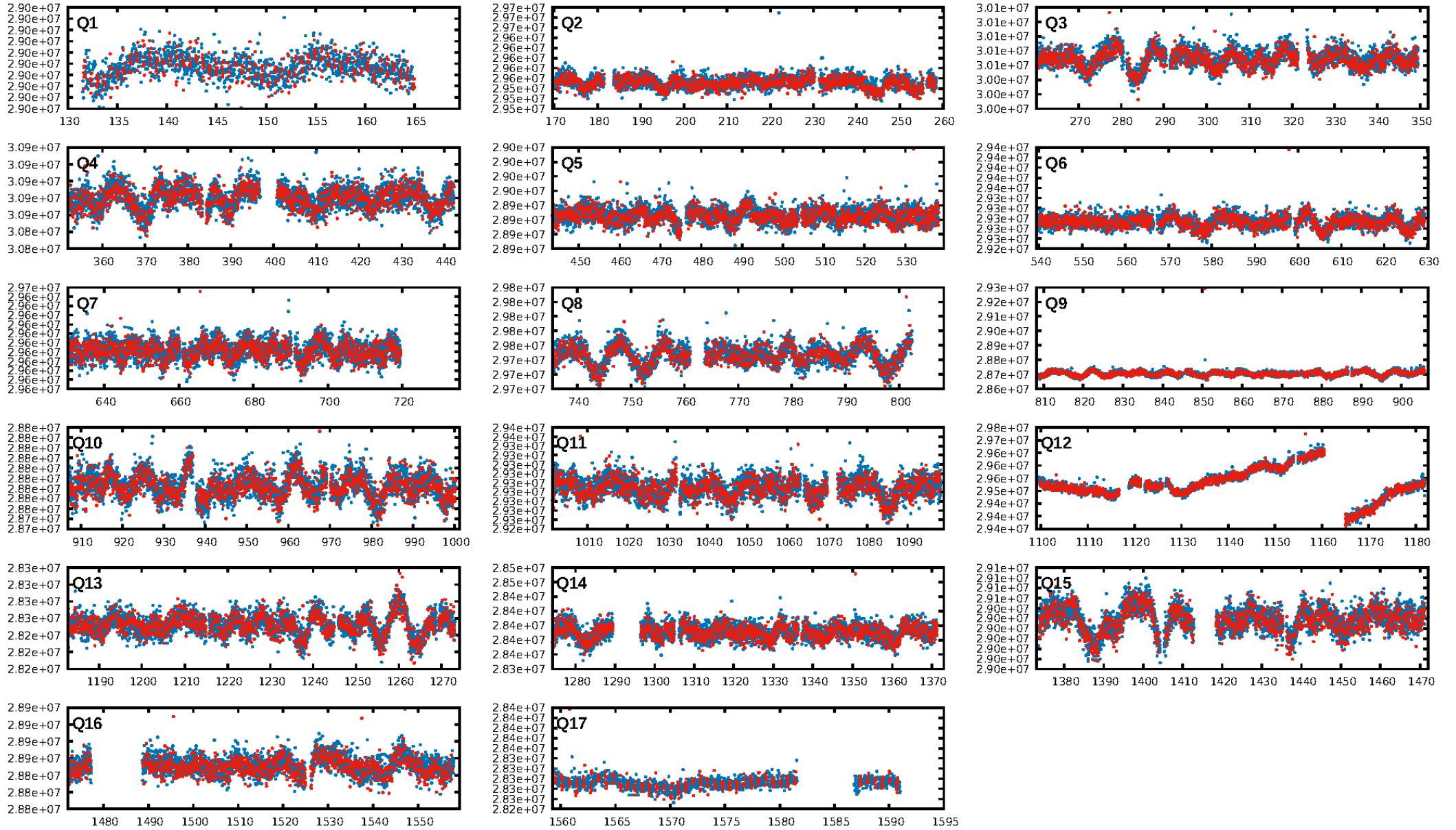
DV Fit Results:

Period = 0.66502 [0.00000] d
Epoch = 131.6685 [0.0012] BKJD
Rp/R* = 0.0104 [0.0040]
a/R* = 1.51 [1.57]
b = 0.89 [0.43]
Seff = 5289.29 [1132.43]
Teff = 2175 [116] K
Rp = 1.21 [0.50] Re
a = 0.0152 [0.0021] AU
Ag = 5.45 [4.62] [0.96σ]
Teffp = 5137 [1058] K [2.78σ]

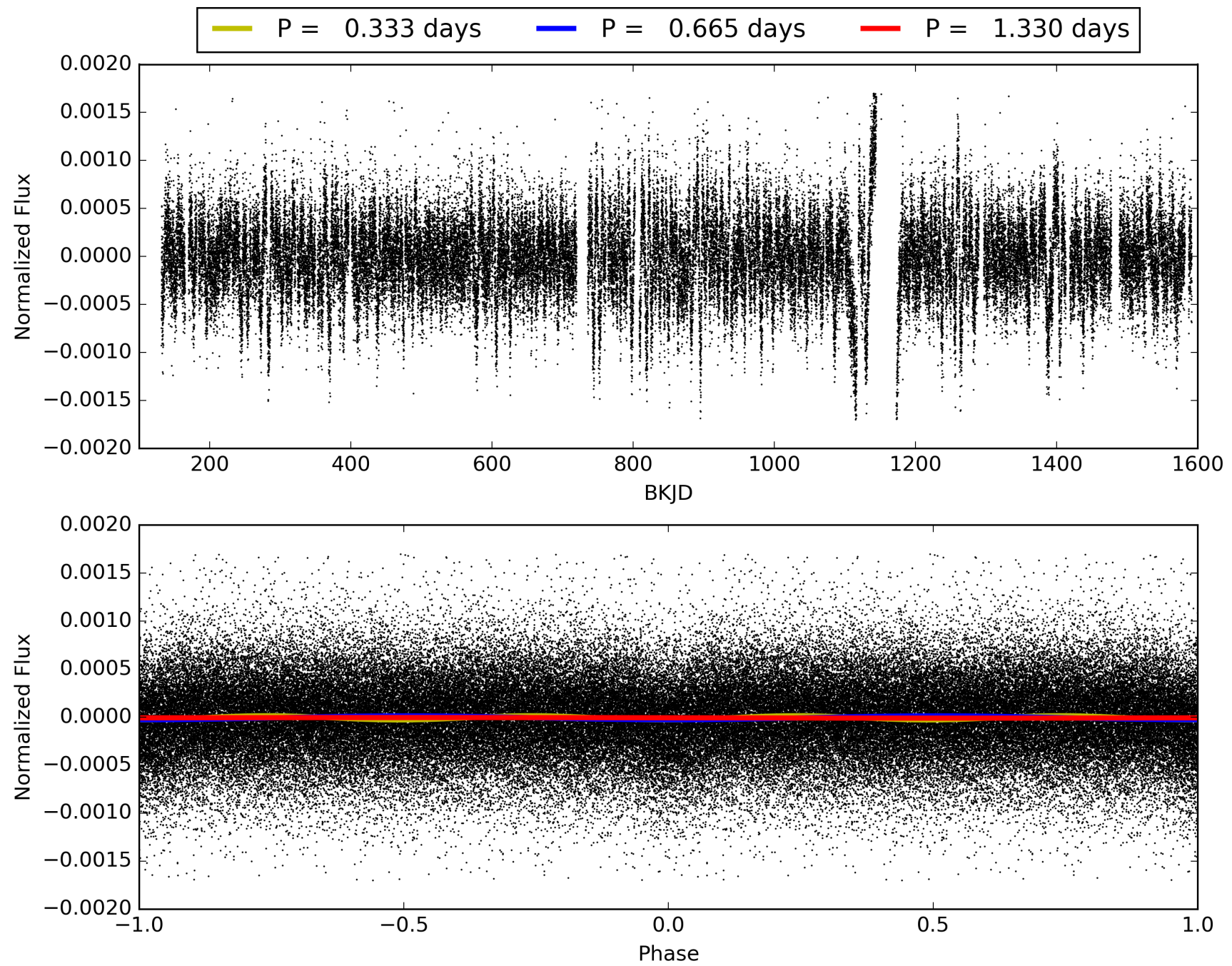
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 3.88e-101
RollingBand-fgt: 1.00 [1919/1924]
GhostDiagnostic-chr: 11.55
Centroid-sig: 0.1%
Centroid-so: 0.804 arcsec [1.48σ]
OotOffset-rm: 0.603 arcsec [3.46σ]
KicOffset-rm: 0.603 arcsec [3.22σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 1.00 [17/17]
DiffImageOverlap-fno: 1.00 [17/17]

TCE 006964929-01, PDC Light Curves

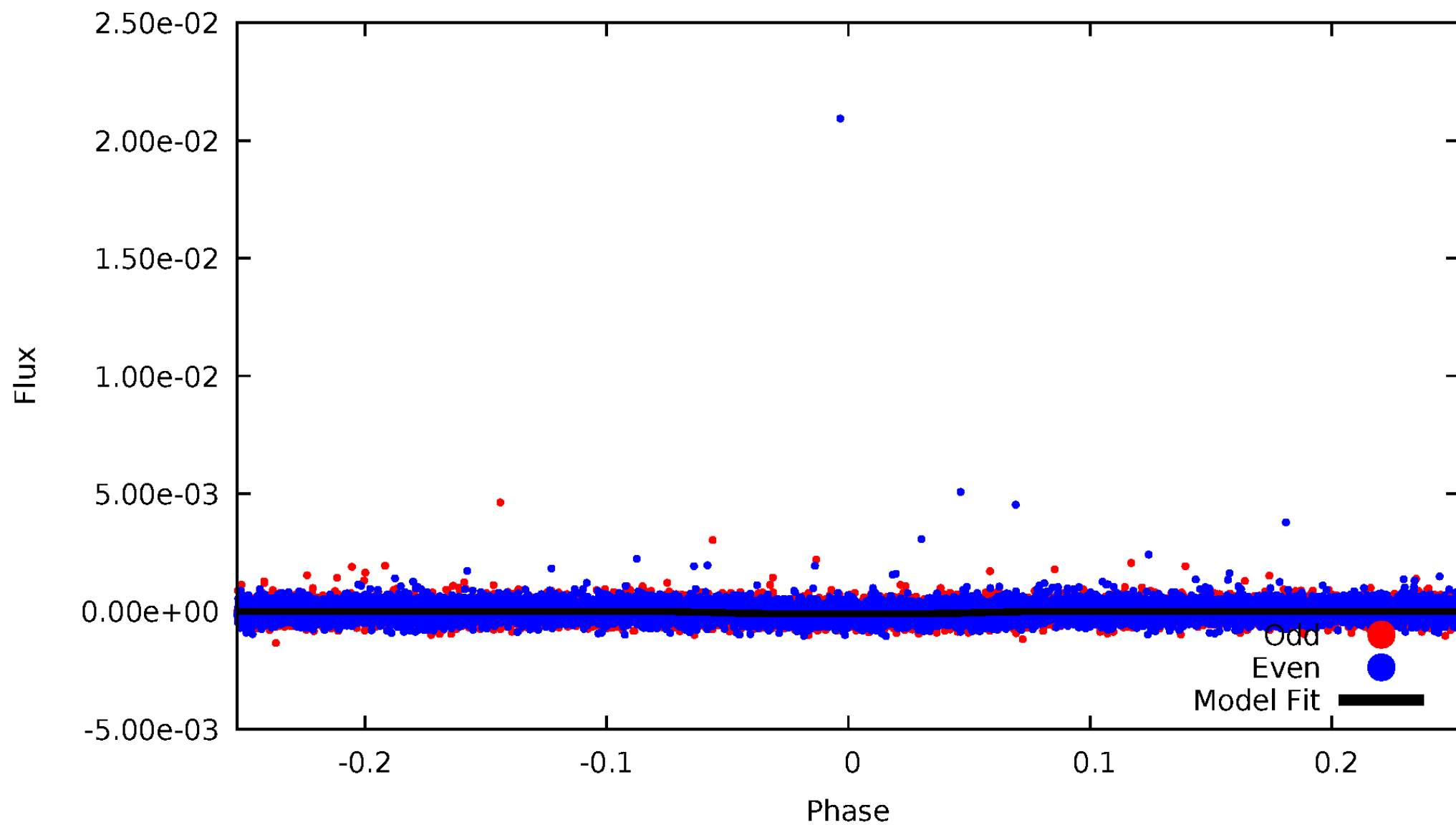


TCE 006964929-01



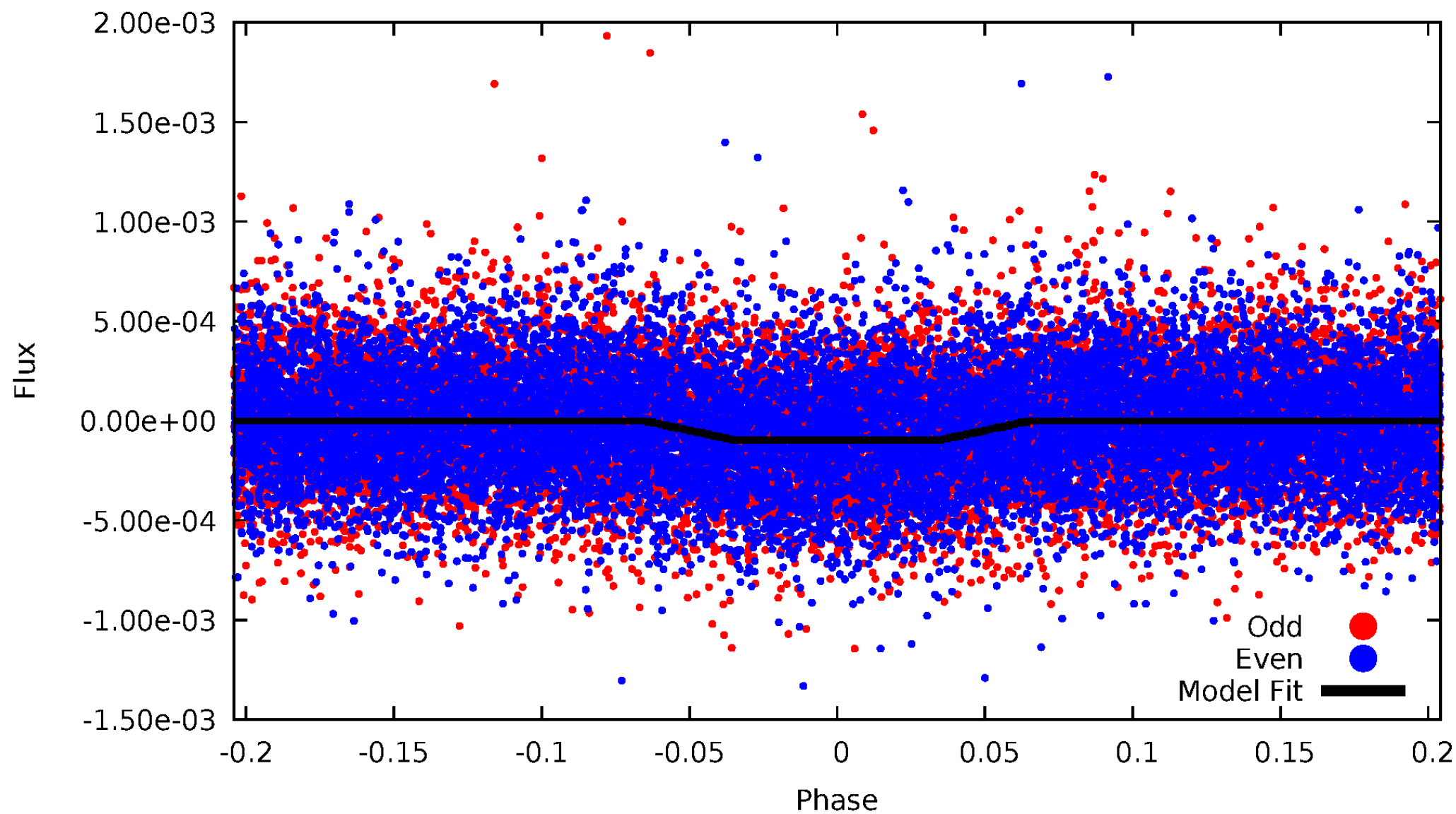
DV Odd/Even

TCE 006964929-01

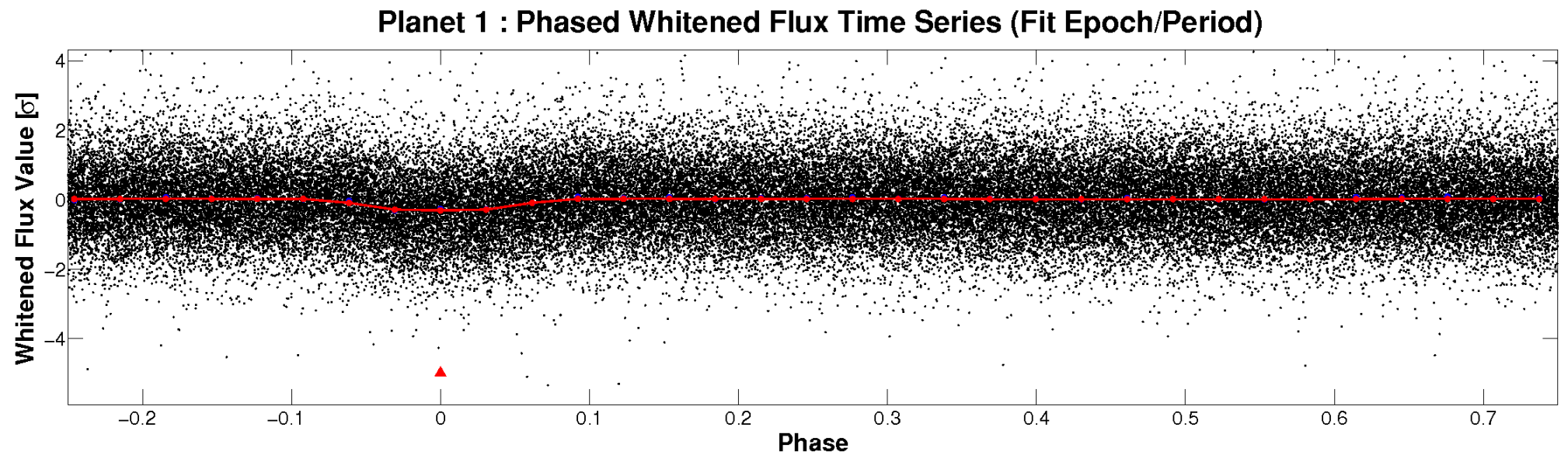
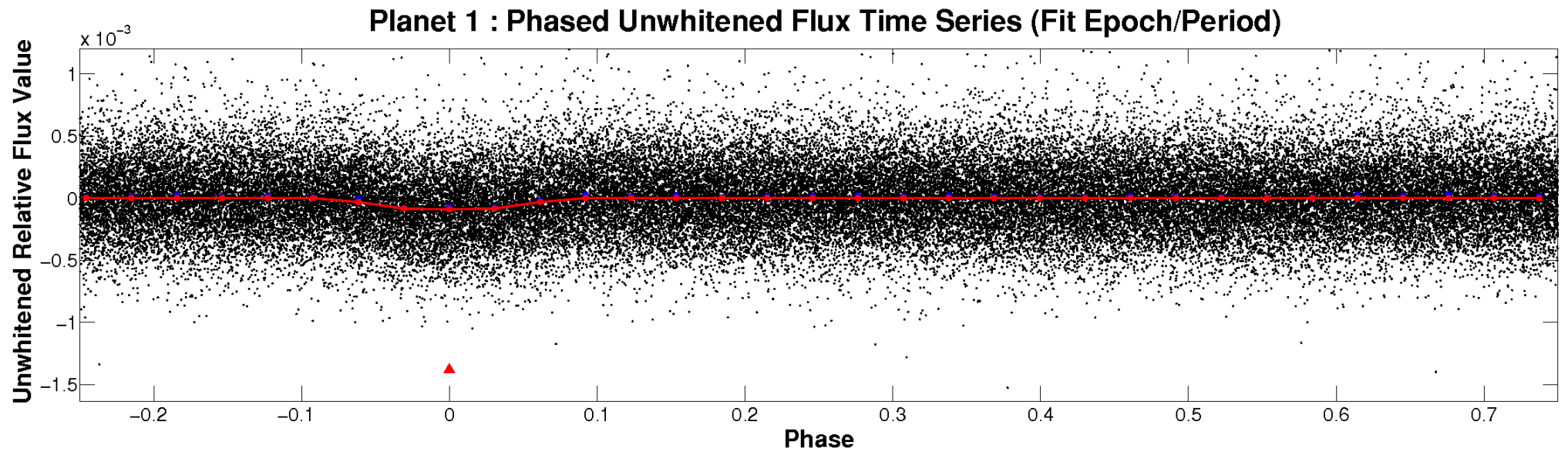


ALT Odd/Even

TCE 006964929-01

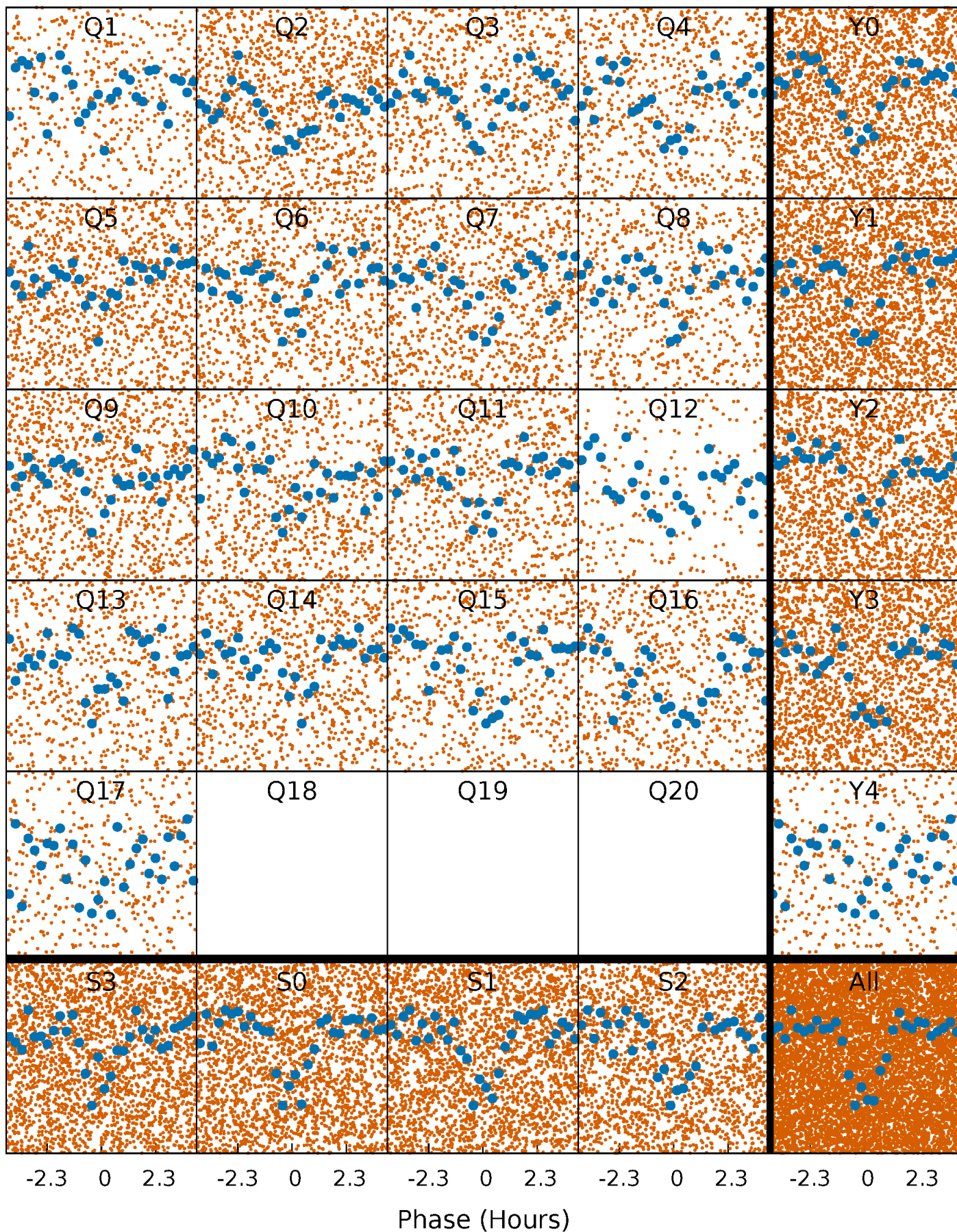


Non-Whitened Vs. Whitened Light Curve



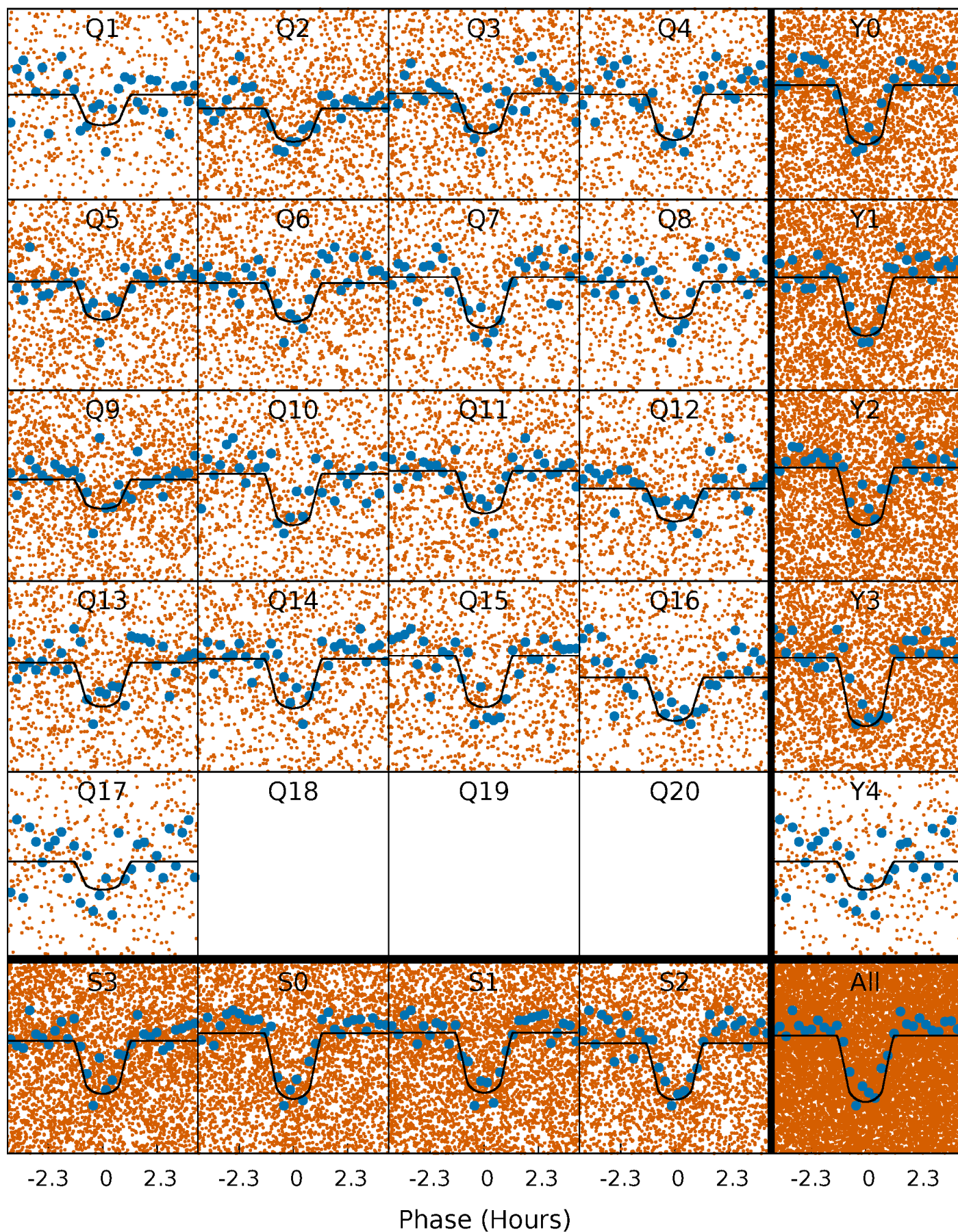
PDC Quarter-Phased Transit Curves

TCE 006964929-01 P= 0.665016 Days $T_0=131.668465$ (BKJD)



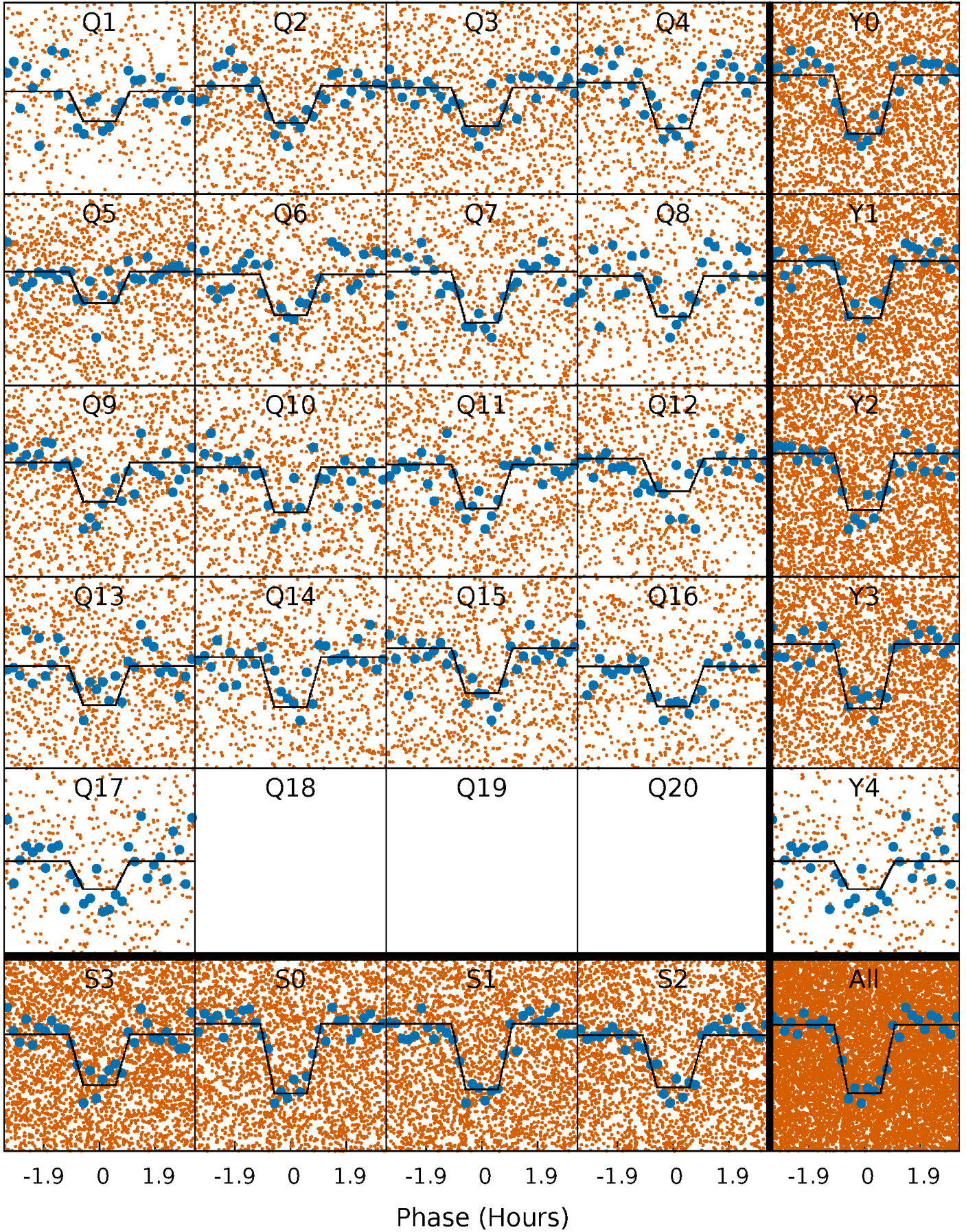
DV Quarter-Phased Transit Curves

TCE 006964929-01 P= 0.665016 Days $T_0=131.668465$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

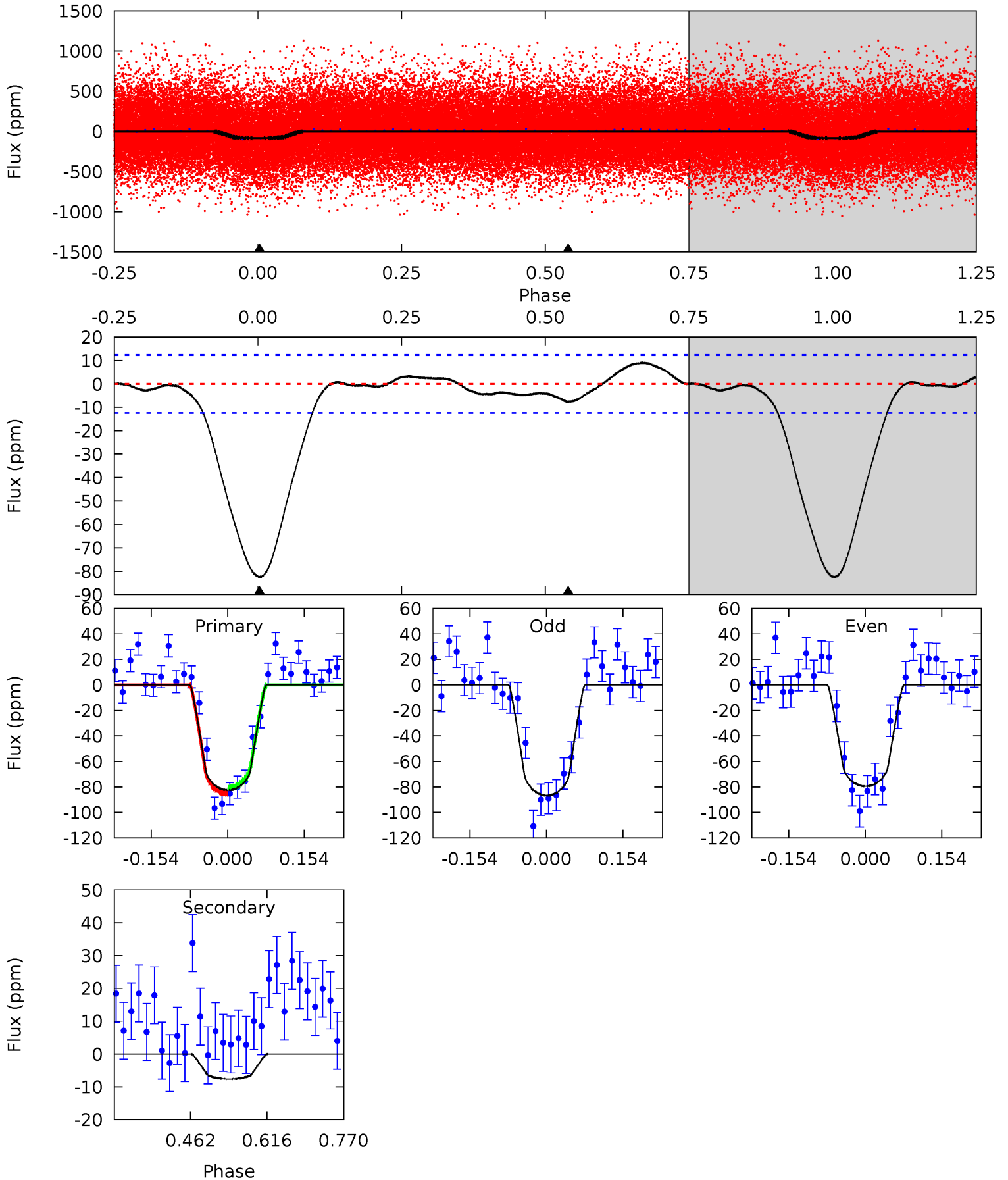
TCE 006964929-01 P= 0.665024 Days $T_0=131.662289$ (BKJD)



DV Model-Shift Uniqueness Test

006964929-01, P = 0.665016 Days, E = 131.003449 Days

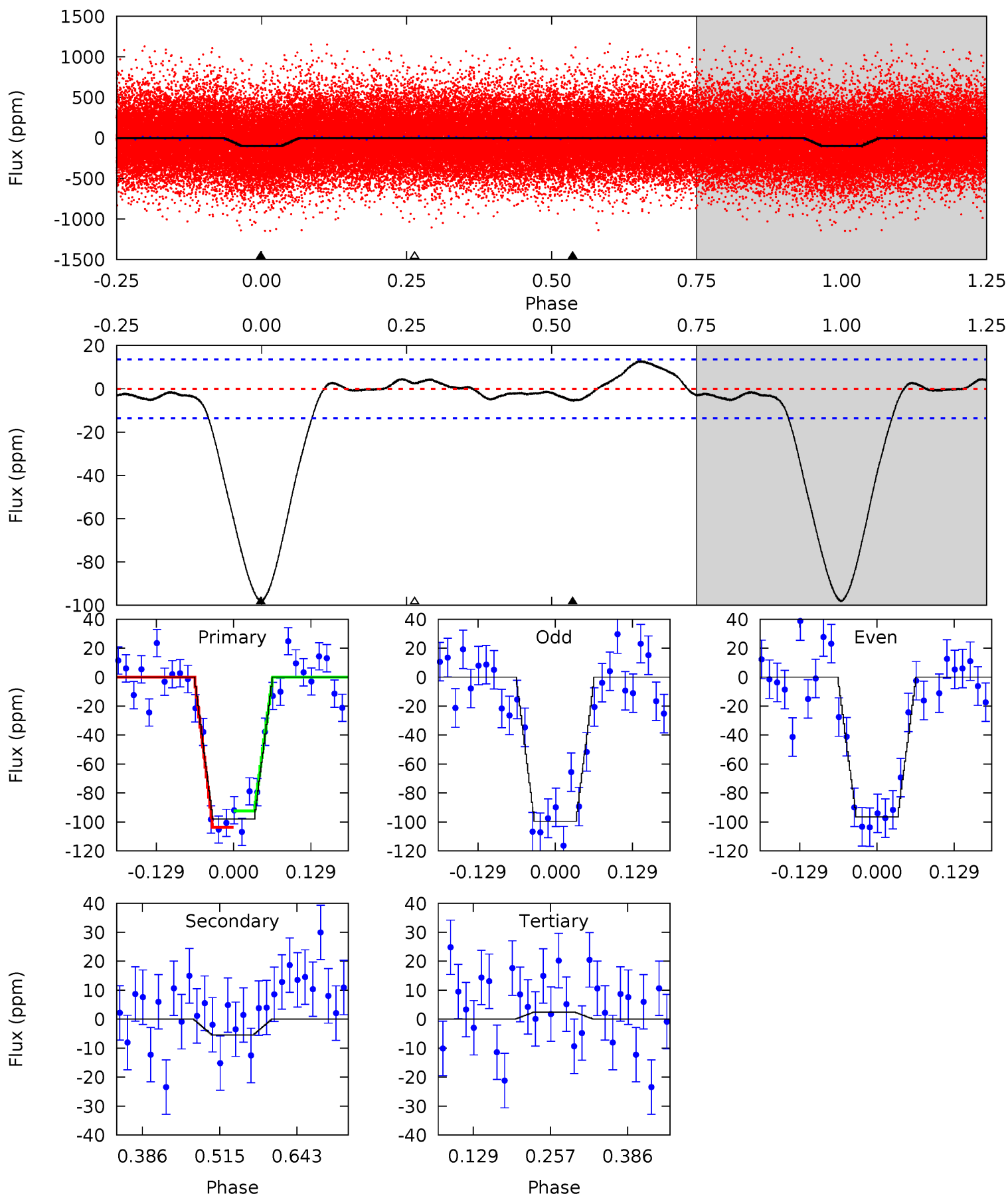
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
29.9	2.76	0	0	4.47	1.43	0.85	29.9	29.9	2.76	2.76	1.32	0.93	0.10	0.83



Alt Model-Shift Uniqueness Test

006964929-01, P = 0.665024 Days, E = 130.997265 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
32.6	1.80	-0.80	0	4.51	1.52	1.32	33.4	32.6	2.60	1.80	0.49	0.99	0.11	1.87



Stellar Parameters For KIC 006964929

	$T_{\text{eff}}(K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5884^{+70}_{-79}	$4.408^{+0.063}_{-0.117}$	$0.160^{+0.150}_{-0.150}$	$1.070^{+0.166}_{-0.083}$	$1.070^{+0.064}_{-0.070}$	$1.229^{+0.301}_{-0.437}$
	+1%/-1%	+1%/-3%	+94%/-94%	+16%/-8%	+6%/-7%	+25%/-36%
Source	SPE90	SPE90	SPE90	DSEP		

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

Secondary Eclipse Parameters for KIC 006964929-01 / KOI 2756.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-8 ± 3	$1.19^{+0.50}_{-0.45}$	3046^{+124}_{-83}	3185^{+874}_{-5409}	$0.636^{+1.224}_{-0.357}$
Alt.	-5 ± 3	$1.16^{+0.47}_{-0.48}$	3042^{+122}_{-82}	2930^{+1030}_{-5700}	$0.498^{+1.058}_{-0.327}$

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

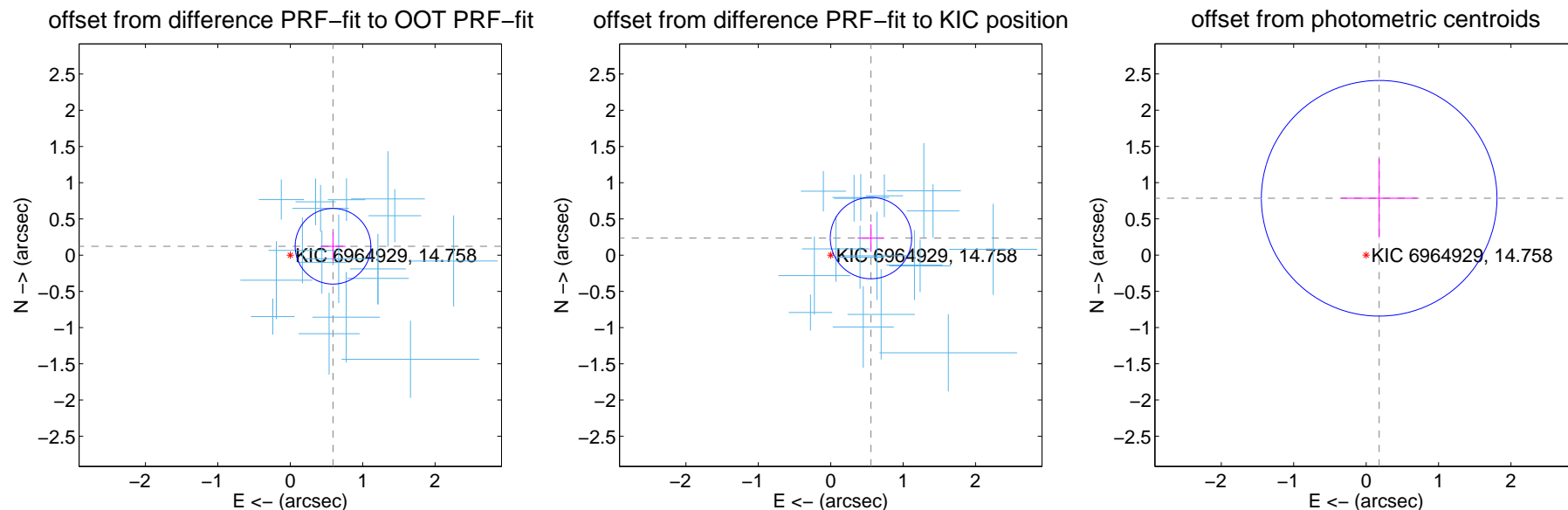
DV Centroid Data

Supplemental centroid analysis for 006964929-01. Kepler magnitude: 14.76. Transit SNR 23.16

There are 17 quarters with good PRF difference image offsets

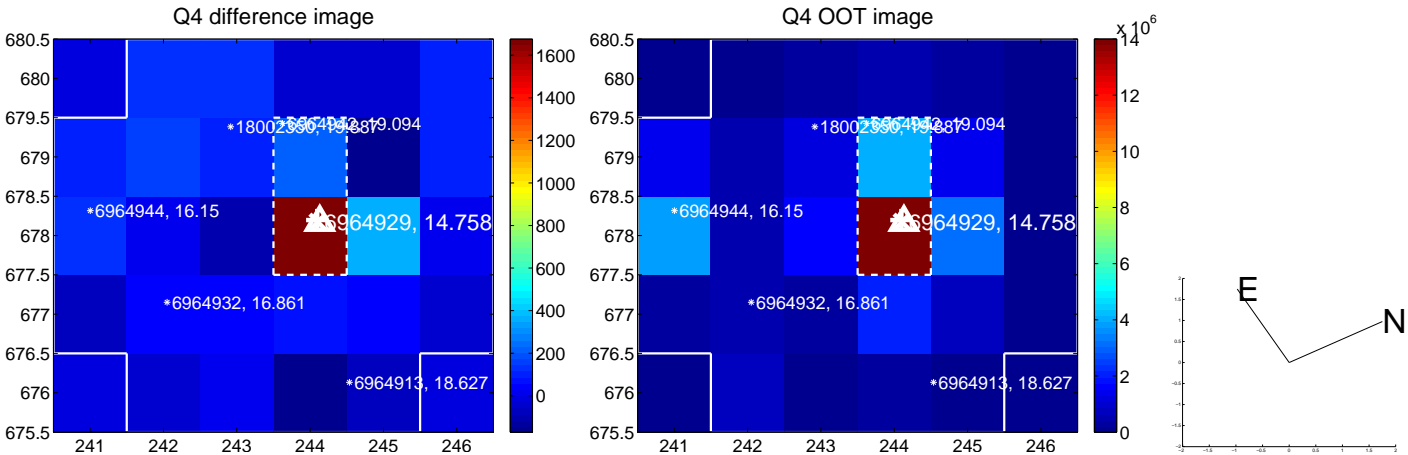
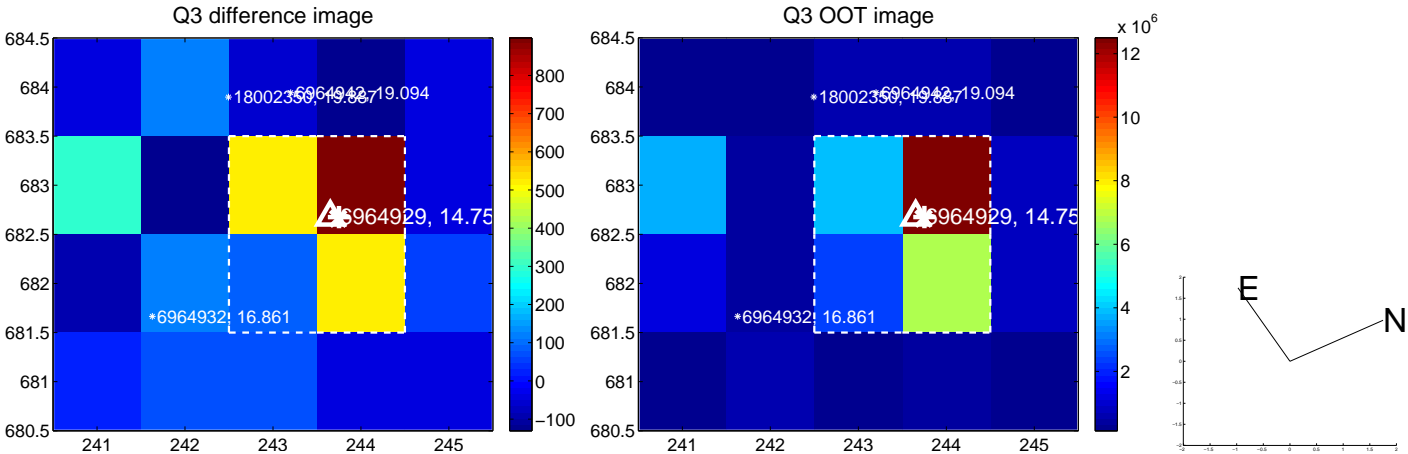
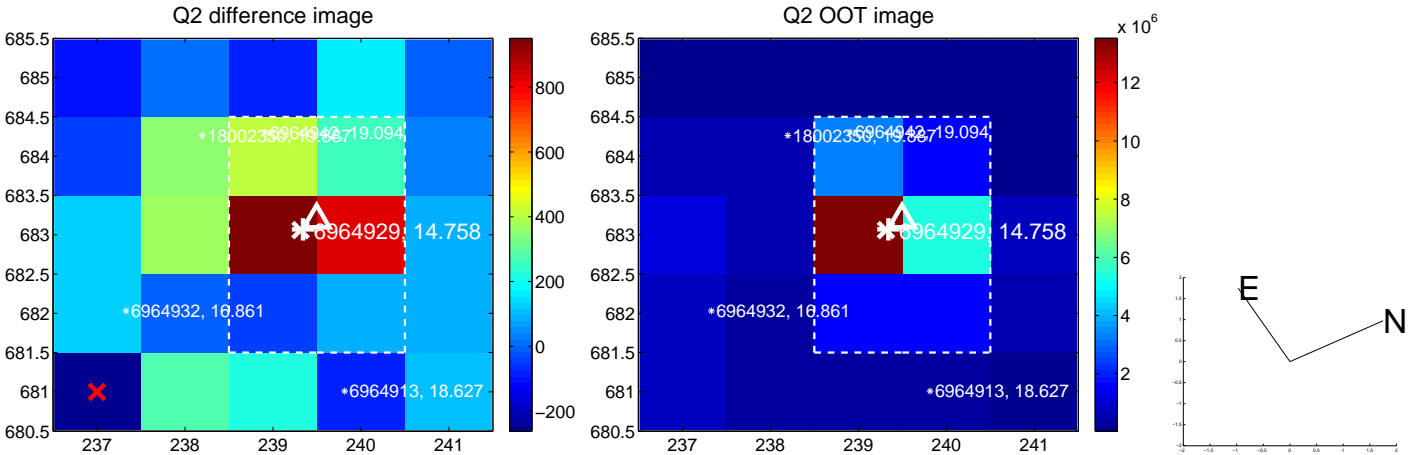
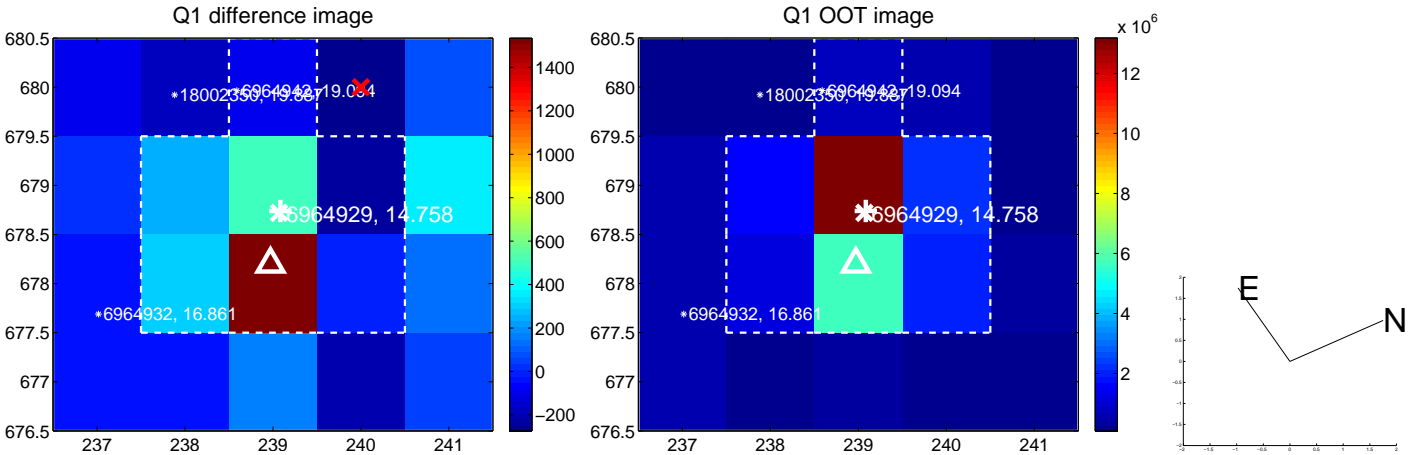
The direct PRF centroid is offset from the target star catalog position by about 0.13 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.603 ± 0.174	3.46	-0.590 ± 0.173	0.123 ± 0.198
PRF-fit source offset from KIC position	0.603 ± 0.187	3.22	-0.556 ± 0.183	0.236 ± 0.189
photometric centroid source offset	0.80 ± 0.54	1.48	-0.18 ± 0.52	0.78 ± 0.54

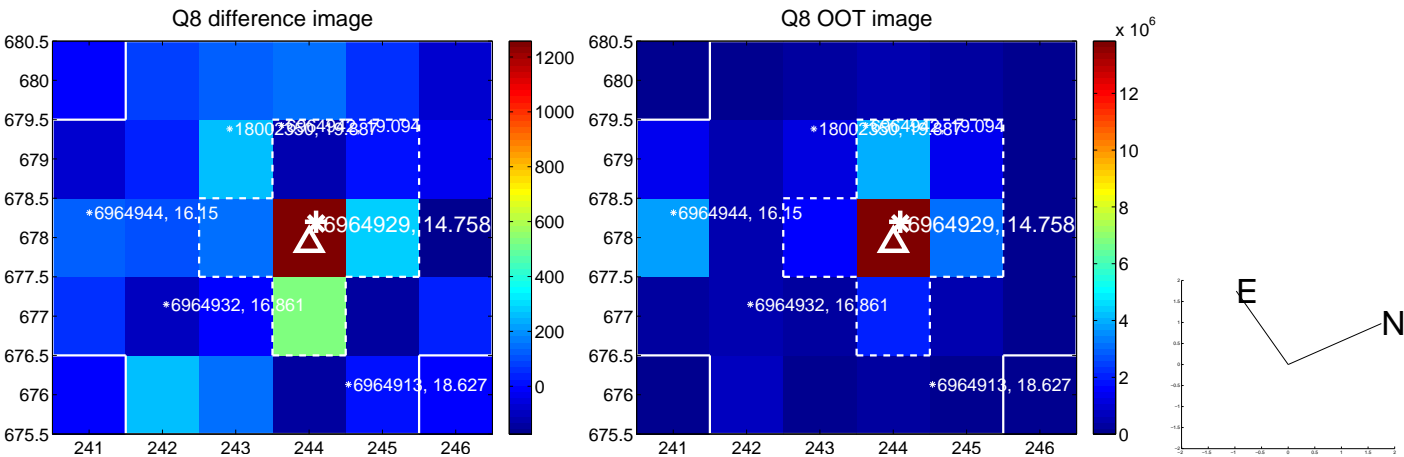
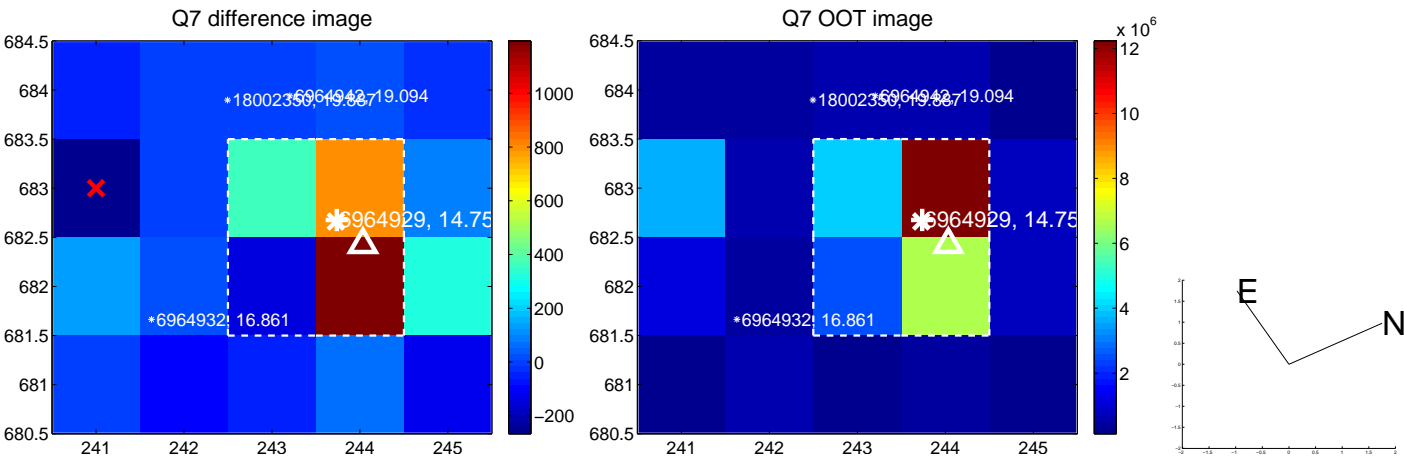
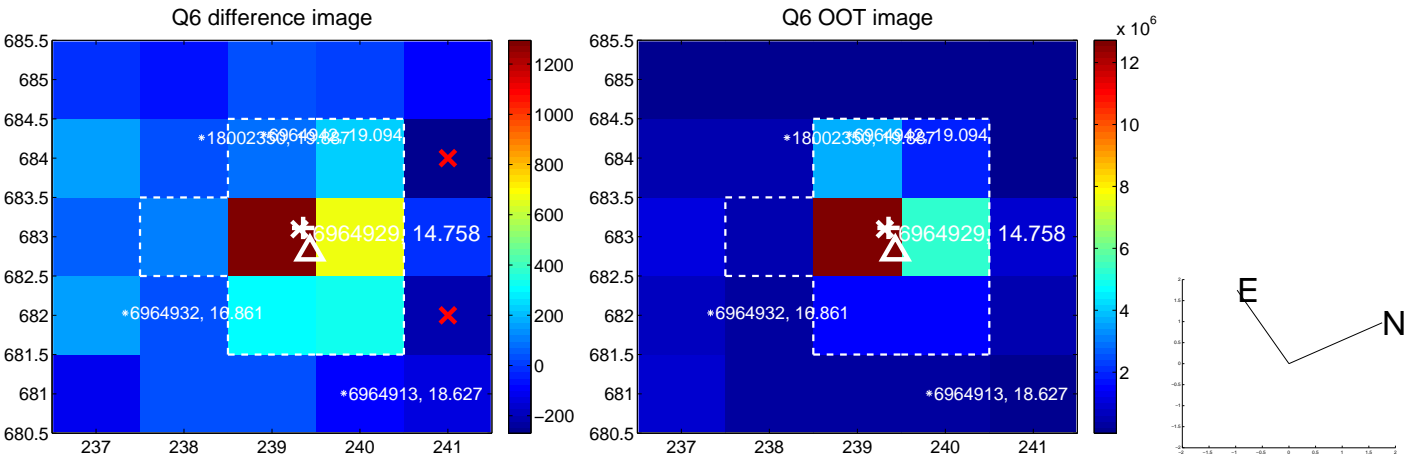
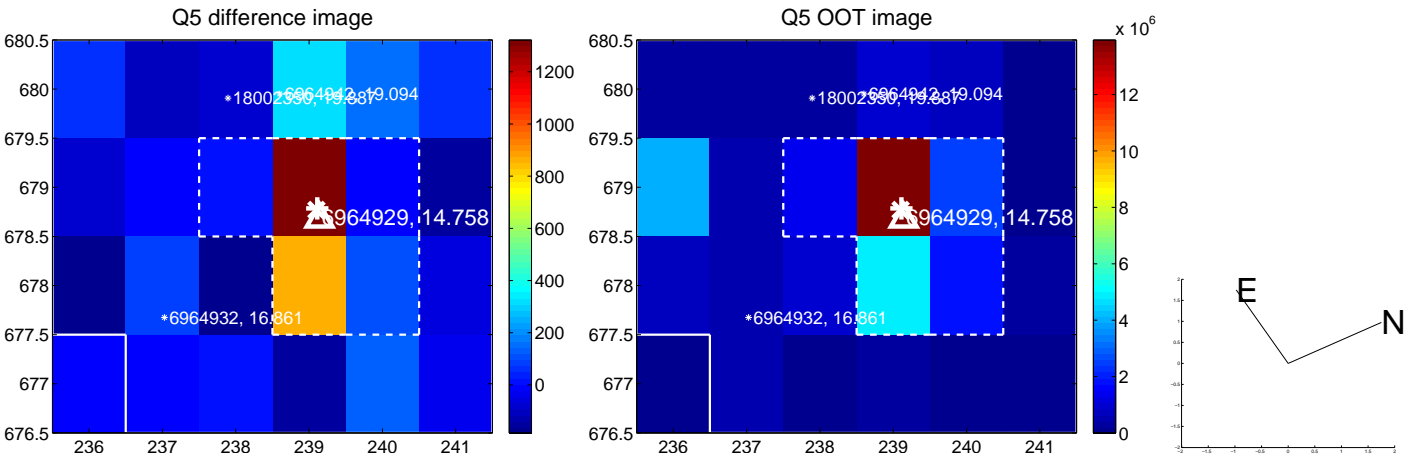


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

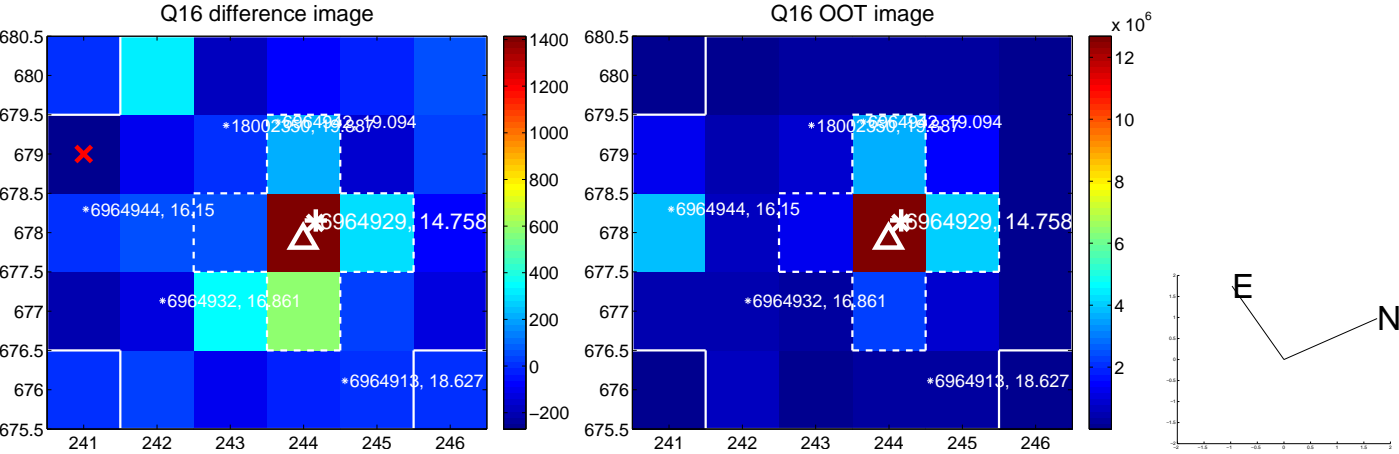
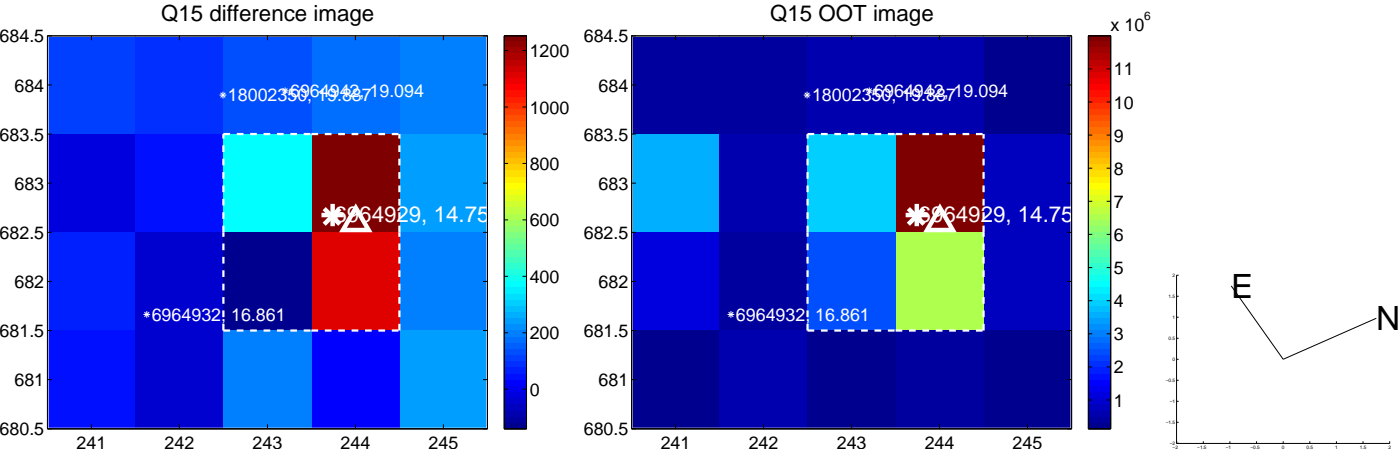
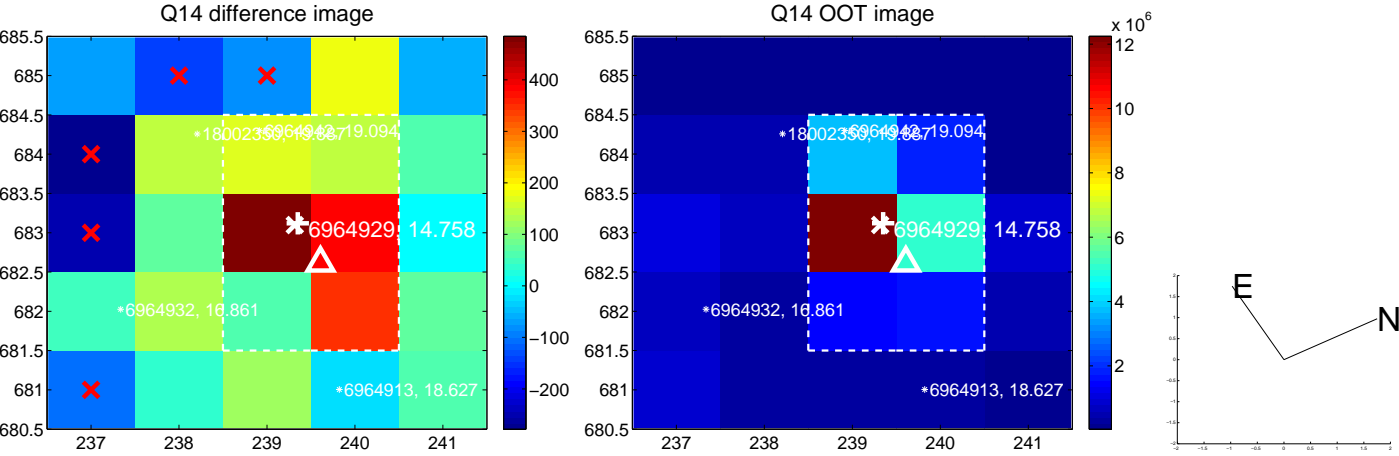
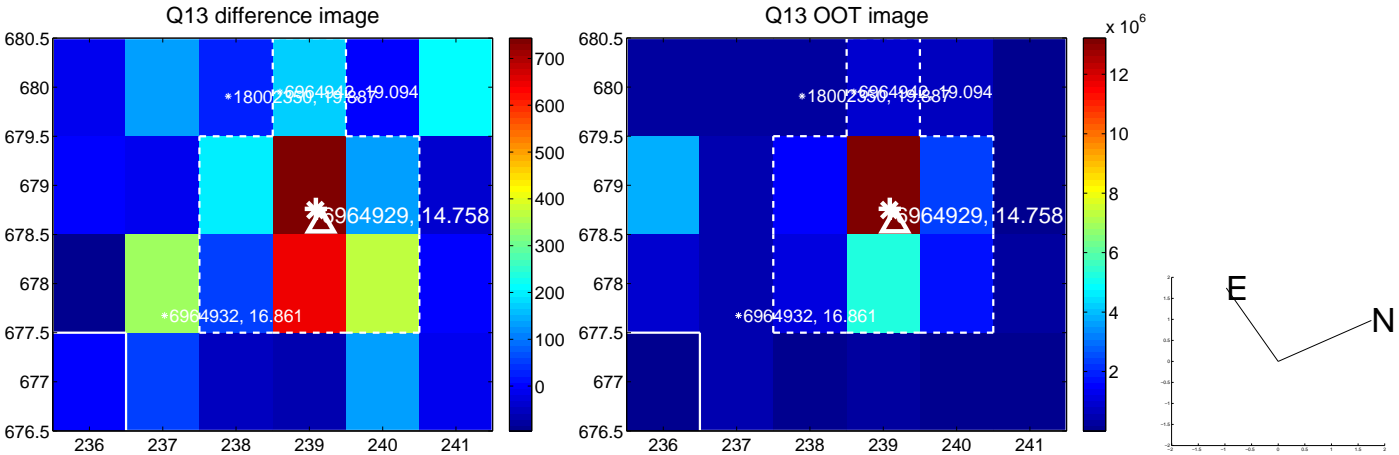
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



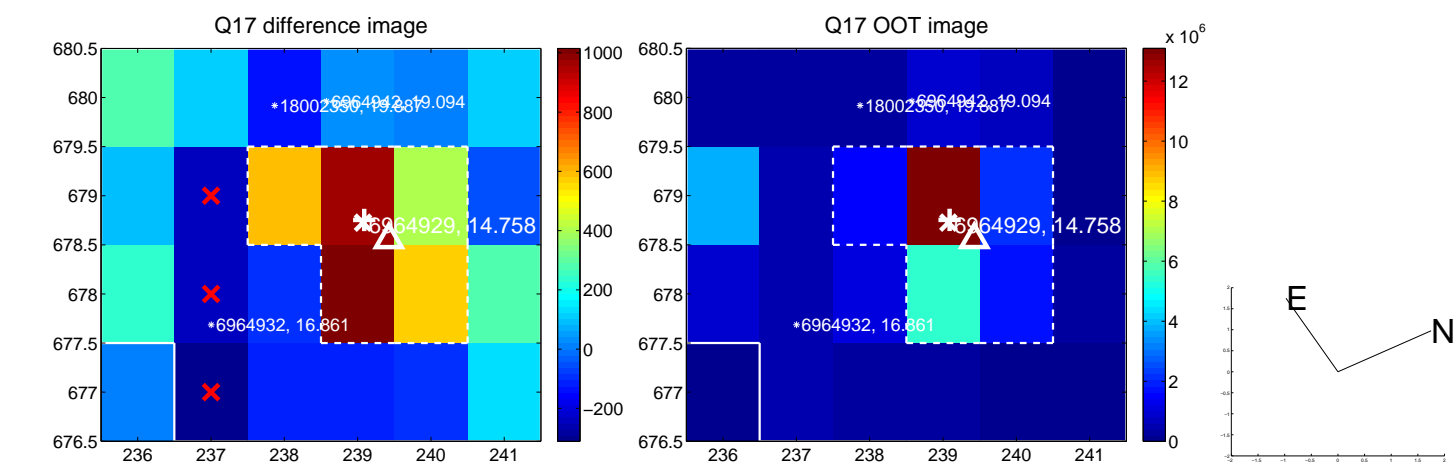
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



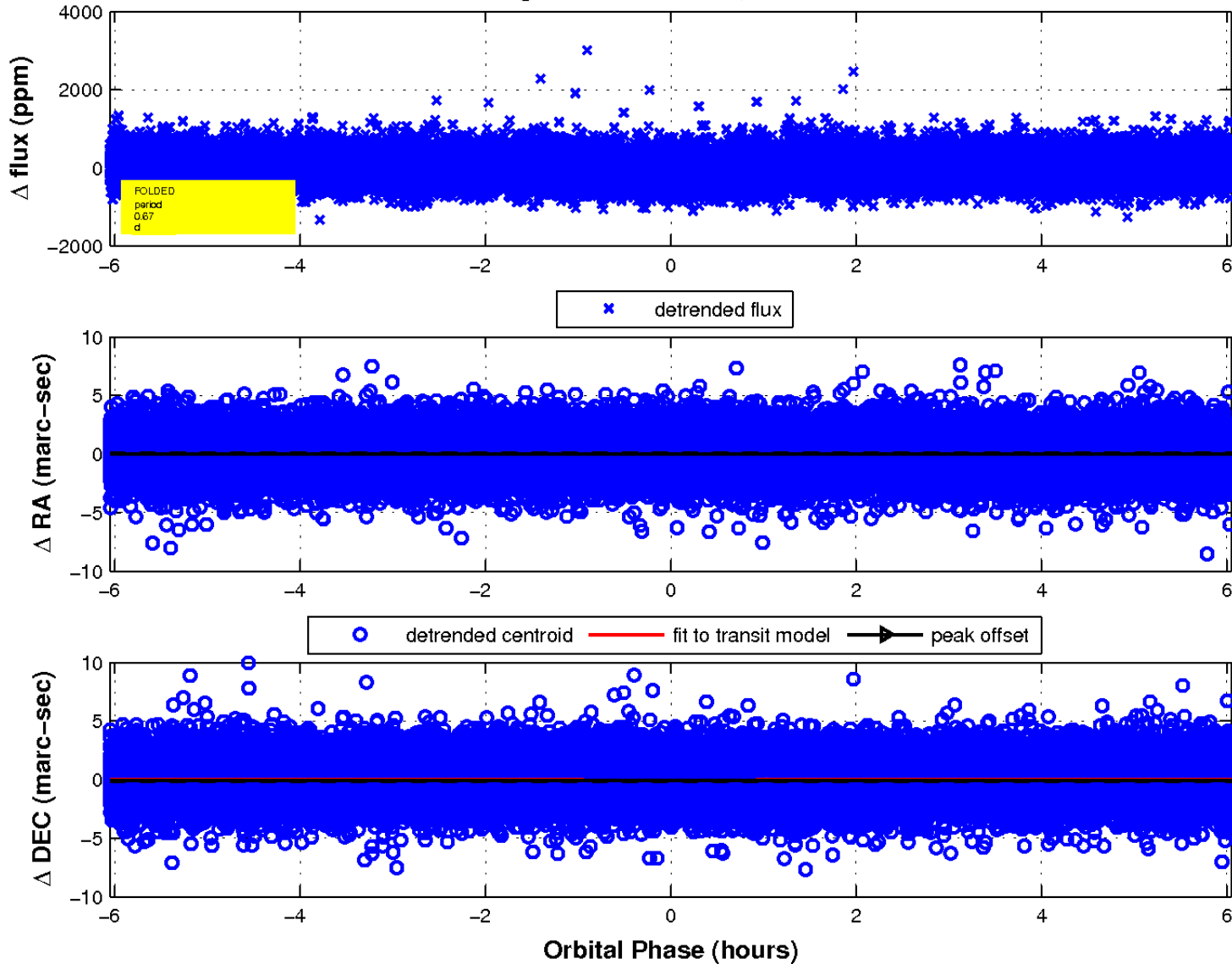
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white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

