

KIC 010964265

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})
010964265-01	OBS	2934.01	0.637480	131.988498	112.0	1.690	12.1	12.1	1.08	6173	1.35	7025.49

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010964265-01	OBS	FP	0.13	0	0	1	0	CENT_RESOLVED_OFFSET

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

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

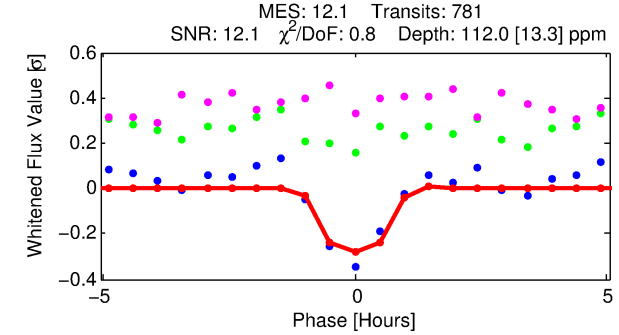
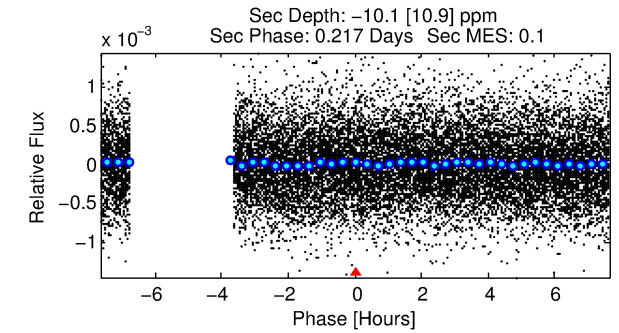
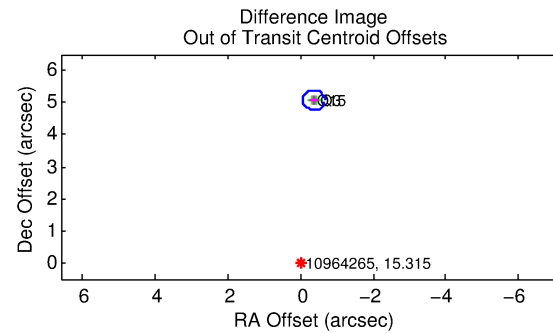
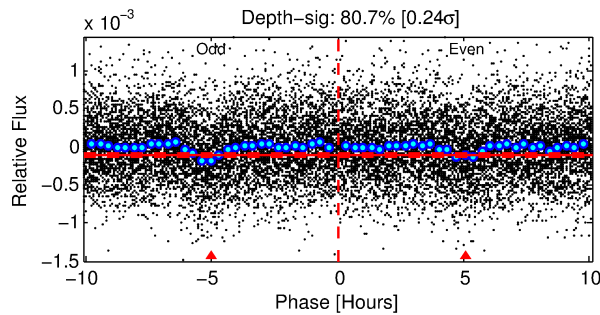
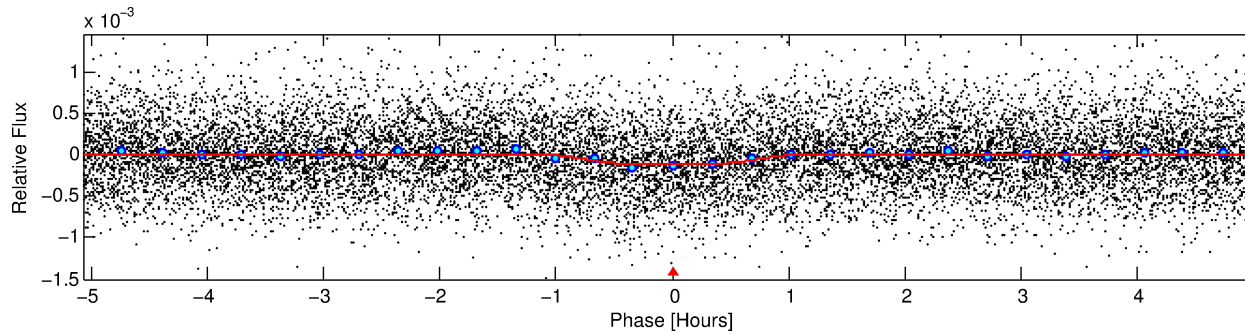
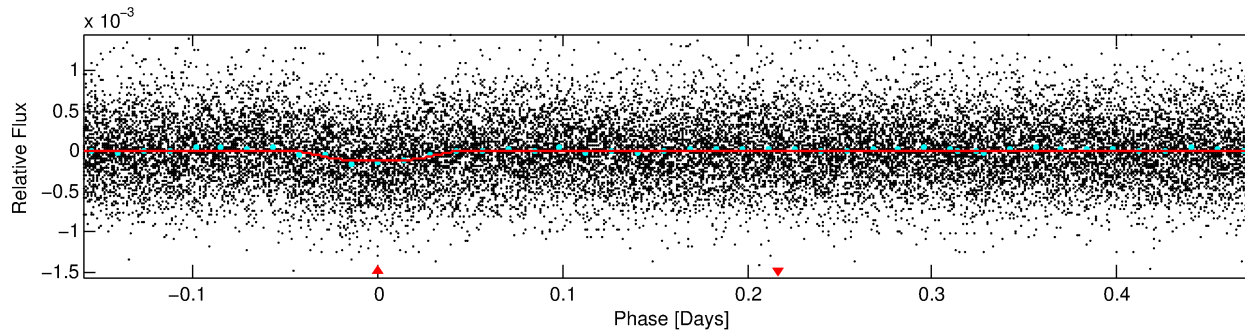
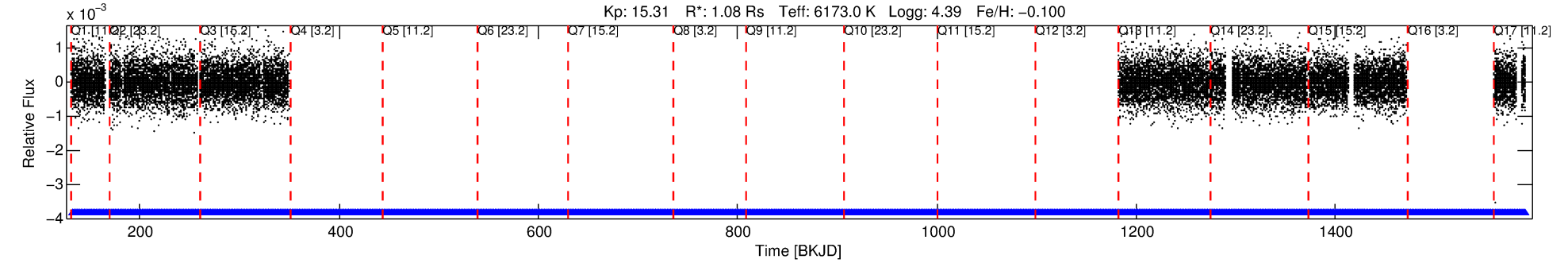
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 010964265-01

No Significant Match Found

DV One-Page Summary

KIC: 10964265 Candidate: 1 of 1 Period: 0.637 d
KOI: K02934.01 Corr: 0.922



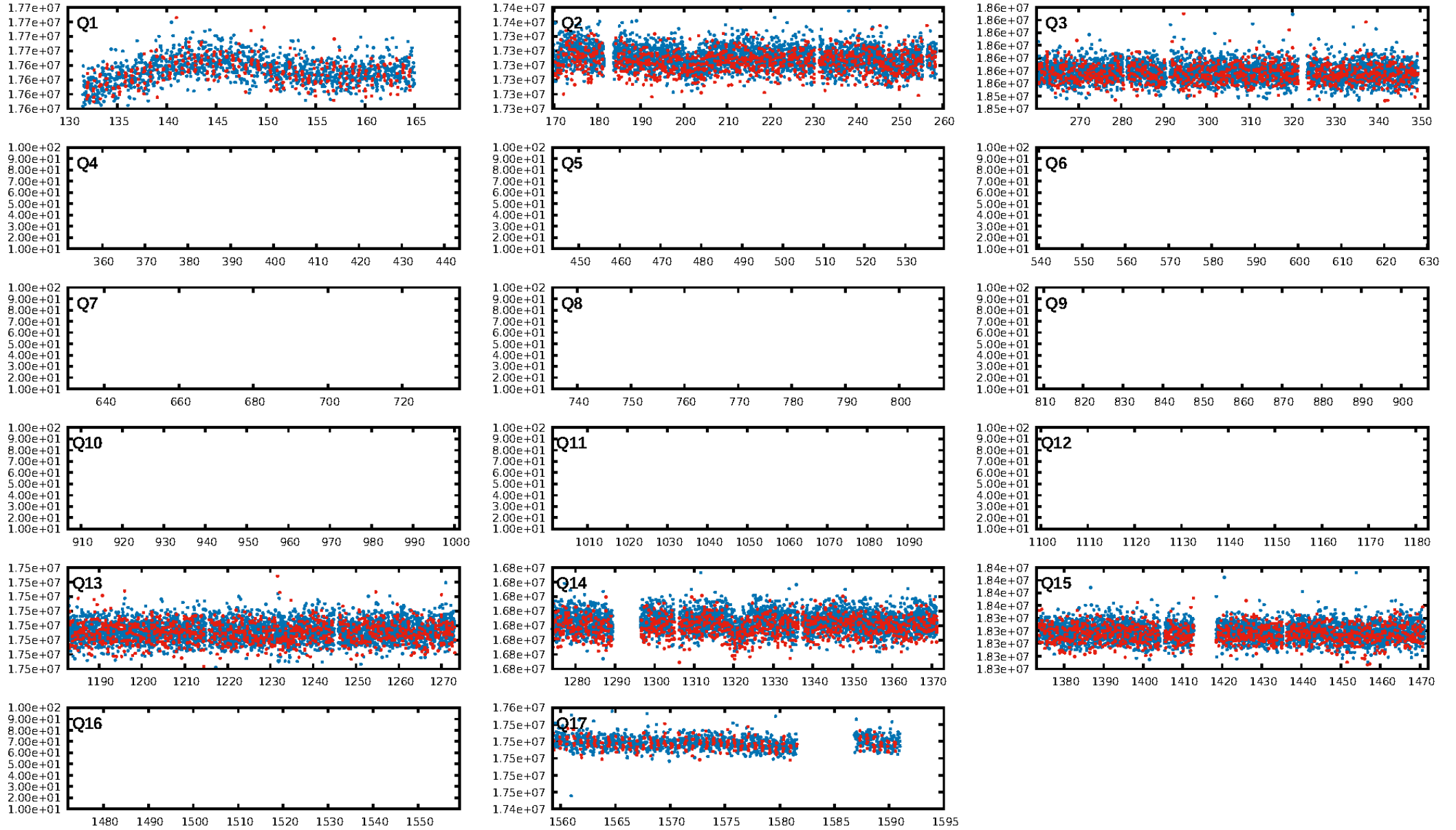
DV Fit Results:

Period = 0.63748 [0.00001] d
Epoch = 131.9885 [0.0021] BKJD
Rp/R* = 0.0115 [0.0074]
a/R* = 1.62 [3.48]
b = 0.90 [0.73]
Seff = 7025.49 [2858.45]
Teff = 2335 [237] K
Rp = 1.35 [0.98] Re
a = 0.0147 [0.0039] AU
Ag = N/A
Teffp = N/A

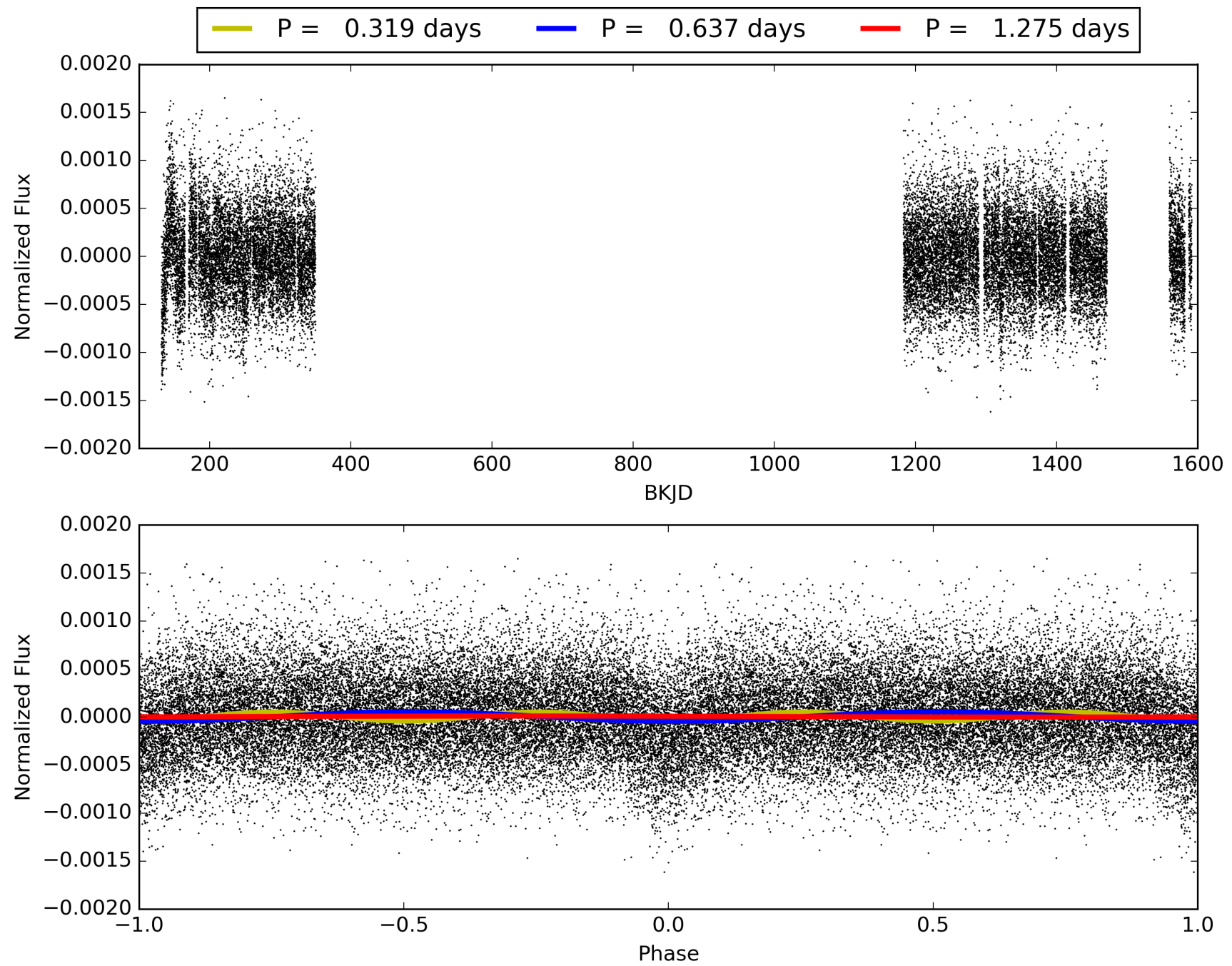
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 7.57e-33
RollingBand-fgt: 1.00 [687/687]
GhostDiagnostic-chr: -0.8351
Centroid-sig: 0.0%
Centroid-so: 11.642 arcsec [8.80 σ]
OotOffset-rm: 5.087 arcsec [48.97 σ]
KicOffset-rm: 4.899 arcsec [47.15 σ]
OotOffset-st: 0/2/0/0 [2]
KicOffset-st: 0/2/0/0 [2]
DiffImageQuality-fgm: 1.00 [2/2]
DiffImageOverlap-fno: 1.00 [7/7]

TCE 010964265-01, PDC Light Curves

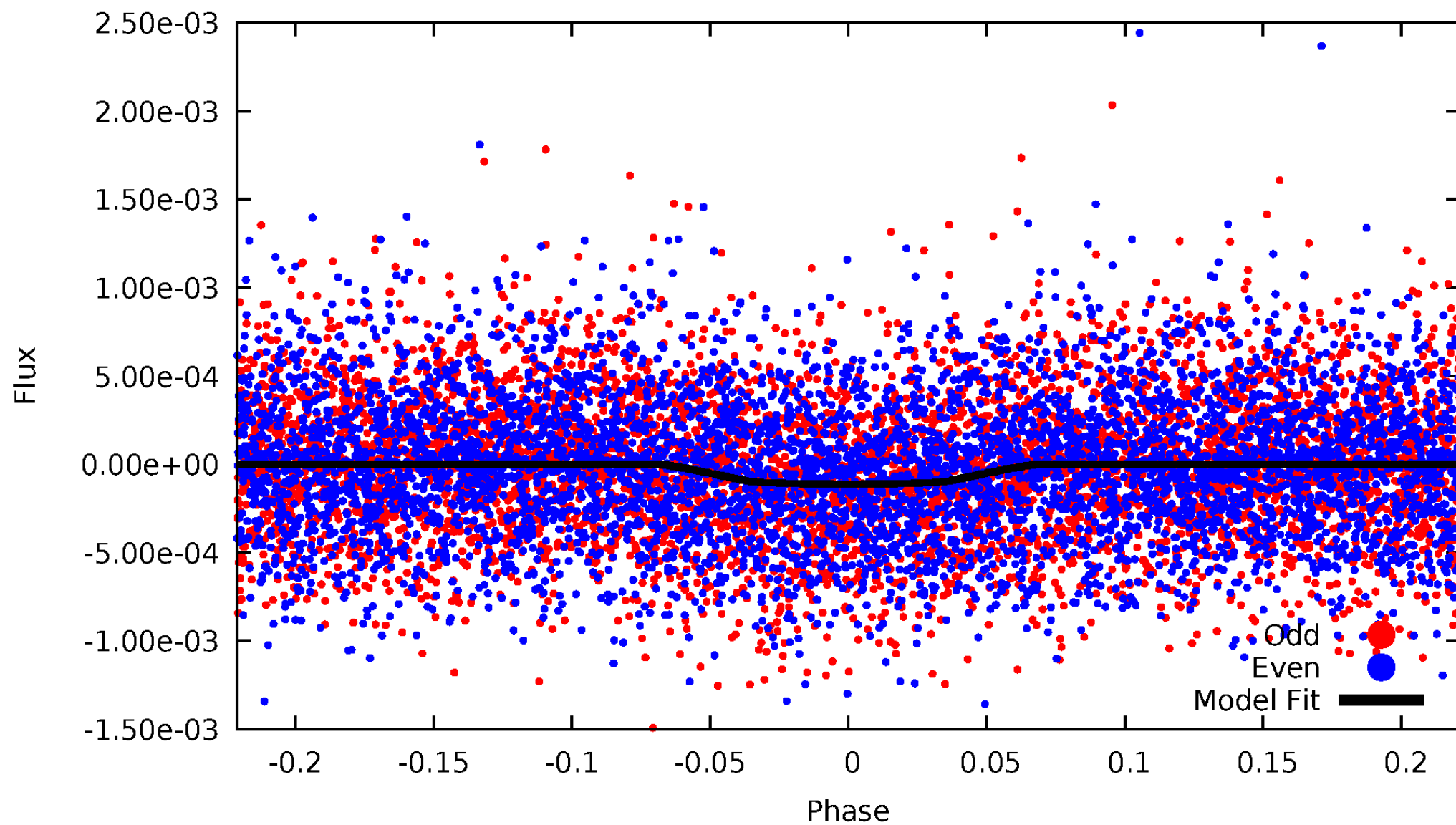


TCE 010964265-01



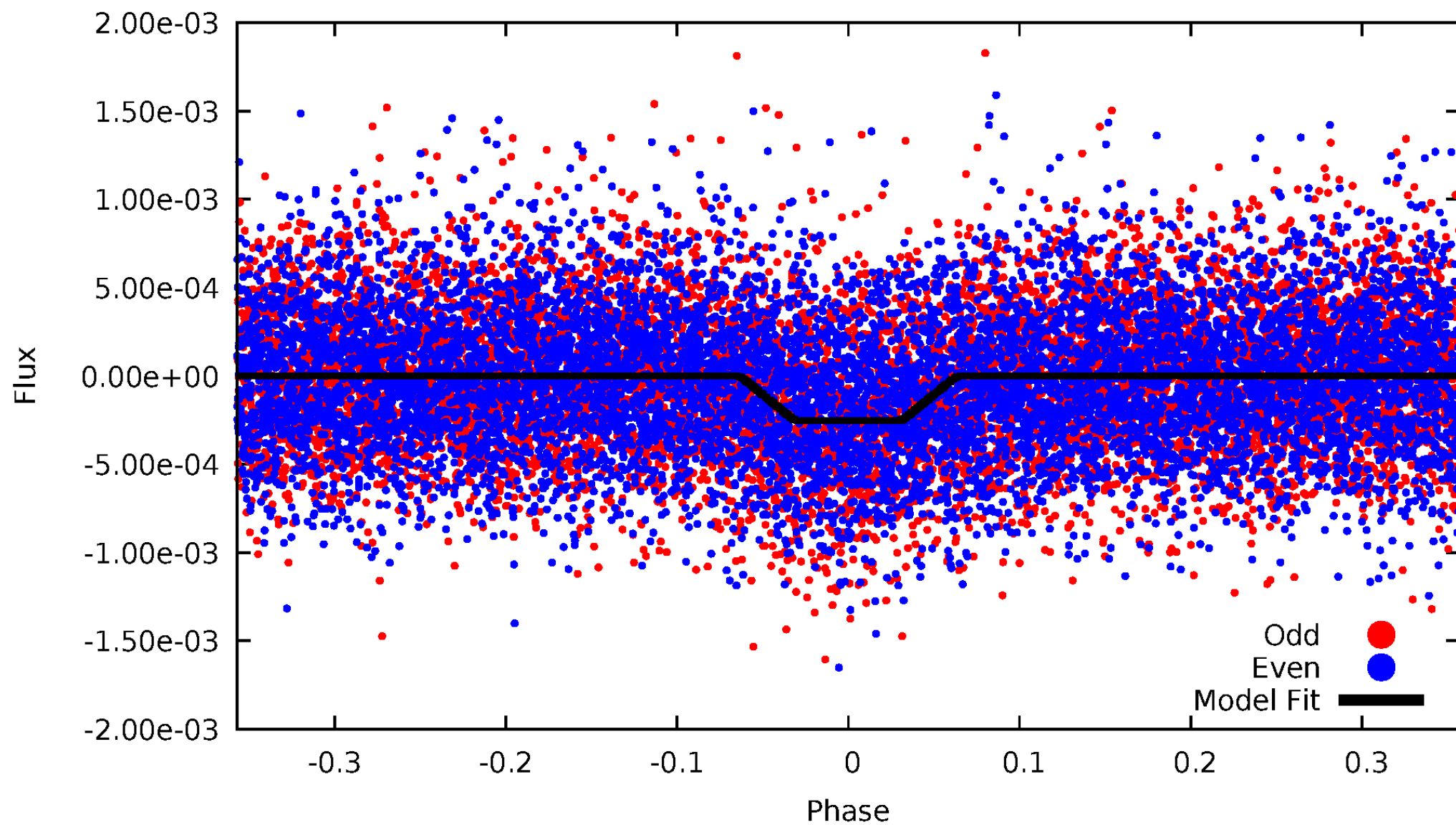
DV Odd/Even

TCE 010964265-01

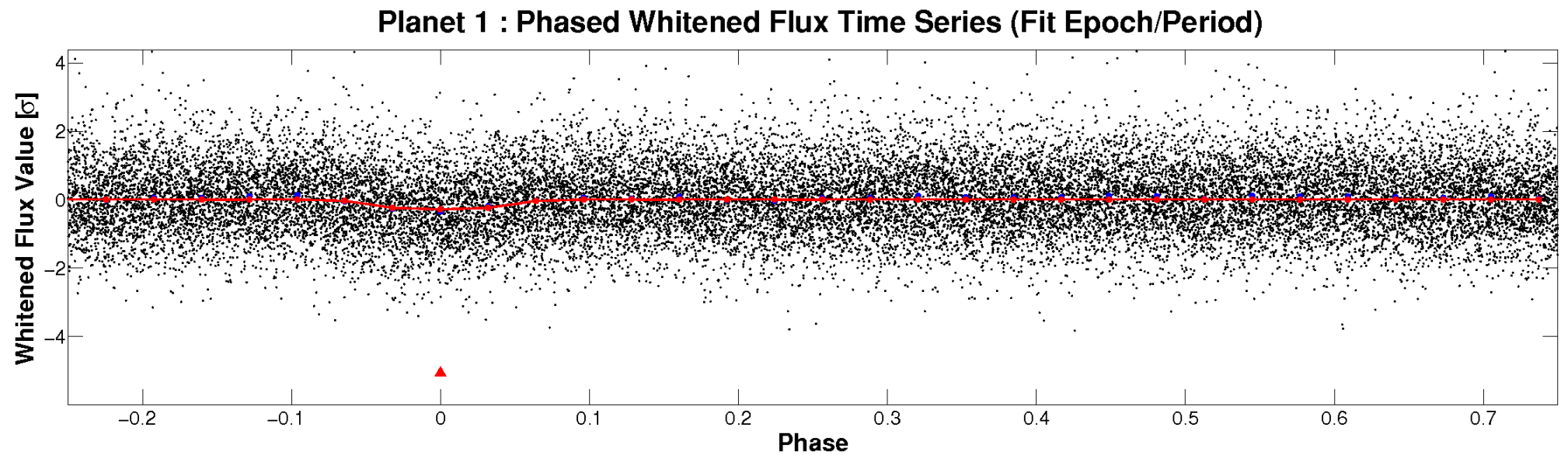
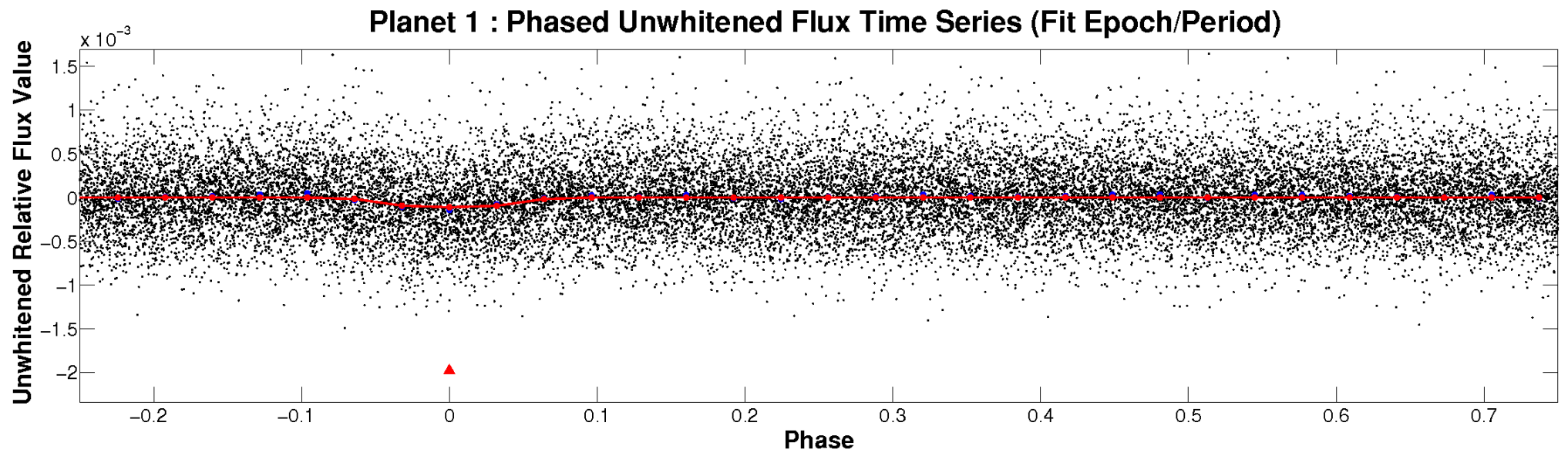


ALT Odd/Even

TCE 010964265-01

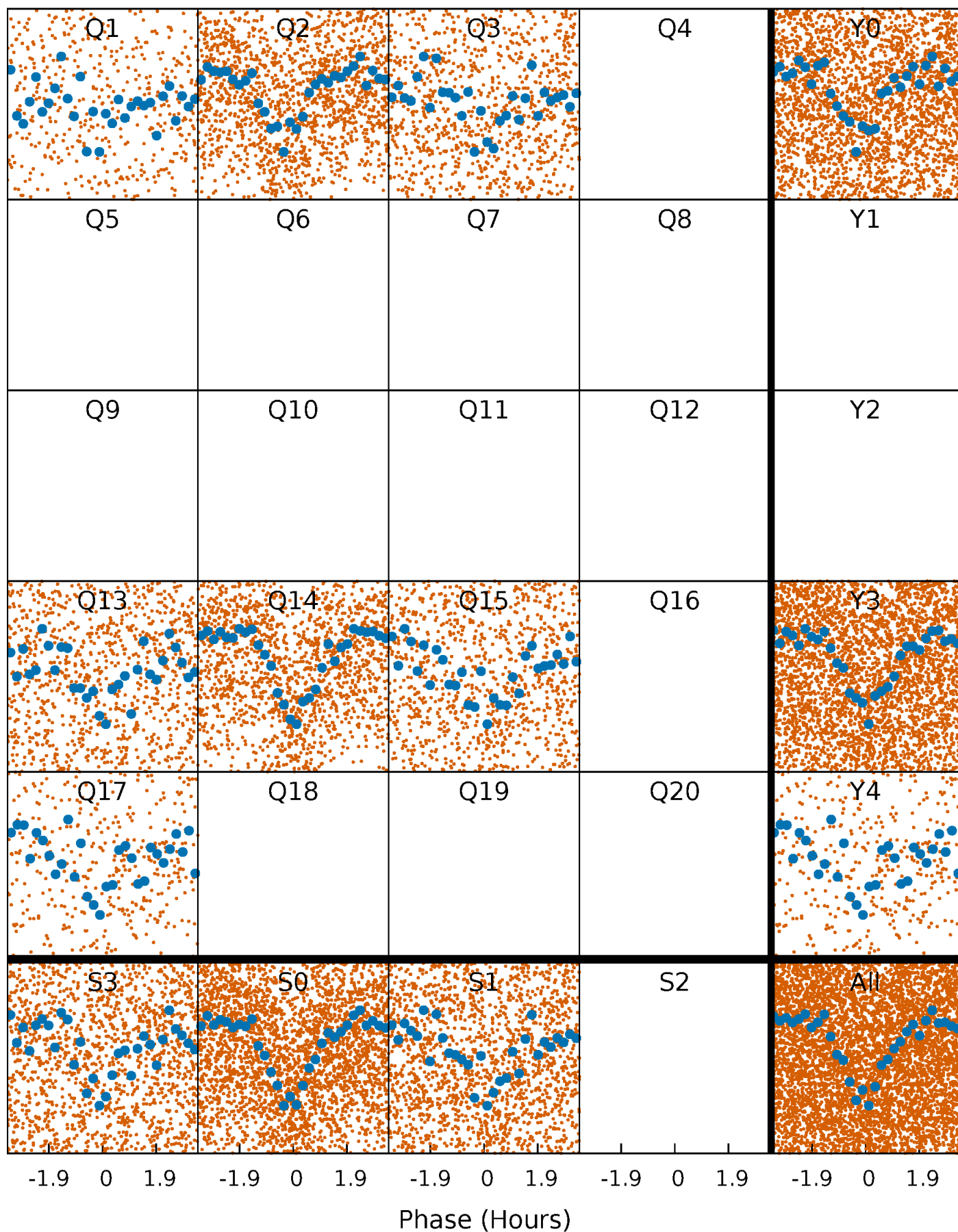


Non-Whitened Vs. Whitened Light Curve



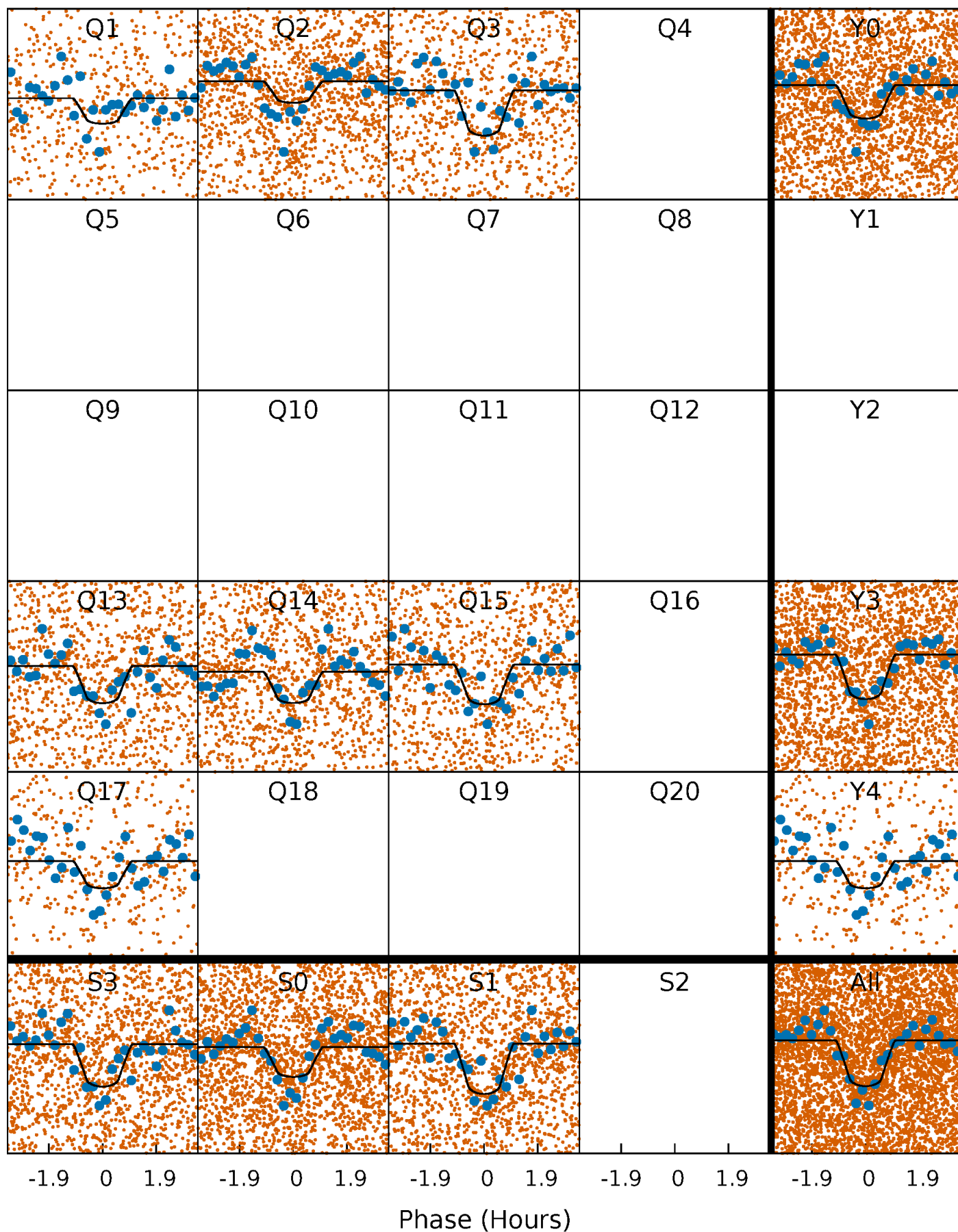
PDC Quarter-Phased Transit Curves

TCE 010964265-01 P= 0.637480 Days $T_0=131.988498$ (BKJD)



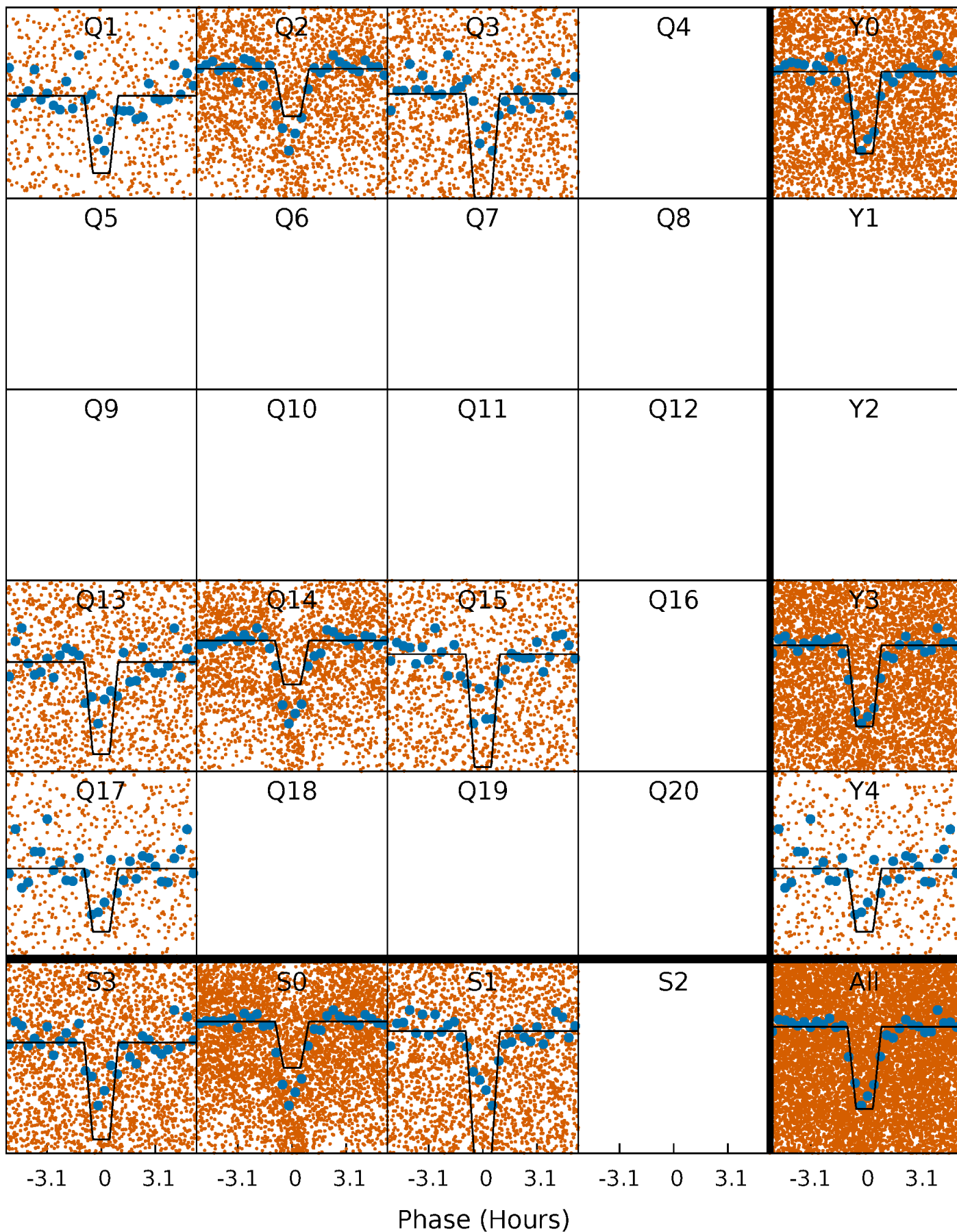
DV Quarter-Phased Transit Curves

TCE 010964265-01 P= 0.637480 Days $T_0=131.988498$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

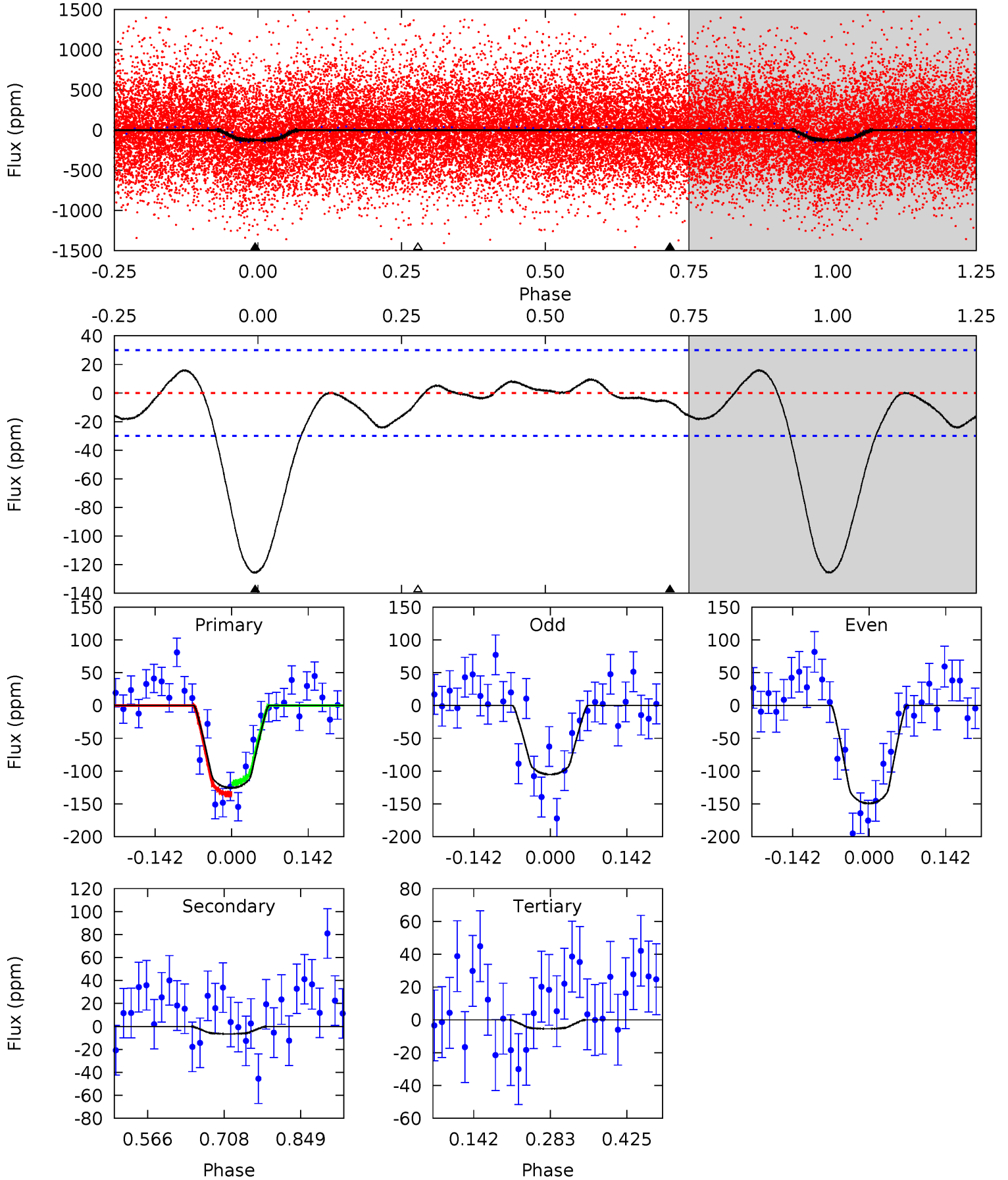
TCE 010964265-01 P= 0.637488 Days $T_0=131.977289$ (BKJD)



DV Model-Shift Uniqueness Test

010964265-01, P = 0.637480 Days, E = 131.351018 Days

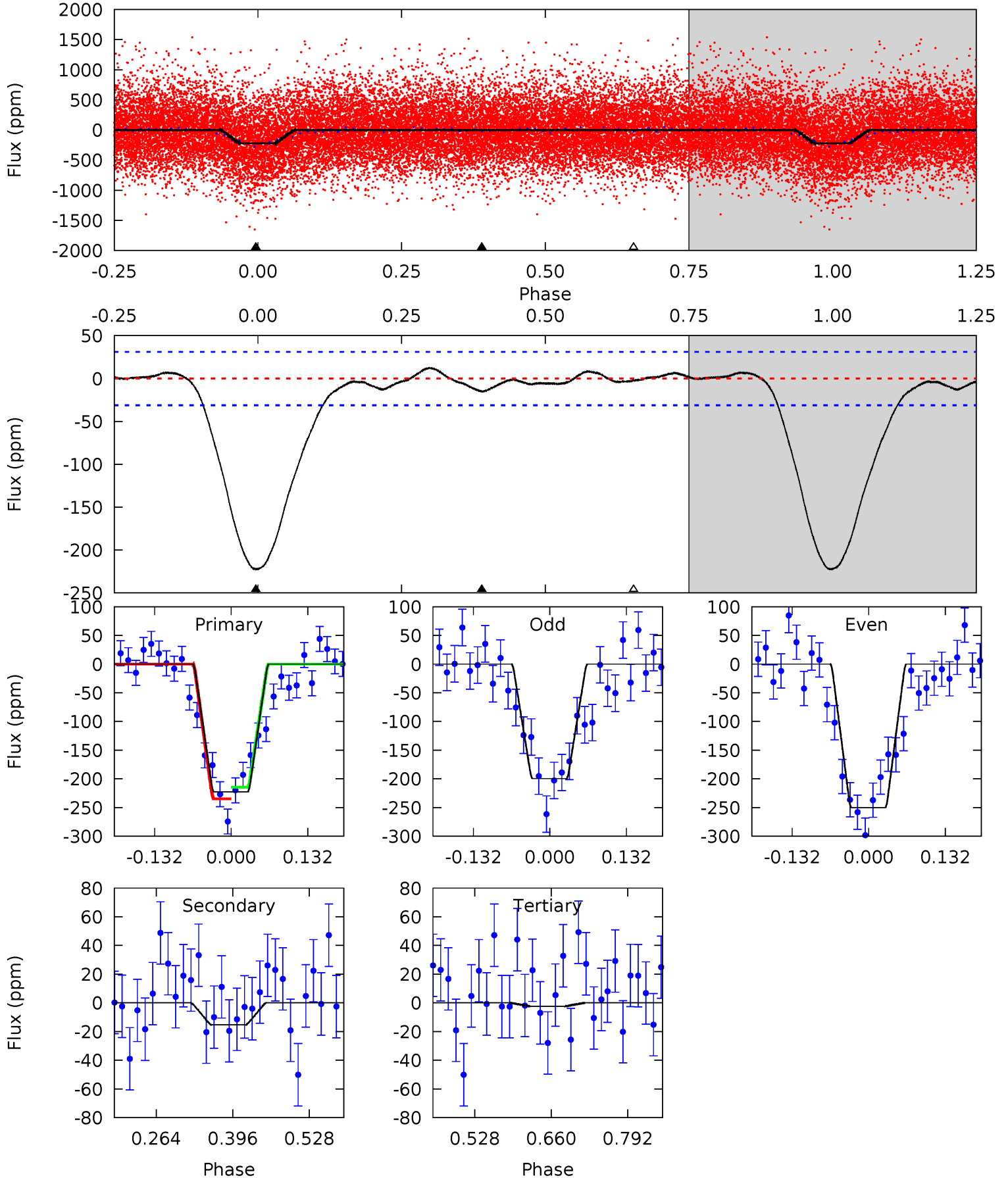
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
18.8	0.98	0.81	0	4.49	1.47	1.33	18.0	18.8	0.16	0.98	3.32	0.99	0.11	1.30



Alt Model-Shift Uniqueness Test

010964265-01, P = 0.637488 Days, E = 131.339801 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
32.2	2.21	0.34	0	4.51	1.51	0.82	31.9	32.2	1.87	2.21	3.66	1.01	0.05	1.46



Stellar Parameters For KIC 010964265

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6173^{+166}_{-203}	$4.390^{+0.090}_{-0.210}$	$-0.100^{+0.250}_{-0.300}$	$1.083^{+0.342}_{-0.147}$	$1.045^{+0.169}_{-0.127}$	$1.159^{+0.458}_{-0.628}$
	+3%/-3%	+2%/-5%	+250%/-300%	+32%/-14%	+16%/-12%	+40%/-54%
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 010964265-01 / KOI 2934.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-7 ± 7	$1.46^{+0.96}_{-0.72}$	3302^{+237}_{-175}	-2207^{+6279}_{-1111}	$0.284^{+1.172}_{-0.291}$
Alt.	-15 ± 7	$1.98^{+0.94}_{-0.94}$	3300^{+232}_{-169}	2993^{+1207}_{-5950}	$0.464^{+1.273}_{-0.307}$

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 $A_{obs} \gg 1.0$

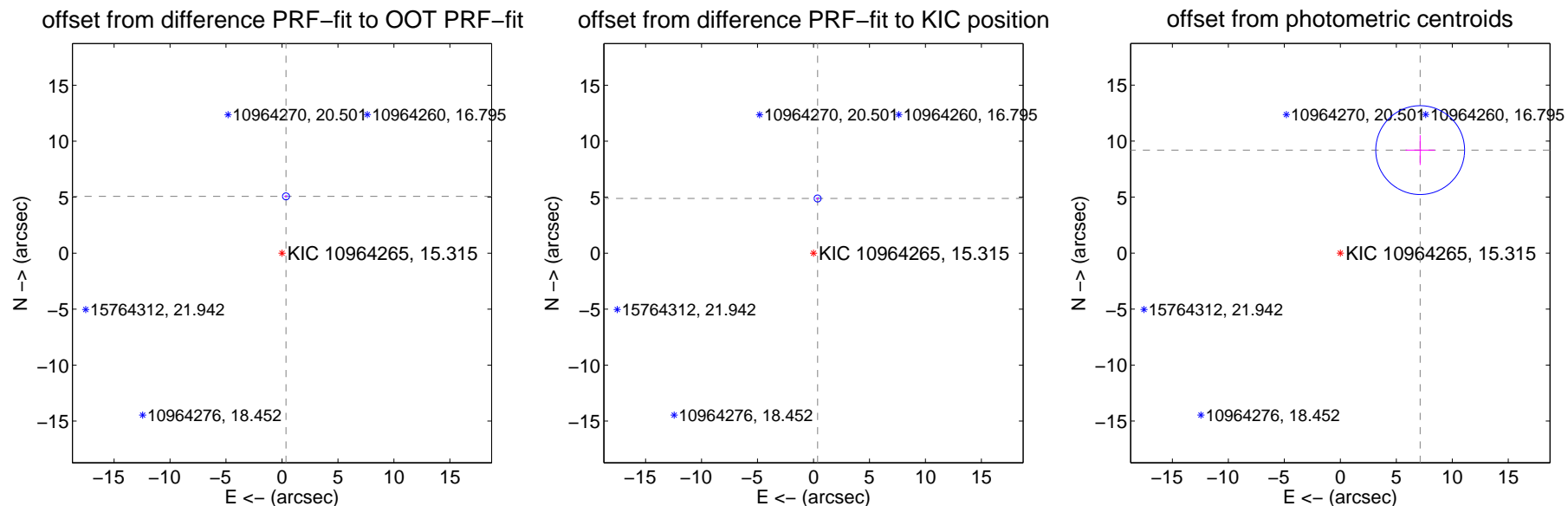
DV Centroid Data

Supplemental centroid analysis for 010964265-01. Kepler magnitude: 15.31. Transit SNR 12.08

There are 2 quarters with good PRF difference image offsets

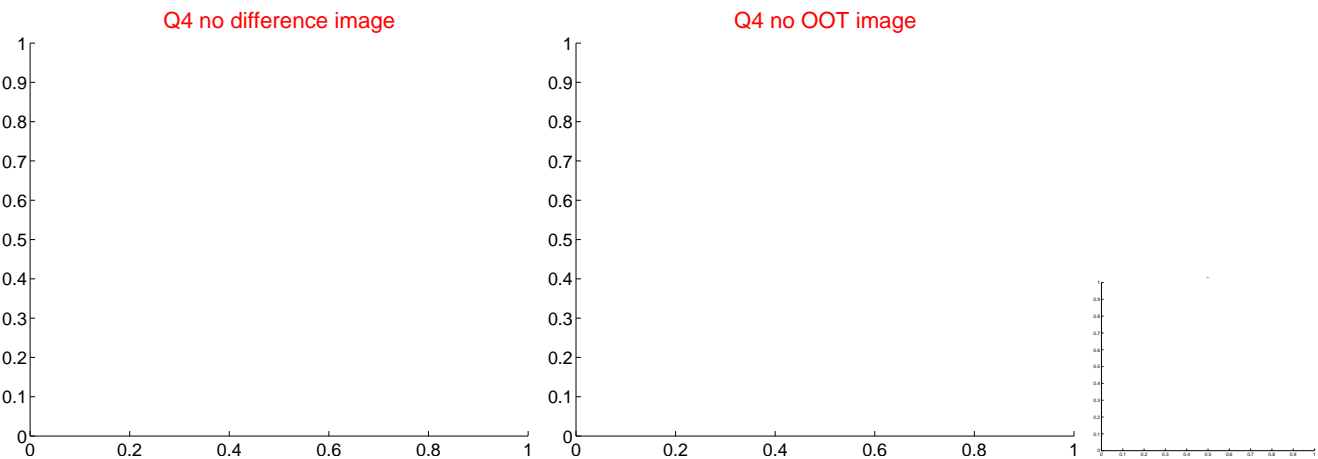
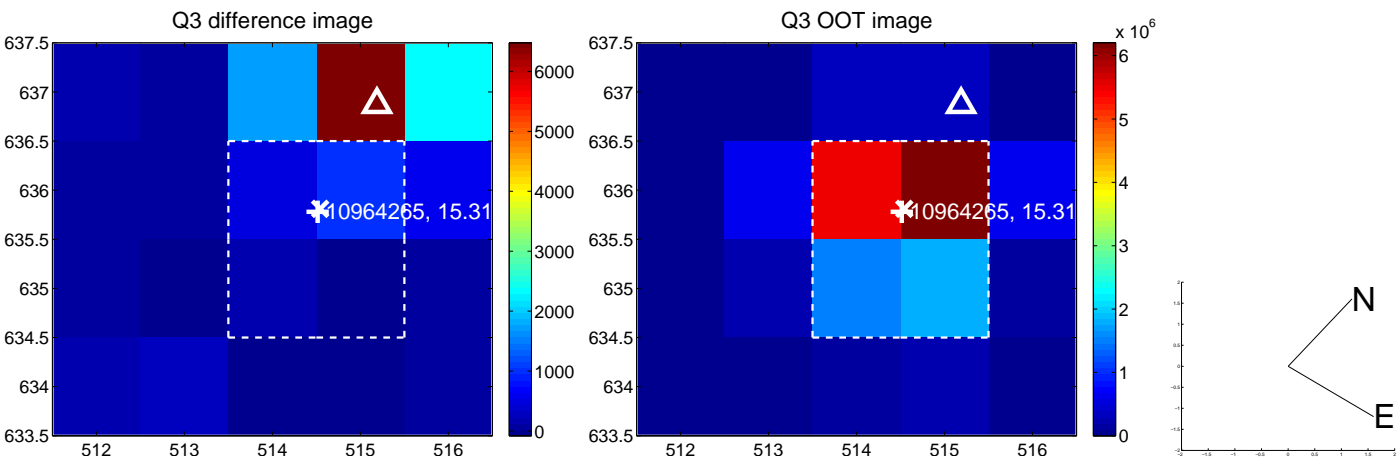
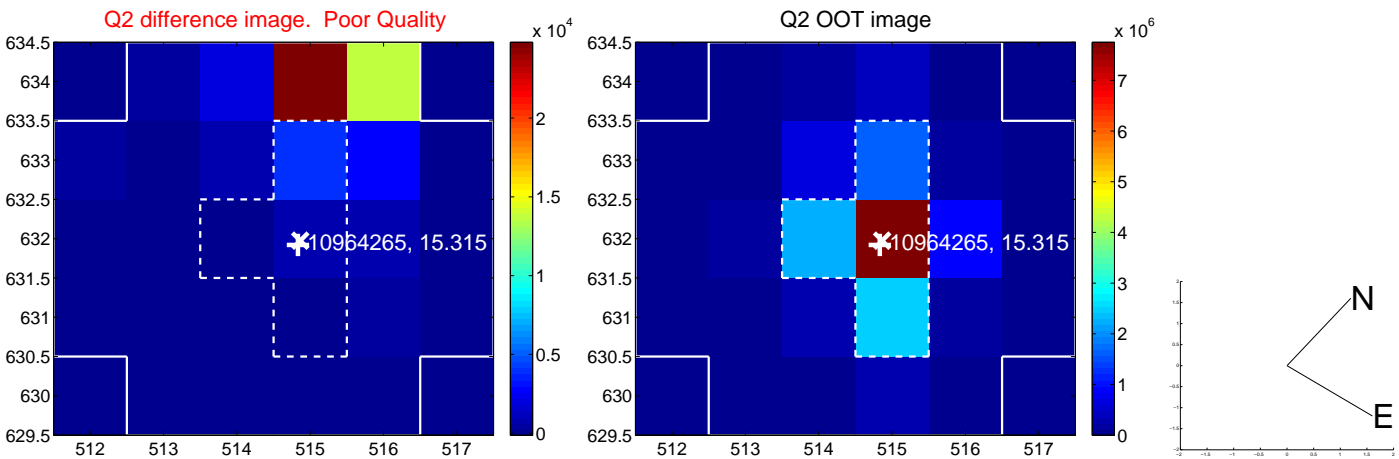
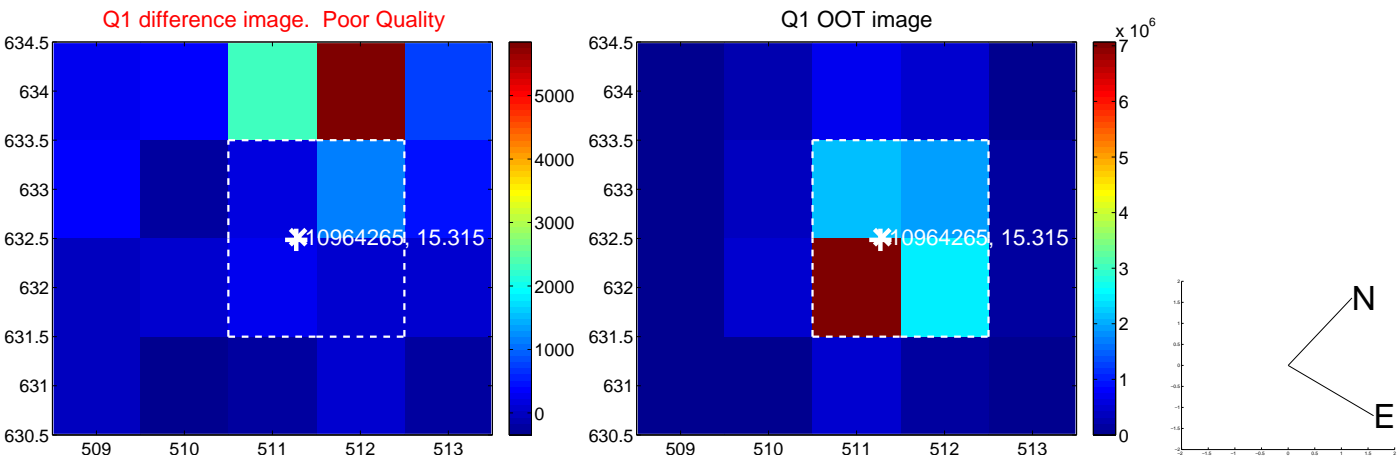
The direct PRF centroid is offset from the target star catalog position by about 0.21 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	5.087 ± 0.104	48.97	-0.357 ± 0.107	5.074 ± 0.104
PRF-fit source offset from KIC position	4.899 ± 0.104	47.15	-0.365 ± 0.107	4.885 ± 0.104
photometric centroid source offset	11.64 ± 1.32	8.80	-7.14 ± 1.31	9.20 ± 1.33

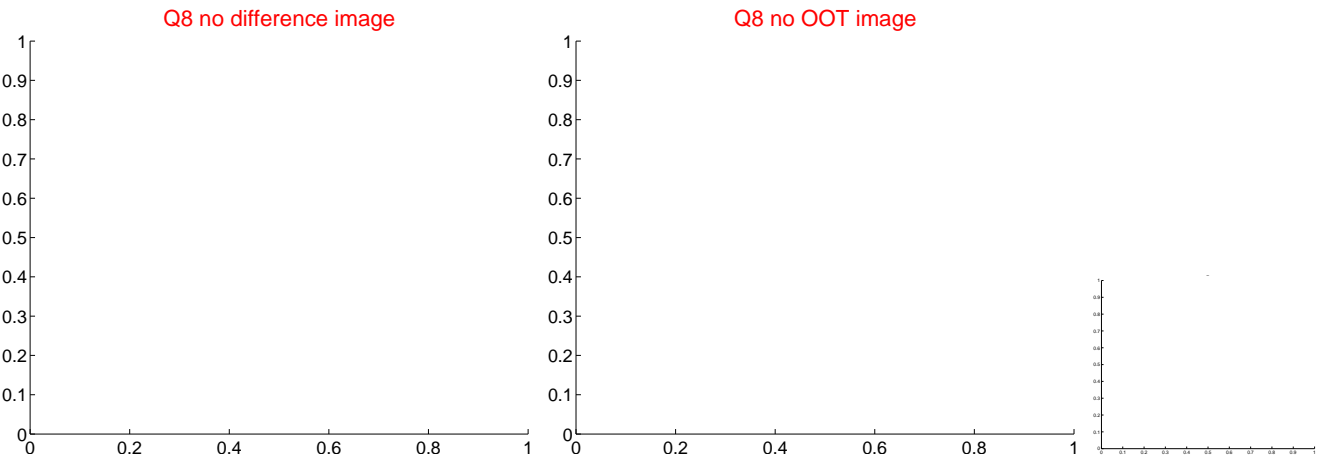
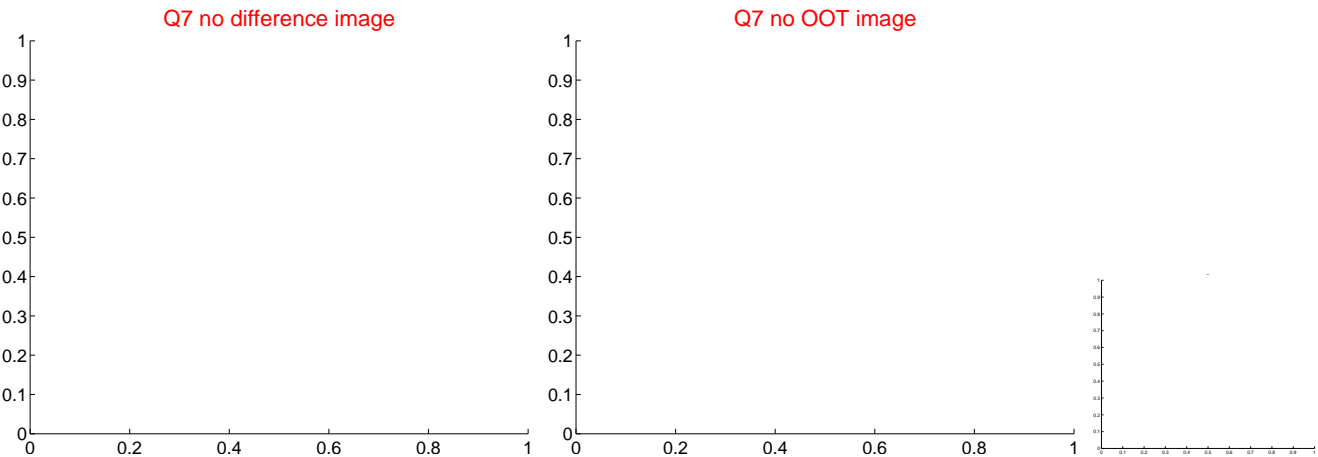
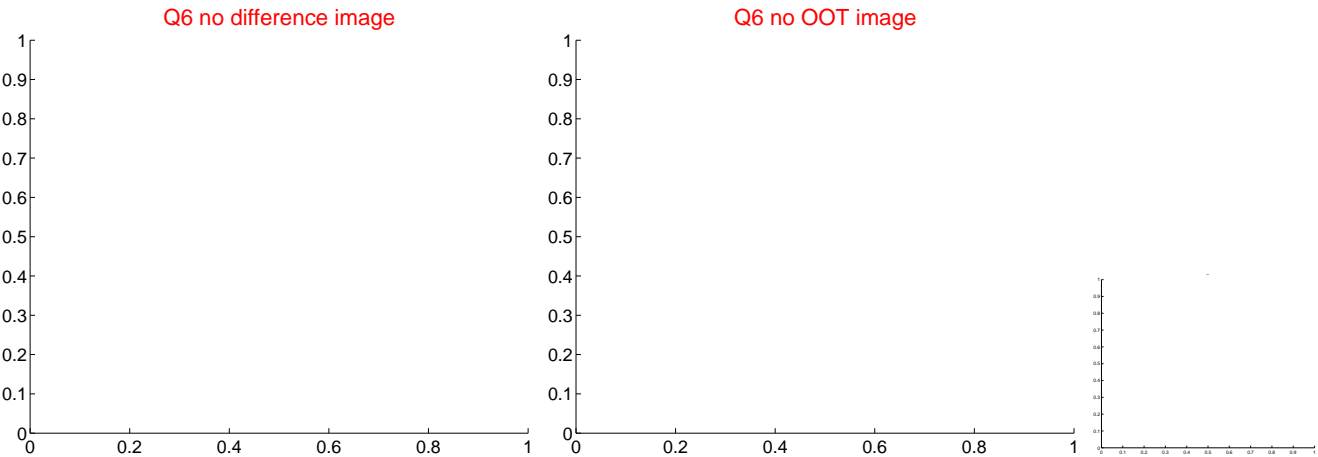
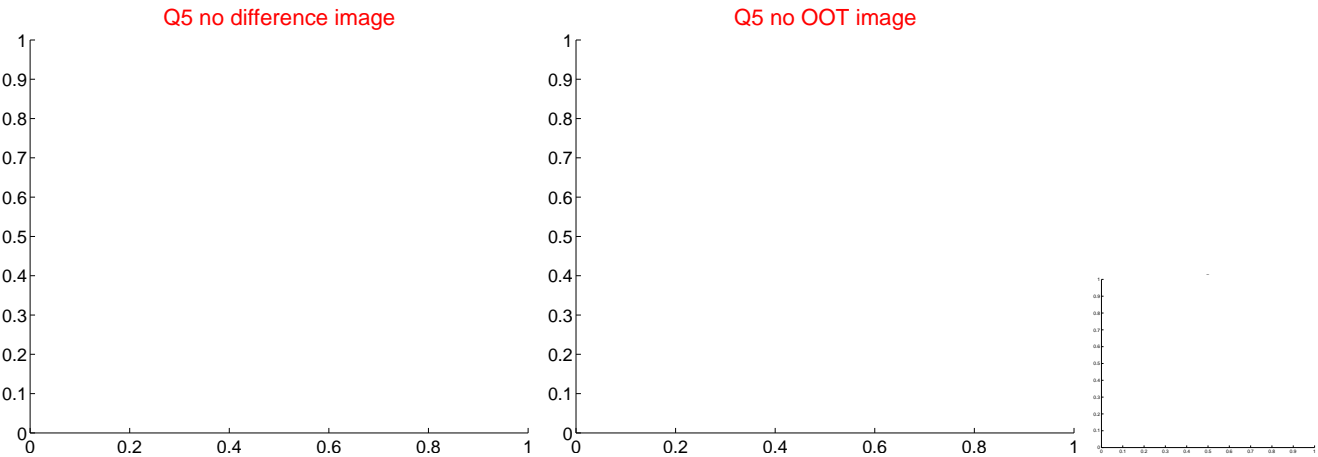


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

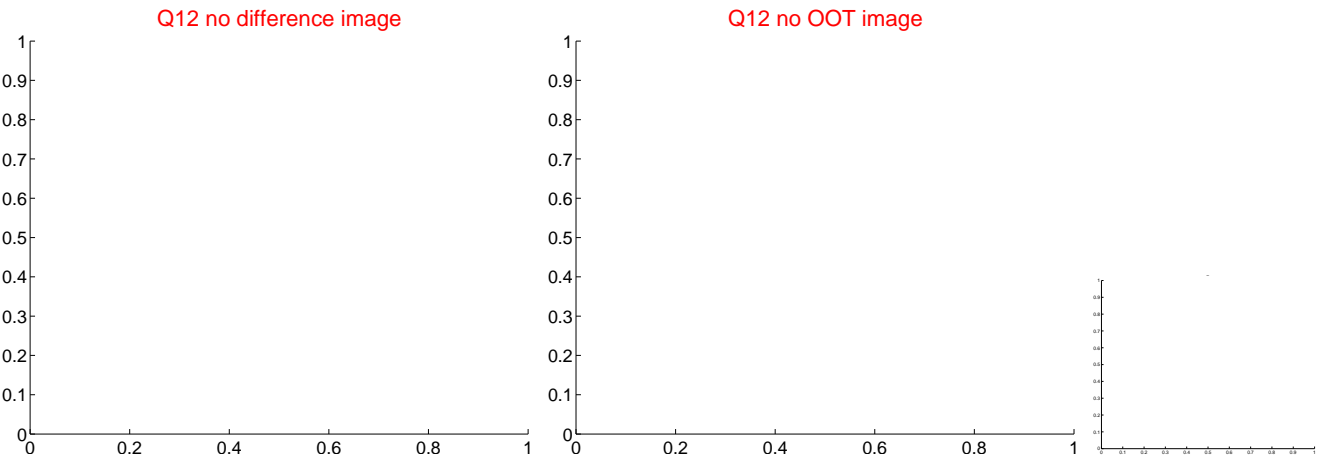
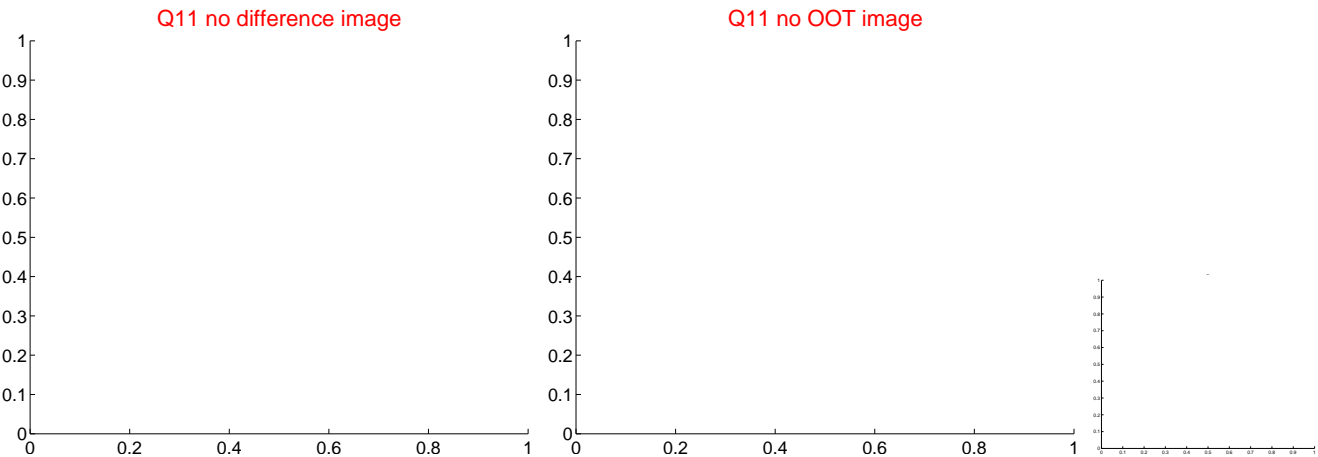
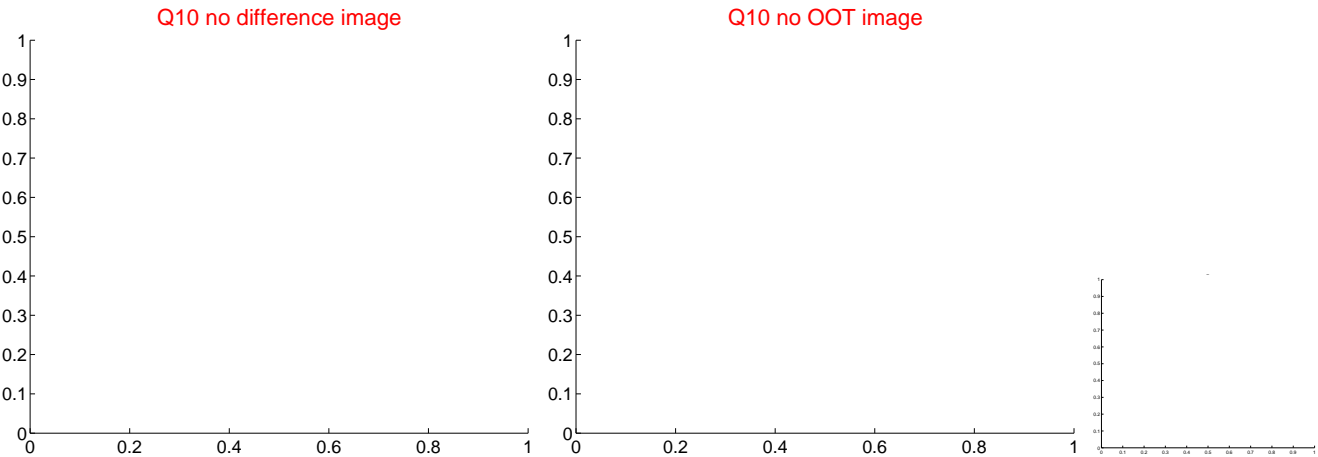
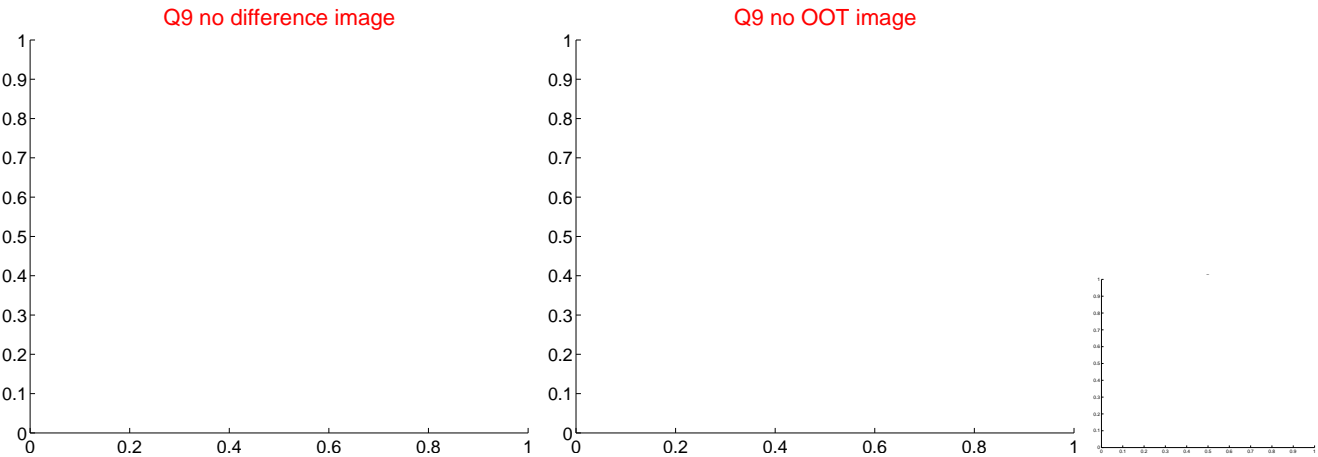
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.



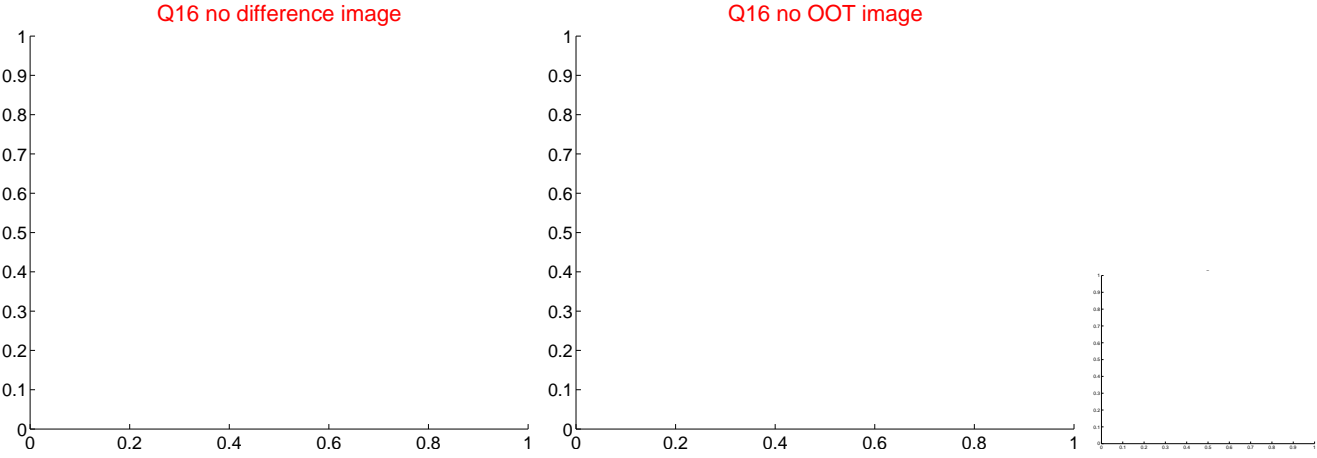
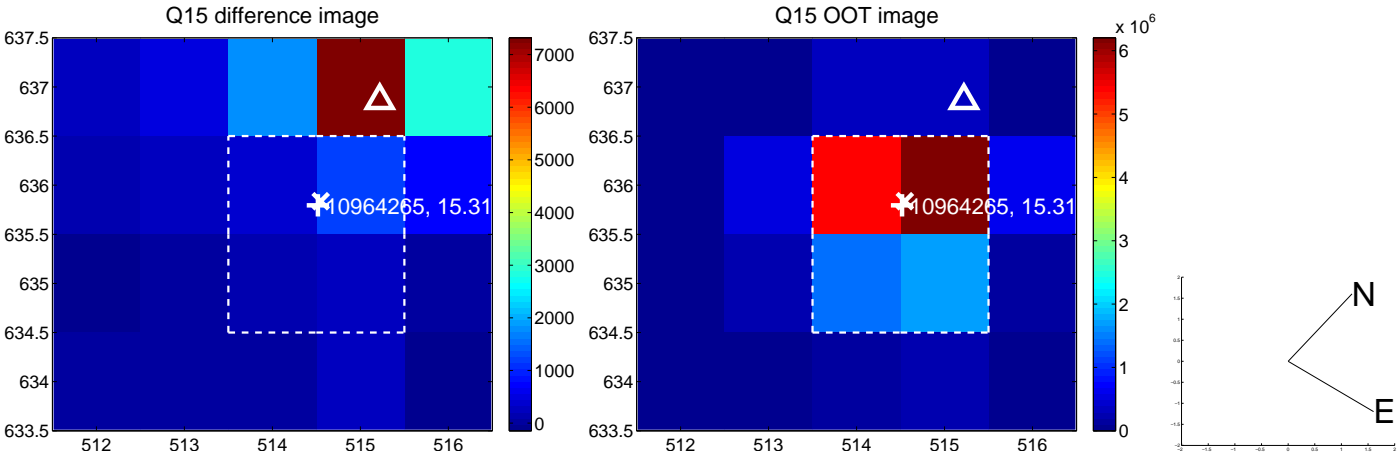
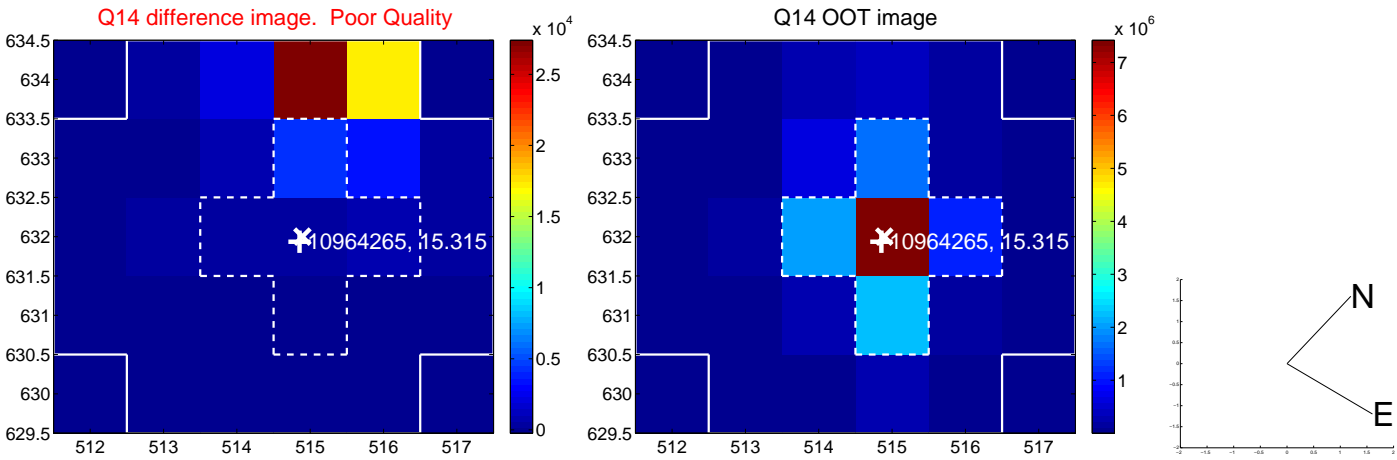
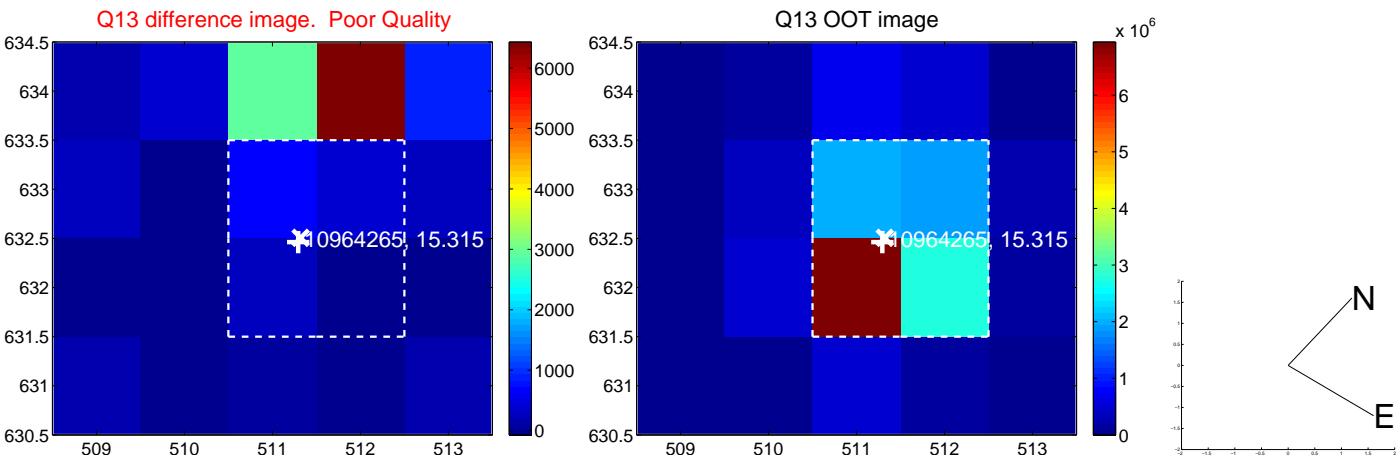
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



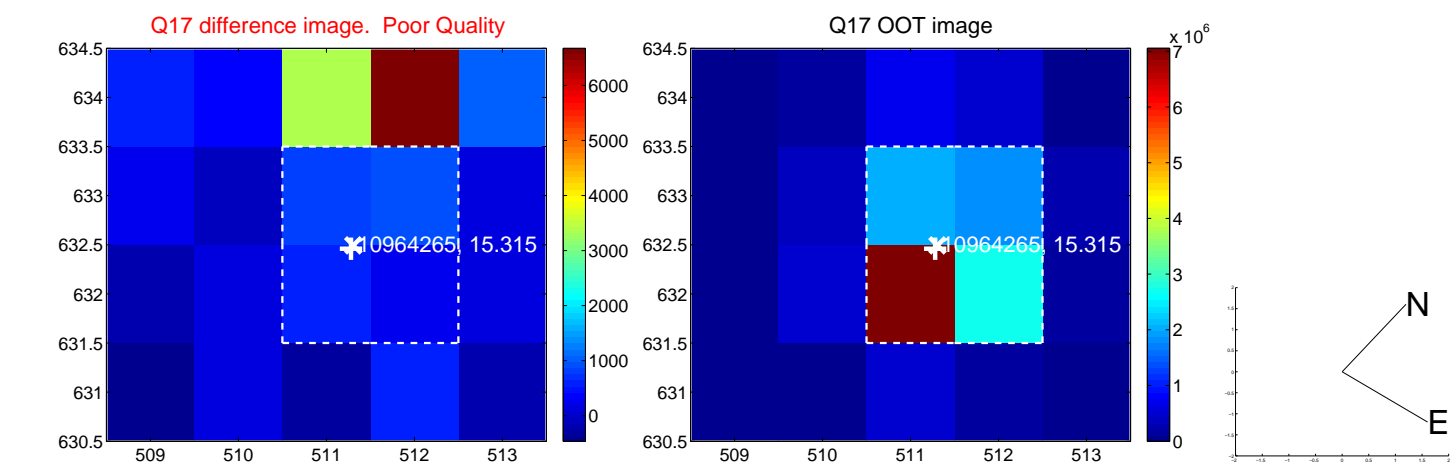
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



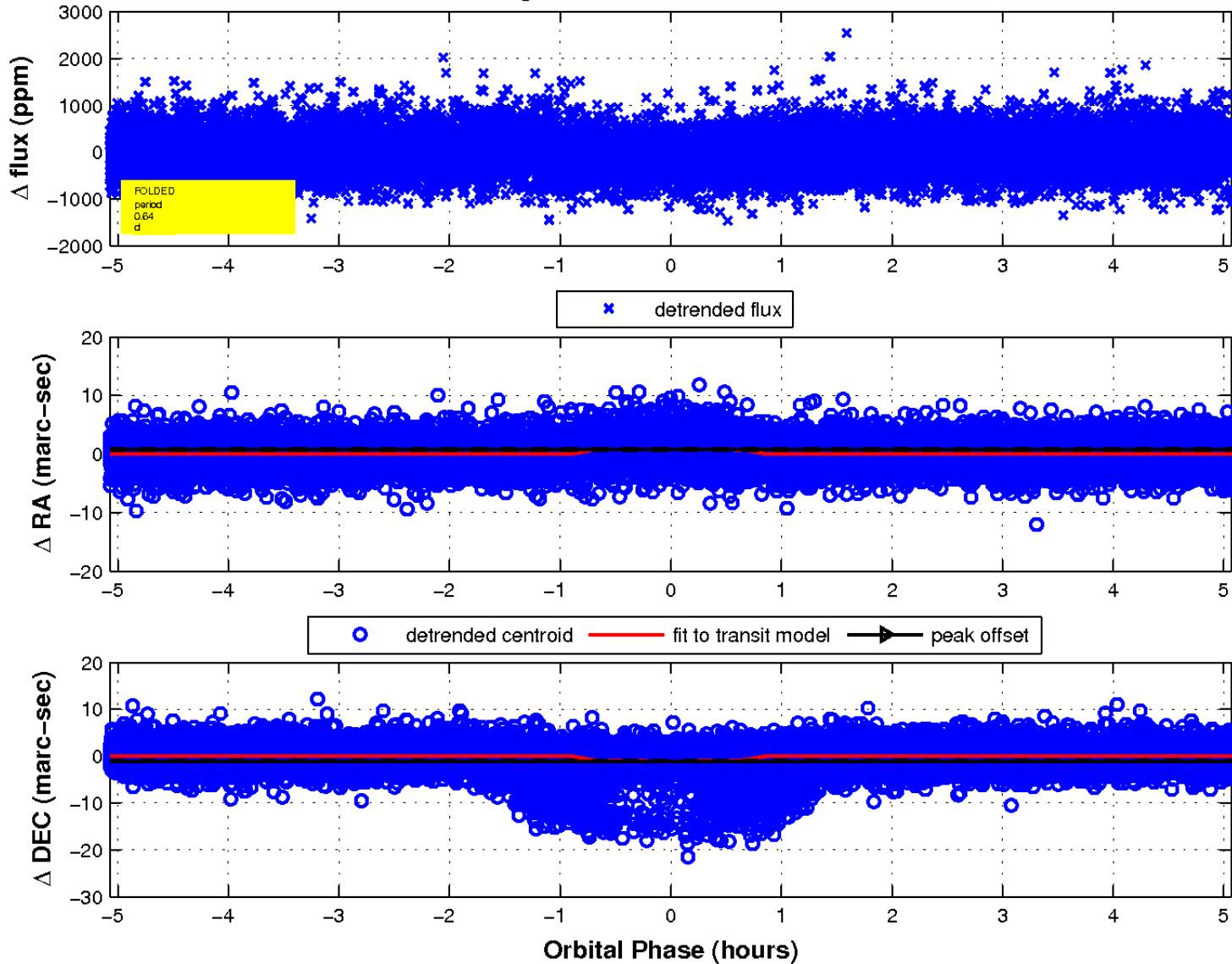
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

