

KIC 011302565

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})
011302565-01	OBS	No	0.844412	131.812431	32.1	6.600	7.4	7.2	1.55	11068	0.91	64801.54

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011302565-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT

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

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

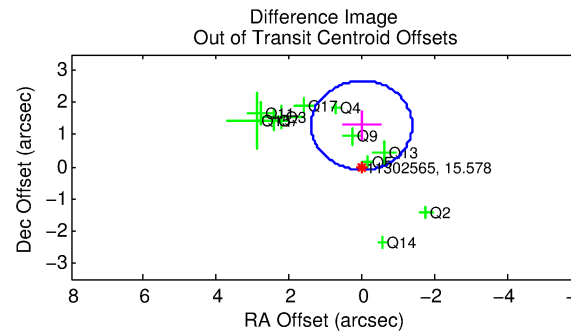
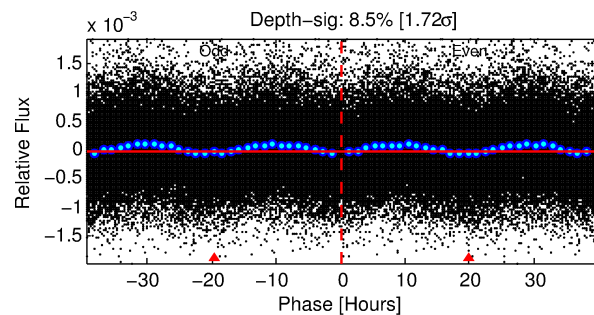
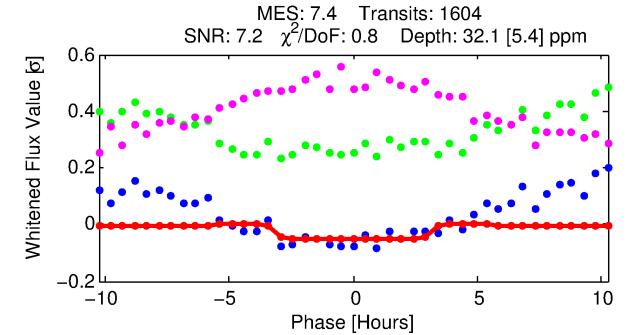
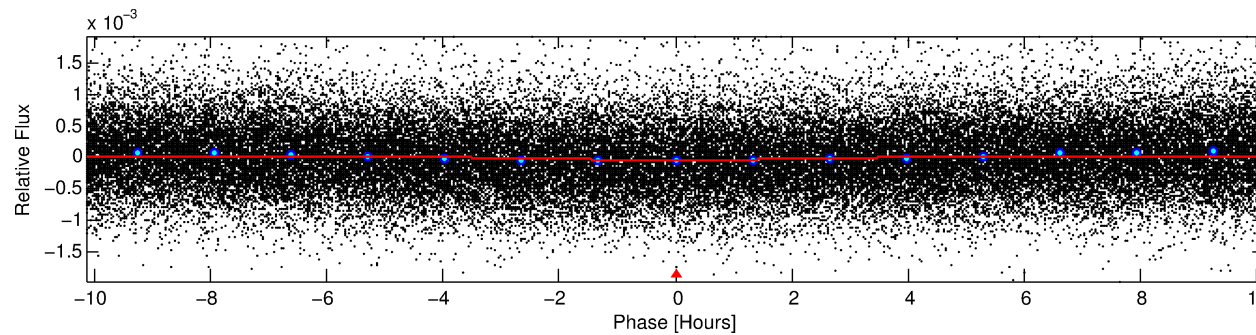
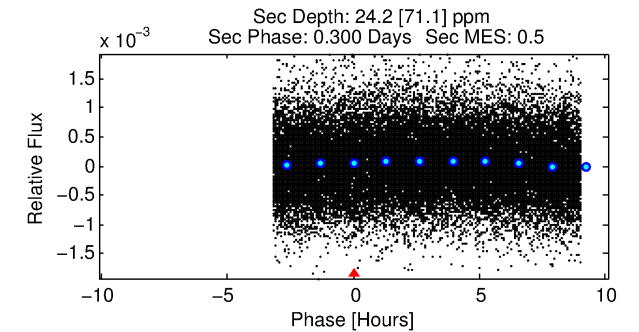
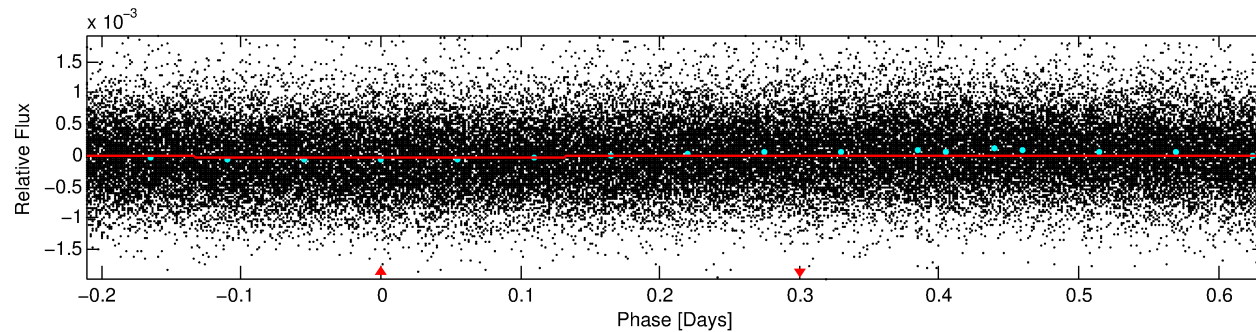
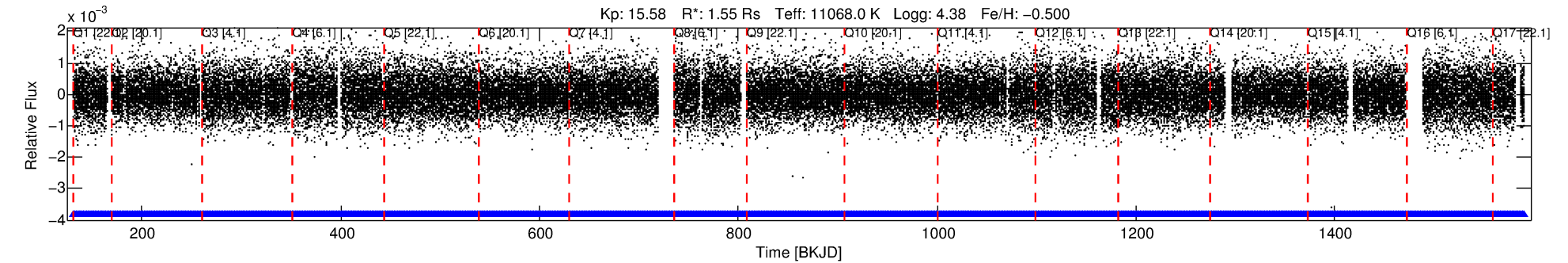
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011302565-01

No Significant Match Found

DV One-Page Summary

KIC: 11302565 Candidate: 1 of 1 Period: 0.844 d



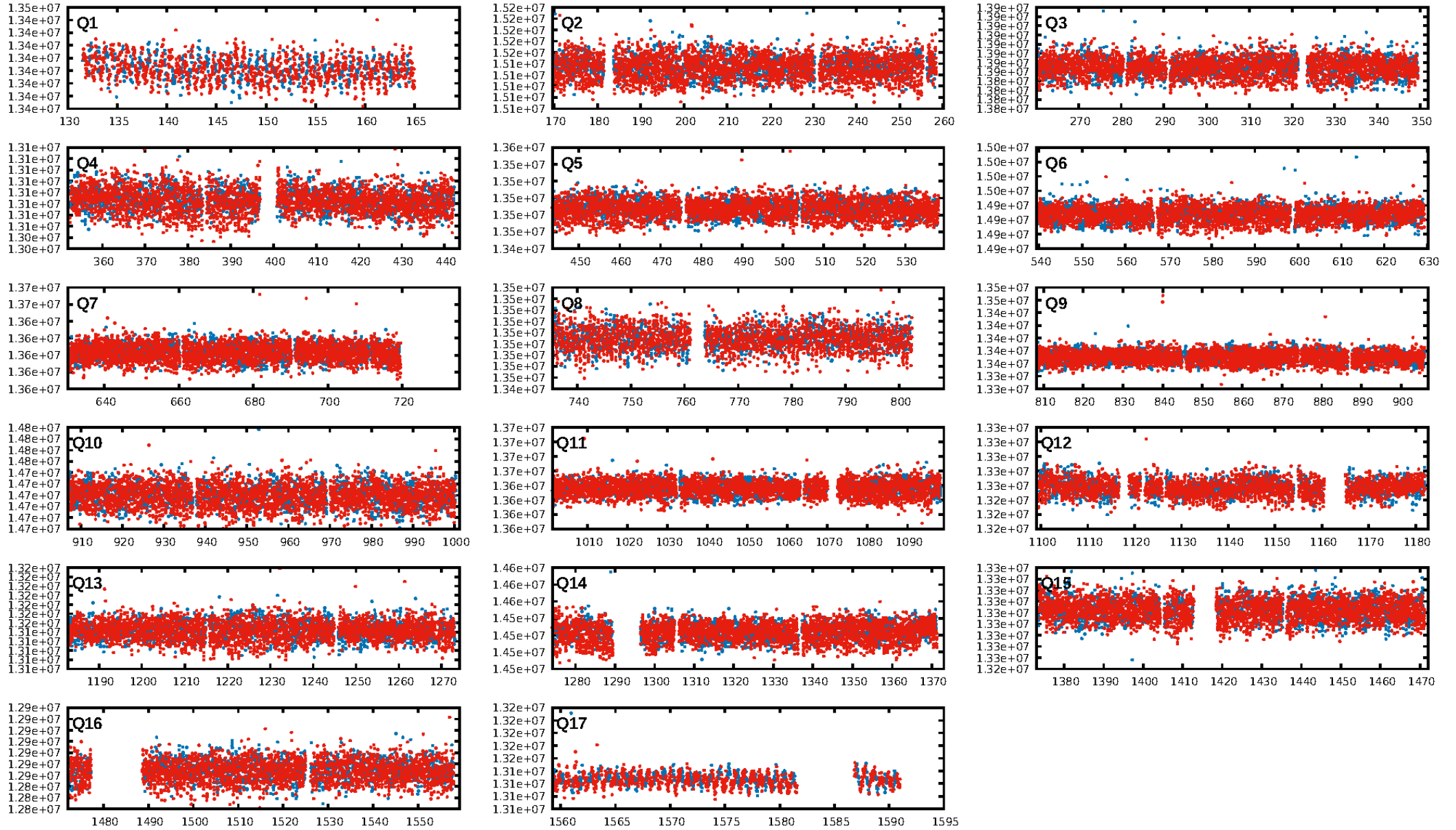
DV Fit Results:

Period = 0.84441 [0.00002] d
Epoch = 131.8124 [0.0079] BKJD
Rp/R* = 0.0054 [0.0055]
a/R* = 1.18 [2.66]
b = 0.01 [1415.66]
Seff = 64801.54 [19552.48]
Teq = 4068 [307] K
Rp = 0.91 [0.96] Re
a = 0.0224 [0.0039] AU
Ag = 8.10 [29.18] [0.24σ]
Teffp = 10611 [9545] K [0.69σ]

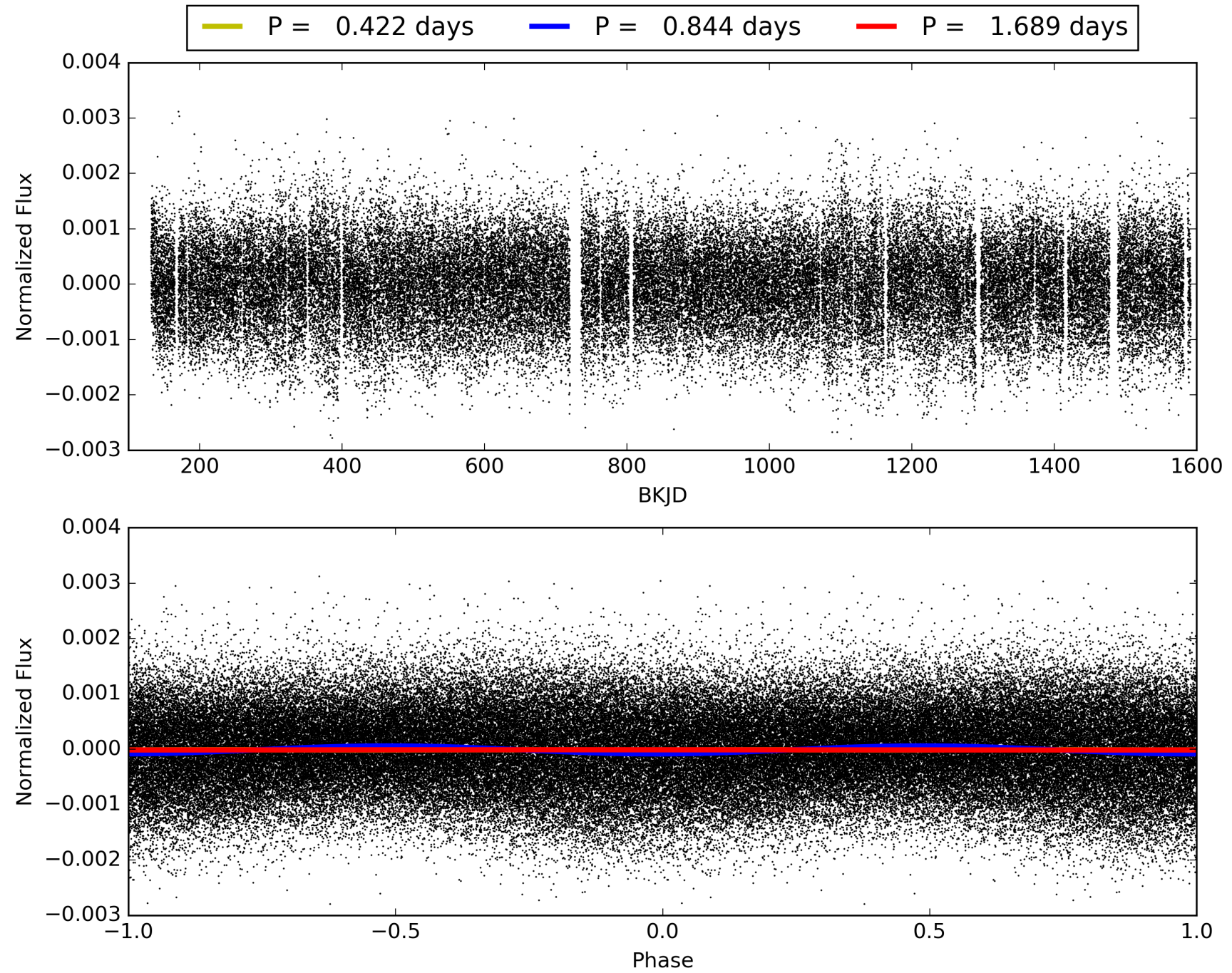
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [1531/1531]
GhostDiagnostic-chr: 4.454
Centroid-sig: 76.7%
Centroid-so: 0.940 arcsec [0.57σ]
OotOffset-rm: 1.284 arcsec [2.77σ]
KicOffset-rm: 1.282 arcsec [3.50σ]
OotOffset-st: 2/4/1/4 [11]
KicOffset-st: 2/4/1/4 [11]
DiffImageQuality-fgm: 0.91 [10/11]
DiffImageOverlap-fno: 1.00 [17/17]

TCE 011302565-01, PDC Light Curves

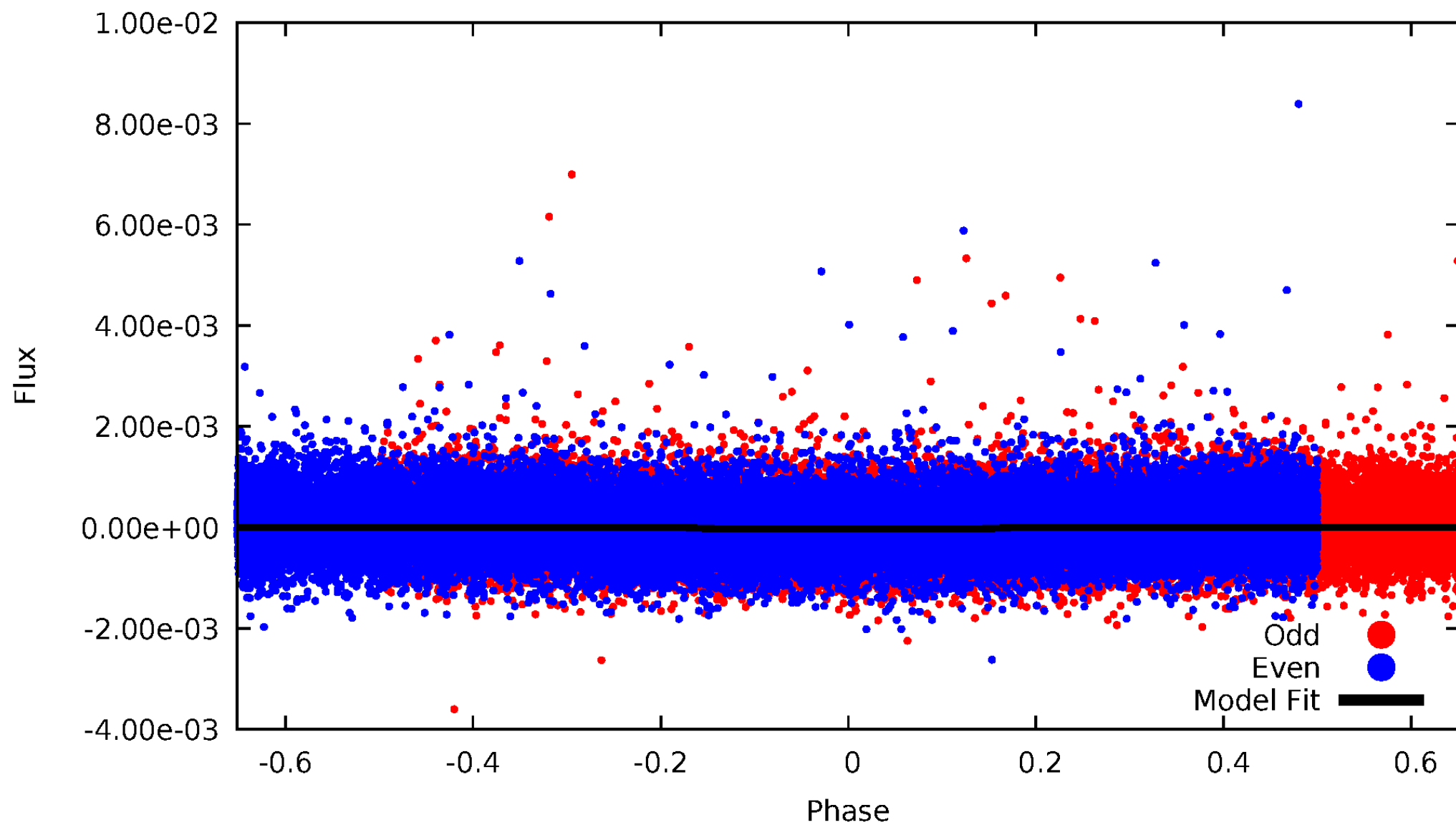


TCE 011302565-01



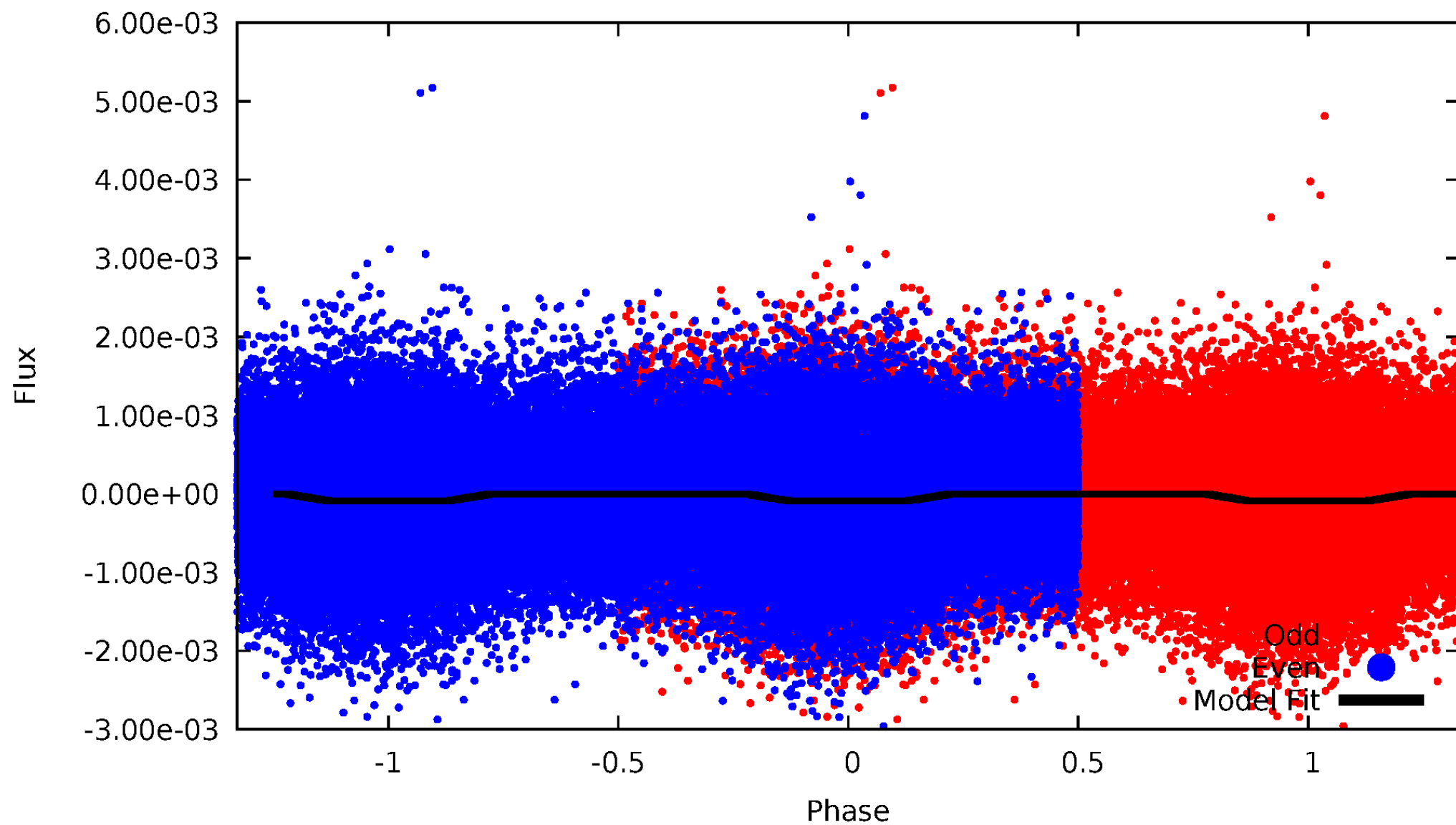
DV Odd/Even

TCE 011302565-01



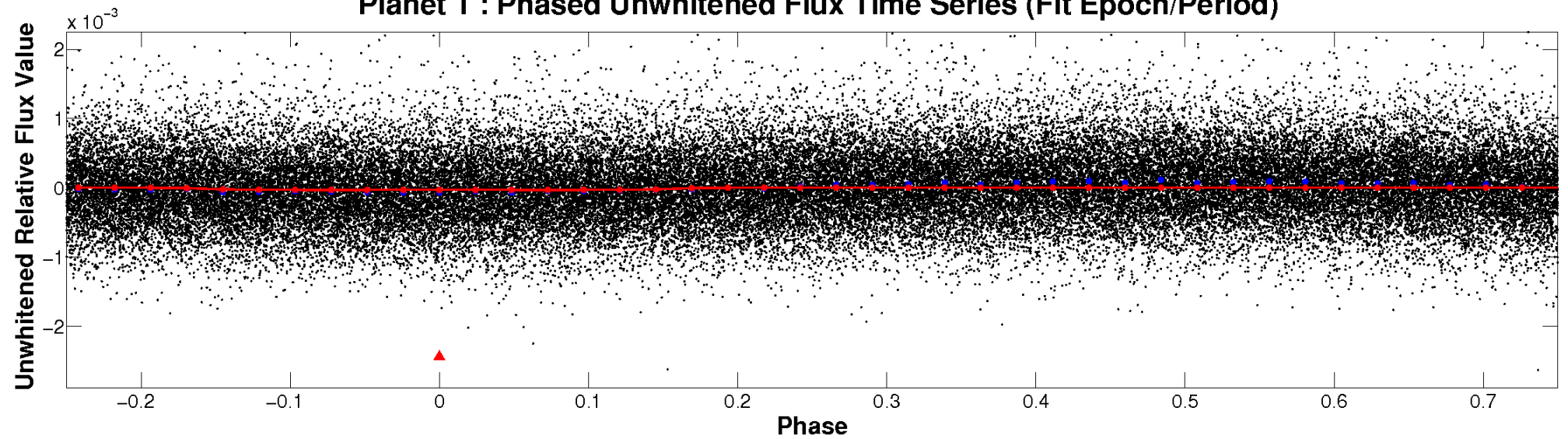
ALT Odd/Even

TCE 011302565-01

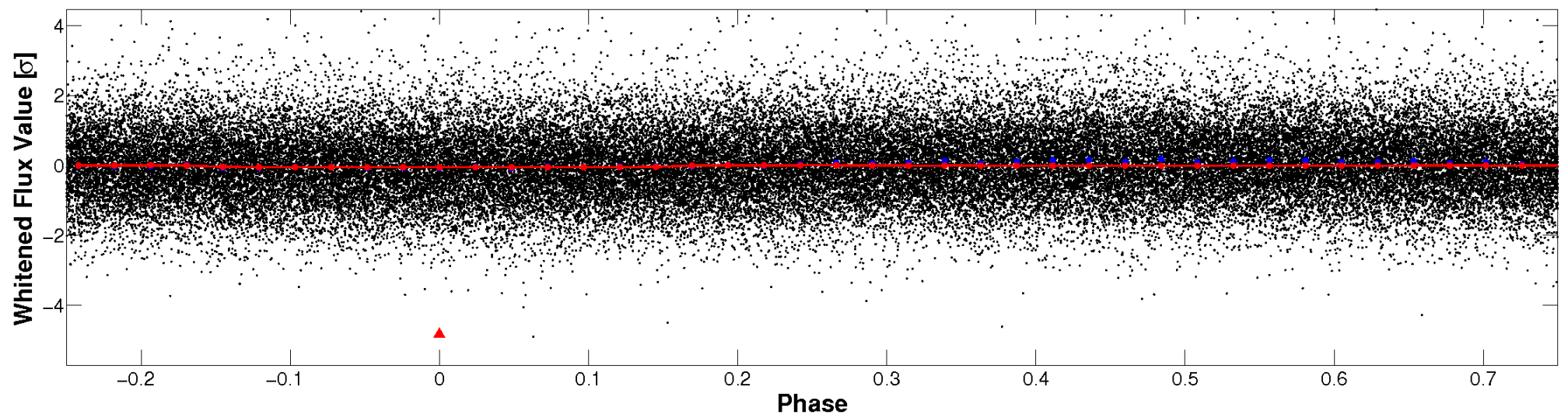


Non-Whitened Vs. Whitened Light Curve

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

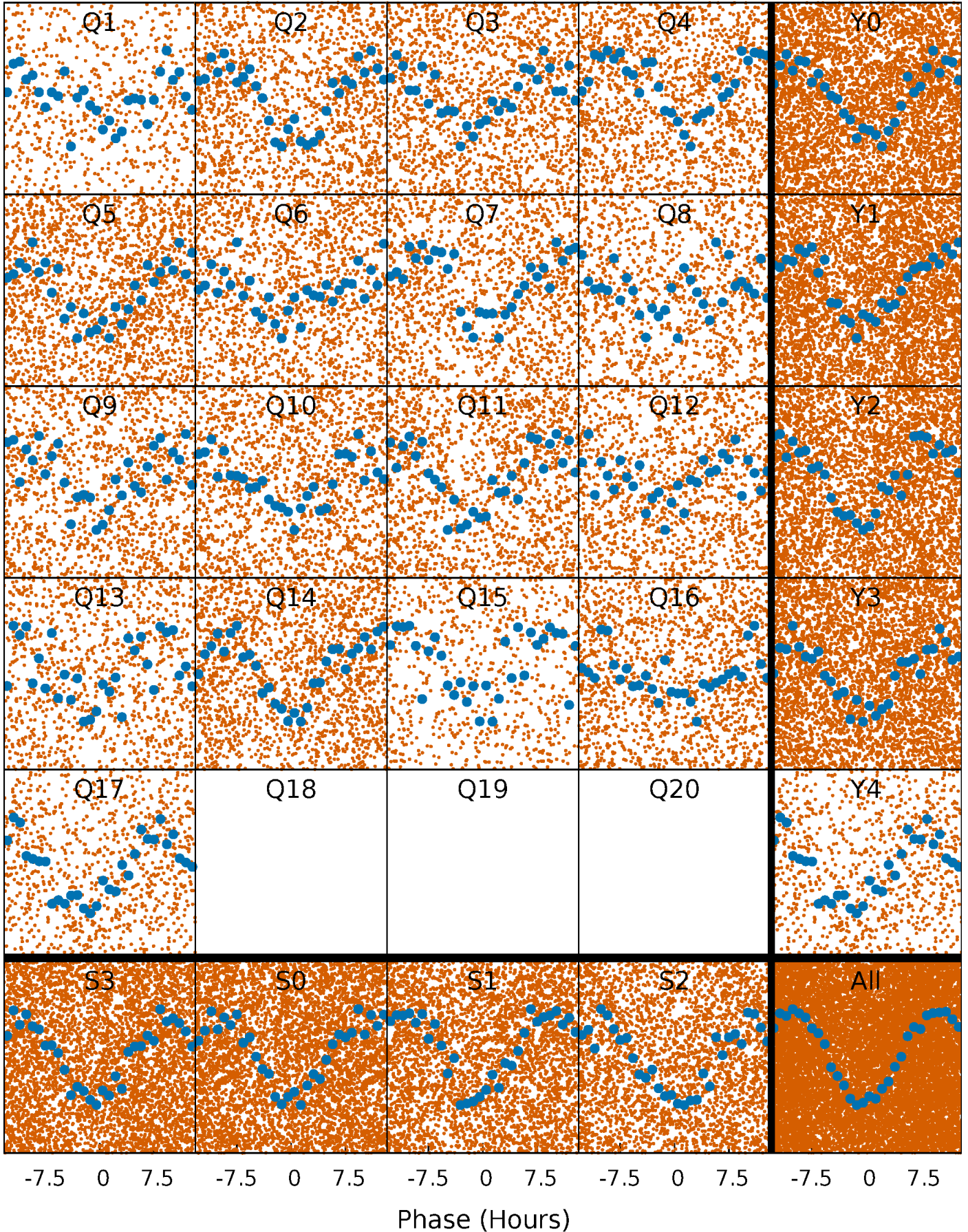


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



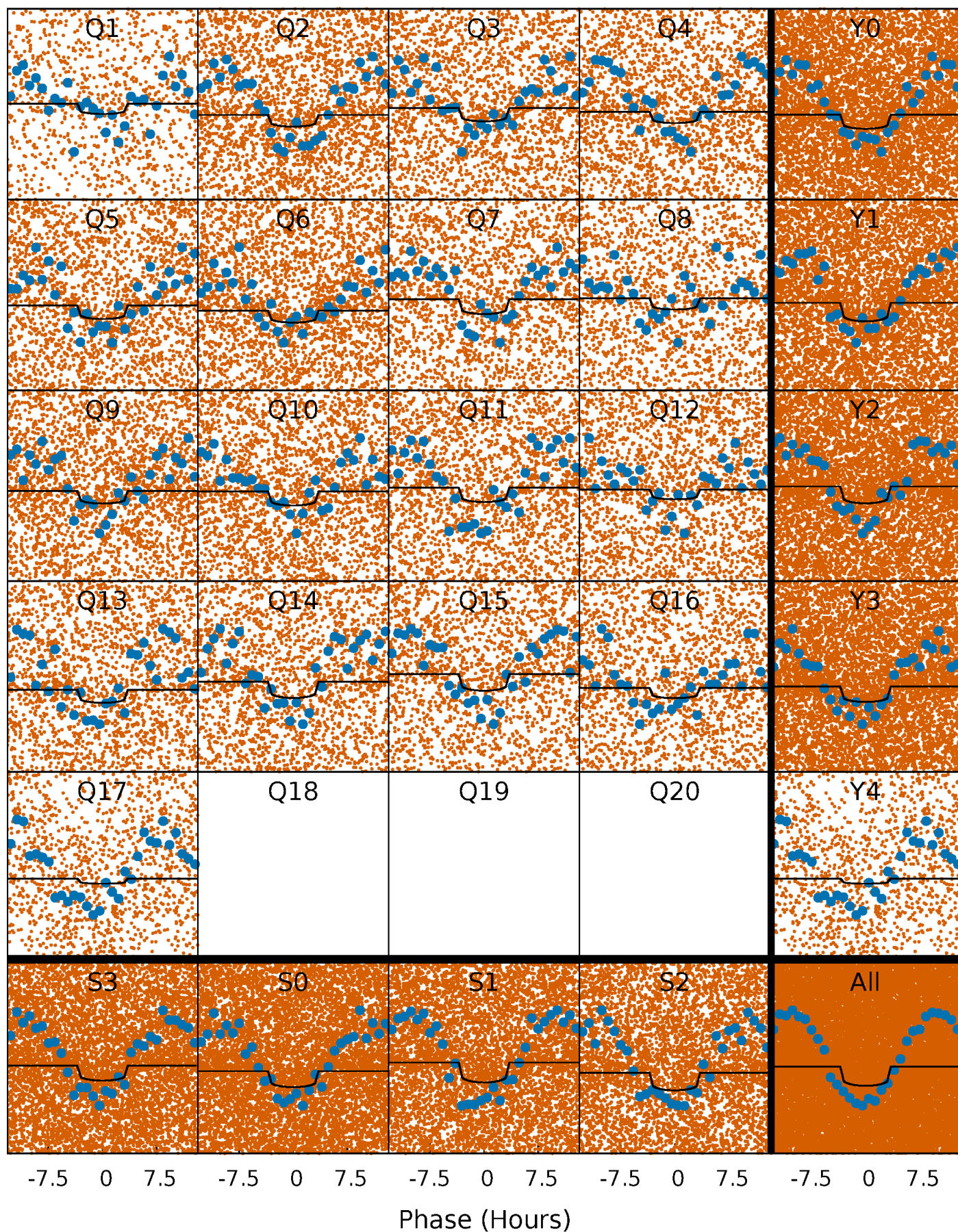
PDC Quarter-Phased Transit Curves

TCE 011302565-01 P= 0.844412 Days $T_0=131.812431$ (BKJD)



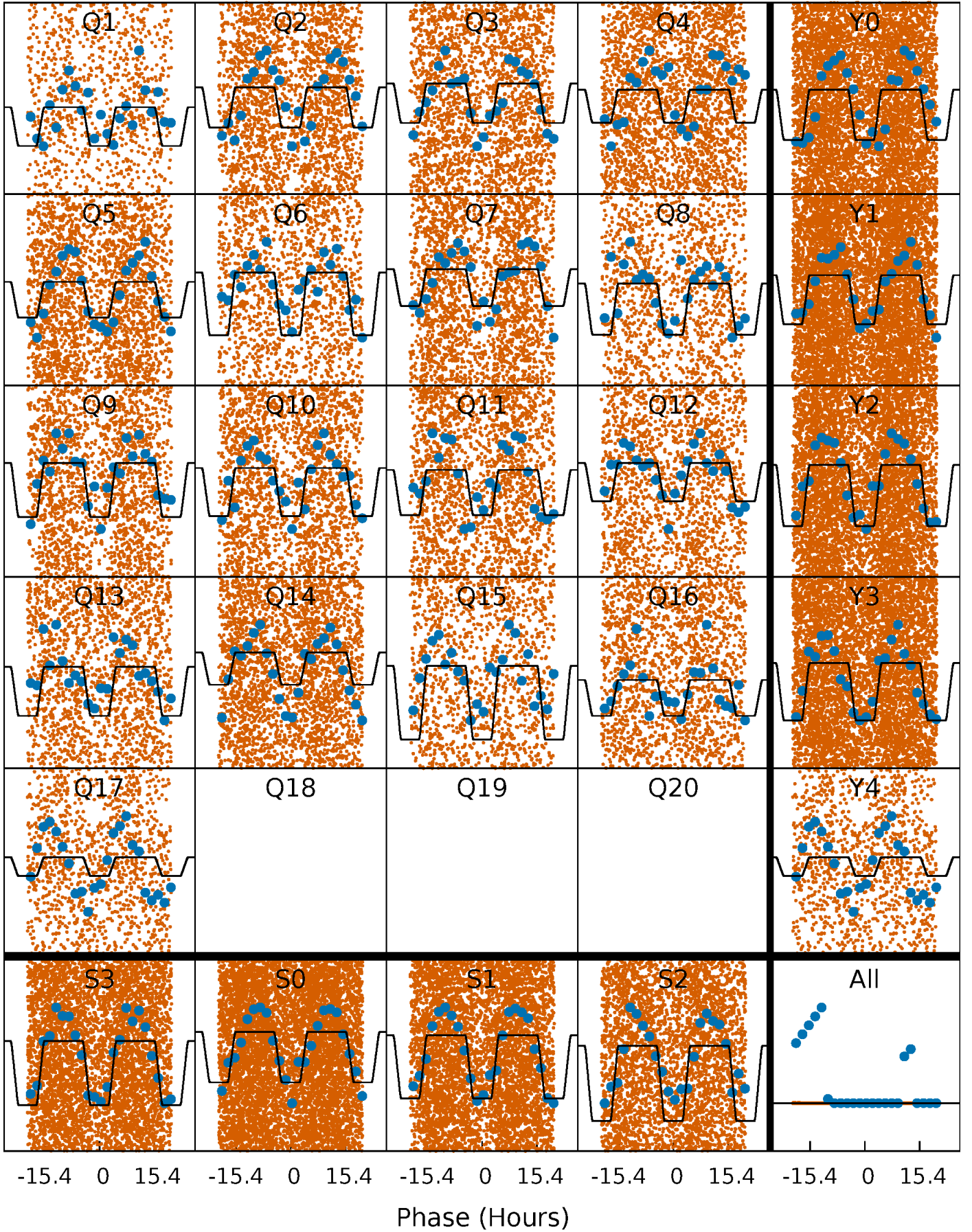
DV Quarter-Phased Transit Curves

TCE 011302565-01 P= 0.844412 Days $T_0=131.812431$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

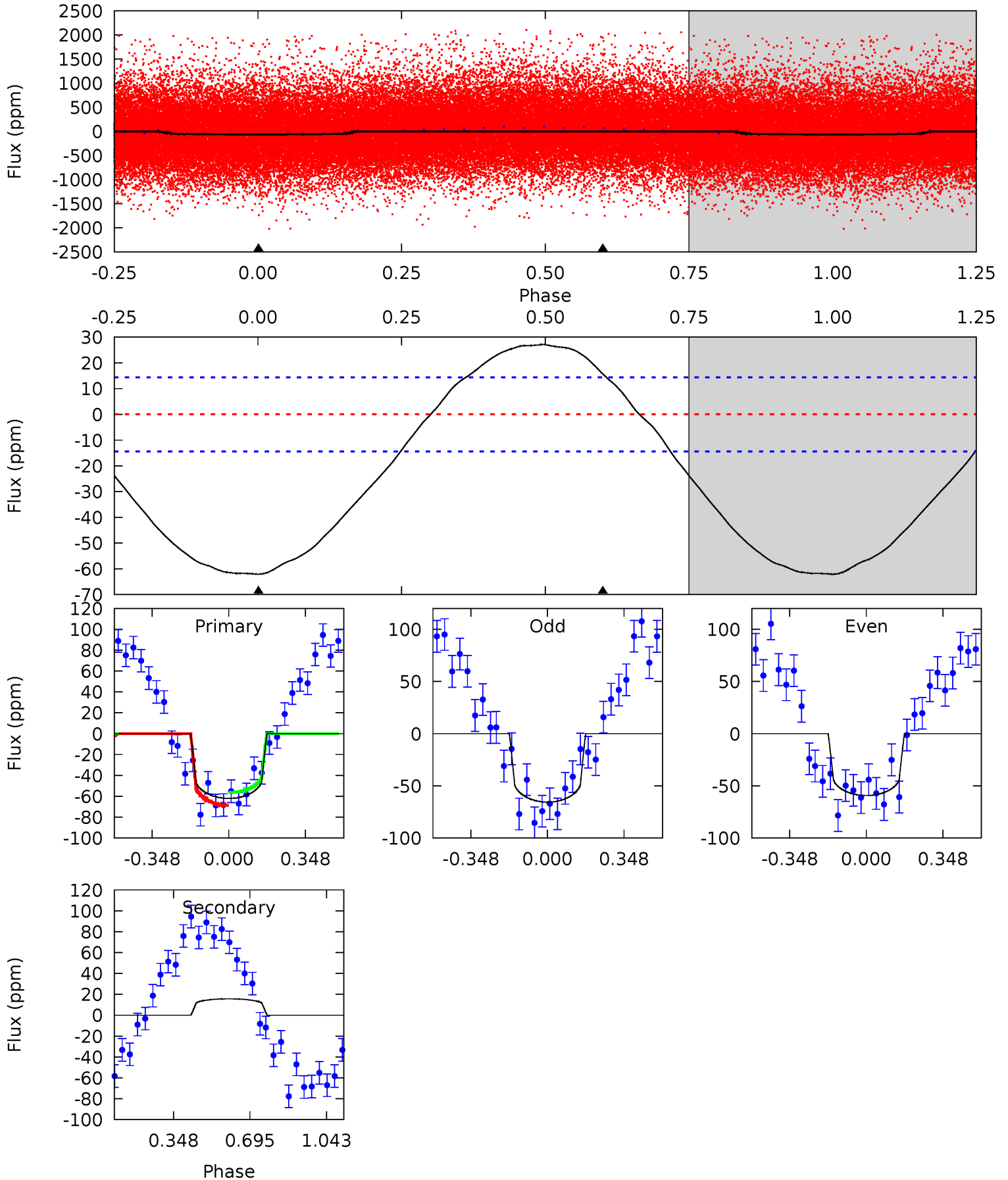
TCE 011302565-01 P= 0.844497 Days $T_0=131.726491$ (BKJD)



DV Model-Shift Uniqueness Test

011302565-01, P = 0.844412 Days, E = 130.968019 Days

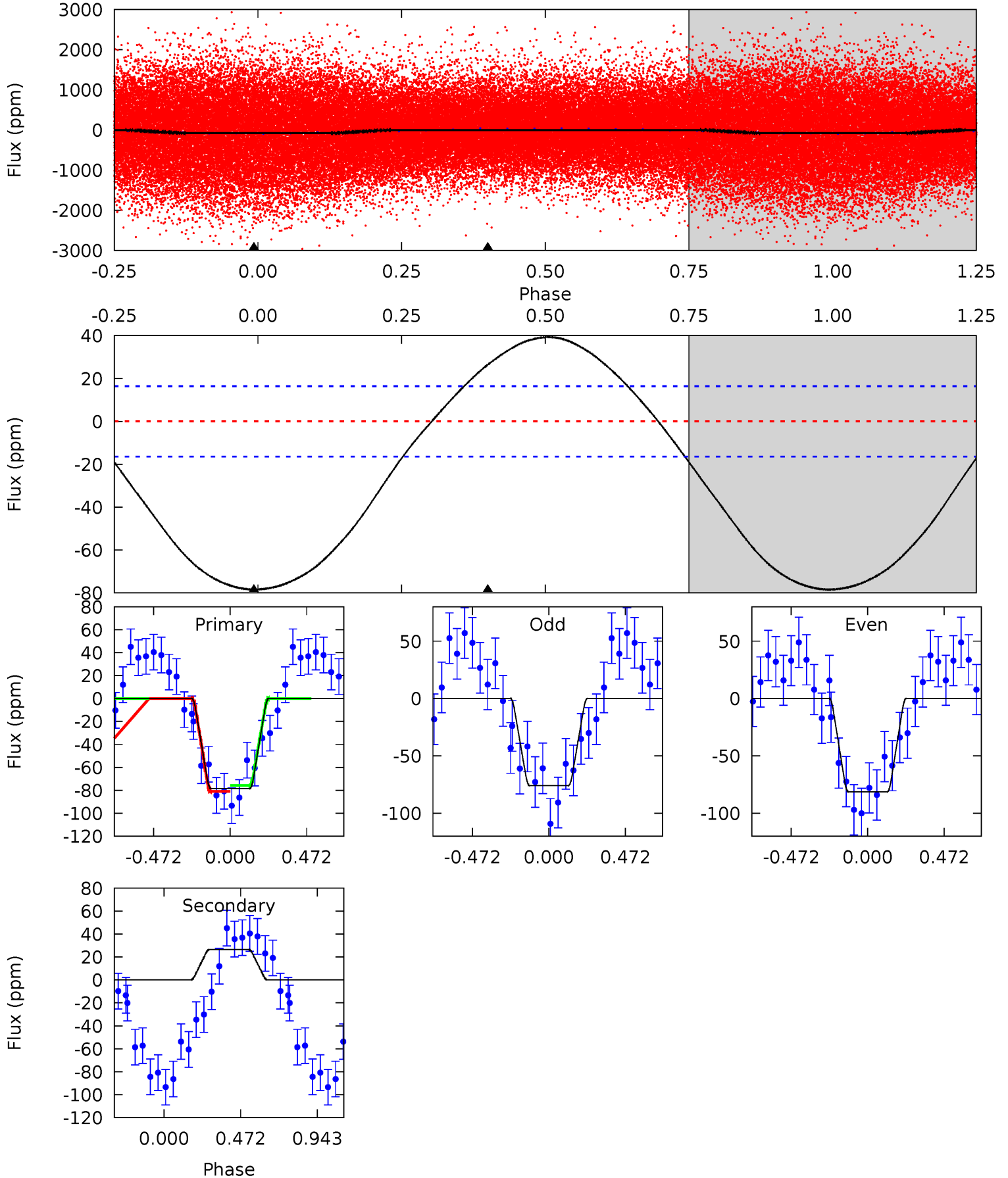
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
18.5	-4.68	0	0	4.30	0.94	2.32	18.5	18.5	-4.68	-4.68	0.95	0.93	0.30	1.84



Alt Model-Shift Uniqueness Test

011302565-01, P = 0.844497 Days, E = 130.881994 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
20.2	-6.81	0	0	4.23	0.72	2.54	20.2	20.2	-6.81	-6.81	0.69	1.71	0.33	0.57



Stellar Parameters For KIC 011302565

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	11068^{+342}_{-456}	$4.377^{+0.084}_{-0.137}$	$-0.500^{+0.600}_{-0.100}$	$1.555^{+0.327}_{-0.201}$	$2.102^{+0.185}_{-0.167}$	$0.788^{+0.327}_{-0.312}$
	+3%/-4%	+2%/-3%	+120%/-20%	+21%/-13%	+9%/-8%	+41%/-40%
Source	KIC0	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 011302565-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	16 ± 3	$1.13^{+0.91}_{-0.71}$	5705^{+319}_{-299}	-8016^{+2011}_{-8666}	$-3.338^{+2.323}_{-20.659}$
Alt.	26 ± 4	$1.68^{+1.01}_{-0.92}$	5718^{+340}_{-316}	-7468^{+1420}_{-5144}	$-2.627^{+1.654}_{-10.097}$

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 $A_{obs} \gg 1.0$

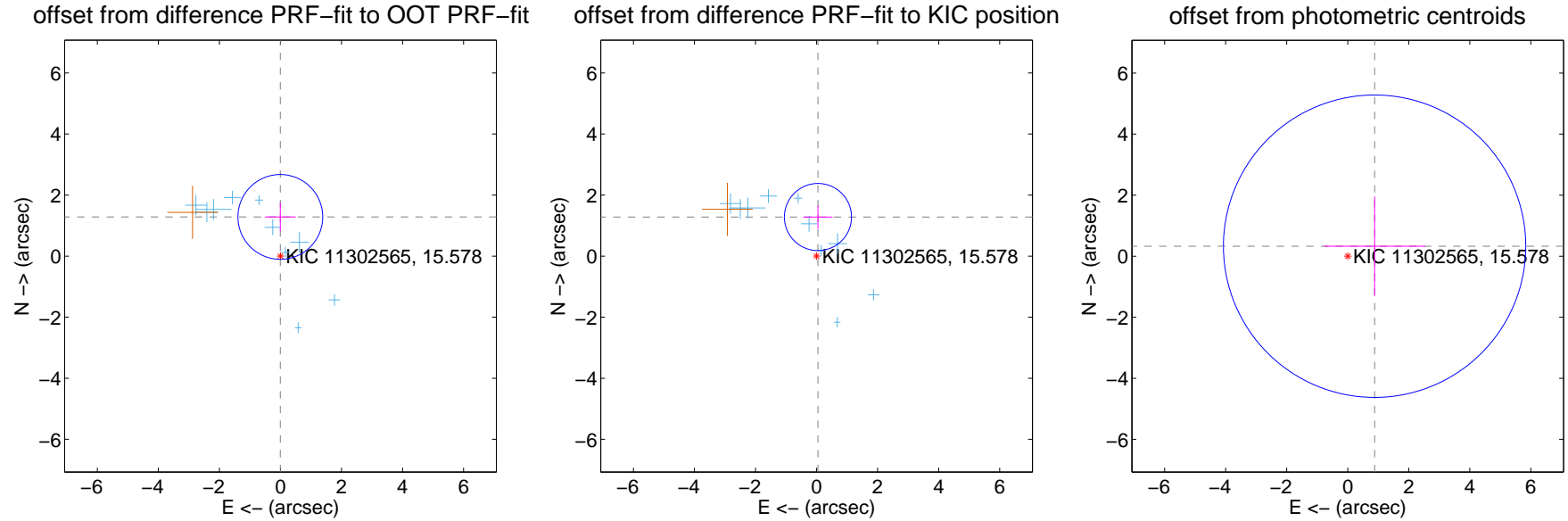
DV Centroid Data

Supplemental centroid analysis for 011302565-01. Kepler magnitude: 15.58. Transit SNR 7.21

There are 10 quarters with good PRF difference image offsets

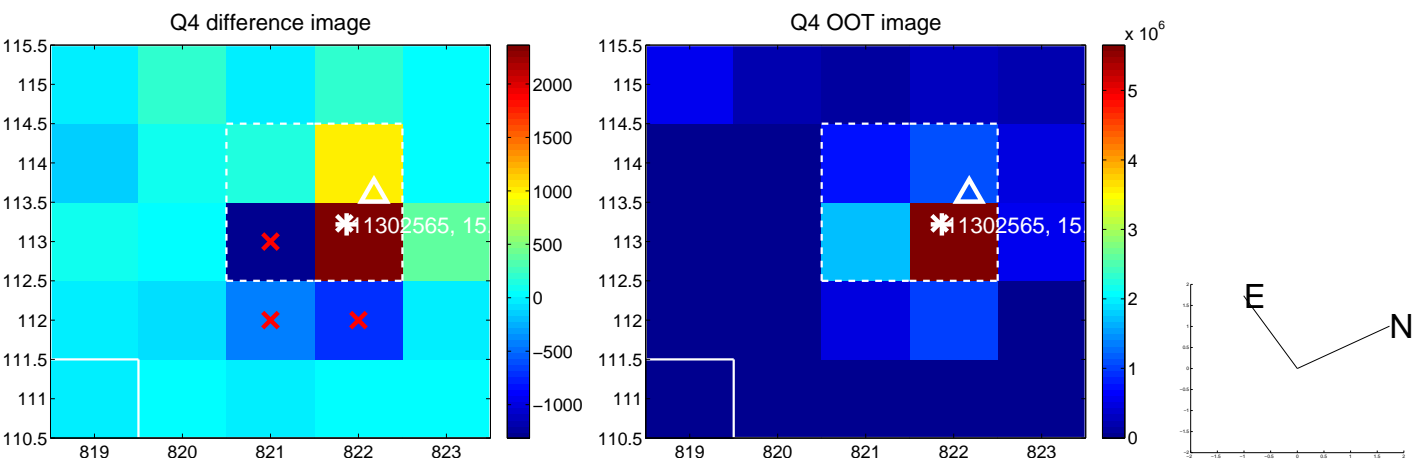
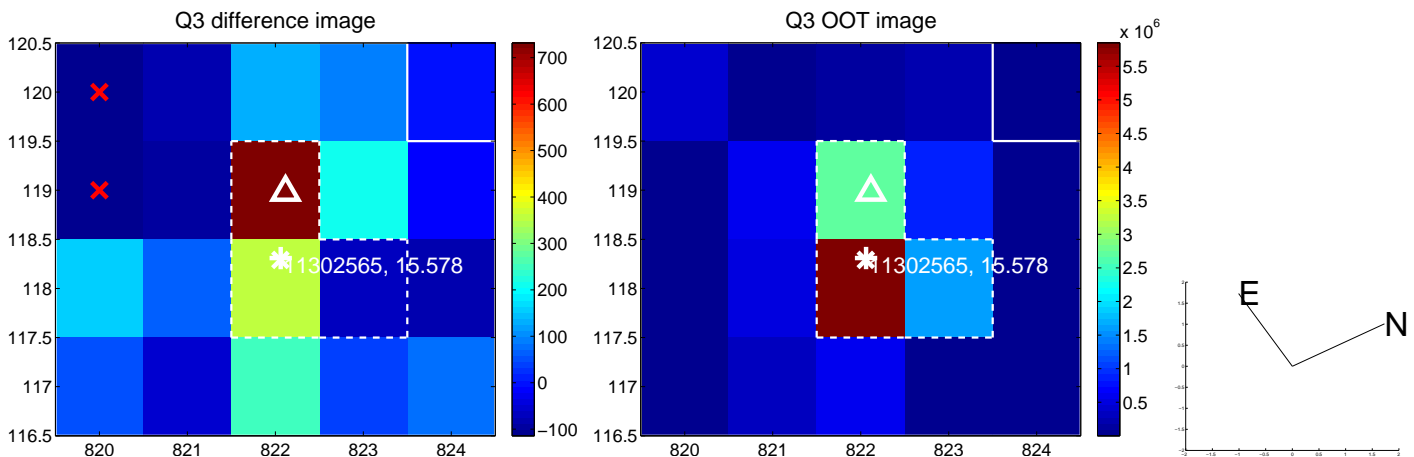
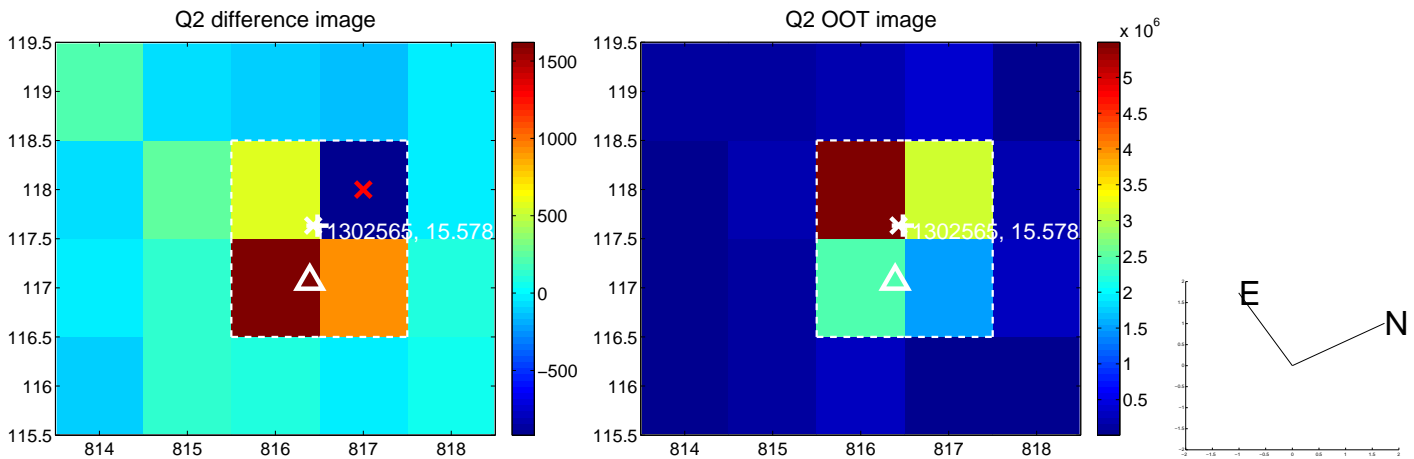
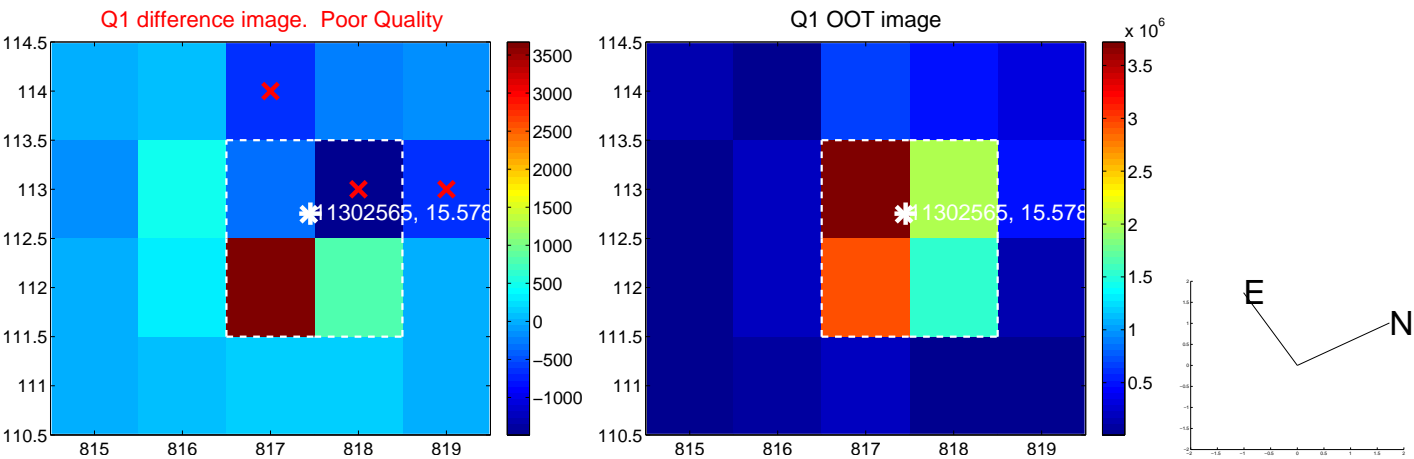
The direct PRF centroid is offset from the target star catalog position by about 0.05 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.284 ± 0.463	2.77	0.005 ± 0.504	1.284 ± 0.462
PRF-fit source offset from KIC position	1.282 ± 0.366	3.50	-0.045 ± 0.480	1.281 ± 0.379
photometric centroid source offset	0.94 ± 1.65	0.57	-0.88 ± 1.65	0.33 ± 1.63

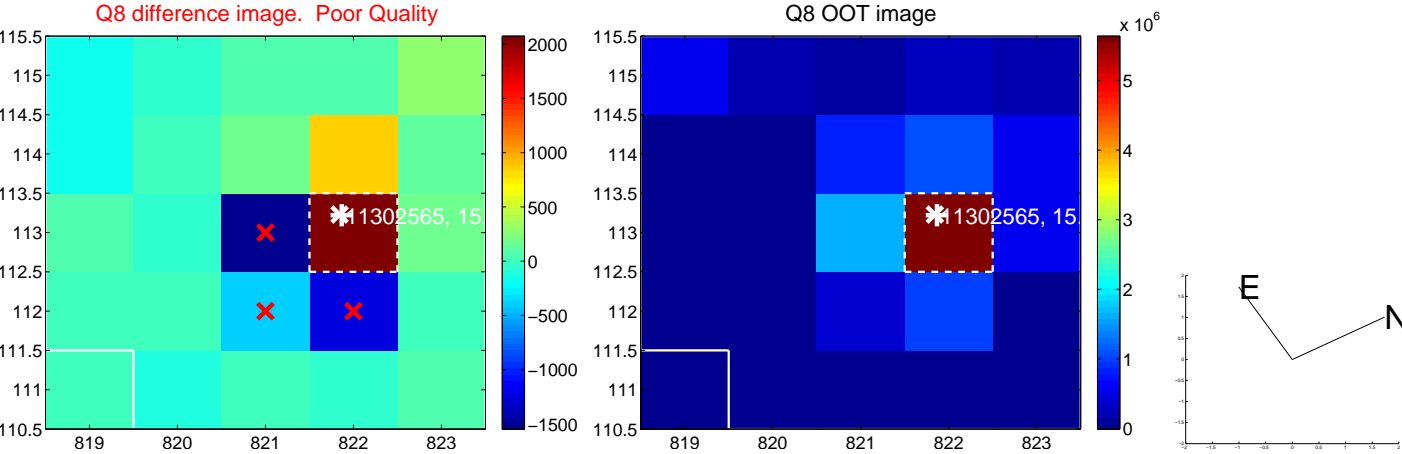
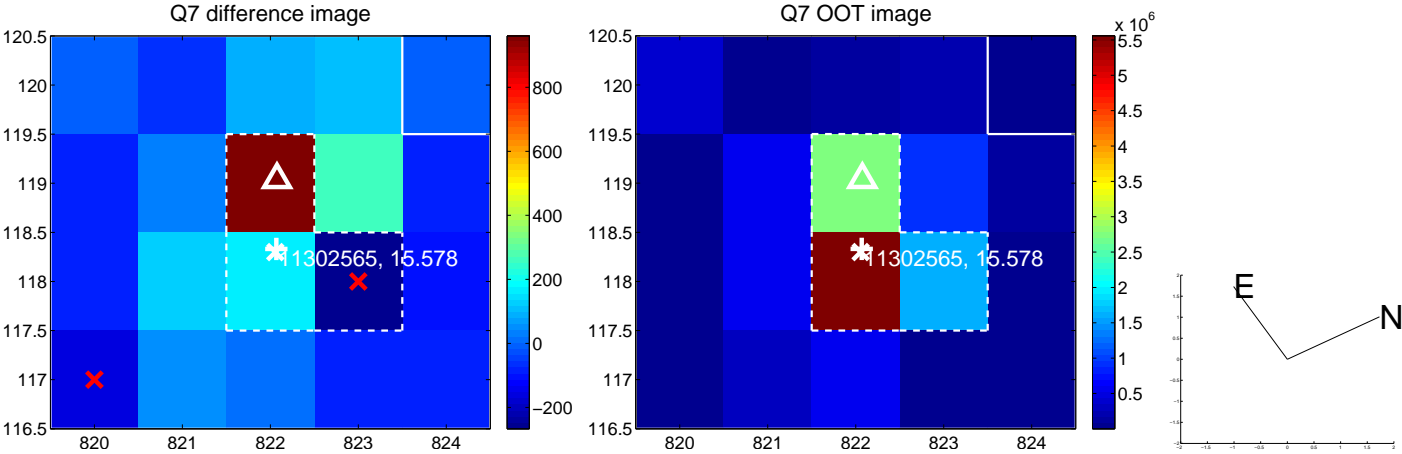
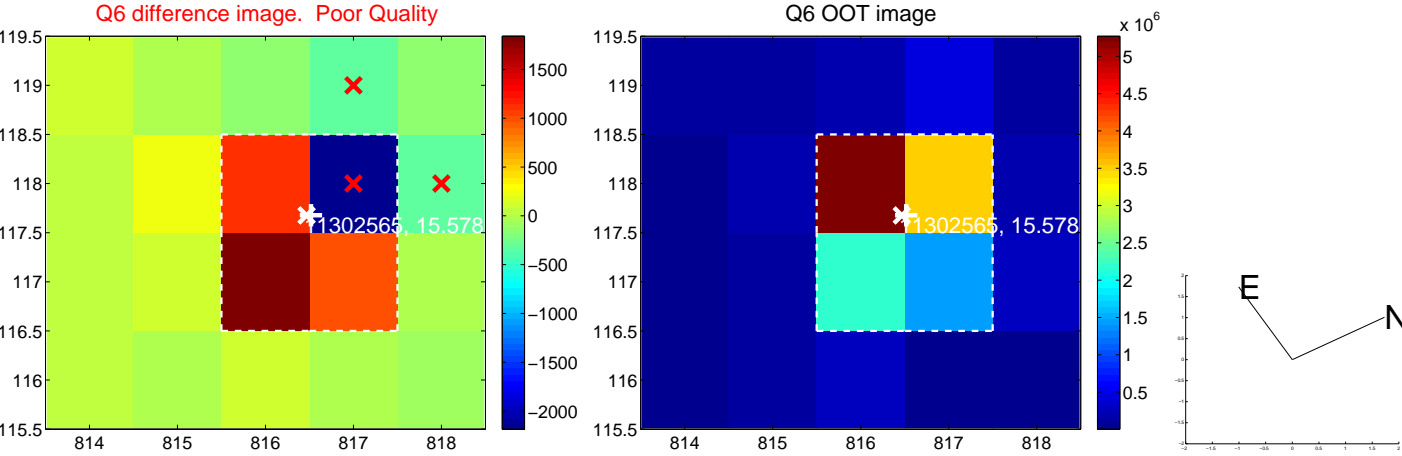
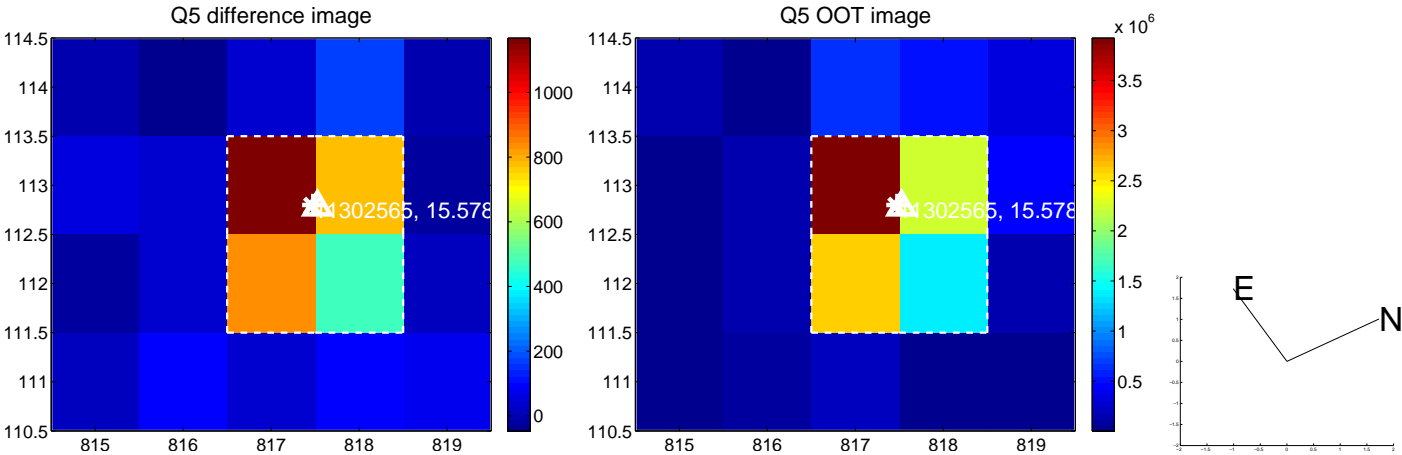


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets**; **Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

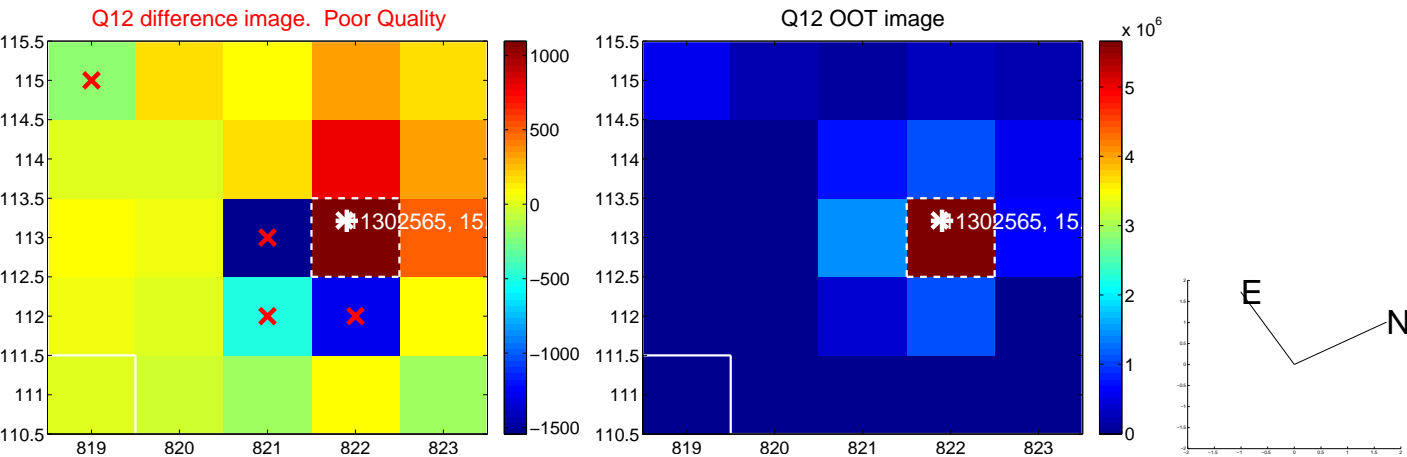
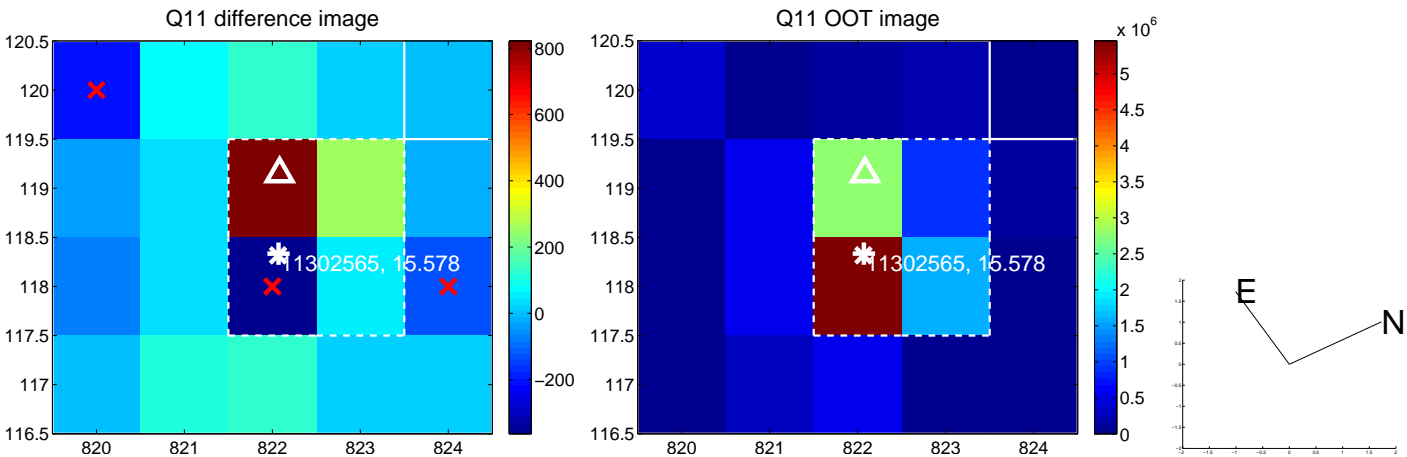
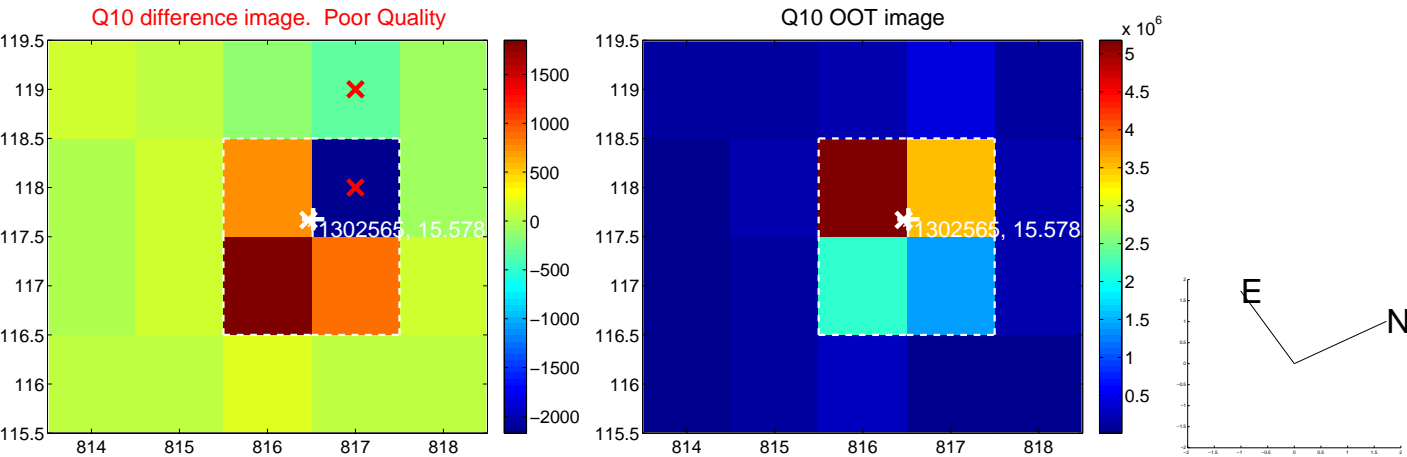
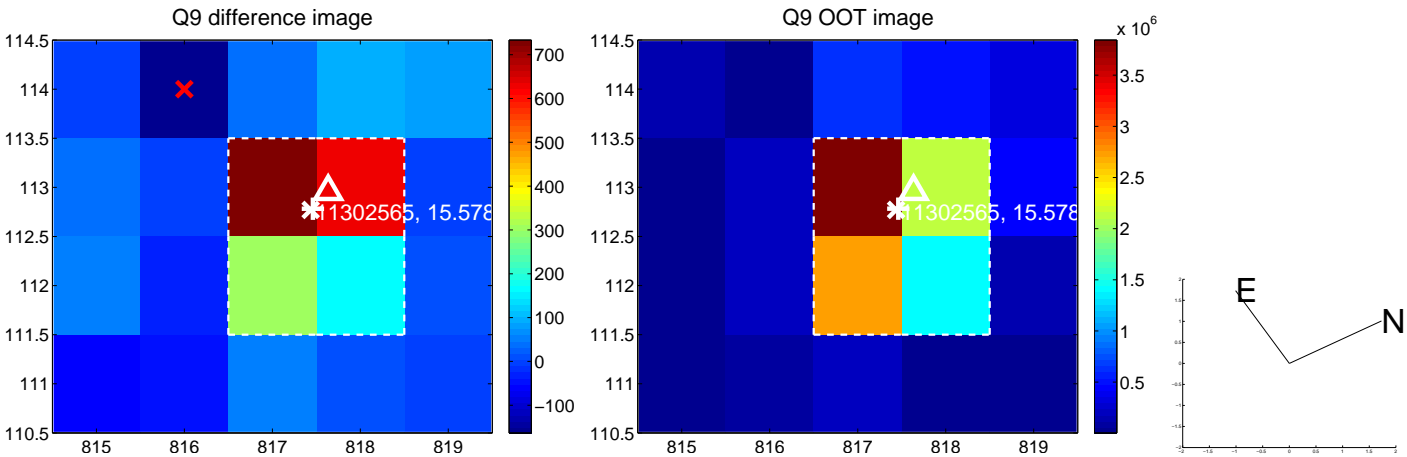
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



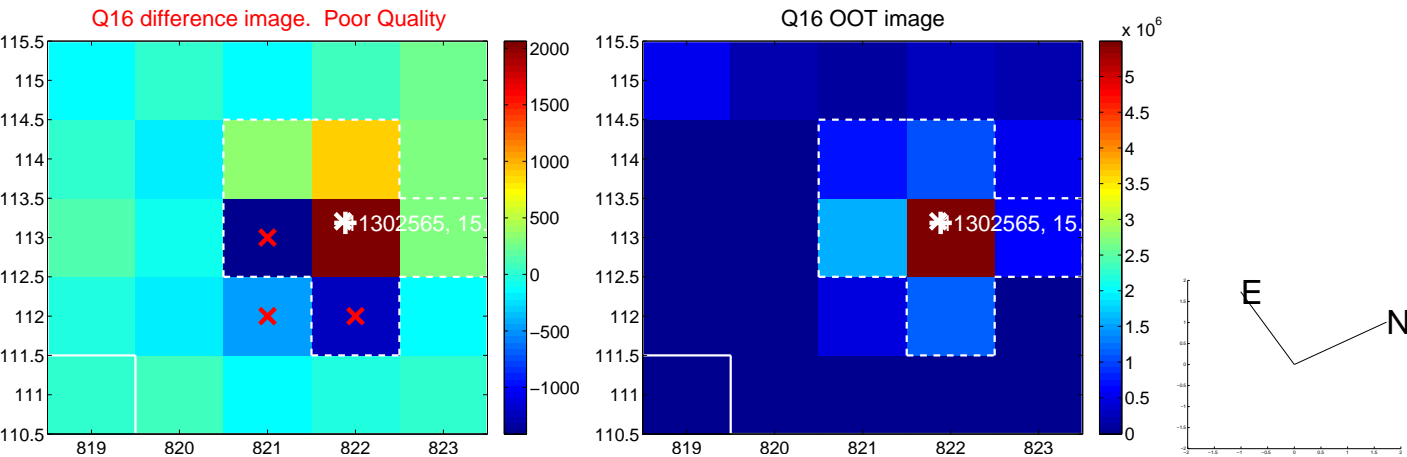
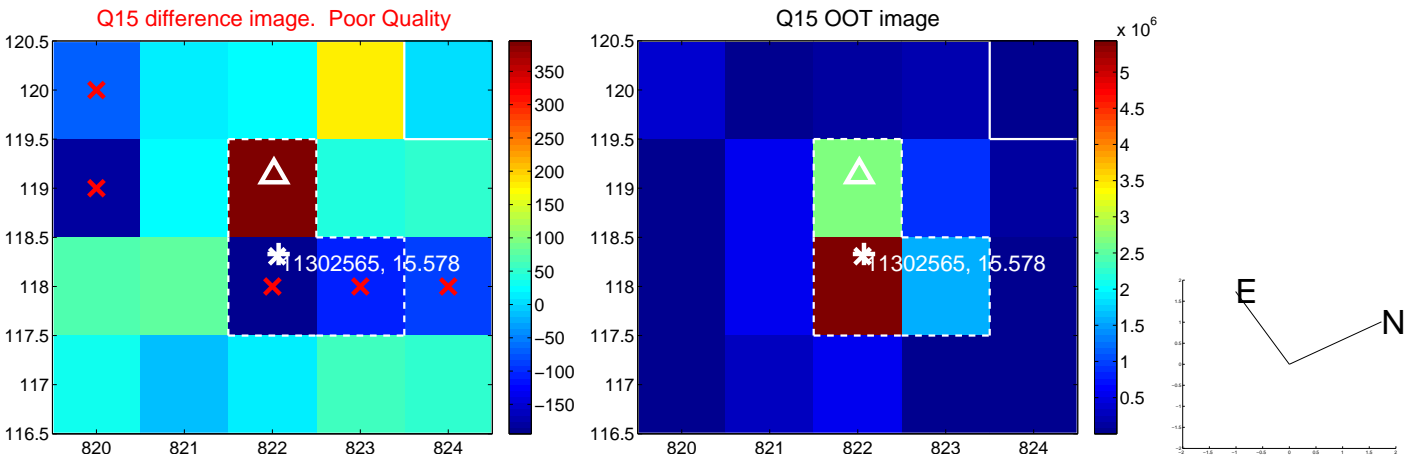
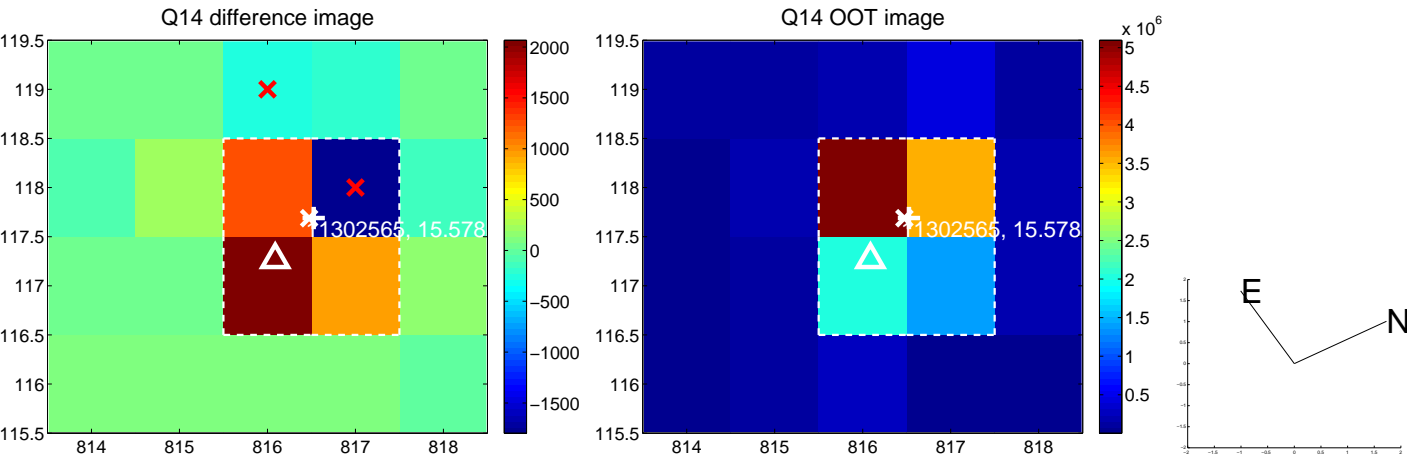
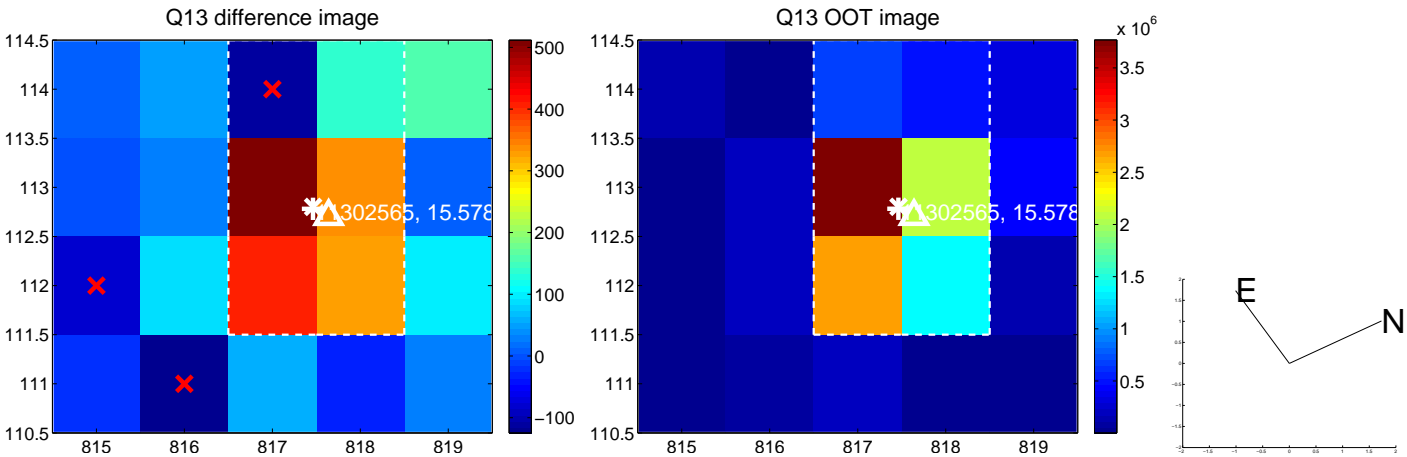
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



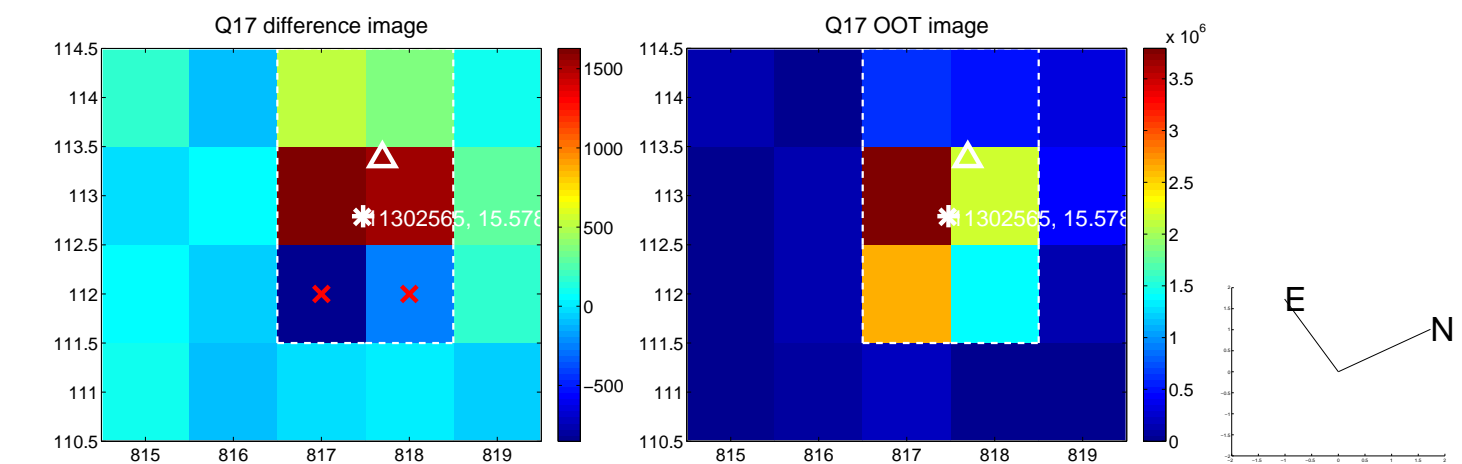
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



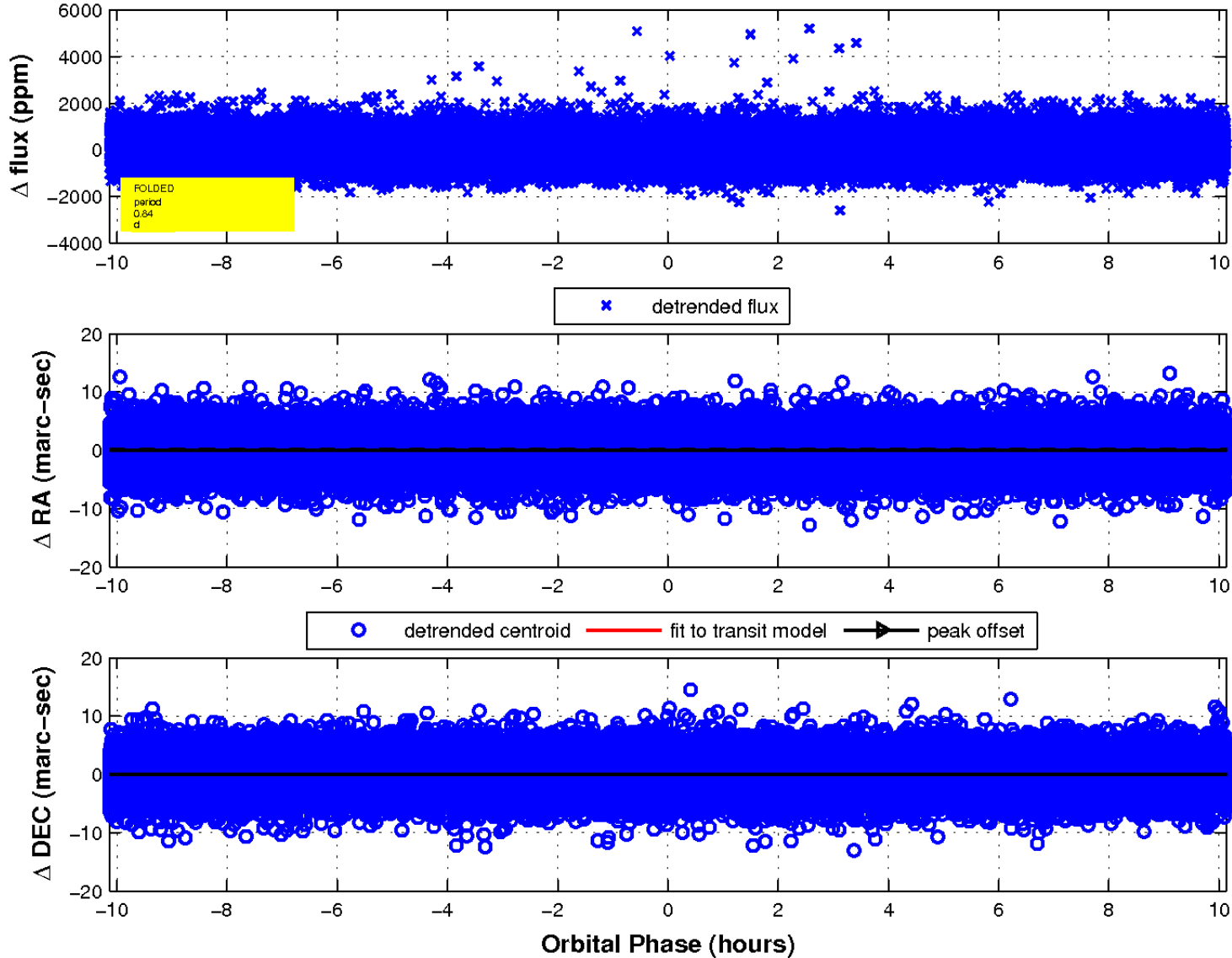
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white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

