

KIC 003765692

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})
003765692-01	OBS	6358.01	3.093748	132.779397	355.1	1.922	8.5	9.6	0.68	5327	1.54	234.93

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003765692-01	OBS	PC	0.18	0	0	0	0	CENT_KIC_POS

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

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

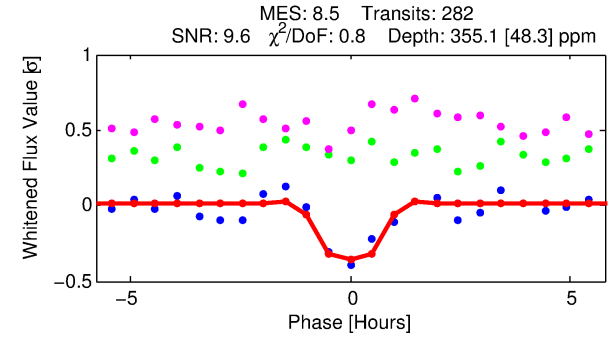
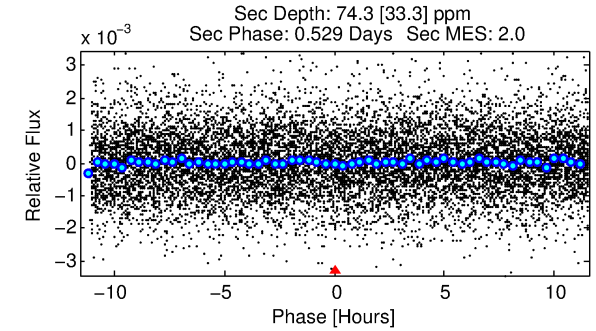
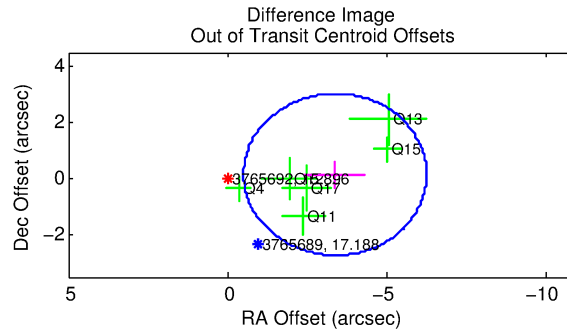
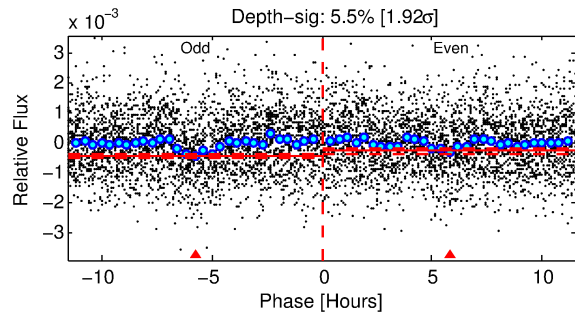
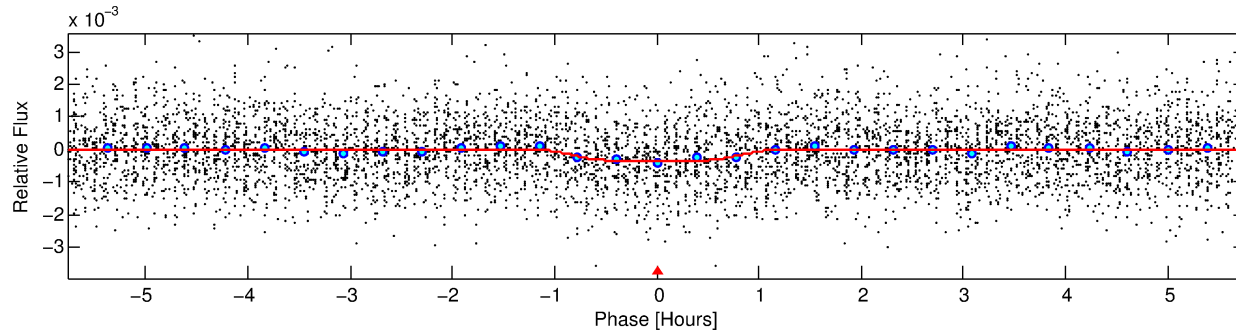
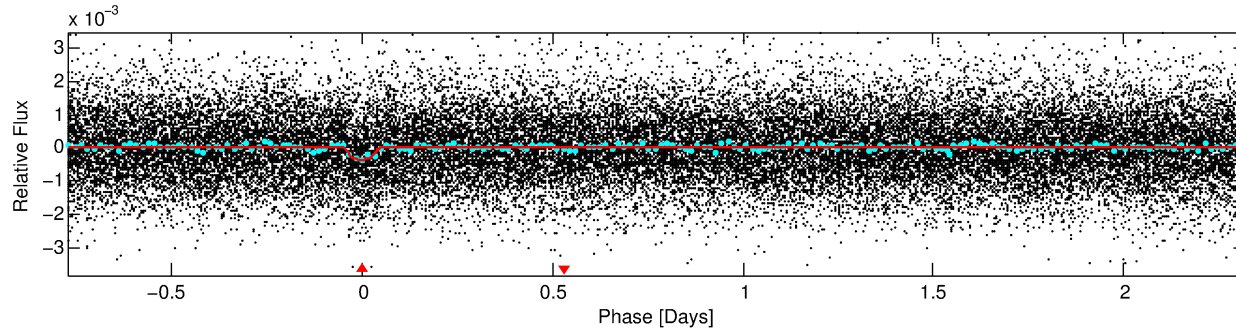
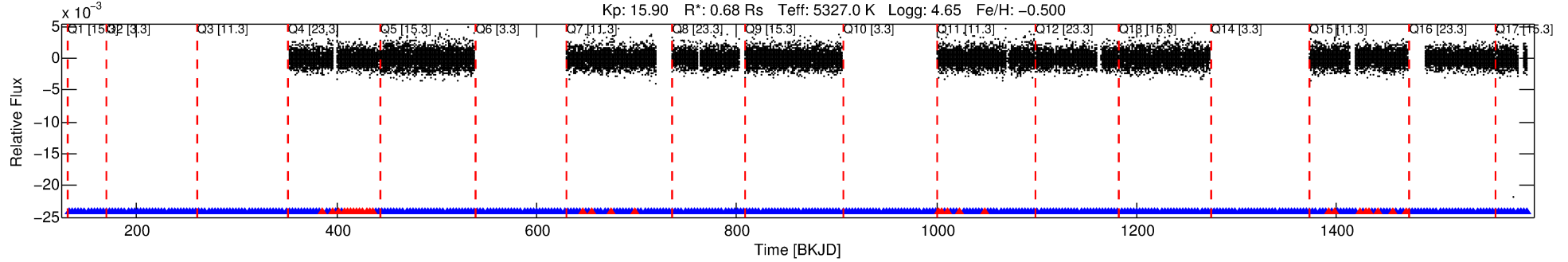
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 003765692-01

No Significant Match Found

DV One-Page Summary

KIC: 3765692 Candidate: 1 of 1 Period: 3.094 d
KOI: K06358.01 Corr: 0.845



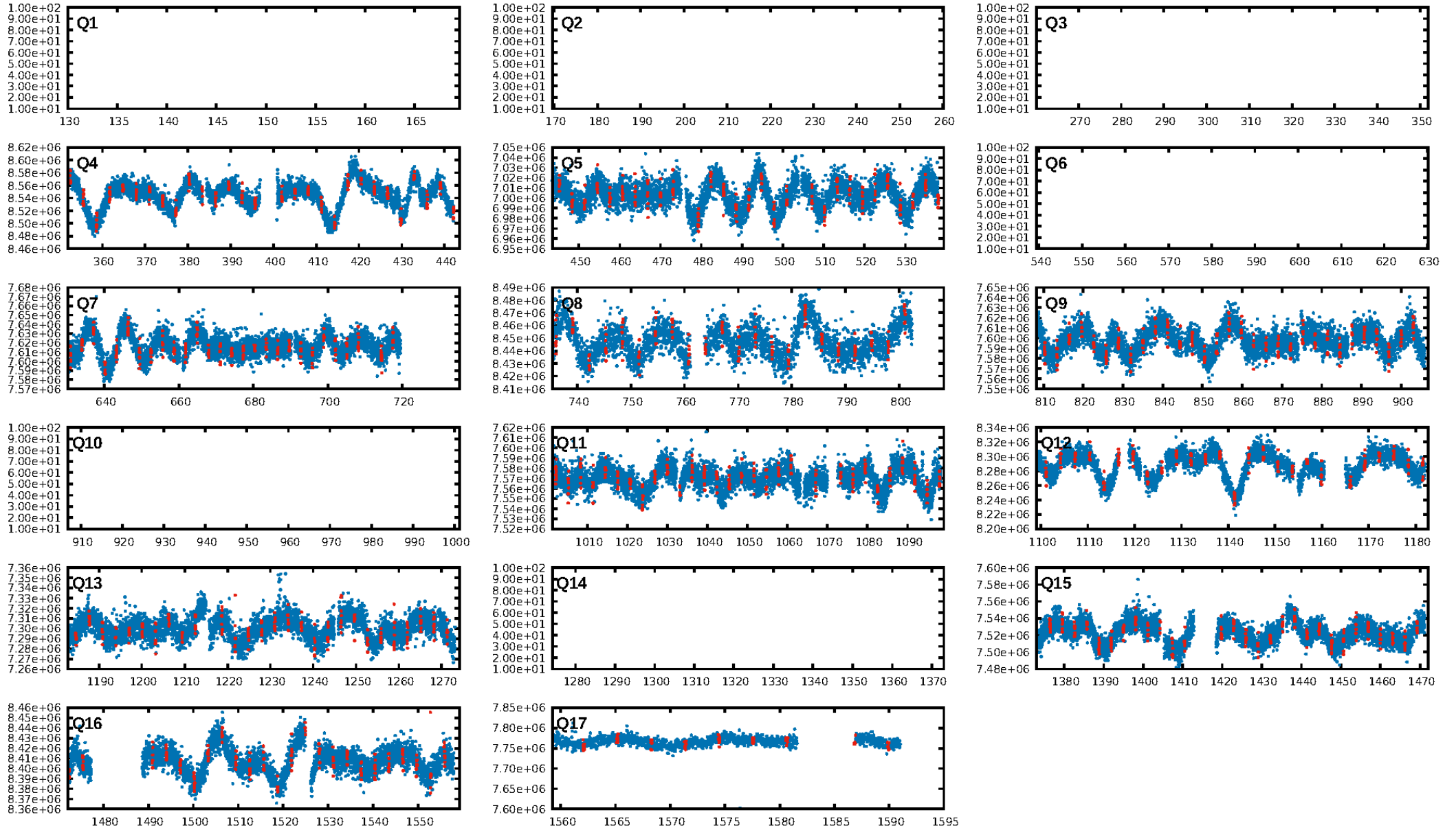
DV Fit Results:

Period = 3.09375 [0.00002] d
Epoch = 132.7794 [0.0036] BKJD
Rp/R* = 0.0207 [0.0136]
a/R* = 6.02 [16.89]
b = 0.90 [0.63]
Seff = 234.93 [54.34]
Teff = 998 [58] K
Rp = 1.54 [1.04] Re
a = 0.0377 [0.0048] AU
Ag = 24.65 [34.49] [0.69 σ]
Teffp = 3439 [1199] K [2.03 σ]

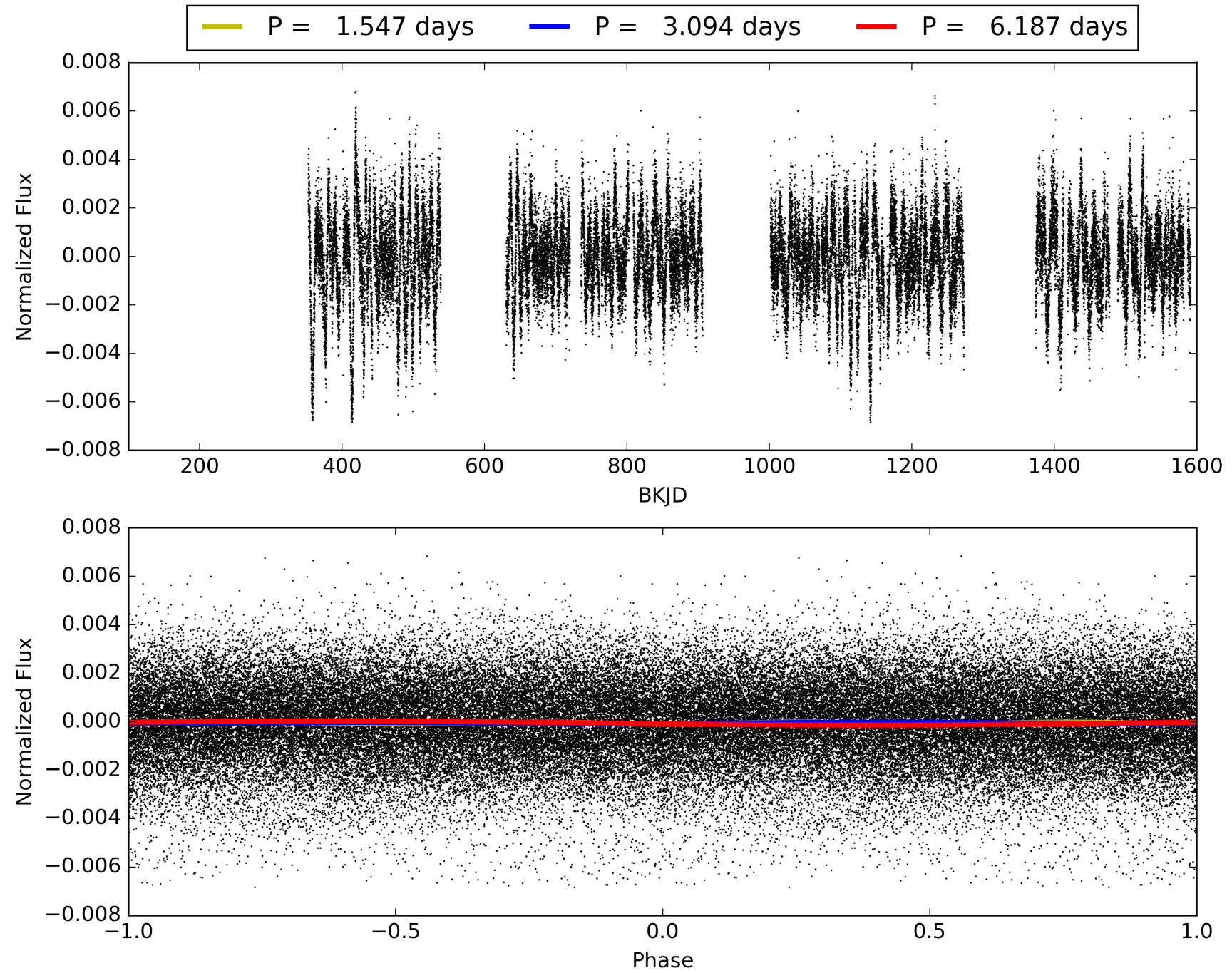
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 6.00e-18
RollingBand-fgt: 0.89 [243/273]
GhostDiagnostic-chr: 18.72
Centroid-sig: 0.2%
Centroid-so: 4.149 arcsec [10.18 σ]
OotOffset-rm: 3.394 arcsec [3.54 σ]
KicOffset-rm: 3.337 arcsec [3.63 σ]
OotOffset-st: 0/2/2/2 [6]
KicOffset-st: 0/2/2/2 [6]
DiffImageQuality-fgm: 0.67 [4/6]
DiffImageOverlap-fno: 1.00 [11/11]

TCE 003765692-01, PDC Light Curves

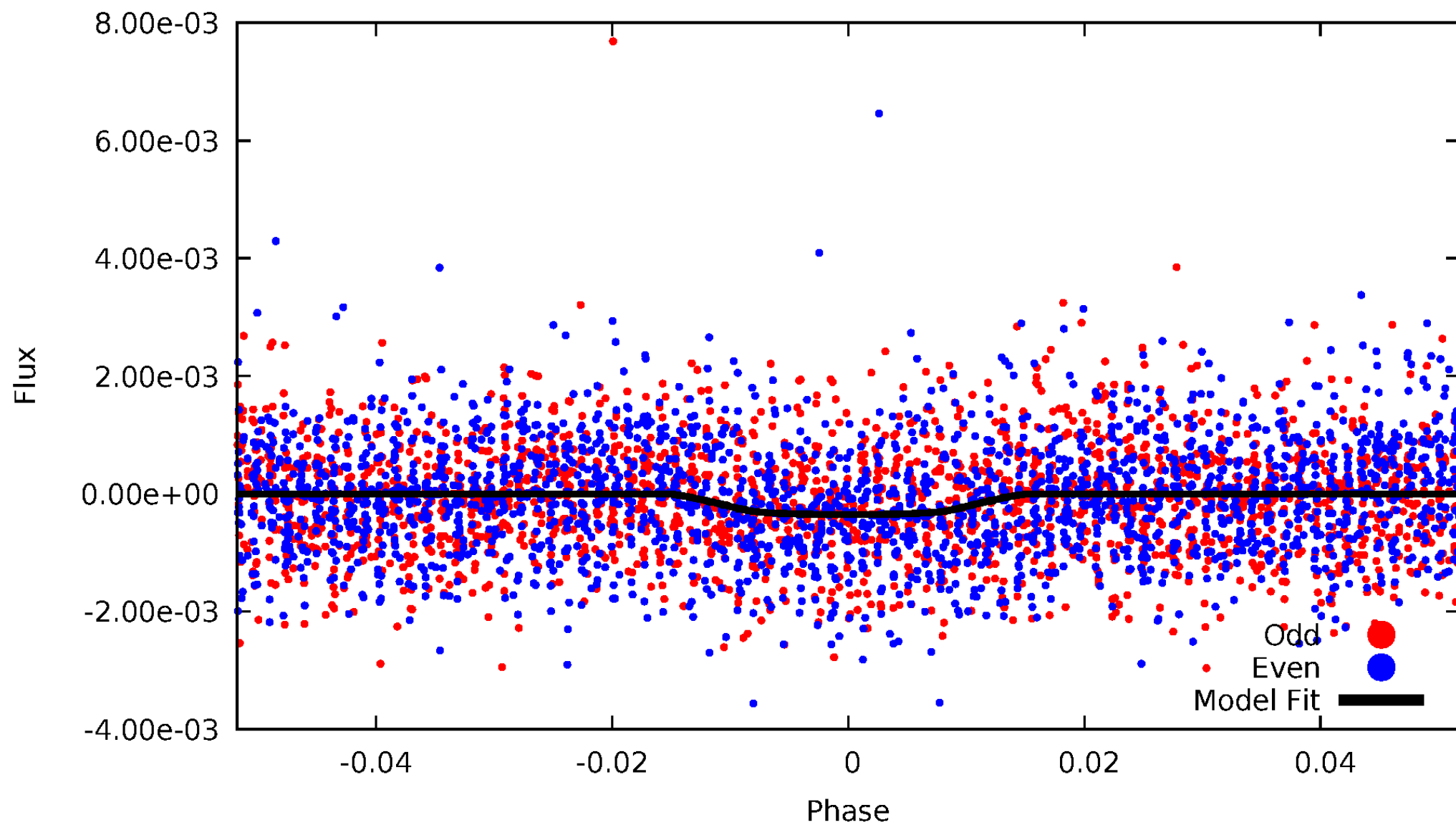


TCE 003765692-01



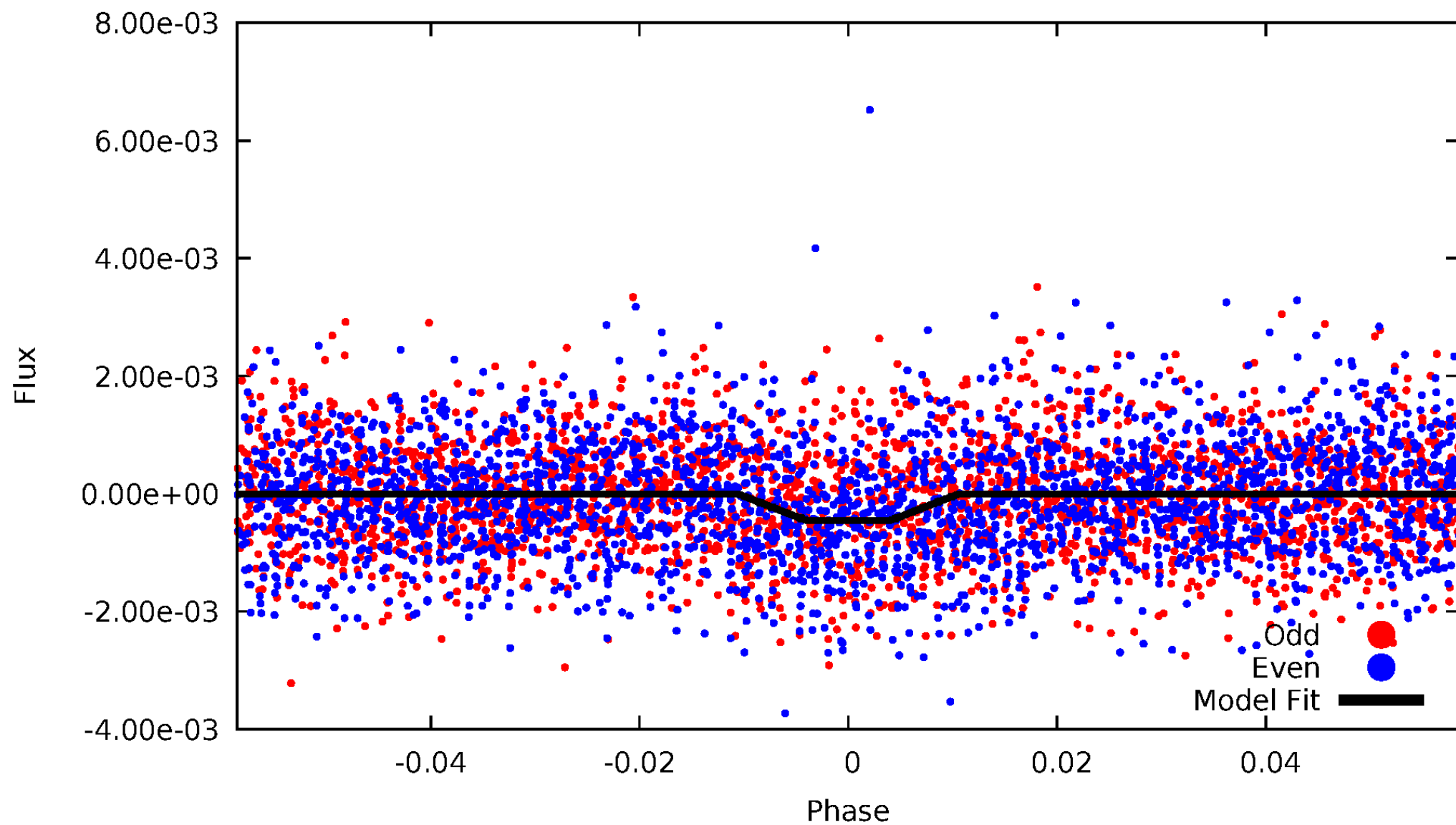
DV Odd/Even

TCE 003765692-01



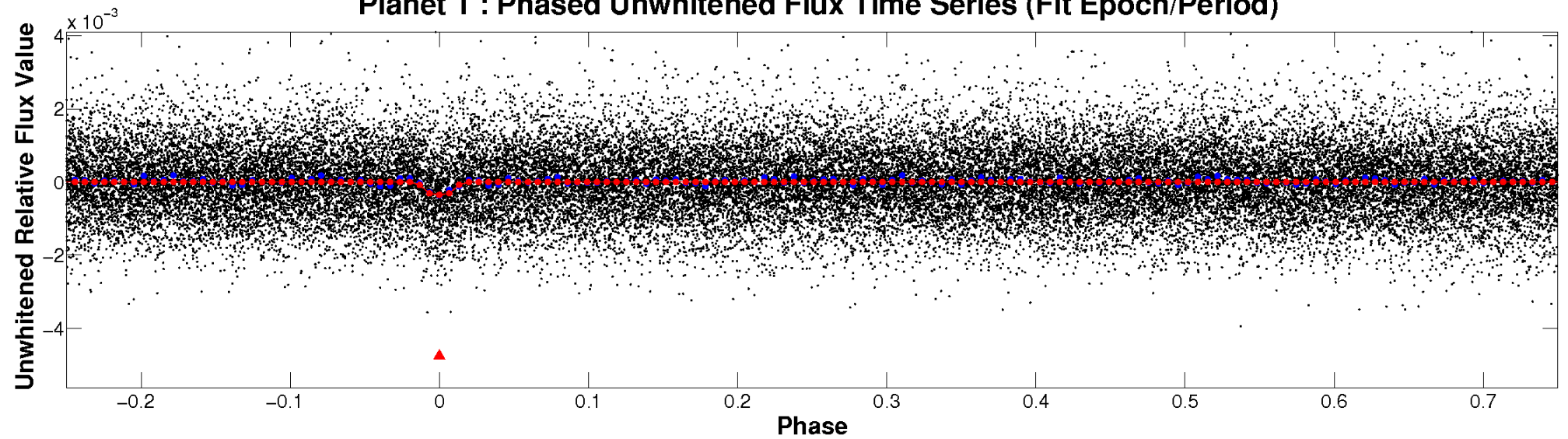
ALT Odd/Even

TCE 003765692-01

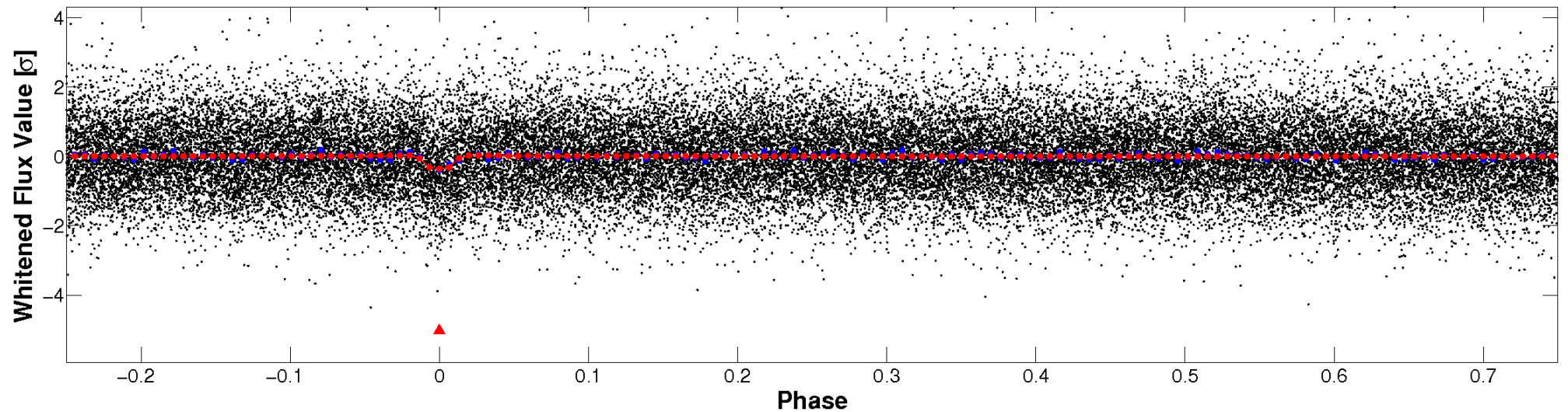


Non-Whitened Vs. Whitened Light Curve

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

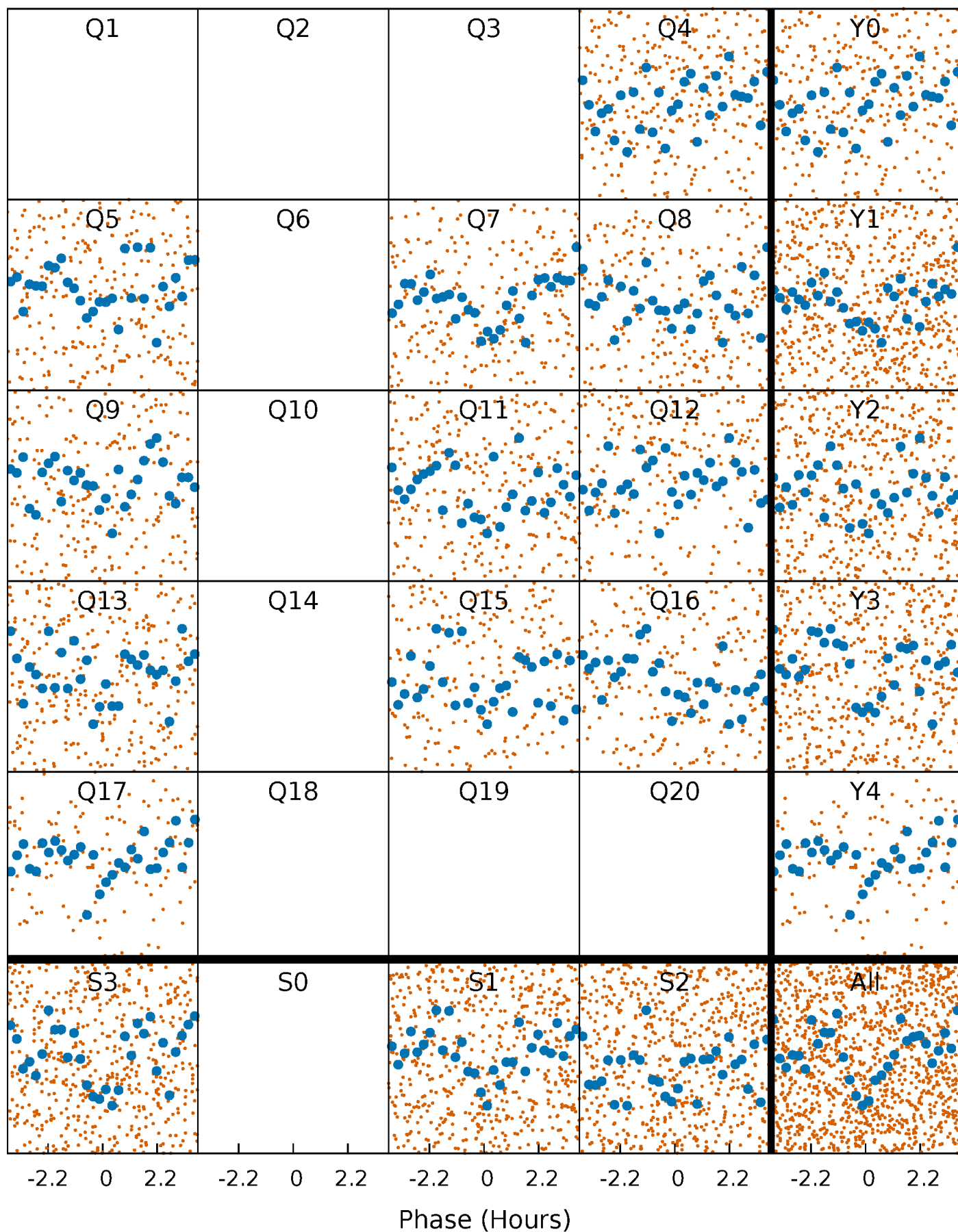


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



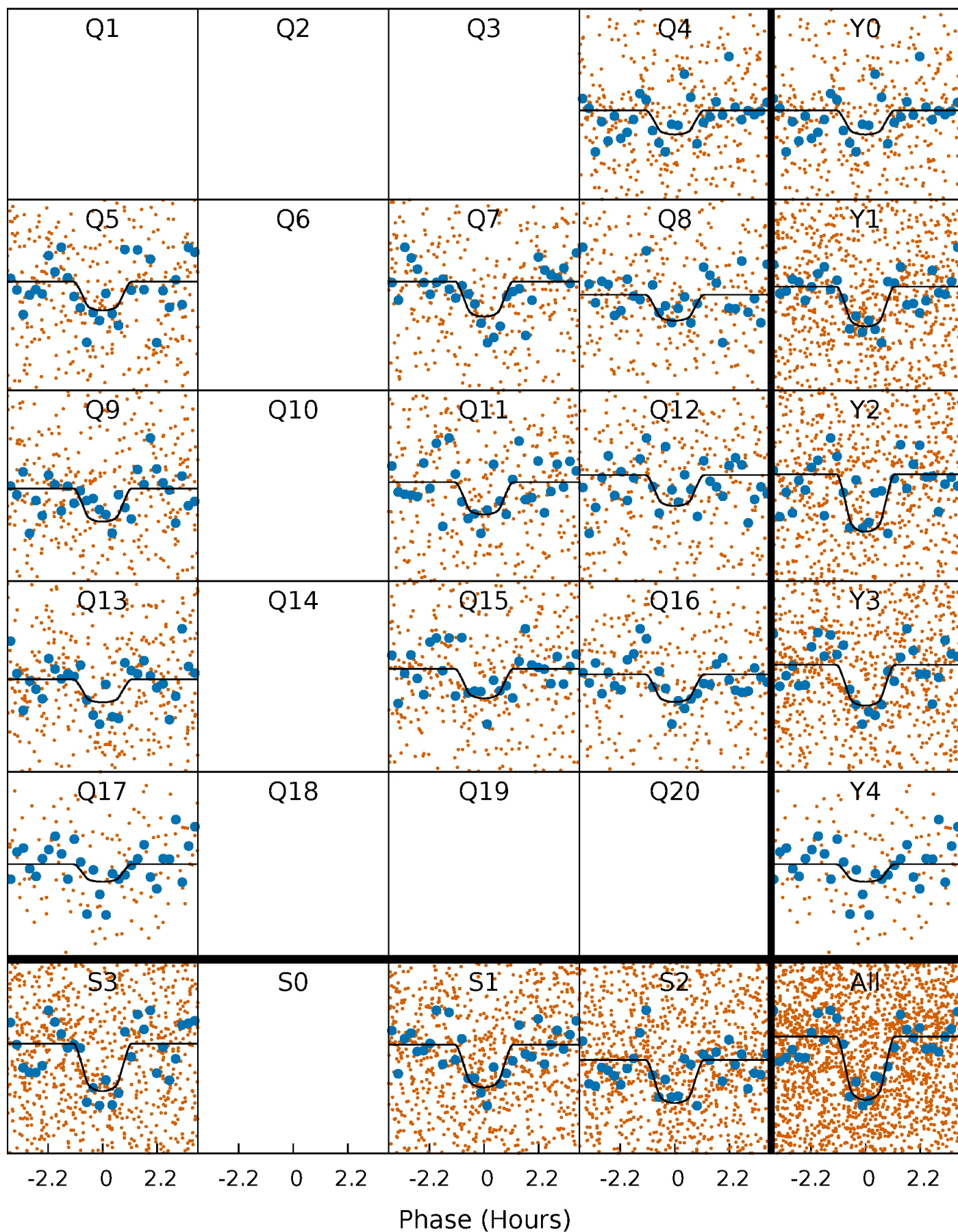
PDC Quarter-Phased Transit Curves

TCE 003765692-01 P= 3.093748 Days $T_0=132.779397$ (BKJD)



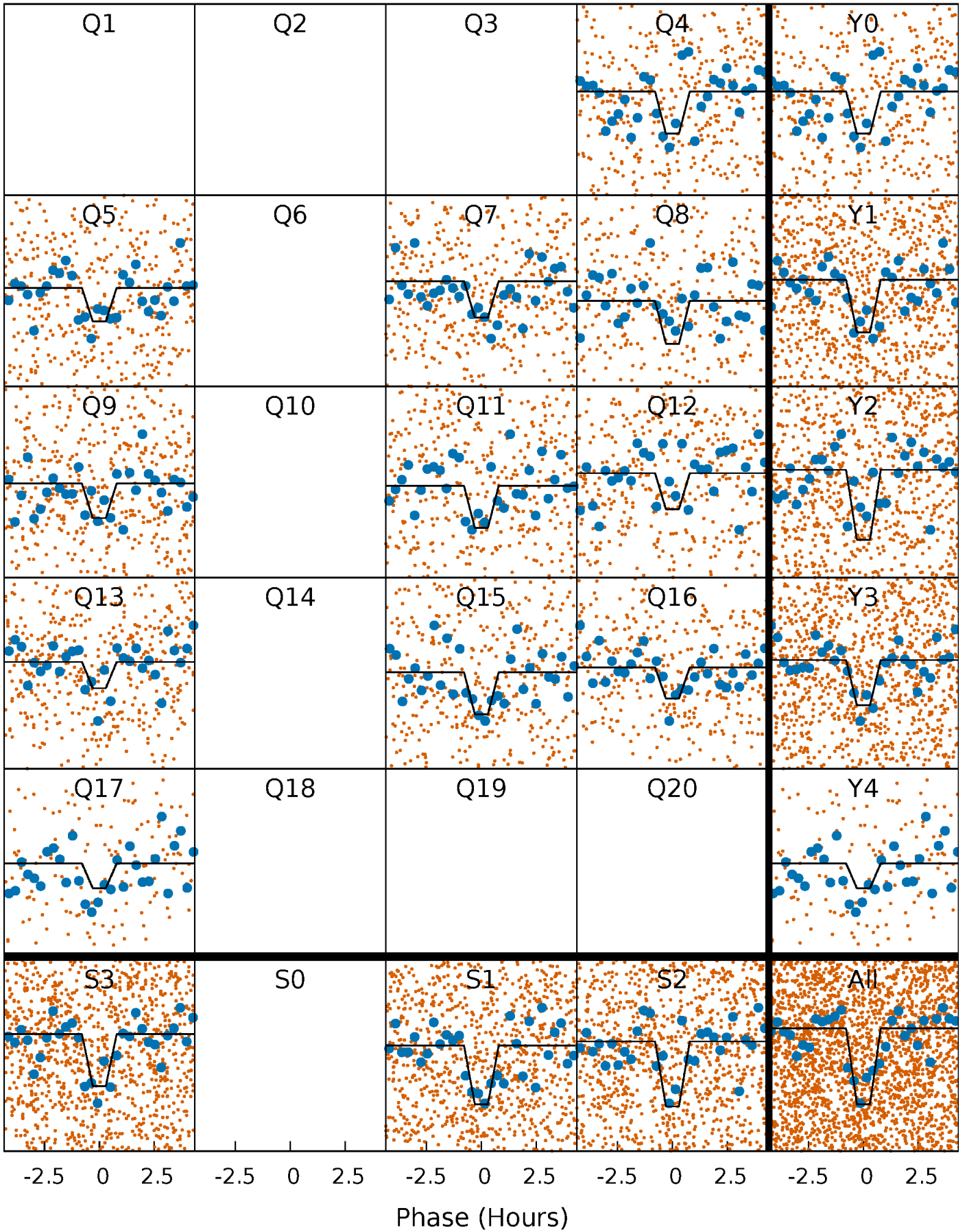
DV Quarter-Phased Transit Curves

TCE 003765692-01 P= 3.093748 Days $T_0=132.779397$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

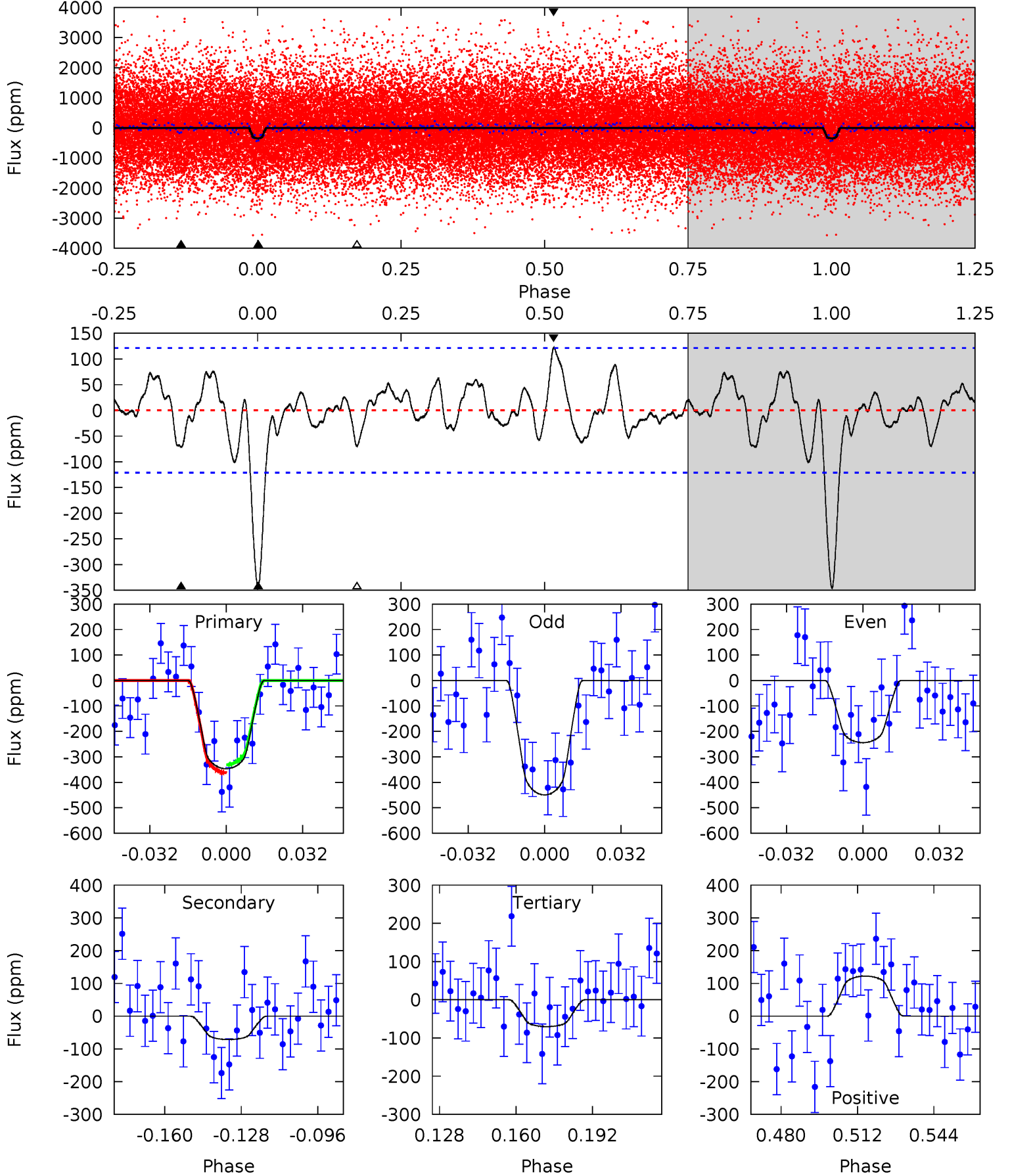
TCE 003765692-01 P= 3.093780 Days $T_0=132.769518$ (BKJD)



DV Model-Shift Uniqueness Test

003765692-01, P = 3.093748 Days, E = 132.779397 Days

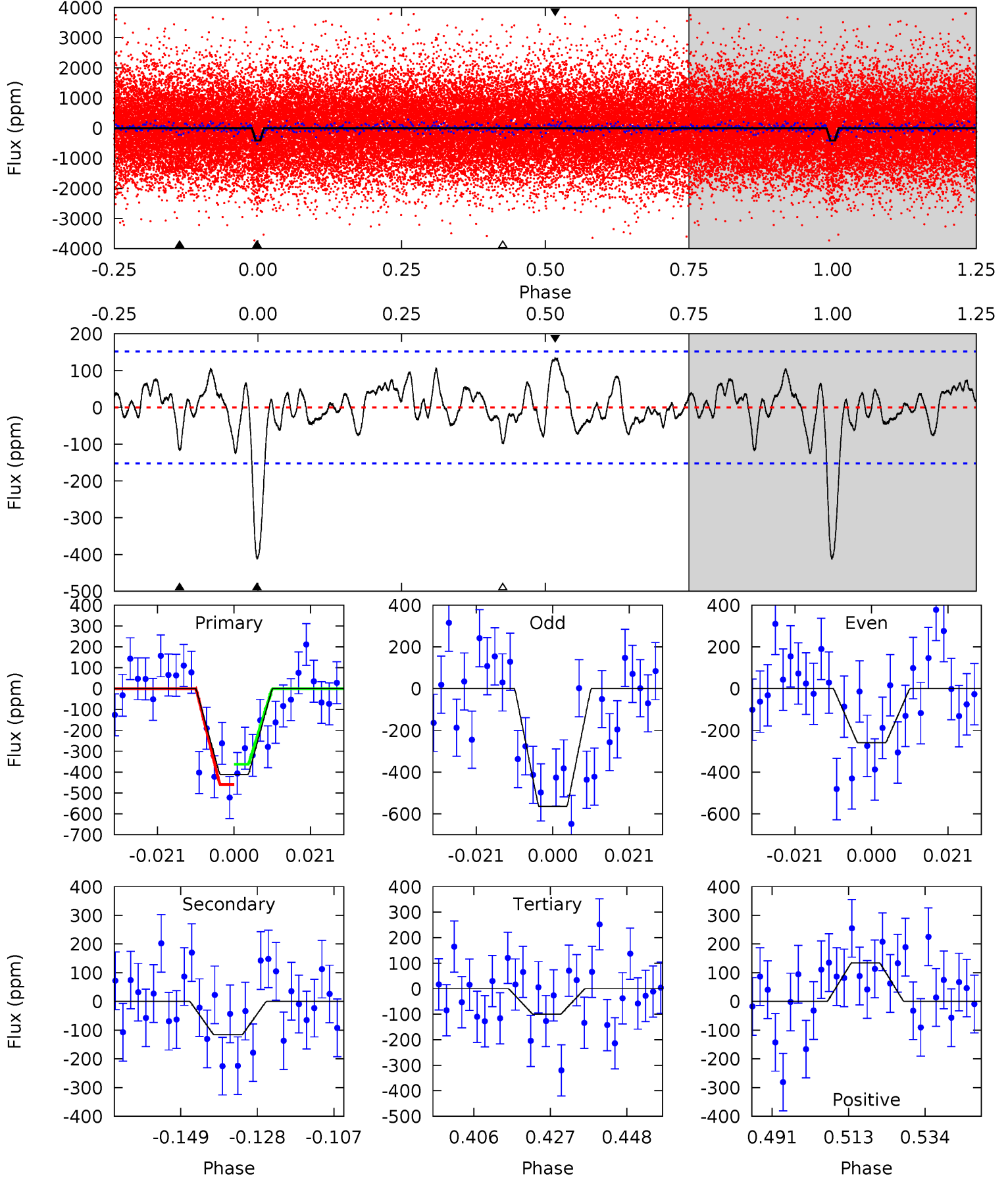
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.7	2.83	2.78	4.83	4.80	2.14	1.52	10.9	8.88	0.05	-2.01	4.07	0.92	0.26	0.62



Alt Model-Shift Uniqueness Test

003765692-01, P = 3.093780 Days, E = 132.769518 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.2	3.72	3.18	4.30	4.88	2.30	1.46	10.0	8.89	0.55	-0.57	4.90	0.95	0.25	1.55



Stellar Parameters For KIC 003765692

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5327^{+190}_{-169}	$4.646^{+0.032}_{-0.097}$	$-0.500^{+0.300}_{-0.300}$	$0.681^{+0.107}_{-0.046}$	$0.772^{+0.072}_{-0.080}$	$3.439^{+0.464}_{-1.086}$
	+4%/-3%	+1%/-2%	+60%/-60%	+16%/-7%	+9%/-10%	+13%/-32%
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 003765692-01 / KOI 6358.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-71 ± 25	$1.62^{+1.05}_{-0.94}$	1415^{+62}_{-57}	3734^{+1385}_{-604}	20^{+93}_{-13}
Alt.	-116 ± 31	$1.78^{+1.04}_{-0.92}$	1413^{+64}_{-54}	3923^{+1426}_{-585}	28^{+101}_{-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 $T_{obs} \gg T_{max}$ AND $A_{obs} \gg 1.0$

DV Centroid Data

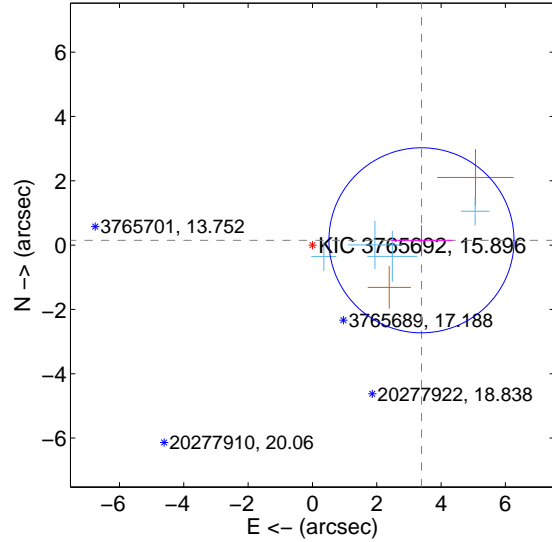
Supplemental centroid analysis for 003765692-01. Kepler magnitude: 15.90. Transit SNR 9.55

There are 4 quarters with good PRF difference image offsets

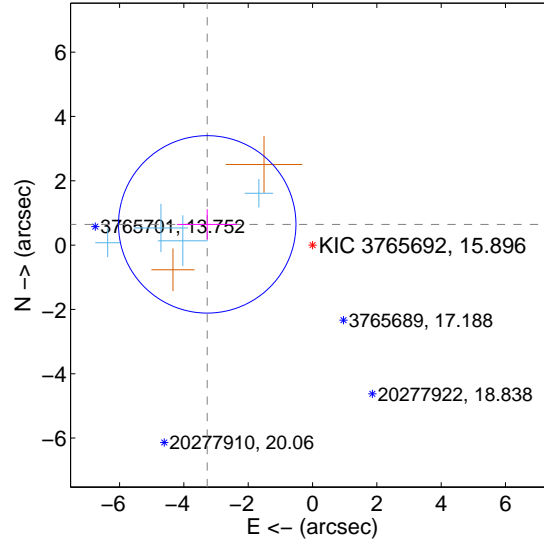
The OOT PRF centroid is offset from the target star catalog position by about 6.53 arcsec so the offset from difference PRF-fit to OOT-fit may be invalid.

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	3.394 ± 0.959	3.54	-3.390 ± 0.960	0.149 ± 0.469
PRF-fit source offset from KIC position	3.337 ± 0.919	3.63	3.274 ± 0.932	0.644 ± 0.472
photometric centroid source offset	4.15 ± 0.41	10.18	4.15 ± 0.41	-0.05 ± 0.30

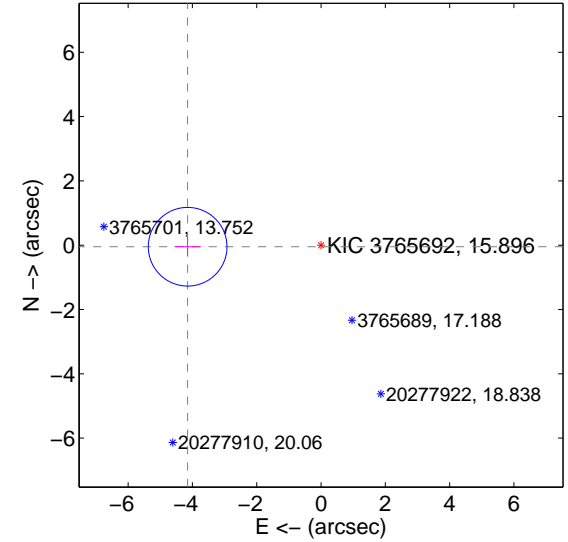
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

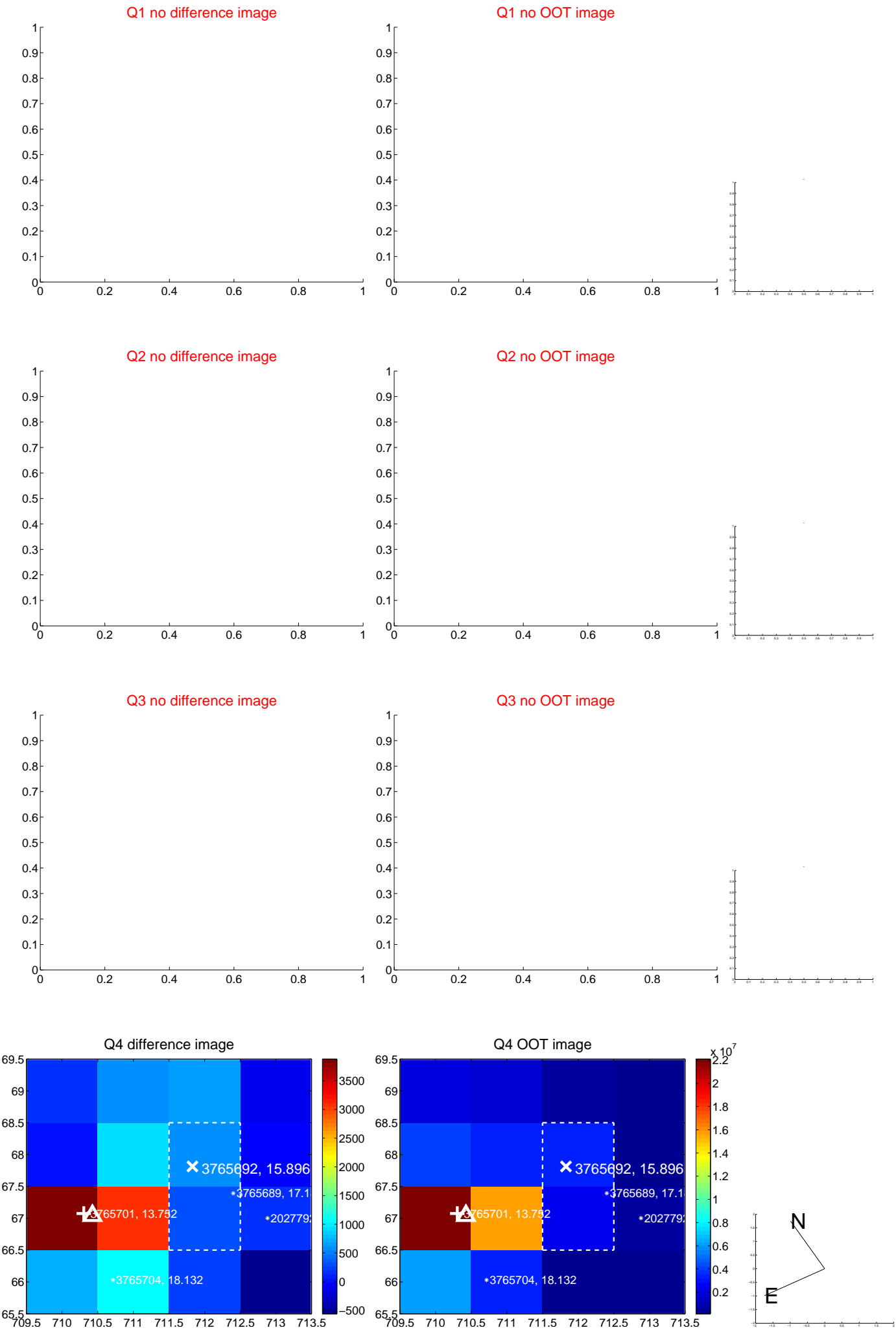


offset from photometric centroids

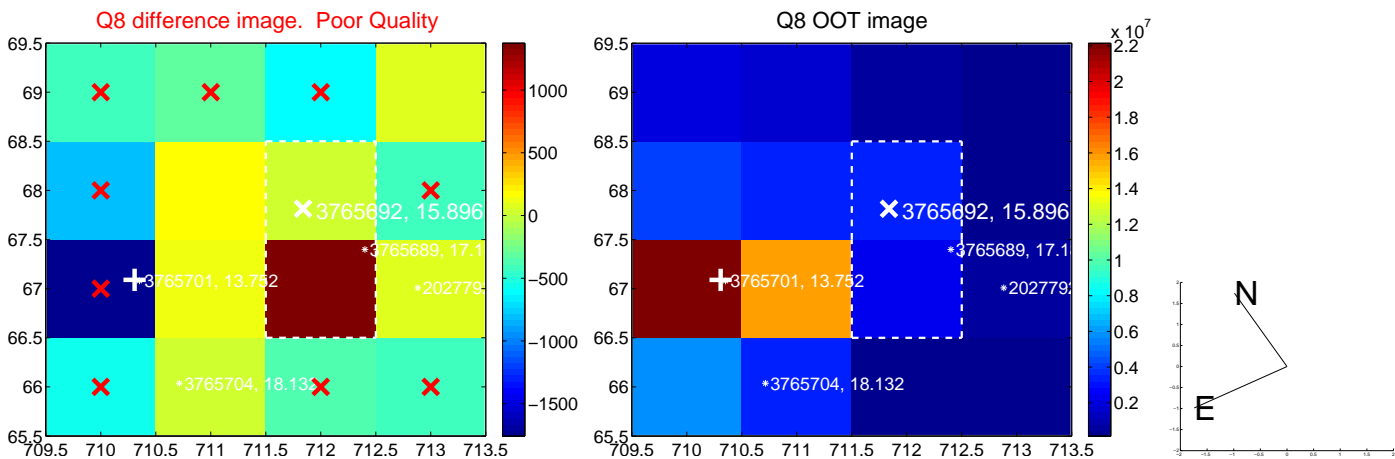
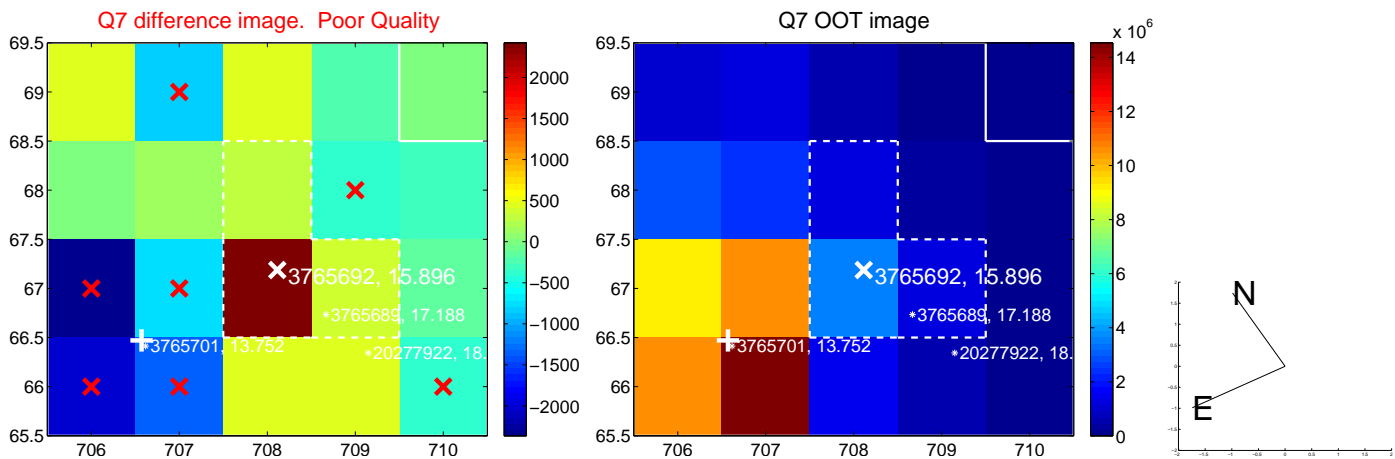
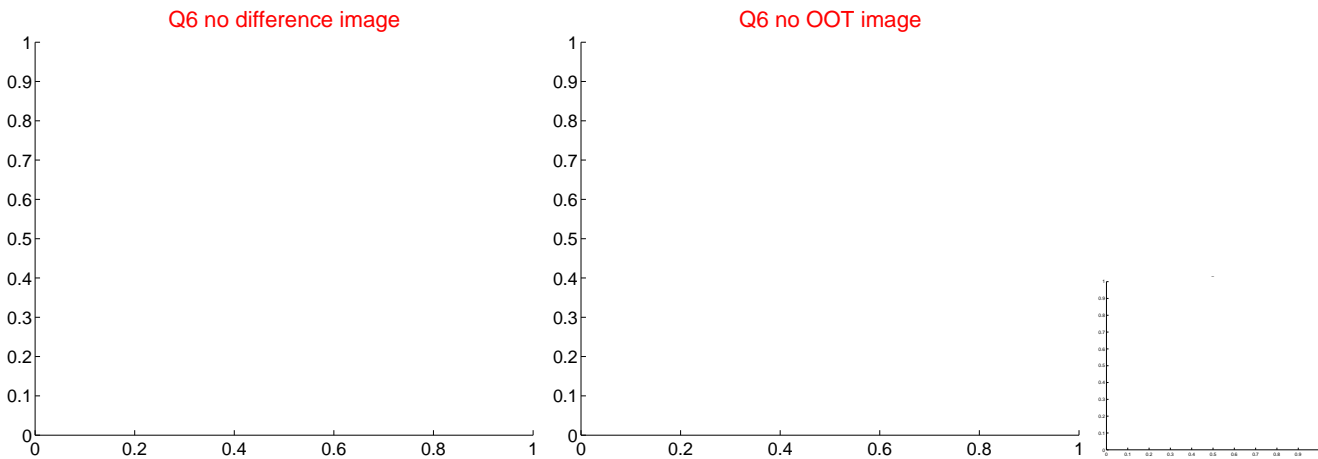
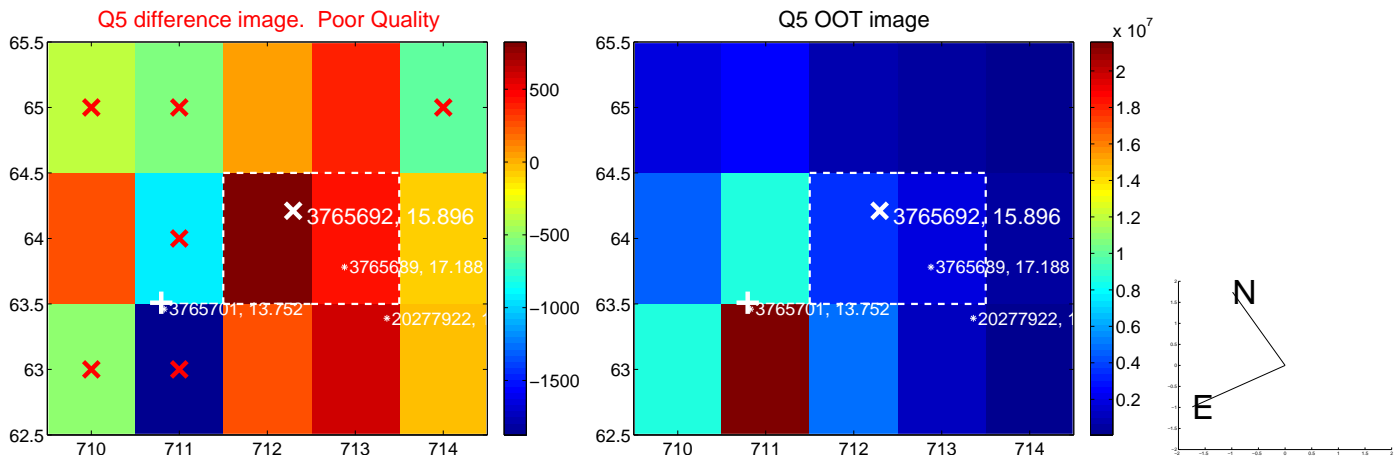


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

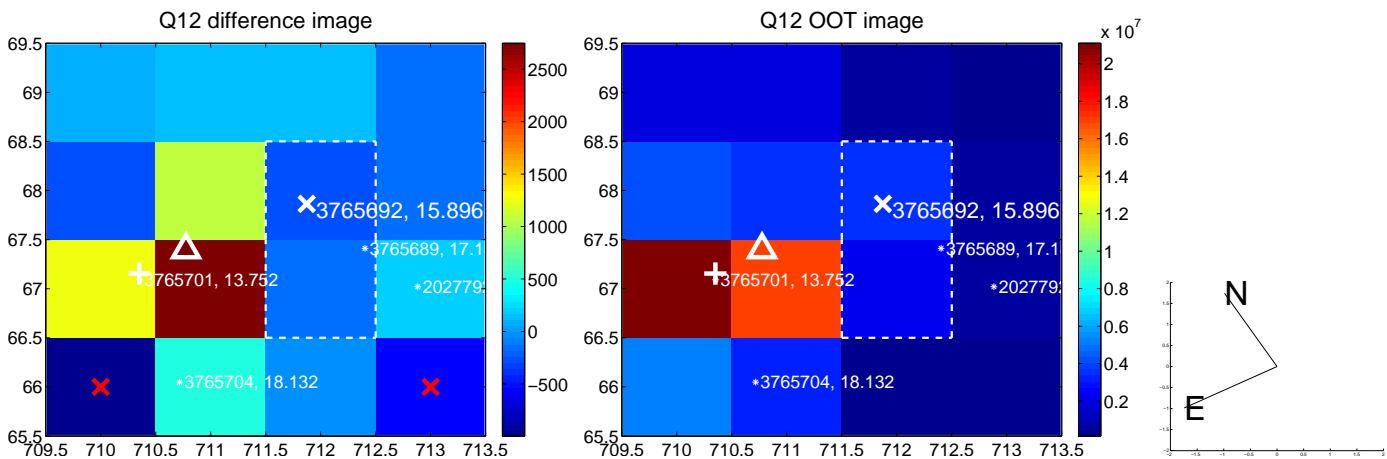
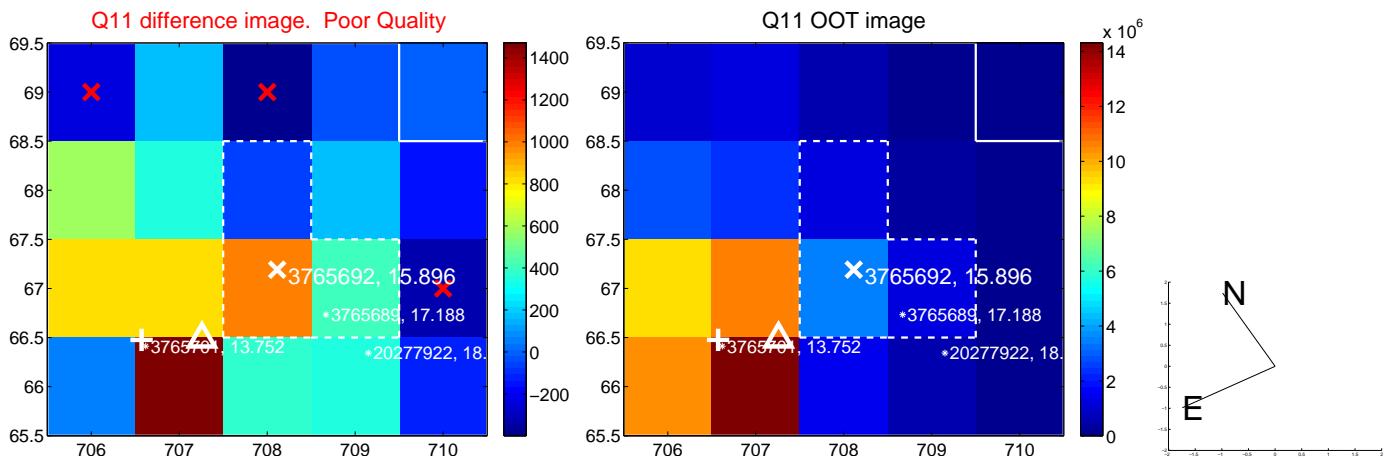
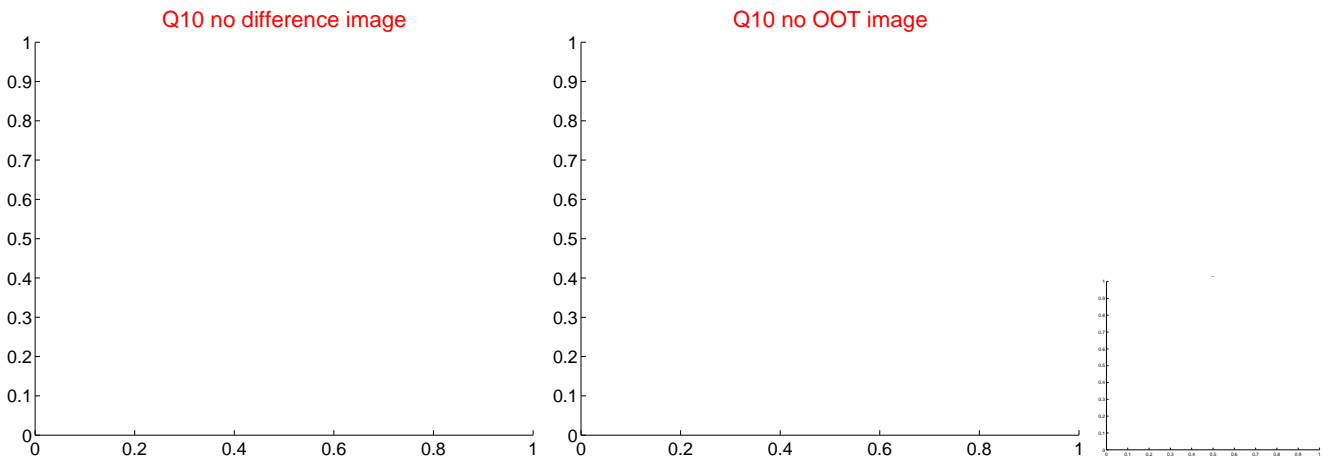
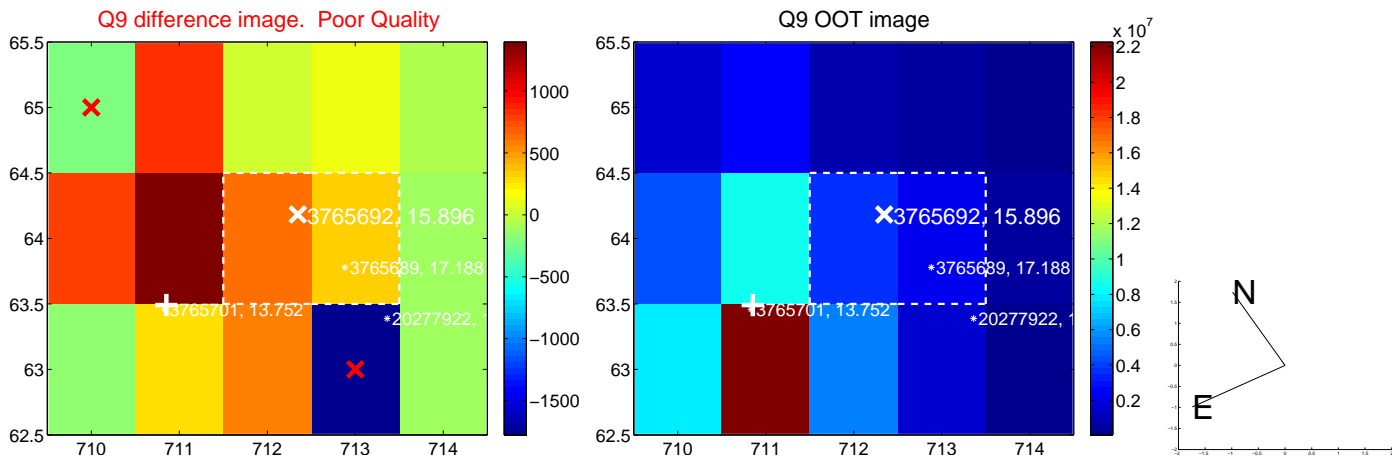
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



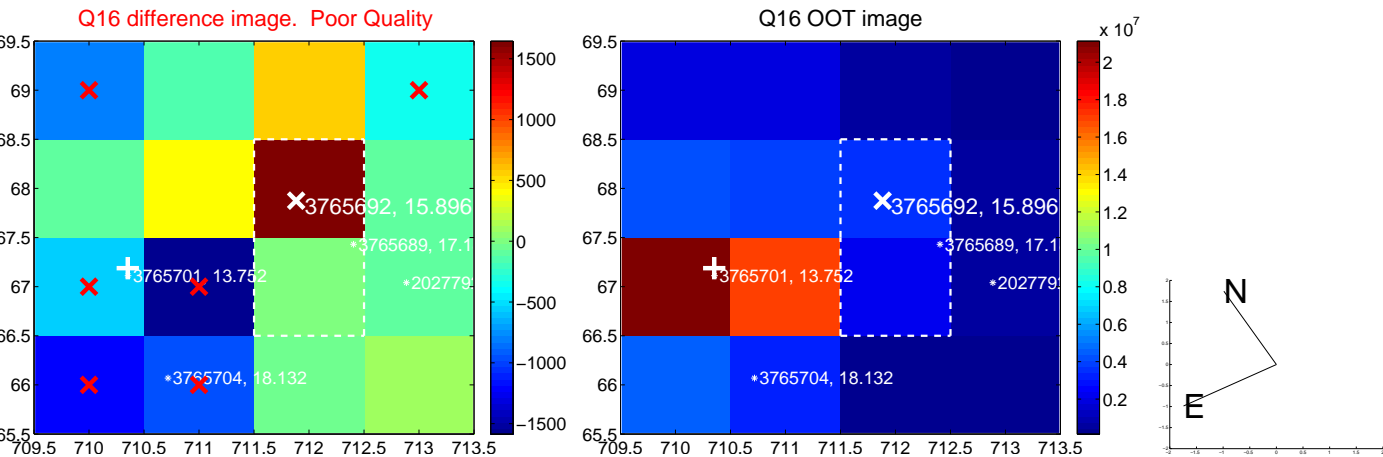
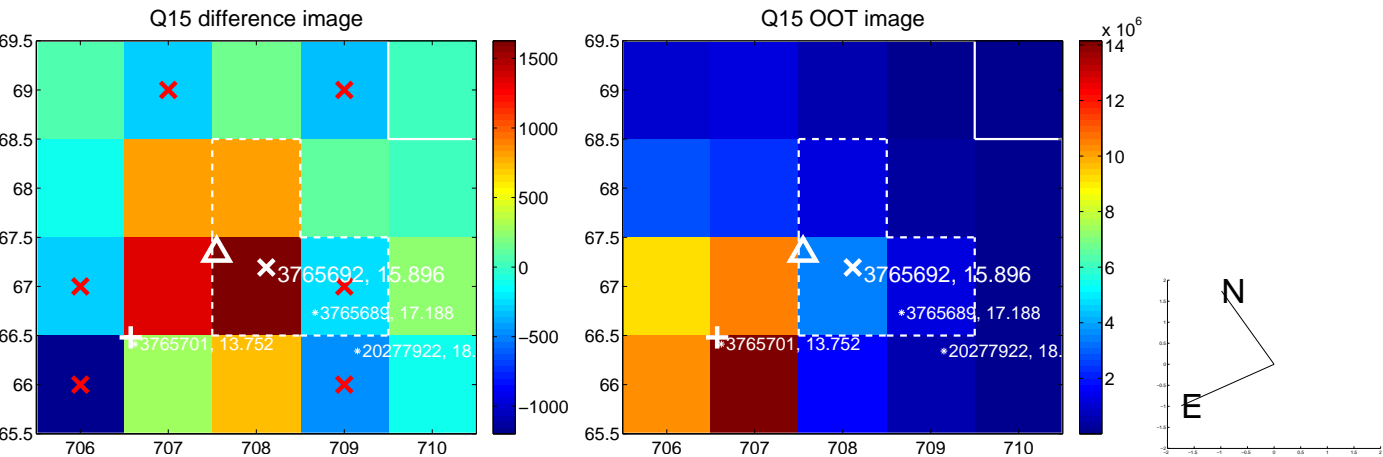
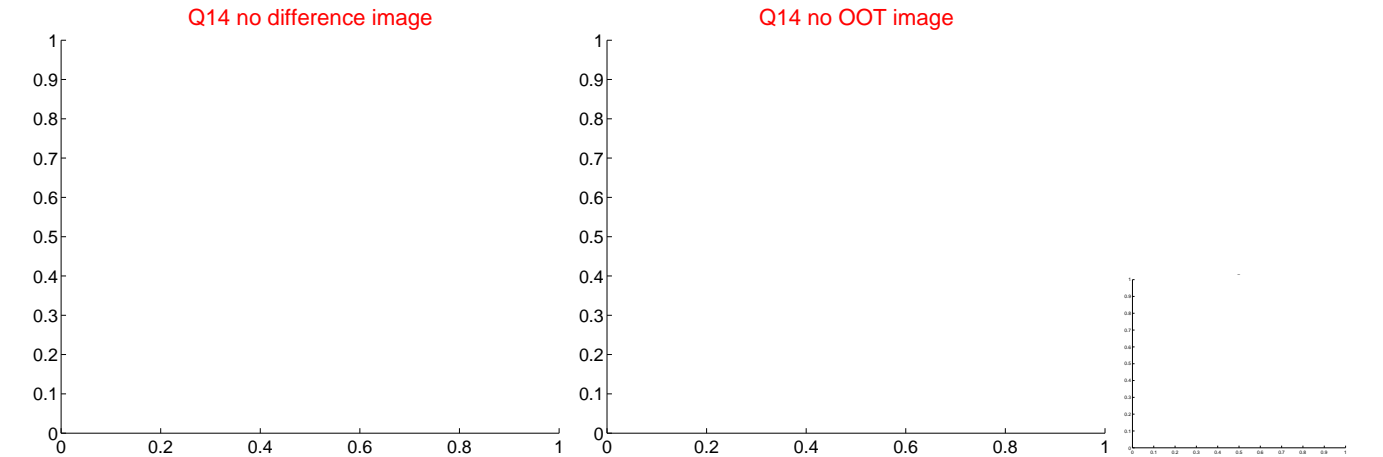
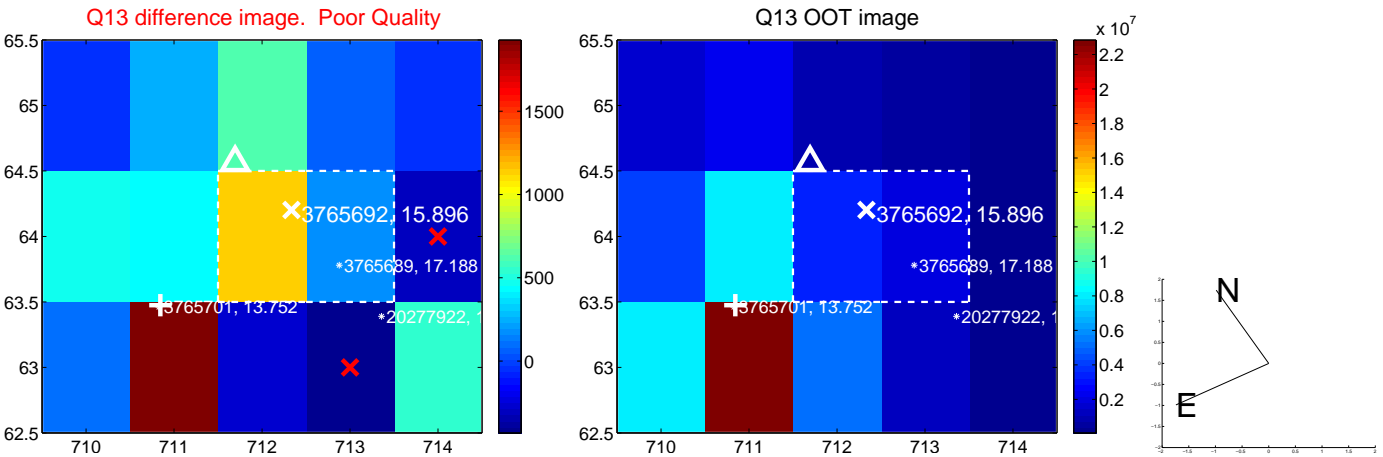
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



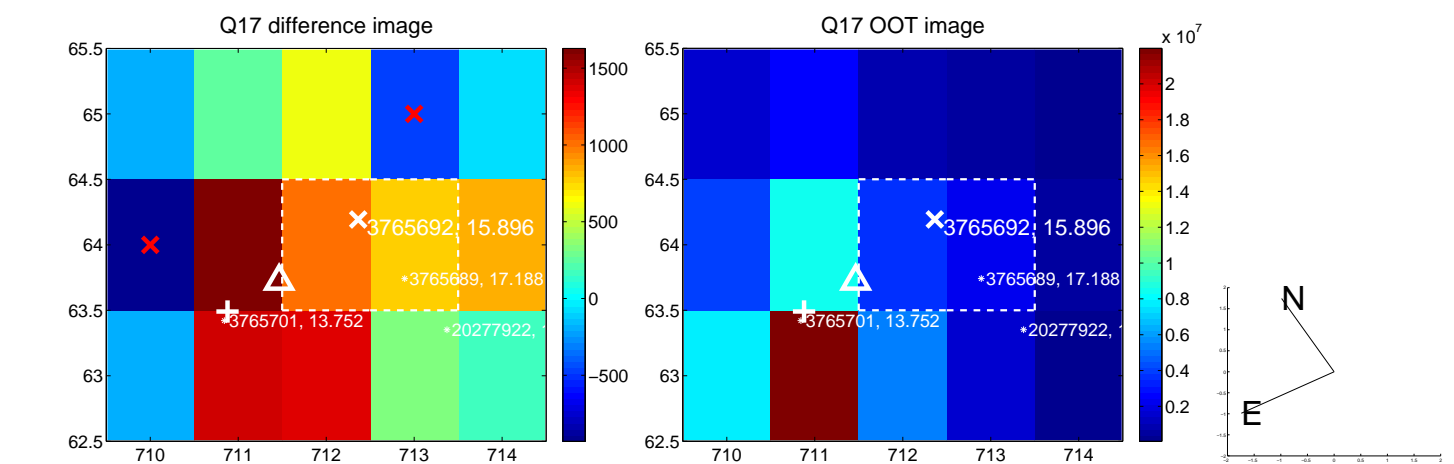
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



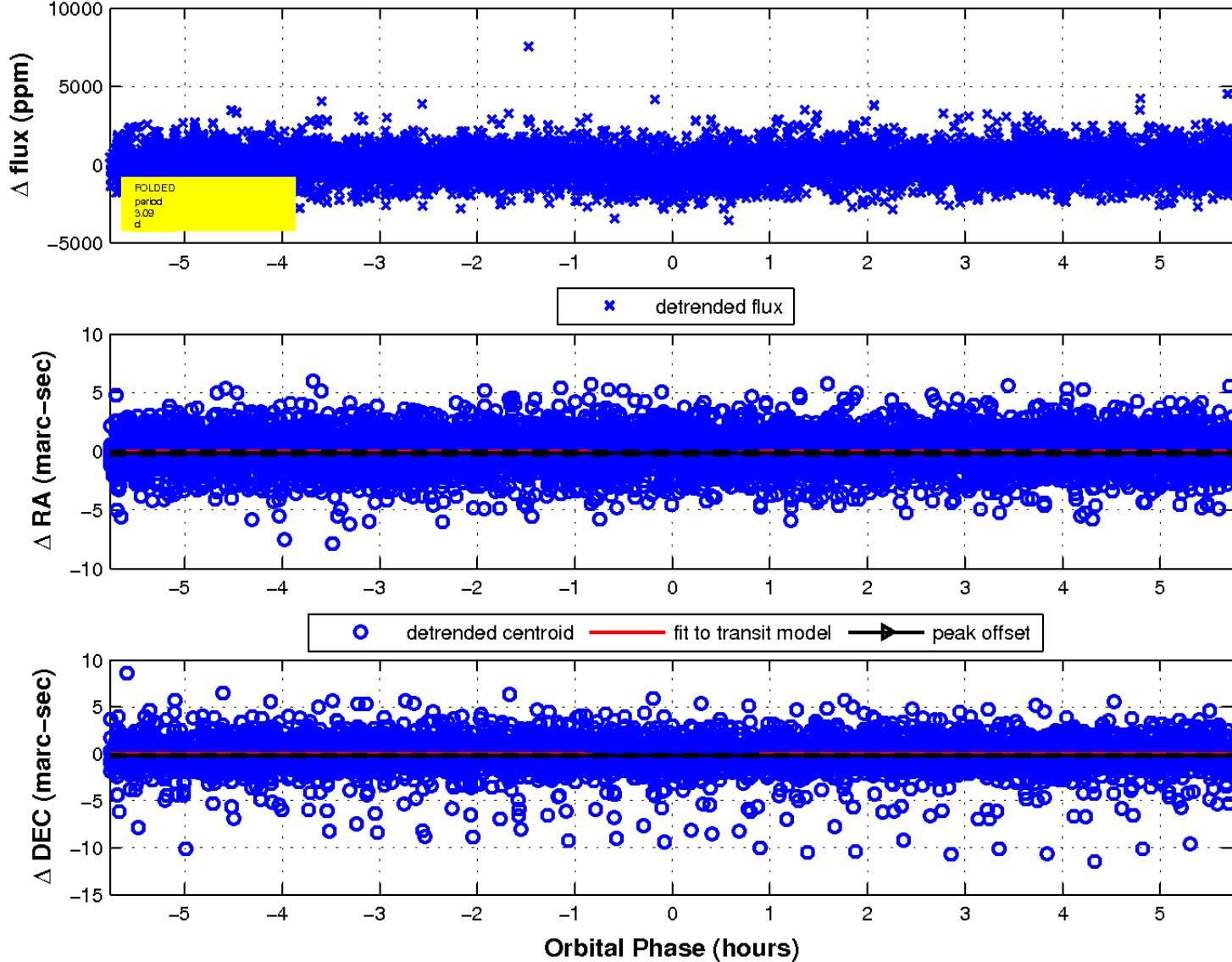
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white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

