

KIC 006665695

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})
006665695-01	OBS	0561.01	5.378862	131.963378	482.0	2.843	49.6	56.6	0.77	5077	2.06	114.00

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006665695-01	OBS	PC	1.00	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.

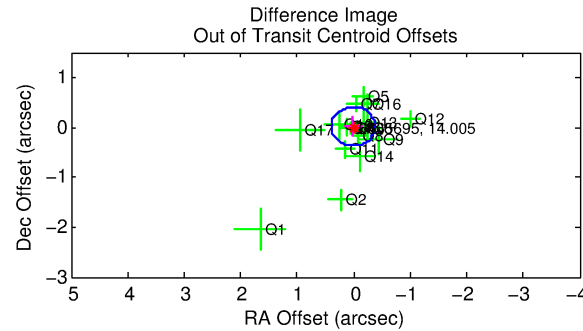
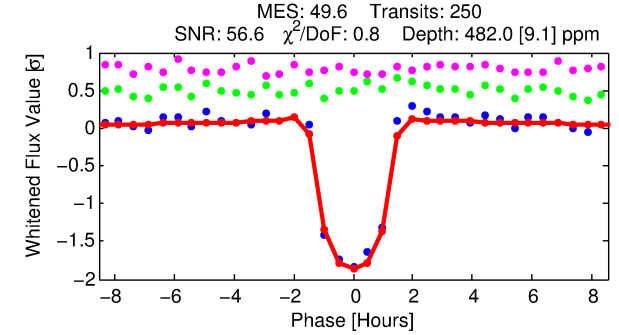
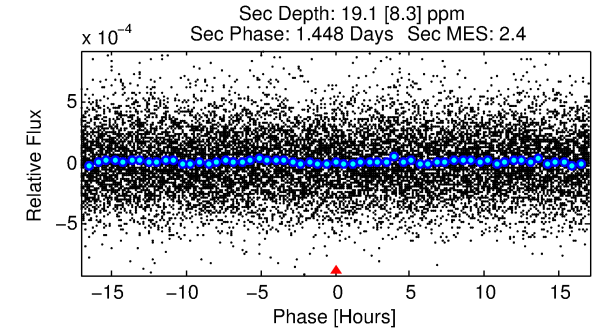
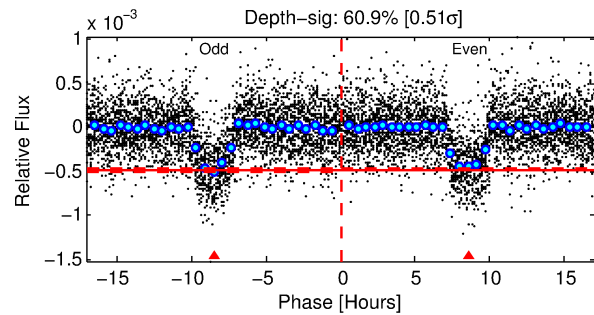
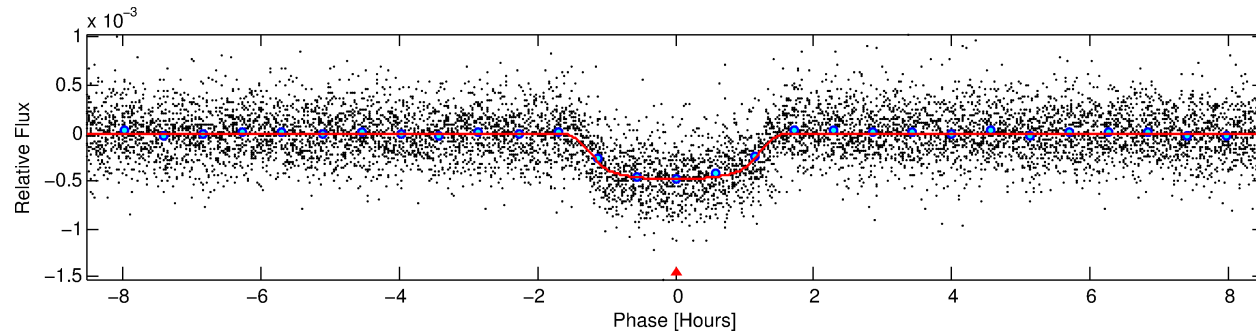
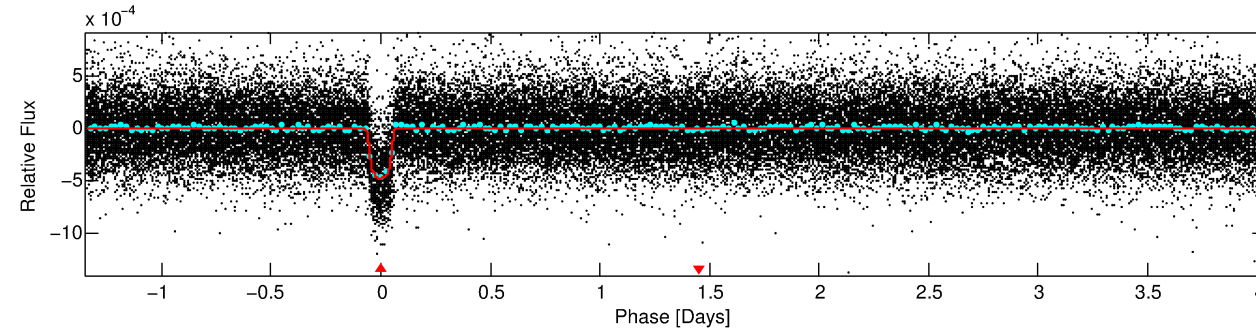
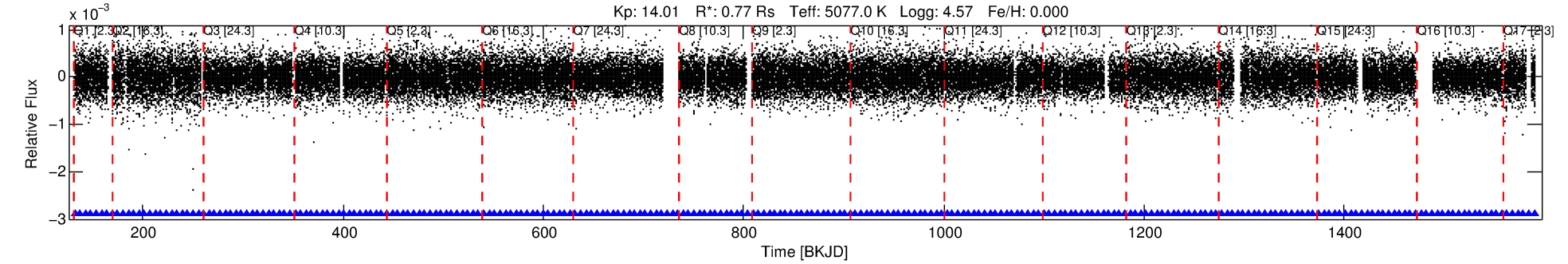
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006665695-01

No Significant Match Found

DV One-Page Summary

KIC: 6665695 Candidate: 1 of 1 Period: 5.379 d
KOI: K00561.01 Corr: 0.977



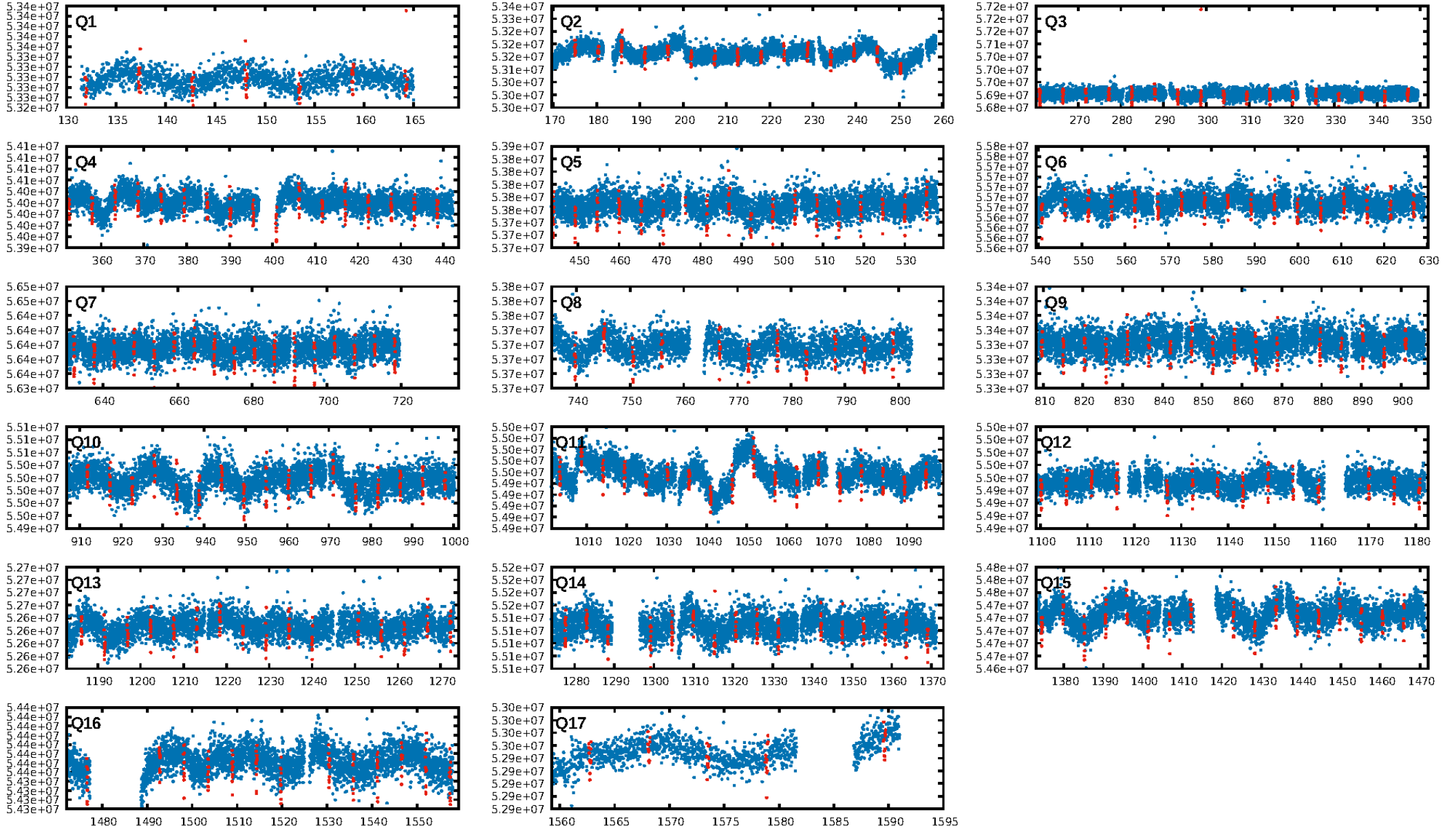
DV Fit Results:

Period = 5.37886 [0.00001] d
Epoch = 131.9634 [0.0009] BKJD
Rp/R* = 0.0244 [0.0020]
a/R* = 7.21 [2.25]
b = 0.90 [0.07]
Seff = 114.00 [13.34]
Teq = 833 [24] K
Rp = 2.06 [0.22] Re
a = 0.0559 [0.0032] AU
Ag = 7.74 [3.66] [1.84 σ]
Teffp = 2149 [254] K [5.16 σ]

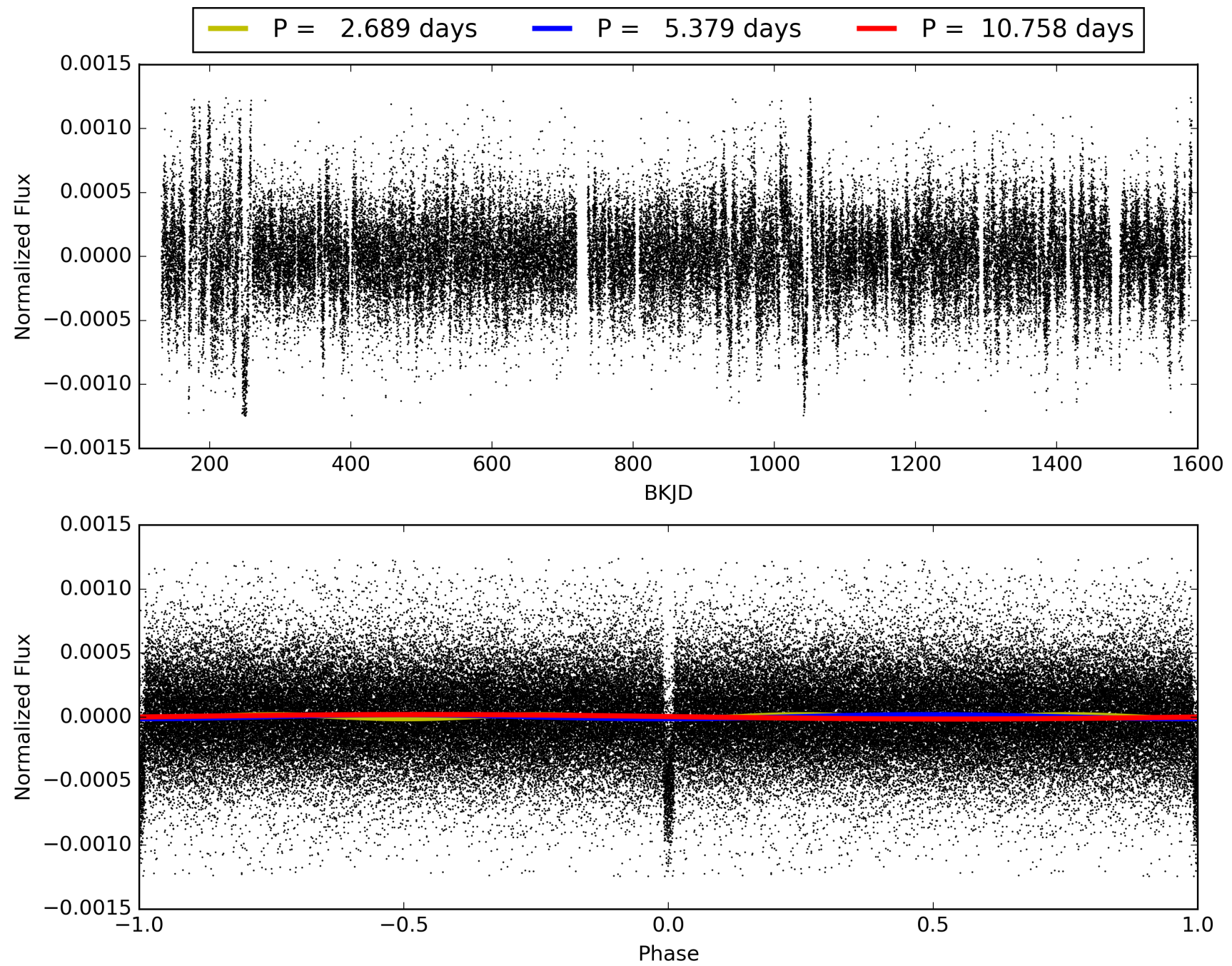
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 0.00e+00
RollingBand-fgt: 1.00 [238/238]
GhostDiagnostic-chr: 4.054
Centroid-sig: 26.8%
Centroid-so: 0.523 arcsec [2.18 σ]
OotOffset-rm: 0.018 arcsec [0.14 σ]
KicOffset-rm: 0.179 arcsec [1.13 σ]
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 006665695-01, PDC Light Curves

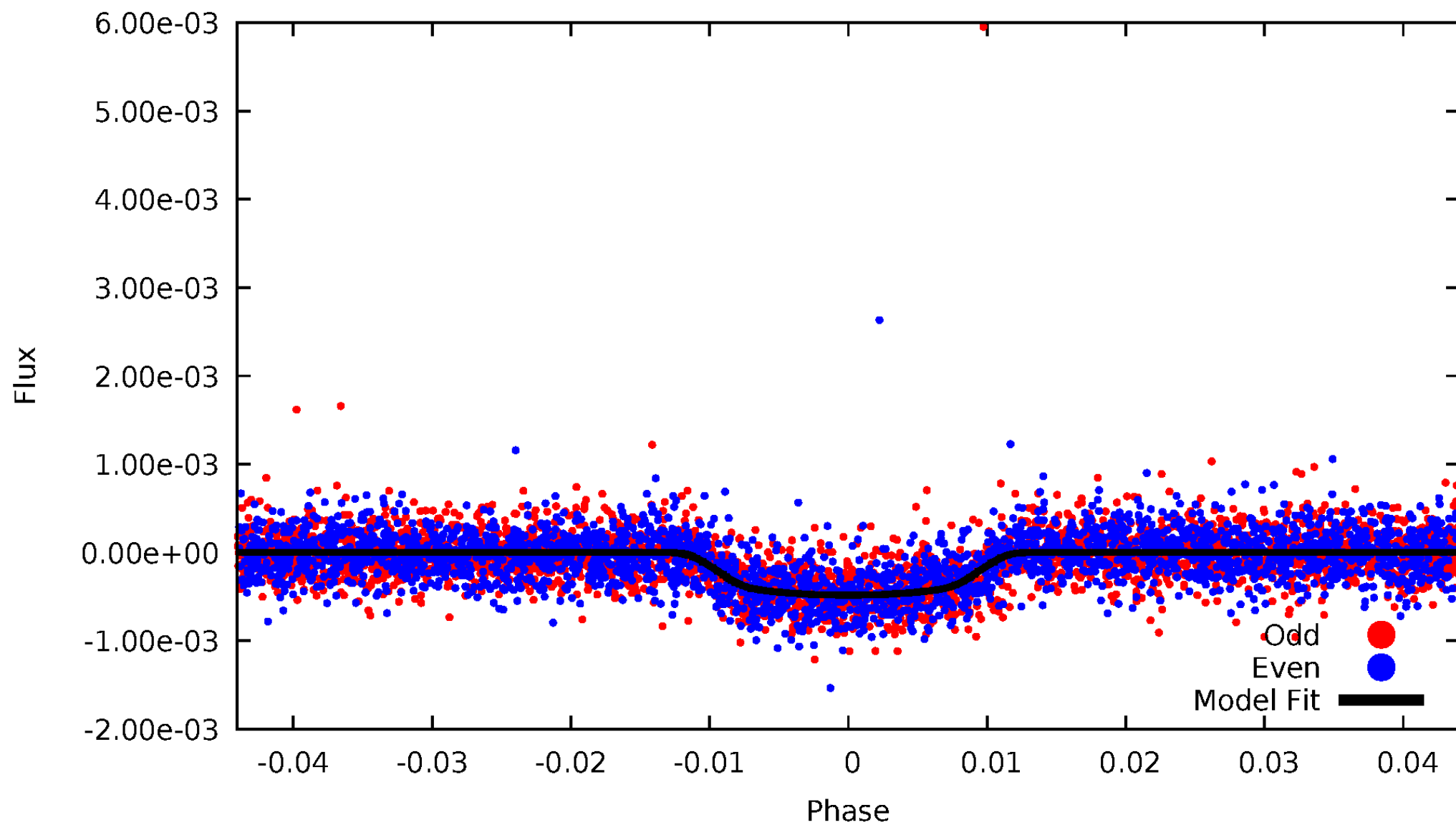


TCE 006665695-01



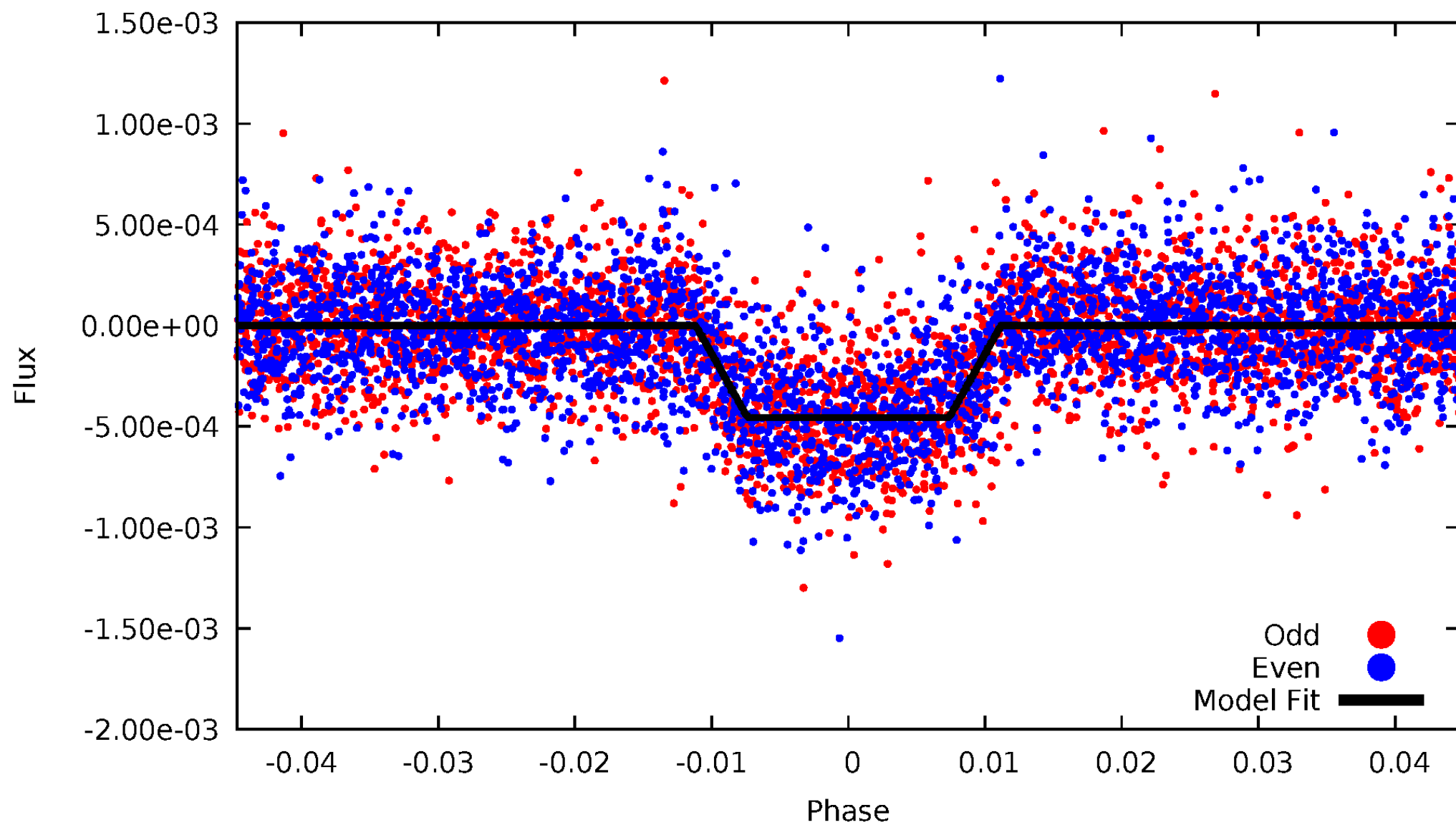
DV Odd/Even

TCE 006665695-01



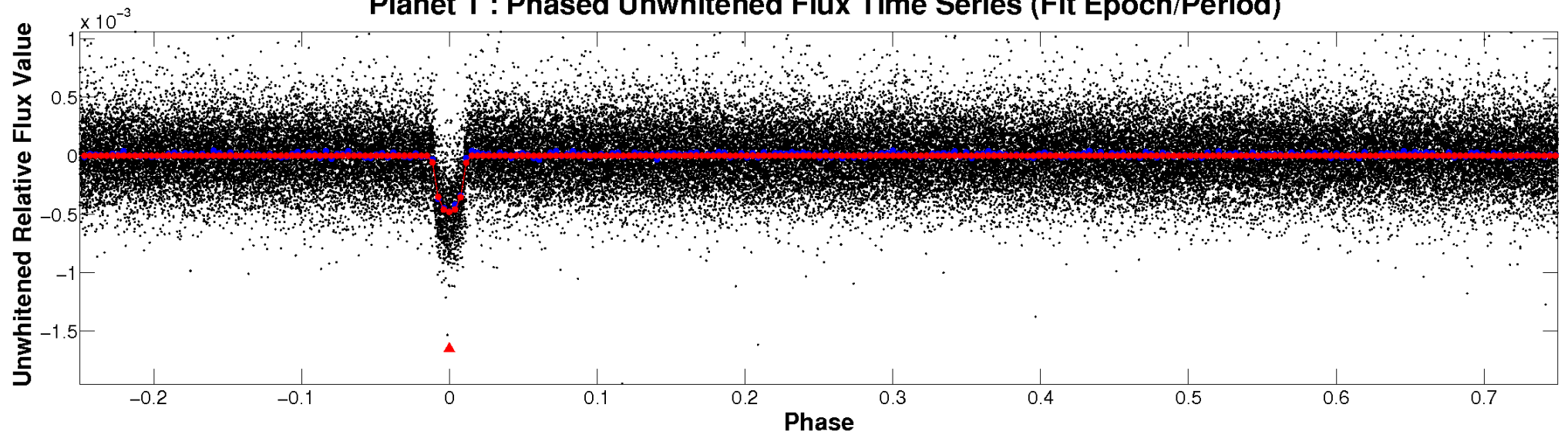
ALT Odd/Even

TCE 006665695-01

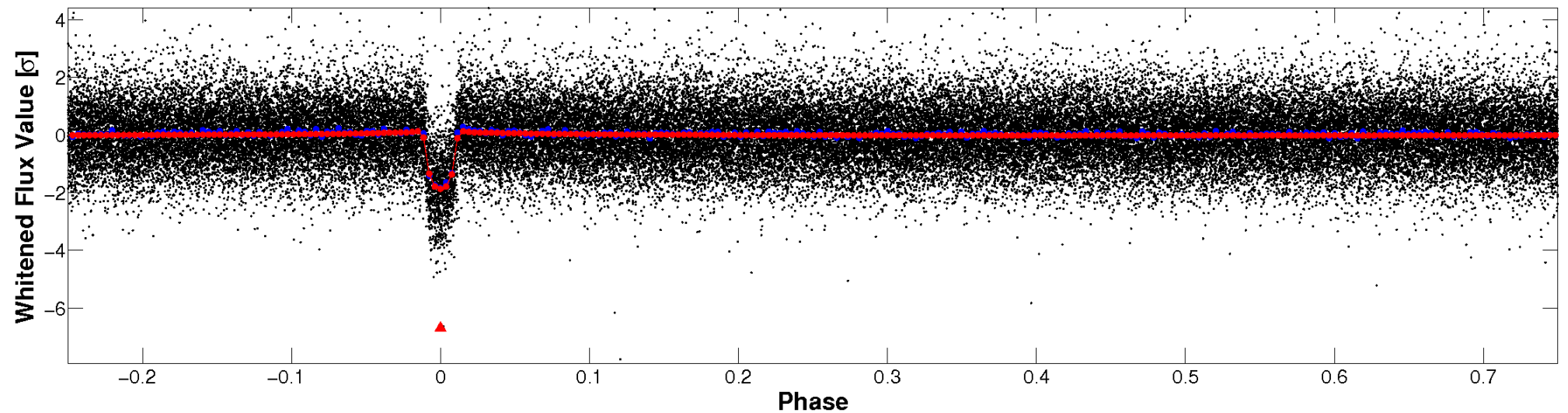


Non-Whitened Vs. Whitened Light Curve

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

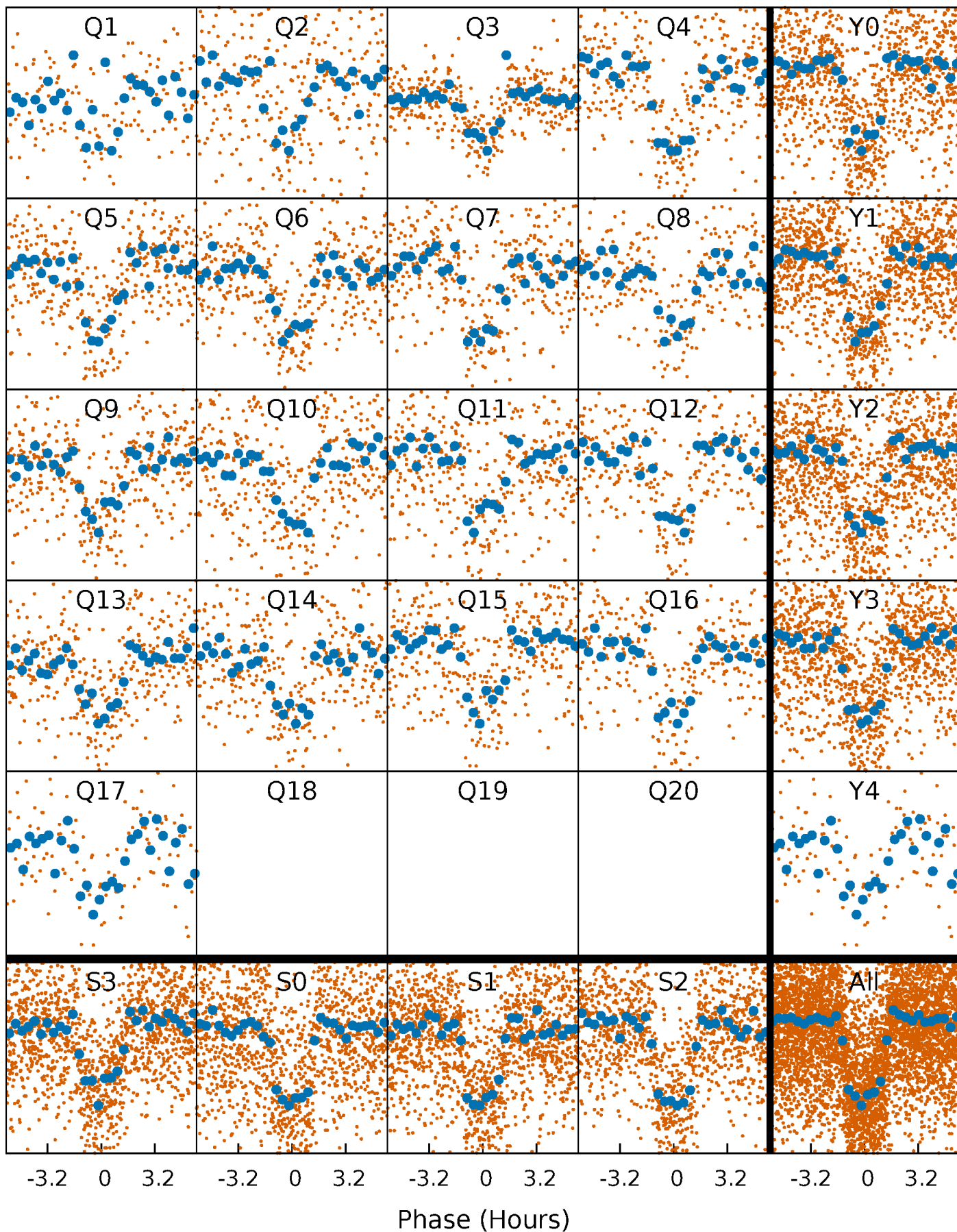


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



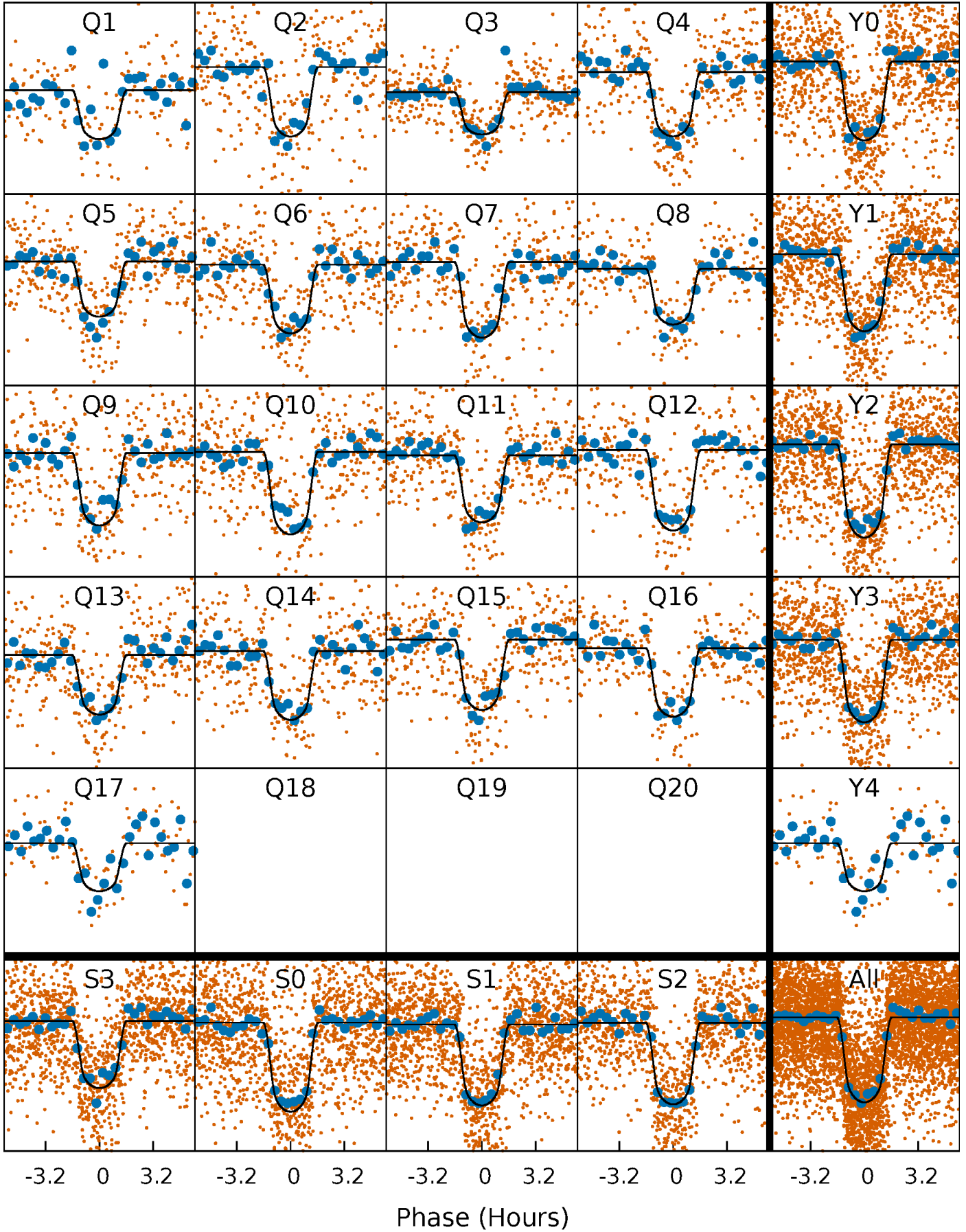
PDC Quarter-Phased Transit Curves

TCE 006665695-01 P= 5.378862 Days $T_0=131.963378$ (BKJD)



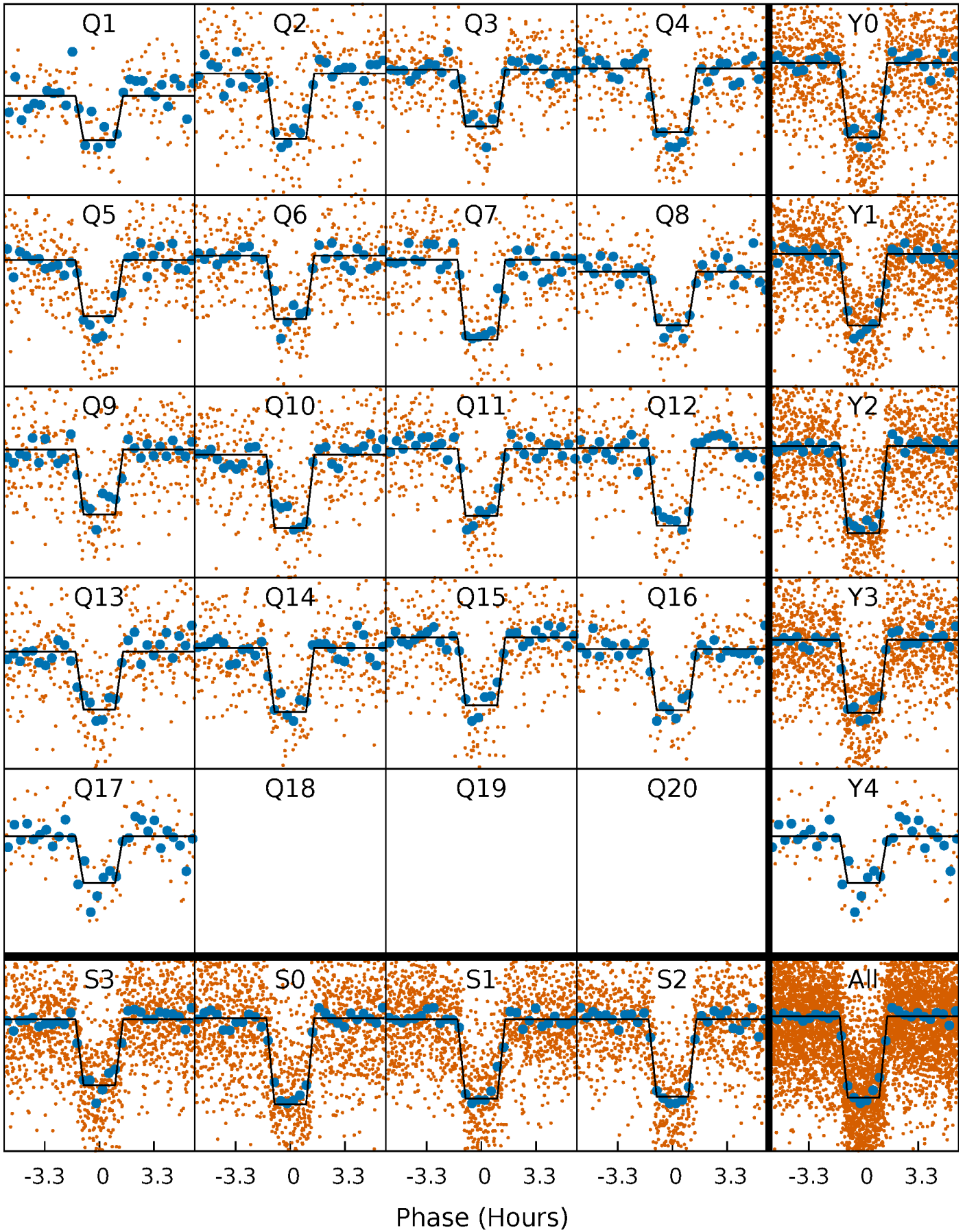
DV Quarter-Phased Transit Curves

TCE 006665695-01 P= 5.378862 Days $T_0=131.963378$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

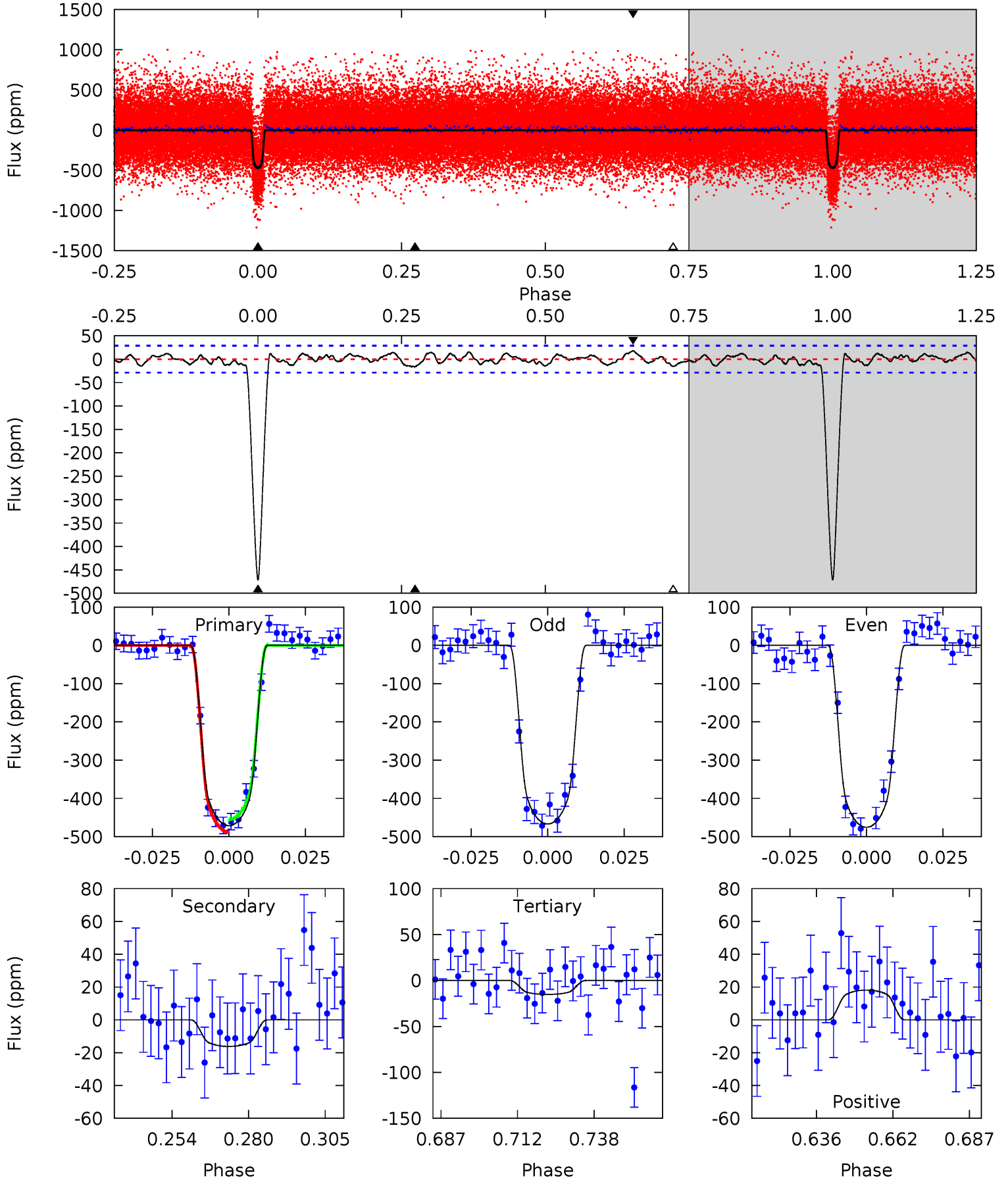
TCE 006665695-01 P= 5.378893 Days $T_0=131.959625$ (BKJD)



DV Model-Shift Uniqueness Test

006665695-01, P = 5.378862 Days, E = 126.584516 Days

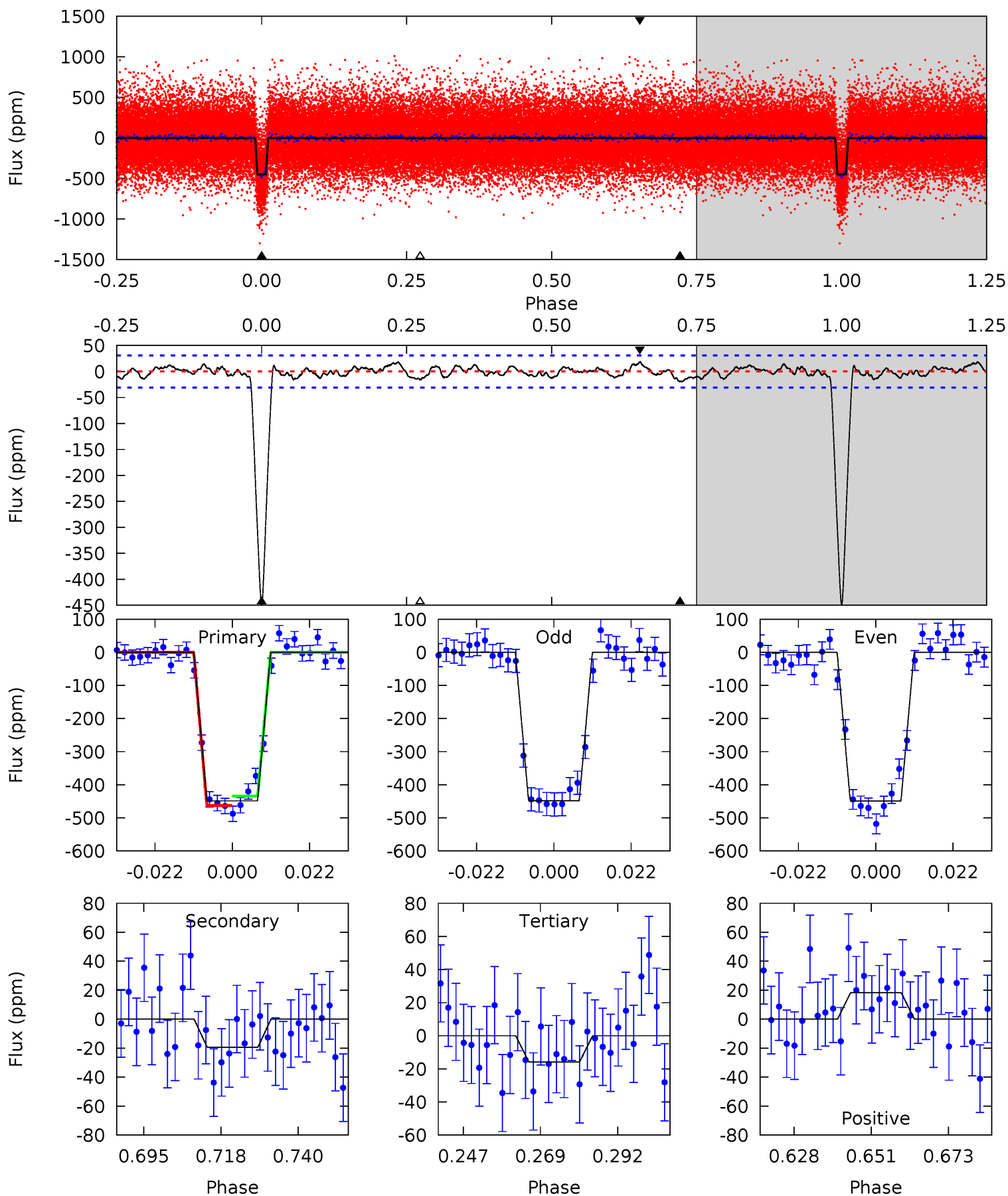
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
79.2	2.72	2.55	3.05	4.84	2.23	1.24	76.7	76.2	0.17	-0.33	0.73	0.95	0.04	2.75



Alt Model-Shift Uniqueness Test

006665695-01, P = 5.378893 Days, E = 126.580732 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
70.6	3.05	2.49	2.87	4.87	2.28	1.17	68.1	67.7	0.56	0.17	0.06	0.99	0.04	2.26



Stellar Parameters For KIC 006665695

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5077^{+101}_{-101}	$4.567^{+0.032}_{-0.048}$	$0.000^{+0.150}_{-0.150}$	$0.774^{+0.051}_{-0.039}$	$0.806^{+0.043}_{-0.043}$	$2.446^{+0.311}_{-0.371}$
	+2%/-2%	+1%/-1%	+inf%/-inf%	+7%/-5%	+5%/-5%	+13%/-15%
Source	SPE57	SPE57	SPE57	DSEP		

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

Secondary Eclipse Parameters for KIC 006665695-01 / KOI 0561.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-16 ± 6	$2.07^{+0.18}_{-0.18}$	1169^{+31}_{-28}	2764^{+153}_{-187}	$6.388^{+2.930}_{-2.557}$
Alt.	-19 ± 6	$1.81^{+0.18}_{-0.17}$	1170^{+32}_{-30}	2945^{+164}_{-177}	$9.872^{+4.404}_{-3.399}$

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 $A_{obs} \gg 1.0$

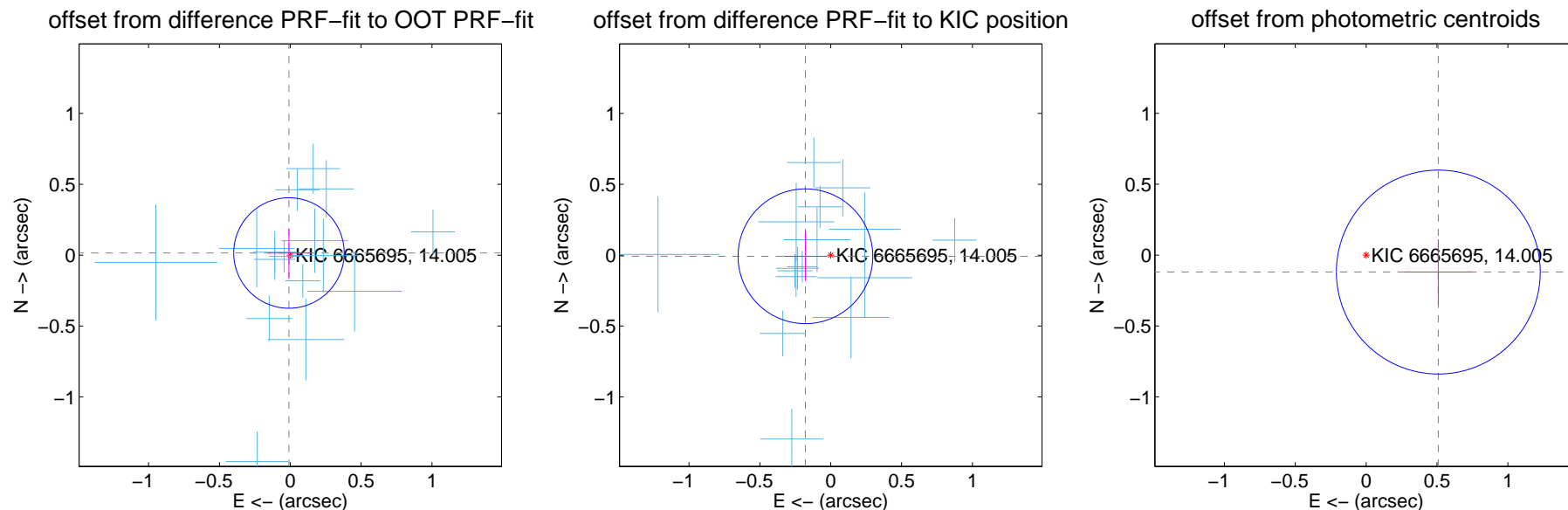
DV Centroid Data

Supplemental centroid analysis for 006665695-01. Kepler magnitude: 14.01. Transit SNR 56.55

There are 17 quarters with good PRF difference image offsets

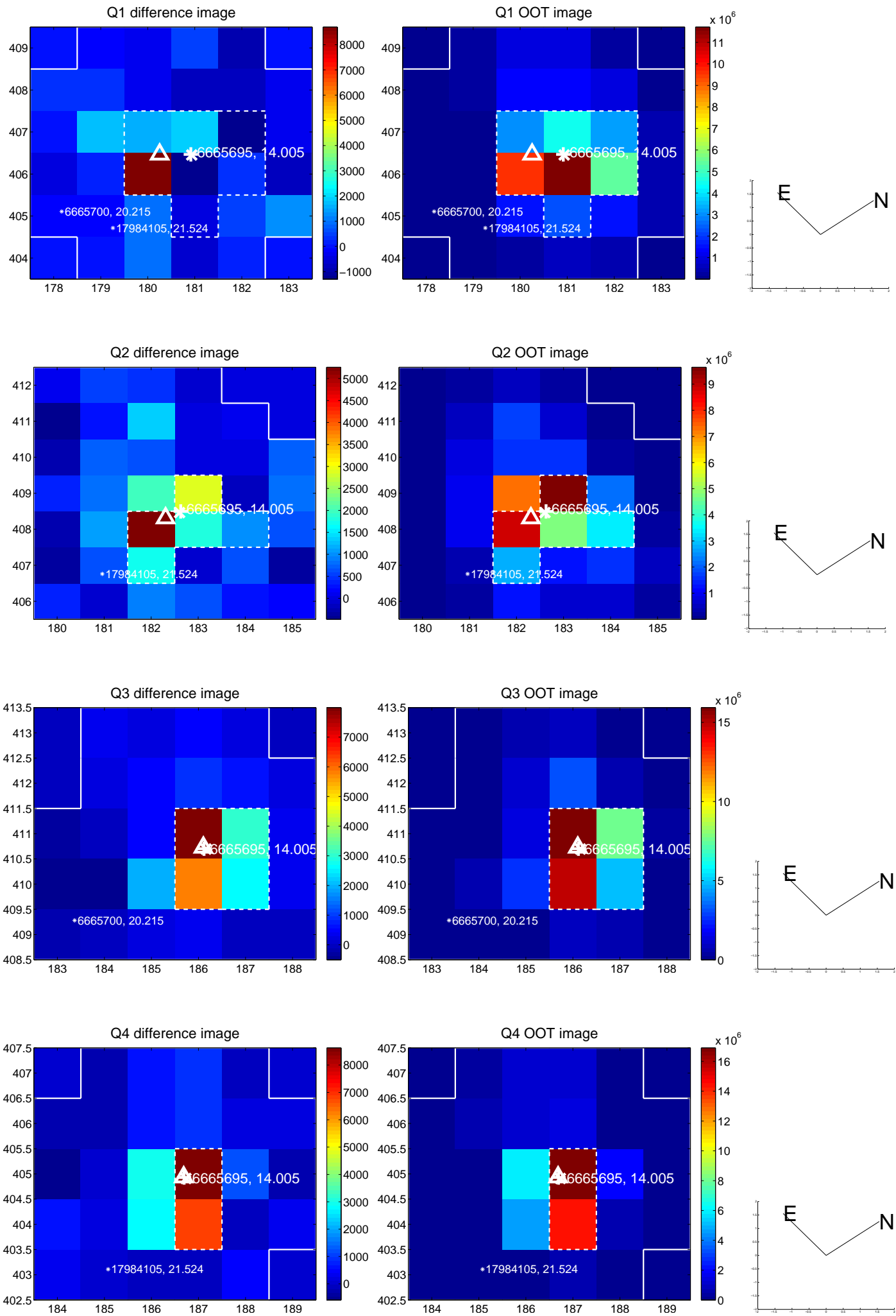
The direct PRF centroid is offset from the target star catalog position by about 0.28 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.018 ± 0.130	0.14	0.009 ± 0.150	0.015 ± 0.174
PRF-fit source offset from KIC position	0.179 ± 0.158	1.13	0.179 ± 0.154	-0.008 ± 0.174
photometric centroid source offset	0.52 ± 0.24	2.18	-0.51 ± 0.24	-0.12 ± 0.23

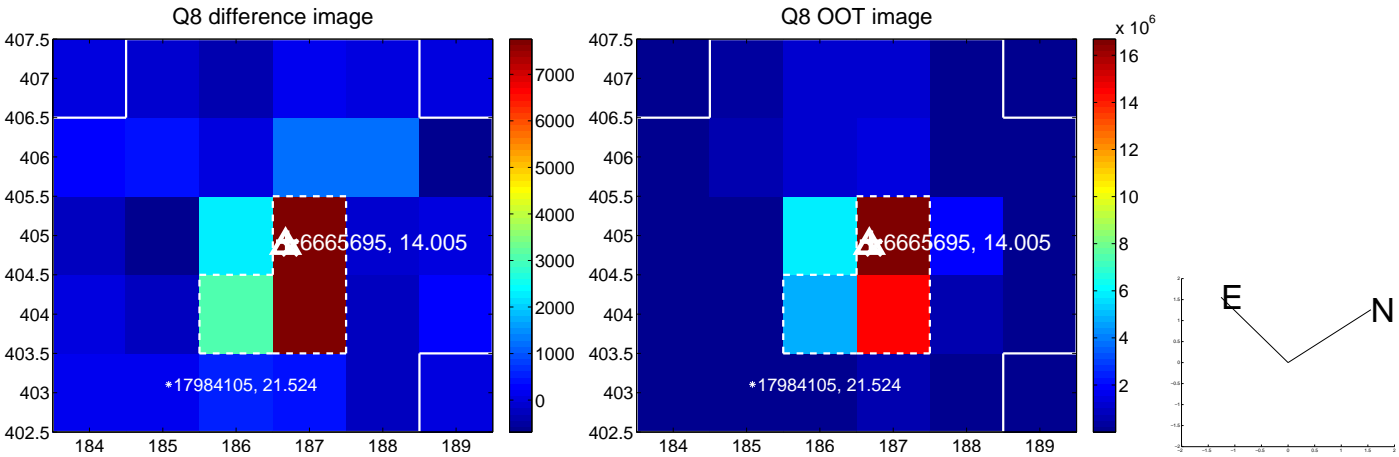
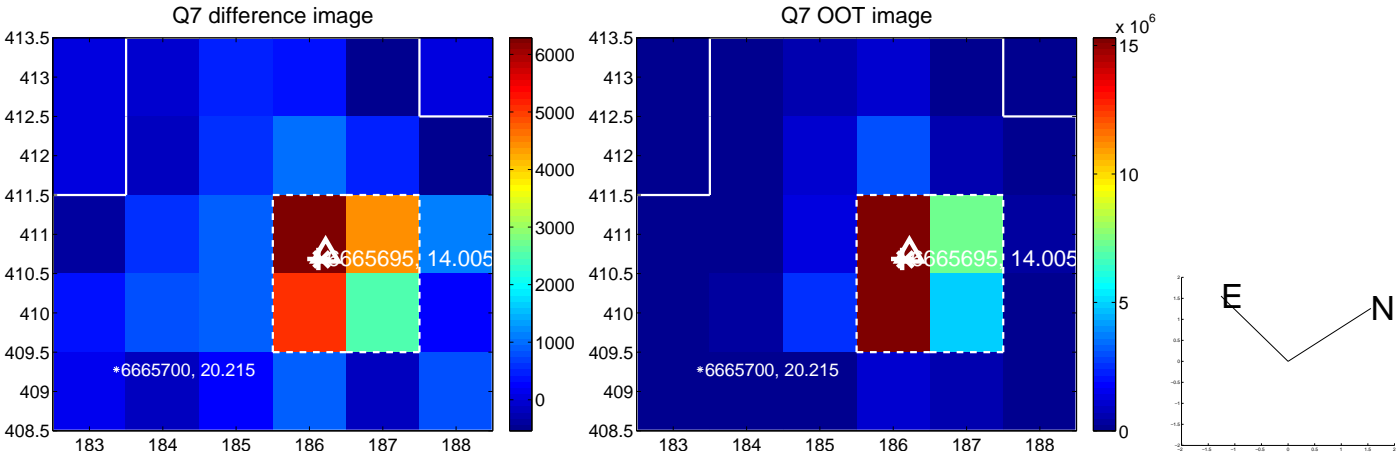
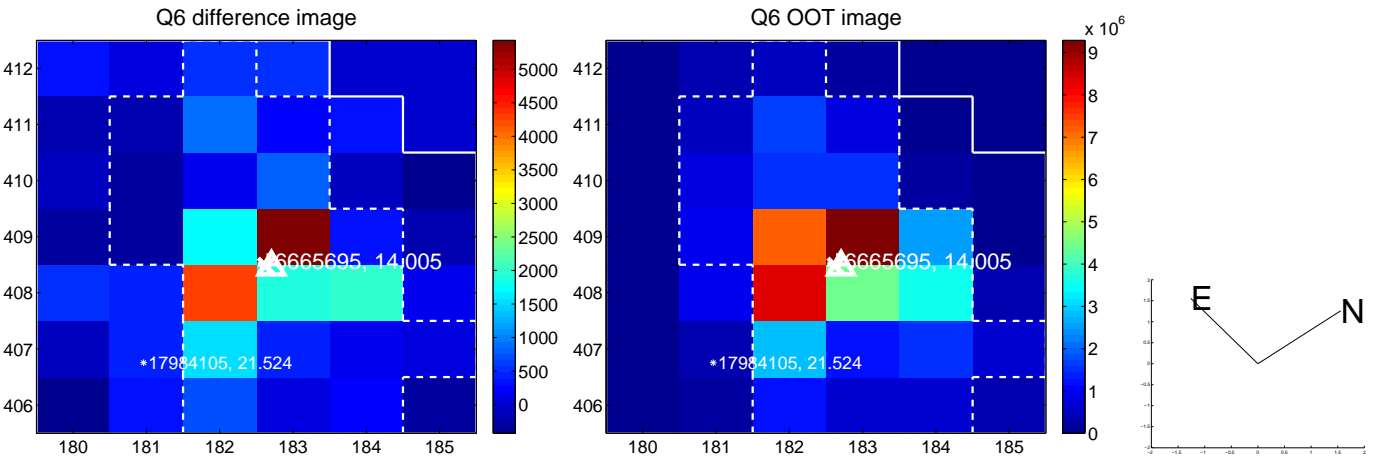
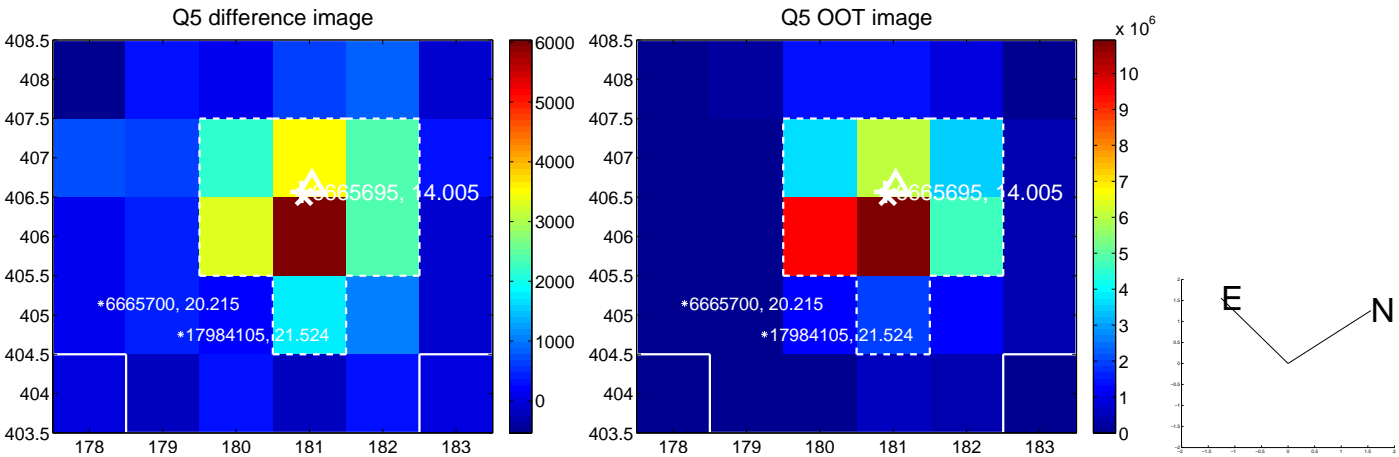


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

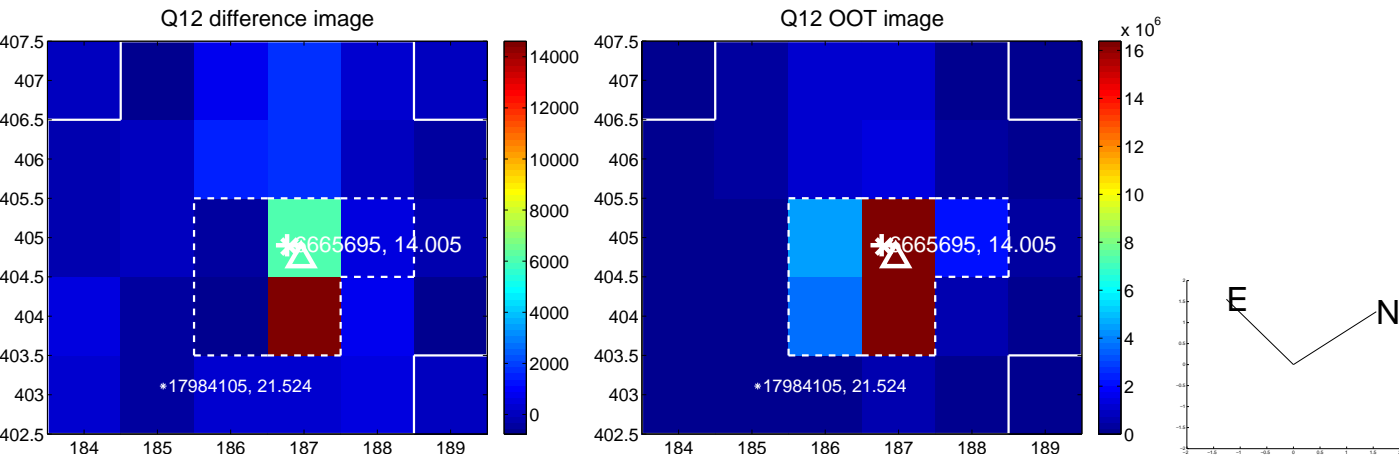
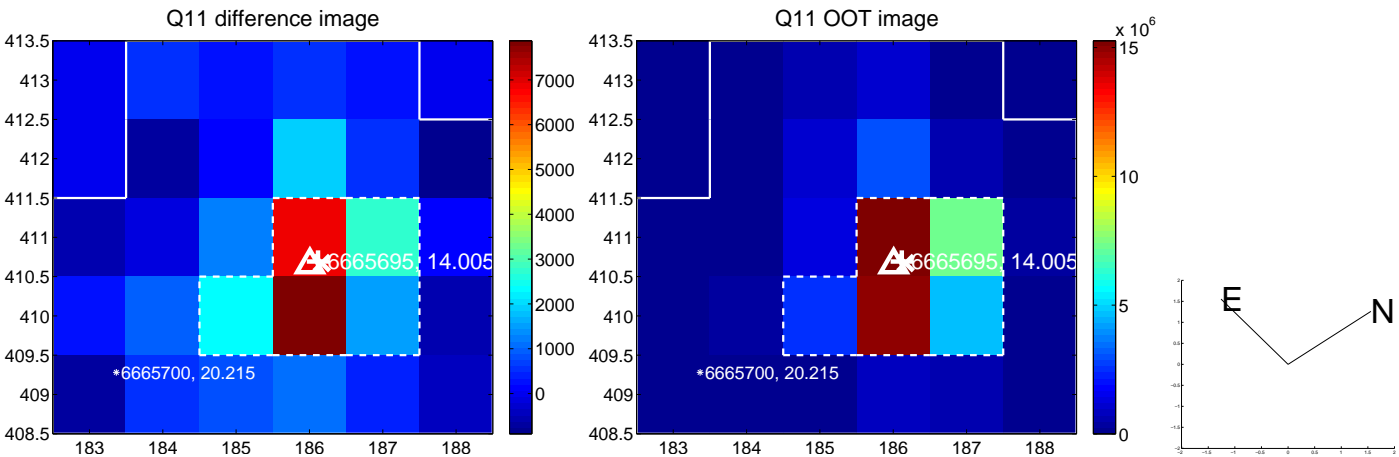
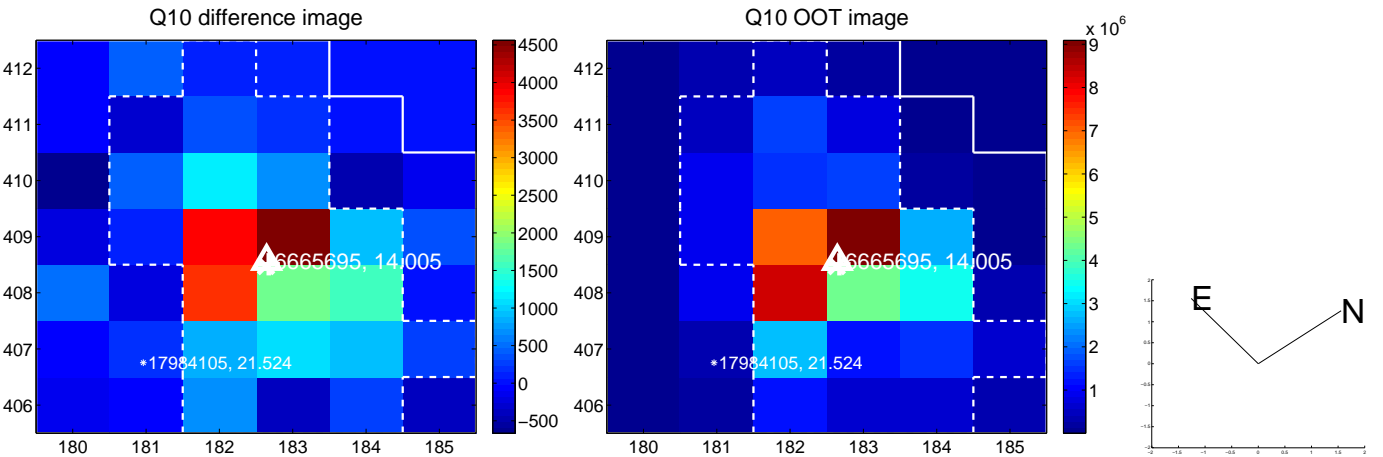
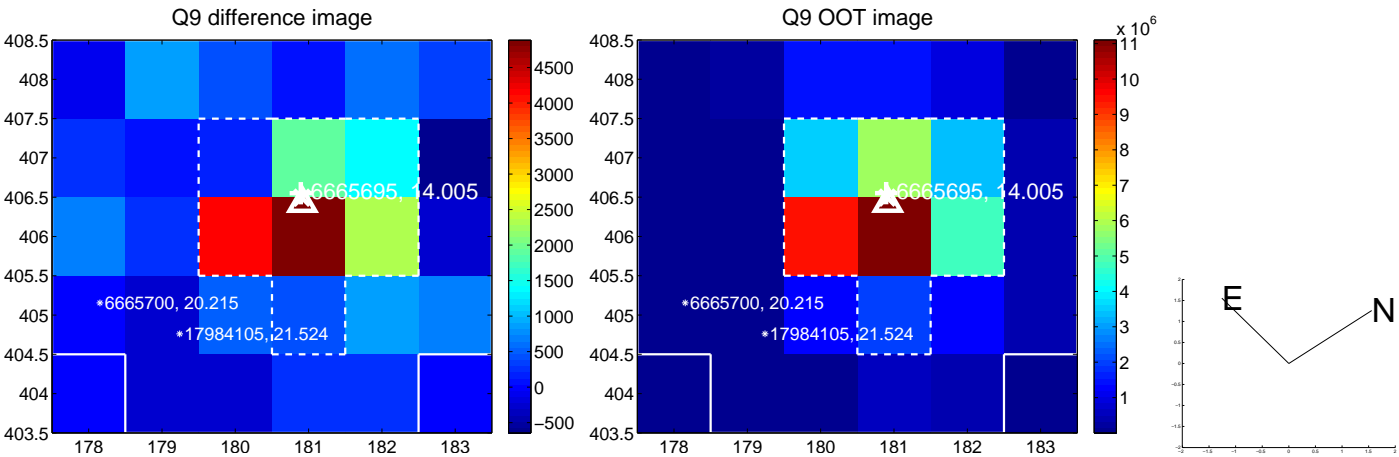
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



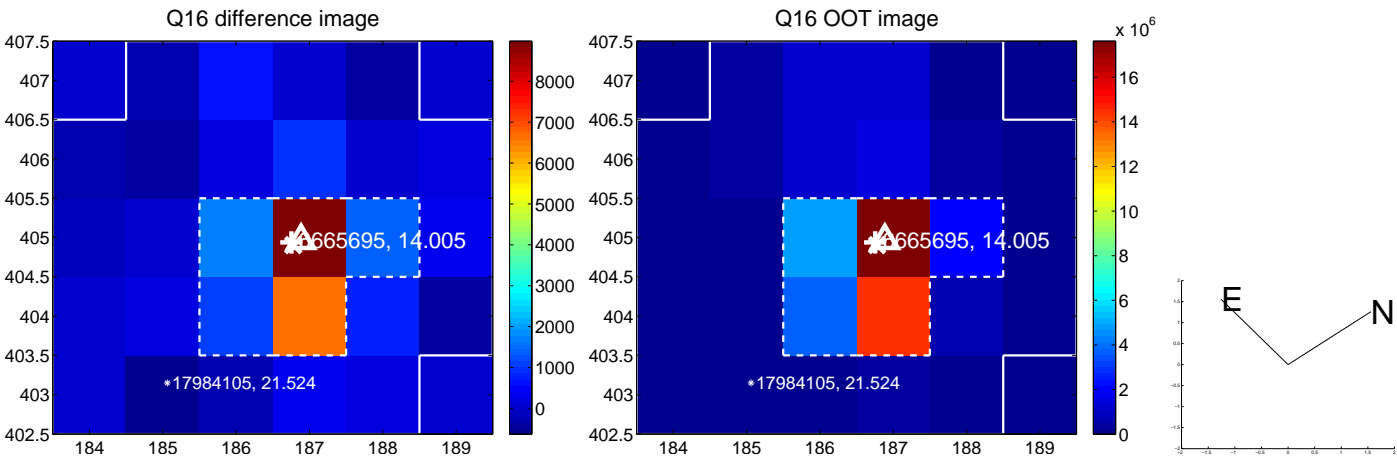
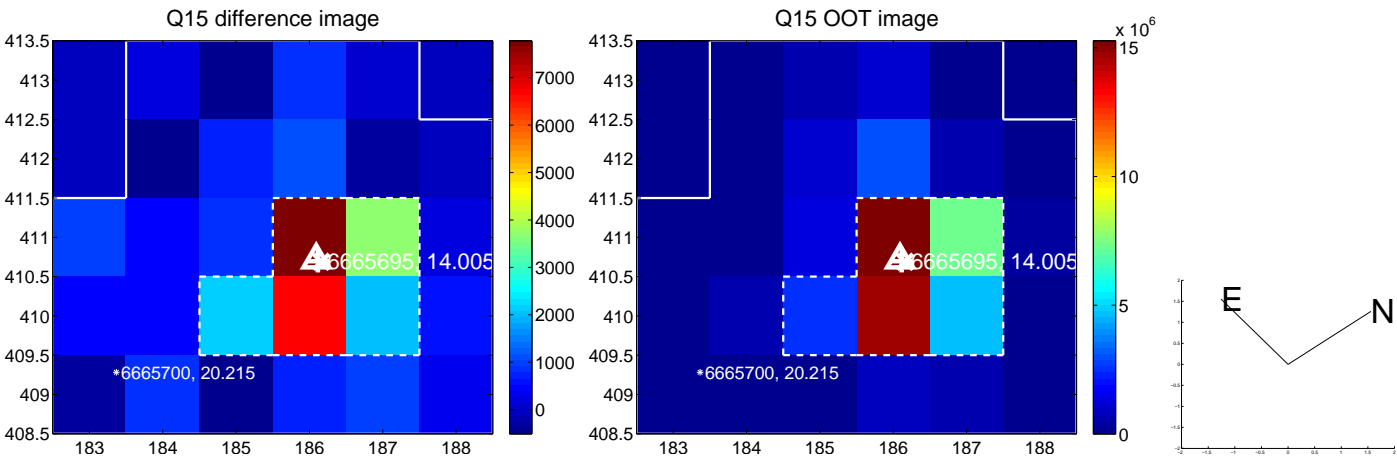
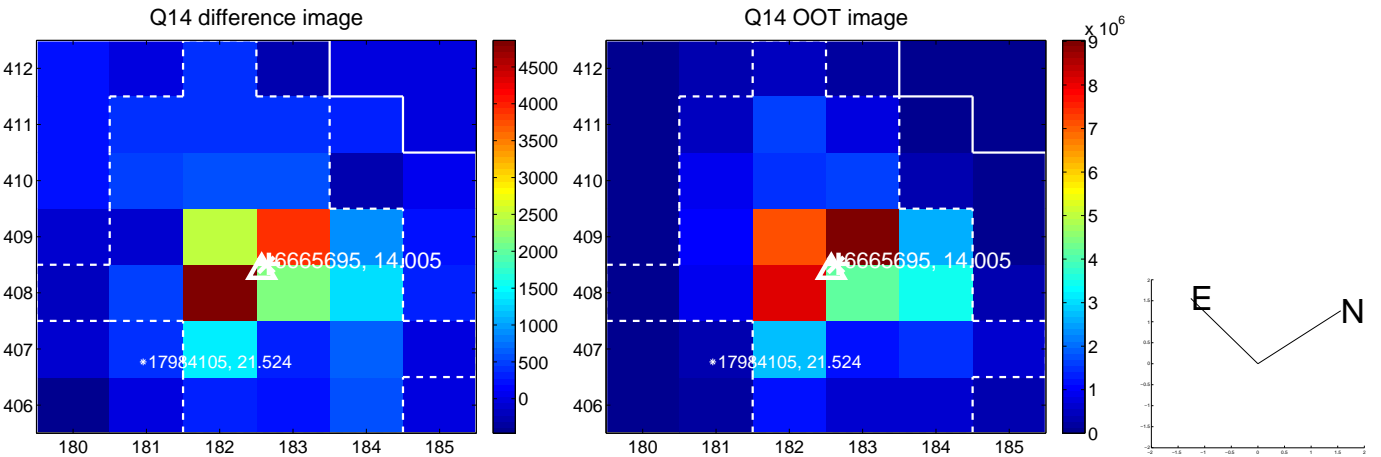
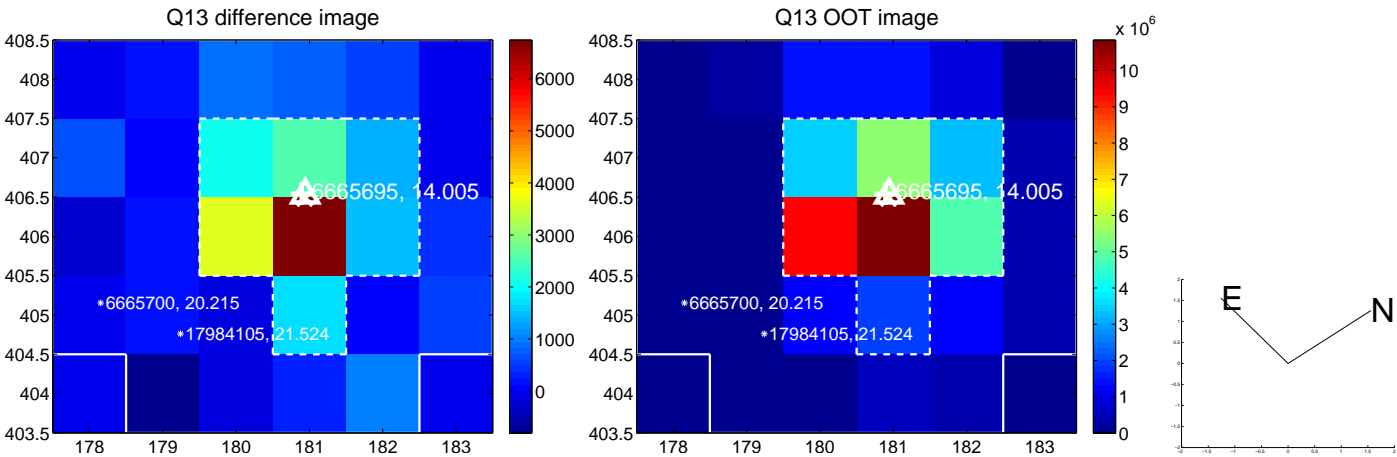
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

