

KIC 006061773

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})
006061773-01	OBS	2001.01	8.277444	138.254895	192.9	2.714	25.8	28.2	1.78	5129	3.00	332.36

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006061773-01	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.

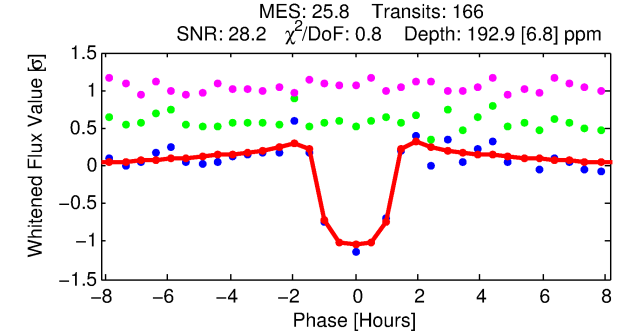
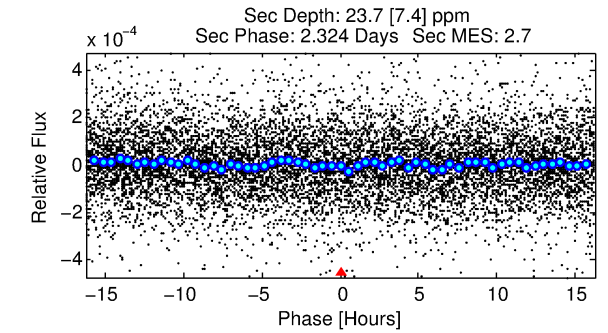
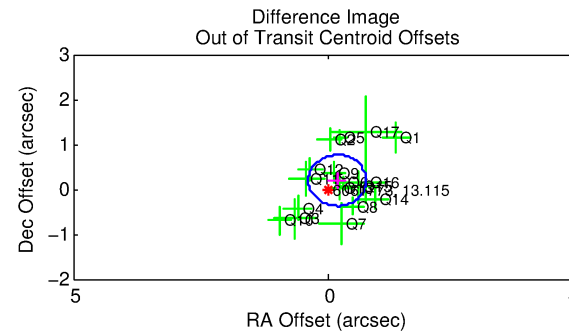
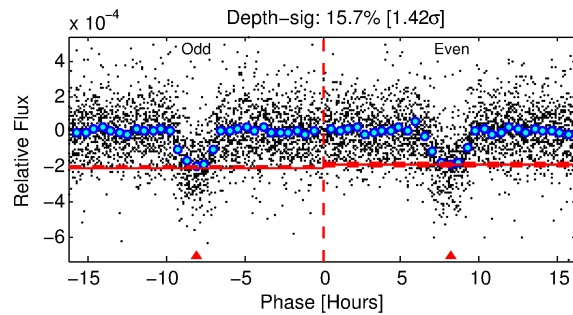
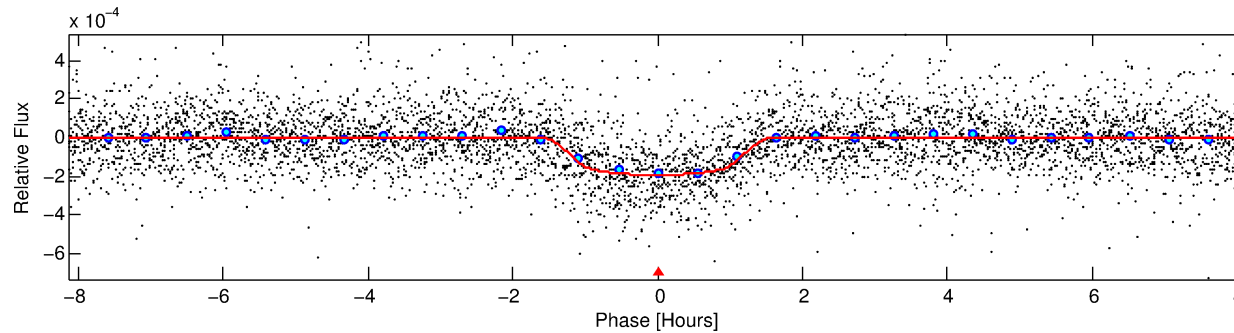
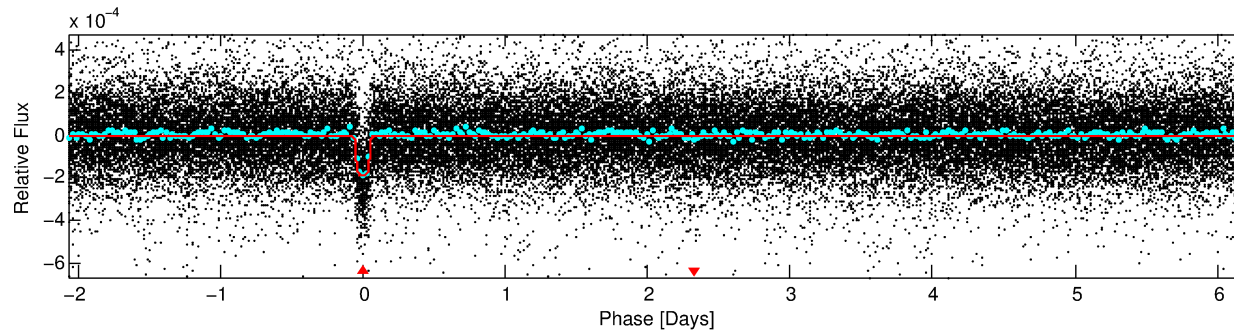
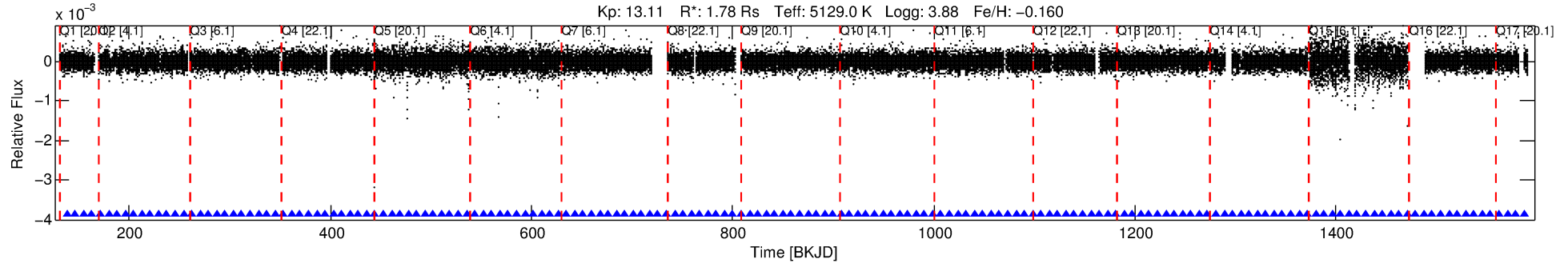
Ephemeris Match Information For 006061773-01

No Significant Match Found

DV One-Page Summary

KIC: 6061773 Candidate: 1 of 1 Period: 8.277 d

KOI: K02001.01 Corr: 0.998



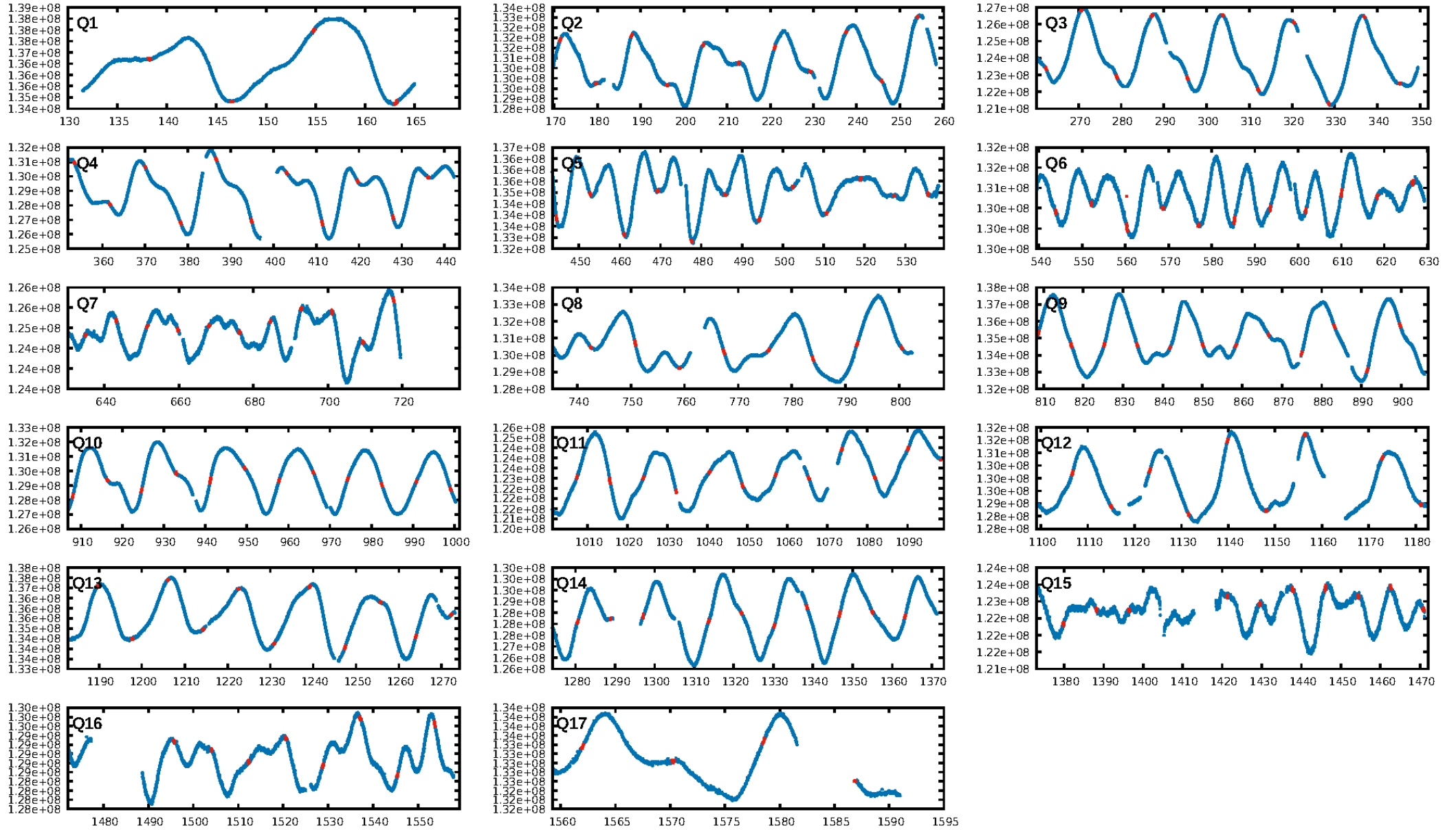
DV Fit Results:

Period = 8.27744 [0.00002] d
Epoch = 138.2549 [0.0016] BKJD
Rp/R* = 0.0154 [0.0029]
a/R* = 10.92 [8.32]
b = 0.90 [0.16]
Seff = 332.36 [388.31]
Teq = 1089 [318] K
Rp = 3.00 [1.95] Re
a = 0.0769 [0.0526] AU
Ag = 8.59 [10.82] [0.70 σ]
Teffp = 2882 [360] K [3.73 σ]

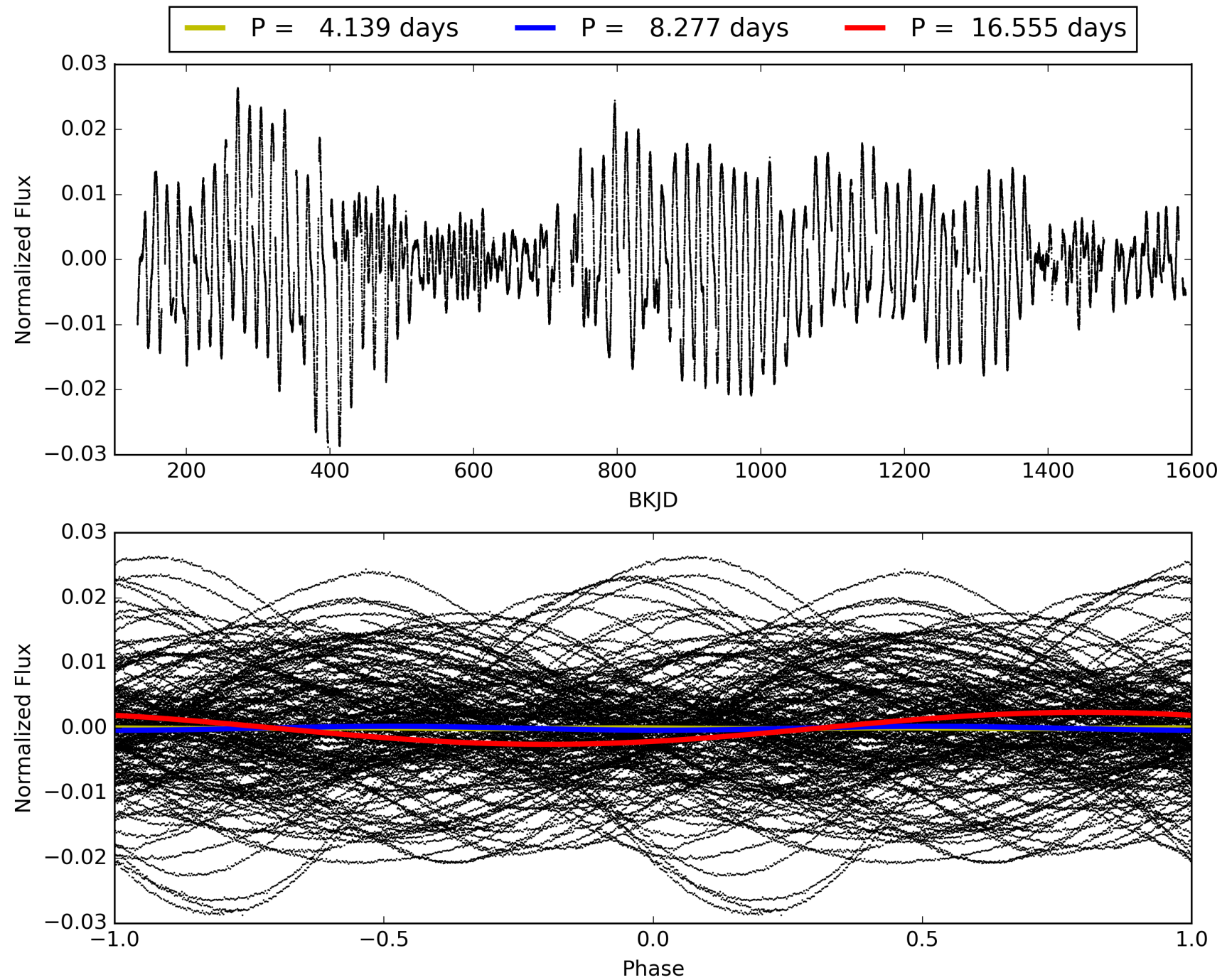
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 99.9%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 5.13e-133
RollingBand-fgt: 1.00 [158/158]
GhostDiagnostic-chr: -7.193
Centroid-sig: N/A
Centroid-so: 0.362 arcsec [0.82 σ]
OotOffset-rm: 0.268 arcsec [1.41 σ]
KicOffset-rm: 0.226 arcsec [1.14 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 006061773-01, PDC Light Curves

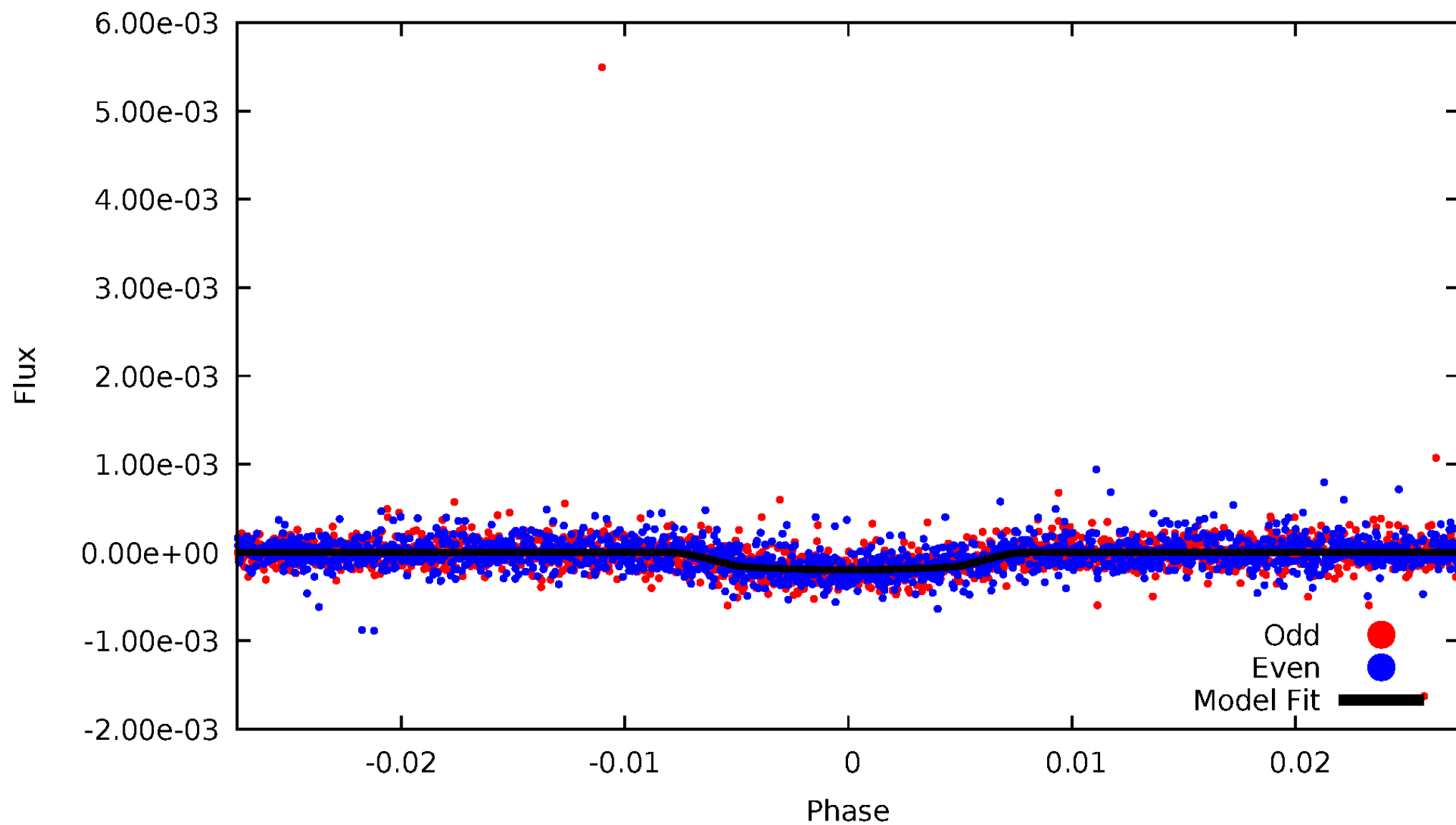


TCE 006061773-01



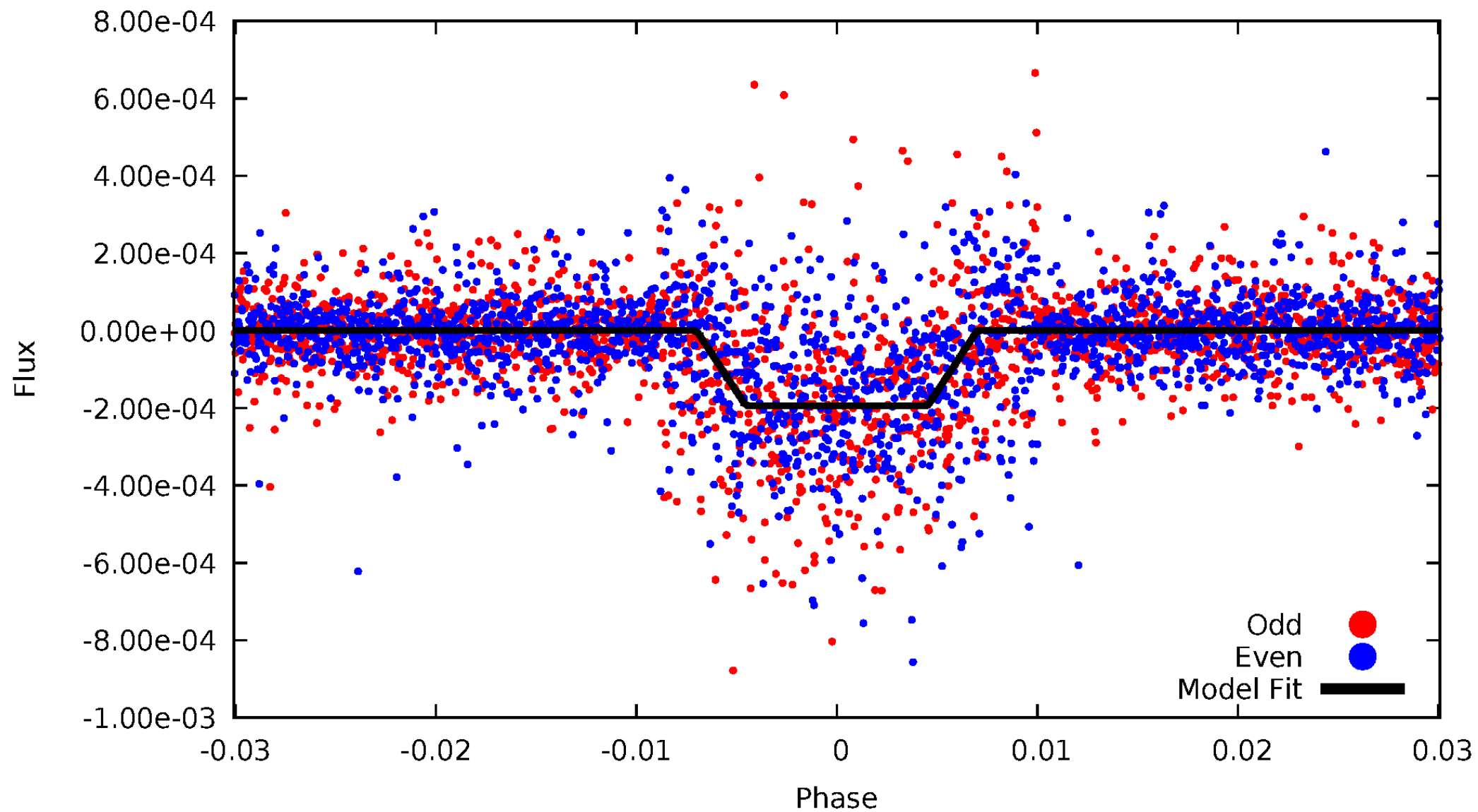
DV Odd/Even

TCE 006061773-01



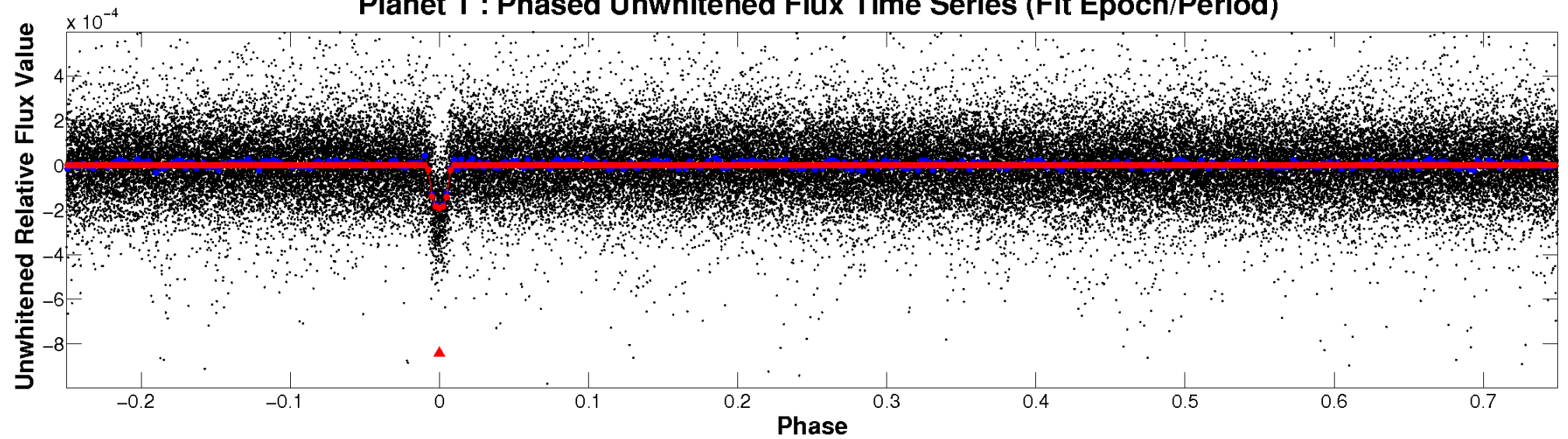
ALT Odd/Even

TCE 006061773-01

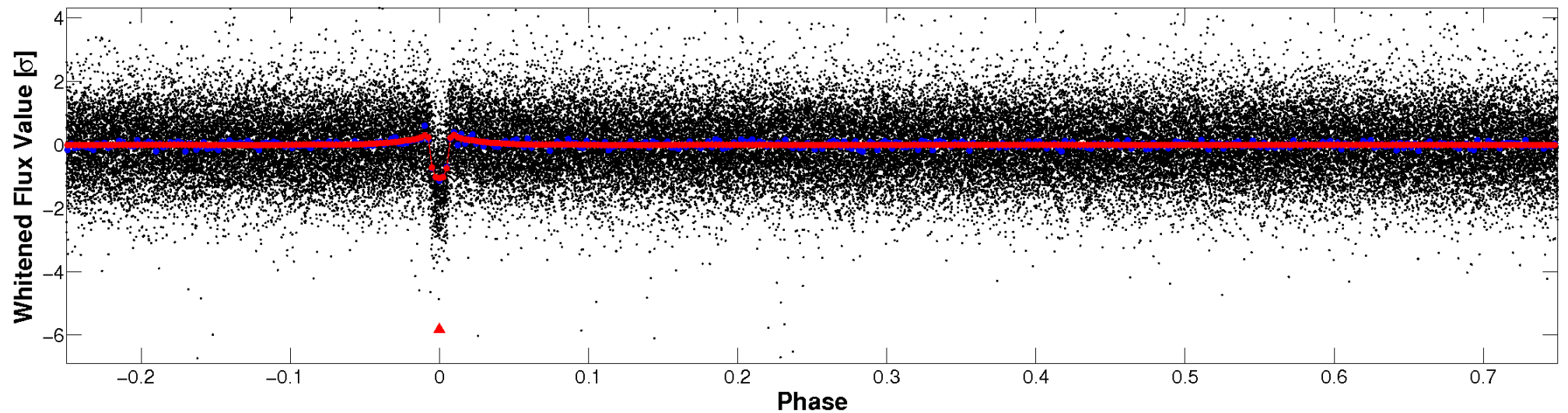


Non-Whitened Vs. Whitened Light Curve

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

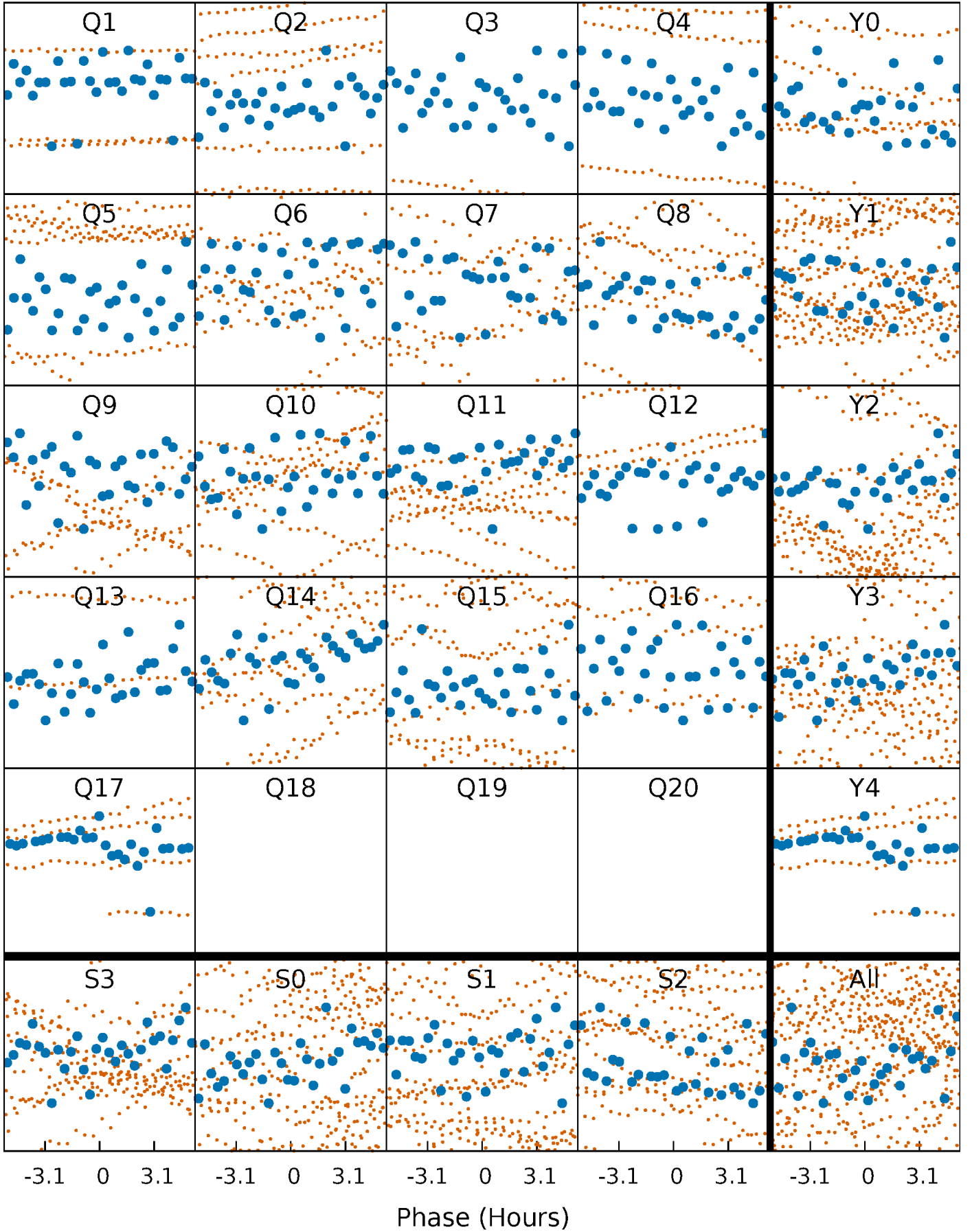


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



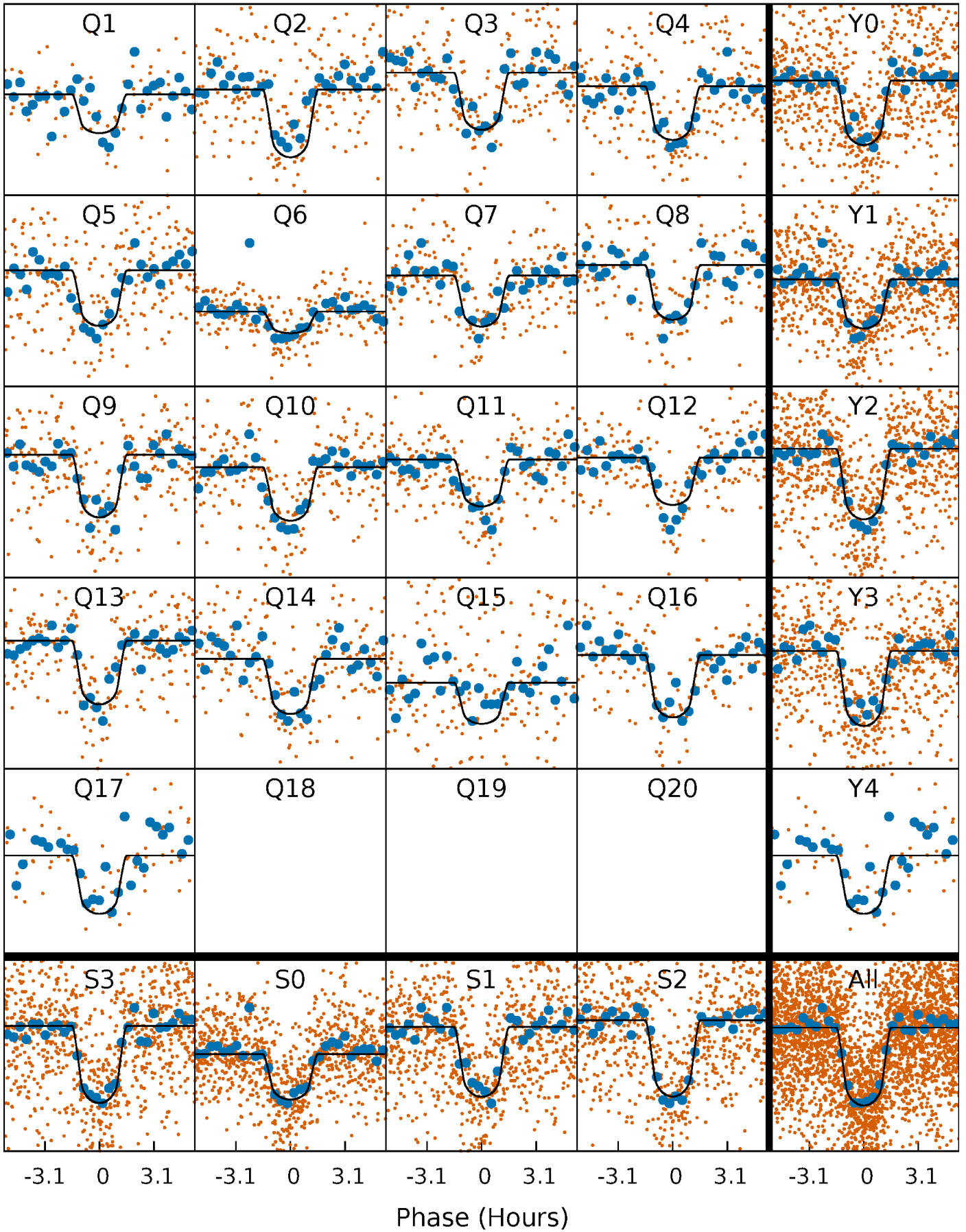
PDC Quarter-Phased Transit Curves

TCE 006061773-01 P= 8.277444 Days $T_0=138.254895$ (BKJD)



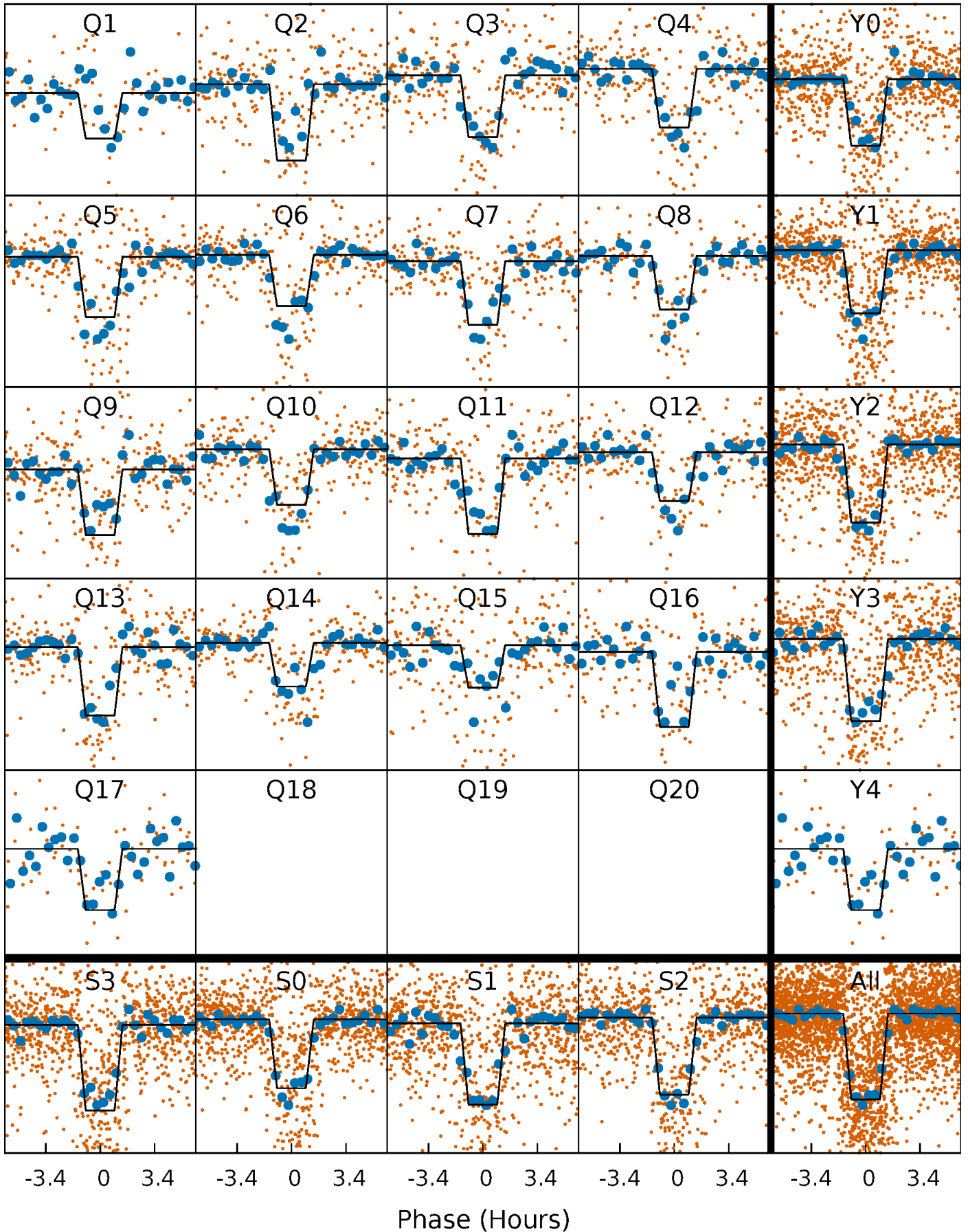
DV Quarter-Phased Transit Curves

TCE 006061773-01 P= 8.277444 Days $T_0=138.254895$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

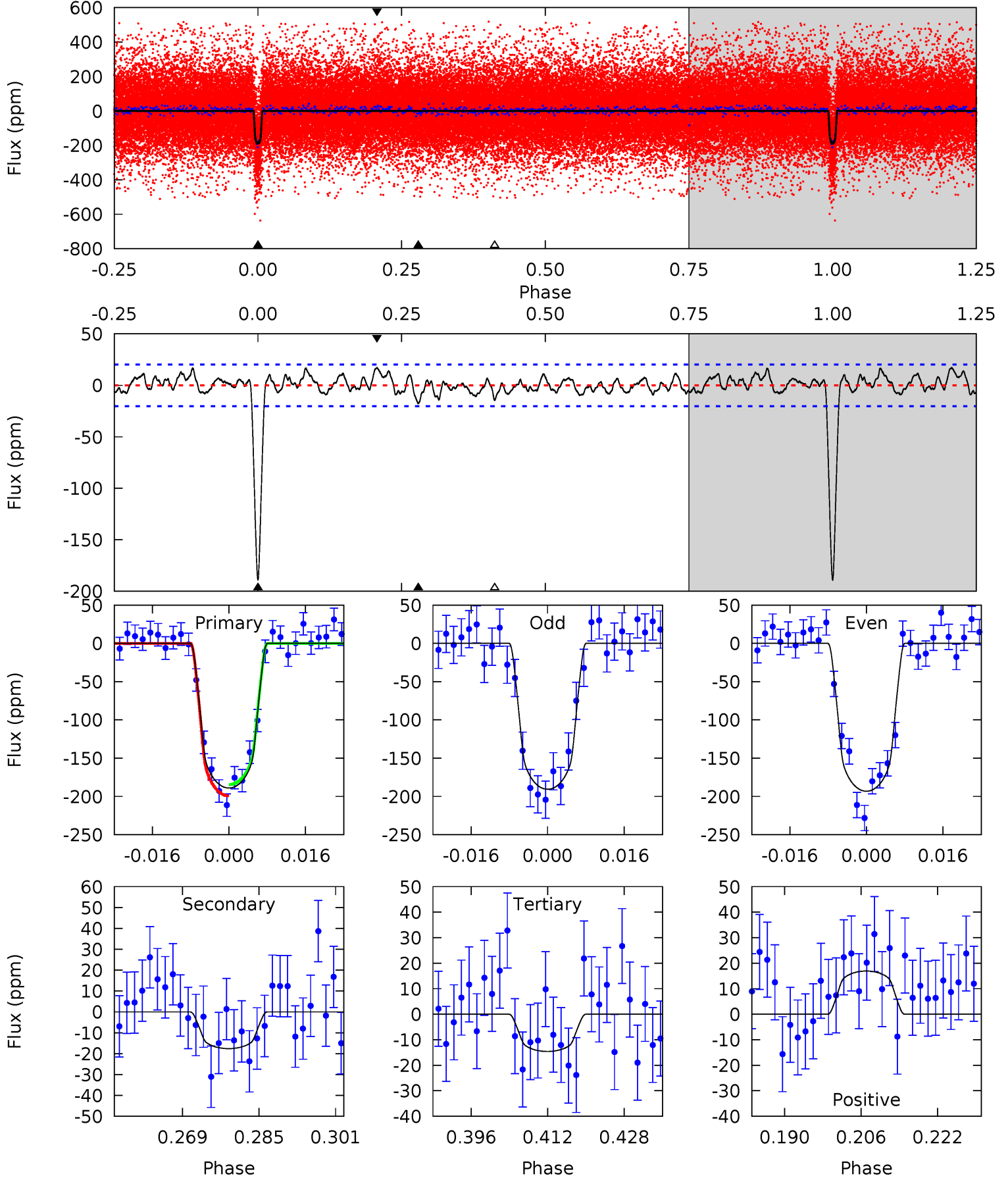
TCE 006061773-01 P= 8.277483 Days $T_0=138.250740$ (BKJD)



DV Model-Shift Uniqueness Test

006061773-01, P = 8.277444 Days, E = 129.977451 Days

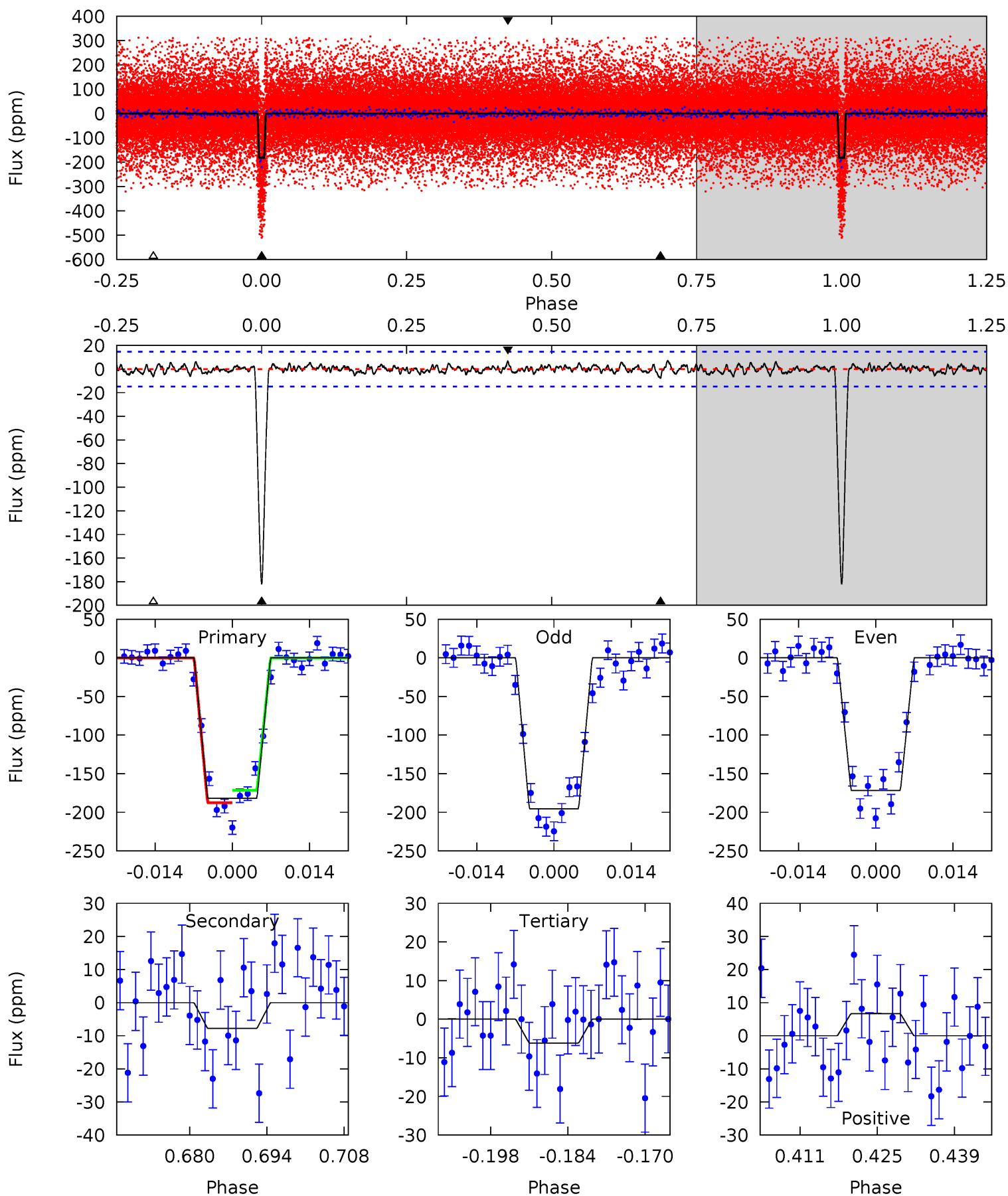
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
46.1	4.29	3.56	4.13	4.94	2.41	1.49	42.5	42.0	0.73	0.16	0.32	1.01	0.08	1.80



Alt Model-Shift Uniqueness Test

006061773-01, P = 8.277483 Days, E = 129.973257 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
61.2	2.62	2.08	2.25	4.96	2.45	0.76	59.1	58.9	0.54	0.37	3.99	1.08	0.04	2.69



Stellar Parameters For KIC 006061773

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5129^{+153}_{-138}	$3.884^{+0.707}_{-0.303}$	$-0.160^{+0.300}_{-0.300}$	$1.781^{+0.909}_{-1.111}$	$0.887^{+0.117}_{-0.157}$	$0.221^{+2.563}_{-0.143}$
	+3%/-3%	+18%/-8%	+188%/-188%	+51%/-62%	+13%/-18%	+1158%/-64%
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 006061773-01 / KOI 2001.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-18 ± 4	$2.87^{+1.07}_{-1.06}$	1503^{+197}_{-275}	3199^{+245}_{-234}	$6.711^{+10.059}_{-3.383}$
Alt.	-8 ± 3	$2.62^{+1.02}_{-0.92}$	1505^{+210}_{-245}	2905^{+262}_{-291}	$3.534^{+5.668}_{-2.008}$

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 $A_{obs} \gg 1.0$

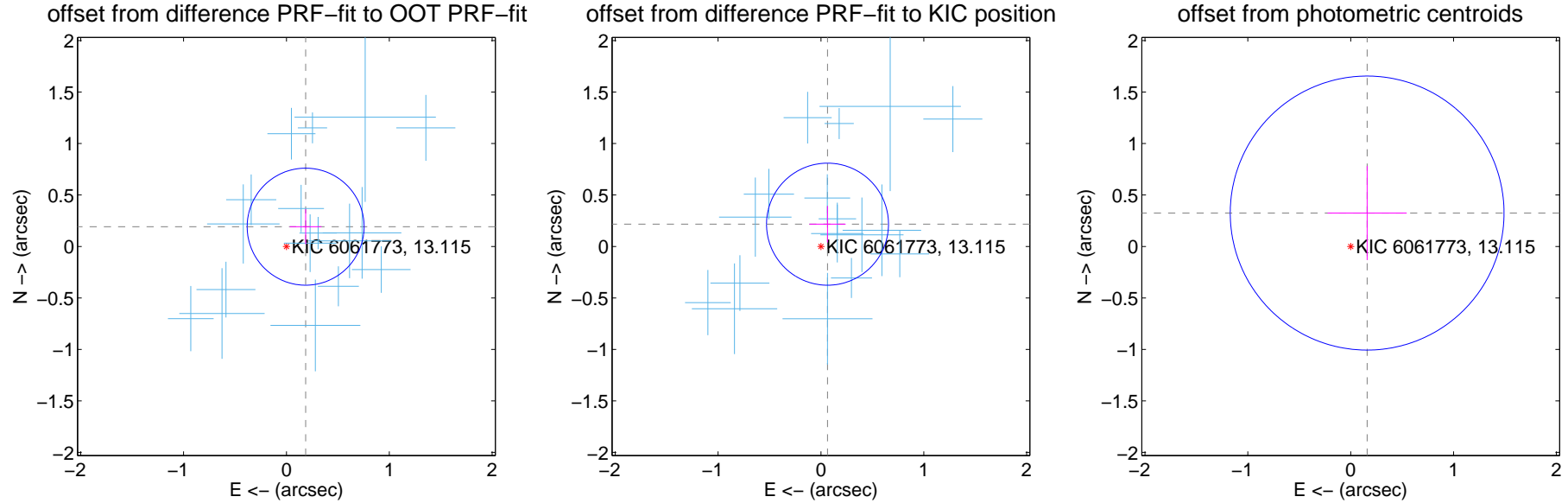
DV Centroid Data

Supplemental centroid analysis for 006061773-01. Kepler magnitude: 13.12. Transit SNR 28.22

There are 17 quarters with good PRF difference image offsets

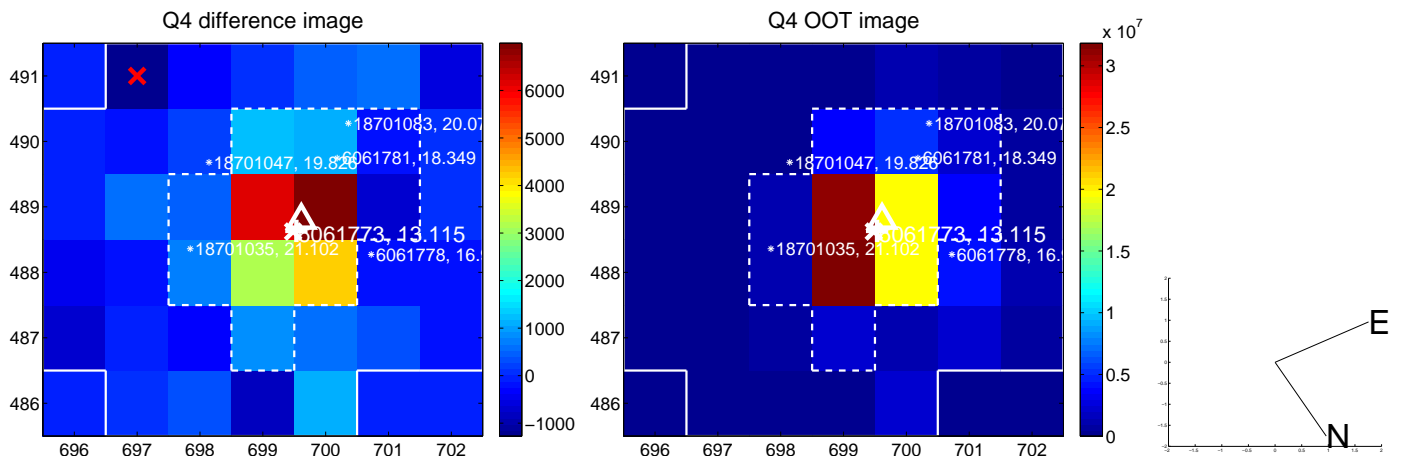
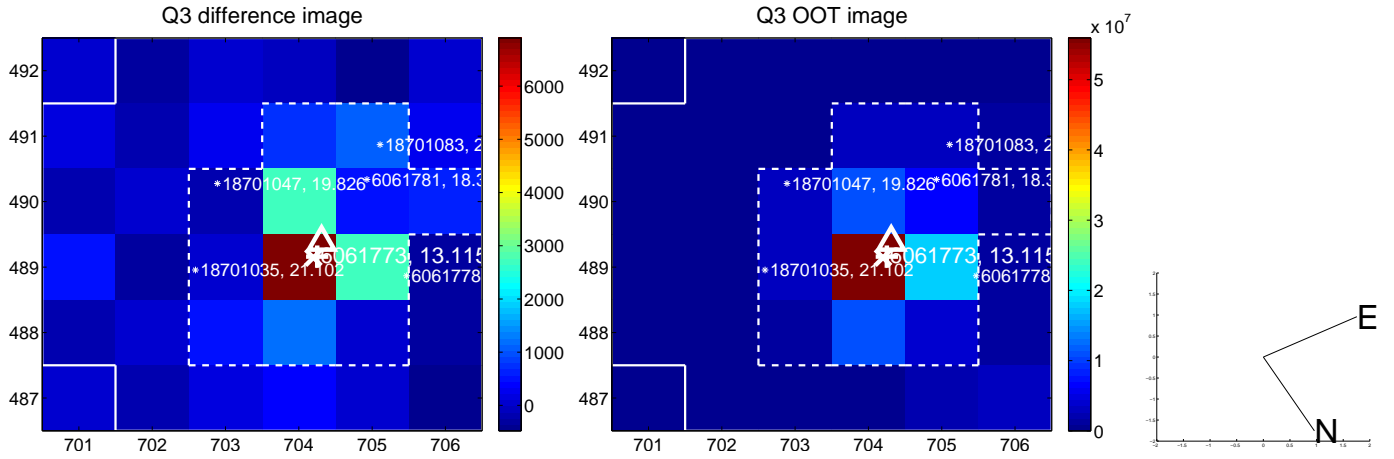
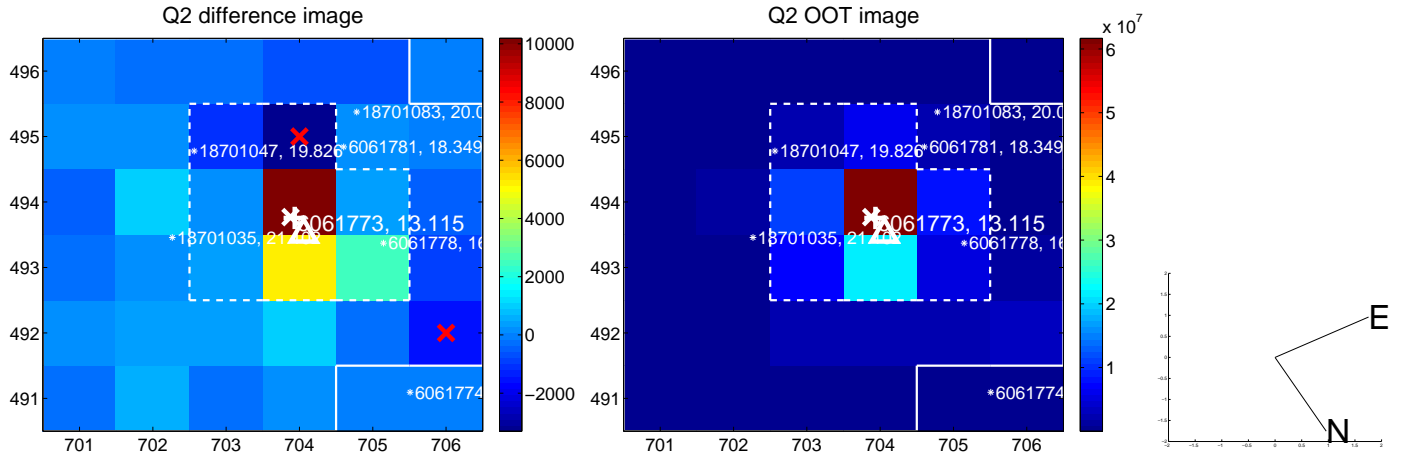
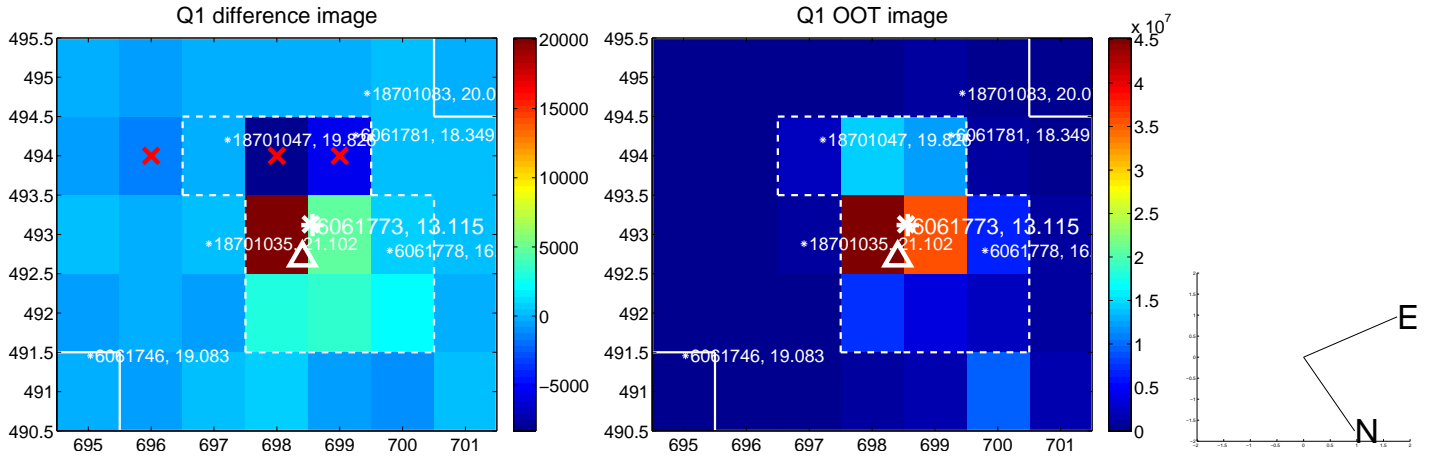
The direct PRF centroid is offset from the target star catalog position by about 0.14 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.268 ± 0.189	1.41	-0.187 ± 0.154	0.192 ± 0.170
PRF-fit source offset from KIC position	0.226 ± 0.198	1.14	-0.064 ± 0.176	0.216 ± 0.177
photometric centroid source offset	0.36 ± 0.44	0.82	-0.16 ± 0.38	0.32 ± 0.46

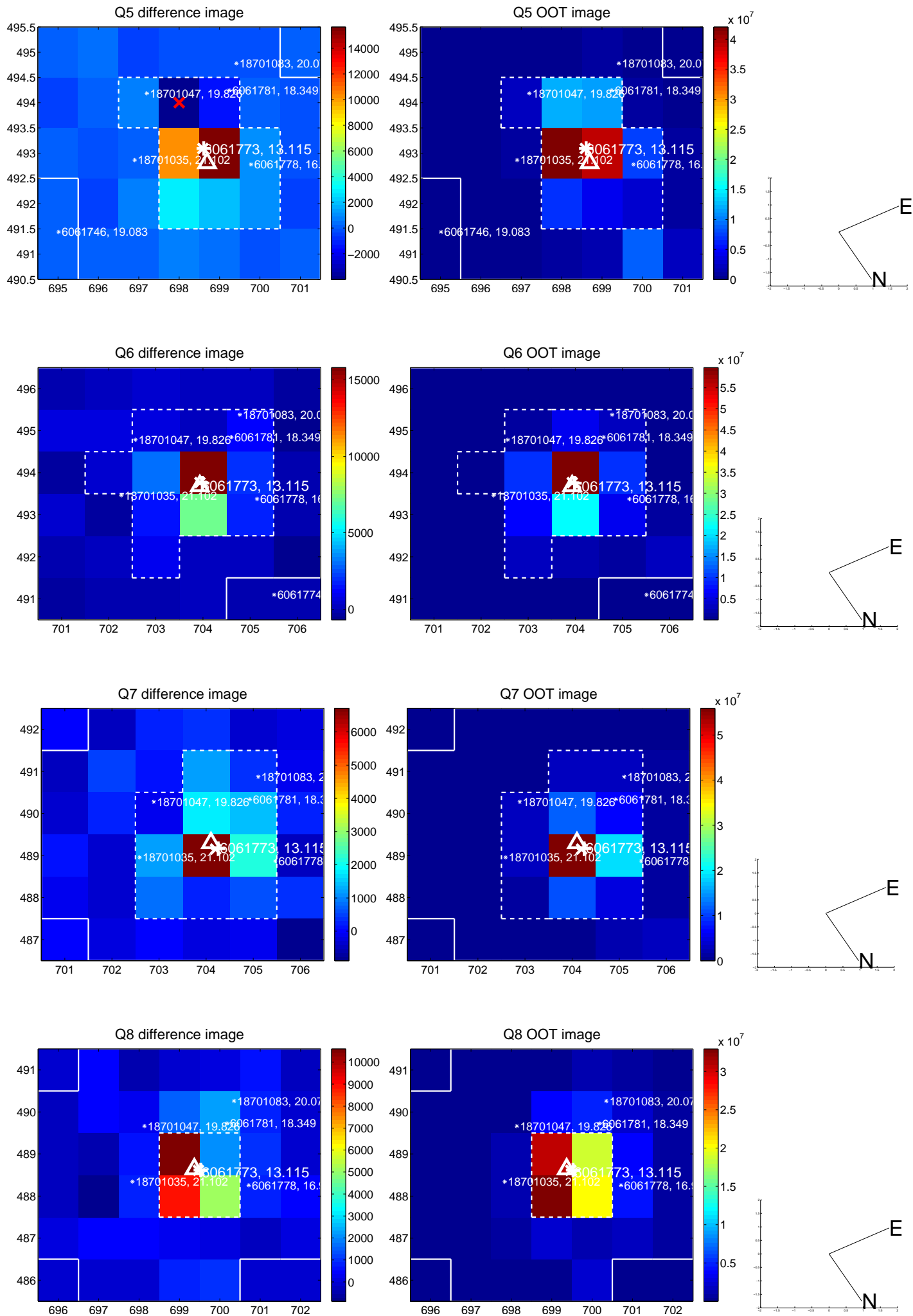


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

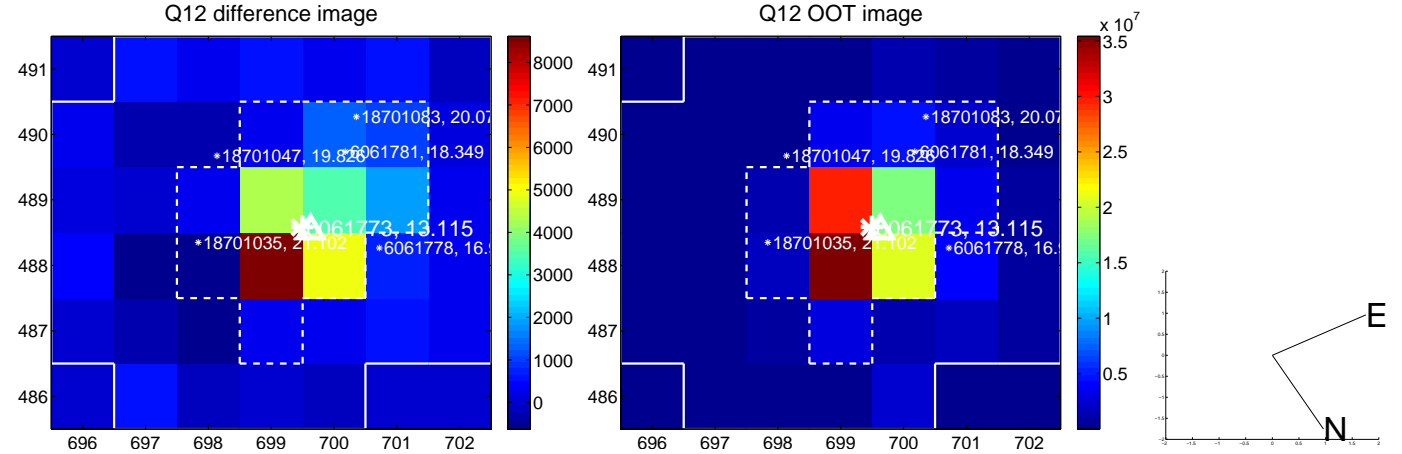
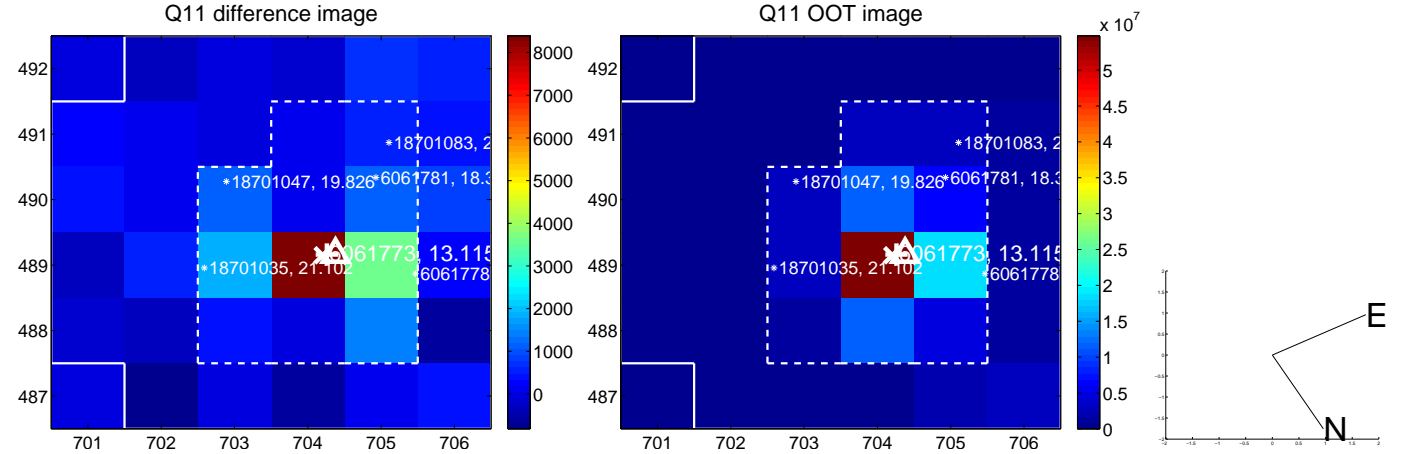
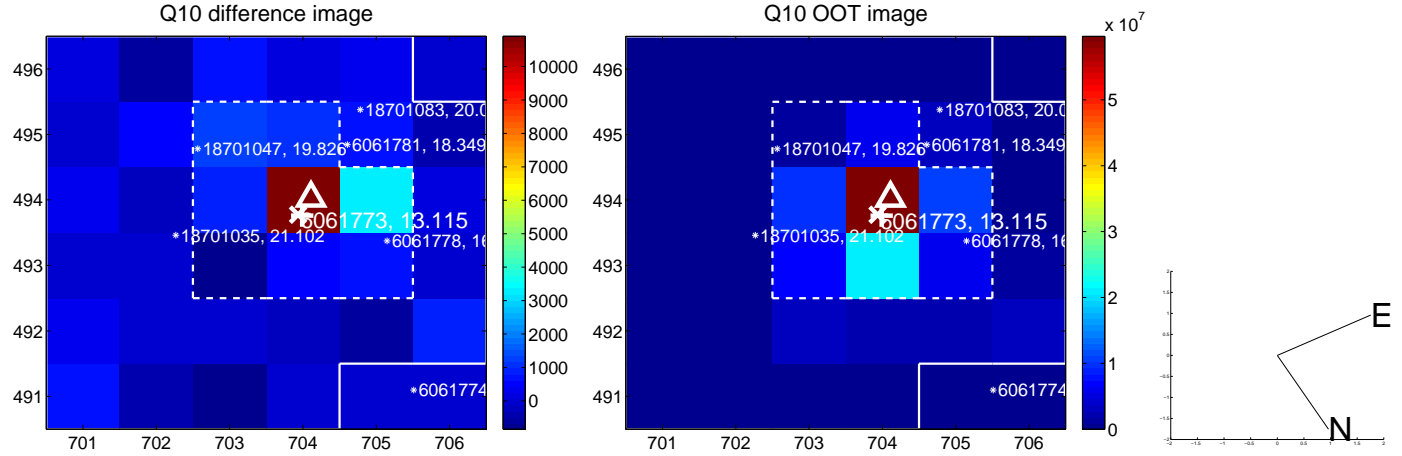
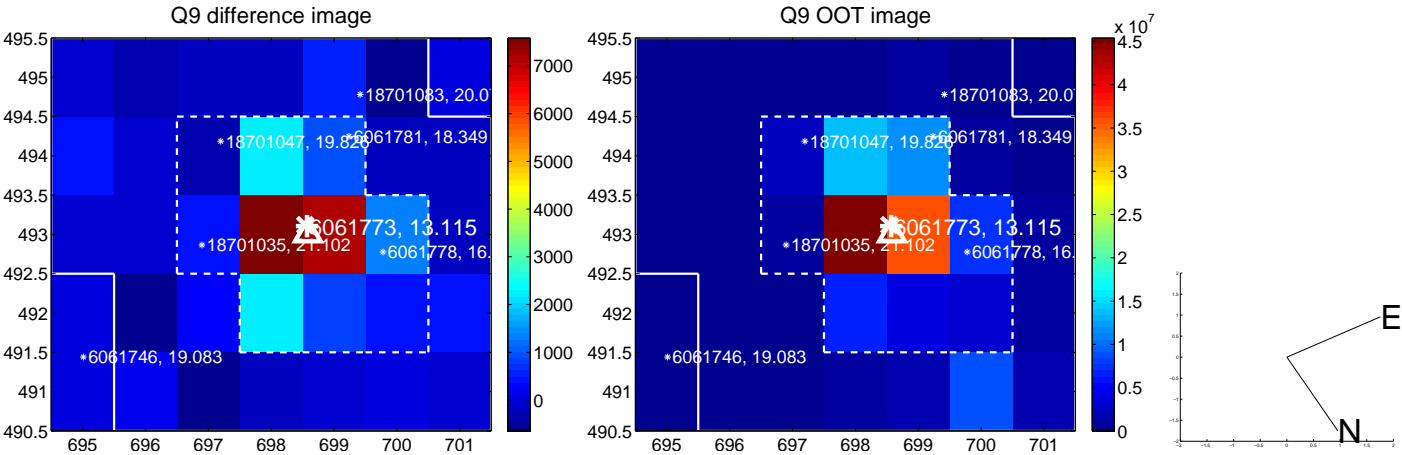
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



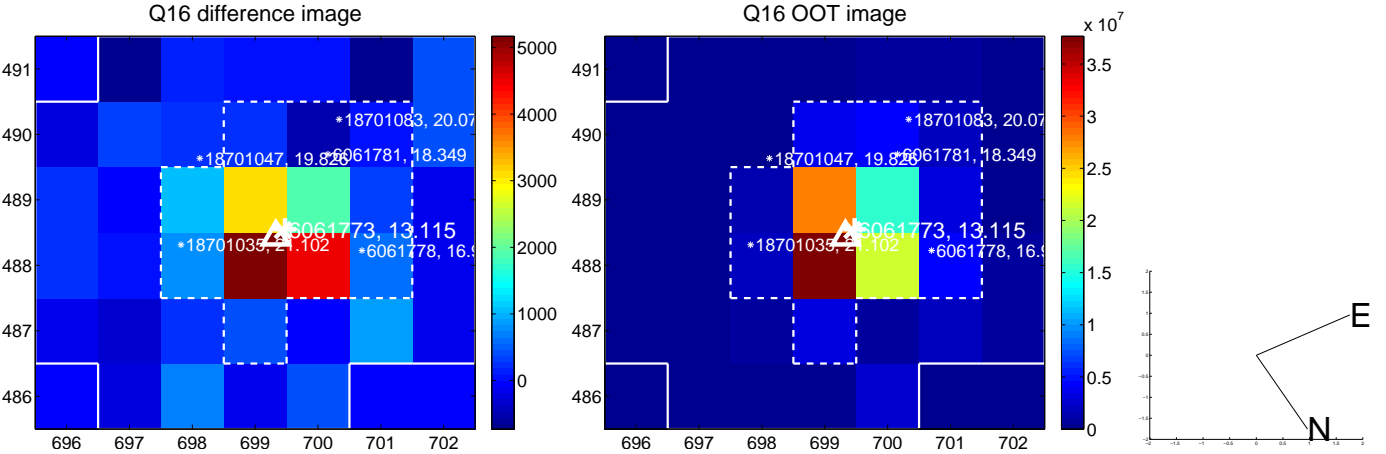
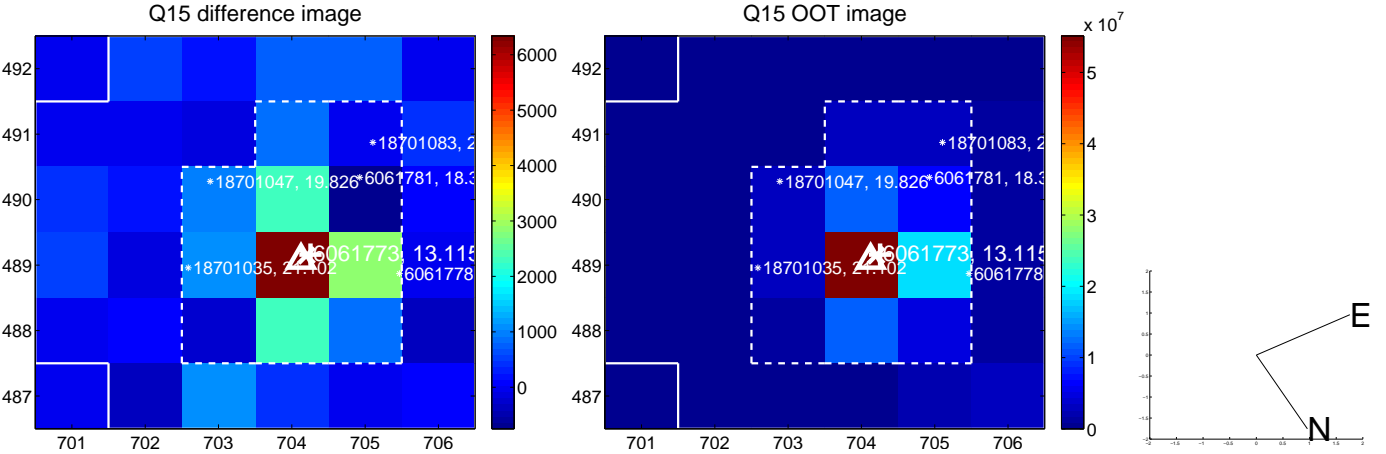
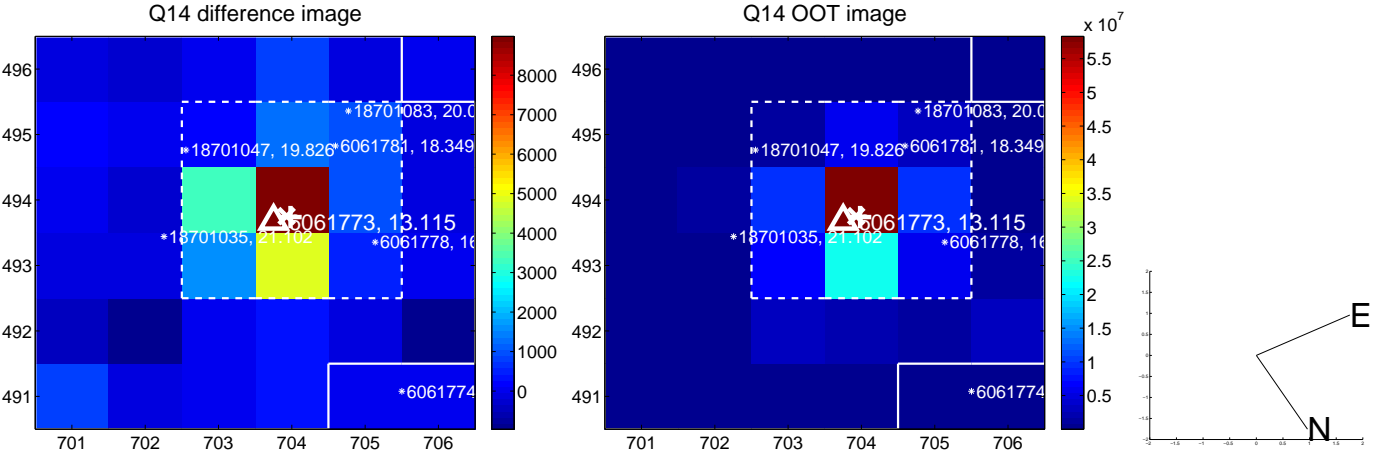
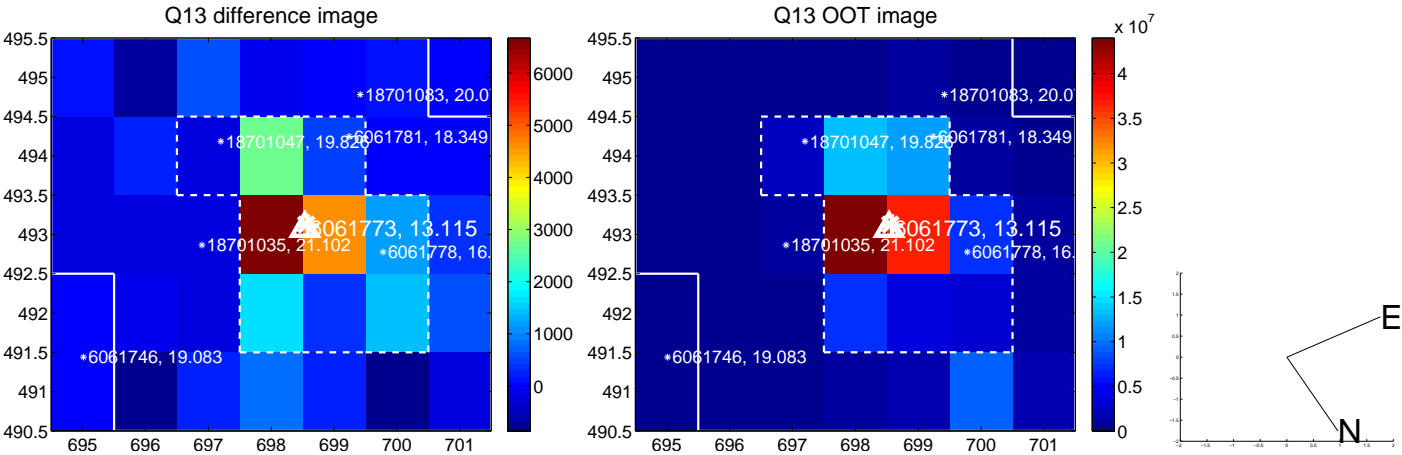
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



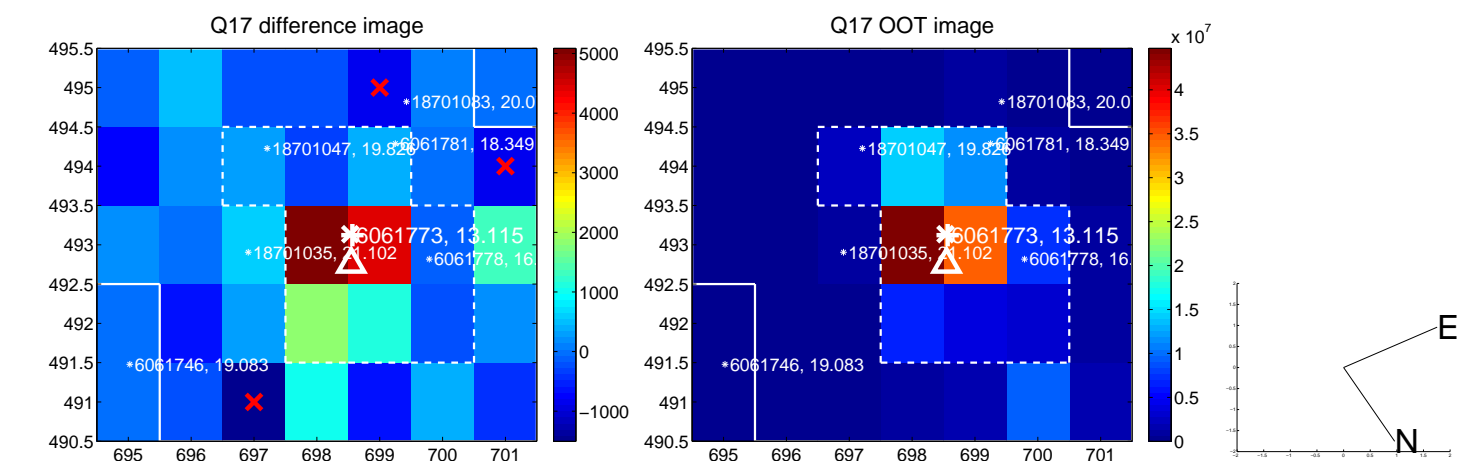
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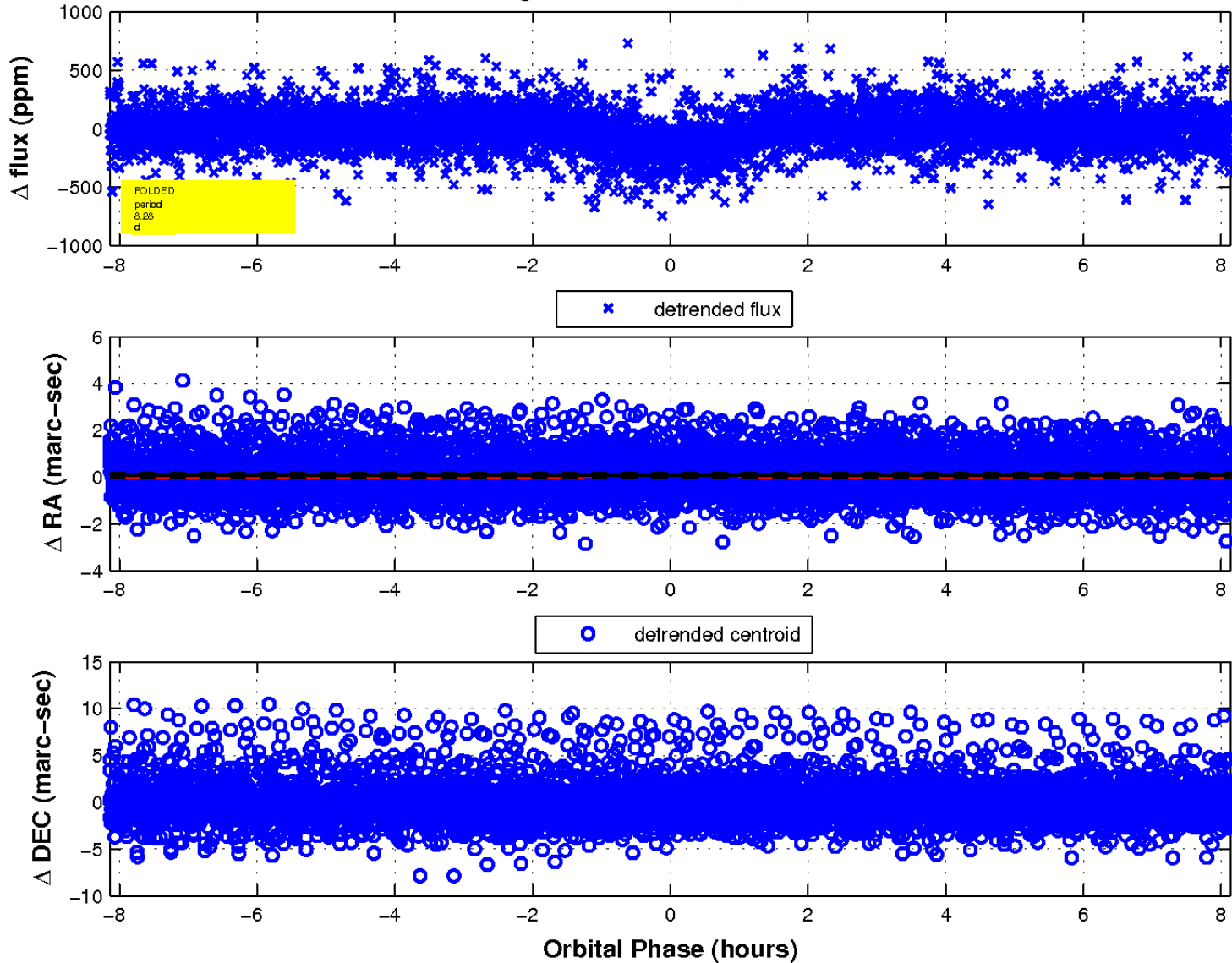
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fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

