

KIC 006675060

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})
006675060-01	OBS	3611.01	10.443344	133.628804	145439.5	3.964	1660.2	1319.9	1.00	6137	56.83	149.64

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006675060-01	OBS	FP	0.00	0	1	0	0	DEEP_V_SHAPED

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.

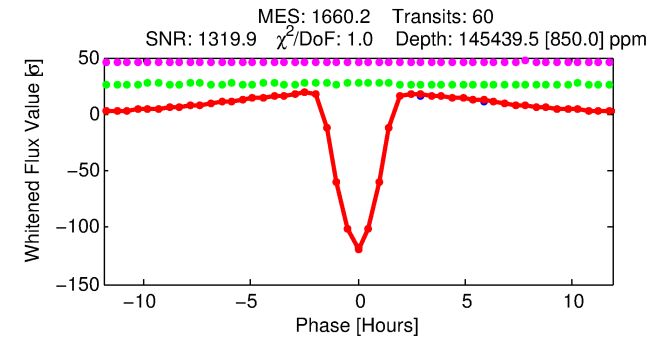
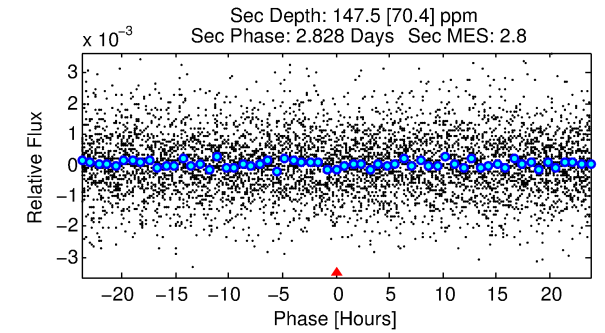
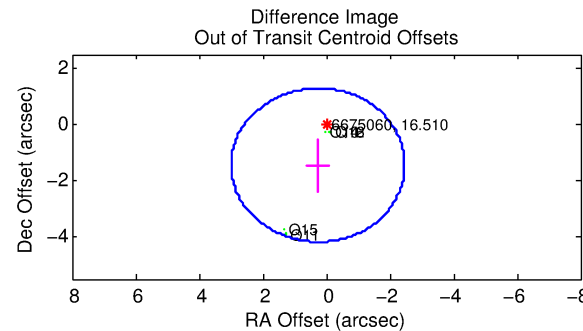
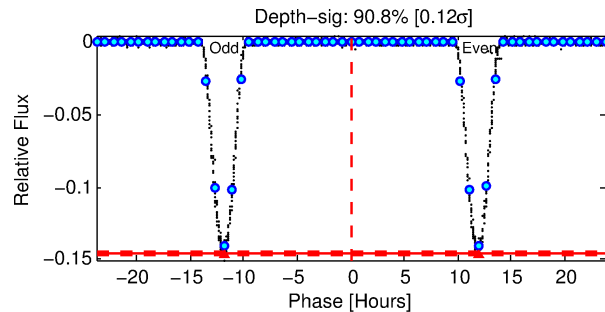
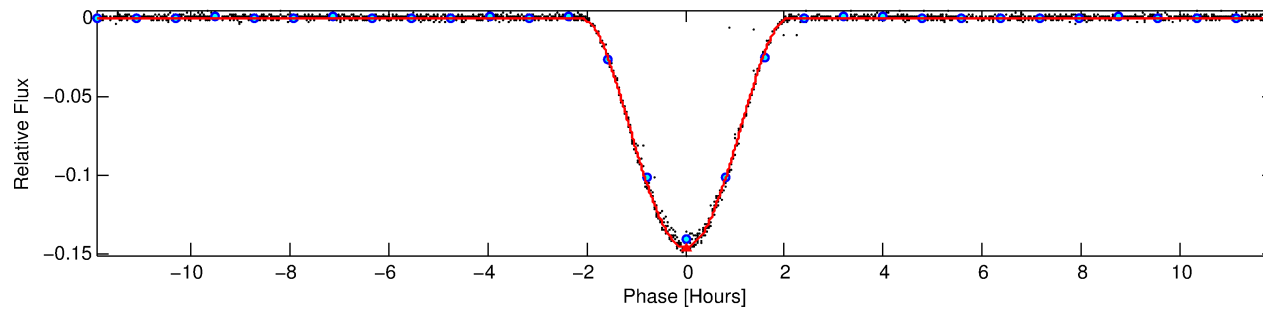
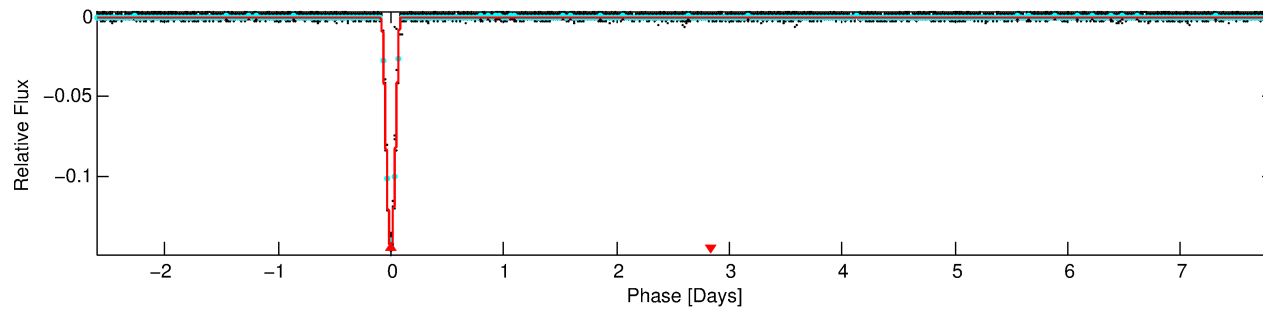
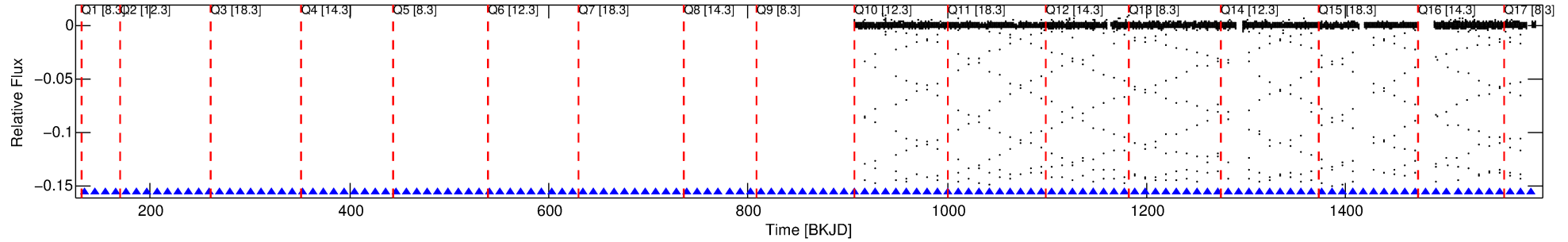
Ephemeris Match Information For 006675060-01

No Significant Match Found

DV One-Page Summary

KIC: 6675060 Candidate: 1 of 1 Period: 10.443 d
KOI: K03611.01 Corr: 0.993

Kp: 16.51 R*: 1.00 Rs Teff: 6137.0 K Logg: 4.42 Fe/H: -0.320



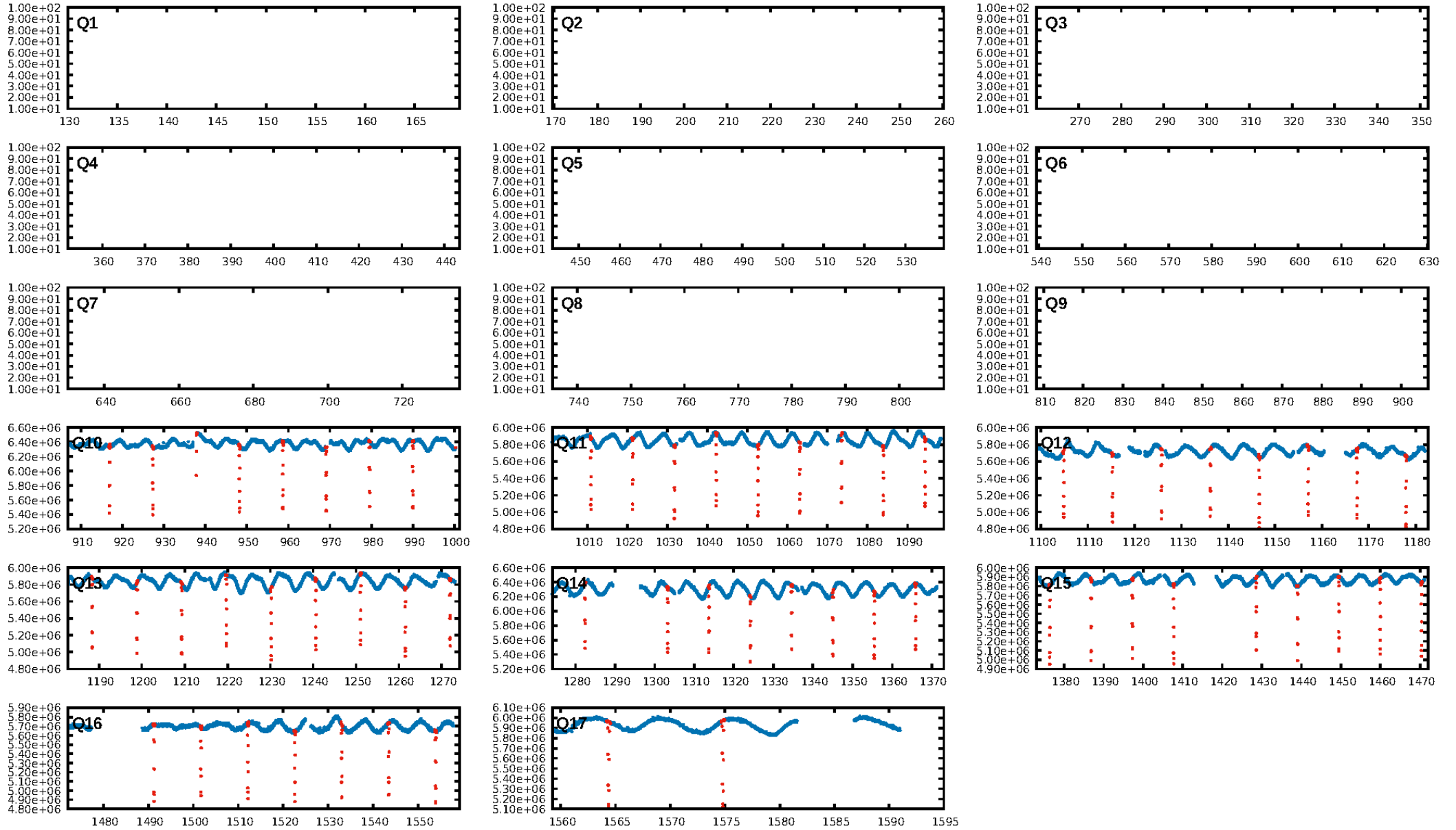
DV Fit Results:

Period = 10.44334 [0.00000] d
Epoch = 133.6288 [0.0002] BKJD
Rp/R* = 0.5182 [0.2578]
a/R* = 24.66 [1.12]
b = 0.90 [0.37]
Seff = 149.64 [59.64]
Teff = 892 [89] K
Rp = 56.83 [32.83] Re
a = 0.0926 [0.0232] AU
Ag = 0.22 [0.25] [-3.13σ]
Teffp = 940 [262] K [0.17σ]

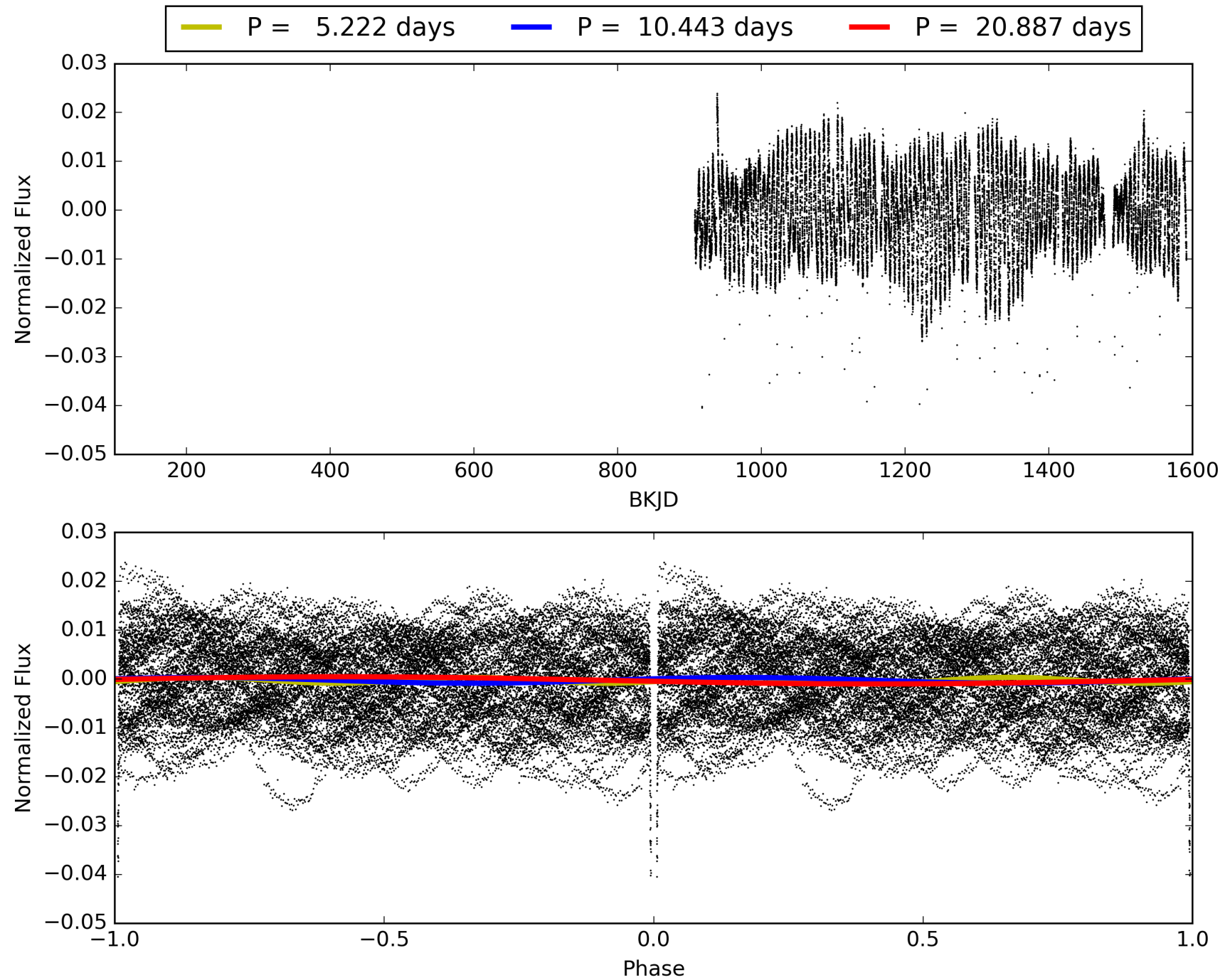
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 0.00e+00
RollingBand-fgt: 1.00 [58/58]
GhostDiagnostic-chr: 4.397
Centroid-sig: 0.0%
Centroid-so: 0.927 arcsec [128.93σ]
OotOffset-rm: 1.471 arcsec [1.61σ]
KicOffset-rm: 0.080 arcsec [1.08σ]
OotOffset-st: 2/2/2/0 [6]
KicOffset-st: 2/2/2/2 [8]
DiffImageQuality-fgm: 1.00 [8/8]
DiffImageOverlap-fno: 1.00 [8/8]

TCE 006675060-01, PDC Light Curves

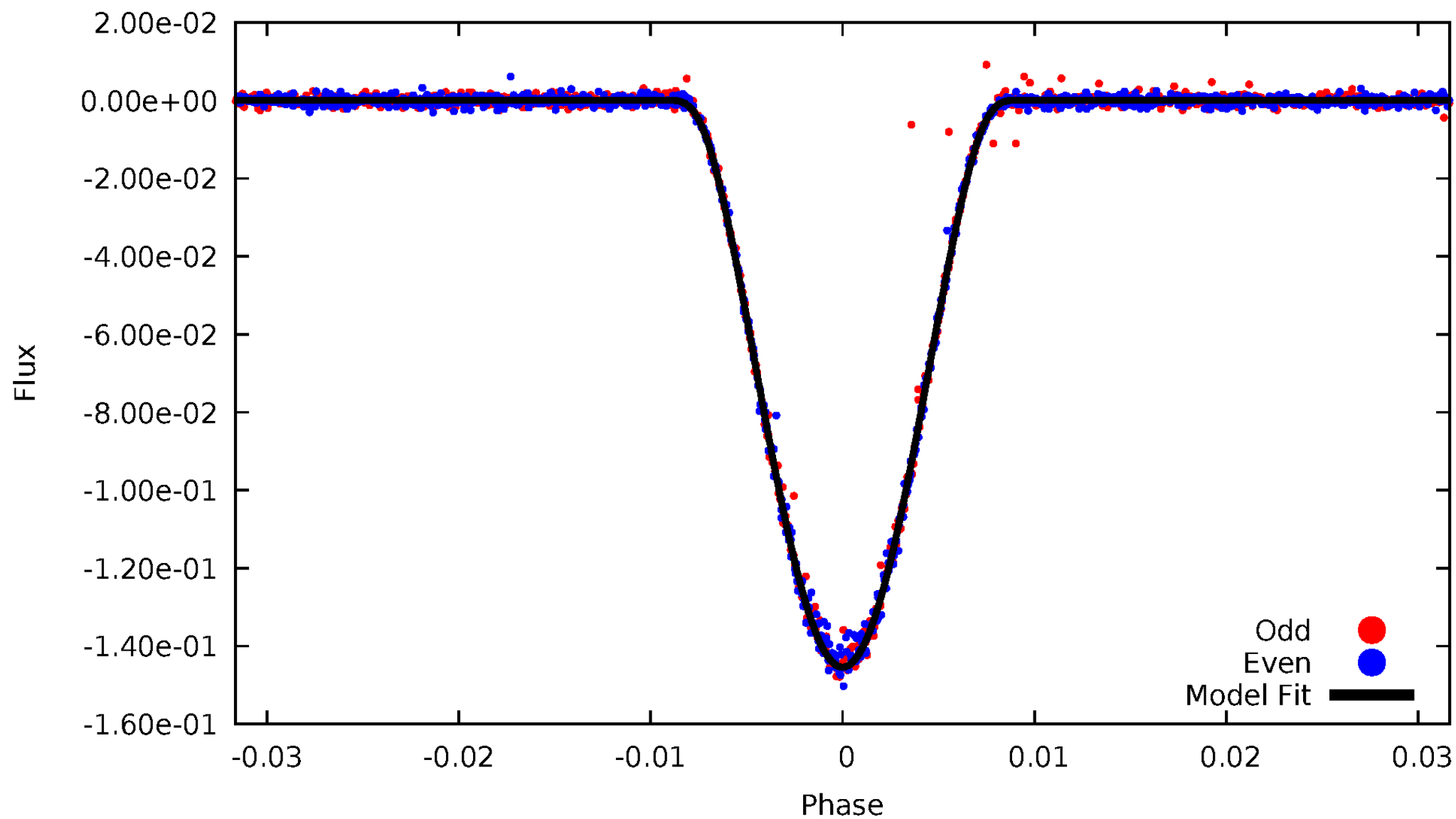


TCE 006675060-01



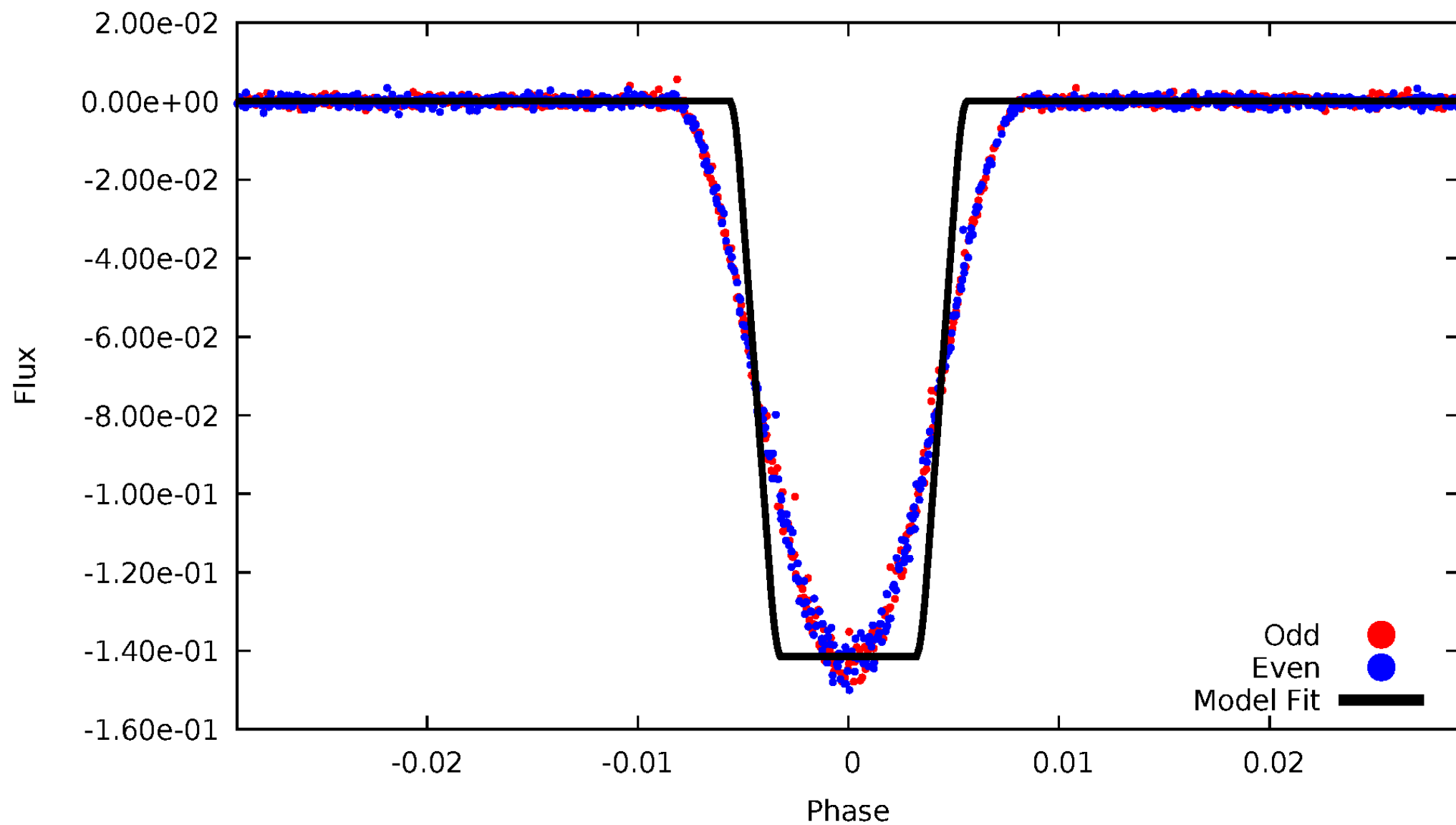
DV Odd/Even

TCE 006675060-01



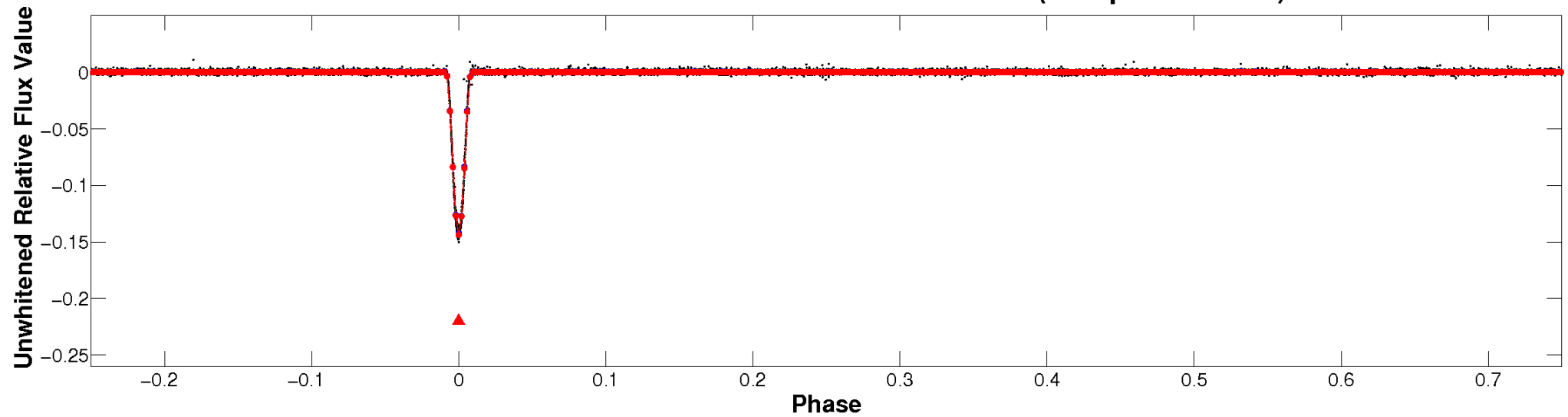
ALT Odd/Even

TCE 006675060-01

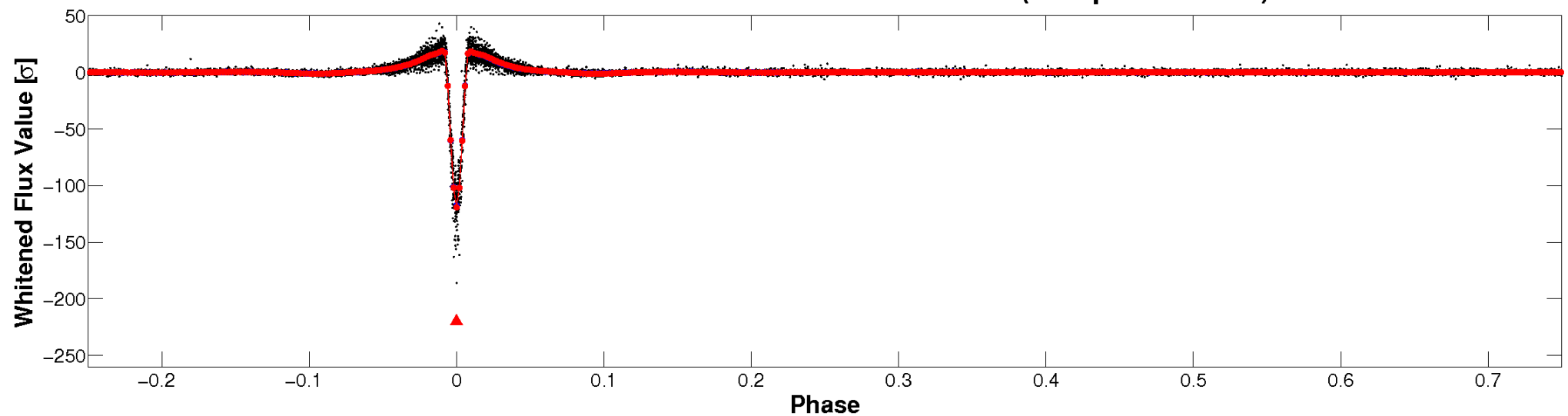


Non-Whitened Vs. Whitened Light Curve

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

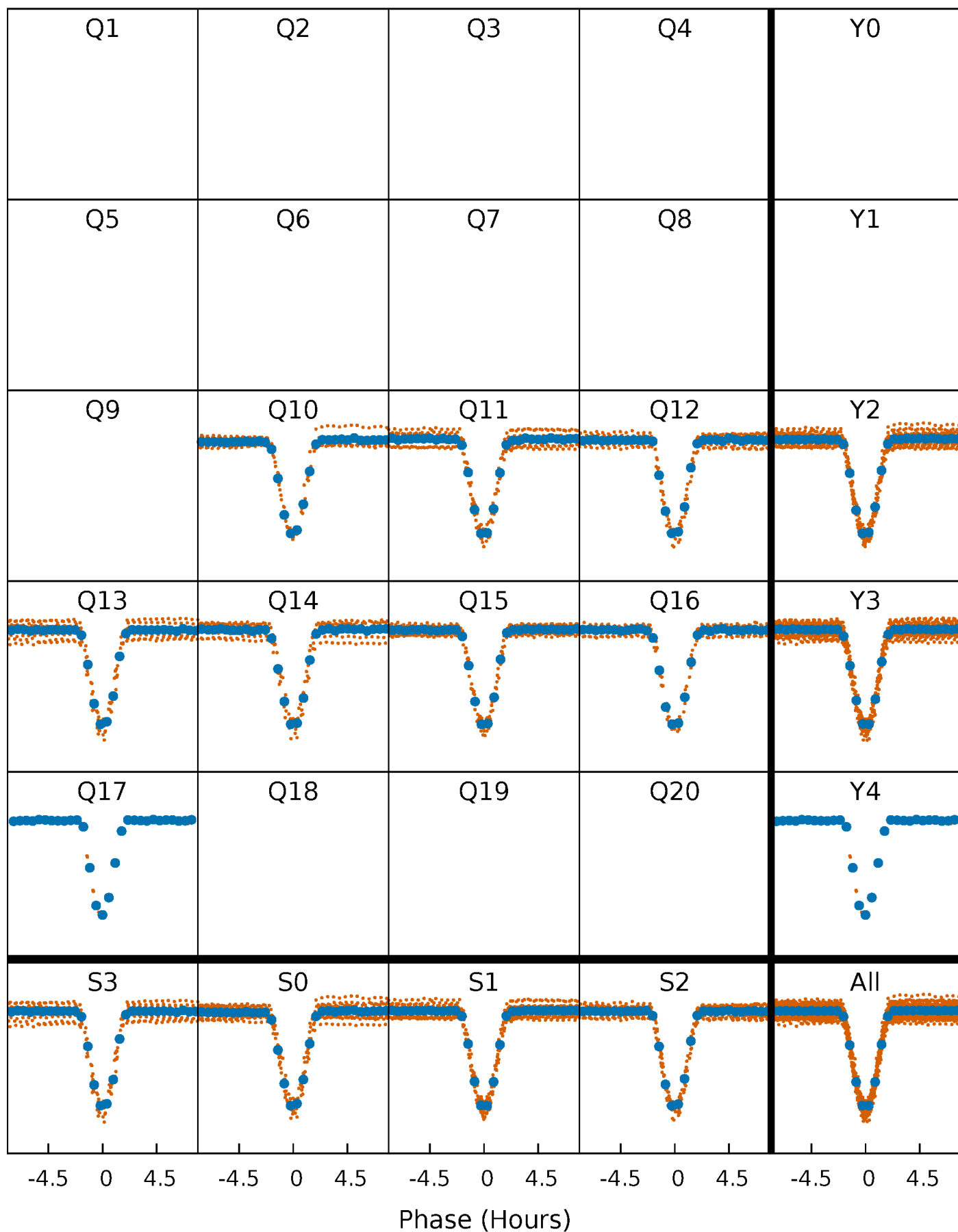


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



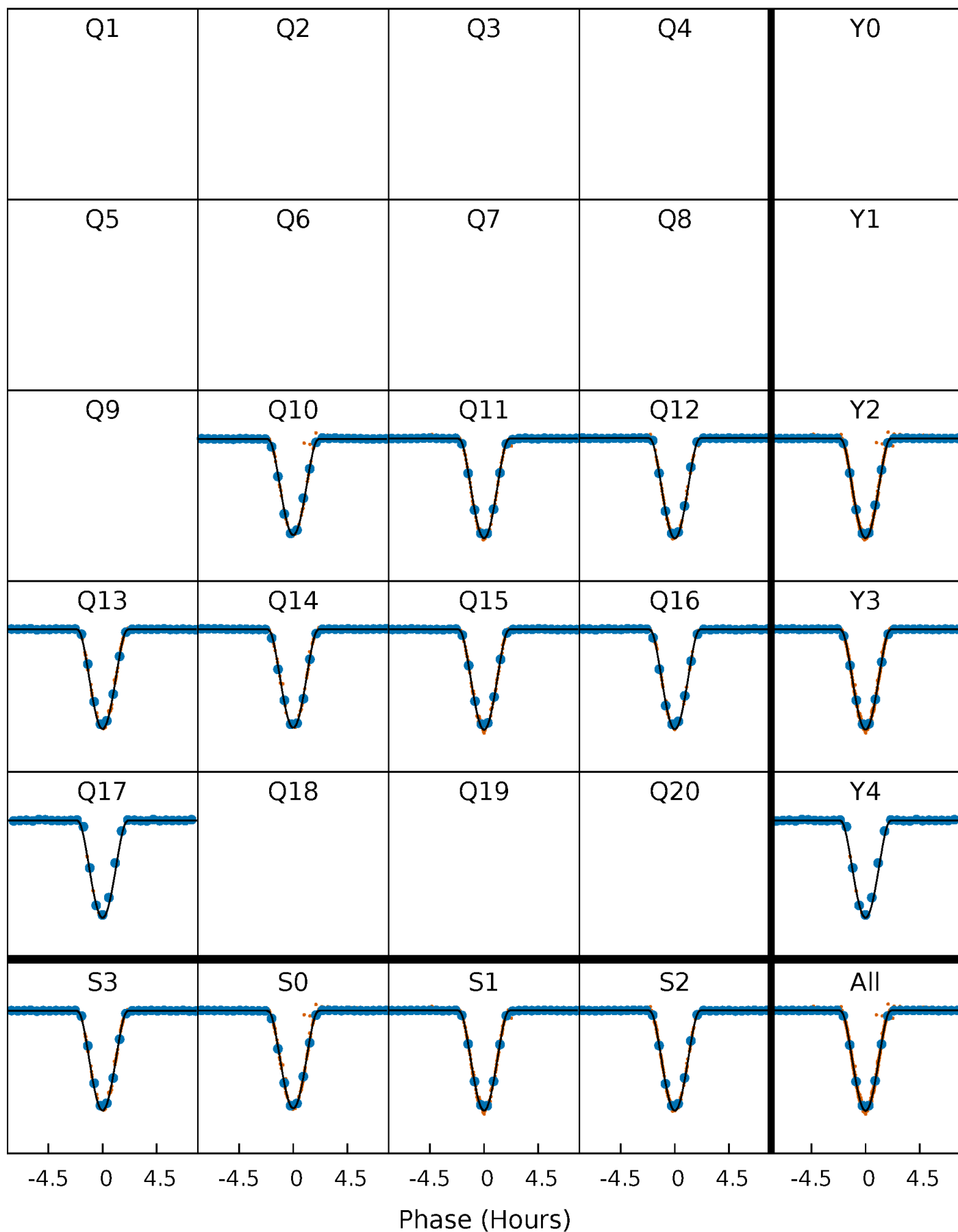
PDC Quarter-Phased Transit Curves

TCE 006675060-01 P= 10.443344 Days $T_0=133.628804$ (BKJD)



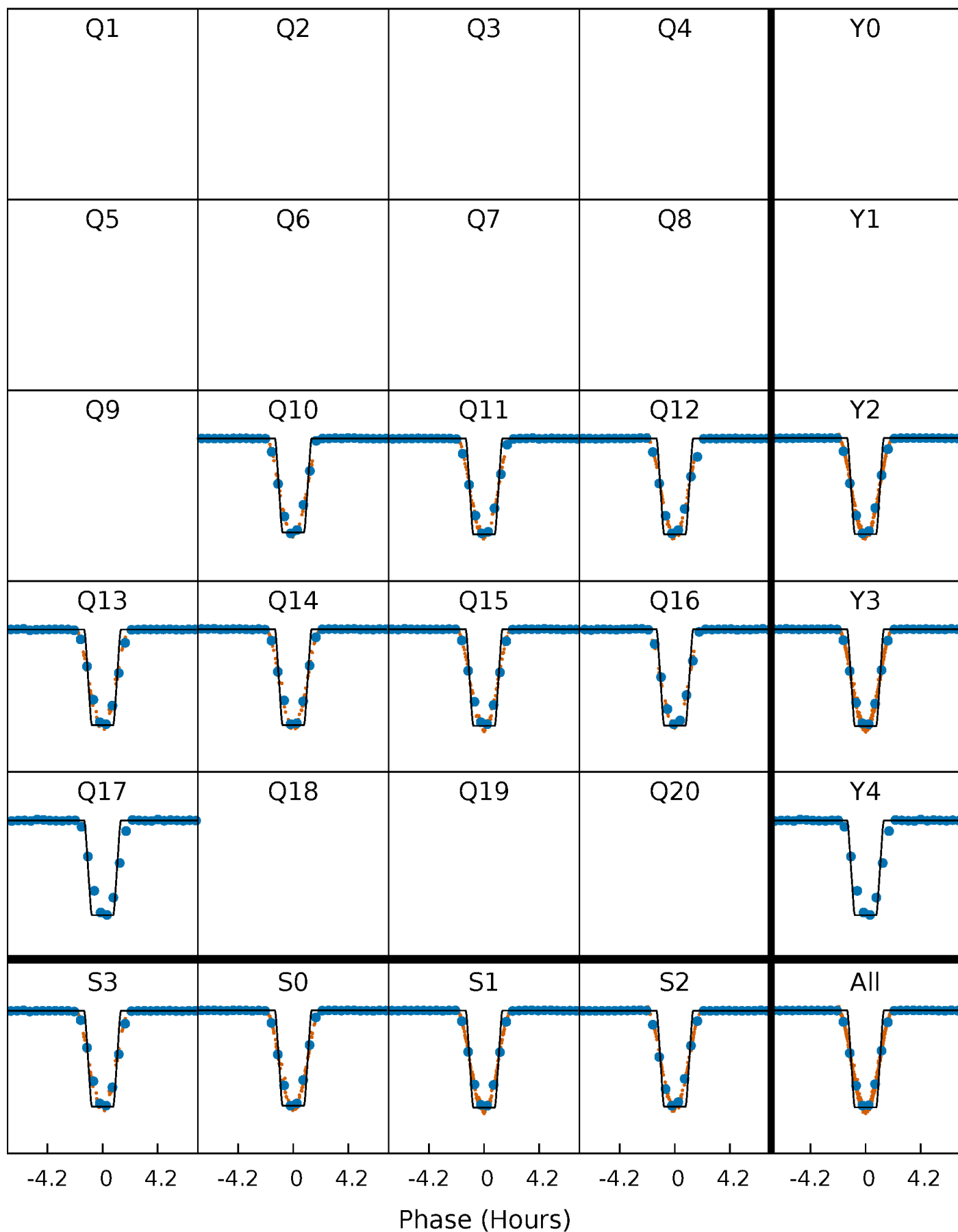
DV Quarter-Phased Transit Curves

TCE 006675060-01 P= 10.443344 Days $T_0=133.628804$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

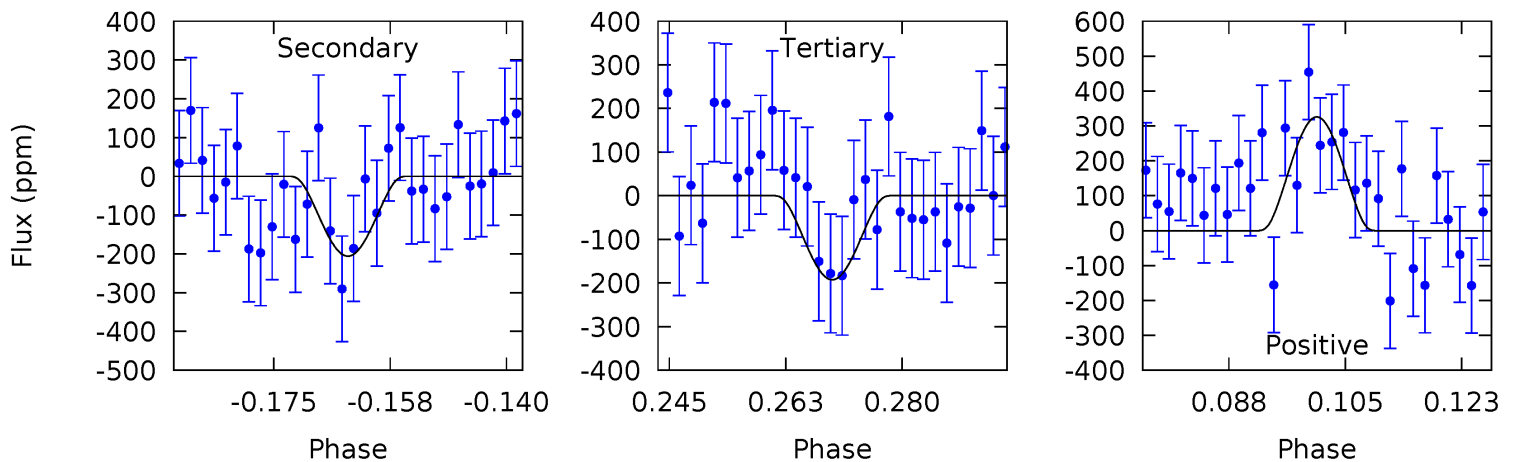
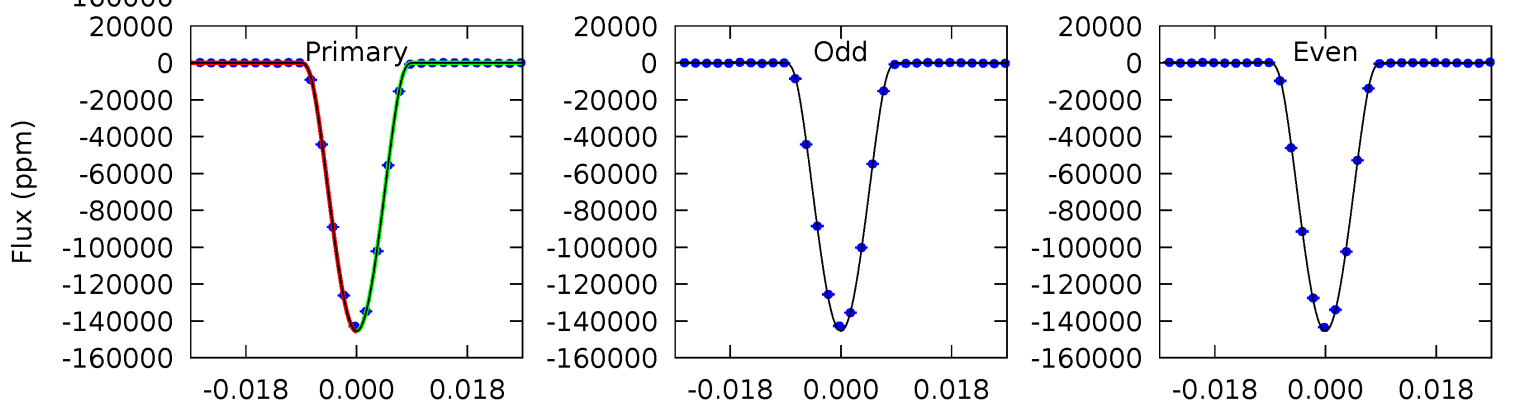
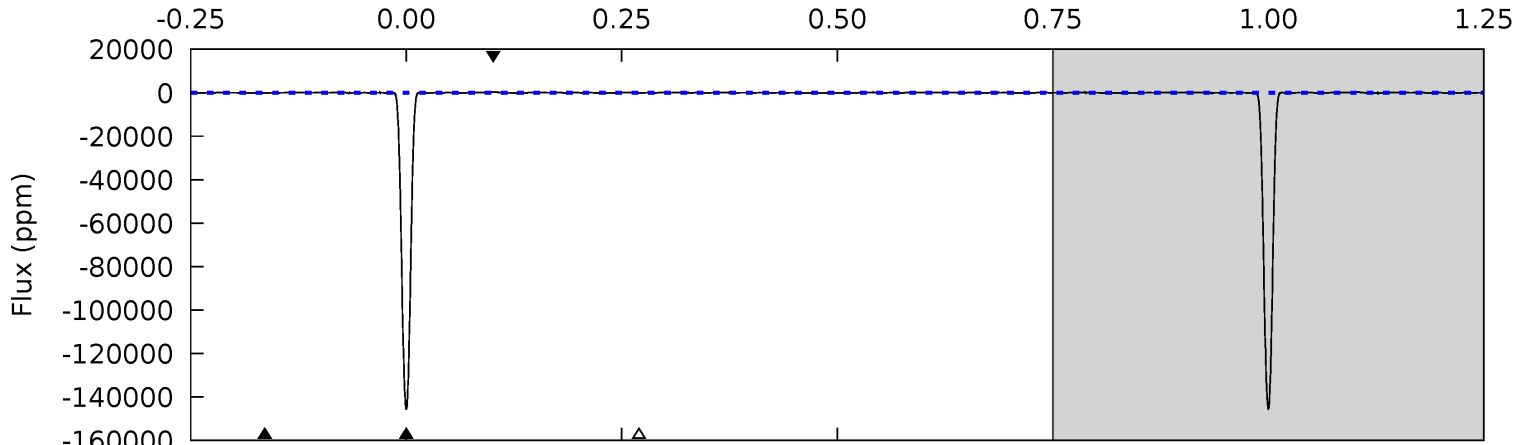
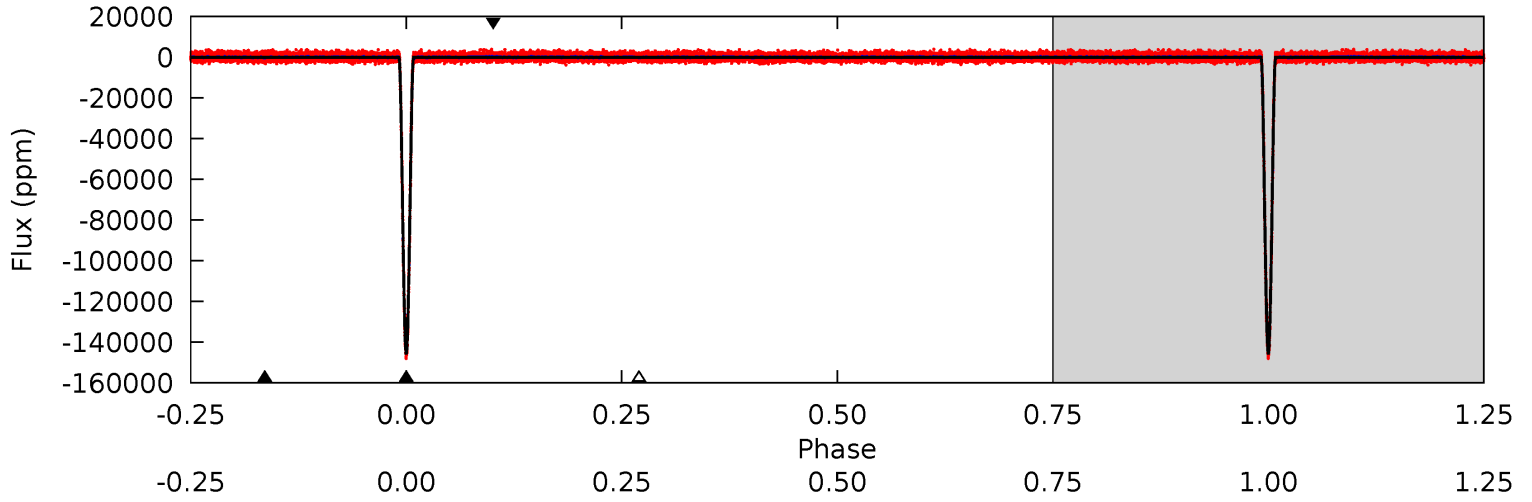
TCE 006675060-01 P= 10.443342 Days $T_0=133.629039$ (BKJD)



DV Model-Shift Uniqueness Test

006675060-01, P = 10.443344 Days, E = 133.628804 Days

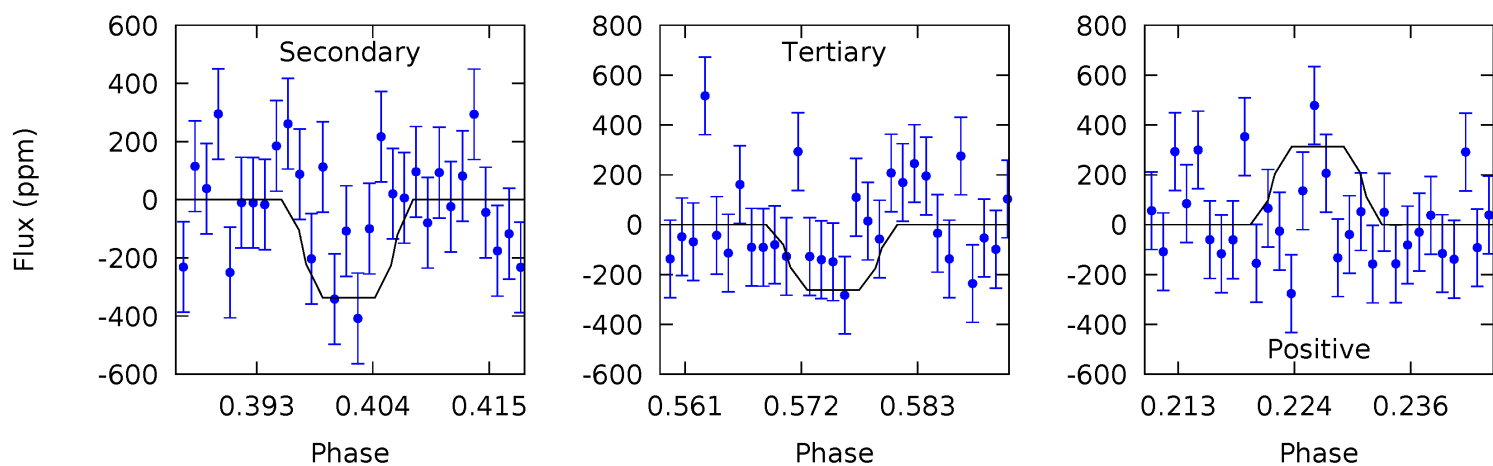
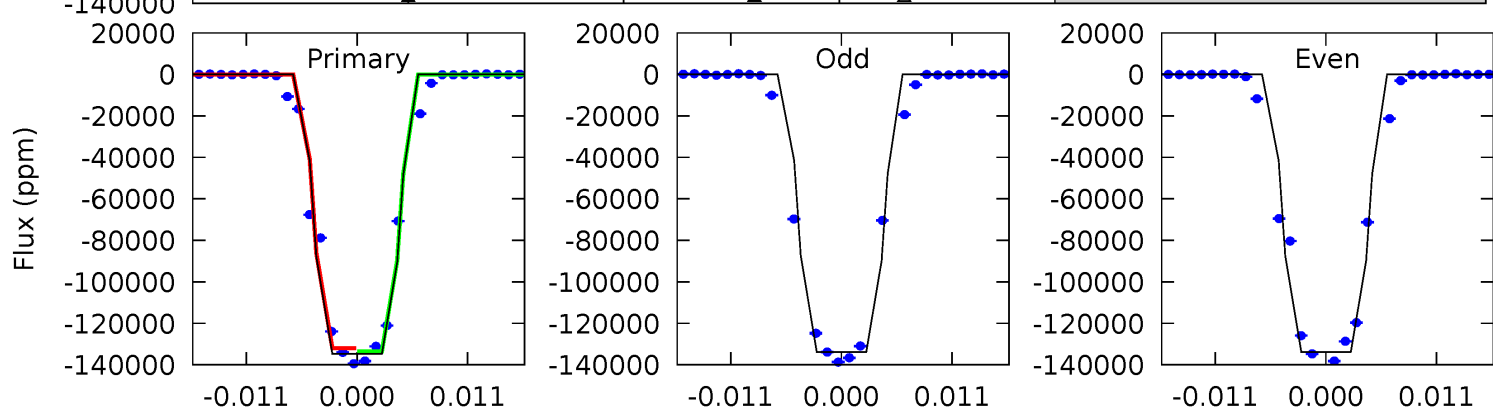
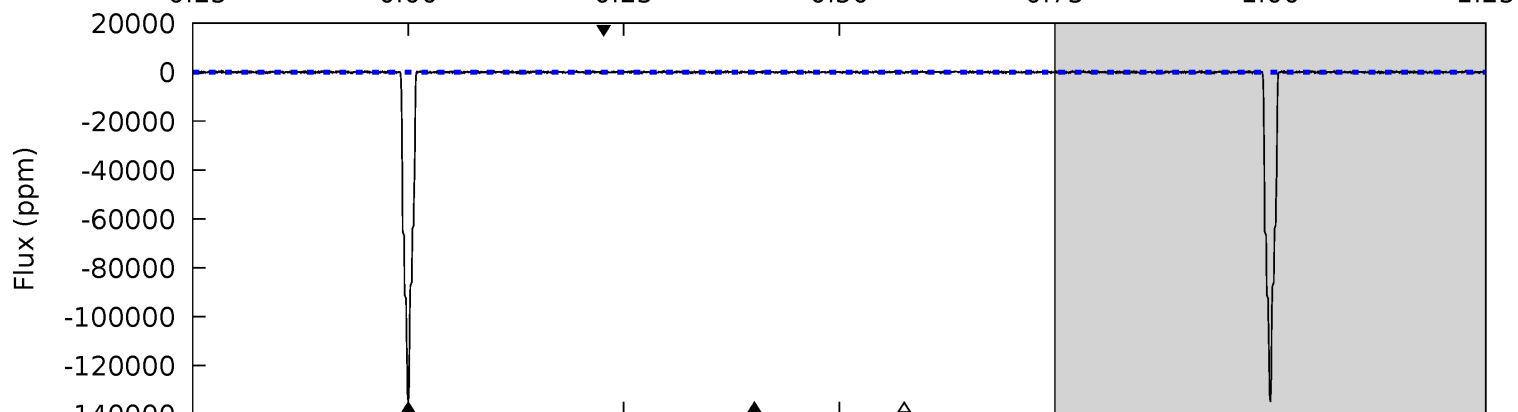
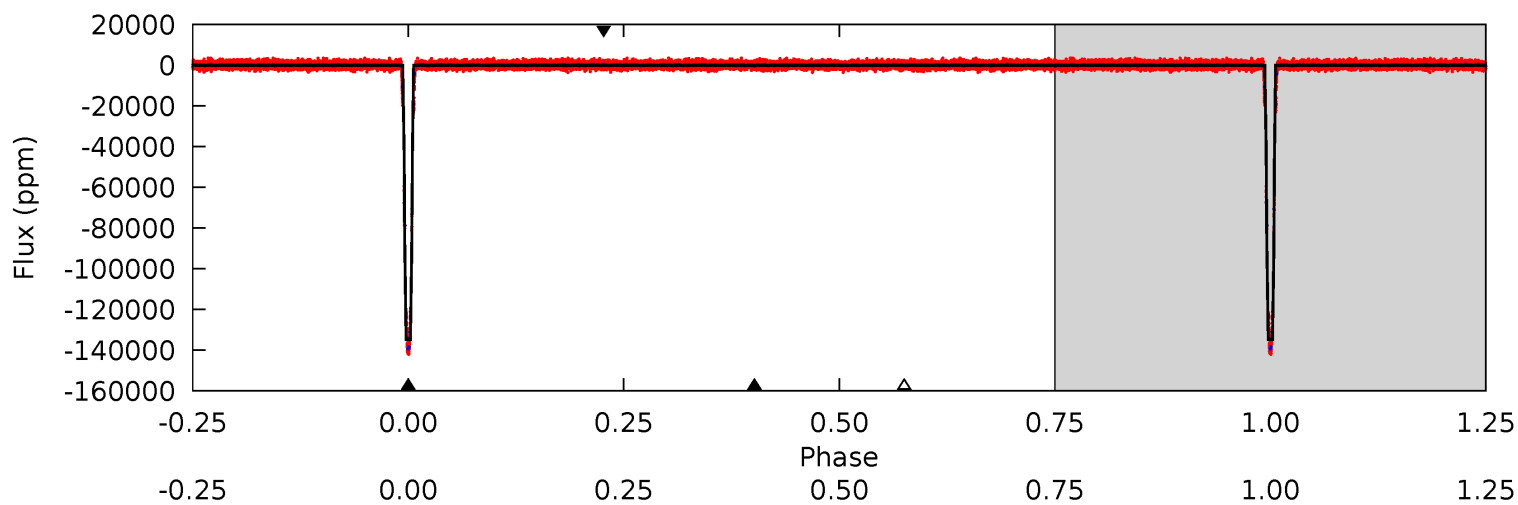
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3232	4.57	4.28	7.24	4.92	2.38	1.93	3228	3225	0.29	-2.66	1.60	0.98	0.00	1.89



Alt Model-Shift Uniqueness Test

006675060-01, P = 10.443342 Days, E = 133.629039 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
1587	3.97	3.08	3.69	5.00	2.54	1.04	1584	1583	0.89	0.28	0.20	0.99	0.00	0



Stellar Parameters For KIC 006675060

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6137^{+192}_{-235}	$4.421^{+0.087}_{-0.203}$	$-0.320^{+0.300}_{-0.300}$	$1.005^{+0.295}_{-0.136}$	$0.972^{+0.140}_{-0.115}$	$1.347^{+0.625}_{-0.686}$
	+3%/-4%	+2%/-5%	+94%/-94%	+29%/-14%	+14%/-12%	+46%/-51%
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 006675060-01 / KOI 3611.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-206 ± 45	$58.56^{+33.66}_{-28.03}$	1264^{+90}_{-76}	-1578^{+3818}_{-368}	$0.282^{+0.736}_{-0.171}$
Alt.	-338 ± 85	$45.05^{+29.83}_{-23.35}$	1262^{+90}_{-73}	2122^{+542}_{-3713}	$0.764^{+2.484}_{-0.486}$

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 $T_{\text{obs}} \gg T_{\text{max}}$ AND $A_{\text{obs}} \gg 1.0$

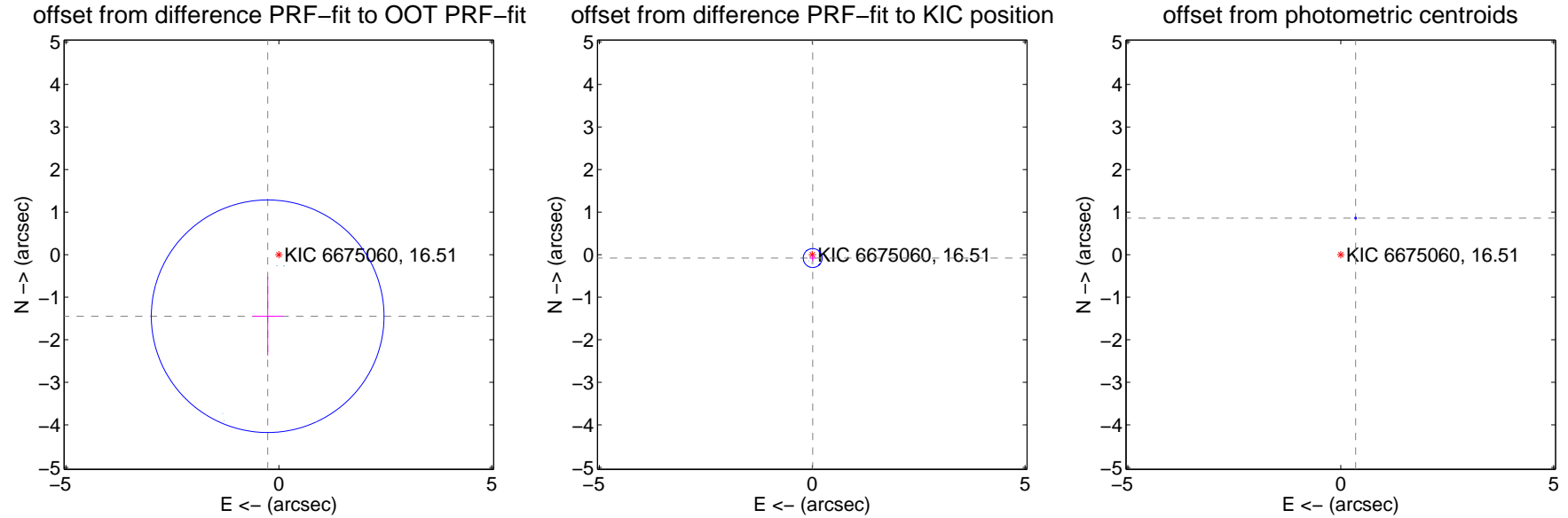
DV Centroid Data

Supplemental centroid analysis for 006675060-01. Kepler magnitude: 16.51. Transit SNR 1319.94

There are 8 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.23 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.471 ± 0.911	1.61	0.262 ± 0.359	-1.447 ± 0.923
PRF-fit source offset from KIC position	0.080 ± 0.074	1.08	-0.011 ± 0.071	-0.079 ± 0.074
photometric centroid source offset	0.93 ± 0.01	128.93	-0.35 ± 0.01	0.86 ± 0.01

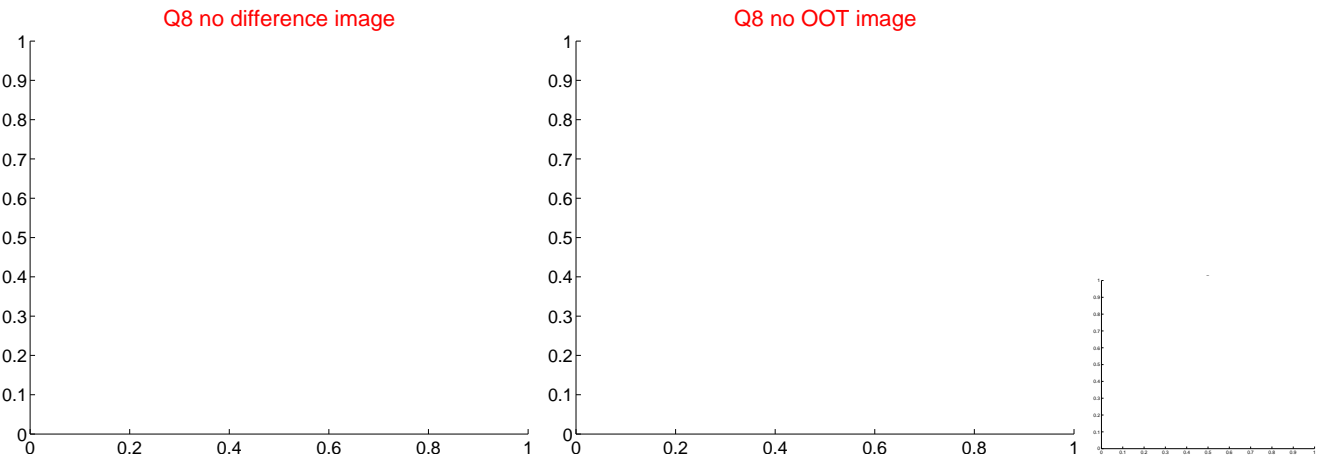


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

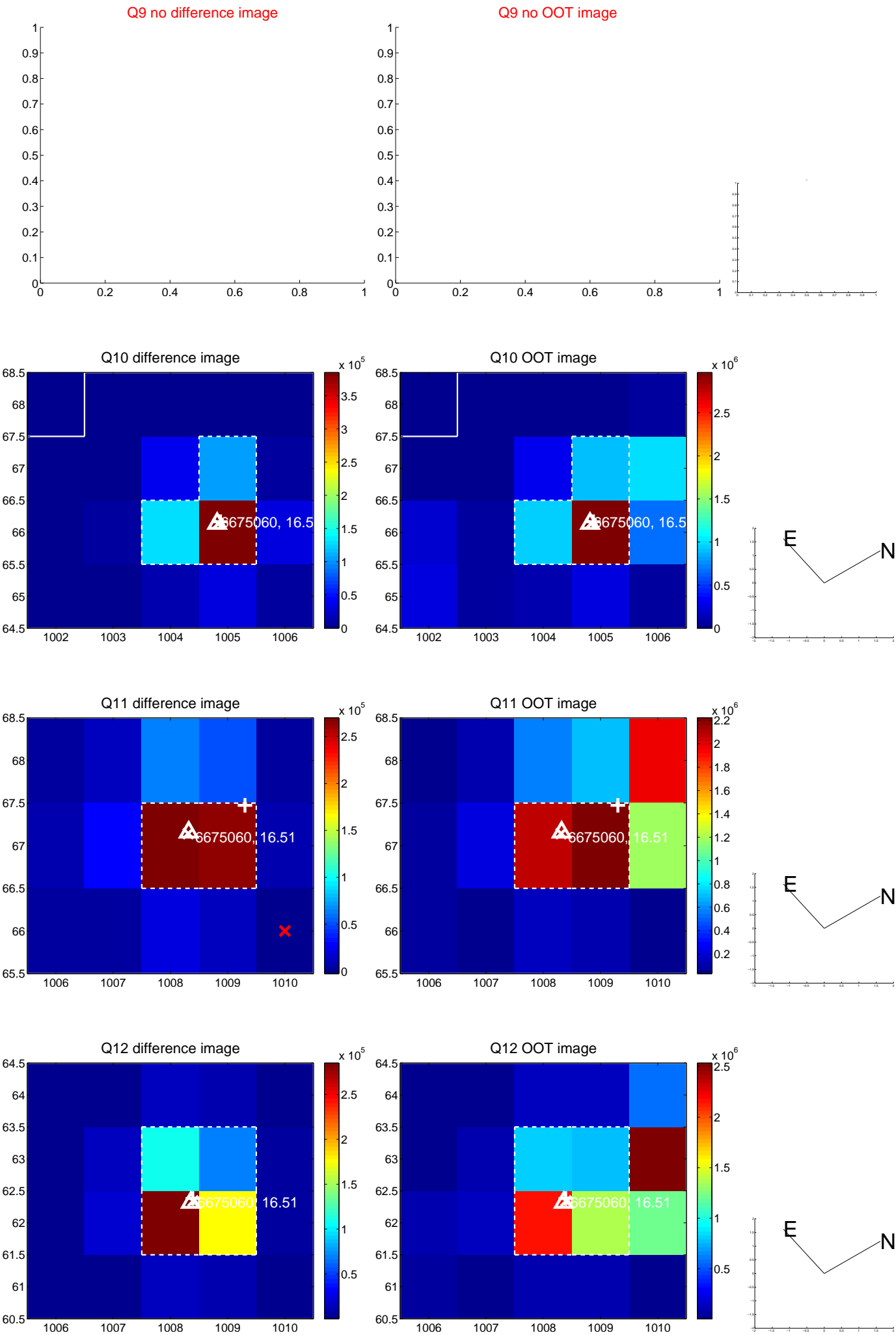
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



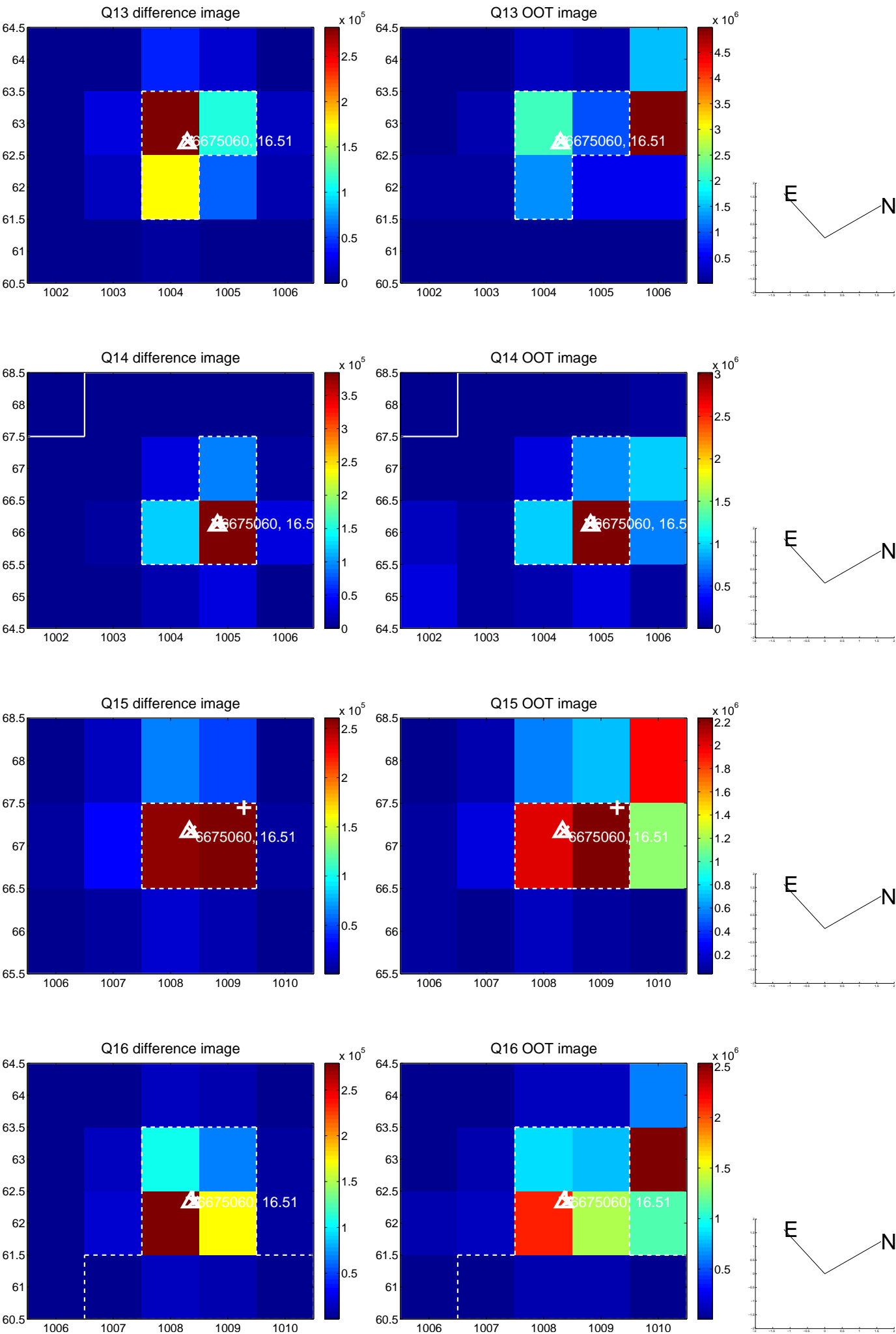
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



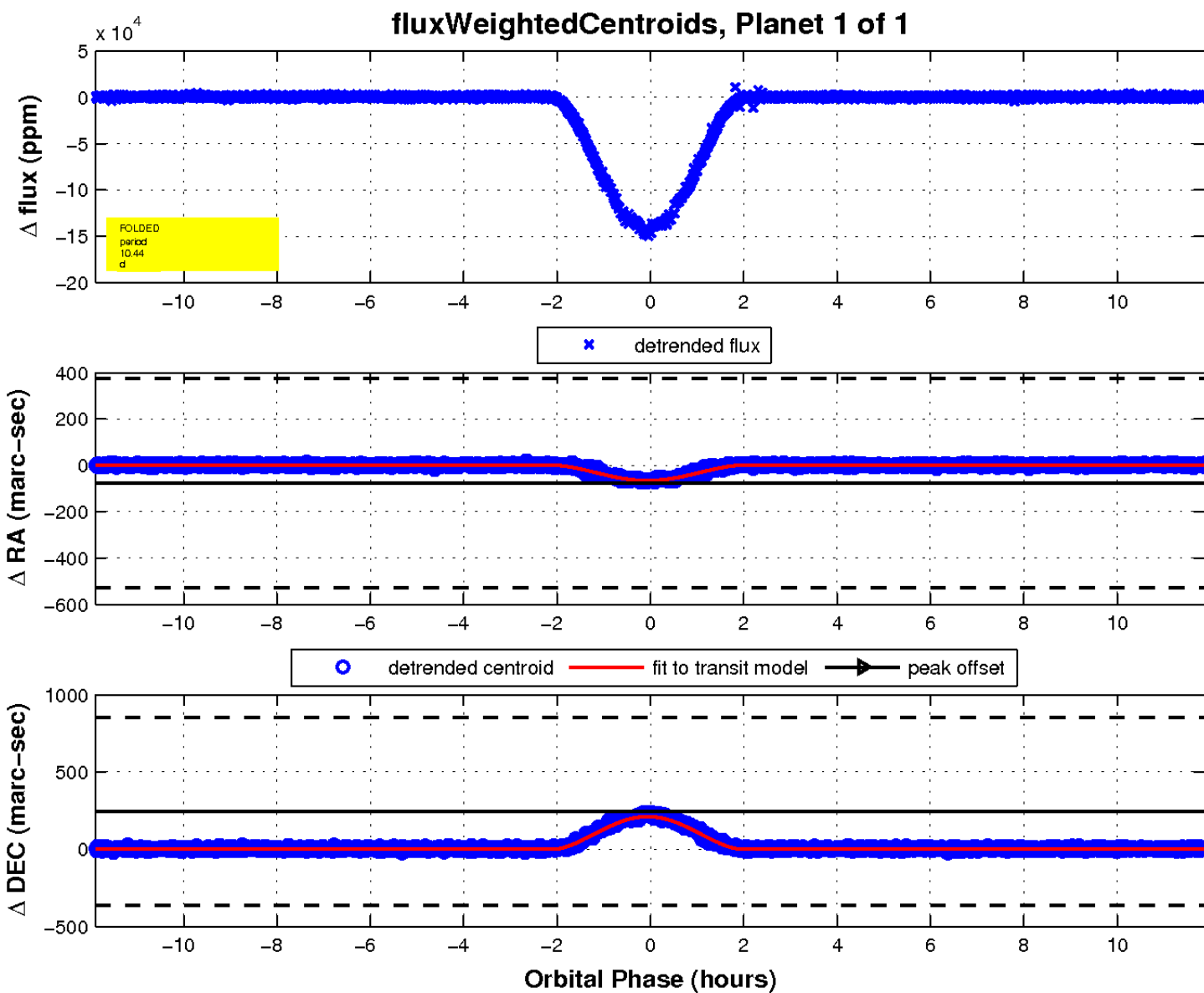
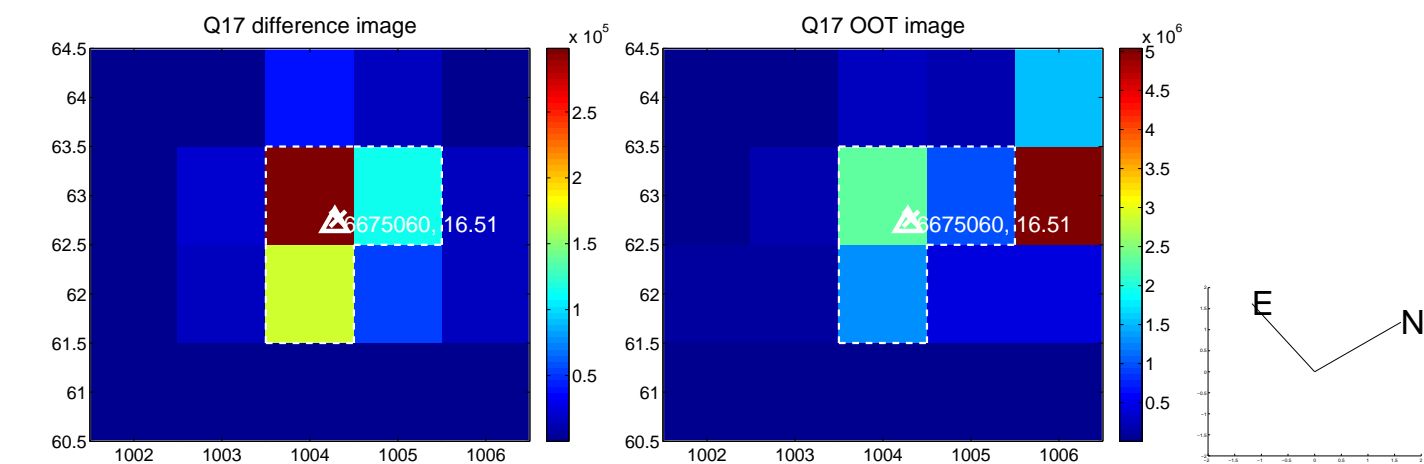
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white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination

