

KIC 006367628

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})
006367628-01	OBS	6696.01	3.779705	131.909448	2624.7	6.000	229.2	-1.0	0.72	5328	3.62	208.84

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006367628-01	OBS	FP	0.00	0	1	0	0	SWEET_EB—CENT_NOFITS

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 006367628-01

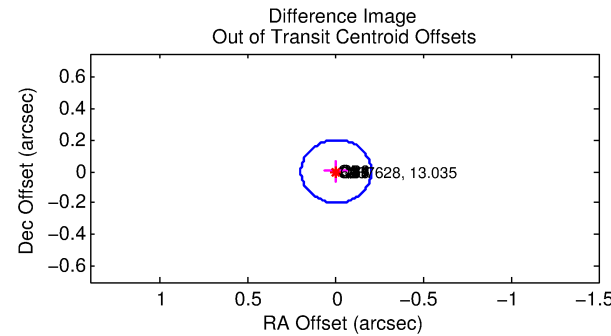
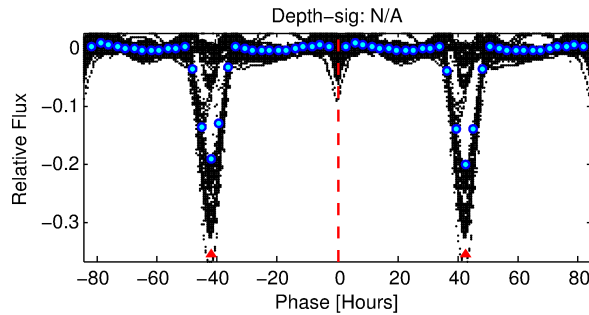
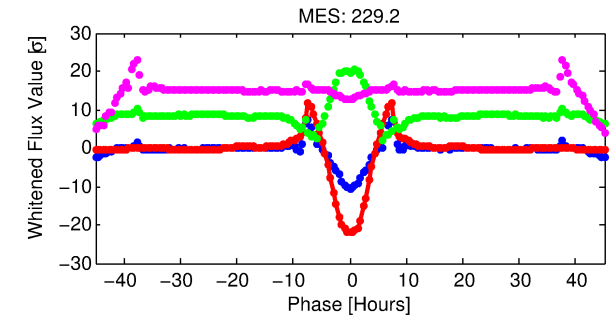
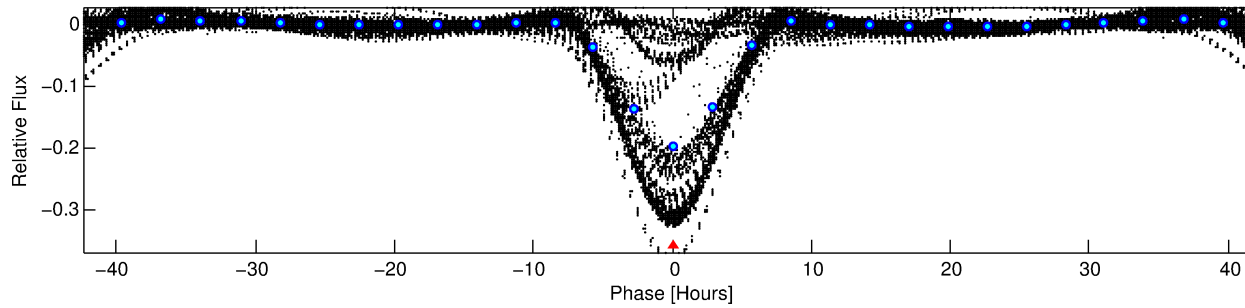
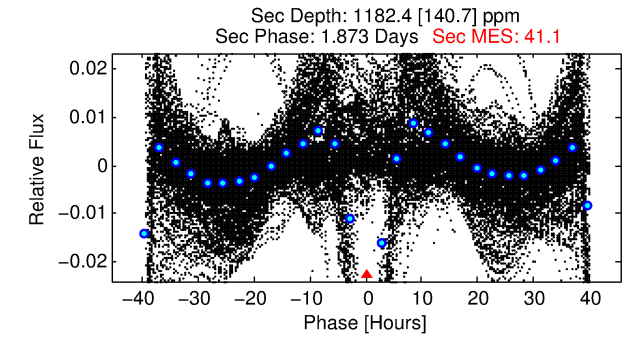
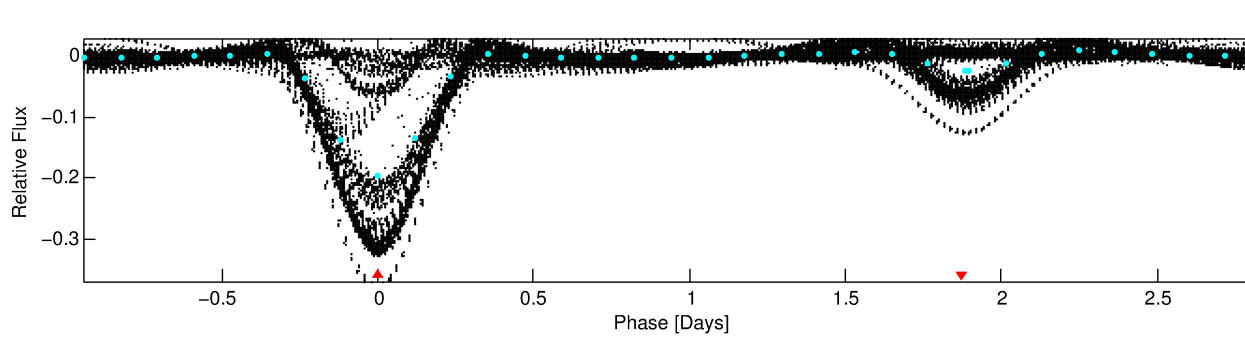
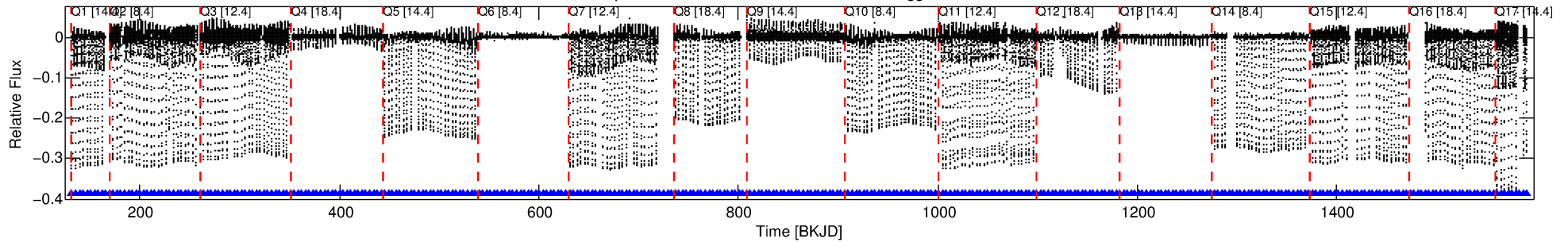
No Significant Match Found

DV One-Page Summary

KIC: 6367628 Candidate: 1 of 1 Period: 3.780 d

KOI: K06696 Corr: No Ephemeris Match

Kp: 13.03 R*: 0.72 Rs Teff: 5328.0 K Logg: 4.57 Fe/H: -0.600



TPS TCE Results:

Period = 3.77971 d
Epoch = 131.9094 BKJD

DV fit results are unavailable

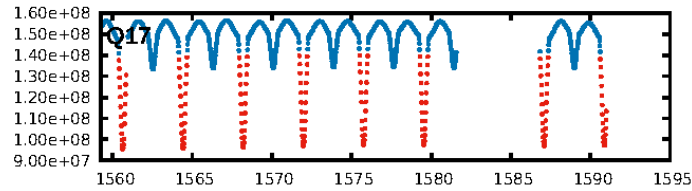
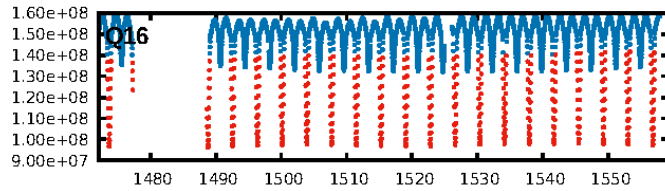
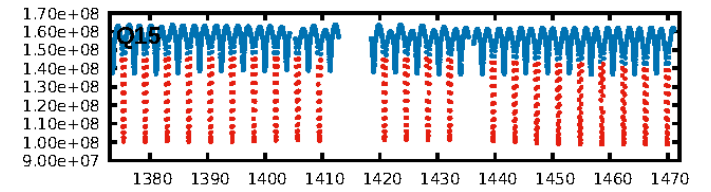
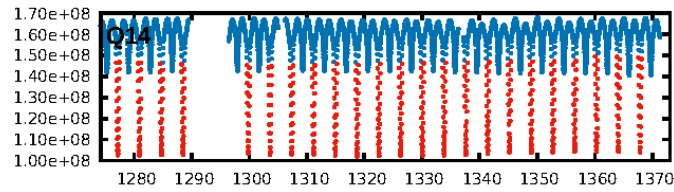
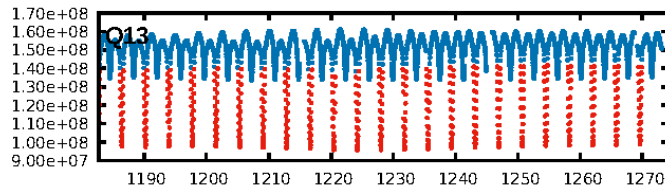
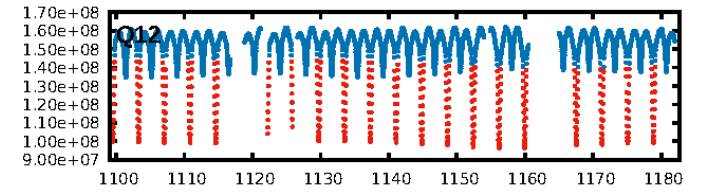
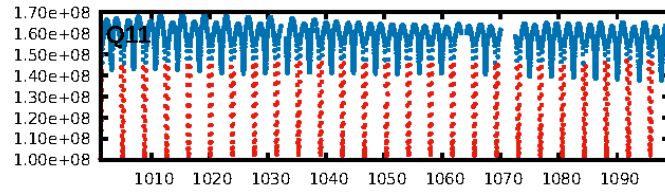
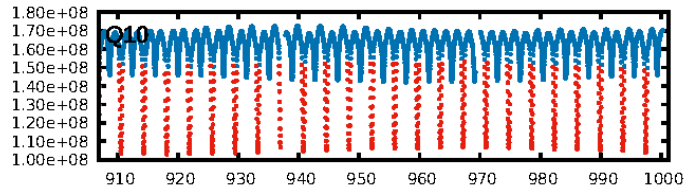
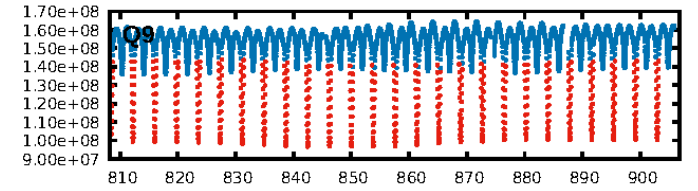
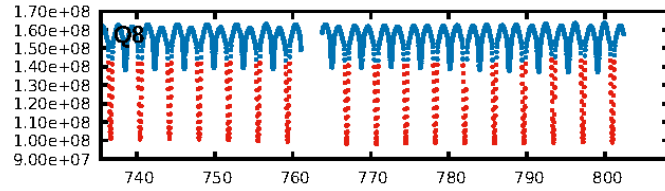
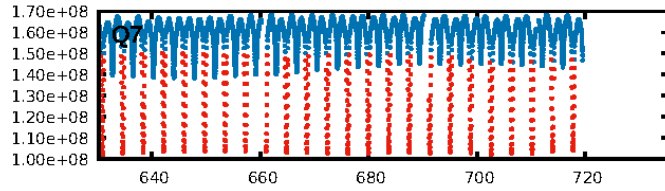
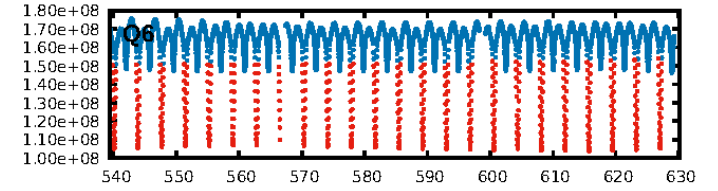
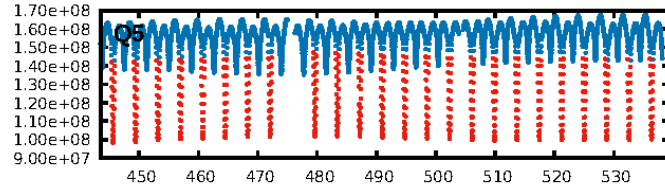
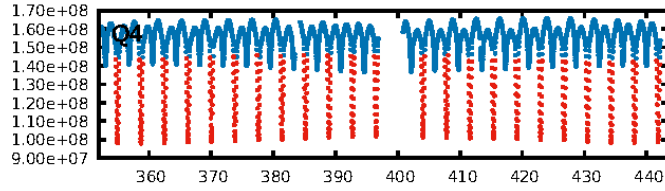
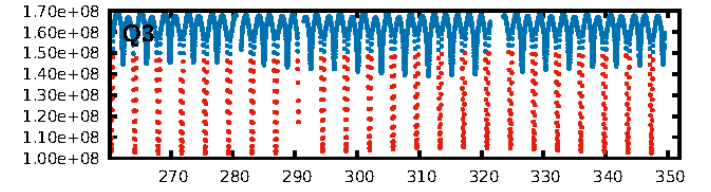
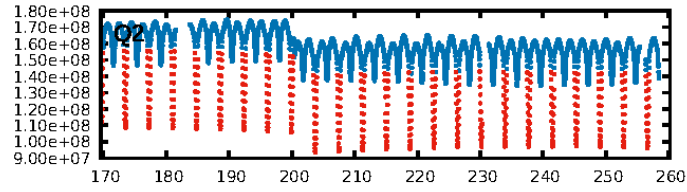
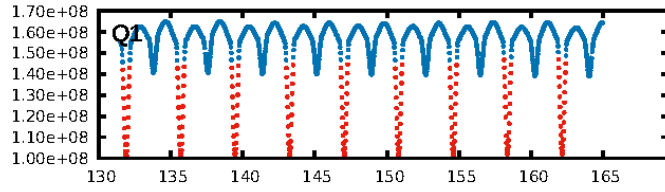
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [346/346]
GhostDiagnostic-chr: 0.9973
Centroid-sig: 0.0%
Centroid-so: 0.026 arcsec [121.63σ]
OotOffset-rm: 0.003 arcsec [0.05σ]
KicOffset-rm: 0.010 arcsec [0.15σ]
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]

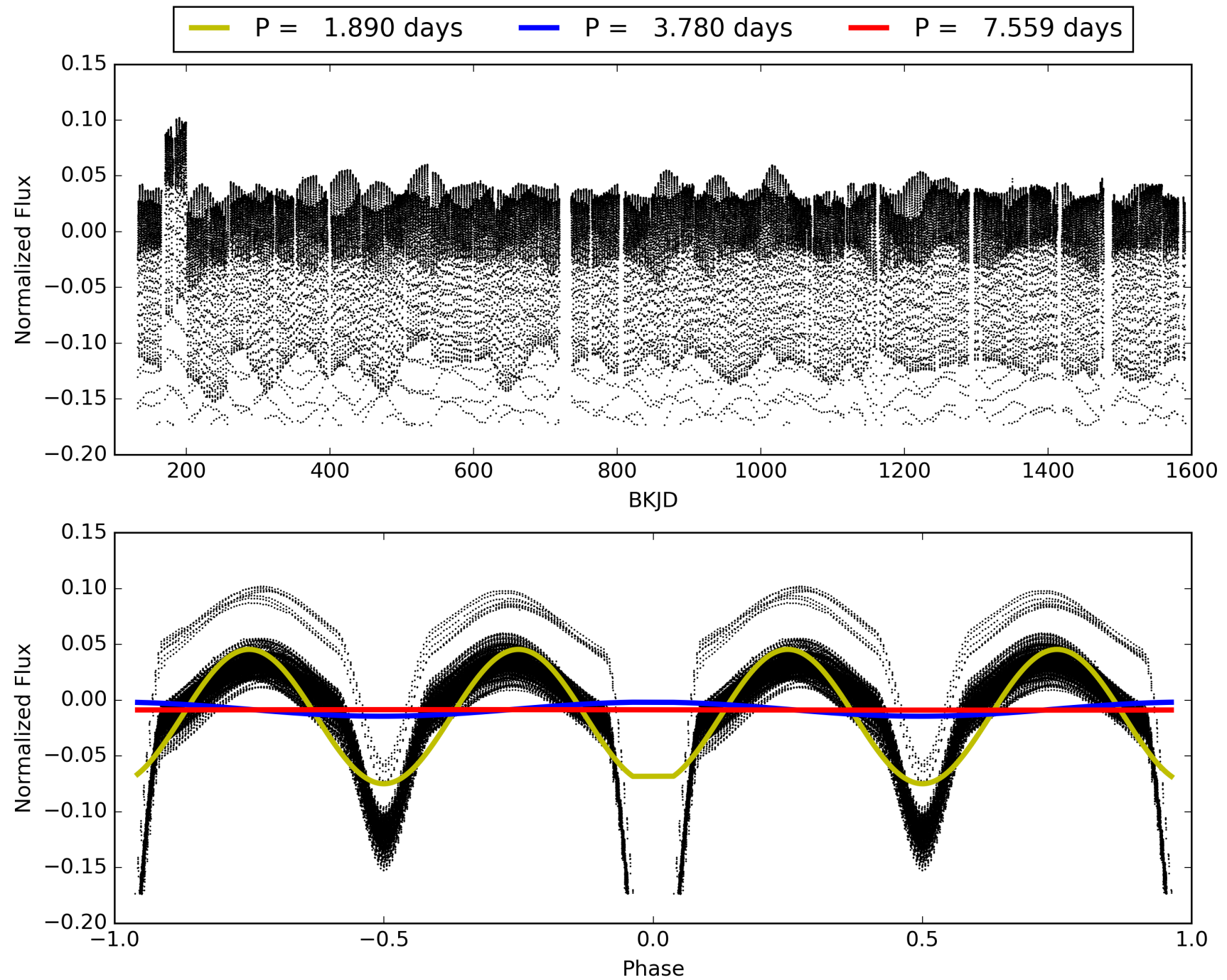
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 03-Feb-2016 09:12:55 Z

This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

TCE 006367628-01, PDC Light Curves

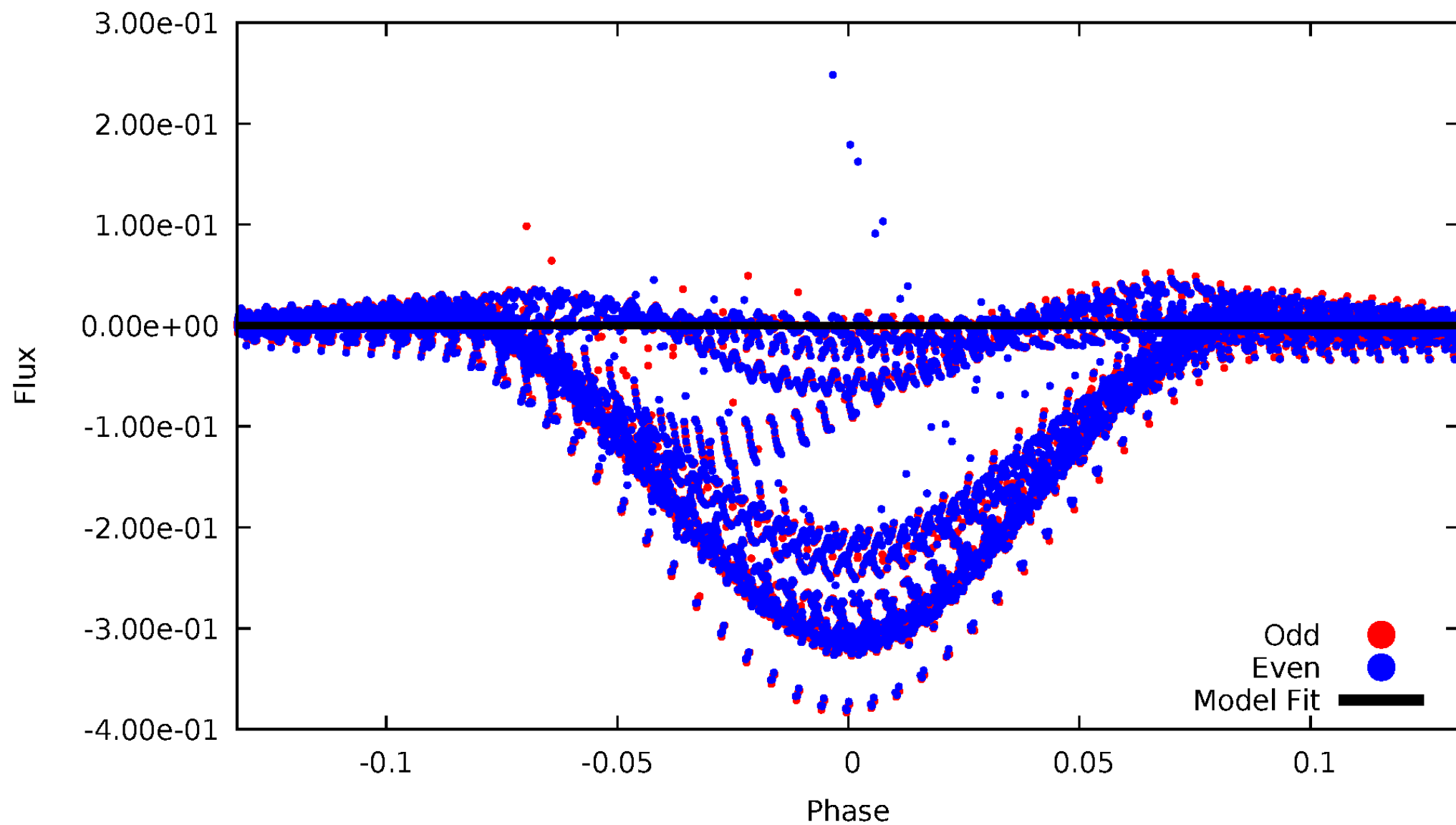


TCE 006367628-01



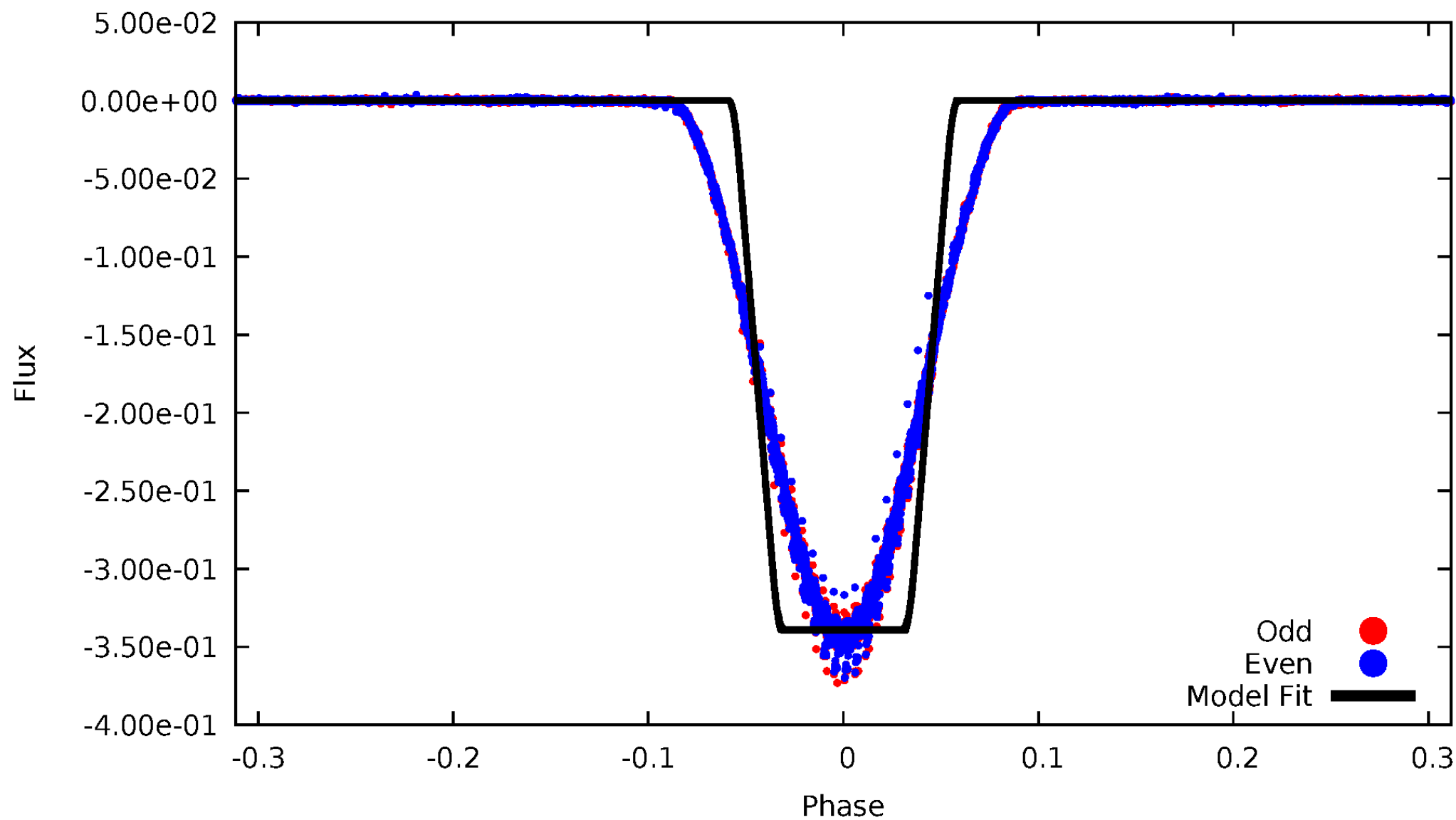
DV Odd/Even

TCE 006367628-01



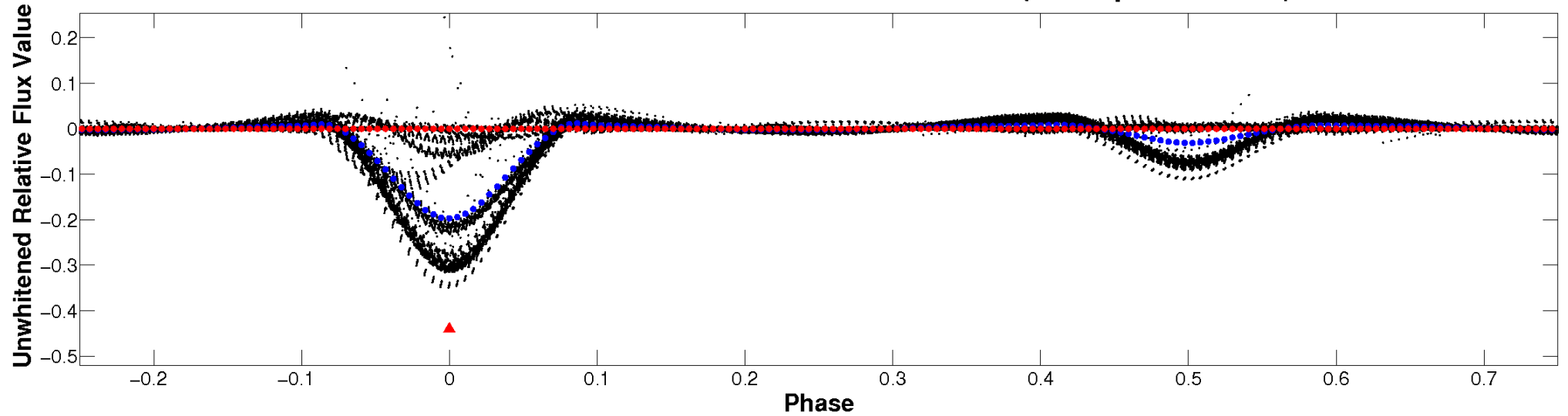
ALT Odd/Even

TCE 006367628-01



Non-Whitened Vs. Whitened Light Curve

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

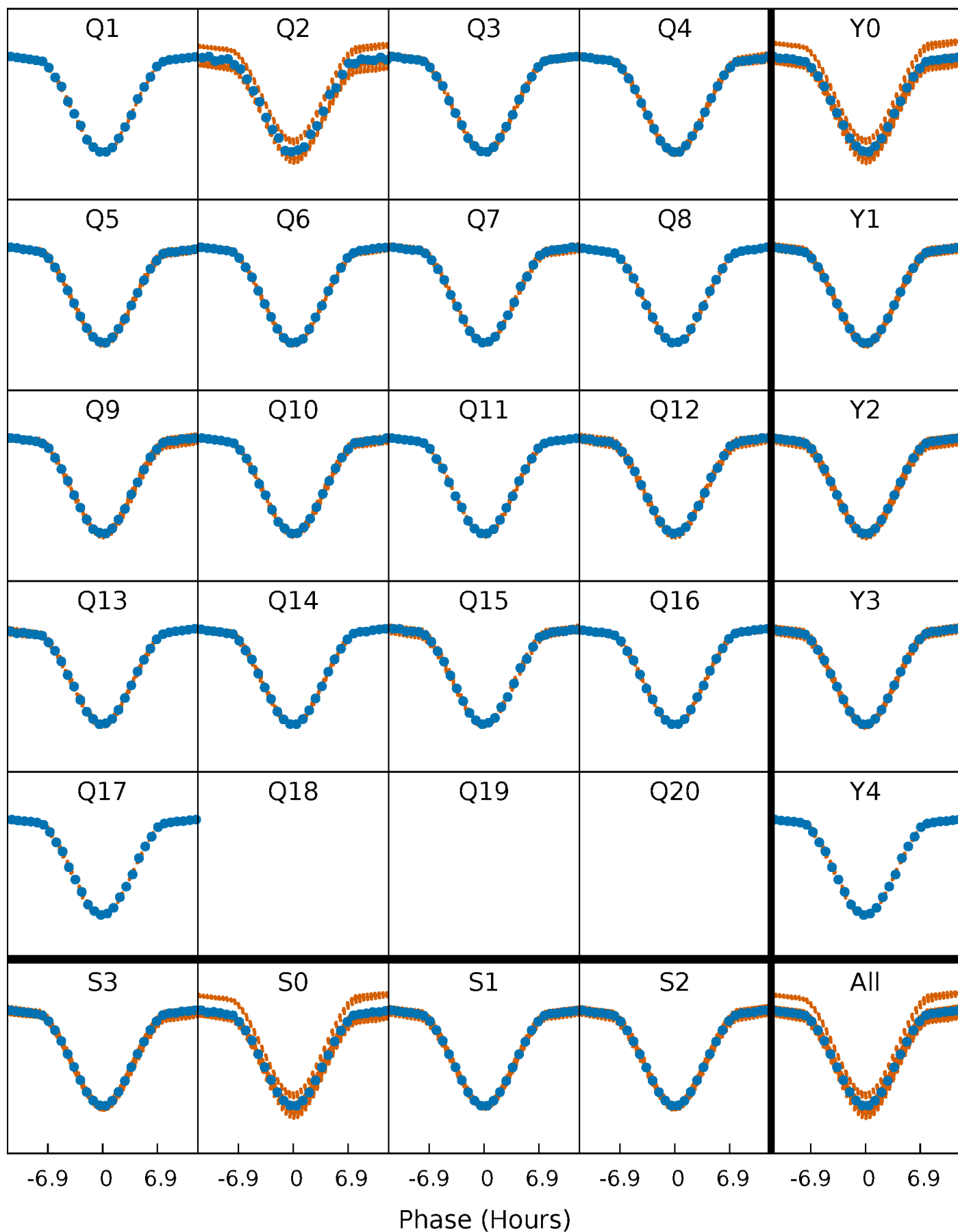


Planet 1 : Phased Whitened Flux Time Series (TPS Epoch/Period)



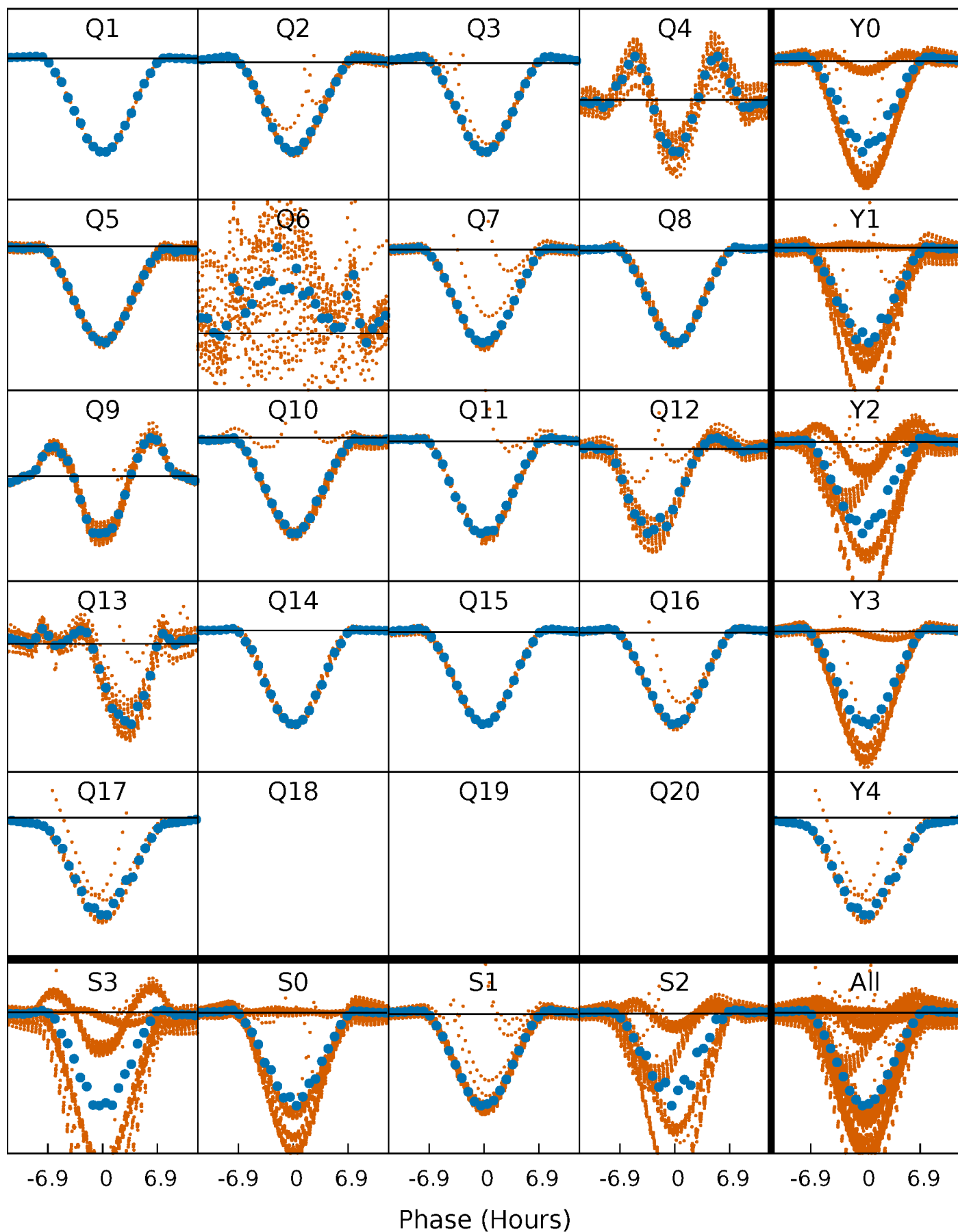
PDC Quarter-Phased Transit Curves

TCE 006367628-01 P= 3.779705 Days $T_0=131.909448$ (BKJD)



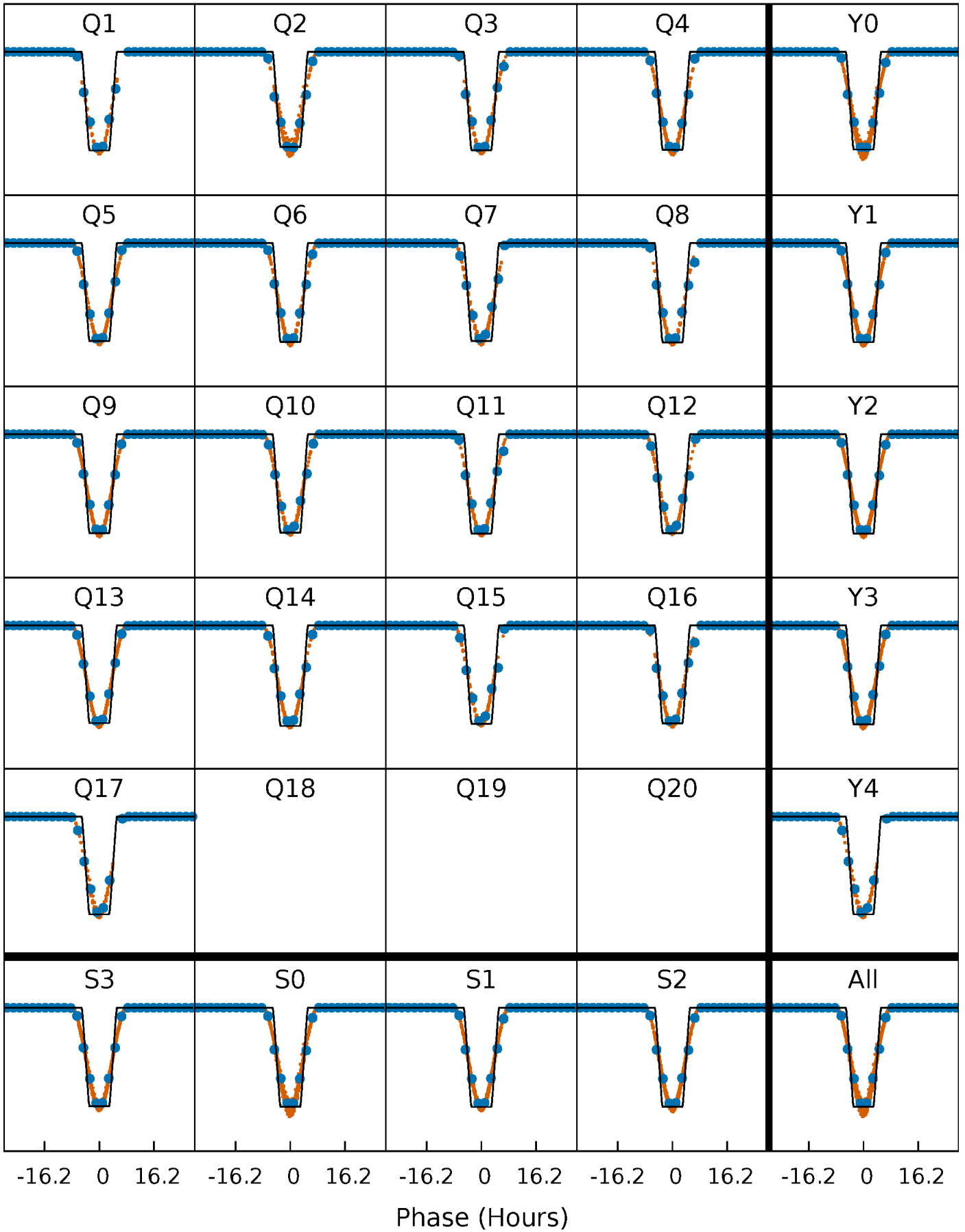
DV Quarter-Phased Transit Curves

TCE 006367628-01 P= 3.779705 Days $T_0=131.909448$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

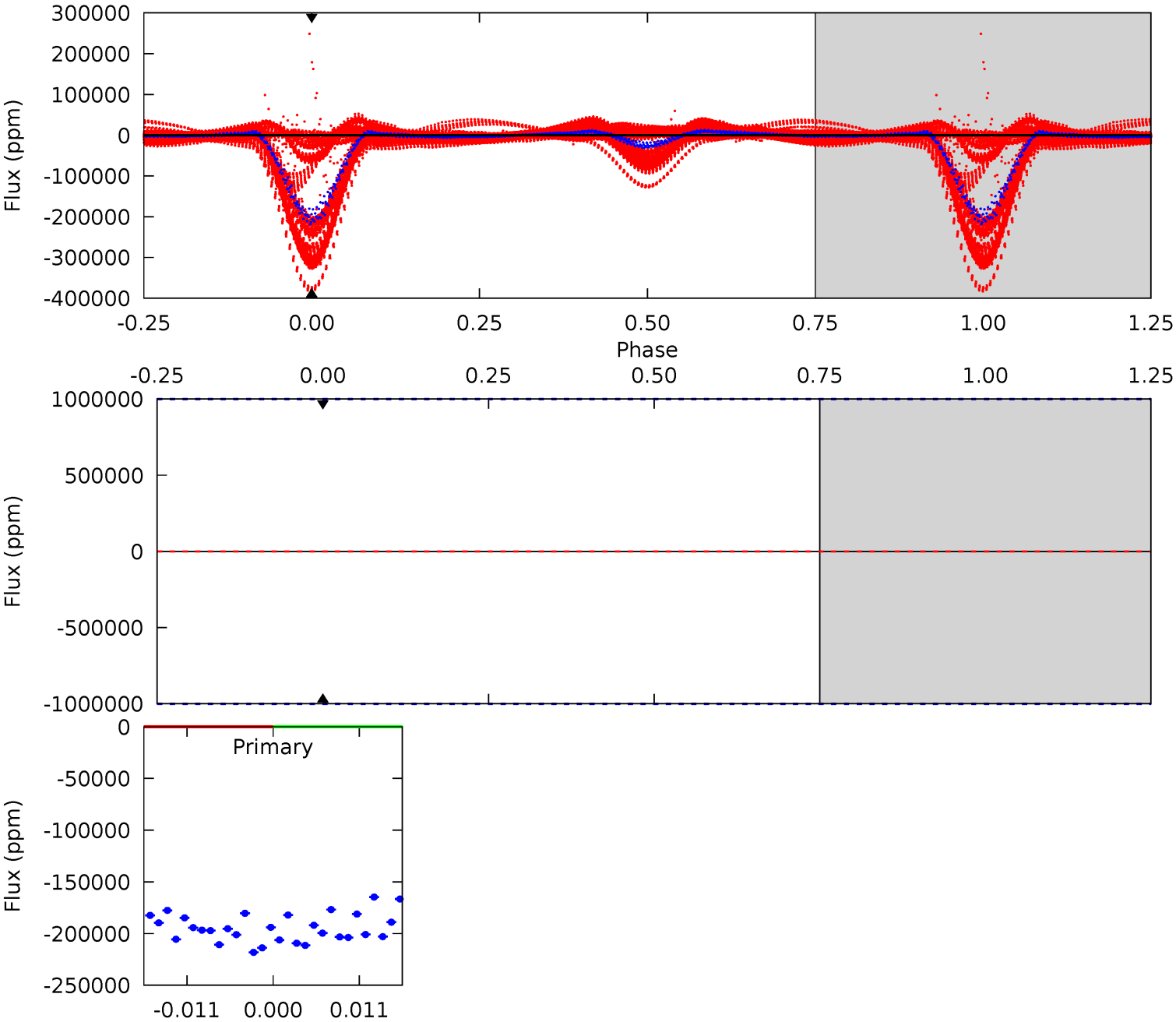
TCE 006367628-01 P= 3.779705 Days $T_0=131.910173$ (BKJD)



DV Model-Shift Uniqueness Test

006367628-01, P = 3.779705 Days, E = 128.129743 Days

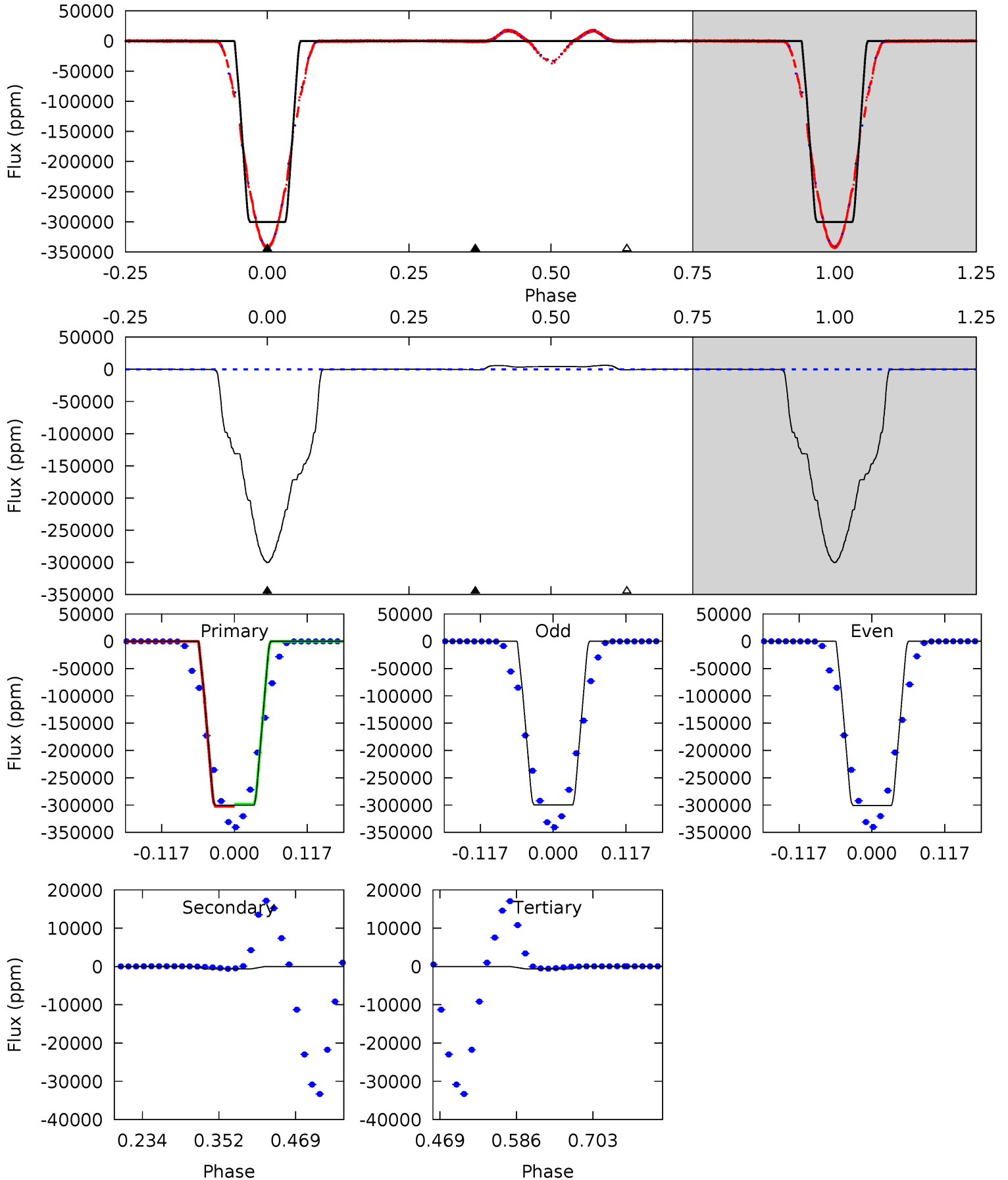
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

006367628-01, P = 3.779705 Days, E = 128.130468 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5071	10.8	10.6	0	4.53	1.57	18.6	5060	5071	0.17	10.8	6.29	1.00	0.02	193.3



Stellar Parameters For KIC 006367628

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5328^{+160}_{-144}	$4.571^{+0.070}_{-0.063}$	$-0.600^{+0.350}_{-0.300}$	$0.716^{+0.082}_{-0.067}$	$0.695^{+0.084}_{-0.039}$	$2.671^{+0.899}_{-0.564}$
	+3%/-3%	+2%/-1%	+58%/-50%	+11%/-9%	+12%/-6%	+34%/-21%
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 006367628-01 / KOI 6696.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	0 ± 1000000	$7.04^{+6.78}_{-4.49}$	1358^{+51}_{-53}	3834^{+11716}_{-15899}	30^{+4085}_{-2334}
Alt.	-639 ± 59	$45.28^{+8.82}_{-7.84}$	1353^{+52}_{-49}	1490^{+449}_{-3336}	$0.308^{+0.142}_{-0.097}$

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 $A_{obs} \gg 1.0$

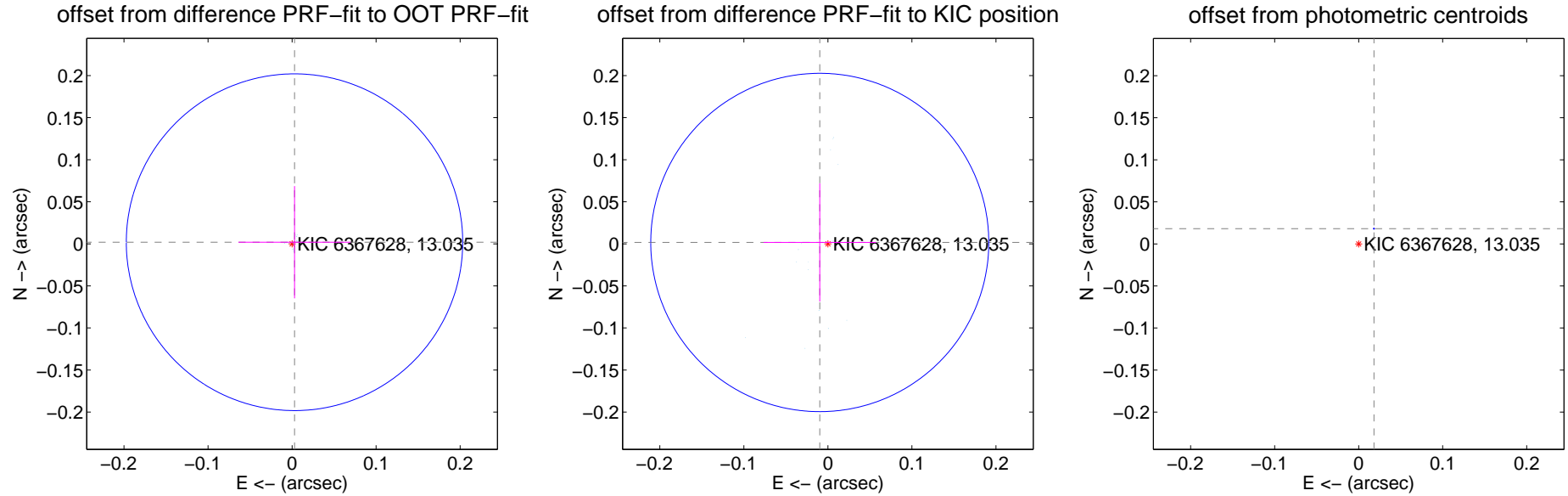
DV Centroid Data

Supplemental centroid analysis for 006367628-01. Kepler magnitude: 13.04. Transit SNR -1.00

There are 17 quarters with good PRF difference image offsets

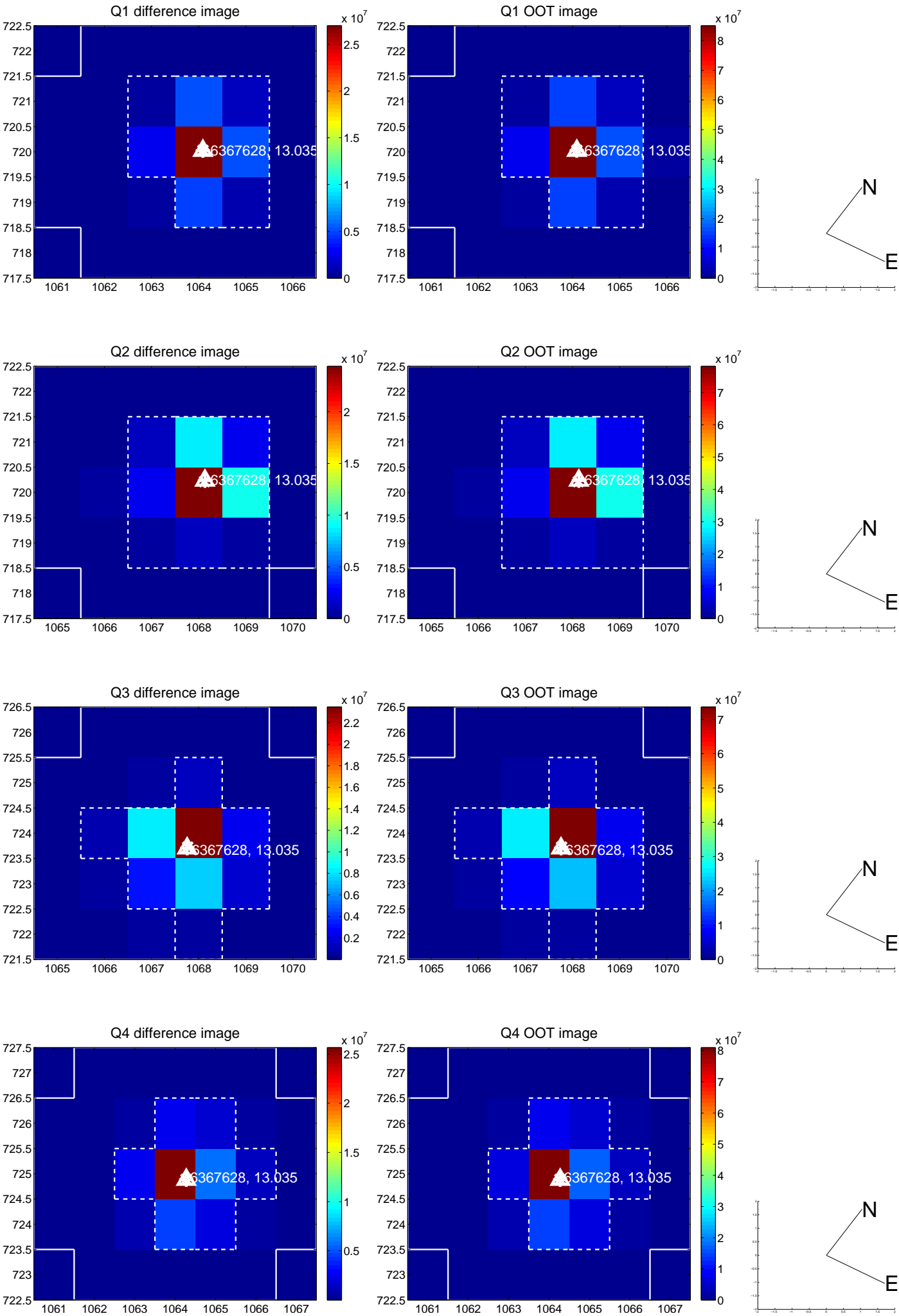
The direct PRF centroid is offset from the target star catalog position by about 0.09 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.003 ± 0.067	0.05	-0.003 ± 0.067	0.002 ± 0.067
PRF-fit source offset from KIC position	0.010 ± 0.067	0.15	0.010 ± 0.067	0.002 ± 0.070
photometric centroid source offset	0.03 ± 0.00	121.63	-0.02 ± 0.00	0.02 ± 0.00

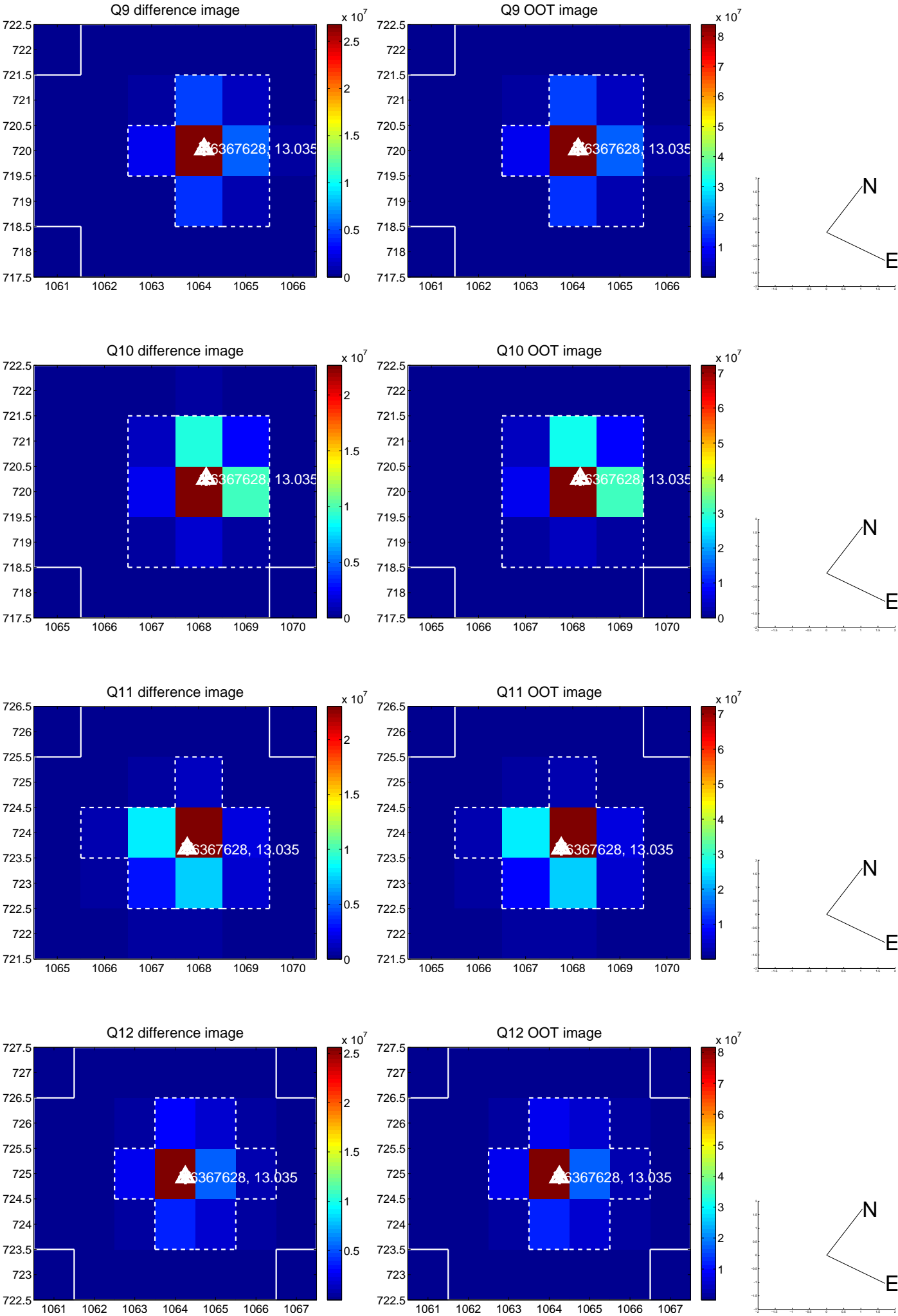


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

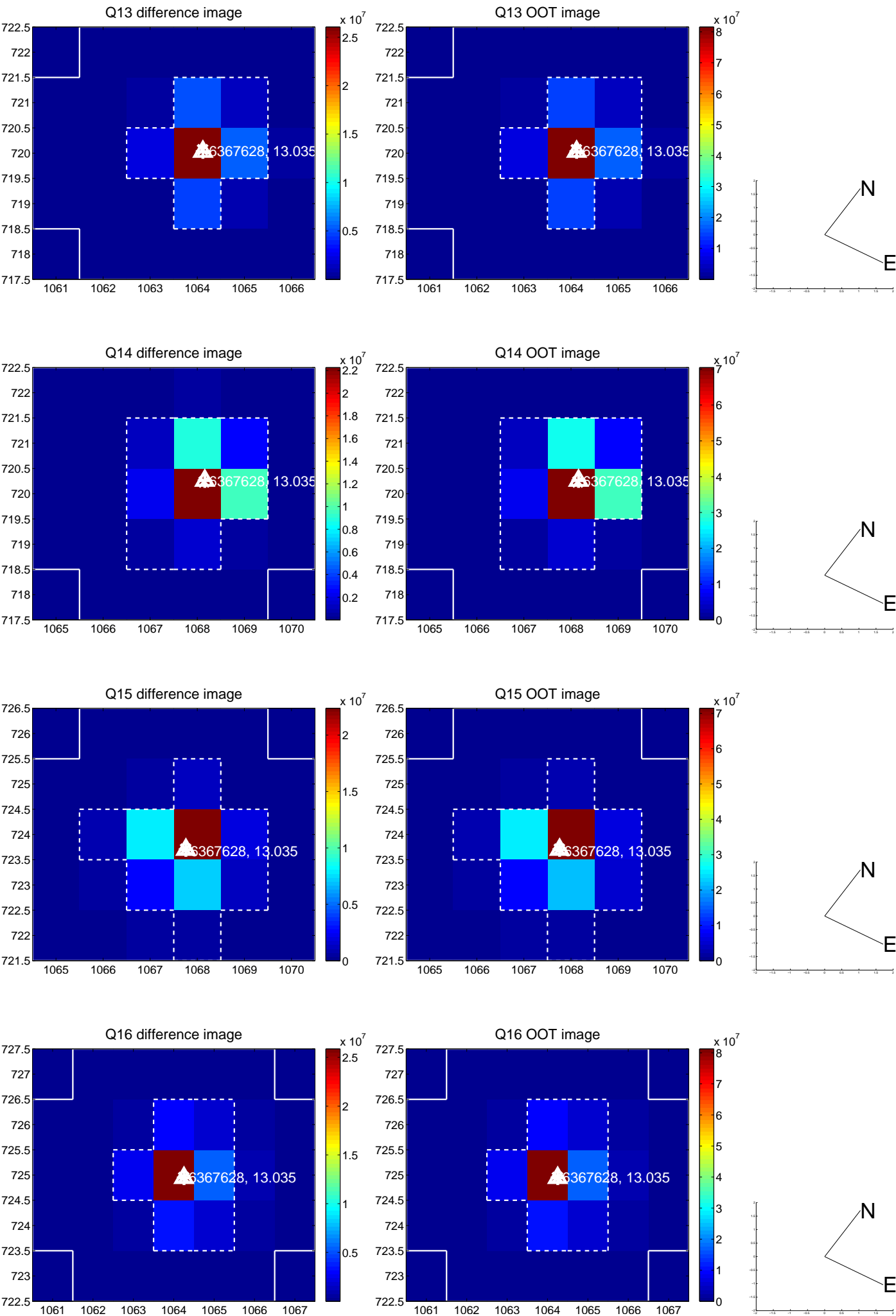
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



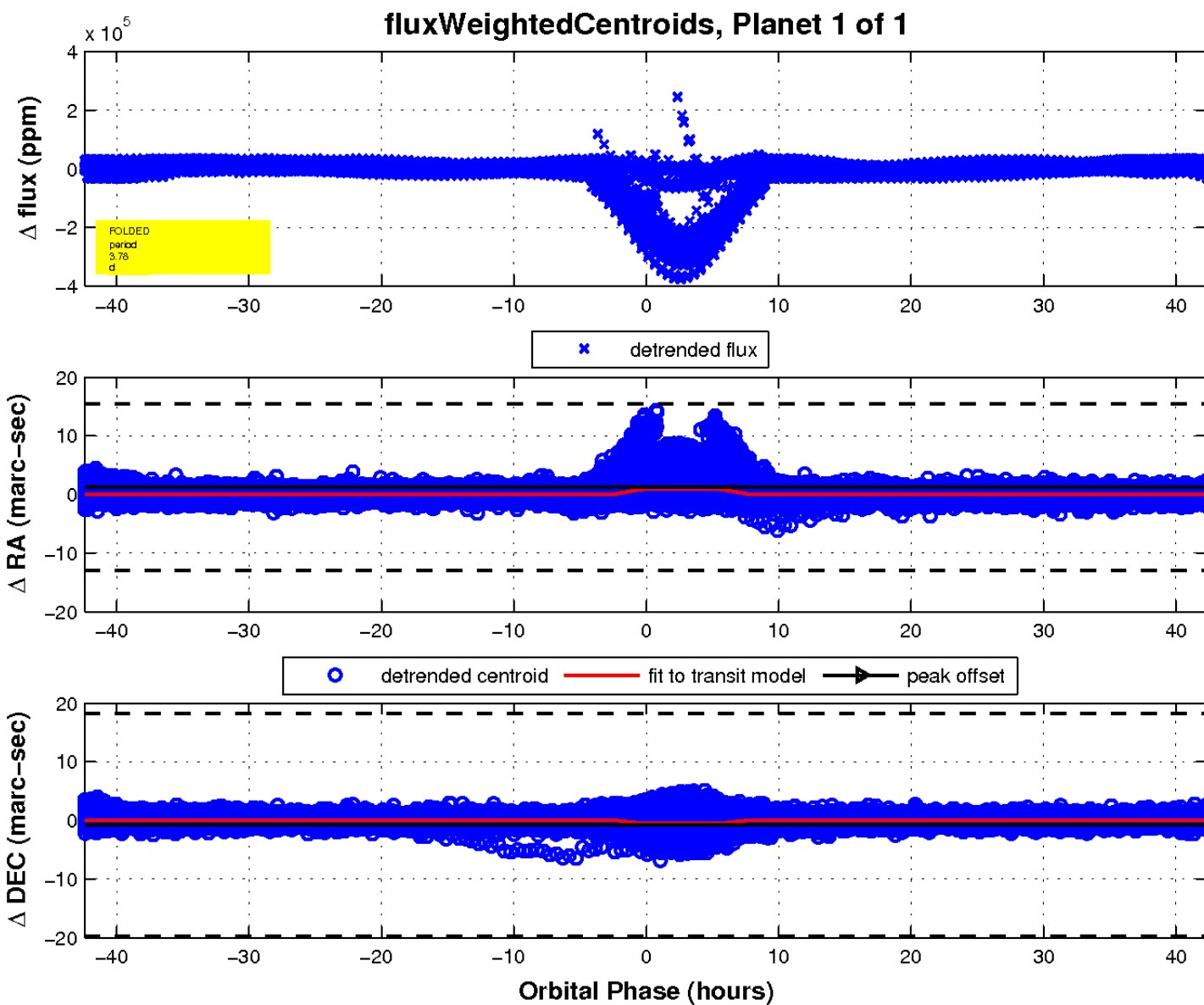
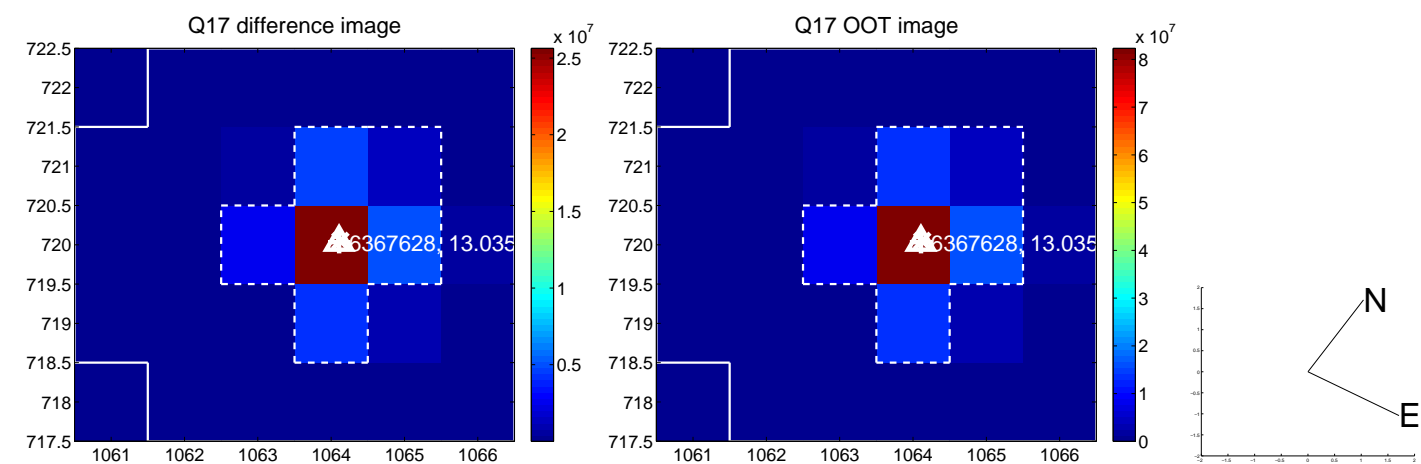
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



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



UKIRT Image

