

KIC 004076952

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})
004076952-01	OBS	6385.01	4.880699	133.741657	91911.6	9.000	13503.4	-1.0	2.05	6468	62.70	1840.28

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
004076952-01	OBS	FP	0.00	0	1	0	0	DEPTH_ODDEVEN_ALT—MOD_ODDEVEN_ALT—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.

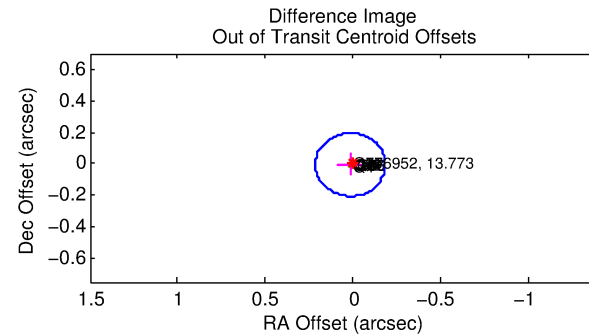
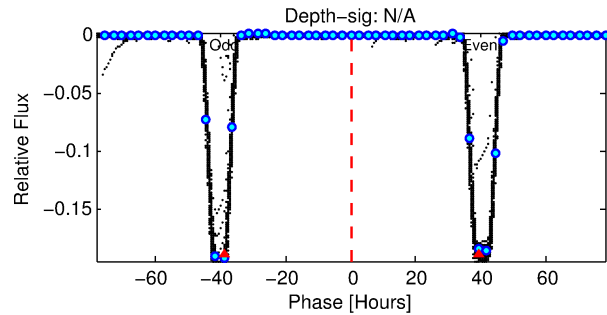
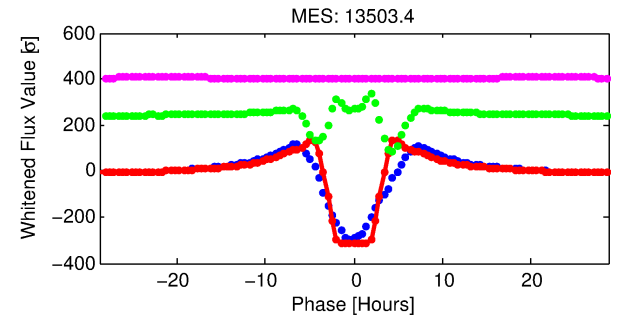
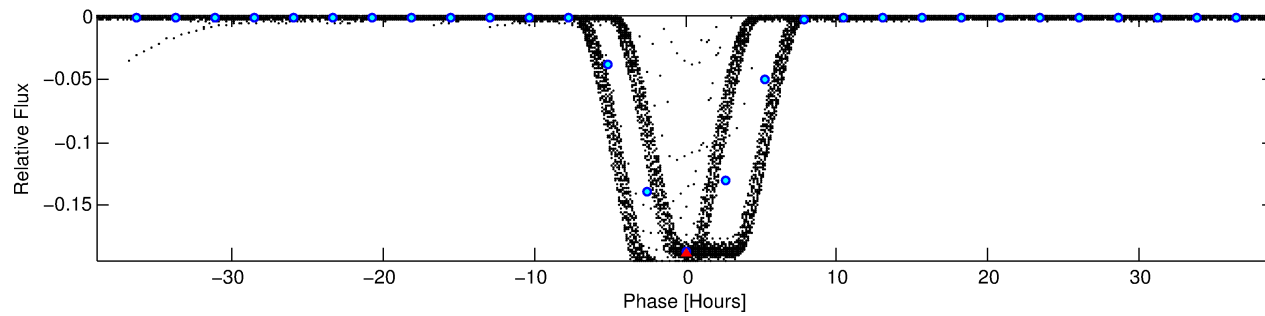
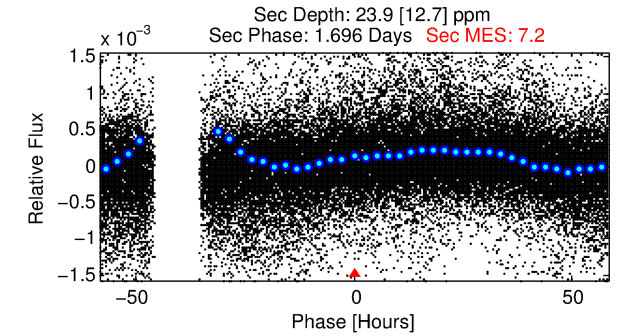
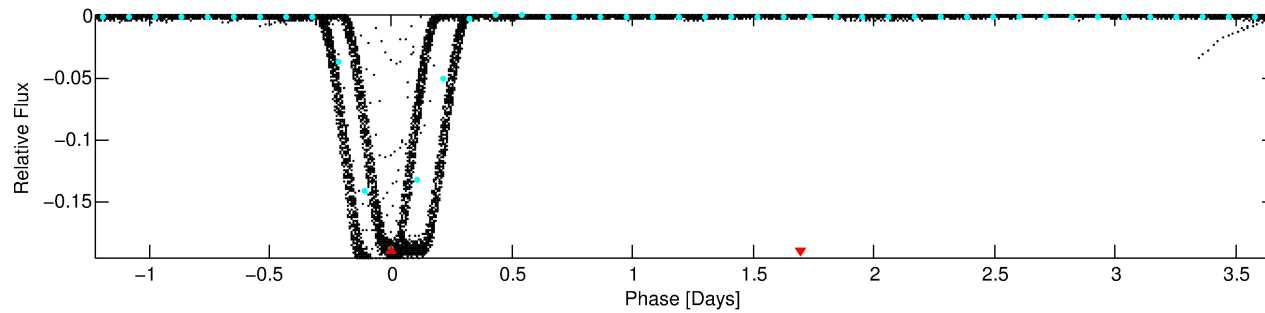
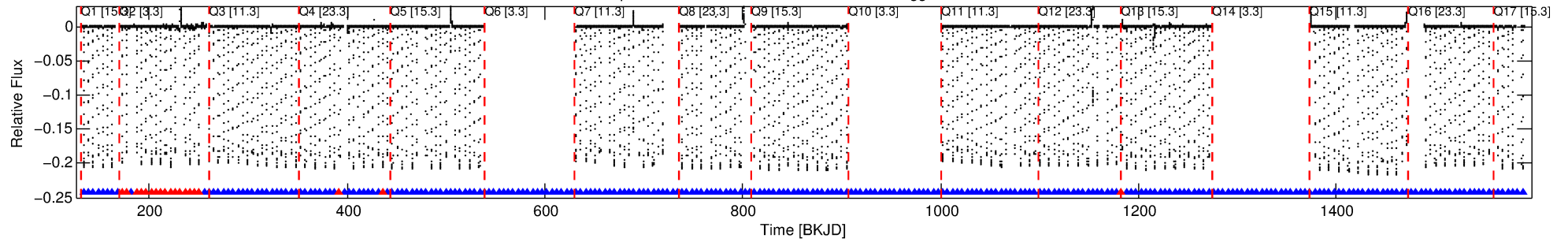
Ephemeris Match Information For 004076952-01

No Significant Match Found

DV One-Page Summary

KIC: 4076952 Candidate: 1 of 1 Period: 4.881 d
KOI: K06385 Corr: No Ephemeris Match

Kp: 13.77 R*: 2.05 Rs Teff: 6468.0 K Logg: 3.89 Fe/H: -0.400



TPS TCE Results:

Period = 4.88070 d
Epoch = 133.7417 BKJD

DV fit results are unavailable

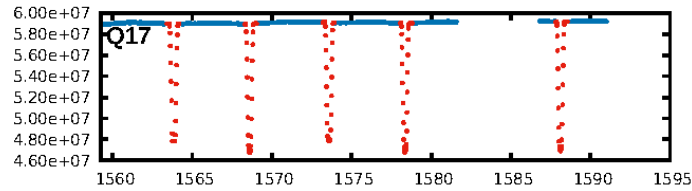
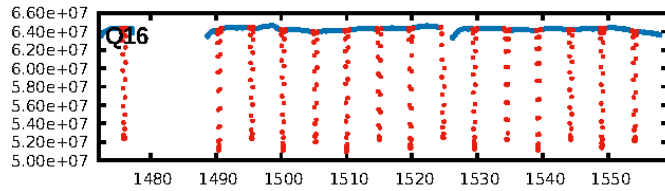
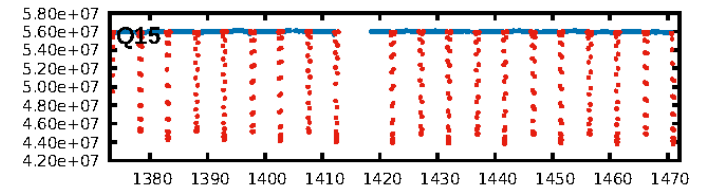
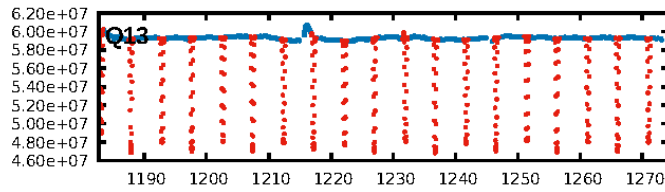
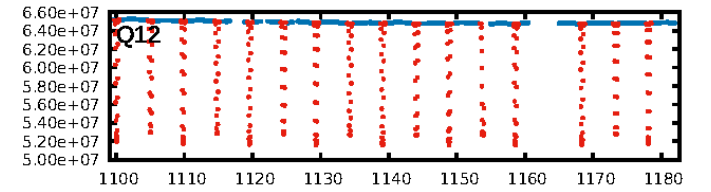
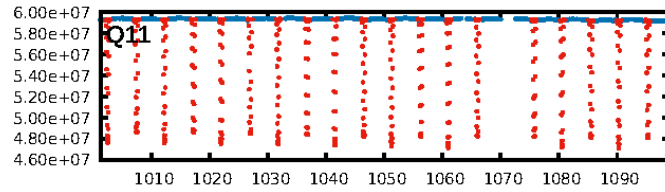
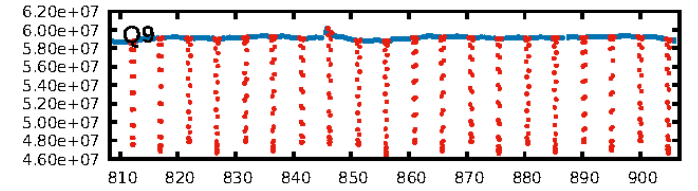
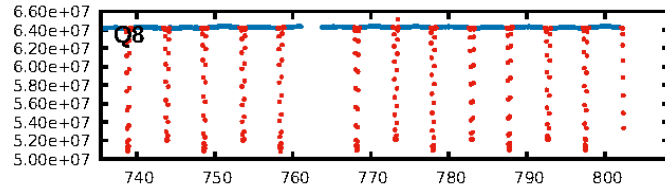
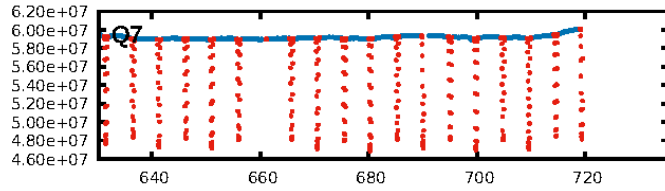
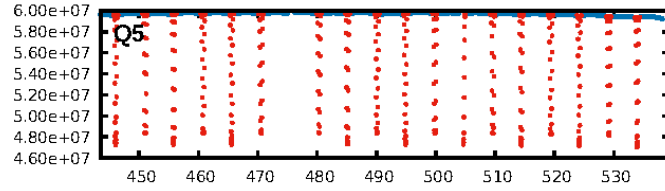
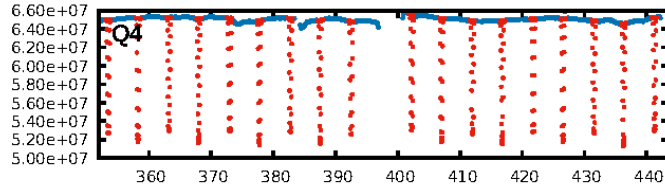
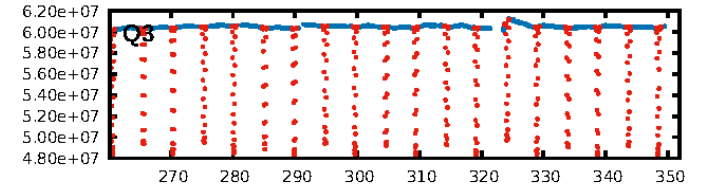
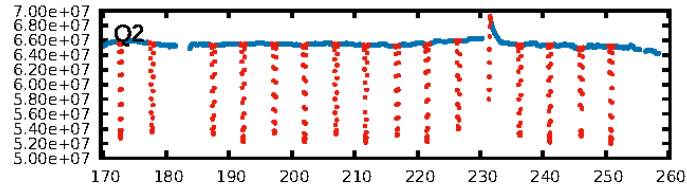
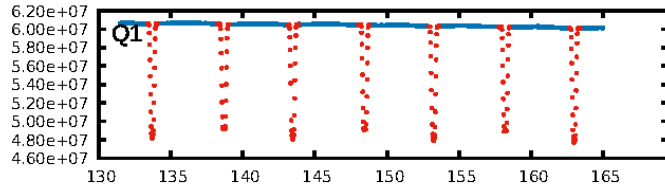
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 0.91 [192/211]
GhostDiagnostic-chr: 1.658
Centroid-sig: 0.0%
Centroid-so: 0.116 arcsec [215.64σ]
OotOffset-rm: 0.017 arcsec [0.25σ]
KicOffset-rm: 0.065 arcsec [0.96σ]
OotOffset-st: 1/4/4/5 [14]
KicOffset-st: 1/4/4/5 [14]
DiffImageQuality-fgm: 1.00 [14/14]
DiffImageOverlap-fno: 1.00 [14/14]

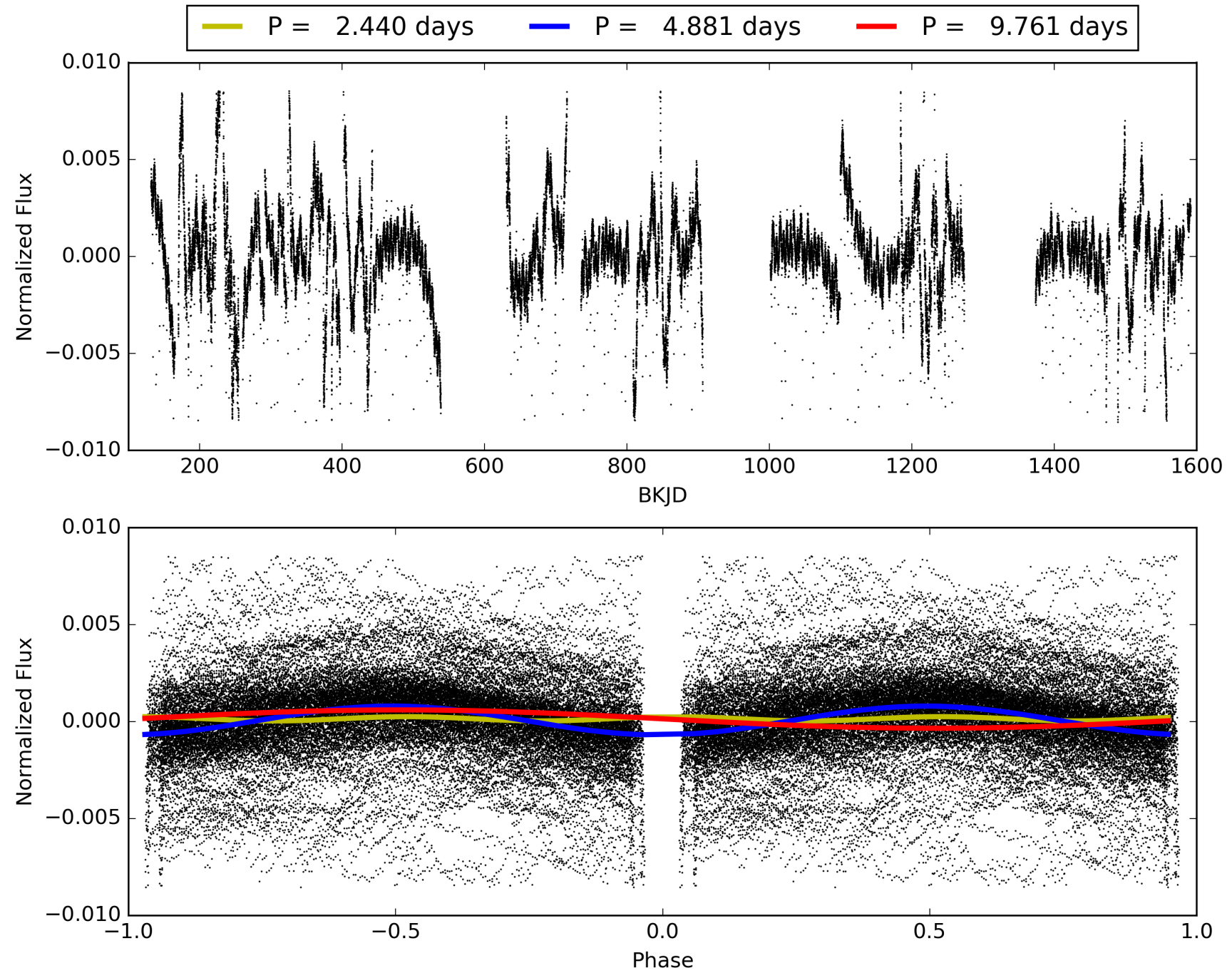
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 05:20:59 Z

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

TCE 004076952-01, PDC Light Curves

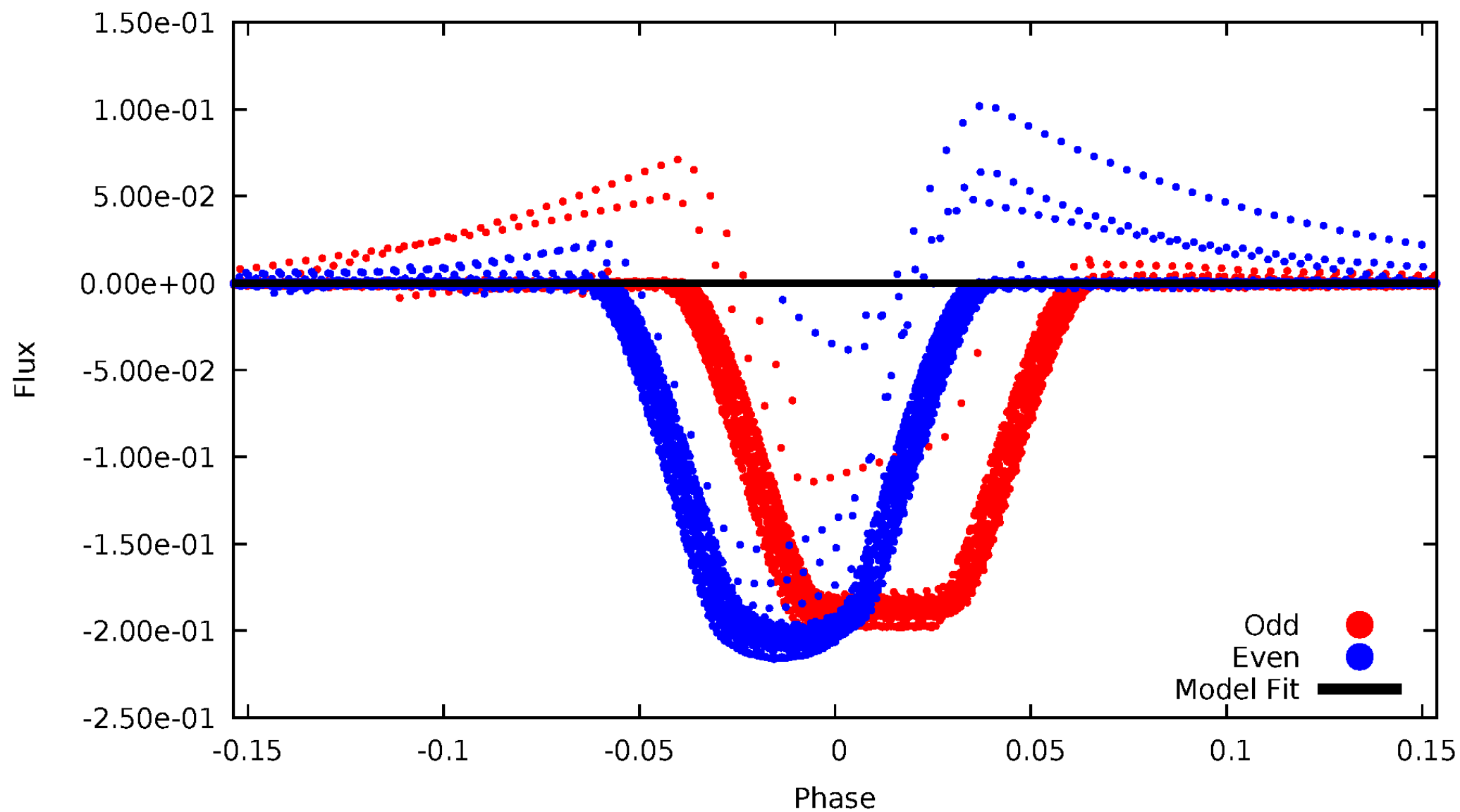


TCE 004076952-01



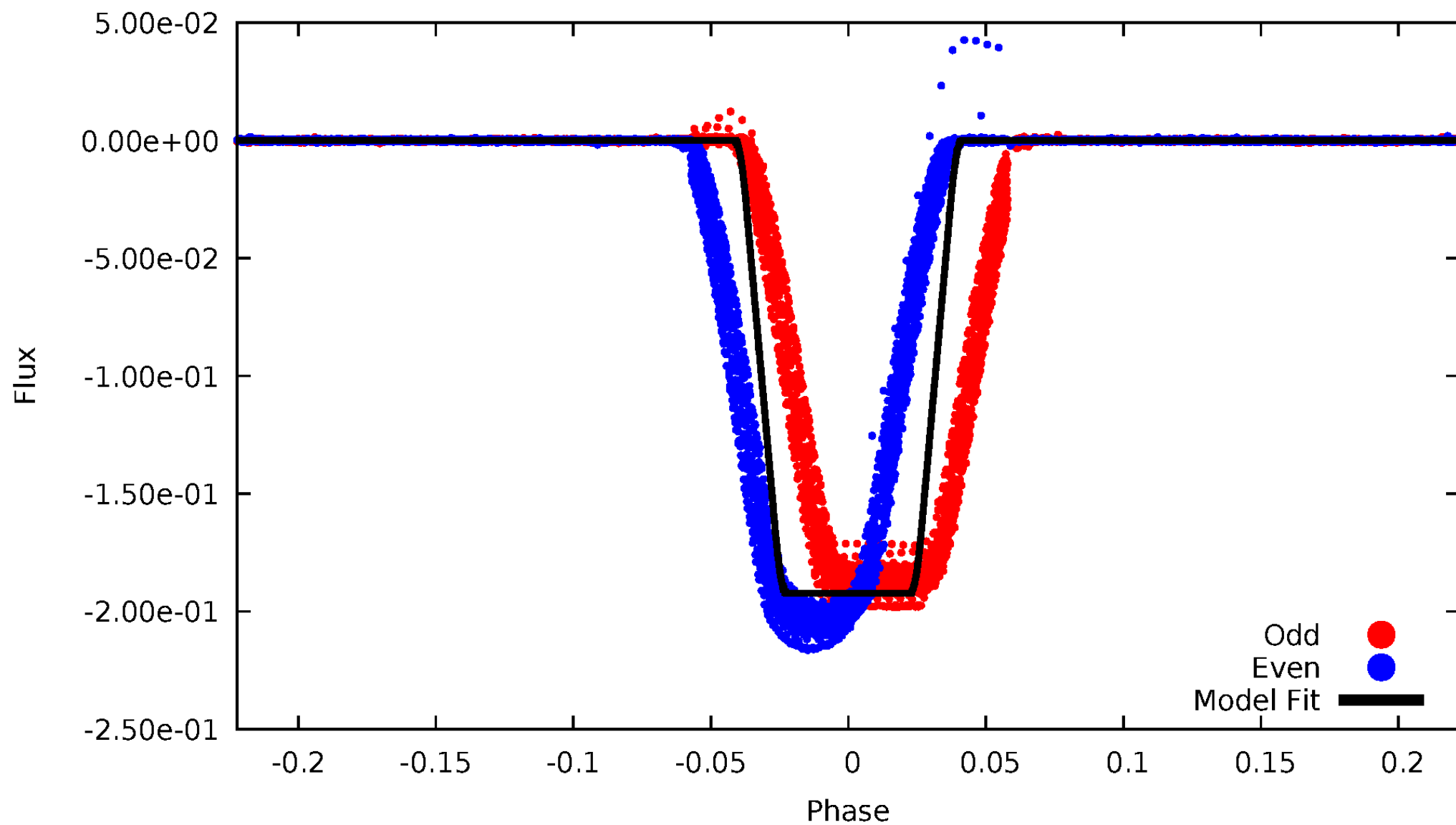
DV Odd/Even

TCE 004076952-01



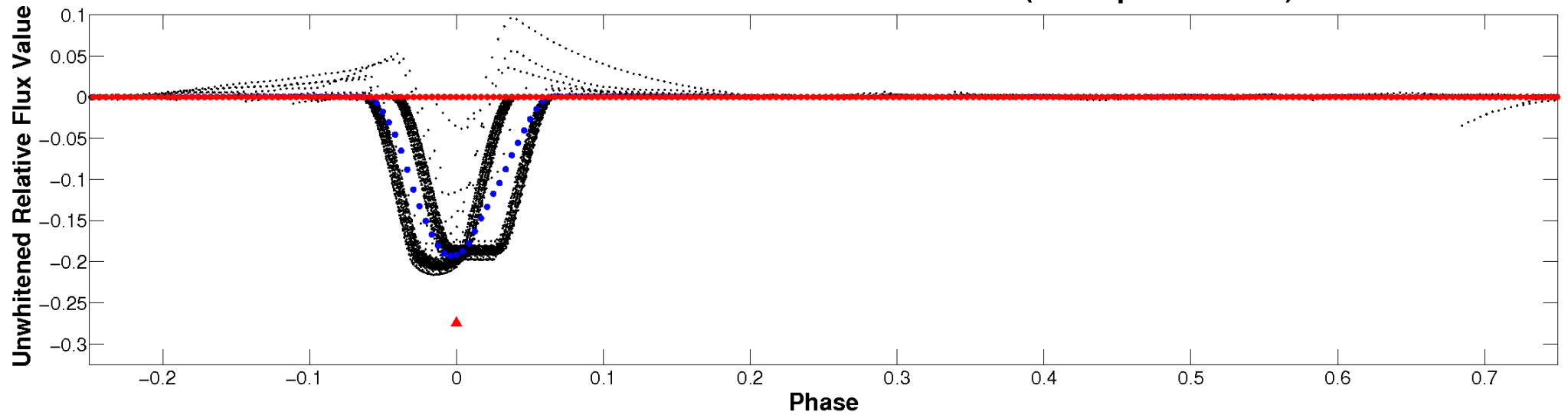
ALT Odd/Even

TCE 004076952-01



Non-Whitened Vs. Whitened Light Curve

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

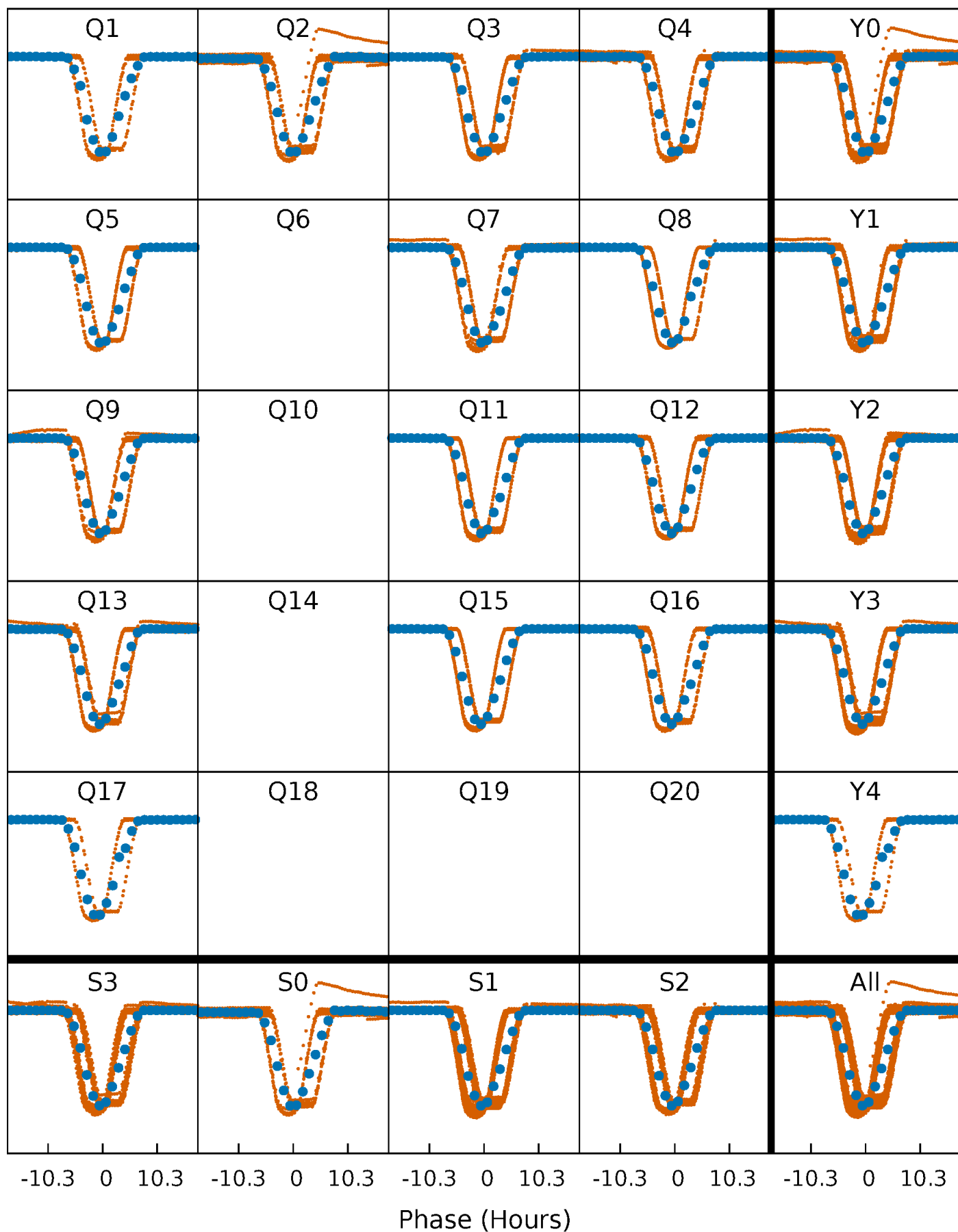


Planet 1 : Phased Whitened Flux Time Series (TPS Epoch/Period)



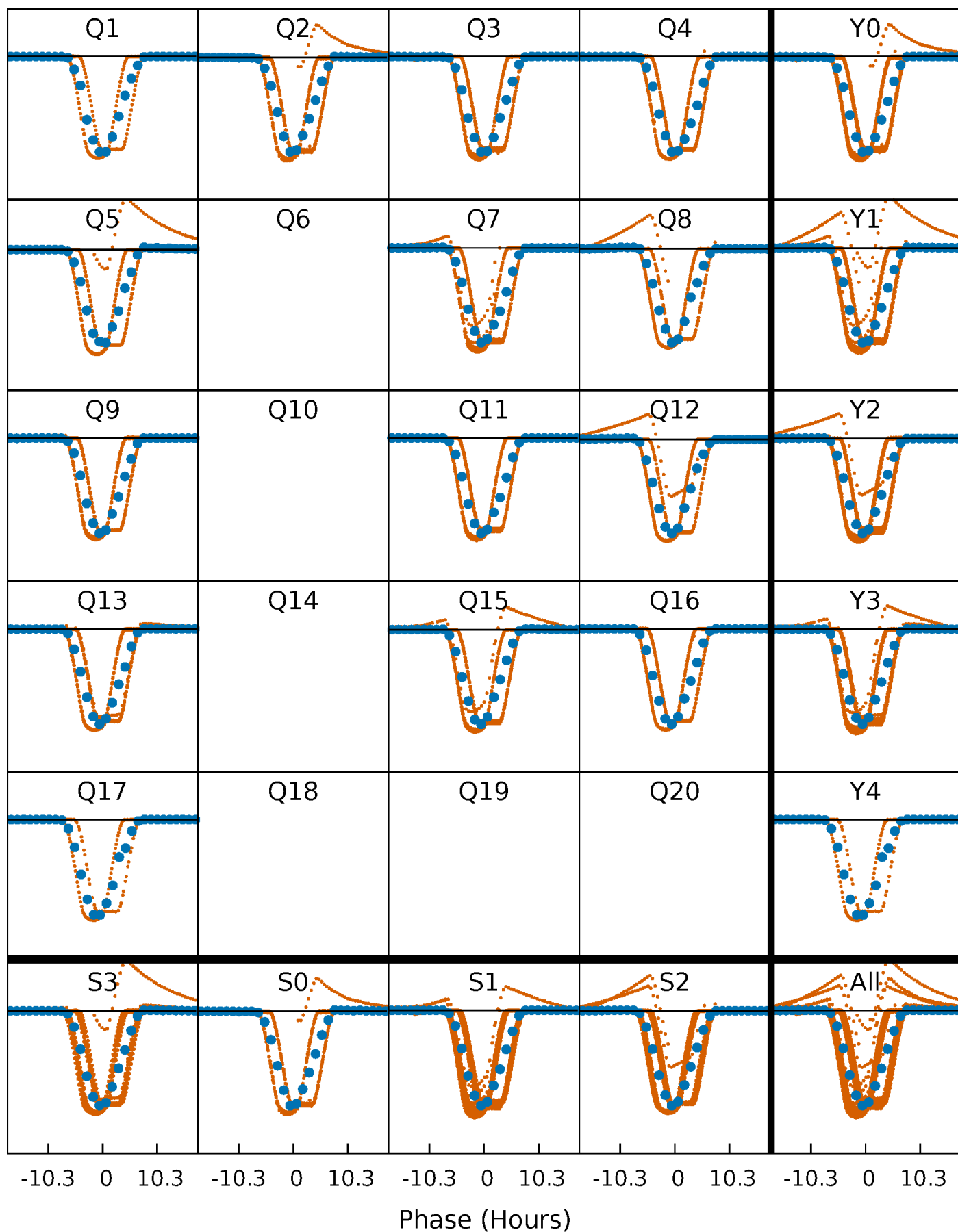
PDC Quarter-Phased Transit Curves

TCE 004076952-01 P= 4.880699 Days $T_0=133.741658$ (BKJD)



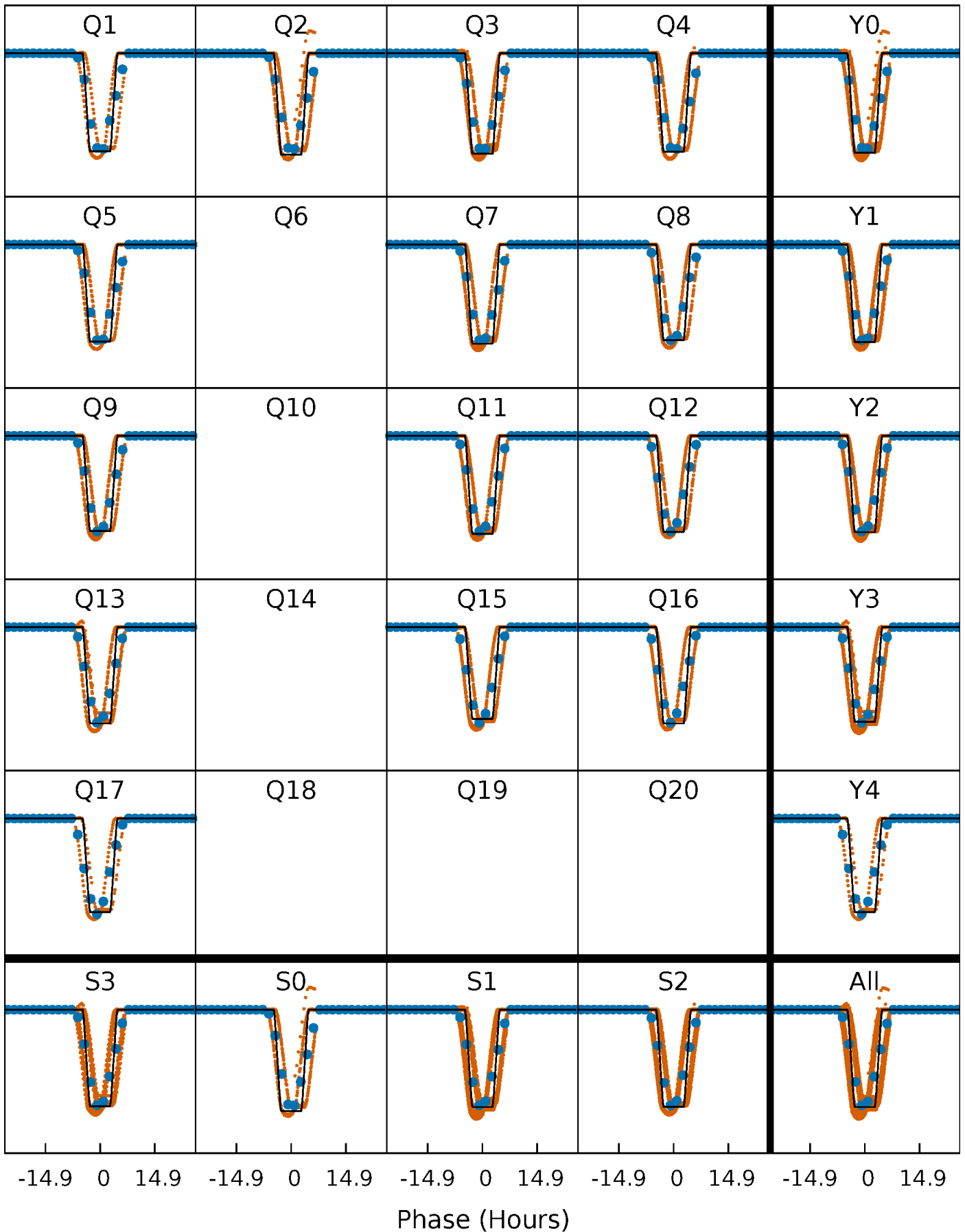
DV Quarter-Phased Transit Curves

TCE 004076952-01 P= 4.880699 Days $T_0=133.741658$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

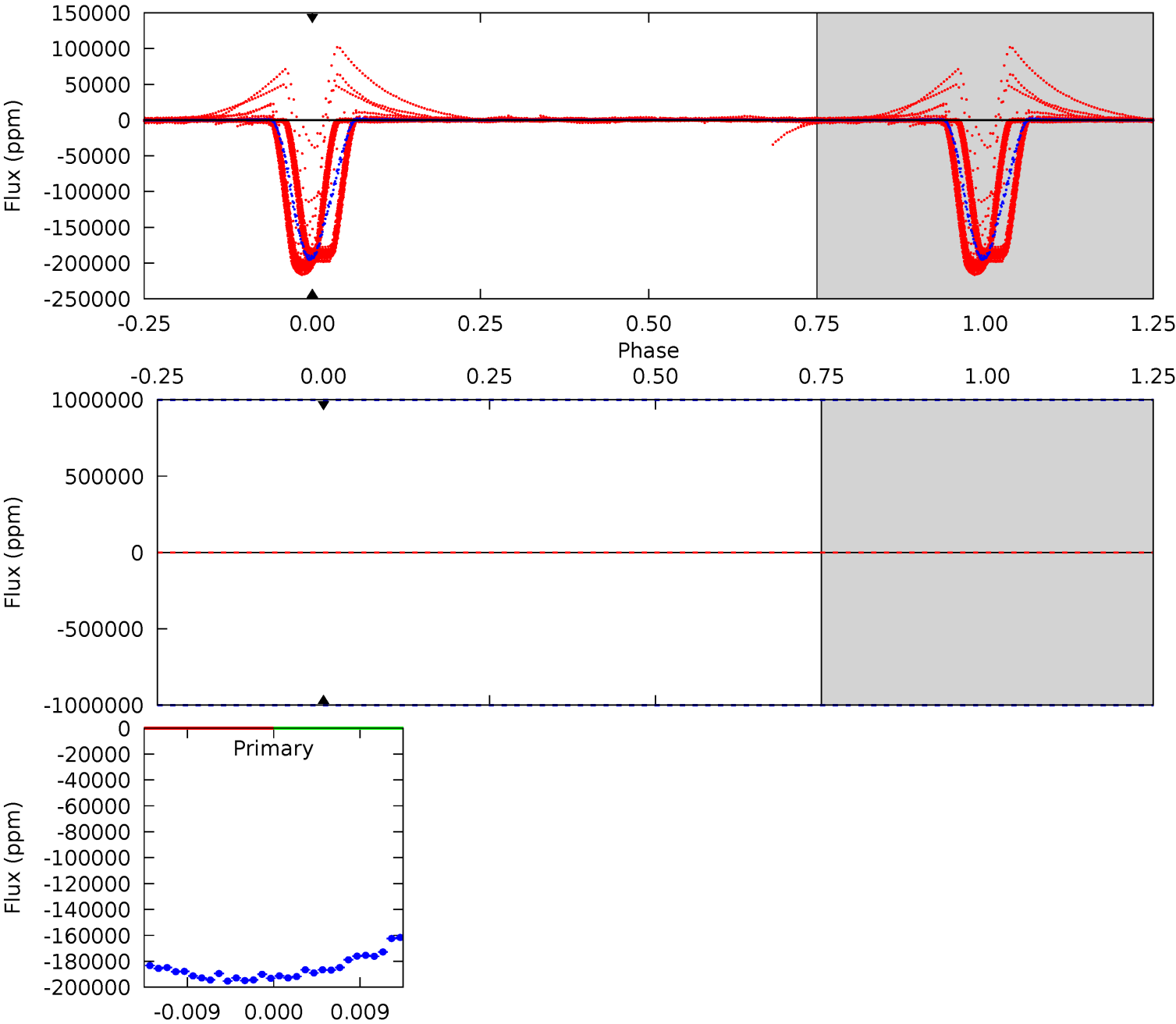
TCE 004076952-01 P= 4.880699 Days $T_0=133.737984$ (BKJD)



DV Model-Shift Uniqueness Test

004076952-01, P = 4.880699 Days, E = 128.860959 Days

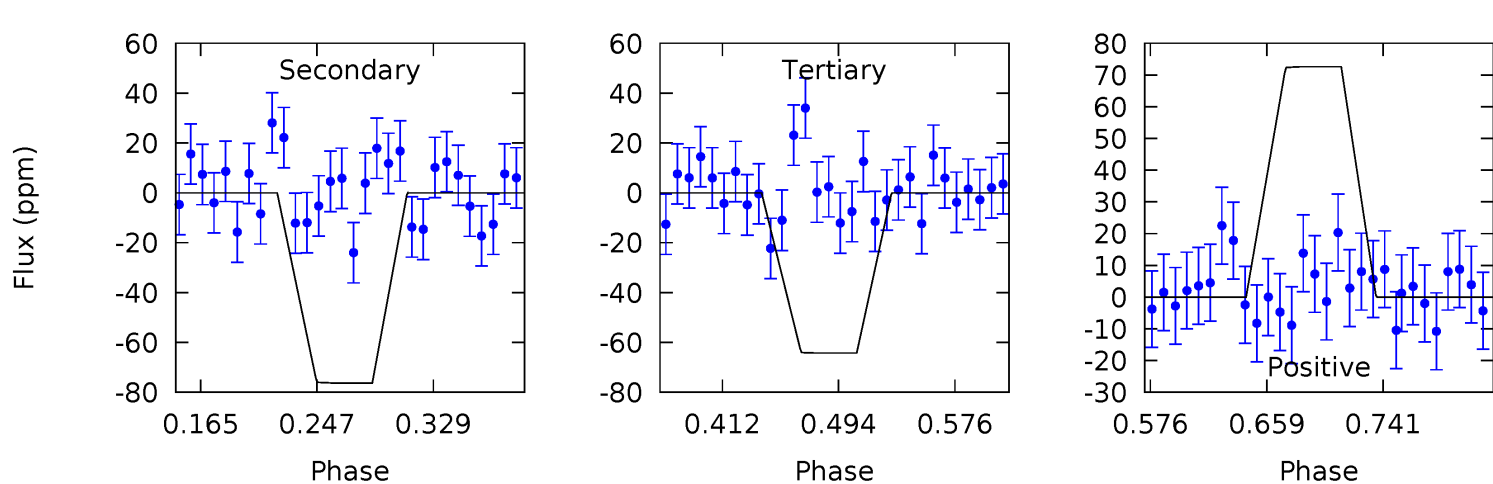
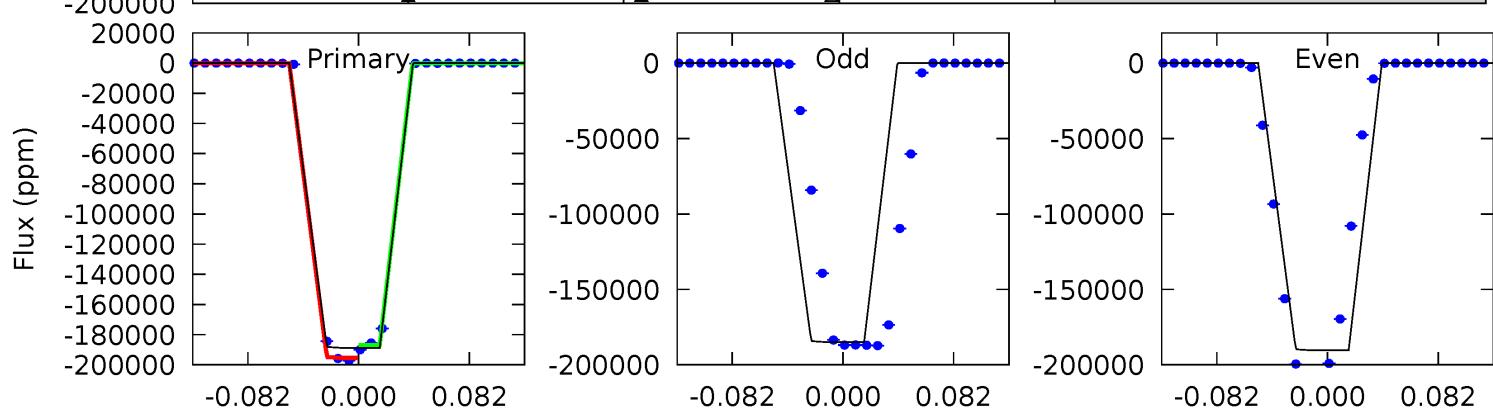
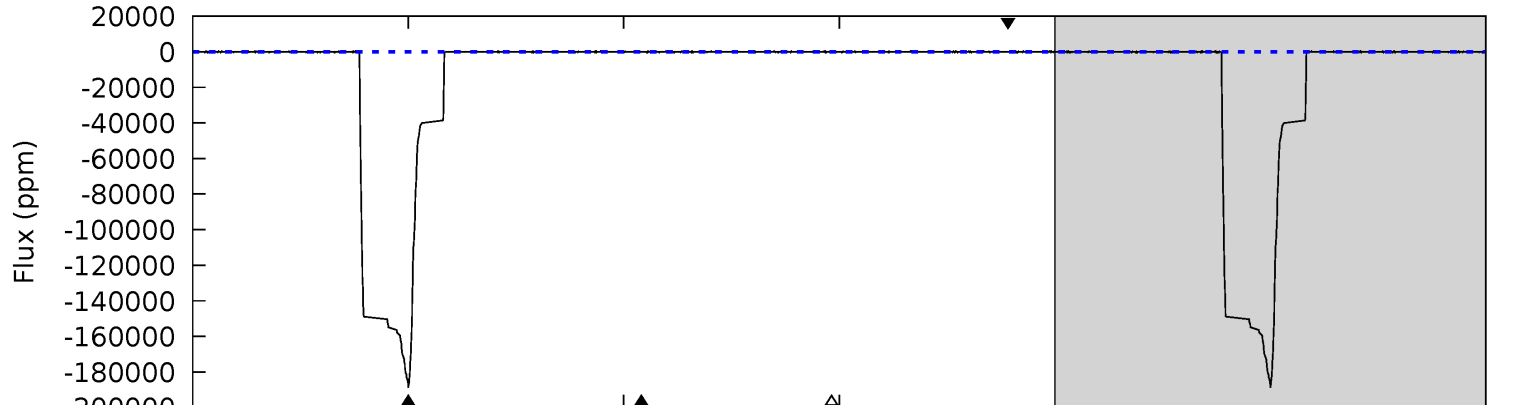
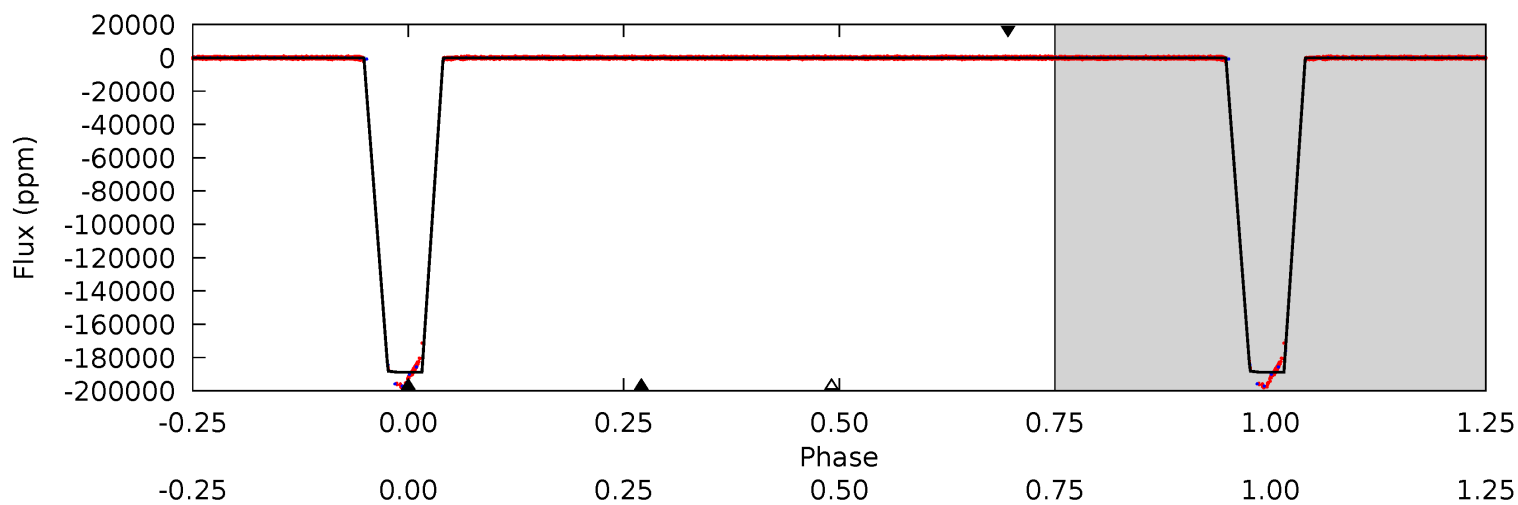
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

004076952-01, P = 4.880699 Days, E = 128.857285 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8683	3.51	2.96	3.34	4.61	1.74	0.99	8680	8680	0.55	0.17	254.3	0.99	0.00	0



Stellar Parameters For KIC 004076952

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6468^{+181}_{-250}	$3.893^{+0.428}_{-0.114}$	$-0.400^{+0.300}_{-0.300}$	$2.048^{+0.486}_{-0.903}$	$1.196^{+0.181}_{-0.221}$	$0.196^{+0.828}_{-0.077}$
	+3%/-4%	+11%/-3%	+75%/-75%	+24%/-44%	+15%/-18%	+422%/-39%
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 004076952-01 / KOI 6385.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	0 ± 1000000	$56.67^{+26.09}_{-23.79}$	2273^{+160}_{-265}	3313^{+4138}_{-10238}	$1.756^{+77.076}_{-64.009}$
Alt.	-76 ± 22	$90.84^{+30.19}_{-26.12}$	2274^{+173}_{-254}	-2639^{+159}_{-101}	$0.017^{+0.018}_{-0.008}$

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 $A_{obs} \gg 1.0$

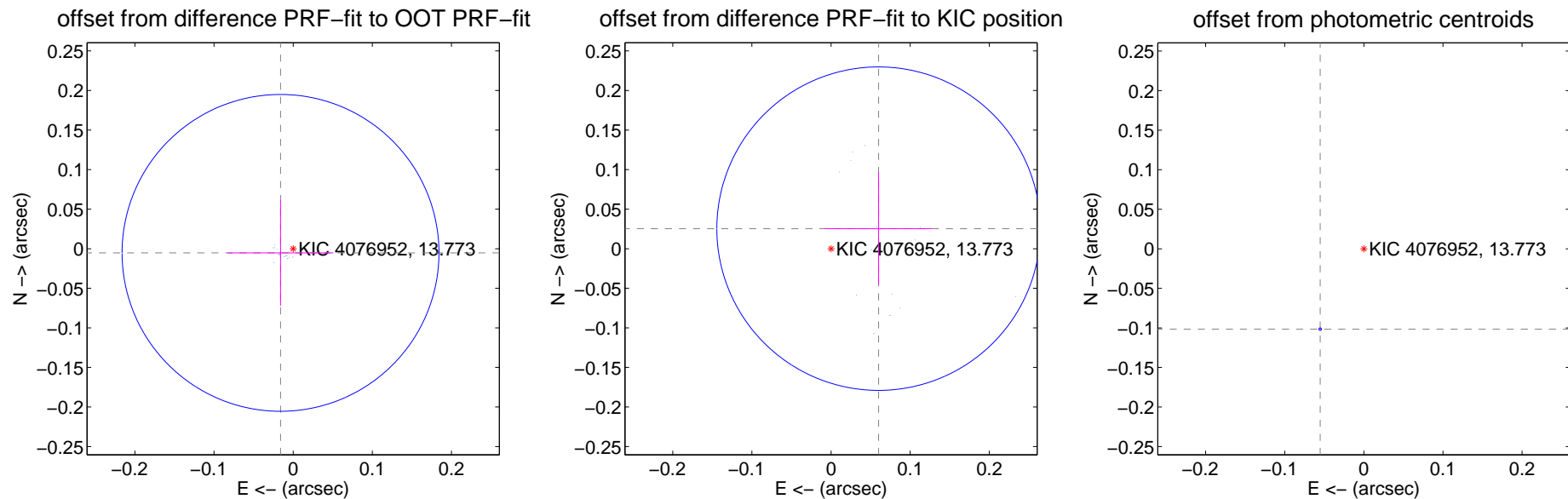
DV Centroid Data

Supplemental centroid analysis for 004076952-01. Kepler magnitude: 13.77. Transit SNR -1.00

There are 14 quarters with good PRF difference image offsets

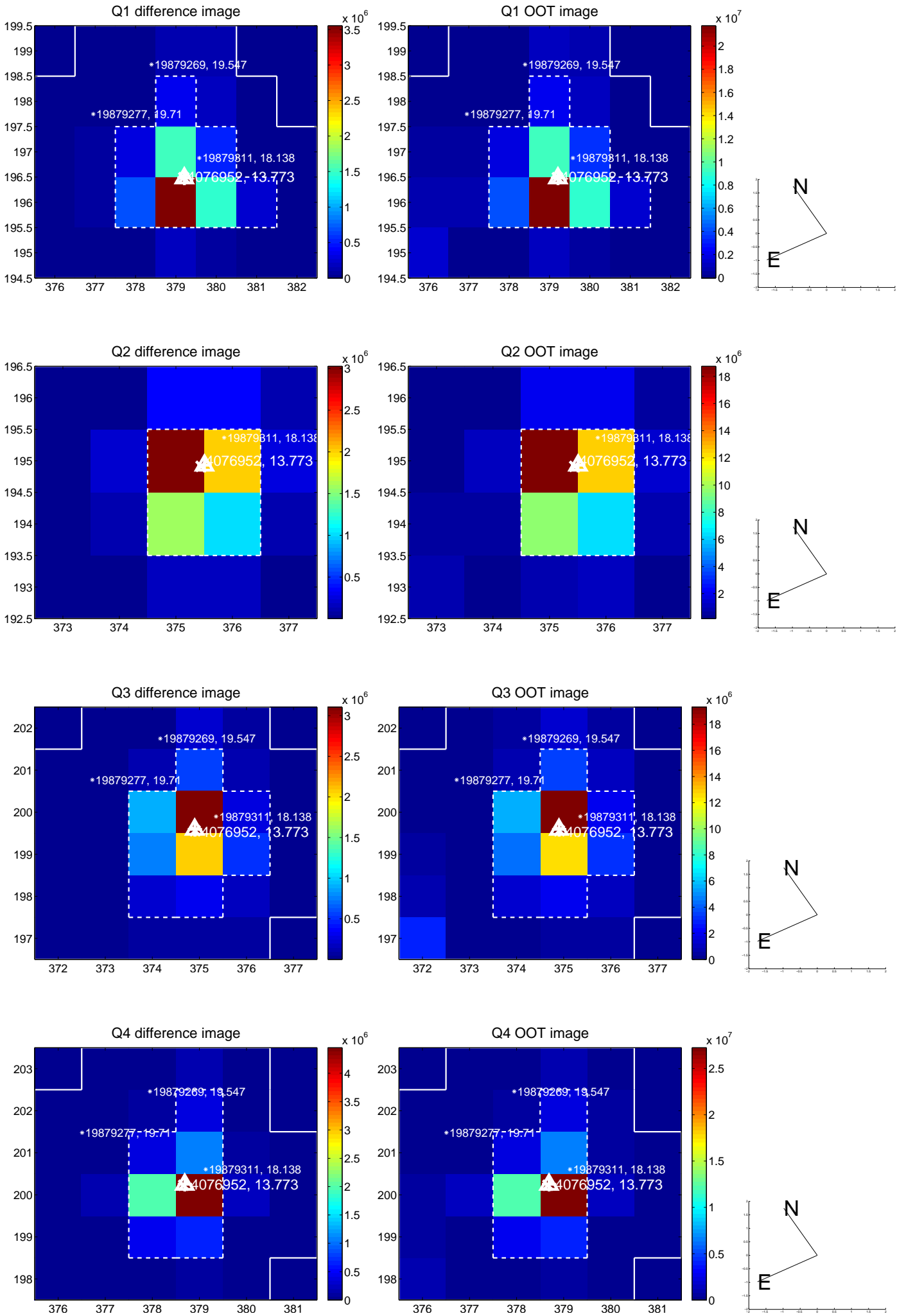
The direct PRF centroid is offset from the target star catalog position by about 0.11 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.017 ± 0.067	0.25	0.016 ± 0.067	-0.005 ± 0.067
PRF-fit source offset from KIC position	0.065 ± 0.068	0.96	-0.060 ± 0.068	0.025 ± 0.071
photometric centroid source offset	0.12 ± 0.00	215.64	0.06 ± 0.00	-0.10 ± 0.00

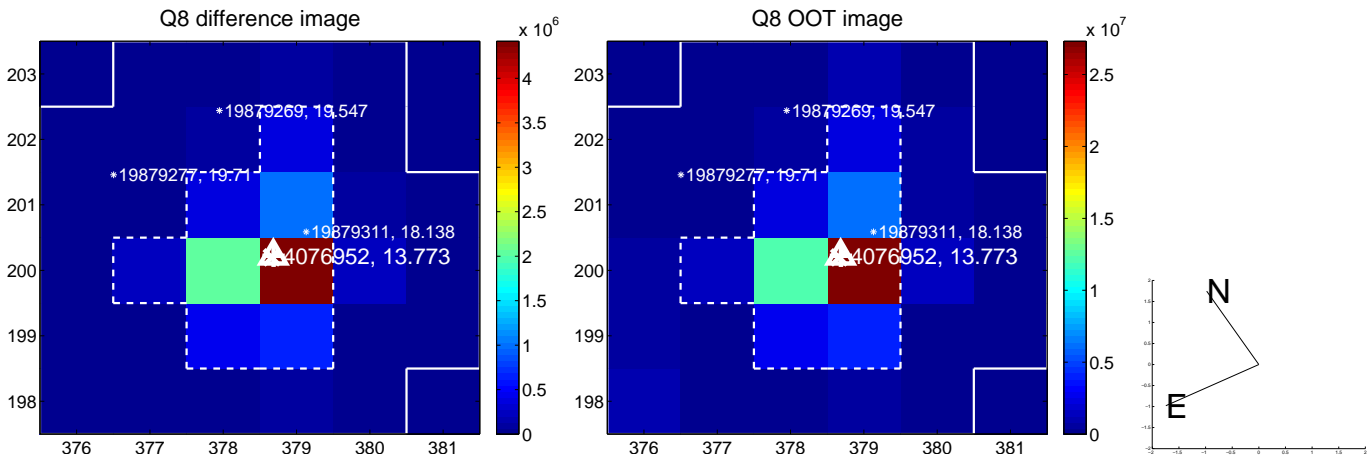
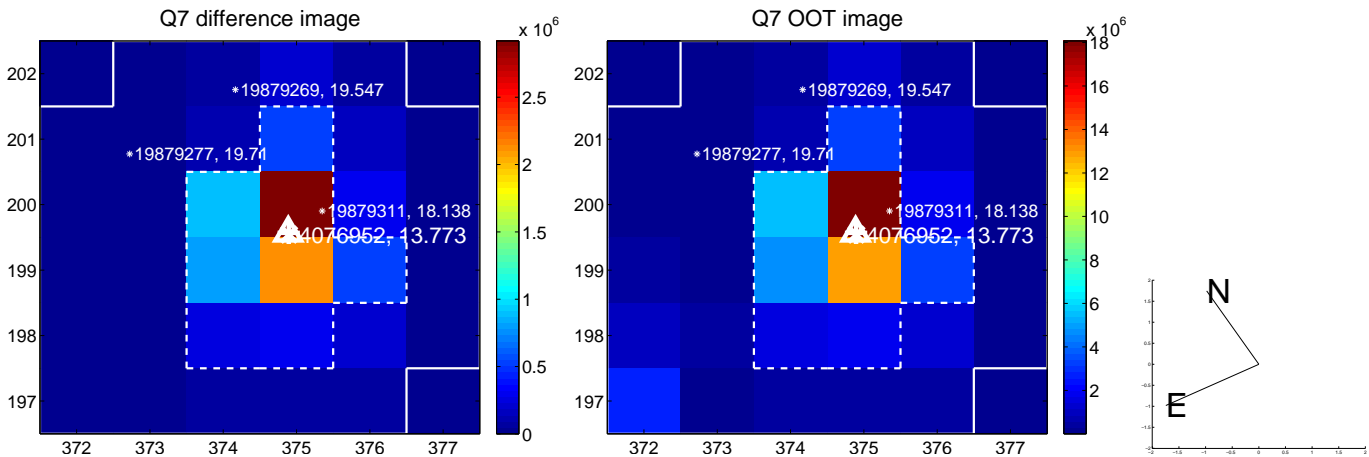
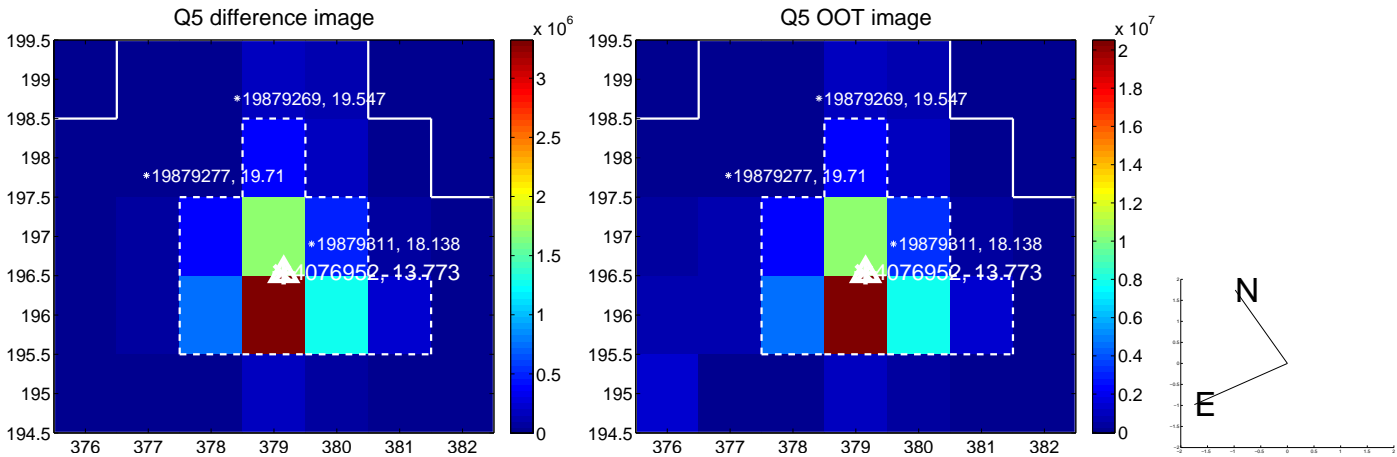


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

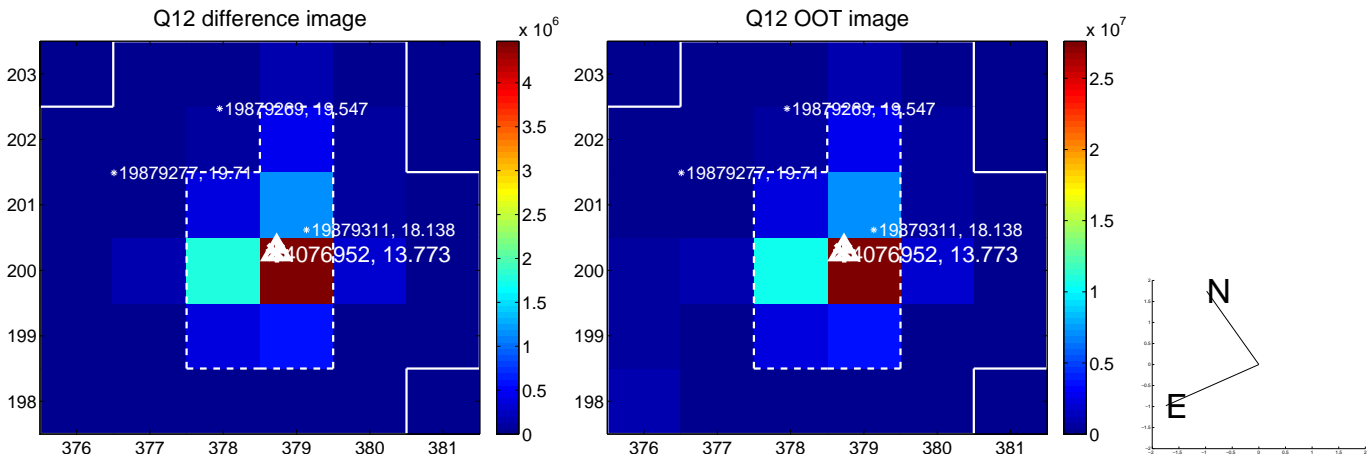
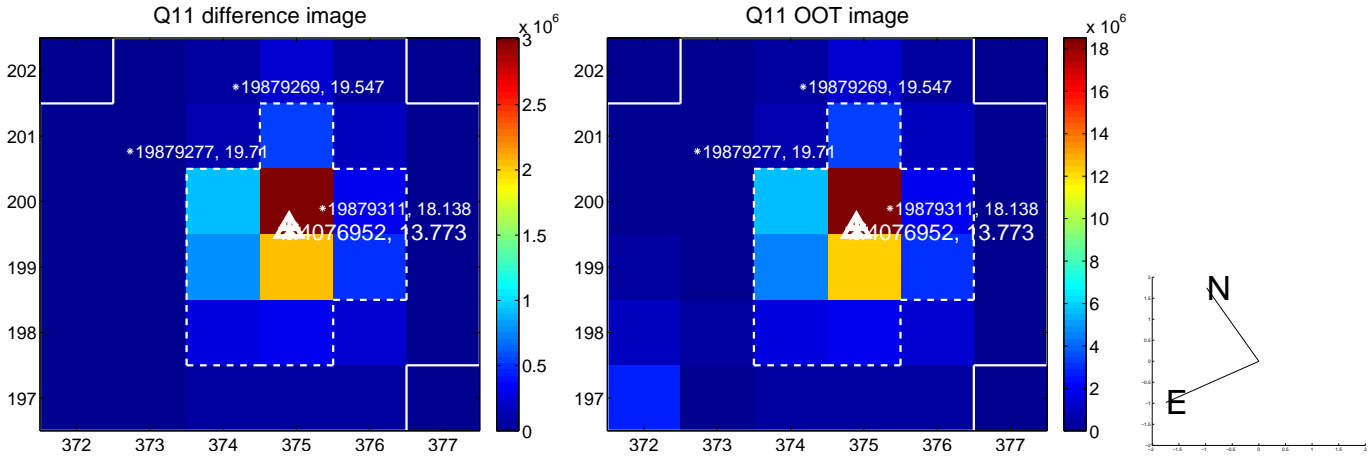
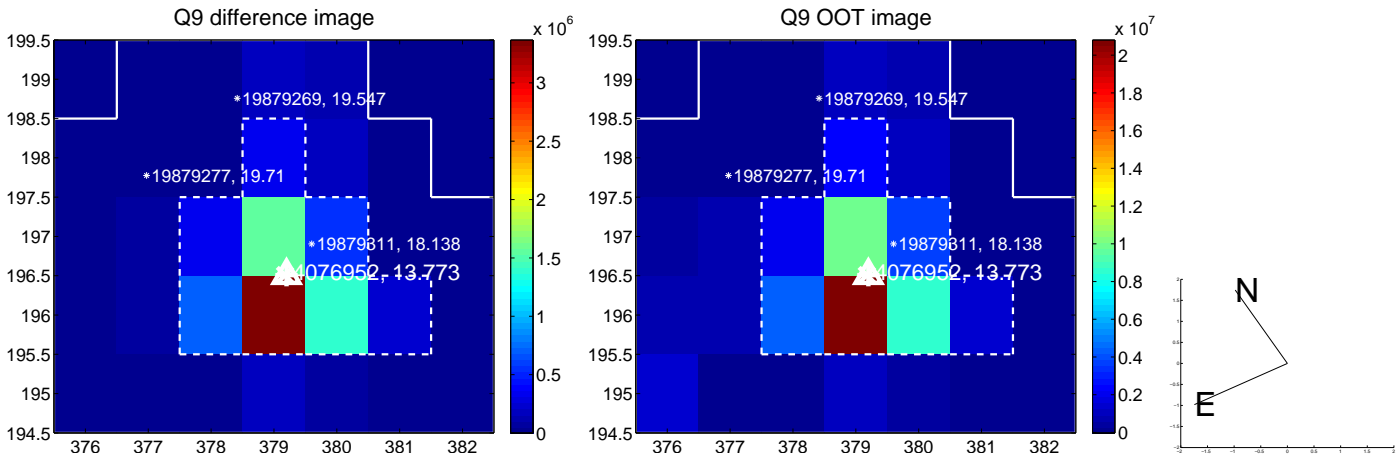
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



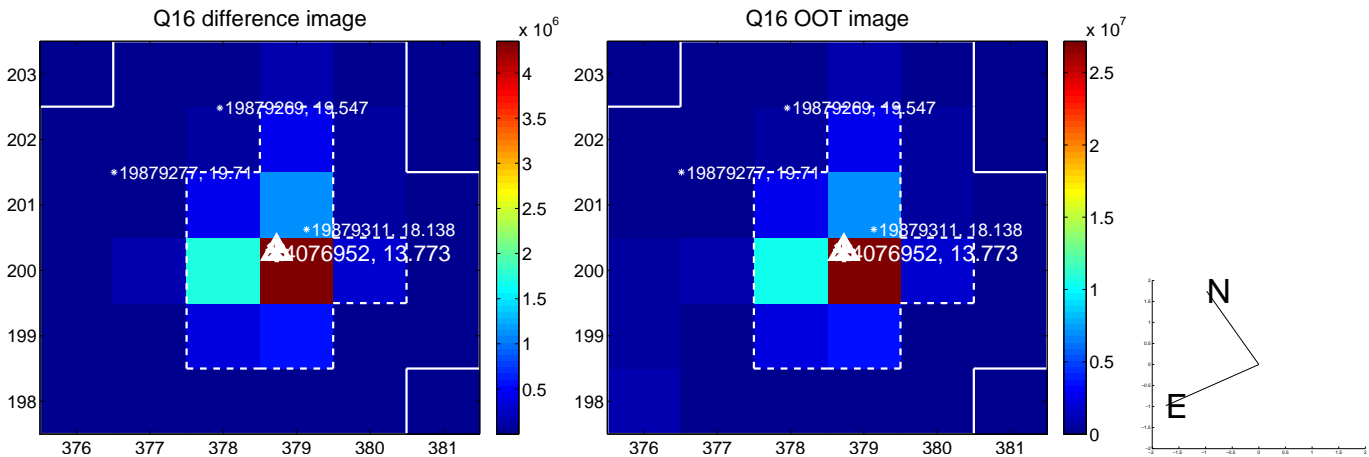
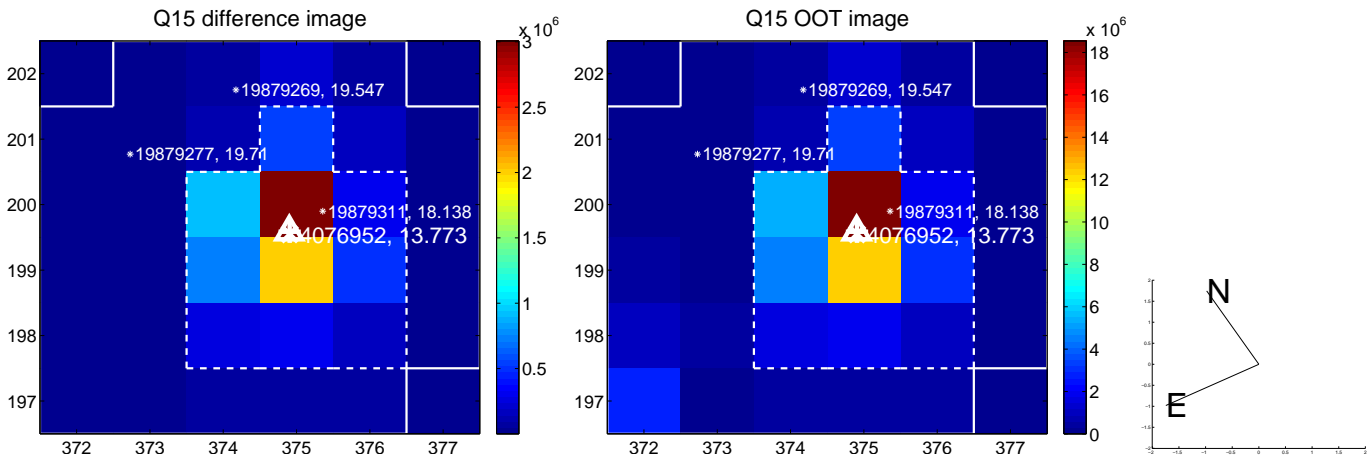
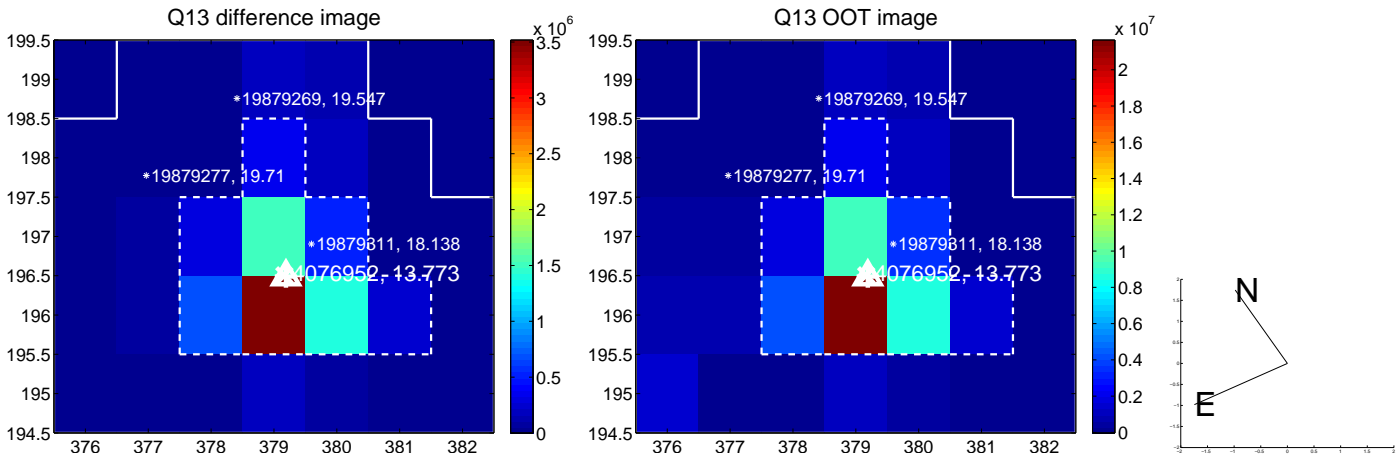
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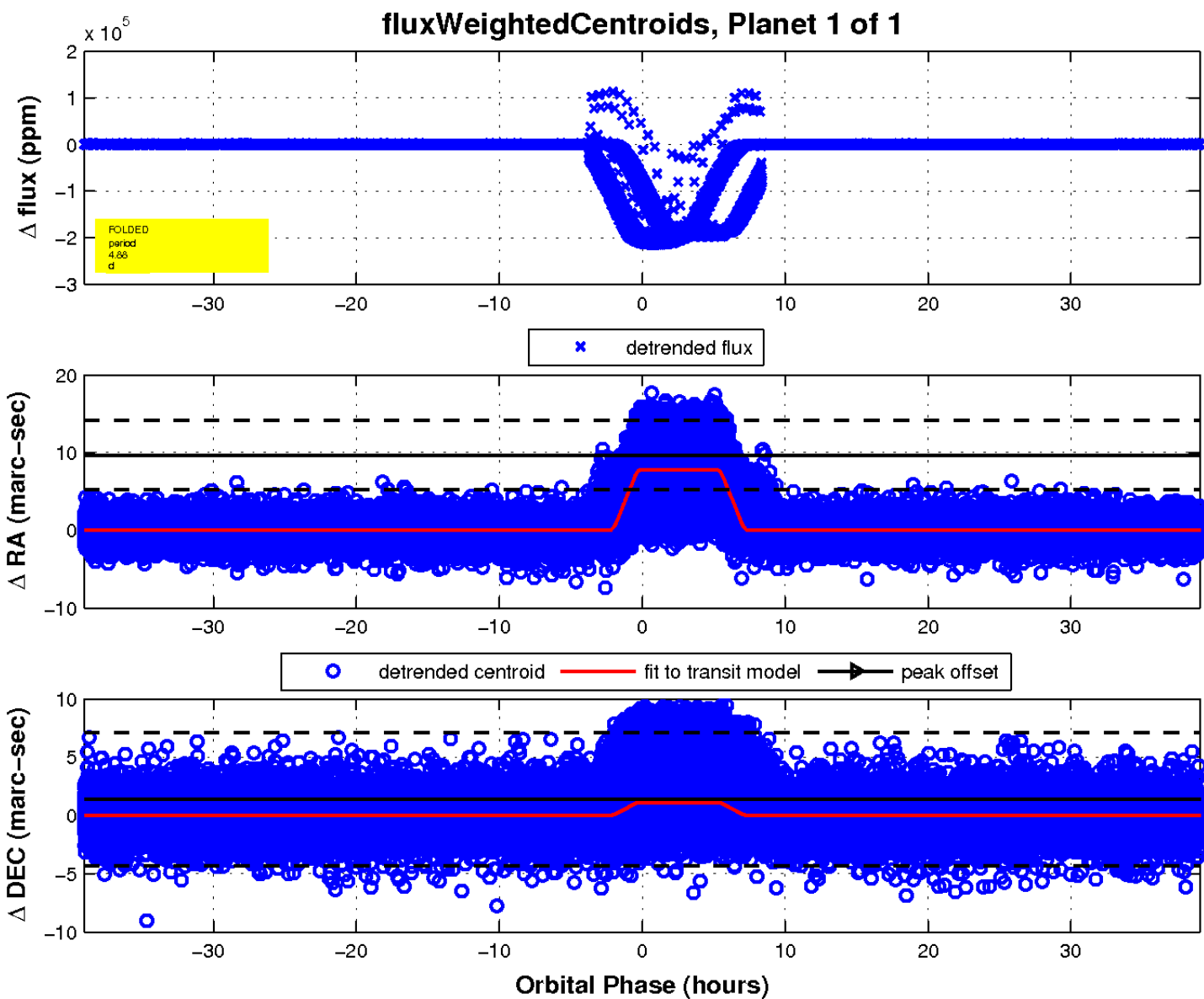
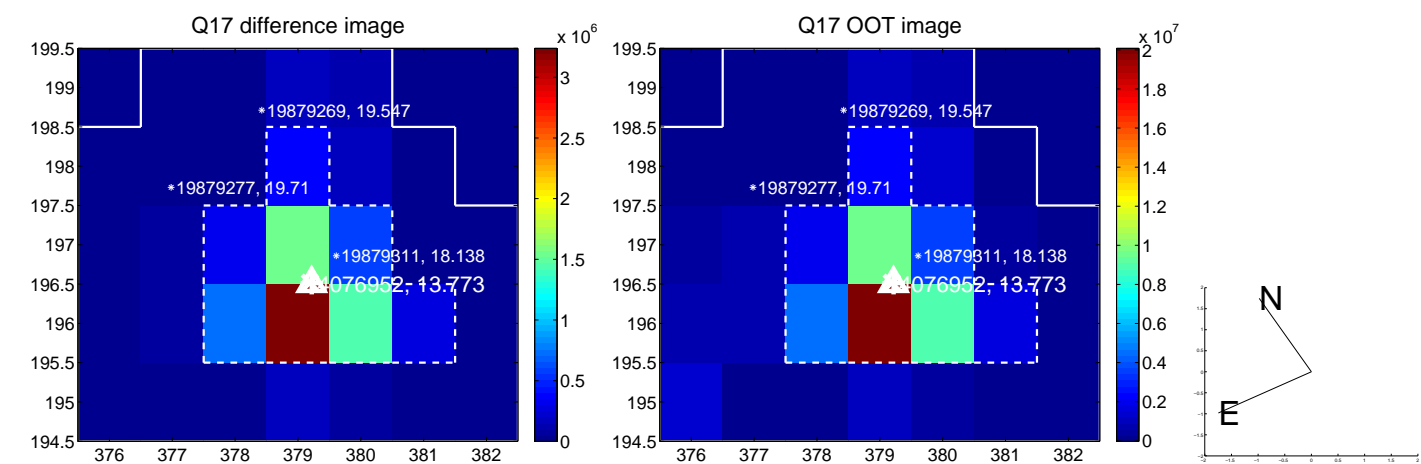
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UKIRT Image

Declination

