

KIC 003348093

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})
003348093-01	OBS	3590.01	3.982199	131.542244	260587.0	2.500	2977.0	-1.0	0.71	4478	35.67	96.07

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003348093-01	OBS	FP	0.00	0	1	0	0	DEPTH_ODDEVEN_DV—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.

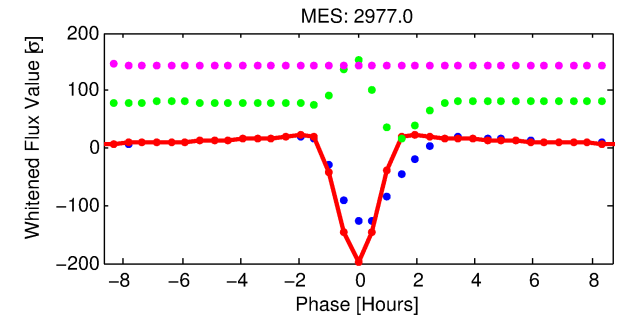
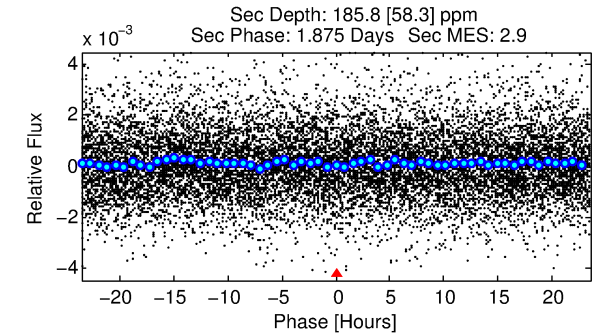
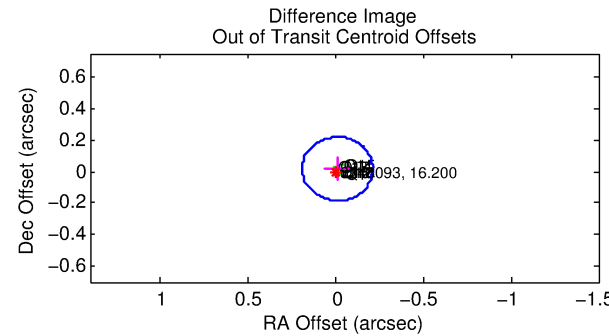
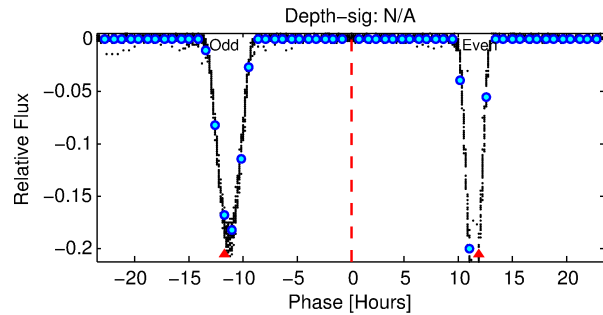
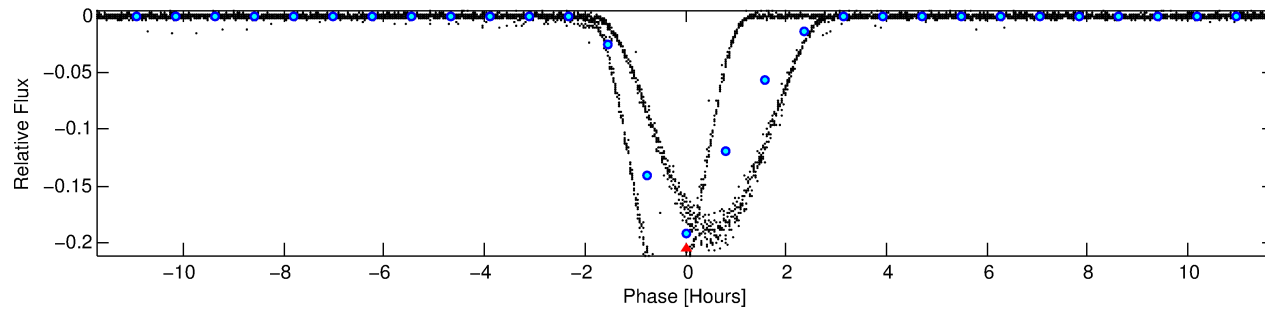
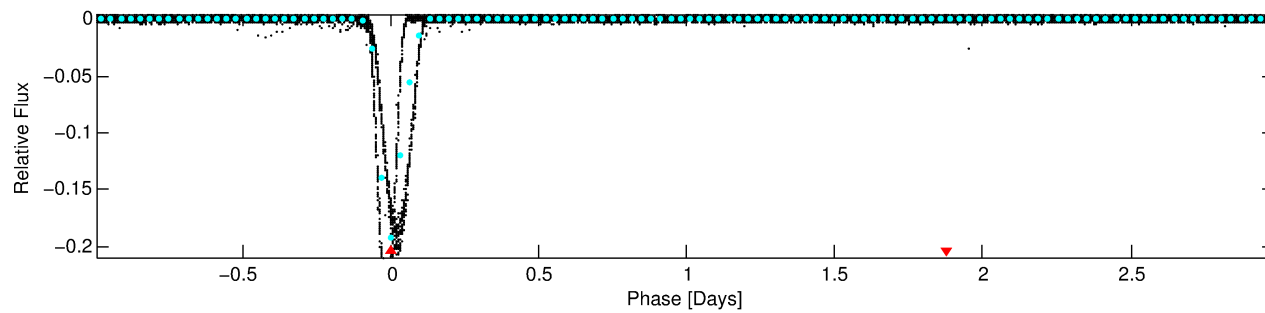
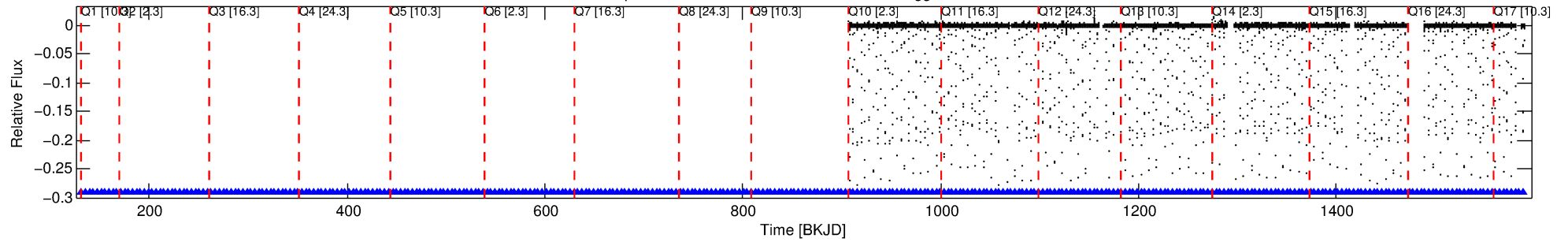
Ephemeris Match Information For 003348093-01

No Significant Match Found

DV One-Page Summary

KIC: 3348093 Candidate: 1 of 1 Period: 3.982 d
KOI: K03590 Corr: No Ephemeris Match

Kp: 16.20 R*: 0.71 Rs Teff: 4478.0 K Logg: 4.58 Fe/H: 0.160



TPS TCE Results:

Period = 3.98220 d
Epoch = 131.5422 BKJD

DV fit results are unavailable

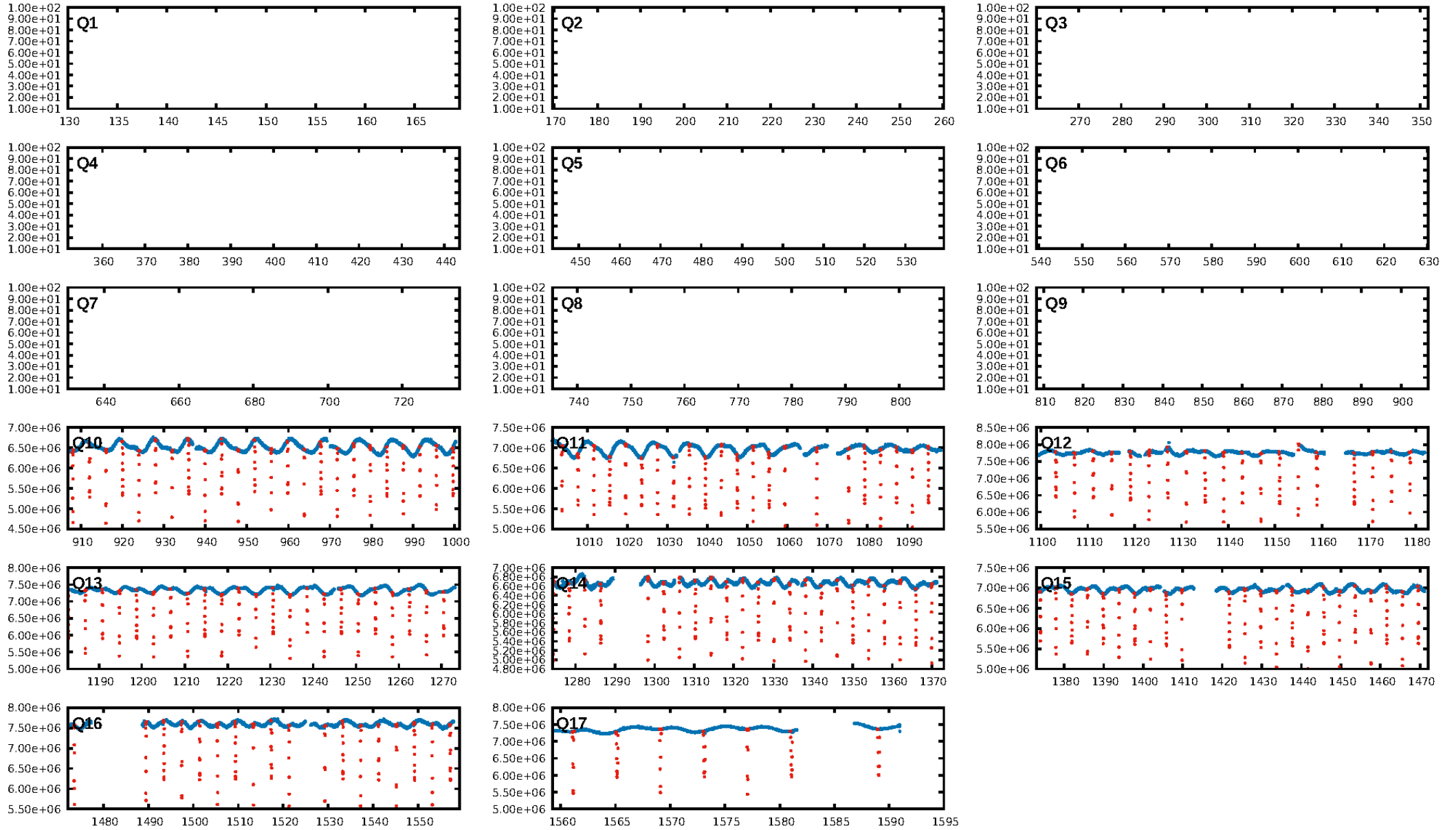
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 0.00e+00
RollingBand-fgt: 1.00 [150/150]
GhostDiagnostic-chr: 1.545
Centroid-sig: 0.0%
Centroid-so: 0.442 arcsec [149.34σ]
OotOffset-rm: 0.020 arcsec [0.30σ]
KicOffset-rm: 0.169 arcsec [2.31σ]
OotOffset-st: 2/2/2/2 [8]
KicOffset-st: 2/2/2/2 [8]
DiffImageQuality-fgm: 1.00 [8/8]
DiffImageOverlap-fno: 1.00 [8/8]

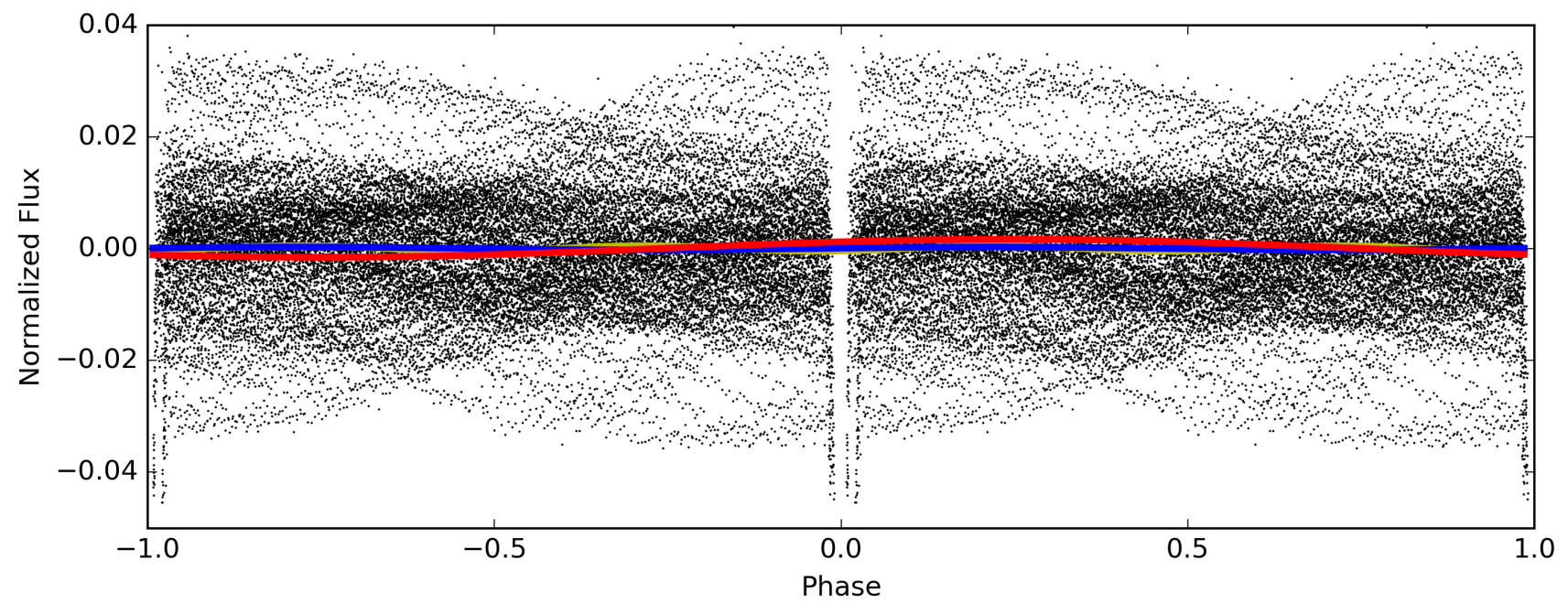
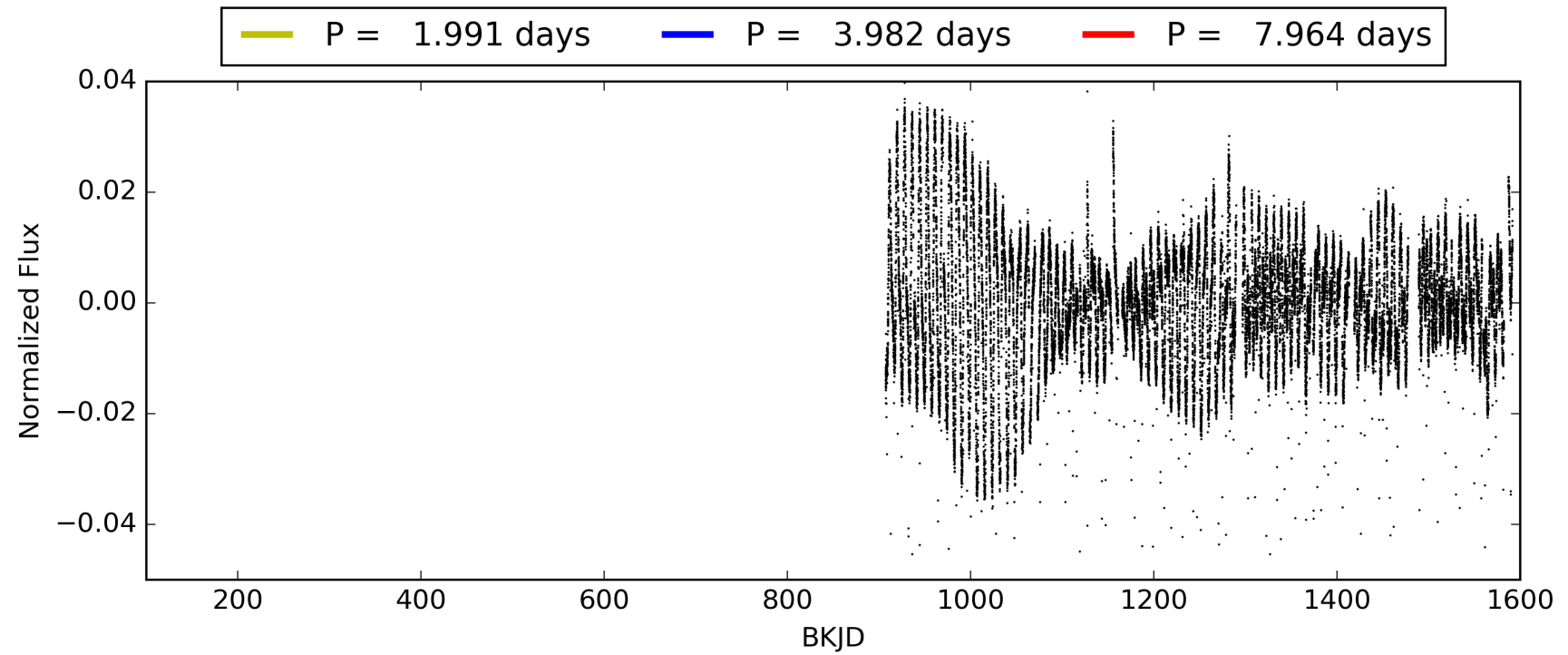
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 12:54:15 Z

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

TCE 003348093-01, PDC Light Curves

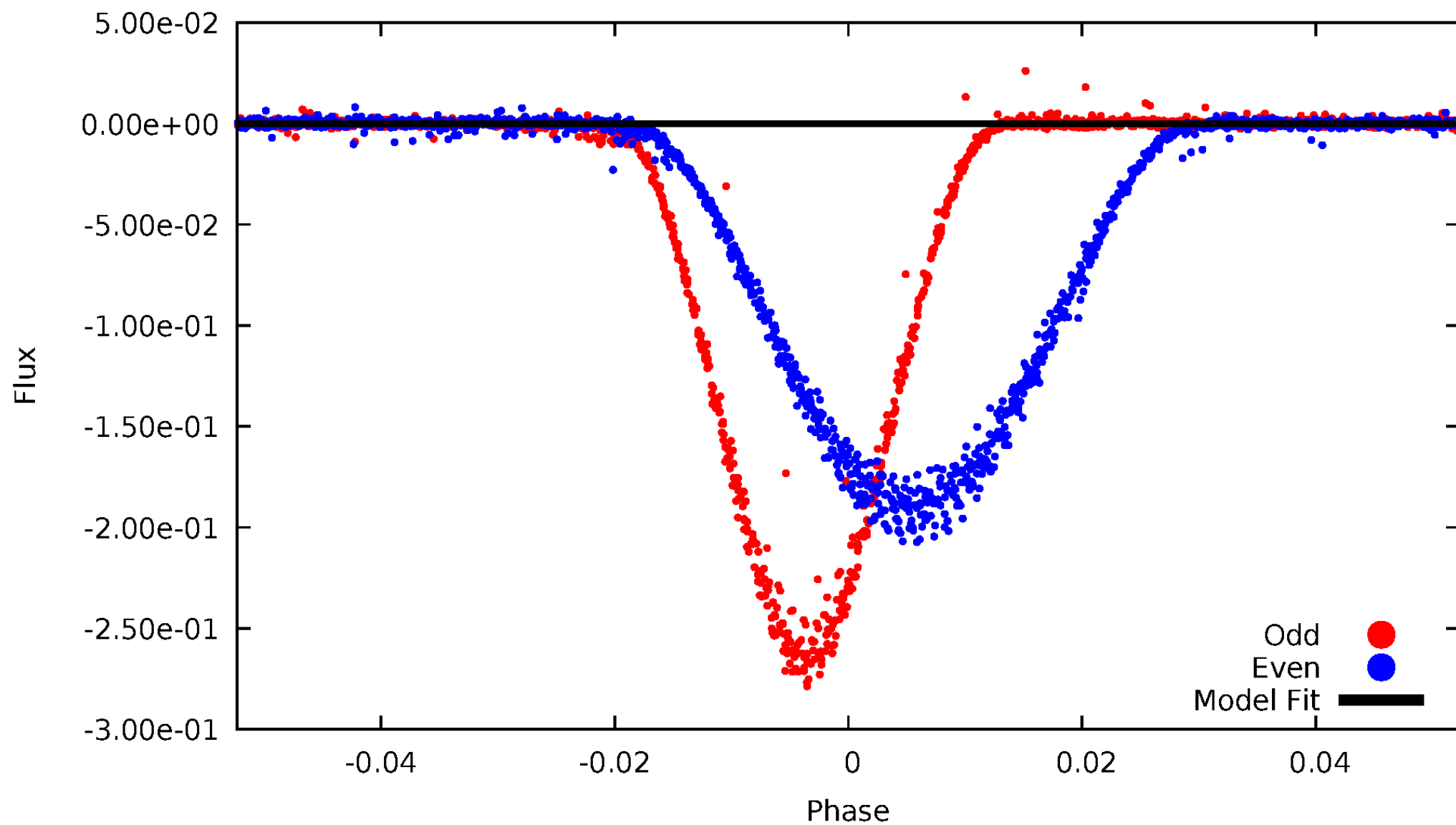


TCE 003348093-01



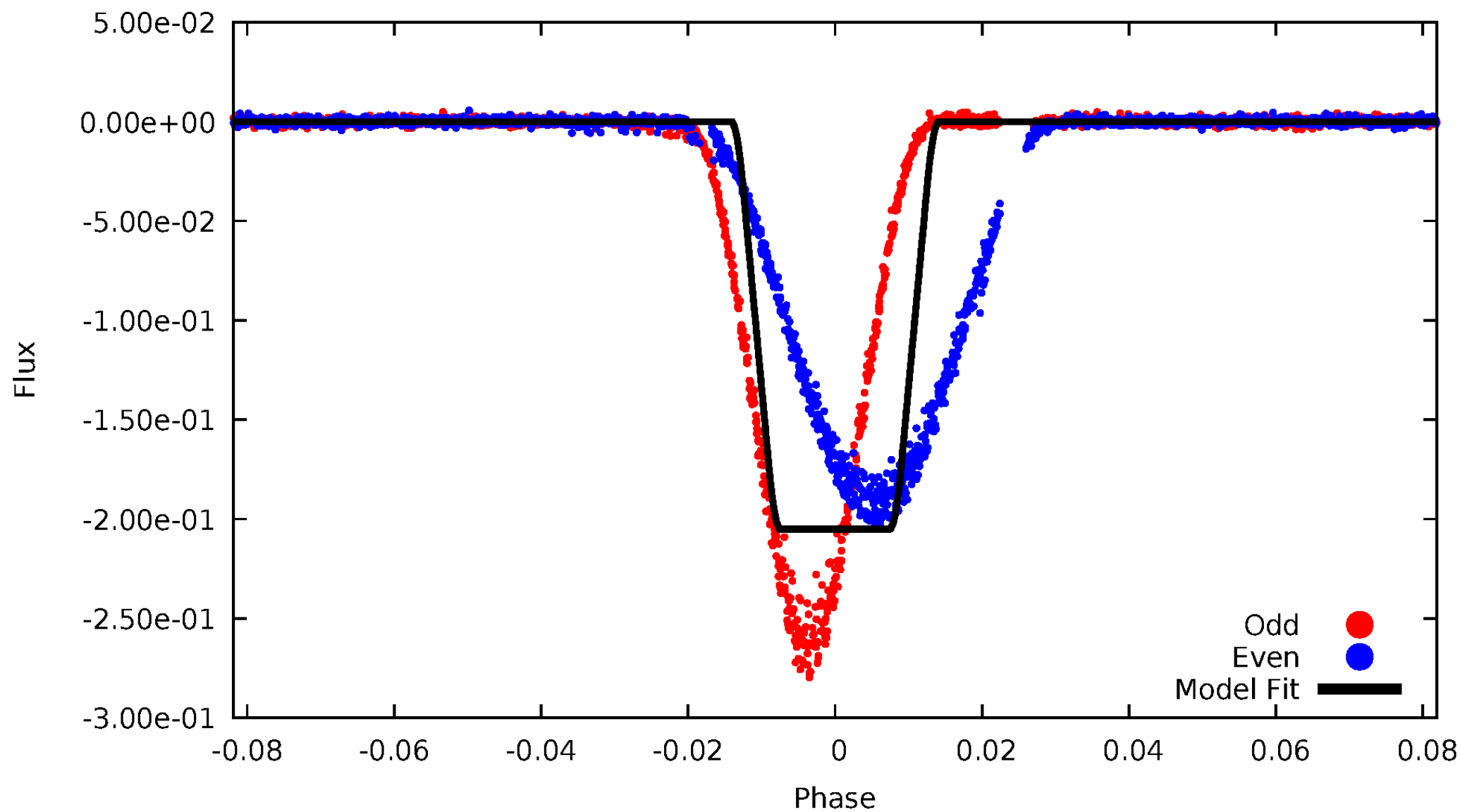
DV Odd/Even

TCE 003348093-01



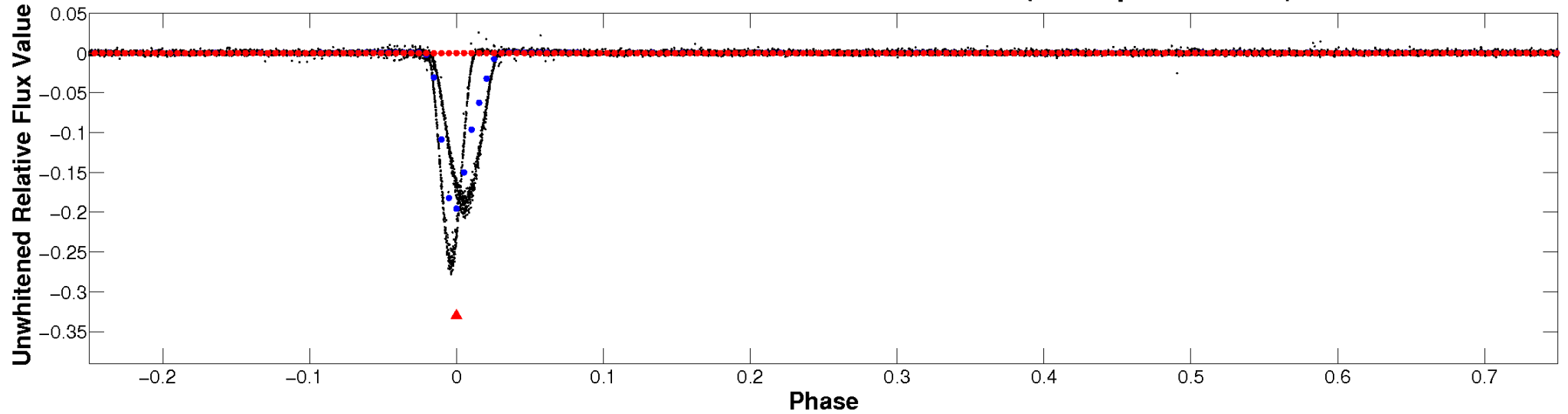
ALT Odd/Even

TCE 003348093-01



Non-Whitened Vs. Whitened Light Curve

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

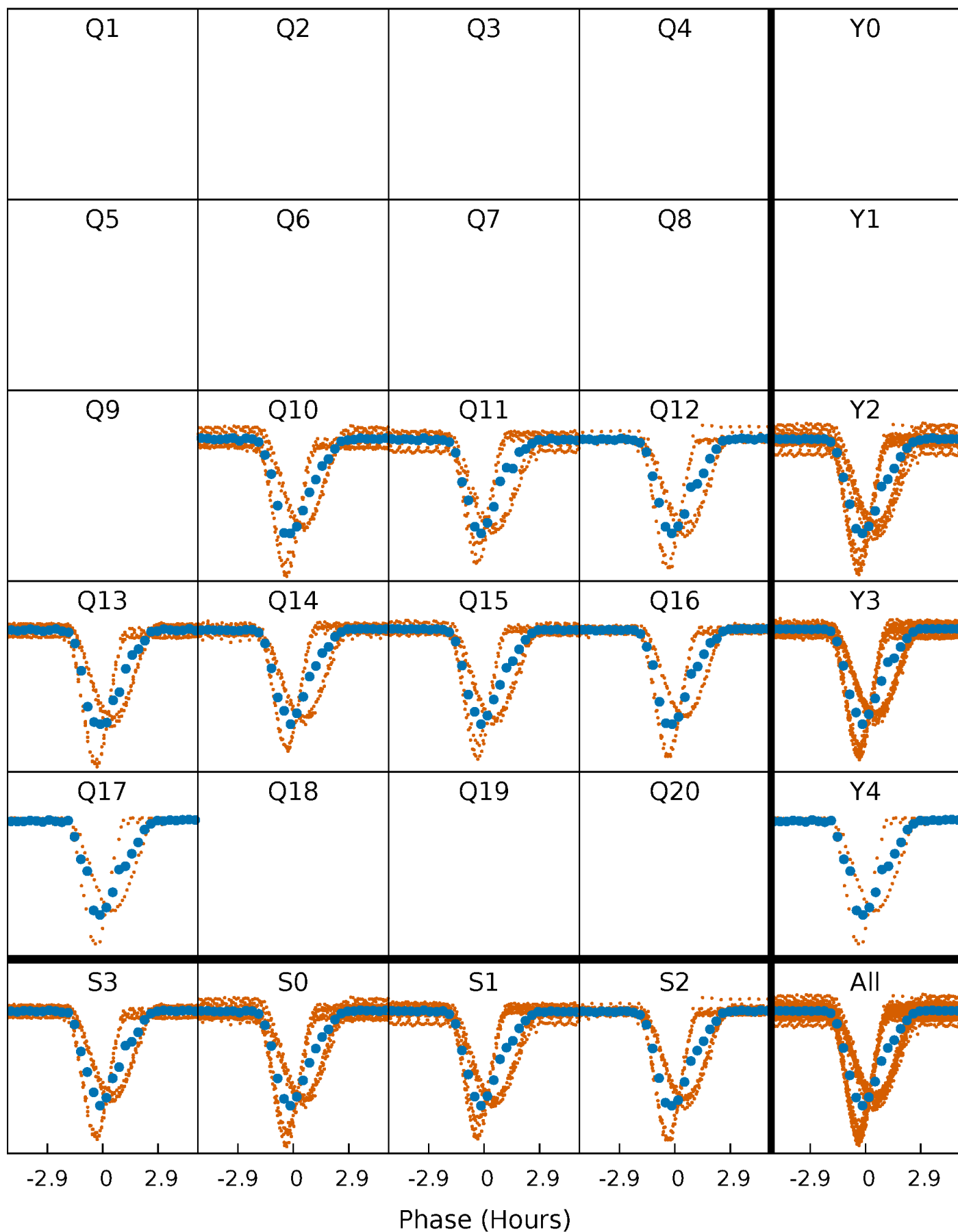


Planet 1 : Phased Whitened Flux Time Series (TPS Epoch/Period)



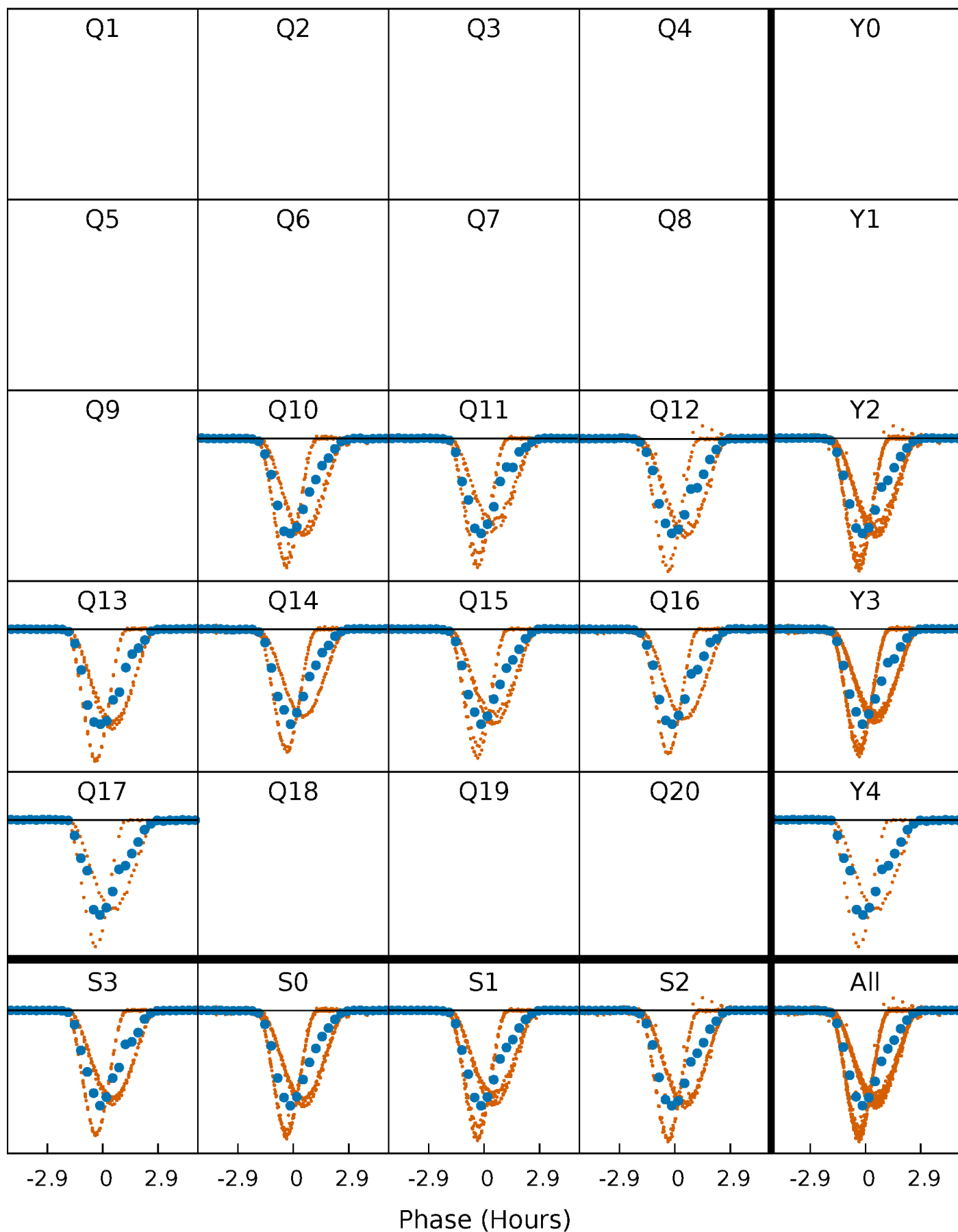
PDC Quarter-Phased Transit Curves

TCE 003348093-01 P= 3.982199 Days $T_0=131.542244$ (BKJD)



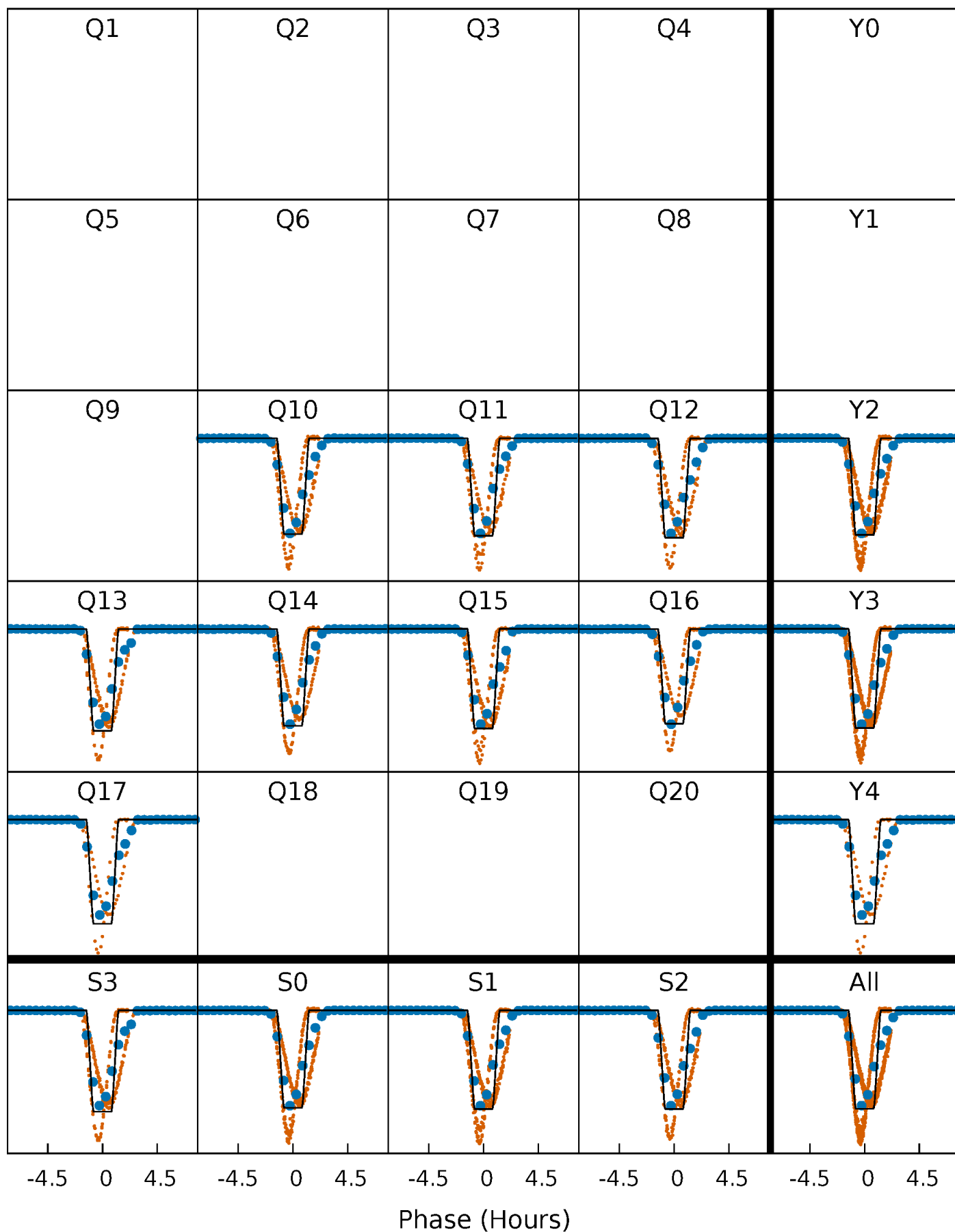
DV Quarter-Phased Transit Curves

TCE 003348093-01 P= 3.982199 Days $T_0=131.542244$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

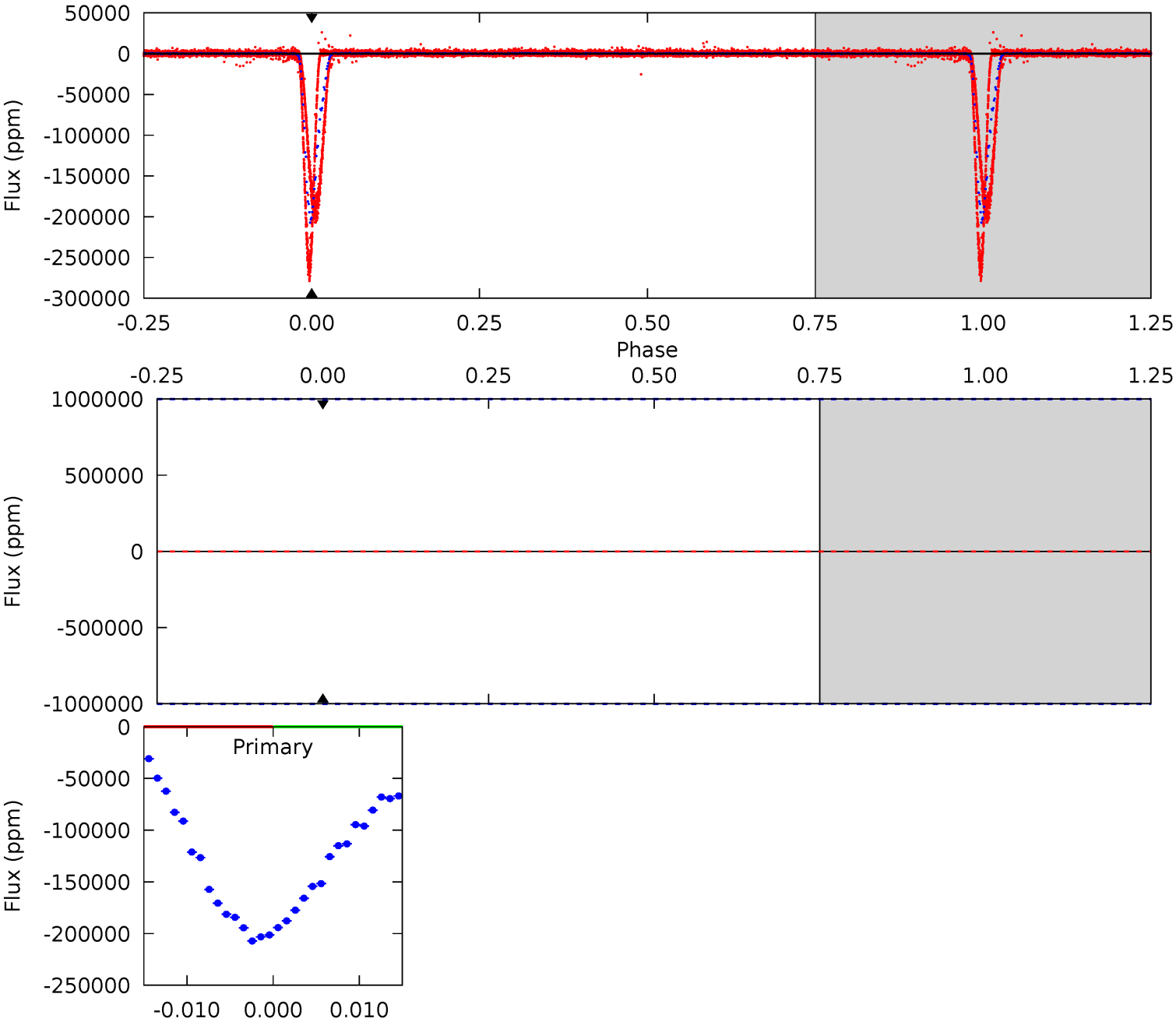
TCE 003348093-01 P= 3.982199 Days $T_0=131.542052$ (BKJD)



DV Model-Shift Uniqueness Test

003348093-01, P = 3.982199 Days, E = 131.542244 Days

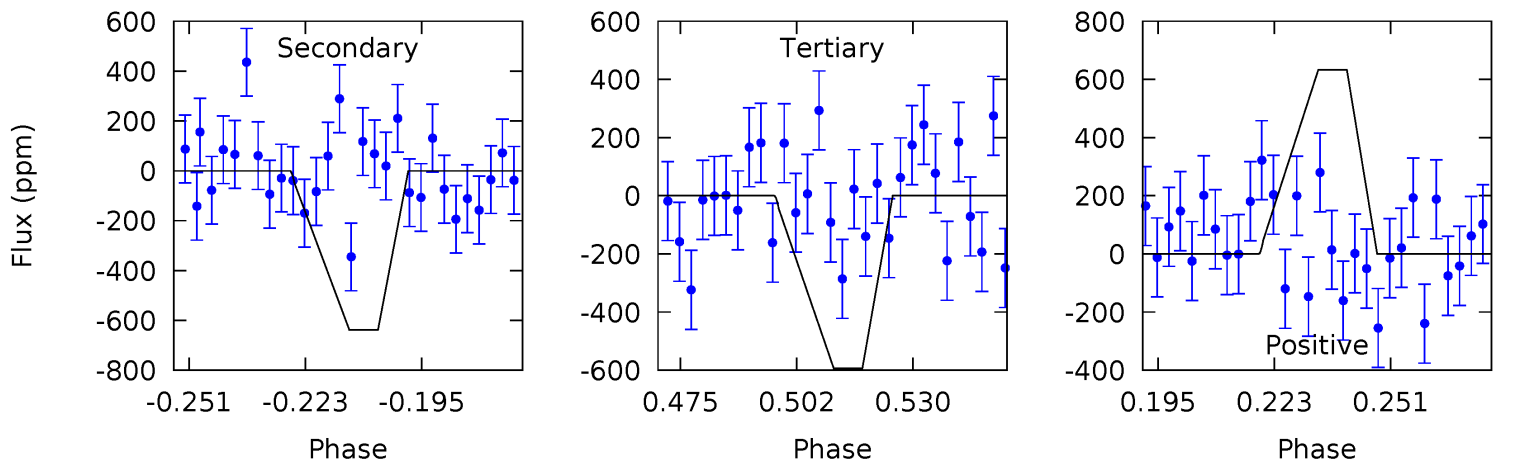
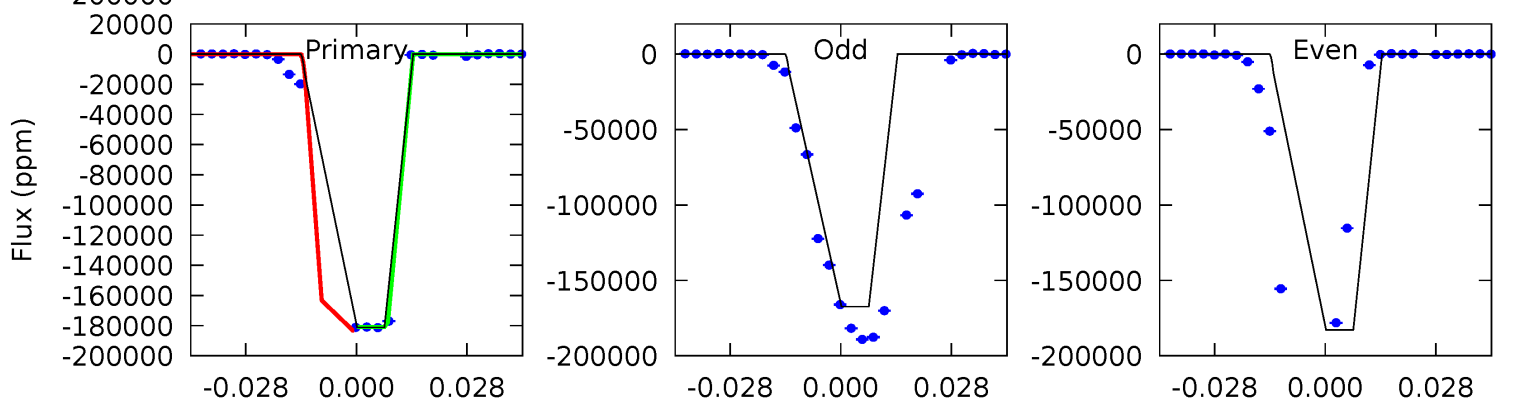
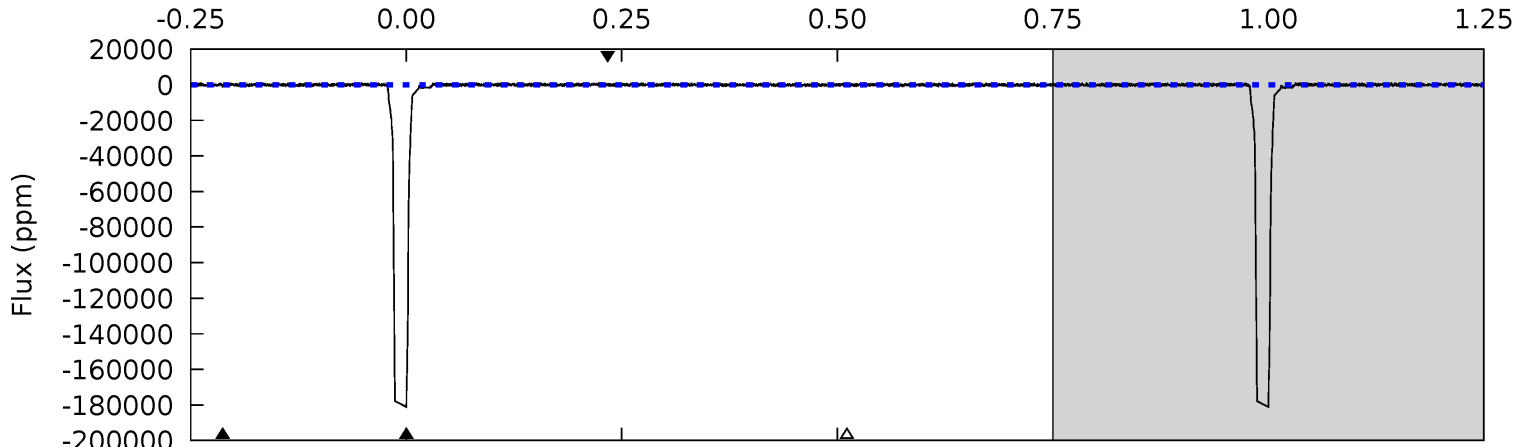
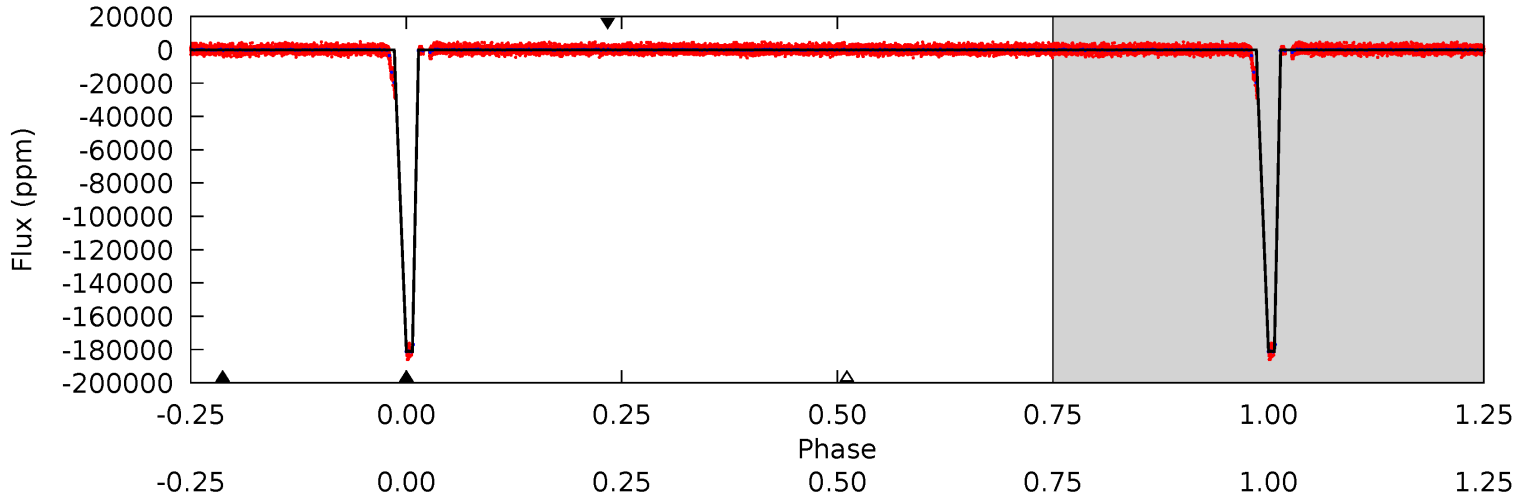
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

003348093-01, P = 3.982199 Days, E = 131.542052 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
1196	4.21	3.92	4.17	4.83	2.20	1.20	1192	1192	0.29	0.04	113.1	1.00	0.00	0



Stellar Parameters For KIC 003348093

	$T_{\text{eff}}(K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	4478^{+156}_{-156}	$4.578^{+0.060}_{-0.020}$	$0.160^{+0.250}_{-0.300}$	$0.715^{+0.034}_{-0.062}$	$0.706^{+0.054}_{-0.054}$	$2.718^{+0.692}_{-0.252}$
	+3%/-3%	+1%/-0%	+156%/-188%	+5%/-9%	+8%/-8%	+25%/-9%
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 003348093-01 / KOI 3590.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	0 ± 1000000	$34.51^{+8.49}_{-8.34}$	1106^{+43}_{-42}	-2129^{+6192}_{-1803}	$-0.905^{+104.149}_{-88.994}$
Alt.	-638 ± 151	$35.05^{+7.48}_{-7.76}$	1107^{+41}_{-43}	1856^{+198}_{-293}	$0.551^{+0.411}_{-0.214}$

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 $A_{\text{obs}} \gg 1.0$

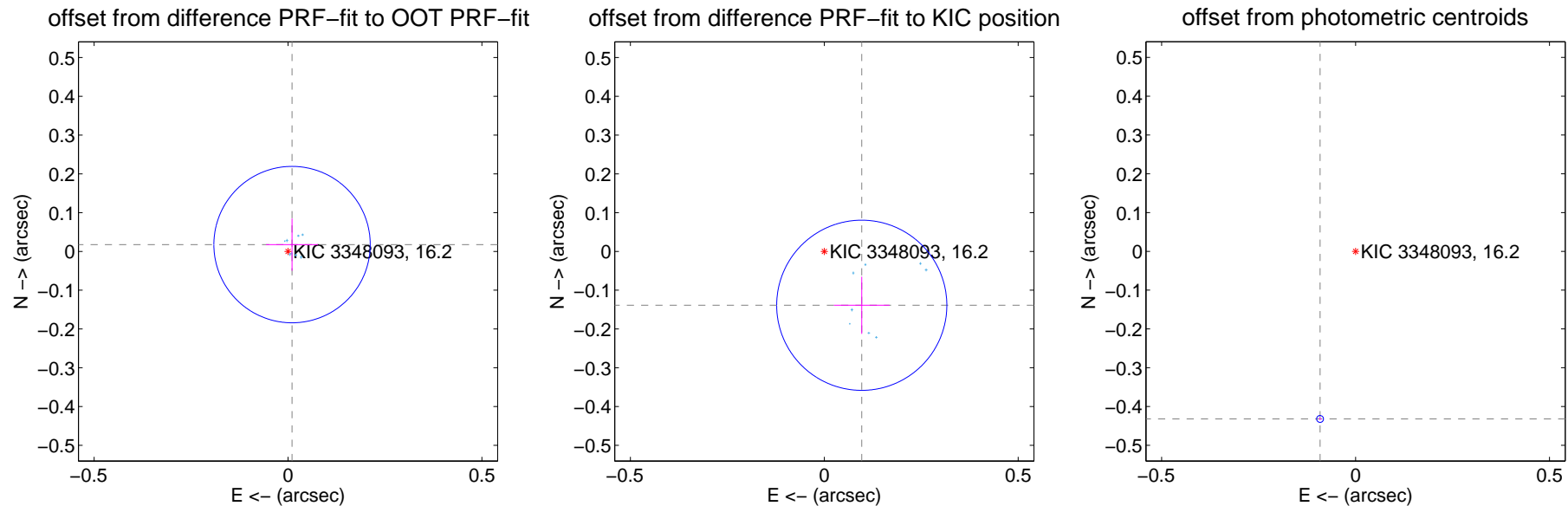
DV Centroid Data

Supplemental centroid analysis for 003348093-01. Kepler magnitude: 16.20. Transit SNR -1.00

There are 8 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.19 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.020 ± 0.067	0.30	-0.010 ± 0.067	0.018 ± 0.067
PRF-fit source offset from KIC position	0.169 ± 0.073	2.31	-0.097 ± 0.072	-0.139 ± 0.074
photometric centroid source offset	0.44 ± 0.00	149.34	0.09 ± 0.00	-0.43 ± 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.

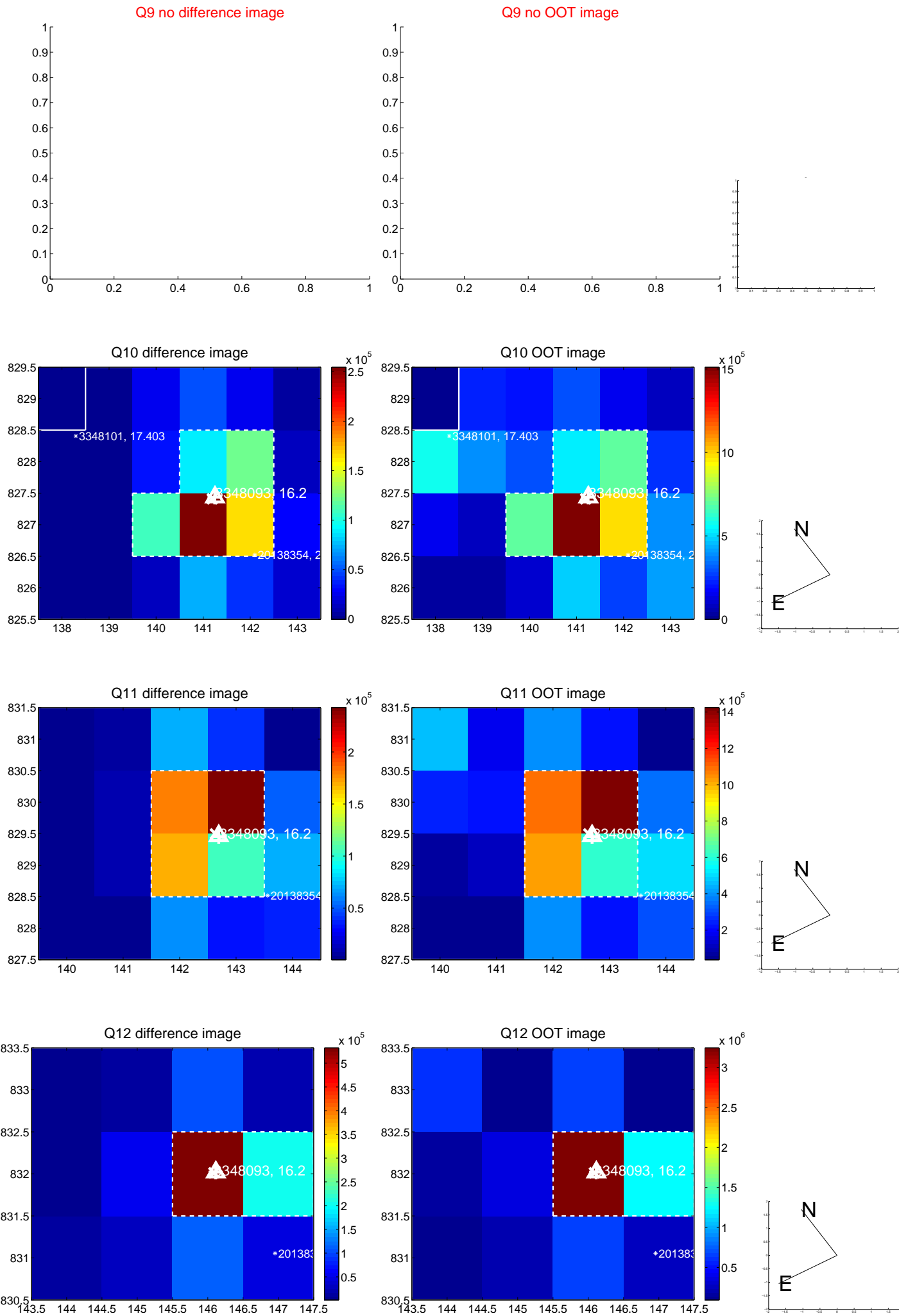
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



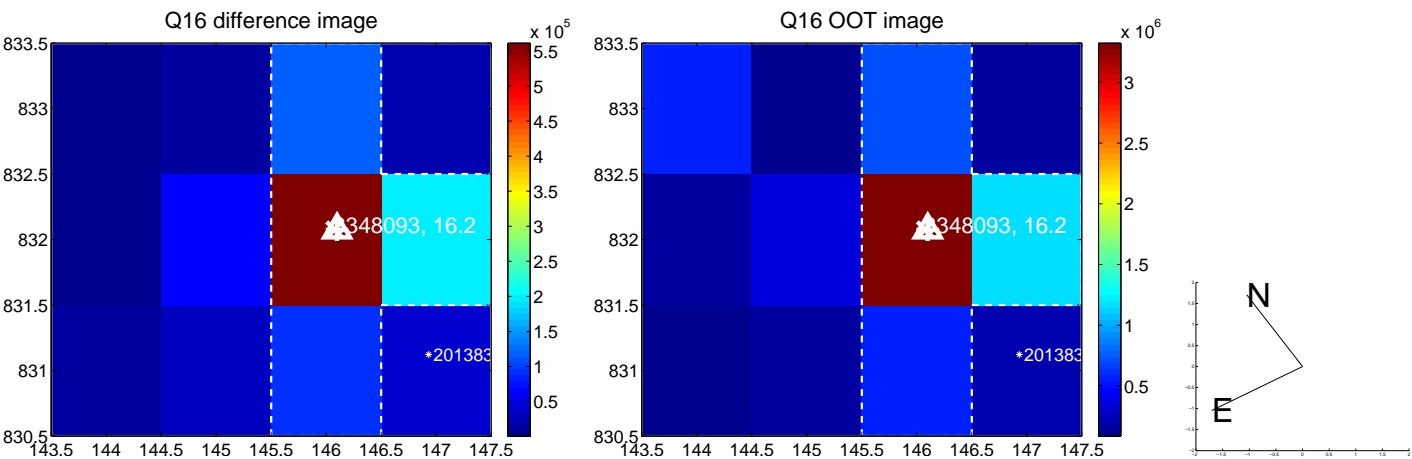
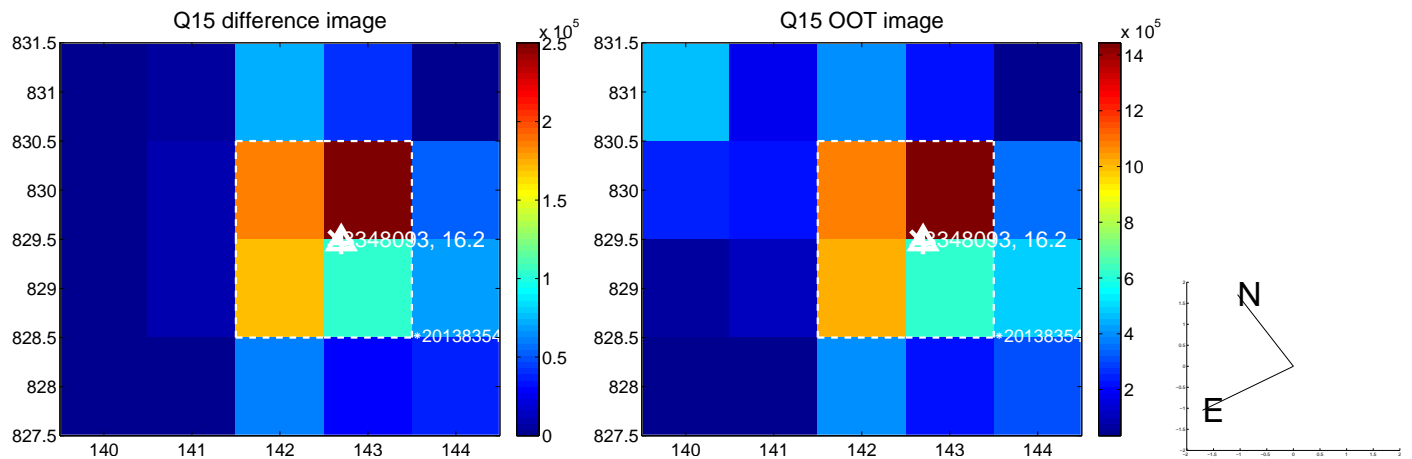
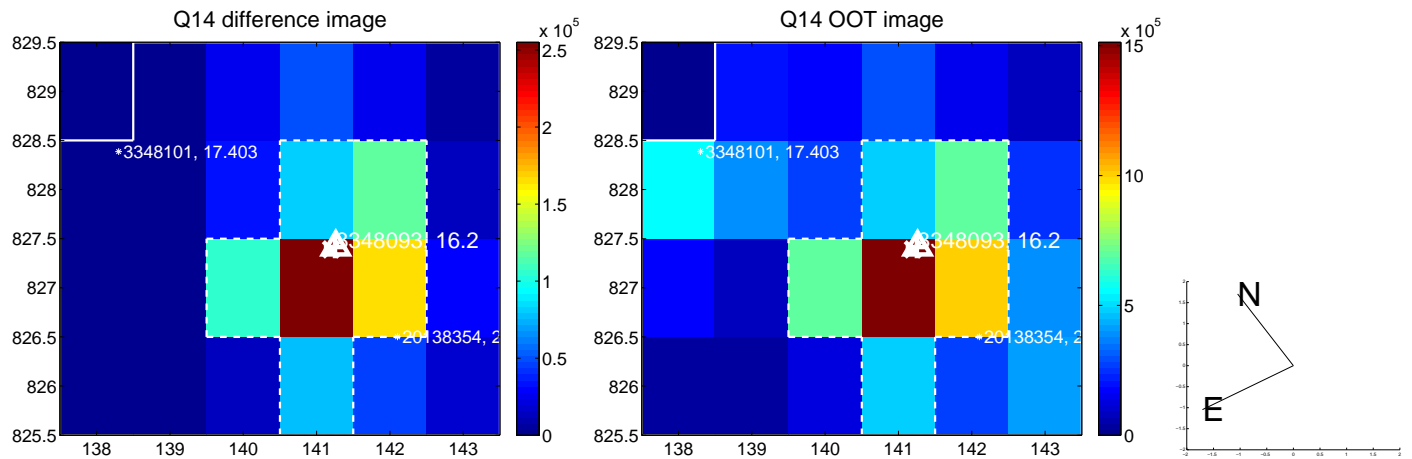
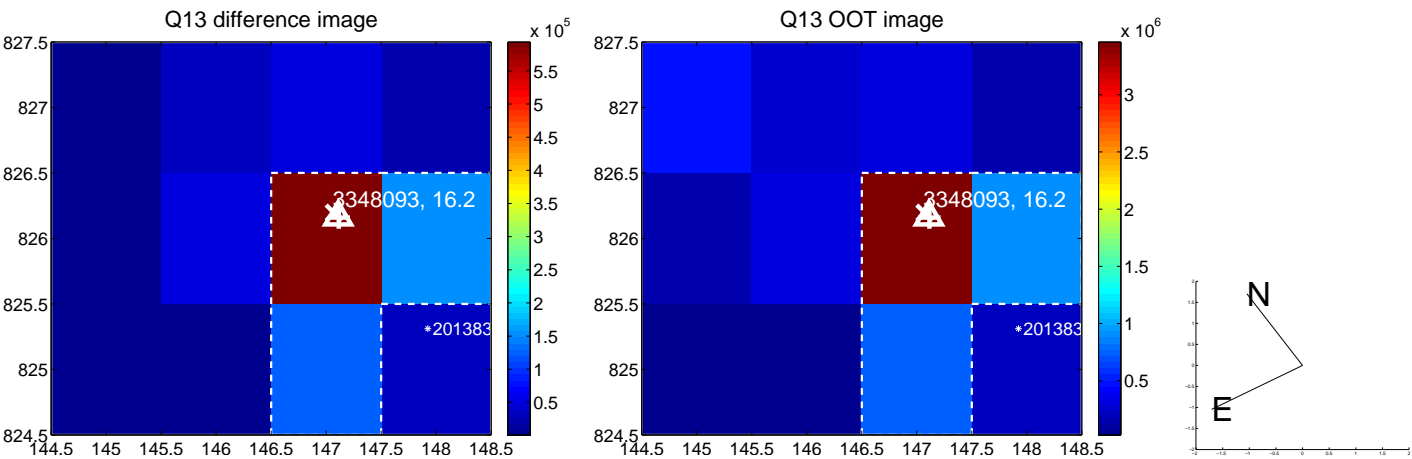
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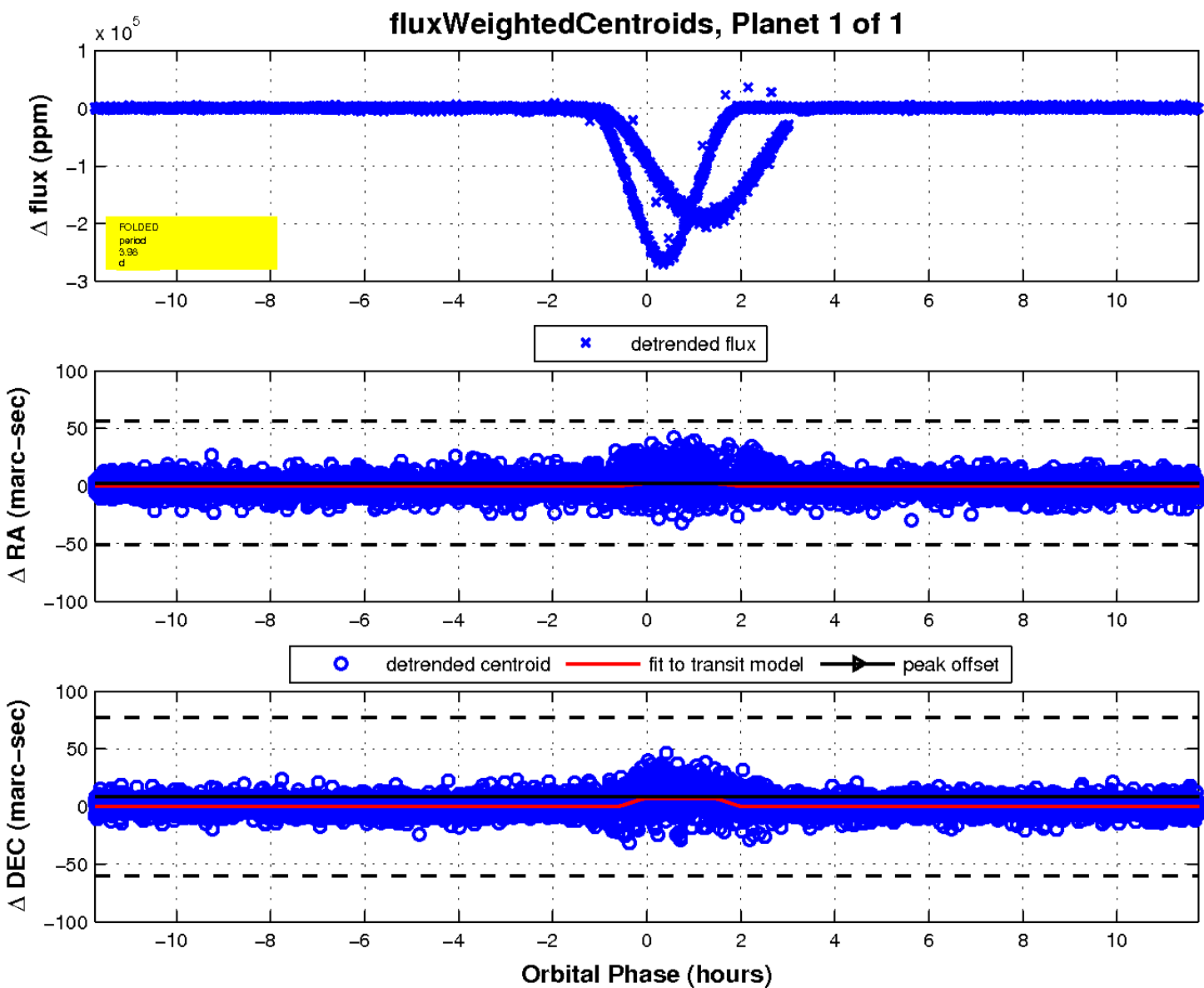
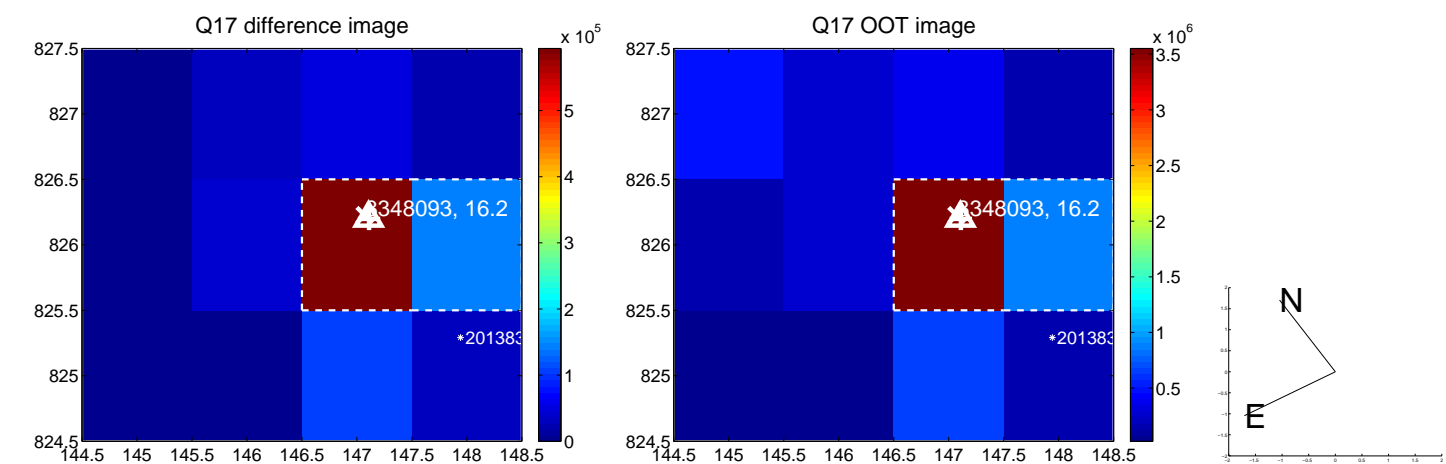
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UKIRT Image

Declination

