

KIC 010924853

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})
010924853-01	OBS	1292.01	2.102399	132.297150	1182.0	1.563	79.5	84.3	0.96	5999	3.92	1003.39

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010924853-01	OBS	FP	0.00	0	0	1	0	CENT_UNRESOLVED_OFFSET

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.

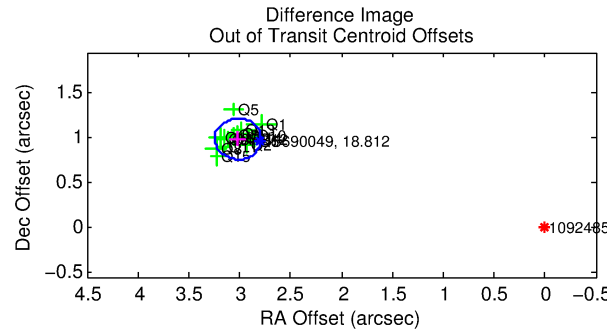
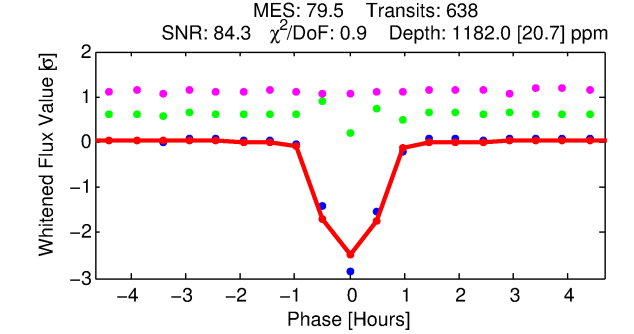
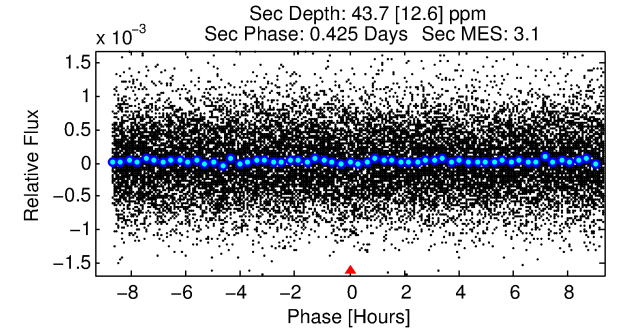
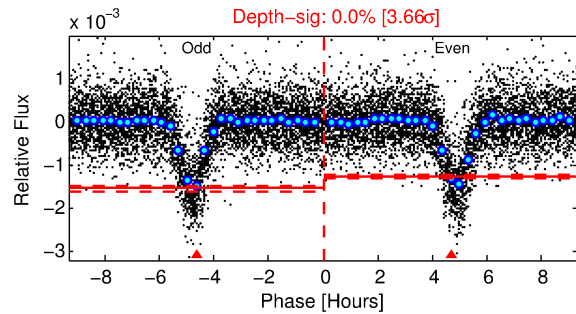
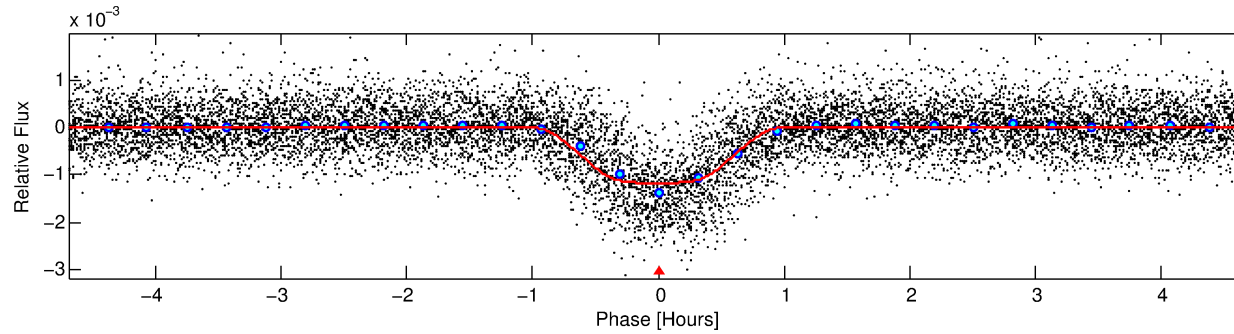
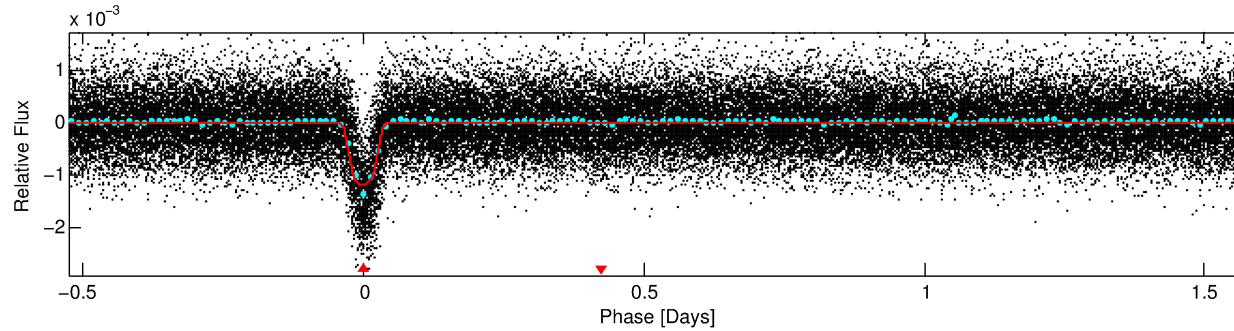
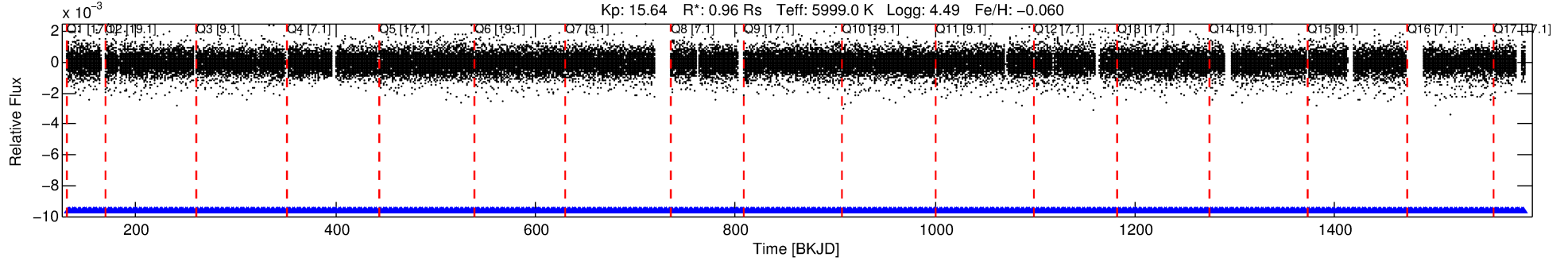
Ephemeris Match Information For 010924853-01

No Significant Match Found

DV One-Page Summary

KIC: 10924853 Candidate: 1 of 1 Period: 2.102 d
KOI: K01292.01 Corr: 0.936

Kp: 15.64 R*: 0.96 Rs Teff: 5999.0 K Logg: 4.49 Fe/H: -0.060



DV Fit Results:

Period = 2.10240 [0.00000] d
Epoch = 132.2971 [0.0003] BKJD
Rp/R* = 0.0375 [0.0015]
a/R* = 5.36 [0.93]
b = 0.90 [0.04]
Seff = 1003.39 [389.82]
Teff = 1435 [139] K
Rp = 3.92 [1.18] Re
a = 0.0326 [0.0082] AU
Ag = 1.67 [0.79] [0.85σ]
Teffp = 2521 [206] K [4.36σ]

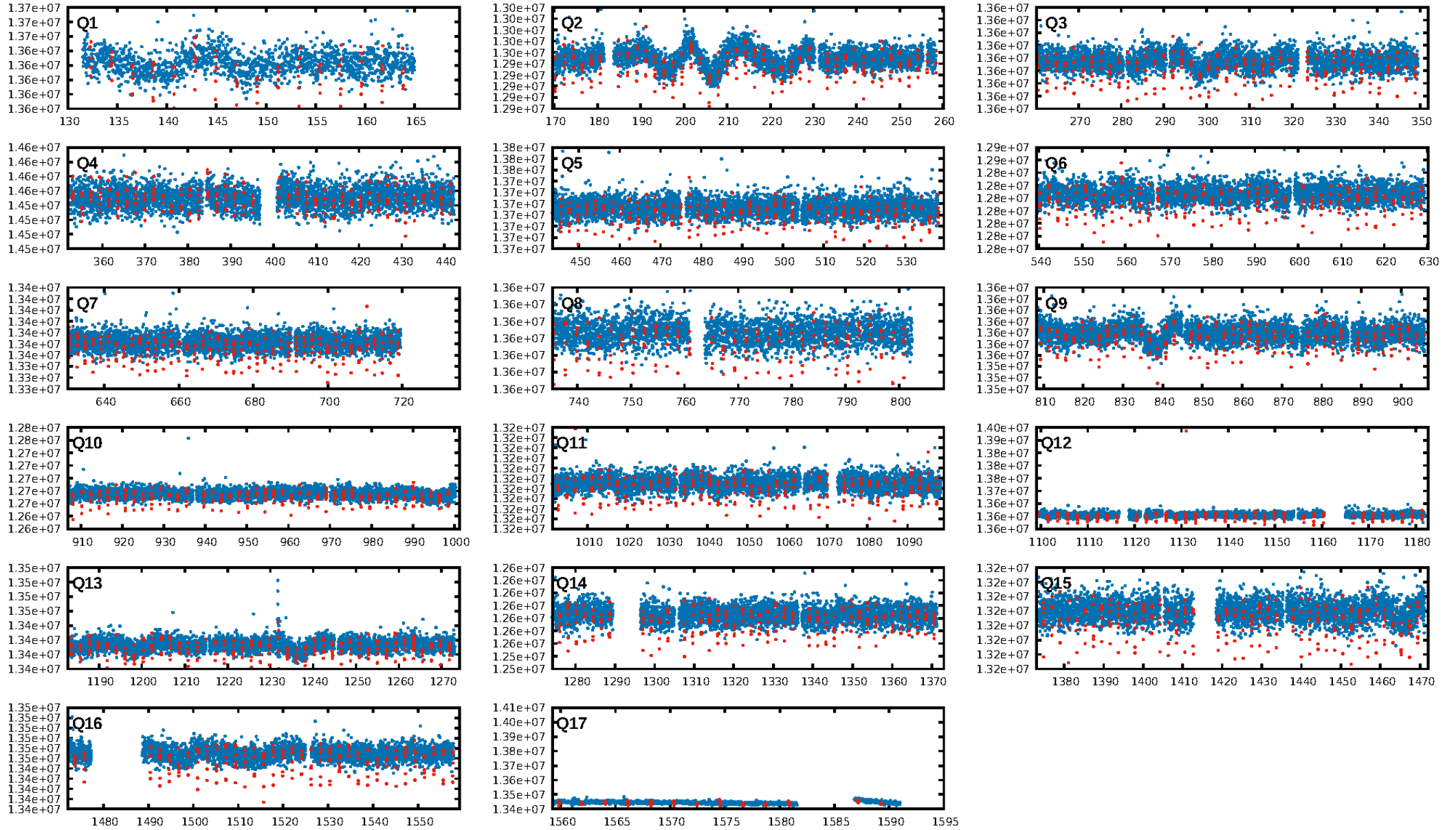
DV Diagnostic Results:

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 [609/609]
GhostDiagnostic-chr: 0.8277
Centroid-sig: 0.0%
Centroid-so: 5.087 arcsec [36.22σ]
OotOffset-rm: 3.173 arcsec [41.91σ]
KicOffset-rm: 3.036 arcsec [39.18σ]
OotOffset-st: 4/4/4/4 [16]
KicOffset-st: 4/4/4/4 [16]
DiffImageQuality-fgm: 1.00 [16/16]
DiffImageOverlap-fno: 1.00 [17/17]

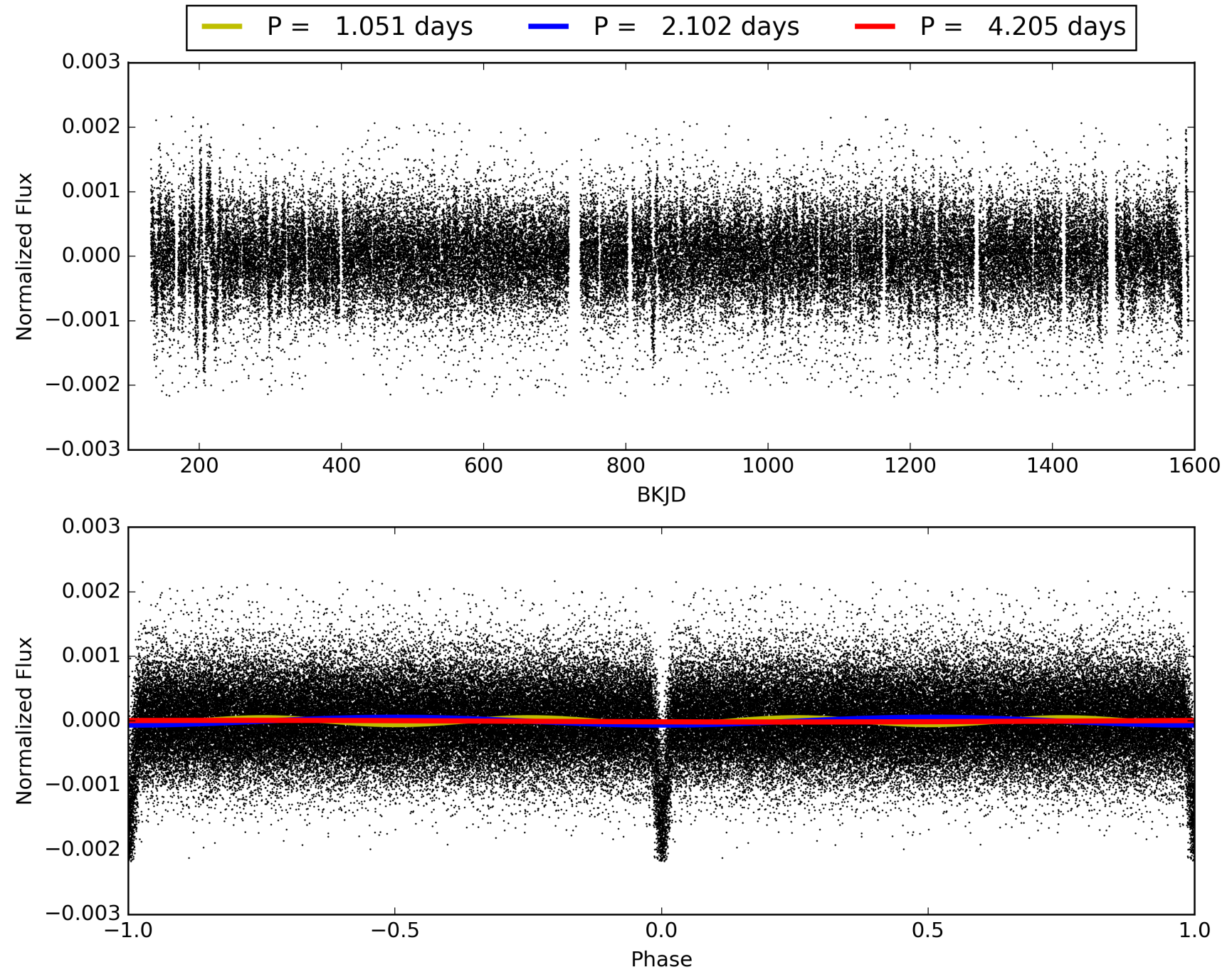
Software Revision: svn-ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 01:39:48 Z

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

TCE 010924853-01, PDC Light Curves

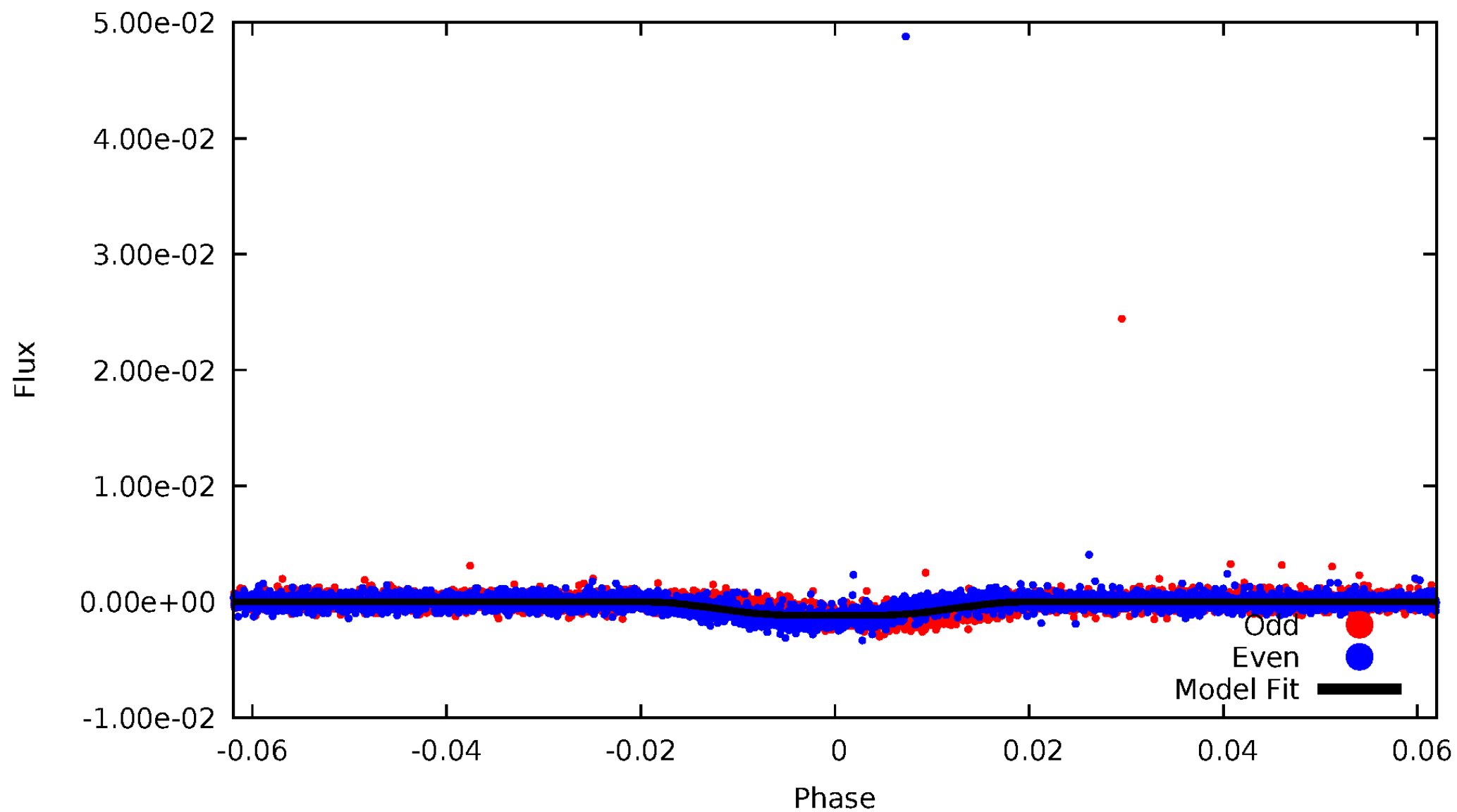


TCE 010924853-01



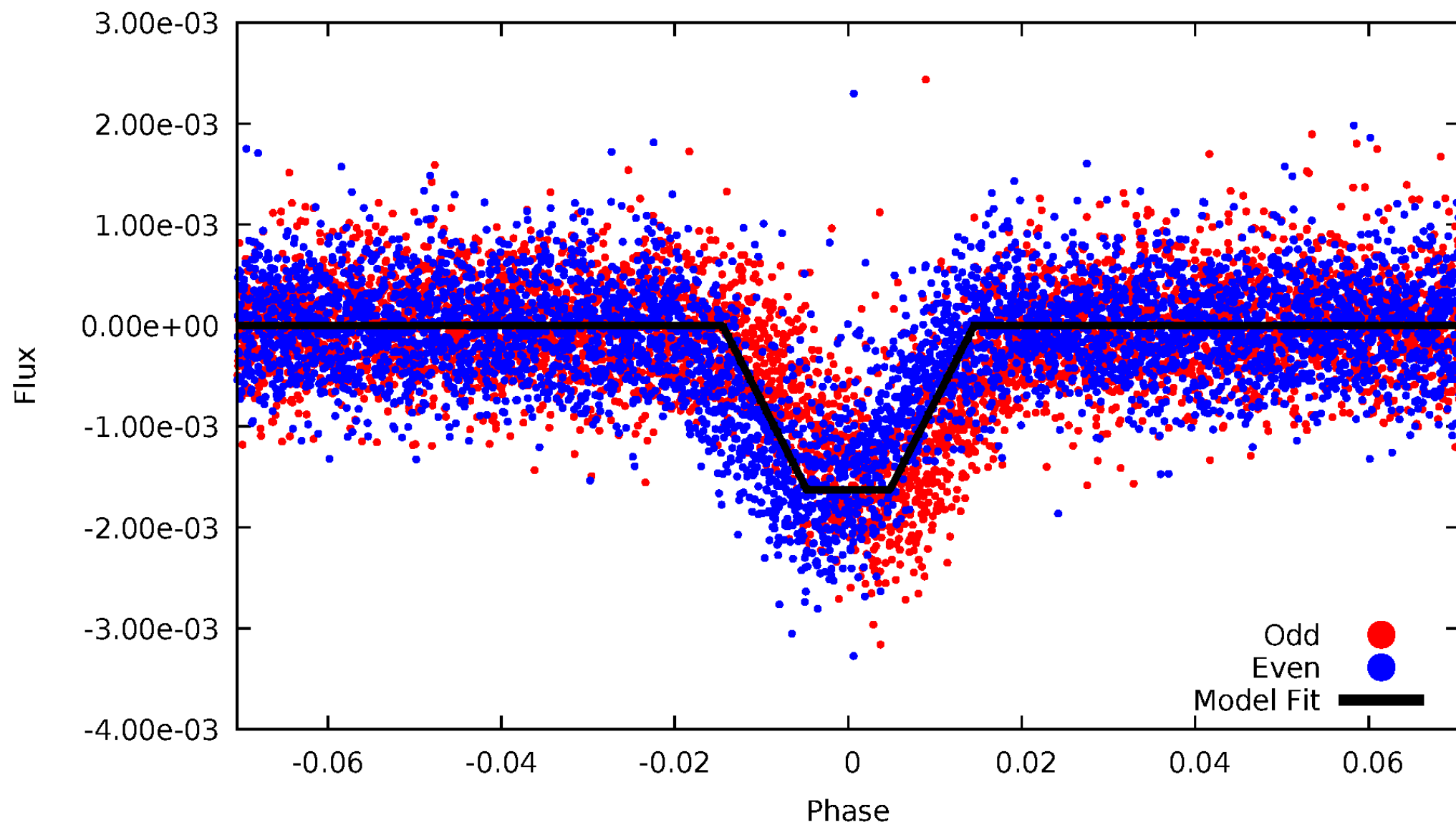
DV Odd/Even

TCE 010924853-01



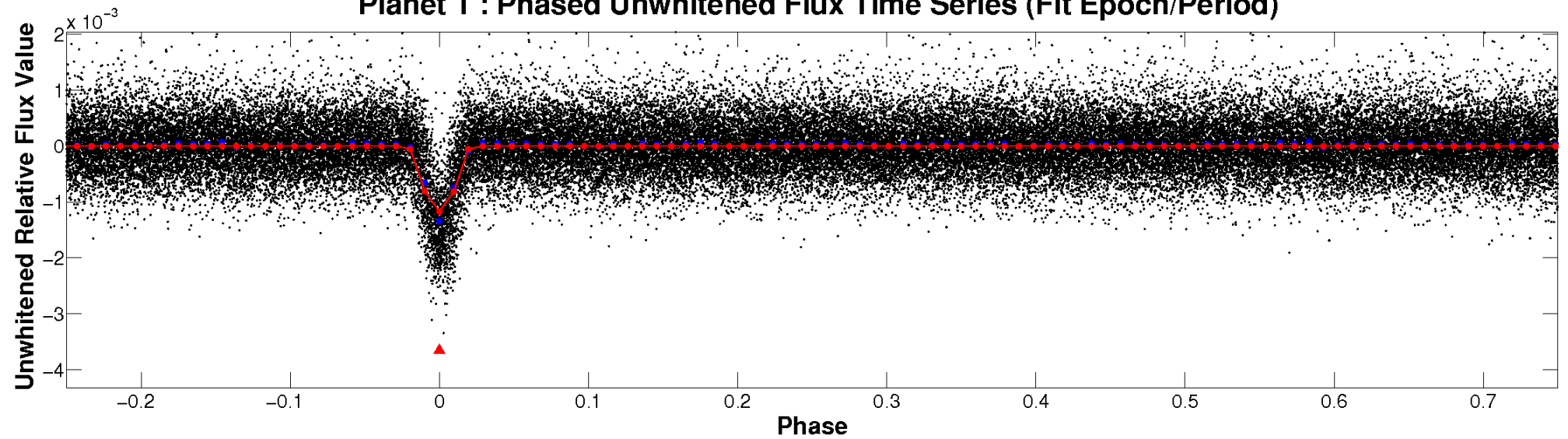
ALT Odd/Even

TCE 010924853-01

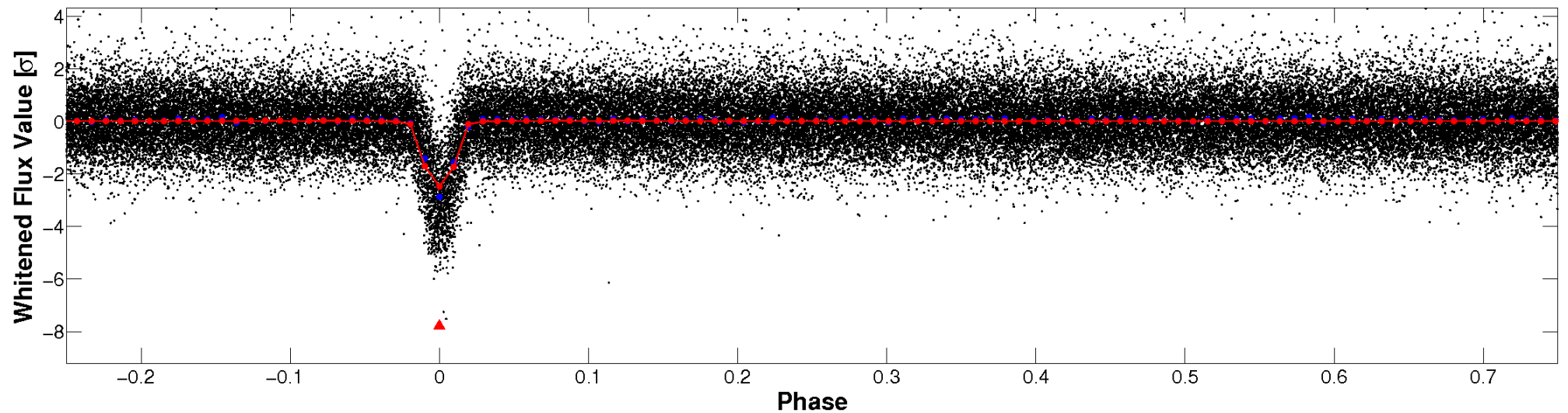


Non-Whitened Vs. Whitened Light Curve

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

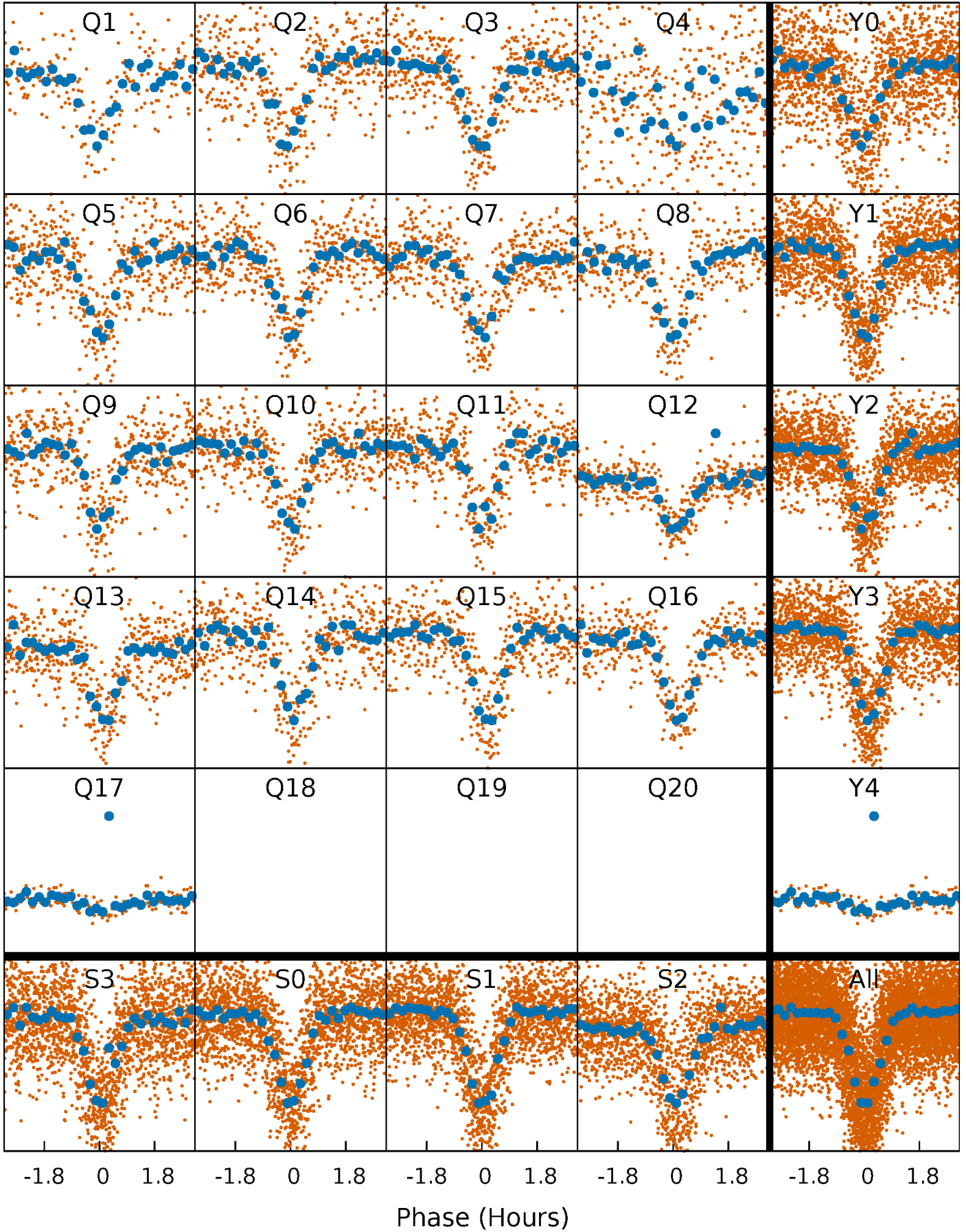


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



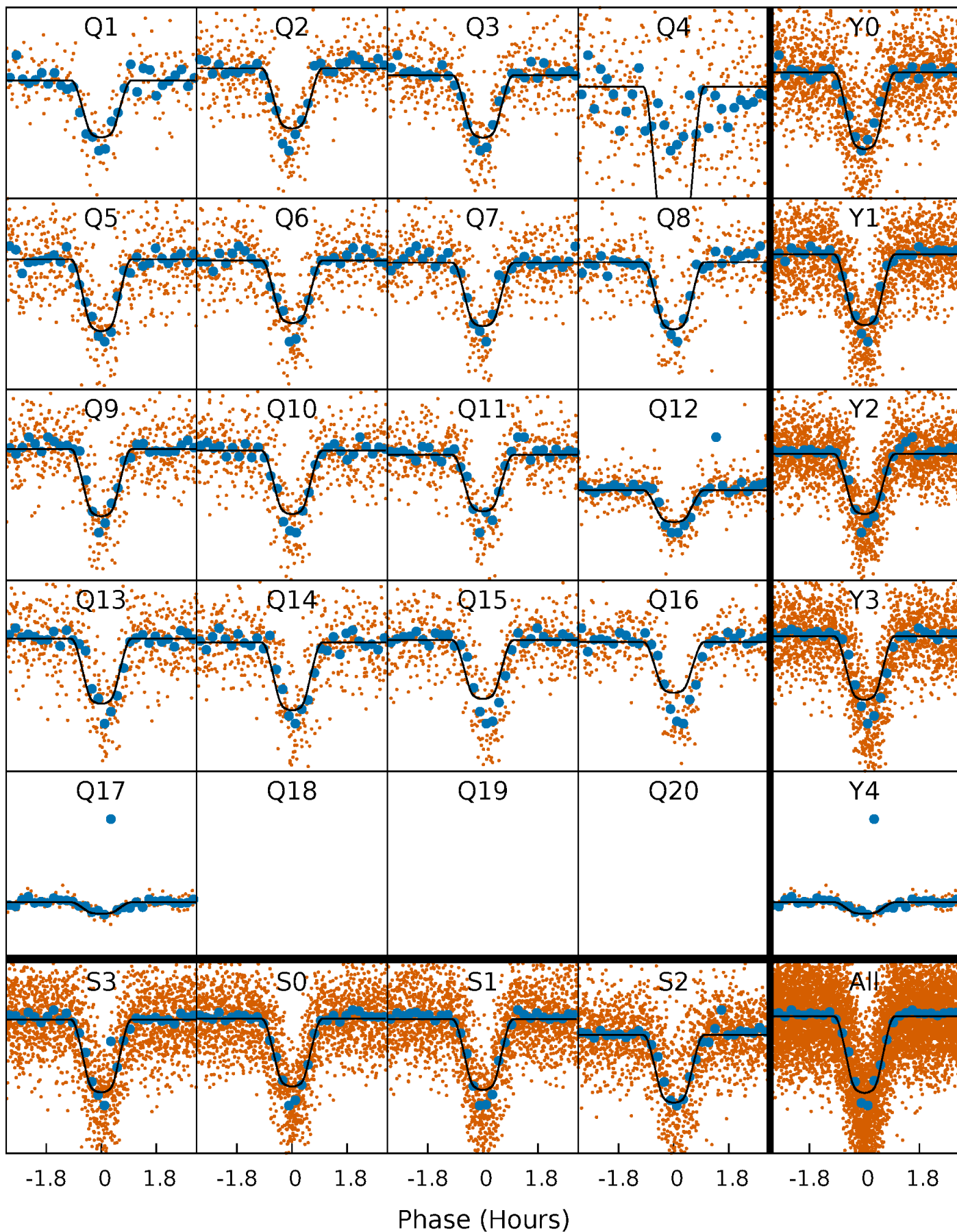
PDC Quarter-Phased Transit Curves

TCE 010924853-01 P= 2.102399 Days $T_0=132.297150$ (BKJD)



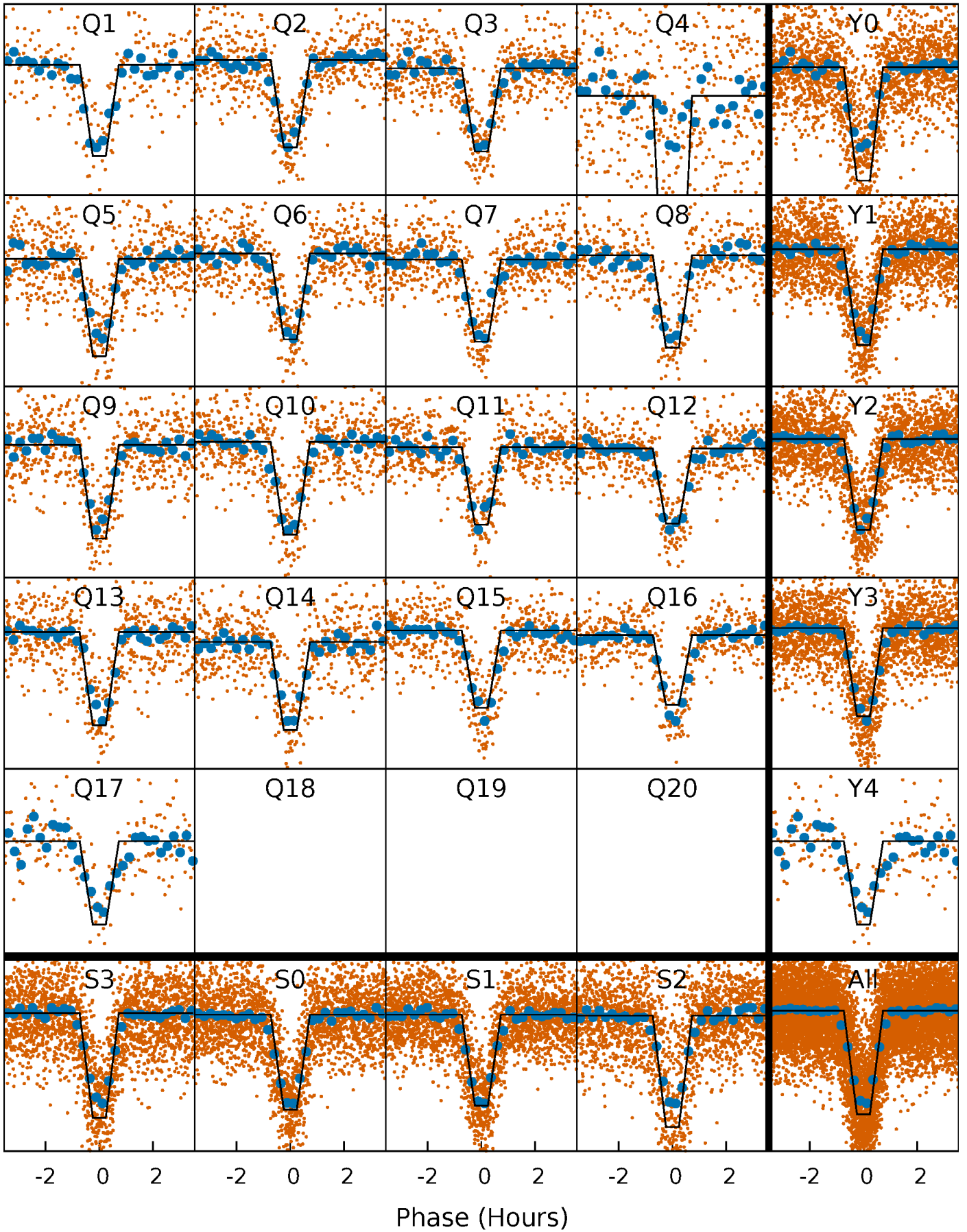
DV Quarter-Phased Transit Curves

TCE 010924853-01 P= 2.102399 Days $T_0=132.297150$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

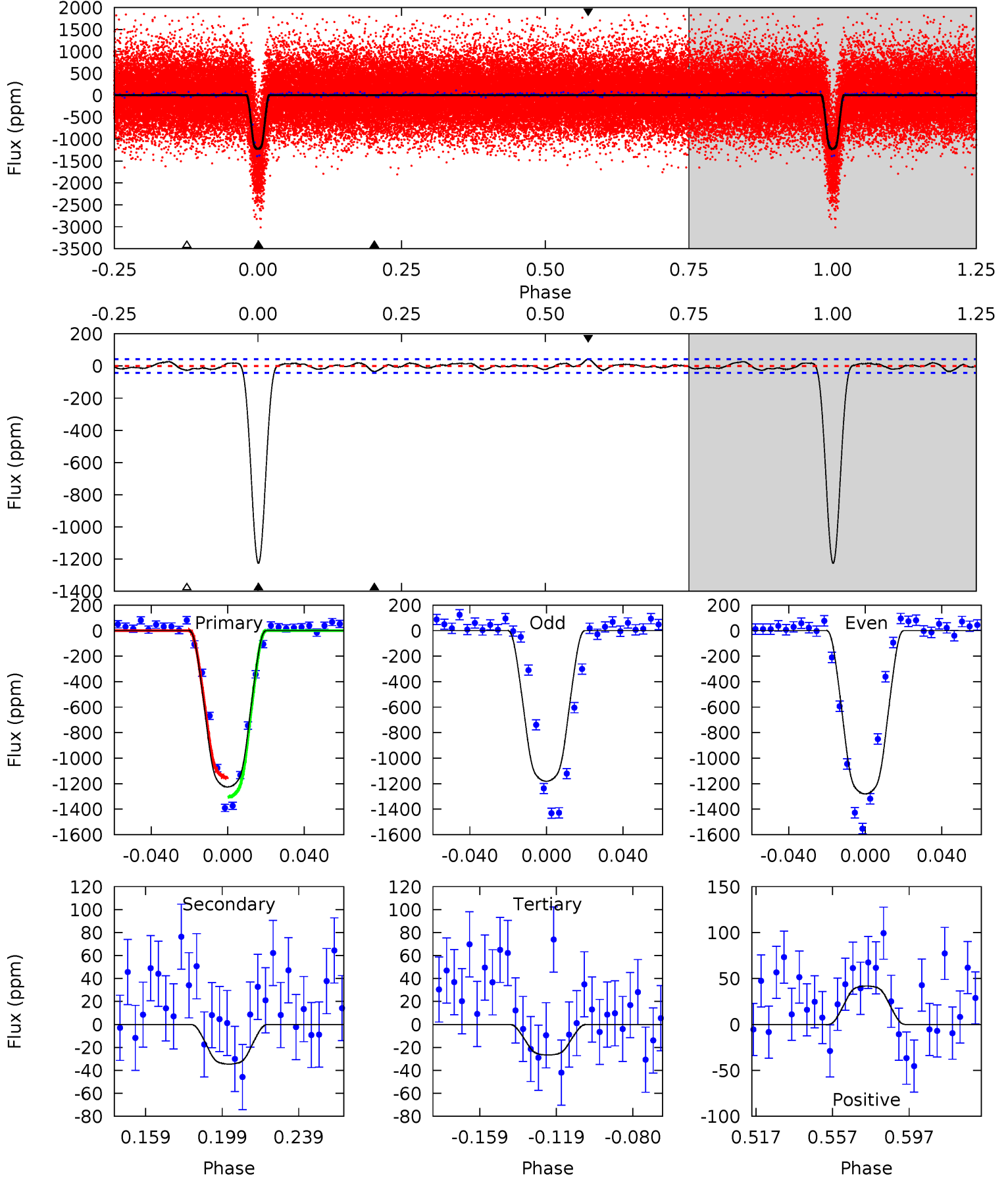
TCE 010924853-01 P= 2.102409 Days $T_0=132.295346$ (BKJD)



DV Model-Shift Uniqueness Test

010924853-01, P = 2.102399 Days, E = 130.194751 Days

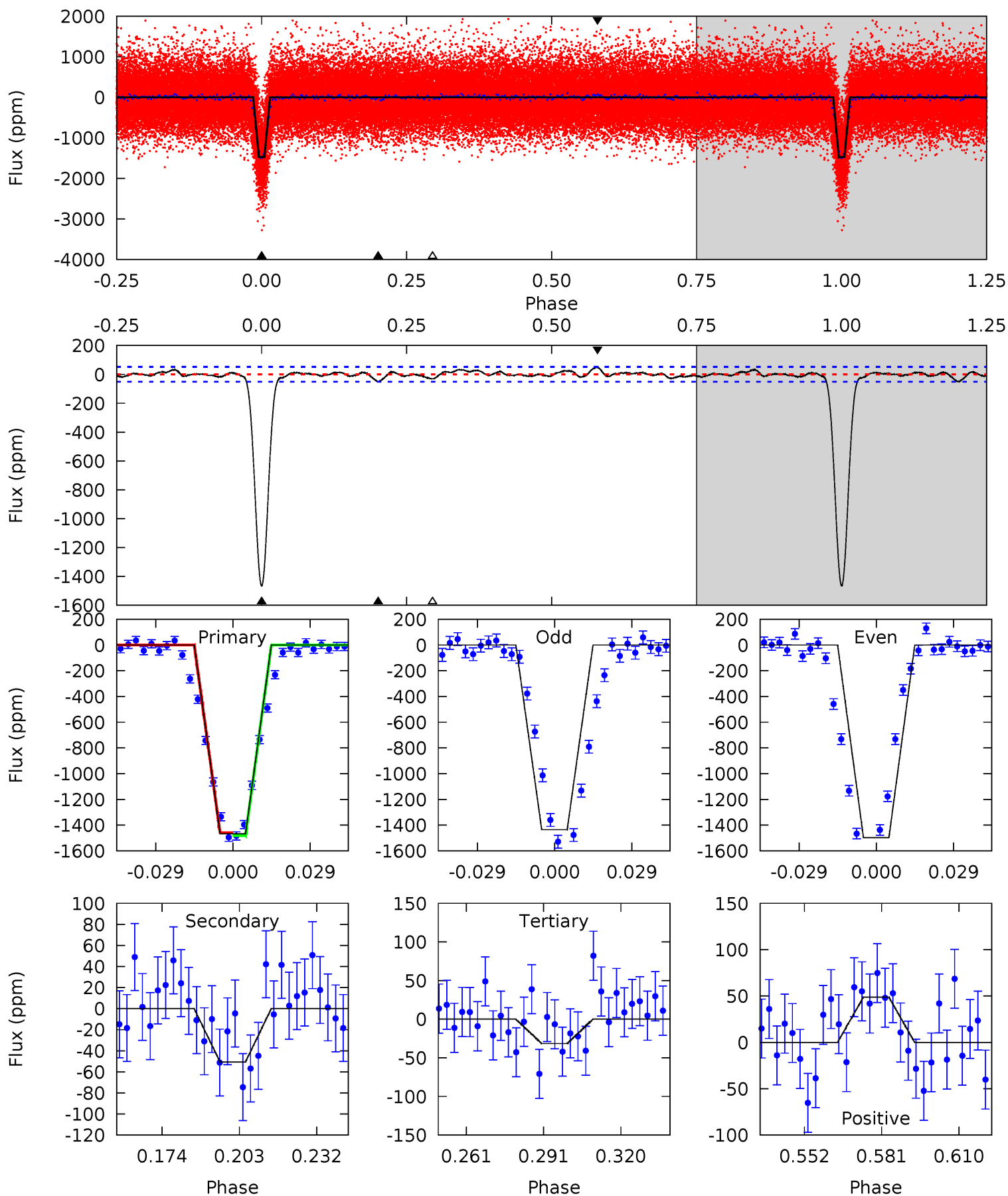
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
135.8	3.83	2.95	4.63	4.75	2.06	1.43	132.9	131.2	0.88	-0.81	5.50	0.95	0.03	8.59



Alt Model-Shift Uniqueness Test

010924853-01, P = 2.102409 Days, E = 130.192937 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
137.8	4.75	2.97	4.59	4.82	2.18	1.34	134.8	133.2	1.79	0.17	2.90	0.96	0.03	1.07



Stellar Parameters For KIC 010924853

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5999^{+180}_{-198}	$4.494^{+0.050}_{-0.200}$	$-0.060^{+0.250}_{-0.300}$	$0.959^{+0.285}_{-0.095}$	$1.045^{+0.129}_{-0.142}$	$1.670^{+0.436}_{-0.840}$
	+3%/-3%	+1%/-4%	+417%/-500%	+30%/-10%	+12%/-14%	+26%/-50%
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 010924853-01 / KOI 1292.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-35 ± 9	$4.02^{+0.63}_{-0.36}$	2043^{+151}_{-99}	2908^{+145}_{-188}	$1.171^{+0.429}_{-0.377}$
Alt.	-51 ± 11	$4.36^{+0.64}_{-0.40}$	2050^{+145}_{-104}	3025^{+140}_{-141}	$1.477^{+0.454}_{-0.427}$

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 $A_{obs} \gg 1.0$

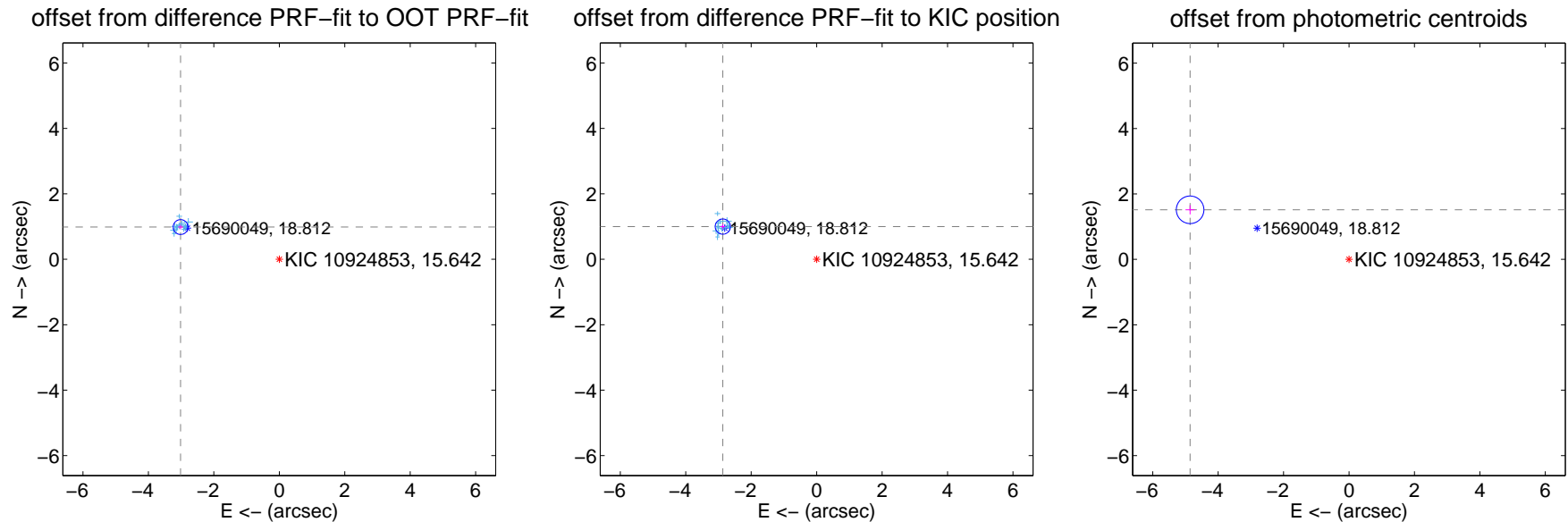
DV Centroid Data

Supplemental centroid analysis for 010924853-01. Kepler magnitude: 15.64. Transit SNR 84.33

There are 16 quarters with good PRF difference image offsets

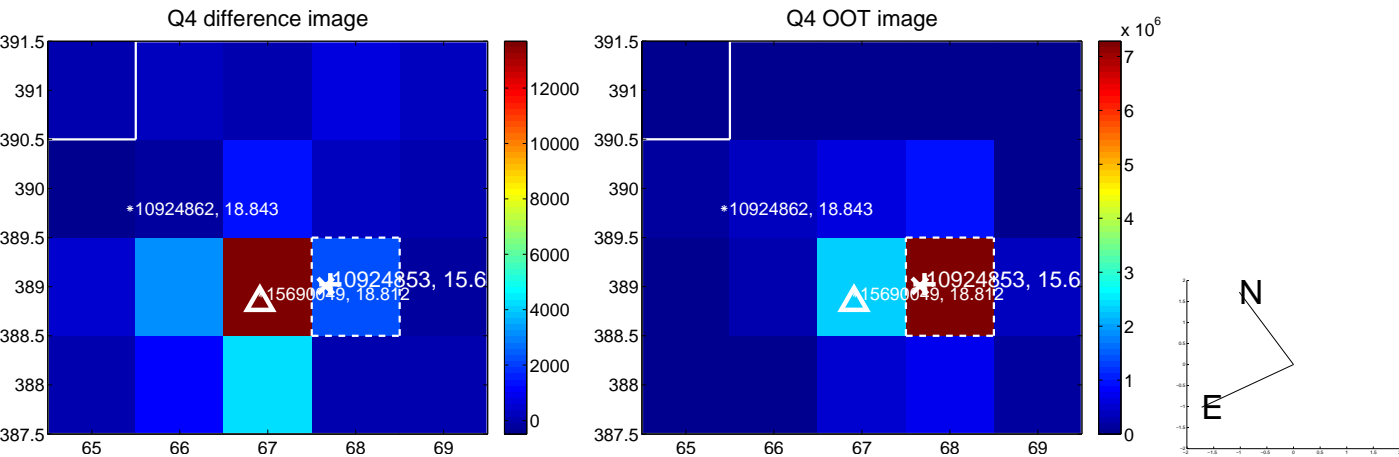
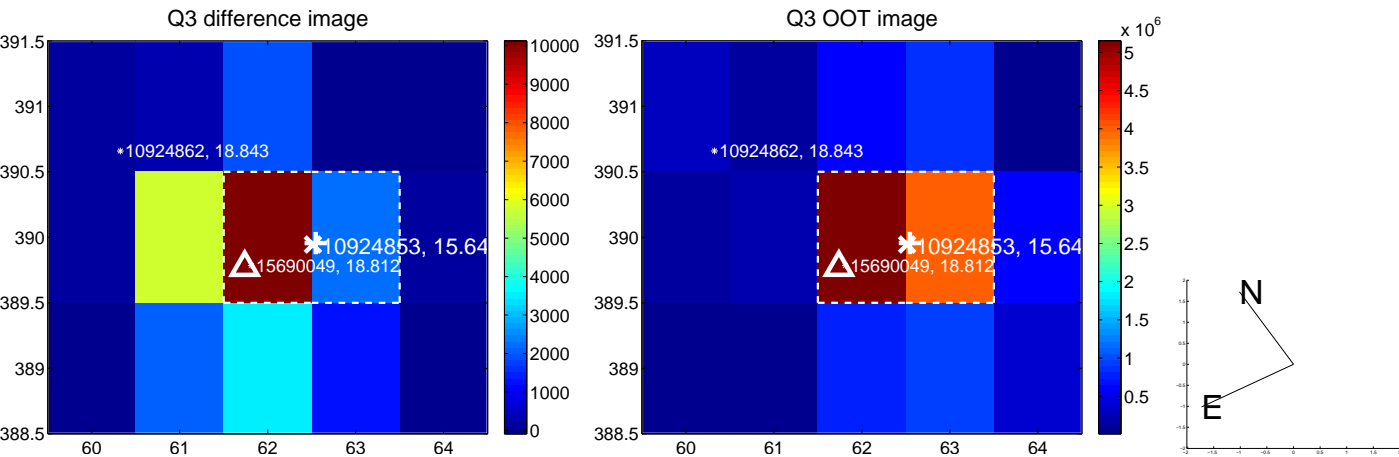
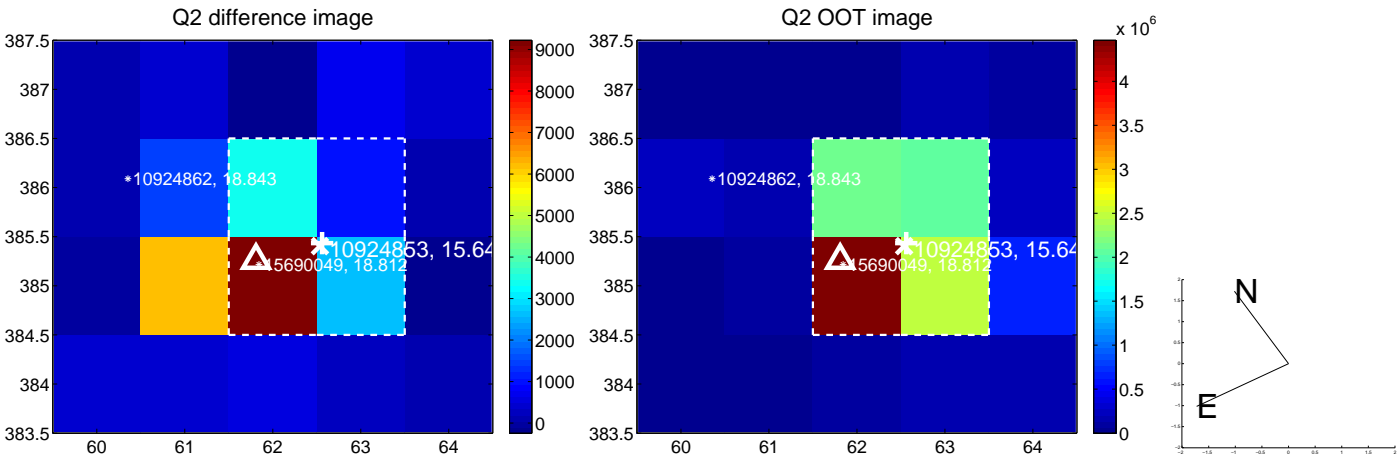
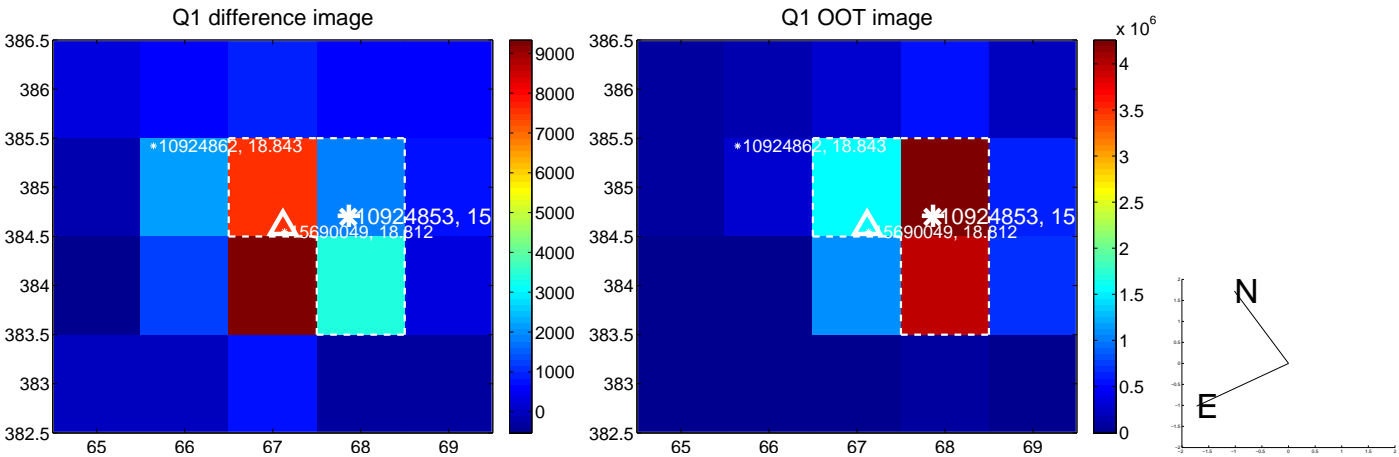
The direct PRF centroid is offset from the target star catalog position by about 0.17 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	3.173 ± 0.076	41.91	3.016 ± 0.076	0.986 ± 0.070
PRF-fit source offset from KIC position	3.036 ± 0.077	39.18	2.867 ± 0.078	0.999 ± 0.076
photometric centroid source offset	5.09 ± 0.14	36.22	4.86 ± 0.14	1.52 ± 0.14

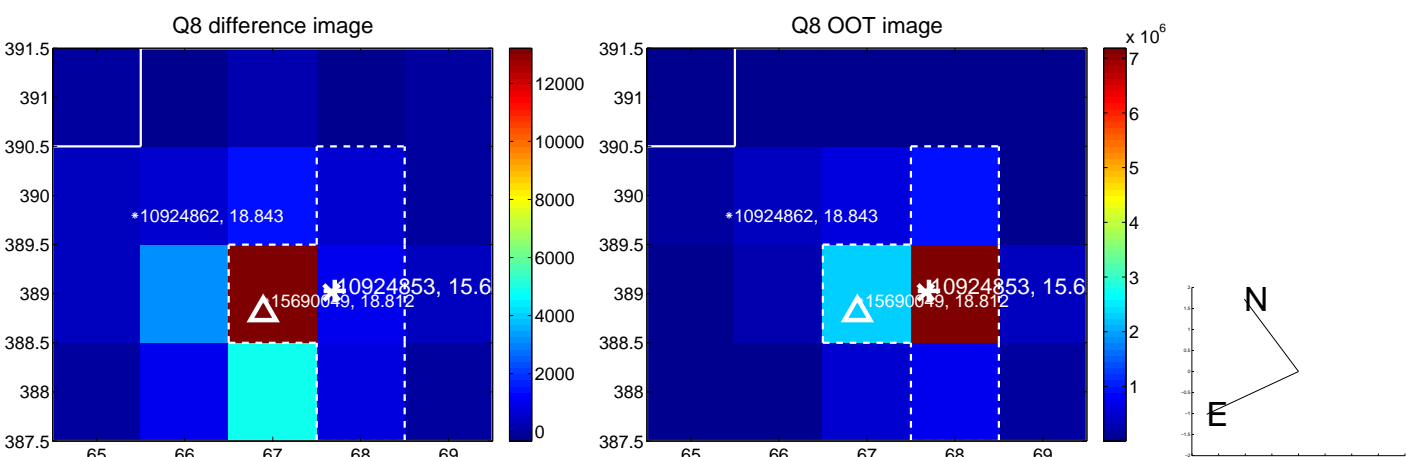
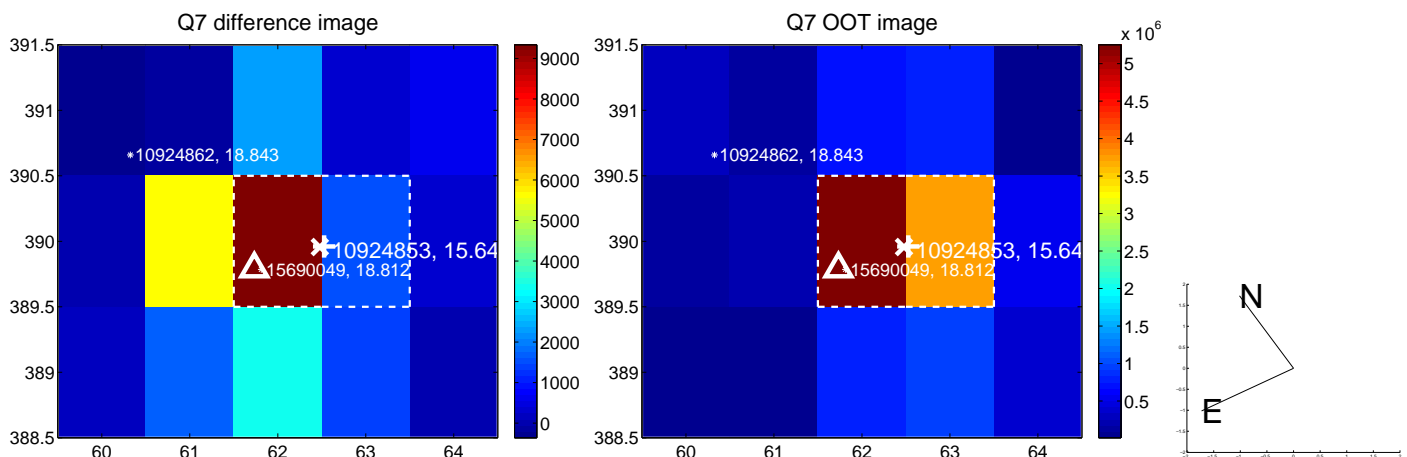
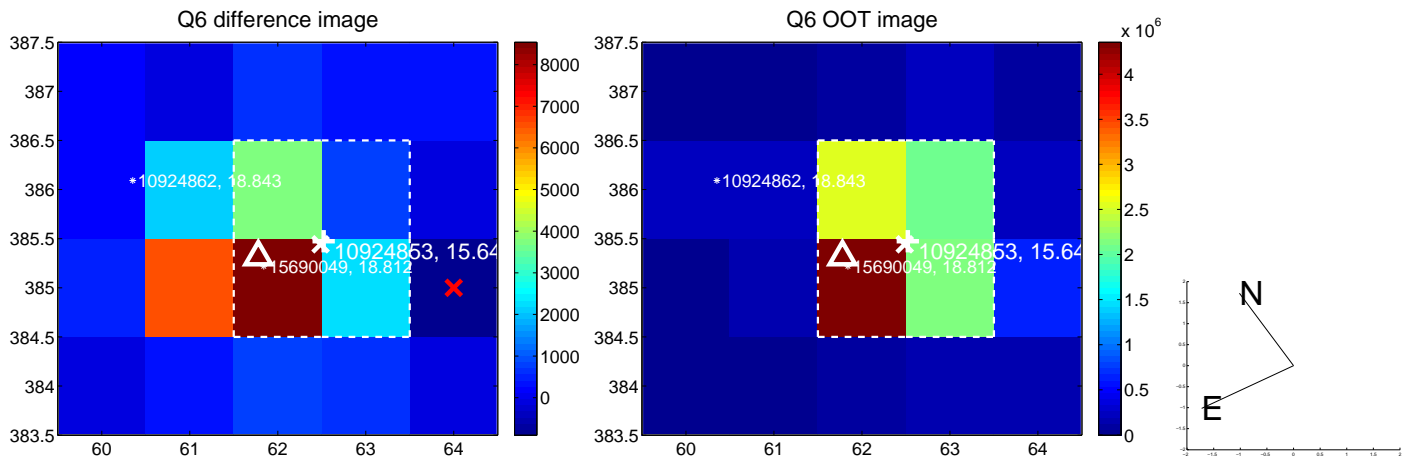
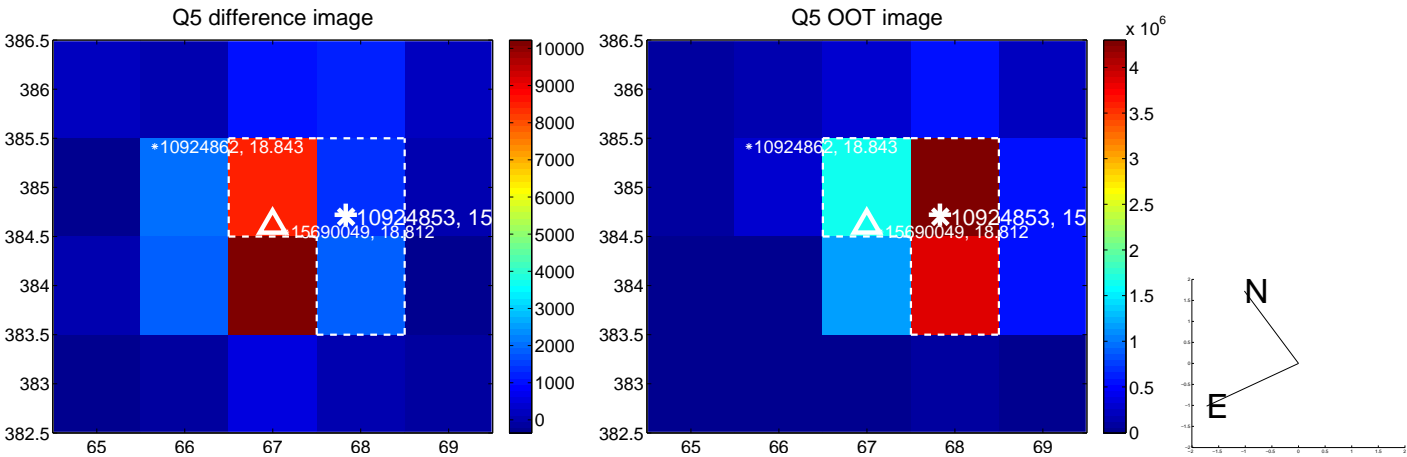


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

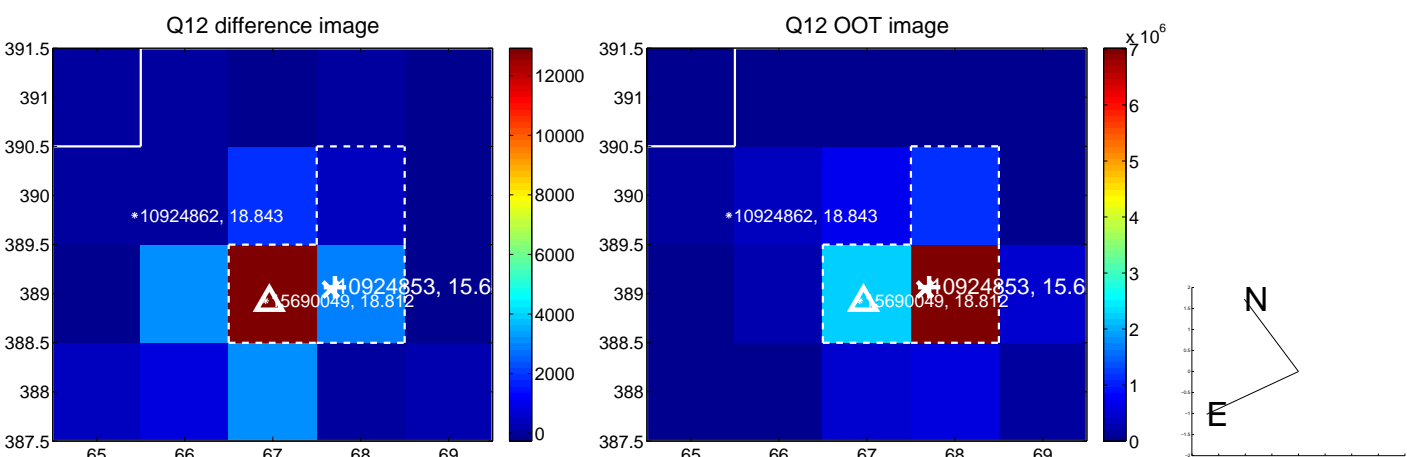
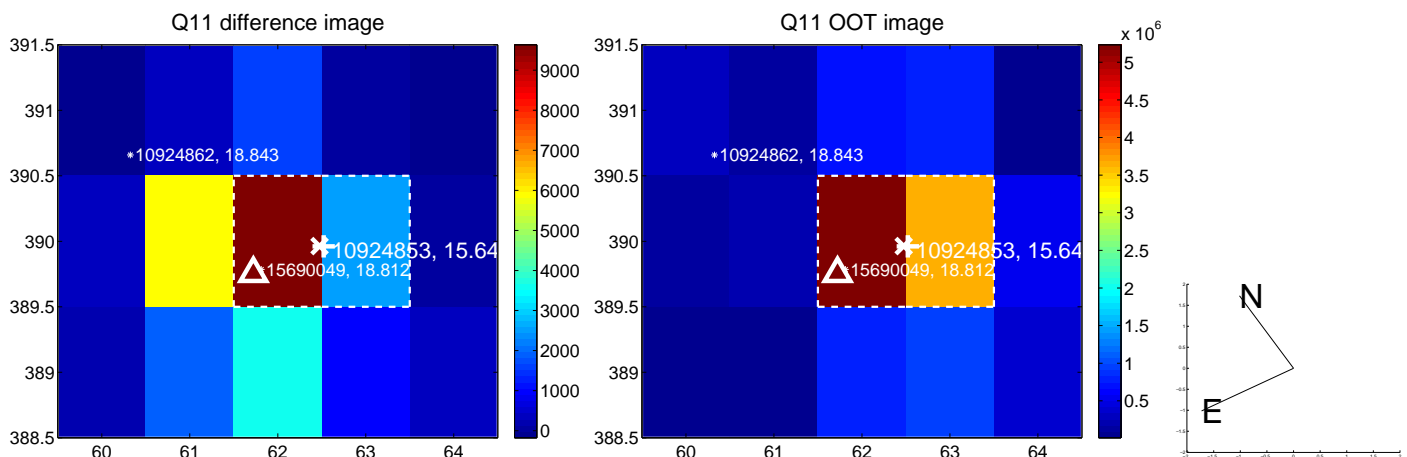
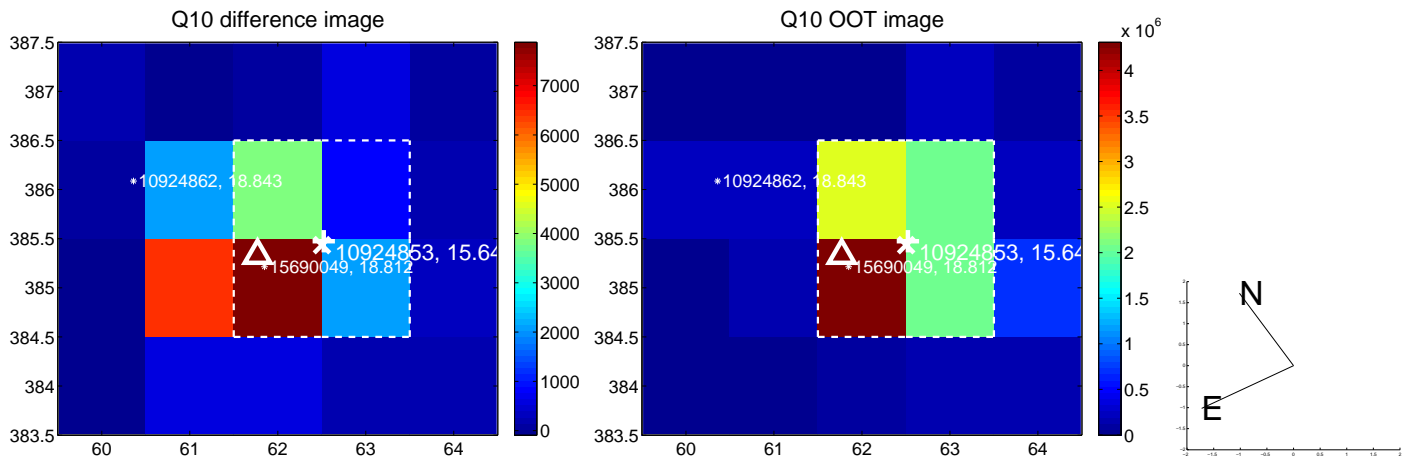
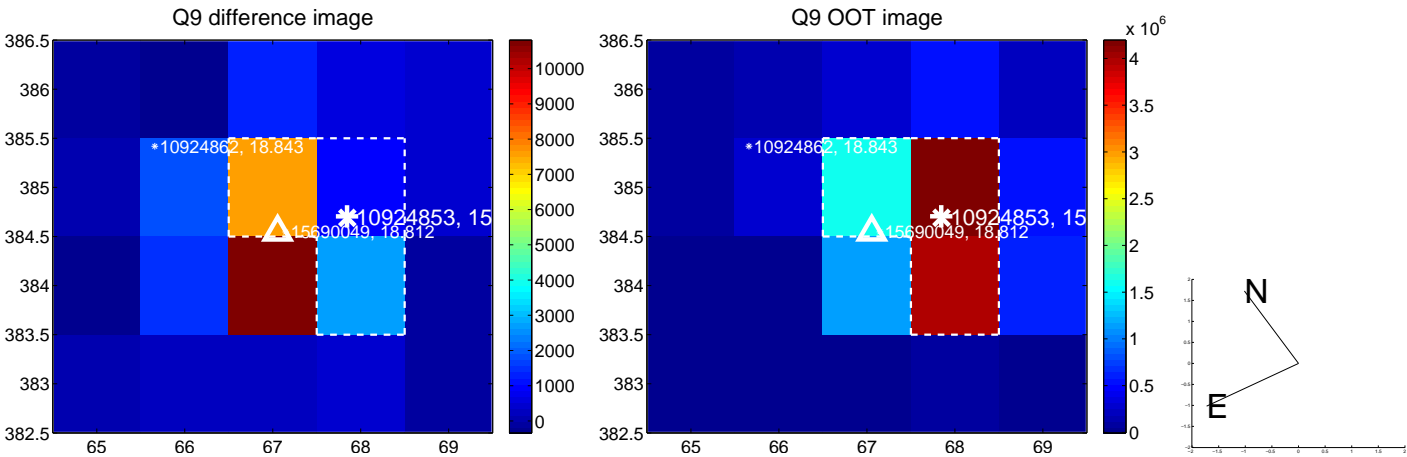
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



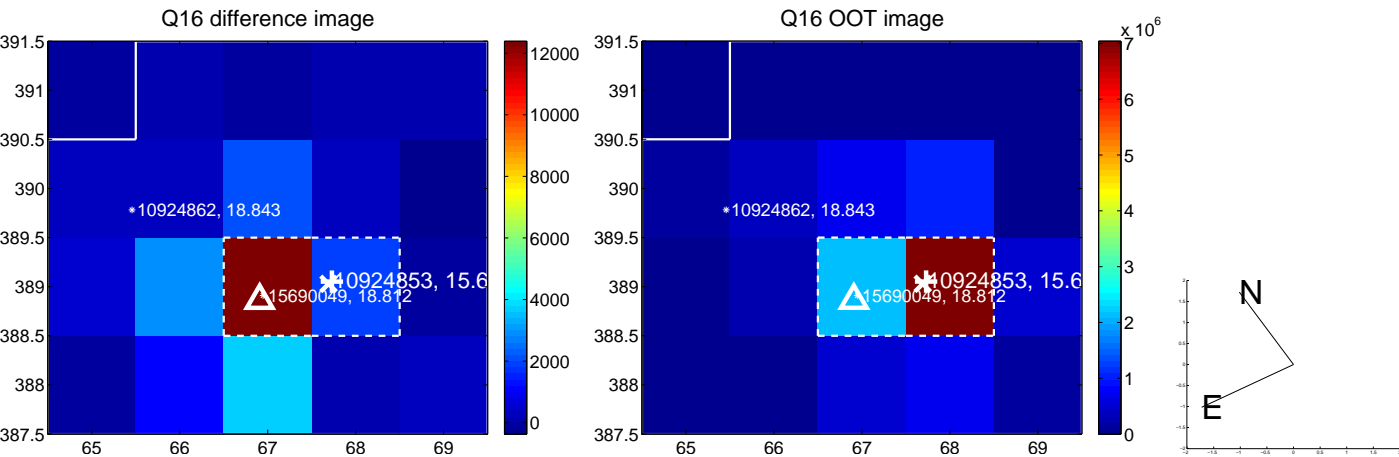
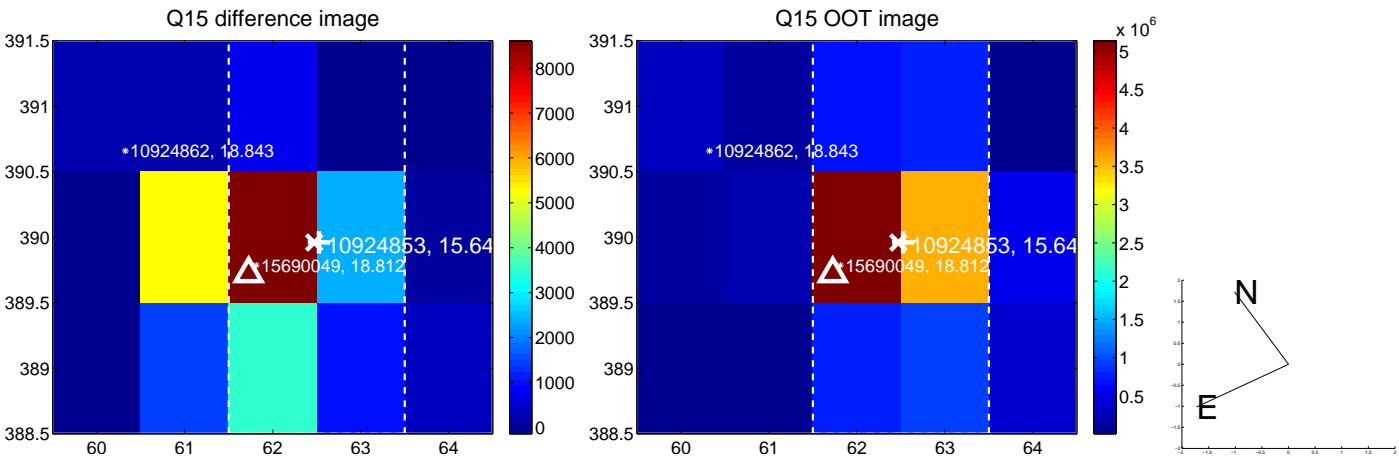
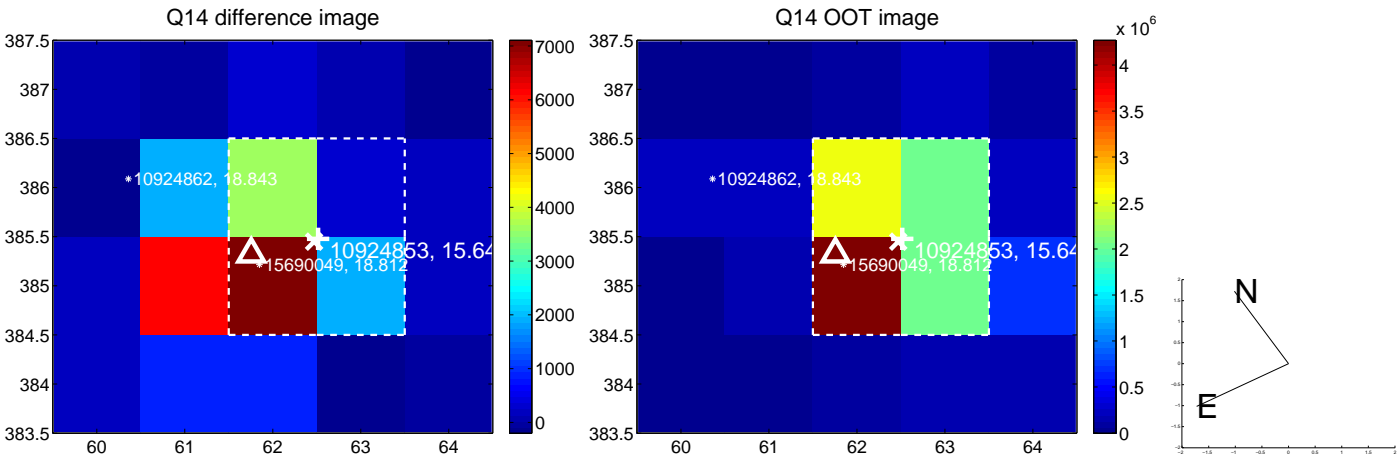
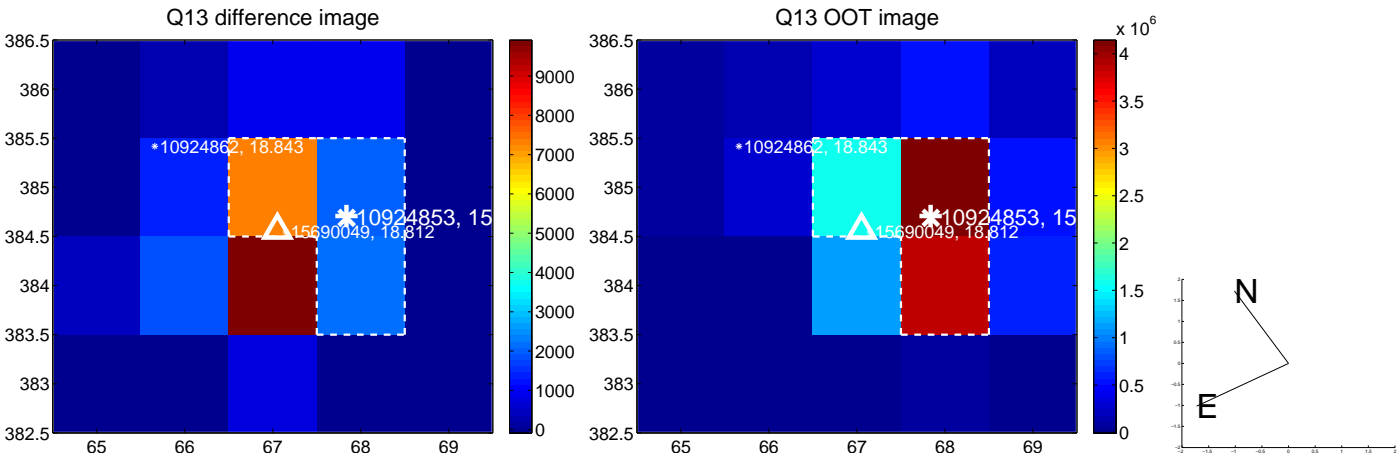
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



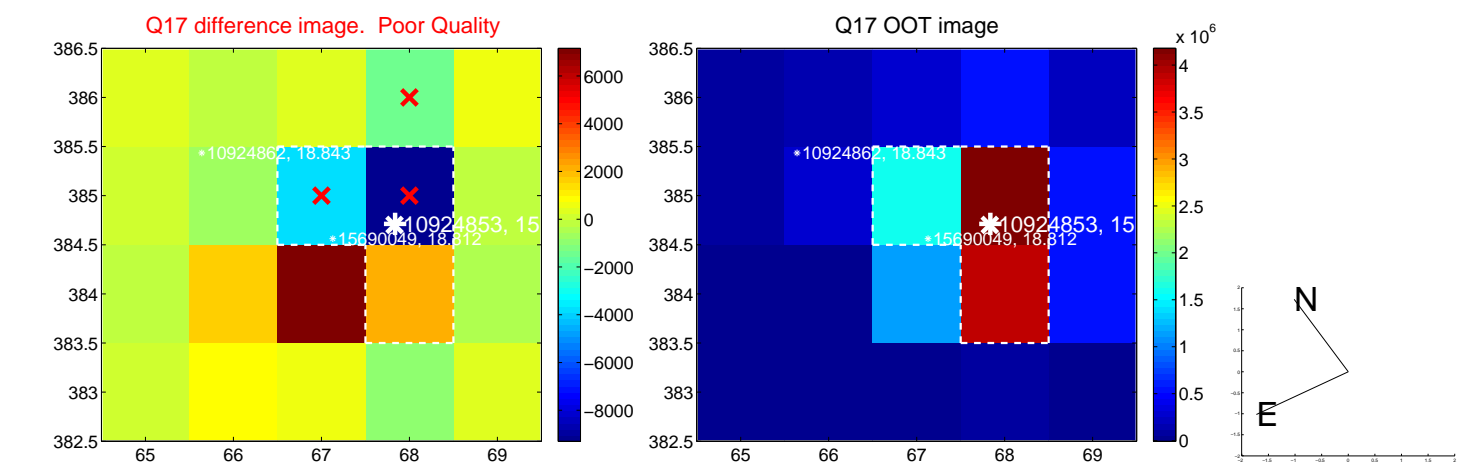
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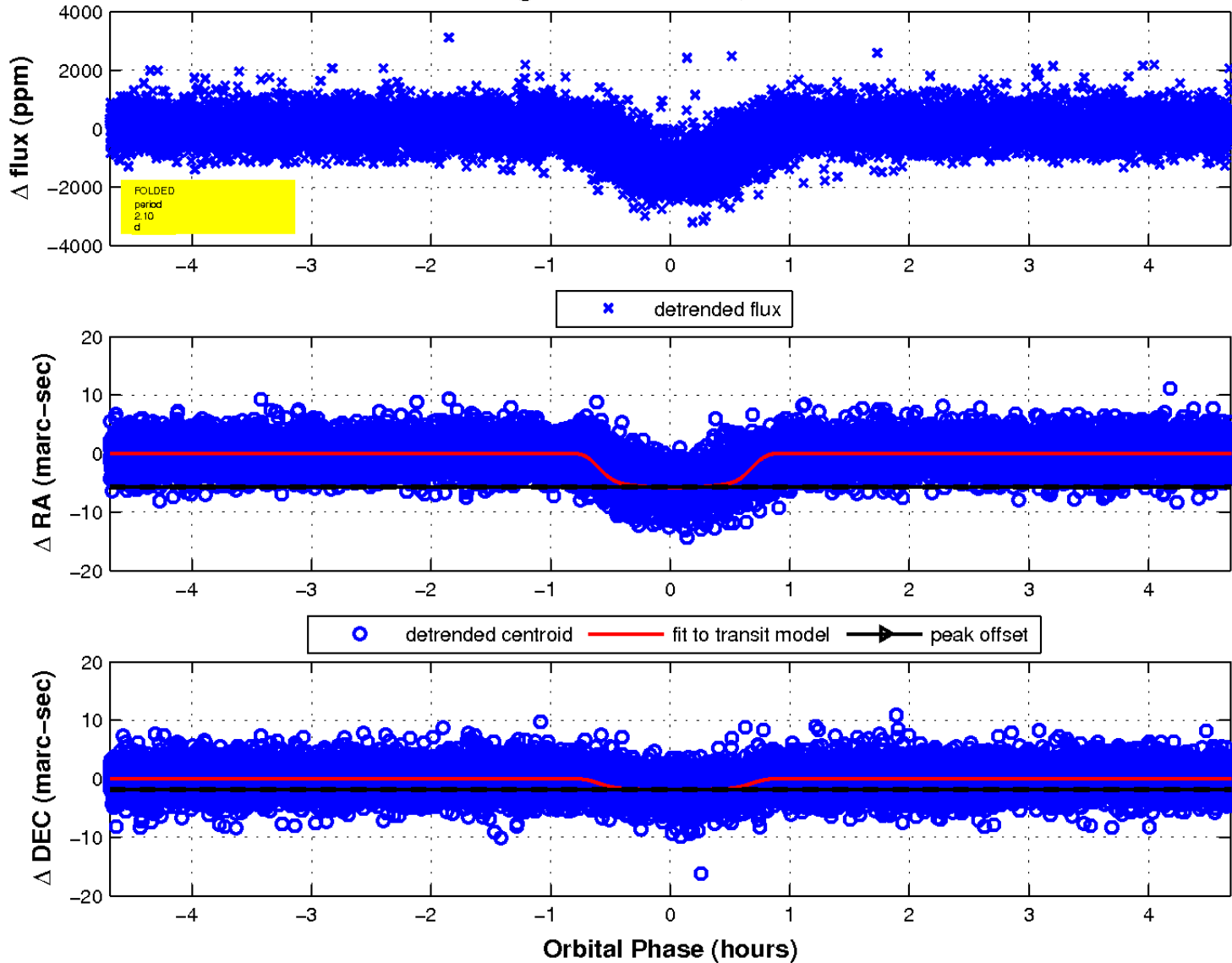
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

