

KIC 011100383

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})
011100383-01	OBS	0346.01	12.924917	132.011265	949.3	2.793	77.7	75.4	0.77	5103	2.79	35.04

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011100383-01	OBS	PC	1.00	0	0	0	0	NO_COMMENT

Notes: OBS = Observed. INJ = Injected. INV = Inverted. SCR = Scrambled.

N = Not Transit-Like. S = Stellar Eclipse. C = Centroid Offset. E = Ephemeris Match.

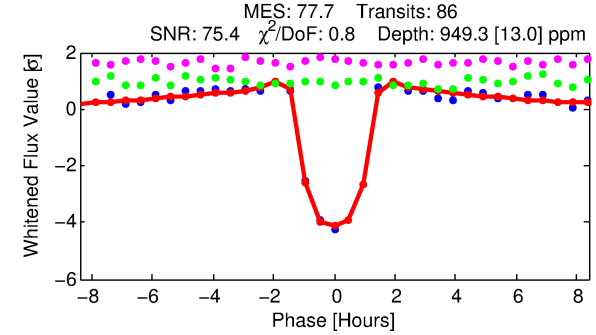
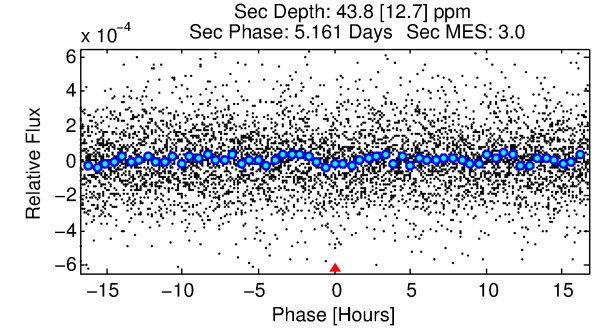
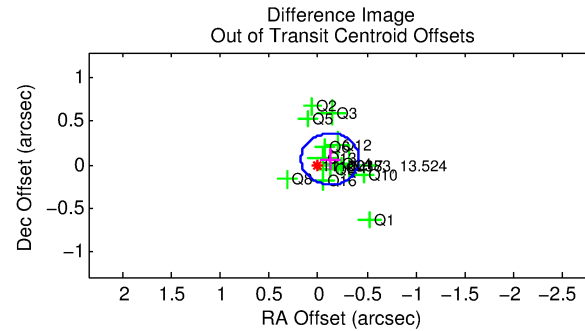
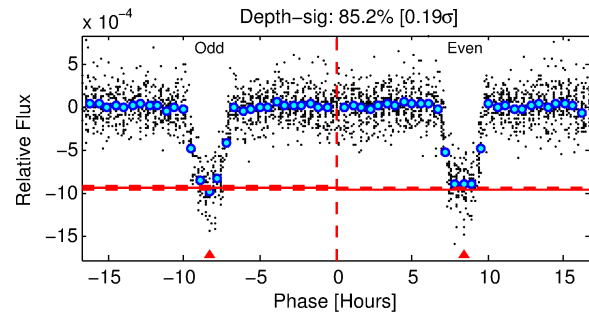
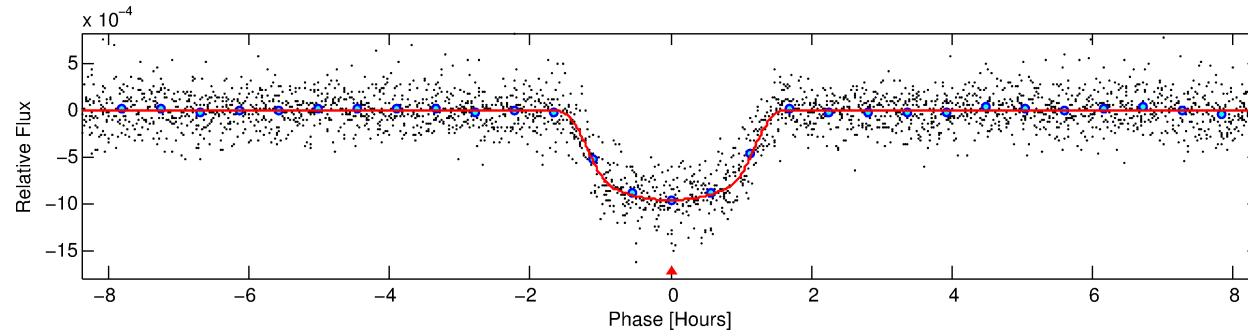
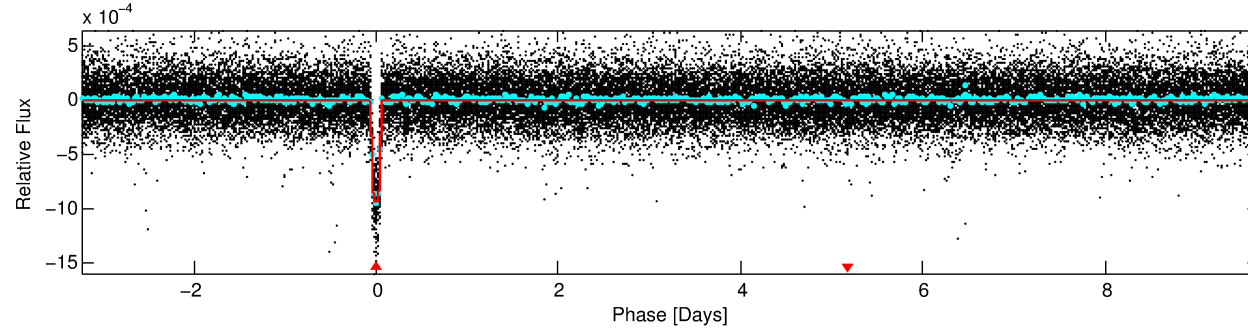
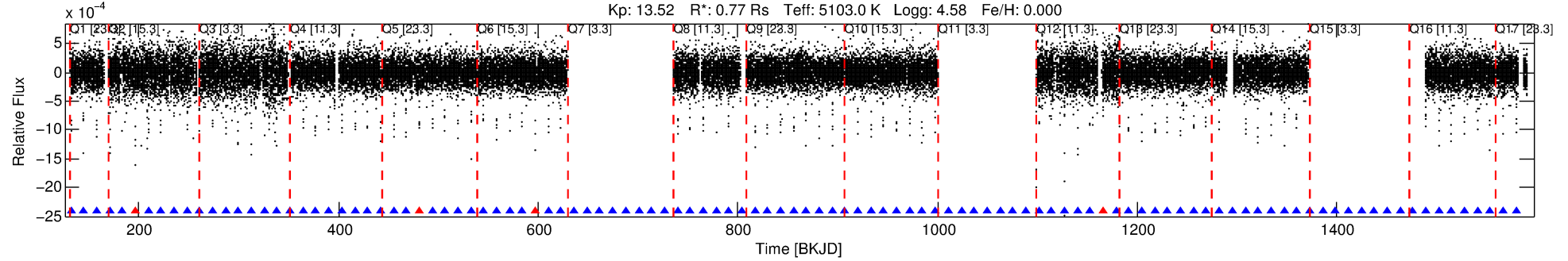
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011100383-01

No Significant Match Found

DV One-Page Summary

KIC: 11100383 Candidate: 1 of 1 Period: 12.925 d
KOI: K00346.01 Corr: 0.969



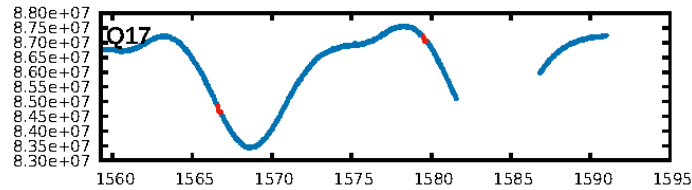
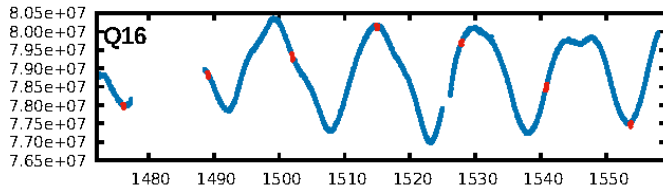
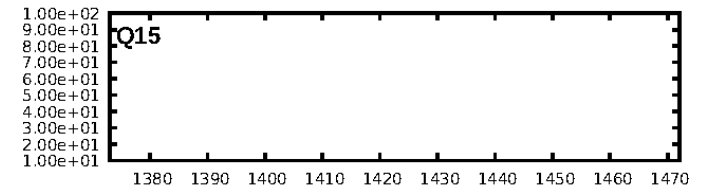
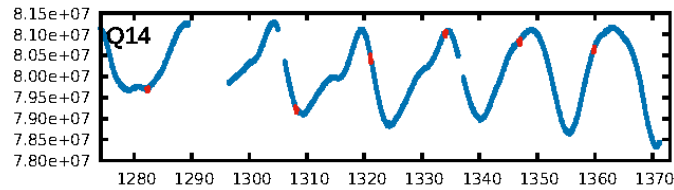
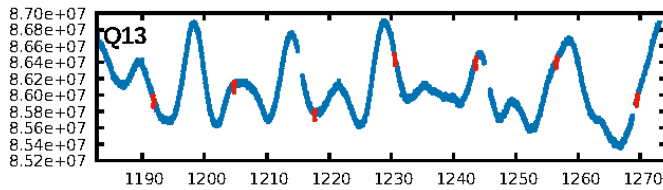
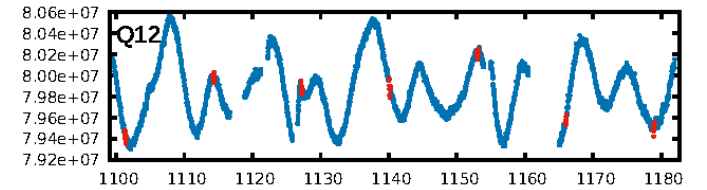
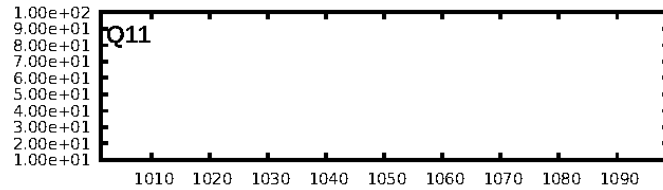
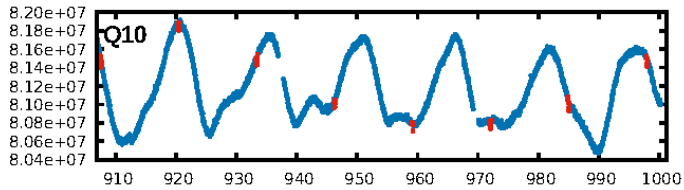
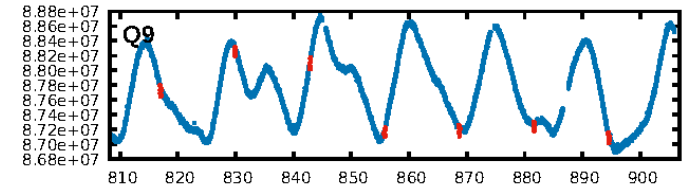
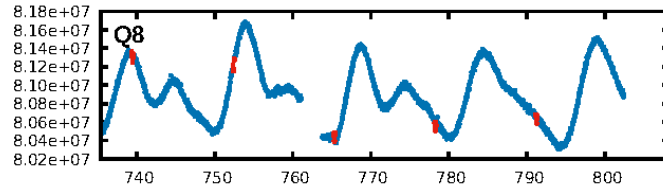
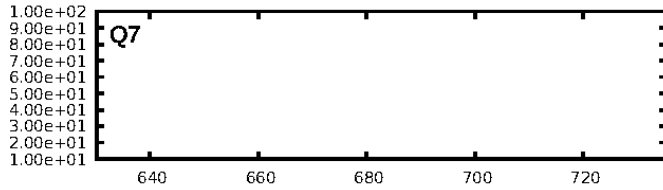
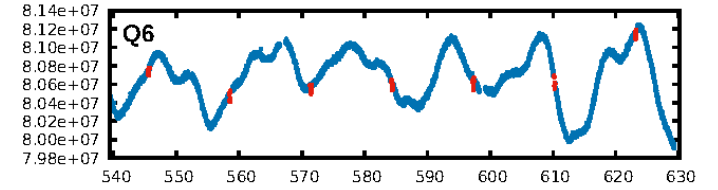
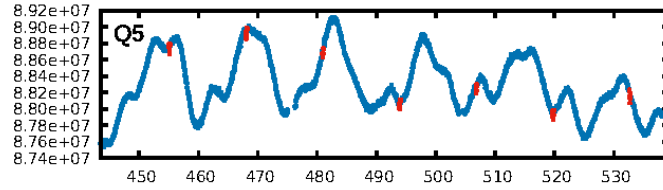
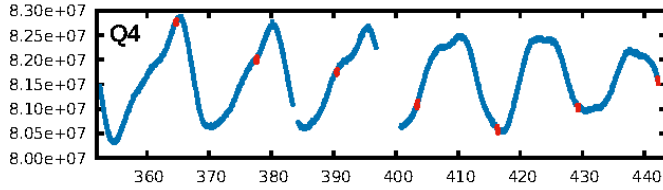
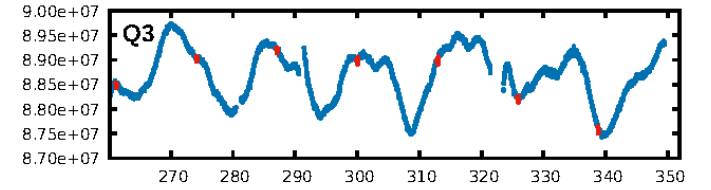
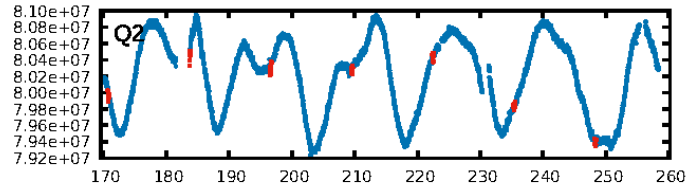
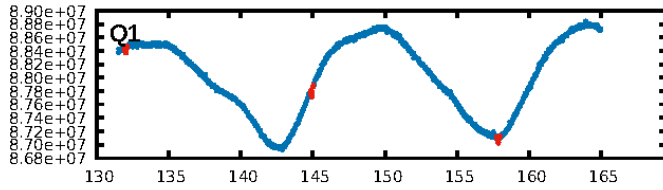
DV Fit Results:

Period = 12.92492 [0.00001] d
Epoch = 132.0113 [0.0007] BKJD
Rp/R* = 0.0333 [0.0016]
a/R* = 19.68 [3.41]
b = 0.87 [0.05]
Seff = 35.04 [4.43]
Teq = 620 [20] K
Rp = 2.79 [0.24] Re
a = 0.1011 [0.0064] AU
Ag = 31.57 [10.12] [3.02 σ]
Teffp = 2274 [179] K [9.17 σ]

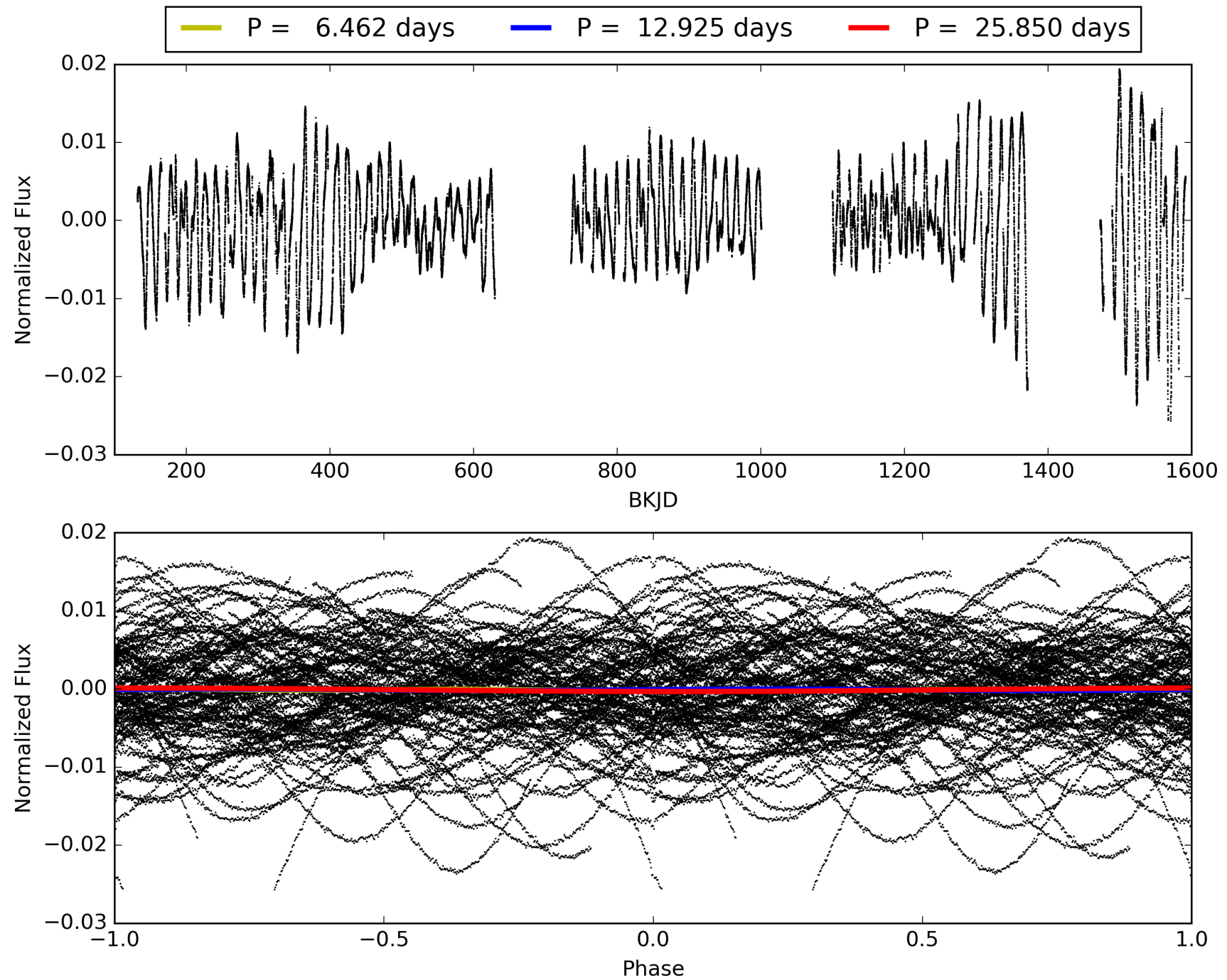
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 99.2%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 0.00e+00
RollingBand-fgt: 0.95 [77/81]
GhostDiagnostic-chr: 3.362
Centroid-sig: 13.7%
Centroid-so: 0.163 arcsec [0.97 σ]
OotOffset-rm: 0.137 arcsec [1.38 σ]
KicOffset-rm: 0.144 arcsec [1.60 σ]
OotOffset-st: 4/1/4/5 [14]
KicOffset-st: 4/1/4/5 [14]
DiffImageQuality-fgm: 1.00 [14/14]
DiffImageOverlap-fno: 1.00 [14/14]

TCE 011100383-01, PDC Light Curves

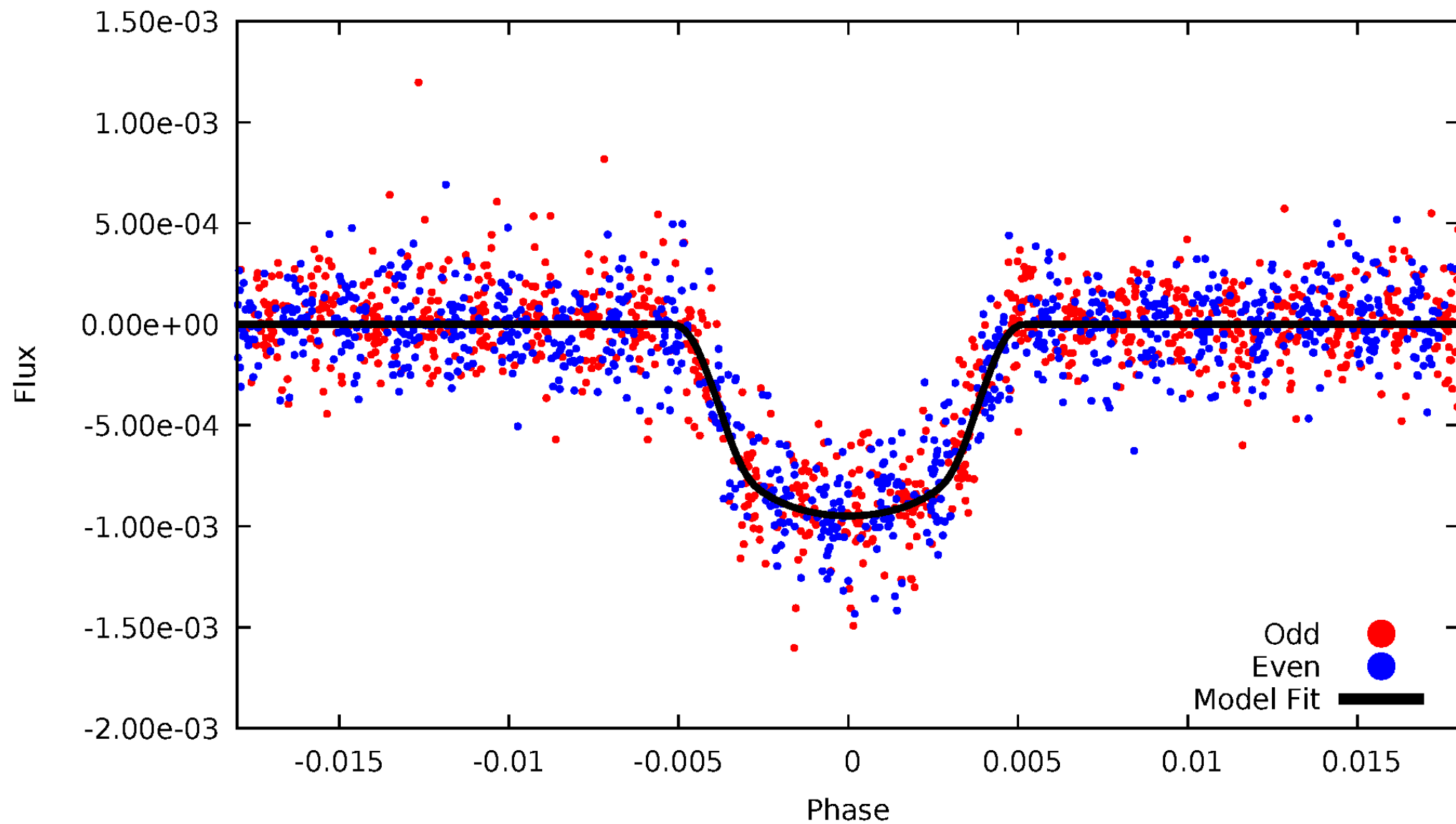


TCE 011100383-01



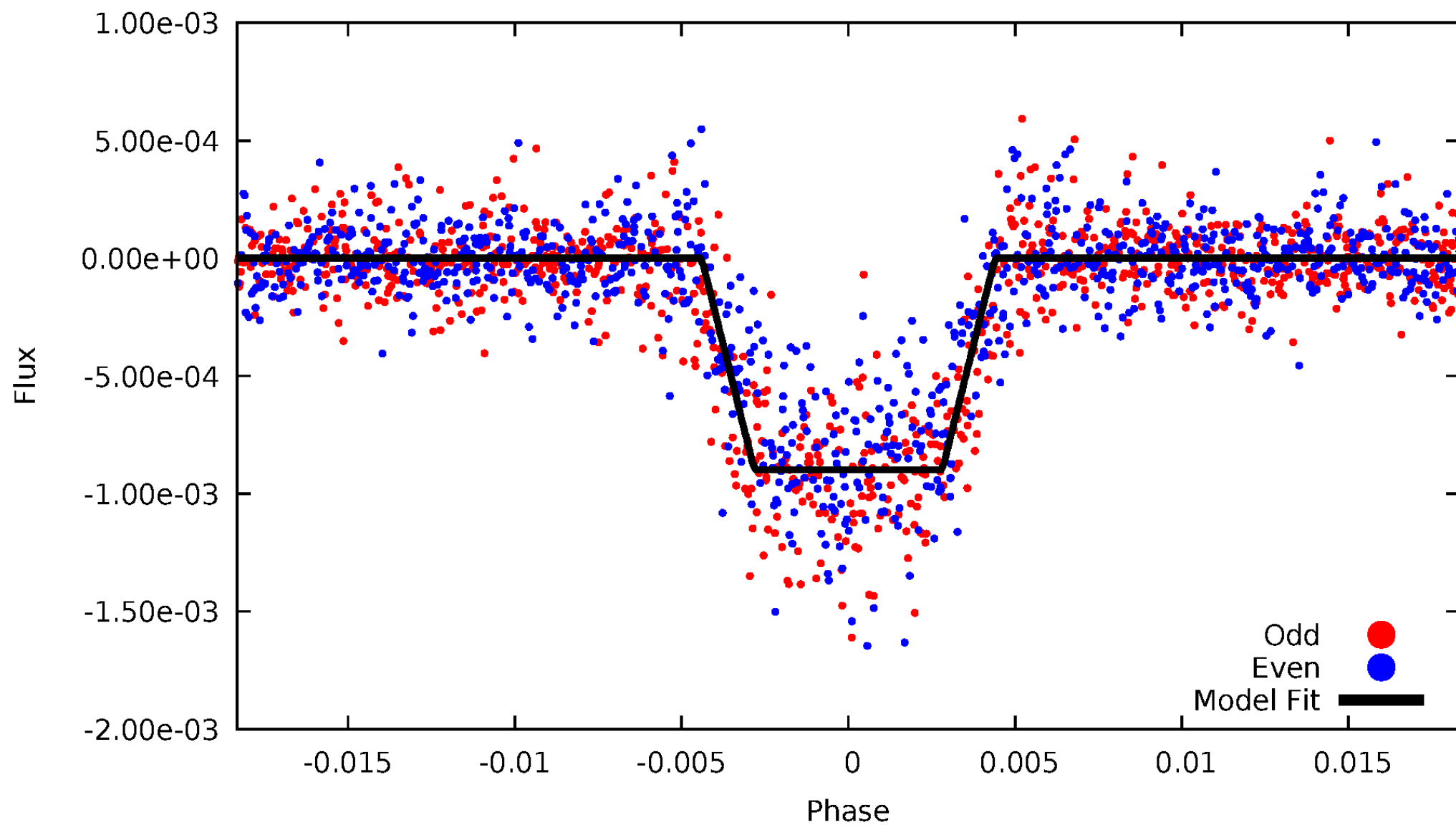
DV Odd/Even

TCE 011100383-01



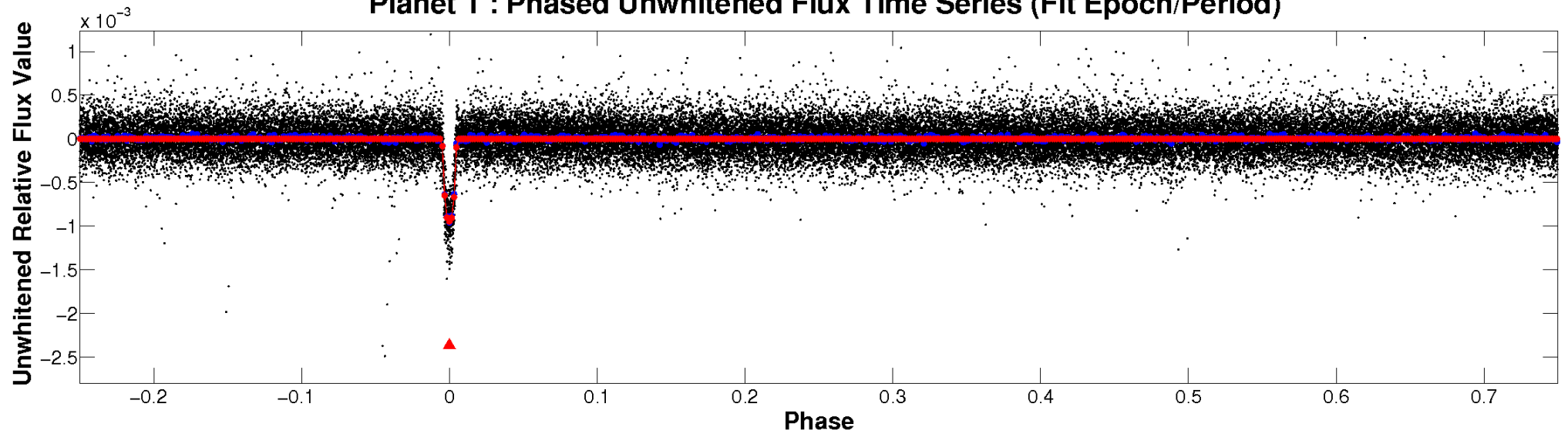
ALT Odd/Even

TCE 011100383-01

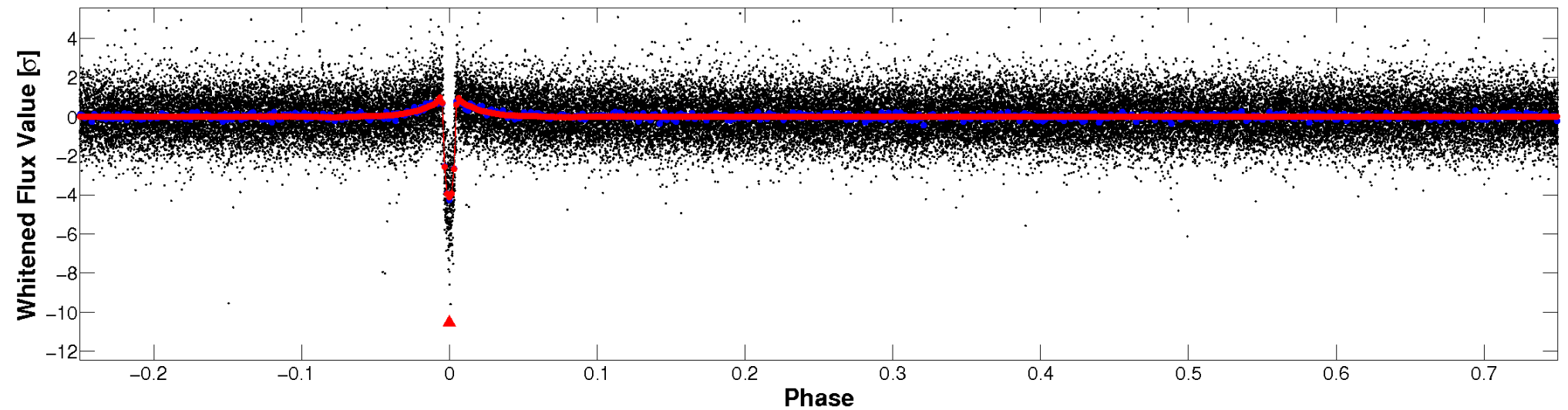


Non-Whitened Vs. Whitened Light Curve

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

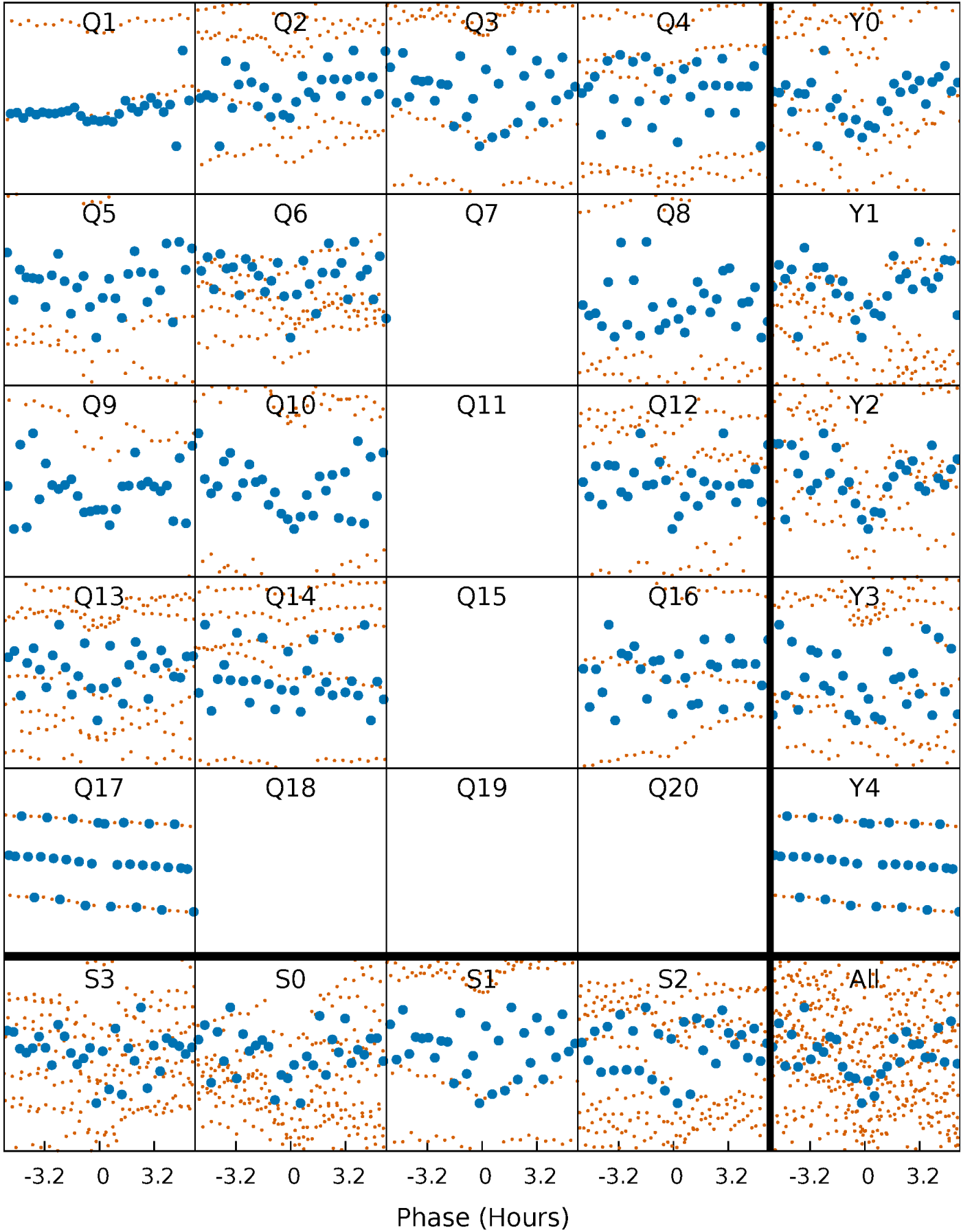


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



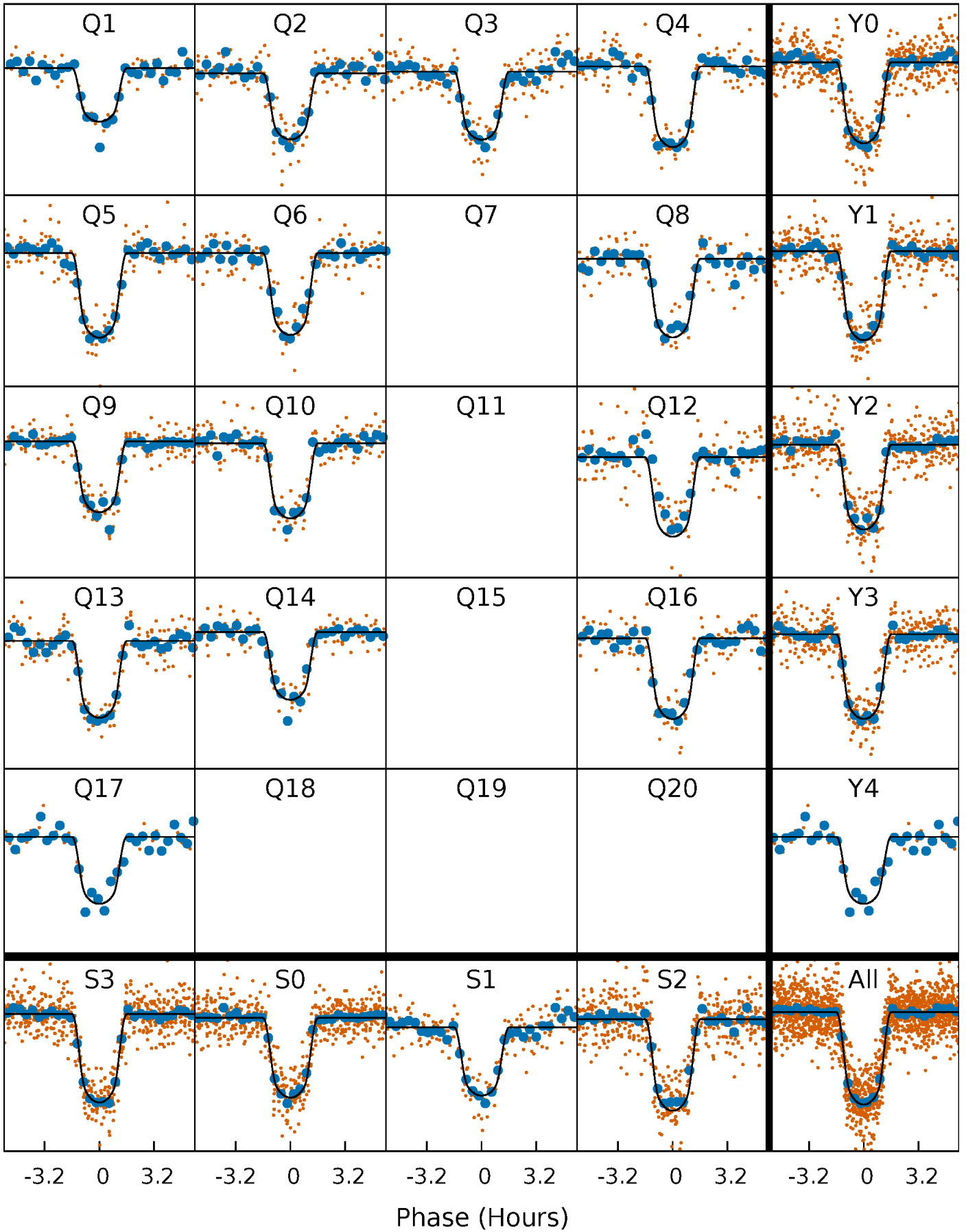
PDC Quarter-Phased Transit Curves

TCE 011100383-01 P= 12.924917 Days $T_0=132.011265$ (BKJD)



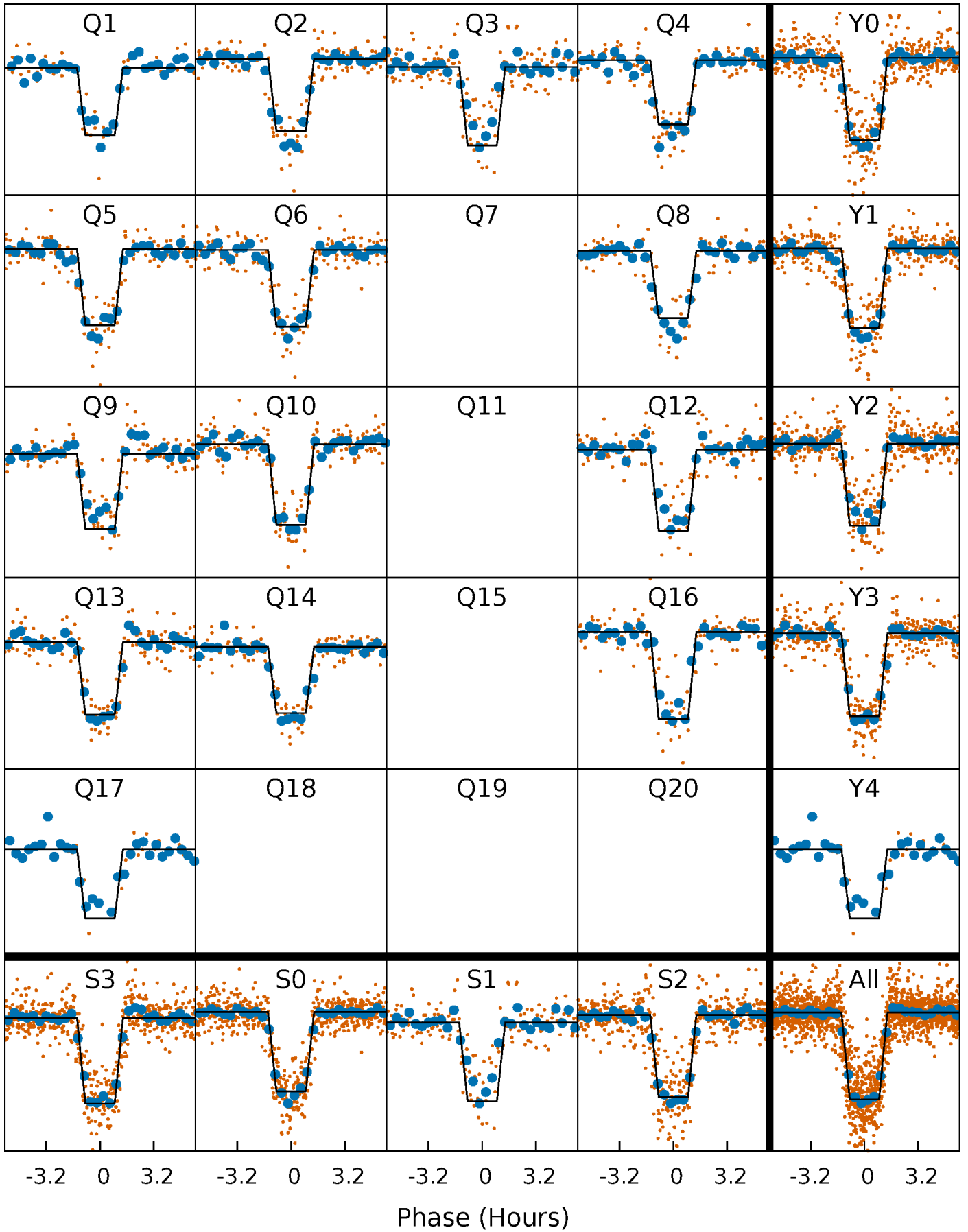
DV Quarter-Phased Transit Curves

TCE 011100383-01 P= 12.924917 Days $T_0=132.011265$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

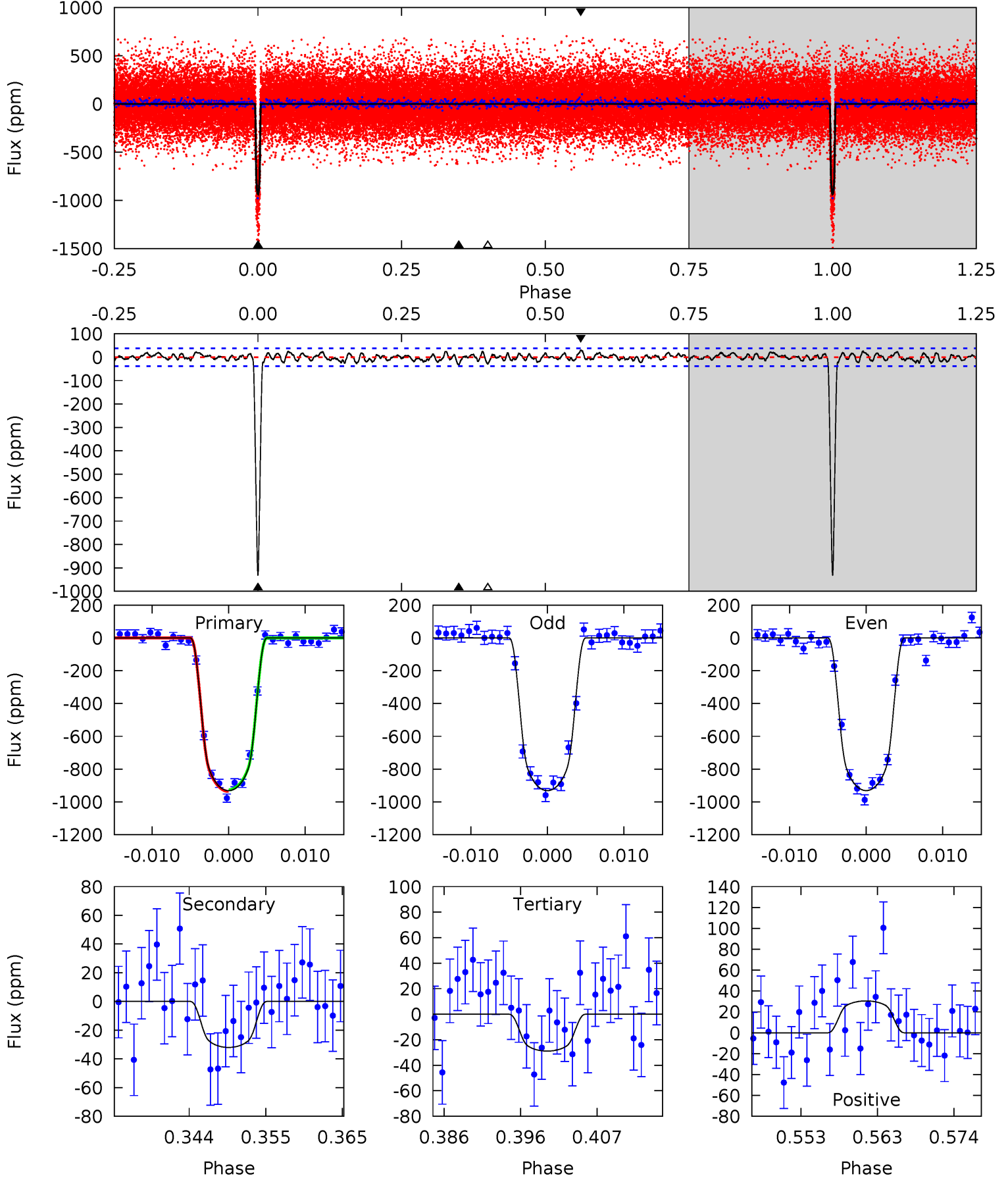
TCE 011100383-01 P= 12.924832 Days $T_0=132.014555$ (BKJD)



DV Model-Shift Uniqueness Test

011100383-01, $P = 12.924917$ Days, $E = 119.086348$ Days

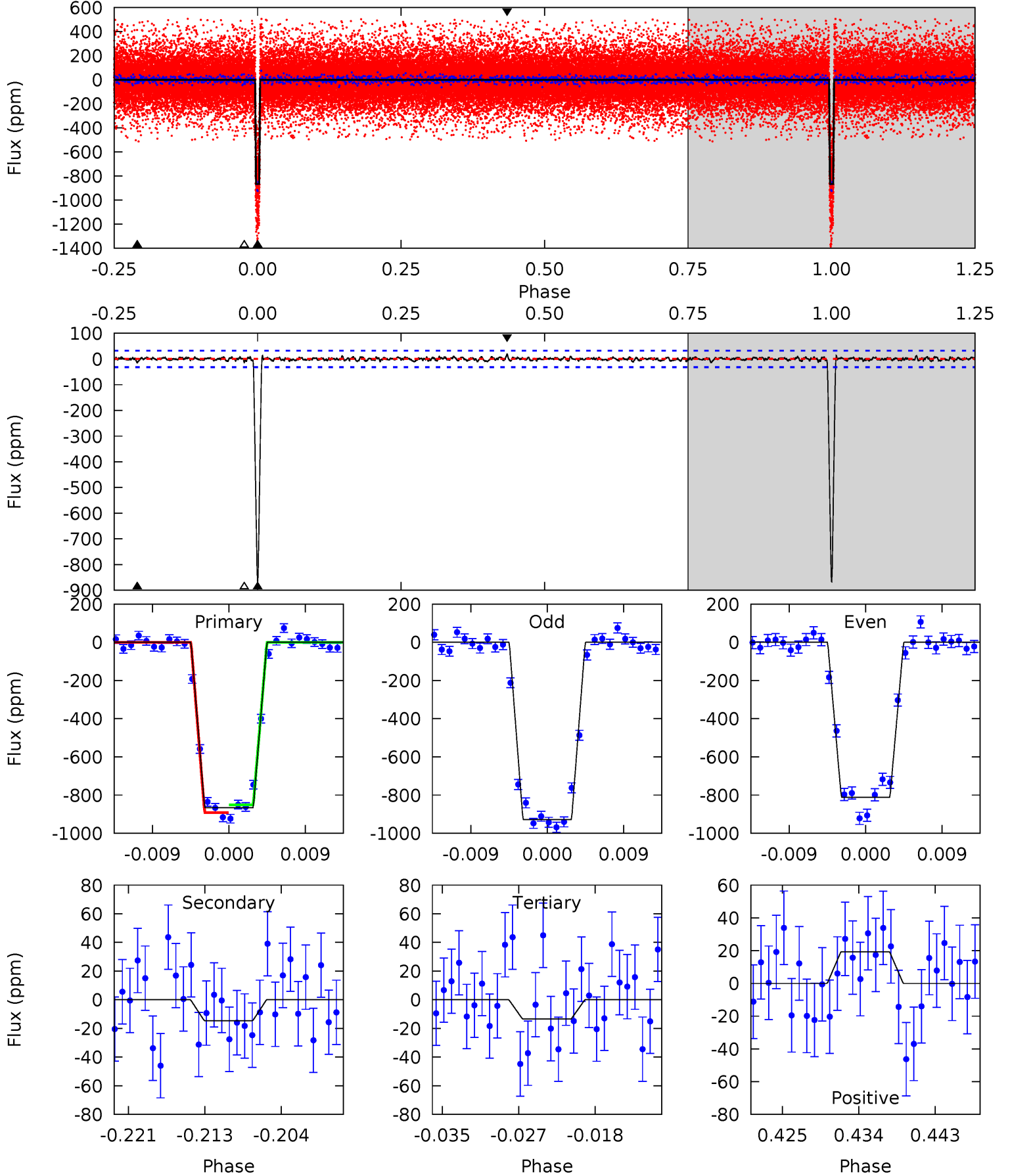
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
122.6	4.22	3.81	4.02	5.02	2.56	1.41	118.8	118.6	0.41	0.20	0.02	0.99	0.03	0.66



Alt Model-Shift Uniqueness Test

011100383-01, P = 12.924832 Days, E = 119.089723 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
136.1	2.29	2.12	3.04	5.05	2.62	0.66	134.0	133.1	0.17	-0.75	9.20	1.00	0.02	3.18



Stellar Parameters For KIC 011100383

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5103^{+102}_{-102}	$4.584^{+0.020}_{-0.056}$	$0.000^{+0.150}_{-0.150}$	$0.768^{+0.054}_{-0.031}$	$0.825^{+0.037}_{-0.049}$	$2.569^{+0.282}_{-0.452}$
	+2%/-2%	+0%/-1%	+inf%/-inf%	+7%/-4%	+4%/-6%	+11%/-18%
Source	SPE57	SPE57	SPE57	DSEP		

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

Secondary Eclipse Parameters for KIC 011100383-01 / KOI 0346.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-32 ± 8	$2.82^{+0.19}_{-0.15}$	874^{+24}_{-22}	2807^{+104}_{-101}	22^{+6}_{-5}
Alt.	-15 ± 6	$2.54^{+0.17}_{-0.17}$	872^{+23}_{-21}	2603^{+134}_{-165}	13^{+6}_{-5}

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

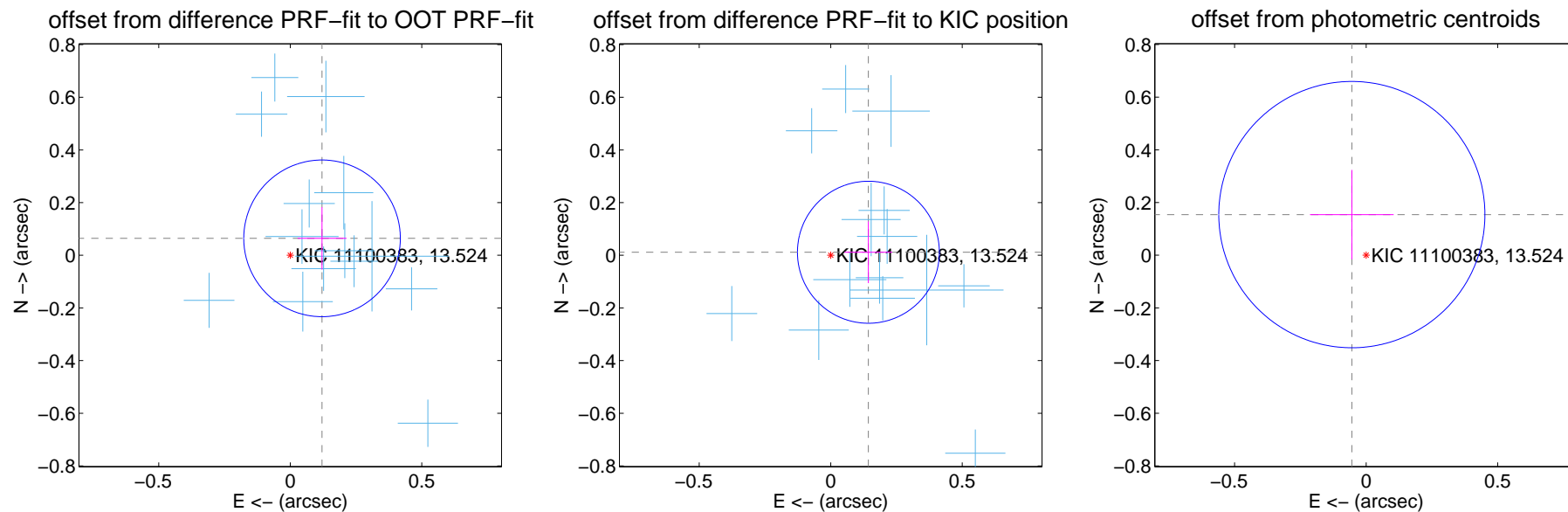
DV Centroid Data

Supplemental centroid analysis for 011100383-01. Kepler magnitude: 13.52. Transit SNR 75.44

There are 14 quarters with good PRF difference image offsets

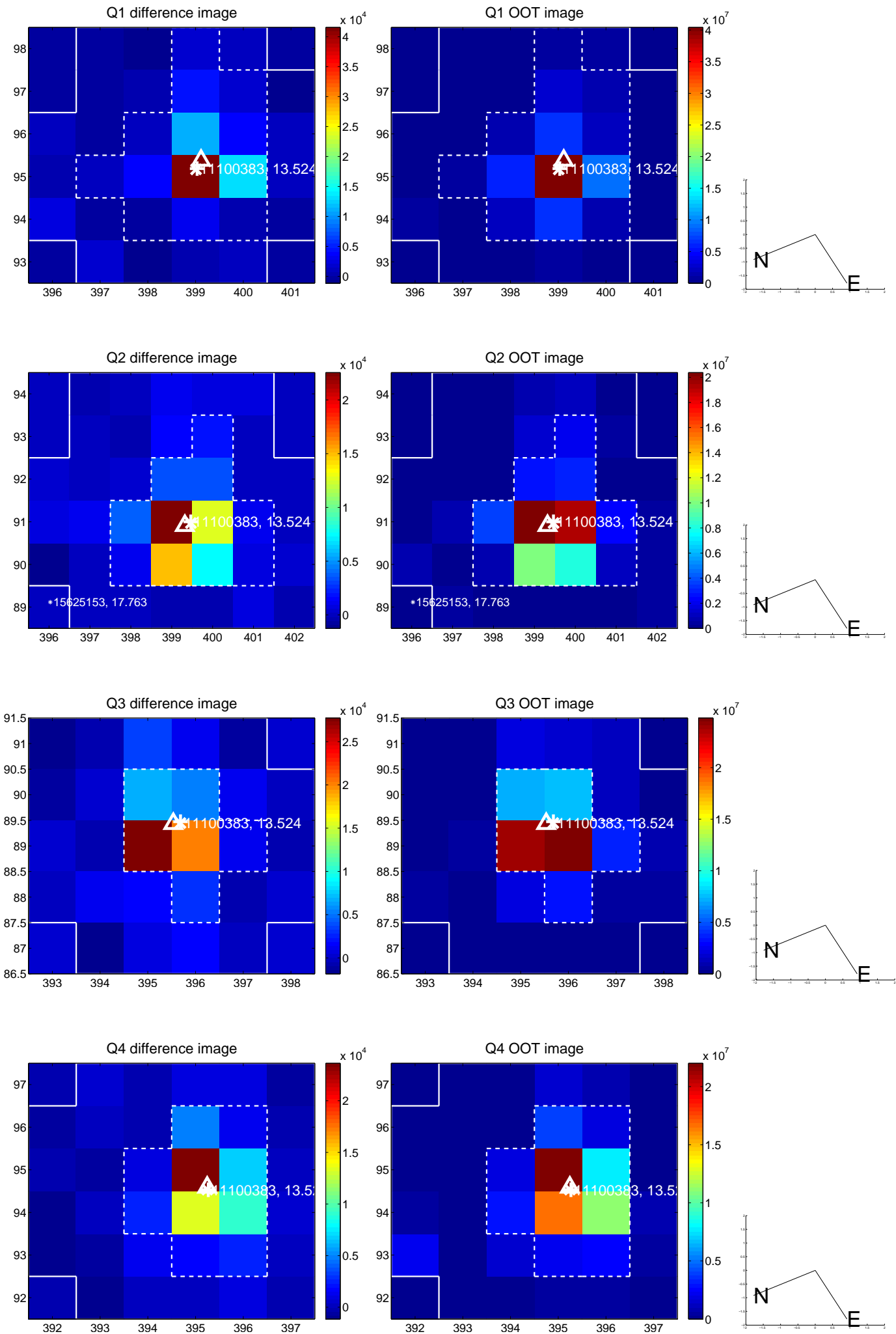
The direct PRF centroid is offset from the target star catalog position by about 0.14 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.137 ± 0.099	1.38	-0.121 ± 0.093	0.064 ± 0.119
PRF-fit source offset from KIC position	0.144 ± 0.090	1.60	-0.143 ± 0.091	0.011 ± 0.117
photometric centroid source offset	0.16 ± 0.17	0.97	0.05 ± 0.16	0.15 ± 0.17

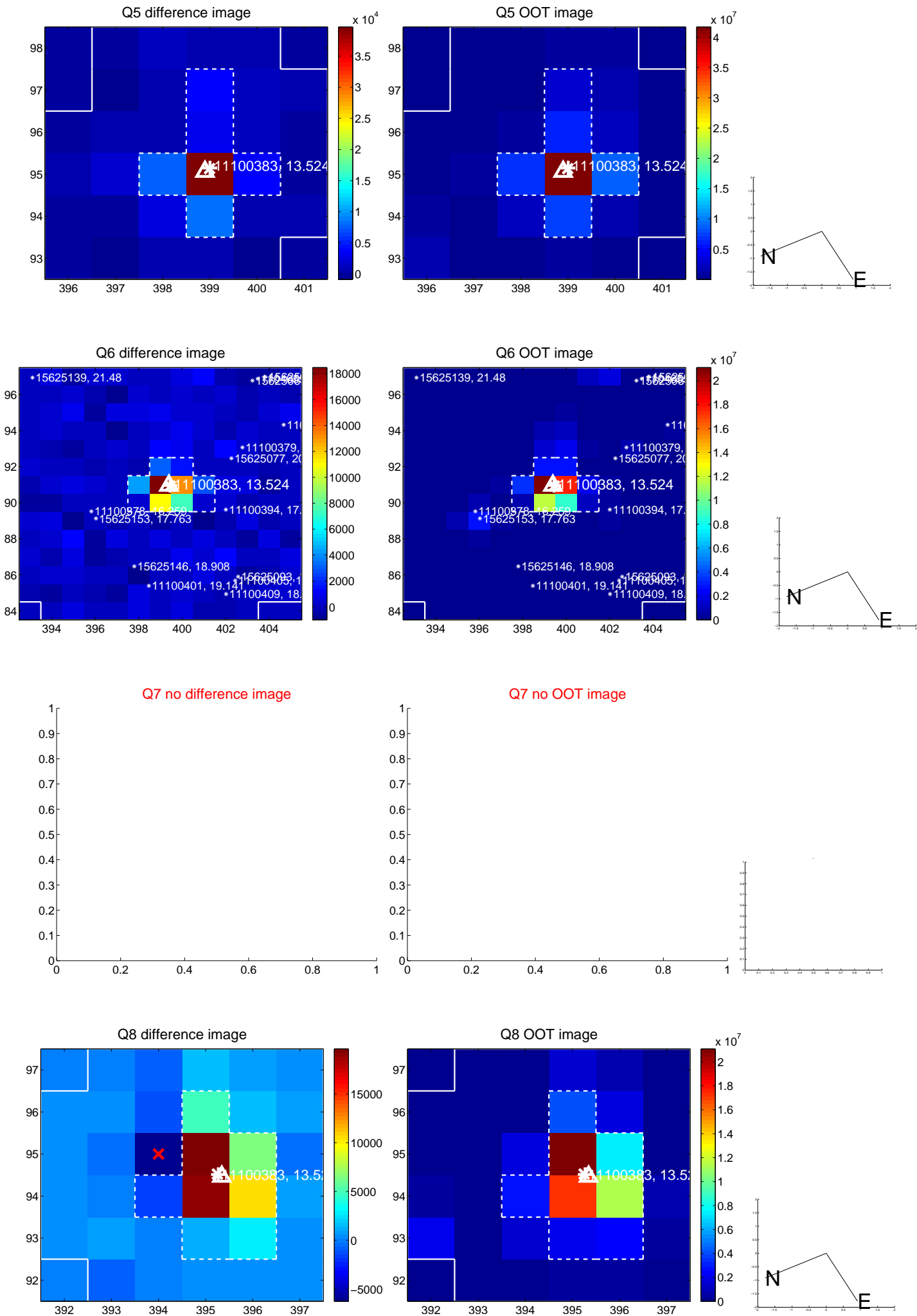


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

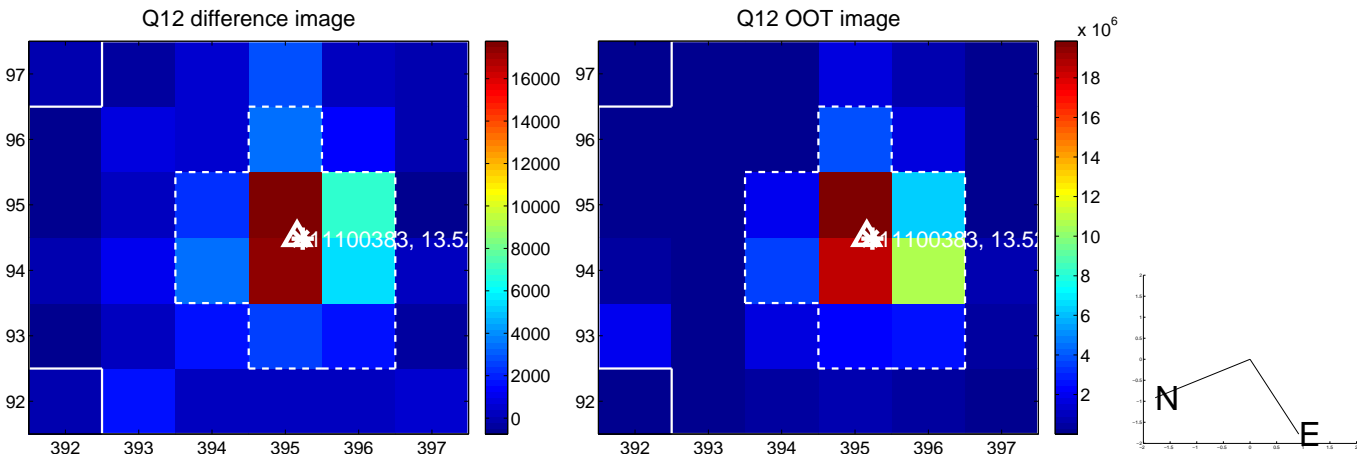
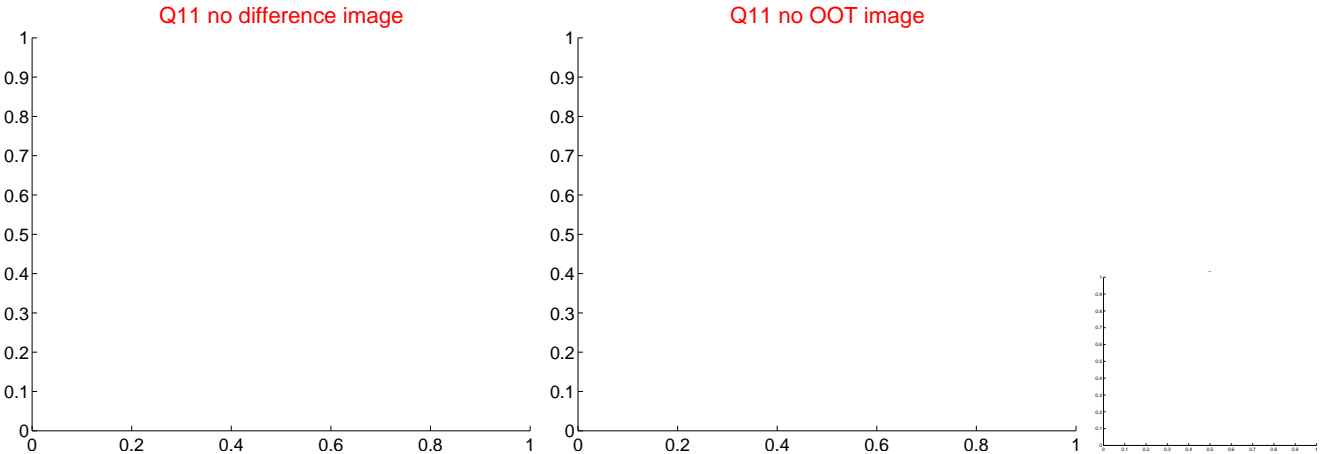
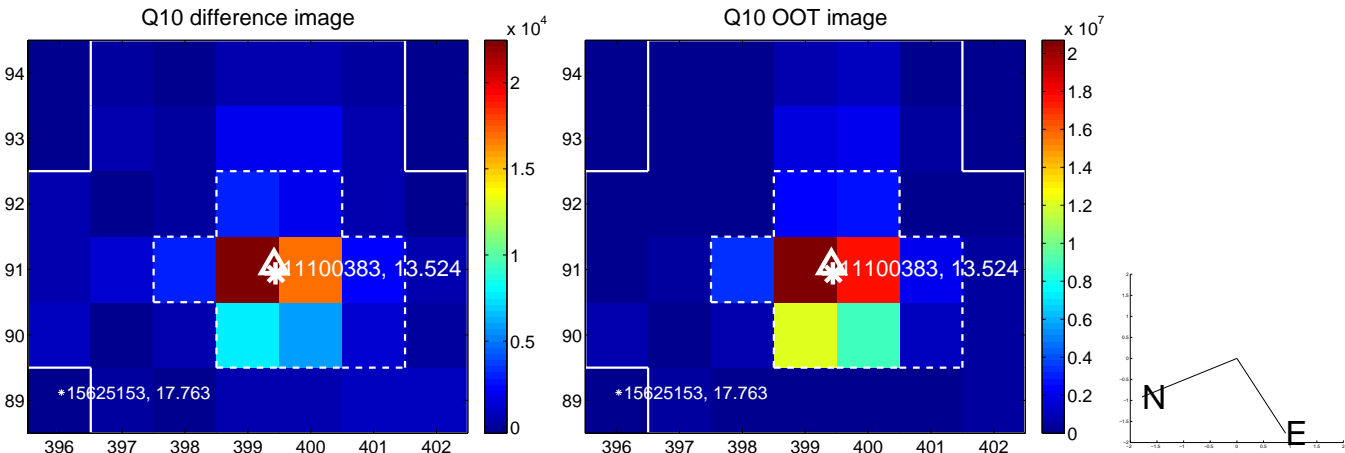
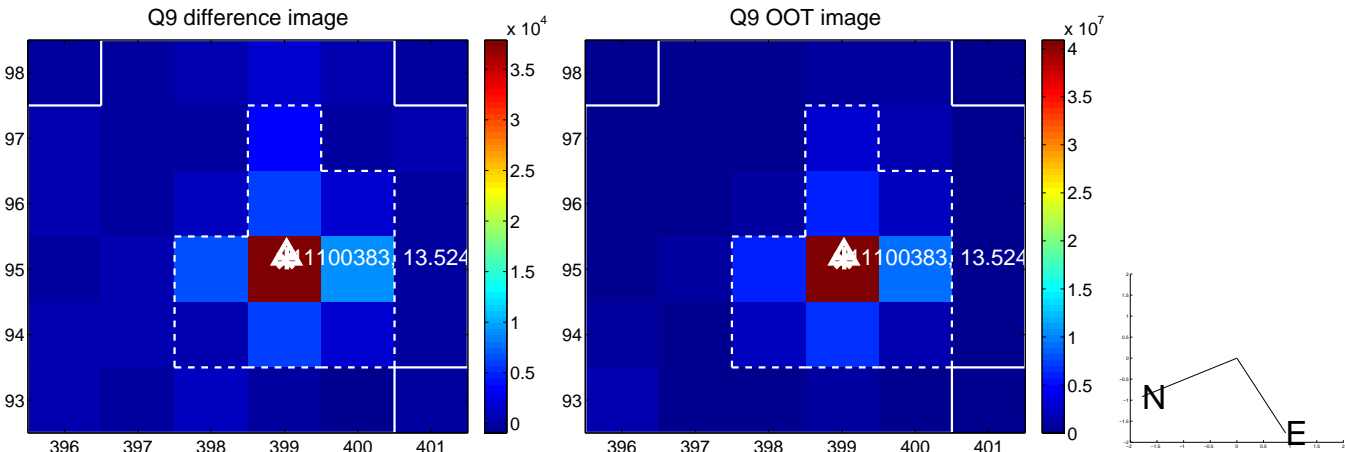
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



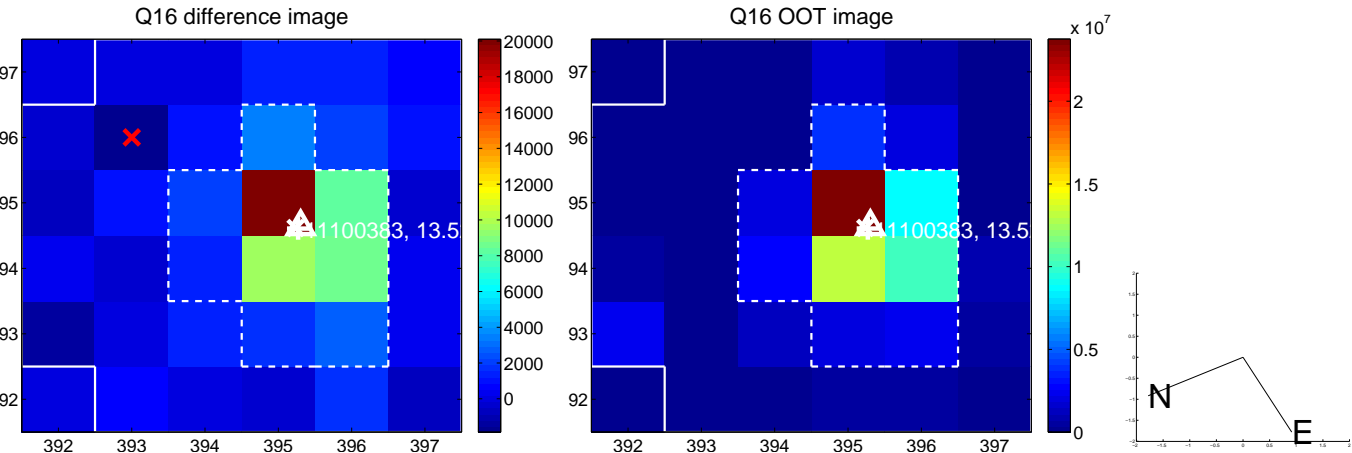
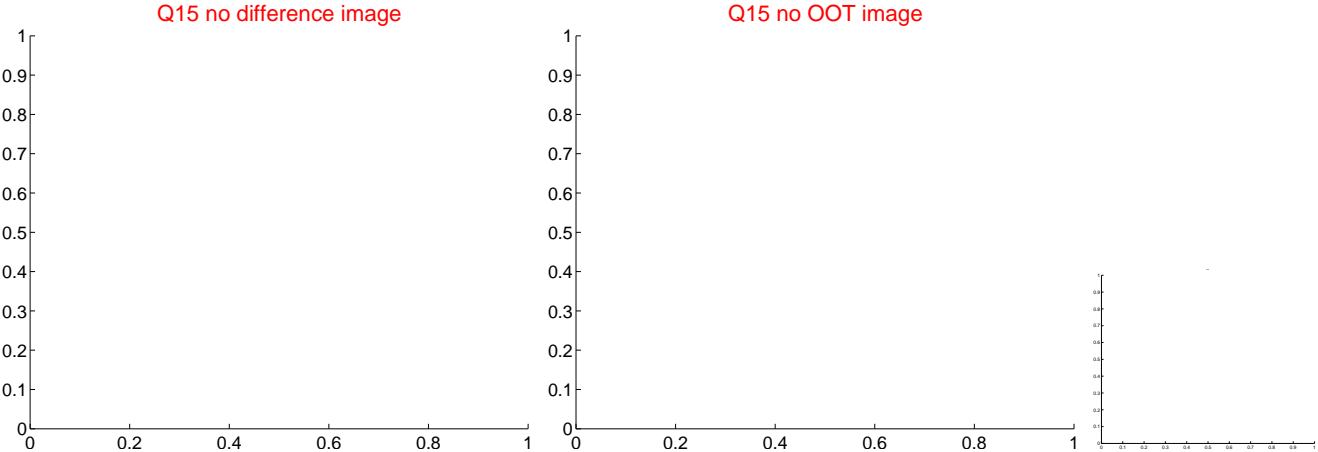
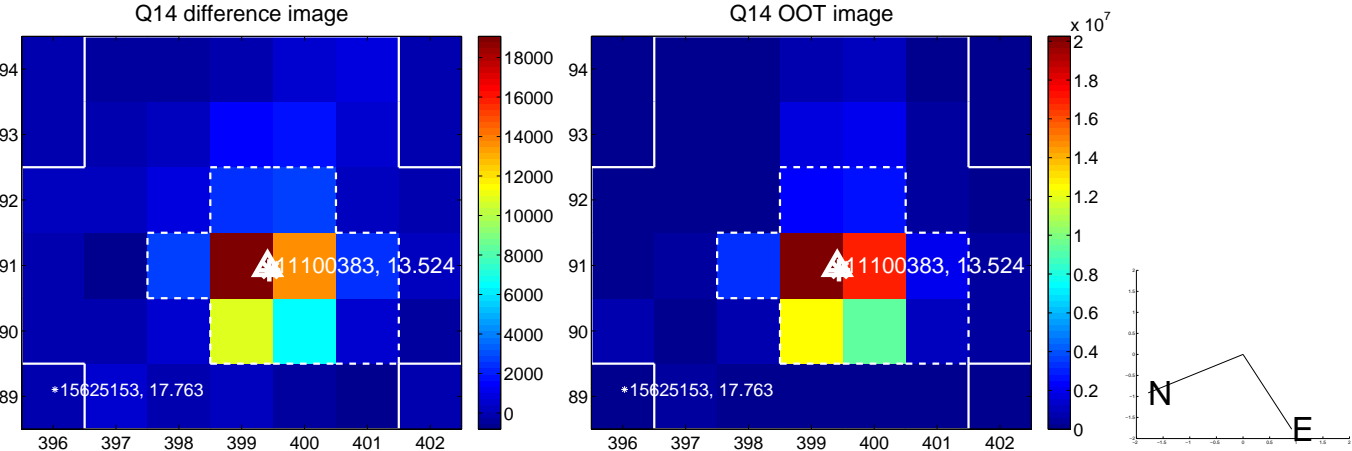
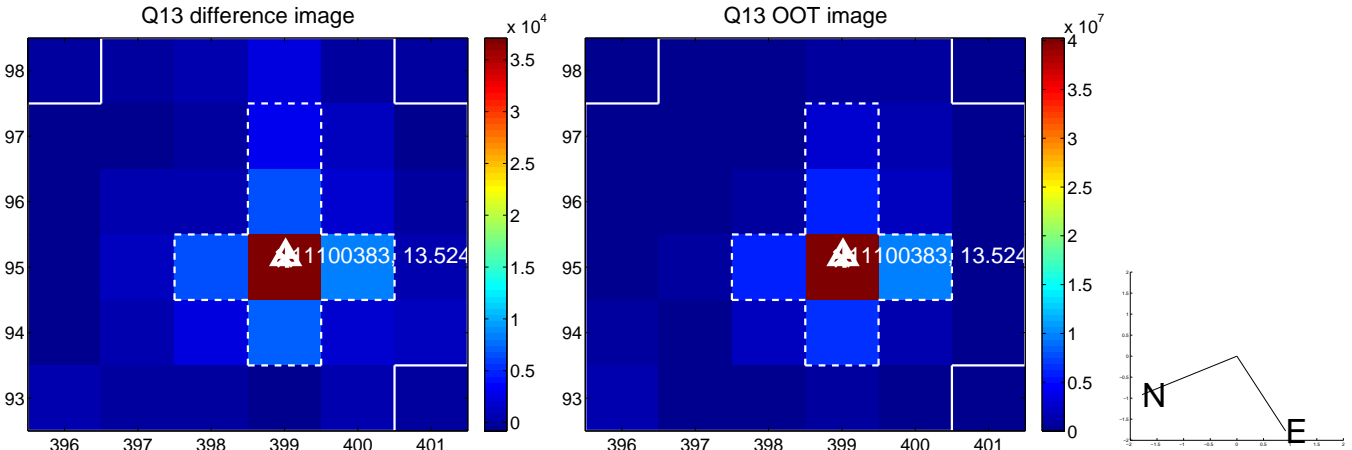
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



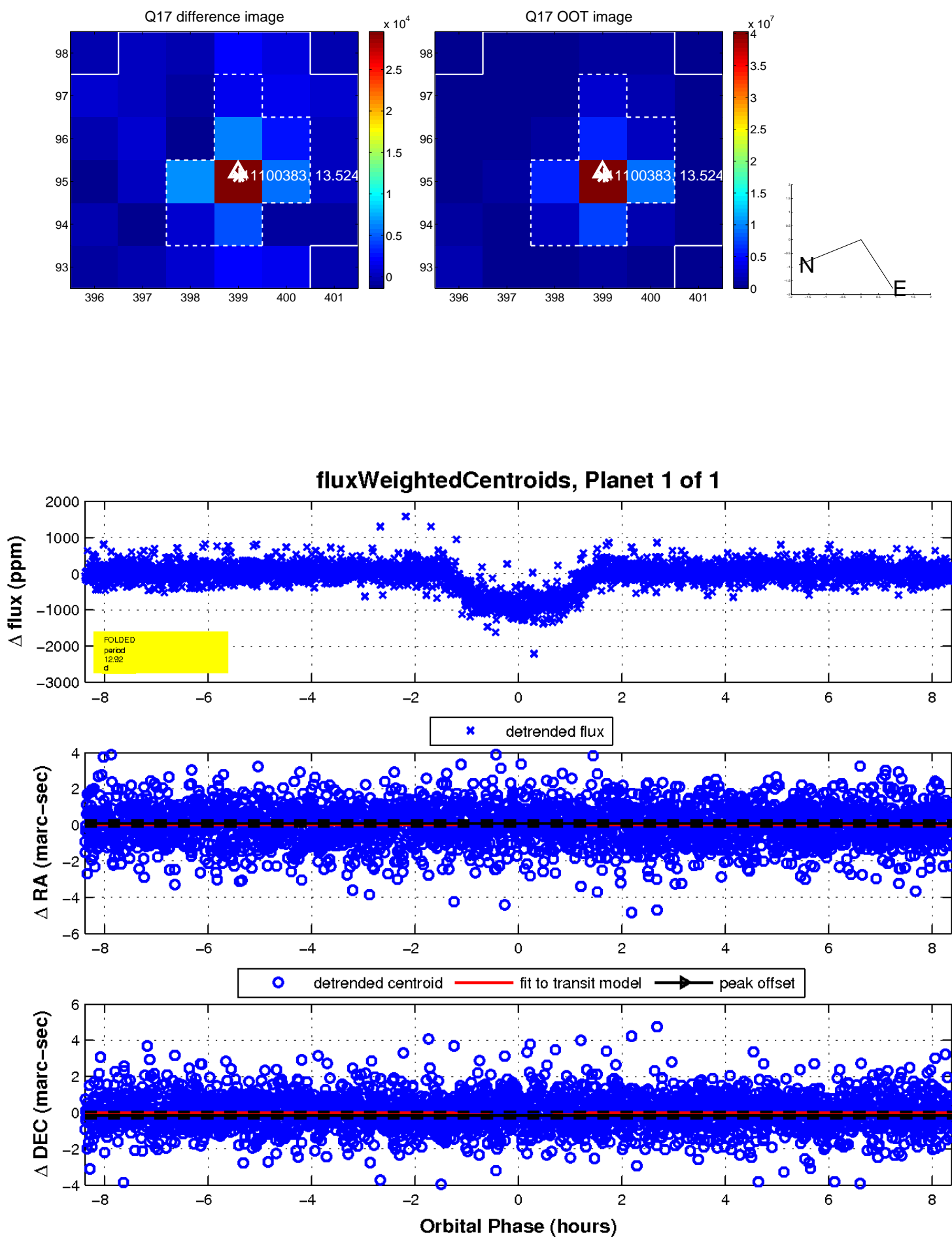
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

