

KIC 006526710

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})
006526710-01	OBS	0856.01	39.748939	133.105521	15197.2	7.320	505.2	517.3	0.96	6122	14.32	21.92

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006526710-01	OBS	PC	0.99	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.

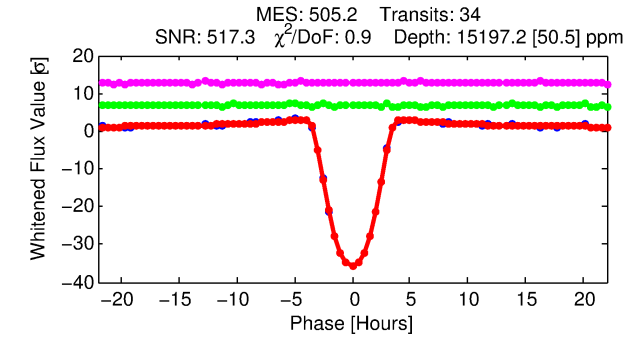
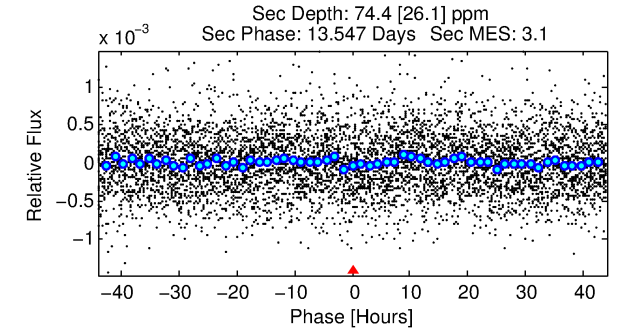
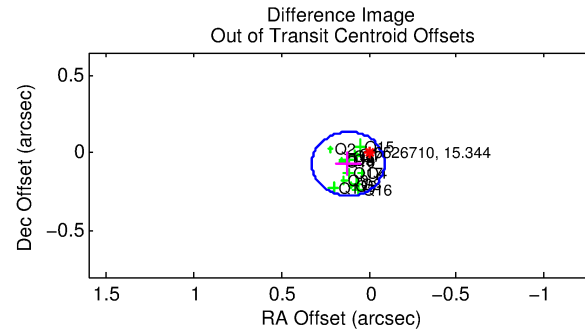
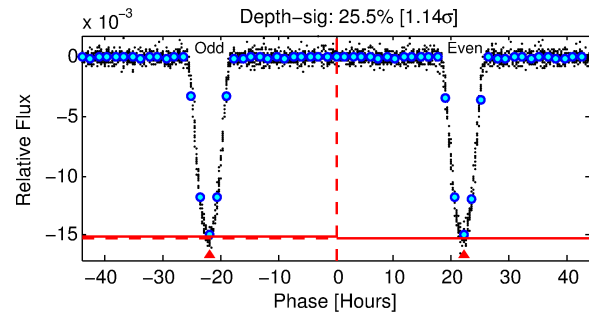
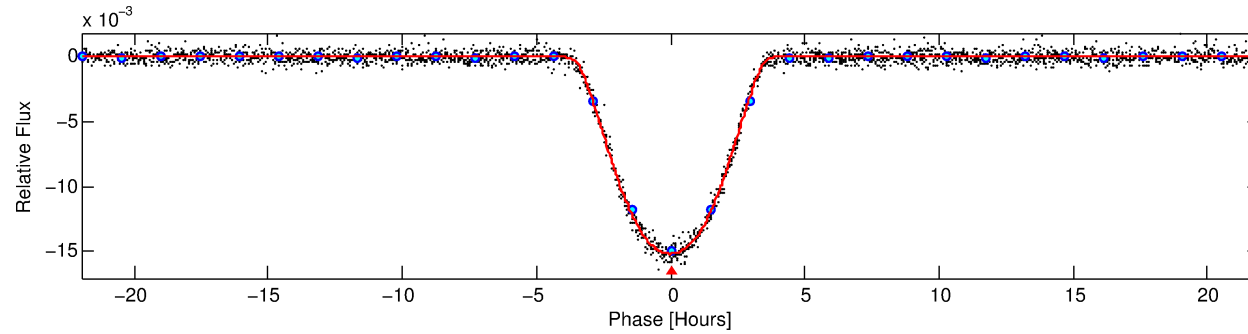
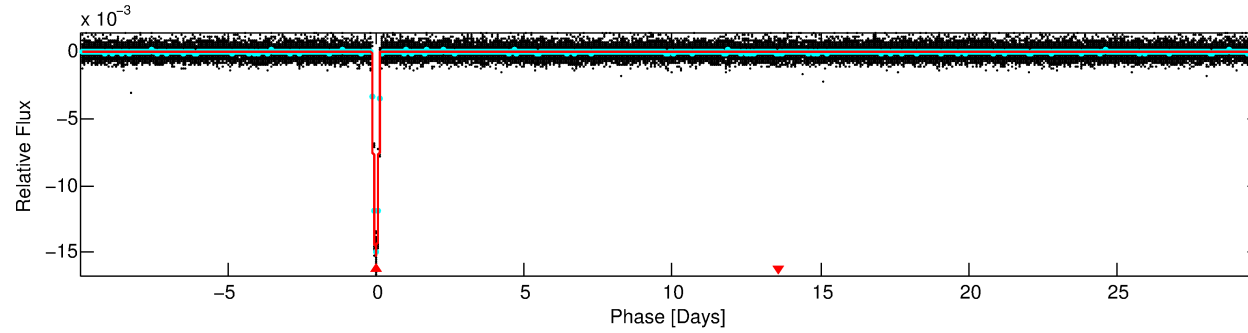
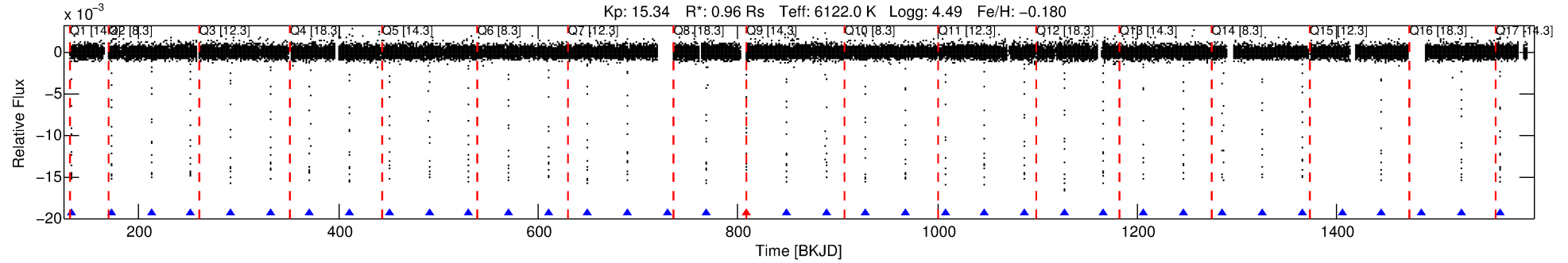
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006526710-01

No Significant Match Found

DV One-Page Summary

KIC: 6526710 Candidate: 1 of 1 Period: 39.749 d
KOI: K00856.01 Corr: 0.999



DV Fit Results:

Period = 39.74894 [0.00002] d
Epoch = 133.1055 [0.0003] BKJD
Rp/R* = 0.1361 [0.0013]
a/R* = 29.49 [0.17]
b = 0.89 [0.00]
Seff = 21.92 [8.93]
Teff = 552 [56] K
Rp = 14.32 [4.50] Re
a = 0.2310 [0.0609] AU
Ag = 10.65 [5.53] [1.75 σ]
Teffp = 1541 [146] K [6.32 σ]

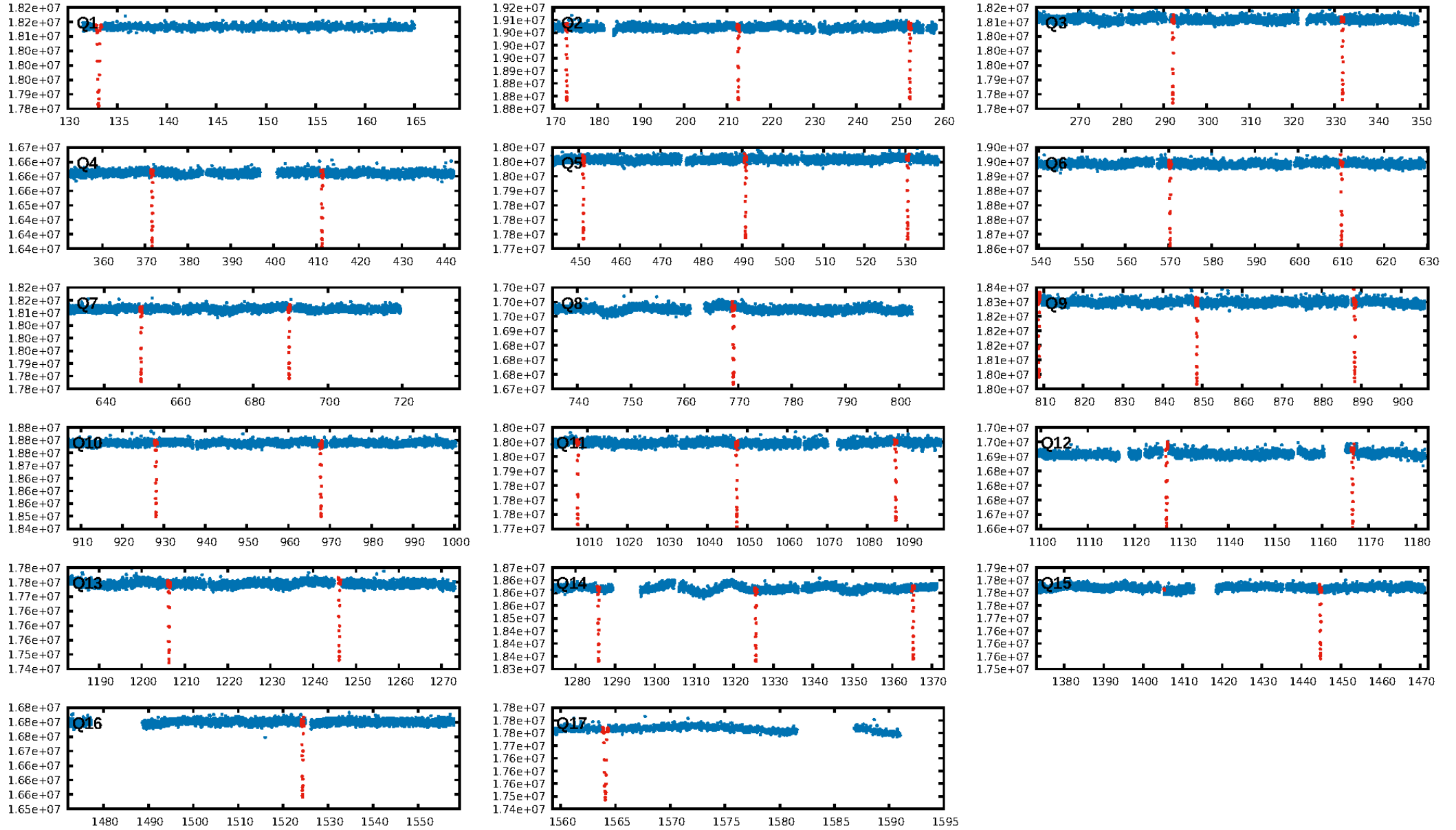
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 0.00e+00
RollingBand-fgt: 0.97 [31/32]
GhostDiagnostic-chr: 4.257
Centroid-sig: 0.0%
Centroid-so: 0.015 arcsec [0.72 σ]
OotOffset-rm: 0.138 arcsec [2.00 σ]
KicOffset-rm: 0.067 arcsec [0.98 σ]
OotOffset-st: 4/4/3/4 [15]
KicOffset-st: 4/4/3/4 [15]
DiffImageQuality-fgm: 1.00 [15/15]
DiffImageOverlap-fno: 1.00 [15/15]

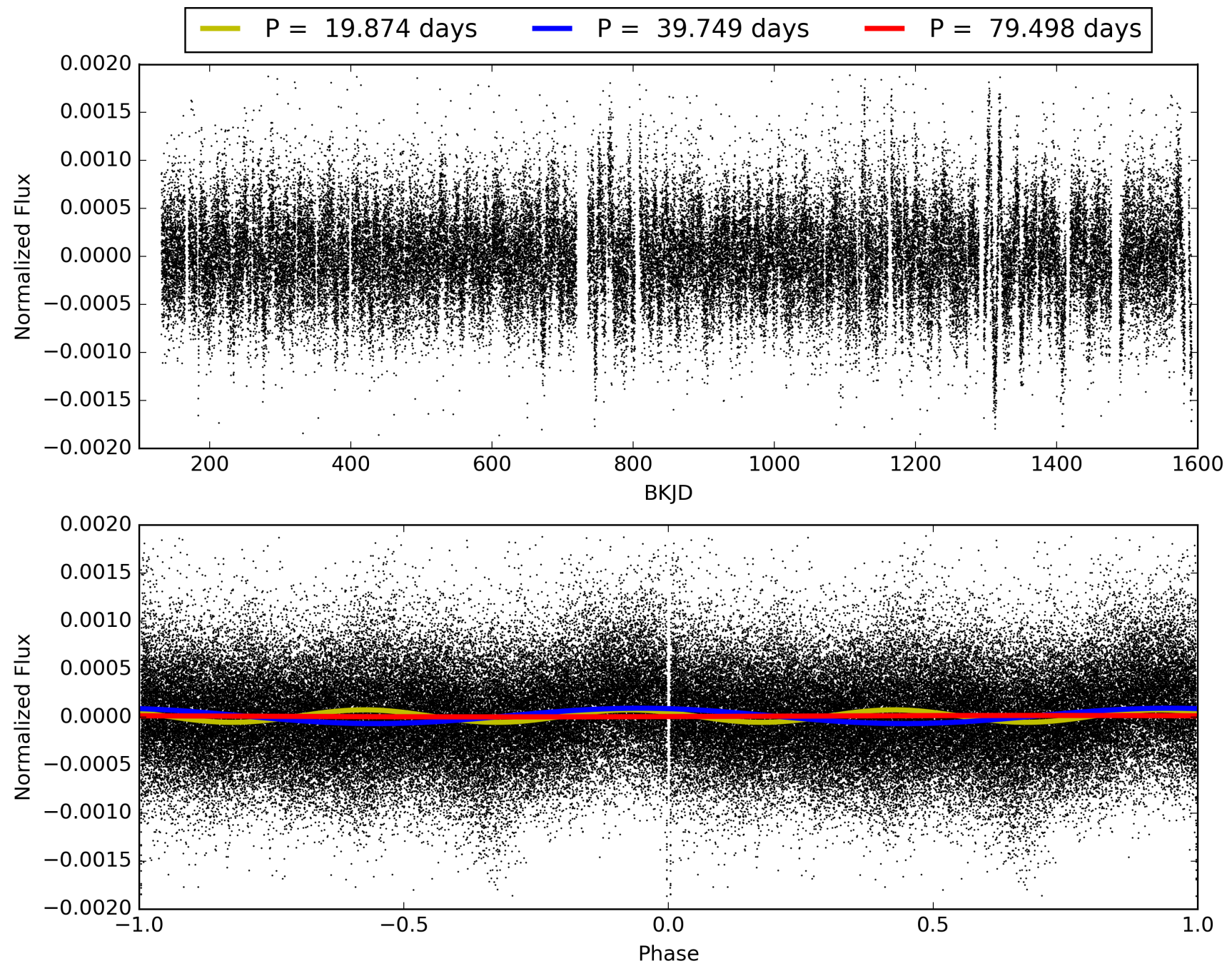
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 14:47:34 Z

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

TCE 006526710-01, PDC Light Curves

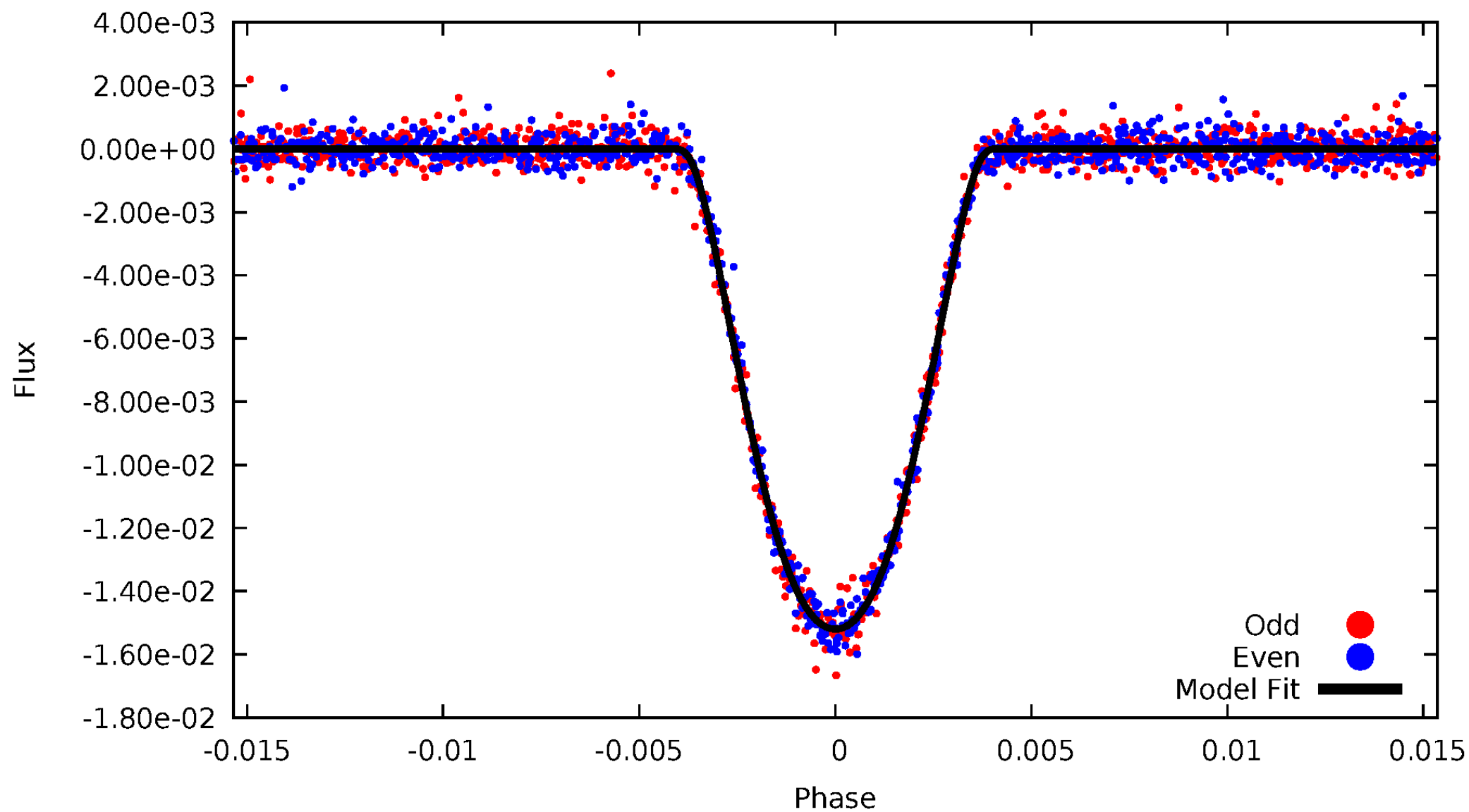


TCE 006526710-01



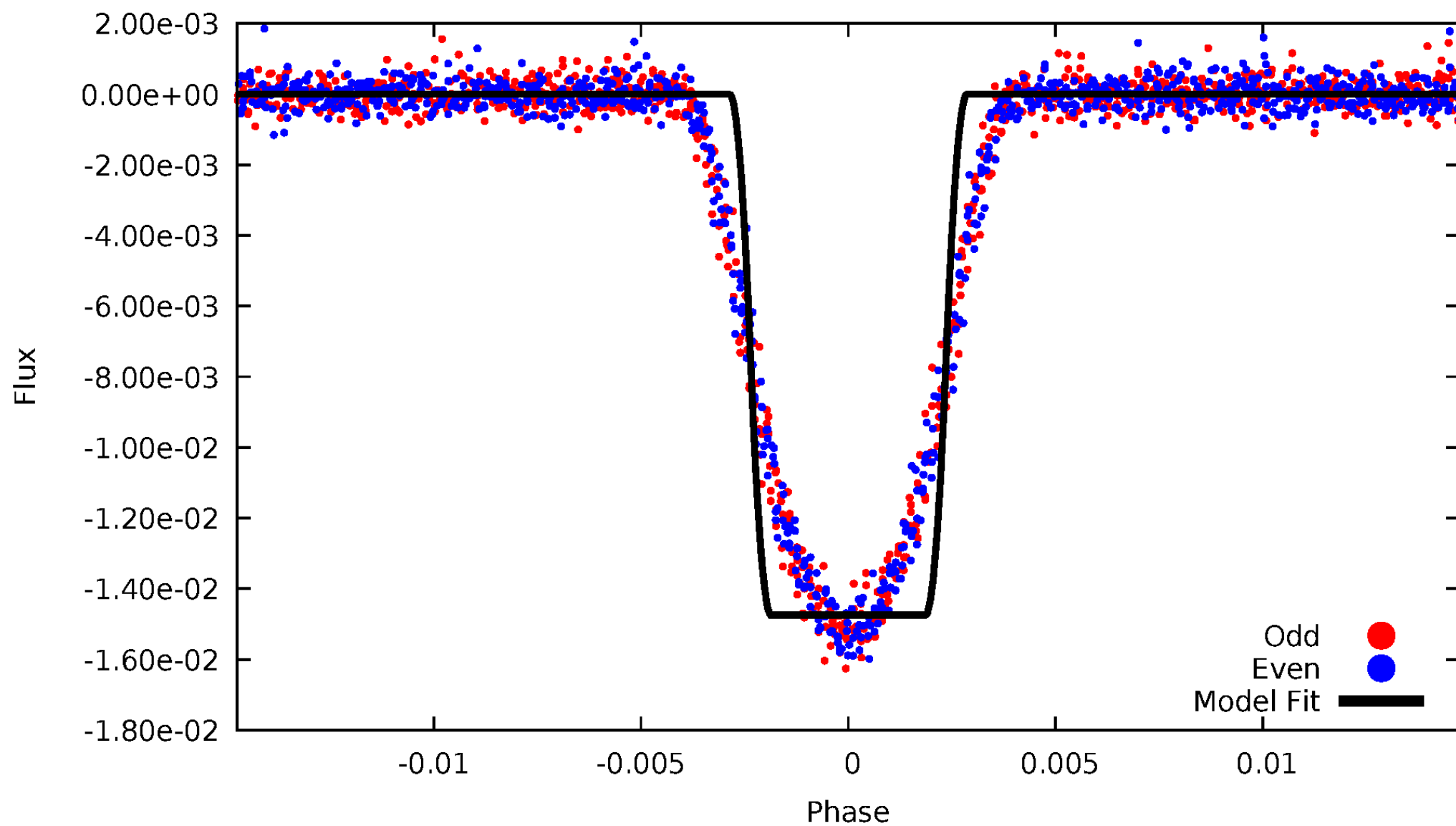
DV Odd/Even

TCE 006526710-01



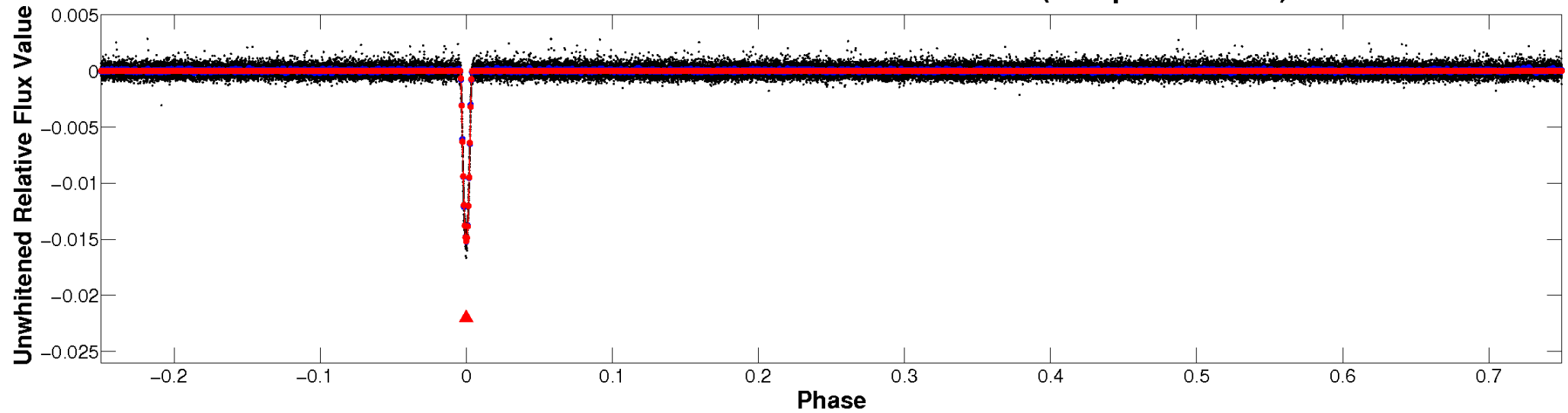
ALT Odd/Even

TCE 006526710-01

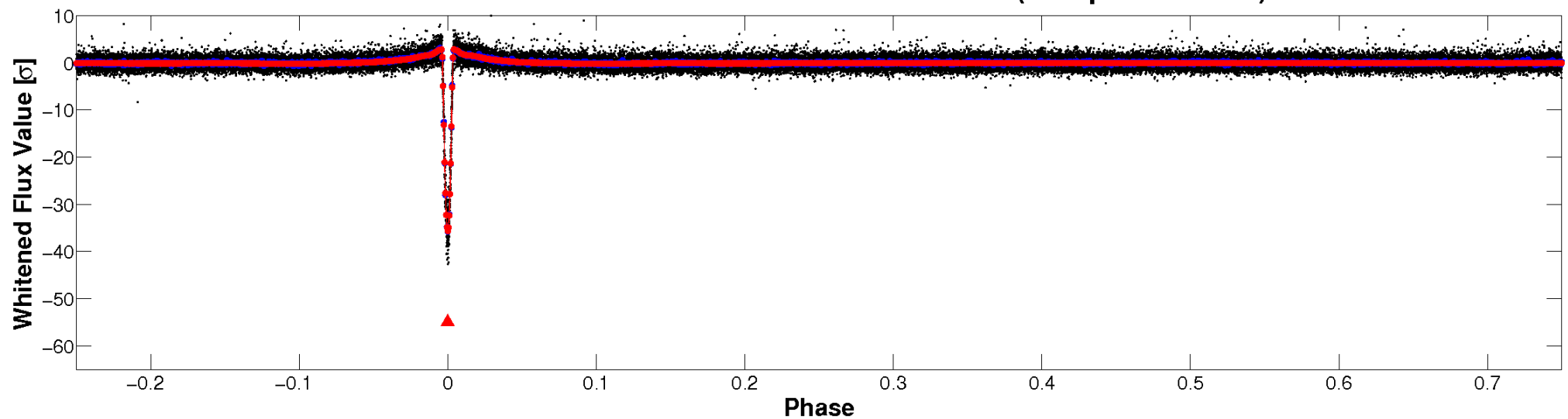


Non-Whitened Vs. Whitened Light Curve

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

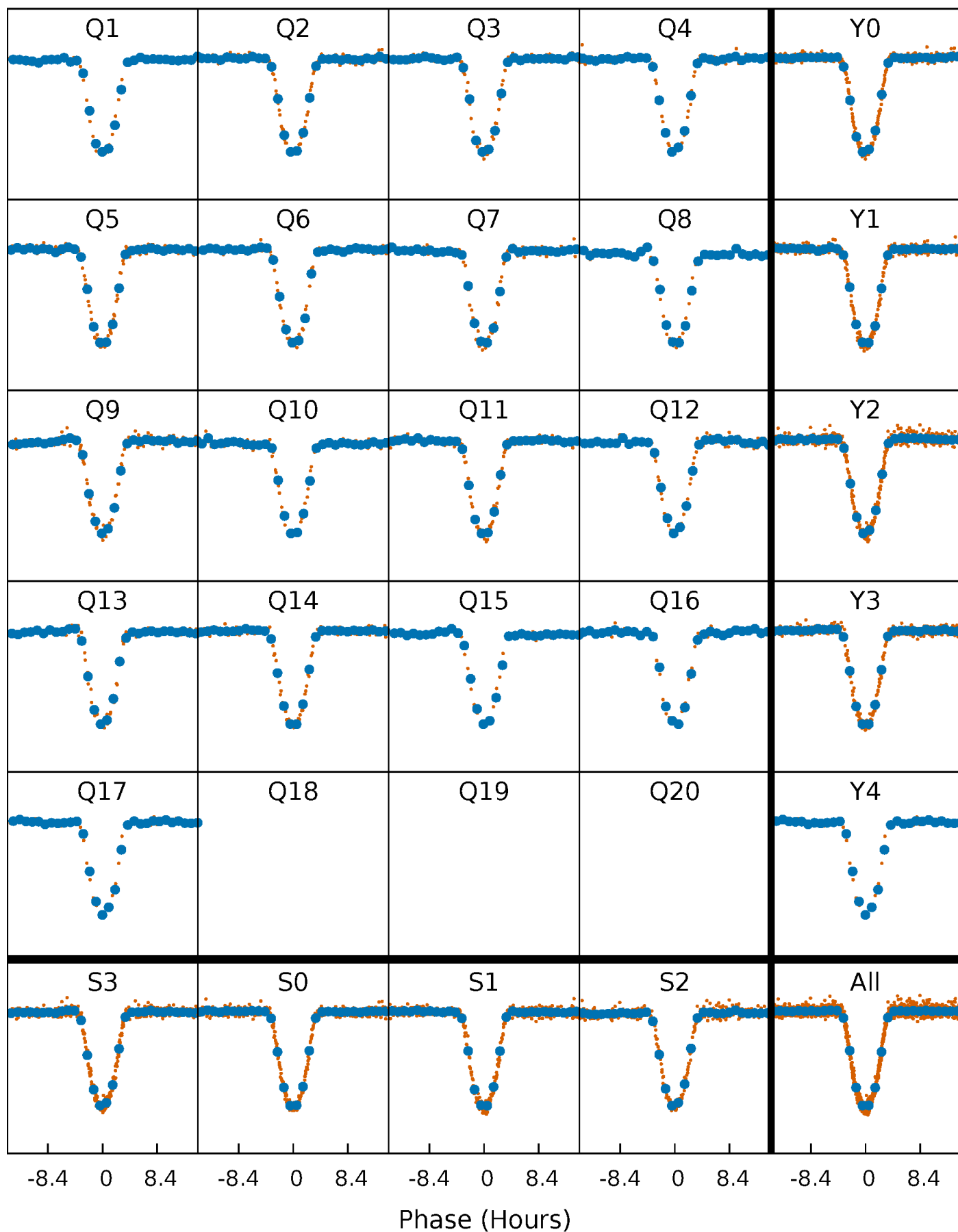


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



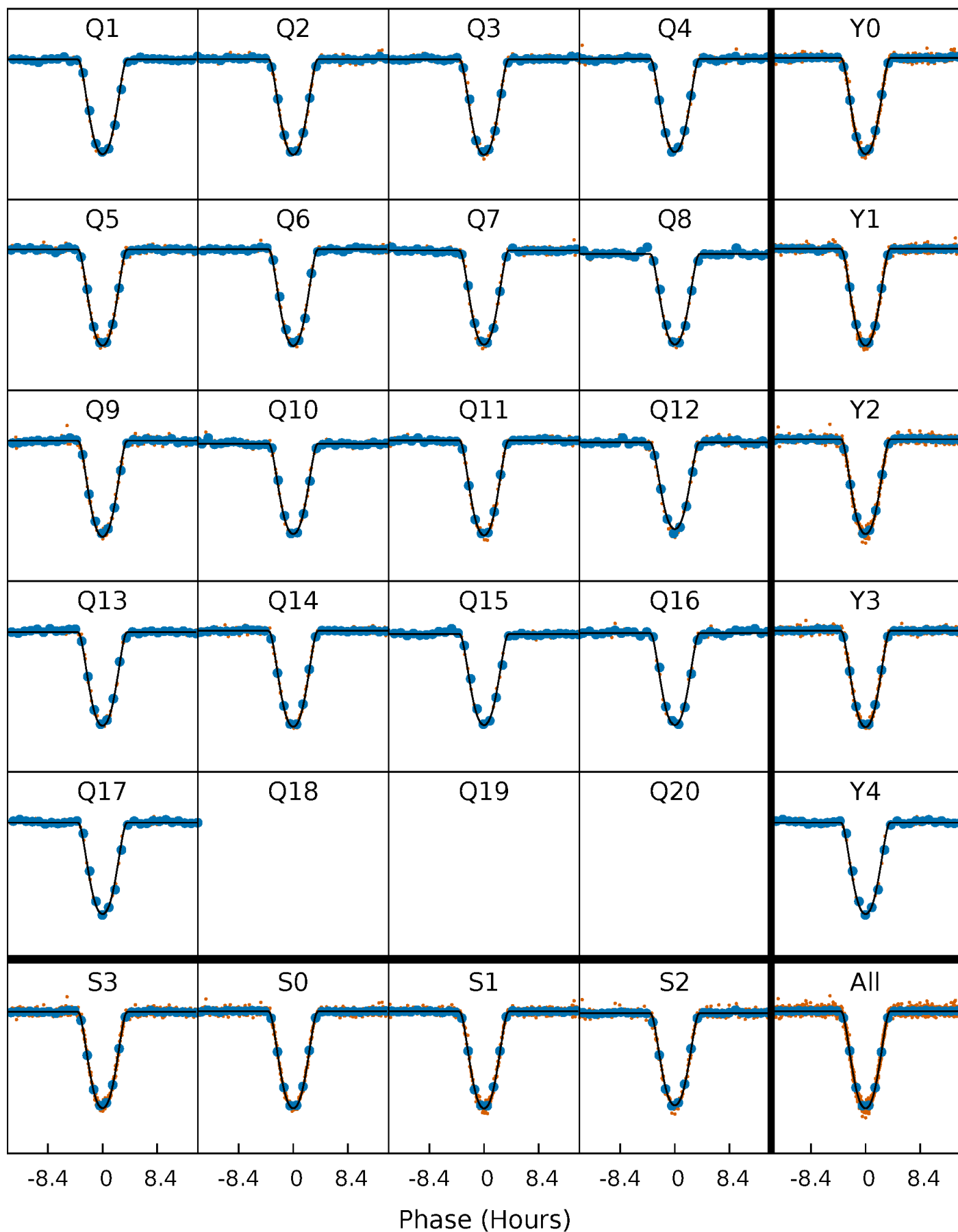
PDC Quarter-Phased Transit Curves

TCE 006526710-01 P= 39.748939 Days $T_0=133.105521$ (BKJD)



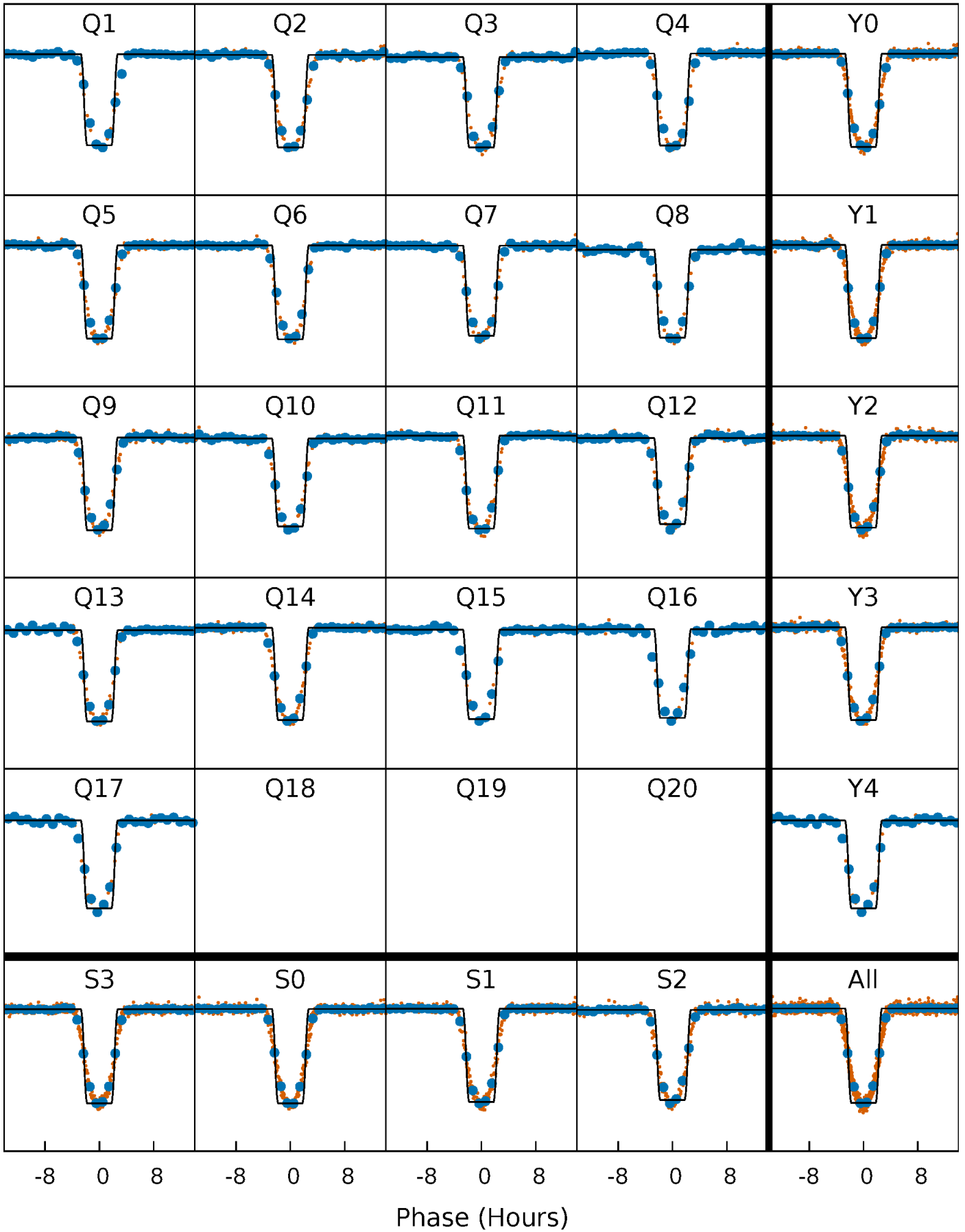
DV Quarter-Phased Transit Curves

TCE 006526710-01 P= 39.748939 Days $T_0=133.105521$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

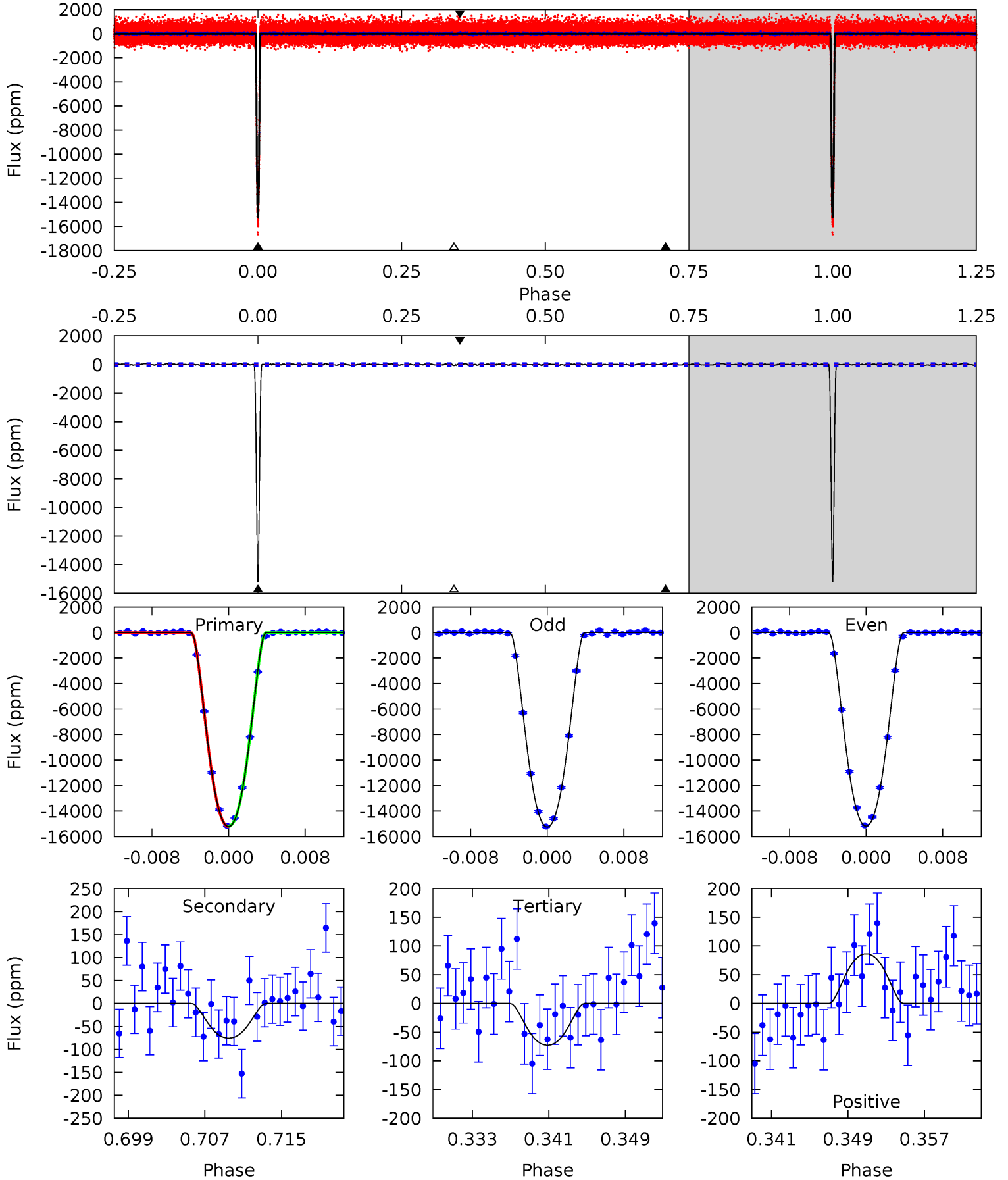
TCE 006526710-01 P= 39.749361 Days $T_0=133.098152$ (BKJD)



DV Model-Shift Uniqueness Test

006526710-01, P = 39.748939 Days, E = 93.356582 Days

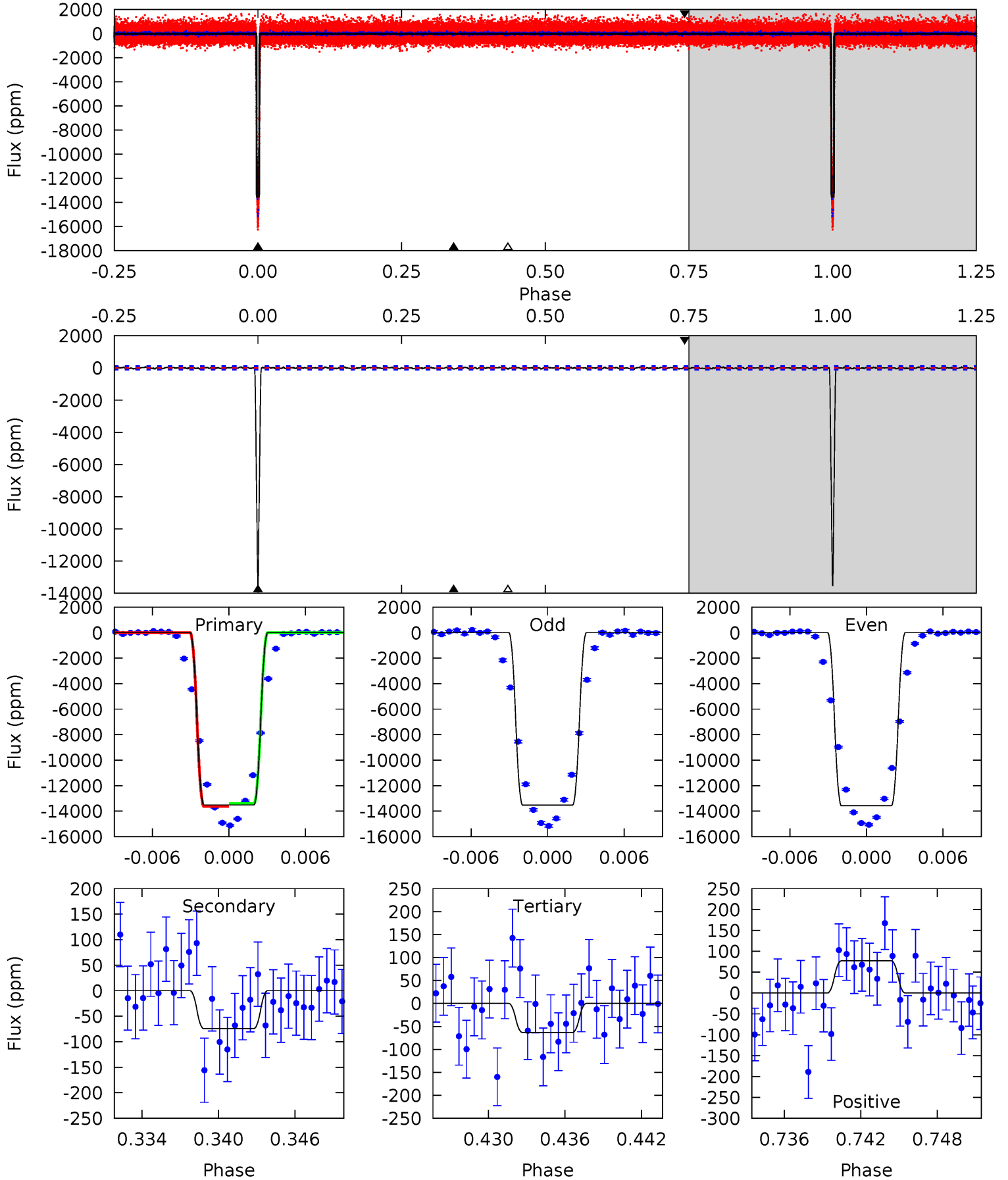
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
899.8	4.46	4.30	5.11	5.07	2.65	1.48	895.5	894.7	0.16	-0.65	2.19	1.00	0.01	0.42



Alt Model-Shift Uniqueness Test

006526710-01, P = 39.749361 Days, E = 93.348791 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
638.0	3.50	2.98	3.64	5.13	2.77	1.04	635.0	634.3	0.52	-0.13	1.09	1.00	0.01	4.98



Stellar Parameters For KIC 006526710

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6122^{+181}_{-218}	$4.487^{+0.052}_{-0.208}$	$-0.180^{+0.300}_{-0.300}$	$0.964^{+0.303}_{-0.101}$	$1.041^{+0.139}_{-0.139}$	$1.635^{+0.449}_{-0.837}$
	+3%/-4%	+1%/-5%	+167%/-167%	+31%/-10%	+13%/-13%	+27%/-51%
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 006526710-01 / KOI 0856.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-75 ± 17	$14.58^{+2.36}_{-1.02}$	786^{+53}_{-37}	2417^{+68}_{-82}	$9.721^{+3.058}_{-2.664}$
Alt.	-74 ± 21	$13.17^{+2.33}_{-1.03}$	786^{+61}_{-37}	2474^{+92}_{-106}	12^{+5}_{-4}

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 $A_{obs} \gg 1.0$

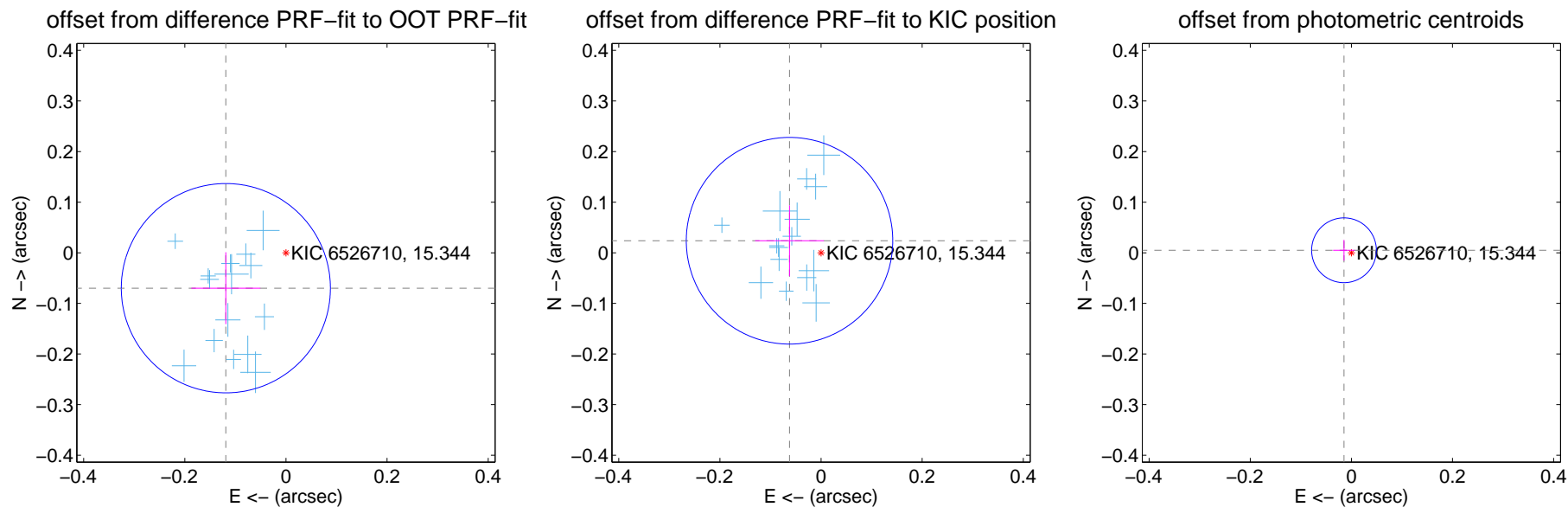
DV Centroid Data

Supplemental centroid analysis for 006526710-01. Kepler magnitude: 15.34. Transit SNR 517.28

There are 15 quarters with good PRF difference image offsets

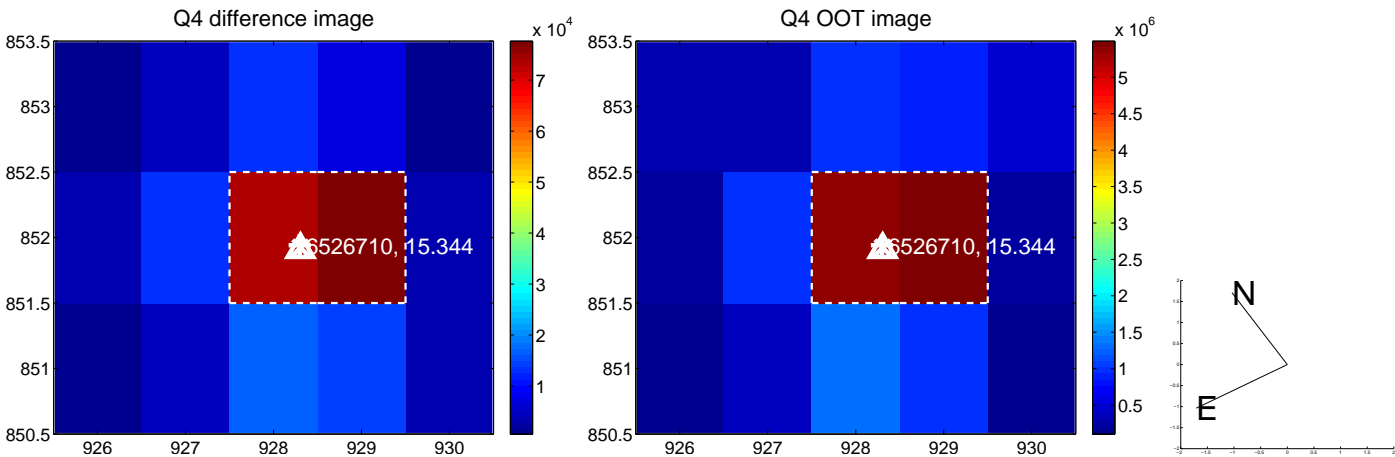
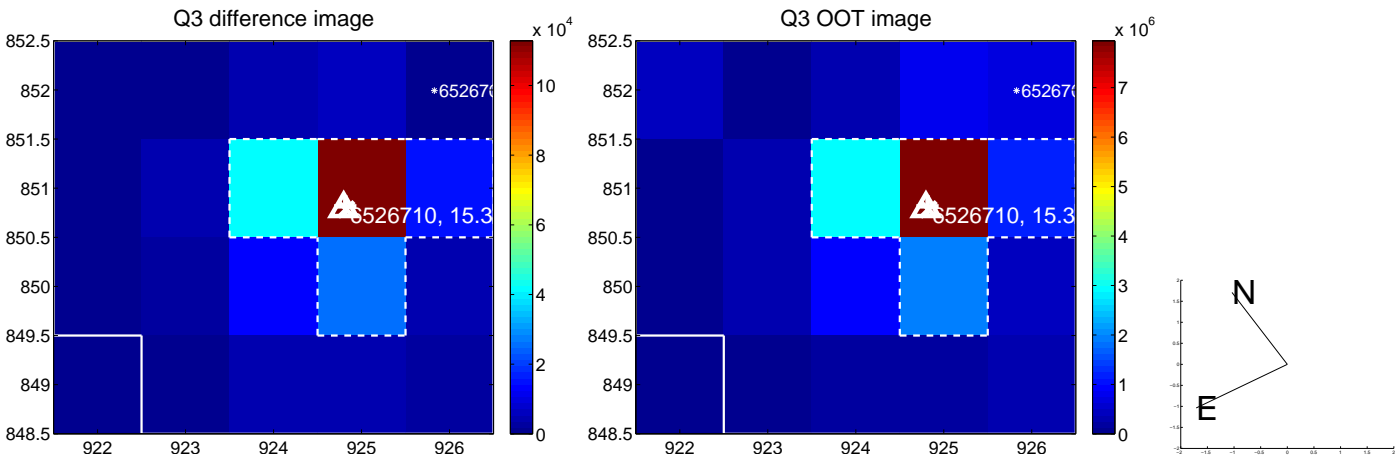
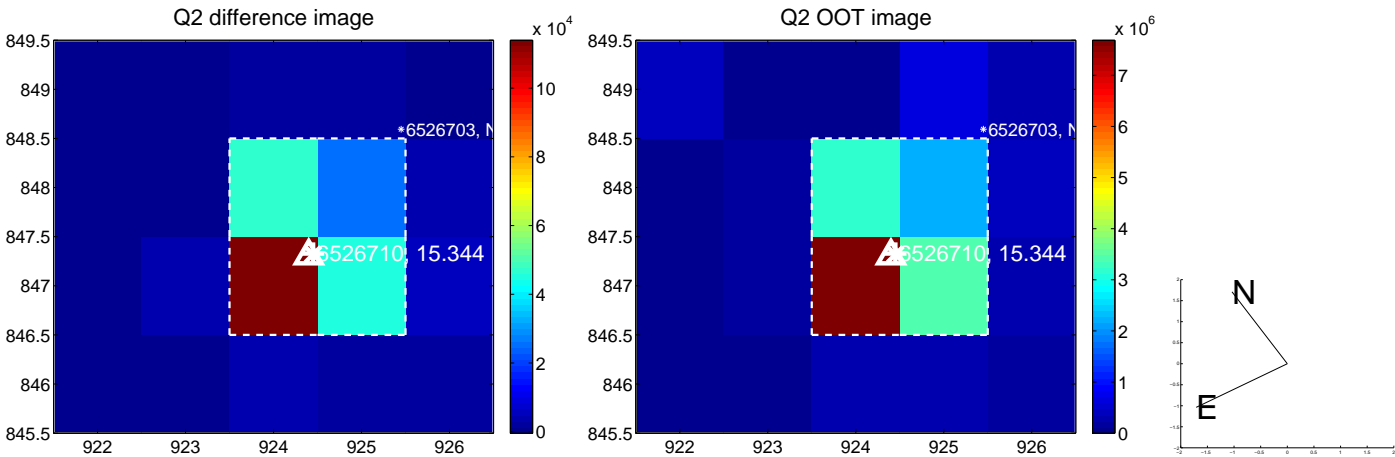
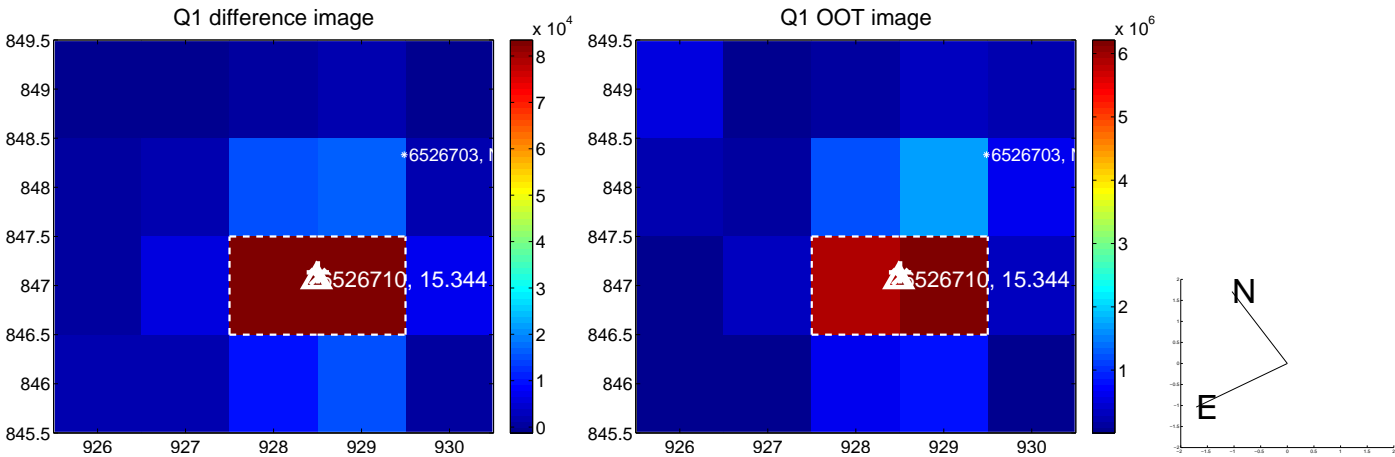
The direct PRF centroid is offset from the target star catalog position by about 0.21 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.138 ± 0.069	2.00	0.119 ± 0.068	-0.070 ± 0.071
PRF-fit source offset from KIC position	0.067 ± 0.068	0.98	0.062 ± 0.068	0.024 ± 0.070
photometric centroid source offset	0.02 ± 0.02	0.72	0.01 ± 0.02	0.00 ± 0.02

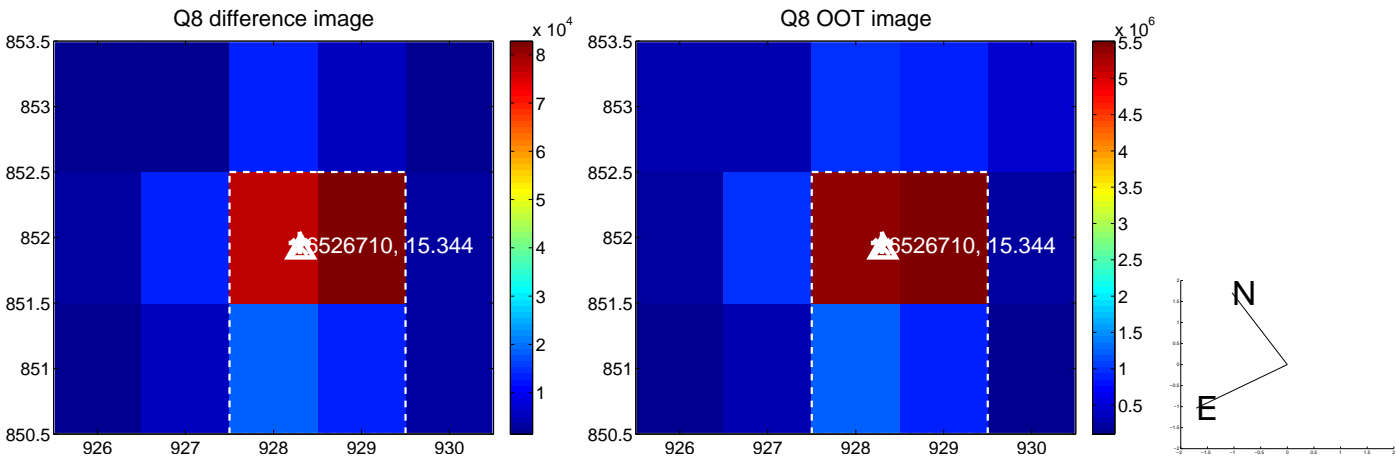
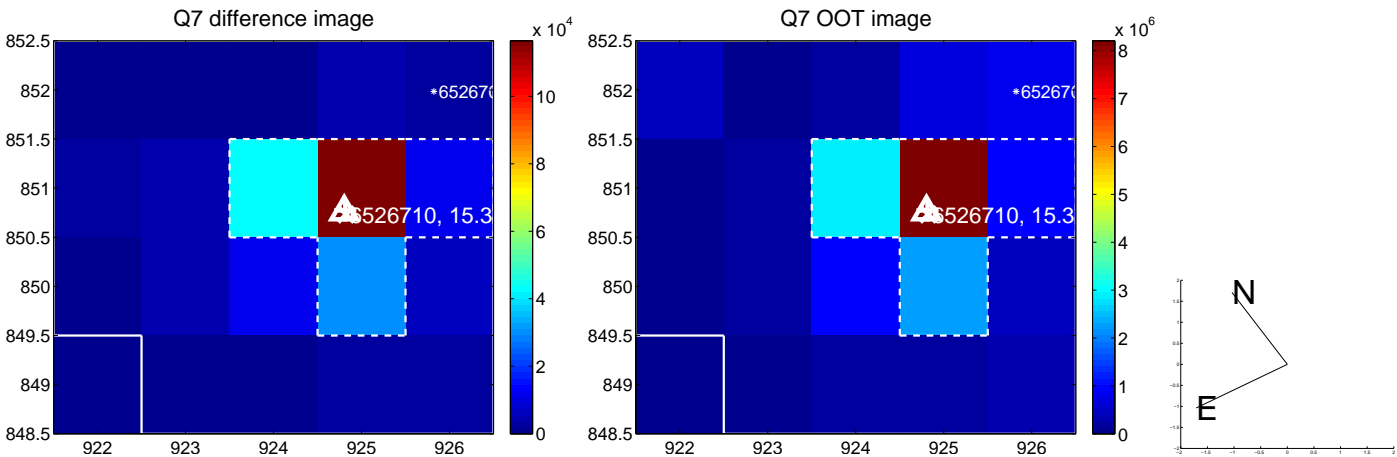
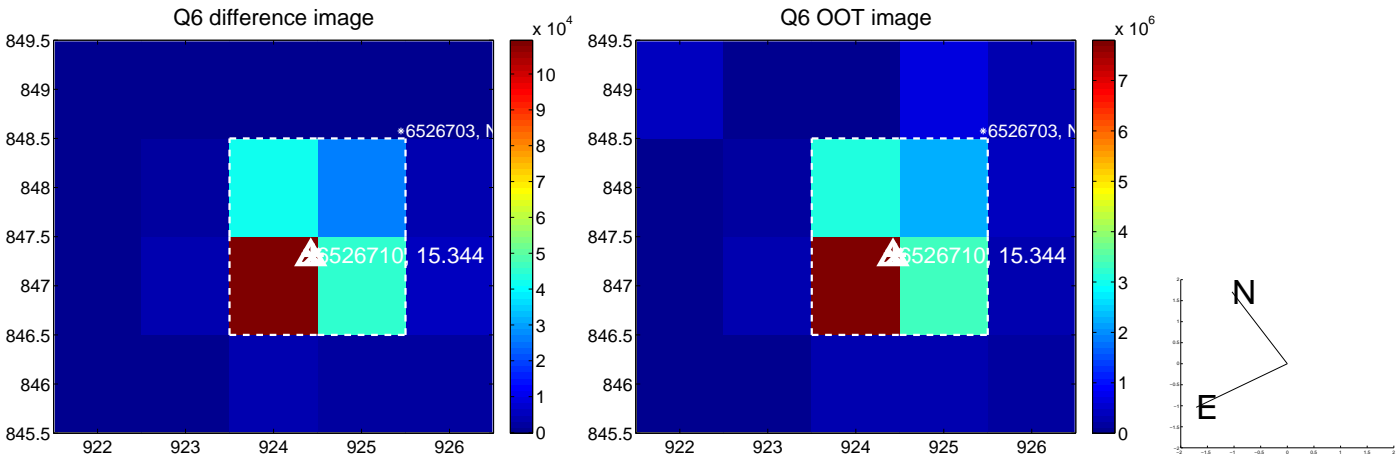
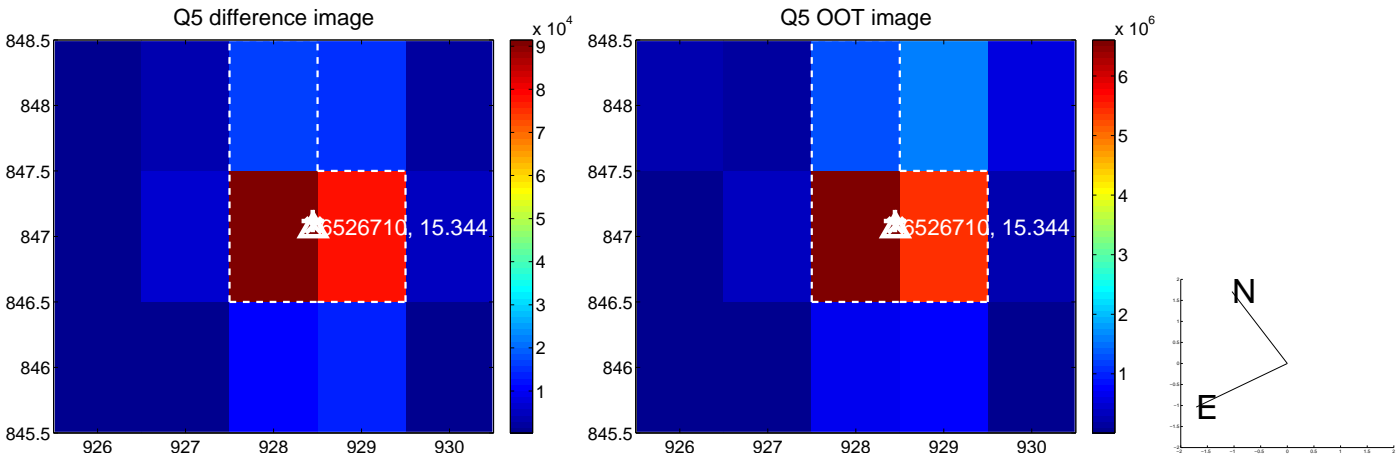


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

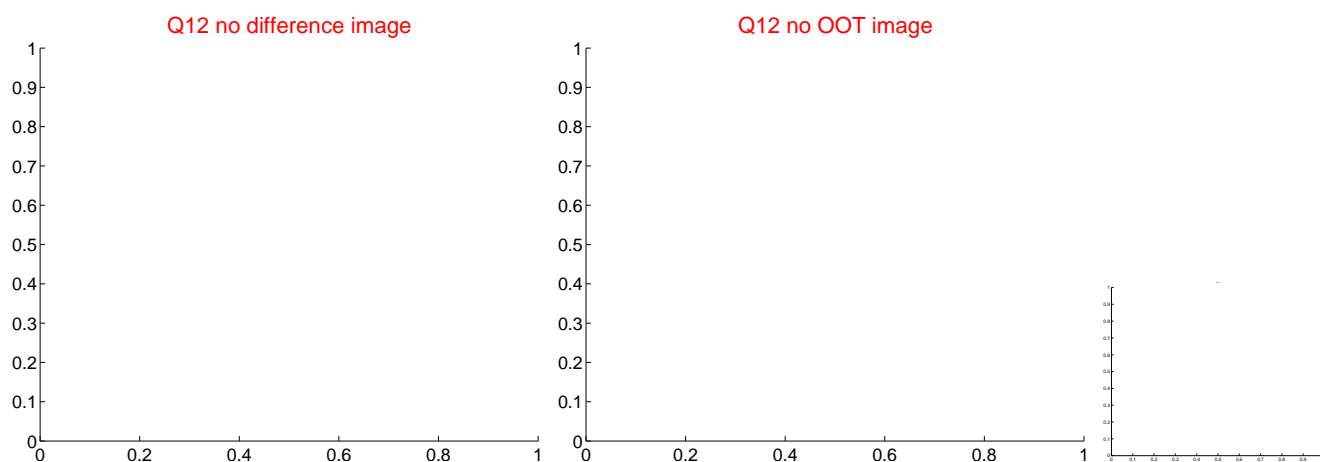
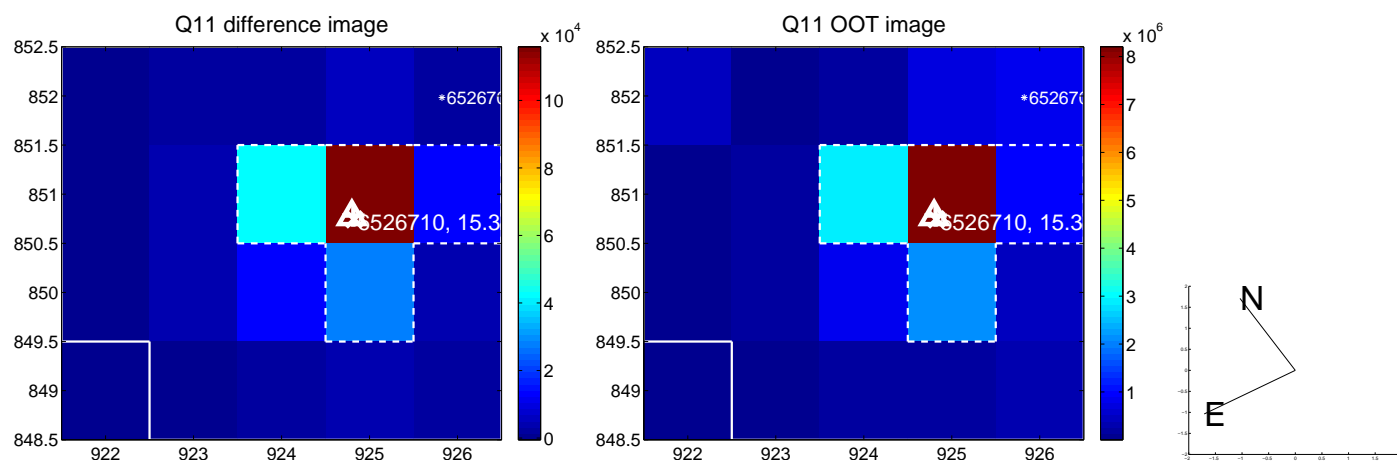
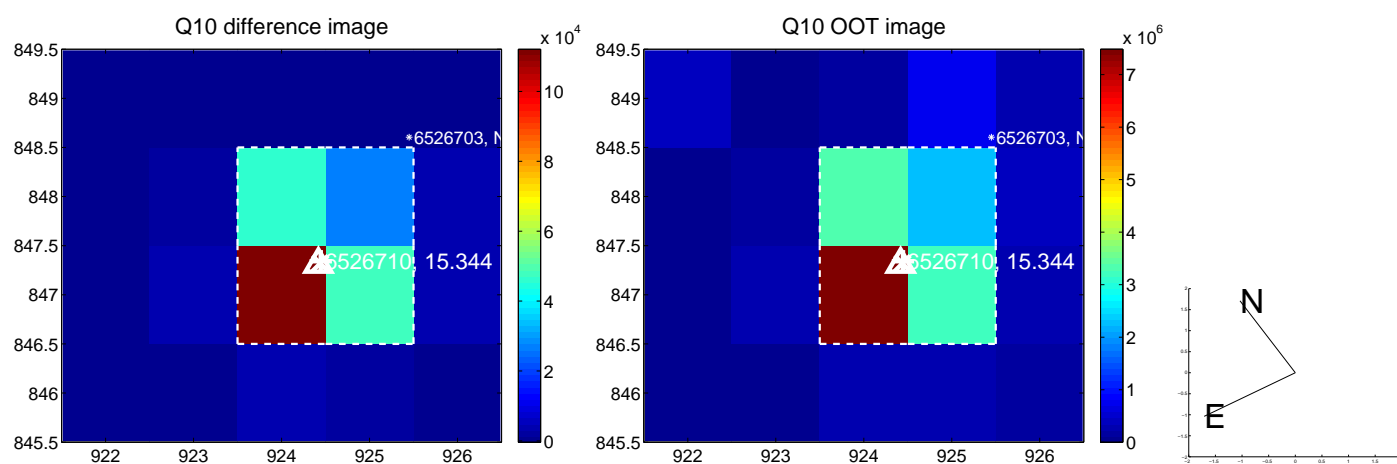
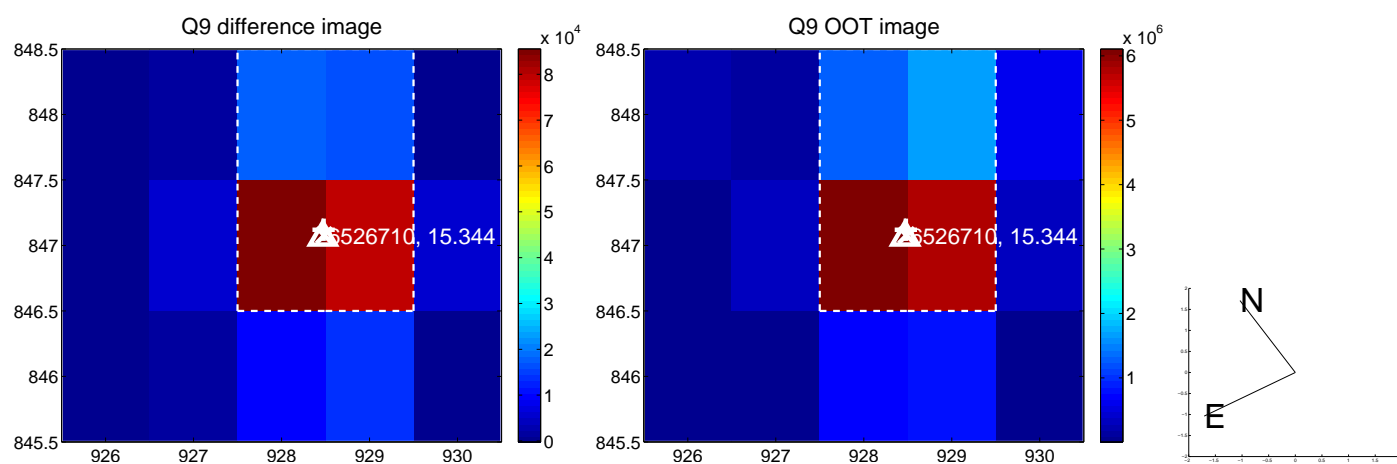
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



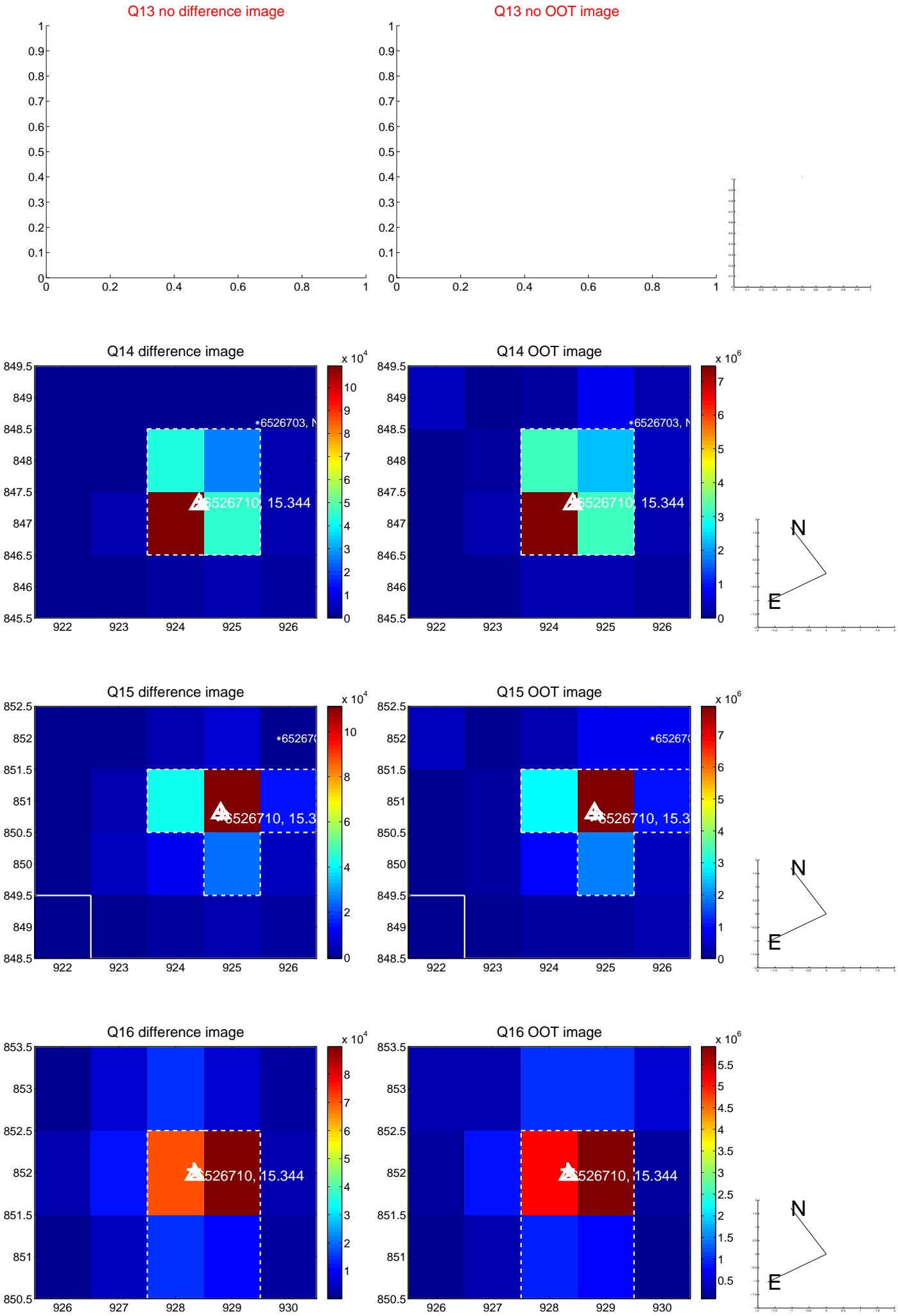
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



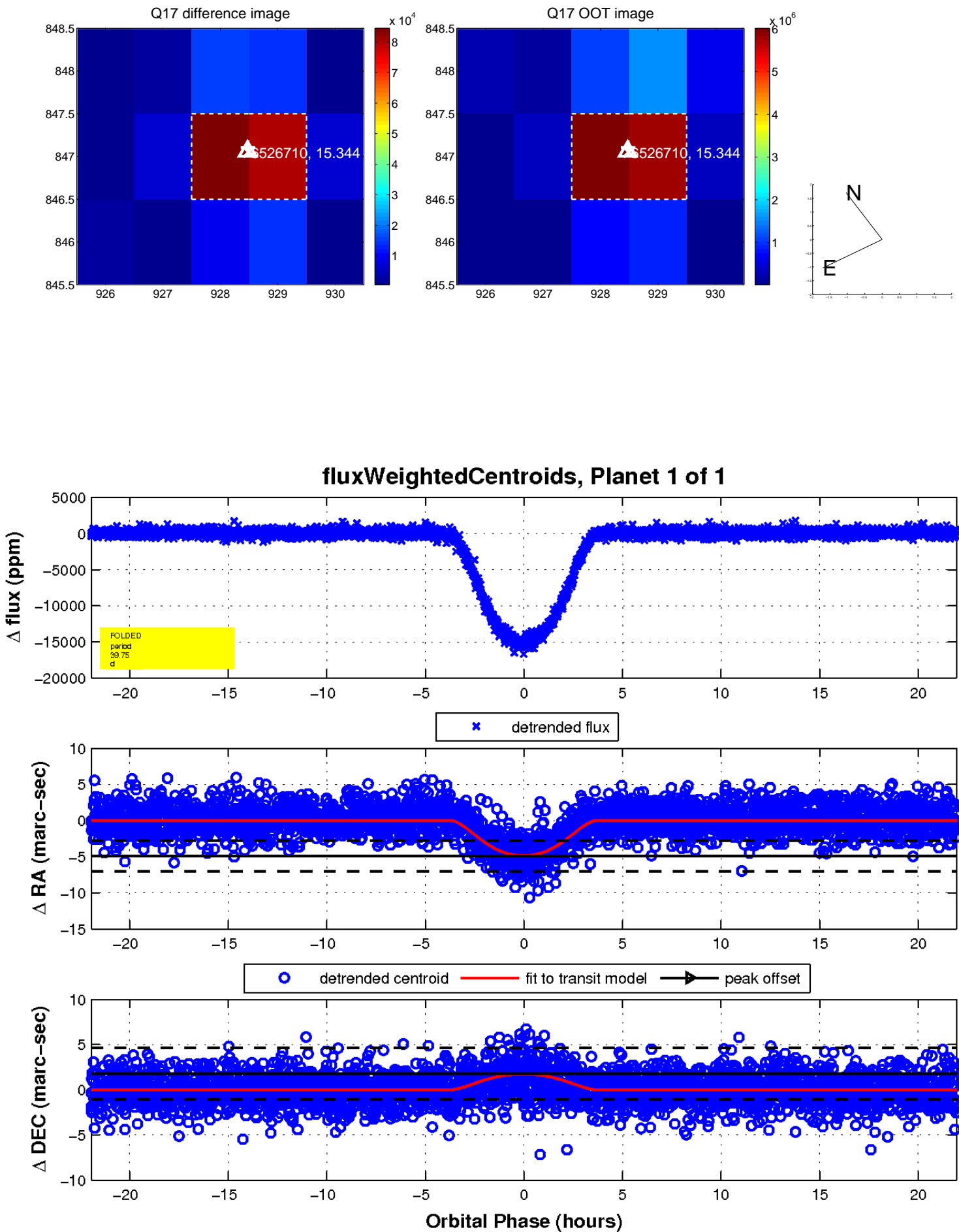
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

