

KIC 006154326

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})
006154326-01	OBS	No	0.882007	131.966886	150.1	6.807	8.1	8.3	1.53	6609	1.97	10557.16

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006154326-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT

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

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

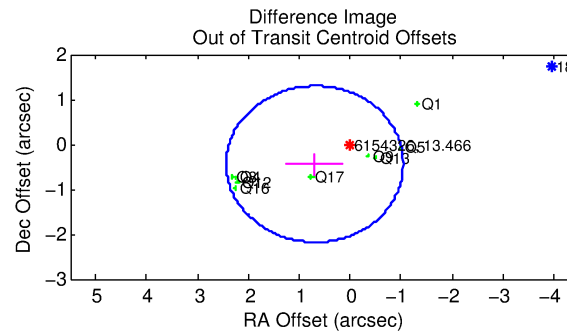
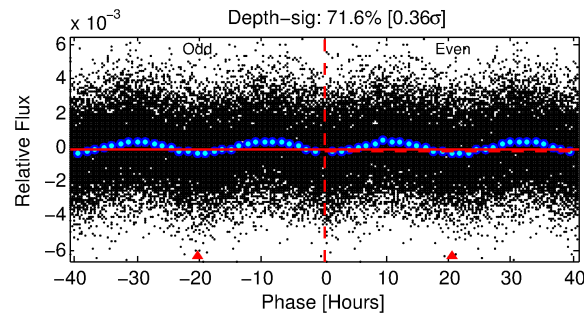
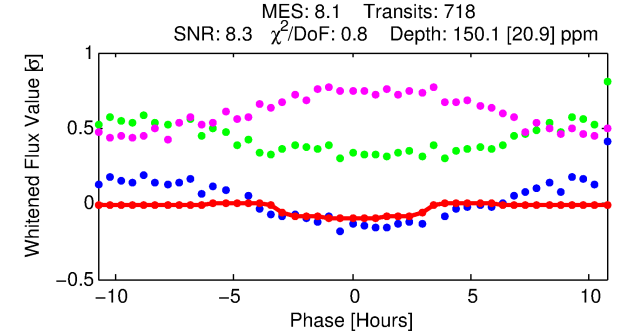
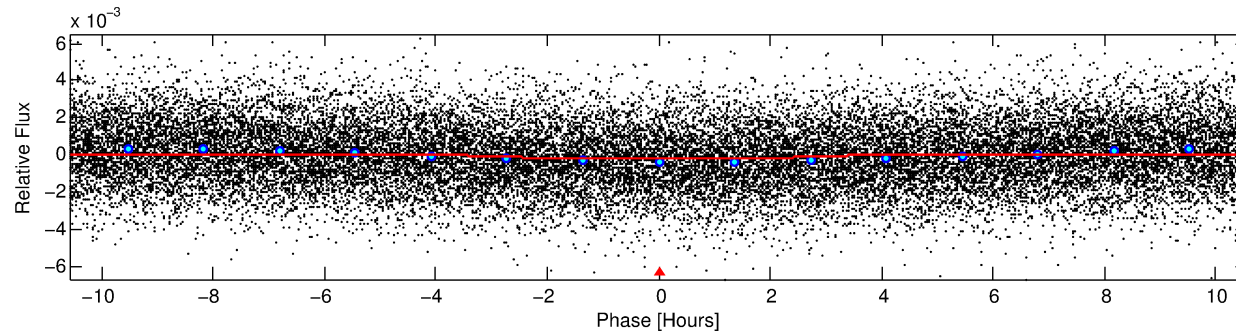
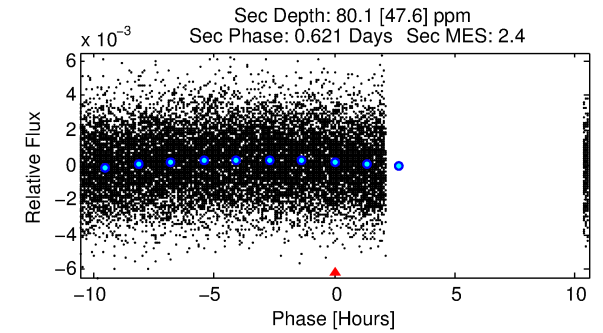
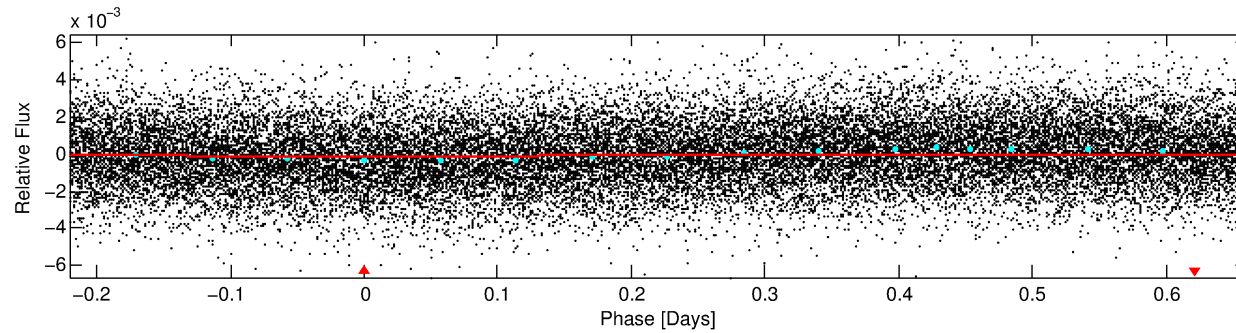
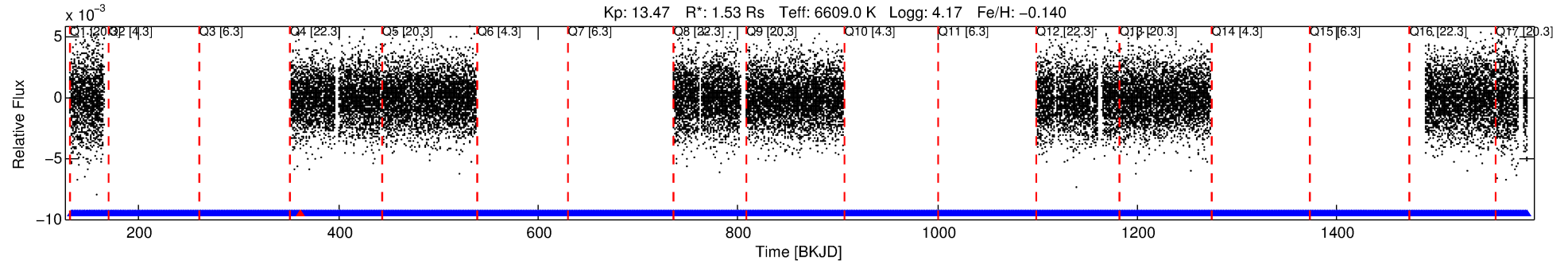
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006154326-01

No Significant Match Found

DV One-Page Summary

KIC: 6154326 Candidate: 1 of 1 Period: 0.882 d



DV Fit Results:

Period = 0.88201 [0.00002] d
Epoch = 131.9669 [0.0091] BKJD
Rp/R* = 0.0118 [0.0175]
a/R* = 1.13 [2.06]
b = 0.60 [8.98]
Seff = 10557.16 [3894.61]
Teq = 2585 [238] K
Rp = 1.97 [2.99] Re
a = 0.0195 [0.0046] AU
Ag = 4.33 [13.26] [0.25σ]
Teffp = 5765 [4390] K [0.72σ]

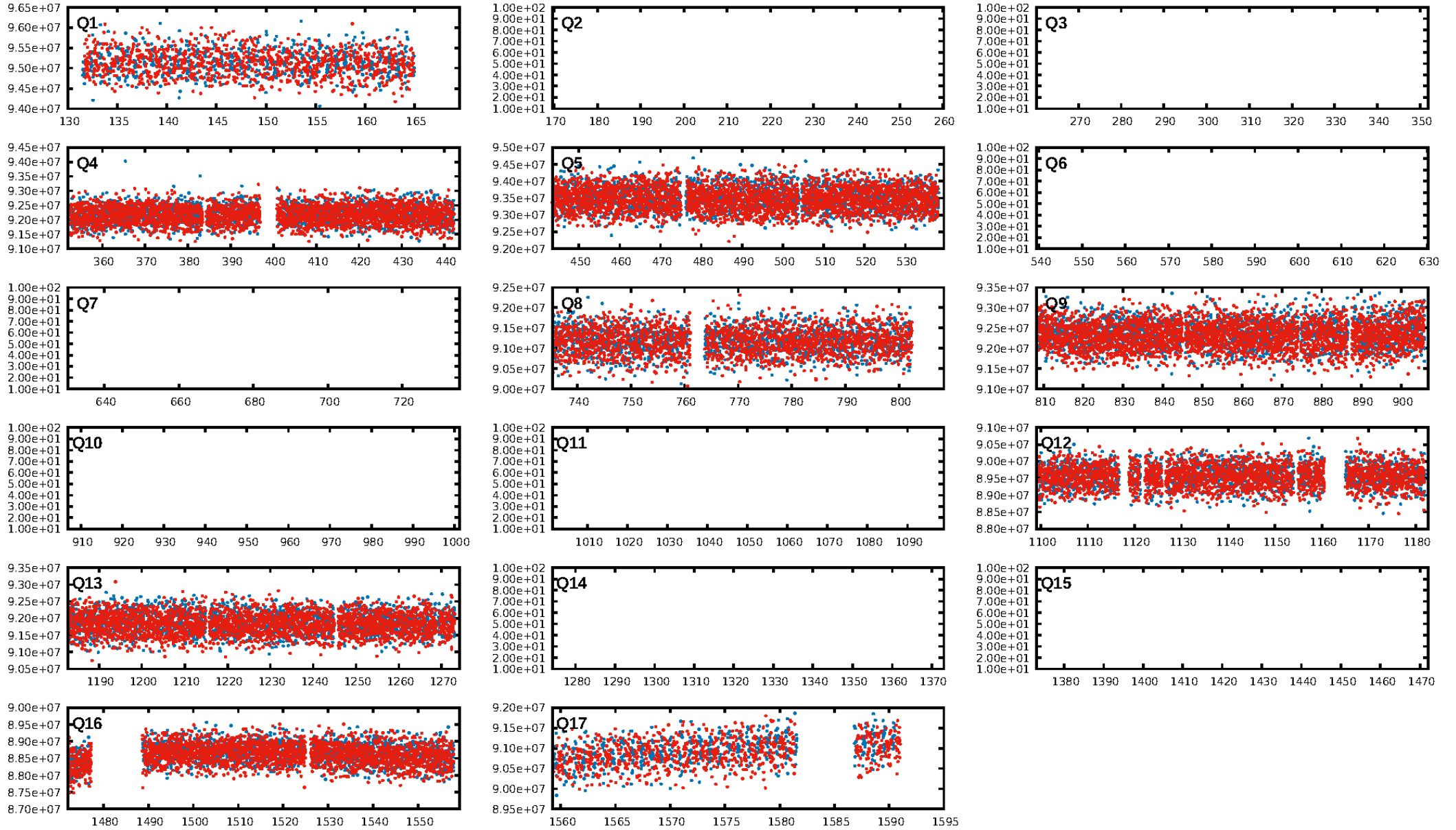
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 2.61e-47
RollingBand-fgt: 1.00 [649/650]
GhostDiagnostic-chr: 2.09
Centroid-sig: 0.0%
Centroid-so: 0.268 arcsec [0.98σ]
OotOffset-rm: 0.822 arcsec [1.42σ]
KicOffset-rm: 1.023 arcsec [1.92σ]
OotOffset-st: 0/0/4/5 [9]
KicOffset-st: 0/0/4/5 [9]
DiffImageQuality-fgm: 1.00 [9/9]
DiffImageOverlap-fno: 1.00 [9/9]

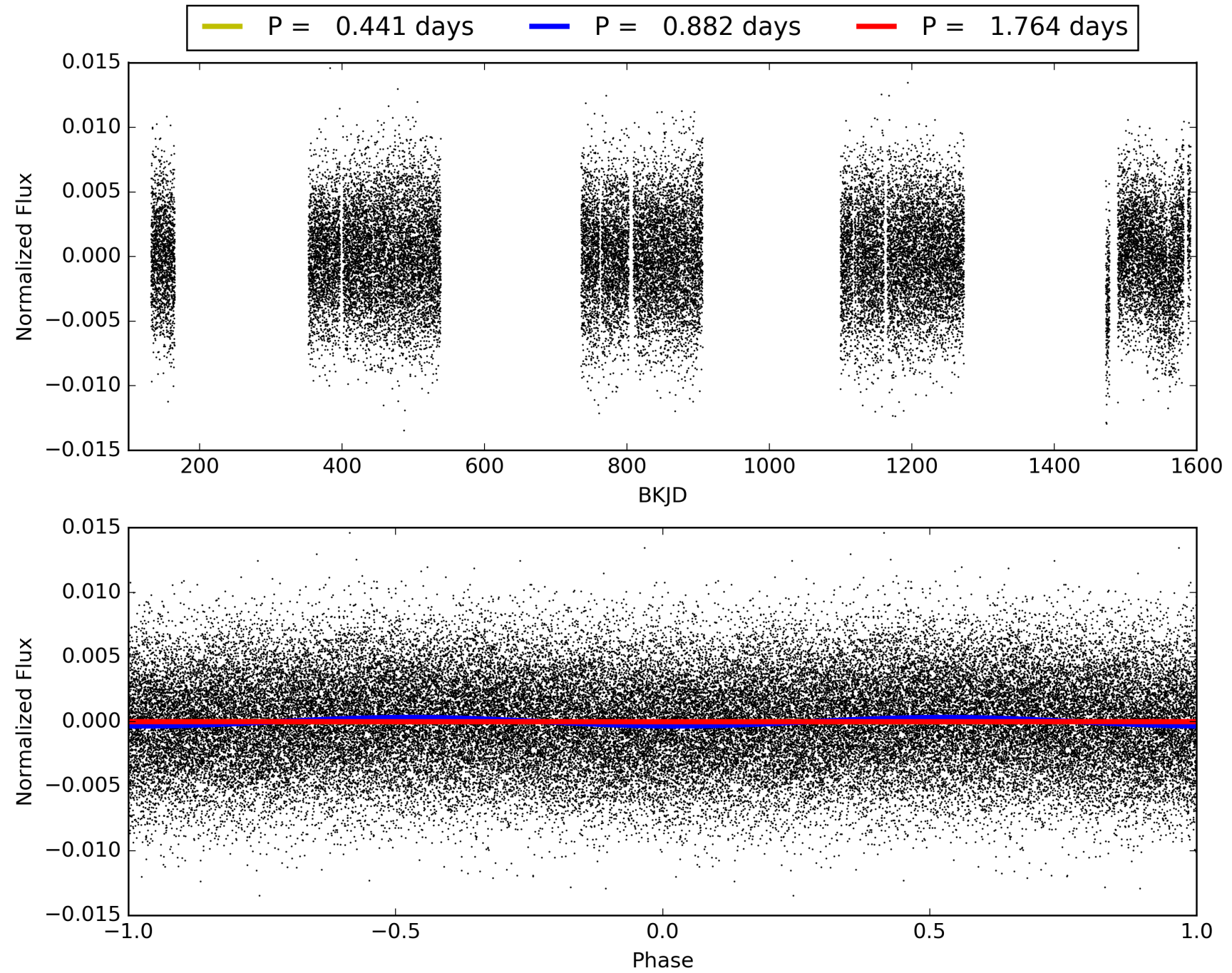
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 03:18:17 Z

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

TCE 006154326-01, PDC Light Curves

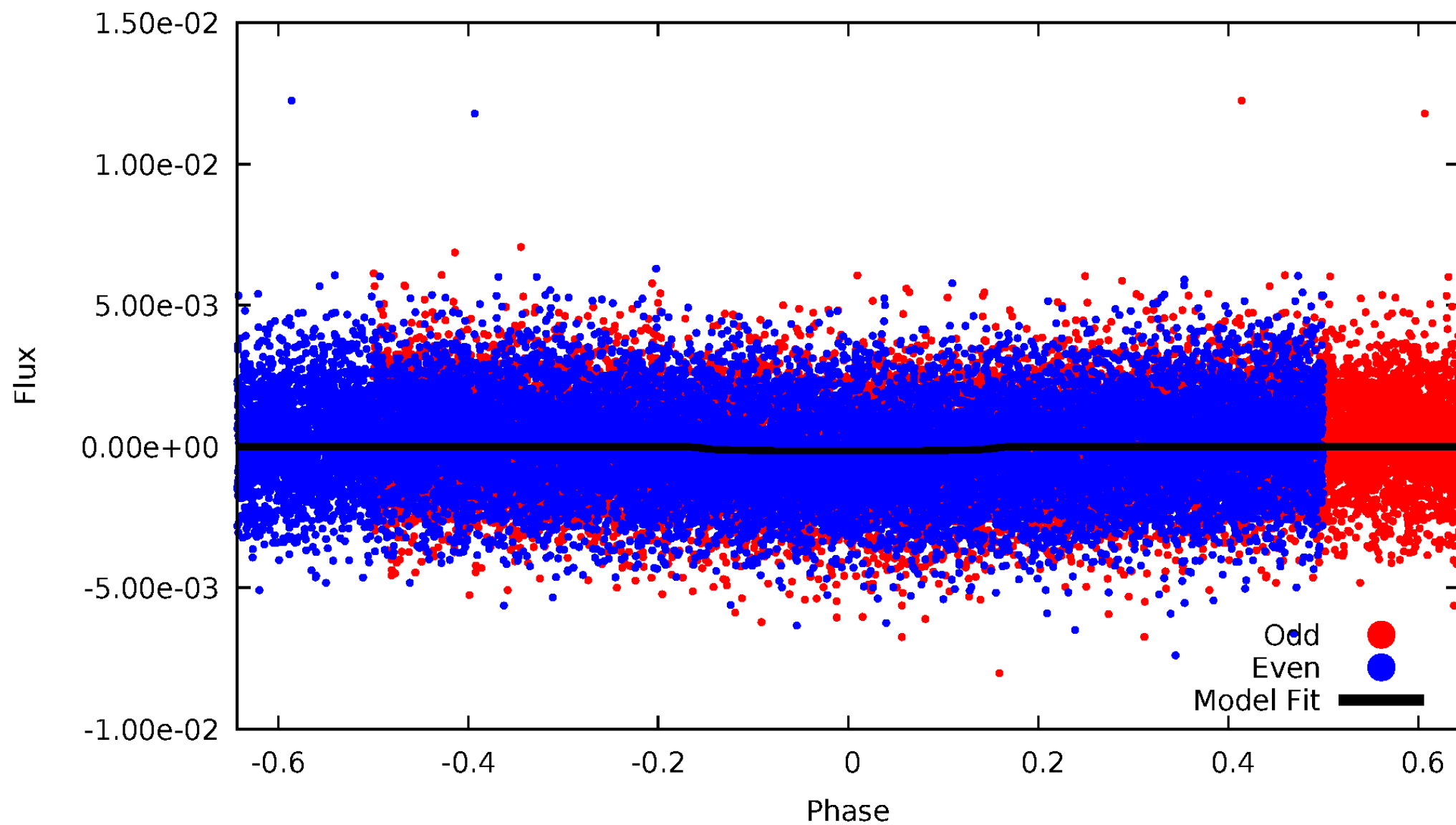


TCE 006154326-01



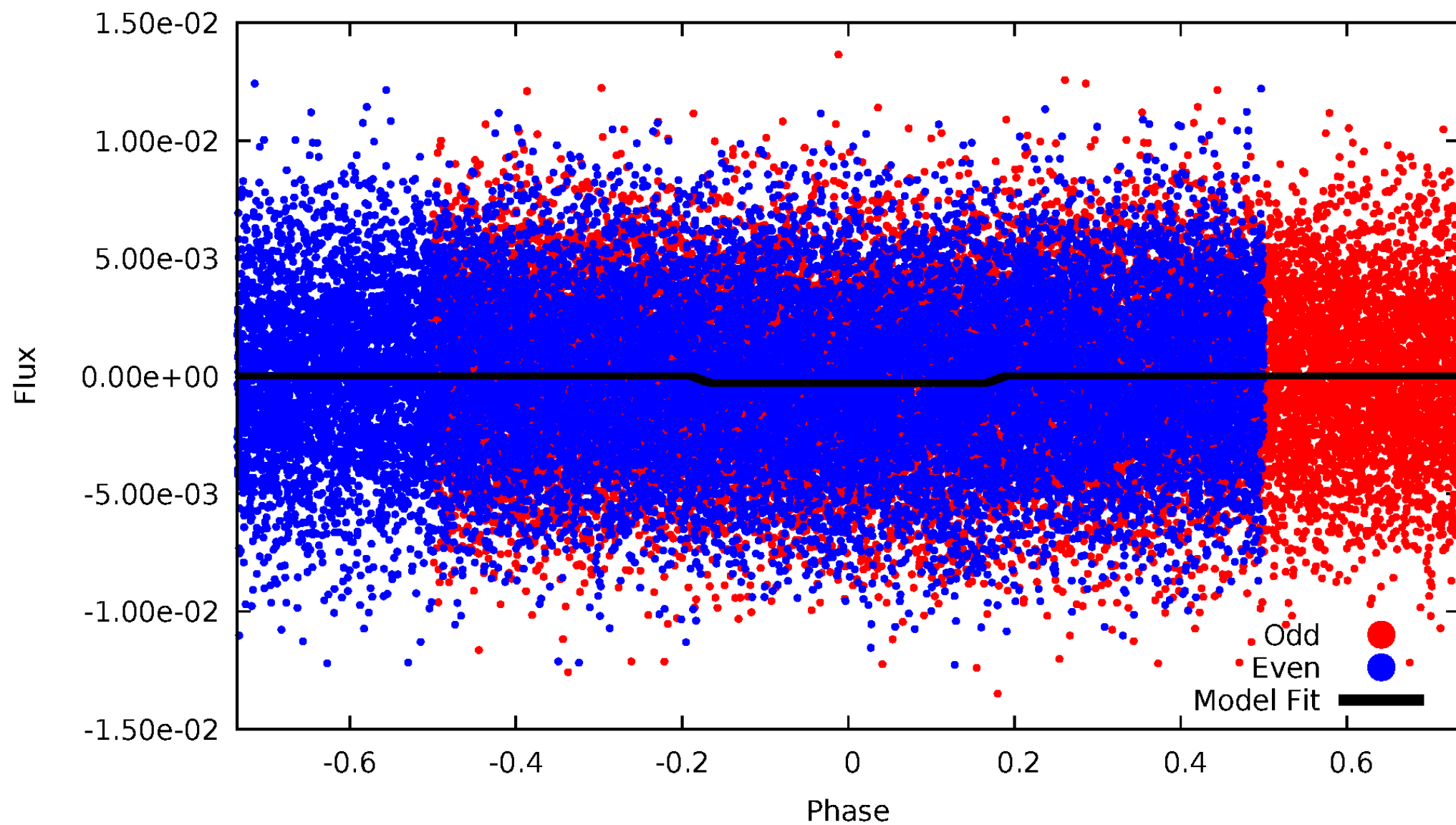
DV Odd/Even

TCE 006154326-01



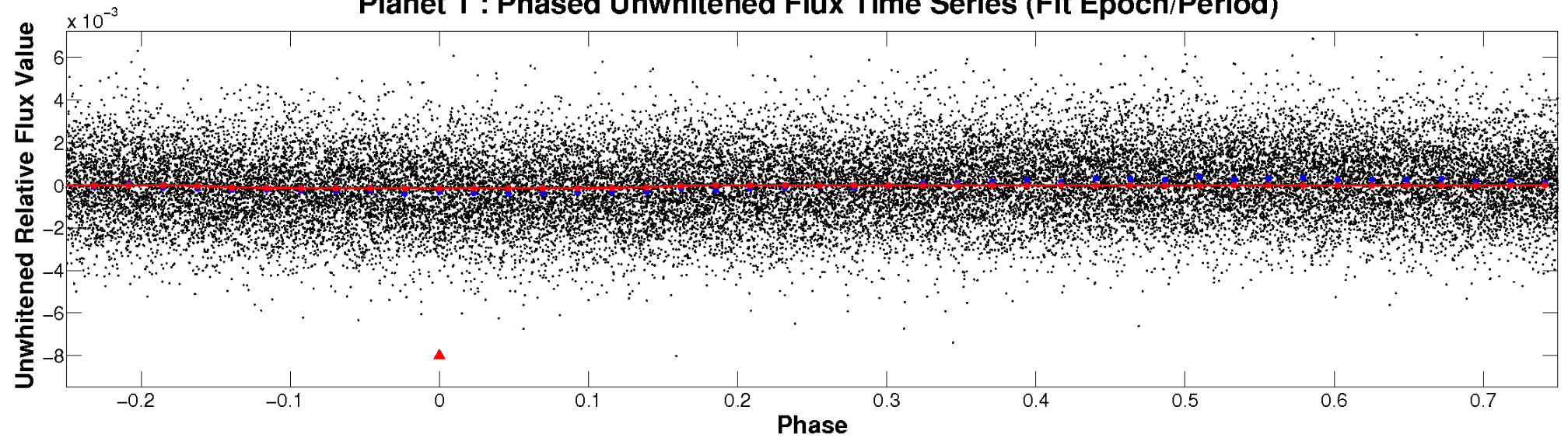
ALT Odd/Even

TCE 006154326-01

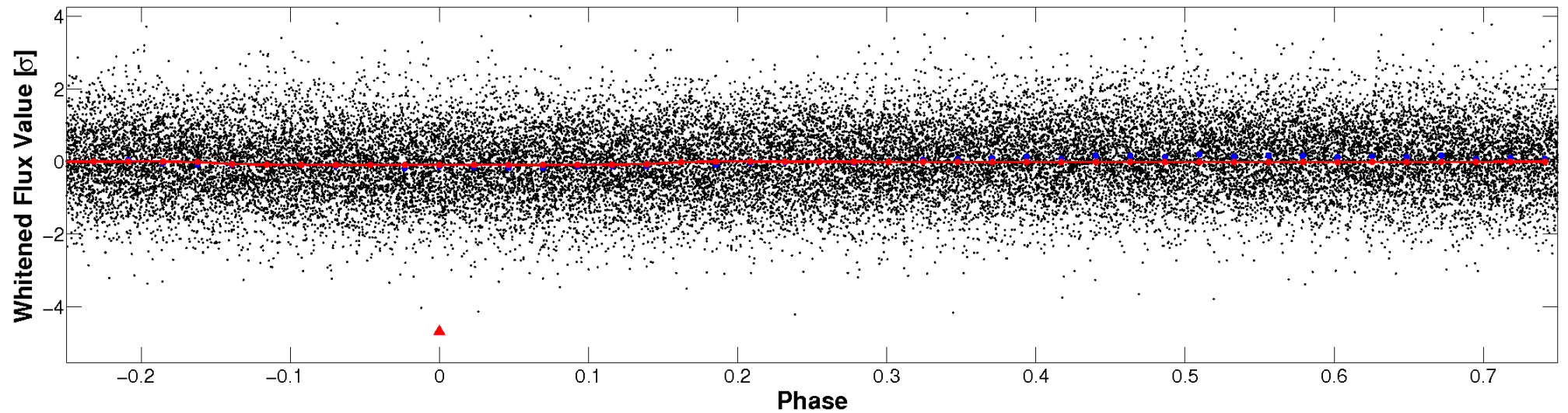


Non-Whitened Vs. Whitened Light Curve

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

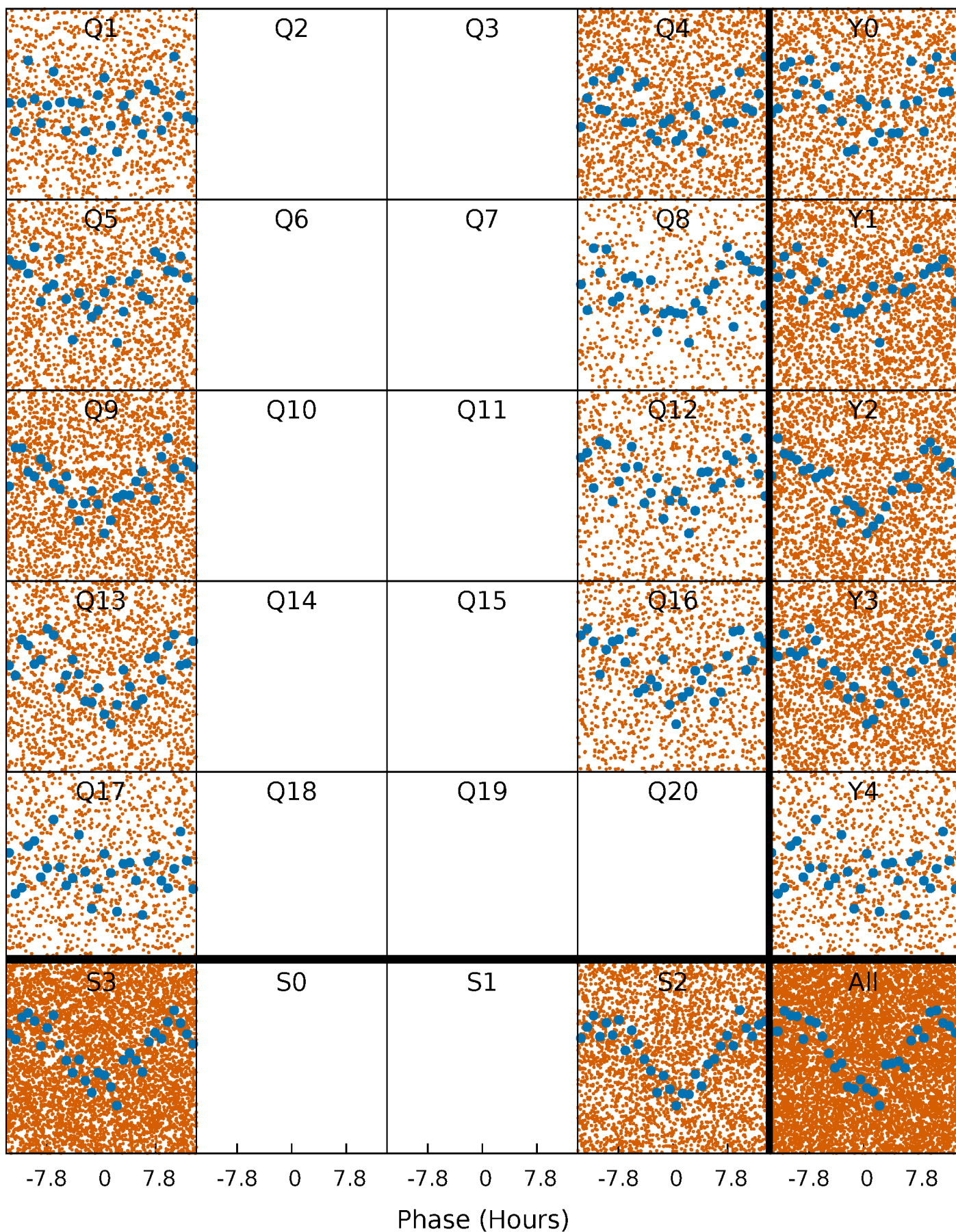


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



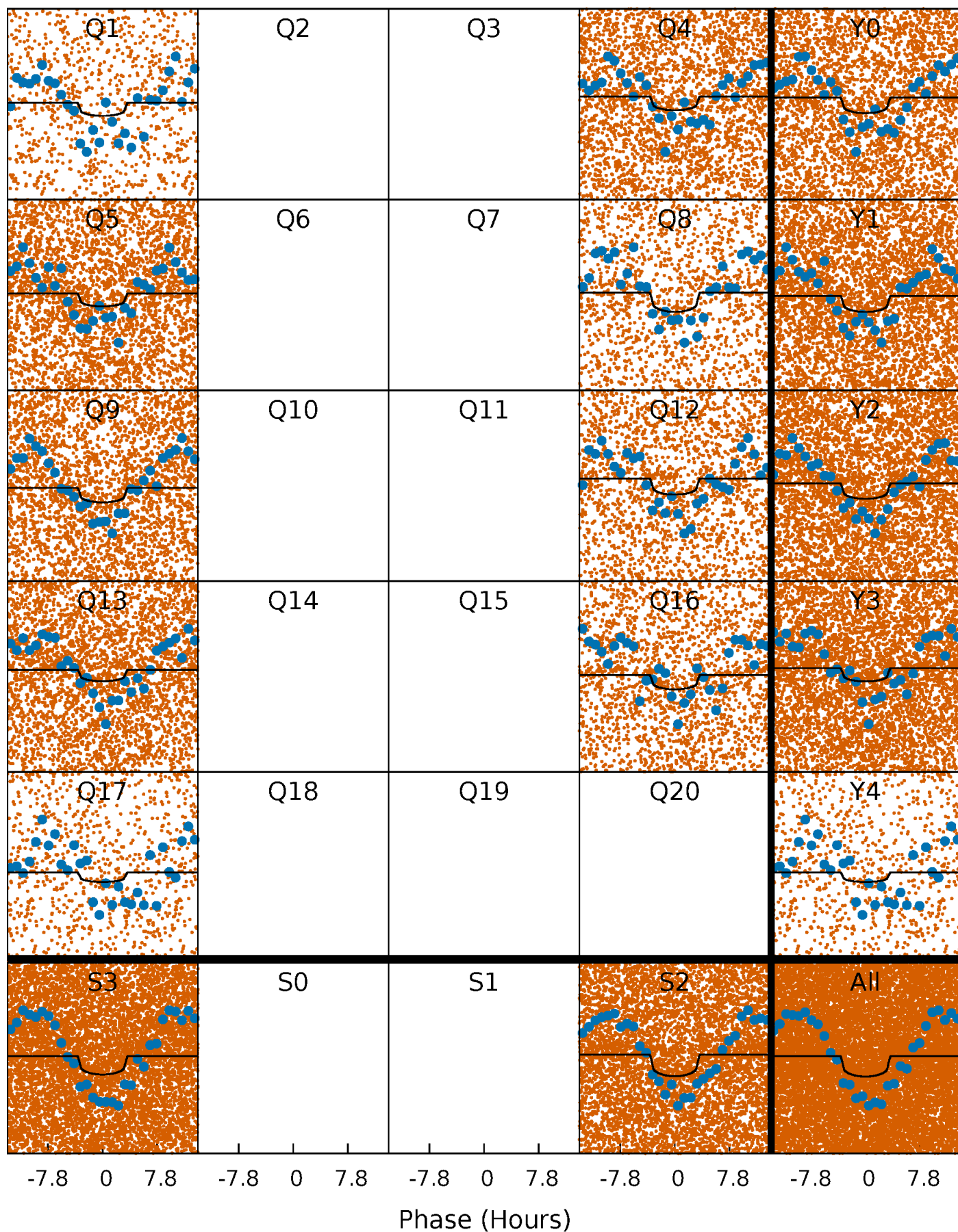
PDC Quarter-Phased Transit Curves

TCE 006154326-01 P= 0.882007 Days $T_0=131.966886$ (BKJD)



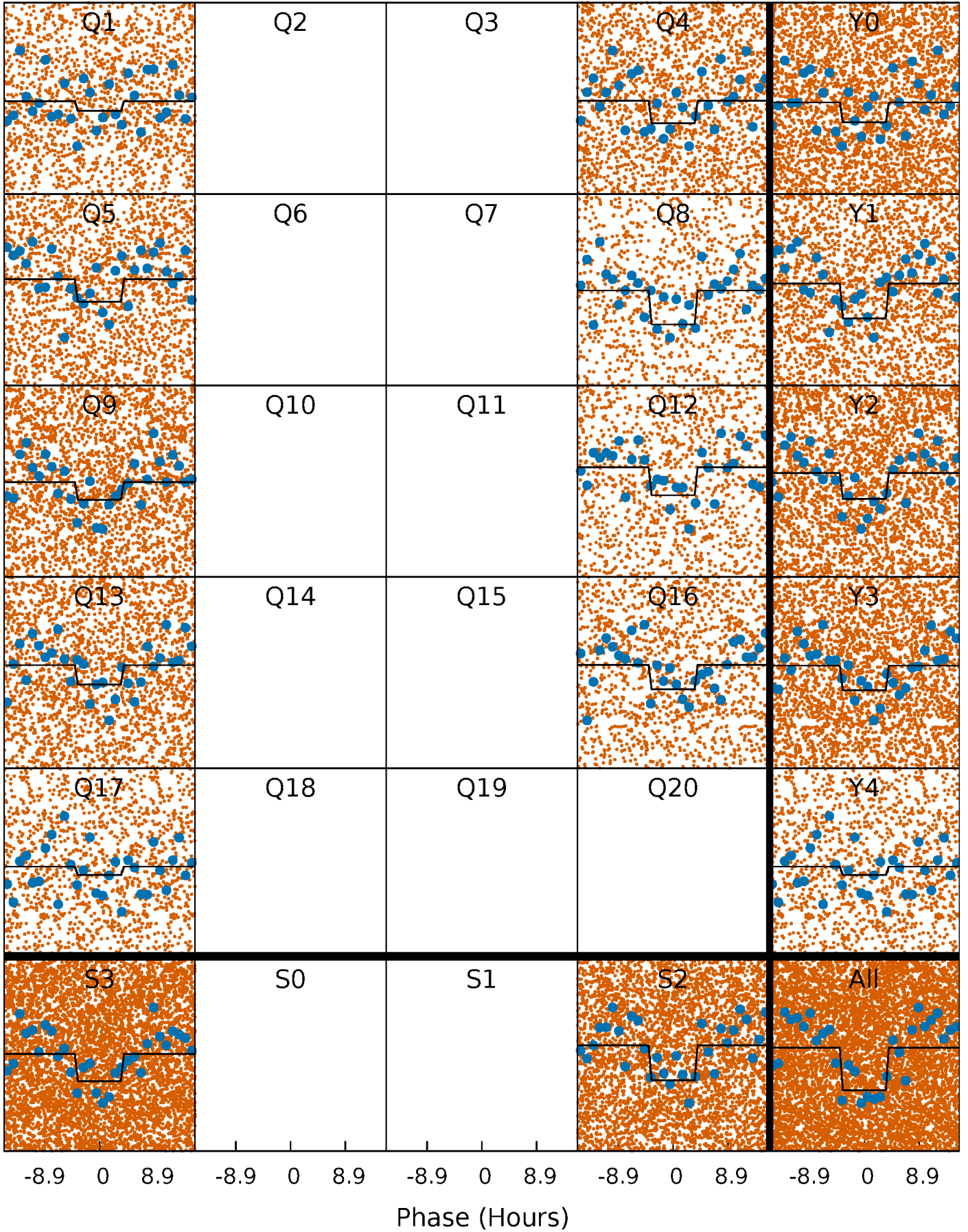
DV Quarter-Phased Transit Curves

TCE 006154326-01 P= 0.882007 Days $T_0=131.966886$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

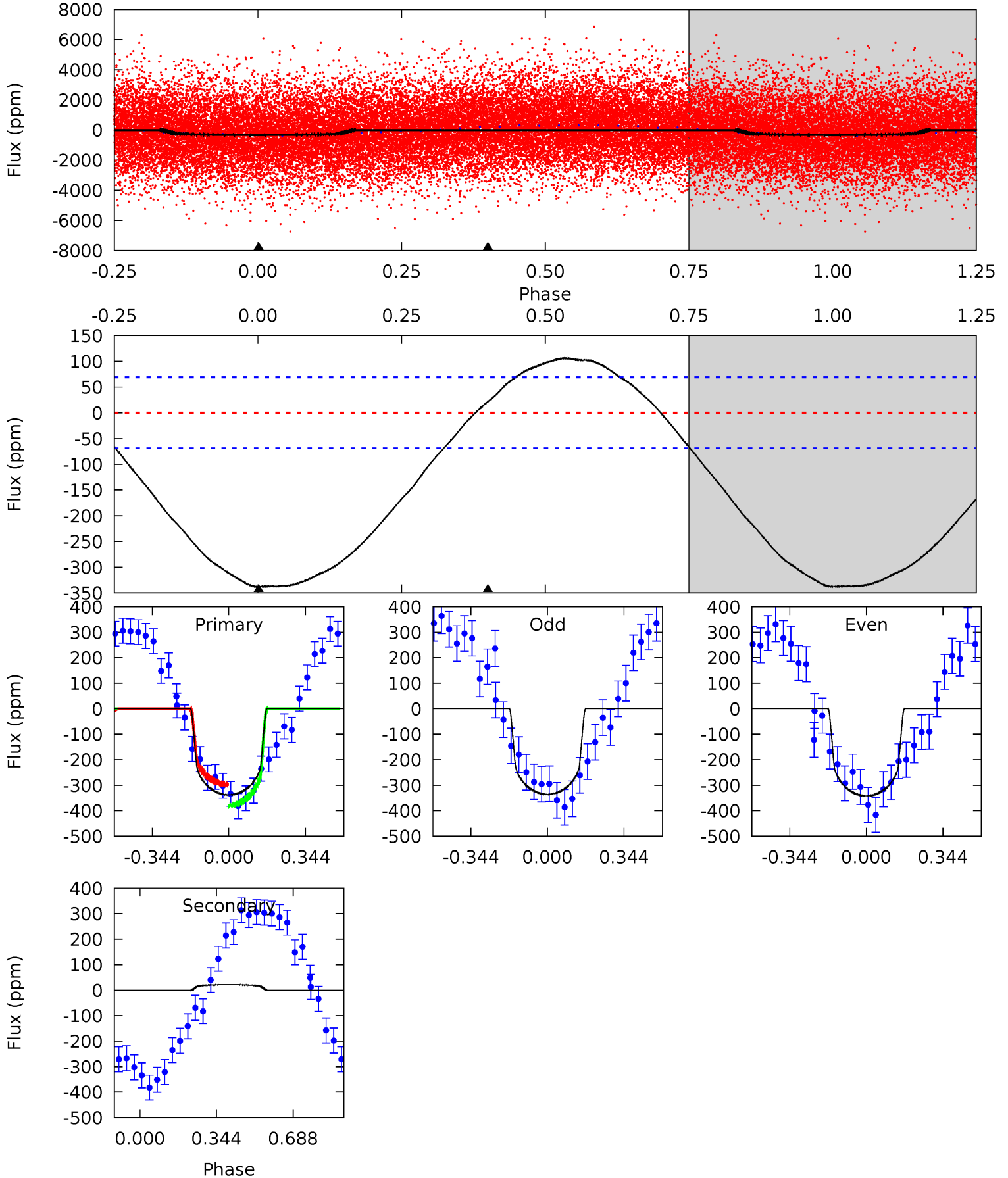
TCE 006154326-01 P= 0.881911 Days $T_0=132.062711$ (BKJD)



DV Model-Shift Uniqueness Test

006154326-01, P = 0.882007 Days, E = 131.084879 Days

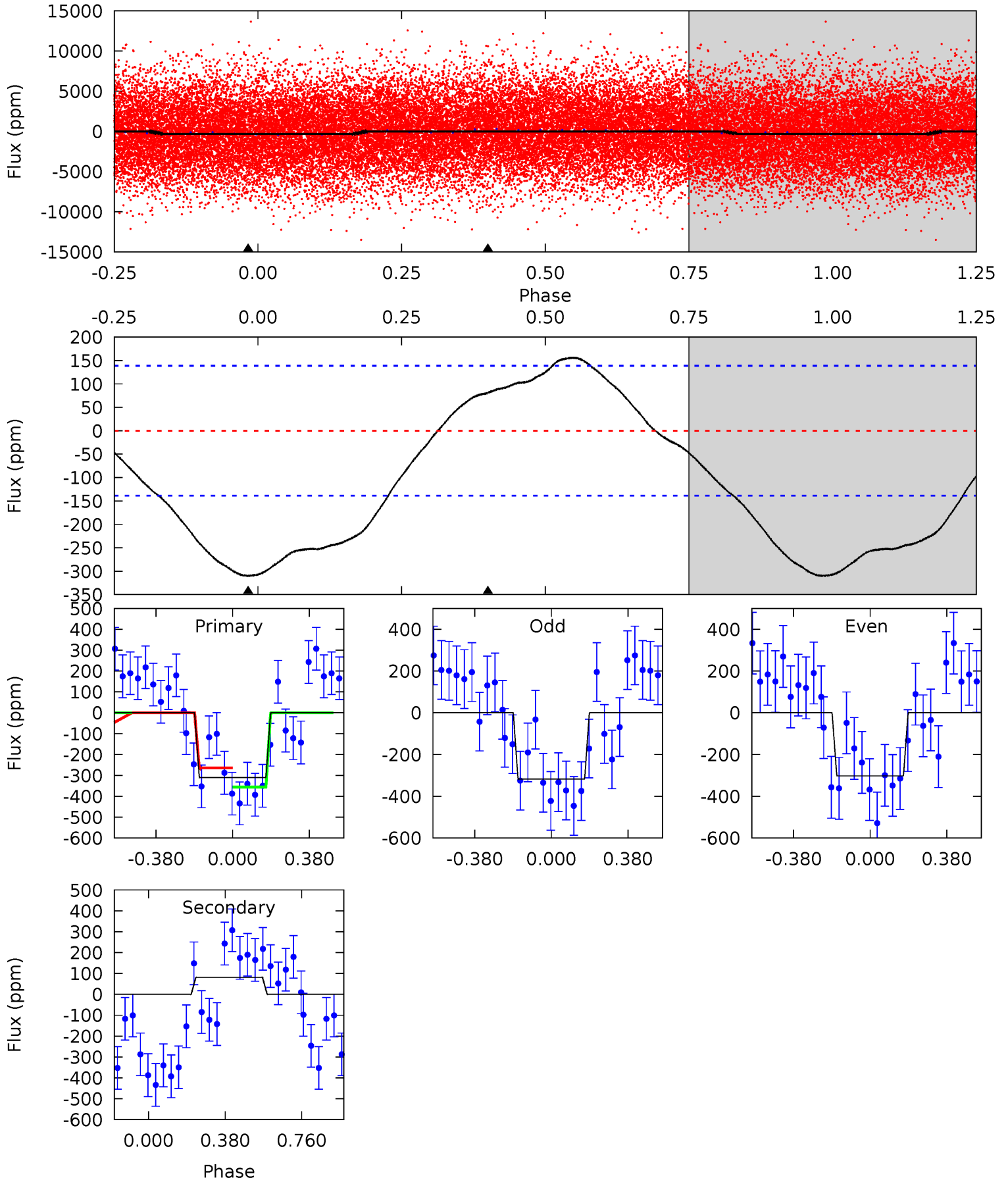
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
21.0	-1.35	0	0	4.30	0.95	2.26	21.0	21.0	-1.35	-1.35	0.19	0.96	0.24	2.51



Alt Model-Shift Uniqueness Test

006154326-01, P = 0.881911 Days, E = 131.180800 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.56	-2.50	0	0	4.28	0.88	1.01	9.56	9.56	-2.50	-2.50	0.23	0.91	0.33	1.42



Stellar Parameters For KIC 006154326

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6609^{+181}_{-250}	$4.172^{+0.180}_{-0.180}$	$-0.140^{+0.250}_{-0.300}$	$1.535^{+0.442}_{-0.402}$	$1.282^{+0.181}_{-0.221}$	$0.499^{+0.493}_{-0.250}$
	+3%/-4%	+4%/-4%	+179%/-214%	+29%/-26%	+14%/-17%	+99%/-50%
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 006154326-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	22 ± 16	$2.87^{+2.78}_{-1.95}$	3604^{+288}_{-270}	-4042^{+496}_{-1901}	$-0.440^{+0.375}_{-4.055}$
Alt.	81 ± 32	$3.32^{+2.91}_{-2.16}$	3637^{+260}_{-284}	-4668^{+706}_{-2751}	$-1.377^{+1.001}_{-9.887}$

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 $A_{obs} \gg 1.0$

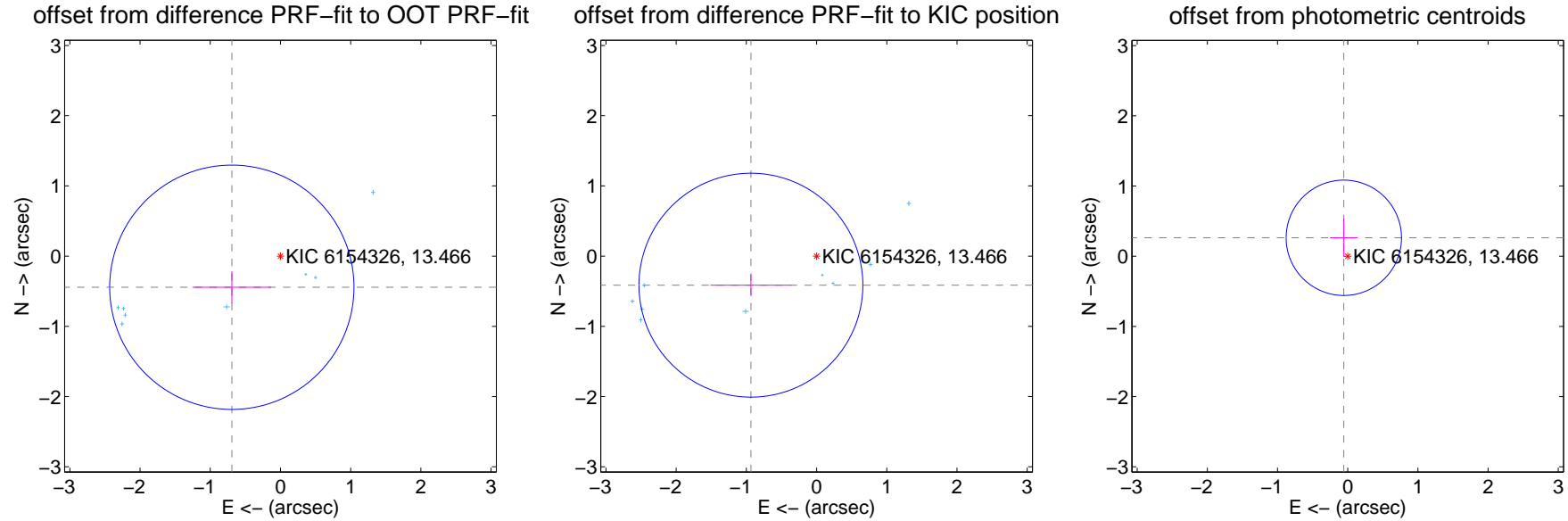
DV Centroid Data

Supplemental centroid analysis for 006154326-01. Kepler magnitude: 13.47. Transit SNR 8.33

There are 9 quarters with good PRF difference image offsets

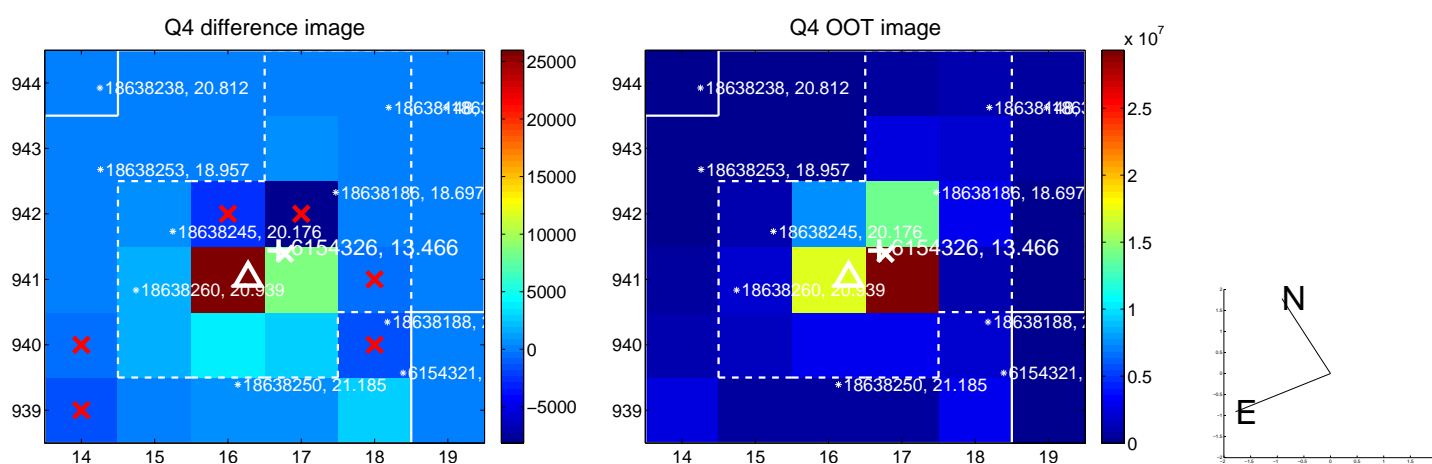
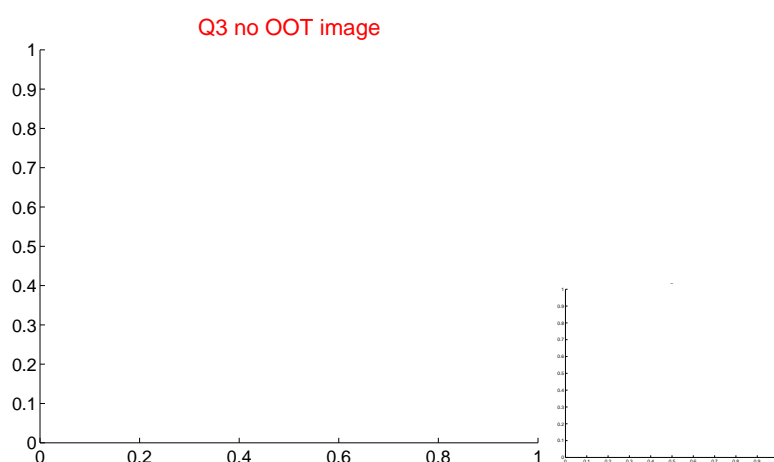
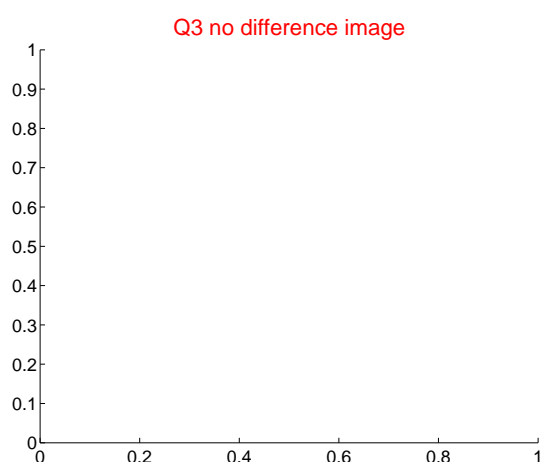
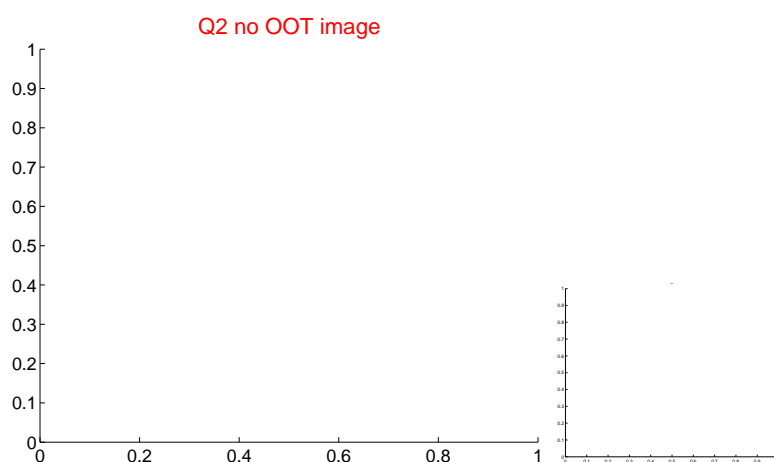
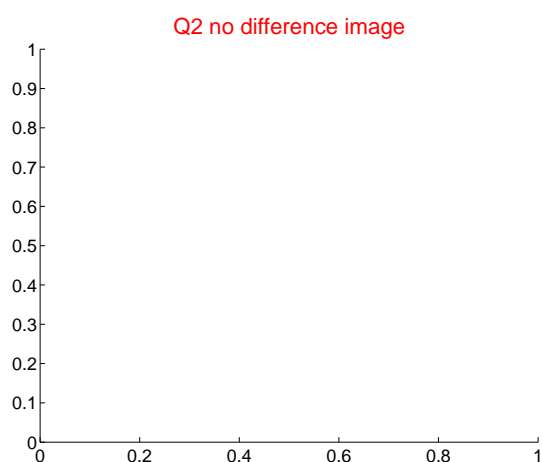
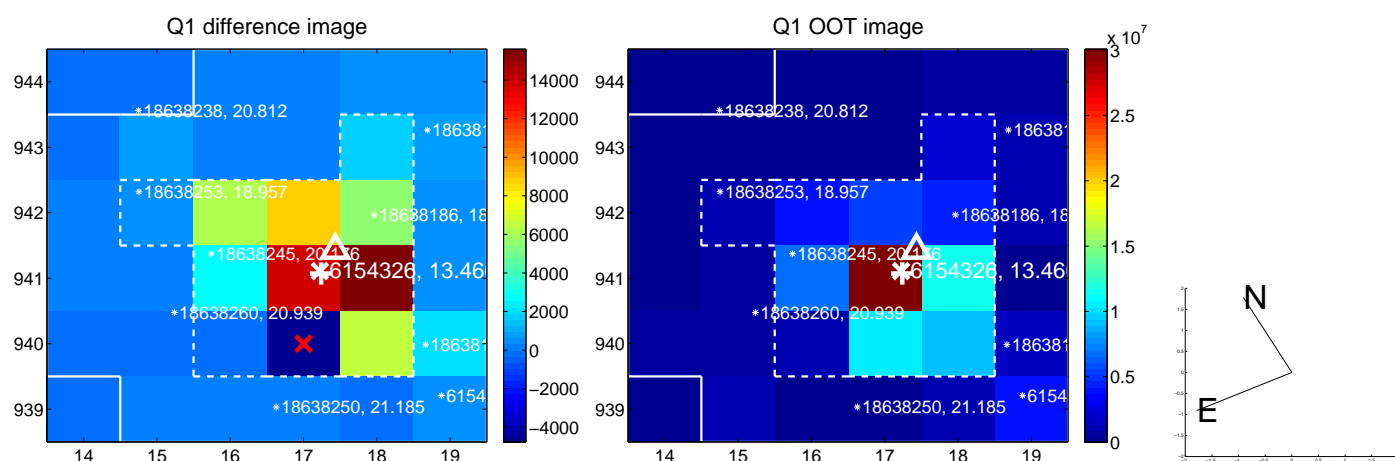
The direct PRF centroid is offset from the target star catalog position by about 0.25 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.822 ± 0.580	1.42	0.693 ± 0.560	-0.443 ± 0.230
PRF-fit source offset from KIC position	1.023 ± 0.531	1.92	0.935 ± 0.577	-0.414 ± 0.151
photometric centroid source offset	0.27 ± 0.27	0.98	0.06 ± 0.20	0.26 ± 0.28

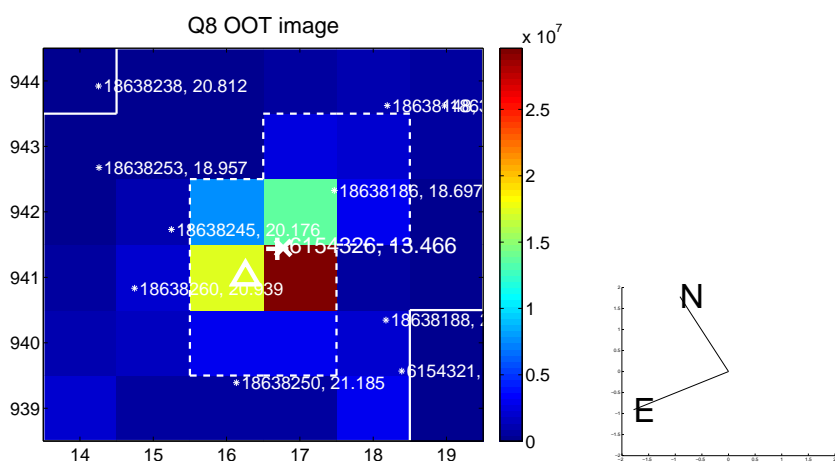
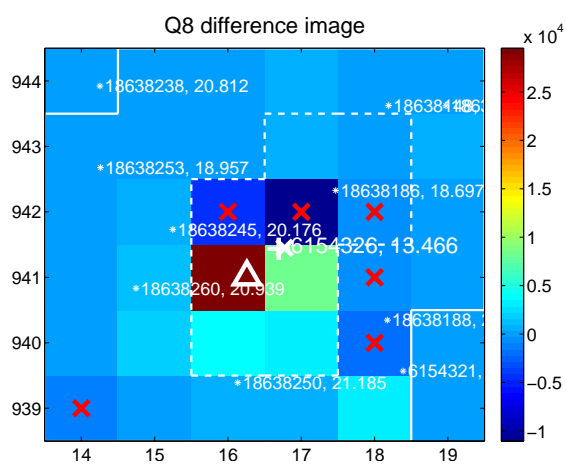
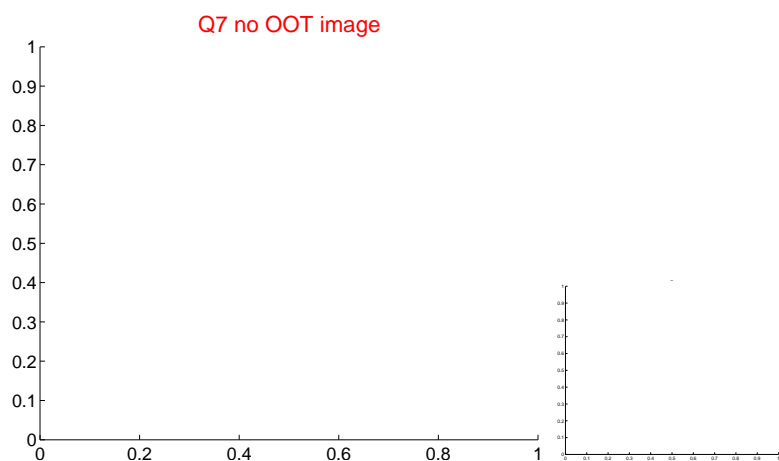
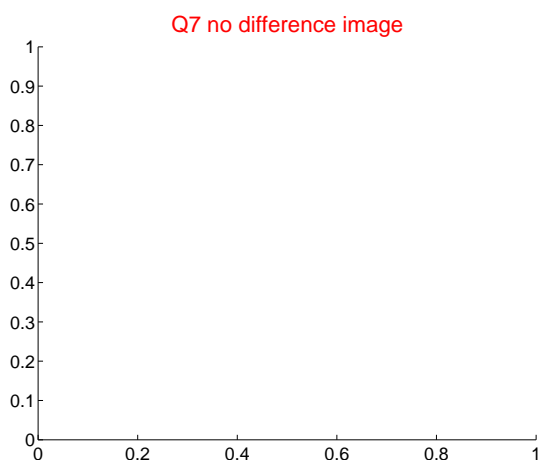
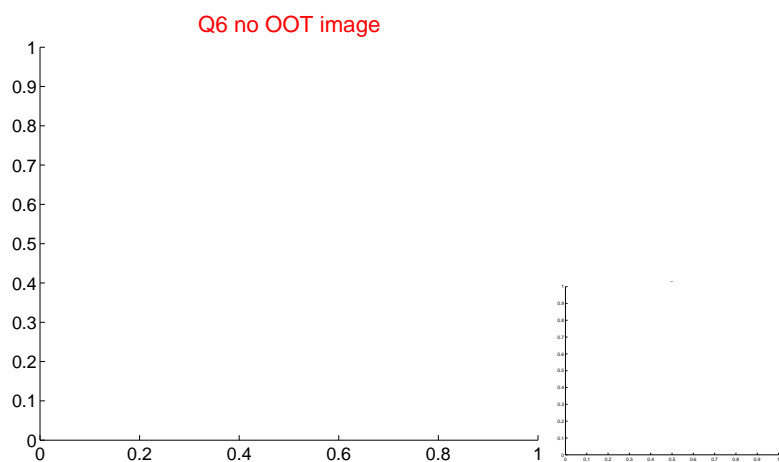
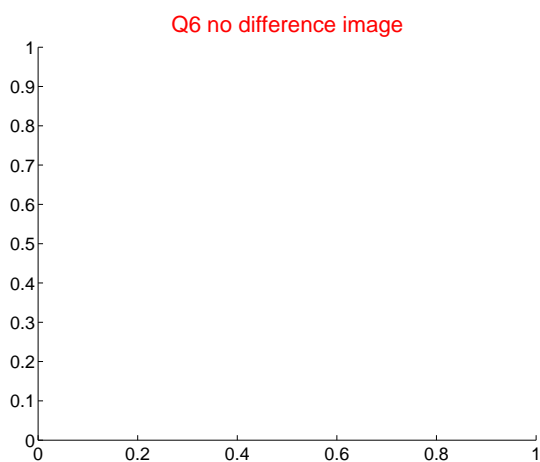
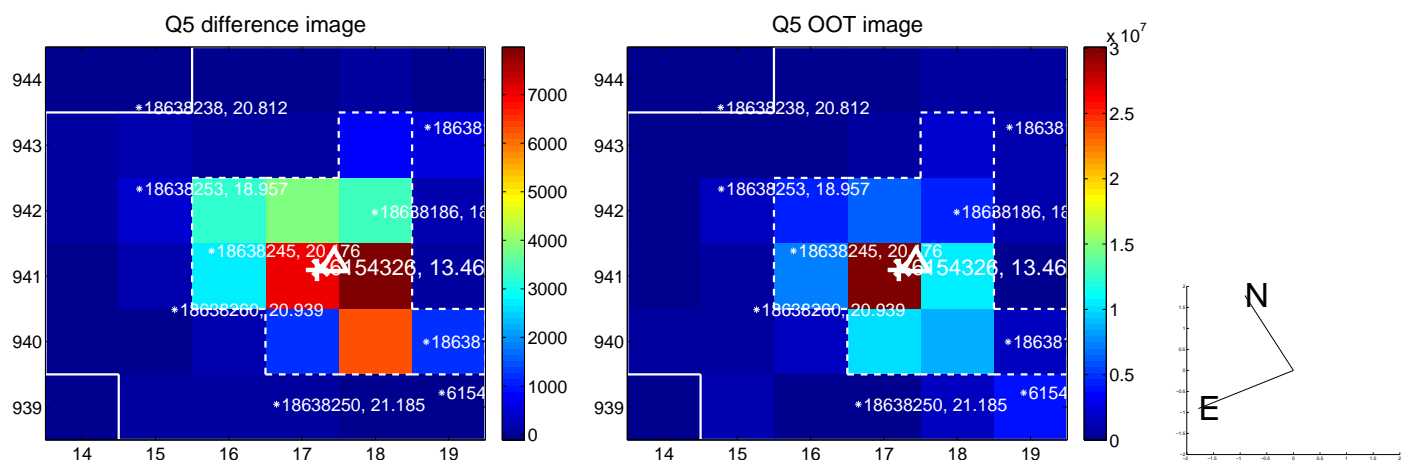


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

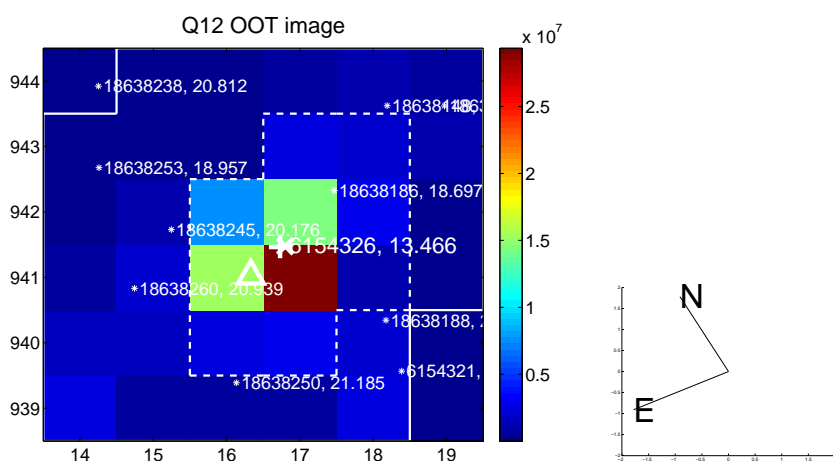
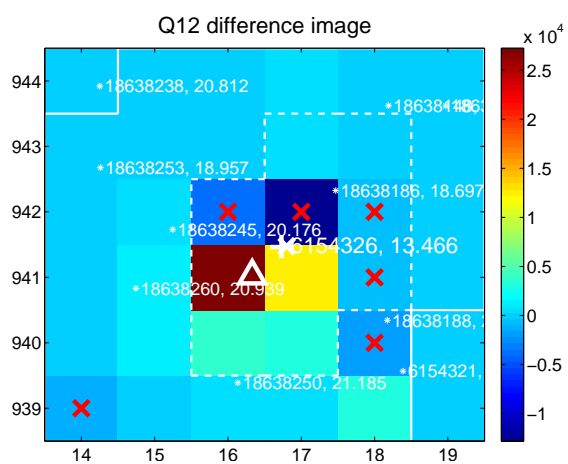
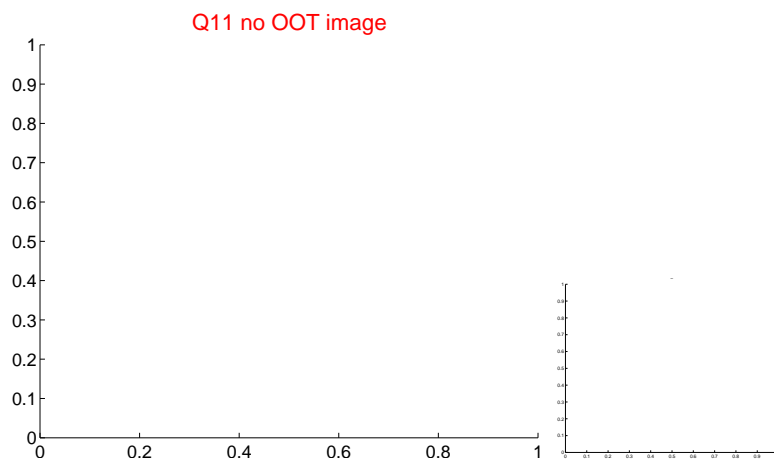
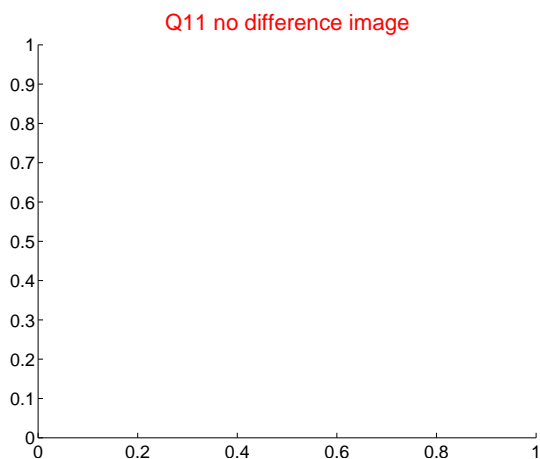
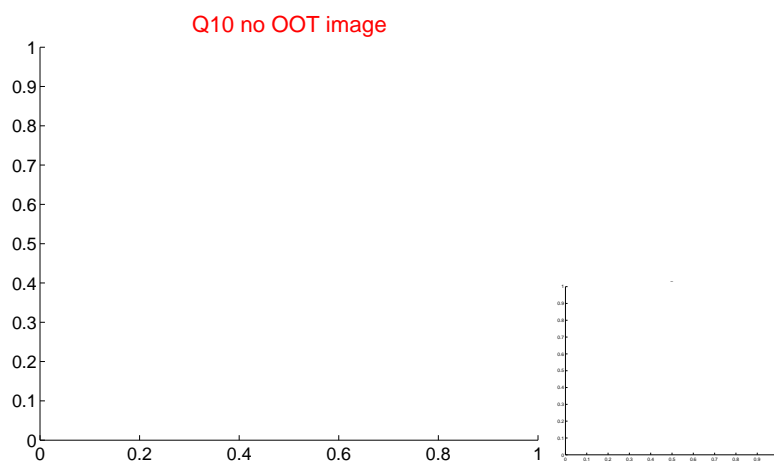
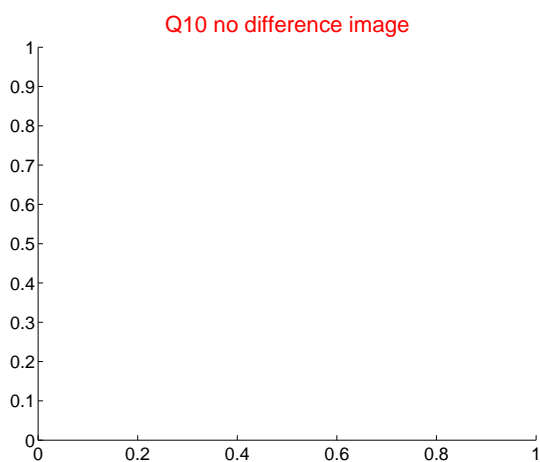
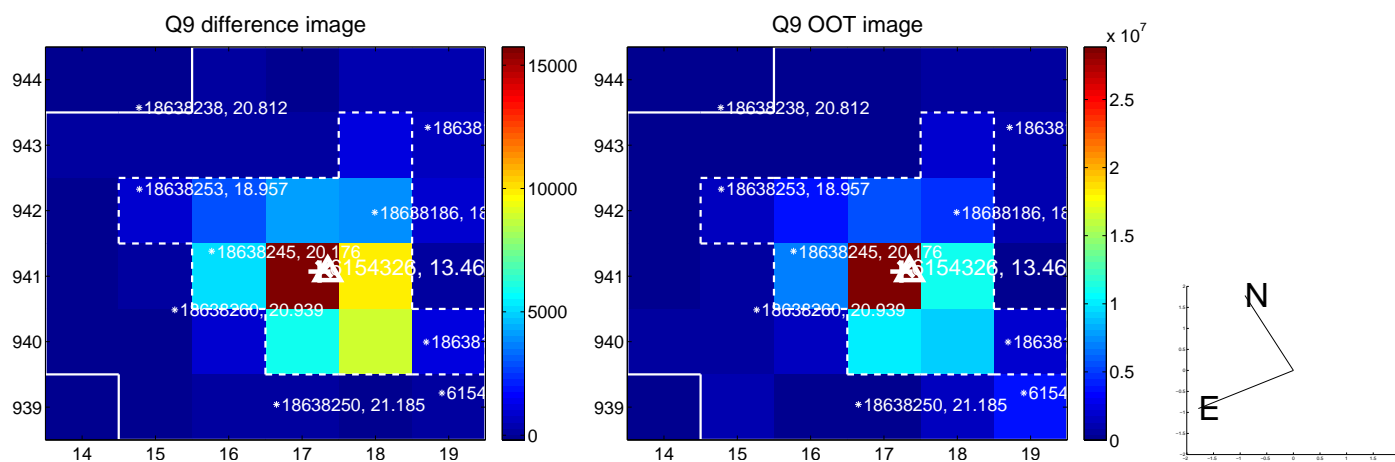
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



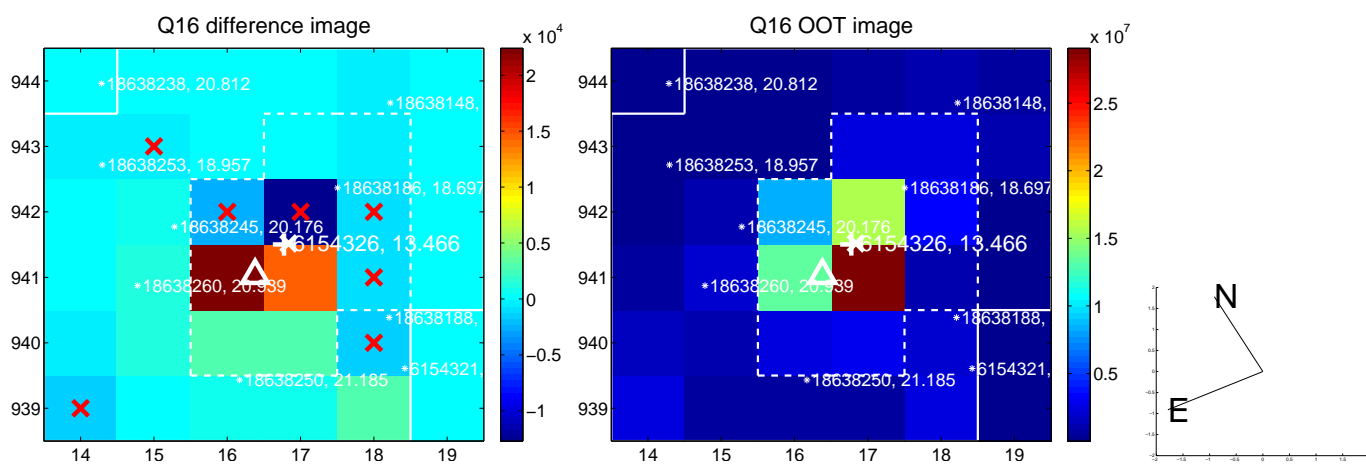
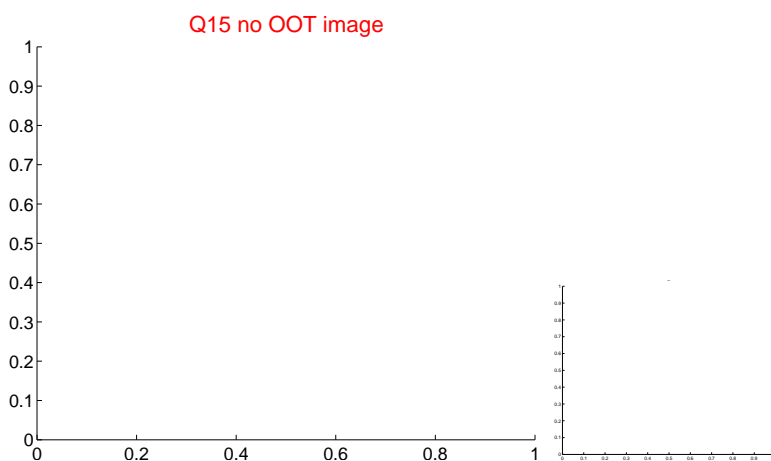
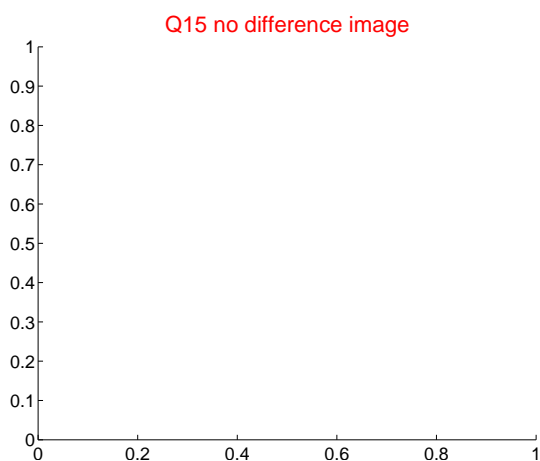
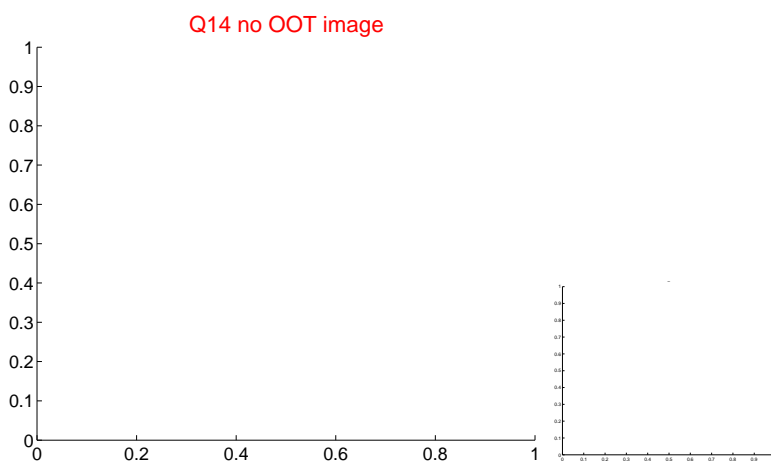
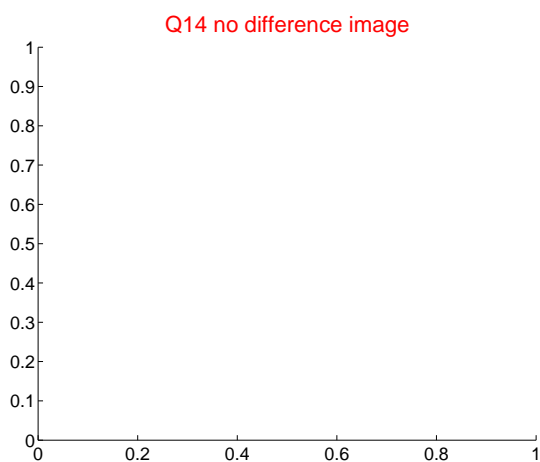
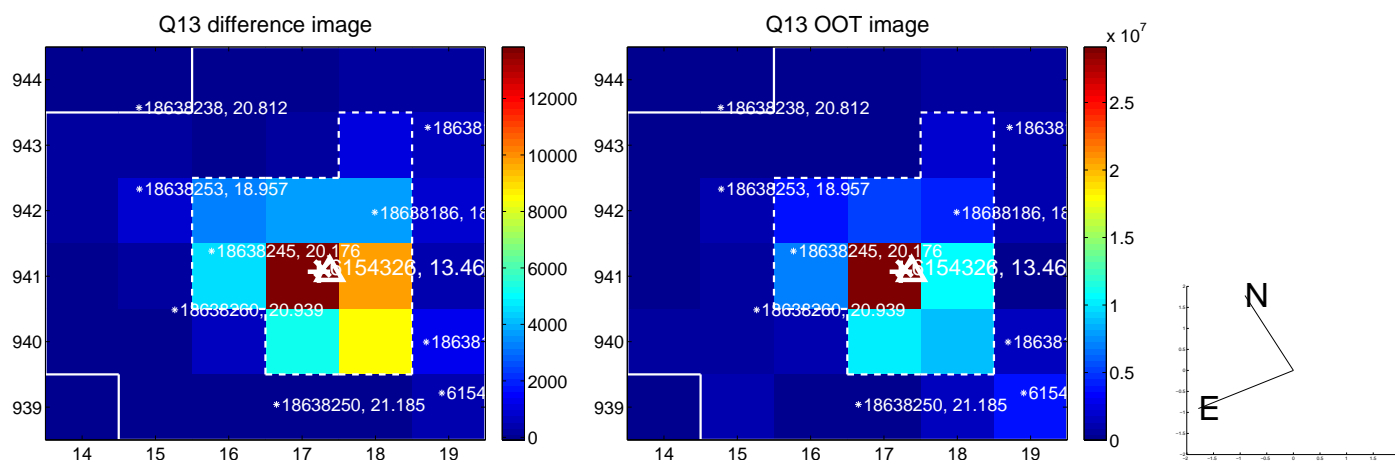
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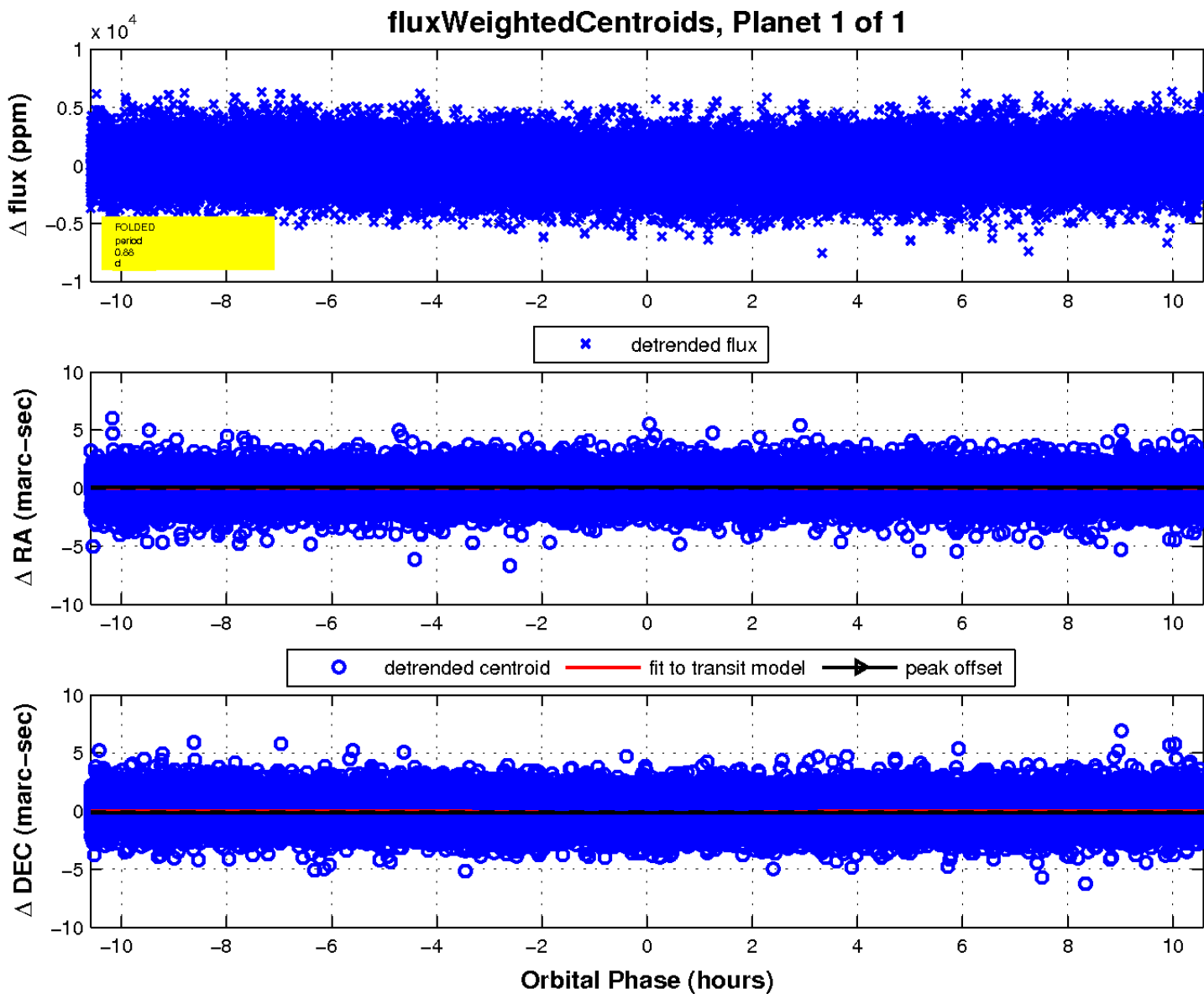
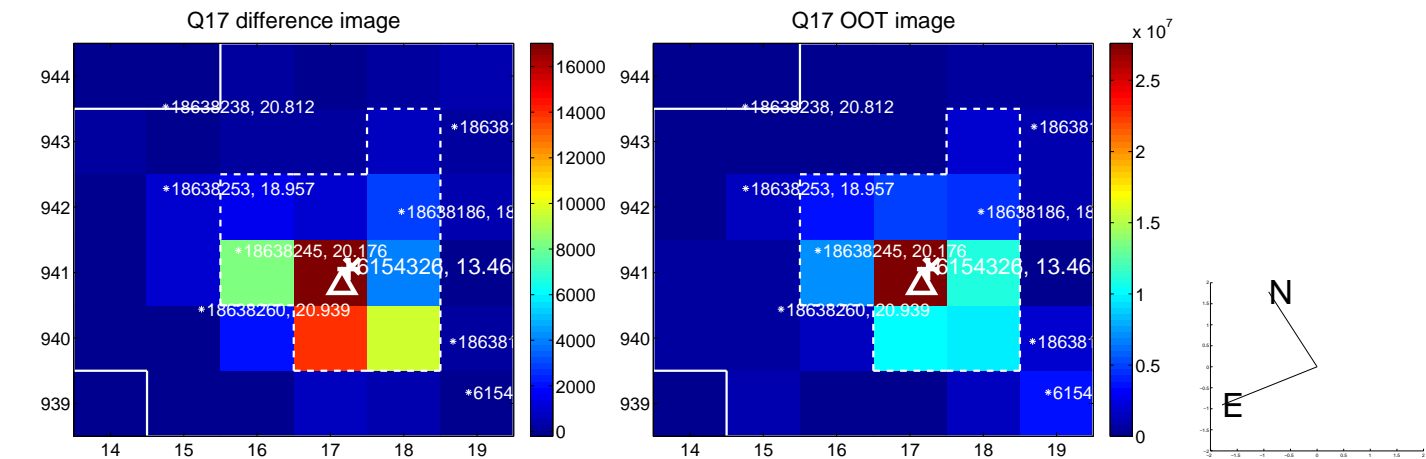
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



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



UKIRT Image

Declination

