

KIC 011700599

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})
011700599-01	OBS	No	0.691539	131.829555	10.4	2.605	8.1	8.9	2.74	9057	1.02	124486.21

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011700599-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT

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

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

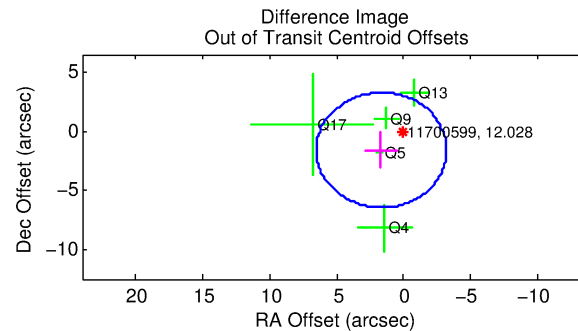
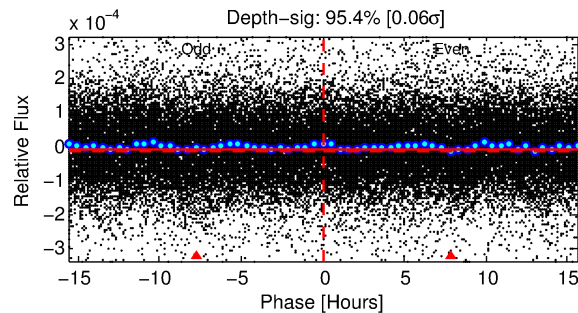
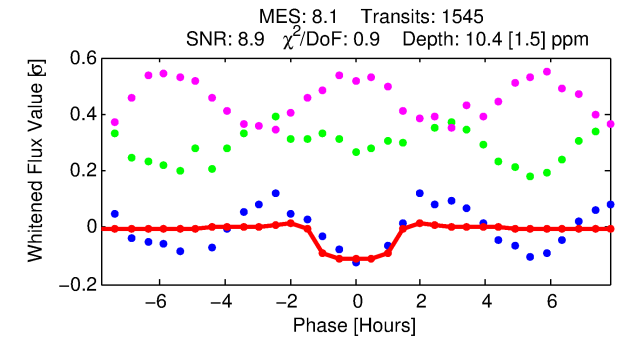
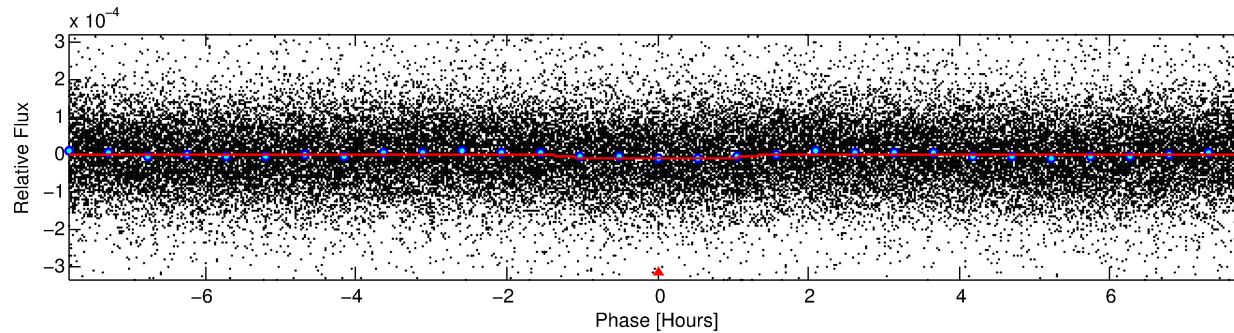
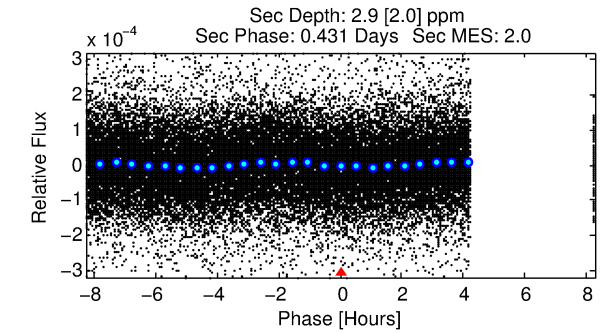
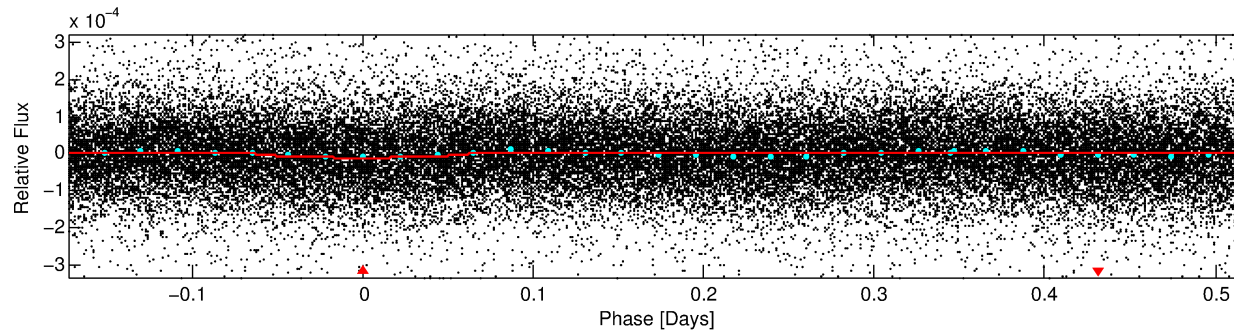
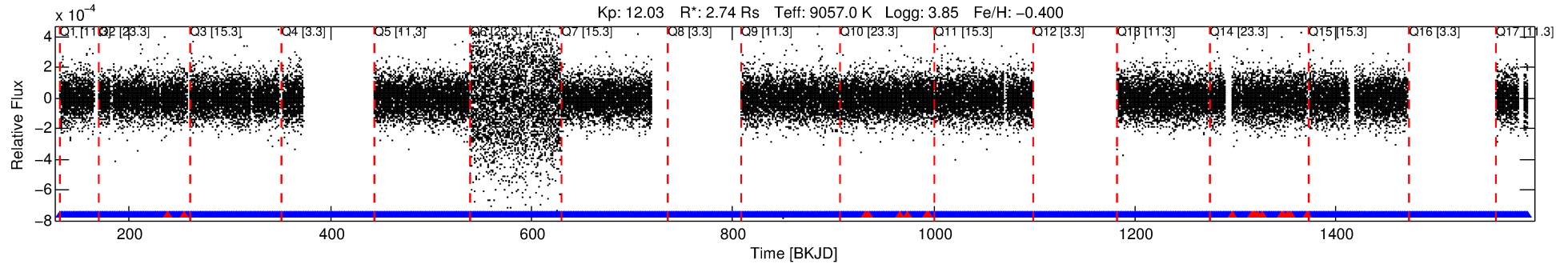
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011700599-01

No Significant Match Found

DV One-Page Summary

KIC: 11700599 Candidate: 1 of 1 Period: 0.692 d



DV Fit Results:

Period = 0.69154 [0.00001] d
Epoch = 131.8296 [0.0035] BKJD
Rp/R* = 0.0034 [0.0009]
a/R* = 1.29 [0.92]
b = 0.90 [0.37]
Seff = 124486.21 [80429.77]
Teq = 4790 [774] K
Rp = 1.02 [0.48] Re
a = 0.0191 [0.0074] AU
Ag = 0.55 [0.58] [-0.79σ]
Teffp = 6366 [1383] K [0.99σ]

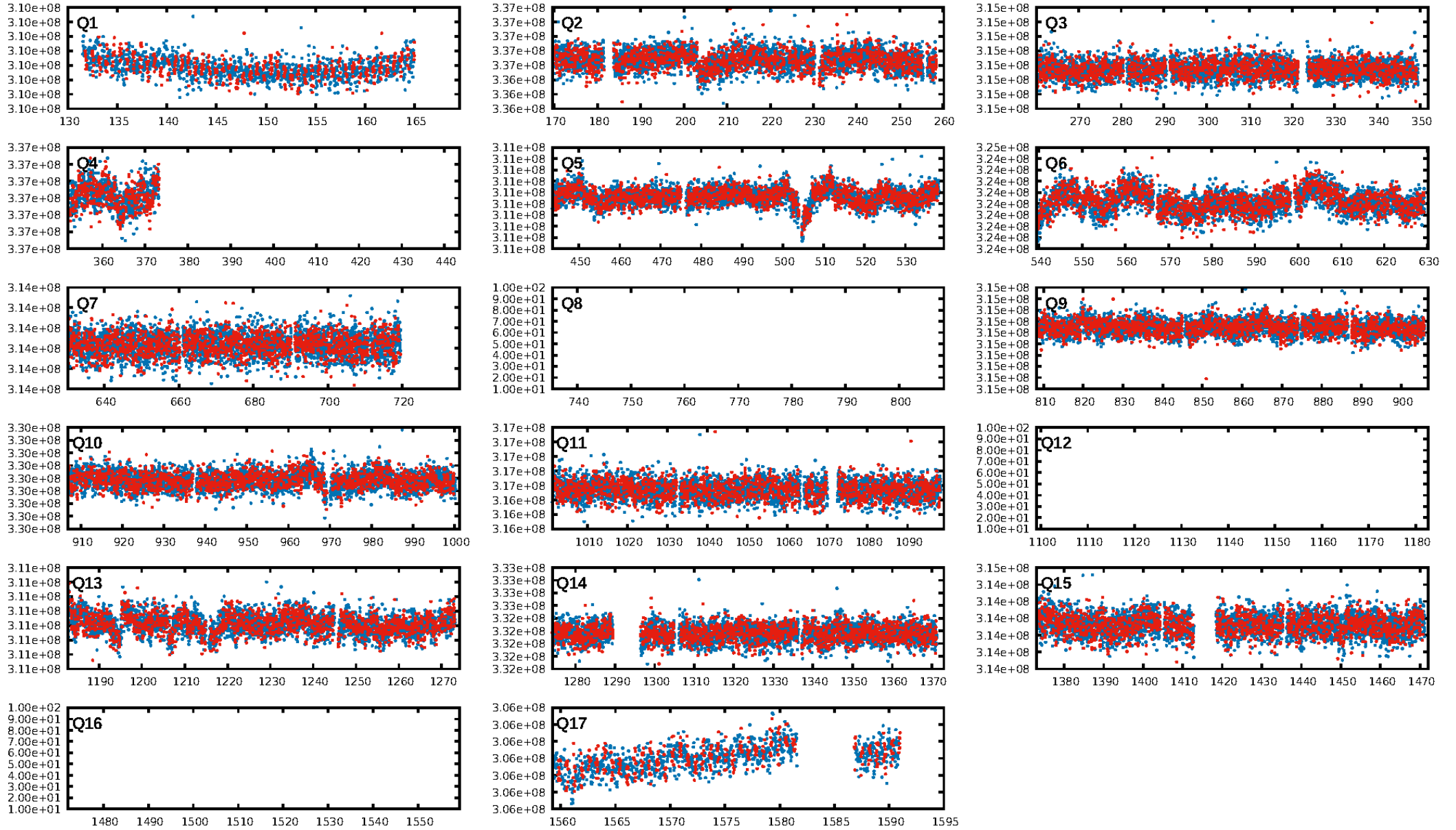
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 3.48e-13
RollingBand-fgt: 0.99 [1405/1426]
GhostDiagnostic-chr: 0.7334
Centroid-sig: 3.4%
Centroid-so: 2.884 arcsec [2.13σ]
OotOffset-rm: 2.301 arcsec [1.42σ]
KicOffset-rm: 2.382 arcsec [1.44σ]
OotOffset-st: 0/0/1/4 [5]
KicOffset-st: 0/0/1/4 [5]
DiffImageQuality-fgm: 0.60 [3/5]
DiffImageOverlap-fno: 1.00 [14/14]

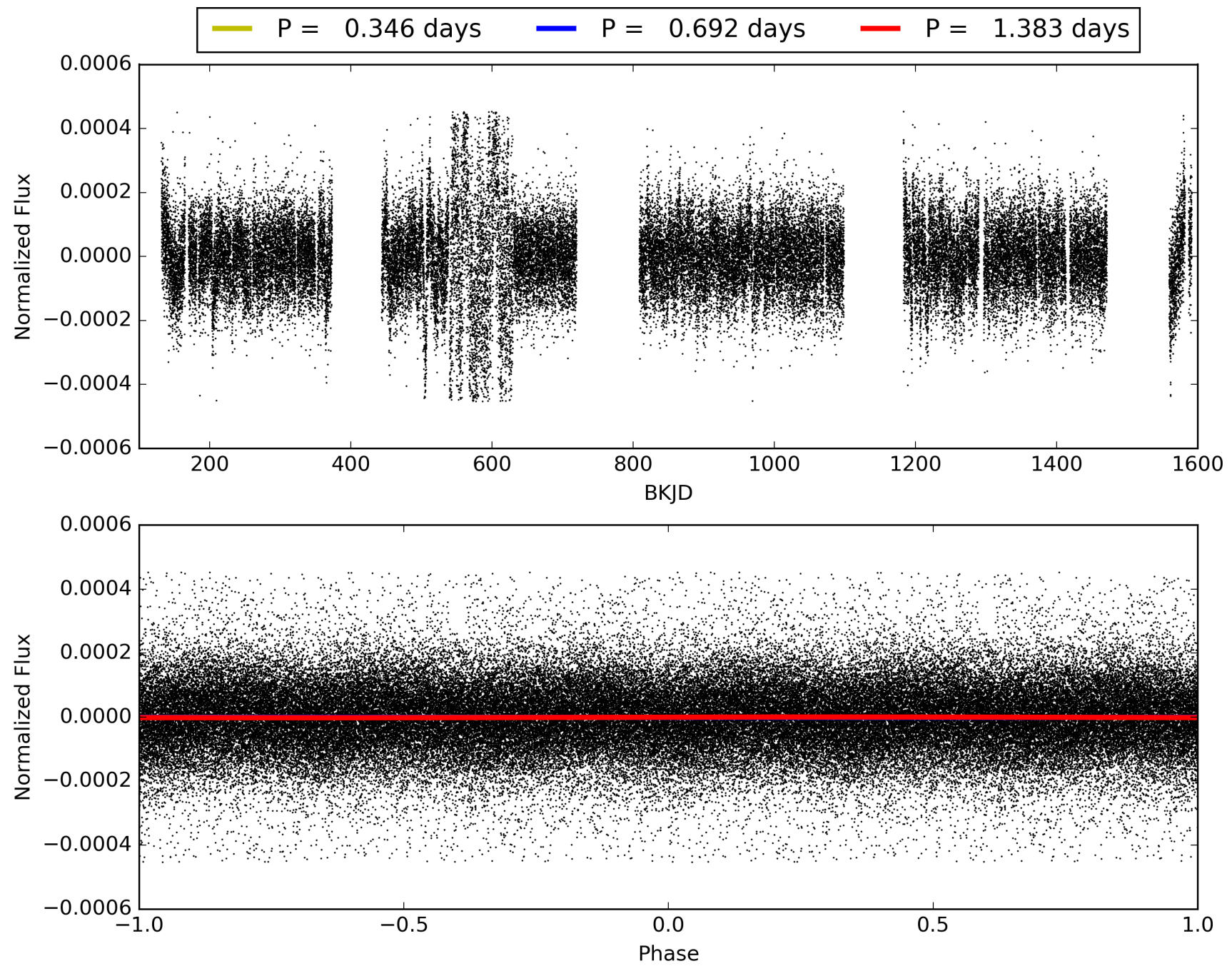
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 00:30:50 Z

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

TCE 011700599-01, PDC Light Curves

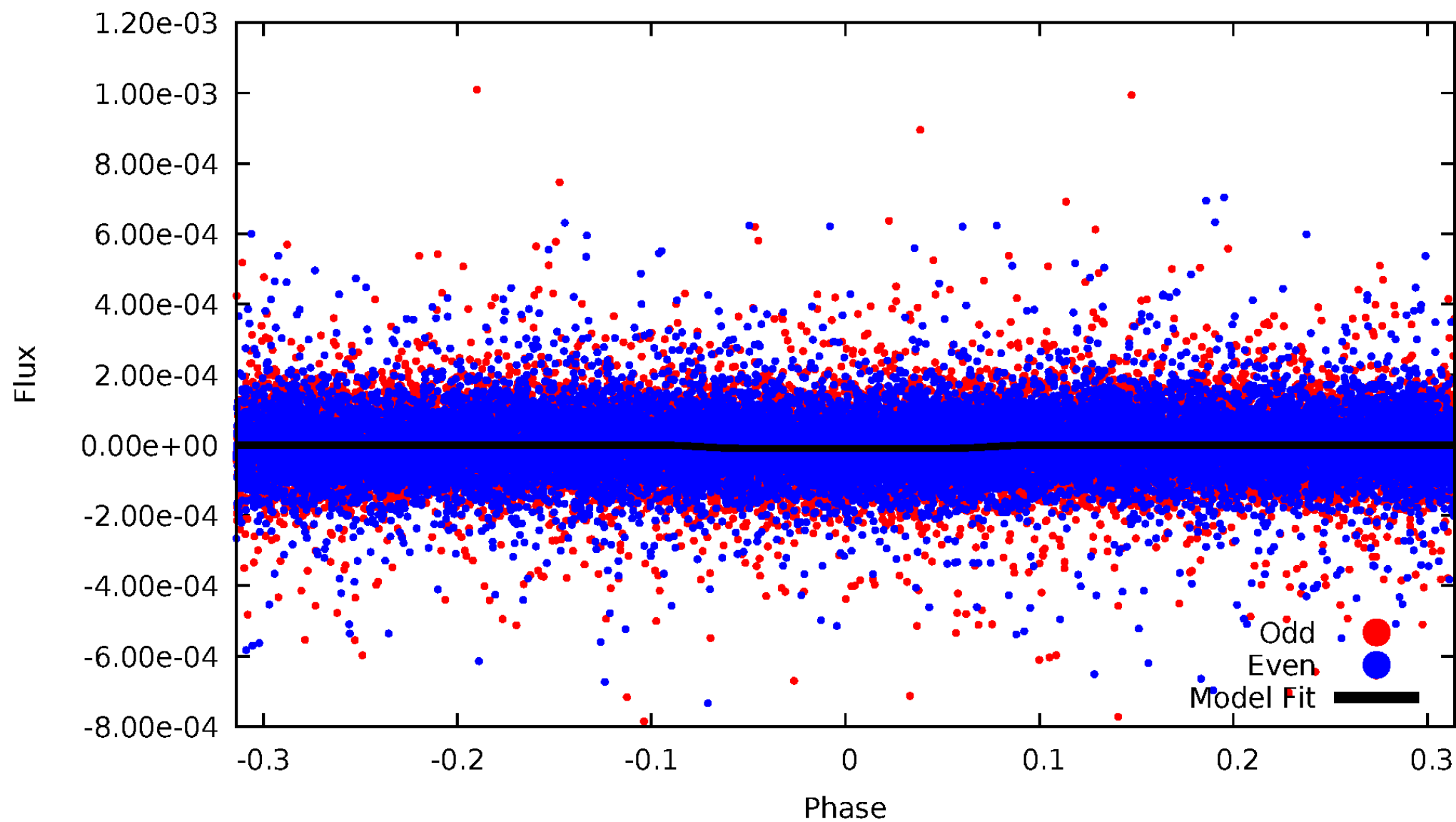


TCE 011700599-01



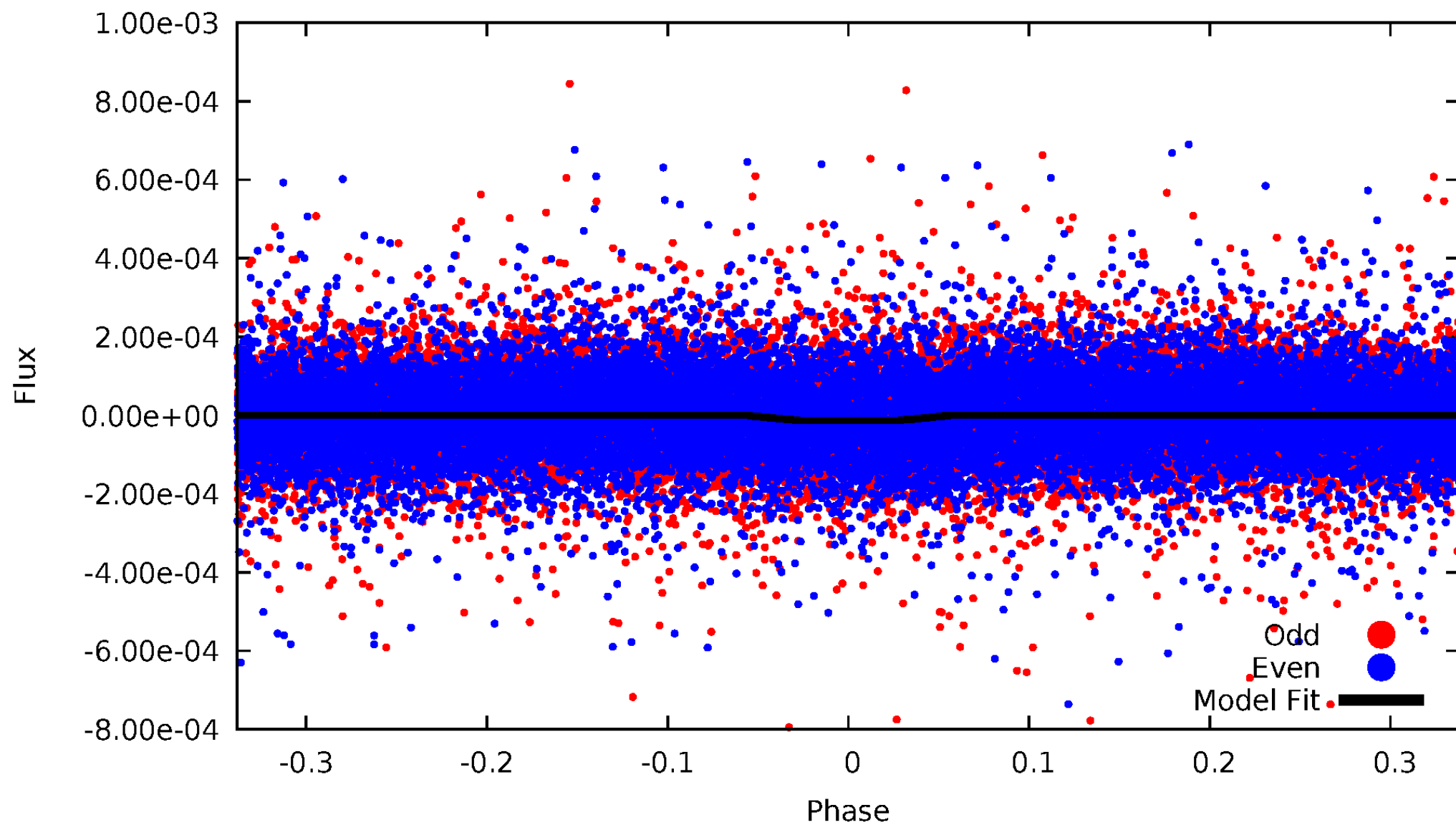
DV Odd/Even

TCE 011700599-01



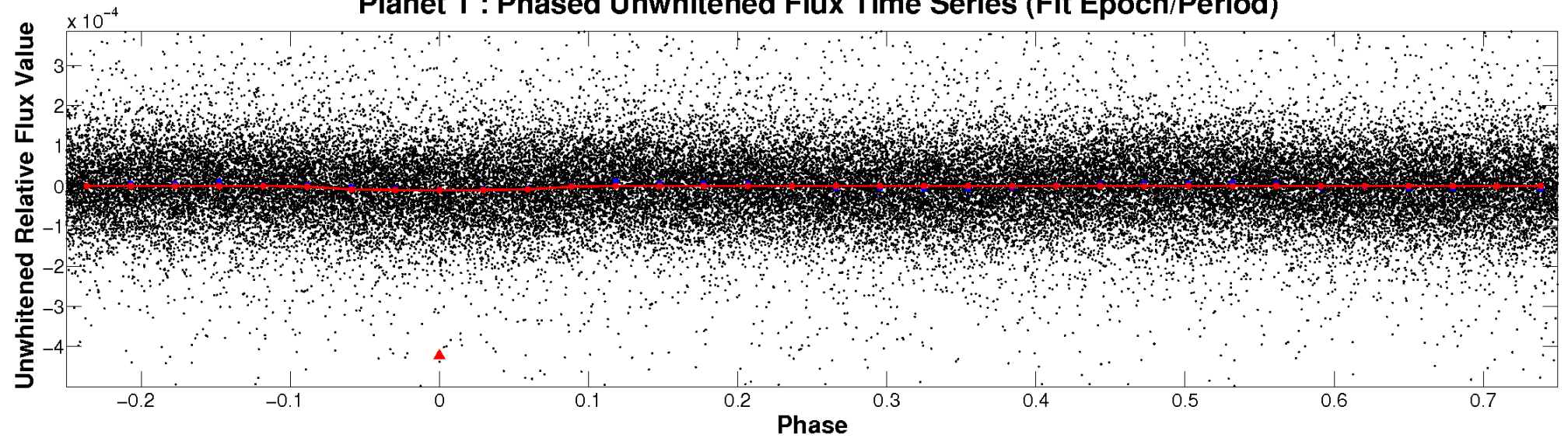
ALT Odd/Even

TCE 011700599-01

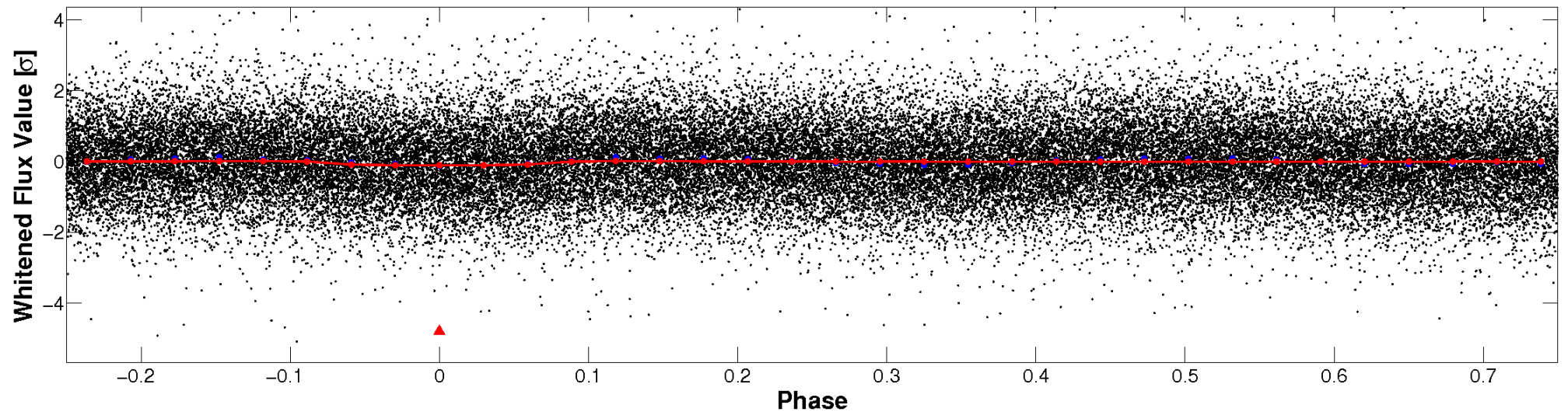


Non-Whitened Vs. Whitened Light Curve

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

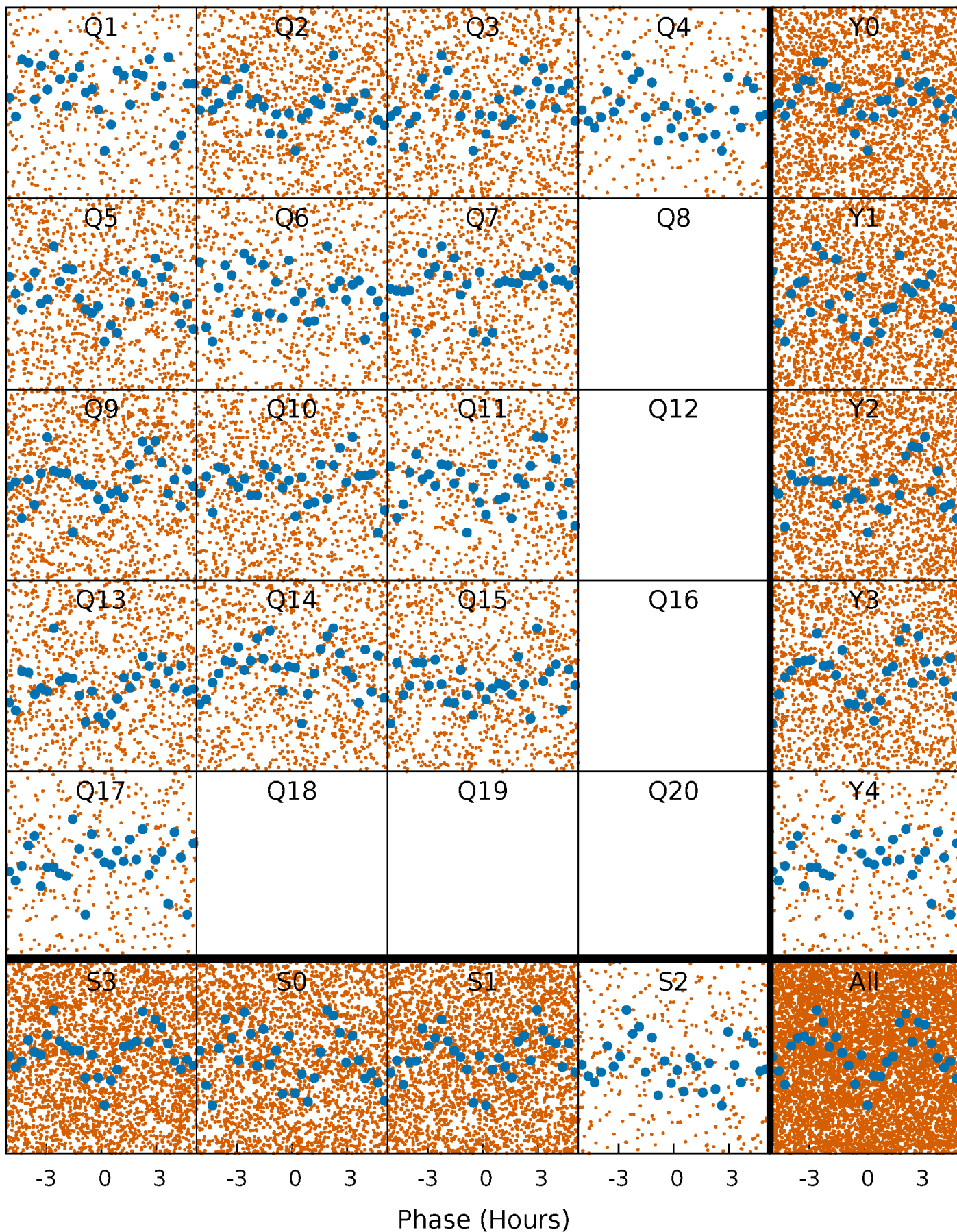


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



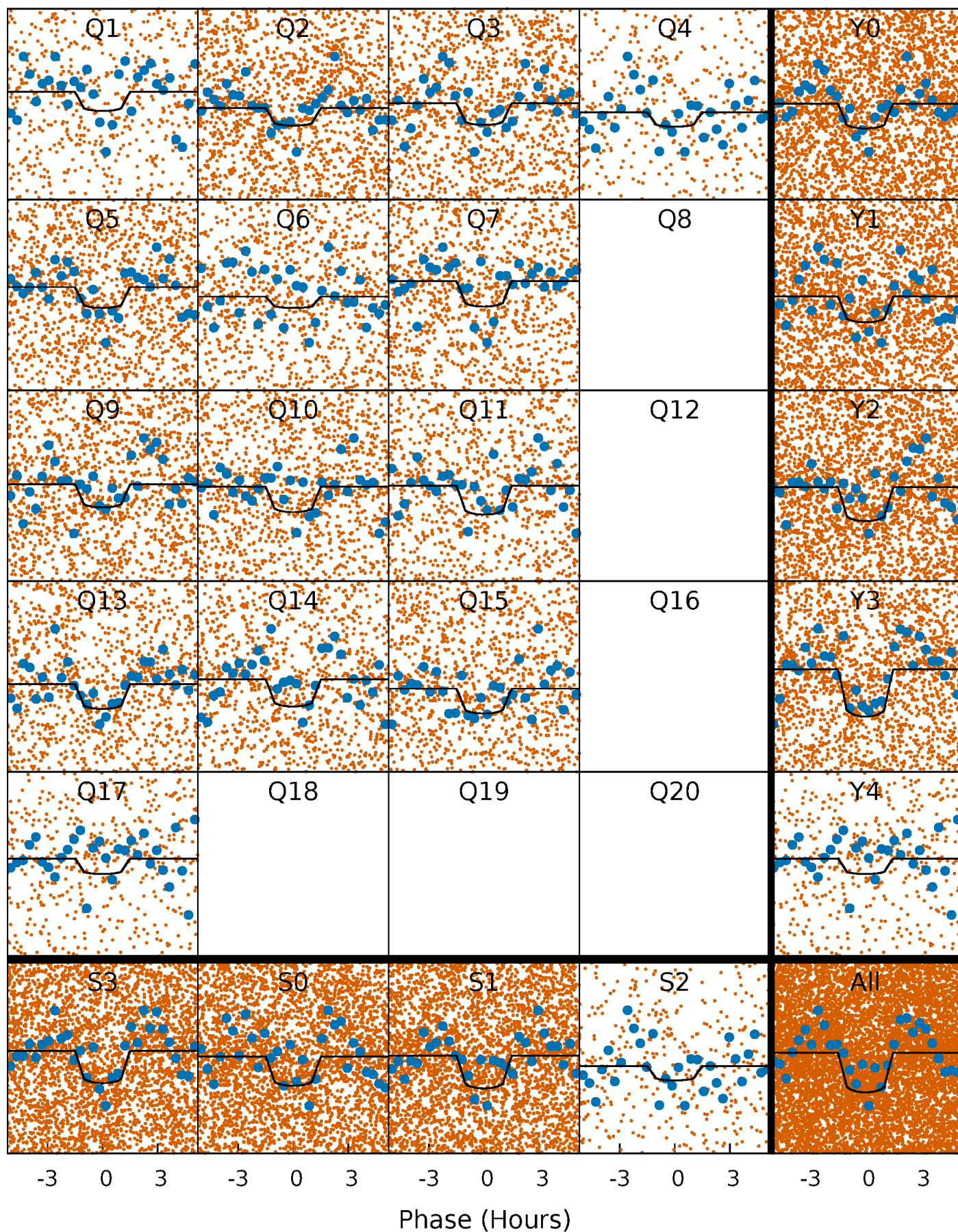
PDC Quarter-Phased Transit Curves

TCE 011700599-01 P= 0.691539 Days $T_0=131.829555$ (BKJD)



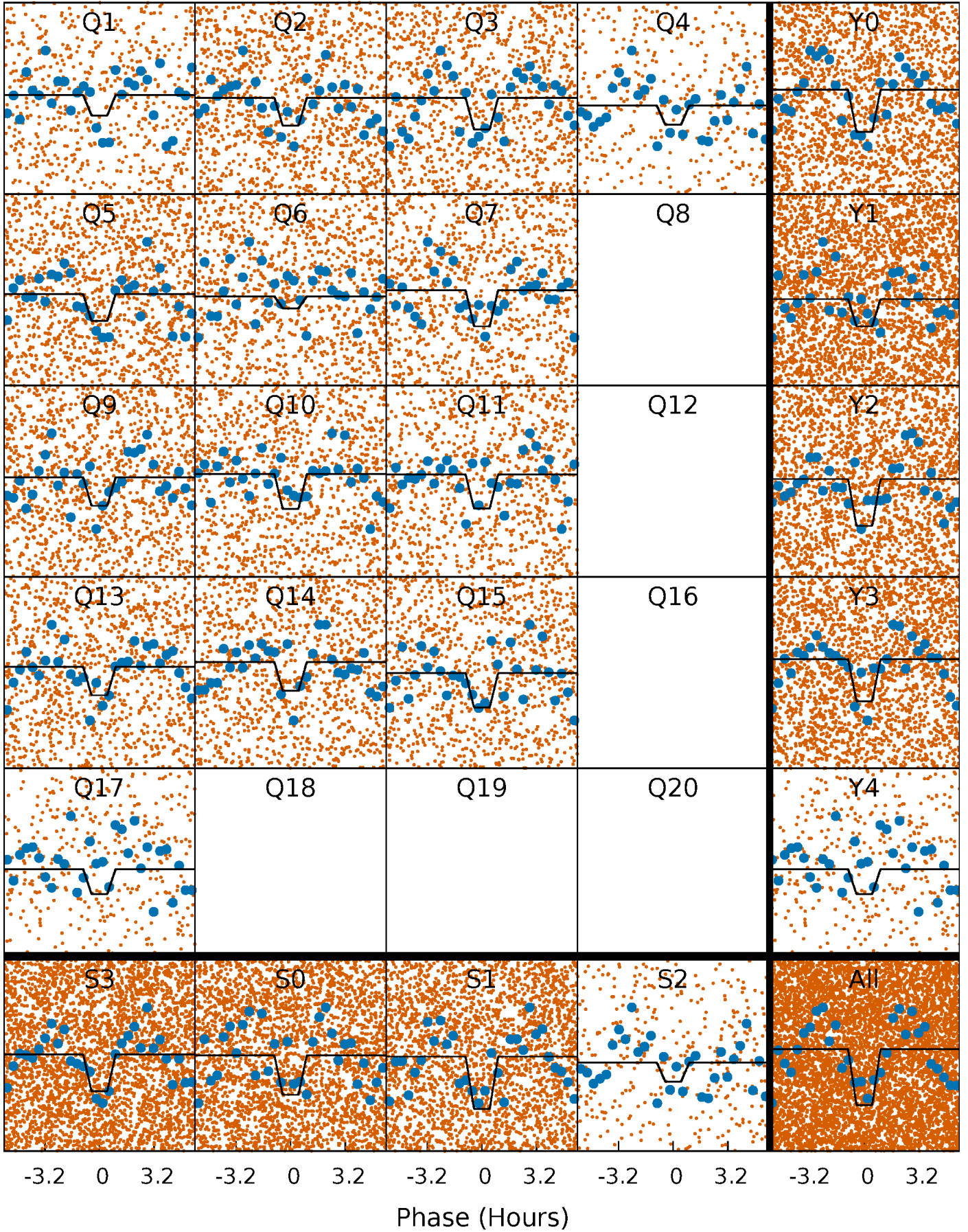
DV Quarter-Phased Transit Curves

TCE 011700599-01 P= 0.691539 Days $T_0=131.829555$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

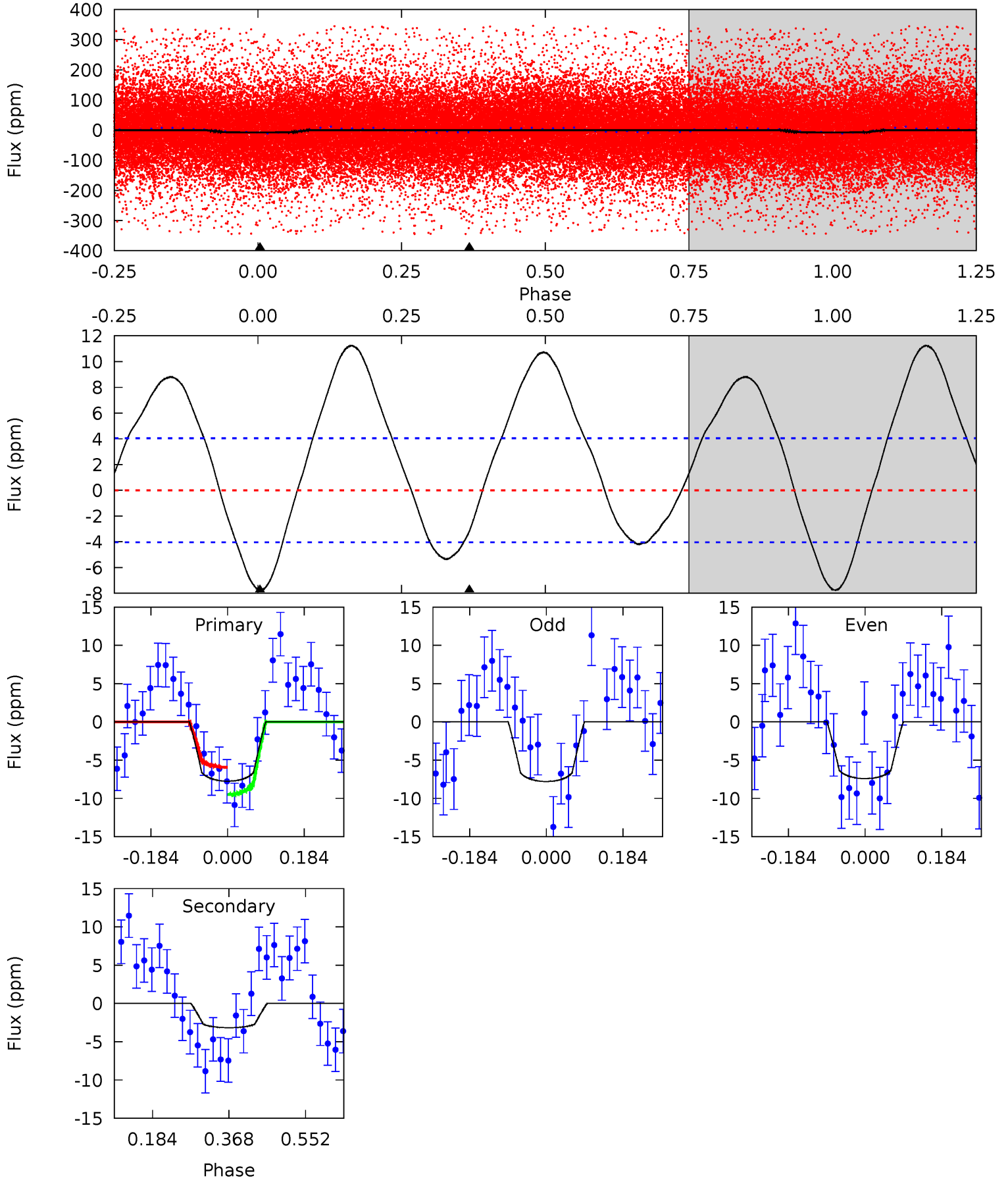
TCE 011700599-01 P= 0.691543 Days $T_0=131.831607$ (BKJD)



DV Model-Shift Uniqueness Test

011700599-01, P = 0.691539 Days, E = 131.138016 Days

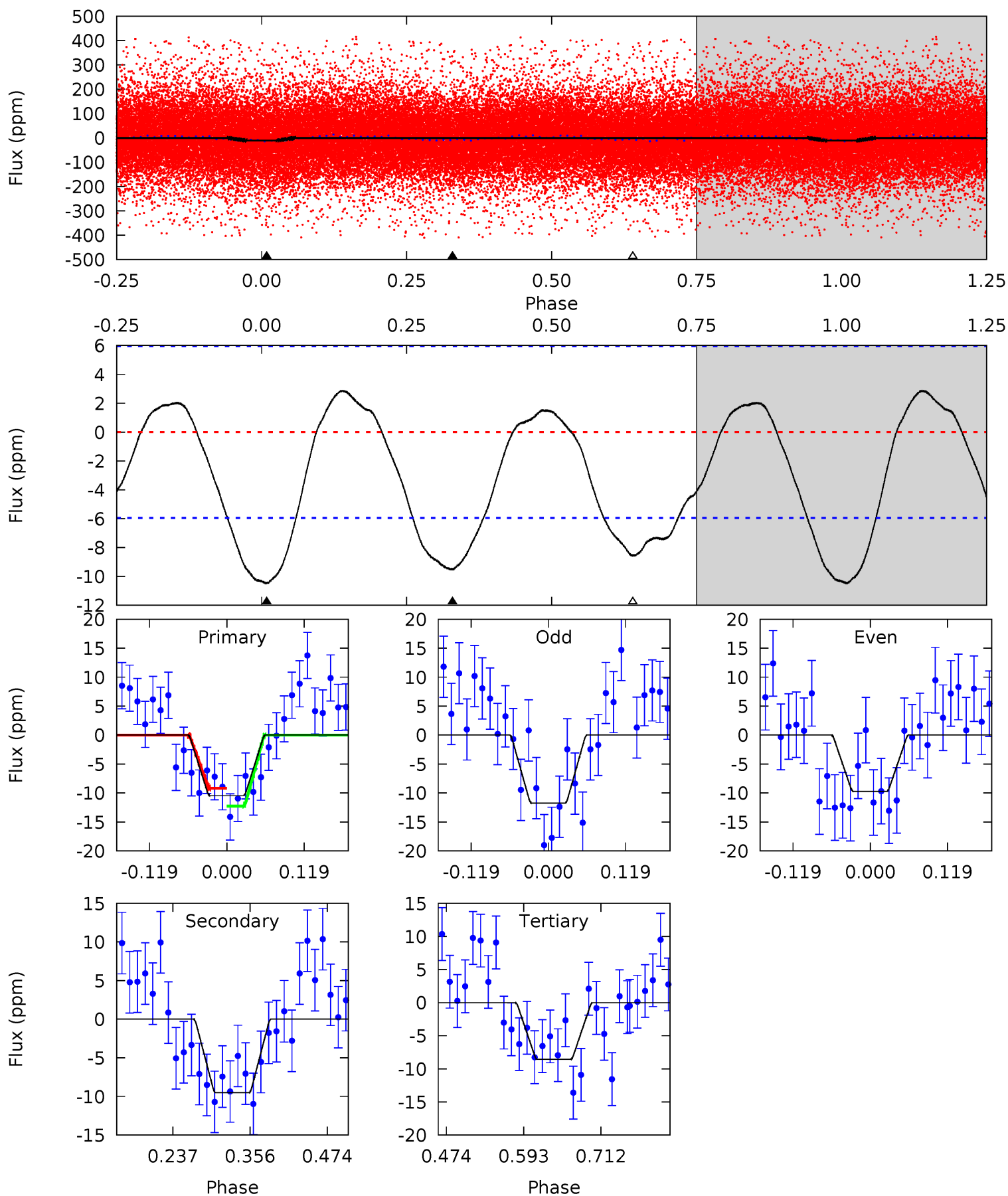
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.52	3.48	0	0	4.44	1.33	4.01	8.52	8.52	3.48	3.48	0.21	0.92	0.59	1.95



Alt Model-Shift Uniqueness Test

011700599-01, P = 0.691543 Days, E = 131.140064 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.98	7.25	6.52	0	4.53	1.56	2.91	1.46	7.98	0.73	7.25	0.78	1.05	0.21	1.18



Stellar Parameters For KIC 011700599

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	9057^{+282}_{-376}	$3.849^{+0.368}_{-0.123}$	$-0.400^{+0.500}_{-0.350}$	$2.742^{+0.730}_{-1.094}$	$1.934^{+0.475}_{-0.389}$	$0.132^{+0.401}_{-0.049}$
	+3%/-4%	+10%/-3%	+125%/-87%	+27%/-40%	+25%/-20%	+303%/-37%
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 011700599-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-3 ± 1	$0.94^{+0.35}_{-0.29}$	6479^{+582}_{-650}	5415^{+1496}_{-1546}	$0.728^{+0.810}_{-0.366}$
Alt.	-10 ± 1	$1.04^{+0.33}_{-0.31}$	6483^{+551}_{-670}	7559^{+1723}_{-1101}	$1.801^{+1.747}_{-0.765}$

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

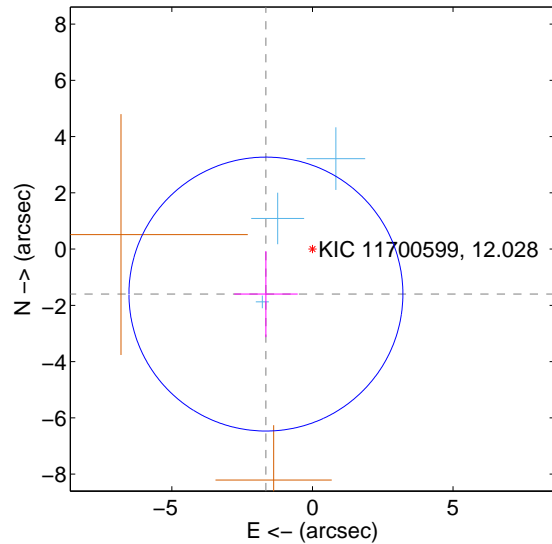
Supplemental centroid analysis for 011700599-01. Kepler magnitude: 12.03. Transit SNR 8.86

There are 3 quarters with good PRF difference image offsets

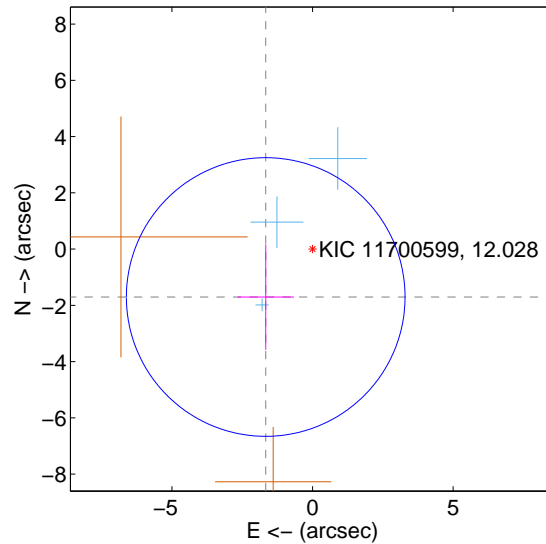
The direct PRF centroid is offset from the target star catalog position by about 0.08 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.301 ± 1.623	1.42	1.654 ± 1.131	-1.599 ± 1.531
PRF-fit source offset from KIC position	2.382 ± 1.651	1.44	1.665 ± 1.004	-1.704 ± 1.873
photometric centroid source offset	2.88 ± 1.35	2.13	2.87 ± 1.35	0.30 ± 1.27

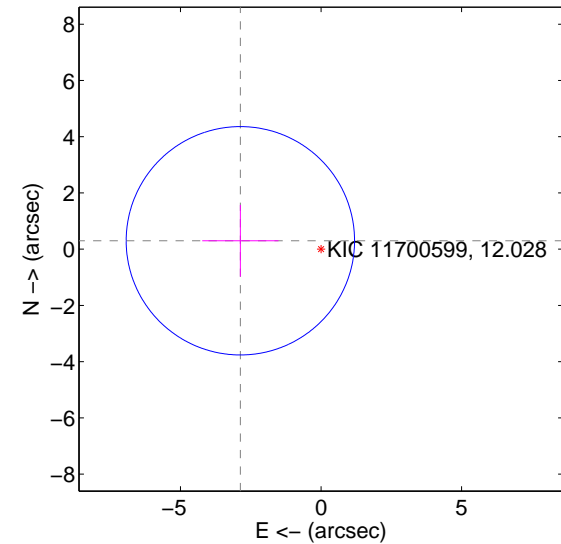
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

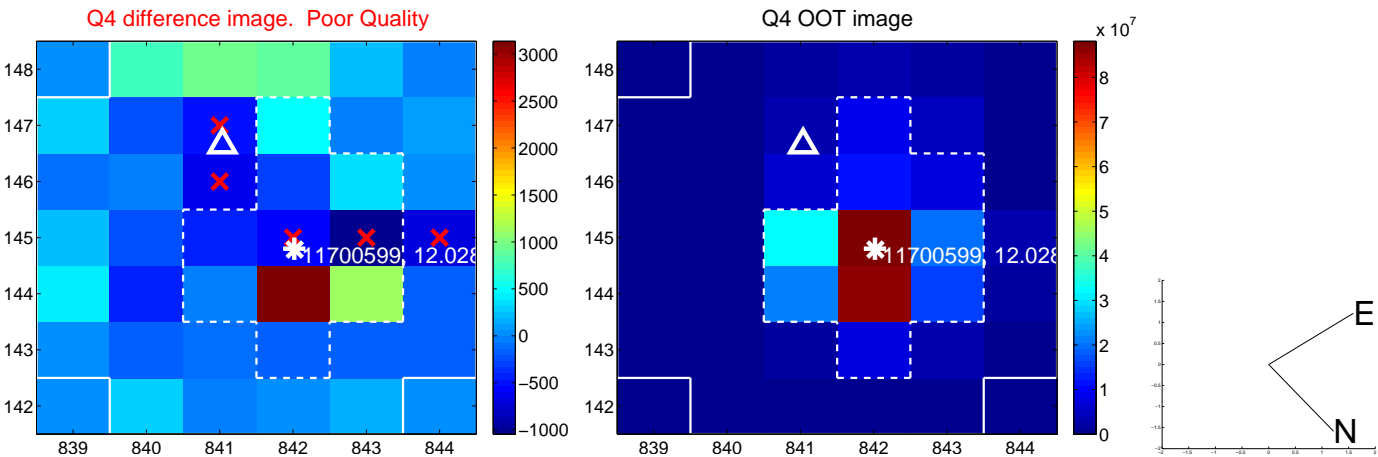
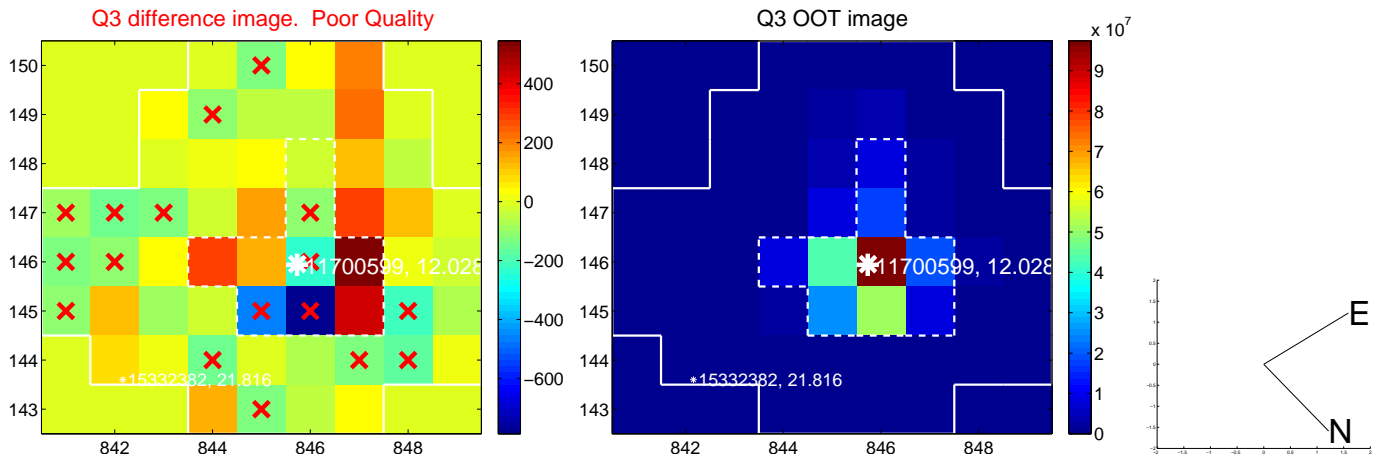
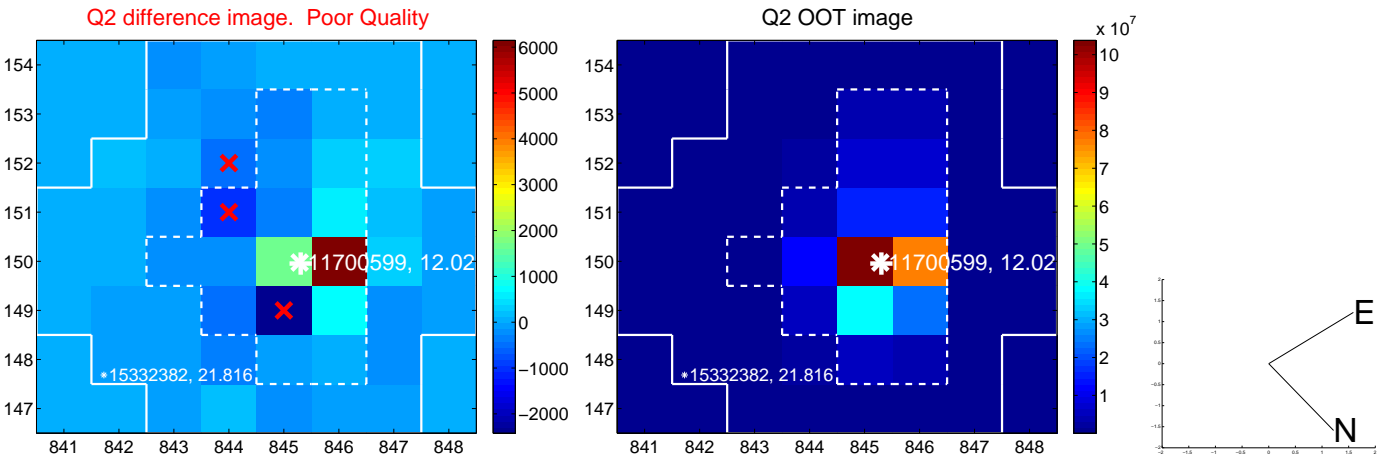
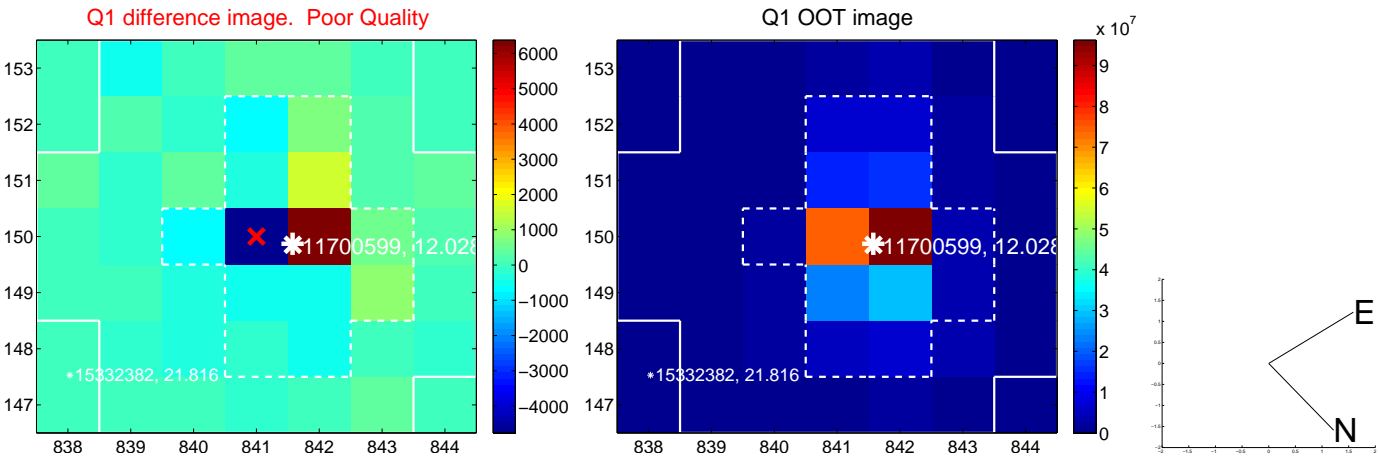


offset from photometric centroids

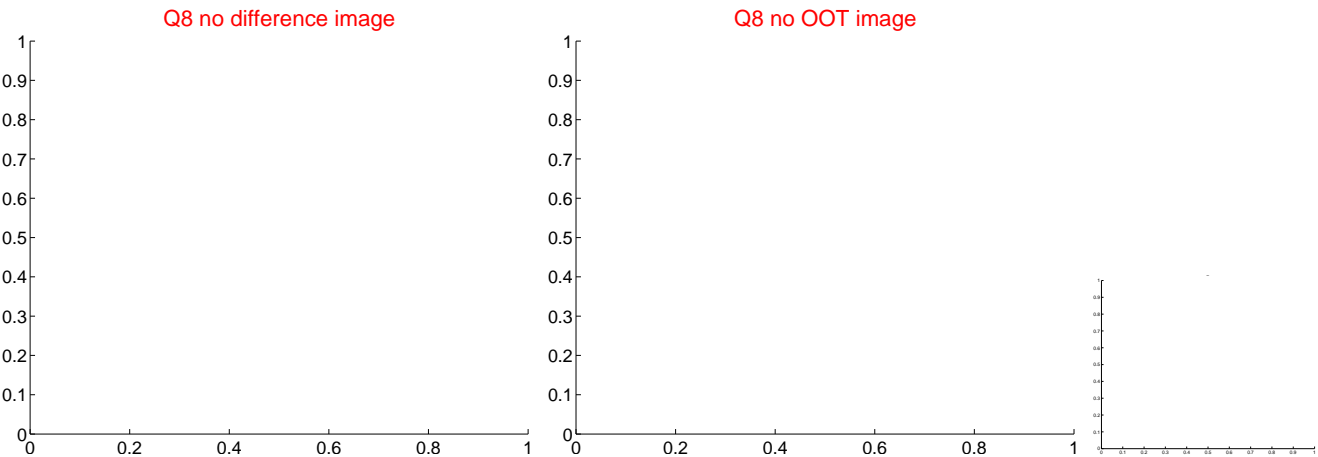
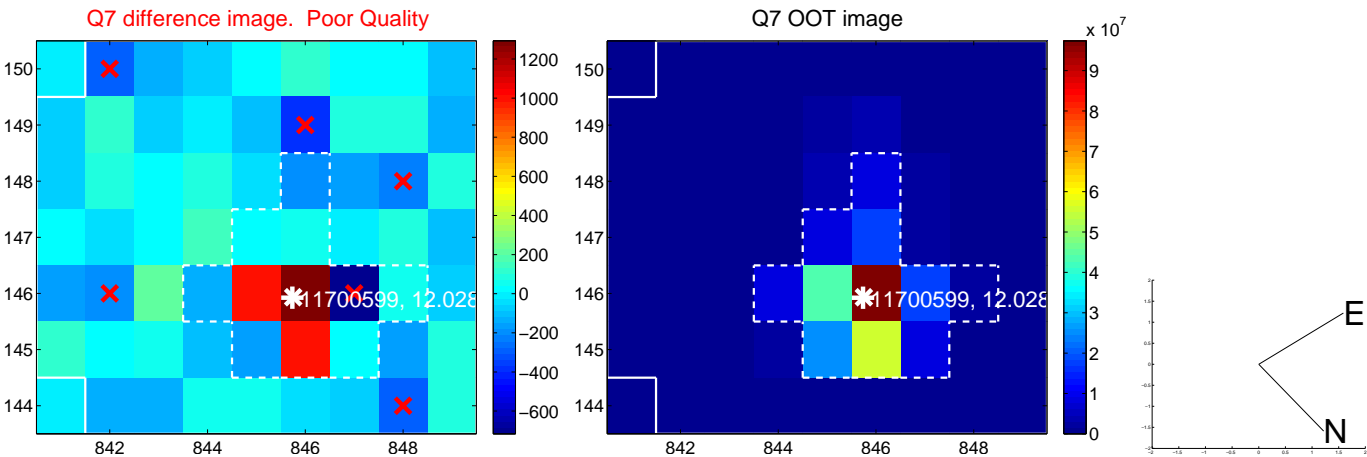
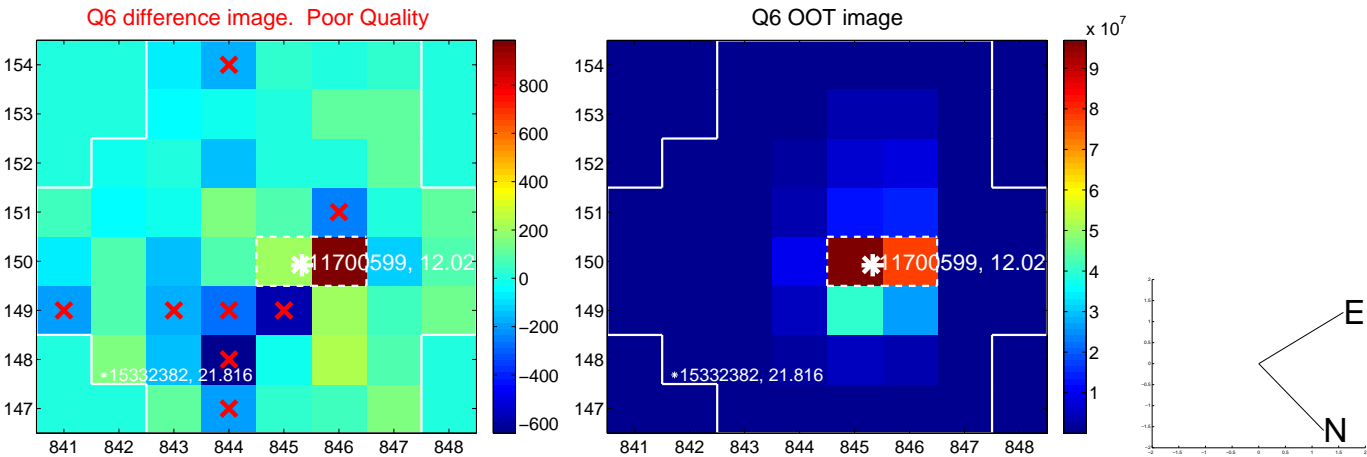
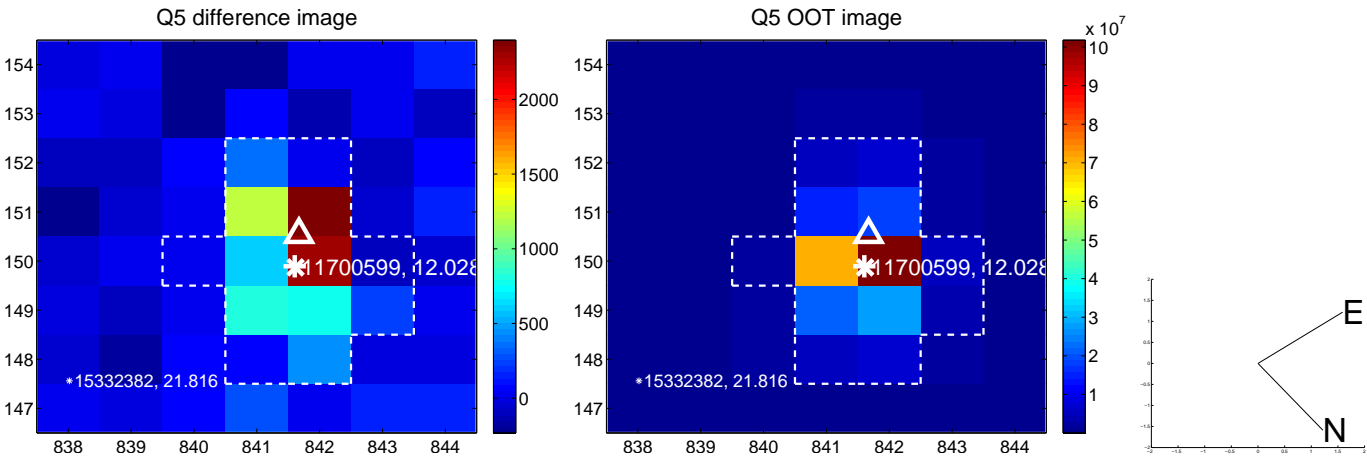


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

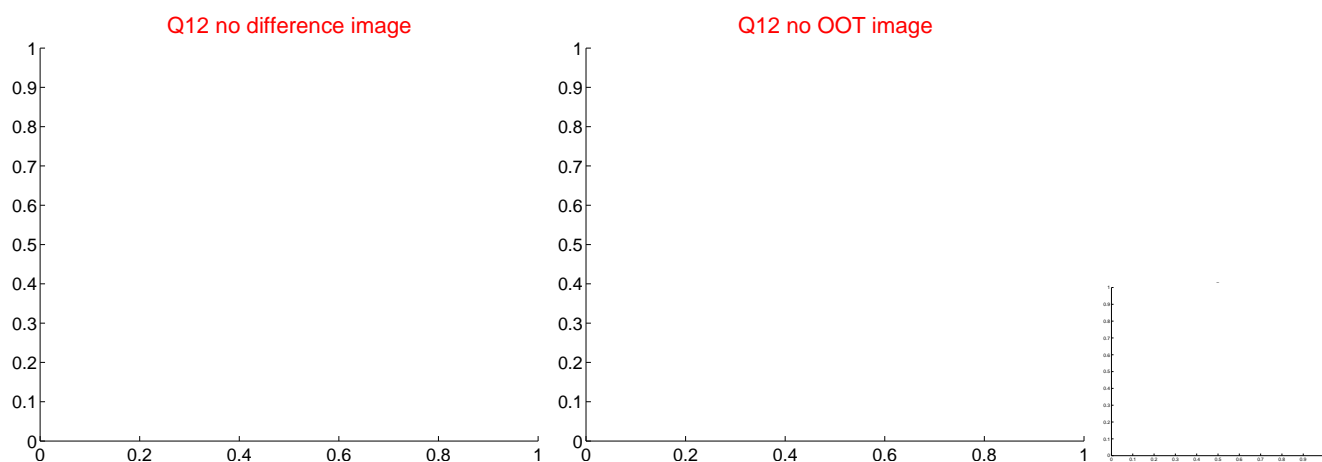
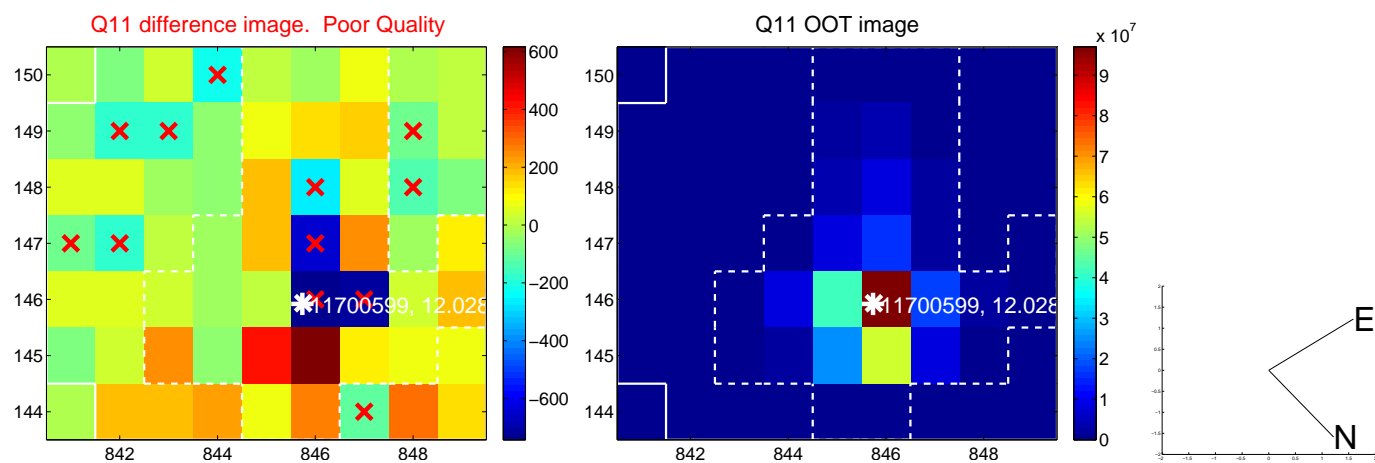
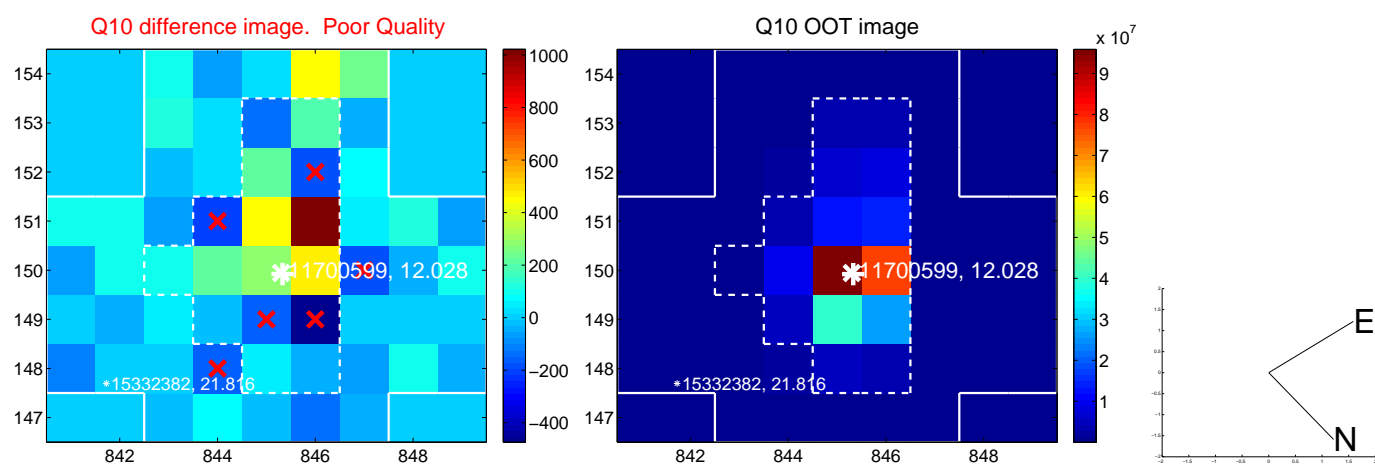
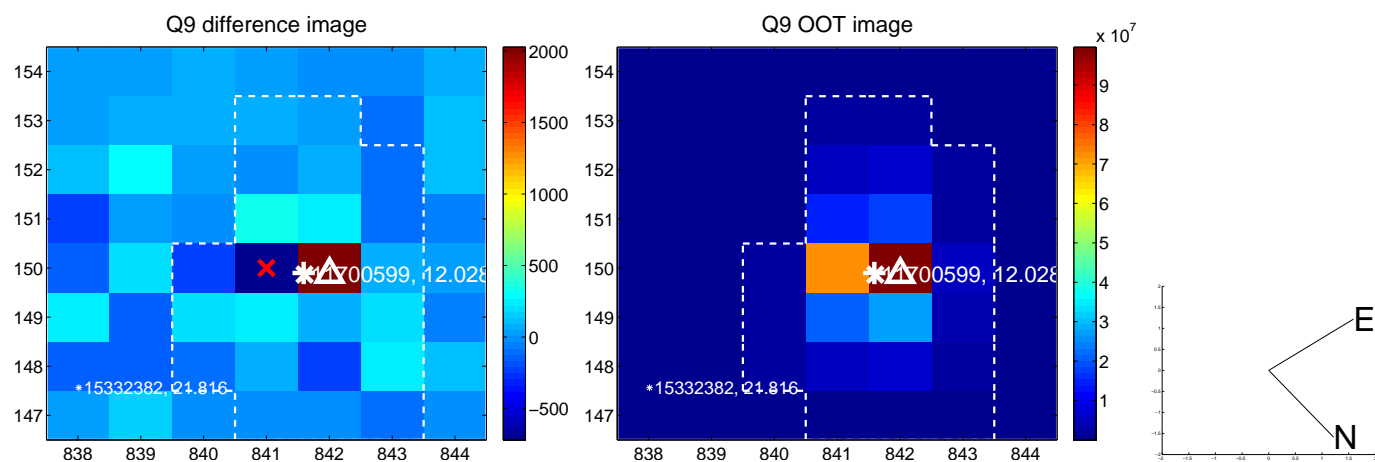
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



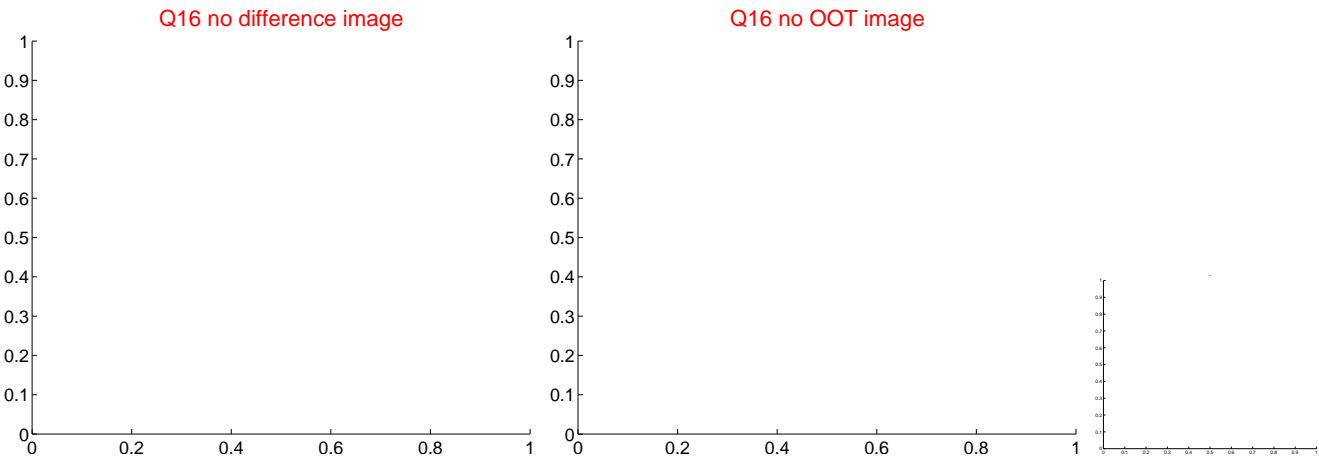
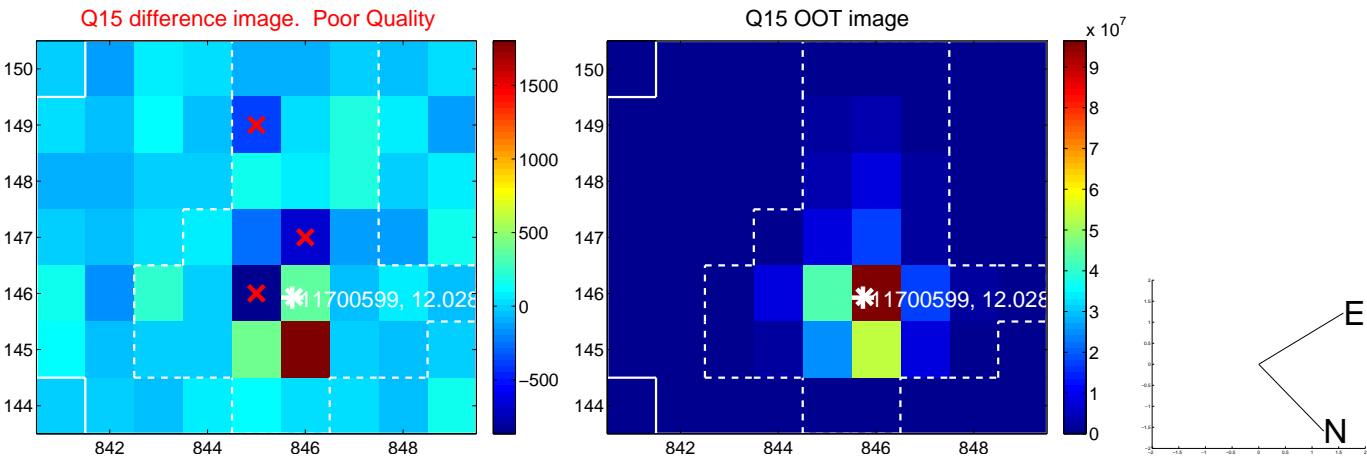
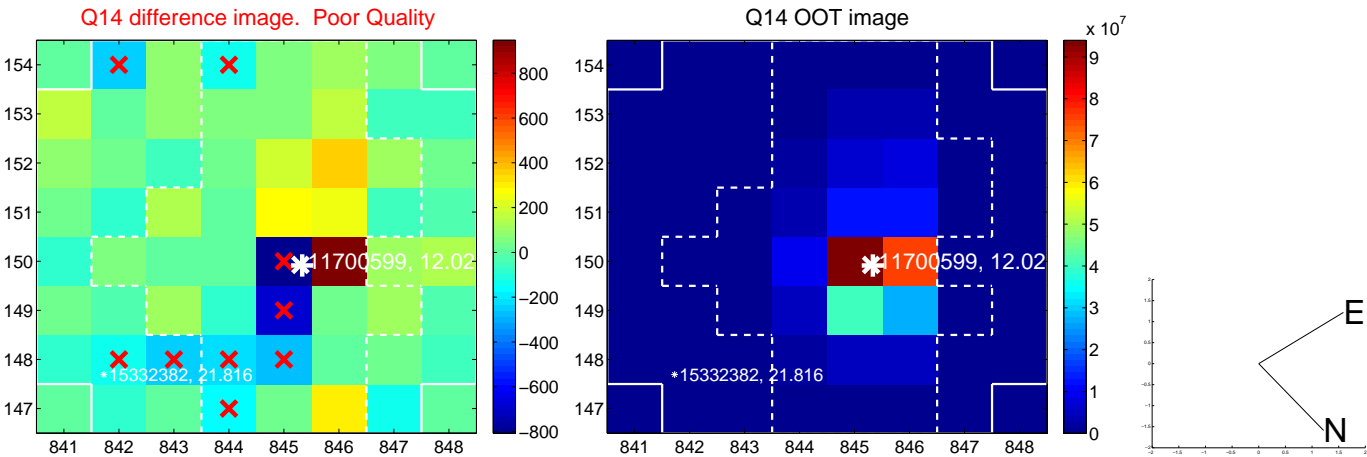
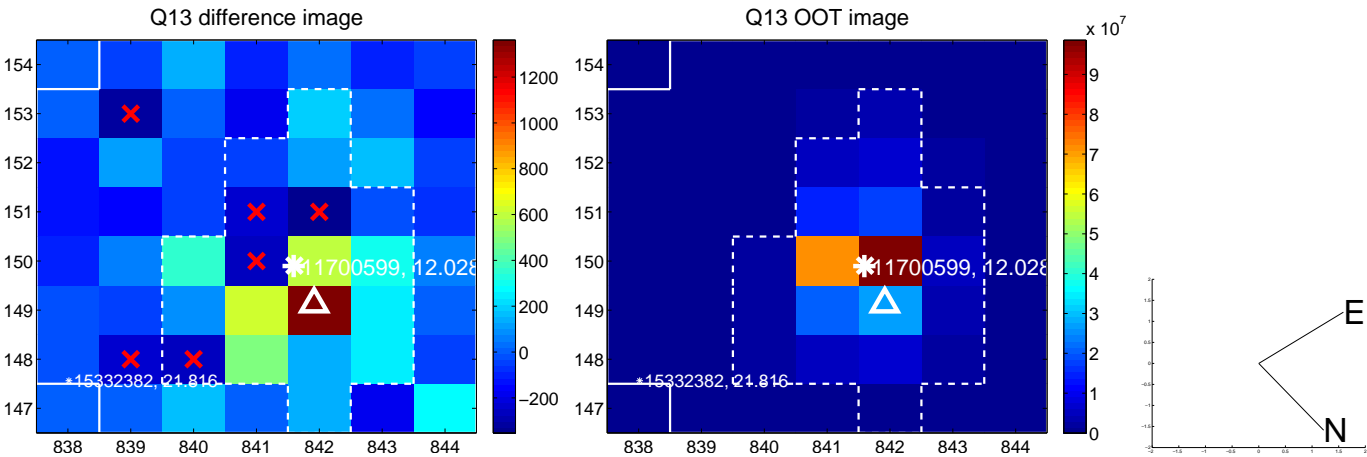
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



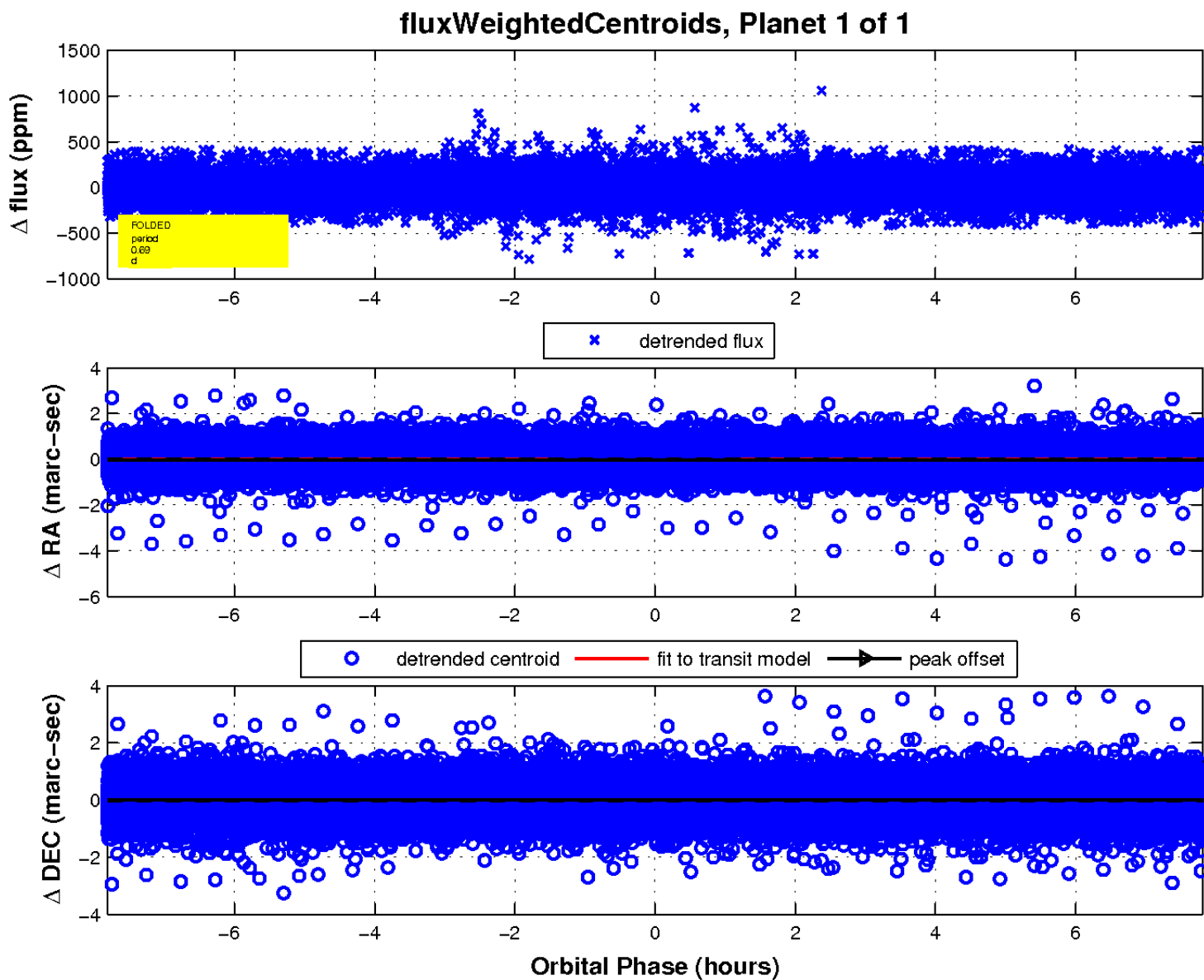
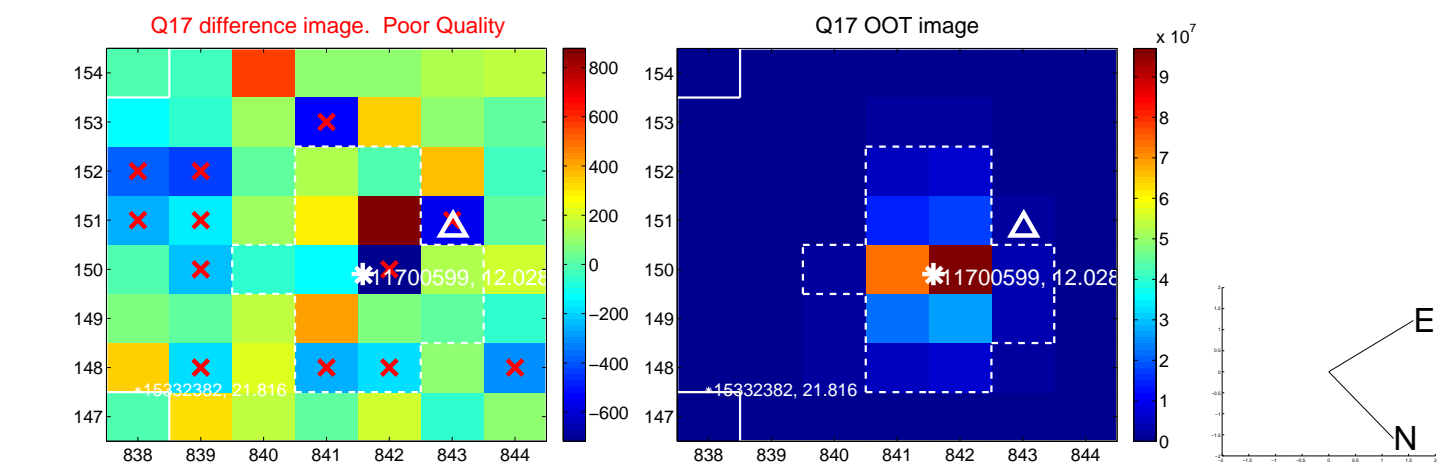
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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UKIRT Image

