

KIC 011768763

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})
011768763-01	OBS	No	0.742048	131.833852	17.6	2.745	8.7	2.6	0.75	4723	0.34	1187.78

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011768763-01	OBS	FP	0.00	1	0	1	0	LPP_DV—LPP_ALT—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.

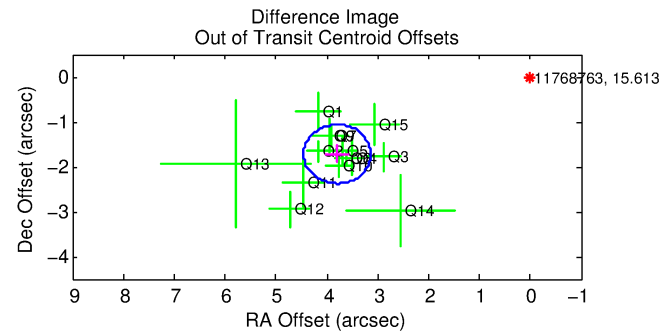
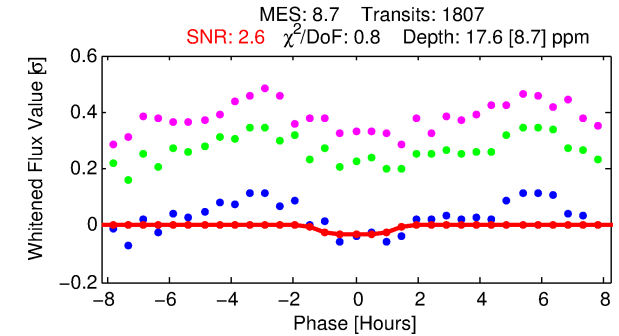
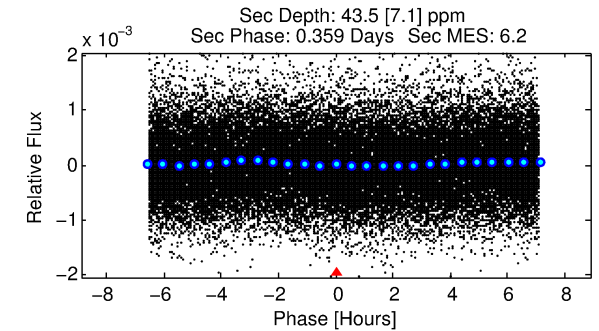
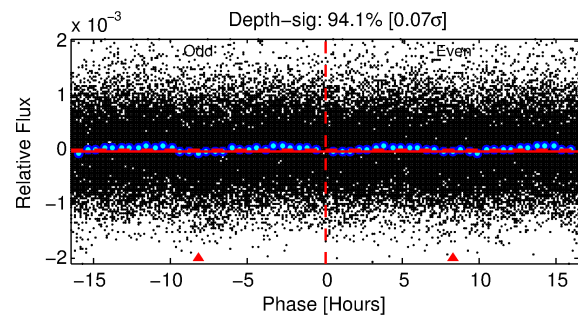
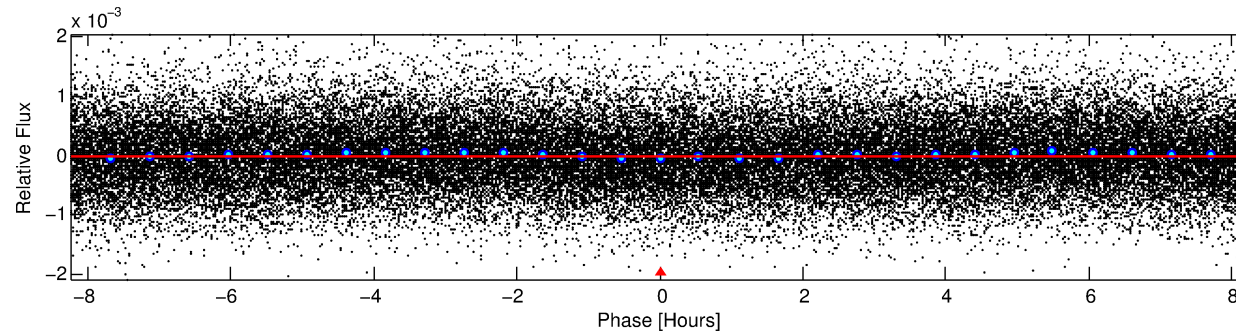
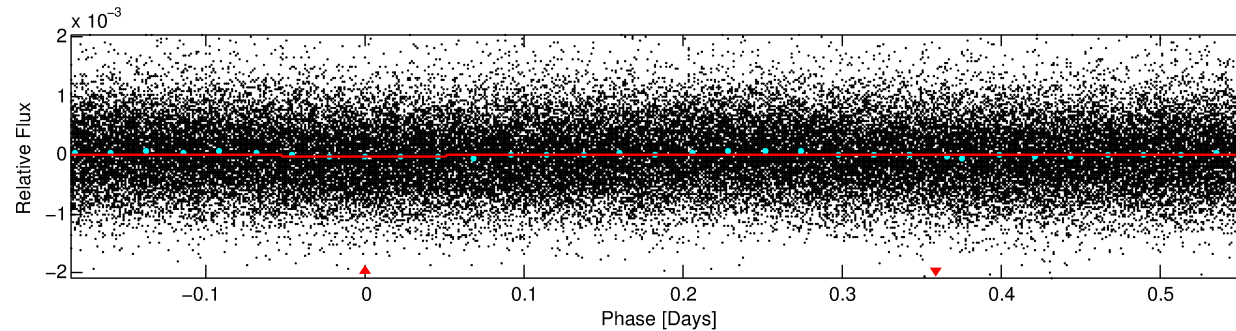
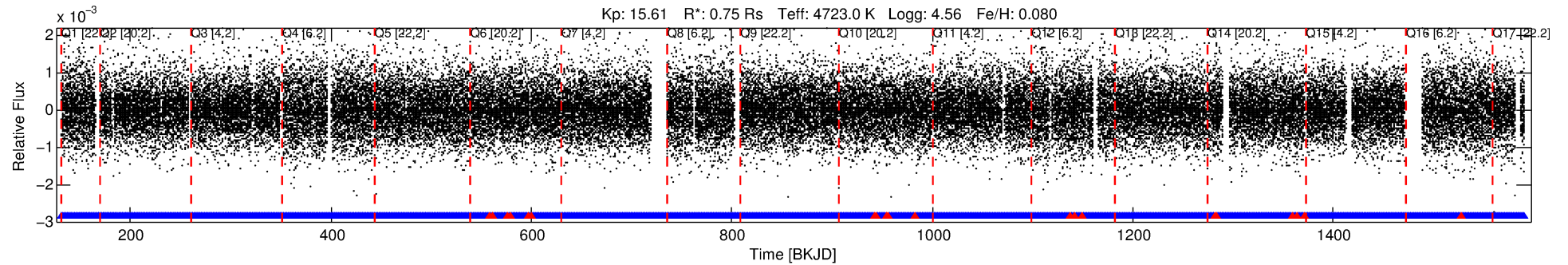
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011768763-01

No Significant Match Found

DV One-Page Summary

KIC: 11768763 Candidate: 1 of 1 Period: 0.742 d



DV Fit Results:

Period = 0.74205 [0.00004] d
Epoch = 131.8339 [0.0143] BKJD
Rp/R* = 0.0041 [0.0066]
a/R* = 1.68 [5.62]
b = 0.71 [3.72]
Seff = 1187.78 [190.24]
Teq = 1497 [60] K
Rp = 0.34 [0.54] Re
a = 0.0145 [0.0010] AU
Ag = 44.36 [141.38] [0.31σ]
Teff = 5973 [4760] K [0.94σ]

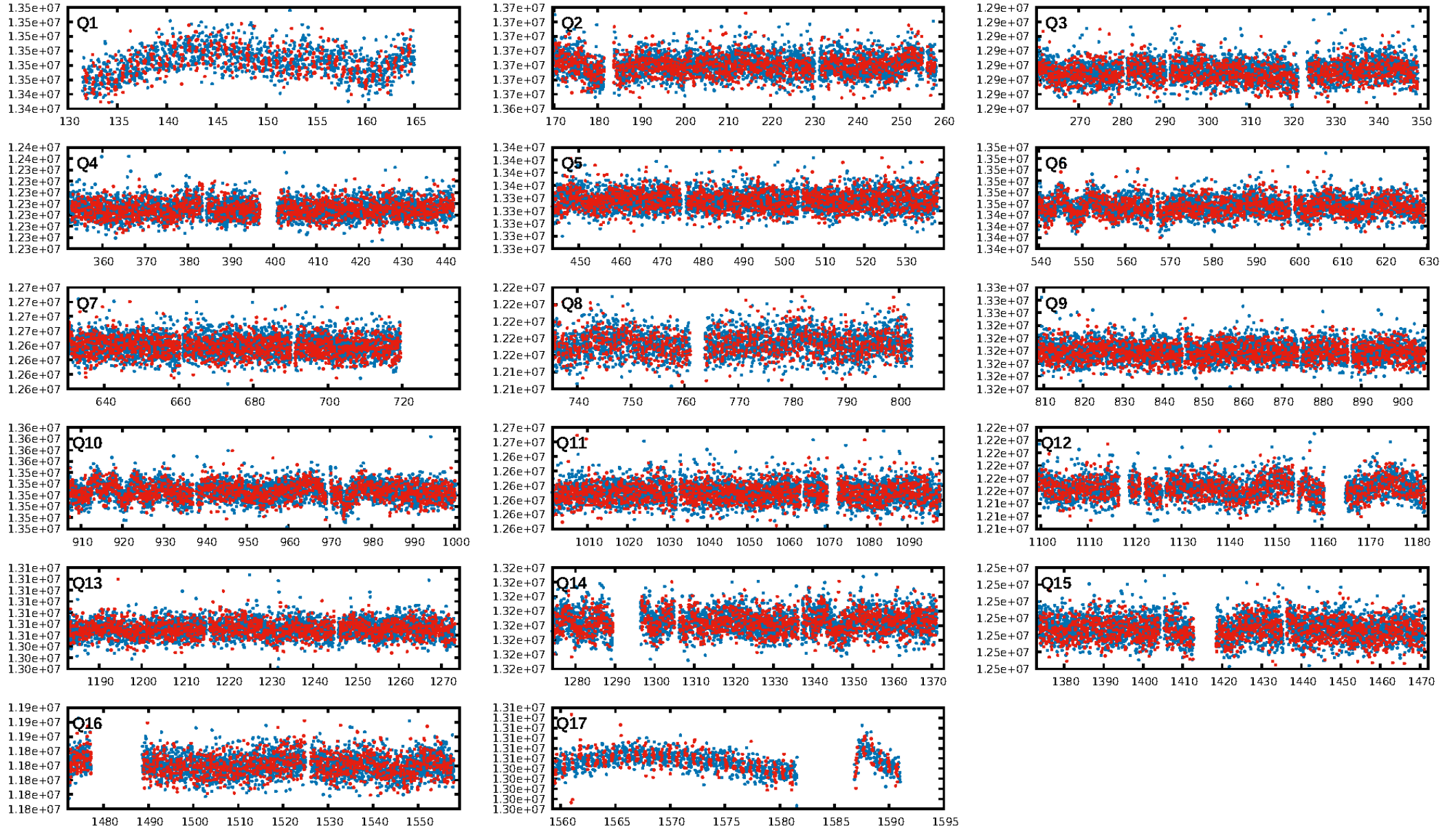
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.08e-18
RollingBand-fgt: 0.99 [1705/1726]
GhostDiagnostic-chr: 0.6455
Centroid-sig: 0.0%
Centroid-so: 24.348 arcsec [3.96σ]
OotOffset-rm: 4.169 arcsec [19.05σ]
KicOffset-rm: 4.275 arcsec [19.14σ]
OotOffset-st: 4/4/2/4 [14]
KicOffset-st: 4/4/2/4 [14]
DiffImageQuality-fgm: 0.93 [13/14]
DiffImageOverlap-fno: 1.00 [17/17]

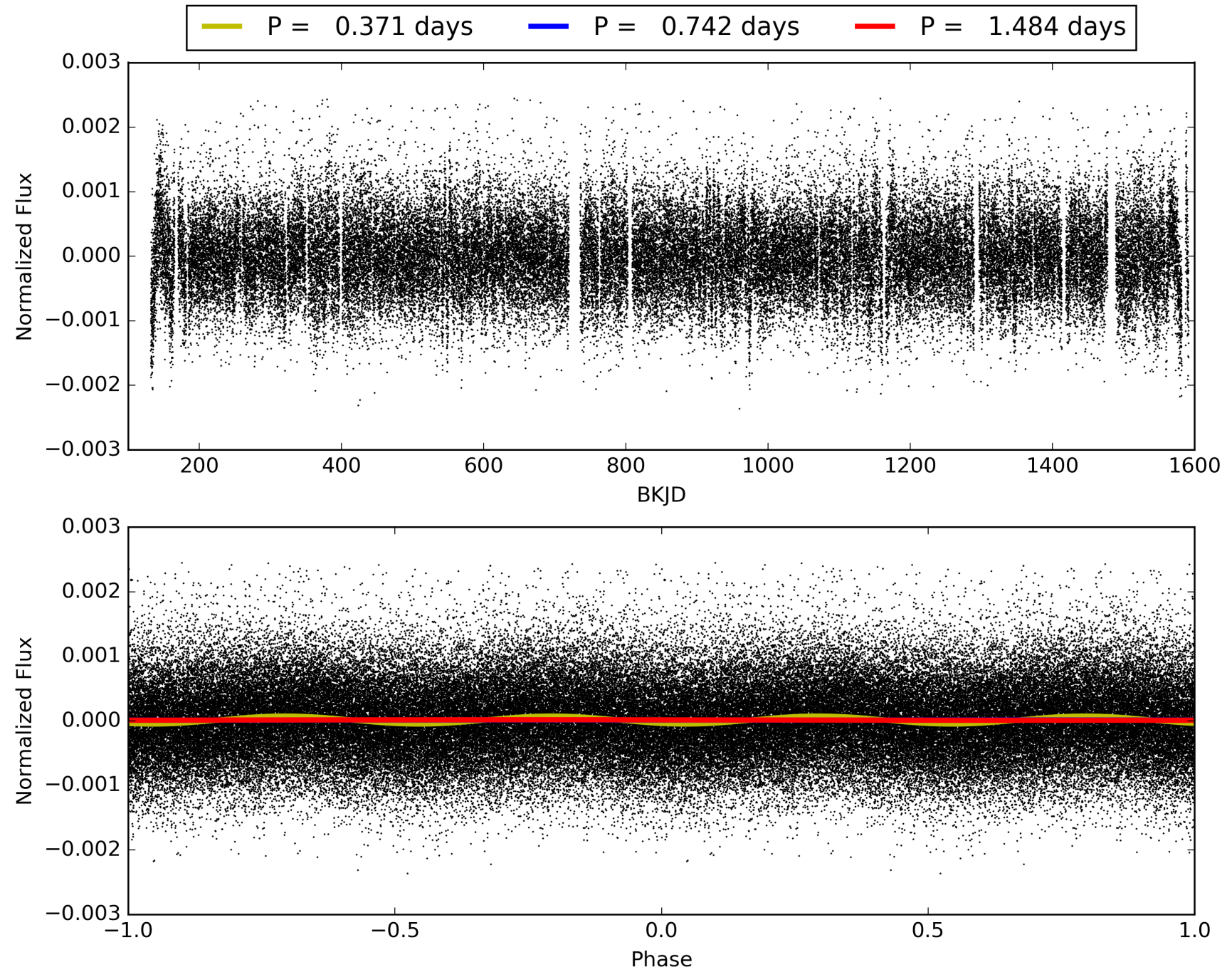
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 23:28:02 Z

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

TCE 011768763-01, PDC Light Curves

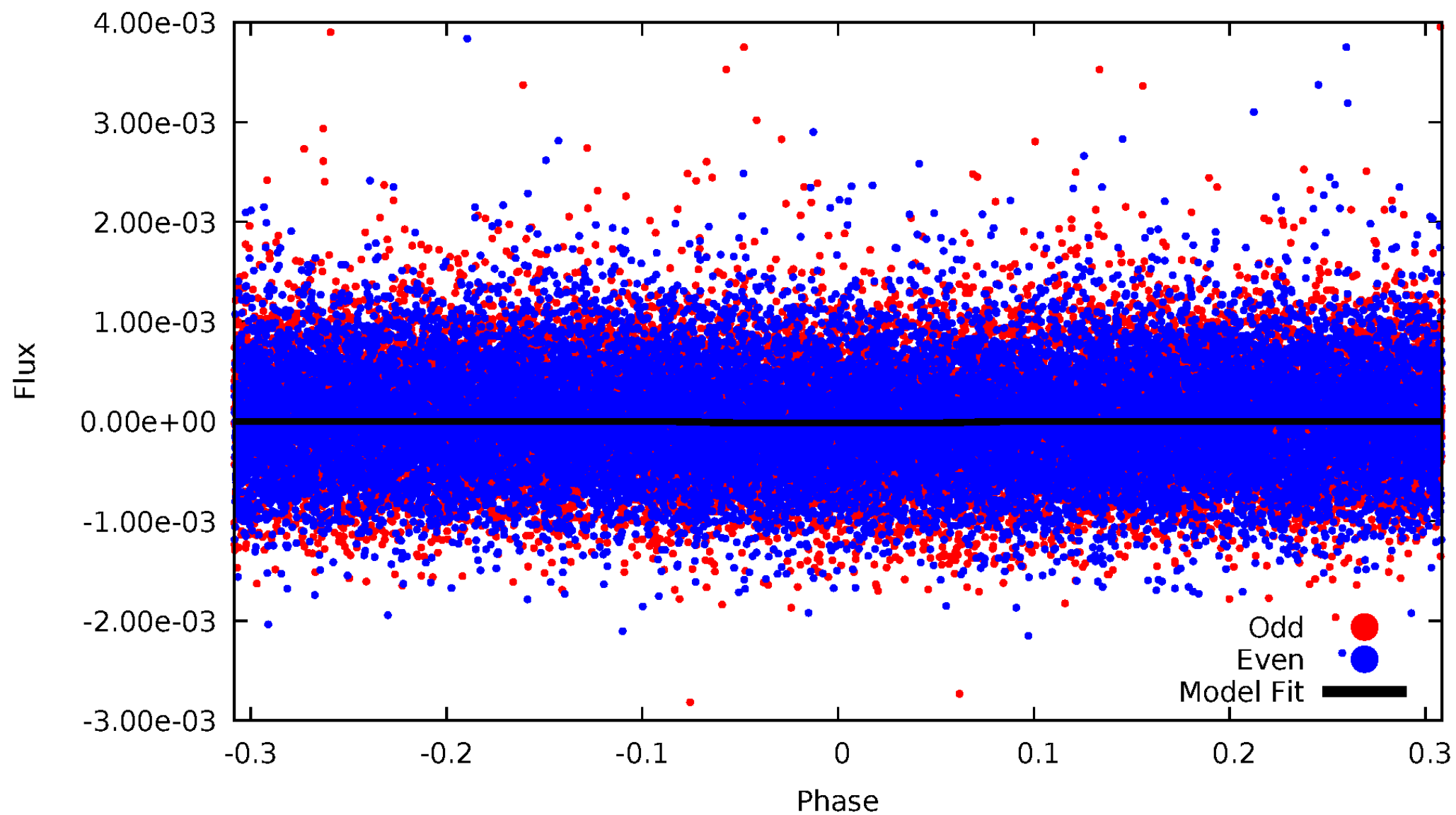


TCE 011768763-01



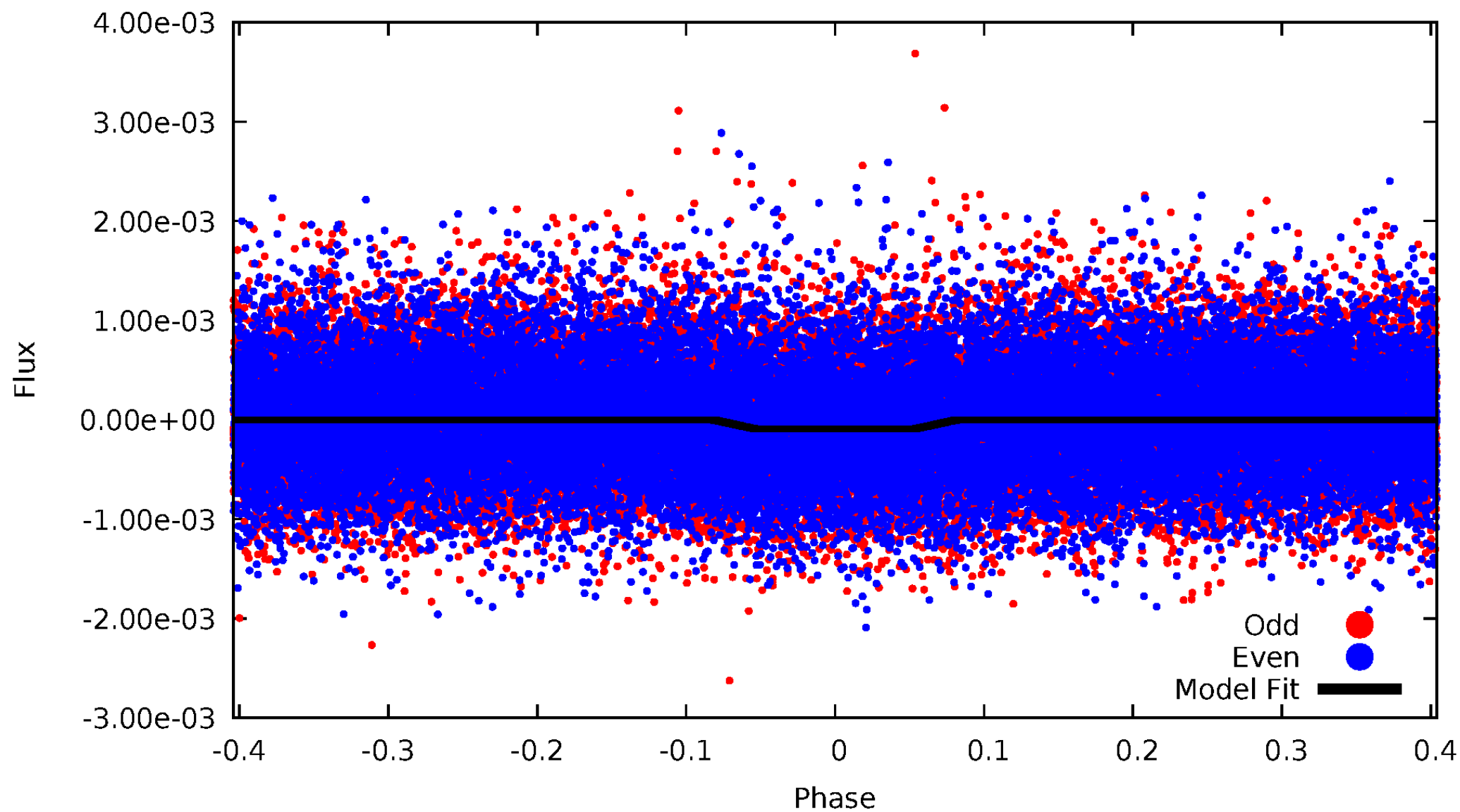
DV Odd/Even

TCE 011768763-01



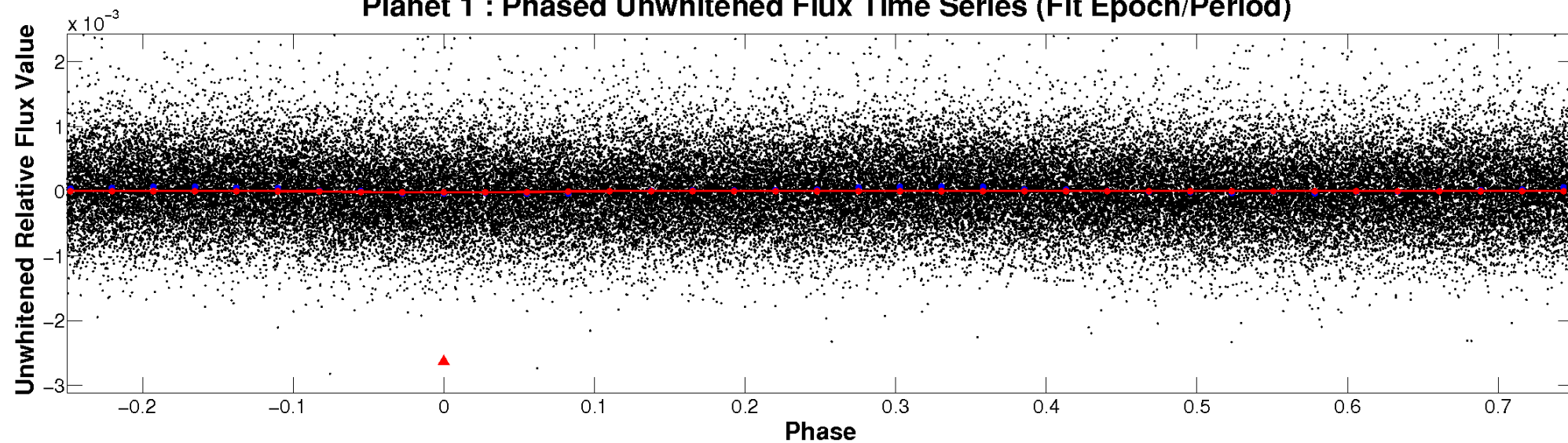
ALT Odd/Even

TCE 011768763-01

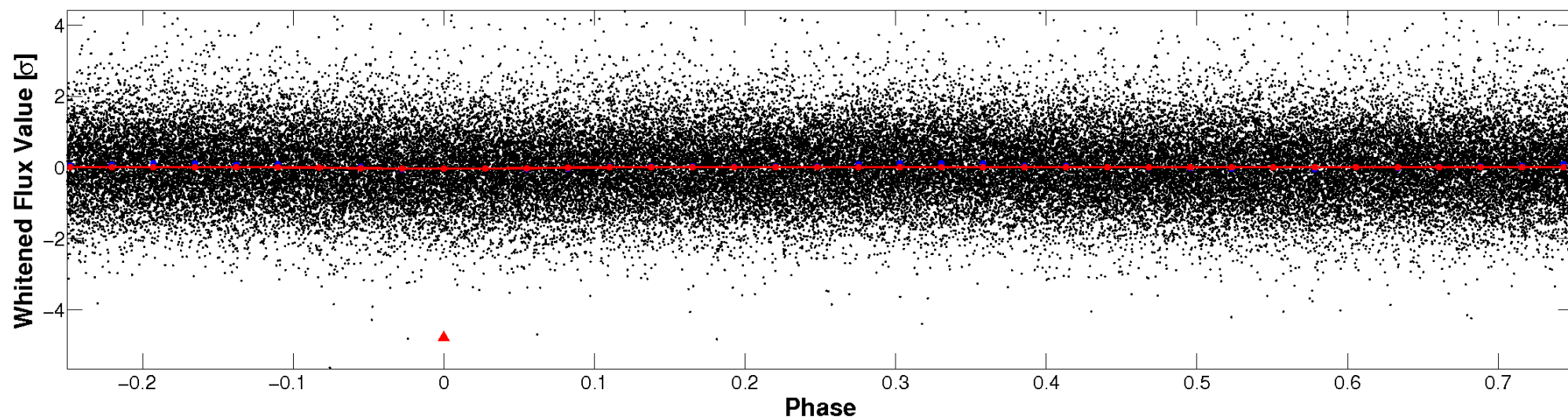


Non-Whitened Vs. Whitened Light Curve

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

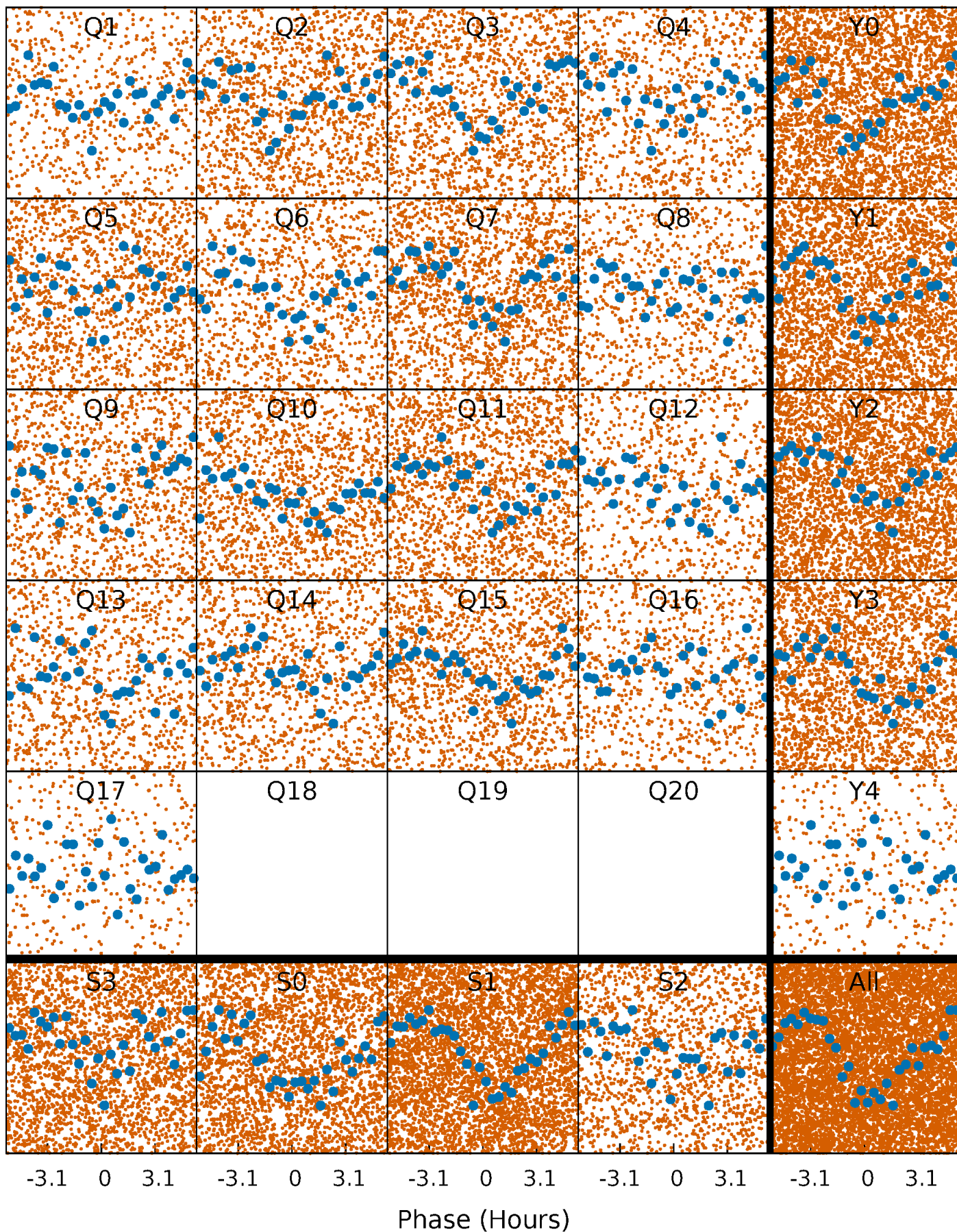


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



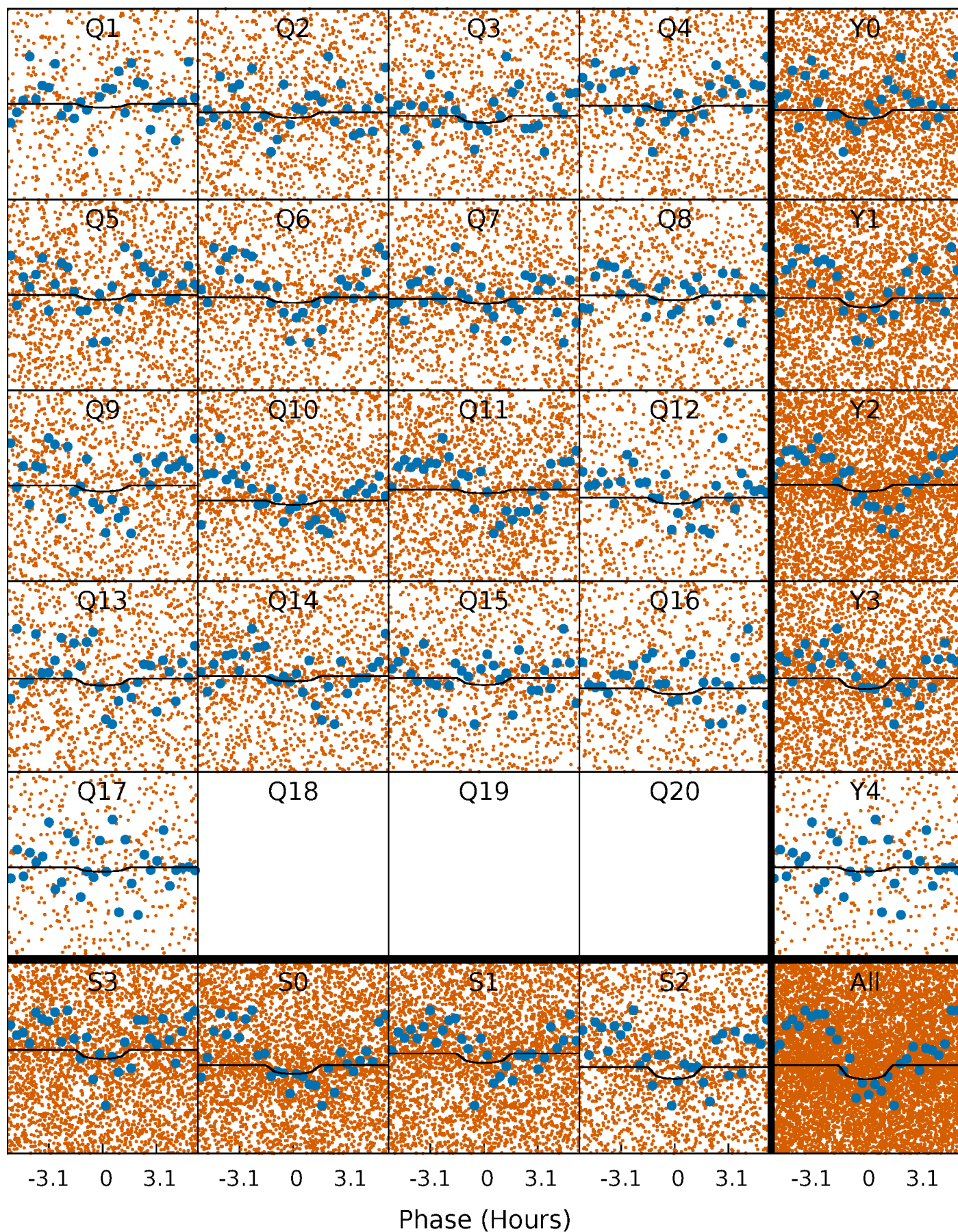
PDC Quarter-Phased Transit Curves

TCE 011768763-01 P= 0.742048 Days $T_0=131.833852$ (BKJD)



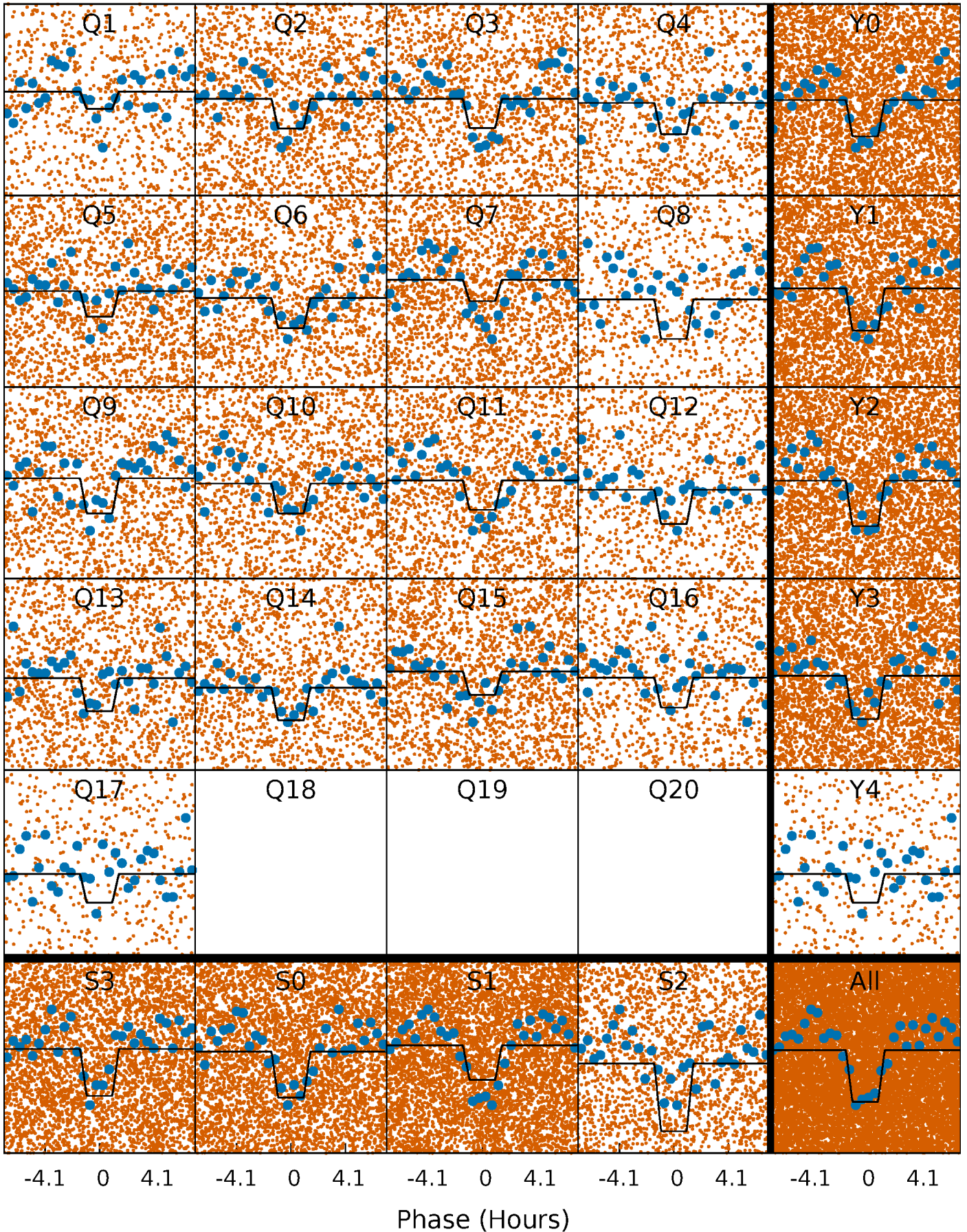
DV Quarter-Phased Transit Curves

TCE 011768763-01 P= 0.742048 Days $T_0=131.833852$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

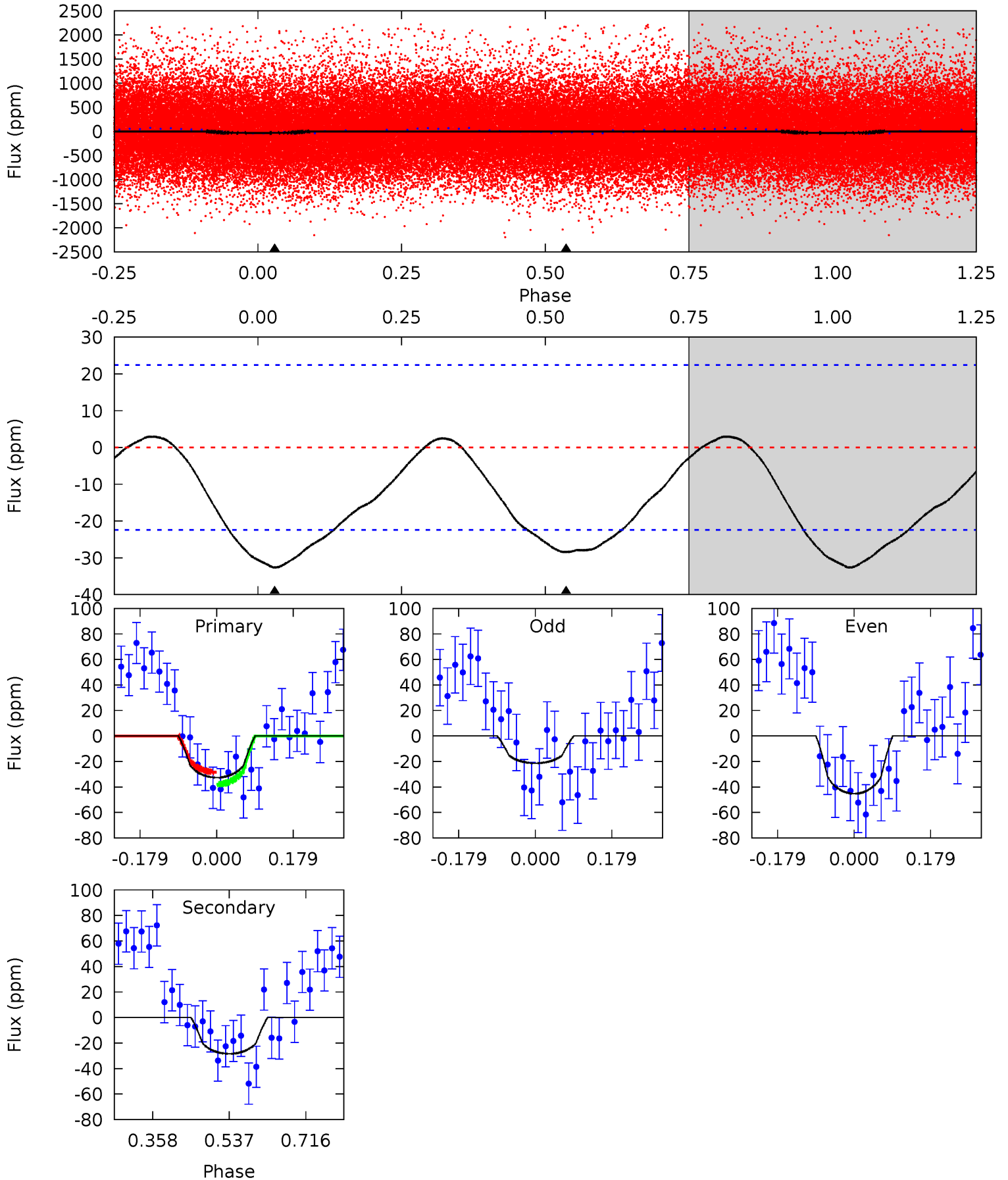
TCE 011768763-01 P= 0.742117 Days $T_0=131.799353$ (BKJD)



DV Model-Shift Uniqueness Test

011768763-01, P = 0.742048 Days, E = 131.091804 Days

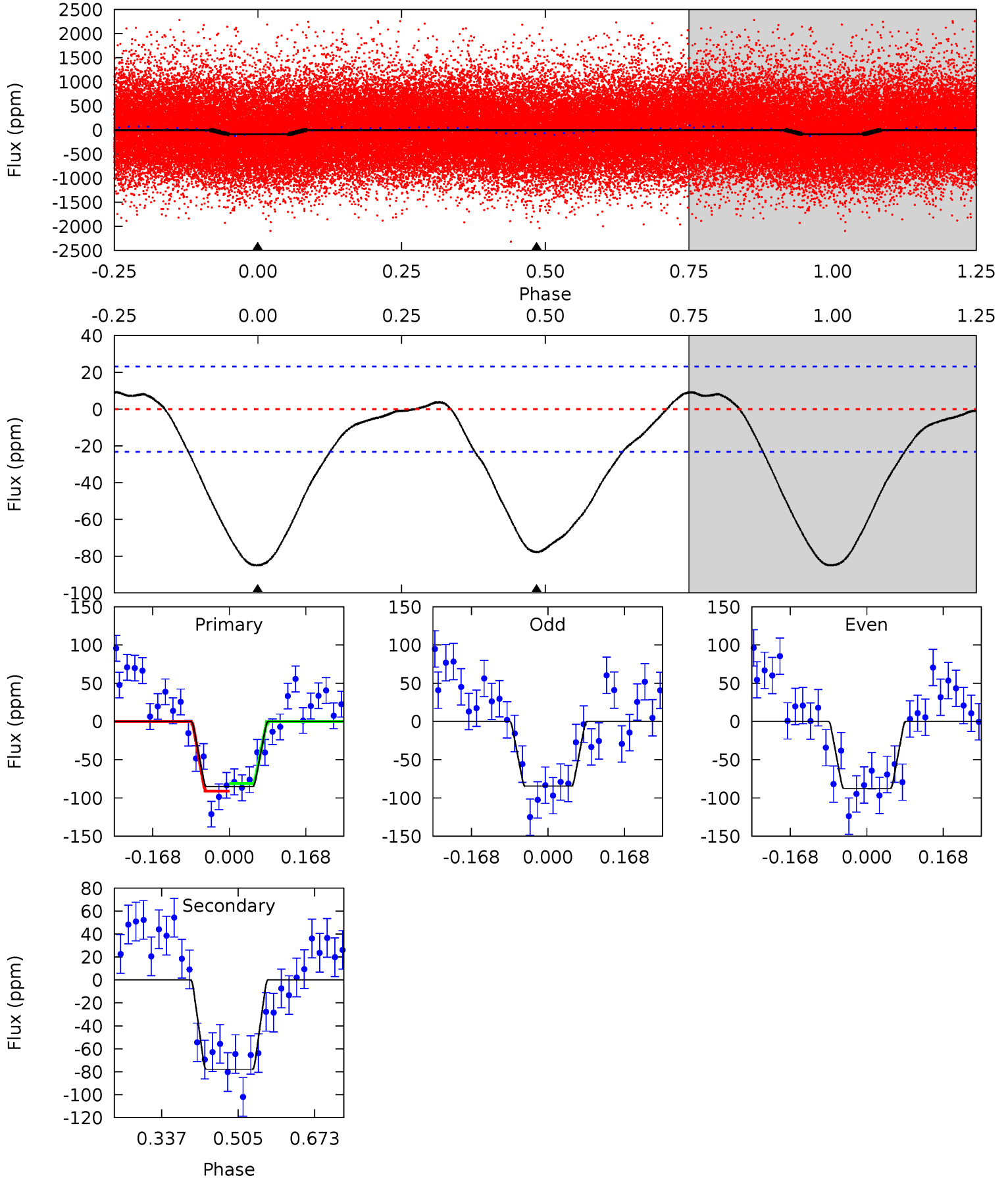
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.47	5.63	0	0	4.44	1.34	0.90	6.47	6.47	5.63	5.63	2.37	0.96	0.08	0.94



Alt Model-Shift Uniqueness Test

011768763-01, P = 0.742117 Days, E = 131.057236 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
16.3	14.9	0	0	4.45	1.38	1.30	16.3	16.3	14.9	14.9	0.30	0.93	0.10	0.96



Stellar Parameters For KIC 011768763

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (g \cdot \text{cm}^{-3})$
	4723^{+142}_{-127}	$4.557^{+0.058}_{-0.027}$	$0.080^{+0.250}_{-0.300}$	$0.747^{+0.043}_{-0.064}$	$0.734^{+0.070}_{-0.053}$	$2.477^{+0.624}_{-0.282}$
	+3%/-3%	+1%/-1%	+312%/-375%	+6%/-9%	+10%/-7%	+25%/-11%
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 011768763-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-28 ± 5	$0.49^{+0.47}_{-0.33}$	2080^{+74}_{-70}	4487^{+3221}_{-1012}	14^{+119}_{-11}
Alt.	-78 ± 5	$0.82^{+0.53}_{-0.48}$	2081^{+70}_{-73}	4457^{+2250}_{-781}	14^{+64}_{-9}

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 $A_{obs} \gg 1.0$

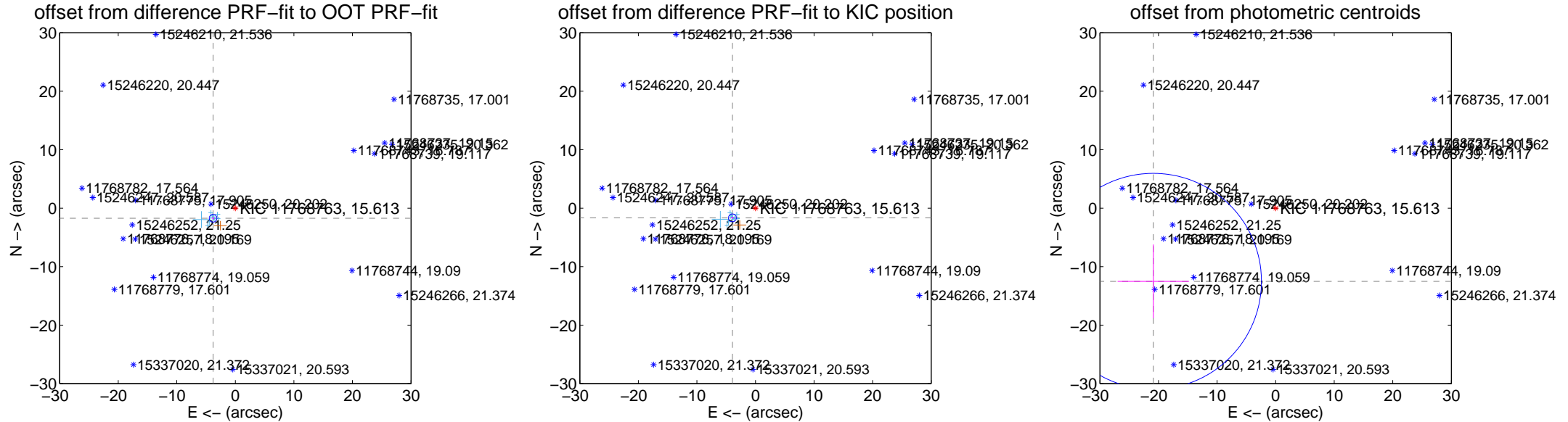
DV Centroid Data

Supplemental centroid analysis for 011768763-01. Kepler magnitude: 15.61. Transit SNR 2.61

There are 13 quarters with good PRF difference image offsets

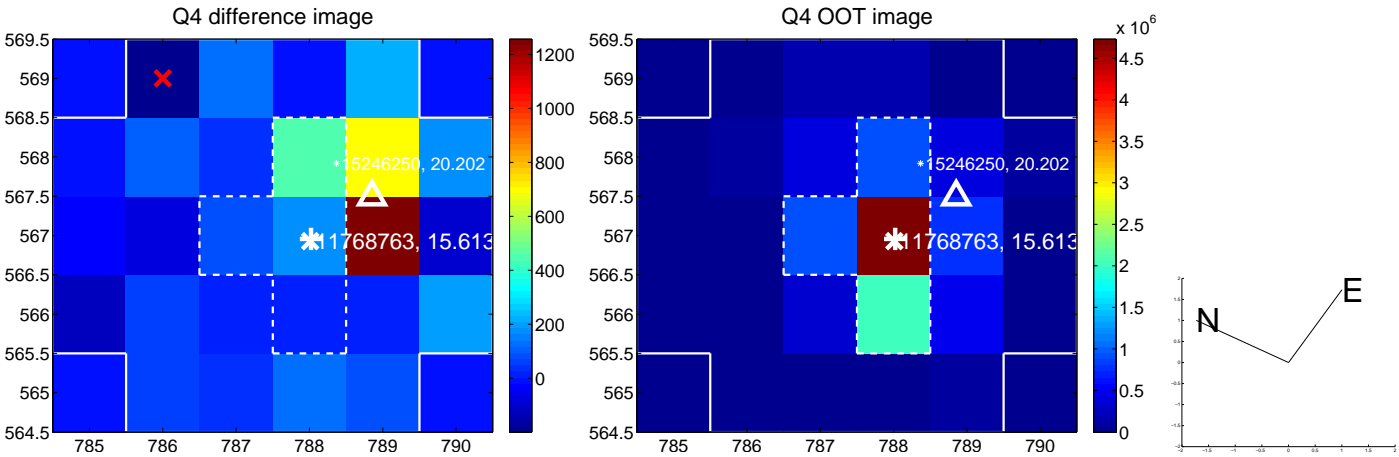
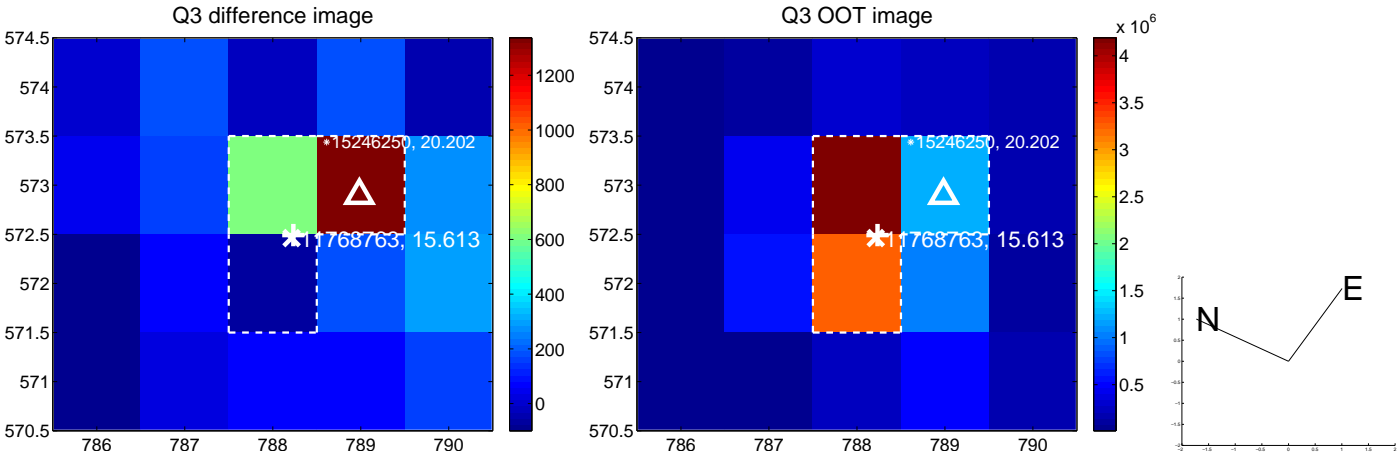
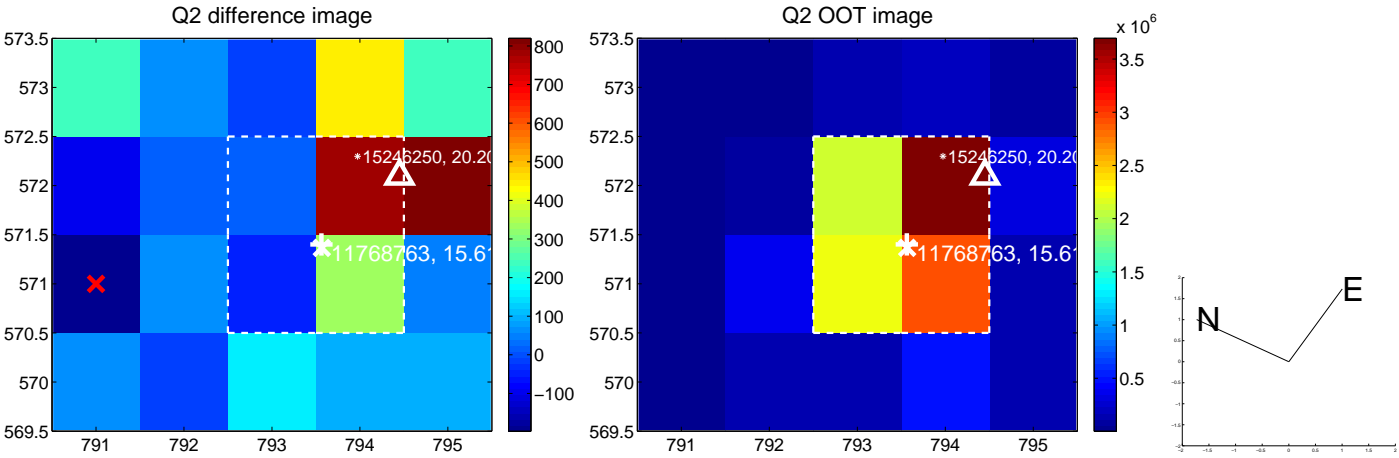
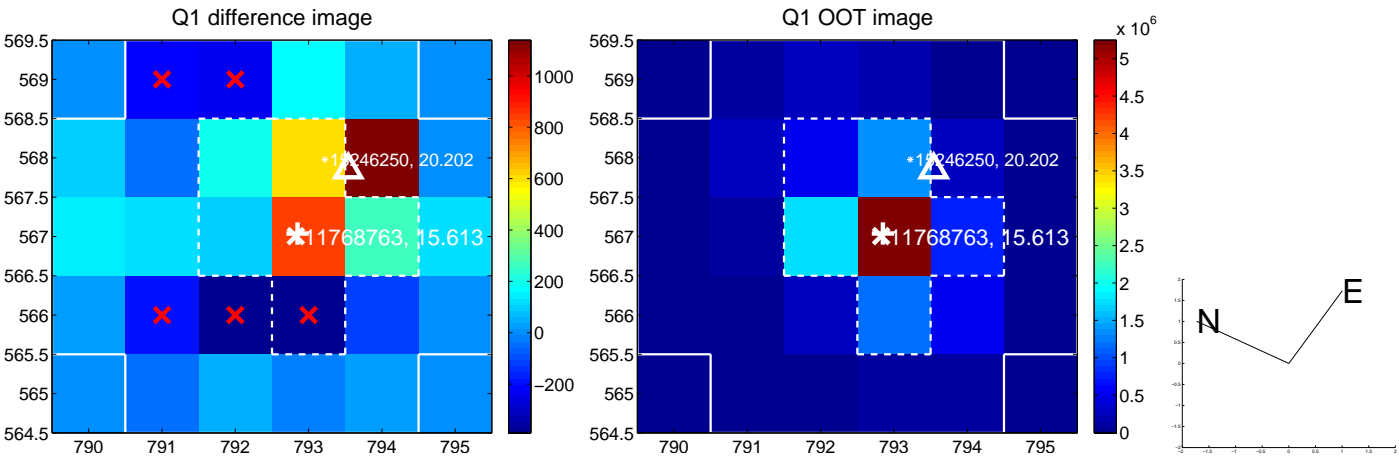
The direct PRF centroid is offset from the target star catalog position by about 0.15 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	4.169 \pm 0.219	19.05	3.798 \pm 0.217	-1.721 \pm 0.183
PRF-fit source offset from KIC position	4.275 \pm 0.223	19.14	3.940 \pm 0.221	-1.659 \pm 0.168
photometric centroid source offset	24.35 \pm 6.15	3.96	20.89 \pm 6.10	-12.51 \pm 6.30

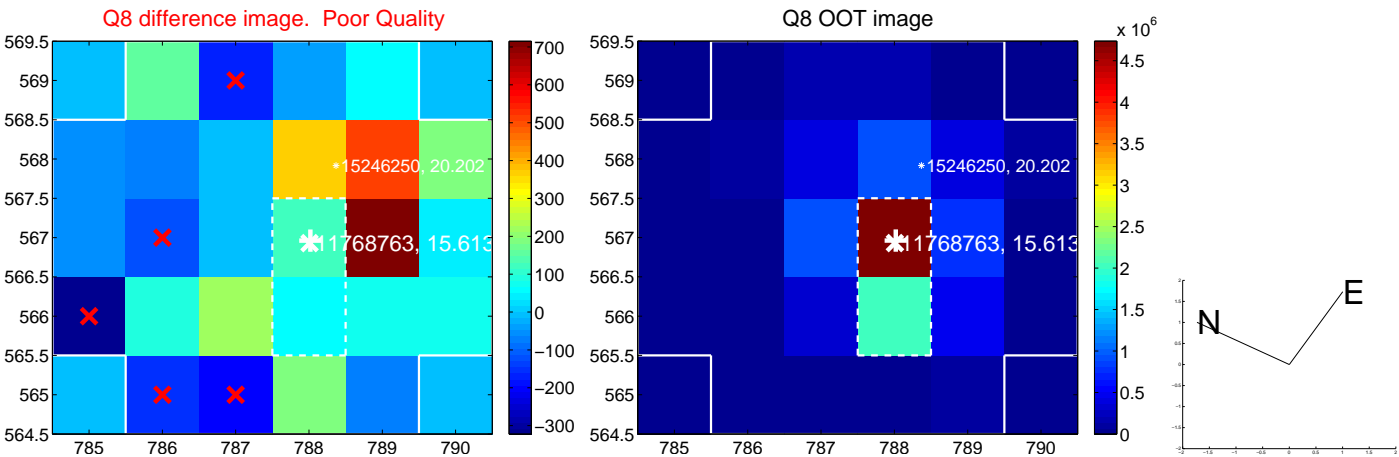
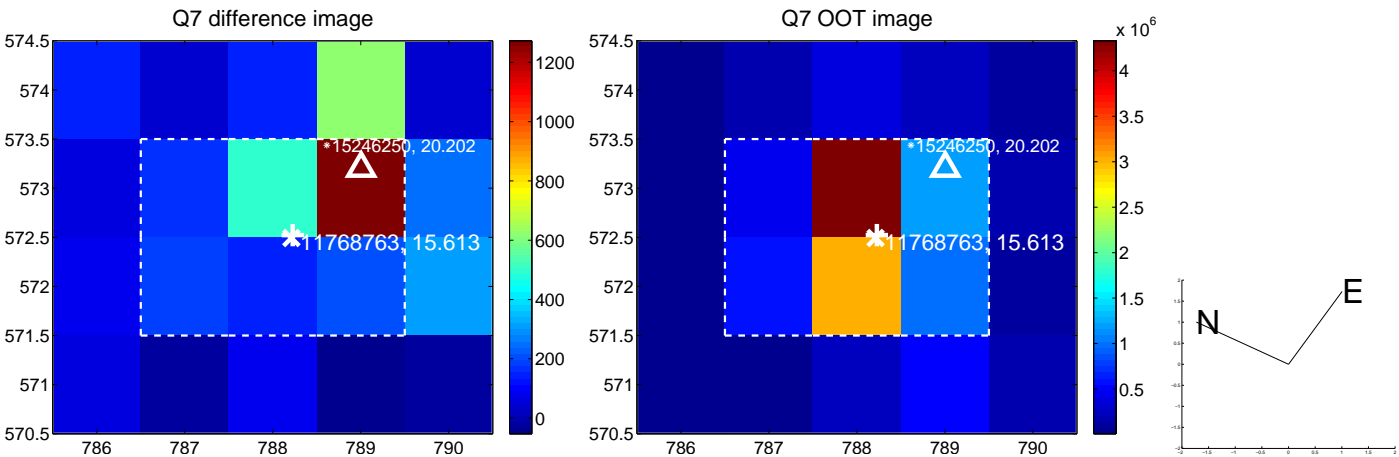
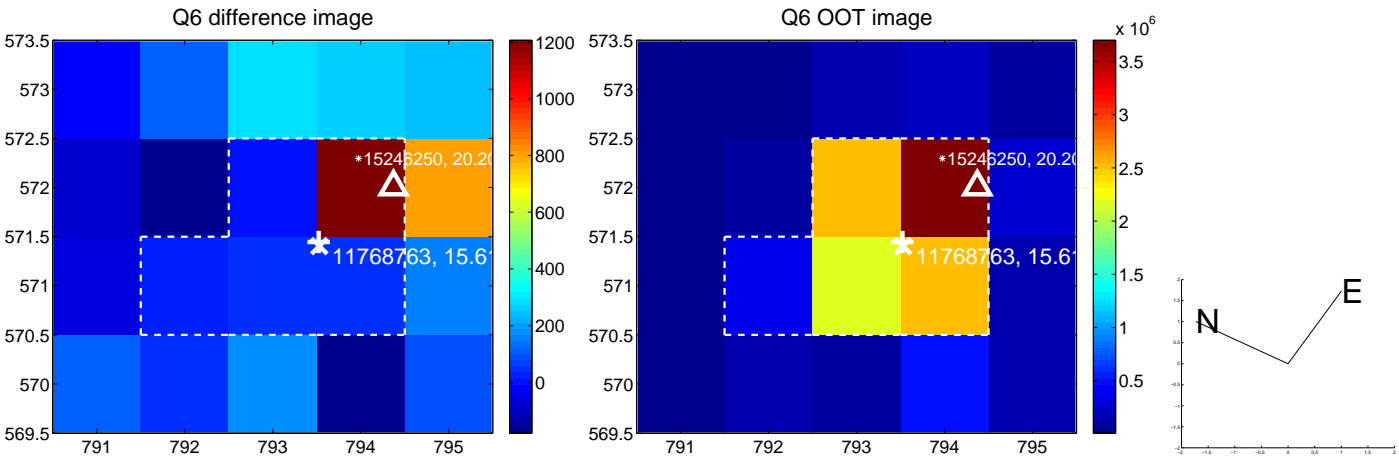
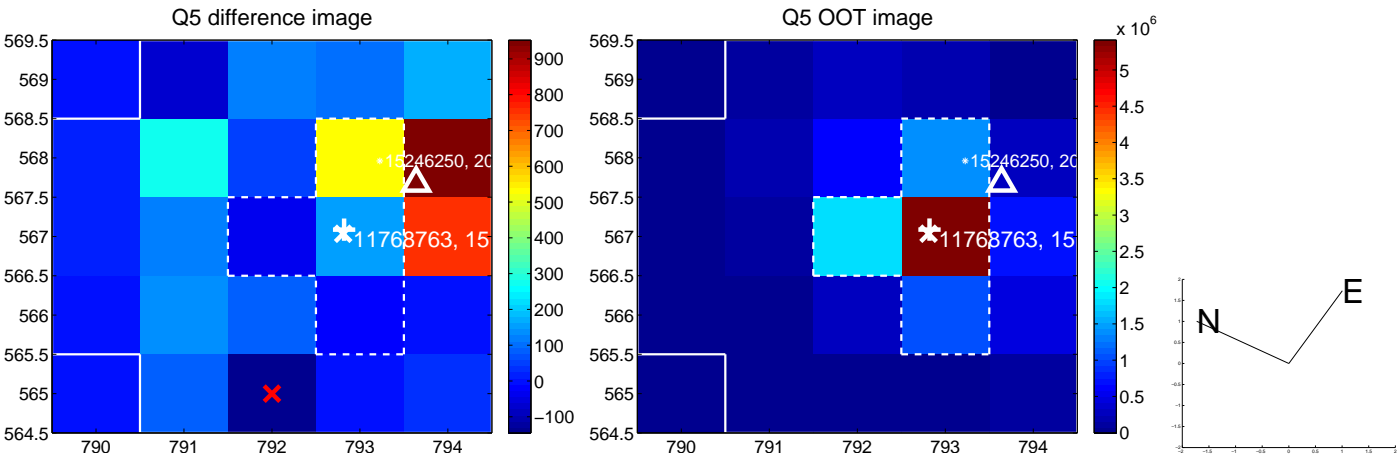


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

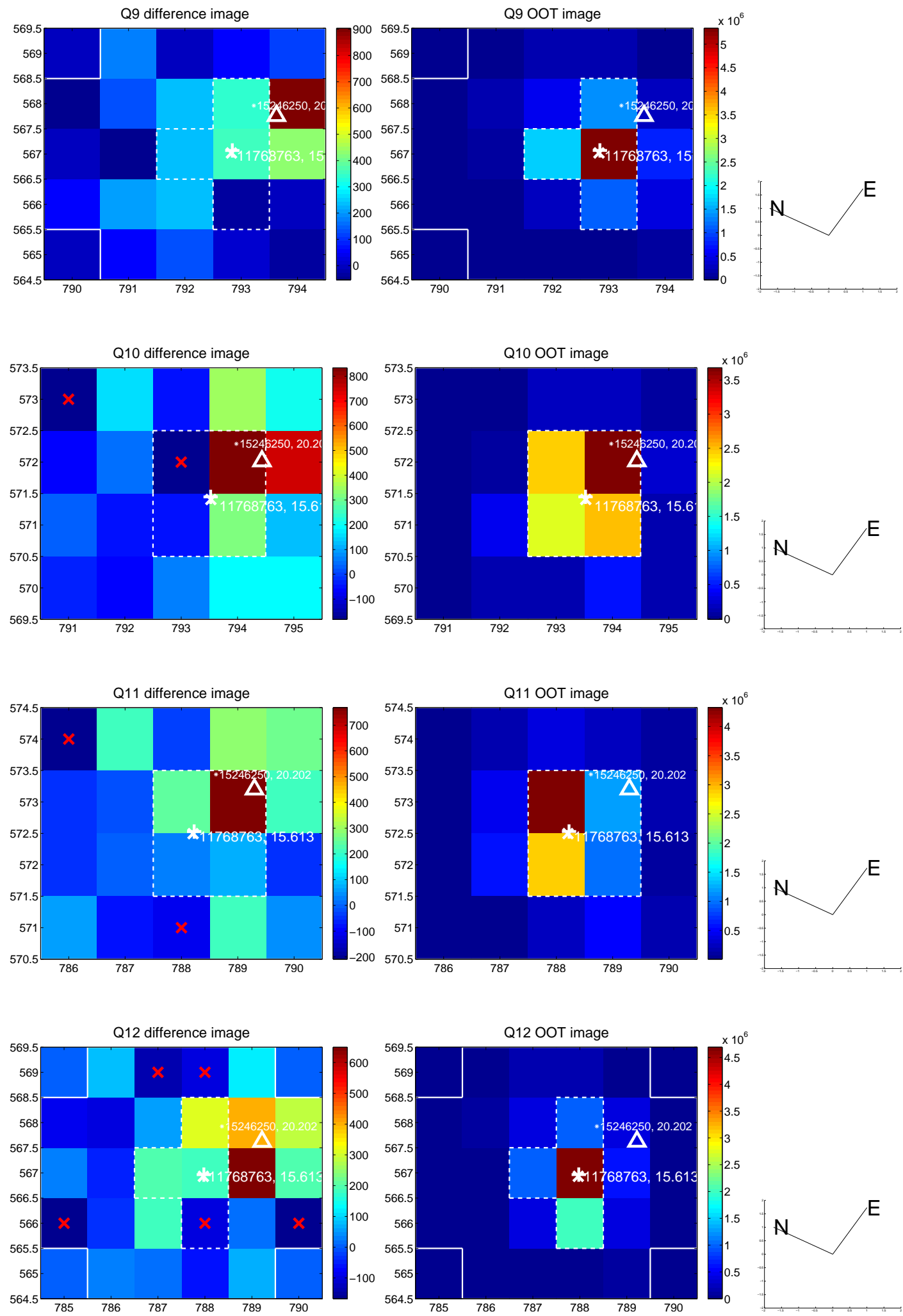
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



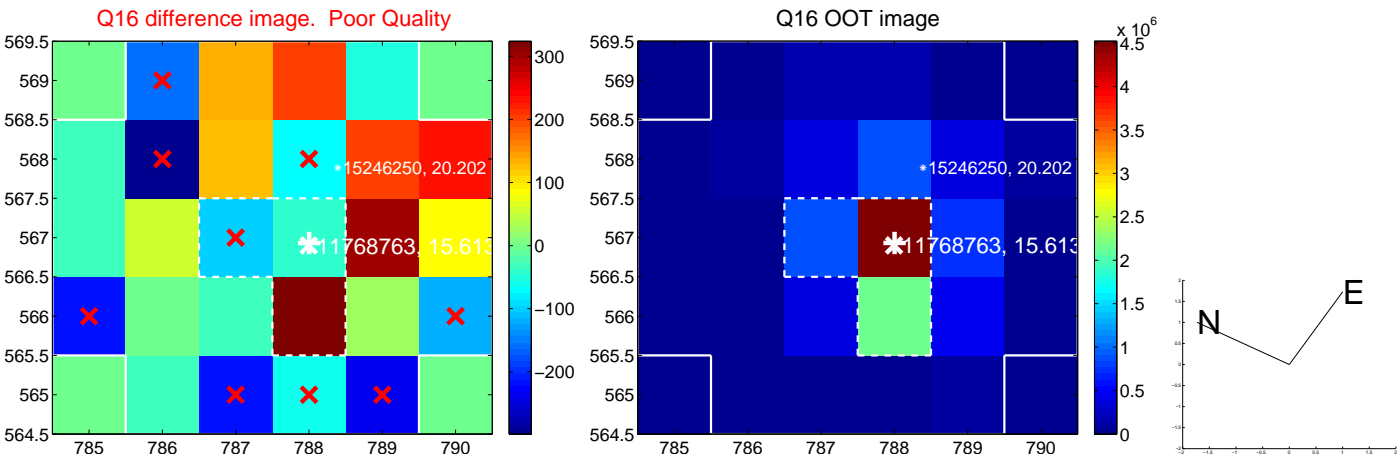
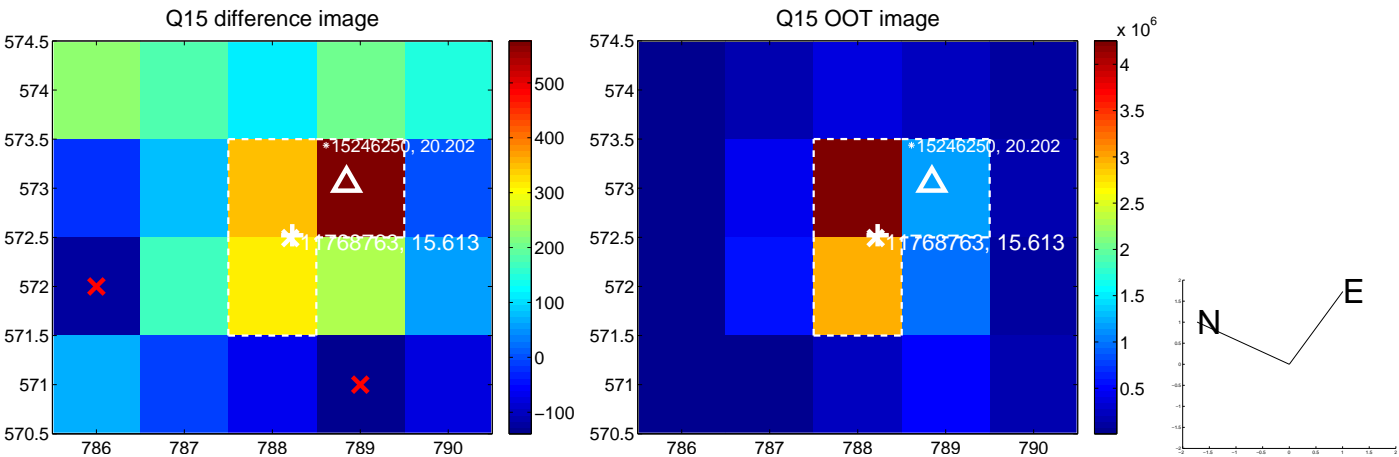
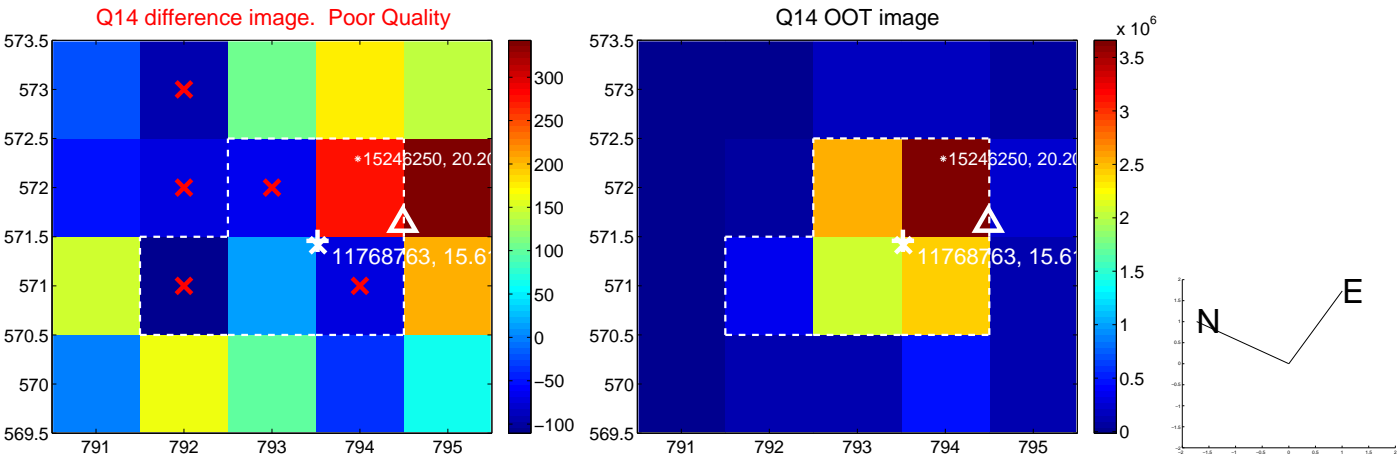
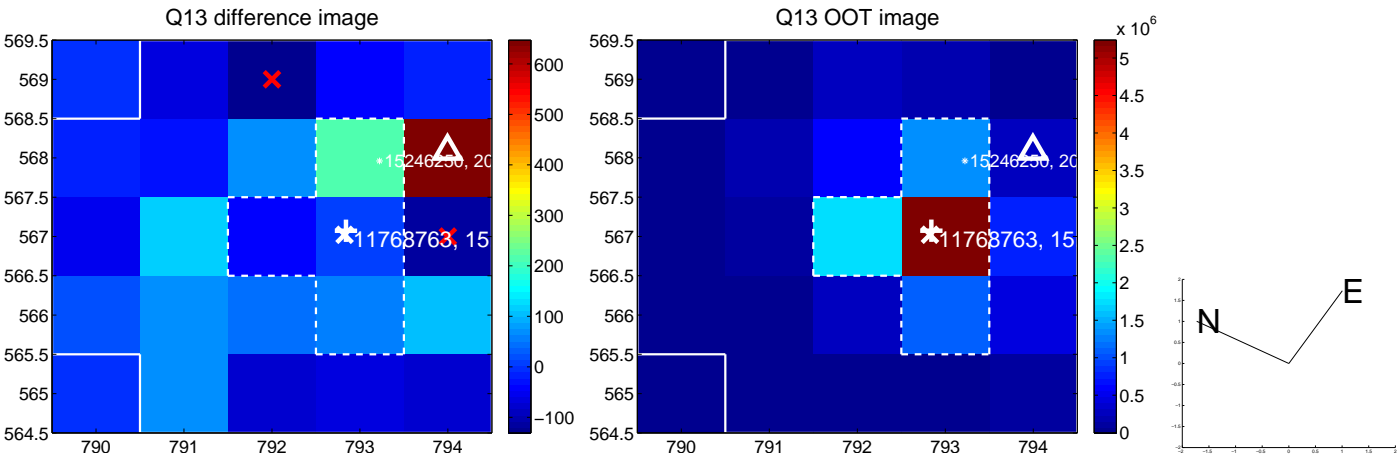
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



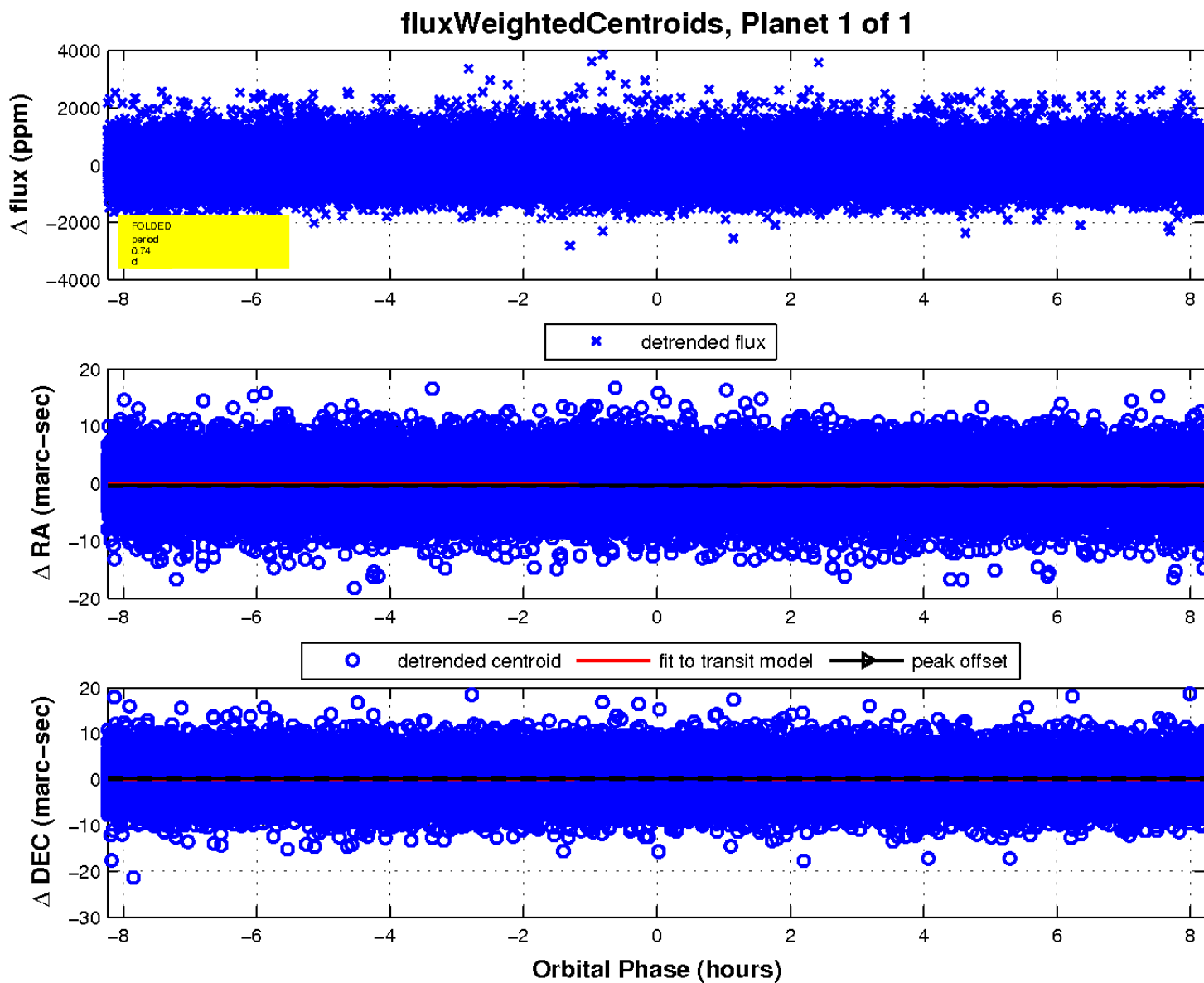
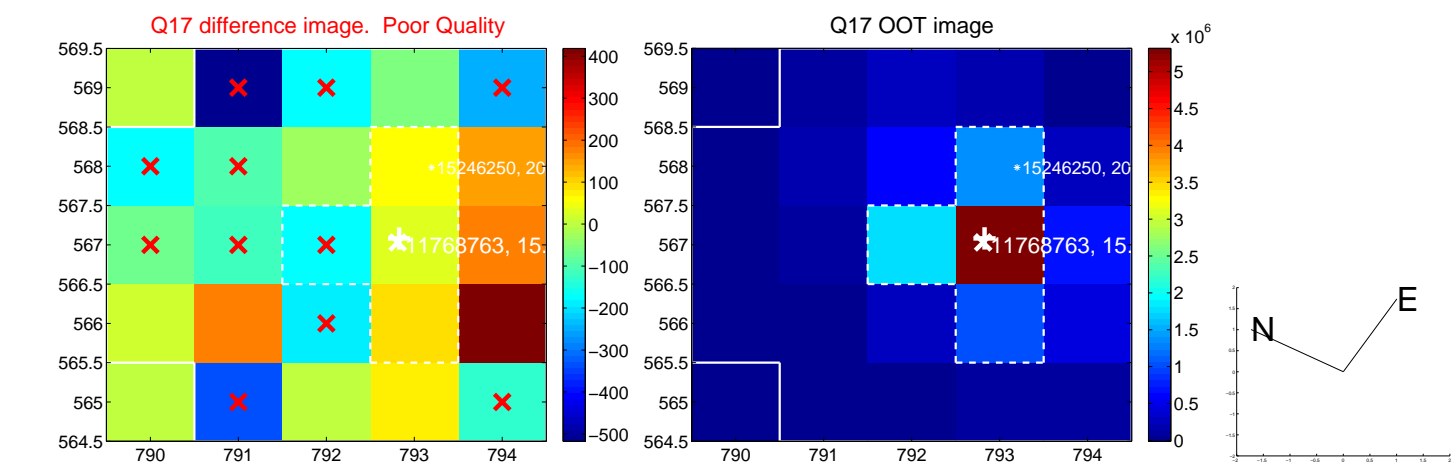
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white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination

