

KIC 011177741

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})
011177741-01	OBS	No	0.677368	131.998377	64.1	7.543	7.9	10.9	0.55	4503	0.48	707.33

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011177741-01	OBS	FP	0.00	1	0	0	0	LPP_DV—CENT_FEW_DIFFS

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

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

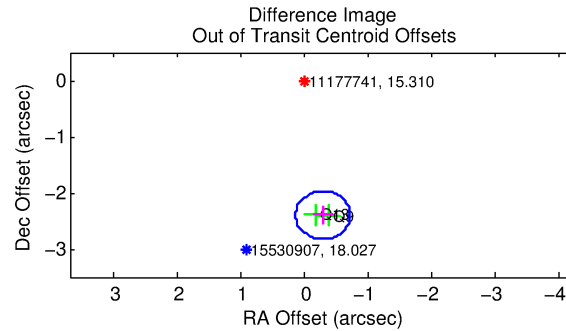
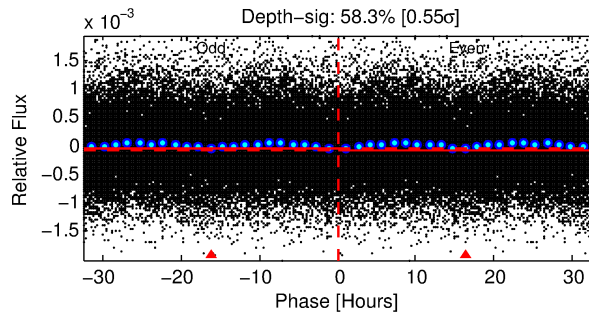
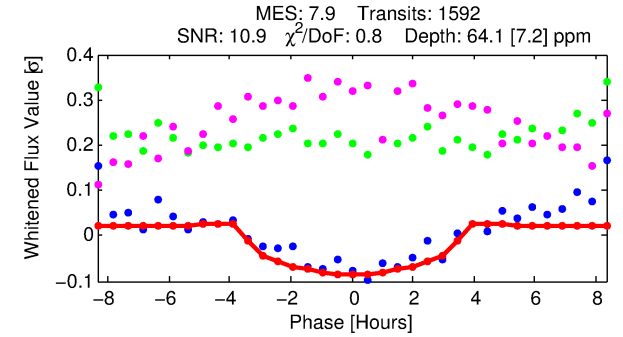
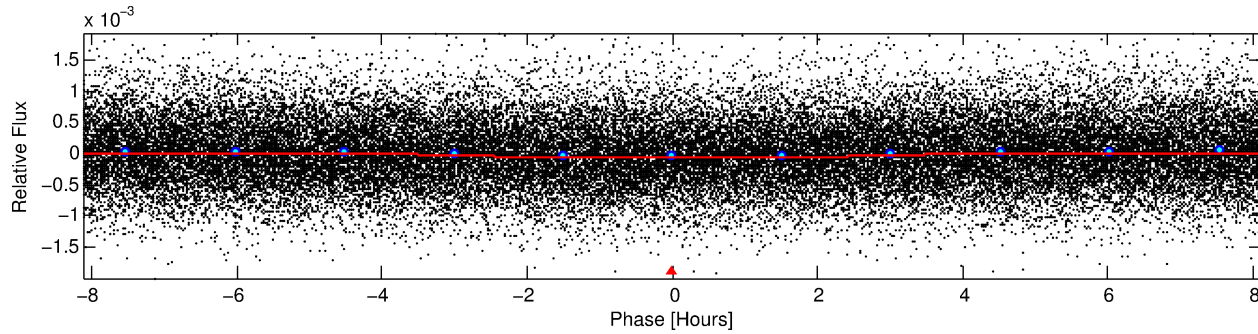
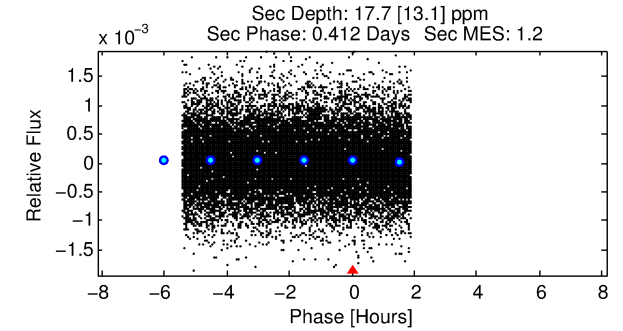
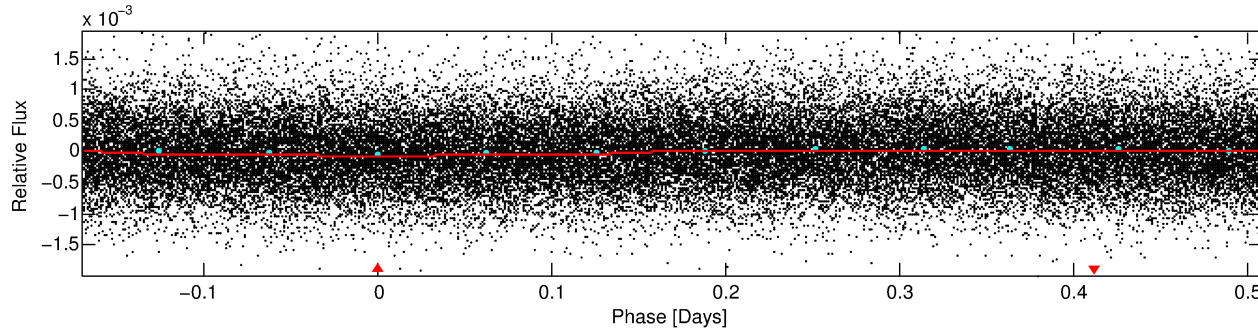
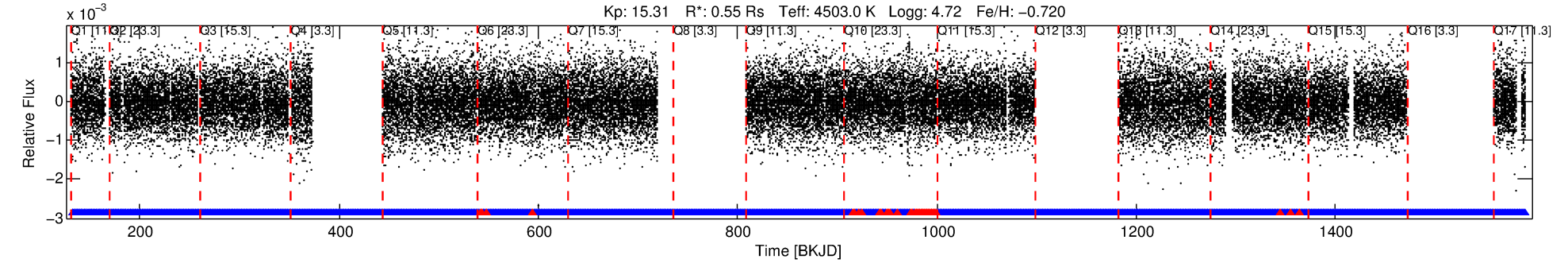
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011177741-01

No Significant Match Found

DV One-Page Summary

KIC: 11177741 Candidate: 1 of 1 Period: 0.677 d



DV Fit Results:

Period = 0.67737 [0.00001] d
Epoch = 131.9984 [0.0064] BKJD
Rp/R* = 0.0079 [0.0032]
a/R* = 1.01 [0.03]
b = 0.72 [0.97]
Seff = 707.33 [111.82]
Teq = 1315 [52] K
Rp = 0.48 [0.20] Re
a = 0.0126 [0.0010] AU
Ag = 6.85 [7.51] [0.78σ]
Teffp = 3289 [903] K [2.18σ]

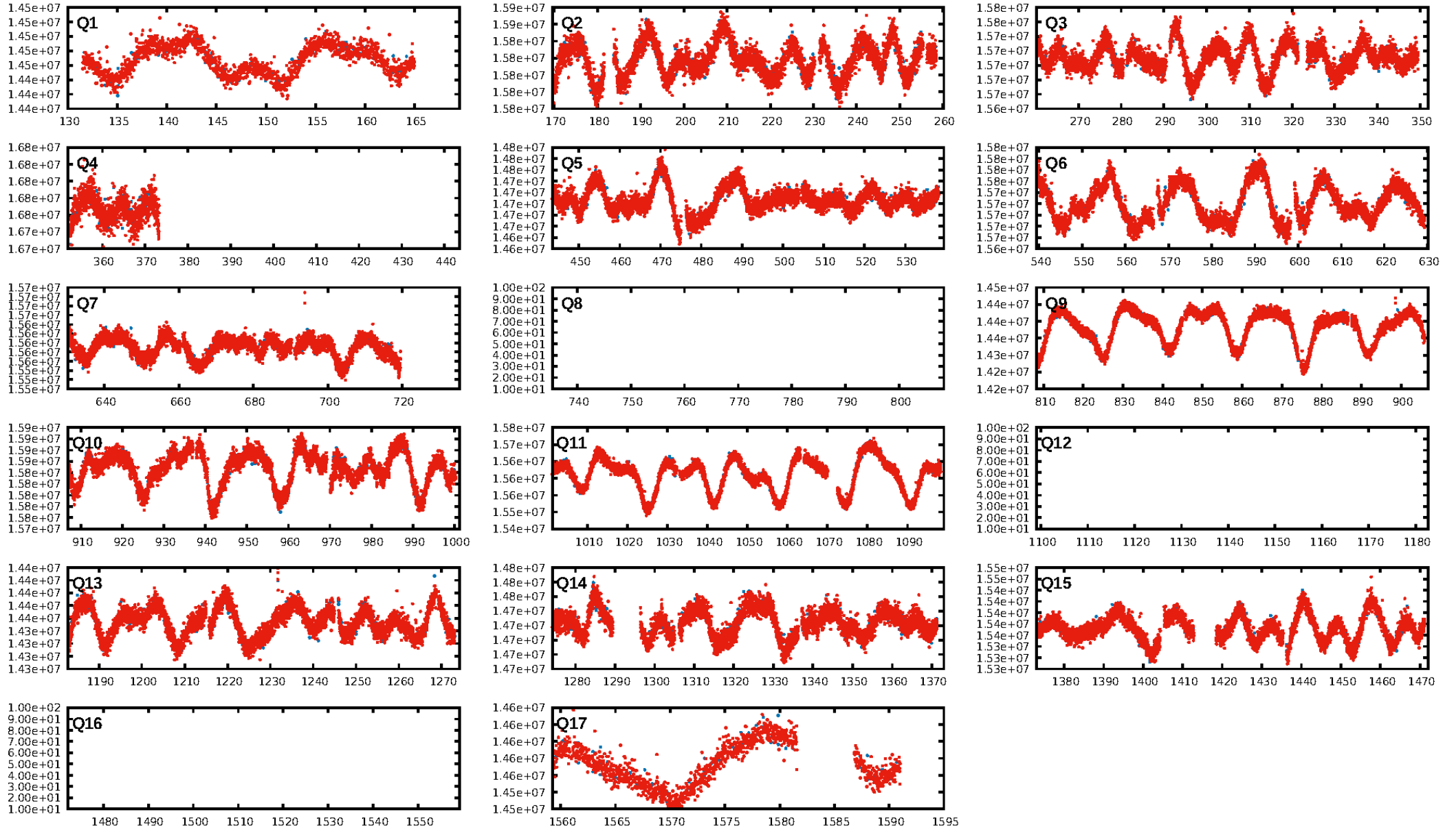
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 0.97 [1429/1471]
GhostDiagnostic-chr: 3.209
Centroid-sig: 11.0%
Centroid-so: 0.967 arcsec [1.13σ]
OotOffset-rm: 2.416 arcsec [16.92σ]
KicOffset-rm: 2.539 arcsec [17.79σ]
OotOffset-st: 0/0/0/2 [2]
KicOffset-st: 0/0/0/2 [2]
DiffImageQuality-fgm: 1.00 [2/2]
DiffImageOverlap-fno: 1.00 [14/14]

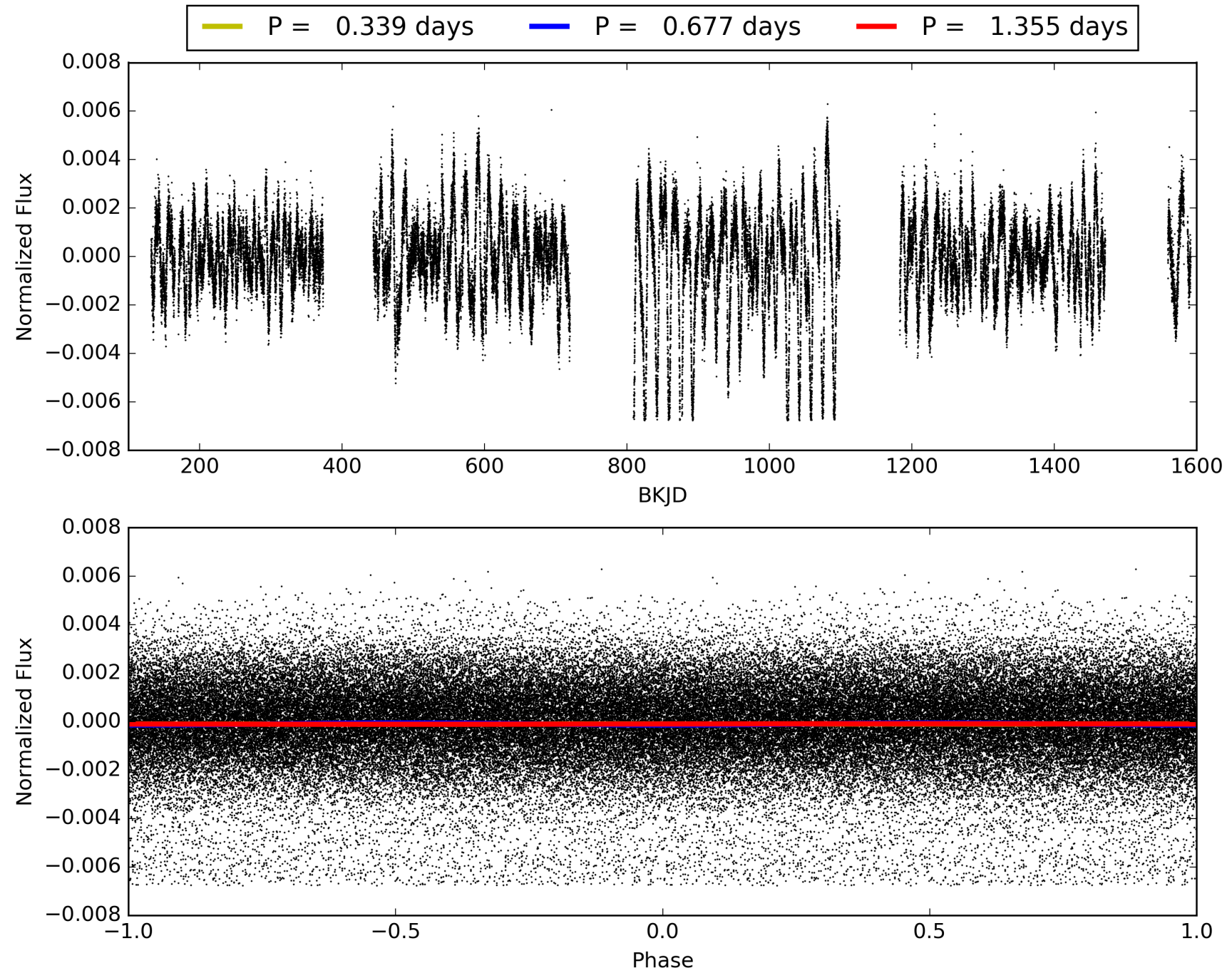
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 02:23:52 Z

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

TCE 011177741-01, PDC Light Curves

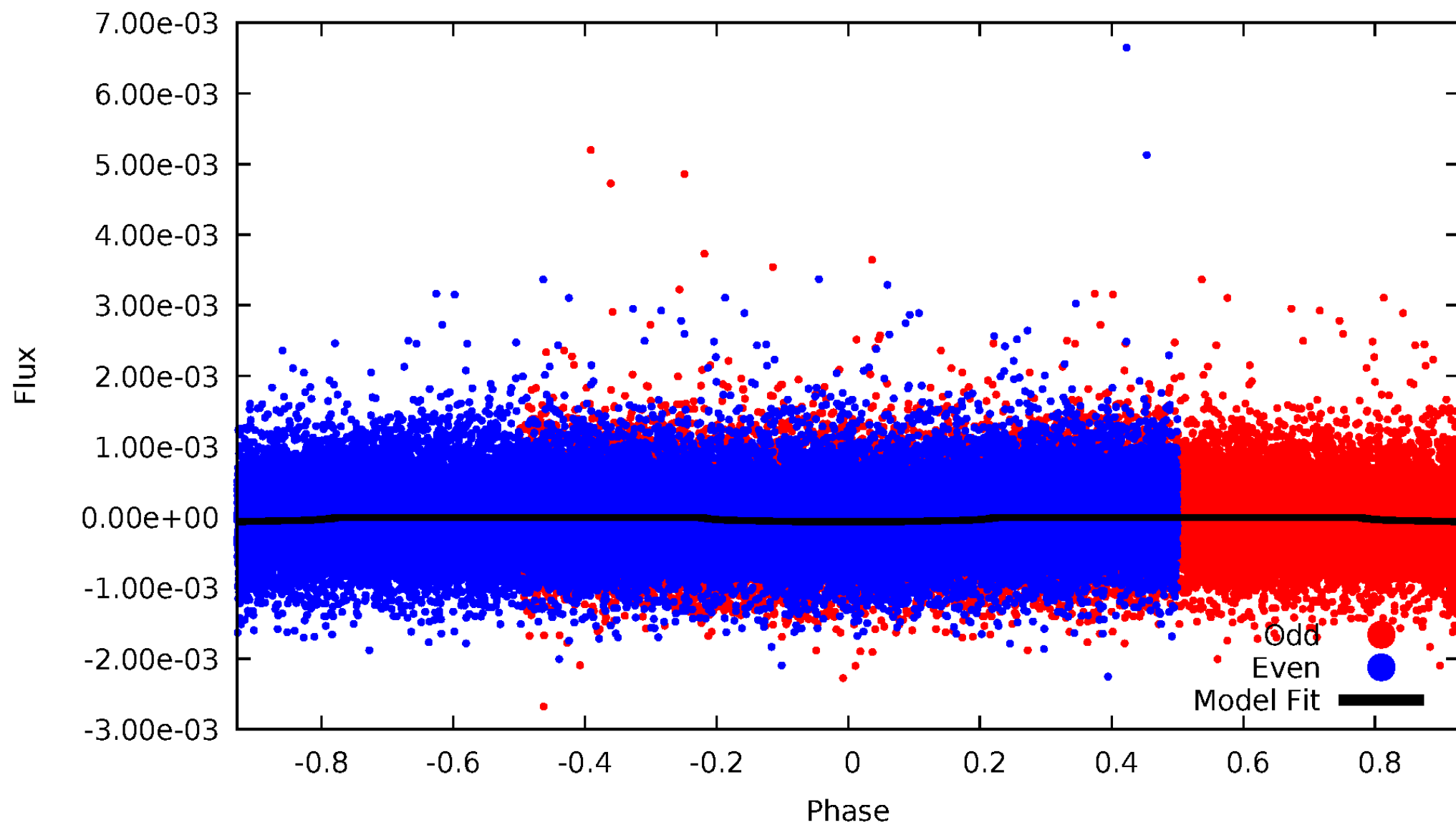


TCE 011177741-01



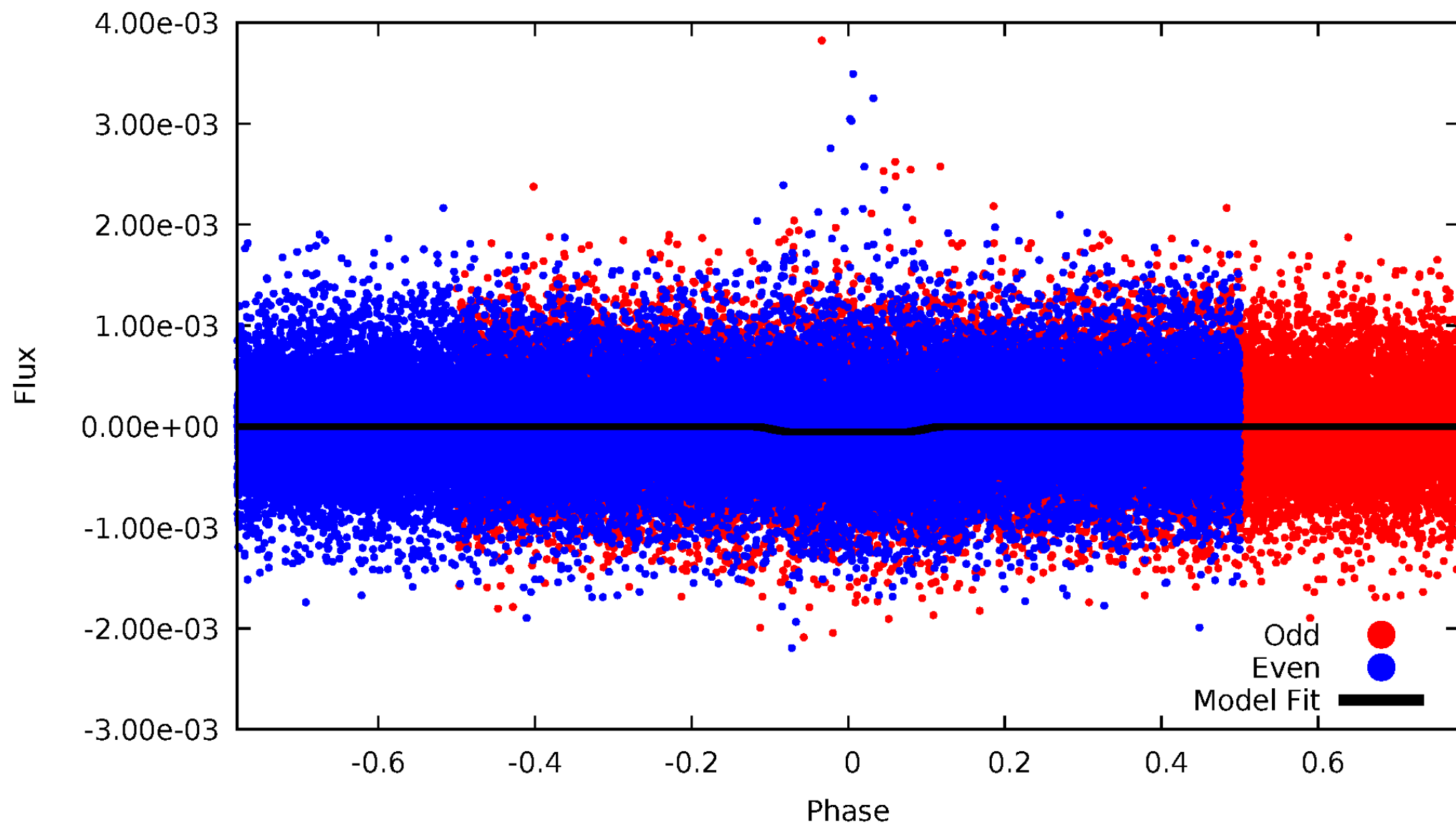
DV Odd/Even

TCE 011177741-01



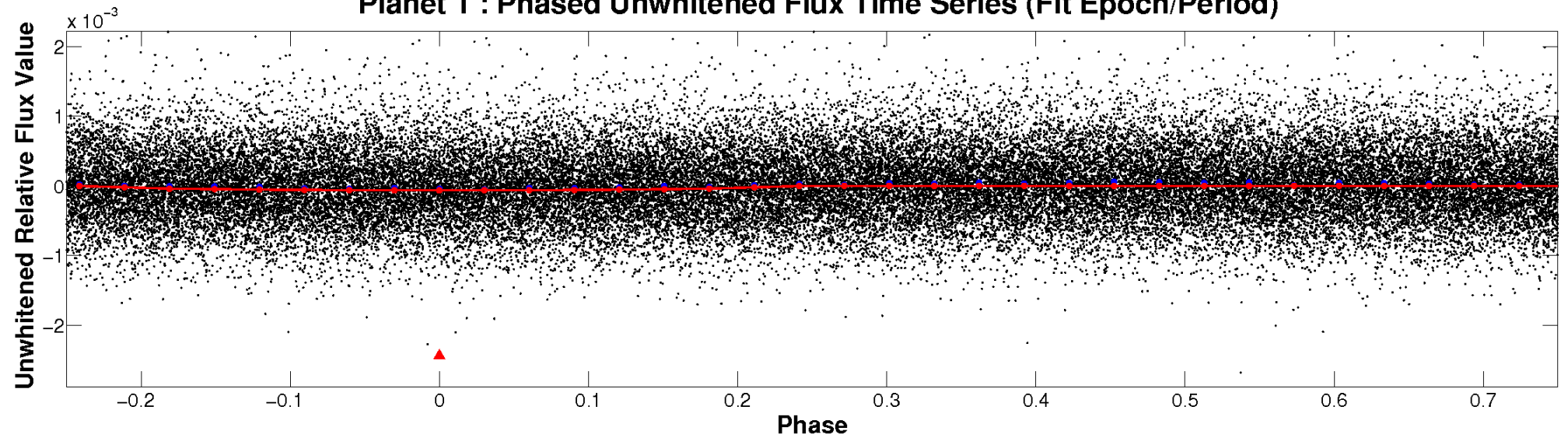
ALT Odd/Even

TCE 011177741-01

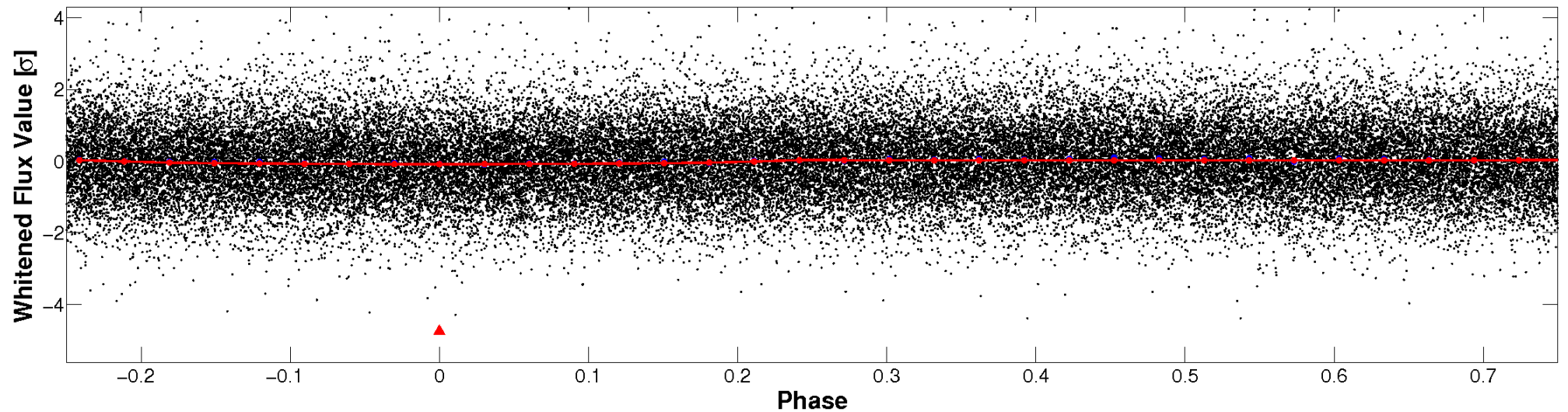


Non-Whitened Vs. Whitened Light Curve

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

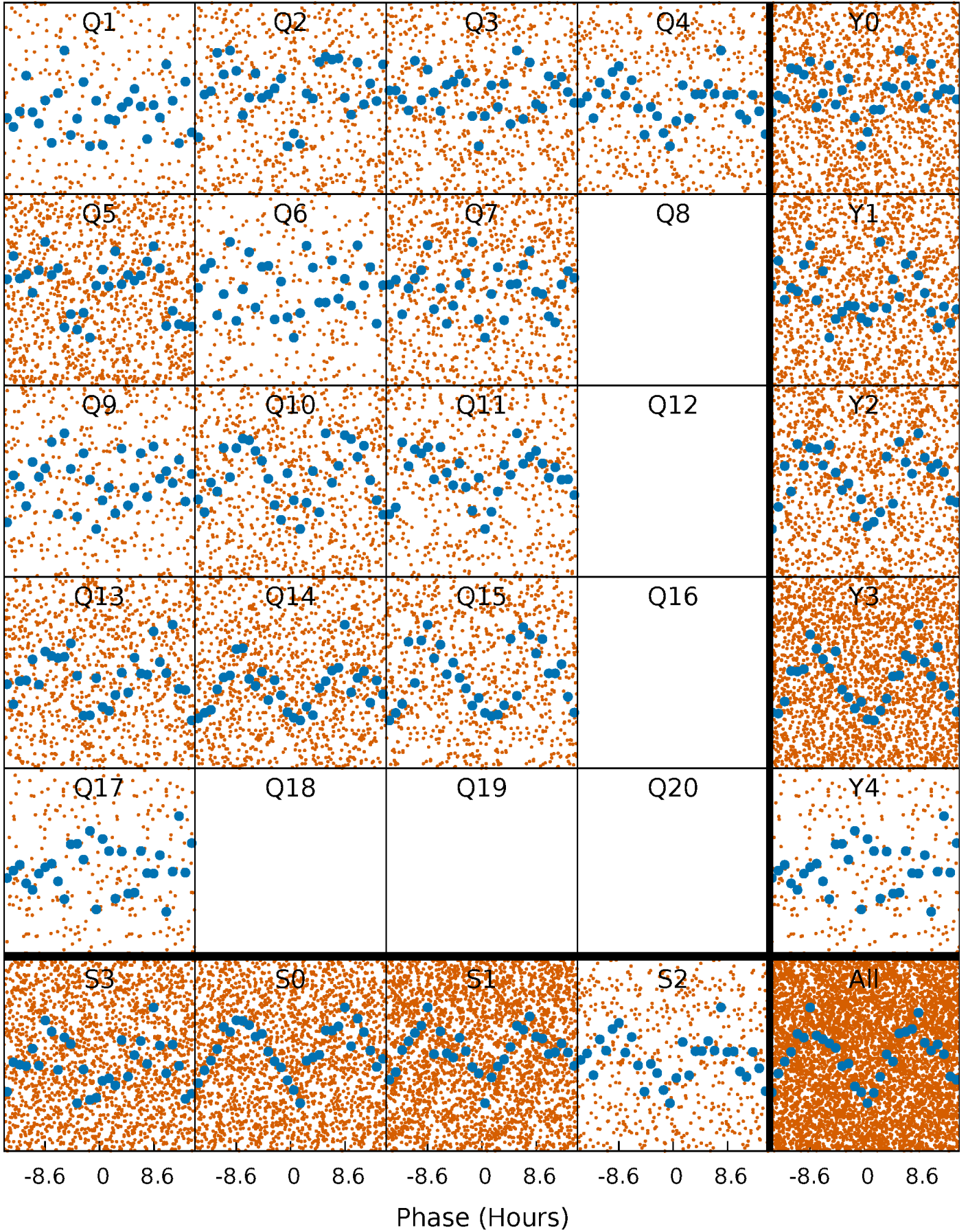


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



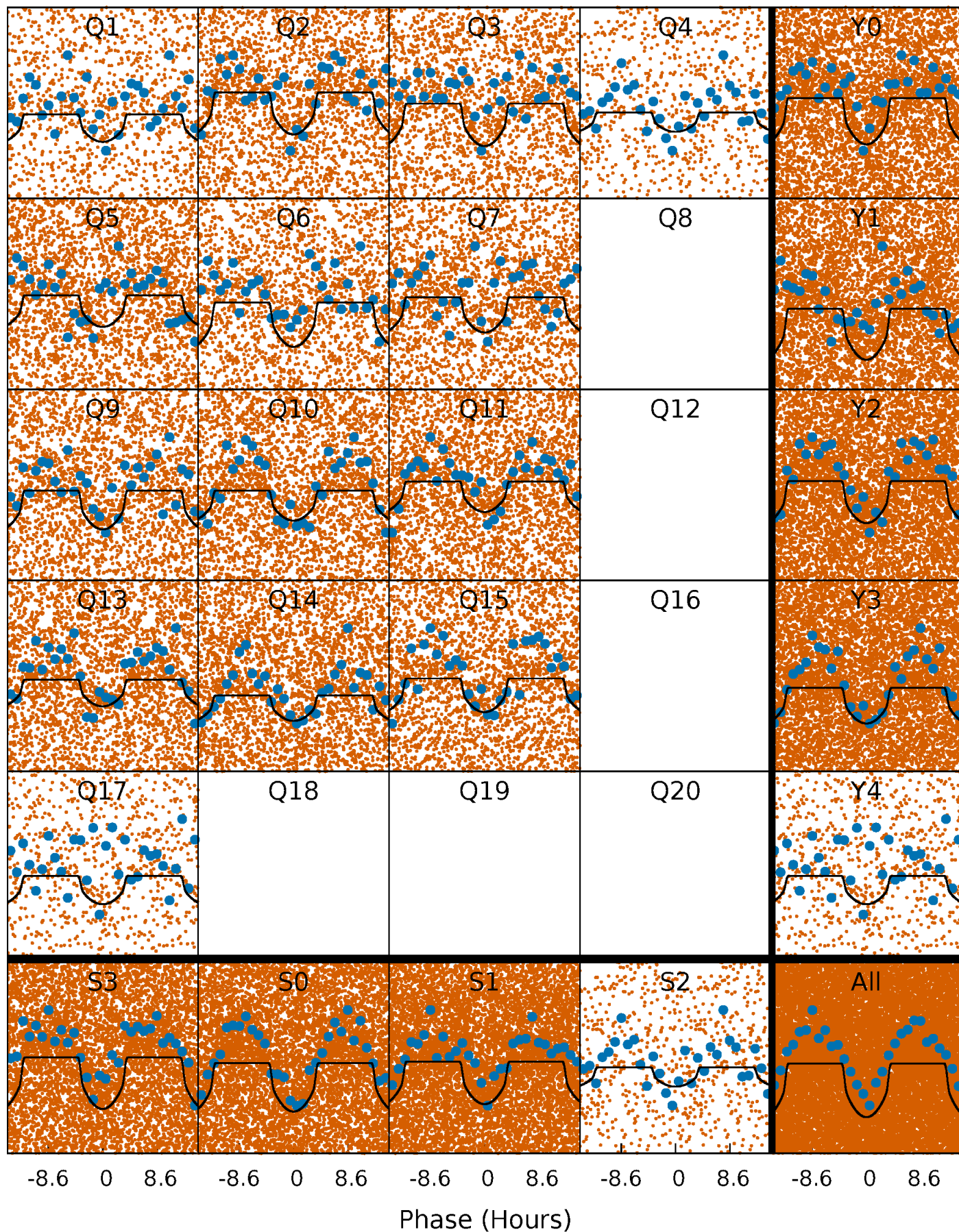
PDC Quarter-Phased Transit Curves

TCE 011177741-01 P= 0.677368 Days $T_0=131.998377$ (BKJD)



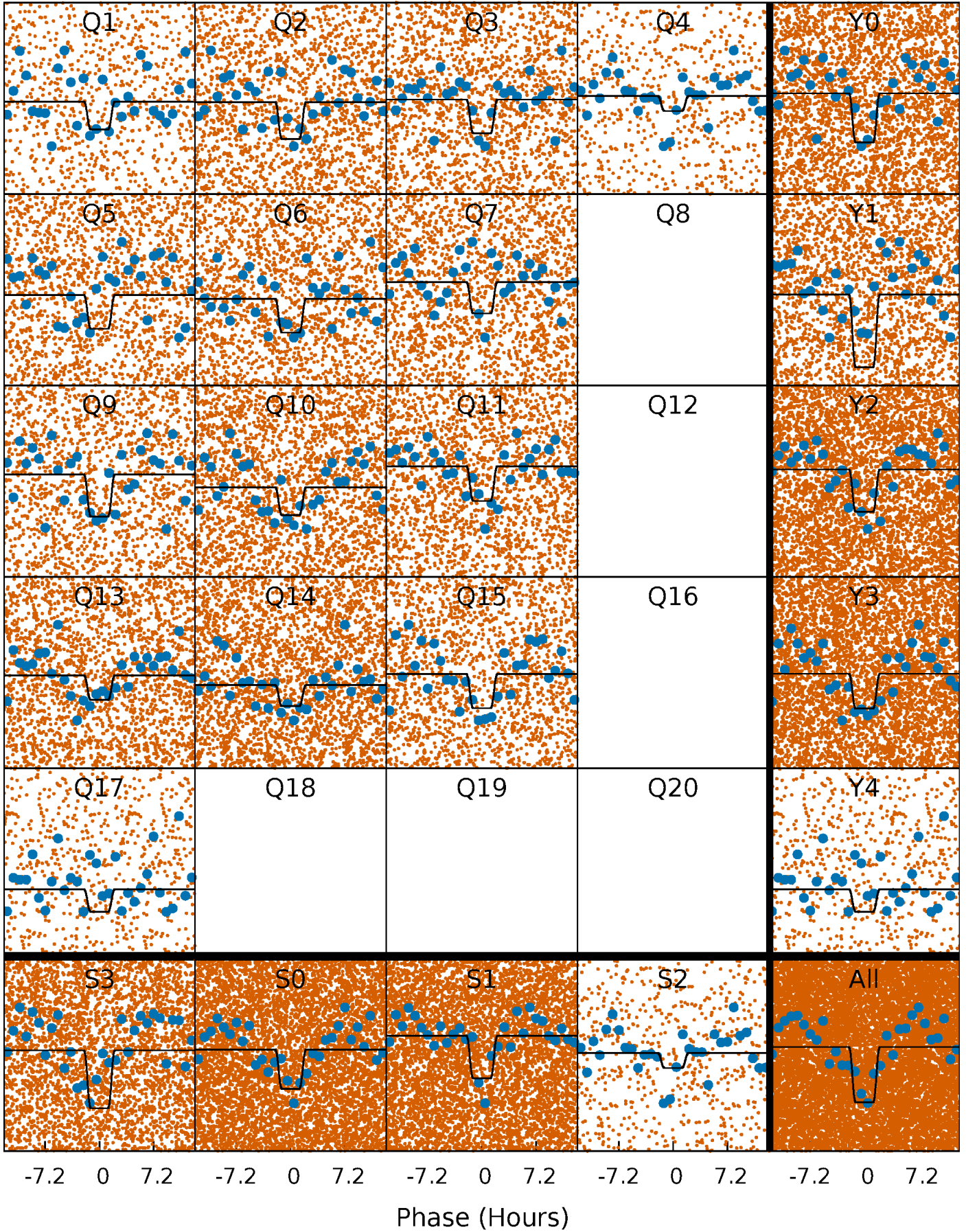
DV Quarter-Phased Transit Curves

TCE 011177741-01 P= 0.677368 Days $T_0=131.998377$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

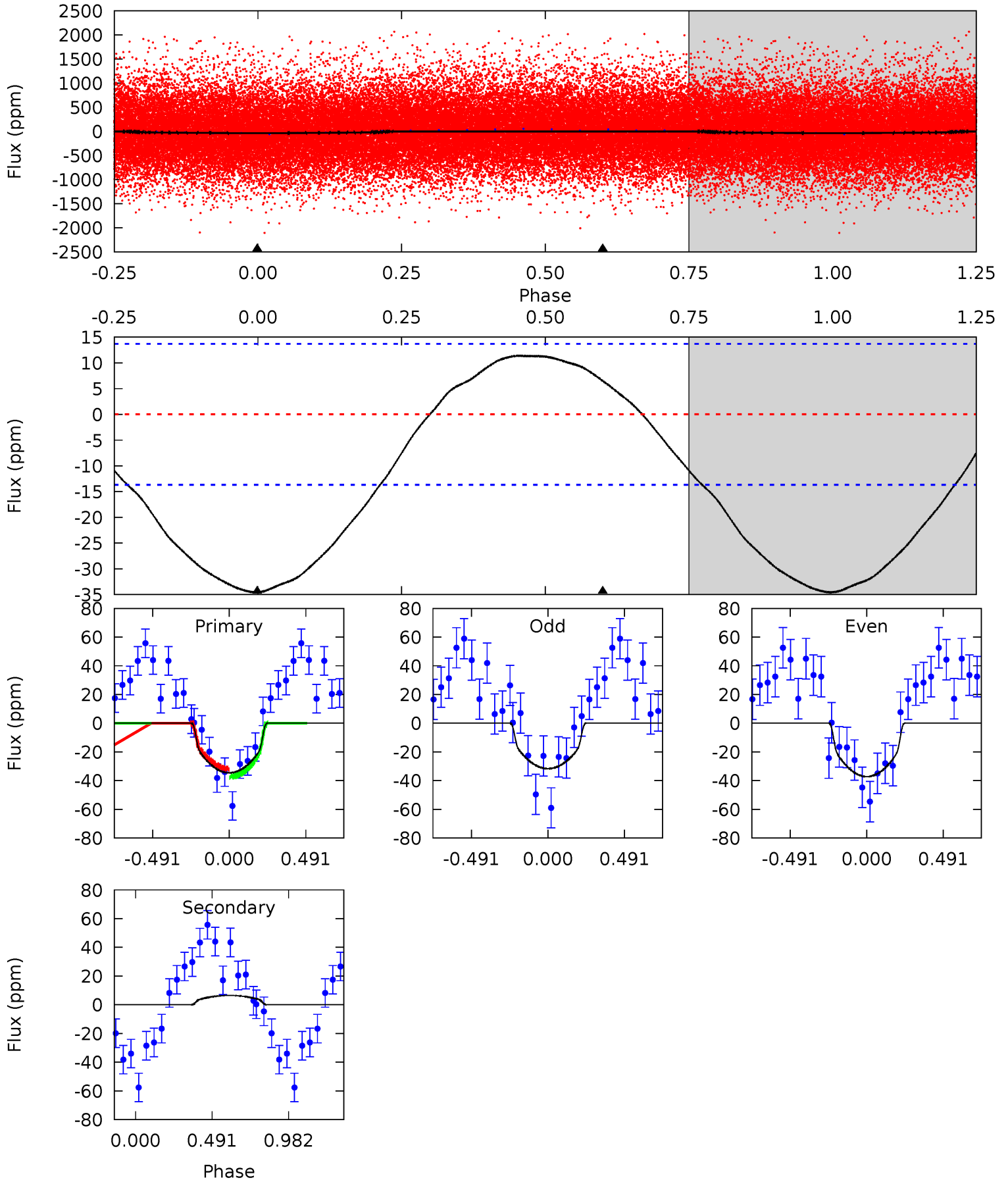
TCE 011177741-01 P= 0.677419 Days $T_0=131.961639$ (BKJD)



DV Model-Shift Uniqueness Test

011177741-01, P = 0.677368 Days, E = 131.321009 Days

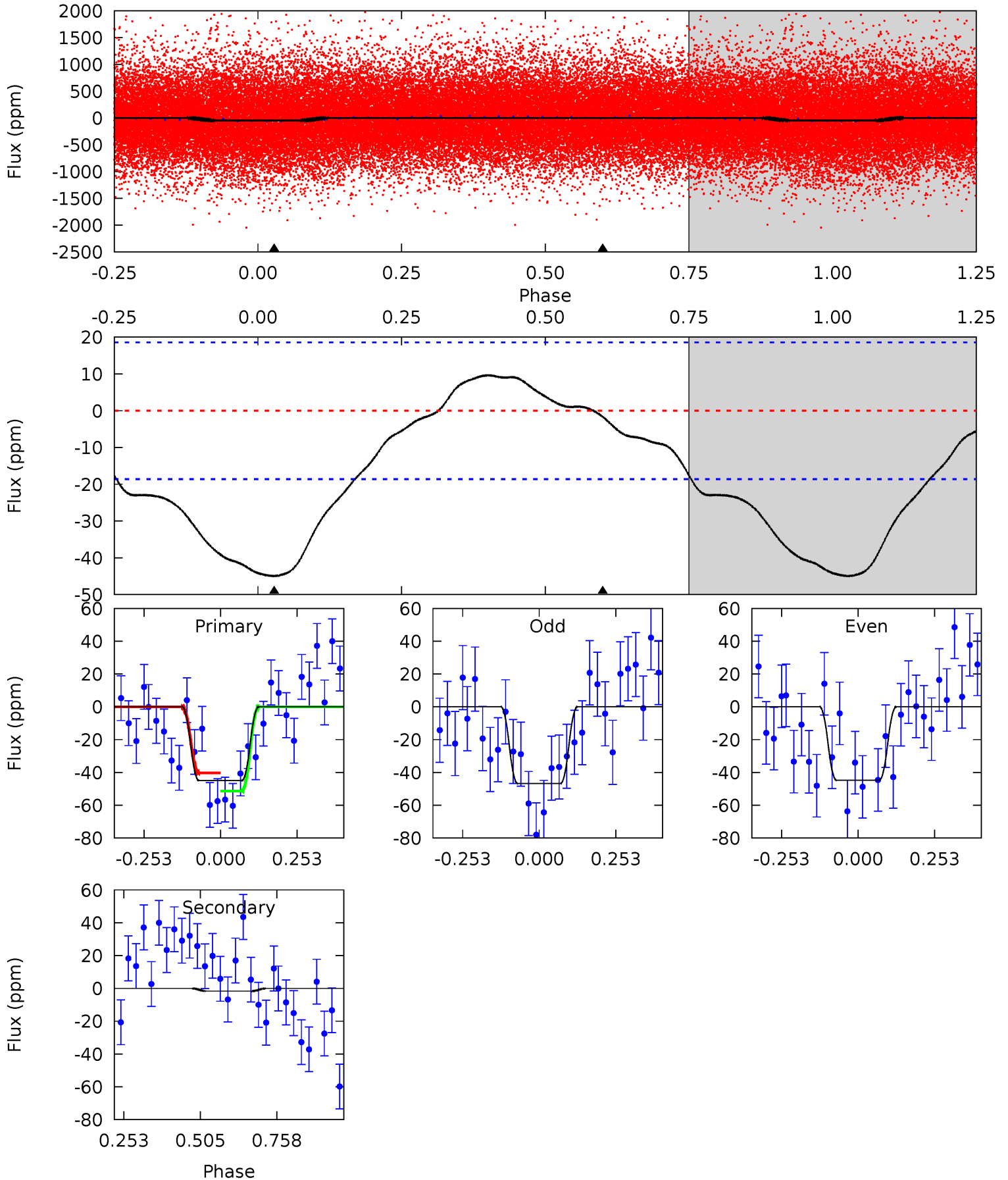
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.7	-2.00	0	0	4.22	0.69	1.21	10.7	10.7	-2.00	-2.00	0.86	0.90	0.25	0.88



Alt Model-Shift Uniqueness Test

011177741-01, $P = 0.677419$ Days, $E = 131.284220$ Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.6	0.40	0	0	4.37	1.14	0.91	10.6	10.6	0.40	0.40	0.24	0.99	0.18	1.31



Stellar Parameters For KIC 011177741

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	4503^{+135}_{-135}	$4.719^{+0.032}_{-0.052}$	$-0.720^{+0.300}_{-0.300}$	$0.553^{+0.054}_{-0.036}$	$0.583^{+0.048}_{-0.043}$	$4.855^{+0.715}_{-0.903}$
	+3%/-3%	+1%/-1%	+42%/-42%	+10%/-7%	+8%/-7%	+15%/-19%
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 011177741-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	6 ± 3	$0.48^{+0.19}_{-0.19}$	1841^{+68}_{-60}	-3138^{+345}_{-565}	$-2.447^{+1.508}_{-5.122}$
Alt.	-2 ± 4	$0.45^{+0.21}_{-0.19}$	1844^{+67}_{-59}	2301^{+906}_{-5124}	$0.553^{+2.858}_{-1.566}$

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

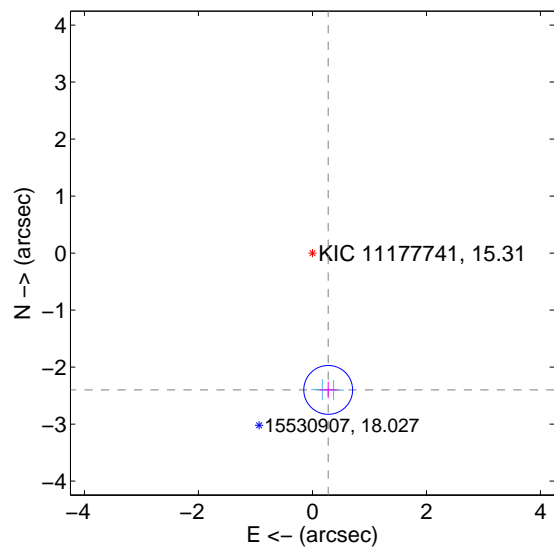
Supplemental centroid analysis for 011177741-01. Kepler magnitude: 15.31. Transit SNR 10.87

There are 2 quarters with good PRF difference image offsets

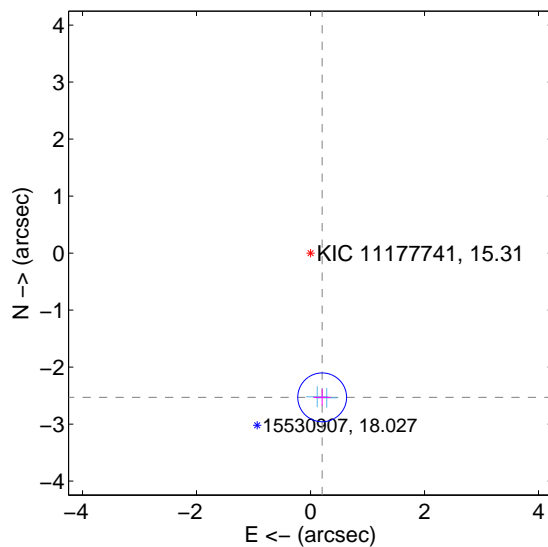
The direct PRF centroid is offset from the target star catalog position by about 0.14 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.416 ± 0.143	16.92	-0.276 ± 0.151	-2.400 ± 0.143
PRF-fit source offset from KIC position	2.539 ± 0.143	17.79	-0.204 ± 0.151	-2.530 ± 0.143
photometric centroid source offset	0.97 ± 0.86	1.13	-0.31 ± 0.87	-0.92 ± 0.86

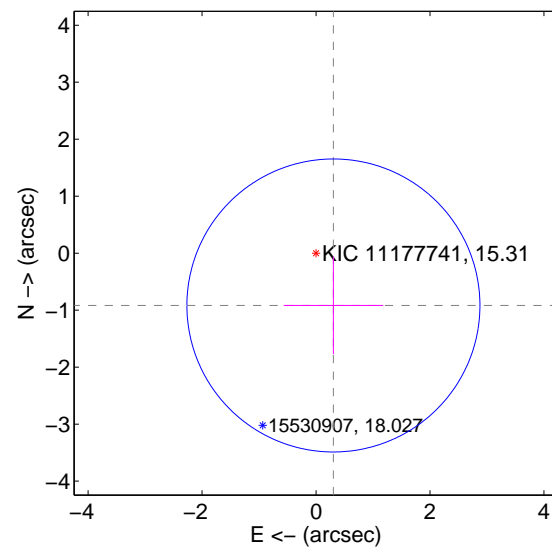
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

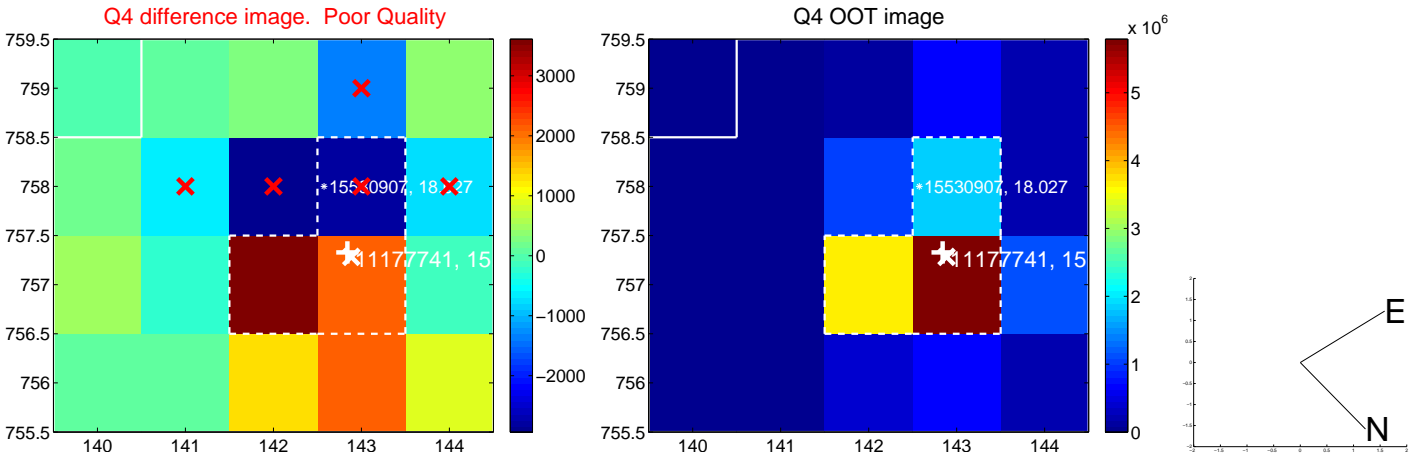
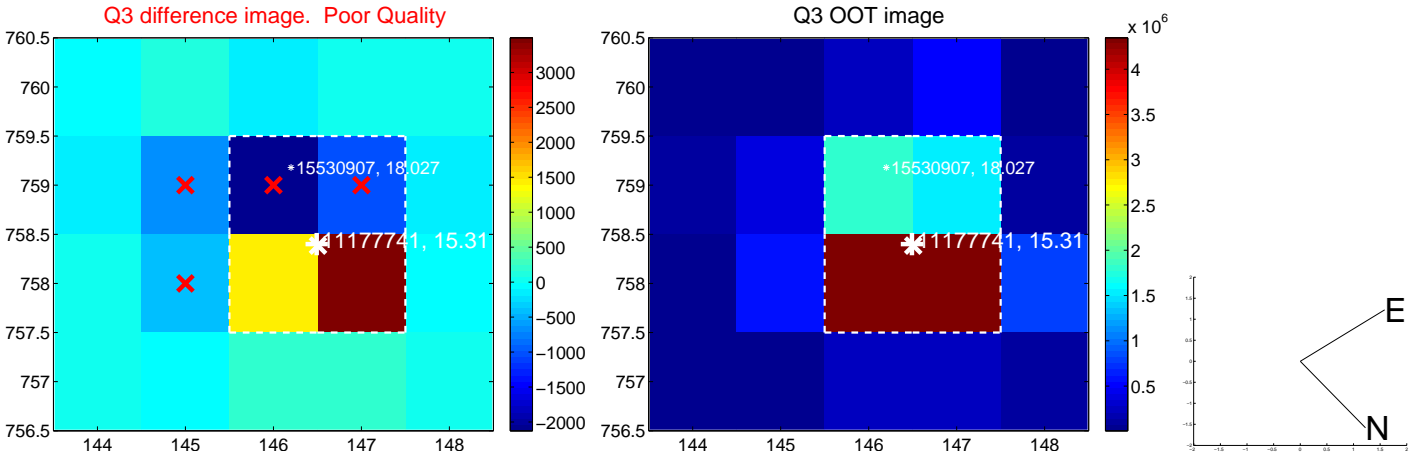
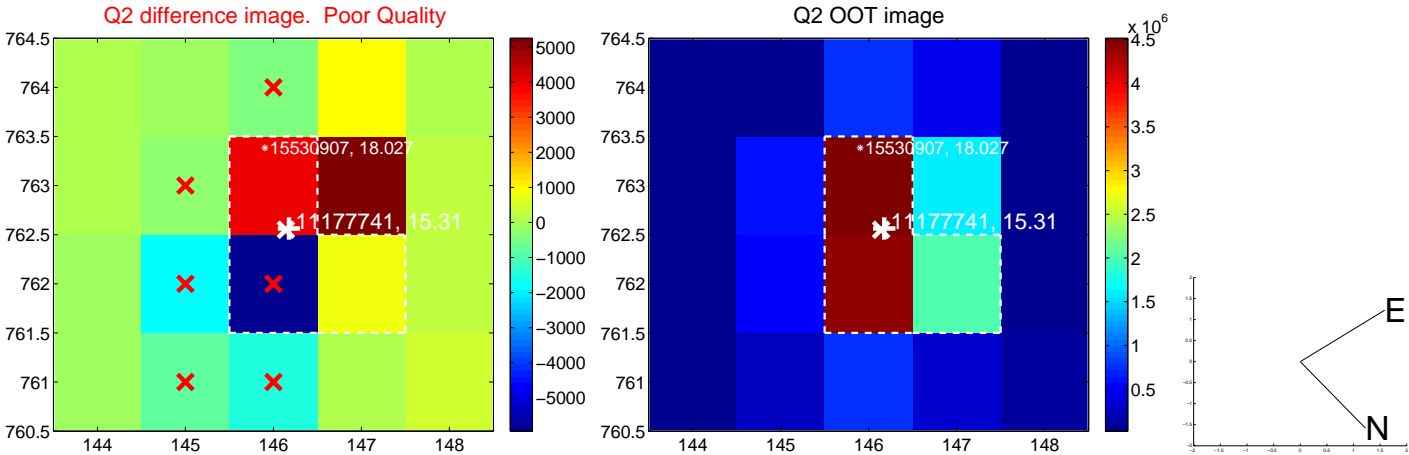
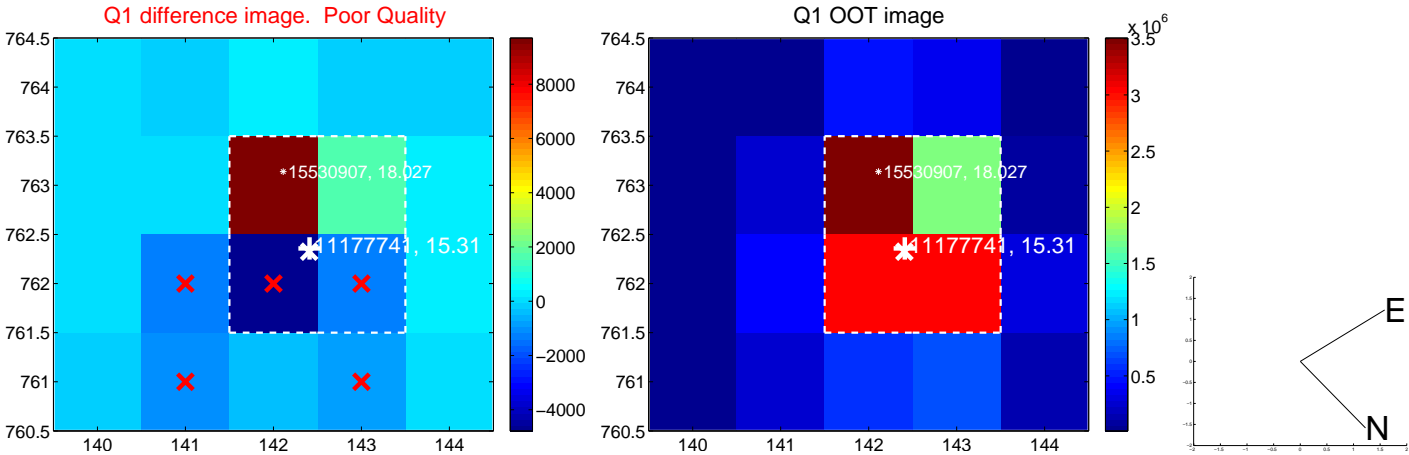


offset from photometric centroids

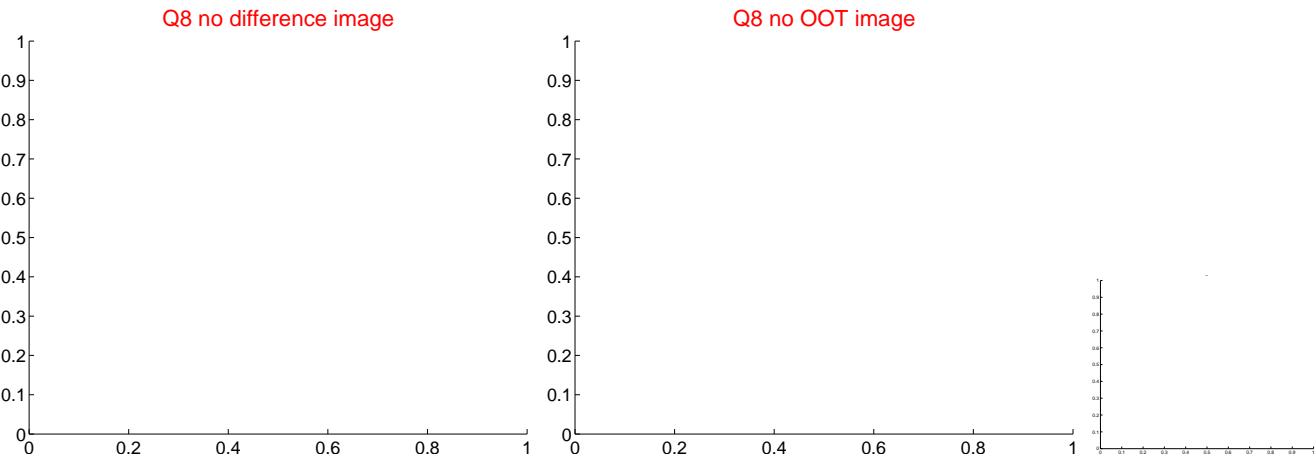
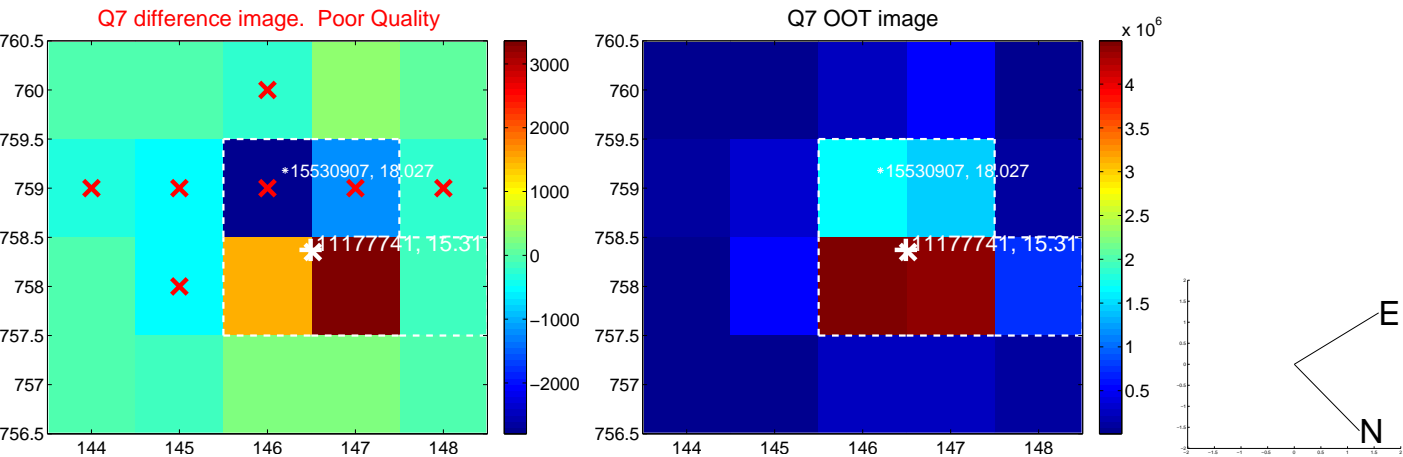
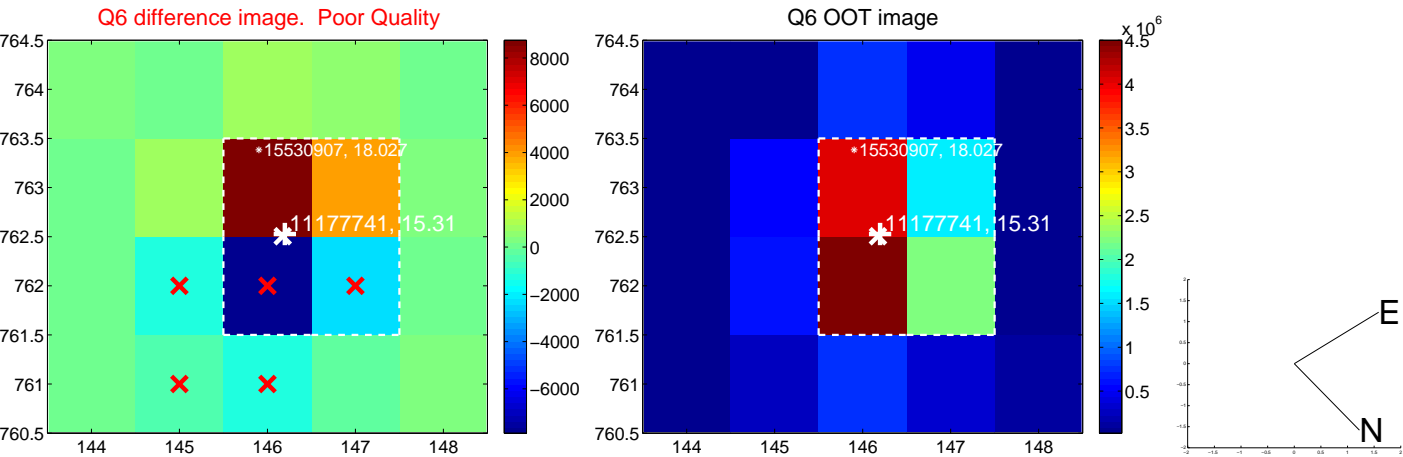
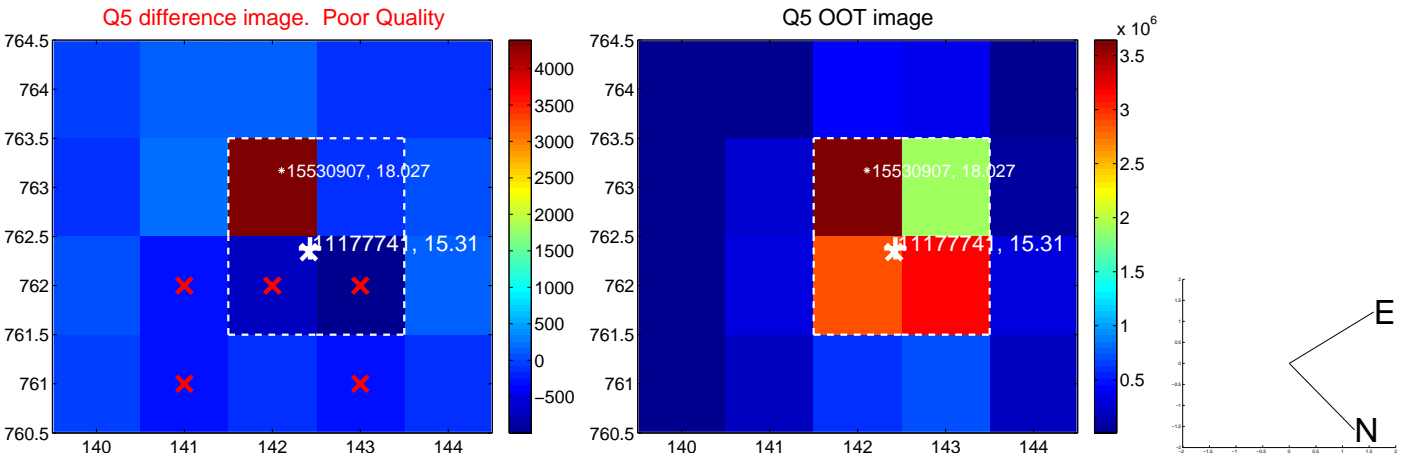


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

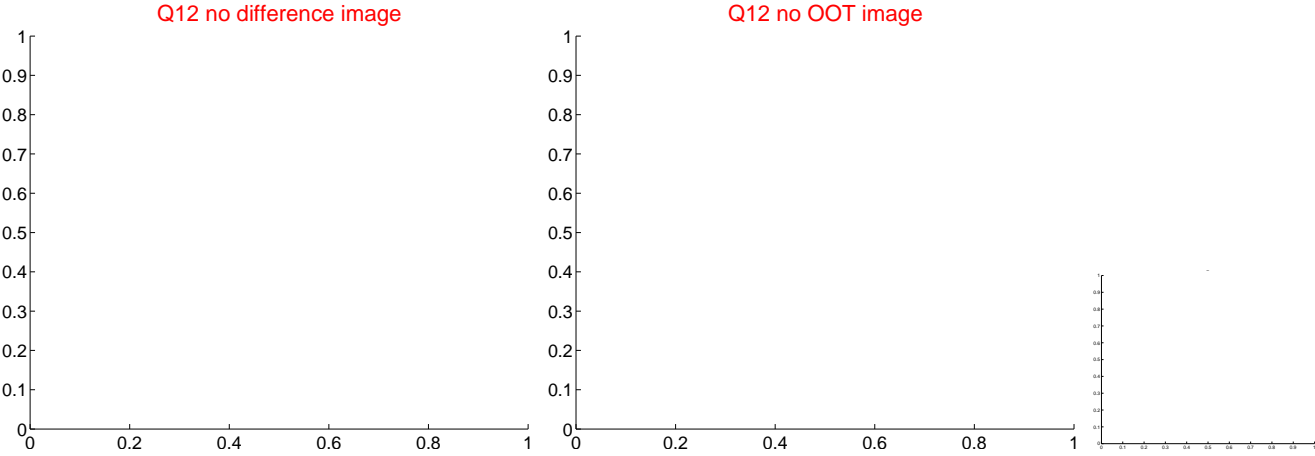
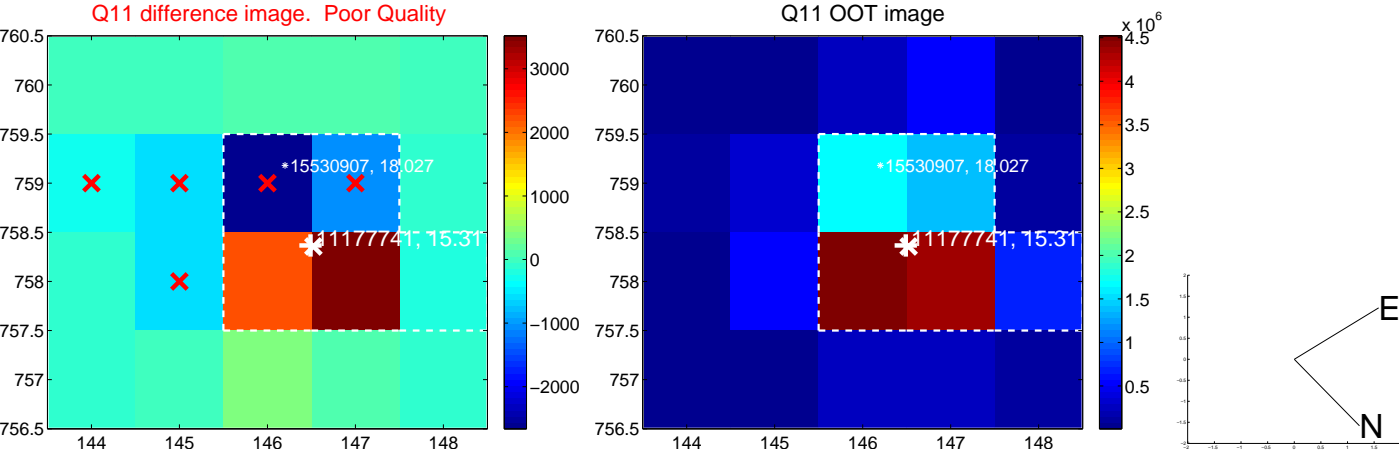
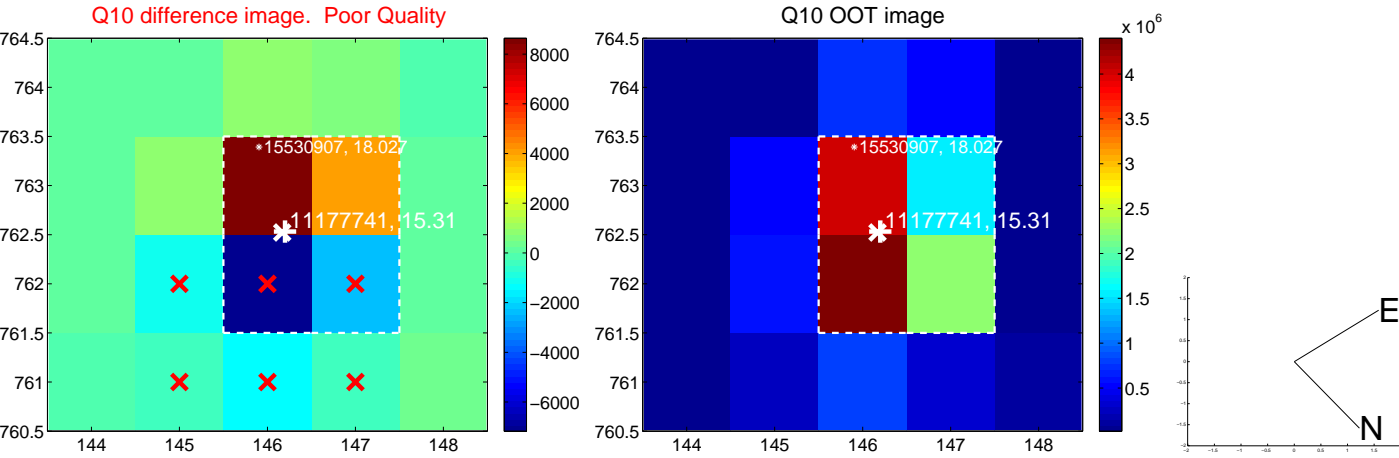
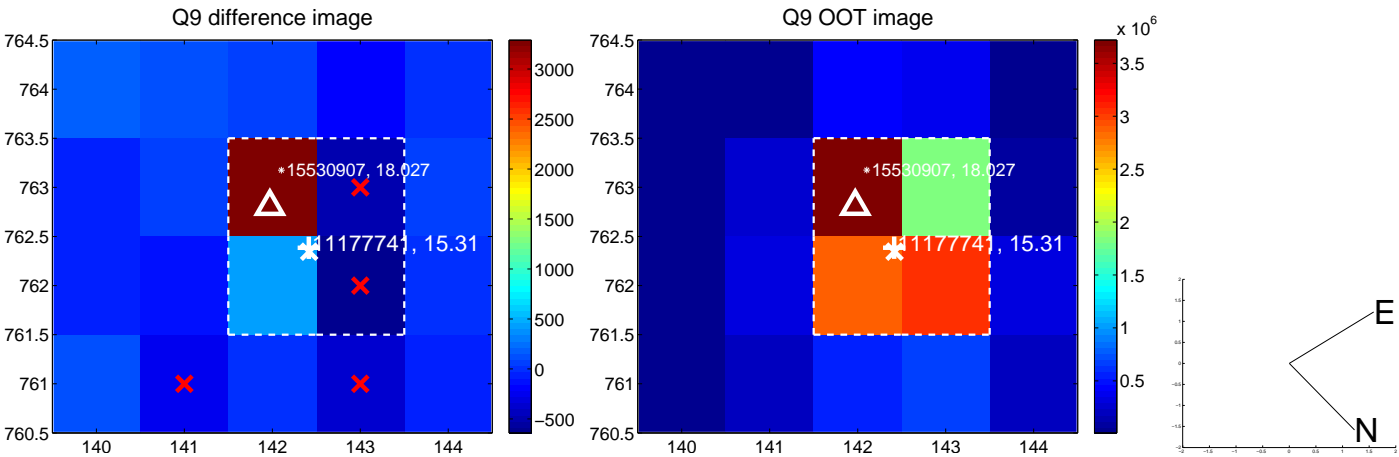
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



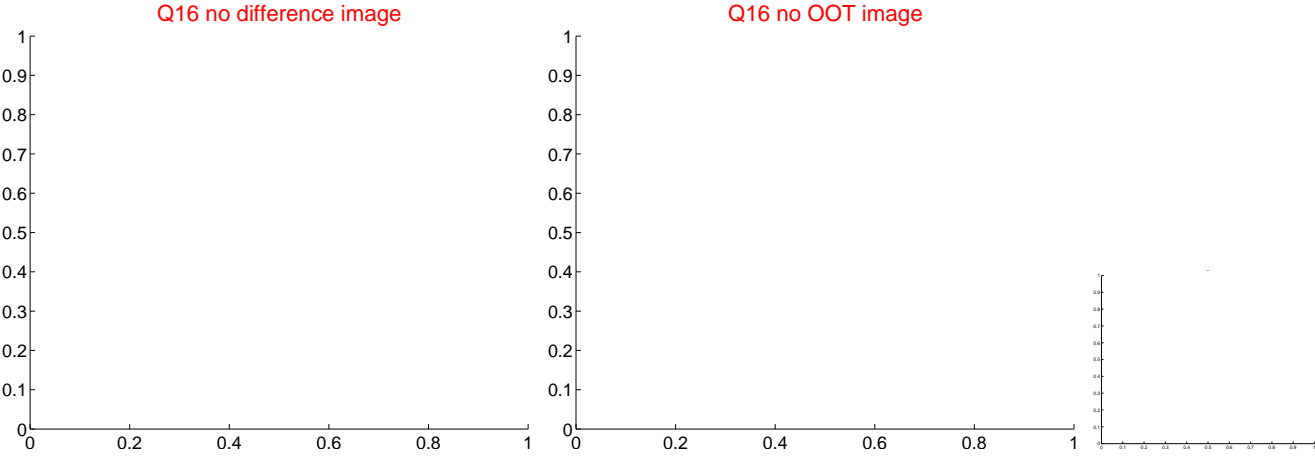
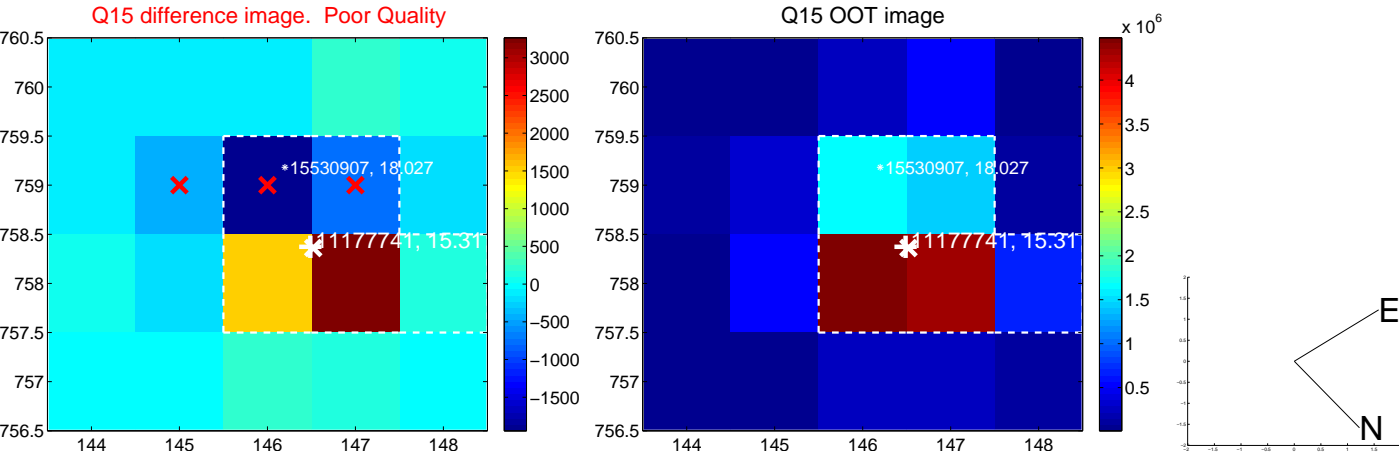
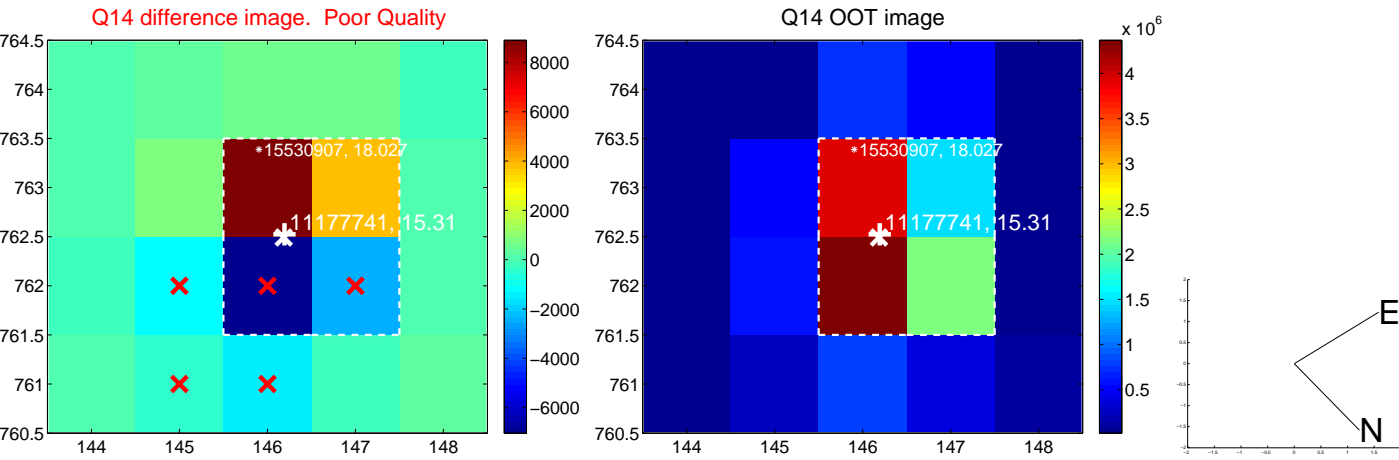
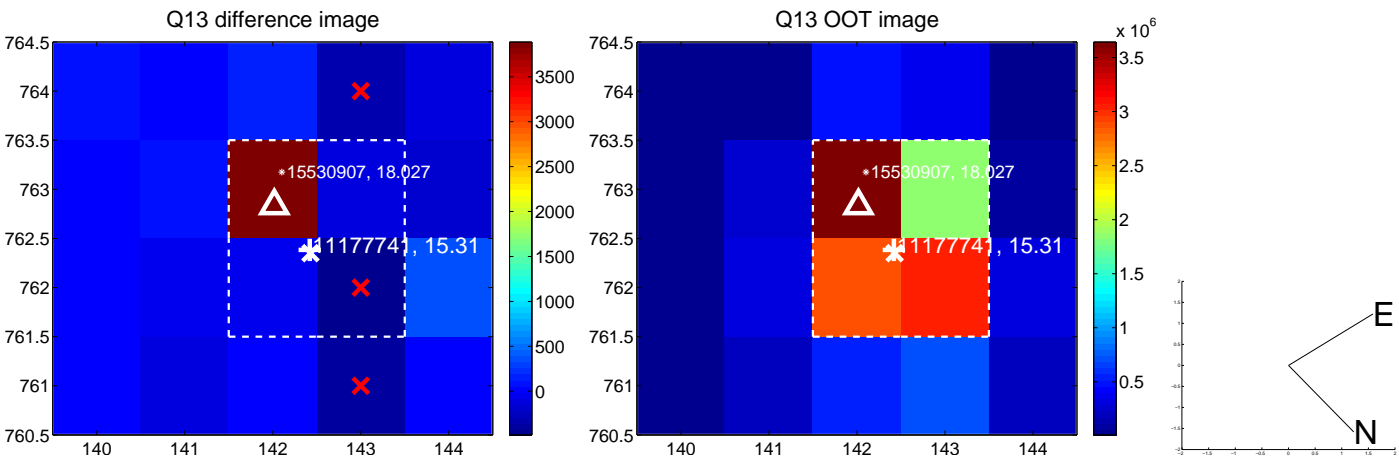
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



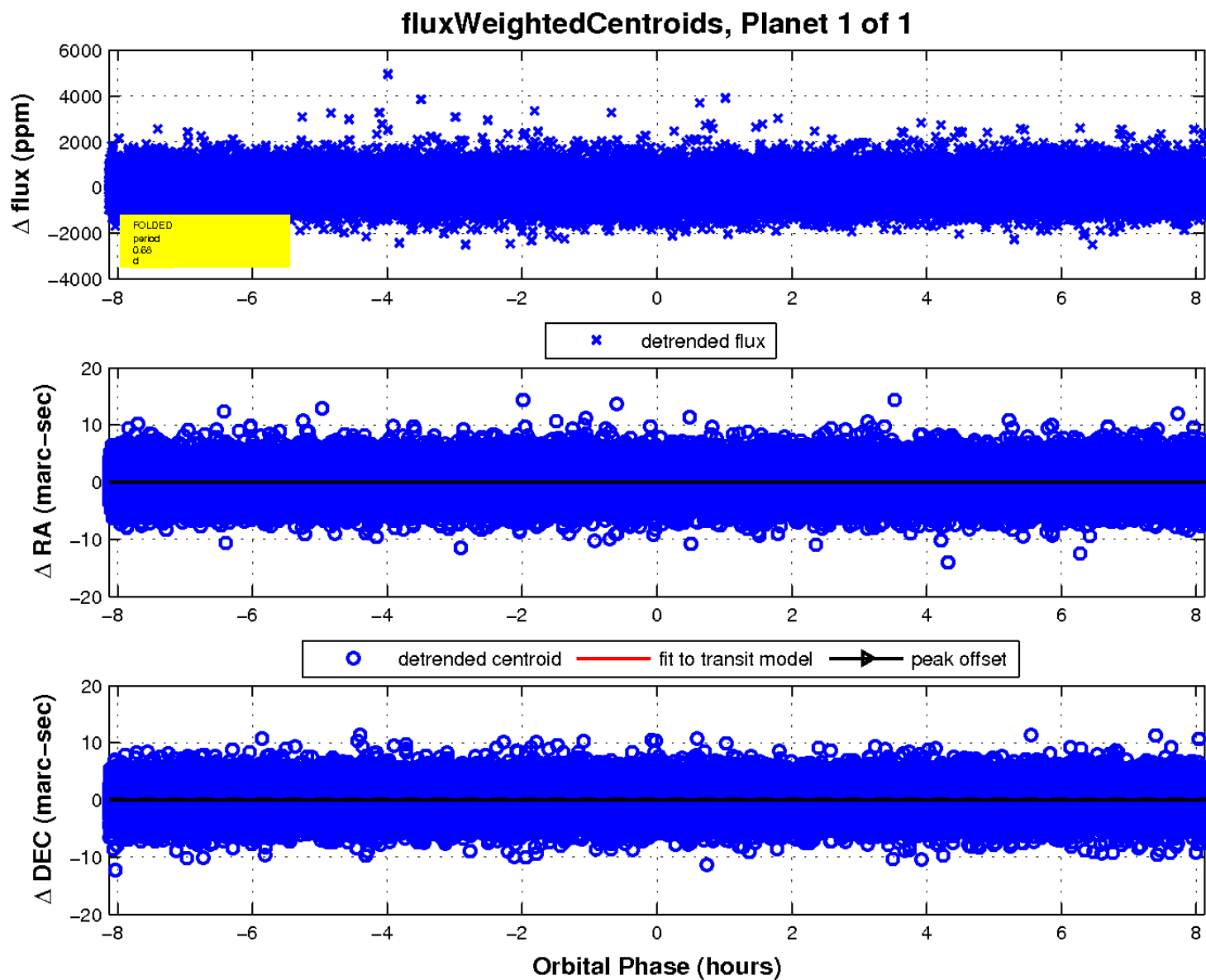
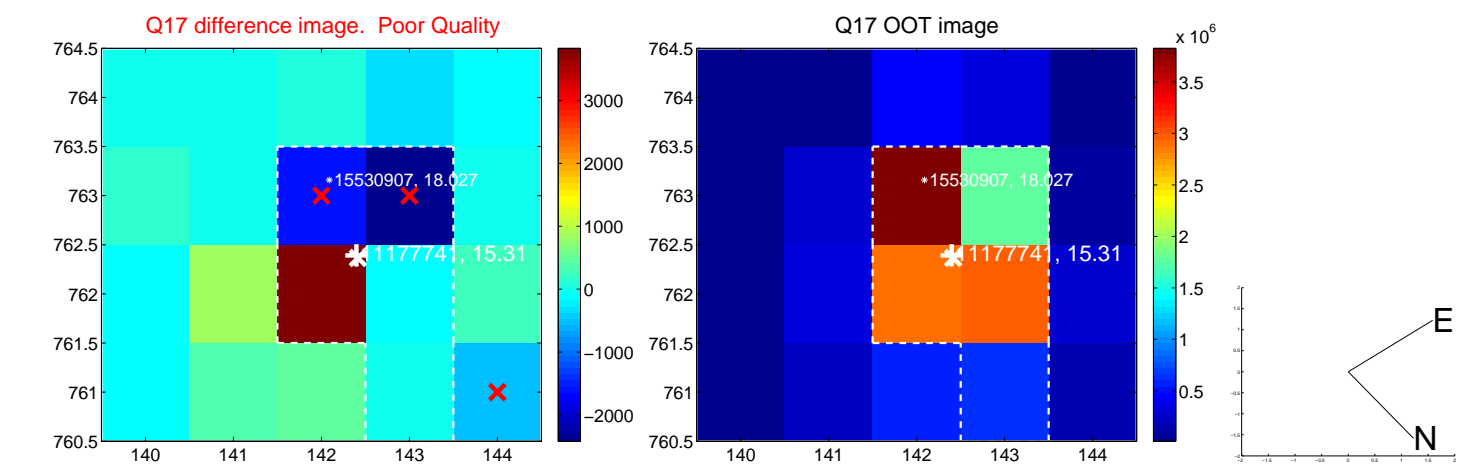
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

