

KIC 007117568

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})
007117568-01	OBS	No	0.566718	131.937623	2.9	4.945	10.4	1.5	0.94	6106	0.17	6074.60

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007117568-01	OBS	FP	0.00	1	0	0	1	LPP_DV—CENT_FEW_DIFFS—EPHEM_MATCH

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.

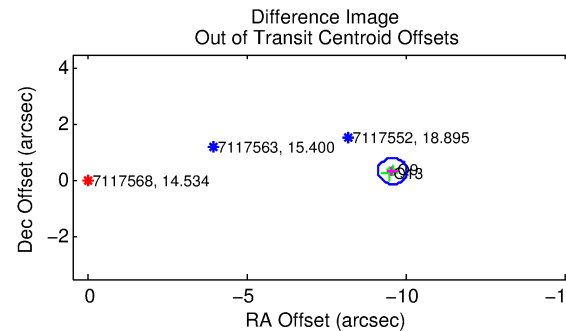
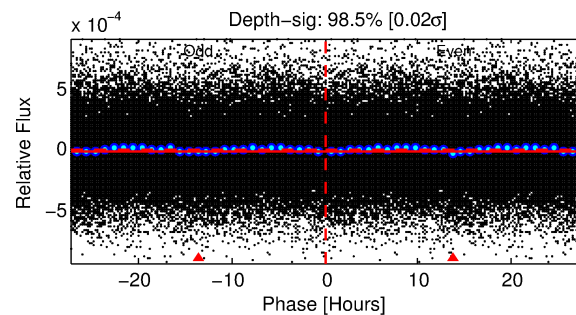
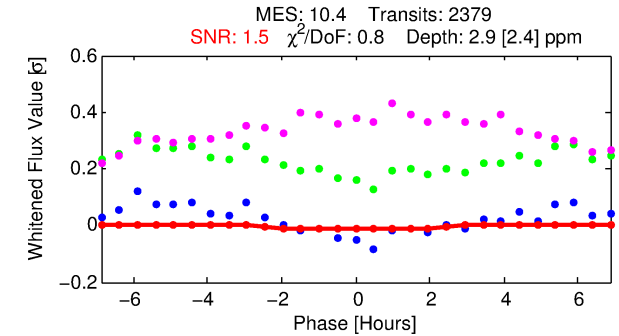
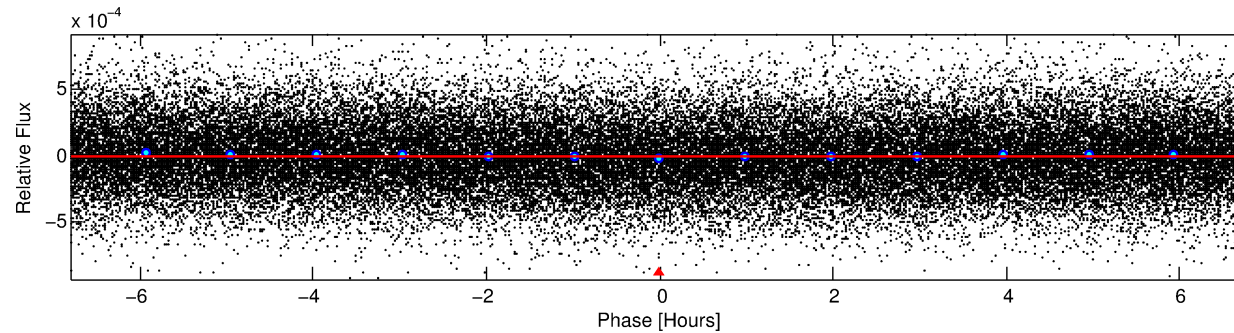
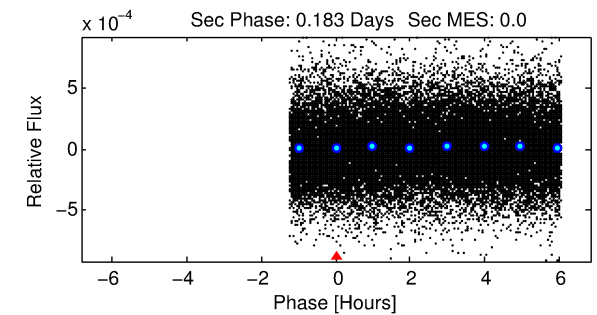
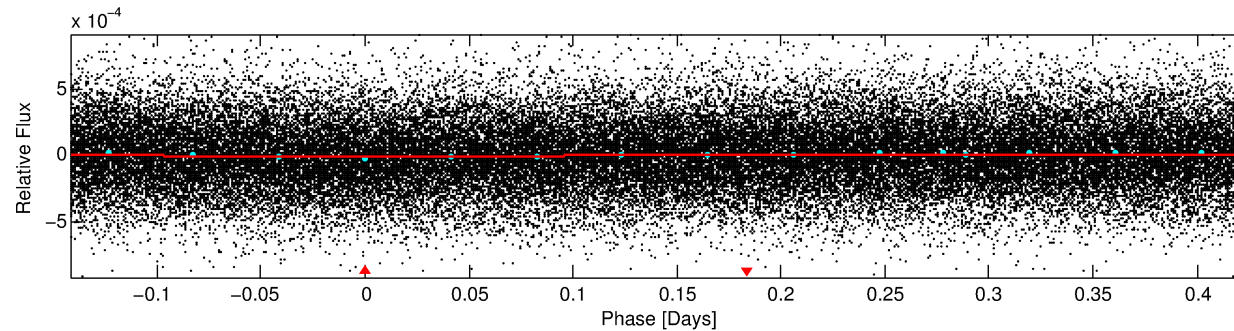
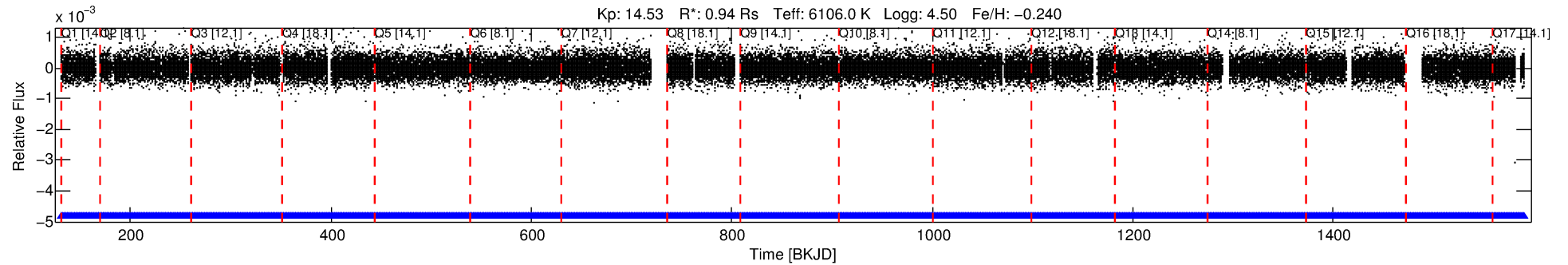
Ephemeris Match Information For 007117568-01

TCE (1)	KIC	Parent (2)	Parent KIC	P ₁ :P ₂	Dist (″)	Δ Row	Δ Col	m ₂	m ₁	D ₂ /D ₁	Mechanism	Flag	σ_P	σ_T
007117568-01	7117568	RR-Lyr-pri	7198959	1:1	1064.2	225	145	7.86	14.53	207770.00	Direct-PRF	0	0.06	9.09

Notes: P₁:P₂ is the period ratio. Dist is the distance in arcseconds. Δ Row and Δ Col are the number of pixels apart in row and column. m₂ and m₁ are the magnitudes of the parent and child. D₂/D₁ is the parent's transit depth divided by the child's. σ_P and σ_T are the significance of the match in period and epoch. For a match to be considered significant $\sigma_P < 5.0$ and $\sigma_T < 5.0$. Matches which have σ_P and σ_T very close to this cutoff should receive extra scrutiny, especially if the period ratio is very large.

DV One-Page Summary

KIC: 7117568 Candidate: 1 of 1 Period: 0.567 d



DV Fit Results:

Period = 0.56672 [0.00007] d
Epoch = 131.9376 [0.0375] BKJD
Rp/R* = 0.0016 [0.0079]
a/R* = 1.06 [3.00]
b = 0.63 [24.09]
Seff = 6074.59 [2481.15]
Teq = 2251 [230] K
Rp = 0.17 [0.82] Re
a = 0.0135 [0.0036] AU
Ag = N/A
Teffp = N/A

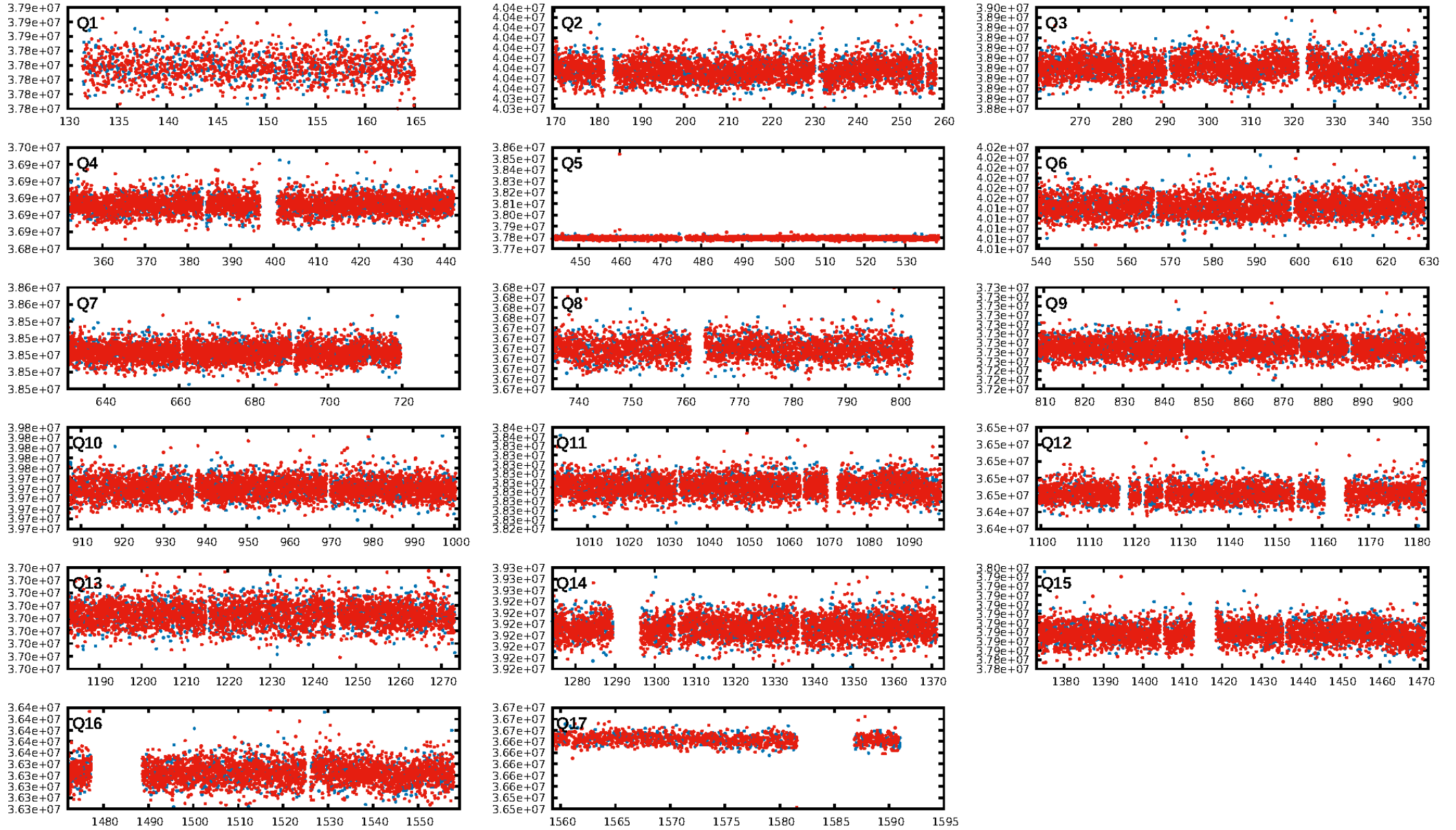
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [2273/2273]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 9.565 arcsec [61.80 σ]
KicOffset-rm: 9.557 arcsec [61.75 σ]
OotOffset-st: 0/0/0/2 [2]
KicOffset-st: 0/0/0/2 [2]
DiffImageQuality-fgm: 0.00 [0/2]
DiffImageOverlap-fno: 1.00 [17/17]

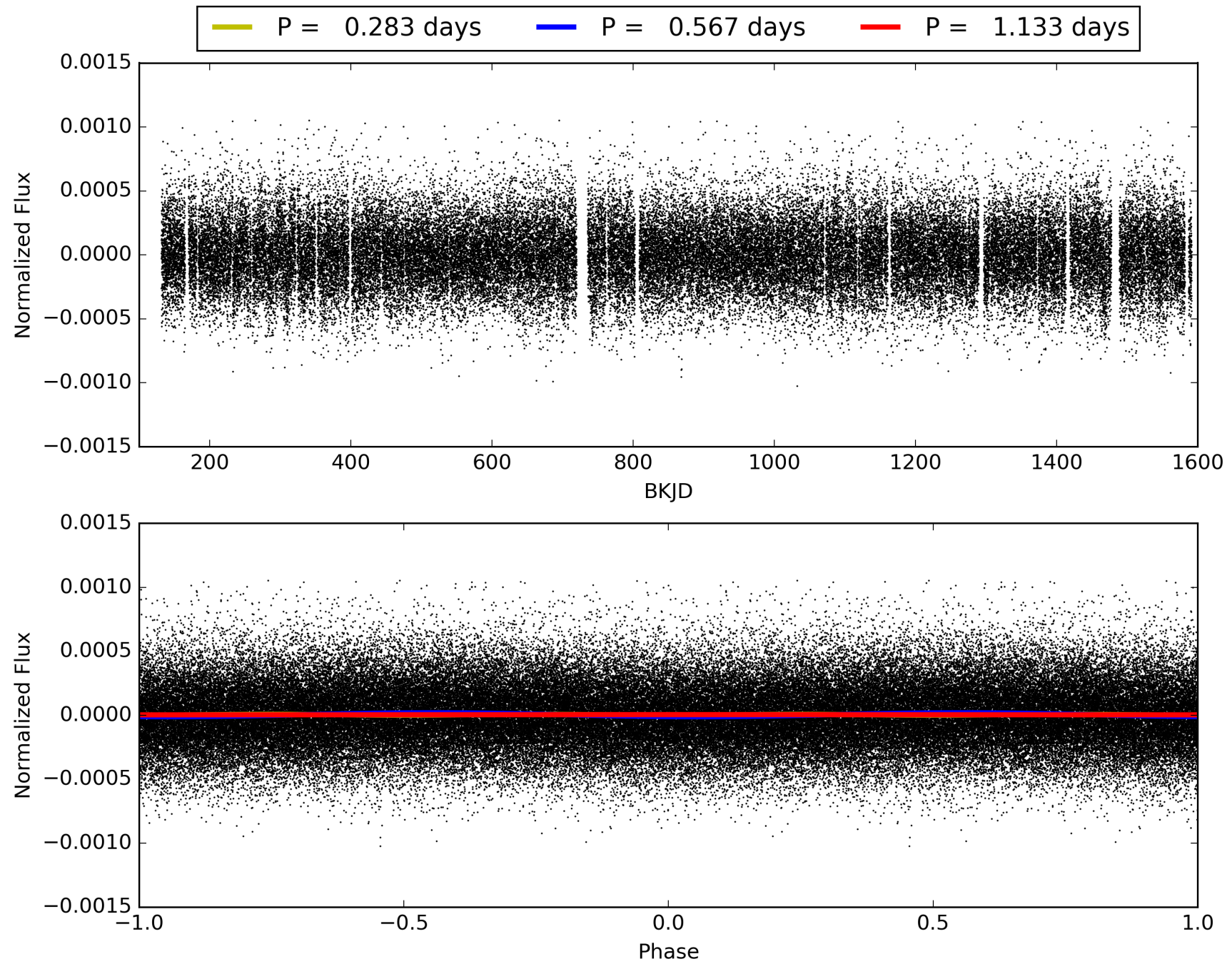
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 14:00:16 Z

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

TCE 007117568-01, PDC Light Curves

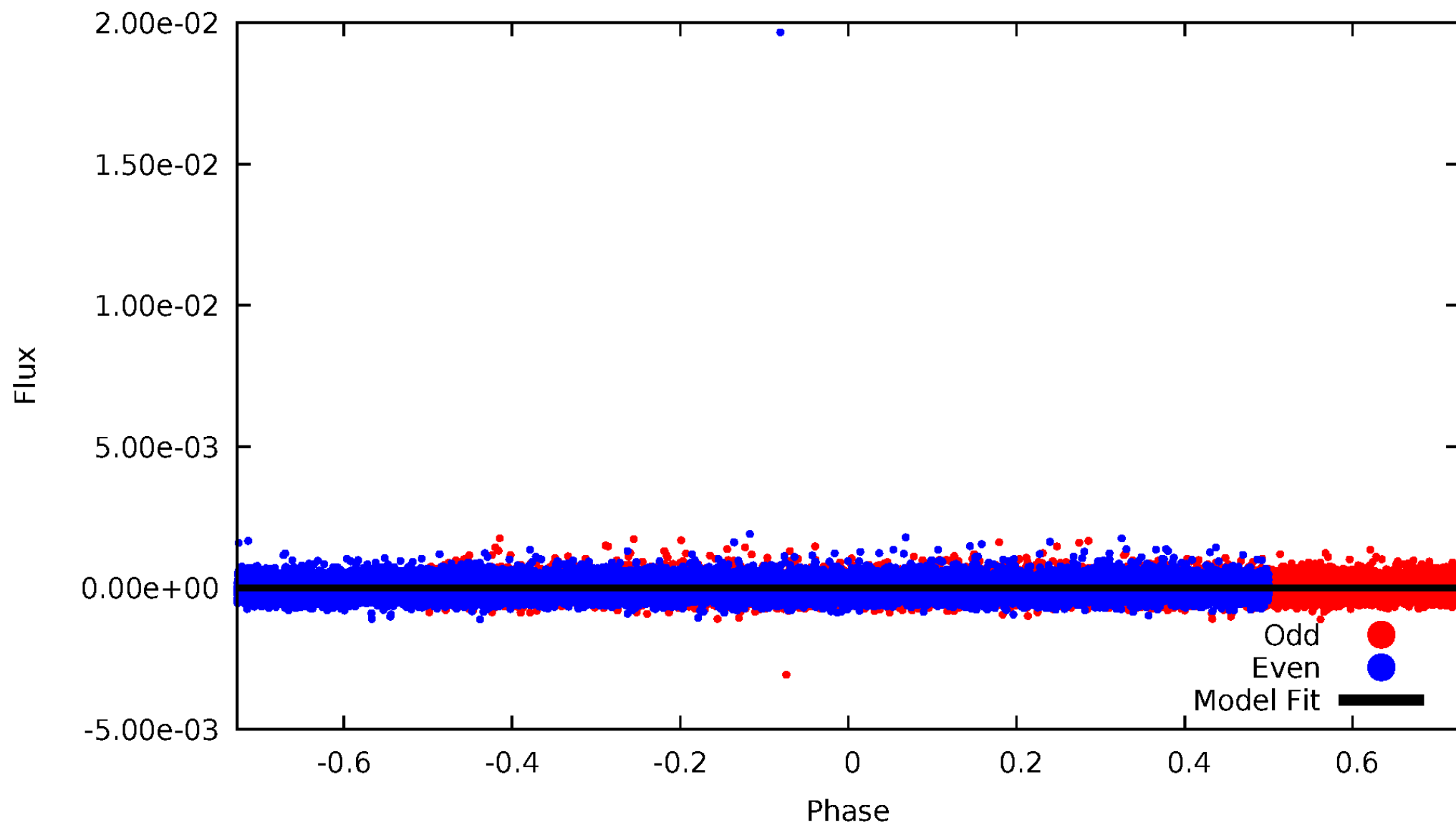


TCE 007117568-01



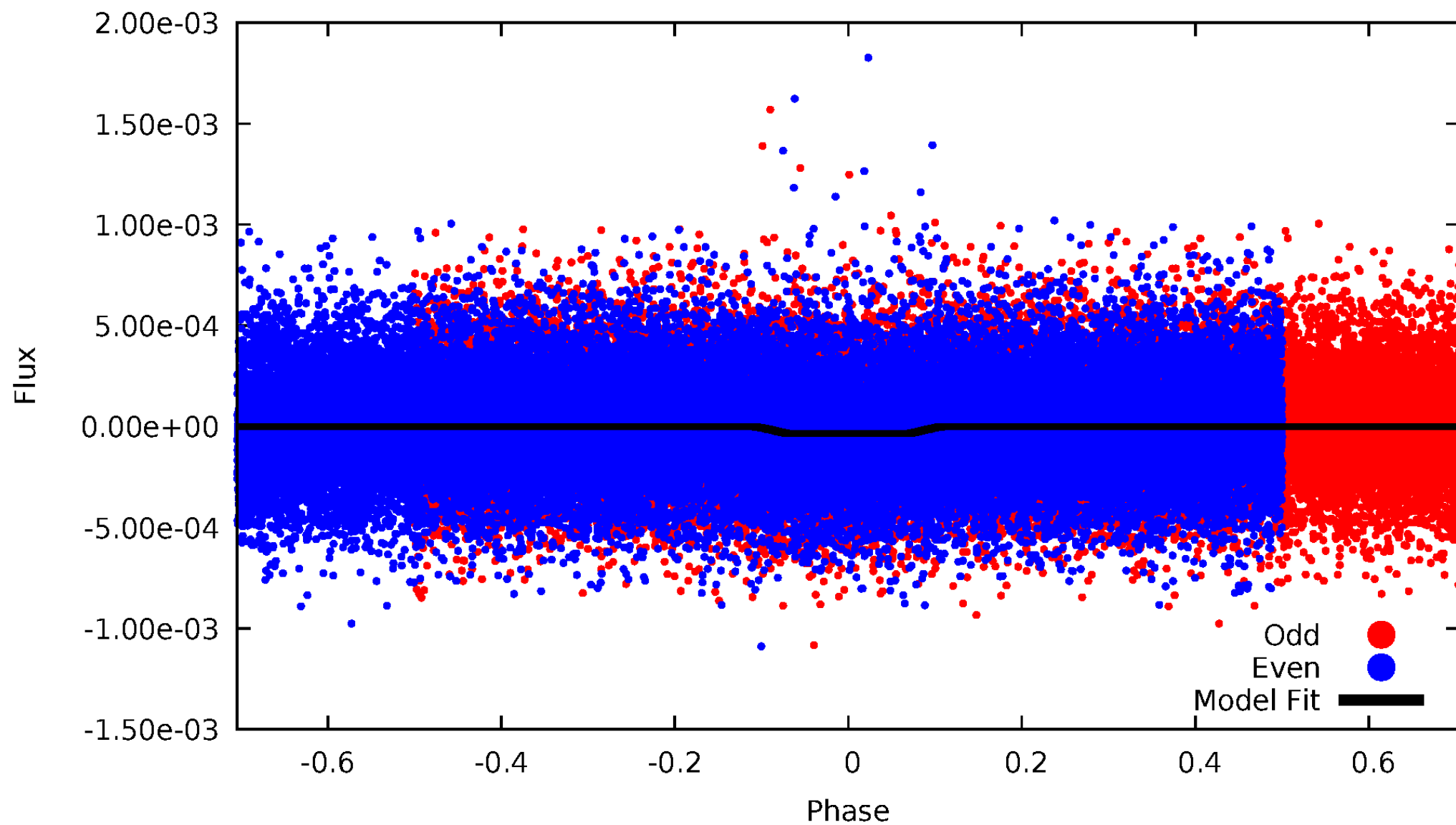
DV Odd/Even

TCE 007117568-01



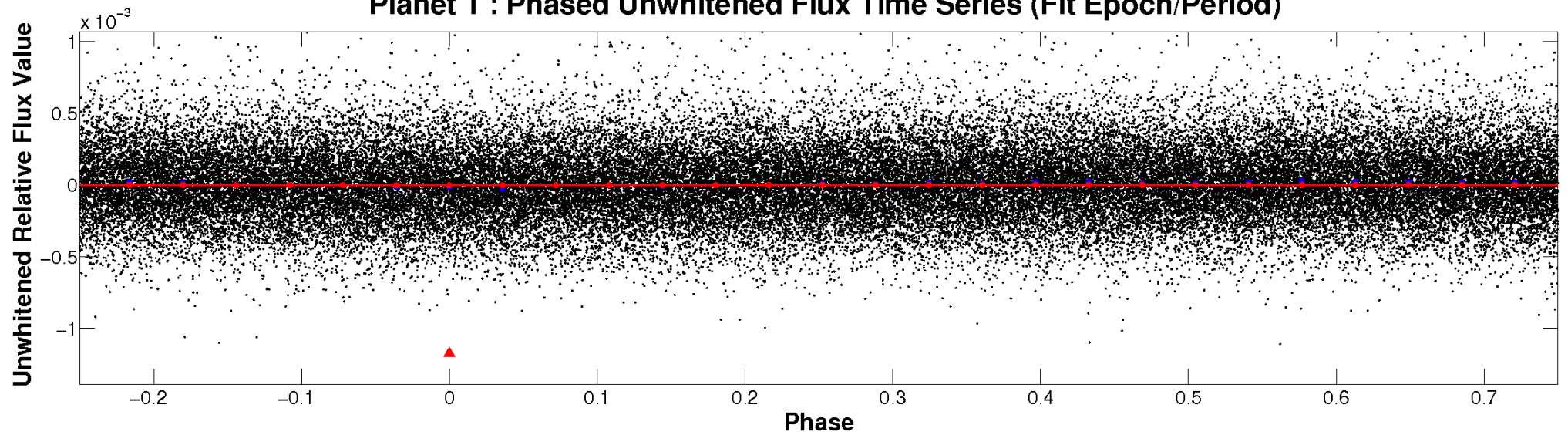
ALT Odd/Even

TCE 007117568-01

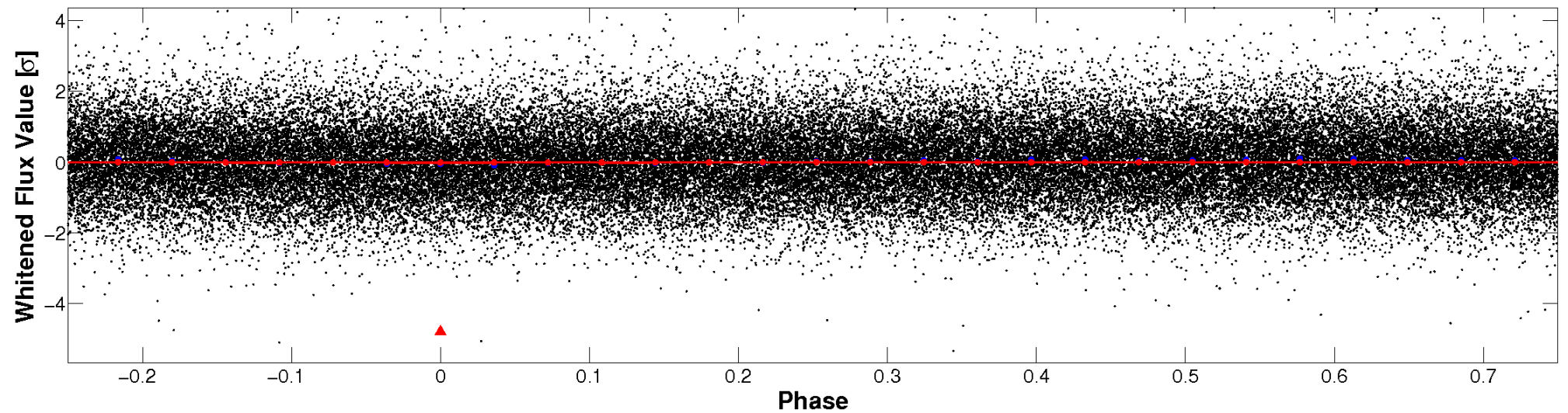


Non-Whitened Vs. Whitened Light Curve

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

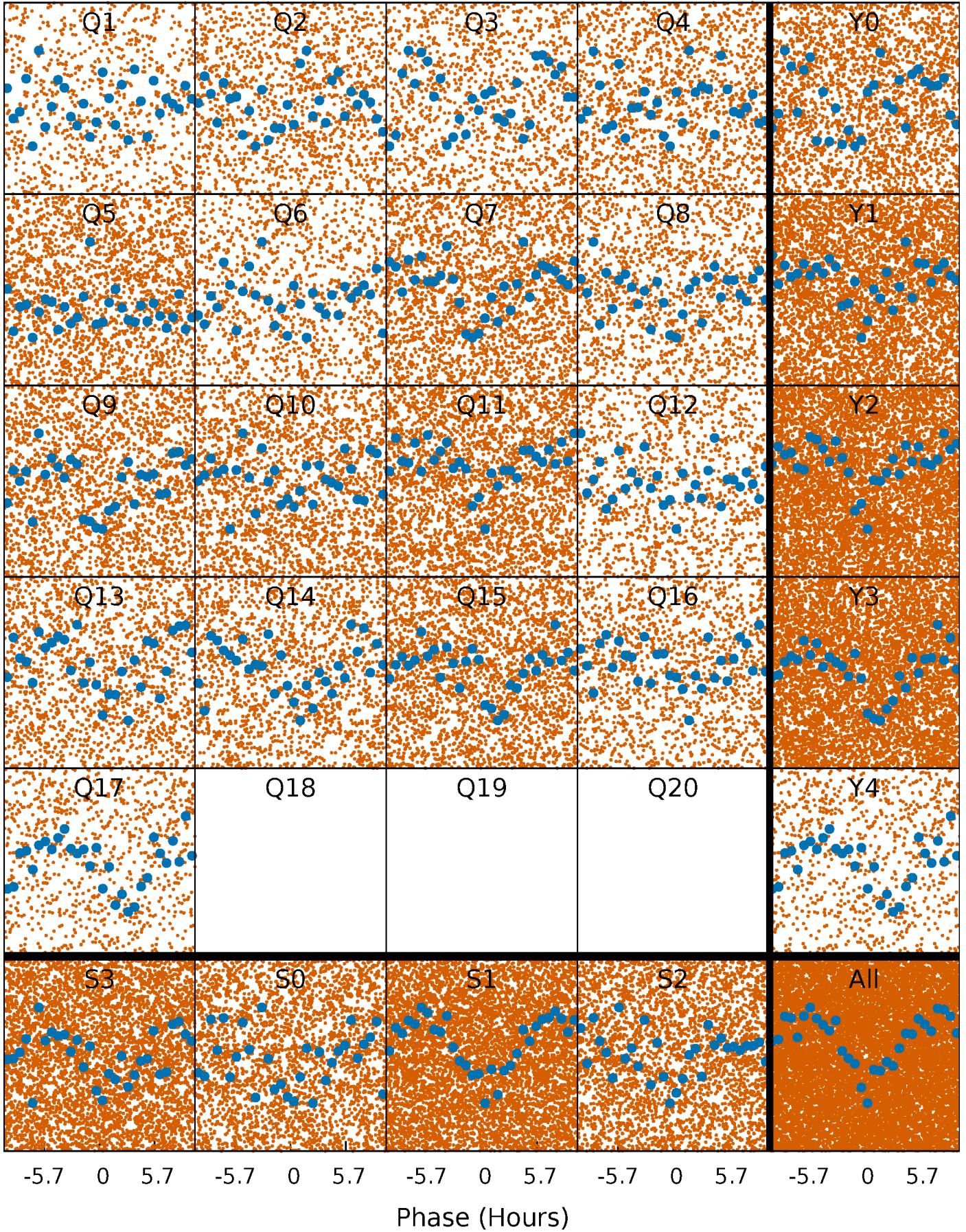


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



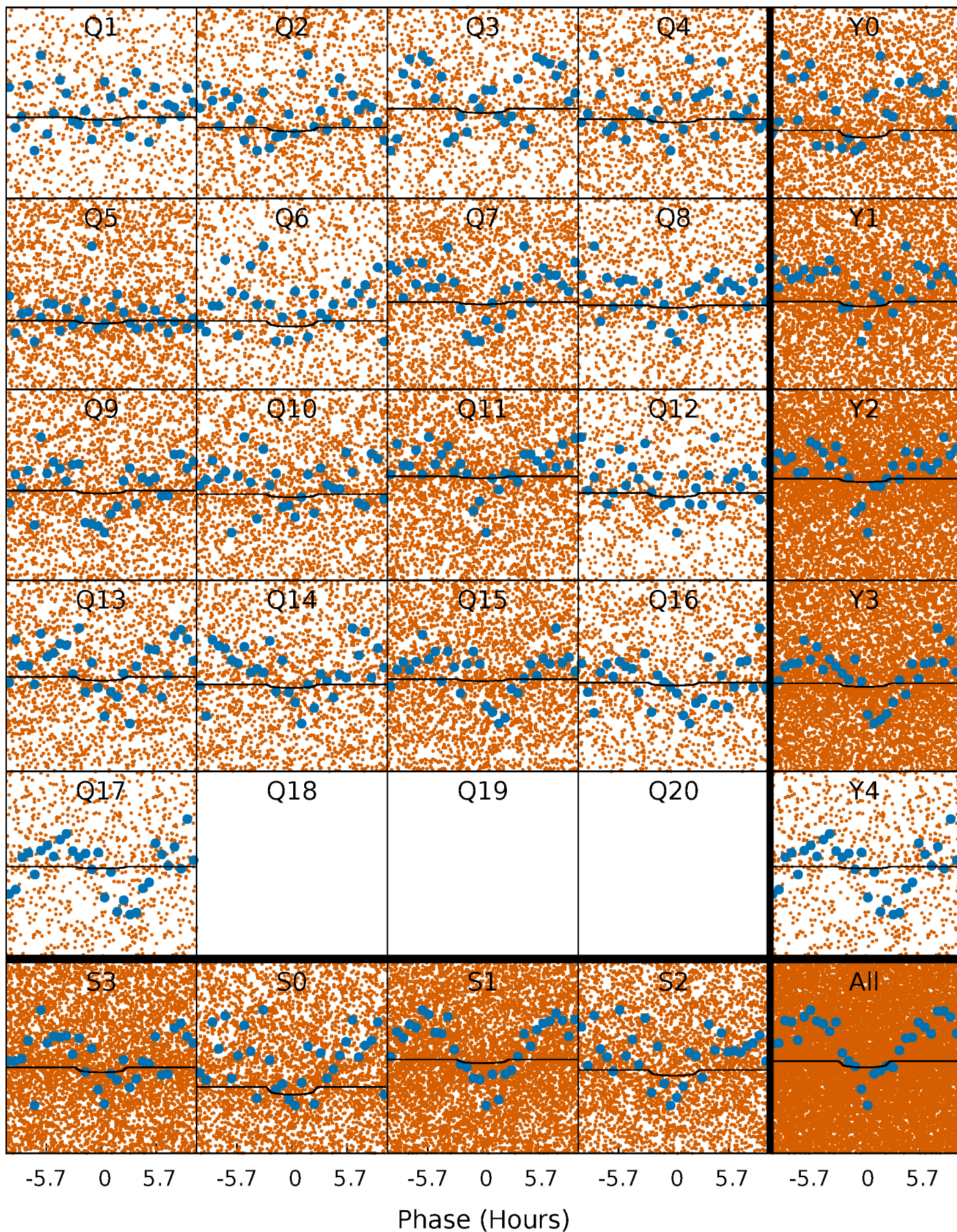
PDC Quarter-Phased Transit Curves

TCE 007117568-01 P= 0.566718 Days $T_0=131.937623$ (BKJD)



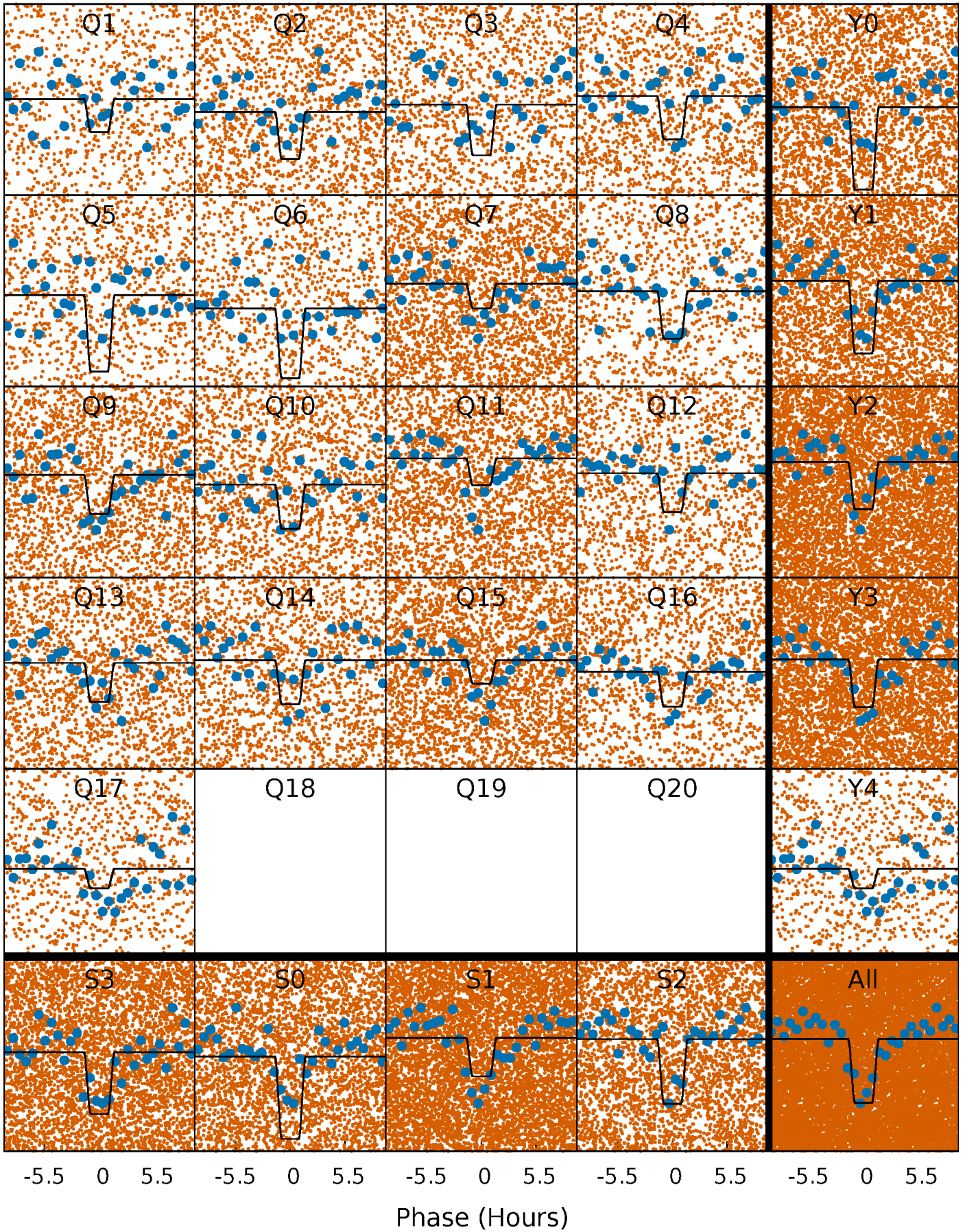
DV Quarter-Phased Transit Curves

TCE 007117568-01 P= 0.566718 Days $T_0=131.937623$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

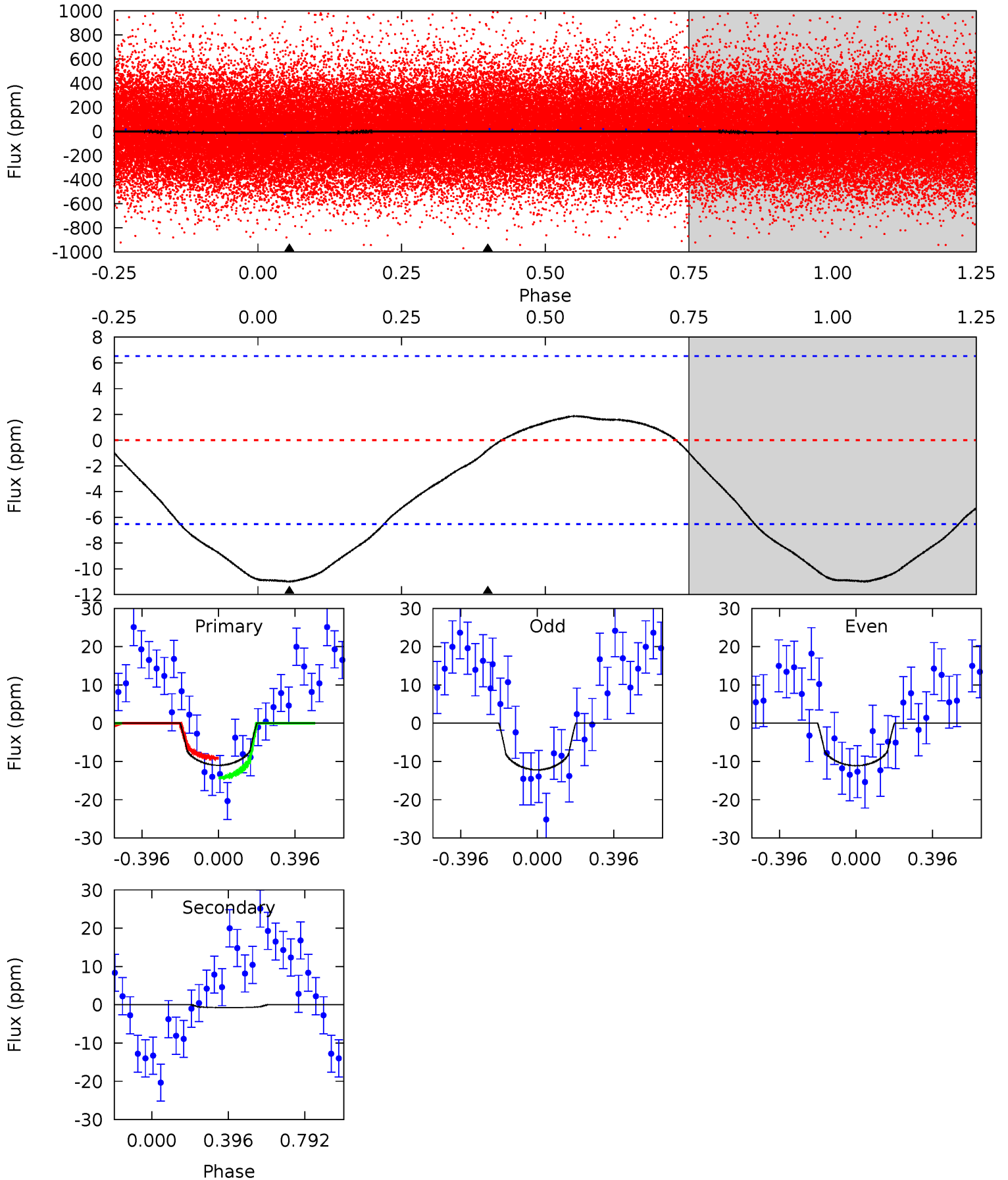
TCE 007117568-01 P= 0.566775 Days $T_0=131.862517$ (BKJD)



DV Model-Shift Uniqueness Test

007117568-01, P = 0.566718 Days, E = 131.370905 Days

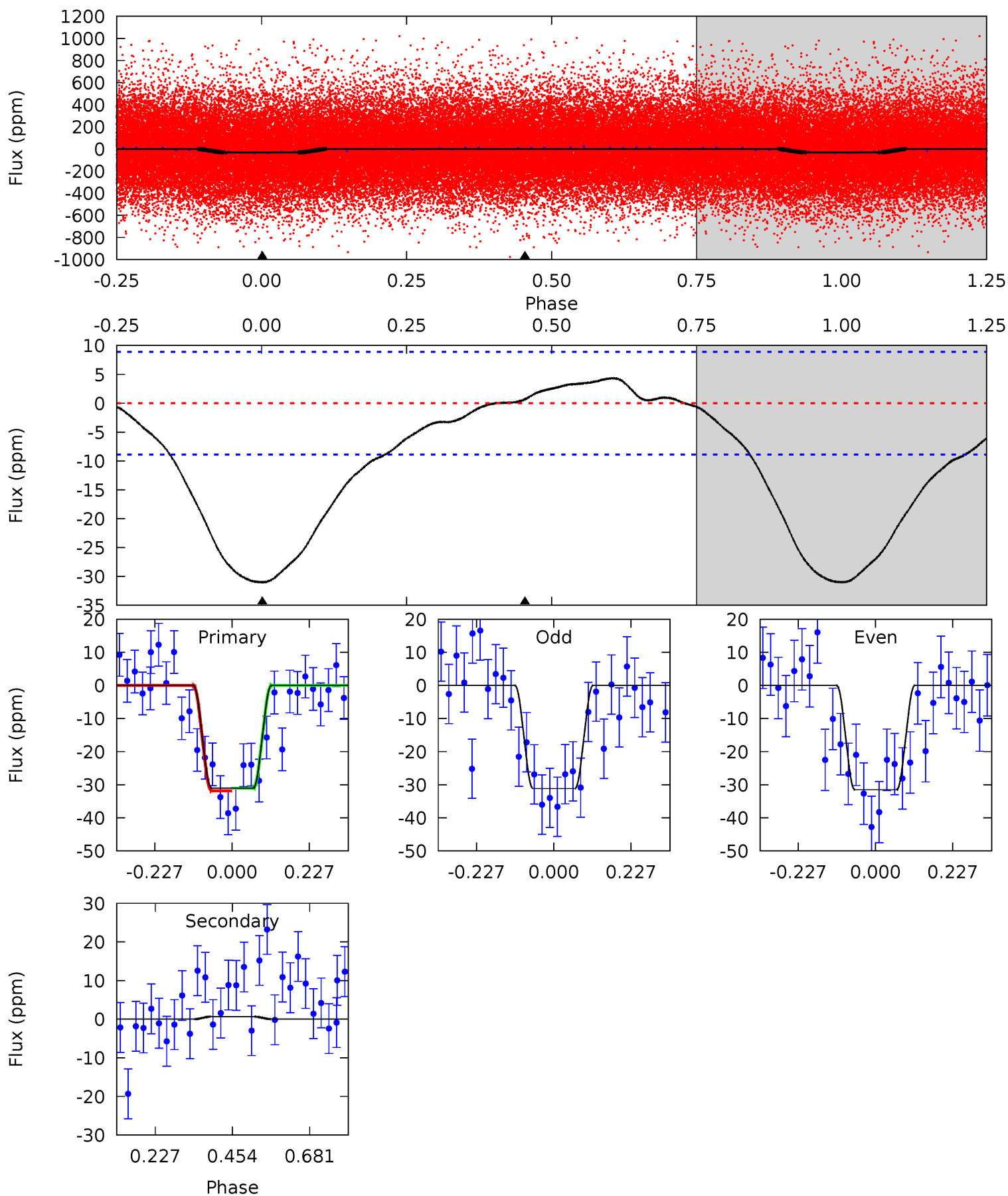
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.18	0.50	0	0	4.27	0.85	0.68	7.18	7.18	0.50	0.50	0.36	0.78	0.14	1.67



Alt Model-Shift Uniqueness Test

007117568-01, P = 0.566775 Days, E = 131.295742 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
15.3	-0.33	0	0	4.39	1.21	0.84	15.3	15.3	-0.33	-0.33	0.09	0.96	0.12	0.19



Stellar Parameters For KIC 007117568

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6106^{+164}_{-200}	$4.497^{+0.052}_{-0.208}$	$-0.240^{+0.300}_{-0.300}$	$0.940^{+0.308}_{-0.096}$	$1.013^{+0.139}_{-0.139}$	$1.716^{+0.370}_{-0.933}$
	+3%/-3%	+1%/-5%	+125%/-125%	+33%/-10%	+14%/-14%	+22%/-54%
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 007117568-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-1 ± 2	$0.65^{+0.66}_{-0.44}$	3209^{+255}_{-163}	-3023^{+7087}_{-472}	$0.100^{+1.410}_{-0.244}$
Alt.	1 ± 2	$0.93^{+0.75}_{-0.64}$	3205^{+248}_{-167}	-3319^{+454}_{-614}	$-0.039^{+0.192}_{-0.692}$

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

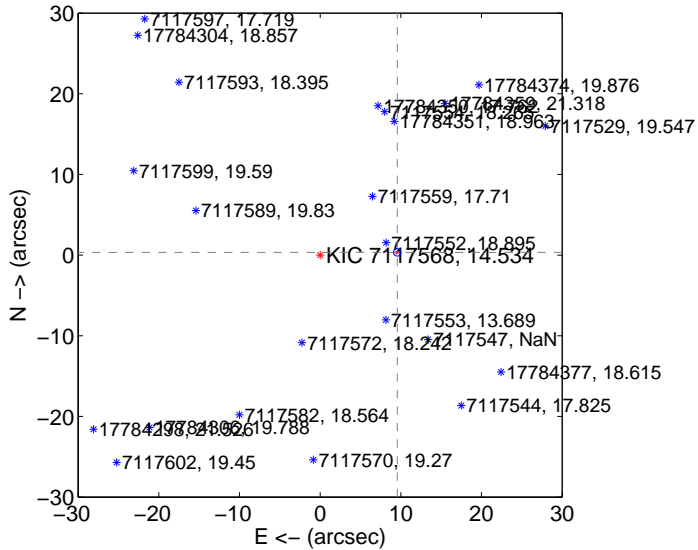
Supplemental centroid analysis for 007117568-01. Kepler magnitude: 14.53. Transit SNR 1.51

There are 0 quarters with good PRF difference image offsets

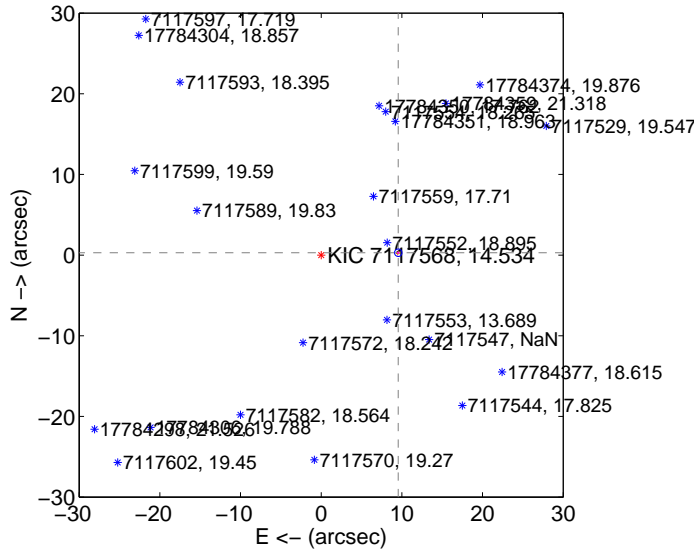
The direct PRF centroid is offset from the target star catalog position by about 0.05 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	9.565 ± 0.155	61.80	-9.559 ± 0.155	0.337 ± 0.157
PRF-fit source offset from KIC position	9.557 ± 0.155	61.75	-9.553 ± 0.155	0.292 ± 0.157
photometric centroid source offset	—	—	—	—

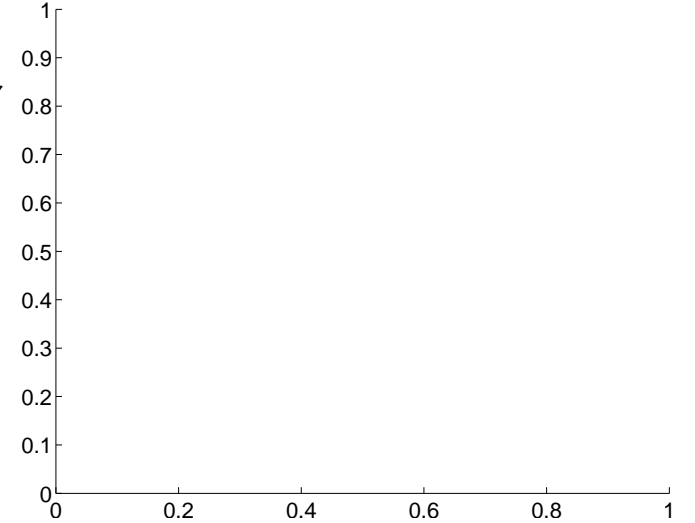
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

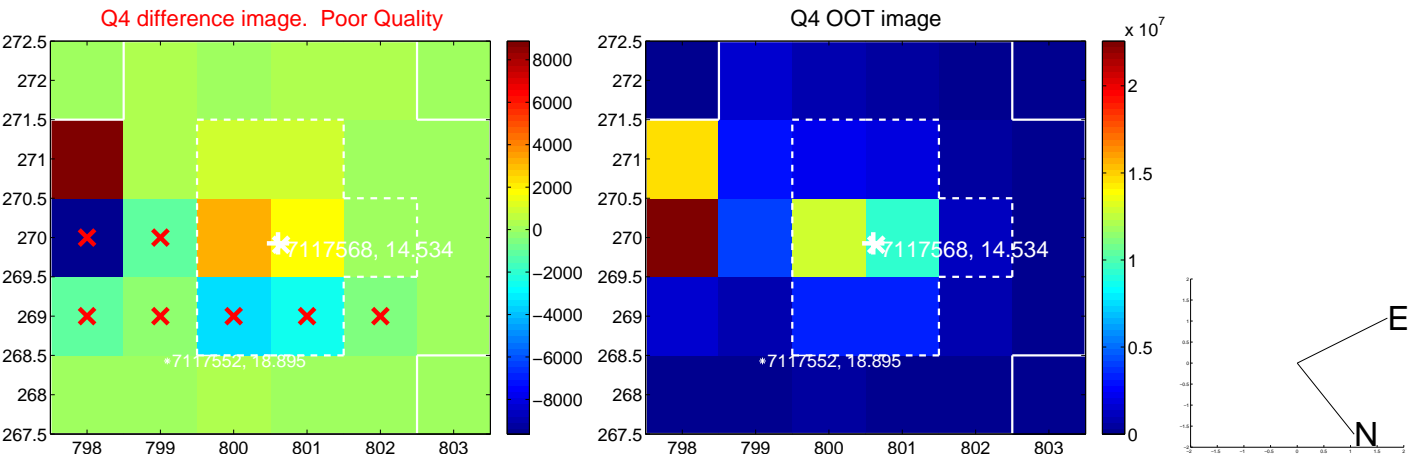
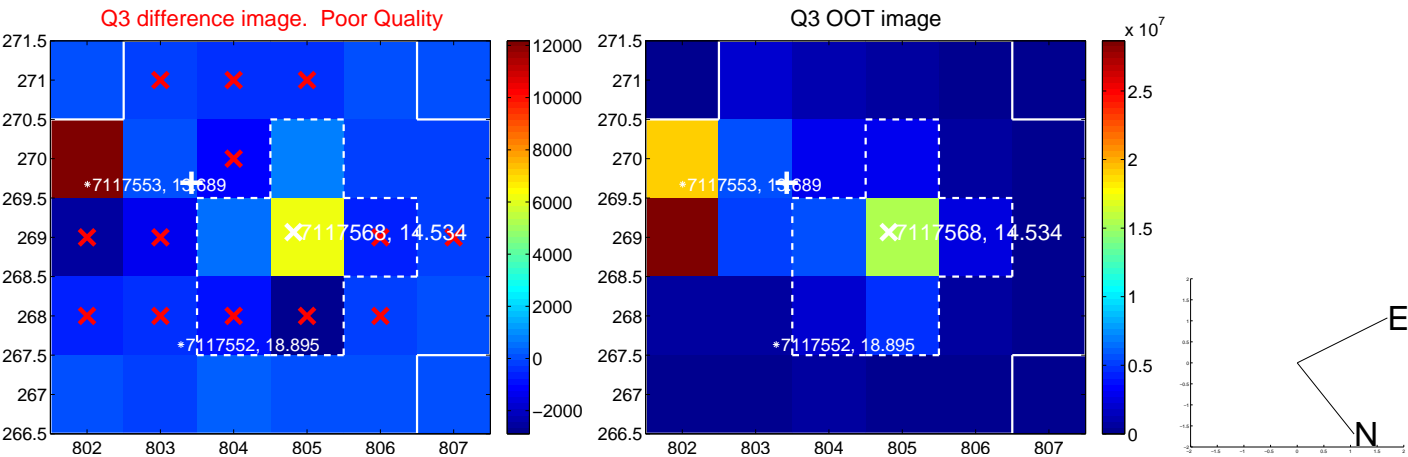
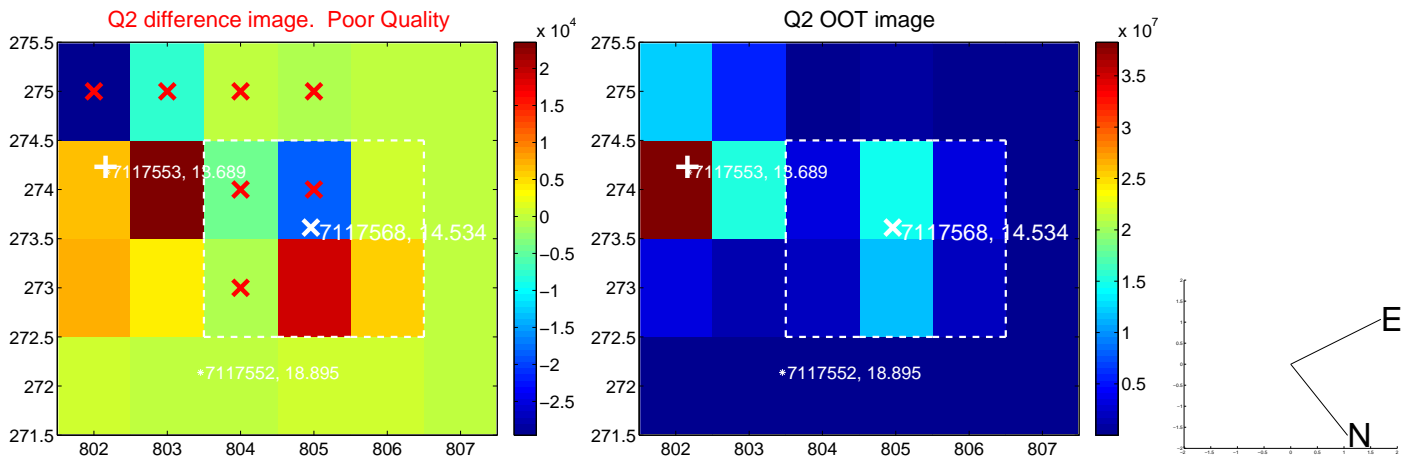
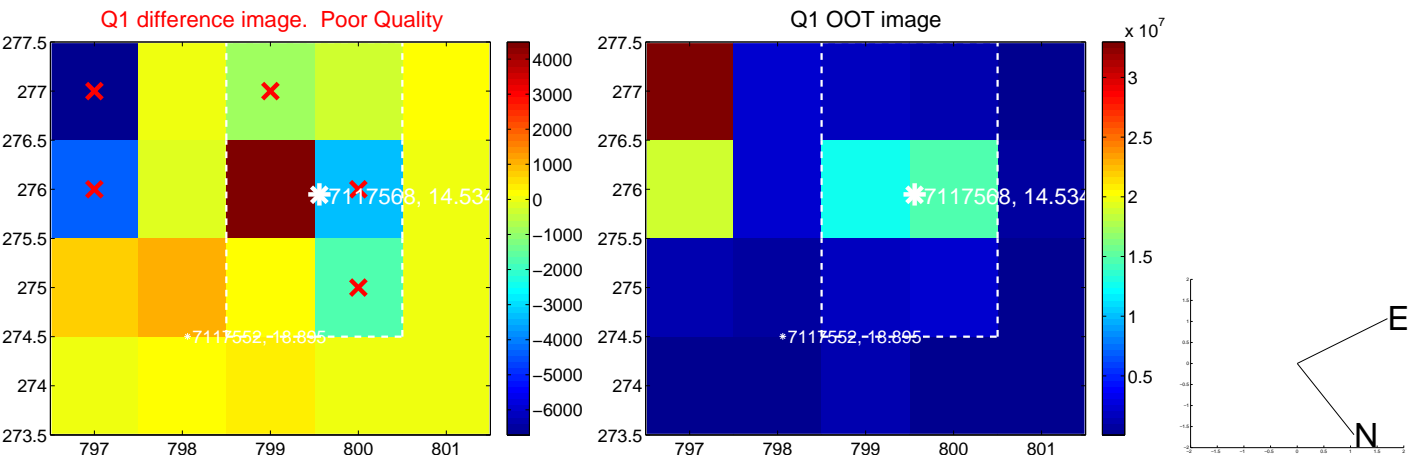


There are no photometric centroids

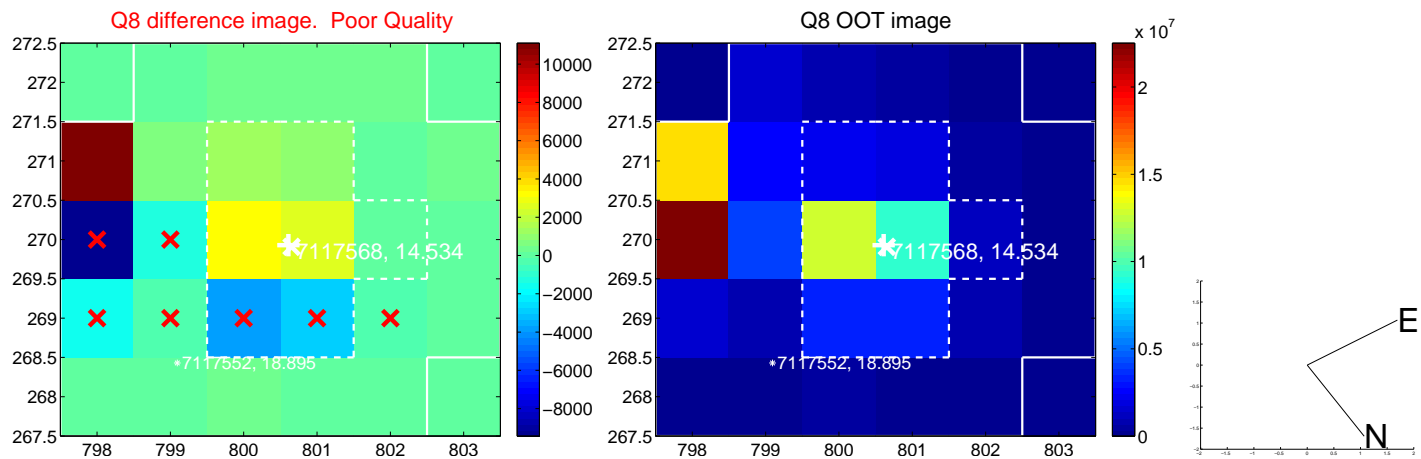
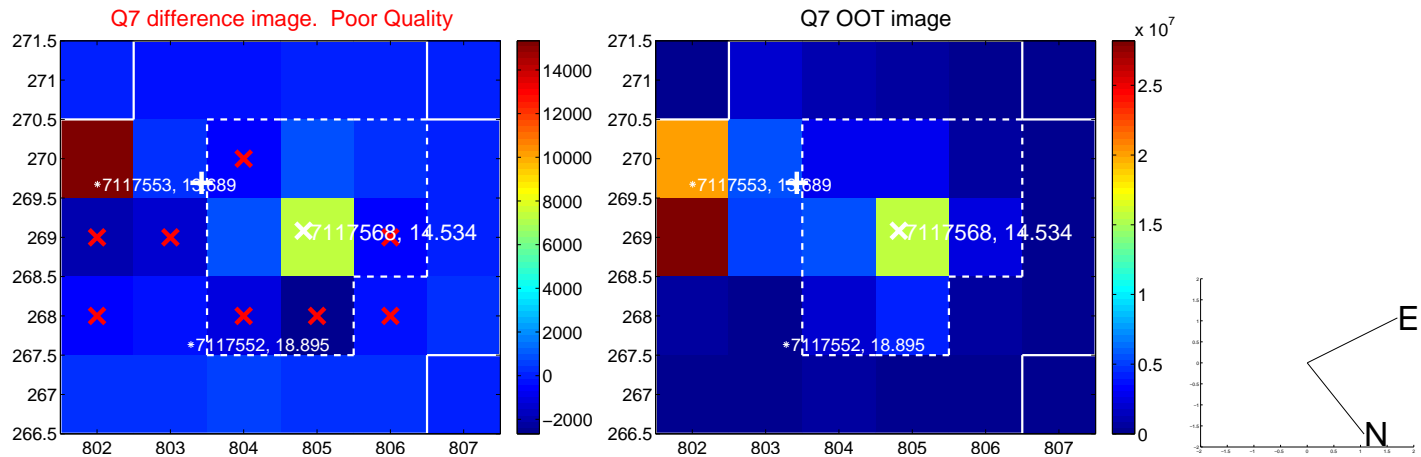
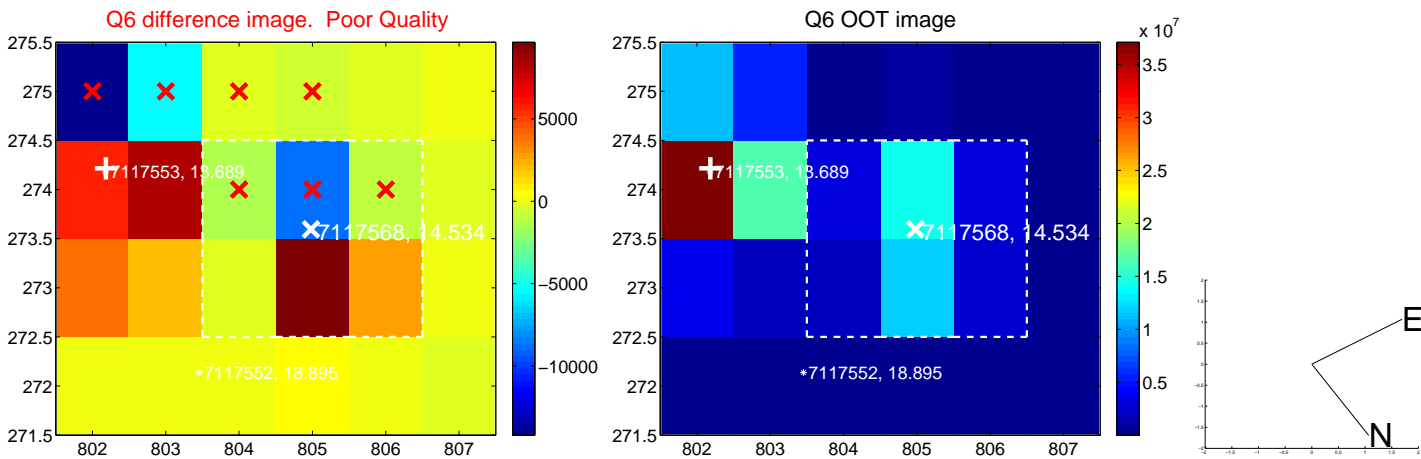
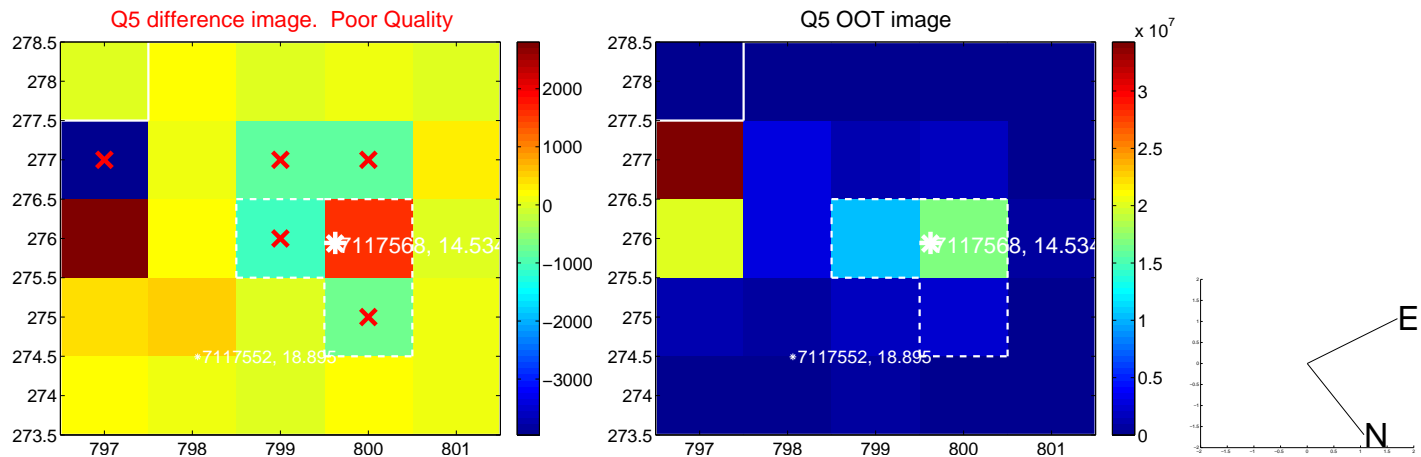


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

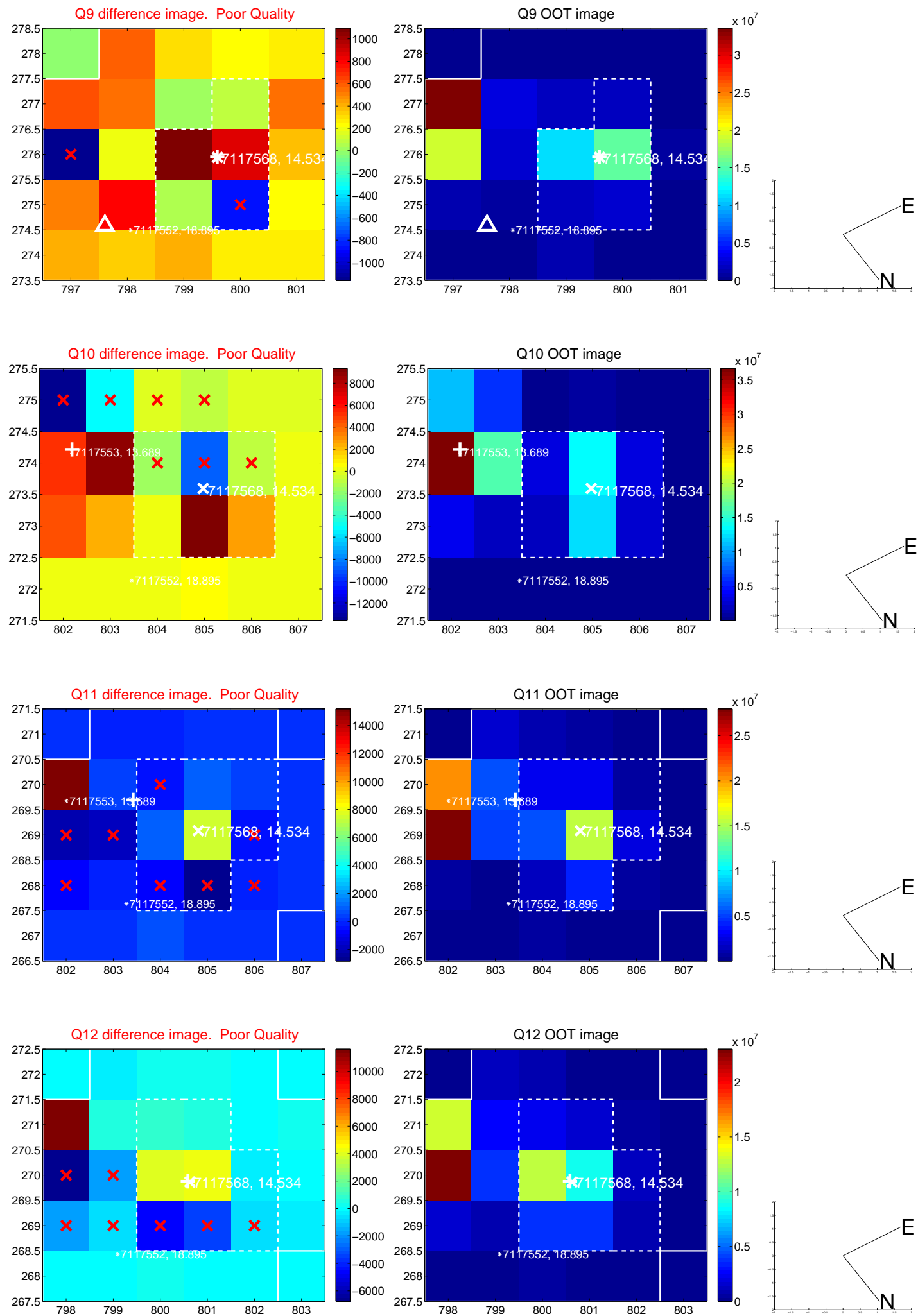
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



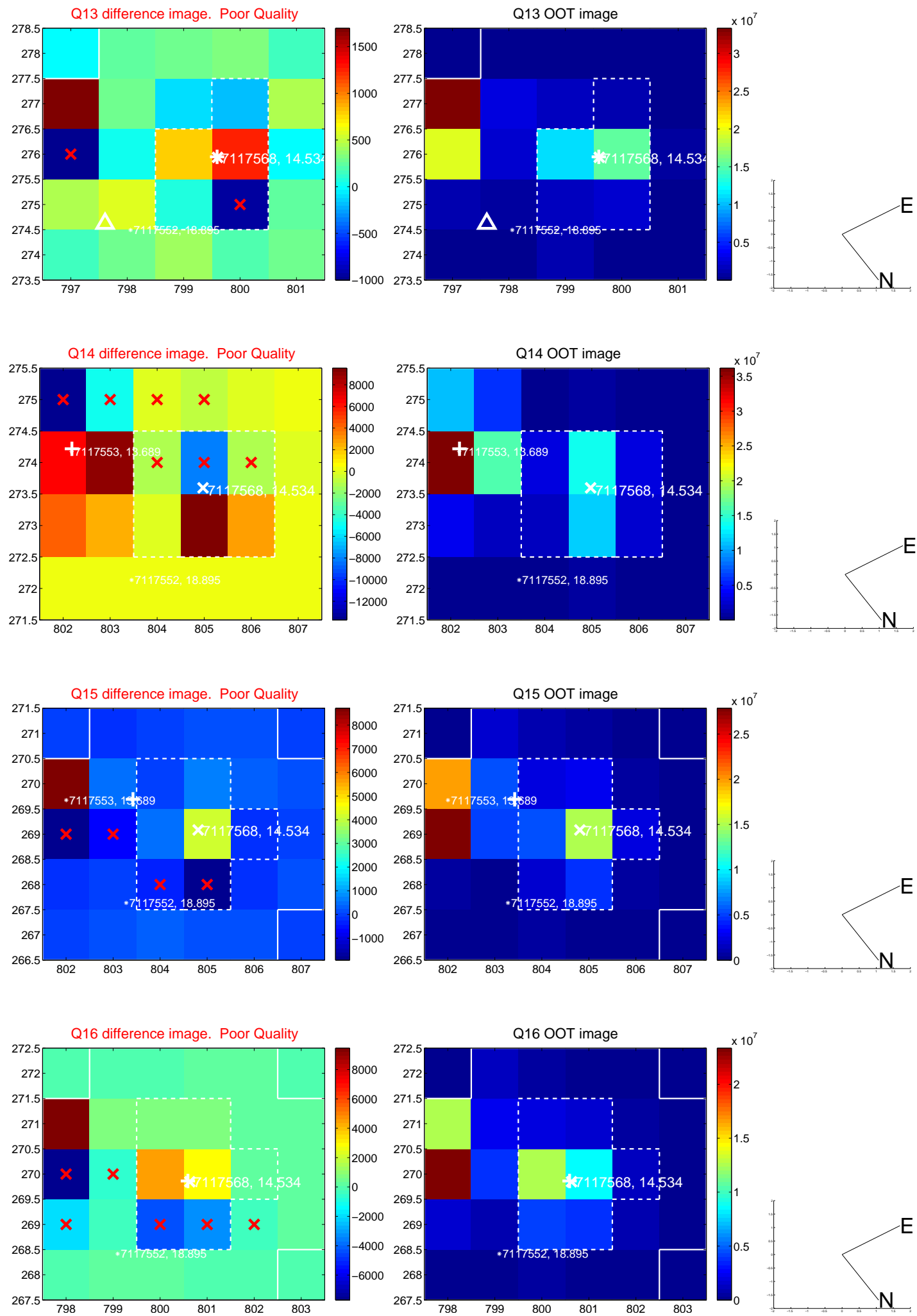
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



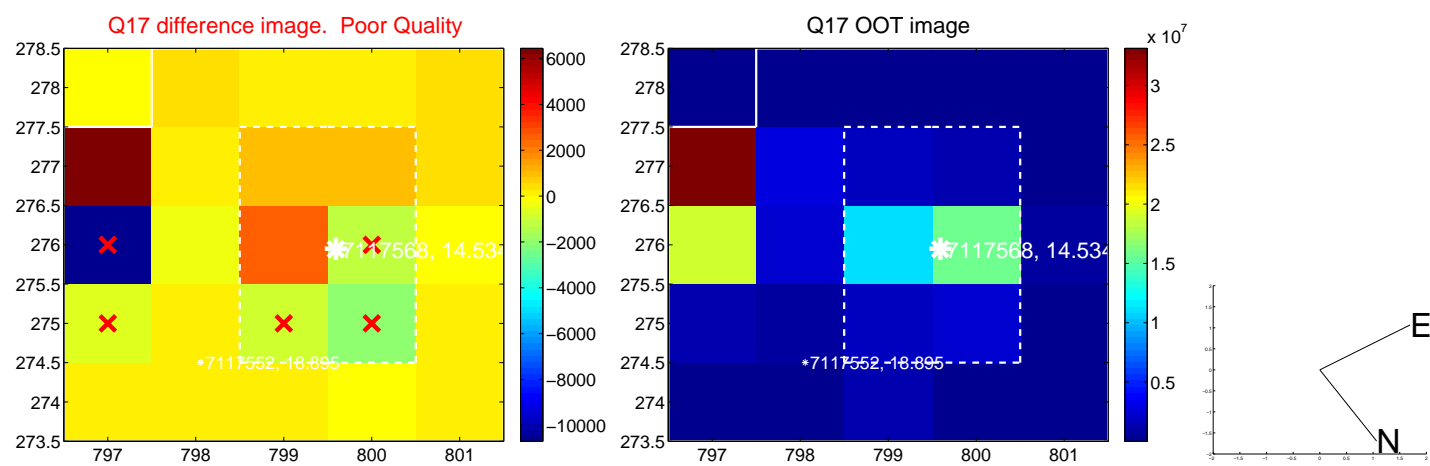
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



folded centroid time series figure for this object.

UKIRT Image

Declination

