

KIC 003338680

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})
003338680-01	OBS	No	1.727607	132.999455	11.2	19.110	8.8	5.5	4.16	7184	1.60	31449.94

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003338680-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—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.

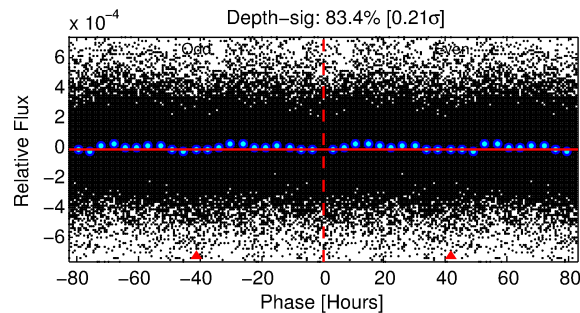
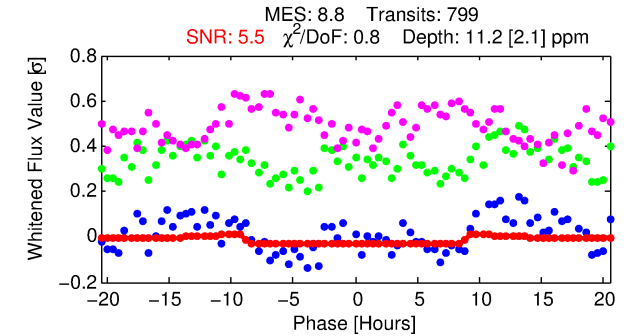
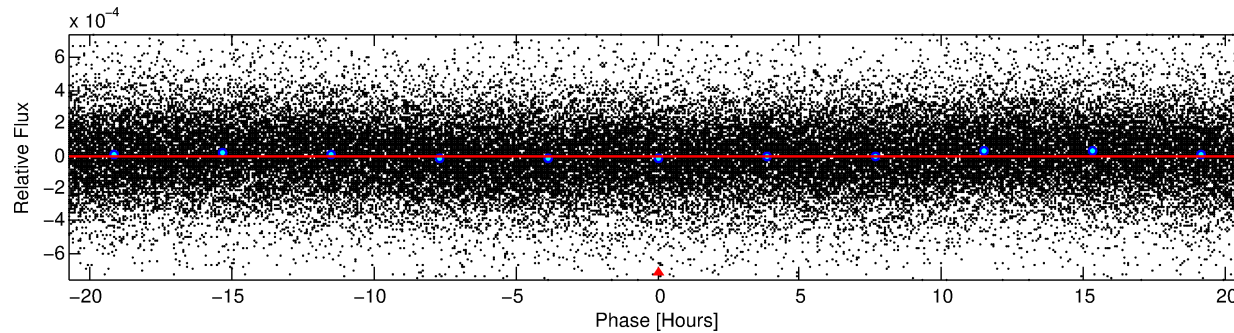
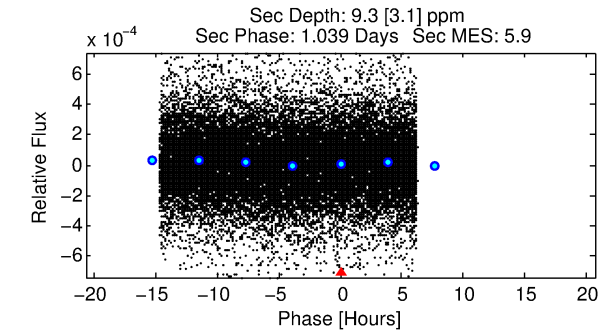
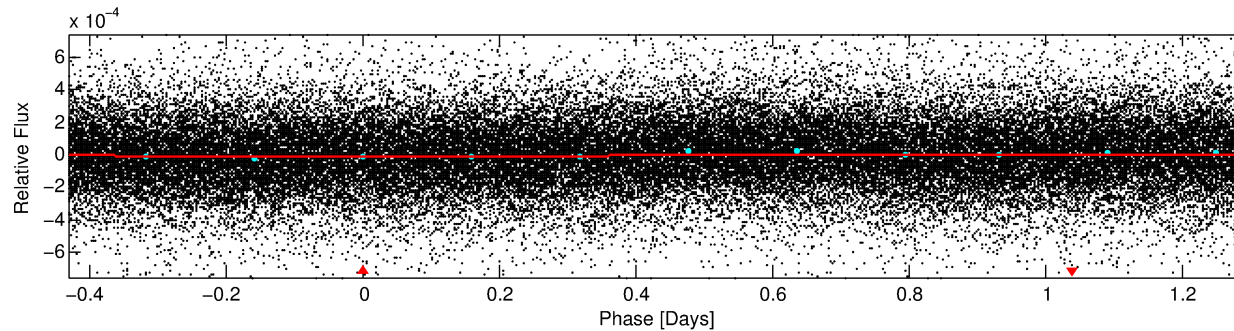
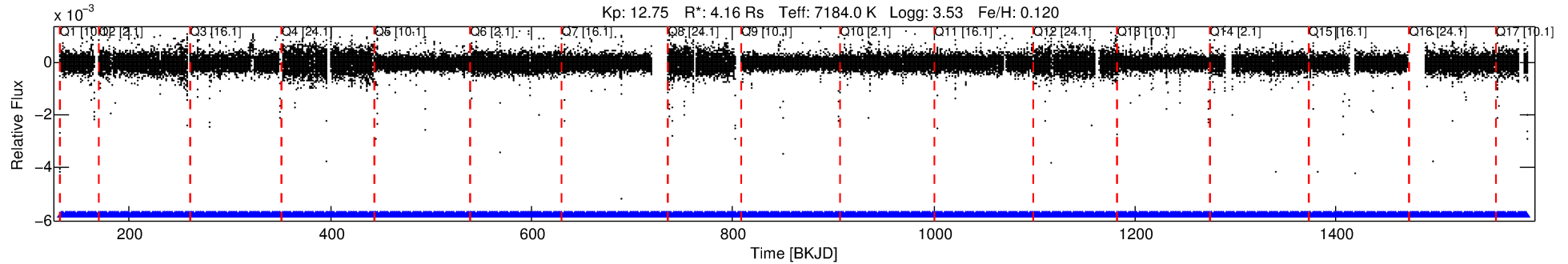
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 003338680-01

No Significant Match Found

DV One-Page Summary

KIC: 3338680 Candidate: 1 of 1 Period: 1.728 d



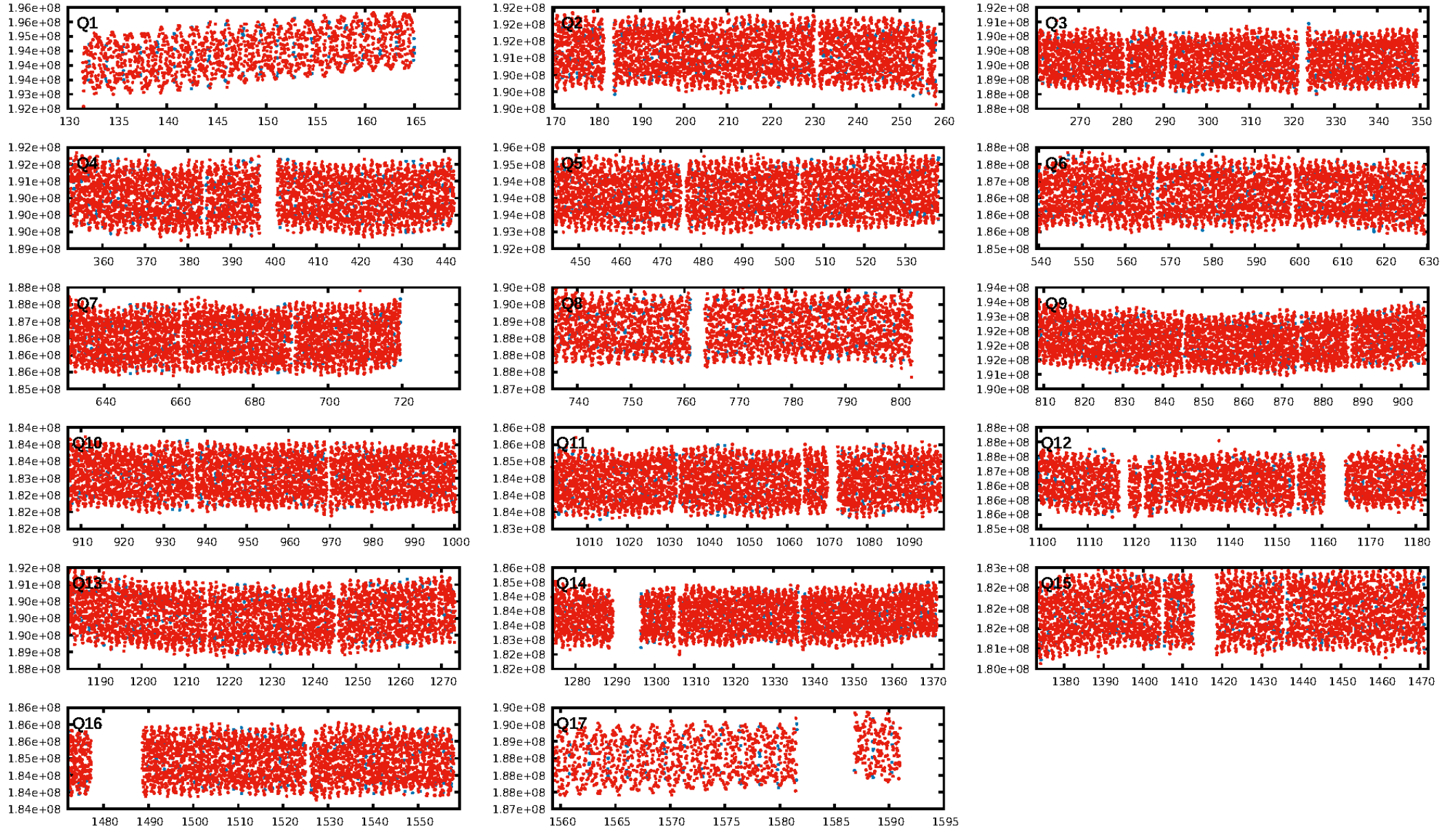
DV Fit Results:

Period = 1.72761 [0.00006] d
Epoch = 132.9995 [0.0223] BKJD
Rp/R* = 0.0035 [0.0008]
a/R* = 1.01 [0.01]
b = 0.89 [0.32]
Seff = 31449.94 [29379.75]
Teq = 3396 [793] K
Rp = 1.60 [0.92] Re
a = 0.0362 [0.0200] AU
Ag = 2.61 [2.79] [0.58σ]
Teffp = 6673 [966] K [2.62σ]

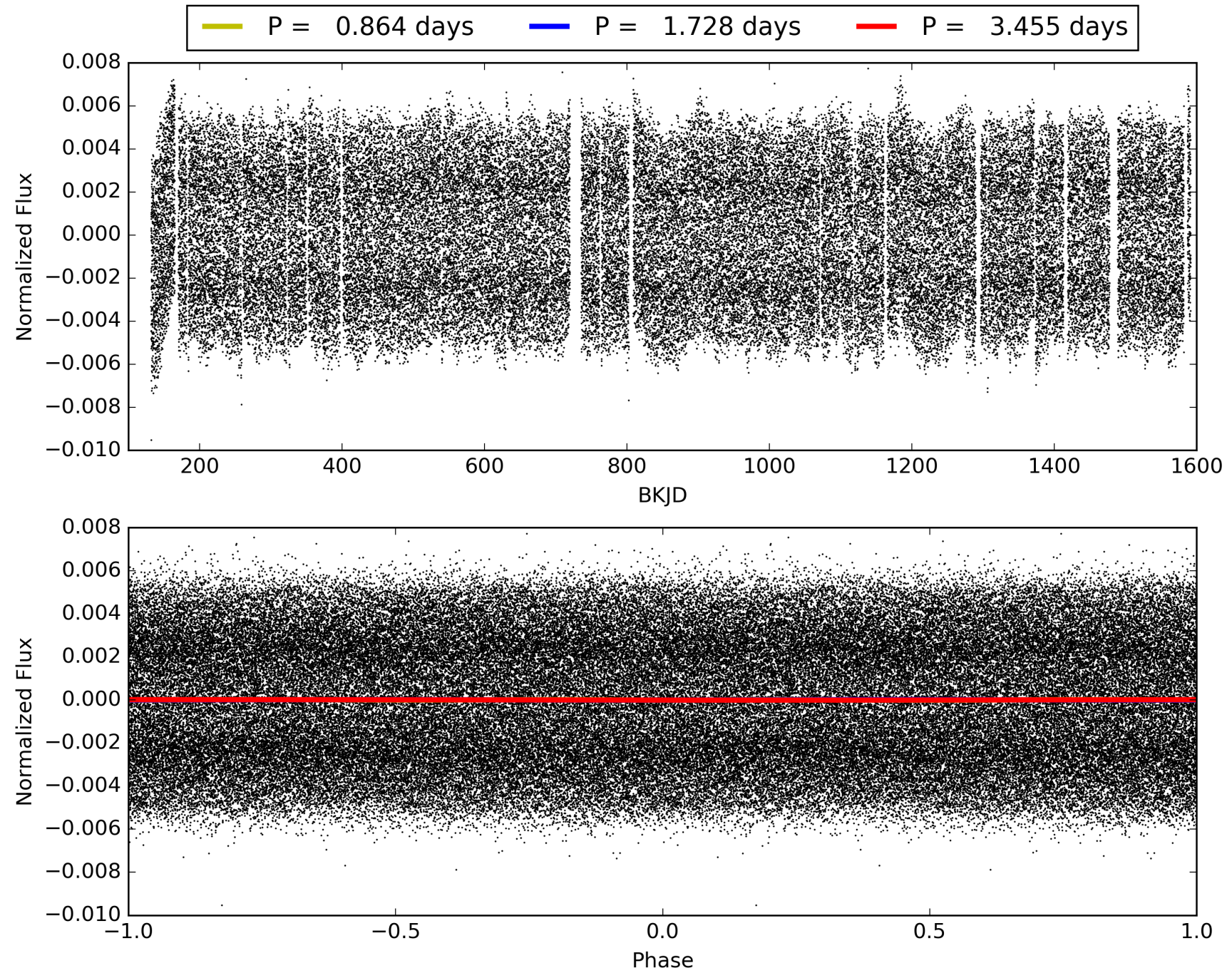
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [763/763]
GhostDiagnostic-chr: 2.434
Centroid-sig: 0.5%
Centroid-so: 2.137 arcsec [1.84σ]
OotOffset-rm: N/A
KicOffset-rm: N/A
OotOffset-st: 0/0/0/0 [0]
KicOffset-st: 0/0/0/0 [0]
DiffImageQuality-fgm: N/A
DiffImageOverlap-fno: 1.00 [17/17]

TCE 003338680-01, PDC Light Curves

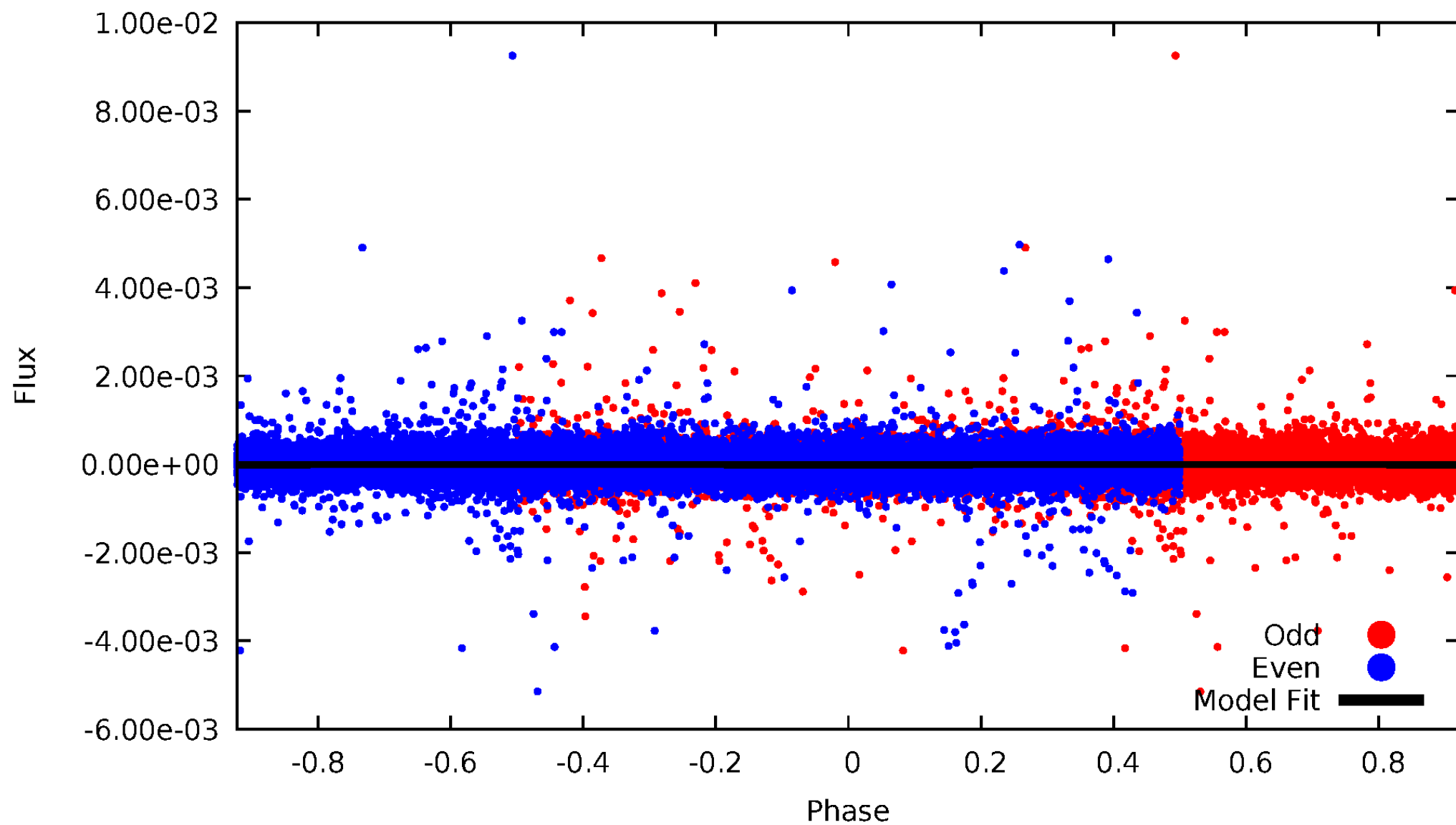


TCE 003338680-01



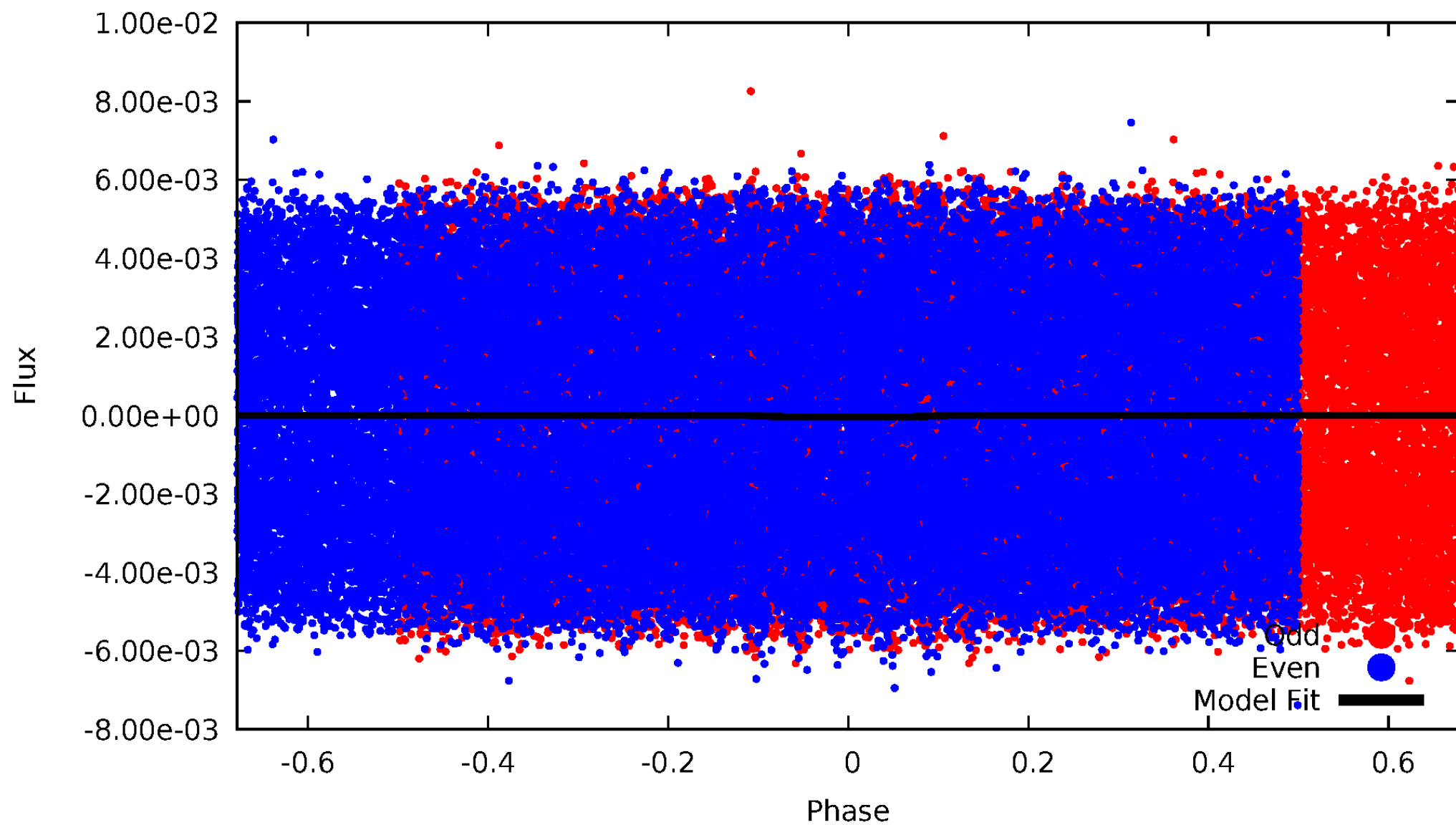
DV Odd/Even

TCE 003338680-01



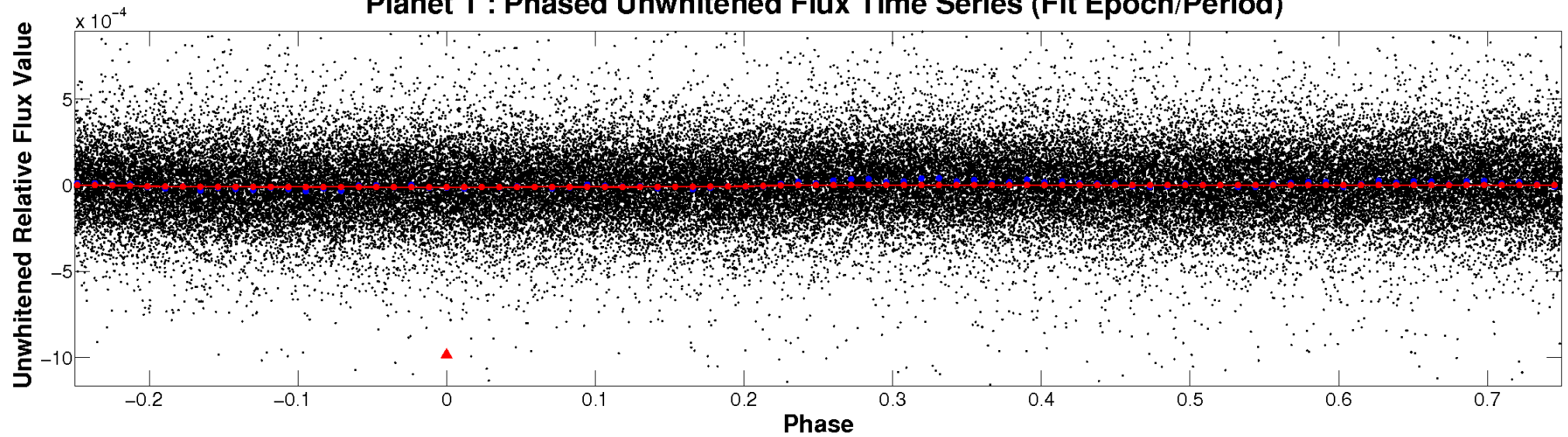
ALT Odd/Even

TCE 003338680-01

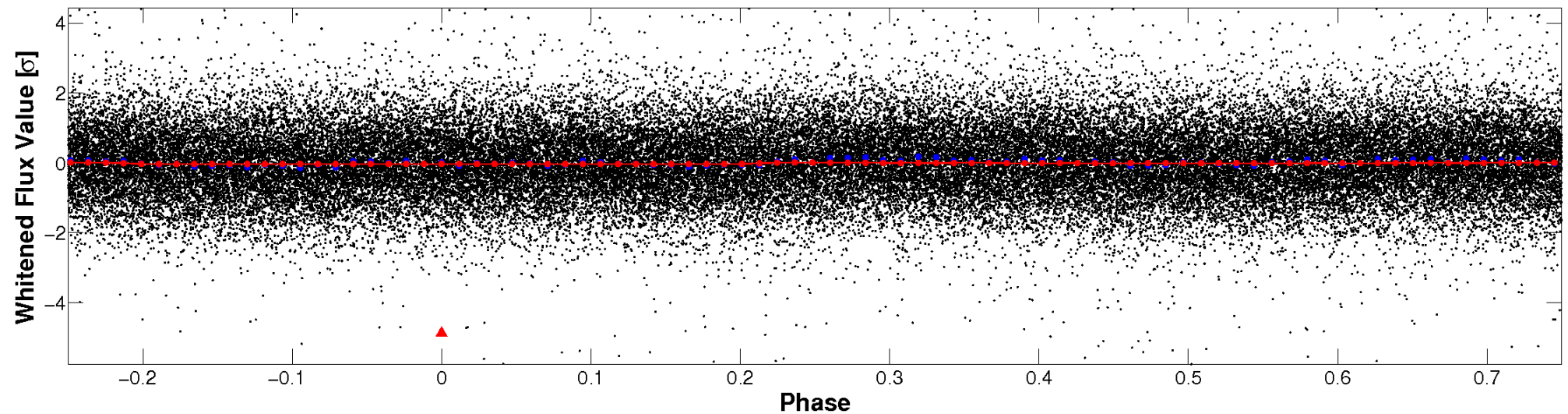


Non-Whitened Vs. Whitened Light Curve

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

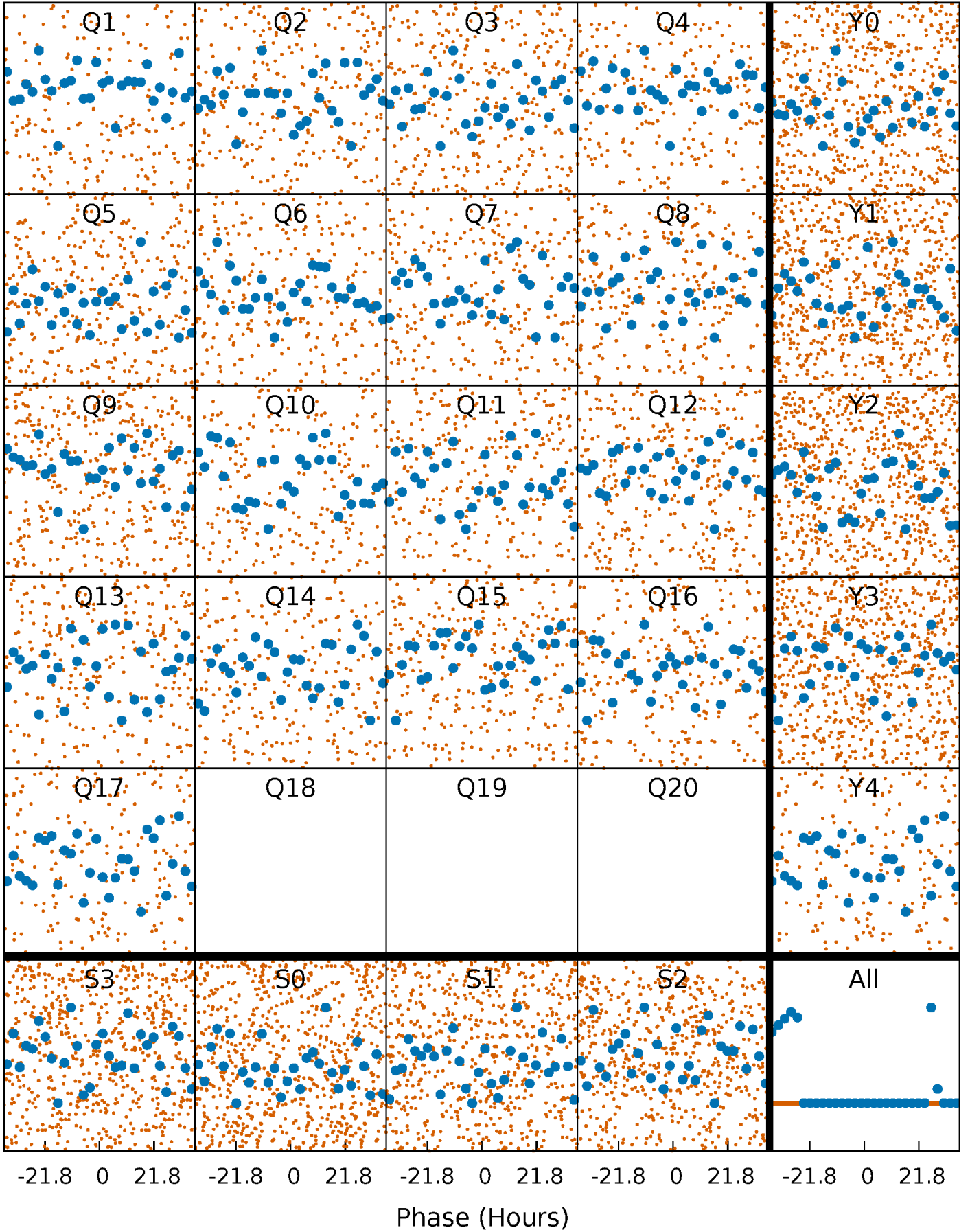


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



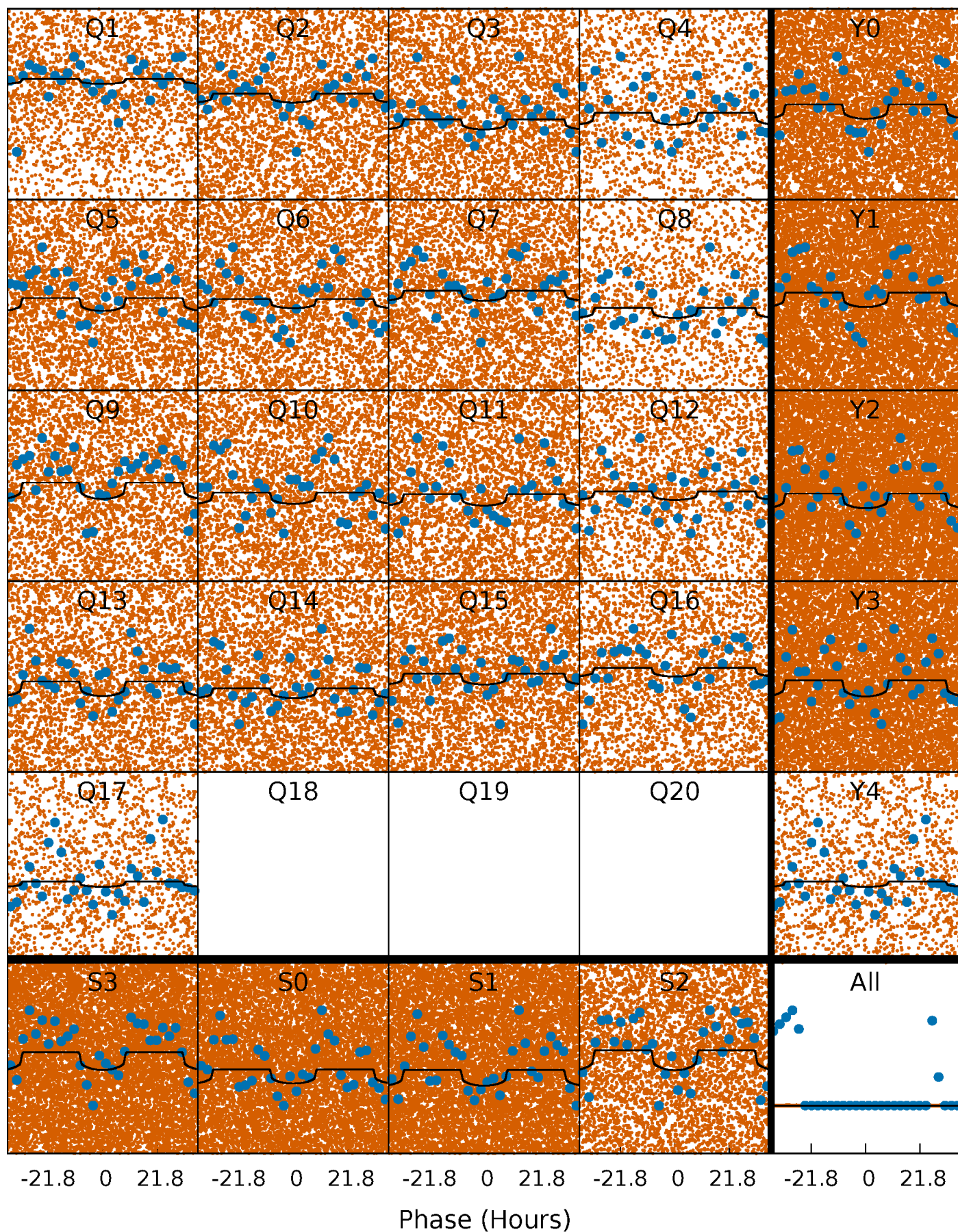
PDC Quarter-Phased Transit Curves

TCE 003338680-01 P= 1.727607 Days $T_0=132.999455$ (BKJD)



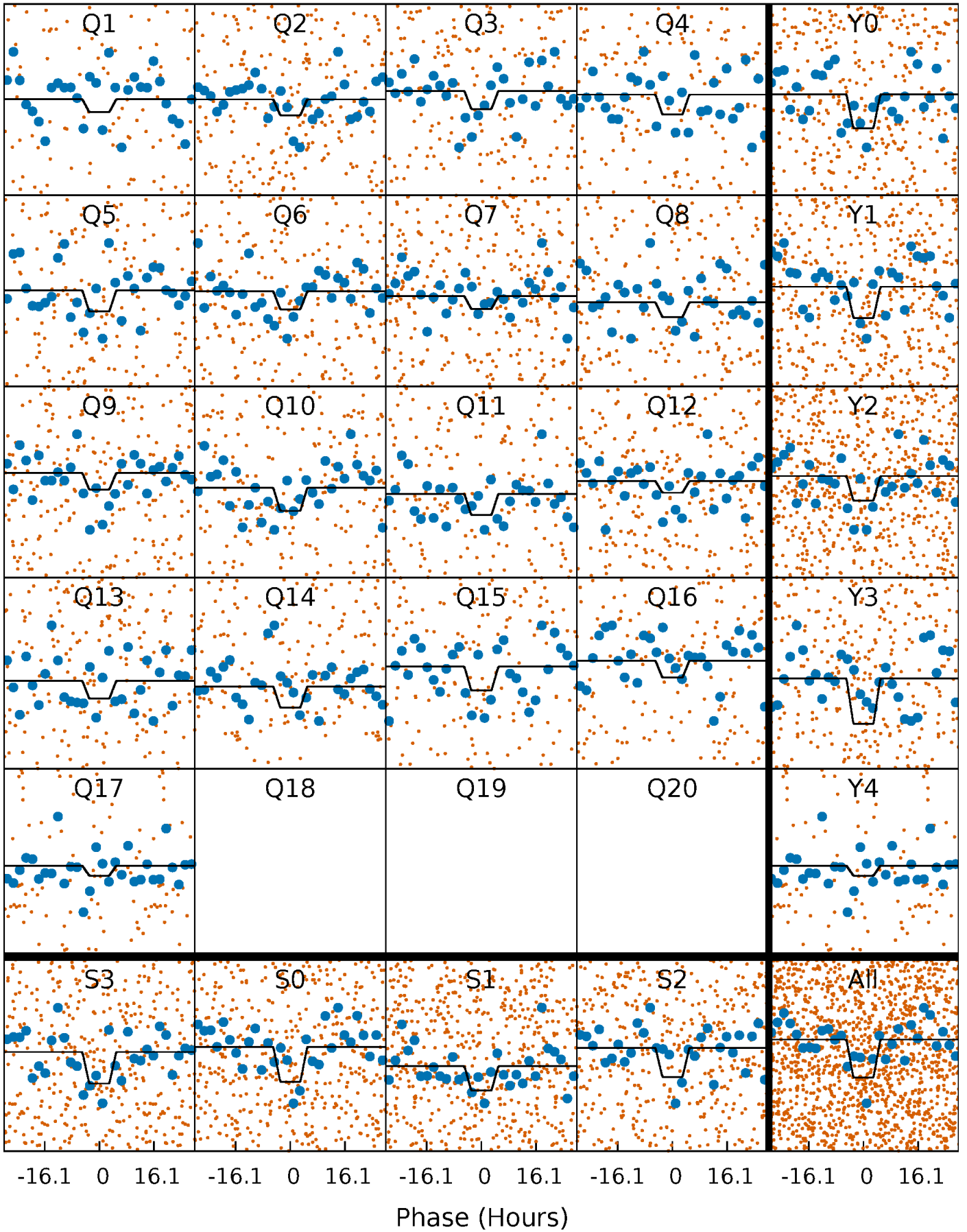
DV Quarter-Phased Transit Curves

TCE 003338680-01 P= 1.727607 Days $T_0=132.999455$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

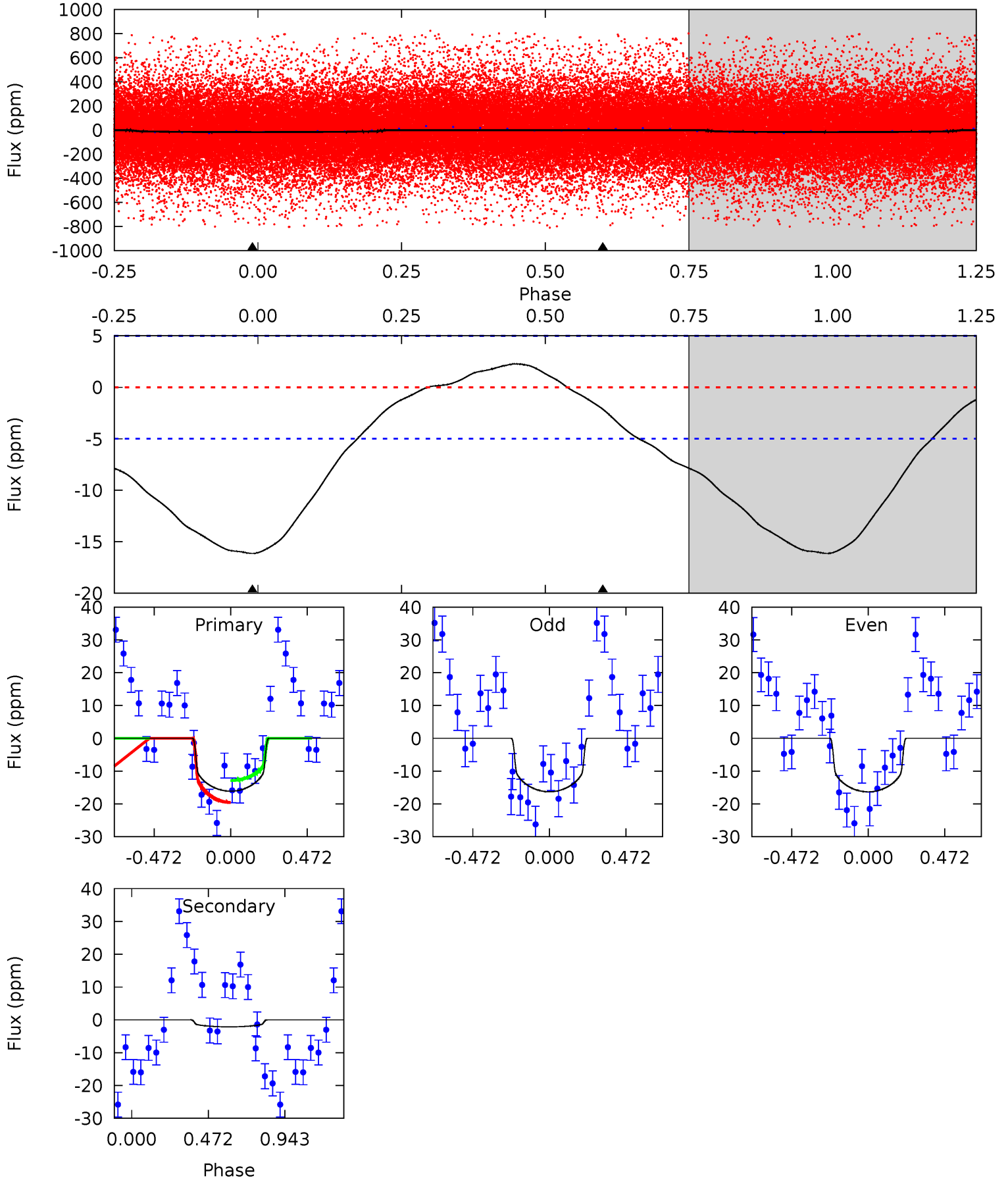
TCE 003338680-01 P= 1.727143 Days $T_0=133.017205$ (BKJD)



DV Model-Shift Uniqueness Test

003338680-01, P = 1.727607 Days, E = 131.271848 Days

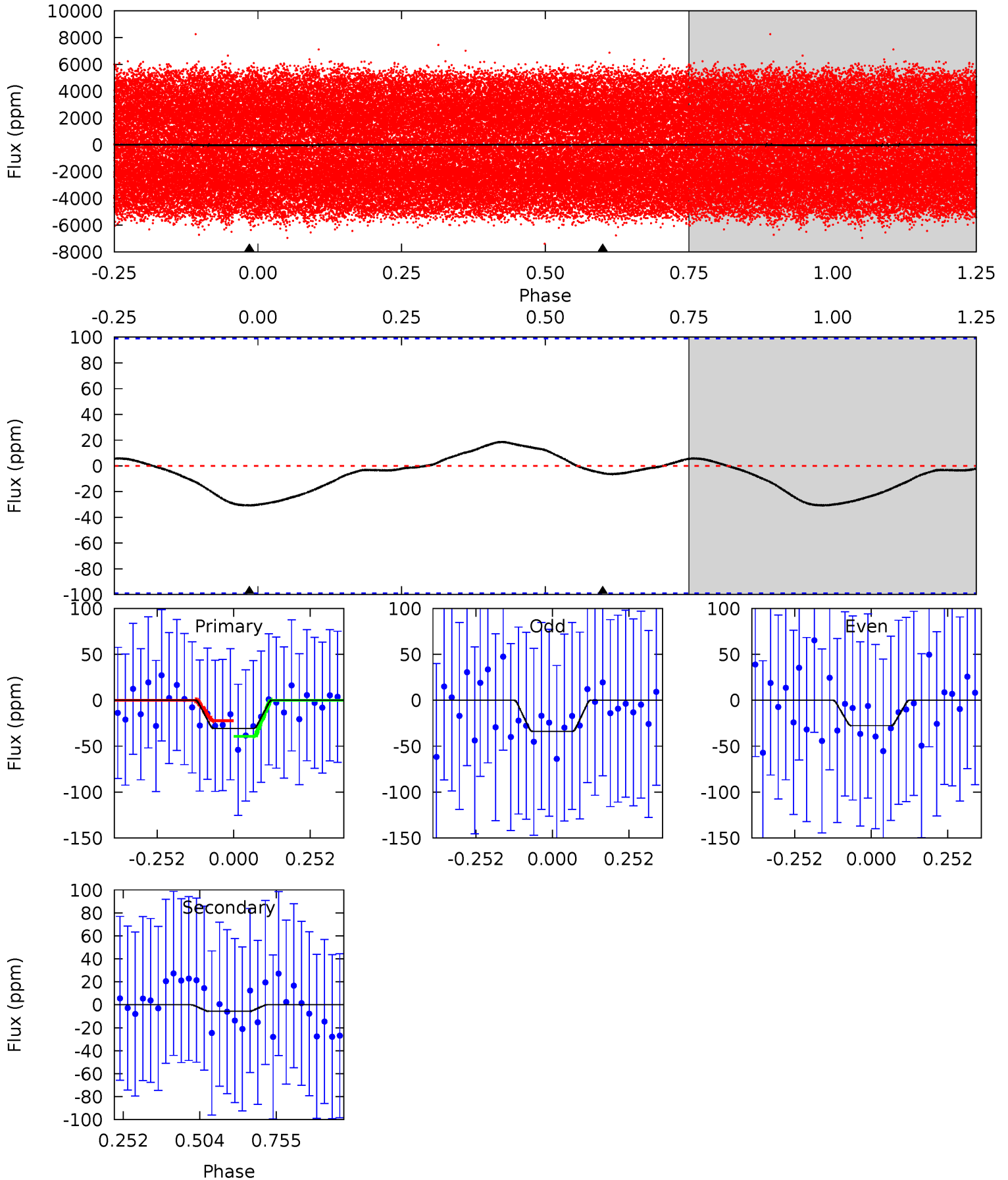
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.7	1.80	0	0	4.23	0.72	0.45	13.7	13.7	1.80	1.80	0.01	1.55	0.12	2.86



Alt Model-Shift Uniqueness Test

003338680-01, P = 1.727143 Days, E = 131.290062 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
1.35	0.25	0	0	4.37	1.15	0.15	1.35	1.35	0.25	0.25	0.14	1.76	0.38	0.37



Stellar Parameters For KIC 003338680

	$T_{\text{eff}} (K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7184^{+199}_{-323}	$3.527^{+0.551}_{-0.058}$	$0.120^{+0.200}_{-0.300}$	$4.157^{+0.389}_{-2.204}$	$2.121^{+0.198}_{-0.556}$	$0.042^{+0.281}_{-0.008}$
	+3%/-4%	+16%/-2%	+167%/-250%	+9%/-53%	+9%/-26%	+676%/-19%
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 003338680-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-2 ± 1	$1.44^{+0.44}_{-0.44}$	4559^{+312}_{-548}	4161^{+945}_{-7047}	$0.695^{+0.900}_{-0.428}$
Alt.	-6 ± 23	$2.44^{+0.55}_{-0.70}$	4552^{+317}_{-610}	4241^{+2406}_{-10392}	$0.681^{+3.189}_{-3.141}$

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

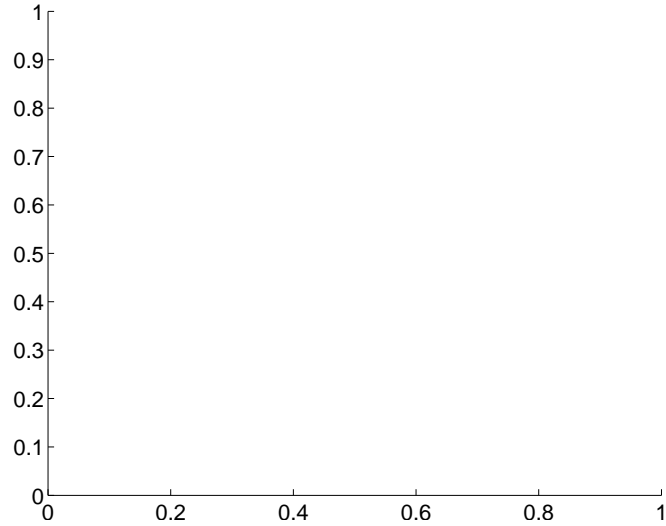
Supplemental centroid analysis for 003338680-01. Kepler magnitude: 12.75. Transit SNR 5.47

There are 0 quarters with good PRF difference image offsets

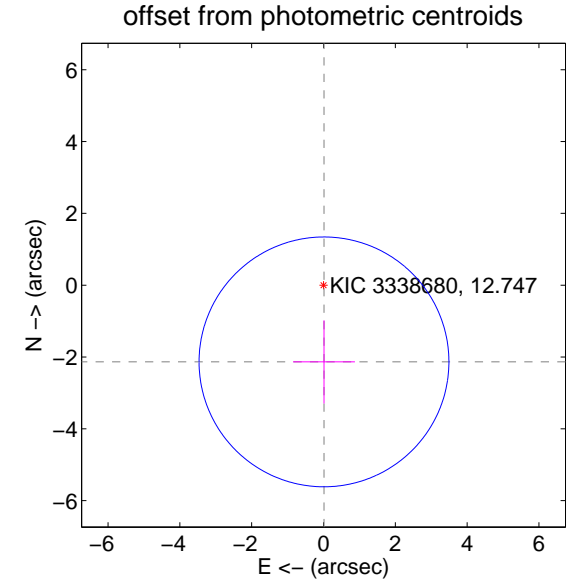
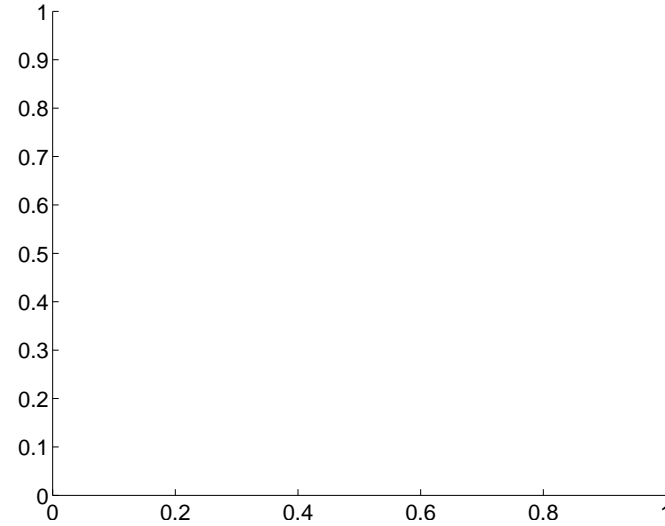
The direct PRF centroid is offset from the target star catalog position by about NaN arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	—	—	—	—
PRF-fit source offset from KIC position	—	—	—	—
photometric centroid source offset	2.14 ± 1.16	1.84	-0.01 ± 0.86	-2.14 ± 1.16

There is no PRF-fit offset from OOT-fit

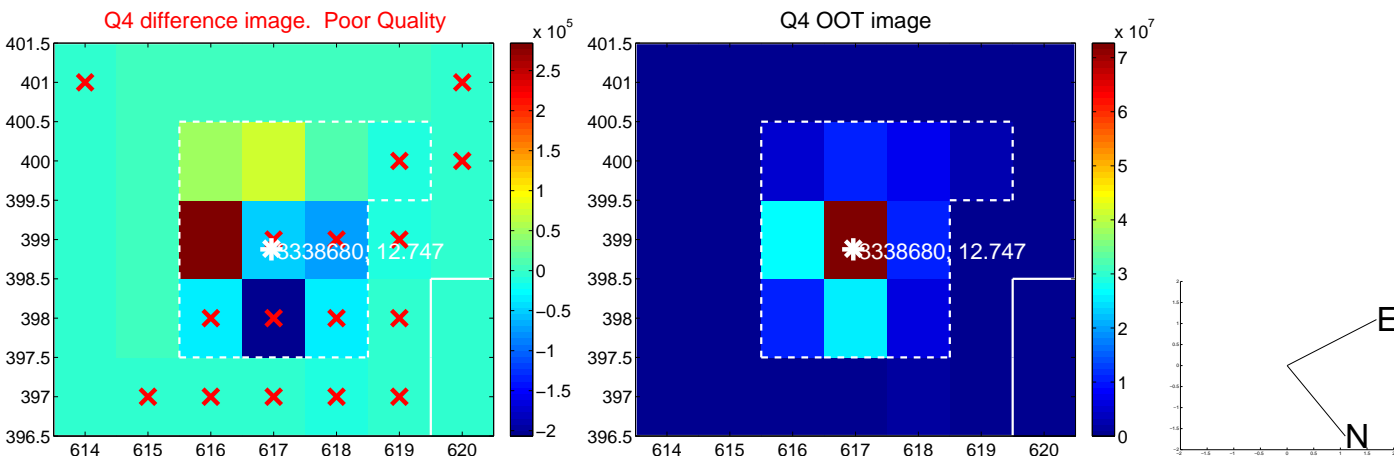
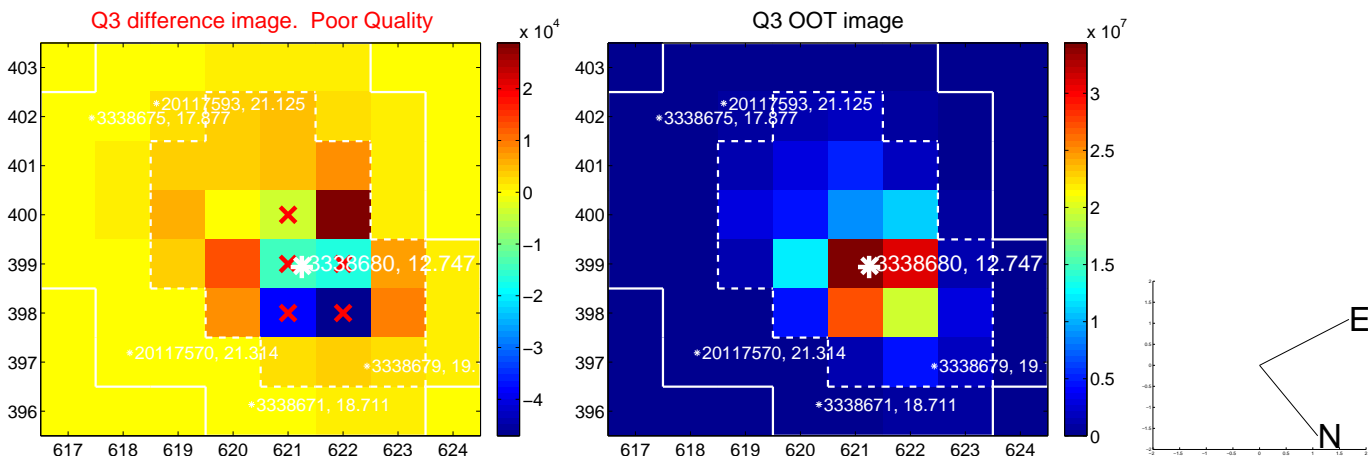
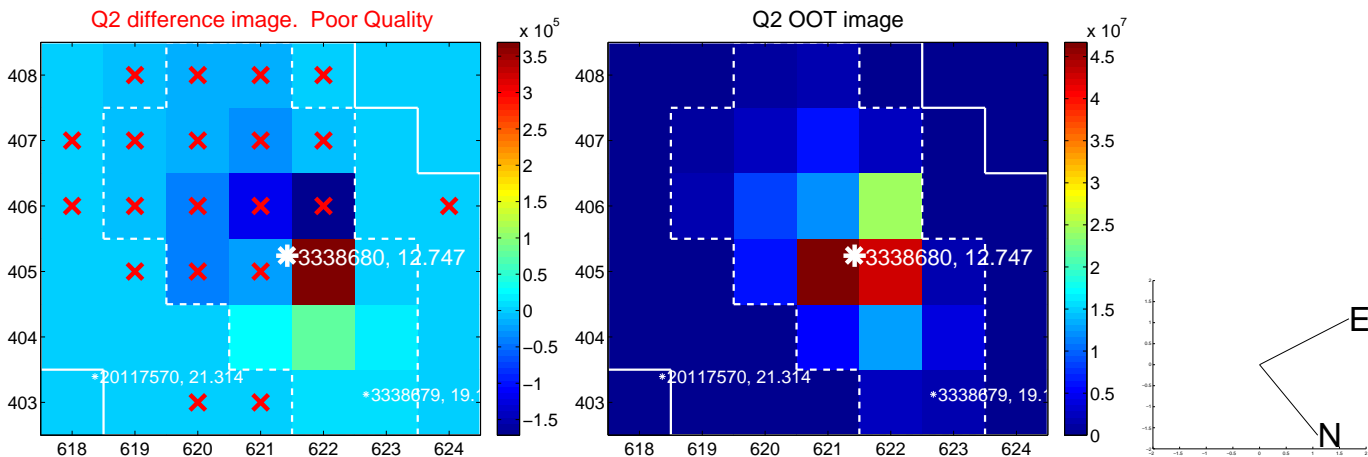
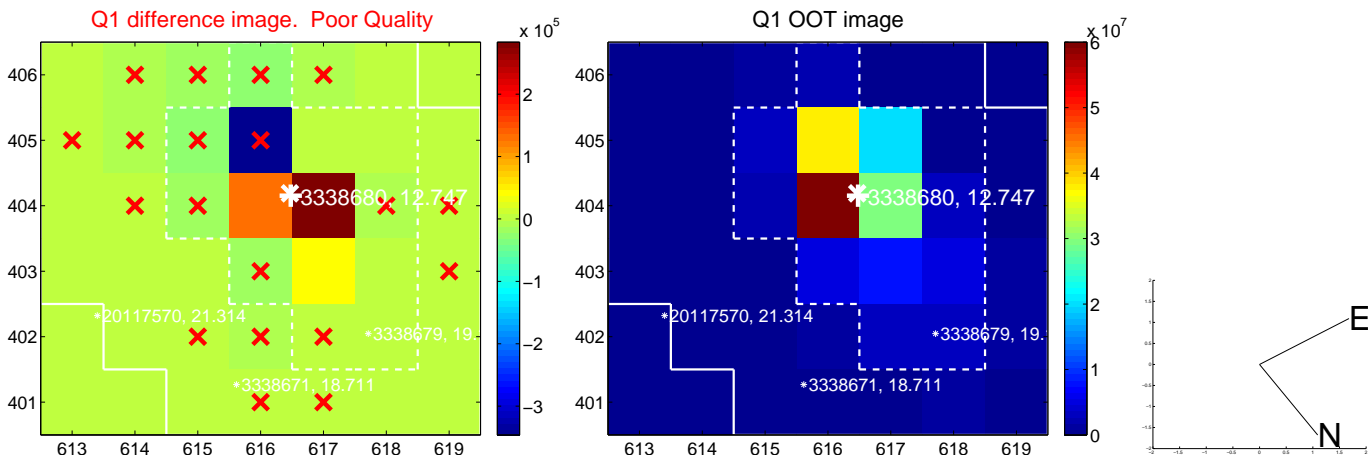


There is no PRF-fit offset from KIC

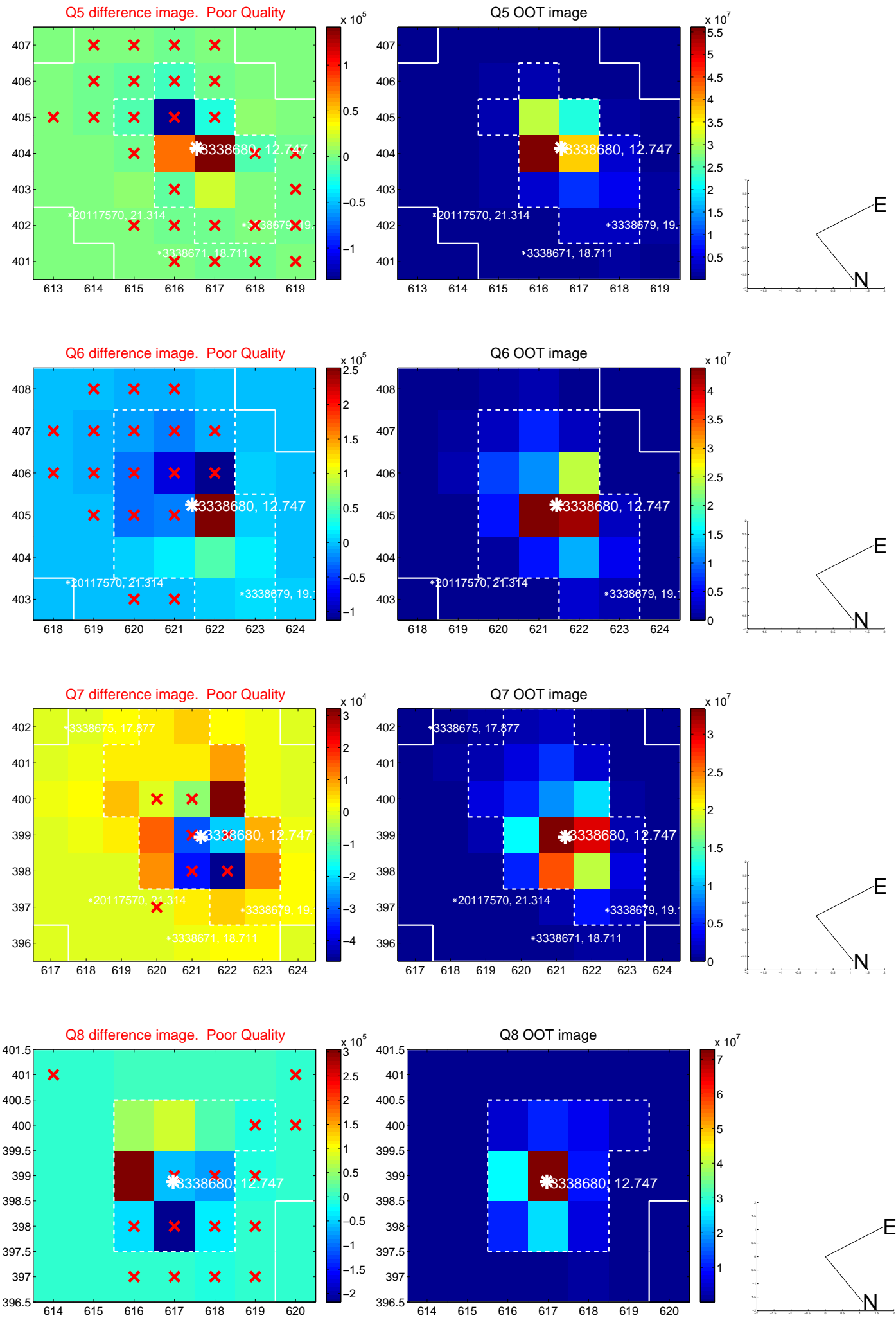


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

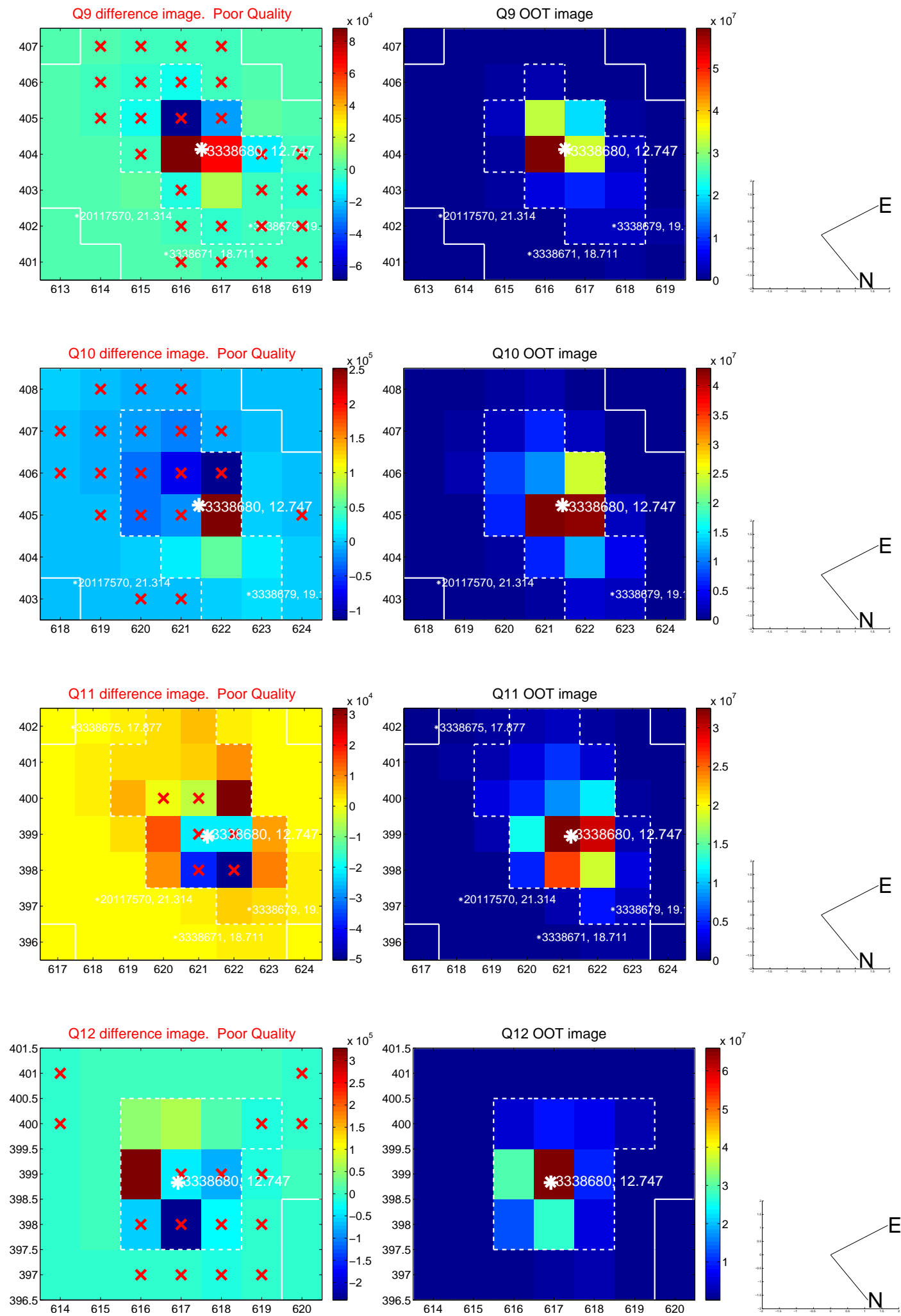
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



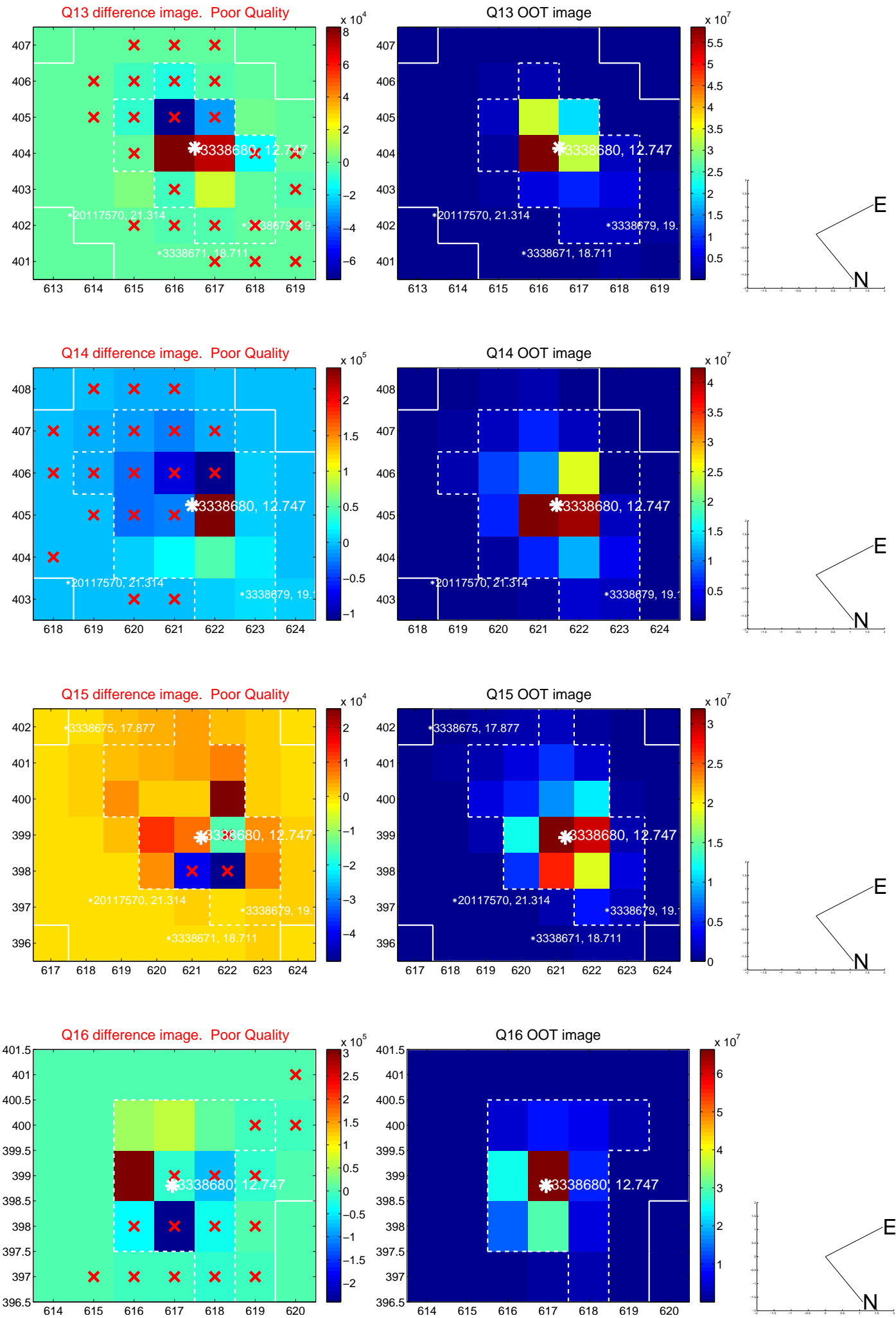
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



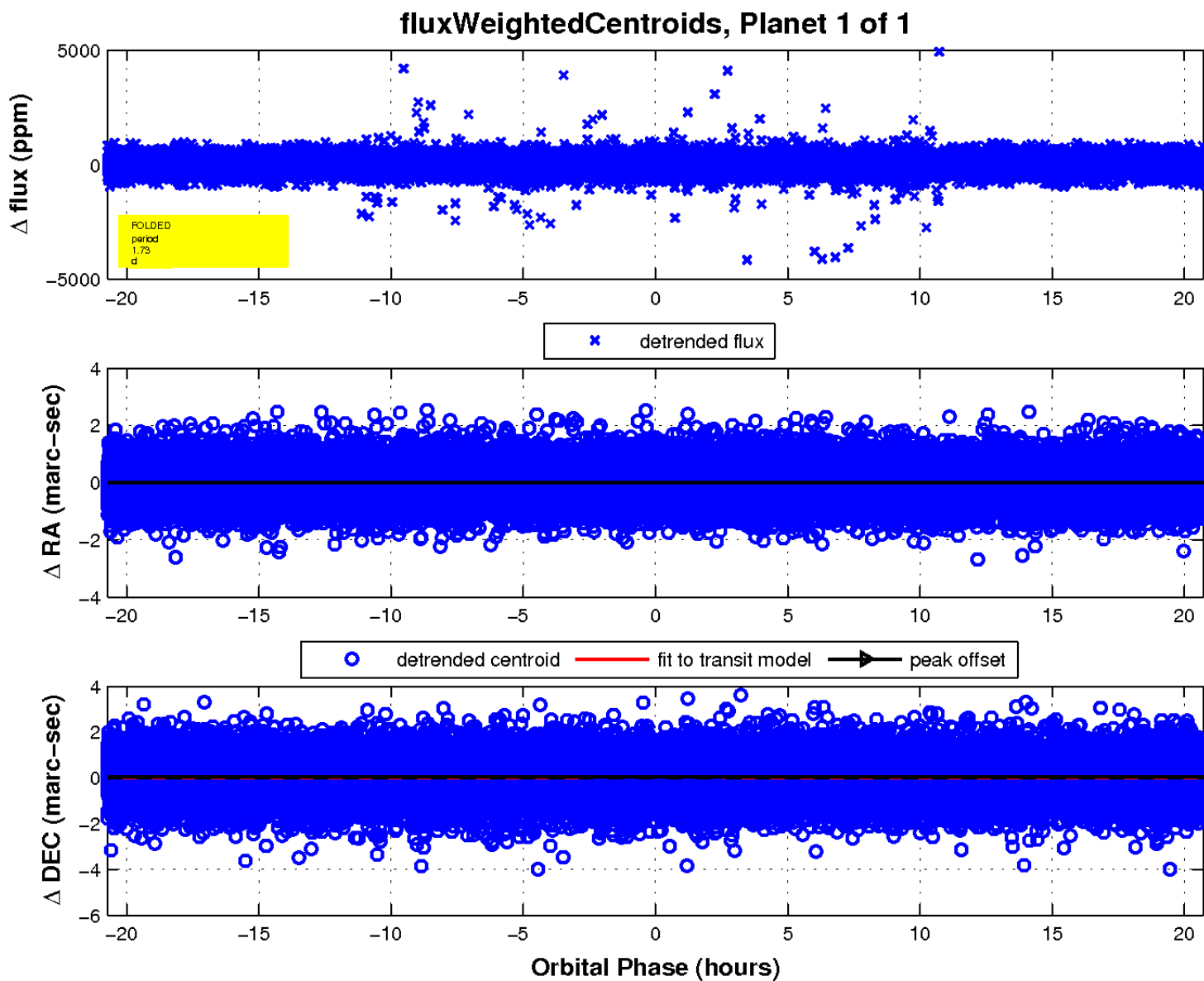
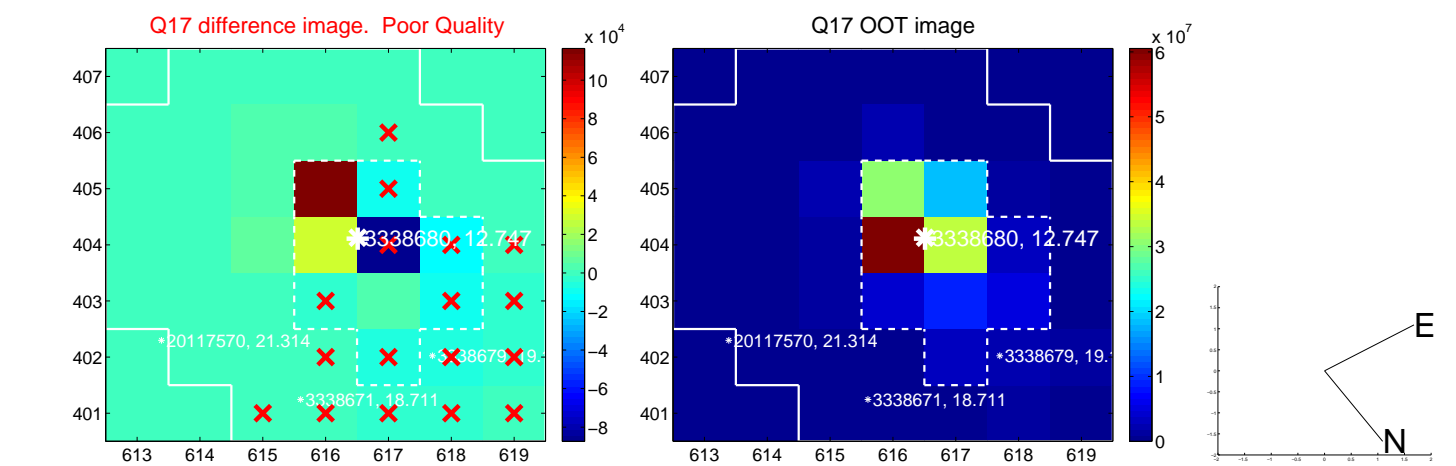
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UKIRT Image

Declination

