

KIC 005286780

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})
005286780-01	OBS	No	0.722436	131.854239	31.7	6.153	7.5	7.1	4.20	4973	2.29	0.00

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005286780-01	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.

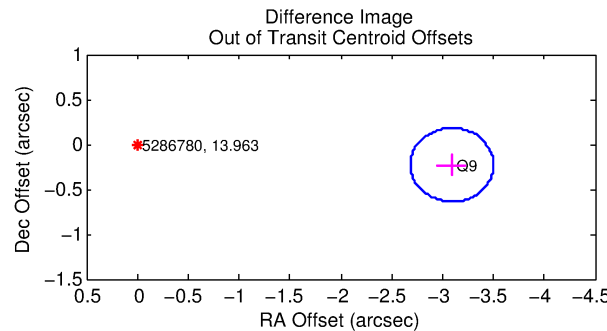
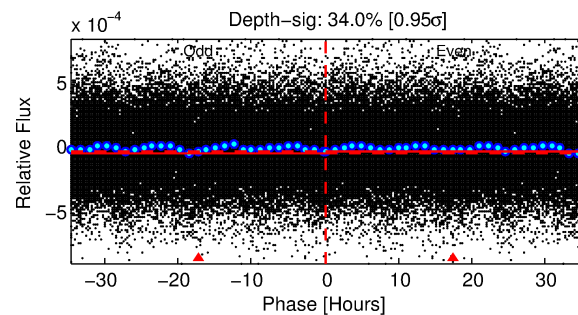
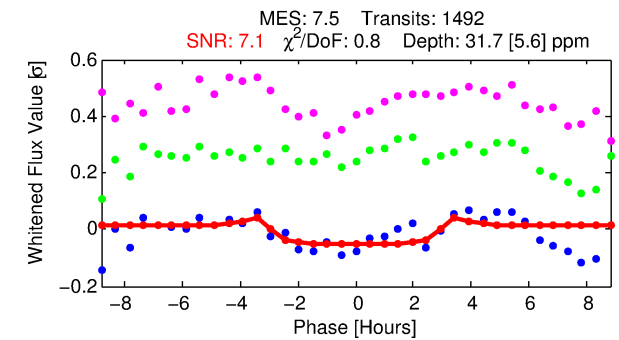
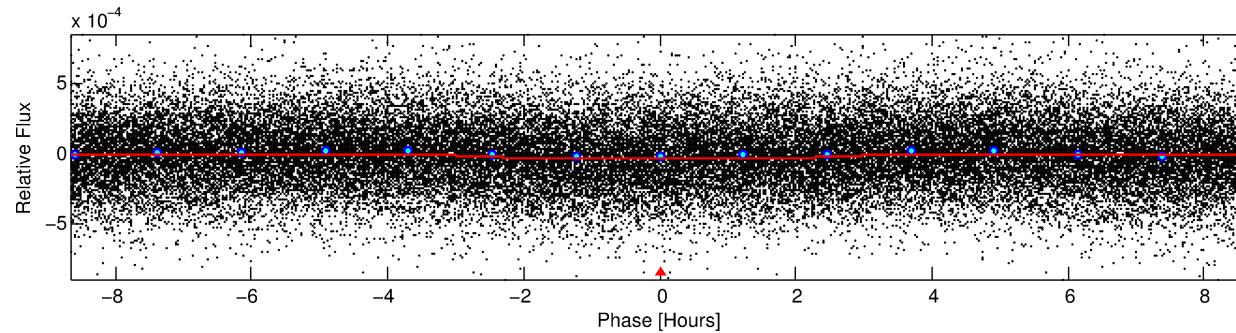
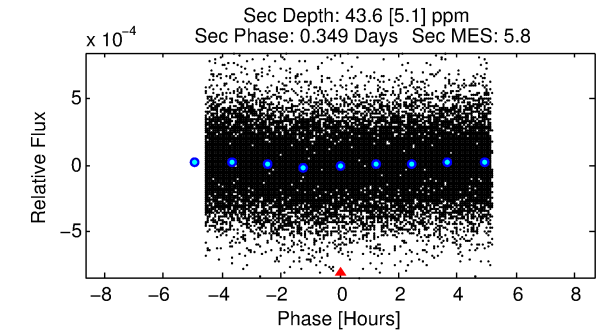
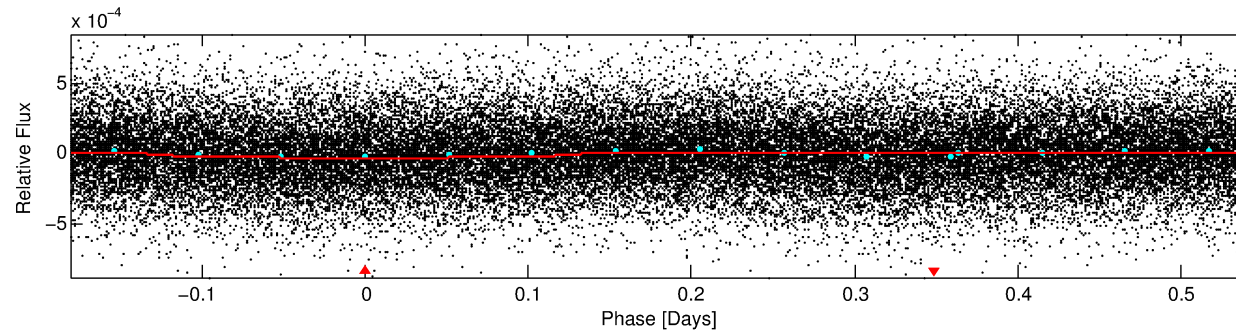
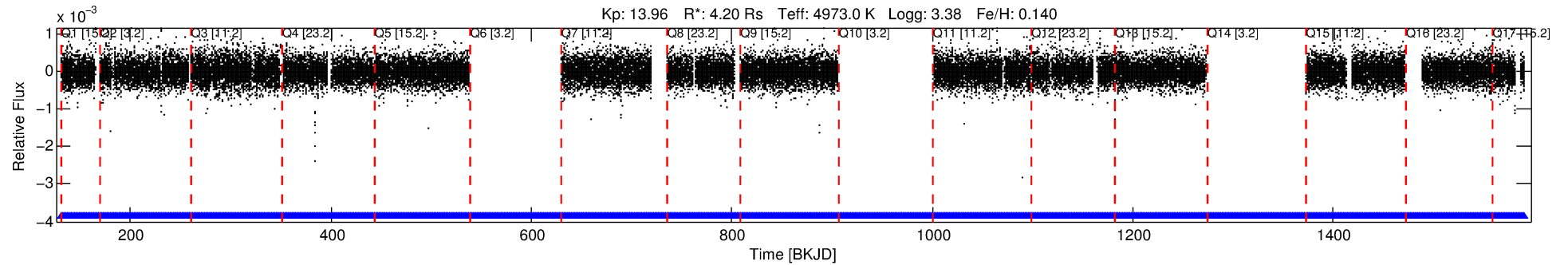
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005286780-01

No Significant Match Found

DV One-Page Summary

KIC: 5286780 Candidate: 1 of 1 Period: 0.722 d



DV Fit Results:

Period = 0.72244 [0.00001] d
Epoch = 131.8542 [0.0051] BKJD
Rp/R* = 0.0050 [0.0034]
a/R* = 1.12 [0.50]
b = 0.13 [18.12]
Seff = N/A
Teq = N/A
Rp = 2.29 [1.85] Re
a = N/A
Ag = N/A
Teff = N/A

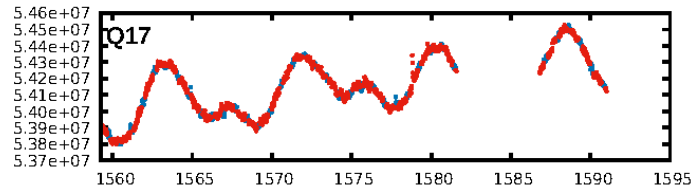
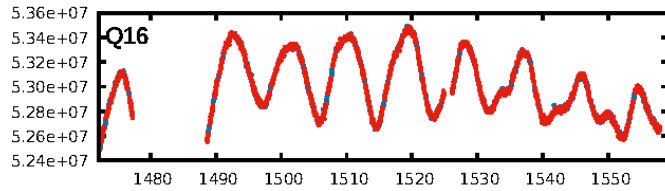
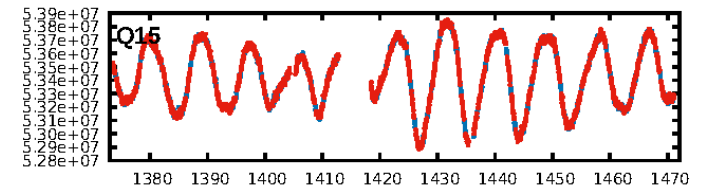
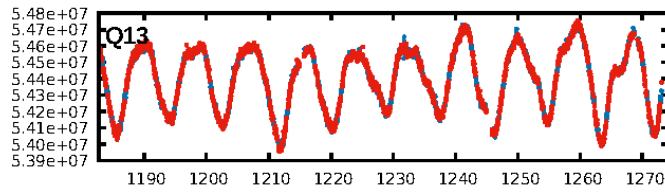
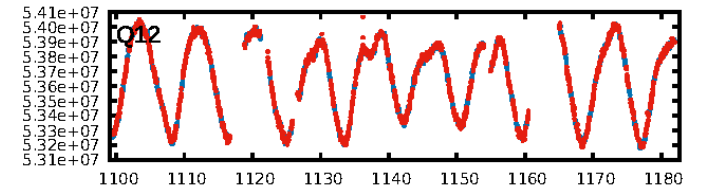
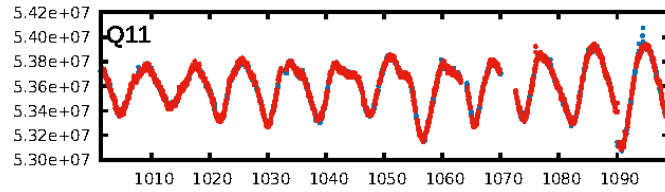
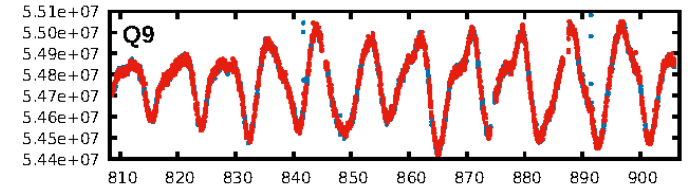
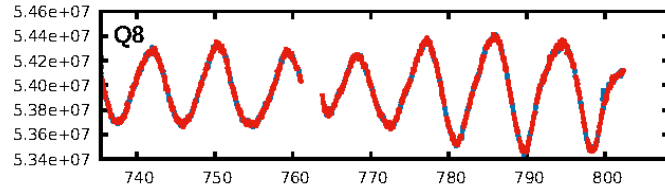
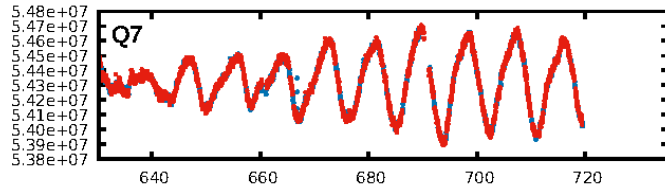
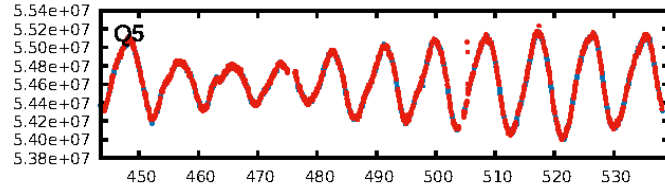
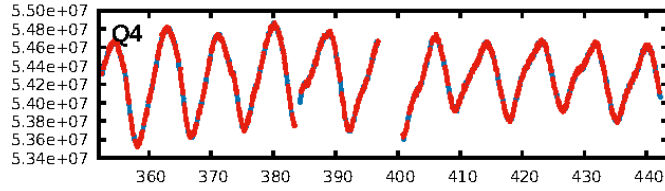
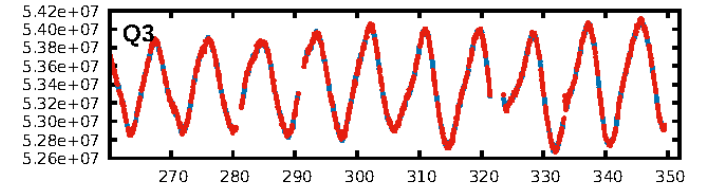
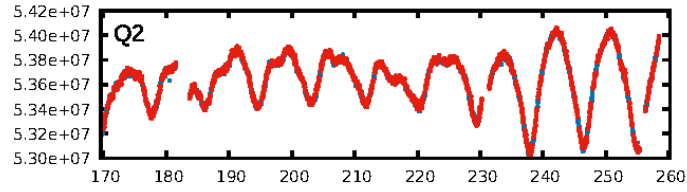
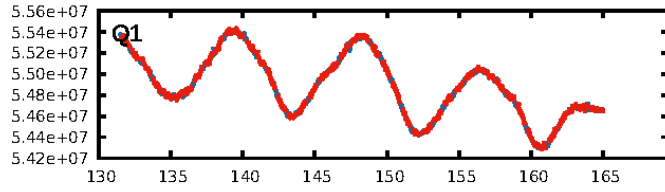
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [1408/1408]
GhostDiagnostic-chr: 0.9302
Centroid-sig: 2.5%
Centroid-so: 1.664 arcsec [1.65 σ]
OotOffset-rm: 3.098 arcsec [22.73 σ]
KicOffset-rm: 3.073 arcsec [22.53 σ]
OotOffset-st: 0/0/0/1 [1]
KicOffset-st: 0/0/0/1 [1]
DiffImageQuality-fgm: 0.00 [0/1]
DiffImageOverlap-fno: 1.00 [14/14]

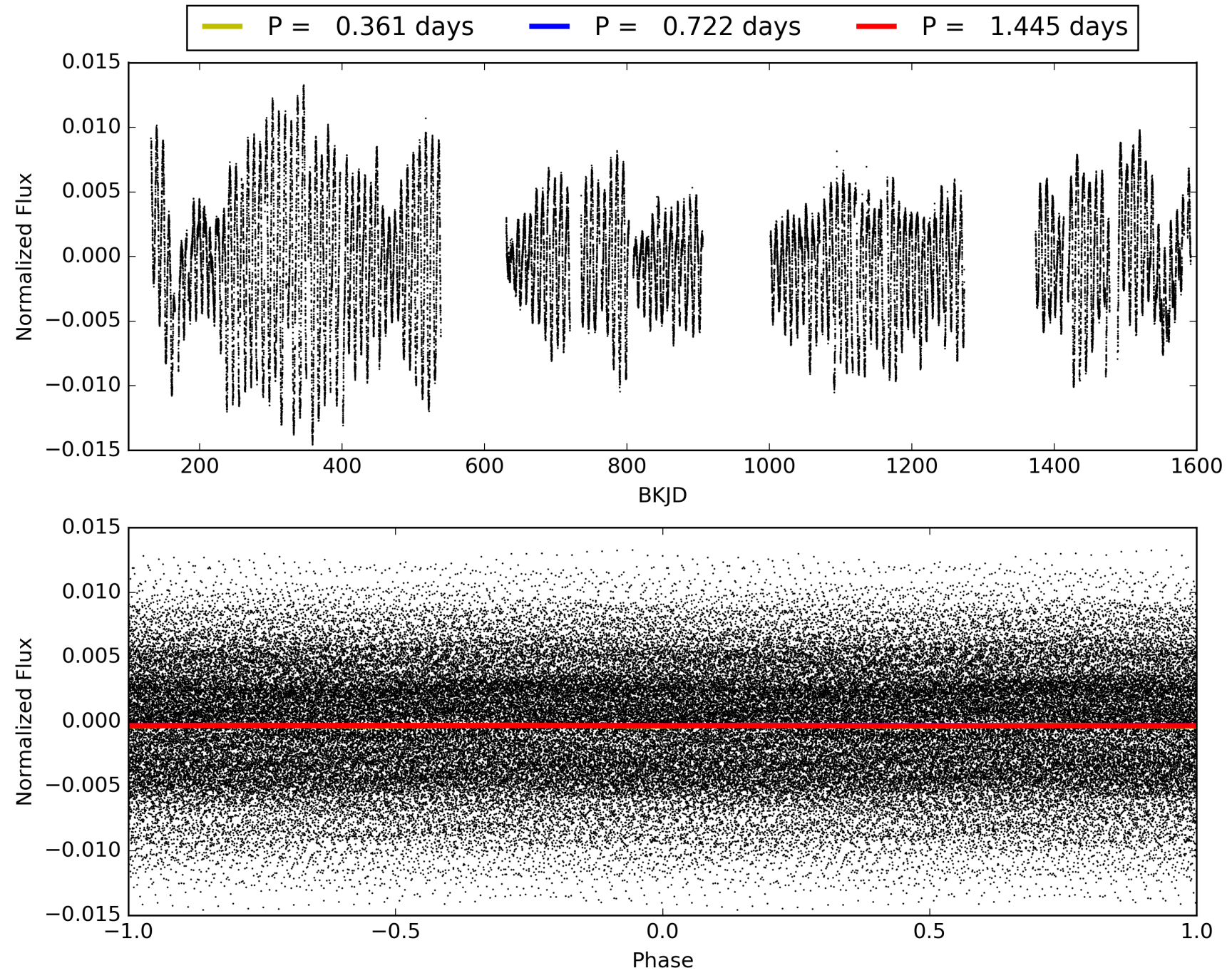
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 03:14:25 Z

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

TCE 005286780-01, PDC Light Curves

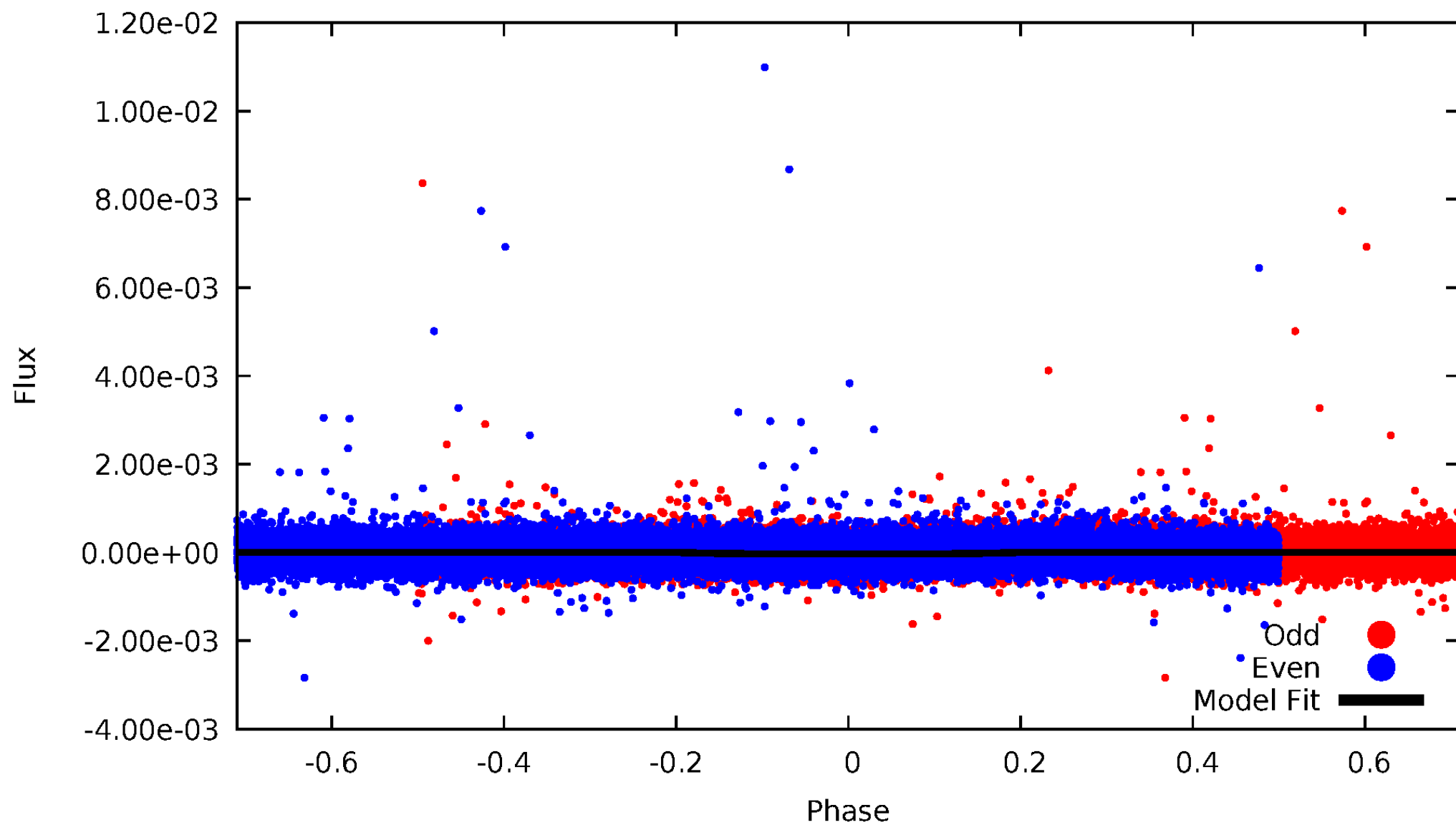


TCE 005286780-01



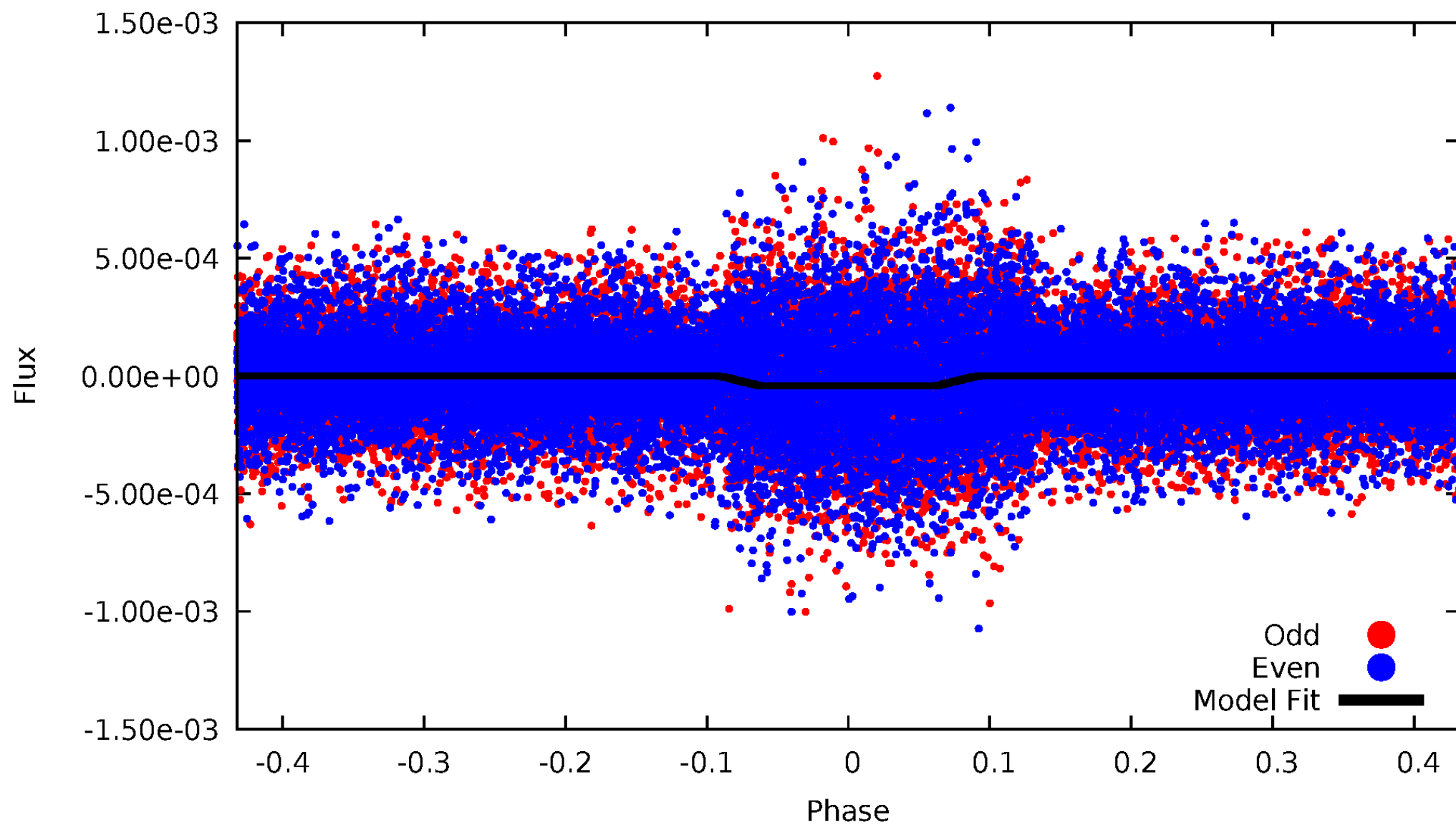
DV Odd/Even

TCE 005286780-01



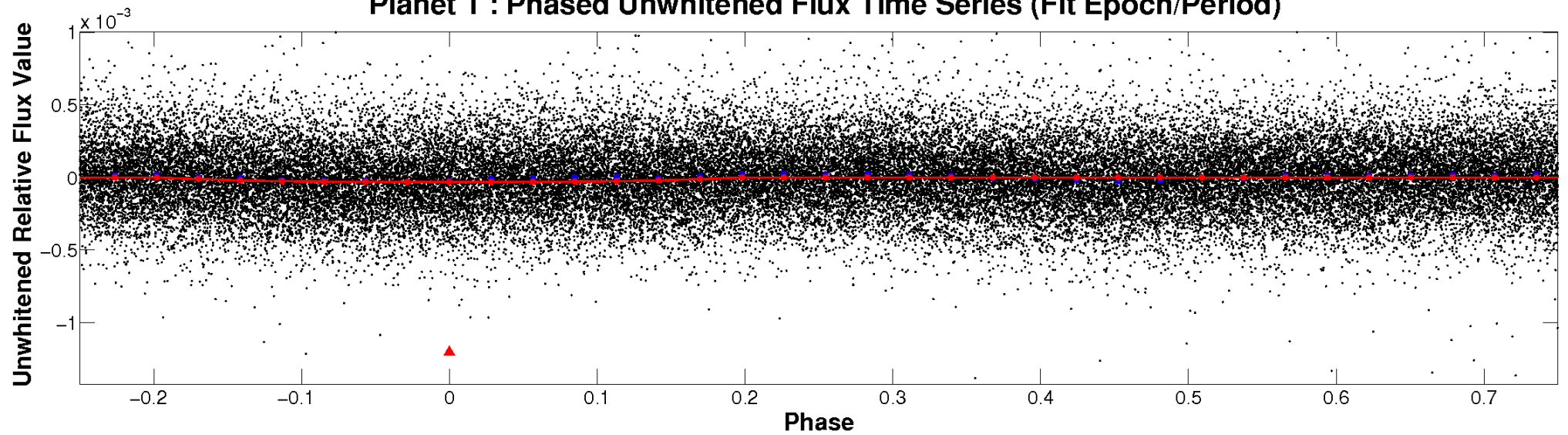
ALT Odd/Even

TCE 005286780-01

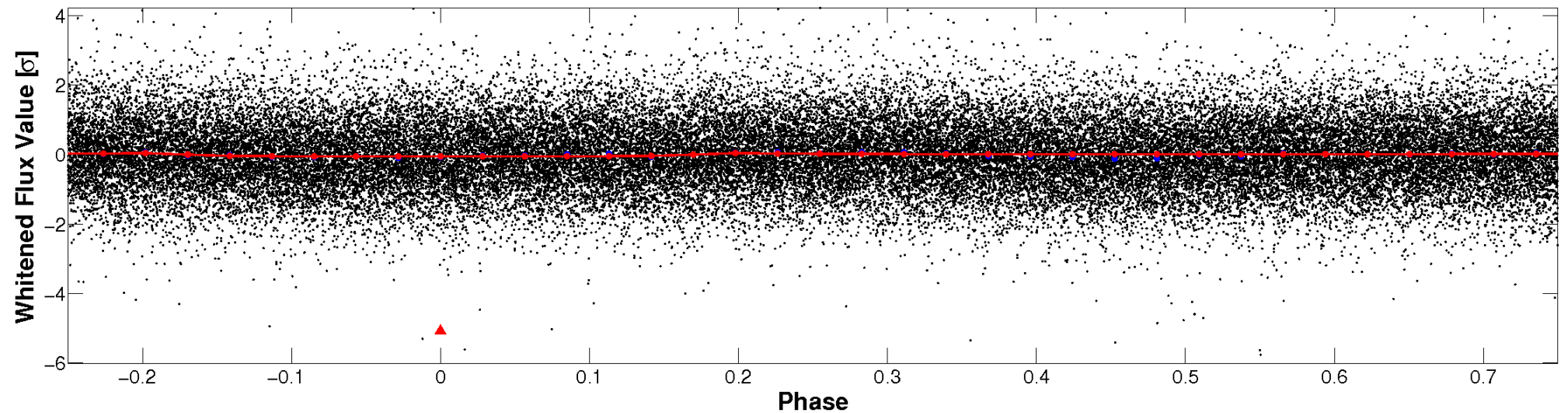


Non-Whitened Vs. Whitened Light Curve

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

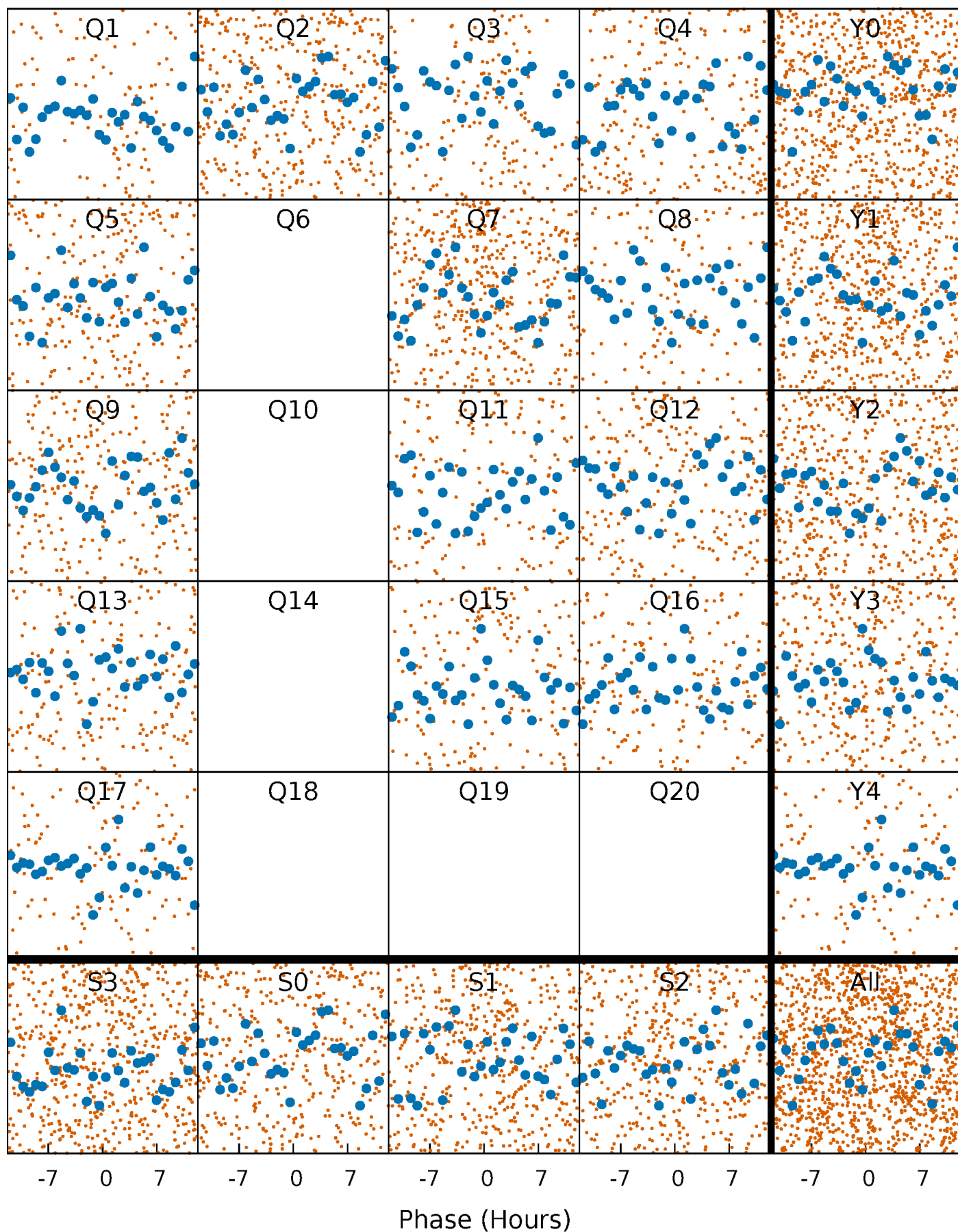


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



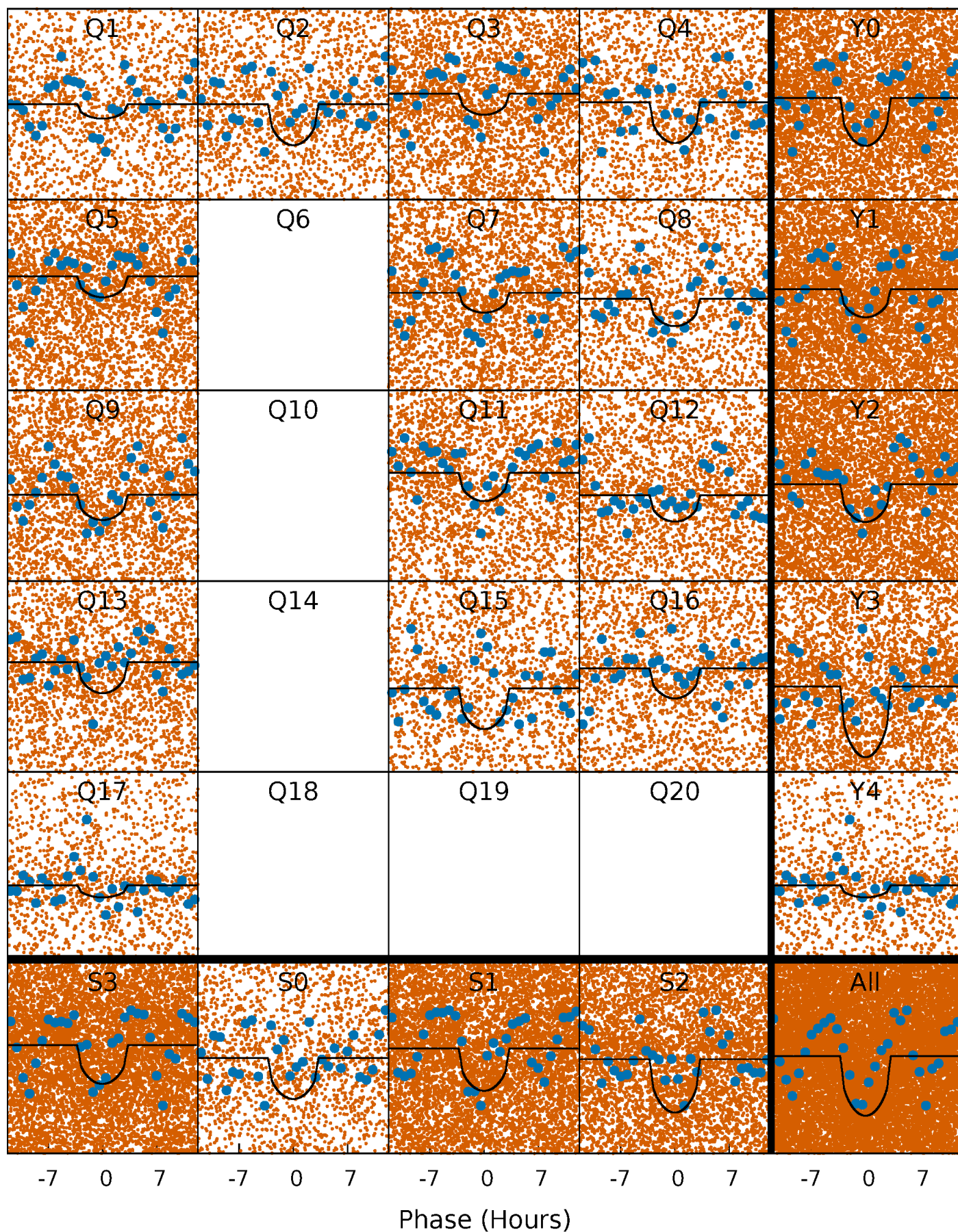
PDC Quarter-Phased Transit Curves

TCE 005286780-01 P= 0.722436 Days $T_0=131.854239$ (BKJD)



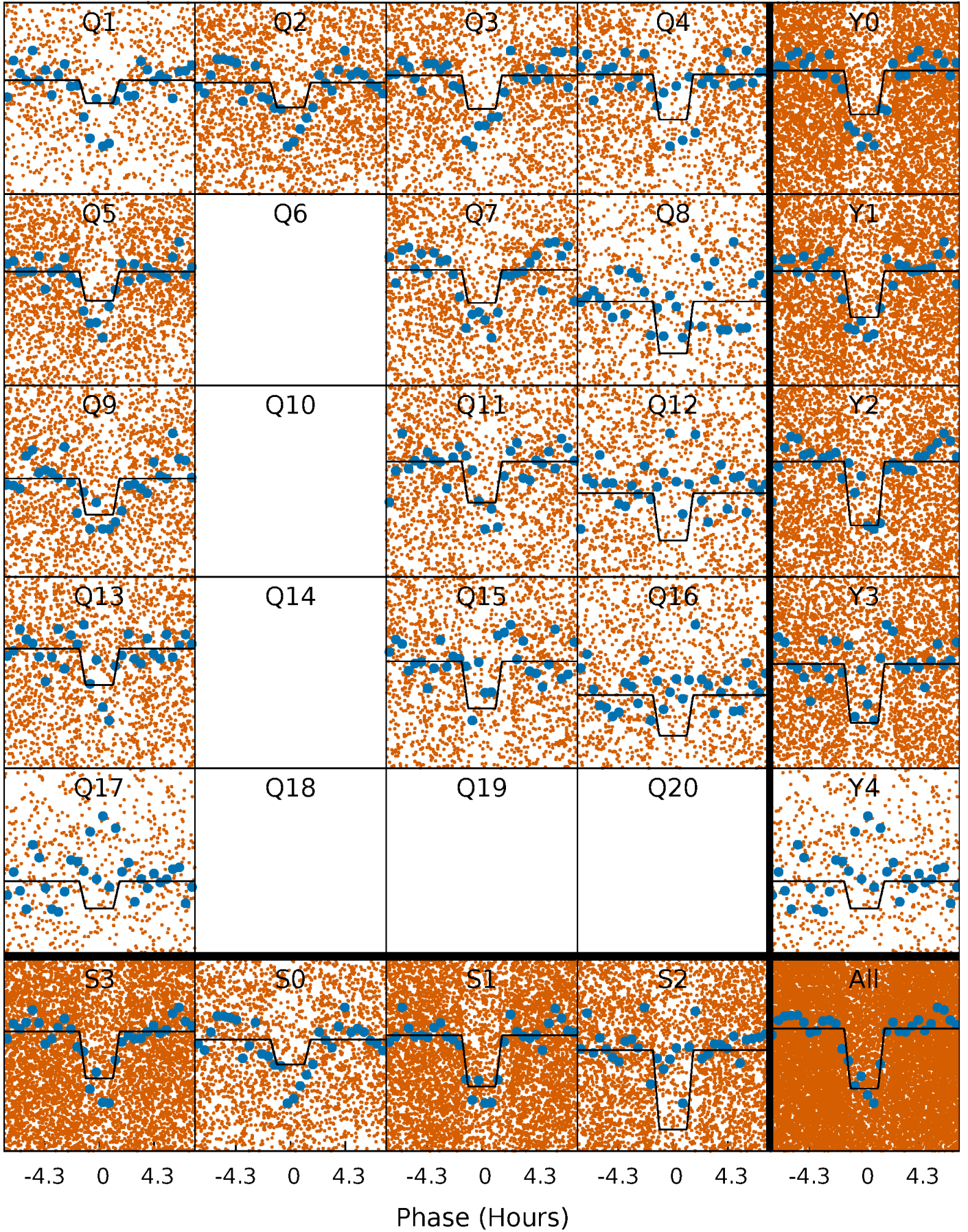
DV Quarter-Phased Transit Curves

TCE 005286780-01 P= 0.722436 Days $T_0=131.854239$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

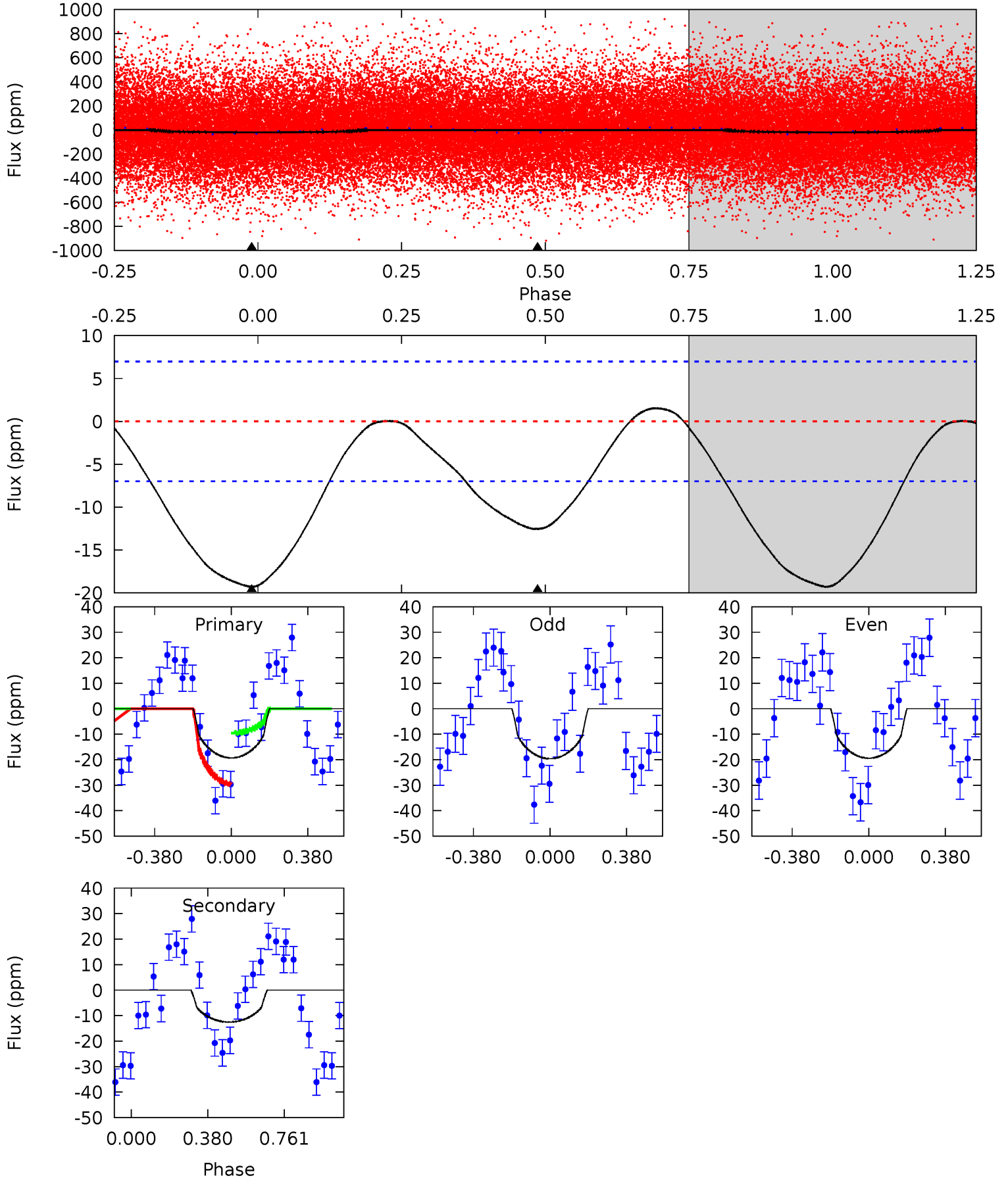
TCE 005286780-01 P= 0.722390 Days $T_0=131.843825$ (BKJD)



DV Model-Shift Uniqueness Test

005286780-01, P = 0.722436 Days, E = 131.131803 Days

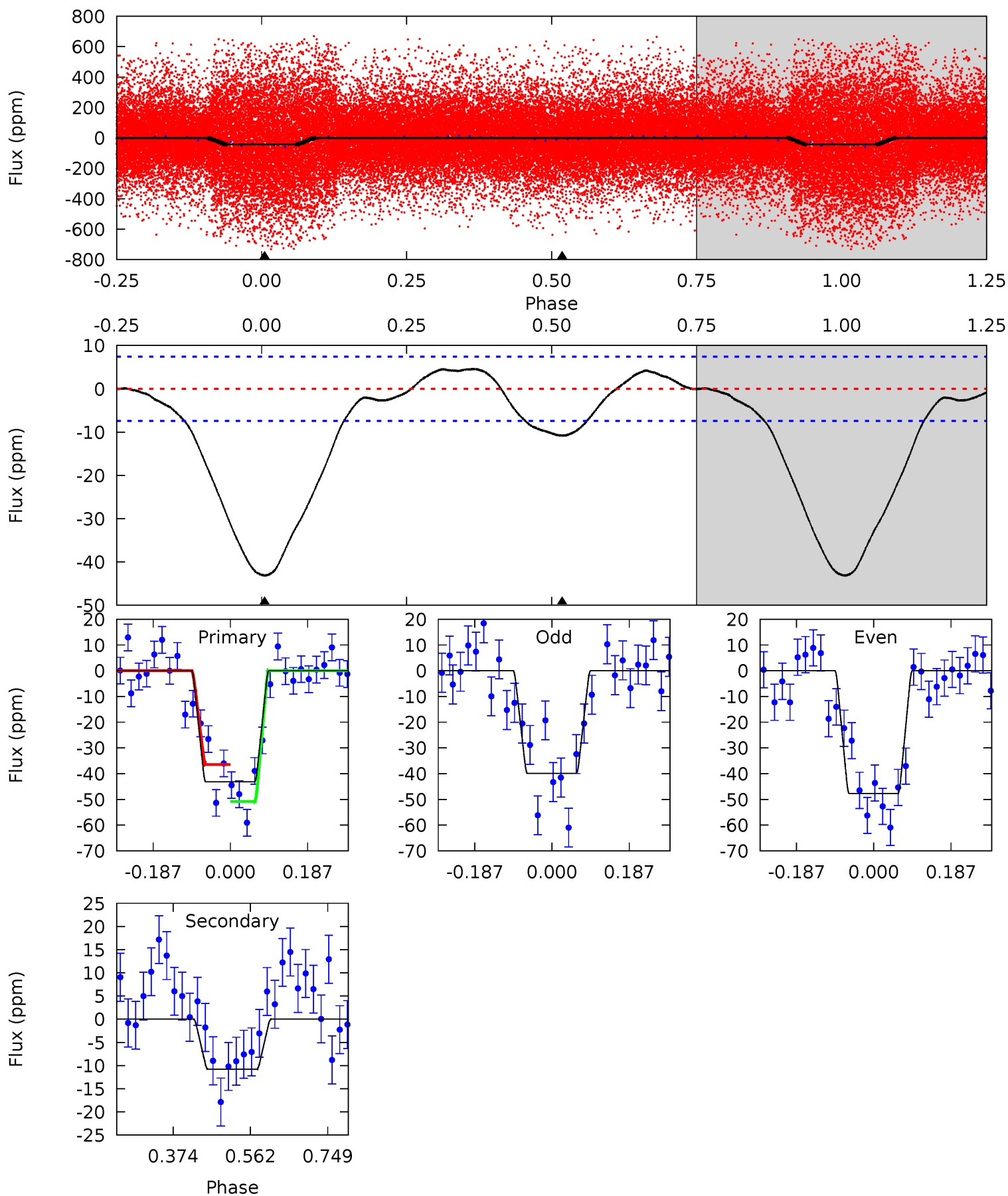
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.8	7.68	0	0	4.28	0.88	0.47	11.8	11.8	7.68	7.68	0.06	0.95	0.07	6.02



Alt Model-Shift Uniqueness Test

005286780-01, P = 0.722390 Days, E = 131.121435 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
25.8	6.47	0	0	4.43	1.32	1.32	25.8	25.8	6.47	6.47	2.31	1.11	0.10	0



Stellar Parameters For KIC 005286780

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	4973^{+148}_{-163}	$3.376^{+0.390}_{-0.260}$	$0.140^{+0.200}_{-0.300}$	$4.204^{+1.493}_{-1.825}$	$1.532^{+0.268}_{-0.536}$	$0.029^{+0.106}_{-0.016}$
	+3%/-3%	+12%/-8%	+143%/-214%	+36%/-43%	+17%/-35%	+365%/-56%
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 005286780-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-13 ± 2	$2.38^{+1.76}_{-1.35}$	4675^{+525}_{-511}	3241^{+2506}_{-7053}	$0.391^{+1.806}_{-0.265}$
Alt.	-11 ± 2	$3.01^{+1.87}_{-1.58}$	4659^{+510}_{-539}	-3247^{+7534}_{-723}	$0.212^{+0.671}_{-0.130}$

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

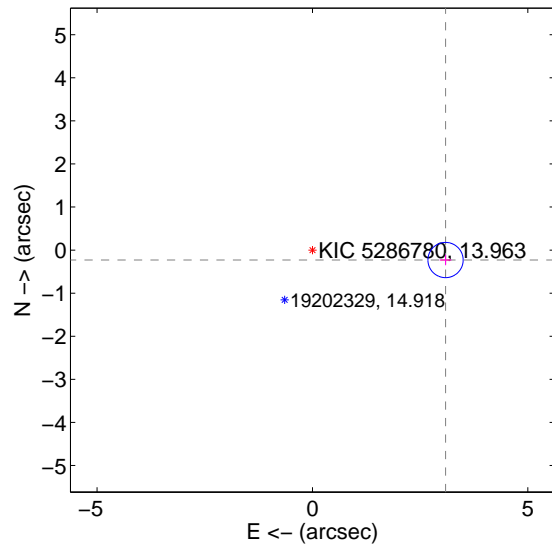
Supplemental centroid analysis for 005286780-01. Kepler magnitude: 13.96. Transit SNR 7.07

There are 0 quarters with good PRF difference image offsets

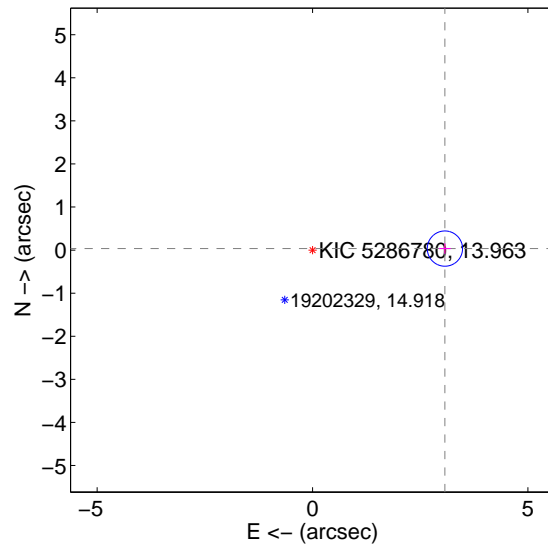
The direct PRF centroid is offset from the target star catalog position by about 0.27 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	3.098 ± 0.136	22.73	-3.090 ± 0.136	-0.231 ± 0.123
PRF-fit source offset from KIC position	3.073 ± 0.136	22.53	-3.073 ± 0.136	0.035 ± 0.123
photometric centroid source offset	1.66 ± 1.01	1.65	-1.43 ± 0.99	0.85 ± 1.05

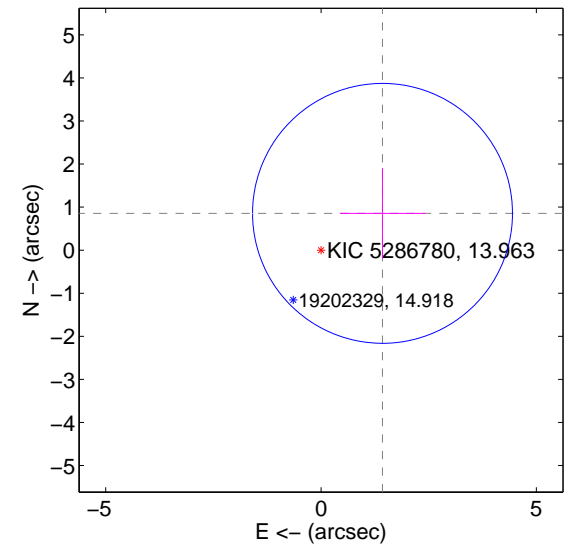
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

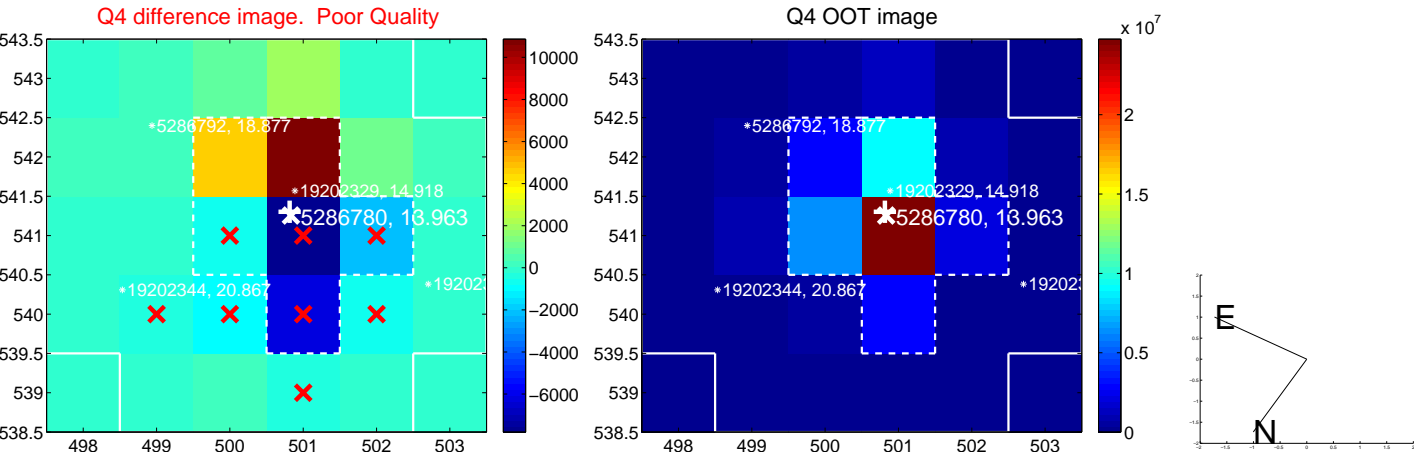
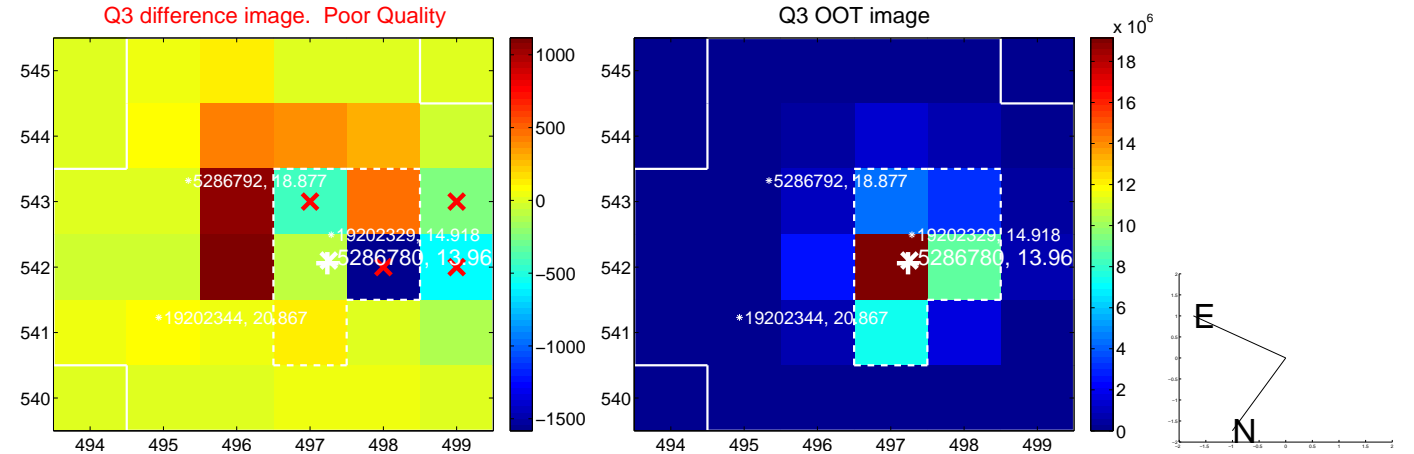
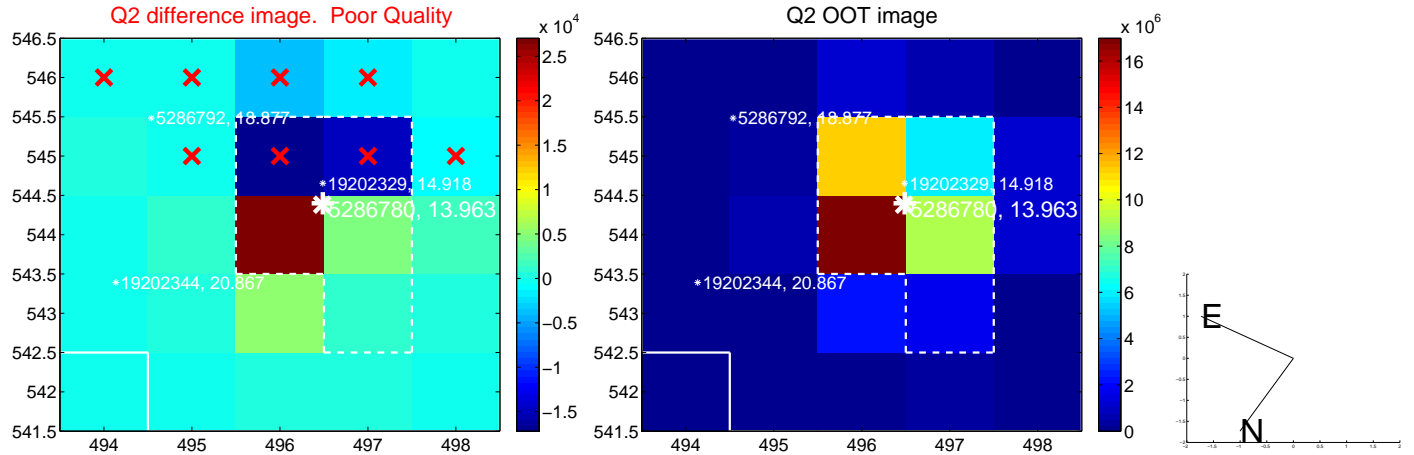
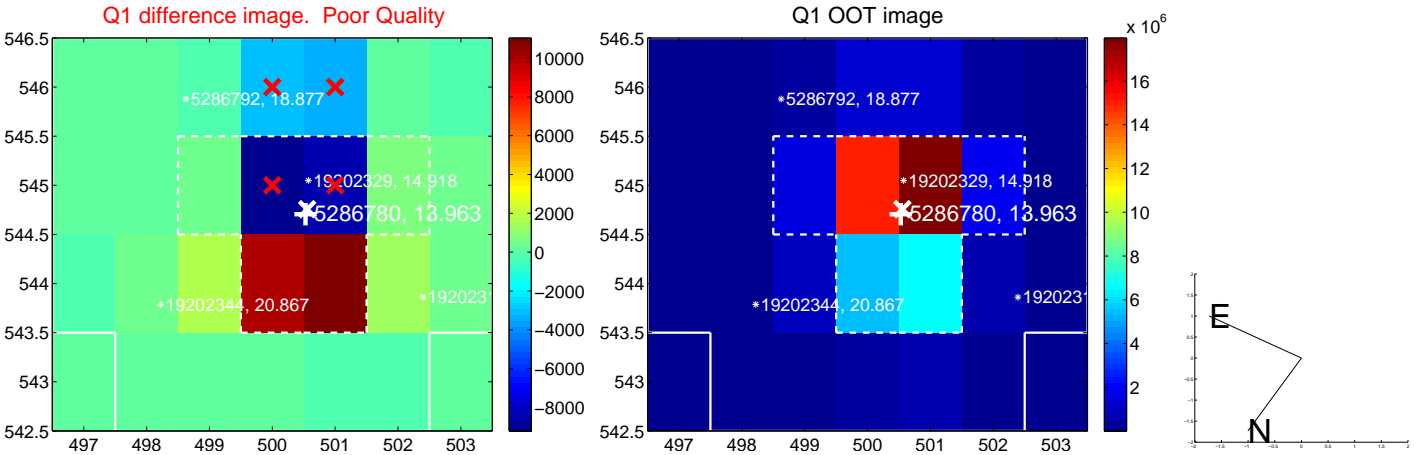


offset from photometric centroids

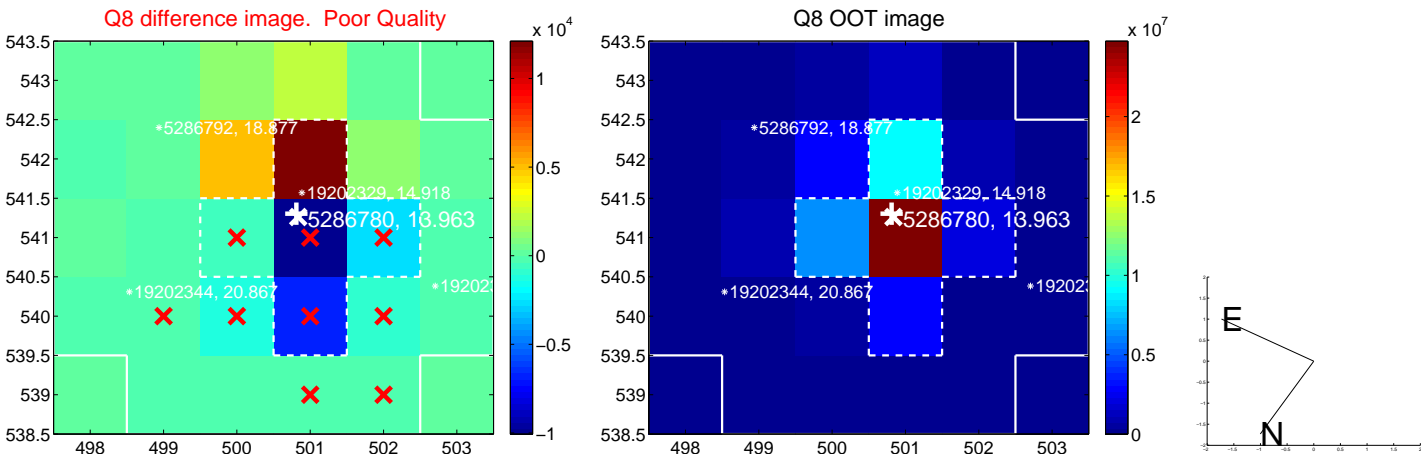
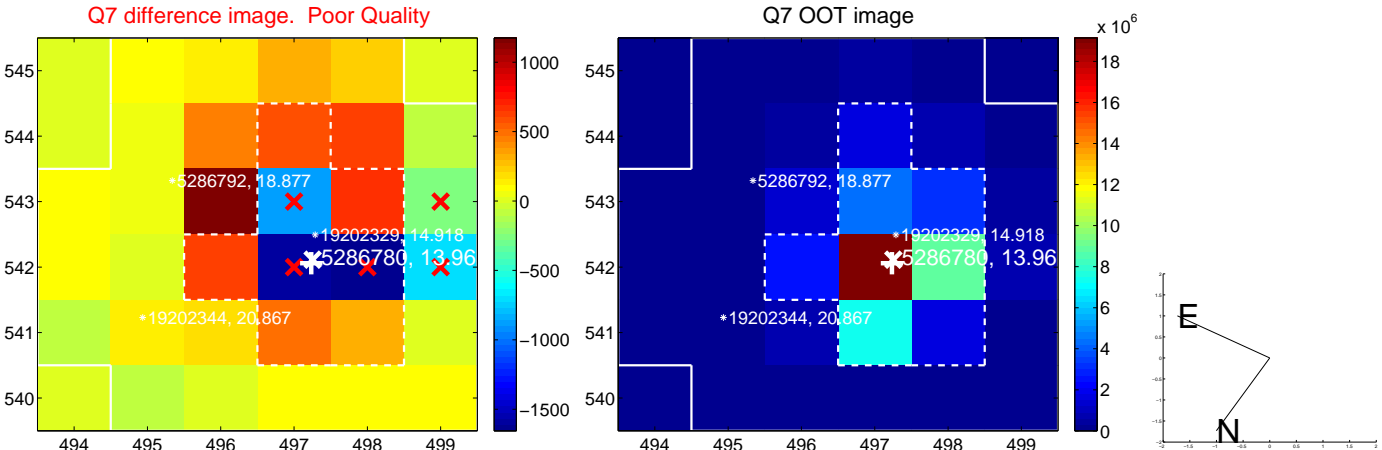
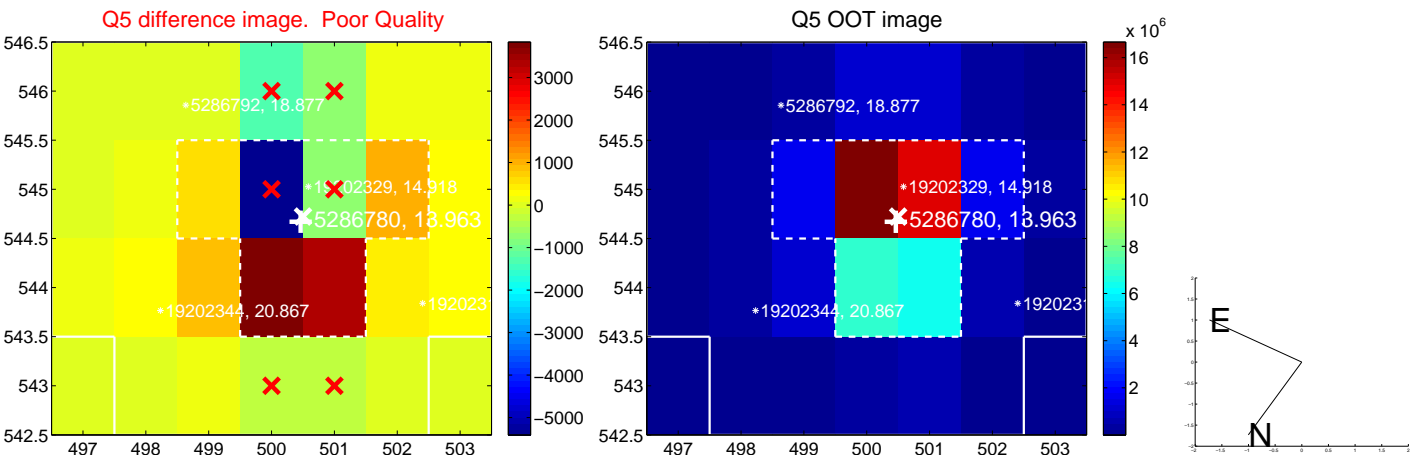


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

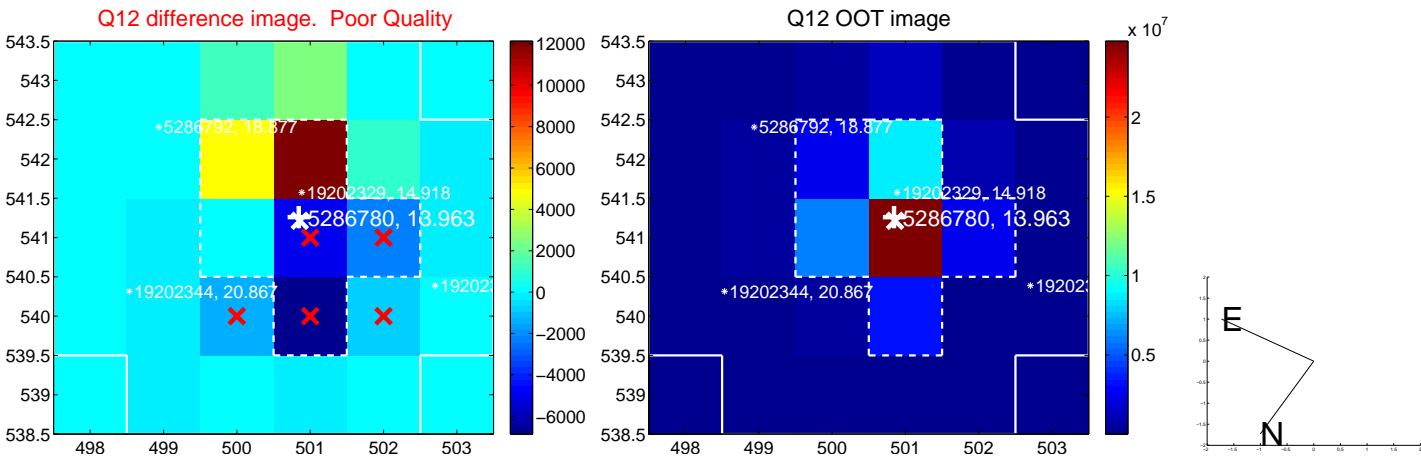
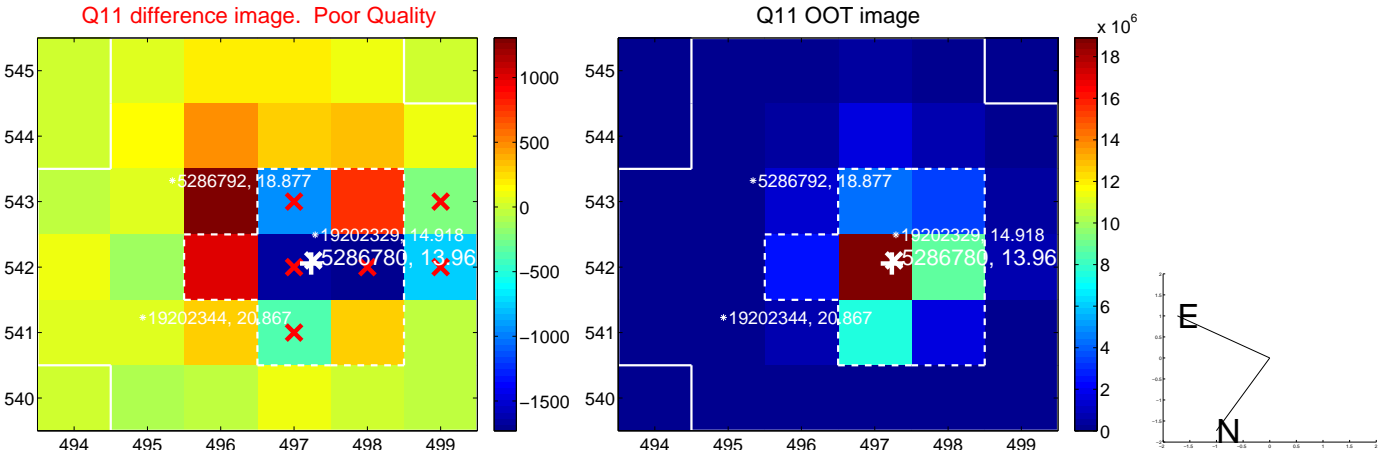
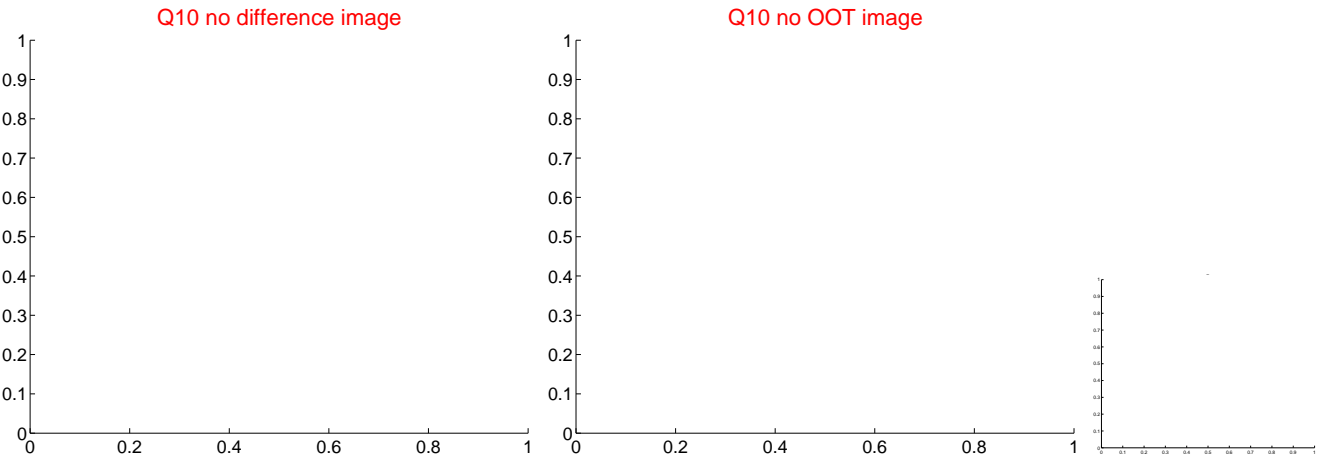
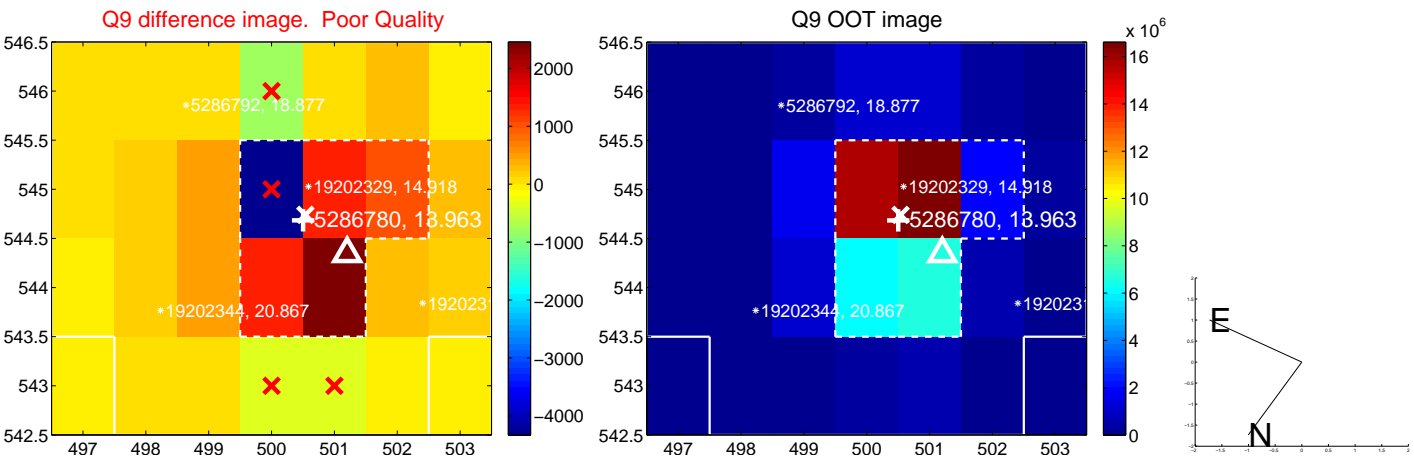
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



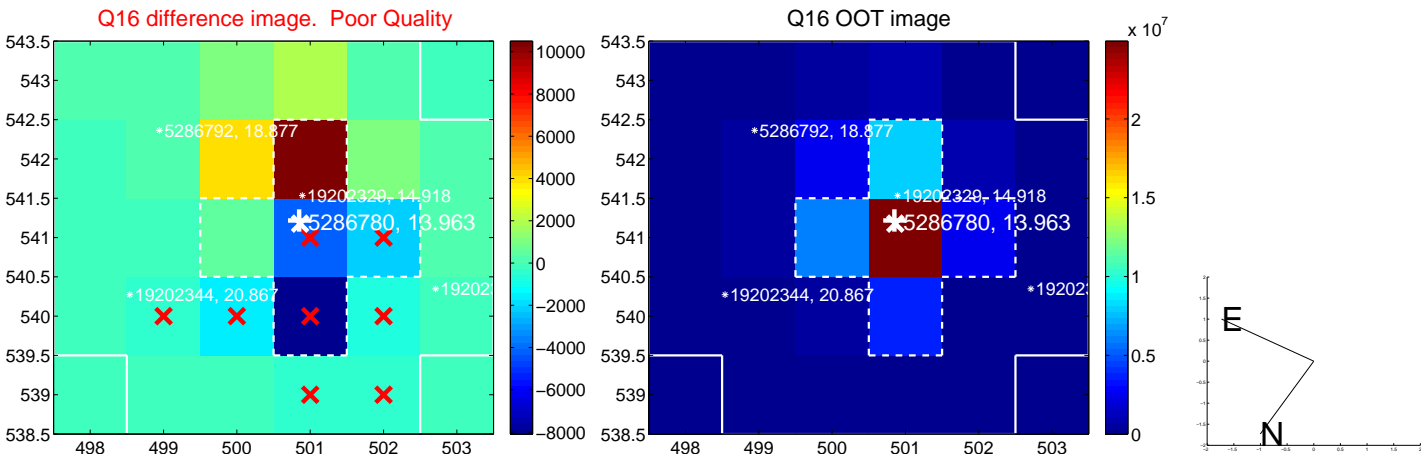
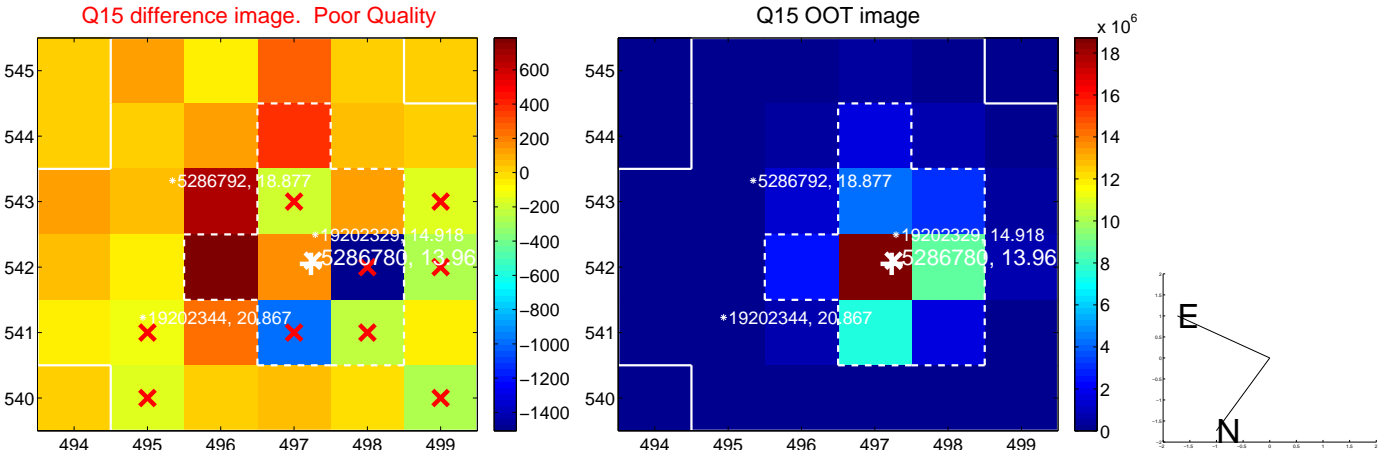
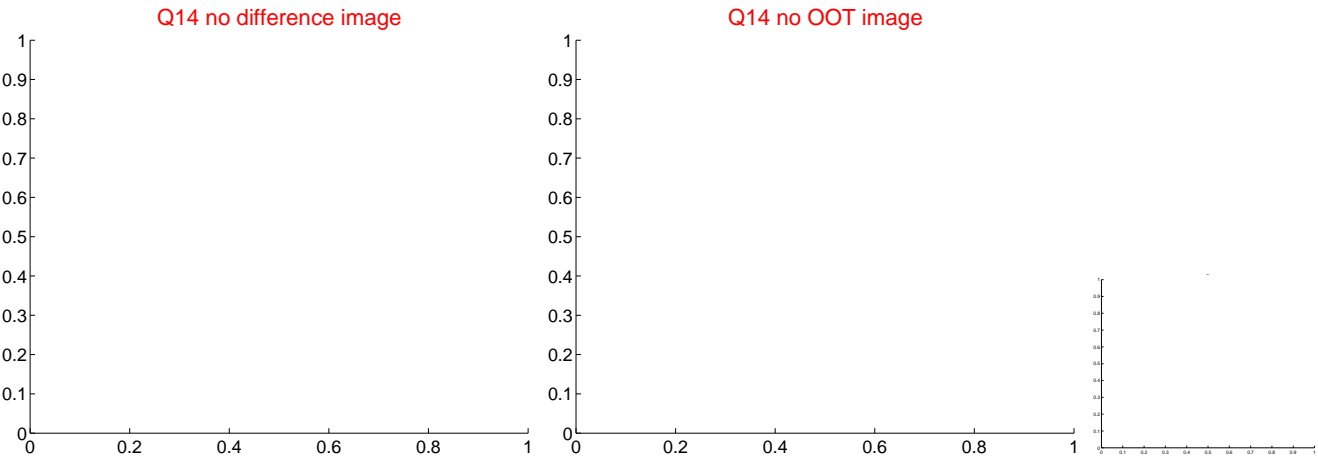
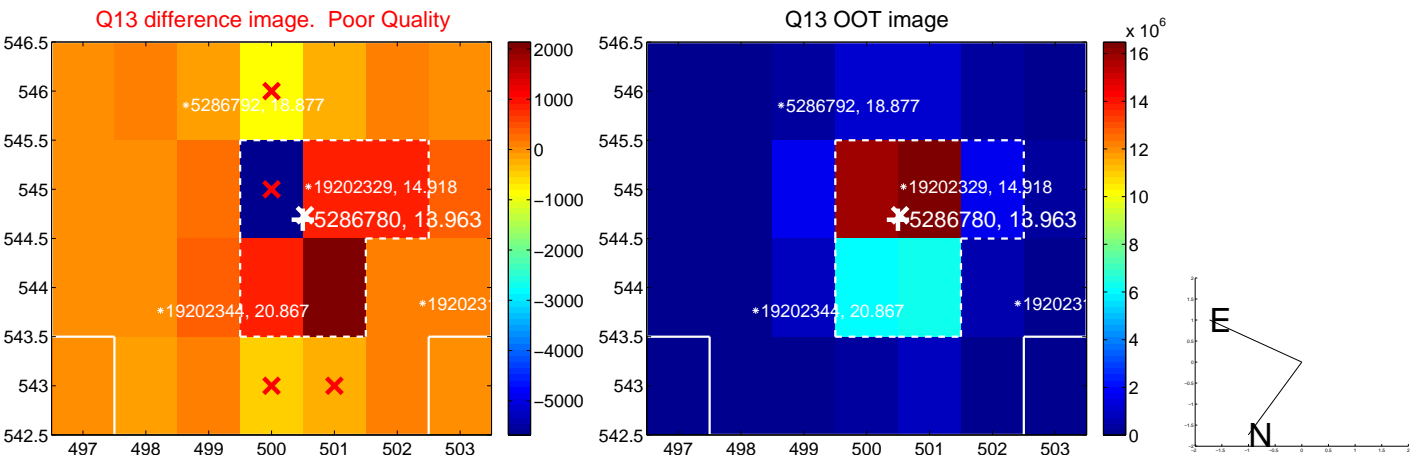
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



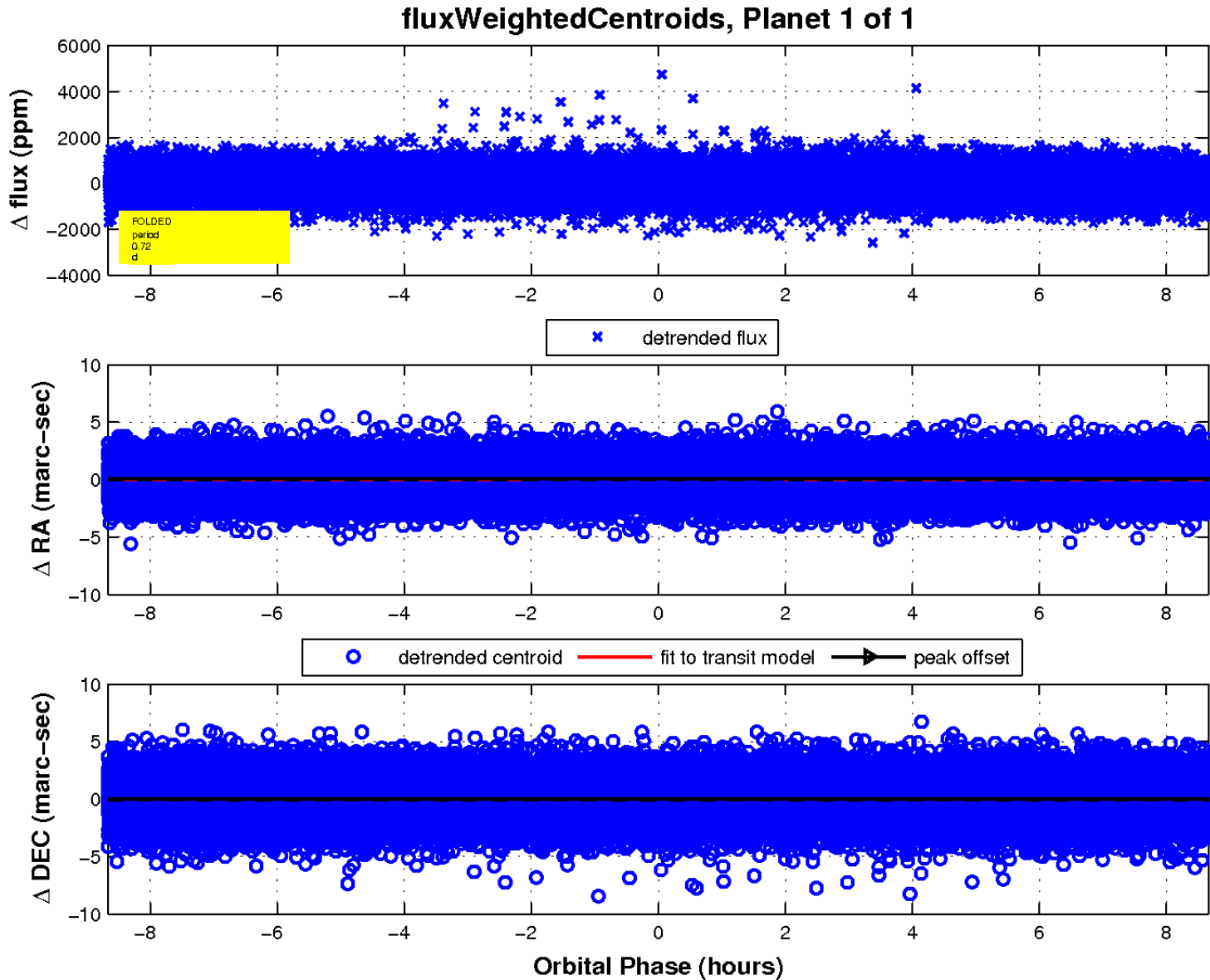
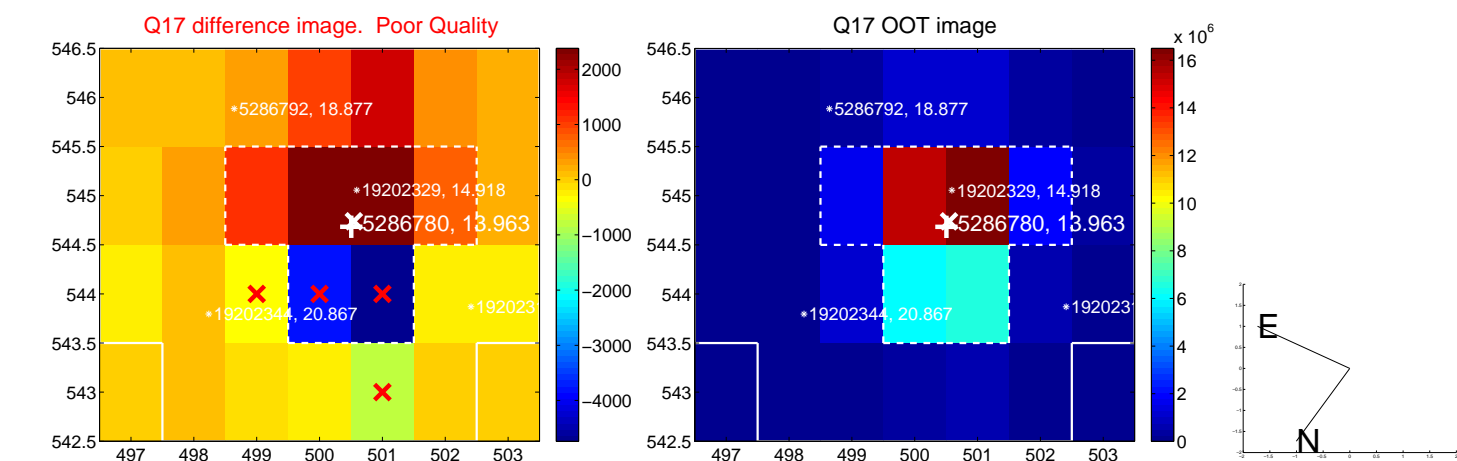
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white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination

