

KIC 005652303

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})
005652303-01	OBS	No	0.572581	132.023972	12.4	6.871	10.6	17.8	2.00	9208	0.88	85448.66

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005652303-01	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.

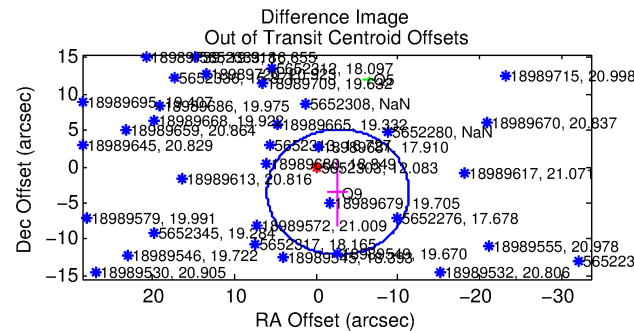
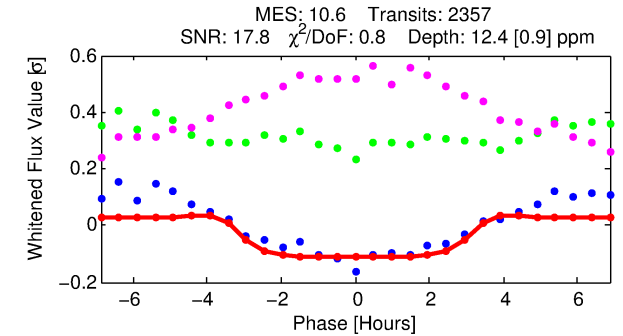
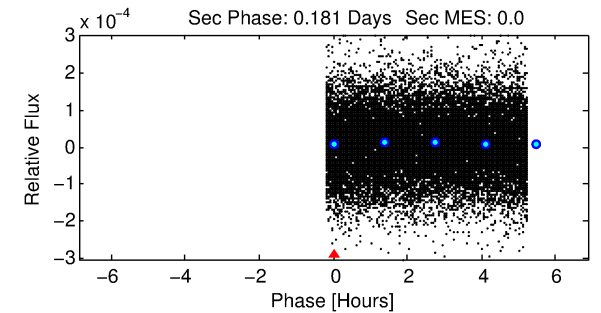
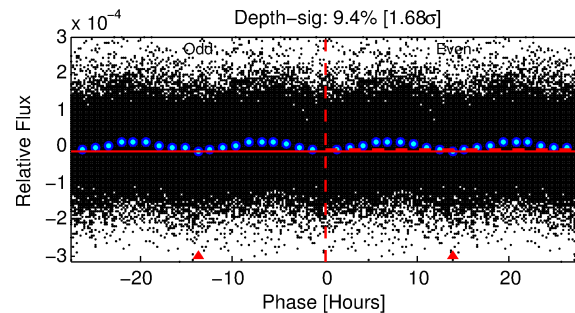
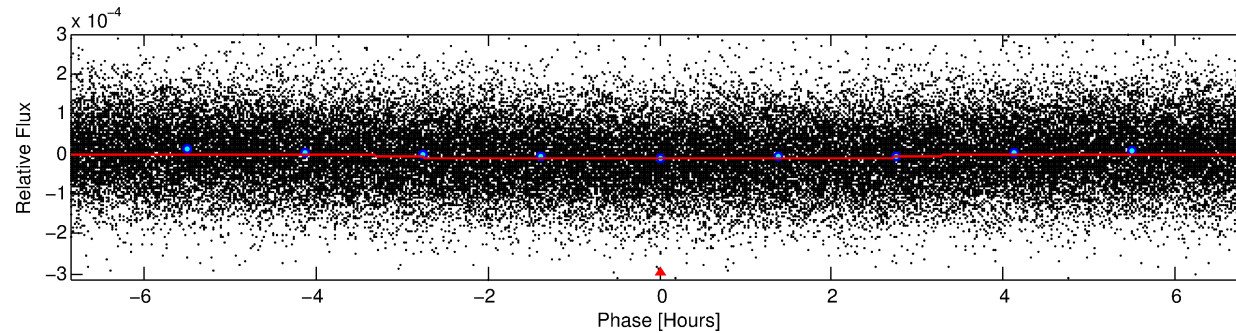
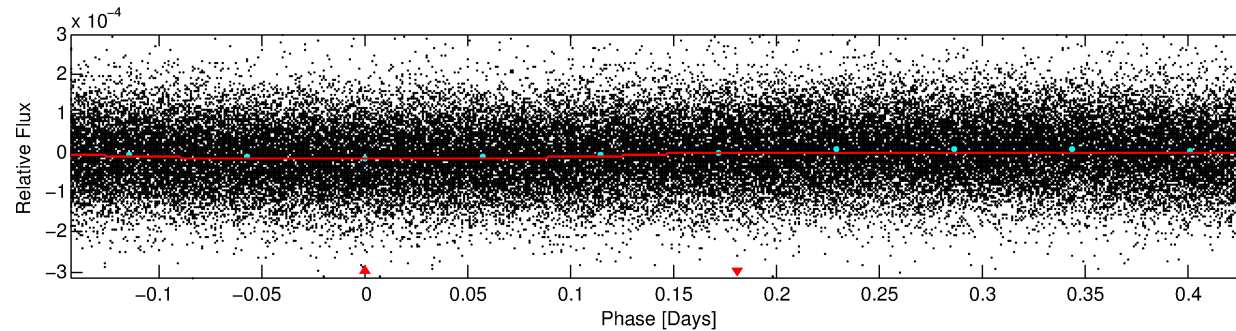
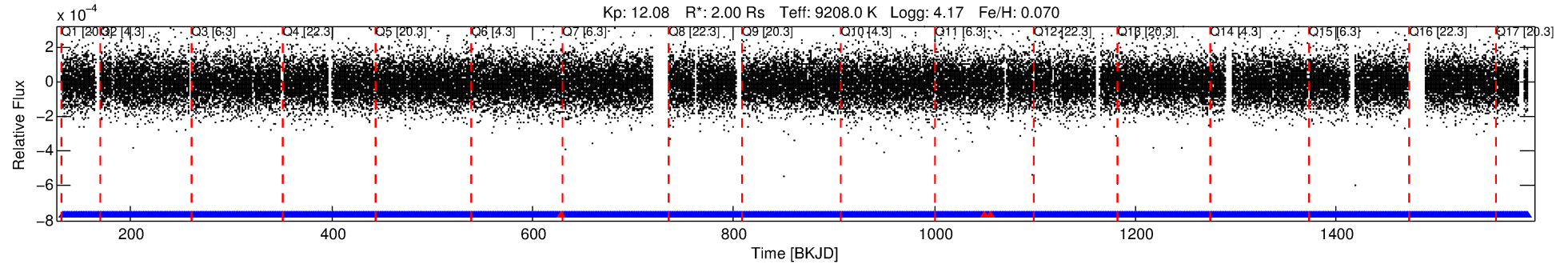
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005652303-01

No Significant Match Found

DV One-Page Summary

KIC: 5652303 Candidate: 1 of 1 Period: 0.573 d



DV Fit Results:

Period = 0.57258 [0.00001] d
Epoch = 132.0240 [0.0038] BKJD
Rp/R* = 0.0040 [0.0002]
a/R* = 1.00 [0.00]
b = 0.97 [0.03]
Seff = 85448.66 [31936.12]
Teq = 4360 [407] K
Rp = 0.88 [0.27] Re
a = 0.0174 [0.0041] AU
Ag = N/A
Teffp = N/A

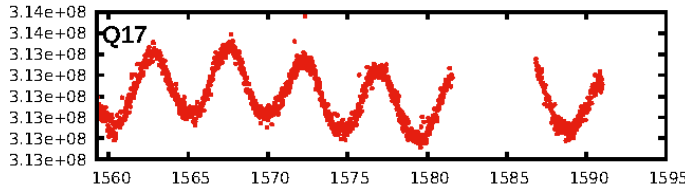
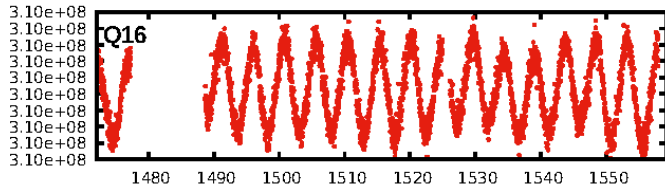
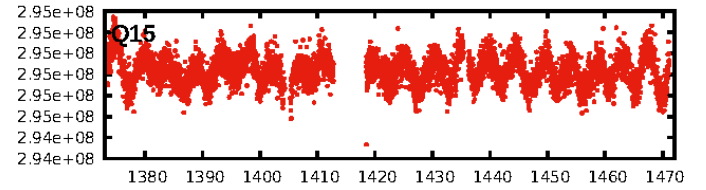
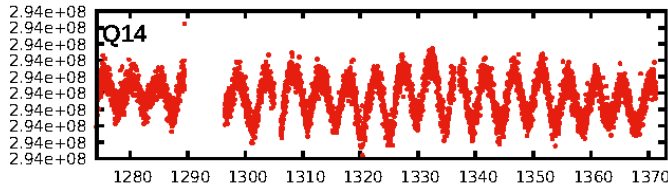
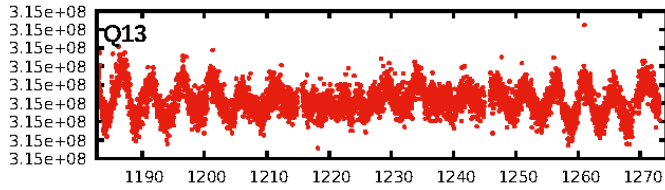
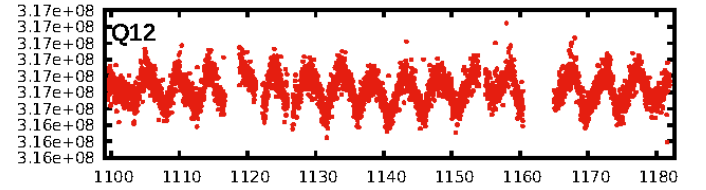
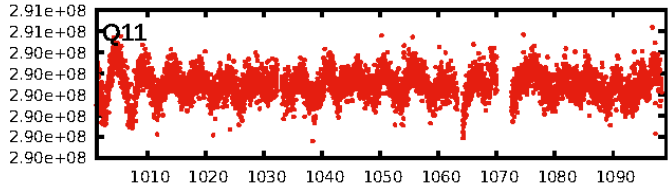
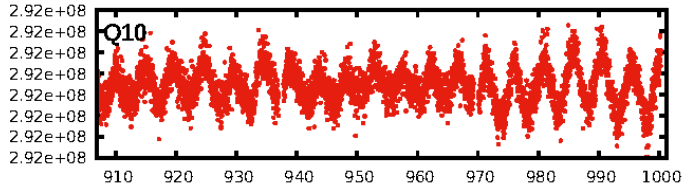
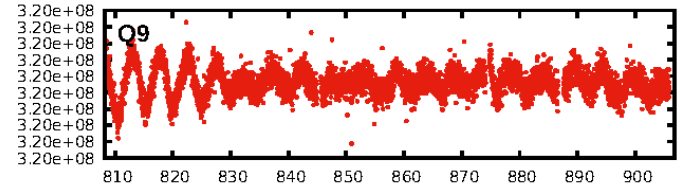
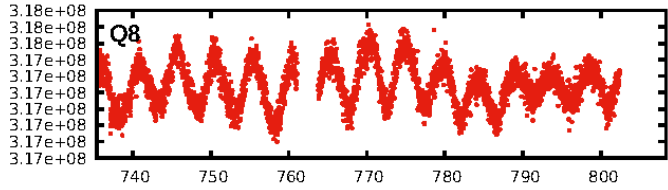
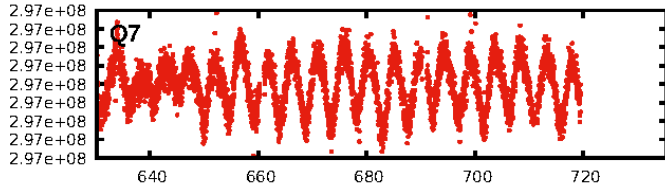
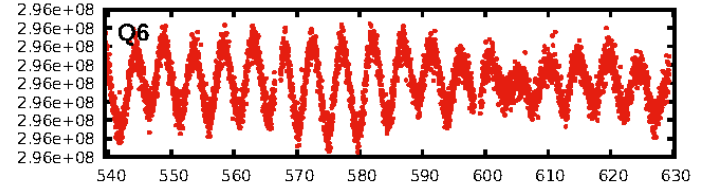
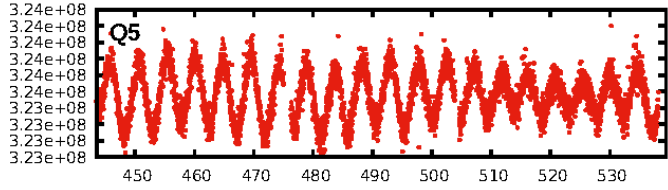
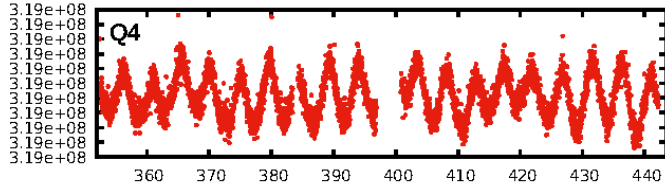
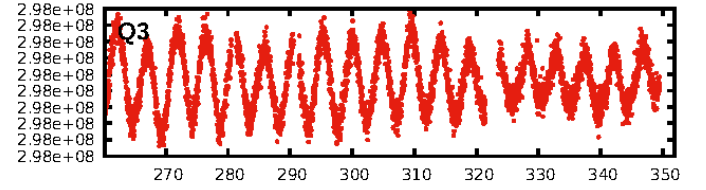
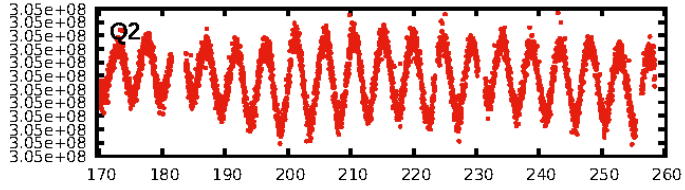
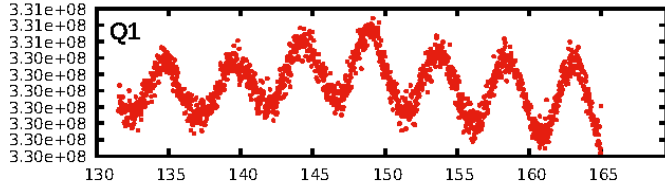
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [2248/2251]
GhostDiagnostic-chr: 5.981
Centroid-sig: 6.2%
Centroid-so: 1.359 arcsec [1.72 σ]
OotOffset-rm: 4.431 arcsec [1.54 σ]
KicOffset-rm: 4.360 arcsec [0.74 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]

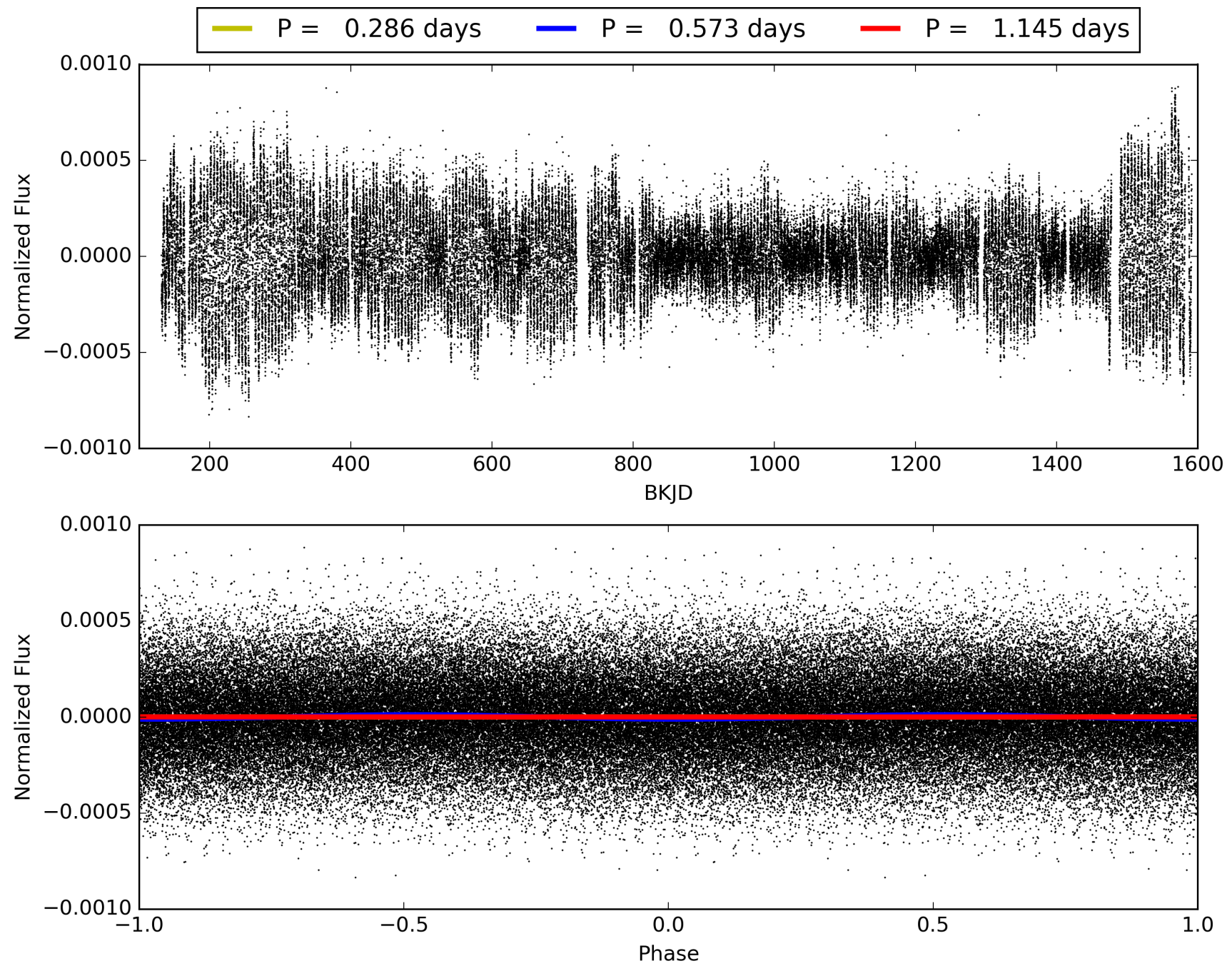
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 11:41:59 Z

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

TCE 005652303-01, PDC Light Curves

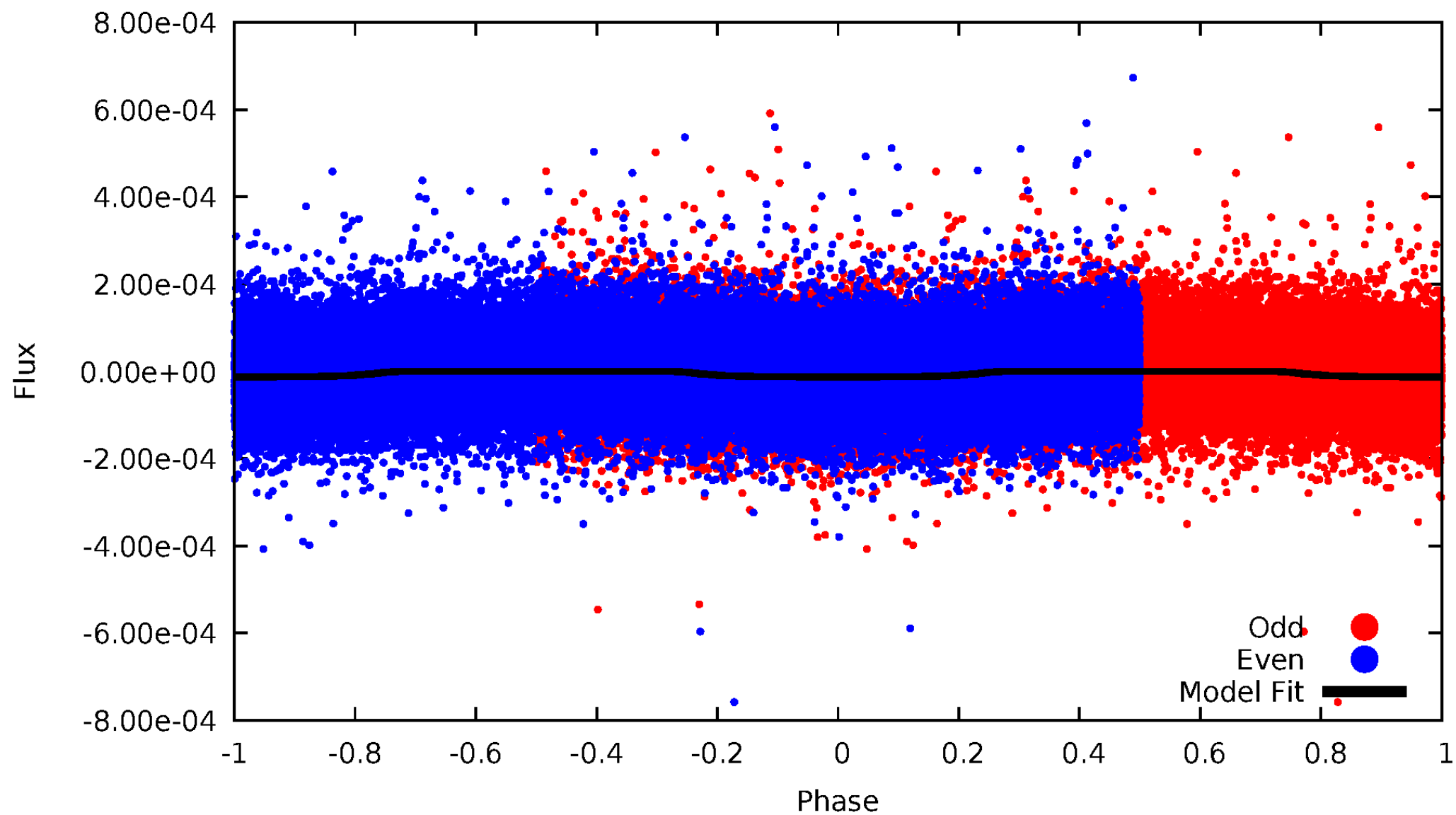


TCE 005652303-01



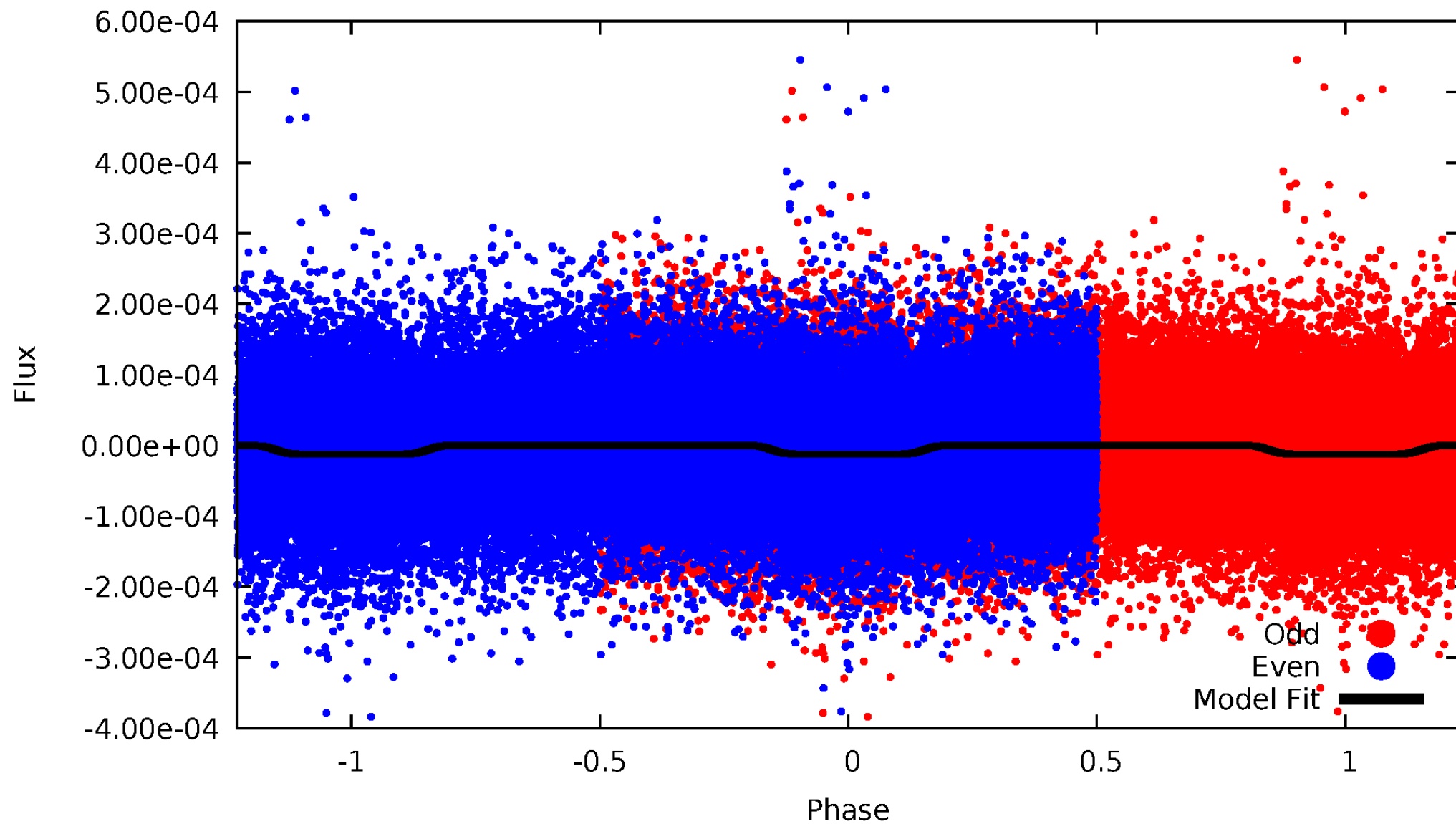
DV Odd/Even

TCE 005652303-01



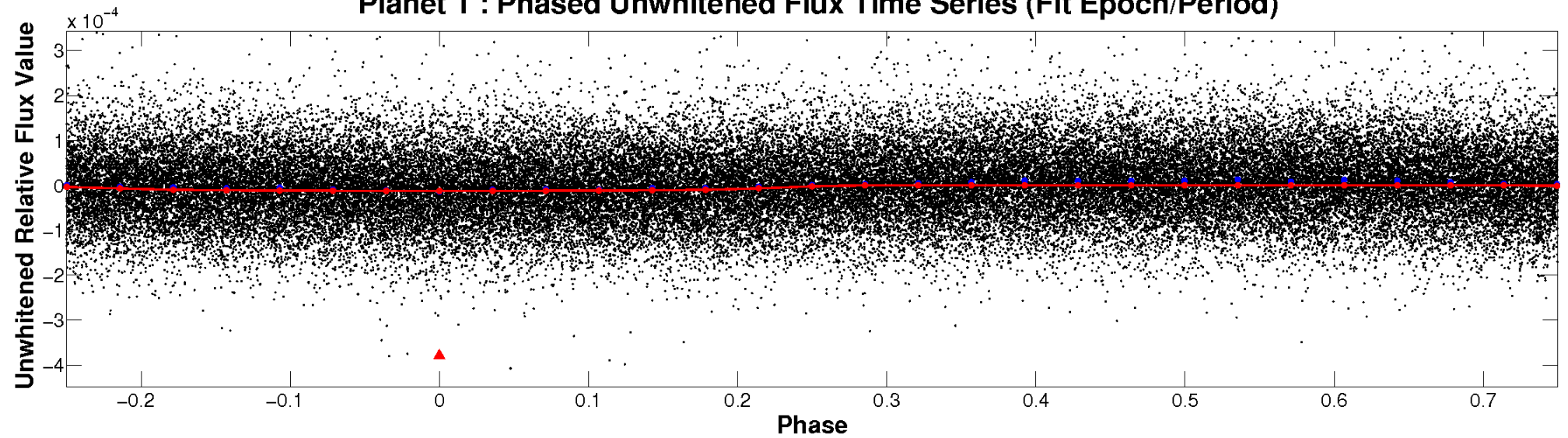
ALT Odd/Even

TCE 005652303-01

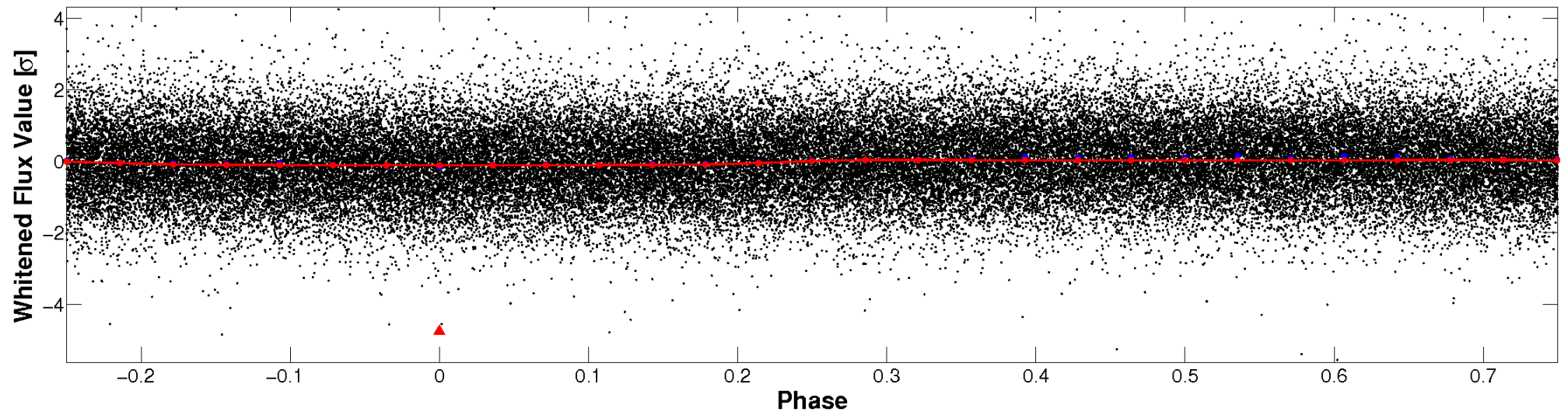


Non-Whitened Vs. Whitened Light Curve

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

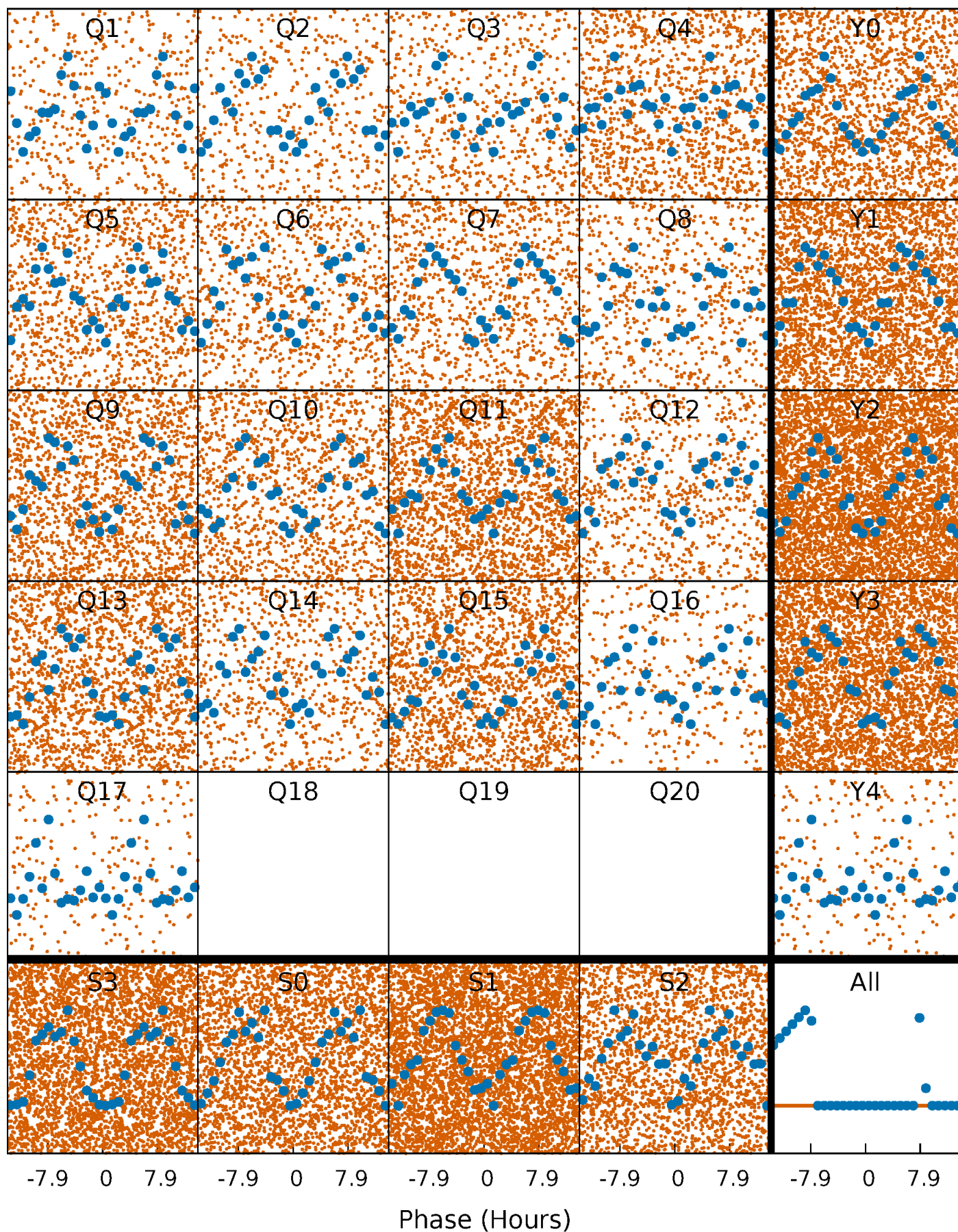


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



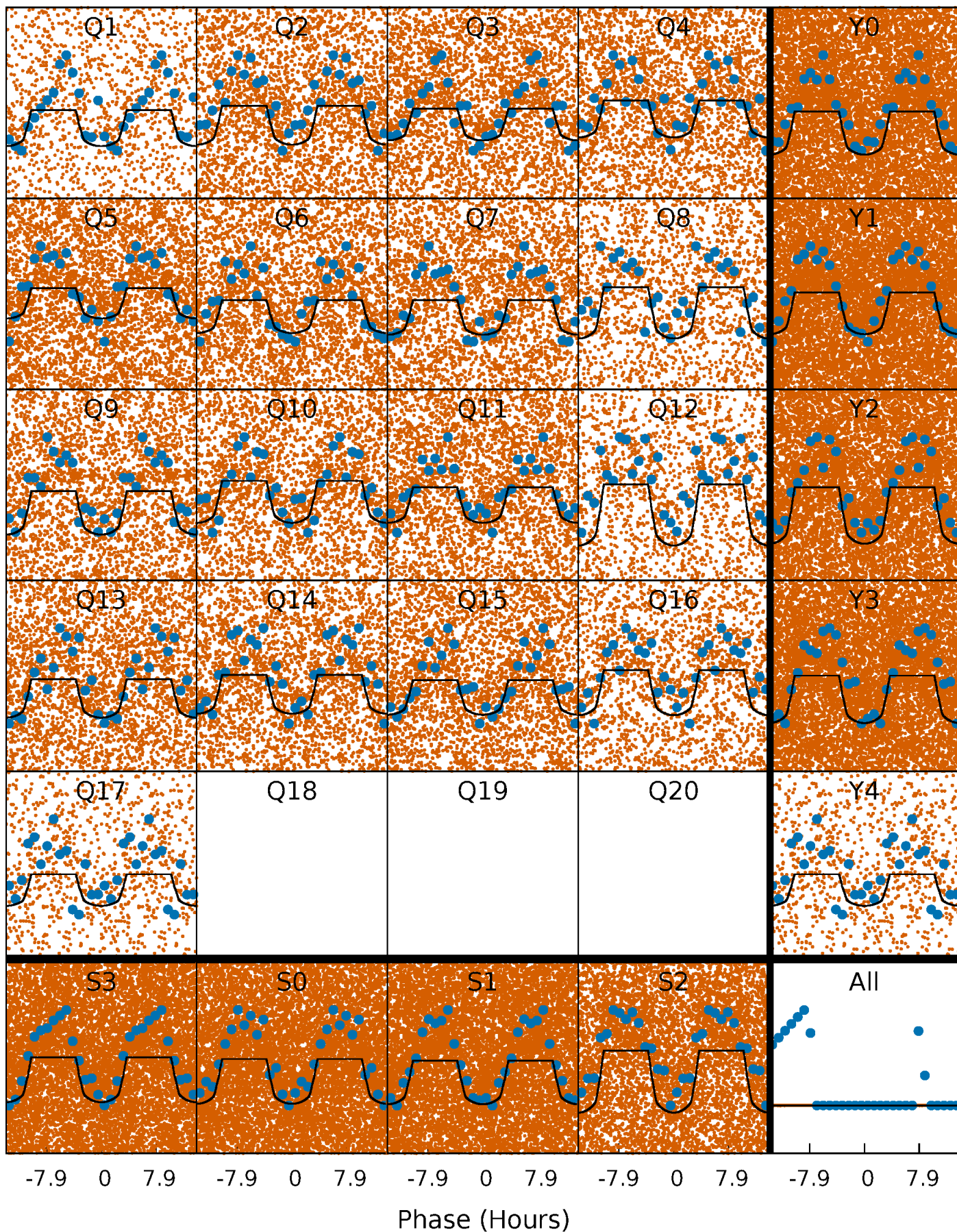
PDC Quarter-Phased Transit Curves

TCE 005652303-01 P= 0.572581 Days $T_0=132.023972$ (BKJD)



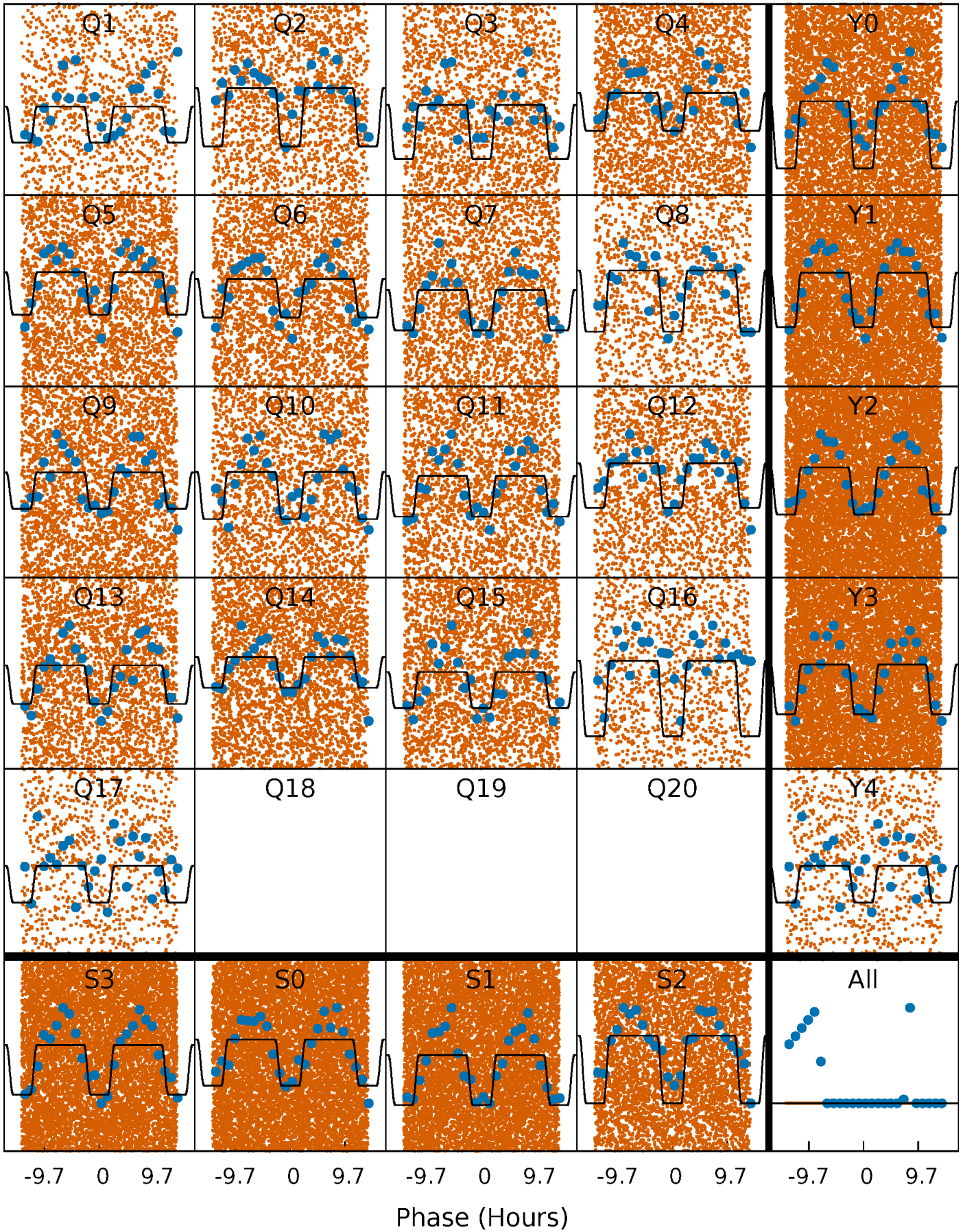
DV Quarter-Phased Transit Curves

TCE 005652303-01 P= 0.572581 Days $T_0=132.023972$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

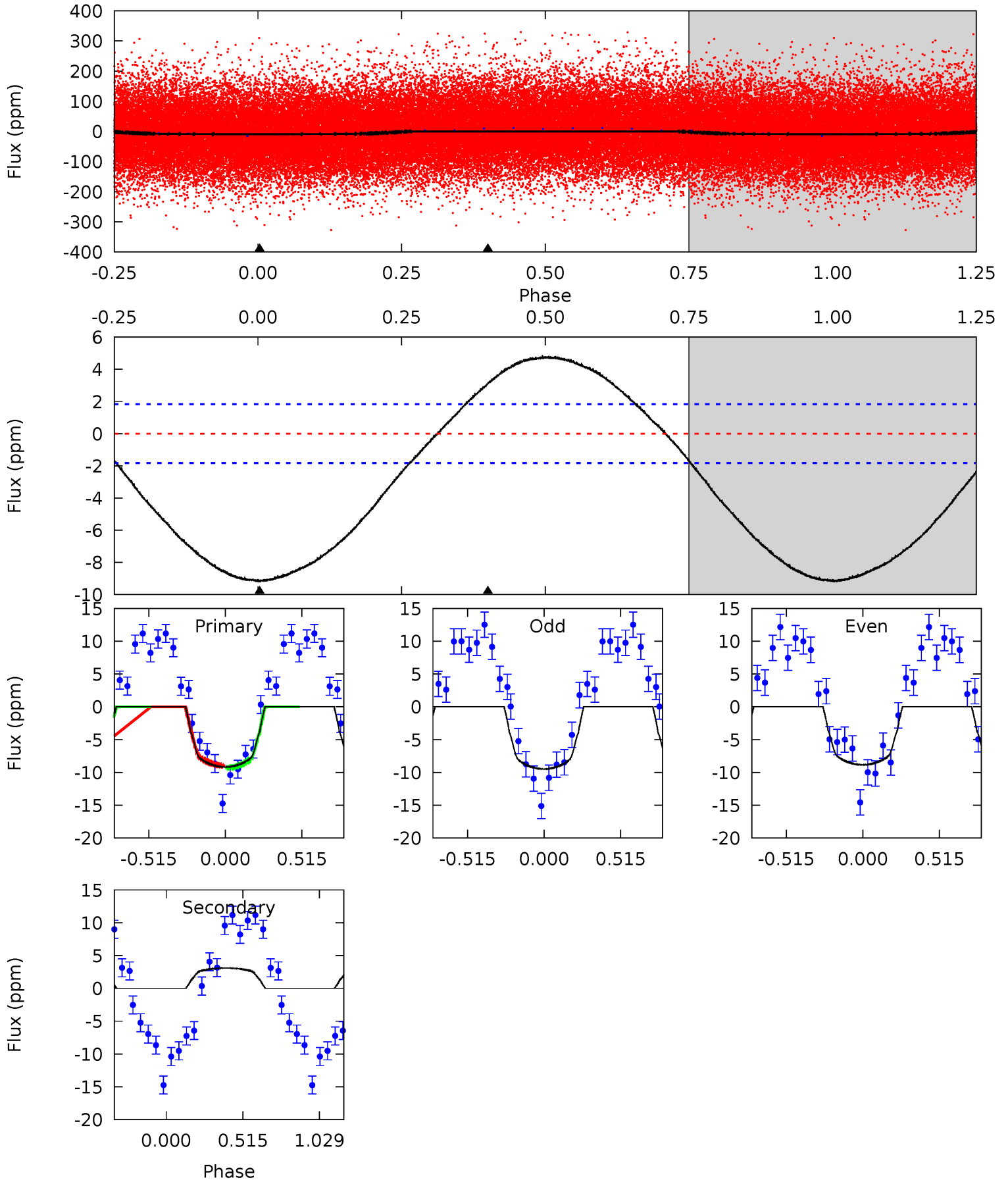
TCE 005652303-01 $P = 0.572590$ Days $T_0 = 132.015440$ (BKJD)



DV Model-Shift Uniqueness Test

005652303-01, P = 0.572581 Days, E = 131.451391 Days

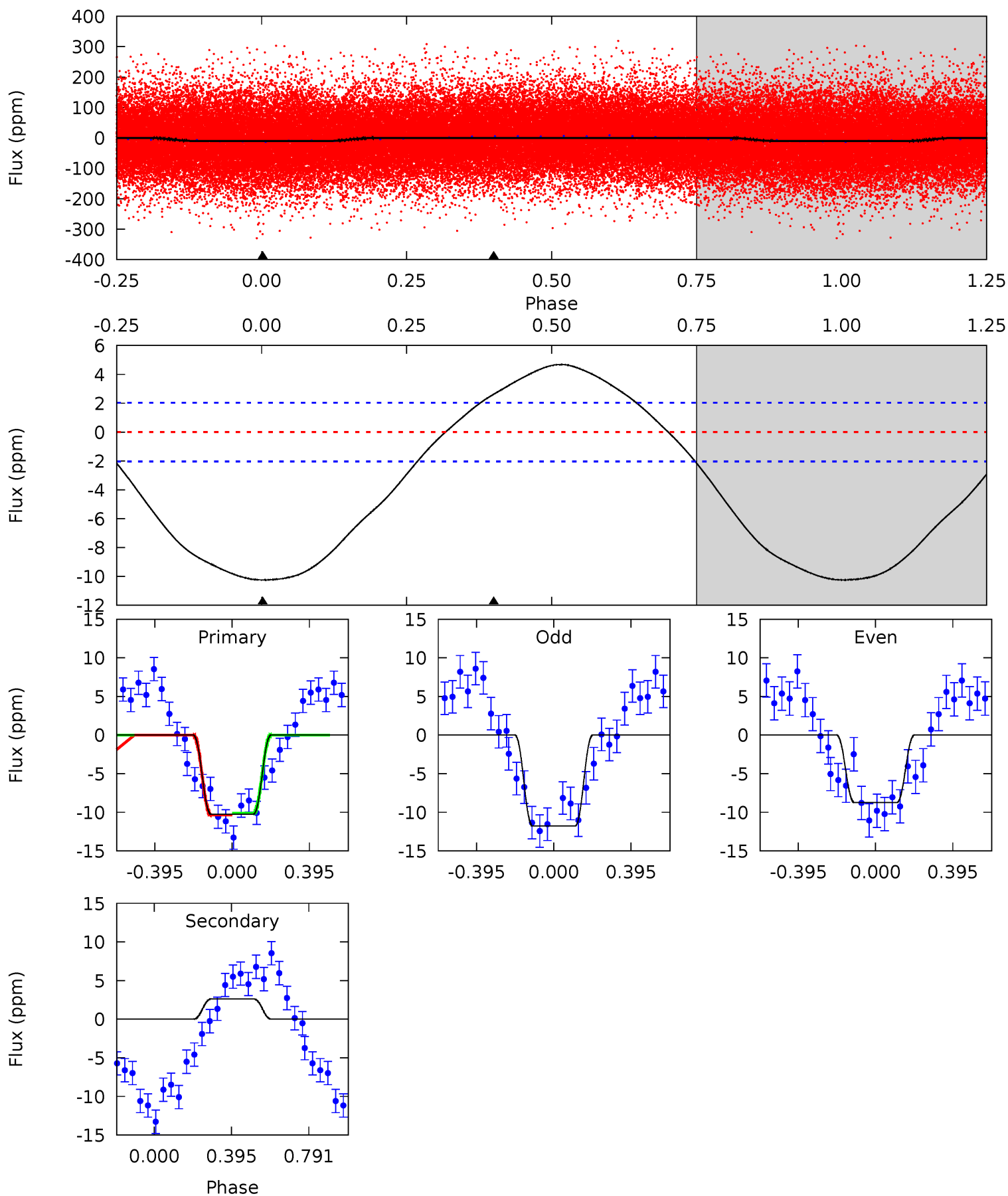
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
21.1	-7.11	0	0	4.21	0.65	2.64	21.1	21.1	-7.11	-7.11	0.73	1.05	0.35	0.40



Alt Model-Shift Uniqueness Test

005652303-01, P = 0.572590 Days, E = 131.442850 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
21.5	-5.49	0	0	4.27	0.85	2.54	21.5	21.5	-5.49	-5.49	3.18	0.97	0.31	0.21



Stellar Parameters For KIC 005652303

	$T_{\text{eff}} (K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (g \cdot \text{cm}^{-3})$
	9208^{+251}_{-430}	$4.165^{+0.120}_{-0.165}$	$0.070^{+0.150}_{-0.700}$	$2.004^{+0.606}_{-0.496}$	$2.141^{+0.372}_{-0.558}$	$0.375^{+0.267}_{-0.180}$
	+3%/-5%	+3%/-4%	+214%/-1000%	+30%/-25%	+17%/-26%	+71%/-48%
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 005652303-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	3 ± 0	$0.89^{+0.15}_{-0.13}$	6123^{+470}_{-403}	-6340^{+316}_{-311}	$-0.633^{+0.163}_{-0.231}$
Alt.	3 ± 0	$0.77^{+0.13}_{-0.12}$	6118^{+456}_{-409}	-6424^{+315}_{-384}	$-0.711^{+0.207}_{-0.250}$

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 $A_{obs} \gg 1.0$

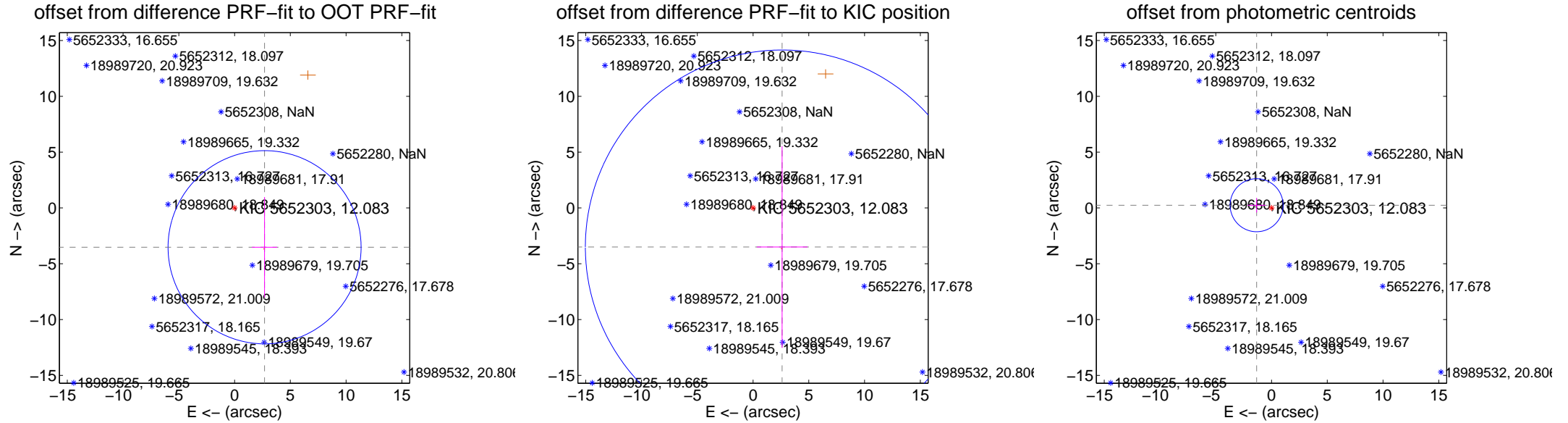
DV Centroid Data

Supplemental centroid analysis for 005652303-01. Kepler magnitude: 12.08. Transit SNR 17.85

There are 0 quarters with good PRF difference image offsets

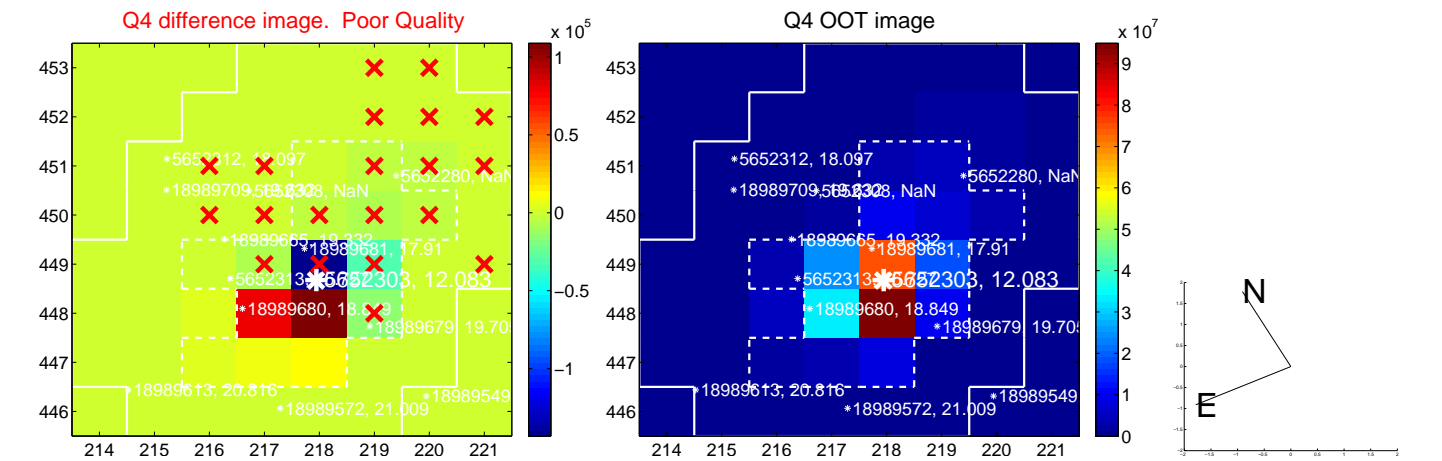
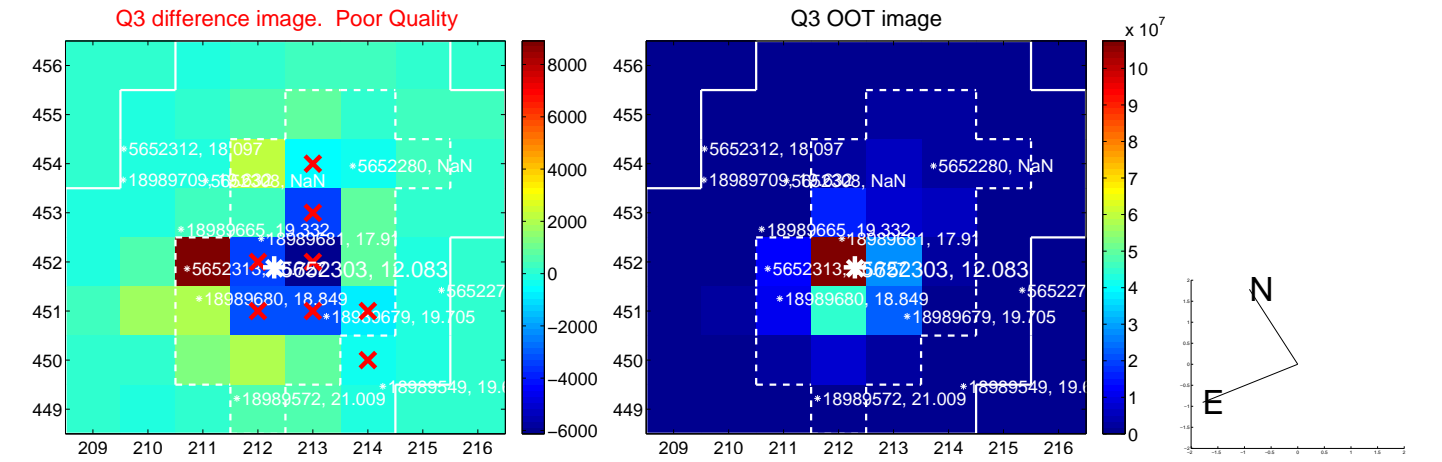
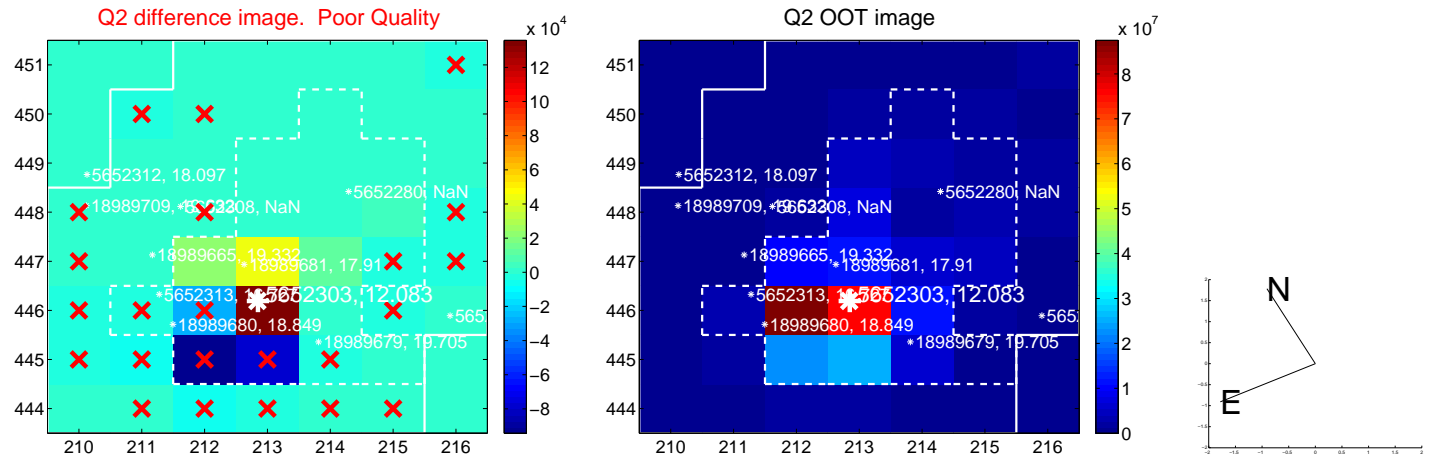
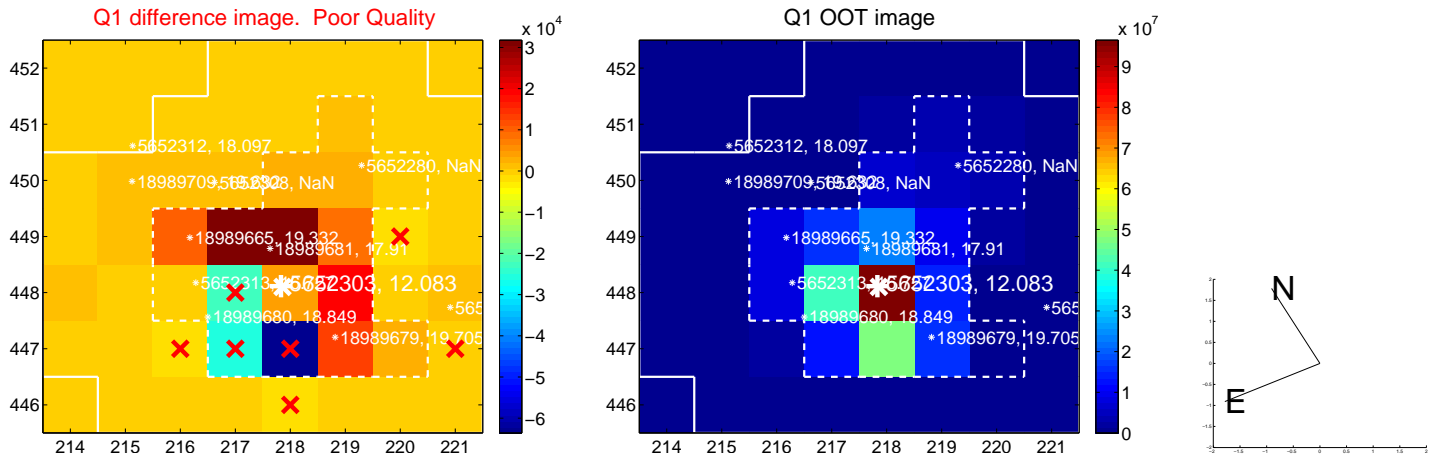
The direct PRF centroid is offset from the target star catalog position by about 0.09 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	4.431 ± 2.885	1.54	-2.690 ± 1.136	-3.521 ± 4.496
PRF-fit source offset from KIC position	4.360 ± 5.881	0.74	-2.608 ± 2.275	-3.494 ± 9.035
photometric centroid source offset	1.36 ± 0.79	1.72	1.34 ± 0.80	0.24 ± 0.65

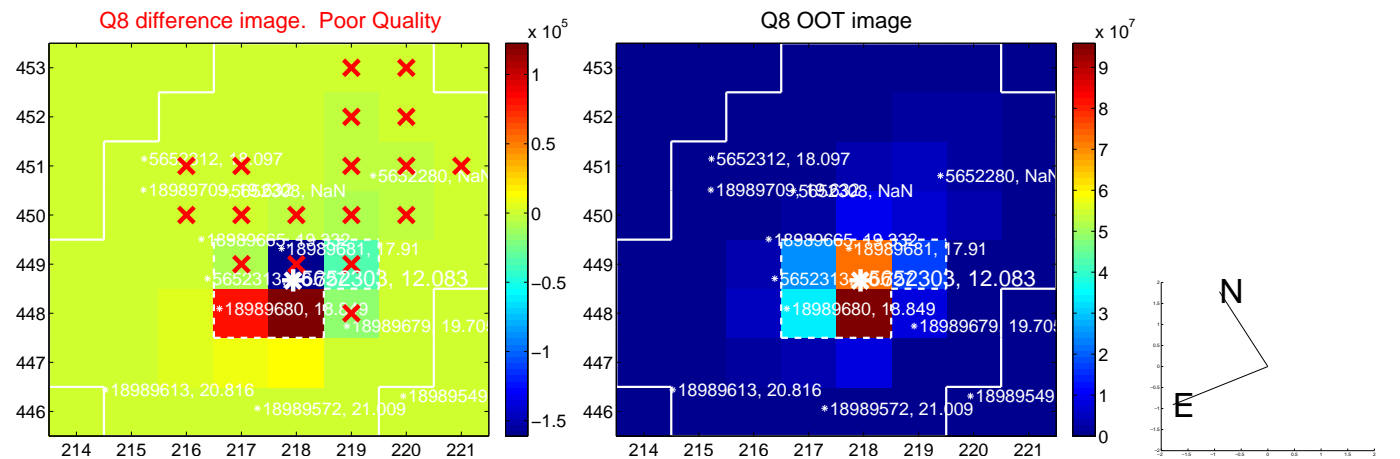
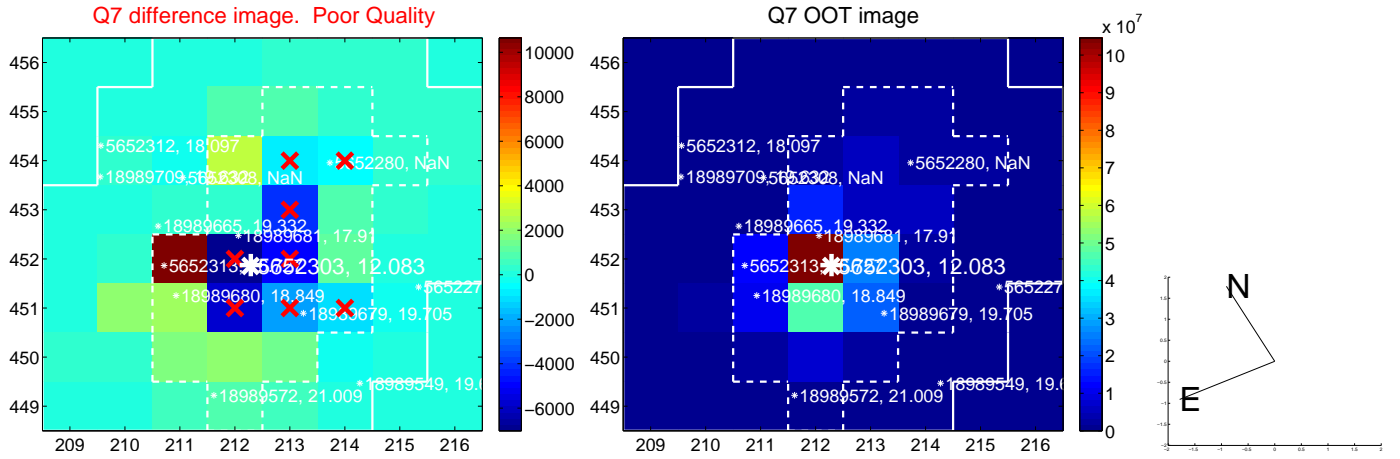
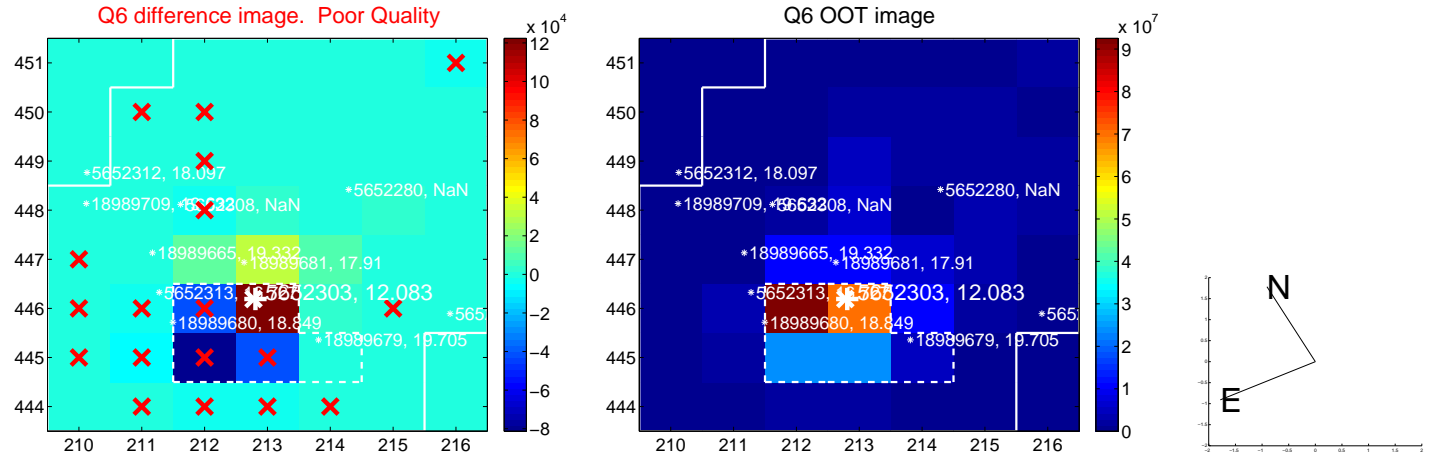
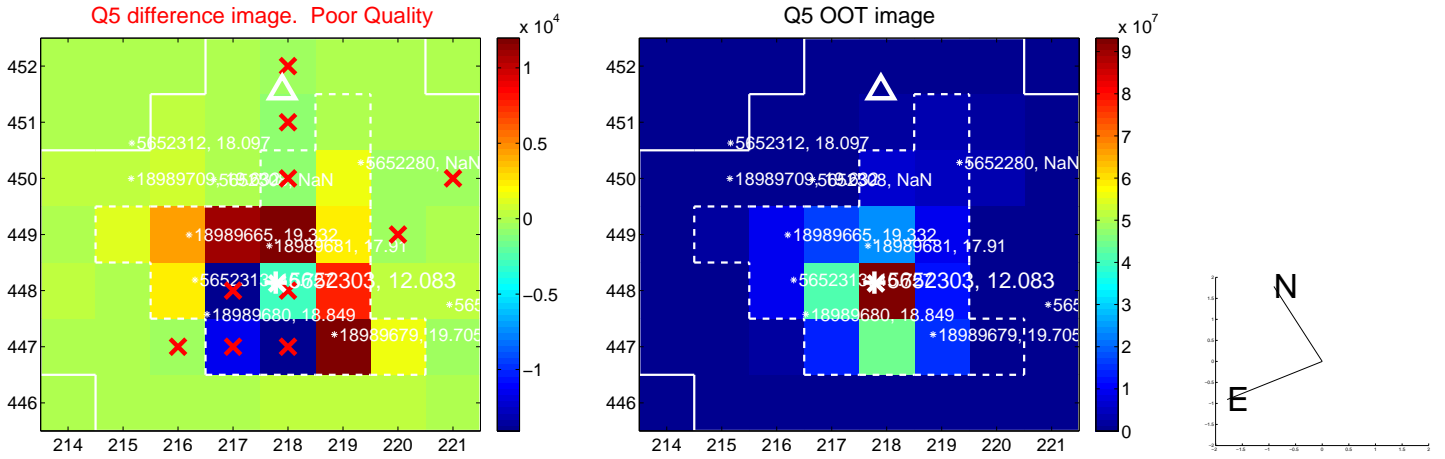


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

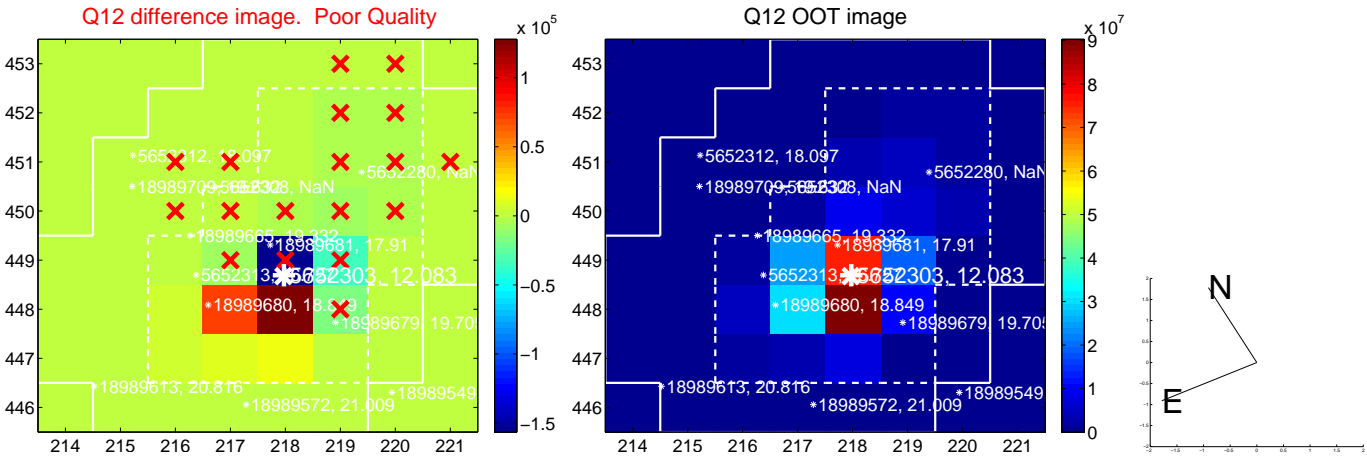
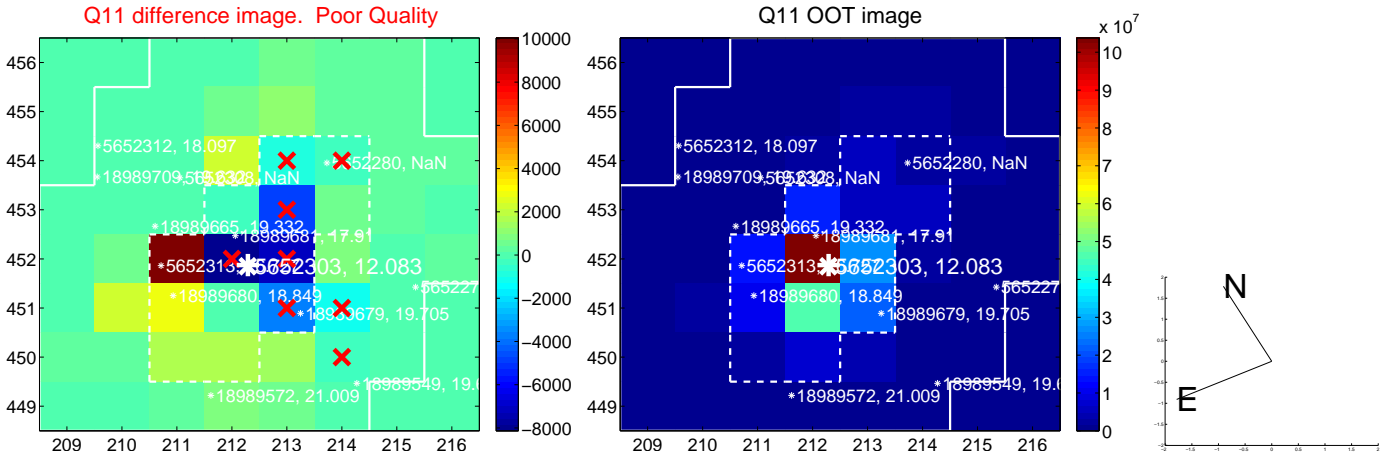
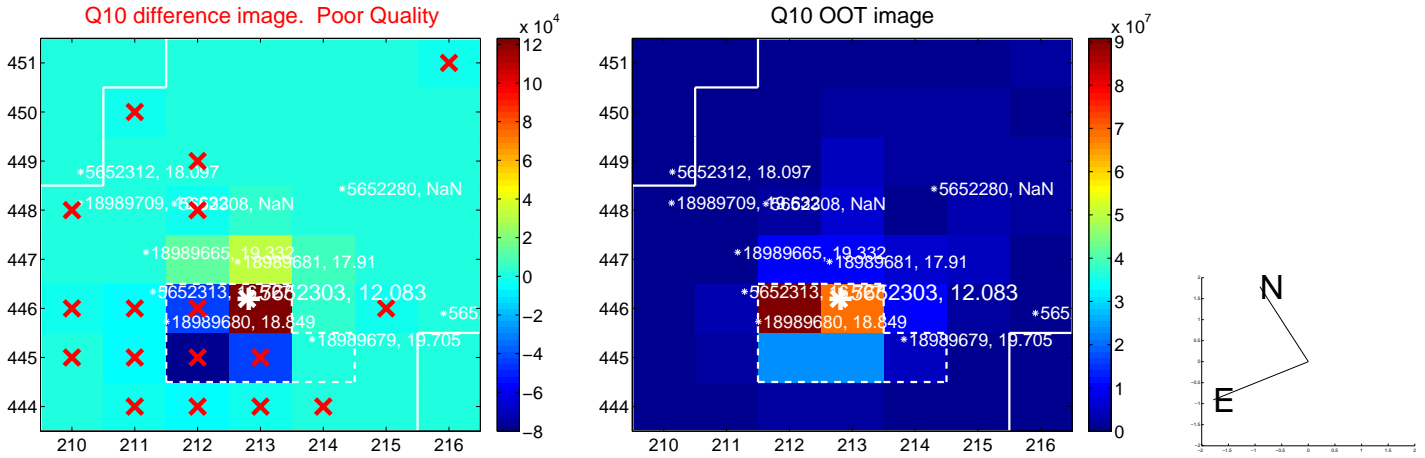
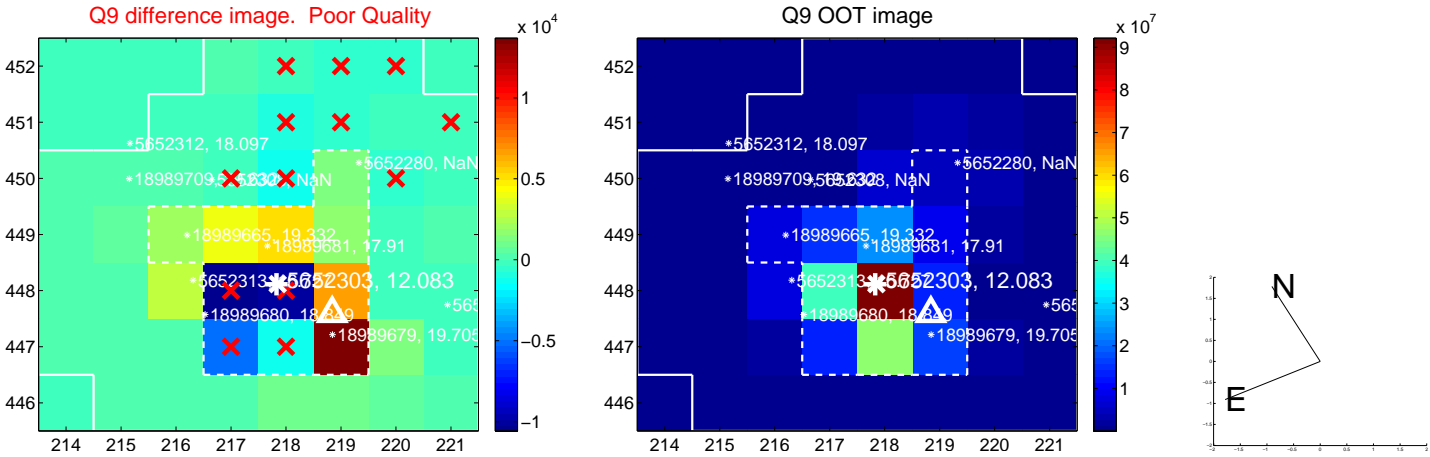
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



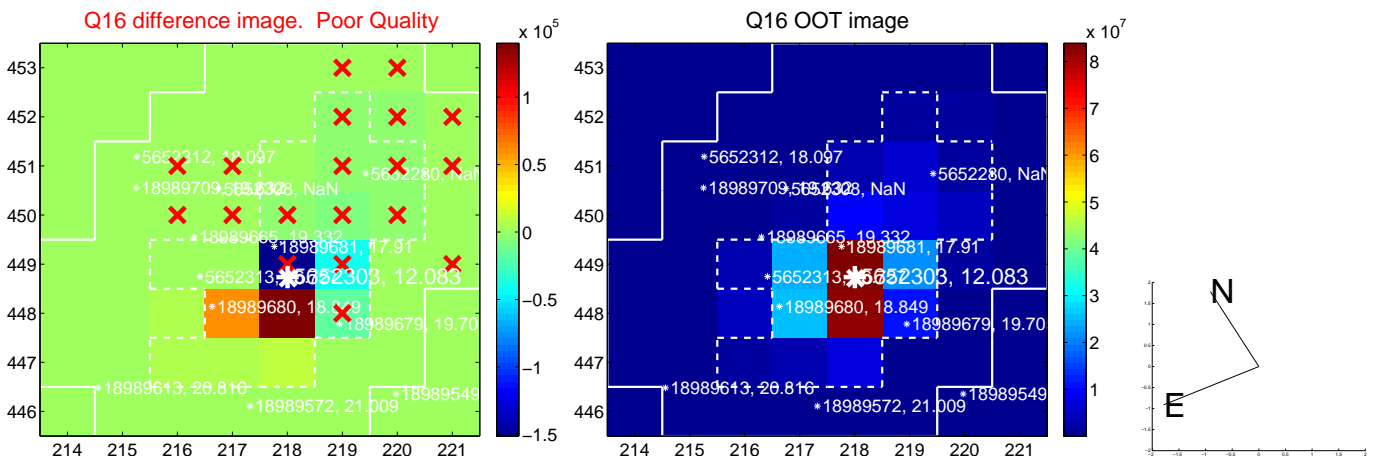
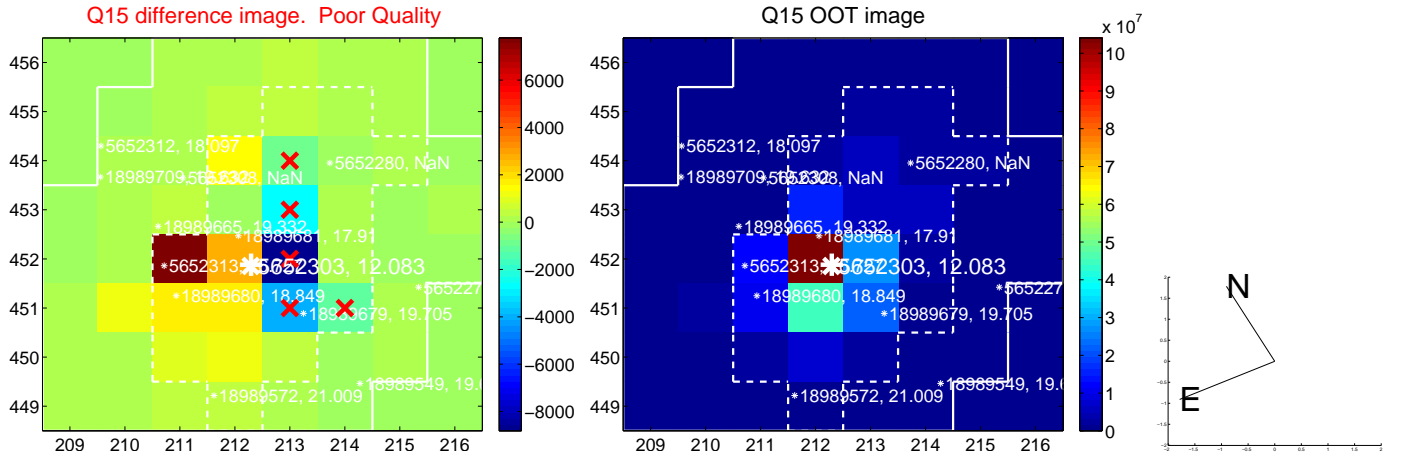
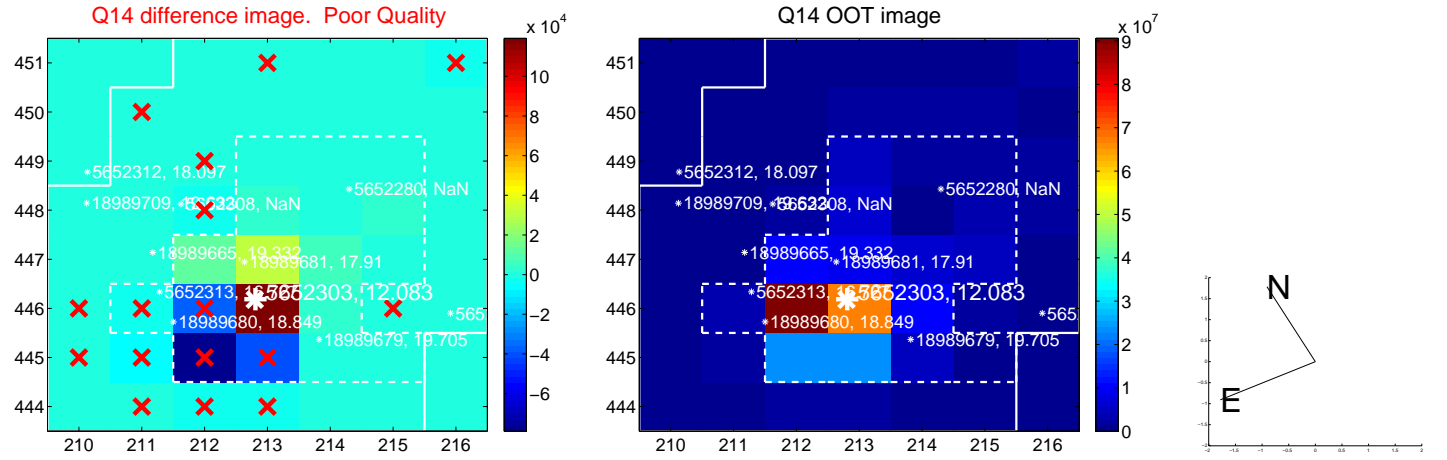
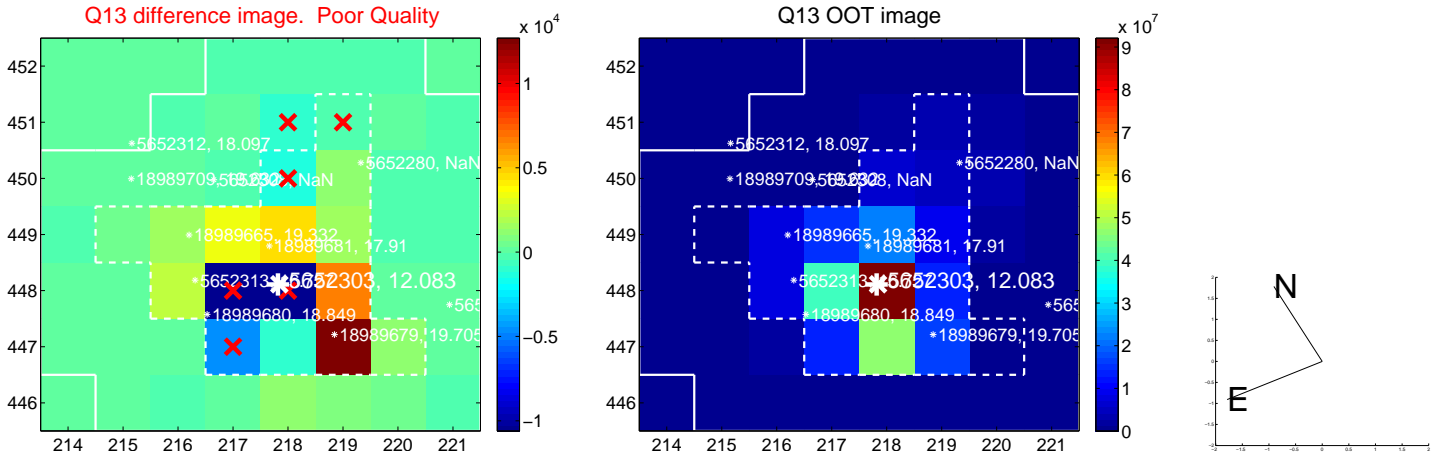
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



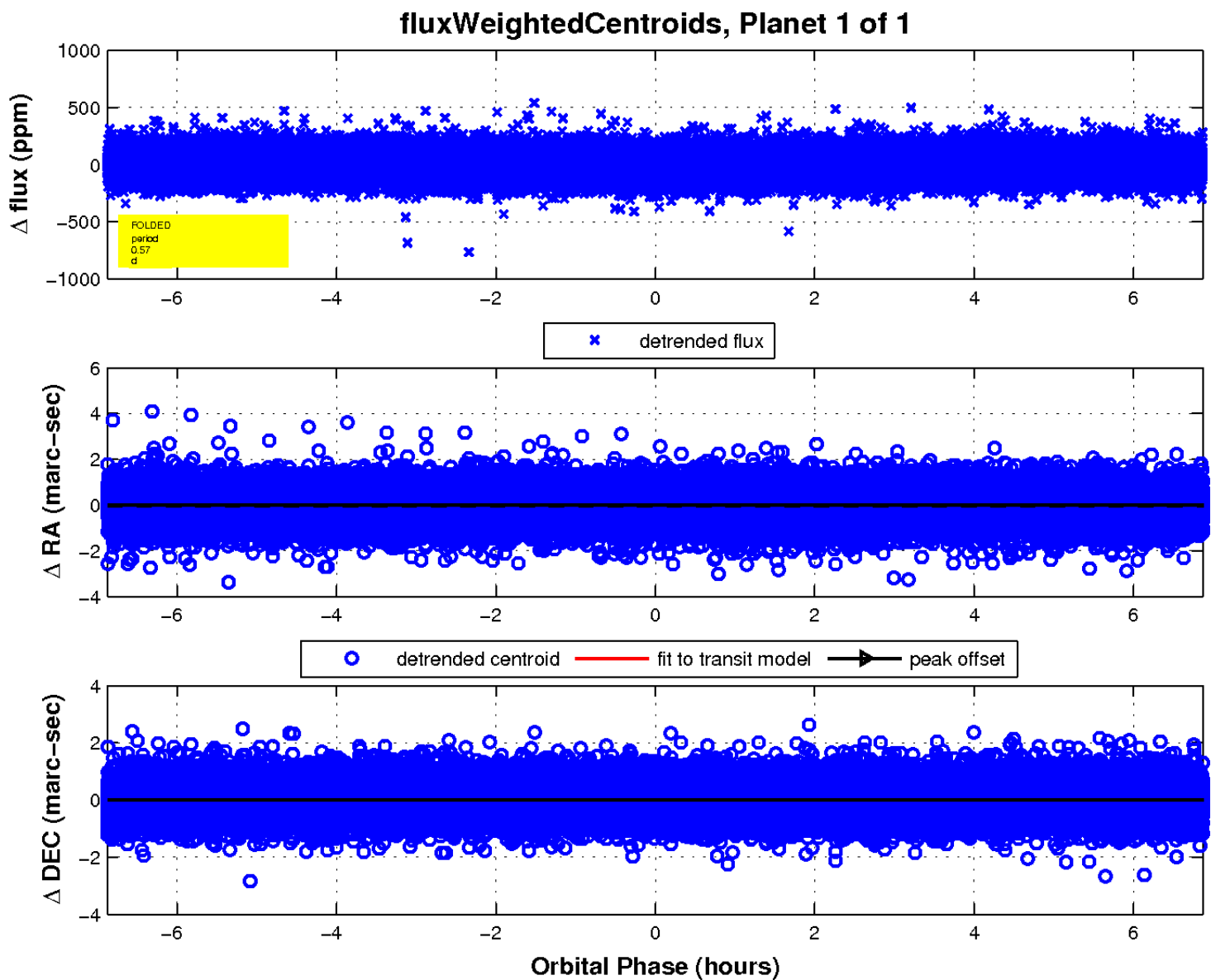
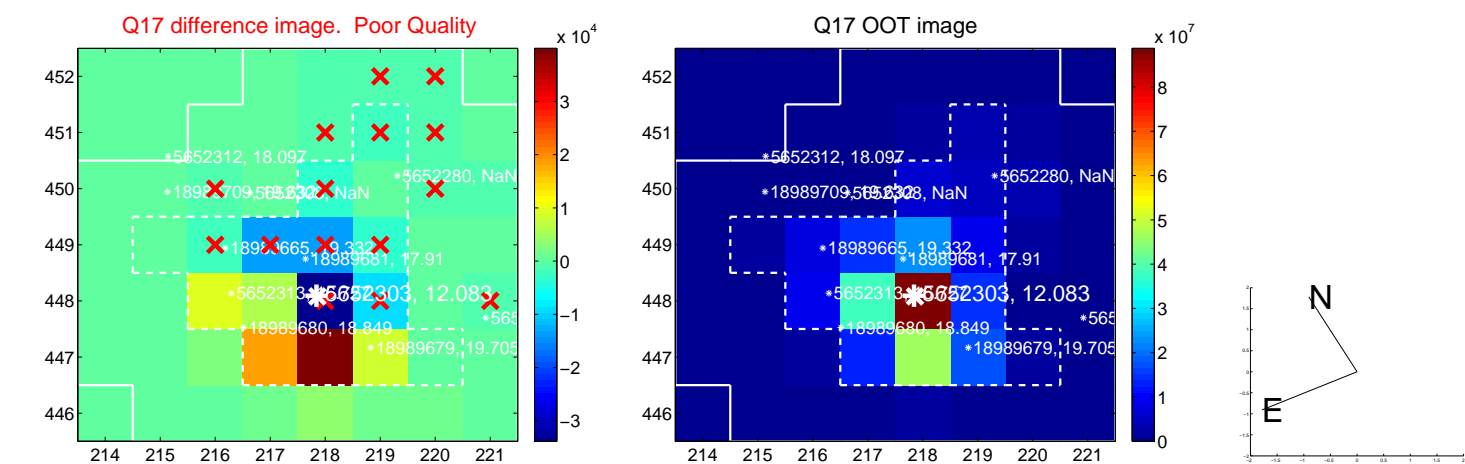
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



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



UKIRT Image

Declination

