

KIC 007772803

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})
007772803-01	OBS	No	5.201057	131.674462	87.9	15.000	7.6	-1.0	2.06	7302	1.96	2281.23

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007772803-01	OBS	FP	0.00	1	0	0	0	LPP_DV—MOD_NONUNIQ_ALT—CENT_NOFITS

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

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

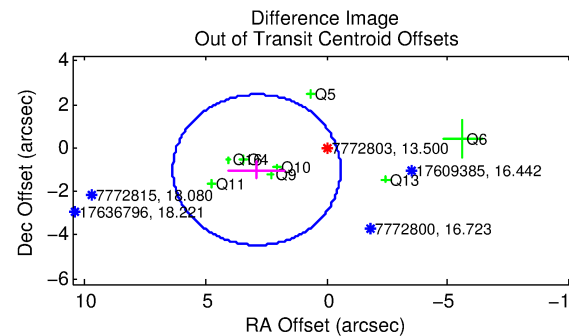
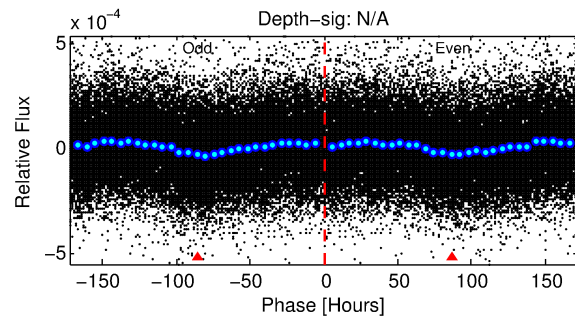
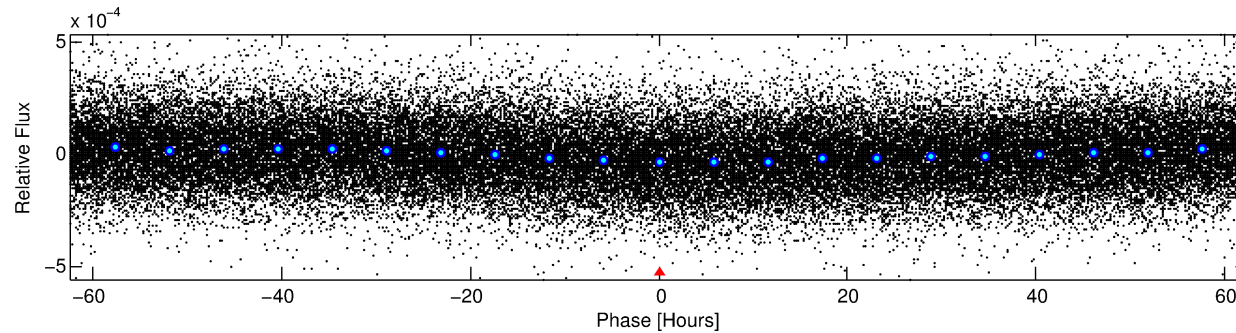
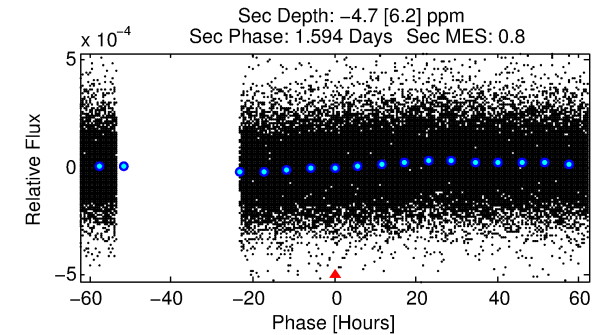
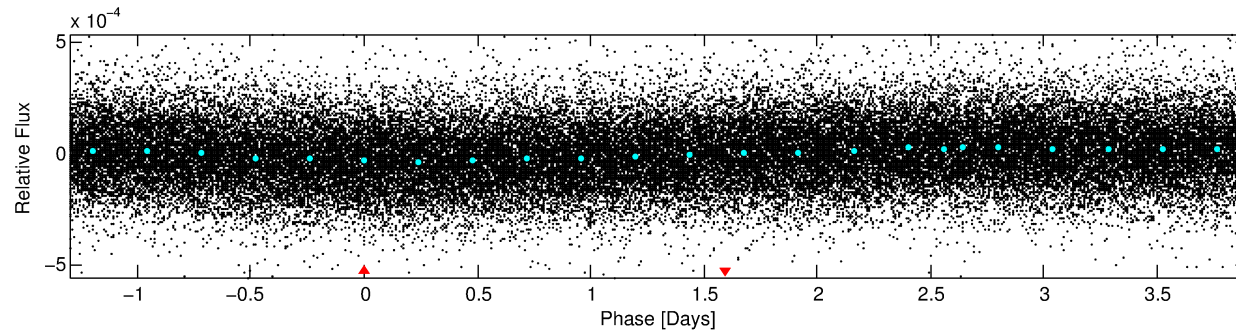
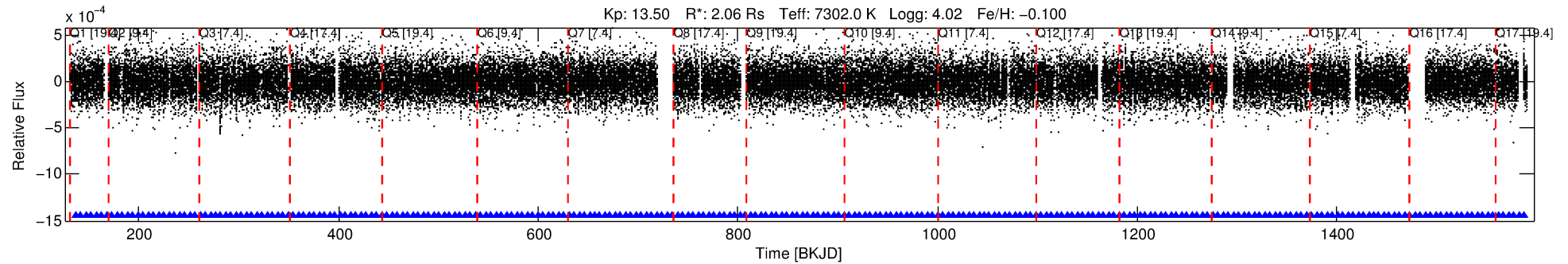
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007772803-01

No Significant Match Found

DV One-Page Summary

KIC: 7772803 Candidate: 1 of 1 Period: 5.201 d



TPS TCE Results:

Period = 5.20106 d
Epoch = 131.6745 BKJD

DV fit results are unavailable

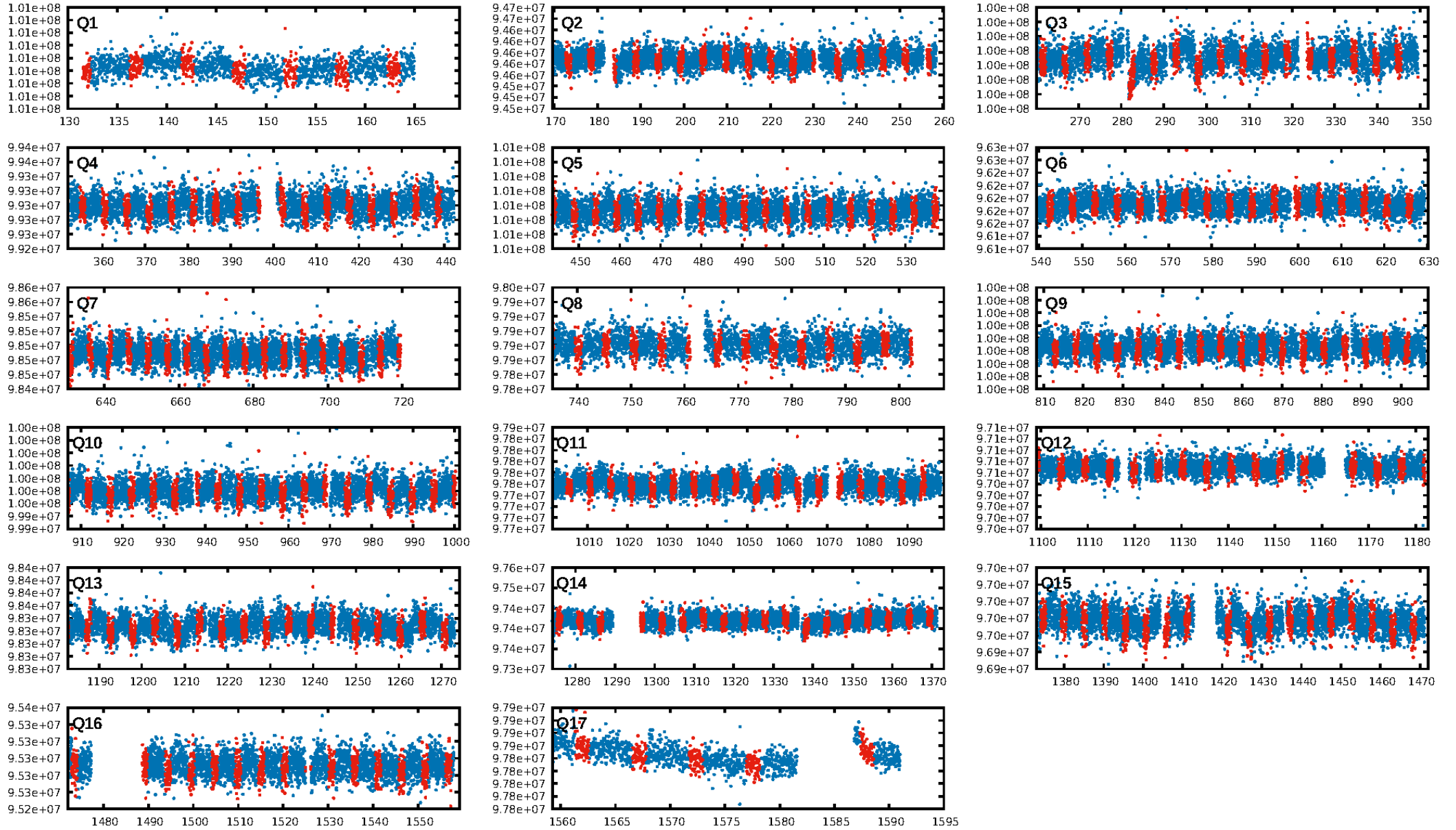
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 6.58e-16
RollingBand-fgt: 1.00 [258/258]
GhostDiagnostic-chr: 1.722
Centroid-sig: 0.1%
Centroid-so: 3.703 arcsec [2.77 σ]
OotOffset-rm: 3.056 arcsec [2.65 σ]
KicOffset-rm: 2.982 arcsec [2.91 σ]
OotOffset-st: 2/1/2/3 [8]
KicOffset-st: 2/1/2/3 [8]
DiffImageQuality-fgm: 0.62 [5/8]
DiffImageOverlap-fno: 1.00 [17/17]

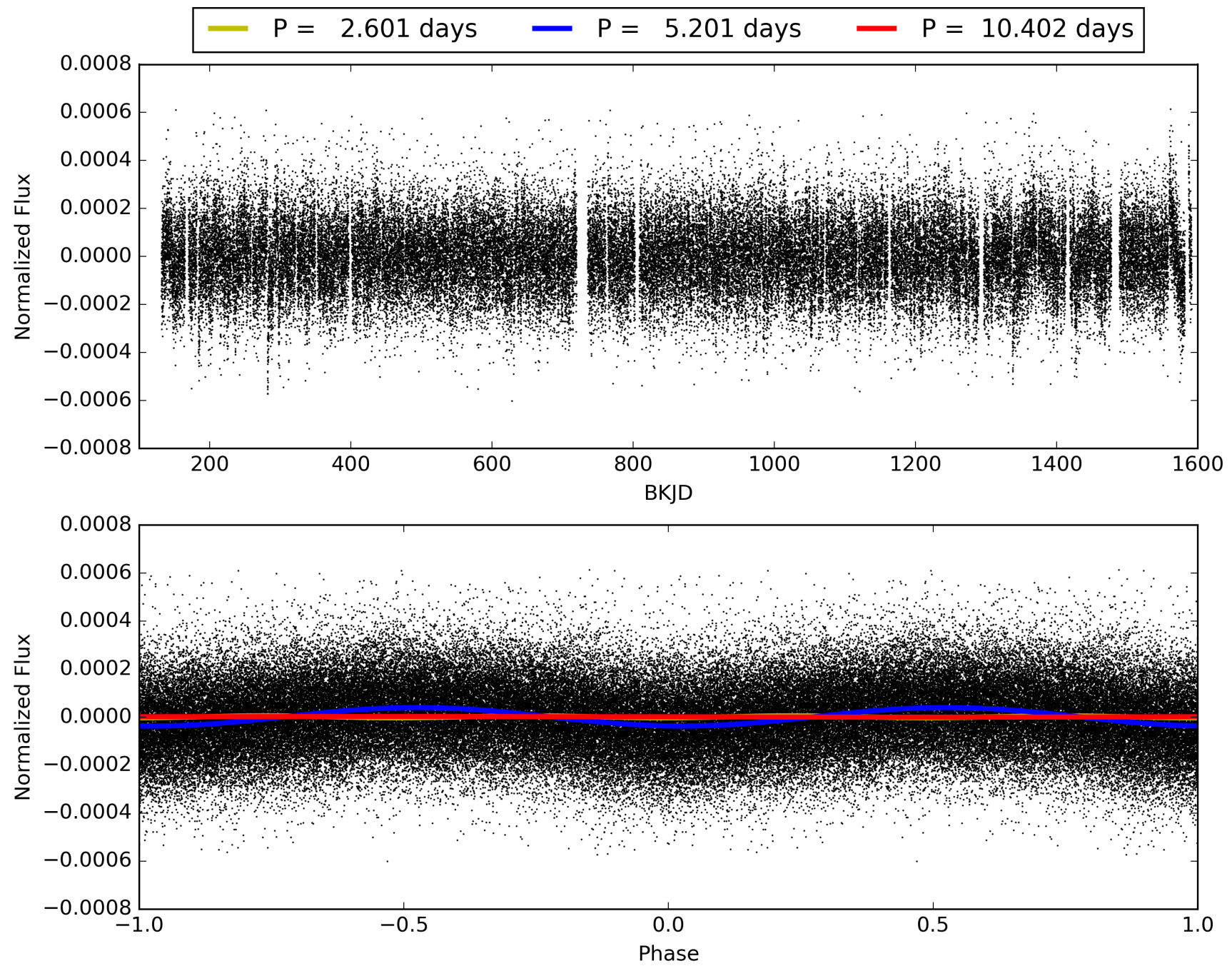
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 18:06:36 Z

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

TCE 007772803-01, PDC Light Curves

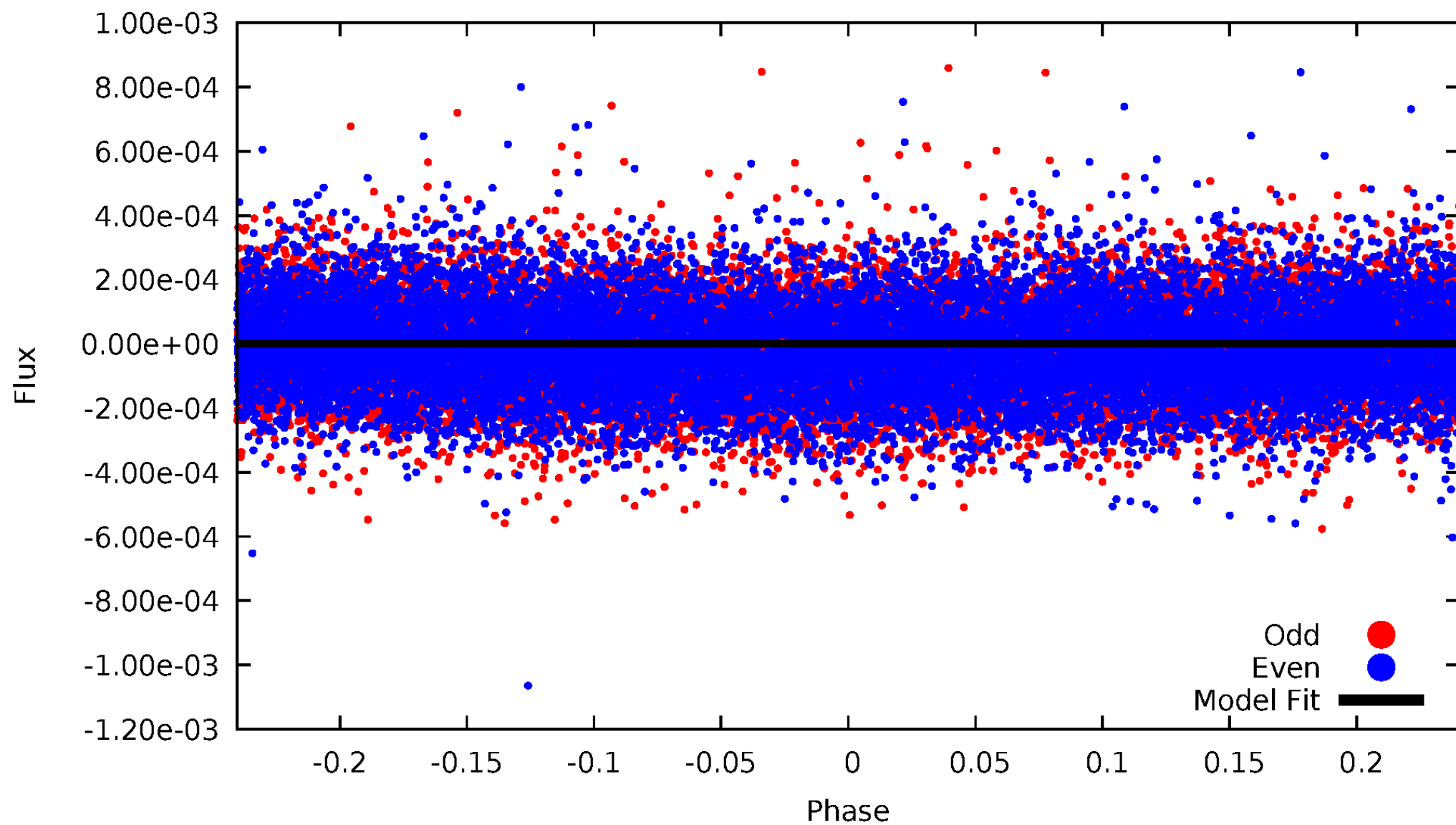


TCE 007772803-01



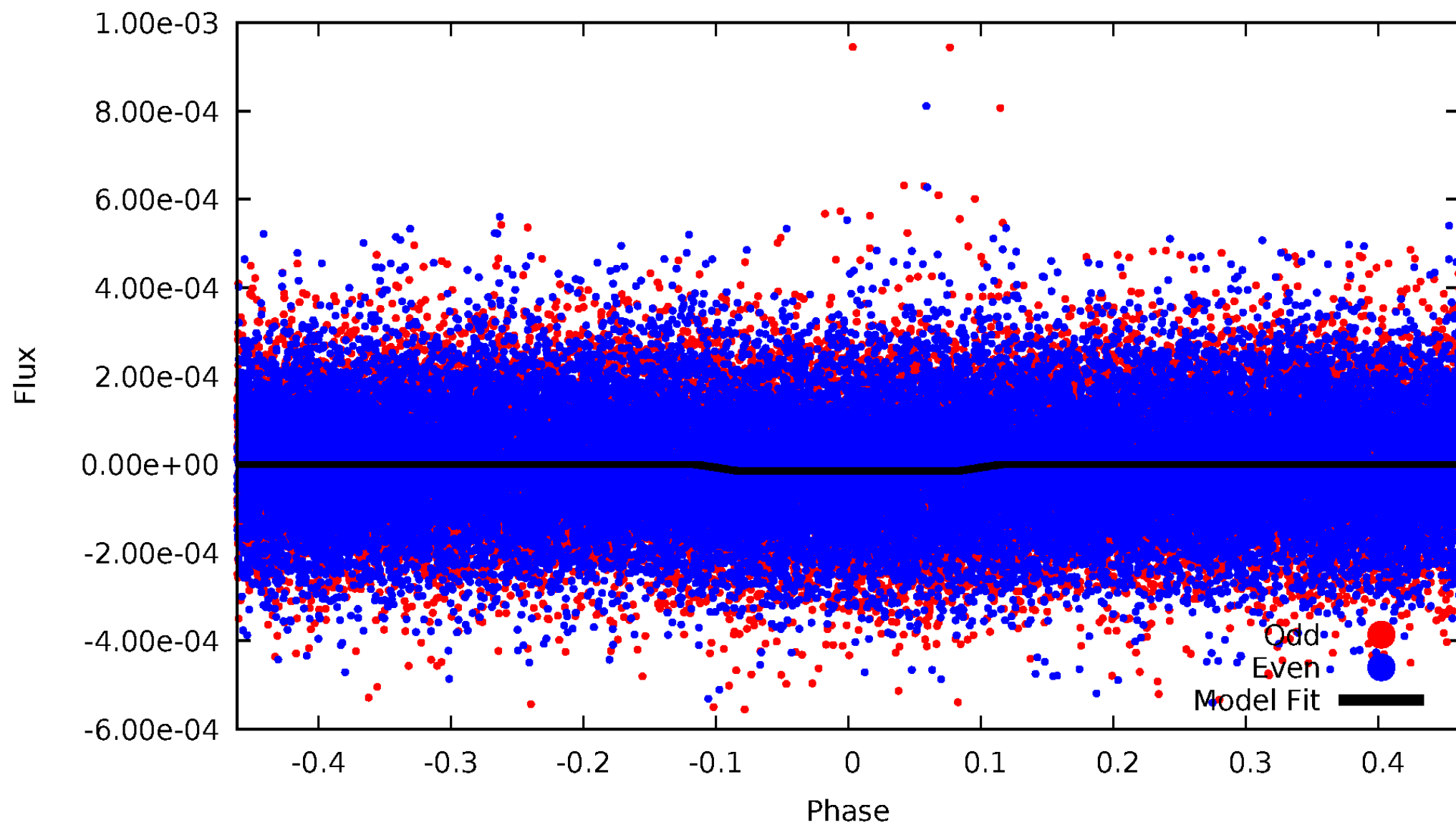
DV Odd/Even

TCE 007772803-01

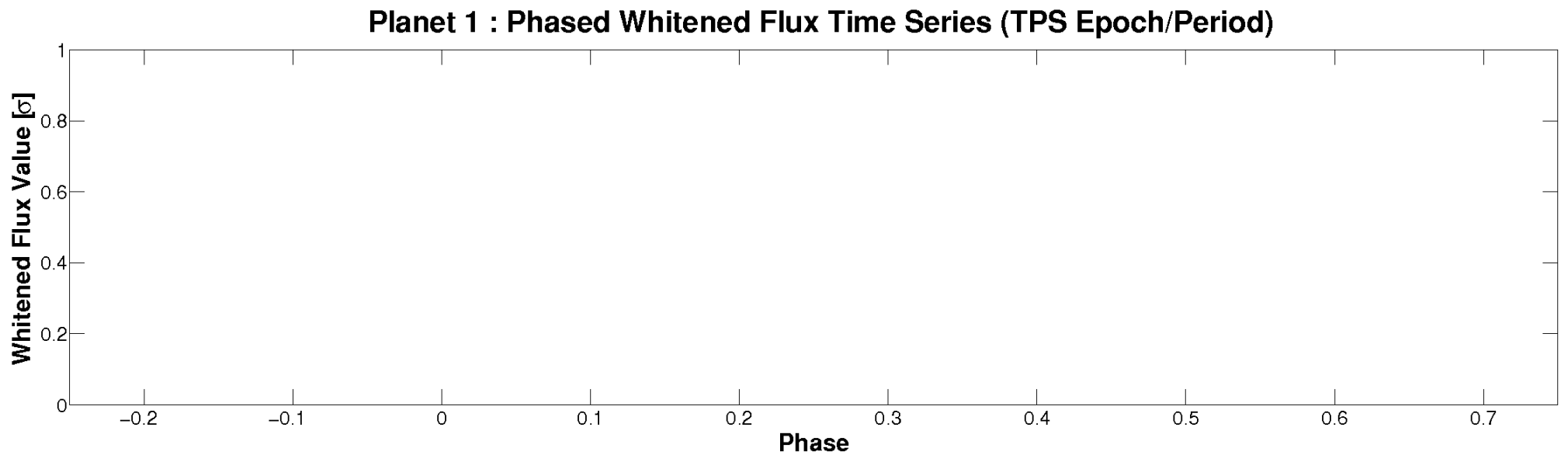
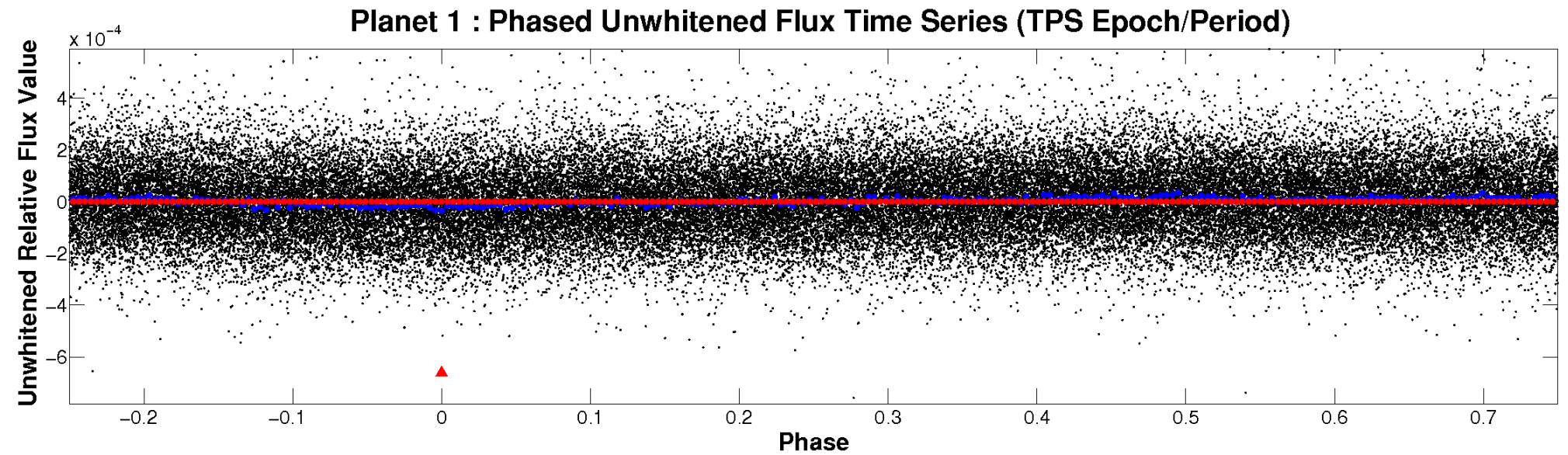


ALT Odd/Even

TCE 007772803-01

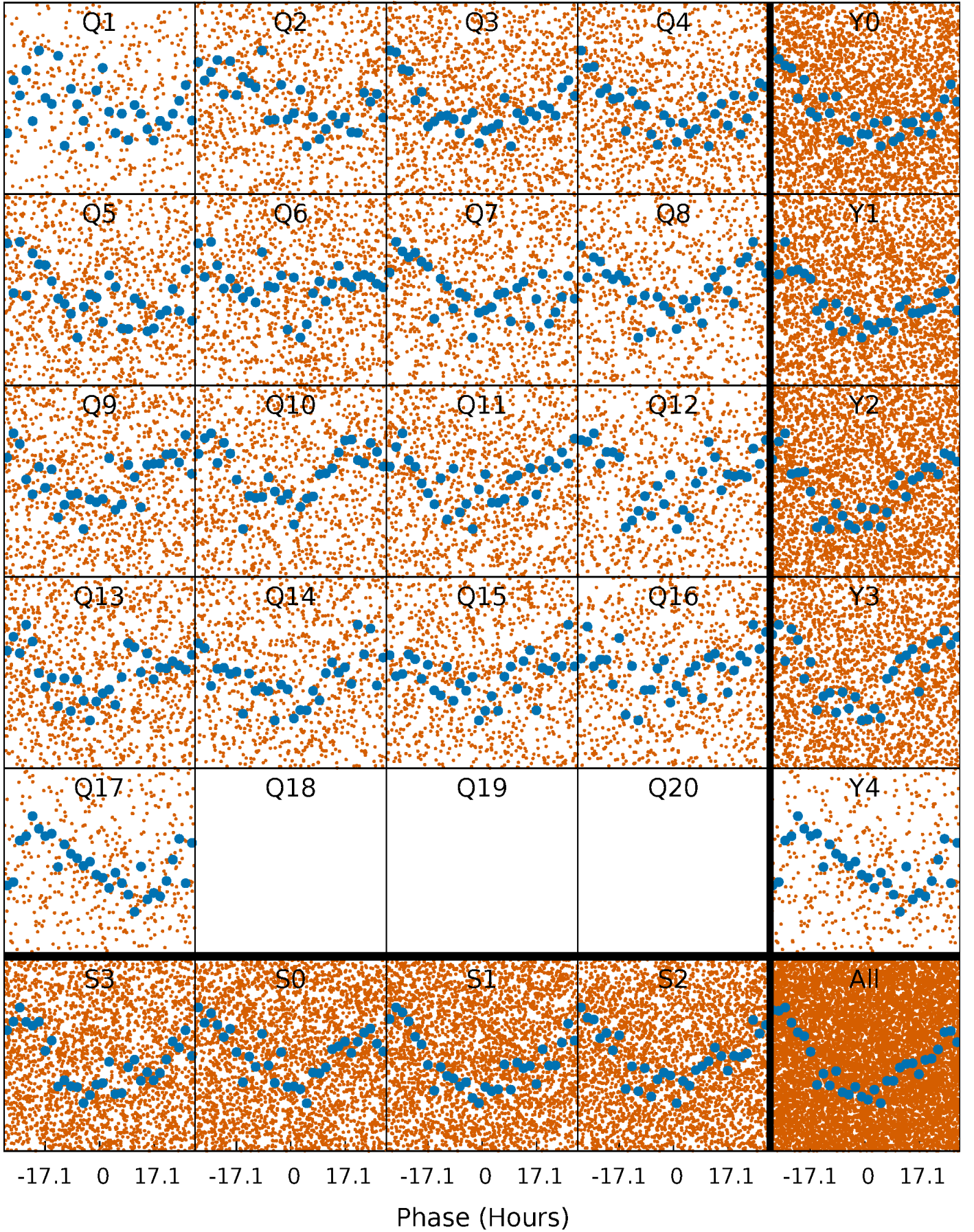


Non-Whitened Vs. Whitened Light Curve



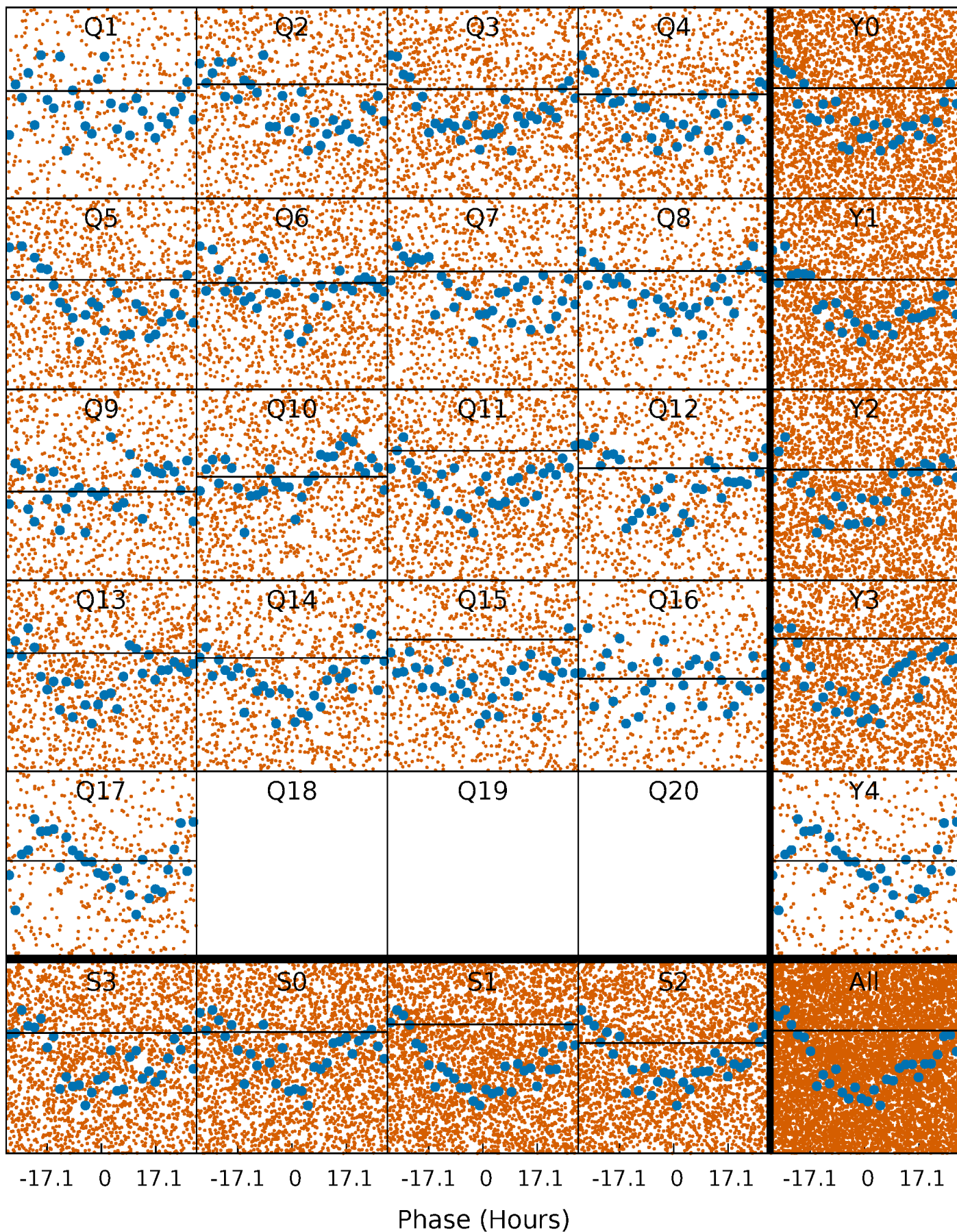
PDC Quarter-Phased Transit Curves

TCE 007772803-01 P= 5.201057 Days $T_0=131.674462$ (BKJD)



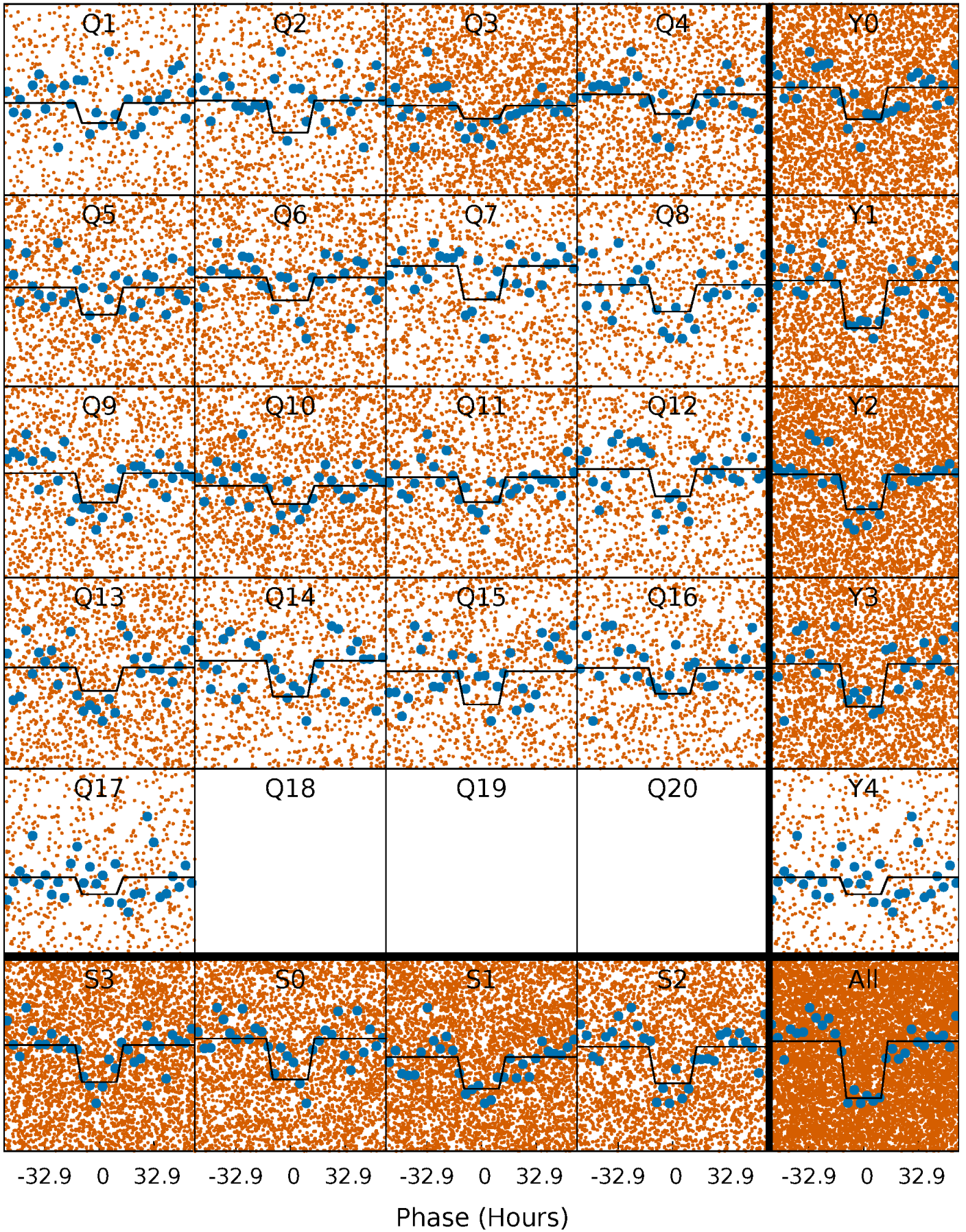
DV Quarter-Phased Transit Curves

TCE 007772803-01 P= 5.201057 Days $T_0=131.674462$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

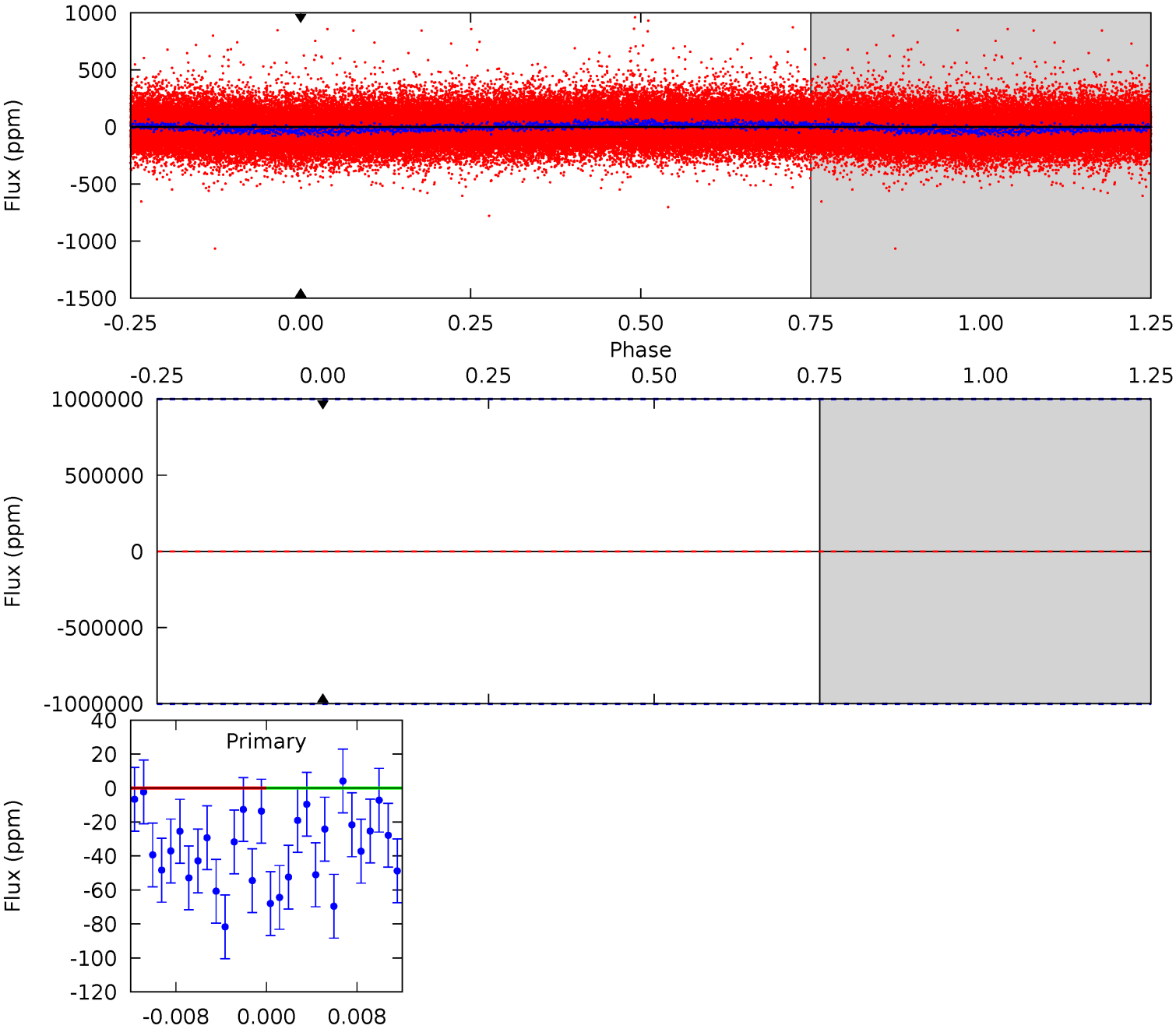
TCE 007772803-01 P= 5.201057 Days $T_0=136.681554$ (BKJD)



DV Model-Shift Uniqueness Test

007772803-01, P = 5.201057 Days, E = 126.473405 Days

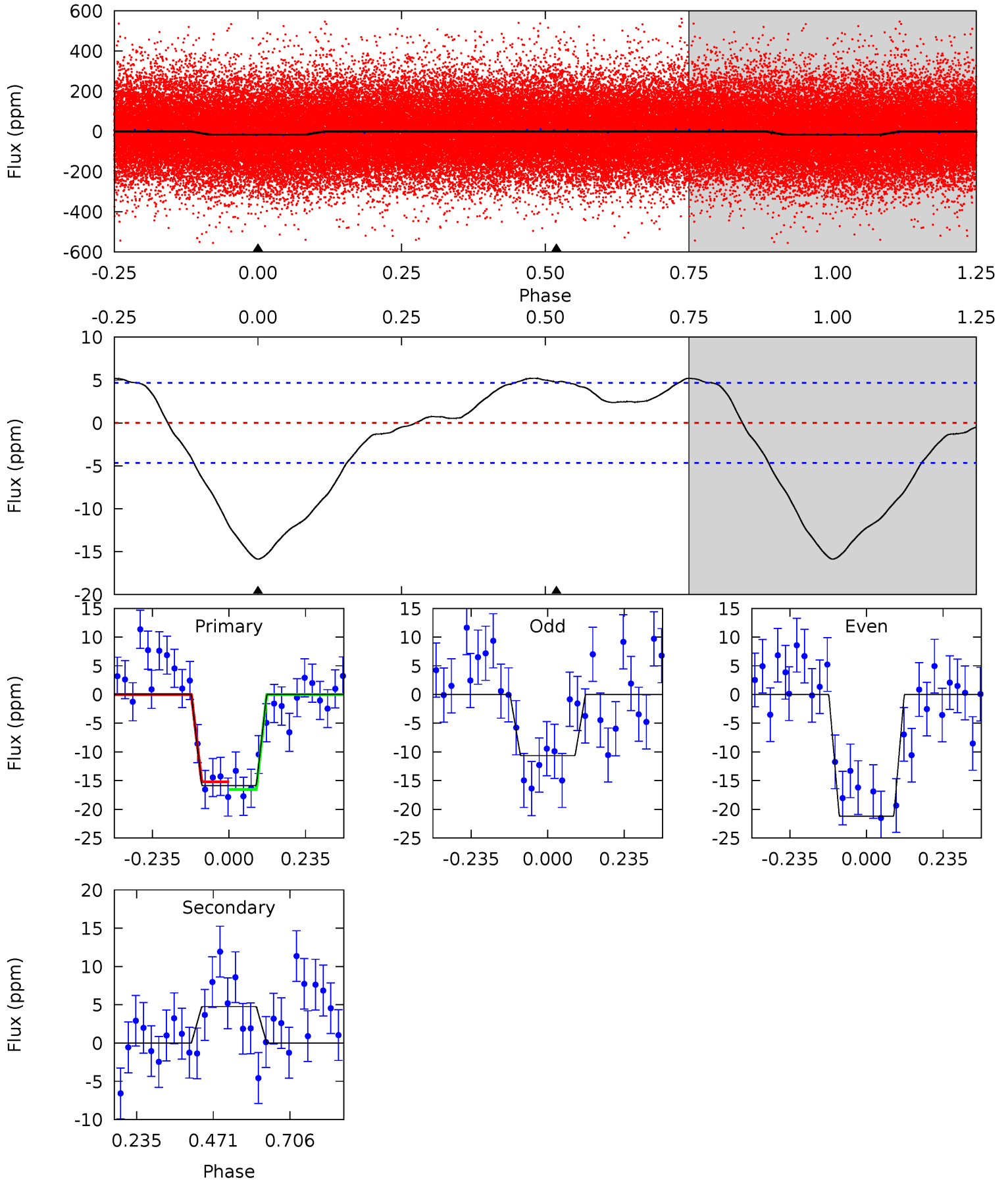
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

007772803-01, P = 5.201057 Days, E = 131.480497 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14.9	-4.48	0	0	4.38	1.19	2.36	14.9	14.9	-4.48	-4.48	4.98	0.74	0.25	0.61



Stellar Parameters For KIC 007772803

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$\rho_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7302^{+228}_{-330}	$4.016^{+0.203}_{-0.166}$	$-0.100^{+0.250}_{-0.350}$	$2.058^{+0.569}_{-0.569}$	$1.601^{+0.199}_{-0.273}$	$0.259^{+0.309}_{-0.124}$
	+3%/-5%	+5%/-4%	+250%/-350%	+28%/-28%	+12%/-17%	+119%/-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 007772803-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	0 ± 1000000	$15.81^{+17.22}_{-11.83}$	2444^{+178}_{-187}	-4478^{+50179}_{-30968}	$-7.616^{+2416.932}_{-1852.323}$
Alt.	5 ± 1	$15.84^{+15.45}_{-10.73}$	2446^{+184}_{-188}	-2843^{+132}_{-299}	$-0.048^{+0.036}_{-0.427}$

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

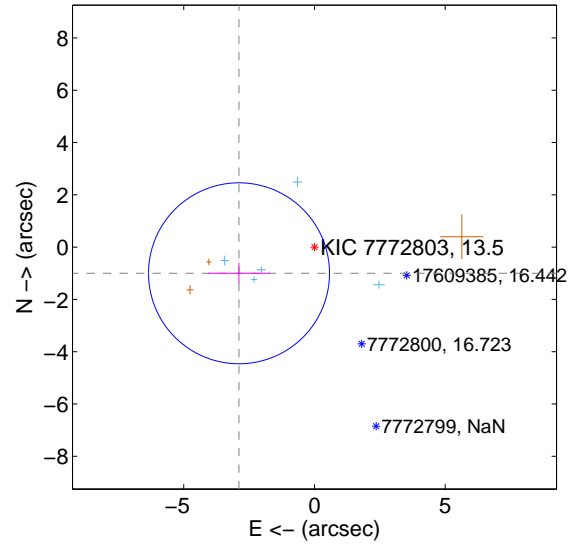
Supplemental centroid analysis for 007772803-01. Kepler magnitude: 13.50. Transit SNR -1.00

There are 5 quarters with good PRF difference image offsets

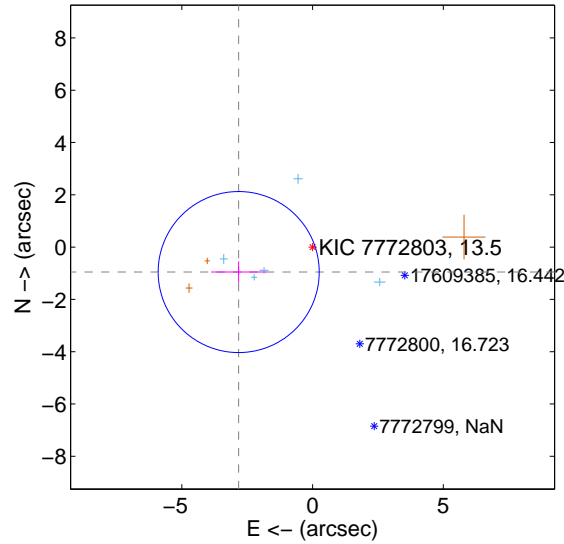
The direct PRF centroid is offset from the target star catalog position by about 0.04 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	3.056 ± 1.154	2.65	2.887 ± 1.187	-1.002 ± 0.397
PRF-fit source offset from KIC position	2.982 ± 1.026	2.91	2.825 ± 1.056	-0.954 ± 0.409
photometric centroid source offset	3.70 ± 1.34	2.77	-3.69 ± 1.34	0.31 ± 1.26

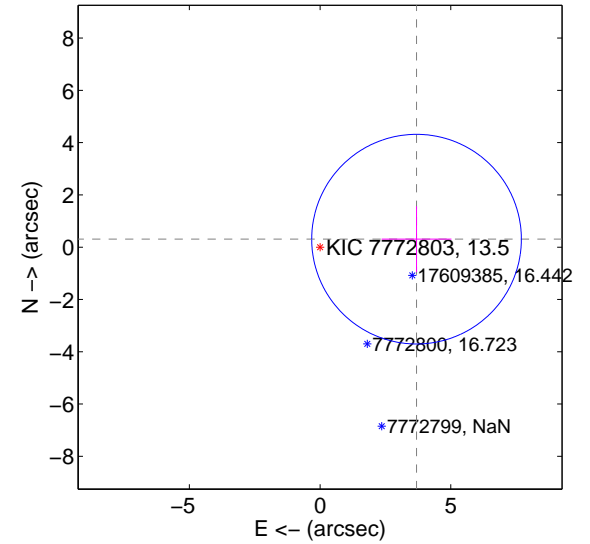
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

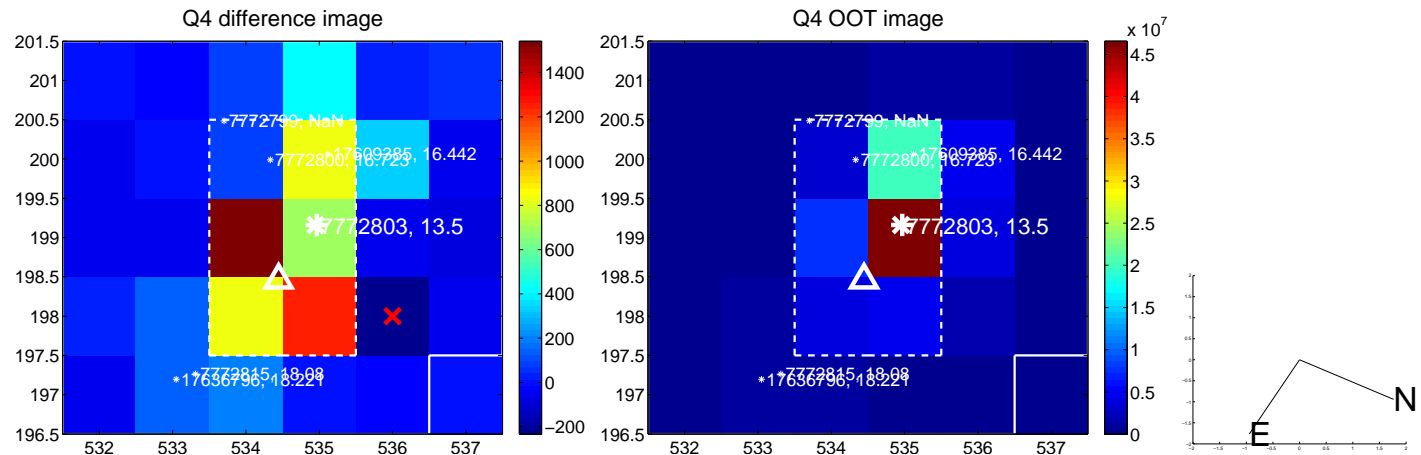
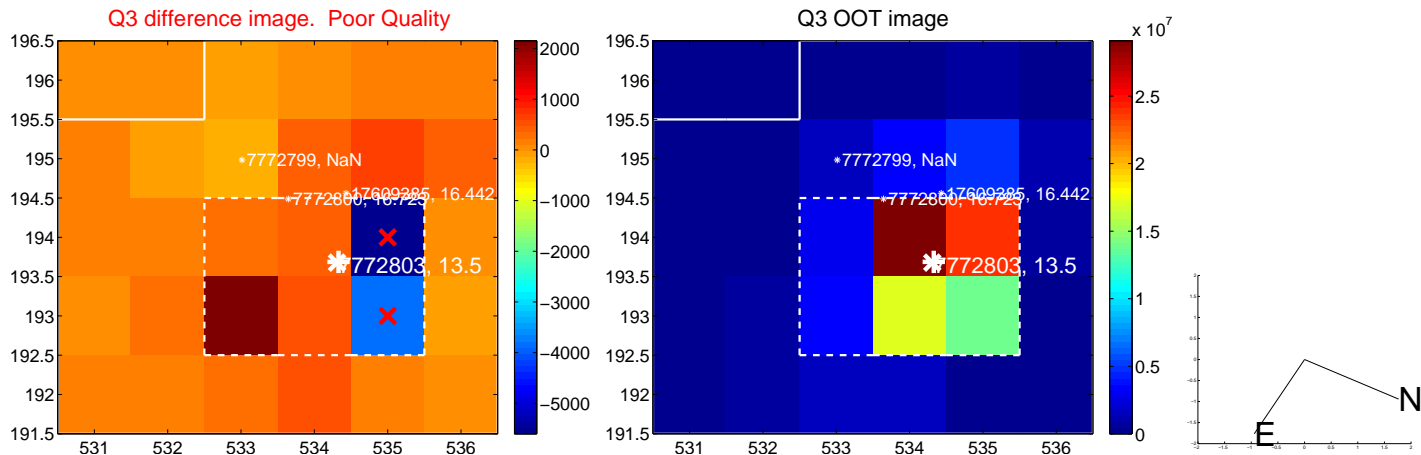
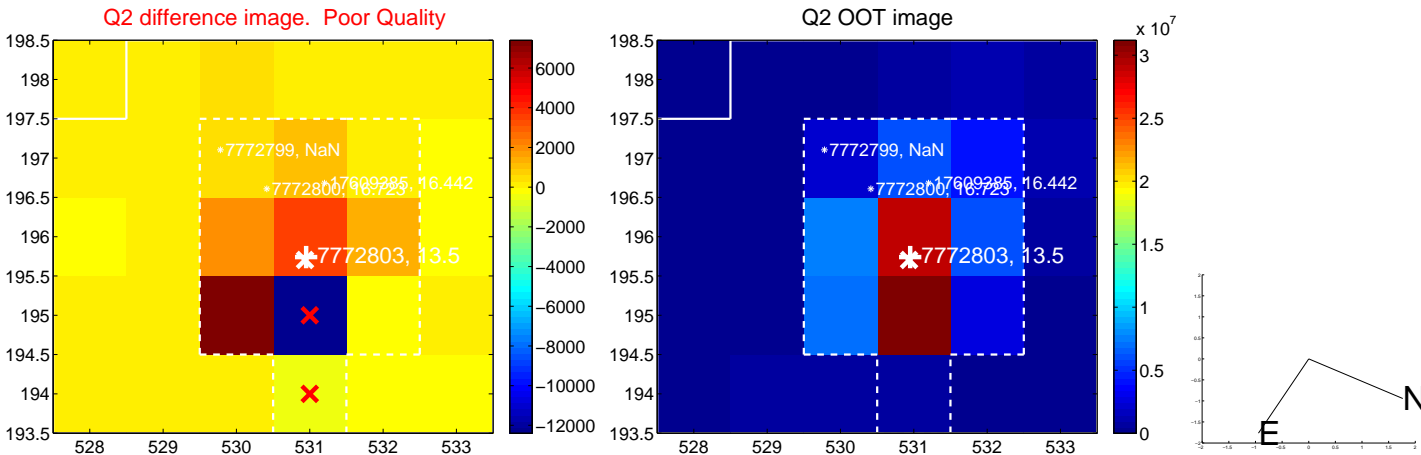
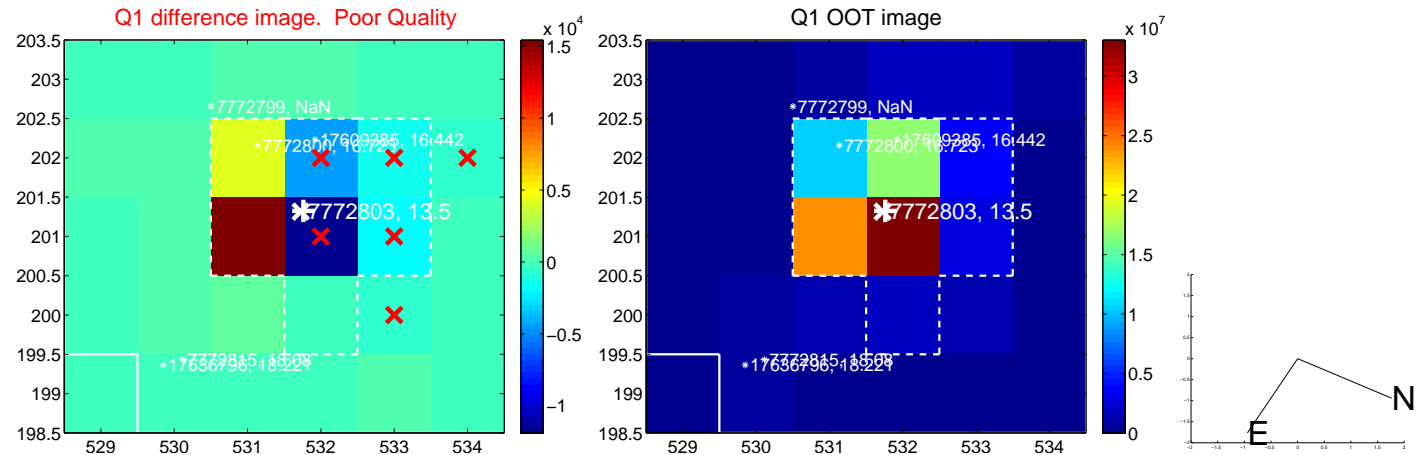


offset from photometric centroids

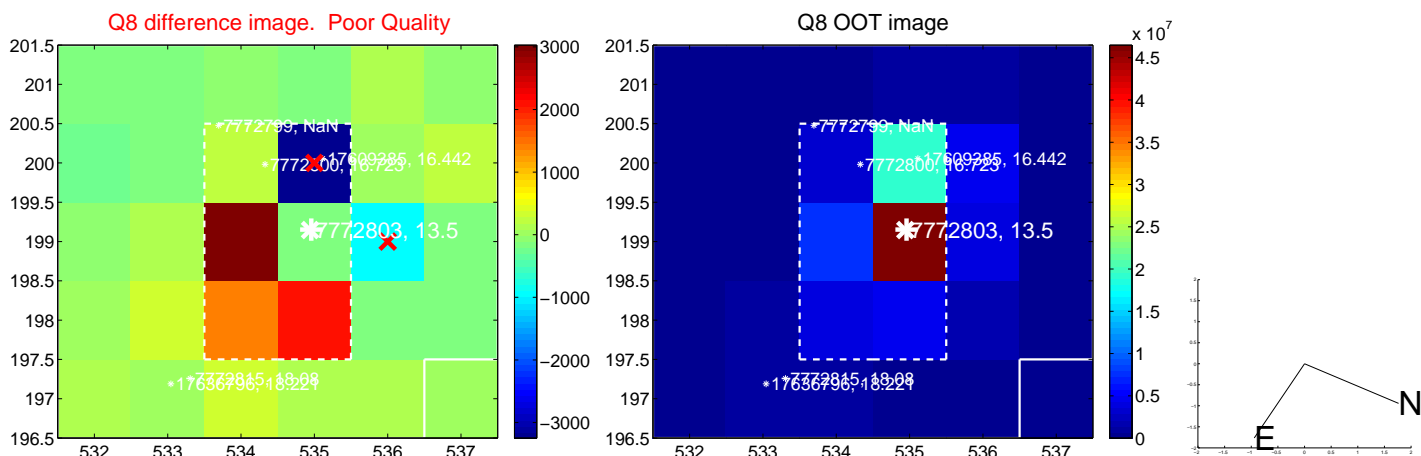
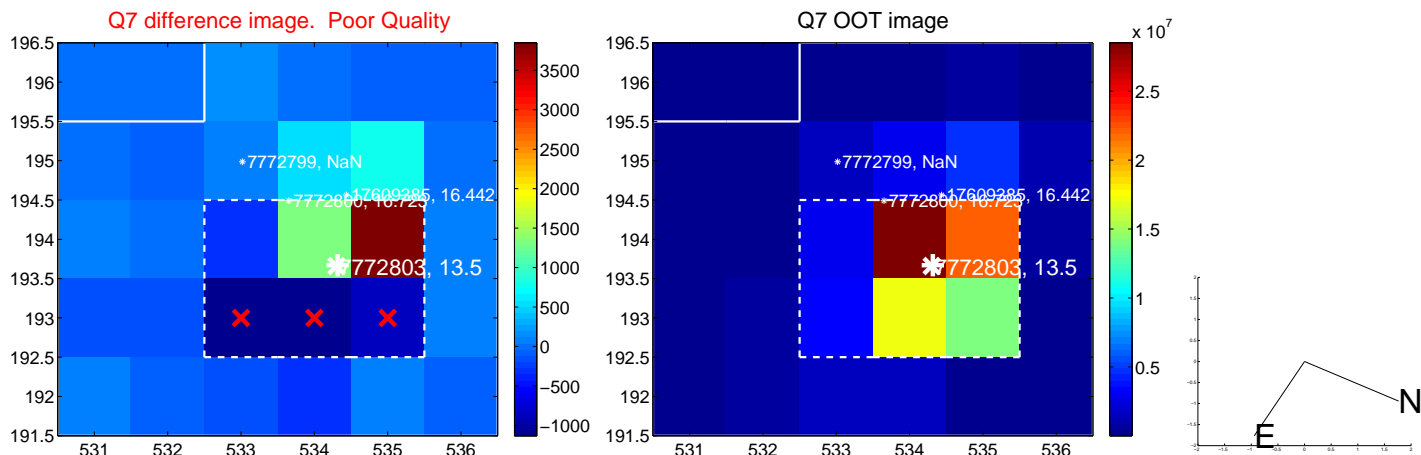
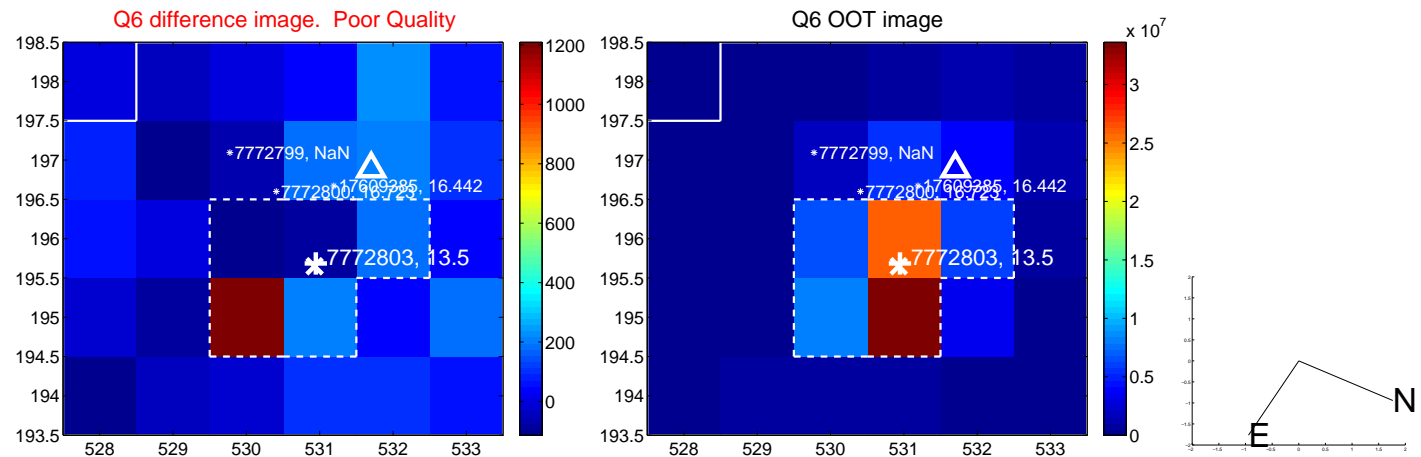
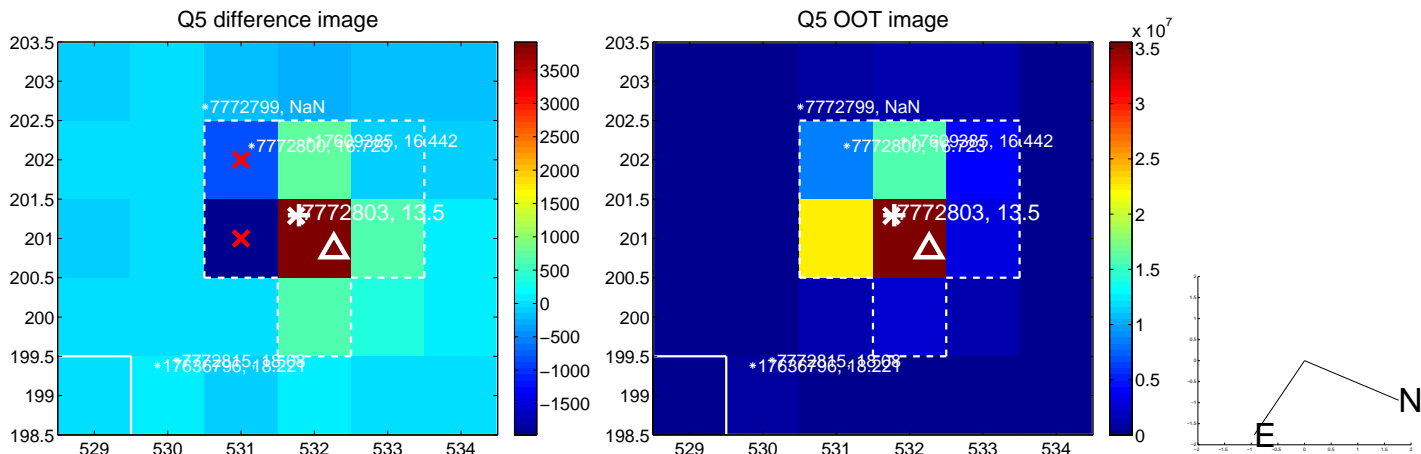


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets**; **Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

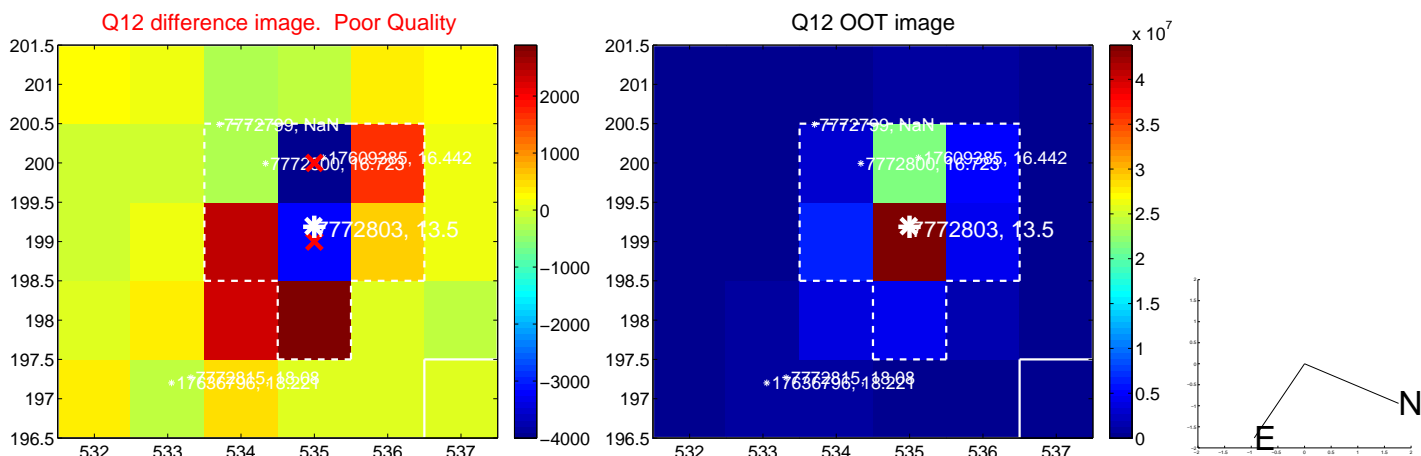
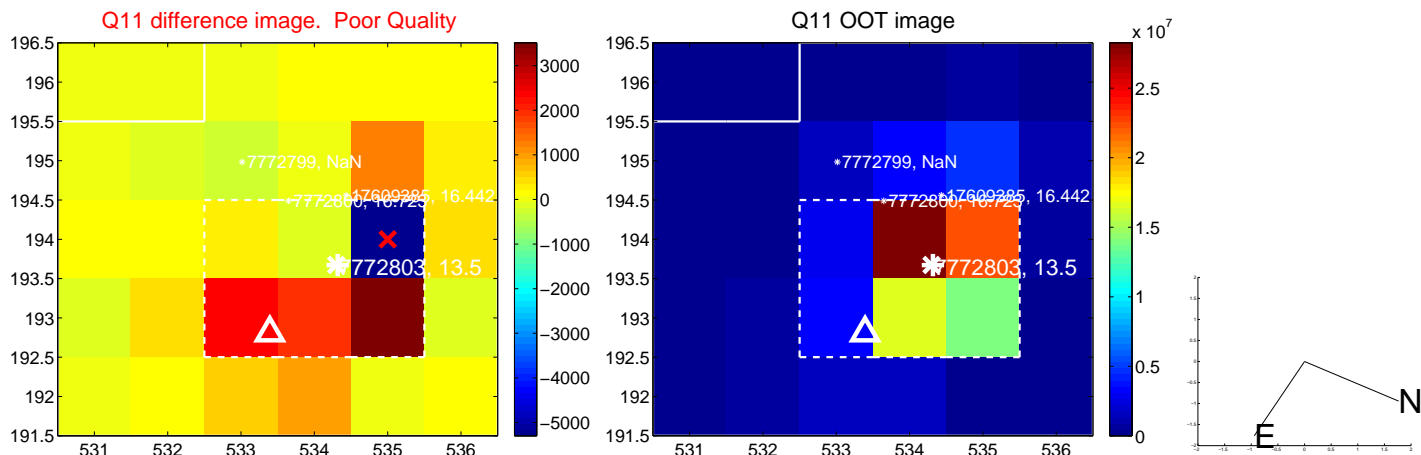
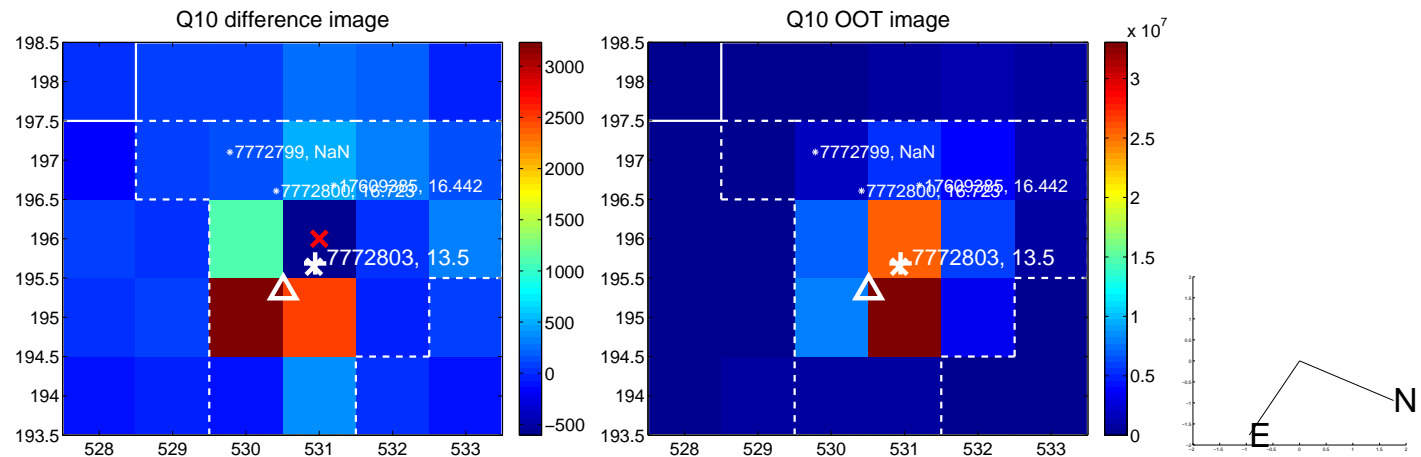
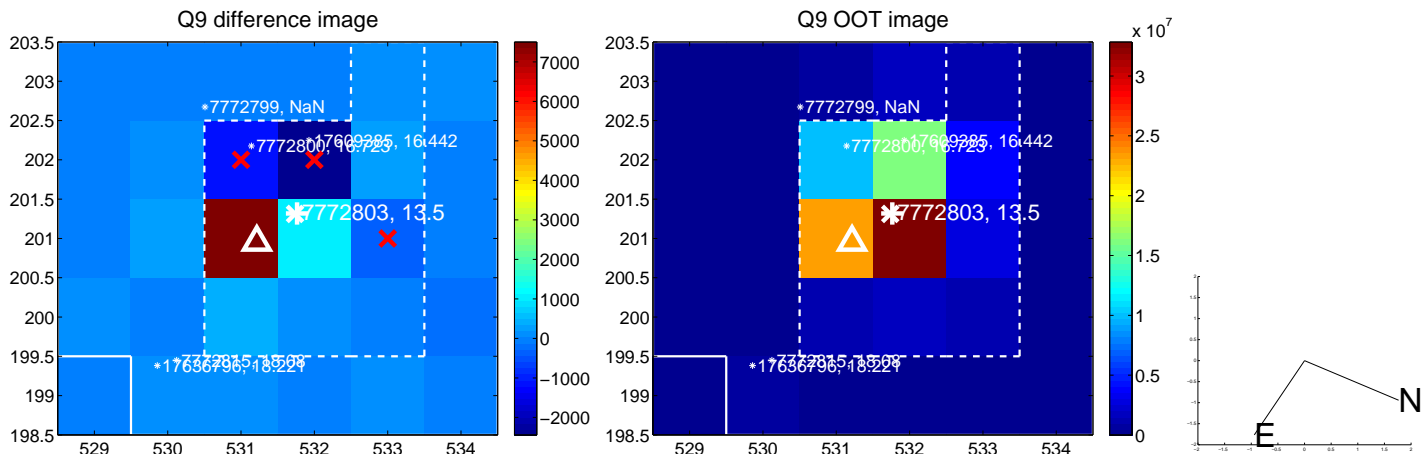
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



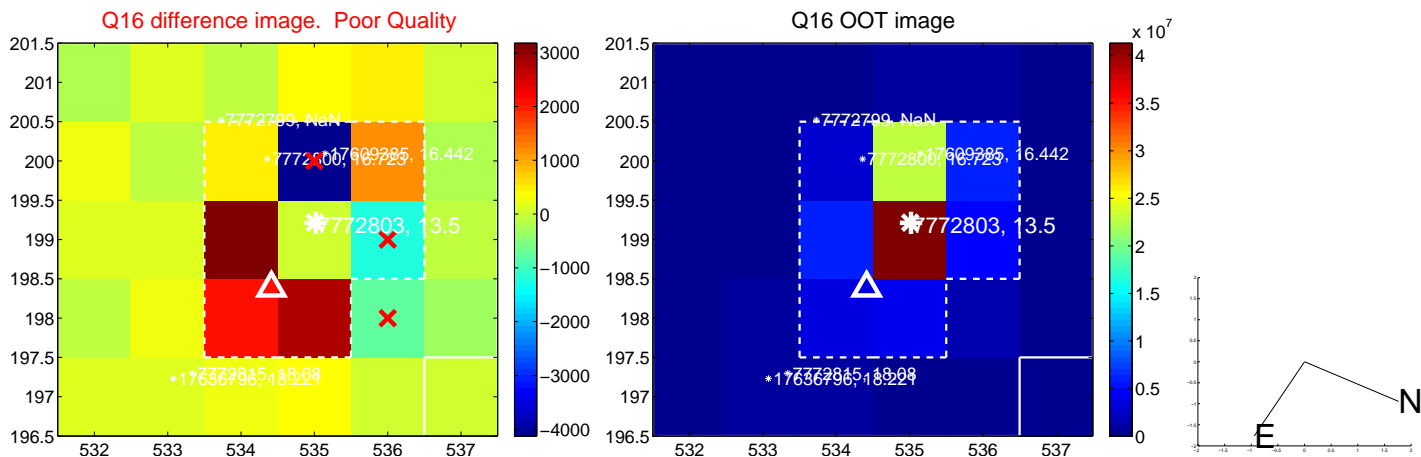
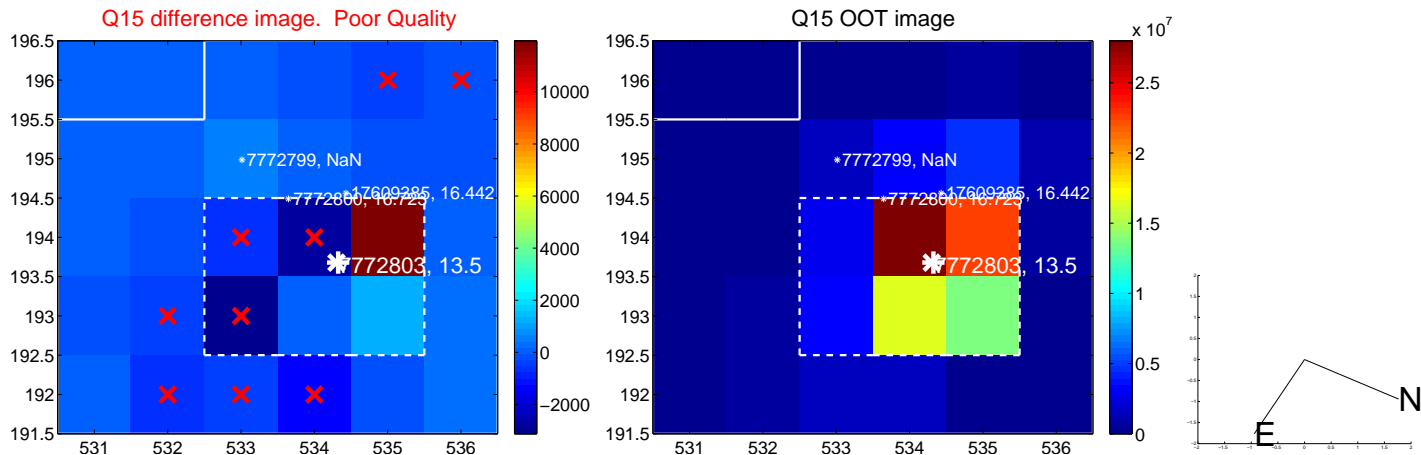
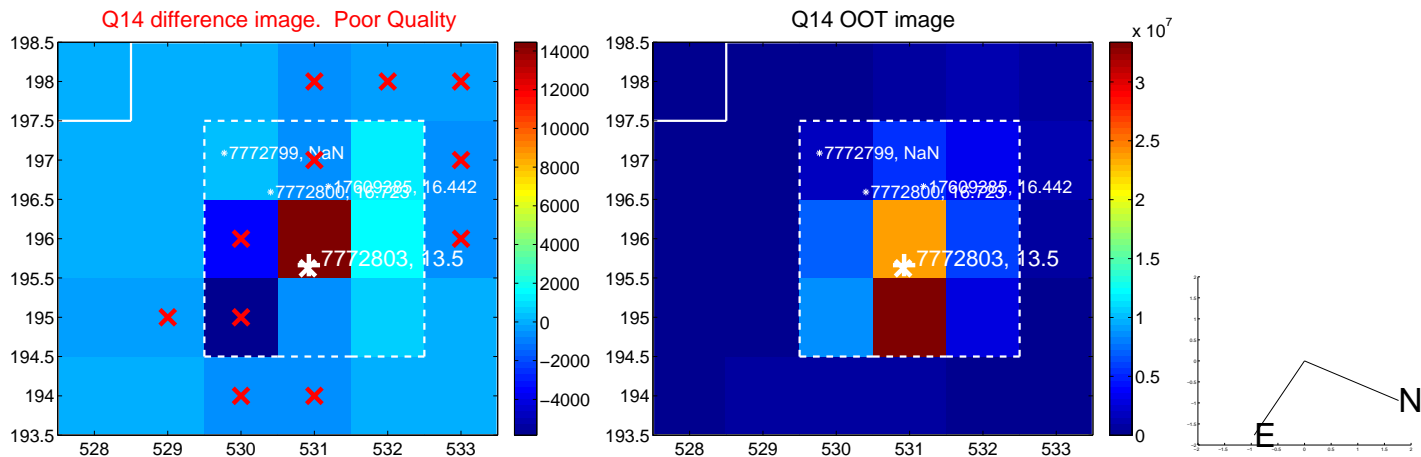
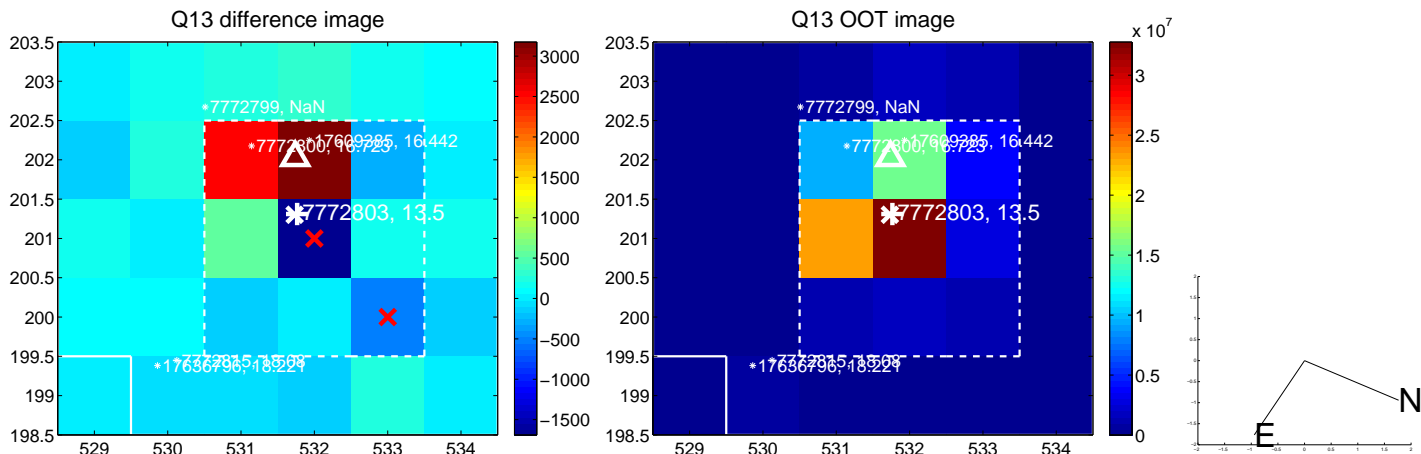
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



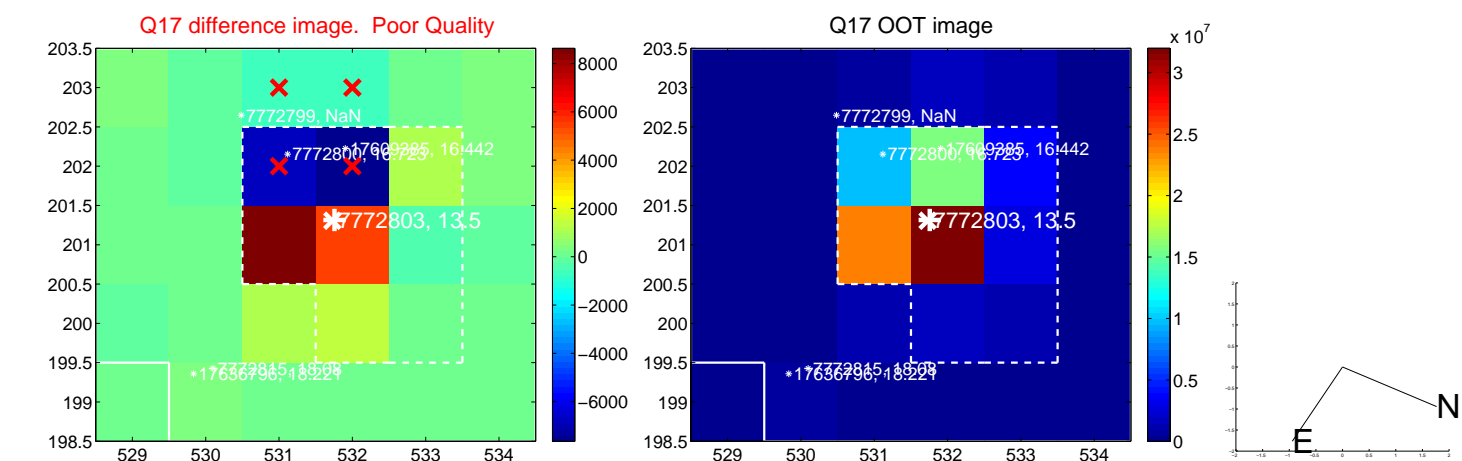
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



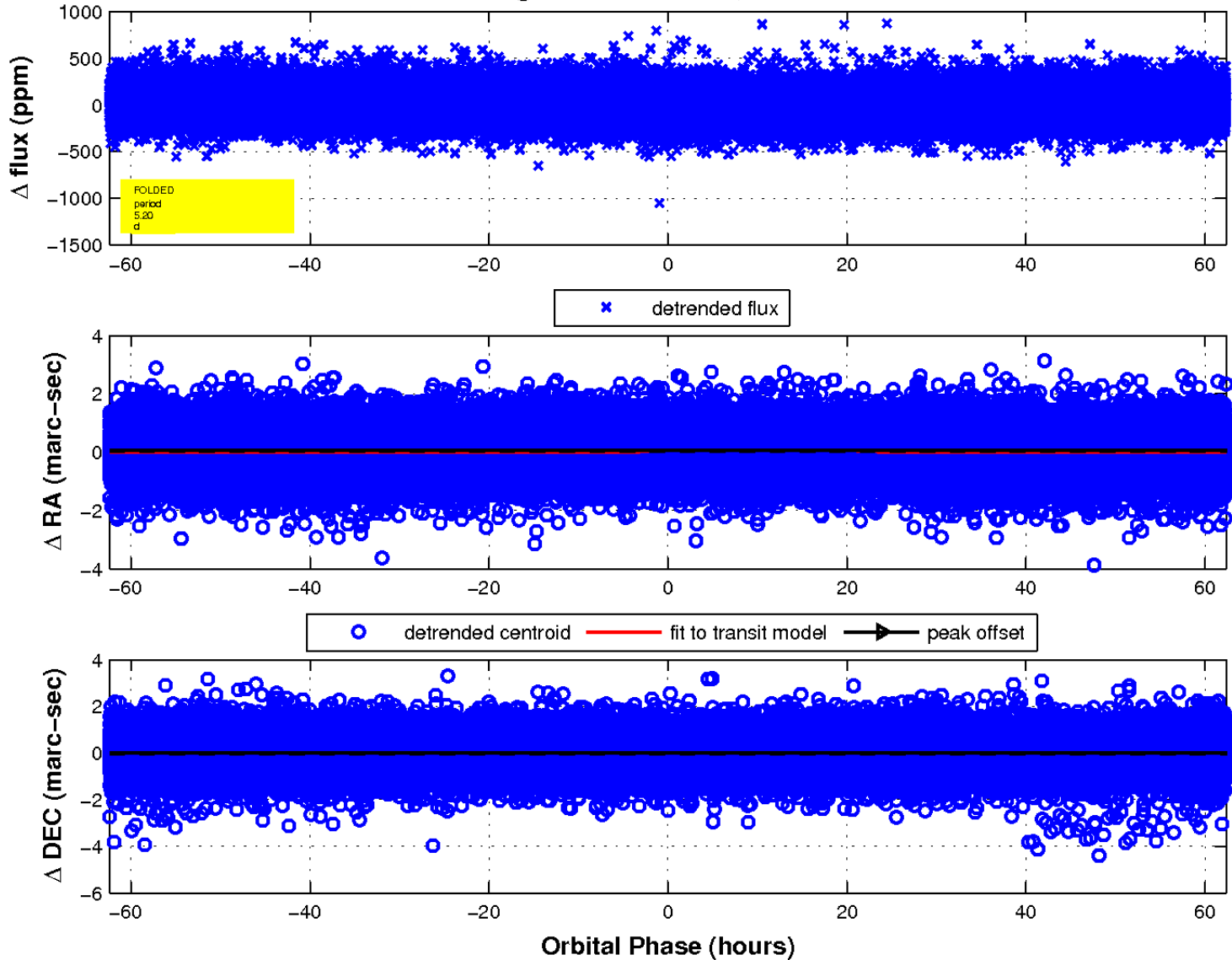
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

