

KIC 009896606

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})
009896606-01	OBS	No	0.655430	131.695841	0.0	5.115	9.7	0.0	1.61	7223	0.00	22951.95

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
009896606-01	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.

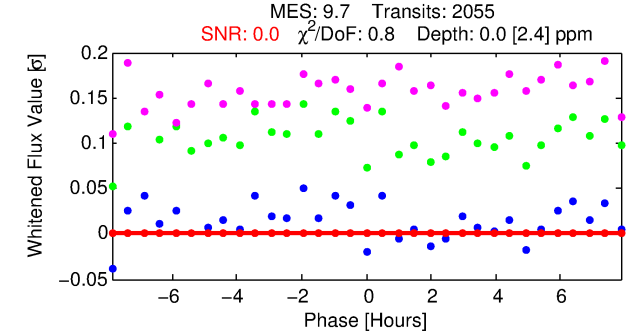
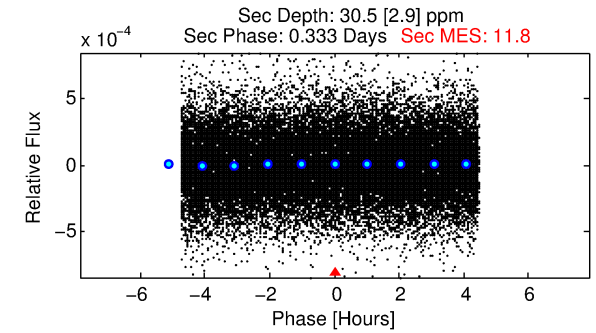
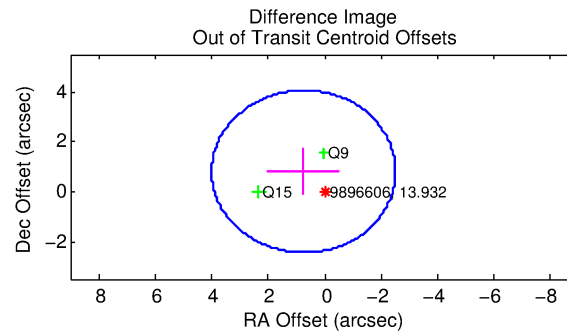
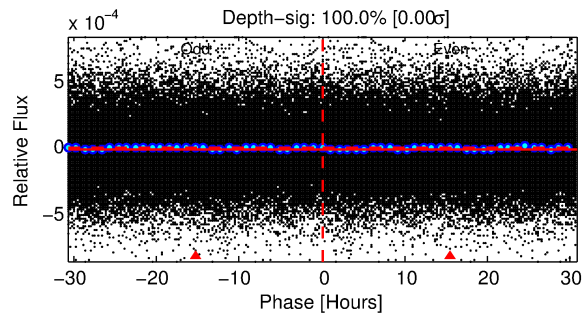
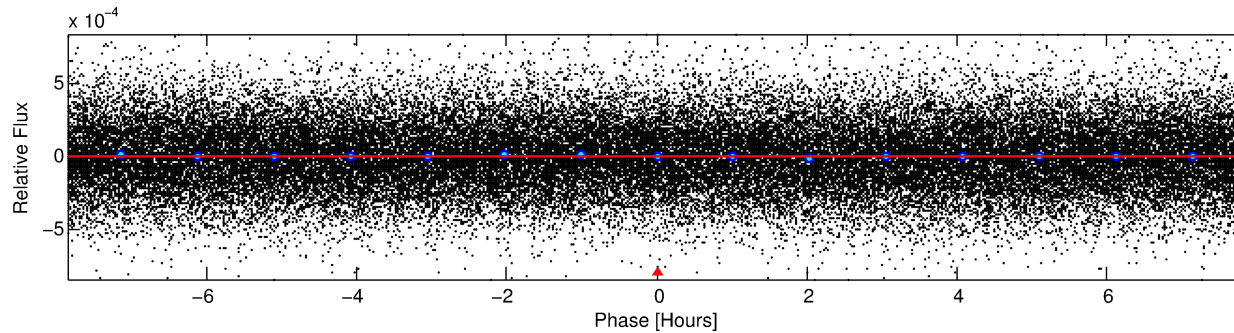
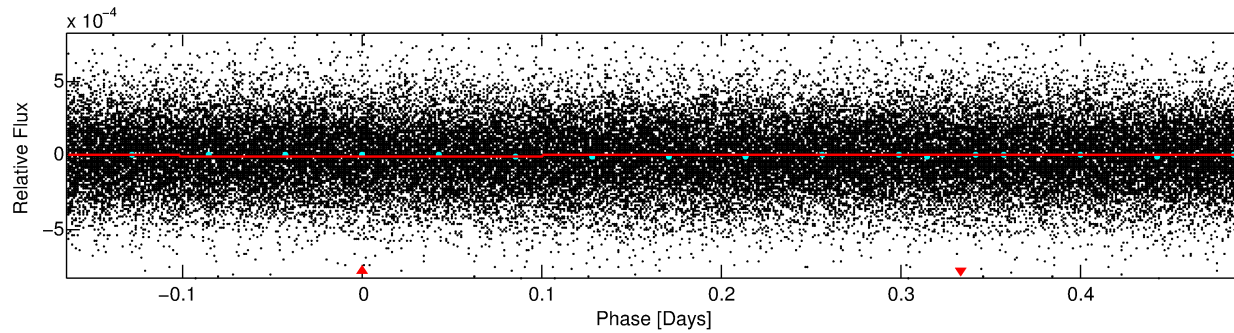
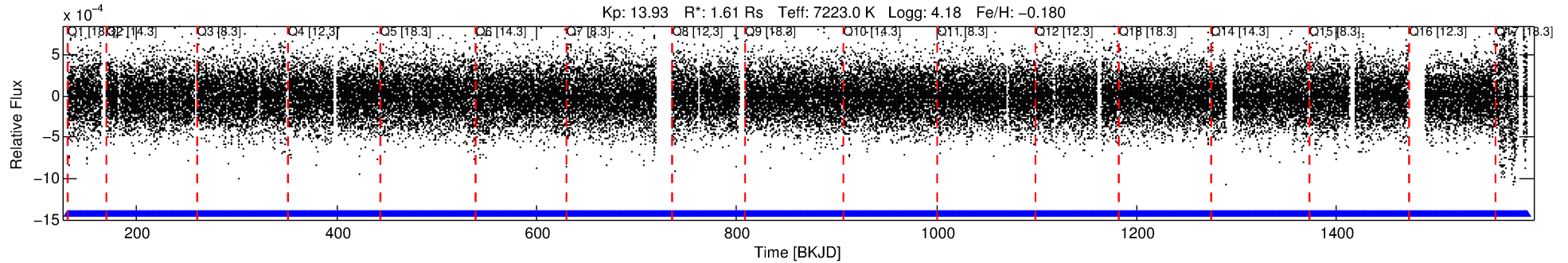
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 009896606-01

No Significant Match Found

DV One-Page Summary

KIC: 9896606 Candidate: 1 of 1 Period: 0.655 d



DV Fit Results:

Period = 0.65543 [4.50848] d
Epoch = 131.6958 [1549.3109] BKJD
Rp/R* = 0.0000 [0.1508]
a/R* = 1.14 [690.38]
b = 0.42 [8128.15]
Seff = 22951.95 [210710.37]
Teq = 3139 [7203] K
Rp = 0.00 [26.55] Re
a = 0.0166 [0.0764] AU
Ag = 2830442.91 [117441018240.36]
Teffp = 199038 [2064836155] K [0.00 σ]

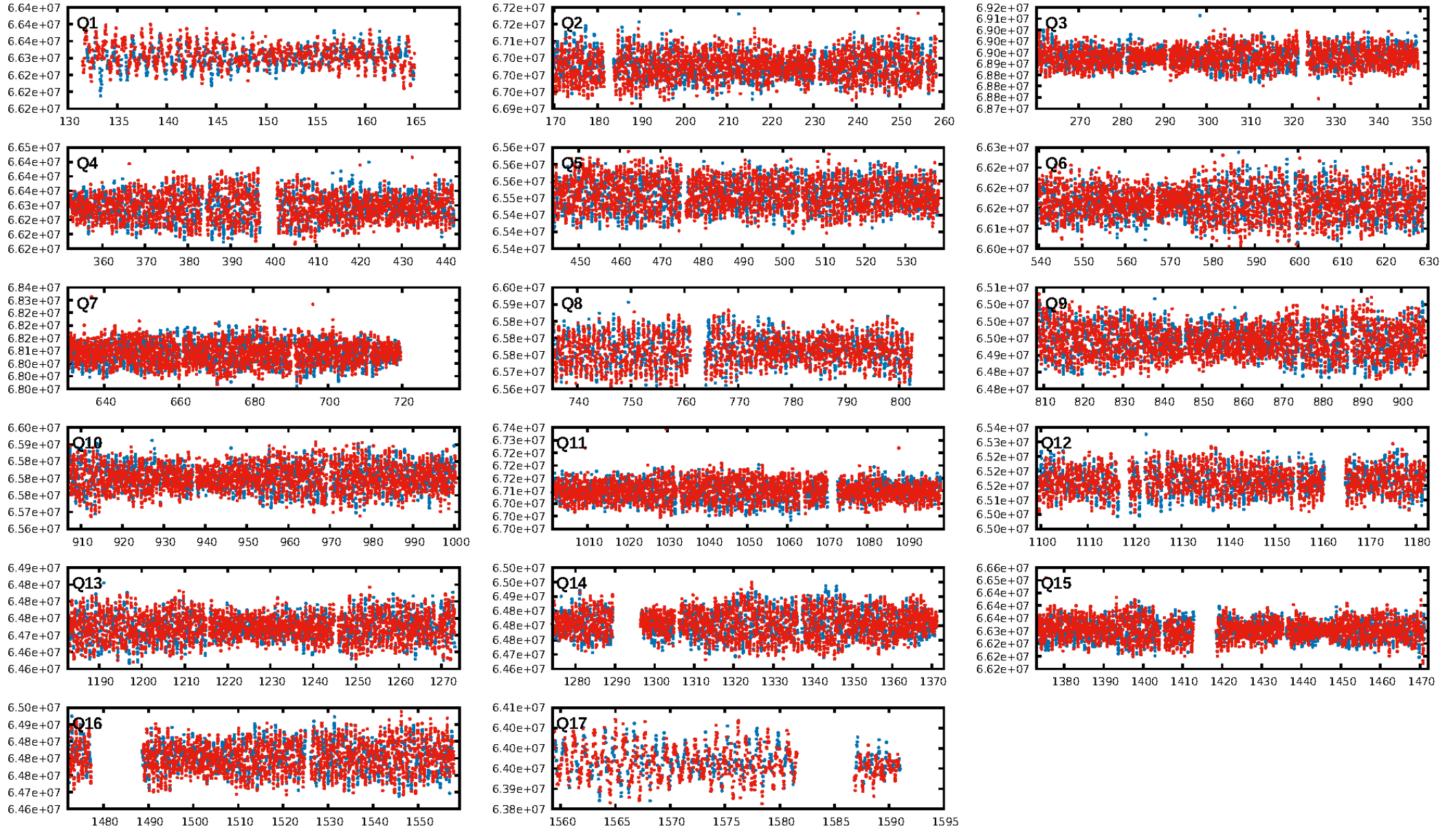
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [1962/1962]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
QotOffset-rm: 1.097 arcsec [1.01 σ]
KicOffset-rm: 1.001 arcsec [0.91 σ]
QotOffset-st: 0/1/0/1 [2]
KicOffset-st: 0/1/0/1 [2]
DiffImageQuality-fgm: 0.00 [0/2]
DiffImageOverlap-fno: 1.00 [17/17]

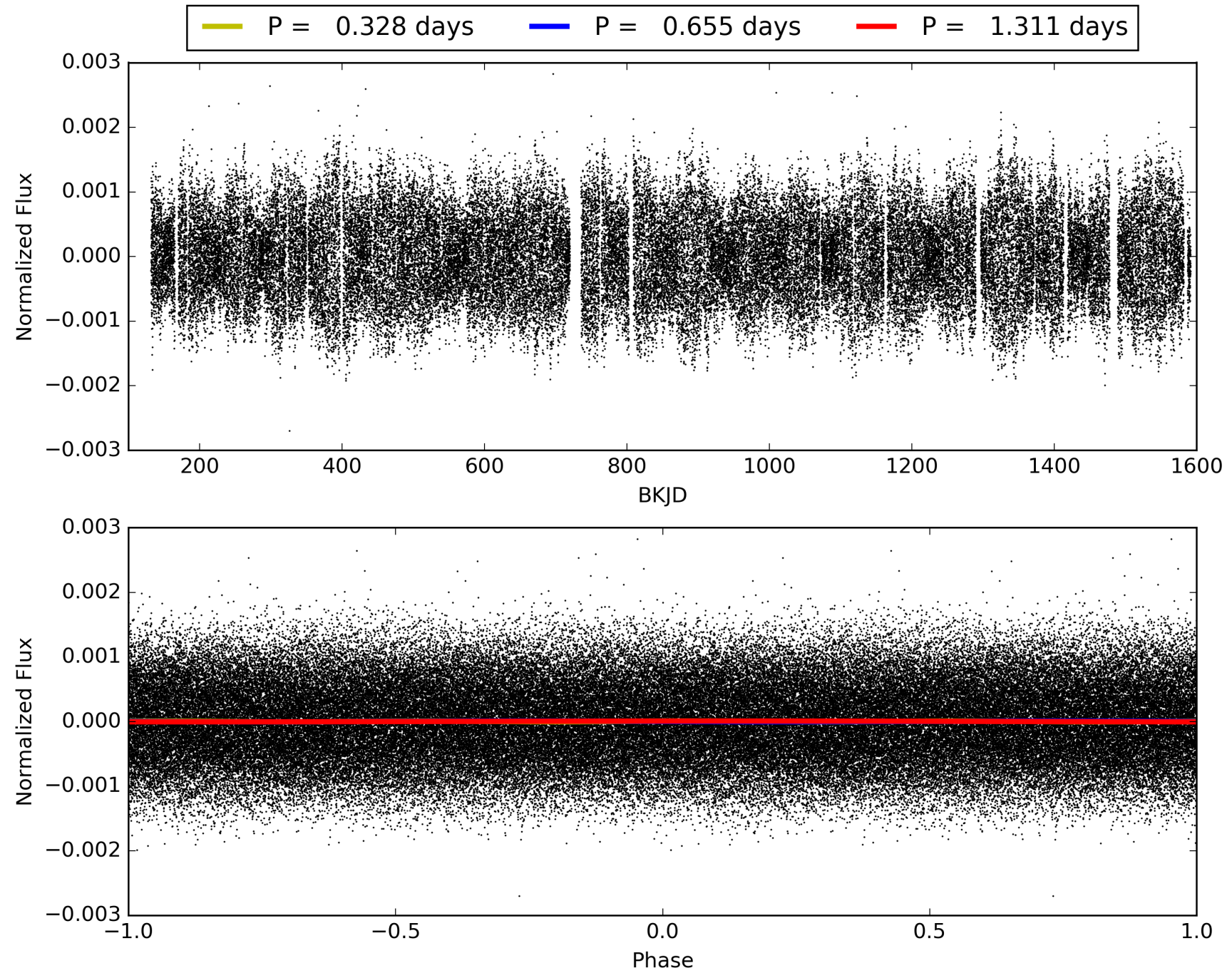
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 18:32:55 Z

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

TCE 009896606-01, PDC Light Curves

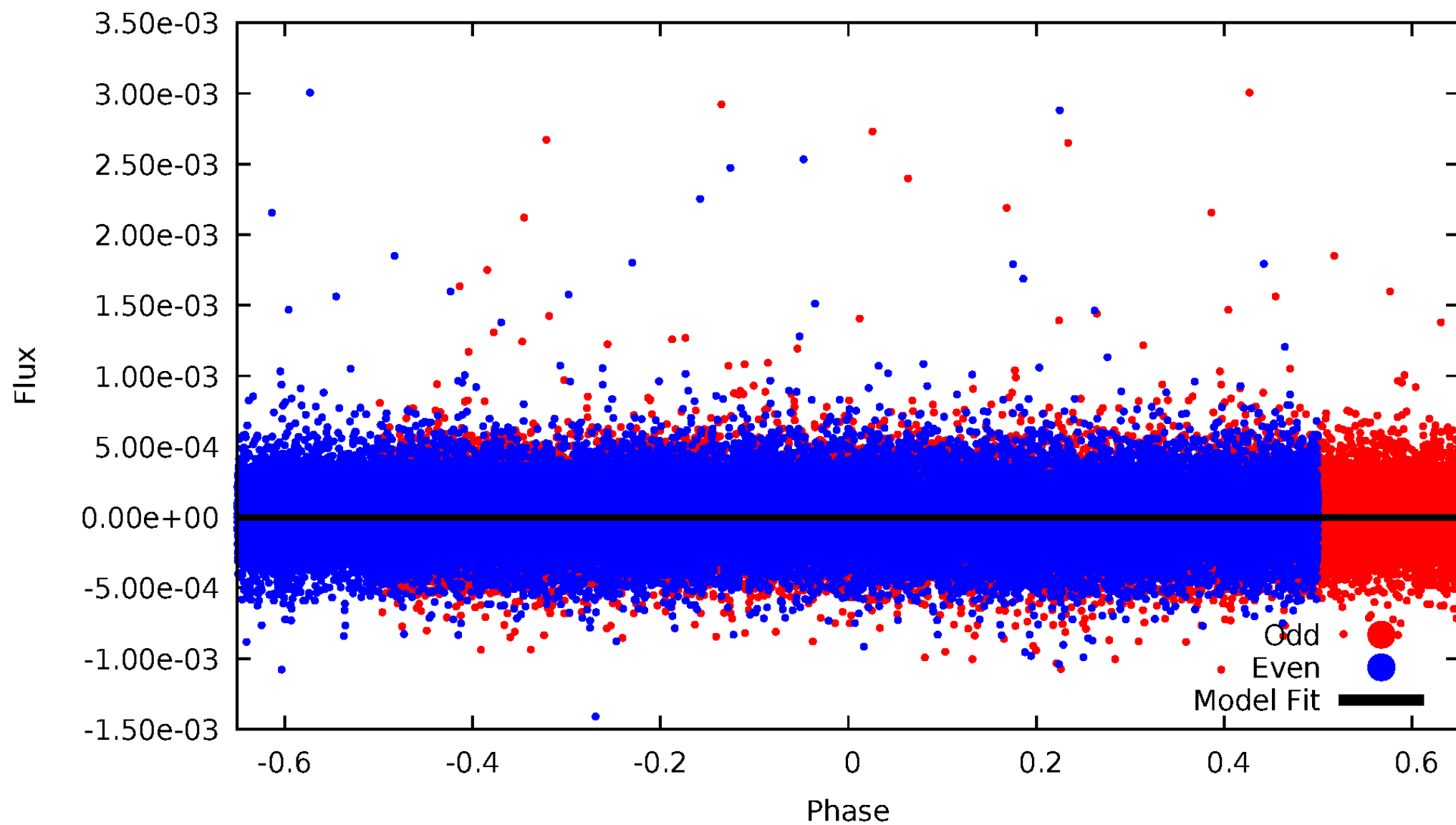


TCE 009896606-01



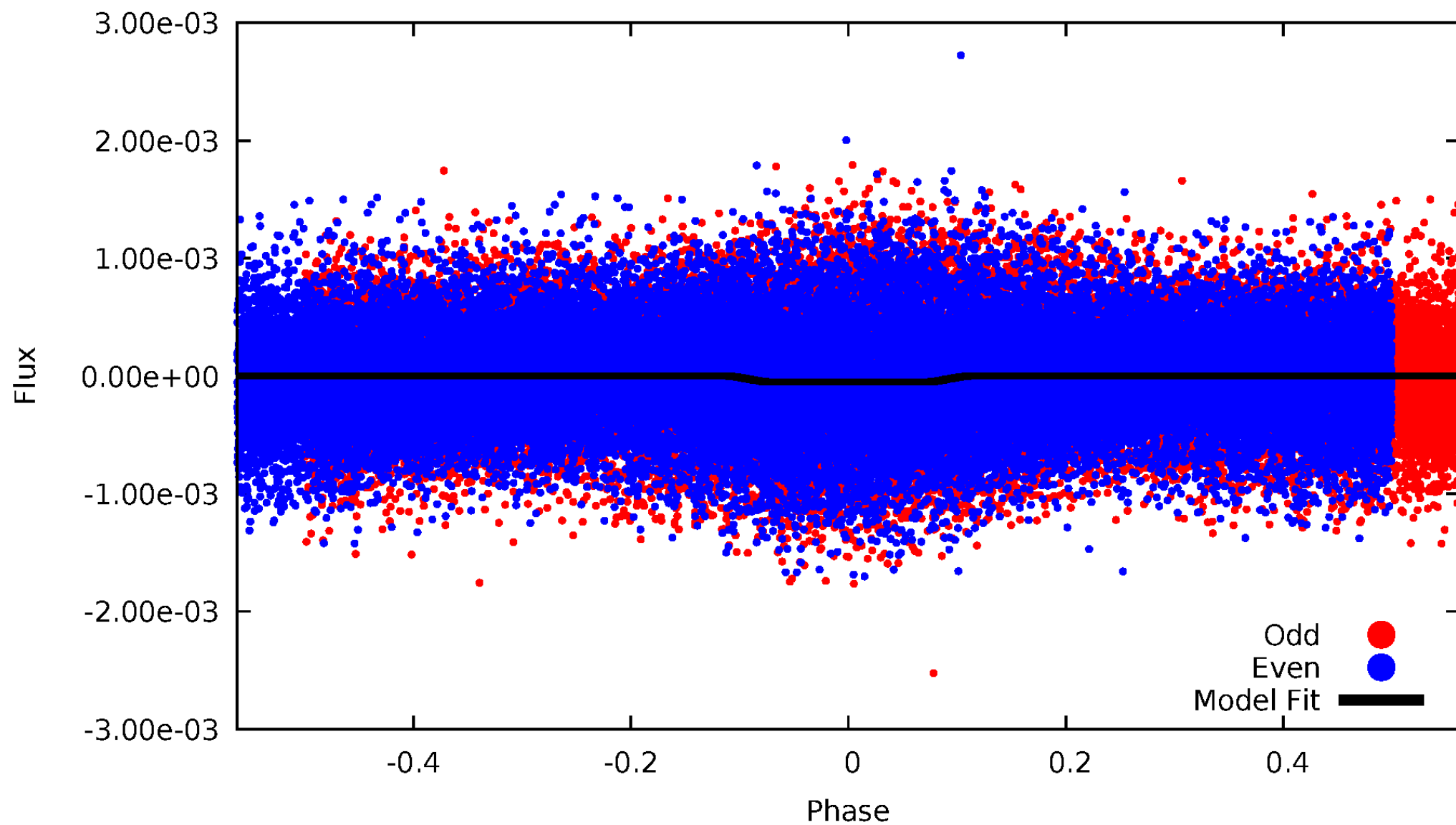
DV Odd/Even

TCE 009896606-01

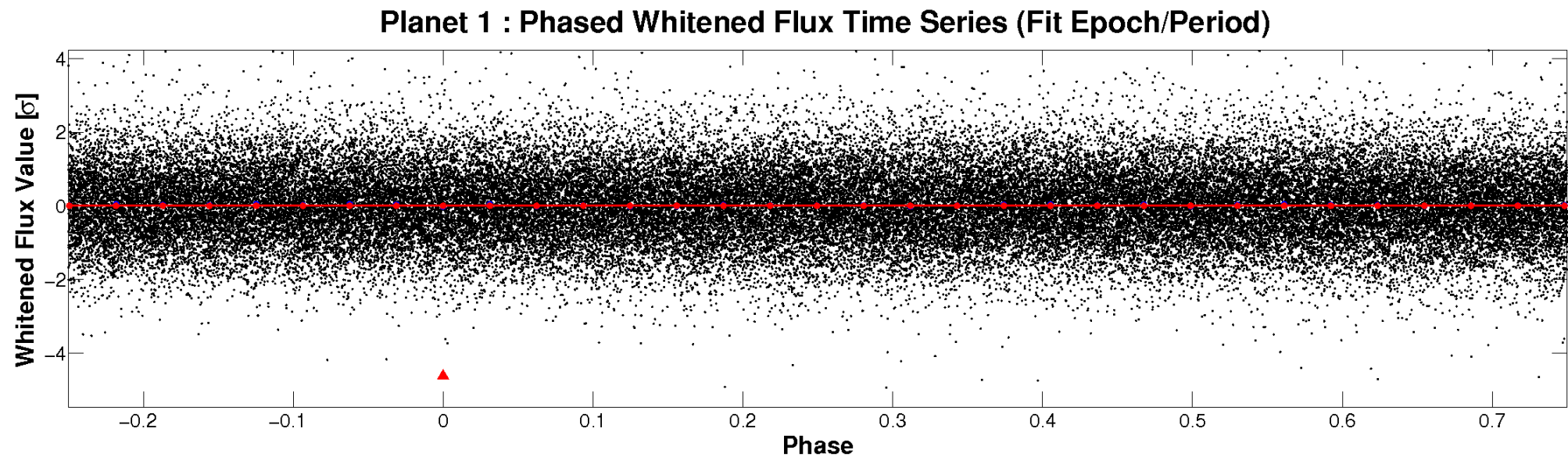
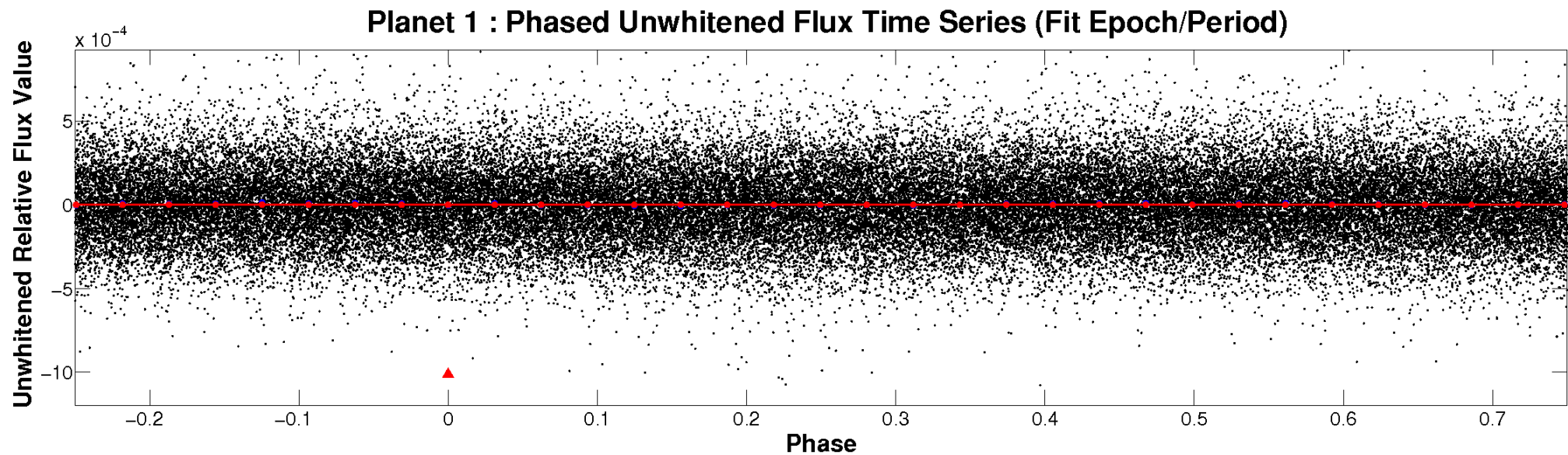


ALT Odd/Even

TCE 009896606-01

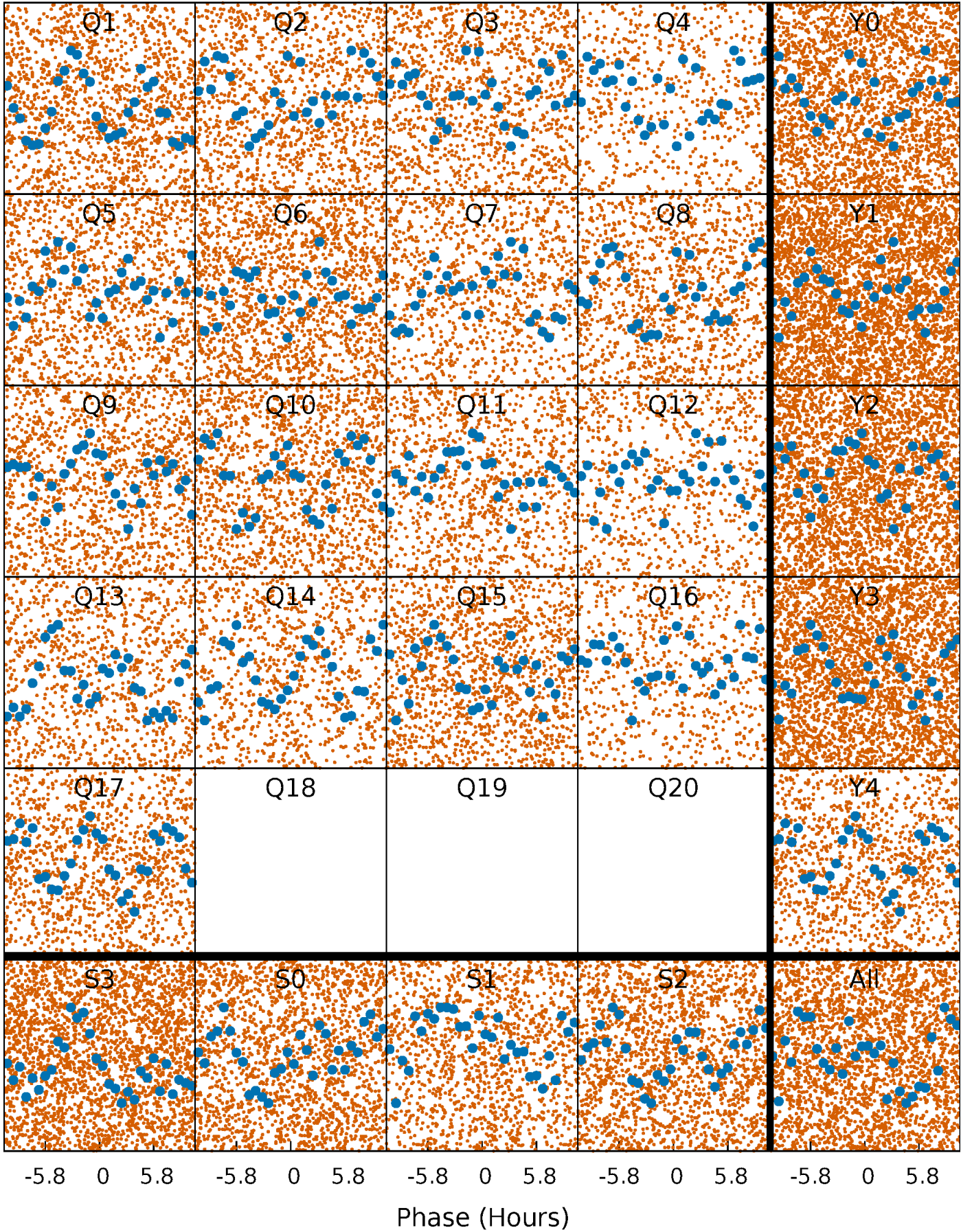


Non-Whitened Vs. Whitened Light Curve



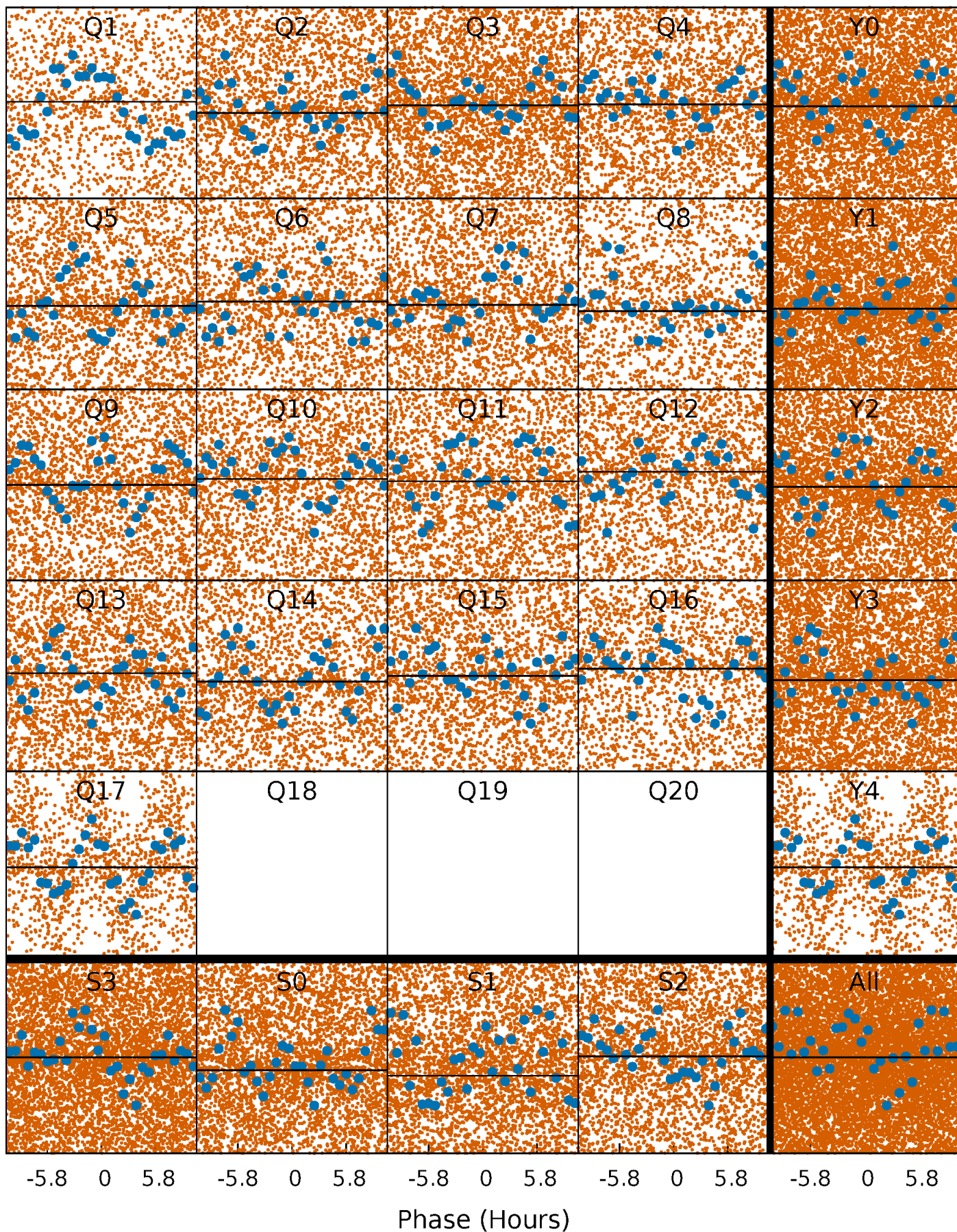
PDC Quarter-Phased Transit Curves

TCE 009896606-01 P= 0.655430 Days $T_0=131.695841$ (BKJD)



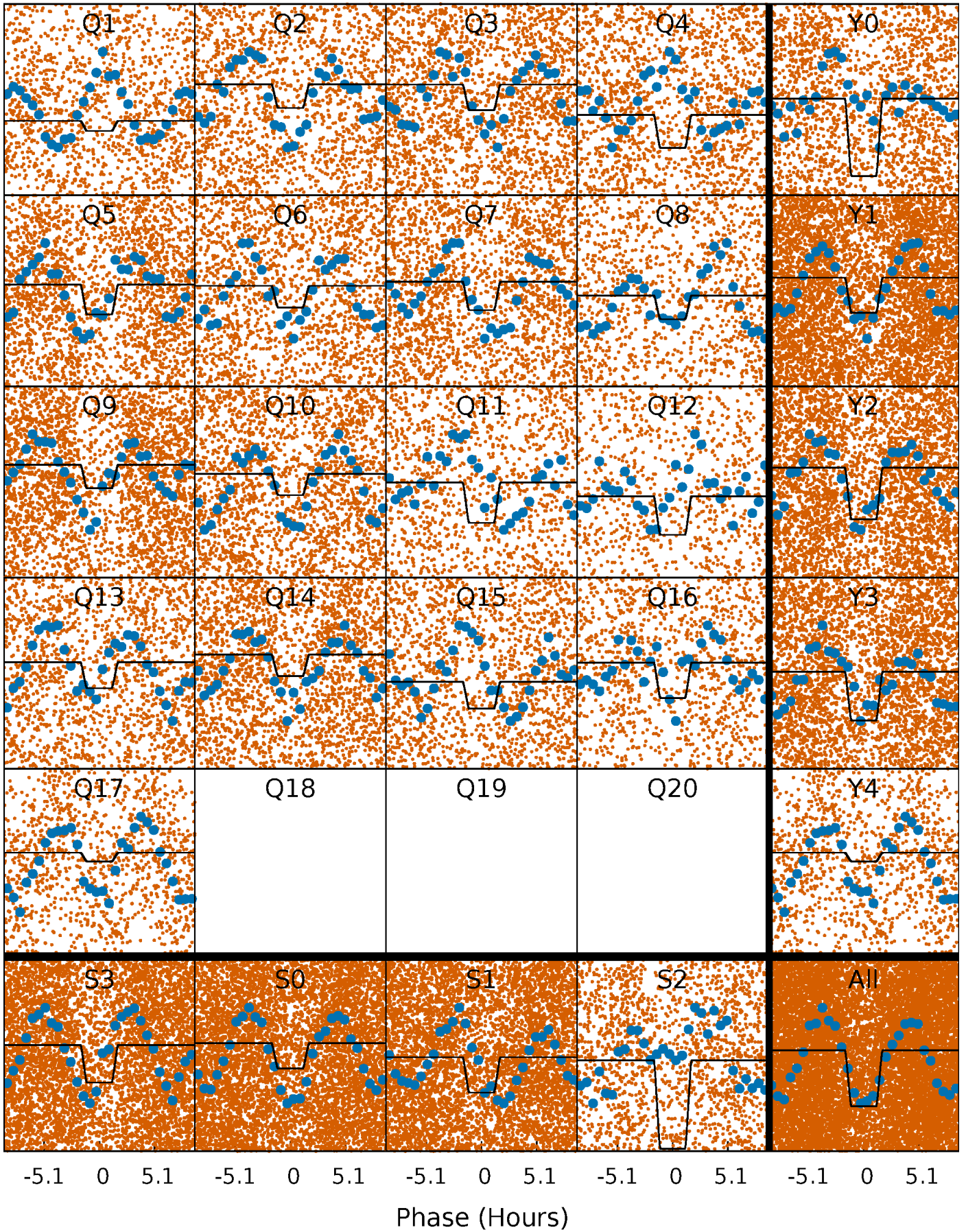
DV Quarter-Phased Transit Curves

TCE 009896606-01 P= 0.655430 Days $T_0=131.695841$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

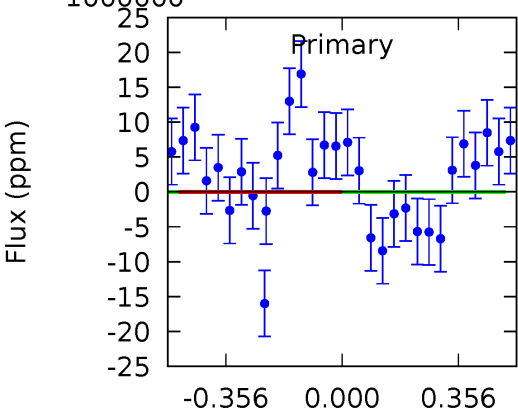
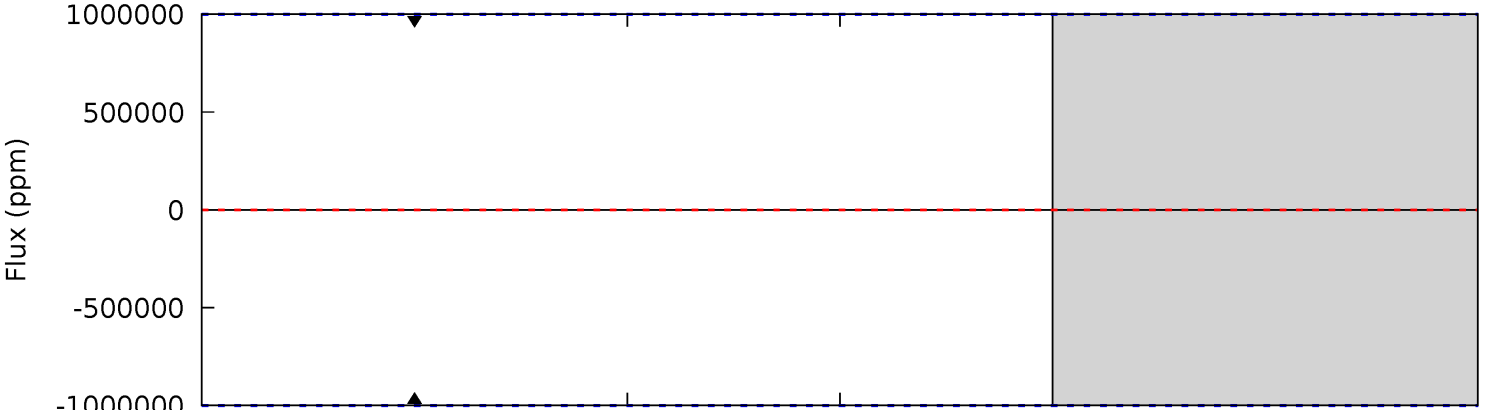
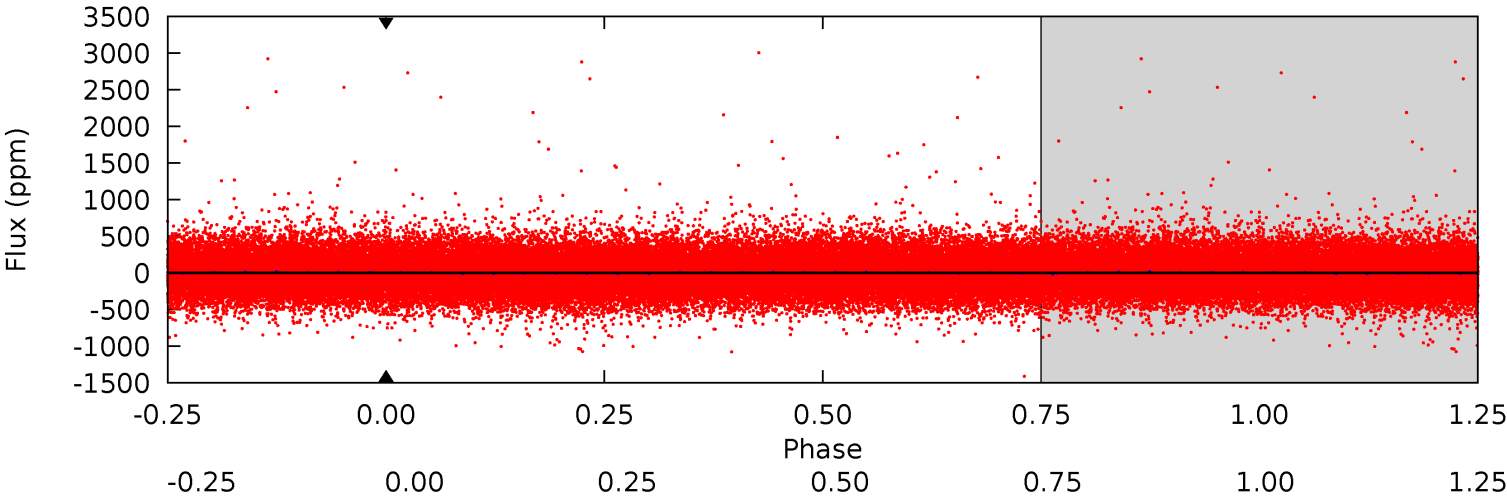
TCE 009896606-01 P= 0.655096 Days $T_0=131.567295$ (BKJD)



DV Model-Shift Uniqueness Test

009896606-01, P = 0.655430 Days, E = 131.040411 Days

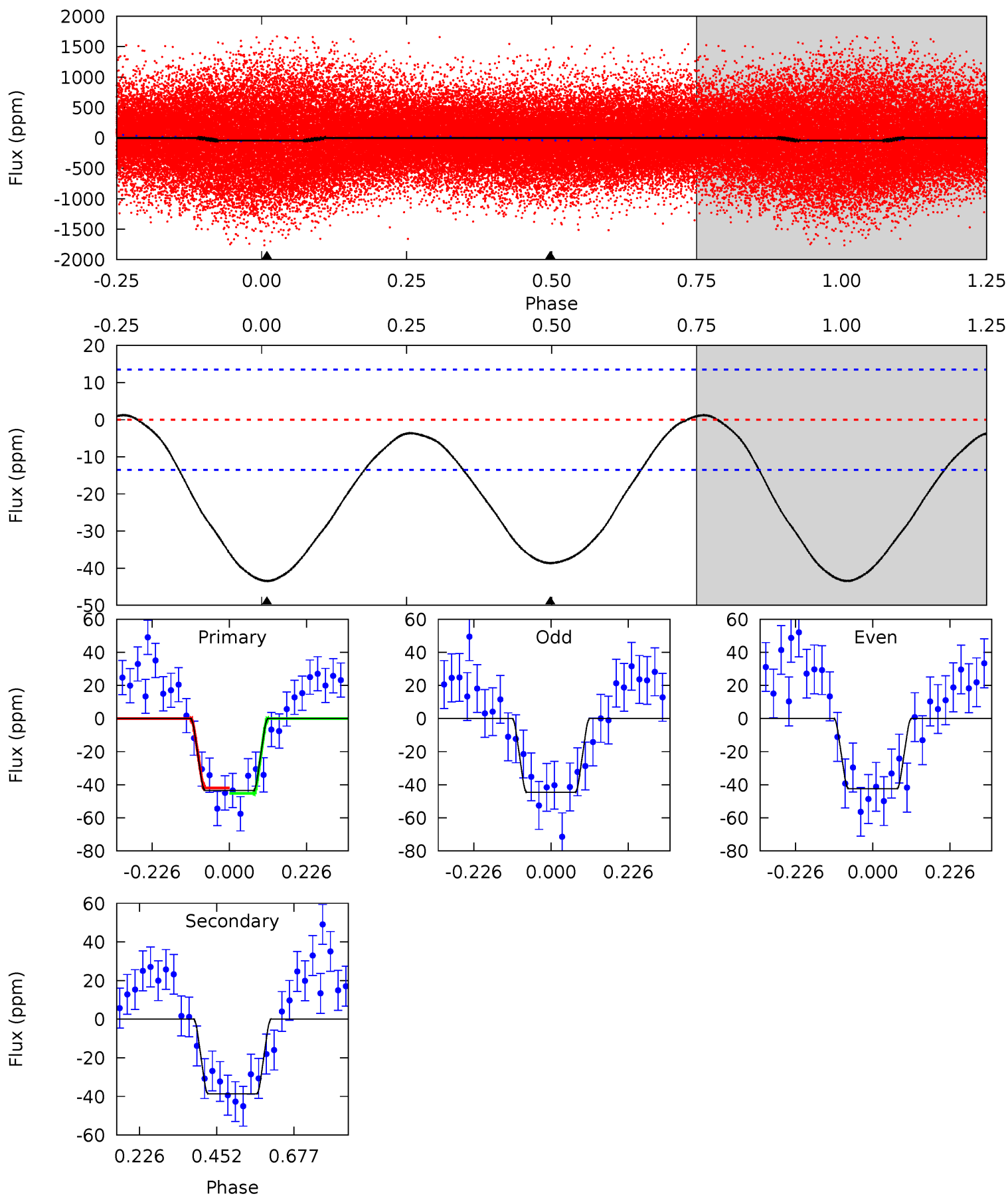
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

009896606-01, P = 0.655096 Days, E = 130.912199 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14.1	12.6	0	0	4.39	1.21	0.73	14.1	14.1	12.6	12.6	0.36	1.23	0.03	0.45



Stellar Parameters For KIC 009896606

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$\rho_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7223^{+228}_{-314}	$4.177^{+0.128}_{-0.192}$	$-0.180^{+0.250}_{-0.350}$	$1.613^{+0.524}_{-0.322}$	$1.429^{+0.218}_{-0.239}$	$0.480^{+0.307}_{-0.236}$
	+3%/-4%	+3%/-5%	+139%/-194%	+32%/-20%	+15%/-17%	+64%/-49%
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 009896606-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	0 ± 1000000	$18.10^{+19.86}_{-12.30}$	2636^{+1290}_{-620}	-4865^{+30453}_{-17877}	$-0.773^{+692.472}_{-653.198}$
Alt.	-39 ± 3	$18.57^{+20.79}_{-12.92}$	2564^{+1345}_{-553}	-2435^{+5795}_{-972}	$0.137^{+1.417}_{-0.122}$

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 $A_{\text{obs}} \gg 1.0$

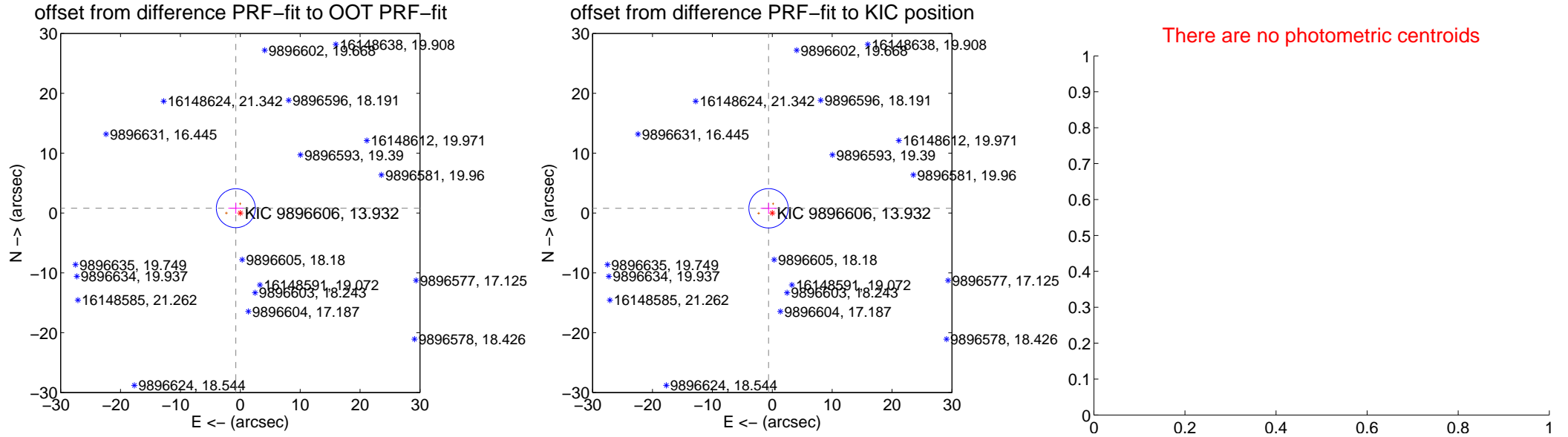
DV Centroid Data

Supplemental centroid analysis for 009896606-01. Kepler magnitude: 13.93. Transit SNR 0.00

There are 0 quarters with good PRF difference image offsets

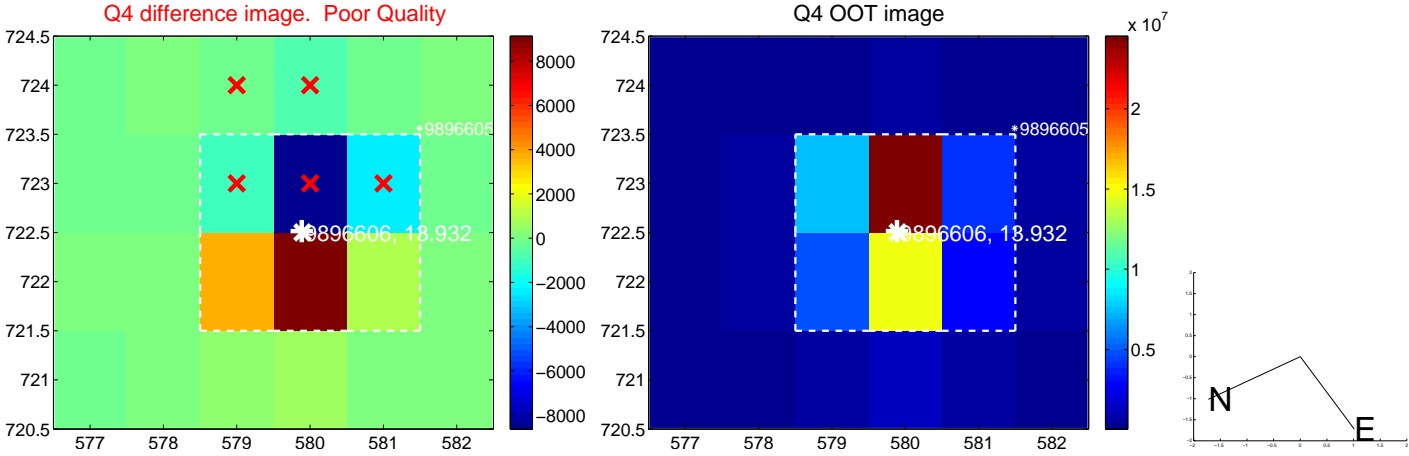
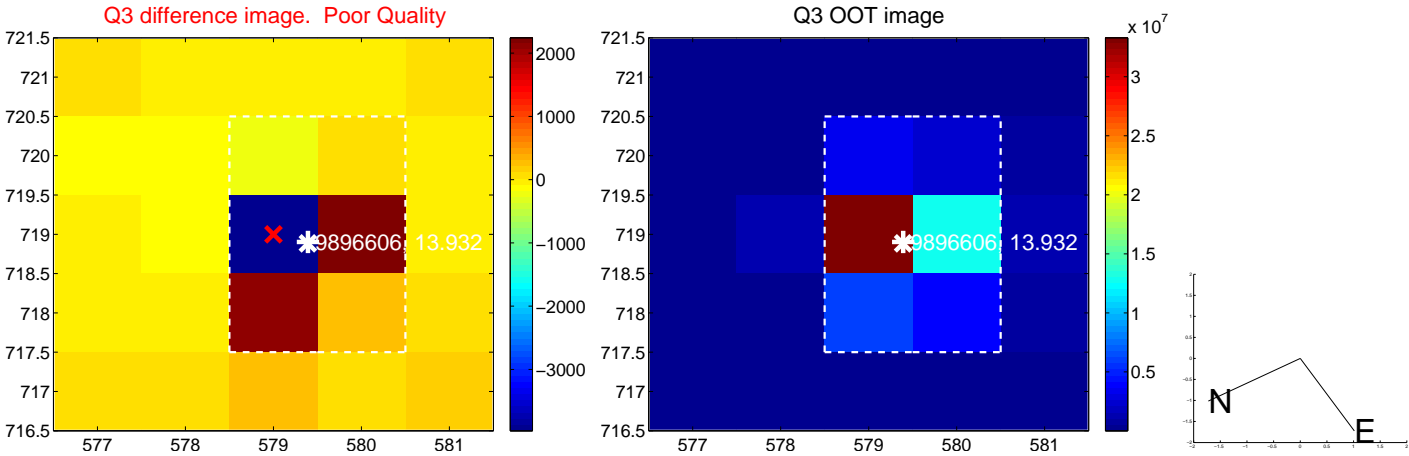
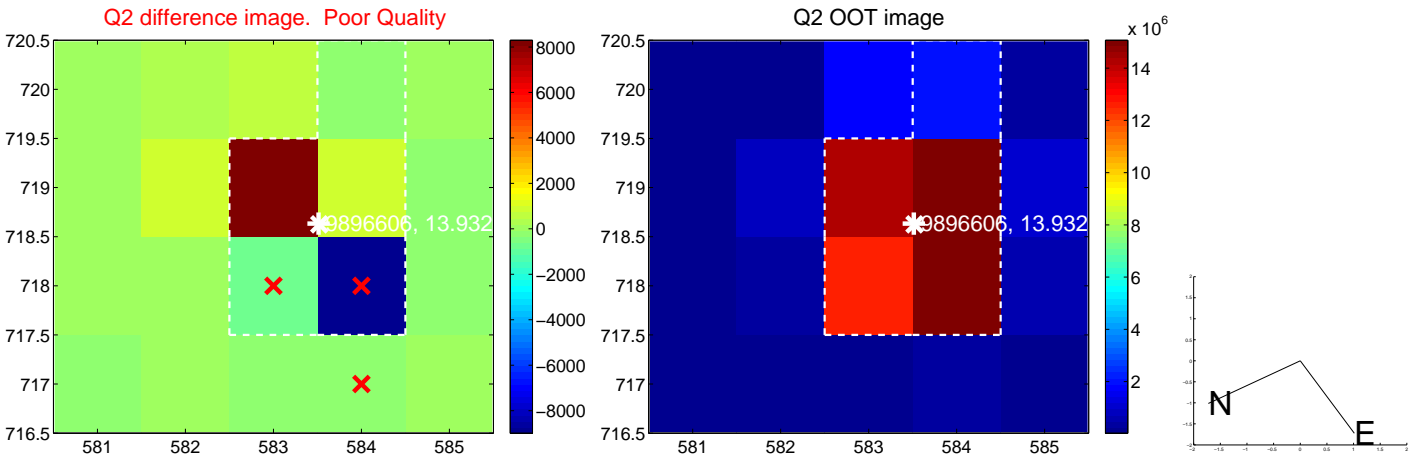
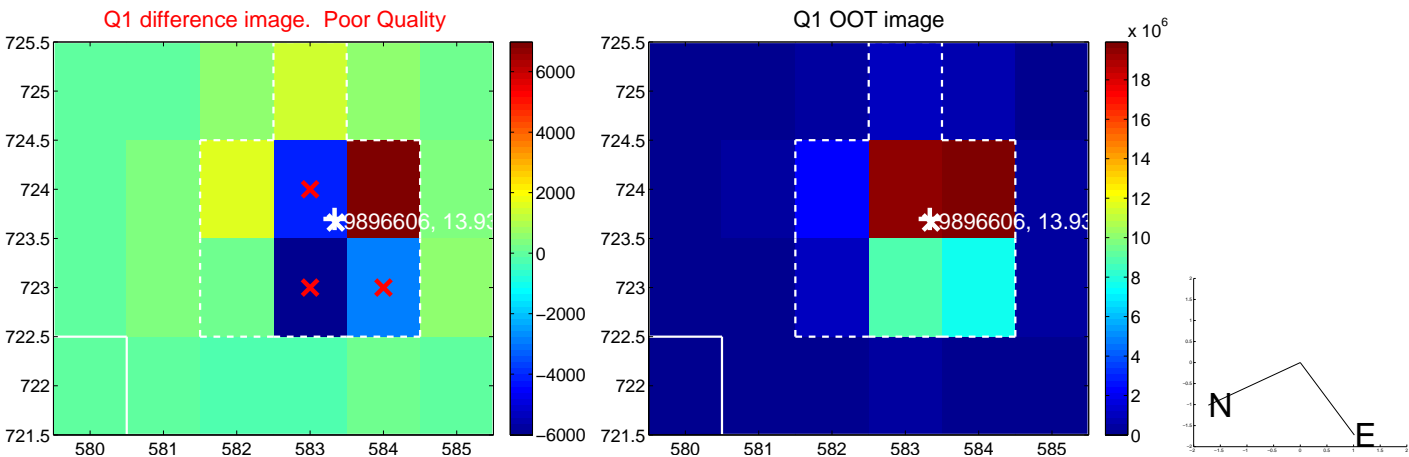
The direct PRF centroid is offset from the target star catalog position by about 0.06 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.097 ± 1.084	1.01	0.745 ± 1.255	0.806 ± 0.914
PRF-fit source offset from KIC position	1.001 ± 1.096	0.91	0.618 ± 1.317	0.787 ± 0.934
photometric centroid source offset	—	—	—	—

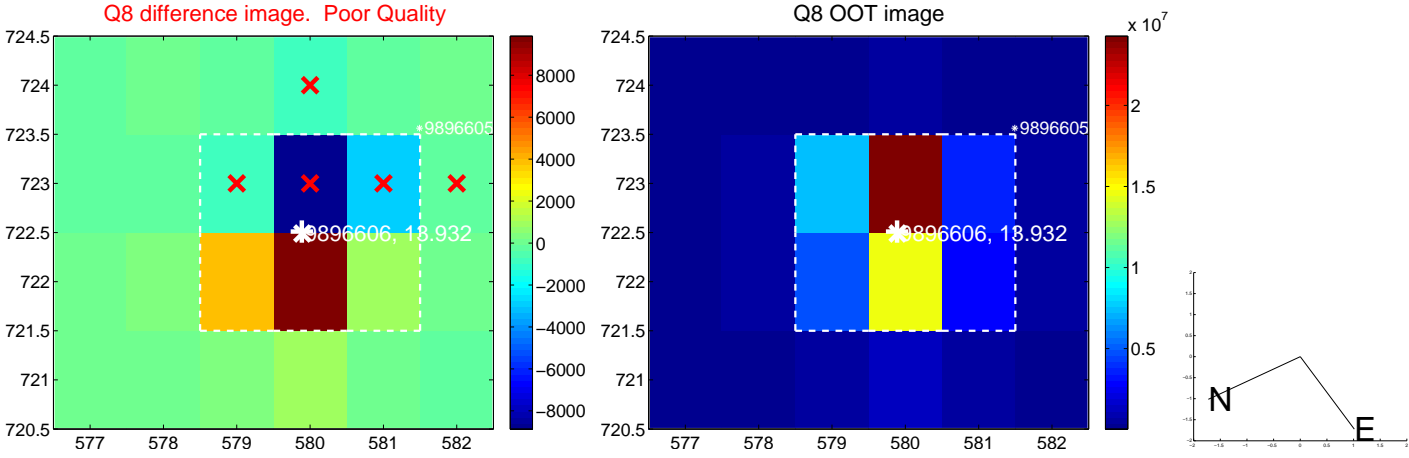
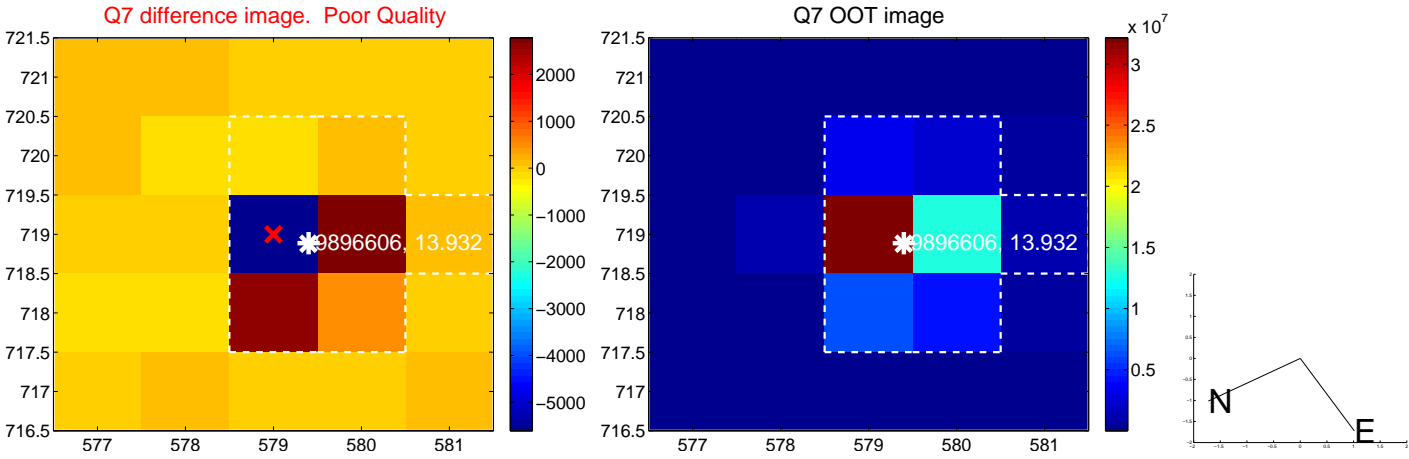
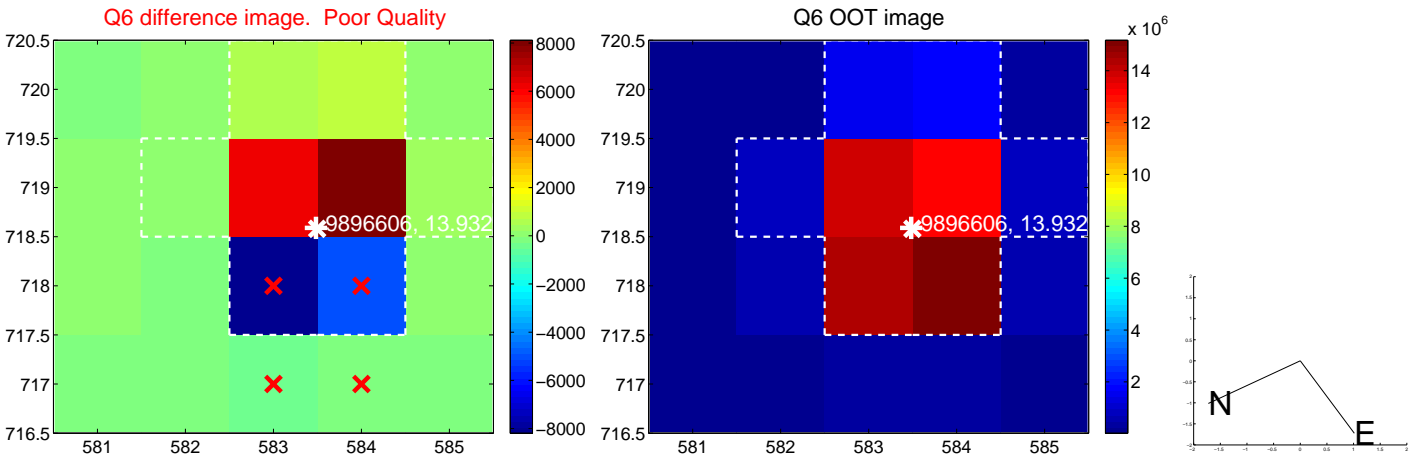
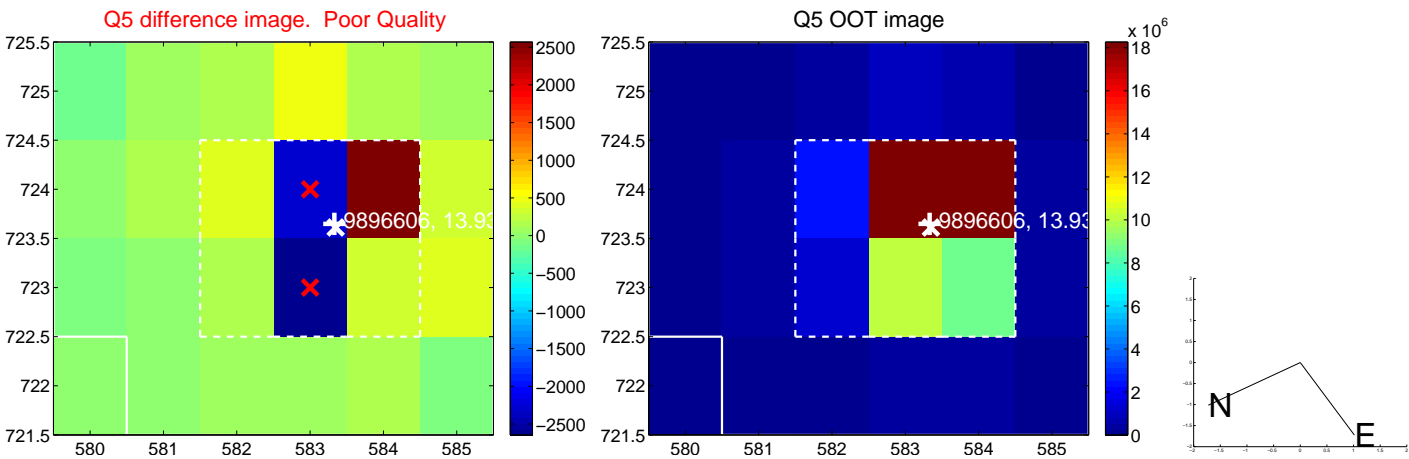


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

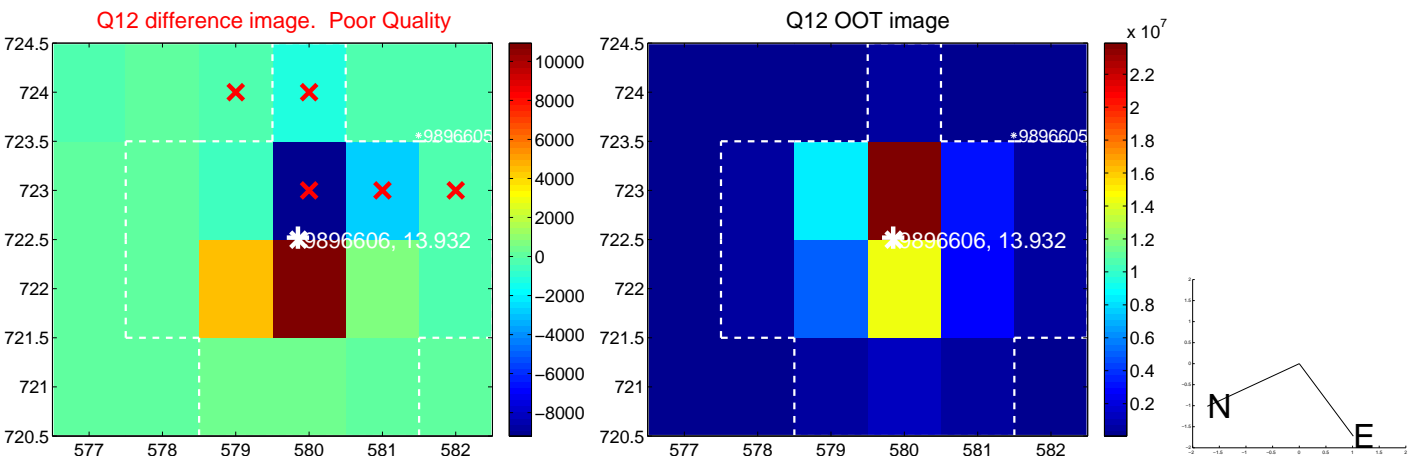
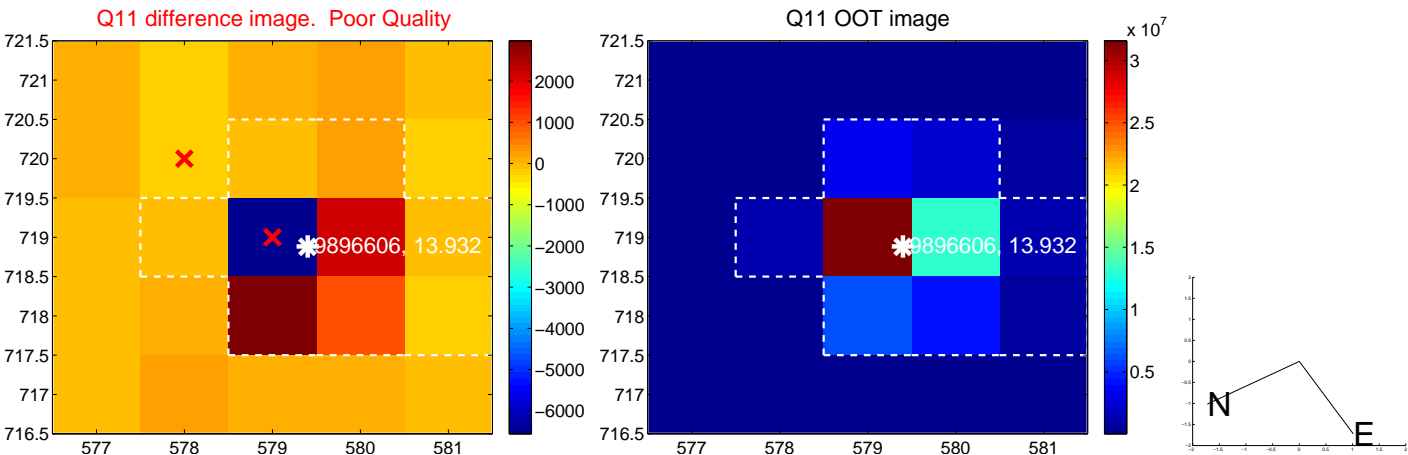
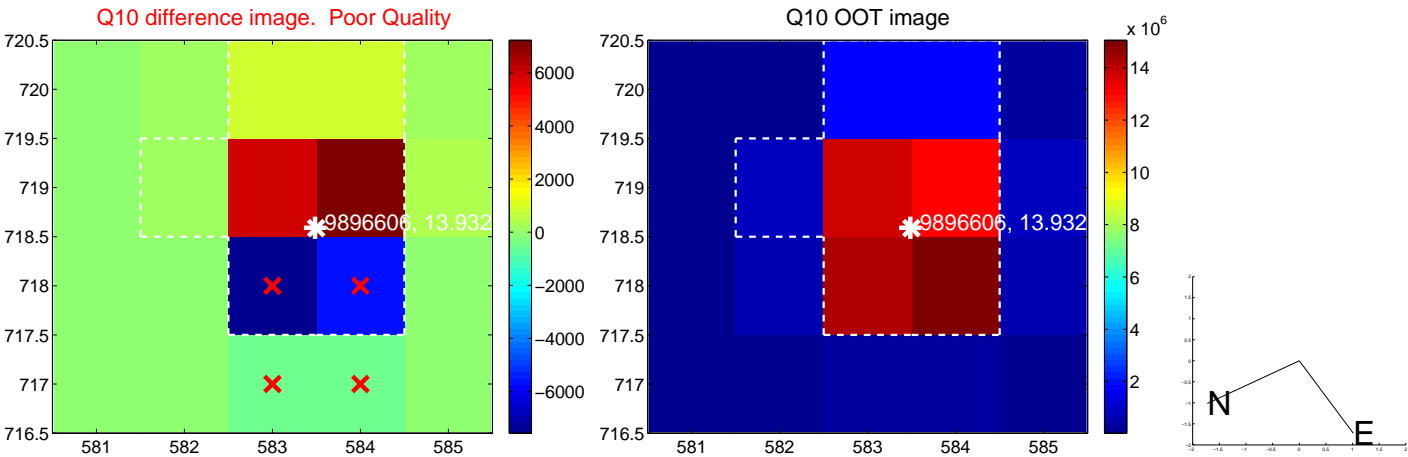
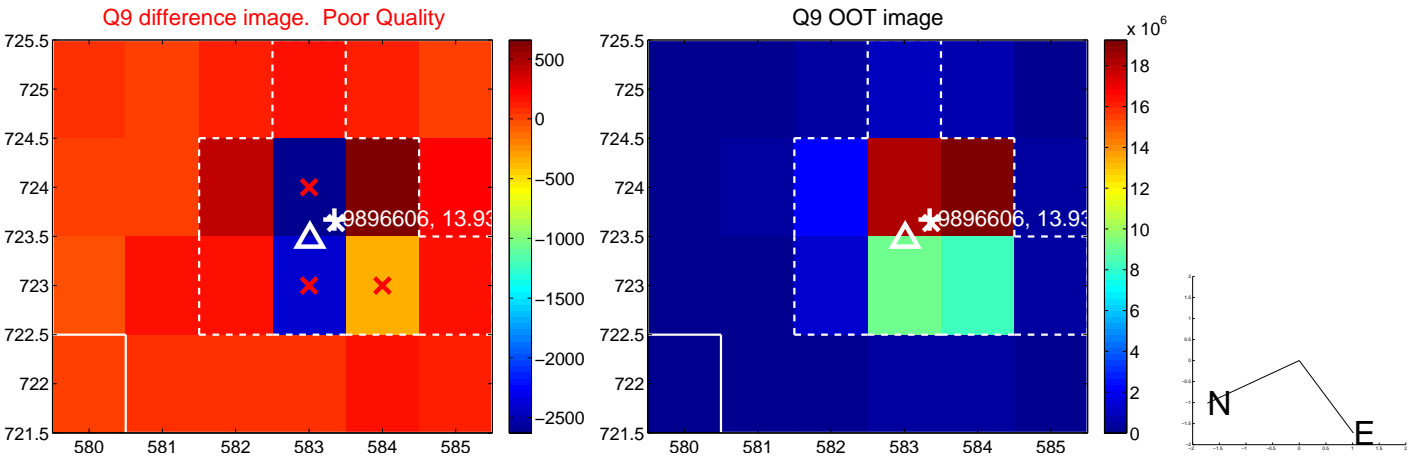
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



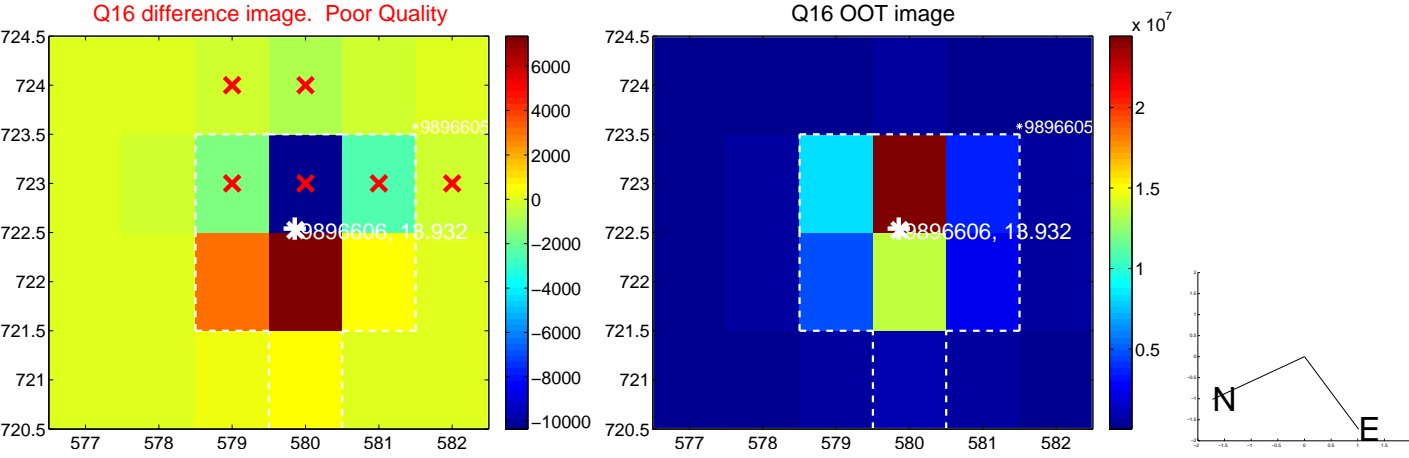
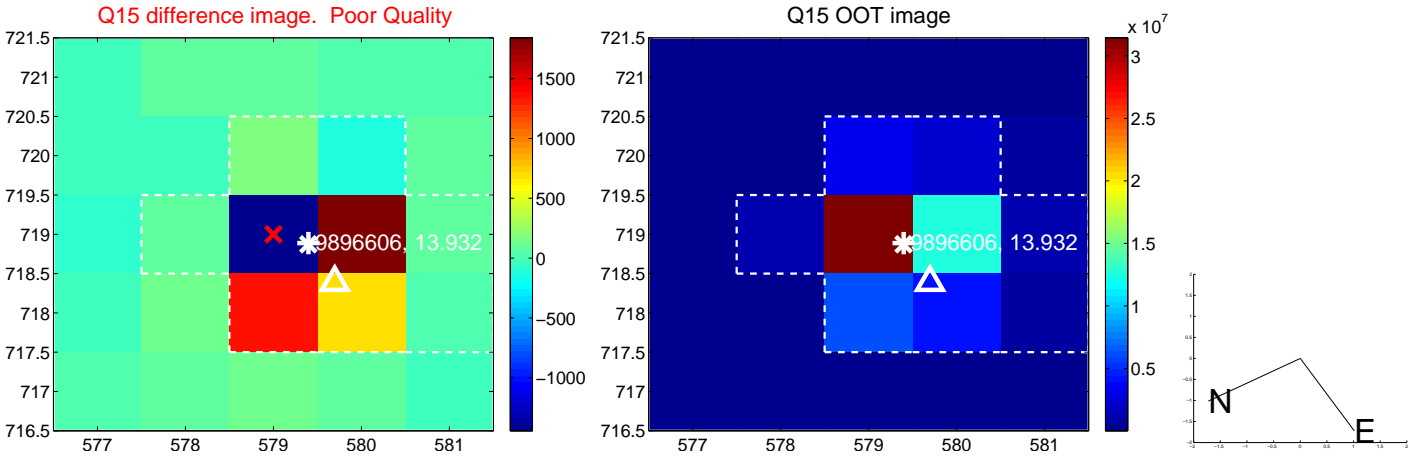
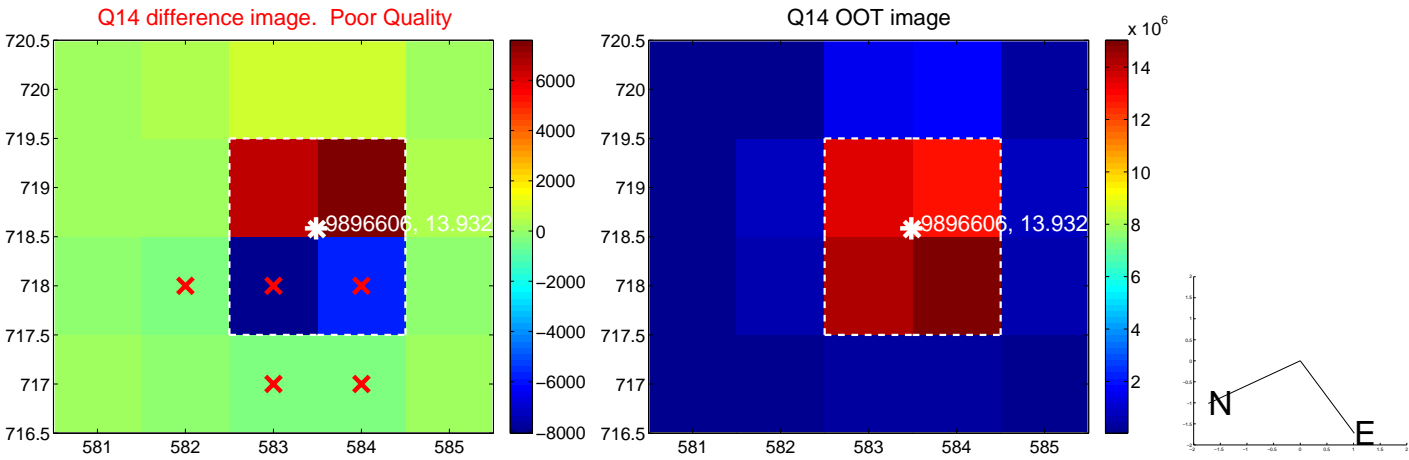
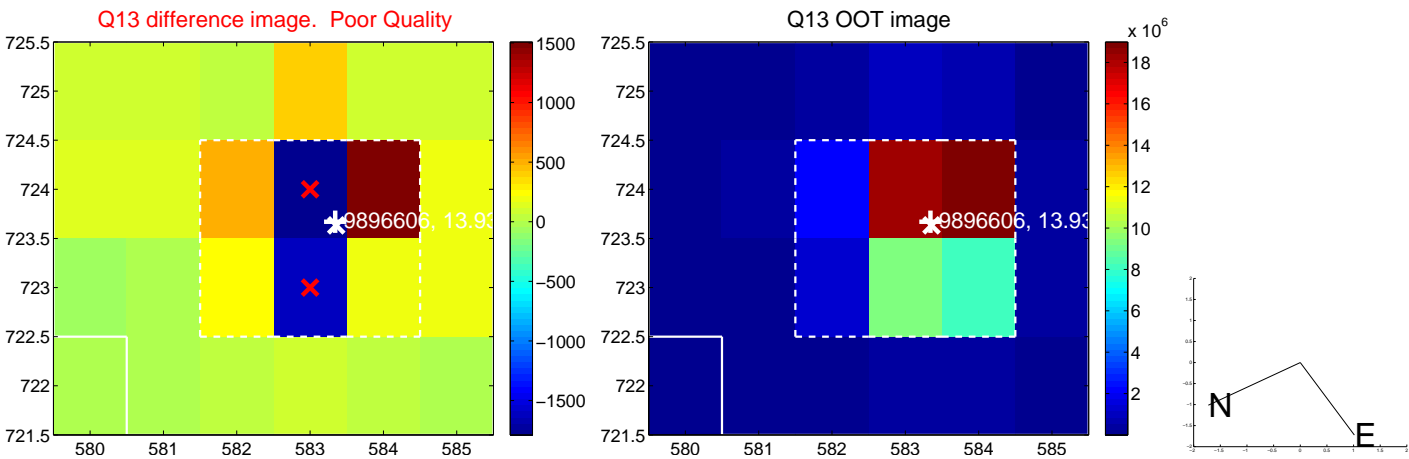
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



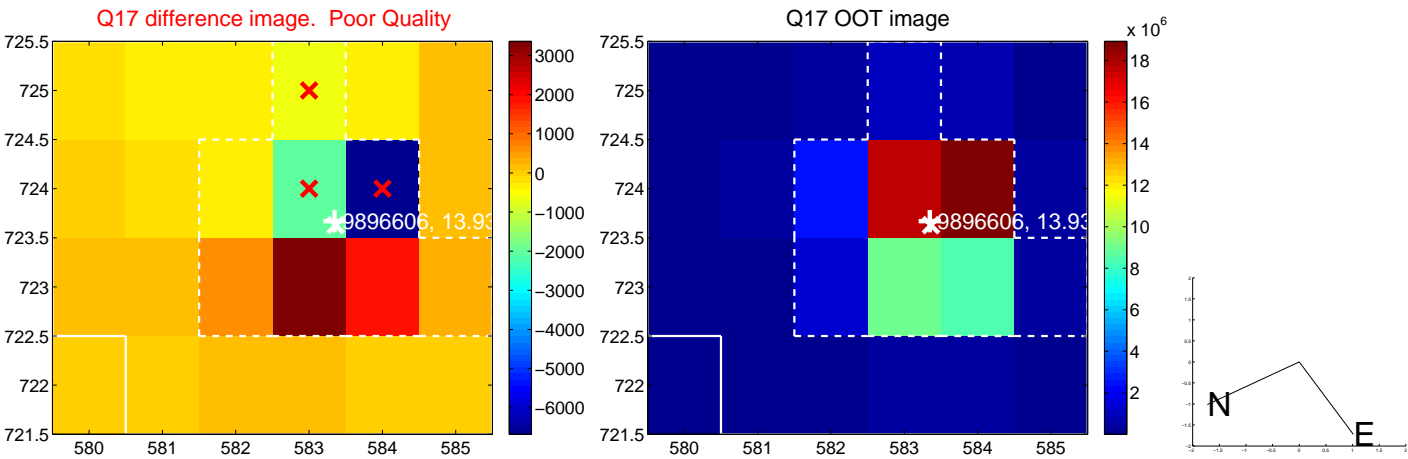
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

