

KIC 008784568

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})
008784568-01	OBS	No	0.823658	131.923963	0.0	6.508	8.4	0.0	1.31	6348	0.01	8695.54

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008784568-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT

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

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

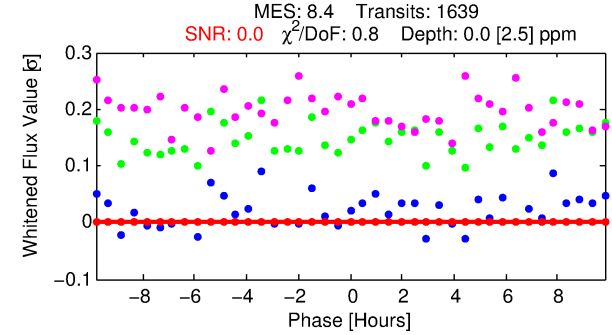
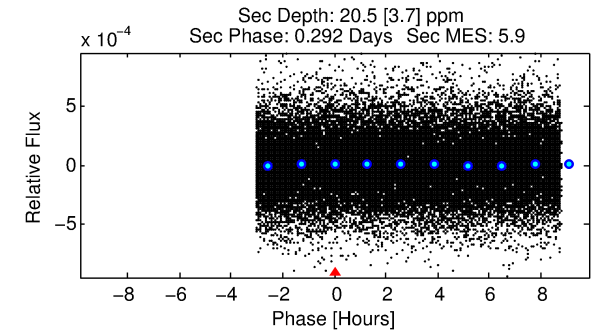
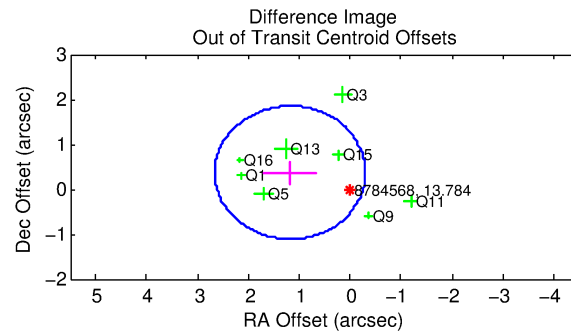
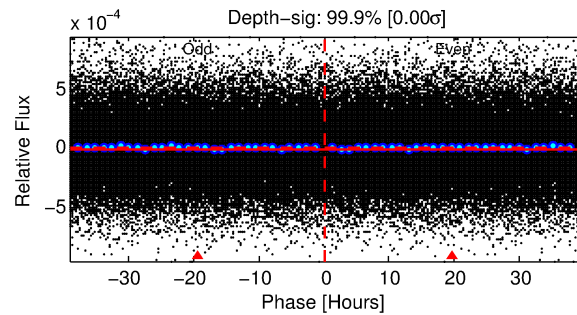
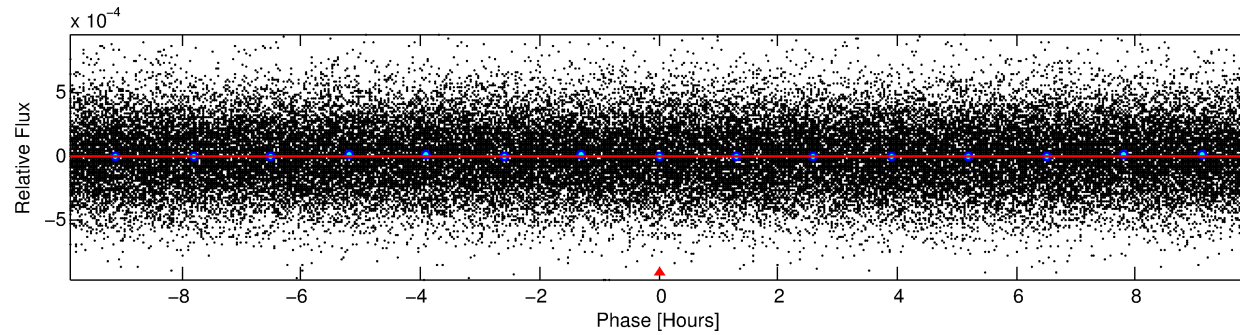
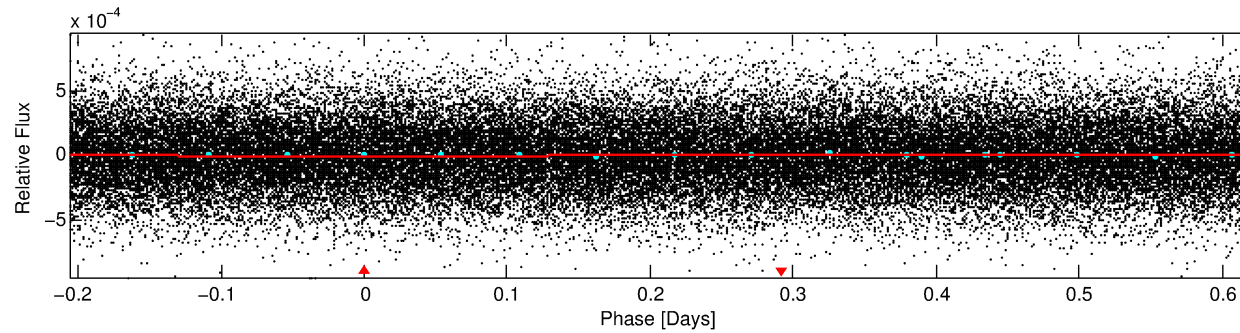
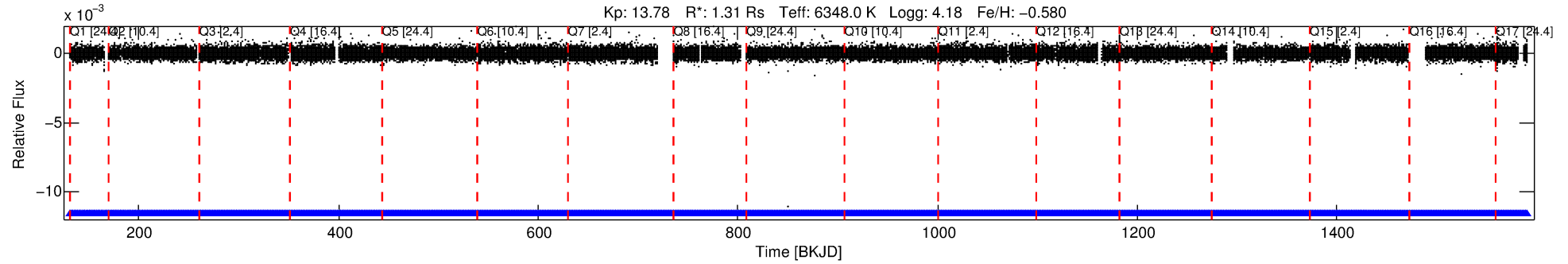
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008784568-01

No Significant Match Found

DV One-Page Summary

KIC: 8784568 Candidate: 1 of 1 Period: 0.824 d



DV Fit Results:

Period = 0.82366 [0.09314] d
Epoch = 131.9240 [37.5157] BKJD
Rp/R* = 0.0001 [0.0215]
a/R* = 1.07 [28.45]
b = 0.78 [143.46]
Seff = 8695.54 [4246.78]
Teq = 2462 [301] K
Rp = 0.01 [3.07] Re
a = 0.0169 [0.0049] AU
Ag = 44754.80 [32403310.02] [0.00 σ]
Teffp = 55373 [10023683] K [0.01 σ]

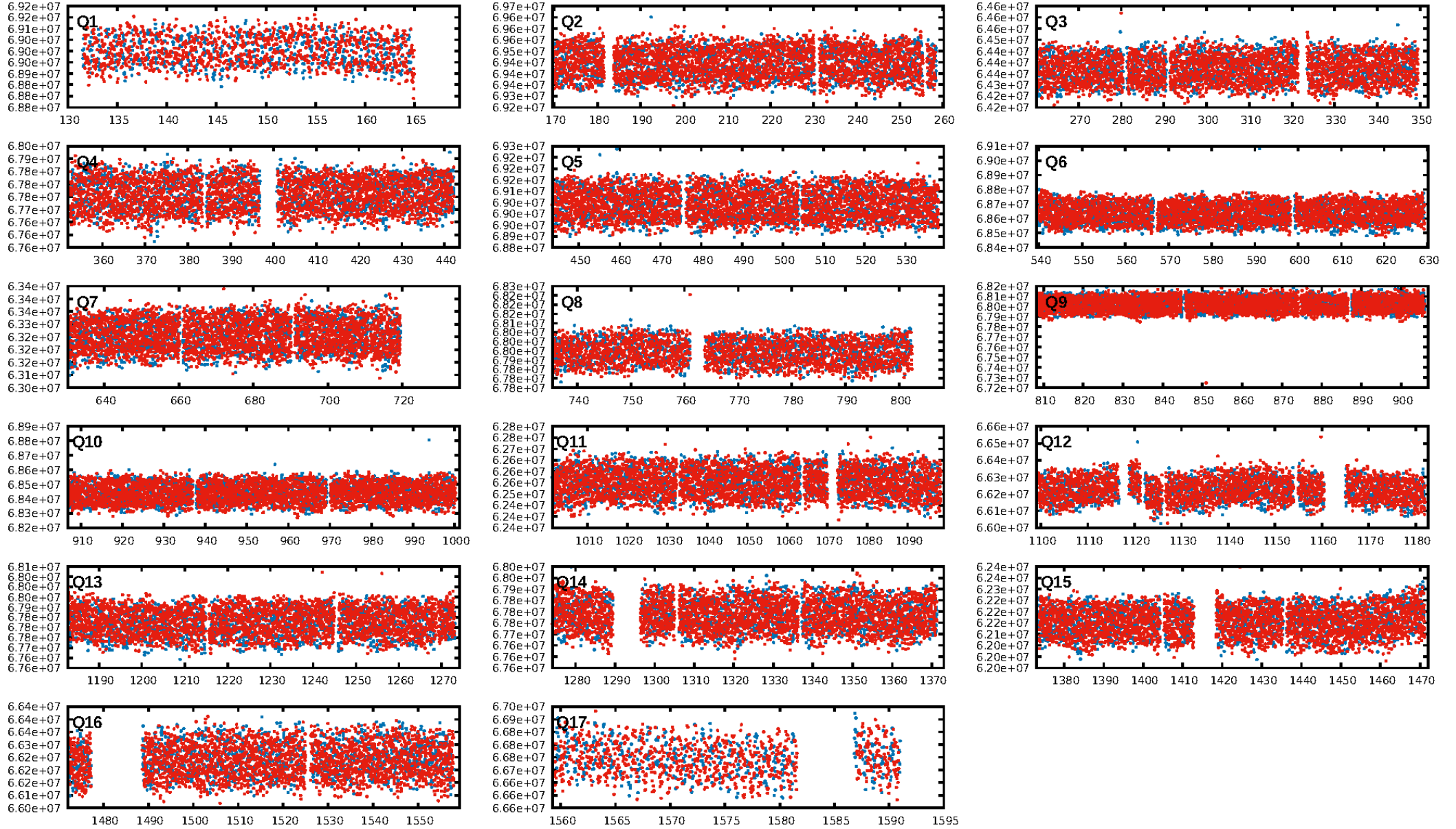
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [1565/1565]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 1.236 arcsec [2.50 σ]
KicOffset-rm: 1.188 arcsec [2.42 σ]
OotOffset-st: 0/3/1/4 [8]
KicOffset-st: 0/3/1/4 [8]
DiffImageQuality-fgm: 0.38 [3/8]
DiffImageOverlap-fno: 1.00 [17/17]

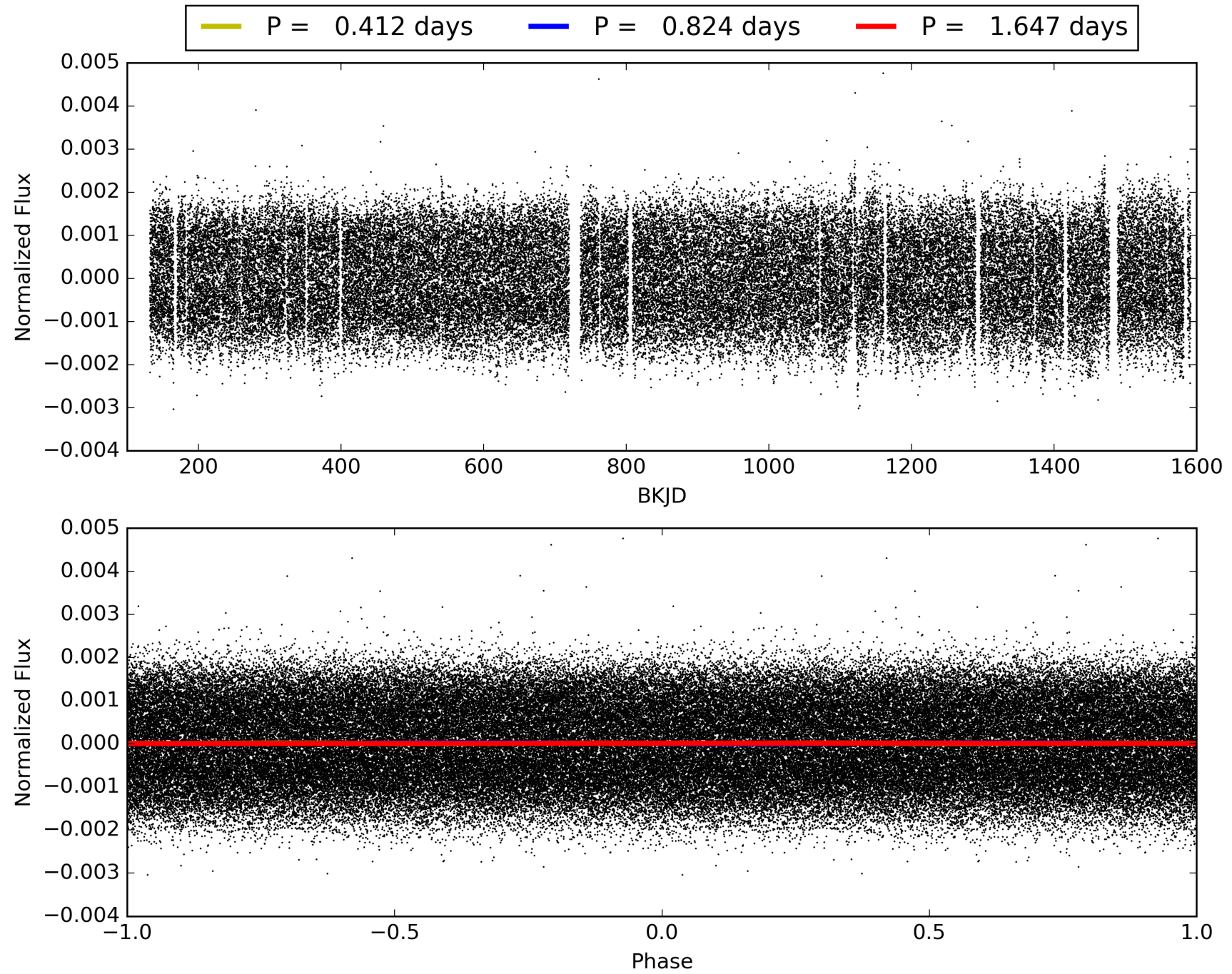
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 22:12:24 Z

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

TCE 008784568-01, PDC Light Curves

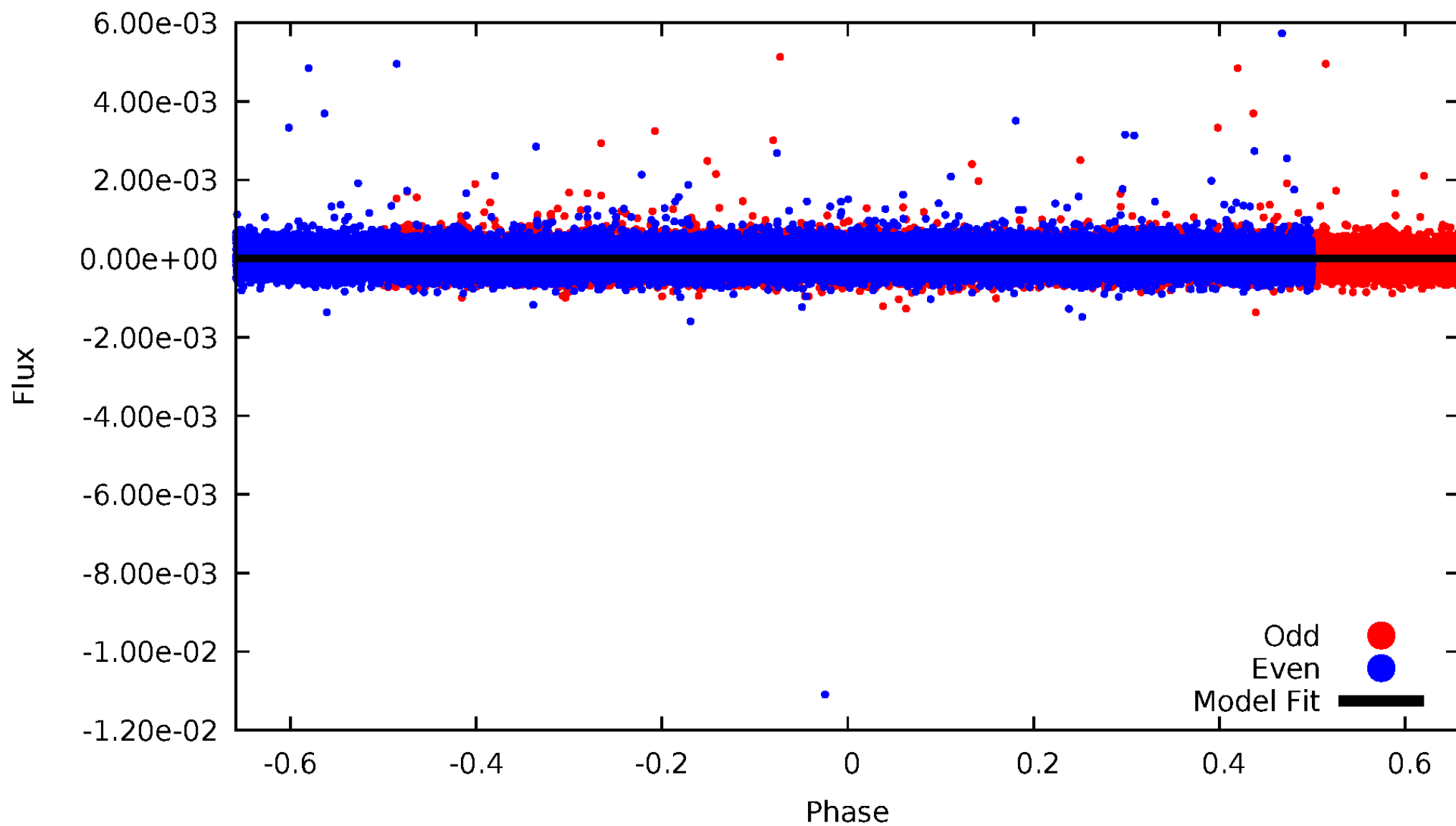


TCE 008784568-01



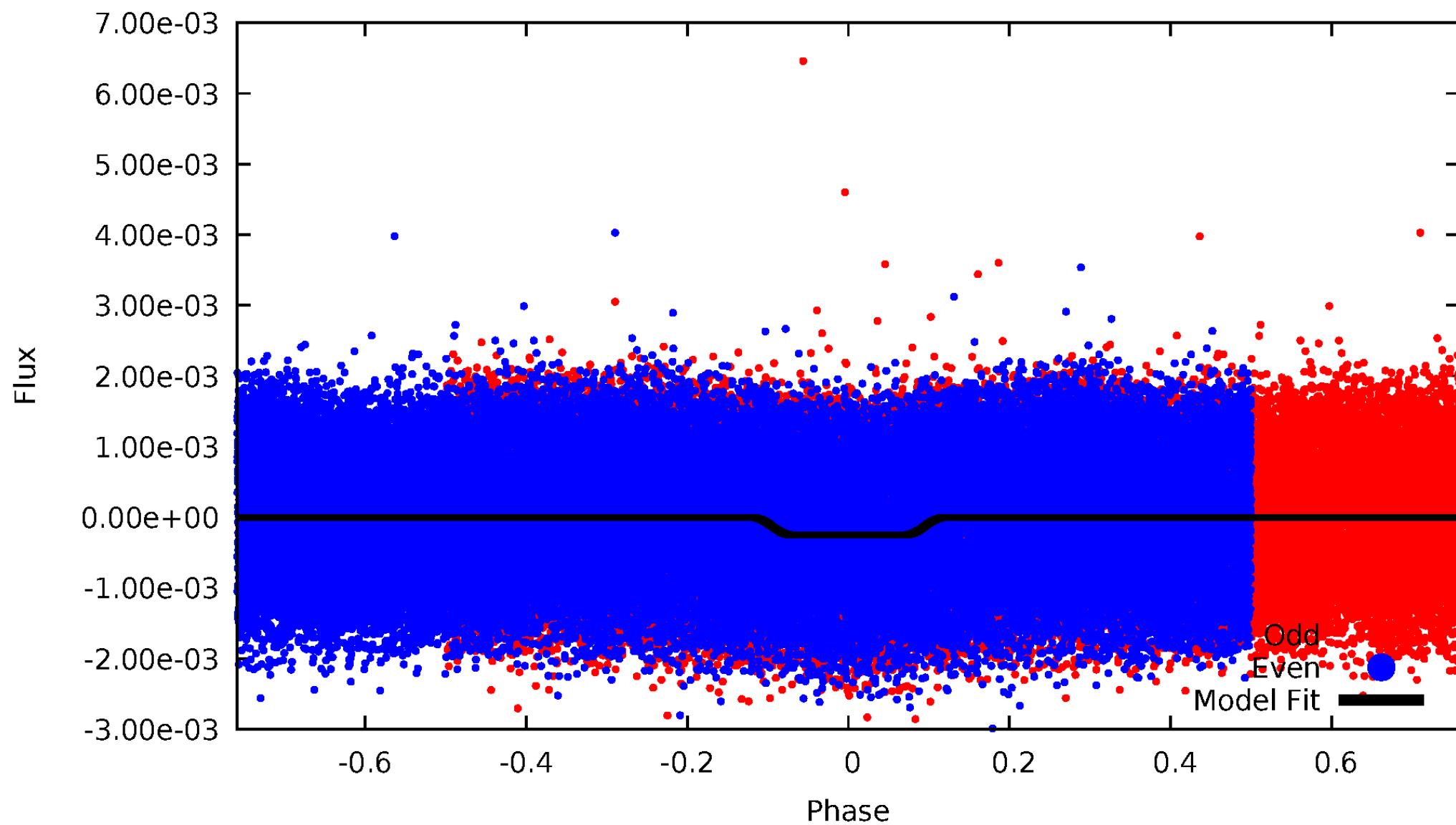
DV Odd/Even

TCE 008784568-01

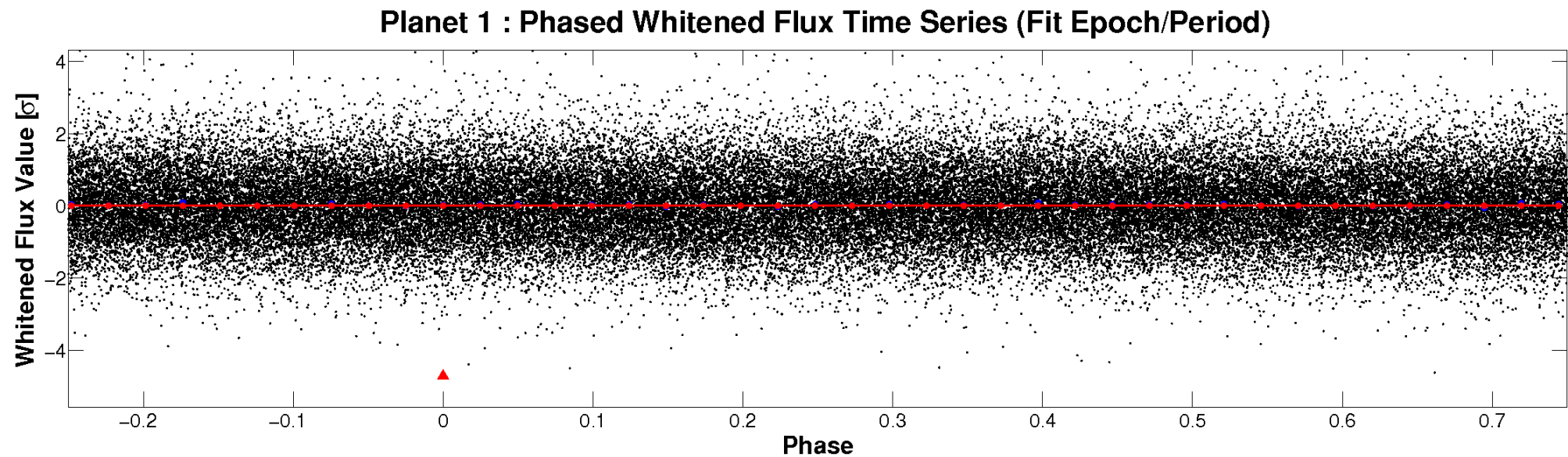
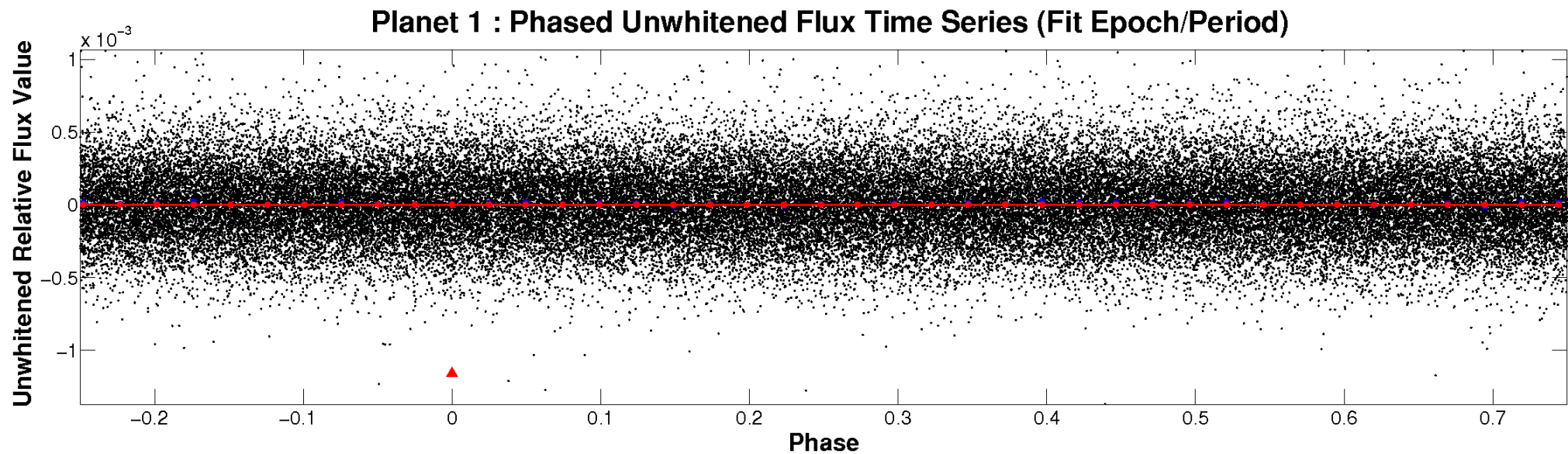


ALT Odd/Even

TCE 008784568-01

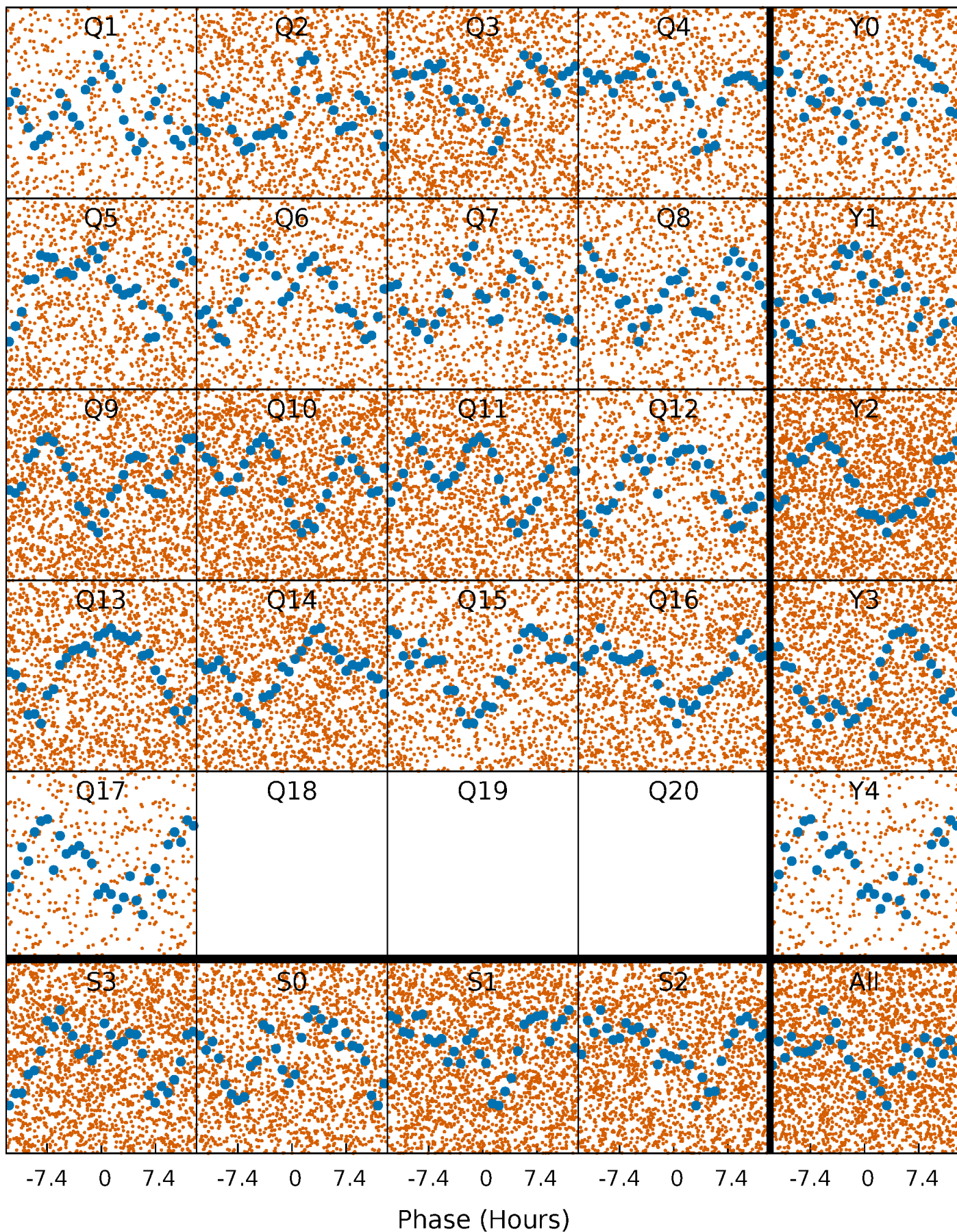


Non-Whitened Vs. Whitened Light Curve



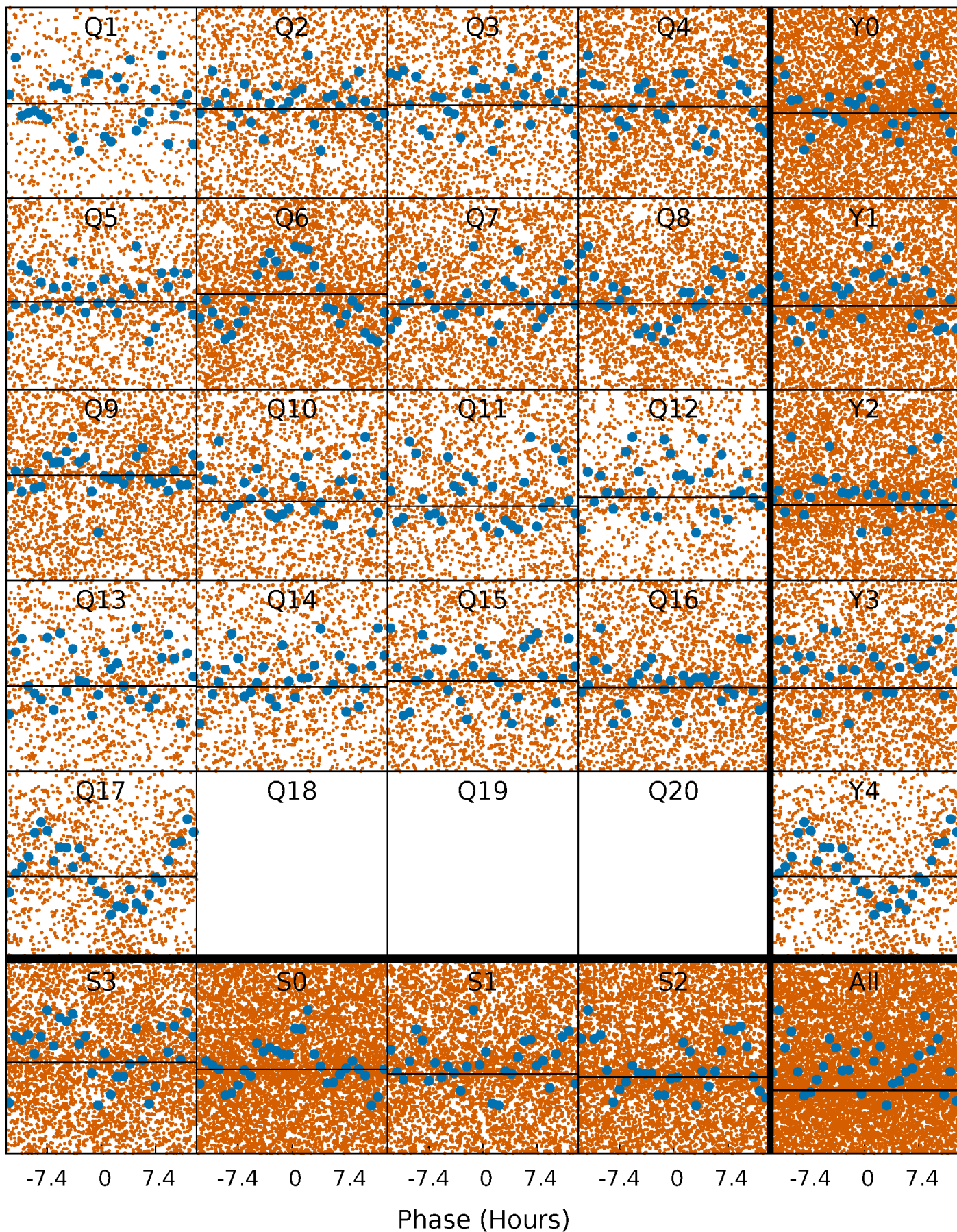
PDC Quarter-Phased Transit Curves

TCE 008784568-01 P= 0.823658 Days $T_0=131.923963$ (BKJD)



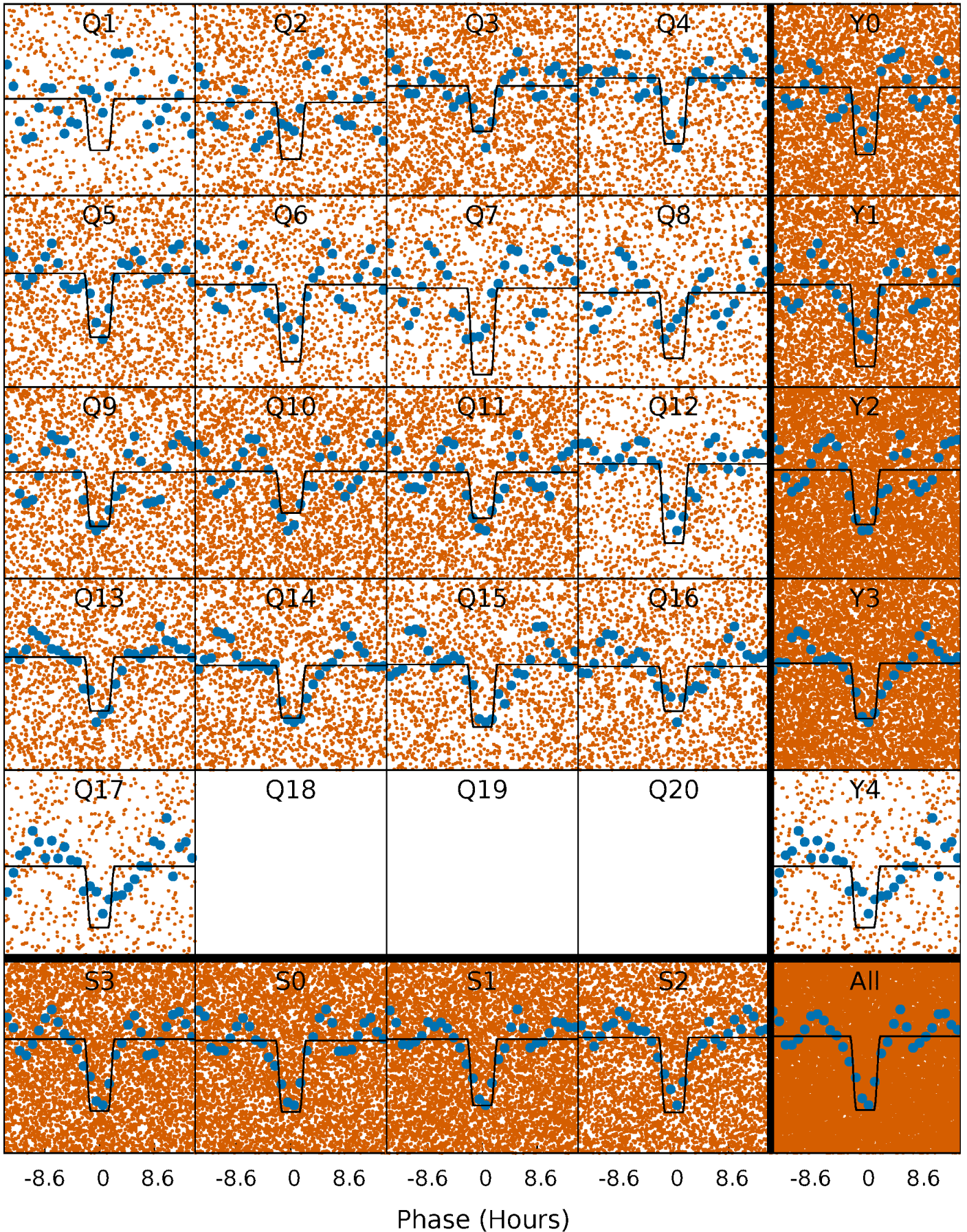
DV Quarter-Phased Transit Curves

TCE 008784568-01 P= 0.823658 Days $T_0=131.923963$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

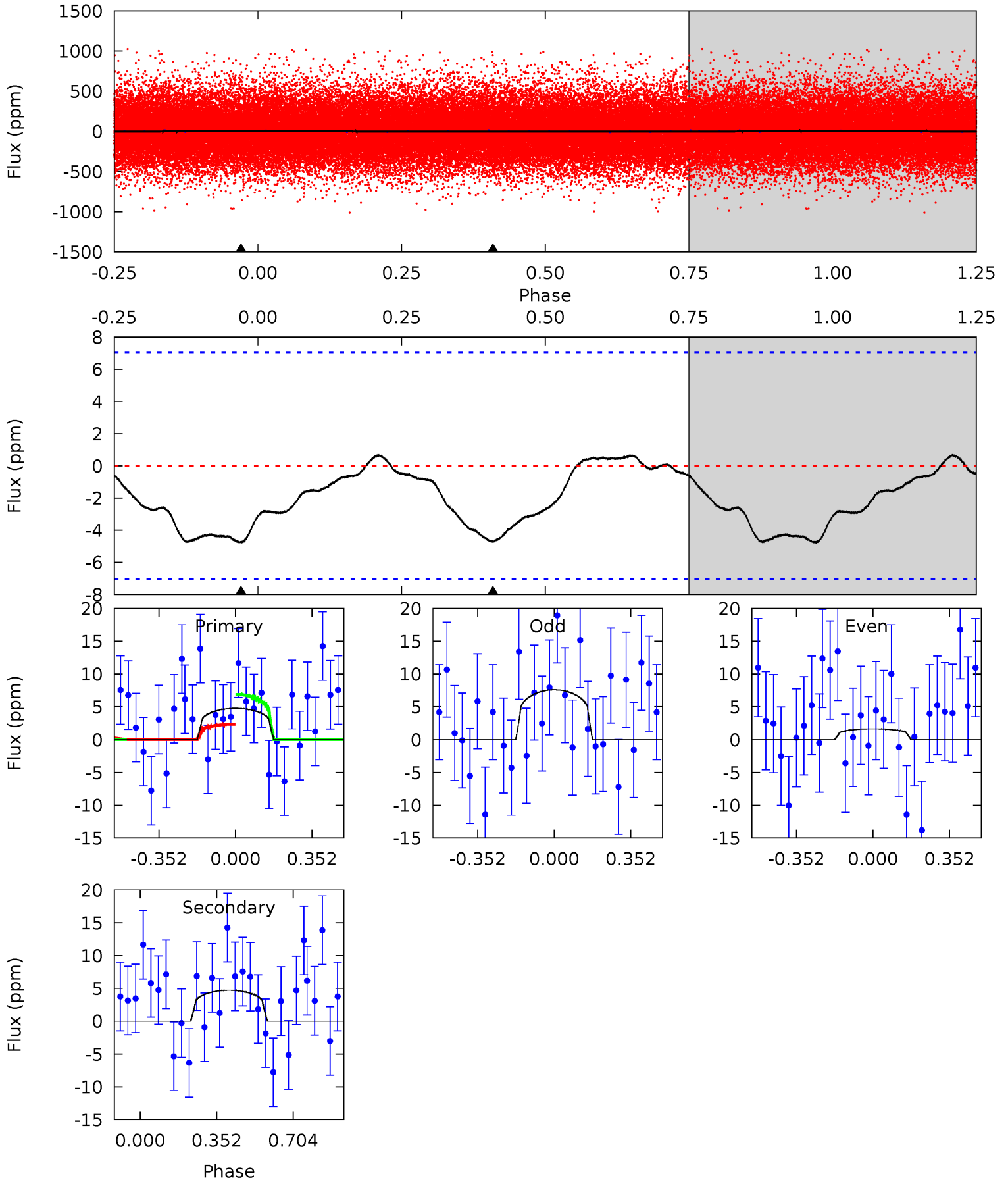
TCE 008784568-01 P= 0.824749 Days $T_0=131.747721$ (BKJD)



DV Model-Shift Uniqueness Test

008784568-01, P = 0.823658 Days, E = 131.100305 Days

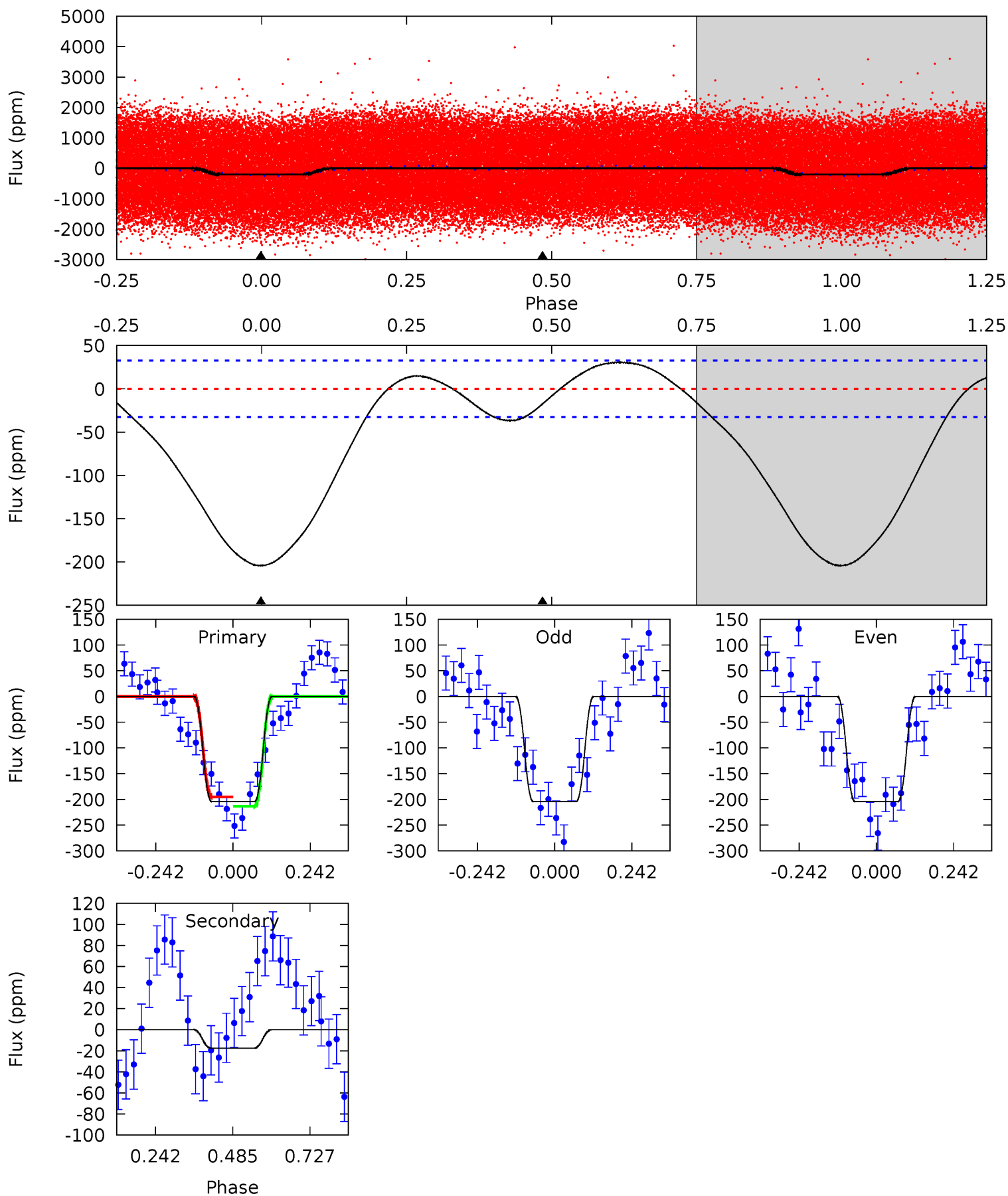
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2.91	2.88	0	0	4.29	0.93	0.20	2.91	2.91	2.88	2.88	1.84	0.52	0.12	1.38



Alt Model-Shift Uniqueness Test

008784568-01, P = 0.824749 Days, E = 130.922972 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
27.4	2.35	0	0	4.38	1.17	1.83	27.4	27.4	2.35	2.35	0.01	1.16	0.13	1.22



Stellar Parameters For KIC 008784568

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6348^{+178}_{-222}	$4.183^{+0.258}_{-0.172}$	$-0.580^{+0.300}_{-0.300}$	$1.307^{+0.353}_{-0.389}$	$0.948^{+0.142}_{-0.107}$	$0.598^{+0.924}_{-0.279}$
	+3%/-3%	+6%/-4%	+52%/-52%	+27%/-30%	+15%/-11%	+154%/-47%
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 008784568-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-5 ± 2	$2.04^{+2.33}_{-1.45}$	3417^{+345}_{-312}	-2860^{+7317}_{-499}	$0.173^{+1.922}_{-0.138}$
Alt.	-17 ± 7	$3.01^{+2.86}_{-1.91}$	3412^{+335}_{-303}	-2149^{+6769}_{-1125}	$0.286^{+2.046}_{-0.224}$

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 $A_{obs} \gg 1.0$

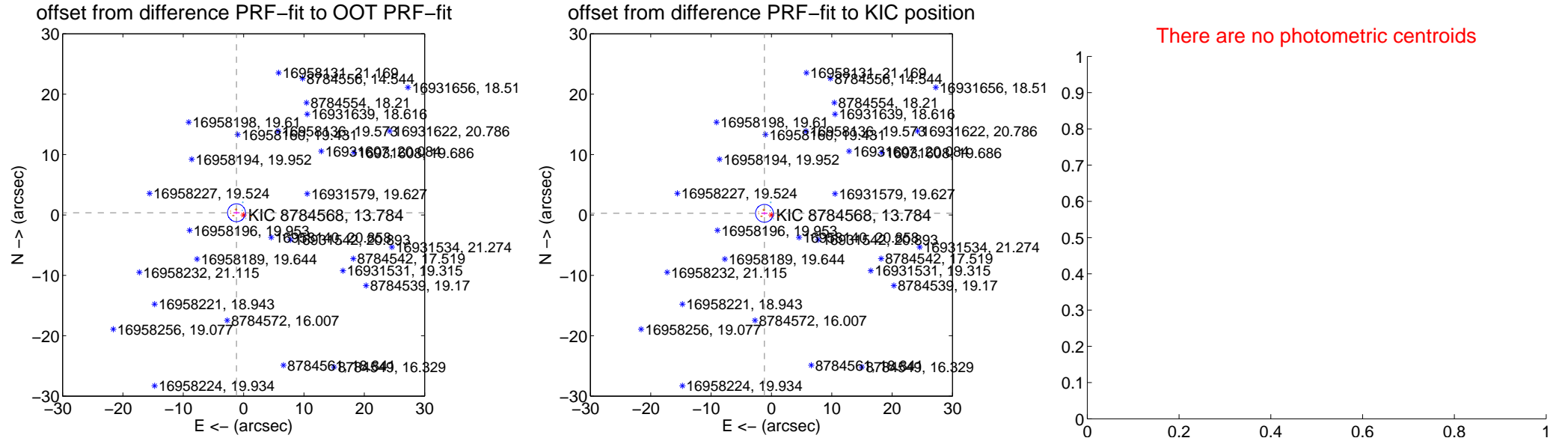
DV Centroid Data

Supplemental centroid analysis for 008784568-01. Kepler magnitude: 13.78. Transit SNR 0.00

There are 3 quarters with good PRF difference image offsets

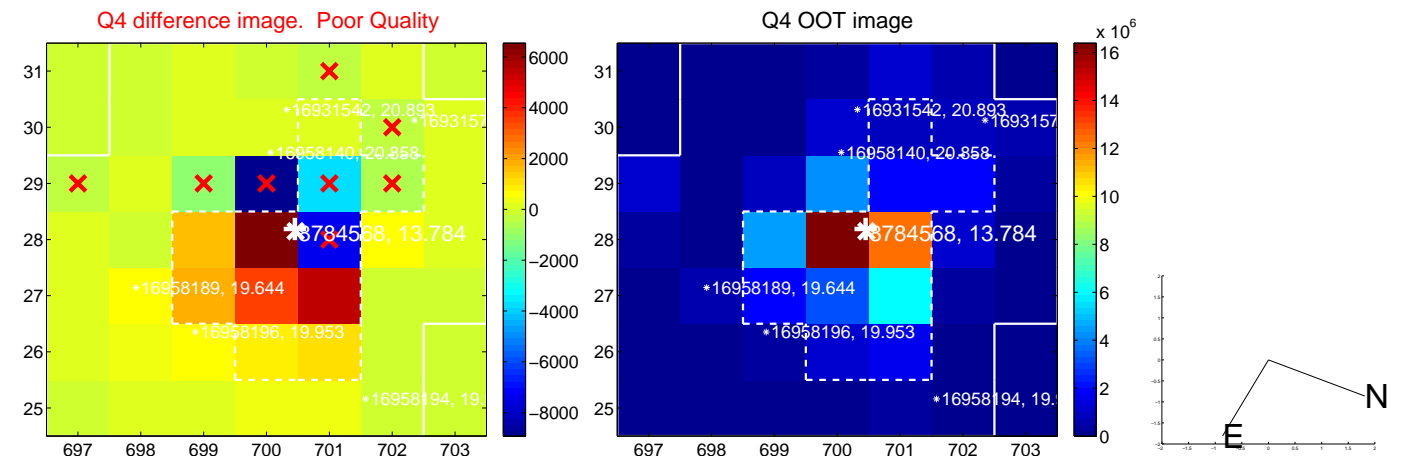
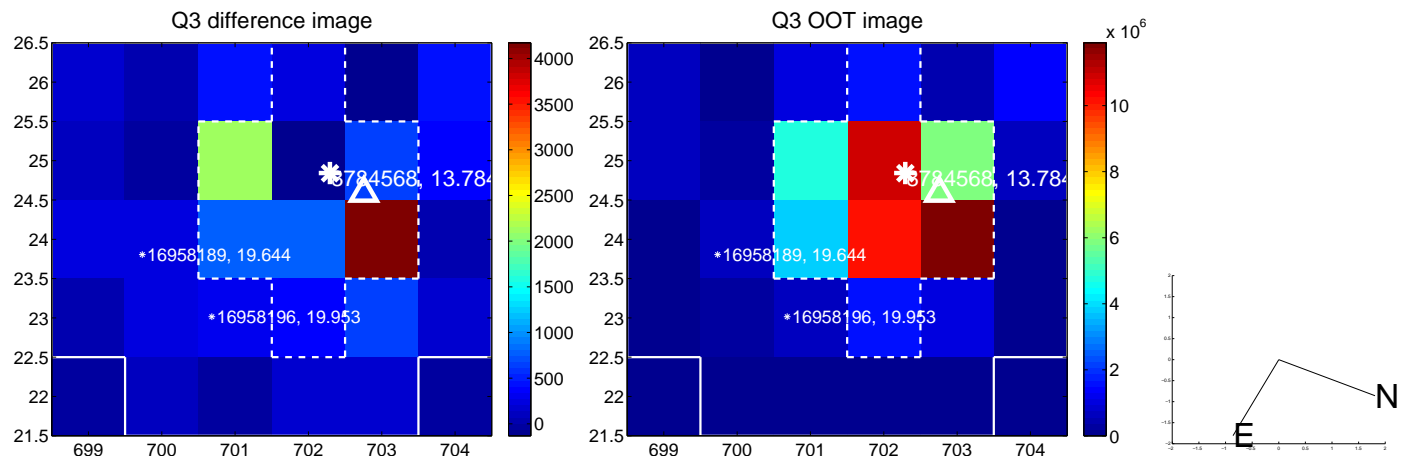
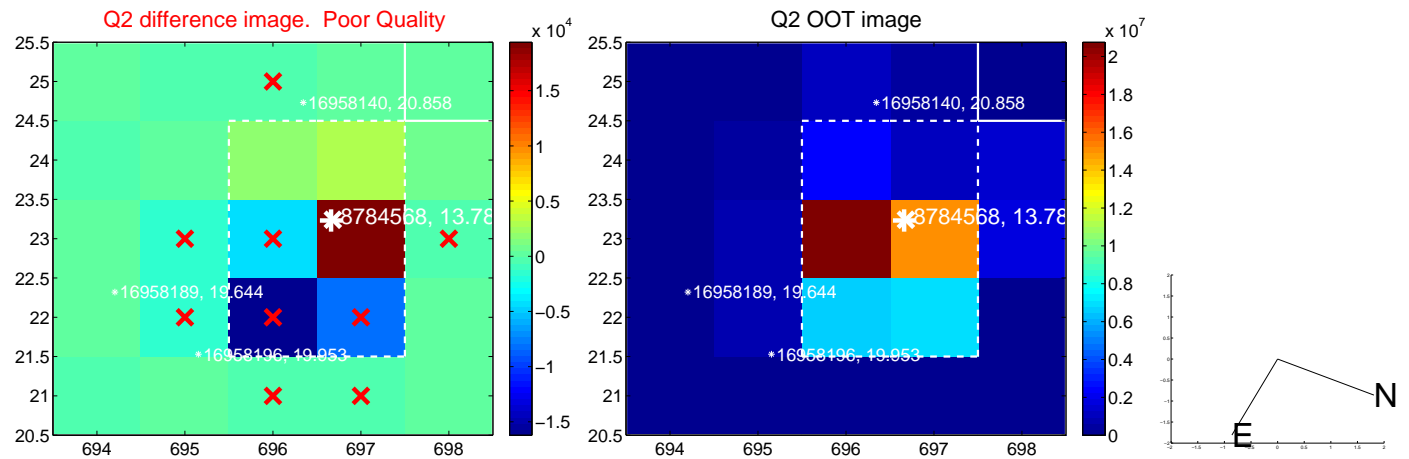
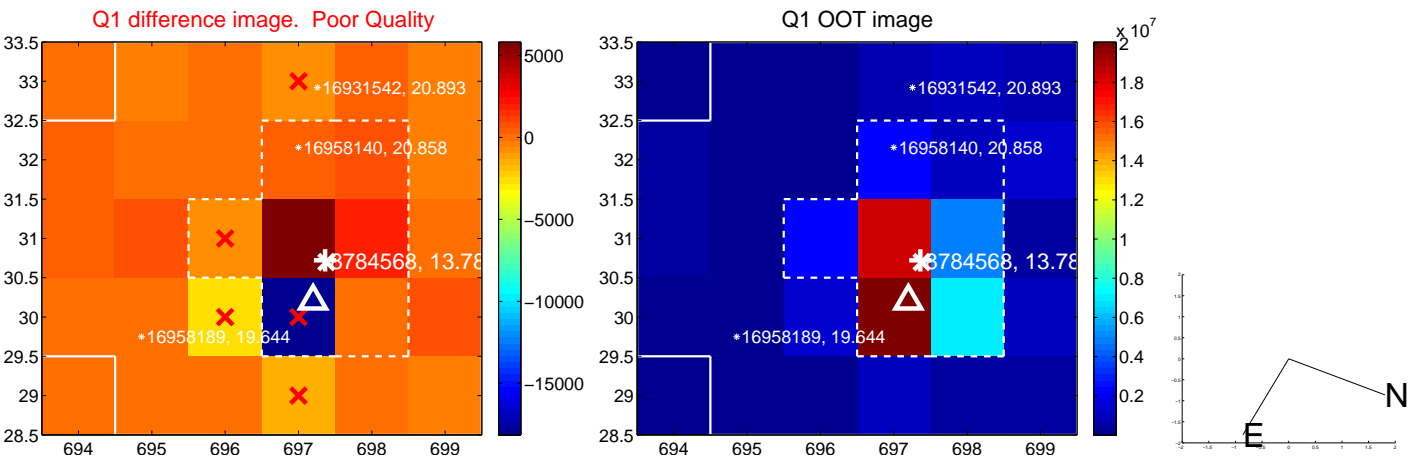
The direct PRF centroid is offset from the target star catalog position by about 0.14 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.236 ± 0.494	2.50	1.180 ± 0.512	0.368 ± 0.247
PRF-fit source offset from KIC position	1.188 ± 0.492	2.42	1.157 ± 0.502	0.271 ± 0.240
photometric centroid source offset	—	—	—	—

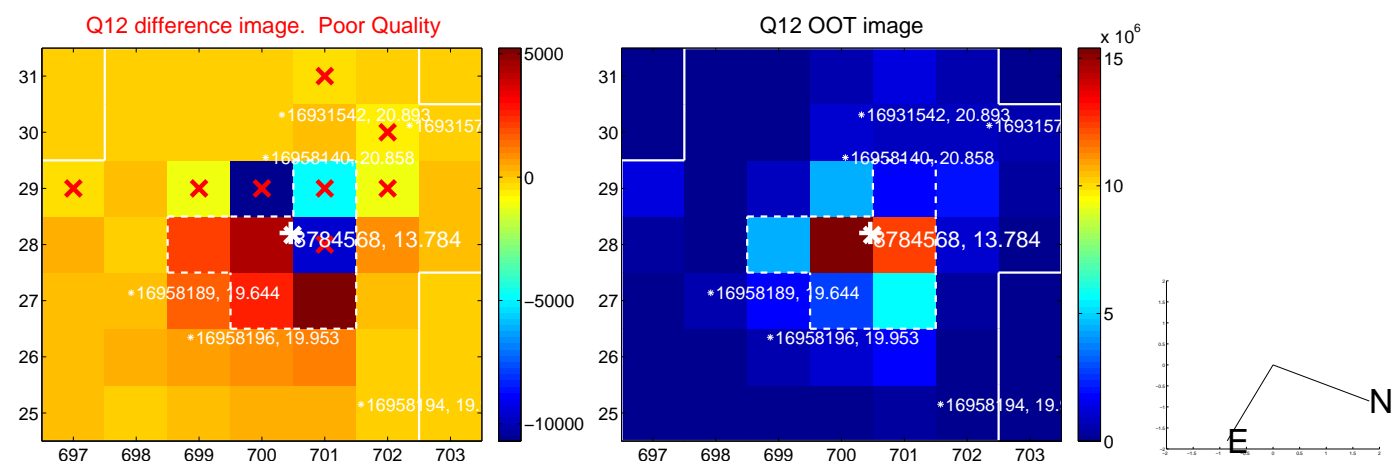
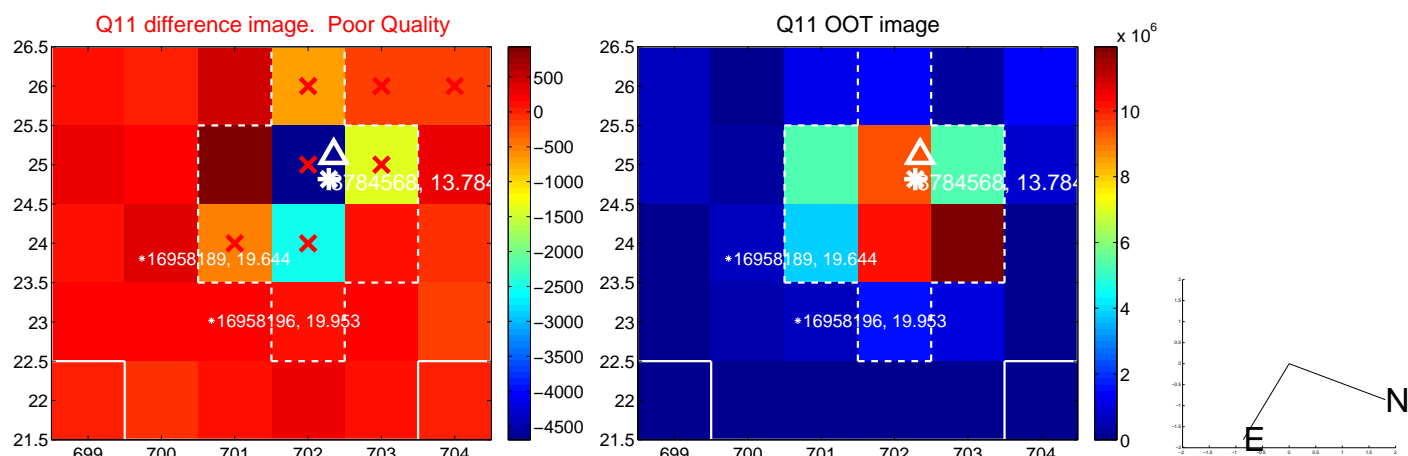
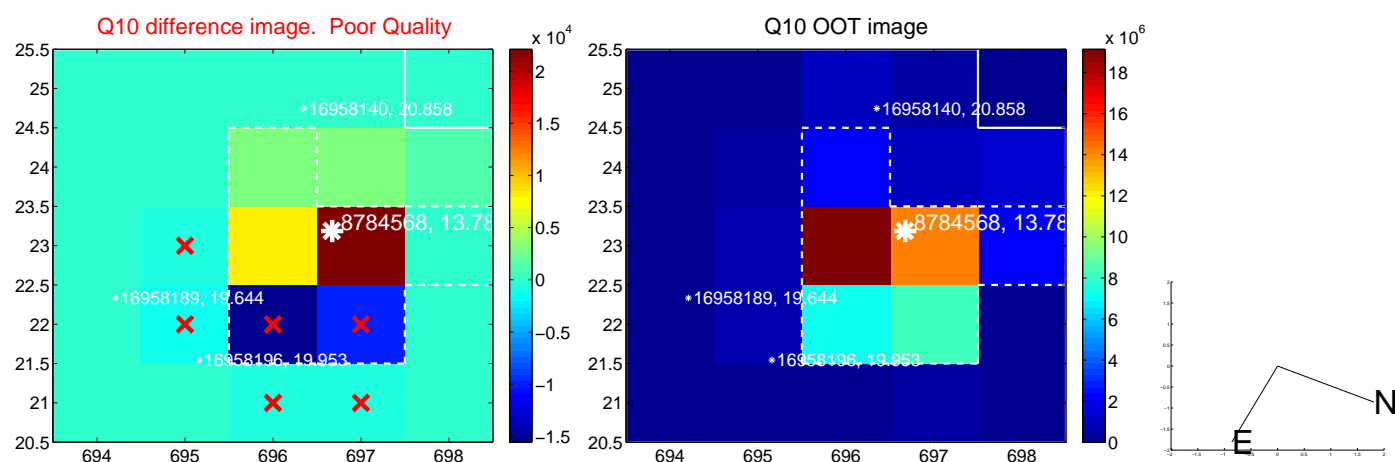
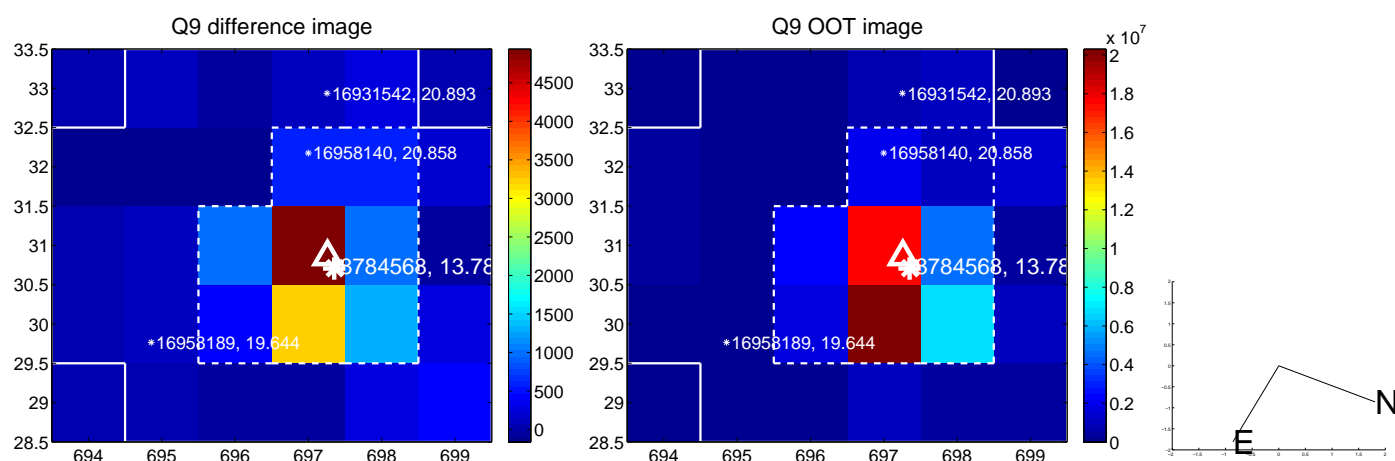


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

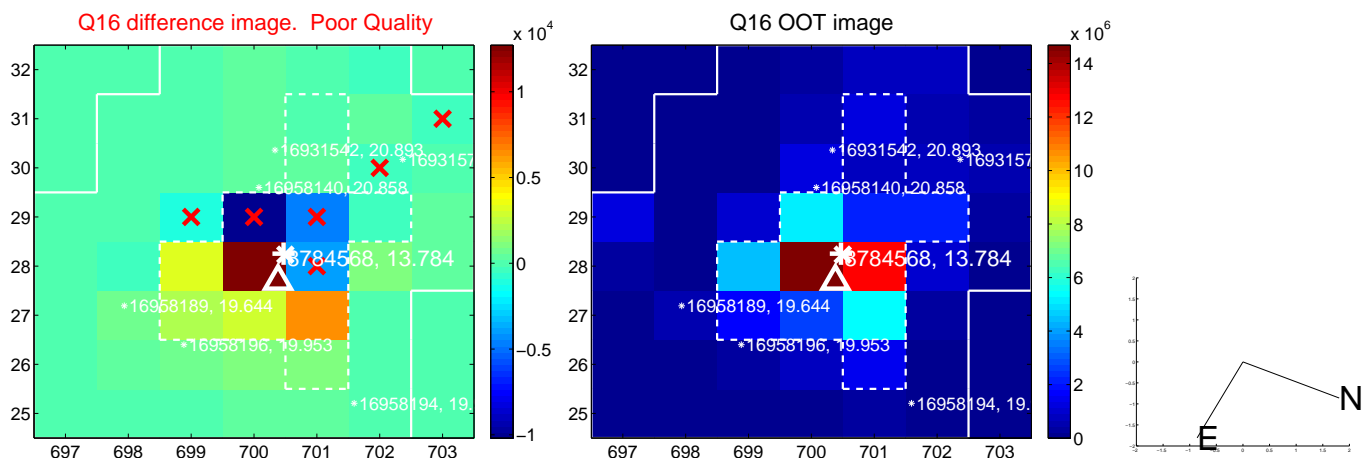
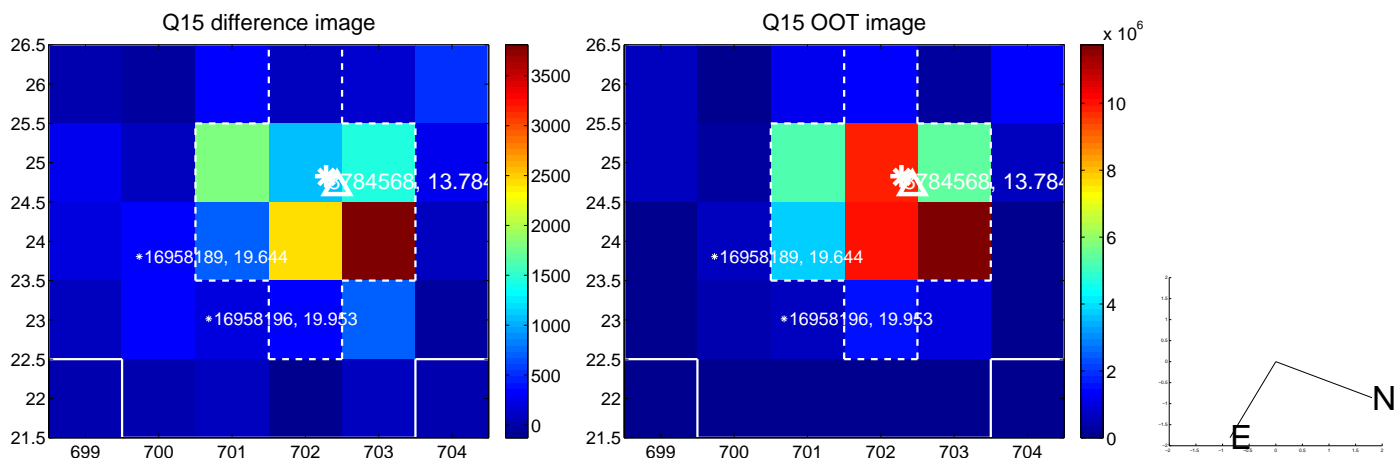
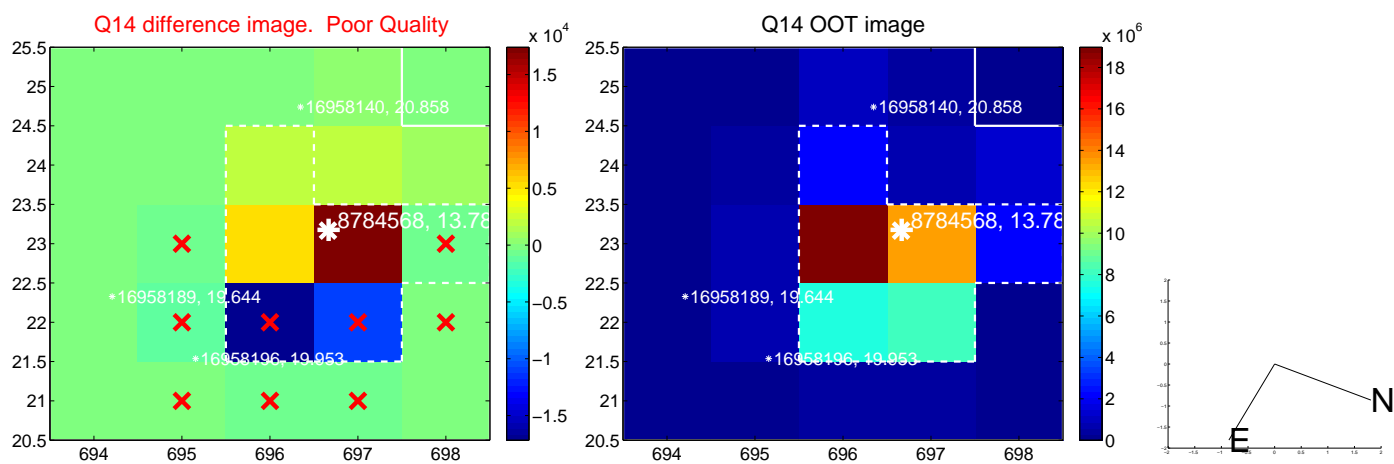
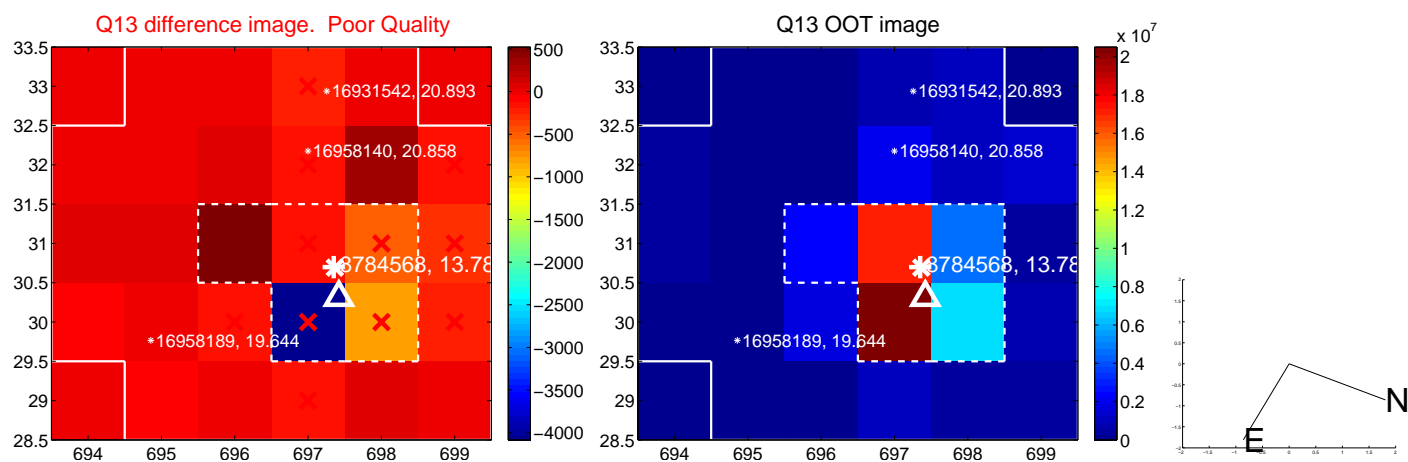
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



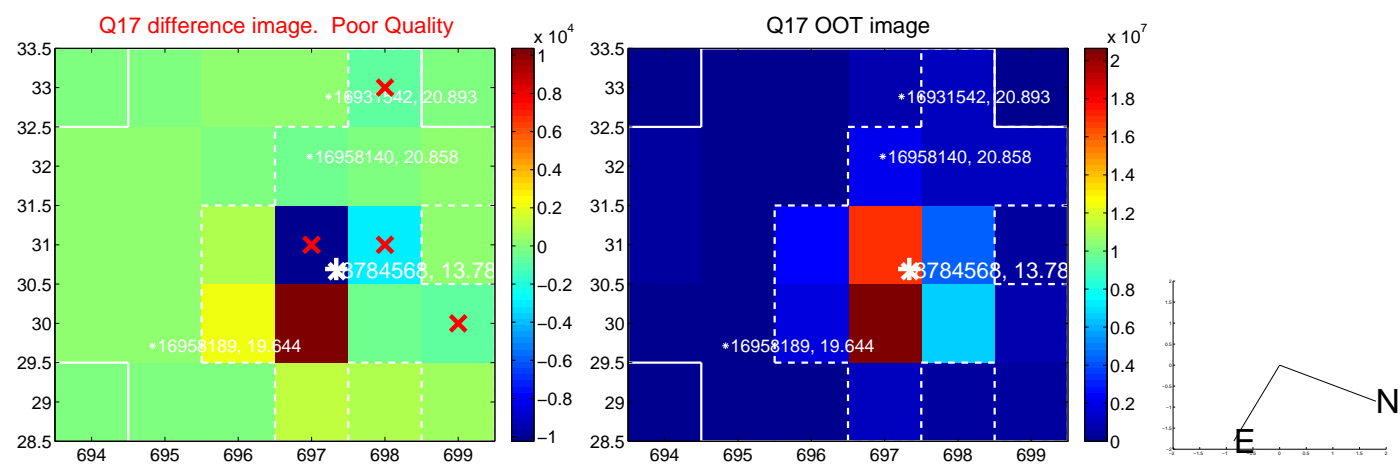
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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.



folded centroid time series figure for this object.

UKIRT Image

