

KIC 006508478

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})
006508478-01	OBS	No	1.173693	132.151487	2.6	10.903	10.5	2.0	3.18	8273	0.60	55396.86

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006508478-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—CENT_FEW_MEAS

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

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

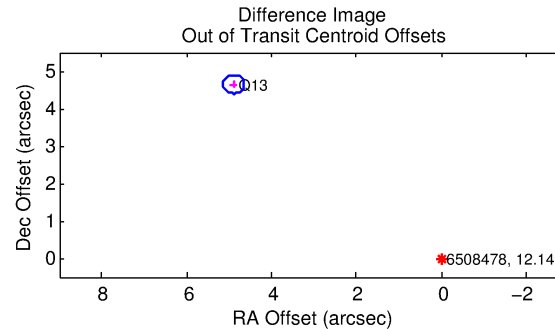
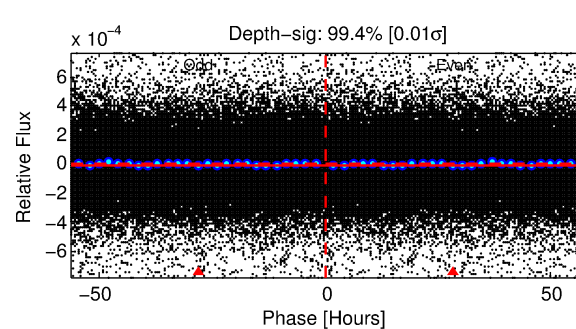
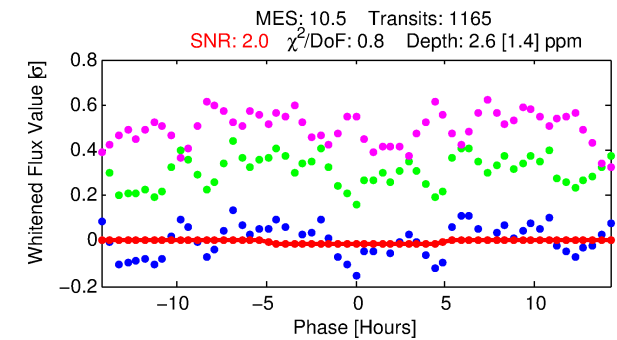
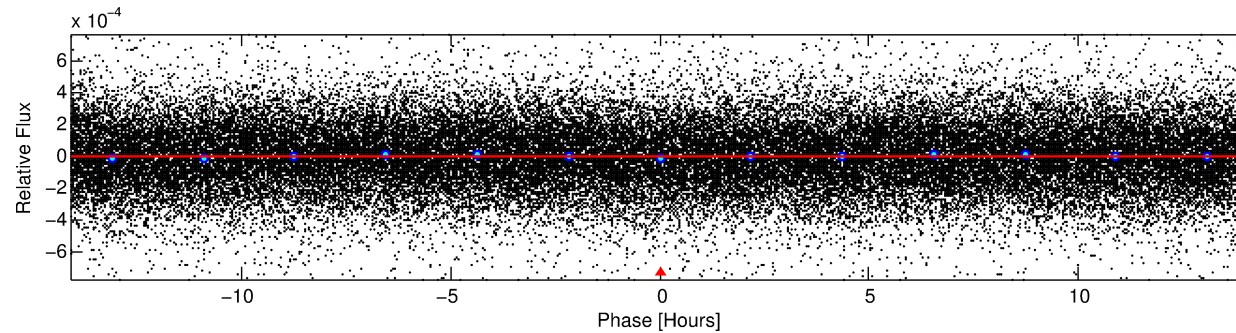
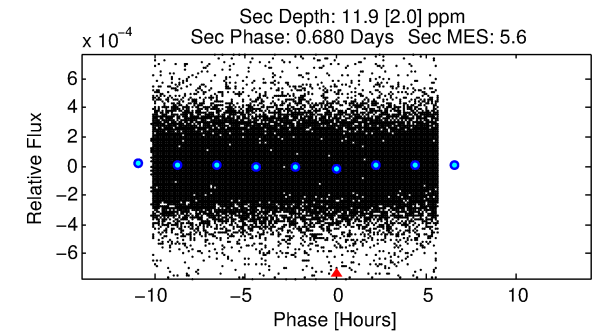
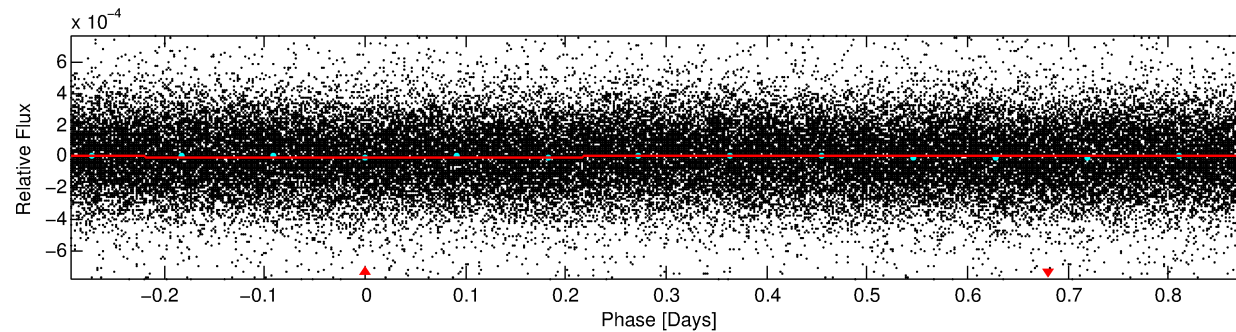
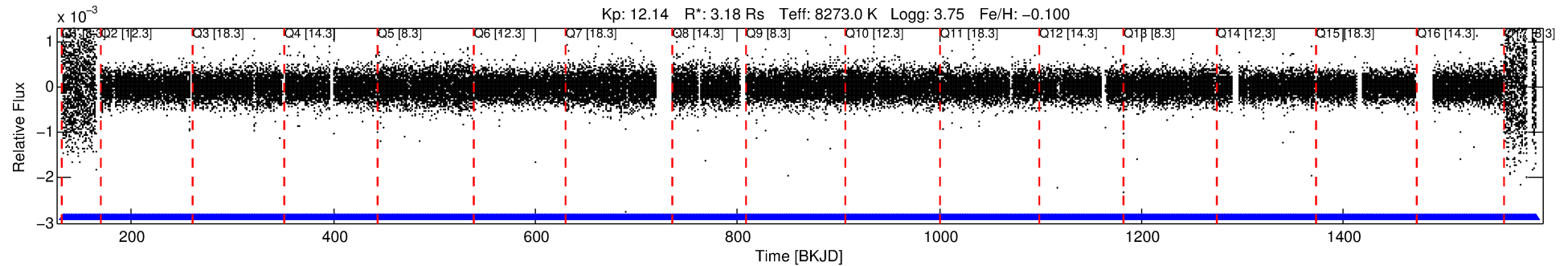
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006508478-01

No Significant Match Found

DV One-Page Summary

KIC: 6508478 Candidate: 1 of 1 Period: 1.174 d



DV Fit Results:

Period = 1.17369 [0.00009] d
Epoch = 132.1515 [0.0376] BKJD
Rp/R* = 0.0017 [0.0035]
a/R* = 1.01 [0.38]
b = 0.90 [2.77]
Seff = 55396.86 [40257.60]
Teq = 3912 [711] K
Rp = 0.60 [1.24] Re
a = 0.0277 [0.0123] AU
Ag = 13.99 [57.18] [0.23σ]
Teff = 11698 [11779] K [0.66σ]

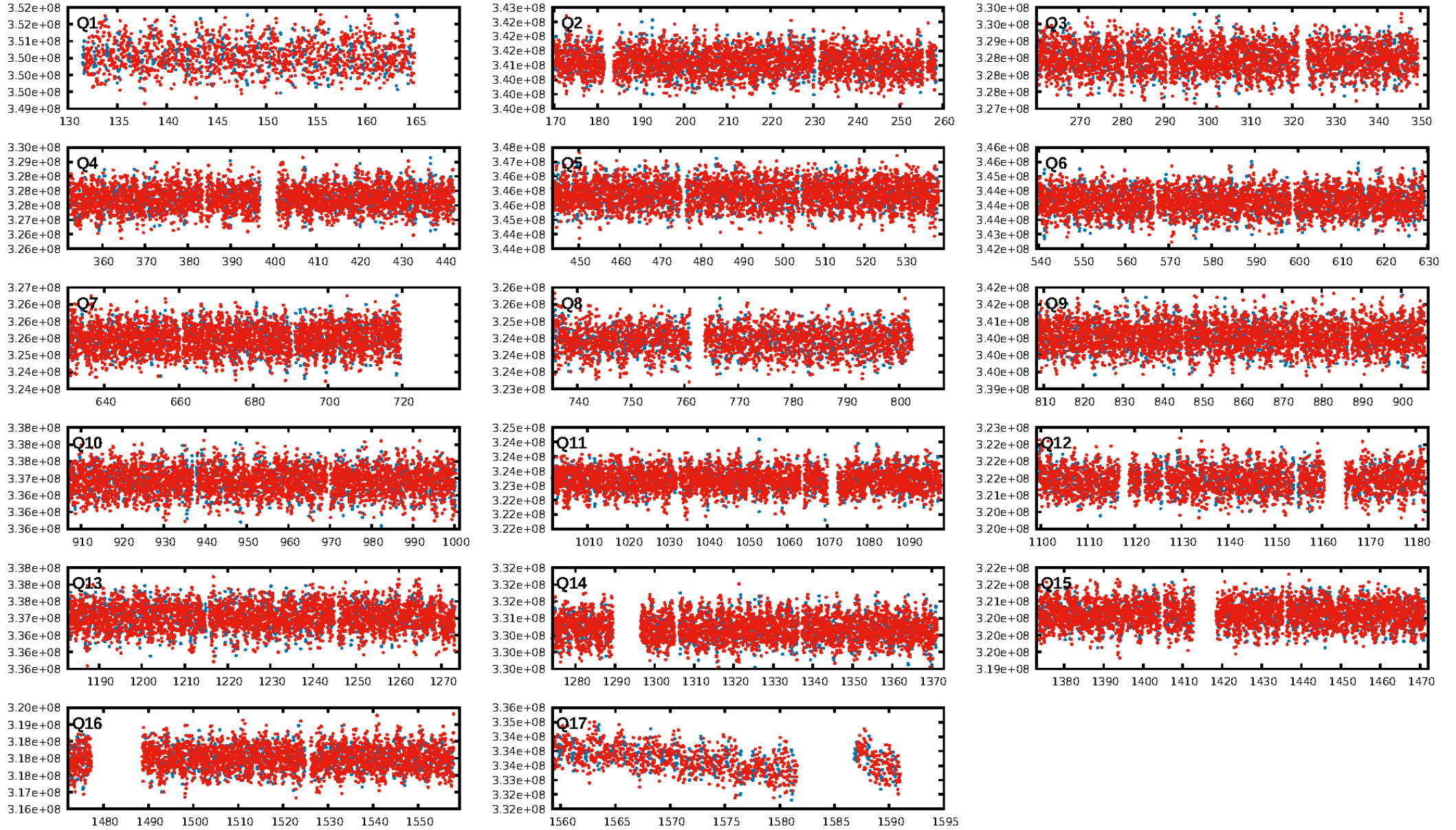
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [1112/1112]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 6.749 arcsec [82.52σ]
KicOffset-rm: 6.622 arcsec [80.96σ]
OotOffset-st: 0/0/0/1 [1]
KicOffset-st: 0/0/0/1 [1]
DiffImageQuality-fgm: 0.00 [0/1]
DiffImageOverlap-fno: 1.00 [17/17]

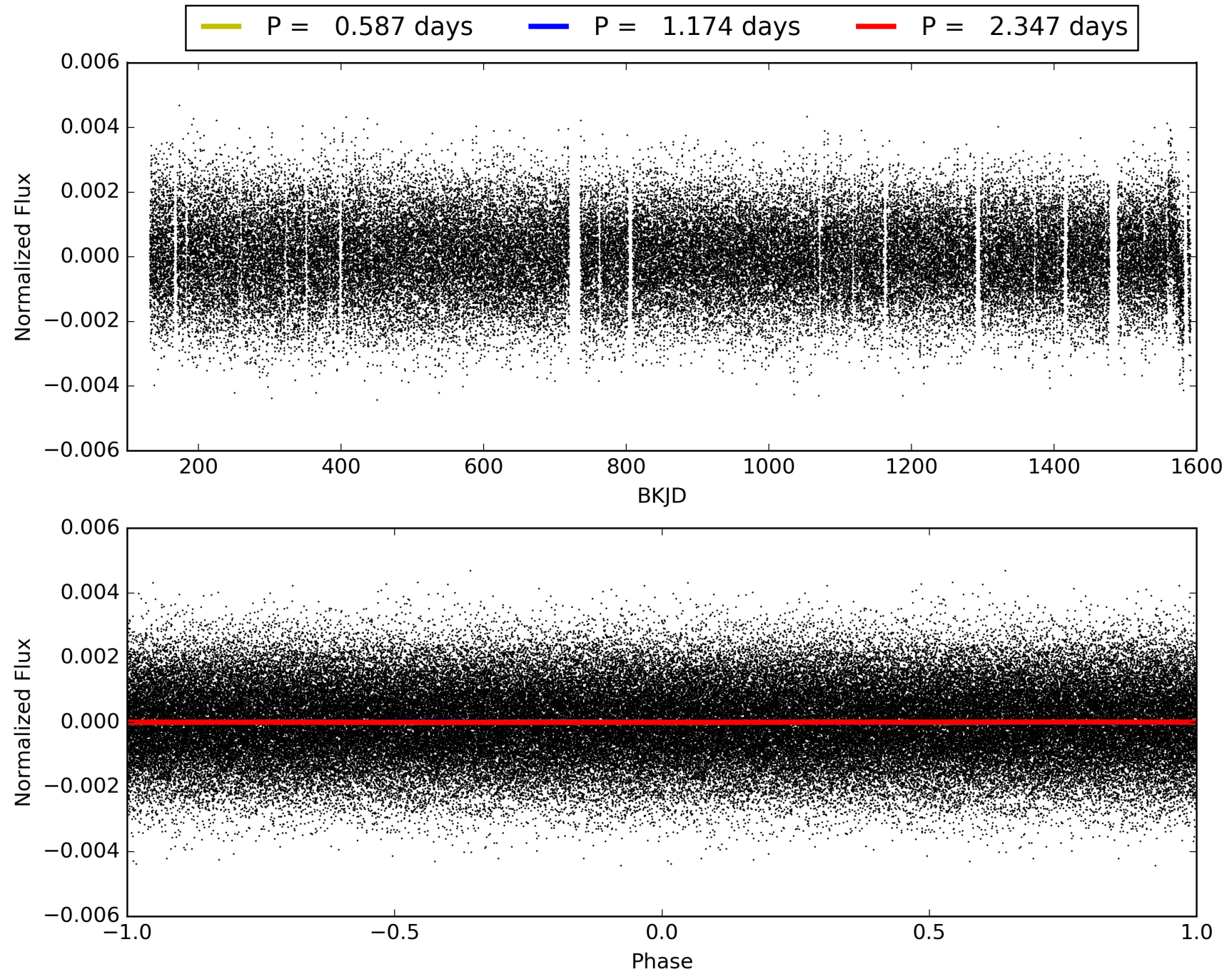
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 16:41:56 Z

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

TCE 006508478-01, PDC Light Curves

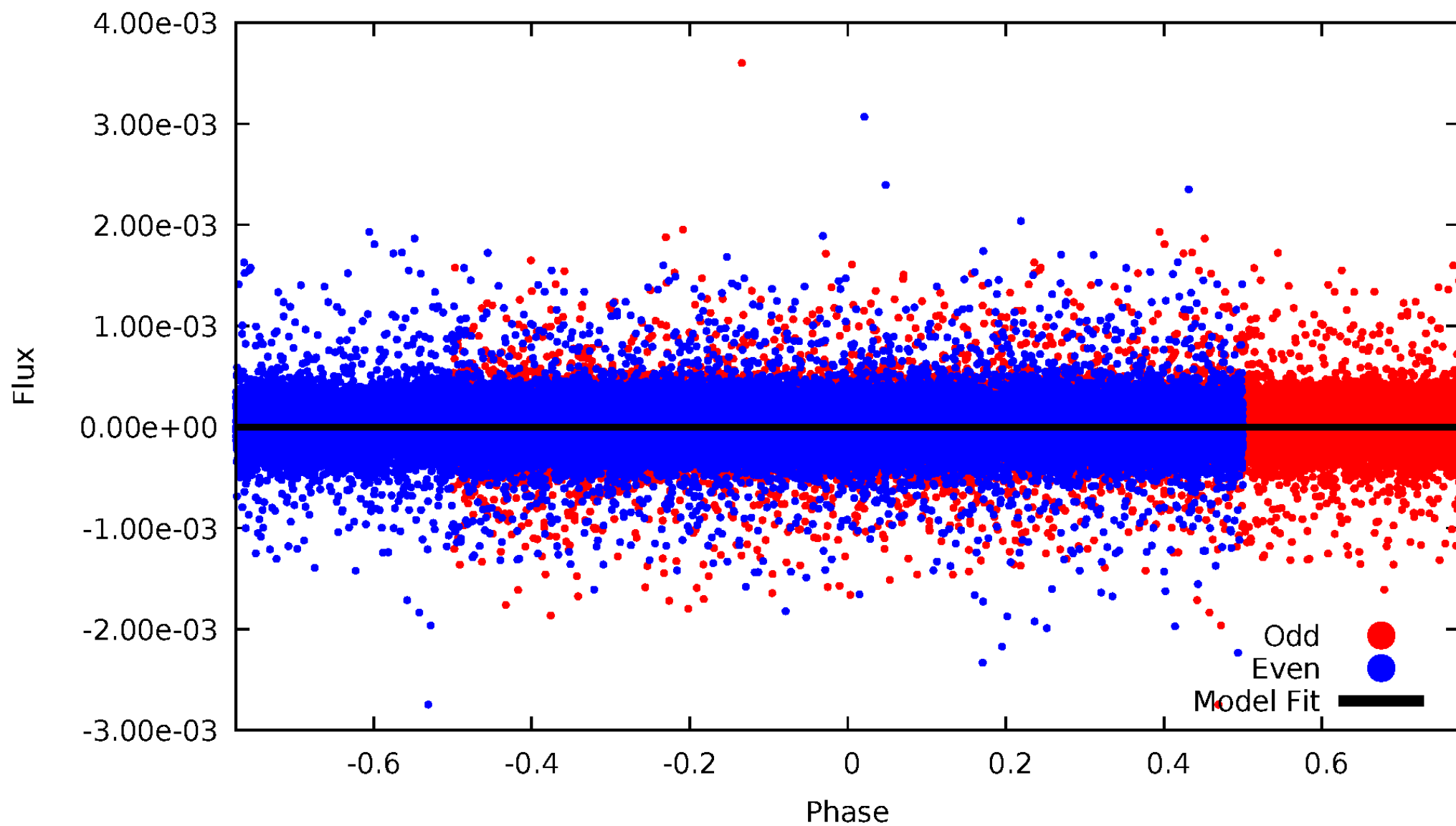


TCE 006508478-01



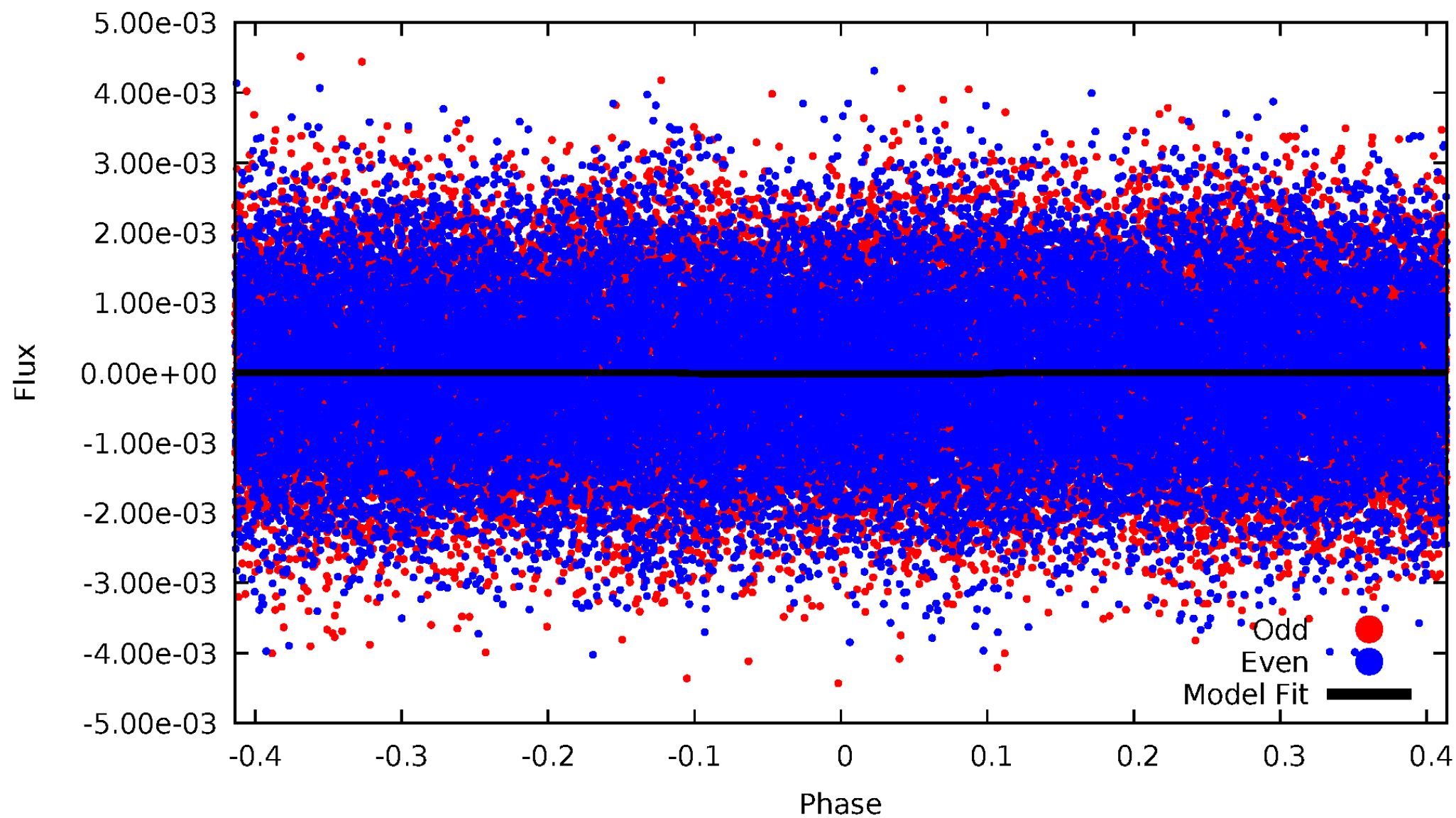
DV Odd/Even

TCE 006508478-01



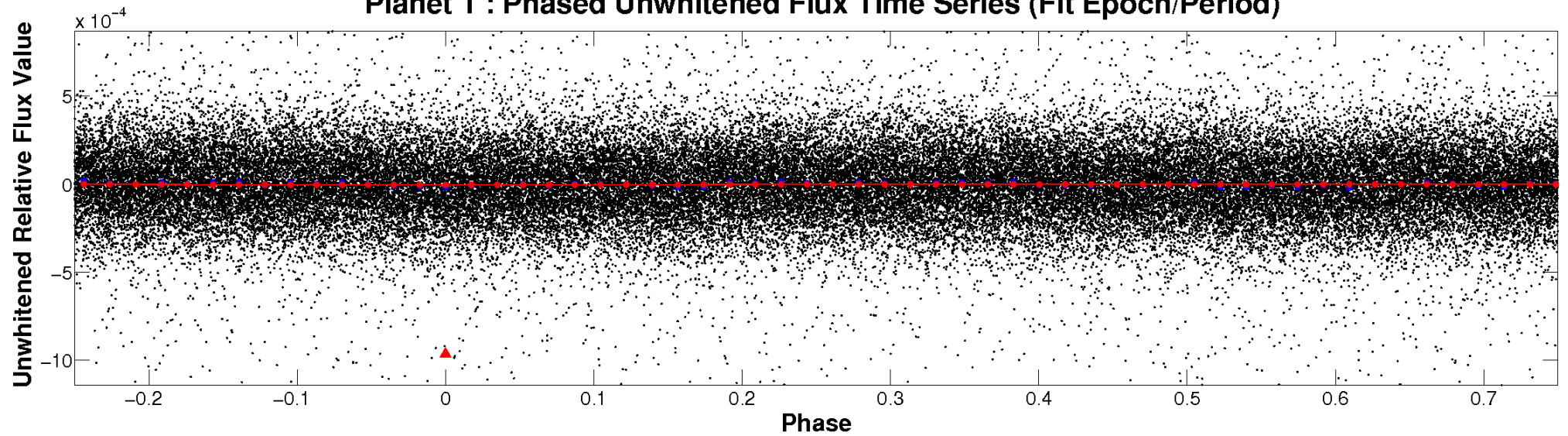
ALT Odd/Even

TCE 006508478-01

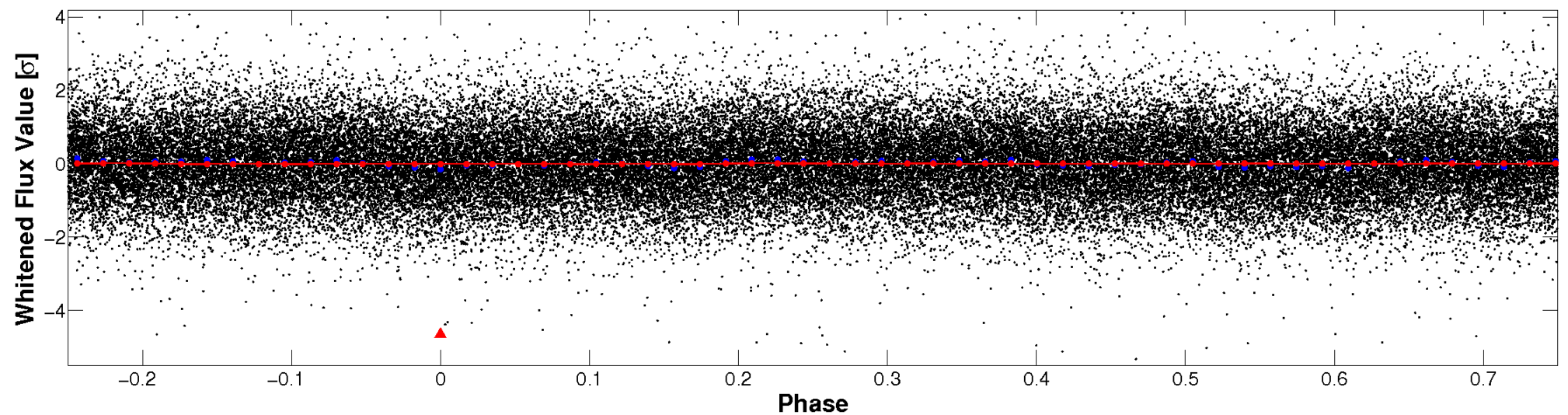


Non-Whitened Vs. Whitened Light Curve

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

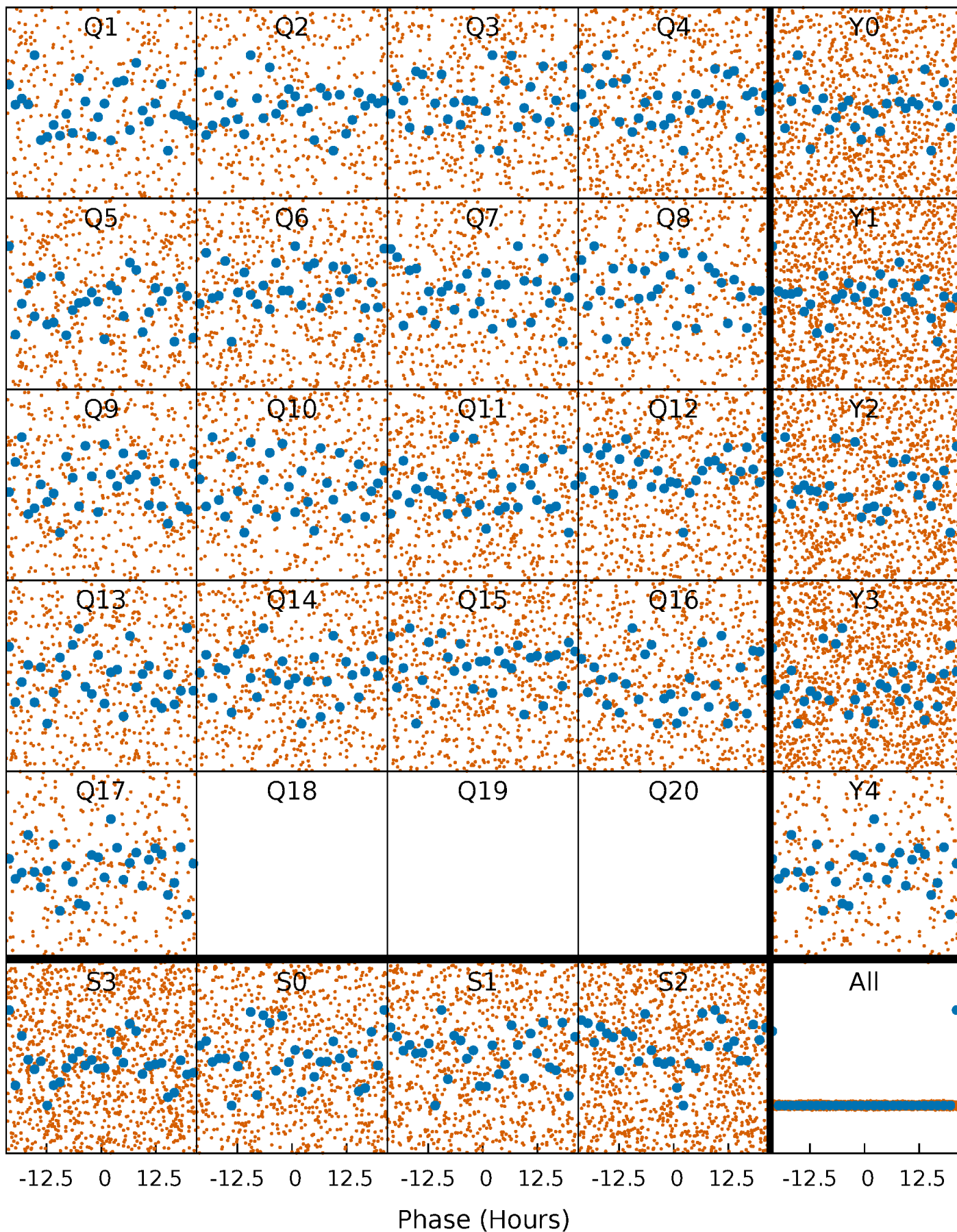


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



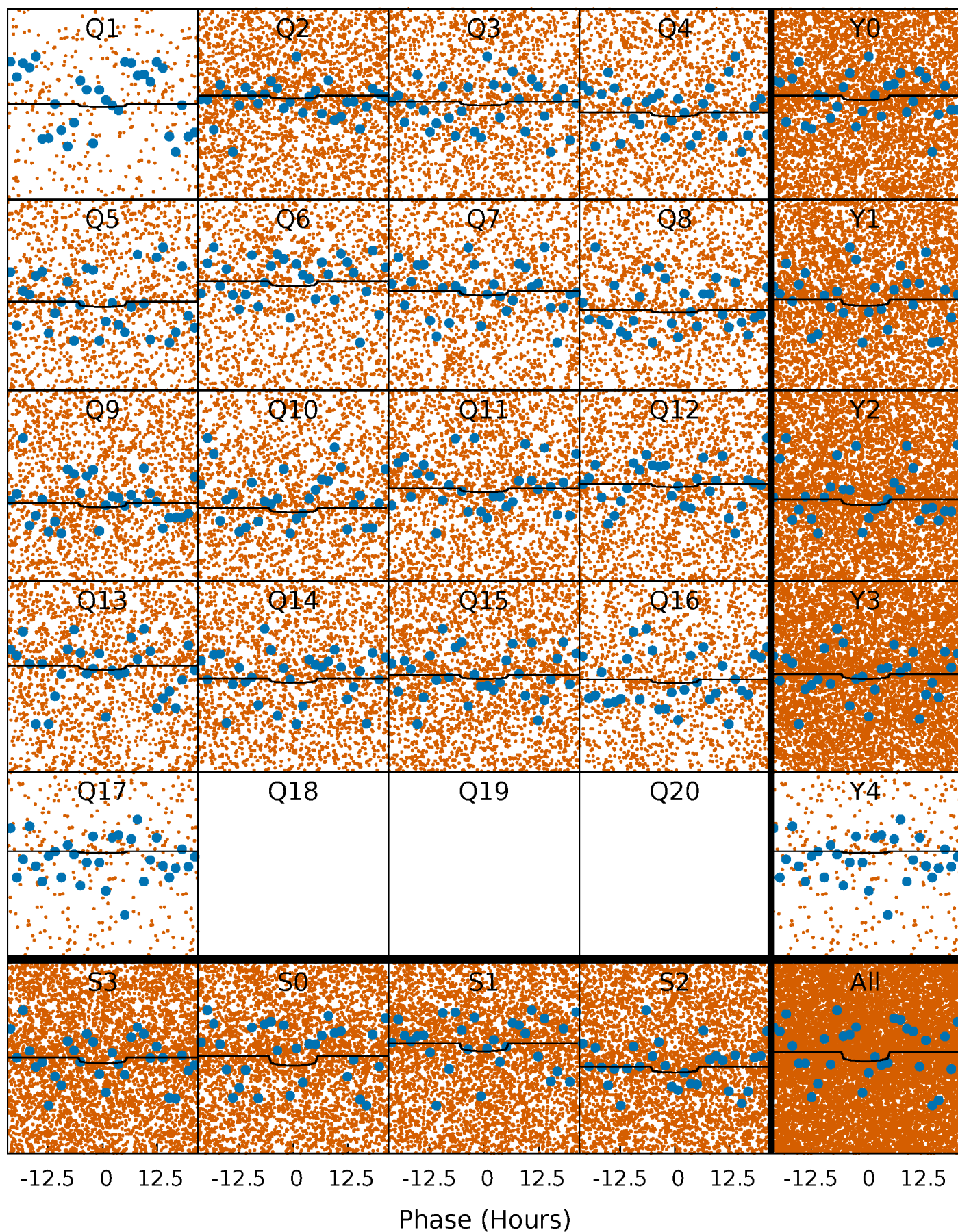
PDC Quarter-Phased Transit Curves

TCE 006508478-01 P= 1.173693 Days $T_0=132.151487$ (BKJD)



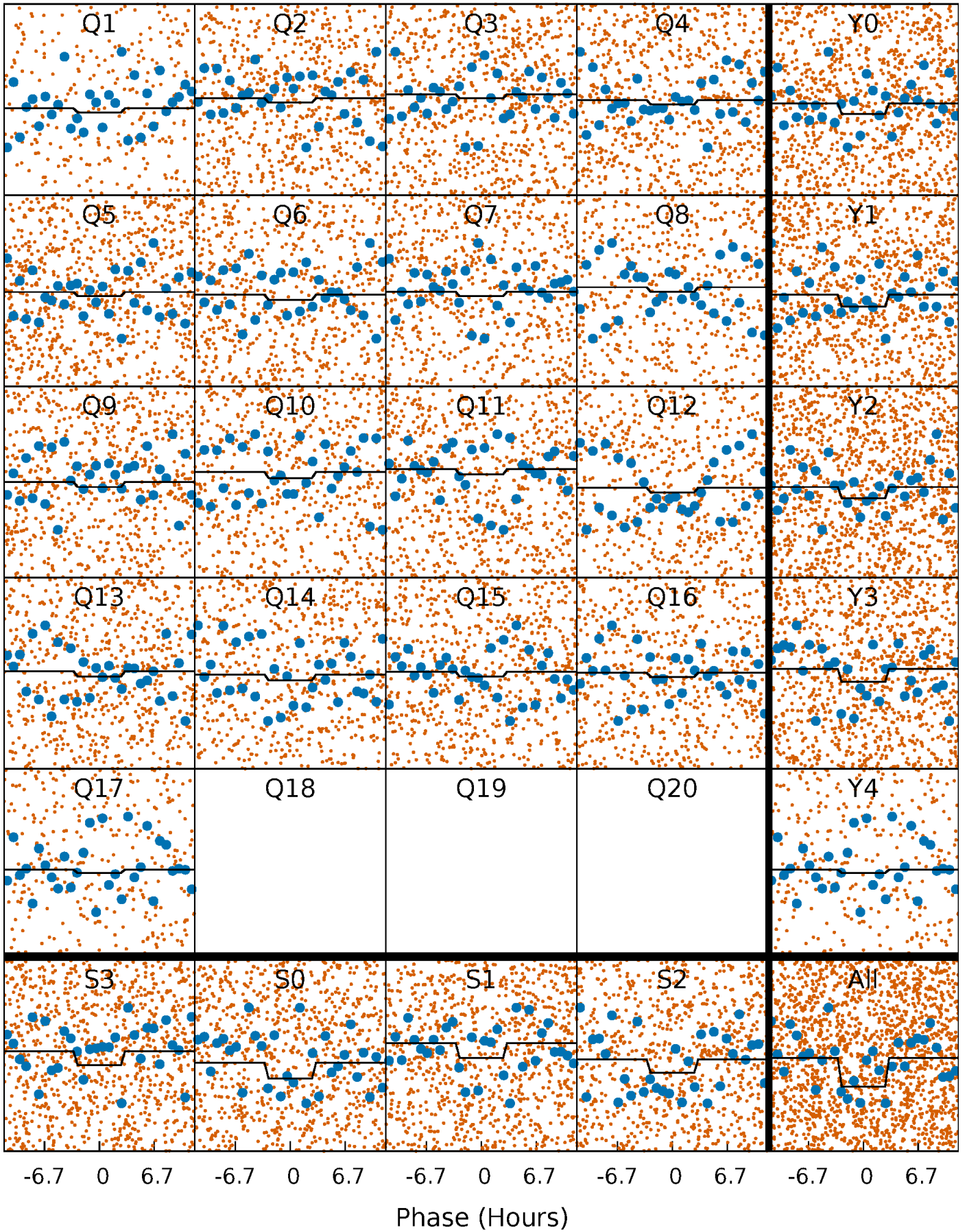
DV Quarter-Phased Transit Curves

TCE 006508478-01 P= 1.173693 Days $T_0=132.151487$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

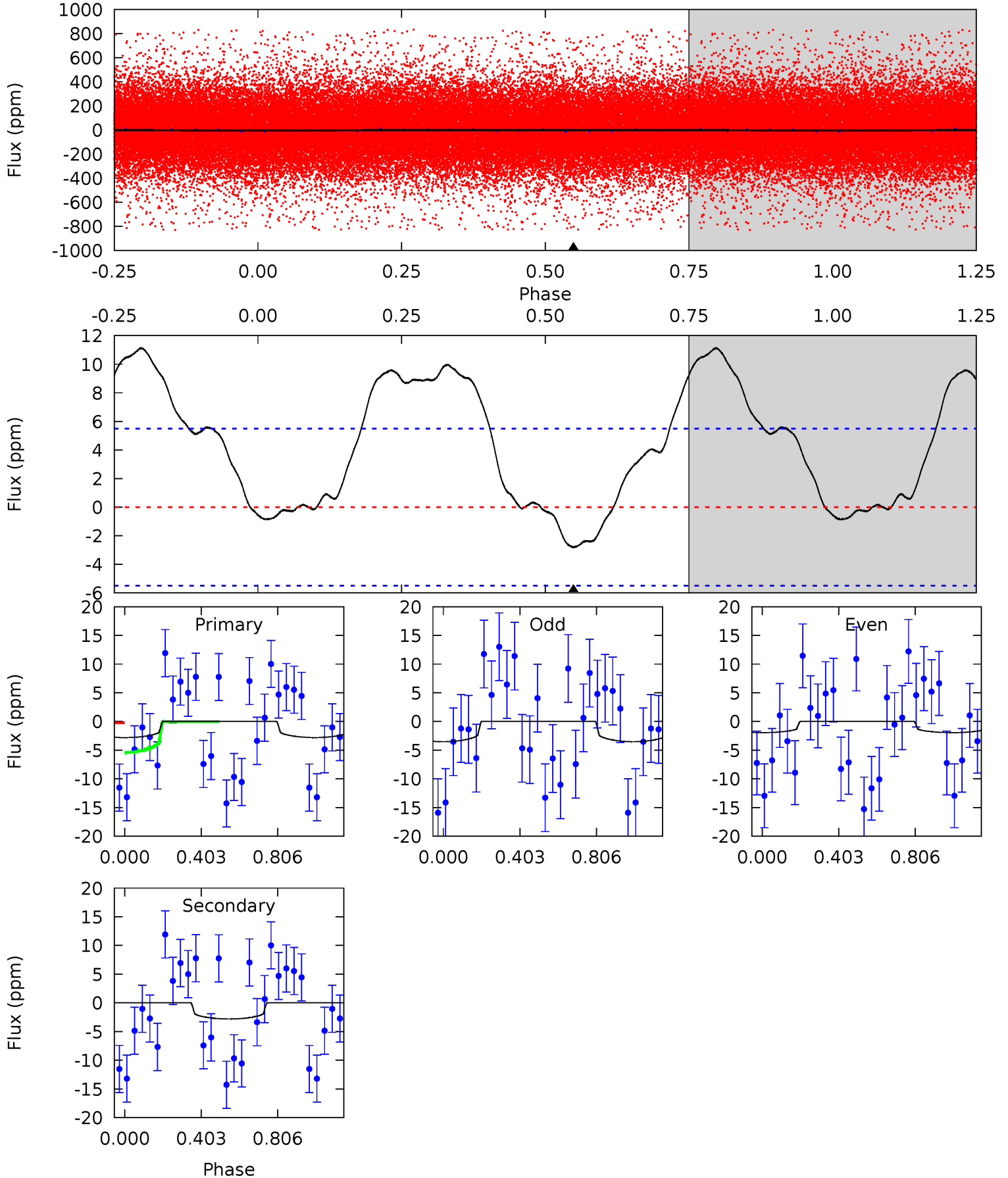
TCE 006508478-01 P= 1.173779 Days $T_0=132.161102$ (BKJD)



DV Model-Shift Uniqueness Test

006508478-01, P = 1.173693 Days, E = 130.977794 Days

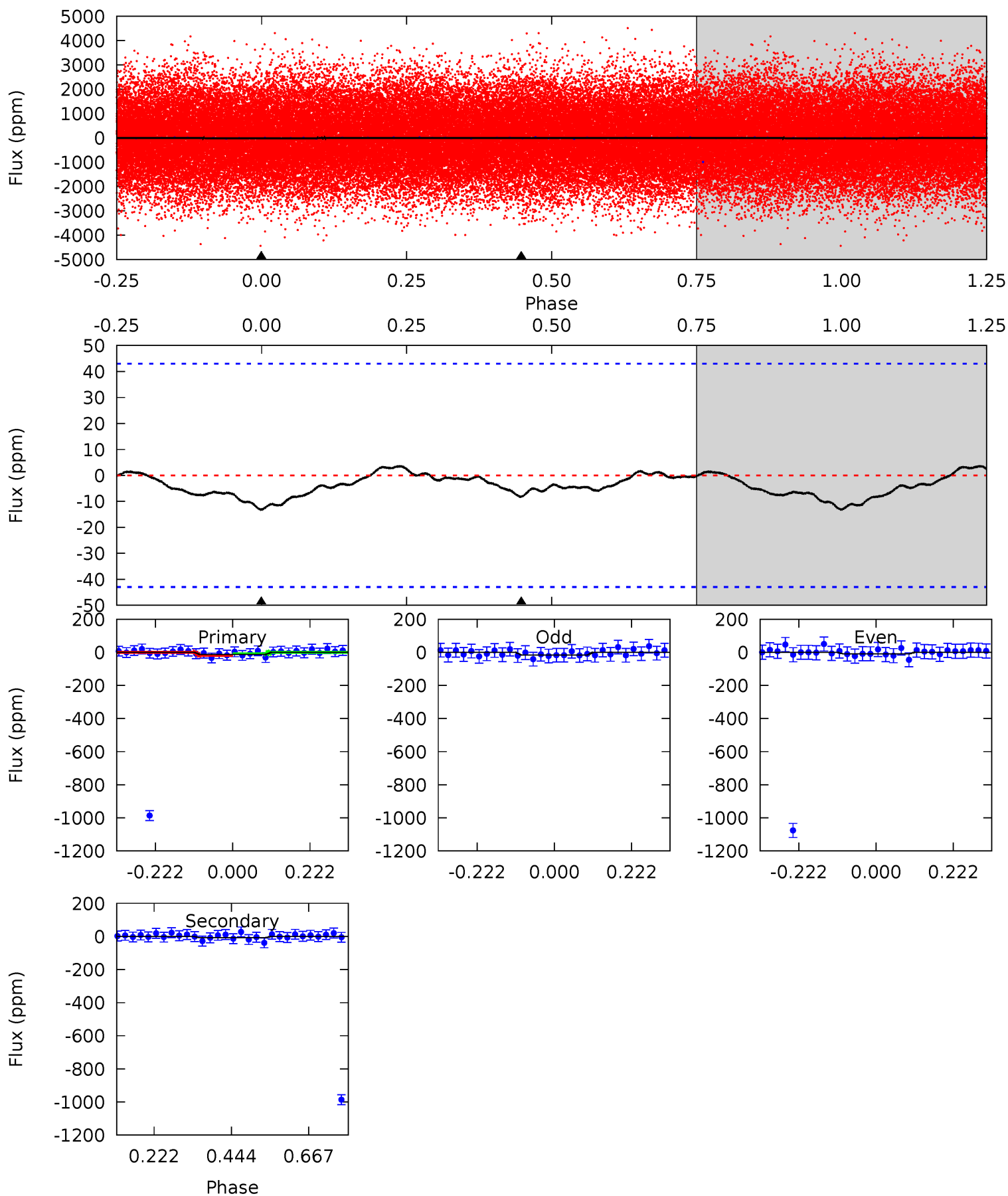
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2.18	2.18	0	0	4.26	0.84	0.72	2.18	2.18	2.18	2.18	0.62	0.53	0.80	2.02



Alt Model-Shift Uniqueness Test

006508478-01, P = 1.173779 Days, E = 130.987323 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
1.36	0.85	0	0	4.39	1.22	0.10	1.36	1.36	0.85	0.85	0.37	0.16	0.21	0.59



Stellar Parameters For KIC 006508478

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	ρ_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	8273^{+229}_{-343}	$3.745^{+0.413}_{-0.110}$	$-0.100^{+0.300}_{-0.350}$	$3.177^{+0.806}_{-1.497}$	$2.046^{+0.329}_{-0.493}$	$0.090^{+0.366}_{-0.038}$
	+3%/-4%	+11%/-3%	+300%/-350%	+25%/-47%	+16%/-24%	+407%/-42%
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 006508478-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-3 ± 1	$0.96^{+1.08}_{-0.63}$	5277^{+448}_{-613}	5313^{+5643}_{-8819}	$1.176^{+9.671}_{-0.955}$
Alt.	-8 ± 10	$1.37^{+1.09}_{-0.86}$	5283^{+427}_{-581}	5688^{+5992}_{-10692}	$1.322^{+11.908}_{-1.555}$

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

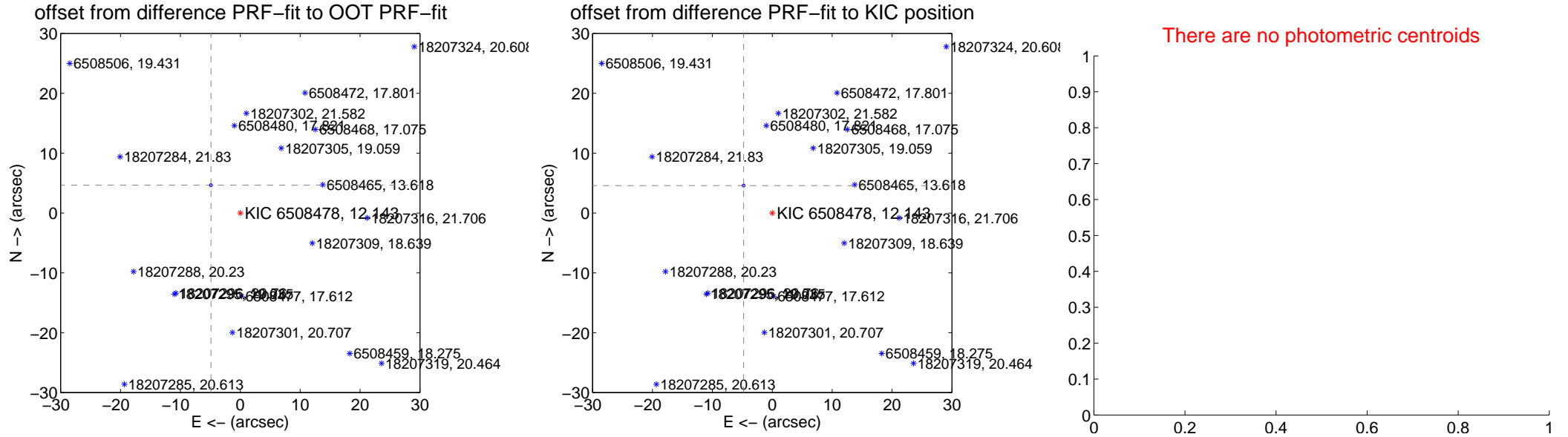
DV Centroid Data

Supplemental centroid analysis for 006508478-01. Kepler magnitude: 12.14. Transit SNR 2.01

There are 0 quarters with good PRF difference image offsets

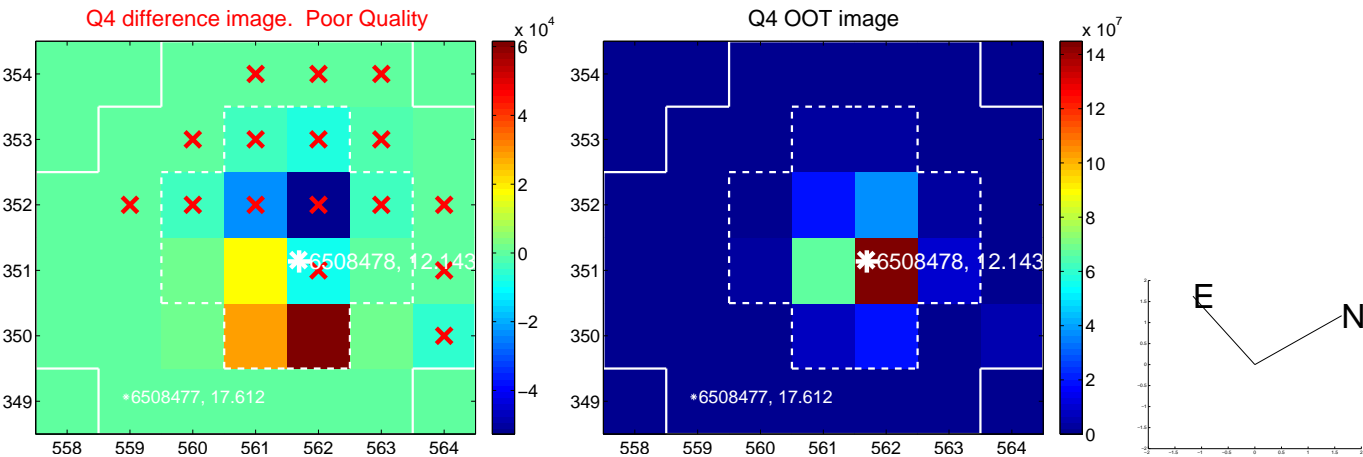
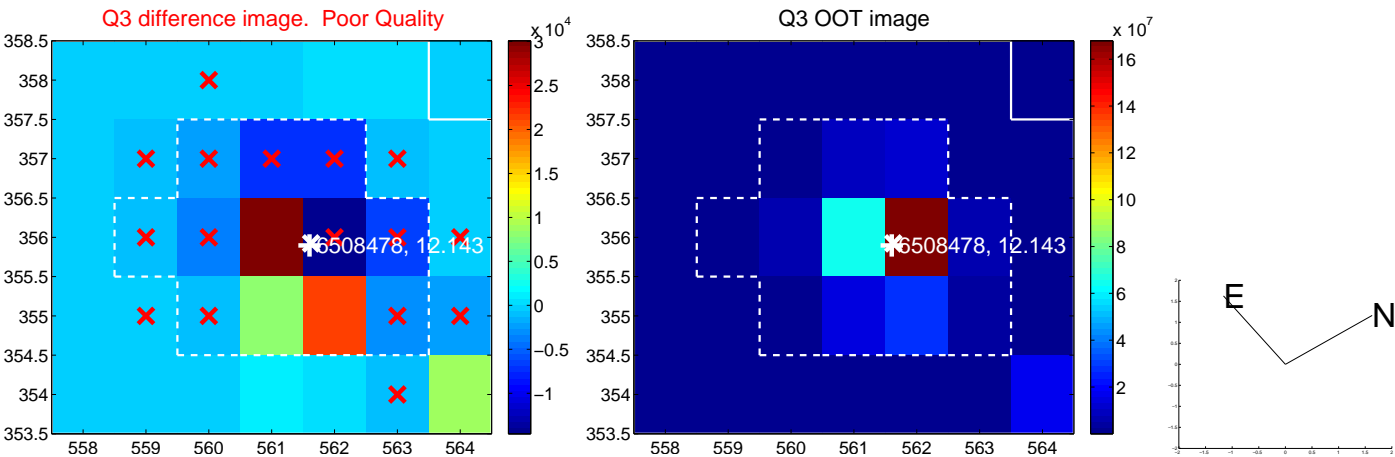
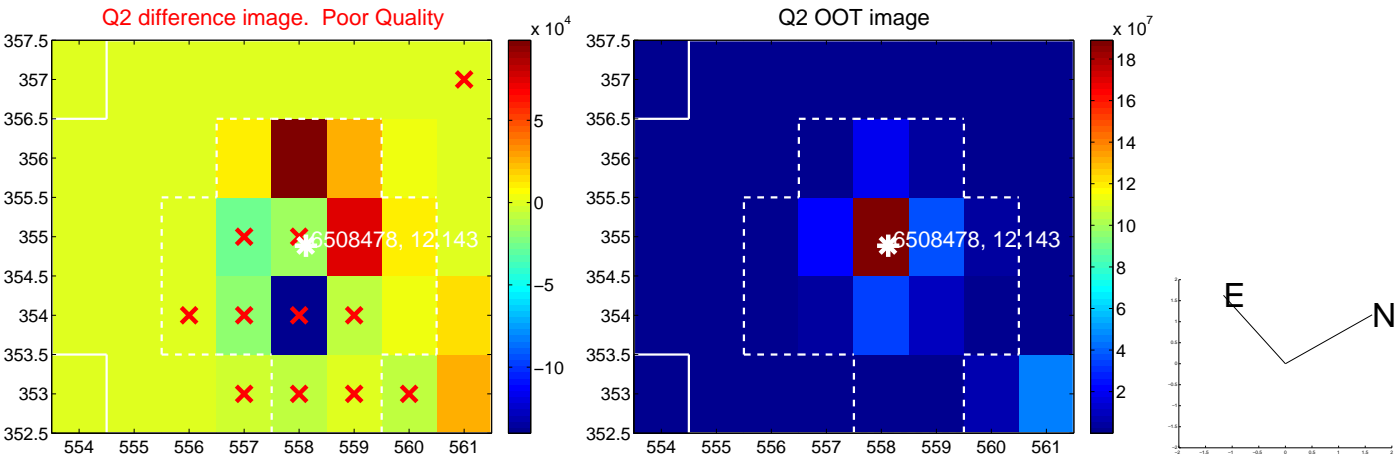
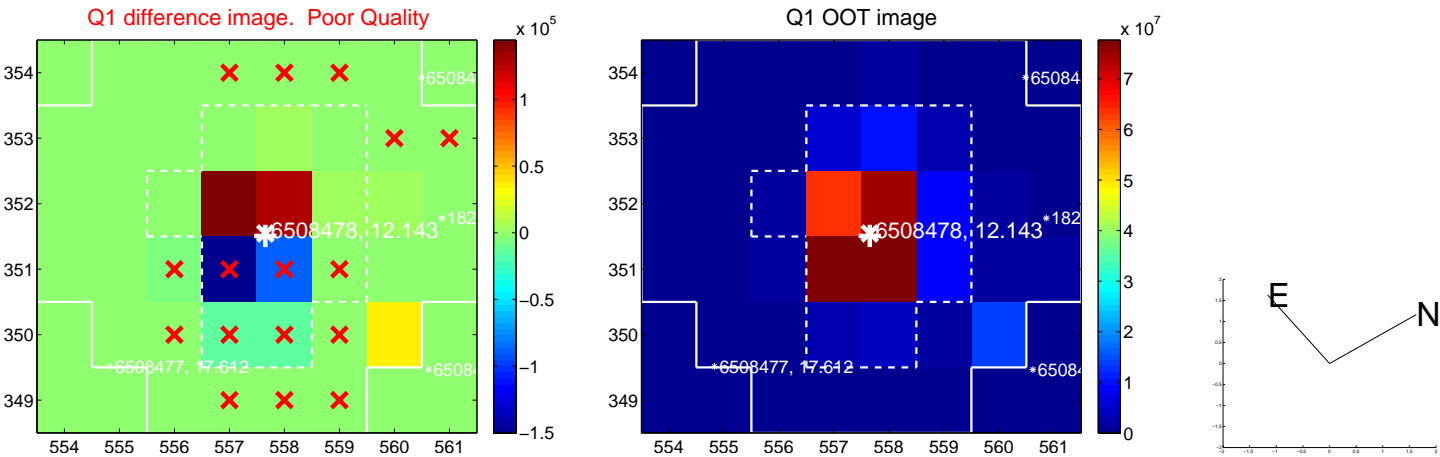
The direct PRF centroid is offset from the target star catalog position by about 0.13 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	6.749 \pm 0.082	82.52	4.897 \pm 0.082	4.645 \pm 0.082
PRF-fit source offset from KIC position	6.622 \pm 0.082	80.96	4.783 \pm 0.082	4.580 \pm 0.082
photometric centroid source offset	—	—	—	—

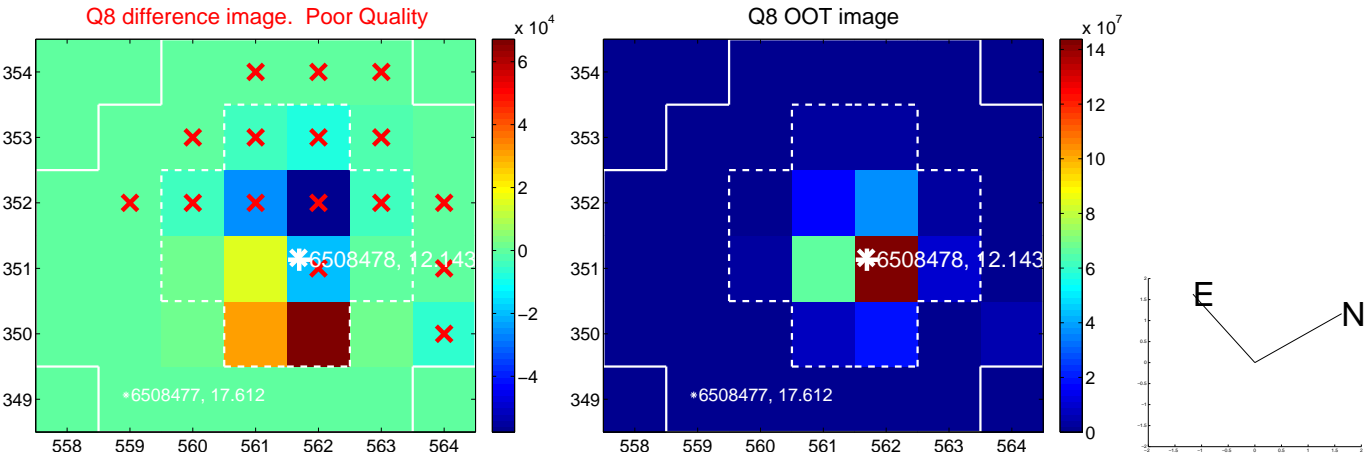
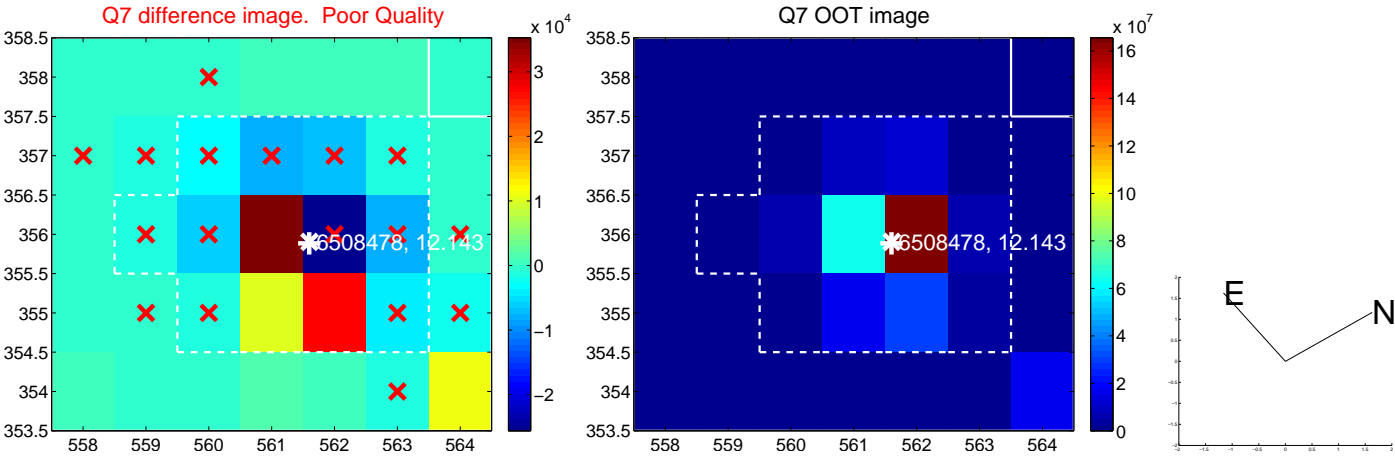
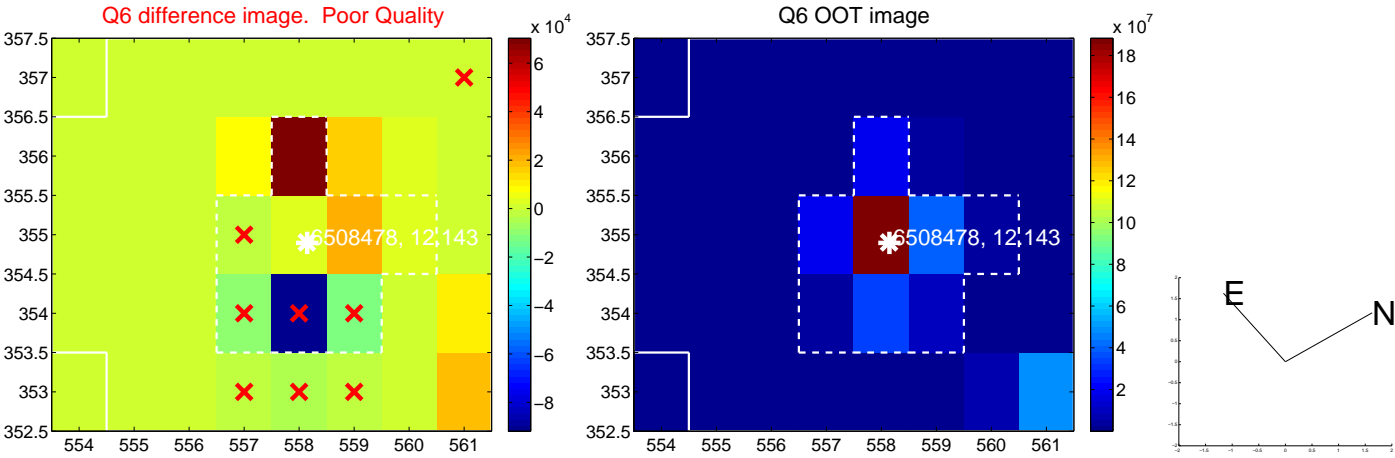
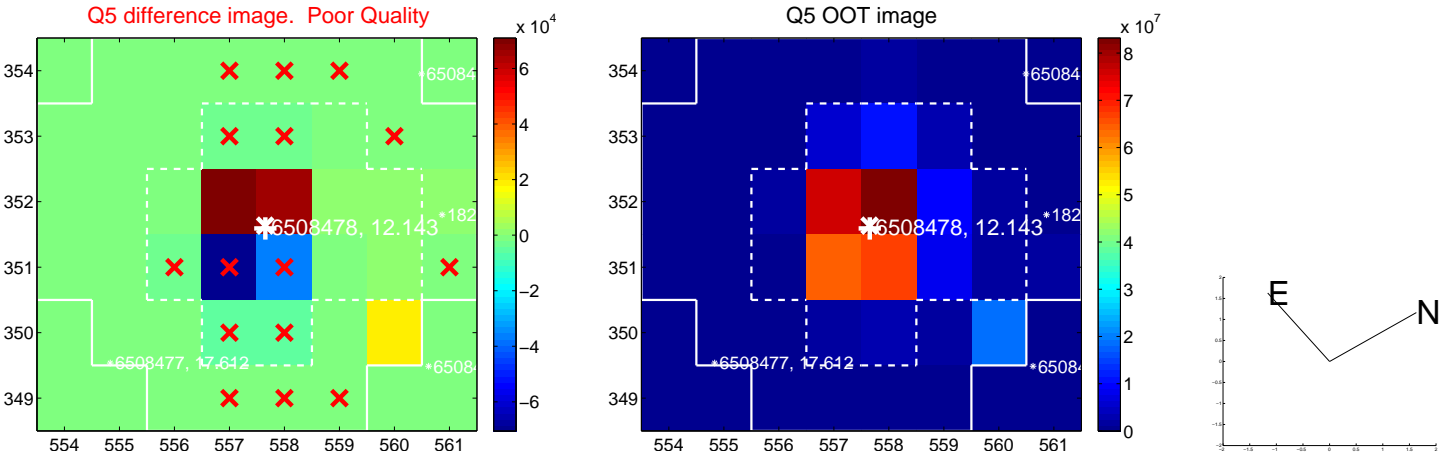


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

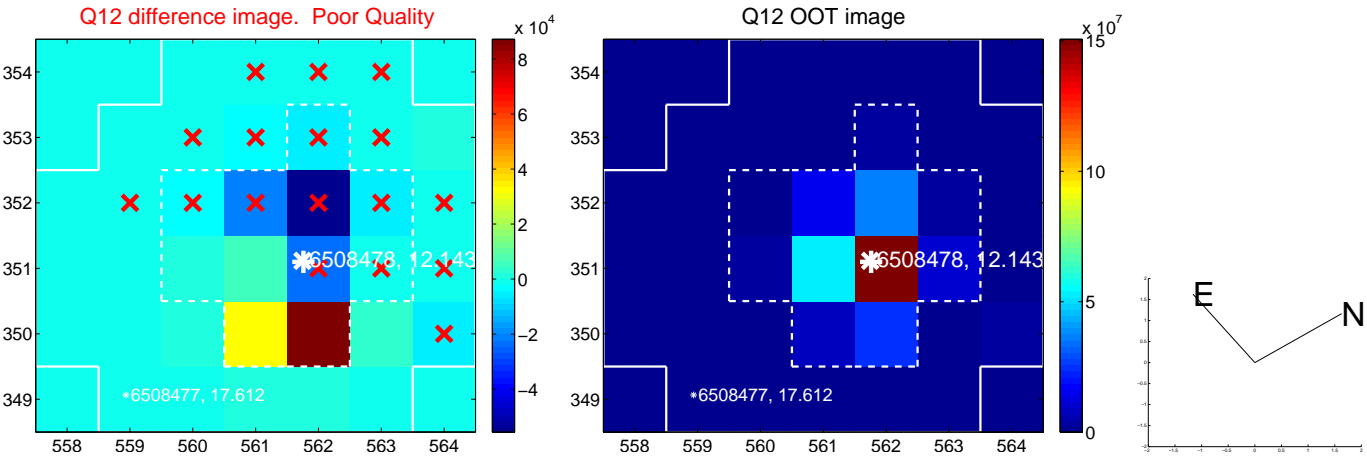
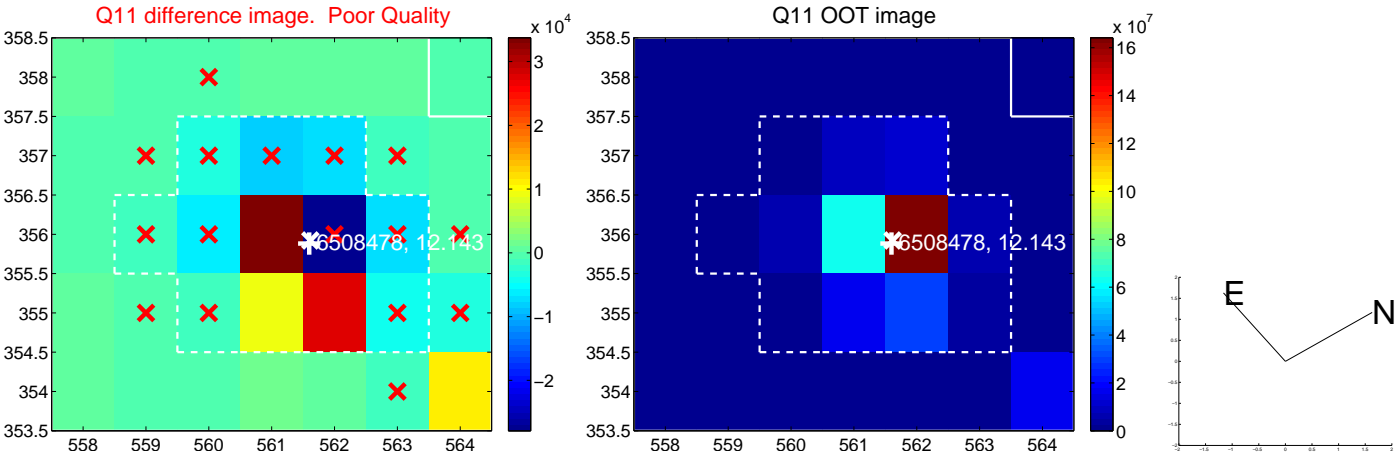
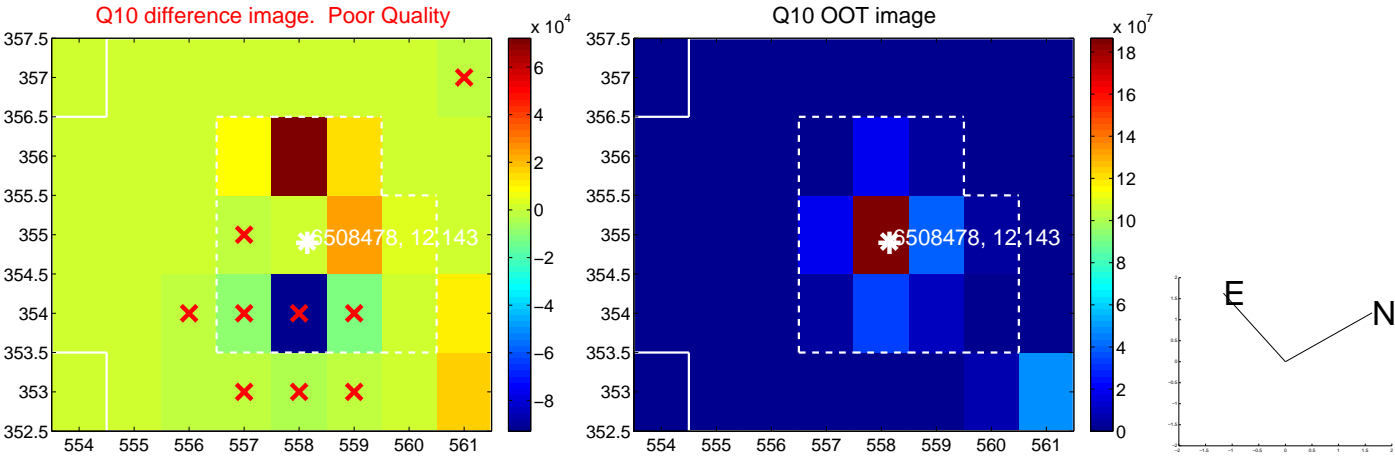
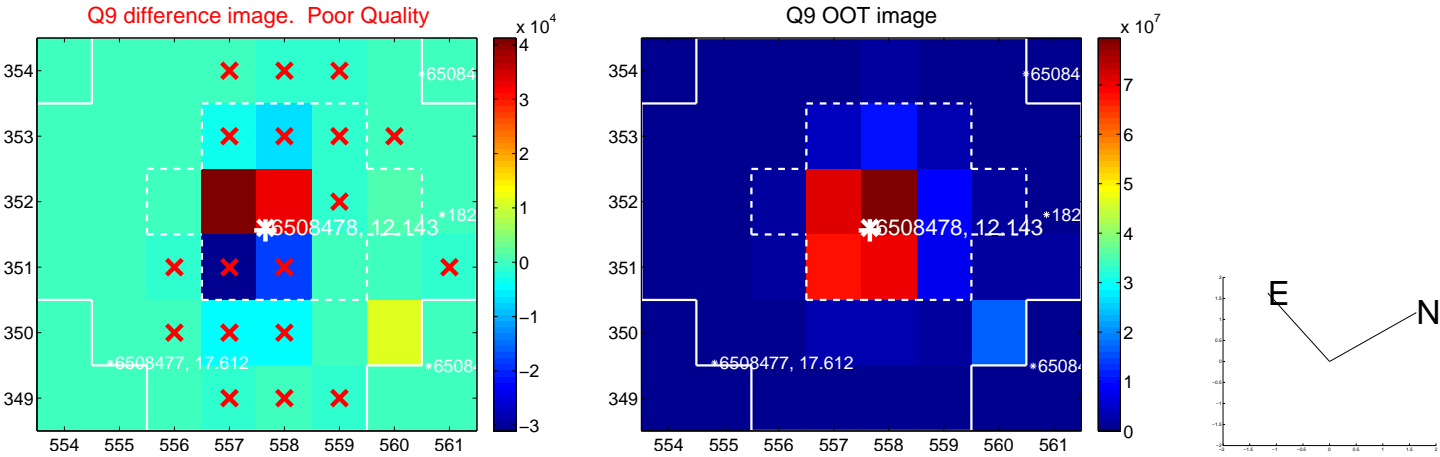
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



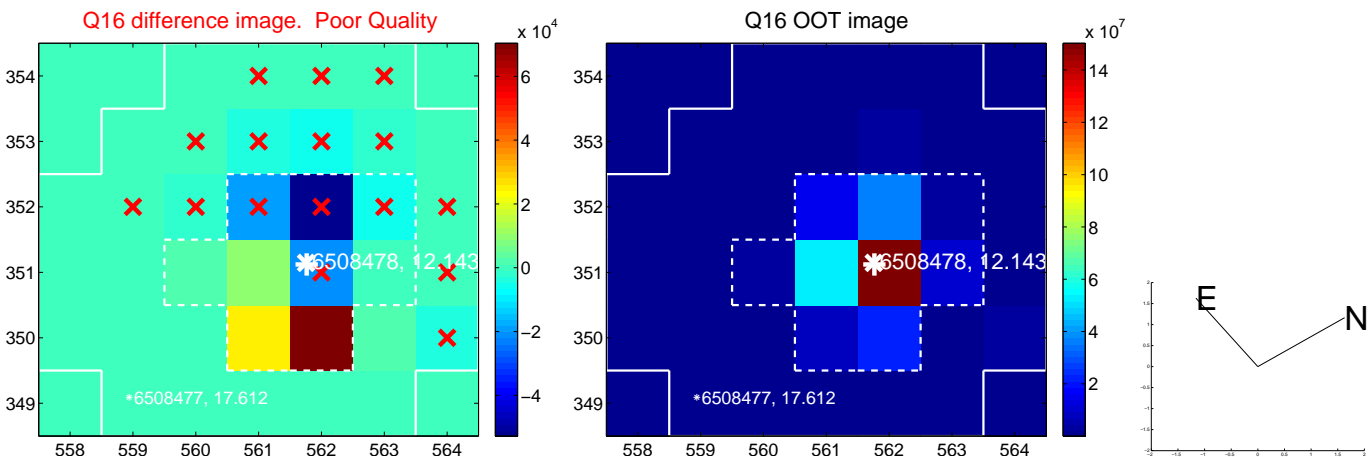
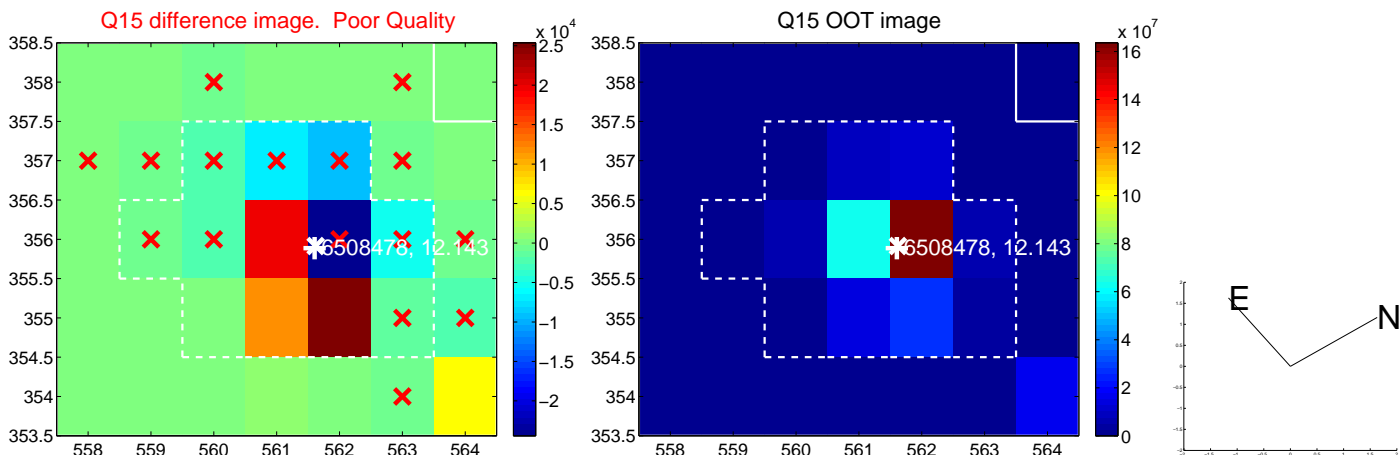
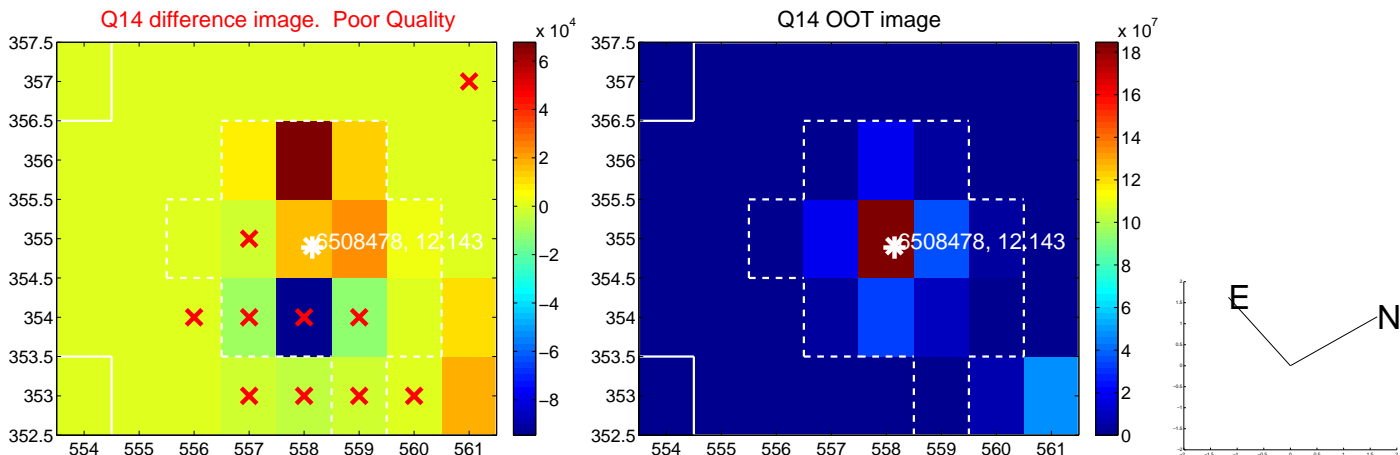
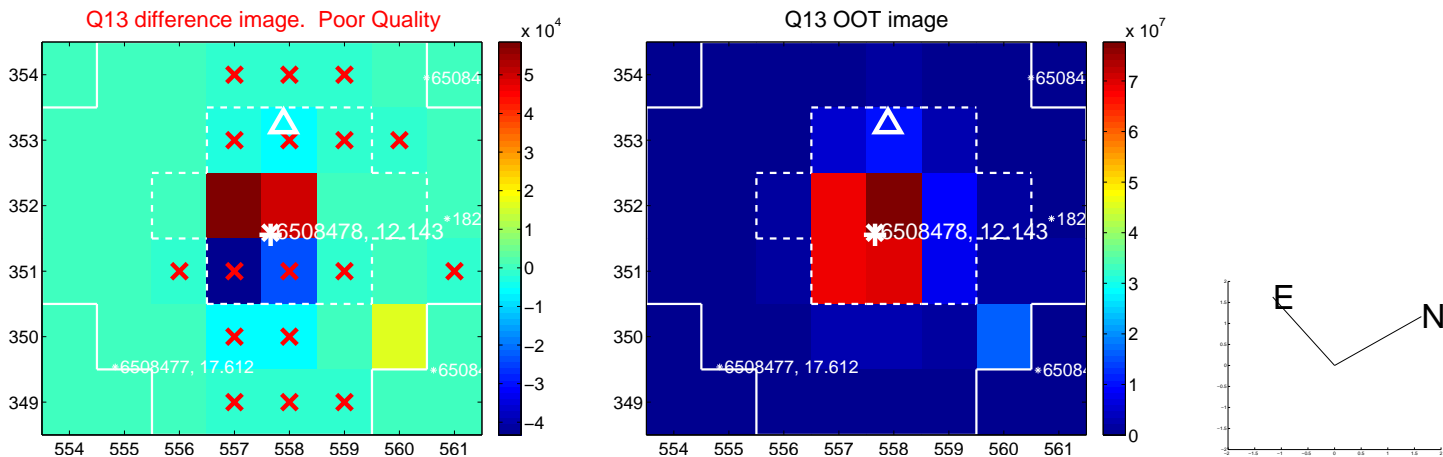
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



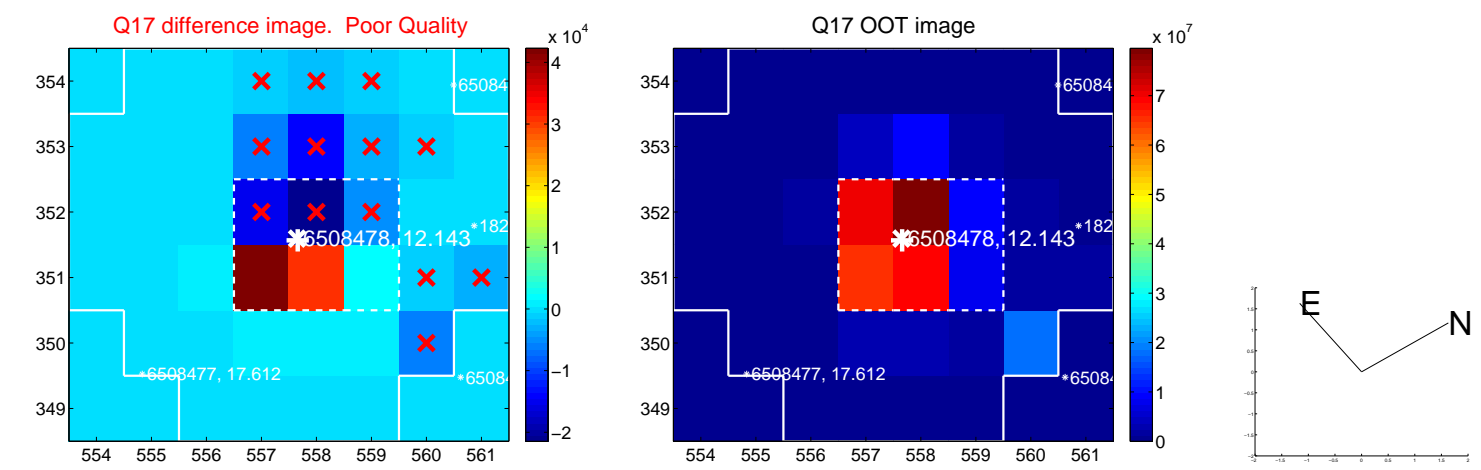
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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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

Declination

