

KIC 008647753

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})
008647753-01	OBS	No	1.180927	132.578305	4.0	9.455	9.9	10.1	3.55	7854	0.76	56562.39

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008647753-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—LPP_ALT—CENT_SATURATED

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

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

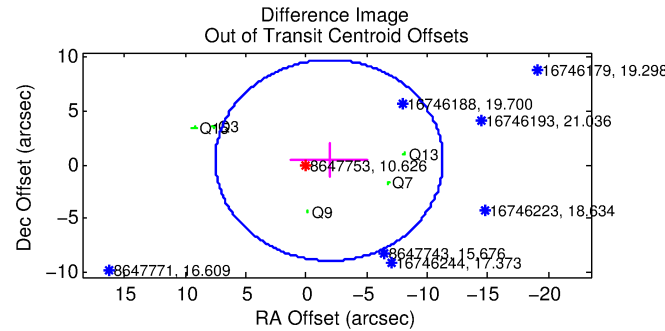
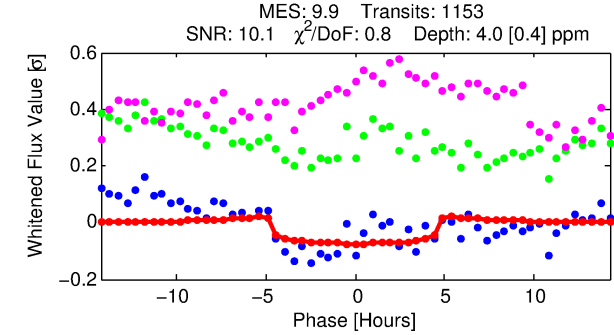
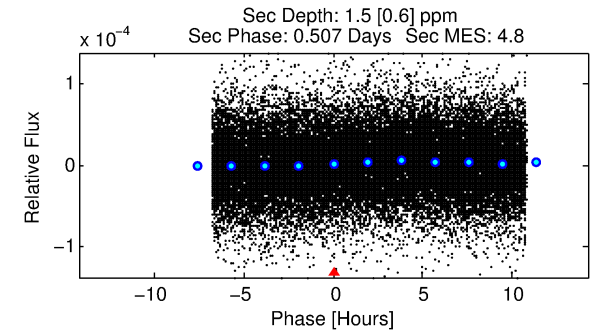
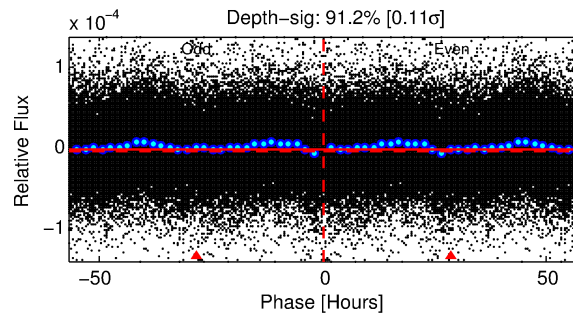
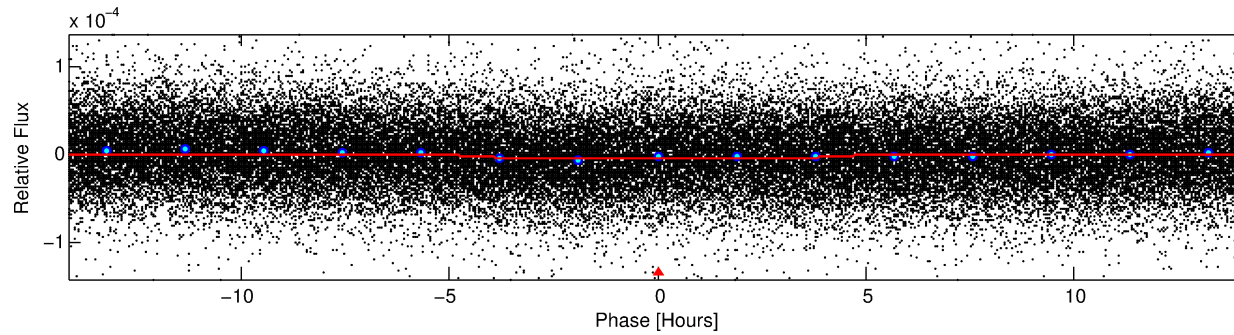
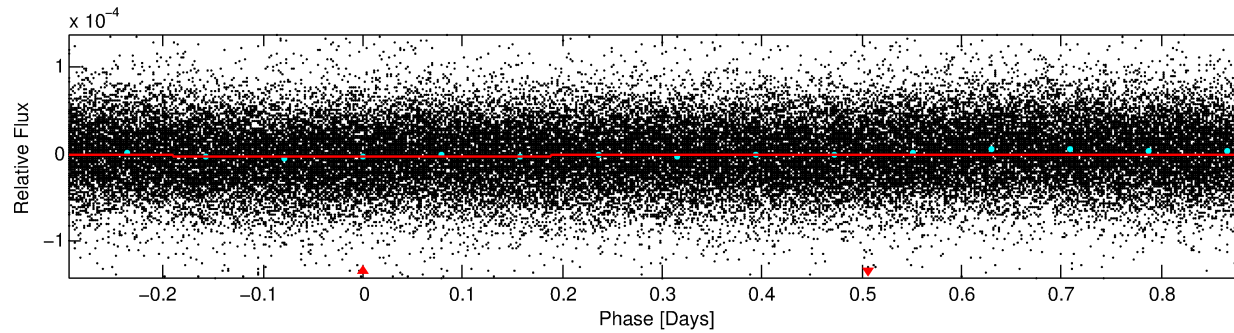
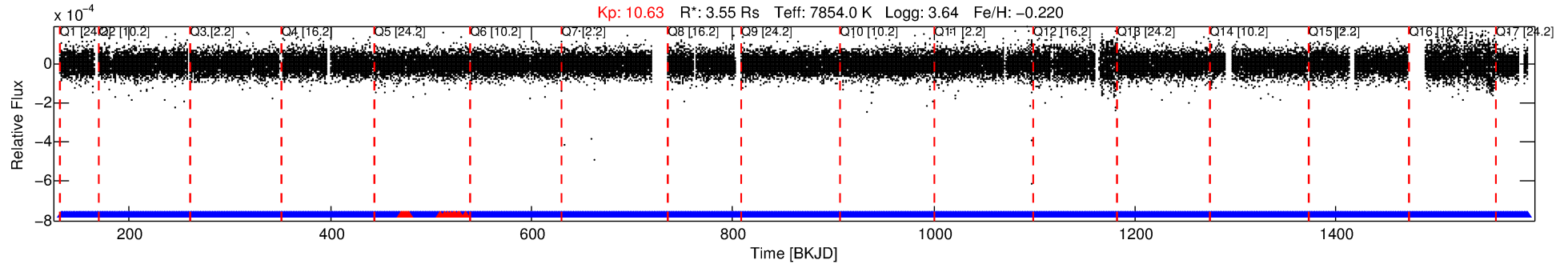
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008647753-01

No Significant Match Found

DV One-Page Summary

KIC: 8647753 Candidate: 1 of 1 Period: 1.181 d



DV Fit Results:

Period = 1.18093 [0.00002] d
Epoch = 132.5783 [0.0065] BKJD
 $R_p/R^* = 0.0020$ [0.0009]
 $a/R^* = 1.08$ [0.39]
 $b = 0.70$ [1.78]
 $\text{Seff} = 56562.39$ [47273.29]
 $T_{\text{eq}} = 3932$ [822] K
 $R_p = 0.76$ [0.52] R_e
 $a = 0.0276$ [0.0141] AU
 $A_g = 1.12$ [1.42] [0.09 σ]
 $T_{\text{eff}} = 6258$ [1533] K [1.34 σ]

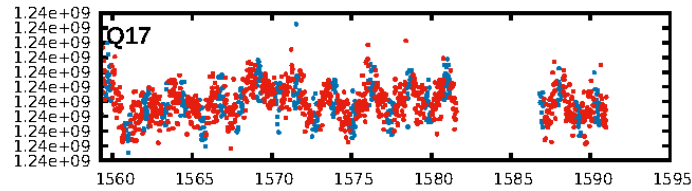
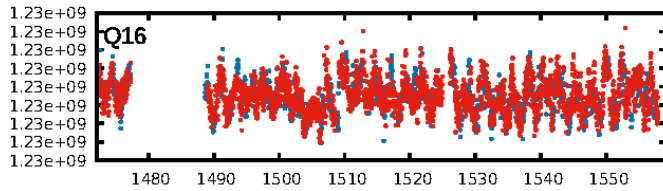
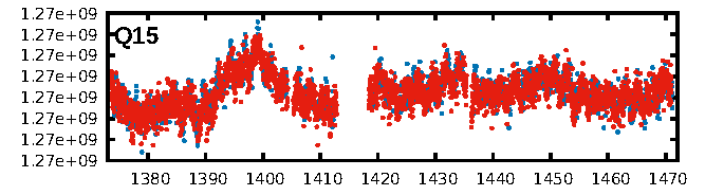
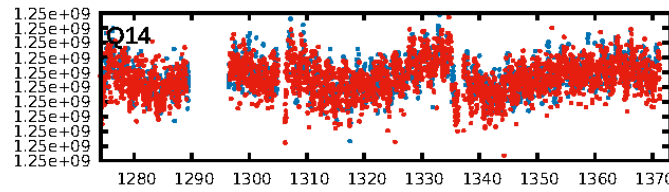
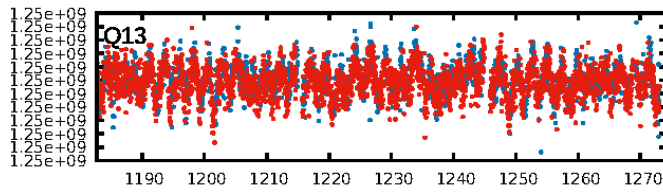
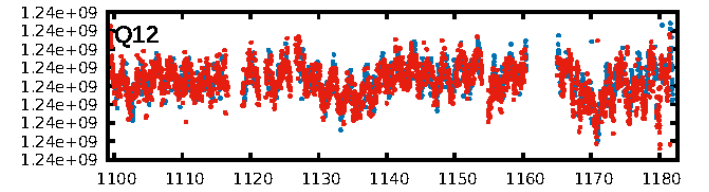
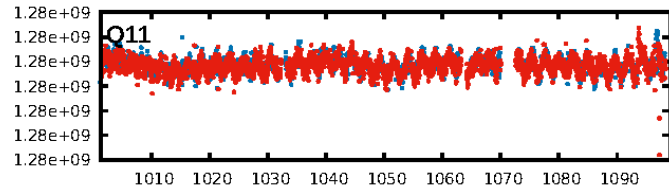
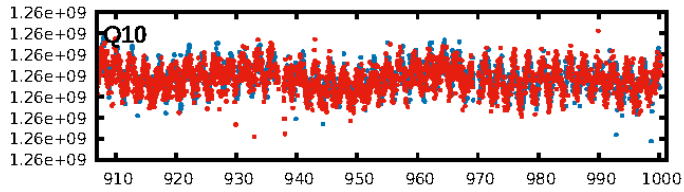
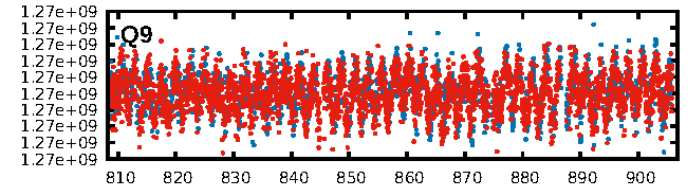
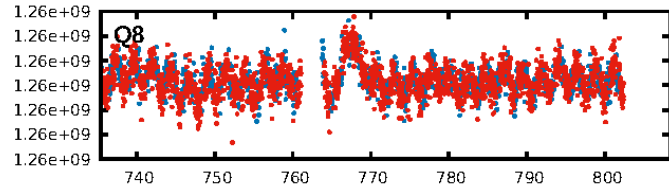
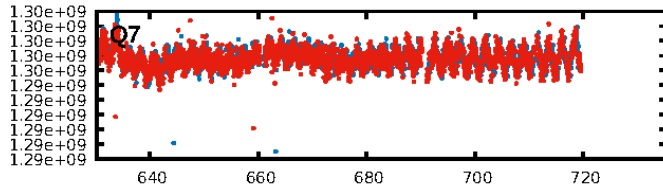
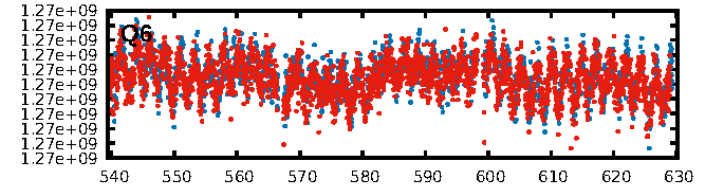
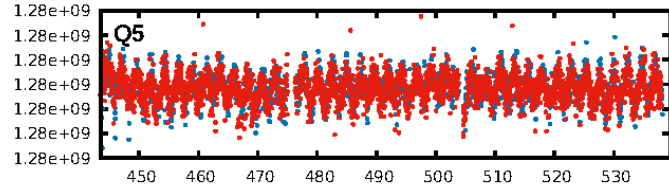
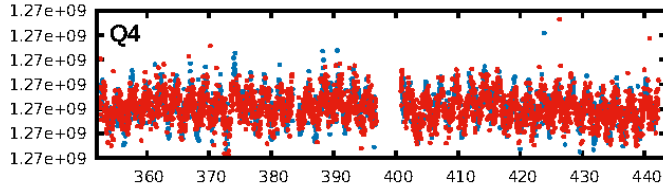
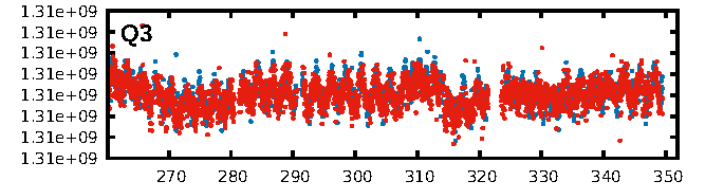
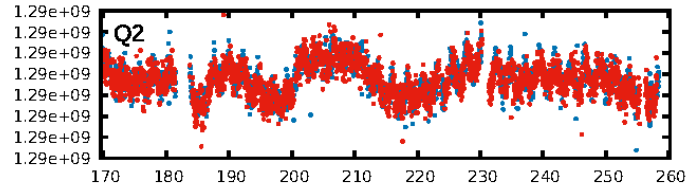
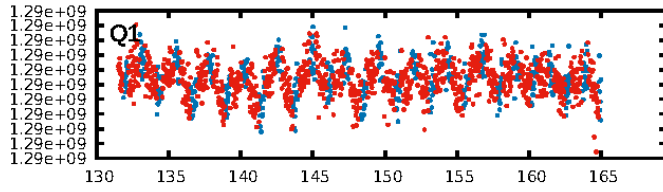
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 0.98 [1082/1100]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 1.941 arcsec [0.62 σ]
KicOffset-rm: 1.802 arcsec [0.59 σ]
OotOffset-st: 0/3/0/2 [5]
KicOffset-st: 0/3/0/2 [5]
DiffImageQuality-fgm: 0.00 [0/5]
DiffImageOverlap-fno: 1.00 [17/17]

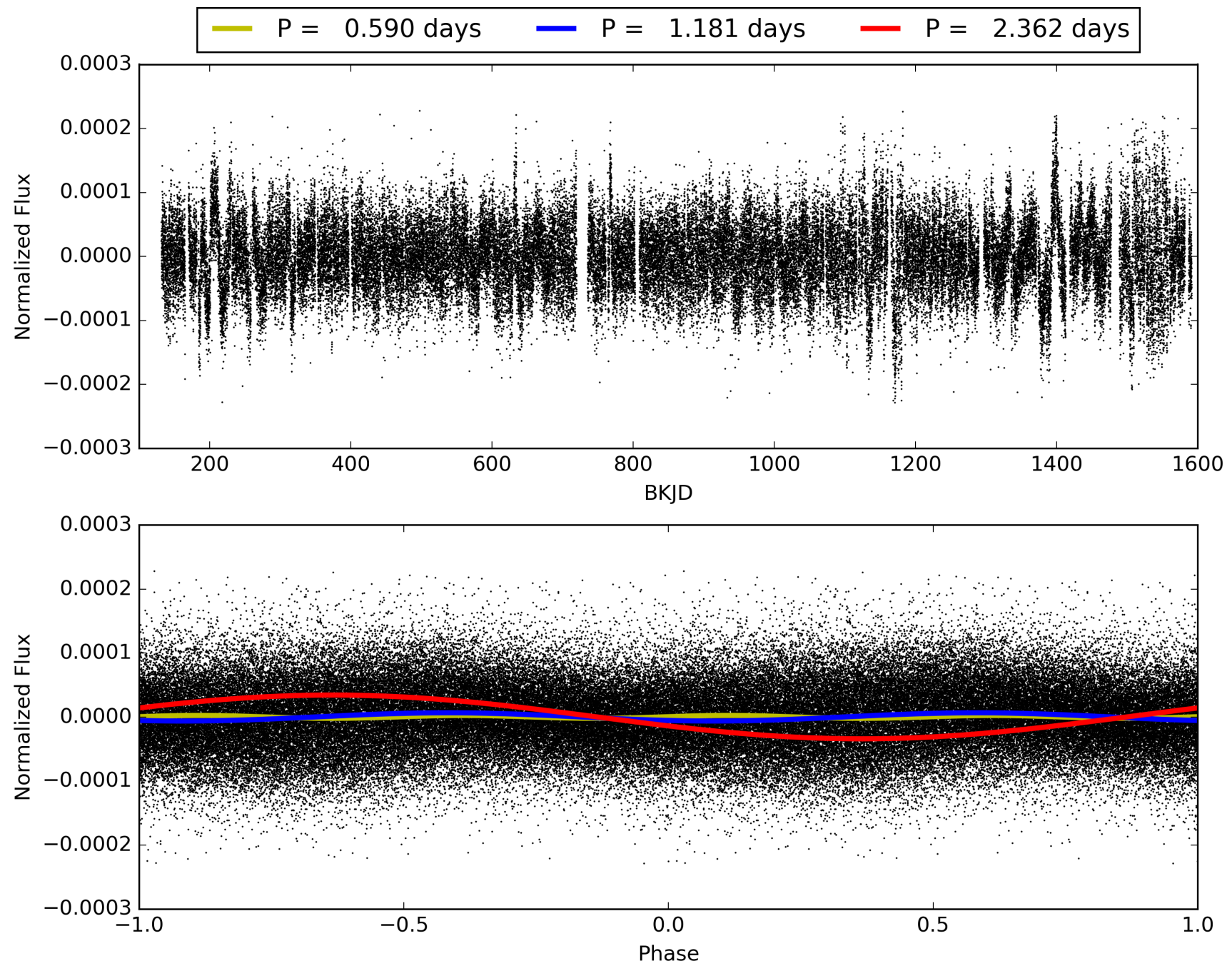
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 14:50:48 Z

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

TCE 008647753-01, PDC Light Curves

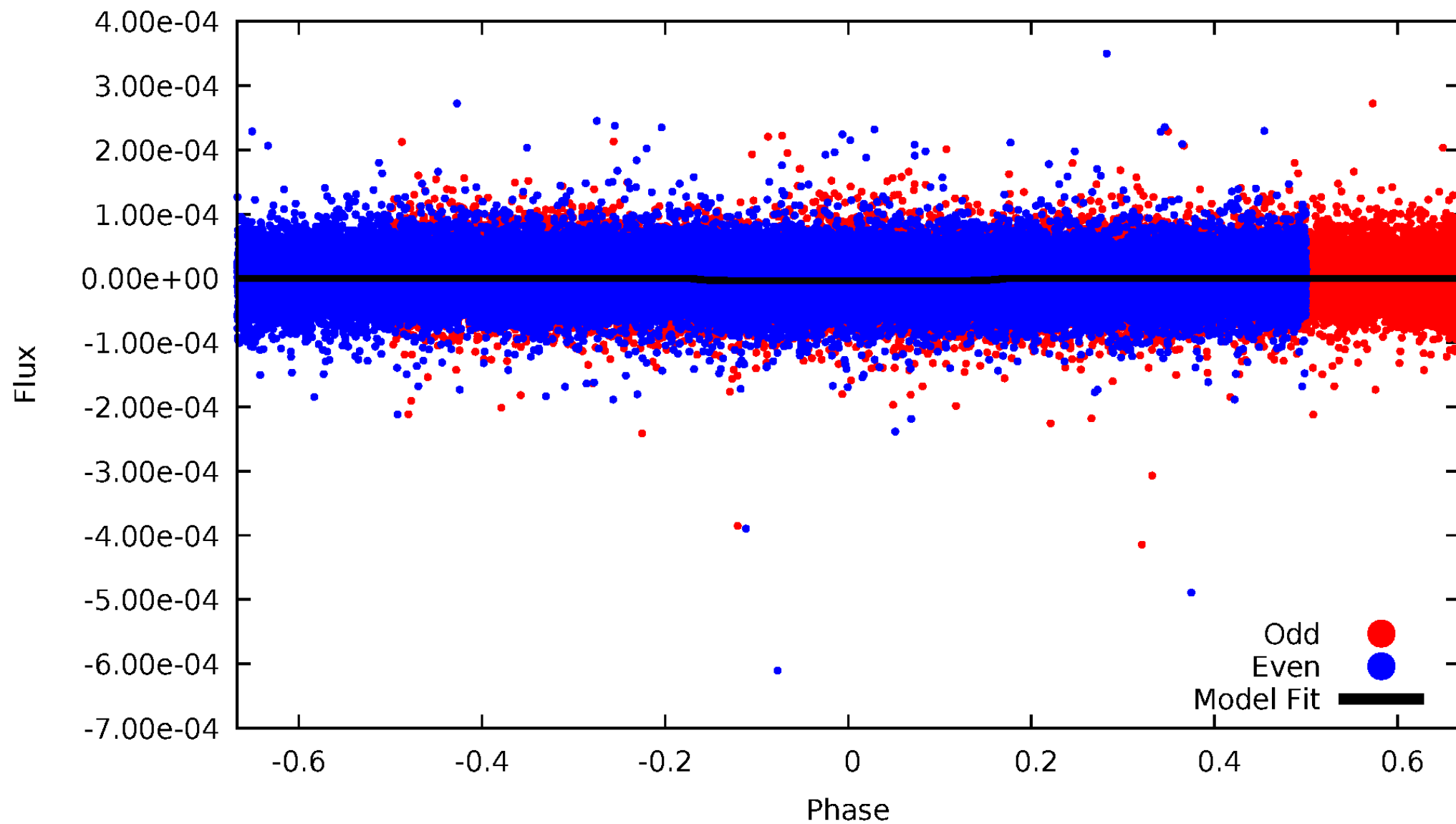


TCE 008647753-01



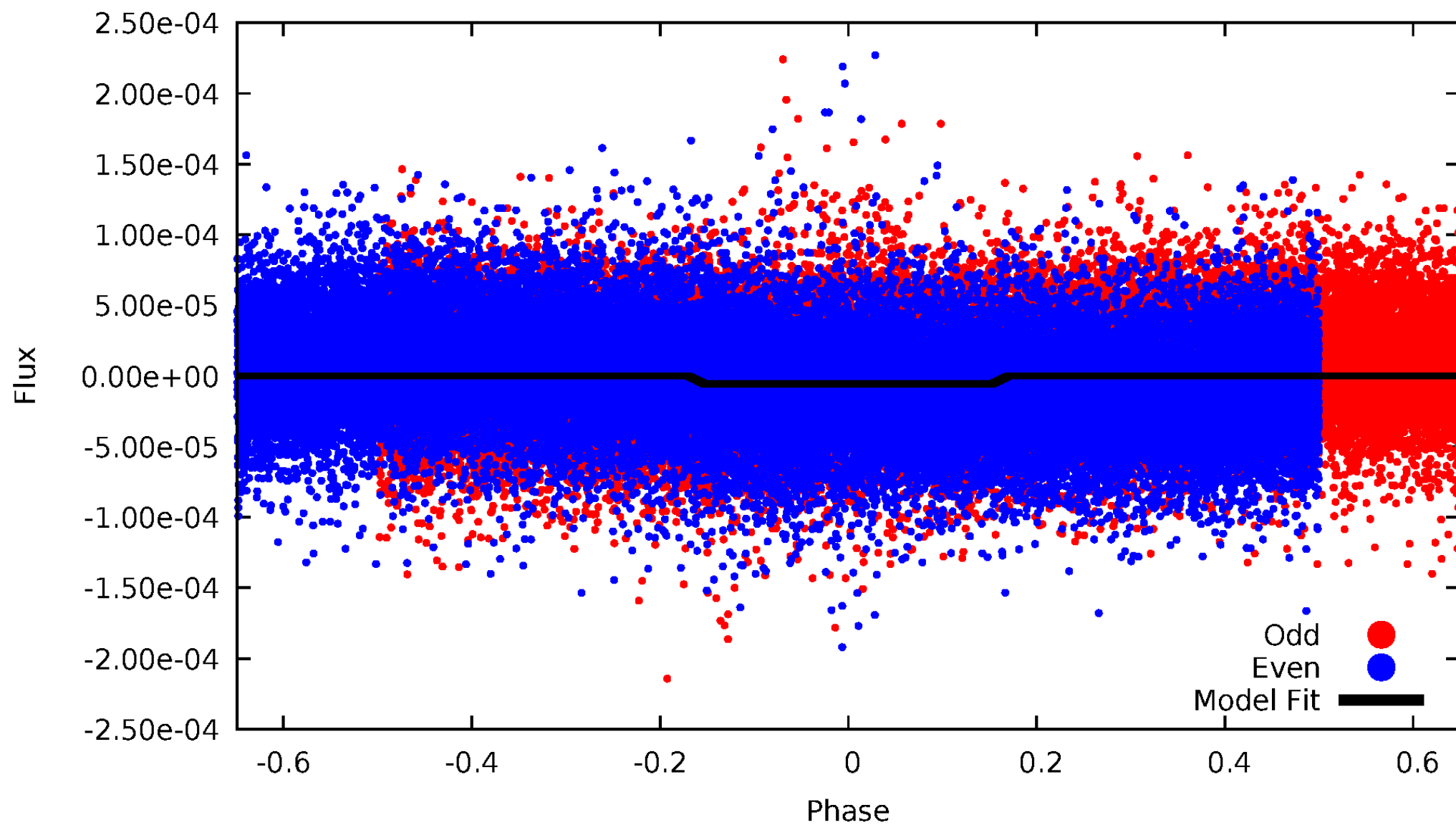
DV Odd/Even

TCE 008647753-01



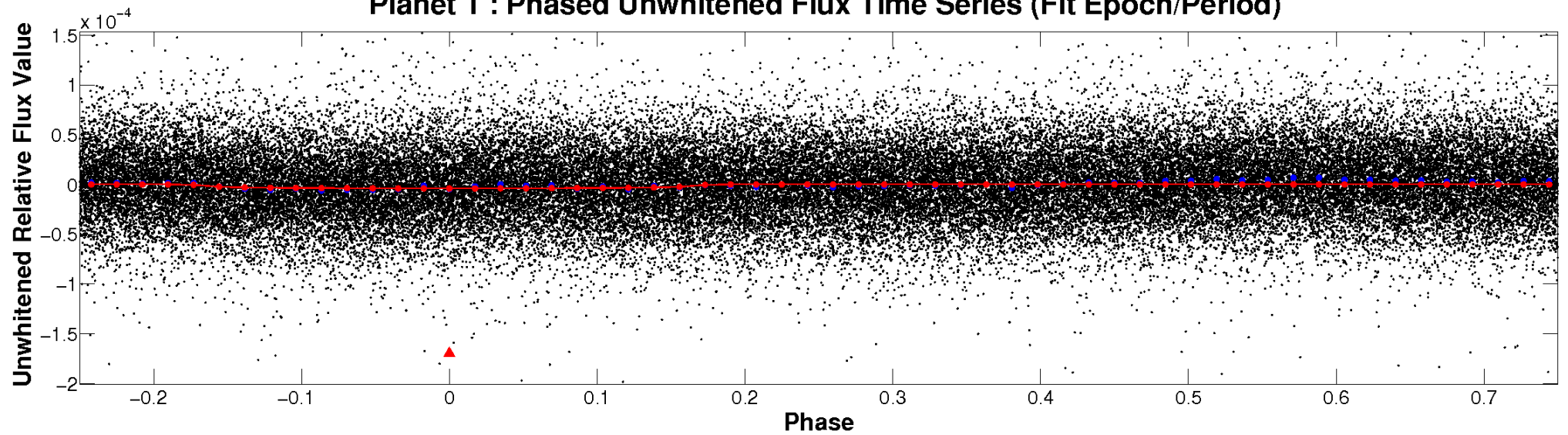
ALT Odd/Even

TCE 008647753-01

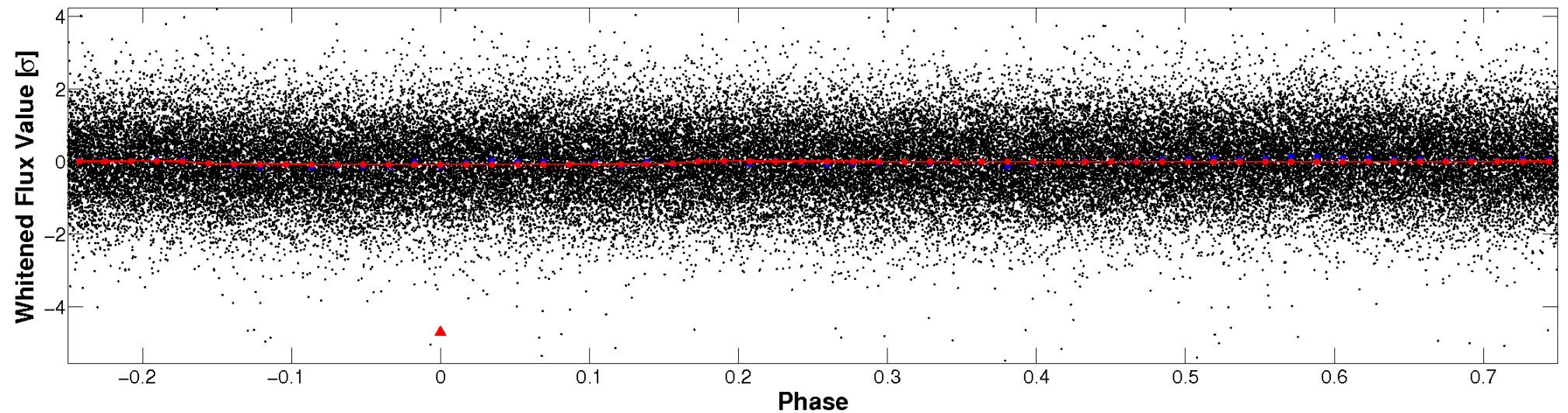


Non-Whitened Vs. Whitened Light Curve

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

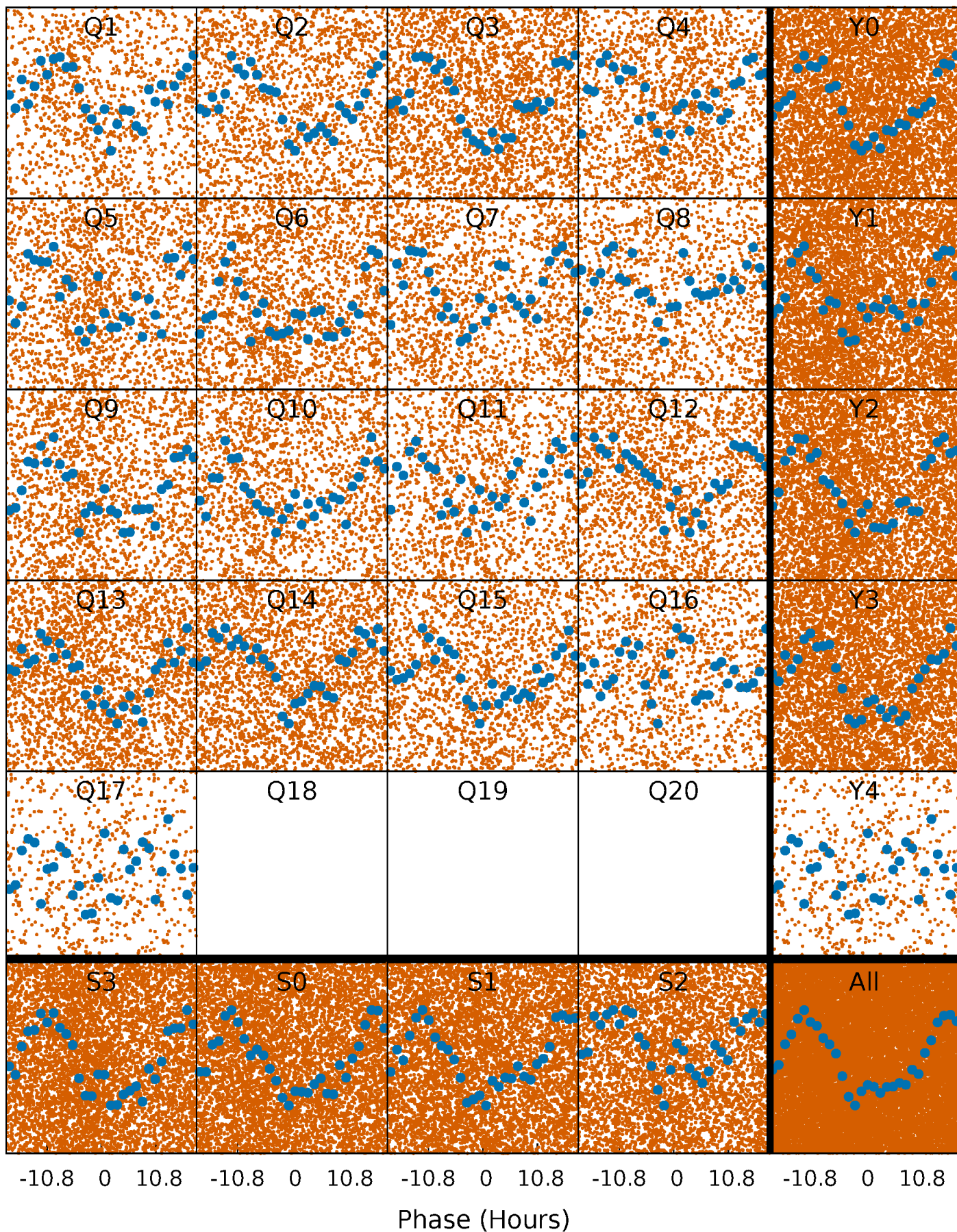


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



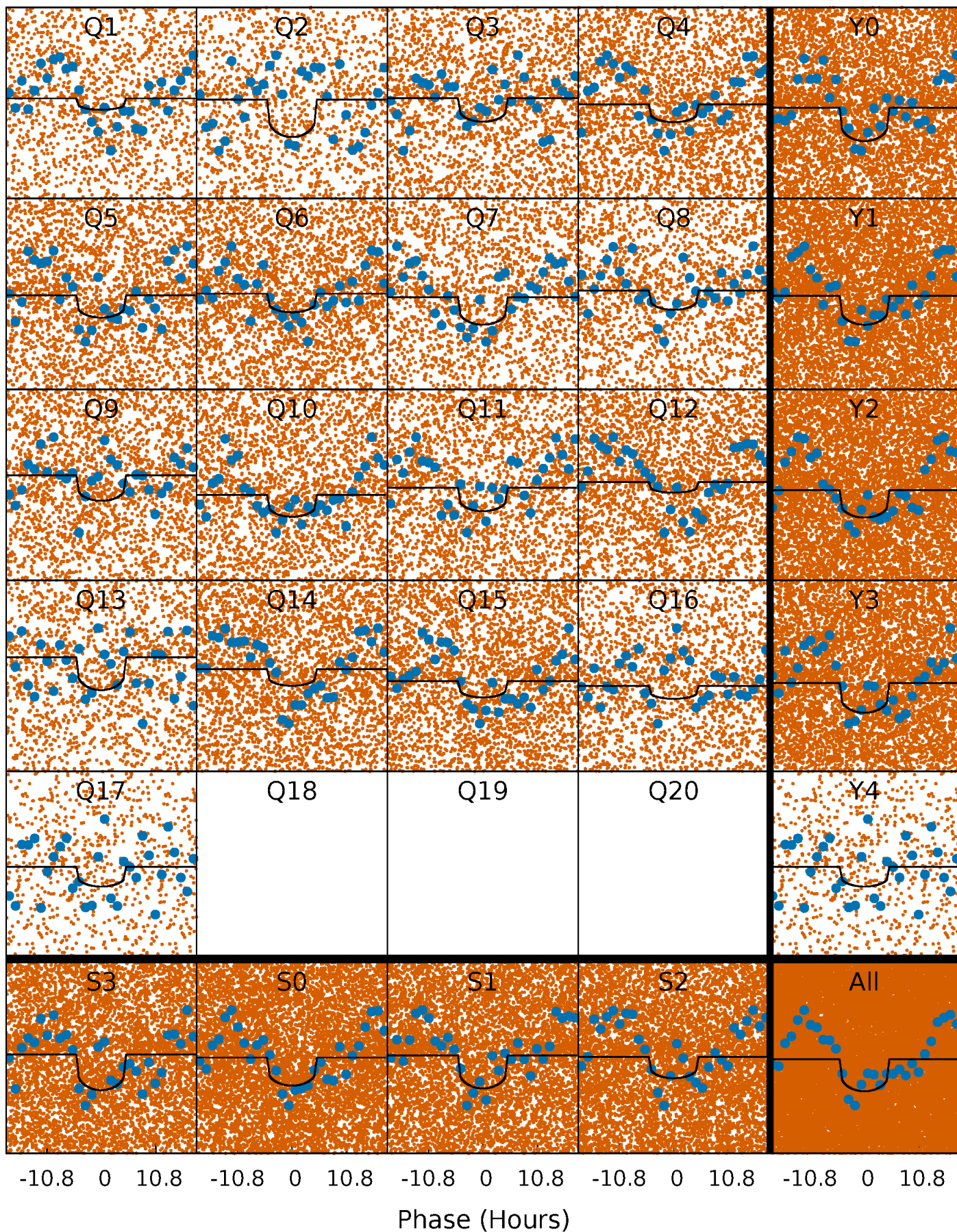
PDC Quarter-Phased Transit Curves

TCE 008647753-01 P= 1.180927 Days $T_0=132.578305$ (BKJD)



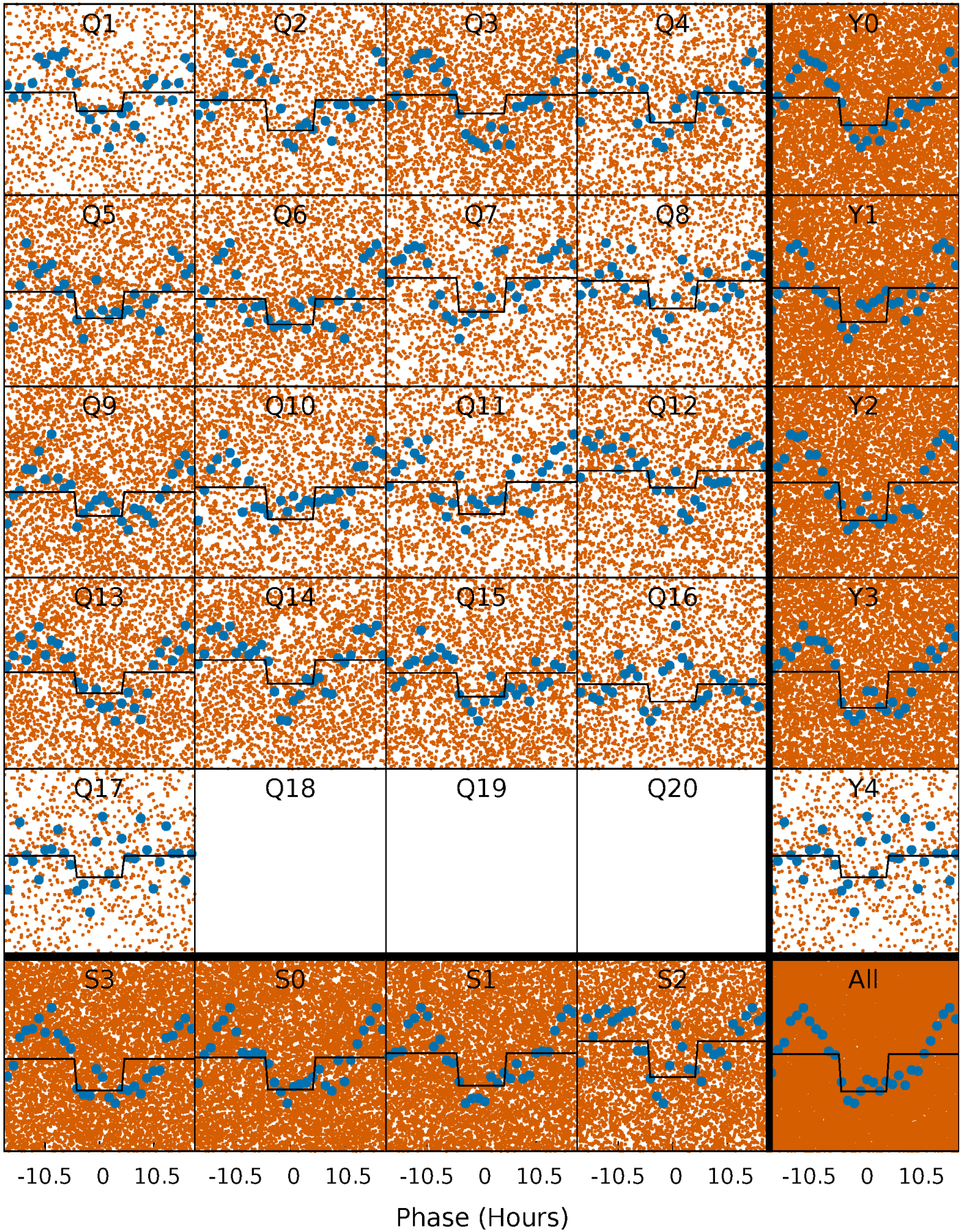
DV Quarter-Phased Transit Curves

TCE 008647753-01 P= 1.180927 Days $T_0=132.578305$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

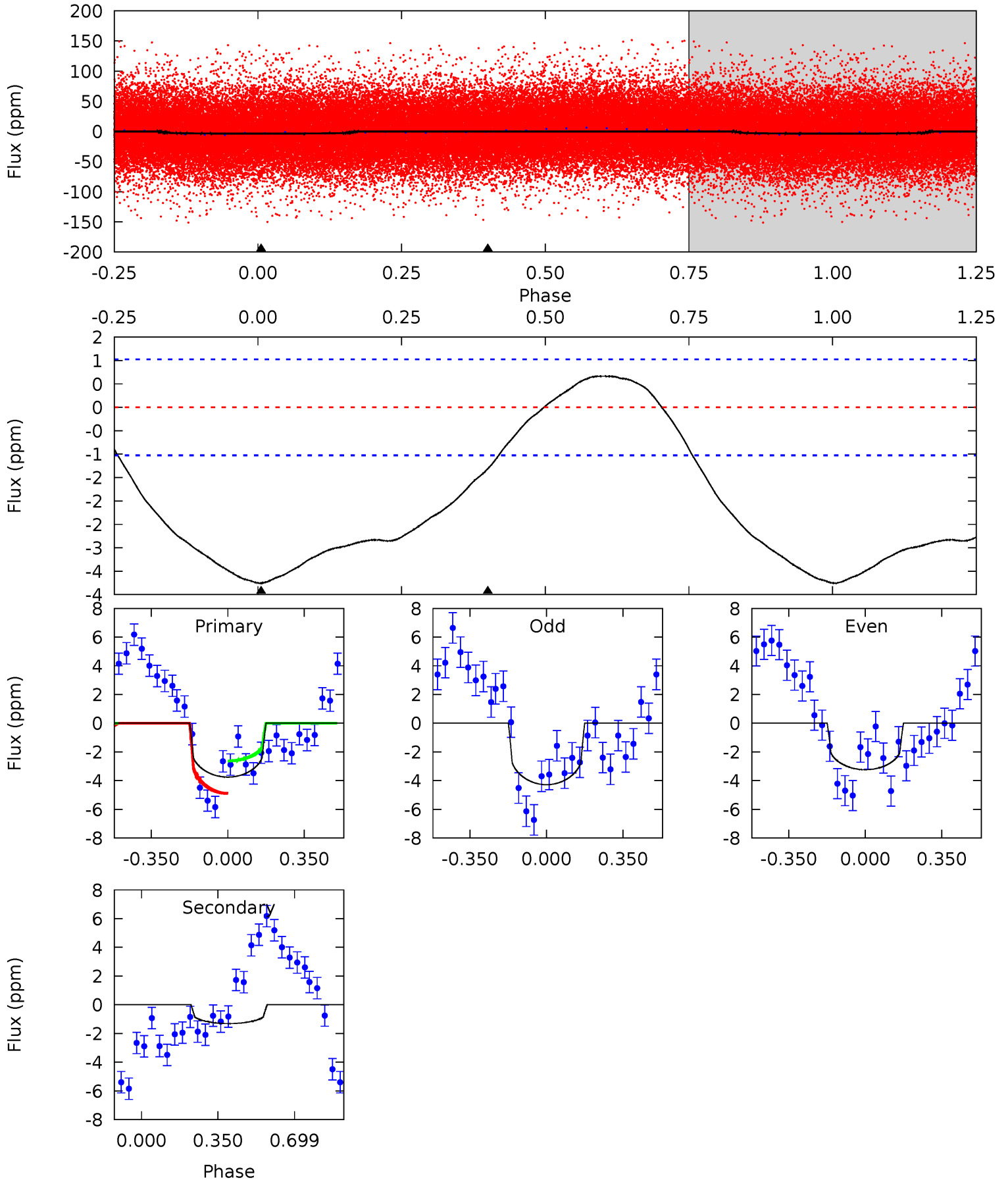
TCE 008647753-01 P= 1.180939 Days $T_0=132.574401$ (BKJD)



DV Model-Shift Uniqueness Test

008647753-01, P = 1.180927 Days, E = 131.397378 Days

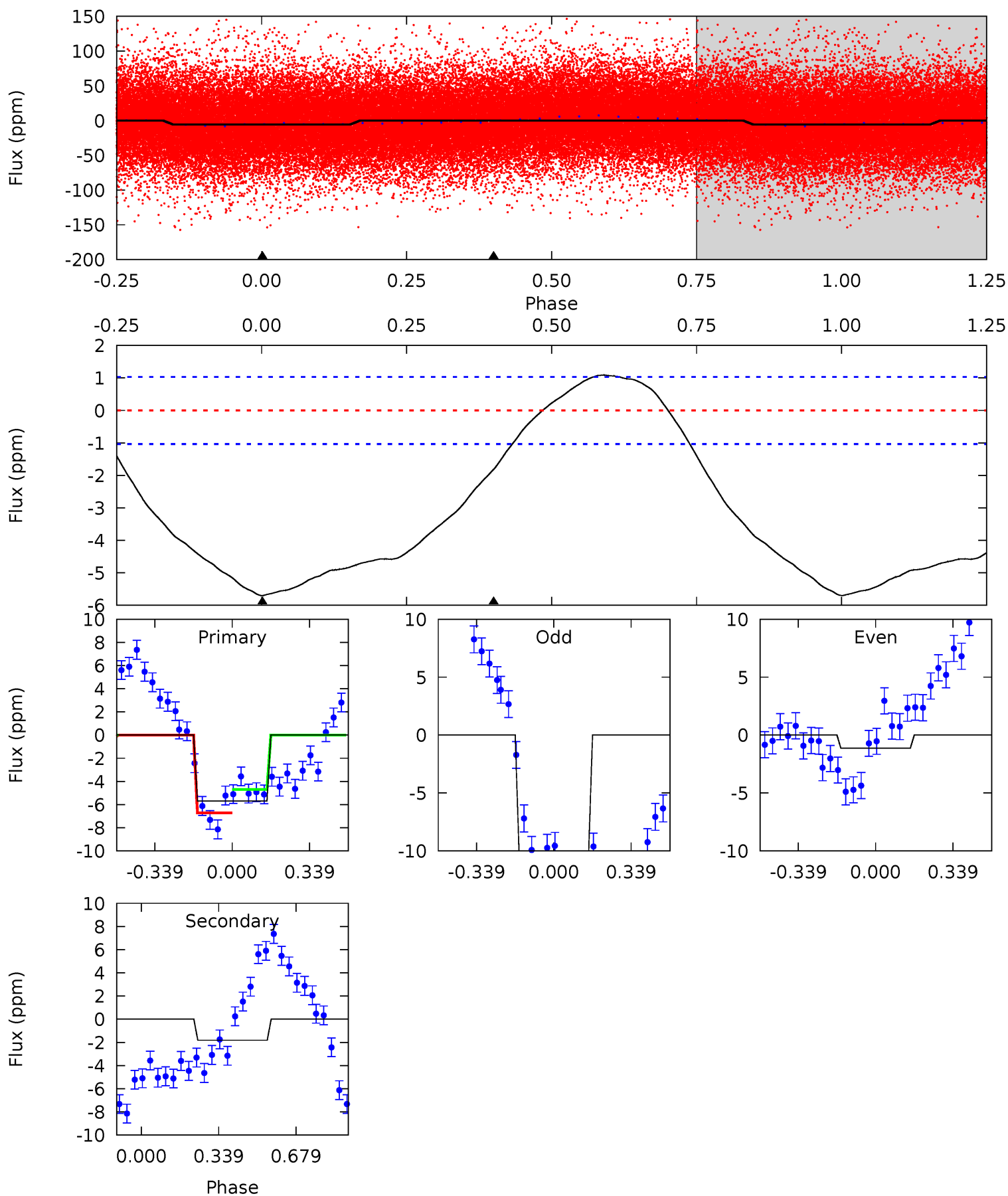
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
15.7	5.49	0	0	4.29	0.94	1.92	15.7	15.7	5.49	5.49	2.19	1.05	0.15	4.79



Alt Model-Shift Uniqueness Test

008647753-01, P = 1.180939 Days, E = 131.393462 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
23.7	7.54	0	0	4.30	0.96	2.96	23.7	23.7	7.54	7.54	18.6	1.06	0.16	4.20



Stellar Parameters For KIC 008647753

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7854^{+219}_{-302}	$3.639^{+0.484}_{-0.085}$	$-0.220^{+0.200}_{-0.300}$	$3.551^{+0.747}_{-1.867}$	$2.002^{+0.300}_{-0.487}$	$0.063^{+0.309}_{-0.023}$
	+3%/-4%	+13%/-2%	+91%/-136%	+21%/-53%	+15%/-24%	+491%/-37%
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 008647753-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-1 ± 0	$0.66^{+0.35}_{-0.30}$	5246^{+398}_{-751}	5441^{+2054}_{-1254}	$1.231^{+2.922}_{-0.695}$
Alt.	-2 ± 0	$0.80^{+0.41}_{-0.31}$	5290^{+373}_{-640}	5380^{+1700}_{-1183}	$1.171^{+2.001}_{-0.660}$

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 $A_{obs} \gg 1.0$

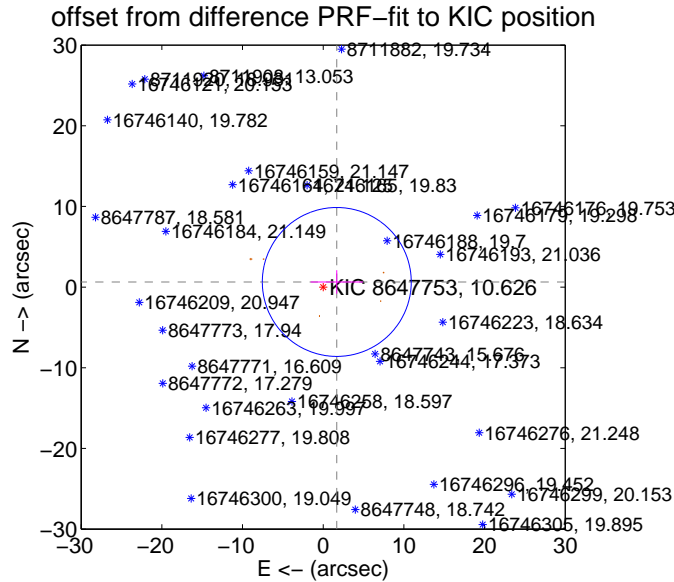
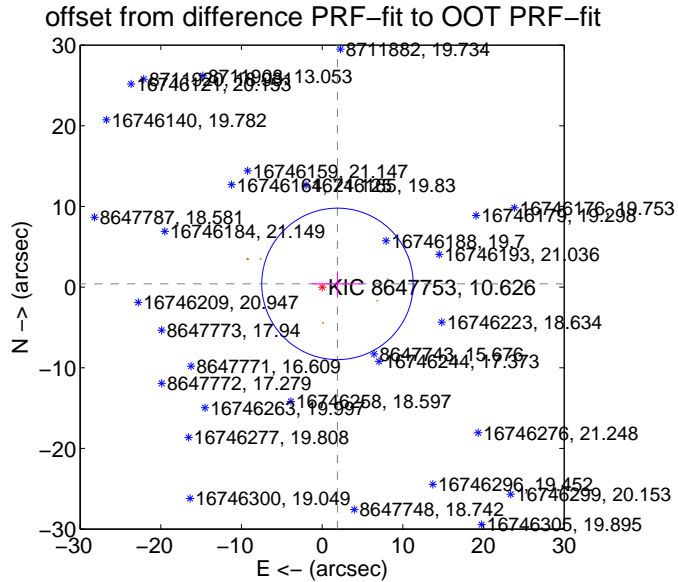
DV Centroid Data

Supplemental centroid analysis for 008647753-01. **Kepler magnitude: 10.63.** Transit SNR 10.14

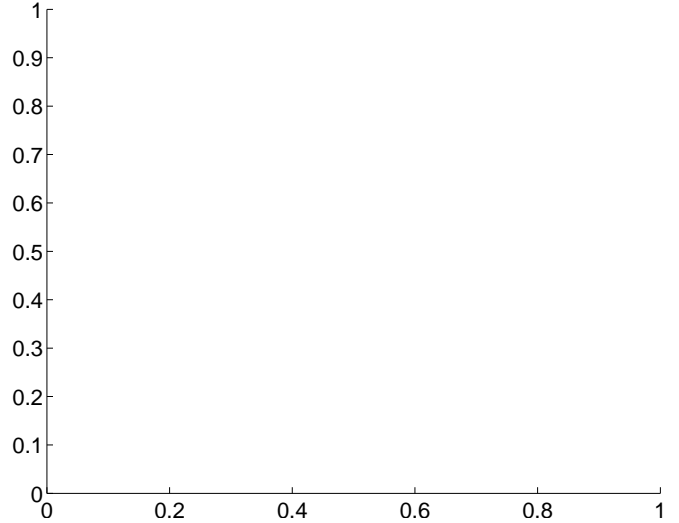
There are 0 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.26 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.941 ± 3.129	0.62	-1.899 ± 3.181	0.399 ± 1.551
PRF-fit source offset from KIC position	1.802 ± 3.077	0.59	-1.686 ± 3.243	0.638 ± 1.457
photometric centroid source offset	—	—	—	—

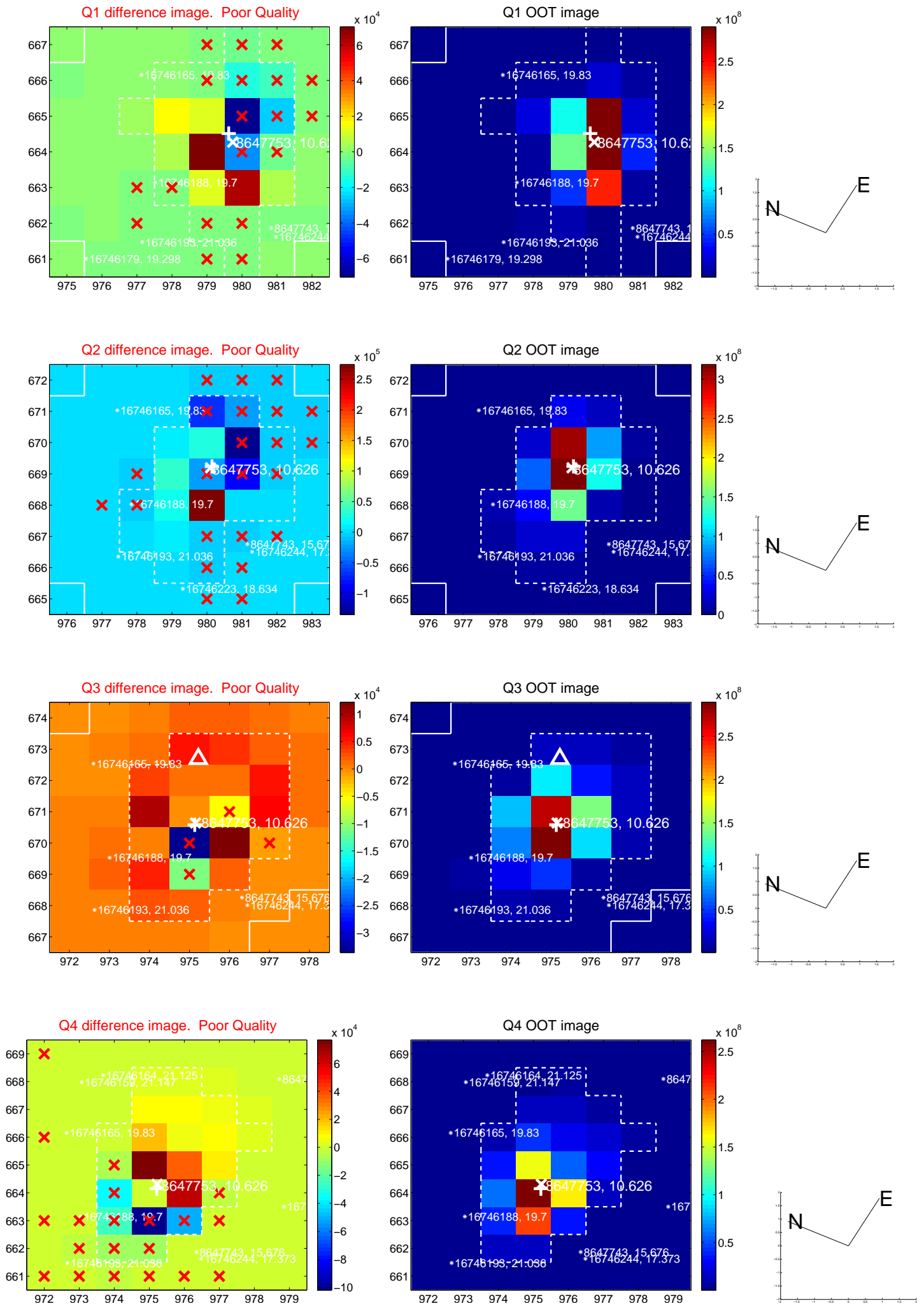


There are no photometric centroids

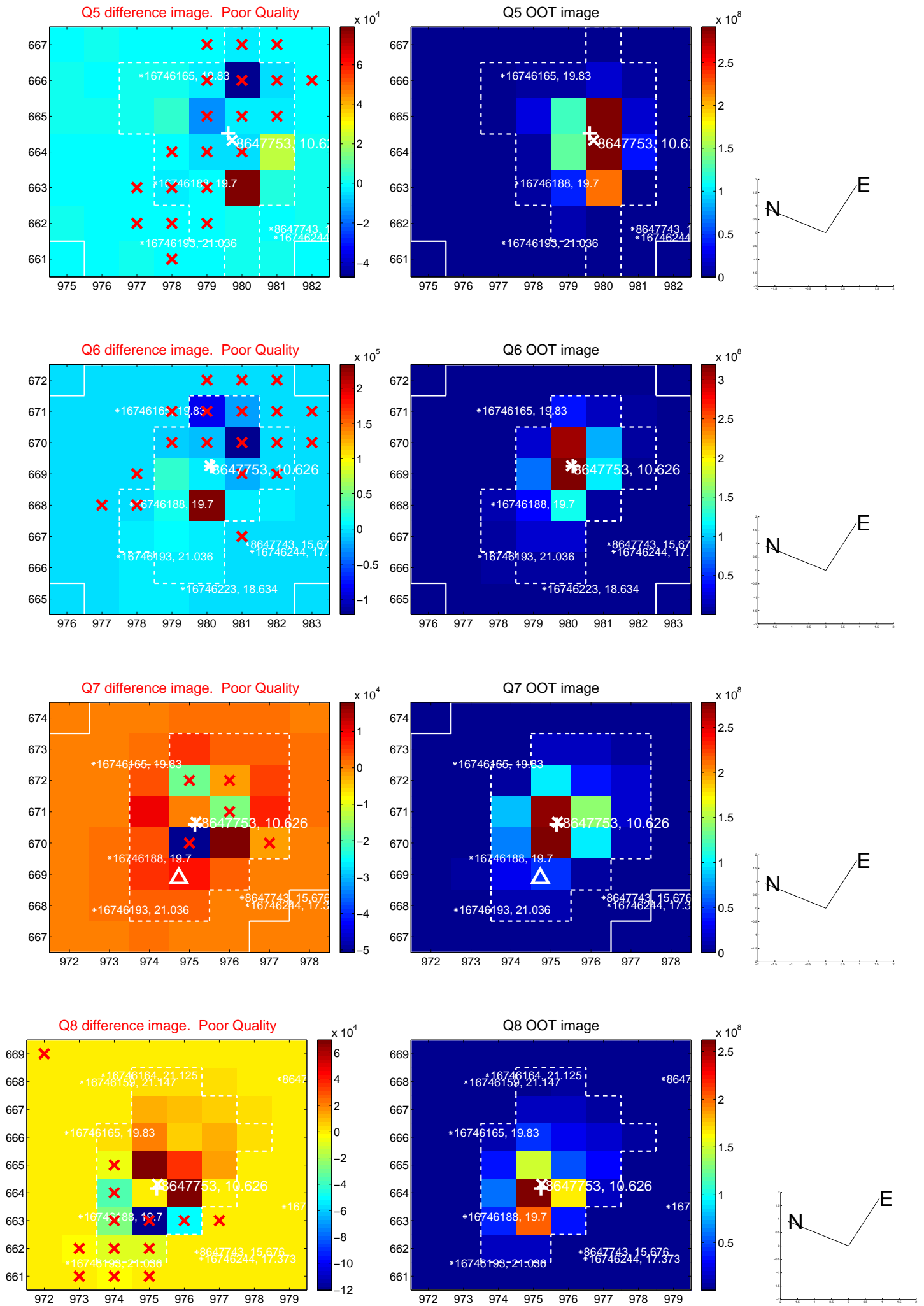


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

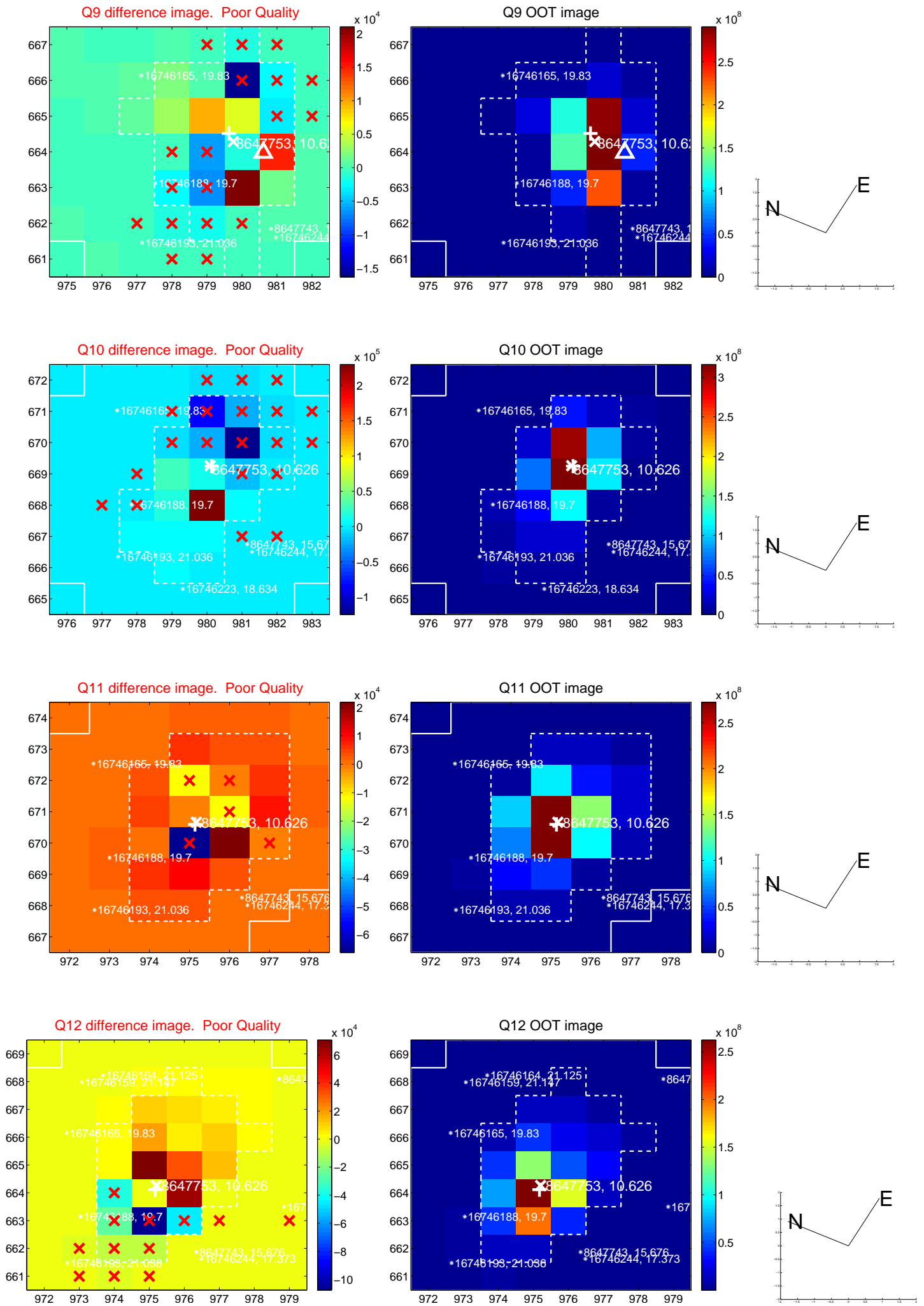
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



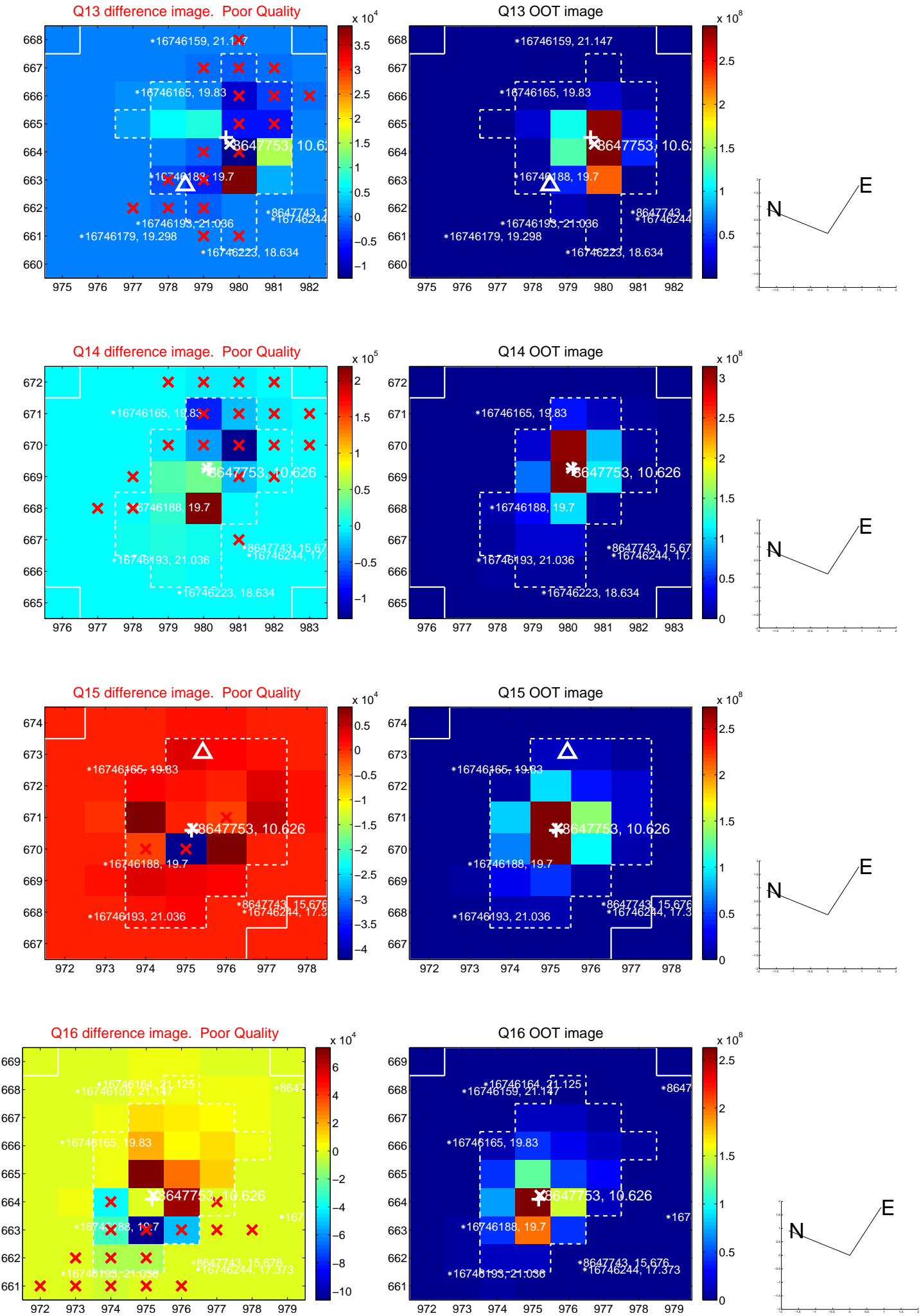
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



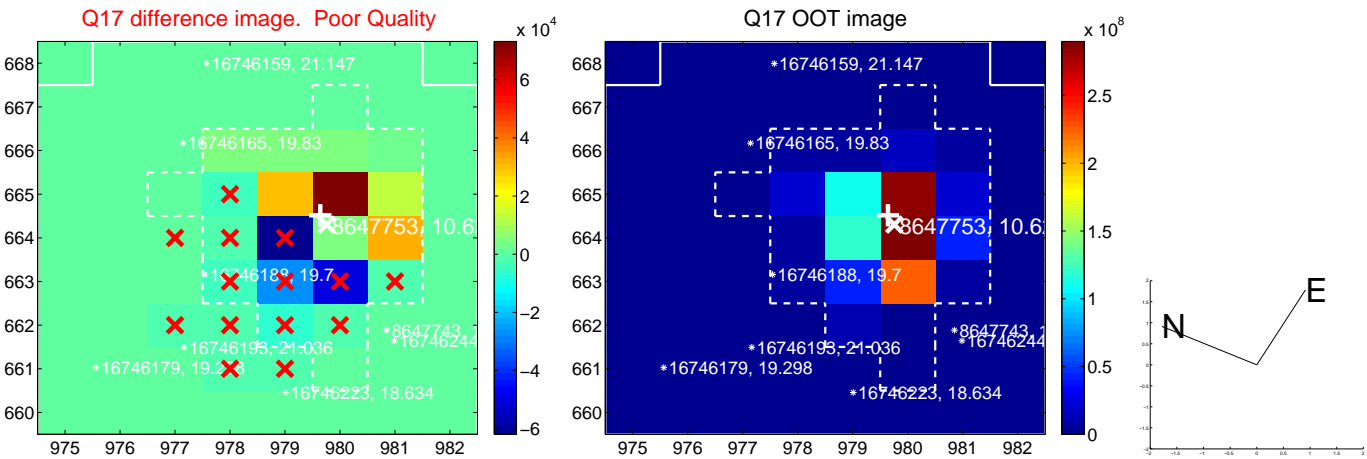
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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.



folded centroid time series figure for this object.

UKIRT Image

Declination

