

KIC 008056861

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})
008056861-01	OBS	No	0.796240	131.996231	19.7	8.331	13.9	3.1	1.83	9454	0.84	51040.53

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008056861-01	OBS	FP	0.00	1	0	0	0	LPP_DV—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.

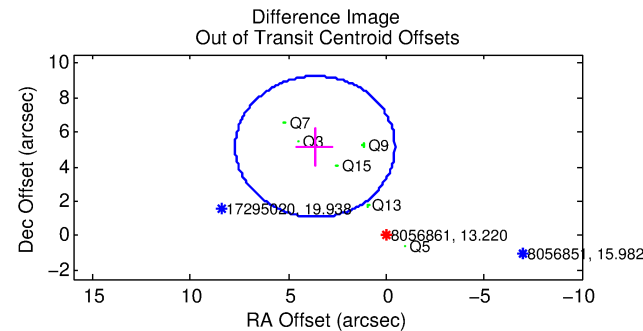
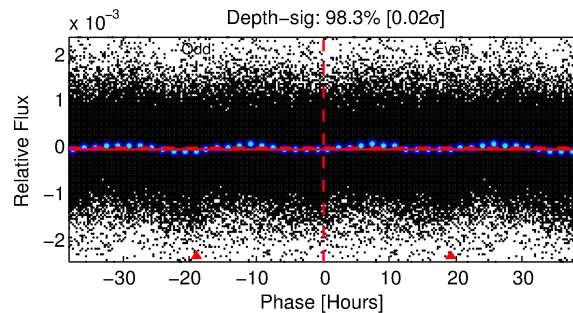
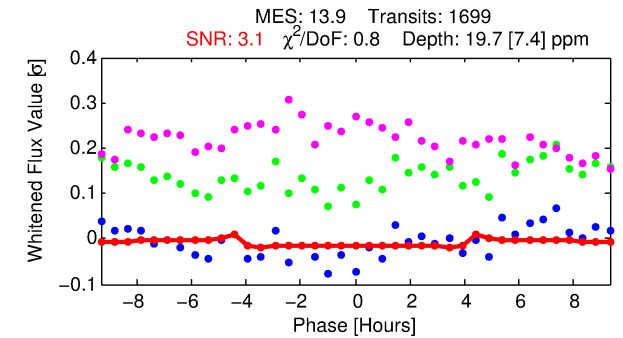
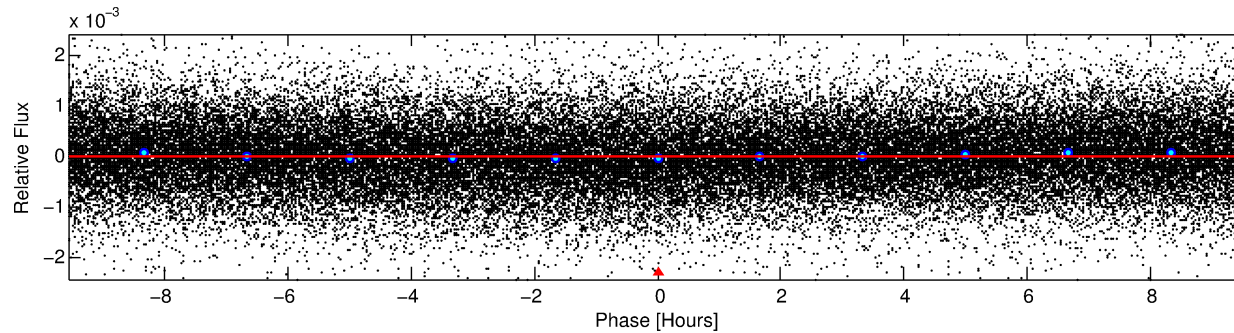
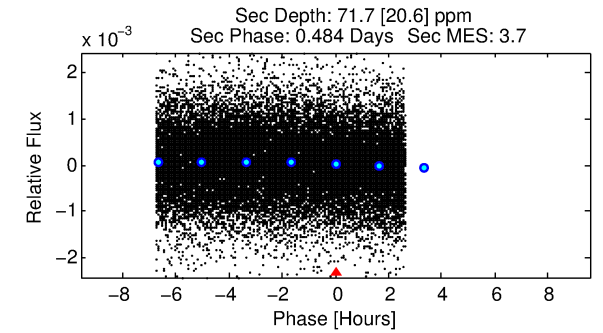
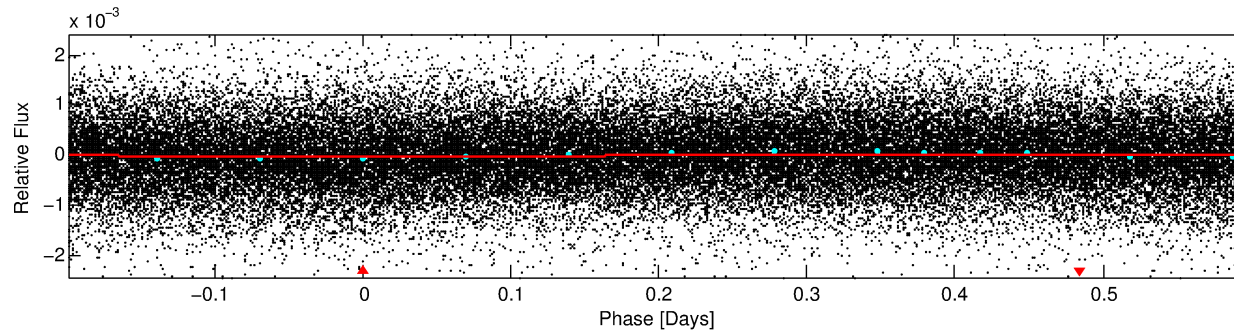
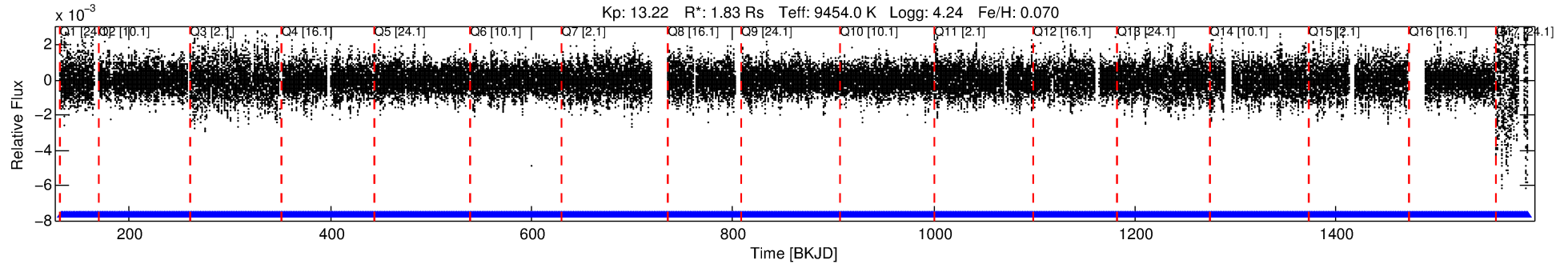
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008056861-01

No Significant Match Found

DV One-Page Summary

KIC: 8056861 Candidate: 1 of 1 Period: 0.796 d



DV Fit Results:

Period = 0.79624 [0.00005] d
Epoch = 131.9962 [0.0090] BKJD
Rp/R* = 0.0042 [0.0052]
a/R* = 1.02 [0.37]
b = 0.40 [18.34]
Seff = 51040.53 [26560.09]
Teq = 3833 [499] K
Rp = 0.84 [1.11] Re
a = 0.0217 [0.0078] AU
Ag = 26.19 [66.22] [0.38σ]
Teffp = 13405 [8330] K [1.15σ]

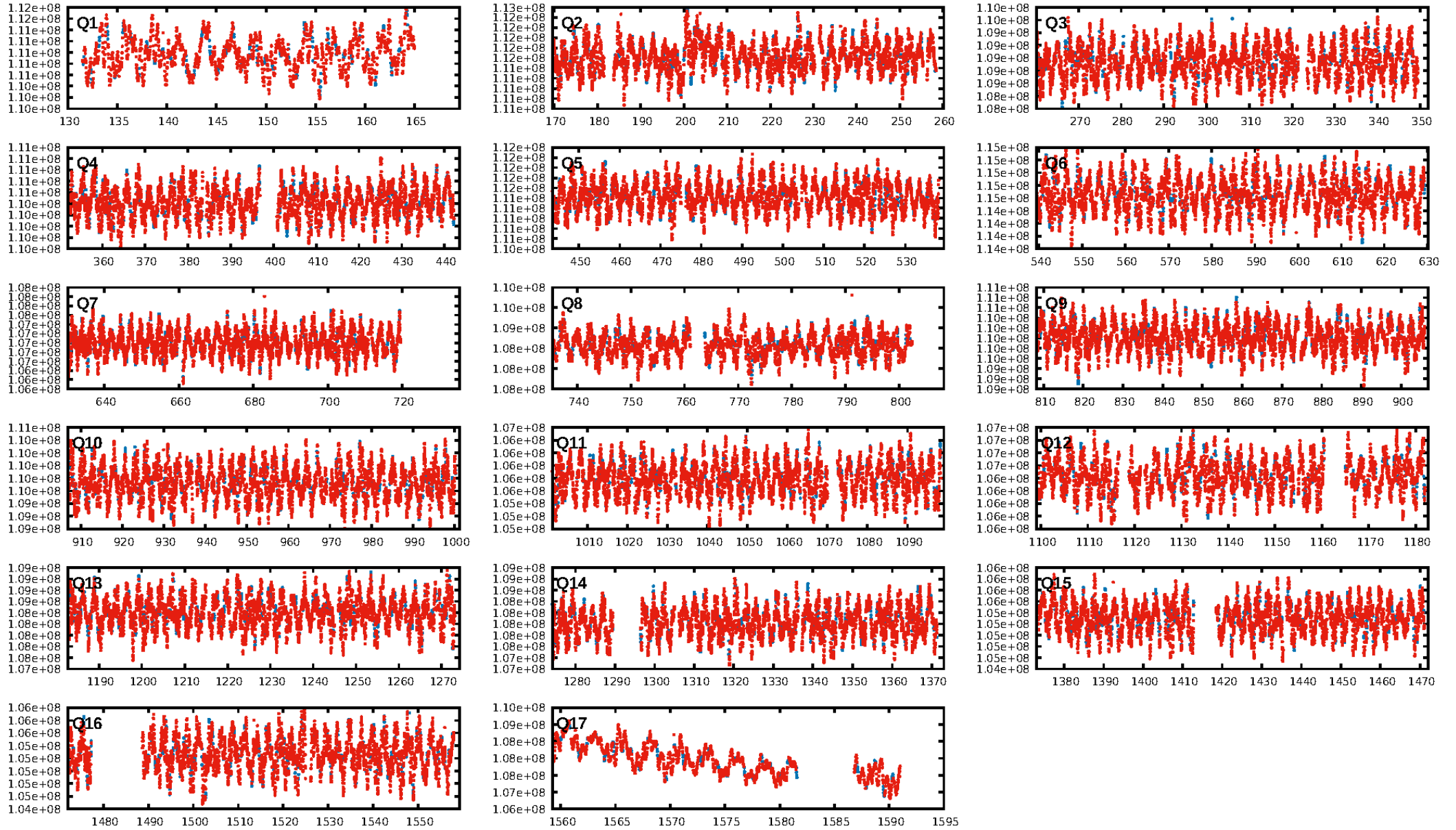
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [1623/1623]
GhostDiagnostic-chr: 0.5719
Centroid-sig: 0.1%
Centroid-so: 2.863 arcsec [1.27σ]
OotOffset-rm: 6.306 arcsec [4.64σ]
KicOffset-rm: 0.469 arcsec [0.76σ]
OotOffset-st: 0/3/0/3 [6]
KicOffset-st: 0/3/0/3 [6]
DiffImageQuality-fgm: 0.17 [1/6]
DiffImageOverlap-fno: 1.00 [17/17]

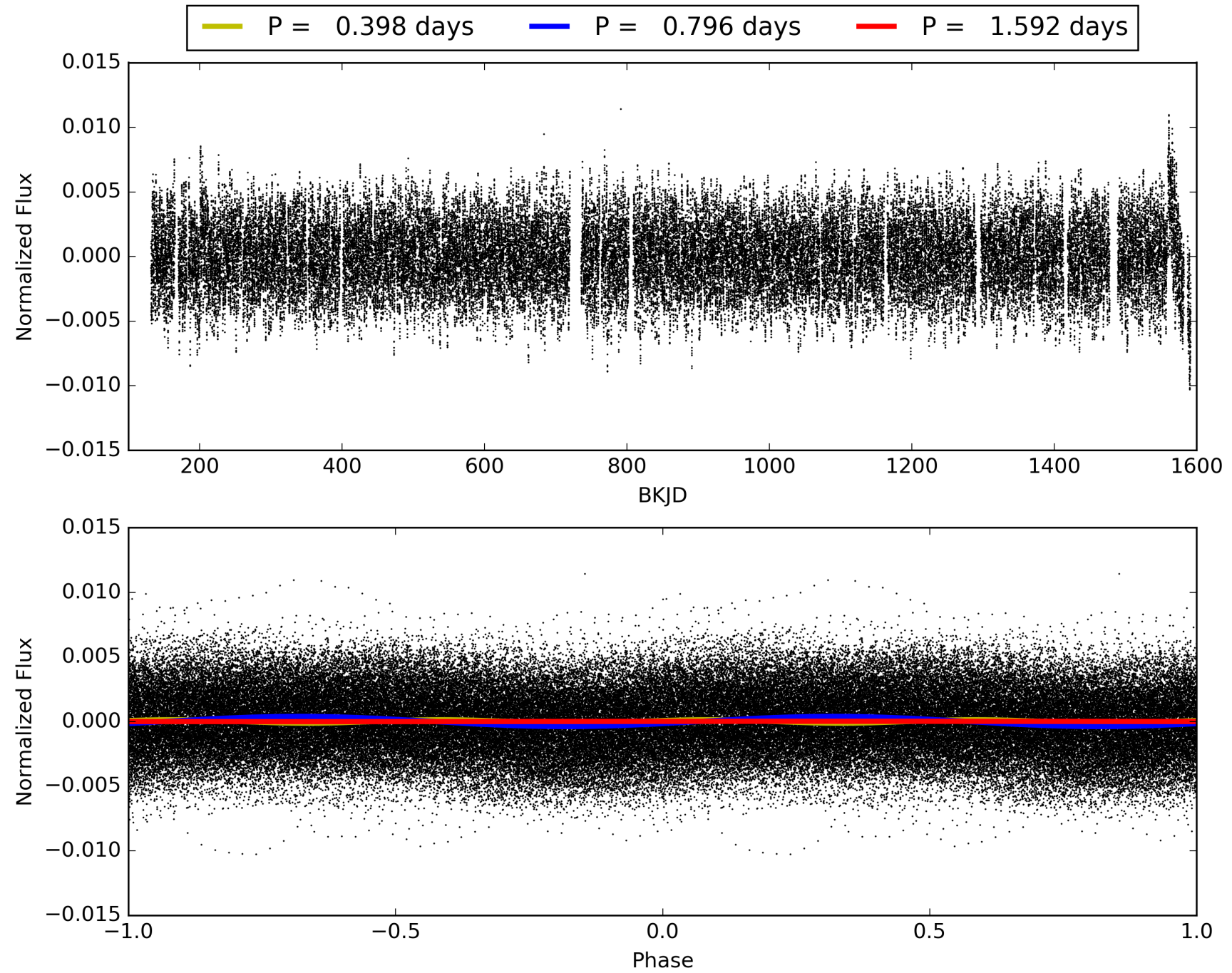
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 20:30:29 Z

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

TCE 008056861-01, PDC Light Curves

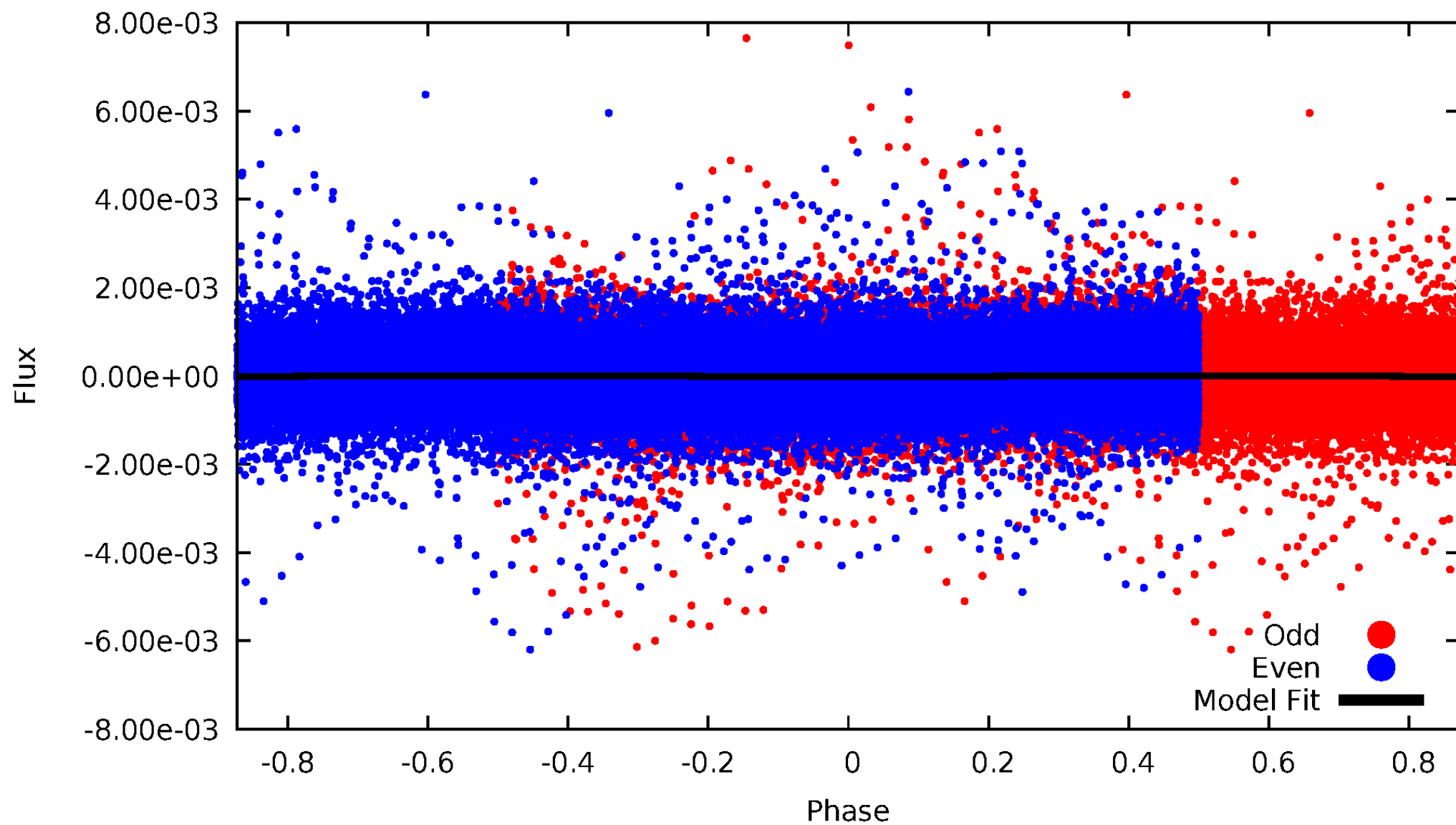


TCE 008056861-01



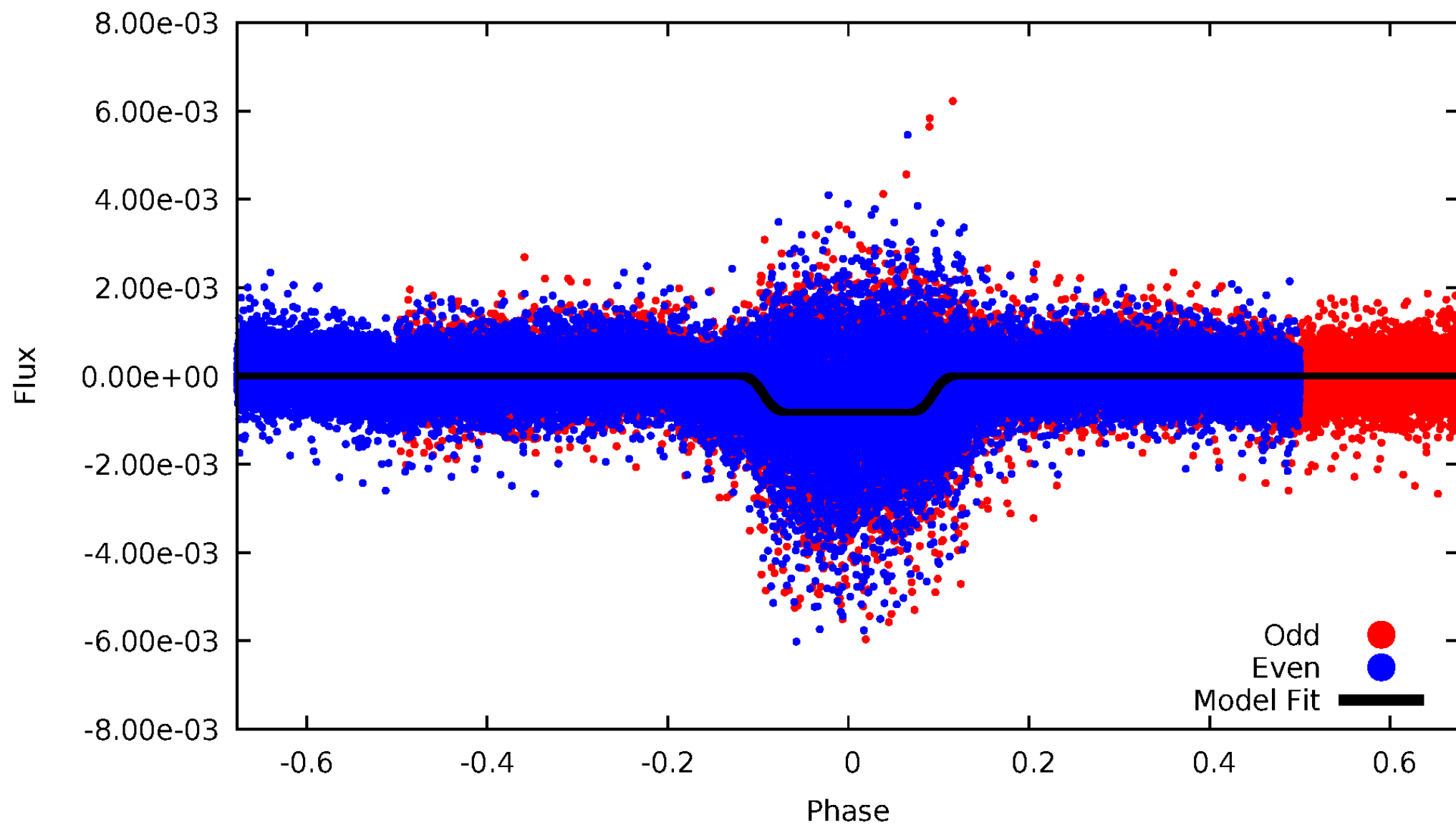
DV Odd/Even

TCE 008056861-01



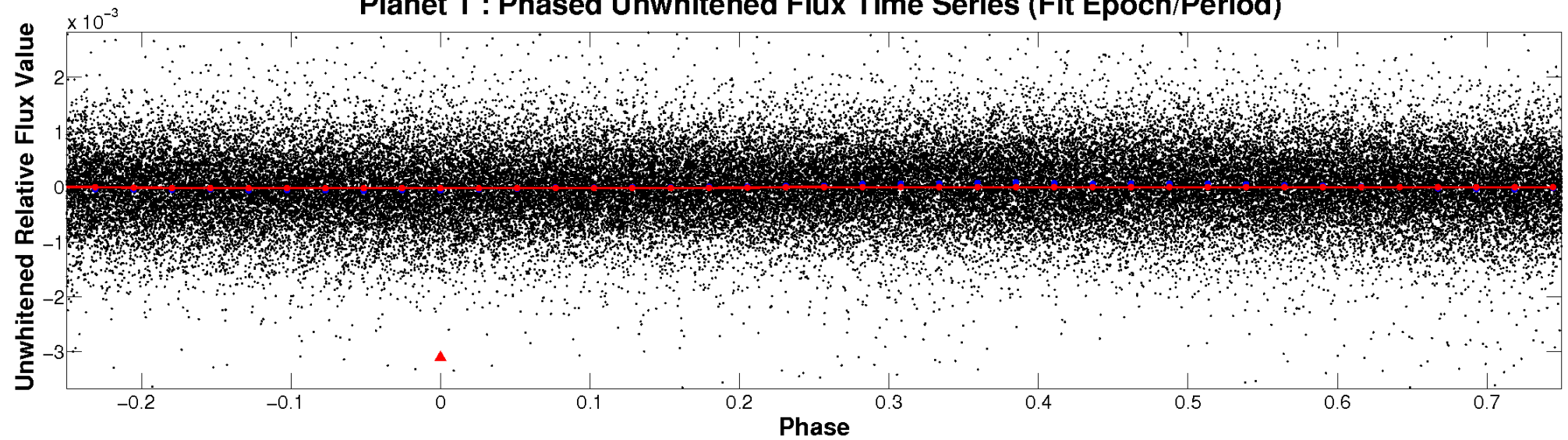
ALT Odd/Even

TCE 008056861-01

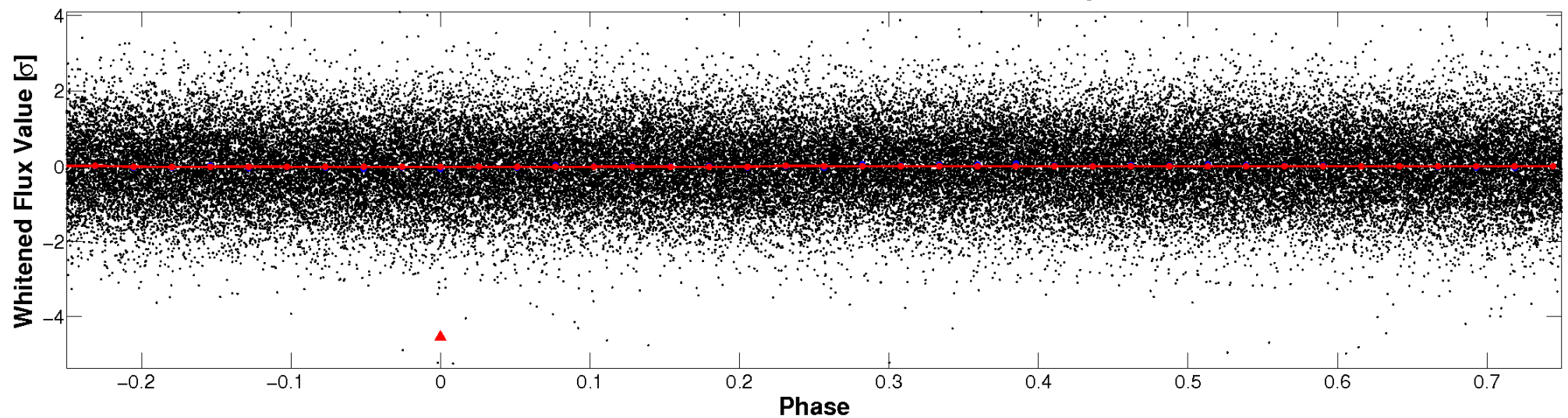


Non-Whitened Vs. Whitened Light Curve

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

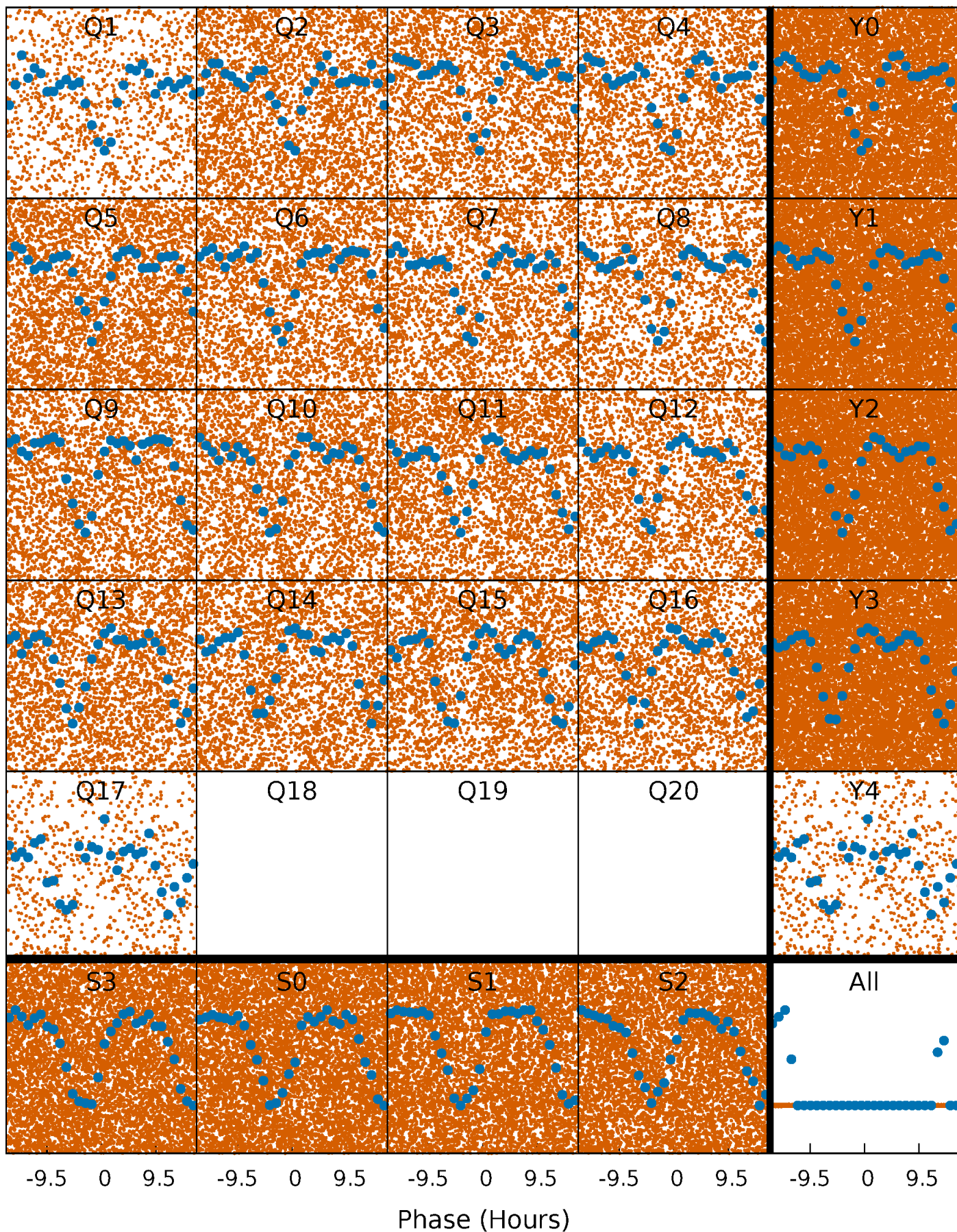


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



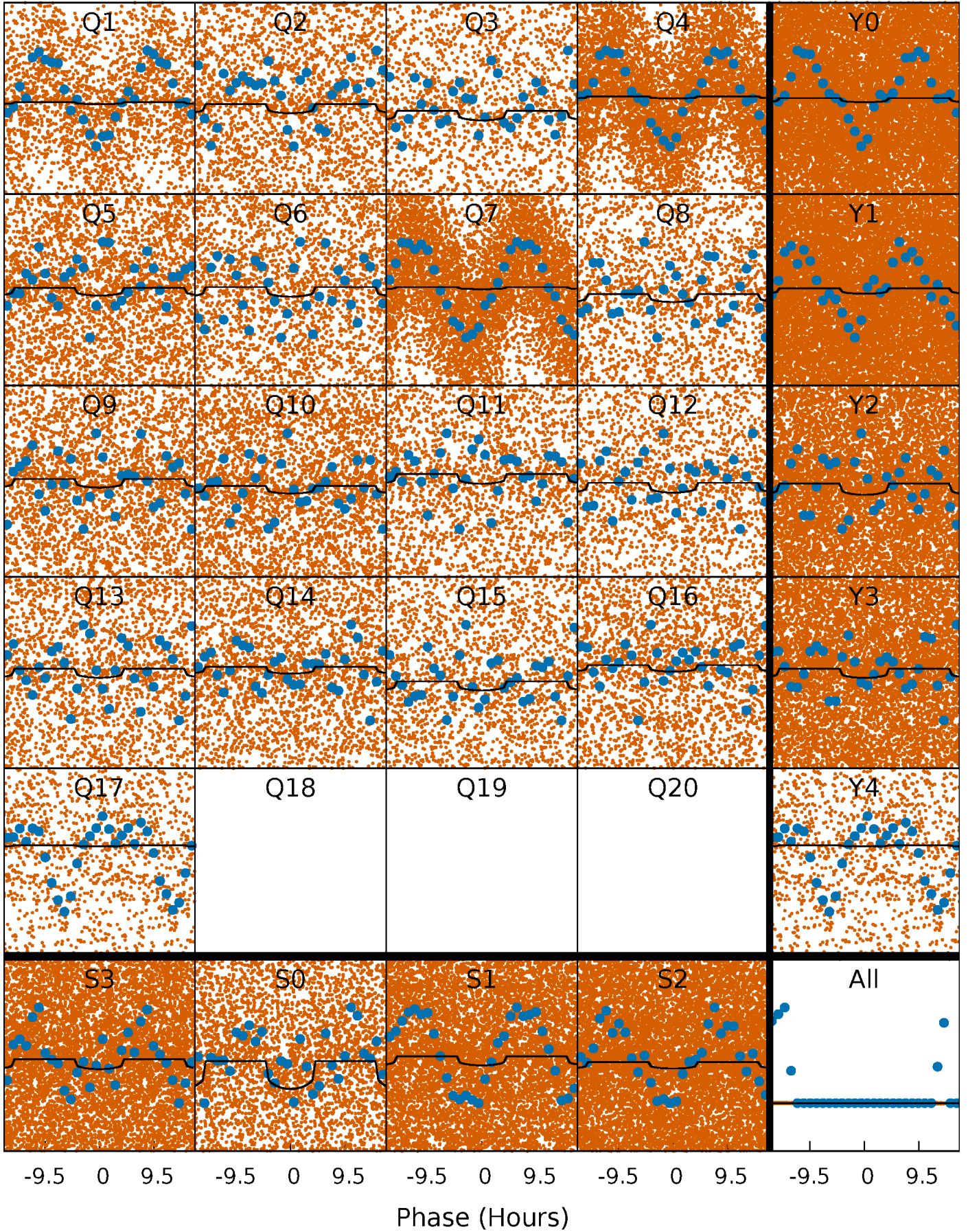
PDC Quarter-Phased Transit Curves

TCE 008056861-01 P= 0.796240 Days $T_0=131.996231$ (BKJD)



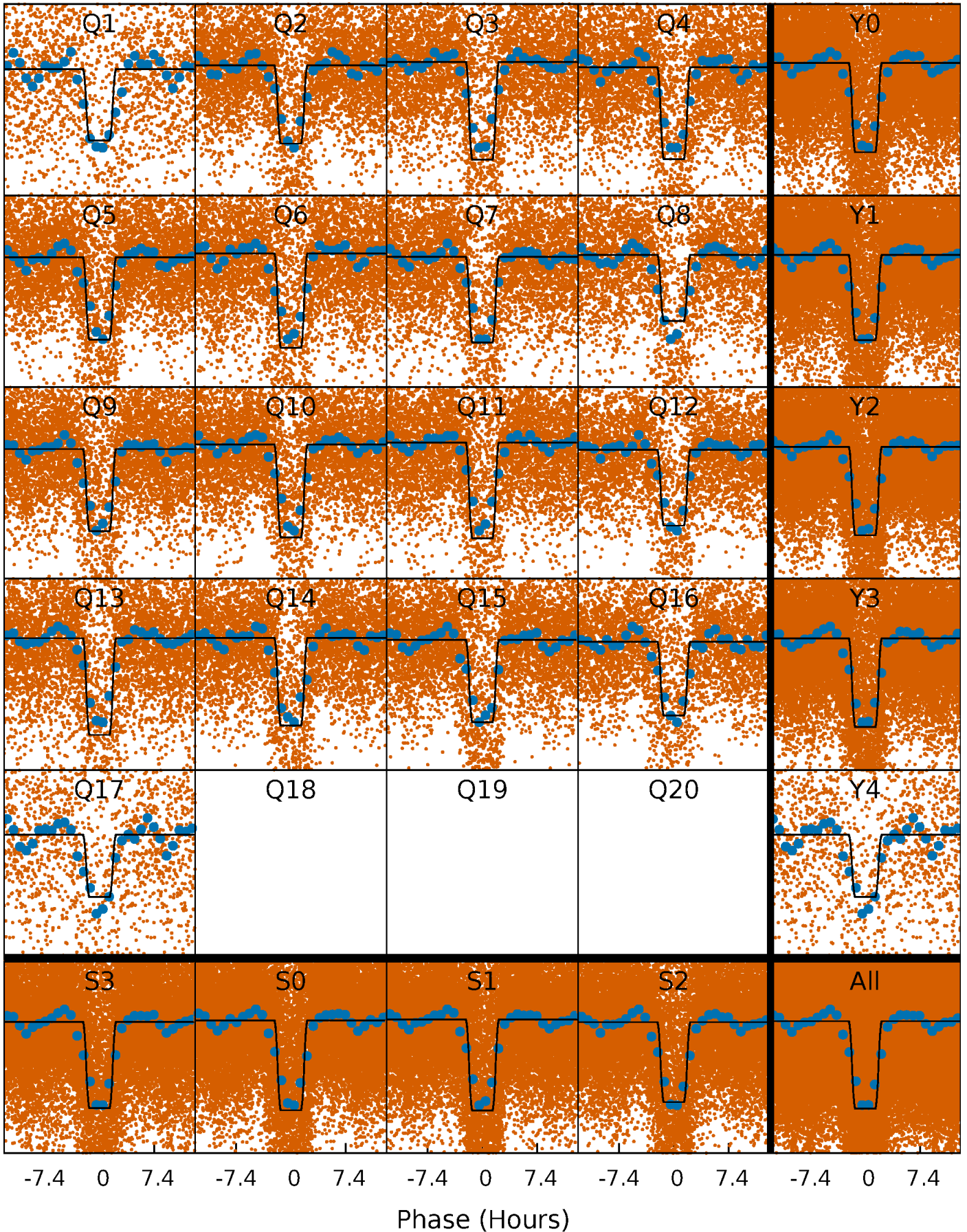
DV Quarter-Phased Transit Curves

TCE 008056861-01 P= 0.796240 Days $T_0=131.996231$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

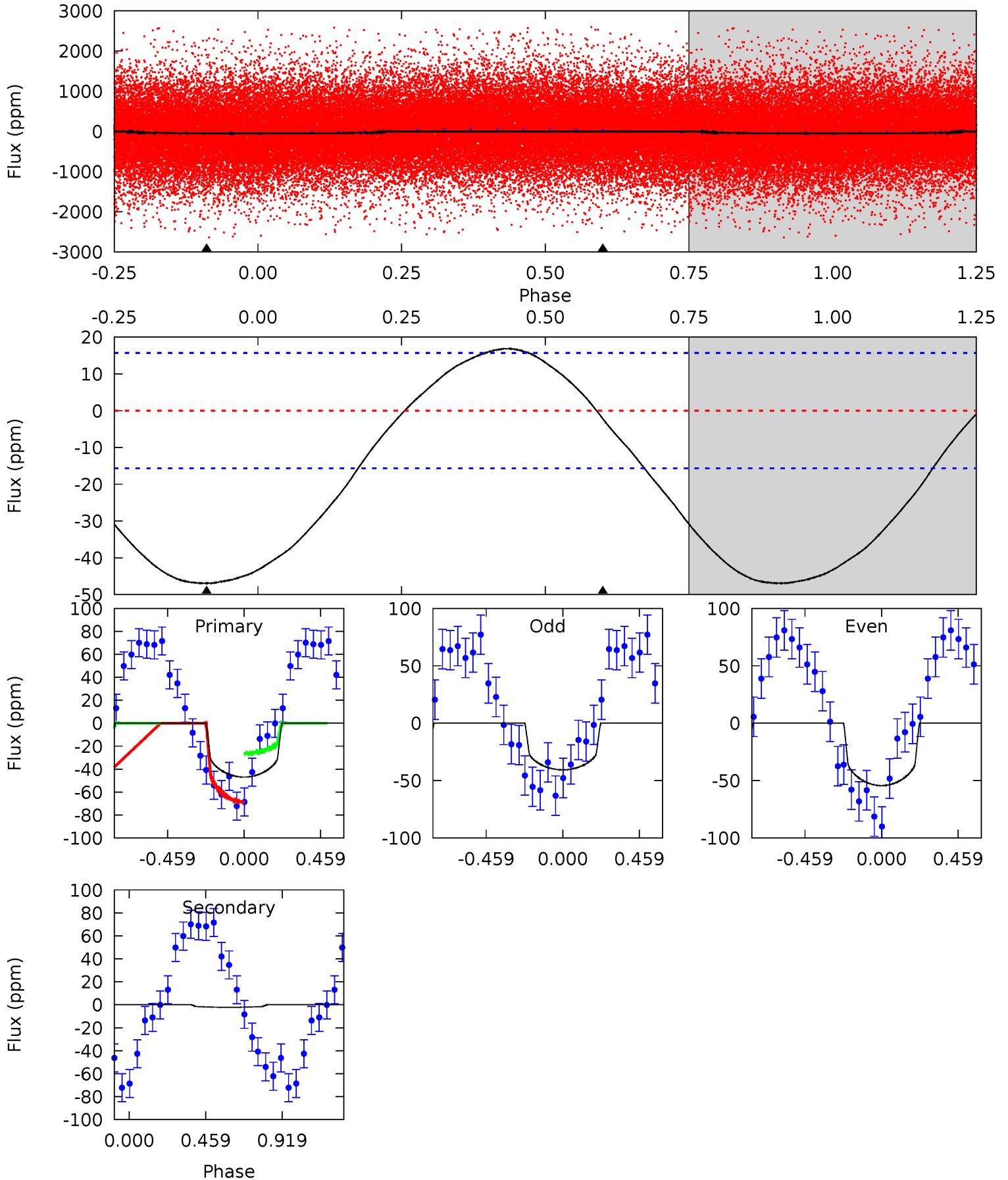
TCE 008056861-01 P= 0.796092 Days $T_0=132.006791$ (BKJD)



DV Model-Shift Uniqueness Test

008056861-01, P = 0.796240 Days, E = 131.199991 Days

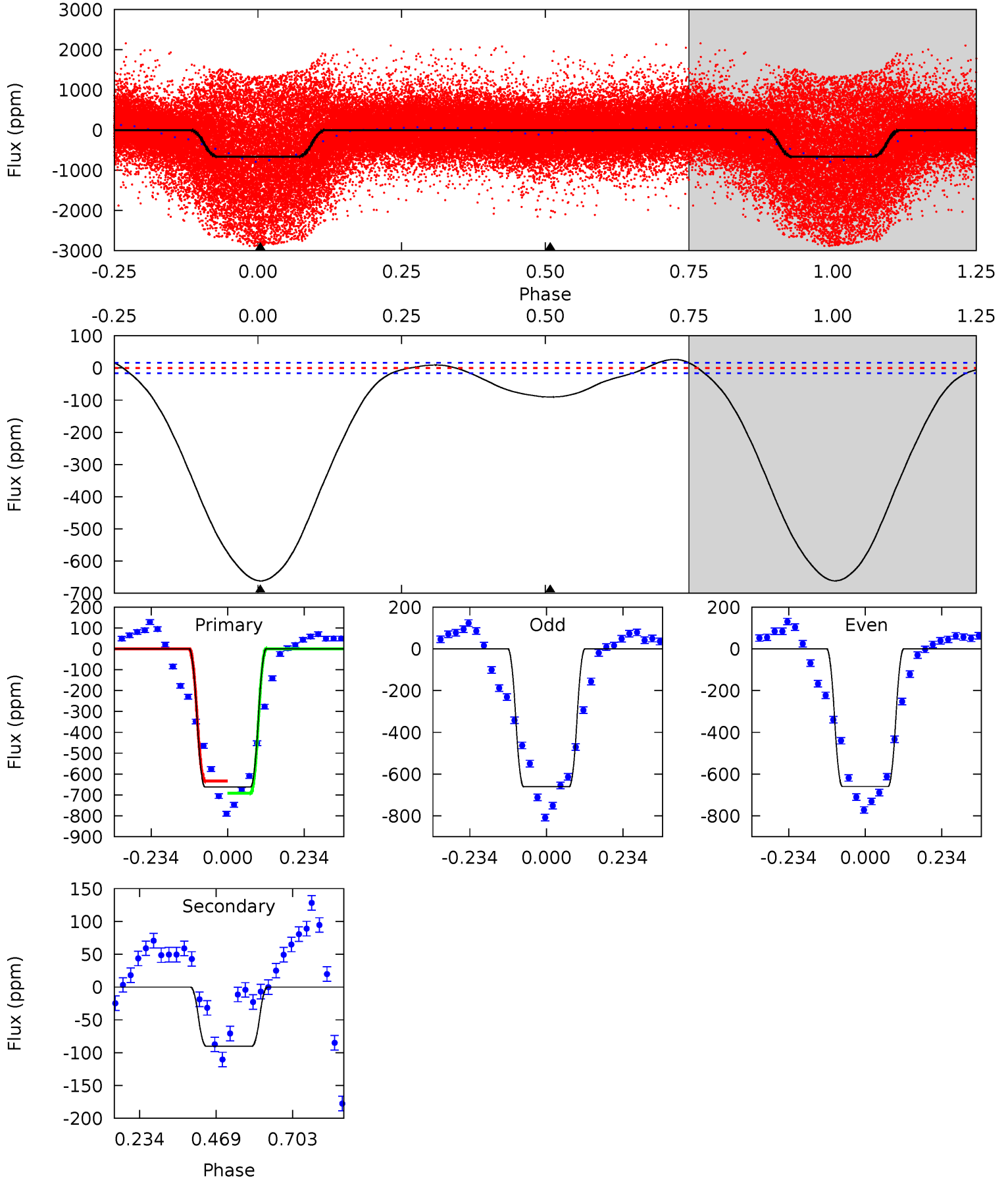
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.7	0.59	0	0	4.23	0.74	1.29	12.7	12.7	0.59	0.59	1.86	1.04	0.26	0



Alt Model-Shift Uniqueness Test

008056861-01, P = 0.796092 Days, E = 131.210699 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
178.3	24.3	0	0	4.38	1.19	3.22	178.3	178.3	24.3	24.3	0.04	1.04	0.04	7.83



Stellar Parameters For KIC 008056861

	$T_{\text{eff}} (K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	9454^{+296}_{-395}	$4.244^{+0.108}_{-0.252}$	$0.070^{+0.150}_{-0.650}$	$1.832^{+0.839}_{-0.360}$	$2.144^{+0.424}_{-0.471}$	$0.491^{+0.314}_{-0.293}$
	+3%/-4%	+3%/-6%	+214%/-929%	+46%/-20%	+20%/-22%	+64%/-60%
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 008056861-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-2 ± 4	$1.18^{+1.19}_{-0.79}$	5470^{+494}_{-380}	-3267^{+10639}_{-1836}	$0.247^{+2.955}_{-0.497}$
Alt.	-90 ± 4	$5.97^{+1.62}_{-1.26}$	5466^{+533}_{-378}	4492^{+673}_{-745}	$0.647^{+0.373}_{-0.239}$

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 $A_{obs} \gg 1.0$

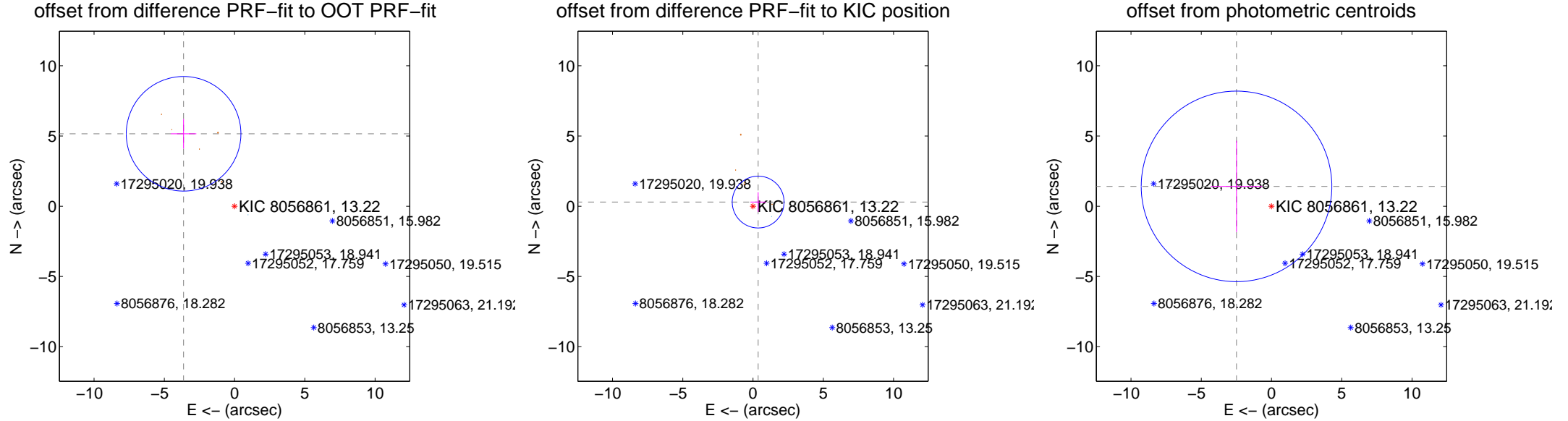
DV Centroid Data

Supplemental centroid analysis for 008056861-01. Kepler magnitude: 13.22. Transit SNR 3.14

There are 1 quarters with good PRF difference image offsets

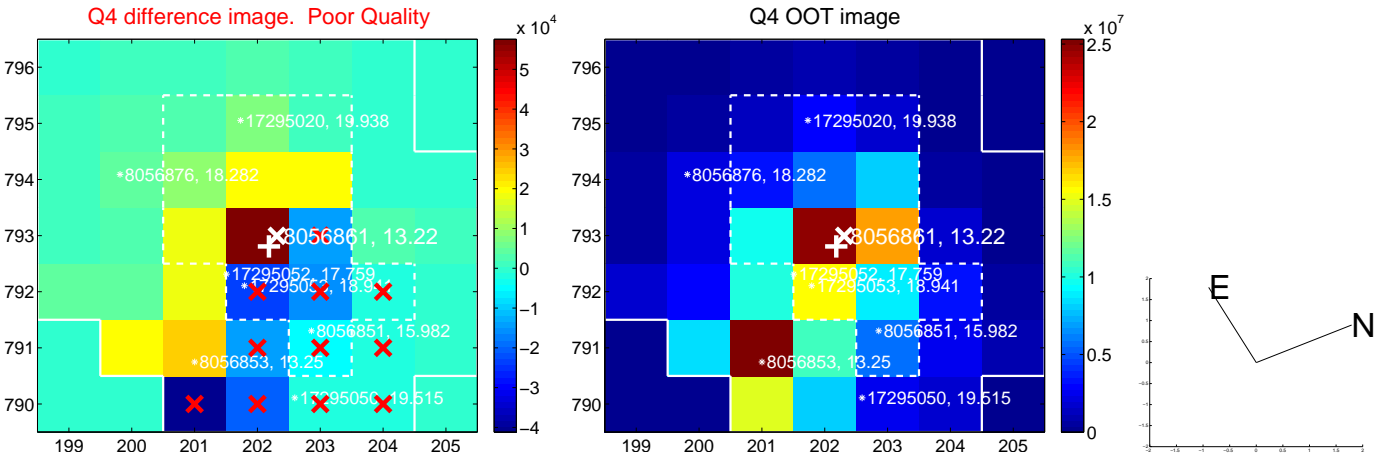
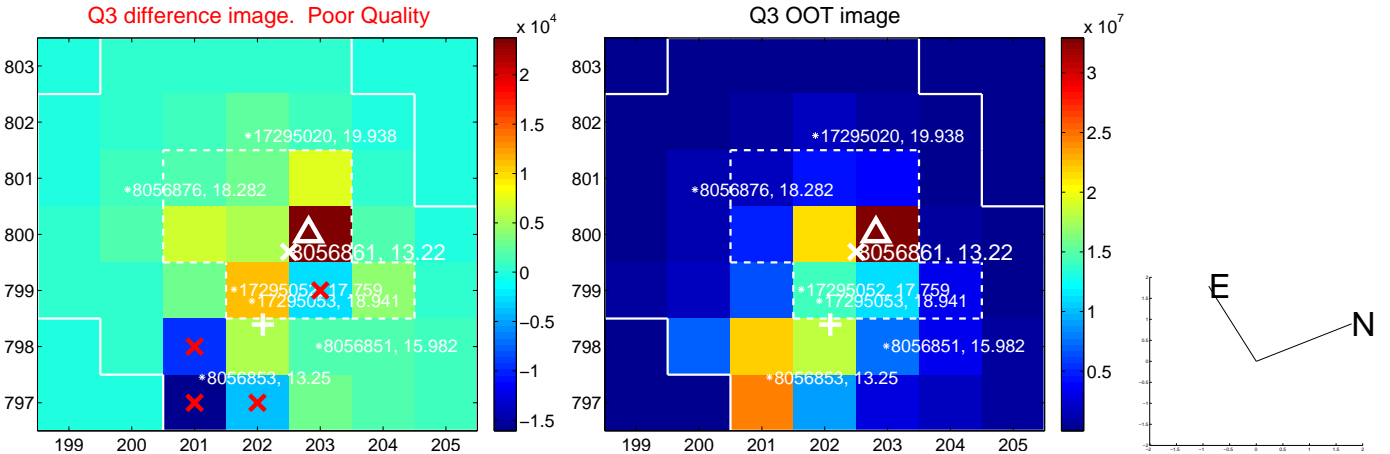
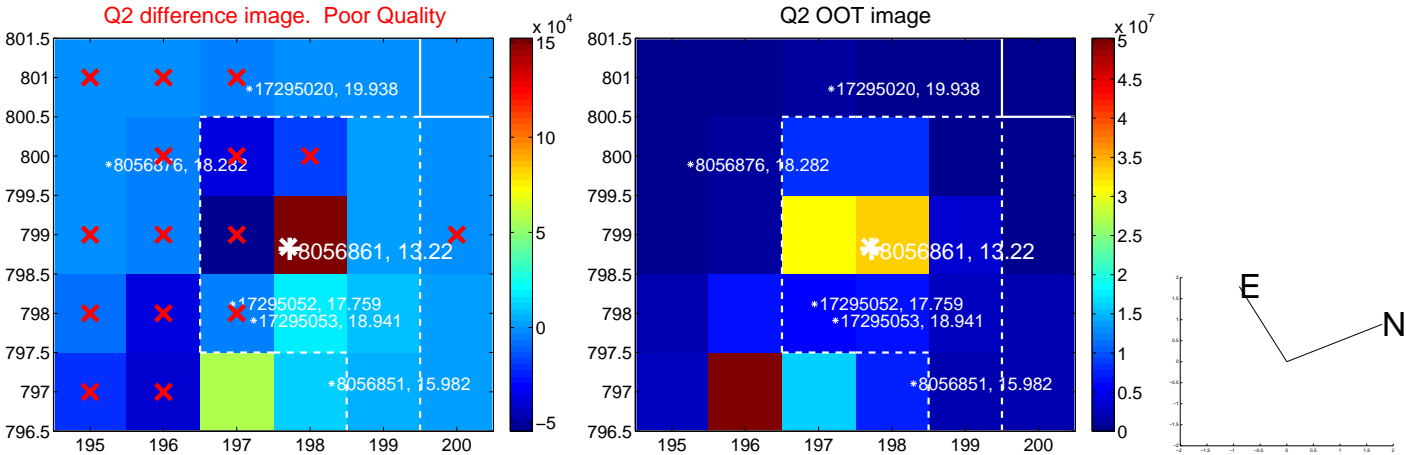
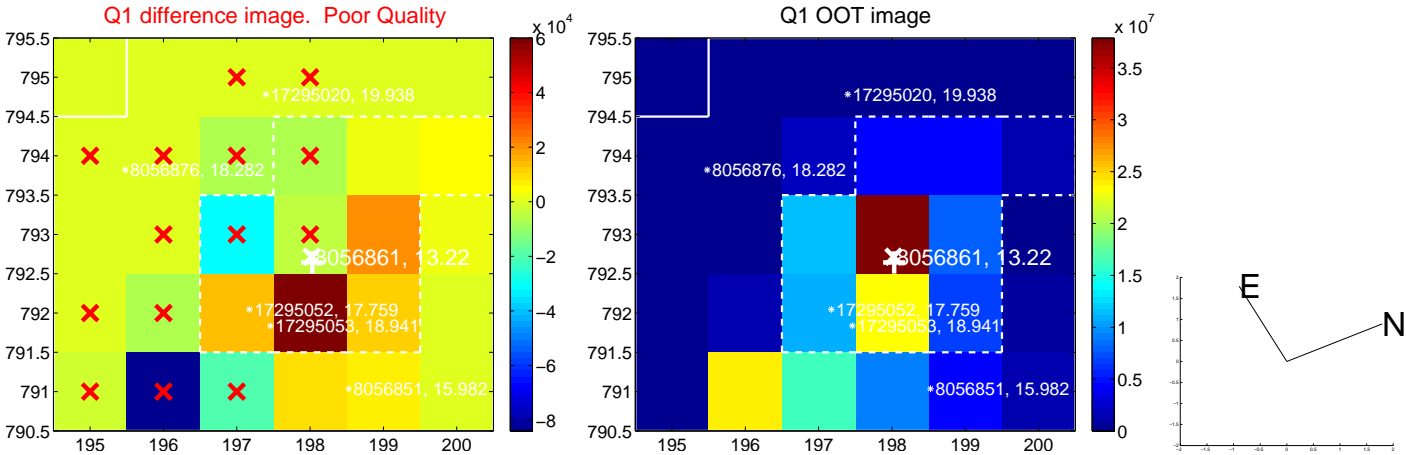
The OOT PRF centroid is offset from the target star catalog position by about 5.50 arcsec so the offset from difference PRF-fit to OOT-fit may be invalid.

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	6.306 ± 1.360	4.64	3.629 ± 0.909	5.157 ± 1.055
PRF-fit source offset from KIC position	0.469 ± 0.615	0.76	-0.362 ± 0.551	0.298 ± 0.699
photometric centroid source offset	2.86 ± 2.26	1.27	2.49 ± 1.83	1.41 ± 3.25

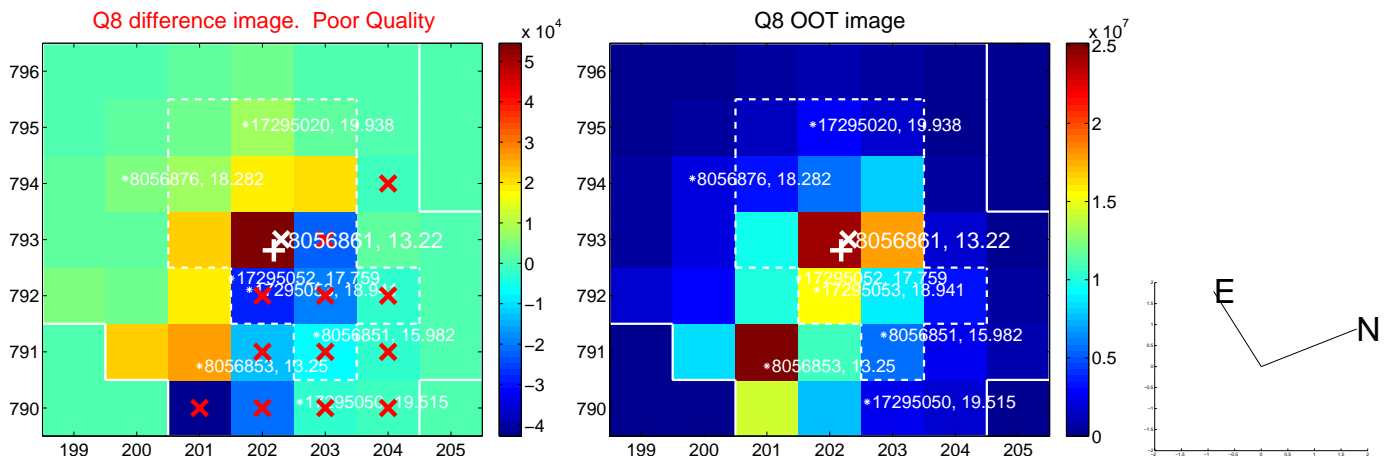
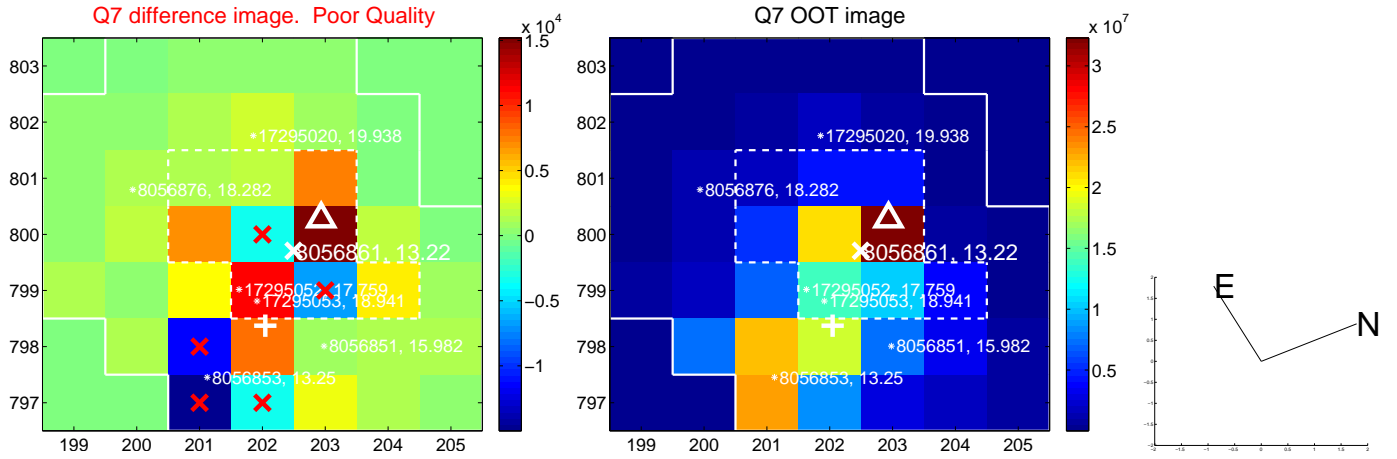
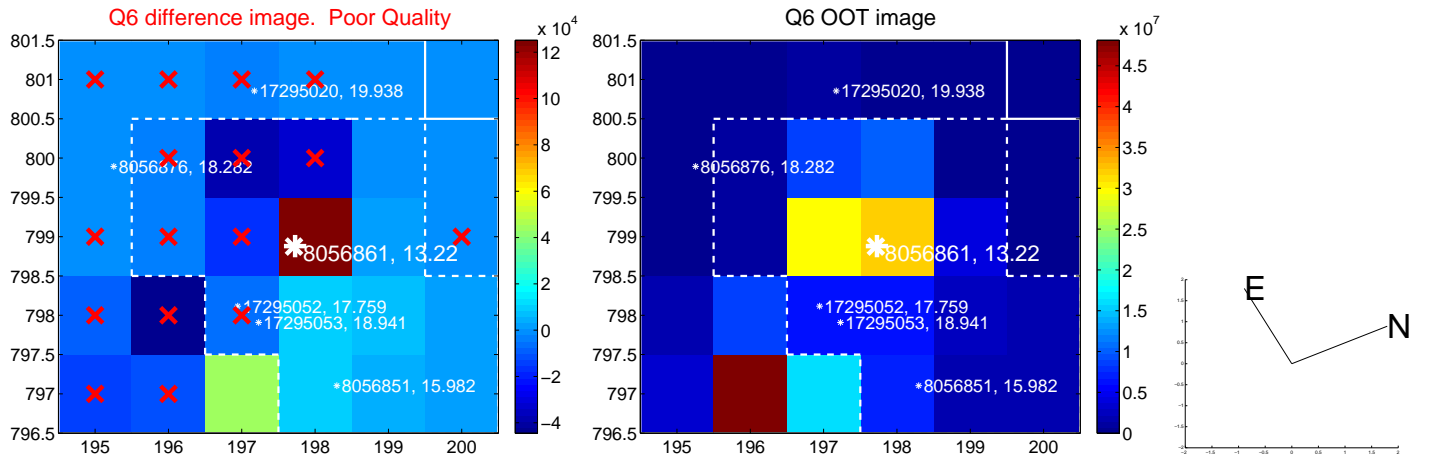
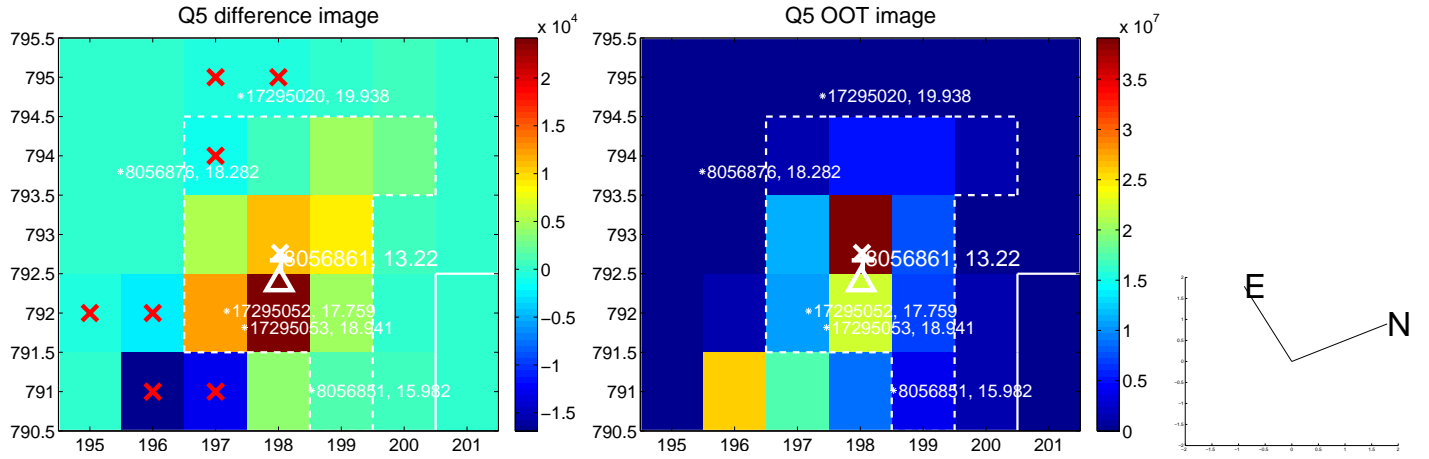


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ . Red *: target star. Blue *: Other stars. Text next to a star gives its KIC ID and kepmag. KIC IDs > 15,000 are from the UKIRT catalog.

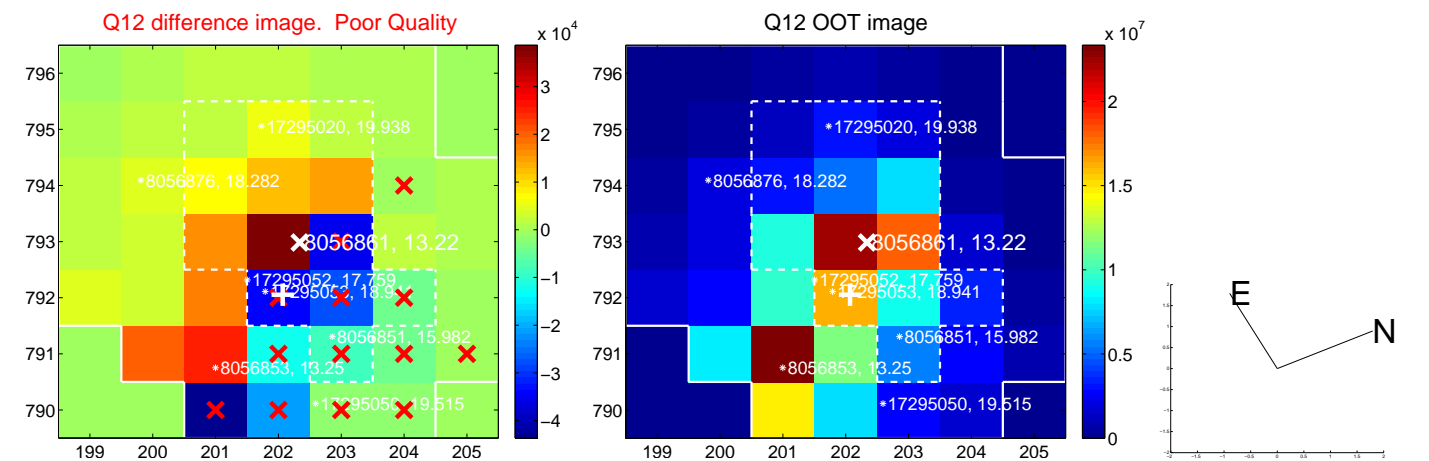
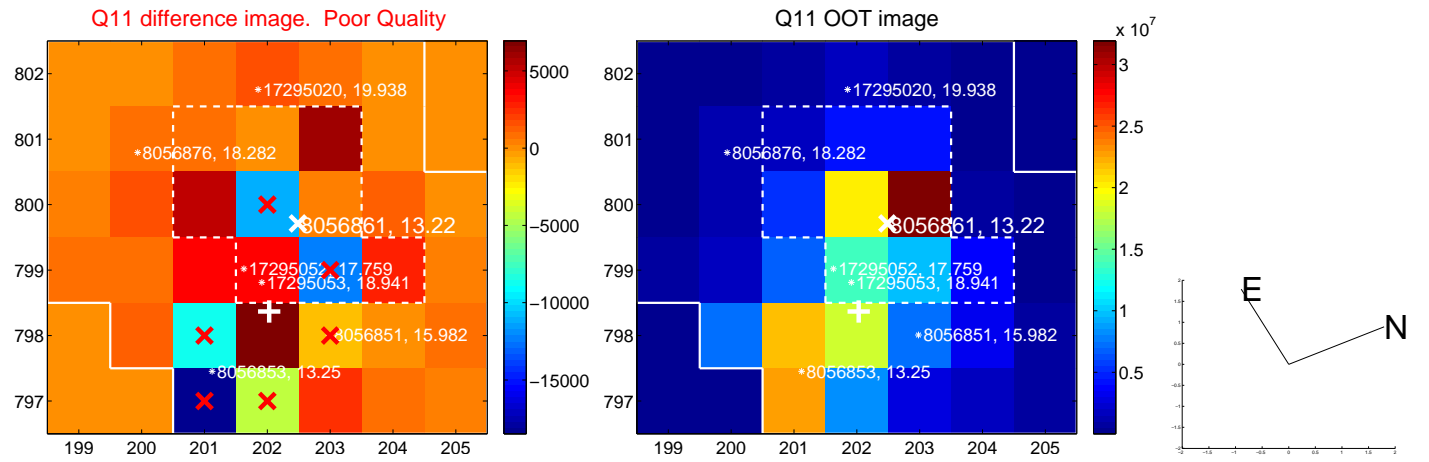
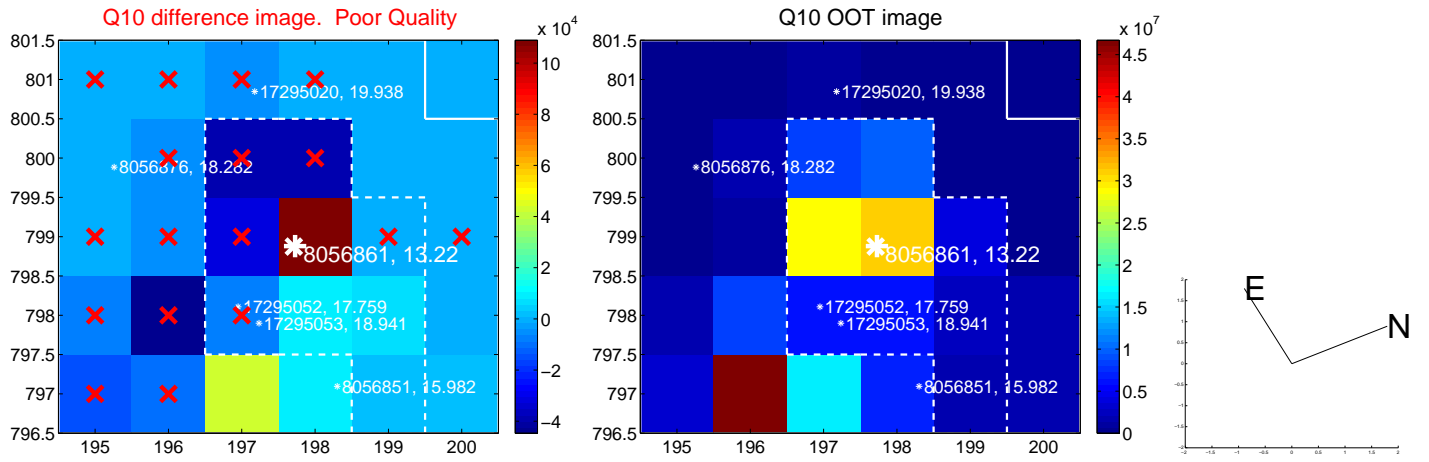
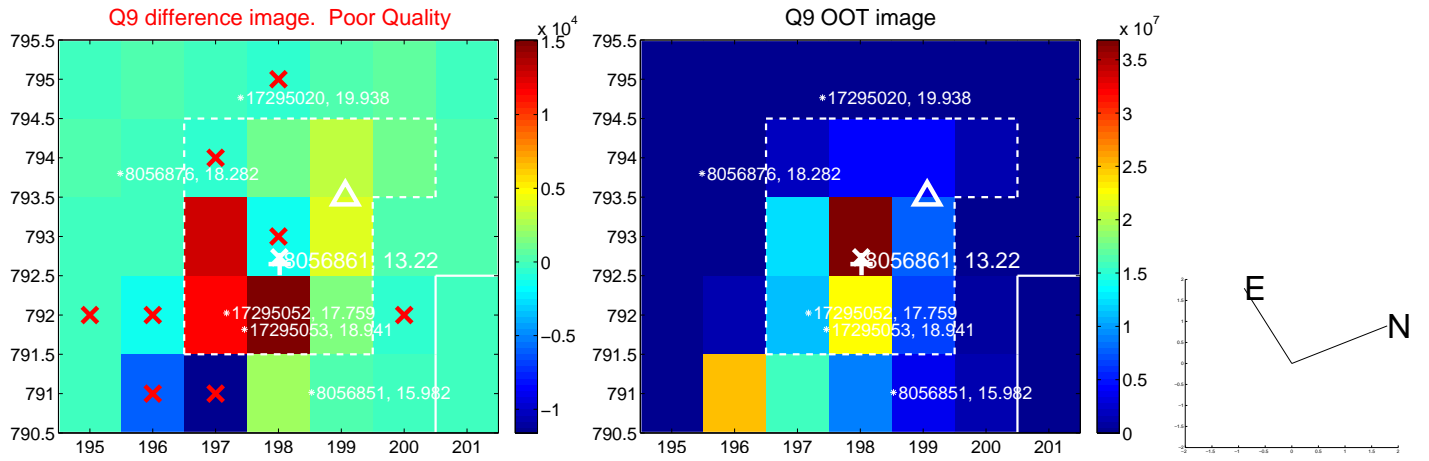
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



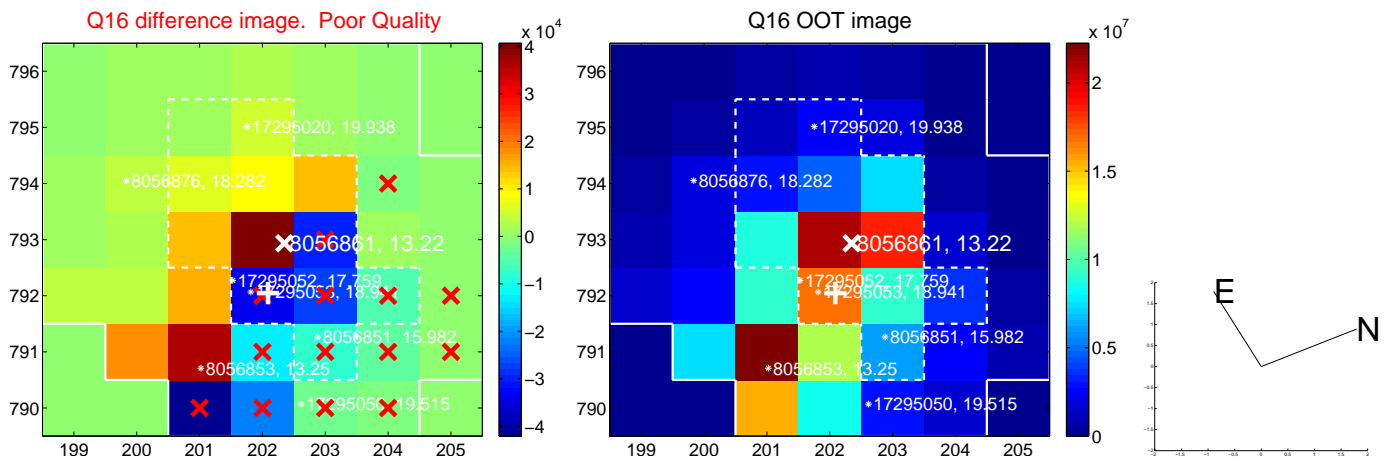
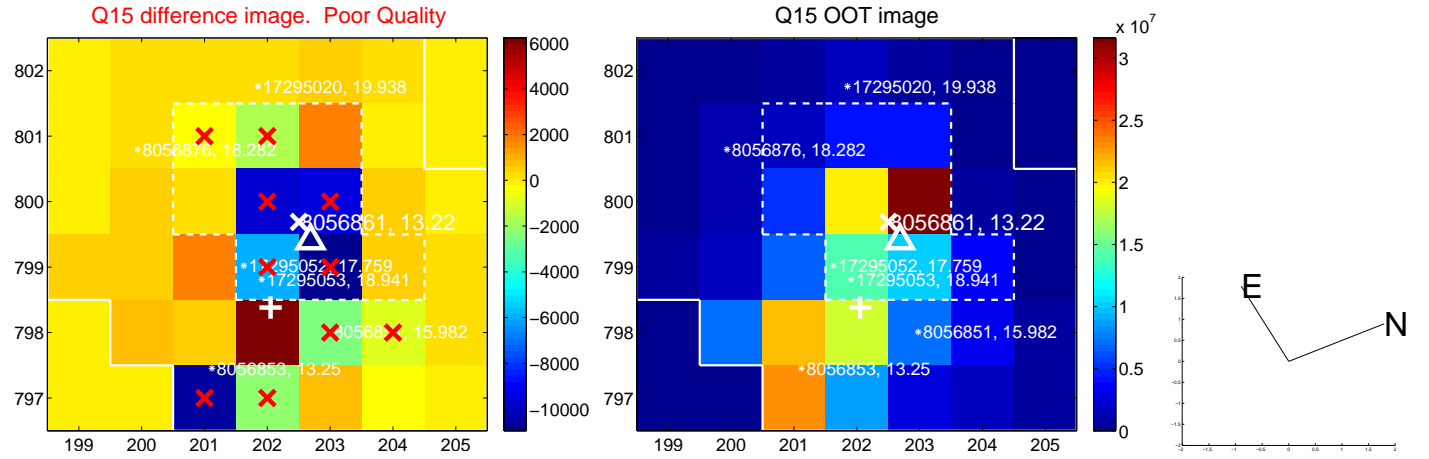
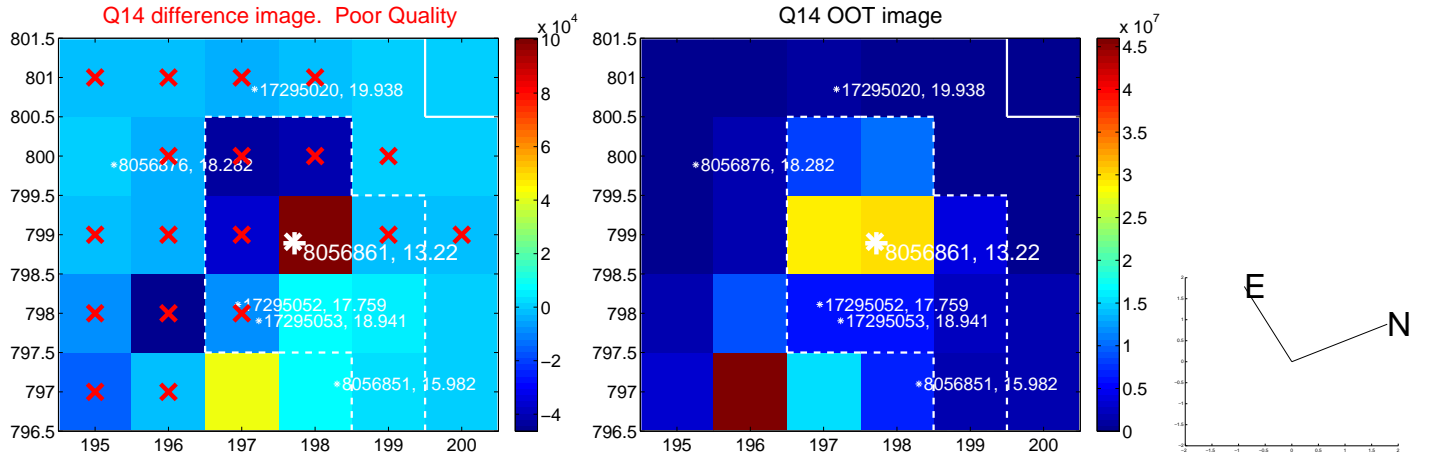
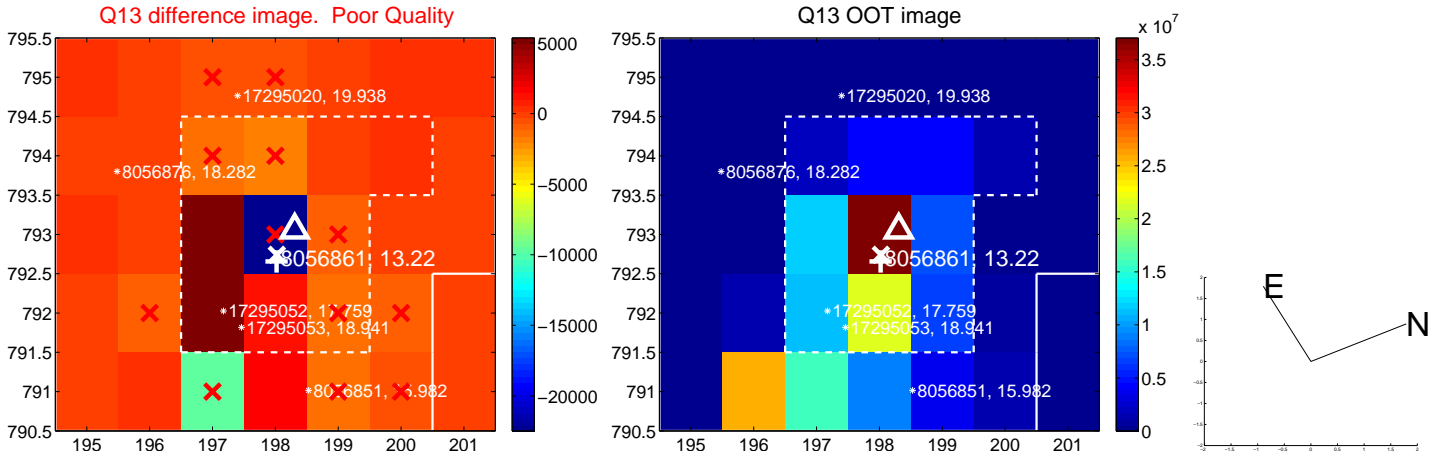
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



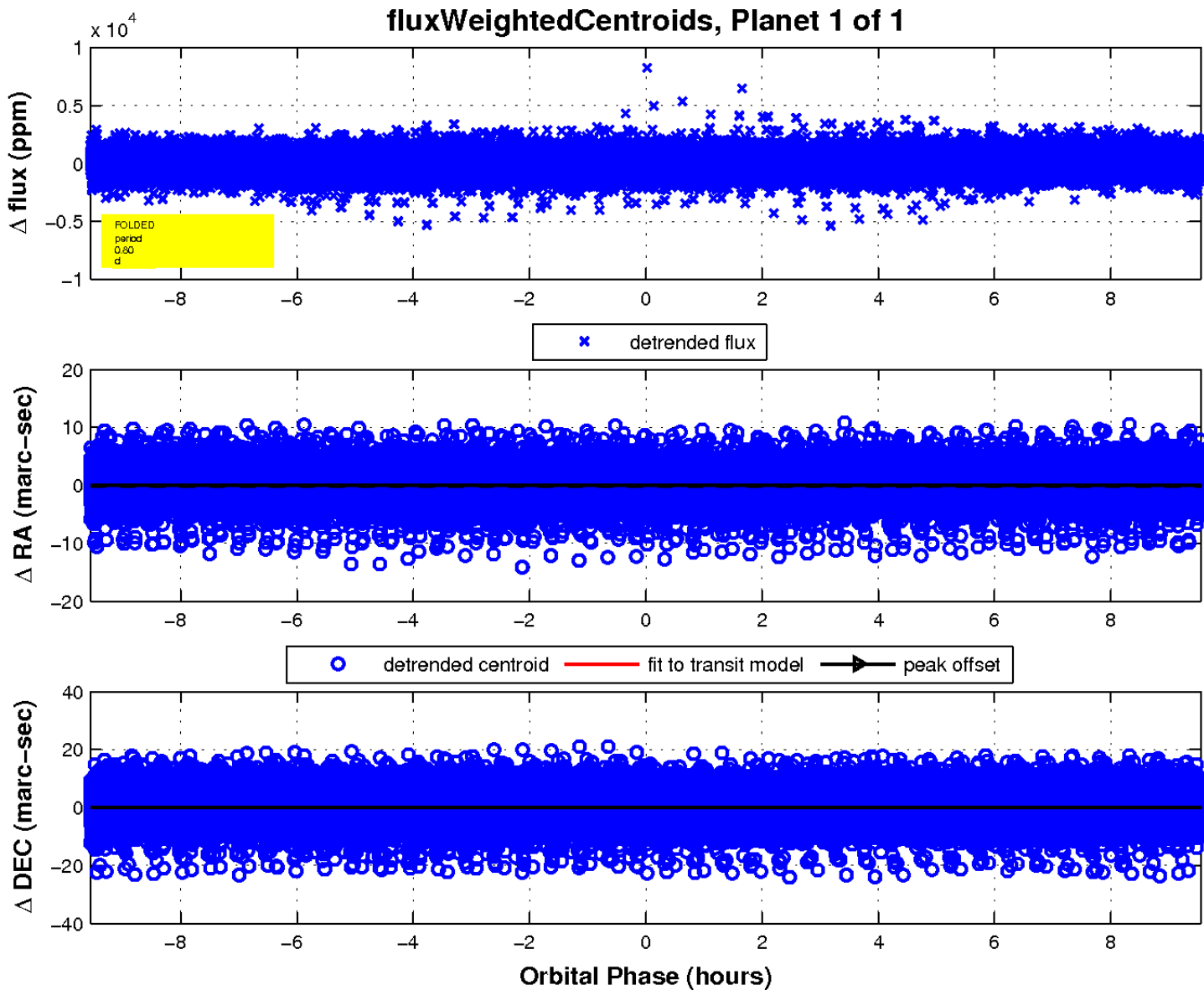
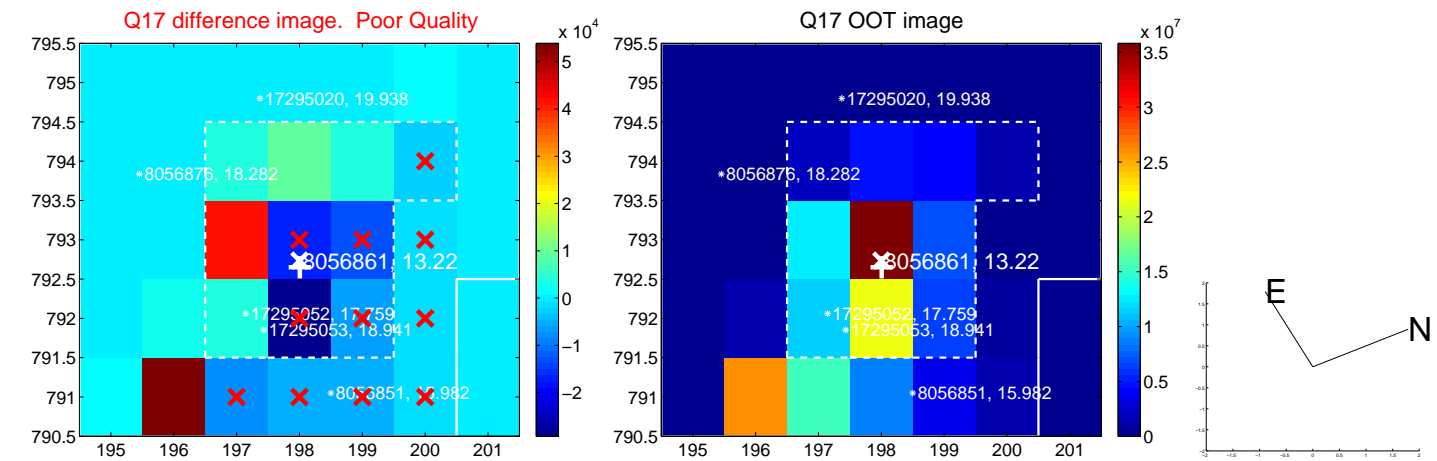
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white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination

