

KIC 006065678

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})
006065678-01	OBS	No	3.987375	132.375384	359.5	12.973	10.5	11.6	1.00	5780	2.08	412.75

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006065678-01	OBS	FP	0.00	1	0	1	0	SWEET_NTL—LPP_DV—MOD_NONUNIQ_DV—CENT_RESOLVED_OFFSET—HALO_GHOST

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.

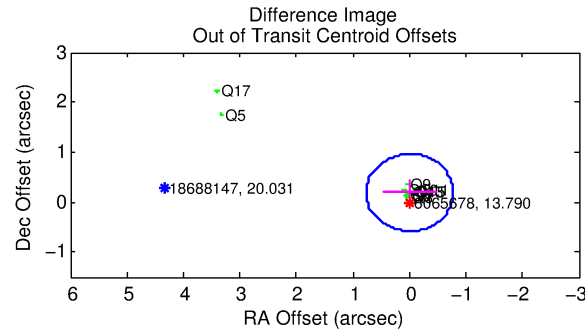
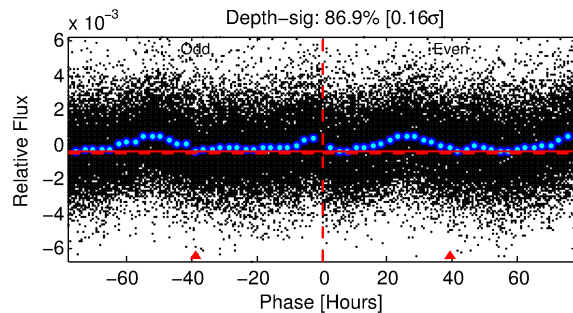
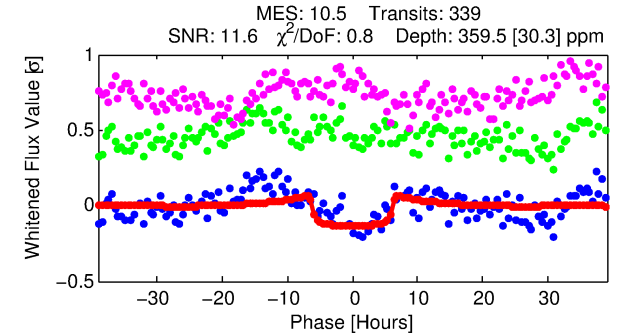
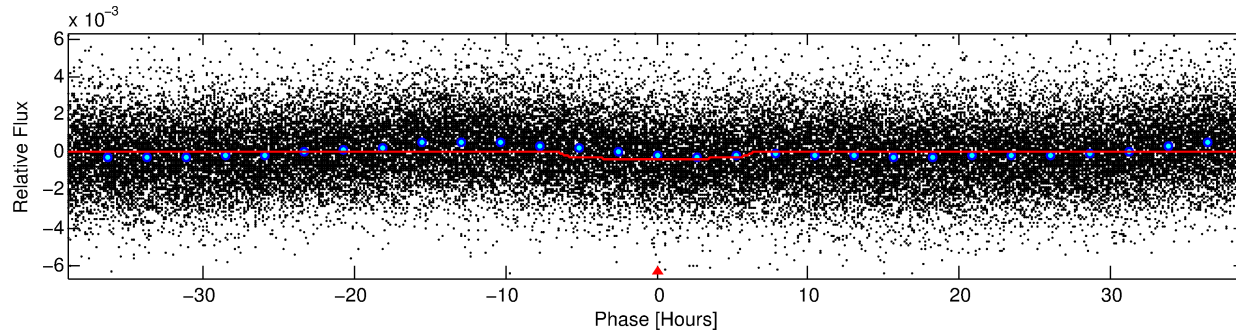
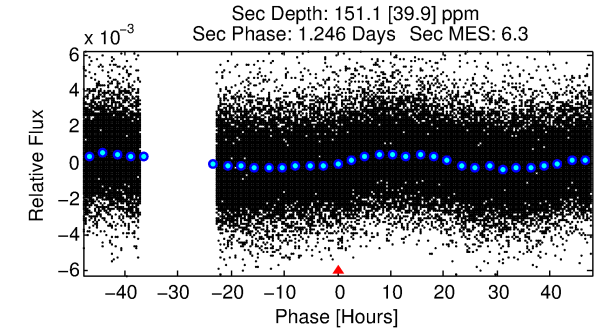
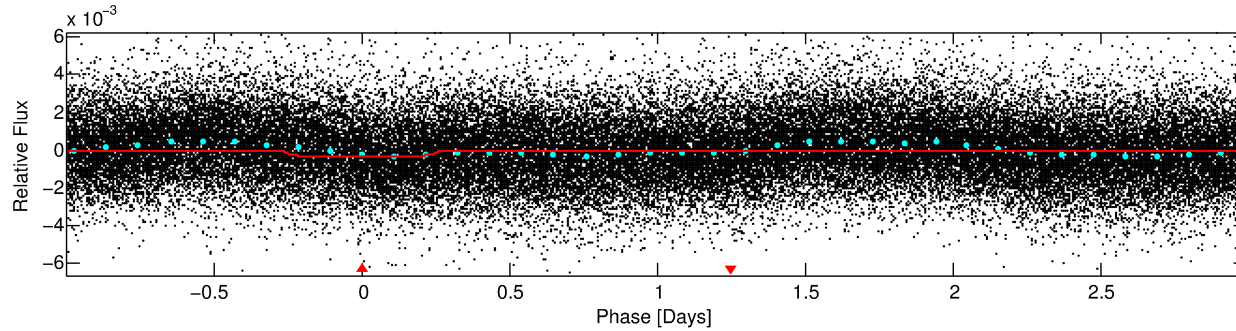
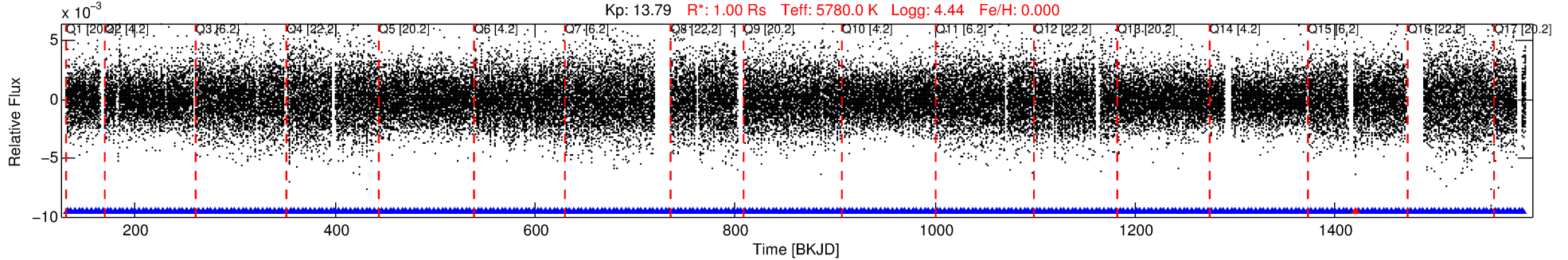
Ephemeris Match Information For 006065678-01

No Significant Match Found

DV One-Page Summary

KIC: 6065678 Candidate: 1 of 1 Period: 3.987 d

Kp: 13.79 R*: 1.00 Rs Teff: 5780.0 K Logg: 4.44 Fe/H: 0.000



DV Fit Results:

Period = 3.98738 [0.00005] d
Epoch = 132.3754 [0.0095] BKJD
Rp/R* = 0.0191 [0.0035]
a/R* = 1.77 [0.97]
b = 0.78 [0.41]
Seff = 412.75 [0.01]
Teq = 1149 [0] K
Rp = 2.08 [0.38] Re
a = 0.0492 [0.0000] AU
Ag = 46.34 [21.01] [2.16σ]
Teff = 4636 [526] K [6.63σ]

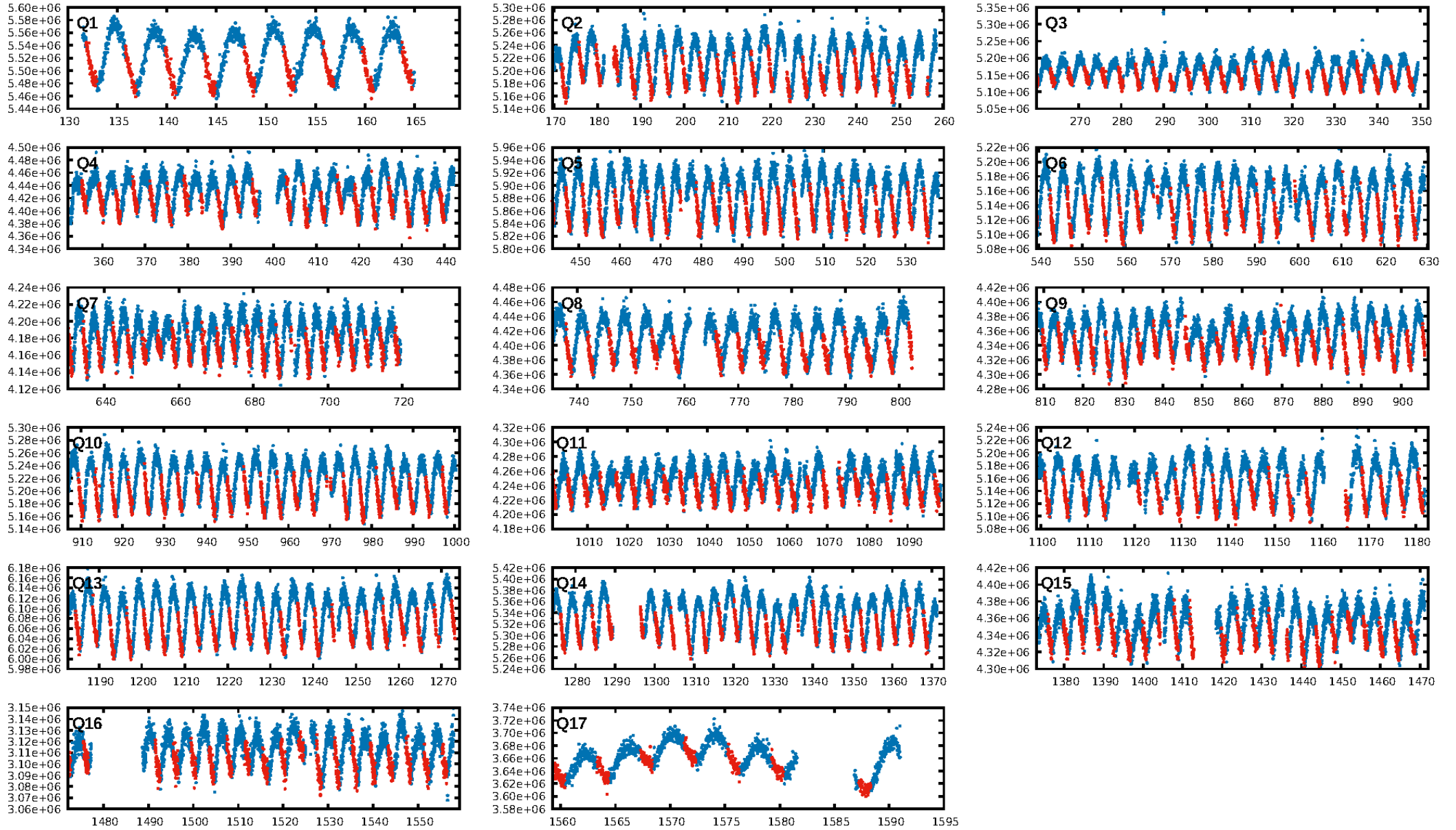
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 7.38e-24
RollingBand-fgt: 1.00 [322/323]
GhostDiagnostic-chr: -0.1631
Centroid-sig: 0.0%
Centroid-so: 3.309 arcsec [4.32σ]
OotOffset-rm: 0.189 arcsec [0.74σ]
KicOffset-rm: 13.086 arcsec [25.35σ]
OotOffset-st: 2/4/0/4 [10]
KicOffset-st: 2/4/0/5 [11]
DiffImageQuality-fgm: 0.55 [6/11]
DiffImageOverlap-fno: 1.00 [17/17]

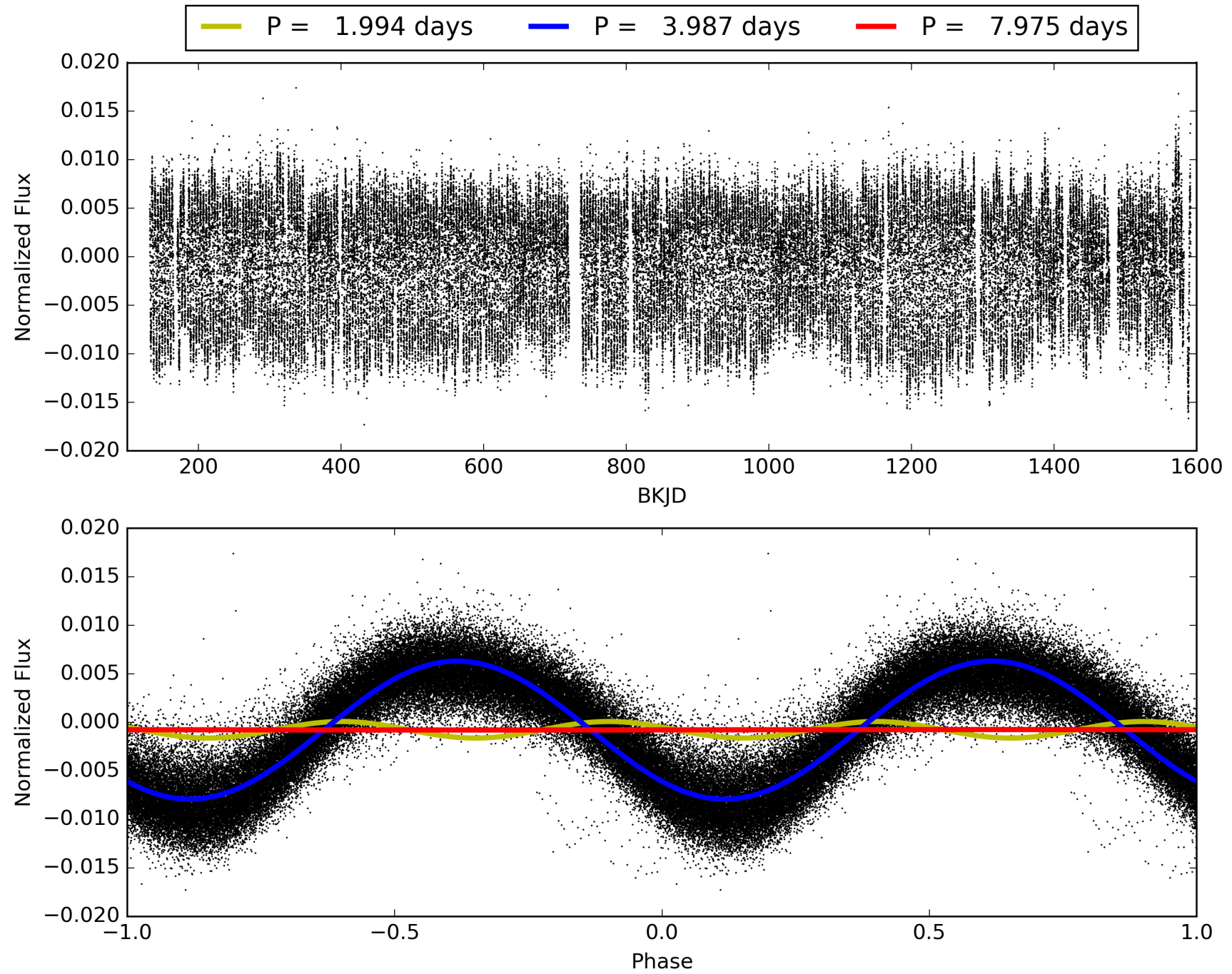
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 02:55:39 Z

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

TCE 006065678-01, PDC Light Curves

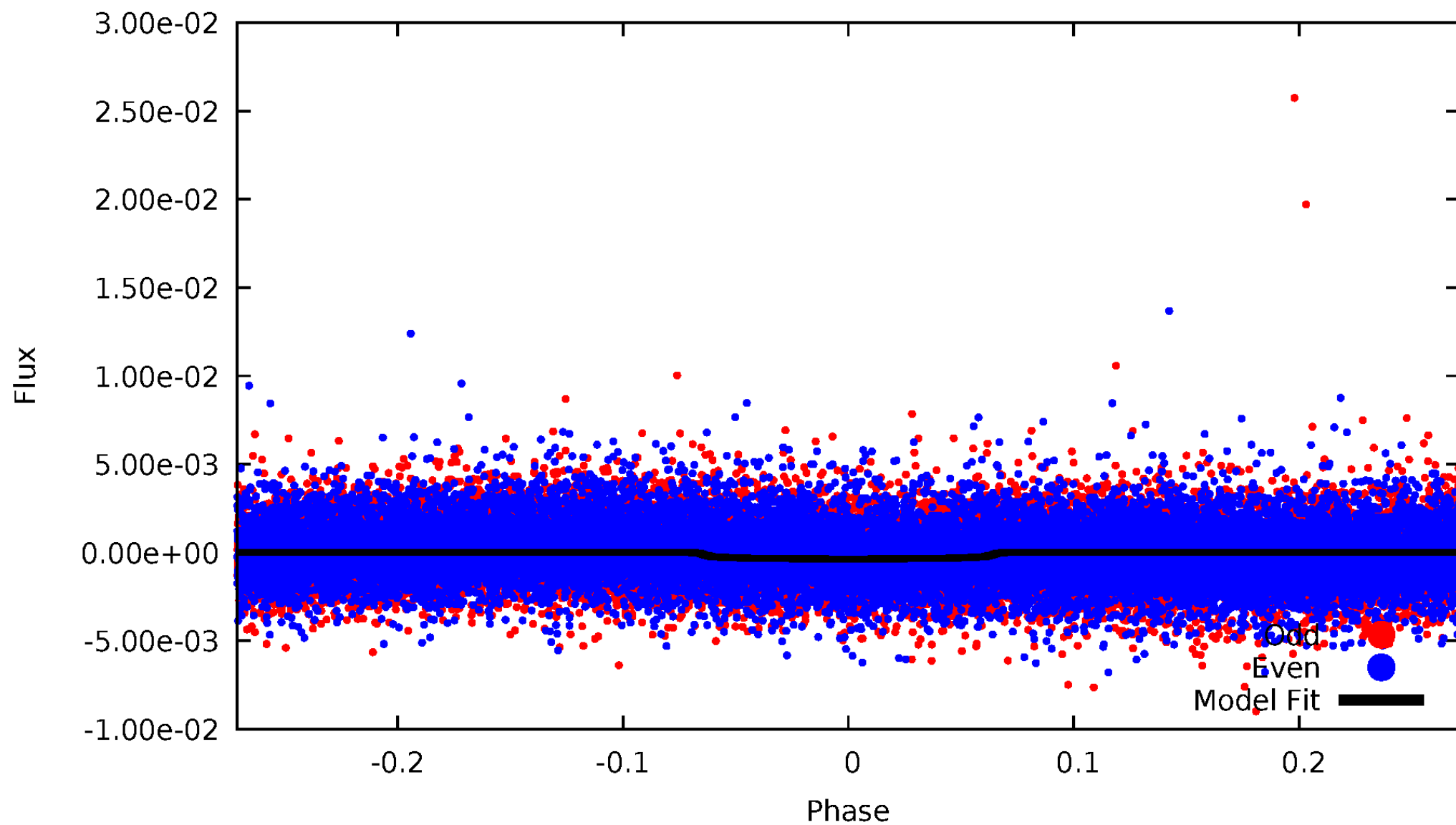


TCE 006065678-01



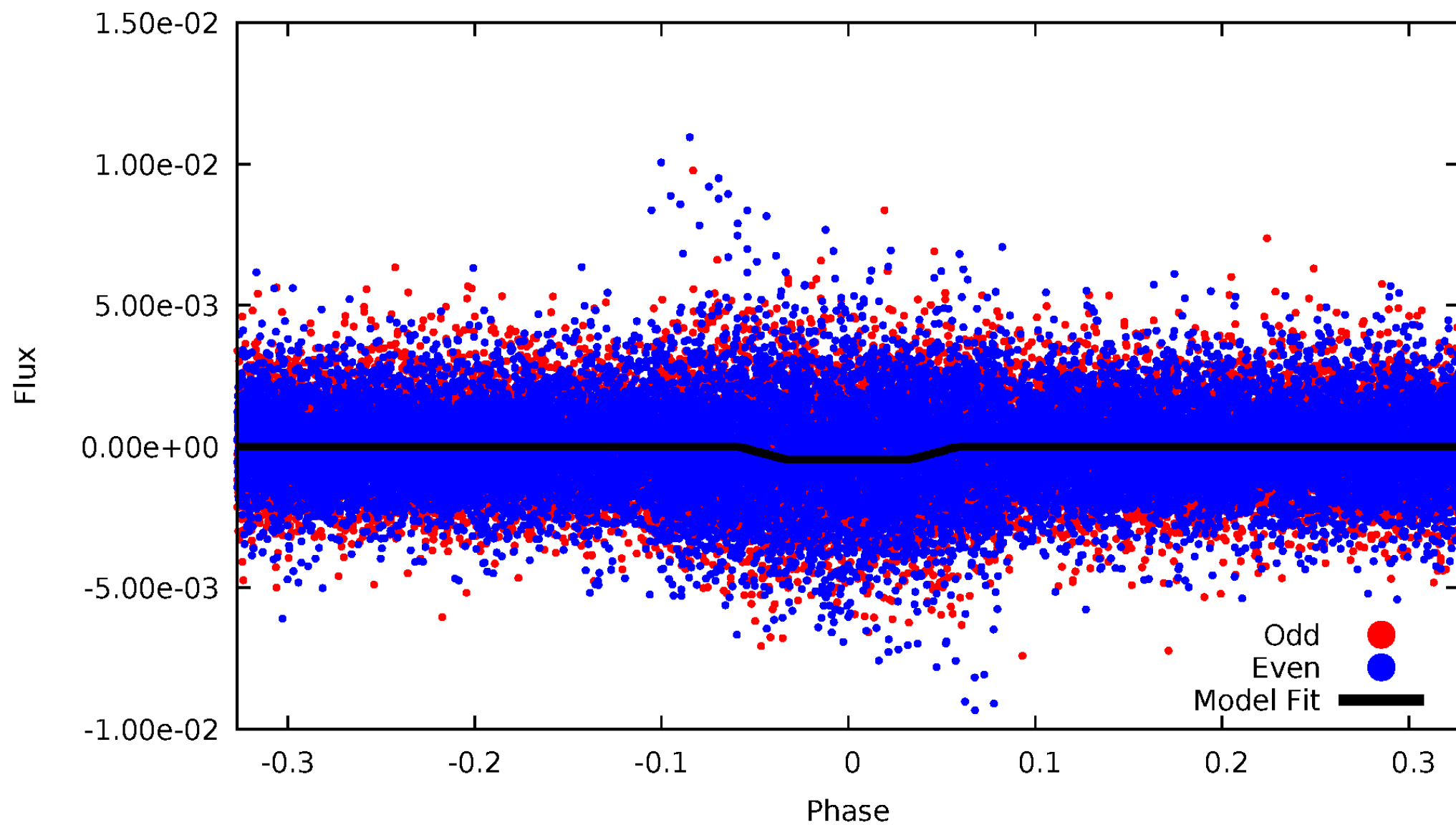
DV Odd/Even

TCE 006065678-01



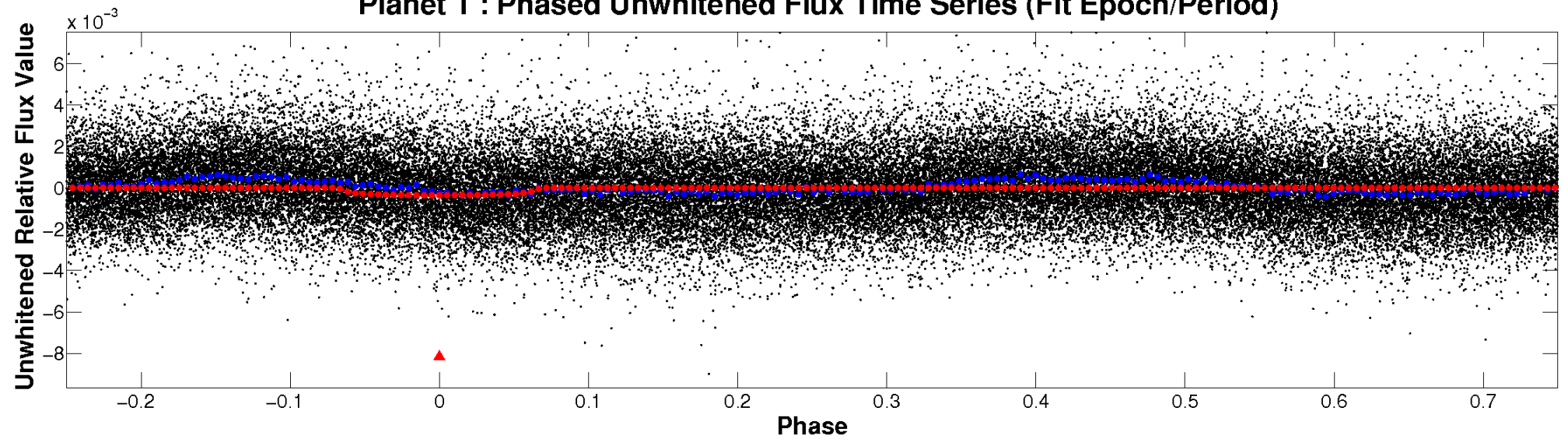
ALT Odd/Even

TCE 006065678-01

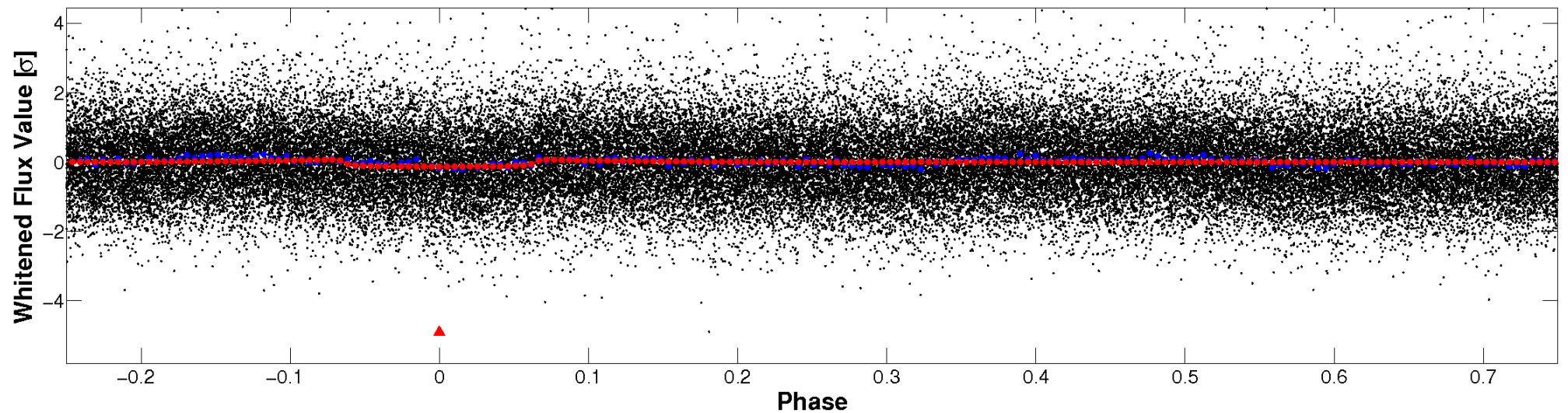


Non-Whitened Vs. Whitened Light Curve

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

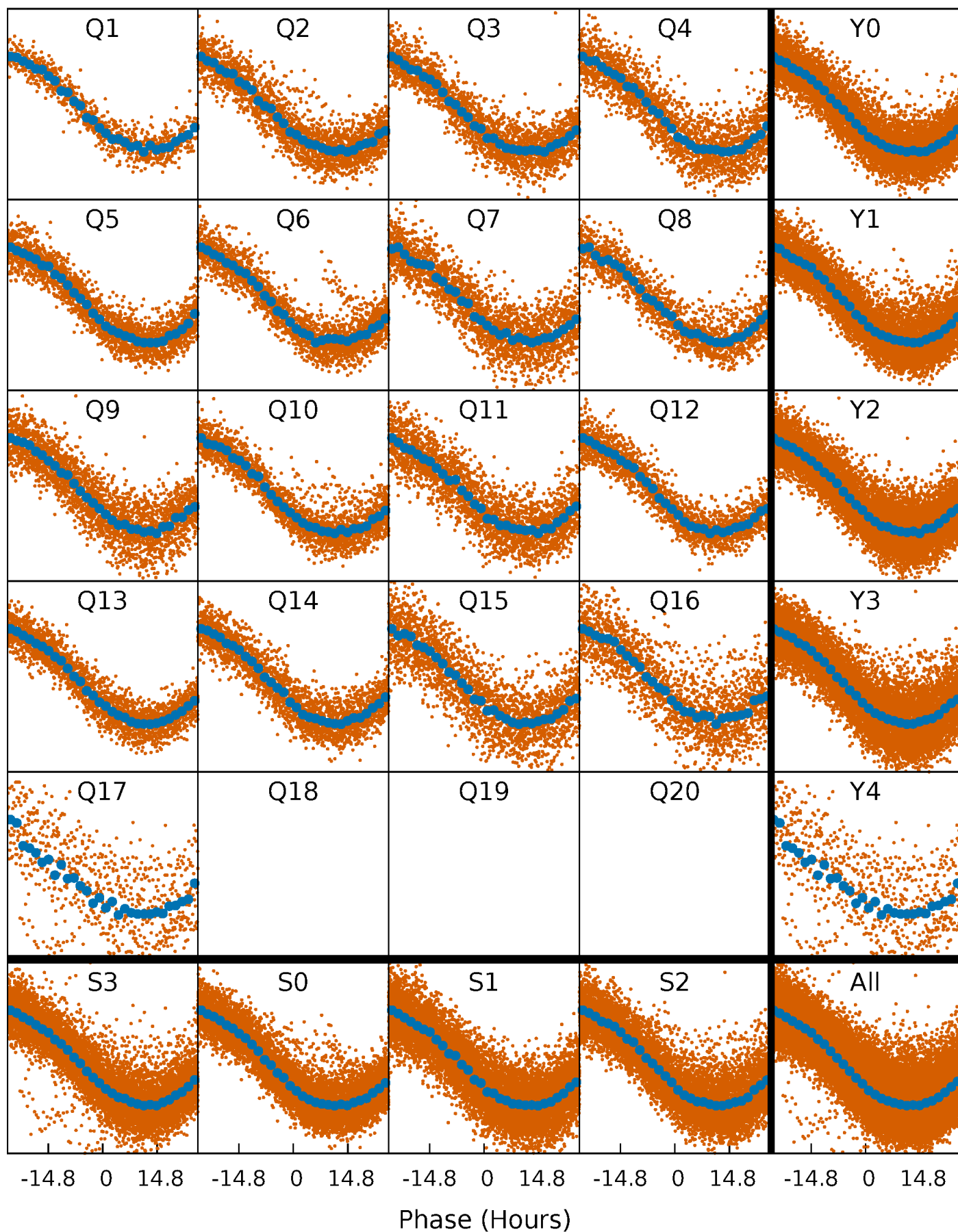


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



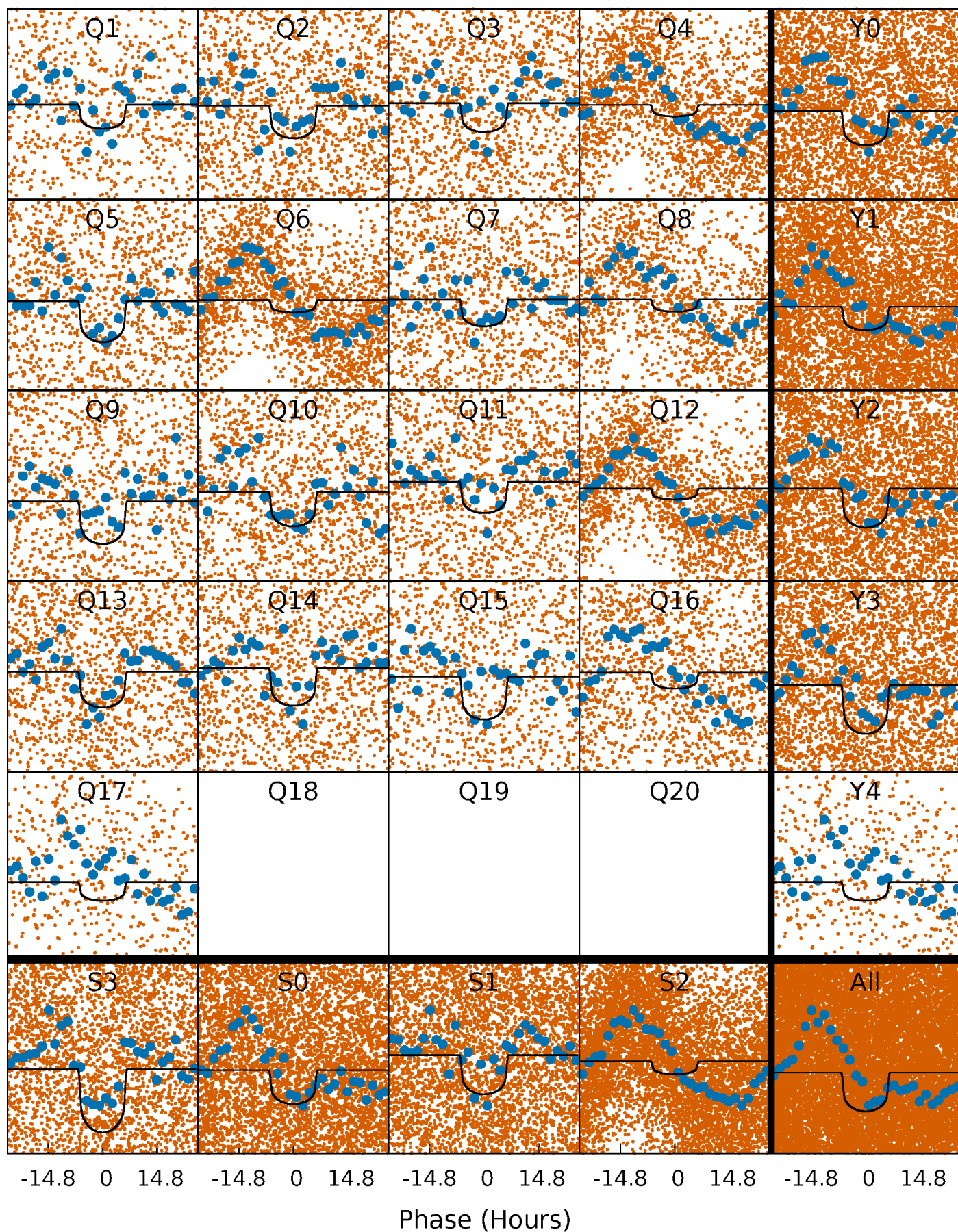
PDC Quarter-Phased Transit Curves

TCE 006065678-01 P= 3.987375 Days $T_0=132.375384$ (BKJD)



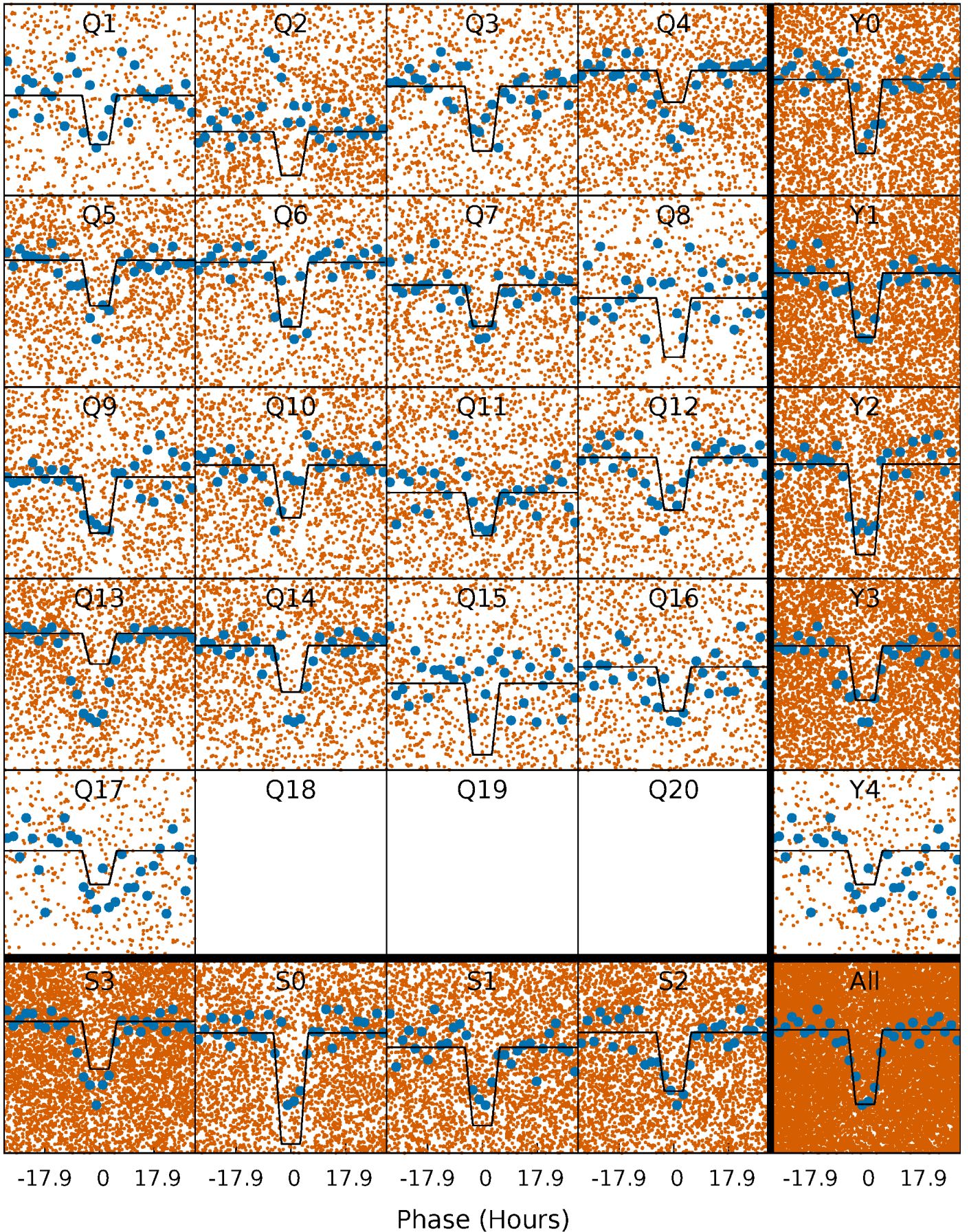
DV Quarter-Phased Transit Curves

TCE 006065678-01 P= 3.987375 Days $T_0=132.375384$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

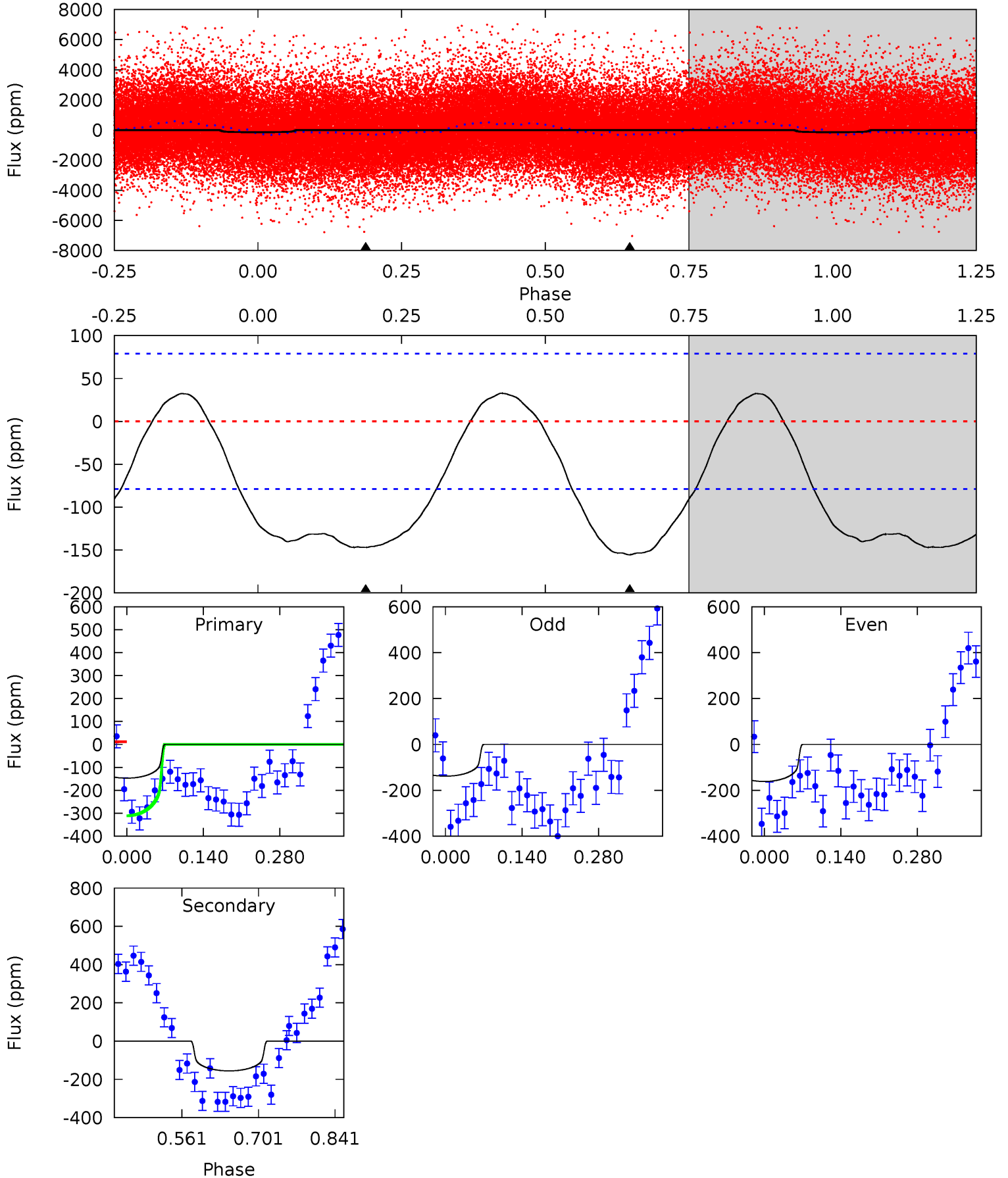
TCE 006065678-01 P= 3.987310 Days $T_0=132.415835$ (BKJD)



DV Model-Shift Uniqueness Test

006065678-01, P = 3.987375 Days, E = 128.388009 Days

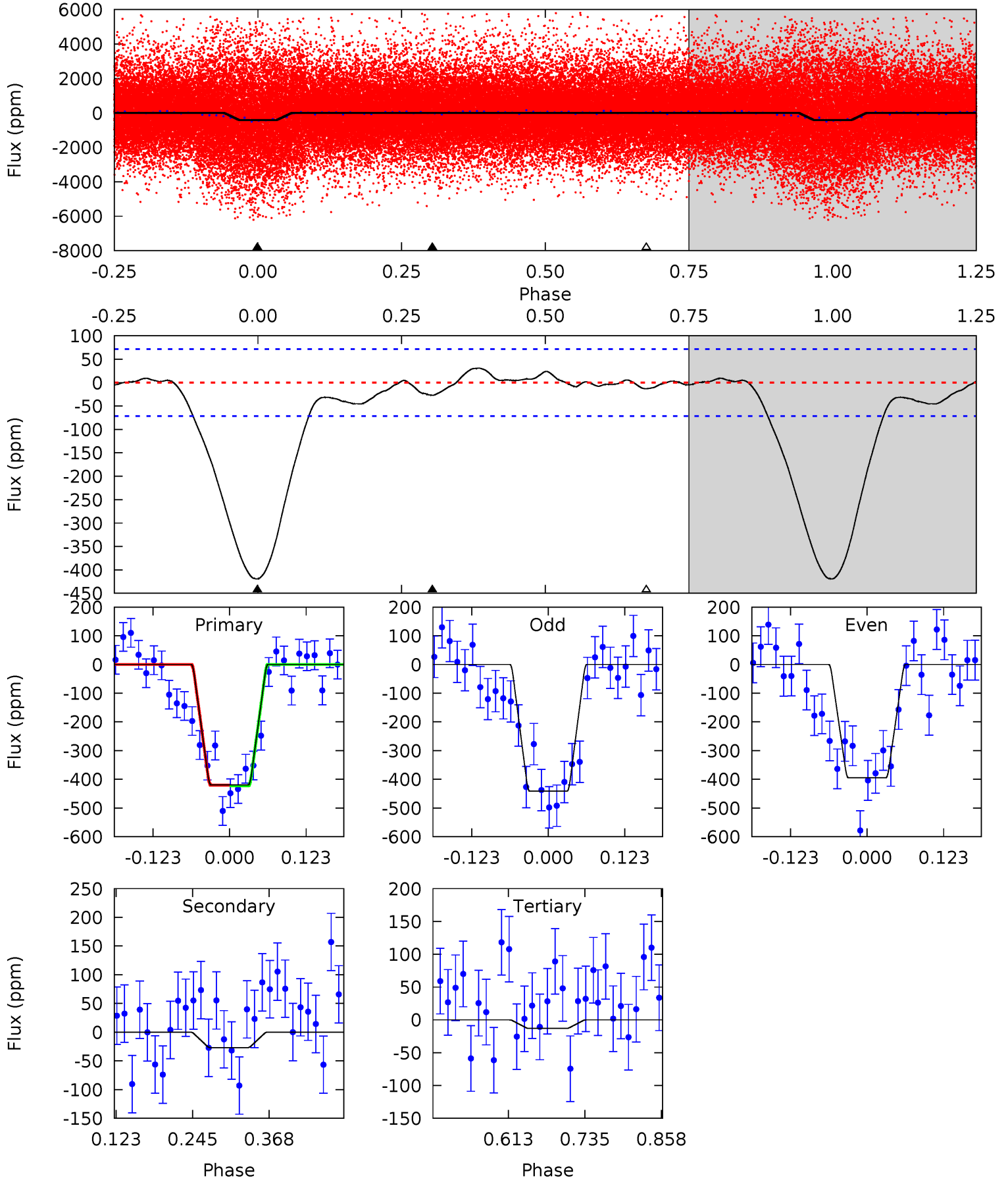
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.38	8.86	0	0	4.49	1.48	3.04	8.38	8.38	8.86	8.86	0.66	0.80	0.17	8.77



Alt Model-Shift Uniqueness Test

006065678-01, P = 3.987310 Days, E = 128.428525 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
26.5	1.70	0.82	0	4.52	1.54	0.97	25.7	26.5	0.87	1.70	1.47	1.20	0.07	0.07



Stellar Parameters For KIC 006065678

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5780^{+1}_{-1}	$4.438^{+1.000}_{-1.000}$	$0.000^{+1.000}_{-1.000}$	$1.000^{+1.000}_{-1.000}$	$-1.000^{+1.000}_{-1.000}$	$-1.000^{+1.000}_{-1.000}$
	+0%/-0%	+23%/-23%	+inf%/-inf%	+100%/-100%	+100%/-100%	+100%/-100%
Source	Solar	Solar	Solar	Solar		

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

Secondary Eclipse Parameters for KIC 006065678-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-156 ± 18	$2.07^{+0.48}_{-0.41}$	1614^{+79}_{-77}	4797^{+487}_{-365}	48^{+28}_{-16}
Alt.	-27 ± 16	$2.35^{+0.42}_{-0.41}$	1612^{+77}_{-73}	3344^{+333}_{-470}	$6.438^{+5.317}_{-4.010}$

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

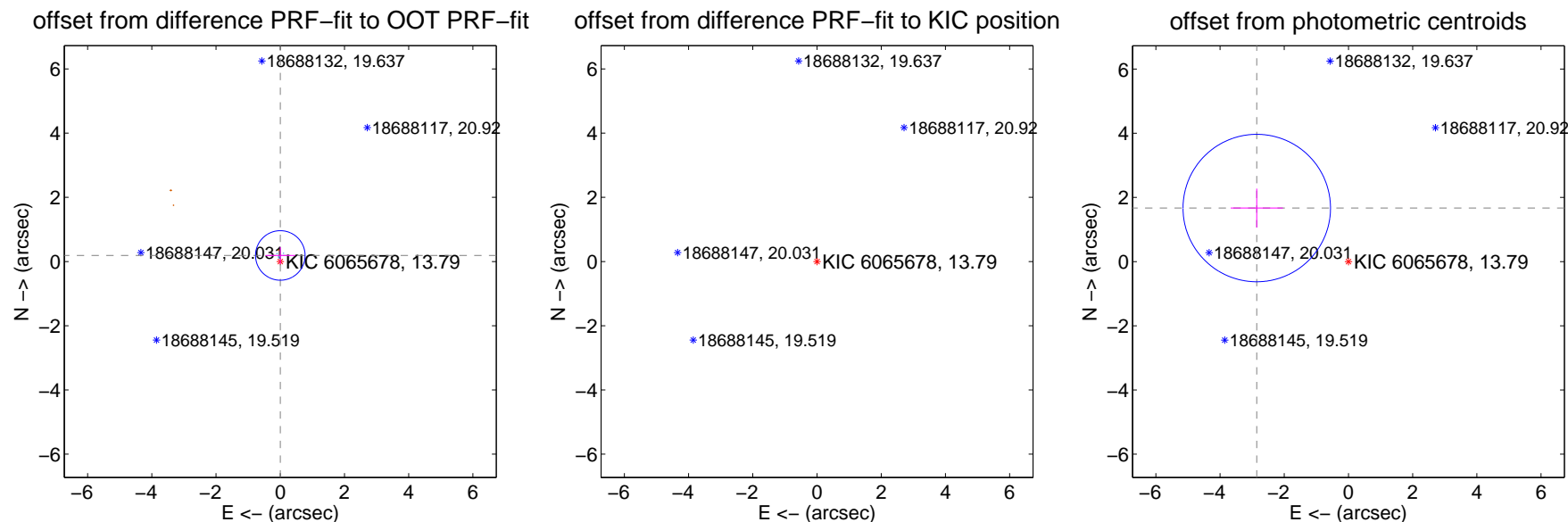
DV Centroid Data

Supplemental centroid analysis for 006065678-01. Kepler magnitude: 13.79. Transit SNR 11.63

There are 6 quarters with good PRF difference image offsets

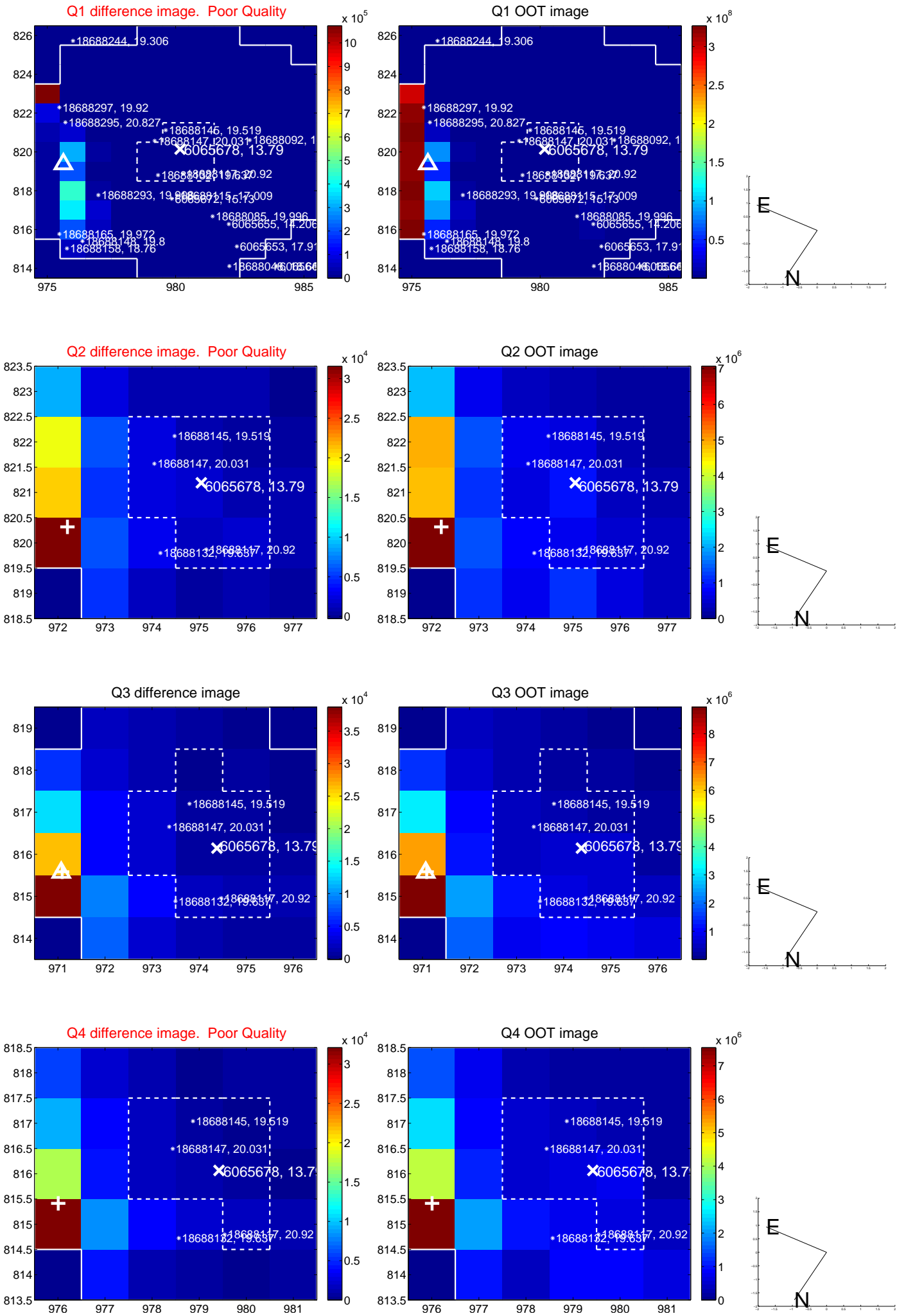
The OOT PRF centroid is offset from the target star catalog position by about 8.67 arcsec so the offset from difference PRF-fit to OOT-fit may be invalid.

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.189 ± 0.257	0.74	-0.001 ± 0.462	0.189 ± 0.260
PRF-fit source offset from KIC position	13.086 ± 0.516	25.35	10.077 ± 0.479	8.347 ± 0.282
photometric centroid source offset	3.31 ± 0.77	4.32	2.86 ± 0.81	1.67 ± 0.61

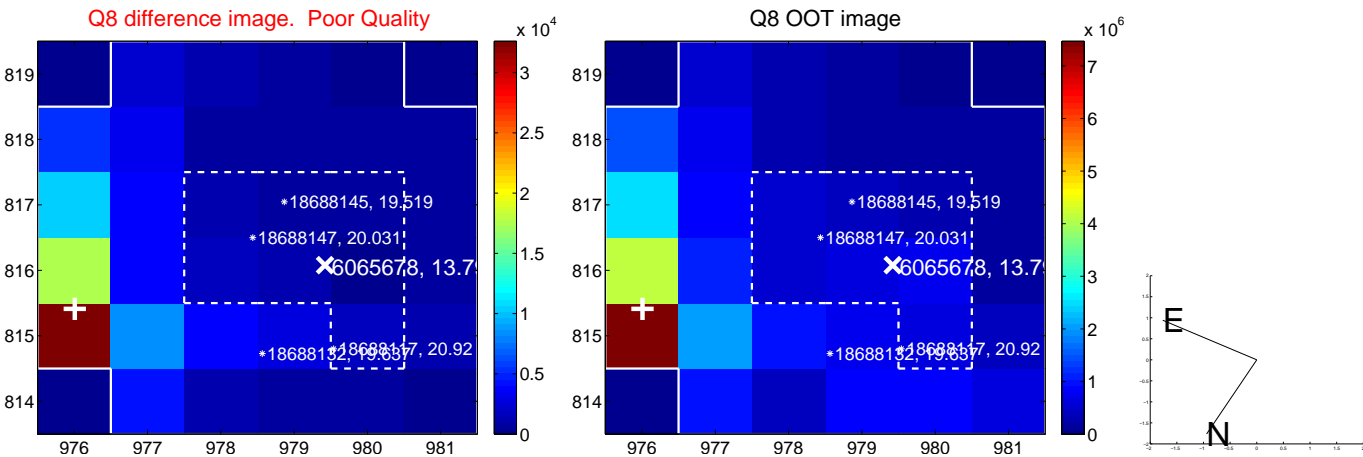
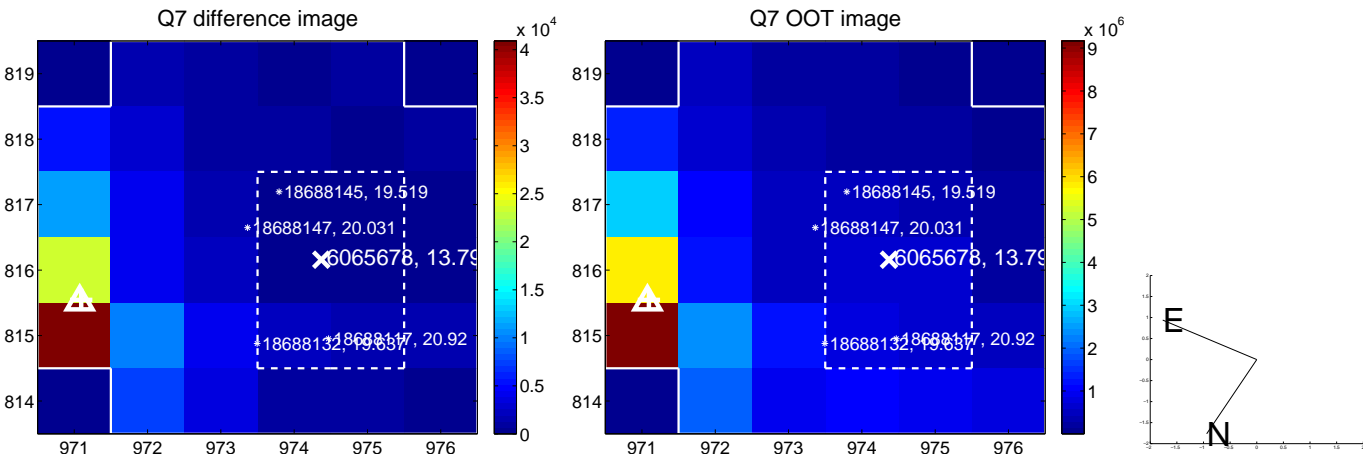
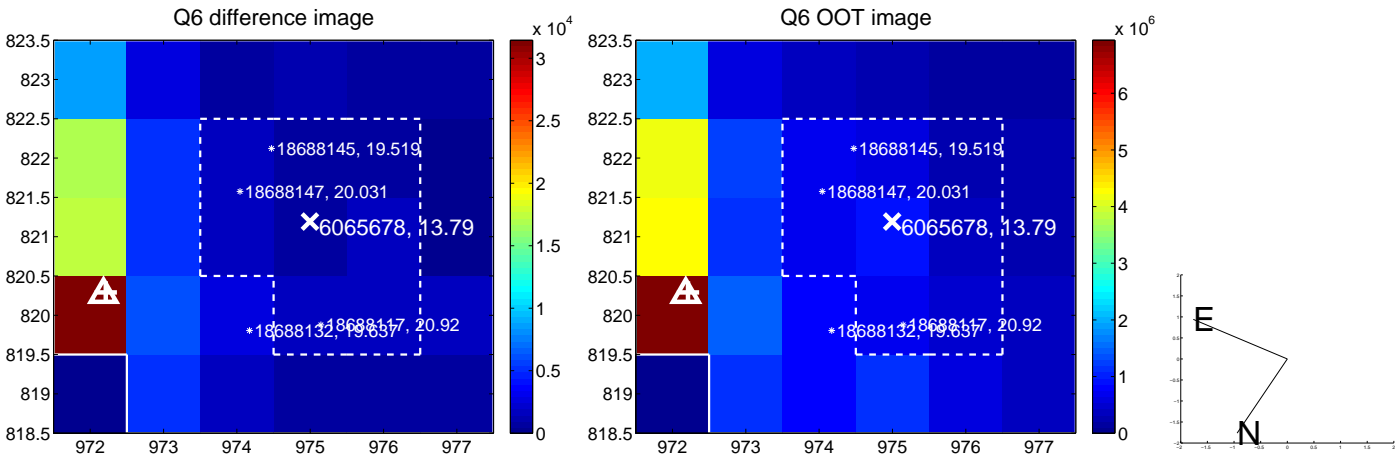
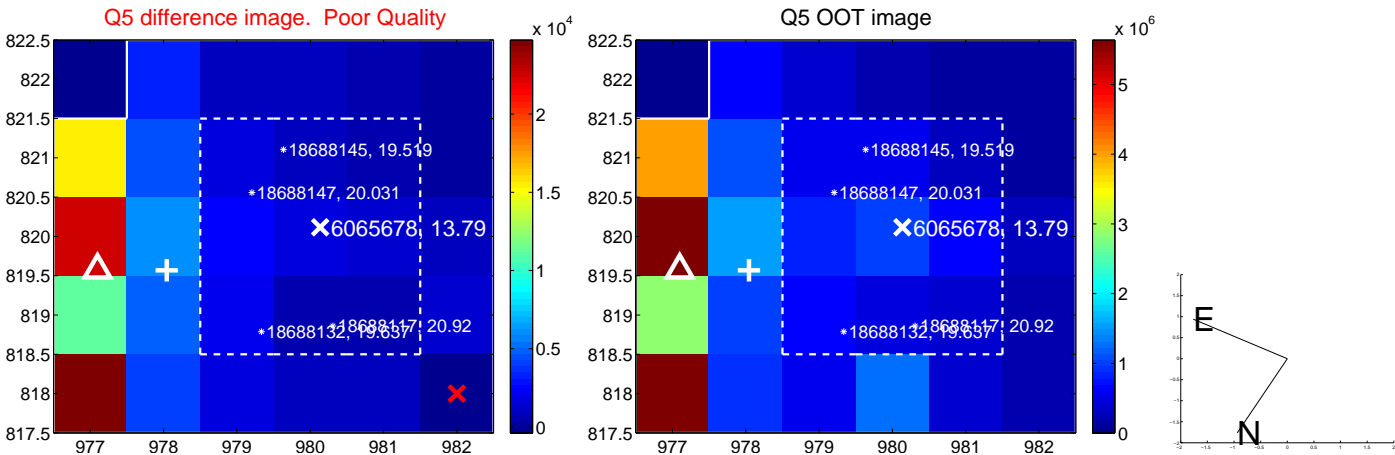


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

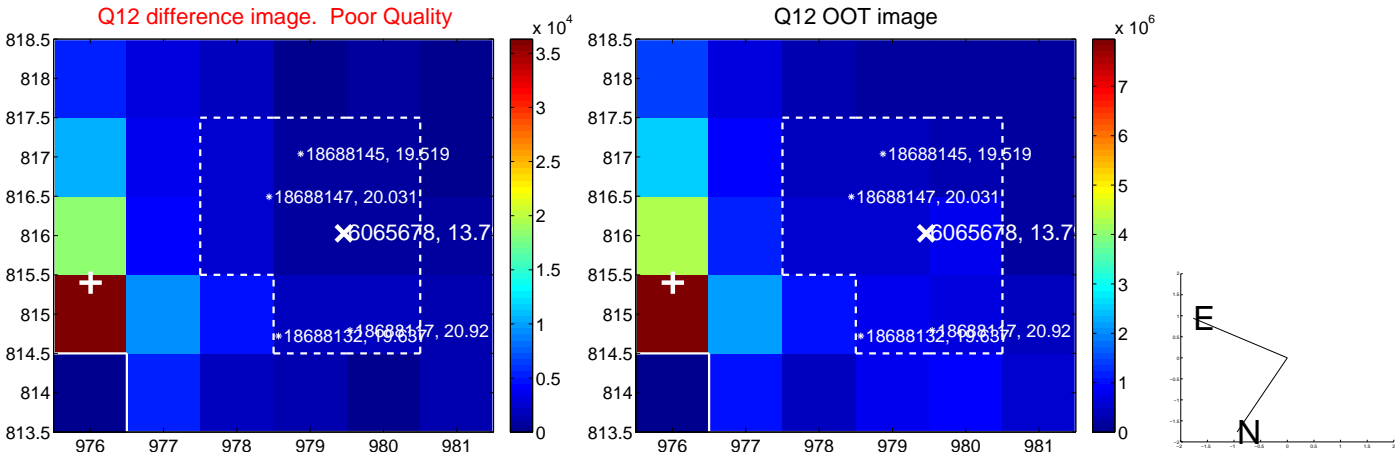
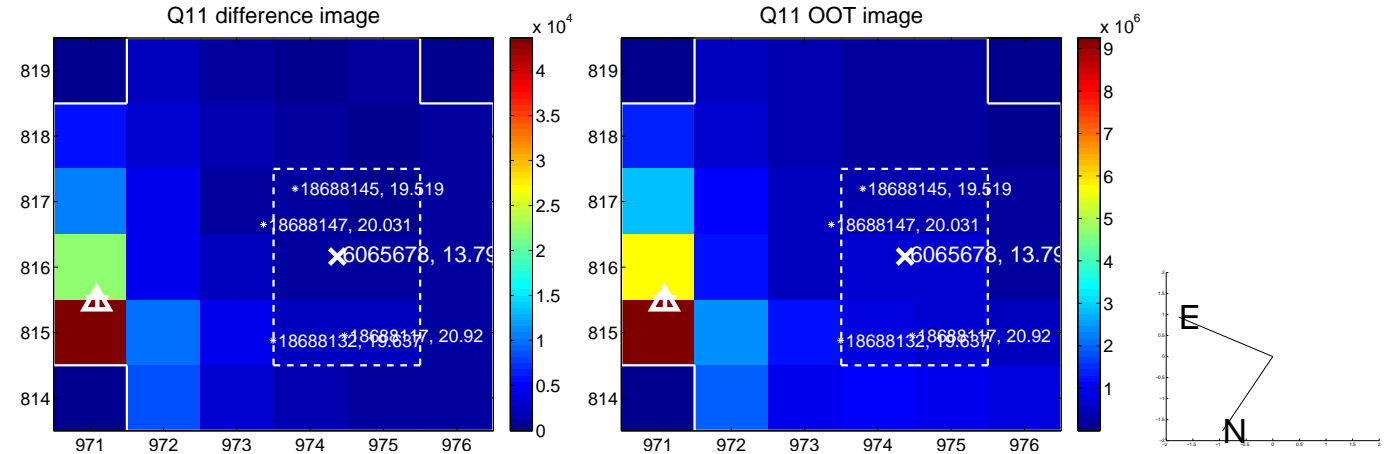
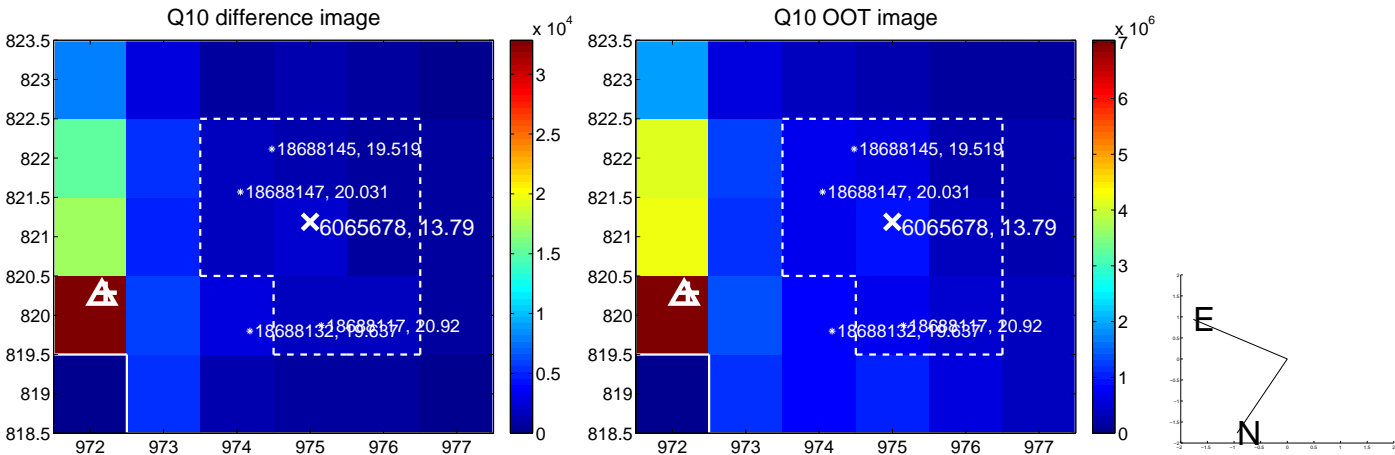
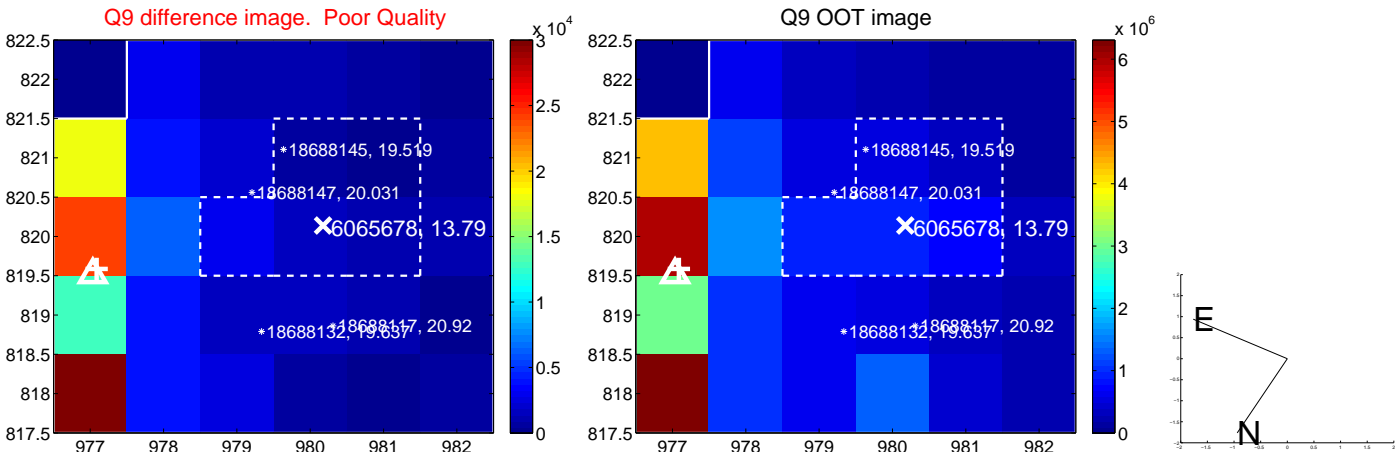
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



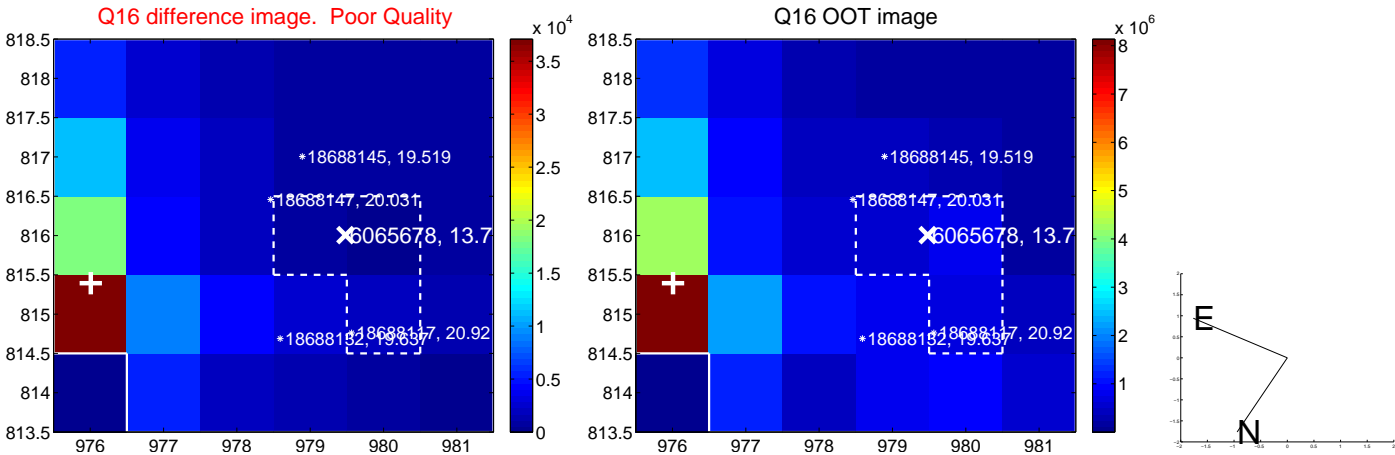
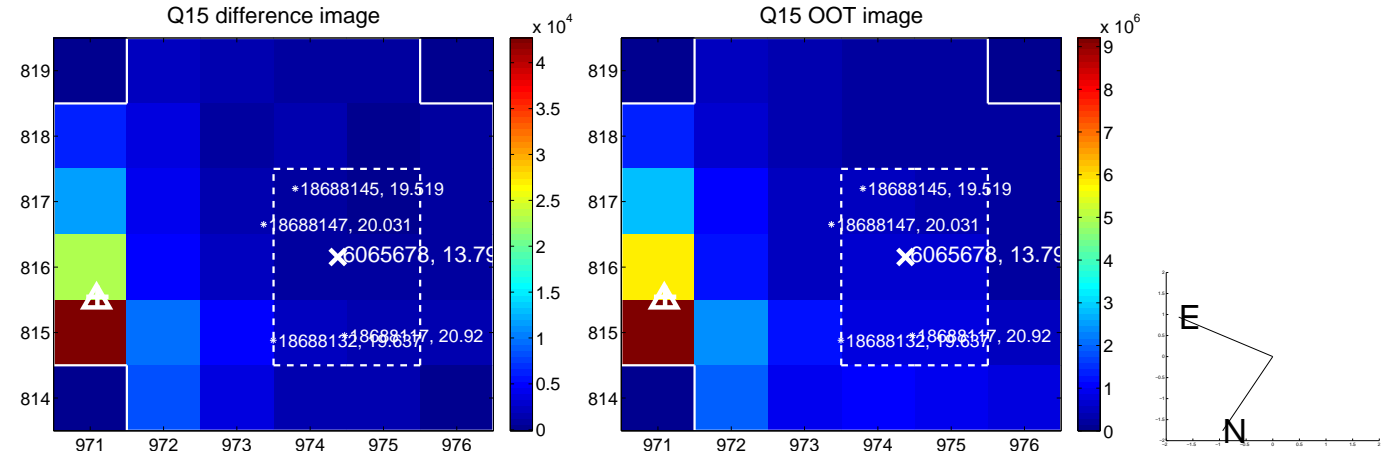
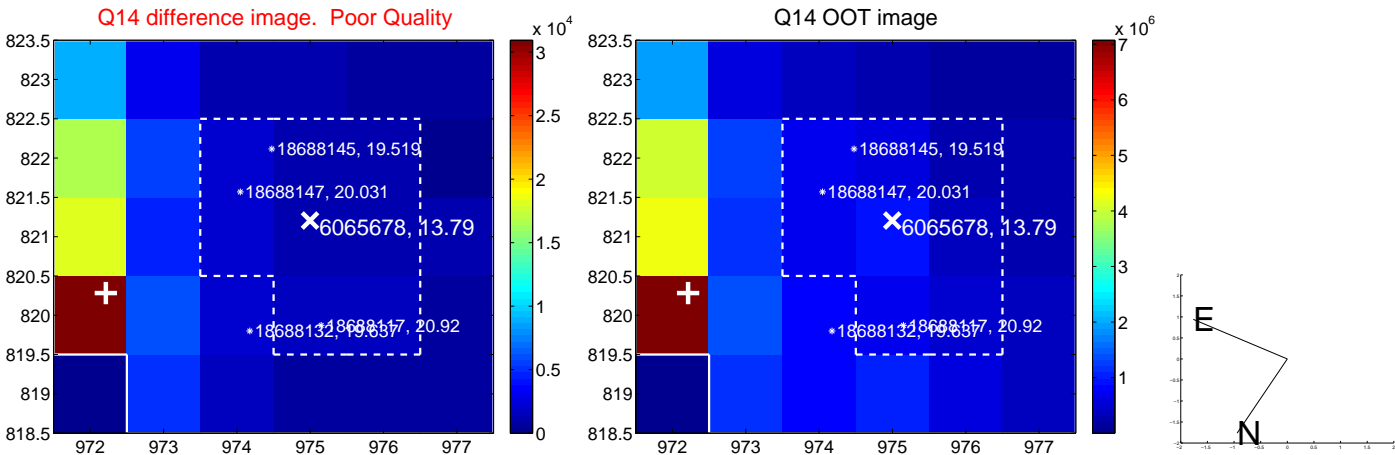
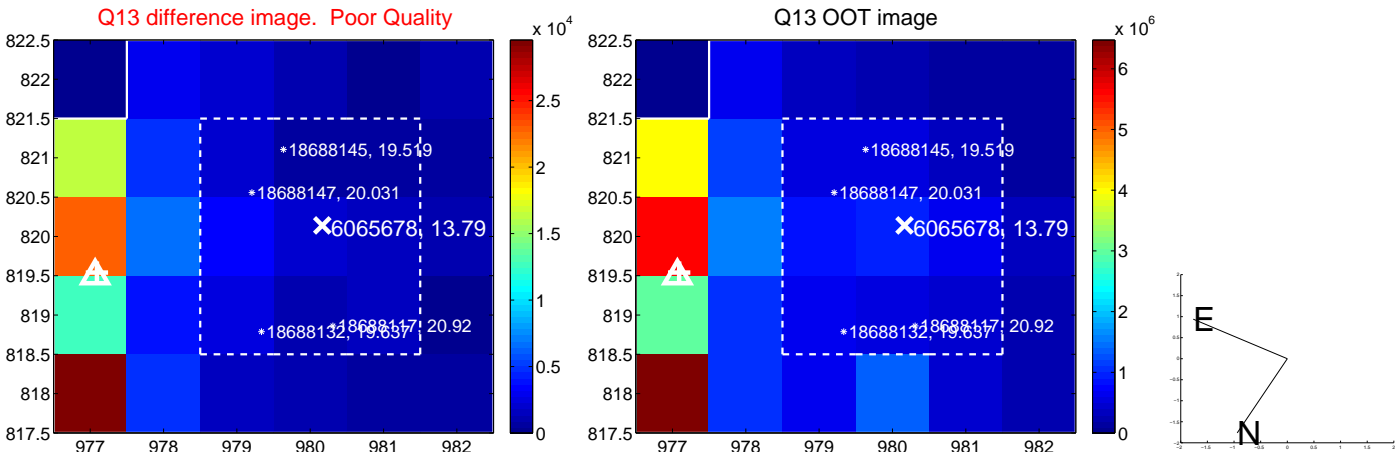
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



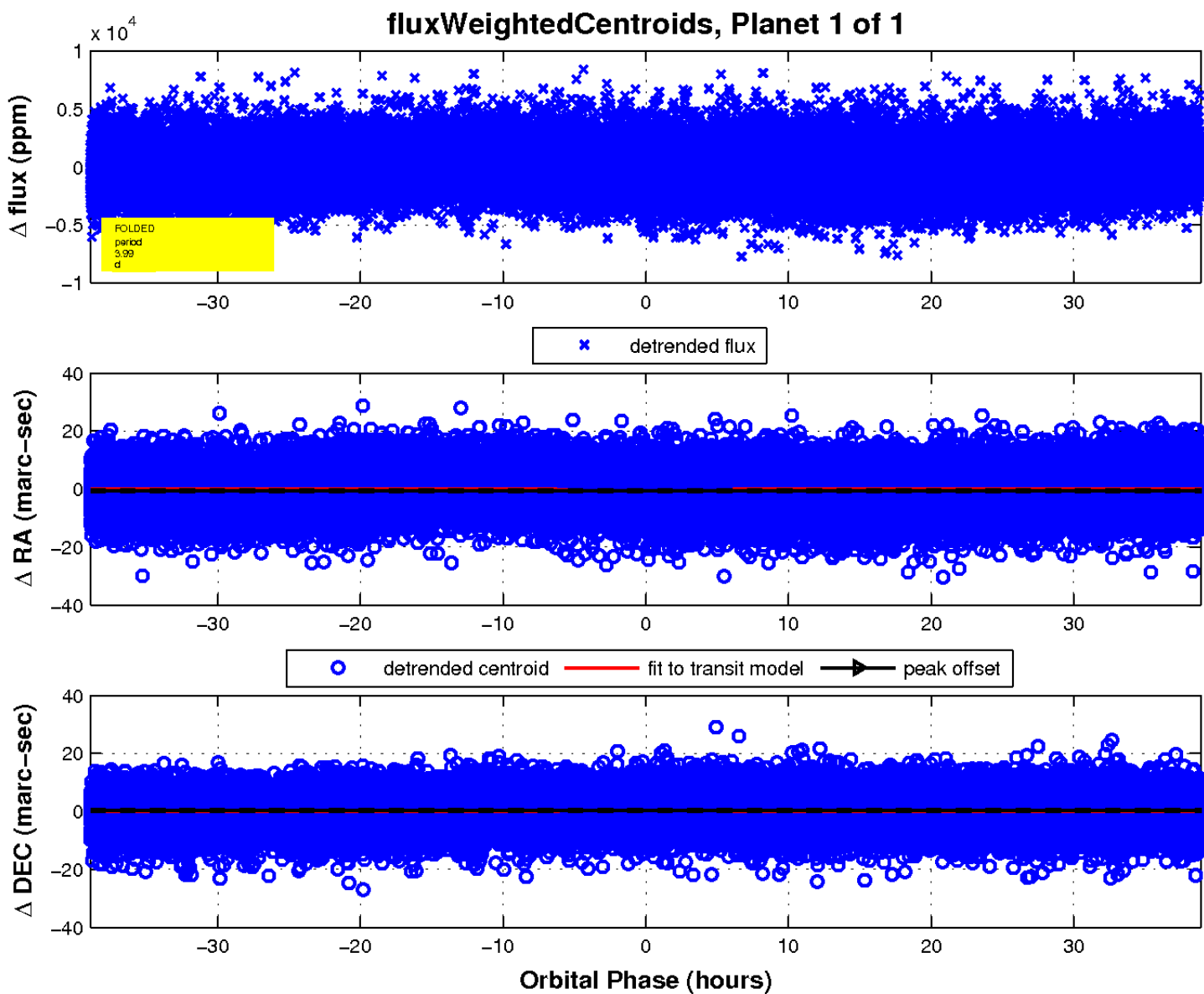
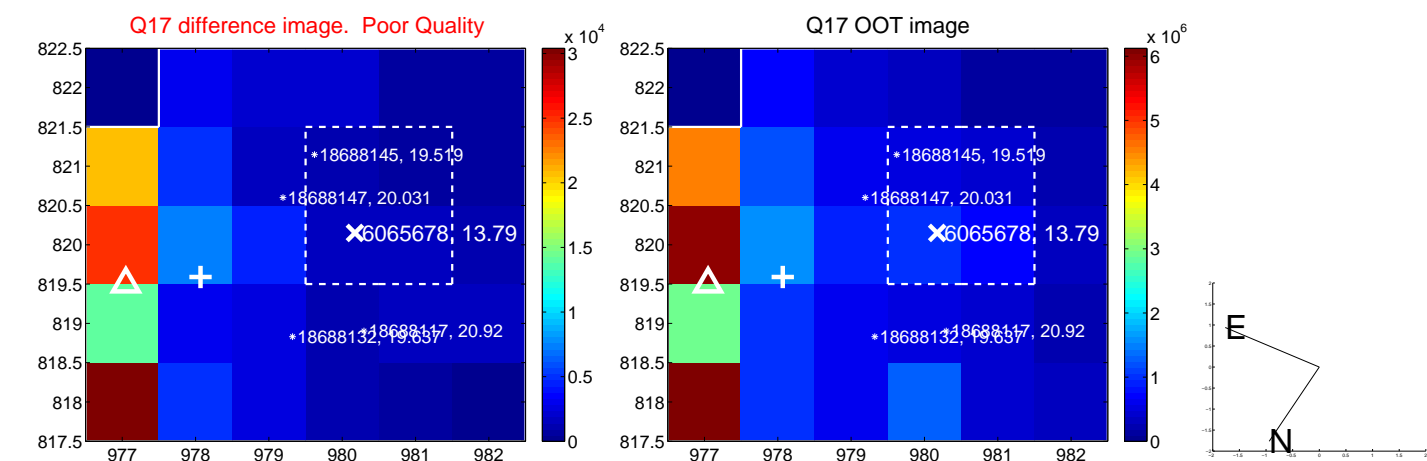
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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.



UKIRT Image

Declination

