

KIC 008007675

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})
008007675-01	OBS	6949.01	2.352459	131.934539	27.3	1.597	7.9	9.5	2.00	6749	1.22	5283.76

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008007675-01	OBS	FP	0.13	1	0	0	0	MOD_NONUNIQ_ALT

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

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

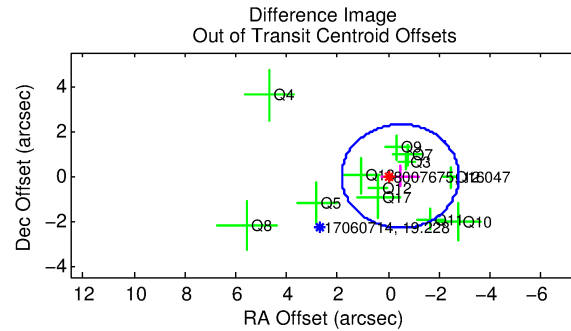
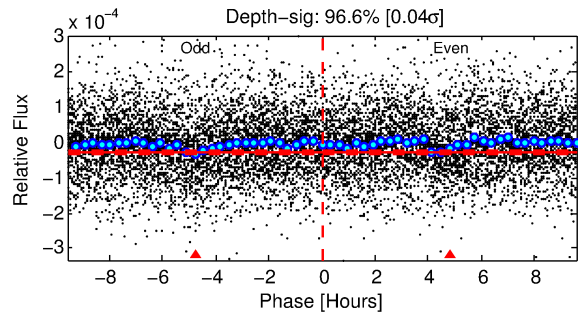
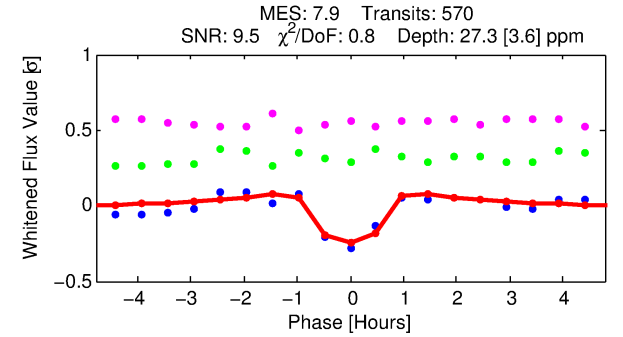
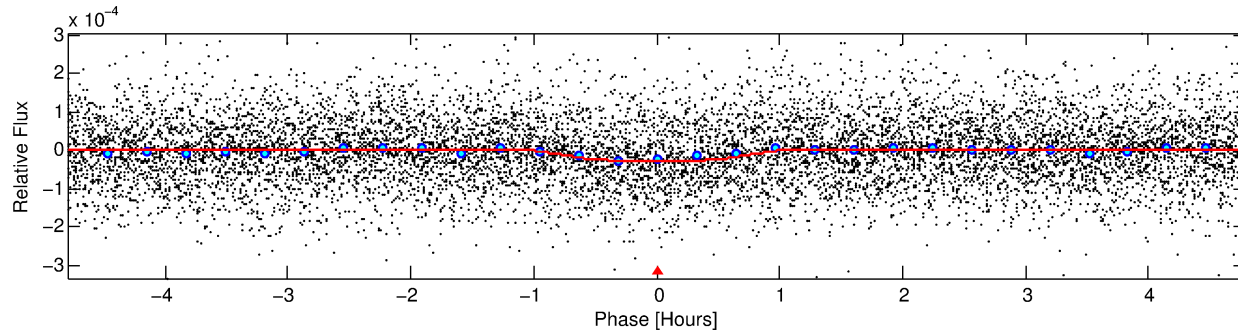
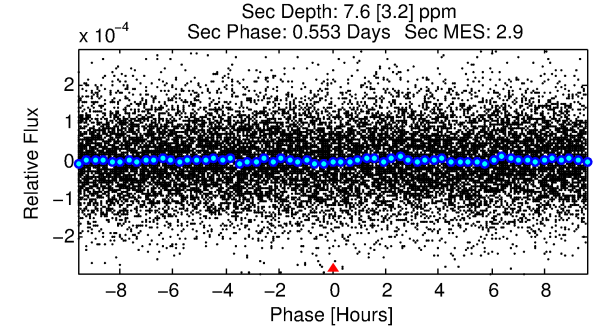
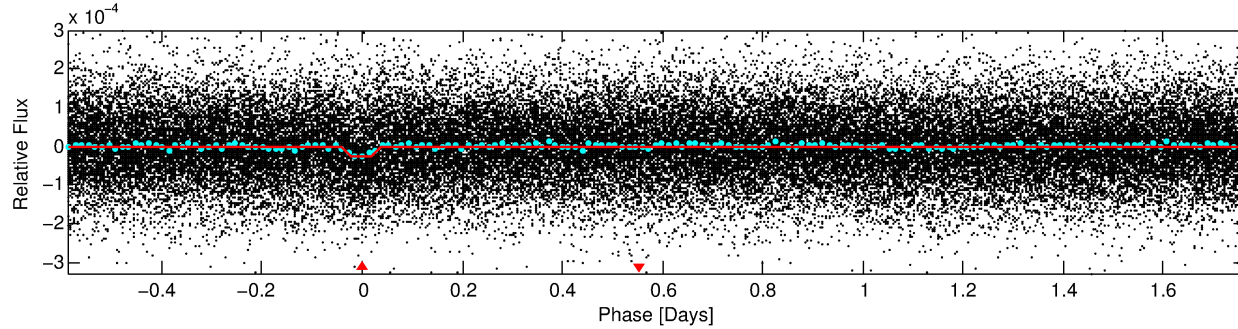
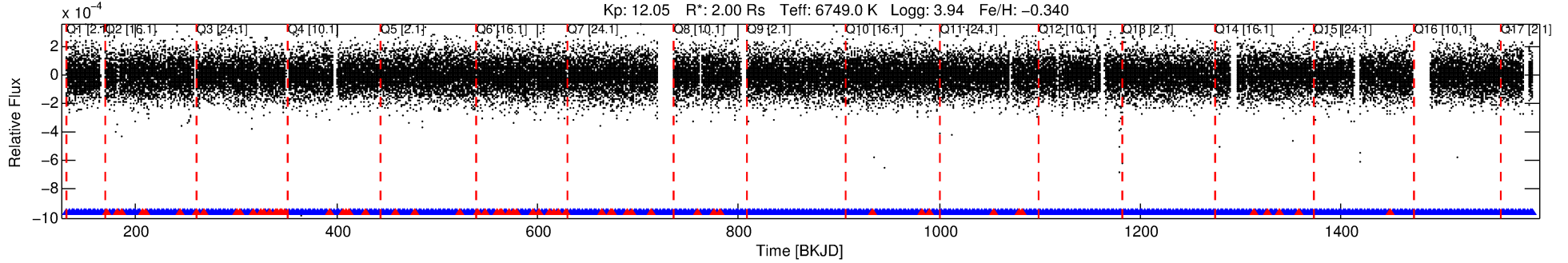
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008007675-01

No Significant Match Found

DV One-Page Summary

KIC: 8007675 Candidate: 1 of 1 Period: 2.352 d
KOI: K06949 Corr: No Ephemeris Match



DV Fit Results:

Period = 2.35246 [0.00001] d
Epoch = 131.9345 [0.0021] BKJD
Rp/R* = 0.0056 [0.0011]
a/R* = 5.16 [5.78]
b = 0.90 [0.25]
Seff = 5283.76 [2321.11]
Teff = 2174 [239] K
Rp = 1.22 [0.42] Re
a = 0.0376 [0.0100] AU
Ag = 3.95 [2.86] [1.03σ]
Teffp = 4739 [712] K [3.42σ]

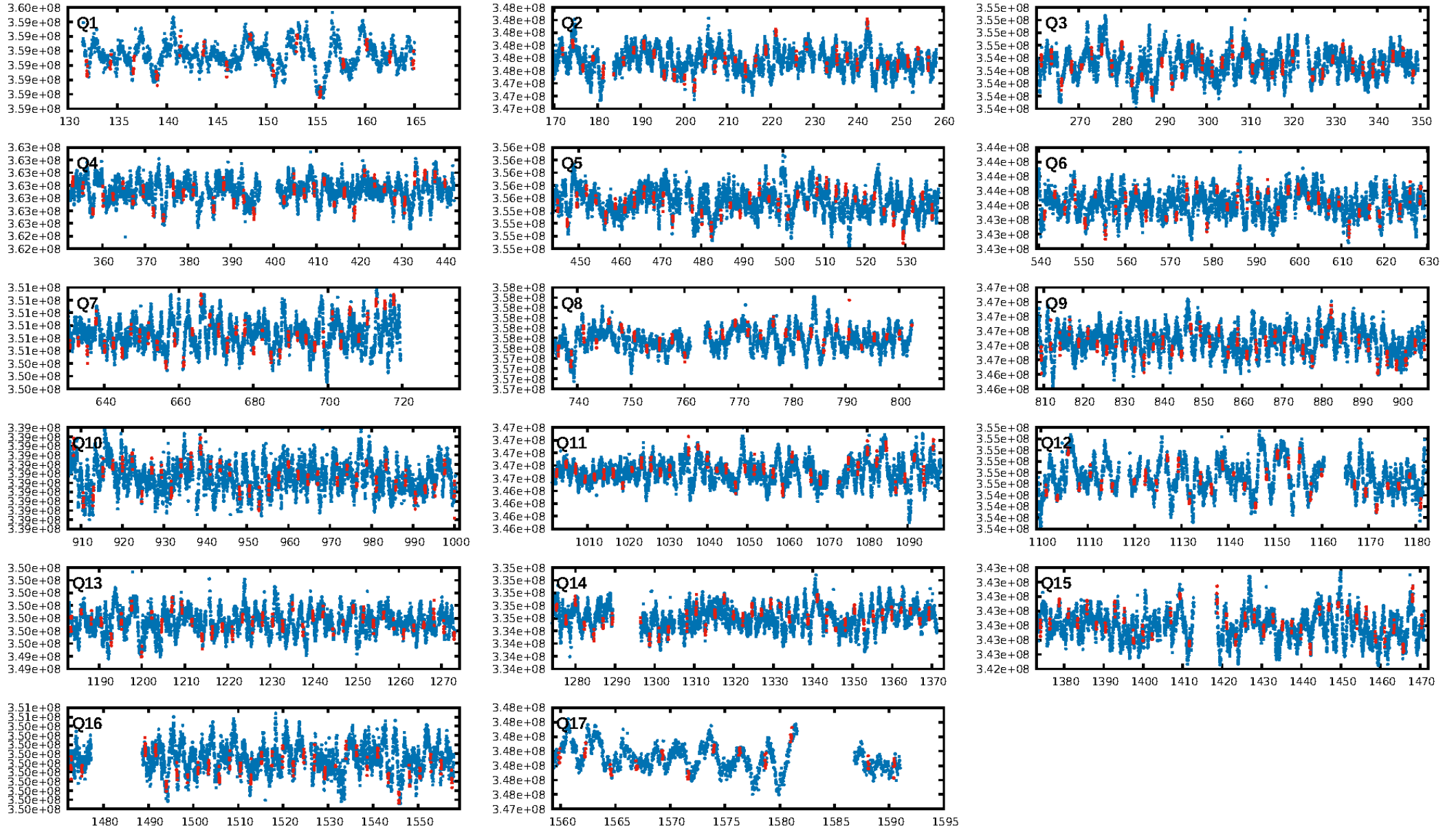
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 5.84e-15
RollingBand-fgt: 0.89 [482/543]
GhostDiagnostic-chr: 5.331
Centroid-sig: 70.1%
Centroid-so: 0.684 arcsec [0.69σ]
OotOffset-rm: 0.473 arcsec [0.61σ]
OotOffset-st: 1/3/4/4 [12]
KicOffset-rm: 0.477 arcsec [0.65σ]
KicOffset-st: 1/3/4/4 [12]
DiffImageQuality-fgm: 0.67 [8/12]
DiffImageOverlap-fno: 1.00 [17/17]

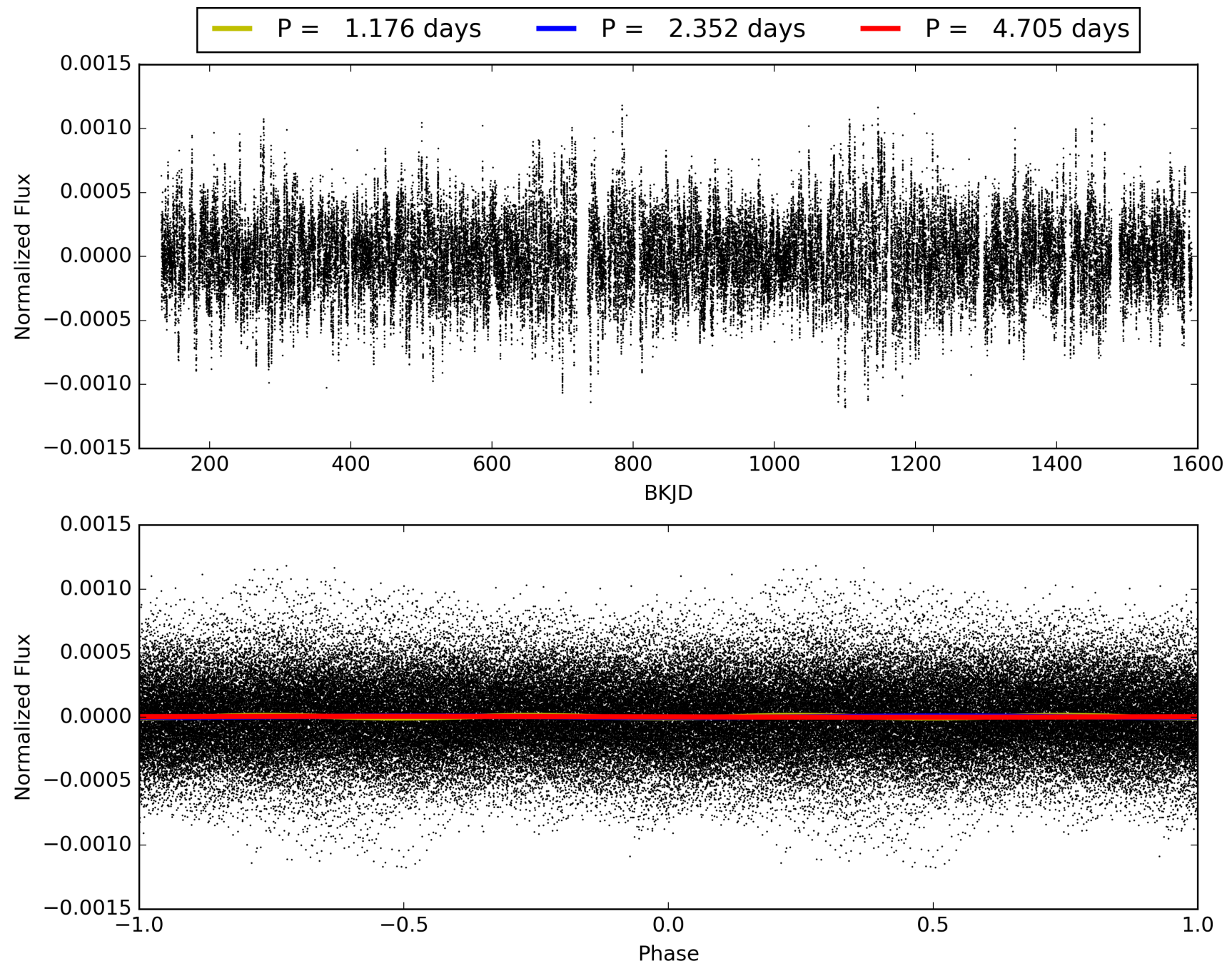
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 23:37:20 Z

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

TCE 008007675-01, PDC Light Curves

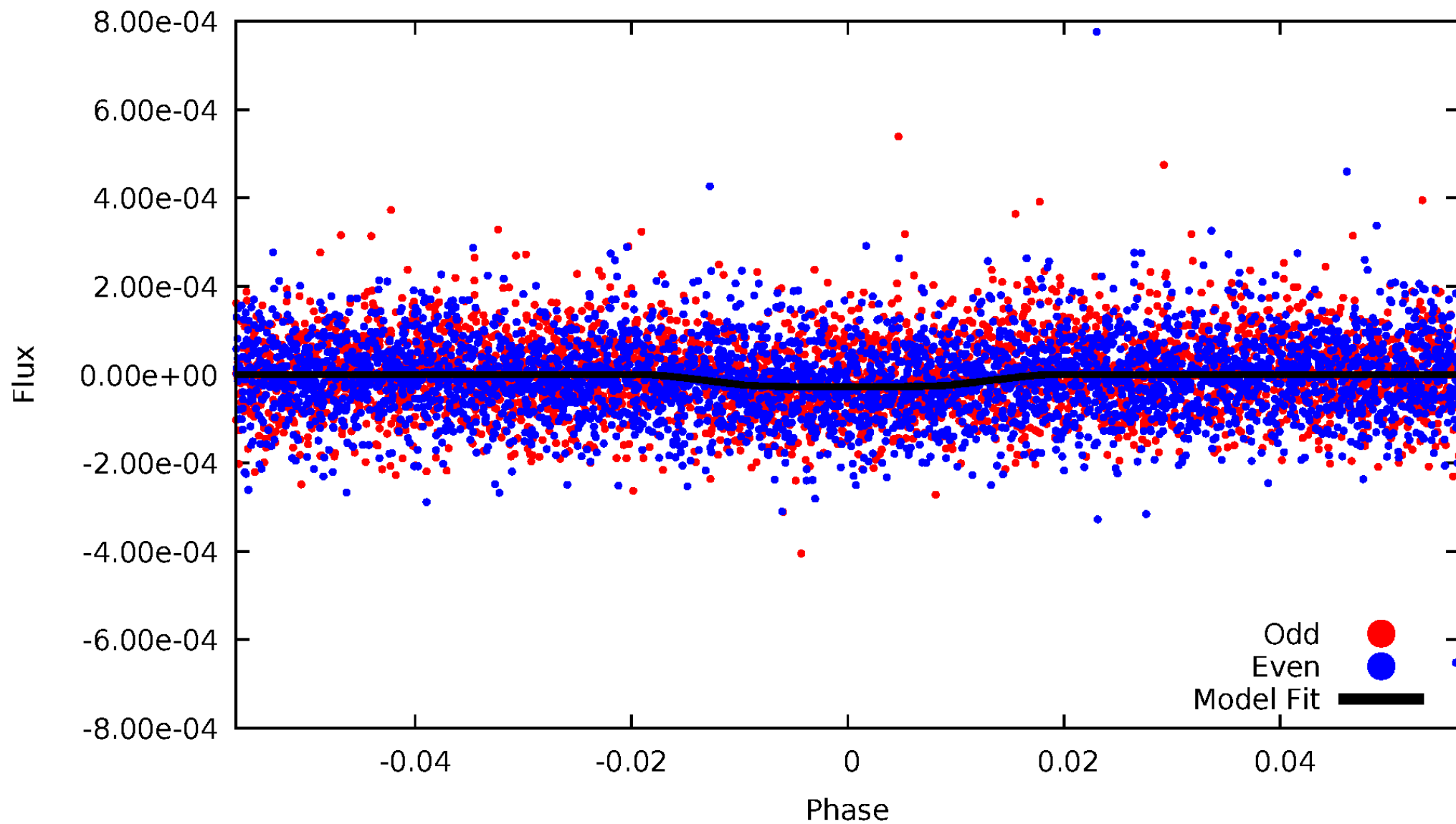


TCE 008007675-01



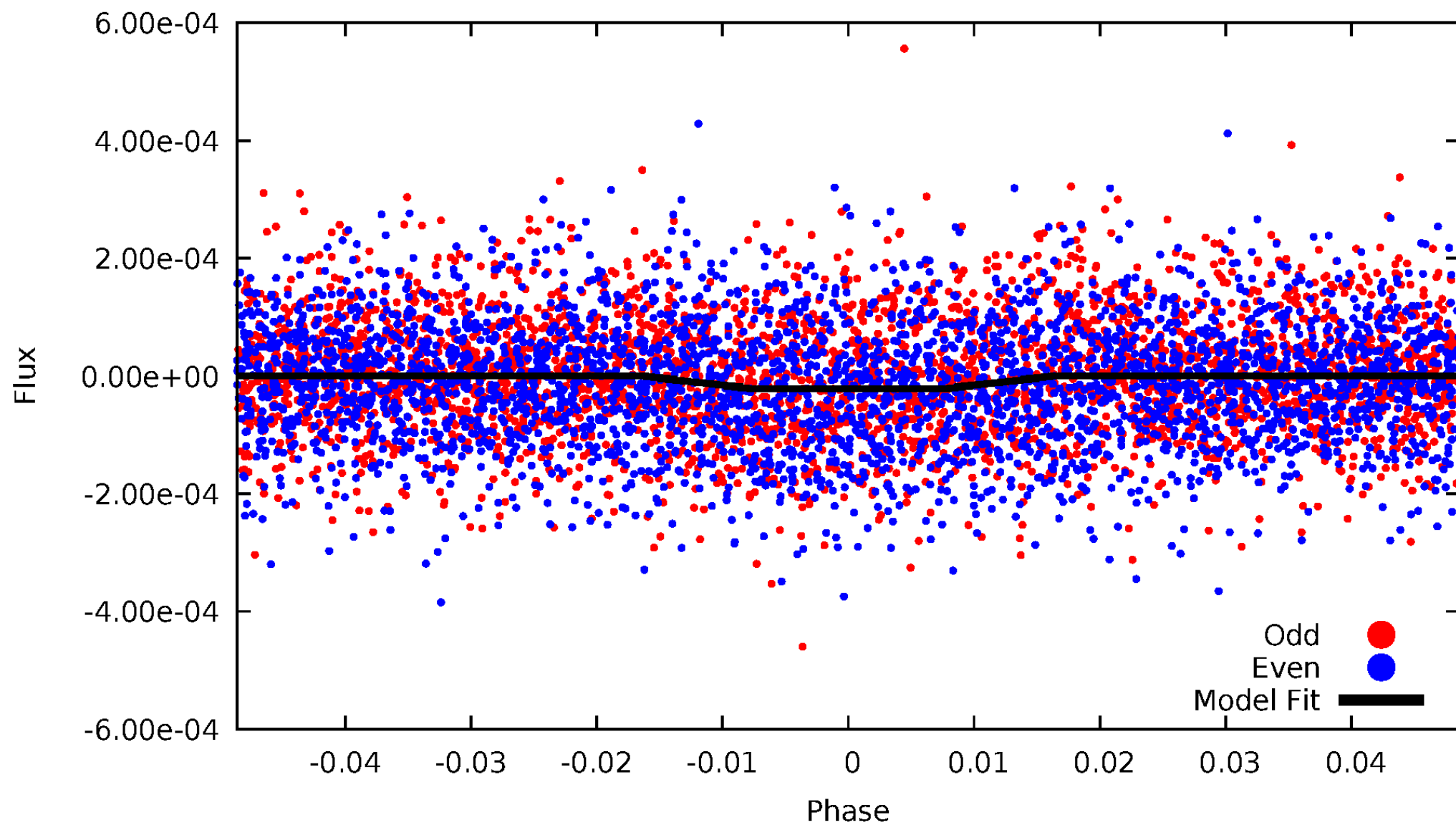
DV Odd/Even

TCE 008007675-01



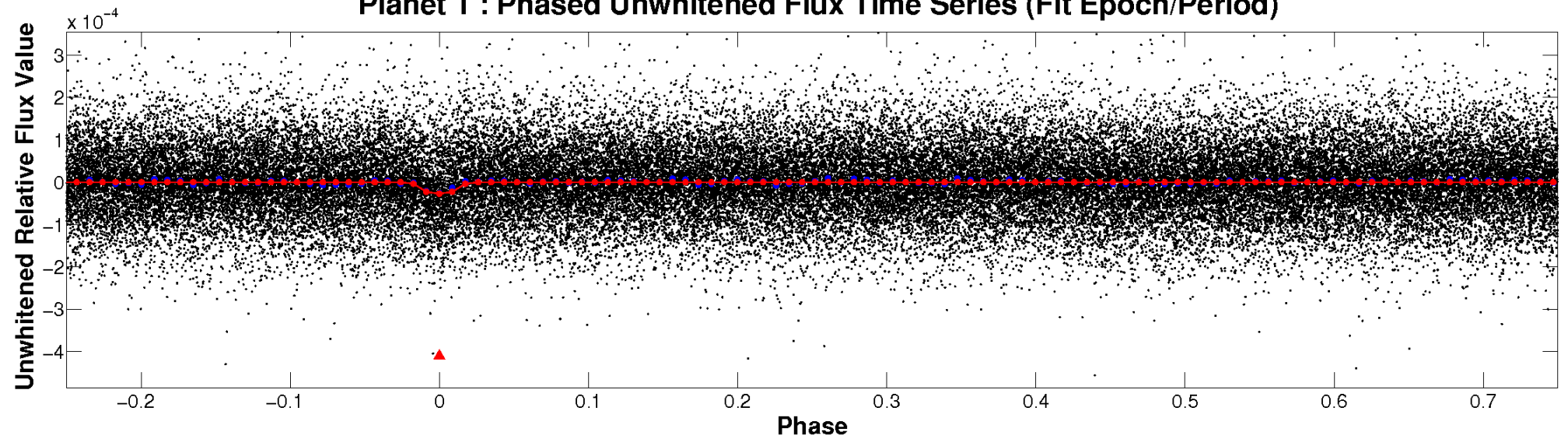
ALT Odd/Even

TCE 008007675-01

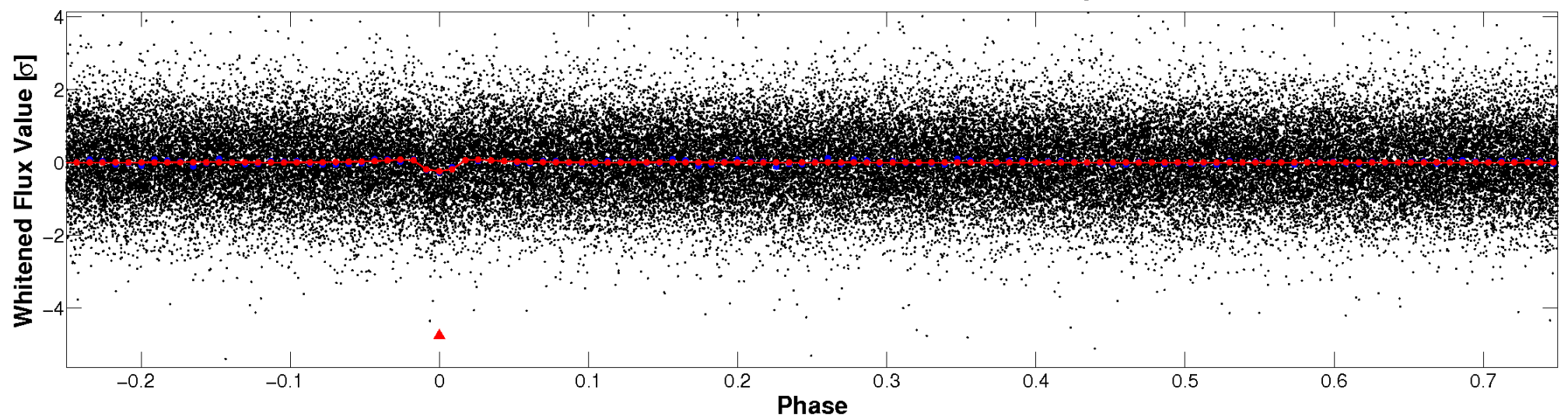


Non-Whitened Vs. Whitened Light Curve

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

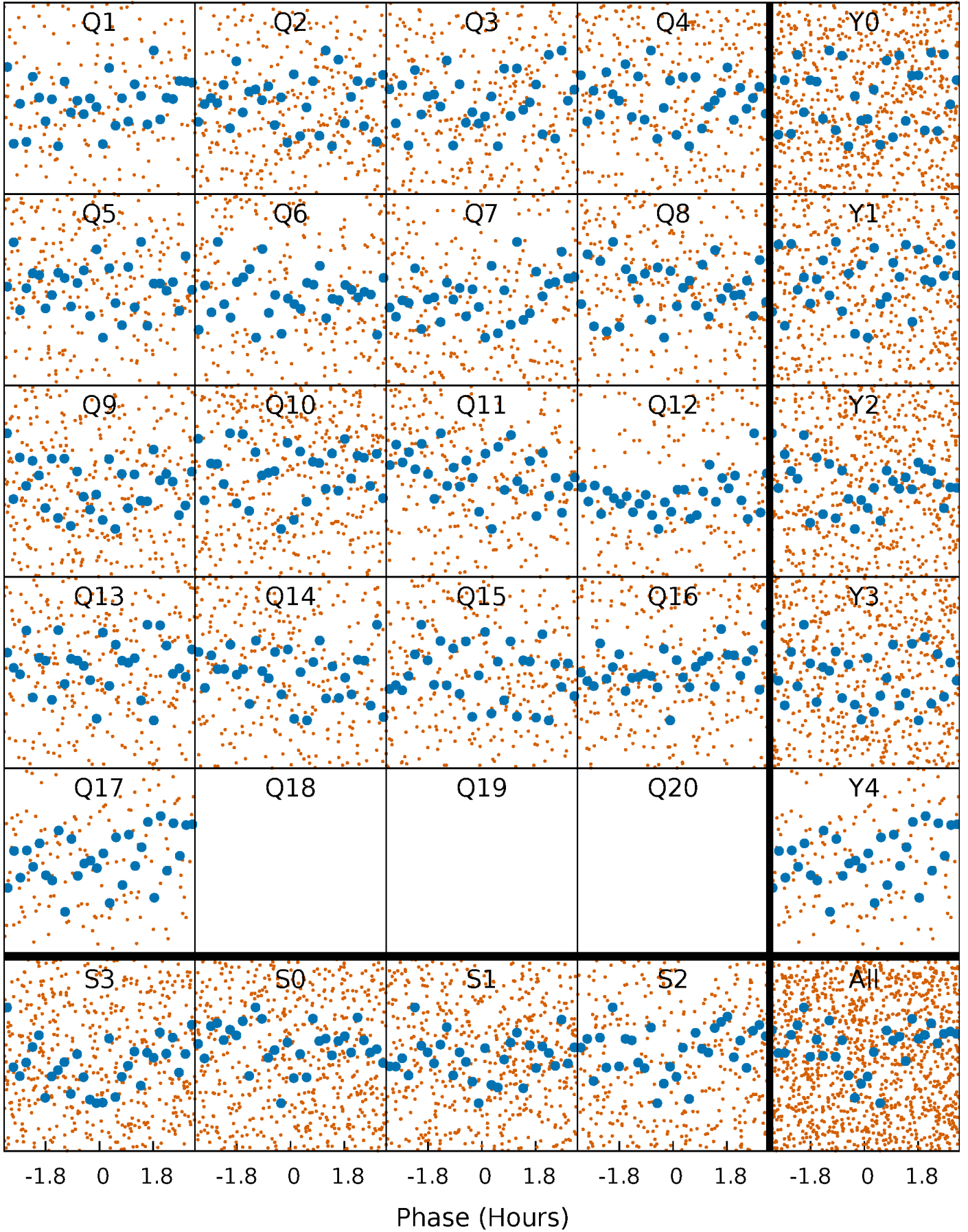


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



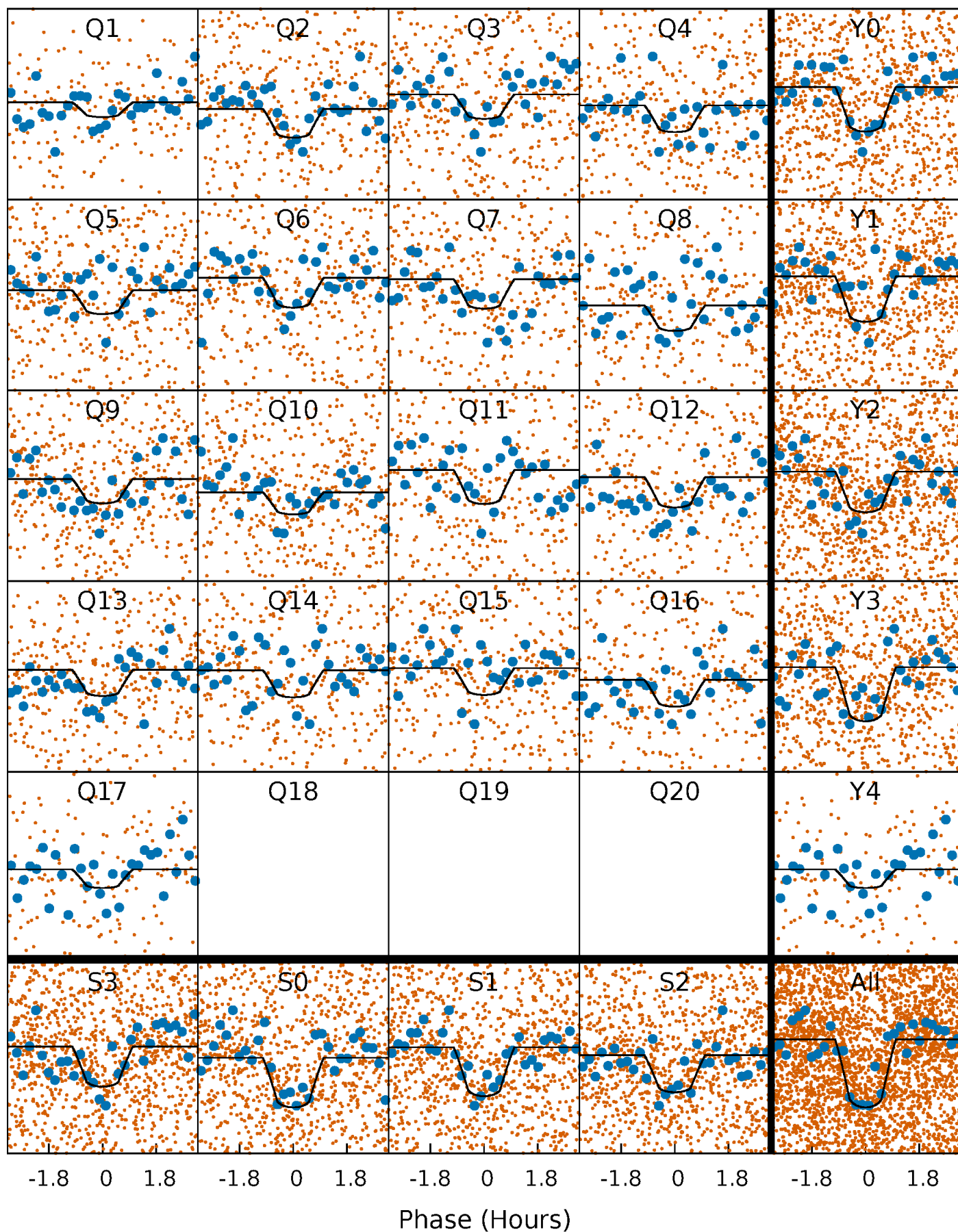
PDC Quarter-Phased Transit Curves

TCE 008007675-01 P= 2.352459 Days $T_0=131.934539$ (BKJD)



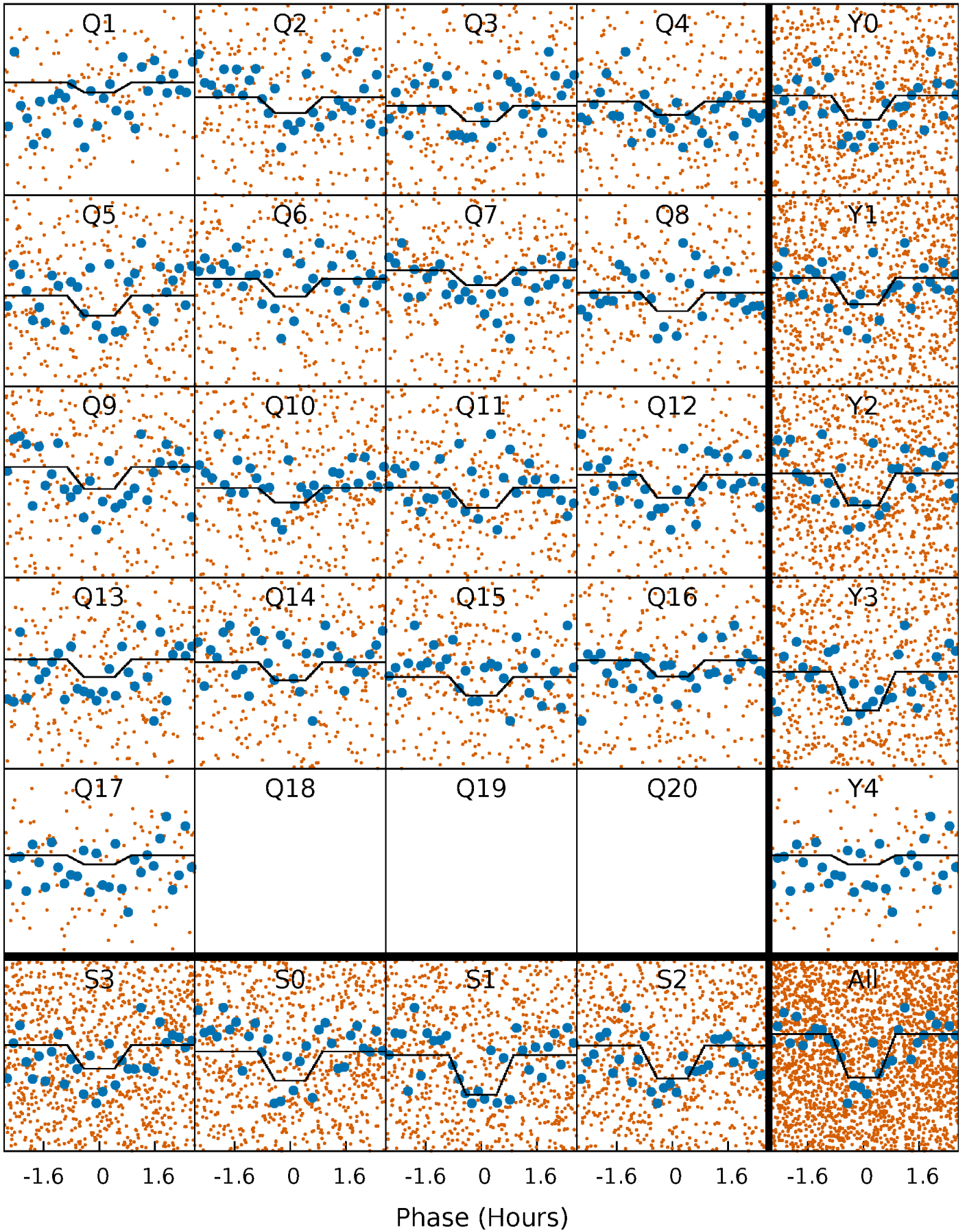
DV Quarter-Phased Transit Curves

TCE 008007675-01 P= 2.352459 Days $T_0=131.934539$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

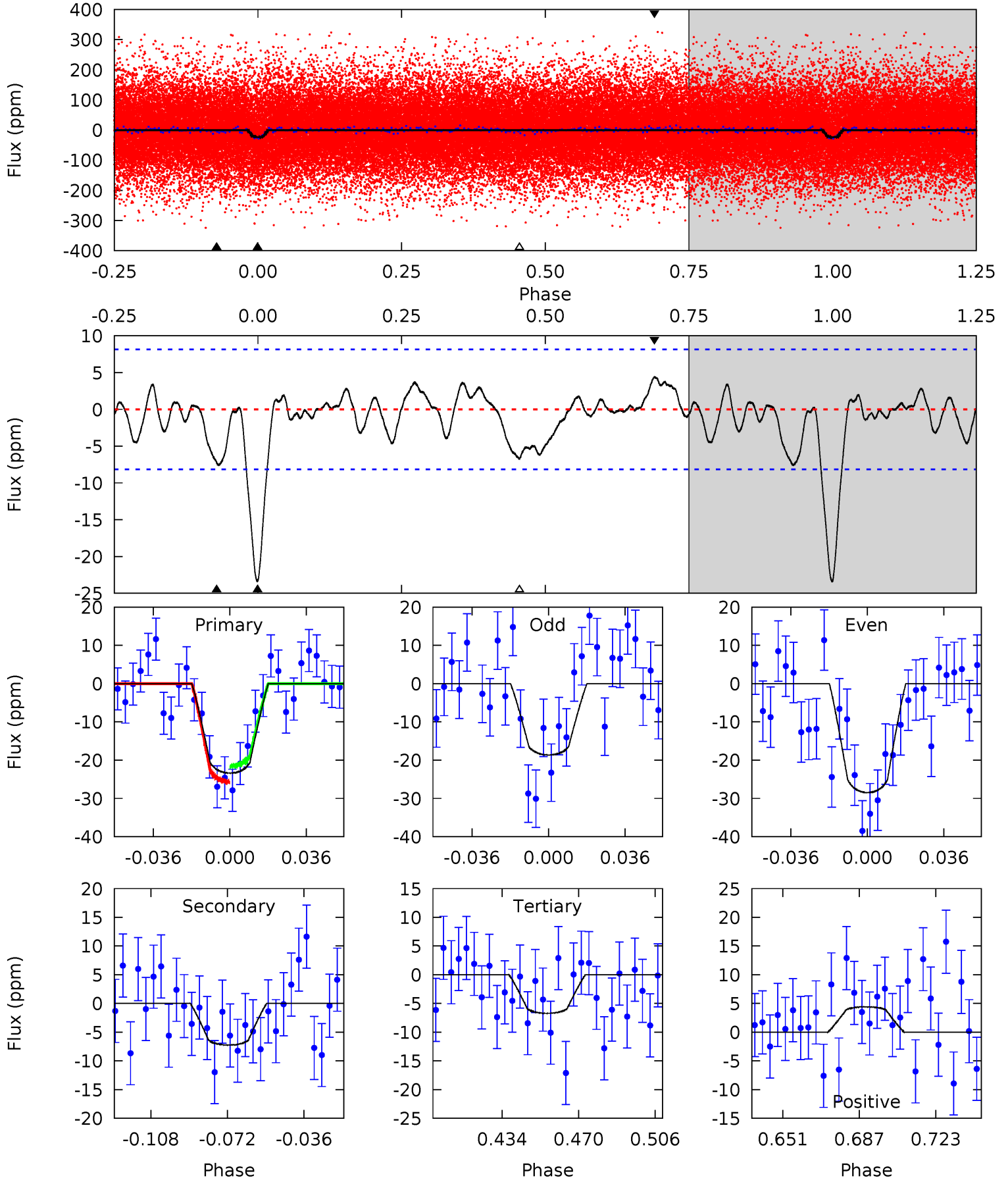
TCE 008007675-01 P= 2.352433 Days $T_0=131.942865$ (BKJD)



DV Model-Shift Uniqueness Test

008007675-01, P = 2.352459 Days, E = 129.582080 Days

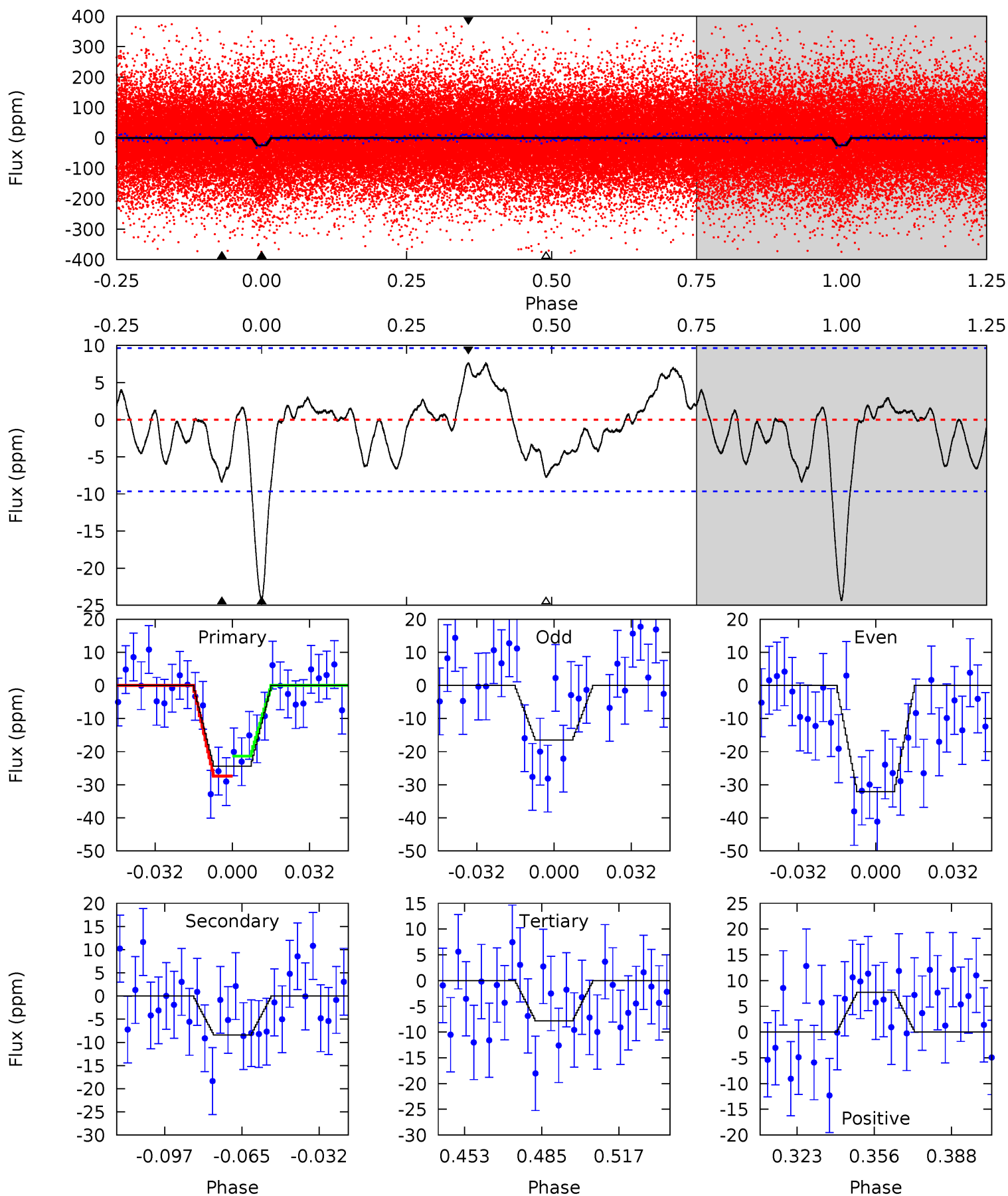
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.7	4.24	3.93	2.58	4.77	2.10	1.44	9.76	11.1	0.31	1.66	2.88	0.79	0.16	1.22



Alt Model-Shift Uniqueness Test

008007675-01, P = 2.352433 Days, E = 129.590432 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.1	4.18	3.88	3.83	4.80	2.14	1.77	8.24	8.29	0.30	0.35	3.89	0.90	0.24	1.50



Stellar Parameters For KIC 008007675

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6749^{+169}_{-203}	$3.941^{+0.247}_{-0.114}$	$-0.340^{+0.300}_{-0.250}$	$2.003^{+0.458}_{-0.560}$	$1.280^{+0.224}_{-0.204}$	$0.224^{+0.367}_{-0.075}$
	+3%/-3%	+6%/-3%	+88%/-74%	+23%/-28%	+18%/-16%	+164%/-34%
Source	PHO1	FLK73	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 008007675-01 / KOI 6949.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-7 ± 2	$1.15^{+0.33}_{-0.28}$	2986^{+193}_{-231}	4722^{+599}_{-476}	$4.144^{+3.436}_{-1.723}$
Alt.	-8 ± 2	$0.98^{+0.30}_{-0.25}$	2991^{+185}_{-237}	5265^{+844}_{-528}	$6.806^{+6.231}_{-2.942}$

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

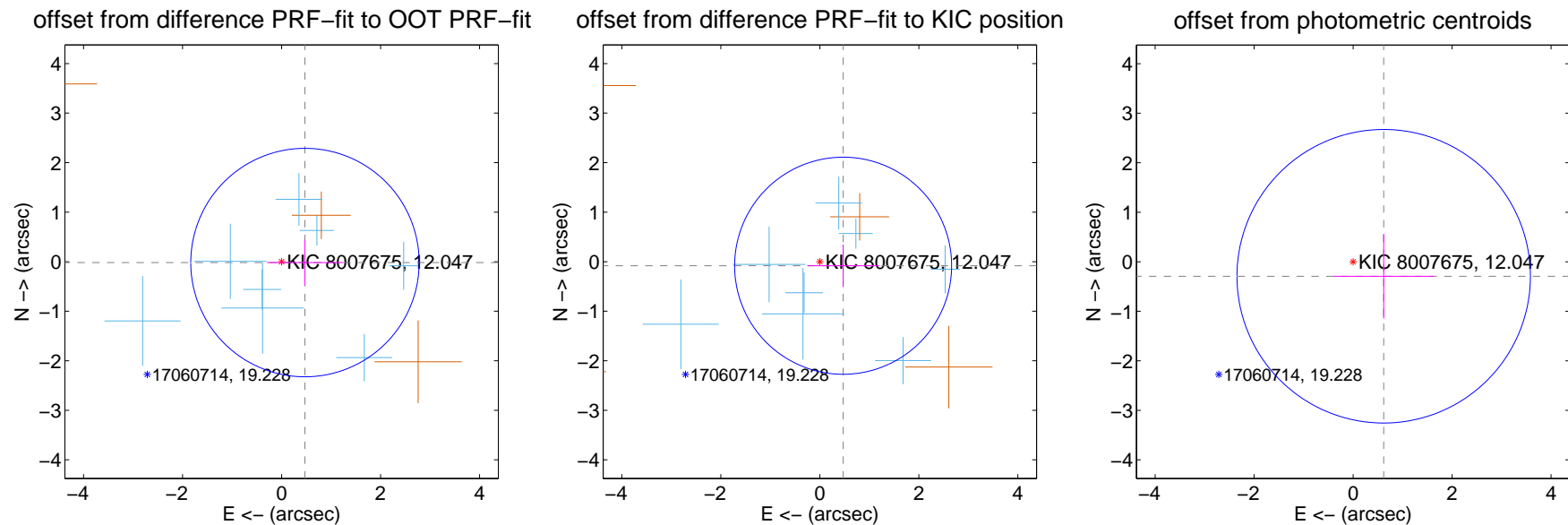
DV Centroid Data

Supplemental centroid analysis for 008007675-01. Kepler magnitude: 12.05. Transit SNR 9.48

There are 8 quarters with good PRF difference image offsets

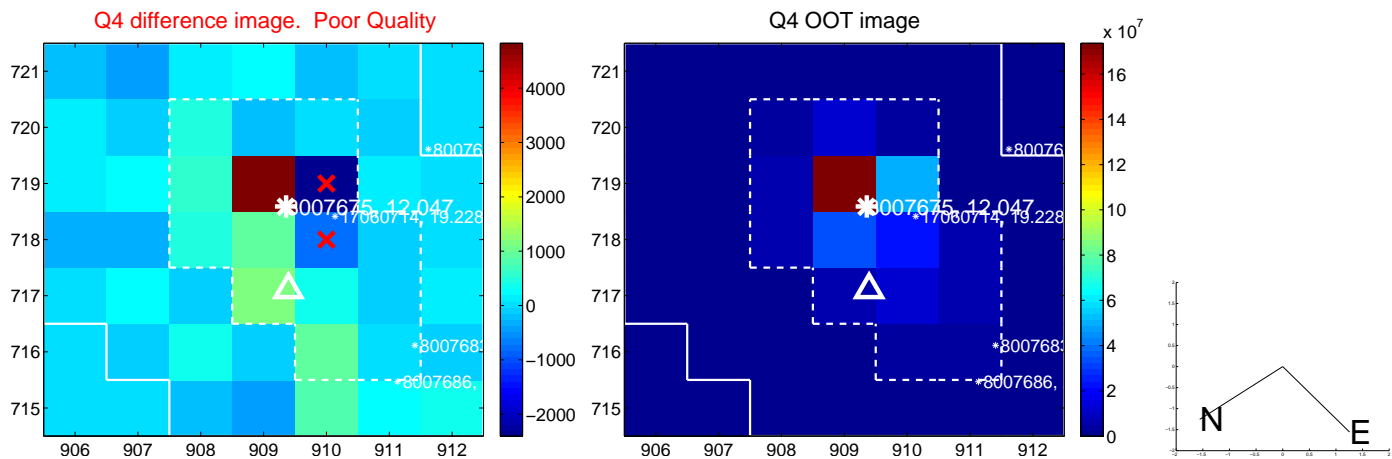
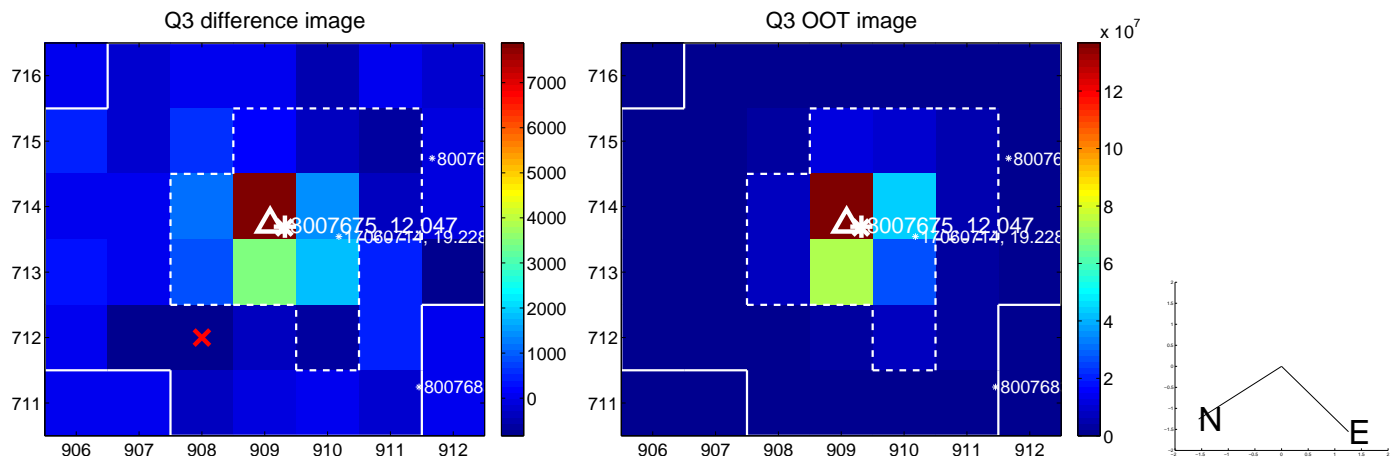
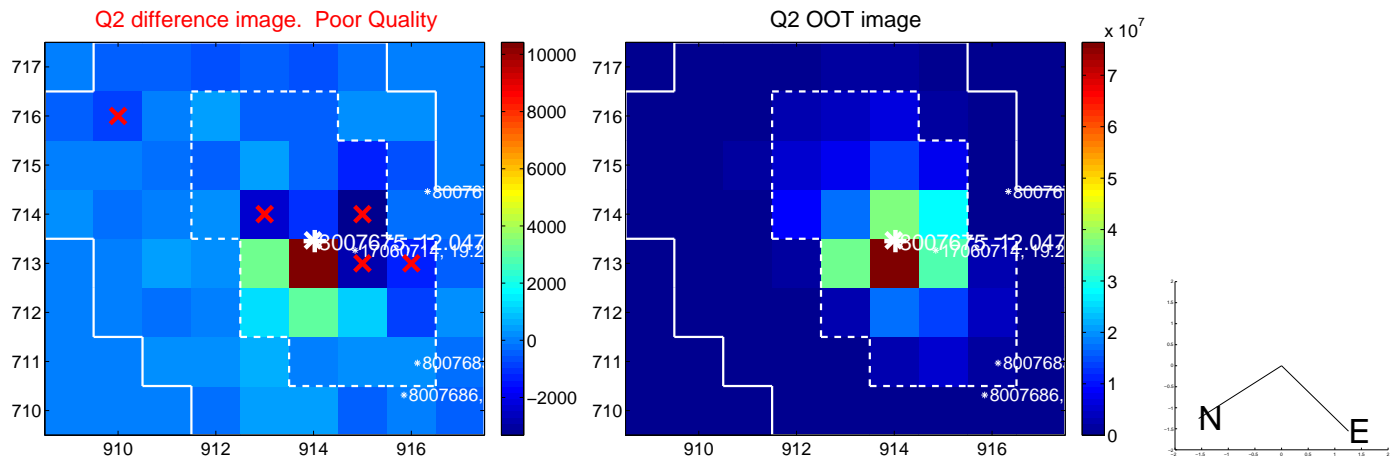
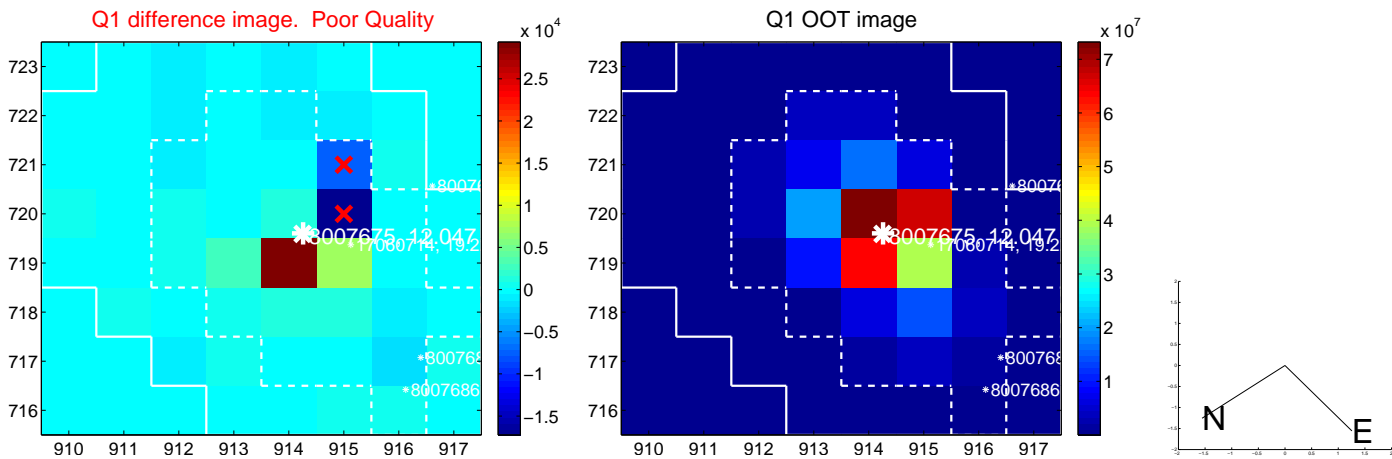
The direct PRF centroid is offset from the target star catalog position by about 0.12 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.473 ± 0.769	0.61	-0.472 ± 0.766	-0.018 ± 0.462
PRF-fit source offset from KIC position	0.477 ± 0.731	0.65	-0.470 ± 0.724	-0.082 ± 0.428
photometric centroid source offset	0.68 ± 0.99	0.69	-0.62 ± 1.02	-0.29 ± 0.85

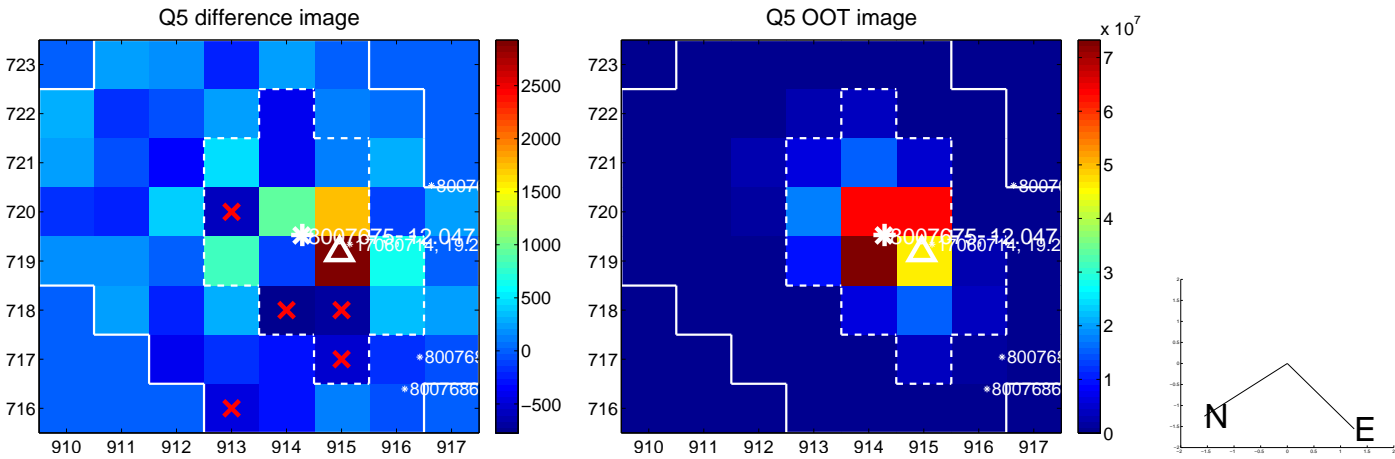


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

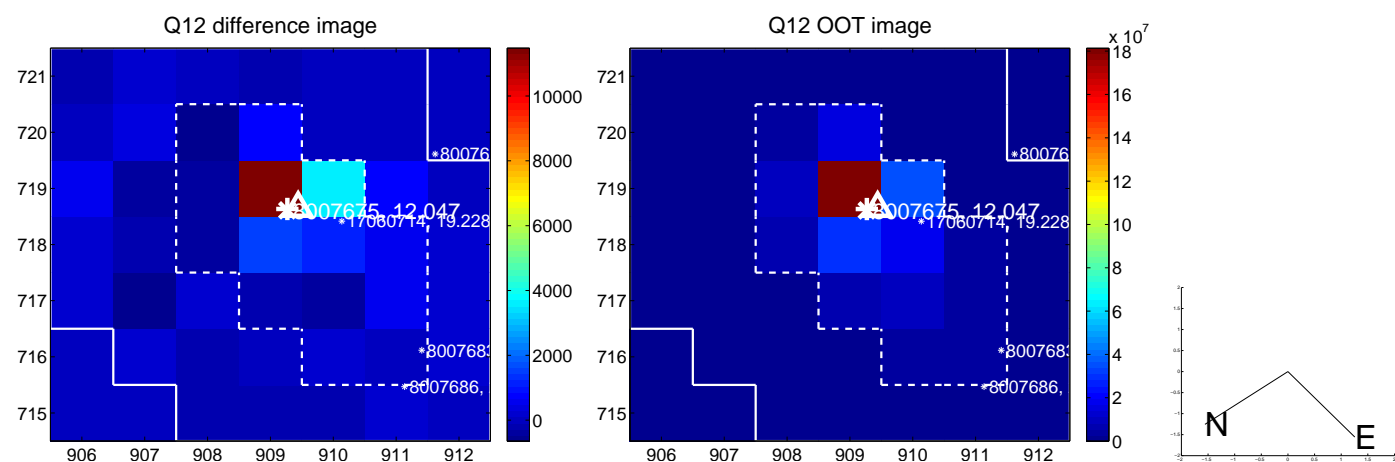
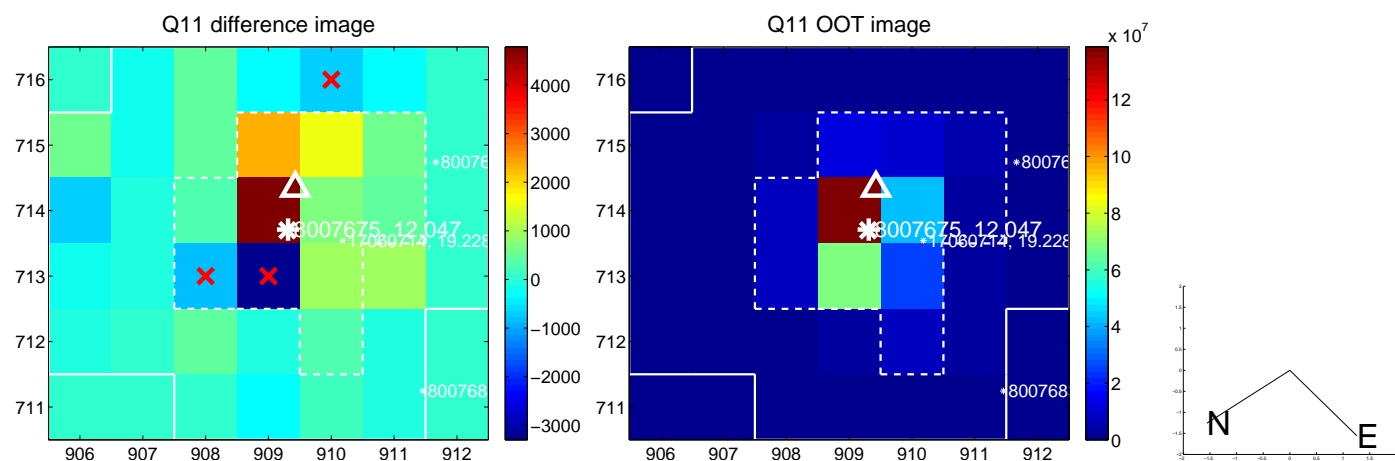
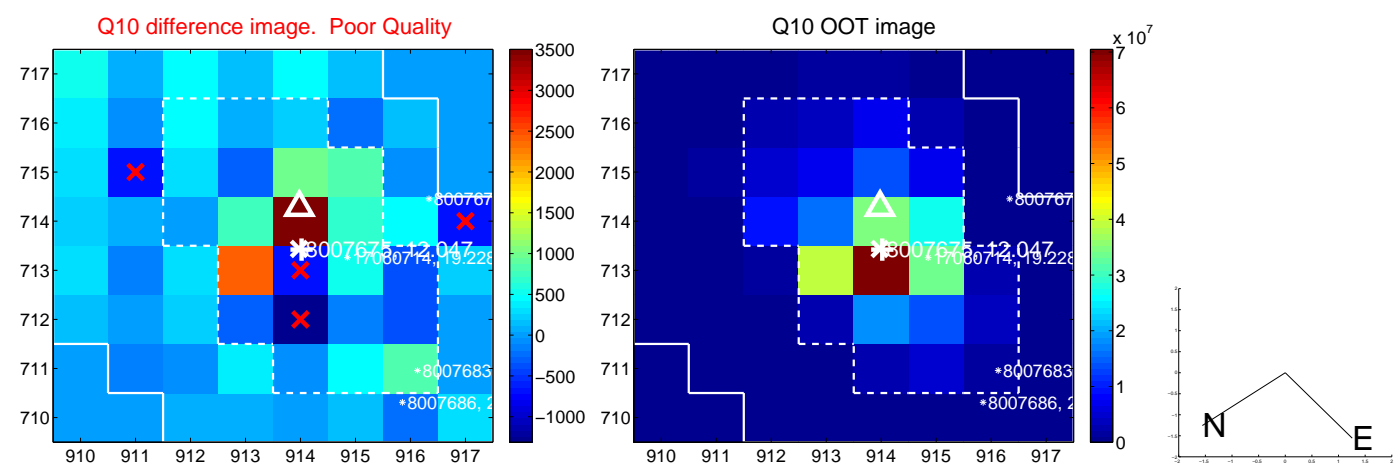
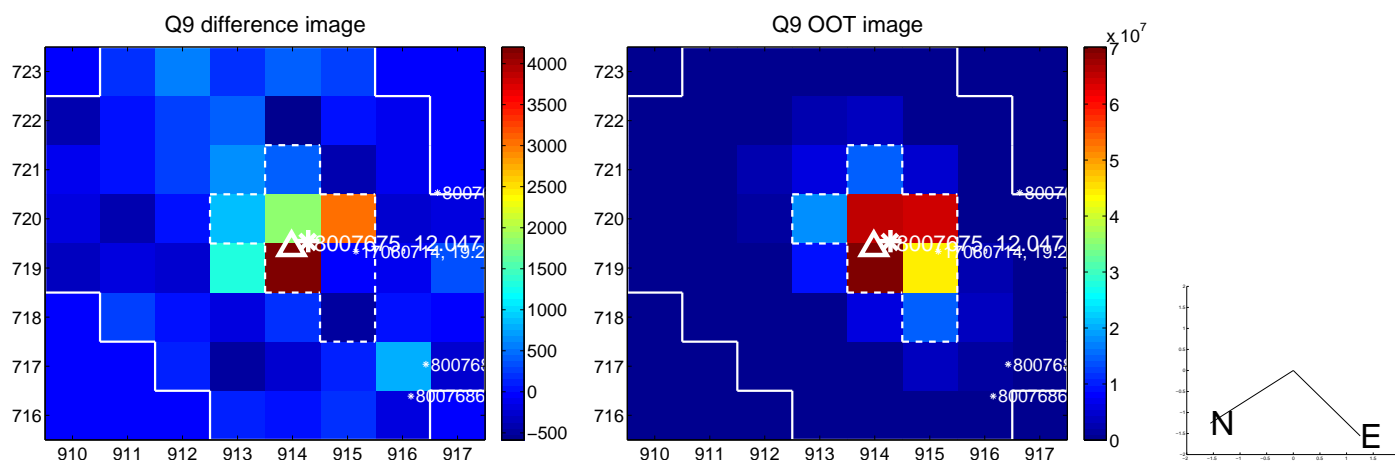
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



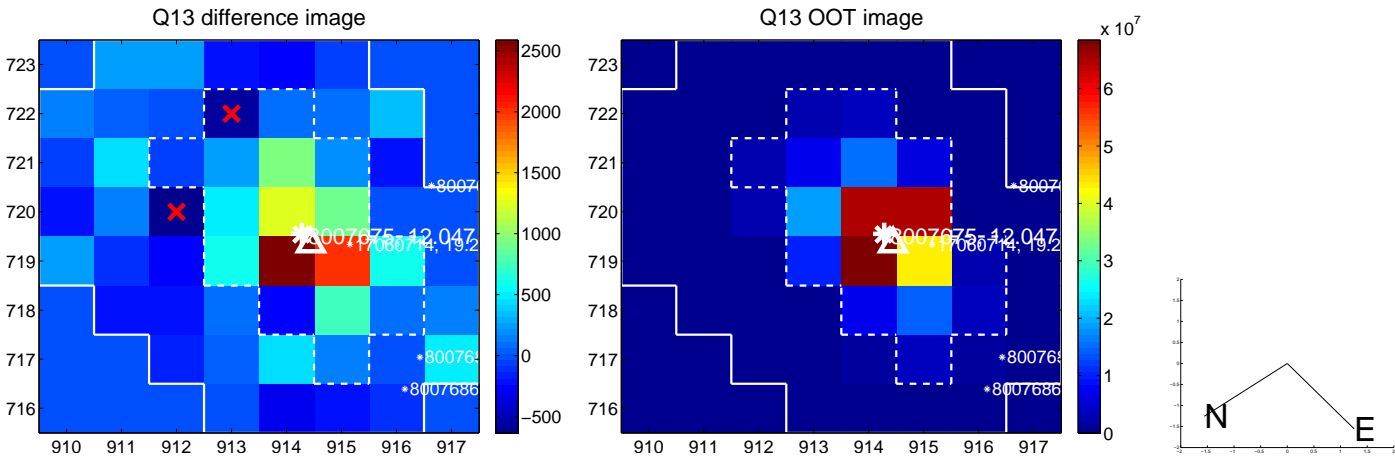
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



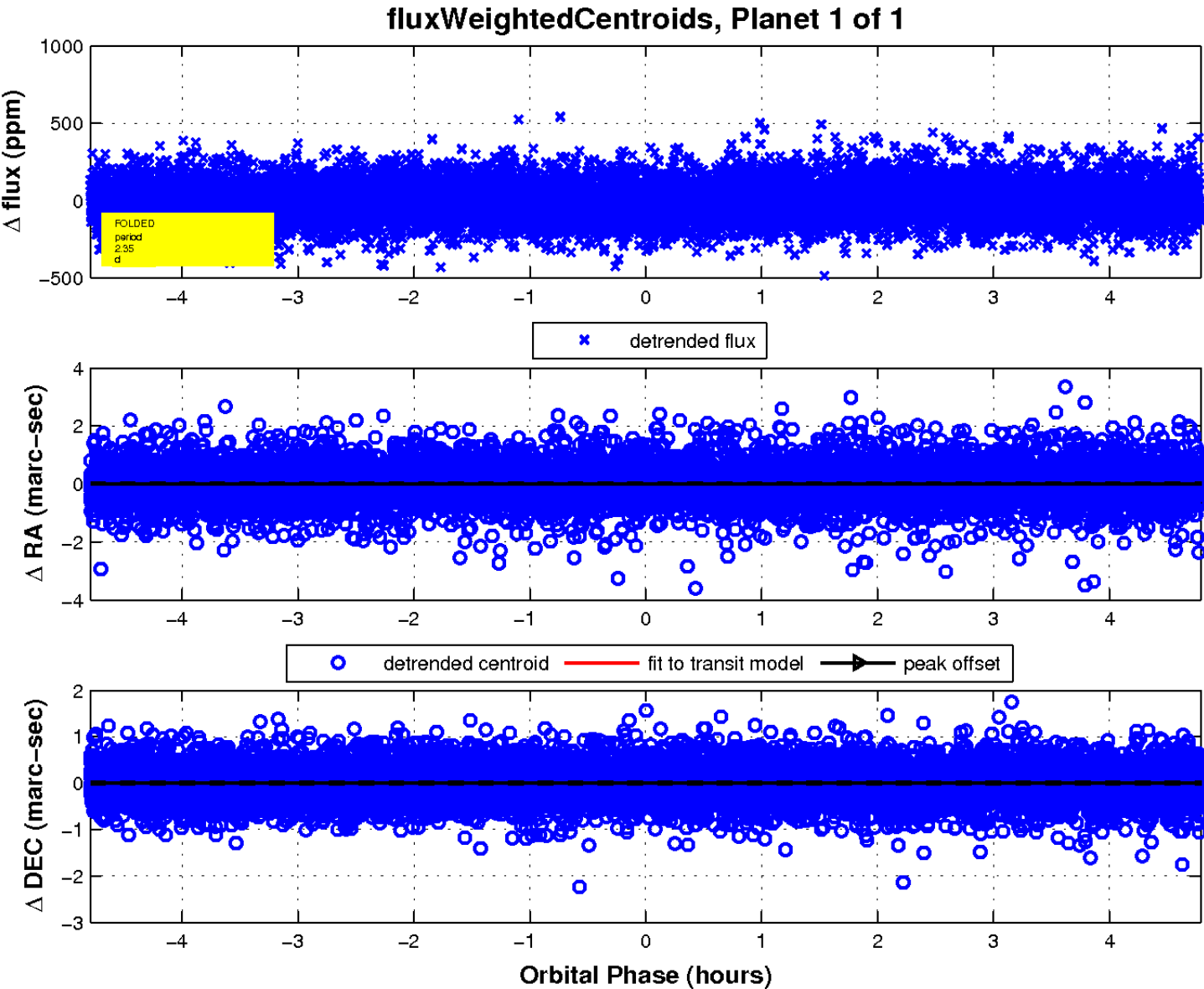
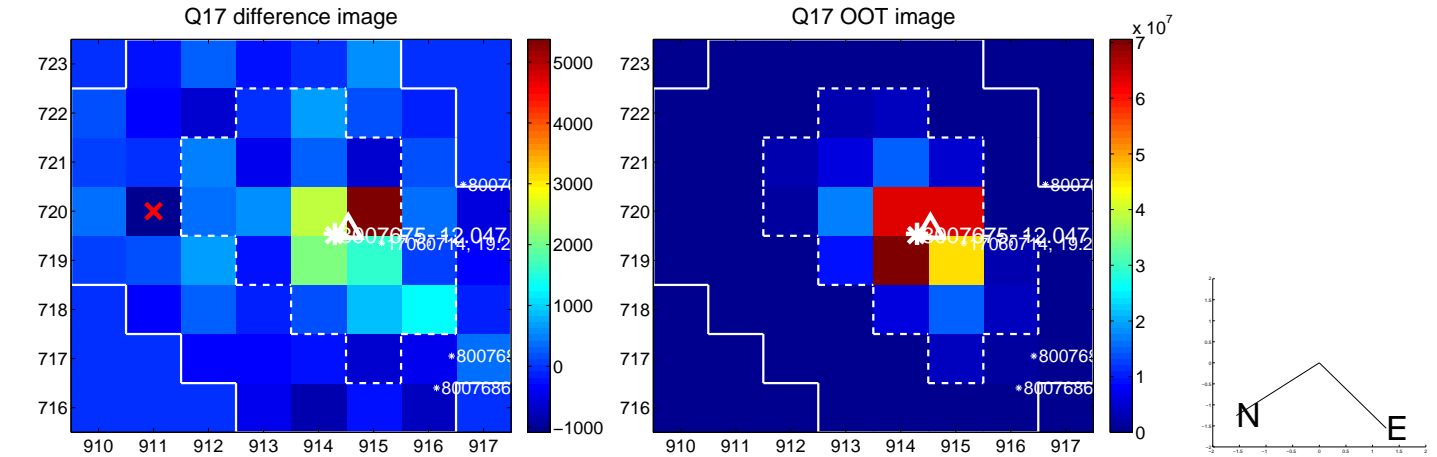
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

