

KIC 008908767

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})
008908767-01	OBS	No	1.134903	132.401696	96.7	4.240	8.1	7.9	2.85	6688	3.28	24577.54

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008908767-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—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.

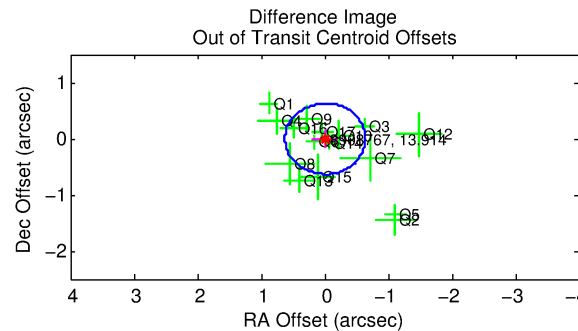
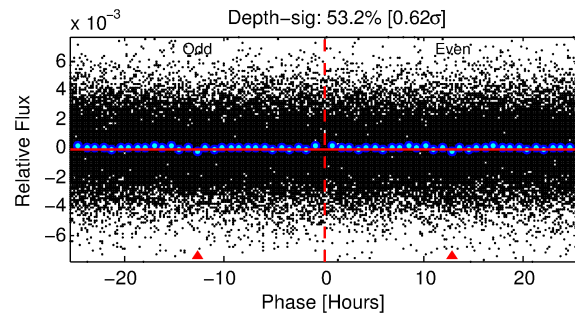
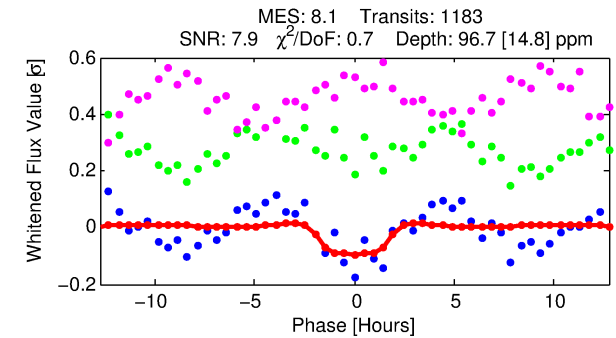
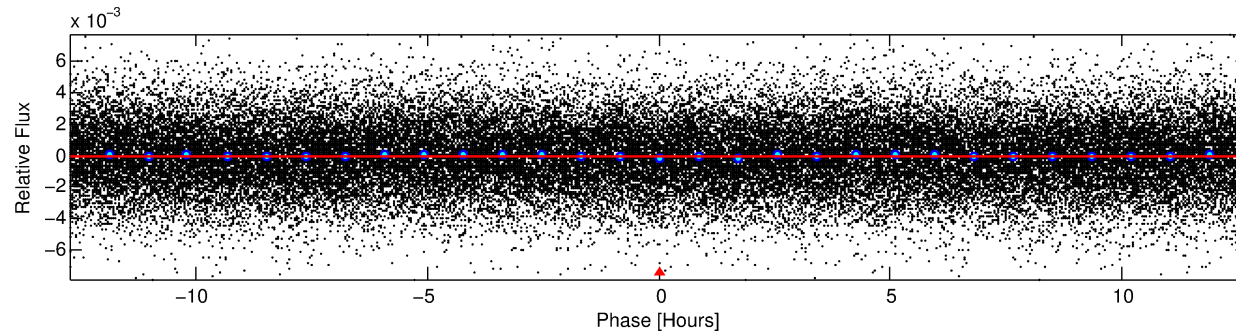
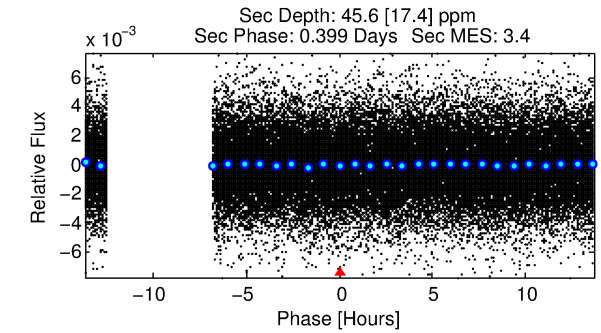
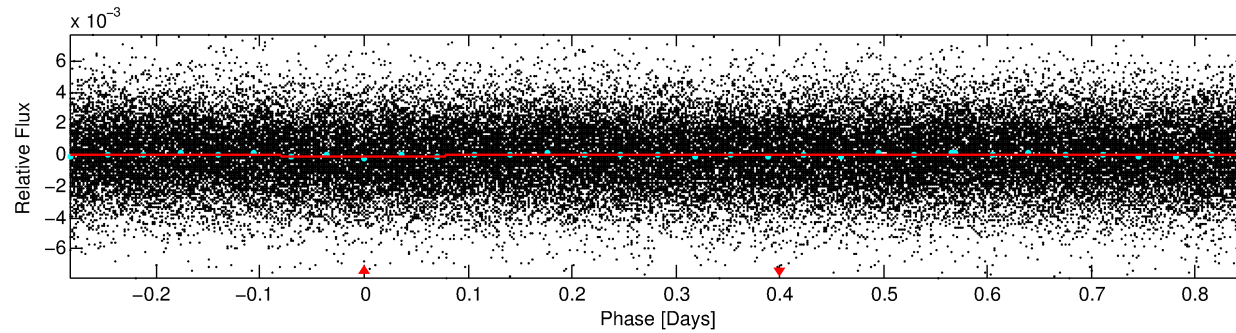
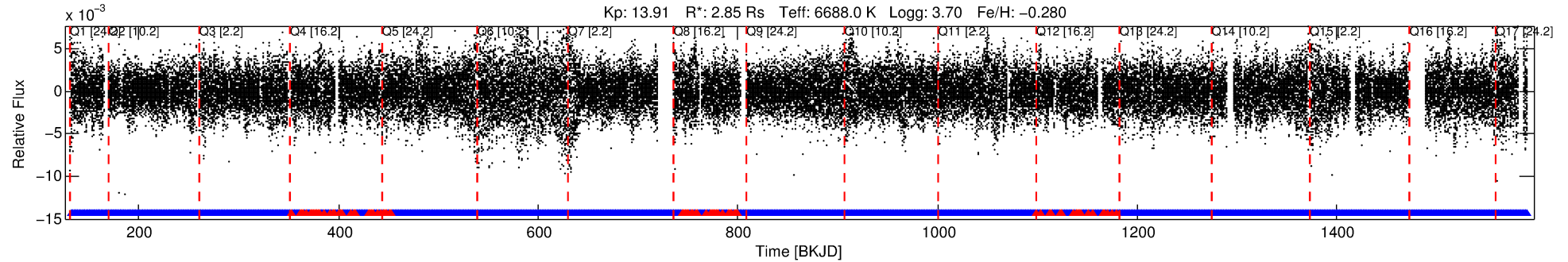
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008908767-01

No Significant Match Found

DV One-Page Summary

KIC: 8908767 Candidate: 1 of 1 Period: 1.135 d



DV Fit Results:

Period = 1.13490 [0.00002] d
Epoch = 132.4017 [0.0070] BKJD
Rp/R* = 0.0105 [0.0093]
a/R* = 1.32 [2.96]
b = 0.90 [1.08]
Seff = 24577.54 [22369.94]
Teq = 3193 [726] K
Rp = 3.28 [3.38] Re
a = 0.0244 [0.0132] AU
Ag = 1.39 [2.79] [0.14σ]
Teffp = 5356 [2428] K [0.85σ]

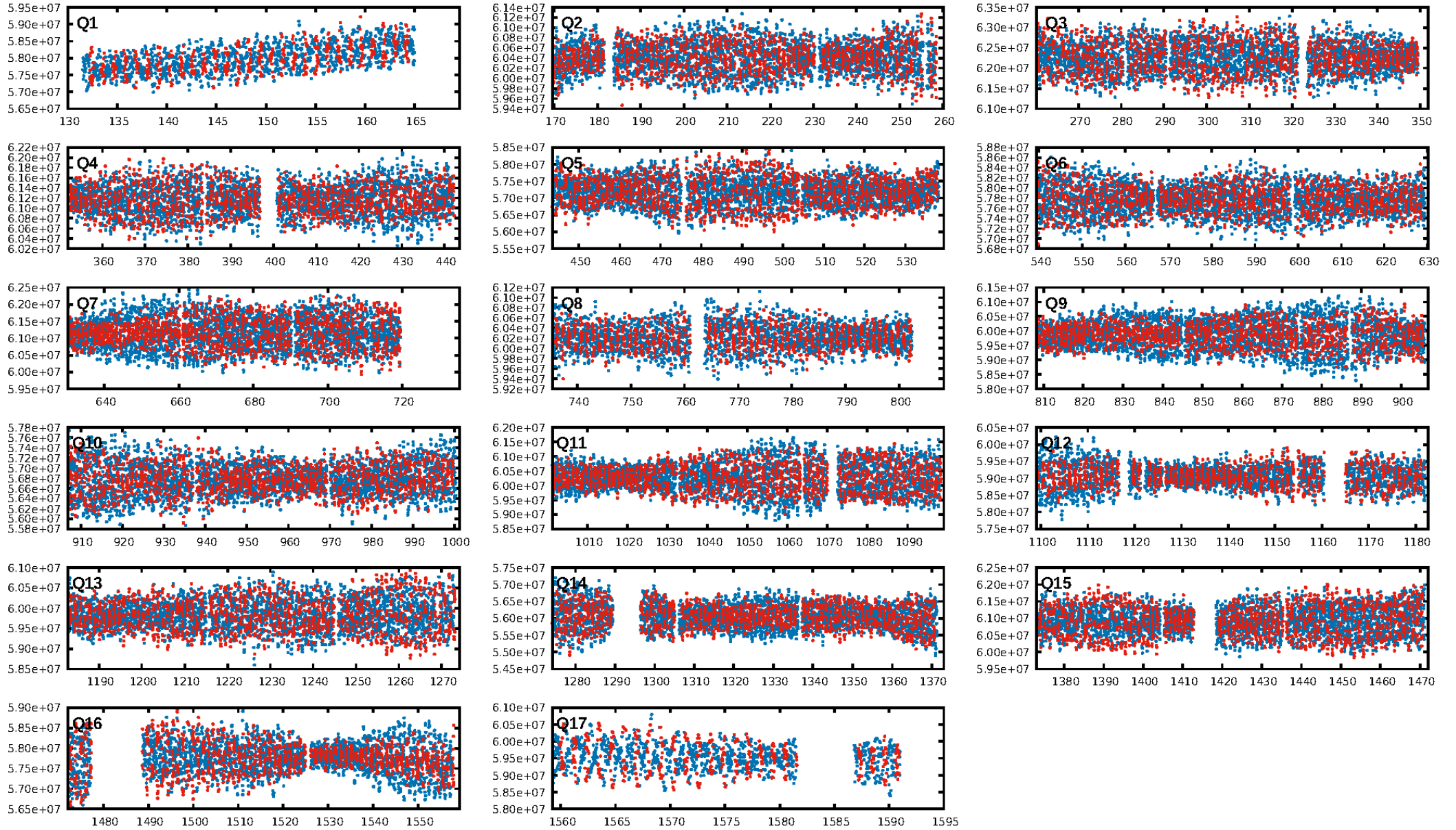
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 4.29e-16
RollingBand-fgt: 0.93 [1048/1130]
GhostDiagnostic-chr: 1.123
Centroid-sig: 90.7%
Centroid-so: 0.380 arcsec [0.94σ]
OotOffset-rm: 0.009 arcsec [0.04σ]
OotOffset-st: 4/3/4/5 [16]
KicOffset-rm: 0.103 arcsec [0.48σ]
KicOffset-st: 4/3/4/5 [16]
DiffImageQuality-fgm: 0.94 [15/16]
DiffImageOverlap-fno: 1.00 [17/17]

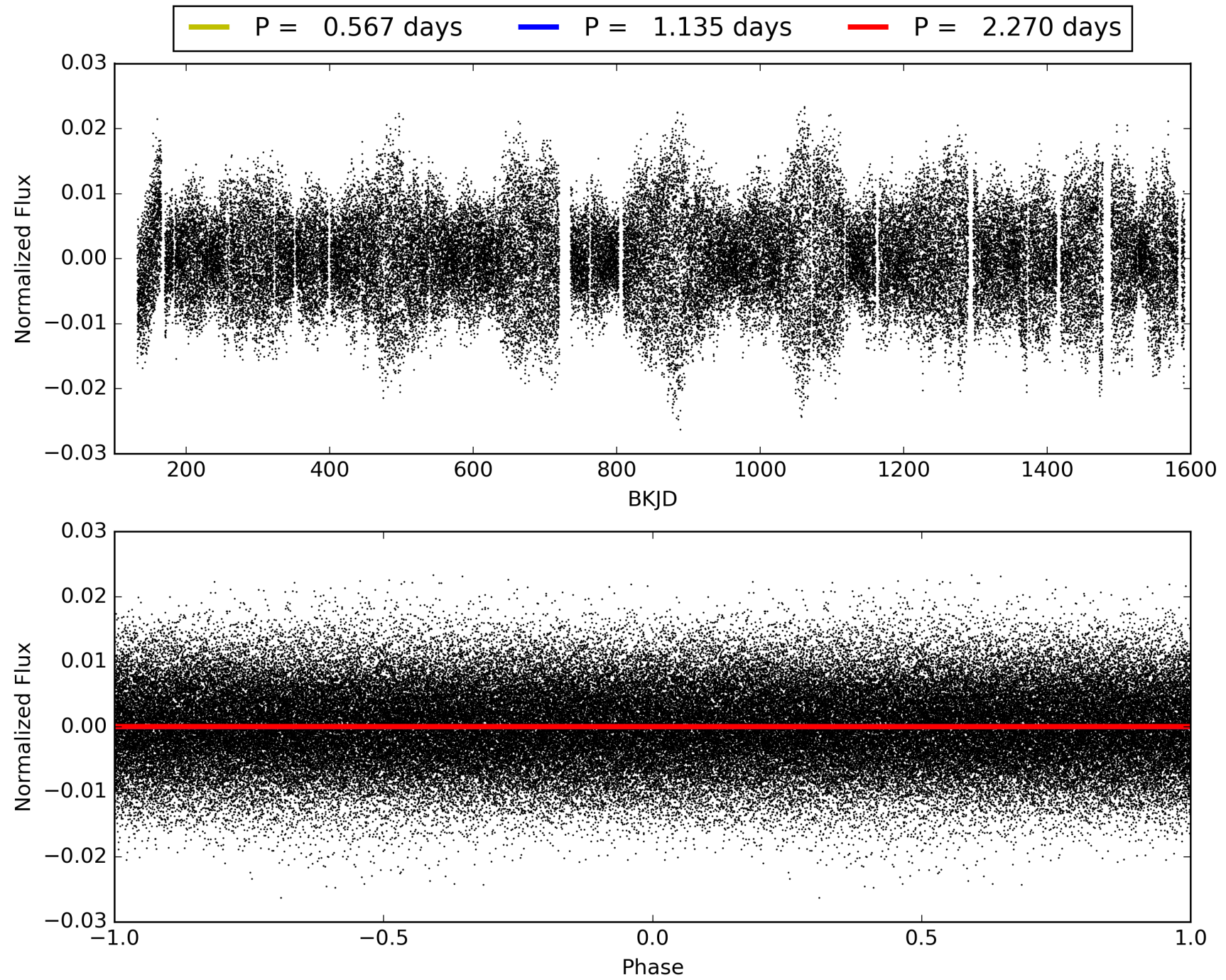
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 20:12:50 Z

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

TCE 008908767-01, PDC Light Curves

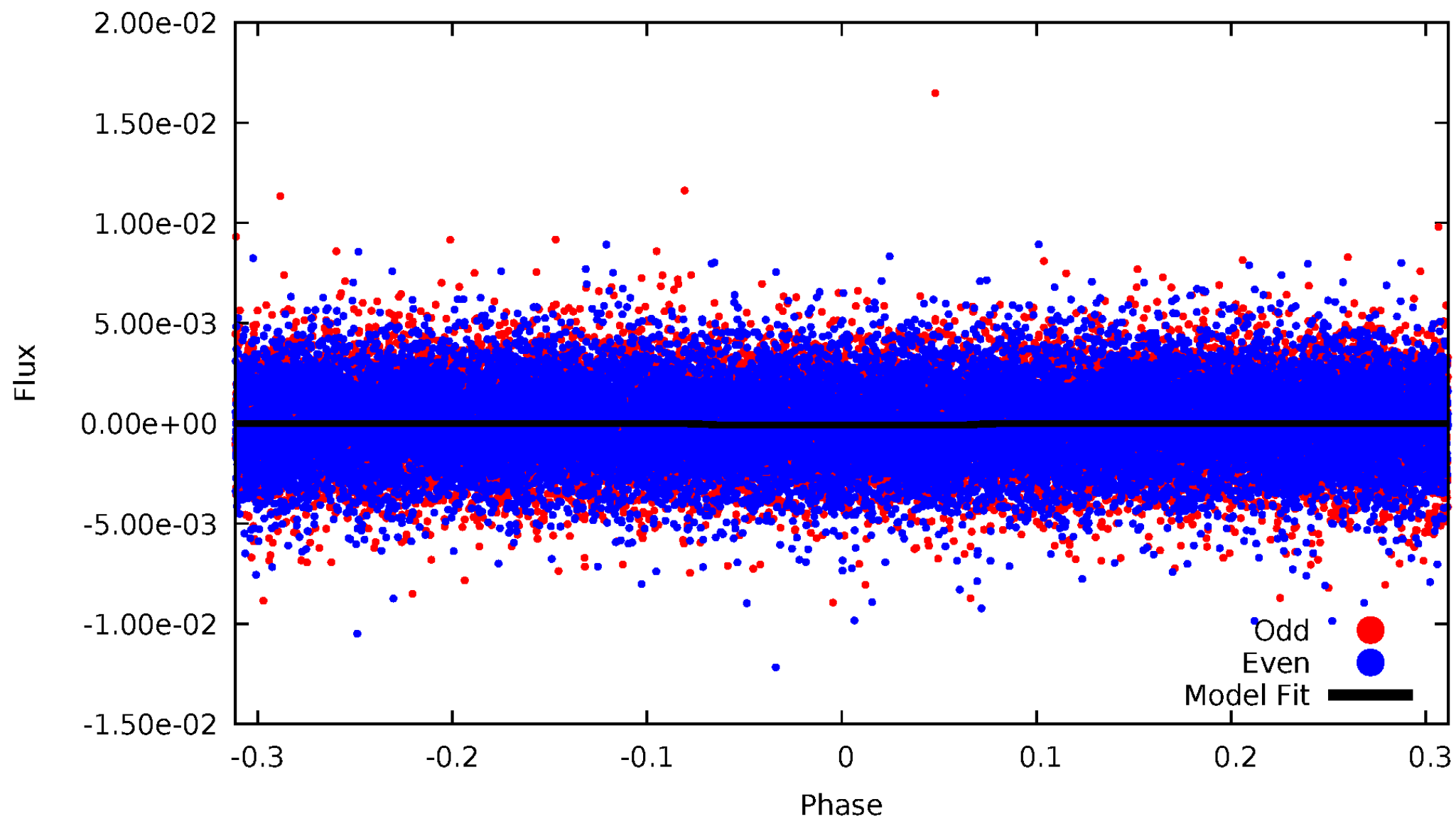


TCE 008908767-01



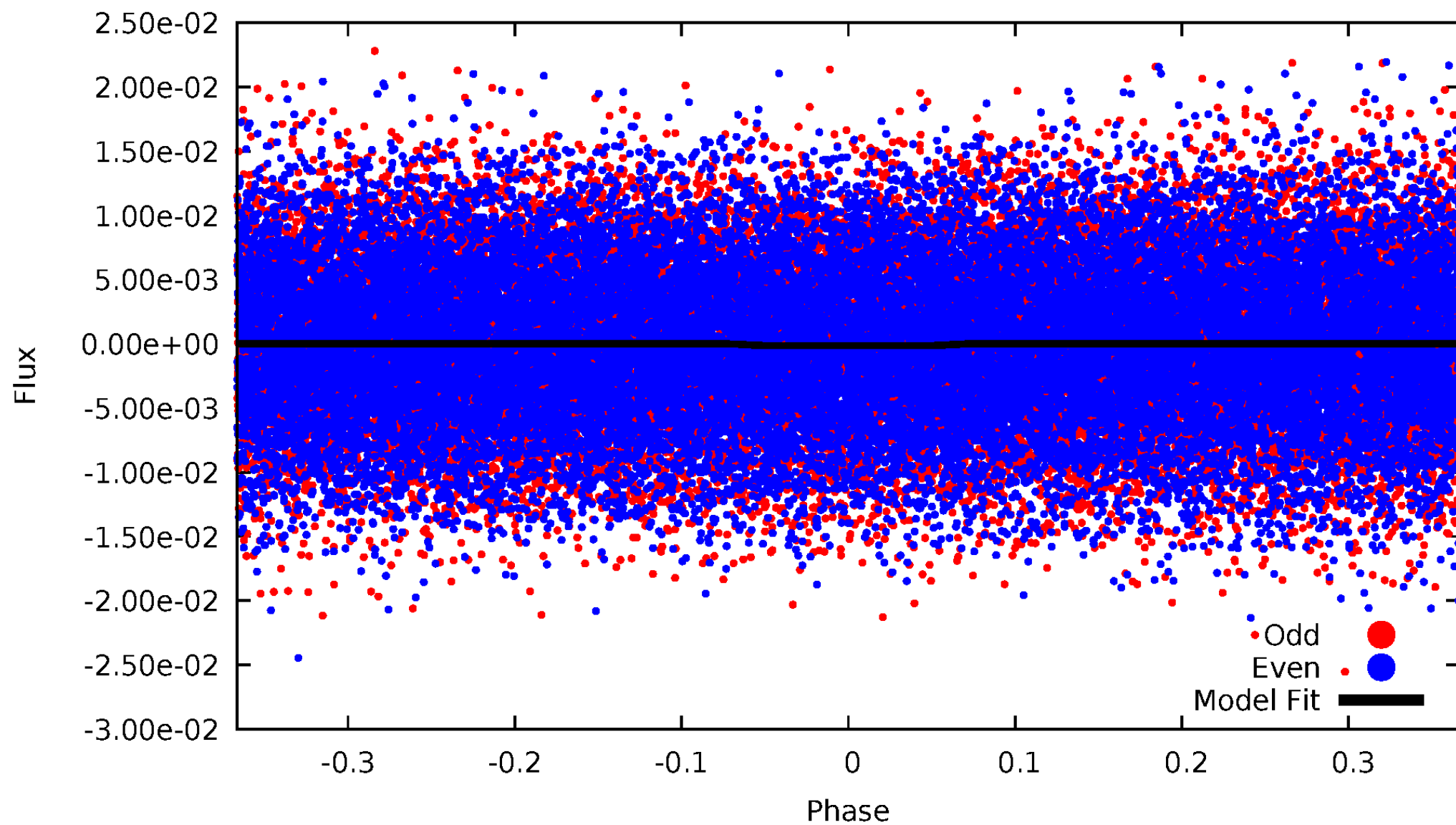
DV Odd/Even

TCE 008908767-01

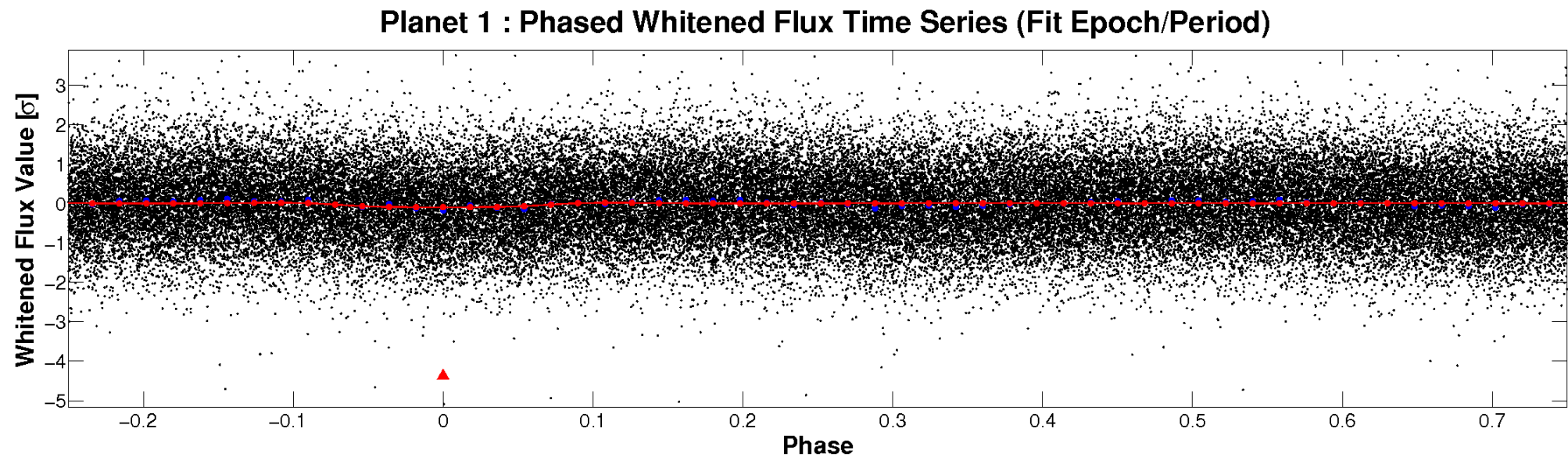
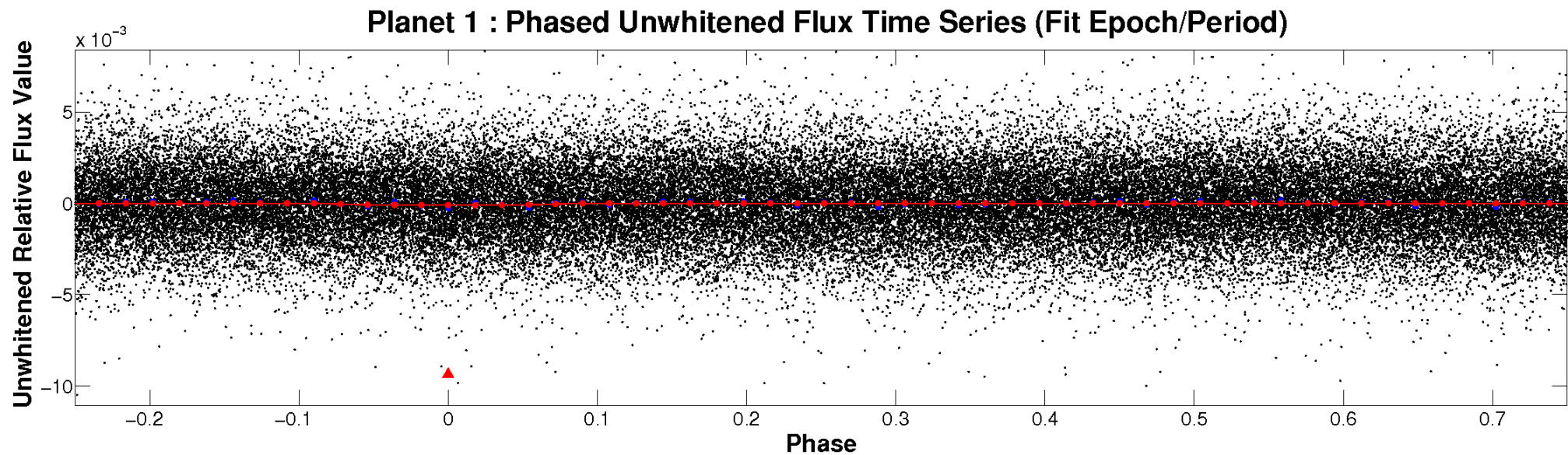


ALT Odd/Even

TCE 008908767-01

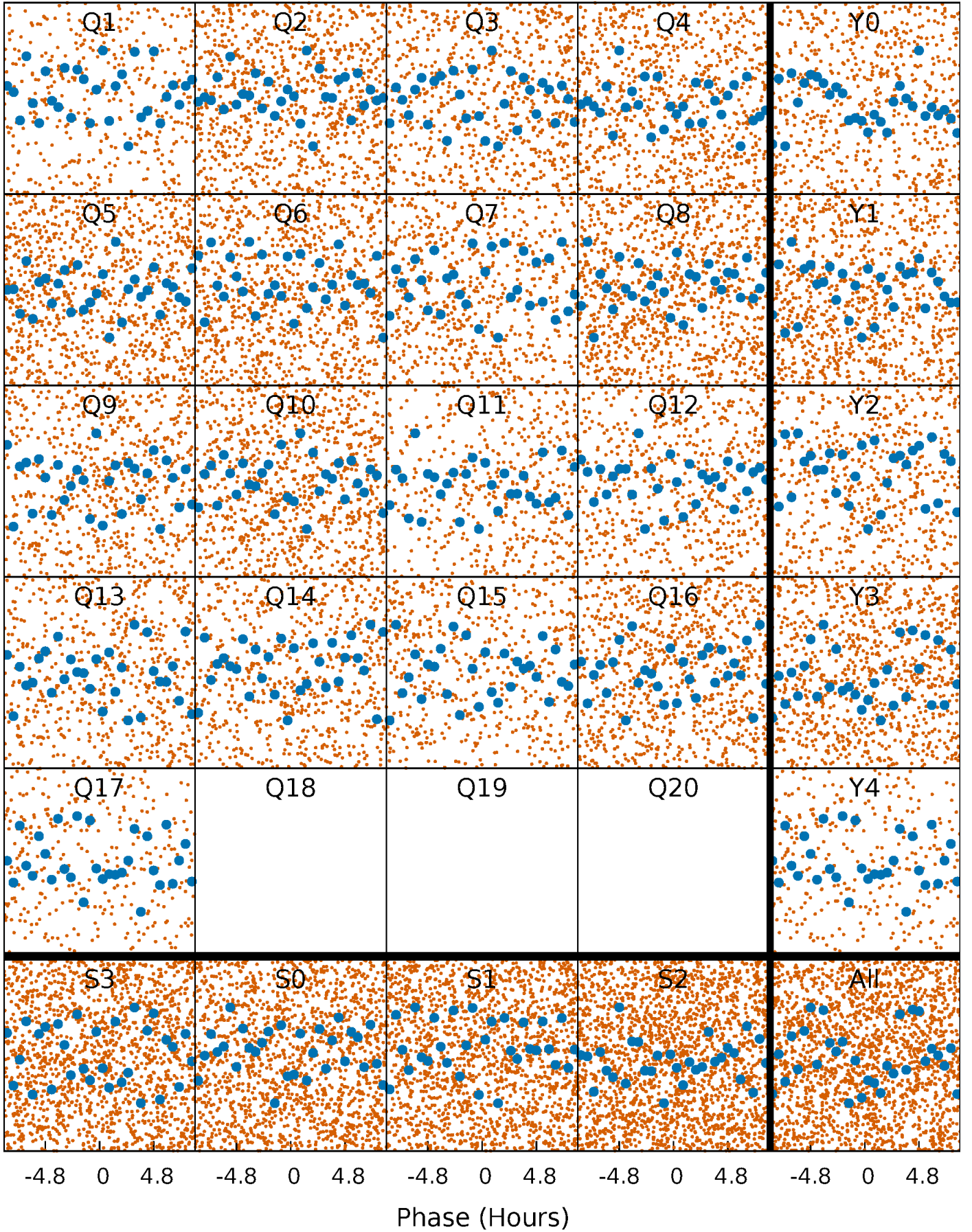


Non-Whitened Vs. Whitened Light Curve



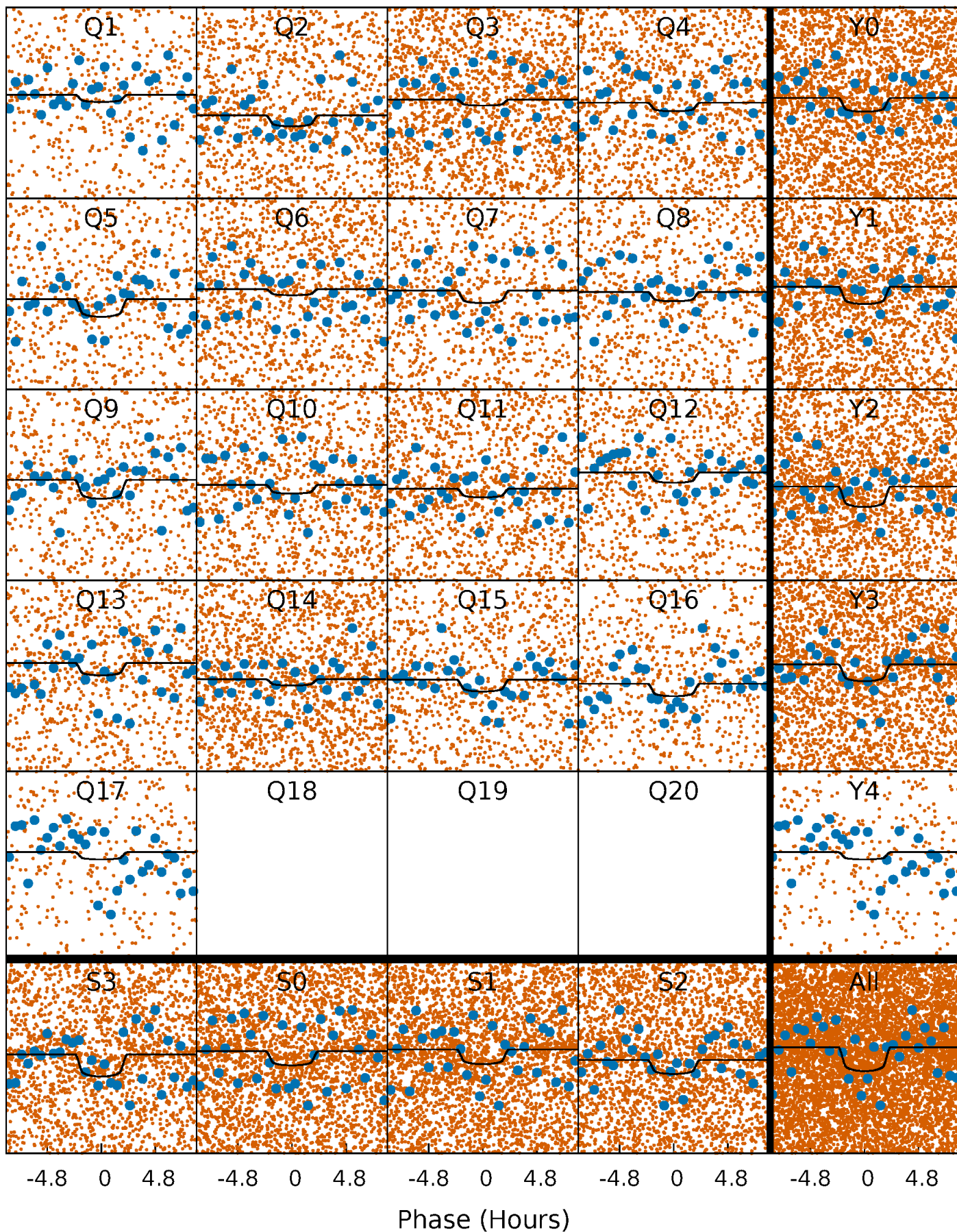
PDC Quarter-Phased Transit Curves

TCE 008908767-01 P= 1.134903 Days $T_0=132.401696$ (BKJD)



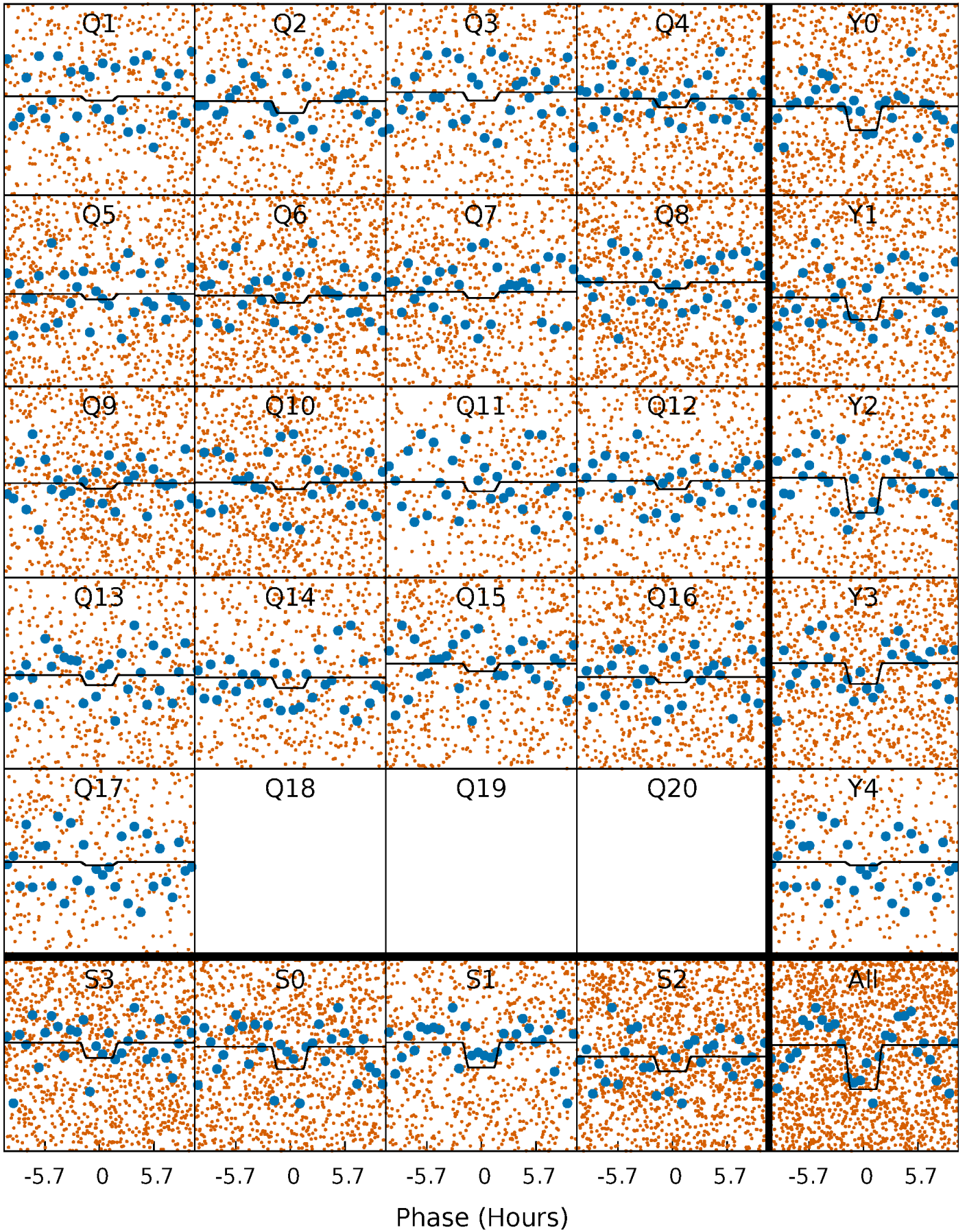
DV Quarter-Phased Transit Curves

TCE 008908767-01 P= 1.134903 Days $T_0=132.401696$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

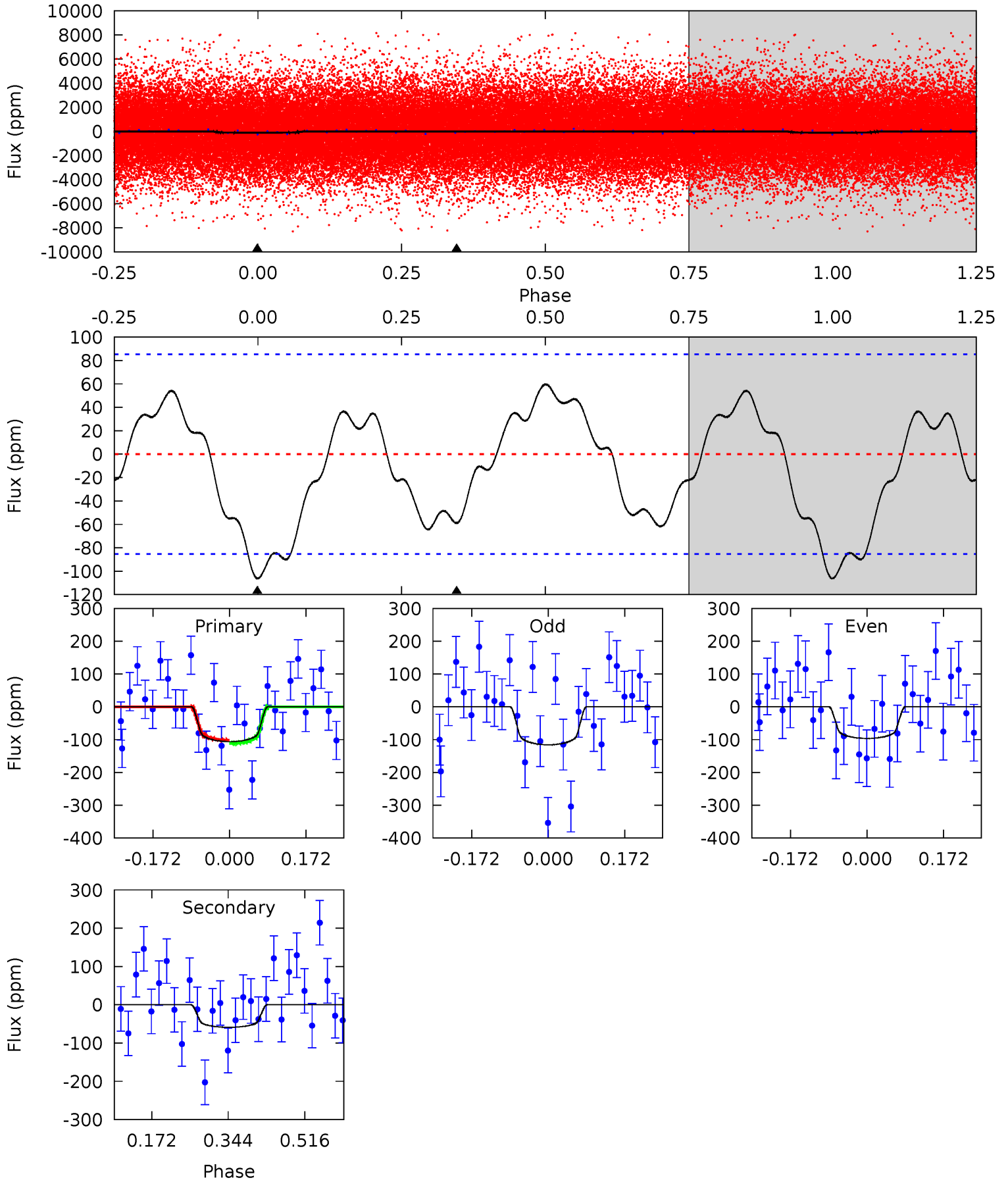
TCE 008908767-01 P= 1.134935 Days $T_0=132.393056$ (BKJD)



DV Model-Shift Uniqueness Test

008908767-01, P = 1.134903 Days, E = 131.266793 Days

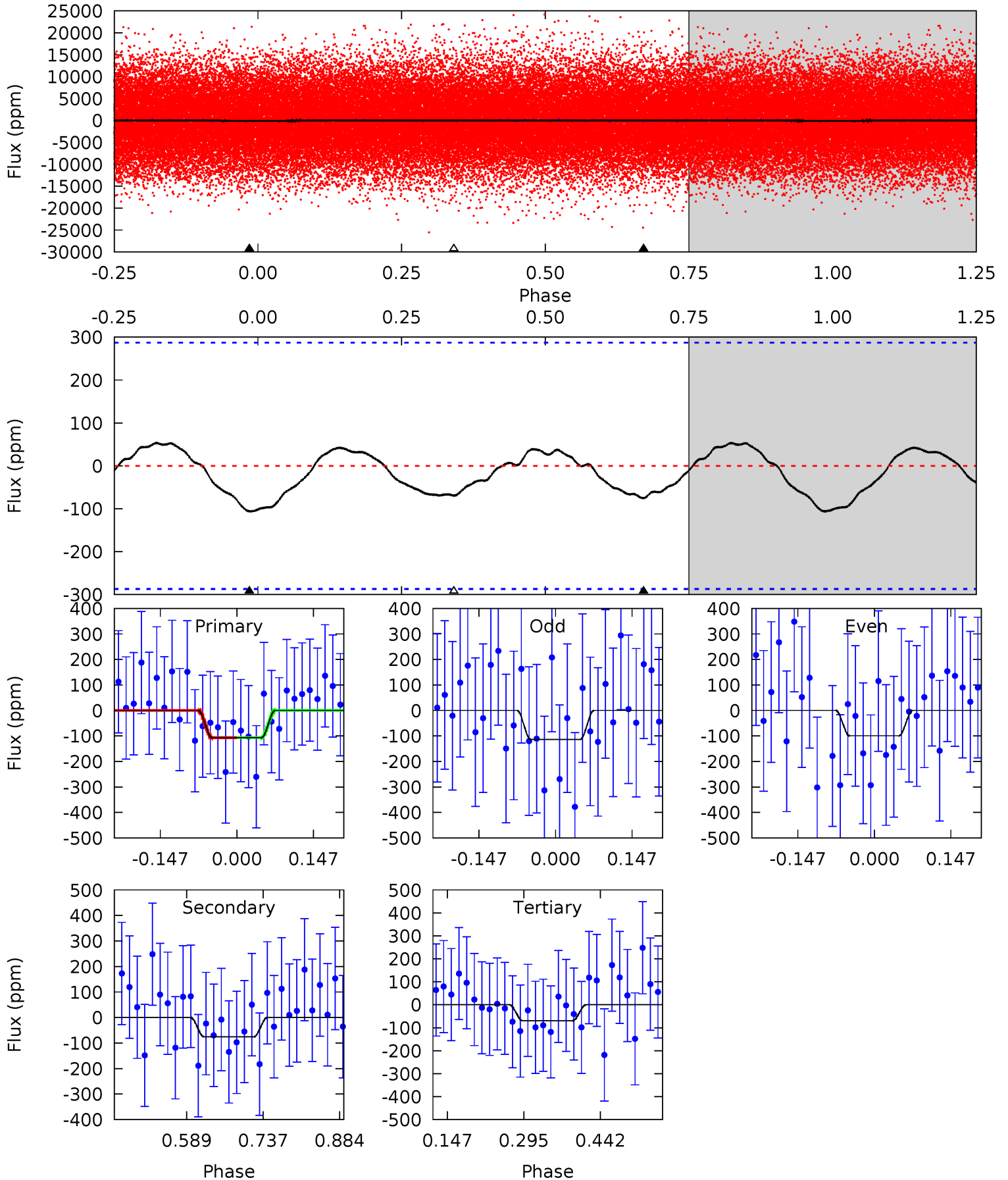
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5.54	3.07	0	0	4.45	1.37	1.93	5.54	5.54	3.07	3.07	0.51	0.99	0.36	0.25



Alt Model-Shift Uniqueness Test

008908767-01, P = 1.134935 Days, E = 131.258121 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
1.66	1.18	1.09	0	4.48	1.45	0.63	0.57	1.66	0.10	1.18	0.11	1.36	0.33	0.00



Stellar Parameters For KIC 008908767

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6688^{+212}_{-283}	$3.703^{+0.535}_{-0.094}$	$-0.280^{+0.300}_{-0.300}$	$2.855^{+0.505}_{-1.516}$	$1.500^{+0.220}_{-0.409}$	$0.091^{+0.553}_{-0.029}$
	+3%/-4%	+14%/-3%	+107%/-107%	+18%/-53%	+15%/-27%	+608%/-32%
Source	PHO1	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 008908767-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-59 ± 19	$3.26^{+2.58}_{-1.97}$	4288^{+344}_{-563}	5082^{+3351}_{-1365}	$1.752^{+8.908}_{-1.212}$
Alt.	-76 ± 64	$3.45^{+2.87}_{-2.13}$	4277^{+362}_{-555}	4977^{+3521}_{-8467}	$1.630^{+9.552}_{-1.480}$

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

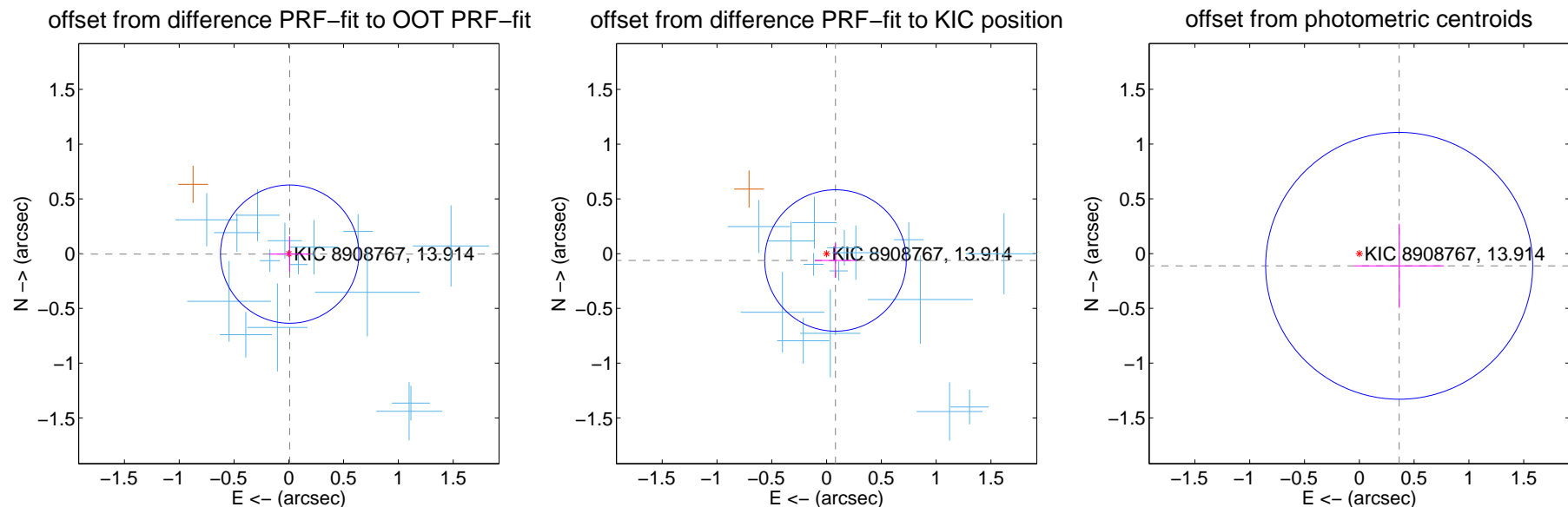
DV Centroid Data

Supplemental centroid analysis for 008908767-01. Kepler magnitude: 13.91. Transit SNR 7.85

There are 15 quarters with good PRF difference image offsets

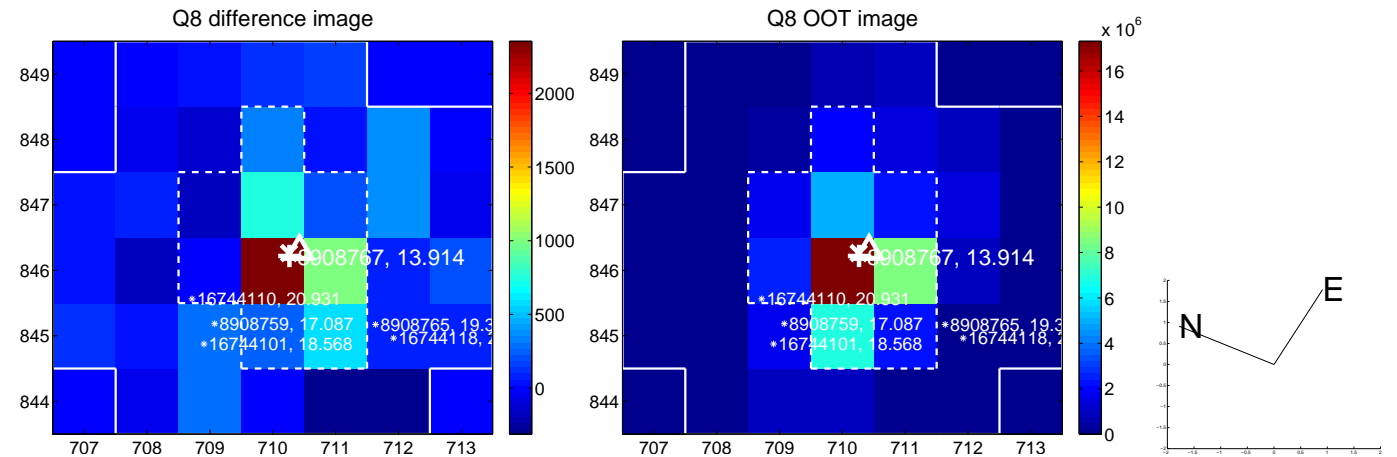
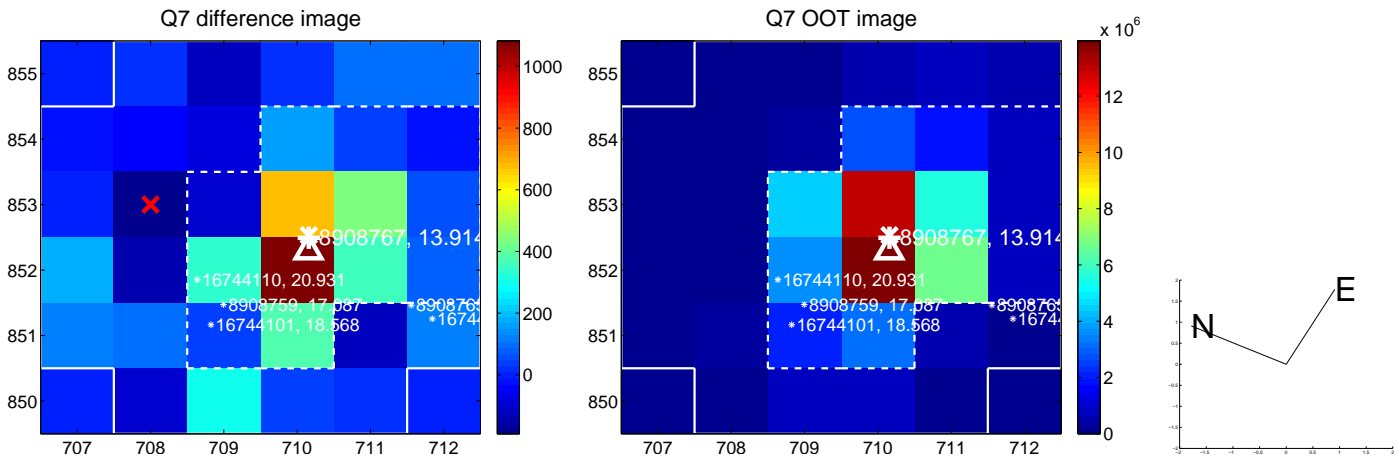
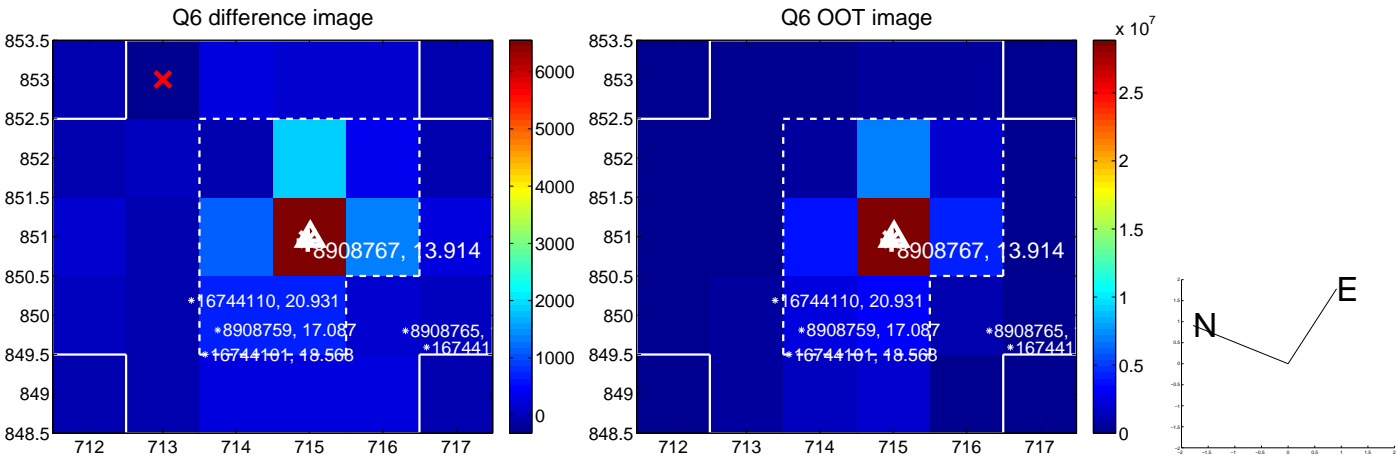
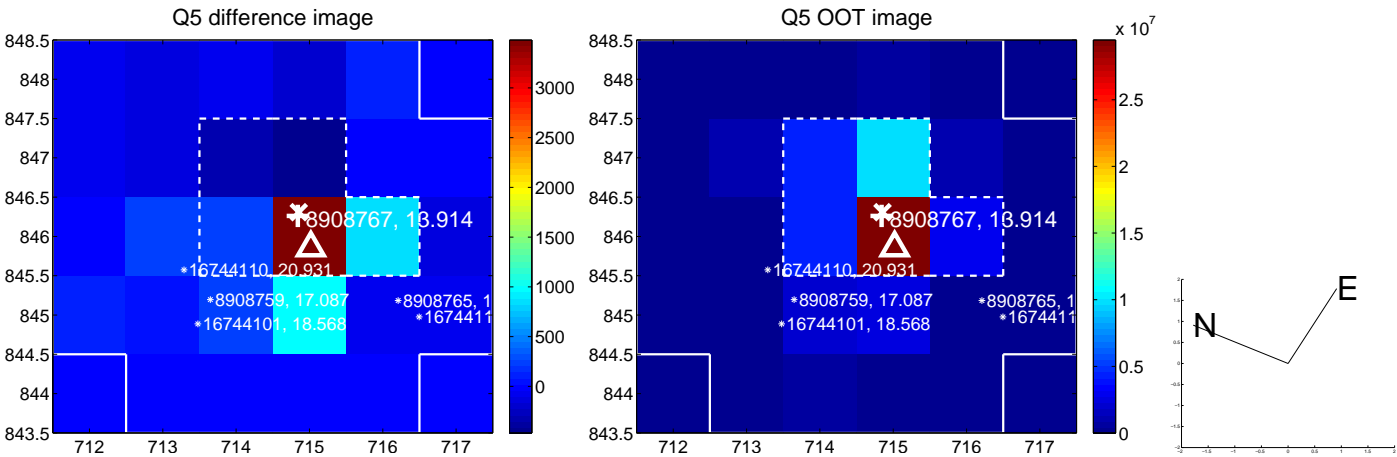
The direct PRF centroid is offset from the target star catalog position by about 0.21 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.009 ± 0.210	0.04	-0.008 ± 0.185	-0.004 ± 0.162
PRF-fit source offset from KIC position	0.103 ± 0.215	0.48	-0.081 ± 0.191	-0.062 ± 0.158
photometric centroid source offset	0.38 ± 0.41	0.94	-0.36 ± 0.41	-0.11 ± 0.38

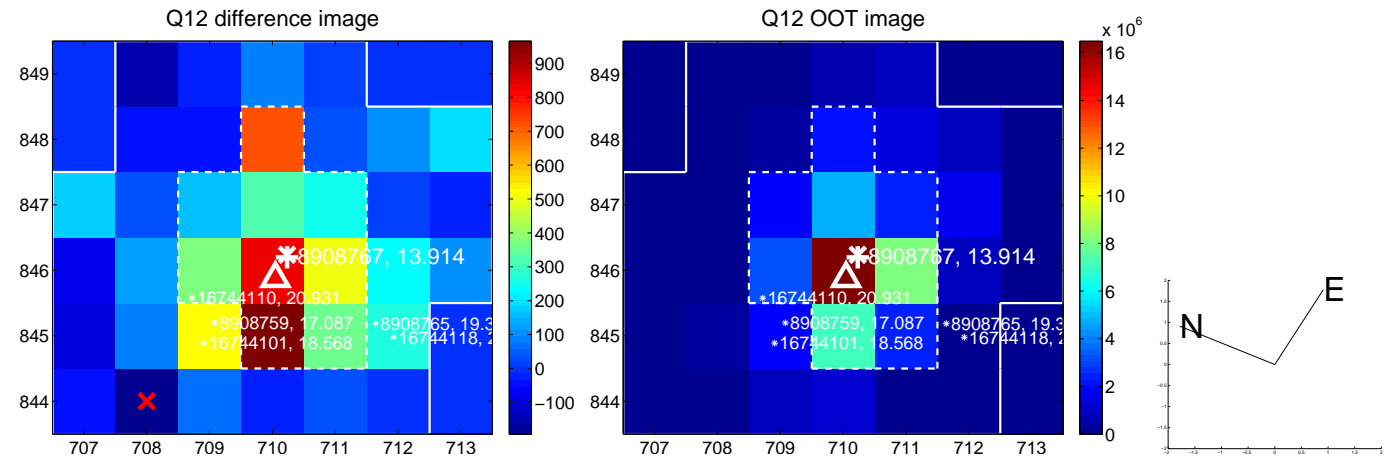
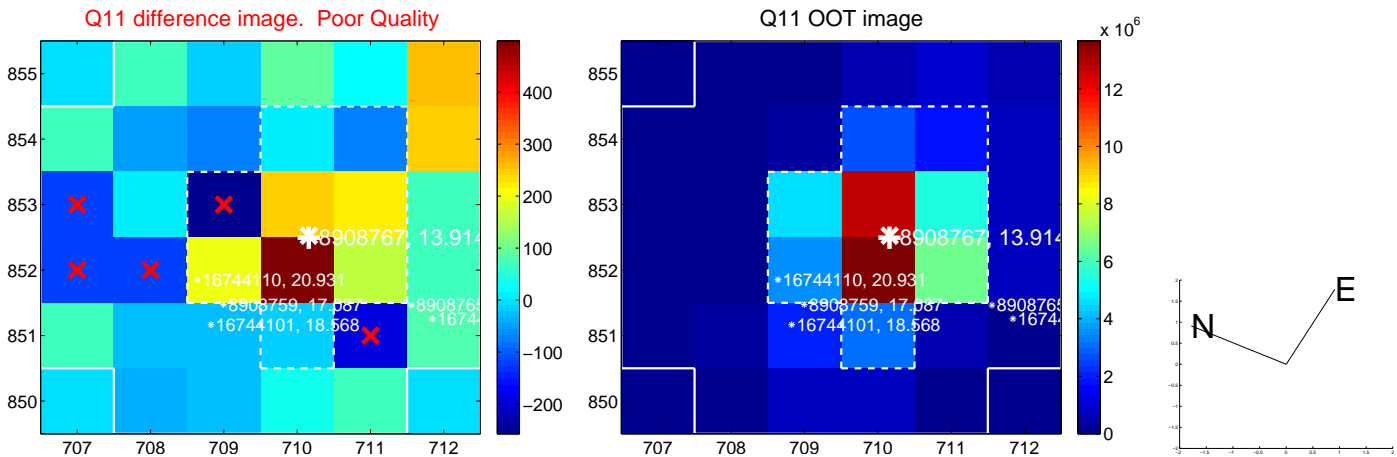
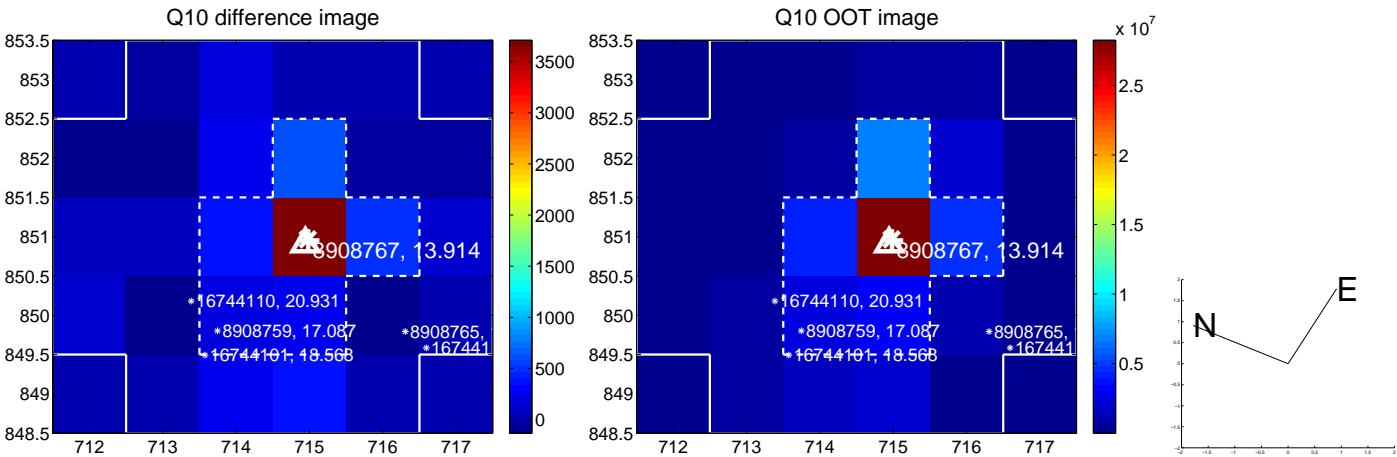
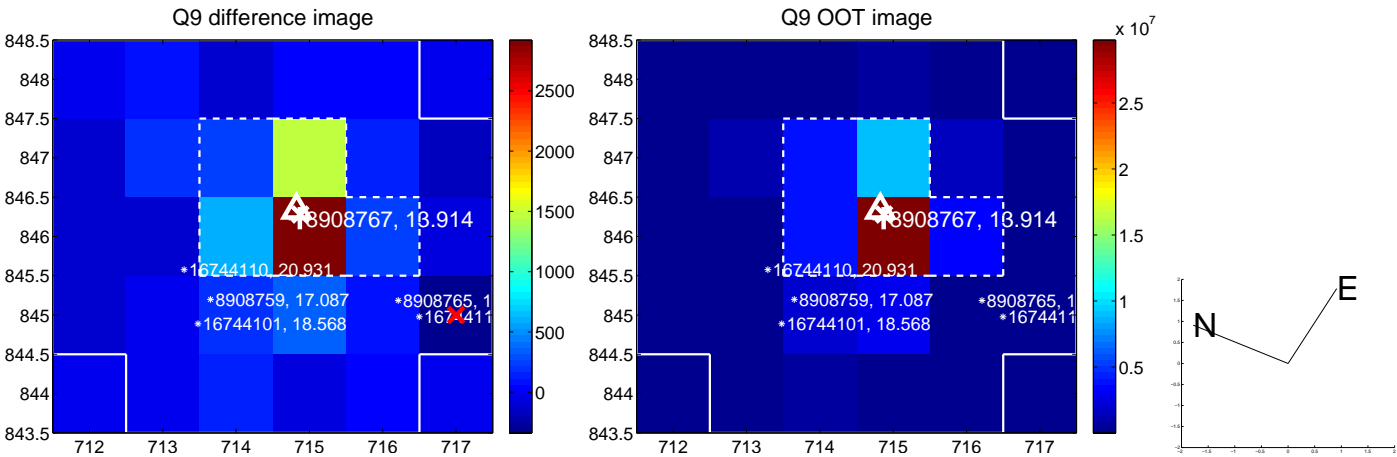


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

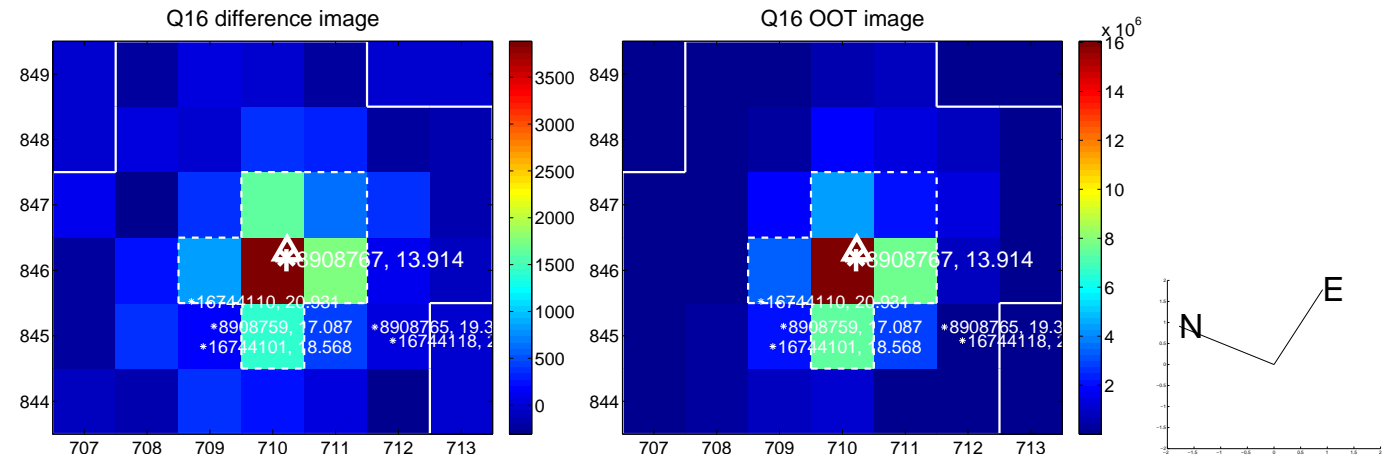
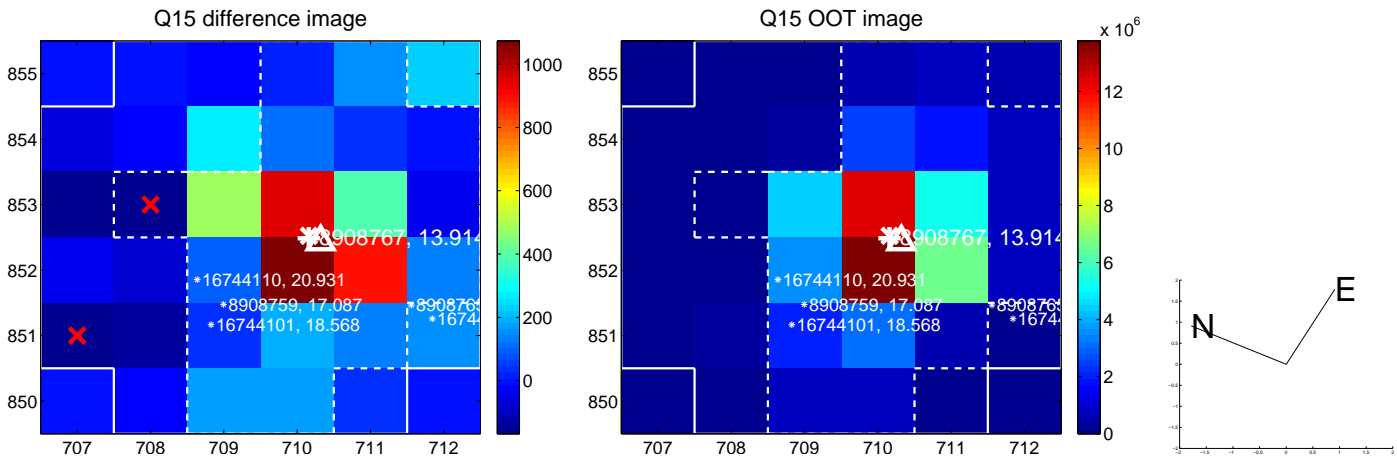
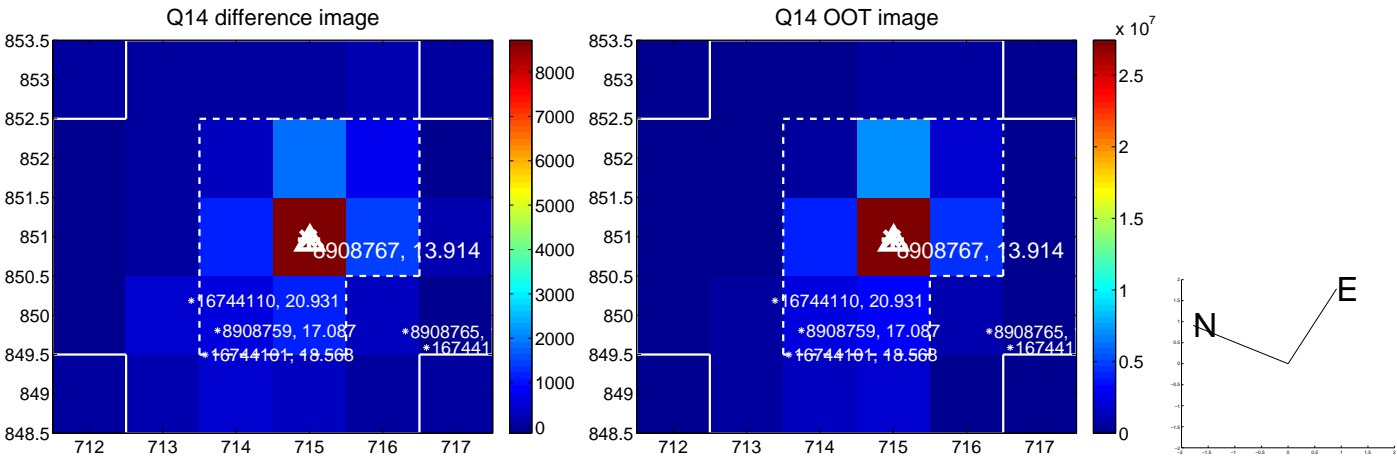
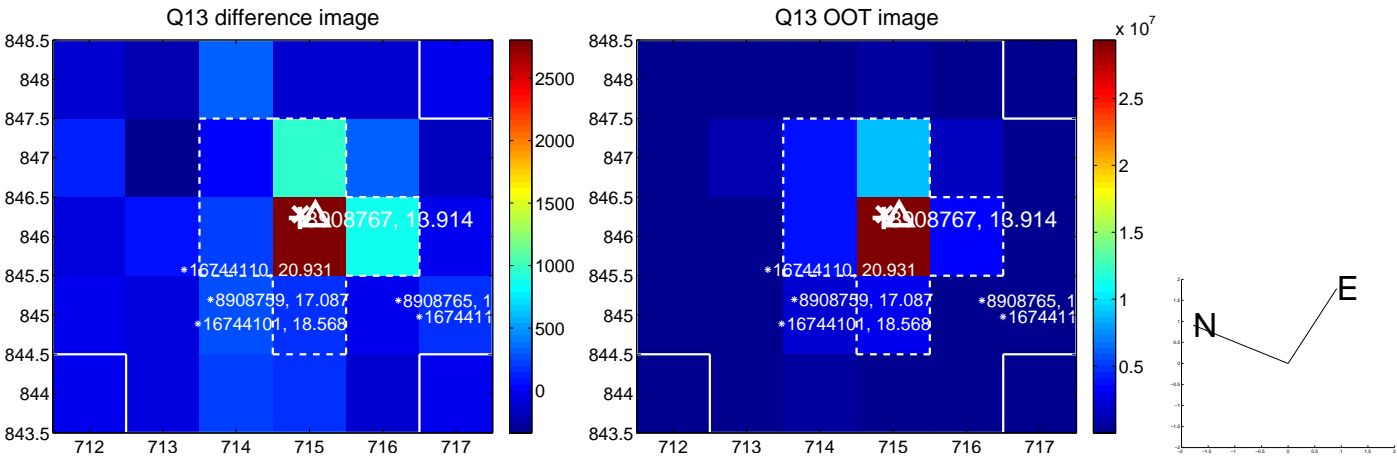
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



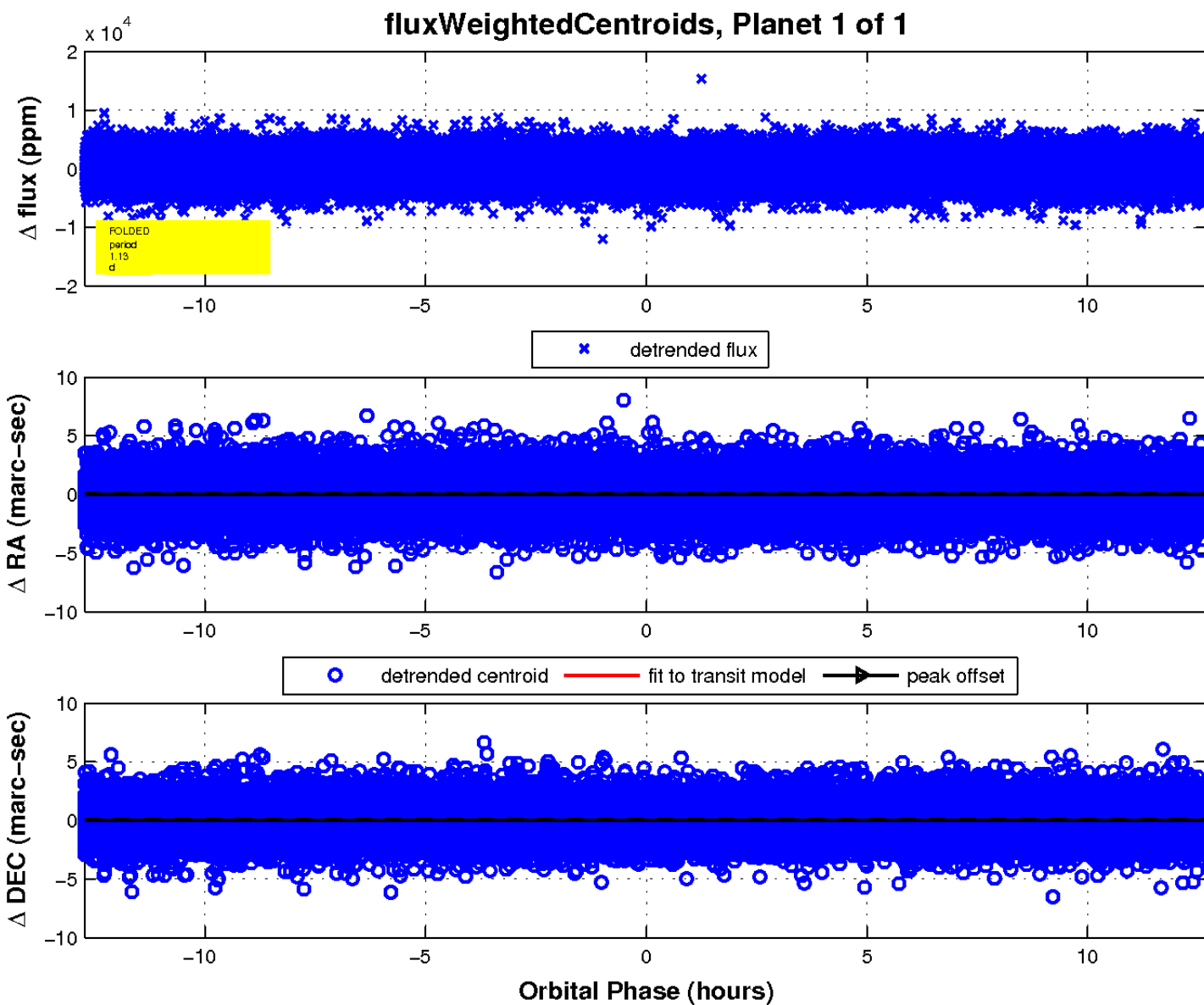
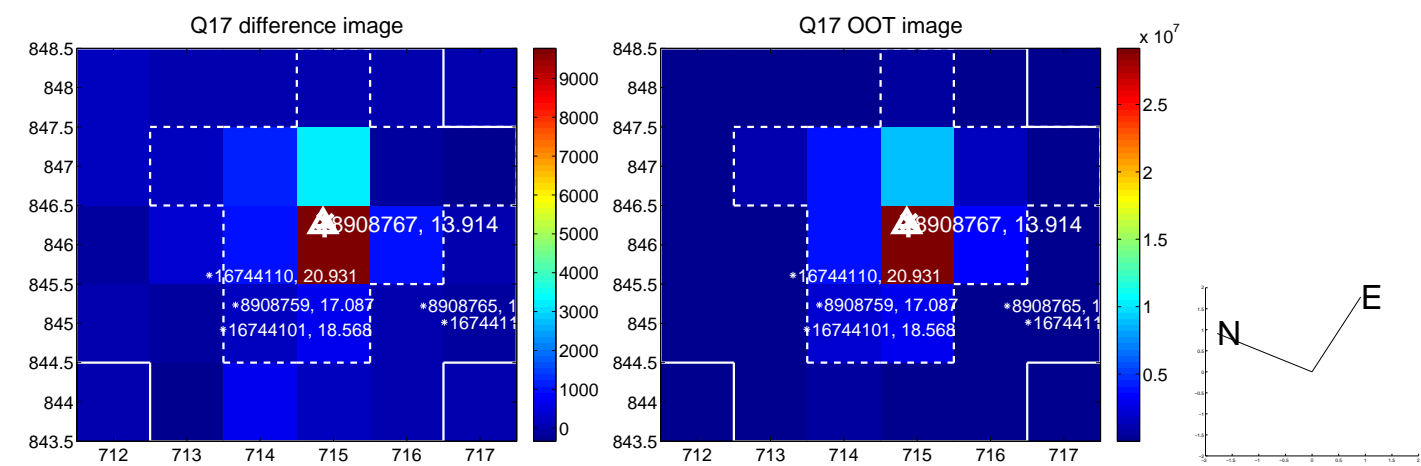
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white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

