

KIC 004847343

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})
004847343-01	OBS	No	11.417405	138.816573	151.0	27.544	22.3	23.7	0.82	5209	2.13	53.57

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
004847343-01	OBS	FP	0.00	1	0	0	0	LPP_DV

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

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

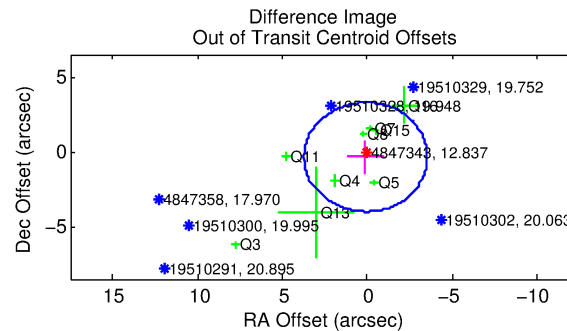
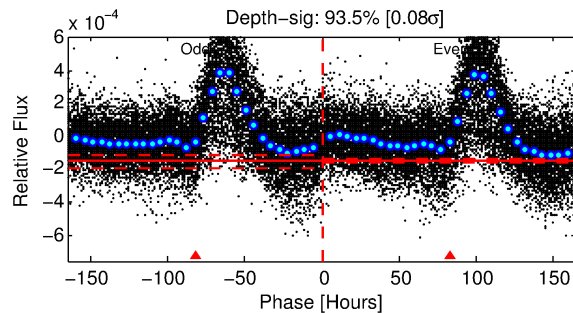
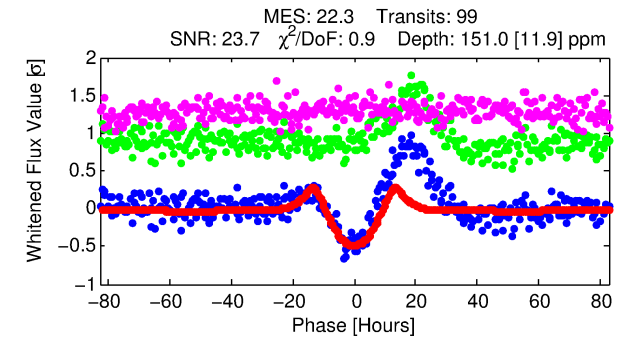
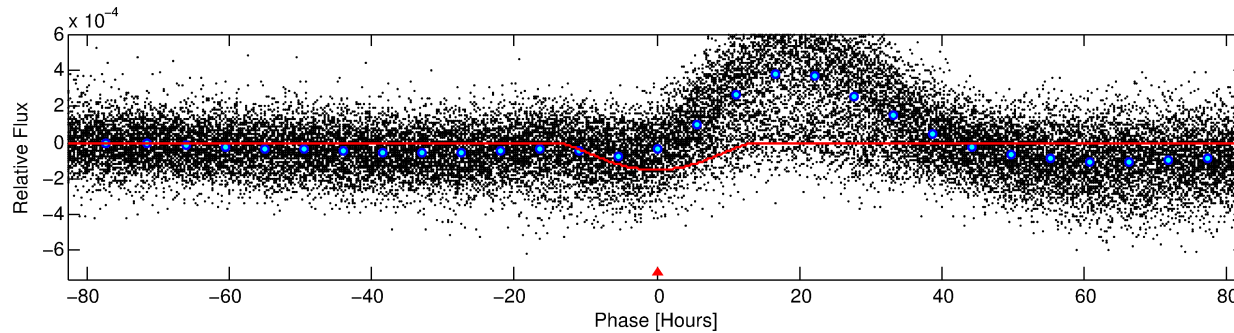
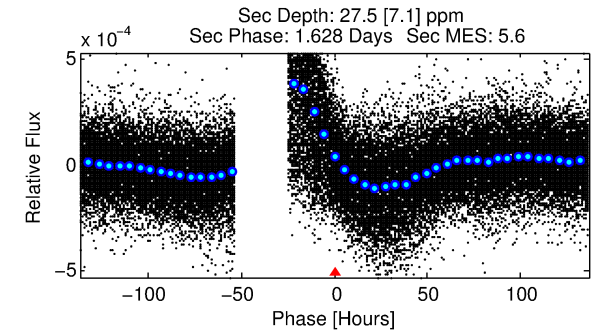
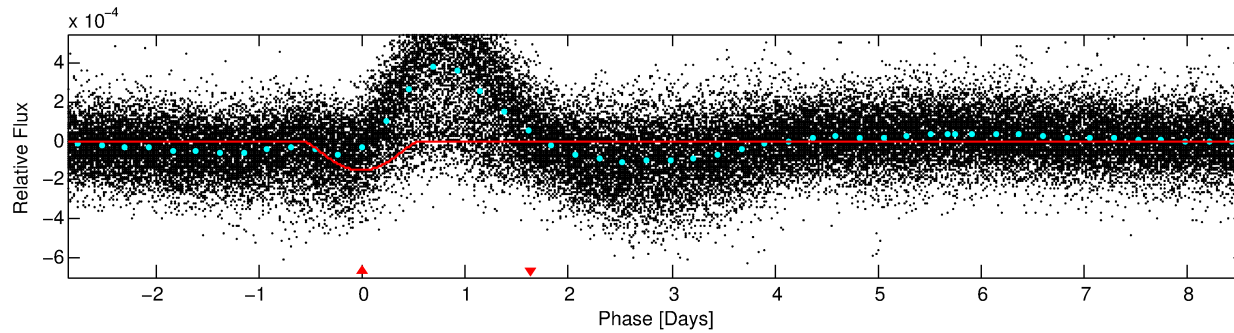
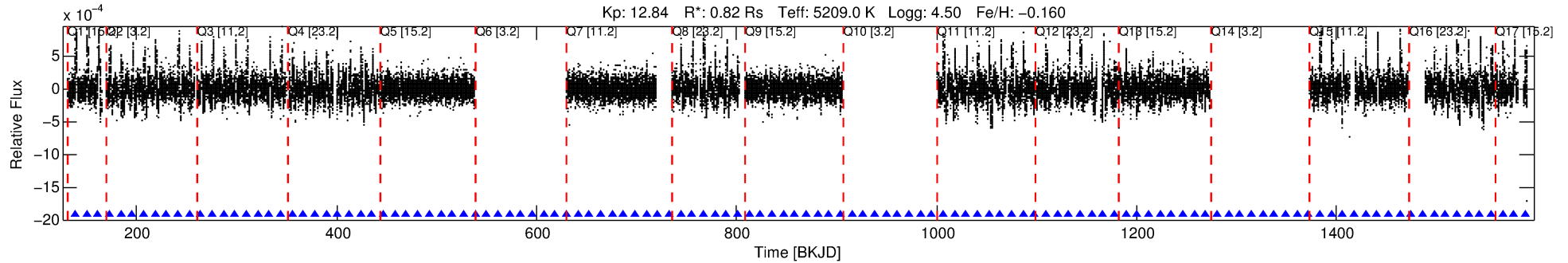
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 004847343-01

No Significant Match Found

DV One-Page Summary

KIC: 4847343 Candidate: 1 of 1 Period: 11.417 d



DV Fit Results:

Period = 11.41740 [0.00023] d
Epoch = 138.8166 [0.0157] BKJD
Rp/R* = 0.0239 [0.0139]
a/R* = 1.23 [0.05]
b = 1.00 [0.02]
Seff = 53.57 [16.61]
Teq = 690 [53] K
Rp = 2.13 [1.30] Re
a = 0.0905 [0.0139] AU
Ag = 27.35 [33.11] [0.80σ]
Teffp = 2439 [737] K [2.37σ]

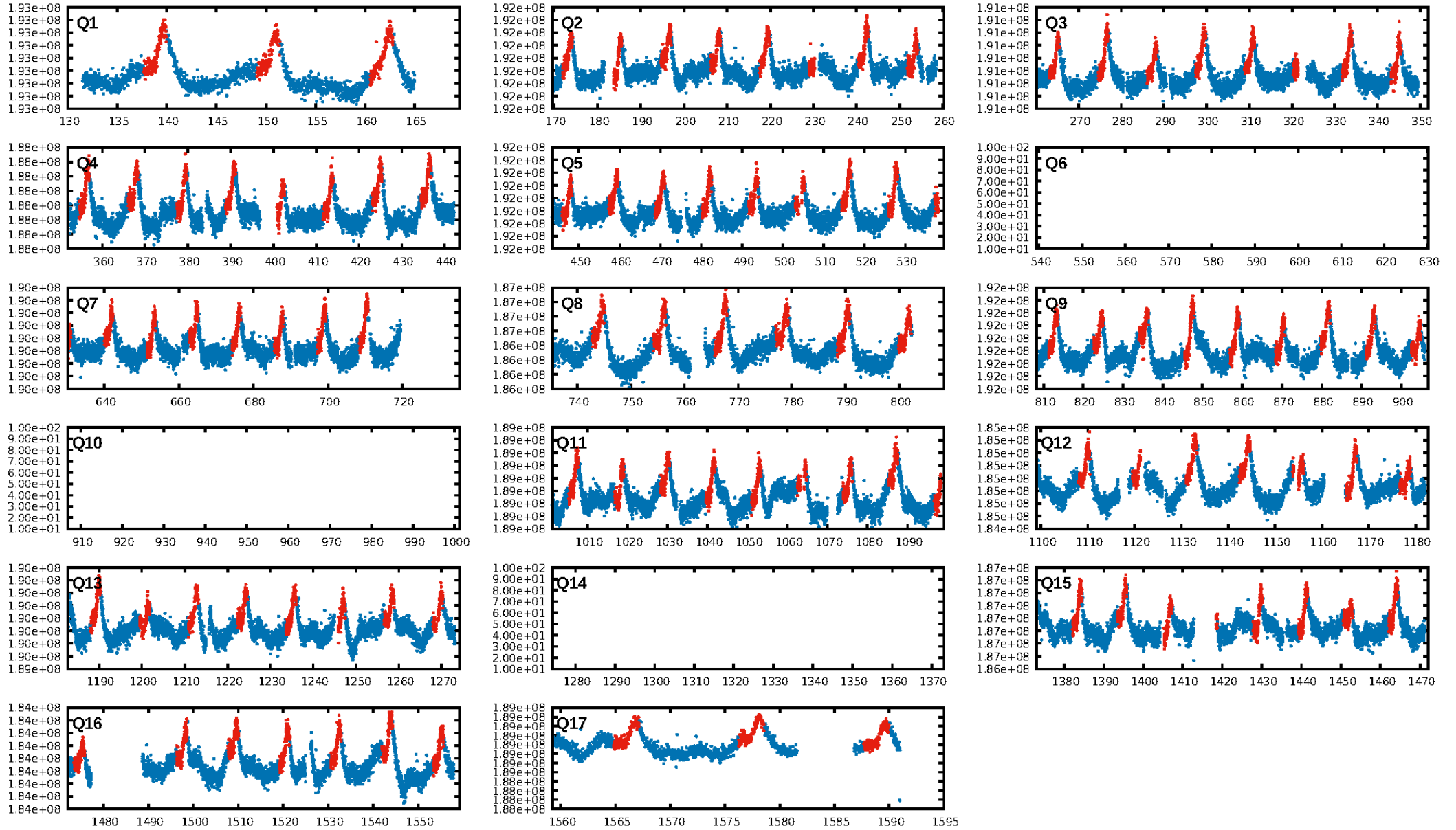
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 68.9%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 1.36e-115
RollingBand-fgt: 1.00 [93/93]
GhostDiagnostic-chr: 10.61
Centroid-sig: 46.6%
Centroid-so: 0.488 arcsec [2.00σ]
OotOffset-rm: 0.371 arcsec [0.31σ]
KicOffset-rm: 0.361 arcsec [0.42σ]
OotOffset-st: 0/4/3/2 [9]
KicOffset-st: 0/4/3/2 [9]
DiffImageQuality-fgm: 0.67 [6/9]
DiffImageOverlap-fno: 1.00 [14/14]

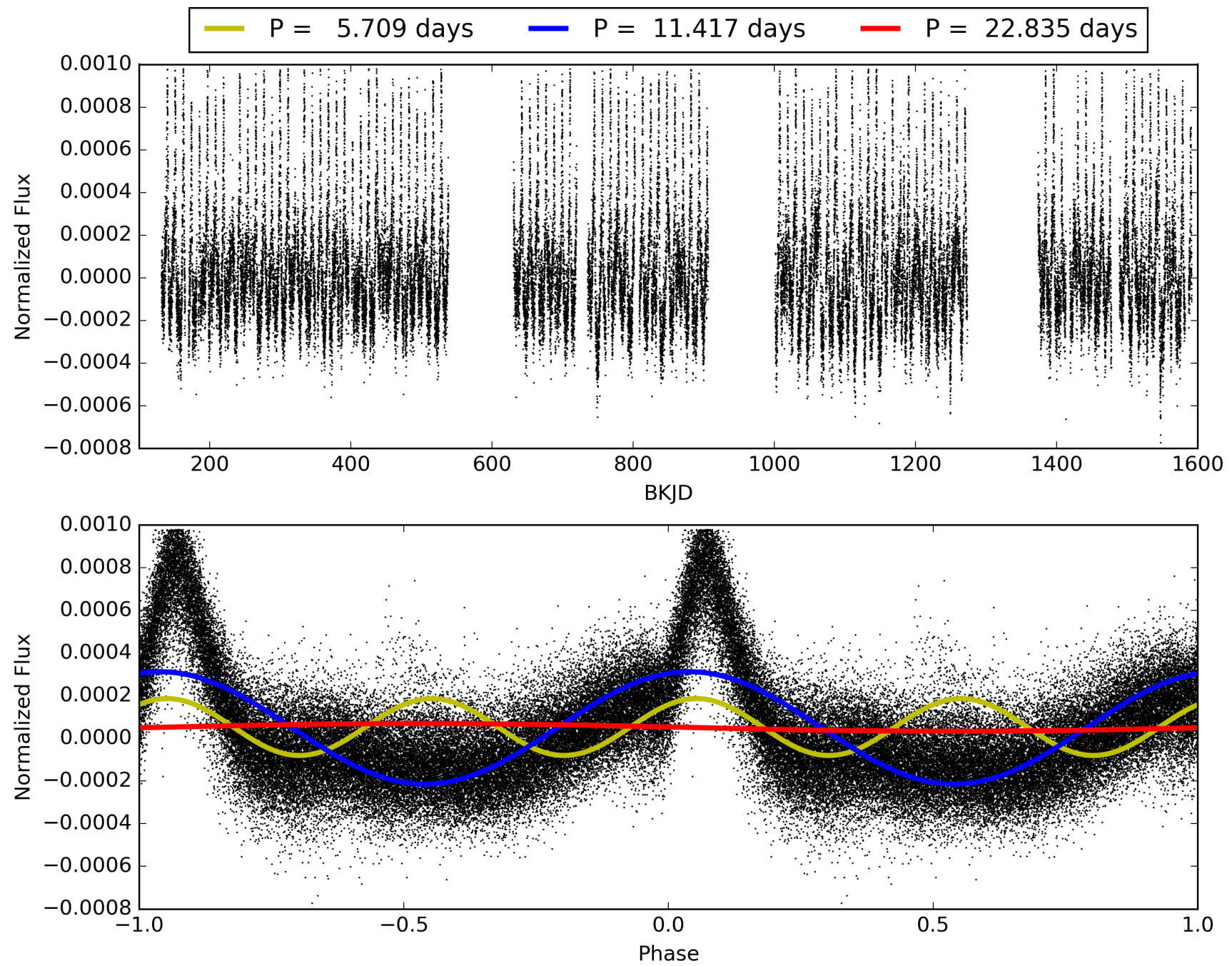
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 23:31:29 Z

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

TCE 004847343-01, PDC Light Curves

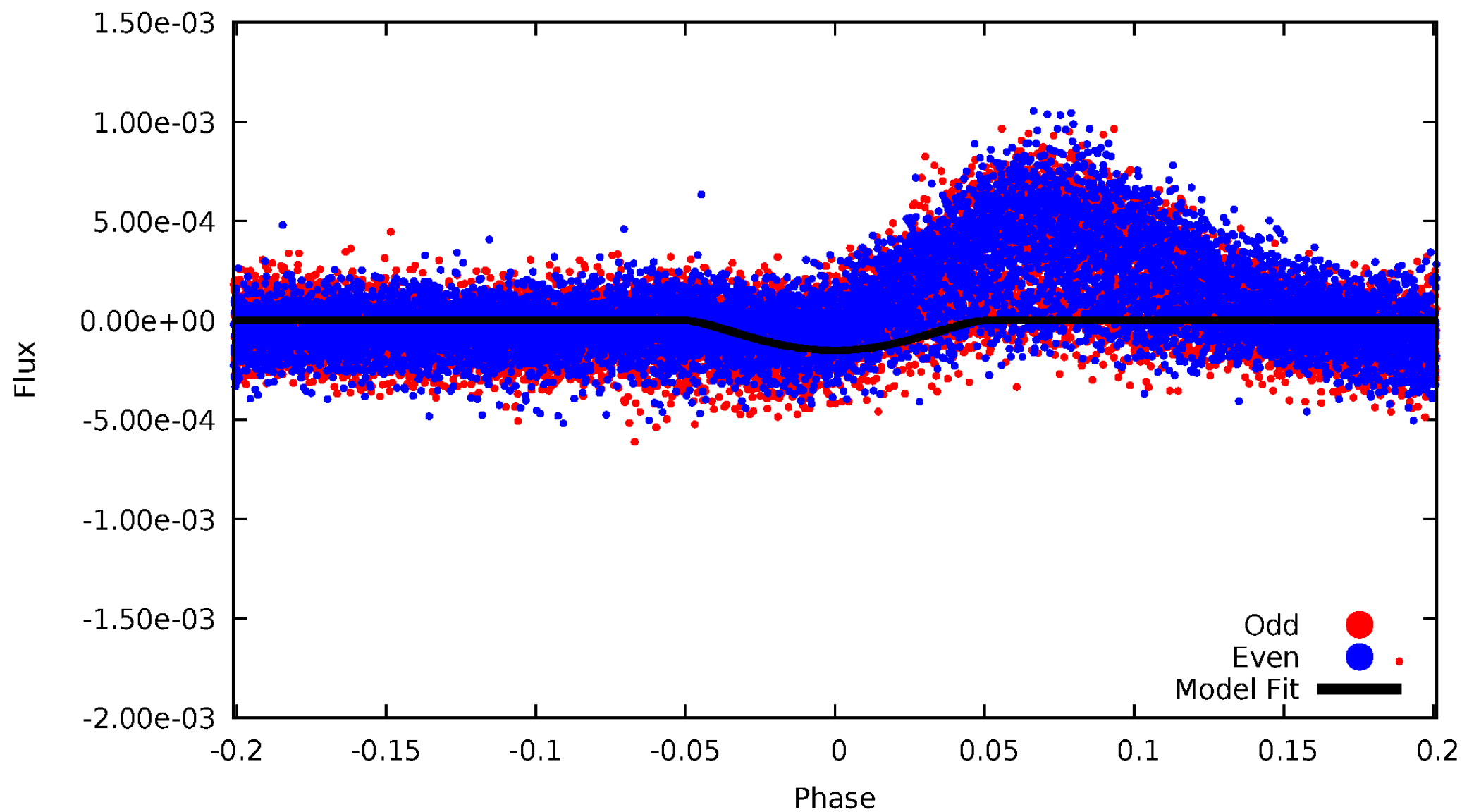


TCE 004847343-01



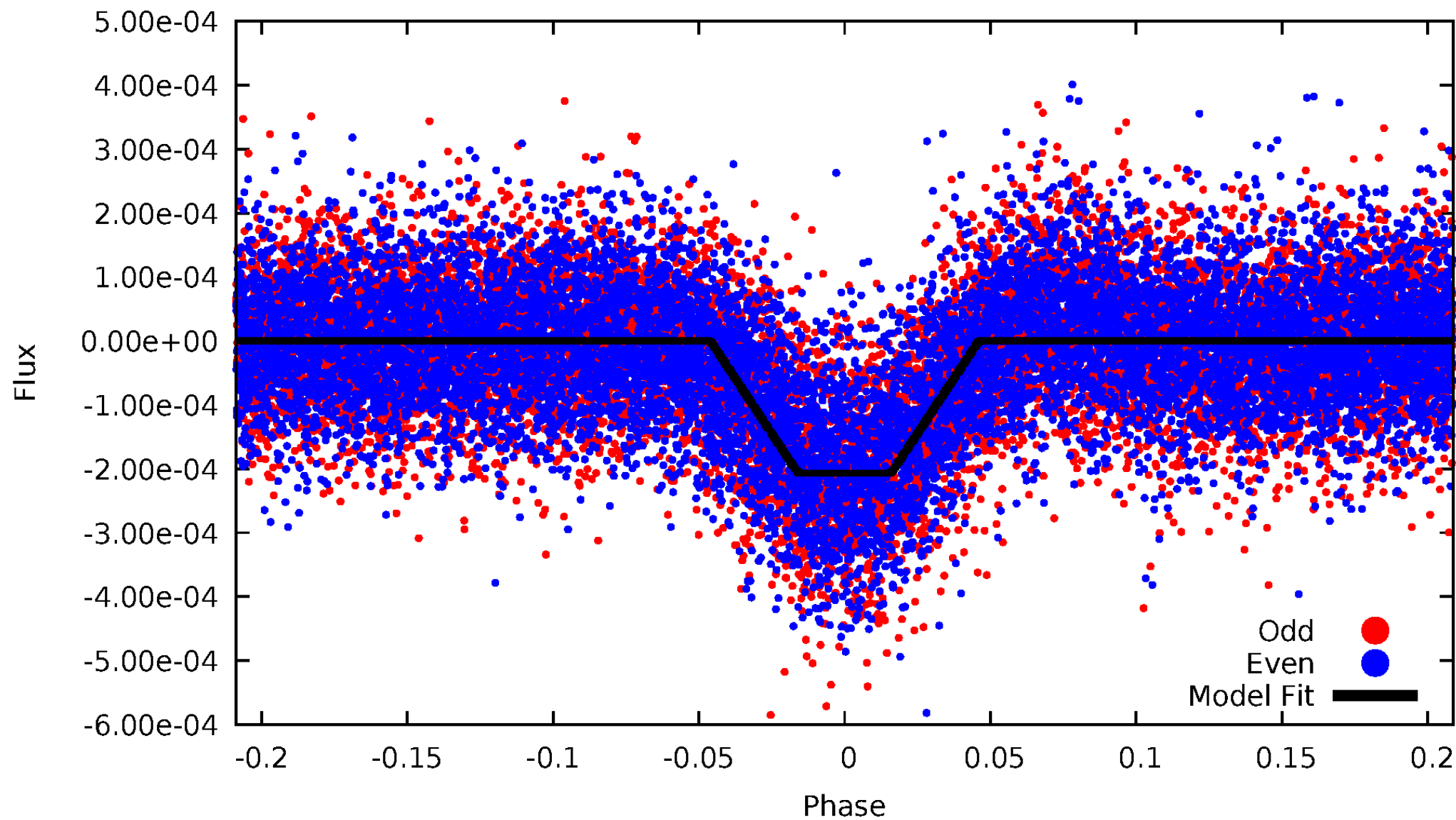
DV Odd/Even

TCE 004847343-01

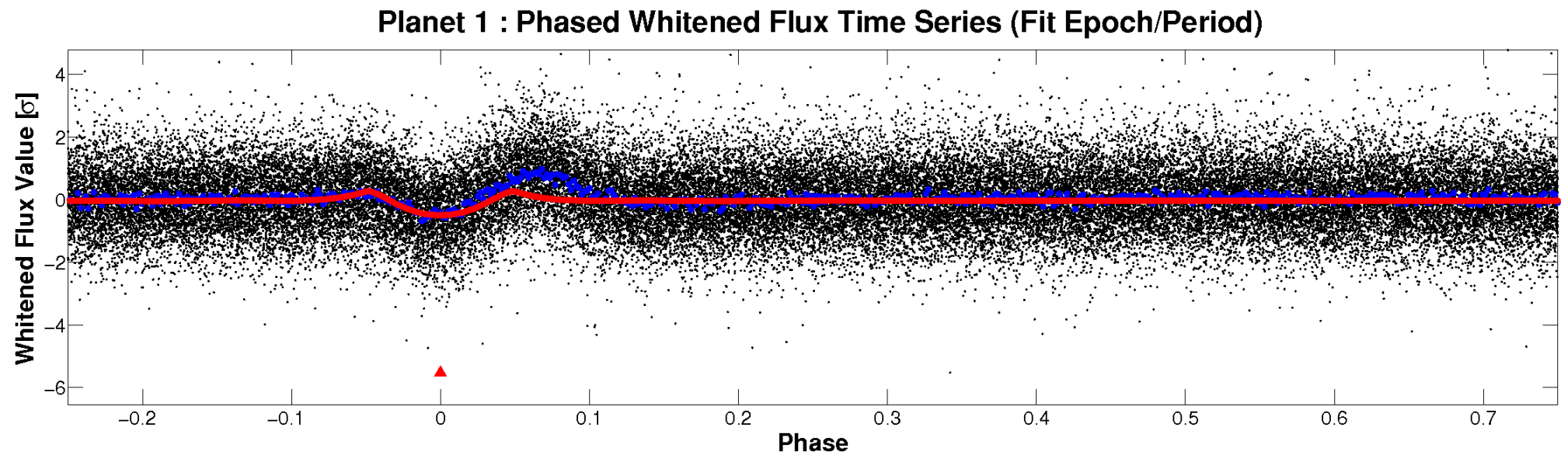
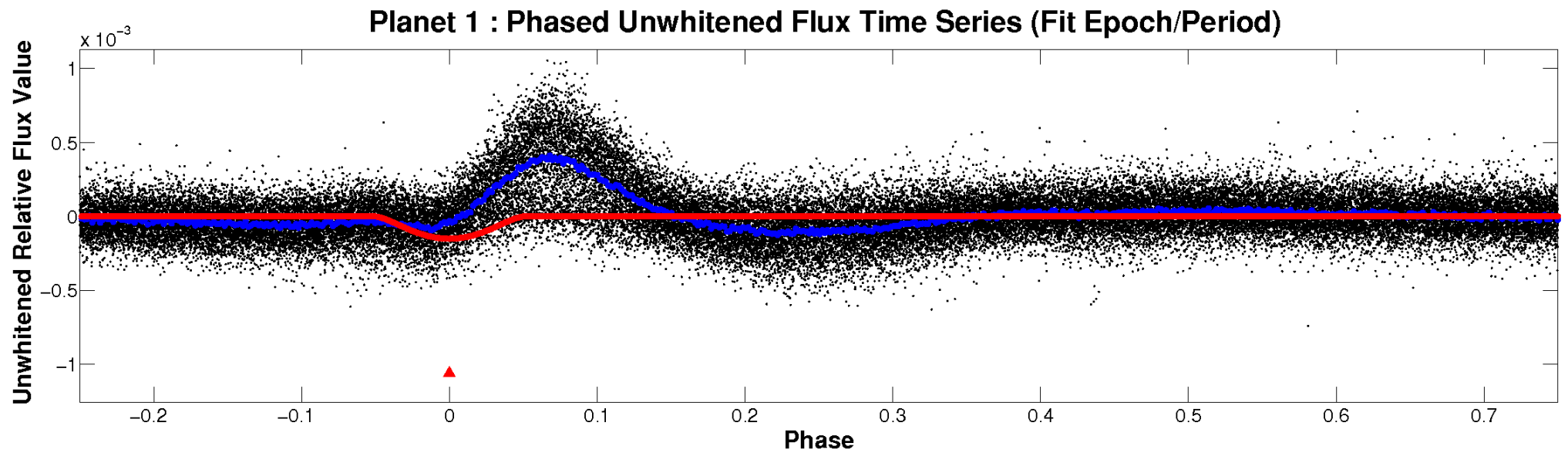


ALT Odd/Even

TCE 004847343-01

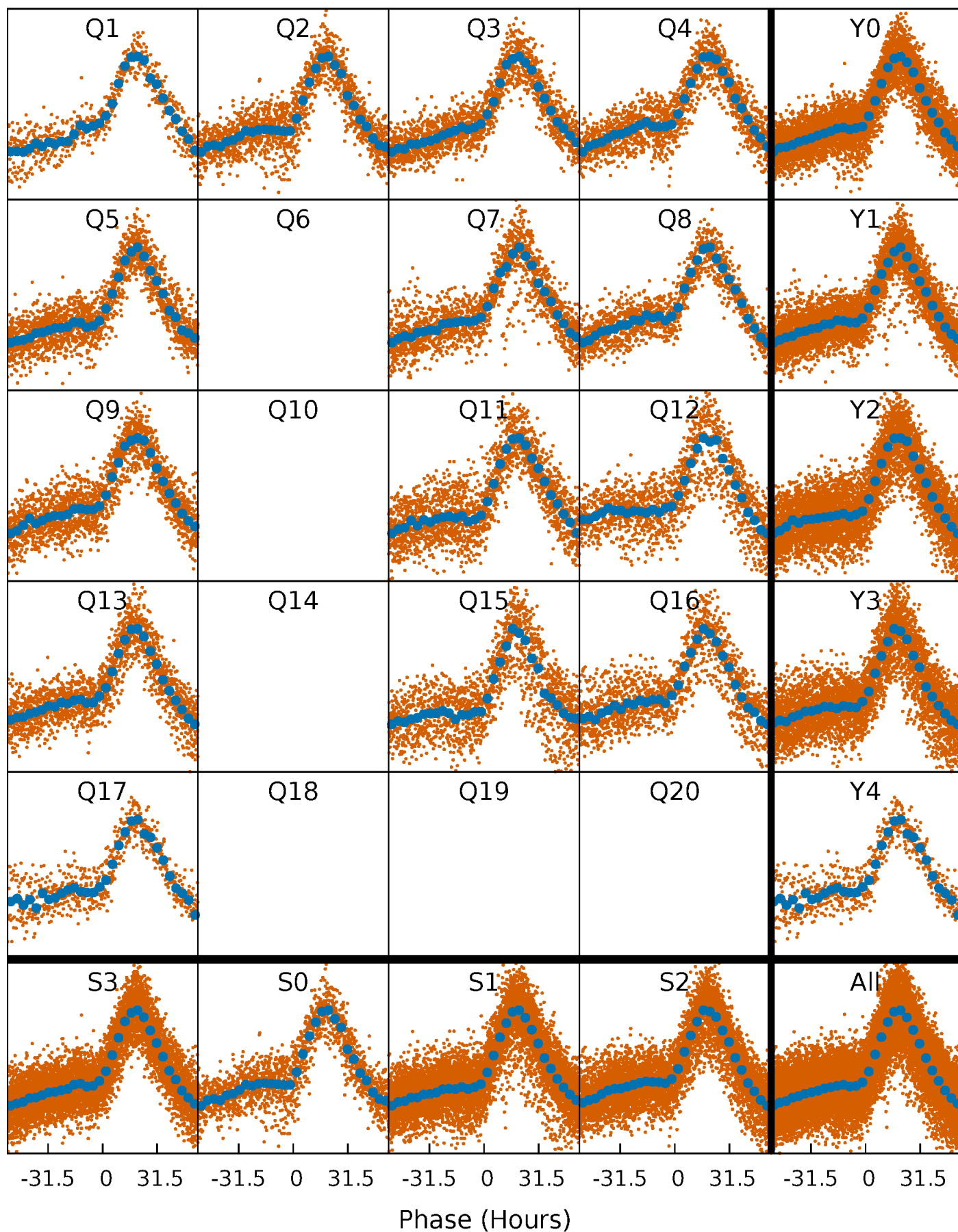


Non-Whitened Vs. Whitened Light Curve



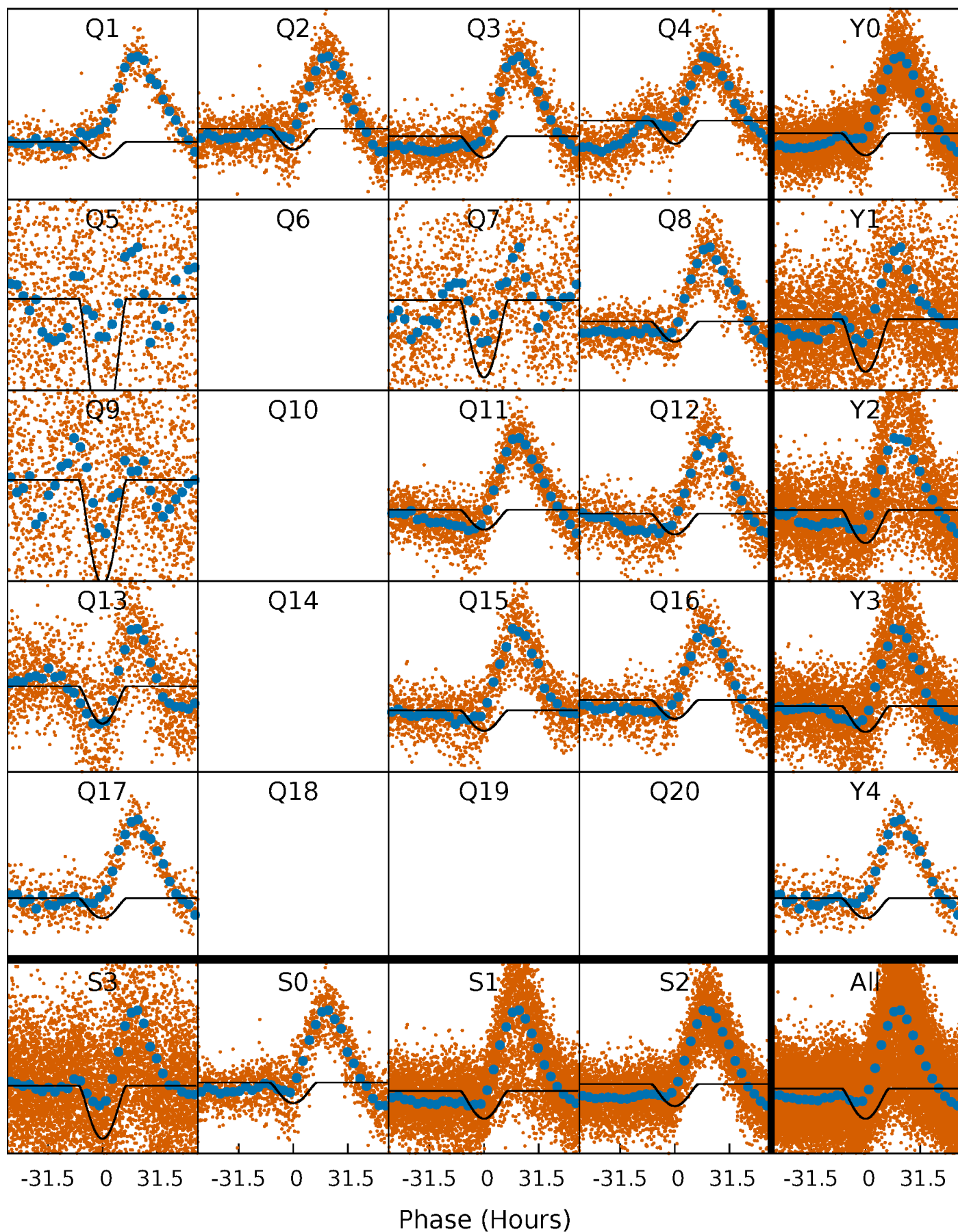
PDC Quarter-Phased Transit Curves

TCE 004847343-01 P= 11.417405 Days $T_0=138.816573$ (BKJD)



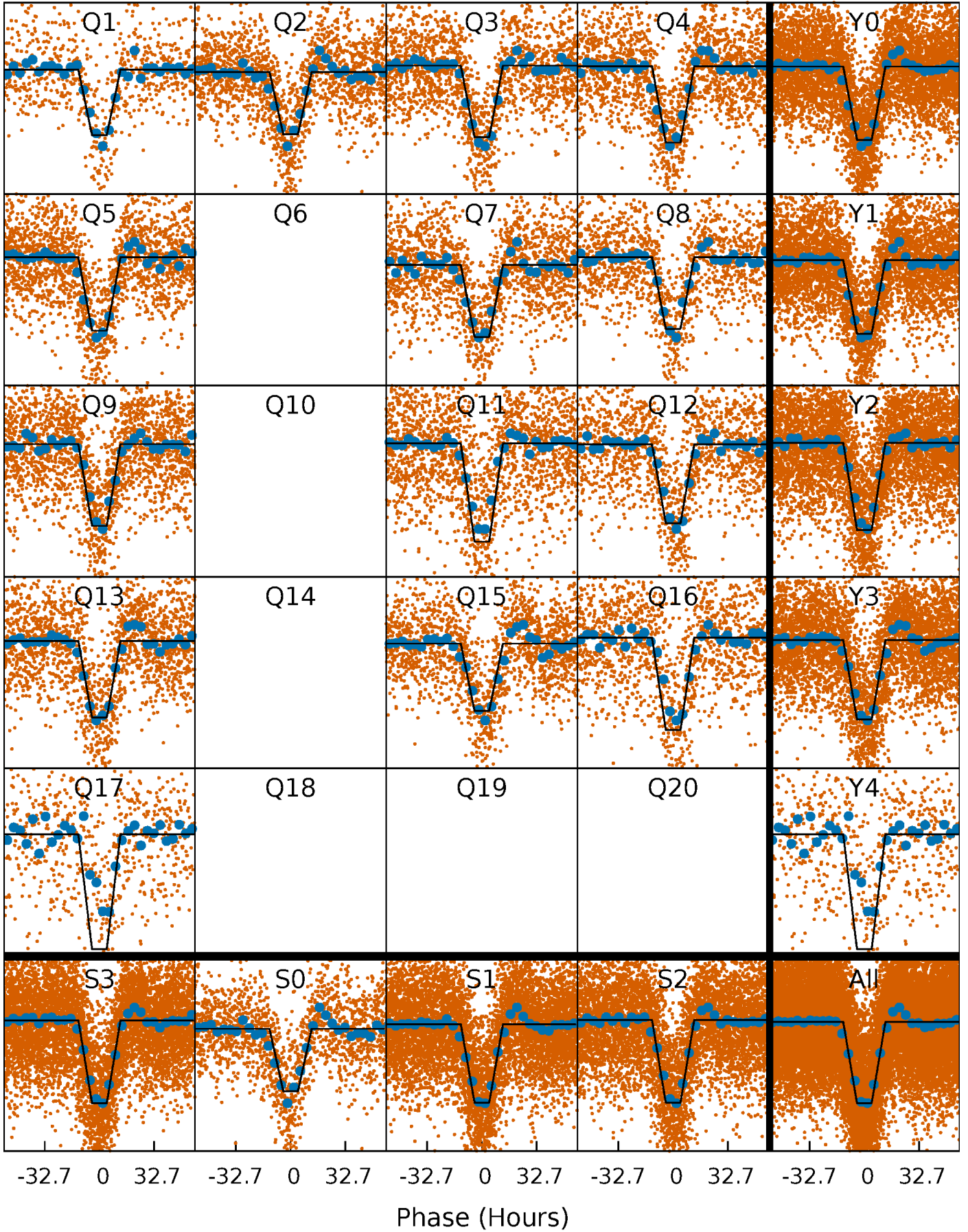
DV Quarter-Phased Transit Curves

TCE 004847343-01 P= 11.417405 Days $T_0=138.816573$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

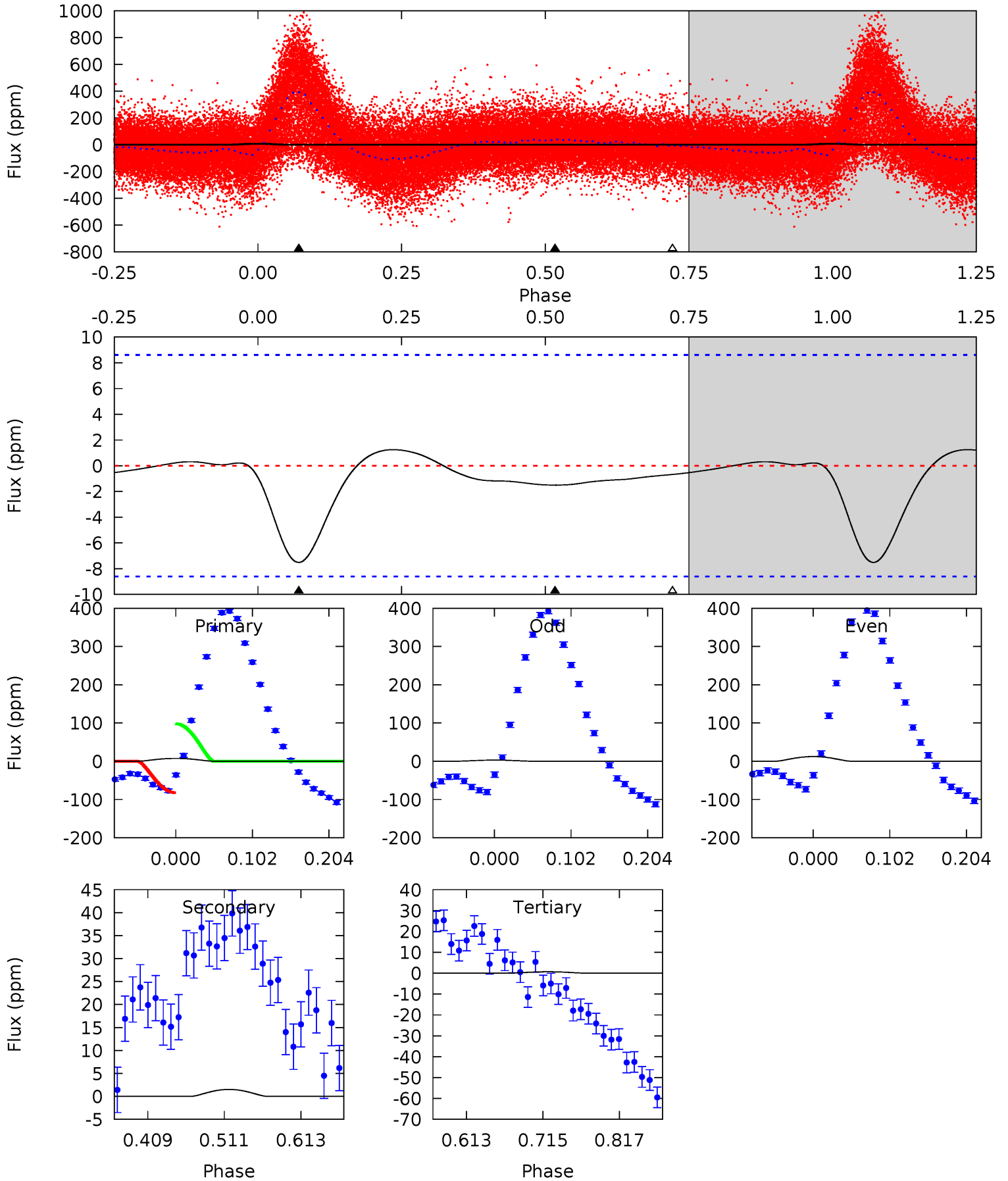
TCE 004847343-01 P= 11.416556 Days $T_0=138.843978$ (BKJD)



DV Model-Shift Uniqueness Test

004847343-01, P = 11.417405 Days, E = 127.399168 Days

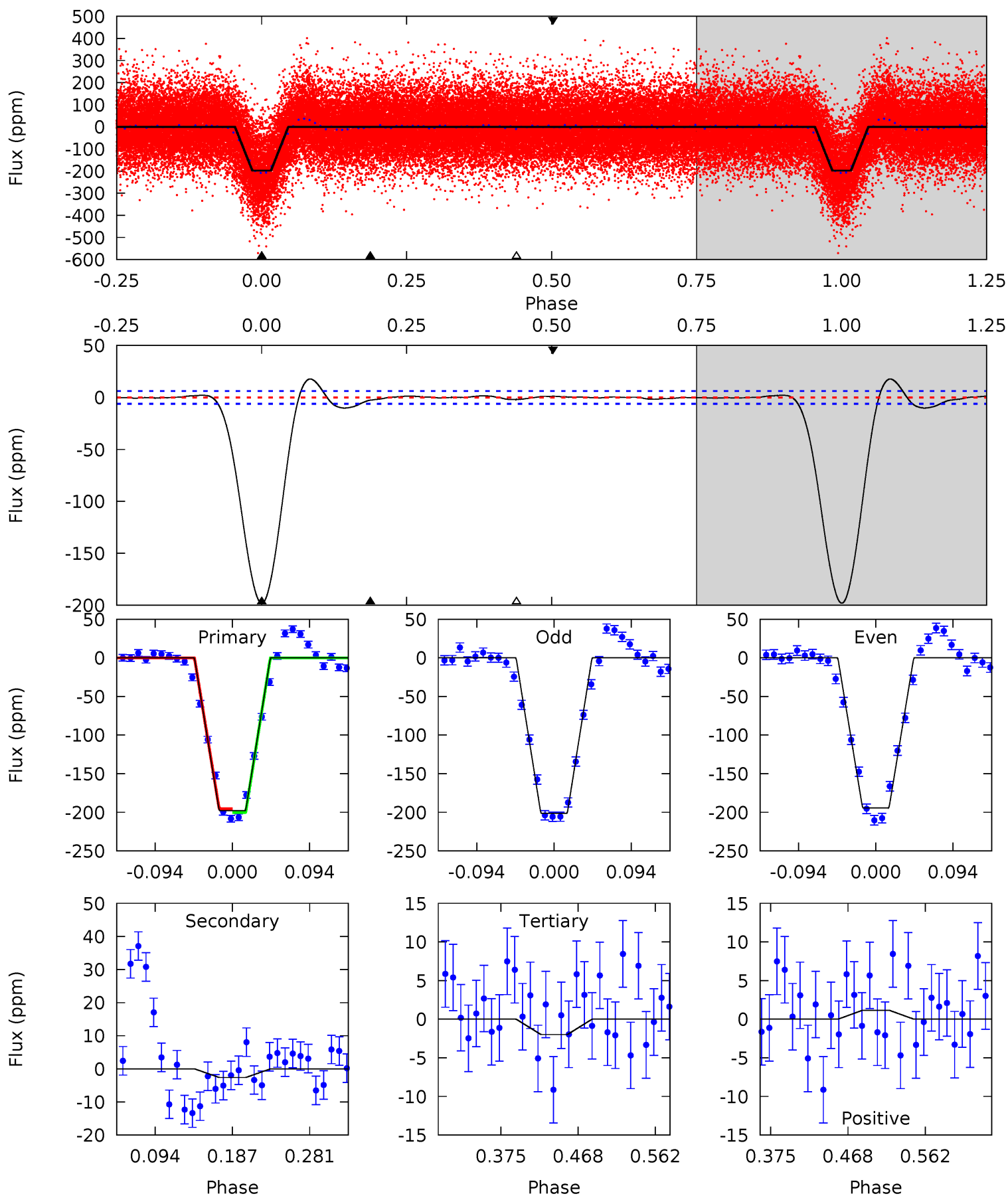
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.98	0.80	0.36	0	4.56	1.63	0.38	3.62	3.98	0.44	0.80	2.49	-1.45	0.14	4.14



Alt Model-Shift Uniqueness Test

004847343-01, P = 11.416556 Days, E = 127.427422 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
147.7	1.96	1.49	0.87	4.58	1.68	0.67	146.2	146.8	0.47	1.09	2.62	1.01	0.08	1.78



Stellar Parameters For KIC 004847343

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5209^{+281}_{-281}	$4.495^{+0.099}_{-0.121}$	$-0.160^{+0.300}_{-0.300}$	$0.816^{+0.150}_{-0.113}$	$0.760^{+0.117}_{-0.063}$	$1.971^{+0.945}_{-0.690}$
	+5%/-5%	+2%/-3%	+188%/-188%	+18%/-14%	+15%/-8%	+48%/-35%
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 004847343-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-2 ± 2	$2.26^{+1.21}_{-1.13}$	967^{+72}_{-66}	2022^{+456}_{-3951}	$1.158^{+4.627}_{-1.397}$
Alt.	-3 ± 1	$1.56^{+1.20}_{-1.01}$	968^{+64}_{-63}	2414^{+759}_{-390}	$4.722^{+32.276}_{-3.516}$

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 $A_{obs} \gg 1.0$

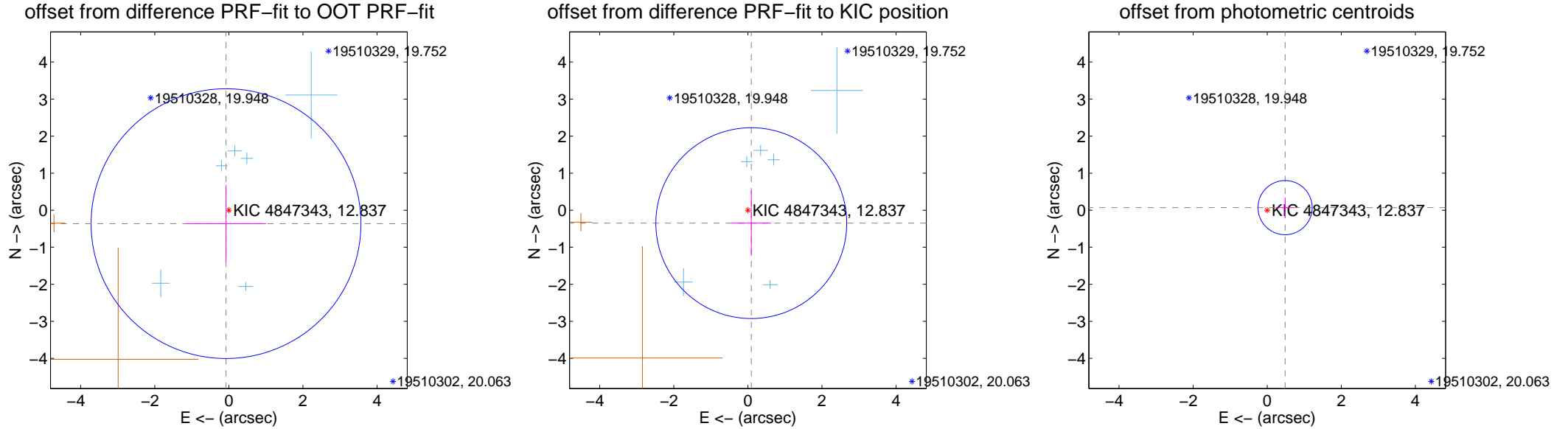
DV Centroid Data

Supplemental centroid analysis for 004847343-01. Kepler magnitude: 12.84. Transit SNR 23.69

There are 6 quarters with good PRF difference image offsets

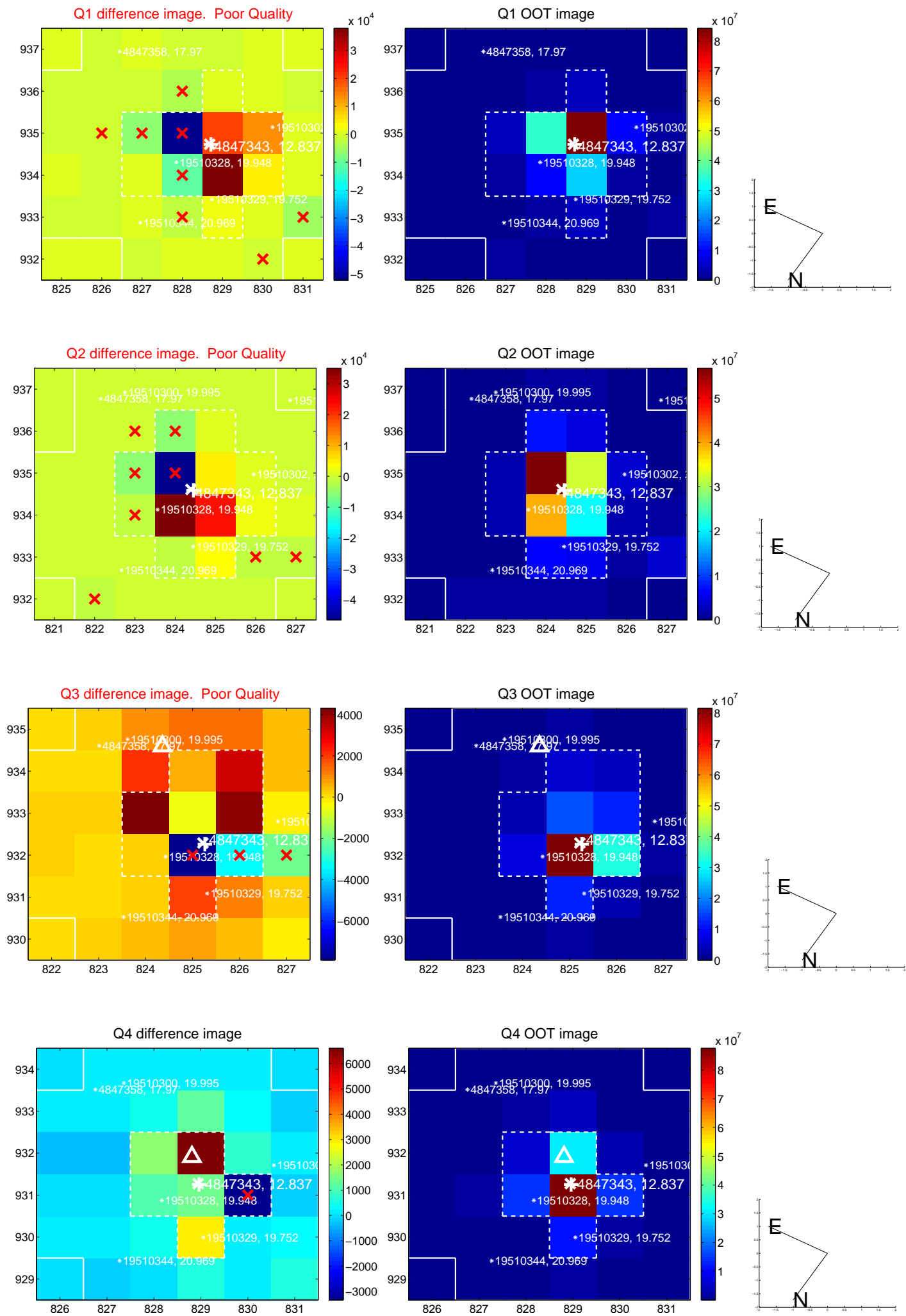
The direct PRF centroid is offset from the target star catalog position by about 0.22 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.371 ± 1.214	0.31	0.077 ± 1.085	-0.363 ± 1.041
PRF-fit source offset from KIC position	0.361 ± 0.858	0.42	-0.092 ± 0.535	-0.349 ± 0.876
photometric centroid source offset	0.49 ± 0.24	2.00	-0.48 ± 0.24	0.07 ± 0.27

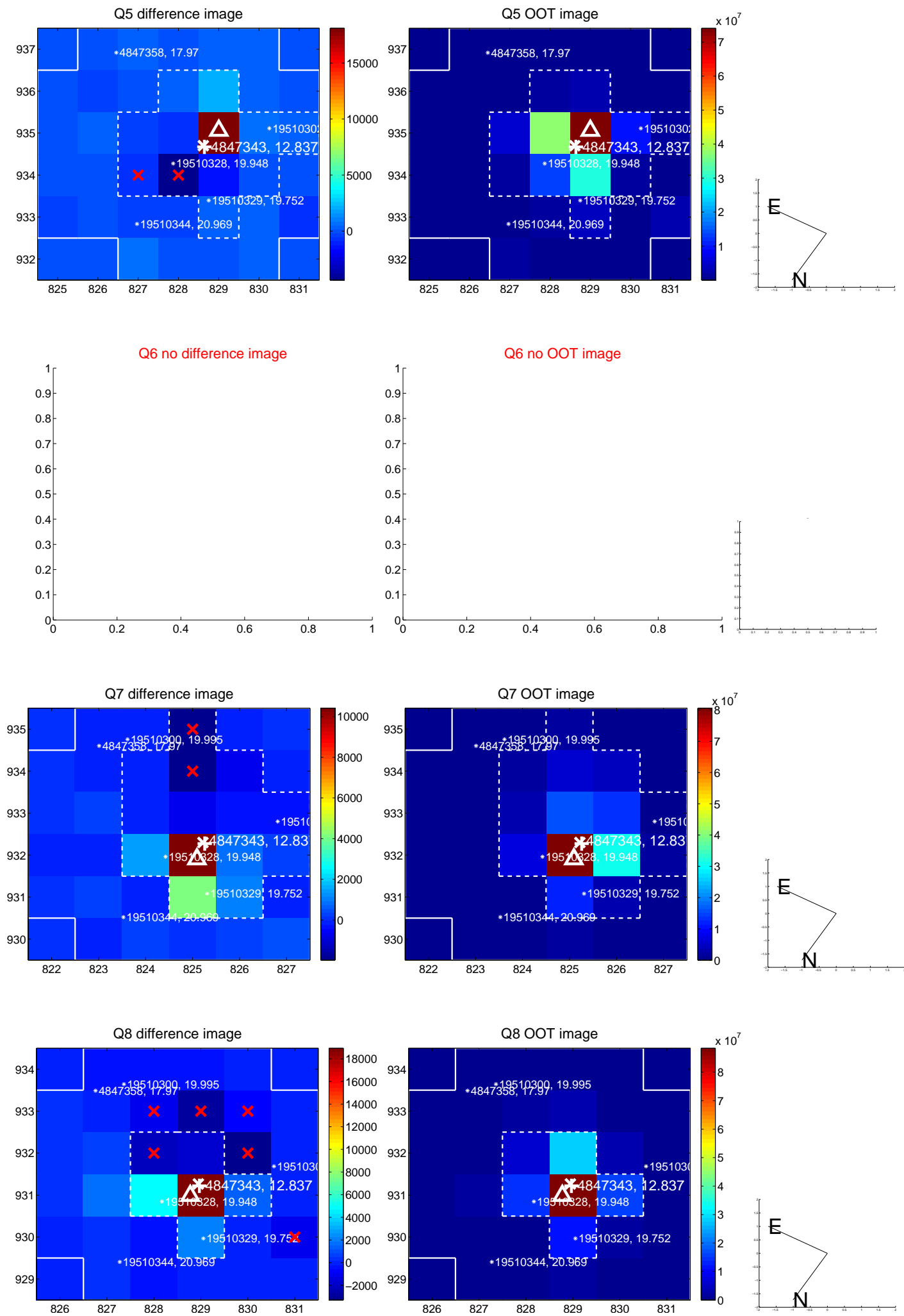


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

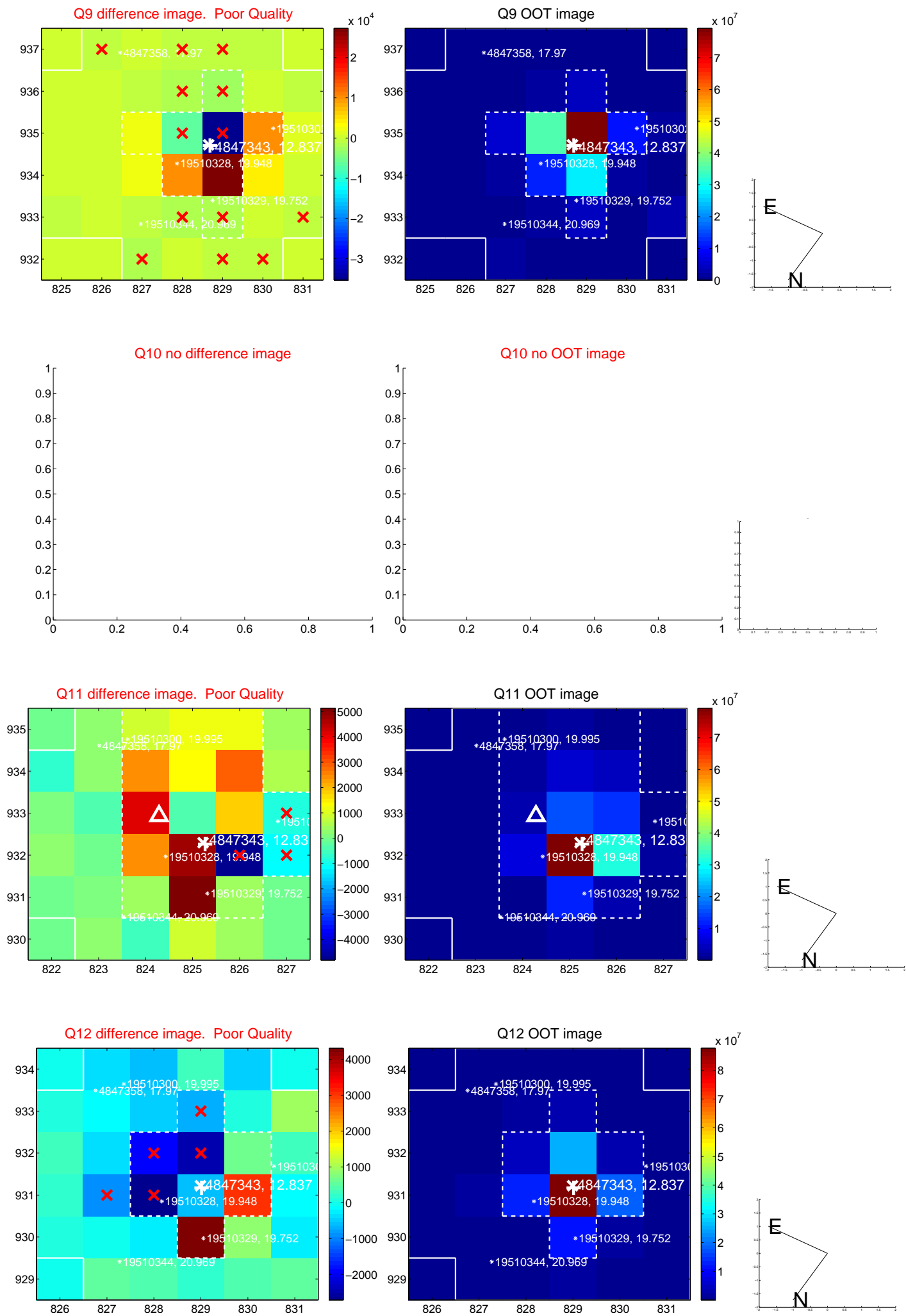
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



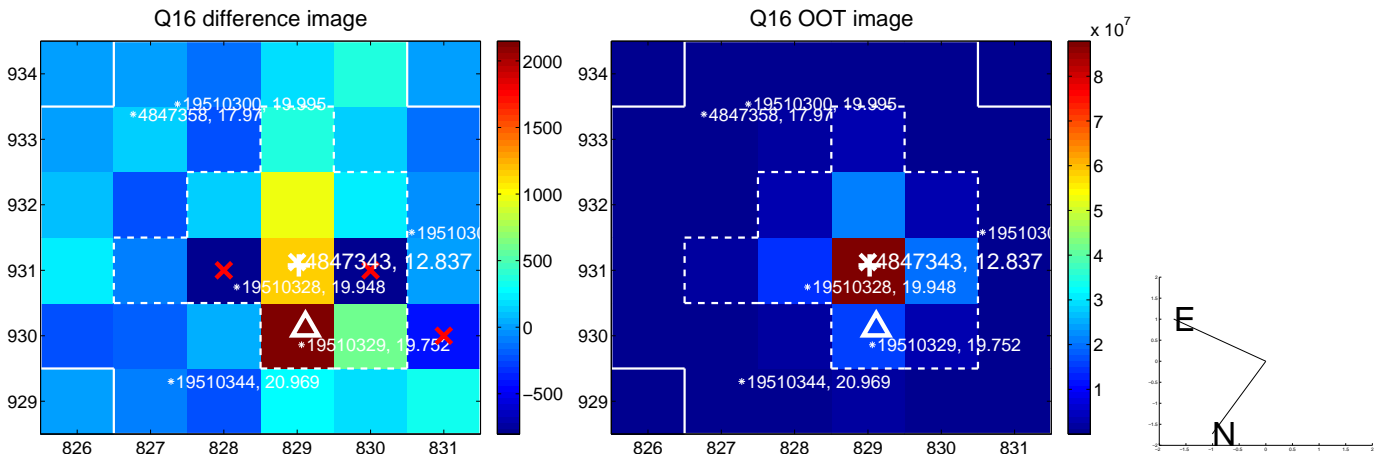
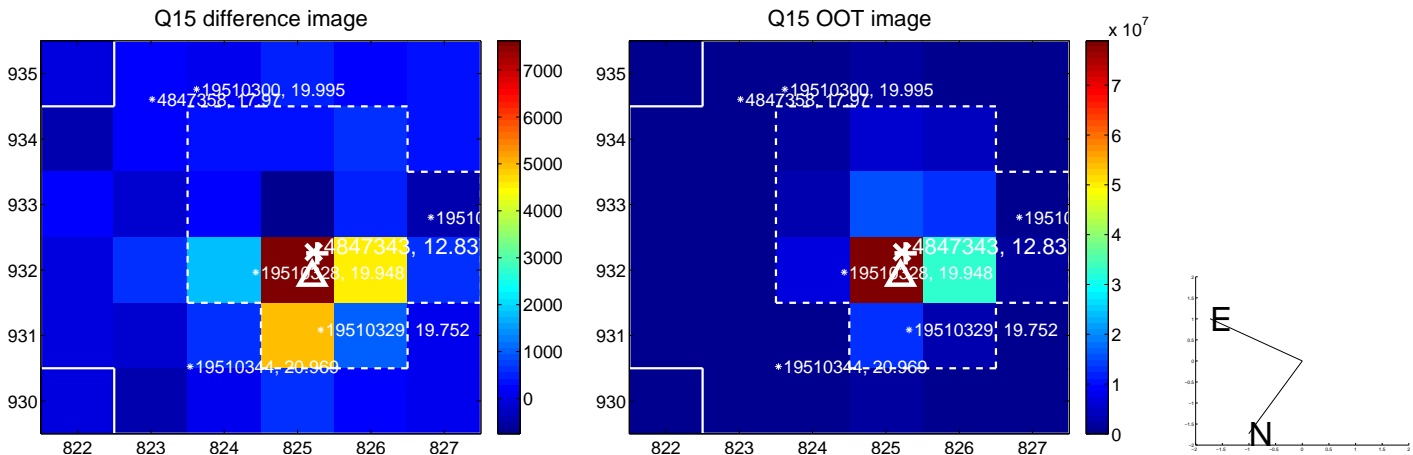
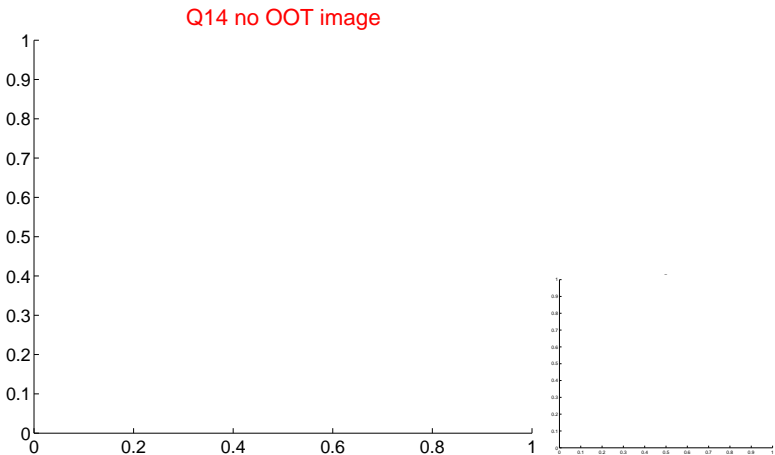
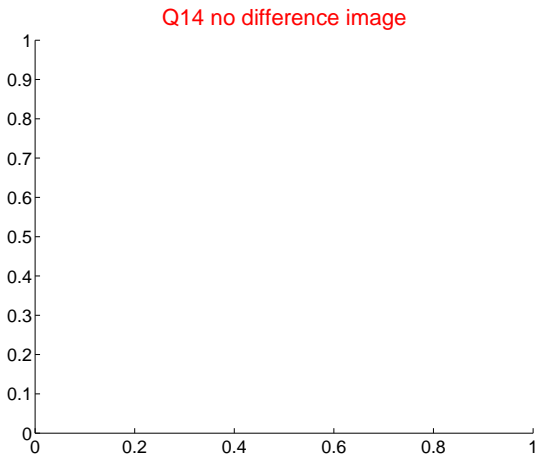
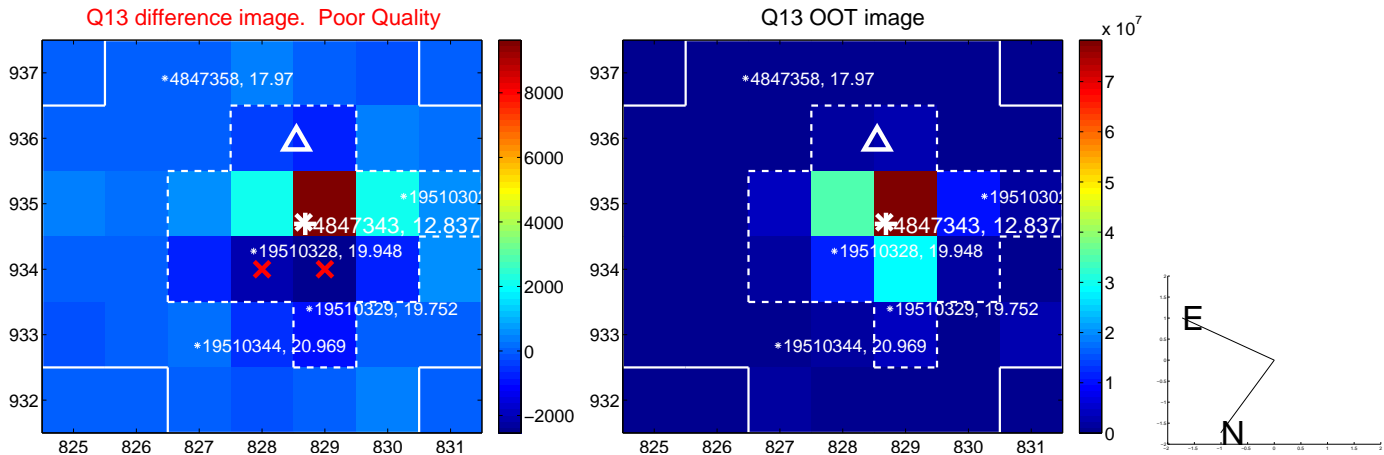
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



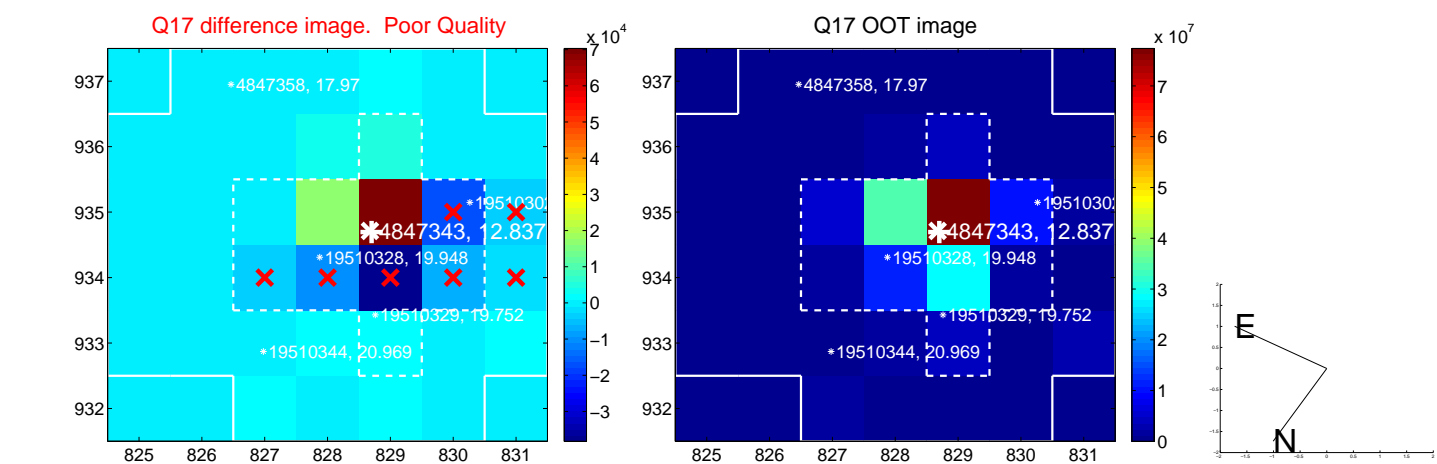
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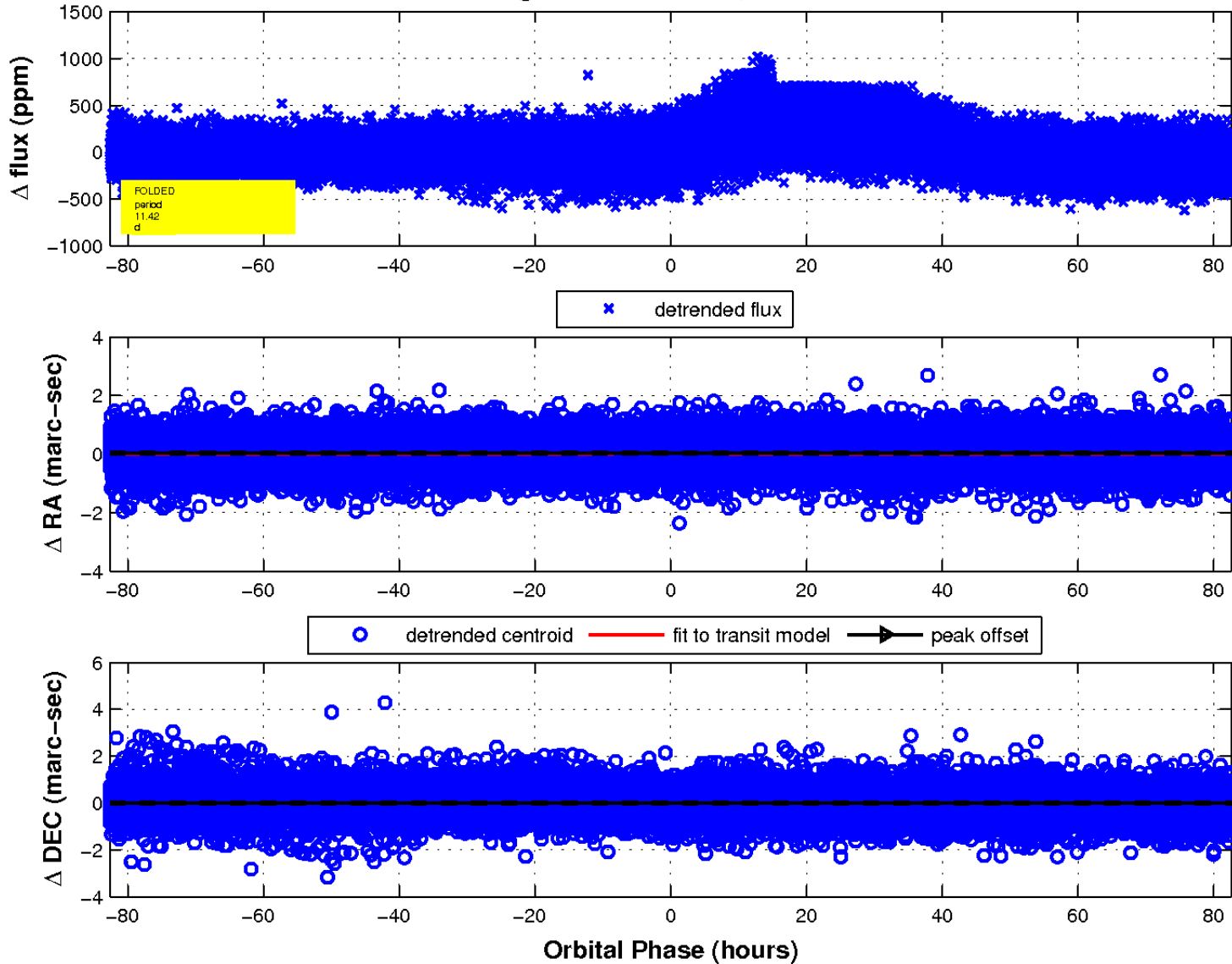
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

