

KIC 007299891

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})
007299891-01	OBS	No	0.911663	131.831777	79.5	3.553	7.8	5.2	0.66	4960	0.71	888.69

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007299891-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_KIC_POS

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

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

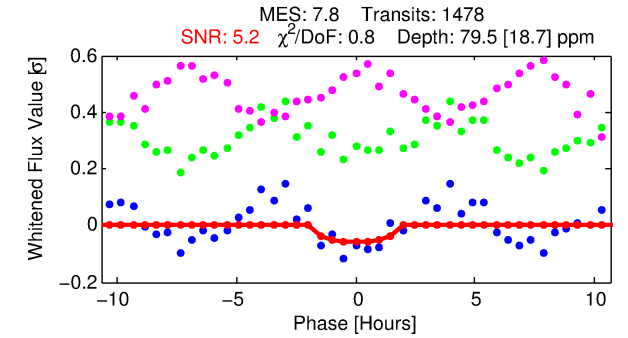
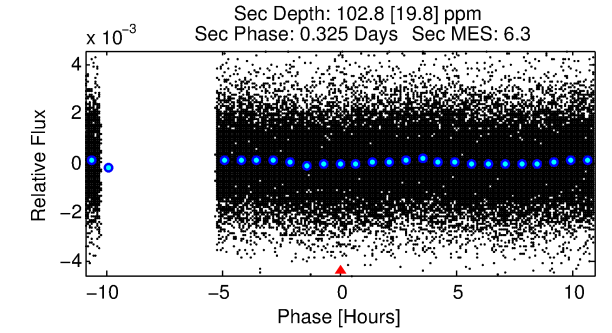
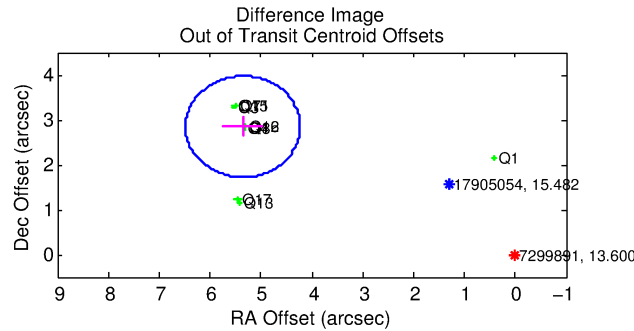
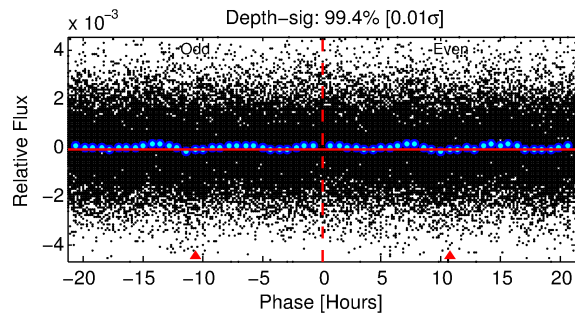
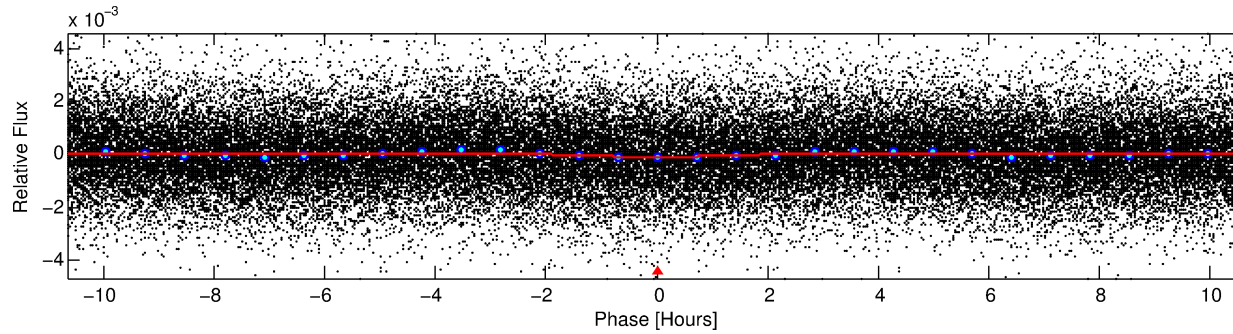
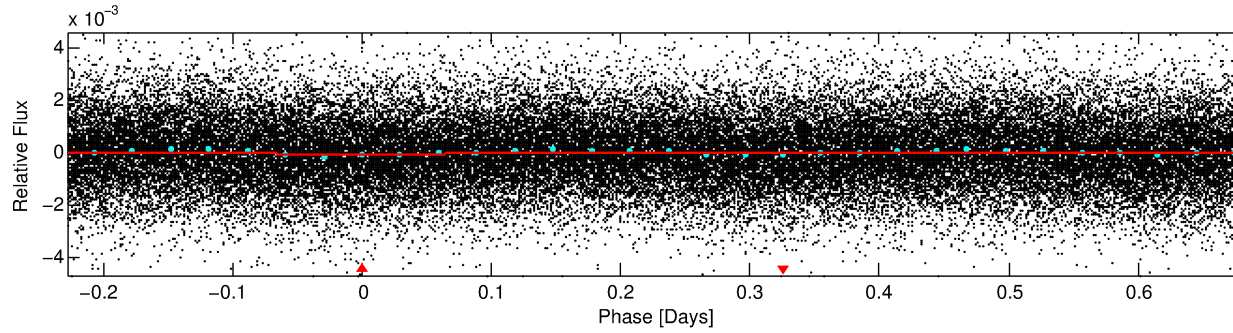
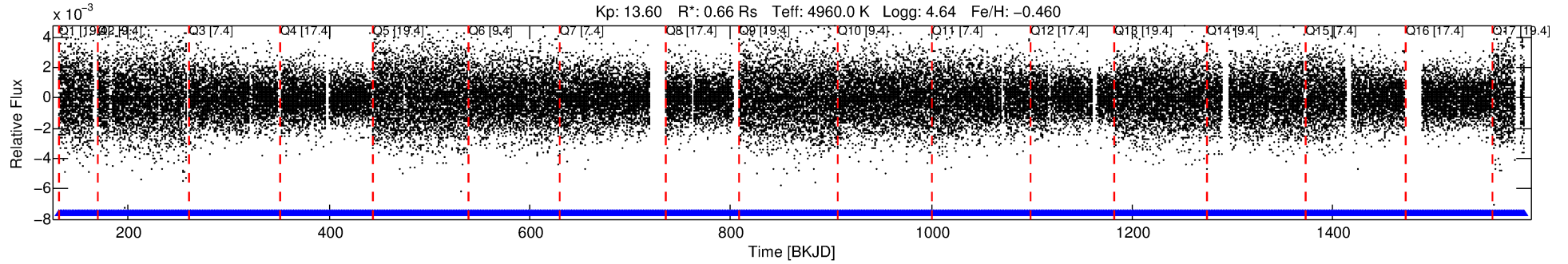
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007299891-01

No Significant Match Found

DV One-Page Summary

KIC: 7299891 Candidate: 1 of 1 Period: 0.912 d



DV Fit Results:

Period = 0.91166 [0.00002] d
Epoch = 131.8318 [0.0079] BKJD
Rp/R* = 0.0099 [0.0134]
a/R* = 1.30 [2.96]
b = 0.90 [1.22]
Seff = 888.69 [160.03]
Teq = 1392 [63] K
Rp = 0.71 [0.96] Re
a = 0.0162 [0.0014] AU
Ag = 29.55 [80.06] [0.36σ]
Teff = 5019 [3401] K [1.07σ]

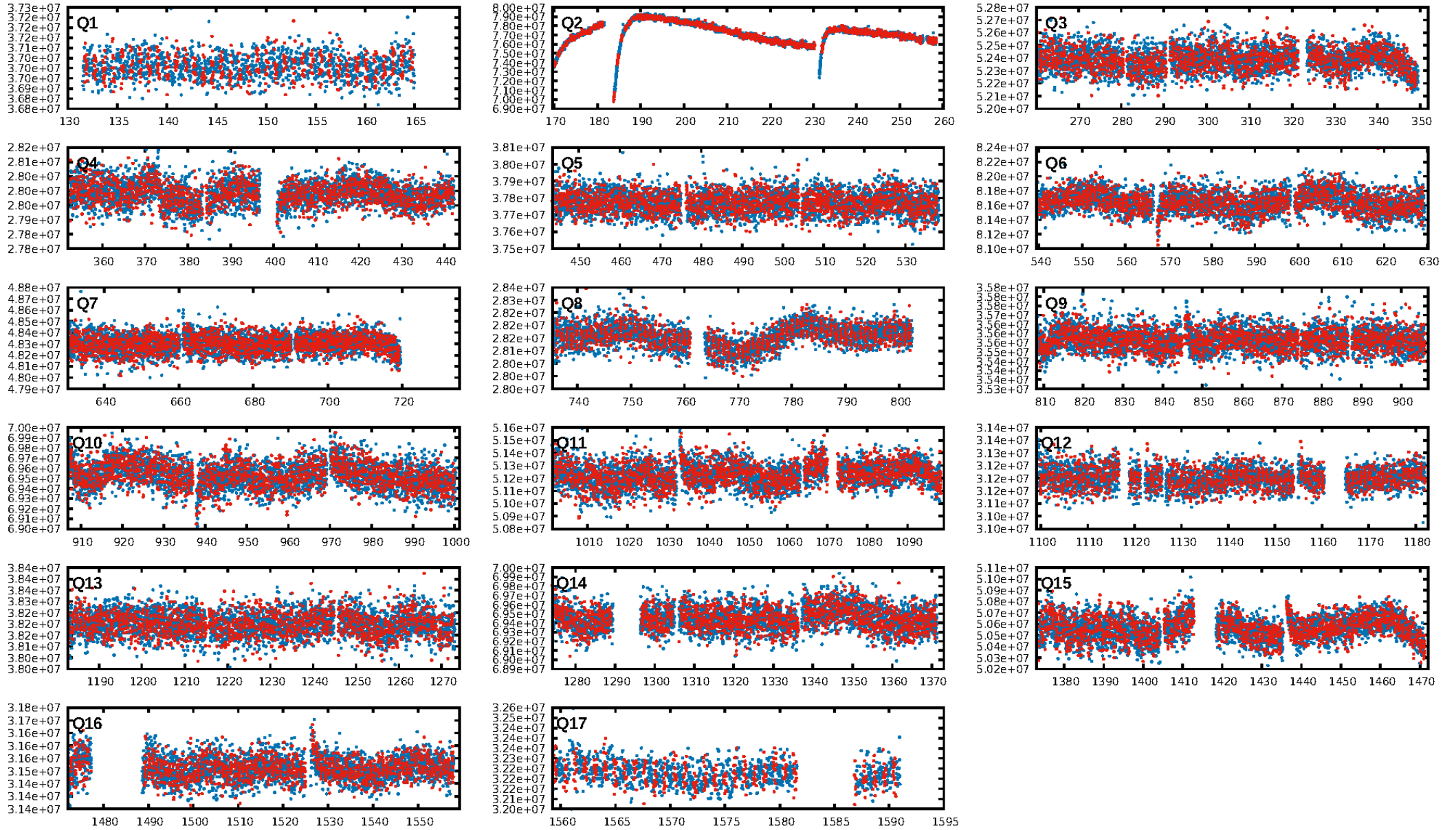
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 2.68e-14
RollingBand-fgt: 1.00 [1411/1411]
GhostDiagnostic-chr: -0.8568
Centroid-sig: 0.0%
Centroid-so: 0.513 arcsec [0.67σ]
OotOffset-rm: 6.064 arcsec [16.14σ]
KicOffset-rm: 1.932 arcsec [4.97σ]
OotOffset-st: 0/4/4/3 [11]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 1.00 [17/17]
DiffImageOverlap-fno: 1.00 [17/17]

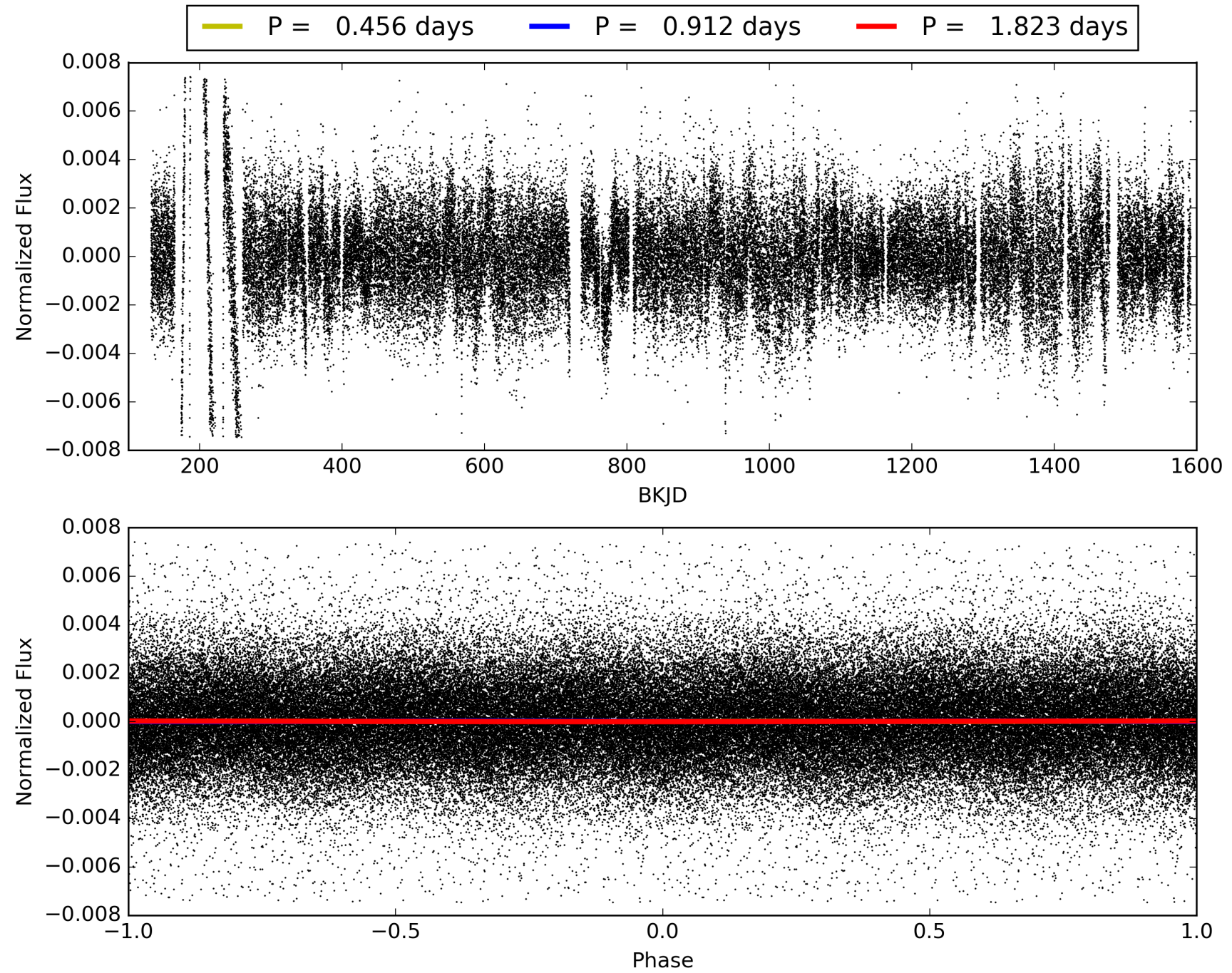
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 23:09:08 Z

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

TCE 007299891-01, PDC Light Curves

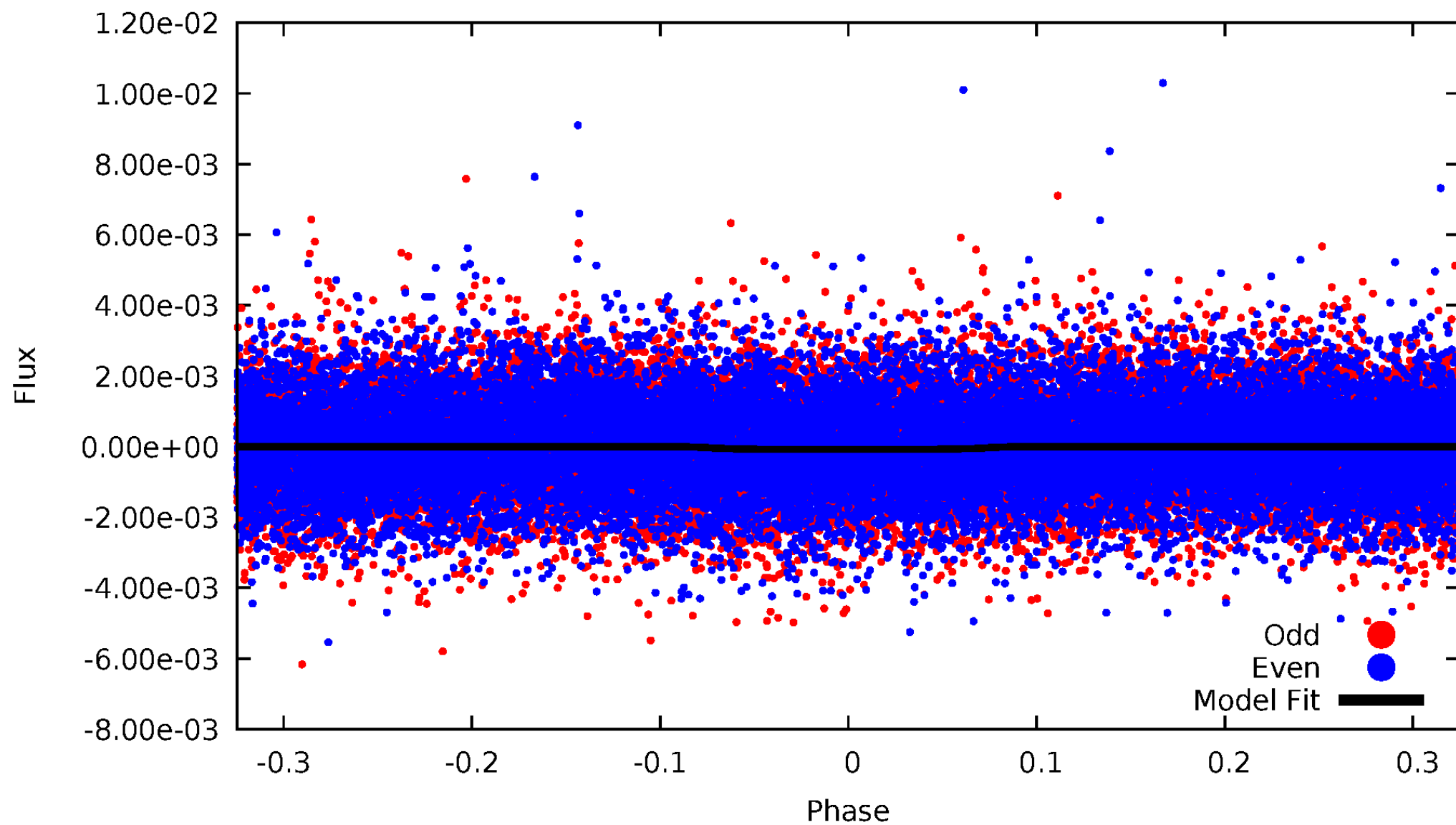


TCE 007299891-01



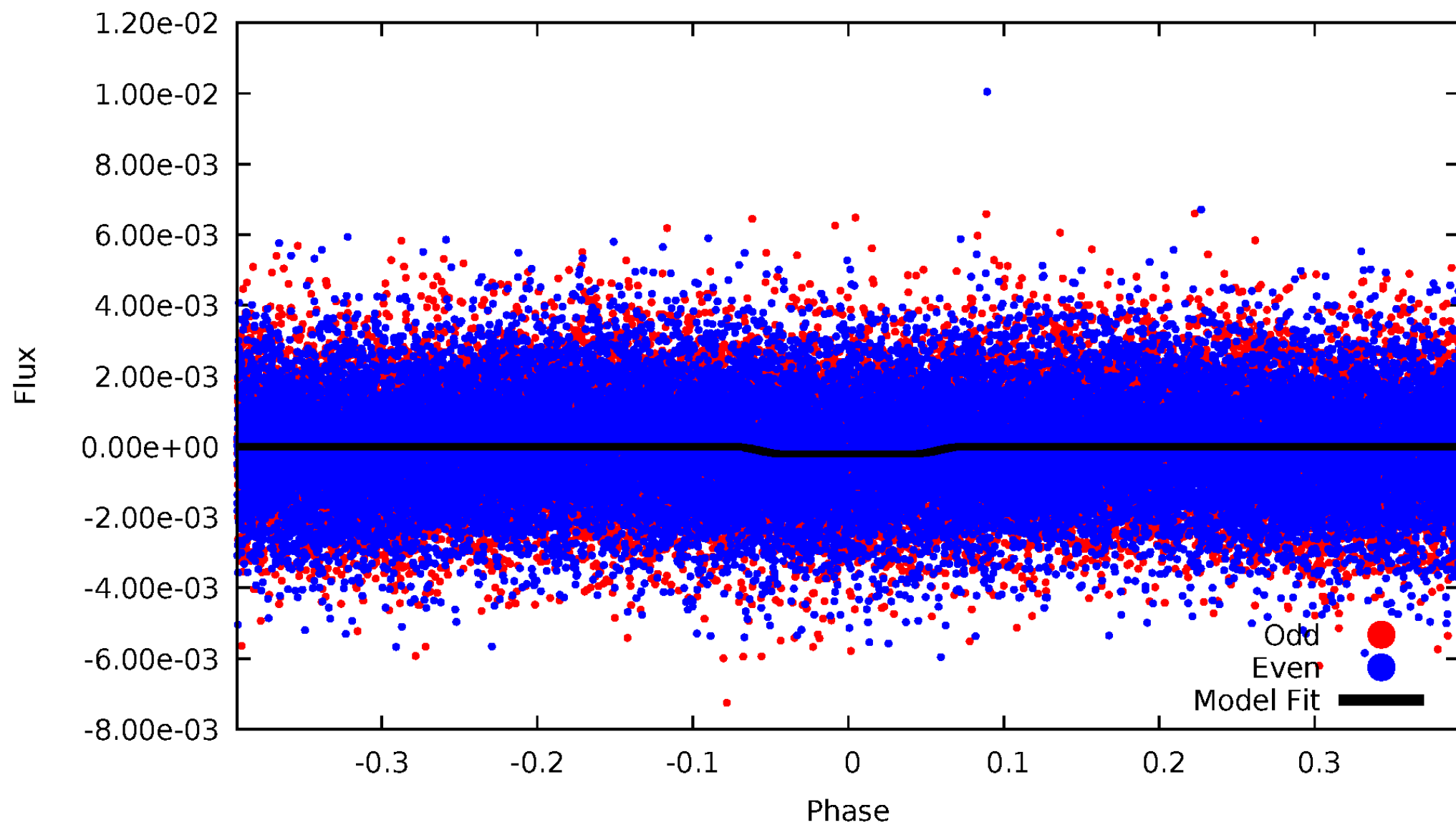
DV Odd/Even

TCE 007299891-01

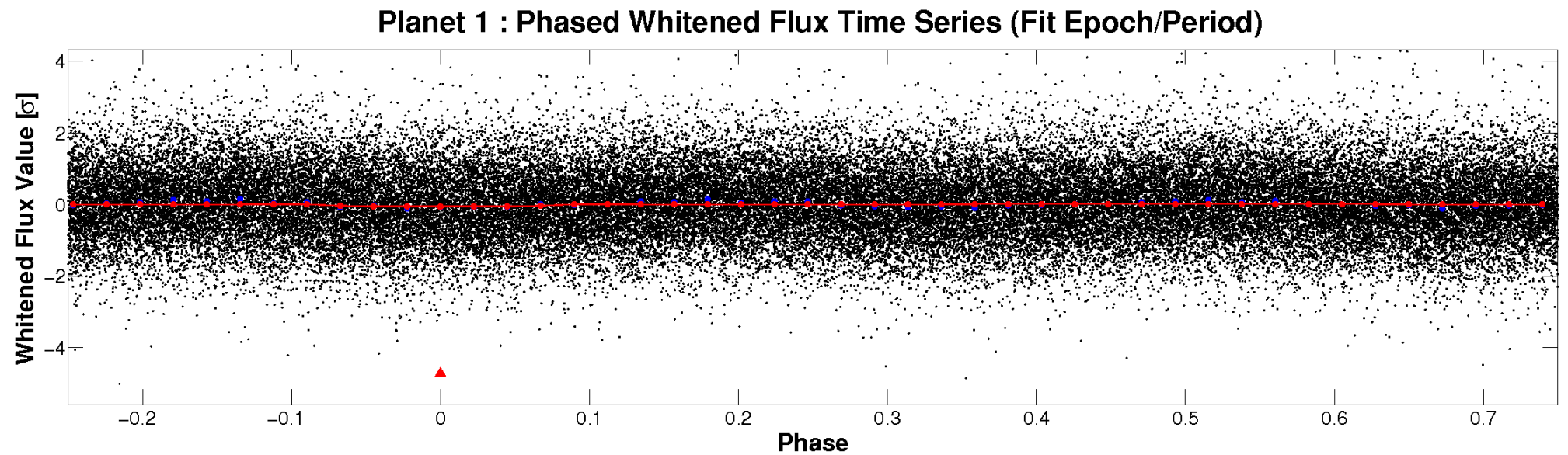
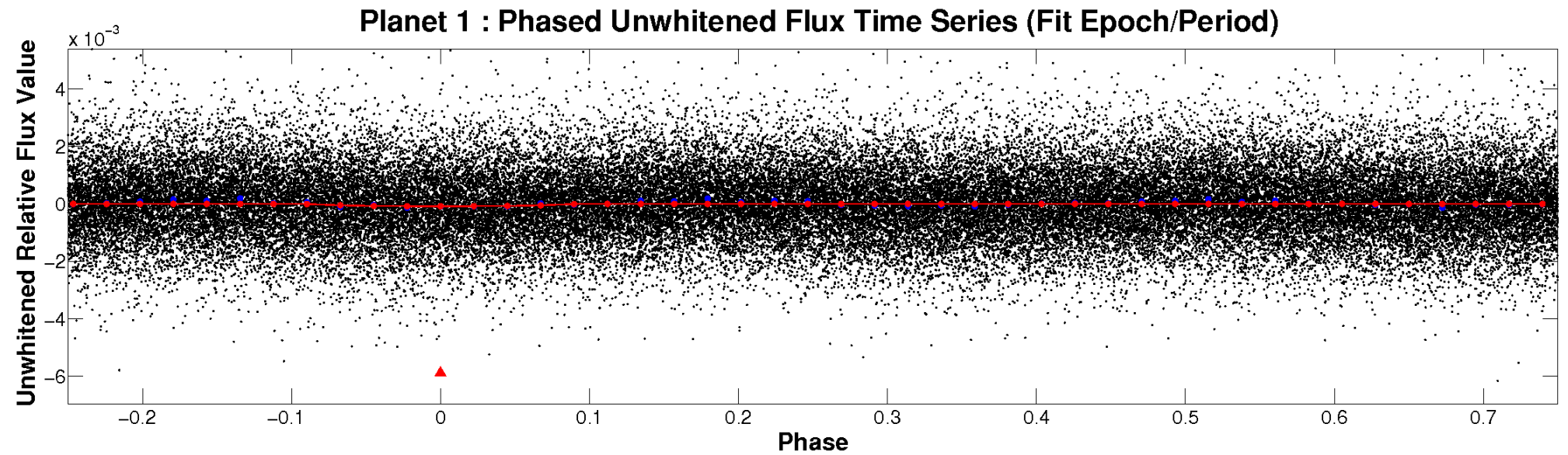


ALT Odd/Even

TCE 007299891-01

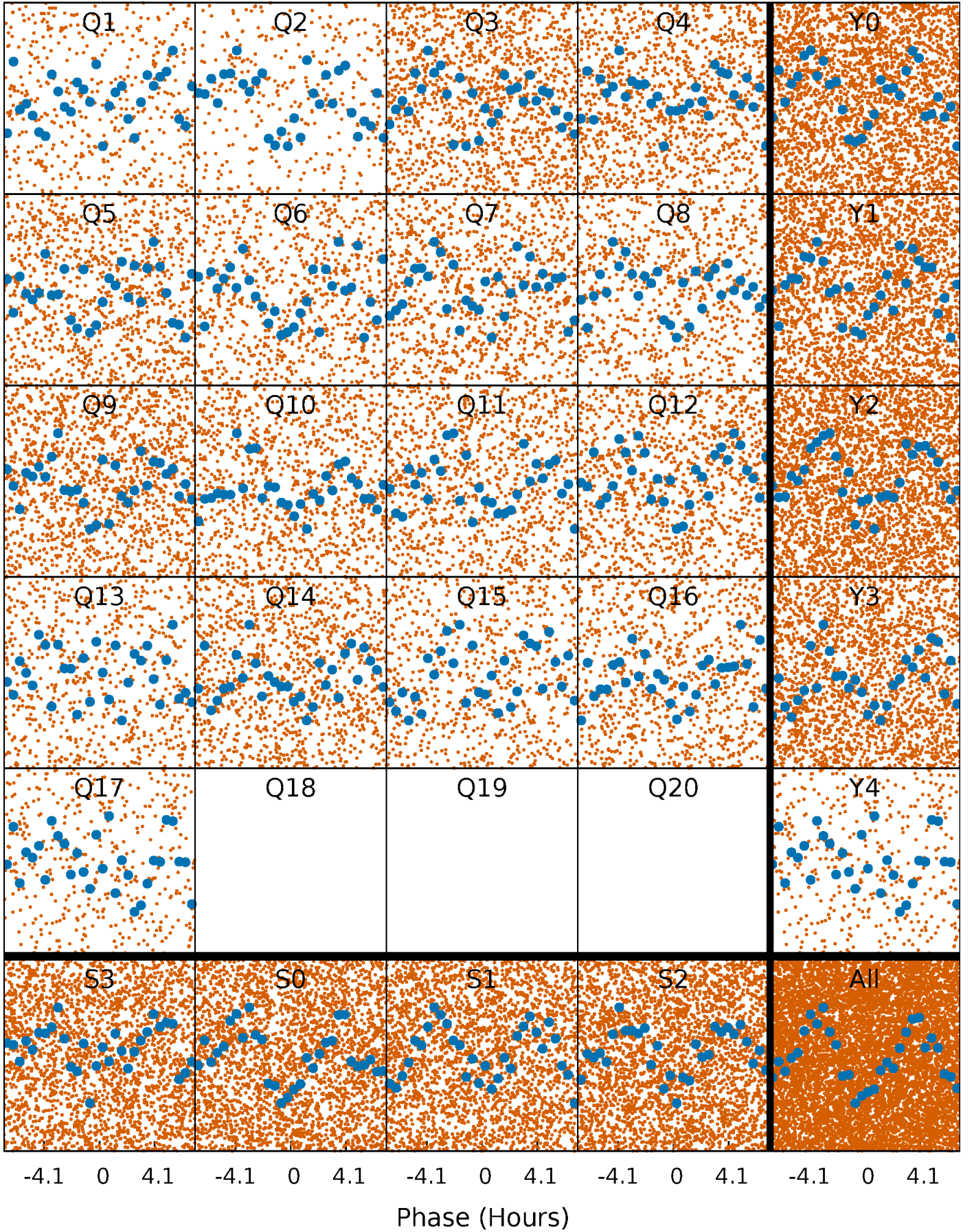


Non-Whitened Vs. Whitened Light Curve



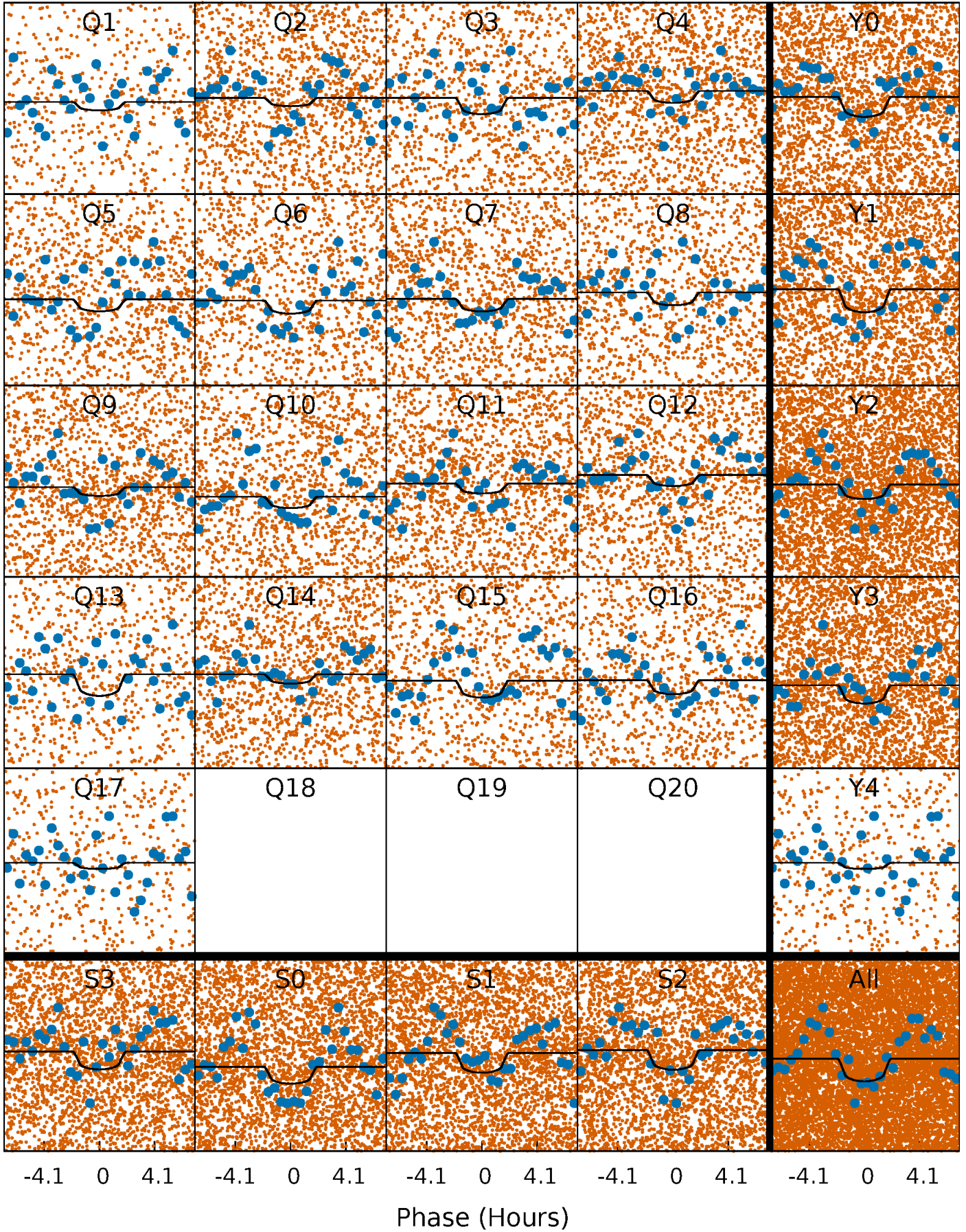
PDC Quarter-Phased Transit Curves

TCE 007299891-01 P= 0.911663 Days $T_0=131.831777$ (BKJD)



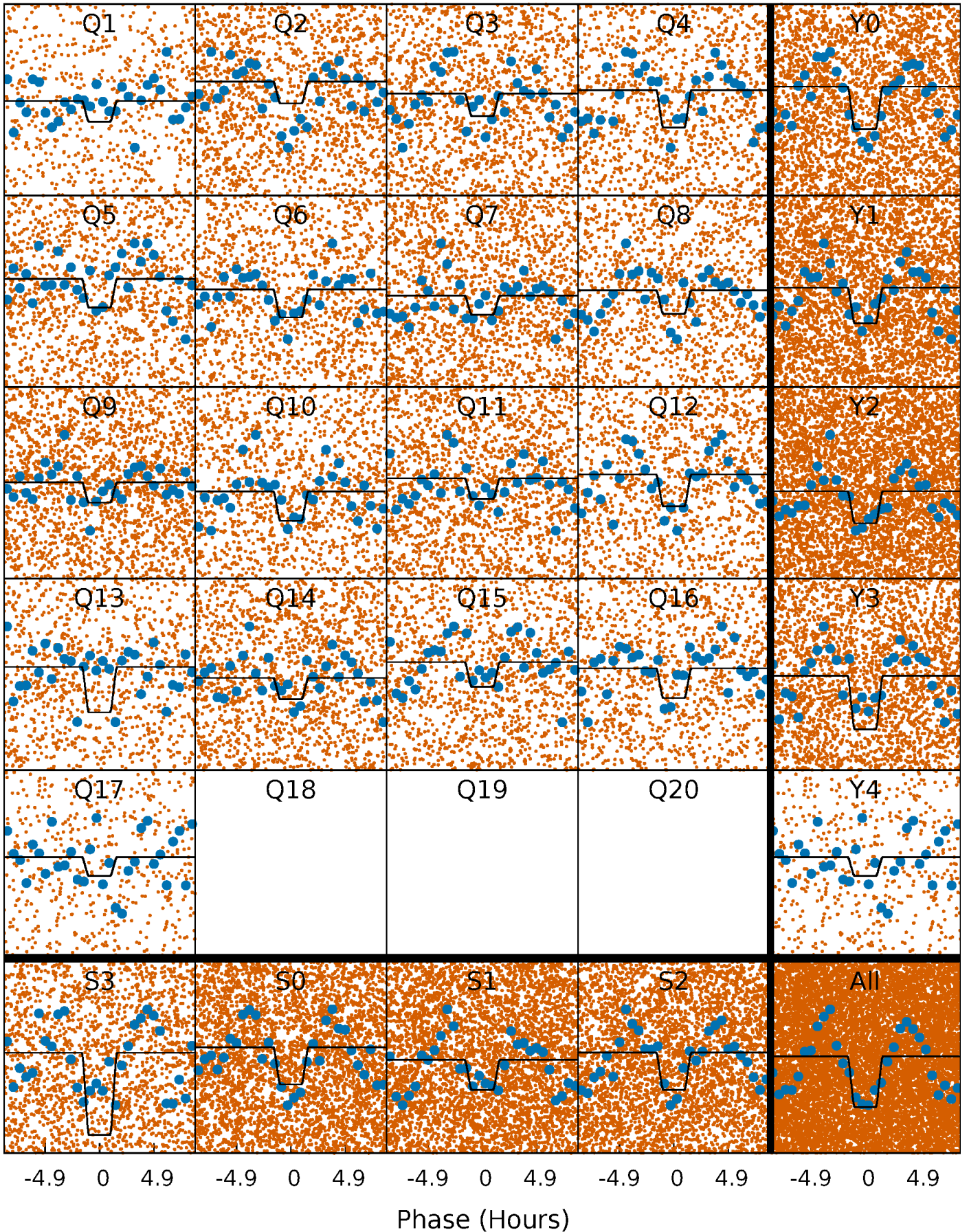
DV Quarter-Phased Transit Curves

TCE 007299891-01 P= 0.911663 Days $T_0=131.831777$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

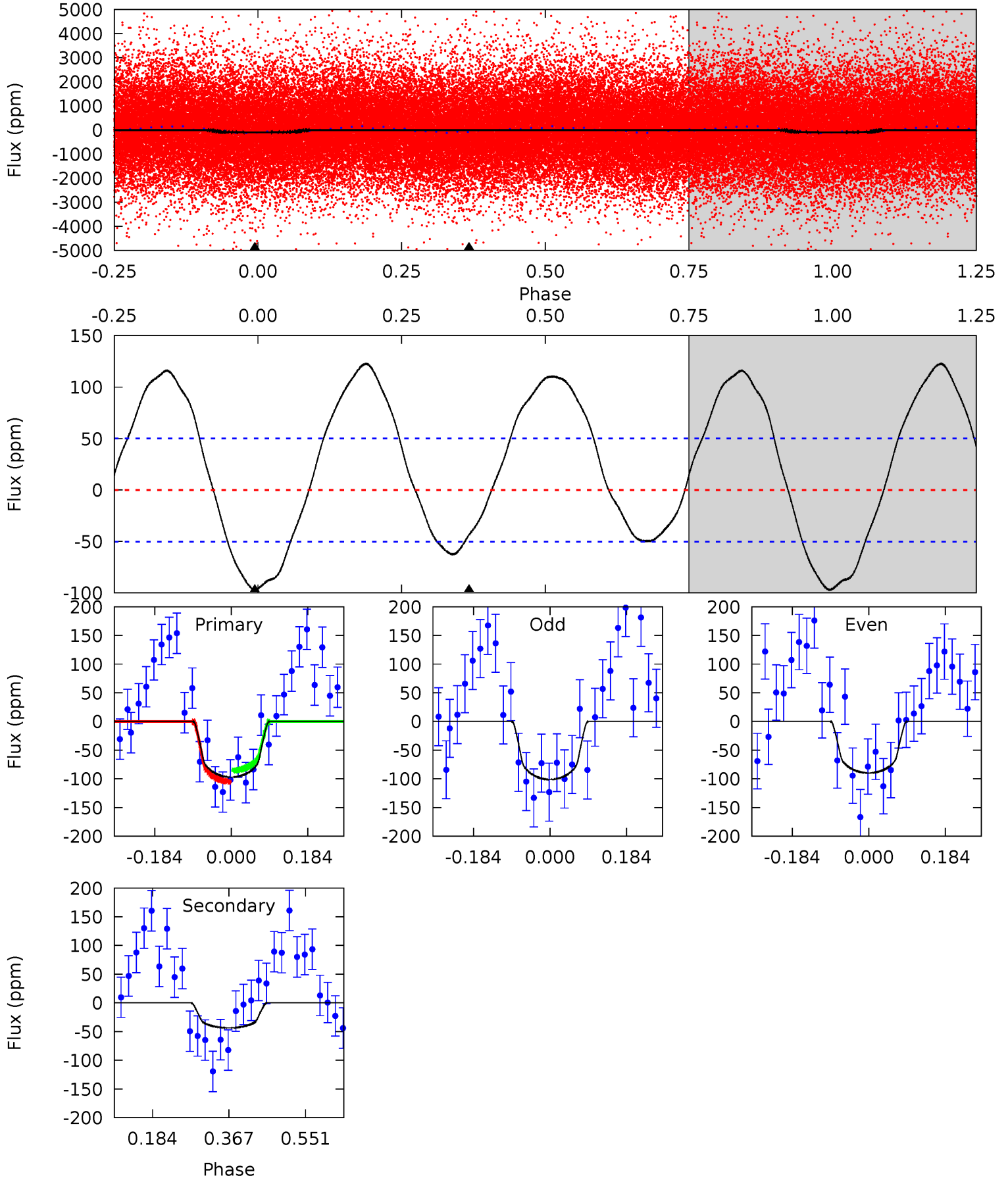
TCE 007299891-01 P= 0.911707 Days $T_0=131.801232$ (BKJD)



DV Model-Shift Uniqueness Test

007299891-01, P = 0.911663 Days, E = 130.920114 Days

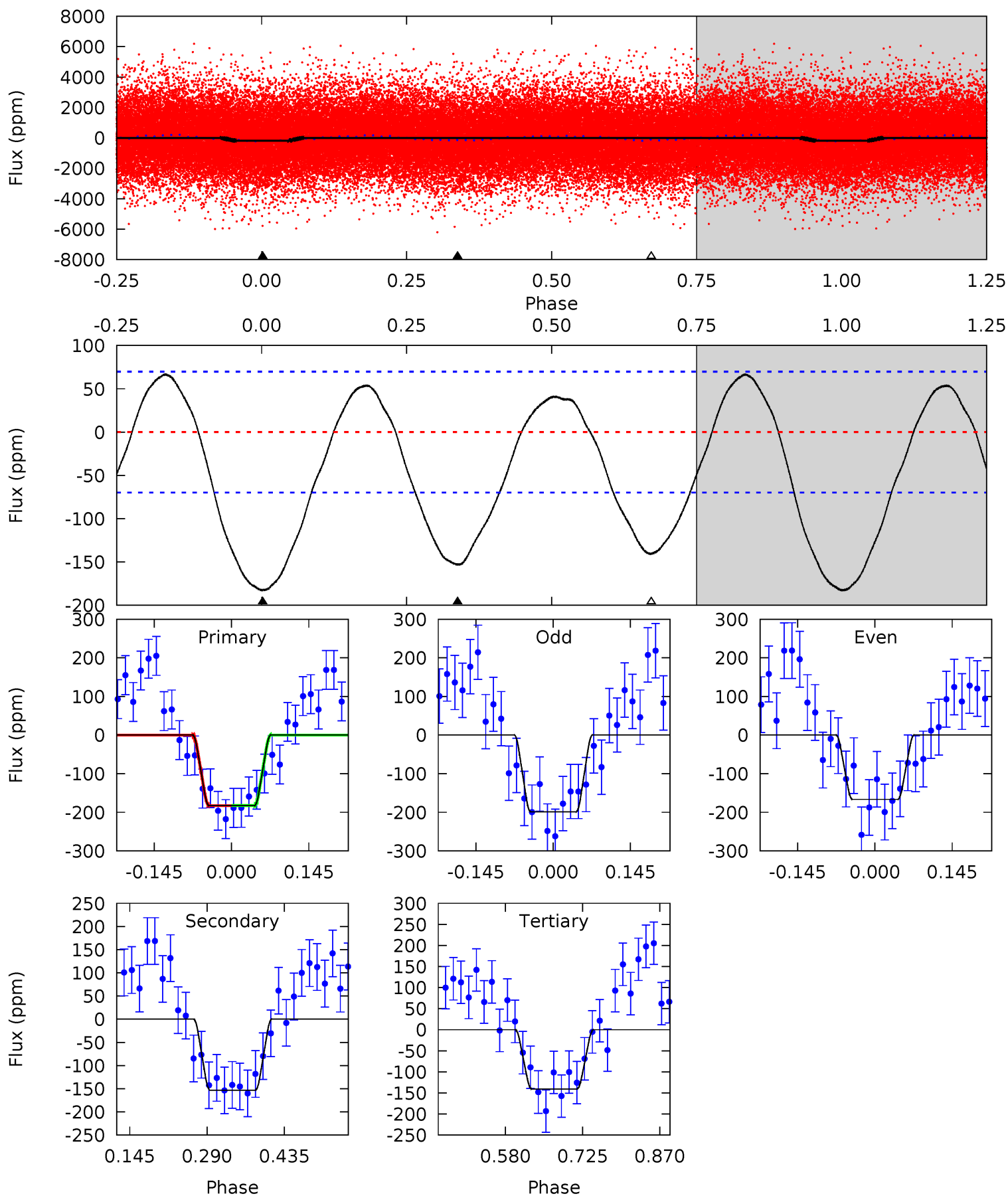
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.59	3.86	0	0	4.44	1.33	4.51	8.59	8.59	3.86	3.86	0.50	1.09	0.56	0.86



Alt Model-Shift Uniqueness Test

007299891-01, P = 0.911707 Days, E = 130.889525 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.8	9.85	9.05	0	4.49	1.46	4.55	2.70	11.8	0.80	9.85	1.05	0.95	0.27	0.02



Stellar Parameters For KIC 007299891

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	4960^{+175}_{-175}	$4.639^{+0.041}_{-0.054}$	$-0.460^{+0.300}_{-0.300}$	$0.657^{+0.074}_{-0.054}$	$0.684^{+0.077}_{-0.056}$	$3.404^{+0.610}_{-0.689}$
	+4%/-4%	+1%/-1%	+65%/-65%	+11%/-8%	+11%/-8%	+18%/-20%
Source	PHO54	PHO54	PHO54	DSEP		

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

Secondary Eclipse Parameters for KIC 007299891-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-44 ± 11	$0.96^{+0.84}_{-0.64}$	1950^{+80}_{-73}	3754^{+2224}_{-750}	$6.600^{+52.869}_{-4.770}$
Alt.	-153 ± 16	$1.28^{+0.83}_{-0.81}$	1948^{+73}_{-75}	4295^{+2425}_{-752}	14^{+91}_{-9}

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 $A_{obs} \gg 1.0$

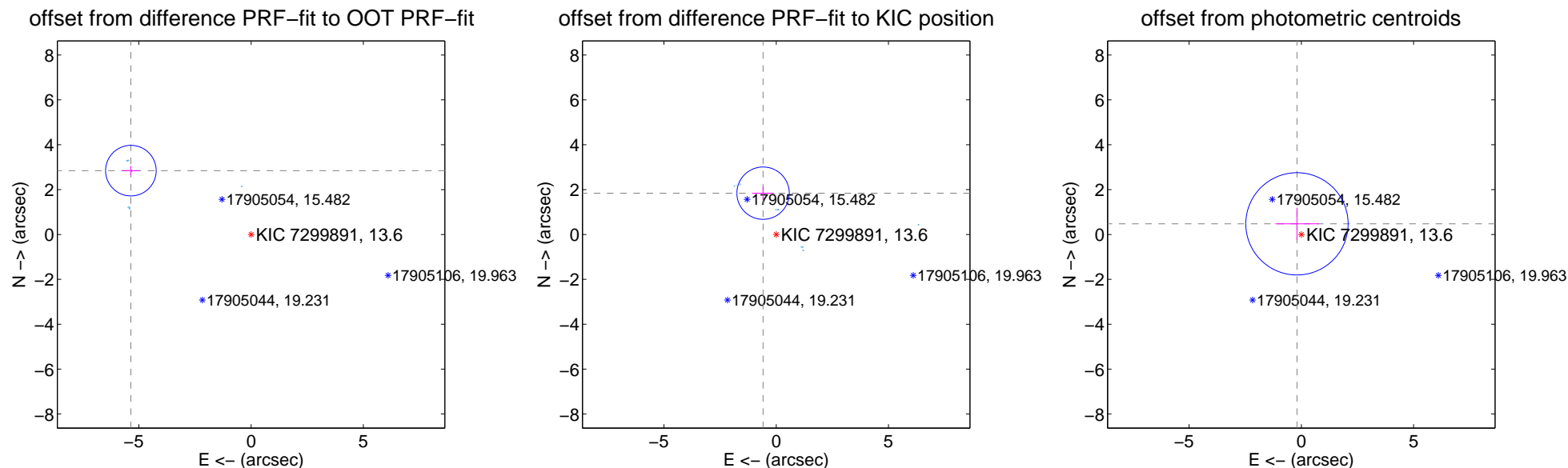
DV Centroid Data

Supplemental centroid analysis for 007299891-01. Kepler magnitude: 13.60. Transit SNR 5.20

There are 17 quarters with good PRF difference image offsets

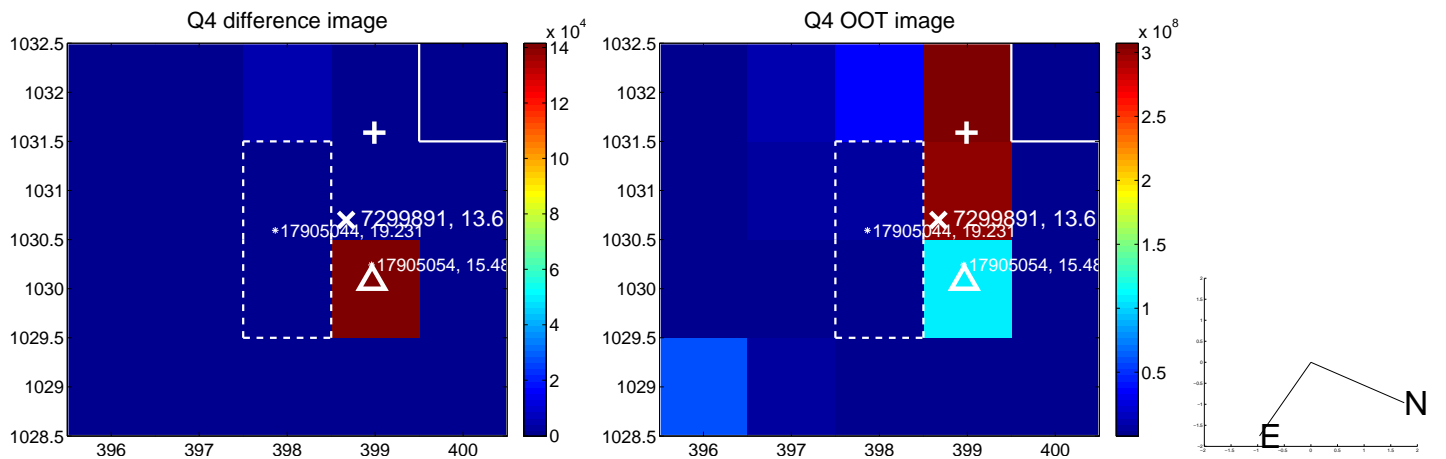
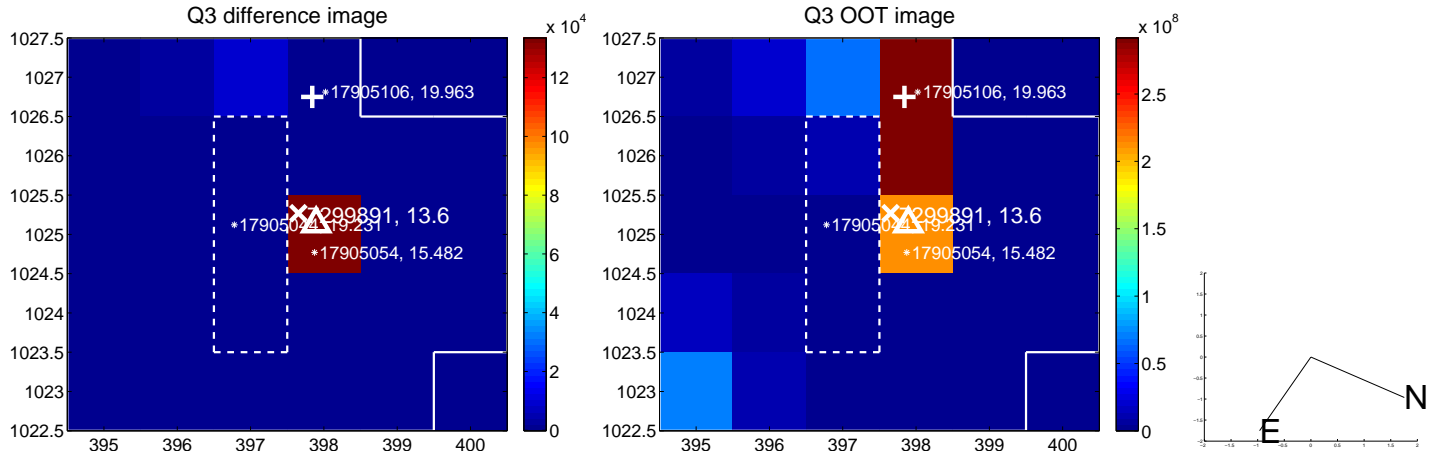
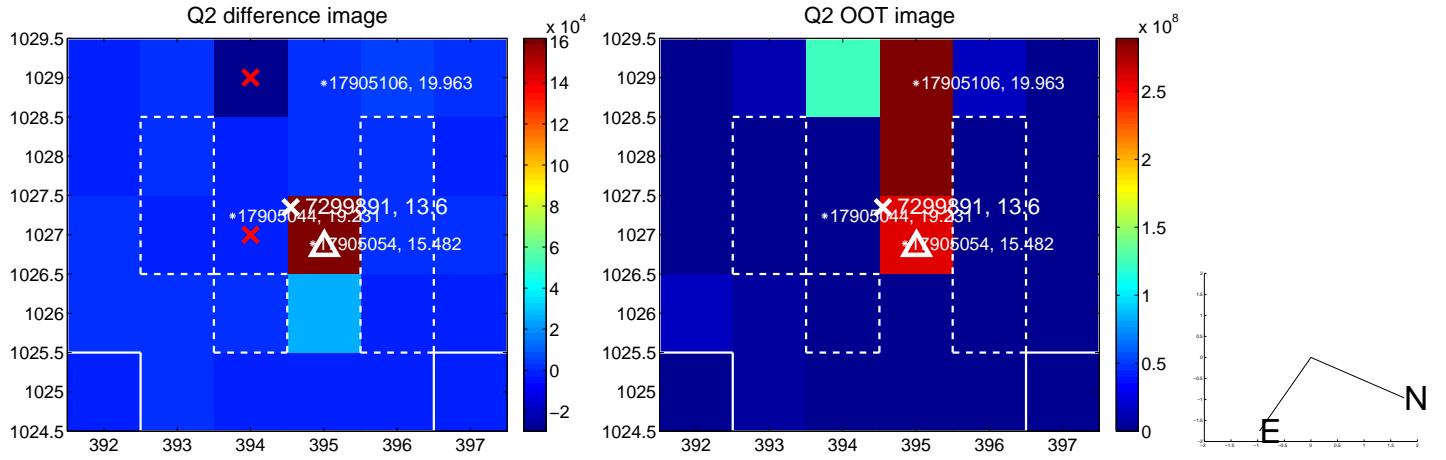
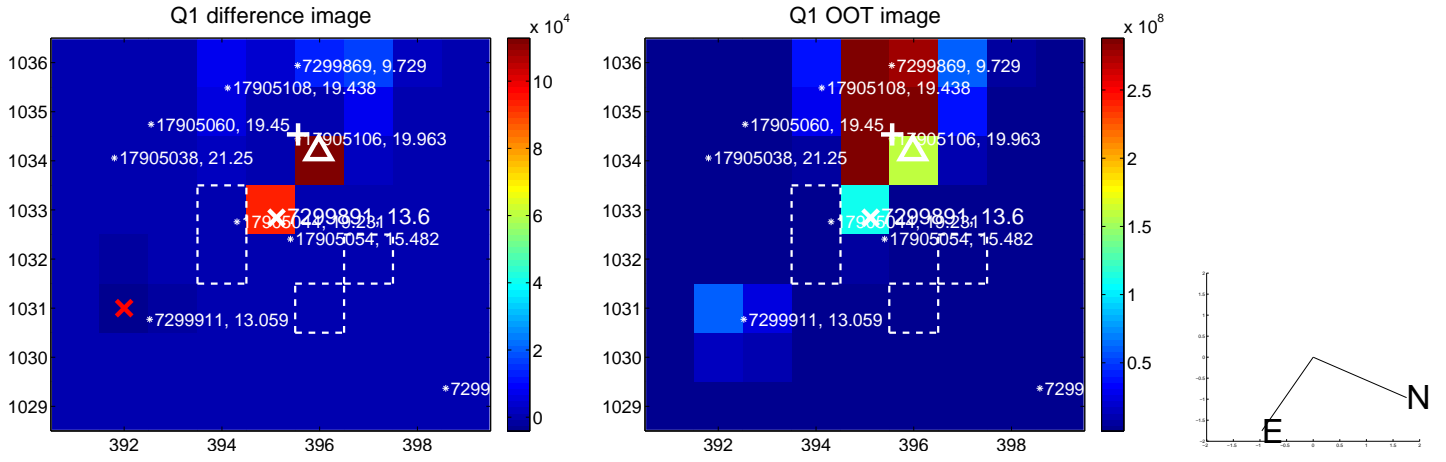
The OOT PRF centroid is offset from the target star catalog position by about 6.83 arcsec so the offset from difference PRF-fit to OOT-fit may be invalid.

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	6.064 \pm 0.376	16.14	5.355 \pm 0.392	2.846 \pm 0.211
PRF-fit source offset from KIC position	1.932 \pm 0.389	4.97	0.585 \pm 0.482	1.842 \pm 0.293
photometric centroid source offset	0.51 \pm 0.76	0.67	0.19 \pm 0.97	0.47 \pm 0.72

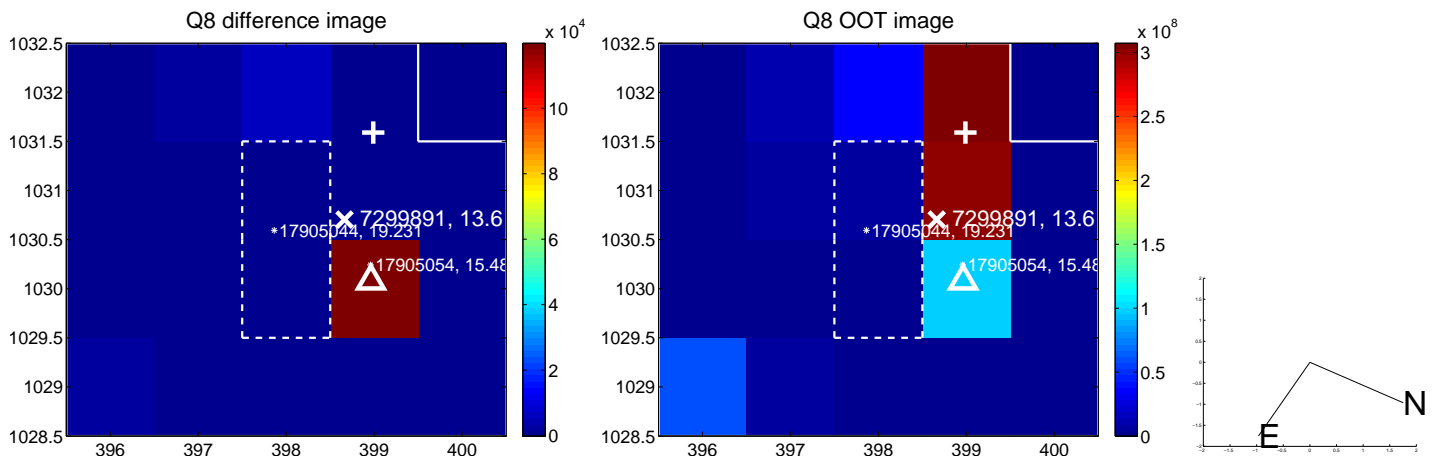
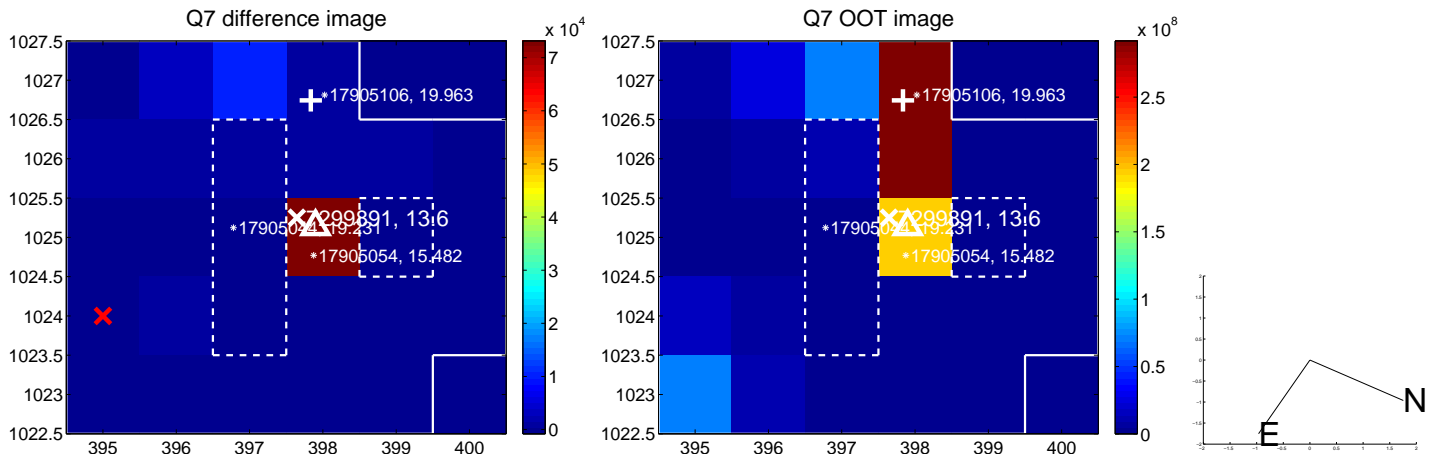
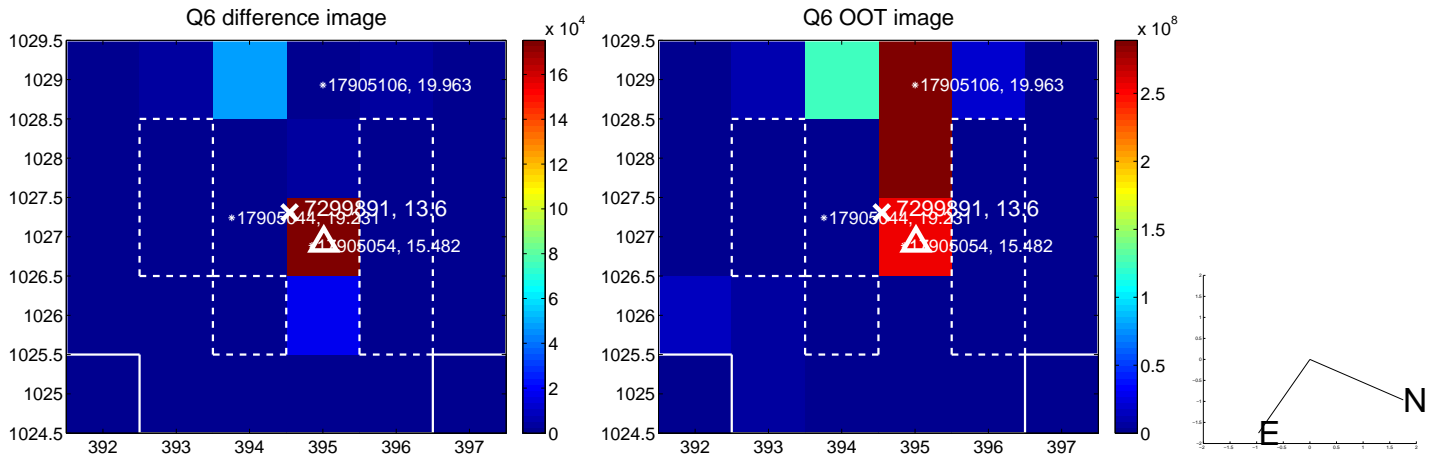
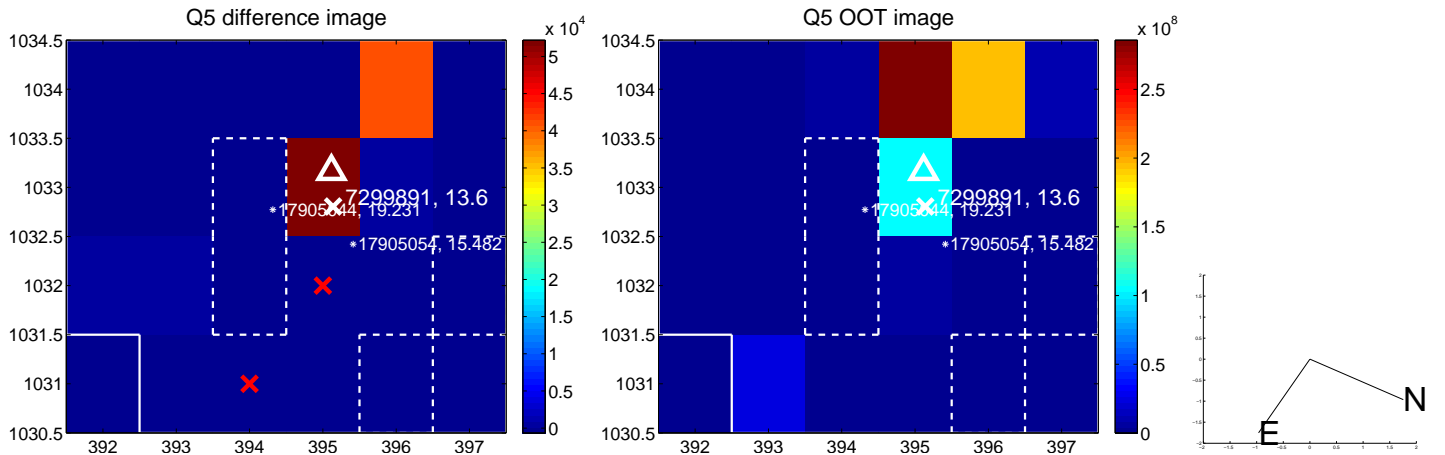


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets**; **Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

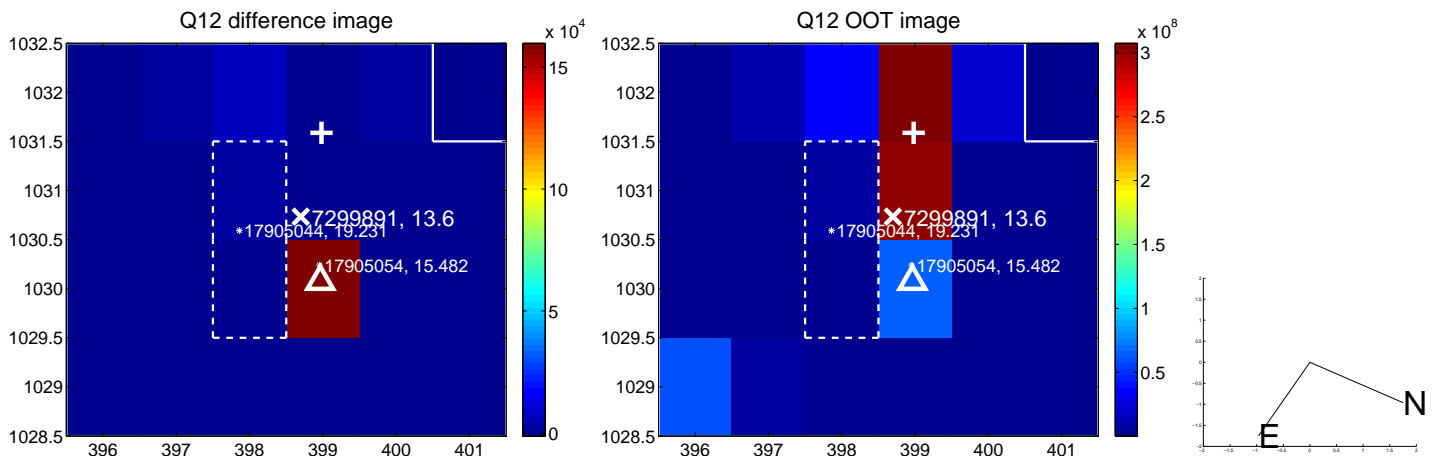
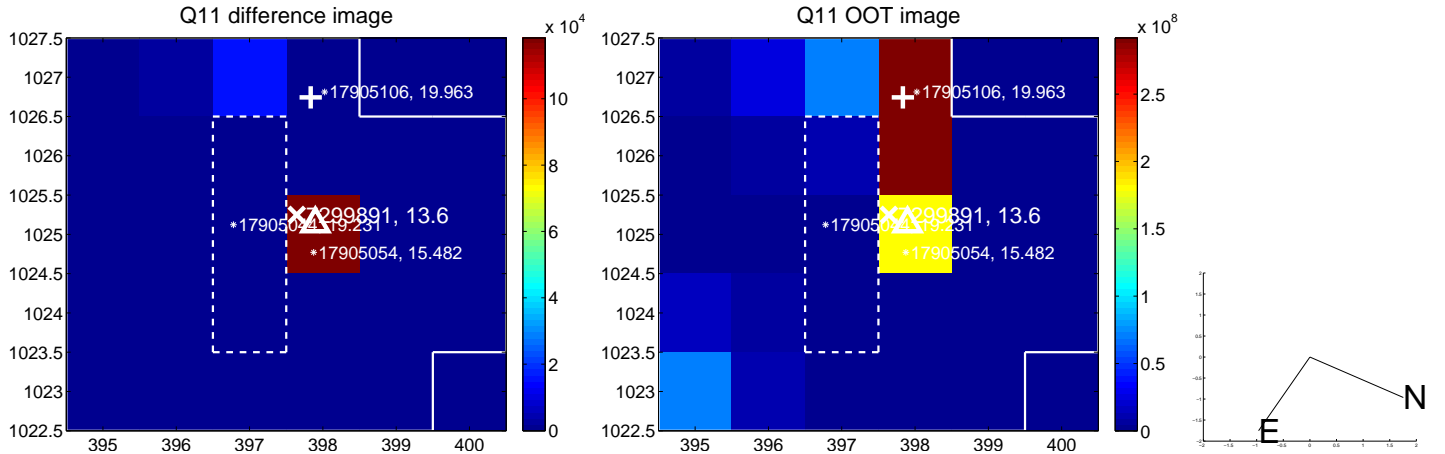
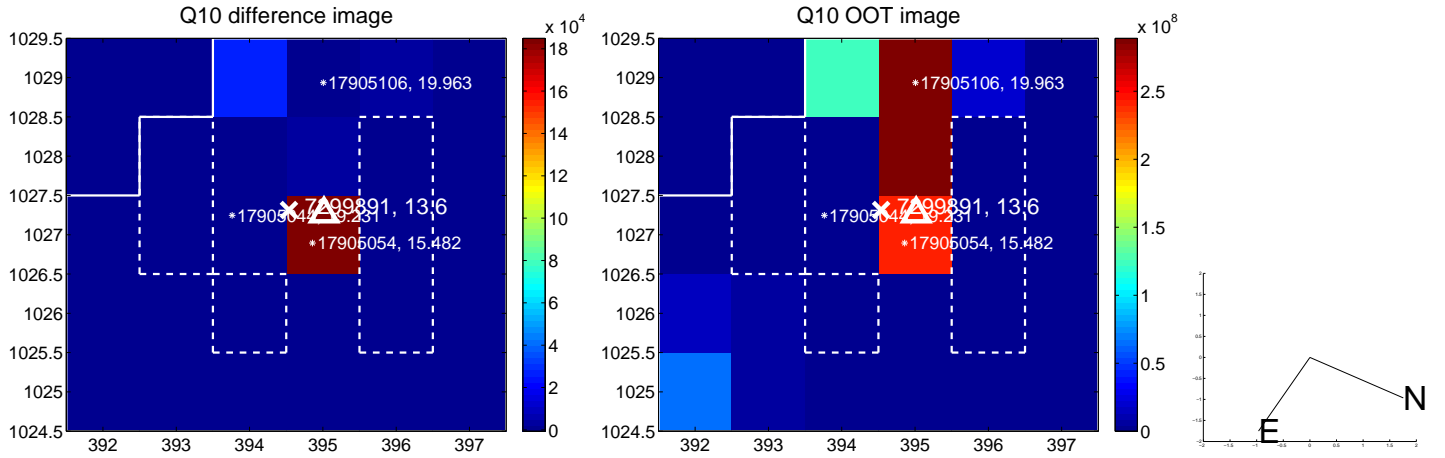
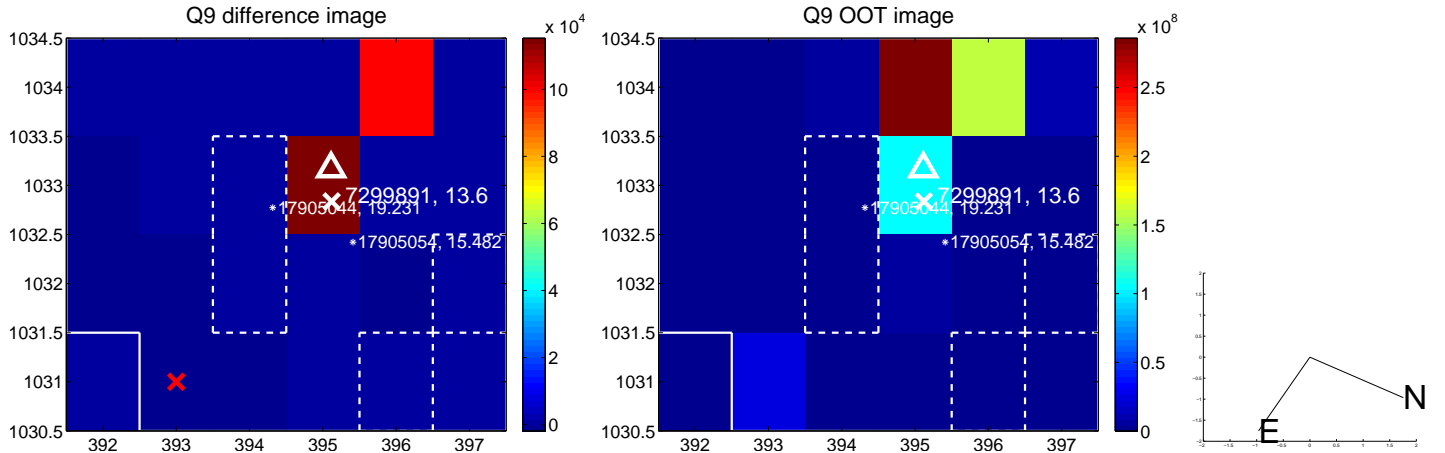
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



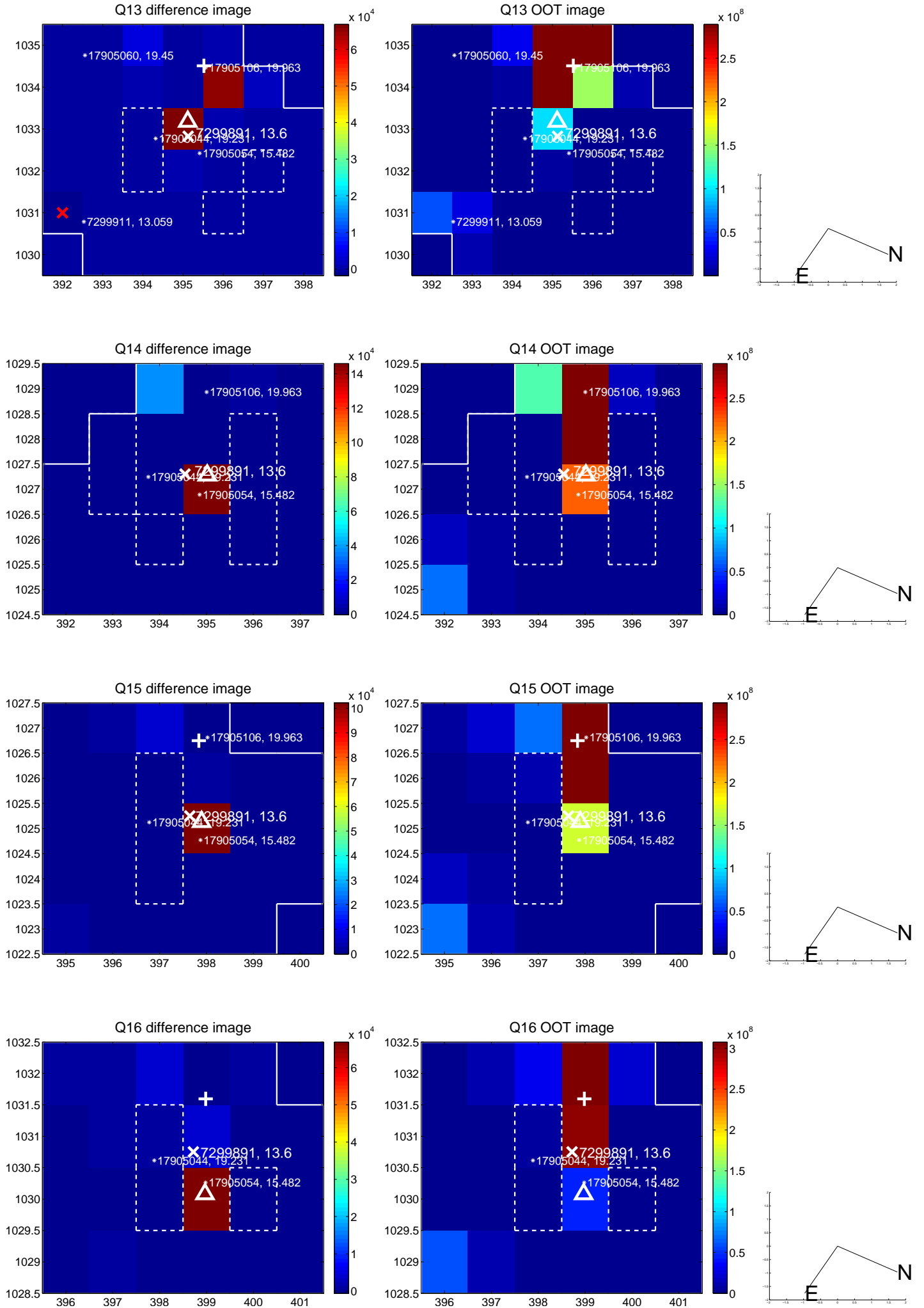
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



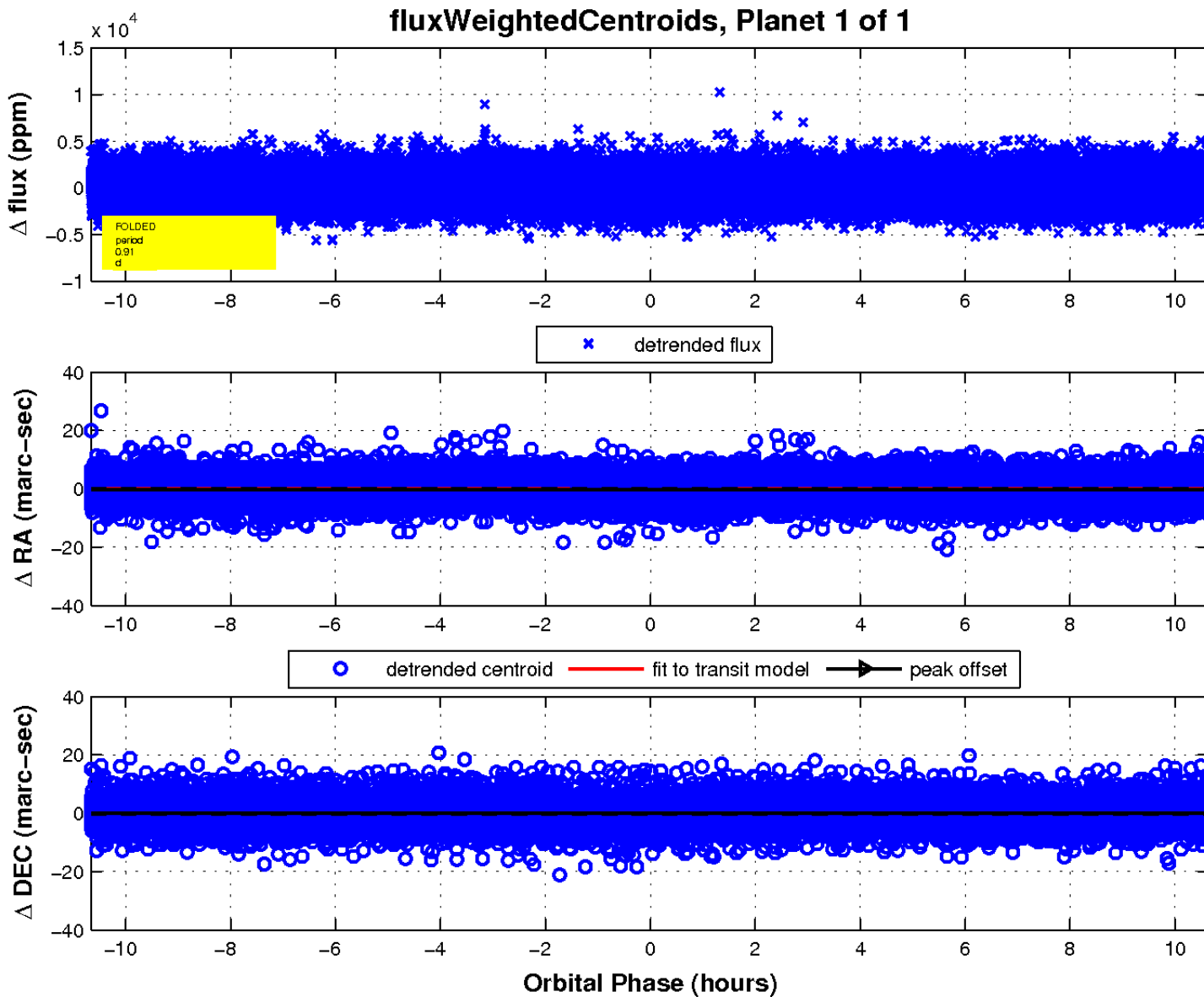
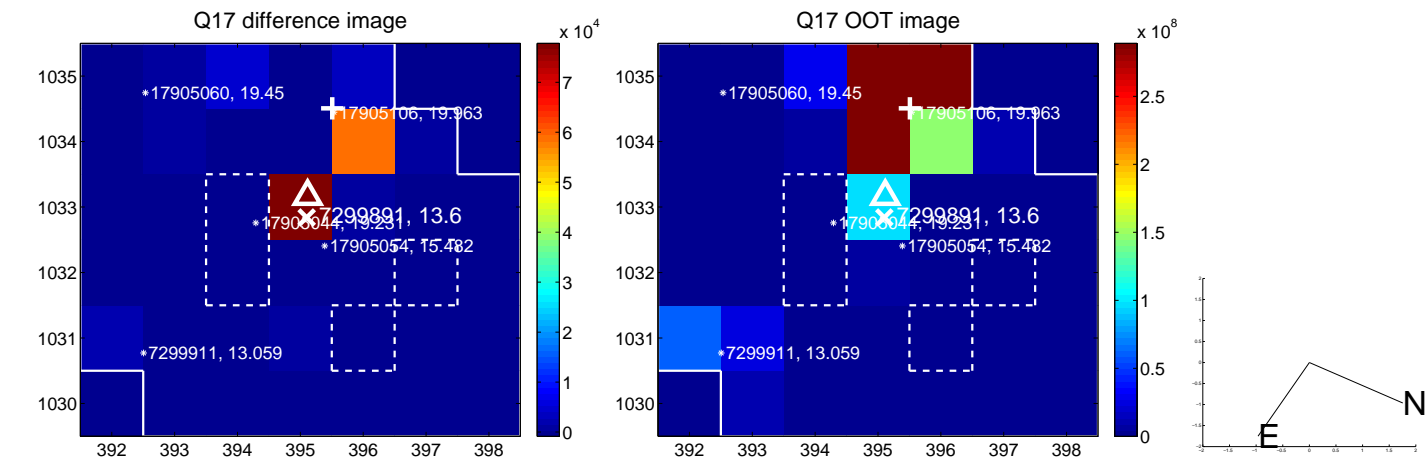
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white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

