

KIC 006228306

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})
006228306-01	OBS	No	1.217975	132.560165	37.9	11.301	9.1	8.5	4.30	7866	2.67	70162.55

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006228306-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—CENT_FEW_DIFFS

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

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

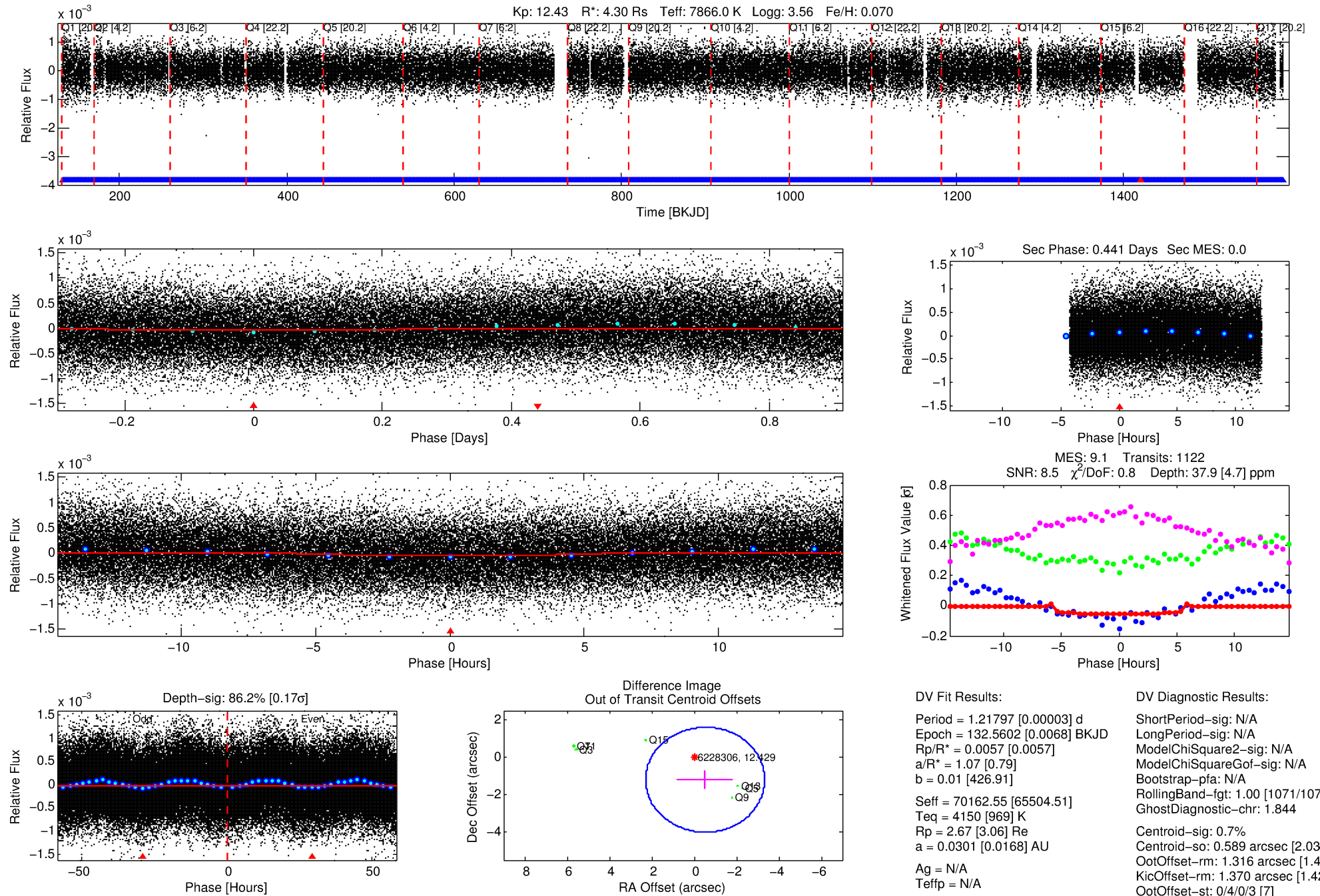
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006228306-01

No Significant Match Found

DV One-Page Summary

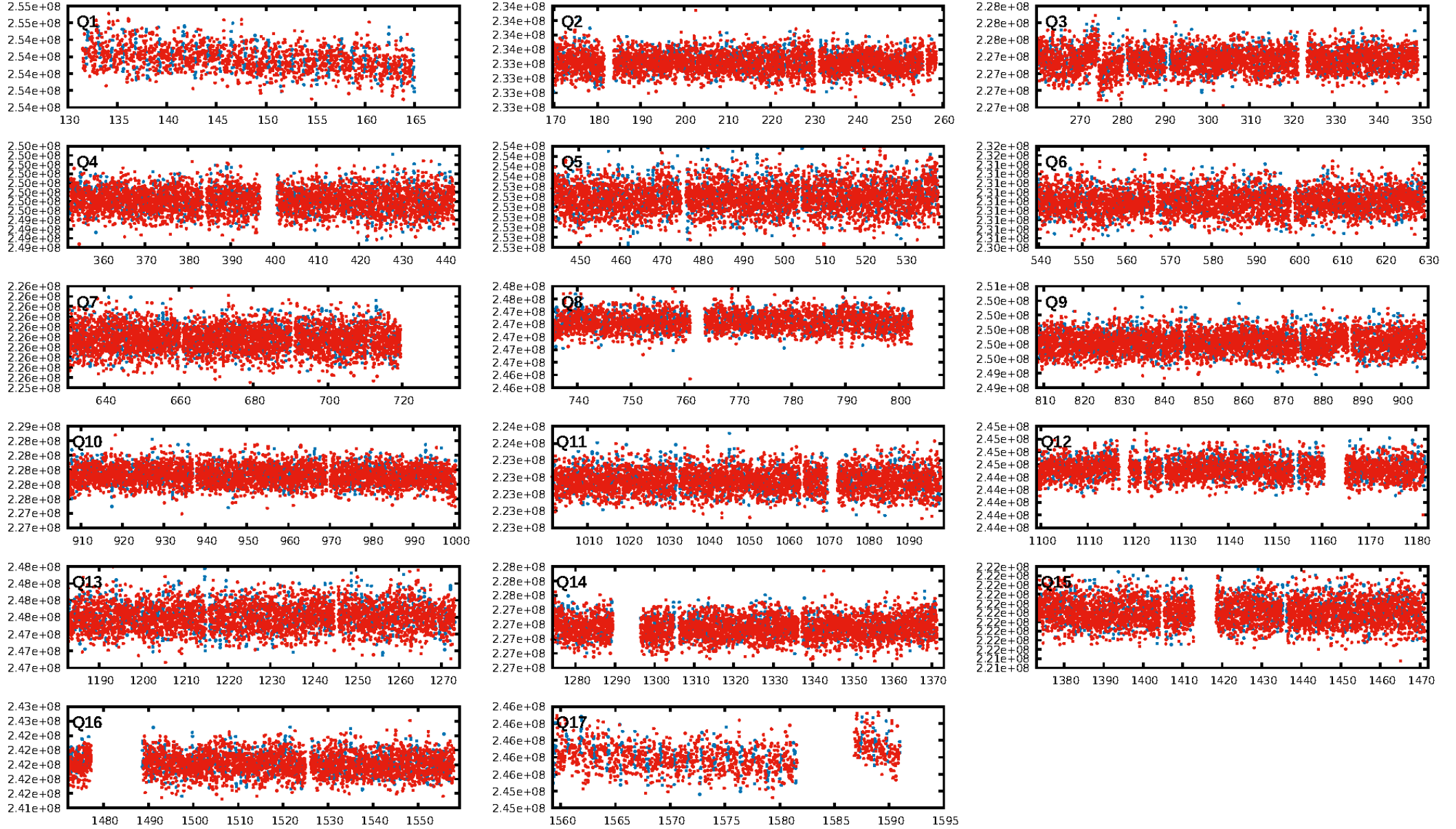
KIC: 6228306 Candidate: 1 of 1 Period: 1.218 d



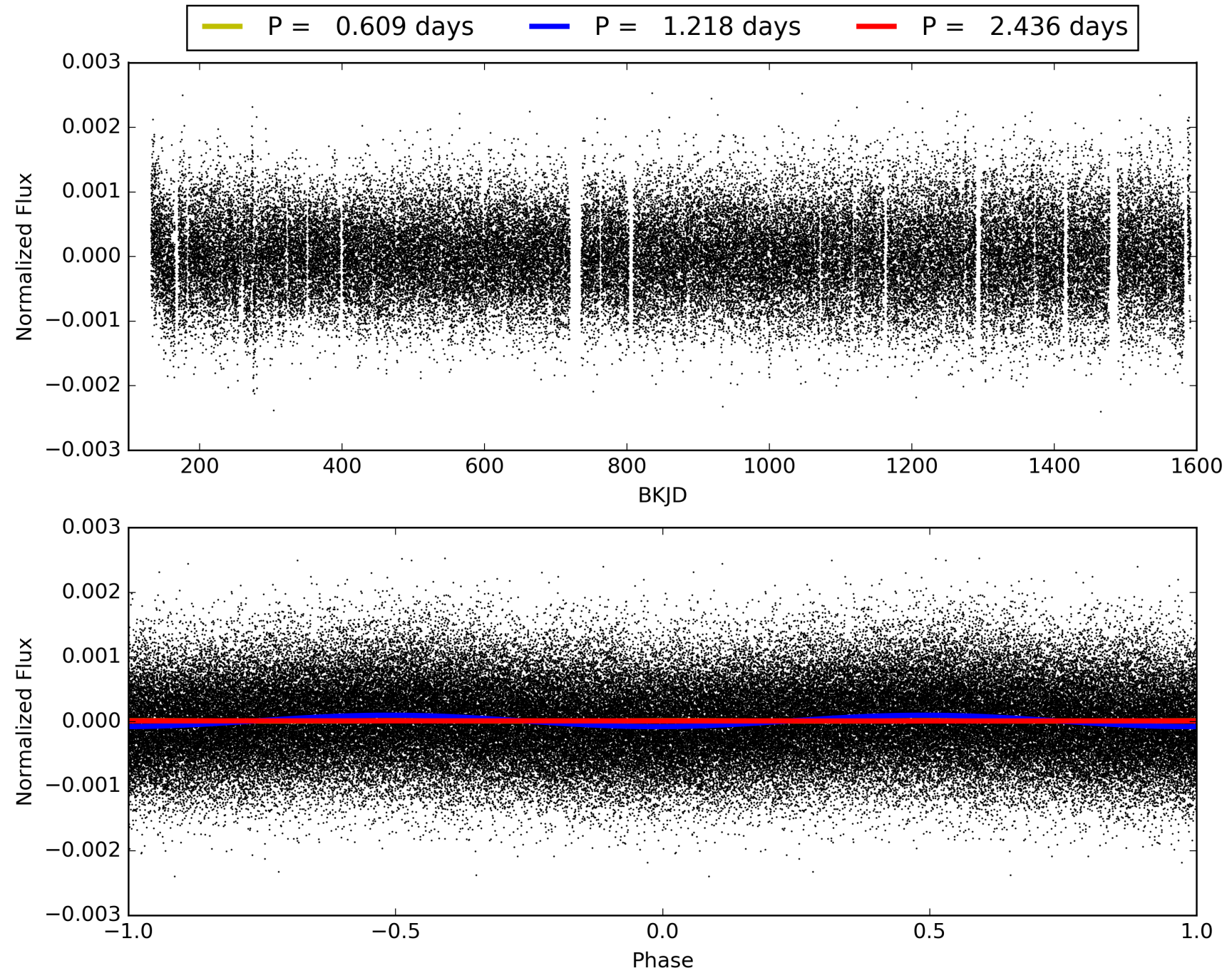
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 21:05:11 Z

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

TCE 006228306-01, PDC Light Curves

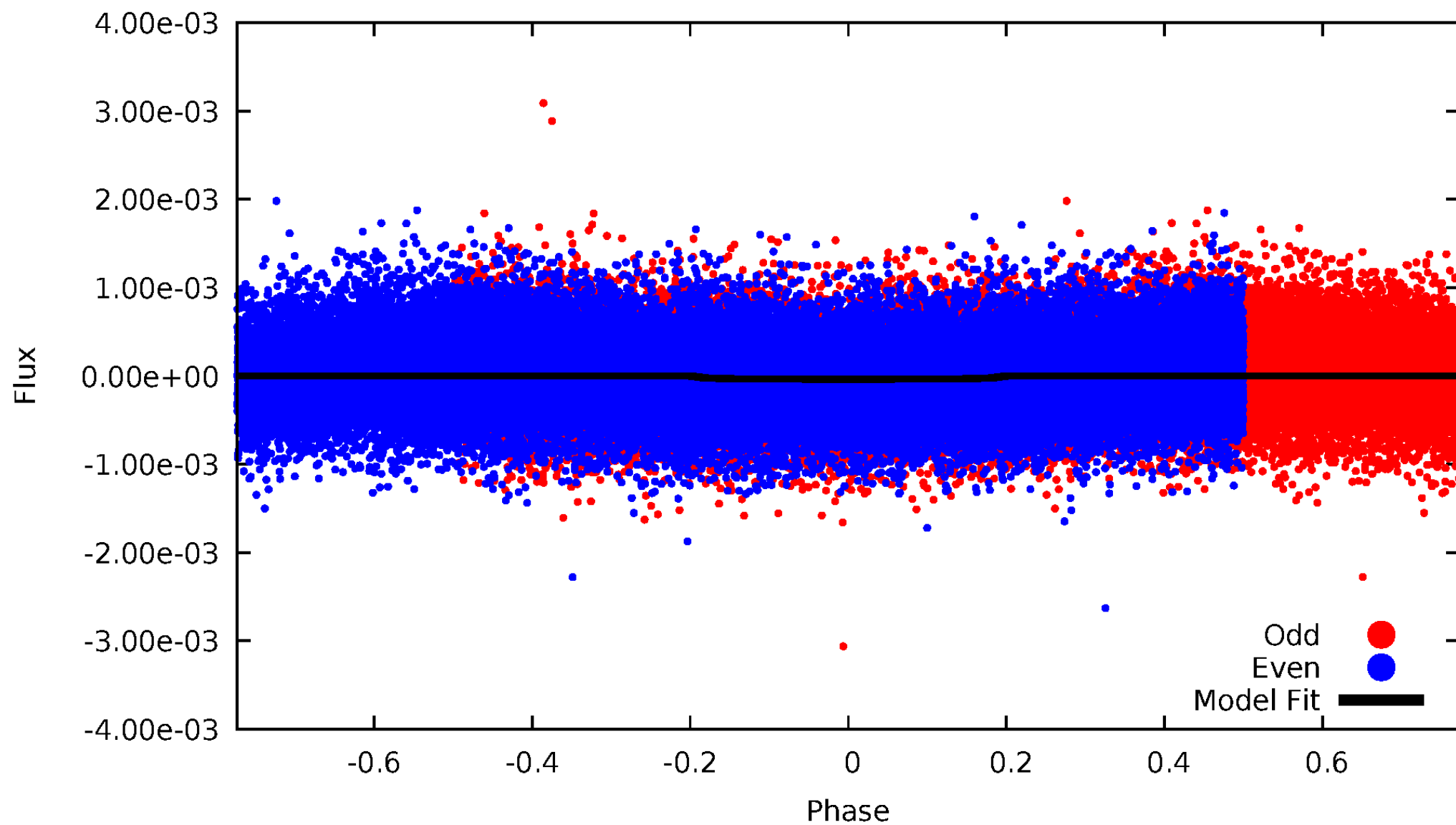


TCE 006228306-01



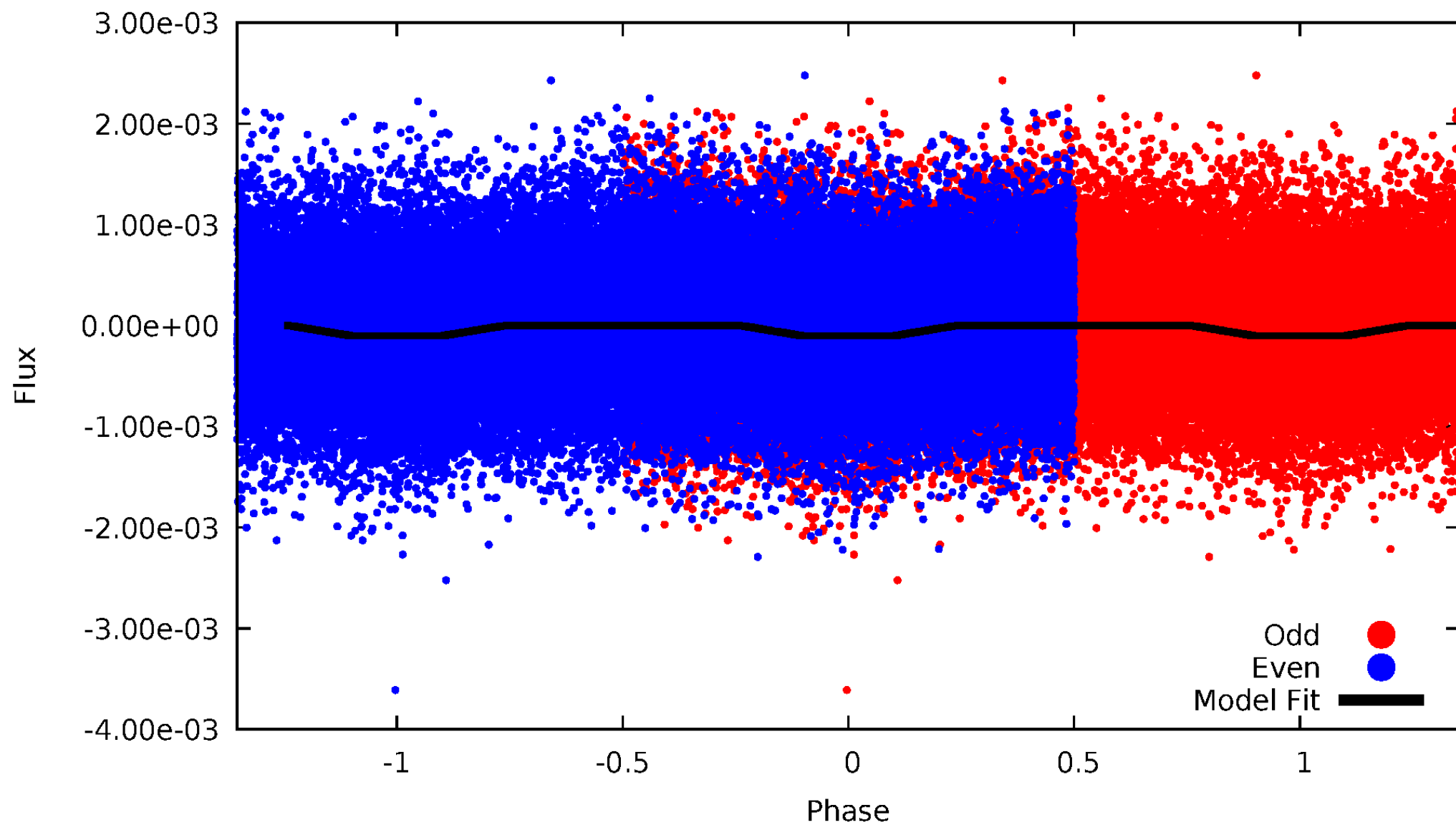
DV Odd/Even

TCE 006228306-01

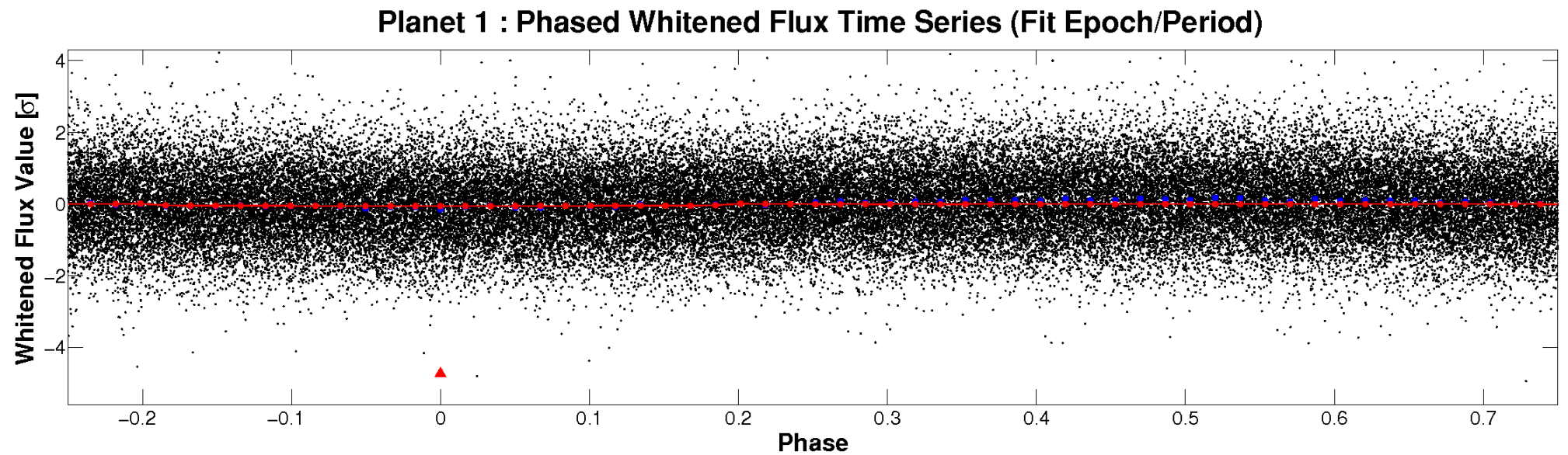
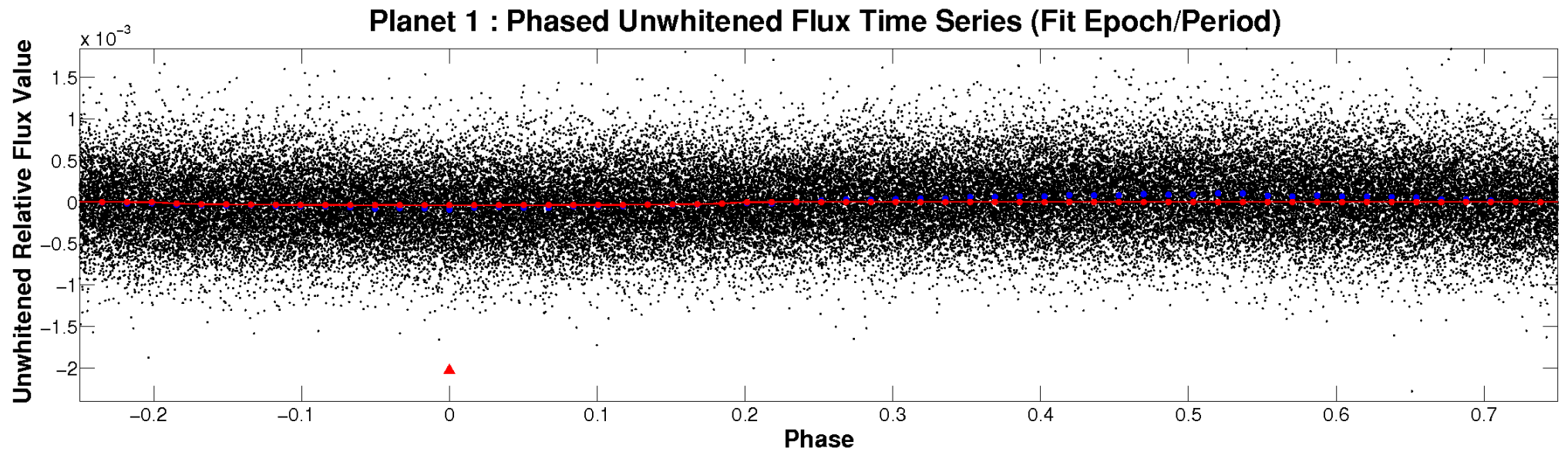


ALT Odd/Even

TCE 006228306-01

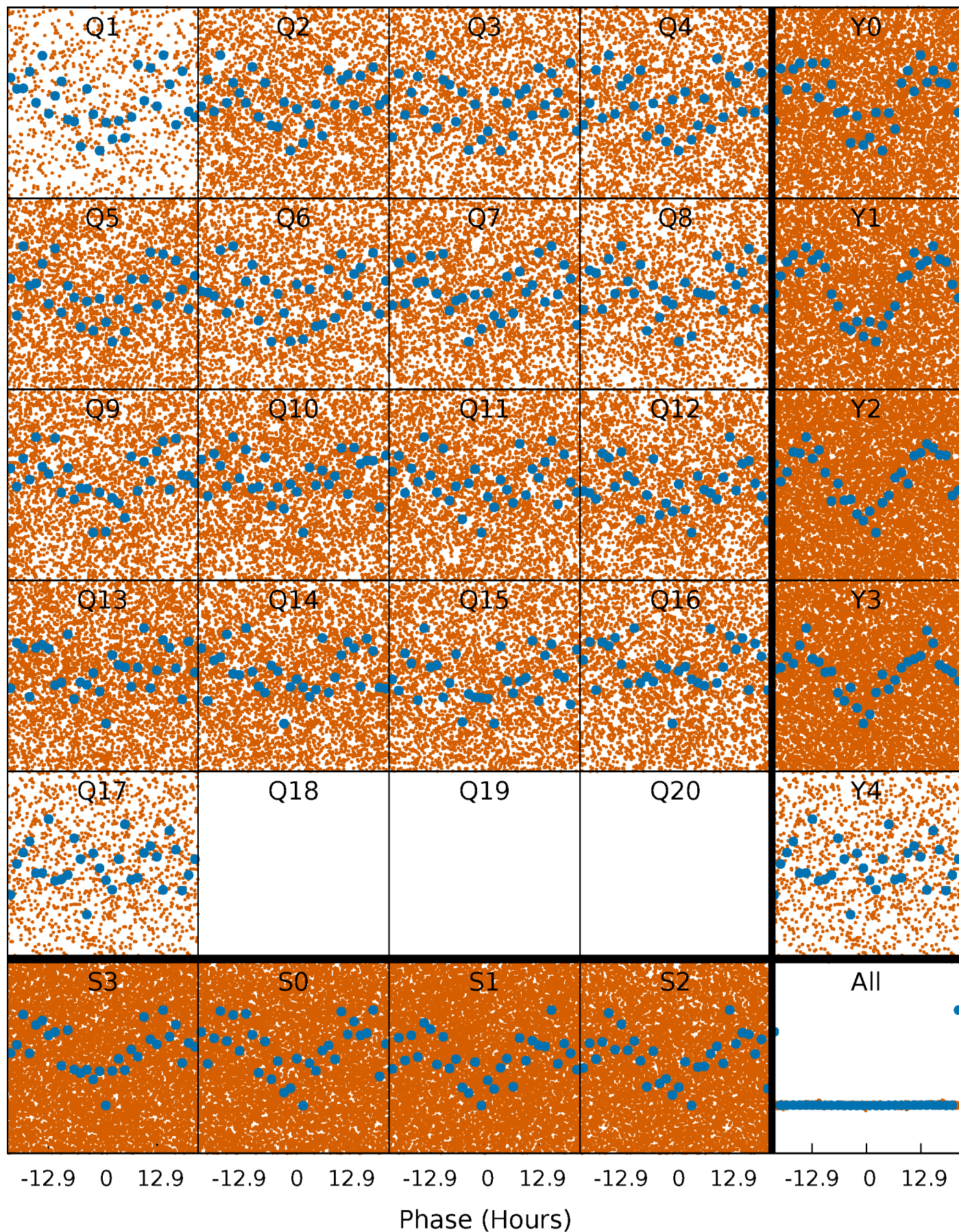


Non-Whitened Vs. Whitened Light Curve



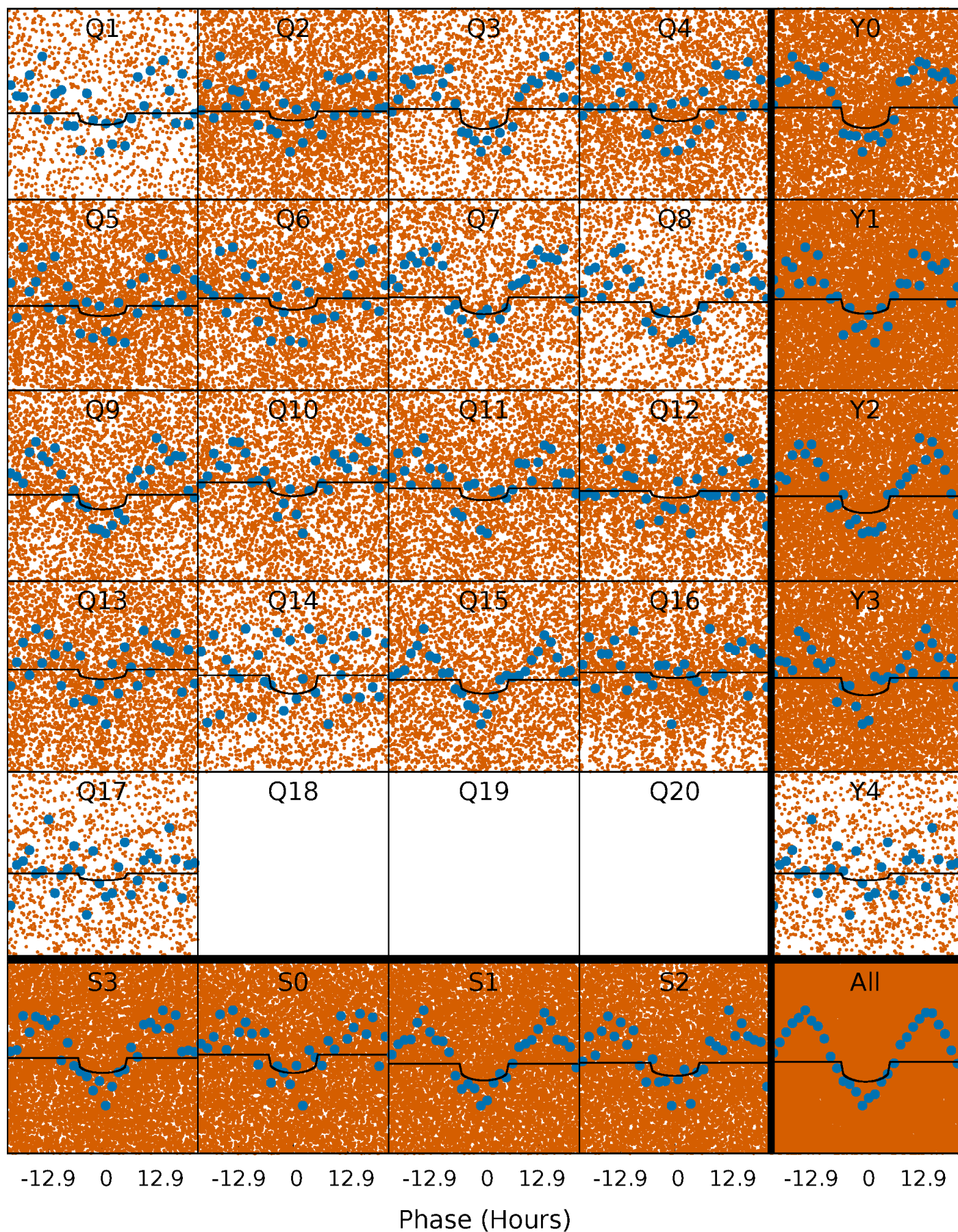
PDC Quarter-Phased Transit Curves

TCE 006228306-01 P= 1.217975 Days $T_0=132.560165$ (BKJD)



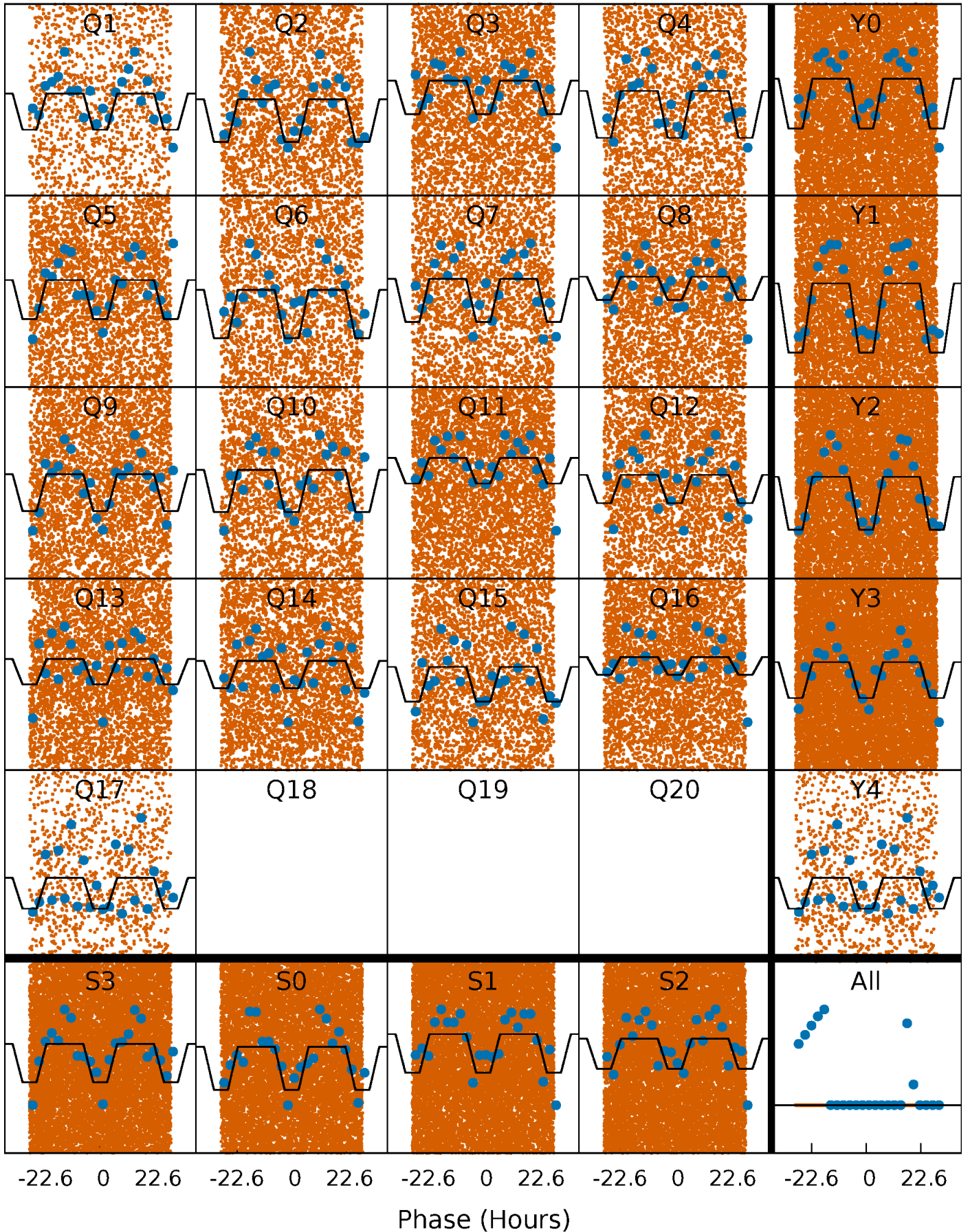
DV Quarter-Phased Transit Curves

TCE 006228306-01 P= 1.217975 Days $T_0=132.560165$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

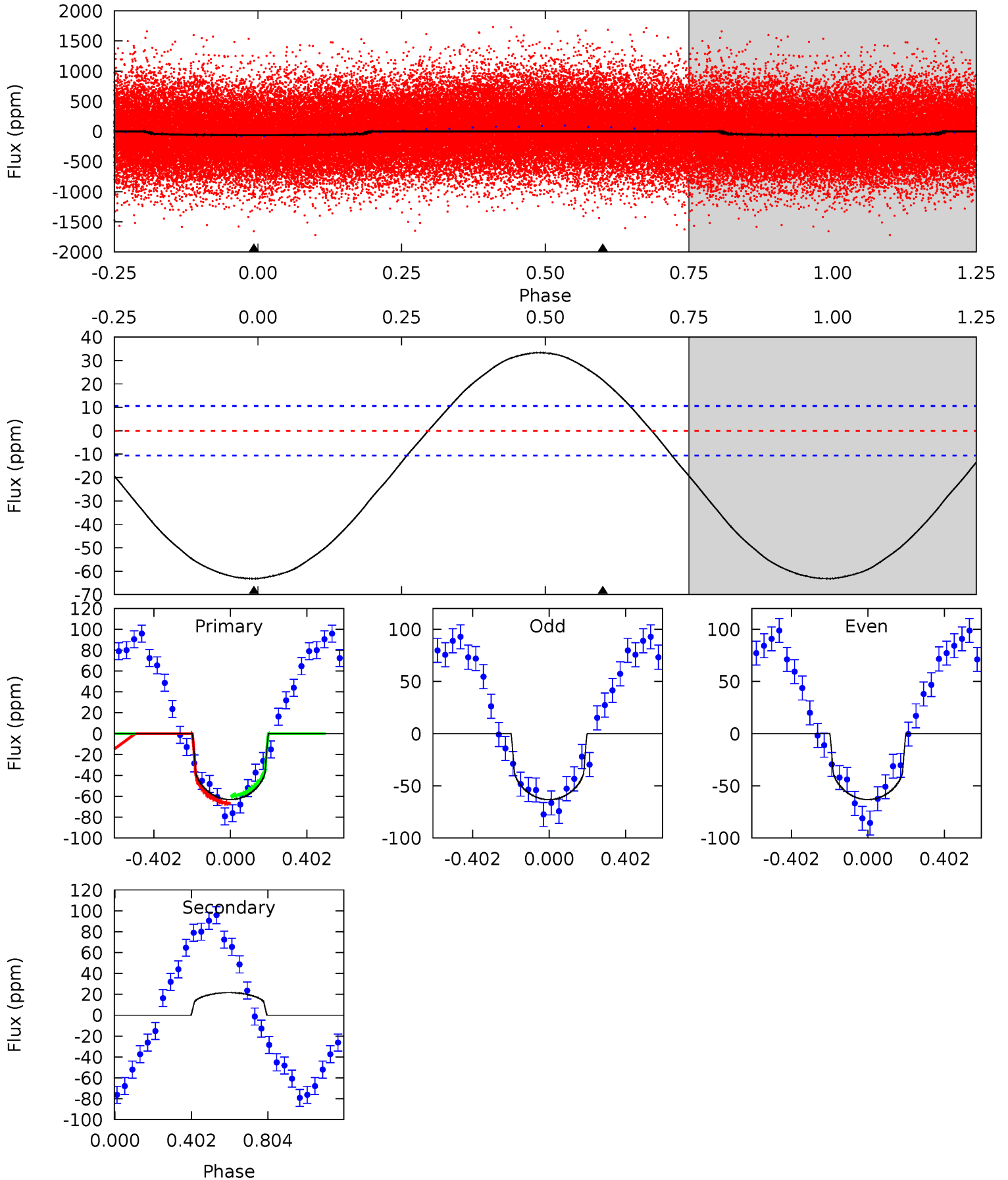
TCE 006228306-01 P= 1.217933 Days $T_0=132.578180$ (BKJD)



DV Model-Shift Uniqueness Test

006228306-01, P = 1.217975 Days, E = 131.342190 Days

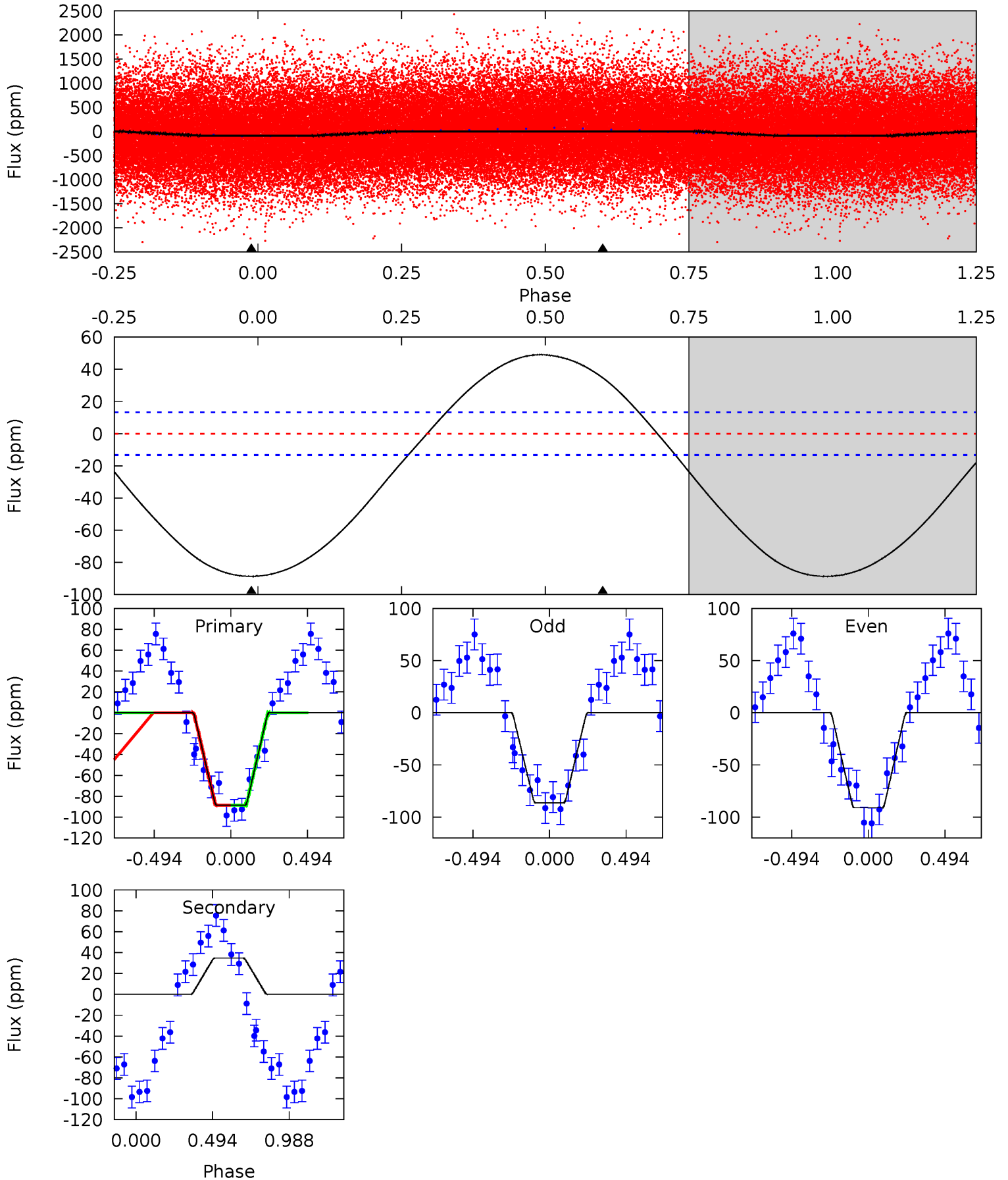
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
25.4	-8.71	0	0	4.26	0.84	3.27	25.4	25.4	-8.71	-8.71	0.01	0.99	0.35	1.47



Alt Model-Shift Uniqueness Test

006228306-01, P = 1.217933 Days, E = 131.360247 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
28.1	-11.0	0	0	4.22	0.68	3.74	28.1	28.1	-11.0	-11.0	0.74	0.97	0.36	0.01



Stellar Parameters For KIC 006228306

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	7866^{+218}_{-328}	$3.559^{+0.549}_{-0.061}$	$0.070^{+0.250}_{-0.400}$	$4.301^{+0.442}_{-2.358}$	$2.443^{+0.221}_{-0.829}$	$0.043^{+0.304}_{-0.009}$
	+3%/-4%	+15%/-2%	+357%/-571%	+10%/-55%	+9%/-34%	+702%/-21%
Source	KIC0	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 006228306-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	22 ± 2	$2.88^{+2.32}_{-1.81}$	5562^{+371}_{-783}	-6487^{+1023}_{-4779}	$-1.287^{+0.883}_{-7.932}$
Alt.	35 ± 3	$4.38^{+2.85}_{-2.32}$	5603^{+351}_{-717}	-6147^{+773}_{-2497}	$-0.901^{+0.554}_{-3.049}$

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 $A_{obs} \gg 1.0$

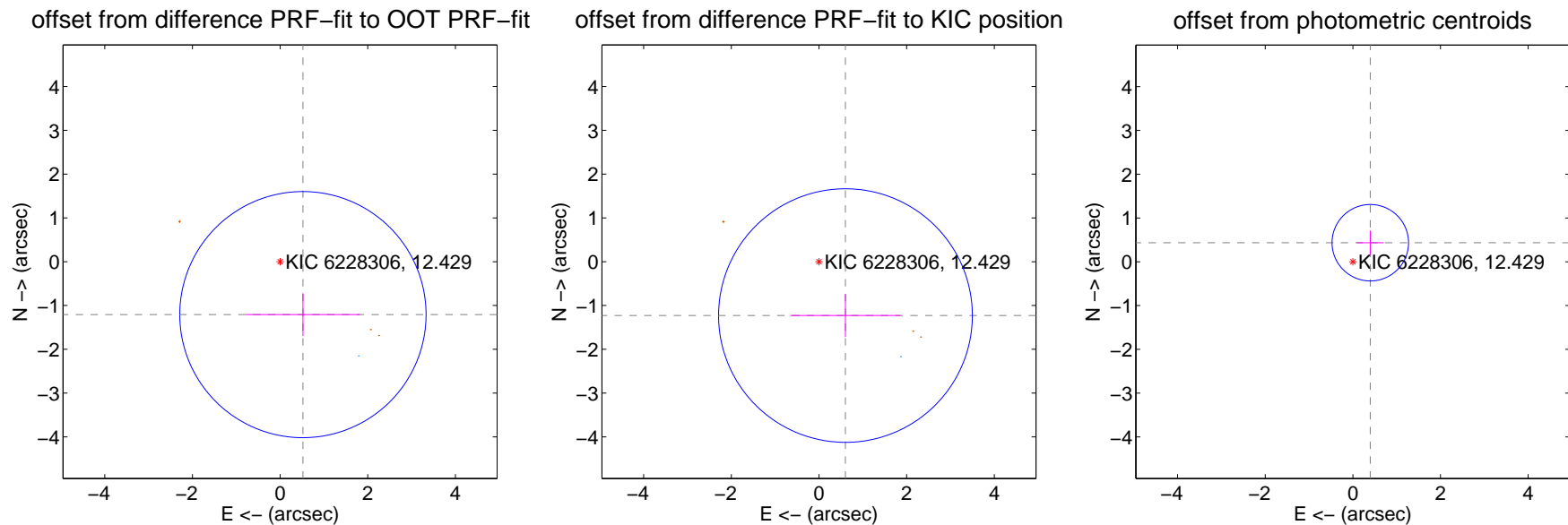
DV Centroid Data

Supplemental centroid analysis for 006228306-01. Kepler magnitude: 12.43. Transit SNR 8.50

There are 1 quarters with good PRF difference image offsets

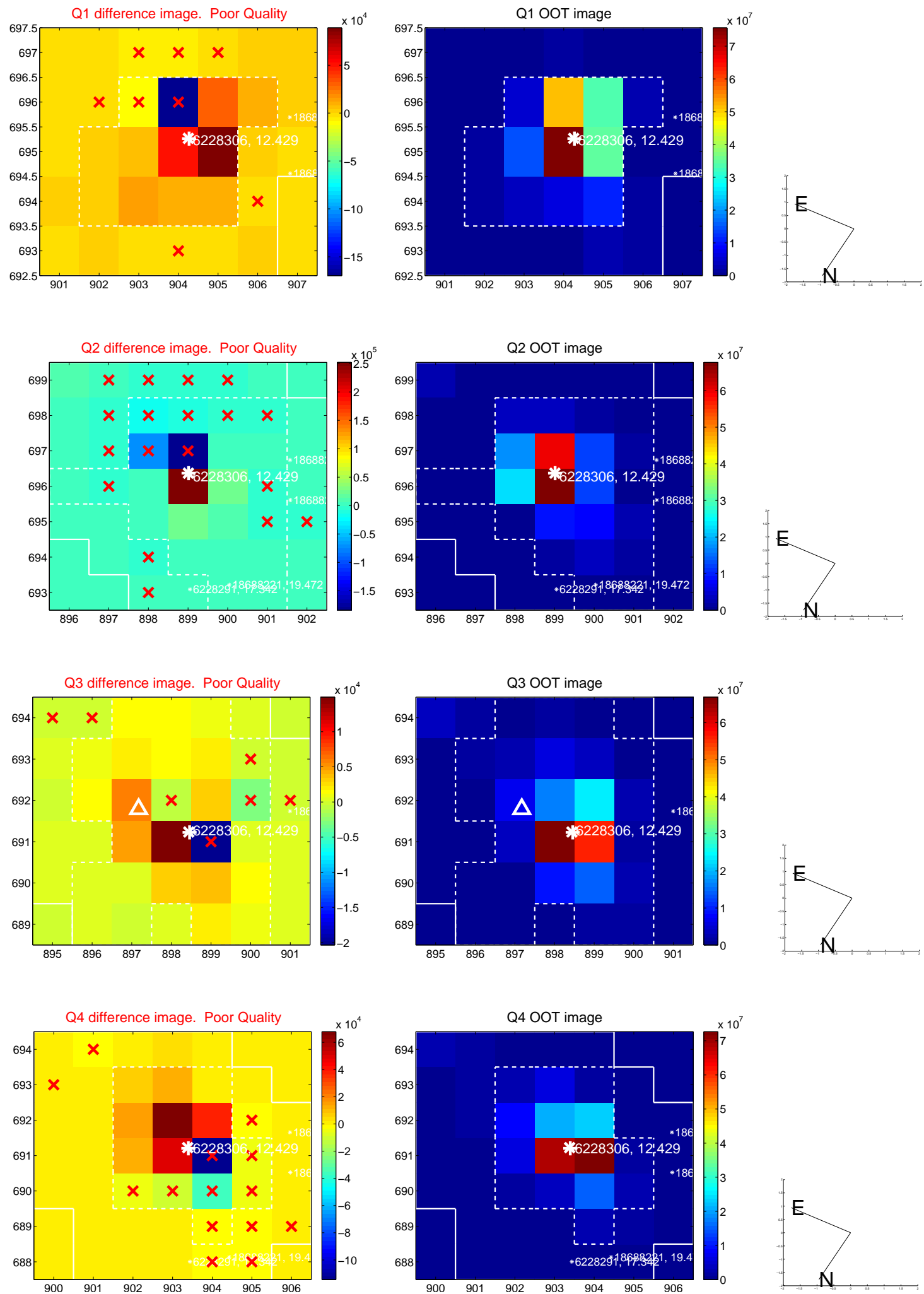
The direct PRF centroid is offset from the target star catalog position by about 0.11 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.316 ± 0.937	1.40	-0.520 ± 1.302	-1.208 ± 0.488
PRF-fit source offset from KIC position	1.370 ± 0.965	1.42	-0.604 ± 1.256	-1.230 ± 0.490
photometric centroid source offset	0.59 ± 0.29	2.03	-0.40 ± 0.31	0.43 ± 0.28

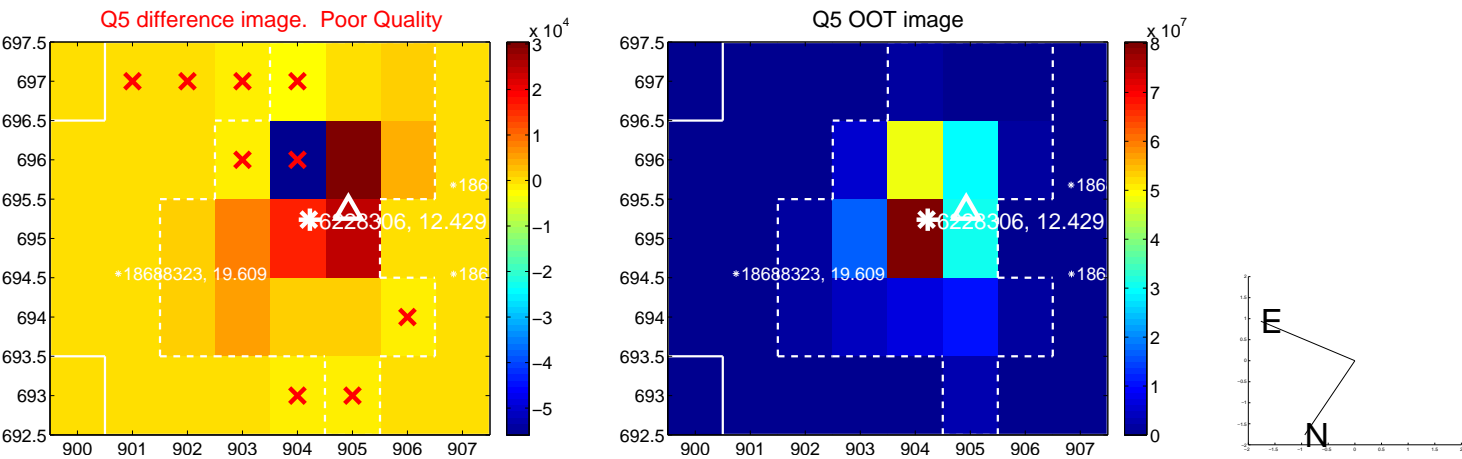


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

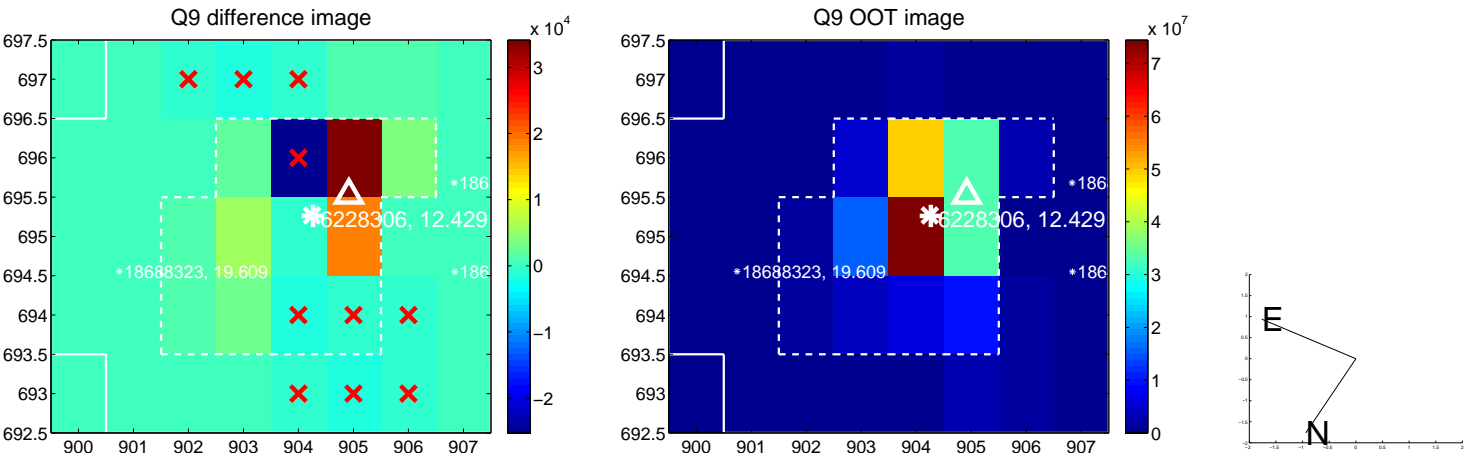
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



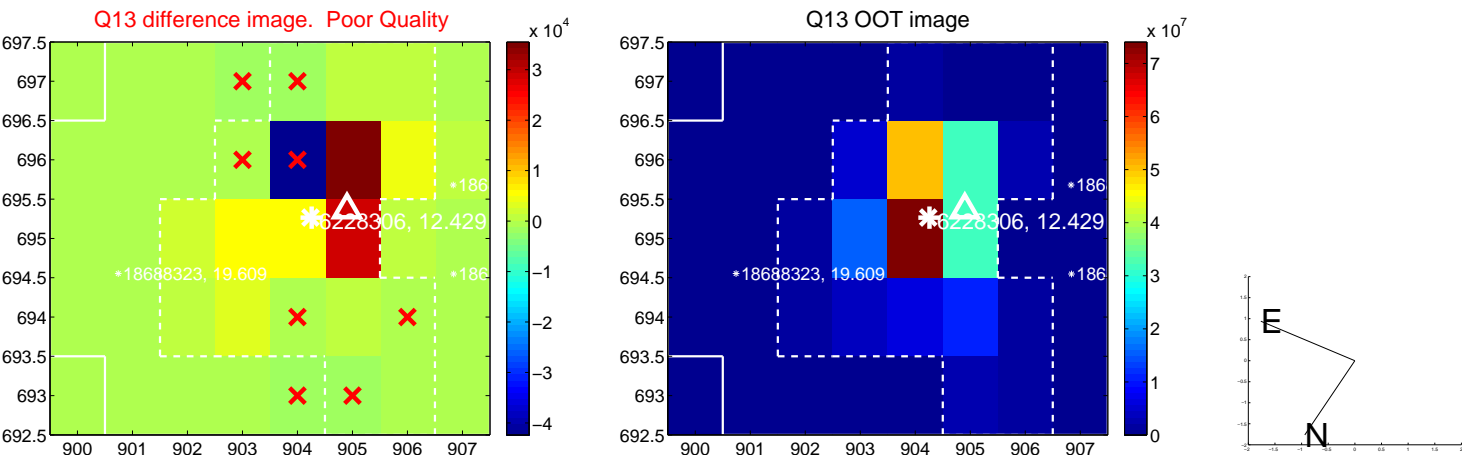
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



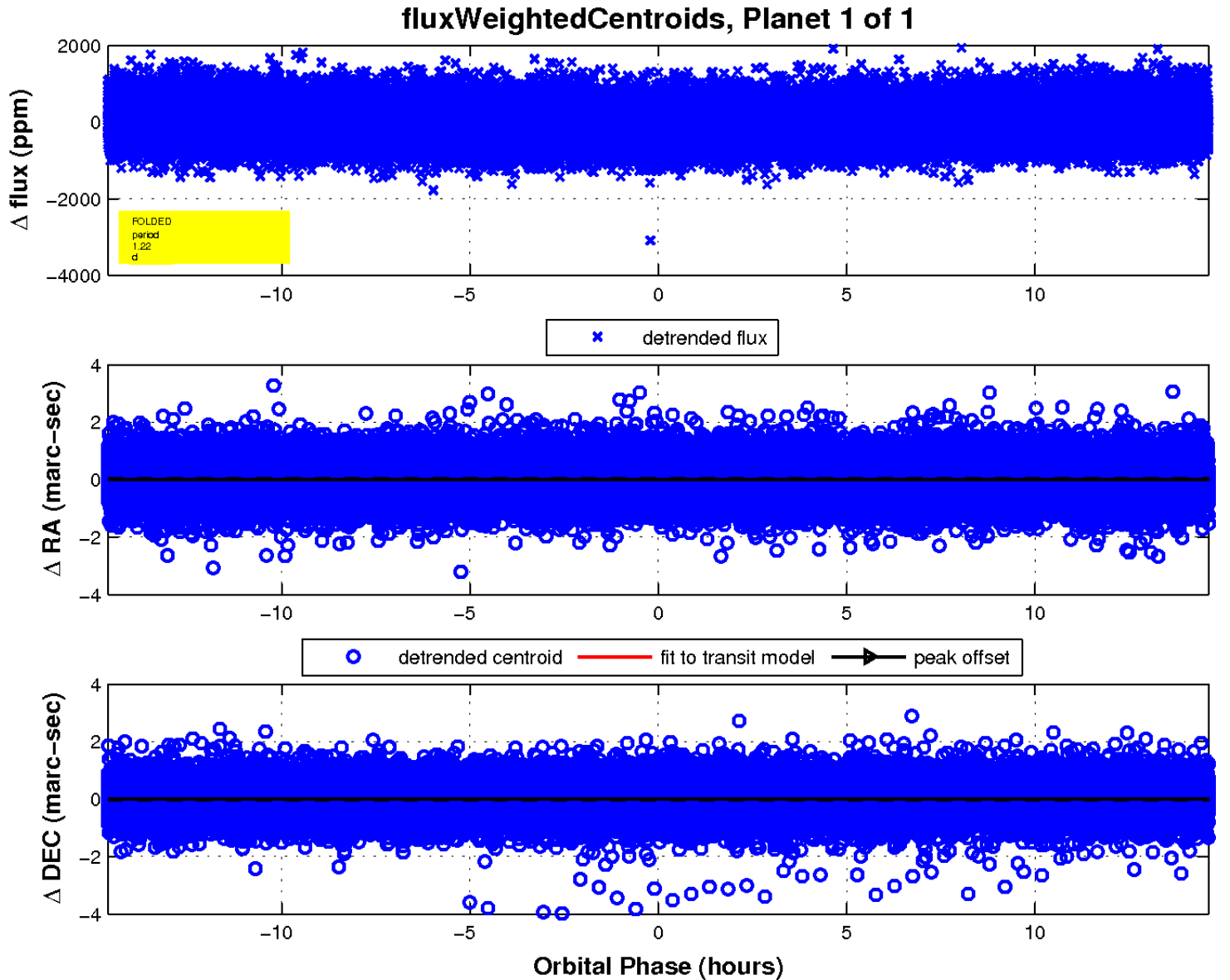
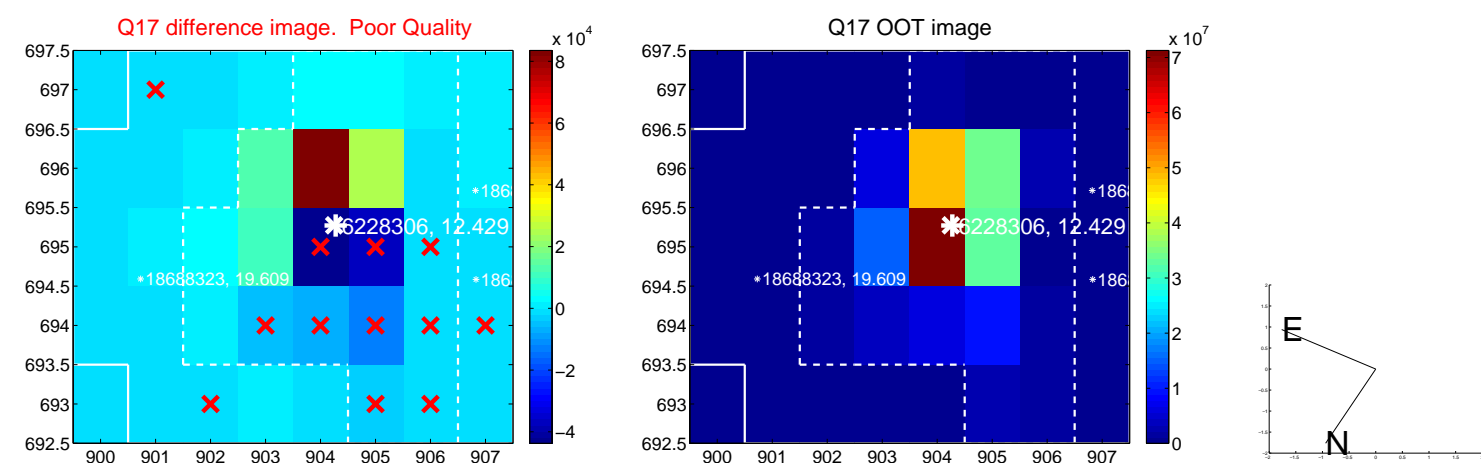
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white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination

